

LITEFRAME<sup>™</sup>  
2.0

**FEATURES**

- 4" LED adjustable accent delivering 1000–6000 lumens
- Direct Install from below ceiling for New Construction or Remodel applications, optional IC and CP housing accessories available
- Available in four beam distributions
- Precise hot aiming/locking 0–40° tilt
- 2700K-5000K, 80+ and 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



**SERVICE PROGRAMS**



**CONTROLS TECHNOLOGY**



**SPECIFICATIONS**

**CONSTRUCTION**

- Standard Fixture Module designed for Non-IC, Direct Install construction
- Optional Non-IC frame, IC or CP 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/enclosures
- Light Engine connections use plenum rated (CMP) cable

**OPTICS**

- Manual friction adjustment with angle indicator and thumbscrew lock for precise hot aiming
- Vertical Tilt: 40° (≤ 0.75" ceiling thickness); 30° (up to 1.25" ceiling thickness)
- Multiple beam distributions allow dramatic effects with minimal occlusion
- High purity, four panel aluminum reflector, self-flanged
- Standard Angle Cut cone in Specular or Semi-Specular anodized or White with painted flange options

**ELECTRICAL**

- Chip-on-board LED with 2 SDCM
- Multiple CCTs, 80+ or 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 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
- Emergency battery pack option available with remote test switch and indicator light

**INSTALLATION**

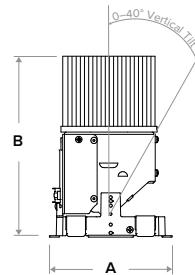
- Accommodates ceiling thickness from 0.50" to 1.25"
- Fixture Module including driver fully accessible from above or below the ceiling
- 10L Fixture Modules are inherently protected IC without the use of IC housing enclosure. (IC housing is still recommended when using loose-fill or spray foam insulation types.)
- Chicago Plenum requires CP housing option

**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 damp locations
- EMR: Certified under UL 924 standard for emergency lighting and power equipment
- 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



Typical Dimensions and Weights			
Lumen Package	"A" Width Inches (mm)	"B" Height Inches (mm)	Weight lbs (kg)
10L - 30L	5.38 (137)	5.89 (150)	4.6 (2.1)
35L - 60L	5.38 (137)	7.47 (190)	4.9 (2.2)

See DIMENSIONS section for complete details

KEY DATA	
Lumen Range	1000–6000
Wattage Range	8–54
Efficacy Range (LPW)	86–119
Reported Life (Hours)	L90 / >50,000
Input Current (mA)	66–450 (120V)

\*Based on Specular, 35K, 80 CRI

# LFR-4SQA

LITEFRAME 4" SQUARE ADJUSTABLE

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

Gray Shading = Service Program **STOCK**

## ORDERING GUIDE

Example: LFR-4SQA-M-10L35K8-WD-DM1 / LFR-4SQA-T-S / LFR-4SQD-H

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

### FIXTURE MODULE

LFR-4SQA-M	Lumen Output		CCT		CRI		Distribution	Driver Options	Control Options	Voltage	Module Options
<b>Ap/Shp/Funct</b>											
<b>LFR-4SQA-M</b> 4" Square Adjustable Fixture Module for Direct Install  <i>(Non-IC frame, IC or CP housings available under Housing Options below)</i>	<b>10L</b>	1000	<b>27K</b>	2700K	<b>8</b>	80+	<b>VNR</b> Very Narrow (14°)	<b>DM1</b> 0-10V Dimming to 1%	<b>NX Lighting Controls</b> <u>Networked Wireless</u>	<i>Standard</i> 120-277V	<b>EMR</b> 6W Emergency Battery Pack (CEC Title 20 Compliant) with remote test switch and indicator light <sup>5</sup>
	<b>15L</b>	1500	<b>30K</b>	3000K	<b>9</b>	90+	<b>NR</b> Narrow (24°)	<b>DM01</b> 0-10V Dimming to < 1% <sup>2</sup>	<b>NXW</b> NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor <sup>3</sup>	<b>34</b> 347V <sup>4</sup>	<b>DTS</b> Device Transfer Switch with Dimming Bypass <sup>5,6</sup>
	<b>20L</b>	2000	<b>35K</b>	3500K			<b>PDM</b> Phase (Forward/Reverse) Dimming to 1% <sup>2</sup>	<u>Networked Wired</u>			
	<b>25L</b>	2500	<b>40K</b>	4000K			<b>DMX</b> DMX with RDM dimming to < 0.1% <sup>2</sup>	<b>NXE</b> NX Wired Dual RJ45 SmartPORTS, without Sensor <sup>3</sup>			
	<b>30L</b>	3000	<b>50K</b>	5000K			<b>DALI</b> DALI Dimming to 1% <sup>2</sup>				
	<b>35L</b>	3500					<b>EDM</b> Lutron Hi-Lume EcoSystem Dimming to 1% <sup>2</sup>				
	<b>40L</b>	4000									
	<b>50L</b>	5000 <sup>1</sup>									
	<b>60L</b>	6000 <sup>1</sup>									

