

LTR-3SQD

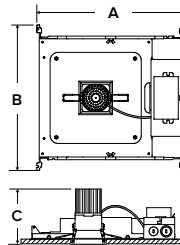
LITEISTRY 3" SQUARE DOWNLIGHT

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

FEATURES

- 3" architectural LED downlight delivering 600–2000 lm
- Five beam distributions from 0.4 to 1.2 Spacing Criteria
- Quiet reflector appearance with 50° optical cutoff
- 2700K–5000K, 80+ and 90+ CRI options
- Available for New Construction (non-IC), IC and Chicago Plenum applications
- Variety of dimming protocol options including 0–10V, DALI, DMX, and Lutron EcoSystem
- NX Lighting Controls wired and wireless controls capability available

LITEISTRY™



Typical Dimensions and Weights				
Lumen Package	"A" Length Inches (mm)	"B" Width Inches (mm)	"C" Height Inches (mm)	Weight lbs (kg)
06L - 20L	14.56 (370)	14.39 (366)	5 (127)	7 (3.2)

See DIMENSIONS section for complete details

CONTROLS TECHNOLOGY



SPECIFICATIONS

CONSTRUCTION

- Standard Non-IC, Chicago Plenum and IC options
- Painted black durable steel platform with pre-installed bar hangers
- Pre-wired junction box with snap-on covers for easy access
- Snap-in connection from driver compartment allows easy installation
- Light Engine connections use plenum rated (CMP) cable

OPTICS

- Visually pleasing 50° cutoff to source and source image
- The light distribution is free of distracting bright spots or pixelation and the perimeter has a smooth transition
- Optical grade silicone lens integral to light engine
- High purity four-panel aluminum reflector, self-flanged
- Flush mount flange option with mud-in ring available
- Large selection of anodized finishes and colors
- Painted cones and flange options available

ELECTRICAL

- Chip-on-board (COB) LED with 2 SDCM
- Multiple CCTs, 80+ or 90+ CRI
- Long LED life: L90 at >55,000 hours (TM-21)

ELECTRICAL (CONTINUED)

- Universal voltage 120V–277V driver, 347V optional
- UL Class 2, inherent short circuit and overload protection
- Flicker free 0–10V dimming with 1% or < 1% performance
- DALI, DMX, and Lutron EcoSystem options
- NX Lighting Controls provides options for standalone and networked functionality with wired or wireless connectivity for NX system deployments
- Lutron Athena control options also available
- Emergency battery pack option available with remote test switch and indicator light
- Refer to additional spec sheets for information on SpectraSync™ Tunable White or Dim-to-Warm solutions

INSTALLATION

- Accommodates ceiling thicknesses up to 1.25"
- Universal adjustable mounting brackets also accept 1/2" EMT conduit or 1/2" or 3/4" lathing channel (by others) or Prescolite accessory bar hangers (B24 or B6)
- Driver and EMR battery pack are serviceable above ceiling only

CERTIFICATIONS

- cCSAus certified to UL 1598
- Suitable for wet locations, covered ceiling, EMR: Suitable for damp locations

CERTIFICATIONS (CONTINUED)

- EMR: Certified under UL 924 standard for emergency lighting and power equipment
- EMR: Emergency battery packs are California Energy Commission (CEC) Title 20 Compliant
- Approved for 8 (4 in/4 out) No. 12AWG conductors rated for 90°C through wiring
- For -BAA Option: This product meets federal procurement law requirements under the Buy American Act (FAR 52.225-9) [See Buy America\(n\) Solutions](#)
- For -TAA Option: Product configurations meet federal procurement law requirements under the Trade Agreements Act (FAR 52.225-11) [See Buy America\(n\) Solutions](#)

WARRANTY

- 5 year warranty

KEY DATA	
Lumen Range	600-2000
Wattage Range	8-25
Efficacy Range (LPW)	76–82*
Reported Life (Hours)	L90 / >55,000
Input Current (mA)	67-208 (120V)

