

LTR-6SQD SpectraSync

LITEISTRY 6" SQUARE DOWNLIGHT WITH COLOR TUNING

LITEISTRY™

FEATURES

- 6" architectural LED downlight delivering 600 – 3000 lm
- Four beam distributions from 0.6 to 1.2 Spacing Criteria
- Quiet reflector appearance with superior 50° optical cutoff
- SpectraSync™ Color Tuning technology allows the flexibility to tailor CCT to aesthetic preferences
- Available in Dim to Warm (2200K-3000K) or Tunable White (2700K-5000K or 2700K-6500K), 90+ CRI
- Available in New Construction (non-IC), IC and Chicago Plenum applications
- Standard with 0-10V dimming to 5%
- NX Distributed Intelligence™ wired and wireless controls capability available



RELATED PRODUCTS

- [Ø 3" LITEISTRY Family](#)
 [Ø 4" LITEISTRY Family](#)
 [Ø 6" LITEISTRY Family](#)

CONTROL TECHNOLOGY



SPECIFICATIONS

CONSTRUCTION

- New Construction: 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

- LED array with 3 SDCM color consistency
- Dim to Warm (2200K-3000K) or Tunable White (2700K-5000K or 2700K-6500K) options available
- 90+ CRI standard
- Long LED life: L70 at >60,000 hours (TM-21)
- Universal voltage 120V–277V driver
- UL Class 2, inherent short circuit and overload protection, RoHS compliant
- Flicker free 0–10V dimming to 5%
- NX Distributed Intelligence or Lutron Vive control options available
- Emergency Battery Pack option available with remote test switch and indicator light
- Refer to additional spec sheets for information on [standard LITEISTRY](#) or [PowerHUBB™ PoE enabled](#) solutions

INSTALLATION

- Accommodates ceiling thicknesses up to 1.25"
- Universal adjustable mounting brackets also accept ½" EMT conduit or 1½" or ¾" lathing channel (by others) or Prescolite accessory bar hangers (B24 or B6).
- Light Engine/Driver fully serviceable from above or below the ceiling

CERTIFICATIONS

- cCSAus certified to UL 1598
- Suitable for wet locations, covered ceiling EM/EMR: Suitable for damp locations
- EM/EMR: Certified under UL 924 standard for emergency lighting and power equipment
- Approved for 8 (4 in/4 out) No. 12AWG conductors rated for 90°C through wiring
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction. Materials under Trade Agreements effective 6/6/2020. See [Buy American Solutions](#).

WARRANTY

- 5 year warranty
- See [HLI Standard Warranty](#) for additional information

KEY DATA	
Lumen Range	600–3000
Wattage Range	10–49
Efficacy Range (LPW)	51-58*
Life (Hours)	L70 / 60,000
Input Current (mA)	83-408 (120V)

* Based on Specular, 30K, 90 CRI



LTR-6SQD SpectraSync

LITEISTRY 6" SQUARE DOWNLIGHT WITH COLOR TUNING

DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

CATALOG #: _____

ORDERING GUIDE

Example: LTR-6SQD-H-SL10L-DMTW-LTR-6SQD-T-SL2230TD9MD-SS

CATALOG #

HOUSING

LTR-6SQD-H		Lumen Package		Lumen Output		Driver Options		Control Options		Voltage	Housing Options						
Aperture/Shape/Function																	
LTR-6SQD-H	6" Square Downlight New Construction Housing	SL	Standard Lumen	06L	600	DMTW	SpectraSync™ Dim to Warm, 0-10V Dimming to 5% ¹	NXE	NX, Dual SmartPORTs	Standard 120-277V	CP	Chicago Plenum ^{7,8,9}					
				10L	1000							IC	IC rated ^{7,8,9}				
		ML	Medium Lumen	15L	1500							DMT	SpectraSync™ Tunable White, 0-10V Dimming to 5% ²	NXWE	NX Wireless Enabled	EM	Emergency Battery Pack with integral test switch and indicator light ^{7,9}
				20L	2000												NXWD
HL	High Lumen	25L	2500	LV	Lutron Vive Enabled, 0-10V ⁶	EMR	Emergency Battery Pack with remote test switch and indicator light ^{7,9}										
		30L	3000				F	Fuse ⁷									

