MODE MANUFACTURING

RTR / LED Troffer Conversion Kit

The LED troffer kits are designed by our expert in house lighting engineers and fabricated with custom made multi-stage roll forming machinery. This retrofit kit is an excellent alternative to standard retrofit designs and is ideally suited for prismatic lensed and recessed grid, suspended or surface mount troffers.

Project Name: _____ Type: _____

Catalog Number: _____ Date: _____

SPECIFICATIONS

Features

- Available in 2' and 4' lengths
- Many lumen packages are available to choose from
- CCT options available
- Modular design with plug and play style connectors
- Connectors reduce chance of miswiring
- 2x4 LED reflectors are compatible with most EPA 2000 series retrofit bracket mounting features
- Familiar design and installation
- UL damp compliant

Construction

- White gloss painted aluminum enclosure
- Rust free
- Light weight
- Installer friendly

Electrical

- 120-277 VAC universal voltage standard
- Power Factor > .9 & THD < 20% @277 VAC on DLC listed models
- 0-10V dimming standard
- Name brand drivers
- Ambient Operating Range: -20˚C to 60˚C (-4˚F to 140˚F)
- TM-21 Reported Lumen Maintenance (L70) of >60k hrs, and Projected Lumen Maintenance of 400k hrs

Optics

- Name brand LED arrays
- High efficiency LEDs
- CRI > 80 on DLC listed models; high color rendering
- White LED panel has 91% reflectance
- Frosted lens option available to reduce LED glare

Warranty

- 5-year limited warranty
- Project specific warranty terms available

Options

Consult with your sales representative for additional options

CERTIFICATIONS

DLC QPL LISTED

c UL US LISTED

ORDERING INFORMATION

TYPE	DIMENSION	LUMEN PACKAGE	CCT*
RTR	**2** 2 x 2 **4** 2 x 4	**20** 2,000L **22** 2,250L **25** 2,500L **27** 2,750L *In 500 lumen increments. See tables on pgs 4-6	**30** 3,000K **35** 3,500K **40** 4,000K **50** 5,000K
RTR			

–

ADDITIONAL OPTIONS:

VOLTAGE	LENS	PACKAGING	GEN
Blank 120/277v	**L**	**DP** Distributor Pack **CP** Contractor Pack	**02**
			-02

Example Ordering Number: **RTR22540-LCP-02**

MODE MANUFACTURING

RTR / LED Troffer Conversion Kit

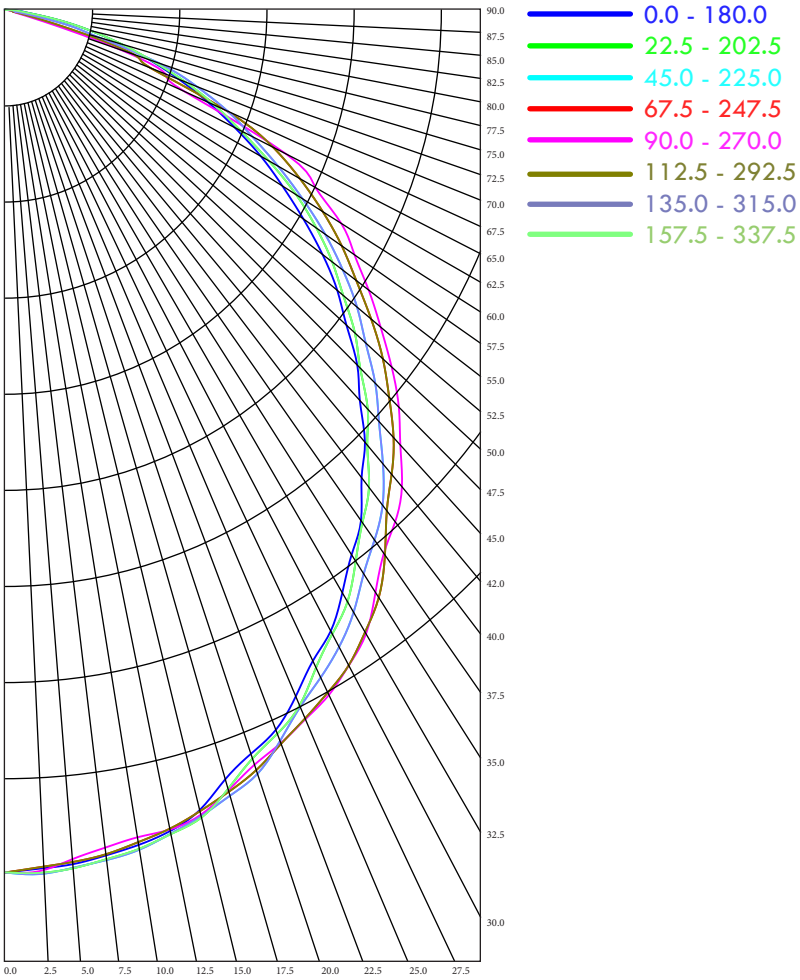
PHOTOMETRIC DATA

Below is the photometric data information for a 2 x 2 fixture.

