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 #		Type
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 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 3000K 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

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.
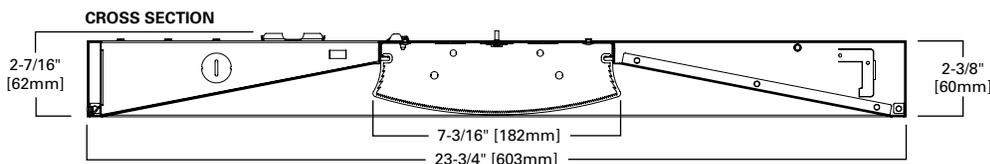
Warranty

Five year warranty.

22RTC
LED

2' X 2' LED TROFFER

General Recessed LED Troffer
For Use in Insulated Ceilings

Connected Systems
CLICK HERE

DLC QPL LISTED

DLC QPL LISTED PREMIUM

CROSS SECTION

2-7/16" [62mm]
2-3/8" [60mm]
7-3/16" [182mm]
23-3/4" [603mm]

DIMENSIONS

TOP VIEW

23-3/4" [603mm]
23-3/4" [603mm]
15-11/32" [390mm]

END VIEW

X=6-1/16" [154mm]

SIDE

23-3/4" [603mm]
Y=2-3/8" [60mm]
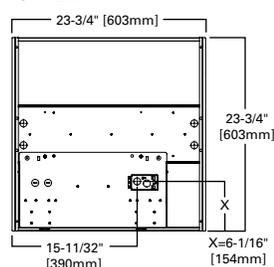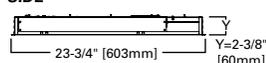
LOAD DATA

Thd	14%
Power Factor	0.96
Weight	8.2 lbs.
Low Temp. Start	-20°C

LINEAR DISCONNECT

Safe and convenient means of disconnecting power

ISO SYSTEMS CERTIFIED

F·A·T·O·N
Powering Business Worldwide

ORDERING INFORMATION

MTO SAMPLE NUMBER: 22RTC-48-UNV-EL14W-L835-HCD-SWPD1-U

Size
22=2' x 2'

Series [8]
RTC=Recessed Center Lensed Troffer

Lumen [4]
24=2400 Lumens
34=3400 Lumens
40=4000 Lumens
48=4800 Lumens

Voltage
UNV=Universal Voltage 120-277
120=120 Volt
277=277 Volt
347=347 Volt

Options
GL=Single Element Fuse
GM=Double Element Fuse
Emergency
EL7W=7-watt, 120V-277V emergency battery pack installed [2]
EL14W=14-watt 120V-277V emergency battery pack installed [2]
GTR2=Bodine Generator Transfer Relay [3]
ETRD=Emergency Transfer Relay with dimming control [3]
Flex
A3/8-5D/18G=6' 3/8" flex with dimming leads installed

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)
SR=Sensor Ready (5% - 100% Dimming) [5]
L5=Lutron 5 Series (LDE5) [7]
LH=Lutron with Soft On, Fade to Black (LDE1) [7]

Sensor
SVPD1=Integrated occupancy and daylight dimming sensor, 144 sq. ft.
SWPD1=WaveLinx Wireless Connected Lighting system
LWIPD1=Integrated LumaWatt Pro Wireless sensor system [5]

Connected Systems
CLICK HERE

Packaging
U=Unit carton
PALC=Palletized with carton

ACCESSORIES

RTCEQ=EQ Grid Clip [1], [6]
DF-22-WU=2' x 2' Drywall Frame Kit
ISHH-01=Programming Remote for SVPD1 Integrated Sensor
ISHH-02=Personal Control Remote for SVPD1 Integrated Sensor
22RTCRLENS=2' x 2' Replacement Lens (full)
22RTCRLENSIOT=2' x 2' Replacement Lens (with sensor)

NOTES: [1] An EQ Grid Clip is recommended for all 9/16" ceiling systems. [2] 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). [3] Used to bypass local control during outage. Must be used in conjunction with UL 1008 device (provided by others). GTR2 option includes 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. [4] Nominal lumen output. See table for actual values [5] SR driver required for LWIPD1. Must use UNV voltage option. [6] Order one set for every fixture (4 clips per kit). [7] Refer to Lutron supplement (PS519148EN) on website. Must use UNV voltage option. [8] 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.

