

Alphalite

PROJECT NAME

CATALOG NO.

TYPE

DATE

NOTE

INFINITY SERIES LED VOLUMETRIC TROFFER

ILT-CB Series

LED Volumetric Troffer -
Center Diffuser

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. Housing and optics maintain damp location rating with all internal components.

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. Damp location rated. 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-22L(26S)/835
- ILT-CB-22L(26S)/840
- ILT-CB-22H(35S)/840
- ILT-CB-24L(34S)/835
- ILT-CB-24L(34S)/840
- ILT-CB-24H(46S)/840
- ILT-CB-24H(60)/840
- ILT-CB-14L(26S)/840
- ILT-CB-14H(35S)/840

ORDERING INFORMATION

Sample Number: ILT-CB-24L(34S)/840

ILT-CB	24	L	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'	VL - Very Low Wattage L - Low Wattage H - High Lumen *See energy data for details	8 - 83+ CRI	35 - 3500K 40 - 4000K 50 - 5000K	(Blank) - 120V-277V	(Blank) - 0-10V Continuous Dimming

Options

Controls

- DMMS** - Integrated step dimming microwave motion sensor
- MMS** - Integrated step dimming microwave motion sensor with sync function
- DL** - Integrated daylight harvesting
- SMC** - Smart Control System

Emergency Backup

- EM700 - 700lm
- EM1400 - 1400lm
- EM2000 - 2000lm



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	> 121 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
Rated Life	70,000 hours

ENERGY PERFORMANCE DATA

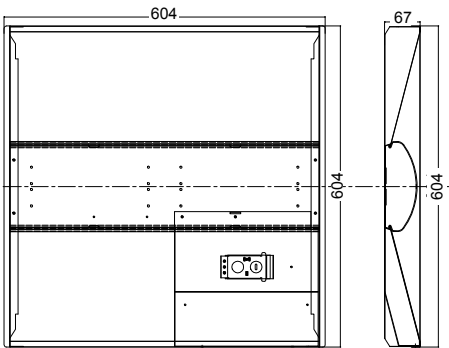
Form Factor	Part No.	Rated Wattage (W)	Tested Wattage (W)	Delivered Lumens (lm)	Efficacy (lm/W)		
2'x2'	ILT-CB-22L(26S)/835	26	25	3075	121		
	ILT-CB-22L(26S)/840			3250	125		
	ILT-CB-22L(26S)/850	35	35	3276	127		
	ILT-CB-22H(35S)/835			4243	122		
	ILT-CB-22H(35S)/840			4410	126		
	ILT-CB-22H(35S)/850			4445	127		
2'x4'	ILT-CB-24VL(25S)/835	25	24	3341	140		
	ILT-CB-24VL(25S)/840			3500	140		
	ILT-CB-24VL(25S)/850			3550	142		
	ILT-CB-24L(34S)/835	34	33	4119	125		
	ILT-CB-24L(34S)/840			4284	127		
	ILT-CB-24L(34S)/850	48	46	4290	130		
	ILT-CB-24H(46S)/835			5620	125		
	ILT-CB-24H(46S)/840			5970	127		
	ILT-CB-24H(46S)/850			6115	130		
	ILT-CB-24H(60)/835			60	58	7023	121
	ILT-CB-24H(60)/840					7500	127
	ILT-CB-24H(60)/850	7501	131				
1'x4'	ILT-CB-14L(26)/835	26	26	3164	122		
	ILT-CB-14L(26)/840			3276	126		
	ILT-CB-14L(26)/850	35	35	3380	130		
	ILT-CB-14H(35S)/835			4243	122		
	ILT-CB-14H(35S)/840			4410	126		
	ILT-CB-14H(35S)/850			4445	127		

