prescolite

LFCR-6RD-R

LITEFRAME COMMERCIAL 6" ROUND
REMODEL DOWNLIGHT

DATE: | LOCATION:

TYPE: | PROJECT:

CATALOG #:

LITEFRAME Commercial



FEATURES

- 6" LED downlight delivering 500–5000 lumens
- Narrow, Medium or Wide Beam Distribution
- 2700K–5000K, 90+ CRI (2 SDCM)
- Dimming protocols include 0–10V, Phase, DMX, DALI
- NX Lighting Controls wired and wireless controls capability available
- TriGain® technology is standard and delivers 90 CRI (50+ R9) color rendition without efficacy compromise

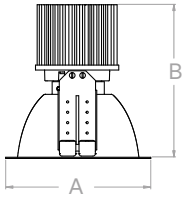
C US WET LOCATION TriGain® technology

SERVICE PROGRAMS

tradeSELECT QS10

CONTROLS TECHNOLOGY

NX WIRELESS NX WIRED



Typical Dimensions and Weights				
Lumen Package	Aperture Inches (mm)	"A" Diameter Inches (mm)	"B" Height Inches (mm)	Weight Lbs (kg)
05L–15L	6.0 (152.4)	7.0 (177.8)	4.4 (111.8)	2.3 (0.9)
20L–30L			5.8 (147.3)	2.3 (1.0)
35L–50L			7.4 (188.0)	2.5 (1.1)

See DIMENSIONS section for complete details

SPECIFICATIONS

CONSTRUCTION

- Fixture Module designed for Non-IC, direct install construction
- Die cast aluminum fixture module with spring steel clips for secure mounting to ceiling
- Junction box allows for both installation and service from below ceiling
- Light engine connections use plenum rated (CMP) cable
- Quick disconnects standard for ease of installation

OPTICS

- High purity spun aluminum reflector, self-flanged
- 55° visual cutoff to source image and 55° cutoff to source
- Specular, semi-specular, or Softglow (diffuse) anodized finishes. White and black painted cone reflector colors also available
- Painted flange options in white or black

ELECTRICAL

- Chip-on-board LED with 2 SDCM
- TriGain® is a patented narrow-band potassium fluorosilicate (PFS) phosphor technology which provides improved color rendition without compromise to LED efficacy
- 2700K, 3000K, 3500K, 4000K, 5000K CCTs, 90+ CRI

ELECTRICAL (CONTINUED)

- Long LED life: L80 / >66,000 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) DMX, DALI, and Lutron 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

INSTALLATION

- Accommodates ceiling thickness from 0.50" to 3.00
- Fixture module including driver fully accessible from above or below the ceiling

CERTIFICATIONS

- cCSAus certified to UL 1598
- For 45L–50L: Marked spacing required (24" fixture center to center; 24" fixture center to building member; 0.5" above fixture)
- Downlight suitable for wet locations, covered ceiling. Wall wash suitable for damp locations

CERTIFICATIONS (CONTINUED)

- Shower trim is 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, High Ambient (HA) option available, up to 40°C

WARRANTY

- 5 year warranty

KEY DATA	
Lumen Range	500–5000
Wattage Range	5.9–52.1
Efficacy Range (LPW)	97–132
Reported Life (Hours)	L80 / >66,000

*Based on Specular, 35K, 90 CRI

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LFCR-6RD-R

LITEFRAME COMMERCIAL 6" ROUND REMODEL DOWNLIGHT

Gray Shading = Service Program

tradeSELECT QS10 Limit of 150 Luminaries

ORDERING GUIDE

Example: LFCR-6D-MR-10L35K9-WD-DM1 / LFCR-6RD-T-WD-S

CATALOG #

FIXTURE MODULE (Ships separately)

LFCR-6D-MR – [ ] [ ] 9 – [ ] – [ ] [ ] – [ ]

