

LTR-4RD-RFH

LITEISTRY 4" ROUND RETROFIT DOWNLIGHT

DATE: _____ LOCATION: _____
 TYPE: _____ PROJECT: _____
 CATALOG #: _____

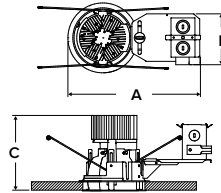
FEATURES

- 4" architectural LED retrofit downlight delivering 600 – 3000 lm
- Five beam distributions from 0.3 to 1.2 Spacing Criteria
- Quiet reflector appearance with superior 50° optical cutoff
- 2700K – 5000K, 80+ and 90+ CRI options
- For use in retrofit (non-IC) applications
- Variety of dimming protocol options including 0–10V, DALI, and Lutron EcoSystem

LITEISTRY™



SERVICE PROGRAMS



Typical Dimensions and Weights				
Lumen Package	"A" Length Inches (mm)	"B" Width Inches (mm)	"C" Height Inches (mm)	Weight lbs (kg)
06L - 15L	10.91 (277)	4.19 (106)	4.97 (126)	4.8 (2.2)
20L - 30L	10.91 (277)	4.19 (106)	6.15 (156)	5.3 (2.4)

See DIMENSIONS section for complete details

SPECIFICATIONS

CONSTRUCTION

- Die cast aluminum mounting ring with 5-axis adjustable junction box
- Retrofit housing allows below ceiling installation without removing existing fixture
- 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
- 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)
- 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
- Refer to additional spec sheets for information on SpectraSync™ Tunable White or Dim-to-Warm solutions

INSTALLATION

- Accommodates ceiling thickness up to 2"
- Light engine/driver fully serviceable from above or below the ceiling

CERTIFICATIONS

- cCSAus certified to UL 1598
- Suitable for wet locations, covered ceiling.
- Approved for 8 (4 in/4 out) No. 12 AWG conductors rated for 90°C through wiring

CERTIFICATIONS (CONTINUED)

- 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	600-3000
Wattage Range	8-35
Efficacy Range (LPW)	90-99*
Reported Life (Hours)	L90 / >55,000
Input Current (mA)	67-292 (120V)

*Based on Specular, 35K, 80 CRI

LTR-4RD-RFH

LITEISTRY 4" ROUND RETROFIT DOWNLIGHT

Gray Shading = Service Program



ORDERING GUIDE

Example: LTR-4RD-RFH-SL10L-DM1-LTR-4RD-T-SL35K8MD-S

CATALOG #

HOUSING

LTR-4RD-RFH		Lumen Package		Lumen Output		Driver Options		Voltage		Housing Options			
Aperture/Shape/Function													
LTR-4RD-RFH	4" Round Downlight Retrofit Housing ⁵	SL	Standard Lumen	06L	600	DM1	0-10V Dimming to 1%	Standard	120-277V	F	Fuse		
				10L	1000							DM01	0-10V Dimming to < 1%
				15L	1500							DALI	DALI Dimming to 1%
LTR-4RD-RFHW	4" Round Downlight Retrofit Housing (for wide diameter) ⁵	ML	Medium Lumen	20L	2000	EDM	Lutron Hi-Lume EcoSystem Dimming to 1% ²	34	347V ⁶	TAA	Trade Agreements Act (FAR 52.225-11) Compliant		
				25L	2500								
				30L	3000								

TRIM

LTR-4RD-T		Lumen Package		CCT		CRI		Distribution			
Aperture/Shape/Function											
LTR-4RD-T	4" Round Downlight Light Engine/Trim Assembly	SL	Standard Lumen	27K	2700K	8	80+CRI	VNR	Very Narrow (0.3 SC/20°) ⁷		
				30K	3000K					9	90+CRI
				35K	3500K						
				40K	4000K						
				50K	5000K ¹						

TRIM CONTINUED

Reflector Finish		Reflector Color		Flange Color Options		Lower Trim Options		Reflector Options	
<i>Finish not applicable with painted reflectors (WC or BC)</i>		Standard Clear		Standard matches reflector color		WF	Wide Flange	AM	Antimicrobial Coating ⁴
S	Specular	CG	Champagne Gold	WT	White Flange ³				
SS	Semi-Specular	BL	Black	BT	Black Flange ³				
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

- LiteGear LiteGear® Inverter, 125VA-250VA
- LPS Series LightPower Micro-Inverter, 20VA-55VA
- MOR4-R-WH Metal Oversized Ring, 4" Round, White (8.25" outside diameter)
- MOR4-R-BL Metal Oversized Ring, 4" Round, Black (8.25" outside diameter)

Notes:

- 1 5000K available in 80+ CRI only.
- 2 EDM available in 10L-30L.
- 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 See line art for compatibility with existing aperture diameters.
- 6 347V requires DM1 driver; not available with F.
- 7 VNR available up to 30L.

