

# LFCR-6RD-R

LITEFRAME COMMERCIAL 6" ROUND  
REMODEL DOWNLIGHT

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

LITEFRAME  
Commercial



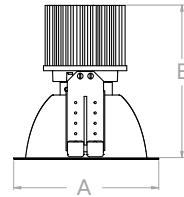
## FEATURES

- 6" LED downlight delivering 500–5000 lumens
- Wide Beam Distribution (1.0 Spacing Criteria) Standard
- 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



SERVICE PROGRAMS  
tradeSELECT® QS10

## CONTROLS TECHNOLOGY



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
- 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
- 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

### WARRANTY

- 5 year warranty

KEY DATA	
Lumen Range	500–5000
Wattage Range	5.9–52.1
Efficacy Range (LPW)	96–110
Reported Life (Hours)	L80 / >66,000

\*Based on Specular, 35K, 90 CRI

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## ORDERING GUIDE

DATE: \_\_\_\_\_ LOCATION: \_\_\_\_\_

TYPE: \_\_\_\_\_ PROJECT: \_\_\_\_\_

CATALOG #: \_\_\_\_\_

Gray Shading = Service Program

tradeSELECT® QS10  
Limit of 150 Luminaries

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

CATALOG # \_\_\_\_\_

### FIXTURE MODULE (Ships separately)

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

### TRIM (Ships separately)

LFCR-6RD-T								
Aperture/Shape/Function	Style <sup>16</sup>	Trim Distribution		Reflector Finish	Flange Color Options <sup>15</sup>	Trim Options		
LFCR-6RD-T 6" Round Downlight Trim Assembly	Do not specify trim style for standard trim	WD	Wide (1.0 SC)	Do not specify reflector finish for SH Trim Style	Standard matches reflector color	EM	Pre-punched reflector for EM integral test switch and indicator	
	SH Non-Conductive Shower Trim with Acrylic, Micro-prism Lens	WW	Wall Wash	S	WT	AM	Antimicrobial Coating <sup>13,14</sup>	
				SS	BT			
				VS				
				WC				
				BC				

#### Accessories

- LFR-MOR6-R-WH Metal Oversized Ring, 6" Round, White (10.12" outside diameter)
- LFCR-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 1/2" 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 HA not available with IC or CP Options
- 13 AM available with WC or Specular Clear (S or SWT), also available with WT for SH trim
- 14 AM not available with WW or EM
- 15 WT not available for WC, BT not available for BC
- 16 SH not available with WW or EM, requires WT or BT- reflector finish not applicable, available with lumen output 05L-30L

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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	✓	✓	✓	-	-	✓	✓	✓ <sup>1</sup>		NXFSP

<sup>1</sup> 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	AWN	The Athena wireless node is a radio frequency (RF) device that enables simple, digital control of individual light fixtures in an Athena control system. <sup>1</sup>	✓	✓	-	-	-	✓	✓	-		A-WN-D01-RF-WH

<sup>1</sup> Lutron Athena Hub required to enable Networking, Grouping and Scheduling.

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## PERFORMANCE DATA TABLE

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

Lumen Package	Nominal Lumens	Distribution	Delivered Lumens	Watts	LPW
05L	500	Wide	576	5.9	98
		Wall Wash	574	5.9	97
10L	1000	Wide	1108	11.2	99
		Wall Wash	1104	11.2	99
15L	1500	Wide	1599	15.2	105
		Wall Wash	1593	15.2	105
20L	2000	Wide	2122	21.8	97
		Wall Wash	2114	21.8	97
25L	2500	Wide	2664	24.1	111
		Wall Wash	2654	24.1	110
30L	3000	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

## 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

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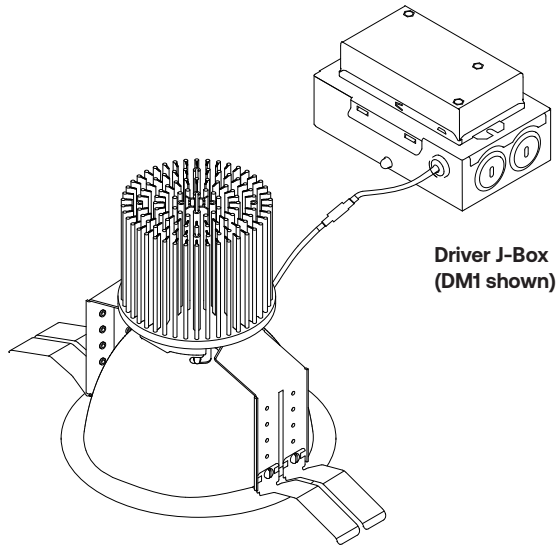
LITEFRAME COMMERCIAL 6" ROUND  
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## DIMENSIONS

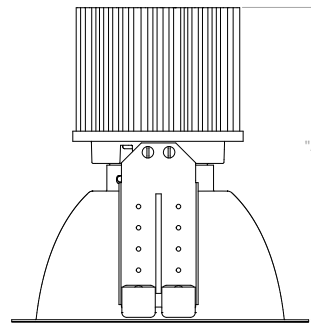
### LFCR-6D-MR

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.

