

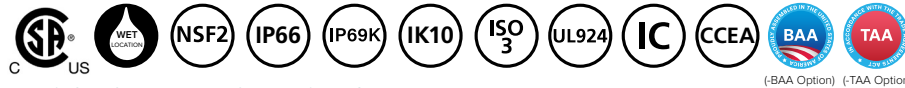
LTR-6RD (CR)

6" ROUND COMPLEX ENVIRONMENT DOWNLIGHT
CLEANROOM / FOOD PROCESSING

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

FEATURES

- 6" round architectural LED downlight delivering 600–4000 lumens
- Five beam distributions and wall wash allow for controlled illumination with a non-institutional appearance
- 50° cutoff to source and source image provides a low glare, distraction free environment with enhanced visual acuity for intricate tasks
- Options for color temperature range from 2700K–5000K in 80+ or 90+ CRI, as well as an option for Amber (590 nm) support a wide array of applications
- Aluminum anodized reflectors accommodate a wide array of colors and finishes
- Closed cell silicone gasket protects against dust and water ingress. Supports an ISO 3 cleanroom rating.
- Wet location and IP66/IP69K ingress protection ratings allow use in wet environments, including hose down and high temperature, sanitation applications
- Durable, marine grade, die cast aluminum bezel trim (low-copper alloy) with optional antimicrobial paint finish is NSF2 certified
- Flush, .250" thick polycarbonate lens allows for easy wipe down and impedes the accumulation of dirt and organic material



CONTROLS TECHNOLOGY



SPECIFICATIONS

CONSTRUCTION

- Corrosion resistant, marine grade (low copper alloy), die cast aluminum bezel trim, optional tamper resistant hardware
- Flush, impact resistant .250" thick, clear polycarbonate lens for ease of wipe down.
- Closed cell silicone gasket prevents dust and water ingress for IP66, IP69K, ISO3 certification
- Standard Non-IC, options for IC and Chicago Plenum
- Steel platform with black finish and pre-installed bar hangers simplify installation
- Pre-wired junction box with snap-on covers provide easy wiring access
- Snap-in quick connectors simplify electrical connections to the driver compartment
- Light engine connections use plenum rated (CMP) cable

OPTICS

- Visually changing 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 is integral to the light engine to ensure precise beam control
- High purity aluminum reflector enables reliable and consistent finish and color
- Large selection of anodized inner reflector finishes and colors as well as painted cone options
- White painted bezel trim finish, antimicrobial white paint as option

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
- Flicker free 0–10V dimming with 1% or <1% performance
- DALI and Lutron EcoSystem options
- NX Lighting Controls provides options for standalone and networked functionality with wired or wireless connectivity for NX system deployments
- Battery pack with remote test switch and indicator available

INSTALLATION

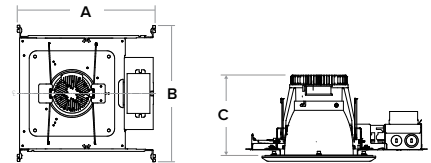
- Accommodates ceiling thickness up to 2" (See DIMENSIONS section for details)
- Universal adjustable mounting brackets also accept 0.5" EMT conduit or 1.5" or 0.75" lathing channel (by others) or Prescolite accessory bar hangers (B24 or B6)
- Light Engine/Driver fully serviceable from above or below the ceiling

CERTIFICATIONS

- CSA certified, UL1598
- Suitable for wet location (under covered ceiling), IP66 and IP69K rated.
- ISO3 certified per ISO 14644-1:2015 ISO class 3 standards



SERVICE PROGRAMS
tradeSELECT™ QS10



Typical Dimensions and Weights				
Lumen Package	"A" Length Inches (mm)	"B" Width Inches (mm)	"C" Height Inches (mm)	Weight lbs (kg)
06L - 15L	14.56 (370)	14.36 (365)	5.9 (150)	7.8 (3.5)
20L - 30L	14.56 (370)	14.36 (365)	6.68 (170)	8.2 (3.7)
35L - 40L	14.56 (370)	14.36 (365)	7.86 (200)	8.8 (4)

