Specification Sheet

Project Name _____ **Qty** _____

Type _____ **Catalog / Part Number** _____

Canopy Ø5"

13",18", 23"

Cylinder Ø8"

Aperture Ø5"

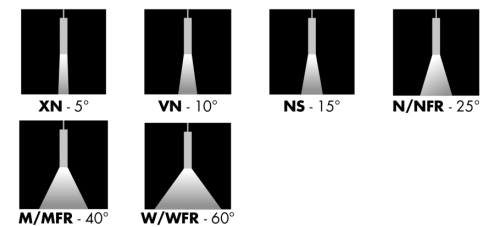Front view

Bottom view
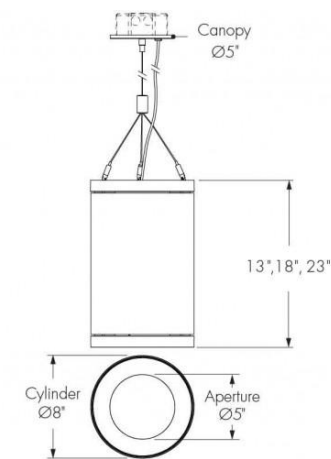
Photometric Summary

Based on Narrow Optic (nominal 25°), 4000K, CRI 80+

Nominal output [lm]	Delivered output [lm][1]	Power (120V) [W][2]	Efficacy [lm/W]	Power (277V) [W][2]	Efficacy [lm/W]
700	698	6.5	107	8	87
1000	921	8	115	10	92
1300	1,256	11	114	13	97
2000	1,953	18	109	19	103

[1] Preliminary, consult website for latest IES files.
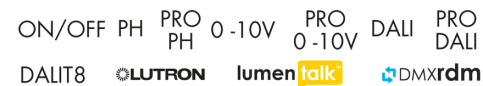[2] Add 3 watts per fixture when specifying Lumentalk™.

Optics

XN - 5°   VN - 10°   NS - 15°   N/NFR - 25°

M/MFR - 40°   W/WFR - 60°

Colors and Color Temperatures

2200K   2700K   3000K   3500K   4000K

D$_{TW}$ Dim to warm 2700K - 2200K
D$_{TWP}$ Dim to warm plus 3500K - 1800K
D$_{WH}$ Dynamic white 2700K - 6500K
D$_{WW}$ Dynamic warm 2200K - 3000K
D$_{WWP}$ Dynamic warm plus 2200K - 3500K

Controls

ON/OFF   PH   PRO PH   0-10V   PRO 0-10V   DALI   PRO DALI

DALIT8   LUTRON   lumentalk   DMXrdm

Description

The Cylinder Large Pendant is a high-performance LED luminaire that is ideal for commercial, residential or hospitality applications and delivers up to 5000 lumens from an 8 in diameter. The Large Pendant comes in a number of finishes, or can be color-specified to fit your taste. Its accessories, beam angles, trims, and optics are easily and quickly changeable in the field.

Features

Mounting Options	Cable mounting (flat canopy or deep canopy), Stem mounting (flat canopy or deep canopy)
Suspension Length	Metal pipe (12 in, 24 in, 36 in or 48 in), Pendant cable (50 in, 100 in or 250 in, field adjustable, black or white)
Light Direction	Direct lighting
Length	13 in, 18 in, 23 in
Direct Lighting Output (nominal lumens)	700lm, 1000lm, 1300lm, 2000lm, 3000lm, 4000lm, 5000lm
Direct Lighting Color Temperature	2200K, 2700K, 3000K, 3500K, 4000K, Dim to warm (2700K to 2200K), Dim to warm plus (3500K to 1800K), Dynamic White (2700K to 6500K), Dynamic warm white (2200K to 3000K), Dynamic warm white plus (2200K to 3500K)
Direct Lighting Optics (nominal distribution)	Extra narrow spot 5°, Very narrow spot 10°, Narrow spot 15°, Narrow 25°, Narrow faceted reflector 25°, Medium 40°, Medium faceted reflector 40°, Wide 60°, Wide faceted reflector 60°
Optical Accessories	Snoot , Half snoot, Clear glass lens, Softening glass lens , Prismatic diffuser, Linear spread lens narrow (1° x 40°), Linear spread lens wide (1° x 60°), Honeycomb louver
Warranty	5-year limited warranty

Finishes

MWH-Matte white	MBK-Matte black	MBR-Matte brown
MOR-Matte orange	MGR-Matte green	MBL-Matte blue
MSI-Matte silver	GWH-Glossy white	GBK-Glossy black
GYL-Glossy yellow	GLR-Glossy red	GVI-Glossy violet
GGR-Glossy green	GIY-Glossy ivory	CGY-Concrete grey
MLG-Metalized grey	IBR-Italian brick red	PWH-Parget white

CC-Custom color and finish
(Please specify RAL color)

Certifications

c(UL)us   RoHS   5 YEARS lumenpulse

Performance

Maximum Delivered Output	Up to 4,798 lm (medium faceted reflector optic 40°, 4000K, CRI 80)
Maximum Delivered Intensity	Up to 63,952 cd (extra narrow spot optic 5°, 4000K, CRI 80)
Efficacy	Up to 129 lm/W (narrow spot optic 15°, 4000K, CRI 80)
Color Consistency	2 SDCM, 3 SDCM (XN optic only)
Color Rendering	CRI 80+, CRI 90+, CRI 95+
Lumen Maintenance	L95 55,000 hrs, L70 225,000 hrs
UGR	< 19

Physical

Weight	Up to 14.75 lbs
Housing Material	Aluminum
TIR Optics Material	Clear polycarbonate
Reflector Material	Aluminum

Electrical and control

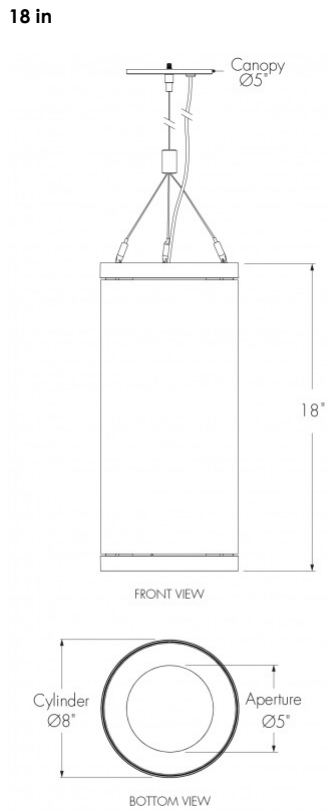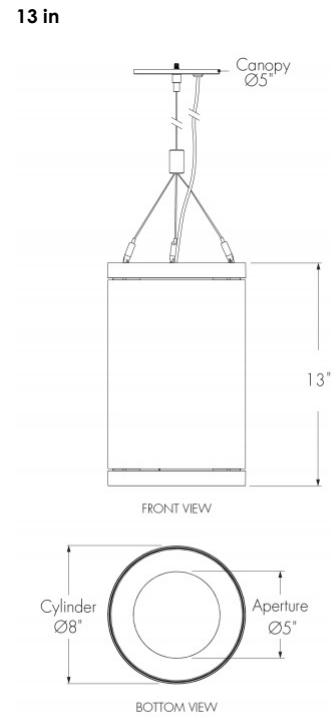|	
Voltage	120 volts, 277 volts, 347 volts
Control	On/Off control, Phase dimming, Pro Phase 1% dimming, Pro Phase Lutron® Hi-lume 1% 2-wire LTEA 120V (temporarily unavailable), Standard 0-10V dimming to 1% linear curve, Standard 0-10V (1% linear or logarithmic), Pro 0-10V (0.1% linear or logarithmic), Standard DALI (1% linear or logarithmic), DALI (0.1% linear or logarithmic), DALI-2 dimming Type 8 (multi channel capability), Lumentalk, Lutron® Hi-lume 1% EcoSystem® LDE1/PEQ1 Soft-on/Fade-to-Black, DMX/RDM enabled

