

LTR-6SQD

LITEISTRY 6" SQUARE DOWNLIGHT

LITEISTRY™

FEATURES

- 6" architectural LED downlight delivering 600 – 9000 lm
- Five beam distributions from 0.4 to 1.2 Spacing Criteria
- Quiet reflector appearance with superior 50° optical cutoff
- 2700K – 5000K, 80+ and 90+ CRI options
- Available in New Construction (non-IC), IC and Chicago Plenum applications
- Variety of dimming protocol options including 0–10V, DALI, DMX, Lutron Forward Phase, and EcoSystem
- NX Distributed Intelligence™ wired and wireless controls capability available



RELATED PRODUCTS

Ø [LTR-6SQD SpectraSync](#)

Ø [LTR-6SQDPH PowerHUBB](#)

Ø [3" LITEISTRY Family](#)

Ø [4" LITEISTRY Family](#)

Ø [6" LITEISTRY Family](#)

CONTROL TECHNOLOGY



SPECIFICATIONS

CONSTRUCTION

- Standard Non-IC, Chicago Plenum and IC options
- 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

- 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, RoHS compliant
- Flicker free 0–10V dimming with 1% or < 1% performance
- DALI, DMX, and Lutron Forward Phase and EcoSystem options
- NX or Lutron Vive control option available
- Integral and remote emergency controller and battery pack options available
- Refer to additional spec sheets for information on SpectraSync™ Tunable White or Dim-to-Warm 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
- For ≥70L: Marked spacing required 36" fixture center to center; 36" fixture center to building member; 0.5" above fixture

CERTIFICATIONS CONTINUED

- Suitable for wet locations, covered ceiling. EM/EMR: Suitable for damp locations.
- Approved for 8 (4 in/4 out) No. 12AWG conductors rated for 90°C through wiring
- EM/EMR: Certified under UL 924 standard for emergency lighting and power equipment
- ENERGY STAR® certified models available. (See list and additional information on page 8.)
- 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	600–9000
Wattage Range	8–99
Efficacy Range (LPW)	87-99*
Life (Hours)	L90 / 55,000
Input Current (mA)	67-825 (120V)

* Based on Specular, 35K, 80 CRI

LTR-6SQD

LITEISTRY 6" SQUARE DOWNLIGHT

DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

CATALOG #: _____

ORDERING GUIDE

Example: LTR-6SQD-H-SL10L-DM1-LTR-6SQD-T-SL35K8MD-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	DM1	0-10V Dimming to 1% ¹¹		NXE	NX, Dual SmartPORTs ⁴		Standard 120-277V	34	347V ⁸	CP	Chicago Plenum ^{1,9}				
			10L	1000		DM01	0-10V Dimming to < 1% ³		NXWE	NX Wireless Enabled ⁴					EM	IC rated ^{1,10}			
			15L	1500			DMX			DMX with RDM dimming to < 0.1% ³						NXWD	NX Wireless, Dual SmartPORTs ⁴		EMR
		ML Medium Lumen	20L	2000	DALI	DALI Dimming to 1% ³		LV	Lutron Vive Enabled, 0-10V (requires 0-10V driver)		GTD	Generator Transfer Device ¹							
			25L	2500		2DM			Lutron Hi-Lume 2-wire Dimming to 1% (120V Forward Phase only) ³			LVE	Lutron Vive Enabled, EcoSystem, (requires EDM)		DTS		Device Transfer Switch with Dimming Bypass ^{1,13}		
			30L	3000			EDM		Lutron Hi-Lume EcoSystem Dimming to 1% ³				F	Fuse ¹					
HL High Lumen	35L	3500	70L	7000	80L	8000		90L	9000										
	40L	4000	VL Very High Lumen	50L	5000	55L		5500	60L	6000									
	45L	4500		75L	7500	85L	8500	95L	9500										
XL Extra high Lumen ¹²	80L	8000	90L	9000															

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	27K	2700K	8	80+CRI	VNR	Very Narrow (0.4 SC/25°) ¹⁴	<i>Finish not applicable with painted reflectors (WC or BC)</i> S Specular SS Semi-Specular VS Softglow® VSS SoftSheen™	
		ML	Medium Lumen	30K	3000K	9	90+CRI	NR	Narrow (0.6 SC/36°)		
		HL	High Lumen	35K	3500K	MD	Medium (0.7 SC/43°)				
		VL	Very High Lumen	40K	4000K	WD	Wide (1.0 SC/65°)				
		XL	Extra High Lumen ¹²	50K	5000K ²	XW	Extra Wide (1.2 SC/69°)				

