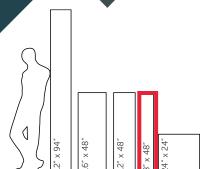
PORCELAIN PLANK DECKING

A new dimension in outdoor decking and paving. Totally fireproof, perfectly straight, absolutely level, fade free, zero maintenance.

Porcelain planks skillfully incorporate the visual features that make natural wood decking so enchanting, but eliminate the problems. Although just 3/4" thick, porcelain planks offer an unsurpassed alternative for building elevated rooftop decks over pedestal supported beams, set in thinset over concrete floors or simply laid over compacted sand.



94" x 12" 'DECKWAY" PLANKS

Extra long (94 1/4") porcelain planks with a simulated wood look. Install options: pedestal supported beams, compacted sand, thinset.









Maple

48"x 16" SLABS

Rectangular porcelain slabs, simulating wood or cement like planks, joined side by side. Install options: pedestals/pads, pedestal supported beams, compacted sand, thinset.











Archatrak



48" x 12" PLANKS

12" wide planks simulating single boards of natural wood. Install options: pedestal supported beams, compacted sand, thinset.











Rovere

Noce

Oleum

48" x 8" PLANKS

8" wide planks simulating single boards of natural wood or with a cement like appearance. Install options: pedestal supported beams, compacted sand, thinset.











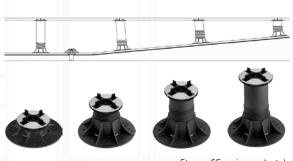




INSTALLATION

ADJUSTABLE HEIGHT PEDESTALS

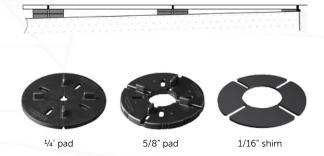
For deck elevations above approx 1 ½" over hard surfaces such as concrete or other sloping substrates, Eterno SE or NM 'Maxi' adjustable height pedestals are placed under each corner and along the edges of the planks at max. 24" spacing. Pedestal heights are easily adjusted to ensure a perfectly level surface by rotating the screwed column from above with a special tool. The soft rubber head material reduces noise transmission and provides extra shock protection.



Eterno SE series pedestals

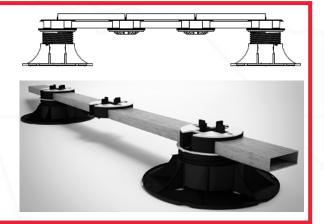
RUBBER SUPPORT PADS

At low elevations (1/4"-11/2") over sloping hard surfaces such as concrete, Eterno fixed rubber support pads are typically used to progressively raise the deck height. These pads permit a starting deck height as low as 1.0". The pads also provide excellent sound absorption, shock resistance and resistance to movement. The stackable 1/4" and 3/8" high pads are placed under each corner and along the edges of the porcelain planks at 24" intervals with 1/16" thick shims used to make minor height adjustments. Above 1 1/2", Eterno SE or NM 'Maxi" adjustable height pedestals are used to provide support at higher elevations up to 20" or more.



PEDESTAL SUPPORTED BEAMS

8" or 12" wide porcelain planks are typically installed over an array of 8' long hollow steel beams, supported by Eterno NM 'Maxi' adjustable height pedestals, spaced at 24" intervals. 16" x 48" porcelain slabs may optionally be supported with this system rather than individual pedestals. The steel beam sub-structure reduces the number of pedestals required and ensures a firm and stable support structure over sloping substrates. Porcelain planks of different widths are accommodated by moving sliding pedestal caps along the steel rail. Porcelain planks are placed on the pedestal caps with the end of each plank situated over a steel rail and separated by the inbuilt spacer tabs on the pedestal caps.



THINSET MORTAR

For areas subject to high levels of foot traffic, planks can be laid over a concrete base in thinset mortar and grouted.

COMPACTED SAND

For landscape paving, large patios, courtyards, walkways and terraces subject to moderate levels of foot traffic, porcelain planks can be laid on a well prepared and compacted sand bed.

NOTE: While Archatrak porcelain planks and pavers are exceptionally durable, dense and rigid, they can nevertheless suffer damage due to cracking and/or breakage if tools, heavy furniture or other heavy objects are dropped on the planks from a significant height.

For installations where hard, heavy objects are likely to be present or where floor heights exceed 4", we recommended installing securely applied reinforcement sheets to the underside of the planks to mitigate the risk of damage or injury.

"SPANSAFE" STEEL PROTECTION TRAYS

Archatrak "Spansafe" galvanized steel sheet trays are designed for placing under our porcelain pavers in pedestal supported deck applications to provide both protection should a paver be accidentally damaged or mitigation against wind uplift.

The Archatrak "Spansafe" tray is constructed of 1mm thick galvanized steel sheet with 3/4" high downturned edges on all four sides, folded to provide a double thickness edge for extra strength. Holes are drilled in the sheet for drainage.

On the wind uplift tray, quarter circle steel plates are welded to each corner which enable a screw to secure the plate to the pedestal head and provide a flat surface to apply adhesive for bonding the paver to the tray. Trays are designed for 24" x 24", 48" x 24" or 16" x 48" (nom.) porcelain pavers only.

SPECIFICATIONS

	Wind uplift tray	Shock protection tray	Shock protection tray
Size:	23 7/16" x 23 7/16"	23 7/16" x 23 7/16"	23 7/16" x 15 7/16"
Edge height:	3/4"	3/4"	3/4"
Weight:	10lb	7lb	4.6lb
Steel thickness at corners:	3/16"	1/32"	1/32"
Hold down washer:	1" diam x 3/16" thick	n/a	n/a

SHOCK PROTECTION

While porcelain pavers are exceptionally dense and durable, they can nevertheless suffer damage including cracking and breakage if heavy objects are dropped on them from a significant height. In accordance with the paver manufacturers' recommendations, protection sheets or trays should be installed underneath the

pavers when the pedestal height exceeds 4", especially in high traffic situations. The Archatrak 'Spansafe' steel tray is designed to support the weight of an average person should a paver become damaged or broken, allowing the person to step away from the damaged paver to avoid potential injury.

(2) (E)

INSTALLATION

The trays are installed by resting each corner of the downturned tray on a pedestal head. The pavers are then placed directly over the steel tray with each corner of the pavers butted tightly against the pedestal tabs. Standard pedestal head tabs will normally be high enough to avoid the need for additional height /special tabs

since the total height of the tray at the corners is only 3/16"max. We recommend placing a rubber shim (e.g. our ETE-LGH2) or a bead of silicone adhesive between the pavers and the plates to minimize noise transmission and/or rattling.



Paver on tray



Broken paver supported by tray



Tray supporting person's weight

Archatrak

WIND UPLIFT MITIGATION

Wind uplift investigations commissioned by Archatrak indicated that blow off of porcelain pavers may occur with pavers installed on 8" high pedestals on elevated decks with a 12" high parapet, at wind speeds of 110 mph. However movement of the pavers on the pedestal heads may occur at lower wind speeds.

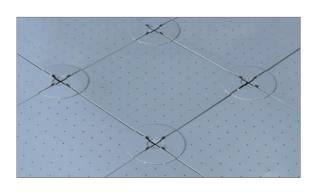
Studies on concrete pavers have indicated that locking pavers together can mitigate the effect of wind uplift on the critical corners and edges as the pavers are able to act together with an increased total weight to counterbalance the net uplift pressure.

The Archatrak 'Spansafe' wind uplift tray provides a mechanism for reducing shaking or side to side movement of the pavers as well as a means of securing the pavers to the pedestal heads with no visible fixing devices on the deck surface. Adhesive is used to bond the pavers to the tray which is in turn secured to the top of the pedestals and to each adjacent metal tray with a washer and screw assembly.

INSTALLATION OF TRAYS WITH HOLD DOWN SCREWS

After placing the inverted trays with each corner resting on a pedestal head, a stainless steel screw with an integral wide flat washer (available from Archatrak) is screwed into the center of the pedestals and tightened so that each corner of the metal tray is held tightly to the pedestal head. Adhesive is then applied to the quarter circle steel plates to bond the pavers to the plates. Pavers are then placed in position over the plates with the correct spacing provided by the tabs on the Eterno pedestal heads.

Further adhesive may also be used to bond the base of the pedestal to the substrate to provide additional wind uplift mitigation.

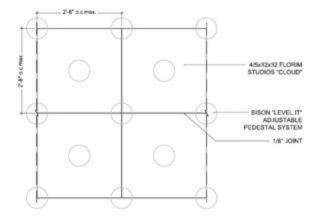


Wind uplift trays with added corner plates

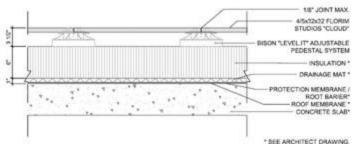


Shock protection tray (no corner plates)

NOTE: While we believe the Archatrak 'Spansafe' tray and hold down screw system will provide a degree of wind uplift mitigation, we have not commissioned any specific wind uplift testing to quantify the additional benefits that this system may provide.



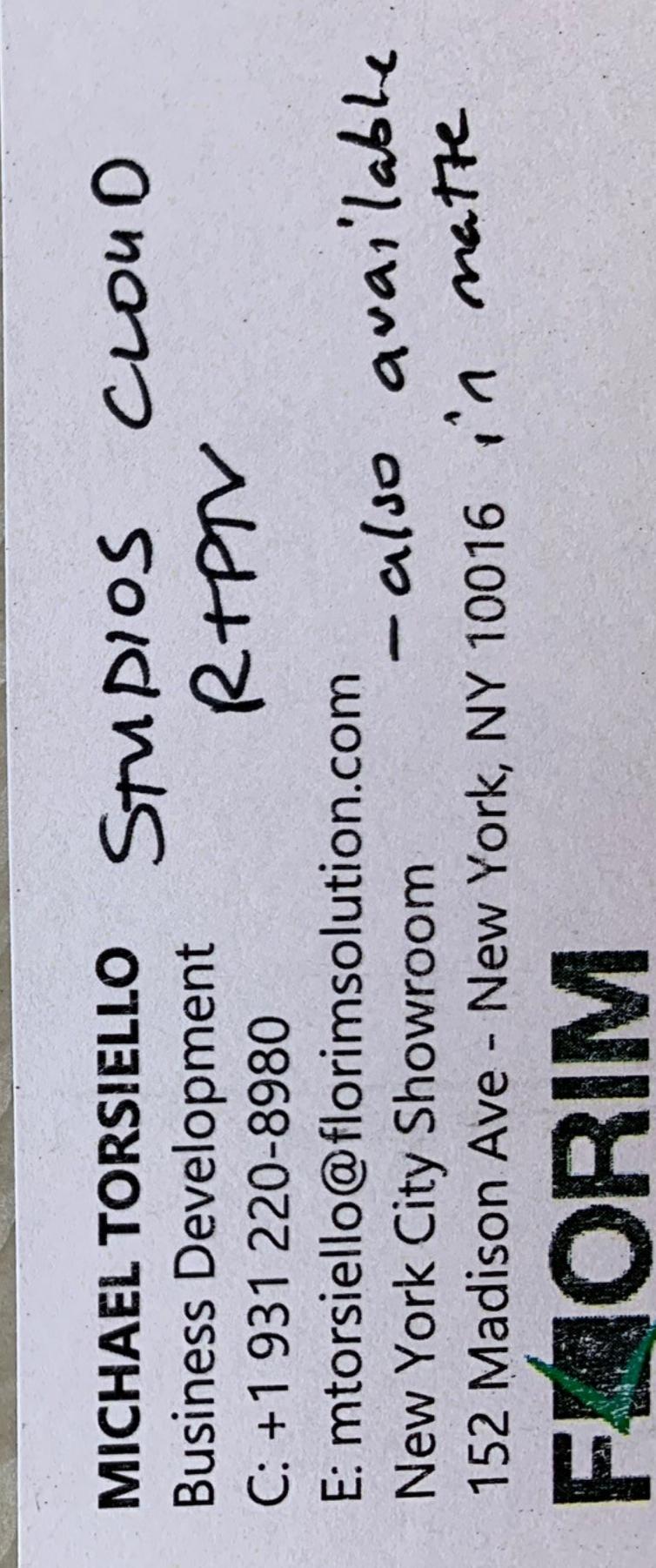
MIN SERVICE



MCTON 1429-14

T (TYP)





CERIM

#100F





Construction Specialties Inc. certifies that Model RS-9615 shown. Herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to wind driven rain and air performance ratings only.

APPLICATION AND DESIGN:

RS-9615 is tested in accordance with AMCA 500-L Air Performance and Wind Driven Rain. RS-9615 is tested in accordance with AMCA 550 Test Method for High Velocity Wind Driven Rain Resistant Louvers. RS-9615 is tested in accordance with AMCA 540 Test Method for Louvers Impacted by Wind Borne Debris (Basic Protection, Missile Level D and Enhanced Protection, Missile Level E). Minimum louver section size to be 16" x 16".

TEST DATA:

For a 4 foot by 4 foot Unit. Tested with mill finish and no screen

Free Area = $9.46 \text{ ft}^2 (0.88 \text{m}^2) = 59.1\%$

To maintain a CLASS A (99%) effectiveness rating with a 50 mph wind speed an rainfall rate of 8 in/hr

- Maximum intake core velocity 5.0 m/s (977 FPM)
- Maximum intake free area velocity 7.57 m/s (1490 FPM)
- Intake pressure drop 188 Pa (0.76 in. H₂O)
- ➤ Intake capacity 5.0 m³/s (10513 CFM)

*louver tested with 1m² core area, mill finish and no screen



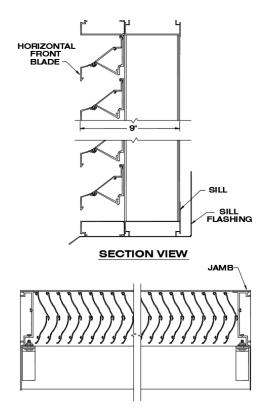
SUGGESTED SPECIFICATIONS:

GENERAL: Furnish and install where indicated on the drawings C/S 9" (228.6 mm) STORM RESISTANT FIXED HORIZONTAL LOUVER **MODEL RS-9615** as manufactured by Construction Specialties, Inc., Cranford, NJ. Complete details shall be submitted to the architect for approval prior to fabrication. The supplier must be a member of AMCA or BSRIA.

MATERIAL: Frames and blades to be fabricated from 6063-T6 aluminum alloy. Louver to be mechanically fastened using stainless steel or aluminum fasteners. Louvers to be supplied with 6" (152.4 mm) high by full depth sill flashing formed from minimum 0.050" (1.27 mm) thick aluminum. Sill flashing to have welded side panels. Louvers and sill flashing to be installed in accordance with the manufacturer's recommended procedures to ensure complete water integrity performance of louver system. All louvers to be furnished with 5/8" (15.87 mm) flattened expanded mesh, aluminum bird screen with a .055" (1.4 mm) thick extruded aluminum frame.

STRUCTURAL DESIGN: Structural supports shall be designed and furnished by the louver manufacturer to carry a wind load of not less than _____psf. (kPa). (Note: If this paragraph is omitted or if the design wind load is not specified, the louvers will be manufactured in self supporting units up to a maximum of 4' (1219 mm) wide by 10' (3048 mm) high. Any additional structural supports required to adequately secure these units within the opening shall be the responsibility of others.)

FINISH: All louvers shall be finished with C/S Powder Coat, a coating to be 1.5 to 3 mil. thick full strength 100% resin Fluoropolymer coating. Finish to allow zero VOCs to be emitted into facility of application. Finish to adhere to a 4H Hardness rating. All finishing procedures shall be one continuous operation in the plant of the manufacturer. The coating shall meet or exceed all requirements of AAMA specification 2605 "Voluntary Specification for High Performance Organic Coatings on Architectural extrusions and Panels." The louver manufacturer shall supply an industry standard 20-year limited warranty against failure or excessive fading of the Fluoropolymer Powder Coat finish. This limited warranty shall begin on the date of material shipment.



Discharge Coefficient
Intake Cd = 0.29 (Class 3)
AMCA certifies the coefficient class only



Construction Specialties Inc. certifies that the louver model RS-9615 shown herein is approved to bear the AMCA Listing Label. The ratings shown are based on tests and procedures performed in accordance with AMCA Publications and comply with the requirements of the AMCA Listing Label Program. The AMCA Listing Label applies to High Velocity Wind Driven Rain Resistant Louvers. The AMCA Listing Label applies to Wind Borne Debris Impact Louvers.

PERFORMANCE DATA MODEL RS-9615

WIND DRIVEN RAIN PERFORMANCE:

The louver test was based on a 39.370'' (1.00 m) x 39.370'' (1.00 m) core area unit tested at a rainfall rate of 8'' per hour (203 mm/hr) and with a wind directed to the face of the louver at a velocity 50 mph (22.4 m/s). The test data shall show the water penetration effectiveness rating at each corresponding ventilation rate.

Core Ventilation Rate (m/s):	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.3	5.0
Core Ventilation Rate (ft/min):	0	98	197	295	394	492	591	689	787	854	977
Free Area Velocity (ft/min):	0	150	300	450	600	750	900	1050	1201	1302	1490
Rating Effectiveness:	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α
Effectiveness Ratio @ 50 & 8 (%)										100.0	99.7
Effectiveness Rating:	A = 1 to	0.99	B = 0.989	to 0.95	C = 0.949	to 0.80	D = 0.80 t	0 0			

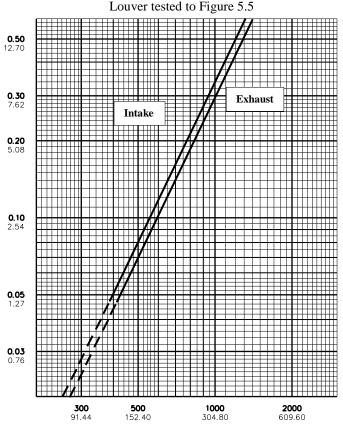
Free Area Table (Free Areas in sq. feet and sq. meters)
Width in Inches and Meters

	16	18	24	30	36	42	48	54	60	
	0.41	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	
16	0.68	0.79	1.13	1.47	1.80	2.14	2.48	2.82	3.16	
0.41	0.06	0.07	0.10	0.14	0.17	0.20	0.23	0.26	0.29	ER
18	0.80	0.93	1.33	1.72	2.12	2.52	2.92	3.31	3.71	WATER
0.46	0.07	0.09	0.12	0.16	0.20	0.23	0.27	0.31		Ь
24	1.15	1.34	1.92	2.50	3.07	3.65	4.22	4.80		
0.61	0.11	0.12	0.18	0.23	0.29	0.34	0.39	0.45	0.50	MILLIMETERS
30	1.51	1.76	2.51	3.27	4.02	4.78	5.53	6.29	7.04	₹
0.76	0.14	0.16	0.23	0.30	0.37	0.44	0.51	0.58		
36	1.87	2.18	3.11	4.04	4.97	5.91	6.84	7.77	8.71	AND
0.91	0.17	0.20	0.29	0.38	0.46	0.55	0.64	0.72		
42	2.22	2.59	3.70	4.81	5.93	7.04	8.15	9.26	10.37	NCHES
1.07	0.21	0.24	0.34	0.45	0.55	0.65	0.76	0.86	0.96	Z
48	2.58	3.01	4.30	5.59	6.88	8.17	9.46	10.75		Z ∩
1.22	0.24	0.28	0.40	0.52	0.64	0.76	0.88	1.00	1.12	DROP
54	2.94	3.42	4.89	6.36	7.83	9.30	10.76	12.23	13.70	띴
1.37	0.27	0.32	0.45	0.59	0.73	0.86	1.00	1.14	1.27	PRESSURE
60	3.29	3.84	5.49	7.13	8.78	10.43	12.07	13.72	15.36	RES
1.52	0.31	0.36	0.51	0.66	0.82	0.97	1.12	1.27	1.73	
66	3.65	4.26	6.08	7.91	9.73	11.56	13.38	15.21	17.03	STATIC
1.68	0.34	0.40	0.57	0.73	0.90	1.07	1.24	1.41		S
72	3.83	4.47	6.38	8.29	10.21	12.12	14.03	15.95	17.86	
1.83	0.36	0.41	0.59	0.77	0.95	1.13	1.30	1.48	1.66	
78	4.18	4.88	6.97	9.07	11.16	13.25	15.34	17.43	19.53	
1.98	0.39	0.45	0.65	0.84	1.04	1.23	1.43	1.62	1.81	
84	4.54	5.30	7.57	9.84	12.11	14.38	16.65	18.92	21.19	
2.13	0.42	0.49	0.70	0.91	1.13	1.34	1.55	1.76	1.97	
90	4.90	5.71	8.16	10.61	13.06	15.51	17.96	20.41	22.86	
2.29	0.46	0.53	0.76	0.99	1.21	1.44	1.67	1.90	2.12	
96	5.25	6.13	8.76	11.38	14.01	16.64	19.27	21.89	24.52	
2.44	0.49	0.57	0.81	1.06	1.30	1.55	1.79	2.03	2.28	
102	5.61	6.55	9.35	12.16	14.96	17.77	20.57	23.38	26.19	
2.59	0.52	0.61	0.87	1.13	1.39	1.65	1.91	2.17	2.43	
108	5.97	6.96	9.95	12.93	15.91	18.90	21.88	24.87	27.85	
2.74	0.55	0.65	0.92	1.20	1.48	1.76	2.03	2.31	2.59	
114	6.32	7.38	10.54	13.70	16.87	20.03	23.19	26.35	29.52	
2.90	0.59	0.69	0.98	1.27	1.57	1.86	2.15	2.45	2.74	
120	6.68	7.79	11.14	14.48	17.82	21.16	24.50	27.84	31.18	

Upper Numerals English Units/Lower Numerals Metric Units

2.28

For a 48" X 48" sized louver
Data corrected to standard air density



AIR VELOCITY IN FEET AND METERS PER MINUTE THROUGH FREE AREA

Construction Specialties, Inc. Manufacturing & Sales Location

www.c-sgroup.com

Cranford, New Jersey 49 Meeker Avenue 07016 Telephone: (800) 631-7379 Fax: (908) 272-2920

To download details and specifications visit www.c-sgroup.com.

For assistance with overseas requirements, call C/S International (908) 236-0800

0.62

3.05

0.72

1.03

Height in Inches and Meters







1" (25mm) Insulating VE1-2M

PERFORMANCE DATA

Transmittance
Visible Light 70%
Solar Energy 33%
UV 10%

Reflectance

Visible Light-Exterior 11% Visible Light-Interior 12% Solar Energy 31%

NFRC U-Value

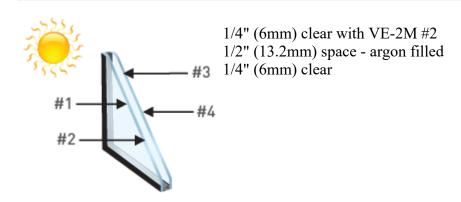
Winter 0.25 Btu/(hr x sqft x °F)Summer 0.21 Btu/(hr x sqft x °F)

Shading Coefficient (SC) 0.43

Relative Heat Gain 89 Btu/(hr x sqft)

Solar Heat Gain Coefficient (SHGC) 0.37 LSG 1.89

Makeup



Viracon's solar and optical performance data is center of glass data based on the National Fenestration Rating Council measurement standards, calculated using Lawrence Berkeley National Laboratory's (LBNL) WINDOW 7 software.

1 Book Tower Glazing Performance Requirements

1.1 Performance categories and metrics:

1. Generic Exterior Glass Center Glass U-Value = 0.25 SHGC = 0.4

Assembly U-value not to exceed 0.41

Current proposed basis of design: VE1-2M Low and mid iron glass options are being considered, laminated exterior lite ¼ - ¼, ODA to coordinate with Viracon.

https://www.viracon.com/search-by-appearance?construction=1&silk=0&argon=0&substrate=1&coating=21

1.2 Allocation of performance types:

Location	Level 14 Skylight Type	Level 14 Skylight Perimeter	Level 4 Skylight Type	Generic Exterior Type
Typical L1 Storefront				X
Fixed L14 Lite				X
L1 and L14 Doors				X
Nanawall				X
Pedestrian Bridge				X

50% CD - February 14, 2020

Description: Exterior Façade - L3 Windows

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-30K-10x60-CL-SAMN-{FINISH}-UCTL-UL + LCBX

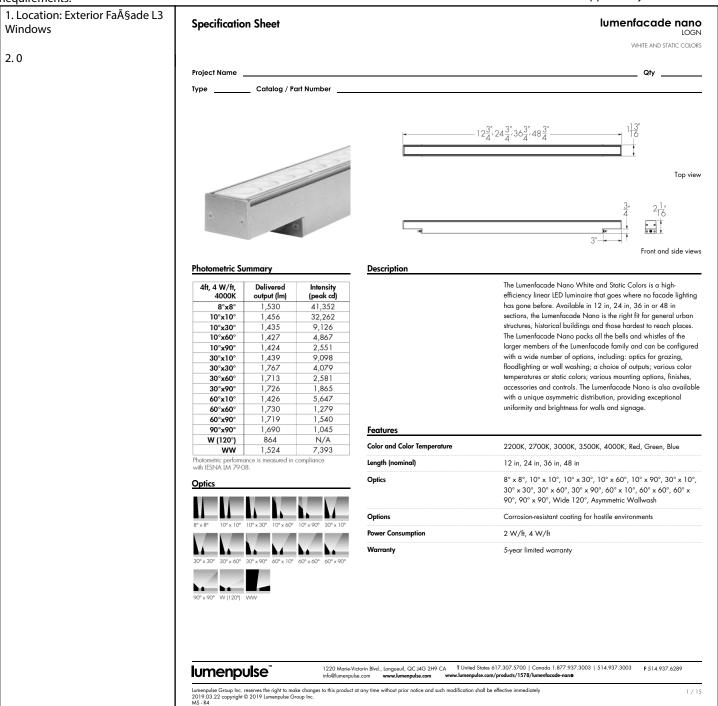
BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-1

Sheet Number 1 of 8

Requirements: Buro Happold Project #0042413



50% CD - February 14, 2020

Description: Exterior Façade - L3 Windows

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

LOGN-4W-48V-{LENGTH}-30K-10x60-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

Sheet Number 2 of 8

Specification Sheet		lumenfacade nanc
Specification street		LOGN WHITE AND STATIC COLOR
Colors and Color Temperatures	Performance	
	Delivered Output	884 lm (2 W/ft, 48 in fixture, 4000K, 30° x 30°, UCTL), 1,767 lm (4 W/ft, 48 in fixture, 4000K, 30° x 30°, UCTL)
2200K 2700K 3000K 3500K 4000K	Delivered Intensity	20,676 cd at nadir (2 W/ft, 48 in fixture, 4000K, 8° x 8°, UCTL) 41,352 cd at nadir (4 W/ft, 48 in fixture, 4000K, 8° x 8°, UCTL)
Red Green Blue	Illuminance at Distance	Minimum 1 fc at 144 ft (2 W/ft, 48 in fixture, 4000K, 8° x 8° , UCTL), Minimum 1 fc at 203 ft (4 W/ft, 48 in fixture, 4000K, 8° : 8° , UCTL)
ON/OFF UCTL	Color Consistency	3 SDCM (2 SDCM for 8° x 8°, 10° x 10°, 10° x 30°, 10° x 60°, 10° x 90°, 30° x 10°, 60° x 10°, W and WW optics)
Patings	Color Rendering	CRI 80+
Ratings	Lumen Maintenance	L70 >90,000 hrs
IP66 IK08	Physical	
Certifications	Housing Material	Low copper content extruded aluminum
c. Un us C € ROHS	Lens Material	Clear tempered glass
RÖHS	Hardware Material	Stainless steel
	End Cap Material	Machined aluminum
	Gasket Material	Silicone
	Surface Finish	Electrostatically applied polyester powder coat
	Weight	1.4 lbs (12 in), 2.9 lbs (24 in), 4.4 lbs (36 in), 6 lbs (48 in)
	Electrical and control	
	Voltage	48 VDC
	Resolution (DMX/RDM)	Per fixture, 8-bit or 16-bit
	Control	On/Off control, Universal control (compatible with 0-10V, DALI c DMX/RDM systems)
	Environmental	
	Storage Temperature	-40 °F to 185 °F (device must reach start-up temperature value before operating)
	Start-up Temperature	-13 °F to 122 °F
	Operating Temperature	-40 °F to 122 °F
	Ingress Protection Rating	IP66
	Impact Resistance Rating	IK08 (IK09 for 48 in fixtures)

50% CD - February 14, 2020

Description: Exterior Façade - L3 Windows

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Requirements:

Catalog Reference: LOGN-4W-48V-{LENGTH}-30K-10x60-CL-SAMN-{FINISH}-UCTL-UL + LCBX

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-1

Sheet Number 3 of 8

Buro Happold Project #0042413

ecification Sheet		lumenfacade nan LOG WHITE AND STATIC COLO
	Accessories (order separately)	
	Cables	Lumenfacade Nano Jumper Cable, Trunk Power Cable, Trunk Da Cable
	Control Boxes	Low-Voltage Control Box, Low-Voltage Splitter Box
	Optical Accessories	Lumenfacade Nano Radial Louver, Lumenfacade Nano Visor
	Control Systems	Lumentone™ 2, Pharos® kit
	Diagnostic and Addressing Tools	LumenID
menpulse [®]	1220 Marie-Victorin Blvd., Longueuil, QC J4G 2H9 CA T United St info@lumenpulse.com www.lumenpulse.com www.lumenpulse.com	tates 617.307.5700 Canada 1.877.937.3003 514.937.3003 F 514.937.6289

50% CD - February 14, 2020

Description: Exterior Façade - L3 Windows

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-30K-10x60-CL-SAMN-{FINISH}-UCTL-UL + LCBX

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-1

Sheet Number 4 of 8

Buro Happold Project #0042413 Requirements: **Specification Sheet** lumenfacade nano WHITE AND STATIC COLORS Optical option installation details HFR - Half-frosted lens WW - Asymmetric wallwash Recommended setback from wall is 1/10 of the wall height. Example: 2 ft setback for a 20 ft wall. Always position frosted side toward the wall. • Applicable for 8° x 8°, 10° x 10° or asymmetric wallwash optics only One mounting bracket provided for 12 in fixtures. Two mounting brackets provided for 24 in, 36 in and 48 in fixtures. See installation instructions for details. SAMN - Slim Adjustable Mounting Nano UMPN - Fixed Mounting No UMPN - Mounting hole patte **lumenpulse** Lumenpulse Group Inc. reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately 2019.03.22 copyright © 2019 Lumenpulse Group Inc.
MS - R4

50% CD - February 14, 2020

Description: Exterior Façade - L3 Windows

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-30K-10x60-CL-SAMN-{FINISH}-UCTL-UL + LCBX

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-1

Sheet Number 5 of 8

Buro Happold Project #0042413 Requirements: **Specification Sheet** lumenfacade nano WHITE AND STATIC COLORS UCTL - Universal control Single unit - LCBX 60W A - Dimmer/controller (order separately from Lumenpulse, or by others) B - Power input (120-277V, wiring by others) C - Data input (wiring by others) D - LCBX (60W) E - Master jumper cable (LOGNJC) F - Lumenfacade Nano G - Terminator cap Continuous run - LCBX 60W or 120W A - Dimmer/controller (order separately from Lumenpulse, or by others) B - Power input (120-277V, wiring by others) C - Data input (wiring by others) D - LCBX (60W or 120W) E - Master jumper cable (LOGNJC) F - Lumenfacade Nano **G** - Jumper cable (LOGNJC) H - Terminator cap Continuous run - LCBX 200W A - Dimmer/controller (order separately from Lumenpulse, or by others) B - Power input (120-277V, wiring by others) C - Data input (wiring by others) D - LCBX (200W) E - Master jumper cable (LOGNJC) F - Lumenfacade Nano G - Jumper cable (LOGNJC) H - Terminator cap ontinuous run - Daisy chain A - Dimmer/controller (order separately from Lumenpulse, or by others) B - Power input (120-277V, wiring by others) C - Data input (wiring by others) **D** - LCBX (60W or 120W) E - Data output to next LCBX (wiring by others) F - Master jumper cable (LOGNJC) G - Lumenfacade Nano H - Jumper cable (LOGNJC) I - Terminator cap T United States 617.307.5700 | Canada 1.877.937.3003 | 514.937.3003 **lumenpulse** Lumenpulse Group Inc. reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately 2019.03.22 copyright © 2019 Lumenpulse Group Inc. MS - 8.4

50% CD - February 14, 2020

Description: Exterior Façade - L3 Windows

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

LOGN-4W-48V-{LENGTH}-30K-10x60-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

Sheet Number 6 of 8

Buro Happold Project #0042413 Requirements:

Specification Sheet

lumenfacade nano WHITE AND STATIC COLORS

Accessories (order separately)

Control Boxes

LCBX-Low-Voltage Control Box





Low-voltage control and power box. One power and data output to fixture, or fixture run. Refer to LCBX specification sheet for details.

LSBX-Low-Voltage Splitter Box



Low-voltage control and power splitter box. One power and data output to fixture run. Refer to LSBX specification sheet for details.

Control Systems

ITN2-Lumentone™ 2



Lumentone 2 is a simple pre-programmed DMX 512 controller with a push button rotary dial and live feedback

PHAROS-Pharos® kit







The Pharos kit, available for 1 or 2 DMX universes, allows for complete control of large lighting installations. 2 DMX universes kit shown.

