

LFCR-4SD-R

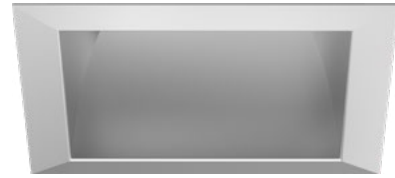
LITEFRAME COMMERCIAL 4" SQUARE
REMODEL DOWNLIGHT

| | |
|------------|-----------|
| 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 support ring 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 diffuse anodized finishes. White and black painted cone reflector colors also available.
- Painted flange options in white or black

ELECTRICAL

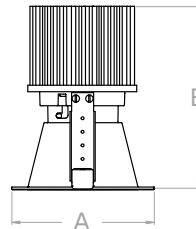
- Chip-on-board LED with 2 SDCM
- TriGain® is a patented narrow-band potassium fluorosilicate (PFS) phosphor technology which provides improved color rendition without compromise to LED efficacy
- 2700K, 3000K, 3500K, 4000K, 5000K CCTs, 90+ CRI

ELECTRICAL (CONTINUED)

- 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" 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
- White Cone (WC) and Black Cone (BC) square painted trim options are inherently non-conductive
- 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-R

LITEFRAME COMMERCIAL 4" SQUARE
REMODEL DOWNLIGHT

ORDERING GUIDE

DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

CATALOG #: _____

Gray Shading = Service Program

tradeSELECT® QS10
Limit of 150 Luminaries

Example: LFCR-4D-MR-10L35K9-WD-DM1 / LFCR-4SD-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 | AWN Lutron Athena Enabled ⁸ | | |
| | 45L 4500 ¹ | | | | DM34 0-10V Dimming to 1% (347V input) ^{5,6} | | | |
| | 50L 5000 ¹ | | | | | | | |

TRIM (Ships separately)

| LFCR-4SD-T | | | | | | |
|---|----------------------------------|--|---|---|--|--|
| Aperture/Shape/Function | Trim Distribution | Reflector Finish | Flange Color Options ¹⁵ | Trim Options | | |
| LFCR-4SD-T 4" Square Downlight Trim Assembly | 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 | | |
| | | 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

- LFR-MOR4-S-WH Metal Oversized Ring, 4" Square, White (8.3" outside dimension)
 - LFCR-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)
- 14 AM not available with WW or EM
- 15 WT not available for WC, BT not available for BC

LFCR-4SD-R

LITEFRAME COMMERCIAL 4" SQUARE
REMODEL DOWNLIGHT

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.

LFCR-4SD-R

LITEFRAME COMMERCIAL 4" SQUARE
REMODEL 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 |

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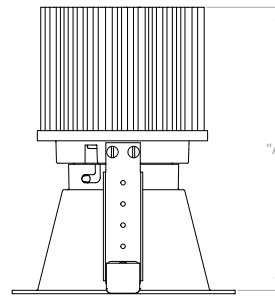
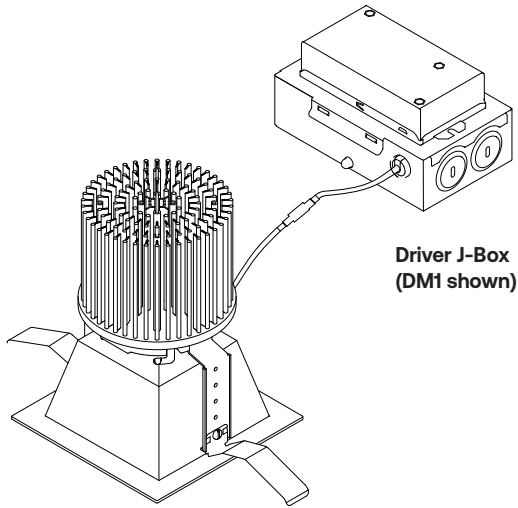
LITEFRAME COMMERCIAL 4" SQUARE
REMODEL DOWNLIGHT

