

FEATURES

- 4" LED adjustable accent delivering 1000–8000 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

LITEFRAME[®] 2.0

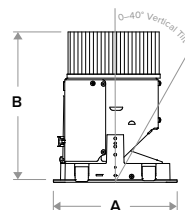


SERVICE PROGRAMS

STOCK



CONTROLS TECHNOLOGY



Typical Dimensions and Weights			
Lumen Package	"A" Width Inches (mm)	"B" Height Inches (mm)	Weight lbs (kg)
10L - 35L	7.38 (187)	7.05 (179)	5.5 (2.5)
40L - 50L	7.38 (187)	7.65 (194)	5.8 (2.6)
60L - 80L	7.38 (187)	8.83 (224)	6.4 (2.9)

See DIMENSIONS section for complete details

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–15L 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

KEY DATA	
Lumen Range	1000–8000
Wattage Range	8–70
Efficacy Range (LPW)	102–130
Reported Life (Hours)	L90 / >50,000
Input Current (mA)	66–583 (120V)

*Based on Specular, 35K, 80 CRI

LFR-6SQA

LITEFRAME 6" SQUARE ADJUSTABLE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

Gray Shading = Service Program **STOCK**

ORDERING GUIDE

Example: LFR-6SQA-M-10L35K8-WD-DM1 / LFR-6SQA-T-S / LFR-6SQD-H

CATALOG #

FIXTURE MODULE

LFR-6SQA-M								
Ap/Shp/Funct	Lumen Output	CCT	CRI	Distribution	Driver Options	Control Options	Voltage	Module Options
LFR-6SQA-M 6" Square Adjustable Fixture Module for Direct Install <i>(Non-IC frame, IC or CP housings available under Housing Options below)</i>	10L 1000	27K 2700K	8 80+	VNR Very Narrow (15°) NR Narrow (24°) MD Medium (38°) WD Narrow (52°)	DM1 0–10V Dimming to 1%	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	<i>Standard 120–277V</i> 34 347V ⁴	EMR 6W Emergency Battery Pack (CEC Title 20 Compliant) with remote test switch and indicator light ⁵ DTS Device Transfer Switch with Dimming Bypass ^{5,6}
	15L 1500	30K 3000K	9 90+		DM01 0–10V Dimming to < 1% ²			
	20L 2000	35K 3500K			PDM Phase (Forward/Reverse) Dimming to 1% ²			
	25L 2500	40K 4000K			DMX DMX with RDM dimming to < 0.1% ²			
	30L 3000	50K 5000K			DALI DALI Dimming to 1% ²			
	35L 3500				2DM Lutron Hi-Lume 2-wire Dimming to 1% (120V Forward Phase only) ²			
	40L 4000				EDM Lutron Hi-Lume EcoSystem Dimming to 1% ²			
	50L 5000							
	60L 6000 ¹							
	70L 7000 ¹							
	80L 8000 ¹							

TRIM (Ships separately)

LFR-6SQA-T			
Aperture/Shape/Function	Trim Style	Reflector Finish/Color	Flange Color Options
LFR-6SQA-T 6" Square Adjustable Trim Assembly	<i>Standard Cut Cone</i>	S Specular SS Semi-Specular WC Painted White Cone and Flange	<i>Standard matches reflector color</i> WT White Flange ⁷ BT Black Flange

HOUSING OPTIONS (Ships separately)

Aperture/Shape/Function
<input type="checkbox"/> LFR-6SQD-H 6" Housing Frame, New Construction, Non-IC
<input type="checkbox"/> LFR-6SQD-H-IC 6" Housing Enclosure, New Construction, IC Rated ^{8,9}
<input type="checkbox"/> LFR-6SQD-H-CP 6" Housing Enclosure, New Construction, Chicago Plenum ¹⁰

Accessories
<input type="checkbox"/> LiteGear LiteGear® Inverter, 125VA–250VA
<input type="checkbox"/> LPS Series LightPower Micro-Inverter, 20VA–55VA
<input type="checkbox"/> LF-MOR6-SQ-WH Metal Oversized Ring, 6" Square, White (10.3" outside dimension)

Notes:

- 60L–80L 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–15L 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.