Environmental

Environment	Damp location (interior applications only)
Operating Temperature	-4 °F to 86 °F
Ingress Protection Rating	IP20

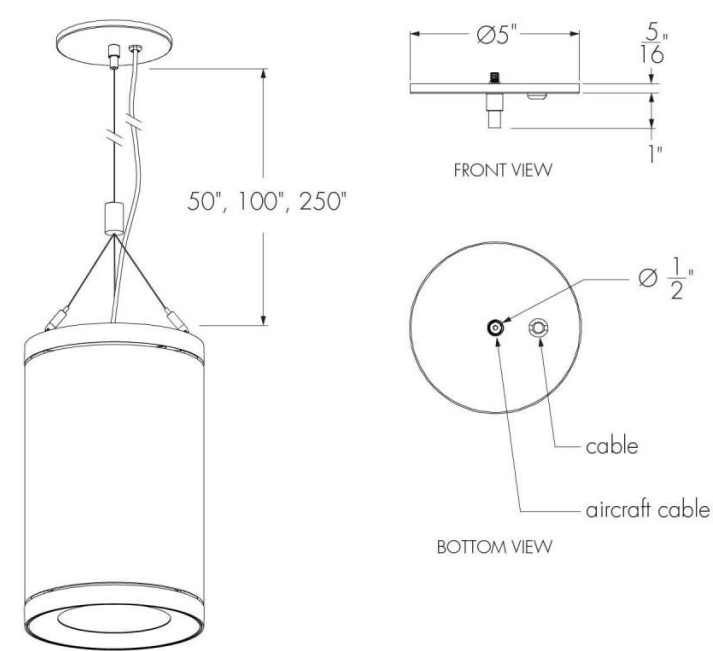## Accessories (order separately)

Control Boxes	DMX/RDM enabled (daisy chain or star configuration), Ethernet enabled (daisy chain or star configuration)
Control Systems	Lumentone™ 2 (LTN2), Pharos® kit (PHAROS), Consult control systems section for details
Diagnostic and Addressing Tools	LumenID (LID), LumentalkID (LIDLT)

lumenpulse™

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www.lumenpulse.com/products/2060

Fixture dimensions (shown with flat canopy & cable options)

13 in

Canopy
Ø5"

13"

FRONT VIEW

Cylinder
Ø8"

Aperture
Ø5"

BOTTOM VIEW

18 in

Canopy
Ø5"

18"

FRONT VIEW

Cylinder
Ø8"

Aperture
Ø5"

BOTTOM VIEW

23 in

Canopy
Ø5"

23"

FRONT VIEW

Cylinder
Ø8"

Aperture
Ø5"

BOTTOM VIEW

Mounting option dimensions (13 in fixture shown)

Flat canopy & cable option

Ø5"

5/16"

FRONT VIEW

1"

50", 100", 250"

Ø 1/2"

cable

aircraft cable

BOTTOM VIEW

Deep canopy & cable option

Ø6"

FRONT VIEW

1 3/4"

50", 100", 250"

cable

aircraft cable

BOTTOM VIEW

Flat canopy & stem option

Ø5"

5/16"

FRONT VIEW

Ø 3/4"

12",24",36",48"

Ø 1/2"

BOTTOM VIEW

Deep canopy & stem option

Ø6"

FRONT VIEW

2 3/8"

12",24",36",48"

Ø 1/2"

Ø1 1/4"