*Based on Specular, 35K, 80 CRI

LTR-3SQD

LITEISTRY 3" SQUARE DOWNLIGHT

ORDERING GUIDE

Example: LTR-3SQD-H-SL10L-DM1-LTR-3SQD-T-SL35K8MD-SS

CATALOG #

HOUSING

LTR-3SQD-H	Lumen Package		Lumen Output	Driver Options	Control Options	Voltage	Housing Options
Aperture/Shape/Function	SL Standard Lumen		06L 600	DM1 0-10V Dimming to 1%	NX Lighting Controls	<i>Standard</i> 120-277V	CP Chicago Plenum ^{7,9}
LTR-3SQD-H 3" Square Downlight New Construction Housing			10L 1000	DM01 0-10V Dimming to < 1%	<i>Networked Wireless</i>	34 347V ⁶	IC IC rated ^{8,9}
			15L 1500	DMX DMX with RDM dimming to < 0.1%	NXW NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor ³		EMR 7W Emergency Battery Pack (CEC Title 20 Compliant) with remote test switch and indicator light ⁹
	ML Medium Lumen		20L 2000	DALI DALI Dimming to 1%	<i>Networked Wired</i>		GTD Generator Transfer Device ^{9,13}
				EDM Lutron Hi-Lume EcoSystem Dimming to 1% ²	NXE NX Wired Dual RJ45 SmartPORTS, without Sensor ³		DTS Device Transfer Switch with Dimming Bypass ^{9,10}
				DM00 Lutron Athena compatible driver ¹²	<i>Other Lighting Controls</i>		F Fuse ⁹
					<i>Networked Wireless</i>		BAA Buy American Act (FAR 52.225-9) Compliant
					AWNR Lutron Athena Enabled ¹²		TAA Trade Agreements Act (FAR 52.225-11) Compliant

TRIM

LTR-3SQD-T	Lumen Package		CCT	CRI	Distribution	Reflector Finish
Aperture/Shape/Function	SL Standard Lumen		27K 2700K	8 80+CRI	VNR Very Narrow (0.4 SC/24") ¹¹	<i>Finish not applicable with painted reflectors (WC or BC)</i>
LTR-3SQD-T 3" Square Downlight Light Engine/Trim Assembly	ML Medium Lumen		30K 3000K	9 90+CRI	NR Narrow (0.6 SC/38")	
			35K 3500K		MD Medium (0.8 SC/48")	
			40K 4000K		WD Wide (1.0 SC/62")	
			50K 5000K ¹		XW Extra Wide (1.2 SC/74")	
						S Specular
						SS Semi-Specular
						VS Softglow®

TRIM CONTINUED

Reflector Color	Flange Color Options	Reflector Options
<i>Standard Clear</i>	<i>Standard matches reflector color</i>	AM Antimicrobial Coating ⁵
CG Champagne Gold	WT White Flange ⁴	BAA Buy American Act (FAR 52.225-9) Compliant
BL Black	BT Black Flange ⁴	TAA Trade Agreements Act (FAR 52.225-11) Compliant
LW Light Wheat		
PW Pewter		
WC Painted White Cone and Flange		
BC Painted Black Cone and Flange		



Accessories

- B24** Set of two (2) 24" bar hangers for T-bar ceilings
- B6** Set of two bar hangers for ceiling joist up to 24" centers
- FMR3-SQ** Flush Mount Flange Mud-In Ring, 3" Square
- LiteGear** LiteGear® Inverter, 125VA-250VA
- LPS Series** LightPower Micro-Inverter, 20VA-55VA
- MOR3-SQ-WH** Metal Oversized Ring, 3" Square, White (6.75" outer dimension)
- MOR3-SQ-BL** Metal Oversized Ring, 3" Square, Black (6.75" outer dimension)

Notes:

- 1 5000K available in 80+ CRI only.
- 2 EDM available in 10L-20L.
- 3 NX requires DM1 driver option.
- 4 WT not needed for WC; BT not needed for BC.
- 5 AM available with WC or Specular Clear (S or SWT). Consult factory for other colors.
- 6 347V requires DM1 driver; not available with Controls, EMR, DTS, GTD or F.
- 7 Not available with DMX, Controls, or EMR options.
- 8 IC available up to 15L; not available with Controls options.
- 9 Housing options (except Fuse, BAA/TAA) not available in combination.
- 10 DTS available with DM1, DM01, DALI, or DM00. Not available with NXE.
- 11 VNR available up to 15L.
- 12 DM00 must be selected with AWNR Lutron Athena controls option.
- 13 Not available with NXE.