Diagnostic and Addressing Tools

LID-LumenID



LumenID is a diagnostic and addressing DMX/RDM tool. It must be specified on all DMX applications. Refer to LID specification sheet for details.

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50% CD - February 14, 2020

Description: Exterior Façade - L3 Windows

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-30K-10x60-CL-SAMN-{FINISH}-UCTL-UL + LCBX

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-1

Sheet Number 7 of 8

ments:						Buro	Happold P	roject #00424
	Specification S	Sheet					lume	nfacade nan
								WHITE AND STATIC COLO
	How to order							
	1	2	3	4	5	6	7	8
						•		
	9	10	11	12			I	I
			•					
	1 . Housing				2 . Wattage			
	LOGN	Lumenfaco	ade™ Nano		2W	2 W/		
					4W	4 W/	TH .	
					^[1] Not available for sta	atic red, green or blue col	or options.	
	3 . Voltage				4 . Length			
	48V	48 VDC			12	12.3	/4 in (1.4 lbs)	
	101				24		/4 in (2.9 lbs)	
					36		/4 in (4.4 lbs)	
					48	48 3,	/4 in (6 lbs)	
	5 . Color and Col	or Temperature (1)		6 . Optics				
	22K	2200K			8x8	8° x 8	3°	
	27К	2700K			10×10	10° x	10°	
	30К	3000K			10x30	10° x	30°	
	35К	3500K			10×60	10° x		
	40K	4000K			10x90	10° x		
	RD	Red (2)			30x10	30° x		
	GR BL	Green (2) Blue (2)			30x30	30° x		
					30x60 30x90	30° x		
		ailability of static Royal Blue, 6	5500K and 90+ CRI.		60x10	60° x		
	(2) Static colors made to	order 8-10 weeks.			60×60	60° x		
					60×90	60° x	90°	
					90×90	90° x	90	
					W	Wide		
					ww	Asym	metric Wallwash	
	7 . Lens				8 . Mounting Op	tions (1)		
	CL	Clear lens	(1)		SAMN	Slim A	Adjustable Mountin	g Nano
	FR	Frosted ler			UMPN		Mounting Nano	
	HFR	Half-froste	d lens ⁽³⁾		UMASN		rsal Adjustable Ma	•
	⁽¹⁾ Not available for 8x8	, 10x10, W or WW optics.			WAMN2		table Wall Mountin	•
	(2) Not available for WV	V optic.			WAMN6			n Mounting Nano 6 in
	⁽³⁾ Available for 8x8, 10	x10 or WW optics only.			WAMN12 WAMN18			n Mounting Nano 12 i n Mounting Nano 18 i
						•		ets provided for 24 in, 36 in
		ти	1220 Marie-Victorin Blvd.,	ongueuil, QC J4G 2H9	CA T United States 617.307.5	700 Canada 1.877.93	7.3003 514.937.300	3 F 514.937.6289
	lumenpuls) C		vww.lumenpulse.com	www.lumenpulse.com/products	/1578/lumenfacade-nand		
	Lumannulea Graup Inc. racon	res the right to make changes t	to this product at any time u	aka	uch modification shall be affective in	mmodiatoly		14 /

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Description: Exterior Façade - L3 Windows

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

LOGN-4W-48V-{LENGTH}-30K-10x60-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

Sheet Number 8 of 8

Specification S	Sheet		lumenfacade na
			WHITE AND STATIC CC
9 . Finish		10 . Control (1)	
BK BRZ Si	Black Sandtex® Bronze Sandtex® Silver Sandtex®	NO UCTL	On/Off control Universal control (compatible with 0-10V, DA or DMX/RDM systems)
wh cc	Smooth white Custom color and finish (please specify RAL	(1) A Low-Voltage Control Bos specified.	x (LCBX) or Low-Voltage Splitter Box (LSBX) and LumenID (LID) must be
	color) (1)	11 . Options	
finish. Please consult fac	vide selection of RAL CLASSIC [K7] colors with a smooth texture and high-gloss tory for a list of available K7 colors, other RAL textures and glosses, or to match nal color matching results may vary.	CRC	Corrosion-resistant coating for hostile environments ^[1]
		⁽¹⁾ Use only when exposed to outdoor exposure.	salt spray and harsh chemicals. This option is not required for normal
12 . Certification			
UL	UL compliant		
CE	CE compliant		
ı			
1			
I			
1			
I			
	™ 1200 Maria Vistoria Bhell Jacquevill CC MC 0M0 C	-A. I Unilled Strites 617 307 5700	Conodo 1 877 937 3003 514 937 3003 E 514 937 4990
lumenpuls	Se [™] 1220 Marie-Victorin Blvd., Longueuil, QC J4G 2HP C info@lumenpulse.com www.lumenpulse.com	_A T United States 617.307.5700	Canada 1.877 937,3003 514.937,3003 F.514.937,6289

50% CD - February 14, 2020

Description: Exterior Façade - L4 Windows/Shield/Cornice

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-30K-10x90-CL-SAMN-{FINISH}-UCTL-UL + LCBX

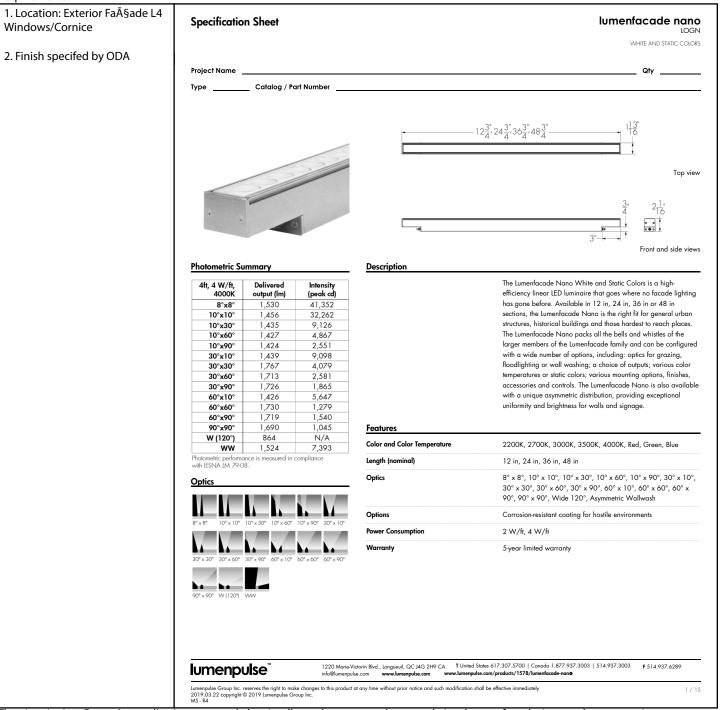
BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-2

Sheet Number 1 of 8

Requirements: Buro Happold Project #0042413



50% CD - February 14, 2020

Description: Exterior Façade - L4 Windows/Shield/Cornice

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

LOGN-4W-48V-{LENGTH}-30K-10x90-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

Sheet Number 2 of 8

Specification Sheet		lumenfacade nanc
		WHITE AND STATIC COLOR
Colors and Color Temperatures	Performance	
	Delivered Output	884 lm (2 W/ft, 48 in fixture, 4000K, 30° x 30°, UCTL), 1,767 lm (4 W/ft, 48 in fixture, 4000K, 30° x 30°, UCTL)
2200K 2700K 3000K 3500K 4000K	Delivered Intensity	20,676 cd at nadir (2 W/ft, 48 in fixture, 4000K, 8° x 8°, UCTL) 41,352 cd at nadir (4 W/ft, 48 in fixture, 4000K, 8° x 8°, UCTL)
Red Green Blue	Illuminance at Distance	Minimum 1 fc at 144 ft [2 W/ft, 48 in fixture, 4000K, $8^{\circ} \times 8^{\circ}$, UCTL], Minimum 1 fc at 203 ft [4 W/ft, 48 in fixture, 4000K, $8^{\circ} \times 8^{\circ}$, UCTL]
Controls ON/OFF UCTL	Color Consistency	3 SDCM (2 SDCM for 8° x 8°, 10° x 10°, 10° x 30°, 10° x 60°, 10° x 90°, 30° x 10°, 60° x 10°, W and WW optics)
Parlings	Color Rendering	CRI 80+
Ratings IP66 IK08	Lumen Maintenance	L70 >90,000 hrs
	Physical	
Certifications	Housing Material	Low copper content extruded aluminum
c∰us C € ROHS	Lens Material	Clear tempered glass
RoHS	Hardware Material	Stainless steel
	End Cap Material	Machined aluminum
	Gasket Material	Silicone
	Surface Finish	Electrostatically applied polyester powder coat
	Weight	1.4 lbs (12 in), 2.9 lbs (24 in), 4.4 lbs (36 in), 6 lbs (48 in)
	Electrical and control	
	Voltage	48 VDC
	Resolution (DMX/RDM)	Per fixture, 8-bit or 16-bit
	Control	On/Off control, Universal control (compatible with 0-10V, DALI or DMX/RDM systems)
	Environmental	
	Storage Temperature	-40 °F to 185 °F (device must reach start-up temperature value before operating)
	Start-up Temperature	-13 °F to 122 °F
	Operating Temperature	-40 °F to 122 °F
	Ingress Protection Rating	IP66
	Impact Resistance Rating	IK08 (IK09 for 48 in fixtures)

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Description: Exterior Façade - L4 Windows/Shield/Cornice

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

LOGN-4W-48V-{LENGTH}-30K-10x90-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

Sheet Number 3 of 8

Buro Happold Project #0042413

Sheet		lumenfacade n
		WHITE AND STATIC
	Accessories (order separately)	
	Cables	Lumenfacade Nano Jumper Cable, Trunk Power Cable, Trun Cable
	Control Boxes	Low-Voltage Control Box, Low-Voltage Splitter Box
	Optical Accessories	Lumenfacade Nano Radial Louver, Lumenfacade Nano Visc
	Control Systems	Lumentone™ 2, Pharos® kit
	Diagnostic and Addressing Tools	LumenID
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Description: Exterior Façade - L4 Windows/Shield/Cornice

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-30K-10x90-CL-SAMN-{FINISH}-UCTL-UL + LCBX

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-2

Sheet Number 4 of 8

Buro Happold Project #0042413 Requirements: **Specification Sheet** lumenfacade nano WHITE AND STATIC COLORS Optical option installation details HFR - Half-frosted lens WW - Asymmetric wallwash Recommended setback from wall is 1/10 of the wall height. Example: 2 ft setback for a 20 ft wall. Always position frosted side toward the wall. • Applicable for 8° x 8°, 10° x 10° or asymmetric wallwash optics only One mounting bracket provided for 12 in fixtures. Two mounting brackets provided for 24 in, 36 in and 48 in fixtures. See installation instructions for details. SAMN - Slim Adjustable Mounting Nano UMPN - Fixed Mounting No UMPN - Mounting hole patte **lumenpulse** Lumenpulse Group Inc. reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately 2019.03.22 copyright © 2019 Lumenpulse Group Inc.
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Description: Exterior Façade - L4 Windows/Shield/Cornice

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-30K-10x90-CL-SAMN-{FINISH}-UCTL-UL + LCBX

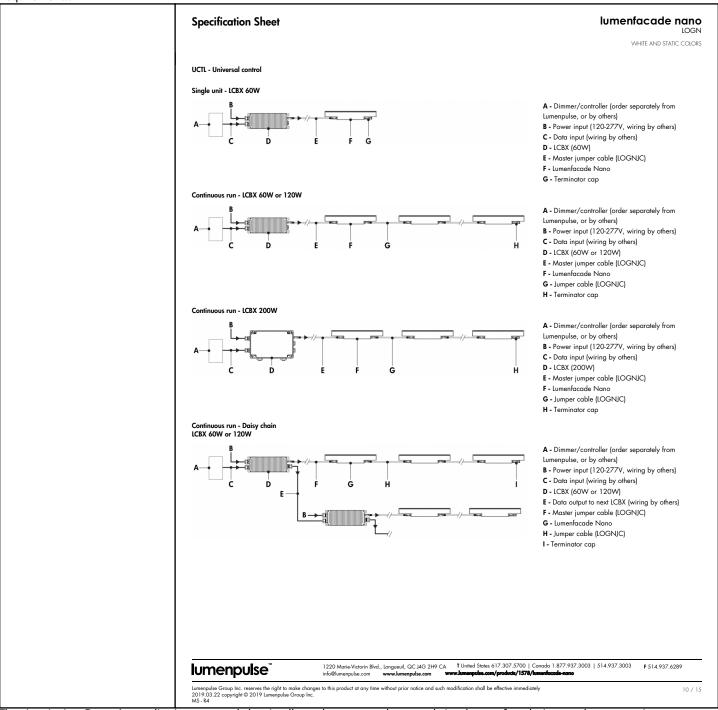
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Luminaire Designation

HE-2

Sheet Number 5 of 8

Requirements: Buro Happold Project #0042413



50% CD - February 14, 2020

Description: Exterior Façade - L4 Windows/Shield/Cornice

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

LOGN-4W-48V-{LENGTH}-30K-10x90-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

Sheet Number 6 of 8

Buro Happold Project #0042413 Requirements:

Specification Sheet

lumenfacade nano

WHITE AND STATIC COLORS

Accessories (order separately)

Control Boxes

LCBX-Low-Voltage Control Box





Low-voltage control and power box. One power and data output to fixture, or fixture run. Refer to LCBX specification sheet for details.

LSBX-Low-Voltage Splitter Box



Low-voltage control and power splitter box. One power and data output to fixture run. Refer to LSBX specification sheet for details.

Control Systems

ITN2-Lumentone™ 2



Lumentone 2 is a simple pre-programmed DMX 512 controller with a push button rotary dial and live feedback

PHAROS-Pharos® kit







The Pharos kit, available for 1 or 2 DMX universes, allows for complete control of large lighting installations. 2 DMX universes kit shown.

Diagnostic and Addressing Tools

LID-LumenID



LumenID is a diagnostic and addressing DMX/RDM tool. It must be specified on all DMX applications. Refer to LID specification sheet for details.

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Description: Exterior Façade - L4 Windows/Shield/Cornice

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-30K-10x90-CL-SAMN-{FINISH}-UCTL-UL + LCBX

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-2

Sheet Number 7 of 8

2	pecification S	Sheet				lumenfacade nanc
						WHITE AND STATIC COLOR
	How to order					
_	1	2	3	4	5	6 7 8
	9	10	11	12	L L	<u> </u>
	·					
1	. Housing				2 . Wattage	
	LOGN	Lumenfaca	de™ Nano		2W	2 W/ft (1)
					4W	4 W/fi
					(1) Not available for static	red, green or blue color options.
	. Voltage				4 . Length	
 						
	48V	48 VDC			12	12 3/4 in (1.4 lbs)
					24	24 3/4 in (2.9 lbs)
					36	36 3/4 in (4.4 lbs) 48 3/4 in (6 lbs)
					48	48 3/4 in (0 lbs)
5	. Color and Col	or Temperature (1)			6 . Optics	
	22K	2200K			8x8	8° × 8°
	27K	2700K			10x10	10° x 10°
	30K	3000K			10x30	10° x 30°
	35K	3500K			10x60	10° x 60°
	40K	4000K			10x90	10° x 90°
	RD	Red ⁽²⁾			30x10	30° x 10°
	GR	Green (2)			30x30	30° x 30°
	BL	Blue (2)			30x60	30° x 60°
	(1) C	ilability of static Royal Blue, 6.	500K 1 00 . CBI		30x90	30° x 90°
			SOUR and 90+ CRI.		60x10	60° x 10°
	(2) Static colors made to	order 8-10 weeks.			60x60	60° x 60°
					60x90	60° x 90°
					90x90	90° x 90
					w	Wide 120°
					ww	Asymmetric Wallwash
] 2	. Lens				8 . Mounting Option	ons (1)
-	CL	Clear lens	(1)		SAMN	Slim Adjustable Mounting Nano
	FR	Frosted len			UMPN	Fixed Mounting Nano
	HFR	Half-frosted			UMASN	Universal Adjustable Mounting Nano
					WAMN2	Adjustable Wall Mounting Nano 2 in
		, 10x10, W or WW optics.			WAMN6	Adjustable Extended Arm Mounting Nano 6 in
	(2) Not available for WV				WAMN12	Adjustable Extended Arm Mounting Nano 12 in
	(3) Available for 8x8, 10	x10 or WW optics only.			WAMN18	Adjustable Extended Arm Mounting Nano 18 in
					(1) One mounting bracket 48 in fixtures.	provided for 12 in fixtures. Two mounting brackets provided for 24 in, 36 in a
l i	umenpuls	se"	220 Marie-Victorin Blvd.,	ongueuil, QC J4G 2H9	CA T United States 617.307.570	10 Canada 1.877.937.3003 514.937.3003 F.514.937.6289
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Description: Exterior Façade - L4 Windows/Shield/Cornice

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-30K-10x90-CL-SAMN-{FINISH}-UCTL-UL + LCBX BUROHAPPOLD ENGINEERING

Luminaire Designation

Sheet Number 8 of 8

Buro Happold Project #0042413

Specification S	heet		lumenfacade no
			WHITE AND STATIC CO
9 . Finish		10 . Control (1)	
BK BRZ	Black Sandtex® Bronze Sandtex® Silver Sandtex®	NO UCTL	On/Off control Universal control (compatible with 0-10V, D, or DMX/RDM systems)
SI WH CC	Smooth white Custom color and finish (please specify RAL	(1) A Low-Voltage Control Bo specified.	x (LCBX) or Low-Voltage Splitter Box (LSBX) and LumenID (LID) must be
	color) ⁽¹⁾	11 . Options	
finish. Please consult facto	de selection of RAL CLASSIC (K7) colors with a smooth texture and high-gloss ny for a list of available K7 colors, other RAL textures and glosses, or to match al color matching results may vary.	CRC	Corrosion-resistant coating for hostile environments $\{1\}$
		(1) Use only when exposed to outdoor exposure.	o salt spray and harsh chemicals. This option is not required for normal
12 . Certification			
UL	UL compliant		
CE	CE compliant		
1			
1			
1			
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li ma a massa da	²⁴ 1220 Marie-Victorin Blvd., Lonouevil OC 14G 2H9 C	CA 1 United States 617-307-5700	Canada 1.877.937.3003 514.937.3003 F.514.937.6789
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50% CD - February 14, 2020

Description: Exterior Façade - L5 Façade Wash

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-30K-10x10-HF-SAMN-{FINISH}-UCTL-UL + LCBX

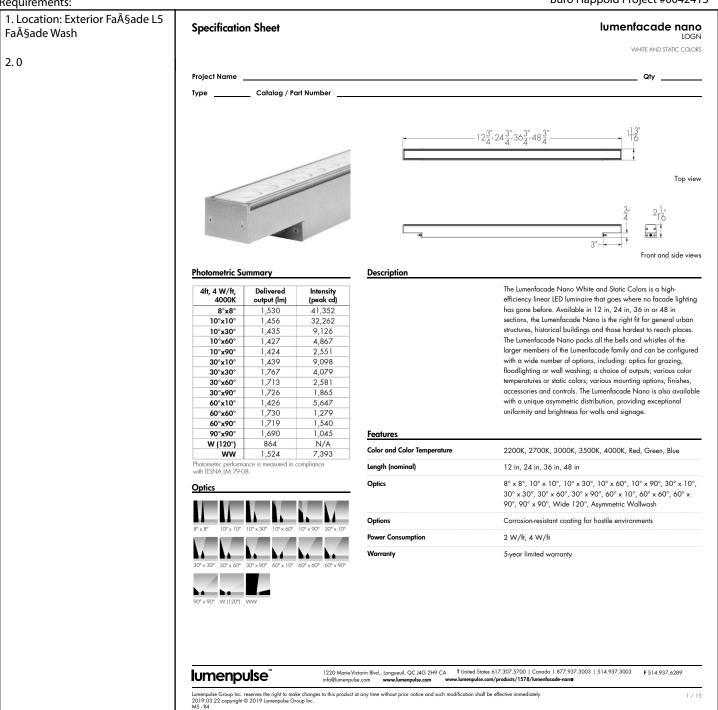
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Luminaire Designation

HE-3

Sheet Number 1 of 8

Requirements: Buro Happold Project #0042413



50% CD - February 14, 2020

Description: Exterior Façade - L5 Façade Wash

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

LOGN-4W-48V-{LENGTH}-30K-10x10-HF-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

Sheet Number 2 of 8

Specification Sheet		lumenfacade nand
Specification sheet		LOGN WHITE AND STATIC COLOR
Colors and Color Temperatures	Performance	
	Delivered Output	884 lm (2 W/ft, 48 in fixture, 4000K, 30° x 30°, UCTL), 1,767 lm (4 W/ft, 48 in fixture, 4000K, 30° x 30°, UCTL)
2200K 2700K 3000K 3500K 4000K	Delivered Intensity	20,676 cd at nadir (2 W/ft, 48 in fixture, 4000K, 8° x 8°, UCTL) 41,352 cd at nadir (4 W/ft, 48 in fixture, 4000K, 8° x 8°, UCTL)
Red Green Blue Controls	Illuminance at Distance	Minimum 1 fc at 144 ft (2 W/ft, 48 in fixture, 4000K, $8^{\circ} \times 8^{\circ}$, UCTL), Minimum 1 fc at 203 ft (4 W/ft, 48 in fixture, 4000K, $8^{\circ} \times 8^{\circ}$, UCTL)
ON/OFF UCTL	Color Consistency	3 SDCM (2 SDCM for 8° x 8°, 10° x 10°, 10° x 30°, 10° x 60°, 10° x 90°, 30° x 10°, 60° x 10°, W and WW optics)
Parlings	Color Rendering	CRI 80+
Ratings	Lumen Maintenance	L70 >90,000 hrs
IP66 IK08	Physical	
Certifications	Housing Material	Low copper content extruded aluminum
c. (Ų_) us C. € ROHS	Lens Material	Clear tempered glass
RÕHS	Hardware Material	Stainless steel
	End Cap Material	Machined aluminum
	Gasket Material	Silicone
	Surface Finish	Electrostatically applied polyester powder coat
	Weight	1.4 lbs (12 in), 2.9 lbs (24 in), 4.4 lbs (36 in), 6 lbs (48 in)
	Electrical and control	
	Voltage	48 VDC
	Resolution (DMX/RDM)	Per fixture, 8-bit or 16-bit
	Control	On/Off control, Universal control (compatible with 0-10V, DALI c DMX/RDM systems)
	Environmental	
	Storage Temperature	-40 °F to 185 °F (device must reach start-up temperature value before operating)
	Start-up Temperature	-13 °F to 122 °F
	Operating Temperature	-40 °F to 122 °F
	Ingress Protection Rating	IP66
	Impact Resistance Rating	IK08 (IK09 for 48 in fixtures)

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Description: Exterior Façade - L5 Façade Wash

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

LOGN-4W-48V-{LENGTH}-30K-10x10-HF-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

Sheet Number 3 of 8

Bure	Happold Project #0042413
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Specification Sheet	lumenfacade r
Specification sheet	
	WHITE AND STATIC
	Accessories (order separately)
	Cables Lumenfacade Nano Jumper Cable, Trunk Power Cable, Trunk Cable Cable
	Control Boxes Low-Voltage Control Box, Low-Voltage Splitter Box
	Optical Accessories Lumenfacade Nano Radial Louver, Lumenfacade Nano Visc
	Control Systems Lumentone [™] 2, Pharos® kit
	Diagnostic and Addressing Tools LumenID
1	
lumenpulse"	1220 Marie-Victorin Blvd., Longueuil, QC J4G 2H9 CA T United States 617.307.5700 Canada 1.877.937.3003 514.937.3003 F 514.937.628 info@lumenpulse.com www.lumenpulse.com www.lumenpulse.com www.lumenpulse.com/products/1578/lumenfocade-name

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Description: Exterior Façade - L5 Façade Wash

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-30K-10x10-HF-SAMN-{FINISH}-UCTL-UL + LCBX

BUROHAPPOLD ENGINEERING

Luminaire Designation

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Sheet Number 4 of 8

Buro Happold Project #0042413 Requirements: **Specification Sheet** lumenfacade nano WHITE AND STATIC COLORS Optical option installation details HFR - Half-frosted lens WW - Asymmetric wallwash Recommended setback from wall is 1/10 of the wall height. Example: 2 ft setback for a 20 ft wall. Always position frosted side toward the wall. • Applicable for 8° x 8°, 10° x 10° or asymmetric wallwash optics only One mounting bracket provided for 12 in fixtures. Two mounting brackets provided for 24 in, 36 in and 48 in fixtures. See installation instructions for details. SAMN - Slim Adjustable Mounting Nano UMPN - Fixed Mounting No UMPN - Mounting hole patte **lumenpulse** Lumenpulse Group Inc. reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately 2019.03.22 copyright © 2019 Lumenpulse Group Inc. MS - R4

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Description: Exterior Façade - L5 Façade Wash

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-30K-10x10-HF-SAMN-{FINISH}-UCTL-UL + LCBX

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Luminaire Designation

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Sheet Number 5 of 8

Buro Happold Project #0042413 Requirements: **Specification Sheet** lumenfacade nano WHITE AND STATIC COLORS UCTL - Universal control Single unit - LCBX 60W A - Dimmer/controller (order separately from Lumenpulse, or by others) B - Power input (120-277V, wiring by others) C - Data input (wiring by others) D - LCBX (60W) E - Master jumper cable (LOGNJC) F - Lumenfacade Nano G - Terminator cap Continuous run - LCBX 60W or 120W A - Dimmer/controller (order separately from Lumenpulse, or by others) B - Power input (120-277V, wiring by others) C - Data input (wiring by others) D - LCBX (60W or 120W) E - Master jumper cable (LOGNJC) F - Lumenfacade Nano G - Jumper cable (LOGNJC) H - Terminator cap Continuous run - LCBX 200W A - Dimmer/controller (order separately from Lumenpulse, or by others) B - Power input (120-277V, wiring by others) C - Data input (wiring by others) D - LCBX (200W) E - Master jumper cable (LOGNJC) F - Lumenfacade Nano G - Jumper cable (LOGNJC) H - Terminator cap ontinuous run - Daisv chain A - Dimmer/controller (order separately from Lumenpulse, or by others) B - Power input (120-277V, wiring by others) C - Data input (wiring by others) **D** - LCBX (60W or 120W) E - Data output to next LCBX (wiring by others) F - Master jumper cable (LOGNJC) G - Lumenfacade Nano H - Jumper cable (LOGNJC) I - Terminator cap

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Description: Exterior Façade - L5 Façade Wash

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

LOGN-4W-48V-{LENGTH}-30K-10x10-HF-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

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Luminaire Designation

Sheet Number 6 of 8

Buro Happold Project #0042413 Requirements:

Specification Sheet

lumenfacade nano

WHITE AND STATIC COLORS

Accessories (order separately)

Control Boxes

LCBX-Low-Voltage Control Box





Low-voltage control and power box. One power and data output to fixture, or fixture run. Refer to LCBX specification sheet for details.

LSBX-Low-Voltage Splitter Box



Low-voltage control and power splitter box. One power and data output to fixture run. Refer to LSBX specification sheet for details.

Control Systems

ITN2-Lumentone™ 2



Lumentone 2 is a simple pre-programmed DMX 512 controller with a push button rotary dial and live feedback

PHAROS-Pharos® kit







The Pharos kit, available for 1 or 2 DMX universes, allows for complete control of large lighting installations. 2 DMX universes kit shown.

Diagnostic and Addressing Tools

LID-LumenID



LumenID is a diagnostic and addressing DMX/RDM tool. It must be specified on all DMX applications. Refer to LID specification sheet for details.

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Description: Exterior Façade - L5 Façade Wash

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-30K-10x10-HF-SAMN-{FINISH}-UCTL-UL + LCBX

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Luminaire Designation

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Sheet Number 7 of 8

Requirements:						Buro	Happold Pro	ject #0042413	
	Specification	Sheet					lumenf	acade nano	
							W	HITE AND STATIC COLORS	
	How to order								
	1	2	3	4	5	6	7	8	
	9	10	11	12	1		I.		
	<u> </u>	l l							
	1 11				2 W				
	1 . Housing				2 . Wattage		- 0		
	LOGN	Lumenfaca	de™ Nano		2W	2 W/			
					4W	4 W/			
					[1] Not available for static red, green or blue color options.				
	3 . Voltage				4 . Length				
	48V	48 VDC			12	12 3/	'4 in (1.4 lbs)		
					24		'4 in (2.9 lbs)		
					36		4 in (4.4 lbs)		
					48	40 3/	'4 in (6 lbs)		
	5 . Color and Col	or Temperature (1)			6 . Optics				
	22K	2200K			8x8	8° x 8			
	27K	2700K			10x10	10° x			
	30K	3000K 3500K			10x30	10° x 10° x			
	35K 40K	4000K			10x60 10x90	10° x			
	RD	Red (2)			30x10	30° x			
	GR	Green (2)			30x30	30° x	30°		
	BL	Blue (2)			30x60	30° x			
	⁽¹⁾ Consult factory for a	vailability of static Royal Blue, 6	500K and 90+ CRI.		30x90	30° x			
	(2) Static colors made to	order 8-10 weeks.			60x10	60° x 60° x			
					60x60 60x90	60° x			
					90x90	90° x			
					w	Wide	120°		
					ww	Asymi	metric Wallwash		
	7 . Lens				8 . Mounting Op	tions (1)			
	CL	Clear lens	(1)		SAMN	Slim A	Adjustable Mounting N	lano	
	FR	Frosted len	s (2)		UMPN	Fixed	Mounting Nano		
	HFR	Half-frosted	d lens ⁽³⁾		UMASN		rsal Adjustable Mount	-	
	⁽¹⁾ Not available for 8x	8, 10x10, W or WW optics.			WAMN2		table Wall Mounting I table Extended Arm N		
	(2) Not available for W	W optic.			WAMN6 WAMN12		table Extended Arm N		
	(3) Available for 8x8, 1	0x10 or WW optics only.			WAMN18		table Extended Arm N	-	
					⁽¹⁾ One mounting brack 48 in fixtures.	set provided for 12 in fixtu	ires. Two mounting brackets p	provided for 24 in, 36 in and	
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	_	ves the right to make changes to			ch modification shall be effective in	nmediately		14 / 15	

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Description: Exterior Façade - L5 Façade Wash

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

LOGN-4W-48V-{LENGTH}-30K-10x10-HF-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

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Luminaire Designation

Sheet Number 8 of 8

equirements:	Buro Happold Project #0042413
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Specification	Sheet		lumenfacade nar
			WHITE AND STATIC COL
9 . Finish		10 . Control (1)	
вк	Black Sandtex®	NO	On/Off control
BRZ	Bronze Sandtex®	UCTL	Universal control (compatible with 0-10V, DAL
SI	Silver Sandtex®		or DMX/RDM systems)
WH	Smooth white	⁽¹⁾ A Low-Voltage Control Box	(LCBX) or Low-Voltage Splitter Box (LSBX) and LumenID (LID) must be
сс	Custom color and finish (please specify RAL	specified.	
	color) (1)	11 . Options	
finish. Please consult fa	wide selection of RAL CLASSIC (K7) colors with a smooth texture and high-gloss ctory for a list of available K7 colors, other RAL textures and glosses, or to match inal color matching results may vary.	CRC	Corrosion-resistant coating for hostile environments [1]
dienide coor chars. I	inal color indicting results indy vary.	⁽¹⁾ Use only when exposed to outdoor exposure.	salt spray and harsh chemicals. This option is not required for normal
12 . Certification		•	
UL	UL compliant		
CE	CE compliant		
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Description: Exterior Façade - L13 Cornice Linear

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-30K-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX

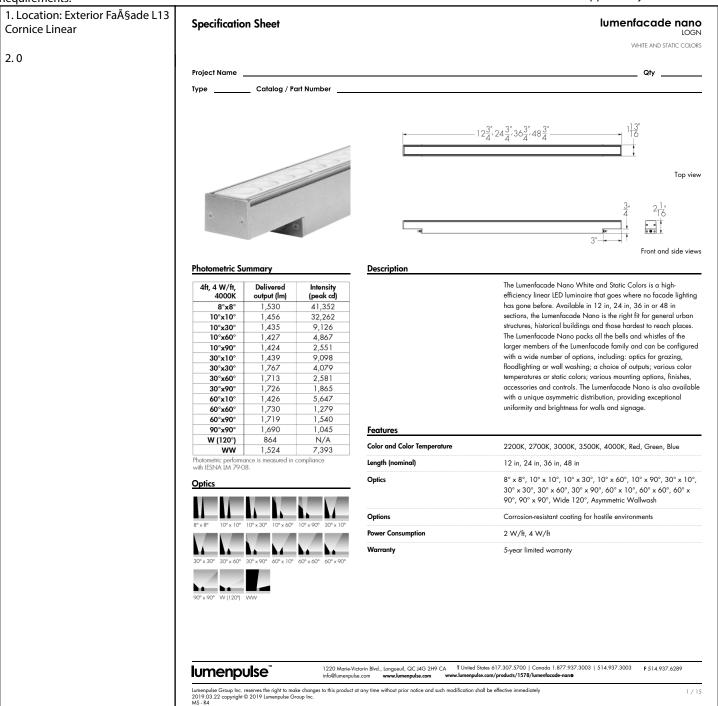
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Luminaire Designation