Ap/Shp/Funct	Lumen Output	CCT	CRI	Distribution	Driver Options	Control Options	Module Options [2]
LFCR-6D-MR 6" Downlight Fixture Module, Remodel	**05L** 500 **10L** 1000 **15L** 1500 **20L** 2000 **25L** 2500 **30L** 3000 **35L** 3500 **40L** 4000 **45L** 4500 [1] **50L** 5000 [1]	**27K** 2700K **30K** 3000K **35K** 3500K **40K** 4000K **50K** 5000K	**9** 90+	**NR** Narrow (35°/0.5 SC) [16] **MD** Medium (50°/0.7 SC) [16] **WD** Wide (65°/1.0 SC)	**120–277V Options** **DM1** 0–10V Dimming to 1% **DM01** 0–10V Dimming to < 1% [3] **PDM** Phase (Forward/Reverse) Dimming to 1% [4] **DALI** DALI Dimming to 1% [3] **DM00** Lutron Athena Compatible Driver for static white CCT **DMX1** DMX with RDM dimming to 1% **347V Option** **DM34** 0–10V Dimming to 1% (347V input) [5, 6]	**NX Lighting Controls** Networked Wireless **NXW** NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor [7] Networked Wired **NXE** NX Wired Dual RJ45 SmartPORTS, without Sensor [7] **Other Lighting Controls** Networked Wireless **AWNR** Lutron Athena Enabled [8]	**EM** Emergency Battery Pack with Integral Test Switch **EMR** Emergency Battery Pack with Remote Test Switch **DTS** Device Transfer Switch with Dimming Bypass [9, 10] **F** Fuse **HA** High Ambient Option (40°C) [11]

TRIM (Ships separately)

LFCR-6RD-T – [ ] – [ ] [ ]

Aperture/Shape/Function	Style [15]	Trim Type	Reflector Finish	Flange Color Options [14]	Trim Options
LFCR-6RD-T 6" Round Downlight Trim Assembly	*Do not specify trim style for standard trim* **SH** Non-Conductive Shower Trim with Acrylic, Micro-prism Lens	**WD** Standard Downlight Reflector (used with NR, MD, and WD distributions from fixture module) **WW** Wall Wash	*Do not specify reflector finish for SH Trim Style* **S** Specular **SS** Semi-Specular **VS** Softglow **WC** Painted White Cone **BC** Painted Black Cone	*Standard matches reflector color* **WT** White Flange **BT** Black Flange	**EM** Pre-punched reflector for EM integral test switch and indicator **AM** Antimicrobial Coating [12, 13]

Accessories

☐ **LF-MOR6-R-WH**	Metal Oversized Ring, 6" Round, White (10.12" outside diameter)
☐ **LF-MOR6-R-BL**	Metal Oversized Ring, 6" Round, Black (10.12" outside diameter)
☐ **LFR-SCA6-__**	Sloped Ceiling Adapter, 6" White *Specify slope angle 5°–35° in 5° increments. Not available with EM options*

Notes:

1. Lumen outputs 45L–50L require marked spacing with dims (24" x 24" x ½" above fixture)
2. Module options EM/EMR/DTS not available in combination
3. DM01 & DALI available 05L–45L
4. PDM available 10L–45L
5. DM34 available 05L–35L
6. DM34 not available with EM, EMR, DTS, or F fixture module options
7. NXW/NXE control options require DM1 or DM34 driver option
8. AWNR control option requires DM00 driver option (DM00 only available in combination with AWNR)
9. Consult factory for DTS with control options
10. DTS requires driver options DM1, DM01 or DALI
11. HA option available 05L–25L
12. AM available with WC or Specular Clear (S or SWT), also available with WT for SH trim
13. AM not available with WW or EM
14. WT not available for WC, BT not available for BC
15. SH not available with WW or EM, requires WT or BT- reflector finish not applicable, available with lumen output 05L–30L
16. NR and MD available 05L–35L

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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]		NXFSP

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

OTHER 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		
Other	AWNR	The Athena wireless node is a radio frequency (RF) device that enables simple, digital control of individual light fixtures in an Athena control system.[1]	✓	✓	-	-	-	✓	✓	-		A-WN-D01-RF-WH

1 Lutron Athena Hub required to enable Networking, Grouping and Scheduling.

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LITEFRAME COMMERCIAL 6" ROUND
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DATE: LOCATION:

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CATALOG #:

PERFORMANCE DATA TABLE

Performance Data shown is 3500K 90+ CRI with Specular reflector.