STOCK SKU AND RATED PERFORMANCE

Catalog	UPC	CRI (Min.)	CCT	Delivered Nominal Lumens *	Watts **	Efficacy (lm/W)	Input Current (A)	
							120V	277V
22RTC3435	080083802586	80	3500K	3638	28.6	127	.25	.11
22RTC3440	080083802593	80	4000K	3632	28.6	127	.25	.11
22RTC4835	080083802609	80	3500K	4780	37.7	127	.32	.14
22RTC4840	080083802616	80	4000K	4889	38.1	128	.32	.14

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

MTO SKU AND RATED PERFORMANCE

Catalog	CRI (Min.)	CCT	Delivered Nominal Lumens *	Watts **	Efficacy (lm/W)	Input Current (A)	
						120V	277V
22RTC-24-UNV-L8**-HCD-U	80	3500K	2612	19.7	133	0.16	0.07
22RTC-40-UNV-L8**-HCD-U	80	3500K	3973	31.7	125	0.26	0.11

CCT TABLE

Approximate Color Temperature	Multiplier
3500K	1.0
4000K	1.02

FAT•N
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PHOTOMETRICS
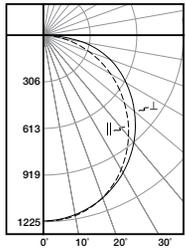
22RTC3435

Electronic Driver
Linear LED 3500K
Spacing criterion:
(II) 1.21 x mounting
height, (⊥) 1.28 x
mounting height
Lumens: 3584.4
Input Watts: 27.8W
Efficacy: 128.8 lm/W

Test Report:
22RTC3435.IES

Candlepower

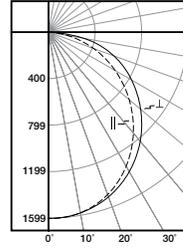| Angle	Along II	45°	Across ⊥
0	1226	1229	1227
5	1226	1225	1221
15	1183	1181	1178
25	1090	1094	1101
35	954	972	992
45	789	822	859
55	607	655	709
65	417	481	552
75	229	300	373
85	60	99	113
90	9	5	0

Coefficients of Utilization

rc	Effective floor cavity reflectance			20%														
	80%				70%				50%			30%			10%			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	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	46	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	50	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	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23

Zonal Lumen Summary

Zone	Lumens	% Fixture	Lamp
0-30	947	26.4	26.4
0-40	1546	43.1	43.1
0-60	2740	76.4	76.4
0-90	3584	100.0	100.0
0-180	3584	100.0	100.0

22RTC4835

Electronic Driver
Linear LED 3500K
Spacing criterion:
(II) 1.21 x mounting
height, (⊥) 1.28 x
mounting height
Lumens: 4670.6
Input Watts: 36.3W
Efficacy: 128.5 lm/W

Test Report:
22RTC4835.IES

Candlepower

Angle	Along II	45°	Across ⊥
0	1599	1602	1598
5	1598	1600	1595
15	1541	1548	1549
25	1420	1439	1456
35	1243	1280	1315
45	1031	1085	1140
55	795	864	938
65	551	634	726
75	306	391	481
85	82	124	136
90	13	6	0

Coefficients of Utilization

rc	Effective floor cavity reflectance			20%														
	80%				70%				50%			30%			10%			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
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	46	58	51	45	56	50	45	55	49	44	42
6	69	56	46	40	67	55	46	40	53	45	39	51	44	39	49	43	39	37
7	64	50	41	35	62	50	41	35	48	40	35	47	40	35	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	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	36	29	25	23

Zonal Lumen Summary

Zone	Lumens	% Fixture	Lamp
0-30	1234	26.4	26.4
0-40	2016	43.2	43.2
0-60	3574	76.5	76.5
0-90	4671	100.0	100.0
0-180	4671	100.0	100.0

SHIPPING DATA

Size	Wt.	Pallet (30" x 53")
2x2	10.8 lbs.	26