prescolite

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

LFR-4SQD

LITEFRAME 4" SQUARE DOWNLIGHT

LITEFRAME 2.0



FEATURES

- 4" LED downlight delivering 1000–6000 lumens
- Direct Install from below ceiling for New Construction or Remodel applications
- Optional housing accessories available
- Five beam distributions
- 2700K–5000K, 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

C US

WET LOCATION

With CL Lens Option

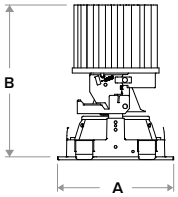
TriGain® technology

SERVICE PROGRAMS

STOCK QS10

CONTROLS TECHNOLOGY

NX WIRELESS NX WIRED



Typical Dimensions and Weights			
Lumen Package	"A" Width (SQ) Inches (mm)	"B" Height Inches (mm)	Weight Lbs (kg)
10L–30L	5.38 (137)	5.45 (138)	4 (1.8)
35L–60L	5.38 (137)	7.03 (179)	4.3 (1.9)

See DIMENSIONS section for complete details

SPECIFICATIONS

CONSTRUCTION

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

OPTICS

- High purity, four panel aluminum reflector, self-flanged
- Specular or Semi-Specular anodized or White painted cone reflector finish/colors
- Painted flange options in White or Black
- Optional clear lens trim for wet location applications
- Wide Angle and Soft Focus lens filter/clip accessories available

ELECTRICAL

- Chip-on-board LED with 2 SDCM
- Multiple CCTs, TriGain technology 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 options 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
- Integral and remote emergency battery options available
- Current's patented TriGain® phosphor delivers 90 CRI color quality at 80 CRI efficacy

INSTALLATION

- Accommodates ceiling thickness from 0.50" to 2.50"
- 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)

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 wet locations, covered ceiling when used with CL lens trim; all other configurations, suitable for damp locations
- 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. Up to 40°C available on certain configurations, contact factory for details

WARRANTY

- 5 year warranty

KEY DATA	
Lumen Range	1000–6000
Wattage Range	8–54
Efficacy Range (LPW)	115–144
Reported Life (Hours)	L90 / >50,000
Input Current (mA)	65–446 (120V)

*Based on Specular, 35K, 90 CRI

© 2026 HLI Solutions, Inc. All rights reserved. Information and specifications subject to change without notice. All values are design or typical values when measured under laboratory conditions.

prescolite

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

LFR-4SQD

LITEFRAME 4" SQUARE DOWNLIGHT

Gray Shading = Service Program STOCK QS10 Limit of 150 Luminaries

ORDERING GUIDE

Example: LFR–4SQD–M–10L35K9–WD–DM1 / LFR–4SQD–T–S / LFR–4SQD–H

CATALOG #

FIXTURE MODULE

LFR-4SQD-M – [ ] [ ] 9 – [ ] – [ ] [ ] [ ] – [ ]

Ap/Shp/Funct	Lumen Output	CCT	CRI	Distribution	Driver Options	Control Options	Voltage	Module Options
LFR-4SQD-M 4" Square Downlight Fixture Module for Direct Install *(Non-IC frame or IC housing available under Housing Options below)*	**10L** 1000 **15L** 1500 **20L** 2000 **25L** 2500 **30L** 3000 **35L** 3500 **40L** 4000 **50L** 5000 [1] **60L** 6000 [1]	**27K** 2700K **30K** 3000K **35K** 3500K **40K** 4000K **50K** 5000K	**9** 90+	**VNR** Very Narrow (15°/0.3 SC) **NR** Narrow (25°/0.4 SC) **MD** Medium (30°/0.5 SC) **WD** Wide (46°/0.7 SC) **XW** Extra Wide (57°/0.9 SC) [12]	**DM1** 0–10V Dimming to 1% **DM01** 0–10V Dimming to < 1% [2] **PDM** Phase (Forward/Reverse) Dimming to 1% [2] **DMX** DMX with RDM dimming to < 0.1% [2] **DALI** DALI Dimming to 1% [2] **EDM** Lutron Hi-Lume EcoSystem Dimming to 1% [2]	**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]	*Standard 120–277V* **34** 347V [4]	**CP** Chicago Plenum [5, 6] **EM** 10W Emergency Battery Pack (CEC Title 20 Compliant) with integral test switch and indicator light [6] **EMR** 10W Emergency Battery Pack (CEC Title 20 Compliant) with remote test switch and indicator light [6] **DTS** Device Transfer Switch with Dimming Bypass [6, 7]