Lumen Package	Nominal Lumens	Distribution	Delivered Lumens	Watts	LPW
05L	500	Narrow	686	5.9	116
		Medium	643	5.9	109
		Wide	576	5.9	98
		Wall Wash	574	5.9	97
10L	1000	Narrow	1320	11.2	118
		Medium	1237	11.2	110
		Wide	1108	11.2	99
		Wall Wash	1104	11.2	99
15L	1500	Narrow	1905	15.2	125
		Medium	1786	15.2	118
		Wide	1599	15.2	105
		Wall Wash	1593	15.2	105
20L	2000	Narrow	2528	21.9	116
		Medium	2370	21.9	108
		Wide	2122	21.8	97
		Wall Wash	2114	21.8	97
25L	2500	Narrow	3174	24.1	132
		Medium	2975	24.1	123
		Wide	2664	24.1	111
		Wall Wash	2654	24.1	110
30L	3000	Narrow	3805	29.8	128
		Medium	3567	29.8	120
		Wide	3194	29.8	107
		Wall Wash	3182	29.8	107
35L	3500	Wide	3753	36.8	102
		Wall Wash	3738	36.8	102
40L	4000	Wide	4228	41.6	102
		Wall Wash	4212	41.6	101
45L	4500	Wide	4764	45.3	105
		Wall Wash	4746	45.3	105
50L	5000	Wide	5284	52.1	101
		Wall Wash	5264	52.1	101

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LFCR-6RD-R

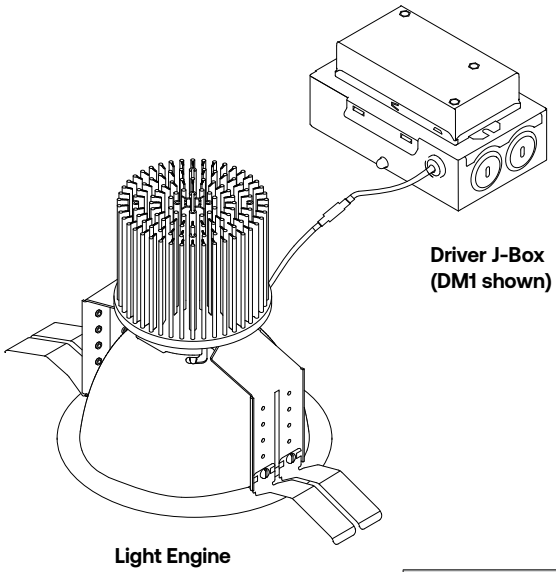
LITEFRAME COMMERCIAL 6" ROUND
REMODEL DOWNLIGHT

DATE:	LOCATION:
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CATALOG #:	

DIMENSIONS

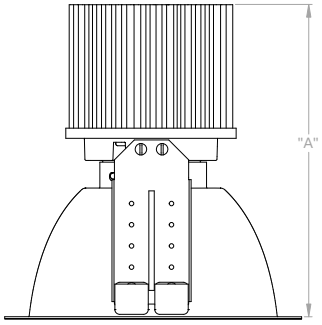
LFCR-6D-MR

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



Side View Standard

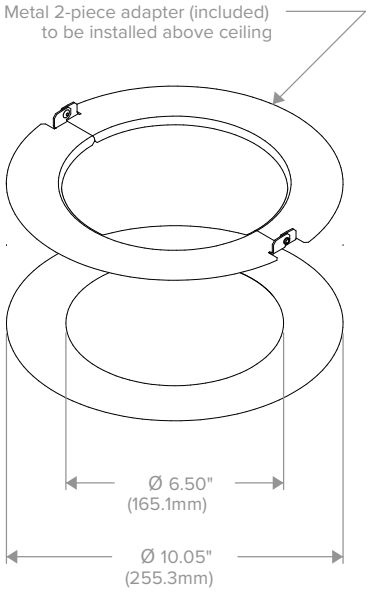
DIMENSIONAL DATA	
Aperture	Ø5.75" (146.1mm)
Overall Width (Flange To Flange)	Ø7.00" (177.8)
Flange Width	0.58" (15mm)
Ceiling Cutout	Ø6.63" (168mm)
Ceiling Thickness	0.50"–3.00" (13–76mm)

OVERALL LIGHT ENGINE HEIGHT * (All Lumen Outputs)	
Lumen Package	**Height ("A")**
05L–15L	4.40" (111.8mm)
20L–30L	5.80" (147.3mm)
35L–50L	7.40" (188.0mm)

