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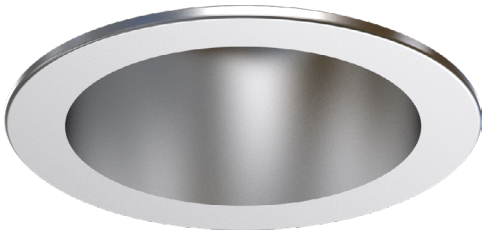
TYPE: PROJECT:

CATALOG #:

LFR-4RD

LITEFRAME 4" ROUND DOWNLIGHT

LITEFRAME 2.0



FEATURES

- 4" LED downlight delivering 1000–6000 lumens
- Direct Install from below ceiling for New Construction or Remodel applications
- Optional housing accessories available
- Five beam distributions
- 2700K–5000K, 90+ CRI (2 SDCM)
- Dimming protocols include 0–10V, Phase (Forward/Reverse), DALI, DMX, and Lutron EcoSystem
- NX Lighting Controls wired and wireless controls capability available

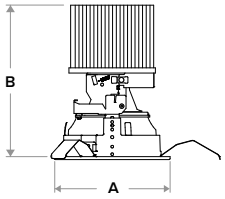
C US WET LOCATION With CL Lens Option IP65 TriGain® technology

SERVICE PROGRAMS

STOCK QS10

CONTROLS TECHNOLOGY

NX WIRELESS NX WIRED



Typical Dimensions and Weights			
Lumen Package	"A" Diameter Inches (mm)	"B" Height Inches (mm)	Weight Lbs (kg)
10L–30L	5.37 (136)	5.45 (138)	4 (1.8)
35L–60L	5.37 (136)	7.03 (179)	4.3 (1.9)

See DIMENSIONS section for complete details

SPECIFICATIONS

CONSTRUCTION

- Standard Fixture Module designed for Non-IC, Direct Install construction
- Optional Non-IC frame or IC housing available with pre-installed bar hangers
- Die cast aluminum fixture module support ring with spring steel clips for secure mounting to ceiling
- Driver J-Box can be installed and accessed from below the ceiling as direct install or easily snap on to optional housing frame/enclosure
- Light Engine connections use plenum rated (CMP) cable

OPTICS

- High purity spun aluminum reflector, self-flanged
- 57° visual cutoff to source image and 31° cutoff to source
- Specular or Semi-Specular anodized or White painted cone reflector finish/colors
- Painted flange options in White or Black
- Optional clear lens trim for wet location applications
- Wide Angle and Soft Focus lens filter/clip accessories available

ELECTRICAL

- Chip-on-board LED with 2 SDCM
- Multiple CCTs, TriGain Technology 90+ CRI
- Long LED life: L90 at >50,000 hours (TM-21)
- Universal voltage 120–277V driver, 347V optional
- UL Class 2, inherent short circuit and overload protection
- Flicker-free dimming options in a wide range of protocols from 1% to <0.1% performance
- 0–10V, Phase (Forward/Reverse), DALI, DMX, and Lutron EcoSystem options
- NX Lighting Controls provides options for standalone and networked functionality with wired or wireless connectivity for NX system deployments
- Integral and remote emergency battery options available
- Current's patented TriGain® phosphor delivers 90 CRI color quality at 80 CRI efficacy

INSTALLATION

- Accommodates ceiling thickness from 0.50" to 2.50"
- Fixture Module including driver fully accessible from above or below the ceiling
- 10L Fixture Modules are inherently protected IC without the use of IC housing enclosure. (IC housing is still recommended when using loose-fill or spray foam insulation types.)

CERTIFICATIONS

- cCSAus certified to UL 1598
- For ≥50L: Marked spacing required 36" fixture center to center; 18" fixture center to building member; 0.5" above fixture
- Suitable for wet locations, covered ceiling when used with CL lens trim; all other configurations, suitable for damp locations
- CL Lens option: IP65 rated (room side) when properly installed per installation instructions
- EM/EMR: Certified under UL 924 standard for emergency lighting and power equipment
- EM/EMR: Emergency battery packs are California Energy Commission (CEC) Title 20 Compliant
- Approved for 8 (4 in/4 out) No. 12AWG conductors rated for 90°C through wiring
- Suitable for -20°C to 25°C standard. Up to 40°C available on certain configurations, contact factory for details

