



RETROFIT SOLUTION LED

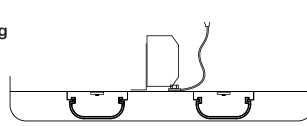
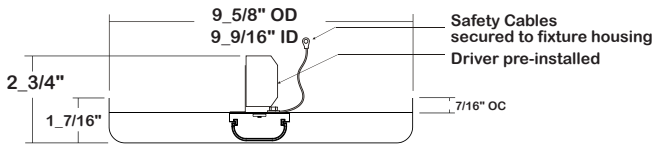
RSTR209 (9" WIDE) SERIES

NOMINAL 9" WIDE STRIP LIGHT RETROFIT SOLUTION

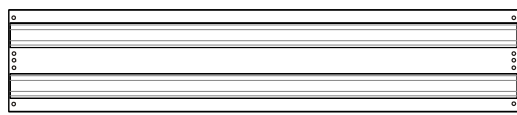
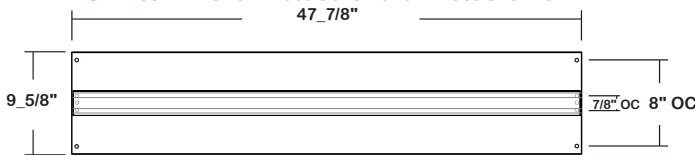
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WWW.LALIGHTING.COM
626-454-8300

EASILY CONVERTS EXISTING NOMINAL 9" WIDE FLUORESCENT STRIPS TO LED LUMINAIRES

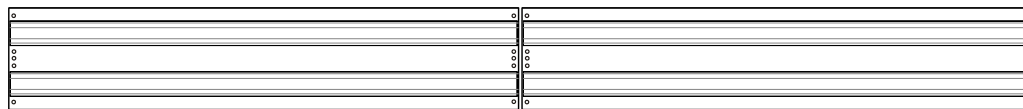


RSTR209-4L - One 4-Foot Cover for a 4-Foot Channel



*2 LED Rows Shown

RSTR209-8LT - Two 4-Foot Covers for an 8-Foot Channel



FEATURES

- LED retrofit solution for fluorescent strip light luminaires from nominal 9" to 9_1/2" wide
- 0-10V dimming driver standard
- Includes easy-to-read installation instructions
- Pre-punched holes to install the necessary hardware and wiring
- Safety cables pre-installed
- Driver pre-installed for ease of installation
- Supports California Title 24 compliance

OPTIONS

- **High (HT)** ambient temperature version for extreme temperature ranges
- Full customization available upon request
- Additional lumen packages and color temperatures available
- Wireless control options available
- Emergency battery pack available
- Frosted acrylic lens available
- Tunable white available (2700K-6500K)
- Painted after fabrication available

SPECIFICATIONS

CONSTRUCTION

- 22 ga. cold rolled steel LED cover tray
- LED cover tray to be secured to the host fixture with provided screws

FINISH

- Baked white polyester finish
- Minimum reflectance 86%

OPTICAL

- Frosted white acrylic lens

LISTING

- UL USA and Canada classified

ELECTRICAL

- High efficiency drivers coupled with long-life LEDs
- Service life greater than 50,000 hours (L70)
- Universal voltage 120V through 277V (347V / 480V available)
- LED light engine is pre-wired with a quick connector for easy connection
- Driver-disconnect is provided for disconnecting the electrical supply conductors to the LED driver
- Power Factor (PF) ≥ 0.9
- Total Harmonic Distortion (THD) $\leq 20\%$