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Sheet Number 1 of 8

Requirements: Buro Happold Project #0042413



50% CD - February 14, 2020

Description: Exterior Façade - L13 Cornice Linear

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Requirements:

Catalog Reference: LOGN-4W-48V-{LENGTH}-30K-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX

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Luminaire Designation

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Sheet Number 2 of 8

Buro Happold Project #0042413

Specification Sheet		lumenfacade nano LOGN
		WHITE AND STATIC COLORS
Colors and Color Temperatures	Performance	
	Delivered Output	884 lm (2 W/ft, 48 in fixture, 4000K, 30° x 30°, UCTL), 1,767 lm (4 W/ft, 48 in fixture, 4000K, 30° x 30°, UCTL)
2200K 2700K 3000K 3500K 4000K	Delivered Intensity	20,676 cd at nadir (2 W/ft, 48 in fixture, 4000K, 8° x 8°, UCTL), 41,352 cd at nadir (4 W/ft, 48 in fixture, 4000K, 8° x 8°, UCTL)
Red Green Blue	Illuminance at Distance	Minimum 1 fc at 144 ft (2 W/ft, 48 in fixture, 4000K, $8^{\circ} \times 8^{\circ}$, UCTL), Minimum 1 fc at 203 ft (4 W/ft, 48 in fixture, 4000K, $8^{\circ} \times 8^{\circ}$, UCTL)
Controls ON/OFF UCTL	Color Consistency	3 SDCM (2 SDCM for 8° x 8°, 10° x 10°, 10° x 30°, 10° x 60°, 10° x 90°, 30° x 10°, 60° x 10°, W and WW optics)
Ratings	Color Rendering	CRI 80+
IP66 IK08	Lumen Maintenance	L70 >90,000 hrs
	Physical	
Certifications	Housing Material	Low copper content extruded aluminum
cŲLus C€ _{ROHS}	Lens Material	Clear tempered glass
HOFIS	Hardware Material	Stainless steel
	End Cap Material	Machined aluminum
	Gasket Material	Silicone
	Surface Finish	Electrostatically applied polyester powder coat
	Weight	1.4 lbs (12 in), 2.9 lbs (24 in), 4.4 lbs (36 in), 6 lbs (48 in)
	Electrical and control	
	Voltage	48 VDC
	Resolution (DMX/RDM)	Per fixture, 8-bit or 16-bit
	Control	On/Off control, Universal control (compatible with 0-10V, DALI or DMX/RDM systems)
	Environmental	
	Storage Temperature	-40 °F to 185 °F (device must reach start-up temperature value before operating)
	Start-up Temperature	-13 °F to 122 °F
	Operating Temperature	-40 °F to 122 °F
	Ingress Protection Rating	IP66
	Impact Resistance Rating	IK08 (IK09 for 48 in fixtures)

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Description: Exterior Façade - L13 Cornice Linear

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-30K-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX

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Luminaire Designation

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Sheet Number 3 of 8

Requirements:			Buro Happold Project #0042413
	Specification Sheet		lumenfacade nano
			WHITE AND STATIC COLORS
		Accessories (order separately)	
		Cables	Lumenfacade Nano Jumper Cable, Trunk Power Cable, Trunk Data Cable
		Control Boxes	Low-Voltage Control Box, Low-Voltage Splitter Box
		Optical Accessories	Lumenfacade Nano Radial Louver, Lumenfacade Nano Visor
		Control Systems	Lumentone™ 2, Pharos® kit
		Diagnostic and Addressing Tools	LumenID

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Description: Exterior Façade - L13 Cornice Linear

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-30K-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX

BUROHAPPOLD ENGINEERING

Luminaire Designation

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Sheet Number 4 of 8

Buro Happold Project #0042413 Requirements: **Specification Sheet** lumenfacade nano WHITE AND STATIC COLORS Optical option installation details HFR - Half-frosted lens WW - Asymmetric wallwash Recommended setback from wall is 1/10 of the wall height. Example: 2 ft setback for a 20 ft wall. Always position frosted side toward the wall. • Applicable for 8° x 8°, 10° x 10° or asymmetric wallwash optics only One mounting bracket provided for 12 in fixtures. Two mounting brackets provided for 24 in, 36 in and 48 in fixtures. See installation instructions for details. SAMN - Slim Adjustable Mounting Nano UMPN - Fixed Mounting No UMPN - Mounting hole patte **lumenpulse** Lumenpulse Group Inc. reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately 2019.03.22 copyright © 2019 Lumenpulse Group Inc. MS - R4

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Description: Exterior Façade - L13 Cornice Linear

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-30K-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX

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Luminaire Designation

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Sheet Number 5 of 8

Buro Happold Project #0042413 Requirements: **Specification Sheet** lumenfacade nano WHITE AND STATIC COLORS UCTL - Universal control Single unit - LCBX 60W A - Dimmer/controller (order separately from Lumenpulse, or by others) B - Power input (120-277V, wiring by others) C - Data input (wiring by others) D - LCBX (60W) E - Master jumper cable (LOGNJC) F - Lumenfacade Nano G - Terminator cap Continuous run - LCBX 60W or 120W A - Dimmer/controller (order separately from Lumenpulse, or by others) B - Power input (120-277V, wiring by others) C - Data input (wiring by others) D - LCBX (60W or 120W) E - Master jumper cable (LOGNJC) F - Lumenfacade Nano **G** - Jumper cable (LOGNJC) H - Terminator cap Continuous run - LCBX 200W A - Dimmer/controller (order separately from Lumenpulse, or by others) B - Power input (120-277V, wiring by others) C - Data input (wiring by others) D - LCBX (200W) E - Master jumper cable (LOGNJC) F - Lumenfacade Nano G - Jumper cable (LOGNJC) H - Terminator cap ontinuous run - Daisv chain A - Dimmer/controller (order separately from Lumenpulse, or by others) B - Power input (120-277V, wiring by others) C - Data input (wiring by others) **D** - LCBX (60W or 120W) E - Data output to next LCBX (wiring by others) F - Master jumper cable (LOGNJC) G - Lumenfacade Nano H - Jumper cable (LOGNJC) I - Terminator cap T United States 617.307.5700 | Canada 1.877.937.3003 | 514.937.3003 **lumenpulse** Lumenpulse Group Inc. reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately 2019.03.22 copyright © 2019 Lumenpulse Group Inc. MS - 8.4

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Description: Exterior Façade - L13 Cornice Linear

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Requirements:

LOGN-4W-48V-{LENGTH}-30K-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

Sheet Number 6 of 8

Buro Happold Project #0042413

Specification Sheet

lumenfacade nano

WHITE AND STATIC COLORS

Accessories (order separately)

Control Boxes

LCBX-Low-Voltage Control Box





Low-voltage control and power box. One power and data output to fixture, or fixture run. Refer to LCBX specification sheet for details.

LSBX-Low-Voltage Splitter Box



Low-voltage control and power splitter box. One power and data output to fixture run. Refer to LSBX specification sheet for details.

Control Systems

ITN2-Lumentone™ 2



Lumentone 2 is a simple pre-programmed DMX 512 controller with a push button rotary dial and live feedback

PHAROS-Pharos® kit







The Pharos kit, available for 1 or 2 DMX universes, allows for complete control of large lighting installations. 2 DMX universes kit shown.

Diagnostic and Addressing Tools

LID-LumenID



LumenID is a diagnostic and addressing DMX/RDM tool. It must be specified on all DMX applications. Refer to LID specification sheet for details.

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Description: Exterior Façade - L13 Cornice Linear

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-30K-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX

BUROHAPPOLD ENGINEERING

Luminaire Designation

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Sheet Number 7 of 8

uirements:						Buro	Happold P	roject #00424
	Specification S	iheet					lume	nfacade nan
								WHITE AND STATIC COLO
	How to order							
	1	2	3	4	5	6	7	8
	9	10	11	12				
	1 . Housing				2 . Wattage			
	LOGN	Lumenfaca	de™ Nano		2W	2 W/	/ft (1)	
					4W	4 W/		
						ic red areen or blue col	or options	
	2 V-h				(1) Not available for static red, green or blue color options.			
	3 . Voltage				4 . Length			
	48V	48 VDC			12		/4 in (1.4 lbs)	
					24		/4 in (2.9 lbs)	
					36		/4 in (4.4 lbs) /4 in (6 lbs)	
		.			48	40 3,	74 IN (O IDS)	
	5 . Color and Colo				6 . Optics			
	22K	2200K			8x8	8° x 8		
	27K	2700K			10x10	10° x		
	30K	3000K			10x30	10° x 30° 10° x 60°		
	35K	3500K			10×60			
	40K	4000K Red ⁽²⁾			10x90	10° x 30° x		
	RD CP	Green (2)			30x10	30° x		
	GR BL	Blue (2)			30x30	30° x		
					30x60 30x90	30° x		
		ilability of static Royal Blue, 6	500K and 90+ CRI.		60×10	60° x		
	(2) Static colors made to o	rder 8-10 weeks.			60×60	60° x		
					60x90	60° x		
					90x90	90° ×		
					w	Wide	120°	
					ww	Asym	metric Wallwash	
	7 . Lens				8 . Mounting Opt			
	CL	Clear lens			SAMN		Adjustable Mountin	g Nano
	FR	Frosted len			UMPN		Mounting Nano	
	HFR	Half-frosted	l lens (3)		UMASN		rsal Adjustable Mo	
	⁽¹⁾ Not available for 8x8,	[1] Not available for 8x8, 10x10, W or WW optics.			WAMN2	Adjustable Wall Mounting Nano 2 in Adjustable Extended Arm Mounting Nano 6 i		
	(2) Not available for WW	optic.			WAMN6			
	(3) Available for 8x8, 10:	10 or WW optics only.			WAMN12 WAMN18			n Mounting Nano 12 i n Mounting Nano 18 i
					(1) One mounting bracke 48 in fixtures.	et provided for 12 in fixt	ures. Two mounting brack	sets provided for 24 in, 36 in a
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Description: Exterior Façade - L13 Cornice Linear

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

LOGN-4W-48V-{LENGTH}-30K-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

Sheet Number 8 of 8

nts:	Buro Happold Project #0042413
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Requirement **Specification Sheet** lumenfacade nano WHITE AND STATIC COLORS 10 . Control (1) 9 . Finish Black Sandtex® On/Off control NO Bronze Sandtex® Universal control (compatible with 0-10V, DALI BRZ UCTL or DMX/RDM systems) Silver Sandtex® Smooth white WH (1) A Low-Voltage Control Box (LCBX) or Low-Voltage Splitter Box (LSBX) and LumenID (LID) must be cc Custom color and finish (please specify RAL color) (1) 11 . Options [1] Lumenpulse offers a wide selection of RAL CLASSIC [K7] colors with a smooth texture and high-gloss finish. Please consult factory for a list of available K7 colors, other RAL textures and glosses, or to match alternate color charts. Final color matching results may vary. Corrosion-resistant coating for hostile CRC environments (1) $^{(1)}$ Use only when exposed to salt spray and harsh chemicals. This option is not required for normal 12 . Certification UL compliant CE compliant CE 1220 Marie-Victorin Blvd., Longueuil, QC J4G 2H9 CA T United States 617.307.5700 | Canada 1.877.937.3003 | 514.937.3003 | info@lumenpulse.com www.lumenpulse.com/products/1578/tomenfacade-nano **lumenpulse** Lumenpulse Group Inc. reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately 2019.03.22 copyright © 2019 Lumenpulse Group Inc. MS - R4

50% CD - February 14, 2020

Description: Exterior Façade - L13 Caryatids Floods, Double Head

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Integral 0-10V Dimming Driver

Luminaire Wattage: 28W Luminaire Voltage: 277

Catalog Reference: LBS-{VOLTAGE}-30K-FL-LSLA-{FINISH}-{CONTROL}-KN-UL-{LENGTH} +LBSVS-{FINISH}

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-5

Sheet Number 1 of 7

Buro Happold Project #0042413 Requirements: 1. Location: Exterior Façade L13 Caryatids Flood **Specification Sheet** lumenbeam Small WHITE AND STATIC COLORS 2.0 — Catalog / Part Number – Front view **Photometric Summary** Description The Lumenbeam Small is a high-performance, 14W luminaire for 4000K lighting landscapes, trees, columns, monuments and architectural output (lm) ۷N 37,291 details. It offers a flexible package of options: a choice of optics NS 750 23,839 for flood or accent lighting; a number of color temperatures and colors; various mounting options, accessories, spread lenses and NF 668 4.235 1,770 FL 639 660 664 WFL Features Color and Color Temperature 2200K, 2700K, 3000K, 3500K, 4000K, 5700K, Red, Green, Optics (nominal distribution) 6°, 10°, 20°, 40°, 60°, Elliptical distribution on 10° to 40° optics Optical Option Linear spread lens horizontal distribution, Linear spread lens vertical distribution Control Mounting Option Stake Mounting, Knuckle Mounting, Canopy Cover Mounting ON/OFF 0-10V DALI DMXrdm 3G ANSI C136.31 Vibration Rating for bridge applications, Options Corrosion-resistant coating for hostile environments Power Consumption 14 W c⊕us C € NAHS 5-year limited warranty Performance 853 lm (4000K, VN optic) **Delivered Intensity** 37.291 cd at nadir (4000K, VN optic) Illuminance at Distance Minimum 1 fc at 193 ft distance (4000K, VN optic) 2 SDCM Color Consistency Color Rendering CRI 80+ L70 120,000 hrs (Ta 25 °C) Lumen Maintenance

The Luminaire Data Appendix is protected by intellectual property laws and is shown for design and construction team use only. Reproduction is restricted. See written specification section 265100 for additional product requirements and information.

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50% CD - February 14, 2020

Description: Exterior Façade - L13 Caryatids Floods, Double Head

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Integral 0-10V Dimming Driver

Luminaire Wattage: 28W Luminaire Voltage: 277

LBS-{VOLTAGE}-30K-FL-LSLA-{FINISH}-{CONTROL}-KN-UL-{LENGTH} +LBSVS-{FINISH} Catalog Reference:

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Luminaire Designation

Sheet Number 2 of 7

Buro Happold Project #0042413

Specificatio	lumenbeam
Specificano	Small WHITE AND STATIC COLORS
	WHILE AND STAILS, COLORS
	Physical
	Housing Material Low copper content high pressure die-cast aluminum
	Yoke Material Heavy aluminum
	Lens Material Clear tempered glass
	Hardware Material Stainless steel
	Gasket Material Silicone
	Surface Finish Electrostatically applied polyester powder coat
	Weight 5.2 lbs
	EPA Front = 0.35 sq ft, Side = 0.31 sq ft
	Electrical and control
	Voltage 100 to 277 volts
	Fixture Cable Power and data in 1 cable, 3 ft cord standard (#16-5), other lengths available
	Resolution (DMX/RDM) Per fixture, 8-bit or 16-bit
	Control On/Off control, 0-10V dimming, DALI dimming, DMX/RDM enabled, Lumentalk system is enabled with LDB accessory - see typical wiring diagrams for details
	Environmental
	Operating Temperature $-13~^\circ\mathrm{F}$ to $122~^\circ\mathrm{F}$
	IP Rating IP66
	IK Rating IK07
	Accessories (order separately)
	Control Boxes Power and control box - daisy chain configuration, Power and control box - star configuration, Lumentalk Data Bridge
	Control Systems Lumentouch 2.0™, Lumencue, Lumentone
	Diagnostic and Addressing Tools LumenID, LumentalkID
lumenpo	1220 Marie-Victorin Blvd., Longueuil, QC J4G 2H9 CA T 1.877.937.3003 514.937.3003 F 514.937.6289 info@lumenpulse.com
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50% CD - February 14, 2020

Description: Exterior Façade - L13 Caryatids Floods, Double Head

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Integral 0-10V Dimming Driver

Luminaire Wattage: 28W Luminaire Voltage: 277

Catalog Reference: LBS-{VOLTAGE}-30K-FL-LSLA-{FINISH}-{CONTROL}-KN-UL-{LENGTH} +LBSVS-{FINISH}

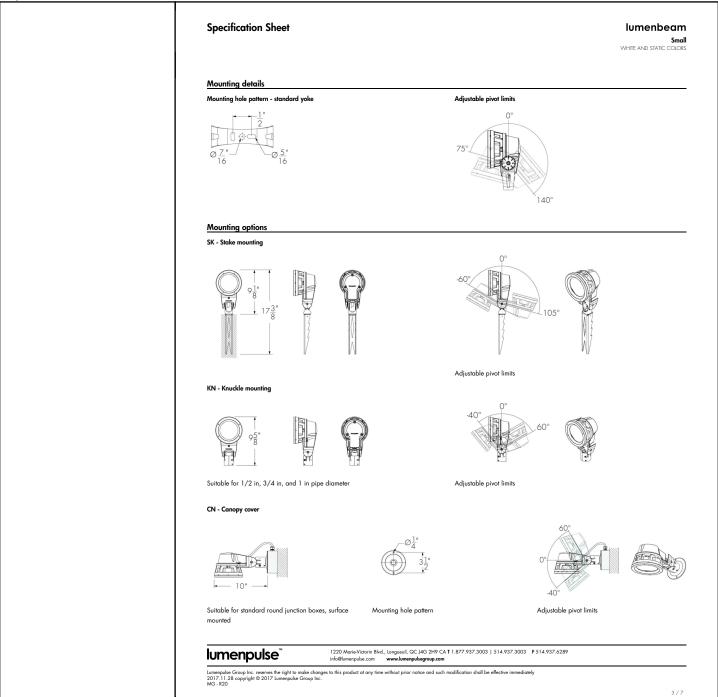
BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-5

Sheet Number 3 of 7

Requirements: Buro Happold Project #0042413



50% CD - February 14, 2020

Description: Exterior Façade - L13 Caryatids Floods, Double Head

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Integral 0-10V Dimming Driver

Luminaire Wattage: 28W Luminaire Voltage: 277

Requirements:

Catalog Reference: LBS-{VOLTAGE}-30K-FL-LSLA-{FINISH}-{CONTROL}-KN-UL-{LENGTH} +LBSVS-{FINISH}

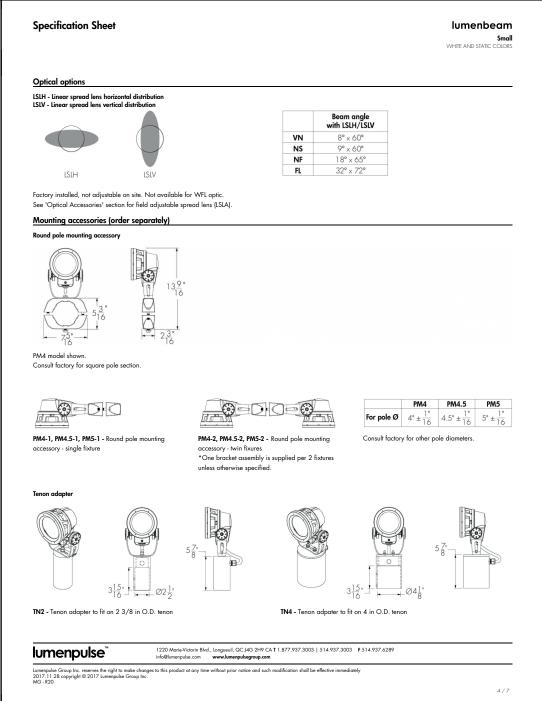
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Luminaire Designation

HE-5

Sheet Number 4 of 7

Buro Happold Project #0042413



50% CD - February 14, 2020

Description: Exterior Façade - L13 Caryatids Floods, Double Head

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Integral 0-10V Dimming Driver

Luminaire Wattage: 28W Luminaire Voltage: 277

Requirements:

LBS-{VOLTAGE}-30K-FL-LSLA-{FINISH}-{CONTROL}-KN-UL-{LENGTH} +LBSVS-{FINISH} Catalog Reference:

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Luminaire Designation

Sheet Number 5 of 7

Buro Happold Project #0042413

Specification Sheet

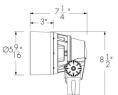
lumenbeam

Small WHITE AND STATIC COLORS

Optical accessories (order separately)

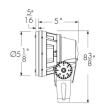
Installed optical accessories will affect the maximum pivot limits for each mounting option, consult factory for details.





Interior surface painted black. Please specify desired exterior FINISH from list of available finishes





IBSISIA-FINISH

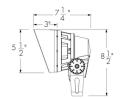
Please specify desired exterior FINISH from list of available finishes

Accessory combinations

+	Snoot	Visor
Linear spread lens adjustable	YES	YES
Wire guard	YES	YES

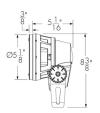
Accessory combinations must be ordered together on a single line. Ex: A snoot + wire guard combination order code is LBSSNWG-BK-BK.





Interior surface painted black. Please specify desired exterior FINISH from list of available finishes





IBSWG-FINISH

Please specify desired exterior FINISH from list of available finishes

Available exterior finishes for optical accessories

BK - Black Sandtex® BRZ - Bronze Sandtex® SI - Silver Sandtex®

WH - Smooth white BKTX - Textured black

BRZTX - Textured bronze, non-metallic GRATX - Textured medium gray GRNTX - Textured green

CC - Custom color and finish (please specify RAL color)*

*Lumenpulse offers a wide selection of RAL CLASSIC (K7) colors with a smooth texture and high-gloss finish. Please consult factory for a list of available K7 colors, other RAL textures and glosses, or to match alternate color charts. Final color matching results may vary.

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Description: Exterior Façade - L13 Caryatids Floods, Double Head

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Integral 0-10V Dimming Driver

Luminaire Wattage: 28W Luminaire Voltage: 277

Catalog Reference: LBS-{VOLTAGE}-30K-FL-LSLA-{FINISH}-{CONTROL}-KN-UL-{LENGTH} +LBSVS-{FINISH}

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-5

Sheet Number 6 of 7

How to order 1 LBS 9 1. Housing LBS 3. Color and Color 22K 27K 30K 35K 40K 57K	2 10	3 11 m™ Small	4	5	6	7	lumenbeam Small WHITE AND STATIC COVORS 8
1 LBS 9 1 . Housing LBS 3 . Color and Color 22K 27K 30K 35K 40K	10	11	4	5	6	7	8
1 . Housing 1 . Housing 1 . Bs 3 . Color and Color 22K 27K 30K 35K 40K	10	11	4	5	6	7	8
9 1 . Housing LBS 3 . Color and Color 22K 27K 30K 35K 40K							
1 . Housing LBS 3 . Color and Color 22K 27K 30K 35K 40K							
3 . Color and Color 22K 27K 30K 35K 40K	Lumenbea	m™ Small					
3 . Color and Color 22K 27K 30K 35K 40K	Lumenbea	m™ Small					
3 . Color and Color 22K 27K 30K 35K 40K	Lumenbea	m™ Small		2 . Voltage			
22K 27K 30K 35K 40K				100		100 volts	
22K 27K 30K 35K 40K				120 208		120 volts	
22K 27K 30K 35K 40K				208		208 volts 220 volts	
22K 27K 30K 35K 40K				240		240 volts	
22K 27K 30K 35K 40K				277		277 volts	
22K 27K 30K 35K 40K	r Tomporaturo (1)			4 . Optics			
27K 30K 35K 40K							
30K 35K 40K	2200K 2700K			VN NS		Very Narrow 6°	
35К 40К	2700K 3000K			NF		Narrow Spot 10° Narrow Flood 20°	
40K	3500K			FL		Flood 40°	
	4000K			WFL		Wide Flood 60°	
	5700K						
RD	Red			5 . Optical Option			
GR	Green			LSLH		Linear spread lens	horizontal distribution (2)
BL	Blue			LSLV		Linear spread lens	vertical distribution ⁽²⁾
				6 . Finish			
				ВК		Black Sandtex®	
				BRZ		Bronze Sandtex®	
				SI		Silver Sandtex®	
				WH		Smooth white	
				вктх		Textured black	
				BRZTX		Textured bronze no	
				GRATX		Textured medium g	ıray
				GRNTX		Textured green	
				WHTX CC		Textured white	Carlo de la carlo
				CC .		color) ⁽³⁾	finish (please specify RAL
7 . Control (4) (5)				8 . Mounting C	Option (6)		
NO	On/Off co	ontrol		SK		Stake Mounting	
DIM	0-10V dim			KN		Knuckle Mounting	
DALI	DALI dimn	ning		CN		Canopy Cover Mo	unting
DMX/RDM	DMX/RDA	Λ enabled					
		20 Marie-Victorin Blvd., Longueui	OC 14C 2H0 CA	T 1 077 027 2002 51440			
lumenpuls	_ M 10				237 3003 E 514 01	7 6289	
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Description: Exterior Façade - L13 Caryatids Floods, Double Head

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Integral 0-10V Dimming Driver

Luminaire Wattage: 28W Luminaire Voltage: 277

LBS-{VOLTAGE}-30K-FL-LSLA-{FINISH}-{CONTROL}-KN-UL-{LENGTH} +LBSVS-{FINISH} Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

Sheet Number 7 of 7

Buro Happold Project #0042413

rements:				виго нарр	old Project #00424
	Specification Shee	et			lumenbeam Small WHITE AND STATIC COLORS
	9 . Options		10 . Certification		
	3GV	3G ANSI C136.31 Vibration Rating for bridge applications ⁽⁷⁾	UL CE	UL compliant	
	CRC	Corrosion-resistant coating for hostile environments (8)	11 . Cable Length	CE compliant	
			3FT	3 ft (9) (10)	
			10FT	10 ft	
			20FT	20 ft	
			30FT	30 ft	
			50FT	50 ft	
			70FT	70 ft	
			100FT	100 ft	
	Notes:				
		y of static Royal Blue, 6500K and 90+ CRI.			
		y or static royal Blue, 0000K and 904 CKI. le for 60° optic. Field adjustable spread lens optical accessory available,			
	[3] Lumenpulse offers a wide sele finish. Please consult factory for alternate color charts. Final color	ction of RAL CLASSIC [K7] colors with a smooth texture and high-gloss a list of available K7 colors, other RAL textures and glosses, or to match r matching results may vary.			
	code. See the typical wiring dia	with LDB accessory, DIM or DMX/RDM must be specified in the order grams in the specification sheet for details.			
	Lumentranslator and Lumentalk p	talkID (UDLT) must be specified for Lumentalk applications. Consult ages and specification sheets for details. d unless an alternate mounting option is specified as part of the order			
	code.				
	[7] 3GV option is available for st				
	⁽⁰⁾ Use only when exposed to sai outdoor exposure.	It spray and harsh chemicals. This option is not required for normal			
	⁽⁹⁾ 3 ft cable length is standard u	unless otherwise specified.			
	⁽¹⁰⁾ Maximum of 3 ft cable lengt	h for daisy chain DMX applications with CBX-DS.			
	<u>lumenpulse</u>	1220 Marie-Victorin Blvd., Longueuil, QC J4G 2H9 CA info@lumenpulse.com www.lumenpulsegroup.com			
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	1				7/7

50% CD - February 14, 2020

Description: Exterior Façade - L28 Base Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX

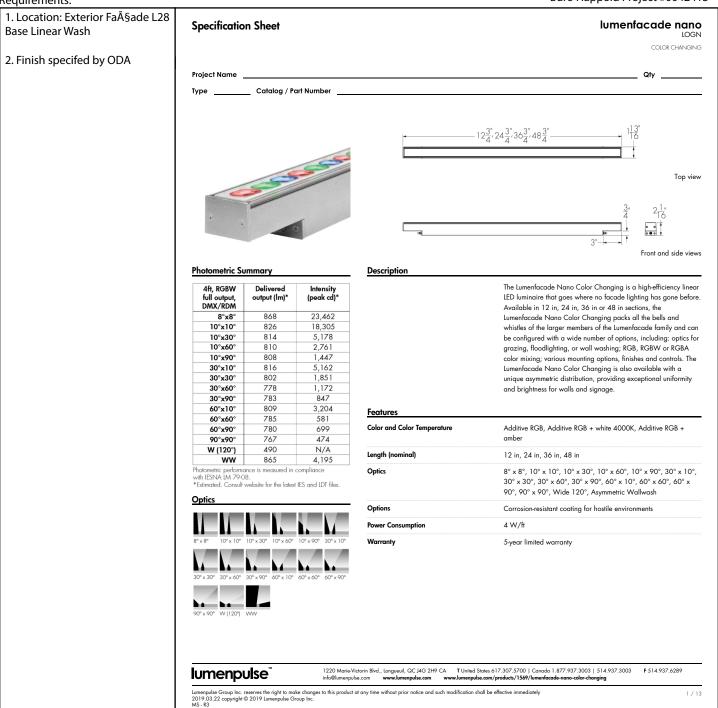
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Luminaire Designation

HE-6

Sheet Number 1 of 9

Requirements: Buro Happold Project #0042413



50% CD - February 14, 2020

Description: Exterior Façade - L28 Base Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Requirements:

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-6

Sheet Number 2 of 9

Buro Happold Project #0042413

Specification Sheet		lumenfacade nan
		COLOR CHANGII
Colors and Color Temperatures	Performance	
RGB RGBW Act Come the Video	Delivered Output	724 lm (48 in fixture, RGB full output, $8^{\circ} \times 8^{\circ}$, UCTI), 868 lm (48 in fixture, RGBW full output, $8^{\circ} \times 8^{\circ}$, UCTI), 748 lm (48 in fixture, RGBA full output, $8^{\circ} \times 8^{\circ}$, UCTI)
<u>Controls</u> UCTL	Delivered Intensity	19,566 cd at nadir (48 in fixture, RGB full output, 8° x 8°, UCTL) 23,462 cd at nadir (48 in fixture, RGBW full output, 8° x 8°, UCTL), 20,211 cd at nadir (48 in fixture, RGBA full output, 8° x 8°, UCTL)
Ratings IP66 IK08 Certifications	Illuminance at Distance	Minimum 1 fc at 153 ft (48 in fixture, RGB full output, $8^{\circ} \times 8^{\circ}$, UCTL), Minimum 1 fc at 168 ft (48 in fixture, RGBW full output, $\times 8^{\circ}$, UCTL), Minimum 1 fc at 156 ft (48 in fixture, RGBA full output, $8^{\circ} \times 8^{\circ}$, UCTL)
	Lumen Maintenance	L70 >90,000 hrs
c (∮) us (€ ROHS	Physical	
	Housing Material	Low copper content extruded aluminum
	Lens Material	Clear tempered glass
	Hardware Material	Stainless steel
	End Cap Material	Machined aluminum
	Gasket Material	Silicone
	Surface Finish	Electrostatically applied polyester powder coat
	Weight	1.4 lbs (12 in), 2.9 lbs (24 in), 4.4 lbs (36 in), 6 lbs (48 in)
	Electrical and control	
	Voltage	48 VDC
	Resolution (DMX/RDM)	Per foot or per fixture (configured with LumenID V3 software), 8-b or 16-bit, 3 channels (RGB) or 4 channels (RGBW, RGBA)
	RGB Color Mixing	12 LEDs per 12 in (4x Red, 4x Green, 4x Blue)
	RGBW Color Mixing	12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x White)
	RGBA Color Mixing	12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x Amber)
	Control	Universal control (compatible with DMX/RDM or DALI-2 Type 8 systems)
	Environmental	
	Environmental Storage Temperature	-40 °F to 185 °F (device must reach start-up temperature value before operating)
	<u>-</u>	
	Storage Temperature	before operating)
	Storage Temperature Start-up Temperature	before operating) -13 °F to 122 °F

50% CD - February 14, 2020

Description: Exterior Façade - L28 Base Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

LOGN-4W-48V-{LENGTH}-RGBW(3000K)-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

Sheet Number 3 of 9

rements:		Buro Happold Project #004
	Specification Sheet	lumenfacade n
		COLOR CHA
		Accessories (order separately)
		Cables Lumenfacade Nano Jumper Cable, Trunk Power Cable, Trun Cable
		Control Boxes Low-Voltage Control Box, Low-Voltage Splitter Box
		Optical Accessories Lumenfacade Nano Visor
		Control Systems Lumentone™ 2, Pharos® kit
		Diagnostic and Addressing Tools LumenID
	lumenpulse [™]	1220 Marie-Victorin Blvd., Longueuil, QC J4G 2H9 CA T United States 617.307.5700 Canada 1.877.937.3003 514.937.3003 F 514.937.6281 info@lumenpulse.com www.lumenpulse.com/products/1569/lumenfacade-nano-color-changing
		te changes to this product at any time without prior notice and such modification shall be effective immediately oup Inc.

50% CD - February 14, 2020

Description: Exterior Façade - L28 Base Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-6

Sheet Number 4 of 9

Buro Happold Project #0042413 Requirements: **Specification Sheet** lumenfacade nano COLOR CHANGING Optical option installation details HFR - Half-frosted lens WW - Asymmetric wallwash Recommended setback from wall is 1/10 of the wall height. Example: 2 ft setback for a 20 ft wall. Always position frosted side toward the wall. • Applicable for 8° x 8°, 10° x 10° or asymmetric wallwash optics only One mounting bracket provided for 12 in fixtures. Two mounting brackets provided for 24 in, 36 in and 48 in fixtures. See installation instructions for details. SAMN - Slim Adjustable Mounting Nano UMPN - Fixed Mounting No UMPN - Mounting hole patte **lumenpulse** Lumenpulse Group Inc. reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately 2019.03.22 copyright © 2019 Lumenpulse Group Inc.