NX LIGHTING CONTROLS

Control Option Ordering Logic & Description			Control Option Functionality								Control Option Components	
			Networkable	Grouping	Scheduling	Occupancy/Motion	Daylight Harvesting	0-10V Dimming	On/Off Control	Bluetooth App Programming		
NX Wireless	NXW	NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor	✓	✓	✓	-	-	✓	✓	✓		NXRM2-H
NX Wired	NXE	NX Wired Dual RJ45 SmartPORTS, without Sensor	✓	✓	✓	-	-	✓	✓	✓ ¹		NXDSP

¹ Requires NXBTC, order separately.

NX LIGHTING CONTROLS APP



The NX Lighting Controls App is a free to use mobile application for programming both an NX Lighting Controls System or Standalone Bluetooth Sensors. The mobile app allows you to configure devices, discover and setup wireless enabled luminaires and program your NX system settings.




Android



Apple iOS

OTHER LIGHTING CONTROLS

Control Option Ordering Logic & Description			Control Option Functionality								Control Option Components	
			Networkable	Grouping	Scheduling	Occupancy/Motion	Daylight Harvesting	0-10V Dimming	On/Off Control	Bluetooth App Programming		
Other	AWNDR	The Athena wireless node is a radio frequency (RF) device that enables simple, digital control of individual light fixtures in an Athena control system. ¹	✓	✓	-	-	-	✓	✓	-		A-WN-D01-RF-WH

¹ Lutron Athena Hub required to enable Networking, Grouping and Scheduling.

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PERFORMANCE DATA TABLE

Performance data provided below is for 3500K, 80 CRI with Specular Clear reflector finish/color

Lumen Package	Nominal Lumens	Distribution	Delivered Lumens	Watts	LPW
06L	600	Very Narrow	635	7.9	81
		Narrow	714	7.8	92
		Medium	685	7.8	88
		Wide	656	7.8	84
		Extra Wide	614	7.8	79
10L	1000	Very Narrow	998	12.4	81
		Narrow	1149	11.9	97
		Medium	1103	11.9	93
		Wide	1056	11.9	89
		Extra Wide	988	11.9	83
15L	1500	Very Narrow	1348	18.2	74
		Narrow	1662	18.6	89
		Medium	1596	18.6	86
		Wide	1528	18.6	82
		Extra Wide	1429	18.6	77
20L	2000	Narrow	2060	25.0	82
		Medium	2018	25.0	81
		Wide	1975	25.0	79
		Extra Wide	1910	25.0	76

LTR-3SQD

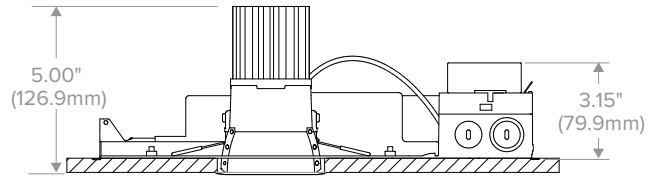
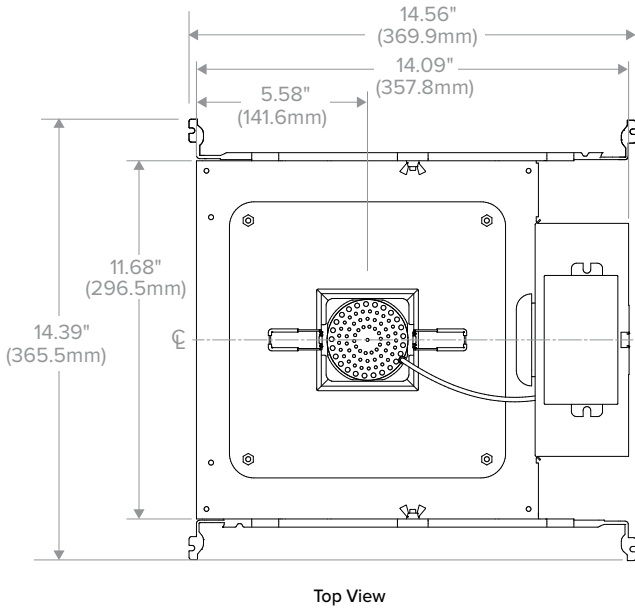
LITEISTRY 3" SQUARE DOWNLIGHT

