

## DESCRIPTION

The RTC lensed troffer series provides performance, reliability and flexibility with a housing optimized for shallow plenums. Developed with Eaton's latest generation of solid state components and electronic driver technologies, these center illuminated troffers provide numerous options for color, lumens, controls and sensing capabilities. Designed to be compatible with popular ceiling systems, the RTC troffers are ideal for new construction or remodel/replacement of fluorescent troffers in commercial office spaces, schools, healthcare, and retail merchandising areas.

<b>Catalog #</b>		<b>Type</b>	
<b>Project</b>			
<b>Comments</b>		<b>Date</b>	
<b>Prepared by</b>			

## SPECIFICATION FEATURES

### Construction/Mounting

Rigid housing is die-formed of code gauge prime cold rolled steel and features full length stiffeners with mechanically attached endplates for added strength. Innovative design includes four corner suspension points for additional retention to the structure where needed. The side flanges are formed to provide optical control. Endplates have integral Grid-lock features for safety and convenience. Frosted polycarbonate lens with linear prisms provides soft, uniform light output and is impact-resistant. Under 2-1/2 inches deep, RTC is an ideal choice for shallow and restricted plenum installations.

### Controls

The RTC is Powered by Fifth Light, with a standard 0-10V driver which continuous dims to 10% that works with many types of controls, like dimmers, occupancy sensors, daylighting controls or lighting relay panels to maximize energy savings. Other options include high-performance dimming as low as 1%. In addition, the RTC can include a factory-installed integrated sensor system for occupancy and daylight dimming control and manual control from

an optional handheld remote with the "SVPD1" option. Or, go wireless with the Wavelinx "SWPD1" option for code-compliance and easy installation, LumaWatt Pro powered by Enlighted options "LWIPD1" for a fully integrated wireless sensor system with Internet of Things (IoT) connectivity and configurable software. See ordering information and specification supplements for details on all these control options.

### Electrical

Long-Life LED system coupled with electrical driver to deliver optimal performance. LED's available in 3500K or 4000K with a CRI ≥ 80. Projected lumen maintenance based on TM21 is L75 > 60,000 hours. Standard electronic drivers are cULus recognized and available for 120-277V and 010V dimming to 10% with options for 347, 1% dimming and alternate controls.

### Emergency Battery Pack Option

Optional 120v-277v integral emergency battery pack is available in 7-watts or 14-watts to meet critical life-safety lighting requirements. The 90-minute batteries provide constant power to the LED system, ensuring code-compliance. A test switch/

indicator button can be tested safely from the ground using a laser pointer, while the patented EZ Key prevents accidental discharge of the battery during construction. Emergency/generator transfer options available – see ordering information for details.

### Finish

Multistage, iron phosphate pretreatment ensures maximum bonding and rust inhibition. Housing and endplates are paint after fab in matte white to provide uniform finish providing long term performance and superior aesthetic.

### Compliance

Constructed of UL recognized components these indoor luminaires are cULus listed for 25°C ambient environments, IC rated for direct insulation contact, RoHS compliant, damp location listed, and comply with IESNA LM-79 and LM-80 standards. NEMA 410 compliant. DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.

### Warranty

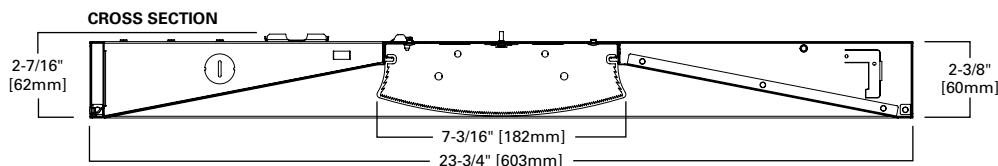
Five year warranty.



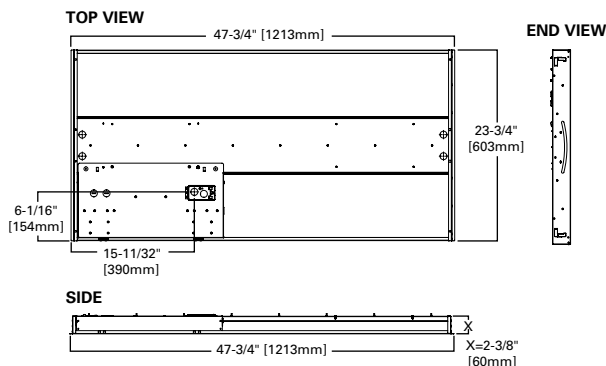
## 24RTC LED

2' X 4' LED TROFFER

General Recessed LED Troffer  
For Use in Insulated Ceilings



## DIMENSIONS



## LOAD DATA

<b>Thd</b>	13%
<b>Power Factor</b>	0.96
<b>Weight</b>	13.6 lbs.
<b>Low Temp. Start</b>	-20°C