LTR-4RD-RFH

LITEISTRY 4" ROUND RETROFIT DOWNLIGHT

PERFORMANCE DATA TABLE

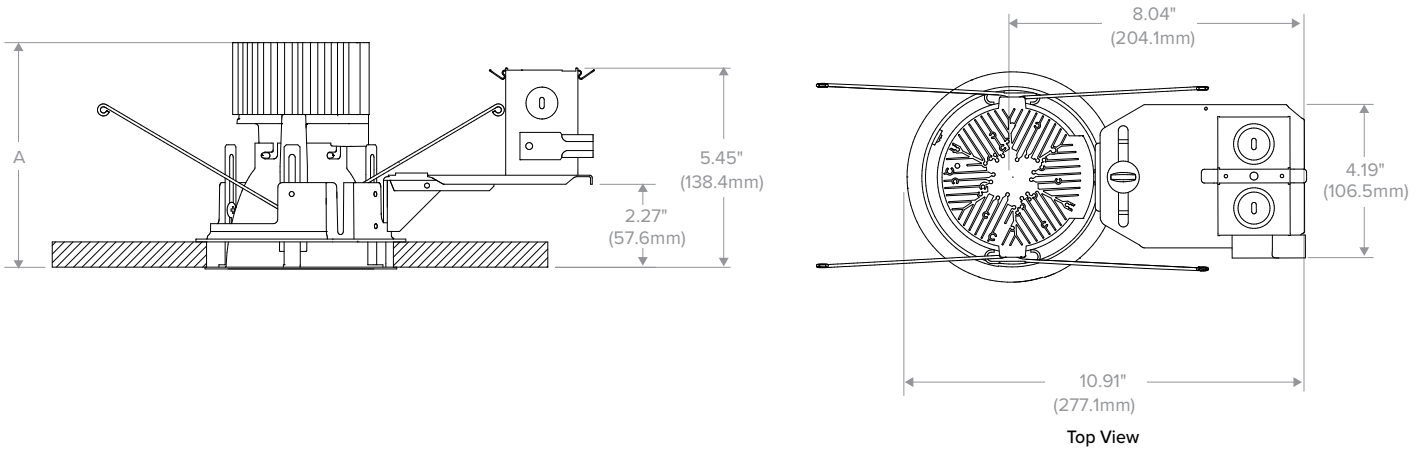
Performance data provided below is for 3500K, 80 CRI with Specular Clear reflector finish/color

Lumen Package	Nominal Lumens	Distribution	"Delivered Lumens"	Watts	LPW
06L	600	Very Narrow	691	7.6	91
		Narrow	785	7.8	101
		Medium	726	7.8	93
		Wide	664	7.8	85
		Extra Wide	644	7.8	83
10L	1000	Very Narrow	1132	11.8	96
		Narrow	1255	12.0	105
		Medium	1160	12.0	97
		Wide	1062	12.0	89
		Extra Wide	1030	12.0	86
15L	1500	Very Narrow	1623	17.2	94
		Narrow	1795	18.6	97
		Medium	1660	18.6	89
		Wide	1519	18.6	82
		Extra Wide	1474	18.6	79
20L	2000	Very Narrow	2032	22.4	91
		Narrow	2238	22.5	99
		Medium	2152	22.5	96
		Wide	2059	22.5	92
		Extra Wide	2028	22.5	90
25L	2500	Very Narrow	2447	28.6	86
		Narrow	2985	27.8	107
		Medium	2760	27.8	99
		Wide	2526	27.8	91
		Extra Wide	2451	27.8	88
30L	3000	Very Narrow	2855	35.9	80
		Narrow	3583	34.6	104
		Medium	3313	34.6	96
		Wide	3032	34.6	88
		Extra Wide	2941	34.6	85

