

LED Luminaires

Controls Ready Troffer and Retrofit Kit

- 1'X4', 2'X2' and 2'X4' fixture sizes
- Standard 3.5mm receptacle for integrated fixture sensors
- Selectable CCT and Lumen Outputs
- Retrofit kits work with fluorescent troffer and panel housings

Specifications

Description

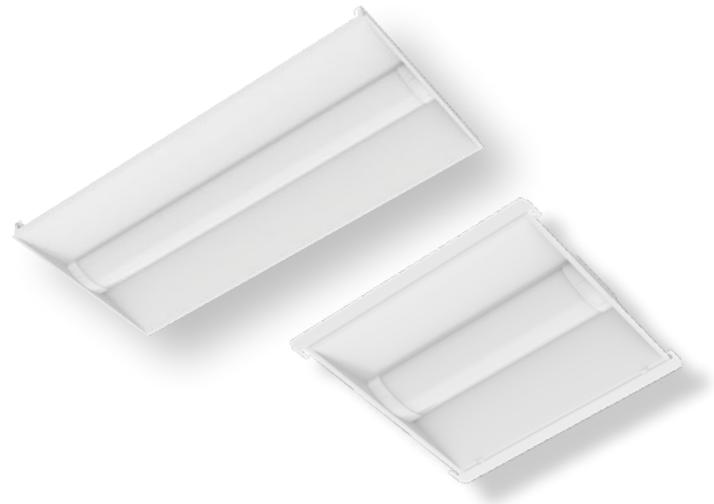
The Center Basket Troffer is a family of sleek, modern LED troffers and retrofit kits designed for new construction, remodel and retrofit recessed ceiling applications. The frosted acrylic center basket design can fully illuminate the floor and walls of a room while still minimizing fixture glare. Removeable end caps conceal a 3.5mm receptacle mounting location for integrated sensor fixture control at one end and an optional emergency battery pack test button on the other end. The retrofit kits can be used to easily and quickly convert most standard fluorescent parabolic, troffer and panel fixtures to an energy efficient, controls ready luminaire.

Performance

- Selectable Color Temperatures (3500K, 4000K, 5000K)
- Field selectable lumen output
- 125+ LPW
- 80+ CRI
- 0-10V Dimming
- L70 Lumen maintenance > 50,000 Hours
- 5 Year limited warranty

Construction

- Powdercoated steel fixture body
- Extruded frosted acrylic lens
- T-bar hinges and cam latches for retrofit kit
- Removeable end caps conceal locations for integral sensor and emergency test buttons



Certifications

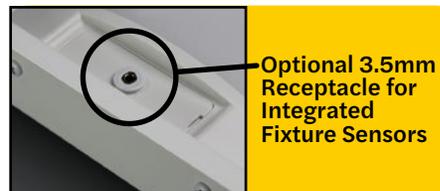
- DLC 5.1 Premium
- cULus listed for damp locations
- IC rated

Applications

- Commercial Buildings
- K-12 Schools, Colleges and Universities
- Healthcare Facilities
- Retailers

Controls

- 3.5mm receptacle for integrated fixture sensors
- Pre-wired for optional emergency battery pack



Controls Ready Troffer and Retrofit Kit

Ordering Logic: Example: CBT-24-LS-CS-UNV-EM

Series	Product Size	Lumen Output	CRI/CCT	Dimming Driver	Options
CBT = Controls Ready Center Basket Troffer CBT-RK = Controls Ready Center Basket Troffer Retrofit Kit	14 = 1' x 4' 22 = 2' x 2' 24 = 2' x 4'	LS = Lumen Selectable 1x4 - 2500 / 3125 / 4000 2x2 - 2500 / 3125 / 4000 2x4 - 4000 / 4500 / 5000	CS = Color Selectable, 80 CRI, 3500K/4000K/5000K	UNV = Universal 120-277V, 50/60 Hz, 0-10V Dimming	EM = 8W Emergency Battery Backup

Ordering Information

Product SKU	Product Code	Description	Replaces	DLC Product ID
81798	CBT-14-LS-CS-UNV	LED 1X4 Center Basket Troffer Controls Ready 3.5mm Receptacle Lumen & Color Selectable (2500-4000Lum 3500K 4000K 5000K) UNV 120-277V 0-10V Dimmable	81779	S-74QQMQ
81799	CBT-22-LS-CS-UNV	LED 2X2 Center Basket Troffer Controls Ready 3.5mm Receptacle Lumen & Color Selectable (2500-4000Lum 3500K 4000K 5000K) UNV 120-277V 0-10V Dimmable	81780	S-93P1NW
81800	CBT-24-LS-CS-UNV	LED 2X4 Center Basket Troffer Controls Ready 3.5mm Receptacle Lumen & Color Selectable (4000-5000Lum 3500K 4000K 5000K) UNV 120-277V 0-10V Dimmable	81781	S-BMBTOY
81801	CBT-RK-14-LS-CS-UNV	LED 1X4 Center Basket Troffer Retrofit Kit Controls Ready 3.5mm Receptacle Lumen & Color Selectable (2500-4000Lum 3500K 4000K 5000K) UNV 120-277V 0-10V Dimmable		S-N2T6WR
81802	CBT-RK-22-LS-CS-UNV	LED 2X2 Center Basket Troffer Retrofit Kit Controls Ready 3.5mm Receptacle Lumen & Color Selectable (2500-4000Lum 3500K 4000K 5000K) UNV 120-277V 0-10V Dimmable		S-Y8SLHD
81803	CBT-RK-24-LS-CS-UNV	LED 2X4 Center Basket Troffer Retrofit Kit Controls Ready 3.5mm Receptacle Lumen & Color Selectable (4000-5000Lum 3500K 4000K 5000K) UNV 120-277V 0-10V Dimmable		S-TR6807
Accessories*				
81810	SMK-CBT-14	Surface Mount Kit for 1X4 Center Basket Troffer		
81811	SMK-CBT-22	Surface Mount Kit for 2X2 Center Basket Troffer		
81812	SMK-CBT-24	Surface Mount Kit for 2X4 Center Basket Troffer		
81813	FMK-CBT-14	Flange Mount Kit for 1X4 Center Basket Troffer		
81814	FMK-CBT-22	Flange Mount Kit for 2X2 Center Basket Troffer		
81815	FMK-CBT-24	Flange Mount Kit for 2X4 Center Basket Troffer		
81816	CBT-ENDCAP-EMTS	Center Basket Troffer End Cap with Emergency Test Switch		
81817	CBT-ENDCAP-3.5MM	Center Basket Troffer End Cap with 3.5MM Receptacle		
81818	CBT-ENDCAP-BLANK	Center Basket Troffer End Cap Replacement Blank		
81819	BBU-8W-UNV-CBT-ENDCAP-EMTS	Emergency Battery Backup 8W 120-277V and CBT End Cap with Emergency Test Switch		
90550	HSN-SEN-PIR-DAY-010-3.5MM	PIR Sensor with Daylight Harvest 0-10V Dim 3.5mm Receptacle		
90552	HSN-SEN-MW-DAY-010-3.5MM	Microwave Sensor with Daylight Harvest 0-10V Dim 3.5mm Receptacle		