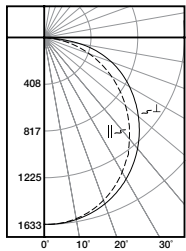
### LINEAR DISCONNECT

Safe and convenient means of disconnecting power



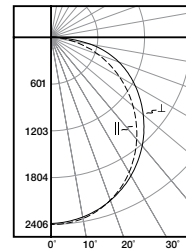
PS519173EN  
12-14-2017

PHOTOMETRICS



**24RTC4835**  
 Electronic Driver  
 Linear LED 3500K  
 Spacing criterion:  
 (||) 1.21 x mounting  
 height, (⊥) 1.28 x  
 mounting height  
 Lumens: 4796.7  
 Input Watts: 36.8W  
 Efficacy: 130.3 lm/W  
 Test Report:  
 24RTC4835.IES

Angle	Candlepower		
	Along	45°	Across ⊥
0	1634	1636	1634
5	1631	1634	1633
15	1572	1583	1591
25	1449	1476	1499
35	1275	1317	1359
45	1052	1120	1181
55	812	896	975
65	559	661	756
75	307	411	499
85	78	130	138
90	9	3	0



**24RTC6435**  
 Electronic Driver  
 Linear LED 3500K  
 Spacing criterion:  
 (||) 1.22 x mounting  
 height, (⊥) 1.28 x  
 mounting height  
 Lumens: 7063.2  
 Input Watts: 55.1W  
 Efficacy: 128.1 lm/W  
 Test Report:  
 24RTC6435.IES

Angle	Candlepower		
	Along	45°	Across ⊥
0	2409	2404	2398
5	2401	2390	2382
15	2311	2298	2300
25	2128	2130	2152
35	1862	1893	1942
45	1542	1603	1682
55	1191	1284	1394
65	821	949	1088
75	446	598	728
85	112	188	200
90	13	4	0

Coefficients of Utilization

rc rw RCR	Effective floor cavity reflectance																								
	80%				70%				50%				30%				10%				0%				
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100							
1	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83							
2	98	89	82	76	95	88	81	75	84	78	74	81	76	72	78	74	70	68							
3	89	78	70	63	87	77	69	63	74	67	61	71	65	60	68	63	59	57							
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	48							
5	75	62	53	46	73	61	52	45	58	51	45	56	50	44	55	49	44	42							
6	69	56	46	40	67	55	46	40	53	45	39	51	44	39	49	43	39	36							
7	64	50	41	35	62	49	41	35	48	40	35	46	40	34	45	39	34	32							
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29							
9	56	42	34	28	54	41	34	28	40	33	28	39	33	28	38	32	28	26							
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23							

Zonal Lumen Summary

Zone	Lumens	% Fixture	Lamp
0-30	1263	26.3	26.3
0-40	2065	43.1	43.1
0-60	3667	76.4	76.4
0-90	4797	100.0	100.0
0-180	4797	100.0	100.0

Coefficients of Utilization

rc rw RCR	Effective floor cavity reflectance																								
	80%				70%				50%				30%				10%				0%				
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100							
1	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83							
2	98	89	82	76	95	88	81	76	84	79	74	81	76	72	78	74	70	68							
3	89	78	70	63	87	77	69	63	74	67	61	71	65	60	68	63	59	57							
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	49							
5	75	62	53	46	73	61	52	45	58	51	45	56	50	44	55	49	44	42							
6	69	56	46	40	67	55	46	40	53	45	39	51	44	39	49	43	39	36							
7	64	50	41	35	62	49	41	35	48	40	35	46	40	34	45	39	34	32							
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29							
9	56	42	34	28	54	41	34	28	40	33	28	39	33	28	38	32	28	26							
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23							

Zonal Lumen Summary

Zone	Lumens	% Fixture	Lamp
0-30	1858	26.3	26.3
0-40	3039	43.0	43.0
0-60	5405	76.5	76.5
0-90	7063	100.0	100.0
0-180	7063	100.0	100.0


STOCK SKU AND RATED PERFORMANCE

Catalog	UPC	CRI (Min.)	CCT	Delivered Nominal Lumens *	Watts **	Efficacy (lm/W)	Input Current (A)	
							120V	277V
24RTC4835	080083802623	80	3500K	4773	38.2	125	.32	.14
24RTC4840	080083802630	80	4000K	4775	37.8	126		
24RTC6835	080083802647	80	3500K	7004	57.0	123	.49	.22
24RTC6840	080083802654	80	4000K	6980	57.1	122		

\* Lumens without sensor. Reduce lumens by 2% with sensors installed.  
 \*\* Watts of standard 0-10V product.

