

LFCR-4RD-R

LITEFRAME COMMERCIAL 4" ROUND
REMODEL DOWNLIGHT

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

LITEFRAME
Commercial



FEATURES

- 4" 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



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

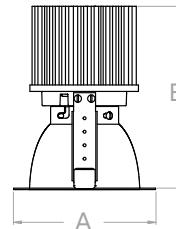
- High purity spun aluminum reflector, self-flanged
- 55° visual cutoff to source image and 55° cutoff to source
- Specular, semi-specular, or Softglow (diffuse) anodized finishes. White and black painted cone reflector colors also available.
- Painted flange options in white or black

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



Typical Dimensions and Weights				
Lumen Package	Aperture Inches (mm)	"A" Diameter Inches (mm)	"B" Height Inches (mm)	Weight lbs (kg)
05L-15L	4.0 (101.6)	5.25 (133.4)	3.9 (99.1)	1.9 (0.9)
20L-30L			5.2 (132.1)	2.1 (1.0)
35L-50L			6.8 (172.7)	2.4 (1.1)

See DIMENSIONS section for complete details

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)	94–110
Reported Life (Hours)	L80 / >66,000

*Based on Specular, 35K, 90 CRI

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ORDERING GUIDE

DATE: _____ LOCATION: _____
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 CATALOG #: _____

Gray Shading = Service Program

tradeSELECT® QS10
Limit of 150 Luminaries

Example: LFCR-4D-MR-10L35K9-WD-DM1 / LFCR-4RD-T-WD-S

CATALOG #

FIXTURE MODULE (Ships separately)

LFCR-4D-MR			9	WD				
Ap/Shp/Funct	Lumen Output	CCT	CRI	Distribution	Driver Options	Control Options	Module Options ²	
LFCR-4D-MR 4" Downlight Fixture Module, Remodel	05L 500	27K 2700K	9 90+	WD Wide (65° /1.0 SC)	120-277V Options	NX Lighting Controls	EM 10W Emergency Battery Pack with Integral Test Switch	
	10L 1000	30K 3000K			DM1 0-10V Dimming to 1%	<u>Networked Wireless</u>	EMR 10W Emergency Battery Pack with Remote Test Switch	
	15L 1500	35K 3500K			DM01 0-10V Dimming to < 1% ³	NXW NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor ⁷	DTS Device Transfer Switch with Dimming Bypass ^{9,10}	
	20L 2000	40K 4000K			PDM Phase (Forward/Reverse) Dimming to 1% ⁴	<u>Networked Wired</u>	F Fuse	
	25L 2500	50K 5000K			DALI DALI Dimming to 1% ³	NXE NX Wired Dual RJ45 SmartPORTS, without Sensor ⁷	HA High Ambient Option (40°C) ^{11,12}	
	30L 3000				DM00 Lutron Athena Compatible Driver for static white CCT	Other Lighting Controls		
	35L 3500				DMX1 DMX with RDM dimming to 1%	<u>Networked Wireless</u>		
	40L 4000				347V Option	AWNR Lutron Athena Enabled ⁸		
	45L 4500 ¹				DM34 0-10V Dimming to 1% (347V input) ^{5,6}			
	50L 5000 ¹							

TRIM (Ships separately)

LFCR-4RD-T								
Aperture/Shape/Function	Style ¹⁶	Trim Distribution		Reflector Finish	Flange Color Options ¹⁵	Trim Options		
LFCR-4RD-T 4" Round Downlight Trim Assembly	<i>Do not specify trim style for standard trim</i>	WD Wide (1.0 SC)	WW Wall Wash	<i>Do not specify reflector finish for SH Trim Style</i>	<i>Standard matches reflector color</i>	EM Pre-punched reflector for EM integral test switch and indicator		
	SH Non-Conductive Shower Trim with Acrylic, Micro-prism Lens			S Specular	WT White Flange	AM Antimicrobial Coating ^{13,14}		
				SS Semi-Specular	BT Black Flange			
				VS Softglow				
				WC Painted White Cone				
				BC Painted Black Cone				