TRIM CONTINUED

Reflector Color		Flange Color Options		Lower Trim Options		Reflector Options	
Standard Clear		Standard matches reflector color		EM	Pre-punched Reflector for Integral Switch	AM	Antimicrobial Coating ⁶
CG	Champagne Gold	WT	White Flange ⁵	FM	Flush Mount Mud-in Ring ⁷		
BL	Black	BT	Black Flange ⁵				
LW	Light Wheat						
PW	Pewter						
WC	Painted White Cone and Flange						
BC	Painted Black Cone and Flange						

Notes:

- Housing options (except Fuse) not available in combination.
- 5000K available in 80+ CRI only.
- 2DM, EDM, DMX available in 10L-35L. DM01, DALI not available on >55L.
- NX requires DM1 driver option, not available on >60L.
- WT not needed for WC, BT not needed for BC.
- AM available with WC or Specular Clear (S or SWT). Consult factory for other colors.
- Flush Mount Flange (FM) requires FMR accessory (sold separately).
- 347V requires DM1 driver option; available 10L-60L; not available with Controls, F, GTD, DTS, EM, EMR.
- CP available up to 20L; not available with DMX, Controls, or EMR options.
- IC available up to 20L; not available with Controls options.
- DM1 on >60L is 0-10V to 5% dimming.
- XL (70L-90L) require marked spacing. See line art for more details.
- DTS available with DM1, DM01, DALI, or EDM; not available with LVE.
- VNR not available with IC or CP options.

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)



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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

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	723	7.8	93
		Narrow	757	7.8	97
		Medium	708	7.8	91
		Wide	600	7.8	77
		Extra Wide	567	7.8	73
10L	1000	Very Narrow	1155	12.0	96
		Narrow	1210	12.0	101
		Medium	1131	12.0	94
		Wide	958	12.0	80
		Extra Wide	906	12.0	76
15L	1500	Very Narrow	1660	18.7	89
		Narrow	1738	18.7	93
		Medium	1624	18.7	87
		Wide	1377	18.7	74
		Extra Wide	1302	18.7	70
20L	2000	Very Narrow	2282	22.7	101
		Narrow	2282	22.8	100
		Medium	2206	22.8	97
		Wide	2031	22.8	89
		Extra Wide	1975	22.8	87
25L	2500	Very Narrow	2774	27.7	100
		Narrow	2903	27.7	105
		Medium	2714	27.7	98
		Wide	2300	27.7	83
		Extra Wide	2176	27.7	79
30L	3000	Very Narrow	3305	34.3	96
		Narrow	3460	34.3	101
		Medium	3234	34.3	94
		Wide	2741	34.3	80
		Extra Wide	2593	34.3	76



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TYPE: _____ PROJECT: _____

CATALOG #: _____

PERFORMANCE DATA TABLE CONTINUED

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

Lumen Package	Nominal Lumens	Distribution	Delivered Lumens	Watts	LPW
35L	3500	Very Narrow	4015	43.0	93
		Narrow	4203	43.0	98
		Medium	3928	43.0	91
		Wide	3329	43.0	77
		Extra Wide	3149	43.0	73
40L	4000	Very Narrow	4589	51.6	89
		Narrow	4804	51.6	93
		Medium	4491	51.6	87
		Wide	3806	51.6	74
		Extra Wide	3600	51.6	70
45L	4500	Very Narrow	4817	55.1	87
		Narrow	5042	55.1	92
		Medium	4713	55.1	86
		Wide	3994	55.1	72
		Extra Wide	3778	55.1	69
50L	5000	Very Narrow	5147	48.7	106
		Narrow	5388	48.7	111
		Medium	5037	48.7	103
		Wide	4268	48.7	88
		Extra Wide	4038	48.7	83
55L	5500	Very Narrow	5708	53.9	106
		Narrow	5975	53.9	111
		Medium	5585	53.9	104
		Wide	4734	53.9	88
		Extra Wide	4478	53.9	83
60L	6000	Very Narrow	6358	60.7	105
		Narrow	6656	60.7	110
		Medium	6221	60.7	103
		Wide	5273	60.7	87
		Extra Wide	4987	60.7	82
70L	7000	Very Narrow	7413	72.1	103
		Narrow	7760	72.1	108
		Medium	7254	72.1	101
		Wide	6147	72.1	85
		Extra Wide	5815	72.1	81
80L	8000	Very Narrow	8342	84.3	99
		Narrow	8732	84.3	104
		Medium	8162	84.3	97
		Wide	6917	84.3	82
		Extra Wide	6543	84.3	78
90L	9000	Very Narrow	9460	98.1	96
		Narrow	9903	98.1	101
		Medium	9257	98.1	94
		Wide	7845	98.1	80
		Extra Wide	7421	98.1	76