Non Stocking product SKU List continues on next page

Controls Ready Troffer and Retrofit Kit

Product SKU List

SKU	Product Code	Description
81804	CBT-14-LS-CS-UNV-EM	LED 1X4 Center Basket Troffer Controls Ready 3.5mm Receptacle Lumen & Color Selectable With 90 Min Emergency Battery Backup
81805	CBT-22-LS-CS-UNV-EM	LED 2X2 Center Basket Troffer Controls Ready 3.5mm Receptacle Lumen & Color Selectable With 90 Min Emergency Battery Backup
81806	CBT-24-LS-CS-UNV-EM	LED 2X4 Center Basket Troffer Controls Ready 3.5mm Receptacle Lumen & Color Selectable With 90 Min Emergency Battery Backup
81807	CBT-RK-14-LS-CS-UNV-EM	LED 1X4 Center Basket Troffer Retrofit Kit Controls Ready 3.5mm Receptacle Lumen & Color Selectable With 90 Min Emergency Battery Backup
81808	CBT-RK-22-LS-CS-UNV-EM	LED 2X2 Center Basket Troffer Retrofit Kit Controls Ready 3.5mm Receptacle Lumen & Color Selectable With 90 Min Emergency Battery Backup
81809	CBT-RK-24-LS-CS-UNV-EM	LED 2X4 Center Basket Troffer Retrofit Kit Controls Ready 3.5mm Receptacle Lumen & Color Selectable With 90 Min Emergency Battery Backup

Performance Table

SKU	Product Code	Wattage	3500K		4000K		5000K	
			Lumen (lm)	Efficacy (lm/W)	Lumen (lm)	Efficacy (lm/W)	Lumen (lm)	Efficacy (lm/W)
81798	CBT-14-LS-CS-UNV	30W	3904	128	4100	139	3982	131
81799	CBT-22-LS-CS-UNV	30W	3792	126	4057	138	3905	129
81800	CBT-24-LS-CS-UNV	40W	5020	129	5271	140	5121	131
81801	CBT-RK-14-LS-CS-UNV	30W	3838	126	4068	139	3876	128
81802	CBT-RK-22-LS-CS-UNV	30W	3772	126	3961	137	3847	129
81803	CBT-RK-24-LS-CS-UNV	40W	4997	128	5196	139	5047	131

0-10V Tested Dimmer Compatibility List

Make	Dimmer Type	Model
LEVITRON	0-10V	DS710
LEVITRON	0-10V	IP710
LUTRON	0-10V	NTSTV-DV
LUTRON	0-10V	DVSTV
LUTRON	0-10V	DVTV-WH
LEGRAND	0-10V	RH4FBL3PW

Default Sensor Setting Information

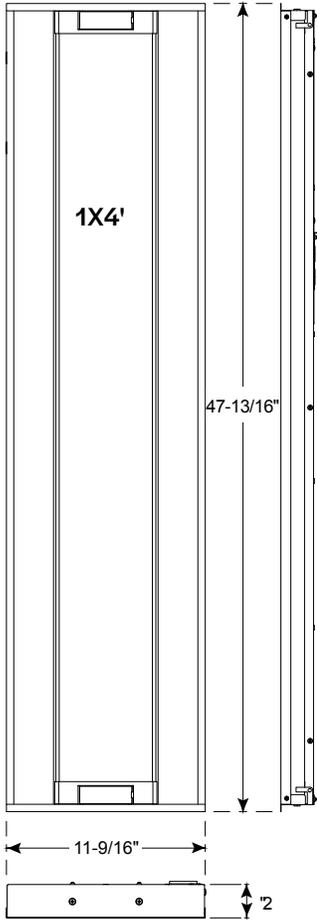
1. Detection Area - 100%
2. Hold Time - 5 Seconds
3. Daylight Threshold - Disabled
4. Standby Period - 0 Seconds
5. Standby Dimming Level - 10%