WARRANTY

- 5 year warranty

KEY DATA	
Lumen Range	1000–6000
Wattage Range	8–54
Efficacy Range (LPW)	110–142
Reported Life (Hours)	L90 / >50,000
Input Current (mA)	65–446 (120V)

*Based on Specular, 35K, 90 CRI

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DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

LFR-4RD

LITEFRAME 4" ROUND DOWNLIGHT

Gray Shading = Service Program STOCK QS10 Limit of 150 Luminaries

ORDERING GUIDE

Example: LFR-4RD-M-10L35K9-WD-DM1 / LFR-4RD-T-S / LFR-4RD-H

CATALOG #

FIXTURE MODULE

LFR-4RD-M – [ ] [ ] 9 – [ ] – [ ] [ ] [ ] – [ ]

Ap/Shp/Funct	Lumen Output	CCT	CRI	Distribution	Driver Options	Control Options	Voltage	Module Options
LFR-4RD-M 4" Round Downlight Fixture Module for Direct Install *(Non-IC frame or IC housing available under Housing Options below)*	**10L** 1000 **15L** 1500 **20L** 2000 **25L** 2500 **30L** 3000 **35L** 3500 **40L** 4000 **50L** 5000 [1] **60L** 6000 [1]	**27K** 2700K **30K** 3000K **35K** 3500K **40K** 4000K **50K** 5000K	**9** 90+	**VNR** Very Narrow (17°/0.3 SC) **NR** Narrow (26°/0.4 SC) **MD** Medium (34°/0.6 SC) **WD** Wide (49°/0.7 SC) **XW** Extra Wide (65°/1.0 SC) [12]	**DM1** 0–10V Dimming to 1% **DM01** 0–10V Dimming to < 1% [2] **PDM** Phase (Forward/Reverse) Dimming to 1% [2] **DMX** DMX with RDM dimming to < 0.1% [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, 6] **EM** 10W Emergency Battery Pack (CEC Title 20 Compliant) with integral test switch and indicator light [6] **EMR** 10W Emergency Battery Pack (CEC Title 20 Compliant) with remote test switch and indicator light [6] **DTS** Device Transfer Switch with Dimming Bypass [6, 7]

TRIM (Ships separately)

LFR-4RD-T – [ ] – [ ] [ ] [ ] [ ]

Aperture/Shape/Function	Distribution	Reflector Finish/Color	Flange Color Options	Lens Options	Lower Trim Options
LFR-4RD-T 4" Round Downlight Trim Assembly	*Standard NR, MD, WD, XW* **VNR** Very Narrow	**S** Specular [12] **SS** Semi-Specular **WC** Painted White Cone and Flange	*Standard matches reflector color* **WT** White Flange [8] **BT** Black Flange	*Standard no lens* **CL** Clear Lens (Wet listed) [9]	**EM** Pre-punched reflector for EM integral test switch and indicator [9] **FM** Flush Mount Mud-In Ring [13]

HOUSING OPTIONS (Ships separately)

Aperture/Shape/Function	
☐ **LFR-4RD-H**	4" Housing Frame, New Construction, Non-IC
☐ **LFR-4RD-H-IC**	4" Housing Enclosure, New Construction, IC Rated [10, 11]

Accessories	
☐ **SFL4**	Soft Focus Lens and Clip, 4" Round
☐ **WAL4**	Wide Angle 80° Lens and Clip, 4" Round
☐ **LiteGear**	LiteGear® Inverter, 125VA–250VA
☐ **LPS Series**	LightPower Micro-Inverter, 20VA–55VA
☐ **LF-FMR4-R**	Flush Mount Mud-in Ring, 4" [13]
☐ **LF-MOR4-R-WH**	Metal Oversized Ring, 4" Round, White (8.3" outside diameter)
☐ **LFR-SCA4-__**	Sloped Ceiling Adapter, 4" White [14]

Notes:

1 50L and 60L require marked spacing. See line art for more details.
2 DM01, PDM, DMX, DALI available up to 50L. EDM available 15L–40L.
3 NX requires DM1 driver option.
4 347V requires DM1 driver option; available 10L–40L; not available with Controls, DTS, EM, EMR.
5 CP not available with PDM, DMX, or Controls.
6 Module options not available in combination.
7 DTS available with DM1, DM01, or DALI.
8 WT not needed for WC.
9 CL lens and EM trim options not available in combination.
10 IC available up to 35L; 10L Fixture Modules are inherently protected IC without the use of IC housing enclosure. (IC housing is still recommended when using loose-fill or spray foam insulation types.)
11 IC Housing not for use in combination with Controls or with Module Options CP, EM, EMR, DTS.
12 XW distribution is not available for Specular (S) reflector finish.
13 Flush Mount Flange (FM) requires FMR accessory (sold separately).
14 Specify slope angle 5°–35° in 5° increments. Not available with EM or FM options.