LTR-6SQD

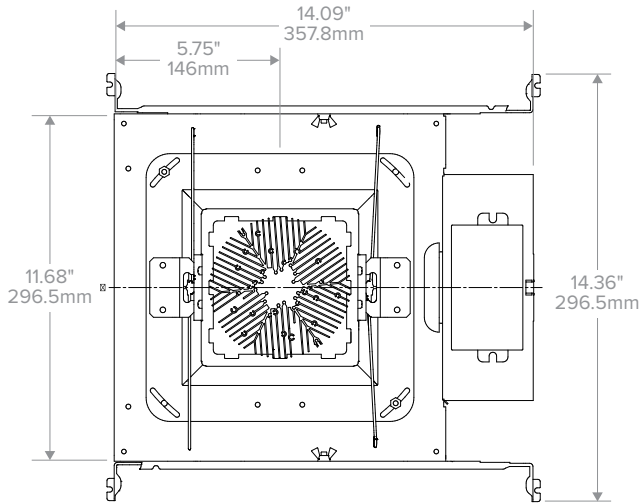
LITEISTRY 6" SQUARE DOWNLIGHT

DIMENSIONS

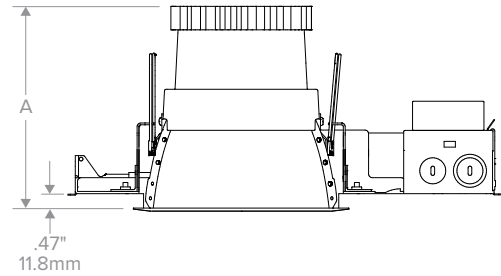
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CATALOG #: _____