BOTTOM VIEW

MAXIMUM CEILING ANGLE FOR DEEP CANOPY: 35°
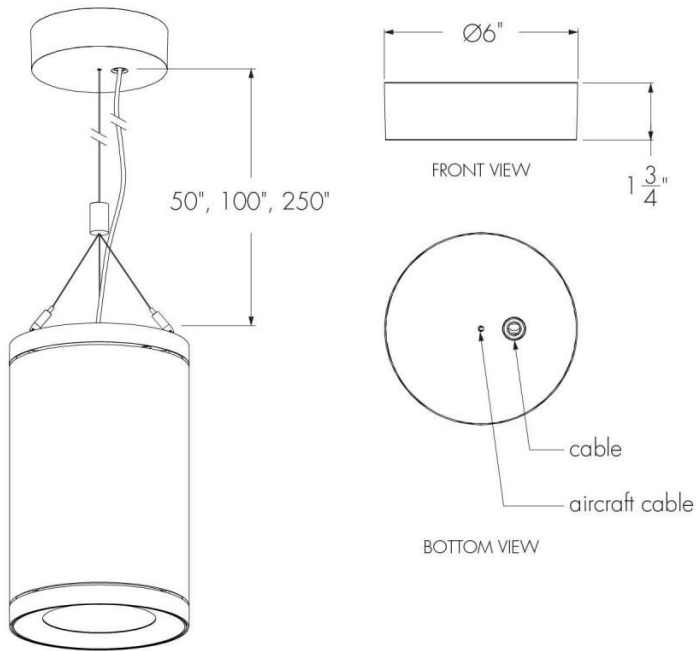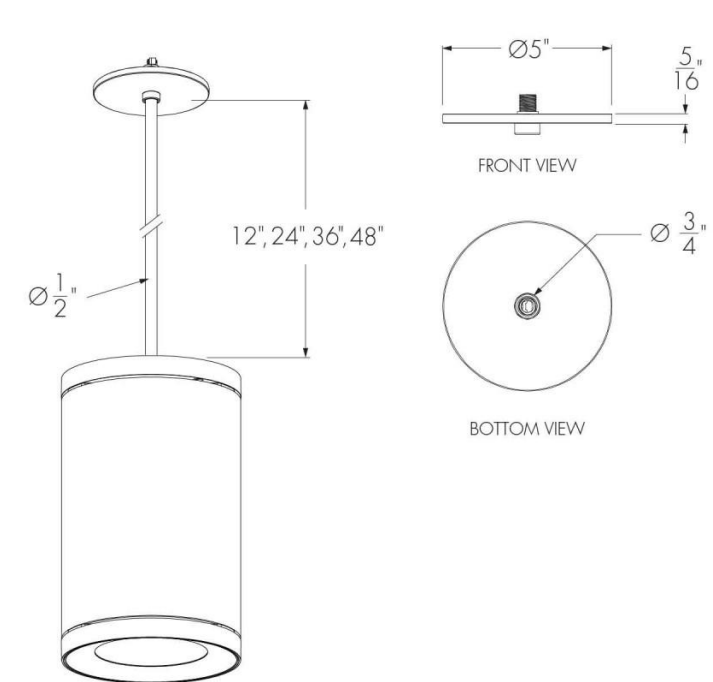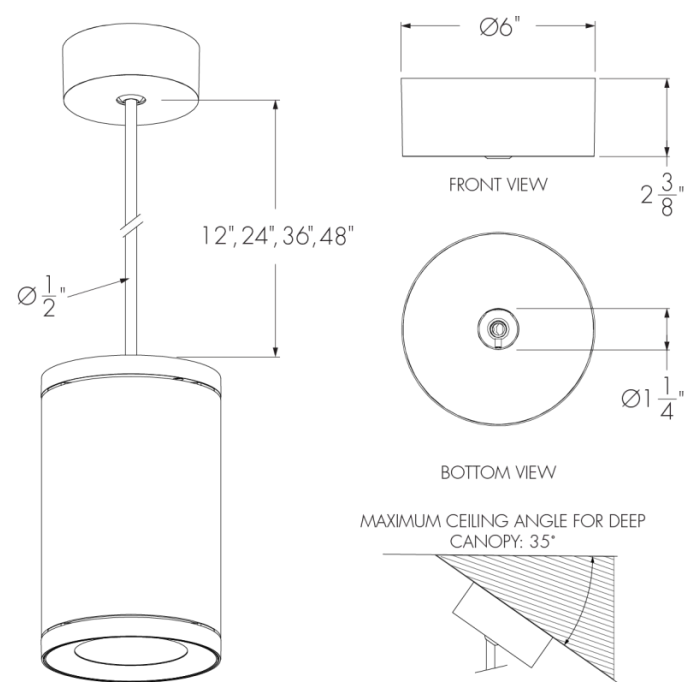
Optical accessory dimensions (13 in fixture shown)

Snoot

$7\frac{3}{4}$"

$4\frac{11}{16}$"

$5\frac{1}{8}$"

FRONT VIEW

$17\frac{11}{16}$"

$7\frac{3}{4}$"

Ø5"

BOTTOM VIEW

Half snoot

$7\frac{3}{4}$"

$4\frac{11}{16}$"

$5\frac{1}{8}$"

FRONT VIEW

$17\frac{11}{16}$"

$7\frac{3}{4}$"

Ø5"

BOTTOM VIEW
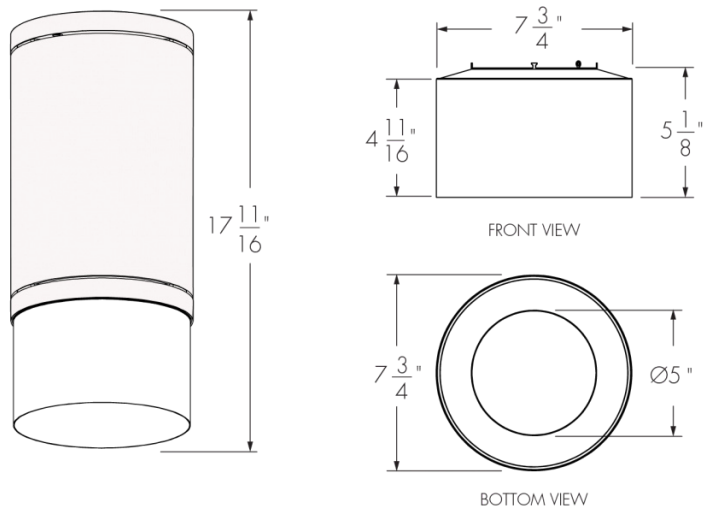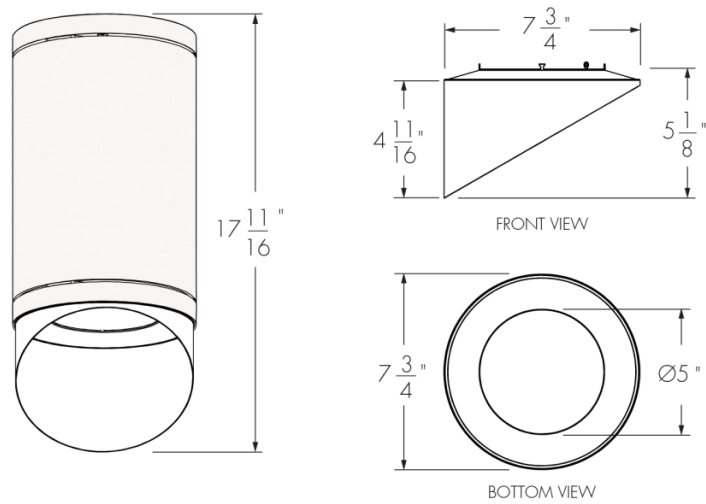
Photometric information - Color rendering options comparison, 3000K

Color sample	Ra	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
CRI 80+	84	82	90	97	83	82	88	86	63	15	77	83	68	84	98	75
CRI 90+	92	93	97	98	92	93	97	90	79	55	93	93	85	94	100	88
CRI 95+	97	96	97	99	96	96	95	96	97	97	96	95	86	96	98	97
Radiant CRI 80+	84	83	91	96	81	82	89	83	62	15	79	80	69	85	98	76
Radiant CRI 95+	95	95	94	95	98	94	90	94	96	96	89	95	80	94	98	96

Optics

TIR Optic
XN/VN/NS/N

Semi-Specular reflector
M/W

Faceted reflector
NFR/MFR/WFR

Color and color temperature

Color temperature ranges

2200K   2700K   3000K   3500K   4000K

1800K   6500K

DTW
Dim to warm
2700K - 2200K

DWW
Dynamic warm
2200K - 3000K

DWWP
Dynamic warm plus
2200K - 3500K

DTWP
Dim to warm plus
3500K - 1800K

DWH
Dynamic white
2700K - 6500K
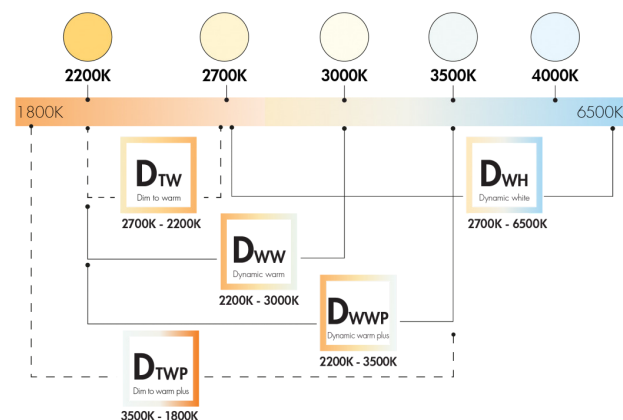
- - - **1 channel (DTW, DTWP)** Compatible with: DA1 SDALI ⟳DMX**rdm** lumen**talk**
——— **2 channels (DWH, DWW, DWWP)** Compatible with: DALIT8 ⟳DMX**rdm** lumen**talk**
——— **3 channels* (DWH, DWW, DWWP)** Compatible with: DALIT8 ⟳DMX**rdm** lumen**talk**

*Can be field changeable via RDM & LT for individual CCT control.