See DIMENSIONS section for complete details

CERTIFICATIONS (CONTINUED)

- NSF2 Non-Food Zone certified
- EMR: Certified under UL 924 standard for emergency lighting and power equipment
- EMR: Emergency battery packs are California Energy Commission (CEC) Title 20 Compliant
- Meets IK10 per IEC 60068-2-75 impact testing
- 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	600–4000
Wattage Range	8–52
Efficacy Range (LPW)	62–89*
Reported Life (Hours)	L90 / >55,000
Input Current (mA)	66–434 (120V)

*Based on 35K, 80 CRI

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Gray Shading = Service Program tradeSELECT® QS10
Limit of 150 Luminaries

ORDERING GUIDE

Example: LTR-6RD-H-SL10L-DM1 / LTR-6RD-T-SL35K8MD-SS / LTR-6RD-CE-WTAM

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 10L 1000 15L 1500	DM1 0-10V Dimming to 1% DM01 0-10V Dimming to < 1% ² DALI DALI Dimming to 1% ² EDM Lutron Hi-Lume EcoSystem Dimming to 1% ²	NX Lighting Controls Networked Wireless NXW NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor ³ Networked Wired NXE NX Wired Dual RJ45 SmartPORTS, without Sensor ³	Standard 120-277V 34 347V ⁴	CP Chicago Plenum ^{5,7} IC IC rated ^{6,7} EMR 7W Emergency Battery Pack (CEC Title 20 Compliant) with remote test switch and indicator light ⁷ DTS Device Transfer Switch with Dimming Bypass ^{7,8} GTD Generator Transfer Device ^{7,11} F Fuse ⁷ BAA Buy American Act (FAR 52.225-9) Compliant TAA Trade Agreements Act (FAR 52.225-11) Compliant	
	ML Medium Lumen	20L 2000 25L 2500 30L 3000					
	HL High Lumen	35L 3500 40L 4000					

TRIM

Aperture/Shape/Function	Lumen Package	CCT	CRI	Distribution	
LTR-6RD-T 6" Round Downlight Light Engine/Trim Assembly	SL Standard Lumen	27K 2700K 30K 3000K 35K 3500K	8 80+CRI 9 90+CRI	VNR Very Narrow (0.3 SC/20°) ¹⁰ NR Narrow (0.5 SC/30°) MD Medium (0.7 SC/40°) WD Wide (0.9 SC/59°) XW Extra Wide (1.1 SC/74°) WW Single Wall Wash ⁹	
LTR-6RW-T 6" Round Wall Wash Light Engine/Trim Assembly ⁹	ML Medium Lumen	40K 4000K 50K 5000K ¹ AMB Amber			
	HL High Lumen				

TRIM CONTINUED

Reflector Finish	Reflector Color	Reflector Options	
Finish not applicable with painted reflectors (WC or BC)	Standard Clear	BAA Buy American Act (FAR 52.225-9) Compliant TAA Trade Agreements Act (FAR 52.225-11) Compliant	
S Specular	CG Champagne Gold		
SS Semi-Specular	BL Black		
MFC American Matte™	LW Light Wheat		
VS Softglow®	PW Pewter		
VSS SoftSheen™	WC Painted White Cone and Flange		
	BC Painted Black Cone and Flange		

Notes:

- 5000K available in 80+ CRI only.
- EDM available in 10L-35L.
- NX requires DM1 driver option.
- 347V requires DM1 driver option; available 06L-30L; not available with Controls, F, GTD, DTS, EMR.
- CP not available with Controls, or EMR options.
- IC available up to 20L; not available with Controls options.
- Housing options (except Fuse, BAA/TAA) not available in combination.
- DTS available with DM1, DM01, or DALI. Not available with NXE.
- Wall wash trim requires WW distribution option.
- VNR not available with AMB CCT.
- Not available with NXE.

