

FEATURES

- 6" architectural LED downlight delivering 600 – 9000 lm
- Five beam distributions from 0.3 to 1.1 Spacing Criteria
- Quiet reflector appearance with superior 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, Lutron Forward Phase, and EcoSystem
- NX Distributed Intelligence™ wired and wireless controls capability available



RELATED PRODUCTS

- [LTR-6RD-RFH Retrofit](#)
- [LTR-6RD SpectraSync](#)
- [6" LITEISTRY Family](#)
- [LTR-6RD PowerHUBB](#)

SERVICE PROGRAMS



CONTROL 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 spun 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 LED with 2 SDCM
- Multiple CCTs, 80+ or 90+ CRI
- Long LED life: L90 at >55,000 hours (TM-21)
- 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 Vibe control options available
- Integral and remote 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 thickness up to 2" (SL, ML, HL); up to 1.25" (VL, XL)
- Universal adjustable mounting brackets also accept 0.5" EMT conduit or 1.5" or 0.75" 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
- 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
- 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)	94-104*
Reported Life (Hours)	L90 / >55,000
Input Current (mA)	65-825 (120V)

*Based on Specular, 35K, 80 CRI



LTR-6RD

LITEISTRY 6" ROUND DOWNLIGHT

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

ORDERING GUIDE

Example: LTR-6RD-H-SL10L-DM1-LTR-6RD-T-SL35K8MD-S

CATALOG #

HOUSING

LTR-6RD-H																				
Aperture/Shape/Function		Lumen Package		Lumen Output		Driver Options		Control Options		Voltage	Housing Options									
LTR-6RD-H	6" Round Downlight New Construction Housing	SL	Standard Lumen	06L	600	DM1	0-10V Dimming to 1% ¹¹	NXE	NX Enabled, Dual SmartPorts ³	Standard 120-277V	34	347V ⁶	CP	Chicago Plenum ^{7,9}						
				10L	1000	DM01	0-10V Dimming to < 1% ²						NXWE	NX Wireless Enabled ³	IC	IC rated ^{8,9}				
				15L	1500	DMX	DMX with RDM dimming to < 0.1% ²								NXWD	NX Wireless Enabled, Dual SmartPorts ³	EM	Emergency Battery Pack with integral test switch and indicator light ⁹		
		ML	Medium Lumen	20L	2000	DALI	DALI Dimming to 1% ²	2DM	Lutron Hi-Lume 2-wire Dimming to 1% (120V Forward Phase only) ²		LV	Lutron Vive Enabled, 0-10V (requires 0-10V driver)					EMR	Emergency Battery Pack with remote test switch and indicator light ⁹		
				25L	2500								EDM	Lutron Hi-Lume EcoSystem Dimming to 1% ²					LVE	Lutron Vive Enabled, EcoSystem, (requires EDM)
				30L	3000										GTD	Generator Transfer Device ⁹				
		HL	High Lumen	35L	3500	F	Fuse ⁹													
				40L	4000															
				45L	4500															
		VL	Very High Lumen	50L	5000															
				55L	5500															
				60L	6000															
		XL	Extra high Lumen ¹²	70L	7000															
				80L	8000															
				90L	9000															

TRIM

LTR-6RD-T				
Aperture/Shape/Function	Lumen Package	CCT	CRI	Distribution
LTR-6RD-T 6" Round Downlight Light Engine/Trim Assembly	SL Standard Lumen	27K 2700K	8 80+CRI	VNR Very Narrow (0.3 SC/18")
	ML Medium Lumen	30K 3000K	9 90+CRI	NR Narrow (0.5 SC/29")
	HL High Lumen	35K 3500K		MD Medium (0.6 SC/37")
	VL Very High Lumen	40K 4000K		WD Wide (0.9 SC/59")
	XL Extra High Lumen ¹²	50K 5000K ¹		XW Extra Wide (1.1 SC/76")