MS - 83

50% CD - February 14, 2020

Description: Exterior Façade - L28 Base Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

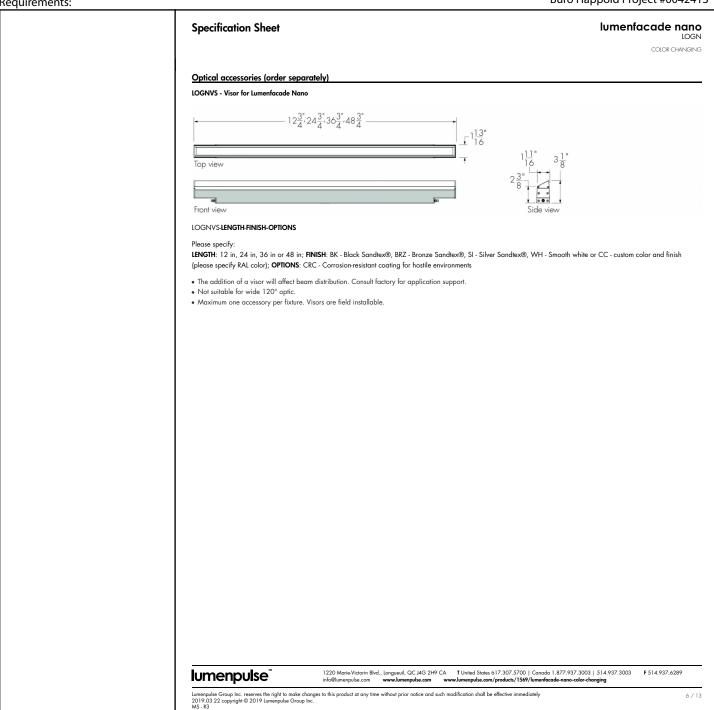
LOGN-4W-48V-{LENGTH}-RGBW(3000K)-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

Sheet Number 5 of 9

Buro Happold Project #0042413 Requirements:



50% CD - February 14, 2020

Description: Exterior Façade - L28 Base Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

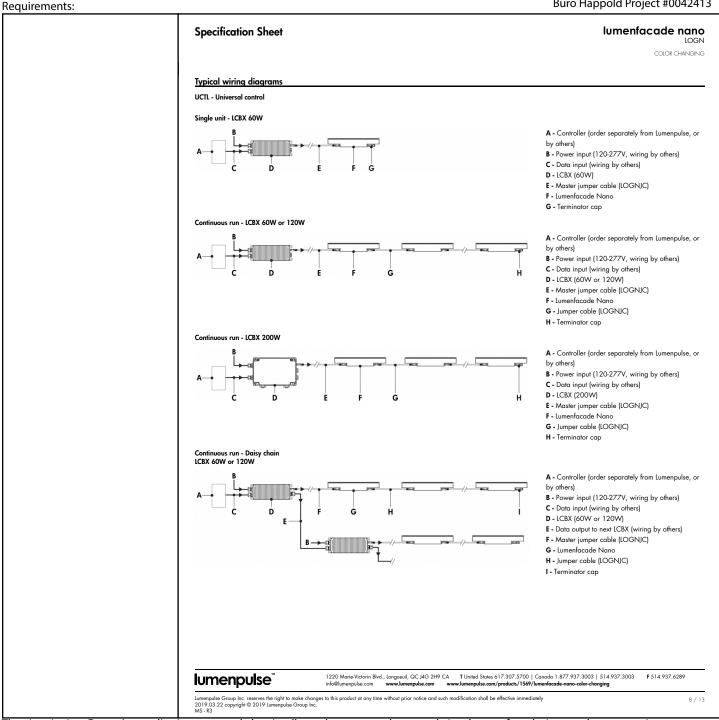
LOGN-4W-48V-{LENGTH}-RGBW(3000K)-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

Sheet Number 6 of 9

Buro Happold Project #0042413



50% CD - February 14, 2020

Description: Exterior Façade - L28 Base Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Requirements:

LOGN-4W-48V-{LENGTH}-RGBW(3000K)-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

Sheet Number 7 of 9

Buro Happold Project #0042413

Specification Sheet

lumenfacade nano

COLOR CHANGING

Accessories (order separately)

Control Boxes

LCBX-Low-Voltage Control Box





Low-voltage control and power box. One power and data output to fixture, or fixture run. Refer to LCBX specification sheet for details.

LSBX-Low-Voltage Splitter Box



Low-voltage control and power splitter box. One power and data output to fixture run. Refer to LSBX specification sheet for details.

Control Systems

ITN2-Lumentone™ 2



Lumentone 2 is a simple pre-programmed DMX 512 controller with a push button rotary dial and live feedback

PHAROS-Pharos® kit







The Pharos kit, available for 1 or 2 DMX universes, allows for complete control of large lighting installations. 2 DMX universes kit shown.

Diagnostic and Addressing Tools

LID-LumenID



LumenID is a diagnostic and addressing DMX/RDM tool. It must be specified on all DMX applications. Refer to LID specification sheet for details.

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MS - R3

11 / 13

50% CD - February 14, 2020

Description: Exterior Façade - L28 Base Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-6

Sheet Number 8 of 9

Requirements:						Buro	Happold P	roject #0042413	
	Specification	Sheet					lumei	nfacade nano LOGN COLOR CHANGING	
	How to order								
	1	2	3	4	5	6	7	8	
	9	10	11	12	_		· L		
	1 . Housing				2 . Wattage				
	'	1	I-TM N	_		4 \\	/fu		
	LOGN	LOGN Lumenfacade™ Nano			4W	4 W.	/π		
	3 . Voltage				4 . Length				
	48V	48 VDC			12	12 3	/4 in (1.4 lbs)		
					24		/4 in (2.9 lbs)		
					36		/4 in (4.4 lbs)		
					48	48 3	/4 in (6 lbs)		
	5 . Color and Col	or Temperature			6 . Optics				
	RGB	Additive F	RGB		8x8 8° × 8°				
	RGBW	Additive F	RGB + white 4000k	standard. 2700K,	10x10	10° :			
				e, consult factory. ⁽¹⁾	10x30	10° :	10° x 30°		
	RGBA	Additive I	RGB + amber		10x60	10° :	10° x 60°		
	⁽¹⁾ Longer lead times ap	$^{(1)}$ Longer lead times apply for Royal Blue, 2700K, 3000K and 3500K white color temperature mixes.		10x90		10° x 90°			
					30x10	30° :			
					30x30	30° :			
					30×60	30° :			
					30x90	30° :			
					60x10		x 10°		
					60x60	60° :			
					60x90 90x90	90° :			
					90x90 W		e 120°		
					ww		nmetric Wallwash		
	7 . Lens				8 . Mounting Op				
	CL	Clear lens	s (1)		SAMN	Slim	Adjustable Mounting	Nano	
	FR	Frosted le			UMPN		Mounting Nano		
	HFR	Half-froste	ed lens ⁽³⁾		UMASN	Univ	ersal Adjustable Mo	unting Nano	
	(1) Not available for 8x	3, 10x10, W or WW optics.			WAMN2	Adju	stable Wall Mountin	g Nano 2 in	
	(2) Not available for W				WAMN6	Adju	stable Extended Arm	Mounting Nano 6 in	
		0x10 or WW optics only.			WAMN12			Mounting Nano 12 in	
	/ Wallable for oxe, in	ox ro or rrrr opiles only.			WAMN18	Adju	stable Extended Arm	Mounting Nano 18 in	
					(1) One mounting brace 48 in fixtures.	sket provided for 12 in fix	tures. Two mounting brack	ets provided for 24 in, 36 in and	
	lumenpul	se [™]	1220 Marie-Victorin Blvc info@lumenpulse.com		A T United States 617.307. www.lumenpulse.com/products			B F 514.937.6289	
	Lumenpulse Group Inc. reser	ves the right to make changes	to this product at any time	without prior notice and such	n modification shall be effective	immediately		12 / 13	
	2019.03.22 copyright © 20 MS - R3	119 Lumenpulse Group Inc.							

50% CD - February 14, 2020

Description: Exterior Façade - L28 Base Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

LOGN-4W-48V-{LENGTH}-RGBW(3000K)-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

Sheet Number 9 of 9

Buro Happold Project #0042413

	t		1001
			LÓGN COLOR CHANGING
9 . Finish		10 . Control (1)	
BK BRZ SI WH CC (1) Lumenpulse offers a wide select finish. Please consult factory for a l	list of available K7 colors, other RAL textures and glosses, or to match	UCTL (1) A Low-Voltage Control Bospecified. 11 . Options CRC	Universal control (compatible with DMX/RDM o DALI-2 Type 8 systems) ax (ICBX) or Low-Vallage Splitter Box (ISBX) and LumenID (IID) must be Corrosion-resistant coating for hostile environments (1) a salt spray and harsh chemicals. This option is not required for normal
			Canada 1.877.937.3003 514.937.3003 F 514.937.6289
	BK BRZ SI WH CC Ill tumenpulse offers a wide select finish. Please consult factory for a alternate color charts. Final color selection.	BK Black Sandlex® BRZ Bronze Sandlex® SI Silver Sandlex® WH Smooth white CC Custom color and finish (please specify RAL color) [1] (1) Lumenpulse offers a wide selection of RAL CLASSIC [K7] colors with a smooth texture and high-gloss finish. Please consult factory for a list of available K7 colors, other RAL textures and glosses, or to match alternate color charts. Final color matching results may vary. 12. Certification UL UL compliant	BK Black Sandtex® BRZ Bronze Sandtex® SI Silver Sandtex® WH Smooth white CC Custom color and finish (please specify RAL color) (1) Lumenpulse offers a wide selection of RAL CLASSIC (K7) colors with a smooth tenture and high-glass finish. Please consult factory for a list of available K7 colors, other RAL textures and glosses, or to match alternate color charts. Final color matching results may vary. 12 . Certification UL UL compliant

50% CD - February 14, 2020

Description: Exterior Façade - L28 Pilasters

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x10-CL-SAMN-{FINISH}-UCTL-UL + LCBX

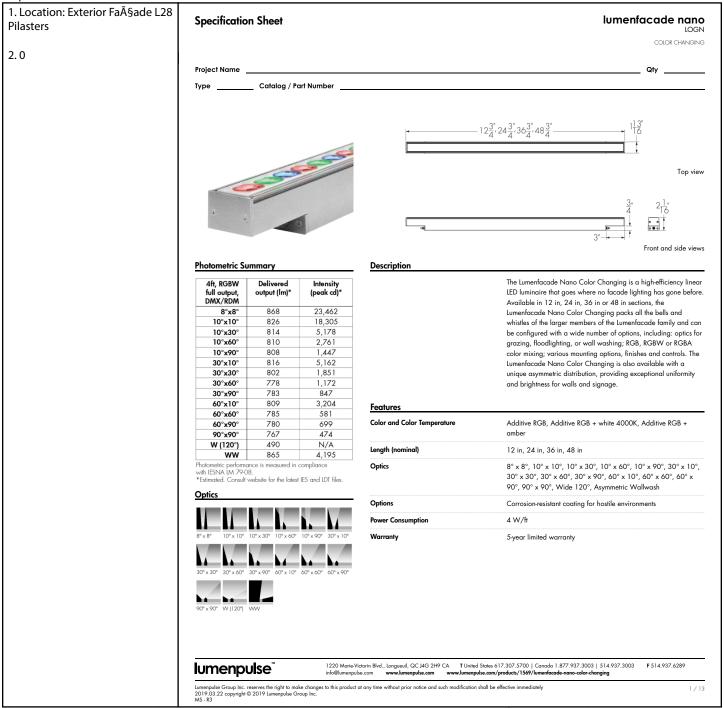
BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-7

Sheet Number 1 of 9

Requirements: Buro Happold Project #0042413



50% CD - February 14, 2020

Description: Exterior Façade - L28 Pilasters

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Requirements:

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x10-CL-SAMN-{FINISH}-UCTL-UL + LCBX

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-7

Sheet Number 2 of 9

Buro Happold Project #0042413

Colors and Color Temperatures Row Row Ros Controls Delivered Output 22 In (48 in fixture, RC98 full output, 8" x 8", UCTI), 368 lin (48 in fixture, RC98 full output, 8" x 8", UCTI), 748 lin (48 in fixture, RC98 full output, 8" x 8", UCTI), 748 lin (48 in fixture, RC98 full output, 8" x 8", UCTI), 748 lin (48 in fixture, RC98 full output, 8" x 8", UCTI), 23,442 ct of mortif (48 in fixture, RC98 full output, 8" x 8", UCTI), 20,211 cd at node (48 in fixture, RC98 full output, 8" x 8", UCTI), 20,211 cd at node (48 in fixture, RC98 full output, 8" x 8", UCTI), 20,211 cd at node (48 in fixture, RC98 full output, 8" x 8", UCTI), Menimum In E cal 158 ft (48 in fixture, RC98 full output, 8" x 8", UCTI), Menimum In E cal 158 ft (48 in fixture, RC98 full output, 8" x 8", UCTI), Menimum In E cal 158 ft (48 in fixture, RC98 full output, 8" x 8", UCTI), Menimum In E cal 158 ft (48 in fixture, RC98 full output, 8" x 8", UCTI), Menimum In E cal 158 ft (48 in fixture, RC98 full output, 8" x 8", UCTI), Menimum In E cal 158 ft (48 in fixture, RC98 full output, 8" x 8", UCTI), Menimum In E cal 158 ft (48 in fixture, RC98 full output, 8" x 8", UCTI), Menimum In E cal 158 ft (48 in fixture, RC98 full output, 8" x 8", UCTI), Menimum In E cal 158 ft (48 in fixture, RC98 full output, 8" x 8", UCTI), Menimum In E cal 158 ft (48 in fixture, RC98 full output, 8" x 8", UCTI), Menimum In E cal 158 ft (48 in fixture, RC98 full output, 8" x 8", UCTI), Menimum In E cal 158 ft (48 in fixture, RC98 full output, 8" x 8", UCTI), Menimum In E cal 158 ft (48 in fixture, RC98 full output, 8" x 8", UCTI), Menimum In E cal 158 ft (48 in fixture, RC98 full output, 8" x 8", UCTI), Menimum In E cal 158 ft (48 in fixture, RC98 full output, 8" x 8", UCTI), Menimum In E cal 158 ft (48 in fixture, RC98 full output, 8" x 8", UCTI), Menimum In E cal 158 ft (48 in fixture, RC98 full output, 8" x 8", UCTI), Menimum In E cal 158 ft (48 in fixture, RC98 full output, 8" x 8", UCTI), Menimum In E cal 158 ft (48 in fixture, RC98 full output, 8" x 8", UCTI), Menimum	Specification Sheet		lumenfacade nan LOG COLOR CHANGIN
Delivered Output 724 Im (48 in finature, RGB full output, 8" x 8", UCTI), 248 Im (48 in finature, RGB full output, 8" x 8", UCTI), 248 Im (48 in finature, RGB full output, 8" x 8", UCTI), 748 Im (48 in finature, RGB full output, 8" x 8", UCTI), 748 Im (48 in finature, RGB full output, 8" x 8", UCTI), 20, 211 ed or nodir (48 in finature, RGB full output, 8" x 8", UCTI), 20, 211 ed or nodir (48 in finature, RGB full output, 8" x 8", UCTI), 20, 211 ed or nodir (48 in finature, RGB full output, 8" x 8", UCTI), Minimum 1 fc at 153 ft (48 in finature, RGB full output, 8" x 8", UCTI), Minimum 1 fc at 153 ft (48 in finature, RGB full output, 8" x 8", UCTI), Minimum 1 fc at 150 ft (48 in finature, RGB full output, 8" x 8", UCTI), Minimum 1 fc at 150 ft (48 in finature, RGB full output, 8" x 8", UCTI), Minimum 1 fc at 150 ft (48 in finature, RGB full output, 8" x 8", UCTI), Minimum 1 fc at 150 ft (48 in finature, RGB full output, 8" x 8", UCTI), Minimum 1 fc at 150 ft (48 in finature, RGB full output, 8" x 8", UCTI), Minimum 1 fc at 150 ft (48 in finature, RGB full output, 8" x 8", UCTI), Minimum 1 fc at 150 ft (48 in finature, RGB full output, 8" x 8", UCTI), Minimum 1 fc at 150 ft (48 in finature, RGB full output, 8" x 8", UCTI), Minimum 1 fc at 150 ft (48 in finature, RGB full output, 8" x 8", UCTI), Minimum 1 fc at 150 ft (48 in finature, RGB full output, 8" x 8", UCTI), Minimum 1 fc at 150 ft (48 in finature, RGB full output, 8" x 8", UCTI), Minimum 1 fc at 150 ft (48 in finature, RGB full output, 8" x 8", UCTI), Minimum 1 fc at 150 ft (48 in finature, RGB full output, 8" x 8", UCTI), Minimum 1 fc at 150 ft (48 in finature, RGB full output, 8" x 8", UCTI), Minimum 1 fc at 150 ft (48 in finature, RGB full output, 8" x 8", UCTI), Minimum 1 fc at 150 ft (48 in finature, RGB full output, 8" x 8", UCTI, Minimum 1 fc at 150 ft (48 in finature, RGB full output, 8" x 8", UCTI, Minimum 1 fc at 150 ft (48 in finature, RGB full output, 8" x 8", UCTI, Minimum 1 fc at 150 ft (48 in finature, RGB full output, 8" x 8", UCTI,	Colors and Color Temperatures	Performance	
## Control of the properties o			(48 in fixture, RGBW full output, $8^{\circ} \times 8^{\circ}$, UCTL), 748 lm (48 in
Minimum I to all 152 if 148 in intoure, RSBM full output, 8 x 8", UCTI), Minimum I to all 156 if 48 in intoure, RSBM full output, 8 x 8", UCTI), Minimum I to all 156 if 48 in intoure, RSBM full output, 8 x 8", UCTI), Minimum I to all 156 if 48 in intoure, RSBM full output, 8 x 8", UCTI), Minimum I to all 156 if 48 in intoure, RSBM full output, 8 x 8", UCTI), Minimum I to all 156 if 48 in intoure, RSBM full output, 8 x 8", UCTI), Minimum I to all 156 if 48 in intoure, RSBM full output, 8 x 8", UCTI), Minimum I to all 156 if 48 in intoure, RSBM full output, 8 x 8", UCTI), Minimum I to all 156 if 48 in intoure, RSBM full output, 8 x 8", UCTI), Minimum I to all 156 if 48 in intoure, RSBM full output, 8 x 8", UCTI), Minimum I to all 156 if 48 in intoure, RSBM full output, 8 x 9", UCTI), Minimum I to all 156 if 48 in intoure, RSBM full output, 8 x 9", UCTI), Minimum I to all 156 if 48 in intoure, RSBM full output, 8 x 9", UCTI), Minimum I to all 156 if 48 in intoure, RSBM full output, 8 x 9", UCTI), Minimum I to all 156 if 48 in intoure, RSBM full output, 8 x 9", UCTI), Minimum I to all 156 if 48 in intoure, RSBM full output, 8 x 9", UCTI), Minimum I to all 156 if 48 in intoure, RSBM full output, 8 x 9", UCTI), Minimum I to all 156 if 48 in intoure, RSBM full output, 8 x 9", UCTI), Minimum I to all 156 if 48 in intoure, RSBM full output, 8 x 9", UCTI), Minimum I to all 156 if 48 in intour, RSBM full output, 8 x 9", UCTI), Minimum I to all 156 if 48 in intoure, RSBM full output, 8 x 9", UCTI, Minimum I to all 156 if 48 in intour, RSBM full output, 8 x 9", UCTI, Minimum I to all 156 if 48 in intour, RSBM full output, 8 x 9", UCTI, Minimum I to all 156 if 48 in intour, RSBM full output, 8 x 9", UCTI, Minimum I to all 156 if 48 in intour, RSBM full output, 8 x 9", UCTI, Minimum I to all 156 if 48 in intour, RSBM full output, 8 x 9", UCTI, Minimum I to all 156 if 48 in intour, RSBM full output, 8 x 9", UCTI, Minimum I to all 156 if 48 in inteut, 8 x 9", United in the inteut, 8 x 9", United intours, 8 x 9", UCTI, Minimum		Delivered Intensity	23,462 cd at nadir (48 in fixture, RGBW full output, 8° x 8° , UCTL), 20,211 cd at nadir (48 in fixture, RGBA full output, 8° x
Physical Housing Material Lens Material Lens Material Lens Material Lens Material Lens Material Lens Material Cleor tempered glass Hardware Material Stainless steel End Cap Material Machined aluminum Gasket Material Silicone Surface Finish Electrostatically applied polyester powder coat Weight 1.4 lbs (12 in), 2.9 lbs (24 in), 4.4 lbs (36 in), 6 lbs (48 in) Electrical and control Voltage 48 VDC Resolution (DMX/RDM) Per foot or per fixture (configured with LumenID V3 software), 8-b or 16-bit, 3 channels (RGB) or 4 channels (RGBW, RGBA) RGB Color Mixing 12 LEDs per 12 in (4x Red, 4x Green, 4x Blue) RGBW Color Mixing 12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x White) RGBA Color Mixing 12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x Amber) Control Universal control (compatible with DMX/RDM or DALI2 Type 8 systems) Environmental Storage Temperature 40 °F to 185 °F (device must reach start-up temperature value before operating) Start-up Temperature 1:3 °F to 122 °F Operating Temperature 4:0 °F to 122 °F Ingress Protection Rating 1P66	IP66 IK08	Illuminance at Distance	UCTL), Minimum 1 fc at 168 ft (48 in fixture, RGBW full output, 8 x 8°, UCTL), Minimum 1 fc at 156 ft (48 in fixture, RGBA full
Housing Material Low copper content extruded aluminum Lens Material Clear tempered glass Hardware Material Stainless steel End Cap Material Surface Finish Electrostatically applied polyester powder coat Weight 1.4 lbs (12 in), 2.9 lbs (24 in), 4.4 lbs (36 in), 6 lbs (48 in) Electrical and control Voltage 48 VDC Resolution (DMX/RDM) Per foot or per fixture (configured with LumenID V3 software), 8-b or 16-bit, 3 channels (RCB) or 4 channels (RCBW, RCBA) RGB Color Mixing 12 LEDs per 12 in (4x Red., 4x Green, 4x Blue, 3x White) RGBW Color Mixing 12 LEDs per 12 in (3x Red., 3x Green, 3x Blue, 3x White) RGBA Color Mixing 12 LEDs per 12 in (3x Red., 3x Green, 3x Blue, 3x Amber) Control Universal control (compatible with DMX/RDM or DALL-2 Type 8 systems) Environmental Storage Temperature 40 °F to 18.5 °F (device must reach start-up temperature value before operating) Start-up Temperature 40 °F to 12.2 °F Operating Temperature 40 °F to 12.2 °F Ingress Protection Rating IP66		Lumen Maintenance	L70 >90,000 hrs
Lens Material Clear tempered glass Hardware Material Strainless steel End Cap Material Machined aluminum Gasket Material Silicone Surface Finish Electrostatically applied polyester powder coat Weight 1.4 lbs (12 in), 2.9 lbs (24 in), 4.4 lbs (36 in), 6 lbs (48 in) Electrical and control Voltage 48 VDC Resolution (DMX/RDM) Per foot or per fixture (configured with LumenID V3 software), 8-b or 16-bit, 3 channels (RGB) or 4 channels (RGBW, RGBA) RGB Color Mixing 12 LEDs per 12 in (4x Red, 4x Green, 4x Blue) RGBW Color Mixing 12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x White) RGBA Color Mixing 12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x Amber) Control Universal control (compatible with DMX/RDM or DALL2 Type 8 systems) Environmental Storage Temperature 40 °F to 185 °F (device must reach start-up temperature value before operating) Start-up Temperature 13 °F to 122 °F Operating Temperature 40 °F to 122 °F	□ (ŲL)us C € ROHS	Physical	
Hardware Material Stainless steel End Cap Material Machined aluminum Gasket Material Silicone Surface Finish Electrostatically applied polyester powder coat Weight 1.4 lbs (12 in), 2.9 lbs (24 in), 4.4 lbs (36 in), 6 lbs (48 in) Electrical and control Voltage 48 VDC Resolution (DMX/RDM) Per foot or per fixture (configured with LumenID V3 software), 8-b or 16-bit, 3 channels (RGBV, RGBA) RGB Color Mixing 12 LEDs per 12 in (4x Red, 4x Green, 4x Blue) RGBW Color Mixing 12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x White) RGBA Color Mixing 12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x Amber) Control Universal control (compatible with DMX/RDM or DALI-2 Type 8 systems) Environmental Storage Temperature 40 °F to 185 °F (device must reach start-up temperature value before operating) Start-up Temperature -13 °F to 122 °F Operating Temperature 40 °F to 122 °F Ingress Protection Rating IP66		Housing Material	Low copper content extruded aluminum
End Cap Material Gasket Material Silicone Surface Finish Electrostatically applied polyester powder coat Weight 1.4 lbs (12 in), 2.9 lbs (24 in), 4.4 lbs (36 in), 6 lbs (48 in) Electrical and control Voltage 48 VDC Resolution (DMX/RDM) Per foot or per fixture (configured with LumenID V3 software), 8-b or 16-bit, 3 channels (RCB) or 4 channels (RCBW, RCBA) RGB Color Mixing 12 LEDs per 12 in (4x Red, 4x Green, 4x Blue) RGBW Color Mixing 12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x White) RGBA Color Mixing 12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x Amber) Control Universal control (compatible with DMX/RDM or DALL-2 Type 8 systems) Environmental Storage Temperature 40 °F to 185 °F (device must reach start-up temperature value before operating) Start-up Temperature -13 °F to 122 °F Operating Temperature 40 °F to 122 °F		Lens Material	Clear tempered glass
Surface Finish Electrostatically applied polyester powder coat Weight 1.4 lbs (12 in), 2.9 lbs (24 in), 4.4 lbs (36 in), 6 lbs (48 in) Electrical and control Voltage 48 VDC Resolution (DMX/RDM) Per foot or per fixture (configured with LumenID V3 software), 8-b or 16-bit, 3 channels (RGB) or 4 channels (RGBW, RGBA) RGB Color Mixing 12 LEDs per 12 in (4x Red, 4x Green, 4x Blue, 3x White) RGBW Color Mixing 12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x White) RGBA Color Mixing 12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x Amber) Control Universal control (compatible with DMX/RDM or DALL-2 Type 8 systems) Environmental Storage Temperature -40 °F to 185 °F (device must reach start-up temperature value before operating) Start-up Temperature -13 °F to 122 °F Operating Temperature -40 °F to 182 °F Ingress Protection Rating IP66		Hardware Material	Stainless steel
Surface Finish Electrostatically applied polyester powder coat Weight 1.4 lbs (12 in), 2.9 lbs (24 in), 4.4 lbs (36 in), 6 lbs (48 in) Electrical and control Voltage 48 VDC Resolution (DMX/RDM) Per foot or per fixture (configured with LumenID V3 software), 8-b or 16-bit, 3 channels (RGB) or 4 channels (RGBW, RGBA) RGB Color Mixing 12 LEDs per 12 in (4x Red, 4x Green, 4x Blue) RGBW Color Mixing 12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x White) RGBA Color Mixing 12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x Amber) Control Universal control (compatible with DMX/RDM or DALI-2 Type 8 systems) Environmental Storage Temperature -40 °F to 185 °F (device must reach start-up temperature value before operating) Start-up Temperature -13 °F to 122 °F Operating Temperature -40 °F to 122 °F Ingress Protection Rating IP66		End Cap Material	Machined aluminum
Neight 1.4 lbs (12 in), 2.9 lbs (24 in), 4.4 lbs (36 in), 6 lbs (48 in)		Gasket Material	Silicone
Electrical and control Voltage		Surface Finish	Electrostatically applied polyester powder coat
Voltage 48 VDC Resolution (DMX/RDM) Per foot or per fixture (configured with LumenID V3 software), 8-b or 16-bit, 3 channels (RGB) or 4 channels (RGBW, RGBA) RGB Color Mixing 12 LEDs per 12 in (4x Red, 4x Green, 4x Blue) RGBW Color Mixing 12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x White) RGBA Color Mixing 12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x Amber) Control Universal control (compatible with DMX/RDM or DALL-2 Type 8 systems) Environmental 40 °F to 185 °F (device must reach start-up temperature value before operating) Start-up Temperature -13 °F to 122 °F Operating Temperature -40 °F to 122 °F Ingress Protection Rating IP66		Weight	1.4 lbs (12 in), 2.9 lbs (24 in), 4.4 lbs (36 in), 6 lbs (48 in)
Resolution (DMX/RDM) Per foot or per fixture (configured with LumenID V3 software), 8-b or 16-bit, 3 channels (RGB) or 4 channels (RGBW, RGBA) RGB Color Mixing 12 LEDs per 12 in (4x Red, 4x Green, 4x Blue) RGBW Color Mixing 12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x White) RGBA Color Mixing 12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x Amber) Control Universal control (compatible with DMX/RDM or DALL-2 Type 8 systems) Environmental Storage Temperature -40 °F to 185 °F (device must reach start-up temperature value before operating) Start-up Temperature -13 °F to 122 °F Operating Temperature -40 °F to 122 °F Ingress Protection Rating		Electrical and control	
or 16-bit, 3 channels (RGB) or 4 channels (RGBW, RGBA) RGB Color Mixing 12 LEDs per 12 in (4x Red, 4x Green, 4x Blue) RGBW Color Mixing 12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x White) RGBA Color Mixing 12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x Amber) Control Universal control (compatible with DMX/RDM or DALI-2 Type 8 systems) Environmental Storage Temperature -40 °F to 185 °F (device must reach start-up temperature value before operating) Start-up Temperature -13 °F to 122 °F Operating Temperature -40 °F to 122 °F Ingress Protection Rating IP66		Voltage	48 VDC
RGBW Color Mixing 12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x White) RGBA Color Mixing 12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x Amber) Control Universal control (compatible with DMX/RDM or DALI-2 Type 8 systems) Environmental Storage Temperature -40 °F to 185 °F (device must reach start-up temperature value before operating) Start-up Temperature -13 °F to 122 °F Operating Temperature -40 °F to 122 °F Ingress Protection Rating IP66		Resolution (DMX/RDM)	
RGBA Color Mixing 12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x Amber) Control Universal control (compatible with DMX/RDM or DALI-2 Type 8 systems) Environmental Storage Temperature -40 °F to 185 °F (device must reach start-up temperature value before operating) Start-up Temperature -13 °F to 122 °F Operating Temperature -40 °F to 122 °F Ingress Protection Rating IP66		RGB Color Mixing	12 LEDs per 12 in (4x Red, 4x Green, 4x Blue)
Control Universal control (compatible with DMX/RDM or DALI-2 Type 8 systems) Environmental Storage Temperature -40 °F to 185 °F (device must reach start-up temperature value before operating) Start-up Temperature -13 °F to 122 °F Operating Temperature -40 °F to 122 °F Ingress Protection Rating IP66		RGBW Color Mixing	12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x White)
systems) Environmental Storage Temperature		RGBA Color Mixing	12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x Amber)
Storage Temperature -40 °F to 185 °F (device must reach start-up temperature value before operating) Start-up Temperature -13 °F to 122 °F Operating Temperature -40 °F to 122 °F Ingress Protection Rating IP66		Control	
before operating) Start-up Temperature -13 °F to 122 °F Operating Temperature -40 °F to 122 °F Ingress Protection Rating IP66		Environmental	
Operating Temperature -40 °F to 122 °F Ingress Protection Rating IP66		Storage Temperature	
Ingress Protection Rating IP66		Start-up Temperature	-13 °F to 122 °F
		Operating Temperature	-40 °F to 122 °F
Impact Resistance Rating IKO8 (IKO9 for 48 in fixtures)		Ingress Protection Rating	IP66
		Impact Resistance Rating	IK08 (IK09 for 48 in fixtures)
		Operating Temperature Ingress Protection Rating	-13 °F to 122 °F -40 °F to 122 °F IP66
	lumenpulse 1220	lumenpulse.com www.lumenpulse.com www.lumen	pulse.com/products/1569/lumenfacade-nano-color-changing

50% CD - February 14, 2020

Description: Exterior Façade - L28 Pilasters

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x10-CL-SAMN-{FINISH}-UCTL-UL + LCBX

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-7

Sheet Number 3 of 9

Requirements:		Buro Happold Project #0042413
	Specification Sheet	lumenfacade nano

Accessories (order separately)	
Cables	Lumenfacade Nano Jumper Cable, Trunk Power Cable, Trunk Data Cable
Control Boxes	Low-Voltage Control Box, Low-Voltage Splitter Box
Optical Accessories	Lumenfacade Nano Visor
Control Systems	Lumentone™ 2, Pharos® kit
Diagnostic and Addressing Tools	LumenID

Indeposite To the product of any time without prior notice and such modification shall be effective immediately 2019 Quency large group inc.

1220 Marrie-Victorin Blvd., Longueuil, QC J4G 2H9 CA T United States 617.307.5700 | Canada 1.877.973.3003 | 514.937.3003 | F 514.937.6289 |

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Description: Exterior Façade - L28 Pilasters

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x10-CL-SAMN-{FINISH}-UCTL-UL + LCBX

BUROHAPPOLD ENGINEERING

Luminaire Designation

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Sheet Number 4 of 9

Buro Happold Project #0042413 Requirements: **Specification Sheet** lumenfacade nano COLOR CHANGING Optical option installation details HFR - Half-frosted lens WW - Asymmetric wallwash Recommended setback from wall is 1/10 of the wall height. Example: 2 ft setback for a 20 ft wall. Always position frosted side toward the wall. • Applicable for 8° x 8°, 10° x 10° or asymmetric wallwash optics only One mounting bracket provided for 12 in fixtures. Two mounting brackets provided for 24 in, 36 in and 48 in fixtures. See installation instructions for details. SAMN - Slim Adjustable Mounting Nano UMPN - Fixed Mounting No UMPN - Mounting hole patte **lumenpulse** Lumenpulse Group Inc. reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately 2019.03.22 copyright © 2019 Lumenpulse Group Inc.

