University of South Carolina, School of Medicine

USC SOM #28 Simulation and Interactive

6311 Garners Ferry Road, Columbia, South Carolina

State Project Number: H27-Z325

September 29, 2017

ADDENDUM NO. 2

This addendum forms a part of the Contract documents and modifies the original Bidding Documents and any previous Addenda as noted below. Acknowledge receipt of this Addendum in the space provided in the Bid Form. Failure to do so may subject Bidder to disqualification.

MODIFICATIONS TO PREVIOUS ADDENDA:

None

MODIFICATIONS TO PROJECT MANUAL:

None

MODIFICATIONS TO DRAWINGS:

None

REQUESTED PRODUCT APPROVALS:

- Approved Manufacturer Addition: Panasonic has been added as an approved manufacturer to Specification 23 8129, Part 2, Section 2.01, Manufacturers, for VRV HVAC Systems.
- 2. Approved Manufacturer Addition: The following lighting manufactures H.E. Williams, GE Lighting, and Astralite Inc. have been added as approved equals to the Light Fixture Schedule on Sheet E2.1. See attached lighting schedule from the Schneider Company, dated September 27, 2017.
 - a. Fixture Types C/C1/CE shall have a non-dimming driver.

QUESTIONS FROM CONTRACTORS:

- 1. In the Pre-Bid meeting it was mentioned that we needed to know how many bags of Ardex to include in our bid for floor leveling. Do you have that information?
 - a. Answer: we do not know how much will be required, but some areas of the floor will need to be leveled for proper installation of floor finishes. The project location was available for review for contractor determination of the amount needed for the floor preparation.
- 2. Can you clarify alternate one in the next addendum? It appears that all millwork is in the alternate. Is this correct? Section 6 on A 401 is labeled folding partition alternate 1 but, the partition appears to be in the base bid. Is this correct?
 - a. Answer: Alternate 1 is for the millwork only, the accordion partition is part of the base bid work.

END OF ADDENDUM NO. 2



Date: Sep 27, 2017

The Schneider Company 39A Pelham Davis Circle Greenville SC 29615 Phone: (864) 675-9250

Fax: (864) 675-9640

Job Name USC SOM SIM CENTER TSC17-35038 6311 GARNERS FERRY RD, COLUMBIA SC

Bid Date Oct 4, 2017

Submittal Date Sep 27, 2017

Architect: STUDIO 2LR ARCHITECTURE 2428 MAIN STREE Columbia SC 29201

Engineer: GMK ASSOCIATES - COLUMBIA 1201 MAIN STREET COLUMBIA SC 29201 SCHNEIDER
COMPANY

Transmittal

The Schneider Company 39A Pelham Davis Circle Greenville SC 29615 Phone: (864) 675-9250 From: ANITA SMITH

Project USC SOM SIM CENTER

Quote# TSC17-35038

Location 6311 GARNERS FERRY RD, COLUMBIA SC

To STUDIO 2LR ARCHITECTURE

2428 MAIN STREE Columbia SC 29201

Contact: WES LYLES, AIA LEED AP

ATTACHED WE ARE SENDING Drawings Prints Plans	YOU 1 COPY OF THE FOLLOW ☐ Specifications ☐ Information ☐ Submittals	ING ITEM: Other:
THESE ARE TRANSMITTED FO Prior Approval	R: Resubmittal for Approval Corrections Your Use Review and Comment	Record Bids due on: Other:

Remarks:

SUBSTITUTION REQUEST FORM ATTACHED

Туре	MFG	Part
A2/A2-H	H.E. WILLIAMS	LPT-24-L67/840-(L48)-SA12125-EQ
		CLIPS-DIM-UNV-A2-H W/DFK-2448-W
A2E	H.E. WILLIAMS	LPT-24-L67/840-(L48)-SA12125-EQ
		CLIPS-EM/10W-SD50-UNV-GTD
C/CE	H.E. WILLIAMS	75R-2-L20/840-DIM-UNV-CE W/EM/
		10WLP
C1	H.E. WILLIAMS	75R-4-L30/840-DIM-BD-UNV
D	GE LIGHTING	LRXR610840MD
D	GE LIGHTING	FRAME6R
EX/EXR	ASTRALITE INC.	LG-750-REM
RH	ASTRALITE INC.	LG-LED-REM-2H-W-6V

FF00009 Page 1/1



Sep 27, 2017

WES LYLES, AIA LEED AP STUDIO 2LR ARCHITECTURE 2428 MAIN STREE Columbia SC 29201

RE: USC SOM SIM CENTER

6311 GARNERS FERRY RD, COLUMBIA SC

Dear WES

SUBSTITUTION REQUEST FORM ATTACHED

Type	MFG	Part
A2/A2-H	H.E. WILLIAMS	LPT-24-L67/840-(L48)-SA12125-EQ
		CLIPS-DIM-UNV-A2-H W/DFK-2448-W
A2E	H.E. WILLIAMS	LPT-24-L67/840-(L48)-SA12125-EQ
		CLIPS-EM/10W-SD50-UNV-GTD
C/CE	H.E. WILLIAMS	75R-2-L20/840-DIM-UNV-CE W/EM/
		10WLP
C1	H.E. WILLIAMS	75R-4-L30/840-DIM-BD-UNV
D	GE LIGHTING	LRXR610840MD
D	GE LIGHTING	FRAME6R
EX/EXR	ASTRALITE INC.	LG-750-REM
RH	ASTRALITE INC.	LG-LED-REM-2H-W-6V

FF00010 Page 1/1

USC SOM SIM CENTER Architect: STUDIO 2LR ARCHITECTURE (Columbia) Engineer: GMK ASSOCIATES - COLUMBIA

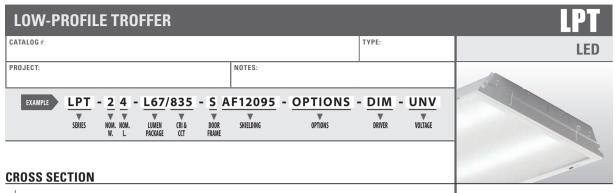
Catalog Number:

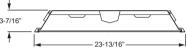
LPT-24-L67/840-(L48)-SA12125-EQ CLIPS-DIM-UNV-A2-H W/DFK-2448-W

Type:

A2/A2-H

TSC17-35038





ORDERING INFORMATION

SERIES	
LPT	Low-Profile Troffer
NOMINAI	WIDTH
2	2'
NOMINAI	LENGTH
2	2'
4	4'

LED PACKAGE NOTE: Nominal lumens are based on AF12095 shielding

INOTIL: NOTHING	INOTE: Nominal famens are based on Al 12033 sinciding.					
LUMEN PACKAGE	NOMINAL LUMENS	MINIMUM CRI & CCT	AVERAGE SYSTEM WATTAGE			
2:	k2					
L30	3,000		33			
L43	4,300	830 = 82 CRI, 3000K	50			
2:	x4	835 = 82 CRI, 3500K				
L42	4,200	840 = 82 CRI, 4000K	39			
L67	6,700		65			
L90	9,000		87			

Nominal lumen output based on 3500 CCT. Actual lumens may vary +/- 5%, see fixture performance data. Additional LED lumen packages available, see options.

DOOR FRAME

SH	HELDING	
	AF12095	Frosted acrylic, pattern #12, .095" thick
	A12125	Clear acrylic, pattern #12, .125" thick (LED pixelation will be visible)
	AF12125	Frosted acrylic, pattern #12, .125" thick
	A19156	Clear acrylic, pattern #19, .156" thick (LED pixelation will be visible)
	AF19156	Frosted acrylic, pattern #19, .156" thick

White flat steel

OPTIONS

For flexible whip options, see Technical Info.

EM/10W Emergency LED battery, nominal 1,100 lumens module output in EM mode (not available with 2'x2' fixtures)

EM/10W/BMTD Back-mounted 10-watt emergency LED battery, nominal 1,100 lumens module output in EM mode, increases fixture height (required for 2'x2' fixtures). See back for details.