LED Luminaires

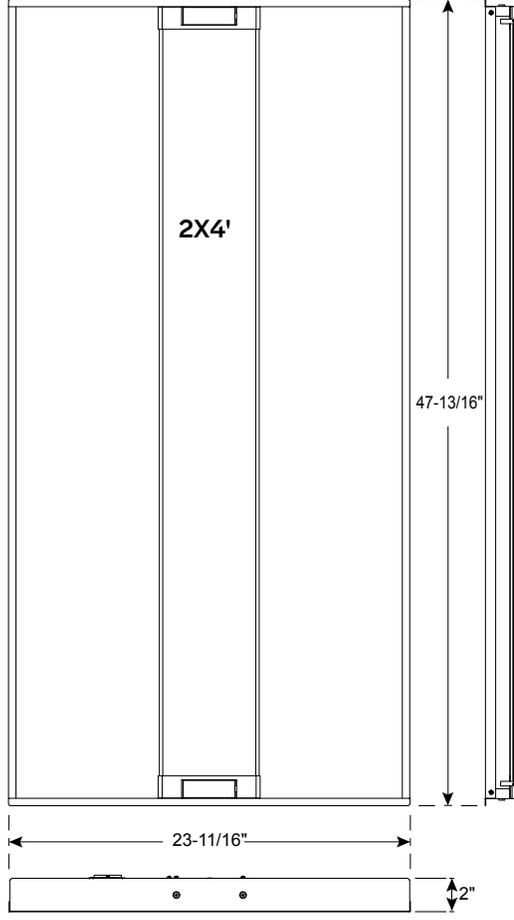
Controls Ready Troffer and Retrofit Kit

Dimensions

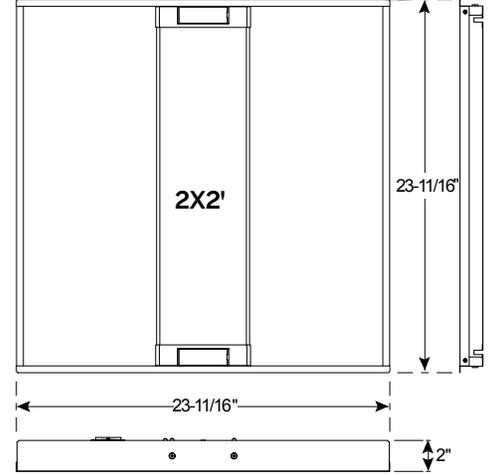
CBT-14-LS-CS-UNV



CBT-24-LS-CS-UNV



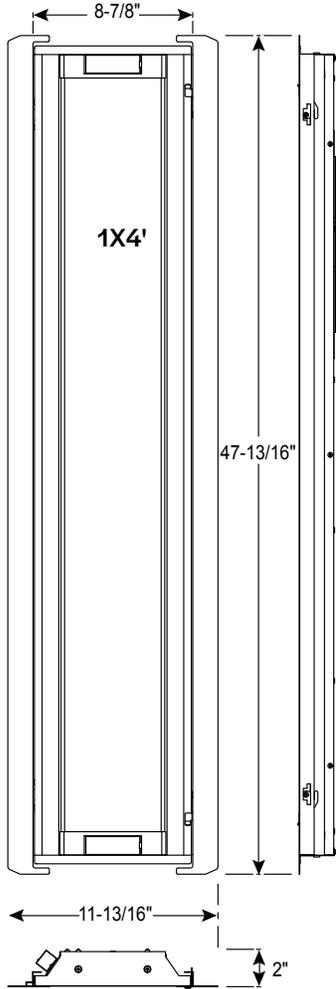
CBT-22-LS-CS-UNV



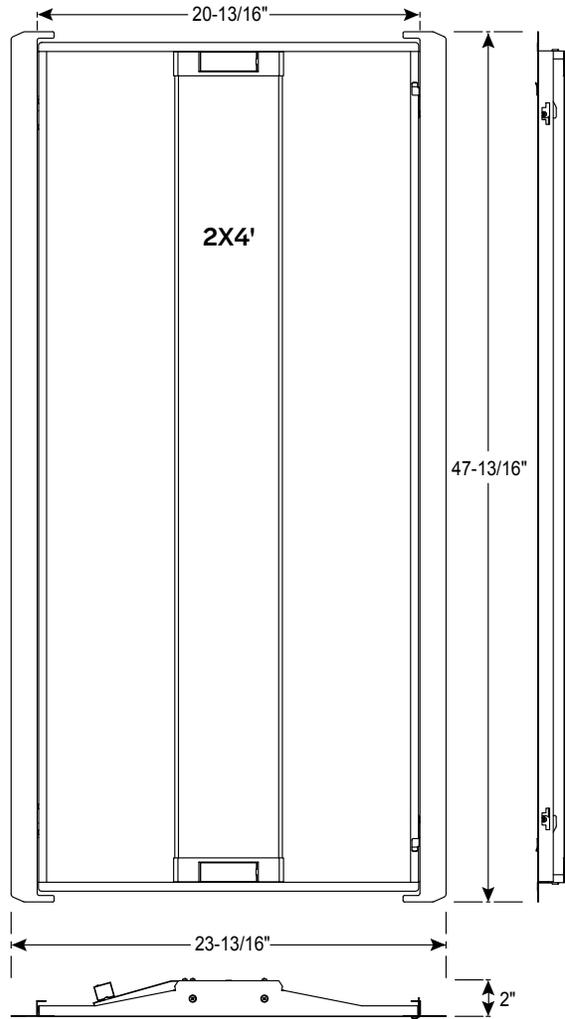
Controls Ready Troffer and Retrofit Kit

Dimensions

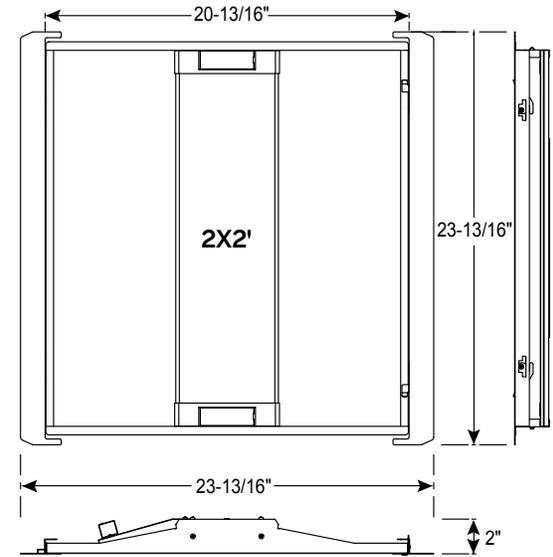
CBT-RK-14-LS-CS-UNV



CBT-RK-24-LS-CS-UNV



CBT-RK-22-LS-CS-UNV



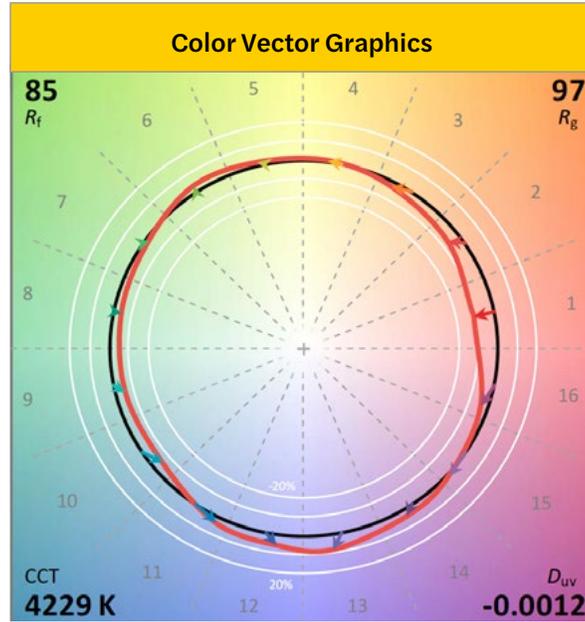
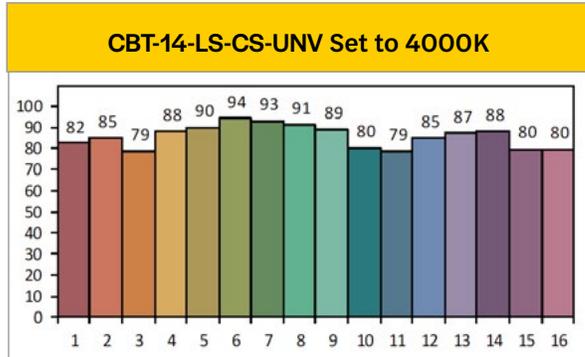
Controls Ready Troffer and Retrofit Kit Specifications Table

	CBT-14-LS-CS-UNV	CBT-22-LS-CS-UNV	CBT-24-LS-CS-UNV	CBT-RK-14-LS-CS-UNV	CBT-RK-22-LS-CS-UNV	CBT-RK-24-LS-CS-UNV
Nominal Wattage	Selectable 20/25/30W	Selectable 20/25/30W	Selectable 30/35/40W	Selectable 20/25/30W	Selectable 20/25/30W	Selectable 30/35/40W
Delivered Lumens	2500 - 4000	2500 - 4000	4000 - 5000	2500 - 4000	2500 - 4000	4000 - 5000