DATE:



LOCATION:

TYPE:

PROJECT:

CATALOG #:

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

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	850	7.5	114
		Narrow	959	7.5	129
		Medium	932	7.5	125
		Wide	874	7.5	117
15L	1500	Very Narrow	1301	11.4	114
		Narrow	1468	11.4	129
		Medium	1426	11.4	125
		Wide	1338	11.4	117
20L	2000	Very Narrow	1660	14.3	116
		Narrow	1873	14.3	131
		Medium	1820	14.3	127
		Wide	1707	14.3	119
25L	2500	Very Narrow	2172	19.4	112
		Narrow	2450	19.4	126
		Medium	2380	19.4	123
		Wide	2233	19.4	115
30L	3000	Very Narrow	2653	24.2	110
		Narrow	2994	24.2	124
		Medium	2908	24.2	120
		Wide	2728	24.2	113
35L	3500	Very Narrow	3105	28.9	107
		Narrow	3503	28.9	121
		Medium	3404	28.9	118
		Wide	3193	28.9	110
40L	4000	Very Narrow	3496	32.3	108
		Narrow	3944	32.3	122
		Medium	3832	32.3	119
		Wide	3595	32.3	111
50L	5000	Very Narrow	4345	41.9	104
		Narrow	4902	41.9	117
		Medium	4763	41.9	114
		Wide	4468	41.9	107
60L	6000	Very Narrow	5338	49.5	108
		Narrow	6023	49.5	122
		Medium	5851	49.5	118
		Wide	5489	49.5	111
70L	7000	Very Narrow	6233	59.0	106
		Narrow	7033	59.0	119
		Medium	6832	59.0	116
		Wide	6410	59.0	109
80L	8000	Very Narrow	7127	69.2	103
		Narrow	8041	69.2	116
		Medium	7812	69.2	113
		Wide	7329	69.2	106

LFR-6SQA

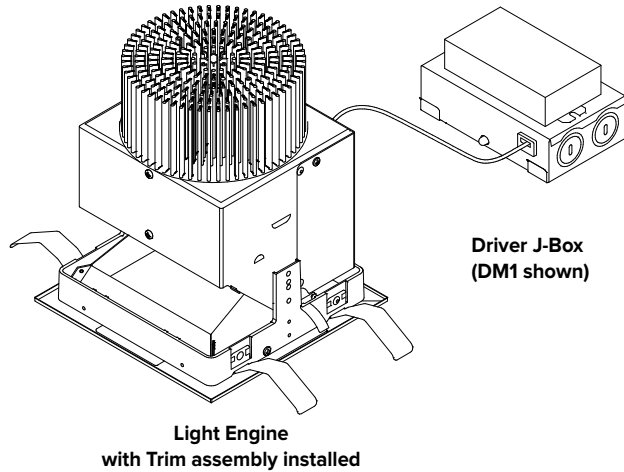
LITEFRAME 6" SQUARE ADJUSTABLE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

DIMENSIONS

LFR-6SQA-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.

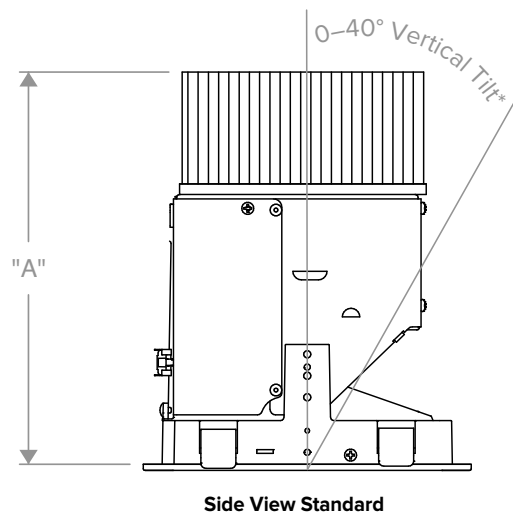


DIMENSIONAL DATA	
APERTURE	□ 6.00" (152.4mm)
FLANGE TO FLANGE	□ 7.38" (187.4mm)
FLANGE WIDTH	0.71" (18.0mm)
CEILING CUTOUT	□ 6.75" (171.5mm)
CEILING THICKNESS	0.50"–1.25" (12.7–31.8mm)

LFR-6SQA LIGHT ENGINE

OVERALL LIGHT ENGINE HEIGHT "A" *		
LUMEN PACKAGE	BEAM DISTRIBUTION	
	VNR	NR / MD / WD
10L–35L	8.16" (207.3mm)	6.94" (176.3mm)
40L–50L	8.73" (221.7mm)	7.51" (190.7mm)
60L–80L	9.92" (252.0mm)	8.70" (221.0mm)