Dim to warm

Intensity (%)
100% / 80% / 60% / 40% / 20% / 0%
2700K   2450K   2200K
Color Temperature (CCT)

Dim to warm plus

Intensity (%)
100% / 80% / 60% / 40% / 20% / 0%
3500K   2650K   1800K
Color Temperature (CCT)
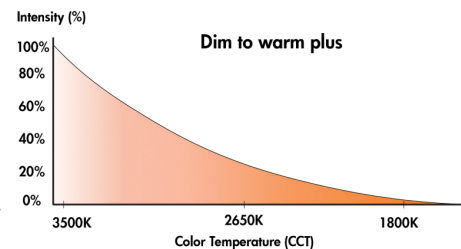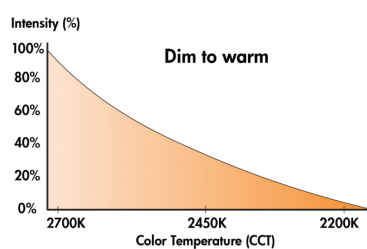
Control

On/off control
NO - On/off control

Phase dimming
PH - Phase dimming
PPH - Pro Phase 1% dimming
PPH2 - Pro Phase Lutron® Hi-lume 1% 2-wire LTEA 120V*

Standard 0-10V dimming down to 1%
DAMC - Standard 0-10V dimming to 1% linear curve

DA1 - Standard 0-10V dimming, 1% linear
DA2 - Standard 0-10V dimming, 1% logarithmic
DA3 - Standard 0-10V dimming, 1% linear (347V)

Professional 0-10V dimming down to 0.1%
PDA1 - Pro 0-10V dimming, 0.1% linear
PDA2 - Pro 0-10V dimming, 0.1% logarithmic

Standard DALI dimming down to 1%
SDALI1 - Standard DALI dimming, 1% linear
SDALI2 - Standard DALI dimming, 1% logarithmic

Professional DALI dimming down to 0.1%
DALI1 - Pro DALI dimming, 0.1% linear
DALI2 - Pro DALI dimming, 0.1% logarithmic

DALI dimming Type 8
DALIT8 - DALI-2 dimming Type 8 (multi channel capability)
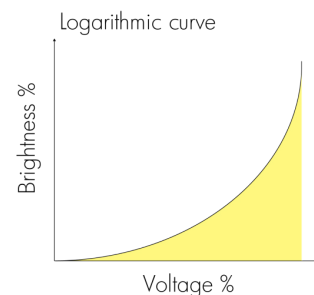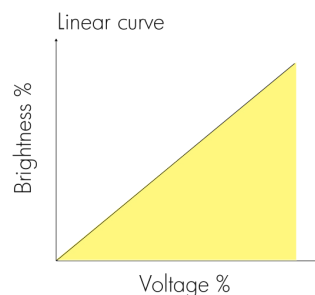
lumen**talk** dimming
LT - Lumentalk dimming, 1% minimum dimming value

Lutron® EcoSystem®
ES - Lutron® Hi-lume 1% EcoSystem® LDE1/PEQ1 Soft-on/Fade-to-Black
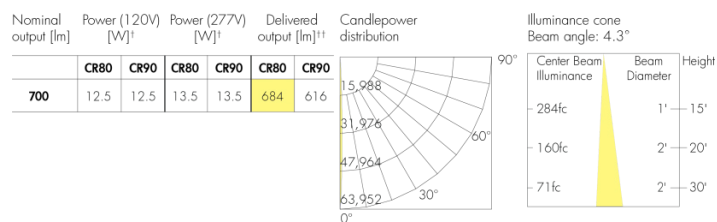1% minimum dimming value

⟳DMX**rdm**
DMX/RDM - DMX/RDM enabled

Linear curve

Brightness %

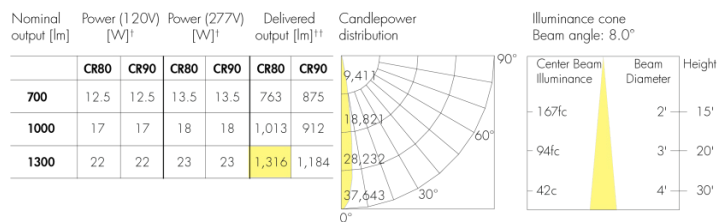Voltage %

Logarithmic curve

Brightness %

Voltage %

*Consult factory for Pro Phase dimming option

Photometric information - direct lighting optics
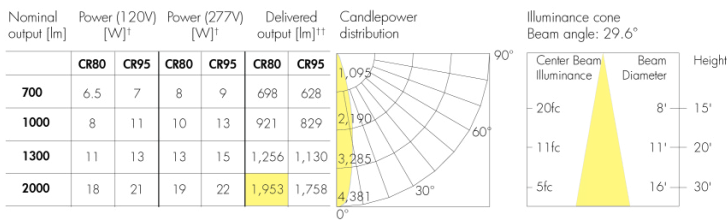
XN - Extra Narrow Spot (nominal 5°), 4000K

Nominal output [lm]	Power (120V) [W]† CR80	CR90	Power (277V) [W]† CR80	CR90	Delivered output [lm]†† CR80	CR90
700	12.5	12.5	13.5	13.5	684	616

Candlepower distribution
15,988
31,976
47,964
63,952
90° 60° 30° 0°

Illuminance cone
Beam angle: 4.3°

Center Beam Illuminance	Beam Diameter	Height
284fc	1'	15'
160fc	2'	20'
71fc	2'	30'

VN - Very Narrow Spot (nominal 10°), 4000K

Nominal output [lm]	Power (120V) [W] CR80	CR90	Power (277V) [W] CR80	CR90	Delivered output [lm]†† CR80	CR90
700	12.5	12.5	13.5	13.5	763	875
1000	17	17	18	18	1,013	912
1300	22	22	23	23	1,316	1,184