TRIM CONTINUED

Reflector Finish	Reflector Color	Flange Color Options	Lower Trim Options	Reflector Options
Finish not applicable with painted reflectors (WC or BC)	Standard Clear	Standard matches reflector color	EM Pre-punched reflector for EM integral test switch and indicator	AM Antimicrobial Coating ⁵
S Specular	CG Champagne Gold	WT White Flange ⁴	FM Flush Mount Mud-in Ring ¹⁰	
SS Semi-Specular	BL Black	BT Black Flange ⁴	WF Wide Flange	
MFC American Matte™	LW Light Wheat			
VS Softglow®	PW Pewter			
VSS SoftSheen™	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-R Flush Mount Mud-In Ring, 6" Round
- ☐ LiteGear LiteGear® Inverter, 125VA-250VA
- ☐ LPS Series LightPower Micro-Inverter, 20VA-55VA
- ☐ MOR6-R-WH Metal Oversized Ring, 6" Round, White (10" outside diameter)
- ☐ MOR6-R-BL Metal Oversized Ring, 6" Round, Black (10" outside diameter)
- ☐ LTR-SCA6-___ Sloped Ceiling Adapter, 6", White ¹⁴

Notes:

- 1 5000K available in 80+ CRI only.
- 2 2DM, EDM, DMX available in 10L-35L. DM01, DALI not available on >55L.
- 3 NX requires DM1 driver option, not available on >60L.
- 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 option; available 10L - 60L not available with Controls, F, GTD, DTS, EM, EMR.
- 7 CP available up to 20L; not available with DMX, Controls, or EMR options.
- 8 IC available up to 20L; not available with Controls options.
- 9 Housing options (except Fuse) not available in combination.
- 10 Flush Mount Flange (FM) requires FMR accessory (sold separately).
- 11 DM1 on >60L is 0-10V to 5% dimming.
- 12 XL (70L-90L) require marked spacing. See line art for more details.
- 13 DTS available with DM1, DM01, DALI, or EDM; not available with LVE.
- 14 Specify slope angle 5°-35° in 5° increments. Not available with EM, WF, or FM options.



LTR-6RD

LITEISTRY 6" ROUND DOWNLIGHT

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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	806	7.8	103
		Narrow	717	7.8	92
		Medium	746	7.8	96
		Wide	691	7.8	89
		Extra Wide	665	7.8	85
10L	1000	Very Narrow	1288	12.0	107
		Narrow	1146	12.0	96
		Medium	1192	12.0	99
		Wide	1104	12.0	92
		Extra Wide	1063	12.0	89
15L	1500	Very Narrow	1851	18.7	99
		Narrow	1623	18.7	87
		Medium	1712	18.7	92
		Wide	1586	18.7	85
		Extra Wide	1527	18.7	82
20L	2000	Very Narrow	2355	22.6	104
		Narrow	2263	22.7	100
		Medium	2265	22.6	100
		Wide	2180	22.7	96
		Extra Wide	2139	22.7	94
25L	2500	Very Narrow	3093	27.7	112
		Narrow	2751	27.7	99
		Medium	2860	27.7	103
		Wide	2650	27.7	96
		Extra Wide	2551	27.7	92
30L	3000	Very Narrow	3686	34.3	107
		Narrow	3278	34.3	96
		Medium	3409	34.3	99
		Wide	3158	34.3	92
		Extra Wide	3040	34.3	89



LTR-6RD

LITEISTRY 6" ROUND DOWNLIGHT

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PERFORMANCE DATA TABLE CONTINUED

