

LTR-4RD (VR)

4" ROUND COMPLEX ENVIRONMENT DOWNLIGHT
VANDAL RESISTANT / BEHAVIORAL

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

FEATURES

- 4" round architectural LED downlight delivering 600–4000 lumens
- Five beam distributions and wall wash allow for controlled illumination that provides security with a non-institutional appearance
- 50° cutoff to source and source image reduces glare to facilitate a calming environment.
- 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 in a wide array of colors and finishes creates a more architectural look in behavioral spaces
- Wet location and IP66/IP69K ingress protection ratings allow for use in wet environments, including exterior covered ceilings and canopies.
- Durable, marine grade, die cast aluminum bezel trim (low-copper alloy) withstands impact, weathering. Optional tamper resistant fasteners avoids unauthorized entry
- Flush, shatter resistant, .250" thick polycarbonate lens meets IK10 (per IEC 60068-2-75 impact testing) making it ideal for behavioral and vandal resistant applications



MIL461G, IEC AVAILABLE ON LTR 4RD (SR)

CONTROLS TECHNOLOGY



SPECIFICATIONS

CONSTRUCTION

- Corrosion resistant, marine grade (low copper alloy), die cast aluminum bezel trim, Tamper Resistant hardware as option
- Flush, impact resistant .250" thick, clear polycarbonate lens supports IK10 certification, deters unauthorized entry
- Closed cell silicone gasket prevents dust and water ingress for IP66, IP69K, ISO3 certification
- Non-IC standard, Chicago Plenum and IC options
- 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 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 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

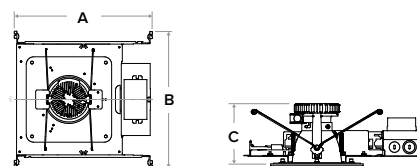
CERTIFICATIONS

- 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

STOCK 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)	4.97 (126)	7.4 (3.3)
20L - 30L	14.56 (370)	14.36 (365)	6.15 (156)	7.8 (3.6)
35L - 40L	14.56 (370)	14.36 (365)	7.33 (186)	8.3 (3.8)

See DIMENSIONS section for complete details

CERTIFICATIONS (CONTINUED)

- NSF2 Non-Food Zone certified
- EMR Option: 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\(n\) Solution](#)

WARRANTY

- 5 year warranty

KEY DATA

Lumen Range	600–4000
Wattage Range	8–52
Efficacy Range (LPW)	52–83*
Reported Life (Hours)	L90 / >55,000
Input Current (mA)	66–434 (120V)

*Based on 35K, 80 CRI

LTR-4RD (VR)

4" ROUND COMPLEX ENVIRONMENT DOWNLIGHT
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Gray Shading = Service Program **STOCK** **QS10**
Limit of 150 Luminaires

ORDERING GUIDE

Example: LTR-4RD-H-SL10L-DM1 / LTR-4RD-T-SL35K8MD-SS / LTR-4RD-CEVR-WTAM

CATALOG #

HOUSING

LTR-4RD-H							
Aperture/Shape/Function	Lumen Package	Lumen Output	Driver Options	Control Options	Voltage	Housing Options	
LTR-4RD-H 4" 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	<u>NX Lighting Controls</u> <u>Networked Wireless</u> NXW NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor ³ <u>Networked Wired</u> 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 with remote test switch and indicator light ⁷ DTS Device Transfer Switch with Dimming Bypass ^{7,8} GTD Generator Transfer Device ⁷ 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-4RD-T 4" Round Downlight Light Engine/Trim Assembly	SL Standard Lumen	27K 2700K 30K 3000K	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/43°) WD Wide(0.9 SC/58°) XW Extra Wide (1.1 SC/70°) WW Single Wall Wash ⁹
LTR-4RW-T 4" Round Wall Wash Light Engine/Trim Assembly ⁹	ML Medium Lumen	35K 3500K 40K 4000K		
	HL High Lumen	50K 5000K ¹ AMB Amber		

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.
- Wall wash trim requires WW distribution option.
- VNR available up to 30L, not available with AMB CCT.