Candlepower distribution
9,411
18,821
28,232
37,643
90° 60° 30° 0°

Illuminance cone
Beam angle: 8.0°

Center Beam Illuminance	Beam Diameter	Height
167fc	2'	15'
94fc	3'	20'
42c	4'	30'

NS - Narrow Spot (nominal 15°), 4000K

Nominal output [lm]	Power (120V) [W]† CR80	CR95	Power (277V) [W]† CR80	CR95	Delivered output [lm]†† CR80	CR95
700	7.5	8.5	9	10.5	969	872
1000	11	13	13	15	1,279*	1,151
1300	13	18	15	20	1,744	1,570
2000	21	N/A	22	N/A	2,713	N/A

Candlepower distribution
7,402
14,806
22,208
29,610
90° 60° 30° 0°

Illuminance cone
Beam angle: 15.0°

Center Beam Illuminance	Beam Diameter	Height
132fc	4'	15'
74fc	5'	20'
33fc	8'	30'

N - Narrow (nominal 25°), 4000K

Nominal output [lm]	Power (120V) [W]† CR80	CR95	Power (277V) [W]† CR80	CR95	Delivered output [lm]†† CR80	CR95
700	6.5	7	8	9	698	628
1000	8	11	10	13	921	829
1300	11	13	13	15	1,256	1,130
2000	18	21	19	22	1,953	1,758

Candlepower distribution
1,095
2,190
3,285
4,381
90° 60° 30° 0°

Illuminance cone
Beam angle: 29.6°

Center Beam Illuminance	Beam Diameter	Height
20fc	8'	15'
11fc	11'	20'
5fc	16'	30'

M - Medium (nominal 40°), 4000K

Nominal output [lm]	Power (120V) [W]† CR80	CR95	Power (277V) [W]† CR80	CR95	Delivered output [lm]†† CR80	CR95
700	6.5	7	8	9	736	662
1000	8	11	10	13	971*	874
1300	11	13	13	15	1,324	1,192
2000	18	21	19	22	2,060	1,854
3000	28	41	29	41	3,090	2,781
4000	41	N/A	41	N/A	4,046	N/A
5000	52	N/A	52	N/A	4,781	N/A

Candlepower distribution
2,038
4,075
6,113
8,150
90° 60° 30° 0°

Illuminance cone
Beam angle: 40.7°

Center Beam Illuminance	Beam Diameter	Height
36fc	11'	15'
20fc	15'	20'
9fc	22'	30'

MFR - Medium faceted reflector (nominal 40°), 4000K

Nominal output [lm]	Power (120V) [W]† CR80	CR95	Power (277V) [W]† CR80	CR95	Delivered output [lm]†† CR80	CR95
700	6.5	7	8	9	788	708
1000	8	11	10	13	1039*	935
1300	11	13	13	15	1,417	1,275
2000	18	21	19	22	2,204	1,984
3000	28	41	29	41	3,306	2,976
4000	41	N/A	41	N/A	4,329	N/A
5000	52	N/A	52	N/A	4,789	N/A

Candlepower distribution
2,181
4,360
6,541
8,721
90° 60° 30° 0°

Illuminance cone
Beam angle: 40.7°

Center Beam Illuminance	Beam Diameter	Height
39fc	11'	15'
22fc	15'	20'
10fc	22'	30'

W - Wide (nominal 60°), 4000K

Nominal output [lm]	Power (120V) [W]† CR80	CR95	Power (277V) [W]† CR80	CR95	Delivered output [lm]†† CR80	CR95
700	6.5	7	8	9	693	624
1000	8	11	10	13	915*	824
1300	11	13	13	15	1,248	1,123
2000	18	21	19	22	1,941	1,747
3000	28	41	29	41	2,911	2,620
4000	41	N/A	41	N/A	3,813	N/A
5000	52	N/A	52	N/A	4,506	N/A

Candlepower distribution
1,067
2,134
3,202
4,269
90° 60° 30° 0°

Illuminance cone
Beam angle: 63.0°

Center Beam Illuminance	Beam Diameter	Height
19fc	18'	15'
11fc	25'	20'
5fc	37'	30'

WFR - Wide faceted reflector (nominal 60°), 4000K

Nominal output [lm]	Power (120V) [W]† CR80	CR95	Power (277V) [W]† CR80	CR95	Delivered output [lm]†† CR80	CR95
700	6.5	7	8	9	742	668
1000	8	11	10	13	979*	882
1300	11	13	13	15	1,335	1,202
2000	18	21	19	22	2,077	1,869
3000	28	41	29	41	3,115	2,803
4000	41	N/A	41	N/A	4,080	N/A
5000	52	N/A	52	N/A	4,513	N/A

Candlepower distribution
1,142
2,284
3,426
4,568
90° 60° 30° 0°

Illuminance cone
Beam angle: 63.0°

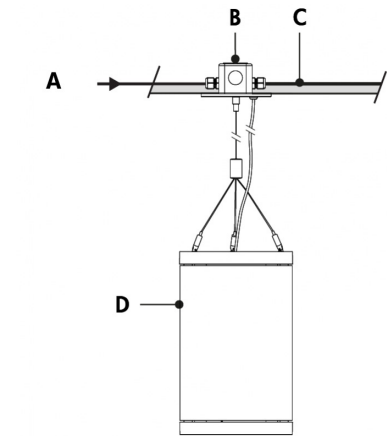| Center Beam Illuminance	Beam Diameter	Height
20fc	18'	15'
11fc	25'	20'
5fc	37'	30'

† Delivered wattage: +/- 10% tolerance. Add 3 watts per fixture when specifying Lumentalk™.

†† Consult website for latest IES files. Delivered output: +/- 10% tolerance.

## Typical wiring diagrams (refer to installation instructions for additional wiring details)

On/Off Control (NO)

A - Power input (120-347V)
B - 4 in octagonal/round junction box (by others)
C - Power wiring (by others)
D - Cylinder Large

- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Consult Photometric Information pages for wattage information.
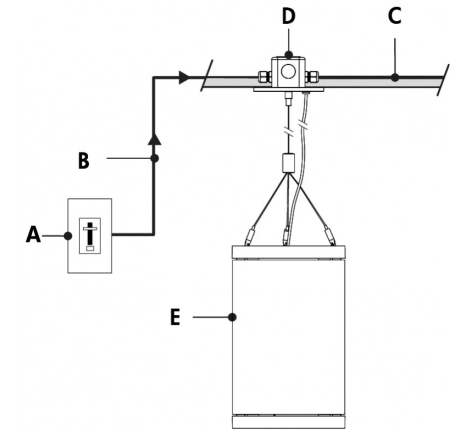
On/Off Control (NO) - wiring detail
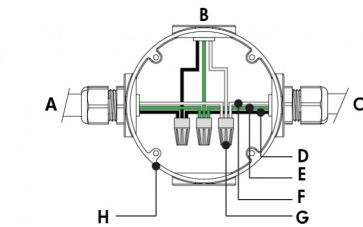
A - Power input or from previous fixture
B - To fixture
C - To next fixture
D - Line
E - Ground
F - Neutral
G - Wire-nuts (by others)
H - 4 in octagonal/round junction box (by others)