Zonal lumen summary

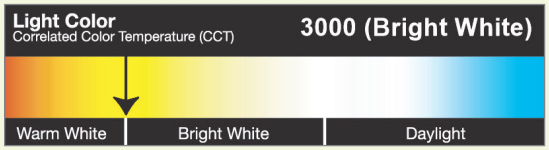
ZONE	LUMENS	% OF FIXTURE
0-30	576	28.2
0-40	947	46.4
0-60	1681	82.3
0-90	2043	100.0
90-120	0	0.0
90-150	0	0.0
90-180	0	0.0
0-180	2043	100.0

Polar plot



LED lighting facts® A Program of the U.S. DOE

Light Output (Lumens)	2000
Watts	16
Lumens per Watt (Efficacy)	125
Color Accuracy *Color Rendering Index (CRI)*	80



All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.* The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.
Registration Number: 61VT-78ZY8Z (11/29/2016)
Model Number: RTR22030-02
Type: Retrofit Kit - Troffer/Grid Ceiling

MODE MANUFACTURING

RTR / LED Troffer Conversion Kit

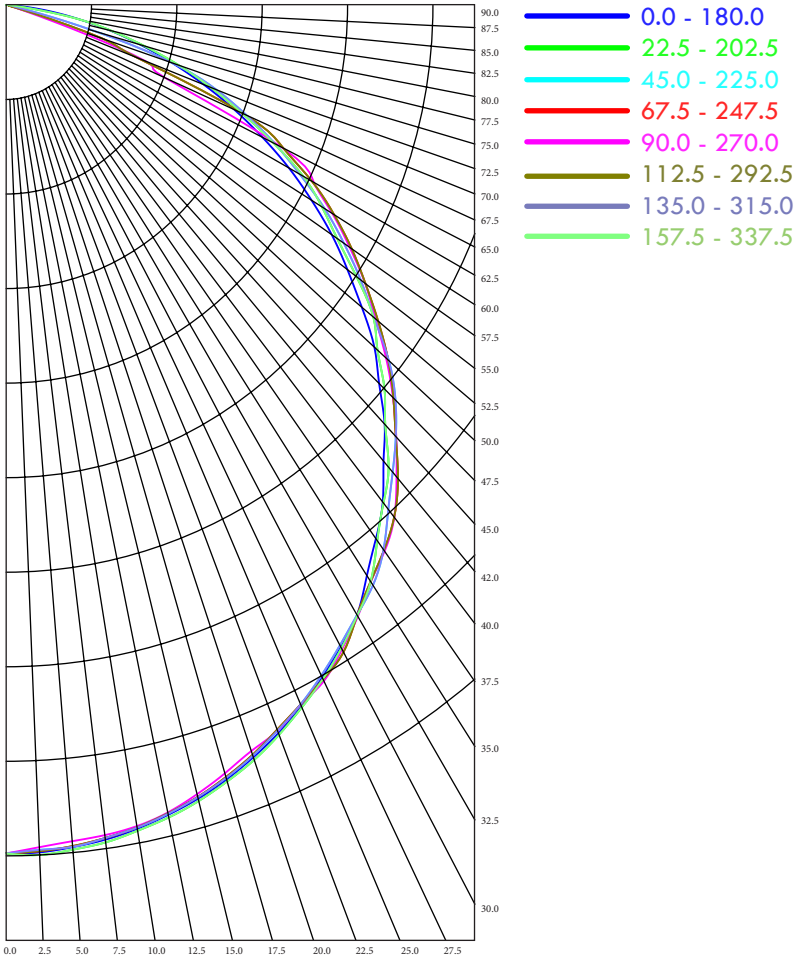
PHOTOMETRIC DATA

Below is the photometric data information for a 2 x 4 fixture.