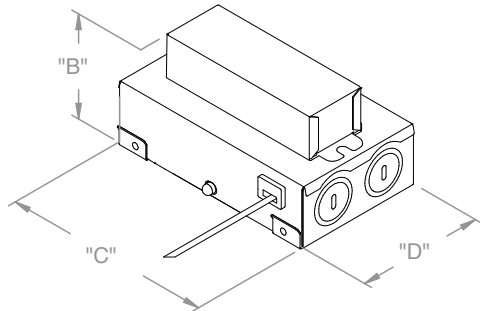
* Note: Add ½" minimum plenum clearance above overall Light Engine Height.
** For ≥60L: Marked spacing required 36" fixture center to center;
18" fixture center to building member; 0.5" above fixture.
*** Non-IC rating requires 3" from insulation and combustible materials.



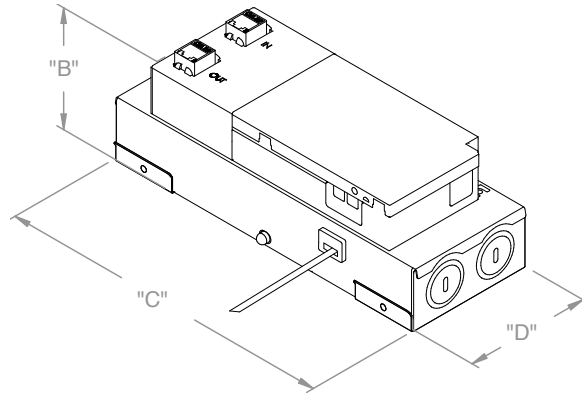
* Vertical Tilt:
0–40° up to 0.75" ceiling thickness
0–35° for 0.75" to 1" ceiling thickness
0–30° for 1" to 1.25" ceiling thickness