BEZEL

Bezel Type	Bezel Trim Color	Options	Accessories
LTR-4RD-CE 4" 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-4RD-CEVR 4" Round Bezel Trim Assembly with Clear Polycarbonate Lens, Stainless steel tamper resistant Torx® center pin reject (included)			



LTR-4RD (VR)

4" ROUND COMPLEX ENVIRONMENT DOWNLIGHT
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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

LTR-4RD (VR)

4" ROUND COMPLEX ENVIRONMENT DOWNLIGHT
VANDAL RESISTANT / BEHAVIORAL

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PERFORMANCE DATA TABLE (3500K, 80CRI)

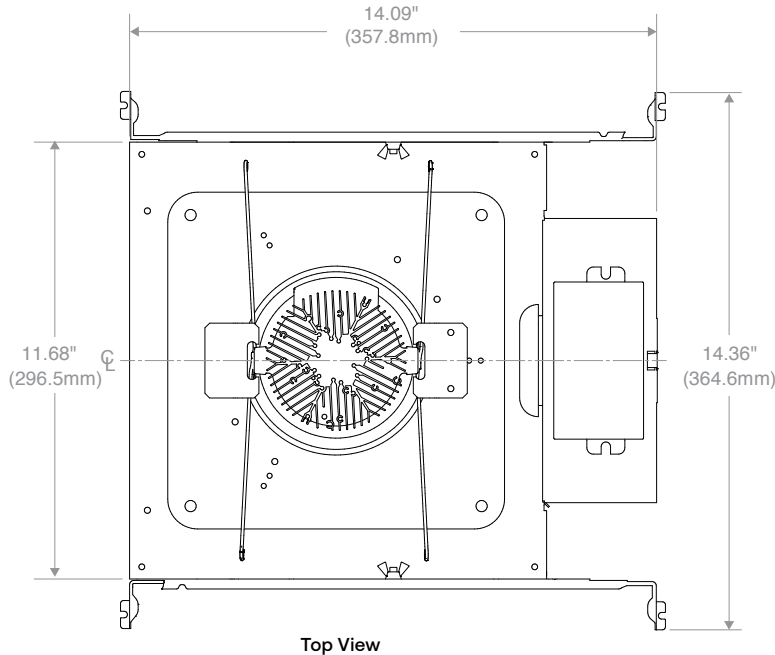
Lumen Package	Nominal Lumens	Distribution	Delivered Lumens	Watts	LPW
06L	600	Very Narrow	571	7.6	75
		Narrow	563	7.8	72
		Medium	541	7.8	69
		Wide	483	7.8	62
		Extra Wide	501	7.8	64
		Wall Wash	427	7.8	55
10L	1000	Very Narrow	935	11.3	83
		Narrow	900	12.0	75
		Medium	866	12.0	72
		Wide	773	12.0	64
		Extra Wide	802	12.0	67
		Wall Wash	682	12.0	57
15L	1500	Very Narrow	1340	17.3	77
		Narrow	1287	18.6	69
		Medium	1239	18.6	67
		Wide	1106	18.6	59
		Extra Wide	1146	18.6	62
		Wall Wash	976	18.6	52
20L	2000	Very Narrow	1678	22.8	74
		Narrow	1745	22.0	79
		Medium	1679	22.3	75
		Wide	1499	22.2	68
		Extra Wide	1554	22.2	70
		Wall Wash	1323	22.0	60
25L	2500	Very Narrow	2021	28.6	71
		Narrow	2141	27.8	77
		Medium	2060	27.8	74
		Wide	1839	27.8	66
		Extra Wide	1906	27.8	69
		Wall Wash	1623	27.8	58
30L	3000	Very Narrow	2358	36.0	66
		Narrow	2570	34.6	74
		Medium	2472	34.6	71
		Wide	2207	34.6	64
		Extra Wide	2288	34.6	66
		Wall Wash	1948	34.6	56
35L	3500	Narrow	3070	42.9	72
		Medium	2954	42.9	69
		Wide	2637	42.9	61
		Extra Wide	2734	42.9	64
		Wall Wash	2327	42.9	54
40L	4000	Narrow	3369	51.5	65
		Medium	3504	51.5	68
		Wide	3371	51.5	65
		Extra Wide	3010	51.5	58
		Wall Wash	2656	51.5	52

LTR-4RD (VR)