WARRANTY

- 5-Year limited warranty standard. 10-Year limited warranty also available



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Revised: 07/27/23



ORDERING INFORMATION

EXAMPLE: RSTR209-4-4L-FRWA-DRDM-UNV-1/840

RETROFIT SERIES	LED LUMEN PACKAGE	EFFICACY	NOMINAL LENGTH	OPTICAL	MECHANICAL	ELECTRICAL	DRIVER	VOLTAGE	# OF LED ROW	CRI / CCT
RSTR209							DRDM	UNV		
RSTR209 Nominal 9" Wide Strip Light Fluorescent Fixture to LED Luminaire Retrofit Solution (Normal Ambient Temperature Version)	2 Nom. 2000 Lumens 4 Nom. 4000 Lumens 6 Nom. 6000 Lumens 8 Nom. 8000 Lumens 12 Nom. 12000 Lumens 16 Nom. 16000 Lumens 24 Nom. 24000 Lumens *Additional Lumen Packages Available	(Blank) Standard HE High Efficacy	4L 4' (one 4-foot cover for a 4-foot channel) (Only 2000 / 4000 / 6000 / 8000 lumens Systems) 8LT 8' (two 4-foot covers for an 8-foot channel) (Only 4000 / 8000 / 12000 / 16000 / 24000 lumens Systems)	FRWA Frosted White Acrylic FRA Frosted Acrylic	PAF Painted After Fabrication, Minimum Reflectance 90% *Leave Blank if Not Specified	BPL1.5 1500lm Emergency Battery Pack WLC(LED RU) EnOcean Wireless Control *Leave Blank if Not Specified <u>Additional Electrical Options</u>	DRDM 0-10V Dimming Driver	UNV 120V-277V	1 One LED Row (Only 2000-4L / 4000 / 6000-4L / 8000 / 12000-8LT / 16000-8LT lumens Systems) 2 Two LED Rows (Only 24000-8LT lumens System)	830 80+CRI / 3000K Color Temp. 835 80+CRI / 3500K Color Temp. 840 80+CRI / 4000K Color Temp. 850 80+CRI / 5000K Color Temp. *Additional Color Temp. Available
Standard options for RSTR209 shown above. For additional options, including lumen packages, controls, lenses, switches, finishes, and more, visit www.lalighting.com/resources or contact customer service.										

RETROFIT SERIES	LED LUMEN PACKAGE	NOMINAL LENGTH	OPTICAL	MECHANICAL	ELECTRICAL	DRIVER	VOLTAGE	# OF LED ROW	CRI / CCT	AMBIENT TEMP.
RSTR209						DRDM	UNV	2		HT
RSTR209 Nominal 9" Wide Strip Light Fluorescent Fixture to LED Luminaire Retrofit Solution (HT - High Ambient Temperature Version)	24 Nom. 24000 Lumens 36 Nom. 36000 Lumens *Additional Lumen Packages Available	4L 4' (one 4-foot cover for a 4-foot channel) (Only 24000 lumens Systems) 8LT 8' (two 4-foot covers for an 8-foot channel)	FRWA Frosted White Acrylic FRA Frosted Acrylic	PAF Painted After Fabrication, Minimum Reflectance 90% *Leave Blank if Not Specified	BPL1.5 1500lm Emergency Battery Pack WLC(LED RU) EnOcean Wireless Control *Leave Blank if Not Specified <u>Additional Electrical Options</u>	DRDM 0-10V Dimming Driver	UNV 120V-277V	2 Two LED Rows	835 80+CRI / 3500K Color Temp. 840 80+CRI / 4000K Color Temp. 850 80+CRI / 5000K Color Temp. *Additional Color Temp. Available	HT High Ambient Temp.



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SYSTEM DATA

THESE ARE THE MOST POPULAR LUMEN PACKAGES. PLEASE CONSULT FACTORY FOR ADDITIONAL SYSTEM DATA.