TRIM

LTR-6SQD-T		Lumen Package		CCT	CRI	Distribution		Reflector Finish		
Aperture/Shape/Function										
LTR-6SQD-T	6" Square Downlight Light Engine/Trim Assembly	SL	Standard Lumen	2230TD	9	90+CRI	NR	Narrow (0.6 SC/36°)	<i>Finish not applicable with painted reflectors (WC or BC)</i>	
		ML	Medium Lumen				MD	Medium (0.7 SC/43°)		
		HL	High Lumen				WD	Wide (1.0 SC/65°)		
				2750T			XW	Extra Wide (1.2 SC/69°)	S	Specular
				2765T					SS	Semi-Specular
									VS	Softglow®
									VSS	SoftSheen™

TRIM CONTINUED

Reflector Color	Flange Color Options	Lower Trim Options	Reflector Options
<i>Standard Clear</i>	<i>Standard matches reflector color</i>	EM Pre-punched reflector for EM integral test switch and indicator	AM Antimicrobial Coating ⁴
CG Champagne Gold	WT White Flange ³	FM Flush Mount Mud-in Ring ⁵	
BL Black	BT Black Flange ³		
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
- FMR6-SQ** Flush Mount Mud-In Ring, 6" Square
- LiteGear** LiteGear® Inverter, 125VA-250VA
- LPS Series** LightPower Micro-Inverter, 20VA-55VA
- MOR6-SQ-WH** Metal Oversized Ring, 6" Square, White (10.25" outer dimension)
- MOR6-SQ-BL** Metal Oversized Ring, 6" Square, Black (10.25" outer dimension)

Notes:

- 1 Must select 2230TD with DMTW driver
- 2 Must select either 2750T or 2765T with DMT driver
- 3 WT not needed for WC, BT not needed for BC.
- 4 AM available with WC or Specular Clear (S or SWT). Consult factory for other colors.
- 5 Flush Mount Flange (FM) requires FMR accessory (sold separately).
- 6 LV available only with DMTW driver option, up to 20L.
- 7 Housing options (except Fuse) not available in combination.
- 8 IC, CP available in 06L.
- 9 Not available with Control options.

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LITEISTRY 6" SQUARE DOWNLIGHT WITH COLOR TUNING

CONTROLS

NX Distributed Intelligence™ Lighting Controls:

Supports applications in a variety of deployment options- wired, wireless, hybrid. Integrates with and enables a wide array of luminaires including those with SpectraSync™ Color Tuning Technology.



NX INTEGRATED CONTROLS REFERENCE								
NX Option	Sensor	Networkable	Scheduling	Occupancy	Daylight Harvesting	0-10V Dimming	On/off Control	Bluetooth® App Programming
NX Networked – Wired								
NXE	N/A	Yes	Yes	No	No	Yes	Yes	Requires NXBTC/R ¹
NX Networked – Wireless								
NXWE ²	N/A	Yes	Yes	No	No	Yes	Yes	No ³
NX Networked – Wired/Wireless								
NXWD	N/A	Yes	Yes	No	No	Yes	Yes	Requires NXBTC/R ^{1,3}

- 1 NXBTC/R needs to be plugged into an available NX SmartPort™ on the fixture network
- 2 Programming via App requires factory assistance
- 3 To program NXWE option, need to consult factory. If connected to an area controller, programming can be done from that

SpectraSync™ Color Tuning Technology:

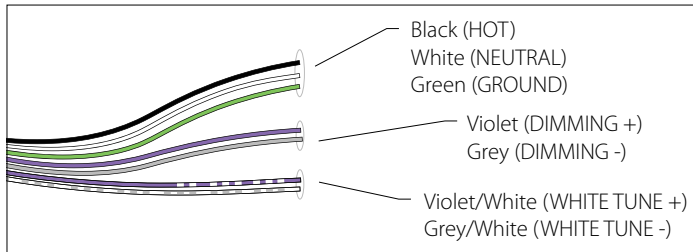
Control your space based on the needs of the application, specific activities throughout the day and preferences of the occupants with distinct SpectraSync™ Color Tuning Technologies.