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LFR-4RD

LITEFRAME 4" ROUND DOWNLIGHT

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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LFR-4RD

LITEFRAME 4" ROUND DOWNLIGHT

PERFORMANCE DATA TABLE

Performance data shown is 3500K 90+ CRI with Specular reflector except Extra Wide distribution which is Semi-Specular.

Lumen Package	Nominal Lumens	Distribution	Delivered Lumens	Watts	LPW
10L	1000	Very Narrow	1147	7.7	149
		Narrow	1086	7.7	141
		Medium	1125	7.7	146
		Wide	1054	7.7	139
		Extra Wide	951	7.7	136
15L	1500	Very Narrow	1575	11.8	133
		Narrow	1490	11.8	126
		Medium	1538	11.8	130
		Wide	1446	11.8	123
		Extra Wide	1303	11.8	121
20L	2000	Very Narrow	2178	14.8	147
		Narrow	2061	14.8	139
		Medium	2128	14.8	144
		Wide	2001	14.8	135
		Extra Wide	1803	14.8	122
25L	2500	Very Narrow	2836	20.4	139
		Narrow	2683	20 .4	132
		Medium	2770	20.4	136
		Wide	2605	20.4	128
		Extra Wide	2347	20.4	127
30L	3000	Very Narrow	3423	25.9	132
		Narrow	3239	25.9	125
		Medium	3343	25.9	129
		Wide	3144	25.9	121
		Extra Wide	2833	25.9	120
35L	3500	Very Narrow	4109	29.9	137
		Narrow	3888	29.9	130
		Medium	4013	29.9	134
		Wide	3774	29.9	126
		Extra Wide	3400	29.9	125
40L	4000	Very Narrow	4617	32.8	141
		Narrow	4368	32.8	133
		Medium	4509	32.8	137
		Wide	4241	32.8	129
		Extra Wide	3820	32.8	128
50L	5000	Very Narrow	5556	42.6	130
		Narrow	5257	42.6	123
		Medium	5427	42.6	127
		Wide	5104	42.6	119
		Extra Wide	4598	42.6	119
60L	6000	Very Narrow	6638	53.1	125
		Narrow	6281	53.1	118
		Medium	6484	53.1	122
		Wide	6098	53.1	115
		Extra Wide	6043	53.1	114

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DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

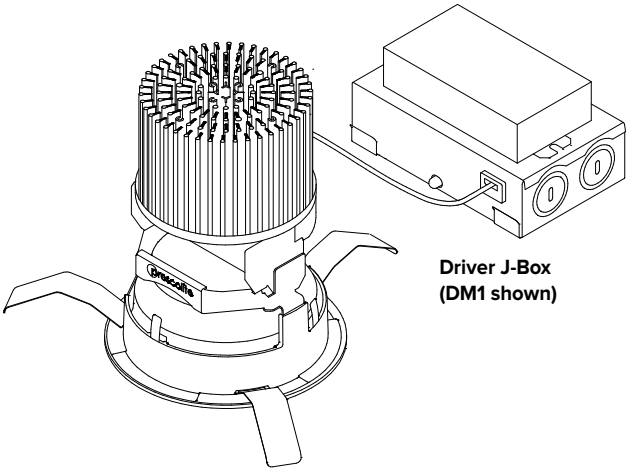
LFR-4RD

LITEFRAME 4" ROUND DOWNLIGHT

DIMENSIONS

LFR-4RD-M

Fixture Module consists of Light Engine and Driver J-Box assemblies.
Overall dimensions for each are dependent upon configuration selected.
See the following pages for details.