Wiring color code

Color	USE
Green	Ground
Black	Line
White	Neutral
Red or purple	0-10V / Data +
Orange or grey	0-10V / Data -

Phase dimming (PH, PPH, PPH2)

A - Phase dimmer (by others)
B - Phase dimmed power circuit (120V)
C - Power wiring (by others)
D - 4 in octagonal/round junction box (by others)
E - Cylinder Large

- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Consult Photometric Information pages for wattage information.
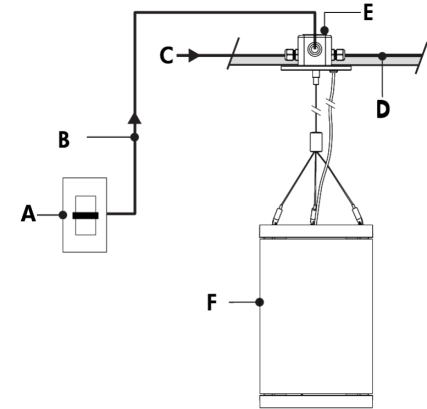
Phase dimming (PH, PPH, PPH2) - wiring detail
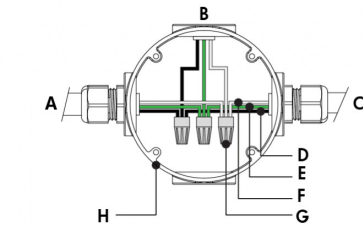
A - Power input or from previous fixture
B - To fixture
C - To next fixture
D - Line
E - Ground
F - Neutral
G - Wire-nuts (by others)
H - 4 in octagonal/round junction box (by others)

Wiring color code

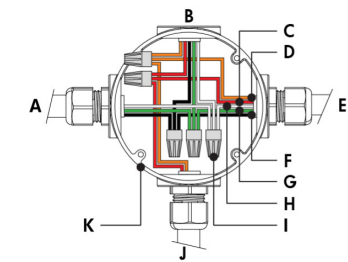| Color	USE
Green	Ground
Black	Line
White	Neutral
Red or purple	0-10V / Data +
Orange or grey	0-10V / Data -

0-10V dimming (DAMC, DA1, DA2, DA3, PDA1, PDA2)

A - Dimmer (by others)
B - Data wiring (by others)
C - Power input (120-347V)
D - Power and data wiring (by others)
E - 4 in octagonal/round junction box (by others)
F - Cylinder Large

0-10V dimming (DAMC, DA1, DA2, DA3, PDA1, PDA2) - wiring detail

A - Power input or from previous fixture
B - To fixture
C - 0-10V +
D - 0-10V -
E - To next fixture
F - Line
G - Ground
H - Neutral
I - Wire-nuts (by others)
J - From dimmer (by others)
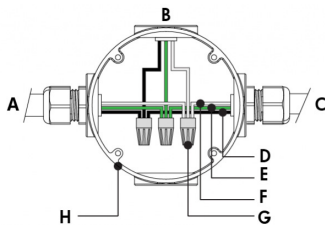K - 4 in octagonal/round junction box (by others)

Wiring color code

Color	USE
Green	Ground
Black	Line
White	Neutral
Red or purple	0-10V / Data +
Orange or grey	0-10V / Data -

- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Consult Photometric Information pages for wattage information.
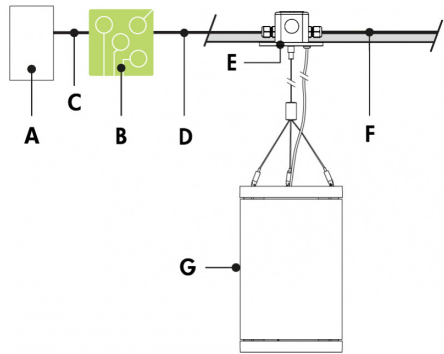
Lumentalk (LT)

A - Dimmer/controller (by others)
B - Lumentranslator 2 (LTL2-DIM, -DMX, -TRIAC, -DALI)
C - Data wiring (by others)
D - Power line (120-277V AC)
E - 4 in octagonal/round junction box (by others)
F - Power wiring (by others)
G - Cylinder Large

Lumentalk (LT) - wiring detail

A - Power input (control over power line via Lumentalk system) or from previous fixture
B - To fixture
C - To next fixture
D - Line
E - Ground
F - Neutral
G - Wire-nuts (by others)
H - 4 in octagonal/round junction box (by others)

Wiring color code

Color	USE
Green	Ground
Black	Line
White	Neutral
Red or purple	0-10V / Data +
Orange or grey	0-10V / Data -

- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Lumentalk enabled fixtures must be commissioned using LumentalkID software and a LID-LT. Consult factory for details.
- Maximum of 1 transmitter (Lumentranslator 2 or Lumenlink) per system. No third party fixtures allowed on the same circuit.
- For DMX applications: 1 DMX controller per Lumentalk network, maximum of 48 DMX channels per Lumentalk network (minimum step transition update rate is 1 second, minimum fade time between two colors is 1 minute). Consult factory for DALI Lumentalk applications.Consult factory for applications that require additional capabilities.
- Consult Photometric Information pages for wattage information.
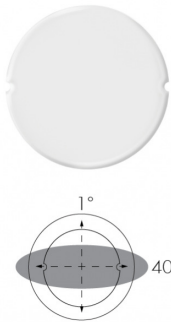
Optical Accessories

SN - Snoot

LACYL - SN

HSN - Half Snoot

LACYL - HSN

HL - Honeycomb louver

LACYL - HL

CL - Clear glass lens

LACYL - CL

SL - Softening glass lens

LACYL - SL

PD – Prismatic diffuser

LACYL - PD

LSN - Linear spread lens narrow (1° x 40°)

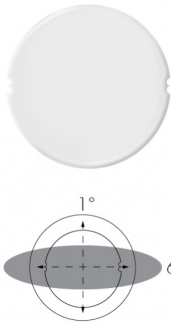Horizontal Beam Distribution   Vertical Beam Distribution

LACYL - LSN

LSW - Linear spread lens wide (1° x 60°)
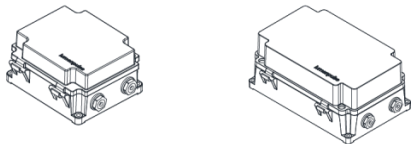

Horizontal Beam Distribution   Vertical Beam Distribution

LACYL - LSW

Control boxes (order separately)

CBX-DMX/RDM - DMX/RDM enabled (daisy chain or star configuration)

DMX/RDM control box. Up to six power and data outputs to fixtures or fixture runs. Consult CBX specification sheet and installation instructions for details. Lumenterminators provided with CBX (2x for daisy chain configuration, 6x for star configuration), consult factory to order spares.