DIMENSIONS

LFCR-4SD-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 #: | |

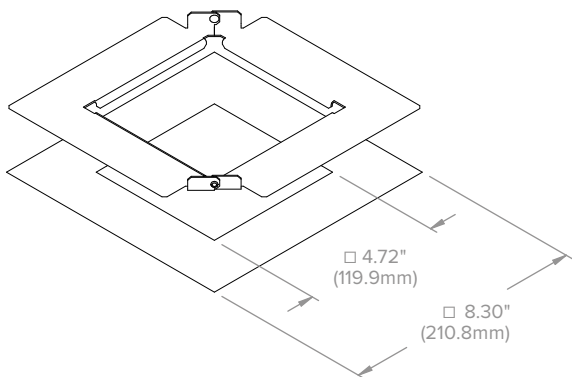


**Light Engine
with Trim assembly installed**

| DIMENSIONAL DATA | |
|----------------------------------|-----------------------|
| Aperture | 4.00" (101.6mm) SQ. |
| Overall Width (Flange To Flange) | 5.25" (133.4mm) SQ. |
| Flange Width | 0.63" (16mm) |
| Ceiling Cutout | 4.75" (121mm) SQ. |
| Ceiling Thickness | 0.50"-3.00" (13-76mm) |

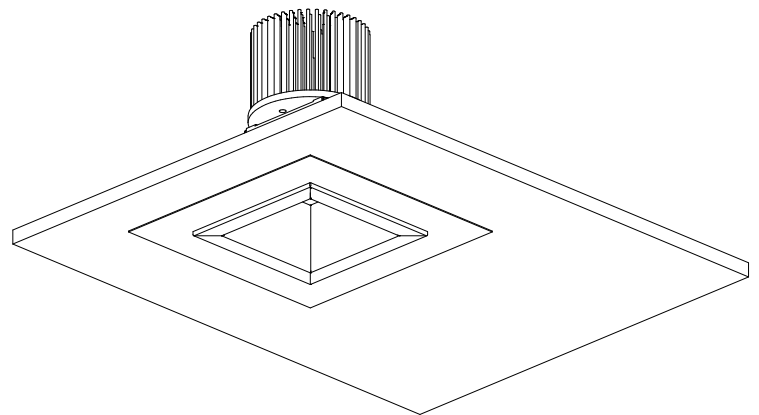
| OVERALL LIGHT ENGINE HEIGHT * (All Lumen Outputs) | |
|--|----------------|
| Lumen Package | Height ("A") |
| 05L-15L | 3.9" (99.1mm) |
| 20L-30L | 5.2" (132.1mm) |
| 35L-50L | 6.8" (172.7mm) |

* 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.



**LF-MOR4-SQ
METAL OVERSIZED RING**

(See LF-MOR Installation Instruction for more details)



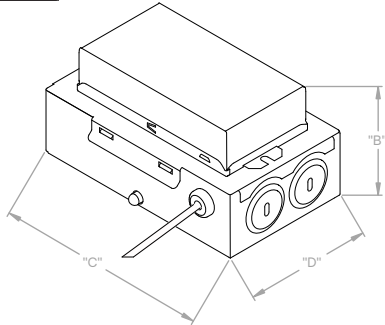
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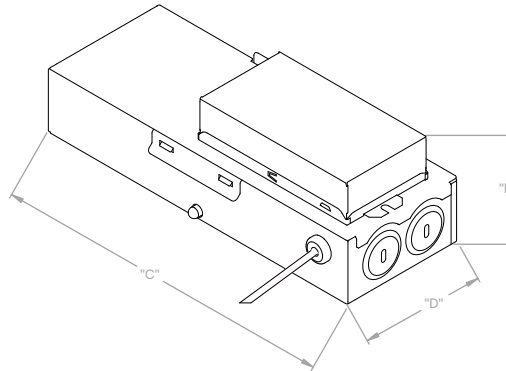
DIMENSIONS CONTINUED