PHYSICAL PARAMETERS

DIMENSION

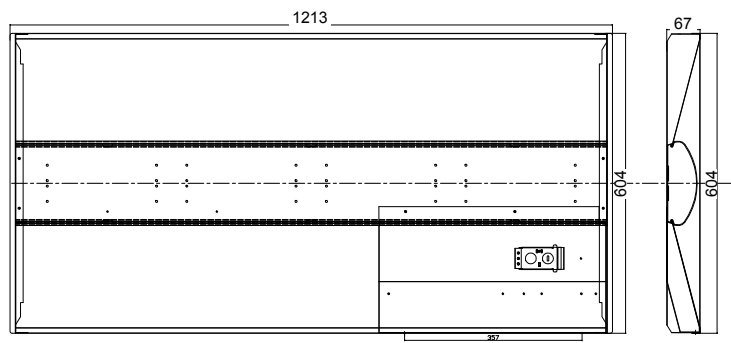
ILT-CB-22

Gross dimensions: 25"x26"x4", 11lbs

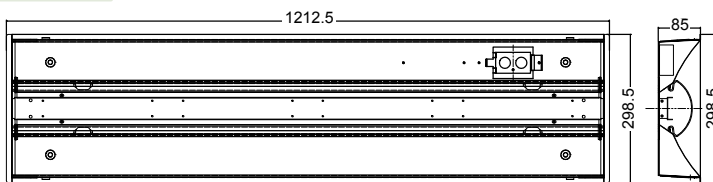


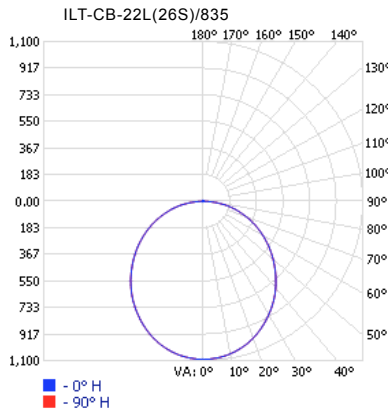
ILT-CB-24

Gross dimensions: 50"x25"x3", 18lbs



ILT-CB-14



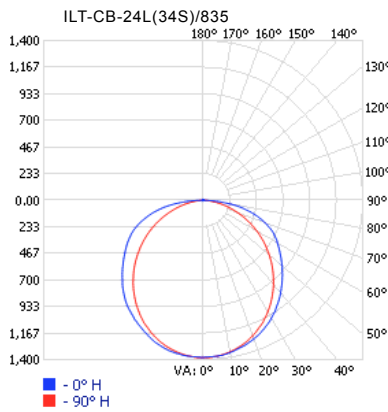


Zonal Lumen Summary

ZONE	LUMENS	% LUMINAIRE
0-30	837.8	26.80%
0-40	1,364.70	43.60%
0-60	2,402.90	76.70%
60-90	722.1	23.10%
70-100	330.1	10.50%
90-120	2.8	0.10%
0-90	3,125.00	99.80%
90-180	6.2	0.20%
0-180	3,131.20	100%

Coefficients of Utilization - Zonal Cavity Method

		EFFECTIVE FLOOR CAVITY REFLECTANCE: 20%																	
RCC		80		70		50		30		10		0							
	%:																		
RW %:		70	50	30	0	70	50	30	0	50	30	20	50	30	20	0			
RCR: 0		1.19	1.19	1.19	1.19	1.16	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
1		1.08	1.03	0.99	0.95	1.05	1.01	0.97	0.83	0.97	0.93	0.9	0.93	0.9	0.87	0.89	0.87	0.85	0.83
2		0.98	0.9	0.83	0.77	0.95	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
3		0.89	0.79	0.7	0.63	0.87	0.77	0.69	0.59	0.74	0.67	0.62	0.71	0.65	0.61	0.68	0.64	0.59	0.57
4		0.82	0.69	0.6	0.54	0.79	0.68	0.6	0.51	0.66	0.58	0.52	0.63	0.57	0.52	0.61	0.55	0.51	0.49
5		0.75	0.62	0.53	0.46	0.73	0.61	0.52	0.44	0.59	0.51	0.45	0.57	0.5	0.45	0.55	0.49	0.44	0.42
6		0.69	0.56	0.47	0.4	0.67	0.55	0.46	0.39	0.53	0.45	0.4	0.51	0.44	0.39	0.5	0.44	0.39	0.37
7		0.64	0.51	0.42	0.35	0.63	0.5	0.41	0.34	0.48	0.41	0.35	0.47	0.4	0.35	0.45	0.39	0.34	0.32
8		0.6	0.46	0.38	0.32	0.58	0.45	0.37	0.31	0.44	0.37	0.31	0.43	0.36	0.31	0.42	0.35	0.31	0.29
9		0.56	0.42	0.34	0.28	0.54	0.42	0.34	0.28	0.41	0.33	0.28	0.39	0.33	0.28	0.38	0.32	0.28	0.26
10		0.52	0.39	0.31	0.26	0.51	0.39	0.31	0.25	0.38	0.3	0.26	0.37	0.3	0.25	0.36	0.3	0.25	0.24

