

LED Volumetric Troffers - Center Basket



High Performance, Optically Efficient Replacement to Traditional Fluorescent Lighting

The aesthetically appealing curved lens fills the room with unobstructed light. Engineered to perform, and delivering up to 130 LPW, these fixtures are ideal for new construction or remodeling of commercial facilities. Standard 0-10V dimming capabilities make these ideal for offices, hospitals, schools and commercial applications.



Optional emergency backup available provides 90 minutes of temporary lighting

FEATURES

- Center LED illumination with arc shape volumetric features for exceptional light distribution
- Steel construction with gloss white enamel finish
- Impact-resistant, polycarbonate lens
- Flicker free driver
- Excellent CCT uniformity
- 6kV Surge protection
- Compatible with 0-10V dimmers or control systems*
- UL Type IC

SUGGESTED APPLICATIONS

- Offices
- Schools
- Hospitals
- Commercial applications
- New construction or Retrofit for T-Grid installations



Job Name/Title: _____ Catalog Number _____

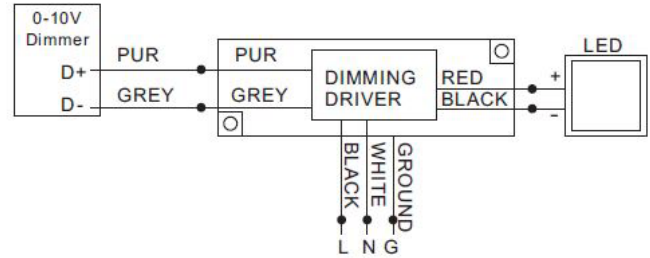
Contractor: _____ Notes: _____

LED Volumetric Troffers - Center Basket

GENERAL SPECIFICATIONS

Input Voltage, Frequency: 120-277V, 50/60 Hz
Power Factor, THD: <0.9, <15%
Input Current: 0.35 Amps Max (2' x 2'), 0.5 Amps Max (2' x 4')
Dimmer Sink Current: 2 mAmps Max
Functional Life (L70): 50,000 hours
Dimming: 100% to 10%
Beam Angle: 120°
CRI: 80, SDCM <4
Lumens Per Watt: 125-130
Ambient Operating Temp: -4°F to 104°F

WIRING DIAGRAM



ITEM SPECIFICATIONS / ORDER INFO

Catalog Number	Order Code	UPC	Size (ft)	CCT	Wattage	Lumens	LPW	DLC ID	Replacement Wattage	Case QTY
F-VTC22/30/835/D-86C	72782	751338025028	2' x 2'	3500K	30W	3,750	125	PLHRP69I0L9P	2x32W T8	1
F-VTC22/30/840/D-86C	72784	751338025035	2' x 2'	4000K	30W	3,800	127	PLYW29UWHD4Y	2x32W T8	1
F-VTC22/30/850/D-86C	72786	751338025134	2' x 2'	5000K	30W	3,900	130	PLDD2Y27G70R	2x32W T8	1
F-VTC24/45/835/D-86C	72751	751338025011	2' x 4'	3500K	45W	5,625	125	PL9ZN2EYG67R	3x32W T8	1
F-VTC24/45/840/D-86C	72752	751338023543	2' x 4'	4000K	45W	5,700	127	PLFRTZ2WAF64	3x32W T8	1
F-VTC24/45/850/D-86C	72753	751338023550	2' x 4'	5000K	45W	5,850	130	PLXY6RFPT98D	3x32W T8	1

NOMENCLATURE

Example: F-VTC22/30/835/D

F=Fixture - VTC22=Volumetric Troffer Center 2' x 2' / 30=30 Watt / 835=3500K / D=Dimmable

ACCESSORIES (SOLD SEPARATELY)

Catalog Number	Order Code	UPC	Description
F-L22/FRAME-87	70280	751338035461	2' x 2' Surface Mount Frame Kit
F-L24/FRAME-87	70281	751338035478	2' x 4' Surface Mount Frame Kit
F-L22/FLANGE-87	70277	751338035423	2' x 2' Sheetrock Flange Kit
F-L24/FLANGE-87	70278	751338035447	2' x 4' Sheetrock Flange Kit
BEL5/120-277V-92	70805	751338020177	Emergency LED Driver
WD-DS710	70605	007847769237	0-10V Dimming Switch