L48 Additional lower lumen packages available. Specify in increments of 100 nominal lumens. Option must be specified with next *higher* lumen

package. **Example:** 8,100 nominal lumens = LPT-24-190/840-SAF12095-(**L81**)
6', 3/8" flex, 3-conductor, No. 18 AWG (DRV only)

F348 3/8" flex, 4-conductor, No. 18 AWG

EQCLIPS Earthquake clips (4 per fixture) Chicago Plenum (CCEA)

DRIVER

F338

DRV	Driver prewired for non-dimming applications
DIM	10% dimming driver prewired for 0-10V low voltage applications
SD40	40% step-dimming driver (must specify 120V or 277V)

VOLTAGE

120	120V
277	277V
UNV	120-277V

A2-H W/DFK-2448-W

FEATURES

- 3-7/16" deep housing installs easily within limited plenum space.
- Gasketed door frame features offset mitered corners to eliminate light leaks.
- Cam latches close securely and allow hassle-free maintenance.
- Reversible door hinges and latches allow access on either side.
- Deep reinforcement ribs provide added
- Integral T-bar clips quickly secure fixture to structure.
- LED technology provides high efficacy and energy efficiency.
- ► Rated for 50,000 hours at 85% lumen maintenance (L85).
- Minimum 82 CRI; 3000K, 3500K, or 4000K
- This fixture is proudly made in the USA.

Williams



USC SOM SIM CENTER Architect: STUDIO 2LR ARCHITECTURE (Columbia) Engineer: GMK ASSOCIATES - COLUMBIA

Catalog Number:

LPT-24-L67/840-(L48)-SA12125-EQ CLIPS-DIM-UNV-A2-H W/DFK-2448-W Notes:

Type:

A2/A2-H

TSC17-35038

LOW-PROFILE TROFFER

Catalog #: LPT-24-L67/835-SAF12095-DIM

LED

SPECIFICATIONS

Housing – 22-gauge die-formed C.R.S. **Door Frame** – 22-gauge C.R.S., offset mitered corners, cam latches, and T-style hinges. Shielding - Frosted acrylic, pattern #12, N95" thick

Finish – 92% minimum average reflective white polyester powder coat bonded to phosphate-free, multi-stage pretreated metal. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.

Electrical – High quality mid-power LED boards. L85 at 50,000 hours. 25°C maximum ambient operating temperature.

Mounting – NEMA Type "G" standard. For flange installations use the Drywall Kit (DFK), ordered separately, see Information section Labels

- cCSAus certified as luminaire suitable for dry or damp locations.
- DLC qualified products listed at
- www.designlights.org.

 City of Chicago Environmental Air approved when specified with CP option.

Warranty - 5-year limited warranty, see hew.com/warranty.

IMPORTANT:

Electrostatic sensitive unit. Observe precautions when handling.

PHOTOMETRY - 2x4

TEST REPORT

- INFORMATION Test Report #: 18560.0
- Date: 12/18/14
- Lamp Type: LED Rated Lumens: 7159
- Watts: 65
- Lumens Per Watt: 110
- CRI: 82
- CCT: 3457K



CANDLEPOWER DISTRIBUTION LUMEN SUMMARY

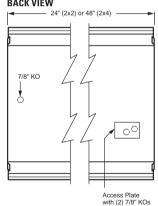
Vertical	Hori	Horizontal Angle			
Angle	0°	45°	90°	Lumens	
0°	3265.	3265.	3265.		
5°	3230.	3221.	3226.	307.8	
15°	3064.	3062.	3068.	868.4	
25°	2747.	2756.	2764.	1274.8	
35°	2294.	2290.	2309.	1441.8	
45°	1686.	1669.	1648.	1290.0	
55°	1080.	1028.	996.	925.3	
65°	615.	566.	568.	575.1	
75°	317.	302.	342.	336.7	
85°	117.	122.	145.	138.7	
90°	0.	0.	0.		

Zone	Lumens	% Fixture		
0° - 30°	2451.	34.2		
0° - 40°	3893.	54.4		
0° - 60°	6108.	85.3		
0° - 90°	7159.	100.0		
Total Luminaire:				
0° - 180°	7159.	100.0		
IES Spacing Criteria: End = 1.2 Diagonal= 1.2 Across = 1.2				

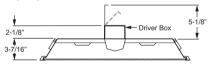
FIXTURE PERFORMANCE DATA

LED PACKAGE	ACKAGE LUMEN OUTPUT WATTAGE (W)		EFFICACY (Im/W)	
	2	x2		
L43/835	L43/835 4332		87	
	2	x4		
L42/830	4244	39	107	
L42/835	4138	39	106	
L42/840	4296	38	112	
L67/835	7159	65	110	
L67/840	L67/840 6876 66		105	
L90/840	8731	82	107	

FIXTURE DETAILS



EM/10W/BMTD DETAILS



2x2 configurations will require EM driver to be back mounted. Additional plenum depth is required for installation and servicing. Not available with NEMA Type "F" applications. Access required through adjacent tile in grid system





DLC qualified products listed at www.designlights.org. The U.S. Department of Energy's Lighting Facts® Program has verified product performance based on industry-standardized testing. For details, see H.E. Williams LPT series at www.lightingfacts.com.

> Williams H.E. WILLIAMS. INC.

H.E. Williams, Inc.

Carthage, Missouri Information contained herein is subject to change without notice.

■ www.hew.com

417-358-4065 HEW70476JL REV.04/18/17

USC SOM SIM CENTER Architect: STUDIO 2LR ARCHITECTURE (Columbia) Engineer: GMK ASSOCIATES - COLUMBIA

Catalog Number:

LPT-24-L67/840-(L48)-SA12125-EQ CLIPS-DIM-UNV-A2-H W/DFK-2448-W

Type:

A2/A2-H

TSC17-35038

Drywall Kit



DFK-2448W

NOMINAL NOMINAL FINISH

ORDERING INFORMATION

SERIES DFK

Drywall Kit

NOMINAL LENGTH

See table below for nominal lengths.

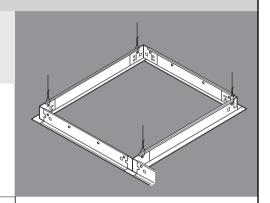
NOMINAL WIDTH

See table below for nominal widths.

FINISH AMW

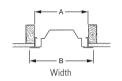
White

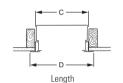
Anti-microbial white



TYPICAL INSTALLATION -

Refer to the table below for dimensions





Catalog	Nominal	Roug	gh-In	Finish Trim Size		Type Of
Number	Size	Width (A)	Length (C)	Width (B)	Length (D)	Mounting
DFK-0424	4" x 2'	4-5/8"	24-3/8"	5-9/16"	25-5/16"	Individual
DFK-0436	4" x 3'	4-5/8"	36-3/8"	5-9/16"	37-5/16"	Individual
DFK-0448	4" x 4'	4-5/8"	48-3/8"	5-9/16"	49-5/16"	Individual
DFK-0624	6" x 2'	6-3/8"	24-3/8"	7-5/16"	25-5/16"	Individual
DFK-0648	6" x 4'	6-3/8"	48-3/8"	7-5/16"	49-5/16"	Individual
DFK-0848	8" x 4'	8-3/8"	48-3/8"	9-5/16"	49-5/16"	Individual
DFK-1024	10" x 2'	10-3/8"	24-3/8"	11-5/16"	25-5/16"	Individual
DFK-1048	10" x 4'	10-3/8"	48-3/8"	11-5/16"	49-5/16"	Individual
DFK-1212	1' x 1'	12-3/8"	12-3/8"	13-5/16"	13-5/16"	Individual
DFK-1224	1' x 2'	12-3/8"	24-3/8"	13-5/16"	25-5/16"	Individual
DFK-1236	1' x 3'	12-3/8"	36-3/8"	13-5/16"	37-5/16"	Individual
DFK-1248	1' x 4'	12-3/8"	48-3/8"	13-5/16"	49-5/16"	Individual
DFK-2048	20" x 4'	20-3/8"	48-3/8"	21-5/16"	49-5/16"	Individual
DFK-2424	2' x 2'	24-3/8"	24-3/8"	25-5/16"	25-5/16"	Individual
DFK-2448	2' x 4'	24-3/8"	48-3/8"	25-5/16"	49-5/16"	Individual
DFK-3636	3' x 3'	36-3/8"	36-3/8"	37-5/16"	37-5/16"	Individual
DFK-4848	4' x 4'	48-3/8"	48-3/8"	49-5/16"	49-5/16"	Individual
DFKR-0448	4" x 4'	4-5/8"		5-9/16"		
DFKR-0648	6" x 4'	6-3/8"	NOTE: For each 4'	7-5/16"	NOTE: For each 4' fixture in continuous row, add 48"	Continuous
DFKR-0848	8" x 4'	8-3/8"	fixture in	9-5/16"		Row
DFKR-1048	10" x 4'	10-3/8"	continuous row, add 48"	11-5/16"		(extension sections)
DFKR-1248	1' x 4'	12-3/8"	to above.	13-5/16"	to above.	Sections)
DFKR-2448	2' x 4'	24-3/8"		25-5/16"		

NOTE: For each 4' fixture in continuous row, add 48" to length. For continuous row installations, order one individual unit and balance in extension DFKR sections.