LED LUMEN PACKAGE	NORMAL AMBIENT TEMPERATURE PRODUCT CODE	DELIVERED LUMENS**	SYSTEM WATTS	LUMINAIRE EFFICACY	AMBIENT TEMP.	FLUORESCENT EQUIVALENT	IES FILES
2000 Lumens (Nominal)	RSTR209-2-4L-FRWA-DRDM-UNV-1/840	1905 lm	15.7 W	121.2 lm/W	-20°C / 35°C	1-F32T8	*
4000 Lumens (Nominal)	RSTR209-4-4L-FRWA-DRDM-UNV-1/840	3627 lm	33.1 W	109.5 lm/W	-20°C / 35°C	2-F32T8, 1-F54T5HO	LA-T3415
	RSTR209-4-8LT-FRWA-DRDM-UNV-1/840	3508 lm	28.7 W	122.3 lm/W			*
6000 Lumens (Nominal)	RSTR209-6-4L-FRWA-DRDM-UNV-1/840	5202 lm	52.3 W	99.4 lm/W	-20°C / 35°C	3-F32T8	*
8000 Lumens (Nominal)	RSTR209-8-4L-FRWA-DRDM-UNV-1/840	6954 lm	57.3 W	121.5 lm/W	-20°C / 35°C	4-F32T8, 2-F54T5HO	*
	RSTR209-8-8LT-FRWA-DRDM-UNV-1/840	7006 lm	63.6 W	110.2 lm/W			*
12000 Lumens (Nominal)	RSTR209-12-8LT-FRWA-DRDM-UNV-1/840	10410 lm	104.6 W	99.5 lm/W	-20°C / 35°C	6-F332T8, 3-F54T5HO	*
16000 Lumens (Nominal)	RSTR209-16-8LT-FRWA-DRDM-UNV-1/840	13598 lm	111.6 W	121.9 lm/W	-20°C / 35°C	4-F54T5HO	*
24000 Lumens (Nominal)	RSTR209-24-4L-FRWA-DRDM-UNV-2/840	20444 lm	204.5 W	100.0 lm/W	-20°C / 35°C	6-F54T5HO	LA-T3416

LED LUMEN PACKAGE	NORMAL AMBIENT TEMPERATURE (HIGH EFFICACY) PRODUCT CODE	DELIVERED LUMENS**	SYSTEM WATTS	LUMINAIRE EFFICACY	AMBIENT TEMP.	FLUORESCENT EQUIVALENT	IES FILES
2000 Lumens (Nominal)	RSTR209-2HE-4L-FRWA-DRDM-UNV-1/840	1911 lm	12.6 W	152.1 lm/W	-20°C / 35°C	1-F32T8	*
4000 Lumens (Nominal)	RSTR209-4HE-4L-FRWA-DRDM-UNV-1/840	3396 lm	23.2 W	146.5 lm/W	-20°C / 35°C	2-F32T8, 1-F54T5HO	*
	RSTR209-4HE-8LT-FRWA-DRDM-UNV-1/840	3441 lm	22.5 W	152.8 lm/W			*
6000 Lumens (Nominal)	RSTR209-6HE-4L-FRWA-DRDM-UNV-1/840	5130 lm	36.8 W	137.4 lm/W	-20°C / 35°C	3-F32T8	*
8000 Lumens (Nominal)	RSTR209-8HE-4L-FRWA-DRDM-UNV-1/840	7039 lm	53.0 W	132.9 lm/W	-20°C / 35°C	4-F32T8, 2-F54T5HO	*
	RSTR209-8HE-8LT-FRWA-DRDM-UNV-1/840	6799 lm	46.4 W	146.6 lm/W			*
12000 Lumens (Nominal)	RSTR209-12HE-8LT-FRWA-DRDM-UNV-1/840	10271 lm	73.6 W	139.6 lm/W	-20°C / 35°C	6-F332T8, 3-F54T5HO	*
16000 Lumens (Nominal)	RSTR209-16HE-8LT-FRWA-DRDM-UNV-1/840	13776 lm	103.3 W	133.4 lm/W	-20°C / 35°C	4-F54T5HO	*
24000 Lumens (Nominal)	RSTR209-24HE-4L-FRWA-DRDM-UNV-2/840	20173 lm	147.2 W	137.1 lm/W	-20°C / 35°C	6-F54T5HO	*

LED LUMEN PACKAGE	HIGH AMBIENT TEMPERATURE PRODUCT CODE	DELIVERED LUMENS**	SYSTEM WATTS	LUMINAIRE EFFICACY	AMBIENT TEMP.	FLUORESCENT EQUIVALENT	IES FILES
24000 Lumens (Nominal)	RSTR209-24-4L-FRWA-DRDM-UNV-2/840HT	20372 lm	155.8 W	130.8 lm/W	-20°C / 35°C	6-F54T5HO	*
	RSTR209-24-8LT-FRWA-DRDM-UNV-2/840HT	20072 lm	141.4 W	142.0 lm/W			*
32000 Lumens (Nominal)	RSTR209-32-8LT-FRWA-DRDM-UNV-2/840HT	30233 lm	223.8 W	135.1 lm/W	-20°C / 35°C	8-F54T5HO	*

NOTE:

System data is based on 120V input voltage. Actual performance may differ as a result of end-user environment and application.