Efficacy (lm/W)	125					
CCT	Selectable 3500K, 4000K or 5000K					
CRI	80					
L70 Lifetime (hrs)	50,000					
Voltage	120-277V					
Power Factor	0.9					
Dimming	Yes (0-10V)					
Housing Material	Steel/Aluminum					
Lens	Frosted Acrylic					
Operating Temperature Range	-25°C to 45°C					
Listings	UL Listed - DLC 5.1 Premium					
Warranty	5 Years Standard					
Environment	Damp Location, IC Rated					

Controls Ready Troffer and Retrofit Kit

Photometric Information

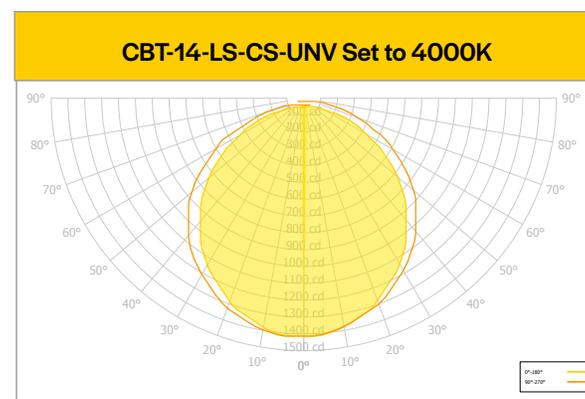
CBT-14-LS-CS-UNV_4000K_30W_81798_Center Basket Troffer



Information	
RF	85
RG	97

Zonal Lumen Summary

Zonal	Lumens	% Fixture
0° - 10°	133.95	3.27%
10° - 20°	381.81	9.31%
20° - 30°	576.87	14.07%
30° - 40°	694.21	16.93%
40° - 50°	722.48	17.62%
50° - 60°	660.83	16.12%
60° - 70°	518.18	12.64%
70° - 80°	314.46	7.67%
80° - 90°	96.56	2.36%
0° - 90°	4099.34	100.00%