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

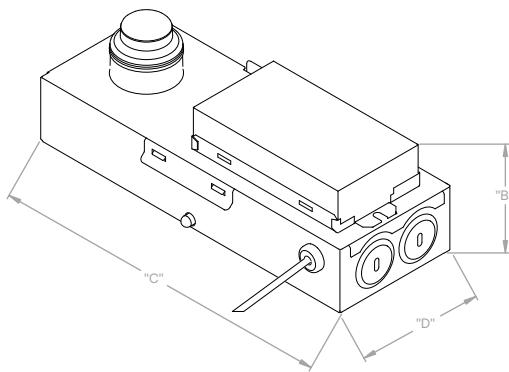
DRIVER J-BOX



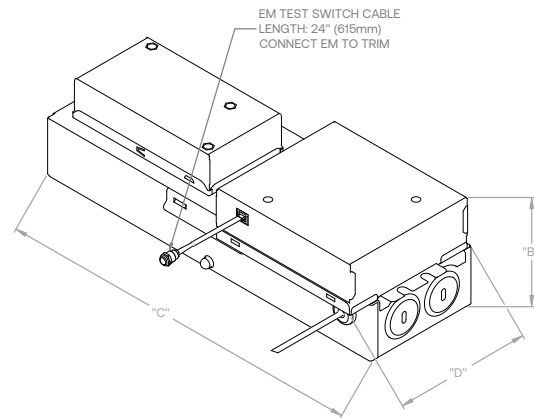
DM1 / DM01 / DALI / PDM / DM34



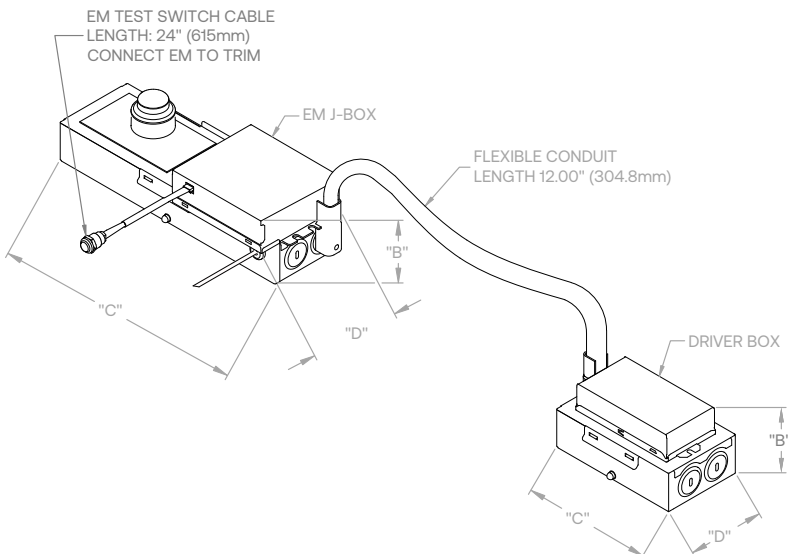
DMX1 / DTS



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) | 7.5" (32.9mm) |
| | Driver Box | 2.7" (68.6mm) | 5.5" (139.7mm) | 3.3" (83.8mm) | |

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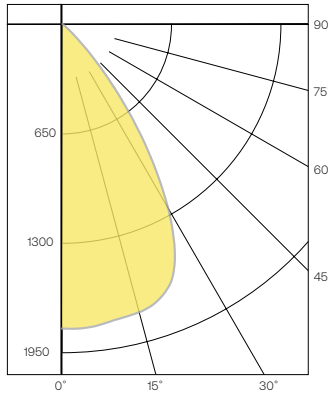
PHOTOMETRY

LFCR-4D-MR-20L35K9-WD-DM1 / LFCR-4SD-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 |

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

ZONAL LUMEN SUMMARY

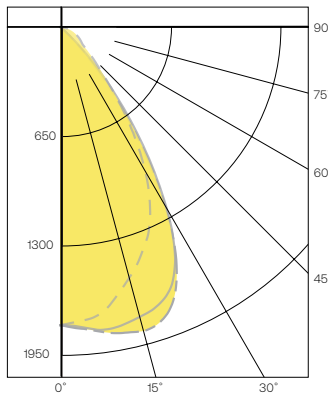
| Zone | Lumens | % Luminaire |
|-------|--------|-------------|
| 0-40 | 1895 | 93.2 |
| 0-60 | 2032 | 99.9 |
| 0-90 | 2034 | 100.0 |
| 0-180 | 2034 | 100.0 |

LFCR-4D-MR-20L35K9-WD-DM1 / LFCR-4SD-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 |

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

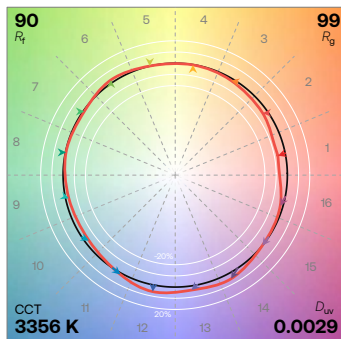
ZONAL LUMEN SUMMARY

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

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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| CATALOG #: | |

| 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.