### TRIM (Ships separately)

LFR-4SQA-T	Trim Style	Reflector Finish/Color	Flange Color Options
<b>Aperture/Shape/Function</b>			
<b>LFR-4SQA-T</b> 4" Square Adjustable Trim Assembly	<i>Standard Cut Cone</i>	<b>S</b> Specular <b>SS</b> Semi-Specular <b>WC</b> Painted White Cone and Flange	<i>Standard matches reflector color</i> <b>WT</b> White Flange <sup>7</sup> <b>BT</b> Black Flange



### HOUSING OPTIONS (Ships separately)

Aperture/Shape/Function	
<input type="checkbox"/> <b>LFR-4SQD-H</b> 4" Housing Frame, New Construction, Non-IC	
<input type="checkbox"/> <b>LFR-4SQD-H-IC</b> 4" Housing Enclosure, New Construction, IC Rated <sup>8,9</sup>	
<input type="checkbox"/> <b>LFR-4SQD-H-CP</b> 4" Housing Enclosure, New Construction, Chicago Plenum <sup>10</sup>	

Accessories	
<input type="checkbox"/> <b>LiteGear</b>	LiteGear® Inverter, 125VA-250VA
<input type="checkbox"/> <b>LPS Series</b>	LightPower Micro-Inverter, 20VA-55VA
<input type="checkbox"/> <b>LF-MOR4-SQ-WH</b>	Metal Oversized Ring, 4" Square, White (8.3" outside dimension)

- Notes:
- 50L and 60L require marked spacing. See line art for more details.
  - DM01, PDM, DMX, DALI available up to 50L. EDM available 15L-40L.
  - NX requires DM1 driver option.
  - 347V requires DM1 driver option; available 10L-40L; not available with Controls, DTS, EMR.
  - Module options not available in combination.
  - DTS available with DM1, DM01, or DALI.
  - WT not needed for WC.
  - 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.)
  - IC housing not available for use in combination with Controls or with Module options EMR, DTS.
  - CP available up to 35L; not available with DMX, Controls, or EMR options.

**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>		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

# LFR-4SQA

LITEFRAME 4" SQUARE ADJUSTABLE

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

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

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

## PERFORMANCE SUMMARY

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

Lumen Package	Nominal Lumens	Distribution	Delivered Lumens	Watts	LPW
10L	1000	Very Narrow	791	7.7	103
		Narrow	913	7.7	119
		Medium	866	7.7	113
		Wide	884	7.7	115
15L	1500	Very Narrow	1190	11.7	102
		Narrow	1373	11.7	117
		Medium	1302	11.7	111
		Wide	1329	11.7	113
20L	2000	Very Narrow	1525	15.0	102
		Narrow	1760	15.0	117
		Medium	1668	15.0	111
		Wide	1703	15.0	113
25L	2500	Very Narrow	1952	20.3	96
		Narrow	2252	20.3	111
		Medium	2135	20.3	105
		Wide	2179	20.3	107
30L	3000	Very Narrow	2356	25.6	92
		Narrow	2719	25.6	106
		Medium	2577	25.6	101
		Wide	2630	25.6	103
35L	3500	Very Narrow	2852	29.2	98
		Narrow	3291	29.2	113
		Medium	3120	29.2	107
		Wide	3185	29.2	109
40L	4000	Very Narrow	3160	32.9	96
		Narrow	3647	32.9	111
		Medium	3456	32.9	105
		Wide	3528	32.9	107
50L	5000	Very Narrow	3903	42.8	91
		Narrow	4504	42.8	105
		Medium	4269	42.8	100
		Wide	4358	42.8	102
60L	6000	Very Narrow	4602	53.3	86
		Narrow	5311	53.3	100
		Medium	5034	53.3	95
		Wide	5138	53.3	96