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

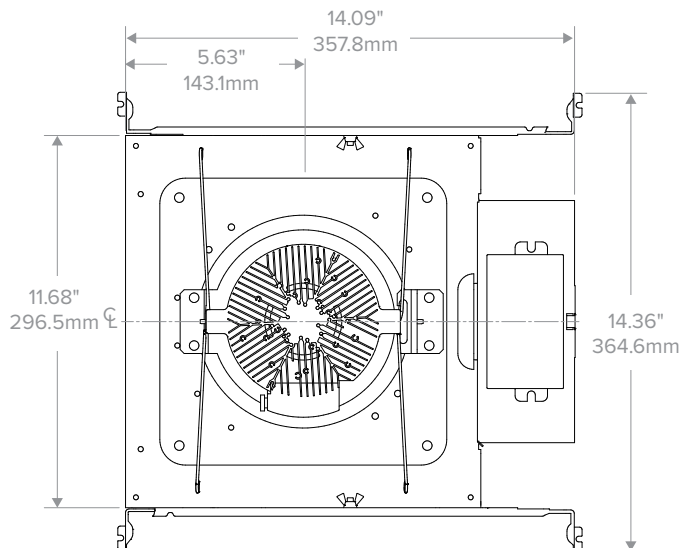
Lumen Package	Nominal Lumens	Distribution	Delivered Lumens	Watts	LPW
35L	3500	Very Narrow	4477	43.0	104
		Narrow	3942	43.0	93
		Medium	4140	43.0	96
		Wide	3836	43.0	89
		Extra Wide	3693	43.0	86
40L	4000	Very Narrow	5117	51.6	99
		Narrow	4552	51.6	88
		Medium	4733	51.6	92
		Wide	4385	51.6	85
		Extra Wide	4221	51.6	82
45L	4500	Very Narrow	5371	55.1	98
		Narrow	4775	55.1	87
		Medium	4967	55.1	90
		Wide	4602	55.1	84
		Extra Wide	4430	55.1	80
50L	5000	Very Narrow	5740	48.7	118
		Narrow	5105	48.7	105
		Medium	5308	48.7	109
		Wide	4918	48.7	101
		Extra Wide	4734	48.7	97
55L	5500	Very Narrow	6365	53.9	119
		Narrow	5662	53.9	105
		Medium	5887	53.9	109
		Wide	5454	53.9	101
		Extra Wide	5250	53.9	97
60L	6000	Very Narrow	7090	60.7	117
		Narrow	6299	60.7	104
		Medium	6557	60.7	108
		Wide	6075	60.7	100
		Extra Wide	5848	60.7	96
70L	7000	Very Narrow	8266	72.1	115
		Narrow	7353	72.1	102
		Medium	7645	72.1	106
		Wide	7083	72.1	98
		Extra Wide	6819	72.1	95
80L	8000	Very Narrow	9301	84.3	111
		Narrow	8273	84.3	98
		Medium	8602	84.3	102
		Wide	7970	84.3	95
		Extra Wide	7672	84.3	91
90L	9000	Very Narrow	10549	98.1	108
		Narrow	9383	98.1	96
		Medium	9756	98.1	99
		Wide	9039	98.1	92
		Extra Wide	8701	98.1	89

DIMENSIONS

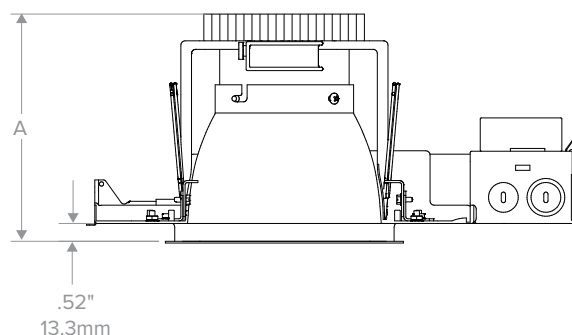
Lumen Package	"A"
06L-15L	5.90" (149.9mm)
20L-30L	6.68" (169.7mm)
35L-40L	7.86" (199.6mm)
50L-60L	9.04" (229.6mm)

Dimensional Data		
Aperture		5.75" (146.1mm)
Flange:	Standard	7.00" (177.8mm)
	Flush Mount	6.54" (166.0mm)
Ceiling Cutout:	Standard	6.50" (165.1mm)
	Flush Mount	6.75" (171.5mm)
Ceiling Thickness:	Standard or w/SCA 5-20° slope	0.50" to 2.00" (12.7mm to 50.8mm)
	With SCA 25-35° slope	0.50" to 1.75" (12.7mm to 44.6mm)

SCA Sloped Ceiling Adapter accessory available, see [LTR-SCA specification sheet](#) and [installation instructions](#) for dimensional data and other details.