Zonal lumen summary

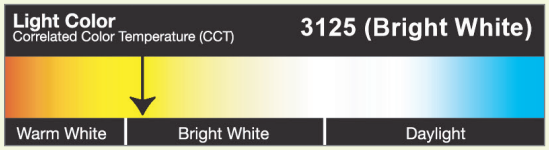
ZONE	LUMENS	% OF FIXTURE
0-30	823	27.4
0-40	1364	45.4
0-60	2462	82.0
0-90	3002	100.0
90-120	0	0.0
90-150	0	0.0
90-180	0	0.0
0-180	3002	100.0

Polar plot



LED lighting facts® A Program of the U.S. DOE

Light Output (Lumens)	3002
Watts	20.32
Lumens per Watt (Efficacy)	147.76
Color Accuracy *Color Rendering Index (CRI)*	83



All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.* The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.
Registration Number: 61VT-B33K4R (11/29/2016)
Model Number: RTR43030-02
Type: Retrofit Kit - Troffer/Grid Ceiling

MODE MANUFACTURING

RTR / LED Troffer Conversion Kit

SCALED PERFORMANCE TABLE

Part #	Dimensions	Initial Light Output (lumens)	Input Power (W)	Luminaire Efficacy (lm/w)	CCT	DLCv4.1 Tier
RTR21530-[blank,DP,CP]-02	2x2	1485	11.30	131.42	3162	Not DLC Listed
RTR21530-L[blank,DP,CP]-02	2x2	1320	11.30	116.80	3162	Not DLC Listed
RTR21535-[blank,DP,CP]-02	2x2	1472	11.16	131.89	3530	Not DLC Listed
RTR21535-L[blank,DP,CP]-02	2x2	1307	11.16	117.10	3530	Not DLC Listed
RTR21540-[blank,DP,CP]-02	2x2	1574	11.15	141.19	4108	Not DLC Listed
RTR21540-L[blank,DP,CP]-02	2x2	1409	11.15	126.38	4108	Not DLC Listed
RTR21550-[blank,DP,CP]-02	2x2	1567	11.18	140.17	5205	Not DLC Listed
RTR21550-L[blank,DP,CP]-02	2x2	1402	11.18	125.40	5205	Not DLC Listed
RTR22030-[blank,DP,CP]-02	2x2	2043	15.71	130.05	3162	Premium
RTR22030-L[blank,DP,CP]-02	2x2	1839	15.70	117.11	3162	Standard
RTR22035-[blank,DP,CP]-02	2x2	2026	15.51	130.60	3530	Premium
RTR22035-L[blank,DP,CP]-02	2x2	1823	15.51	117.54	3530	Standard
RTR22040-[blank,DP,CP]-02	2x2	2166	15.49	139.81	4108	Premium
RTR22040-L[blank,DP,CP]-02	2x2	1949	15.49	125.82	4108	Premium
RTR22050-[blank,DP,CP]-02	2x2	2156	15.53	138.81	5205	Premium
RTR22050-L[blank,DP,CP]-02	2x2	1940	15.53	124.92	5205	Standard
RTR22530-[blank,DP,CP]-02	2x2	2745	21.51	127.60	3162	Premium
RTR22530-L[blank,DP,CP]-02	2x2	2470	21.51	114.83	3162	Standard
RTR22535-[blank,DP,CP]-02	2x2	2721	21.25	128.06	3530	Premium
RTR22535-L[blank,DP,CP]-02	2x2	2449	21.25	115.24	3530	Standard
RTR22540-[blank,DP,CP]-02	2x2	2909	21.22	137.08	4108	Premium
RTR22540-L[blank,DP,CP]-02	2x2	2618	21.22	123.37	4108	Standard
RTR22550-[blank,DP,CP]-02	2x2	2896	21.28	136.10	5205	Premium
RTR22550-L[blank,DP,CP]-02	2x2	2606	21.28	122.48	5205	Standard
RTR23030-[blank,DP,CP]-02	2x2	3035	24.09	125.97	3162	Premium
RTR23030-L[blank,DP,CP]-02	2x2	2731	24.09	113.37	3162	Standard
RTR23035-[blank,DP,CP]-02	2x2	3009	23.80	126.43	3530	Premium
RTR23035-L[blank,DP,CP]-02	2x2	2708	23.80	113.78	3530	Standard
RTR23040-[blank,DP,CP]-02	2x2	3217	23.77	135.34	4108	Premium
RTR23040-L[blank,DP,CP]-02	2x2	2895	23.77	121.80	4108	Standard
RTR23050-[blank,DP,CP]-02	2x2	3202	23.83	134.37	5205	Premium
RTR23050-L[blank,DP,CP]-02	2x2	2882	23.83	120.93	5205	Standard
RTR23530-[blank,DP,CP]-02	2x2	3407	27.60	123.44	3162	Not DLC Listed
RTR23530-L[blank,DP,CP]-02	2x2	3028	27.60	109.72	3162	Not DLC Listed
RTR23535-[blank,DP,CP]-02	2x2	3378	27.27	123.89	3530	Not DLC Listed
RTR23535-L[blank,DP,CP]-02	2x2	2999	27.27	109.99	3530	Not DLC Listed
RTR23540-[blank,DP,CP]-02	2x2	3611	27.23	132.62	4108	Not DLC Listed
RTR23540-L[blank,DP,CP]-02	2x2	3233	27.23	118.71	4108	Not DLC Listed
RTR23550-[blank,DP,CP]-02	2x2	3595	27.30	131.67	5205	Not DLC Listed