DIMENSIONS CONTINUED

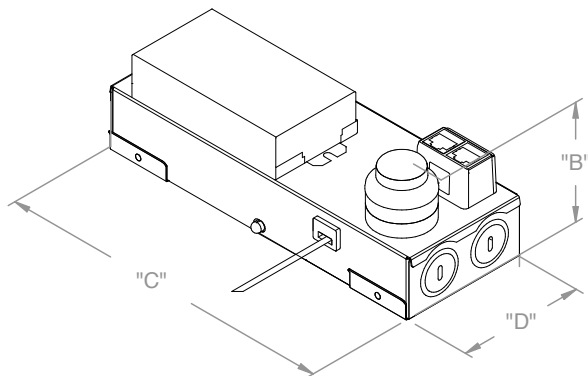
DRIVER J-BOX



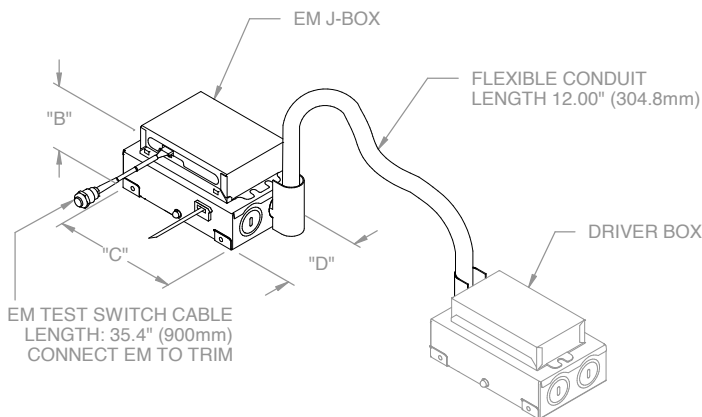
DM1 / DM01 / PDM / DALI



DMX



NX CONTROLS OPTION



EMR OPTION

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

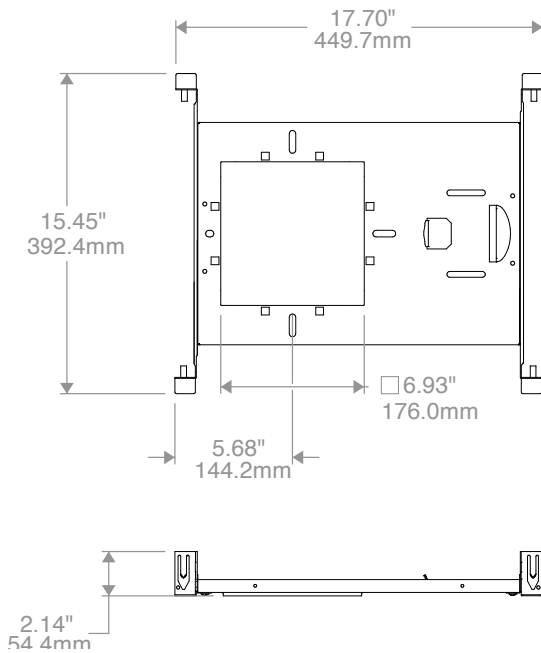
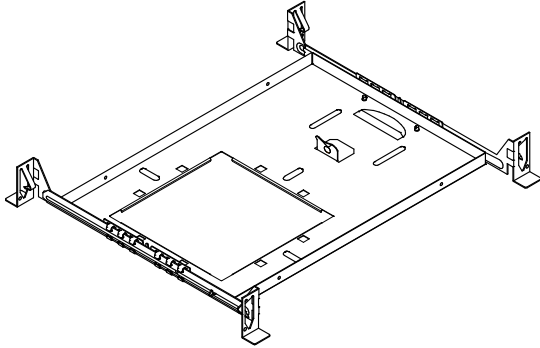
OVERALL DRIVER J-BOX DIMENSIONS (ALL LUMEN OUTPUTS)				
DRIVER/ CONTROLS /OPTIONS	"B" (HEIGHT)	"C" (LENGTH)	"D" (WIDTH)	MINIMUM J-BOX PLENUM CLEARANCE
DM1 / DM01 / PDM / DALI	2.67" (67.8mm)	5.34" (135.6mm)	3.23" (82.0mm)	3.00" (76.2mm)
DMX	3.07" (78.0mm)	8.68" (220.5mm)	3.23" (82.0mm)	3.50" (88.9mm)
NX	3.02" (76.7mm)	8.68" (220.5mm)	3.23" (82.0mm)	3.75" (95.3mm)
EMR	2.73" (69.3mm)	5.34" (135.6mm)	3.23" (82.0mm)	3.00" (76.2mm)

LFR-6SQA

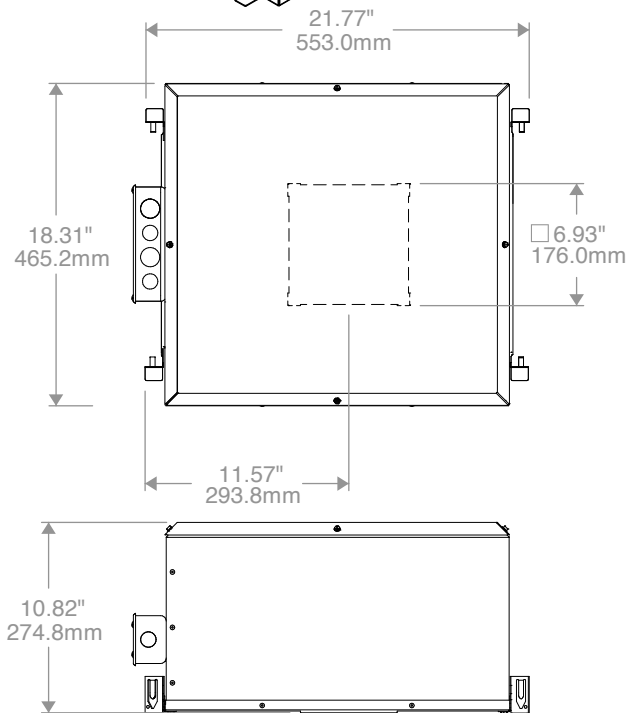
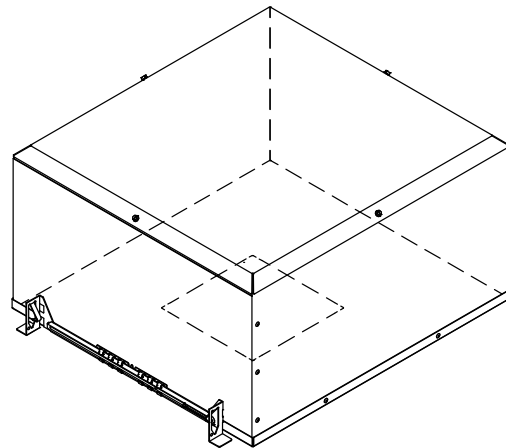
LITEFRAME 6" SQUARE ADJUSTABLE

