

Alphalite

PROJECT NAME

CATALOG NO.

TYPE

DATE

NOTE

INFINITY SERIES LED Volumetric Troffer

ILT-CB

DESCRIPTION

The Infinity Volumetric LED Troffer series combines the benefits of long life, controllability, and energy savings with elegant design and superior quality of light. The ILT luminaires optimize LED optics and electronics to deliver energy savings and high performance.

APPLICATION

Indoor general/ambient illumination. Idea for offices, schools, retail, and other architectural spaces that demand energy demand reduction and high quality light.

SPECIFICATION FEATURES

Construction

Rugged construction: solid die-formed, cold-rolled steel. Interior utilizes highly reflective powder coat finish. All surfaces coated and baked post-fabrication with high gloss powder-paint. Diffuser lens provides even and consistent light while eliminating pixelation. Tool-less removal of diffuser allows access to LED array. LED module and driver are replaceable.

Electrical

Luminaire utilizes long life, high efficacy LEDs and a highly efficient, reliable LED driver. 120V-277V input voltage for increased versatility. 0-10V continuous dimming comes standard. Ideal when used in conjunction with controls and sensors. Comes equipped with quick disconnect for compliance with US code

Mounting

Installs recessed with T-bar grid. LED module arrays and drivers accessible from fixture during service and operation, no need to access via plenum.



INFINITY SERIES LED Volumetric Troffer - Center Diffuser

2x2, 2x4, 1x4



Finish

Highly reflective powder coat finish. Baked white matte paint, applied after fabrication.

Optics

Volumetric effect achieved by delivering a comfortable mix of light to working and surrounding surfaces, creating balanced illumination throughout the environment. Occupants can realize a productive and comfortable atmosphere through enhanced light quality and distribution. Diffuser shape, pattern, and opacity designed in conjunction with precisely-engineered reflector cavity angles to distribute LED light consistently, reducing glare and pixelation.

Certifications / Regulatory

UL/cUL listed. All components used have UL approval. UL Class 2. Power supply: SCP, OTP, OVP protection, FCC Part 15 Class B, UL8750 Class 2. DLC Premium listed.

Warranty

7-year limited warranty. See complete warranty terms for details.

Quick Ship Product

- ILT-CB-24H(60)/840

ORDERING INFORMATION

Sample Number: **ILT-CB-22H(40)/840**

ILT-CB	22	H(40)	8	40	(Blank)	(Blank)
Series	Form Factor	Lumen Package	CRI	CCT	Input Voltage	Dimming
ILT - Infinity LED Troffer, Center Diffuser	22 - 2'x2' 24 - 2'x4' 14 - 1'x4'	2'x2' : L(26) - 26W H(41) - 41W 2'x4' : VL(30) - 30W L(36) - 36W L(48) - 48W H(60) - 60W 1'x4' : L(26) - 26W H(41) - 41W *see energy data for details	8 - 83+ CRI	35 - 3500K 40 - 4000K 50 - 5000K	(Blank) - 120V-277V 347 - 347V	(Blank) - 0-10V
Options						
Controls			Emergency Backup			
MMS - Integrated bi-level dimming microwave motion sensor DL - Integrated daylight harvesting			EM700 - 700lm EM1400 - 1400lm EM2000 - 2000lm			

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Specifications and dimensions subject to change without notice.

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SUMMARY

Input Voltage	120V-277V
Input Power	See energy data for details
Power Factor	> 0.95
THD (Max.)	20%
Efficacy	> 110 LPW
Delivered Lumens	See energy data for details
Controls/ Dimming	Full Range 0-10V dimming standard
Dimming Range	0-10V Continuous (10-100%)
CRI	> 83
CCT	3500K, 4000K, 5000K
Operating Temp.	-20 ~ +55 C