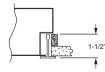
FEATURES

- · Allows use of any Williams grid fixture in ceilings that require a flange product.
- · Heavy-duty galvanized angle brackets secure end rail to side rail.
- Extruded aluminum end and side rails provide rigid structure to support fixture.
- Available in individual (DFK) or continuous row (DFKR) models.
- Available in most sizes. See table for specific availability.
- · This fixture is proudly made in the USA.

SPECIFICATIONS

- Construction Heavy-duty .050" thick extruded aluminum
- Finish Baked white enamel.
- Mounting Field assembled and installed into drywall ceiling independent of luminaire.

See back for installation details.



Some fixtures' end plates extend over the top of the "T". When using these fixtures, the structure surrounding the DFK is to extend no more than 1-1/2" from the bottom of the "T" as shown. See back views provided on individual specification sheets to identify fixtures with extended end plates.

H.E. Williams, Inc.
Carthage, Missouri www.hew.com 417-358-4065



Indoor Information

Job Name:
USC SOM SIM CENTER
Architect: STUDIO 2LR ARCHITECTURE
(Columbia)
Engineer: GMK ASSOCIATES - COLUMBIA

Catalog Number:

LPT-24-L67/840-(L48)-SA12125-EQ CLIPS-DIM-UNV-A2-H W/DFK-2448-W

Type:

A2/A2-H

TSC17-35038

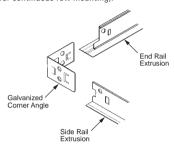
Drywall Kit

INSTALLATION

The Drywall Kit is easily assembled and installed. Use when mounting in drywall or ceilings requiring flange trim.

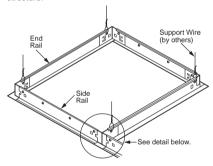
1. ASSEMBLE CORNER ANGLES

Insert galvanized corner angles into side and end rails (for individual fixtures) or into side rail and intermediate rail (for continuous row mounting).



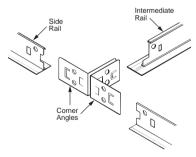
2. CEILING MOUNTING

Place the assembled frame into the ceiling opening and support with wire (as shown below) from rigid ceiling structure.



3. CONTINUOUS ROW MOUNTING

For continuous row installation, order one individual unit (DFK) and the balance in extension sections (DFKR). Use one end rail from the individual unit at each end of the row.



Submitted On: Sep 27, 2017

USC SOM SIM CENTER
Architect: STUDIO 2LR ARCHITECTURE
(Columbia)
N Engineer: GMK ASSOCIATES - COLUMBIA

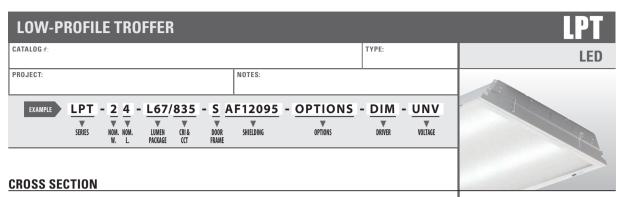
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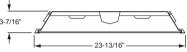
LPT-24-L67/840-(L48)-SA12125-EQ CLIPS-EM/10W-SD50-UNV-GTD Notes:

Type:

A₂E

TSC17-35038





ORDERING INFORMATION

SERIES		
LPT	Low-Profile Troffer	
NOMINAL	WIDTH	
2	2'	
NOMINAL	LENGTH	
2	2'	
4	4'	

LED PACKAGE NOTE: Nominal lumens are based on AF12095 shielding.

10 12. Nomina fameno are basea on 71 12000 sinerang.					
LUMEN PACKAGE	NOMINAL LUMENS	MINIMUM CRI & CCT	AVERAGE SYSTEM WATTAGE		
2:	x2				
L30	3,000		33		
L43	4,300	830 = 82 CRI, 3000K	50		
2	x4	835 = 82 CRI, 3500K			
L42	4,200	840 = 82 CRI, 4000K	39		
L67	6,700		65		
L90	9,000		87		

Nominal lumen output based on 3500 CCT. Actual lumens may vary +/- 5%, see fixture performance data. Additional LED lumen packages available, see options.

DOOR FRAME

S	HIELDING		
	AF12095	Frosted acrylic, pattern #12, .095" thick	
	A12125	Clear acrylic, pattern #12, .125" thick (LED pixelation will be visible)	
	AF12125	Frosted acrylic, pattern #12, .125" thick	
	A19156	Clear acrylic, pattern #19, .156" thick (LED pixelation will be visible)	
	AF19156	Frosted acrylic, pattern #19, .156" thick	

White flat steel

OPTIONS	
For flexible whip opt	ions, see Technical Info.
EM/10W	Emergency LED battery, nominal 1,100 lumens module output in EM mode (not available with 2'x2' fixtures)
EM/10W/BMTD	Back-mounted 10-watt emergency LED battery, nominal 1,100 lumens module output in EM mode, increases fixture height (required for 2'x2' fixtures). See back for details. Additional lower lumen packages available. Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package. Example: 8,100 nominal lumens = LPT-24-L90/840-SAF12095-(L81)
F338	6', 3/8" flex, 3-conductor, No. 18 AWG (DRV only)
F348	6', 3/8" flex, 4-conductor, No. 18 AWG (DRV only)
EQCLIPS	Earthquake clips (4 per fixture)
CP	Chicago Plenum (CCEA)
DRIVER	
DRV	Driver prewired for non-dimming applications
DIM	10% dimming driver prewired for 0-10V low voltage applications
SD40	40% step-dimming driver (must specify 120V or 277V)
VOLTAGE	SD50
120	120V
277	277V
UNV	120-277V

GTD

FEATURES

- ► 3-7/16" deep housing installs easily within limited plenum space.
- Gasketed door frame features offset mitered corners to eliminate light leaks.
- Cam latches close securely and allow hassle-free maintenance.
- Reversible door hinges and latches allow access on either side.
- ► Deep reinforcement ribs provide added
- ► Integral T-bar clips quickly secure fixture to structure.
- LED technology provides high efficacy and energy efficiency.
- ► Rated for 50,000 hours at 85% lumen maintenance (L85).
- ► Minimum 82 CRI; 3000K, 3500K, or 4000K
- ► This fixture is proudly made in the USA.



USC SOM SIM CENTER Architect: STUDIO 2LR ARCHITECTURE (Columbia) Engineer: GMK ASSOCIATES - COLUMBIA

Catalog Number:

LPT-24-L67/840-(L48)-SA12125-EQ CLIPS-EM/10W-SD50-UNV-GTD Notes:

Type:

A₂E

TSC17-35038



LOW-PROFILE TROFFER

LED

SPECIFICATIONS

Housing – 22-gauge die-formed C.R.S. **Door Frame** – 22-gauge C.R.S., offset mitered corners, cam latches, and T-style hinges. Shielding - Frosted acrylic, pattern #12, N95" thick

Finish – 92% minimum average reflective white polyester powder coat bonded to phosphate-free, multi-stage pretreated metal. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.

Electrical – High quality mid-power LED boards. L85 at 50,000 hours. 25°C maximum ambient operating temperature.

Mounting – NEMA Type "G" standard. For flange installations use the Drywall Kit (DFK), ordered separately, see Information section Labels

- cCSAus certified as luminaire suitable for dry or damp locations.
- DLC qualified products listed at
- www.designlights.org.

 City of Chicago Environmental Air approved when specified with CP option.

Warranty - 5-year limited warranty, see hew.com/warranty.

IMPORTANT:

Electrostatic sensitive unit. Observe precautions when handling.

PHOTOMETRY - 2x4

Catalog #: LPT-24-L67/835-SAF12095-DIM

TEST REPORT INFORMATION

- Test Report #: 18560.0
- Date: 12/18/14
- Lamp Type: LED
- Rated Lumens: 7159 Watts: 65
- Lumens Per Watt: 110
- CRI: 82
- CCT: 3457K



CANDLEPOWER DISTRIBUTION LUMEN SUMMARY Vertical Horizontal Angle Zonal

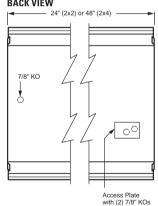
Angle	0°	45°	90°	Lumens
0°	3265.	3265.	3265.	
5°	3230.	3221.	3226.	307.8
15°	3064.	3062.	3068.	868.4
25°	2747.	2756.	2764.	1274.8
35°	2294.	2290.	2309.	1441.8
45°	1686.	1669.	1648.	1290.0
55°	1080.	1028.	996.	925.3
65°	615.	566.	568.	575.1
75°	317.	302.	342.	336.7
85°	117.	122.	145.	138.7
90°	0.	0.	0.	