Driver J-Box (DM1 shown)

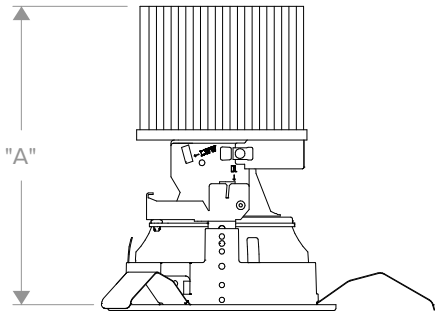
Light Engine with Trim assembly installed

DIMENSIONAL DATA		
APERTURE		Ø4.00" (101.6mm)
OVERALL		Ø5.37" (136.5mm)
FLANGE WIDTH	Standard	0.69" (17.5mm)
	Flush Mount	0.19" (4.8mm)
FLANGE TO FLANGE	Standard	Ø5.37" (136.6mm)
	Flush Mount	Ø4.38" (111.2mm)
CEILING CUTOUT	Standard	Ø4.75" (120.7mm)
	Flush Mount	Ø4.88" (123.9mm)
CEILING THICKNESS		0.50"–2.50" (12.7–63.5mm)

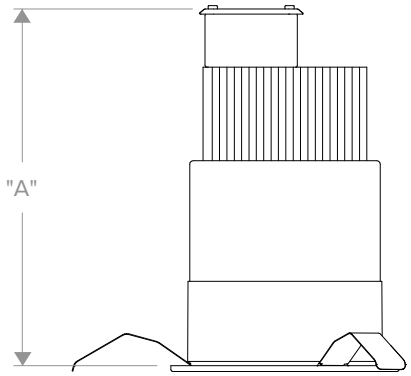
LFR-4RD LIGHT ENGINE

OVERALL LIGHT ENGINE HEIGHT "A" *				
LUMEN PACKAGE	FIXTURE MODULE	BEAM DISTRIBUTION		
		VNR	NR / MD / WD	XW
10L–30L	STANDARD	6.24" (158.5mm)	5.45" (138.5mm)	5.1" (129.5mm)
	CP	9.22" (324.1mm)	8.43" (214.0mm)	8.08" (205.1mm)
35L–60L	STANDARD	7.82" (198.6mm)	7.03" (178.6mm)	6.68" (169.7mm)
	CP	9.22" (234.1mm)	8.43" (214.0mm)	8.08" (205.1mm)

* Note: Add ½" minimum plenum clearance above overall Light Engine Height.
** For ≥50L: Marked spacing required 36" fixture center to center; 18" fixture center to building member; 0.5" above fixture.
*** Non-IC rating requires 3" from insulation and combustible materials.



Side View Standard



Side View CP – Chicago Plenum

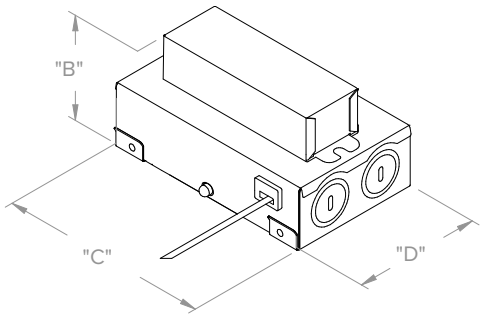
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LFR-4RD

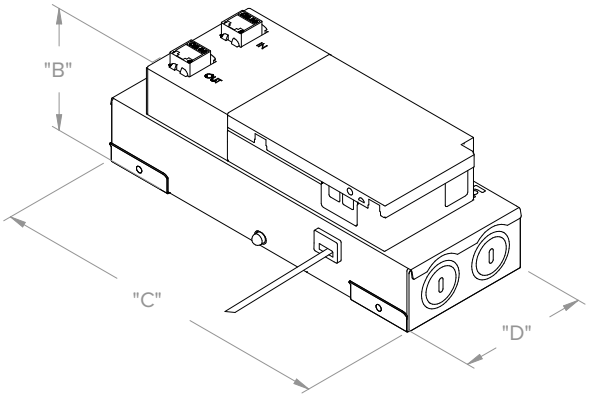
LITEFRAME 4" ROUND DOWNLIGHT

DIMENSIONS (CONTINUED)