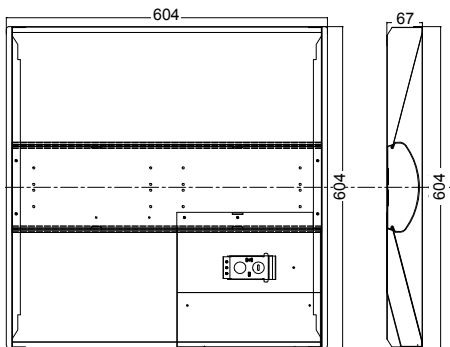
ENERGY PERFORMANCE DATA

	Lumen package	Rated Wattage	Tested Wattage	Lumens	LPW
2 x 2	ILT-CB-22L(26)/835	26	26	3172	122
	ILT-CB-22L(26)/840	26	26	3250	125
	ILT-CB-22L(26)/850	26	26	3276	126
	ILT-CB-22H(41)/835	40	41	4880	122
	ILT-CB-22H(41)/840	40	41	5000	125
	ILT-CB-22H(41)/850	40	41	5040	126
2 x 4	ILT-CB-24VL(26)/835	26	26	3172	122
	ILT-CB-24VL(26)/840	26	26	3250	125
	ILT-CB-24VL(26)/850	26	26	3302	127
	ILT-CB-24L(36)/835	36	34	4392	122
	ILT-CB-24L(36)/840	36	34	4500	125
	ILT-CB-24L(36)/850	36	34	4572	127
	ILT-CB-24L(48)/835	48	48	5856	122
	ILT-CB-24L(48)/840	48	48	6000	125
	ILT-CB-24L(48)/850	48	48	6096	127
	ILT-CB-24H(60)/835	60	60	7320	122
	ILT-CB-24H(60)/840	60	60	7500	125
	ILT-CB-24H(60)/850	60	60	7620	127
1 x 4	ILT-CB-14L(26)/835	26	26	3172	122
	ILT-CB-14L(26)/840	26	26	3250	125
	ILT-CB-14L(26)/850	26	26	3276	126
	ILT-CB-14H(41)/835	41	41	5002	122
	ILT-CB-14H(41)/840	41	41	5125	125
		ILT-CB-14H(41)/850	41	41	5207

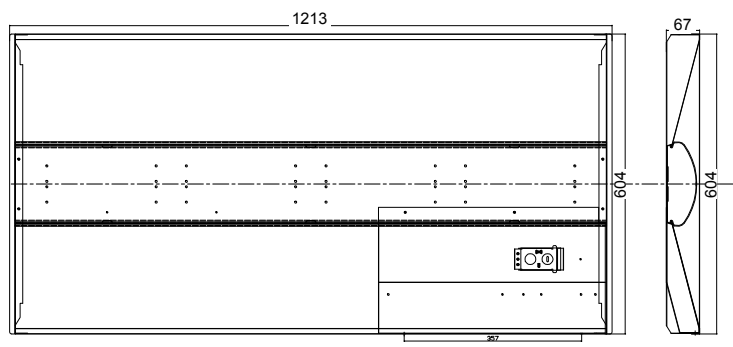
PHYSICAL PARAMETERS

DIMENSION

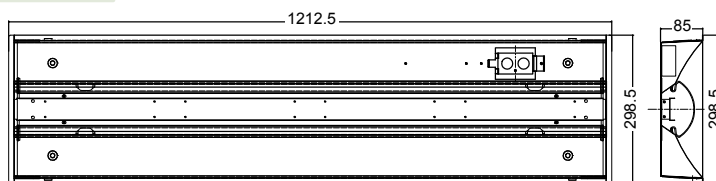
ILT-CB-22



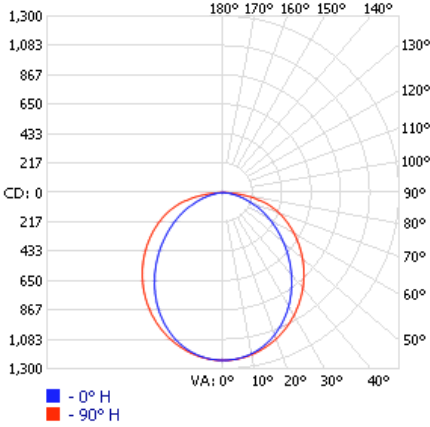
ILT-CB-24



ILT-CB-14



ILT-CB-22H/830



Candlepower

ANGLE IN DEG	0	45	90
0	1238	1238	1238
5	1230	1231	1232
10	1207	1211	1214
15	1169	1178	1185
20	1114	1131	1147
25	1047	1075	1101
30	967	1008	1047
35	879	935	984
40	786	856	917
45	686	772	844
50	588	687	767
55	493	600	688
60	401	512	606
65	312	425	525
70	221	340	440
75	144	244	346
80	76	161	228
85	15	69	88
90	0	0	0

Coefficients of Utilization - Zonal Cavity Method

RCC	EFFECTIVE FLOOR CAVITY REFLECTANCE: 20%																	
	80			70			50			30			10			0		
RW %:	70	50	30	0	70	50	30	0	50	30	20	50	30	20	50	30	20	0
RCR: 0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1
1	1.09	1.04	0.99	0.95	1.06	1.01	0.97	0.84	0.97	0.94	0.91	0.93	0.91	0.88	0.9	0.87	0.85	0.83
2	0.99	0.9	0.83	0.77	0.96	0.88	0.82	0.71	0.85	0.79	0.75	0.81	0.77	0.73	0.78	0.75	0.71	0.69
3	0.9	0.79	0.71	0.64	0.87	0.78	0.7	0.6	0.75	0.68	0.63	0.72	0.66	0.62	0.69	0.65	0.6	0.58
4	0.82	0.7	0.61	0.55	0.8	0.69	0.61	0.52	0.66	0.59	0.53	0.64	0.58	0.53	0.62	0.56	0.52	0.5
5	0.76	0.63	0.54	0.47	0.74	0.62	0.53	0.45	0.59	0.52	0.46	0.57	0.51	0.46	0.56	0.5	0.45	0.43
6	0.7	0.56	0.47	0.41	0.68	0.56	0.47	0.4	0.54	0.46	0.4	0.52	0.45	0.4	0.5	0.44	0.4	0.38
7	0.65	0.51	0.42	0.36	0.63	0.5	0.42	0.35	0.49	0.41	0.36	0.47	0.41	0.36	0.46	0.4	0.35	0.33
8	0.6	0.47	0.38	0.32	0.59	0.46	0.38	0.32	0.45	0.37	0.32	0.44	0.37	0.32	0.42	0.36	0.32	0.3
9	0.56	0.43	0.35	0.29	0.55	0.42	0.34	0.29	0.41	0.34	0.29	0.4	0.34	0.29	0.39	0.33	0.29	0.27
10	0.53	0.4	0.32	0.26	0.52	0.39	0.32	0.26	0.38	0.31	0.26	0.37	0.31	0.26	0.36	0.3	0.26	0.24