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Description: Exterior Façade - L28 Pilasters

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x10-CL-SAMN-{FINISH}-UCTL-UL + LCBX BUROHAPPOLD ENGINEERING

Luminaire Designation

COLOR CHANGING

Sheet Number 5 of 9

Buro Happold Project #0042413 Requirements: **Specification Sheet** lumenfacade nano

Optical accessories (order separately)

LOGNVS - Visor for Lumenfacade Nano

 $12\frac{3}{4}$, $24\frac{3}{4}$, $36\frac{3}{4}$, $48\frac{3}{4}$ Top view Front view

LOGNVS-LENGTH-FINISH-OPTIONS

LENGTH: 12 in, 24 in, 36 in or 48 in; FINISH: BK - Black Sandtex®, BRZ - Bronze Sandtex®, SI - Silver Sandtex®, WH - Smooth white or CC - custom color and finish (please specify RAL color); OPTIONS: CRC - Corrosion-resistant coating for hostile environments

- The addition of a visor will affect beam distribution. Consult factory for application support
- Not suitable for wide 120° optic.
- Maximum one accessory per fixture. Visors are field installable.

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Description: Exterior Façade - L28 Pilasters

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

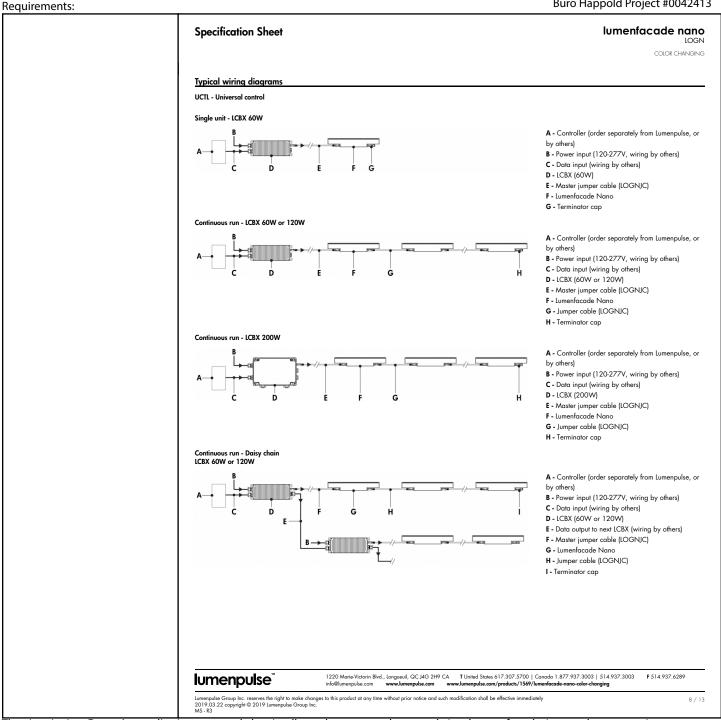
LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x10-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

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Luminaire Designation

Sheet Number 6 of 9

Buro Happold Project #0042413



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Description: Exterior Façade - L28 Pilasters

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Requirements:

LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x10-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

Sheet Number 7 of 9

Buro Happold Project #0042413

Specification Sheet

lumenfacade nano

COLOR CHANGING

Accessories (order separately)

Control Boxes

LCBX-Low-Voltage Control Box





Low-voltage control and power box. One power and data output to fixture, or fixture run. Refer to LCBX specification sheet for details.

LSBX-Low-Voltage Splitter Box



Low-voltage control and power splitter box. One power and data output to fixture run. Refer to LSBX specification sheet for details.

Control Systems

ITN2-Lumentone™ 2



Lumentone 2 is a simple pre-programmed DMX 512 controller with a push button rotary dial and live feedback

PHAROS-Pharos® kit





The Pharos kit, available for 1 or 2 DMX universes, allows for complete control of large lighting installations. 2 DMX universes kit shown.

Diagnostic and Addressing Tools

LID-LumenID



LumenID is a diagnostic and addressing DMX/RDM tool. It must be specified on all DMX applications. Refer to LID specification sheet for details.

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Description: Exterior Façade - L28 Pilasters

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x10-CL-SAMN-{FINISH}-UCTL-UL + LCBX

BUROHAPPOLD ENGINEERING

Luminaire Designation

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Sheet Number 8 of 9

Requirements:						Buro	Happold P	roject #0042413	
	Specification	Sheet					lume	nfacade nano LOGN COLOR CHANGING	
	How to order								
	1	2	3	4	5	6	7	8	
	9	10	11	12	_	l	ı		
		•		•	_				
	1 . Housing				2 . Wattage				
	LOGN	Lumenfac	cade™ Nano		4W	4 W/	′fi		
	3 . Voltage				4 . Length				
		10.1/0.0				10.0	(4. (2. (1).)		
	48V	48 VDC			12 24		/4 in (1.4 lbs) /4 in (2.9 lbs)		
					36		/4 in (4.4 lbs)		
					48		/4 in (6 lbs)		
	5 . Color and Co	or Tomporaturo			6 . Optics				
	RGB Additive RGB RGBW Additive RGB + white 4000K standard. 2700K,				8x8		8° x 8°		
	RGBW			e, consult factory. (1)	10x10 10x30		10° x 10° 10° x 30° 10° x 60° 10° x 90° 30° x 10°		
	RGBA	Additive	RGB + amber	,	10x60				
	(1) Longer lead times as	ply for Royal Blue, 2700K, 3	000K and 3500K white co	olor temperature mixes.	10×90				
					30x10	30° x			
					30x30	30° x	30°		
					30x60	30° x			
					30x90	30° x			
					60×10	60° x			
					60x60 60x90	60° x			
					90×90	90° x			
					W	Wide			
					ww	Asym	metric Wallwash		
	7 . Lens				8 . Mounting C	Options (1)			
	CL	Clear len	ns (1)		SAMN	Slim A	Adjustable Mountin	g Nano	
	FR	Frosted le	ens ⁽²⁾		UMPN	Fixed	Mounting Nano		
	HFR	Half-frost	ted lens ⁽³⁾		UMASN		rsal Adjustable Mo		
	(1) Not available for 8x	8, 10x10, W or WW optics.			WAMN2		table Wall Mounti	-	
	(2) Not available for W	W optic.			WAMN6			m Mounting Nano 6 in	
	(3) Available for 8x8, 1	0x10 or WW optics only.			WAMN12 WAMN18			m Mounting Nano 12 in m Mounting Nano 18 in	
								xets provided for 24 in, 36 in and	
					48 in fixtures.	provided for 12 ill lixi		p. 31000 for 24 III, 30 III UIU	
	lumenpul	se [™]	1220 Marie-Victorin Blv info@lumenpulse.com	d., Longueuil, QC J4G 2H9 C/	A T United States 617.30 www.lumenpulse.com/produc			03 F 514.937.6289	
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Description: Exterior Façade - L28 Pilasters

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x10-CL-SAMN-{FINISH}-UCTL-UL + LCBX

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Luminaire Designation

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Sheet Number 9 of 9

Requirements:				Buro Happold Project #0042413
	Specification Sheet			lumenfacade nano LOGN COLOR CHANGING
	9 . Finish		10 . Control (1)	COLOR CI MINGING
	BK BRZ SI WH CC (1) Lumenpulse offers a wide selection finish. Please consult factory for a list alternate color charts. Final color mat 12 . Certification UL CE	Black Sandtex® Silver Sandtex® Smooth white Custom color and finish (please specify RAL color) [1] of RAL CLASSIC [K7] colors with a smooth texture and high-gloss of available K7 colors, other RAL textures and glosses, or to match teching results may vary. UL compliant CE compliant	specified. 11 . Options CRC	Universal control (compatible with DMX/RDM or DALI-2 Type 8 systems) or Low-Voltage Splitter Box (LSBX) and LumenID (LID) must be Corrosion-resistant coating for hostile environments (1) ray and harsh chemicals. This option is not required for normal
	lumenpulse [™]	1220 Marie-Victorin Blvd., Longueuil, QC J4G 2H9 C info@lumenpulse.com www.lumenpulse.com	www.lumenpulse.com/products/1569/lumenf	acade-nano-color-changing
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Description: Exterior Façade - L32 Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x90-CL-SAMN-{FINISH}-UCTL-UL + LCBX

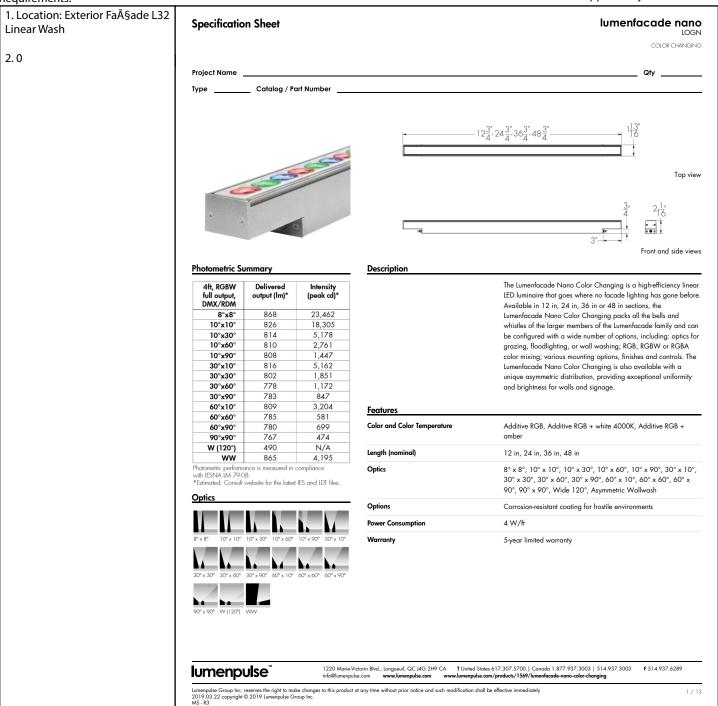
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Luminaire Designation

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Sheet Number 1 of 9

Requirements: Buro Happold Project #0042413



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Description: Exterior Façade - L32 Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Requirements:

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x90-CL-SAMN-{FINISH}-UCTL-UL + LCBX

BUROHAPPOLD ENGINEERING

Luminaire Designation

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Sheet Number 2 of 9

Buro Happold Project #0042413

Specification Sheet		lumenfacade nan
		COLOR CHANGII
Colors and Color Temperatures	Performance	
RGB Mariama Jan RGBA Mariama Jan Mariama J	Delivered Output	724 lm (48 in fixture, RGB full output, $8^{\circ} \times 8^{\circ}$, UCTI), 868 lm (48 in fixture, RGBW full output, $8^{\circ} \times 8^{\circ}$, UCTI), 748 lm (48 in fixture, RGBA full output, $8^{\circ} \times 8^{\circ}$, UCTI)
<u>Controls</u> UCTL	Delivered Intensity	19,566 cd at nadir (48 in fixture, RGB full output, 8° x 8°, UCTL) 23,462 cd at nadir (48 in fixture, RGBW full output, 8° x 8°, UCTL), 20,211 cd at nadir (48 in fixture, RGBA full output, 8° x 8°, UCTL)
Ratings IP66 IK08 Certifications	Illuminance at Distance	Minimum 1 fc at 153 ft (48 in fixture, RGB full output, $8^{\circ} \times 8^{\circ}$, UCTL), Minimum 1 fc at 168 ft (48 in fixture, RGBW full output, $\times 8^{\circ}$, UCTL), Minimum 1 fc at 156 ft (48 in fixture, RGBA full output, $8^{\circ} \times 8^{\circ}$, UCTL)
	Lumen Maintenance	L70 >90,000 hrs
c	Physical	
	Housing Material	Low copper content extruded aluminum
	Lens Material	Clear tempered glass
	Hardware Material	Stainless steel
	End Cap Material	Machined aluminum
	Gasket Material	Silicone
	Surface Finish	Electrostatically applied polyester powder coat
	Weight	1.4 lbs (12 in), 2.9 lbs (24 in), 4.4 lbs (36 in), 6 lbs (48 in)
	Electrical and control	
	Voltage	48 VDC
	Resolution (DMX/RDM)	Per foot or per fixture (configured with LumenID V3 software), 8-b or 16-bit, 3 channels (RGB) or 4 channels (RGBW, RGBA)
	RGB Color Mixing	12 LEDs per 12 in (4x Red, 4x Green, 4x Blue)
	RGBW Color Mixing	12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x White)
	RGBA Color Mixing	12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x Amber)
	Control	Universal control (compatible with DMX/RDM or DALI-2 Type 8 systems)
	Environmental	
	Environmental Storage Temperature	-40 °F to 185 °F (device must reach start-up temperature value before operating)
	Storage Temperature	before operating)
	Storage Temperature Start-up Temperature	before operating) -13 °F to 122 °F

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Description: Exterior Façade - L32 Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Requirements:

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x90-CL-SAMN-{FINISH}-UCTL-UL + LCBX

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Luminaire Designation

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Sheet Number 3 of 9

В	Suro Happold Project #0042413
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Specification Sheet		lumenfacade nan LOC COLOR CHANGII
	Accessories (order separately)	
	Cables	Lumenfacade Nano Jumper Cable, Trunk Power Cable, Trunk Do Cable
	Control Boxes	Low-Voltage Control Box, Low-Voltage Splitter Box
	Optical Accessories	Lumenfacade Nano Visor
	Control Systems	Lumentone™ 2, Pharos® kit
	Diagnostic and Addressing Tools	LumenID
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Description: Exterior Façade - L32 Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x90-CL-SAMN-{FINISH}-UCTL-UL + LCBX

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Luminaire Designation

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Sheet Number 4 of 9

Buro Happold Project #0042413 Requirements: **Specification Sheet** lumenfacade nano COLOR CHANGING Optical option installation details HFR - Half-frosted lens WW - Asymmetric wallwash Recommended setback from wall is 1/10 of the wall height. Example: 2 ft setback for a 20 ft wall. Always position frosted side toward the wall. • Applicable for 8° x 8°, 10° x 10° or asymmetric wallwash optics only One mounting bracket provided for 12 in fixtures. Two mounting brackets provided for 24 in, 36 in and 48 in fixtures. See installation instructions for details. SAMN - Slim Adjustable Mounting Nano UMPN - Fixed Mounting No UMPN - Mounting hole patte **lumenpulse** Lumenpulse Group Inc. reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately 2019.03.22 copyright © 2019 Lumenpulse Group Inc.

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Description: Exterior Façade - L32 Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x90-CL-SAMN-{FINISH}-UCTL-UL + LCBX

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Luminaire Designation

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Sheet Number 5 of 9

Buro Happold Project #0042413 Requirements: **Specification Sheet** lumenfacade nano COLOR CHANGING Optical accessories (order separately) LOGNVS - Visor for Lumenfacade Nano $12\frac{3}{4}$, $24\frac{3}{4}$, $36\frac{3}{4}$, $48\frac{3}{4}$ Top view Front view LOGNVS-LENGTH-FINISH-OPTIONS LENGTH: 12 in, 24 in, 36 in or 48 in; FINISH: BK - Black Sandtex®, BRZ - Bronze Sandtex®, SI - Silver Sandtex®, WH - Smooth white or CC - custom color and finish (please specify RAL color); OPTIONS: CRC - Corrosion-resistant coating for hostile environments • The addition of a visor will affect beam distribution. Consult factory for application support • Not suitable for wide 120° optic. • Maximum one accessory per fixture. Visors are field installable.

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Description: Exterior Façade - L32 Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

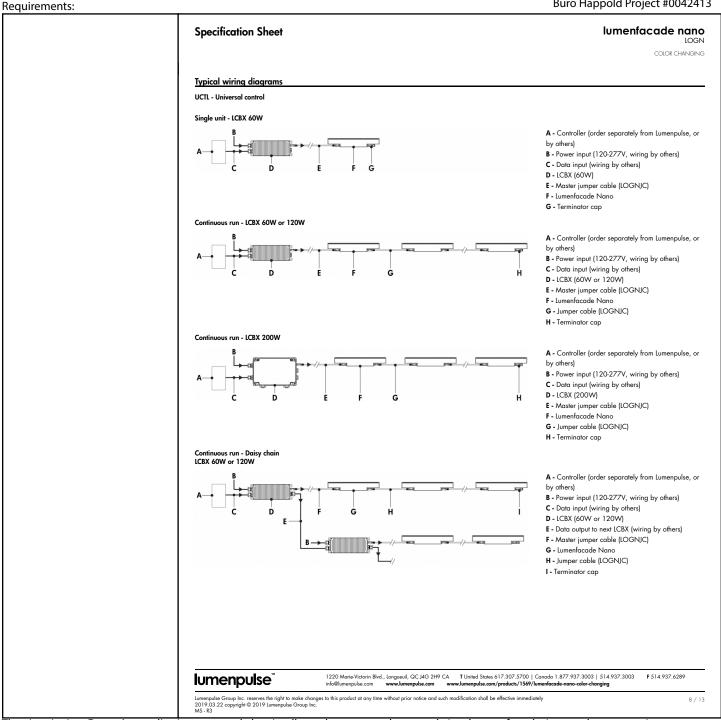
LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x90-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

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Luminaire Designation

Sheet Number 6 of 9

Buro Happold Project #0042413



50% CD - February 14, 2020

Description: Exterior Façade - L32 Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Requirements:

LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x90-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

Sheet Number 7 of 9

Buro Happold Project #0042413

Specification Sheet

lumenfacade nano

COLOR CHANGING

Accessories (order separately)

Control Boxes

LCBX-Low-Voltage Control Box





Low-voltage control and power box. One power and data output to fixture, or fixture run. Refer to LCBX specification sheet for details.

LSBX-Low-Voltage Splitter Box



Low-voltage control and power splitter box. One power and data output to fixture run. Refer to LSBX specification sheet for details.

Control Systems

ITN2-Lumentone™ 2



Lumentone 2 is a simple pre-programmed DMX 512 controller with a push button rotary dial and live feedback

PHAROS-Pharos® kit







The Pharos kit, available for 1 or 2 DMX universes, allows for complete control of large lighting installations. 2 DMX universes kit shown.

Diagnostic and Addressing Tools

LID-LumenID



LumenID is a diagnostic and addressing DMX/RDM tool. It must be specified on all DMX applications. Refer to LID specification sheet for details.

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Description: Exterior Façade - L32 Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x90-CL-SAMN-{FINISH}-UCTL-UL + LCBX

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Luminaire Designation

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Sheet Number 8 of 9

Specificatio	n Sheet					lumer	nfacade nar
							COLOR CHANGI
How to order							
1	2	3	4	5	6	7	8
9	10	11	12				
1 . Housing				2 . Wattage			
LOGN	Lumen	facade™ Nano		4W	4 W	//fi	
3 . Voltage				4 . Length			
	48 VD)C	-		10.0	2 /4 := /1 4 -1	
48V	46 VD			12 24		3/4 in (1.4 lbs) 3/4 in (2.9 lbs)	
				36		3/4 in (4.4 lbs)	
				48		3/4 in (6 lbs)	
5 . Color and (Color Temperature			6 . Optics			
RGB		ve RGB	-	8x8	8° x	8°	
RGBW			OK standard. 2700K,	10x10		x 10°	
RODVV			ole, consult factory. (1)	10x10		x 30°	
RGBA	Additi	ve RGB + amber		10x60		x 60°	
(1) Longer lead time:	apply for Royal Blue, 2700k	C. 3000K and 3500K white	color temperature mixes.	10x90	10° × 90°		
	7,7			30x10		x 10°	
				30x30	30°	x 30°	
				30x60	30°	x 60°	
				30x90	30°	x 90°	
				60x10	60°	x 10°	
				60x60	60°	x 60°	
				60x90		x 90°	
				90x90		× 90	
				W		le 120°	
				ww	Asyı	mmetric Wallwash	
7 . Lens				8 . Mounting Op	tions (1)		
CL		lens (1)		SAMN	Slim	Adjustable Mounting	g Nano
FR		d lens ⁽²⁾		UMPN	Fixe	d Mounting Nano	
HFR	Half-fr	osted lens ⁽³⁾		UMASN		rersal Adjustable Mou	-
(1) Not available for	8x8, 10x10, W or WW opt	tics.		WAMN2		ustable Wall Mounting	
(2) Not available for	WW optic.			WAMN6		stable Extended Arm	-
(3) Available for 8x8	, 10x10 or WW optics only.			WAMN12		ustable Extended Arm	
				WAMN18		ustable Extended Arm	
				(1) One mounting brack 48 in fixtures.	set provided for 12 in fi	xtures. Two mounting bracke	ets provided for 24 in, 36 in
lumenpu	ulco™	1220 Marie-Victorin E	lvd., Longueuil, QC J4G 2H9 C	T United States 617.307.5	700 Canada 1.877.	937.3003 514.937.3003	3 F 514.937.6289

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Description: Exterior Façade - L32 Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x90-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

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Sheet Number 9 of 9

Buro Happold Project #0042413

9. Finish WE Book Souther D SI She formbuck D CC Custon order off minis planes questly 80 classes of program of the control program of	Requirements:				Buro Happold Project #0042413
9. Finish UC Such Sandward SI Sules Sandward UC Co Co Co Co Co Co Co Co Co Co Co Co Co		Specification Shee	t		lumenfacade nano
BK Biock Scordwich BK BK Process Scordwich BK BK BK Scordwich BK BK BK Scordwich BK BK BK BK BK BK BK BK BK BK BK BK BK					COLOR CHANGING
BEZ Boron Scandwalls Si Shark Scandwalls CC Curon color on fill be limited (please speedly RAL color) "I Samoph white a cube stored of DC I CRIC E7 prior we have a read high give from himself and color from the CRIC E7 prior with a server was not high give from himself and color from the CRIC E7 prior with a server was not high give from himself and color from the other broad of many mark himself and color from the other broad of many mark himself and color from the other broad of many mark himself and color from the other broad of many mark himself and color from the other broad of many mark himself and color from the other broad of many mark himself and color from the other broad of many marks himself and color from the other broad of many marks himself and color from the other broad of many marks himself and color from the other broad of many marks himself and color from the other broad of many marks himself and color from the other broad of many marks himself and color from the other broad of many marks himself and color from the other broad of many marks himself and color from the other broad of many marks himself and color from the other broad of many marks himself and color from the other broad of the color from the other broad of the color from the other broad of the color from the other broad of the color from		9 . Finish		10 . Control (1)	
		BRZ SI WH CC (1) Lumenpulse offers a wide select finish. Please consult factory for a alternate color charts. Final color r	Bronze Sandtex® Silver Sandtex® Smooth white Custom color and finish (please specify RAL color) [11] tion of RAL CLASSIC (K7) colors with a smooth texture and high-gloss lits of evallable K7 colors, other RAL textures and glosses, or to match matching results may vary. UL compliant	(1) A Low-Voltage Control Box specified. 11 . Options CRC	DALI-2 Type 8 systems) (ICBX) or Low-Voltage Splitter Box (LSBX) and LumenID (IID) must be Corrosion-resistant coating for hostile environments (1)
		lumenpulse [™]	1220 Marie-Victorin Blvd., Longueuil, QC J4G 2H9 C info@lumenpulse.com www.lumenpulse.com	CA T United States 617.307.5700 www.lumenpulse.com/products/1569/	Canada 1.877.937.3003 514.937.3003
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Description: Exterior Façade - L33 Base Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX

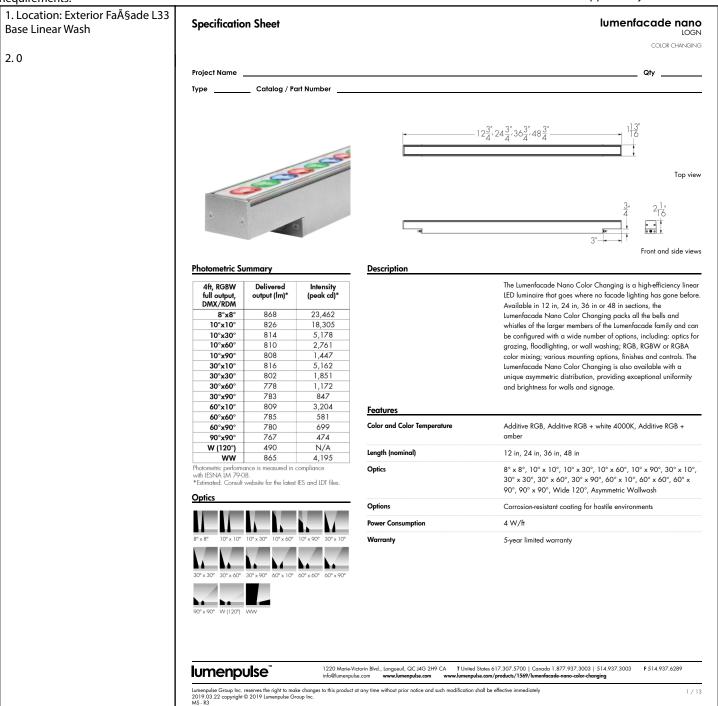
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Luminaire Designation

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Sheet Number 1 of 9

Requirements: Buro Happold Project #0042413



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Description: Exterior Façade - L33 Base Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Requirements:

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX

BUROHAPPOLD ENGINEERING

Luminaire Designation

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Sheet Number 2 of 9

Buro Happold Project #0042413

Specification Sheet		lumenfacade nan LOG COLOR CHANGIN
Colors and Color Temperatures	Performance	
R _{GBW} R _{GBA}	Delivered Output	724 Im (48 in fixture, RGB full output, 8° x 8°, UCTL), 868 Im (48 in fixture, RGBW full output, 8° x 8°, UCTL), 748 Im (48 in fixture, RGBA full output, 8° x 8°, UCTL)
<u>Controls</u> UCTL	Delivered Intensity	19,566 cd at nadir (48 in fixture, RGB full output, 8° x 8°, UCTL), 23,462 cd at nadir (48 in fixture, RGBW full output, 8° x 8°, UCTL), 20,211 cd at nadir (48 in fixture, RGBA full output, 8° x 8°, UCTL)
Ratings IP66 IK08 Certifications	Illuminance at Distance	Minimum 1 fc at 1.53 ft (48 in fixture, RGB full output, $8^{\circ} \times 8^{\circ}$, UCTL), Minimum 1 fc at 1.68 ft (48 in fixture, RGBW full output, $8^{\circ} \times 8^{\circ}$, UCTL), Minimum 1 fc at 1.56 ft (48 in fixture, RGBA full output, $8^{\circ} \times 8^{\circ}$, UCTL)
0 (((Lumen Maintenance	L70 >90,000 hrs
	Physical	
	Housing Material	Low copper content extruded aluminum
	Lens Material	Clear tempered glass
	Hardware Material	Stainless steel
	End Cap Material	Machined aluminum
	Gasket Material	Silicone
	Surface Finish	Electrostatically applied polyester powder coat
	Weight	1.4 lbs (12 in), 2.9 lbs (24 in), 4.4 lbs (36 in), 6 lbs (48 in)
	Electrical and control	
	Voltage	48 VDC
	Resolution (DMX/RDM)	Per foot or per fixture (configured with LumenID V3 software), 8-bit or 16-bit, 3 channels (RGB) or 4 channels (RGBW, RGBA)
		12 LEDs per 12 in (4x Red, 4x Green, 4x Blue)
	RGB Color Mixing	
	RGB Color Mixing RGBW Color Mixing	12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x White)
		12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x White) 12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x Amber)
	RGBW Color Mixing	
	RGBW Color Mixing	12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x Amber) Universal control (compatible with DMX/RDM or DALI-2 Type 8
	RGBW Color Mixing RGBA Color Mixing Control	12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x Amber) Universal control (compatible with DMX/RDM or DALL-2 Type 8
	RGBW Color Mixing RGBA Color Mixing Control Environmental	12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x Amber) Universal control (compatible with DMX/RDM or DALI-2 Type 8 systems) -40 °F to 185 °F (device must reach start-up temperature value
	RGBW Color Mixing RGBA Color Mixing Control Environmental Storage Temperature	12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x Amber) Universal control (compatible with DMX/RDM or DALI-2 Type 8 systems) -40 °F to 185 °F (device must reach start-up temperature value before operating)
	RGBW Color Mixing RGBA Color Mixing Control Environmental Storage Temperature Start-up Temperature	12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x Amber) Universal control (compatible with DMX/RDM or DALI-2 Type 8 systems) -40 °F to 185 °F (device must reach start-up temperature value before operating) -13 °F to 122 °F

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Description: Exterior Façade - L33 Base Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

LOGN-4W-48V-{LENGTH}-RGBW(3000K)-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

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Luminaire Designation

Sheet Number 3 of 9

Requirements:			Buro Happold Project #004241
	Specification Sheet		lumenfacade nano
			COLOR CHANGING
		Accessories (order separately)	() () () () () () () () () ()
		Cables Lum Cat	nenfacade Nano Jumper Cable, Trunk Power Cable, Trunk Data ole
		Control Boxes Low	-Voltage Control Box, Low-Voltage Splitter Box
		Optical Accessories Lum	nenfacade Nano Visor
			nentone™ 2, Pharos® kit
		Diagnostic and Addressing Tools Lum	nenID
	lumenpulse [™]	1220 Marie-Victorin Blvd., Longueuil, QC J4G 2H9 CA T United States 617.307.: info@lumenpulse.com www.lumenpulse.com/products,	5700 Canada 1.877.937.3003 514.937.3003
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Description: Exterior Façade - L33 Base Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX

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Luminaire Designation

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Sheet Number 4 of 9

Buro Happold Project #0042413 Requirements: **Specification Sheet** lumenfacade nano COLOR CHANGING Optical option installation details HFR - Half-frosted lens WW - Asymmetric wallwash Recommended setback from wall is 1/10 of the wall height. Example: 2 ft setback for a 20 ft wall. Always position frosted side toward the wall. • Applicable for 8° x 8°, 10° x 10° or asymmetric wallwash optics only One mounting bracket provided for 12 in fixtures. Two mounting brackets provided for 24 in, 36 in and 48 in fixtures. See installation instructions for details. SAMN - Slim Adjustable Mounting Nano UMPN - Fixed Mounting No UMPN - Mounting hole patte **lumenpulse** Lumenpulse Group Inc. reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately 2019.03.22 copyright © 2019 Lumenpulse Group Inc.

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Description: Exterior Façade - L33 Base Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX

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Luminaire Designation

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Sheet Number 5 of 9

Buro Happold Project #0042413 Requirements: **Specification Sheet** lumenfacade nano COLOR CHANGING Optical accessories (order separately) LOGNVS - Visor for Lumenfacade Nano $12\frac{3}{4}$, $24\frac{3}{4}$, $36\frac{3}{4}$, $48\frac{3}{4}$ Top view Front view LOGNVS-LENGTH-FINISH-OPTIONS LENGTH: 12 in, 24 in, 36 in or 48 in; FINISH: BK - Black Sandtex®, BRZ - Bronze Sandtex®, SI - Silver Sandtex®, WH - Smooth white or CC - custom color and finish (please specify RAL color); OPTIONS: CRC - Corrosion-resistant coating for hostile environments • The addition of a visor will affect beam distribution. Consult factory for application support • Not suitable for wide 120° optic. • Maximum one accessory per fixture. Visors are field installable.

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Description: Exterior Façade - L33 Base Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

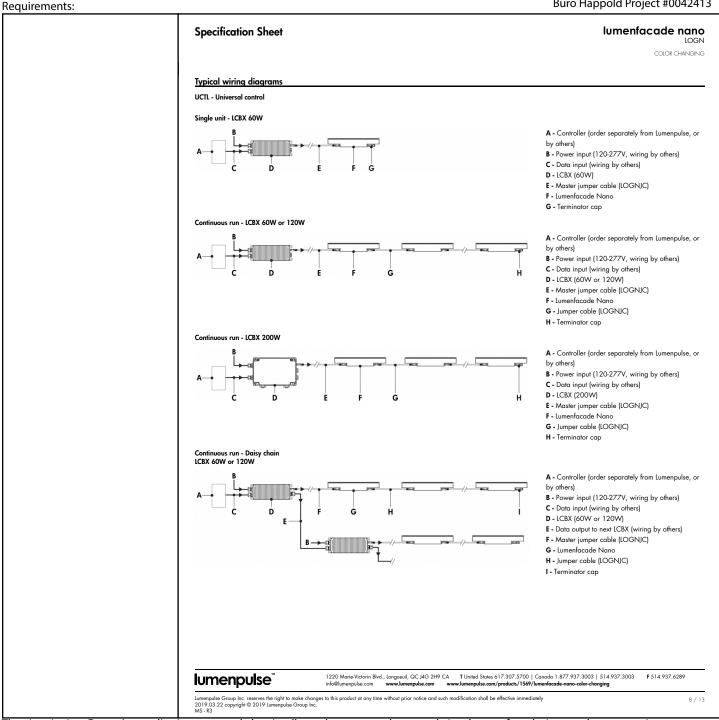
LOGN-4W-48V-{LENGTH}-RGBW(3000K)-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

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Sheet Number 6 of

Buro Happold Project #0042413



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Description: Exterior Façade - L33 Base Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Requirements:

LOGN-4W-48V-{LENGTH}-RGBW(3000K)-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

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Luminaire Designation

Sheet Number 7 of 9

Buro Happold Project #0042413

Specification Sheet

lumenfacade nano

COLOR CHANGING

Accessories (order separately)

Control Boxes

LCBX-Low-Voltage Control Box





Low-voltage control and power box. One power and data output to fixture, or fixture run. Refer to LCBX specification sheet for details.