Accessories

- LFCR-MOR4-R-WH Metal Oversized Ring,
4" Round, White
(8.3" outside diameter)
- LFR-SCA4-__ Sloped Ceiling Adapter,
4" 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

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

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	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. ¹	✓	✓	-	-	-	✓	✓	-		A-WN-D01-RF-WH

¹ 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	552	5.9	95
		Wall Wash	572	5.9	97
10L	1000	Wide	1062	11.2	94
		Wall Wash	1101	11.2	98
15L	1500	Wide	1533	15.2	101
		Wall Wash	1589	15.2	105
20L	2000	Wide	2034	21.3	95
		Wall Wash	2108	21.7	97
25L	2500	Wide	2554	24.1	106
		Wall Wash	2647	24.1	110
30L	3000	Wide	3062	29.8	103
		Wall Wash	3173	29.8	106
35L	3500	Wide	3597	36.8	98
		Wall Wash	3728	36.8	101
40L	4000	Wide	4053	41.6	97
		Wall Wash	4200	41.6	101
45L	4500	Wide	4566	45.3	101
		Wall Wash	4732	45.3	104
50L	5000	Wide	5065	52.1	97
		Wall Wash	5249	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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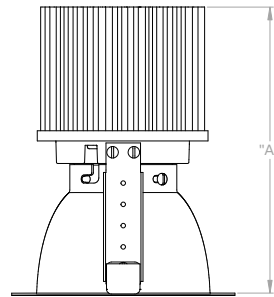
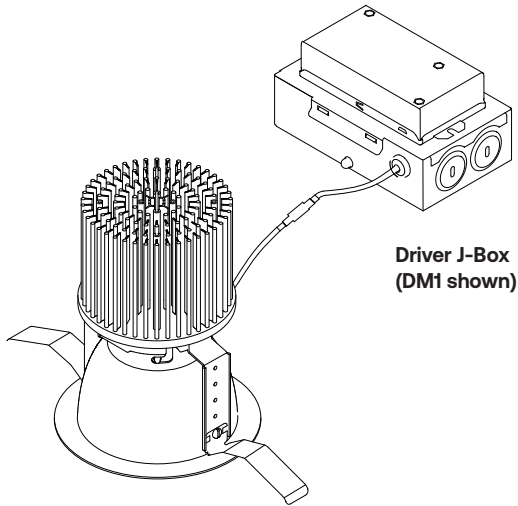
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DIMENSIONS

LFCR-4D-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:
TYPE:	PROJECT:
CATALOG #:	



Side View Standard

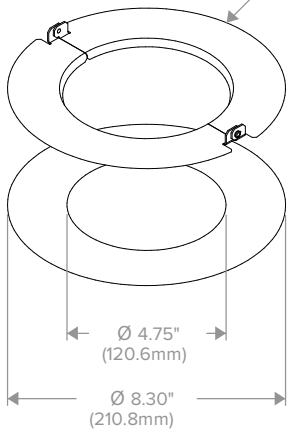
Light Engine
with Trim assembly installed

DIMENSIONAL DATA	
Aperture	Ø4.00" (101.6mm)
Overall Width (Flange To Flange)	Ø5.25" (133.4mm)
Flange Width	0.63" (16mm)
Ceiling Cutout	Ø4.75" (121mm)
Ceiling Thickness	0.50" - 3.00" (13 - 76mm)

OVERALL LIGHT ENGINE HEIGHT * (All Lumen Outputs)	
Lumen Package	Height ("A")
05L-15L	3.9" (99.1mm)
20L-30L	5.2" (132.1mm)
35L-50L	6.8" (172.7mm)