MODE MANUFACTURING

RTR / LED Troffer Conversion Kit

SCALED PERFORMANCE TABLE

RTR23550-L[blank,DP,CP]-02	2x2	3216	27.30	117.79	5205	Not DLC Listed
RTR24030-[blank,DP,CP]-02	2x2	3883	32.20	120.59	3162	Not DLC Listed
RTR24030-L[blank,DP,CP]-02	2x2	3451	32.20	107.18	3162	Not DLC Listed
RTR24035-[blank,DP,CP]-02	2x2	3850	31.81	121.03	3530	Not DLC Listed
RTR24035-L[blank,DP,CP]-02	2x2	3418	31.81	107.45	3530	Not DLC Listed
RTR24040-[blank,DP,CP]-02	2x2	4116	31.77	129.56	4108	Not DLC Listed
RTR24040-L[blank,DP,CP]-02	2x2	3684	31.77	115.97	4108	Not DLC Listed
RTR24050-[blank,DP,CP]-02	2x2	4097	31.85	128.63	5205	Not DLC Listed
RTR24050-L[blank,DP,CP]-02	2x2	3976	32.23	123.36	5205	Not DLC Listed
RTR24530-[blank,DP,CP]-02	2x2	4408	37.50	117.55	3162	Not DLC Listed
RTR24530-L[blank,DP,CP]-02	2x2	3918	37.50	104.48	3162	Not DLC Listed
RTR24535-[blank,DP,CP]-02	2x2	4370	37.05	117.97	3530	Not DLC Listed
RTR24535-L[blank,DP,CP]-02	2x2	3880	37.05	104.74	3530	Not DLC Listed
RTR24540-[blank,DP,CP]-02	2x2	4672	37.00	126.29	4108	Not DLC Listed
RTR24540-L[blank,DP,CP]-02	2x2	4182	37.00	113.04	4108	Not DLC Listed
RTR24550-[blank,DP,CP]-02	2x2	4651	37.09	125.38	5205	Not DLC Listed
RTR24550-L[blank,DP,CP]-02	2x2	4514	37.54	120.25	5205	Not DLC Listed
RTR25030-[blank,DP,CP]-02	2x2	4858	42.20	115.12	3162	Not DLC Listed
RTR25030-L[blank,DP,CP]-02	2x2	4318	42.20	102.32	3162	Not DLC Listed
RTR25035-[blank,DP,CP]-02	2x2	4817	41.69	115.53	3530	Not DLC Listed
RTR25035-L[blank,DP,CP]-02	2x2	4276	41.69	102.58	3530	Not DLC Listed
RTR25040-[blank,DP,CP]-02	2x2	5149	41.64	123.68	4108	Not DLC Listed
RTR25040-L[blank,DP,CP]-02	2x2	4609	41.64	110.70	4108	Not DLC Listed
RTR25050-[blank,DP,CP]-02	2x2	5126	41.74	122.79	5205	Not DLC Listed
RTR25050-L[blank,DP,CP]-02	2x2	4975	42.24	117.76	5205	Not DLC Listed
RTR42030-[blank,DP,CP]-02	2x4	1916	12.40	154.52	3162	Not DLC Listed
RTR42030-L[blank,DP,CP]-02	2x4	1703	12.40	137.33	3162	Not DLC Listed
RTR42035-[blank,DP,CP]-02	2x4	1900	12.25	155.07	3530	Not DLC Listed
RTR42035-L[blank,DP,CP]-02	2x4	1687	12.25	137.68	3530	Not DLC Listed
RTR42040-[blank,DP,CP]-02	2x4	2031	12.23	166.01	4108	Not DLC Listed
RTR42040-L[blank,DP,CP]-02	2x4	1818	12.23	148.59	4108	Not DLC Listed
RTR42050-[blank,DP,CP]-02	2x4	2022	12.27	164.81	5205	Not DLC Listed
RTR42050-L[blank,DP,CP]-02	2x4	1962	12.41	158.07	5205	Not DLC Listed
RTR42530-[blank,DP,CP]-02	2x4	2445	16.00	152.81	3162	Not DLC Listed
RTR42530-L[blank,DP,CP]-02	2x4	2173	16.00	135.82	3162	Not DLC Listed
RTR42535-[blank,DP,CP]-02	2x4	2424	15.81	153.36	3530	Not DLC Listed
RTR42535-L[blank,DP,CP]-02	2x4	2152	15.81	136.16	3530	Not DLC Listed
RTR42540-[blank,DP,CP]-02	2x4	2592	15.79	164.18	4108	Not DLC Listed
RTR42540-L[blank,DP,CP]-02	2x4	2320	15.79	146.95	4108	Not DLC Listed
RTR42550-[blank,DP,CP]-02	2x4	2580	15.83	163.00	5205	Not DLC Listed
RTR42550-L[blank,DP,CP]-02	2x4	2504	16.02	156.32	5205	Not DLC Listed
RTR43030-[blank,DP,CP]-02	2x4	3002	20.32	147.76	3162	Premium