# LFR-4SQA

LITEFRAME 4" SQUARE ADJUSTABLE

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

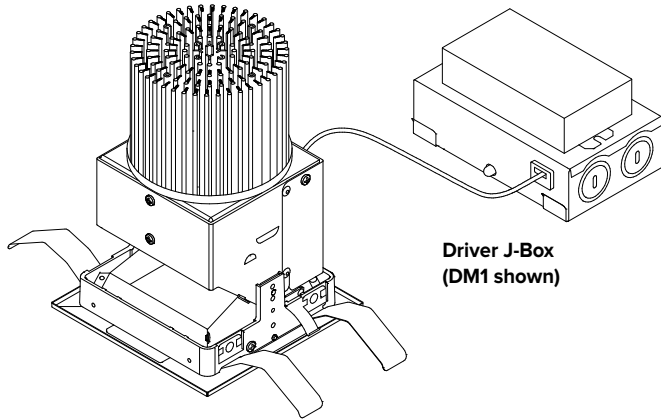
TYPE: \_\_\_\_\_ PROJECT: \_\_\_\_\_

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

## DIMENSIONS

### LFR-4SQA-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.



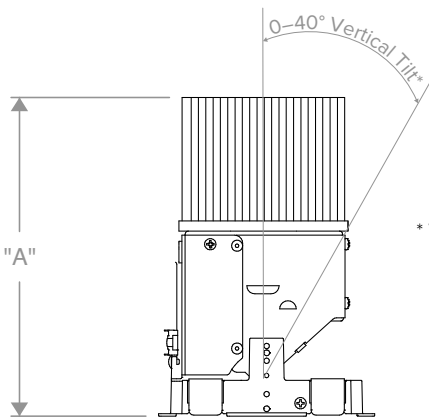
**Light Engine  
with Trim assembly installed**

DIMENSIONAL DATA	
APERTURE	□ 4.00" (101.6mm)
OVERALL	□ 5.37" (136.5mm)
FLANGE WIDTH	0.71" (18.0mm)
CEILING CUTOUT	□ 4.75" (120.7mm)
CEILING THICKNESS	0.50"-1.25" (12.7-31.8mm)

### LFR-4SQA LIGHT ENGINE

OVERALL LIGHT ENGINE HEIGHT "A" *		
LUMEN PACKAGE	BEAM DISTRIBUTION	
	VNR	NR / MD / WD
10L-30L	6.68" (169.7mm)	5.89" (149.7mm)
35L-60L	8.26" (209.9mm)	7.47" (189.8mm)

\* Note: Add 1/2" 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.