BEZEL

Bezel Type	Bezel Trim Color	Options	Accessories
LTR-6RD-CE 6" Round Bezel Trim Assembly with Clear Polycarbonate Lens, Stainless Steel Philips Head Screws (included)	WT White WTAM White Antimicrobial	BAA Buy American Act (FAR 52.225-9) Compliant TAA Trade Agreements Act (FAR 52.225-11) Compliant	<input type="checkbox"/> B24 Set of two (2) 24" bar hangers for T-bar ceilings <input type="checkbox"/> B6 Set of two bar hangers for ceiling joist up to 24" centers <input type="checkbox"/> LiteGear LiteGear® Inverter, 25VA-250VA <input type="checkbox"/> LPS Series LightPower Micro-Inverter, 20VA-55VA
LTR-6RD-CEVR 6" Round Bezel Trim Assembly with Clear Polycarbonate Lens, Stainless steel tamper resistant Torx® center pin reject (included)			

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PROJECT:

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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

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PERFORMANCE DATA TABLE (3500K, 80CRI)

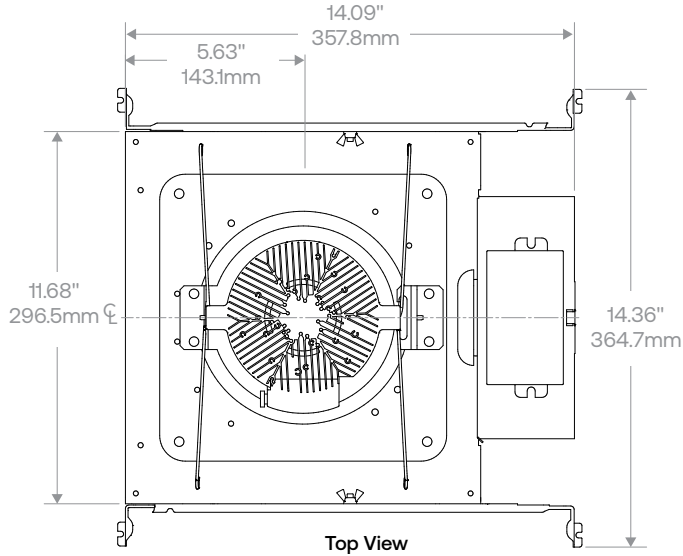
Lumen Package	Nominal Lumens	Distribution	Delivered Lumens	Watts	LPW
06L	600	Very Narrow	625	7.8	80
		Narrow	605	7.8	78
		Medium	624	7.8	80
		Wide	545	7.8	70
		Extra Wide	590	7.8	76
		Wall Wash	508	7.8	65
10L	1000	Very Narrow	999	12.0	83
		Narrow	967	12.0	81
		Medium	997	12.0	83
		Wide	871	12.0	73
		Extra Wide	942	12.0	79
		Wall Wash	812	12.0	68
15L	1500	Very Narrow	1435	18.7	77
		Narrow	1390	18.7	74
		Medium	1432	18.7	77
		Wide	1251	18.7	67
		Extra Wide	1354	18.7	72
		Wall Wash	1166	18.7	62
20L	2000	Very Narrow	1973	22.2	89
		Narrow	1910	22.2	86
		Medium	1969	22.2	89
		Wide	1720	22.2	77
		Extra Wide	1861	22.2	84
		Wall Wash	1603	22.2	72
25L	2500	Very Narrow	2398	27.7	87
		Narrow	2322	27.7	84
		Medium	2394	27.7	86
		Wide	2091	27.7	75
		Extra Wide	2262	27.7	82
		Wall Wash	1949	27.7	70
30L	3000	Very Narrow	2858	34.3	83
		Narrow	2767	34.3	81
		Medium	2852	34.3	83
		Wide	2492	34.3	73
		Extra Wide	2696	34.3	79
		Wall Wash	2322	34.3	68
35L	3500	Very Narrow	3472	43.0	81
		Narrow	3361	43.0	78
		Medium	3465	43.0	81
		Wide	3027	43.0	70
		Extra Wide	3275	43.0	76
		Wall Wash	2821	43.0	66
40L	4000	Very Narrow	3969	51.6	77
		Narrow	3842	51.6	74
		Medium	3961	51.6	77
		Wide	3460	51.6	67
		Extra Wide	3743	51.6	73
		Wall Wash	3224	51.6	62