ENERGY SAVINGS

Catalog Number	LED Wattage	Energy Cost/ kWh	Fluorescent	Fluorescent Wattage	Watts Saved	Yearly Saving, Fixture	5 Year Savings
Based on 12 hours/day and \$0.11/kWh							
F-VTC22/30/8XX/D	30W	\$0.11	2 Lamp 32W T8	60W	30W	\$14.45	\$72.25
F-VTC24/45/8XX/D	45W	\$0.11	3 Lamp 32W T8	90W	45W	\$21.68	\$108.40
F-VTC24/45/8XX/D	45W	\$0.11	4 Lamp 32W T8	120W	75W	\$36.14	\$180.20
Based on 12 hours/day and \$0.22/kWh							
F-VTC22/30/8XX/D	30W	\$0.22	2 Lamp 32W T8	60W	30W	\$28.91	\$144.55
F-VTC24/45/8XX/D	45W	\$0.22	3 Lamp 32W T8	90W	45W	\$43.36	\$216.80
F-VTC24/45/8XX/D	45W	\$0.22	4 Lamp 32W T8	120W	75W	\$72.27	\$361.35

NOTES:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Fixture may not be compatible with all dimmers.

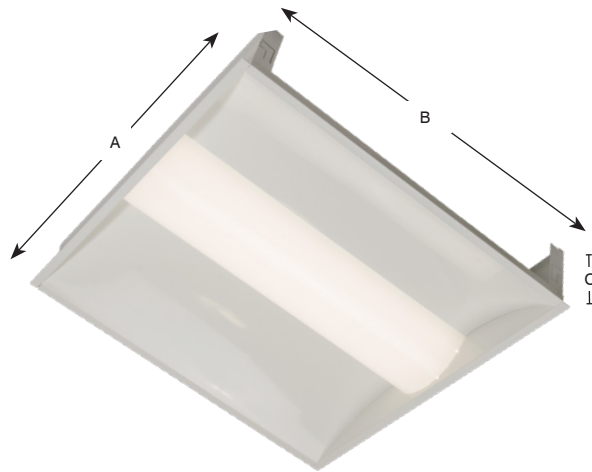
Specifications are subject to change without prior notice.

Revised July 2020

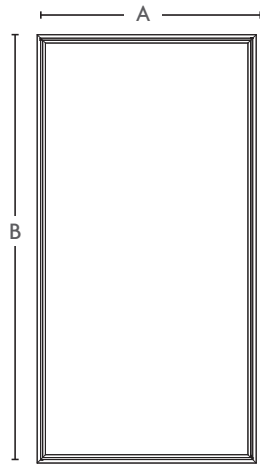
LED Volumetric Troffers - Center Basket

PRODUCT DIMENSIONS / LINE DRAWINGS

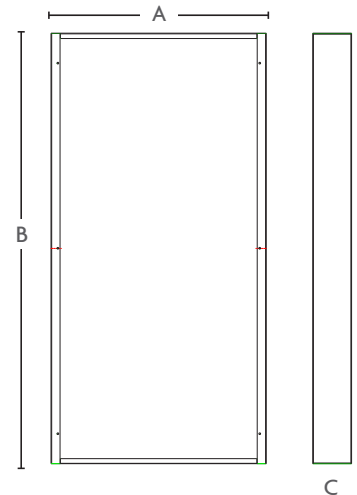
Catalog Number	Length (A)	Width (B)	Depth (C)	Weight
F-VTC22/30/8xx/D-86C	23.74"	23.74"	3.39"	8.2 Lbs
F-VTC24/45/8xx/D-86C	23.74"	47.71"	3.39"	14.4 Lbs.
F-L22/FRAME-87	24.0"	24.0"	4.3"	6.6 Lbs.
F-L24/FRAME-87	24.0"	48.0"	4.3"	7.6 Lbs.
F-L22/FLANGE-87	24.0"	24.0"	1.8"	5.8 Lbs.
F-L24/FLANGE-87	26.0"	48.0"	2.9"	8.5 Lbs.