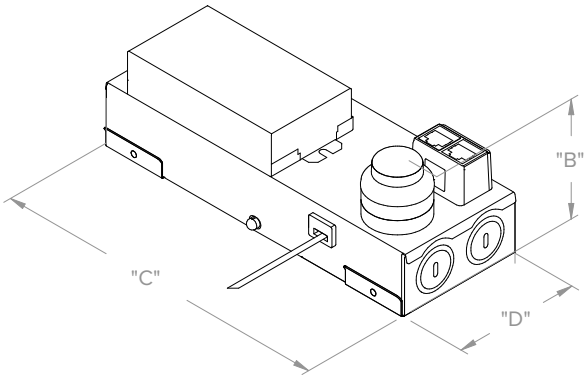
DRIVER J-BOX



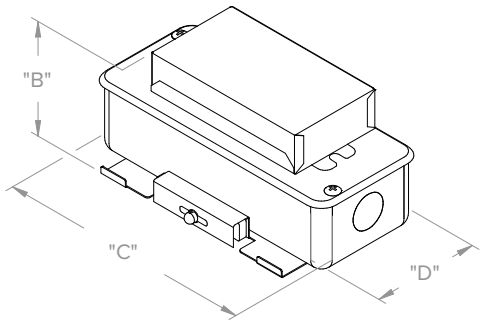
DM1 / DM01 / PDM / DALI



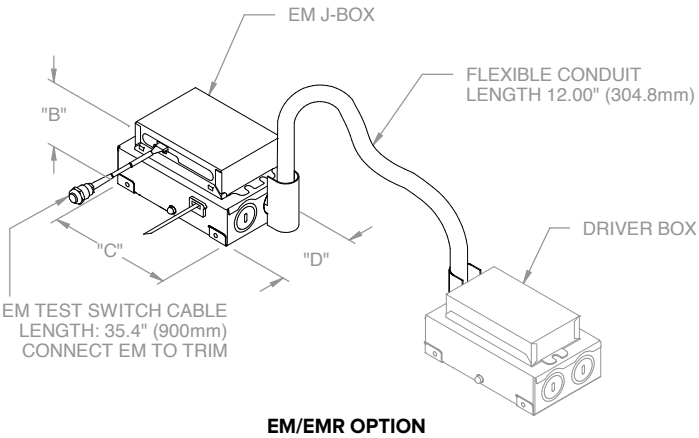
DMX



NX CONTROLS OPTION



CP



EM/EMR OPTION

EM/EMR Driver J-Box Conduit (provided) connects to Driver J-Box
(see Driver J-Box for additional details)

OVERALL DRIVER J-BOX DIMENSIONS (ALL LUMEN OUTPUTS)				
DRIVER/ CONTROLS OPTIONS	"B" (HEIGHT)	"C" (LENGTH)	"D" (WIDTH)	MINIMUM J-BOX PLENUM CLEARANCE
DM1 / DM01 / PDM / DALI	2.67" (67.8mm)	5.34" (135.6mm)	3.23" (82.0mm)	3.50" (88.9mm)
DMX	3.07" (78.0mm)	8.68" (220.5mm)	3.23" (82.0mm)	5.00" (127.0mm)
NX	3.02" (76.7mm)	8.68" (220.5mm)	3.23" (82.0mm)	6.00" (152.4mm)
EM/EMR	2.73" (69.3mm)	5.34" (135.6mm)	3.23" (82.0mm)	4.00" (101.6mm)
CP	1.89" (73.4mm)	6.50" (165.1mm)	2.72" (69.1mm)	5.00" (127mm)