DIMENSIONS CONTINUED

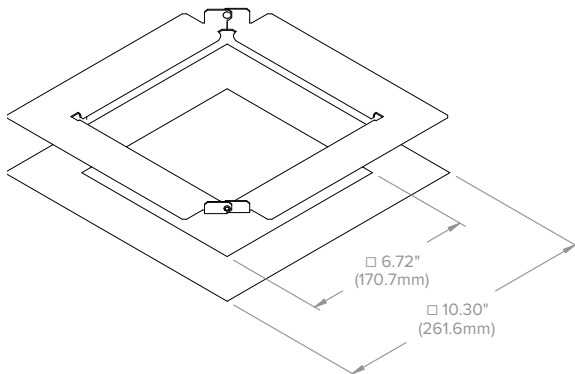
OPTIONAL HOUSINGS



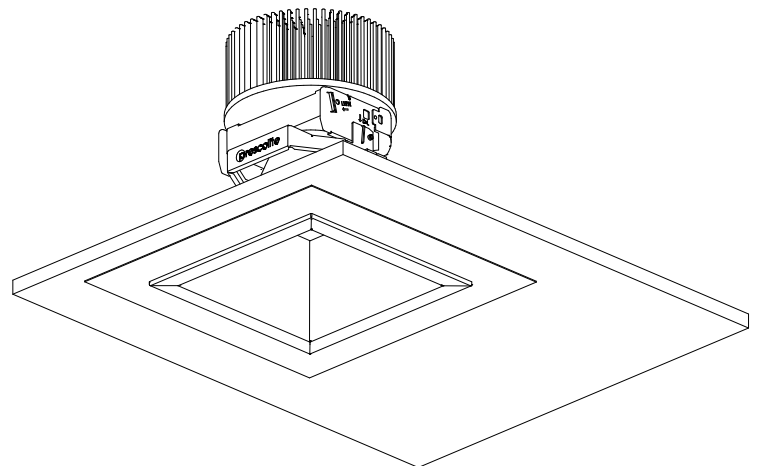
LFR-6SQD-H
NON-IC HOUSING FRAME



LFR-6SQD-H-IC
LFR-6SQD-H-CP
IC or CP HOUSING



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



DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

PHOTOMETRY

LFR-6SQA-M-20L35K8VNR-DM1 / LFR-6SQA-T-S

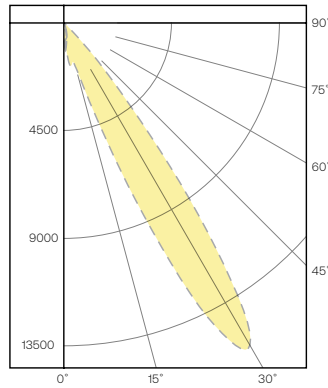
LUMINAIRE DATA

Test No.	22.00793
Description	2000 lm, Very Narrow, 3500K, 80 CRI
Delivered Lumens	1660
Watts	14.3W
Efficacy	116
Mounting	Recessed/Ceiling
Beam Angle (FWHM)	15

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1548	93.3
0-60	1659	99.9
0-90	1660	100.0
0-180	1660	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	784
5	1186
15	1961
25	12460
35	9790
45	432
55	26
65	7
75	1
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	26304
55°	1952
65°	713
75°	166
85°	0

*Candela/Square Meter

LFR-6SQA-M-20L35K8NR-DM1 / LFR-6SQA-T-S

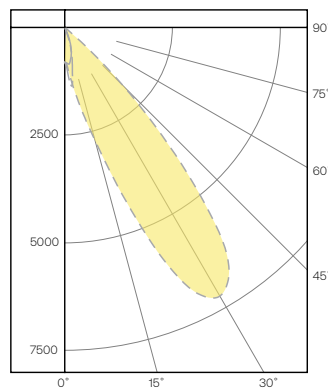
LUMINAIRE DATA

Test No.	22.00794
Description	2000 lm, Narrow, 3500K, 80 CRI
Delivered Lumens	1873
Watts	14.3W
Efficacy	131
Mounting	Recessed/Ceiling
Beam Angle (FWHM)	24

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1608	85.8
0-60	1871	99.9
0-90	1873	100.0
0-180	1873	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	808
5	1026
15	2710
25	6538
35	6606
45	1942
55	43
65	11
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	118248
55°	3228
65°	1121
75°	0
85°	0