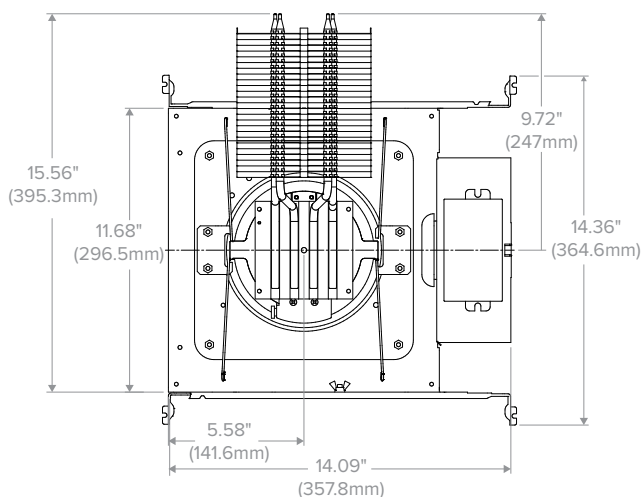
Top View



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

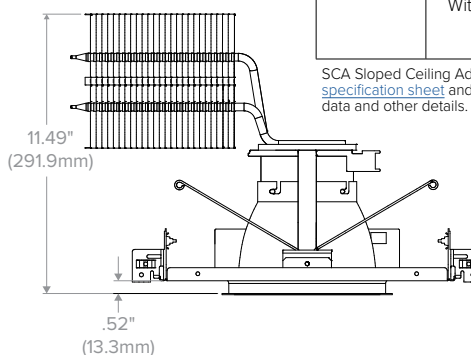
Dimensional Data		
Aperture		5.75" (146.1mm)
Flange:	Standard	7.00" (177.8mm)
	Flush Mount	6.54" (166.0mm)
Ceiling Cutout:	Standard	6.50" (165.1mm)
	Flush Mount	6.75" (171.5mm)
Ceiling Thickness:	Standard or w/SCA 5-20° slope	0.50" to 2.00" (12.7mm to 50.8mm)
	With SCA 25-35° slope	0.50" to 1.75" (12.7mm to 44.6mm)

SCA Sloped Ceiling Adapter accessory available, see [LTR-SCA specification sheet](#) and [installation instructions](#) for dimensional data and other details.



Top View

Marked spacing required:
36" fixture center to center;
36" center to building member;
0.50" above fixture



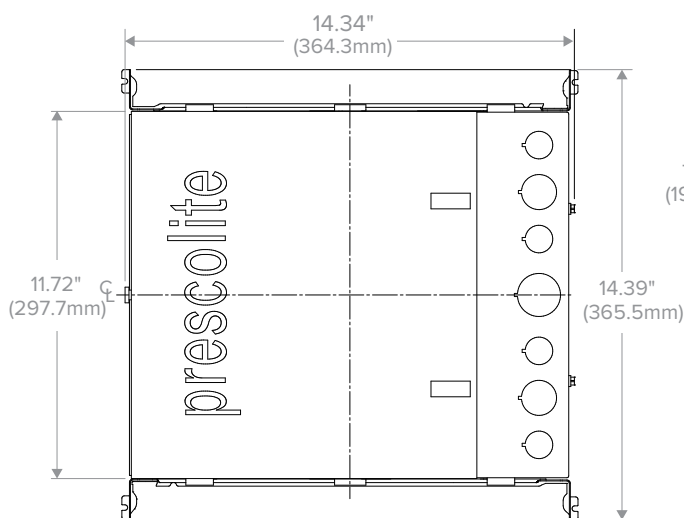
LTR-6RD-H (70L - 90L) New Construction

LTR-6RD

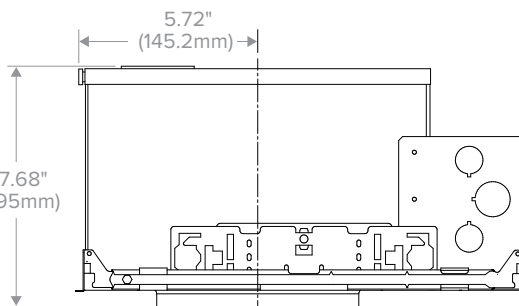
LITEISTRY 6" ROUND DOWNLIGHT

DATE:	LOCATION:
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DIMENSIONS CONTINUED