MODE MANUFACTURING

RTR / LED Troffer Conversion Kit

SCALED PERFORMANCE TABLE

RTR43030-L[blank,DP,CP]-02	2x4	2792	20.30	137.52	3162	Premium
RTR43035-[blank,DP,CP]-02	2x4	3075	20.05	153.36	3530	Premium
RTR43035-L[blank,DP,CP]-02	2x4	2768	20.05	138.01	3530	Premium
RTR43040-[blank,DP,CP]-02	2x4	3183	20.05	158.74	4108	Premium
RTR43040-L[blank,DP,CP]-02	2x4	2959	20.03	147.74	4108	Premium
RTR43050-[blank,DP,CP]-02	2x4	3273	20.08	162.99	5205	Premium
RTR43050-L[blank,DP,CP]-02	2x4	2945	20.08	146.68	5205	Premium
RTR43530-[blank,DP,CP]-02	2x4	3606	23.84	151.25	3162	Premium
RTR43530-L[blank,DP,CP]-02	2x4	3245	23.84	136.12	3162	Premium
RTR43535-[blank,DP,CP]-02	2x4	3620	24.01	150.78	3530	Premium
RTR43535-L[blank,DP,CP]-02	2x4	3258	24.01	135.69	3530	Premium
RTR43540-[blank,DP,CP]-02	2x4	3777	23.91	157.96	4108	Premium
RTR43540-L[blank,DP,CP]-02	2x4	3399	23.91	142.16	4108	Premium
RTR43550-[blank,DP,CP]-02	2x4	3847	23.90	160.96	5205	Premium
RTR43550-L[blank,DP,CP]-02	2x4	3462	23.90	144.85	5205	Premium
RTR44030-[blank,DP,CP]-02	2x4	4118	27.40	150.29	3162	Premium
RTR44030-L[blank,DP,CP]-02	2x4	3706	27.40	135.26	3162	Premium
RTR44035-[blank,DP,CP]-02	2x4	4083	27.07	150.83	3530	Premium
RTR44035-L[blank,DP,CP]-02	2x4	3674	27.07	135.74	3530	Premium
RTR44040-[blank,DP,CP]-02	2x4	4365	27.03	161.47	4108	Premium
RTR44040-L[blank,DP,CP]-02	2x4	3928	27.03	145.31	4108	Premium
RTR44050-[blank,DP,CP]-02	2x4	4345	27.10	160.31	5205	Premium
RTR44050-L[blank,DP,CP]-02	2x4	3910	27.10	144.27	5205	Premium
RTR44530-[blank,DP,CP]-02	2x4	4614	31.07	148.49	3162	Premium
RTR44530-L[blank,DP,CP]-02	2x4	4152	31.07	133.63	3162	Premium
RTR44535-[blank,DP,CP]-02	2x4	4574	30.69	149.02	3530	Premium
RTR44535-L[blank,DP,CP]-02	2x4	4117	30.69	134.12	3530	Premium
RTR44540-[blank,DP,CP]-02	2x4	4890	30.65	159.53	4108	Premium
RTR44540-L[blank,DP,CP]-02	2x4	4401	30.65	143.57	4108	Premium
RTR44550-[blank,DP,CP]-02	2x4	4868	30.73	158.38	5205	Premium
RTR44550-L[blank,DP,CP]-02	2x4	4381	30.73	142.54	5205	Premium
RTR45030-[blank,DP,CP]-02	2x4	4970	33.79	147.08	3162	Premium
RTR45030-L[blank,DP,CP]-02	2x4	4473	33.79	132.36	3162	Premium
RTR45035-[blank,DP,CP]-02	2x4	4927	33.38	147.61	3530	Premium
RTR45035-L[blank,DP,CP]-02	2x4	4434	33.38	132.84	3530	Premium
RTR45040-[blank,DP,CP]-02	2x4	5268	33.34	158.01	4108	Premium
RTR45040-L[blank,DP,CP]-02	2x4	4741	33.34	142.20	4108	Premium
RTR45050-[blank,DP,CP]-02	2x4	5243	33.42	156.88	5205	Premium
RTR45050-L[blank,DP,CP]-02	2x4	4719	33.42	141.18	5205	Premium
RTR45530-[blank,DP,CP]-02	2x4	5496	38.50	142.75	3162	Not DLC Listed
RTR45530-L[blank,DP,CP]-02	2x4	4885	38.50	126.88	3162	Not DLC Listed
RTR45535-[blank,DP,CP]-02	2x4	5449	38.03	143.27	3530	Not DLC Listed