LTR-6RD (CR)

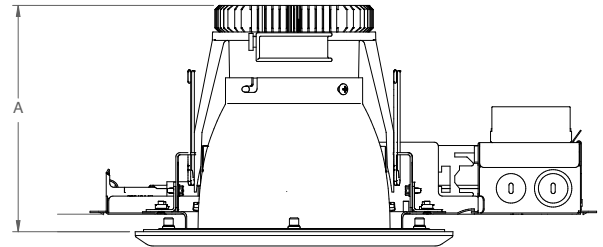
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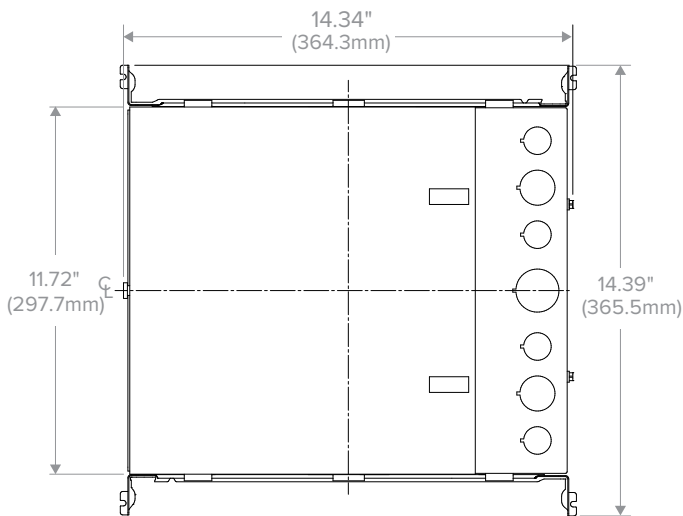
DIMENSIONS



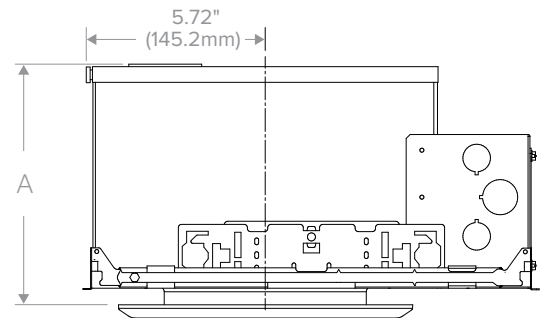
LTR-6RD-H New Construction



Dimensional Data		Lumen Package	"A"
Aperture Opening	Ø 5.75" (146.1 mm)	06L-15L	5.90" (149.9mm)
Overall Flange	Ø 9.42" (293.3 mm)	20L-30L	6.68" (169.7mm)
Bezel (below ceiling)	0.42" (10.7 mm)	35L-40L	7.86" (199.6mm)
Ceiling Cutout	Ø 8.25" (209.6 mm)		
Ceiling Thickness	0.50" to 2.00" (12.7 mm to 50.8 mm)		



LTR-6RD-IC / LTR-6RD-CP



Dimensional Data		Lumen Package	"A"
Aperture Opening	Ø 5.75" (146.1 mm)	Standard	7.68" (195.0mm)
Overall Flange	Ø 9.42" (293.3 mm)	CP option ≥35L	10.06" (255.5mm)
Bezel (below ceiling)	0.42" (10.7 mm)		
Ceiling Cutout	Ø 8.25" (209.6 mm)		
Ceiling Thickness	0.50" to 2.00" (12.7 mm to 50.8 mm)		

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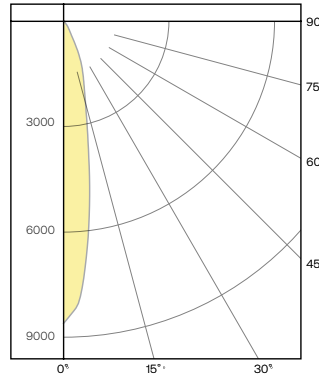
PHOTOMETRY