LTR-6RD-IC



Dimensional Data		
Aperture		5.75" (146.1mm)
Flange:	Standard	7.00" (177.8mm)
	Flush Mount	6.54" (166.0mm)
Ceiling Cutout:	Standard	6.50" (165.1mm)
	Flush Mount	6.75" (171.5mm)
Ceiling Thickness:	Standard or w/SCA 5-20° slope	0.50" to 2.00" (12.7mm to 50.8mm)
	With SCA 25-35° slope	0.50" to 1.75" (12.7mm to 44.6mm)

SCA Sloped Ceiling Adapter accessory available, see [LTR-SCA specification sheet](#) and [installation instructions](#) for dimensional data and other details.

PHOTOMETRY

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

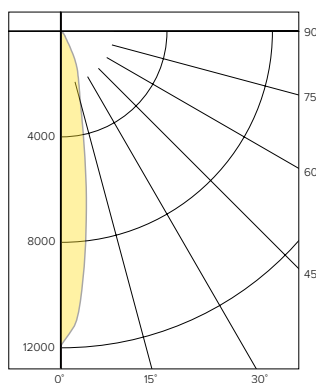
LUMINAIRE DATA

Test No.	19.00588
Description	2000 lm, Very Narrow, 3500K, 80 CRI
Delivered Lumens	2355
Watts	22.6W
Efficacy	104.0
Mounting	Recessed
Spacing Criterion	0.3
Beam Angle (FWHM)	18

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	2290	97.2
0-60	2355	100.0
0-90	2355	100.0
0-180	2355	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	11881
5	9399
15	2776
25	1236
35	255
45	74
55	0
65	0
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	6247
55°	0
65°	0
75°	0
85°	0

*Candela/Square Meter

LTR-6RD-H-ML20L-DM1 / LTR-6RD-T-ML35K8NR-S

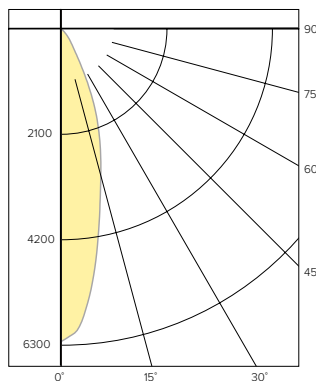
LUMINAIRE DATA

Test No.	20.01439
Description	2000 lm, Narrow, 3500K, 80 CRI
Delivered Lumens	2263
Watts	22.1W
Efficacy	103.0
Mounting	Recessed
Spacing Criterion	0.5
Beam Angle (FWHM)	29

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	2185	96.6
0-60	2260	99.9
0-90	2263	100.0
0-180	2263	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	6222
5	5603
15	3035
25	1354
35	348
45	83
55	5
65	2
75	1
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	6712
55°	498
65°	271
75°	221
85°	0

*Candela/Square Meter

PHOTOMETRY CONTINUED

LTR-6RD-H-ML20L-DM1 / LTR-6RD-T-ML35K8MD-S

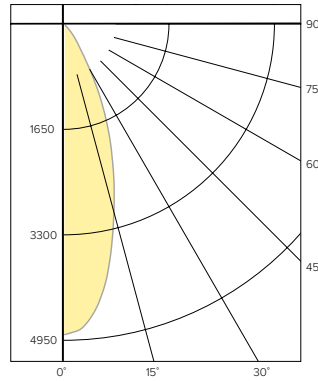
LUMINAIRE DATA

Test No.	19.00587
Description	2000 lm, Medium, 3500K, 80 CRI
Delivered Lumens	2265
Watts	22.6W
Efficacy	100.0
Mounting	Recessed
Spacing Criterion	0.6
Beam Angle (FWHM)	37

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	2171	95.9
0-60	2262	99.9
0-90	2265	100.0
0-180	2265	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	4851
5	4619
15	3007
25	1450
35	386
45	99
55	6
65	2
75	1
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	8357
55°	624
65°	282
75°	231
85°	0