TRIM (Ships separately)

LFR-4SQD-T – [ ] – [ ] [ ] [ ] [ ]

Aperture/Shape/Function	Distribution	Reflector Finish/Color	Flange Color Options	Lens Options	Lower Trim Options
LFR-4SQD-T 4" Square Downlight Trim Assembly	*Standard NR, MD, WD, XW* **VNR** Very Narrow	**S** Specular [12] **SS** Semi-Specular **WC** Painted White Cone and Flange	*Standard matches reflector color* **WT** White Flange [8] **BT** Black Flange	*Standard no lens* **CL** Clear Lens (Wet listed) [9]	**EM** Pre-punched reflector for EM integral test switch and indicator [9] **FM** Flush Mount Flange [13]

HOUSING OPTIONS (Ships separately)

Aperture/Shape/Function	
☐ **LFR-4SQD-H**	4" Housing Frame, New Construction, Non-IC
☐ **LFR-4SQD-H-IC**	4" Housing Enclosure, New Construction, IC Rated [10, 11]

Accessories	
☐ **SFL4**	Soft Focus Lens and Clip, 4" Square
☐ **WAL4**	Wide Angle 80° Lens and Clip, 4" Square
☐ **LiteGear**	LiteGear® Inverter, 125VA–250VA
☐ **LPS Series**	LightPower Micro-Inverter, 20VA–55VA
☐ **LF-FMR4-SQ**	Flush Mount Mud-in Ring, 4" Square [13]
☐ **LF-MOR4-SQ-WH**	Metal Oversized Ring, 4" Square, White (8.3" outside dimension)

Notes:

1 50L and 60L require marked spacing. See line art for more details.
2 DM01, PDM, DMX, DALI available up to 50L. EDM available 15L–40L.
3 NX requires DM1 driver option.
4 347V requires DM1 driver option; available 10L–40L; not available with Controls, DTS, EM, EMR.
5 CP not available with PDM, DMX, or Controls.
6 Module options not available in combination.
7 DTS available with DM1, DM01 or DALI.
8 WT not needed for WC.
9 CL lens and EM trim options not available in combination.
10 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.)
11 IC Housing not for use in combination with Controls or with Module Options CP, EM, EMR, DTS.
12 XW distribution is not available for Specular (S) reflector finish.
13 Flush Mount Flange requires FMR accessory.

© 2026 HLI Solutions, Inc. All rights reserved. Information and specifications subject to change without notice. All values are design or typical values when measured under laboratory conditions.

LFR-4SQD

LITEFRAME 4" SQUARE DOWNLIGHT

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

© 2026 HLI Solutions, Inc. All rights reserved. Information and specifications subject to change without notice. All values are design or typical values when measured under laboratory conditions.

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

LFR-4SQD

LITEFRAME 4" SQUARE DOWNLIGHT

PERFORMANCE DATA TABLE

Performance data shown is 3500K 90+ CRI with Specular reflector except Extra Wide distribution which is Semi-Specular.

