prescolite

LFR-4RW
LITEFRAME 4" ROUND LENSED WALL WASH

LITEFRAME 2.0

FEATURES

- 4" LED lensed wall wash delivering 1000-6000 lumens
- Direct Install from below ceiling for New Construction or Remodel applications
- Optional housing accessories available
- Provides smooth, uniform illumination
- 2700K–5000K, 80+ and 90+ CRI (2 SDCM)
- Dimming protocols include 0-10V, Phase (Forward/Reverse), DALI, DMX, Lutron 2-wire Forward Phase, and EcoSystem
- NX Distributed Intelligence™ wired and wireless controls capability available

CSA C US

WET LOCATION
With CL Lens Option

RELATED PRODUCTS
- LFR-4RD
- LFR-4RDS
- LFR-4RA
- Liteframe Family

SERVICE PROGRAMS
STOCK

CONTROL TECHNOLOGY

NX DISTRIBUTED INTELLIGENCE™

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
- Tempered Glass Lens Standard
- Provides uniform light distribution down the wall
- High purity spun aluminum reflector, self-flanged
- Specular or Semi-Specular anodized or White painted cone reflector finish/colors
- Painted flange options in White or Black

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, RoHS compliant
- Flicker-free dimming options in a wide range of protocols from 1% to <0.1% performance
- 0–10V, Phase (Forward/Reverse), DALI, DMX, Lutron 2-wire Forward Phase, and EcoSystem options
- Remote emergency battery option available

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.)

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
- EMR: Certified under UL 924 standard for emergency lighting and power equipment
- Approved for 8 (4 in/4 out) No. 12AWG conductors rated for 90°C through wiring

WARRANTY
- 5 year warranty
- See HLI Standard Warranty for additional information

KEY DATA	
Lumen Range	1000–6000
Wattage Range	8–54
Efficacy Range (LPW)	91-108
Reported Life (Hours)	L90 / >50,000
Input Current (mA)	66–450 (120V)

*Based on Specular, 35K, 80 CRI

HUBBELL Lighting

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LFR-4RW
LITEFRAME 4" ROUND LENSED WALL WASH

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

☐ = Service Program

STOCK

Click icon for Stocked item list

ORDERING GUIDE

Example: LFR–4RW–M–10L35K8–LWW–DM1 / LFR–4RW–T-LWW–S / LFR-4RW-H

CATALOG # [ ]

FIXTURE MODULE

LFR-4RW-M —			—		—				—		
Ap/Shp/Funct	**Lumen Output**	**CCT**	**CRI**		**Distribution**		**Driver Options**	**Control Options**	**Voltage**		**Module Options**
LFR-4RW-M 4" Round Lensed Wall Wash Fixture Module for Direct Install *(Non-IC frame or IC housing available under Housing Options below)l*	**10L** 1000 **15L** 1500 **20L** 2000 **25L** 2500 **30L** 3000 **35L** 3500 **40L** 4000 **45L** 4500 **50L** 5000[1] **60L** 6000[1]	**27K** 2700K **30K** 3000K **35K** 3500K **40K** 4000K **50K** 5000K	**8** 80+ **9** 90+		**LWW** Lensed Wall Wash		**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] **2DM** Lutron Hi-Lume 2-wire Dimming to 1% (120V Forward Phase only)[2] **EDM** Lutron Hi-Lume EcoSystem Dimming to 1%[2]	**NXE** NX Enabled, Dual SmartPorts[3] **NXWE** NX Wireless Enabled[3] **NXWD** NX Wireless Enabled, Dual SmartPorts[3]	*Standard 120-277V* **34** 347V[4]		**CP** Chicago Plenum[5,6] **EMR** Emergency Battery Pack with remote test switch and indicator light[6] **DTS** Device Transfer Switch with Dimming Bypass[6,7]

TRIM (Ships separately)

LFR-4RW-T	—		—		
Aperture/Shape/Function		**Distribution**		**Reflector Finish/Color**	**Flange Color Options**
LFR-4RW-T 4" Round Lensed Wall Wash Trim Assembly		**LWW** Lensed Wall Wash		**S** Specular **SS** Semi-Specular **WC** Painted White Cone and Flange	*Standard matches reflector color* **WT** White Flange[8] **BT** Black Flange

HOUSING OPTIONS (Ships separately)

Aperture/Shape/Function	
☐ **LFR-4RD-H**	4" Housing Frame, New Construction, Non-IC
☐ **LFR-4RD-H-IC**	4" Housing Enclosure, New Construction, IC Rated[9,10]