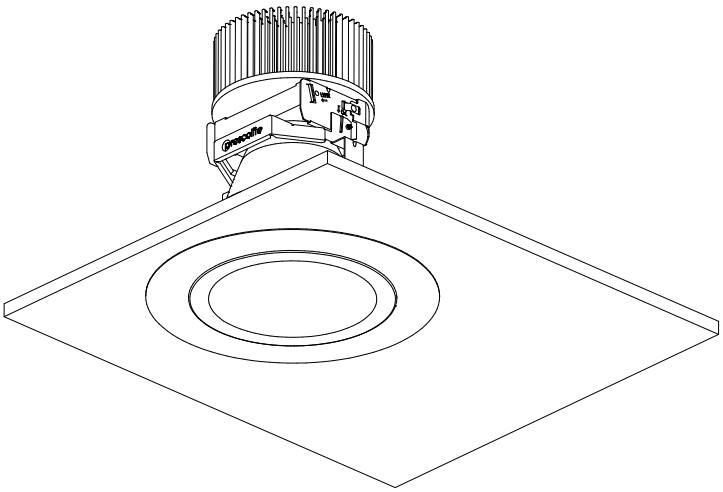
* Note: Add ½" minimum plenum clearance above overall Light Engine Height.

** For 45L–50L: Marked spacing required 24" fixture center to center; 24" fixture center to building member; 0.5" above fixture.

*** Non-IC rating requires 3" from insulation and combustible materials.



ROUND LF-MOR6-R
METAL OVERSIZED RING
(See LF-MOR Installation Instruction for more details)



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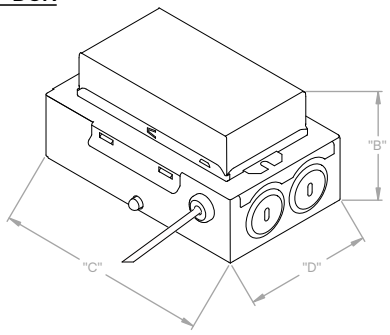
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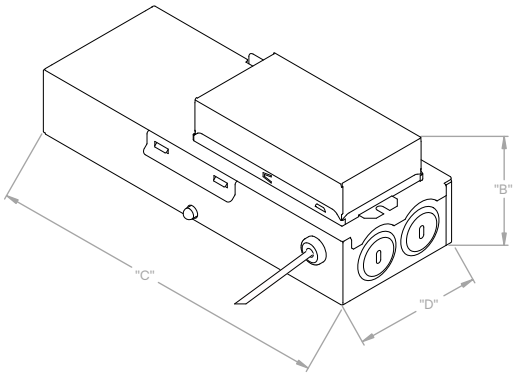
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DIMENSIONS (CONTINUED)