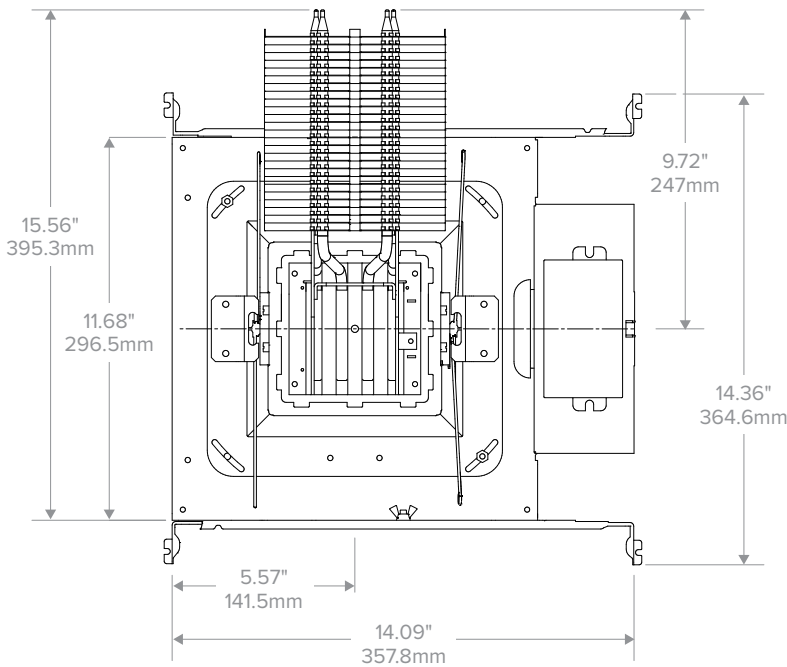
Top View



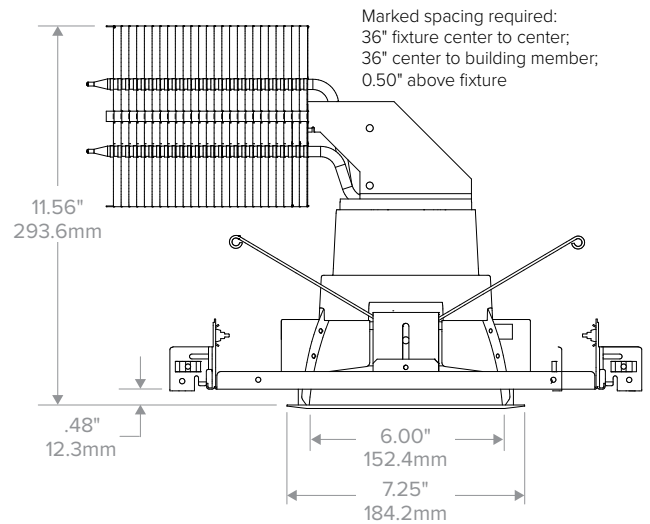
Dimensional Data	
Aperture	6.00" (152.4mm) SQ
Flange	Standard 7.25" (184.2mm) SQ
	Flush Mount 6.47" (164.3mm) SQ
Ceiling Cutout	Standard 6.69" (169.9mm) SQ
	Flush Mount 6.88" (174.8mm) SQ
Ceiling Thickness	0.50" to 1.25" (12.7mm to 31.8mm)

Lumen Package	"A"
06L-15L	6.00" (152.4mm)
20L-30L	6.78" (172.2mm)
35L-45L	7.96" (202.2mm)
50L-60L	9.14" (232.2mm)

LTR-6SQD-H (06L-60L) New Construction



LTR-6SQD-H (70L-90L) New Construction



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

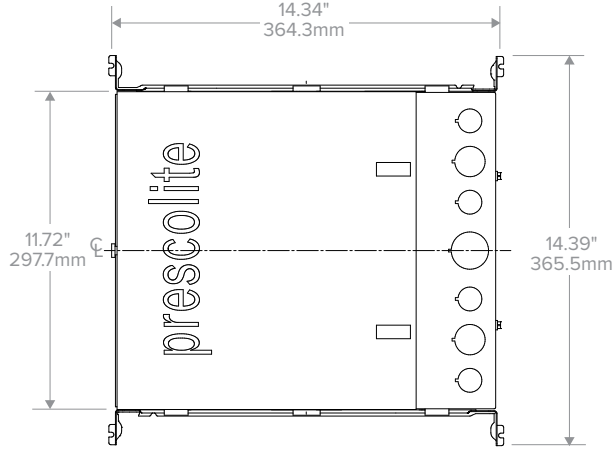
LITEISTRY 6" SQUARE DOWNLIGHT

DIMENSIONS CONTINUED

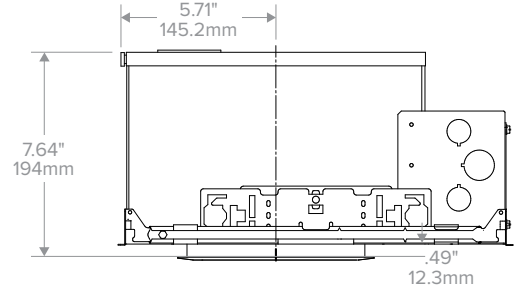
DATE: _____ LOCATION: _____

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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

PHOTOMETRY

LTR-6SQD-H-ML20L-DM1 / LTR-6SQD-T-ML35K8VNR-S

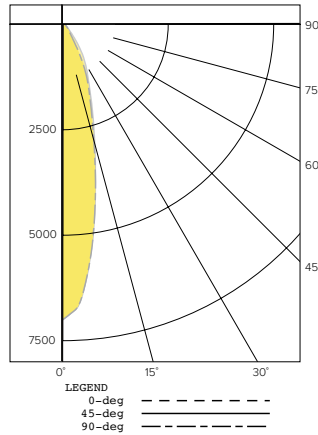
LUMINAIRE DATA

Test No.	19.00934
Description	2000 lm, Very Narrow, 3500K, 80 CRI
Delivered Lumens	2282
Watts	22.8W
Efficacy	100
Mounting	Recessed
Spacing Criterion	0.4
Beam Angle (FWHM)	25