SPECTRASYNCR COLOR TUNING TECHNOLOGY		
Mode	Kelvin Range	Description
Dim to Warm	2200K-3000K	Mimics the familiar warming effect that occurs with traditional incandescent sources as they are dimmed
Tunable White	2700K-5000K 2700K-6500K	Offers users the ability to tailor CCT to their personal preference, enhancing task visibility, material and colors or the aesthetics of the space
Scheduled White	2700K-5000K 2700K-6500K	Mimics the rhythm of natural light or follows an alternative user-defined schedule throughout the day, enhancing an occupant's mood and well-being

SpectraSync Tunable White

Available in two options: 2750T (2700K–5000K) or 2765T (2700K–6500K). Requires two 0-10V controllers, one for intensity and one for CCT. Minimum 5% dimming.

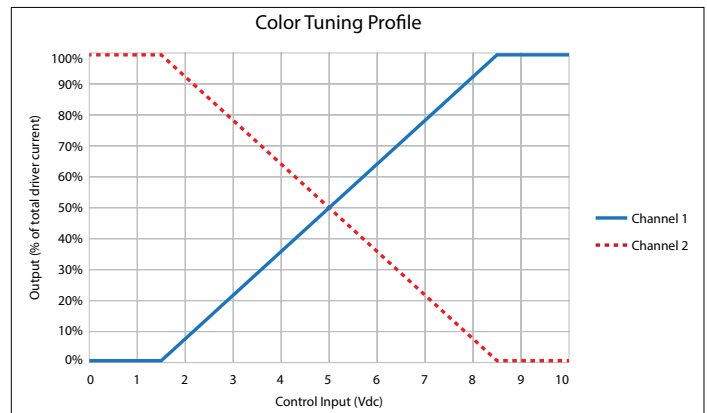


SpectraSync Tunable White luminaires are provided with two 0-10V circuits. The violet and grey circuit is for wiring to any qualified 0-10V controller for dimming. The violet/white and grey/white circuit is for wiring to any qualified 0-10V controller for Tunable White CCT control.

Controller Manufacturer Data

SpectraSync Tunable White was designed to be used with sinking style dimmers (provided by others) and is compatible with:

- Hubbell Control Solutions (HCS): NX Distributed Intelligence™ Room Controllers (NXRC) and In-fixture Controllers (NXFM)
- Lutron: DDTV, DVSTV, and NDTV dimmers
- Wattstopper: ADF120277 and CD4BL (Titan) dimmers



To enable scheduling and for use with NX wall control preset stations please refer to Hubbell Control Solutions NX SpectraSync technical sheet.



LTR-6SQD SpectraSync

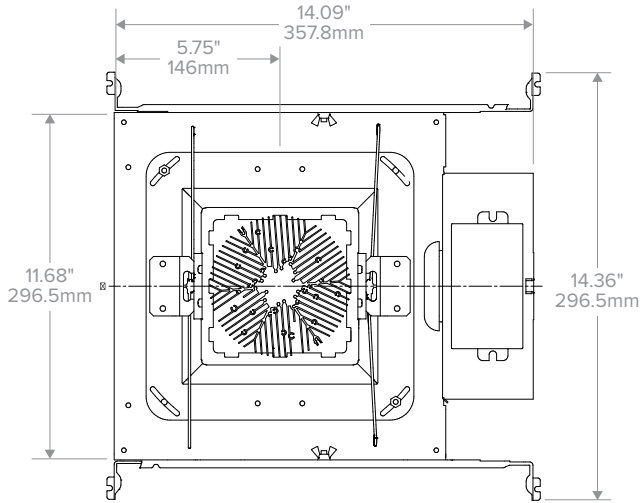
LITEISTRY 6" SQUARE DOWNLIGHT WITH COLOR TUNING