LOINE II OOMMININ					
Zone	Zone Lumens				
0° - 30°	2451.	34.2			
0° - 40°	3893.	54.4			
0° - 60°	6108.	85.3			
0° - 90°	7159.	100.0			
Total Lum	Total Luminaire:				
0° - 180°	100.0				
IES Spacing Criteria: End = 1.2 Diagonal= 1.2 Across = 1.2					

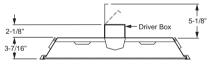
FIXTURE PERFORMANCE DATA

LED PACKAGE	LUMEN OUTPUT	WATTAGE (W)	EFFICACY (Im/W)
	2	x2	
L43/835	4332	50	87
	2	x4	
L42/830	4244	39	107
L42/835	4138	39	106
L42/840	4296	38	112
L67/835	7159	65	110
L67/840	6876	66	105
L90/840	8731	82	107

FIXTURE DETAILS



EM/10W/BMTD DETAILS



2x2 configurations will require EM driver to be back mounted. Additional plenum depth is required for installation and servicing. Not available with NEMA Type "F" applications. Access required through adjacent tile in grid system





DLC qualified products listed at www.designlights.org. The U.S. Department of Energy's Lighting Facts® Program has verified product performance based on industry-standardized testing. For details, see H.E. Williams LPT series at www.lightingfacts.com.

> Williams H.E. WILLIAMS. INC.

H.E. Williams, Inc.

Carthage, Missouri Information contained herein is subject to change without notice.

www.hew.com

417-358-4065 HEW70476JL REV.04/18/17

Submitted On: Sep 27, 2017

USC SOM SIM CENTER Architect: STUDIO 2LR ARCHITECTURE (Columbia) Engineer: GMK ASSOCIATES - COLUMBIA

Catalog Number:

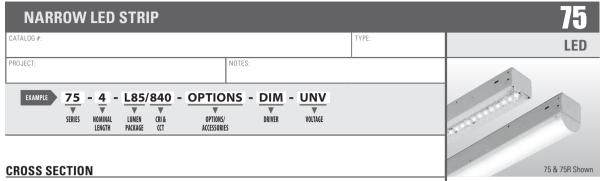
75R-2-L20/840-DIM-UNV-CE W/EM/ 10WLP

Notes:

Type:

C/CE

TSC17-35038









75 Shown

ORDERING INFORMATION

TYPE CE W/EM/10WLP

SERIES

Narrow LED Strip 75R Round Lens LED Strip

NOMINAL LENGTH

2	2' (Actual length 22-1/2")
4	4' (Actual length 44-5/8")
8	8' (Actual length 89-1/4")

LED PACKAGE

LUMEN PACKAGE	NOMINAL LUMENS	MINIMUM CRI & CCT	WATTAGE
	2	<u>'</u>	
L15	1,500	830 = 80CRI, 3000K	12
L20	1,900	835 = 80CRL 3500K	20
L30	2,900	840 = 80CRI, 4000K	24
L40 ¹	3,800	850 = 80CRI, 5000K	33
	4	!'	
L30	3,200	830 = 80CRI, 3000K	23
L50	5,500	835 = 80CRI, 3500K	44
L65	6,600	840 = 80CRI, 4000K	49
L85 ¹	8,500	850 = 80CRI, 5000K	73
	8	i'	
L60	6,500	830 = 80CRI, 3000K	43
L100	10,900	835 = 80CRI, 3500K	77
L130	13,200	840 = 80CRI, 4000K	97
L170 ¹	17,000	850 = 80CRI, 5000K	146

Nominal lumen output based on 4000 CCT. Actual lumens may vary +/-5%. See specific photometric tests

OPTIONS

75S Shown

Two circuit quick-connect wiring harness (See Technical Info for C2 complete quick-connect offering.) Low-profile 10-watt emergency LED battery (4' and 8' only; must specify EM/10WLP 120V or 277V)
Remote mount 10-watt emergency EM/10W REMOTE LED battery (2' only; must specify 120V or 277V)

ACCESSORIES (ordered separately)

See page 4 for special reflectors, ordered separately. Aircraft cable accessories available, see page 4.

WG-7511-LED 11-gauge white powder coat wireguard (available with 75 only) WG-7514-LED 14-gauge white powder coat wireguard (available with 75 only) 315 1-1/2" ceiling spacer (2) Y-hangers VBY VBY-2 (2) Y-nangers (2) Y-hangers and (2) 2' chains Row aligner (required when mounting with aircraft cables)

DRIVER

Additional dimming drivers available, see Technical Info. DRV Driver prewired for non-dimming applications 10% dimming driver prewired for 0-10V low DIM voltage applications

VOLTAGE

120 120V 277 277V UNV 120-277V

347V (not available with EM drivers)

FEATURES

- Small fixture profile allows inconspicuous placement in coves or confined spaces.
- Round and square lensed fixtures provide a clean look for architectural environments
- Row applications produce continuous light with minimal interruption between fixtures.
- Diffuse acrylic lens on 75R and 75S enhances uniformity and minimizes glare.
- Variety of mounting accessories for surface
- and suspended applications. 3000K, 3500K, 4000K, or 5000K CCT.
- Special reflectors are available to provide precise light distribution (75 only).
- ► This fixture is proudly made in the USA.

Submitted On: Sep 27, 2017

Williams H.E. WILLIAMS, INC.

¹ Available with 75 only.

USC SOM SIM CENTER
Architect: STUDIO 2LR ARCHITECTURE
(Columbia)
Engineer: GMK ASSOCIATES - COLUMBIA

Catalog Number:

75R-2-L20/840-DIM-UNV-CE W/EM/ 10WLP Notes: Type:

C/CE

TSC17-35038

75 NARROW LED STRIP

LED

SPECIFICATIONS

Housing – 22-gauge die-formed C.R.S. Finish – 92% minimum average reflective white polyester powder coat bonded to phosphate-free, multi-stage pretreated metal. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion

Electrical – High quality mid-power LED board. Rated for 50,000 hours at 70% lumen maintenance (L70). 25°C maximum ambient operating temperature.

Mounting – Surface or suspended.

Labels – cETLus conforms to UL STD 1598.
Certified to CAN/CSA STD C22.2 No. 250.0.
Suitable for damp locations.

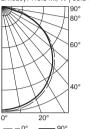
Warranty – 5-year limited warranty, see hew.com/warranty.

IMPORTANT:

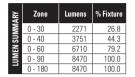
Electrostatic sensitive unit. Observe precautions when handling.

PHOTOMETRY

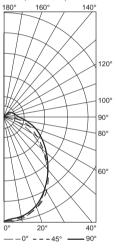
75-4-185/840-DIM Report #: 17875.0; 01/03/14 | Total Luminaire Output: 8470 lumens; 71.6 Watts Efficacy: 118.3 lm/W | 83.6 CRI; 4053K CCT | IES Spacing Criteria: End: 1.3, Across: 1.3



	Vertical	Horizontal Angle			Zonal
	Angle	0°	45°	90°	Lumens
CANDLEPOWER DISTRIBUTION	0	2874	2874	2874	
5	5	2895	2865	2854	273.8
₽	15	2815	2778	2770	788.6
2	25	2643	2604	2590	1208.3
2	35	2397	2348	2320	1480.4
Ĭ	45	2050	1991	1975	1546.3
E	55	1622	1568	1548	1412.3
į	65	1115	1061	1040	1067.9
\$	75	577	539	527	574.1
	85	103	115	100	118.4
	90	9	14	9	



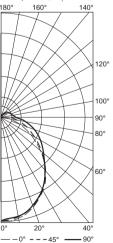
75R-4-L65/835 Report #: 19750.0; 03/02/17 | Total Luminaire Output: 6223 lumens; 52 Watts Efficacy: 120 lm/W | 84.5 CRI; 3515K CCT | IES Spacing Criteria: End: 1.2, Across: 1.3, Diagonal: 1.3