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LFR-4RD

LITEFRAME 4" ROUND DOWNLIGHT

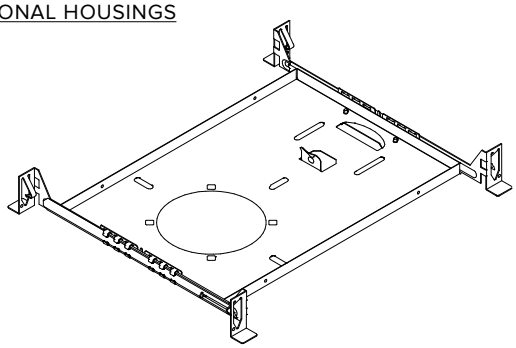
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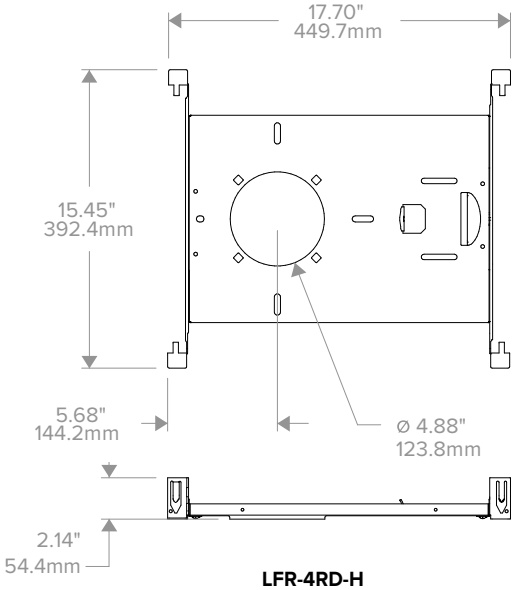
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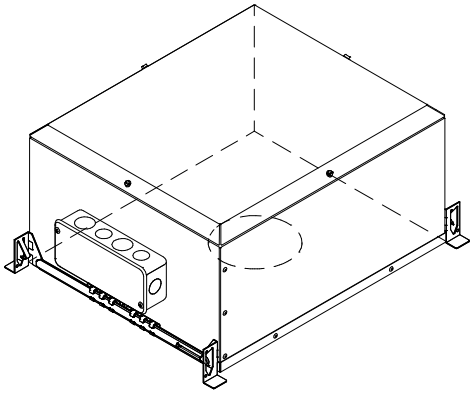
DIMENSIONS (CONTINUED)

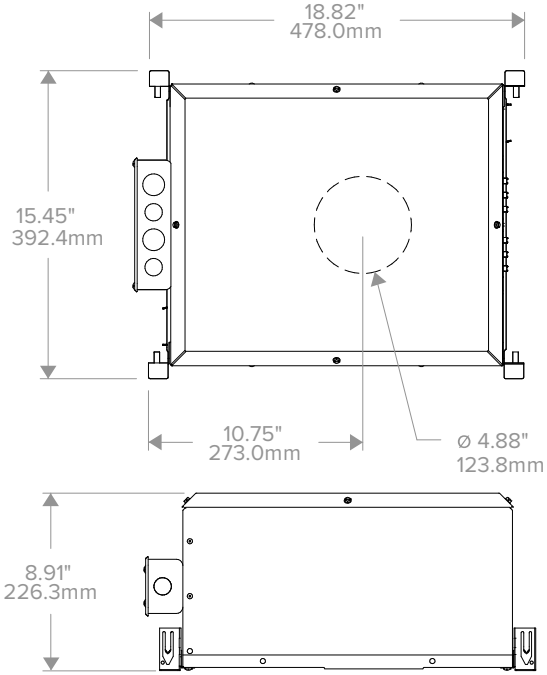
OPTIONAL HOUSINGS



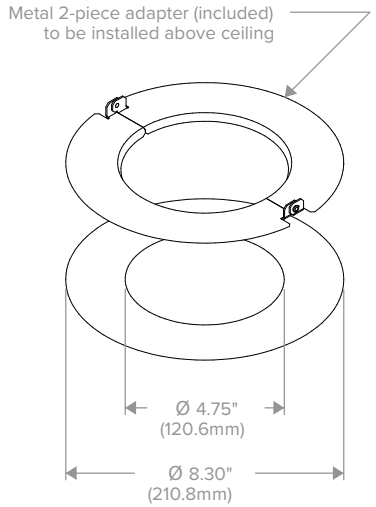


LFR-4RD-H
NON-IC HOUSING FRAME

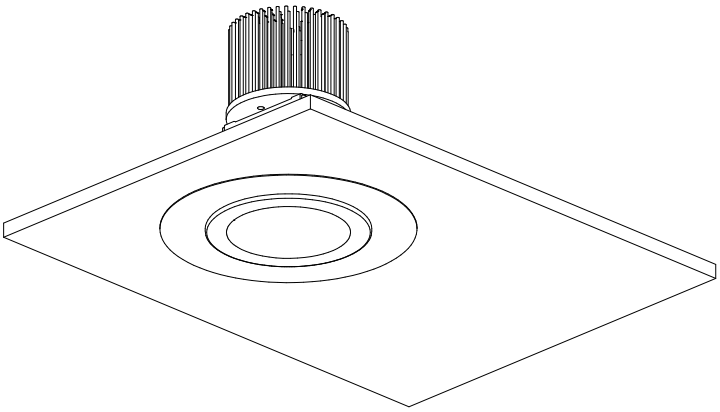




LFR-4RD-H-IC
IC HOUSING
Not for use with CP Shroud



ROUND LF-MOR4-R
METAL OVERSIZED RING
(See LF-MOR Installation Instruction for more details)