DATE:	LOCATION:
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Light Engine  
with Trim assembly installed

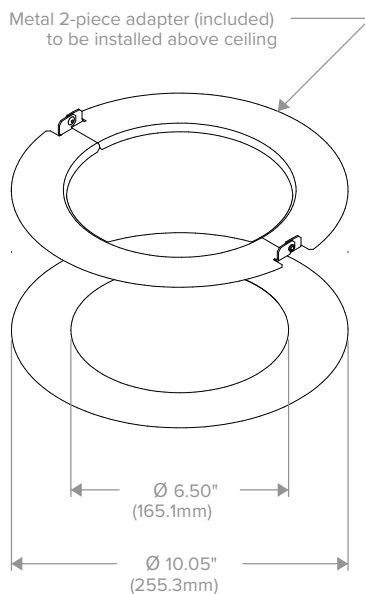


Side View Standard

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)

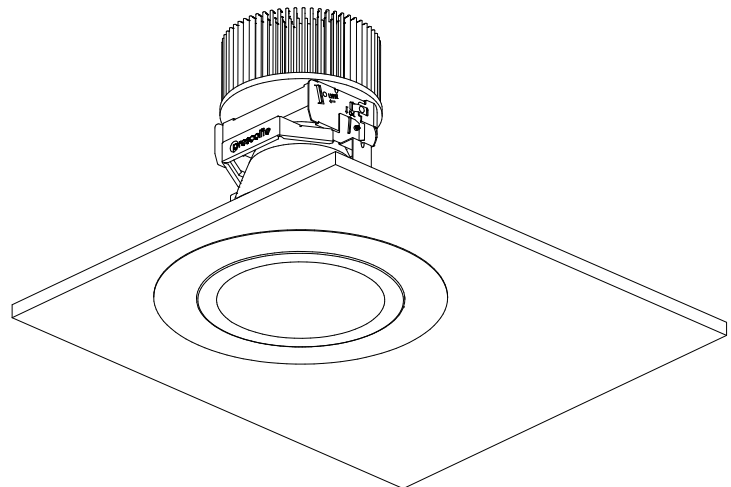
OVERALL LIGHT ENGINE HEIGHT * (All Lumen Outputs)	
Lumen Package	Height ("A")
05L-15L	4.40" (111.8mm)
20L-30L	5.80" (147.3mm)
35L-50L	7.40" (188.0mm)

\* Note: Add 1/2" 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)



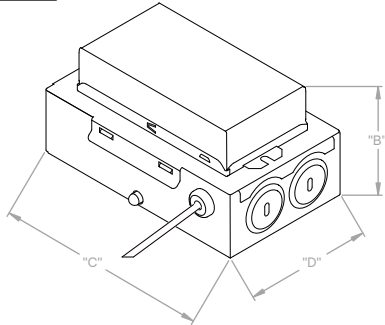
# LFCR-6RD-R

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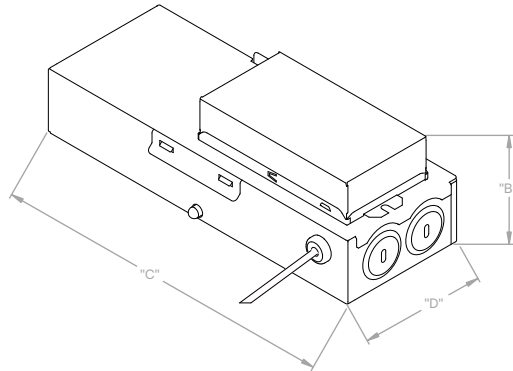
## DIMENSIONS CONTINUED