Lumen Package	Nominal Lumens	Distribution	Delivered Lumens	Watts	LPW
10L	1000	Very Narrow	1077	7.7	140
		Narrow	1104	7.7	143
		Medium	1064	7.7	138
		Wide	1080	7.7	140
		Extra Wide	1056	7.7	137
15L	1500	Very Narrow	1478	11.8	125
		Narrow	1514	11.8	128
		Medium	1454	11.8	123
		Wide	1482	11.8	126
		Extra Wide	1449	11.8	123
20L	2000	Very Narrow	2044	15	136
		Narrow	2095	15	140
		Medium	2012	15	134
		Wide	2050	15	137
		Extra Wide	1823	15	122
25L	2500	Very Narrow	2661	20.4	130
		Narrow	2728	20.4	134
		Medium	2620	20.4	128
		Wide	2669	20.4	131
		Extra Wide	2610	20.4	128
30L	3000	Very Narrow	3212	25.9	124
		Narrow	3292	25.9	127
		Medium	3162	25.9	122
		Wide	3221	25.9	124
		Extra Wide	3151	25.9	122
35L	3500	Very Narrow	3855	29.9	129
		Narrow	3952	29.9	132
		Medium	3795	29.9	127
		Wide	3867	29.9	129
		Extra Wide	3782	29.9	126
40L	4000	Very Narrow	4332	32.8	132
		Narrow	4440	32.8	135
		Medium	4264	32.8	130
		Wide	4345	32.8	132
		Extra Wide	4249	32.8	130
50L	5000	Very Narrow	5214	42.6	122
		Narrow	5344	42.6	125
		Medium	5132	42.6	120
		Wide	5229	42.6	123
		Extra Wide	5114	42.6	120
60L	6000	Very Narrow	6229	53.1	117
		Narrow	6384	53.1	120
		Medium	6132	53.1	115
		Wide	6247	53.1	118
		Extra Wide	6110	53.1	115

© 2026 HLI Solutions, Inc. All rights reserved. Information and specifications subject to change without notice. All values are design or typical values when measured under laboratory conditions.

prescolite

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

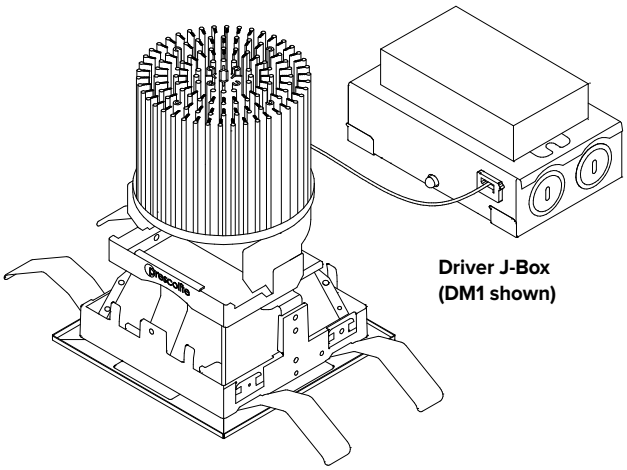
LFR-4SQD

LITEFRAME 4" SQUARE DOWNLIGHT

DIMENSIONS

LFR-4SQD-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.



Driver J-Box (DM1 shown)

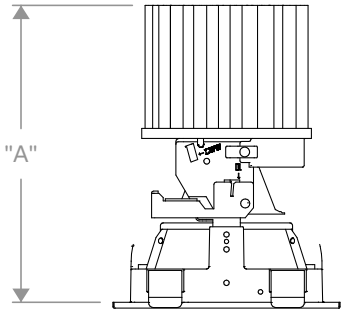
Light Engine with Trim assembly installed

DIMENSIONAL DATA		
APERTURE		□ 4.00" (101.6mm)
FLANGE WIDTH	Standard	0.69" (17.5mm)
	Flush Mount	0.18" (4.6mm)
FLANGE TO FLANGE	Standard	□ 5.38" (136.7mm)
	Flush Mount	□ 4.37" (111.0mm)
CEILING CUTOUT	Standard	□ 4.75" (120.7mm)
	Flush Mount	□ 4.88" (123.9mm)
CEILING THICKNESS		0.50" – 2.50" (12.7 – 63.5mm)

