# Metalux

### 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.

Catalog #	Туре
Project	
Comments	Date
Prepared by	

#### 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 strenath. 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 codecompliance 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  $\geq$  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 codecompliance. 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. 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

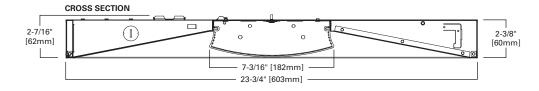
### 2' X 4' LED TROFFER

General Recessed LED Troffer For Use in Insulated Ceilings

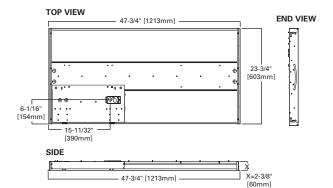








# DIMENSIONS



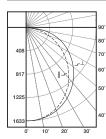


# LOAD DATA

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







# 24RTC4835 **Electronic Driver** Linear LED 3500K

Spacing criterion: (II) 1.21 x mounting height, (⊥) 1.28 x mounting height Lumens: 4796.7

Input Watts: 36.8W Efficacy: 130.3 lm/W 90

Test Report: 24RTC4835.IES

# Candlepower

	•				
Angle	Along II	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: (II) 1.22 x mounting height, (⊥) 1.28 x mounting height Lumens: 7063.2

Input Watts: 55.1W Efficacy: 128.1 lm/W 90 Test Report:

24RTC6435.IES

Candlepower									
Angle	Along II	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						
an	12	4	0						

### Coefficients of Utilization

	Effe	ectiv	e flo	or cav	ity ref	lecta	nce	20	%									
rc		8	0%			7	0%			509	%		30%	6		109	6	0%
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
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	90	82	76	95	88	81	76	84	79	74	81	76	72	78	74	70	68
	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	33	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

# Coefficients of Utilization

	Effe	ectiv	e floo	or cav	ity ref	ecta	nce	20	%									
rc		8	0%			7	0%			509	%		30%	6		10%	Ď	0%
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
	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
0 1 2 3 4	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
5 6 7	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

### STOCK SKU AND RATED PERFORMANCE

				Delivered Nominal		Efficacy Input		t Current (A)	
Catalog	UPC	CRI (Min.)	ССТ	Lumens *	Watts **	(Im/W)	120V	277V	
24RTC4835	080083802623	80	3500K	4773	38.2	125	.32	.14	
24RTC4840	080083802630	80	4000K	4775	37.8	126	.32	.14	
24RTC6835	080083802647	80	3500K	7004	57.0	123	40	.22	
24RTC6840	080083802654	80	4000K	6980	57.1	122	.49	.22	

<sup>\*</sup> Lumens without sensor. Reduce lumens by 2% with sensors installed.

# ORDERING INFORMATION

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

Size 24=2' x 4' Series (12)

RTC=Recessed Center Lensed Troffer

48=4800 Lumens 68=6800 Lumens

Voltage UNV=Universal Voltage 120-277 347=347 Volt (2)

Options GL=Single Element Fuse GM=Double Element Fuse Emergency

EL7W=7-watt, 120V-277V emergency battery pack installed (3) EL14W=14-watt 120V-277V emergency

GTD2=Bodine Generator Transfer Device (6) ETS2=IOTA Emergency Transfer Switch (6)

Flex Multiple configurations available

battery pack installed (3)

CRI/CCT L835=80 CRI/3500K

L840=80 CRI/4000K

Driver Type CD=0-10V Dimming Driver

(10% - 100% Dimming) HCD=0-10V Dimming Driver (1% - 100% Dimming) SD=Step-Dim Driver (4) 5LTD=Fifth Light DALI Driver

(10% - 100% Dimming) (5)
SR=Sensor Ready (5% - 100% Dimming) (8) LH=Lutron Hi-Lume A-Series (L3DAE) (11)

L5=Lutron 5 Series (LDE5) (11) LU=Lutron with Soft On, Fade to Black (LDE1) (10),(11)

Sensor

SVPD1=Integrated occupancy and daylight dimming sensor, 144 sq. ft. SWPD1=WaveLinx Wireless Connected

Lighting system LWIPD1=Integrated LumaWatt Pro Wireless sensor system (8

Packaging U=Unit carton PALC=Palletized with carton



# **ACCESSORIES**

RTCEQ=EQ Grid Clip (1), (9)

**DF-24-WU**=2' x 4' Drywall Frame Kit

ISHH-01=Programming Remote for SVPD1 Integrated Sensor ISHH-02=Personal Control Remote for SVPD1 Integrated Sensor

24RTCRLENS=2' x 4' Replacement Lens (full)

24RTCRLENSIOT=2' x 4' Replacement Lens (with sensor)

NOTES: (1) An EQ Grid Clip is recommended for all 9/16" ceiling systems. (2) Available only with CD and HCD drivers. (3) 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). (4) Step dimming (bi-level) driver only available on 6800 lumen. (5) DALI only available on 6800 lumen. (6) Used to transfer fixture to secondary power source for life-safety operation. Two devices are required to ensure control is disabled while operating under emergency power. (7) Nominal lumen output. See table for actual values. (8) SR driver required for LWIPD1. Must use UNV voltage option. (12) DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.

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



Size Wt. Pallet (30" x 53") 2×4 17 1 lbs 13

<sup>\*\*</sup> Watts of standard 0-10V product.