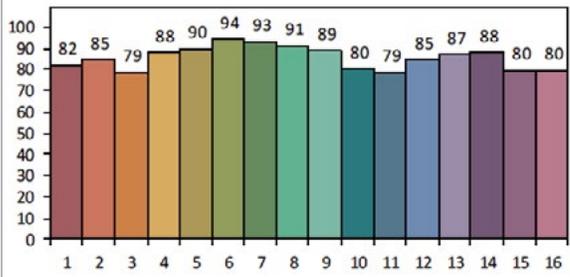


Controls Ready Troffer and Retrofit Kit

Photometric Information

CBT-22-LS-CS-UNV_4000K_30W_81799_Center Basket Troffer

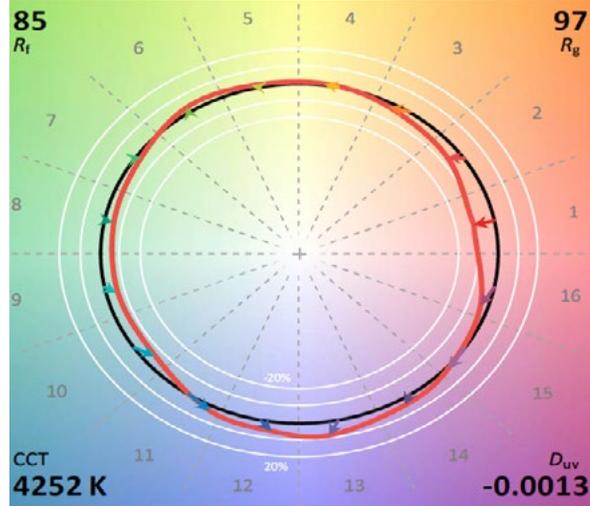
CBT-22-LS-CS-UNV Set to 4000K



Zonal Lumen Summary

Zonal	Lumens	% Fixture
0° - 10°	150.10	3.70%
10° - 20°	427.14	10.53%
20° - 30°	638.96	15.75%
30° - 40°	747.05	18.41%
40° - 50°	730.71	18.01%
50° - 60°	606.70	14.96%
60° - 70°	431.99	10.65%
70° - 80°	251.05	6.19%
80° - 90°	73.09	1.80%
0° - 90°	4056.79	100.00%

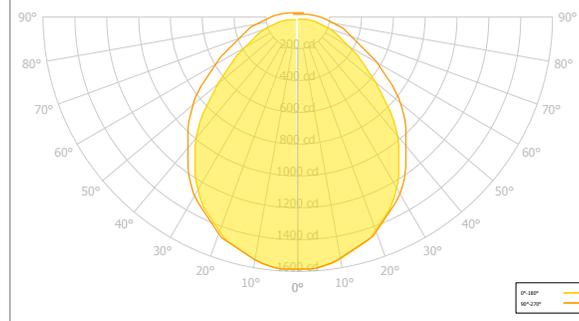
Color Vector Graphics



Information

RF	85
RG	97

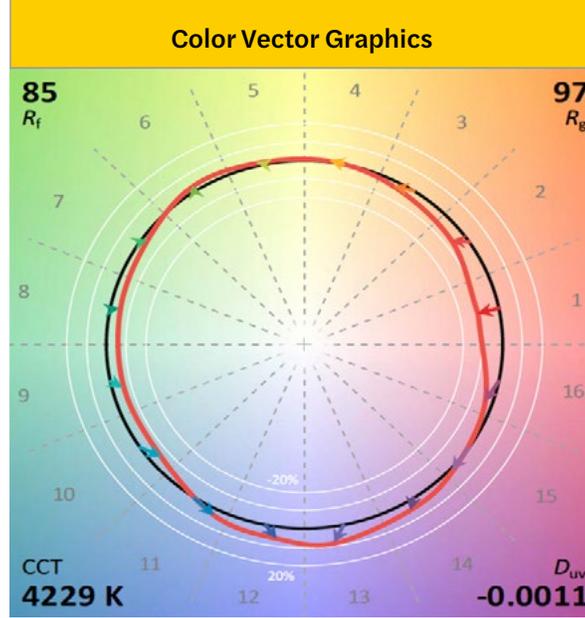
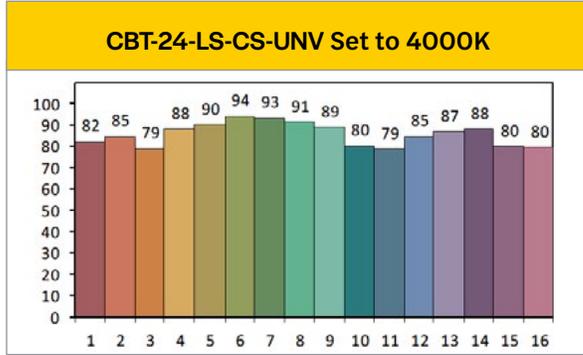
CBT-22-LS-CS-UNV Set to 4000K