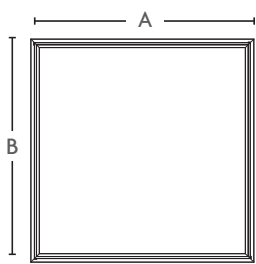
2' x 4' Sheetrock Flange Kit



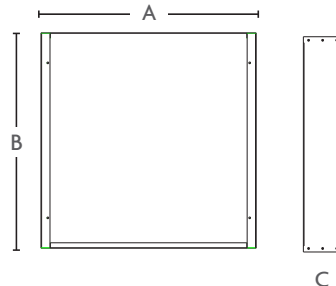
2' x 4' Frame Kit



2' x 2' Sheetrock Flange Kit



2' x 2' Frame Kit

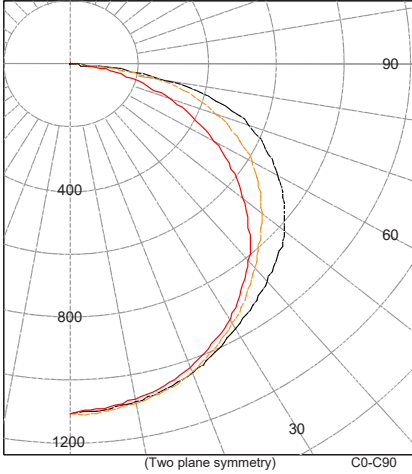


LED Volumetric Troffers - Center Basket

2' X 2' Troffer

PHOTOMETRIC DATA

Legend: C0-Red, C45-Orange, C90-Black



Total Light Output = 3,613 lm

Spacing Criterion:	0-180	1.3
Spacing Criterion:	90-270	1.3

Average Luminance (cd / m²)

Gamma	C0	C45	C90
45.0	3189	3389	3714
55.0	3061	3584	4069
65.0	2827	3882	4568
75.0	2394	4245	5223
85.0	1537	3414	3999

Zonal Flux and Percentages

Zone	Flux (lm)	% Lamp	% Luminaire
0-30	864	N/A	23.9
0-40	1428	N/A	39.5
0-60	2636	N/A	73.0
0-90	3613	N/A	100.0
40-90	2185	N/A	60.5
60-90	977	N/A	27.0
90-180	0	N/A	0.0
0-180	3613	N/A	100.0

Intensity Summary (cd)

Gamma	C-Plane					Flux (lm)
	C0	C22.5	C45	C67.5	C90	
0.0	1106	1106	1106	1106	1106	
5.0	1093	1100	1106	1103	1100	105
10.0	1078	1086	1092	1090	1088	
15.0	1055	1062	1070	1068	1068	301
20.0	1023	1030	1038	1039	1039	
25.0	981	989	997	1001	1004	459
30.0	932	939	949	959	966	
35.0	874	883	895	918	931	563
40.0	809	818	839	877	896	
45.0	738	747	784	836	859	611
50.0	659	671	728	794	818	
55.0	574	591	673	738	764	597
60.0	484	513	611	674	701	
65.0	391	436	537	601	632	515
70.0	296	360	453	519	552	
75.0	203	275	359	420	442	358
80.0	117	177	243	269	281	
85.0	44	72	97	109	114	103
90.0	0	0	0	0	0	

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	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
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	
1	108	102	98	93	105	100	96	92	96	92	89	92	89	86	88	86	83	81	
2	97	88	81	74	94	86	79	73	82	77	72	79	74	70	76	72	68	66	
3	88	77	68	61	85	75	67	60	72	65	59	69	63	58	66	61	57	55	
4	80	67	58	51	78	66	57	50	63	56	50	61	54	49	59	53	48	46	
5	73	60	50	43	71	59	50	43	57	49	43	54	48	42	53	46	42	39	
6	68	54	44	38	66	53	44	37	51	43	37	49	42	37	47	41	36	34	
7	63	49	39	33	61	48	39	33	46	38	33	45	38	32	43	37	32	30	
8	58	44	35	29	57	43	35	29	42	34	29	41	34	29	40	33	29	27	
9	54	40	32	26	53	40	32	26	39	31	26	38	31	26	37	30	26	24	
10	51	37	29	24	50	37	29	24	36	29	24	35	28	23	34	28	23	21	

For absolute test reports, CUs are expressed as a percentage of total lumen output. Calculations were based on published IES procedures, and are based on the zonal cavity method. Basic assumptions: 1) Room surfaces are lambertian reflectors. 2) Incident flux on each surface is uniformly distributed. 3) The room is spectrally neutral. When luminaires are not evenly distributed throughout the room, or do not exhibit lateral symmetry, CU values may differ from actual performance.