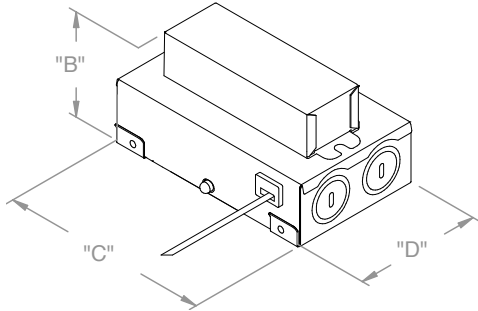


**Side View Standard**

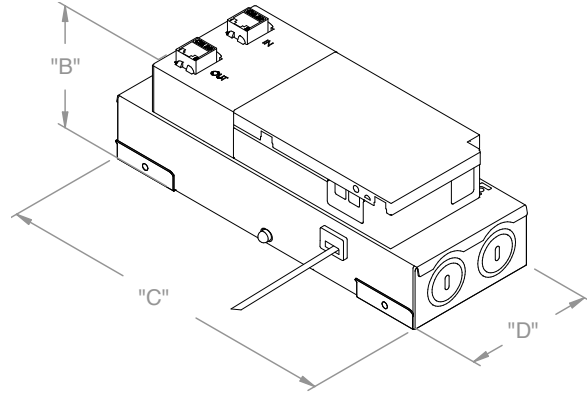
\* Vertical Tilt:  
 0-40° up to 0.75" ceiling thickness  
 0-35° for 0.75" to 1" ceiling thickness  
 0-30° for 1" to 1.25" ceiling thickness

**DIMENSIONS CONTINUED**

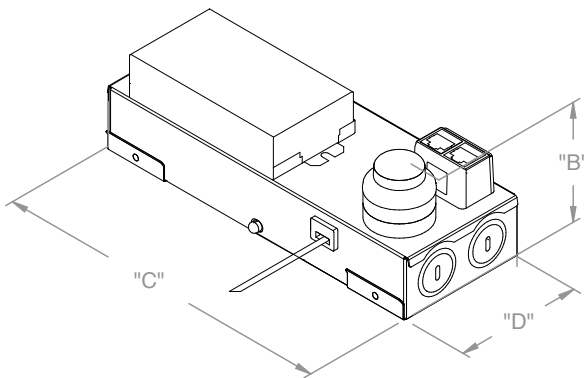
**DRIVER J-BOX**



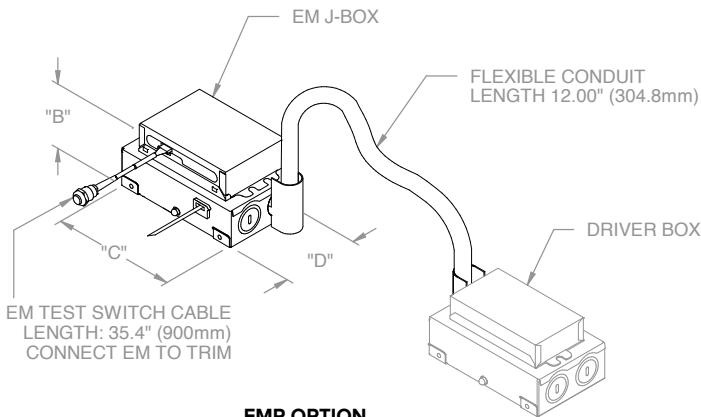
**DM1 / DM01 / PDM / DALI**



**DMX**



**NX CONTROLS OPTION**



**EMR OPTION**

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)
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" (127.0mm)

# LFR-4SQA

LITEFRAME 4" SQUARE ADJUSTABLE

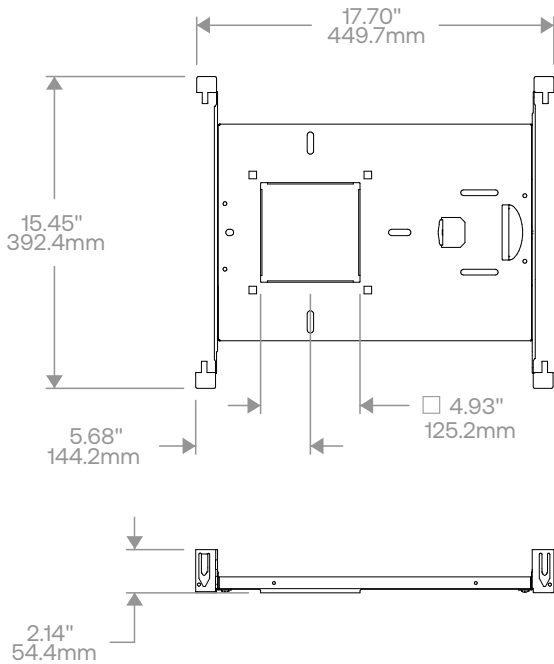
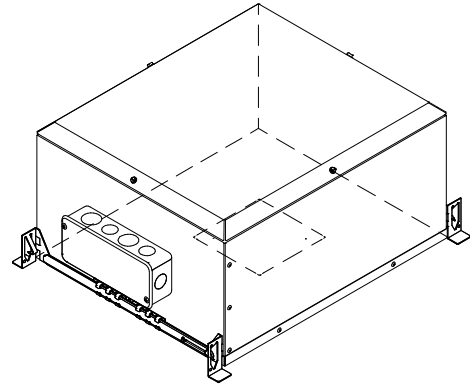
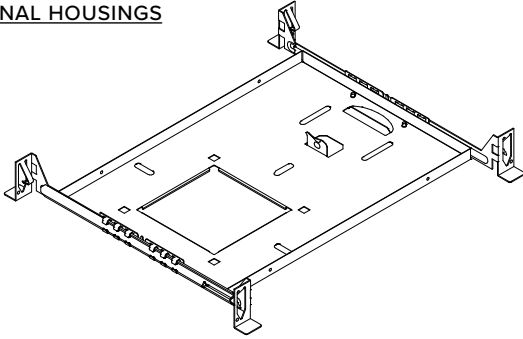
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TYPE: \_\_\_\_\_ PROJECT: \_\_\_\_\_