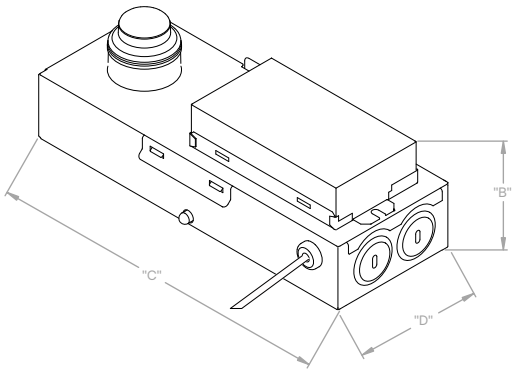
DRIVER J-BOX



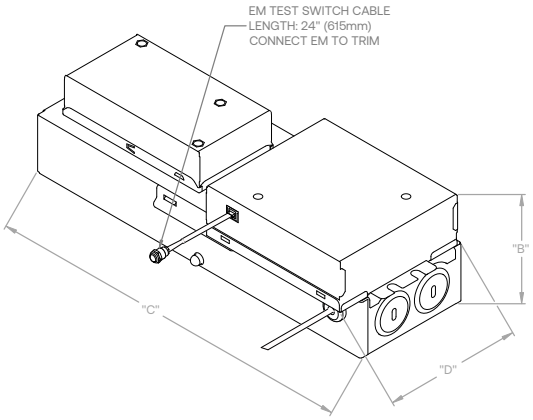
DM1 / DM01 / DALI / PDM / DM34



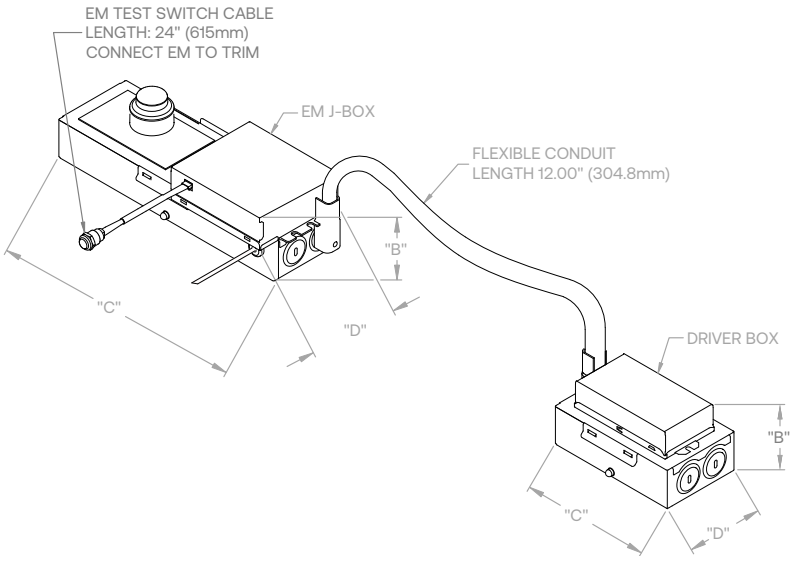
DMX1 / DTS



NX* / AWNR CONTROLS OPTION



DM1 / DMO1 / DALI / PDM / DMX1 + EM/EMR



NX* / AWNR CONTROLS + EM/EMR OPTIONS

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 / DALI / PDM		2.7" (68.6mm)	5.5" (139.7mm)	3.3" (83.8mm)	3.5" (88.9mm)
DMX1 / DTS		2.7" (68.6mm)	8.9" (226.1mm)	3.3" (83.8mm)	5.25" (133.4mm)
NX* / AWNR		2.7" (68.6mm)	8.9" (226.1mm)	3.3" (83.8mm)	5.25" (133.4mm)
EM/EMR		3.0" (76.2mm)	10.5" (266.7mm)	3.7" (94mm)	7.5" (32.9mm)
EM/EMR + NX* / AWNR	EM J-Box	3.0" (76.2mm)	10.5" (266.7mm)	3.7" (94mm)	7.5" (32.9mm)
	Driver Box	2.7" (68.6mm)	5.5" (139.7mm)	3.3" (83.8mm)	

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LITEFRAME COMMERCIAL 6" ROUND
REMODEL DOWNLIGHT

PHOTOMETRY

LFCR-6D-MR-20L35K9-NR-DM1 / LFCR-6RD-T-WD-S

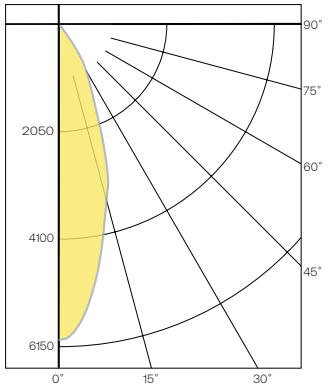
LUMINAIRE DATA

Test No.	**P26.00760**
Description	**2000 lm, Narrow, 3500K, 90 CRI**
Delivered Lumens	**2528**
Watts	**21.9W**
Efficacy	**116**
Mounting	**Recessed**
Spacing Criterion	**0.6**
Beam Angle (FWHM)	**36**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0–40	2497	98.7
0–60	2528	100.0
0–90	2528	100.0
0–180	2528	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	6004
5	5524
15	3454
25	1516
35	511
45	32
55	1
65	0
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	2701
55°	104
65°	0
75°	0
85°	0

*Candela/Square Meter

LFCR-6D-MR-20L35K9-MD-DM1 / LFCR-6RD-T-WD-S

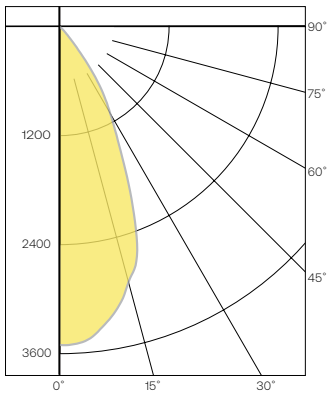
LUMINAIRE DATA

Test No.	**P26.00763**
Description	**2000 lm, Medium, 3500K, 90 CRI**
Delivered Lumens	**2370**
Watts	**21.9W**
Efficacy	**108**
Mounting	**Recessed**
Spacing Criterion	**0.8**
Beam Angle (FWHM)	**49**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0–40	2301	97.1
0–60	2369	100.0
0–90	2370	100.0
0–180	2370	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	3495
5	3450
15	2898
25	1649
35	668
45	67
55	1
65	1
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	5656
55°	104
65°	141
75°	0
85°	0