Circle of Light Plot

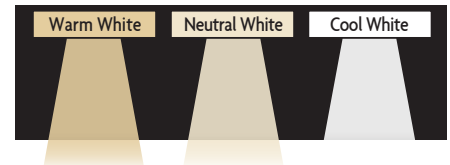
Height Ft.	Illuminance at Nadir (fc)	Beam Width (across 50% Nadir Illum)	
		0-180	90-270
6.0	30.7	7.52	7.85
8.0	17.3	10.03	10.47
10.0	11.1	12.54	13.09
12.0	7.7	15.04	15.70
14.0	5.6	17.55	18.32
16.0	4.3	20.06	20.94

DIMMER COMPATIBILITY

*Dimming with standard 0-10V dimmer such as:

Leviton IP710
Lutron DS710
Lutron DVSTV

COLOR TEMPERATURES

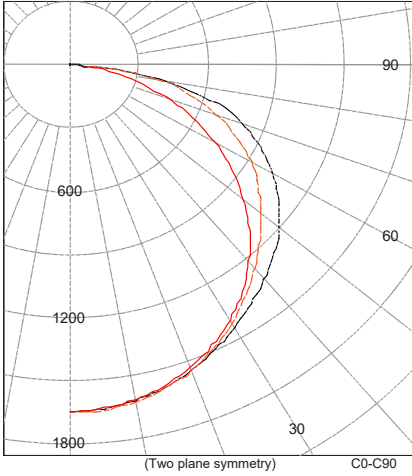


LED Volumetric Troffers - Center Basket

2' X 4' Troffer

PHOTOMETRIC DATA

Legend: C0-Red, C45-Orange, C90-Black



Total Light Output = 5,389 lm

Spacing Criterion:	0-180	1.3
Spacing Criterion:	90-270	1.3

Average Luminance (cd / m²)

Gamma	C0	C45	C90
45.0	2322	2459	2645
55.0	2228	2593	2881
65.0	2062	2814	3207
75.0	1712	3102	3618
85.0	1104	2530	2588

Zonal Flux and Percentages

Zone	Flux (lm)	% Lamp	% Luminaire
0-30	1291	N/A	24.0
0-40	2133	N/A	39.6
0-60	3932	N/A	73.0
0-90	5389	N/A	100.0
40-90	3256	N/A	60.4
60-90	1457	N/A	27.0
90-180	0	N/A	0.0
0-180	5389	N/A	100.0

Intensity Summary (cd)

Gamma	C0	C-Plane				Flux (lm)
		C22.5	C45	C67.5	C90	
0.0	1653	1653	1653	1653	1653	
5.0	1638	1649	1650	1647	1640	156
10.0	1616	1627	1628	1627	1622	
15.0	1579	1593	1595	1593	1590	449
20.0	1532	1545	1548	1549	1547	
25.0	1471	1484	1488	1491	1494	686
30.0	1400	1411	1417	1427	1437	
35.0	1315	1326	1339	1364	1383	842
40.0	1218	1230	1256	1299	1325	
45.0	1109	1125	1175	1232	1263	911
50.0	990	1010	1091	1165	1200	
55.0	863	893	1005	1083	1116	888
60.0	730	780	915	986	1021	
65.0	589	666	803	879	915	766
70.0	443	555	679	758	796	
75.0	299	435	542	613	633	535
80.0	168	290	371	391	398	
85.0	65	132	149	152	152	155
90.0	0	0	0	0	0	

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	102	98	93	105	100	96	92	96	92	89	92	89	86	88	86	83	81
2	97	88	81	74	94	86	79	73	82	77	72	79	74	70	76	72	68	66
3	88	77	68	61	85	75	67	60	72	65	59	69	63	58	66	61	57	55
4	80	67	58	51	78	66	57	50	63	56	50	61	54	49	59	53	48	46
5	73	60	50	43	71	59	50	43	57	49	43	54	48	42	53	47	42	39
6	68	54	44	38	66	53	44	37	51	43	37	49	42	37	48	41	36	34
7	63	49	39	33	61	48	39	33	46	38	33	45	38	32	43	37	32	30
8	58	44	35	29	57	43	35	29	42	34	29	41	34	29	40	33	29	27
9	54	40	32	26	53	40	32	26	39	31	26	38	31	26	37	30	26	24
10	51	37	29	24	50	37	29	24	36	29	24	35	28	23	34	28	23	22

For absolute test reports, CUs are expressed as a percentage of total lumen output. Calculations were based on published IES procedures, and are based on the zonal cavity method. Basic assumptions: 1) Room surfaces are lambertian reflectors. 2) Incident flux on each surface is uniformly distributed. 3) The room is spectrally neutral. When luminaires are not evenly distributed throughout the room, or do not exhibit lateral symmetry, CU values may differ from actual performance.

Circle of Light Plot

Height Ft.	Illuminance at Nadir (fc)	Beam Width (across 50% Nadir Illum)	
		0-180	90-270
6.0	45.9	7.55	7.81
8.0	25.8	10.07	10.42
10.0	16.5	12.59	13.02
12.0	11.5	15.11	15.63
14.0	8.4	17.63	18.23
16.0	6.5	20.15	20.83

