

LFCR-4SD-N

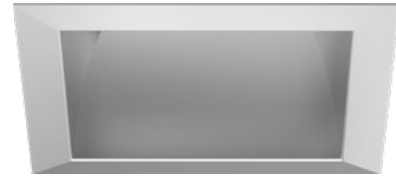
LITEFRAME COMMERCIAL 4" SQUARE
NEW CONSTRUCTION DOWNLIGHT

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

- Standard fixture module designed for Non-IC, with new construction housing
- All housing options come standard with pre-installed bar hangers
- Die cast aluminum fixture module with torsion springs for secure mounting to fixture housing
- Snap-in driver 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 quality polymer reflector with PVD finish, self flanged
- 55° visual cutoff to source image and 55° cutoff to source
- Specular, Semi-Specular, or Softglow (Diffuse) PVD finishes. White and black painted cone reflector colors also available.
- Painted flange options in white or black

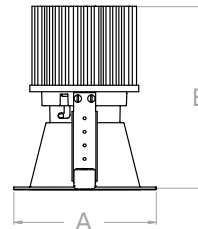
ELECTRICAL

- 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 0.25" to 1.25".
- Fixture module including driver fully accessible from above or below the ceiling

Typical Dimensions and Weights				
Lumen Package	Aperture Inches (mm)	"A" Width Inches (mm)	"B" Height Inches (mm)	Weight lbs (kg)
05L-15L			3.9 (99.1)	4.0 (1.8)
20L-30L	4.1 (104.1)	5.25 (133.4)	5.2 (132.1)	4.2 (1.9)
35L-50L			6.8 (172.7)	4.4 (2.0)



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
- 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

LFCR-4SD-N

LITEFRAME COMMERCIAL 4" SQUARE
 NEW CONSTRUCTION DOWNLIGHT

Gray Shading = Service Program

tradeSELECT® QS10
 Limit of 150 Luminaries

ORDERING GUIDE

Example: LFCR-4SD-H / LFCR-4D-MN-10L35K9-WD-DM1 / LFCR-4SD-T-WD-S

CATALOG #

HOUSING (Ships separately)

Aperture/Shape/Function	
<input type="checkbox"/> LFCR-4SD-H	4" Housing Frame, New Construction, Non-IC
<input type="checkbox"/> LFCR-4SD-H-IC	4" Housing Enclosure, New Construction, IC Rated ¹
<input type="checkbox"/> LFCR-4SD-H-CP	4" Housing Enclosure, New Construction, Chicago Plenum ²

FIXTURE MODULE (Ships separately)

LFCR-4D-MN			9	WD				
Ap/Shp/Funct	Lumen Output	CCT	CRI	Distribution	Driver Options	Control Options	Module Options ⁴	
LFCR-4D-MN 4" Downlight Fixture Module, New Construction	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 EMR 10W Emergency Battery Pack with Remote Test Switch DTS Device Transfer Switch with Dimming Bypass ^{11,12} F Fuse HA High Ambient Option (40°C) ^{13,14}	
	10L 1000	30K 3000K			DM1 0-10V Dimming to 1%	Networked Wireless		
	15L 1500	35K 3500K			DM01 0-10V Dimming to < 1% ⁵	NXW NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor ⁹		
	20L 2000	40K 4000K			PDM Phase (Forward/Reverse) Dimming to 1% ⁶	Networked Wired		
	25L 2500	50K 5000K			DALI DALI Dimming to 1% ⁵	NXE NX Wired Dual RJ45 SmartPORTS, without Sensor ⁹		
	30L 3000				DM00 Lutron Athena Compatible Driver for static white CCT	Other Lighting Controls		
	35L 3500				DMX1 DMX with RDM dimming to 1%	Networked Wireless		
	40L 4000				347V Option	AWNR Lutron Athena Enabled ¹⁰		
	45L 4500 ³				DM34 0-10V Dimming to 1% (347V input) ^{7,8}			
	50L 5000 ³							

TRIM (Ships separately)