## ORDERING INFORMATION

MTO SAMPLE NUMBER: 24RTC-48-UNV-EL7W-L840-HCD-SWPD1-U

<b>Size</b> <b>24=2' x 4'</b>	<b>Lumen</b> <sup>(7)</sup> <b>48=4800 Lumens</b> <b>68=6800 Lumens</b>	<b>CRI/CCT</b> <b>L835=80 CRI/3500K</b> <b>L840=80 CRI/4000K</b>	<b>Sensor</b> <b>SVPD1=Integrated occupancy and daylight dimming sensor, 144 sq. ft.</b> <b>SWPD1=WaveLinx Wireless Connected Lighting system</b> <b>LWIPD1=Integrated LumaWatt Pro Wireless sensor system</b> <sup>(8)</sup>	<b>Packaging</b> <b>U=Unit carton</b> <b>PALC=Palletized with carton</b>
<b>Series</b> <sup>(12)</sup> <b>RTC=Recessed Center Lensed Troffer</b>	<b>Voltage</b> <b>UNV=Universal Voltage 120-277</b> <b>347=347 Volt</b> <sup>(2)</sup>	<b>Driver Type</b> <b>CD=0-10V Dimming Driver (10% - 100% Dimming)</b> <b>HCD=0-10V Dimming Driver (1% - 100% Dimming)</b> <b>SD=Step-Dim Driver</b> <sup>(4)</sup> <b>5LTD=Fifth Light DALI Driver (10% - 100% Dimming)</b> <sup>(6)</sup> <b>SR=Sensor Ready (5% - 100% Dimming)</b> <sup>(8)</sup> <b>LH=Lutron Hi-Lume A-Series (L3DAE)</b> <sup>(11)</sup> <b>L5=Lutron 5 Series (LDE5)</b> <sup>(11)</sup> <b>LU=Lutron with Soft On, Fade to Black (LDE1)</b> <sup>(10),(11)</sup>	 <b>Connected Systems</b> <a href="#">CLICK HERE</a>	<b>ACCESSORIES</b> <b>RTCEQ=EQ Grid Clip</b> <sup>(1),(9)</sup> <b>DF-24-WU=2' x 4' Drywall Frame Kit</b> <b>ISHH-01=Programming Remote for SVPD1 Integrated Sensor</b> <b>ISHH-02=Personal Control Remote for SVPD1 Integrated Sensor</b> <b>24RTCRLENS=2' x 4' Replacement Lens (full)</b> <b>24RTCRLENSLOT=2' x 4' Replacement Lens (with sensor)</b>
<b>Options</b> <b>GL=Single Element Fuse</b> <b>GM=Double Element Fuse</b>	<b>Emergency</b> <b>EL7W=7-watt, 120V-277V emergency battery pack installed</b> <sup>(3)</sup> <b>EL14W=14-watt 120V-277V emergency battery pack installed</b> <sup>(3)</sup> <b>GTR2=Bodine Generator Transfer Relay</b> <sup>(6)</sup> <b>ETR2=lota Emergency Transfer Relay</b> <sup>(6)</sup> <b>ETRD=lota Emergency Transfer Relay with dimming control</b> <sup>(6)</sup>	<b>Flex</b> Multiple configurations available		

**NOTES:** <sup>(1)</sup> An EQ Grid Clip is recommended for all 9/16" ceiling systems. <sup>(2)</sup> Available only with CD and HCD drivers. <sup>(3)</sup> With integral test switch/indicator/laser test. For approximate delivered lumens multiply the lumens per watt of the desired fixture by the wattage of the emergency battery pack (100 lm/W x 7=700 lumens). <sup>(4)</sup> Step dimming (bi-level) driver only available on 6800 lumen. <sup>(5)</sup> DALI only available on 6800 lumen. <sup>(6)</sup> Used to bypass local control during outage. Must be used in conjunction with UL 1008 device (provided by others). GTR2 and ETR2 options include 2 relays on fixtures with dimming drivers. ETRD option only requires one relay when used on a dimming fixture. Must specify voltage as 120V or 277V when ordering these devices. <sup>(7)</sup> Nominal lumen output. See table for actual values. <sup>(8)</sup> SR driver required for LWIPD1. Must use UNV voltage option. <sup>(9)</sup> Order one set for every fixture (4 clips per kit). <sup>(10)</sup> Only available on 4800 lumen. <sup>(11)</sup> Refer to Lutron supplement (PS519148EN) on website. Must use UNV voltage option. <sup>(12)</sup> DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to [www.designlights.org](http://www.designlights.org) for details.

Specifications & dimensions subject to change without notice. Consult your Eaton Representative for availability and ordering information.

## SHIPPING DATA

Size	Wt.	Pallet (30" x 53")
2x4	17.1 lbs.	13