4" ROUND COMPLEX ENVIRONMENT DOWNLIGHT
VANDAL RESISTANT / BEHAVIORAL

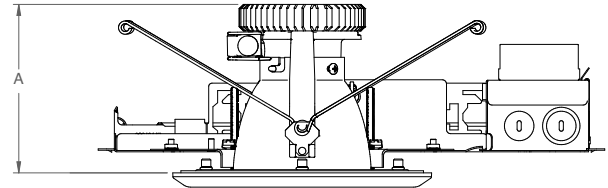
DIMENSIONS

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TYPE:	PROJECT:
CATALOG #:	

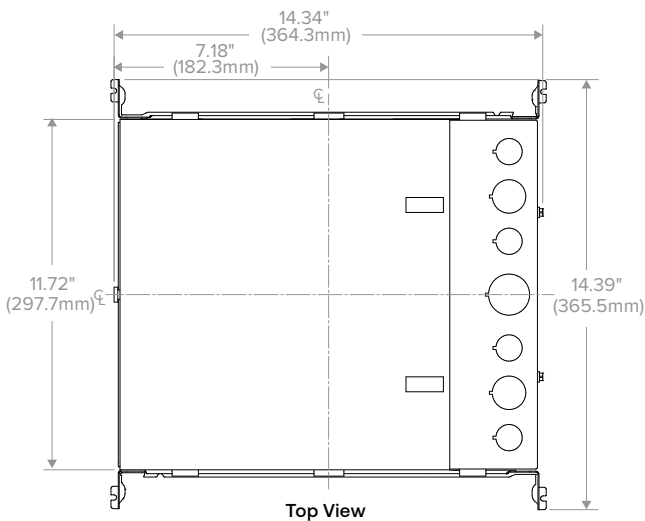


Top View

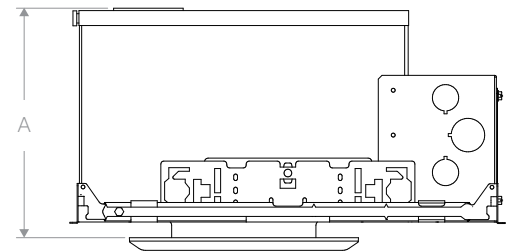
LTR-4RD-H New Construction



Dimensional Data		Lumen Package	"A"
Aperture Opening	4.00" (101.6mm)	06L-15L	4.97" (126.2mm)
Overall Flange	Ø 7.67" (194.8 mm)	20L-30L	6.15" (156.2mm)
Bezel (below ceiling)	0.42" (10.7 mm)	35L-40L	7.33" (186.2mm)
Ceiling Cutout:	Ø 6.50" (165.1 mm)		
Ceiling Thickness:	0.50" to 2.00" (12.7 mm to 50.8 mm)		



Top View



LTR-4RD-H IC/CP

Dimensional Data		Lumen Package	"A"
Aperture Opening	4.00" (101.6mm)	Standard	7.68" (195.0mm)
Overall Flange	Ø 7.67" (194.8 mm)	CP option ≥35L	10.06" (255.5mm)
Bezel (below ceiling)	0.42" (10.7 mm)		
Ceiling Cutout:	Ø 6.50" (165.1 mm)		
Ceiling Thickness:	0.50" to 2.00" (12.7 mm to 50.8 mm)		

LTR-4RD (VR)

4" ROUND COMPLEX ENVIRONMENT DOWNLIGHT
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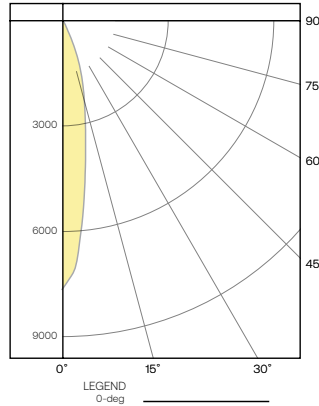
PHOTOMETRY

LTR-4RD-H-ML20L-DM1 / LTR-4RD-T-ML35K8VNR-SS / LTR-4RD-CEVR-WT

LUMINAIRE DATA

Test No.	23.00004
Description	2000 lm, Very Narrow, 3500K, 80 CRI
Delivered Lumens	1678
Watts	22.8W
Efficacy	74
Mounting	Recessed
Spacing Criterion	0.3
Beam Angle (FWHM)	20