DATE: _____ LOCATION: _____

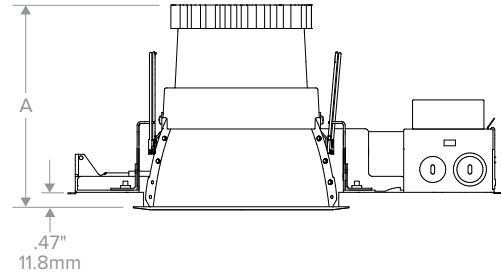
TYPE: _____ PROJECT: _____

CATALOG #: _____

DIMENSIONS



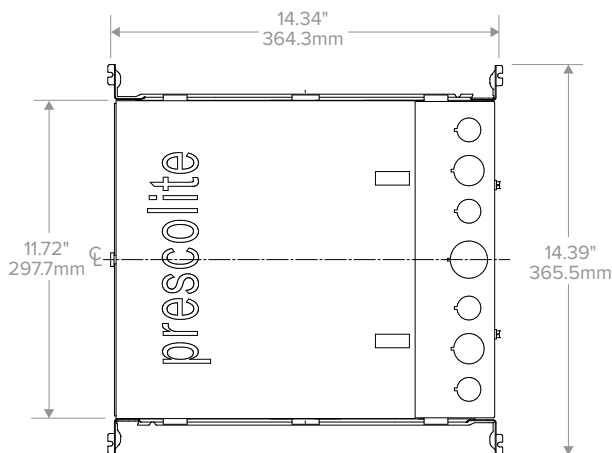
Top View



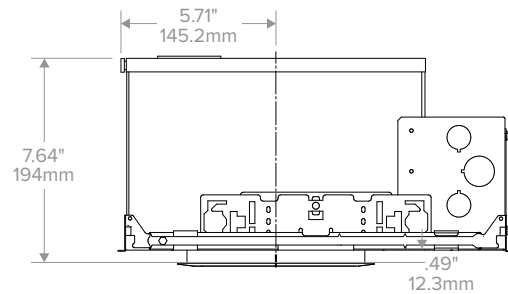
Dimensional Data		
Aperture		6.00" (152.4mm) SQ
Flange	Standard	7.25" (184.2mm) SQ
	Flush Mount	6.47" (164.3mm) SQ
Ceiling Cutout	Standard	6.69" (169.9mm) SQ
	Flush Mount	6.88" (174.8mm) SQ
Ceiling Thickness		0.50" to 1.25" (12.7mm to 31.8mm)

Lumen Package	"A"
06L-10L	6.00" (152.4mm)
15L-20L	7.96" (202.2mm)
25L-30L	9.14" (232.2mm)

LTR-6SQD-H New Construction



Top View



Dimensional Data		
Aperture		6.00" (152.4mm) SQ
Flange	Standard	7.25" (184.2mm) SQ
	Flush Mount	6.47" (164.3mm) SQ
Ceiling Cutout	Standard	6.69" (169.9mm) SQ
	Flush Mount	6.88" (174.8mm) SQ
Ceiling Thickness		0.50" to 1.25" (12.7mm to 31.8mm)