*Candela/Square Meter

LFCR-6D-MR-20L35K9-WD-DM1 / LFCR-6RD-T-WD-S

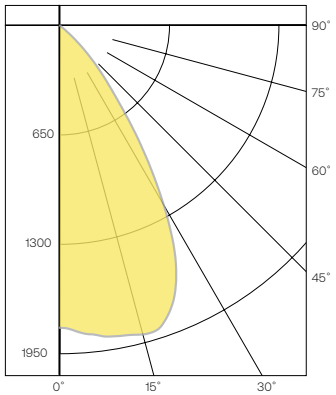
LUMINAIRE DATA

Test No.	**P26.00014**
Description	**2000 lm, Wide, 3500K, 90 CRI**
Delivered Lumens	**2122**
Watts	**21.8W**
Efficacy	**95**
Mounting	**Recessed**
Spacing Criterion	**1.0**
Beam Angle (FWHM)	**66**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0–40	1445	91.4
0–60	12121	99.9
0–90	2122	100.0
0–180	2122	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	1796
5	1840
15	1900
25	1637
35	785
45	214
55	2
65	1
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	16591
55°	191
65°	130
75°	0
85°	0

*Candela/Square Meter

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PHOTOMETRY (CONTINUED)

LFCR-6D-MR-20L35K9-WD-DM1 / LFCR-6RD-T-WW-S

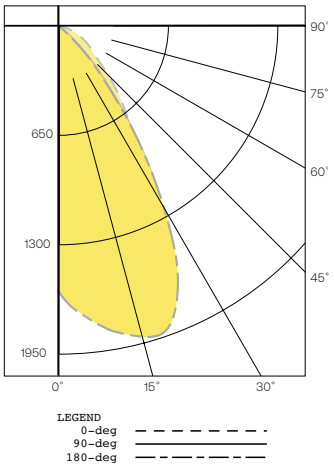
LUMINAIRE DATA

Test No.	**P26.00056**
Description	**2000 lm, Wall Wash, 3500K, 90 CRI**
Delivered Lumens	**2114**
Watts	**21.8W**
Efficacy	**96.8**
Mounting	**Recessed**
Spacing Criterion	**N/A**
Beam Angle (FWHM)	**N/A**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0–40	1764	83.4
0–60	2051	97.0
0–90	2114	100.0
0–180	2114	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	1576
5	1444
15	1324
25	1078
35	755
45	420
55	234
65	134
75	51
85	6
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	32562
55°	22365
65°	17382
75°	10802
85°	3774

*Candela/Square Meter

LUMEN MULTIPLIER

Option	27K9	30K9	35K9	40K9	50K9
Multiplier	0.95	0.99	1.00	1.00	1.00

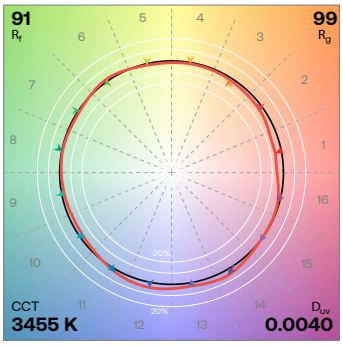
Photometrics are published below at a nominal 3500 Kelvin, 90+ CRI. This table may be used to approximate the lumen values at different Kelvin temperatures. Power consumption would stay the same.

REFLECTOR FINISH & COLOR MULTIPLIER

Option	Specular (S)	Semi-Specular (SS)	Soft Glow (VS)	White Cone (WC)	Black Cone (BC)
Multiplier	1.00	1.00	0.89	0.98	0.44

TM-30 DATA

COLOR VECTOR GRAPHIC
3500K, 90 CRI



TEST RESULTS - 3500K	
Value	90+ CRI
R_f	91
R_g	99
CCT (K)	3455
D_{UV}	0.0040
x	0.4122
y	0.4034
CIE R_a	92
CIE R_9	59

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prescolite

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

LFCR-6RD-R

LITEFRAME COMMERCIAL 6" ROUND
REMODEL 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 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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