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	7663
5	6093
15	2462
25	713
35	146
45	24
55	11
65	7
75	4
85	1
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	4186
55°	2366
65°	2043
75°	1906
85°	1415

*Candela/Square Meter

ZONAL LUMEN SUMMARY

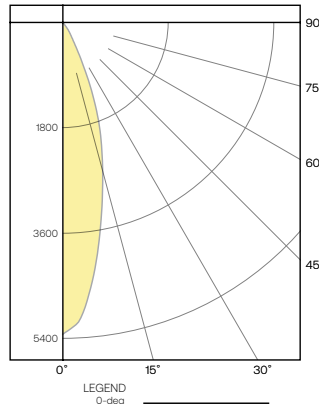
Zone	Lumens	% Luminaire
0-40	1633	97.3
0-60	1666	99.3
0-90	1678	100.0
0-180	1678	100.0

LTR-4RD-H-ML20L-DM1 / LTR-4RD-T-ML35K8NR-SS / LTR-4RD-CEVR-WT

LUMINAIRE DATA

Test No.	23.00005
Description	2000 lm, Narrow, 3500K, 80 CRI
Delivered Lumens	1745
Watts	22.0W
Efficacy	79
Mounting	Recessed
Spacing Criterion	0.5
Beam Angle (FWHM)	30

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	5312
5	4767
15	2623
25	907
35	196
45	27
55	9
65	5
75	3
85	1
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	4710
55°	1935
65°	1459
75°	1430
85°	1415

*Candela/Square Meter

ZONAL LUMEN SUMMARY

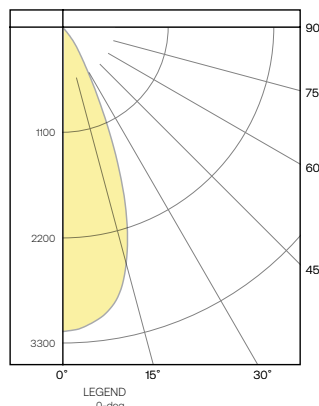
Zone	Lumens	% Luminaire
0-40	1700	97.4
0-60	1736	99.5
0-90	1745	100.0
0-180	1745	100.0

LTR-4RD-H-ML20L-DM1 / LTR-4RD-T-ML35K8MD-SS / LTR-4RD-CEVR-WT

LUMINAIRE DATA

Test No.	23.00006
Description	2000 lm, Medium, 3500K, 80 CRI
Delivered Lumens	1679
Watts	22.3W
Efficacy	75
Mounting	Recessed
Spacing Criterion	0.7
Beam Angle (FWHM)	43

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	3167
5	3106
15	2546
25	1036
35	255
45	25
55	10
65	6
75	3
85	1
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	4361
55°	2150
65°	1751
75°	1430
85°	1415

*Candela/Square Meter

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1633	97.3
0-60	1669	99.4
0-90	1679	100.0
0-180	1679	100.0

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4" ROUND COMPLEX ENVIRONMENT DOWNLIGHT
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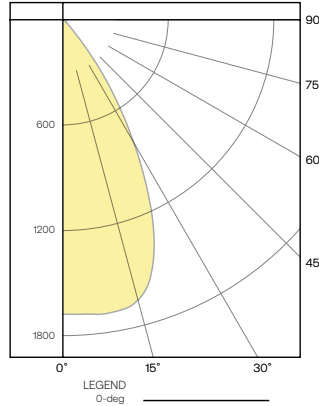
PHOTOMETRY CONTINUED

LTR-4RD-H-ML20L-DM1 / LTR-4RD-T-ML35K8WD-SS / LTR-4RD-CEVR-WT

LUMINAIRE DATA

Test No.	22.00434
Description	2000 lm, Wide, 3500K, 80 CRI
Delivered Lumens	1499
Watts	22.2W
Efficacy	68
Mounting	Recessed
Spacing Criterion	0.9
Beam Angle (FWHM)	58

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	1677
5	1683
15	1651
25	1181
35	445
45	41
55	16
65	8
75	4
85	1
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	7152
55°	3441
65°	2335
75°	1906
85°	1415