LTR-6SQD-H IC/CP

LTR-6SQD SpectraSync

LITEISTRY 6" SQUARE DOWNLIGHT WITH COLOR TUNING

DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

CATALOG #: _____

PHOTOMETRY

LTR-6SQD-H-ML20L-DMT / LTR-6SQD-T-ML2765T9NRS

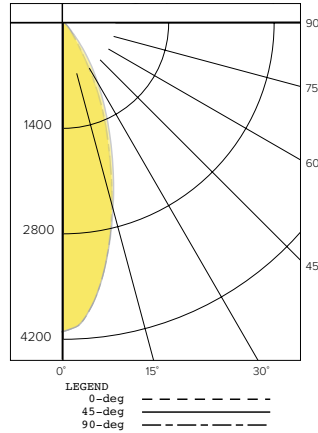
LUMINAIRE DATA

Test No.	R19.00935-21
Description	2000 lm, Narrow, 3000K, 90 CRI
Delivered Lumens	2035
Watts	35.3W
Efficacy	58.0
Mounting	Recessed
Spacing Criterion	0.6
Beam Angle (FWHM)	43

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1919	94.3
0-60	2028	99.7
0-90	2035	100.0
0-180	2035	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	4127	4127	4127
5	3890	3892	3890
15	2530	2597	2535
25	1205	1389	1214
35	309	567	311
45	89	121	91
55	17	23	17
65	4	5	4
75	2	2	2
85	0	1	0
90	0	0	0

LTR-6SQD-H-ML20L-DMT / LTR-6SQD-T-ML2765T9MDS

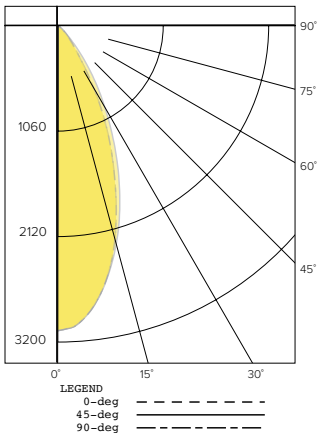
LUMINAIRE DATA

Test No.	R19.01046-21
Description	2000 lm, Medium, 3000K, 90 CRI
Delivered Lumens	2023
Watts	35.3W
Efficacy	57.0
Mounting	Recessed
Spacing Criterion	0.7
Beam Angle (FWHM)	65

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1891	93.5
0-60	2016	99.7
0-90	2023	100.0
0-180	2023	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	3315	3315	3315
5	3197	3198	3196
15	2392	2447	2386
25	1272	1460	1270
35	378	627	378
45	103	142	103
55	18	27	18
65	4	5	5
75	2	2	2
85	0	1	0
90	0	0	0

LTR-6SQD-H-ML20L-DMT / LTR-6SQD-T-ML2765T9WDS

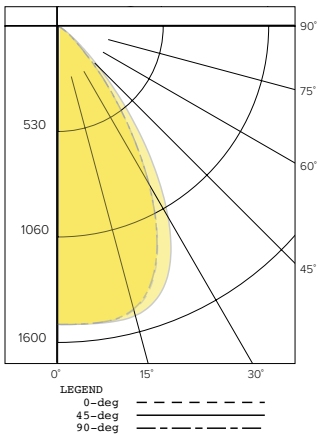
LUMINAIRE DATA

Test No.	R19.00936-21
Description	2000 lm, Wide, 3000K, 90 CRI
Delivered Lumens	1853
Watts	35.3W
Efficacy	52.0
Mounting	Recessed
Spacing Criterion	1.0
Beam Angle (FWHM)	69

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1613	87.0
0-60	1843	99.5
0-90	1853	100.0
0-180	1853	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	1548	1548	1548
5	1552	1553	1552
15	1525	1556	1518
25	1218	1369	1210
35	640	835	636
45	187	281	189
55	28	49	29
65	5	6	5
75	3	3	3
85	1	1	1
90	0	0	0