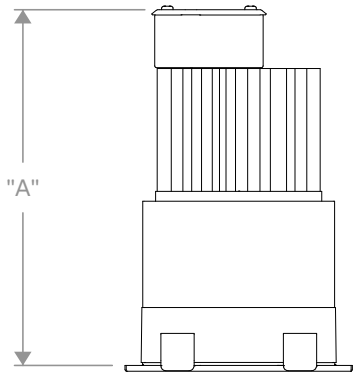
LFR-4SQD LIGHT ENGINE

OVERALL LIGHT ENGINE HEIGHT "A" *				
LUMEN PACKAGE	FIXTURE MODULE	BEAM DISTRIBUTION		
		VNR	NR / MD / WD	XW
10L–30L	STANDARD	6.24" (158.5mm)	5.45" (138.5mm)	5.10" (129.5mm)
	CP	9.22" (234.1mm)	8.43" (214.0mm)	8.08" (205.1mm)
35L–60L	STANDARD	7.82" (198.6mm)	7.03" (178.6mm)	6.68" (169.7mm)
	CP	9.22" (234.1mm)	8.43" (214.0mm)	8.08" (205.1mm)

* Note: Add ½" 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



Side View CP – Chicago Plenum

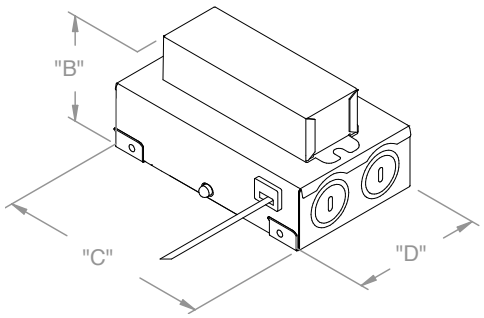
© 2026 HLI Solutions, Inc. All rights reserved. Information and specifications subject to change without notice. All values are design or typical values when measured under laboratory conditions.

LFR-4SQD

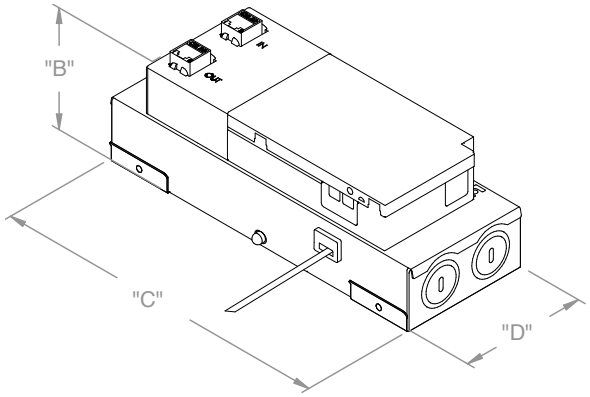
LITEFRAME 4" SQUARE DOWNLIGHT

DIMENSIONS (CONTINUED)