*Candela/Square Meter

ZONAL LUMEN SUMMARY

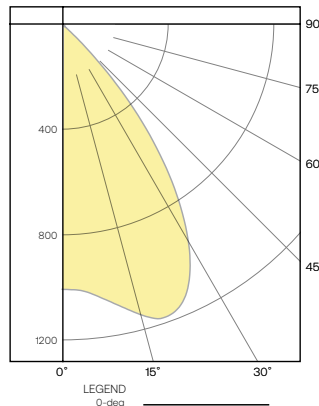
Zone	Lumens	% Luminaire
0-40	1427	95.2
0-60	1486	99.1
0-90	1499	100.0
0-180	1499	100.0

LTR-4RD-H-ML20L-DM1 / LTR-4RD-T-ML35K8XW-SS / LTR-4RD-CEVR-WT

LUMINAIRE DATA

Test No.	23.00007
Description	2000 lm, Extra Wide, 3500K, 80 CRI
Delivered Lumens	1554
Watts	22.2W
Efficacy	70
Mounting	Recessed
Spacing Criterion	1.1
Beam Angle (FWHM)	70

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	1002
5	1015
15	1136
25	1117
35	725
45	175
55	19
65	7
75	3
85	1
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	30526
55°	4086
65°	2043
75°	1430
85°	1415

*Candela/Square Meter

ZONAL LUMEN SUMMARY

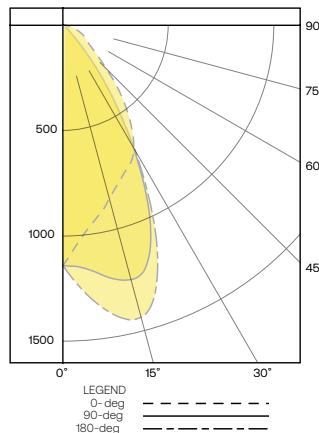
Zone	Lumens	% Luminaire
0-40	1370	88.2
0-60	1542	99.3
0-90	1554	100.0
0-180	1554	100.0

LTR-4RD-H-ML20L-DM1 / LTR-4RW-T-ML35K8WW-SS / LTR-4RD-CEVR-WT

LUMINAIRE DATA

Test No.	22.01314
Description	2000 lm, Single Wall Wash, 3500K, 80 CRI
Delivered Lumens	1323
Watts	22.2W
Efficacy	60
Mounting	Recessed

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	1143
5	1014
15	853
25	740
35	553
45	283
55	143
65	95
75	30
85	1
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	49366
55°	30752
65°	27727
75°	14297
85°	1415

*Candela/Square Meter

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1133	85.7
0-60	1275	96.4
0-90	1323	100.0
0-180	1323	100.0

LTR-4RD (VR)

4" ROUND COMPLEX ENVIRONMENT DOWNLIGHT
VANDAL RESISTANT / BEHAVIORAL

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PHOTOMETRY CONTINUED

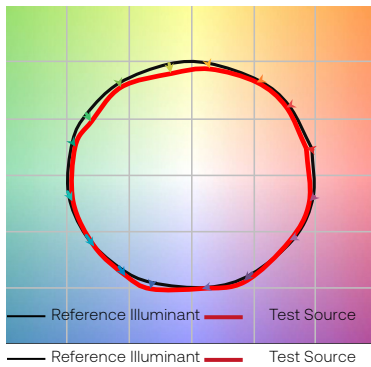
LUMEN MULTIPLIER

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.

TM-30 DATA

COLOR VECTOR GRAPHIC
3500K, 90 CRI

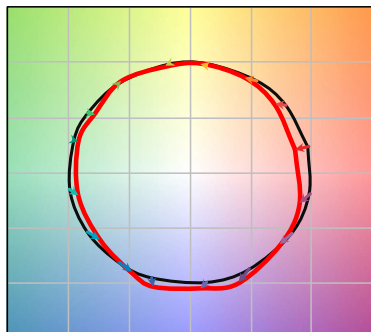


COLOR DISTORTION GRAPHIC
3500K, 90 CRI



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



COLOR DISTORTION GRAPHIC
3500K, 80 CRI



LTR-4RD (VR)

4" ROUND COMPLEX ENVIRONMENT DOWNLIGHT
VANDAL RESISTANT / BEHAVIORAL

DATE:	LOCATION:
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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/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.