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LFR-4RD

LITEFRAME 4" ROUND DOWNLIGHT

PHOTOMETRY

LFR-4RD-M-20L35K9VNR-DM1 / LFR-4RD-T-VNR-S

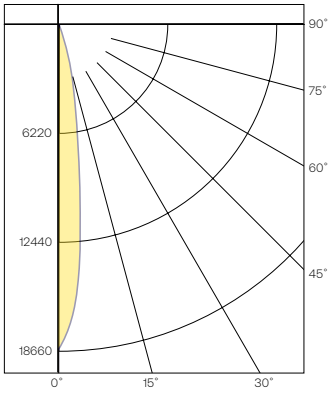
LUMINAIRE DATA

Test No.	**25.00686-R07**
Description	**2000 lm, Very Narrow, 3500K, 90 CRI**
Delivered Lumens	**2177**
Watts	**14.8W**
Efficacy	**147**
Mounting	**Recessed**
Spacing Criterion	**0.3**
Beam Angle (FWHM)	**17**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0–40	2142	98.4
0–60	2172	99.8
0–90	2177	100.0
0–180	2177	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	18630
5	13913
15	2658
25	359
35	77
45	26
55	9
65	3
75	1
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	4531
55°	1934
65°	875
75°	476
85°	0

*Candela/Square Meter

LFR-4RD-M-20L35K9NR-DM1 / LFR-4RD-T-S

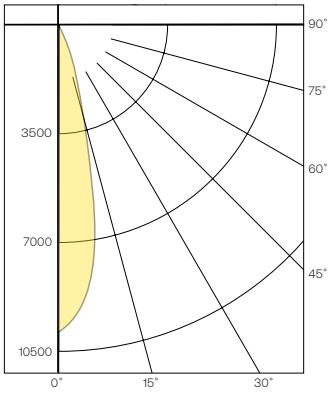
LUMINAIRE DATA

Test No.	**25.00687**
Description	**2000 lm, Narrow, 3500K, 90 CRI**
Delivered Lumens	**2061**
Watts	**14.8W**
Efficacy	**139**
Mounting	**Recessed**
Spacing Criterion	**0.4**
Beam Angle (FWHM)	**24**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0–40	2058	99.9
0–60	2061	100.0
0–90	2061	100.0
0–180	2061	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	9861
5	8999
15	3112
25	858
35	8
45	2
55	1
65	0
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	349
55°	215
65°	0
75°	0
85°	0

*Candela/Square Meter

LFR-4RD-M-20L35K9MD-DM1 / LFR-4RD-T-S

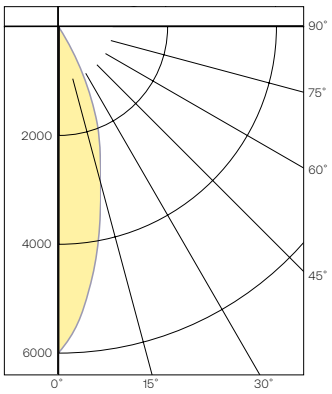
LUMINAIRE DATA

Test No.	**24.01004-R07**
Description	**2000 lm, Medium, 3500K, 90 CRI**
Delivered Lumens	**2128**
Watts	**14.8W**
Efficacy	**144**
Mounting	**Recessed**
Spacing Criterion	**0.5**
Beam Angle (FWHM)	**34**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0–40	2109	99.1
0–60	2125	99.9
0–90	2128	100.0
0–180	2128	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	5953
5	5241
15	3054
25	1593
35	74
45	14
55	4
65	2
75	1
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	2440
55°	859
65°	583
75°	476
85°	0