CBX-ENET - Ethernet enabled (daisy chain or star configuration)
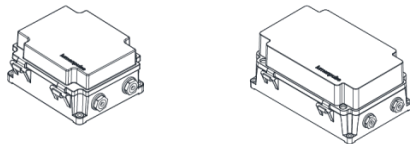
Ethernet control box. Up to four power and data outputs to fixture or fixture runs. Consult Ethernet CBX specification sheet and installation instructions for details.

lumenpulse™

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www.lumenpulse.com/products/2060

12 / 16

Control systems (order separately)

LTN2 - Lumentone™ 2

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

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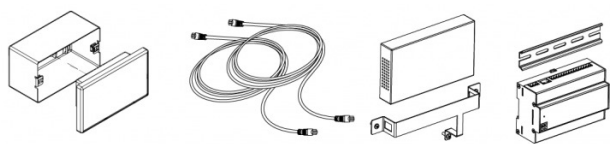
The Pharos kit, available for 1 or 2 DMX universes, allows for complete control of large lighting installations. 2 DMX universes kit shown.

Diagnostic and addressing tools (order separately)

LID - LumenID

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

LID-LT - LumentalkID

LumentalkID is a diagnostic and addressing tool. It must be specified for all Lumentalk (LT) applications. Consult LID-LT specification sheet for details.

How to order

Housing [1]	Certification	Mounting	Mounting Option Finish	Mounting Length	Light Direction	Voltage	Length	Direct Lighting Output (nominal lumens)	Direct Lighting Color Temperature
LACYL Cylinder Large - Ø8 in	**A** UL/cUL	**PMF** Pendant mount flat canopy (aircraft cable) **PMD** Pendant mount deep canopy (aircraft cable) **PSF** Pendant stem mount flat canopy [2] **PSD** Pendant stem mount deep canopy [2]	**MWH** Matte white **MBK** Matte black **MSI** Matte silver **CC** Custom color [3] [4]	**M1** Metal pipe (12 in) [5] **M2** Metal pipe (24 in) [5] **M3** Metal pipe (36 in) [5] **M4** Metal pipe (48 in) [5] **ACC50BK** Aircraft cable black (50 in, field adjustable) [6] **ACC100BK** Aircraft cable black (100 in, field adjustable) [6] **ACC250BK** Aircraft cable black (250 in, field adjustable) [6] **ACC50WH** Aircraft cable white (50 in, field adjustable) [6] **ACC100WH** Aircraft cable white (100 in, field adjustable) [6] **ACC250WH** Aircraft cable white (250 in, field adjustable) [6]	**D** Direct lighting	**120** 120 volts **277** 277 volts **347** 347 volts [7] [8]	**13** 13 in **18** 18 in **23** 23 in	**dL07** 700lm **dL10** 1000lm [9] **dL13** 1300lm [9] **dL20** 2000lm [10] **dL30** 3000lm [11] **dL40** 4000lm [11] **dL50** 5000lm [11]	**22K** 2200K [8] [12] **27K** 2700K **30K** 3000K **35K** 3500K **40K** 4000K **DTW** Dim to warm (2700K to 2200K) [13] [14] **DTWP** Dim to warm plus (3500K to 1800K) [13] [14] **DWH** Dynamic White (2700K to 6500K) [14] [15] **DWW** Dynamic warm white (2200K to 3000K) [14] [15] **DWWP** Dynamic warm white plus (2200K to 3500K) [14] [15]

Notes:
1. Refer to website product configurator for all exceptions.
2. Stem finish matches fixture housing color.
3. Refer to Finish section for additional color codes (ex. MGR).
4. Longer lead times can be expected for custom RAL color finishes.
5. Metal pipe available for PSF and PSD mounting options only.
6. Available for PMF and PMD mounting options only.
7. Not available for 700 and 5000 lumens.
8. Not available for XN and VN optics.
9. Available for VN, NS, N, NFR, M, MFR, W and WFR optics only.
10. Available for NS, N, NFR, M, MFR, W and WFR optics only.
11. Available for NFR, M, MFR, W and WFR optics only.
12. Available for CR80 only.
13. Available for 1000, 1300, 2000 and 3000 lumens when combined with CR90 and NFR, M, MFR, W or WFR optics only.
14. NFR, MFR and WFR faceted reflector optics are recommended for optimal performance.
15. Available for 1300 lumens when combined with CR80 and NFR, M, MFR, W or WFR optics only.

How to order

Direct Lighting Color Rendering	Direct Lighting Optics (nominal distribution)	Direct Lighting Control [22]	Direct Lighting Accessories [49] [50]	Finish	Bezel	Bezel Finish
CR80 CRI 80+ [16]	**XN** Extra narrow spot 5° [19]	**NO** On/off control [23] [24] [25]	**NA** No accessory	**MWH** Matte white	**b** Bezel	**MWH** Matte white
CR90 CRI 90+ [17]	**VN** Very narrow spot 10° [20]	**PH** Phase dimming [25] [26] [27] [28]	**SN** Snoot [51]	**MBK** Matte black		**MBK** Matte black
CR95 CRI 95+	**NS** Narrow spot 15° [21]	**PPH** Pro Phase 1% dimming [8] [25] [28] [29] [30]	**HSN** Half snoot [51]	**MBR** Matte brown		**MBR** Matte brown
RCR80 Radiant CRI 80+ [8] [18]	**N** Narrow 25° [21]	**PPH2** Pro Phase Lutron® Hi-lume 1% 2-wire LTEA 120V (temporarily unavailable) [8] [25] [28] [31] [32] [33]	**HL** Honeycomb louver [52]	**MOR** Matte orange		**MOR** Matte orange
RCR95 Radiant CRI 95+ [8] [18]	**NFR** Narrow faceted reflector 25°	**DAMC** Standard 0-10V dimming to 1% linear curve [25] [29] [34] [35] [36]	**CL** Clear glass lens	**MGR** Matte green		**MGR** Matte green
	M Medium 40°	**DA1** Standard 0-10V dimming 1% linear [24] [37] [38]	**SL** Softening glass lens	**MBL** Matte blue		**MBL** Matte blue
	MFR Medium faceted reflector 40°	**DA2** Standard 0-10V dimming 1% logarithmic [24] [37] [38]	**PD** Prismatic diffuser [53]	**MSI** Matte silver		**MSI** Matte silver
	W Wide 60°	**DA3** Standard 0-10V dimming 1% linear (347V) [38] [39]	**LSN** Linear spread lens narrow (1° x 40°) [54] [55]	**GWH** Glossy white		**GWH** Glossy white
	WFR Wide faceted reflector 60°	**PDA1** Pro 0-10V dimming 0.1% linear [24] [25] [37]	**LSW** Linear spread lens wide (1° x 60°) [55] [56]	**GBK** Glossy black		**GBK** Glossy black
		PDA2 Pro 0-10V dimming 0.1% logarithmic [24] [25] [37]		**GYL** Glossy yellow		**GYL** Glossy yellow
		SDALI1 Standard DALI dimming 1% linear [36] [40]		**GLR** Glossy red		**GLR** Glossy red
		SDALI2 Standard DALI dimming 1% logarithmic [36] [40]		**GVI** Glossy violet		**GVI** Glossy violet
		DALI1 Pro DALI dimming 0.1% linear [24] [25] [41]		**GGR** Glossy green		**GGR** Glossy green
		DALI2 Pro DALI dimming 0.1% logarithmic [24] [25] [41]		**GIY** Glossy ivory		**GIY** Glossy ivory
		DALIT8 DALI-2 dimming Type 8 (multi channel capability) [42] [43]		**CGY** Concrete grey		**CGY** Concrete grey
		ES Lutron® Hi-lume 1% EcoSystem® LDE1/PEQ1 Soft-on/Fade-to-Black [8] [25] [44] [45]		**MLG** Metalized grey		**MLG** Metalized grey
		LT Lumentalk dimming [46] [47]		**IBR** Italian brick red		**IBR** Italian brick red
		DMX/RDM DMX/RDM enabled [46] [48]		**PWH** Parget white		**PWH** Parget white
				CC Custom color & finish [4]		**CC** Custom color & finish [4]