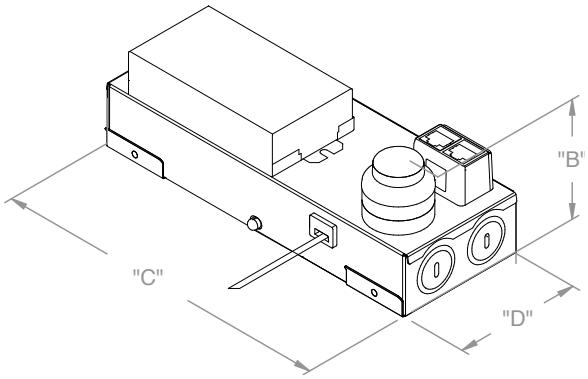
DRIVER J-BOX



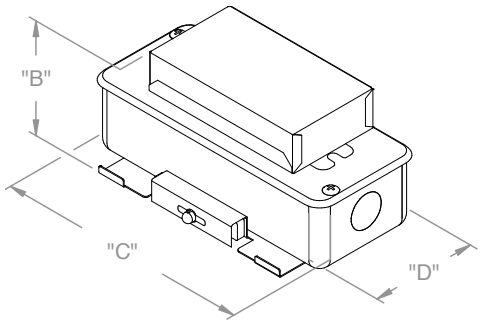
DM1 / DM01 / PDM / DALI



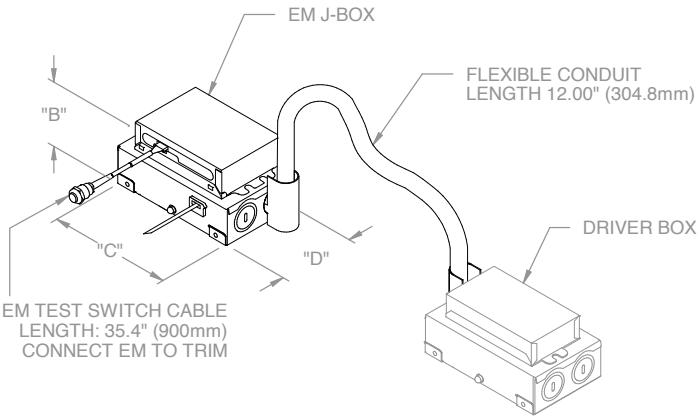
DMX



NX CONTROLS OPTION



CP



EM/EMR OPTION

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 / 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)
EM/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" (127mm)

© 2026 HLI Solutions, Inc. All rights reserved. Information and specifications subject to change without notice. All values are design or typical values when measured under laboratory conditions.

DATE: LOCATION:

TYPE: PROJECT:

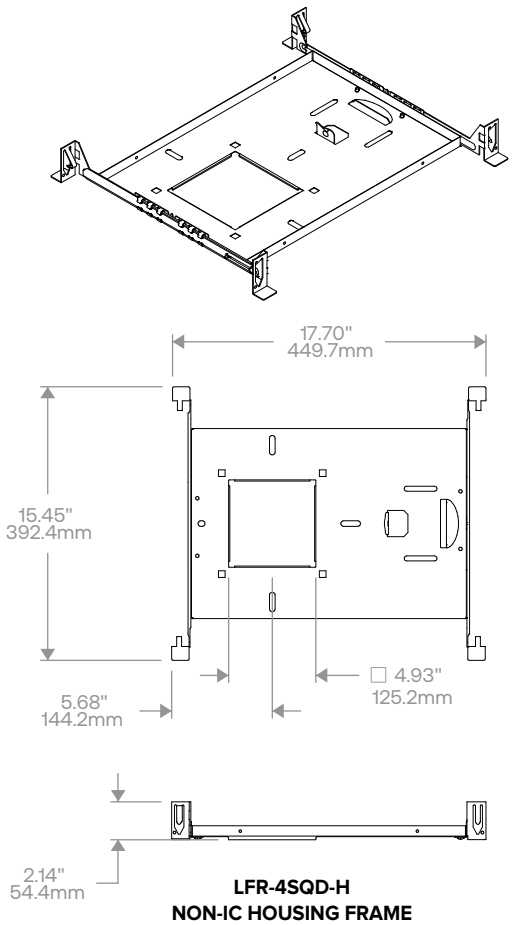
CATALOG #:

LFR-4SQD

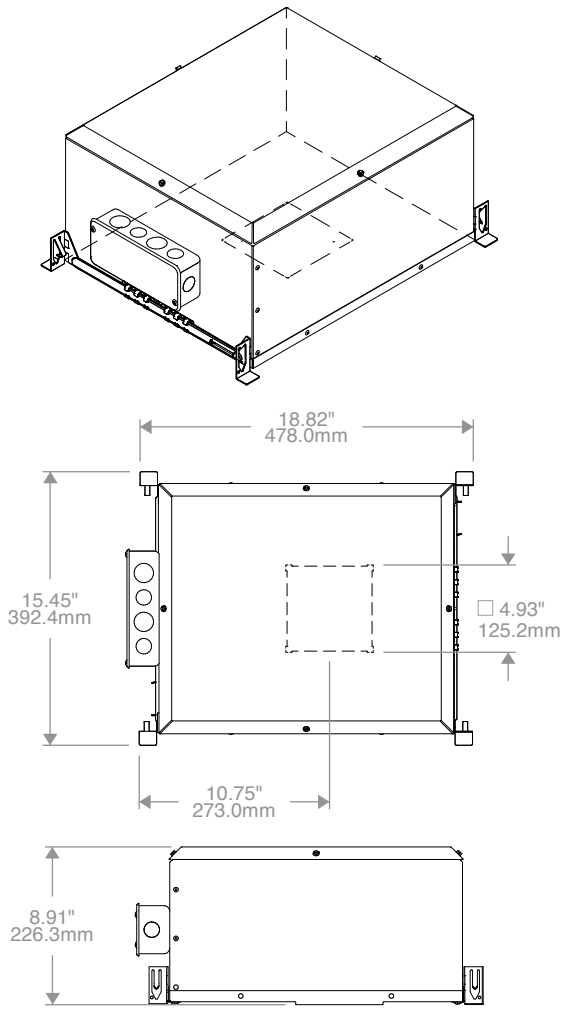
LITEFRAME 4" SQUARE DOWNLIGHT

DIMENSIONS (CONTINUED)

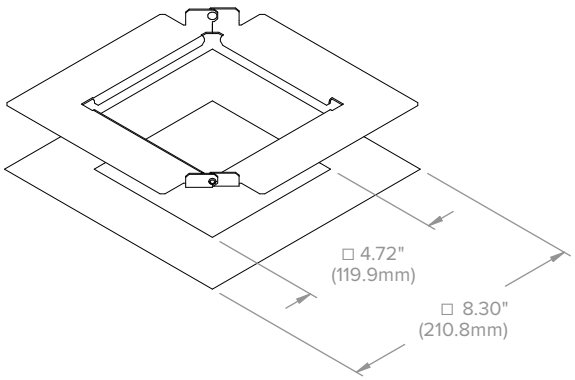
OPTIONAL HOUSINGS



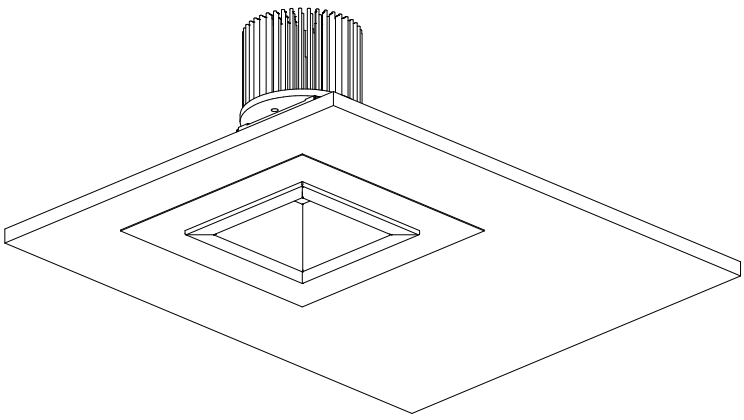
LFR-4SQD-H
NON-IC HOUSING FRAME



LFR-4SQD-H-IC
IC HOUSING
Not for use with CP Shroud



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



© 2026 HLI Solutions, Inc. All rights reserved. Information and specifications subject to change without notice. All values are design or typical values when measured under laboratory conditions.