LSBX-Low-Voltage Splitter Box



Low-voltage control and power splitter box. One power and data output to fixture run. Refer to LSBX specification sheet for details.

Control Systems

ITN2-Lumentone™ 2



Lumentone 2 is a simple pre-programmed DMX 512 controller with a push button rotary dial and live feedback

PHAROS-Pharos® kit







The Pharos kit, available for 1 or 2 DMX universes, allows for complete control of large lighting installations. 2 DMX universes kit shown.

Diagnostic and Addressing Tools

LID-LumenID



LumenID is a diagnostic and addressing DMX/RDM tool. It must be specified on all DMX applications. Refer to LID specification sheet for details.

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Description: Exterior Façade - L33 Base Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX

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Luminaire Designation

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Sheet Number 8 of 9

Requirements:						Buro	Happold Pr	oject #0042413	
	Specification	Sheet					lumen	facade nano	
								LOGN COLOR CHANGING	
								COLOR CHAINGING	
	How to order								
	now to order								
	1	2	3	4	5	6	7	8	
	9	10	11	12	-				
					_				
	1 Hausian				2 . Wattage				
	1 . Housing								
	LOGN	Lumenta	cade™ Nano		4W	4 W/	/H		
	3 . Voltage				4 . Length				
	48V	48 VDC			12	12 3,	/4 in (1.4 lbs)		
					24	24 3,	/4 in (2.9 lbs)		
					36		/4 in (4.4 lbs)		
					48	48 3,	/4 in (6 lbs)		
	5 . Color and Co	or Temperature			6 . Optics				
	RGB	Additive	RGB		8x8	8° x 8	3°		
	RGBW	Additive	RGB + white 4000	K standard. 2700K,	10x10	10° x	10°		
				e, consult factory. ⁽¹⁾	10x30	10° x	30°		
	RGBA		RGB + amber		10x60		10° x 60°		
	⁽¹⁾ Longer lead times ap	ply for Royal Blue, 2700K, 3	8000K and 3500K white c	olor temperature mixes.	10x90	10° x			
					30x10	30° x			
					30x30 30x60	30° x 30° x			
					30x90	30° x			
					60x10	60° x			
					60x60	60° x	60°		
					60x90	60° x			
					90x90	90° x			
					W	Wide			
					ww	Asym	metric Wallwash		
	7 . Lens				8 . Mounting O	ptions (1)			
	CL	Clear ler			SAMN	Slim A	Adjustable Mounting	Nano	
	FR	Frosted le			UMPN		Mounting Nano		
	HFR	Half-frost	ted lens ⁽³⁾		UMASN		ersal Adjustable Mou		
	⁽¹⁾ Not available for 8x	8, 10x10, W or WW optics.	-		WAMN2 WAMN6		table Wall Mounting	Mounting Nano 6 in	
	(2) Not available for W	W optic.			WAMN12			Mounting Nano 12 in	
	(3) Available for 8x8, 1	0x10 or WW optics only.			WAMN18			Mounting Nano 18 in	
					(1) One mounting bro	acket provided for 12 in fixt	ures. Two mounting bracket	s provided for 24 in, 36 in and	
					48 in fixtures.	,			
	-								
	lumenpul	se [™]	1220 Marie-Victorin Blv info@lumenpulse.com	rd., Longueuil, QC J4G 2H9 C/ www.lumenpulse.com	A T United States 617.307 www.lumenpulse.com/product	7.5700 Canada 1.877.93 ts/ 1569/lumenfacade-nano	37.3003 514.937.3003 -color-changing	F 514.937.6289	
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Description: Exterior Façade - L33 Base Linear Wash

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

LOGN-4W-48V-{LENGTH}-RGBW(3000K)-30x30-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

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Luminaire Designation

Sheet Number 9 of 9

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Description: Exterior Façade - L34 Columns

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x10-CL-SAMN-{FINISH}-UCTL-UL + LCBX

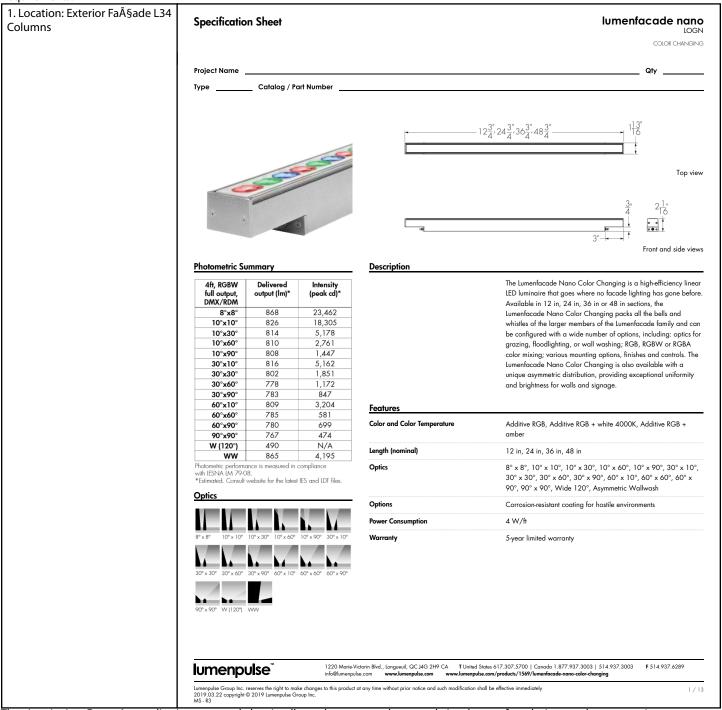
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Luminaire Designation

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Sheet Number 1 of 9

Requirements: Buro Happold Project #0042413



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Description: Exterior Façade - L34 Columns

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Requirements:

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x10-CL-SAMN-{FINISH}-UCTL-UL + LCBX

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Luminaire Designation

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Sheet Number 2 of 9

Buro Happold Project #0042413

Specification Sheet		lumenfacade nan LOG COLOR CHANGIN
Colors and Color Temperatures	Performance	
RGB RGBW RGBA	Delivered Output	724 lm (48 in fixture, RGB full output, 8° x 8°, UCTL), 868 lm (48 in fixture, RGBW full output, 8° x 8°, UCTL), 748 lm (48 in fixture, RGBA full output, 8° x 8°, UCTL)
<u>Controls</u> UCTL	Delivered Intensity	19,566 cd at nadir (48 in fixture, RGB full output, 8° x 8°, UCTL) 23,462 cd at nadir (48 in fixture, RGBW full output, 8° x 8°, UCTL), 20,211 cd at nadir (48 in fixture, RGBA full output, 8° x 8°, UCTL)
Ratings IP66 IK08 Certifications	Illuminance at Distance	Minimum 1 fc at 153 ft (48 in fixture, RGB full output, 8° x 8°, UCTL), Minimum 1 fc at 168 ft (48 in fixture, RGBW full output, 8 x 8°, UCTL), Minimum 1 fc at 156 ft (48 in fixture, RGBA full output, 8° x 8°, UCTL)
	Lumen Maintenance	L70 >90,000 hrs
c thus C € ROHS	Physical	
	Housing Material	Low copper content extruded aluminum
	Lens Material	Clear tempered glass
	Hardware Material	Stainless steel
	End Cap Material	Machined aluminum
	Gasket Material	Silicone
	Surface Finish	Electrostatically applied polyester powder coat
	Weight	1.4 lbs (12 in), 2.9 lbs (24 in), 4.4 lbs (36 in), 6 lbs (48 in)
	Electrical and control	
	Voltage	48 VDC
	Resolution (DMX/RDM)	Per foot or per fixture (configured with LumenID V3 software), 8-b or 16-bit, 3 channels (RGB) or 4 channels (RGBW, RGBA)
	RGB Color Mixing	12 LEDs per 12 in (4x Red, 4x Green, 4x Blue)
	RGBW Color Mixing	12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x White)
	RGBA Color Mixing	12 LEDs per 12 in (3x Red, 3x Green, 3x Blue, 3x Amber)
	Control	Universal control (compatible with DMX/RDM or DALI-2 Type 8 systems)
	Environmental	
	Storage Temperature	-40 °F to 185 °F (device must reach start-up temperature value before operating)
	Start-up Temperature	-13 °F to 122 °F
	Operating Temperature	-40 °F to 122 °F
	Ingress Protection Rating	IP66
	Impact Resistance Rating	IK08 (IK09 for 48 in fixtures)
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Description: Exterior Façade - L34 Columns

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x10-CL-SAMN-{FINISH}-UCTL-UL + LCBX

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Luminaire Designation

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Sheet Number 3 of 9

Requirements: Buro Happold Project #0042413

Specification Sheet		lumenfacade nar LOC COLOR CHANGI
	Accessories (order separately)	
	Cables	Lumenfacade Nano Jumper Cable, Trunk Power Cable, Trunk Do Cable
	Control Boxes	Low-Voltage Control Box, Low-Voltage Splitter Box
	Optical Accessories	Lumenfacade Nano Visor
	Control Systems	Lumentone™ 2, Pharos® kit
	Diagnostic and Addressing Tools	LumenID
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50% CD - February 14, 2020

Description: Exterior Façade - L34 Columns

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x10-CL-SAMN-{FINISH}-UCTL-UL + LCBX

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Luminaire Designation

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Sheet Number 4 of 9

Buro Happold Project #0042413 Requirements: **Specification Sheet** lumenfacade nano COLOR CHANGING Optical option installation details HFR - Half-frosted lens WW - Asymmetric wallwash Recommended setback from wall is 1/10 of the wall height. Example: 2 ft setback for a 20 ft wall. Always position frosted side toward the wall. • Applicable for 8° x 8°, 10° x 10° or asymmetric wallwash optics only One mounting bracket provided for 12 in fixtures. Two mounting brackets provided for 24 in, 36 in and 48 in fixtures. See installation instructions for details. SAMN - Slim Adjustable Mounting Nano UMPN - Fixed Mounting No UMPN - Mounting hole patte **lumenpulse** Lumenpulse Group Inc. reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately 2019.03.22 copyright © 2019 Lumenpulse Group Inc.

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Description: Exterior Façade - L34 Columns

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

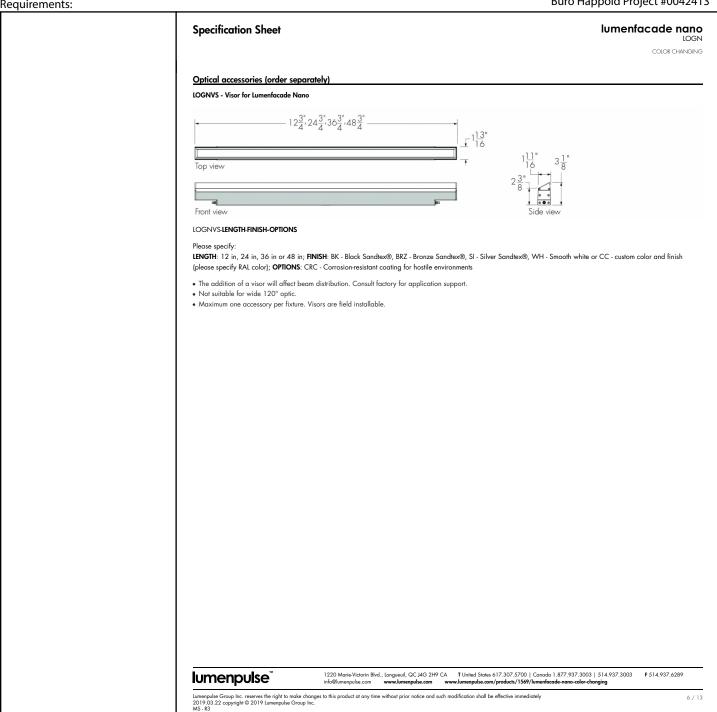
LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x10-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

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Luminaire Designation

Sheet Number 5 of 9

Buro Happold Project #0042413 Requirements:



50% CD - February 14, 2020

Description: Exterior Façade - L34 Columns

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

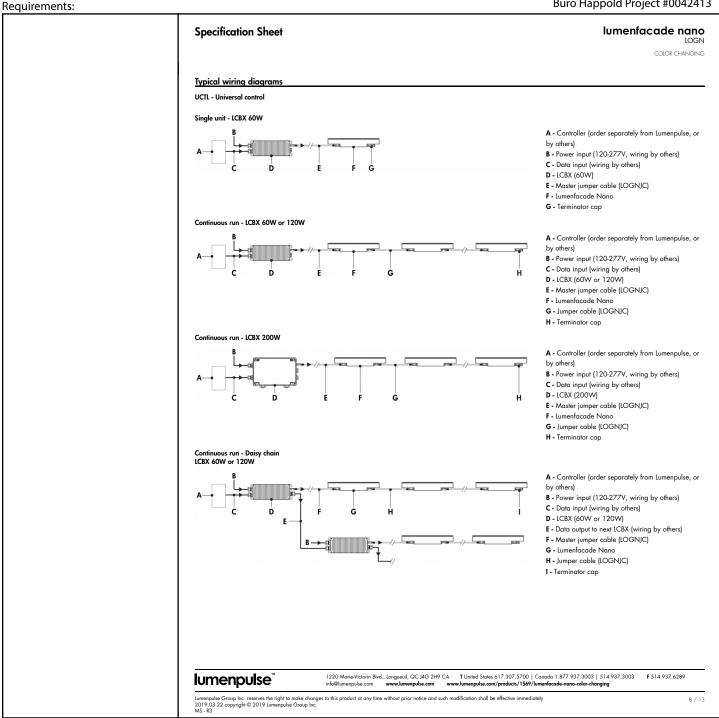
LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x10-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

Sheet Number 6 of 9

Buro Happold Project #0042413



50% CD - February 14, 2020

Description: Exterior Façade - L34 Columns

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Requirements:

LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x10-CL-SAMN-{FINISH}-UCTL-UL + LCBX Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

Sheet Number 7 of 9

Buro Happold Project #0042413

Specification Sheet

lumenfacade nano

COLOR CHANGING

Accessories (order separately)

Control Boxes

LCBX-Low-Voltage Control Box



Low-voltage control and power box. One power and data output to fixture, or fixture run. Refer to LCBX specification sheet for details.

LSBX-Low-Voltage Splitter Box



Low-voltage control and power splitter box. One power and data output to fixture run. Refer to LSBX specification sheet for details.

Control Systems

ITN2-Lumentone™ 2



Lumentone 2 is a simple pre-programmed DMX 512 controller with a push button rotary dial and live feedback

PHAROS-Pharos® kit







The Pharos kit, available for 1 or 2 DMX universes, allows for complete control of large lighting installations. 2 DMX universes kit shown.

Diagnostic and Addressing Tools

LID-LumenID



LumenID is a diagnostic and addressing DMX/RDM tool. It must be specified on all DMX applications. Refer to LID specification sheet for details.

lumenpulse

1220 Marie-Victorin Blvd., Langueuil, QC J4G 2H9 CA T United States 617.307.5700 | Canada 1.877.937.3003 | 514.937.3003 info@lumenpulse.com www.lumenpulse.com/products/1569/lumenfacade-nano-color-changing

Lumenpulse Group Inc. reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately 2019.03.22 copyright © 2019 Lumenpulse Group Inc.
MS - R3

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50% CD - February 14, 2020

Description: Exterior Façade - L34 Columns

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x10-CL-SAMN-{FINISH}-UCTL-UL + LCBX

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-10

Sheet Number 8 of 9

Requirements:						Buro	Happold P	roject #0042413
	Specification	Sheet					lumei	nfacade nano LOGN COLOR CHANGING
	How to order							
	1	2	3	4	5	6	7	8
	9	10	11	12	_		II.	
	1 Housing				2 Wattage			
	1 . Housing		LTMAL		2 . Wattage	4344	ıt.	
	LOGN	Lumentac	cade™ Nano		4W	4 W.	/#	
	3 . Voltage				4 . Length			
	48V	48 VDC			12	12 3	/4 in (1.4 lbs)	
					24		/4 in (2.9 lbs)	
					36		/4 in (4.4 lbs)	
					48	48 3	/4 in (6 lbs)	
	5 . Color and Col	or Temperature			6 . Optics			
	RGB	Additive	RGB		8×8	8° x	8°	
	RGBW			K standard. 2700K,	10x10	10° :		
	RODVV			le, consult factory. (1)	10x10	10° s		
	RGBA	Additive	RGB + amber		10×60	10° s		
	(1) Longer lead times ap	ply for Royal Blue, 2700K, 3	000K and 3500K white c	olor temperature mixes.	10x90	10° :	< 90°	
	,				30x10	30° s	< 10°	
					30x30	30° 2	∢ 30°	
					30x60	30° 2	< 60°	
					30x90	30° 2	< 90°	
					60x10	60° s	k 10°	
					60x60	60° s	< 60°	
					60x90	60° :	∢90°	
					90x90	90° :		
					W		e 120°	
					ww	Asym	metric Wallwash	
	7 . Lens				8 . Mounting Op			
	CL	Clear len			SAMN		Adjustable Mounting	g Nano
	FR	Frosted le			UMPN		Mounting Nano	
	HFR	Halt-trost	ted lens ⁽³⁾		UMASN		ersal Adjustable Mo	
	⁽¹⁾ Not available for 8x	3, 10x10, W or WW optics.			WAMN2		stable Wall Mountin	
	(2) Not available for W	W optic.			WAMN6			Mounting Nano 6 in
	(3) Available for 8x8, 1	0x10 or WW optics only.			WAMN12			Mounting Nano 12 in Mounting Nano 18 in
								ets provided for 24 in, 36 in and
	lumenpul		info@lumenpulse.com	www.lumenpulse.com	48 in fixtures. A T United States 617.307. www.lumenpulse.com/products	/1569/lumenfacade-nand		3 F 514.937.6289
	Lumenpulse Group Inc. rese 2019.03.22 copyright © 20 MS - R3	ves the right to make change 119 Lumenpulse Group Inc.	s to this product at any tim	ne without prior notice and such	n modification shall be effective	immediately		12 / 13

50% CD - February 14, 2020

Description: Exterior Façade - L34 Columns

Manufacturer: Lumenpulse Lamp Reference: RGBW LED (3000K)

Ballast/Transformer: Remote DMX Dimming Driver

Luminaire Wattage: 4W/ft Luminaire Voltage: 277

Catalog Reference: LOGN-4W-48V-{LENGTH}-RGBW(3000K)-10x10-CL-SAMN-{FINISH}-UCTL-UL + LCBX

BUROHAPPOLD ENGINEERING

Luminaire Designation

Sheet Number 9 of 9

9. Finish BK Slock Sondher/9 BZZ Brown Sondher/9 SI Slow Sondher/9 WH Smooth white CC Counter covered filed by Elevens specify RAI CO Counter covered filed by Elevens specify RAI Covered filed to the covered filed by Elevens specify RAI Covered filed to the covered filed by Elevens specify RAI Covered filed to the covered filed by Elevens specify RAI CE Correlation of the covered filed by Elevens specify RAI CE Correlation of the Covered filed by Elevens specify RAI CE Correlation of the Covered filed by Elevens specify RAI CE Correlation of the Covered filed by Elevens specify RAI CE Correlation of the Covered filed by Elevens specify RAI CE Correlation of the Covered filed by Elevens specify RAI CE Correlation of the Covered filed by Elevens specific filed by Elevens sp	Specification Sheet	r		lumenfacade nan LOG COLOR CHANGIN
C Cycles color and final liphous specify RAL color 1 Cycles and color and final liphous specify RAL color 1 Cycles and the color and final RAL CASE_EV color with a round house and high given flows and described to color the light of the side of the light product and color the light color and the light product and color the light product and color the light product and color the light product and color the light product and color the light product and color the light product and color the light product and the light	BK BRZ SI	Bronze Sandtex® Silver Sandtex®	UCTL (1) A Low-Voltage Control B	Universal control (compatible with DMX/RDM o DAU-2 Type 8 systems)
	CC (1) Lumenpulse offers a wide selectifinish. Please consult factory for a liabernate color charts. Final color m 12 . Certification UL	Custom color and finish (please specify RAL color) (1) on of RAL CLASSIC (K7) colors with a smooth texture and high-gloss sit of available K7 colors, other RAL textures and glosses, or to match acthing results may vary. UL compliant	11 . Options CRC (1) Use only when exposed	environments (1)
1220 Marie-Victorin Blvd., Longueuil, QC J4G 2H9 CA	 	1220 Mario Metris Bl.d. 1	A Thinked Stores 417 207 5700	Consider 977 027 2002 \$14 027 2002 \$514 027 7000

Book Development Detroit, MI 50% CD - February 14, 2020

Description: Exterior Façade - Entry Sconces Washington

Manufacturer: TBD Lamp Reference: TBD Ballast/Transformer: TBD Luminaire Wattage: TBD Luminaire Voltage: 277 Catalog Reference: TBD

1. Location: Exterior Façade Entry Sconces Washington

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-11

Sheet Number 1 of 1

Requirements: Buro Happold Project #0042413

Fixture TBD

Book Development Detroit, MI 50% CD - February 14, 2020

Description: Exterior Façade - Entry Sconces Grand River

Manufacturer: TBD Lamp Reference: TBD Ballast/Transformer: TBD Luminaire Wattage: TBD Luminaire Voltage: 277 Catalog Reference: TBD

1. Location: Exterior Façade Entry Sconces Grand River BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-12

Sheet Number 1 of 1

Requirements: Buro Happold Project #0042413

Fixture TBD

50% CD - February 14, 2020

Description: LED Tape Light - Outdoor Egress - Level 14

Manufacturer: Osram Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 1.2W/ft Luminaire Voltage: 277

LFP500-G1-830-10 Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

HF-15

Sheet Number 1 of 10

Buro Happold Project #0042413

1. Location: Exterior Fire Escape

- Level 14

Requirements:

www.osram.com

Light is OSRAM

OSRAM

LINEARlight® FLEX Protect Low Power

The best solution for amazing decorative lighting LFP500-G1







Features & Benefits

- Luminous flux up to 520 lm/m
- IP67 protection
- Color uniformity ≤2 SDCM*
- Lifetime up to 60.000 h L80B10 at Tp CRI 90 and 80 options

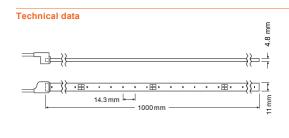
- Internal constant current regulator LM80 & LM79 compliant
- High light quality and large selection of light color temperatures Dimmable by OPTOTRONIC® LED drivers
- Great design freedom thanks to flexibility and cuttability of the LED strip
- Easy mounting on many smooth surfaces thanks to self-adhesive tape at the back Outdoor use possible: UV and salt mist resistant
- Reel-to-Reel technology
- Made in Italy

Application areas

Decorative Lighting, Path lighting

Standards

CE, ENEC 10, EAC, VDE, CSA and UL recognized



Lowest Bending Radius = 50mm Number LED/m = 70 Smallest unit = 100 mm

Nominal Voltage	24.0 V
Reverse voltage protection up to	25.0 V
Temperature range in operation @ Tc point	-30+70 °C
Storage Temperature	-40+85 °C
Ambient Temperature with profile **	-30+50 °C

180 270

Beam Angle 120°

50% CD - February 14, 2020

Description: LED Tape Light - Outdoor Egress - Level 14

Manufacturer: Osram Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 1.2W/ft Luminaire Voltage: 277

Catalog Reference: LFP500-G1-830-10 BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-15

Sheet Number 2 of 10

LF Low Power IP67 LFF								
Technical data								
LFP500	Nor See co	minal CCT	CRI	Luminous Flux per meter Im/m	Power W/m	Luminous Efficacy Im/W	Performance Temp. Tp °C	Length m
LFP500-G1-827-10		2700 K	>80	440	3.9	113	35	10
LFP500-G1-830-10		3000 K	>80	480	3.9	123	35	10
LFP500-G1-835-10		3500 K	>80	480	3.9	123	35	10
LFP500-G1-840-10	0	4000 K	>80	520	3.9	133	35	10
LFP500-G1-850-10		5000 K	>80	520	3.9	133	35	10
LFP500-G1-865-10		6500 K	>80	520	3.9	133	35	10
LFP500-G1-927-10		2700 K	>90	360	3.9	92	35	10
LFP500-G1-935-10		3500 K	>90	400	3.9	103	35	10
LFP500-G1-940-10		4000 K	>90	400	3.9	103	35	10
LFP500-G1-965-10		6500 K	>90	440	3.9	113	35	10

Description: LED Tape Light - Outdoor Egress - Level 14

Manufacturer: Osram Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 1.2W/ft Luminaire Voltage: 277

Catalog Reference: LFP500-G1-830-10

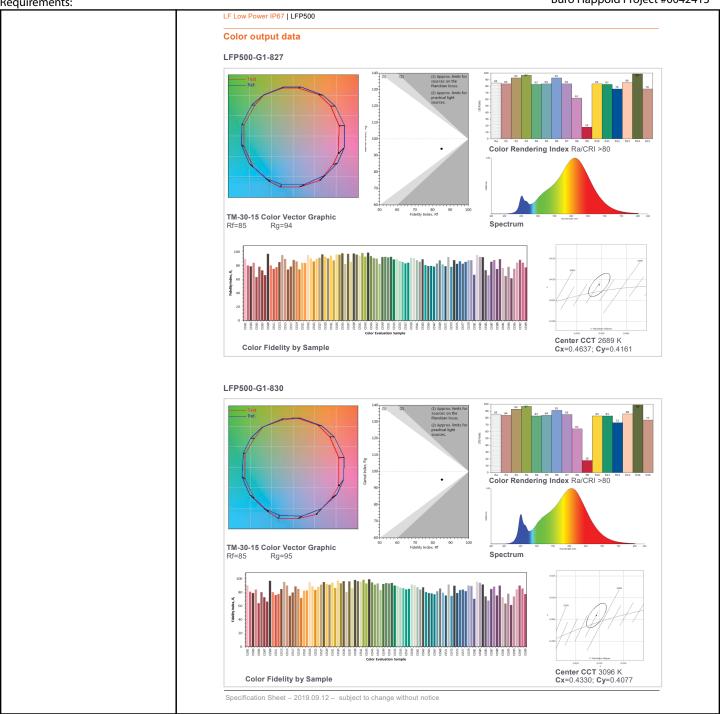
BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-15

Sheet Number 3 of 10

Requirements: Buro Happold Project #0042413



50% CD - February 14, 2020

Description: LED Tape Light - Outdoor Egress - Level 14

Manufacturer: Osram Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 1.2W/ft Luminaire Voltage: 277

Catalog Reference: LFP500-G1-830-10

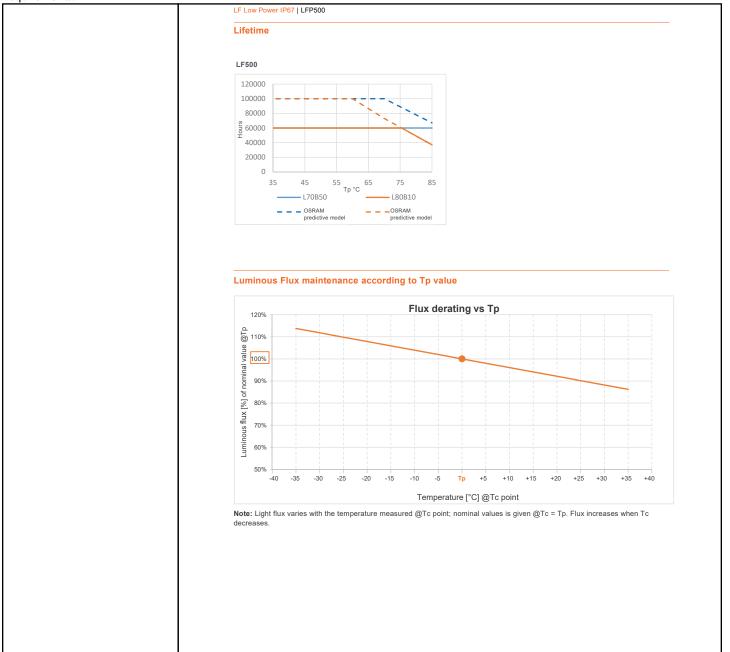
BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-15

Sheet Number 4 of 10

Requirements: Buro Happold Project #0042413



The Luminaire Data Appendix is protected by intellectual property laws and is shown for design and construction team use only. Reproduction is restricted. See written specification section 265100 for additional product requirements and information.