Controls Ready Troffer and Retrofit Kit

Photometric Information

CBT-24-LS-CS-UNV_4000K_40W_81800_Center Basket Troffer

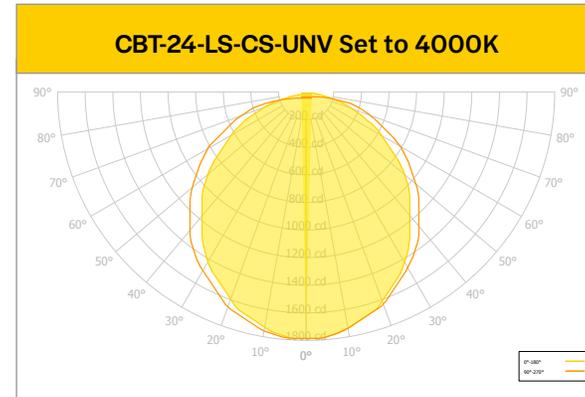


Information

RF	85
RG	97

Zonal Lumen Summary

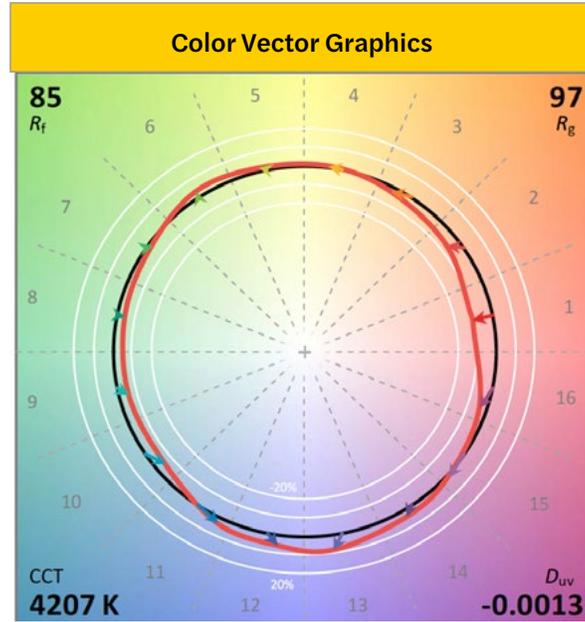
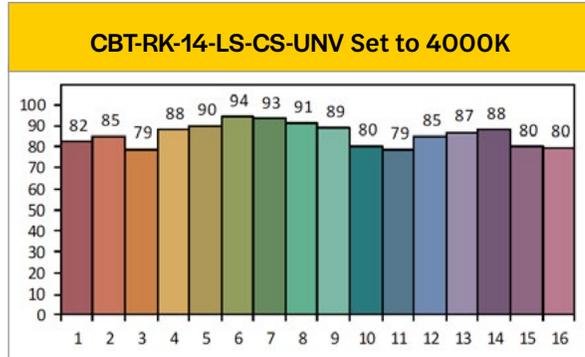
Zonal	Lumens	% Fixture
0° - 10°	169.18	3.21%
10° - 20°	481.73	9.14%
20° - 30°	725.81	13.77%
30° - 40°	870.28	16.51%
40° - 50°	902.32	17.12%
50° - 60°	827.25	15.69%
60° - 70°	669.59	12.70%
70° - 80°	454.69	8.63%
80° - 90°	170.12	3.23%
0° - 90°	5270.98	100.00%



Controls Ready Troffer and Retrofit Kit

Photometric Information

CBT-RK-14-LS-CS-UNV_4000K_30W_81801_Center Basket Retrofit Kit

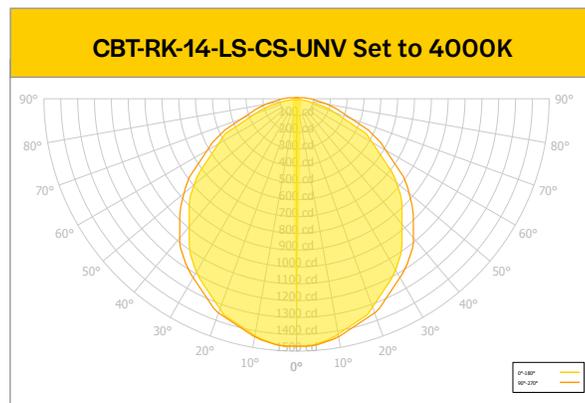


Information

RF	85
RG	97

Zonal Lumen Summary

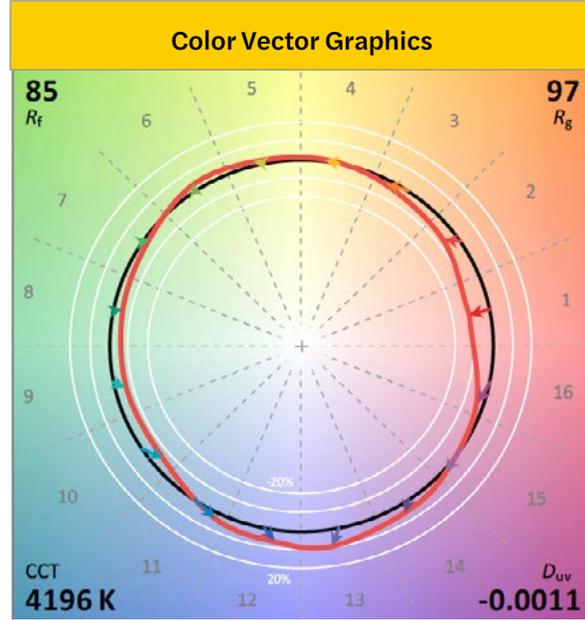
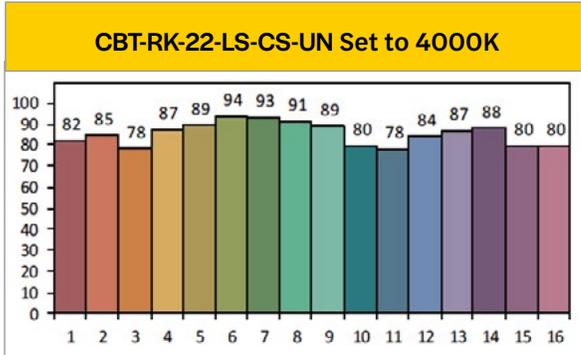
Zonal	Lumens	% Fixture
0° - 10°	138.85	3.41%
10° - 20°	395.19	9.72%
20° - 30°	597.29	14.68%
30° - 40°	720.54	17.71%
40° - 50°	747.86	18.39%
50° - 60°	666.88	16.40%
60° - 70°	492.33	12.10%
70° - 80°	260.66	6.41%
80° - 90°	47.96	1.18%
0° - 90°	4067.56	100.00%