prescolite

LFR-4SQD

LITEFRAME 4" SQUARE DOWNLIGHT

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

PHOTOMETRY

LFR-4SQD-M-20L35K9VNR-DM1 / LFR-4SQD-T-VNR-S

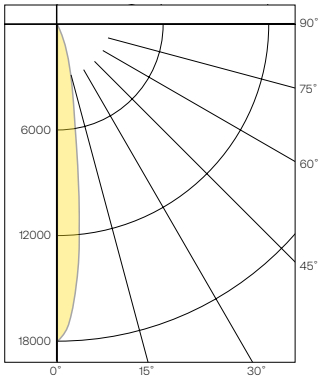
LUMINAIRE DATA

Test No.	**25.00698-R03**
Description	**2000 lm, Very Narrow, 3500K, 90 CRI**
Delivered Lumens	**2044**
Watts	**15W**
Efficacy	**134.1**
Mounting	**Recessed/Ceiling**
Spacing Criterion	**0.3**
Beam Angle (FWHM)	**15**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0–40	2034	99.5
0–60	2042	99.9
0–90	2044	100.0
0–180	2044	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	17967
5	13317
15	2511
25	206
35	23
45	9
55	3
65	1
75	1
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	1232
55°	506
65°	229
75°	374
85°	0

*Candela/Square Meter

LFR-4SQD-M-20L35K9NR-DM1 / LFR-4SQD-T-S

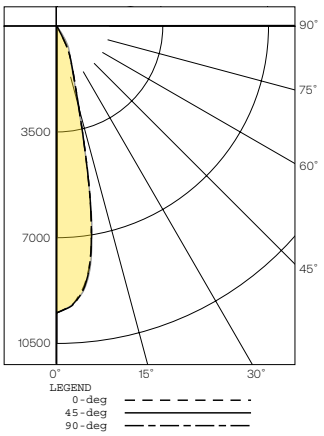
LUMINAIRE DATA

Test No.	**25.00699**
Description	**2000 lm, Narrow, 3500K, 90 CRI**
Delivered Lumens	**2095**
Watts	**15W**
Efficacy	**140**
Mounting	**Recessed/Ceiling**
Spacing Criterion	**0.4**
Beam Angle (FWHM)	**25**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0–40	2090	99.8
0–60	2094	100.0
0–90	2095	100.0
0–180	2095	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	9451
5	8840
15	2740
25	875
35	11
45	4
55	1
65	1
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	548
55°	169
65°	229
75°	0
85°	0

*Candela/Square Meter

LFR-4SQD-M-20L35K9MD-DM1 / LFR-4SQD-T-S

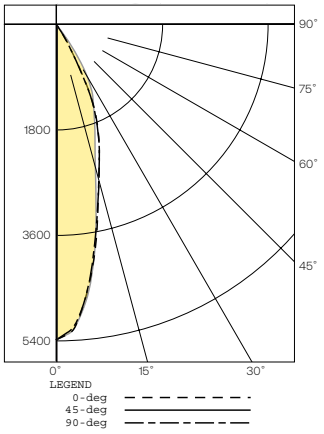
LUMINAIRE DATA

Test No.	**25.00700**
Description	**2000 lm, Medium, 3500K, 90 CRI**
Delivered Lumens	**2012**
Watts	**15W**
Efficacy	**134**
Mounting	**Recessed/Ceiling**
Spacing Criterion	**0.5**
Beam Angle (FWHM)	**30**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0–40	2003	99.6
0–60	2011	99.9
0–90	2012	100.0
0–180	2012	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	5370
5	4892
15	2789
25	1460
35	50
45	6
55	2
65	1
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	822
55°	338
65°	229
75°	0
85°	0

*Candela/Square Meter

© 2026 HLI Solutions, Inc. All rights reserved. Information and specifications subject to change without notice. All values are design or typical values when measured under laboratory conditions.

LFR-4SQD

LITEFRAME 4" SQUARE DOWNLIGHT

PHOTOMETRY (CONTINUED)