Accessories	
☐ **LiteGear**	LiteGear® Inverter, 125VA–250VA
☐ **LPS Series**	LightPower Micro-Inverter, 20VA–55VA

Notes:
1   50L and 60L require marked spacing. See line art for more details.
2   DM01, PDM, DMX, DALI available up to 50L. 2DM and EDM available 15L–40L.
3   NX requires DM1 driver option.
4   347V requires DM1 driver option; available 10L–40L; not available with Controls, DTS, EMR.
5   CP available up to 35L; not available with DMX, Controls, or EMR options.
6   Module options not available in combination.
7   DTS available with DM1, DM01, or DALI.
8   WT not needed for WC.
9   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 types.)
10   IC Housing not for use in combination with Controls or with Module Options CP, EMR, DTS.

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LFR-4RW
LITEFRAME 4" ROUND LENSED WALL WASH

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

CONTROLS

NX Distributed Intelligence™ Lighting Controls:

Supports applications in a variety of deployment options- wired, wireless, hybrid. Integrates with and enables a wide array of luminaires including those with SpectraSync™ Color Tuning Technology.

NX DISTRIBUTED INTELLIGENCE™

NX INTEGRATED CONTROLS REFERENCE								
NX Option	Sensor	Networkable	Scheduling	Occupancy	Daylight Harvesting	0–10V Dimming	On/off Control	Bluetooth® App Programming
NX Networked – Wired								
NXE	N/A	Yes	Yes	No	No	Yes	Yes	Requires NXBTC/R[1]
NX Networked – Wireless								
NXWE[2]	N/A	Yes	Yes	No	No	Yes	Yes	No[3]
NX Networked – Wired/Wireless								
NXWD	N/A	Yes	Yes	No	No	Yes	Yes	Requires NXBTC/R[1,3]

1   NXBTC/R needs to be plugged into an available NX SmartPort™ on the fixture network
2   Programming via App requires factory assistance
3   To program NXWE option, need to consult factory. If connected to an area controller, programming can be done from that

PERFORMANCE DATA TABLE

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

Lumen Package	Nominal Lumens	Distribution	Delivered Lumens	Watts	LPW
10L	1000	Lensed WW	821	7.6	108
15L	1500		1233	11.8	104
20L	2000		1591	15.3	104
25L	2500		2066	20.9	99
30L	3000		2463	26.0	95
35L	3500		2994	29.4	102
40L	4000		3338	32.9	101
50L	5000		4061	42.0	97
60L	6000		4844	53.4	91

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DIMENSIONS

LFR-4RW-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**
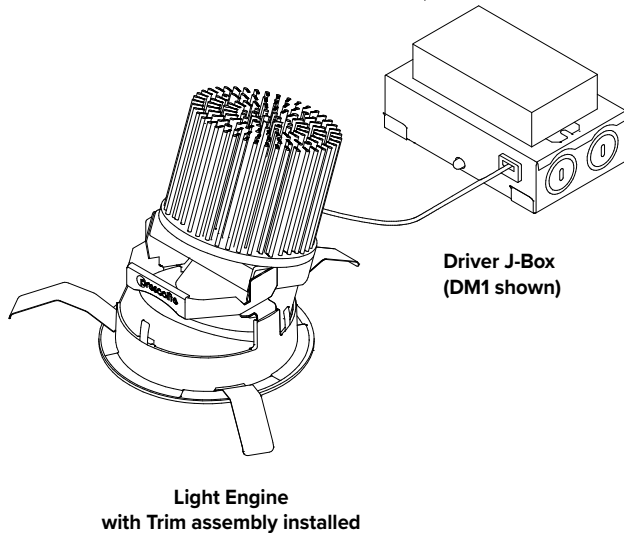
DIMENSIONAL DATA	
APERTURE	Ø 4.00" (101.6mm)
OVERALL	Ø 5.37" (136.5mm)
FLANGE WIDTH	0.69" (17.5mm)
CEILING CUTOUT	Ø 4.75" (120.7mm)
CEILING THICKNESS	0.50" - 2.50" (12.7 - 63.5mm)

LFR-4RW LIGHT ENGINE

OVERALL LIGHT ENGINE HEIGHT "A" *		
LUMEN PACKAGE	FIXTURE MODULE	BEAM DISTRIBUTION
		LWW
10L-30L	STANDARD	4.81" (122.2mm)
	CP	5.80" (147.3mm)
35L-50L	STANDARD	6.29" (159.8mm)
	CP	7.28" (184.9mm)
60L	STANDARD	6.29" (159.8mm)
	CP	7.28" (184.9mm)