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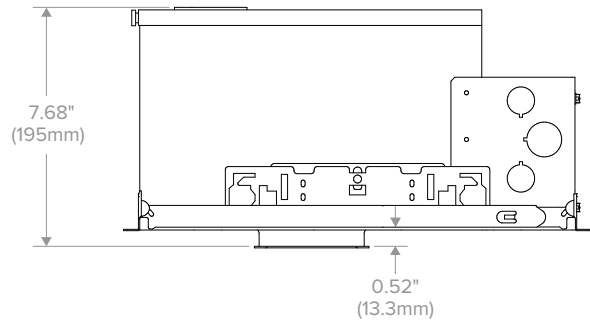
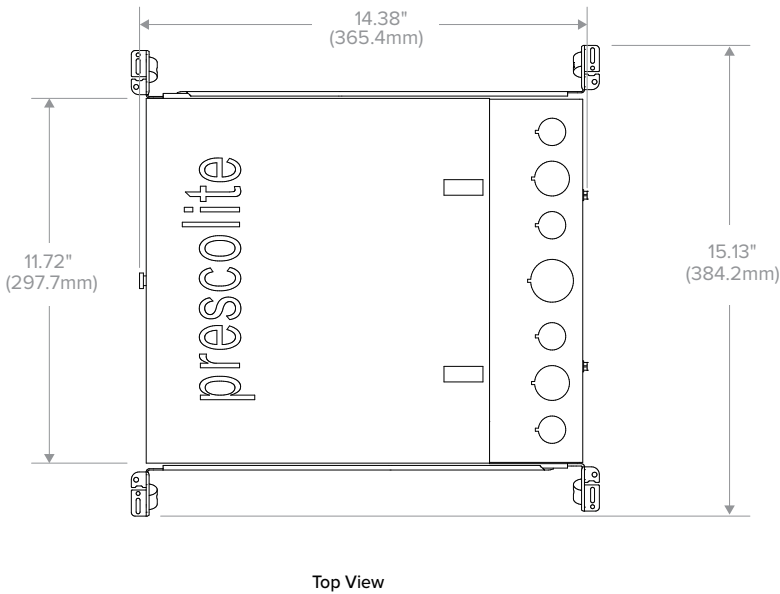
CATALOG #: _____

DIMENSIONS



Dimensional Data		
Aperture		2.88" SQ. (73.2mm)
Flange	Standard	3.62" SQ. (91.9mm)
	Flush Mount	3.62" SQ. (91.9mm)
Ceiling Cutout	Standard	3.31" SQ. (84.1mm)
	Flush Mount	3.94" SQ (100.1mm)
Ceiling Thickness		0.50" to 1.25" (12.7mm to 31.8mm)

LTR-3SQD-H New Construction



Dimensional Data		
Aperture		2.88" SQ. (73.2mm)
Flange	Standard	3.62" SQ. (91.9mm)
	Flush Mount	3.62" SQ. (91.9mm)
Ceiling Cutout	Standard	3.31" SQ. (84.1mm)
	Flush Mount	3.94" SQ (100.1mm)
Ceiling Thickness		0.50" to 1.25" (12.7mm to 31.8mm)

LTR-3SQD-H IC/CP

LTR-3SQD

LITEISTRY 3" SQUARE DOWNLIGHT

PHOTOMETRY

LTR-3SQD-H-SL15L-DM1 / LTR-3SQD-T-ML35K8VNR-S

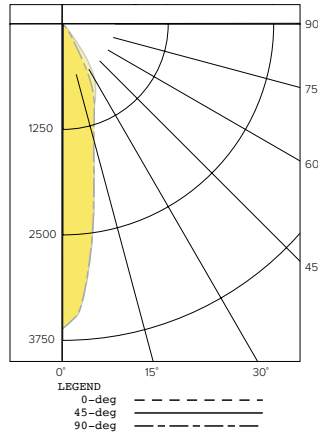
LUMINAIRE DATA

Test No.	20.01196
Description	1500 lm, Very Narrow, 3500K, 80 CRI
Delivered Lumens	1348
Watts	18.2W
Efficacy	74
Mounting	Recessed
Spacing Criterion	0.4
Beam Angle (FWHM)	24

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1243	92.2
0-60	1339	99.3
0-90	1348	100.0
0-180	1348	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	3611	3611	3611
5	3120	3115	3105
15	1431	1399	1415
25	809	915	818
35	191	492	188
45	78	97	78
55	26	28	27
65	5	6	6
75	2	2	2
85	1	1	1
90	0	0	0