** As tested in a host fixture with a smooth frosted white acrylic lens

This fixture has been tested and listed in accordance with UL Standards. L.A. Lighting certifies that it will operate safely when installed properly, and within an ambient temperature range noted in the system data table.

Additional lumen packages and color temperatures available.



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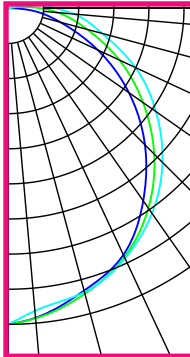
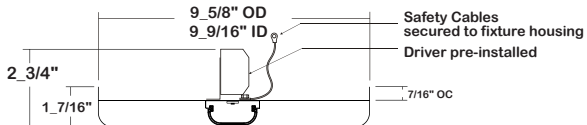
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PHOTOMETRIC DATA - RSTR209 SERIES

RSTR209-4-4L-FRWA-DRDM-UNV-1/840

TEST NO.=LA-T3415
 HOST FIXTURE=STR400 with Smooth Frosted White Acrylic Lens
 LED TYPE=48 LED MODULE
 NO. OF MODULE=2
 SYSTEM WATT (W)=33.1
 CRI ≥ 80
 L70(Hrs.) ≥ 50,000
 PHOTOMETRY TYPE=C



CANDLEPOWER

ANGLE	END	45	CROSS
0	1179	1179	1179
5	1160	1161	1133
15	1091	1103	1097
25	1015	1024	1029
35	877	911	934
45	721	769	813
55	549	613	672
65	368	457	523
75	201	305	363
85	84	187	247
90	22	121	176
95	1	62	128
115	0	1	9
125	0	0	0
135	0	0	0
145	0	0	0
155	0	0	0
165	0	0	0
175	0	0	0
180	0	0	0

ZONAL LUMEN SUMMARY

DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	895	21	25
0-40	1466	34	40
0-60	2610	61	72
0-90	3542	83	98
90-120	85	2	2
90-150	85	2	2
90-180	85	2	2
0-180	3627	85	100

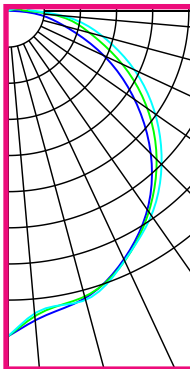
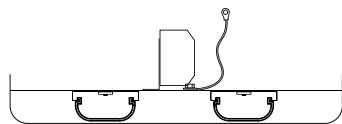
Luminaire Output = 3626.8 lumens
 Luminaire Efficacy = 109.6 lm/W

SPACING CRITERION

ALONG	ACROSS
1.19	1.24

RSTR209-24-8LT-FRWA-DRDM-UNV-2/840

TEST NO.=LA-T3416
 HOST FIXTURE=STR400 with Smooth Frosted White Acrylic Lens
 LED TYPE=48 LED MODULE
 NO. OF MODULE=8
 SYSTEM WATT (W)=204.5
 CRI ≥ 80
 L70(Hrs.) ≥ 50,000
 PHOTOMETRY TYPE=C



CANDLEPOWER

ANGLE	END	45	CROSS
0	6791	6791	6791
5	6484	6397	6339
15	6208	6174	2646
25	5720	5759	5753
35	5068	5120	5212
45	4212	4385	4530
55	3224	3546	3749
65	2206	2630	2909
75	1222	1758	2041
85	519	982	1137
90	115	406	559
95	22	274	416
115	0	106	266
125	0	2	26
135	0	0	0
145	0	0	0
155	0	0	0
165	0	0	0
175	0	0	0
180	0	0	0

ZONAL LUMEN SUMMARY

DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	5032	21	25
0-40	8254	34	40
0-60	14799	60	72
0-90	20008	82	98
90-120	437	2	2
90-150	437	2	2
90-180	437	2	2
0-180	20445	83	100

Luminaire Output = 20444.6 lumens
 Luminaire Efficacy = 99.9 lm/W

SPACING CRITERION

ALONG	ACROSS
1.18	1.20