LFCR-4SD-T						
Aperture/Shape/Function	Trim Distribution		Reflector Finish	Flange Color Options ¹⁷	Trim Options	
LFCR-4SD-T 4" Square Downlight Trim Assembly	WD	Wide (1.0 SC)	<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 AM Antimicrobial Coating ^{15,16}	
	WW	Wall Wash	S Specular	WT White Flange		
			SS Semi-Specular	BT Black Flange		
			VS Softglow			
			WC Painted White Cone			
			BC Painted Black Cone			

Accessories

<input type="checkbox"/> MOR4-S-WH	Metal Oversized Ring, 4" Square, White (8.3" outside diameter)
<input type="checkbox"/> MOR4-S-BL	Metal Oversized Ring, 4" Square, Black (8.3" outside diameter)
<input type="checkbox"/> LFCR-TCA	Thick ceiling accessory (1.25"-3.00")



Notes:

- IC Housing available 05L-20L, not available with controls or EMR
- CP housing available 05-30L. CP Housing is IC Rated 05L-20L, non-IC rated 25L-30L, not available with controls options or EMR
- Lumen outputs 45L-50L require marked spacing with dims (24"x24"x1/2" above fixture)
- Module options EM/EMR/DTS not available in combination
- DM01 & DALI available 05L-45L
- PDM available 10L-45L
- DM34 available 05L-35L
- DM34 not available with EM, EMR, DTS, or F fixture module options
- NXW/NXE control options require DM1 or DM34 driver option
- AWNR control option requires DM00 driver option (DM00 only available in combination with AWNR)
- Consult factory for DTS with control options
- DTS requires driver options DM1, DM01 or DALI
- HA option available 05L-25L
- HA not available with IC or CP Options
- AM available with WC or Specular Clear (S or SWT), also available with WT for SH trim
- AM not available with WW or EM
- WT not available for WC, BT not available for BC
- SH not available with WW or EM, requires WT or BT- reflector finish not applicable, available with lumen output 05L-30L

LFCR-4SD-N

LITEFRAME COMMERCIAL 4" SQUARE
NEW CONSTRUCTION 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		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.

LFCR-4SD-N

LITEFRAME COMMERCIAL 4" SQUARE
NEW CONSTRUCTION DOWNLIGHT

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	578	5.9	98
		Wall Wash	565	5.9	96
10L	1000	Wide	1111	11.2	99
		Wall Wash	1087	11.2	97
15L	1500	Wide	1604	15.2	106
		Wall Wash	1569	15.2	103
20L	2000	Wide	2128	21.6	98
		Wall Wash	2082	21.6	96
25L	2500	Wide	2672	24.1	111
		Wall Wash	2614	24.1	108
30L	3000	Wide	3204	29.8	108
		Wall Wash	3134	29.8	105
35L	3500	Wide	3763	36.8	102
		Wall Wash	3682	36.8	100
40L	4000	Wide	4240	41.6	102
		Wall Wash	4149	41.6	100
45L	4500	Wide	4777	45.3	105
		Wall Wash	4674	45.3	103
50L	5000	Wide	5299	52.1	102
		Wall Wash	5185	52.1	100

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

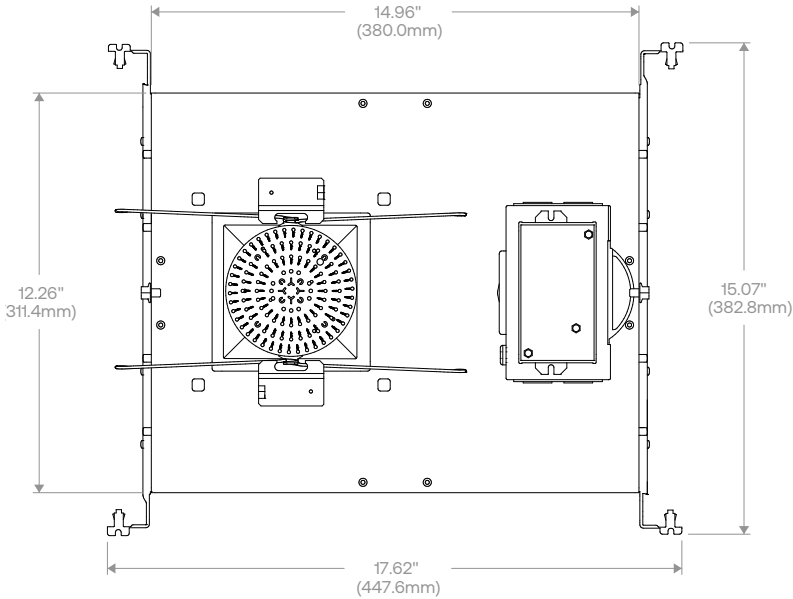
Option	Specular (S)	Semi-Specular (SS)	Soft Glow (VS)	White Cone (WC)	Black Cone (BC)
Multiplier	1.00	1.00	0.89	0.98	0.44