Notes:

4. Longer lead times can be expected for custom RAL color finishes.

8. Not available for XN and VN optics.

16. Available for 2200K, 2700K, 3000K, 3500K, 4000K and DWH, DWW or DWWP color options only.

17. Available for 2700K, 3000K, 3500K and 4000K color options when combined with XN or VN optics only. Available for DTW and DTWP color options when combined with NFR, M, MFR, W or WFR optics only.

18. Radiant CRI options available for 3000K only.

19. Available for 700 lumens when combined with CR80 or CR90 color rendering options only.

20. Available for 700, 1000 and 1300 lumens when combined with CR80 or CR90 color rendering options only.

21. Available up to 2000 lumens.

22. Control options vary according to color temperature, color rendering and optics combination. Refer to website product configurator for details.

23. Manufacturer's choice driver. Order code may change to NO1.

24. Available up to 1300 lumens (CR80, RCR80, CR95 or RCR95) and 2000 lumens (CR80 or RCR80) for NS and N optics. Available up to 3000 lumens (CR80, RCR80, CR95 or RCR95), 4000 lumens (CR80 or RCR80) and 5000 lumens (CR80 or RCR80) for NFR, M, MFR, W and WFR optics.

25. Not available for DTW, DTWP, DWH, DWW or DWWP color options.

26. Manufacturer's choice driver. Order code may change to PH1 or PH2.

27. Available up to 1300 lumens (CR80, RCR80, CR95 or RCR95) and 2000 lumens (CR80 or RCR80) for NS optic. Available up to 2000 lumens (CR80, RCR80, CR95 or RCR95) for N optic and up to 3000 lumens (CR80 or RCR80) for NFR, M, MFR, W and WFR optics.

28. Available for 120V voltage option only.

29. Available up to 3000 lumens when combined with CR80 color rendering option. Available up to 2000 lumens when combined with CR90 or CR95 color rendering options.

30. Manufacturer's choice driver. Order code is subject to change.

31. Consult factory for PPH2 control option.

32. Available for 1300, 2000 and 3000 lumens only.

33. Not available for CR90.

34. Manufacturer's choice driver. Order code may change to DAMC1 or DAMC2.

35. Not available for XN and VN optics.

36. Not available with 347V.

37. Driver cuts off power to the fixture when the control signal drops below 0.5V.

38. Not available for DWH, DWW or DWWP color options.

39. Available up to 1300 lumens (CR80, RCR80, CR95 or RCR95) and 2000 lumens (CR80 or RCR80) for NS optic. Available up to 2000 lumens (CR80, RCR80, CR95 or RCR95) for N optic and up to 4000 lumens (CR80 or RCR80) for NFR, M, MFR, W and WFR

28. Manufacturer's choice driver. Order code may change to PH1 or PH2.

2000 lumens (CR80, RCR80, CR95 or RCR95) for N optic and up to 4000 lumens (CR80 or RCR80) for NFR, M, MFR, W and WFR optics.

40. Available for DTW and DTWP color options only, when combined with 1000, 1300, 2000 or 3000 lumens.

41. Consult factory for other DALI control options for static color temperatures.

42. Available for DWH, DWW and DWWP color options only. DALI-2 Type 8 controller required.

43. Consult factory for DALIT8 control option.

44. One EcoSystem® address per fixture. 1% minimum dimming value. Lutron® EcoSystem® Enabled dimming not available for 700 lumens or 1000 lumens.

45. Available for 1300 lumens (CR80, RCR80, CR95 or RCR95) and 2000 lumens (CR80 or RCR80) for NS optic. Available up to 2000 lumens (CR80, RCR80, CR95 or RCR95) for N optic and up to 3000 lumens (CR80, RCR80, CR95 or RCR95) for NFR, M, MFR, W and WFR optics.

46. Available up to 1300 lumens (CR80, RCR80, CR95 or RCR95) and 2000 lumens (CR80 or RCR80) for NS optic. Available up to 2000 lumens (CR80, RCR80, CR95 or RCR95) for N, NFR, M, MFR, W and WFR optics.

47. A Lumentranslator 2 (LTL2) and LumentalkID (LIDLT) must be specified for Lumentalk applications. Consult Lumentranslator 2 and Lumentalk pages and specification sheets for details.

48. A Control Box (CBX-DS or CBX-ST) and lumenID (LID) must be specified.

49. Accessories specified in the fixture code are factory installed but can also be changed in the field. Refer to installation instructions for details. To order accessories separately, refer to the Optical Accessories section of the specification sheet.

50. Maximum of two lenses can be installed per fixture. The Snoot (SN) or Half Snoot (HSN) can be combined with any accessory. The Clear Glass Lens (GL) and Softening Glass Lens (SL) cannot be combined together. The Linear Spread Lenses (LSN and LSW) are compatible with the Snoot and Half Snoot accessories only.

51. Matte black interior surface, exterior finish matches housing color.

52. When combined with another accessory, the HL will be factory-installed in second position (furthest from the LED source).

53. Can be combined with HL accessory for 2200K, 2700K, 3000K, 3500K and 4000K color options only.

54. Nominal 10° x 40° distribution when used with the NS optic.

55. Available for XN, VN, NS, N and NFR optics when combined with 2200K, 2700K, 3000K, 3500K, 4000K color options only. Available for NFR optic only when combined with DTW, DTWP, DWH, DWW or DWWP color options only.

56. Nominal 10° x 60° distribution when used with the NS optic.