LTR-3SQD-H-ML20L-DM1 / LTR-3SQD-T-ML35K8NR-S

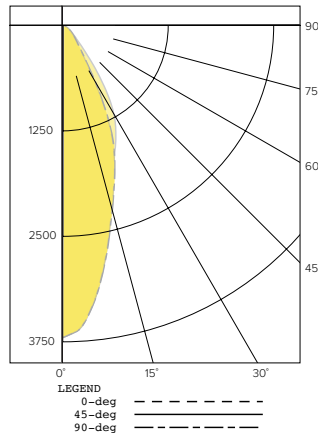
LUMINAIRE DATA

Test No.	P19.00953
Description	2000 lm, Narrow, 3500K, 80 CRI
Delivered Lumens	2060
Watts	25.0W
Efficacy	82.4
Mounting	Recessed
Spacing Criterion	0.6
Beam Angle (FWHM)	38

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1861	90.4
0-60	2045	99.3
0-90	2060	100.0
0-180	2060	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	3722	3722	3722
5	3454	3456	3462
15	2243	2200	2258
25	1270	1475	1294
35	338	738	350
45	151	180	157
55	53	57	60
65	7	9	7
75	3	4	3
85	1	1	1
90	0	0	0

LTR-3SQD-H-ML20L-DM1 / LTR-3SQD-T-ML35K8MD-S

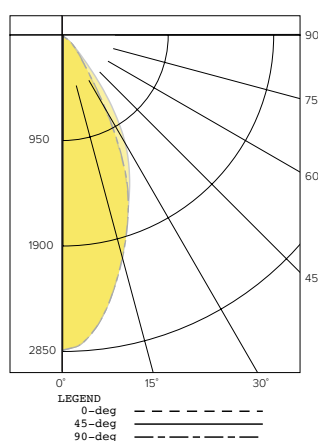
LUMINAIRE DATA

Test No.	P19.00954
Description	2000 lm, Medium, 3500K, 80 CRI
Delivered Lumens	2018
Watts	25.0W
Efficacy	80.7
Mounting	Recessed
Spacing Criterion	0.7
Beam Angle (FWHM)	48

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1799	89.2
0-60	2003	99.3
0-90	2018	100.0
0-180	2018	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	2842	2842	2842
5	2728	2727	2728
15	2080	2062	2083
25	1310	1432	1324
35	410	772	422
45	165	202	171
55	58	63	65
65	7	10	8
75	3	4	4
85	1	1	1
90	0	0	0

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LITEISTRY 3" SQUARE DOWNLIGHT

PHOTOMETRY CONTINUED

LTR-3SQD-H-ML20L-DM1 / LTR-3SQD-T-ML35K8WD-S

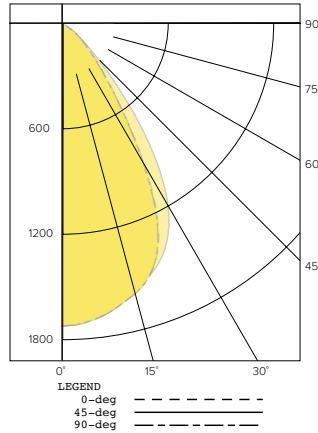
LUMINAIRE DATA

Test No.	P19.01044
Description	2000 lm, Wide, 3500K, 80 CRI
Delivered Lumens	1975
Watts	25.0W
Efficacy	78.9
Mounting	Recessed
Spacing Criterion	1.0
Beam Angle (FWHM)	62

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1671	96.3
0-60	1956	99.8
0-90	1975	100.0
0-180	1975	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	1730	1730	1730
5	1713	1711	1711
15	1605	1594	1602
25	1305	1403	1292
35	600	914	580
45	236	304	224
55	87	84	75
65	10	12	9
75	4	5	4
85	1	1	1
90	0	0	0

LTR-3SQD-H-ML20L-DM1 / LTR-3SQD-T-ML35K8XW-S

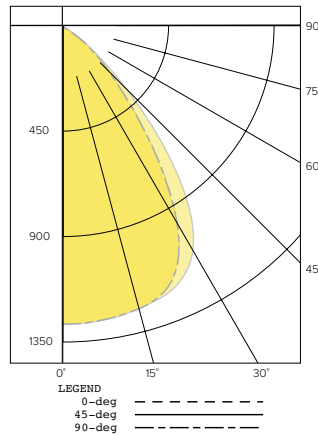
LUMINAIRE DATA

Test No.	P19.00956
Description	2000 lm, Extra Wide, 3500K, 80 CRI
Delivered Lumens	1910
Watts	25.0W
Efficacy	76.3
Mounting	Recessed
Spacing Criterion	1.2
Beam Angle (FWHM)	74