LTR-4RD-RFH

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DIMENSIONS



Housing Compatibility Guide			
Existing Frame Opening**		Use Housing	Use Flange Option
MIN	MAX		
4.75" (120.7mm)	5.00" (127.0mm)	-RFH	(Standard)
5.00" (127.0mm)	5.50" (139.7mm)	-RFHW	WF

**Measure the existing plaster frame opening at its narrowest point

Dimensional Data		
Aperture		4.00" (101.6mm)
Flange:	Standard	5.25" (133.4mm)
	Flush Mount	4.50" (114.3mm)
	Wide (WF)	5.75" (146.1mm)
Ceiling Cutout:	Standard	5.00" (127.0mm)
	Flush Mount	5.12" (130.0mm)
Ceiling Thickness:		0.50" to 2.00" (12.7mm to 50.8mm)

Lumen Package	"A"
06L-15L	4.97" (126.2mm)
20L-30L	6.15" (156.2mm)

LTR-4RD-RFH/-RFHW

PHOTOMETRY

LTR-4RD-RFH-ML20L-DM1 / LTR-4RD-T-ML35K8VNR-S

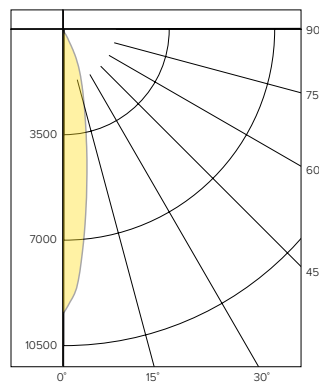
LUMINAIRE DATA

Test No.	R20.01331-02
Description	2000 lm, Very Narrow, 3500K, 80 CRI
Delivered Lumens	2032
Watts	22.4W
Efficacy	91
Mounting	Recessed
Spacing Criterion	0.3
Beam Angle (FWHM)	20

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	2011	99.0
0-60	2032	100.0
0-90	2032	100.0
0-180	2032	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	9388
5	7360
15	2780
25	1073
35	198
45	20
55	0
65	0
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	3489
55°	0
65°	0
75°	0
85°	0

*Candela/Square Meter

LTR-4RD-RFH

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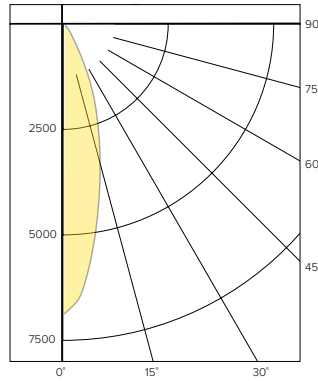
PHOTOMETRY CONTINUED

LTR-4RD-RFH-ML20L-DM1 / LTR-4RD-T-ML35K8NR-S

LUMINAIRE DATA

Test No.	R19.00532-C02
Description	2000 lm, Narrow, 3500K, 80 CRI
Delivered Lumens	2238
Watts	22.5W
Efficacy	99.3
Mounting	Recessed
Spacing Criterion	0.4
Beam Angle (FWHM)	29

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	6877
5	6035
15	3284
25	1313
35	260
45	26
55	3
65	1
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	4535
55°	645
65°	292
75°	0
85°	0

*Candela/Square Meter

ZONAL LUMEN SUMMARY

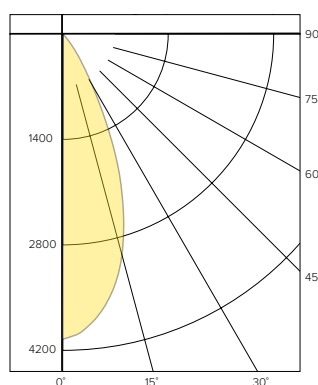
Zone	Lumens	% Luminaire
0-40	2208	98.6
0-60	2237	99.9
0-90	2238	100.0
0-180	2238	100.0

LTR-4RD-RFH-ML20L-DM1 / LTR-4RD-T-ML35K8MD-S

LUMINAIRE DATA

Test No.	R19.00533-C02
Description	2000 lm, Medium, 3500K, 80 CRI
Delivered Lumens	2152
Watts	22.5W
Efficacy	95.6
Mounting	Recessed
Spacing Criterion	0.7
Beam Angle (FWHM)	44