DATE: \_\_\_\_\_ LOCATION: \_\_\_\_\_  
 TYPE: \_\_\_\_\_ PROJECT: \_\_\_\_\_  
 CATALOG #: \_\_\_\_\_

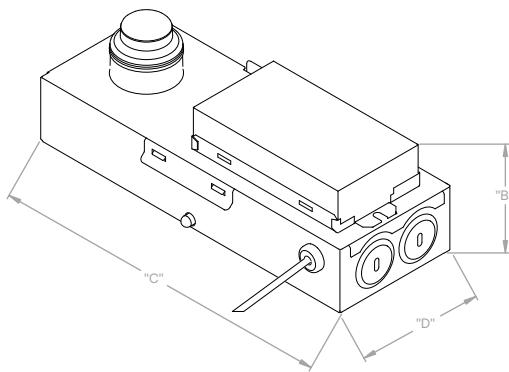
### DRIVER J-BOX



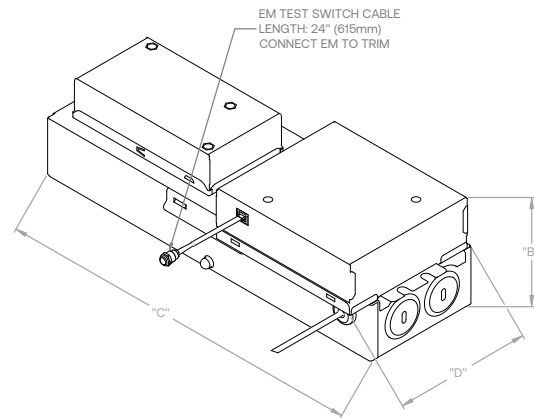
**DM1 / DM01 / DALI / PDM / DM34**



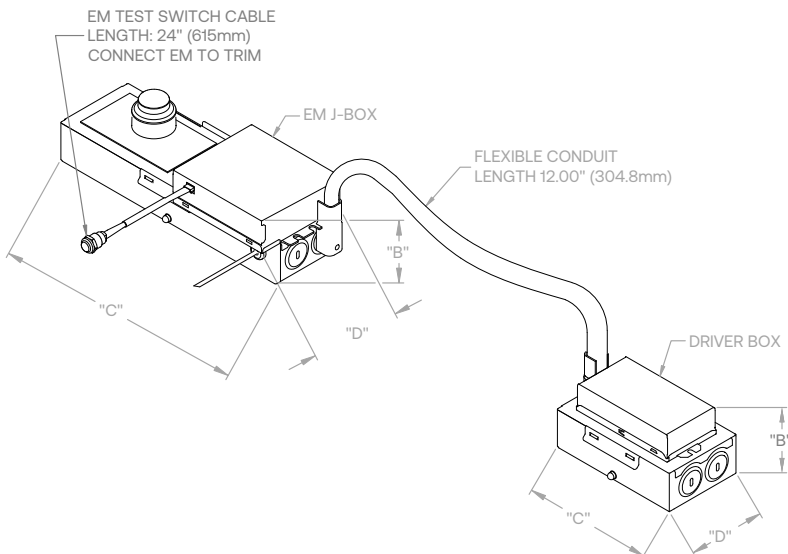
**DMX1 / DTS**



**NX\* / AWRN CONTROLS OPTION**



**DM1 / DM01 / DALI / PDM / DMX1 + EM/EMR**



### NX\* / AWRN 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* / AWRN	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* / AWRN	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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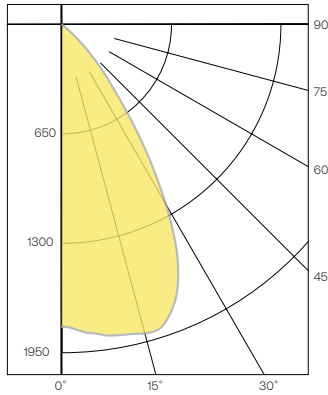
## PHOTOMETRY

### 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	95.3
Mounting	Recessed
Spacing Criterion	1.0
Beam Angle (FWHM)	66

#### 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

#### ZONAL LUMEN SUMMARY

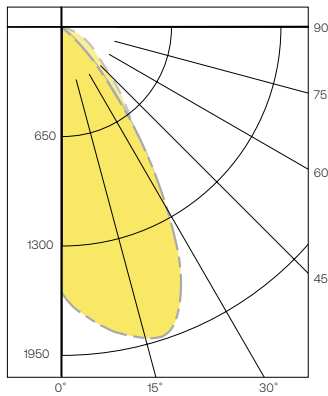
Zone	Lumens	% Luminaire
0-40	1445	91.4
0-60	12121	99.9
0-90	2122	100.0
0-180	2122	100.0

### 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

#### 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

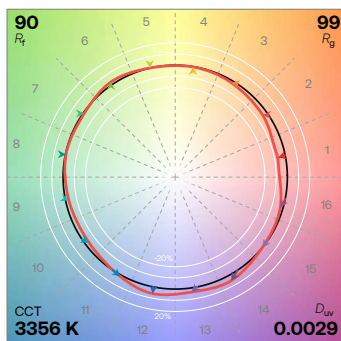
#### ZONAL LUMEN SUMMARY

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

LEGEND  
 0-deg - - - - -  
 90-deg - - - - -  
 180-deg - - - - -

## TM-30 DATA

COLOR VECTOR GRAPHIC  
3500K, 90 CRI



— Reference Illuminant — Test Source

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## ELECTRICAL DATA

DATE:	LOCATION:
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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](http://currentlighting.com/prescolite).

### DMX

See instruction sheet on [currentlighting.com/prescolite](http://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.com](http://currentlighting.com/dual-lite.com) 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.