MODE MANUFACTURING

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SCALED PERFORMANCE TABLE

RTR45535-L[blank,DP,CP]-02	2x4	4838	38.03	127.20	3530	Not DLC Listed
RTR45540-[blank,DP,CP]-02	2x4	5826	37.99	153.37	4108	Not DLC Listed
RTR45540-L[blank,DP,CP]-02	2x4	5215	37.99	137.28	4108	Not DLC Listed
RTR45550-[blank,DP,CP]-02	2x4	5799	38.08	152.27	5205	Not DLC Listed
RTR45550-L[blank,DP,CP]-02	2x4	5188	38.08	136.22	5205	Not DLC Listed
RTR46030-[blank,DP,CP]-02	2x4	6054	42.90	141.12	3162	Not DLC Listed
RTR46030-L[blank,DP,CP]-02	2x4	5381	42.90	125.43	3162	Not DLC Listed
RTR46035-[blank,DP,CP]-02	2x4	6002	42.38	141.63	3530	Not DLC Listed
RTR46035-L[blank,DP,CP]-02	2x4	5329	42.38	125.74	3530	Not DLC Listed
RTR46040-[blank,DP,CP]-02	2x4	6417	42.33	151.61	4108	Not DLC Listed
RTR46040-L[blank,DP,CP]-02	2x4	5744	42.33	135.71	4108	Not DLC Listed
RTR46050-[blank,DP,CP]-02	2x4	6388	42.44	150.52	5205	Not DLC Listed
RTR46050-L[blank,DP,CP]-02	2x4	5714	42.44	134.66	5205	Not DLC Listed
RTR46530-[blank,DP,CP]-02	2x4	6537	46.80	139.68	3162	Not DLC Listed
RTR46530-L[blank,DP,CP]-02	2x4	5810	46.80	124.15	3162	Not DLC Listed
RTR46535-[blank,DP,CP]-02	2x4	6481	46.23	140.18	3530	Not DLC Listed
RTR46535-L[blank,DP,CP]-02	2x4	5754	46.23	124.46	3530	Not DLC Listed
RTR46540-[blank,DP,CP]-02	2x4	6929	46.17	150.07	4108	Not DLC Listed
RTR46540-L[blank,DP,CP]-02	2x4	6202	46.17	134.32	4108	Not DLC Listed
RTR46550-[blank,DP,CP]-02	2x4	6897	46.29	148.99	5205	Not DLC Listed
RTR46550-L[blank,DP,CP]-02	2x4	6170	46.29	133.29	5205	Not DLC Listed
RTR47030-[blank,DP,CP]-02	2x4	7013	50.80	138.05	3162	Not DLC Listed
RTR47030-L[blank,DP,CP]-02	2x4	6233	50.80	122.70	3162	Not DLC Listed
RTR47035-[blank,DP,CP]-02	2x4	6953	50.19	138.55	3530	Not DLC Listed
RTR47035-L[blank,DP,CP]-02	2x4	6173	50.19	123.01	3530	Not DLC Listed
RTR47040-[blank,DP,CP]-02	2x4	7434	50.12	148.32	4108	Not DLC Listed
RTR47040-L[blank,DP,CP]-02	2x4	6654	50.12	132.76	4108	Not DLC Listed
RTR47050-[blank,DP,CP]-02	2x4	7399	50.25	147.25	5205	Not DLC Listed
RTR47050-L[blank,DP,CP]-02	2x4	6620	50.25	131.73	5205	Not DLC Listed
RTR47530-[blank,DP,CP]-02	2x4	7485	54.80	136.59	3162	Not DLC Listed
RTR47530-L[blank,DP,CP]-02	2x4	6653	54.80	121.40	3162	Not DLC Listed
RTR47535-[blank,DP,CP]-02	2x4	7421	54.14	137.08	3530	Not DLC Listed
RTR47535-L[blank,DP,CP]-02	2x4	6589	54.14	121.71	3530	Not DLC Listed
RTR47540-[blank,DP,CP]-02	2x4	7934	54.07	146.74	4108	Not DLC Listed
RTR47540-L[blank,DP,CP]-02	2x4	7102	54.07	131.35	4108	Not DLC Listed
RTR47550-[blank,DP,CP]-02	2x4	7897	54.21	145.69	5205	Not DLC Listed
RTR47550-L[blank,DP,CP]-02	2x4	7065	54.21	130.34	5205	Not DLC Listed