*Candela/Square Meter

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LFR-4RD

LITEFRAME 4" ROUND DOWNLIGHT

PHOTOMETRY (CONTINUED)

LFR-4RD-M-20L35K9WD-DM1 / LFR-4RD-T-S

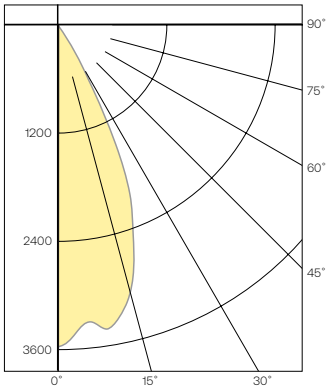
LUMINAIRE DATA

Test No.	**26.00600**
Description	**2000 lm, Wide, 3500K, 90 CRI**
Delivered Lumens	**2001**
Watts	**14.9W**
Efficacy	**135**
Mounting	**Recessed**
Spacing Criterion	**0.7**
Beam Angle (FWHM)	**49**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0–40	1995	99.7
0–60	2000	100.0
0–90	2001	100.0
0–180	2001	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	3564
5	3321
15	3084
25	1672
35	104
45	3
55	1
65	1
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	523
55°	215
65°	292
75°	0
85°	0

*Candela/Square Meter

LFR-4RD-M-20L35K9XW-DM1 / LFR-4RD-T-SS

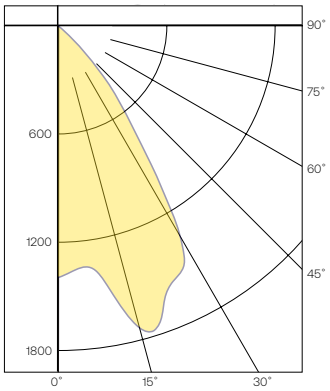
LUMINAIRE DATA

Test No.	**26.00723-R07**
Description	**2000 lm, Extra Wide, 3500K, 90 CRI**
Delivered Lumens	**1803**
Watts	**14.8W**
Efficacy	**122**
Mounting	**Recessed**
Spacing Criterion	**1.2**
Beam Angle (FWHM)	**65**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0–40	1712	95.0
0–60	1800	99.9
0–90	1803	100.0
0–180	1803	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	1343
5	1282
15	1697
25	1472
35	688
45	44
55	2
65	1
75	1
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	7668
55°	430
65°	292
75°	476
85°	0

*Candela/Square Meter

LUMEN MULTIPLIER

Option	27K9	30K9	35K9	40K9	50K9
Multiplier	0.94	0.98	1.00	1.01	1.02

Photometrics are published at a nominal 3500 Kelvin, 90+ 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)	White Cone (WC)
Multiplier	1	0.909	0.984

LENS OPTION / LENS FILTER ACCESSORY MULTIPLIER (Based on Clear Specular)

Option	CL (Clear Lens)	SFL4 (Soft Focus Accessory)	WAL4 (Wide Angle Accessory)
Multiplier	0.95	0.96	0.83

Multiply lumen/lens multipliers to calculate applicable combinations. Example: 27K9 with Clear Lens option (CL) = 0.93 x 0.95 = **0.88**

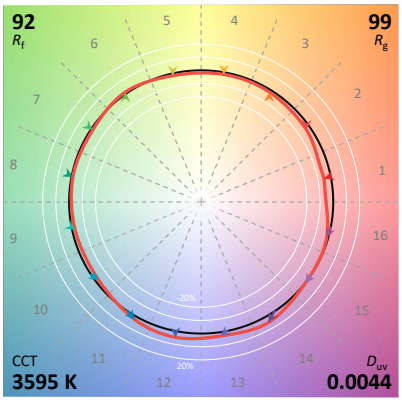
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LFR-4RD

LITEFRAME 4" ROUND DOWNLIGHT

TM-30 DATA

COLOR VECTOR GRAPHIC
3500K, 90 CRI



TEST RESULTS - 3500K	
Value	90+ CRI
R_f	92
R_g	99
CCT (K)	3595
D_{UV}	0.0044
x	0.4045
y	0.4004
CIE R_a	93
CIE R_9	61

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/prescolite.

DMX

See instruction sheet on currentlighting.com/prescolite for connection & installation information.

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.

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, 10W x 120 LPW = 1200 lumens in emergency mode.

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