Ve	rtical	Horizontal Angle			Zonal
A	ingle	0°	45°	90°	Lumens
	0	1993	1993	1993	
	5	2015	1986	1962	188.7
	15	1924	1919	1906	540.1
	25	1733	1772	1786	814.1
	35	1472	1569	1622	971.5
N O	45	1138	1285	1401	984.4
5	55	771	996	1144	872.4
<u> </u>	65	477	724	858	684.5
	75	205	484	596	471.2
CANDLEPOWER DISTRIBUTION	85	49	308	385	290.5
<u> </u>	90	7	239	313	
<u> </u>	95	1	191	253	172.9
를 _1	05	0	115	168	104.3
<u> </u>	15	0	72	114	63.6
_ 1	25	0	41	78	36.1
_ 1	35	0	22	49	18.2
1	45	0	10	27	7.5
1	55	0	5	12	2.4
1	65	0	0	3	0.3
1	75	0	0	0	0
1	80	0	0	0	

	Zone	Lumens	% Fixture
בֱ	0 - 30	1543	24.8
LUMEN SUMMARY	0 - 40	2515	40.4
록	0 - 60	4371	70.2
S	0 - 90	5817	93.5
₩	90 - 120	341	5.5
3	90 - 150	403	6.5
	90 - 180	405	6.5
	0 - 180	6223	100.0

75S-4-L65/835 Report #: 19745.0; 03/02/17 | Total Luminaire Output: 6223 lumens; 52 Watts Efficacy: 120 lm/W |84.6 CRI; 3518K CCT | IES Spacing Criteria: End: 1.2, Across: 1.2, Diagonal: 1.2



	Vertical	Ho	rizontal An	gle	Zonal
	Angle	0°	45°	90°	Lumens
	0	2100	2100	2100	
	5	2118	2090	2061	198.4
	15	2024	2007	1982	563.8
	25	1807	1815	1785	832.2
	35	1513	1545	1510	957.9
ᅙ	45	1165	1194	1217	929.1
틸	55	809	892	992	807.4
뿙	65	475	645	785	634.7
ਙ	75	207	416	572	432.3
몵	85	36	248	377	254.8
CANDLEPOWER DISTRIBUTION	90	0	189	299	
ᇳ	95	0	177	264	171.5
ᅙ	105	0	154	223	142.0
ਤ∣	115	0	131	197	114.8
	125	0	106	166	84.6
	135	0	74	127	54.8
	145	0	45	86	29.1
	155	0	28	48	12.2
	165	0	13	24	3.4
	175	0	0	0	0.2
	180	0	0	0	

z	one	Lumens	% Fixture
0 -	30	1594	25.6
0 -	40	2552	41.0
0 - n -	60	4289	68.9
0 -	90	5611	90.2
90	- 120	428	6.9
90	- 150	597	9.6
90	- 180	612	9.8
0 -	180	6223	100.0

Williams
2 of 4 H.E. WILLIAMS. INC.

Information contained herein is subject to change without notice.

H.E. Williams, Inc.
Carthage, Missouri www.hew.com 417-358-4065

Submitted On: Sep 27, 2017

USC SOM SIM CENTER Architect: STUDIO 2LR ARCHITECTURE (Columbia) Engineer: GMK ASSOCIATES - COLUMBIA

Catalog Number:

75R-2-L20/840-DIM-UNV-CE W/EM/ 10WLP Notes:

Type:

MULTIPLIER TABLE

3500K/80CRI

4000K/80CRI 5000K/80CRI

COLOR TEMPERATURE

C/CE

TSC17-35038

NARROW LED STRIP

LED

0.97

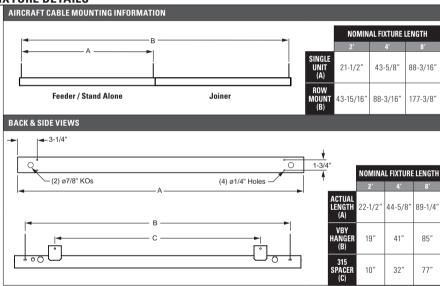
1.04

FIXTURE PERFORMANCE DATA

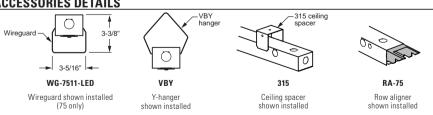
		/5 (no lens)		/5K &	k /58		
LED PACKAGE	WATTAGE	DELIVERED LUMENS	EFFICACY (Im/W)	DELIVERED LUMENS	EFFICACY (Im/W)		
	2'						
L15	12	1457	121	1370	114		
L20	15	1927	128	1812	121		
L30	23	2872	125	2700	117		
L40	34	3830	113	-	-		
		4					
L30	22	3162	149	2973	135		
L50	42	5463	130	5135	122		
L65	52	6620	127	6223	120		
L85	73	8521	117	-	-		
		8	t [*]				
L60	44	6456	147	6069	138		
L100	81	10927	135	10272	127		
L130	103	13240	129	12446	119		
L170	145	17041	118	-	-		

- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
- Wattage shown is average for 120V through 277V input.
 Results scaled based on relative CCT output.
 Use multiplier table to calculate additional options.

FIXTURE DETAILS



ACCESSORIES DETAILS





Notes:

Type:

TSC17-35038



Job Name: USC SOM SIM CENTER Architect: STUDIO 2LR ARCHITECTURE (Columbia) Engineer: GMK ASSOCIATES - COLUMBIA

NARROW LED STRIP CATALOG # TYPE PROJECT: NOTES EXAMPLE - L85/840 - OPTIONS - DIM - UNV 75 - 4 OPTIONS/ VOLTAGE SERIES LENGTH PACKAGE ((T ACCESSORIES **CROSS SECTION** 75 & 75R Shown







75S Shown

ORDERING INFORMATION

SERIES

75 Shown

75	Narrow LED Strip
75R	Round Lens LED Strip
75S	Square Lens LED Strip

NOMINAL LENGTH

2	2' (Actual length 22-1/2")
4	4' (Actual length 44-5/8")
Q	8' (Actual Janath 89-1//")

LED PACKAGE

LUMEN PACKAGE	NOMINAL LUMENS	MINIMUM CRI & CCT	WATTAGE
	2	<u>'</u>	
L15	1,500	830 = 80CRI, 3000K	12
L20	1,900	835 = 80CRI, 3500K	20
L30	2,900	840 = 80CRI, 4000K	24
L40 ¹	3,800	850 = 80CRI, 5000K	33
		ľ	
L30	3,200	830 = 80CRI, 3000K	23
L50	5,500	835 = 80CRI, 3500K	44
L65	6,600	840 = 80CRI, 4000K	49
L85 1	8,500	850 = 80CRI, 5000K	73
	8	3'	
L60	6,500	830 = 80CRI, 3000K	43
L100	10,900	835 = 80CRI, 3500K	77
L130	13,200	840 = 80CRI, 4000K	97
L170 ¹	17,000	850 = 80CRI, 5000K	146

Nominal lumen output based on 4000 CCT. Actual lumens may vary +/-5%. See specific photometric tests

OPTIONS

Two circuit quick-connect wiring harness (See Technical Info for C2 complete quick-connect offering.) Low-profile 10-watt emergency LED battery (4' and 8' only; must specify EM/10WLP 120V or 277V)
Remote mount 10-watt emergency EM/10W REMOTE LED battery (2' only; must specify 120V or 277V)

ACCESSORIES (ordered separately)

See page 4 for special reflectors, ordered separately. Aircraft cable accessories available, see page 4.

WG-7511-LED 11-gauge white powder coat wireguard (available with 75 only) WG-7514-LED 14-gauge white powder coat wireguard (available with 75 only) 315 1-1/2" ceiling spacer (2) Y-hangers VBY VBY-2 (2) Y-nangers (2) Y-hangers and (2) 2' chains Row aligner (required when mounting with aircraft cables)

DRIVER

Additional dimming drivers available, see Technical Info. DRV Driver prewired for non-dimming applications 10% dimming driver prewired for 0-10V low voltage applications DIM

VOLTAGE

120	120V
277	277V
UNV	120-277V
347	347V (not available with EM drivers)

FEATURES

- Small fixture profile allows inconspicuous placement in coves or confined spaces.
- Round and square lensed fixtures provide a clean look for architectural environments
- Row applications produce continuous light with minimal interruption between fixtures.
- Diffuse acrylic lens on 75R and 75S enhances uniformity and minimizes glare.
- Variety of mounting accessories for surface
- and suspended applications. 3000K, 3500K, 4000K, or 5000K CCT.
- Special reflectors are available to provide precise light distribution (75 only).
- ► This fixture is proudly made in the USA.