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	2282	95.1
0-60	2274	99.7
0-90	2282	100.0
0-180	2282	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	7034	7034	7034
5	6158	6172	6176
15	2778	2894	2806
25	1214	1390	1221
35	266	580	269
45	88	116	90
55	17	23	21
65	4	4	4
75	2	2	2
85	0	1	0
90	0	0	0

LTR-6SQD-H-ML20L-DM1 / LTR-6SQD-T-ML35K8NRS

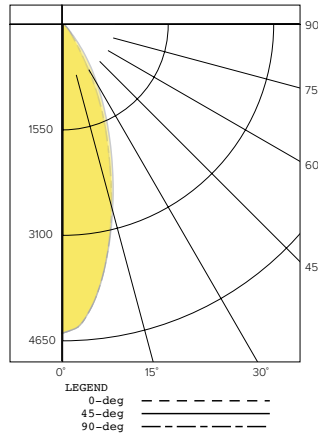
LUMINAIRE DATA

Test No.	P19.00935
Description	2000 lm, Narrow, 3500K, 80 CRI
Delivered Lumens	2252
Watts	22.8W
Efficacy	98.7
Mounting	Recessed
Spacing Criterion	0.6
Beam Angle (FWHM)	36

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	2124	94.3
0-60	2244	99.7
0-90	2252	100.0
0-180	2252	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	4567	4567	4567
5	4305	4307	4304
15	2800	2874	2805
25	1334	1536	1343
35	342	628	344
45	99	134	101
55	19	26	19
65	4	5	4
75	2	2	2
85	0	1	0
90	0	0	0

LTR-6SQD-H-ML20L-DM1 / LTR-6SQD-T-ML35K8MDS

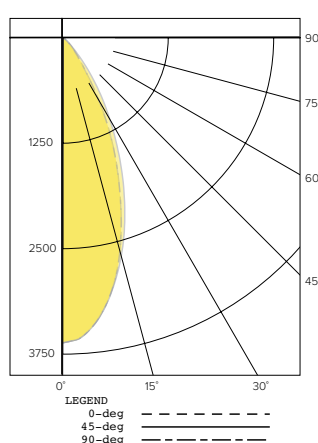
LUMINAIRE DATA

Test No.	P19.01046
Description	2000 lm, Medium, 3500K, 80 CRI
Delivered Lumens	2206
Watts	22.8W
Efficacy	96.8
Mounting	Recessed
Spacing Criterion	0.7
Beam Angle (FWHM)	43

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	2062	93.5
0-60	2199	99.7
0-90	2206	100.0
0-180	2206	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	3615	3615	3615
5	3486	3487	3485
15	2608	2668	2602
25	1387	1592	1385
35	413	684	414
45	112	155	112
55	20	29	20
65	4	5	4
75	2	2	2
85	0	1	0
90	0	0	0

LTR-6SQD

LITEISTRY 6" SQUARE DOWNLIGHT

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PHOTOMETRY CONTINUED

LTR-6SQD-H-ML20L-DM1 / LTR-6SQD-T-ML35K8WDS

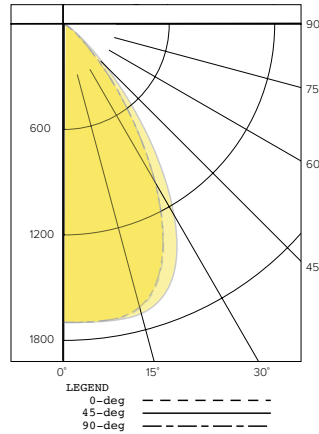
LUMINAIRE DATA

Test No.	P19.00936
Description	2000 lm, Wide, 3500K, 80 CRI
Delivered Lumens	2031
Watts	22.8W
Efficacy	89.0
Mounting	Recessed
Spacing Criterion	1.0
Beam Angle (FWHM)	65

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1768	87.0
0-60	2020	99.5
0-90	2031	100.0
0-180	2031	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	1697	1697	1697
5	1701	1702	1701
15	1671	1704	1664
25	1335	1501	1326
35	701	915	697
45	205	308	207
55	31	54	32
65	6	7	6
75	3	3	3
85	1	1	1
90	0	0	0