* Note: Add ½" minimum plenum clearance above overall Light Engine Height.
** For ≥50L: Marked spacing required 18" fixture center to center; 18" fixture center to building member; 0.5" above fixture.
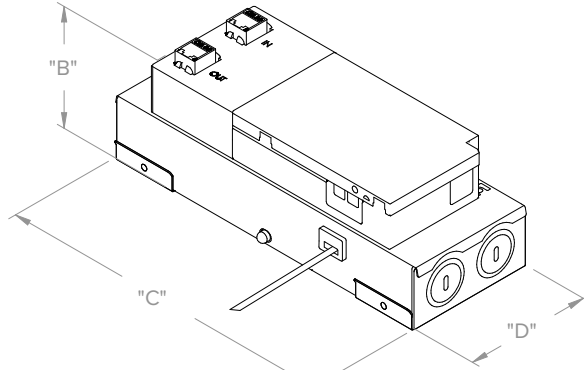*** Non-IC rating requires 3" from insulation and combustible materials.

"A"

Side View Standard
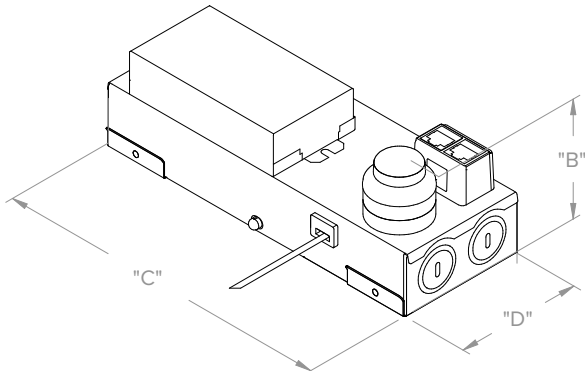
"A"

Side View CP – Chicago Plenum

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LFR-4RW
LITEFRAME 4" ROUND LENSED WALL WASH
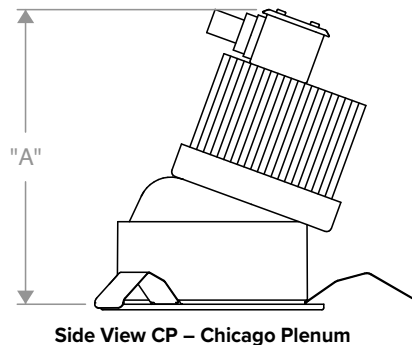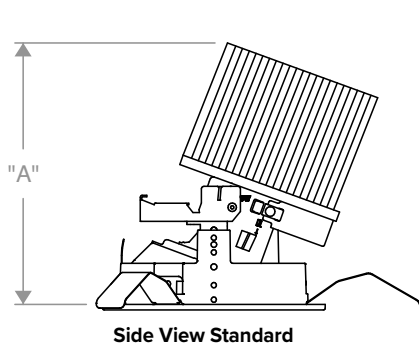
DIMENSIONS CONTINUED

DRIVER J-BOX
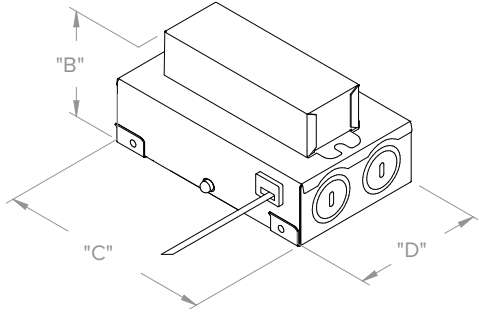
DM1 / DM01 / PDM / DALI

DMX

NX CONTROLS OPTION

CP

EM J-BOX

FLEXIBLE CONDUIT
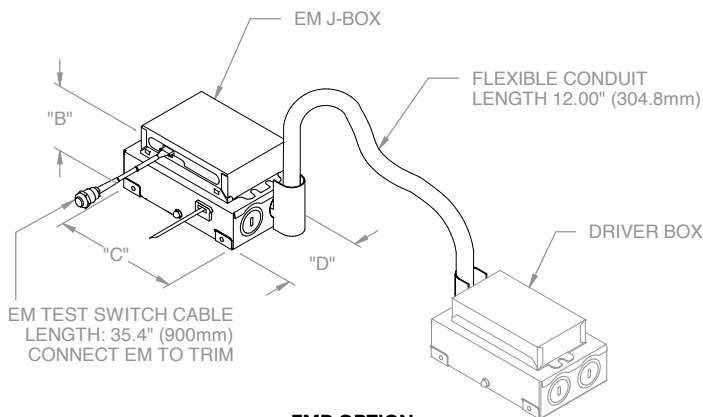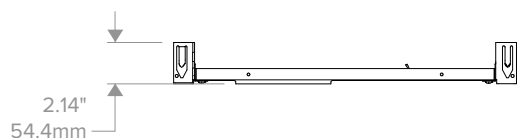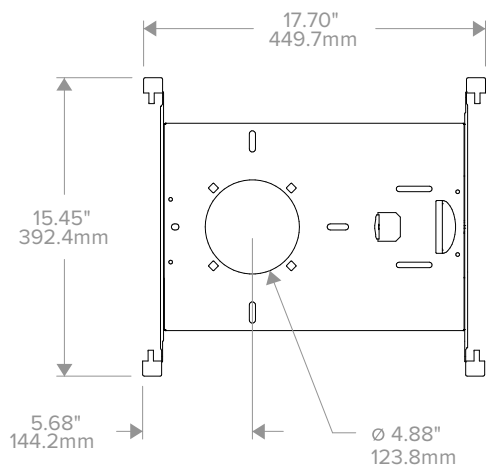LENGTH 12.00" (304.8mm)