Controls Ready Troffer and Retrofit Kit

Photometric Information

CBT-RK-22-LS-CS-UNV_4000K_30W_81802_Center Basket Retrofit Kit

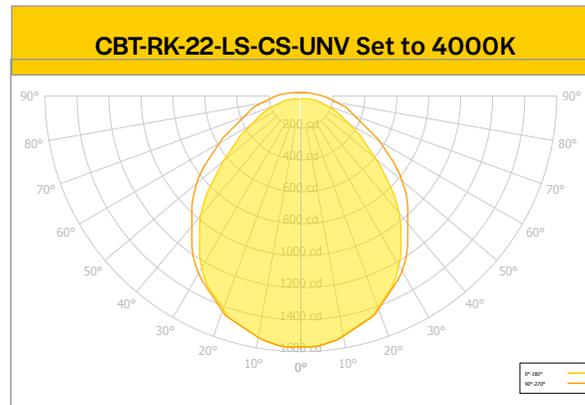


Information

RF	85
RG	97

Zonal Lumen Summary

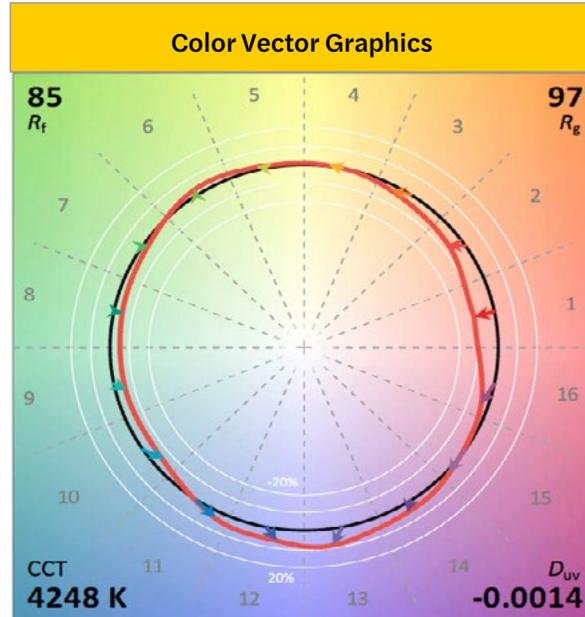
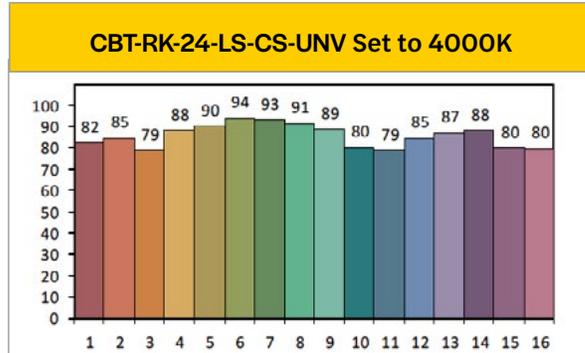
Zonal	Lumens	% Fixture
0° - 10°	148.62	3.75%
10° - 20°	422.11	10.66%
20° - 30°	629.75	15.90%
30° - 40°	733.67	18.53%
40° - 50°	714.27	18.04%
50° - 60°	589.95	14.90%
60° - 70°	417.70	10.55%
70° - 80°	239.53	6.05%
80° - 90°	64.76	1.64%
0° - 90°	3960.37	100.00%



Controls Ready Troffer and Retrofit Kit

Photometric Information

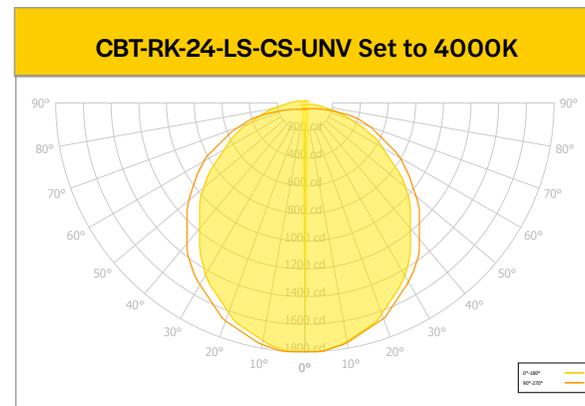
CBT-RK-24-LS-CS-UNV_4000K_40W_81803_Center Basket Retrofit Kit



Information	
RF	85
RG	97

Zonal Lumen Summary

Zonal	Lumens	% Fixture
0° - 10°	169.98	3.27%
10° - 20°	482.72	9.29%
20° - 30°	725.05	13.95%
30° - 40°	866.44	16.67%
40° - 50°	894.67	17.22%
50° - 60°	816.06	15.70%
60° - 70°	655.82	12.62%
70° - 80°	437.70	8.42%
80° - 90°	147.80	2.84%
0° - 90°	5196.24	100.00%



Controls Ready Troffer and Retrofit Kit Accessories

81810-Surface Mount Kit for 1X4 Center Basket Troffer



81813-Flange Mount Kit for 1X4 Center Basket Troffer



81811-Surface Mount Kit for 2X2 Center Basket Troffer



81814-Flange Mount Kit for 2X2 Center Basket Troffer



81812-Surface Mount Kit for 2X4 Center Basket Troffer



81815-Flange Mount Kit for 2X4 Center Basket Troffer



81816-Center Basket Troffer End Cap with Emergency Test Switch



81817-Center Basket Troffer End Cap with 3.5MM Receptacle



81818-Center Basket Troffer End Cap Replacement Blank



81819-Emergency Battery Backup 8W 120-277V and CBT End Cap with Emergency Test Switch