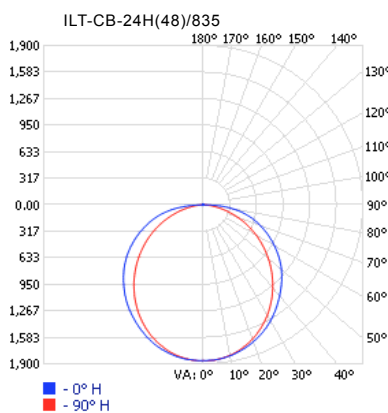


Zonal Lumen Summary

ZONE	LUMENS	% LUMINAIRE
0-30	1,069.70	25.50%
0-40	1,753.30	41.80%
0-60	3,131.40	74.70%
60-90	1,053.70	25.10%
70-100	502.5	12%
90-120	3.6	0.10%
0-90	4,185.10	99.80%
90-180	7.1	0.20%
0-180	4,192.20	100%

Coefficients of Utilization - Zonal Cavity Method

		EFFECTIVE FLOOR CAVITY REFLECTANCE: 20%																	
RCC		80		70		50		30		10		0							
	%:																		
RW %:		70	50	30	0	70	50	30	0	50	30	20	50	30	20	0			
RCR: 0		1.19	1.19	1.19	1.19	1.16	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
1		1.08	1.03	0.98	0.94	1.05	1	0.96	0.83	0.96	0.93	0.89	0.92	0.89	0.86	0.88	0.86	0.84	0.82
2		0.97	0.89	0.81	0.75	0.95	0.87	0.8	0.69	0.83	0.78	0.73	0.8	0.75	0.71	0.77	0.73	0.69	0.67
3		0.89	0.77	0.69	0.62	0.86	0.76	0.68	0.58	0.73	0.66	0.6	0.7	0.64	0.59	0.67	0.62	0.58	0.56
4		0.81	0.68	0.59	0.52	0.79	0.67	0.58	0.49	0.64	0.57	0.51	0.62	0.56	0.5	0.6	0.54	0.5	0.47
5		0.74	0.61	0.52	0.45	0.72	0.6	0.51	0.43	0.58	0.5	0.44	0.56	0.49	0.43	0.54	0.48	0.43	0.41
6		0.69	0.55	0.46	0.39	0.67	0.54	0.45	0.37	0.52	0.44	0.38	0.5	0.43	0.38	0.49	0.42	0.38	0.36
7		0.64	0.5	0.41	0.34	0.62	0.49	0.4	0.33	0.47	0.4	0.34	0.46	0.39	0.34	0.44	0.38	0.33	0.31
8		0.59	0.45	0.37	0.31	0.57	0.45	0.36	0.3	0.43	0.36	0.3	0.42	0.35	0.3	0.41	0.34	0.3	0.28
9		0.55	0.42	0.33	0.27	0.54	0.41	0.33	0.27	0.4	0.32	0.27	0.39	0.32	0.27	0.38	0.31	0.27	0.25
10		0.52	0.38	0.3	0.25	0.5	0.38	0.3	0.24	0.37	0.3	0.25	0.36	0.29	0.25	0.35	0.29	0.24	0.23