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1519	79.5
0-60	1889	98.9
0-90	1910	100.0
0-180	1910	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	1275	1275	1275
5	1273	1273	1273
15	1252	1253	1253
25	1149	1199	1150
35	740	944	735
45	307	412	301
55	102	108	92
65	11	14	10
75	5	5	5
85	1	1	1
90	0	0	0

LUMEN MULTIPLIER

Option	27K8	30K8	35K8	40K8	50K8	27K9	30K9	35K9	40K9
Multiplier	0.94	0.98	1.00	1.01	1.02	0.81	0.84	0.85	0.85

Photometrics are published below at a nominal 3500 Kelvin, 80+ CRI. This table may be used to approximate the lumen values at different Kelvin temperatures. Power consumption would stay the same.

REFLECTOR FINISH MULTIPLIER (Based on Clear (Standard) Color)

Option	Specular (S)	Semi-Specular (SS)	American Matte (MFC)	Softglow (VS)	Softsheen (VSS)
Multiplier	1	1	0.984	0.888	0.938

REFLECTOR COLOR MULTIPLIER (Based on Semi-Specular (SS) Finish)

Option	Clear (Standard)	Champagne Gold (CG)	Black (BL)	Light Wheat (LW)	Pewter (PW)	White Cone (WC)	Black Cone (BC)
Multiplier	1	0.974	0.444	0.861	0.915	0.984	0.442

Multiply FINISH x COLOR to calculate other reflector finish and color combinations. Example: SoftGlow Pewter (VSPW) = 0.888 (VS) x 0.915 (PW) = 0.813

LTR-3SQD

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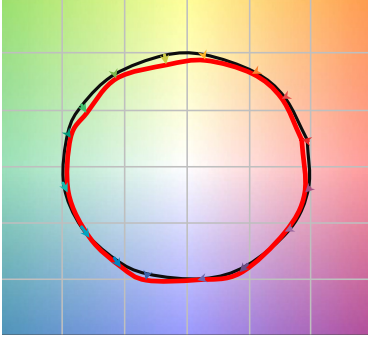
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TM-30 DATA

COLOR VECTOR GRAPHIC
3500K, 90 CRI



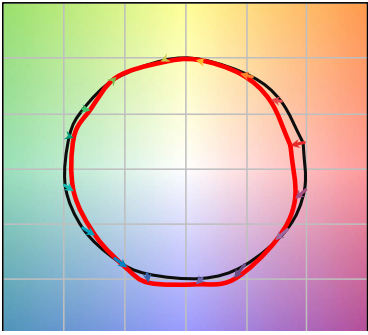
— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
3500K, 90 CRI



TEST RESULTS - 3500K		
Value	80+ CRI	90+ CRI
R_t	84	88
R_g	95	95
CCT (K)	3411	3419
D_{uv}	0.0015	0.0042
x	0.4120	0.4147
y	0.3974	0.4052
CIE R_a	84	93
CIE R_g	11	62

COLOR VECTOR GRAPHIC
3500K, 80 CRI



— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
3500K, 80 CRI



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ELECTRICAL DATA

DRIVER DATA		
Input Voltage	120-277 V	347 V
Input Frequency	50/60 Hz	50/60 Hz
Power Factor	≥0.90	≥0.90
THD	<20%	<20%
EMI Filtering (FCC 47 CFR Part 15)	Class A	Class A

* Values for DM1 option shown, values for other dimming options may vary.

ADDITIONAL INFORMATION

Dimming Compatibility

For more details and recommended dimmer list, see Dimming Compatibility Information on currentlighting.com/prescolite.

DMX

See instruction sheet on currentlighting.com/prescolite for connection & installation information.

Central Inverters

For full fixture output in back-up mode, we recommend you visit currentlighting.com/dual-lite for your Central Lighting Inverter options. Please contact your local Current representative for any assistance with proper sizing and loading of your inverter selection. Central lighting inverters must be ordered separately.

Lumen Output in Emergency Mode

To determine the lumen output in emergency mode multiply the battery pack wattage by the fixture lumens per watt (LPW). For example, 7W x 120 LPW = 840 lumens in emergency mode.