

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, 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.



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 listed.

Warranty

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

ILT-CB

Infinity Series

LED Volumetric Troffer -
Center Diffuser

2x2, 2x4, 1x4



Quick Ship Product

ILT-CB-22H/840

ILT-CB-22L/840

ILT-CB-24L/840

ILT-CB-24H/840

ORDERING INFORMATION

Sample Number: ILT-CB-22H/840

ILT	CB	22	H	8	40	(Blank)	(Blank)	
Series	Style	Size	Lumen Package	CRI	CCT	Input Voltage	Dimming	Options
ILT = Infinity LED Troffer	CB - Center Diffuser	22 - 2'x2' 24 - 2'x4' 14 - 1'x4'	L - Low Wattage H - High Lumen * see energy data for details	8 - 82+ CRI 9 - 90+ CRI	30 - 3000K 35 - 3500K 40 - 4000K 50 - 5000K	(Blank) - 120V-277V 347 - 347V	(Blank) - 0-10V AB - Dual Relay PD - Phase Dimming DA - DALI	EM14 - Emergency Backup (1400 lumens) PIR - Integrated occupancy sensor (PIR) DL - Integrated daylight photocell

SUMMARY

Input Voltage	120V-277V
Input Power	See energy data for details
Power Factor	> 0.95
THD (Max.)	20%
Efficacy	> 93 LPW
Delivered Lumens	See energy data for details
Controls/ Dimming	Full Range 0-10V dimming standard
Dimming Range	10-100%
CRI	> 82
CCT	3000K, 3500K, 4000K, 5000K
Operating Temp.	-20 ~ +55 C

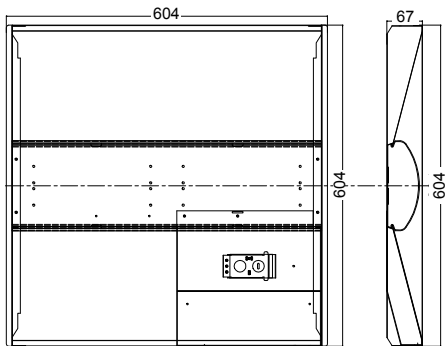
ENERGY PERFORMANCE DATA

	Lumen package	Input watts	Lumens	LPW	CCT
2 x 2	ILT-CB-22H/830	36	3348	93.0	3000K
	ILT-CB-22H/835	36	3440	97.6	3500K
	ILT-CB-22H/840	36	3510	99.2	4000K
	ILT-CB-22H/850	36	3563	99.0	5000K
	ILT-CB-22L/830	24	2185	91.0	3000K
	ILT-CB-22L/835	24	2210	95.1	3500K
	ILT-CB-22L/840	24	2291	97.2	4000K
2 x 4	ILT-CB-24L/830	42	4160	99.0	3000K
	ILT-CB-24L/835	42	4389	102.7	3500K
	ILT-CB-24L/840	42	4410	104.9	4000K
	ILT-CB-24L/850	42	4505	107.3	5000K
	ILT-CB-24H/830	68	6594	97.0	3000K
	ILT-CB-24H/835	68	6630	96.9	3500K
	ILT-CB-24H/840	68	6803	98.1	4000K
1 x 4	ILT-CB-14H/830	36	3323	92.3	3000K
	ILT-CB-14H/835	36	3440	97.6	3500K
	ILT-CB-14H/840	36	3510	99.2	4000K
	ILT-CB-14H/850	36	3702	102.8	5000K
	ILT-CB-14L/830	24	2213	92.2	3000K
	ILT-CB-14L/835	24	2290	97.6	3500K
	ILT-CB-14L/840	24	2340	99.2	4000K
	ILT-CB-14L/850	24	2431	101.3	5000K

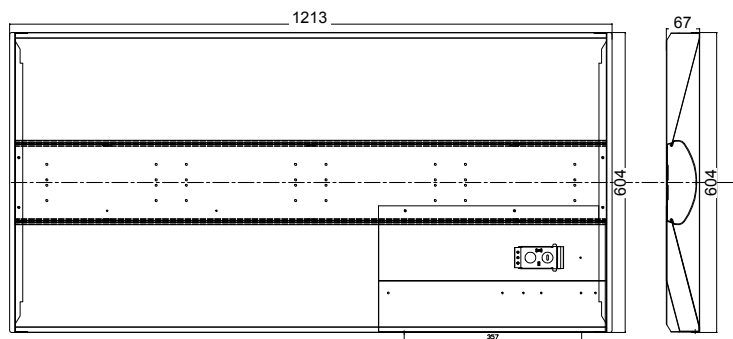
PHYSICAL PARAMETERS

DIMENSION

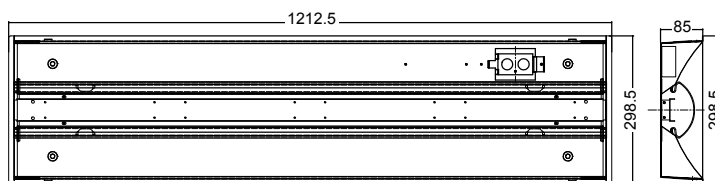
ILT-CB-22



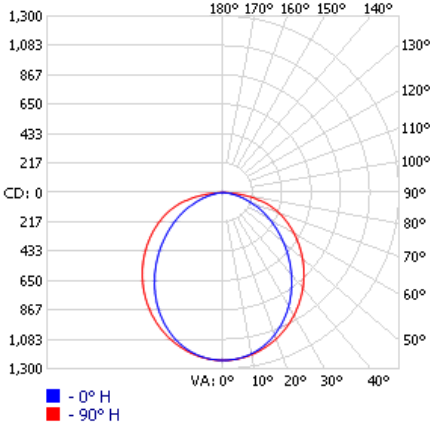
ILT-CB-24



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 %:	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1	
RCR: 0	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
1	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
2	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
3	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
4	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
5	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
6	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
7	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
8	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
9	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
10																		

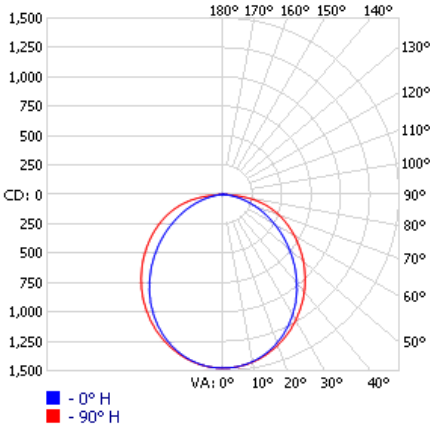
Zonal Lumen Summary

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	1.11	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
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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%