LFR-4SQD-M-20L35K9WD-DM1 / LFR-4SQD-T-S

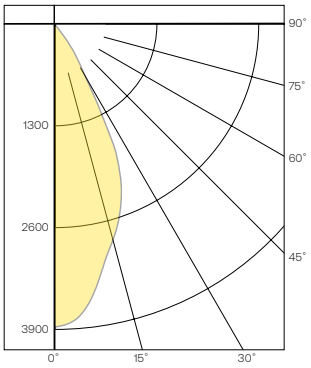
LUMINAIRE DATA

Test No.	**25.00702-R03**
Description	**2000 lm, Wide, 3500K, 90 CRI**
Delivered Lumens	**2050**
Watts	**15W**
Efficacy	**137**
Mounting	**Recessed/Ceiling**
Spacing Criterion	**0.8**
Beam Angle (FWHM)	**46**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0–40	2040	99.5
0–60	2049	99.9
0–90	2050	100.0
0–180	2050	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	3817
5	3689
15	2788
25	1753
35	92
45	5
55	2
65	1
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	684
55°	337
65°	229
75°	0
85°	0

*Candela/Square Meter

LFR-4SQD-M-20L35K9XW-DM1 / LFR-4SQD-T-SS

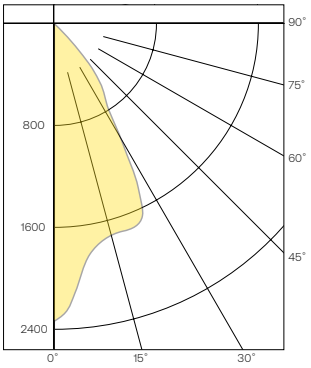
LUMINAIRE DATA

Test No.	**25.00703-R03**
Description	**2000 lm, Extra Wide, 3500K, 90 CRI**
Delivered Lumens	**1823**
Watts	**15W**
Efficacy	**122**
Mounting	**Recessed/Ceiling**
Spacing Criterion	**1.0**
Beam Angle (FWHM)	**57**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0–40	1696	93.1
0–60	1821	99.9
0–90	1823	100.0
0–180	1823	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	2258
5	2009
15	1649
25	1593
35	657
45	23
55	3
65	2
75	1
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	3148
55°	506
65°	458
75°	374
85°	0

*Candela/Square Meter

LUMEN MULTIPLIER

Option	27K9	30K9	35K9	40K9	50K9
Multiplier	0.94	0.98	1.00	1.01	1.02

Photometrics are published 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 MULTIPLIER (Based on Clear (Standard) Color)

Option	Specular (S)	Semi-Specular (SS)	White Cone (WC)
Multiplier	1	0.909	0.984

LENS OPTION / LENS FILTER ACCESSORY MULTIPLIER (Based on Clear Specular)

Option	CL (Clear Lens)	SFL4 (Soft Focus Accessory)	WAL4 (Wide Angle Accessory)
Multiplier	0.95	0.96	0.83

Multiply lumen/lens multipliers to calculate applicable combinations. Example: 27K9 with Clear Lens option (CL) = 0.93 x 0.95 = **0.88**

© 2026 HLI Solutions, Inc. All rights reserved. Information and specifications subject to change without notice. All values are design or typical values when measured under laboratory conditions.

prescolite

DATE: LOCATION:

TYPE: PROJECT:

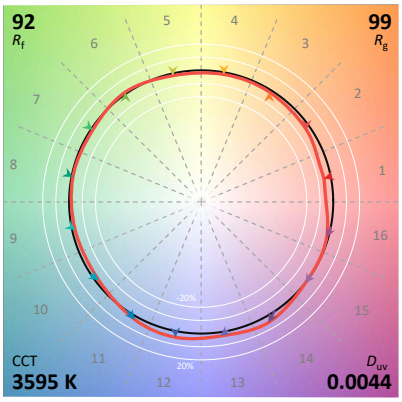
CATALOG #:

LFR-4SQD

LITEFRAME 4" SQUARE DOWNLIGHT

TM-30 DATA

COLOR VECTOR GRAPHIC
3500K, 90 CRI



TEST RESULTS - 3500K	
Value	90+ CRI
R_f	92
R_g	99
CCT (K)	3595
D_{UV}	0.0044
x	0.4045
y	0.4004
CIE R_a	93
CIE R_9	61

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.

© 2026 HLI Solutions, Inc. All rights reserved. Information and specifications subject to change without notice. All values are design or typical values when measured under laboratory conditions.