LFCR-4SD-N

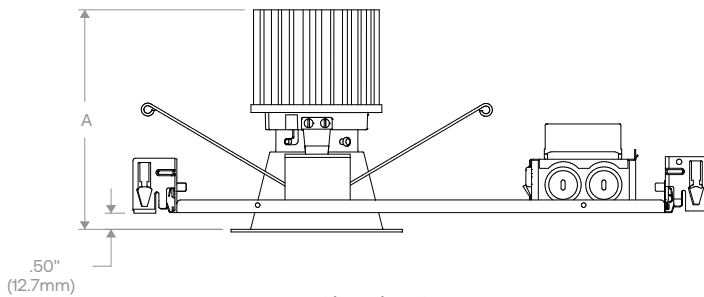
LITEFRAME COMMERCIAL 4" SQUARE
NEW CONSTRUCTION DOWNLIGHT

DIMENSIONS

Standard New Construction Housing, Fixture Module, and Trim assembly



Top View Standard



Side View Standard

DIMENSIONAL DATA		
Aperture		4.00" (101.6mm) SQ.
Flange	Standard	5.25" (133.4mm) SQ.
Ceiling Cutout		4.75" to 4.88" SQ. (120.7mm to 123.8mm)
Ceiling Thickness	Standard	0.00" to 1.25" (0.00mm to 31.8mm)
	With TCA Accessory	1.25" to 3.00" (31.8mm to 76.2mm)

Lumen Package	"A"
05L-15L	3.9" (99.1mm)
20L-30L	5.2" (132.1mm)
35L-50L	6.8" (172.7mm)

LFCR-4SD-N

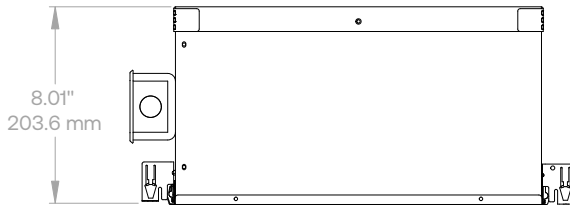
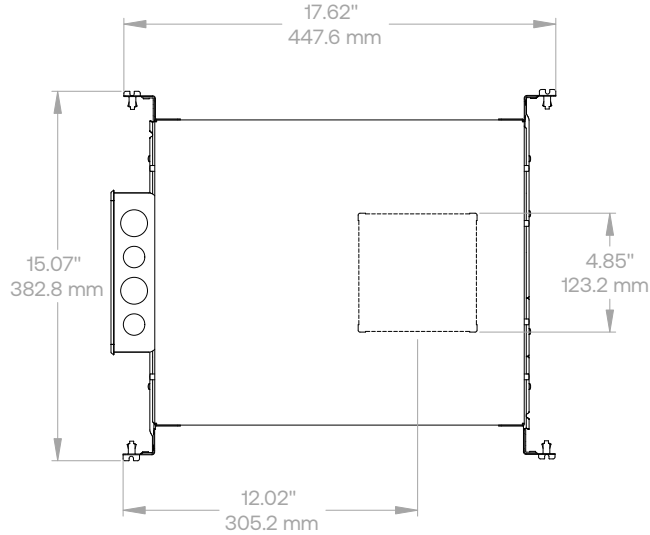
LITEFRAME COMMERCIAL 4" SQUARE
NEW CONSTRUCTION DOWNLIGHT