*Candela/Square Meter

LFR-6SQA-M-20L35K8MD-DM1 / LFR-6SQA-T-S

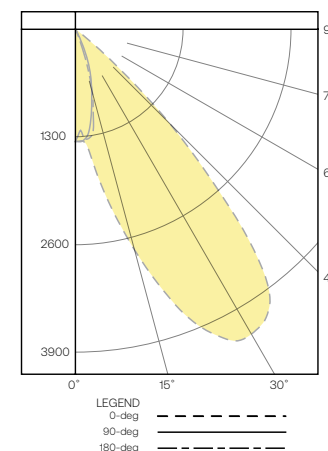
LUMINAIRE DATA

Test No.	22.00795
Description	2000 lm, Narrow, 3500K, 80 CRI
Delivered Lumens	1820
Watts	14.3W
Efficacy	127
Mounting	Recessed/Ceiling
Beam Angle (FWHM)	38

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1544	84.9
0-60	1818	99.9
0-90	1820	100
0-180	1820	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	1354
5	1375
15	2751
25	4083
35	4080
45	1617
55	44
65	11
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	98459
55°	3303
65°	1121
75°	0
85°	0

*Candela/Square Meter

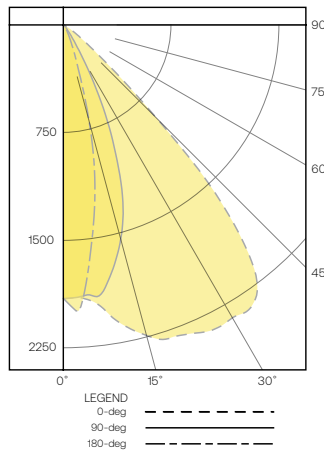
PHOTOMETRY CONTINUED

LFR-6SQA-M-20L35K8WD-DM1 / LFR-6SQA-T-S

LUMINAIRE DATA

Test No.	22.00796
Description	2000 lm, Wide, 3500K, 80 CRI
Delivered Lumens	1707
Watts	14.3W
Efficacy	119
Mounting	Recessed/Ceiling
Beam Angle (FWHM)	52

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	1904
5	1918
15	2238
25	2355
35	2327
45	898
55	97
65	7
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	54679
55°	7281
65°	713
75°	0
85°	0

*Candela/Square Meter

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1485	87.0
0-60	1705	99.9
0-90	1707	100.0
0-180	1707	100.0

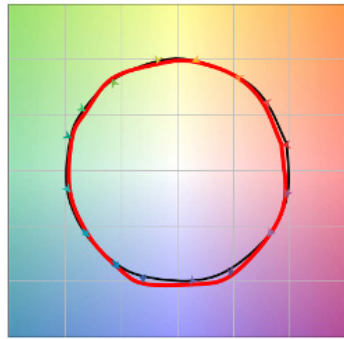
LUMEN MULTIPLIER

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 above 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.

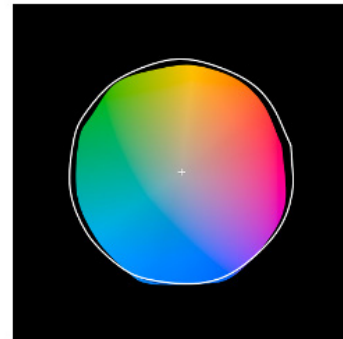
TM-30 DATA

COLOR VECTOR GRAPHIC 3500K, 90 CRI



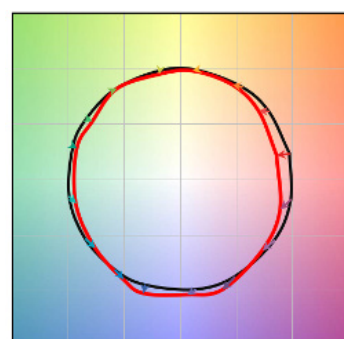
— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC 3500K, 90 CRI



TEST RESULTS - 3500K		
Value	80+ CRI	90+ CRI
R _t	85	90
R _g	95	99
CCT (K)	3422	3416
D _{uv}	-0.0008	-0.0019
x	0.4089	0.408
y	0.3906	0.3877
CIE R _a	85	93
CIE R _g	16	66

COLOR VECTOR GRAPHIC 3500K, 80 CRI



— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC 3500K, 80 CRI



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, 6W x 120 LPW = 720 lumens in emergency mode.