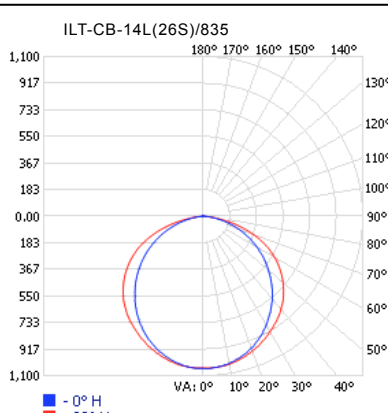


Zonal Lumen Summary

ZONE	LUMENS	% LUMINAIRE
0-30	1,439.90	25.80%
0-40	2,356.20	42.20%
0-60	4,200.50	75.20%
60-90	1,372.00	24.60%
70-100	654.5	11.70%
90-120	5	0.10%
0-90	5,572.50	99.80%
90-180	9.7	0.20%
0-180	5,582.20	100%

Coefficients of Utilization - Zonal Cavity Method

		EFFECTIVE FLOOR CAVITY REFLECTANCE: 20%																	
RCC		80		70		50		30		10		0							
	%:																		
RW %:		70	50	30	0	70	50	30	0	50	30	20	50	30	20	0			
RCR: 0		1.19	1.19	1.19	1.19	1.16	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
1		1.08	1.03	0.98	0.94	1.05	1	0.96	0.83	0.96	0.93	0.89	0.92	0.89	0.87	0.88	0.86	0.84	0.82
2		0.98	0.89	0.82	0.76	0.95	0.87	0.8	0.69	0.83	0.78	0.73	0.8	0.75	0.71	0.77	0.73	0.7	0.67
3		0.89	0.78	0.69	0.62	0.86	0.76	0.68	0.58	0.73	0.66	0.61	0.7	0.64	0.6	0.68	0.63	0.58	0.56
4		0.81	0.69	0.6	0.53	0.79	0.67	0.59	0.5	0.65	0.57	0.51	0.62	0.56	0.51	0.6	0.55	0.5	0.48
5		0.74	0.61	0.52	0.45	0.72	0.6	0.51	0.43	0.58	0.5	0.44	0.56	0.49	0.44	0.54	0.48	0.43	0.41
6		0.69	0.55	0.46	0.39	0.67	0.54	0.45	0.38	0.52	0.44	0.39	0.5	0.44	0.38	0.49	0.43	0.38	0.36
7		0.64	0.5	0.41	0.35	0.62	0.49	0.4	0.33	0.47	0.4	0.34	0.46	0.39	0.34	0.45	0.38	0.34	0.32
8		0.59	0.45	0.37	0.31	0.58	0.45	0.36	0.3	0.43	0.36	0.3	0.42	0.35	0.3	0.41	0.35	0.3	0.28
9		0.55	0.42	0.33	0.28	0.54	0.41	0.33	0.27	0.4	0.33	0.27	0.39	0.32	0.27	0.38	0.32	0.27	0.25
10		0.52	0.38	0.3	0.25	0.51	0.38	0.3	0.25	0.37	0.3	0.25	0.36	0.29	0.25	0.35	0.29	0.25	0.23



Zonal Lumen Summary

ZONE	LUMENS	% LUMINAIRE
0-30	815.1	26%
0-40	1,340.80	42.80%
0-60	2,418.50	77.10%
60-90	711	22.70%
70-100	295.9	9.40%
90-120	2.8	0.10%
0-90	3,129.50	99.80%
90-180	6.2	0.20%
0-180	3,135.70	100%