LTR-6RD-H-ML20L-DM1 / LTR-6RD-T-ML35K8VNR-SS / LTR-6RD-CE-WT

LUMINAIRE DATA

Test No.	22.01620
Description	2000 lm, Very Narrow, 3500K, 80 CRI
Delivered Lumens	1973
Watts	22.2W
Efficacy	89
Mounting	Recessed
Spacing Criterion	0.3
Beam Angle (FWHM)	20

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	8590
5	7037
15	2416
25	994
35	257
45	73
55	13
65	6
75	3
85	1
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	6162
55°	1353
65°	847
75°	692
85°	685

*Candela/Square Meter

ZONAL LUMEN SUMMARY

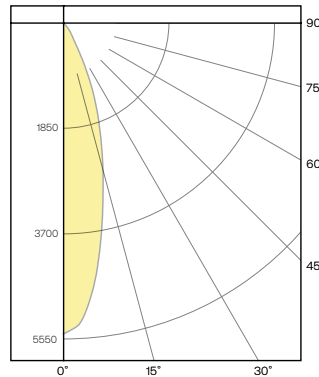
Zone	Lumens	% Luminaire
0-40	1889	95.7
0-60	1962	99.5
0-90	1973	100.0
0-180	1973	100.0

LTR-6RD-H-ML20L-DM1 / LTR-6RD-T-ML35K8NR-SS / LTR-6RD-CE-WT

LUMINAIRE DATA

Test No.	23.00002
Description	2000 lm, Narrow, 3500K, 80 CRI
Delivered Lumens	1910
Watts	22.2W
Efficacy	86
Mounting	Recessed
Spacing Criterion	0.5
Beam Angle (FWHM)	30

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	5460
5	4978
15	2690
25	1057
35	261
45	61
55	8
65	5
75	3
85	1
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	5149
55°	833
65°	706
75°	692
85°	685

*Candela/Square Meter

ZONAL LUMEN SUMMARY

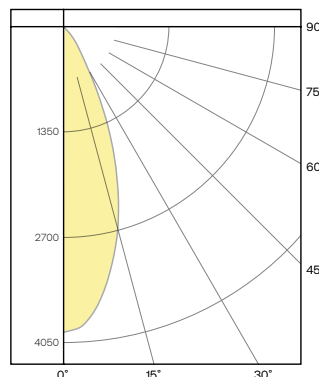
Zone	Lumens	% Luminaire
0-40	1839	96.3
0-60	1900	99.5
0-90	1910	100.0
0-180	1910	100.0

LTR-6RD-H-ML20L-DM1 / LTR-6RD-T-ML35K8MD-SS / LTR-6RD-CE-WT

LUMINAIRE DATA

Test No.	23.00009
Description	2000 lm, Medium, 3500K, 80 CRI
Delivered Lumens	1969
Watts	22.2W
Efficacy	89
Mounting	Recessed
Spacing Criterion	0.7
Beam Angle (FWHM)	40

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	3906
5	3743
15	2675
25	1252
35	354
45	81
55	10
65	6
75	3
85	1
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	6838
55°	1041
65°	847
75°	692
85°	685

*Candela/Square Meter

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1878	95.4
0-60	1958	99.4
0-90	1969	100.0
0-180	1969	100.0

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PHOTOMETRY CONTINUED

LTR-6RD-H-ML20L-DM1 / LTR-6RD-T-ML35K8WD-SS / LTR-6RD-CE-WT

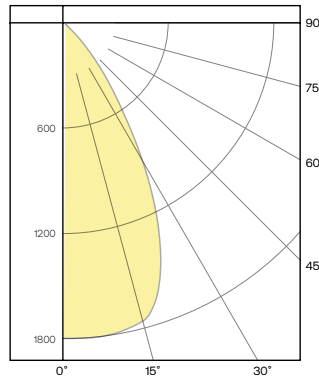
LUMINAIRE DATA

Test No.	23.00010
Description	2000 lm, Wide, 3500K, 80 CRI
Delivered Lumens	1720
Watts	22.2W
Efficacy	78
Mounting	Recessed
Spacing Criterion	0.9
Beam Angle (FWHM)	59