APPLICATION NOTES

Actual performance may vary by up to +/-10% of values listed. See IES file for actual values.

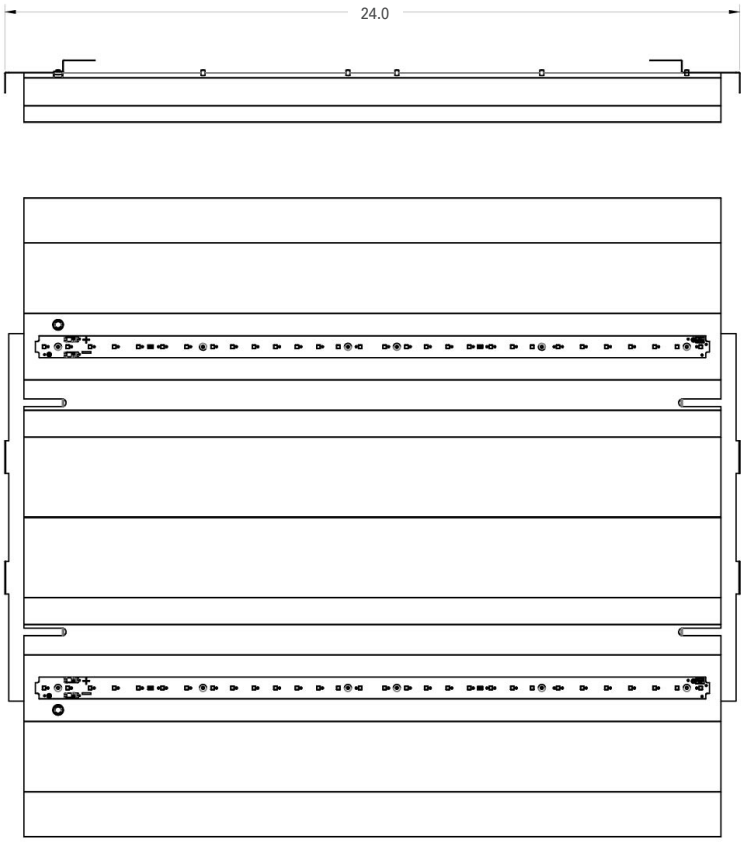
See DLC QPL for listed models. Model numbers will be listed under the manufacturer Energy Planning Associates.