DRIVER BOX

EM TEST SWITCH CABLE
LENGTH: 35.4" (900mm)
CONNECT EM TO TRIM
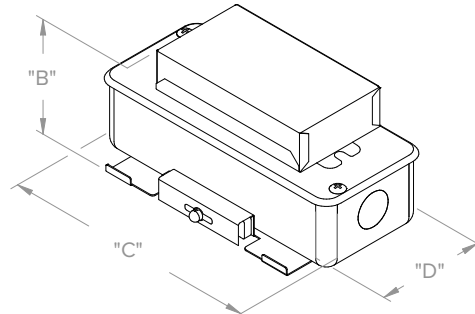
EMR OPTION
EM/Driver J-Box Conduit (provided) connects to Driver J-Box
(see Driver J-Box for additional details)

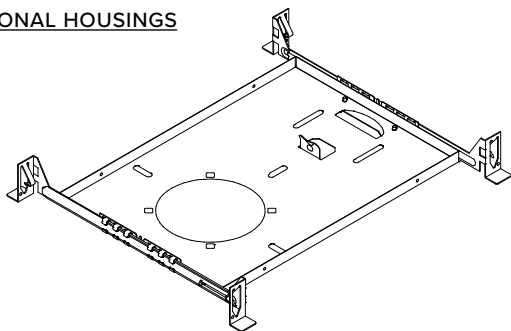| OVERALL DRIVER J-BOX DIMENSIONS (ALL LUMEN OUTPUTS)				
DRIVER/ CONTROLS /OPTIONS	"B" (HEIGHT)	"C" (LENGTH)	"D" (WIDTH)	MINIMUM J-BOX PLENUM CLEARANCE
DM1 / DM01 / PDM / DALI	2.67" (67.8mm)	5.34" (135.6mm)	3.23" (82.0mm)	3.50" (88.9mm)
DMX	3.07" (78.0mm)	8.68" (220.5mm)	3.23" (82.0mm)	5.00" (127.0mm)
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" (127mm)

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LFR-4RW
LITEFRAME 4" ROUND LENSED WALL WASH

DIMENSIONS CONTINUED

OPTIONAL HOUSINGS

17.70"
449.7mm

15.45"
392.4mm

5.68"
144.2mm

Ø 4.88"
123.8mm

2.14"
54.4mm

LFR-4RD-H
NON-IC HOUSING FRAME

18.82"
478.0mm

15.45"
392.4mm

10.75"
273.0mm

Ø 4.88"
123.8mm

8.91"
226.3mm
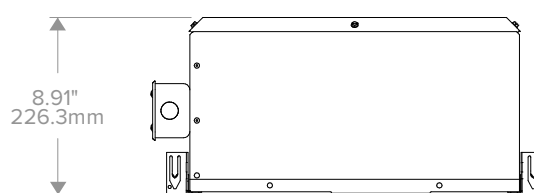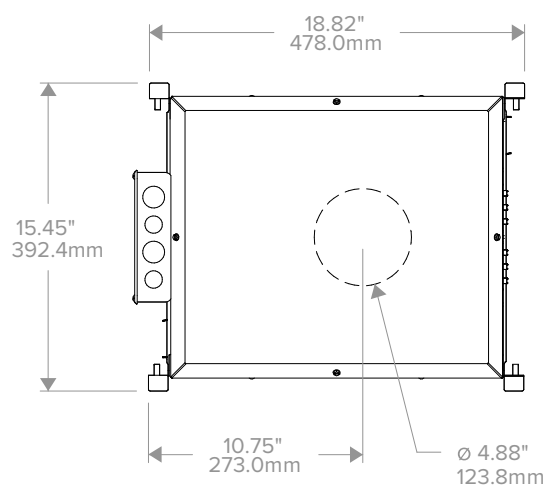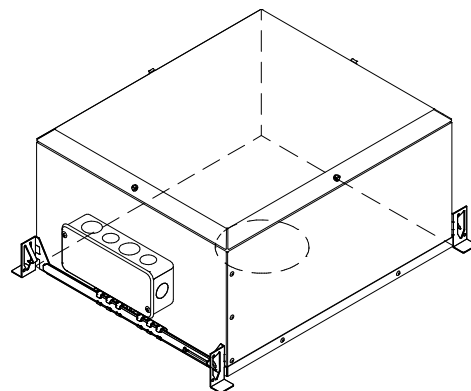
LFR-4RD-H-IC
IC HOUSING
Not for use with CP Shroud