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1572	91.4
0-60	1705	99.1
0-90	1720	100.0
0-180	1720	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	1791
5	1795
15	1751
25	1269
35	535
45	135
55	20
65	9
75	4
85	1
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	11396
55°	2081
65°	1271
75°	923
85°	685

*Candela/Square Meter

LTR-6RD-H-ML20L-DM1 / LTR-6RD-T-ML35K8XW-SS / LTR-6RD-CE-WT

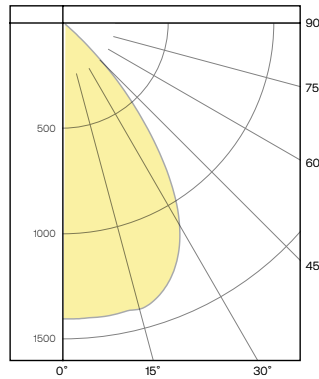
LUMINAIRE DATA

Test No.	23.00011
Description	2000 lm, Extra Wide, 3500K, 80 CRI
Delivered Lumens	1861
Watts	22.3W
Efficacy	94.4
Mounting	Recessed
Spacing Criterion	1.1
Beam Angle (FWHM)	74

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1625	87.3
0-60	1850	99.4
0-90	1861	100.0
0-180	1861	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	1402
5	1402
15	1403
25	1261
35	853
45	254
55	15
65	7
75	3
85	1
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	21442
55°	1561
65°	989
75°	692
85°	685

*Candela/Square Meter

LTR-6RD-H-ML20L-DM1 / LTR-6RW-T-ML35K8WW-SS / LTR-6RD-CE-WT

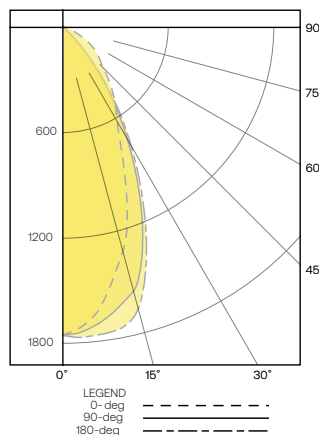
LUMINAIRE DATA

Test No.	22.01618
Description	2000 lm, Single Wall Wash, 3500K, 80 CRI
Delivered Lumens	1603
Watts	22.8W
Efficacy	72
Mounting	Recessed

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1343	83.8
0-60	1547	96.5
0-90	1603	100.0
0-180	1603	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	1753
5	1682
15	1324
25	802
35	517
45	326
55	222
65	100
75	33
85	3
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	27519
55°	23103
65°	14124
75°	7611
85°	2055

*Candela/Square Meter

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PHOTOMETRY CONTINUED

LUMEN MULTIPLIER

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

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

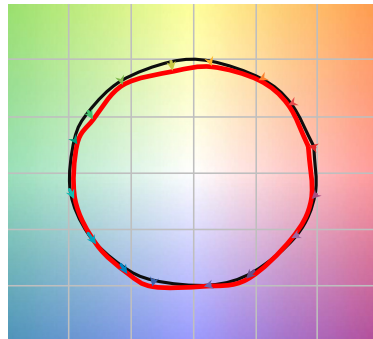
REFLECTOR COLOR MULTIPLIER (Based on Semi-Specular (SS) Finish)

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

TM-30 DATA

COLOR VECTOR GRAPHIC
3500K, 90 CRI



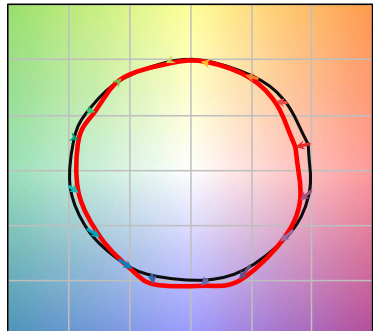
— Reference Illuminant — Test Source

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 (CR)

6" ROUND COMPLEX ENVIRONMENT DOWNLIGHT
CLEANROOM / FOOD PROCESSING

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.

ADDITIONAL INFORMATION

Dimming Compatibility

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

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.

Bezel Trim

See installation instructions on currentlighting.com/lifeshield for complete details.

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.