LTR-6SQD SpectraSync

LITEISTRY 6" SQUARE DOWNLIGHT WITH COLOR TUNING

PHOTOMETRY CONTINUED

LTR-6SQD-H-ML20L-DMT / LTR-6SQD-T-ML2765T9XWS

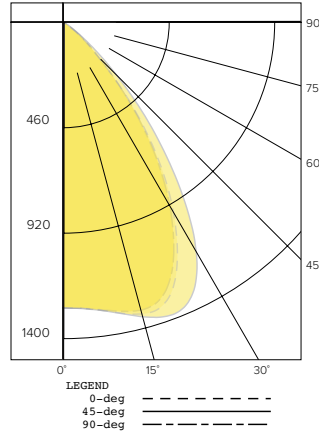
LUMINAIRE DATA

Test No.	R19.01047-21
Description	2000 lm, Extra Wide, 3000K, 90 CRI
Delivered Lumens	1802
Watts	35.3W
Efficacy	51.0
Mounting	Recessed
Spacing Criterion	1.2
Beam Angle (FWHM)	69

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1523	84.5
0-60	1792	99.4
0-90	1802	100.0
0-180	1802	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	1235	1235	1235
5	1244	1245	1243
15	1306	1318	1289
25	1163	1310	1127
35	707	885	681
45	223	335	219
55	33	58	33
65	6	7	6
75	3	3	3
85	1	1	1
90	0	0	0

LTR-6SQD SpectraSync

LITEISTRY 6" SQUARE DOWNLIGHT WITH COLOR TUNING

DATE: _____ LOCATION: _____

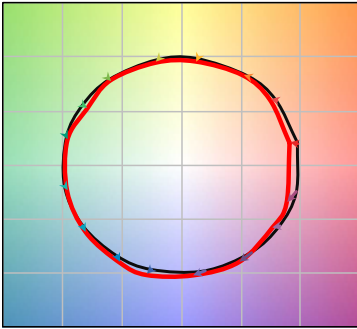
TYPE: _____ PROJECT: _____

CATALOG #: _____

TM-30 DATA

SPECTRASYNCTM TUNABLE WHITE (2765T)

COLOR VECTOR GRAPHIC
2700K, 90+ CRI

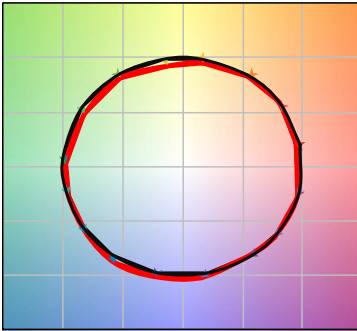


— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
2700K, 90+ CRI

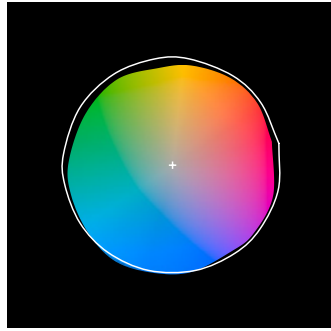


COLOR VECTOR GRAPHIC
4600K, 90+ CRI

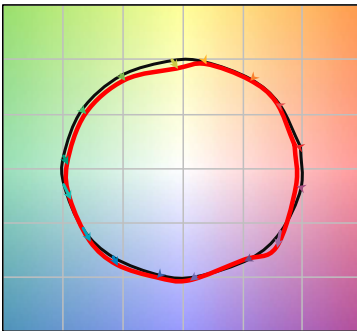


— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
4600K, 90+ CRI



COLOR VECTOR GRAPHIC
6500K, 90+ CRI



— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
6500K, 90+ CRI



TEST RESULTS - TUNABLE WHITE @ 1500 LUMENS (NOMINAL)			
Value	2700K	4600K	6500K
Luminous Flux (lm)	1407	1604	1660
Wattage (W)	23.9	24.3	24.6
Efficacy (lm/W)	59	66	68
R _f	90	89	87
R _g	97	98	96
CCT (K)	2817	4588	6518
D _{UV}	-0.0013	-0.0040	0.0018
x	0.4482	0.3565	0.3131
y	0.4047	0.3531	0.3273
CIE R _a	91	95	94
CIE R _g	47	81	76