*Candela/Square Meter

LTR-6RD-H-ML20L-DM1 / LTR-6RD-T-ML35K8WD-S

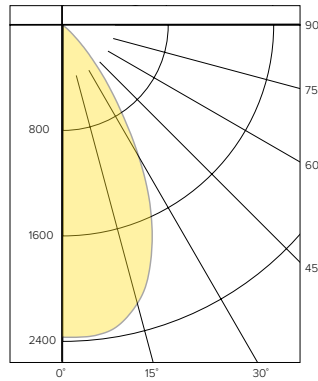
LUMINAIRE DATA

Test No.	19.00585
Description	2000 lm, Wide, 3500K, 80 CRI
Delivered Lumens	2180
Watts	22.6W
Efficacy	96.1
Mounting	Recessed
Spacing Criterion	0.9
Beam Angle (FWHM)	59

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	2014	92.4
0-60	2176	99.8
0-90	2180	100.0
0-180	2180	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	2368
5	2371
15	2189
25	1591
35	726
45	177
55	10
65	3
75	1
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	14942
55°	1041
65°	424
75°	231
85°	0

*Candela/Square Meter

LTR-6RD-H-ML20L-DM1 / LTR-6RD-T-ML35K8XW-S

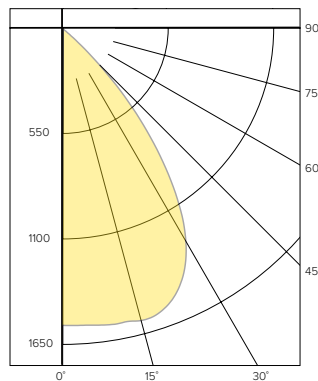
LUMINAIRE DATA

Test No.	19.00586
Description	2000 lm, Extra Wide, 3500K, 80 CRI
Delivered Lumens	2139
Watts	22.7W
Efficacy	94.4
Mounting	Recessed
Spacing Criterion	1.1
Beam Angle (FWHM)	76

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1875	87.7
0-60	2134	99.8
0-90	2139	100.0
0-180	2139	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	1547
5	1552
15	1576
25	1461
35	1007
45	301
55	9
65	3
75	1
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	25409
55°	937
65°	424
75°	231
85°	0

*Candela/Square Meter

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.



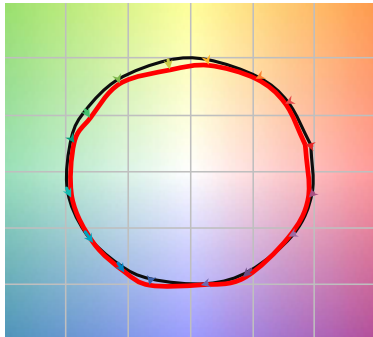
LTR-6RD

LITEISTRY 6" ROUND DOWNLIGHT

DATE:	LOCATION:
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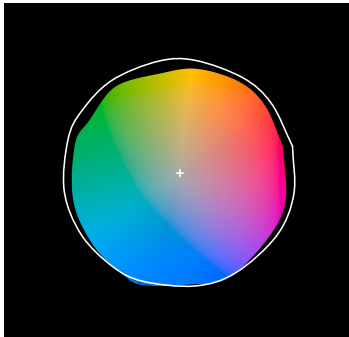
TM-30 DATA

COLOR VECTOR GRAPHIC
3500K, 90 CRI



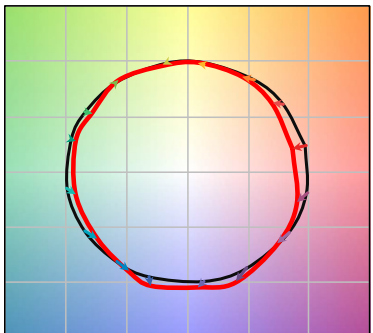
— Reference Illuminant — Test Source

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





LTR-6RD

LITEISTRY 6" ROUND DOWNLIGHT

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

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.

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 DVTV	http://bit.ly/1IjSvZg
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®

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

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