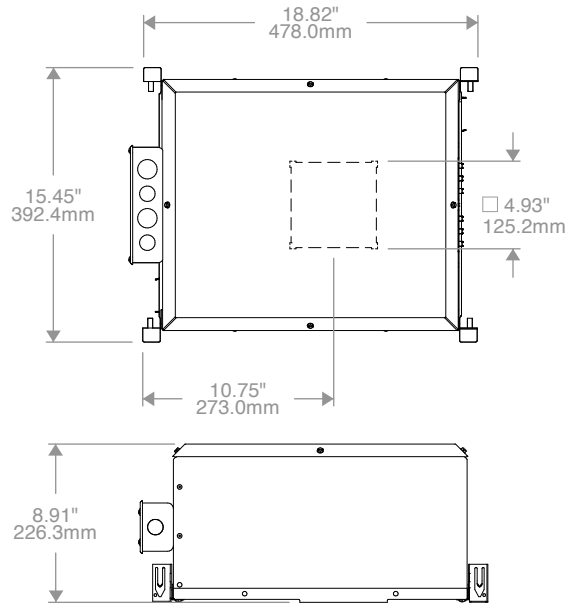
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## DIMENSIONS CONTINUED

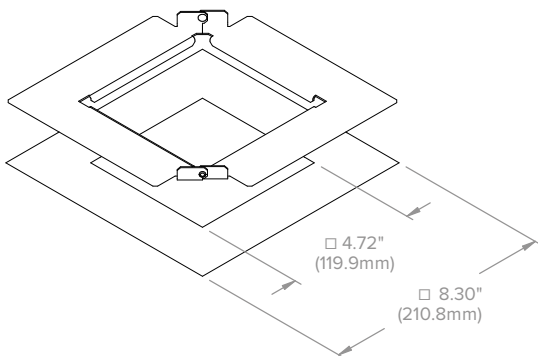
### OPTIONAL HOUSINGS



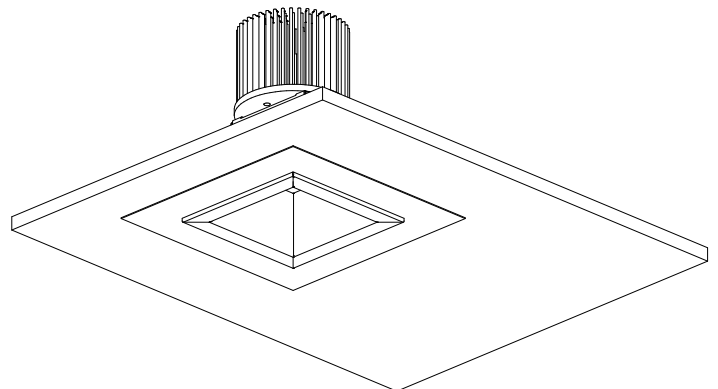
**LFR-4SQA-H  
NON-IC HOUSING FRAME**



**LFR-4SQA-D-H-IC  
LFR-4SQA-D-H-CP  
IC or CP HOUSING**



**LF-MOR4-SQ  
METAL OVERSIZED RING**  
(See LF-MOR Installation Instruction for more details)



# LFR-4SQA

LITEFRAME 4" SQUARE ADJUSTABLE

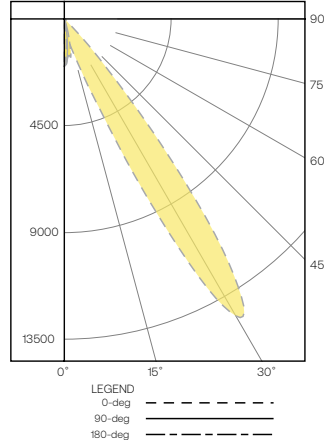
## PHOTOMETRY

### LFR-4SQA-M-20L35K8VNR-DM1 / LFR-4SQA-T-S

#### LUMINAIRE DATA

Test No.	22.00789
Description	2000 lm, Very Narrow, 3500K, 80 CRI
Delivered Lumens	1525
Watts	15.0W
Efficacy	102
Mounting	Recessed/Ceiling
Beam Angle (FWHM)	14

#### POLAR GRAPH



#### CANDELA DISTRIBUTION

Degree	Candela
0	1991
5	972
15	1482
25	8390
35	11030
45	368
55	38
65	12
75	0
85	0
90	0

#### LUMINANCE DATA\*

Vertical Angle	Average
45°	50417
55°	6418
65°	2751
75°	0
85°	0

\*Candela/Square Meter