LTR-6SQD SpectraSync

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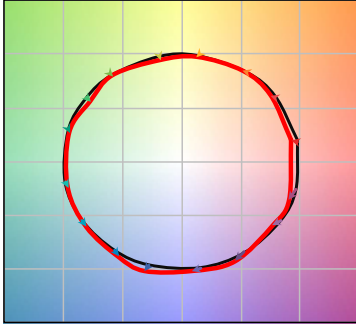
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CATALOG #: _____

TM-30 DATA CONTINUED

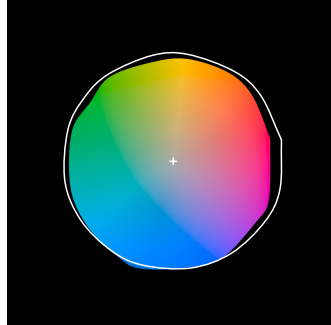
SPECTRASYNCTM DIM TO WARM (2230TD)

COLOR VECTOR GRAPHIC
3000K, 90+ CRI @ 100%

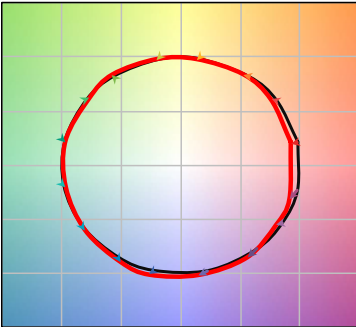


— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
3000K, 90+ CRI @ 100%

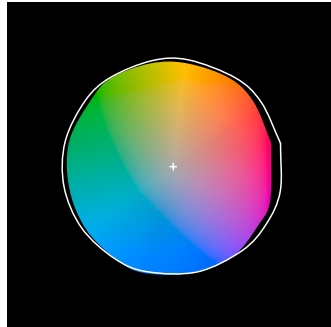


COLOR VECTOR GRAPHIC
2600K, 90 CRI @ 50% DIM

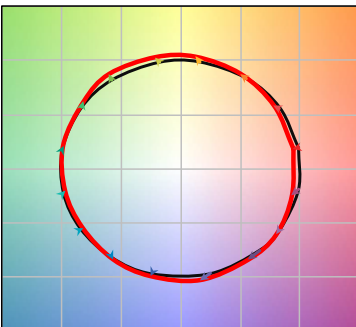


— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
2600K, 90 CRI @ 50% DIM

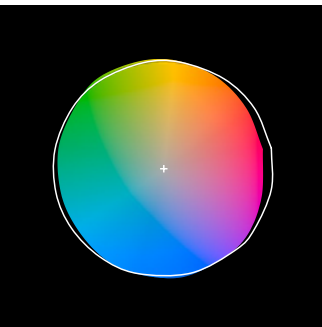


COLOR VECTOR GRAPHIC
2200K, 90 CRI @ 5% DIM



— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
2200K, 90 CRI @ 5% DIM



TEST RESULTS - DIM TO WARM @ 3 DIMMING LEVELS			
Value	100%	50% Dim	5% Dim
Luminous Flux (lm)	1501	772	53
Wattage (W)	24.3	14	3.4
Efficacy (lm/W)	62	55	16
R _f	90	92	91
R _g	97	99	102
CCT (K)	3123	2590	2282
D _{uv}	-0.0017	-0.0015	-0.0029
x	0.4261	0.4662	0.4907
y	0.3965	0.4082	0.4068
CIE R _a	92	93	93
CIE R _g	53	60	64



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ELECTRICAL DATA

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

WATTAGE DATA		
Lumen Output	Nominal Lumens	WATTAGE
06L	600	10
10L	1000	18
15L	1500	25
20L	2000	36
25L	2500	38
30L	3000	49

* Wattage may vary based on configuration and options selected

ADDITIONAL INFORMATION

Central Inverters

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

LiteGear: www.dual-lite.com/products/litegear_lg_series

LPS Series: www.dual-lite.com/products/lps

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