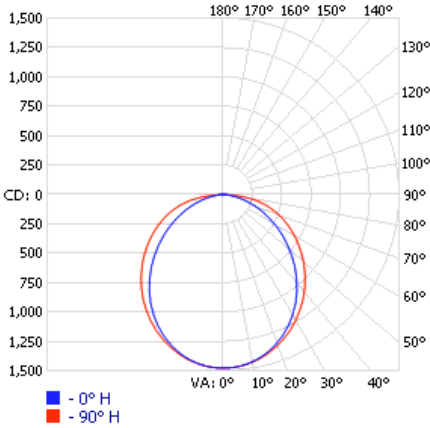
Zonal Lumen Summary

ZONE	LUMENS	% LUMINAIRE
0-30	943.2	27.70%
0-40	1,526.90	44.90%
0-60	2,652.30	78%
60-90	746.8	22%
70-100	329.4	9.70%
90-120	0	0%
0-90	3,399.10	100%
90-180	0	0%
0-180	3,399.10	100%

Average Luminance (cd/m2)

ANGLE IN DEG	0	45	90
0	281836	281836	281836
45	38974	45508	102651
55	25526	32317	81516
65	15271	21635	62362
75	6863	12168	42618
85	707	3451	11539

ILT-CB-24L/830



Candlepower

ANGLE IN DEG	0	45	90
0	1477	1477	1477
5	1469	1469	1470
10	1444	1445	1447
15	1402	1406	1412
20	1343	1352	1364
25	1269	1285	1305
30	1184	1210	1237
35	1081	1122	1159
40	975	1032	1076
45	864	936	987
50	742	832	894
55	626	731	800
60	507	625	702
65	397	523	607
70	292	424	506
75	193	322	399
80	104	219	280
85	39	102	120
90	9	28	3

Coefficients of Utilization - Zonal Cavity Method

RCC	EFFECTIVE FLOOR CAVITY REFLECTANCE: 20%																	
	80			70			50			30			10			0		
RW %:	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1
RCR: 0	1.08	1.03	0.99	0.95	1.05	1.01	0.97	0.84	0.97	0.93	0.9	0.93	0.9	0.87	0.89	0.87	0.85	0.83
1	0.98	0.9	0.83	0.77	0.96	0.88	0.81	0.7	0.84	0.79	0.74	0.81	0.76	0.72	0.78	0.74	0.71	0.68
2	0.89	0.79	0.7	0.64	0.87	0.77	0.69	0.59	0.74	0.67	0.62	0.71	0.66	0.61	0.69	0.64	0.6	0.58
3	0.82	0.7	0.61	0.54	0.8	0.68	0.6	0.51	0.66	0.59	0.53	0.63	0.57	0.52	0.61	0.56	0.51	0.49
4	0.75	0.62	0.53	0.46	0.73	0.61	0.53	0.44	0.59	0.51	0.46	0.57	0.5	0.45	0.55	0.49	0.45	0.42
5	0.7	0.56	0.47	0.41	0.68	0.55	0.47	0.39	0.53	0.46	0.4	0.52	0.45	0.4	0.5	0.44	0.39	0.37
6	0.65	0.51	0.42	0.36	0.63	0.5	0.42	0.35	0.48	0.41	0.35	0.47	0.4	0.35	0.46	0.4	0.35	0.33
7	0.6	0.46	0.38	0.32	0.59	0.46	0.38	0.31	0.44	0.37	0.32	0.43	0.36	0.31	0.42	0.36	0.31	0.29
8	0.56	0.43	0.34	0.29	0.55	0.42	0.34	0.28	0.41	0.34	0.29	0.4	0.33	0.28	0.39	0.33	0.28	0.26
9	0.53	0.39	0.31	0.26	0.51	0.39	0.31	0.26	0.38	0.31	0.26	0.37	0.3	0.26	0.36	0.3	0.26	0.24
10	0.53	0.4	0.32	0.26	0.52	0.39	0.32	0.26	0.38	0.31	0.26	0.37	0.31	0.26	0.36	0.3	0.26	0.24

Zonal Lumen Summary

ZONE	LUMENS	% LUMINAIRE
0-30	1,127.50	27.30%
0-40	1,827.20	44.30%
0-60	3,181.30	77.10%
60-90	944.9	22.90%
70-100	441.3	10.70%
90-120	1.8	0%
0-90	4,126.20	100%
90-180	1.8	0%
0-180	4,127.90	100%