Coefficients of Utilization - Zonal Cavity Method

		EFFECTIVE FLOOR CAVITY REFLECTANCE: 20%																	
RCC		80		70		50		30		10		0							
	%:																		
RW %:		70	50	30	0	70	50	30	0	50	30	20	50	30	20	0			
RCR: 0		1.19	1.19	1.19	1.19	1.16	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
1		1.08	1.04	0.99	0.95	1.06	1.01	0.97	0.84	0.97	0.94	0.91	0.93	0.9	0.88	0.89	0.87	0.85	0.83
2		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	0.69
3		0.89	0.79	0.7	0.64	0.87	0.77	0.69	0.59	0.74	0.67	0.62	0.71	0.65	0.61	0.69	0.64	0.6	0.57
4		0.82	0.69	0.6	0.54	0.79	0.68	0.6	0.51	0.65	0.58	0.52	0.63	0.57	0.52	0.61	0.55	0.51	0.49
5		0.75	0.62	0.53	0.46	0.73	0.61	0.52	0.44	0.59	0.51	0.45	0.56	0.5	0.45	0.55	0.49	0.44	0.42
6		0.69	0.56	0.46	0.4	0.67	0.55	0.46	0.38	0.53	0.45	0.39	0.51	0.44	0.39	0.49	0.43	0.39	0.36
7		0.64	0.5	0.41	0.35	0.62	0.49	0.41	0.34	0.48	0.4	0.35	0.46	0.4	0.34	0.45	0.39	0.34	0.32
8		0.6	0.46	0.37	0.31	0.58	0.45	0.37	0.3	0.44	0.36	0.31	0.42	0.36	0.31	0.41	0.35	0.3	0.29
9		0.56	0.42	0.34	0.28	0.54	0.41	0.33	0.27	0.4	0.33	0.28	0.39	0.32	0.28	0.38	0.32	0.27	0.26
10		0.52	0.39	0.31	0.25	0.51	0.38	0.31	0.25	0.37	0.3	0.25	0.36	0.3	0.25	0.35	0.29	0.25	0.23

-DMMS/MMS control pre-commissioning

Sample Number: -DMMS (10-3M-L3-S10M)

10	3M	L3	S10M	(Blank)
Detection Area	Hold Time	Low Mode	Stand-by Period	Daylight Sensor
10 - 100%	NM - ∞	L5 - 50%	SN - ∞	(Blank) - Disable
7 - 75%	20M - 20 min.	L3 - 30%	S1H - 1 hr.	D100 - 100 lux
5 - 50%	3M - 3 min.	L2 - 20%	S30M - 30 min.	D50 - 50 lux
1 - 10%	30S - 30 sec.	L1 - 10%	S10M - 10 min.	D25 - 25 lux
	5S - 5 sec.		S5M - 5 min.	D10 - 10 lux
			S5S - 5 sec.	D5 - 5 lux
			(Blank) - Disable	D2 - 2 lux

Detection Area: Detection area can be reduced to fit precisely each application.

Hold Time: The time period the luminaire remains at 100% illumination after no motion detected.

Low Mode: The selected low light level after the hold time.

Stand-by Period: The time period the luminaire remains at "Low Mode" before it completely switched off in the long absence of people. When set to "∞" mode, the low light level is maintained until motion is detected.

Daylight Sensor: The sensor can be set to only allow the luminaire to illuminate below a defined ambient brightness threshold. When set to "Disable" mode, the daylight sensor will switch on the luminaire when motion is detected regardless of ambient light level.

****Noted that daylight sensor is active only when the luminaire switches off****

WIRELESS SMART CONTROL SYSTEM (ASMC)

The Alphalite Wireless Smart Control System is an ideal choice to provide convenient control of lighting. The LED controller uses wireless technology to communicate with other self-powered products in the system and provides an amazingly simple solution for dimming control of LED lighting

APPLICATION

Versatile solution for general purpose applications. Ideal for multi level building, offices, school, warehouse, manufacturing facilities, and spaces that demand energy demand reduction and high quality light.

BENEFITS

- Reliable, longer indoor range wireless communication
- Easy Design-in
- License-free
- Self-powered
- Lower energy costs
- Lower installation costs
- Strength of interoperability
- Convenient access to replaceable, standard components reduces life cycle costs