#### ZONAL LUMEN SUMMARY

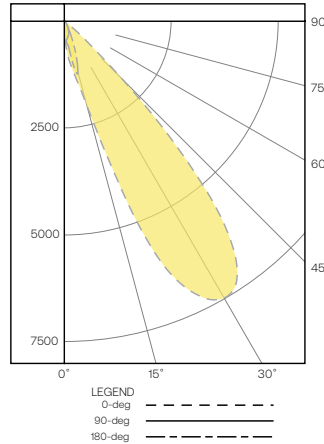
Zone	Lumens	% Luminaire
0-40	1416	92.8
0-60	1523	99.9
0-90	1525	100.0
0-180	1525	100.0

### LFR-4SQA-M-20L35K8NR-DM1 / LFR-4SQA-T-S

#### LUMINAIRE DATA

Test No.	22.00790
Description	2000 lm, Narrow, 3500K, 80 CRI
Delivered Lumens	1760
Watts	15.0W
Efficacy	117
Mounting	Recessed/Ceiling
Beam Angle (FWHM)	24

#### POLAR GRAPH



#### CANDELA DISTRIBUTION

Degree	Candela
0	440
5	871
15	2251
25	6973
35	6997
45	1616
55	29
65	4
75	0
85	0
90	0

#### LUMINANCE DATA\*

Vertical Angle	Average
45°	221396
55°	4898
65°	917
75°	0
85°	0

\*Candela/Square Meter

#### ZONAL LUMEN SUMMARY

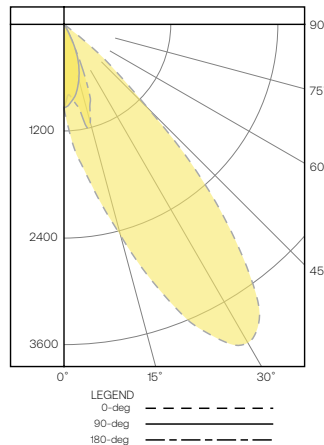
Zone	Lumens	% Luminaire
0-40	1557	88.5
0-60	1759	99.9
0-90	1760	100.0
0-180	1760	100.0

### LFR-4SQA-M-20L35K8MD-DM1 / LFR-4SQA-T-S

#### LUMINAIRE DATA

Test No.	22.00791
Description	2000 lm, Medium, 3500K, 80 CRI
Delivered Lumens	1668
Watts	15.0W
Efficacy	111
Mounting	Recessed/Ceiling
Beam Angle (FWHM)	33