Specification Sheet – 2019.09.12 – subject to change without notice

50% CD - February 14, 2020

Description: LED Tape Light - Outdoor Egress - Level 14

Manufacturer: Osram Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 1.2W/ft Luminaire Voltage: 277

Catalog Reference: LFP500-G1-830-10

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-15

Sheet Number 5 of 10

LF L	Low Power IP67 LF	P500		
Ord	der Code			
Pr	roduct description	Product code	Dimensions (length x width x height)	EAN10 Package content
LF	FP500-G1-827-10	4052899575400	10000 x 11 x 4 mm	1x Led strip 1x connector already installed
LF	FP500-G1-830-10	4052899575424	10000 x 11 x 4 mm	1x Led strip 1x connector already installed
LF	FP500-G1-835-10	4052899575448	10000 x 11 x 4 mm	1x Led strip 1x connector already installed
LF	FP500-G1-840-10	4052899575462	10000 x 11 x 4 mm	1x Led strip 1x connector already installed
LF	FP500-G1-850-10	4062172061810	10000 x 11 x 4 mm	1x Led strip 1x connector already installed
LF	FP500-G1-865-10	4052899575486	10000 x 11 x 4 mm	1x Led strip 1x connector already installed
LF	FP500-G1-927-10	4052899595217	10000 x 11 x 4 mm	1x Led strip
	FP500-G1-935-10	4052899575523	10000 x 11 x 4 mm	1x connector already installed 1x Led strip 1x connector already installed
	FP500-G1-940-10	4052899575547	10000 x 11 x 4 mm	1x connector already installed 1x Led strip
			10000 x 11 x 4 mm	1x connector already installed 1x Led strip
LF	FP500-G1-965-10	4052899575561	1000 X . 1 X 7 11111	1x connector already installed
Ch	hoose your acc	cessories		
	oduct Type	Product description	Product code (EAN10)	EAN10 Package content
	End cap IP67	LF-ENDCAP 1P67 LP	4062172016360	10x endcap,
				1x glue
	Connector IP6	67 LF-2PIN IP67 LP	4062172016414	5x connector,
Pro	ofile System co	LF-2CONN IP67 LP Flex LED strips are fully compatib ompatibility	4062172016414 4062172016384 le with OSRAM OT and OTi LED drivers a	5x endcap, 1x glue 5x jumper and dimmers.
Pro	Jumper IP67 te: All LINEARlight offile System cone table reports the	LF-2CONN IP67 LP Flex LED strips are fully compatib pmpatibility maximum recommended ambier	4062172016384	5x endcap, 1x glue 5x jumper and dimmers. ombination with LFP500, in case
Pro The	Jumper IP67 te: All LINEARlight ofile System co the table reports the surface or recesses	LF-2CONN IP67 LP Flex LED strips are fully compatib pmpatibility maximum recommended ambier id mounting. In these conditions	te with OSRAM OT and OTi LED drivers and temperature for each listed profile in the expected Tc of LED strip is the maximum SURFACE MOUNTING	5x endcap, 1x glue 5x jumper and dimmers. ombination with LFP500, in case mum allowed. RECESSED MOUNTING
Pro The of s	Jumper IP67 te: All LINEARlight ofile System co ne table reports the surface or recesse ack Type	LF-2CONN IP67 LP Flex LED strips are fully compatib pmpatibility maximum recommended ambier d mounting. In these conditions Product description	t temperature for each listed profile in che expected Tc of LED strip is the maximum product code (EAN)	5x endcap, 1x glue 5x jumper and dimmers. ombination with LFP500, in cas- mum allowed. RECESSED MOUNTING The CC Ambient Temperature *CC
Pro The of s	Jumper IP67 te: All LINEARlight ofile System co ne table reports the surface or recesse nck Type Slim Profile	LF-2CONN IP67 LP Flex LED strips are fully compatible compatibility maximum recommended ambier d mounting. In these conditions Product description LF-LTS-2100	te with OSRAM OT and OTI LED drivers a set temperature for each listed profile in the expected Tc of LED strip is the maximum surprise MOUNTING Product code (EAN) 4008321978981 50	5x endcap, 1x glue 5x jumper and dimmers. ombination with LFP500, in cas mum allowed. RECESSED MOUNTING re °C Ambient Temperature °C
Pro The	Jumper IP67 te: All LINEARlight ofile System co ne table reports the surface or recesse nck Type Slim Profile	LF-2CONN IP67 LP Flex LED strips are fully compatible compatibility maximum recommended ambier domounting. In these conditions Product description LF-LTS-2100 FX-QMS-G1-TU15H6-300	te with OSRAM OT and OTI LED drivers at temperature for each listed profile in the expected Tc of LED strip is the maximum SURFACE MOUNTING Product code (EAN) 4008321978981 50 4052899448865 50	5x endcap, 1x glue 5x jumper and dimmers. combination with LFP500, in case mum allowed. RECESSED MOUNTING re °C Ambient Temperature °C 50 50
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Pro The of s	Jumper IP67 te: All LINEARlight offile System co ne table reports the surface or recesse ock Type Slim Profile Slim Profile Slim Profile Slim Profile	LF-2CONN IP67 LP Flex LED strips are fully compatib compatibility maximum recommended ambier d mounting. In these conditions Product description LF-LTS-2100 FX-QMS-G1-TU15H6-300 FX-QMS-G1-TU15H6W3-300 FX-QMS-G1-TU16H12-300 FX-QMS-G1-TU16H12-300	## 4062172016384 The with OSRAM OT and OTI LED drivers at the expected Tc of LED strip is the maximum and the expected Tc of	5x endcap, 1x glue 5x jumper and dimmers. combination with LFP500, in case mum allowed. RECESSED MOUNTING 50 50 50 50 50 50 50 50
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Pro The of s	Jumper IP67 te: All LINEARlight ofile System co te table reports the surface or recesse ock Type Slim Profile Slim Profile Slim Profile Slim Profile Slim Profile Slim Profile Slim Profile	LF-2CONN IP67 LP Flex LED strips are fully compatible compatibility maximum recommended ambier dimounting. In these conditions Product description LF-LTS-2100 FX-QMS-G1-TU15H6-300 FX-QMS-G1-TU15H6W3-300 FX-QMS-G1-TU16H12-300 FX-QMS-G1-TU16H12W3-300 FX-QMS-G1-TU16H12W3-300 FX-QMS-G1-TU16H12W3-300 FX-QMS-G1-TU16H12W3-300	## 4062172016384 ## with OSRAM OT and OTI LED drivers at the expected Tc of LED strip is the maximal strip in the expected Tc of LED strip is the maximal strip in the expected Tc of LED strip is the maximal strip in the expected Tc of LED strip is the maximal strip in the expected Tc of LED strip is the maximal strip in the maximal strip in the maximal strip in the expected Tc of LED strip is the maximal strip in the maximal strip in the expected Tc of LED strip is the maximal strip in the expected Tc o	5x endcap, 1x glue 5x jumper and dimmers. combination with LFP500, in cas mum allowed. FRECESSED MOUNTING 50 50 50 50 50 50 50 50 50 50 50 50 50
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Trace Trace	Jumper IP67 te: All LINEARlight ofile System co the table reports the surface or recesse ock Type Slim Profile Wide Profile Wide Profile	LF-2CONN IP67 LP Flex LED strips are fully compatible compatibility maximum recommended ambier of mounting. In these conditions Product description LF-LTS-2100 FX-QMS-G1-TU15H6-300 FX-QMS-G1-TU15H6W3-300 FX-QMS-G1-TU16H12-300 FX-QMS-G1-TU16H12-300 FX-QMS-G1-TU16H12W3-300 FX-QMS-G1-TU16H12LS-300 FX-QMS-G1-TU16H12LS-300 FX-QMS-G1-TU16H12LS-300 FX-QMS-G1-TU16H12LS-300 FX-QMS-G1-TU16H12LS-300 FX-QMS-G1-TU16H12LS-300 FX-QMS-G1-TU16H12LS-300	## 4062172016384 ## With OSRAM OT and OTI LED drivers a continuous profile in	5x endcap, 1x glue 5x jumper and dimmers. combination with LFP500, in case mum allowed. FRECESSED MOUNTING 50 50 50 50 50 50 50 50 50 50 50 50 50
Trace Trace	Jumper IP67 te: All LINEARlight ofile System co ne table reports the surface or recesse ock Type Slim Profile Slim Profile Slim Profile Slim Profile Slim Profile Slim Profile Wide Profile Wide Profile	LF-2CONN IP67 LP Flex LED strips are fully compatible compatibility maximum recommended ambier of mounting. In these conditions Product description LF-LTS-2100 FX-QMS-G1-TU15H6-300 FX-QMS-G1-TU15H6W3-300 FX-QMS-G1-TU16H12-300	## 4062172016384 ## With OSRAM OT and OTI LED drivers a continuous profile in	5x endcap, 1x glue 5x jumper and dimmers. combination with LFP500, in case mum allowed. The RECESSED MOUNTING 50 50 50 50 50 50 50 50 50 50 50 50 50
Trace Trace	Jumper IP67 te: All LINEARlight offile System co the table reports the surface or recesse tock Type Slim Profile Wide Profile Wide Profile Wide Profile Wide Profile	LF-2CONN IP67 LP Flex LED strips are fully compatib compatibility maximum recommended ambier d mounting. In these conditions Product description LF-LTS-2100 FX-QMS-G1-TU15H6-300 FX-QMS-G1-TU15H6W3-300 FX-QMS-G1-TU16H12-300 FX-QMS-G1-TU16H12-300 FX-QMS-G1-TU16H12LS-300 FX-QMS-G1-TU16H12LS-300 FX-QMS-G1-TU16H12LS-300 FX-QMS-G1-TU16H12LS-300 FX-QMS-G1-TU16H12LS-300 FX-QMW-G1-TU26H8-300 FX-QMW-G1-TU26H8-300 FX-QMW-G1-TU26H8-300	## 14 Mos	5x endcap, 1x glue 5x jumper and dimmers. combination with LFP500, in case mum allowed. Fe °C Ambient Temperature °C 50 50 50 50 50 50 50 50 50 5
Trace Trace	Jumper IP67 te: All LINEARlight ofile System co the table reports the surface or recesse ock Type Slim Profile Slim Profile Slim Profile Slim Profile Slim Profile Slim Profile Slim Profile Wide Profile Wide Profile Wide Profile Wide Profile	LF-2CONN IP67 LP Flex LED strips are fully compatible compatibility maximum recommended ambier of mounting. In these conditions Product description LF-LTS-2100 FX-QMS-G1-TU15H6-300 FX-QMS-G1-TU15H6W3-300 FX-QMS-G1-TU16H12-300	## 4062172016384 ## With OSRAM OT and OTI LED drivers a continuous profile in	5x endcap, 1x glue 5x jumper and dimmers. combination with LFP500, in case mum allowed. The RECESSED MOUNTING 50 50 50 50 50 50 50 50 50 50 50 50 50

50% CD - February 14, 2020

Description: LED Tape Light - Outdoor Egress - Level 14

Manufacturer: Osram Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 1.2W/ft Luminaire Voltage: 277

Requirements:

Catalog Reference: LFP500-G1-830-10

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-15

Sheet Number 6 of 10

Buro Happold Project #0042413

LF Low Power IP67 | LFP500

Disclaimer

Subject to change without notice. Errors and omission excepted. Make sure to use the most recent release. All values are average typical and cannot be used as reference for compliance tests. Always refer to the official data on web site: www.osram.com

* The color uniformity shown is a result of internal theoretical and statistical evaluation under specific conditions; it is intended to provide our customers with an estimation of color uniformity in real applications. Despite LEDs used in OSRAM strips are single BIN 3 SDCM ellipse, their careful combination in a LED strip with proper manufacturing process, results in a mixed light through a diffusive material which is within a 2SDCM ellipse, with a probability realest than 00%

greater trains or un. Due to variability of each single chip and statistical meth, this indication cannot be considered as legally binding. The guaranteed color consistency claim can be found inside the official data sheets of every product.

** Always ensure that Tc will not exceed the maximum allowed value.

OSRAM GmbH

Head Office:

OSRAM

50% CD - February 14, 2020

Description: LED Tape Light - Outdoor Egress - Level 14

Manufacturer: Osram Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 1.2W/ft Luminaire Voltage: 277

LFP500-G1-830-10 Catalog Reference:

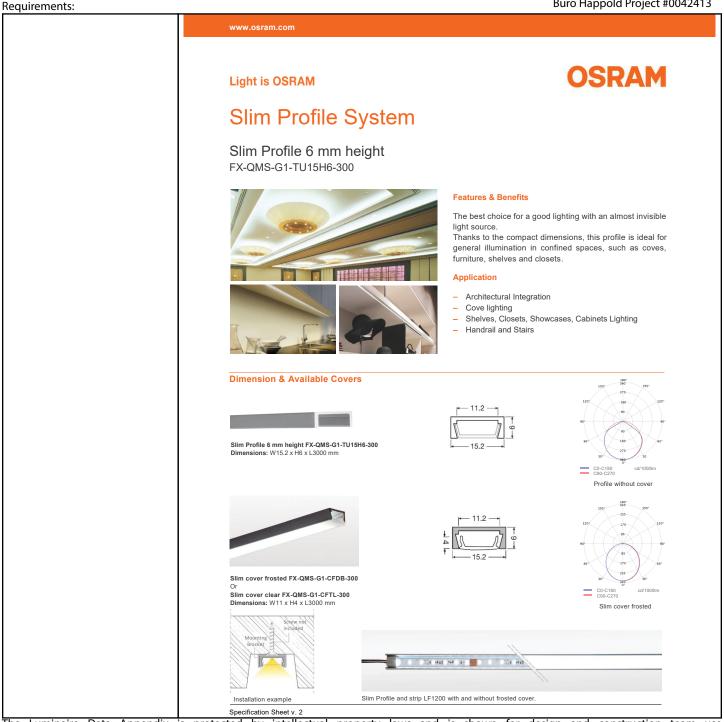
BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-15

Sheet Number 7 of 10

Buro Happold Project #0042413



50% CD - February 14, 2020

Description: LED Tape Light - Outdoor Egress - Level 14

Manufacturer: Osram Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 1.2W/ft Luminaire Voltage: 277

Catalog Reference: LFP500-G1-830-10

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-15

Sheet Number 8 of 10

Paguiramento	Buro Happold Project #0042413
Requirements:	But o nappola i roject #0042415

				F	Profile & LED	Strip Compati	bility			
	ED Strip Wh			LF500	LF800S	LF1200	LF2		LF3000	LF4000
Co	olor Tempera		Mhita				inous Flux (Im/r		2275	
	820 822	2000 K 2200 K	White White	418	703	950	150		2375	-
	824	2400 K	White	-	-	1140	190		2850	
	825	2500 K	White	456	760	-	-		-	-
	827	2700 K	White	456	760	1140	190	00	2850	3562
	830	3000 K	White	494	760	1140	190	00	2850	3562
	835	3500 K	White	494	760	-	-		-	-
0	840	4000 K	White	494	760	1140	190		2850	3657
	850 865	5000 K 6500 K	White White	494	760	1140 1140	190		2850 2850	3657 3657
	CRI 90 922	2200 K	White	342	522	-	-		-	-
	CRI 90 927	2700 K	White	380	589	1045	17		2565	-
	CRI 90 930	3000 K	White	380	589	1140	190	00	2850	-
	CRI 90 935	3500 K	White	418	646	-	-		-	-
	CRI 90 940	4000 K	White	418	646	1140	190		2850	-
	CRI 90 965	6500 K	White	418	646	-	-	•	-	-
LE	ED Strip Sp	ecial Whi	te IP00	LF1200 SW	LF1200 TW	LF2000 SW	LF2		LF3000 SW	LF3000 TW**
	olor Tempera						inous Flux (lm/r	n) ¹		
	CRI 90 930	3000 K	White	1140	-	1900	-		2850	-
0	CRI 90 940	4000 K	White	1140	-	1900	-		2850	-
	TW	2700 - 6500 K	Dynamic White - Dynamic	-	1140	-	190	00	-	2850
•	TWW	6500 K	White	-	-	-	-		-	-
	ED Strip Co olor Wave ler	ngth				Lumi	LF0: inous Flux (lm/r			
			Red Green Blue	114 171 76	-	Lumi - -		m) ¹	-	
	olor Wave ler R G B	625 525 467 587	Green Blue Yellow	171 76 104		-	inous Flux (Im/r - - -	m) ¹	-	-
Co	Polor Wave ler R G B Y	625 525 467 587 602	Green Blue Yellow Orange	171 76 104 123	-	- - - -	inous Flux (Im/r - - - -	m) ¹	-	-
Co	olor Wave ler R G B Y O RGB	625 525 467 587 602 RGB	Green Blue Yellow Orange RGB	171 76 104 123	- - - - 198	- - - - - 171	inous Flux (Im/r - - - - - 44	m) ¹	- - - -	- - -
Co	Polor Wave ler R G B Y	625 525 467 587 602	Green Blue Yellow Orange	171 76 104 123	-	- - - -	inous Flux (Im/r - - - -	m) ¹	- - - - - 662*	- - - - 1228*
Co	olor Wave ler R G B Y O RGB	625 525 467 587 602 RGB	Green Blue Yellow Orange RGB RGBW	171 76 104 123 -	- - - - 198 - mpatibility (co	- - - - 171 - ombination po	inous Flux (Im/r	m) 1	662* *Both channel:	- - - 1228* s RGB and White
Co	B Y O RGB RGBW	625 525 467 587 602 RGB RGBW	Green Blue Yellow Orange RGB RGBW	171 76 104 123 -	- - - - 198	- - - - 171 - ombination pc	inous Flux (Im/r	m) 1 6 6 without cov LFP1200 SW	- - - - - 662*	- - - 1228* s RGB and White
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LE	Polor Wave ler R G B Y O RGB RGBW	625 525 467 587 602 RGB RGBW	Green Blue Yellow Orange RGB RGBW	171 76 104 123 - - - - - - - - - - - - - - - - - - -	- - - 198 - mpatibility (co	- - - - 171 - ombination po LFP800	inous Flux (Im/r	m) 1 66 66 CFP1200 SW	662* *Both channel:	- - - 1228* s RGB and White LFP2000 SW
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LEE	ED Strip Wilsolor Tempera 824 827 830 835 840 860 865 CRI 90 927	625 625 527 467 587 602 RGB RGBW hite IP67 ture 2400 K 2700 K 3500 K 4000 K 6500 K 6500 K	Green Blue Vellow Orange RGB RGBW Profile & L White White White White White White White White White White White White White White White White White White	171 76 104 123	- 198 - 198		inous Flux (lm/r	m) 1		- 1228* s RG8 and White LFP2000 SW
LE	Dolor Wave Ier R G B Y O RGB RGBW ED Strip Wholor Tempera 824 827 830 835 840 866 CRI 90 927 CRI 99 927 CRI 99 930	egth 625 525 467 587 602 RGB RGBW hite IP67 ture 2400 K 3000 K 3500 K 4000 K 6000 K 6500 K 2700 K	Green Blue Veillow Orange RGB RGBW Profile & L White	171 76 104 123			inous Flux (lm/r	m) 1		1228* s RGB and White LFP2000 SW
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LE	ED Strip WH ED Strip WH Solor Tempera 824 827 830 835 840 865 CRI 90 927 CRI 90 935 CRI 90 940 CRI 90 965	ngth 625 525 467 587 602 RGB RGBW hite IP67 ture 2400 K 2700 K 3000 K 4000 K 6500 K 2700 K 3000 K	Green Blue Veillow Orange RGB RGBW Profile & L White	171 76 104 123			inous Flux (Im/r	without cov LFP1200 SW n) 1		- 1228* s RGB and White LFP2000 SW

50% CD - February 14, 2020

Description: LED Tape Light - Outdoor Egress - Level 14

Manufacturer: Osram Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 1.2W/ft Luminaire Voltage: 277

Catalog Reference: LFP500-G1-830-10

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-15

Sheet Number 9 of 10

Requirements: Buro Happold Project #0042413

		ile System Slim Pro											
	Thorns		Tile 6 mm	height FX	(-QMS-	G1-TU15H6	3-300						
	memi	al compatibility	/										
	IP00 LED	strip		Whit	e & Spe	cial White		1	unable Wh	ite		Color	
			LF500 LF800S			LF3000 LF3000 SW	LF4000	LF1200 TW	LF2000 TW	LF3000 TW	LF05A2 LF05CA2 LF05CE LF200C	LF700	
	Mounting	condition					Maximum /	Ambient Te	emperature	°C			
	10000	Surface mounting	50	50	47	30	30	50	45	25	50	50	40
	ŢŢ	Recessed mounting	50	50	35	25	25	50	35	-	50	50	35
	IP67 LED	strip			W	/hite & Spec	ial White				C	olor	
				.FP500 FP800S		LFP80 LFP12 LFP120	:00		2000 000SW	LF0	05A-P 05CE-P P200C	LF	05CA-P
	Mountin	g condition							emperature				
	*****	Surface mounting		50		50		4	10		50		40
	TT	Recessed mounting		50		50		3	15		50		35
		y of LED spots		187	hita 9 0	negial Mil-14		Turre	blo Whit-		Co	olor	
	IP00 LED	strip		W	hite & S	pecial White	•	Tuna	ble White	LF05A2			
			LF500) LF8	00S	LF1200 LF2000 LF3000	LF12008 LF20008 LF30008	SW LF	1200TW 2000TW 3000TW	LF05CA2 LF05CE LF200C	2	RGBW L	F1300RGBV
	Covers	cover					Maximum	Ambient I	emperature				
	FX-QMS-	-G1-CFDB-300	•		•	•	•		•	•		•	•
	Clear Co FX-QMS-	-G1-CFTL-300	•		•	•	•		•	•		•	•
	LINEARIIgi	ht FLEX [®] LED strips in	system co	mbination ·	with prof	iles and cove	ers – Visibility	of LED sp	ots.		Front size: r	view from obsession to scale	rving point: < 1.5m

50% CD - February 14, 2020

Description: LED Tape Light - Outdoor Egress - Level 14

Manufacturer: Osram Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 1.2W/ft Luminaire Voltage: 277

Catalog Reference: LFP500-G1-830-10

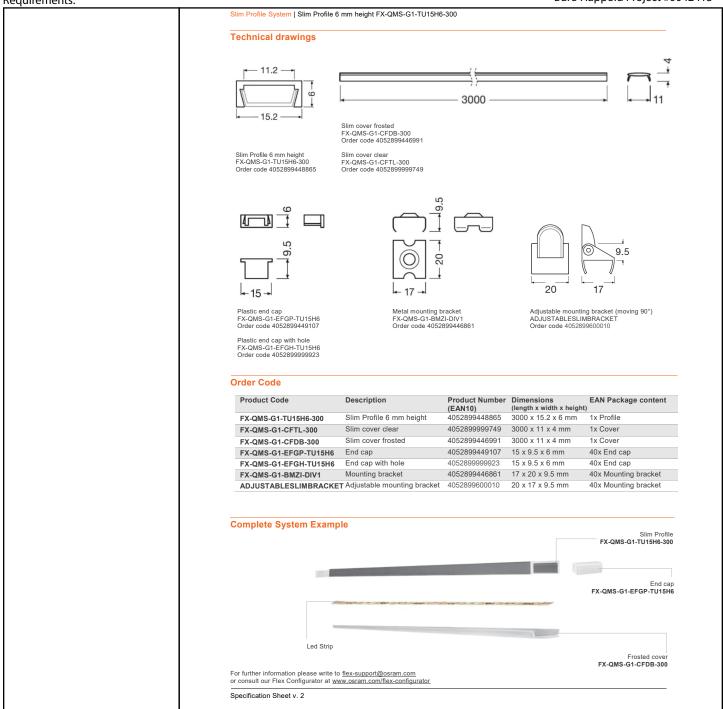
BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-15

Sheet Number 10 of 10

Requirements: Buro Happold Project #0042413



50% CD - February 14, 2020

Description: LED Wall Mount - Lightwells

Manufacturer: Lithonia Lamp Reference: 3500K LED

Ballast/Transformer: Integral 0-10V Dimming Driver

Luminaire Wattage: 40W Luminaire Voltage: 277

VGR1C-40LED-277-{FINISHES} Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-16

Sheet Number 1 of 2

Buro Happold Project #0042413

Requirements:

1. Location: Exterior Lightwells

2.0

LITHONIA LIGHTING

FEATURES & SPECIFICATIONS

 $\textbf{INTENDED USE} \ -- \ \text{Architectural deep-cast luminaire provides general illumination for rough service}$ (vandal resistant) applications, Ideal for interior or exterior applications where safety and security are a concern. Designed to complement building architecture and to endure extreme environmental conditions and physical abuse. Amber LEDs available for applications requiring turtle-safe lighting. Certain airborne contaminants can diminish integrity of acrylic. Click here for Acrylic Environmental Compatibility table for

CONSTRUCTION — Bezel - One-piece, die-cast aluminum, low copper alloy (<1% copper). Encloses lens and secures to housing with stainless steel Torx T-10 set screws (two included) or optional stainless steel tamper-resistant screws (see options).

Housing - One-piece, die-cast aluminum, low copper alloy (<1% copper), with post-painted polyester powder coat finish. Four hole mounting detail for use directly over outlet box, or conduit entry through three directly over outlet box, or conduit entry through three directly over outlet box, or conduit entry through three directly over outlet box, or conduit entry through three directly over outlet box, or conduit entry through three directly over outlet box, or conduit entry through three directly over outlet box, or conduit entry through three directly over outlet box, or conduit entry through three directly over outlet box, or conduit entry through three directly over outlet box, or conduit entry through three directly over outlet box, or conduit entry through three directly over outlet box, or conduit entry through three directly over outlet box. The directly over outlet box of the directly over outlet box of1/2" threaded openings on side or 3/4" threaded opening on rear surface. .012 gauge aluminum sheet metal internal bracket and board plate for thermal conduction and support.

Gasket - Polycarbonate: Perimeter lens gasket is one-piece silicone "O" ring, mechanically held in lens channel.

Finish - Standard finish is textured polyester powder coat in white, black or bronze. Optional architectural colors available (see paint finishes).

OPTICS — Polycarbonate lens - Injection-molded lens is .125 inch thick. Designed to enrich the LED color and lumen output. Smooth exterior allows for easy cleaning, and interior pattern diffuses light for even surface illumination.

ELECTRICAL — Utilizes high-efficiency LEDs mounted to 3 metal core circuit boards, 3500 Kelvin temperature. Driver: 2 electronic drivers wired in series allows total power to be reduced by half while maintaining even illumination across the 3 boards. 70% lumen maintenance at 50,000 hours. 100V through 277V, $50\text{-}60\text{HZ}\ operation.\ 6\text{KV}\ pulse\ rated.\ Initial\ surge\ protection\ standard.$

INSTALLATION — Unit may be wall or ceiling mounted.

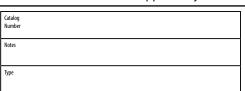
LISTINGS — CSA Certified to UL and C-UL standards. NOM Certified (see Options). CSA Listed for 30°C ambient and wet locations. IP65 rated.

WARRANTY — 5-year limited warranty. Complete warranty terms located at

www.acuitybrands.com/CustomerResources/Terms_and_conditions.as

For installed Rough Service Product(s), Acuity warrants that, for the lifetime of the product(s), the polycarbonate lens and/or polycarbonate housing will withstand breakage resulting from occasional physical abuse and rough handling (the "Rough Service Warranty"), notwithstanding the vandalism exclusion set forth at www.acuitybrands.com/CustomerResources/Terms and conditions.aspx

NOTE: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25°C. Specifications subject to change without notice.





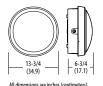
Architectural Rough Service Fixture

VGR1C

FRS

LED Round Open Face Deep Housing Ceiling/Wall Mounted





ORDERING INFORMATION	For shortest lead times

SPECIAL APPLICATIONS

s, configure products using **bolded options**

Example: VGR1C 50LED 120 DWHG SF LPI

VGR1C							
Series	Lumen output¹/Color temperature²		umen output¹/Color temperature² Lens Voltage Paint finishes³		Options	Lamp	
VGR1C	Lumen output ¹ 50LED 50W 40LED 40W	Color temperature ² (blank) 3500K	(blank) Polycarbonate	120 277 MVOLT	Standard textured finishes DWHG White DBLB Black DDBT Dark bronze DNAT Natural aluminum DSST Sandstone	Shipped installed in fixture DF Double fuse ⁴ SF Single fuse ⁵ DS Dual switching MSI8 Wet location motion sensor ⁶ PE Photoelectric cell ^{7 a} TRS Tamper-resistant screws ⁷ VGRDS Decorative shroudl ^{0, 11} NOM Meets Mexican standards	LPI Lamp included

Accessories: Order as separate catalog number RK1 T10DRV Torx TX10 screwdriver, for use with Gateway set screws RK1 T20BIT Hex-base driver bit, Torx TX20, for tamper-resistant screws with center reject pin. RK1 T20DRV Torx TX20 screwdriver for use with tamper-resistant screws with center reject pin. VGRDS XXX Decorative shroud 11, 12

- Refer to table on back page.
- The CCT value provided is of lamp source and actual CCT will vary upon power levels. For additional colors, refer to Architectural Paint
- brochure.
- 4 Must specify DS option
- Provided with lens for mounting up to 8'
- Must specify voltage. Not available with MVOLT.
- Not available with DS option. T-20 screws with center reject pin
- 10 Color will be the same as the bezel.
- 11 Maximum operating ambient temperature is 25°C when using this accessory.

 12 Must specify color (Example: VGRDS DWHG).

VGR1C_LED

50% CD - February 14, 2020

Description: LED Wall Mount - Lightwells

Manufacturer: Lithonia Lamp Reference: 3500K LED

Ballast/Transformer: Integral 0-10V Dimming Driver

Luminaire Wattage: 40W Luminaire Voltage: 277

Requirements:

VGR1C-40LED-277-{FINISHES} Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-16

Sheet Number 2 of 2

Buro Happold Project #0042413

VGR1C Rough Service Wall/Ceiling-Mounted Fixture, LED

System watts	Initial delivered lumens through polycarbonate lens* 3500K	Initial delivered lumens through glass lens* 3500K	mA	Ambient temperature °C
50	1785	1265	700	30
40	1320	930	500	30

^{* 3500}K is LED CCT

PHOTOMETRICS

See www.lithonia.com.



VGR1C LED

SPECIAL APPLICATIONS: One Lithonia Way Conyers, GA 30012 Phone: 800.315.4963 Fax: 770-981-8191 www.lithonia.com © 2010-2019 Acuity Brands, Inc. All rights reserved. Rev. 08/09/19

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50% CD - February 14, 2020

Description: Exterior Mech Roof Light

Manufacturer: Lithonia Lamp Reference: 4000K LED

Ballast/Transformer: Integral 0-10V Dimming Driver

Luminaire Wattage: 49W Luminaire Voltage: 277

Catalog Reference: XVML L48 5000LM MVOLT 40K 80CRI BUROHAPPOLD ENGINEERING

Luminaire Designation

HF-17

Sheet Number 1 of 3

Buro Happold Project #0042413

Requirements:

1. Location: Exterior Mech Roof Light



FEATURES & SPECIFICATIONS

INTENDED USE — Ideal for damp/wet locations such as outdoor venues, canopies and locker rooms Certain airborne contaminants can diminish the integrity of acrylic and/or polycarbonate. $\underline{Click here for Acrylic and Polycarbonate Environmental Compatibility table for suitable uses.}$ Certain airborne contaminants may adversely affect the functioning of LEDs and other electronic components, depending on various factors such as concentrations of the con $taminants, ventilation, and temperature at the end-user location. \\ \underline{Click here} for a \underline{list} of \underline{substances} that \underline{may} \underline{not} \underline{besuitable} for \underline{interaction} \underline{with LEDs} \underline{and} \underline{other} \underline{electronic components}.$

 $\textbf{CONSTRUCTION} \ -\! \text{Light gray, fully gasketed, polycarbonate housing with ten polycarbonate captive}$ latches provides a watertight seal. The high-impact resistant housing and extruded silicone rubber gasket protects the internal components from the environment, including moisture and dirt. 3/8" wet location fitting provided on the 3500LM fixture and 1/2" wet location fitting provided on the 5000LM fixture on one end for use with liquid tight conduit. The housing dimensions vary based on the lumen package selected. See DIMENSIONS drawings on page 2 for details. Polycarbonate latches (included) deter tampering, by accommodating #6-32x3/8" tamper resistant fasteners (not provided). Grade 301 stainless steel latches (available separately) deter tampering, by accommodating #8-32x1/2" tamper resistant fasteners (not provided).

 $\textbf{OPTICS} - \textbf{UV-stabilized, high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, frosted polycarbonate lens for uniform light output and high-impact, f$ impact resistance.

ELECTRICAL — High-efficiency LEDs. 0-10V dimming standard for a dimming range of 100% to 10% Luminaire Surge Protection Level: Designed to withstand up to 2.5kV/0.75kA per ANSI C82.77-5-2015. Suitable for 50/60 Hz.

cally) included. Mounting hardware kit also includes hooks for suspended mount (chain not included) Optional 45° corner angle bracket mount and junction mount kit also available. Maximum of 15 units or 6A for through wiring connection or daisy chain type installation. Tool-less access for installation.

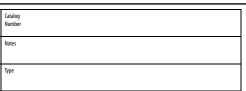
ceilings. For use in ambient temperatures from -4°F (-20°C) to 104°F (40°C). IP65 and IP66 rated when ceiling, suspended, wall or corner mounted. Junction Box mount rated IP65. This unit meets FCC Non-Consumer Class A (277v) and Consumer Class B (120V) limits.

DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. $Please\ check\ the\ DLC\ Qualified\ Products\ List\ at\ \underline{www.designlights.org/QPL}\ to\ confirm\ which\ versions$

WARRANTY - 5-year limited warranty. Complete warranty terms located at:

www.acuitybrands.com/resources/terms-and-conditions

 $\textbf{Note:} \ \textbf{Actual performance may differ as a result of end-user environment and application}.$ All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



LED Vapor Tight













ORDERING INFORMATION

Catalog number	Lumens	Voltage	Color temperature	Standard carton quantity
XVML L48 3500LM MVOLT 40K 80CRI	3500LM	MVOLT (120-277)	4000K, 80CRI	1
XVML L48 3500LM MVOLT 50K 80CRI	3500LM	MVOLT (120-277)	5000K, 80CRI	1
XVML L48 5000LM MVOLT 40K 80CRI	5000LM	MVOLT (120-277)	4000K, 80CRI	1
XVML L48 5000LM MVOLT 50K 80CRI	5000LM	MVOLT (120-277)	5000K, 80CRI	1
XVML L48 5000LM 347 40K 80CRI	5000LM	347	4000K, 80CRI	1
XVML L48 5000LM 347 50K 80CRI	5000LM	347	5000K, 80CRI	1

Accessories: Order as separate catalog number XVML STSL LATCH Stainless steel latch kit (Set of 10) XVMLJSB Junction box mount² XVMLANGBKT45 Angle mount bracket

- 1 To deter tampering, stainless steel latches can accommodate #8-32x1/2* tamper resistant fasteners (not provided). Kit includes 10 latches.
- 2 IP65 rated. Not compatible with angle mount bracket. Required to be used in center of fixture with supplied brackets for additional mounting
- 3 For use with applications where ceiling meets wall at a 90° angle. See drawing on page 3 for more information.