LTR-6SQD-H-ML20L-DM1 / LTR-6SQD-T-ML35K8XWS

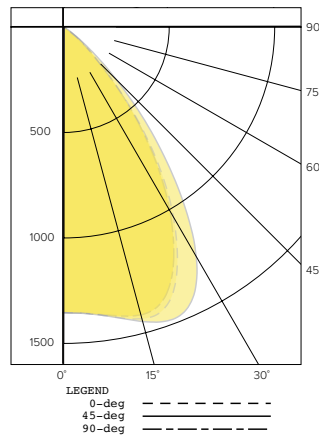
LUMINAIRE DATA

Test No.	P19.01047
Description	2000 lm, Extra Wide, 3500K, 80 CRI
Delivered Lumens	1975
Watts	22.7W
Efficacy	87.0
Mounting	Recessed
Spacing Criterion	1.2
Beam Angle (FWHM)	69

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1670	84.5
0-60	1964	99.4
0-90	1975	100.0
0-180	1975	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela - 0	Candela - 45	Candela - 90
0	1354	1354	1354
5	1364	1365	1363
15	1432	1445	1413
25	1275	1436	1236
35	775	970	747
45	244	367	240
55	36	64	36
65	7	8	7
75	3	3	3
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.

LTR-6SQD

LITEISTRY 6" SQUARE DOWNLIGHT

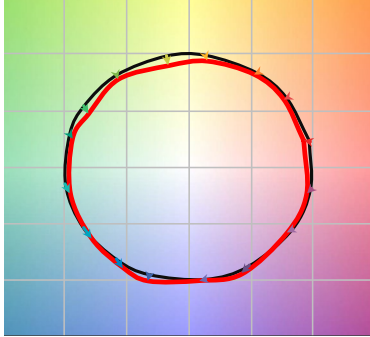
DATE: _____ LOCATION: _____

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TM-30 DATA

COLOR VECTOR GRAPHIC
3500K, 90 CRI



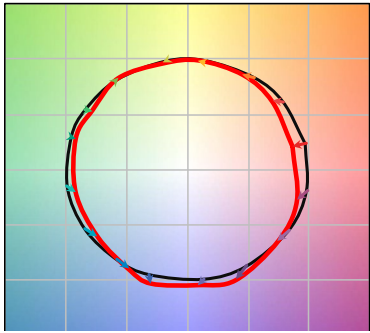
— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
3500K, 90 CRI



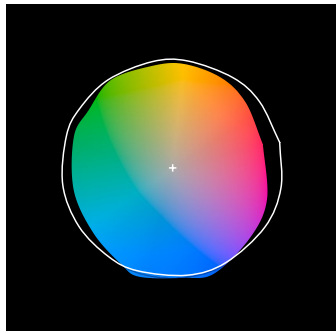
TEST RESULTS - 3500K		
Value	80+ CRI	90+ CRI
R_f	84	88
R_g	95	95
CCT (K)	3411	3419
D_{uv}	0.0015	0.0042
x	0.4120	0.4147
y	0.3974	0.4052
CIE R_a	84	93
CIE R_g	11	62

COLOR VECTOR GRAPHIC
3500K, 80 CRI



— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
3500K, 80 CRI



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.



LTR-6SQD

LITEISTRY 6" SQUARE DOWNLIGHT

DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

CATALOG #: _____

ELECTRICAL DATA CONTINUED

WATTAGE DATA		
Lumen Output	Nominal Lumens	WATTAGE
06L	600	8
10L	1000	12
15L	1500	19
20L	2000	23
25L	2500	28
30L	3000	35
35L	3500	43
40L	4000	52
45L	4500	55
50L	5000	49
55L	5500	54
60L	6000	61
70L	7000	72
80L	8000	85
90L	9000	99

* Wattage may vary based on configuration and options selected

ADDITIONAL INFORMATION

DIMMING COMPATIBILITY CHART		
Dimming Driver	Manufacturer	Web Link
DM1 /DM01	Lutron DDTV	http://bit.ly/1tjSvZg
DM1	Leviton AWRMG-7xx, AWSMG-7xx, AWSMT-7xx	http://bit.ly/1BJn2R9
EDM	Lutron	http://bit.ly/1vtjHAI
2DM	Lutron	http://bit.ly/1S4WjXK

DMX

See instruction sheet on www.prescolite.com for connection & installation 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

ENERGY STAR® Certified Models

For a list of certified models, click on the ENERGY STAR® MODELS link or visit www.energystar.gov.

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