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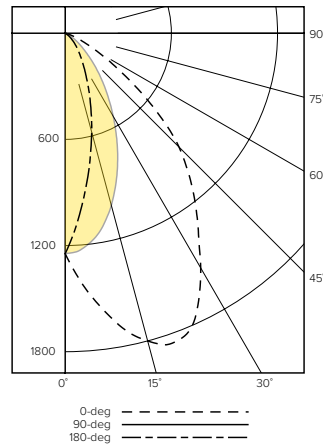LITEFRAME 4" ROUND LENSED WALL WASH

PHOTOMETRY

LFR-4RW-M-20L35K8LWW-DM1 / LFR-4RW-T-LWW-S

LUMINAIRE DATA

Test No.	21.00599
Description	2000 lm, Very Narrow, 3500K, 80 CRI
Delivered Lumens	1591
Watts	15.2W
Efficacy	104.3
Mounting	Recessed

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1164	73.2
0-60	1549	97.4
0-90	1591	100.0
0-180	1591	100.0

POLAR GRAPH

0-deg ————
90-deg ————
180-deg ————

CANDELA DISTRIBUTION

Degree	Candela
0	1246
5	1466
15	1800
25	1751
35	1305
45	910
55	399
65	108
75	13
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	158737
55°	85803
65°	31521
75°	6195
85°	0

*Candela/Square Meter

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.
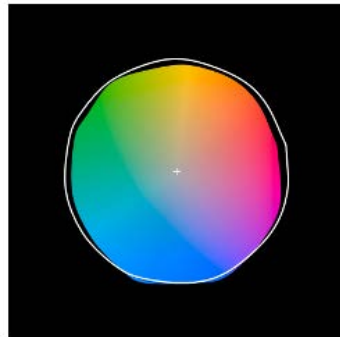
TM-30 DATA
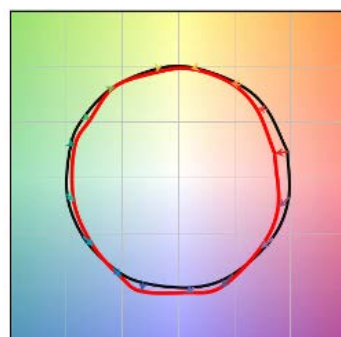
COLOR VECTOR GRAPHIC
3500K, 90 CRI

—— Reference Illuminant —— Test Source

COLOR DISTORTION GRAPHIC
3500K, 90 CRI

COLOR VECTOR GRAPHIC
3500K, 80 CRI
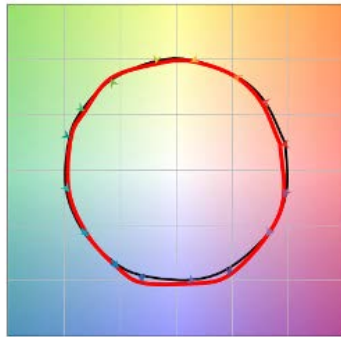
—— Reference Illuminant —— Test Source

COLOR DISTORTION GRAPHIC
3500K, 80 CRI

TEST RESULTS - 3500K

Value	80+ CRI	90+ CRI
R_f	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_9	16	66

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LFR-4RW

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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 Compatability
See the DIMMING link for more information on dimming compatability and recommended dimmer list.

DMX
See instruction sheet on www.prescolite.com for connection & installation information.

Central Inverters
For full fixture output in back-up mode, we recommend you visit www.dual-lite.com for your Central Lighting Inverter options. Please contact your local Hubbell representative for any assistance with proper sizing and loading of your inverter selection. Central lighting inverters must be ordered separately.
LiteGear: www.dual-lite.com/products/litegear_lg_series
LPS Series: www.dual-lite.com/products/lps

8 DIMMING

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