50% CD - February 14, 2020

Description: Exterior Mech Roof Light

Manufacturer: Lithonia Lamp Reference: 4000K LED

Ballast/Transformer: Integral 0-10V Dimming Driver

Luminaire Wattage: 49W Luminaire Voltage: 277

Catalog Reference: XVML L48 5000LM MVOLT 40K 80CRI

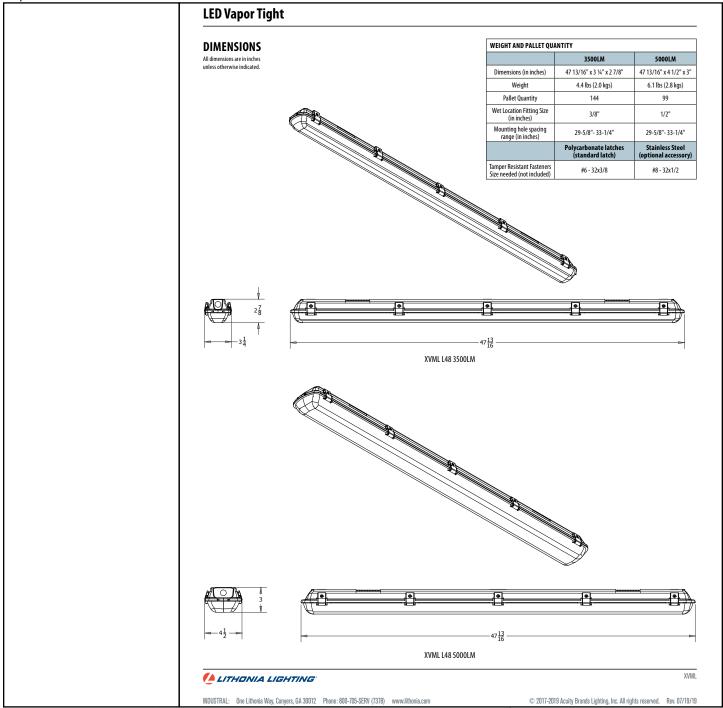
BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-17

Sheet Number 2 of 3

Requirements: Buro Happold Project #0042413



50% CD - February 14, 2020

Description: Exterior Mech Roof Light

Manufacturer: Lithonia Lamp Reference: 4000K LED

Ballast/Transformer: Integral 0-10V Dimming Driver

Luminaire Wattage: 49W Luminaire Voltage: 277

Catalog Reference: XVML L48 5000LM MVOLT 40K 80CRI

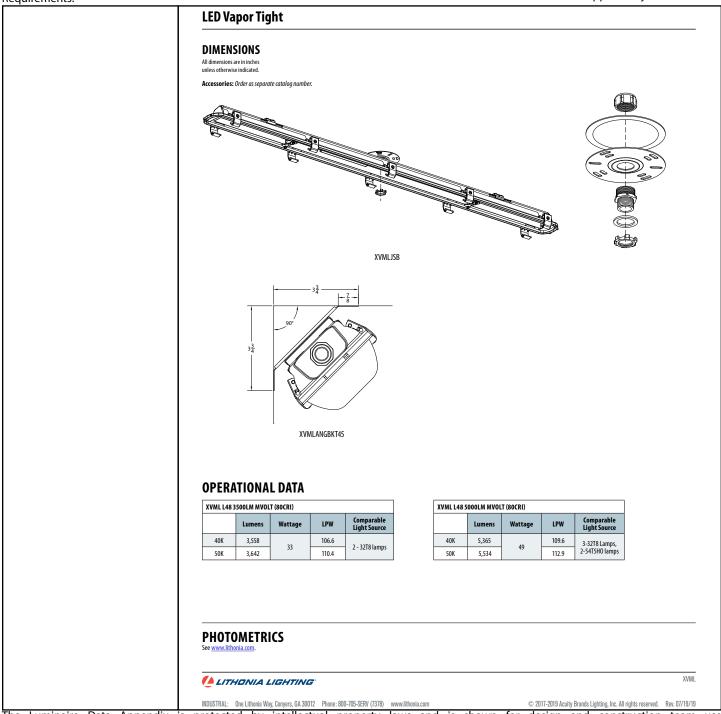
BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-17

Sheet Number 3 of 3

Requirements: Buro Happold Project #0042413



50% CD - February 14, 2020

Description: Exterior Amenity Ingrade Uplight

Manufacturer: Delta Light Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 1.1W Luminaire Voltage: 277

Catalog Reference: LEDS C R ST 6 302 20 32 + Manufacturer Recommended Driver

BUROHAPPOLD ENGINEERING

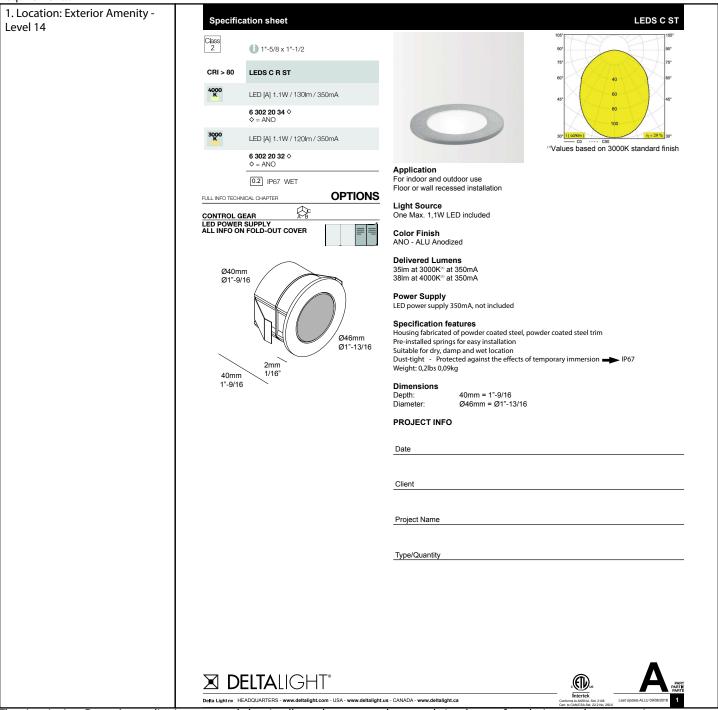
Luminaire Designation

HE-18

Sheet Number 1 of 1

Requirements:

Buro Happold Project #0042413



50% CD - February 14, 2020

Description: Exterior Pendant Mount Downlight

Manufacturer: Landscape Forms

Lamp Reference: TBD Ballast/Transformer: TBD Luminaire Wattage: TBD Luminaire Voltage: TBD

Catalog Reference: ARP-18-A-1-WF-O-C-{FINISH}

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-21

Sheet Number 1 of 2

Requirements: Buro Happold Project #0042413

equirements.						
1. Location: Alley Ambient Layer (Downlight)						landscapeforms
2. 0	Arne					
	Specification Shee	t				
	Project Name:				Job Location: _	
	Fixture Type:				Fixture Quantit	r
	Frequency 50 EPA .5: Weight 18	20V-277V 0/60 Hz 577 ft ² 8 lbs (luminaire only)				15 MY 8 50T
	The Arne luminaire is aluminum ext Cole Urbidermis with a clear or opa	d / diffused tempered	d glass.	nish orrered by Sam	a &	121/4" -
	Pole & Wall Mount Luminaire					
	Product	ARP				
	LED Configuration	18	36			
	Drive Current	A (350 mA)	B (500 mA)	C (700 mA)		
	Color Temperature Distribution	1 (3000K) WF (Wide	2 (4000K)	M (Medium)	C (Spot Slood)	TII (Type 2) TIII (Type 3) TIV (Type 4)
	Distribution	WF (Wide Flood)	F (Flood)	M (Medium)	S (Spot Flood)	TII (Type 2) TIII (Type 3) TIV (Type 4)
	Lens	Null (Clear)	O (Opal / Diffused)			
	Color	AS (Aluminum Silver)	DK (Dusk)			
	EXAMPLE: ARP - 18 - B - 1 - WF - AS					J
	Catenary Luminaire Product	ARP				
	LED Configuration	18	36			
	Drive Current	A (350 mA)		C (700 mA)		
	Color Temperature	1 (3000K)	2 (4000K)			
	Distribution	WF (Wide Flood)	TII+II (Quad Oval)			
	Lens	Null (Clear)	O (Opal / Diffused)			
	Bracket	C (Catenary)				
	Color	AS (Aluminum Silver)	DK (Dusk)			
	EXAMPLE: ARP - 36 - B - 1 - WF - O - C	: - DK				-1
	Mounting Offering					
	Catenary					
	Page 1 of 2				Landscap	e Forms, Inc. 800.521.2546 F 269.381.3455 7800 E. Michigan Ave., Kalamazoo, MI 49048

50% CD - February 14, 2020

Description: Exterior Pendant Mount Downlight

Manufacturer: Landscape Forms

Lamp Reference: TBD Ballast/Transformer: TBD Luminaire Wattage: TBD Luminaire Voltage: TBD

Catalog Reference: ARP-18-A-1-WF-O-C-{FINISH}

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-21

Sheet Number 2 of 2

Buro Happold Project #0042413 Requirements: landscapeforms Mounting & Luminaire Accessories for Pole & Wall Mount Luminaire 01D (Double Column) 02 (Wall) 07 (Single Arm) 07D (Double Arm) AS (Aluminum Silver) EXAMPLE: ARP - 01 - 05 - DK Single Column Double Column Double Arm Arne Aluminum Pole 4.2m (13.8 ft) 0.125" 65 lbs 65 lbs 65 lbs 5.0m (16.4 ft) ΔRF21 0.125" (2) Single Column Brackets, Staggered Heights, 180° Orientation (1) Double Column Bracket ARF23 0.125" (1) Single Column Bracket (2) Single Column Brackets, Staggered Heights, 180° Orientation (1) Double Column Bracket (2) Double Column Brackets, Staggered Heights Single Arm or Double Arm Bracket(s) 5.8m (19.0 ft) ARF31 ARF32 0.125" 0.125" 0.125" 0.125" 0.125" 75 lbs 75 lbs 75 lbs 75 lbs 75 lbs (3) Single Column Brackets, Spiral Configuration, 120° Orientation (4) Single Column Brackets, Spiral Configuration, 90° Orientation (2) Single Arms, Stagegered Heights, 130° Orientation (2) Double Column Brackets, Stagegered Heights Single Arm or Double Arm Brackets)
Single Arm or Double Arm Brackets, Stagegered Heights 7.6m (25.0 ft) ARF51 ARF52 (4) Single Column Brackets, Spiral Configuration, 90° Orientation 180 lbs 9.2m (30.2 ft) Stepped 8"/5" 0.188"/0.25' (5) Single Column Brackets, Spiral Configuration, 72° Orientation (2) Double Column Brackets, Staggered Heights (3) Double Column Brackets, Staggered Heights Stepped 8"/5" 0.188"/0.25' Stepped 8"/5" Stepped 8"/5" 0.188"/0.25' * Landscape Forms can provide poles for your catenary project. Contact the factory for more information. MBK (Matte Black) MER (Mercury) * Mercury from Landscape Forms is our recommended color match for aluminum silver from Santa & Cole EXAMPLE: ARF33 - T - MER Don't see what you are looking for? Our goal is to partner with you as the designer to manufacture solutions needed for the space you are creating. We offer the option to modify our standard product to meet certain design specifications or needs. Common modifications can include GCFI outlets, custom RAL colors, banner arm(s) mounting, and custom pole heights. Contact your local Landscape Forms representative to learn more about these offerings. Notes Please send completed forms to your Landscape Forms representative or contact us at (800) 430-6209 with any questions

50% CD - February 14, 2020

Description: Exterior Wall Mounted Accent Downlight

Manufacturer: Bega Lamp Reference: 3000K LED

Ballast/Transformer: Remote 0-10V Dimming Driver

Luminaire Wattage: 9W Luminaire Voltage: 277

Catalog Reference: 77 607 K3 + 77 755 + 195XX

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-22

Sheet Number 1 of 1

Buro Happold Project #0042413

Requirements:		Buro Happoid Project #0042413
1. Location: Alley Building Mount	LED compact floodlight - wide beam distribution	BEGA
Downlight		
	Analiantian	Times
	Application LED compact floodlights with mounting canopy and narrow beam light	Type:
	distribution designed for use in illuminating landscaping, facades, flag poles,	BEGA Product:
	trees and signage.	Project:
	Materials Luminaire housing and canopy constructed of die-cast marine grade,	Modified:
	copper free (≤ 0.3% copper content) A360.0 aluminum alloy Clear safety glass	
	Reflector made of pure anodized aluminum	
	Silicone optical lens High temperature silicone gasket	
	Mechanically captive stainless steel fasteners	
	NRTL listed to North American Standards, suitable for wet locations Protection class IP 65 Weight: 2.0 lbs	
	Electrical	
	Operating voltage 24V DC (remote power supply req.) Minimum start temperature -40° C	
	LED module wattage 7.9 W	
	System wattage 9.0W Color rendering index Ra > 80	
	Luminaire lumens 888 lumens (3000K)	
	LED service life (L70) 60,000 hours LED color temperature	
	□ 4000K - Product number + K4	
	☐ 3500K - Product number + K35	
	□ 3000K - Product number + K3 □ 2700K - Product number + K27	
	☐ Amber - Product number + AMB	
	Wildlife friendly amber LED - Optional Luminaire is optionally available with a narrow bandwidth, amber LED	
	source (585-600nm) approved by the FWC. This light output is suggested	
	for use within close proximity to sea turtle nesting and hatching habitats. Electrical and control information may vary from standard luminaire.	
	LED module wattage 9.0W (Amber)	Available Accessories
	System wattage 9.61 W (Amber)	☐ 77755 180° glare shield
	Luminaire lumens 285 lumens (Amber) BEGA can supply you with suitable LED replacement modules for up to	□ 70050 Elliptical spread lens
	20 years after the purchase of LED luminaires - see website for details	☐ 19591 Remote 50W LED driver and box ☐ 19580 Remote 25W LED driver and box
		See individual accessory spec sheet for details.
	Finish All RECA standard finishes are metter toutured polyceter polycler cost with	
	All BEGA standard finishes are matte, textured polyester powder coat with minimum 3 mil thickness.	
	Available colors ☐ Black (BLK) ☐ White (WHT) ☐ RAL:	
	☐ Bronze (BRZ) ☐ Silver (SLV) ☐ CUS:	
	· A · · · C ·	
	. p .	
	LED annual flood Bakk wide boom district	
	LED compact floodlight · wide beam distribution	
	LED β A B C D 77607 7.9W 24V DC 47° 4½ 5½ 4¾ 3½	
	7/8 0/8 7/8 0/2	
	β=Beam angle	
	BEGA 1000 BEGA Way, Carpinteria, CA 93013 (805) 684-0533 info@bega-us.com	
	Due to the dynamic nature of lighting products and the associated technologies, luminaire data on this sheet is subject to chan © copyright BEGA 2019	ge at the discretion of BEGA North America. For the most current technical data, please refer to bega-us.com Updated 08/13/19

50% CD - February 14, 2020

Description: Exterior Stem Mounted Downlight

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Integral 0-10V Dimming Driver

Luminaire Wattage: 28W Luminaire Voltage: 277

LBMP-277-30K-WFL-SCAN-{MOUNT LENGTH}-{FINISH}-DIM-UL-MOD:OPAL LENS Catalog Reference:

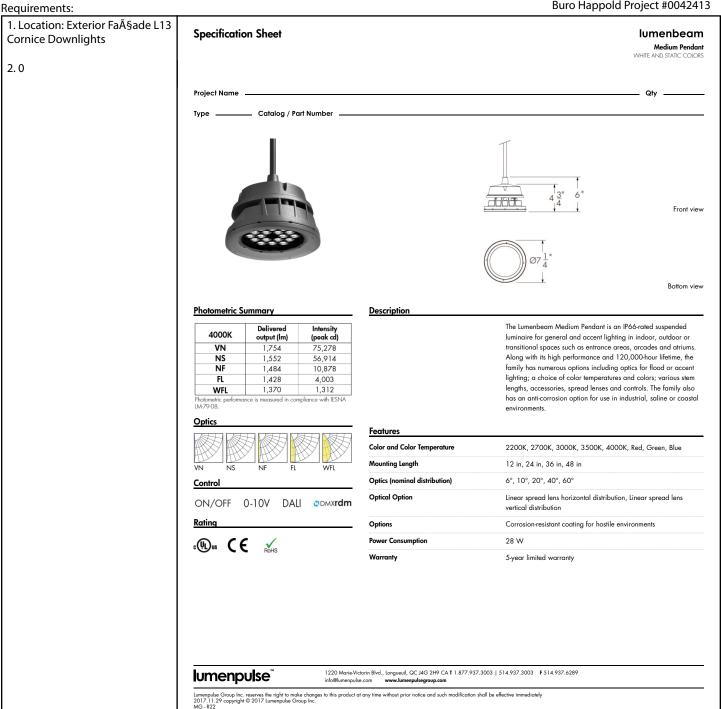
BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-25

Sheet Number 1 of 6

Buro Happold Project #0042413



50% CD - February 14, 2020

Description: Exterior Stem Mounted Downlight

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Integral 0-10V Dimming Driver

Luminaire Wattage: 28W Luminaire Voltage: 277

Requirements:

Catalog Reference: LBMP-277-30K-WFL-SCAN-{MOUNT LENGTH}-{FINISH}-DIM-UL-MOD:OPAL LENS

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-25

Sheet Number 2 of 6

Buro Happold Project #6)042413

Specification Sheet		lumenbeam Medium Pendant WHITE AND STATIC COLORS
	Performance	
	Delivered Output	1,754 lm (4000K, VN optic)
	Delivered Intensity	75,278 cd at nadir (4000K, VN optic)
	Illuminance at Distance	Minimum 15 fc at 71 ft distance (4000K, VN optic)
	Color Consistency	2 SDCM
	Color Rendering	CRI 80+
	Lumen Maintenance	L70 120,000 hrs (Ta 25 °C)
	Physical	
	Housing Material	Low copper content high pressure die-cast aluminum
	Lens Material	Clear tempered glass
	Hardware Material	Stainless steel
	Gasket Material	Silicone
	Surface Finish	Electrostatically applied polyester powder coat
	Weight	6.7 lbs
	EPA	Front = 0.46 sq ft, Side = 0.37 sq ft
	Electrical and control	
	Voltage	100 to 277 volts
	Fixture Cable	Power and data cable goes through stem
	Resolution (DMX/RDM)	Per fixture, 8-bit or 16-bit
	Control	On/Off control, 0-10V dimming, DALI dimming, DMX/RDM enabled, Lumentalk system is enabled with LDB accessory - see typical wiring diagrams for details
	Environmental	
	Operating Temperature	-13 °F to 122 °F
	IP Rating	IP66 fixture, IP54 canopy (suitable for wet location, not suitable for water jet)
	IK Rating	IK09
	Accessories (order separately)	
	Control Boxes	Power and control box - daisy chain configuration, Power and control box - star configuration, Lumentalk Data Bridge
	Control Systems	Lumentouch 2.0™, Lumencue, Lumentone
	Diagnostic and Addressing Tools	LumenID, LumentalkID
	nrie-Victorin Blvd., Longueuil, QC J4G 2H9 CA T 1.877.937.30 enpulse.com www.lumenpulsegroup.com	03 514 937 3003 F514 937 6289
Lumenpulse Group Inc. reserves the right to make changes to this pro 2017.11.29 copyright © 2017 Lumenpulse Group Inc. MG - R22		be effective immediately

50% CD - February 14, 2020

Description: Exterior Stem Mounted Downlight

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Integral 0-10V Dimming Driver

Luminaire Wattage: 28W Luminaire Voltage: 277

LBMP-277-30K-WFL-SCAN-{MOUNT LENGTH}-{FINISH}-DIM-UL-MOD:OPAL LENS Catalog Reference:

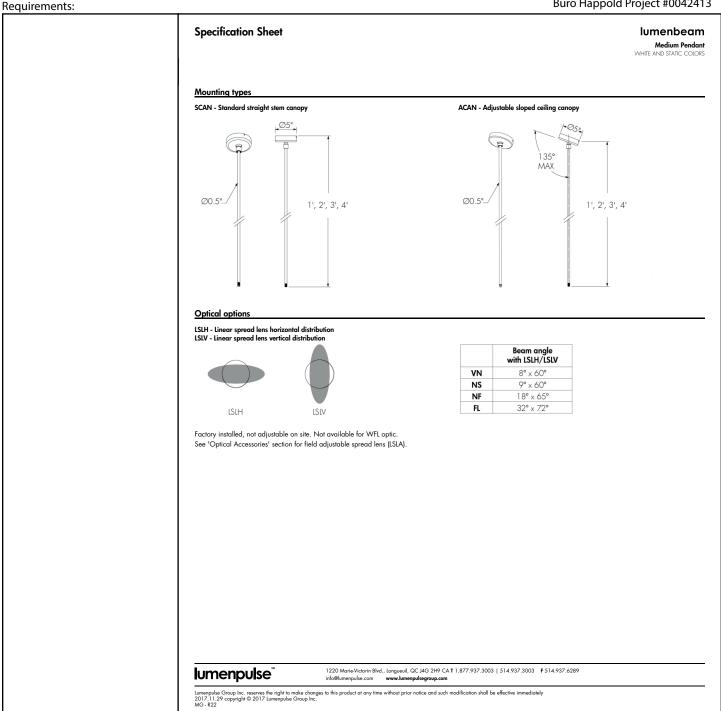
BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-25

Sheet Number 3 of 6

Buro Happold Project #0042413



50% CD - February 14, 2020

Description: Exterior Stem Mounted Downlight

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Integral 0-10V Dimming Driver

Luminaire Wattage: 28W Luminaire Voltage: 277

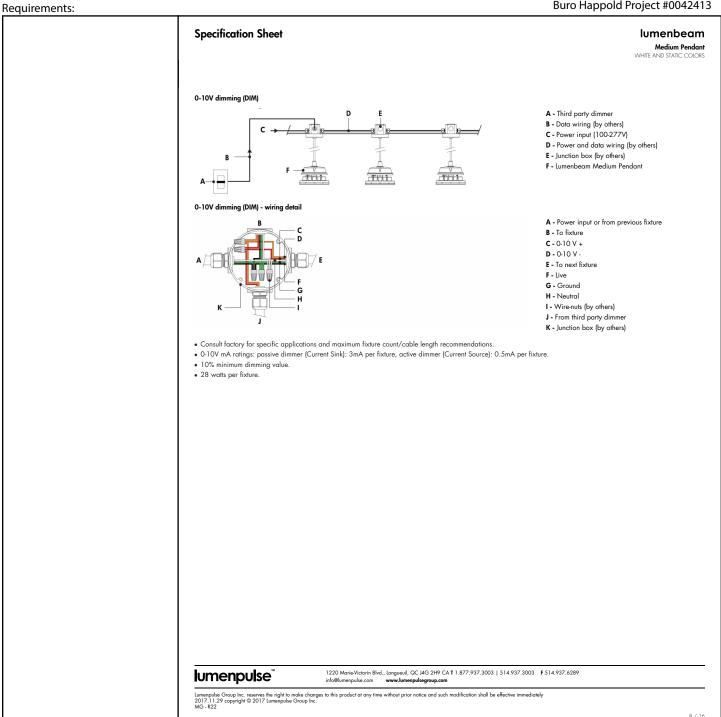
Catalog Reference: LBMP-277-30K-WFL-SCAN-{MOUNT LENGTH}-{FINISH}-DIM-UL-MOD:OPAL LENS BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-25

Sheet Number 4 of 6

Buro Happold Project #0042413



50% CD - February 14, 2020

Description: Exterior Stem Mounted Downlight

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Integral 0-10V Dimming Driver

Luminaire Wattage: 28W Luminaire Voltage: 277

Catalog Reference: LBMP-277-30K-WFL-SCAN-{MOUNT LENGTH}-{FINISH}-DIM-UL-MOD:OPAL LENS

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-25

Sheet Number 5 of 6

Requirements:						Buro	Happold	Project #0042413
	Specification	Sheet						lumenbeam Medium Pendant WHITE AND STATIC COLORS
	How to order							
	1	2	3	4	5	6	7	8
	LBMP							
	9	10	11			J		
	, , , , , , , , , , , , , , , , , , ,		1					
	1 . Housing				2 . Voltage			
	LBMP	Lum	nenbeam™ Medium	Pendant	100		0 volts	
					120		0 volts	
					208		8 volts	
					220 240		0 volts 0 volts	
					277		7 volts	
						27	7 40113	
	3 . Color and Co	or Temperature	(1)		4 . Optics			
	22K	220	ООК		VN	Ve	ry Narrow 6°	
	27K	270			NS		rrow Spot 10°	
	30K	300			NF		irrow Flood 20°	
	35K	350			FL		od 40°	
	40K RD	400			WFL	Wi	ide Flood 60°	
	GR	Red Gre			5 . Mounting T	уре		
	BL	Blue			SCAN	Stro	aight stem canopy	,
					ACAN	Ad	justable sloped ce	eiling canopy
	6 . Mounting Len	gth (2)			7 . Optical Op			
	12	12			LSLH			orizontal distribution ⁽³⁾
	24	24			LSLV	Lin	ear spread lens ve	ertical distribution (3)
	36 48	36 48			8 . Finish			
	40	48			ВК	Blo	ick Sandtex®	
					BRZ		onze Sandtex®	
					SI	Silv	ver Sandtex®	
					WH		ooth white	
					BKTX		tured black	
					BRZTX		tured bronze non	
					GRATX GRNTX		ctured medium gro ctured green	зу
					WHTX		dured green dured white	
					сс	Cu		ish (please specify RAL
	lumenpul	se [™]	1220 Marie-Victorin info@lumenpulse.com		IG 2H9 CA T 1.877.937.3003 514.	937.3003 F 514.937.62	89	
	Lumenpulse Group Inc. reset 2017.11.29 copyright © 20 MG - R22	rves the right to make cho 017 Lumenpulse Group In	anges to this product at any	time without prior notic	e and such modification shall be effective	ve immediately		15 / 16

50% CD - February 14, 2020

Description: Exterior Stem Mounted Downlight

Manufacturer: Lumenpulse Lamp Reference: 3000K LED

Ballast/Transformer: Integral 0-10V Dimming Driver

Luminaire Wattage: 28W Luminaire Voltage: 277

Catalog Reference: LBMP-277-30K-WFL-SCAN-{MOUNT LENGTH}-{FINISH}-DIM-UL-MOD:OPAL LENS

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-25

Sheet Number 6 of 6

Specification Sh	neet		lumenbed Medium Per White and static co
9 . Control (5) (6)		10 . Options	
NO DIM	On/Off control 0-10V dimming	CRC	Corrosion-resistant coating for hostile environments $^{(7)}$
DALI	DALI dimming	11 . Certification	n
DMX/RDM	DMX/RDM enabled	UL	UL compliant
		CE	CE compliant
Notes:			
(1) Consult factory for availa	ability of static Royal Blue, 6500K and 90+ CRI.		
(2) Consult factory for custon	n stem lengths.		
(3) Factory installed, not ava order separately.	ailable for 60° optic. Field adjustable spread lens optical acc	essory available,	
⁽⁴⁾ Lumenpulse offers a wide finish. Please consult factory	e selection of RAL CLASSIC (K7) colors with a smooth texture r for a list of available K7 colors, other RAL textures and glos color matching results may vary.	and high-gloss ses, or to match	
(5) Lumentalk system is enab	color matching results may vary. led with LDB accessory, DIM or DMX/RDM must be specifie diagrams in the specification sheet for details.	d in the order	
⁽⁶⁾ A Lumentranslator and Lu	mentalkID (LIDLT) must be specified for Lumentalk applicatio	ns. Consult	
	alk pages and specification sheets for details.		
outdoor exposure.	to salt spray and harsh chemicals. This option is not required	for normal	
lumenpulse	1220 Marie-Victorin Blvd., Longu info@lumenpulse.com www	euil, QC J4G 2H9 CA T 1.877.937.3003 514.93 lumenpulsegroup.com	37.3003 F 514.937.6289

50% CD - February 14, 2020

Description: Exterior In Grade Wall Washer

Manufacturer: We-ef Lamp Reference: 3000K LED Ballast/Transformer: Integral Luminaire Wattage: 21W Luminaire Voltage: 277

611-3020 + 611-8038 Catalog Reference:

BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-26

Sheet Number 1 of 5

Requirements:

Buro Happold Project #0042413

1. Location: Alley Way Art and Green wall wash

ETC130-GB LED+I 0 - 180° (ETC130/300-GB LED)

611-3020+611-8038





Description

IP67. Inground LED uplight. Suitable for flush installation in concrete or earth. Drive Over Rated. Offset gimbal mounted lamp module, with lockable aiming, 30° vertical tilt, and 360° horizontal rotation. Special effects can be realized with linear lens, flood lens, or color filters.

Beam Type	linear spread, medium beam [M]
Light Source	LED-12/18W / 500 mA - 3000 K
CRI	80
Gear Type	electronic gear

Nominal Luminous Flux

184.8 lm	
12	
2217 lm	
	12

Delivered Lumens Flux

Τj

151.6 lm	
1819.8 lm	
25 °C	
	1819.8 lm

Rated Input Power 21 W

WE-EF LIGHTING USA LLC

50% CD - February 14, 2020

Description: Exterior In Grade Wall Washer

Manufacturer: We-ef Lamp Reference: 3000K LED Ballast/Transformer: Integral Luminaire Wattage: 21W Luminaire Voltage: 277

Catalog Reference: 611-3020 + 611-8038 BUROHAPPOLD ENGINEERING

Luminaire Designation

HE-26

Sheet Number 2 of 5

Buro Happold Project #0042413 Requirements:

ETC130-GB LED+I 0 - 180° (ETC130/300-GB LED) 611-3020+611-8038 10.43 ø 10.63 **Material Specification** Luminaire body constructed of deep drawn stainless steel. Outer housing composite Weight (lbs): 18.20 Lens: 5/8" thick clear tempered glass lens. Max. load 5000kg/11,000 lbs. Colours: Stainless Steel S Lightspeed Need Fixtures Fast? Ask for LIGHTSPEED. LIGHTSPEED features a 5-day dispatch guaranteed on CORE products, or 25% back! Our CORE Products include 80+ subfamilies, available in 4 standard finishes. Standard dispatch of CORE products is 2-weeks. Maximum order quantities apply. Gasket: Silicone rubber gasket Fasteners: PCS polymer coated stainless steel IP67 Ingress protection: Impact protection: IK10+ Corrosion protection: 5CE Suitable for installation in concrete or earth. Suitable for walk-over and DRIVE-OVER applications. Proper drainage and foundation support must be provided. Mounting Listings: UL 1598, CSA C22.2 #250.0 (Intertek) **Electrical Specification** Power supply: Integral [ECG] LED driver provides 120-277 volt range Power factor: > 0.9 Driver / Ballast: Integral EC electronic converter Termination: Factory sealed termination chamber Cable: 3 feet of flexible 18/3 cable WE-EF LIGHTING USA LLC

50% CD - February 14, 2020

Description: Exterior In Grade Wall Washer

Manufacturer: We-ef Lamp Reference: 3000K LED Ballast/Transformer: Integral Luminaire Wattage: 21W Luminaire Voltage: 277

Catalog Reference: 611-3020 + 611-8038

BUROHAPPOLD ENGINEERING

Luminaire Designation

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quirements:		Buro	Happold Project #00424
	ETC130-GB LED+I 0 - 180° (E	TC130/300-GB LED)	
	611-3020+611-8038	•	we-ef
	3/5		
	Lifetime		
	LED >60,000 h Ta 25°C (L70/B10) Control gear >50,000 h Ta 25°C		
	Dimming 0-10V available in request. Must be factory fitted.		
	Optical Accessories		
	Flood lens Broadens light distribution in all planes. Does not fit in combina with [W] lens.	ition	
		C1	
	611-8037 IO-360-ETC130-GB-LED	3.86	
	C1		
	Honeycomb louvre Honeycomb louvre, matt black Teflon® coated. For luminaires equipped with [M] [VN] and [VNS] light distribution.		

50% CD - February 14, 2020

Description: Exterior In Grade Wall Washer

Manufacturer: We-ef Lamp Reference: 3000K LED Ballast/Transformer: Integral Luminaire Wattage: 21W Luminaire Voltage: 277

Catalog Reference: 611-3020 + 611-8038

BUROHAPPOLD ENGINEERING

Luminaire Designation

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Sheet Number 4 of 5

ETC130-GB LED+I 0 - 180°	(ETC130/300-GB LED)	
611-3020+611-8038	V	ve-e
4/5	_	
	C1	
611-8036 IW-ETC130/330-GB-LED	3.86	
C1		
Linear spread lens Broadens light distribution in one plane only. Does not fit combination with [W] lens.	in	
Broadens light distribution in one plane only. Does not fit		
Broadens light distribution in one plane only. Does not fit combination with [W] lens.	C1 3.94	
Broadens light distribution in one plane only. Does not fit	C1	
Broadens light distribution in one plane only. Does not fit combination with [W] lens.	C1	
Broadens light distribution in one plane only. Does not fit combination with [W] lens. 611-8038 IO-180 ETC130/330-GB LED	C1	
Broadens light distribution in one plane only. Does not fit combination with [W] lens. 611-8038 IO-180 ETC130/330-GB LED	C1	

50% CD - February 14, 2020

Description: Exterior In Grade Wall Washer

Manufacturer: We-ef Lamp Reference: 3000K LED Ballast/Transformer: Integral Luminaire Wattage: 21W Luminaire Voltage: 277

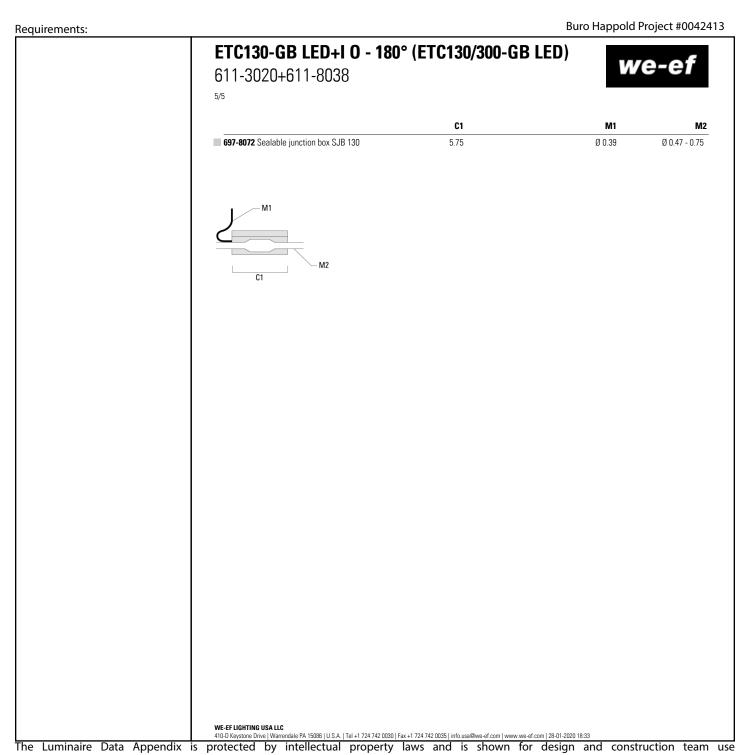
Catalog Reference: 611-3020 + 611-8038

BUROHAPPOLD ENGINEERING

Luminaire Designation

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Sheet Number 5 of 5



50% CD - February 14, 2020

Description: Exterior Ground Mounted

88 360

Manufacturer: Bega Lamp Reference: 3000K LED Ballast/Transformer: Luminaire Wattage: 12W Luminaire Voltage: 277 BUROHAPPOLD ENGINEERING

Luminaire Designation

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Sheet Number 1 of 1

Requirements:

Catalog Reference:

Buro Happold Project #0042413