Williams

Strips

Page 1 of 4

¹ Available with 75 only.

DER NSIM CENTER
Architect: STUDIO 2LR ARCHITECTURE
(Columbia)
Engineer: GMK ASSOCIATES - COLUMBIA

Catalog Number:

75R-4-L30/840-DIM-BD-UNV

Type:

TSC17-35038

NARROW LED STRIP

Notes:

LED

corrosion.

operating temperature.

hew.com/warranty.

IMPORTANT:

Suitable for damp locations. Warranty – 5-year limited warranty, see

SPECIFICATIONS

 $\begin{array}{l} \textbf{Housing}-22\text{-gauge die-formed C.R.S.} \\ \textbf{Finish}-92\% \ \text{minimum average reflective} \end{array}$ white polyester powder coat bonded to phosphate-free, multi-stage pretreated metal. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit

Electrical – High quality mid-power LED board. Rated for 50,000 hours at 70% lumen maintenance (L70). 25°C maximum ambient

Mounting – Surface or suspended.

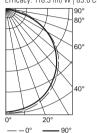
Labels – cETLus conforms to UL STD 1598.

Certified to CAN/CSA STD C22.2 No. 250.0.

Electrostatic sensitive unit. Observe precautions when handling.

PHOTOMETRY

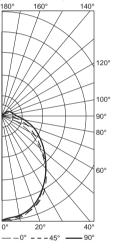
75-4-185/840-DIM Report #: 17875.0; 01/03/14 | Total Luminaire Output: 8470 lumens; 71.6 Watts Efficacy: 118.3 lm/W | 83.6 CRI; 4053K CCT | IES Spacing Criteria: End: 1.3, Across: 1.3



	Vertical	Ho	rizontal An	gle	Zonal
	Angle	0°	45°	90°	Lumens
8	0	2874	2874	2874	
틸	5	2895	2865	2854	273.8
#	15	2815	2778	2770	788.6
2	25	2643	2604	2590	1208.3
몵	35	2397	2348	2320	1480.4
8	45	2050	1991	1975	1546.3
ᇳ	55	1622	1568	1548	1412.3
CANDLEPOWER DISTRIBUTION	65	1115	1061	1040	1067.9
3	75	577	539	527	574.1
	85	103	115	100	118.4
	90	9	14	9	

LUMEN SUMMARY	Zone	Lumens	% Fixture
¥	0 - 30	2271	26.8
≌	0 - 40	3751	44.3
즓	0 - 60	6710	79.2
₹.	0 - 90	8470	100.0
-	0 - 180	8470	100.0

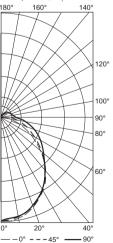
75R-4-L65/835 Report #: 19750.0; 03/02/17 | Total Luminaire Output: 6223 lumens; 52 Watts Efficacy: 120 lm/W | 84.5 CRI; 3515K CCT | IES Spacing Criteria: End: 1.2, Across: 1.3, Diagonal: 1.3



Vertical	Ho	rizontal An	ale	Zonal
Angle	O°	45°	90°	Lumens
0	1993	1993	1993	
5	2015	1986	1962	188.7
15	1924	1919	1906	540.1
25	1733	1772	1786	814.1
35	1472	1569	1622	971.5
45	1138	1285	1401	984.4
55	771	996	1144	872.4
65	477	724	858	684.5
75	205	484	596	471.2
85	49	308	385	290.5
90	7	239	313	
95	1	191	253	172.9
105	0	115	168	104.3
115	0	72	114	63.6
125	0	41	78	36.1
135	0	22	49	18.2
145	0	10	27	7.5
155	0	5	12	2.4
165	0	0	3	0.3
175	0	0	0	0
180	0	0	0	

	Zone	Lumens	% Fixture
£	0 - 30	1543	24.8
LUMEN SUMMARY	0 - 40	2515	40.4
록	0 - 60	4371	70.2
S	0 - 90	5817	93.5
뿔	90 - 120	341	5.5
3	90 - 150	403	6.5
	90 - 180	405	6.5
	0 - 180	6223	100.0

75S-4-L65/835 Report #: 19745.0; 03/02/17 | Total Luminaire Output: 6223 lumens; 52 Watts Efficacy: 120 lm/W |84.6 CRI; 3518K CCT | IES Spacing Criteria: End: 1.2, Across: 1.2, Diagonal: 1.2



LU	opacing o	III. LIII	u. 1.2,7101	000. I.Z, D	lagoriai. 1.
	Vertical		rizontal An		Zonal
	Angle	0°	45°	90°	Lumens
	0	2100	2100	2100	
	5	2118	2090	2061	198.4
	15	2024	2007	1982	563.8
	25	1807	1815	1785	832.2
	35	1513	1545	1510	957.9
ᅙ	45	1165	1194	1217	929.1
5	55	809	892	992	807.4
쁥	65	475	645	785	634.7
<u>≅</u>	75	207	416	572	432.3
묾	85	36	248	377	254.8
⋛	90	0	189	299	
ᇳ	95	0	177	264	171.5
CANDLEPOWER DISTRIBUTION	105	0	154	223	142.0
₹	115	0	131	197	114.8
	125	0	106	166	84.6
	135	0	74	127	54.8
	145	0	45	86	29.1
	155	0	28	48	12.2
	165	0	13	24	3.4
	175	0	0	0	0.2
	180	0	0	0	

	Zone	Lumens	% Fixture
<u></u>	0 - 30	1594	25.6
SUMMAR	0 - 40	2552	41.0
₹	0 - 60	4289	68.9
	0 - 90	5611	90.2
MEN	90 - 120	428	6.9
3	90 - 150	597	9.6
	90 - 180	612	9.8
	0 - 180	6223	100.0

Williams H.E. WILLIAMS. INC.

H.E. Williams, Inc.
Carthage, Missouri www.hew.com 417-358-4065 Information contained herein is subject to change without notice.

USC SOM SIM CENTER Architect: STUDIO 2LR ARCHITECTURE (Columbia) Engineer: GMK ASSOCIATES - COLUMBIA

Catalog Number: 75R-4-L30/840-DIM-BD-UNV

Notes:

Type:

MULTIPLIER TABLE

3500K/80CRI

4000K/80CRI 5000K/80CRI

COLOR TEMPERATURE

C1

TSC17-35038

NARROW LED STRIP

LED

0.97

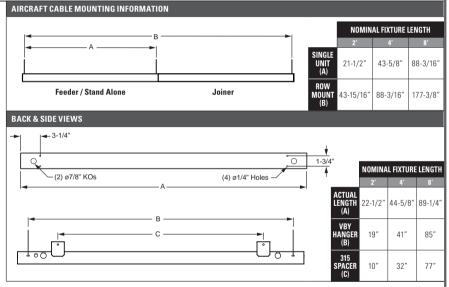
1.04

FIXTURE PERFORMANCE DATA

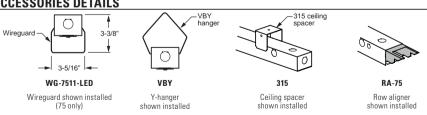
		73 (110	iens)	/3h & /38			
LED PACKAGE	WATTAGE	DELIVERED LUMENS	EFFICACY (Im/W)	DELIVERED LUMENS	EFFICACY (Im/W)		
		2	."				
L15	12	1457	121	1370	114		
L20	15	1927	128	1812	121		
L30	23	2872	125	2700	117		
L40	L40 34		113	-	-		
		4					
L30	22	3162	149	2973	135		
L50	42	5463	130	5135	122		
L65	52	6620	127	6223	120		
L85	73	8521	117	-	-		
		8	t [*]				
L60	44	6456	147	6069	138		
L100	L100 81		135	10272	127		
L130	103	13240	129	12446	119		
L170	145	17041	118	-	-		

- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
- Wattage shown is average for 120V through 277V input.
 Results scaled based on relative CCT output.
 Use multiplier table to calculate additional options.

FIXTURE DETAILS



ACCESSORIES DETAILS





USC SOM SIM CENTER Architect: STUDIO 2LR ARCHITECTURE (Columbia) Engineer: GMK ASSOCIATES - COLUMBIA

Catalog Number: LRXR610840MD

Notes:

Type:

D

Lumination™ LED Luminaires

LRX Round Series LED Downlights



Project name Date Type

Product Description:

The Lumination LRX Series LED downlights are the ideal retrofit or new construction solution for traditional downlight fixtures. They install in just minutes into most 4-inch, 6-inch, and 8-inch rough-in frames and bring afresh look to the space. Unlike plug-in LED lamps, the LRX downlight gives you a new power supply and 50,000 hour life rating, so that you won't have to worry about compatibility or maintenance issues with the original ballasts. All downlights in the LRX family utilize a non-conductive poly carbonate trim perfect for wet rated applications.