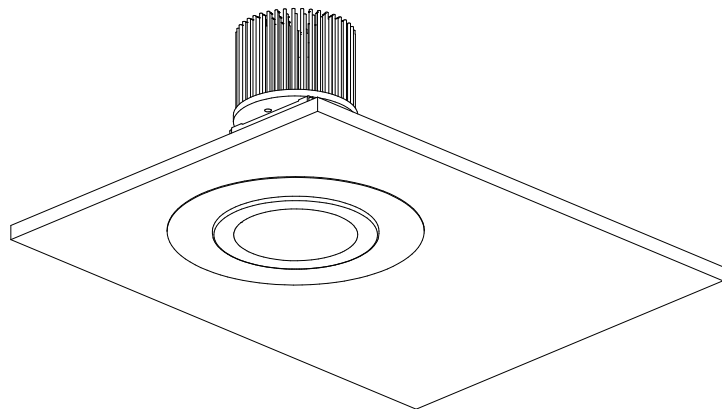
* Note: Add 1/2" minimum plenum clearance above overall Light Engine Height.
** For 45L-50L: Marked spacing required 24" fixture center to center; 24" fixture center to building member; 0.5" above fixture.
*** Non-IC rating requires 3" from insulation and combustible materials.

Metal 2-piece adapter (included)
to be installed above ceiling



ROUND LF-MOR4-R
METAL OVERSIZED RING

(See LF-MOR Installation Instruction for more details)



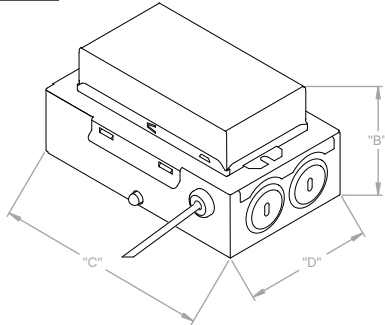
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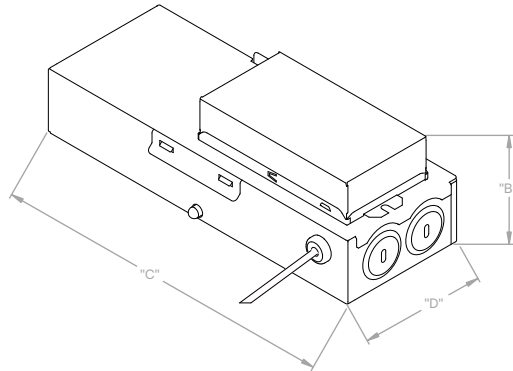
DIMENSIONS CONTINUED