DIMENSIONS CONTINUED

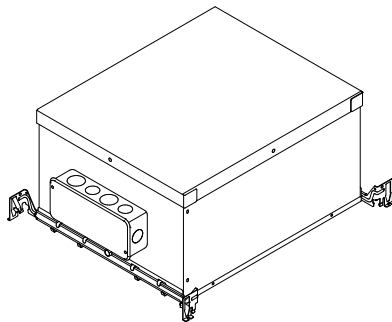
DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

CATALOG #: _____



LFCR-4SD-H-IC/CP



OPTIONAL IC/CP HOUSING

LFCR-4SD-N

LITEFRAME COMMERCIAL 4" SQUARE
NEW CONSTRUCTION DOWNLIGHT

PHOTOMETRY

LFCR-4SD-H / LFCR-4D-MN-20L35K9-WD-DM1 / LFCR-4SD-T-WD-S

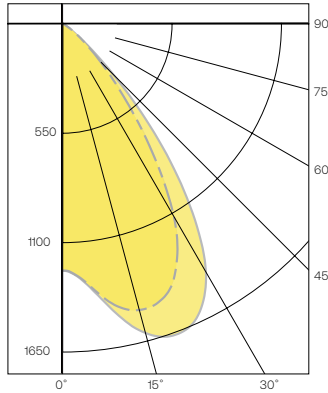
LUMINAIRE DATA

Test No.	P26.00018
Description	2000 lm, Wide, 3500K, 90 CRI
Delivered Lumens	2128
Watts	21.6W
Efficacy	98.4
Mounting	Recessed
Spacing Criterion	1.2
Beam Angle (FWHM)	69

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1828	85.9
0-60	2127	100.0
0-90	2128	100.0
0-180	2128	100.0

POLAR GRAPH



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

CANDELA DISTRIBUTION

Degree	Candela
0	1242
5	1302
15	1486
25	1346
35	782
45	262
55	52
65	1
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	35895
55°	8783
65°	229
75°	0
85°	0

*Candela/Square Meter

LFCR-4SD-H / LFCR-4D-MN-20L35K9-WD-DM1 / LFCR-4SD-T-WW-S

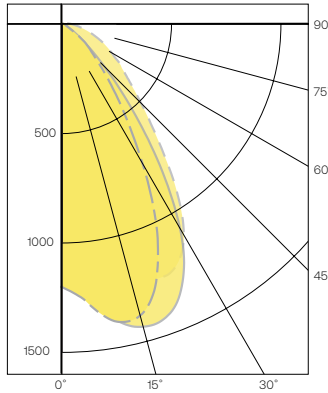
LUMINAIRE DATA

Test No.	P26.00051
Description	2000 lm, Wall Wash, 3500K, 90 CRI
Delivered Lumens	2082
Watts	21.6W
Efficacy	96.3
Mounting	Recessed
Spacing Criterion	N/A
Beam Angle (FWHM)	N/A

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1641	78.8
0-60	2011	96.6
0-90	2082	100.0
0-180	2082	100.0

POLAR GRAPH



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

CANDELA DISTRIBUTION

Degree	Candela
0	1207
5	1182
15	1225
25	1230
35	899
45	505
55	322
65	200
75	98
85	31
90	0

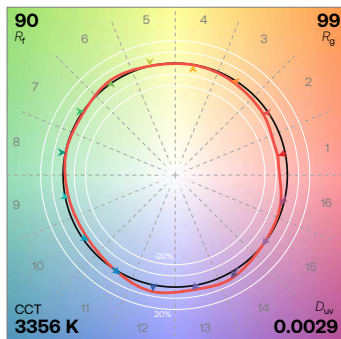
LUMINANCE DATA*

Vertical Angle	Average
45°	69186
55°	54385
65°	45845
75°	33681
85°	33457

*Candela/Square Meter

TM-30 DATA

COLOR VECTOR GRAPHIC
3500K, 90 CRI



LFCR-4SD-N

LITEFRAME COMMERCIAL 4" SQUARE
NEW CONSTRUCTION DOWNLIGHT

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.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.