Performance Summary:

NOMINAL LUMENS				
Delivered Lumens-LRXR4	700	1020	N/A	N/A
Delivered Lumens-LRXR6	700	1050	1900	N/A
Delivered Lumens-LRXR8	750	1200	2000	3300
System Input Power (W)	8.5	13	22	35
System Efficacy (LPW)	88	92	91	94

*LPW based on LRXR8

Input Voltage: 120 - 277V

Standard Dimming Controls: 0-10V down to 10%

CCT: 3000K, 3500K, 4000K

CRI: 82

Lifetime Rating: L85 @ 50,000 Hours Input Frequency (Hz): 50/60Hz

Power Factor: >0.9

Mounting Options: Spring clips clamp on to existing frame or directly to ceiling

Weight: 0.6 lb IC Rating: Non-IC Rated

Limited Warranty: 5 years system Files Available: LM79, LM80, IES

Listings: c(UL)us

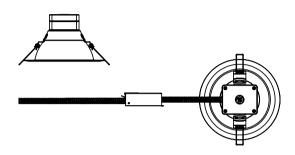


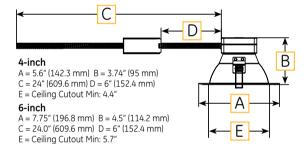


• Suitable for wet locations



Product Dimensions:





8-inch

A = 9.75" (247.6 mm) B = 5.1" (129.4 mm) C = 24.0" (609.6 mm) D = 6" (152.4 mm) E = Ceiling Cutout Min: 7.7"

DaintreeNetworks

a product of ecomagination^a

Ordering Information:

LRX 	<u>R</u>		8 -		MD 	
PRODUCT FAMILY		LUMENS	CRI	ССТ	DIMMING	
LRX = Lumination RX Series Downlight	R4 = 4" Round Retrofit Downlight R6 = 6" Round Retrofit Downlight R8 = 8" Round Retrofit Downlight	10 ¹ =	8 = 82 CF	30 = 3000K 35 = 3500K 40 = 4000K	MD = 0-10V Dimming	BLANK = None EL² = EMBB Ready ² Must order "EL" option + LRXEMBBKIT (sold separately) for complete EMBB solution.
	Theatone Downing It	18 = 1800lm 30 = 3000lm 11000lm models feature a selectable lumen package to allow field adjustments to light output. See page 2 for further info.			im is white. Colored trim ease see page 2 for det	options





Catalog Number: LRXR610840MD

Notes:

Type:

D

Accessories:

PRODUCT DESCRIPTION	MATERIAL DESCRIPTION		NOTES
347V KIT	LRX347V277	93036250	347V TRANSFORMER QUICK CONNECT KIT
6" WHITE PAINTED GOOF RING	GRRC6RPTWT	93018829	RECOMMENDED FOR OVER-SIZED HOLES IN CEILING
8" WHITE PAINTED GOOF RING	GRRC8RPTWT	93018831	RECOMMENDED FOR OVER-SIZED HOLES IN CEILING
6" NEW CONSTRUCTION FRAME KIT	FRAME6R	93025091	RECOMMENDED FOR NEW CONSTRUCTION APPLICATIONS
8" NEW CONSTRUCTION FRAME KIT	FRAME8R	93025092	RECOMMENDED FOR NEW CONSTRUCTION APPLICATIONS
ENLIGHTED SENSOR KIT	LCACBAVQNUNGALV	93029451	SEE LCA KIT LITERATURE & INSTALL GUIDE
DAINTREE SENSOR KIT	LCACBAVTQUNGALV	93057194	SEE LCA KIT LITERATURE & INSTALL GUIDE
EMERGENCY BATTERY BACKUP KIT (7W)	LRXEMBBKIT07	93043031	7 WATT EMBB QUICK CONNECT KIT (MUST HAVE FIXTURE WITH "EL" OPTION)
EMERGENCY BATTERY BACKUP KIT (10W)	LRXEMBBKIT10	93043540	10 WATT EMBB QUICK CONNECT KIT (MUST HAVE FIXTURE WITH "EL" OPTION)

Colored Trim Options:

	PRODUCT DESCRIPTION	MATERIAL DESCRIPTION	MATERIAL	LUMEN OUTPUT
0	LRXR6 ROUND 6" TRIM INSERT, BLACK	LRXR6TRIMBL	93059501	70%
0	LRXR6 ROUND 6" TRIM INSERT, SILVER	LRXR6TRIMSV	93059502	90%
0	LRXR8 ROUND 8" TRIM INSERT, BLACK (NOT AVAILABLE IN 3000LM)	LRXR8TRIMBL	93059503	70%
0	LRXR8 ROUND 8" TRIM INSERT, SILVER (NOT AVAILABLE IN 3000LM)	LRXR8TRIMSV	93059504	85%

Photometric Data: Lumination™ LRX Series Downlights

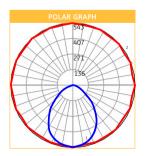
LRXR410830MD

45°	44163	43507	44576
55°	31383	30998	31794
65°	19283	19142	19599
75°	12977	12649	12986
85°	6327	6456	8002

IMEN SUMMARY
50.98
143.53
208.85
226.68
194.68
131.45
66.78
29.04
6.9
0.04
0.04
0.03
0.02
0.02
0.02
0.02
0.01
0.00

	COEFFICIENTS OF UTILIZATION																	
RC								50%						10%			0%	
				10%												30%		0%
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	88	77	70	64	86	76	69	63	74	67	63	71	66	62	69	65	61	59
5	81	70	62	56	79	69	62	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42
8	66	54	46	41	65	53	46	40	52	45	40	51	44	40	49	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	40	36	35
10	58	46	39	34	57	46	38	34	45	38	34	44	38	33	43	37	33	32

		JMEN SUMMAR					
			% of Fixture				
0-20	194.51	N.A.	18.4				
0-30	403.36	N.A.	38.1				
0-40	630.04	N.A.	59.5				
0-60	956.17	N.A.	90.3				
0-80	1052	N.A.	99.3				
0-90	1058.9	N.A.	100				



Job Name:
USC SOM SIM CENTER
Architect: STUDIO 2LR ARCHITECTURE
(Columbia)
Engineer: GMK ASSOCIATES - COLUMBIA

Catalog Number: LRXR610840MD

Notes:

Type:

D

Photometric Data: Lumination™ LRX Series Downlights

LRXR610830MD

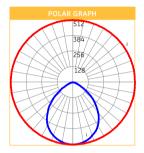
ZONAL	
Zone	
0-10°	48.26
10-20°	135.99
20-30°	199.14
30-40°	221.96
40-50°	188.12
50-60°	118.95
60-70°	54.04
70-80°	25.47
80-90°	7.78
90-100°	0.06
100-110°	0.02
110-120°	0.03
120-130°	0.03
130-140°	0.04
140-150°	0.05
150-160°	0.05
160-170°	0.03
170-180°	0.01

							COEFFI	CIENTS	OF UTIL	IZATIOI	V							
RC 80%								50%										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	90	85	100	94	89	85	91	86	83	87	84	81	85	82	79	77
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	69	68
4	88	78	70	64	86	76	69	64	74	68	63	72	67	62	70	65	62	60
5	82	70	63	57	80	69	62	57	67	61	56	66	60	55	64	59	55	53
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	48	44	43
8	66	54	46	41	65	53	46	41	52	45	41	51	45	40	50	44	40	39
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35
10	59	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

NOTE: Floor Cavity Reflectance : 20%

		% of Fixture				
0-20°	184.25	18.40				
0-30°	383.39	38.30				
0-40°	605.34	60.50				
0-60°	912.41	91.20				
0-80°	991.92	99.20				
0-90°	999.70	100.00				

LUMINANCE DATA (CANDELA/m²)							
45°	17519	17519	17519				
55°	11682	11682	11682				
65°	6286	6286	6286				
75°	4723	4723	4723				
85°	4000	4000	4000				