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	4053
5	3893
15	3037
25	1493
35	366
45	34
55	3
65	1
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	5931
55°	645
65°	292
75°	0
85°	0

*Candela/Square Meter

ZONAL LUMEN SUMMARY

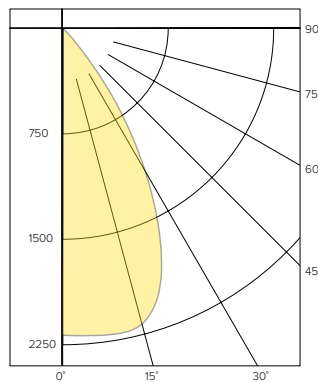
Zone	Lumens	% Luminaire
0-40	2113	98.2
0-60	2151	99.9
0-90	2152	100.0
0-180	2152	100.0

LTR-4RD-RFH-ML20L-DM1 / LTR-4RD-T-ML35K8WD-S

LUMINAIRE DATA

Test No.	R19.00534-C02
Description	2000 lm, Wide, 3500K, 80 CRI
Delivered Lumens	2059
Watts	22.5W
Efficacy	91.6
Mounting	Recessed
Spacing Criterion	0.9
Beam Angle (FWHM)	61

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	2201
5	2210
15	2051
25	1504
35	692
45	169
55	10
65	3
75	1
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	11338
55°	1075
65°	584
75°	477
85°	0

*Candela/Square Meter

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1983	96.3
0-60	2056	99.8
0-90	2059	100.0
0-180	2059	100.0

LTR-4RD-RFH

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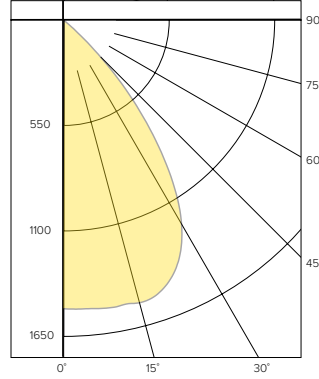
PHOTOMETRY CONTINUED

LTR-4RD-RFH-ML20L-DM1 / LTR-4RD-T-ML35K8XW-S

LUMINAIRE DATA

Test No.	R19.00535-C02
Description	2000 lm, Extra Wide, 3500K, 80 CRI
Delivered Lumens	2028
Watts	22.5W
Efficacy	90.2
Mounting	Recessed
Spacing Criterion	1.2
Beam Angle (FWHM)	78

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	1235
5	1252
15	1392
25	1454
35	1010
45	256
55	6
65	2
75	1
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	44656
55°	1290
65°	584
75°	231
85°	477

*Candela/Square Meter

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1794	88.5
0-60	2025	99.8
0-90	2028	100.0
0-180	2028	100.0

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.

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

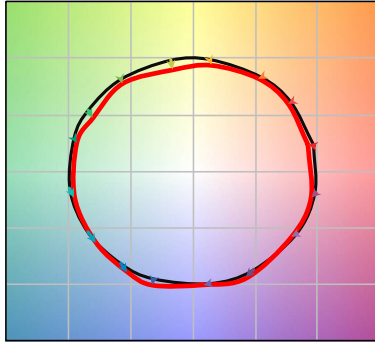
Multiply FINISH x COLOR to calculate other reflector finish and color combinations. Example: SoftGlow Pewter (VSPW) = 0.888 (VS) x 0.915 (PW) = 0.813

LTR-4RD-RFH

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TM-30 DATA

COLOR VECTOR GRAPHIC
3500K, 90 CRI



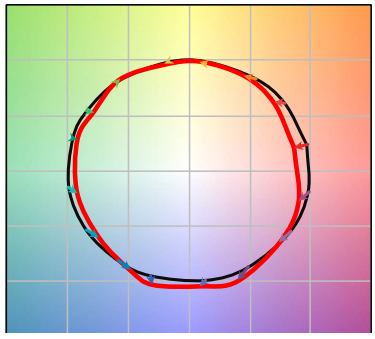
— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC
3500K, 90 CRI



TEST RESULTS - 3500K		
Value	80+ CRI	90+ CRI
R_t	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-4RD-RFH

LITEISTRY 4" ROUND RETROFIT DOWNLIGHT

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 DMI 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/prescolite.

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.