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

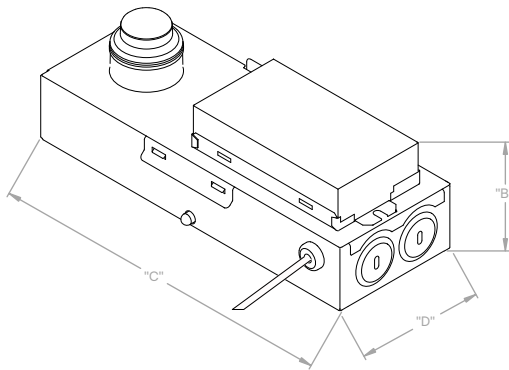
DRIVER J-BOX



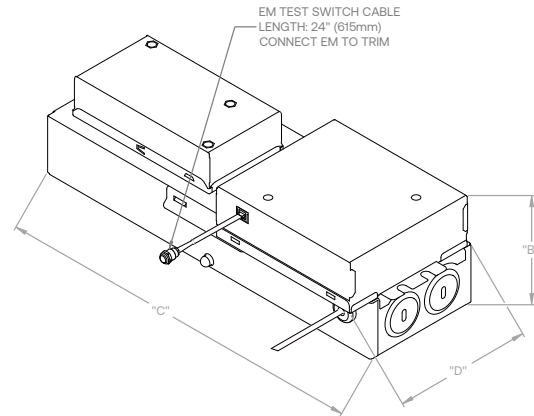
DM1 / DM01 / DALI / PDM / DM34



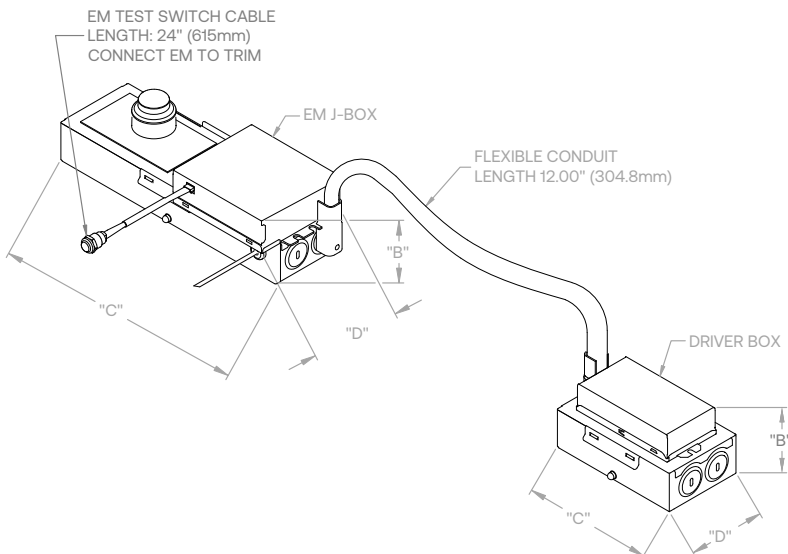
DMX1 / DTS



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)
	Driver Box	2.7" (68.6mm)	5.5" (139.7mm)	3.3" (83.8mm)

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PHOTOMETRY

LFCR-4D-MR-20L35K9-WD-DM1 / LFCR-4RD-T-WD-S

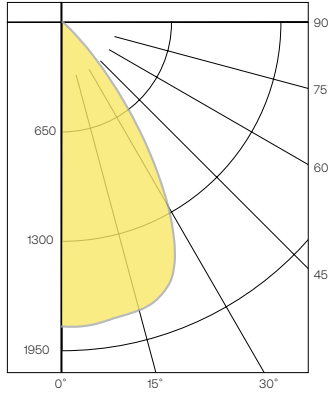
LUMINAIRE DATA

Test No.	P25.01118
Description	2000 lm, Wide, 3500K, 90 CRI
Delivered Lumens	2034
Watts	21.3W
Efficacy	95.3
Mounting	Recessed
Spacing Criterion	1.0
Beam Angle (FWHM)	68

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1895	93.2
0-60	2032	99.9
0-90	2034	100.0
0-180	2034	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	1810
5	1810
15	1580
25	832
35	146
45	3
55	1
65	1
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	25468
55°	645
65°	292
75°	477
85°	0

*Candela/Square Meter

LFCR-4D-MR-20L35K9-WD-DM1 / LFCR-4RD-T-WW-S

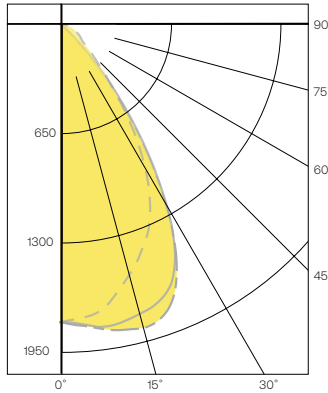
LUMINAIRE DATA

Test No.	26.00057
Description	2000 lm, Wall Wash, 3500K, 90 CRI
Delivered Lumens	2108
Watts	21.7W
Efficacy	126
Mounting	Recessed
Spacing Criterion	N/A
Beam Angle (FWHM)	N/A

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1844	87.5
0-60	2055	97.5
0-90	2108	100.0
0-180	1928	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	1762
5	1737
15	1547
25	1255
35	734
45	297
55	152
65	103
75	53
85	14
90	0

LUMINANCE DATA*

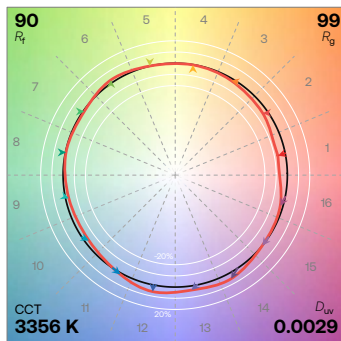
Vertical Angle	Average
45°	51808
55°	32687
65°	876
75°	953
85°	1415

*Candela/Square Meter

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

TM-30 DATA

COLOR VECTOR GRAPHIC
3500K, 90 CRI



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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.

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.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.