LRXR818830MD

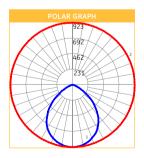
0-10°	87.00			
10-20°	245.00			
20-30°	357.94			
30-40°	405.72			
40-50°	355.72			
50-60°	213.19			
60-70°	84.35			
70-80°	37.58			
80-90°	10.61			
90-100°	0.07			
100-110°	0.14			
110-120°	0.29			
120-130°	0.44			
130-140°	0.54			
140-150°	0.55			
150-160°	0.48			
160-170°	0.31			
170-180°	0.10			

	CONFESCIONES OF HITH PATION																	
RC 80%						COEFFICIENTS OF UTILIZATION 70% 50%												
RC			%															
RW																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78
3	95	87	80	74	93	85	79	74	82	77	72	80	75	71	77	73	70	68
4	88	78	71	65	86	77	70	65	75	68	64	72	67	63	70	66	62	60
5	82	71	63	57	80	70	63	57	68	61	56	66	60	56	64	59	55	53
6	76	65	57	51	75	64	56	51	62	55	50	60	54	50	59	54	50	48
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	62	50	43	38	61	50	42	38	49	42	37	47	41	37	47	41	37	35
10	59	47	39	34	57	46	39	34	45	39	34	44	38	34	43	38	34	32

NOTE: Floor Cavity Reflectance : 20%

TOTE: 11001 Carring Hericatanica : 2070								
Zone								
0-20°	332.00	18.40						
0-30°	689.94	38.30						
0-40°	1095.66	60.90						
0-60°	1664.57	92.50						
0-80°	1786.51	99.20						
0-90°	1797.12	99.80						

LUMINANCE DATA (CANDELA/m²)							
45°	8251	8251	8251				
55°	4433	4433	4433				
65°	1645	1645	1645				
75°	827	827	827				
85°	263	263	263				



Job Name:
USC SOM SIM CENTER
Architect: STUDIO 2LR ARCHITECTURE
(Columbia)
Engineer: GMK ASSOCIATES - COLUMBIA

Catalog Number: LRXR610840MD

Notes:

Type:

Selectable Driver Package:

The LRX Series comes with a new Selectable Driver Package which allows customers to manually switch from full power (1000lm) to lower power (650lm) with just the switch of a button. This affords unprecedented flexibility for distributors to stock fewer SKUs. Reduces install risk by effectively having 2 lumen levels in 1 simple package.



^{*}This feature is only available in the 1000/650lm package.

Product Specifications:

Construction:

- 16 gauge Aluminum spinning reflector housing, powder coating
- Custom engineered heat sink flange for passive cooling on all lumen options

- Fixture mounting to an existing metal frame
- Conduit connect to quick-disconnect for easy installation

Optical System:

- Custom engineered reflectors for wide distributions.
- Semi-diffuse diffuser for ideal combination of optical efficiency and uniformity

- High Efficiency, integrated driver with 0-10V dimming
- Selectable Lumen Driver available in the 1000/650lm package.

For more information and access to all of our resources, including our design tool visit: www.gelighting.com



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www.currentbyge.com | IND288 (Rev 06/27/17)





USC SOM SIM CENTER Architect: STUDIO 2LR ARCHITECTURE (Columbia) Engineer: GMK ASSOCIATES - COLUMBIA

Catalog Number: FRAME6R

Notes:

Type:

Lumination[™] **LED Luminaires**

Retrofit Commercial Downlights New Construction Frame Kit



Project name Date Type

Product Description:

Non-IC rated frame kit designed to enable 6" and 8" retrofit downlight fixtures to be used in new construction applications. Suitable for grid or drywall ceilings. Hanger bars accessories available for installation in t-grid ceilings.

Performance Summary:

Mounting Options: Hanger bars for grid or drywall ceilings Limited Warranty: 5 years system

A = 15.35" [390 mm] B = 11.34" [288 mm] C = 6.27" [159.30 mm]

A = 15.35" [390 mm] **B** = 11.34" [288 mm] **C** = 7.87" [200 mm]

Height: 3.72" [94.50 mm]

Listings: c(UL)us

a product of ecomagination[®]

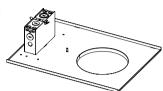
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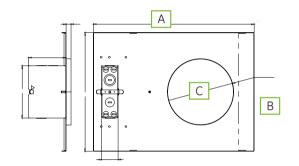
• Suitable for damp locations.

Ordering Information:

Frame Kit SKU's	Description	Recessed Can Size			
93025091	FRAME6R	6" Retrofit Downlight			
93025092	FRAME8R	8" Retrofit Downlight			
Hanger Bars	Description Code	Product Code			

Product Dimensions:





Product Specifications:

C-Channel – 25 1/4", pair

Compatibility:

Intended for use with the following fixtures:

- GE Lumination RX Series GE Lumination RC Series
- GE Lumination RI Series

Installation:

- Universal mounting brackets with over 3" of vertical adjustment accommodate several types of hanger bars
- C-channel bar hanger is provided for mounting to T-bar grid
- · Mount in T-bar grid or drywall ceilings, up to 1.5" thick

Construction:

- 22 gauge galvanized steel housing
- Galvanized steel junction box with multiple knockouts for the RC and RX fixtures

For more information and access to all of our resources, including our design tool visit: www.gelighting.com



www.gelighting.com

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IND272 (Rev 05/12/16)

Notes:

Type:

EX/EXR

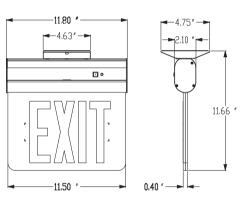
C17-35038





LG-750-REM

DIMENSIONS



LG-750-REM Remote Capable Extruded Aluminum Edge-lit

GENERAL DESCRIPTION

CATALOG# _

The LG-750-REM Edge-Lit provides a thin profile design that complements upscale commercial or retail architectural applications. Edge-lit illumination is provided utilizing the highest quality LEDs (AllnGaP) for even light distribution and trouble free operation.

HOUSING

The LG-750 consists of an extruded aluminum body with a die cast mounting plate. White, black and brushed aluminum finish (matches all products in same family). Unit installs in less than 5 minutes and is prewired at factory.

ILLUMINATION

The edge-lit utilizes high-output AllnGaP LEDs with rated lamp life of 10+ years.

REMOTE HEADS

Can remote two LED heads. Refer to LG-REM-LED cut sheet and specify 6V option

ELECTRONICS AND BATTERY

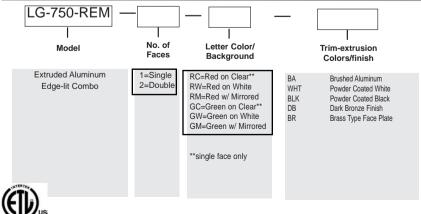
Dual Voltage 120/277 VAC input facilitates the fully automatic Solid State charging system which features (LVD) Low Voltage Disconnect, AC lockout installation, brown out protection, AC indicator LED light with push to test button standard. 6V **Nickel Cadmium** battery provides a minimum of 90 minutes of illumination in emergency mode.

CODE COMPLIANCE

Tested and Listed to UL 924 for damp location, meets or exceeds NFPA, NEC, and OSHA illumination standard.

WARRANTY

5 year pro rated warranty on battery.



20 Pocono Rd. Brookfield, CT. 06804 Tel: 203-775-0172 ~ Fax: 203-775-0797~www.Astralitelighting.com

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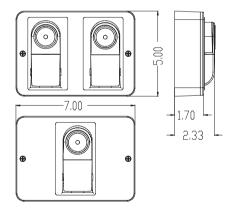
Job Name: USC SOM SIM CENTER Architect: STUDIO 2LR ARCHITECTURE (Columbia) Engineer: GMK ASSOCIATES - COLUMBIA

Notes:





DIMENSIONS



LG-LED-REM L.E.D. REMOTE HEADS

GENERAL DESCRIPTION Unique remote head with 1W L.E.D. heads for commercial applications.

HOUSING

UV Stable Thermoplastic flame retardant meets UL94 standard. This unit is available in white, black, and titanium.

ILLUMINATION

Illuminated by long-lasting high-output 1W L.E.D. heads with minimum degradation over the life of L.E.D.'s. Unit meets all Energy Star requirements.

MOUNTING

Universal mounting plate provided; mounts to any standard electrical box.

CODE COMPLIANCE

Meets UL standard.

WARRANTY

3-year warranty on housing and electronics

LG-LED-REM MODEL

NO. OF HEADS

HOUSING COLOR

1H = 1 HEAD 2H = 2 HEADS W = WHITE
B = BLACK
TI = TITANIUM



20 Pocono Road , Brookfield , Connecticut , 06804 , 203.775.0172 (P) , 203.775.0797 (F) LG-LED-REM