#### POLAR GRAPH



#### CANDELA DISTRIBUTION

Degree	Candela
0	938
5	1425
15	2453
25	3826
35	3791
45	1351
20	20
65	6
75	0
85	0
90	0

#### LUMINANCE DATA\*

Vertical Angle	Average
45°	185090
55°	3378
65°	1375
75°	0
85°	0

\*Candela/Square Meter

#### ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1434	86.0
0-60	1667	99.9
0-90	1668	100.0
0-180	1668	100.0



# LFR-4SQA

LITEFRAME 4" SQUARE ADJUSTABLE

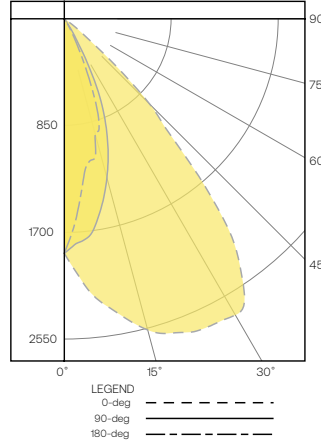
## PHOTOMETRY CONTINUED

### LFR-4SQA-M-20L35K8WD-DM1 / LFR-4SQA-T-S

#### LUMINAIRE DATA

Test No.	P22.00792
Description	2000 lm, Wide, 3500K, 80 CRI
Delivered Lumens	1703
Watts	15.0W
Efficacy	97
Mounting	Recessed/Ceiling
Beam Angle (FWHM)	48

#### POLAR GRAPH



#### CANDELA DISTRIBUTION

Degree	Candela
0	1864
5	2161
15	2561
25	2702
35	2447
45	964
55	45
65	2
75	0
85	0
90	0

#### LUMINANCE DATA\*

Vertical Angle	Average
45°	132070
55°	7600
65°	458
75°	0
85°	0

\*Candela/Square Meter

#### ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1527	89.7
0-60	1702	100.0
0-90	1703	100.0
0-180	1703	100.0

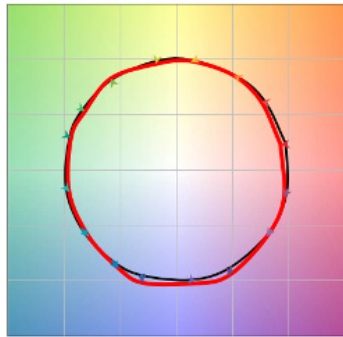
#### LUMEN MULTIPLIER

Option	27K8	30K8	35K8	40K8	50K8	27K9	30K9	35K9	40K9	50K9
Multiplier	0.93	0.96	1.00	1.01	1.03	0.78	0.82	0.85	0.87	0.89

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.

### TM-30 DATA

#### COLOR VECTOR GRAPHIC 3500K, 90 CRI



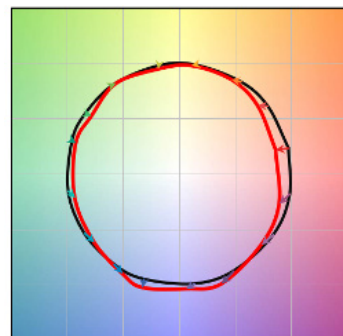
— Reference Illuminant — Test Source

#### COLOR DISTORTION GRAPHIC 3500K, 90 CRI



TEST RESULTS - 3500K		
Value	80+ CRI	90+ CRI
R <sub>t</sub>	85	90
R <sub>g</sub>	95	99
CCT (K)	3422	3416
D <sub>uv</sub>	-0.0008	-0.0019
x	0.4089	0.408
y	0.3906	0.3877
CIE R <sub>a</sub>	85	93
CIE R <sub>g</sub>	16	66

#### COLOR VECTOR GRAPHIC 3500K, 80 CRI



— Reference Illuminant — Test Source

#### COLOR DISTORTION GRAPHIC 3500K, 80 CRI



# LFR-4SQA

LITEFRAME 4" SQUARE ADJUSTABLE

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

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

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

## 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](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](http://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, 6W x 120 LPW = 720 lumens in emergency mode.