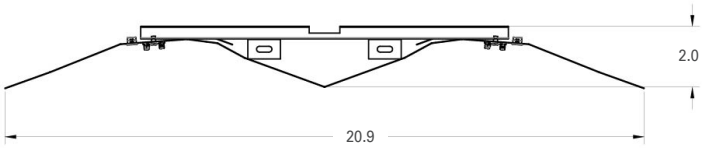
MODE MANUFACTURING

RTR / LED Troffer Conversion Kit

FIXTURE DIMENSIONS

Dimensions for 2x2 fixture



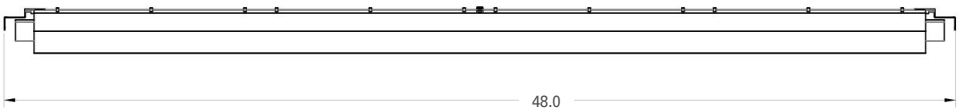


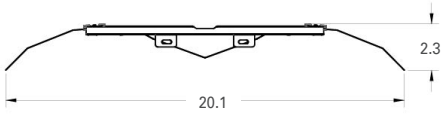
MODE MANUFACTURING

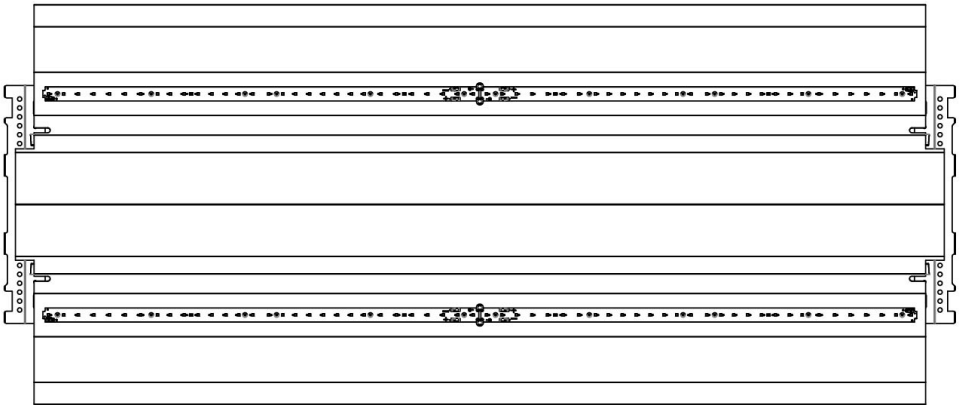
RTR / LED Troffer Conversion Kit

FIXTURE DIMENSIONS

Dimensions for 2x4 fixture







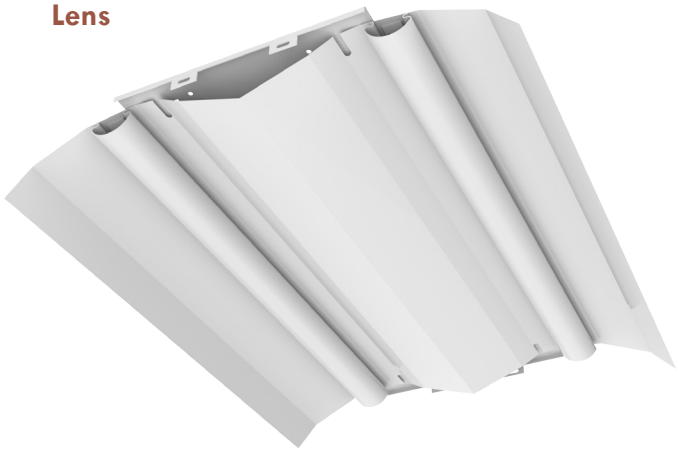
MODE MANUFACTURING

RTR / LED Troffer Conversion Kit

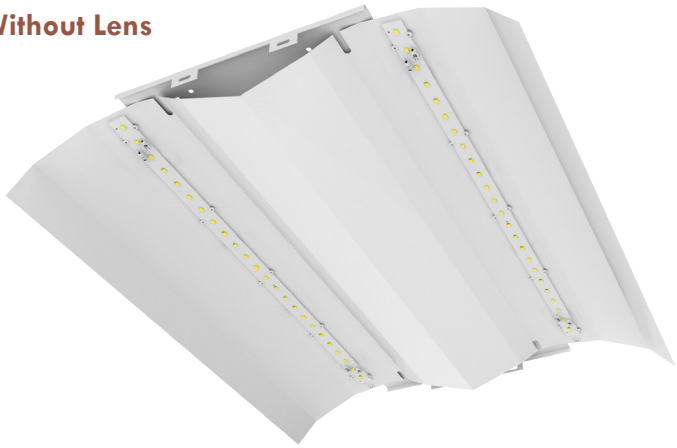
ADDITIONAL PRODUCT IMAGES

2x2 fixture

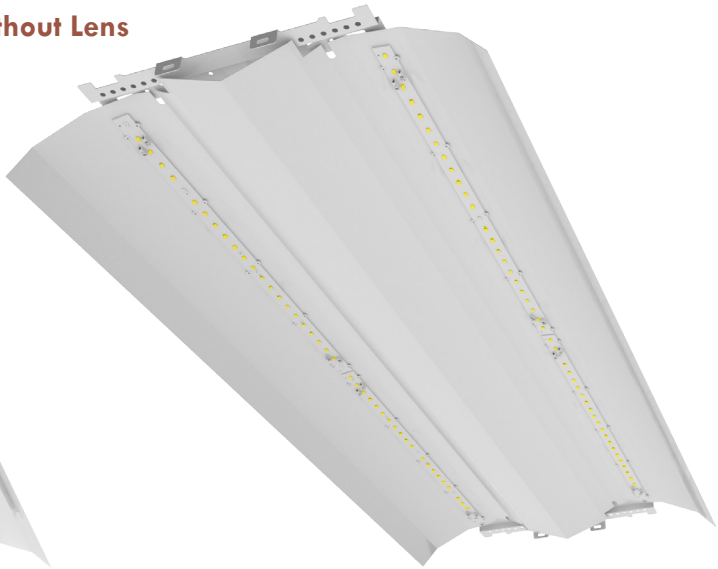
Lens



Without Lens



2x4 fixture

Lens

Without Lens