90550-PIR Sensor with Daylight Harvest 0-10V Dim 3.5mm Receptacle



90552-Microwave Sensor with Daylight Harvest 0-10V Dim 3.5mm Receptacle



30292-Motion Control Sensor Remote



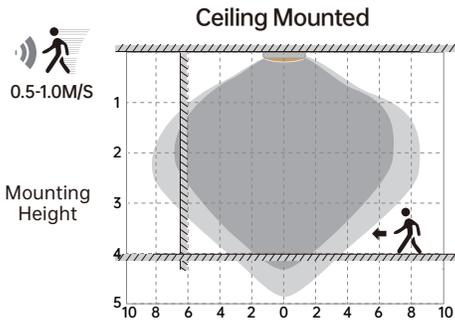
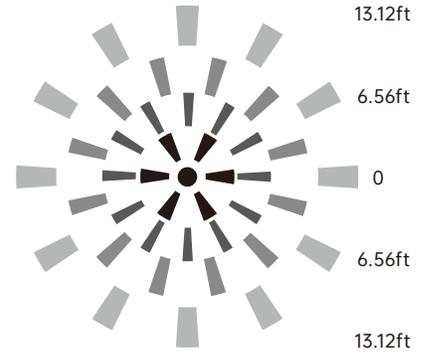
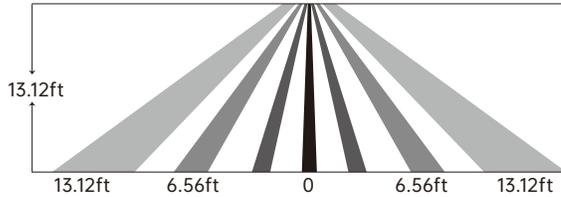
Controls Ready Troffer and Retrofit Kit

Detection Coverage

PIR Sensor

Mounting Height
 <4m/13.12' Ceiling Mounted

Detection Distance
 Radius 2-4m/6.56-13.12'



Microwave Sensor

Highest mounting height is 4m/13.12'.

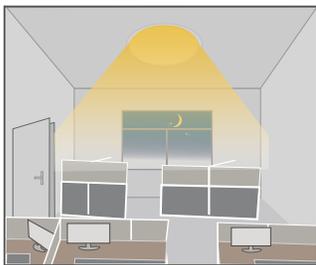
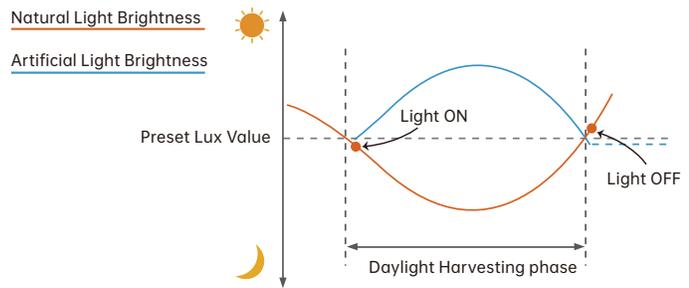
This figure indicates the maximum distance at the highest mounting height with 100% sensitivity.

Well Detected Area Possibly Detected Area

Performance

1. Daylight Harvesting

1. Adjust "daylight" value higher than 50lux
2. Preset "standby period" 0S
3. press MW/PIR button 3 times till MW/PIR icons both blinking on LCD screen, daylight harvesting function enabled.



When ambient brightness is lower than preset lux level, sensor will turn on light automatically and keep dimming according to the change of the ambient brightness; when outside is getting darker, the inside will be brighter, and brighter darker.

Light OFF when ambient brightness becomes higher than the preset lux level.

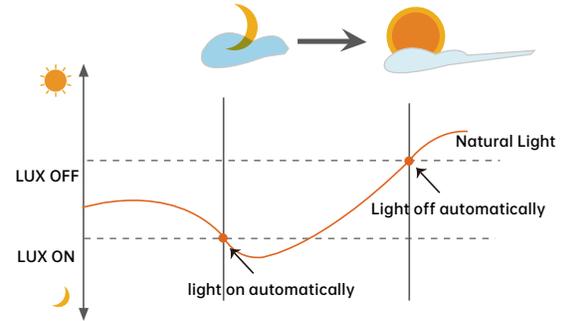
Controls Ready Troffer and Retrofit Kit

2. Dusk/Dawn function

Sensor is able to differentiate artificial light brightness from natural light after installed inside the fixture, and automatically turn off light when ambient brightness exceeds preset lux level.

Precondition of Dusk/Dawn function:

1. Standby period is +∞;
2. Standby dimming level is on 10%, 20% or 30%;
3. Daylight threshold is on 30lux/ 50lux/ 80lux/ 120lux/ 200Lux/ 250Lux/300Lux/ 350Lux/ 400Lux



3. With Dusk/Dawn function



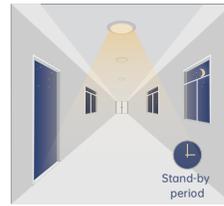
With insufficient ambient brightness, sensor turns on light and keeps it at standby dimming level even if there is no motion or presence.



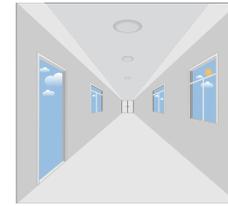
When sensor detects motion or presence it will bring the light level up to 100%.



After motion is no longer detected, fixture remains at 100% for hold time.



After pre-set hold time period it will dim light to standby dimming level again and always keep it.



With sufficient ambient brightness, sensor will turn OFF light automatically.

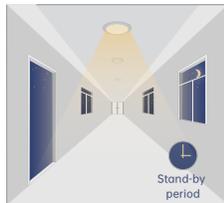
4. Without daylight disabled



Sensor turns ON light when motion is detected.



Sensor keeps for a hold time period after motion leaves

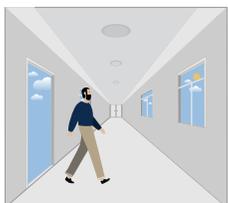


Sensor dims light to standby dimming level after hold time if there is still no motion

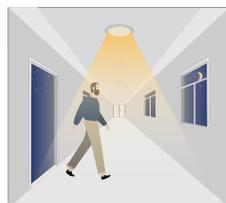


Sensor turns OFF light after standby period

5. With Daylight Threshold



With sufficient daylight, the sensor keeps light OFF even motion gets detected



With insufficient daylight, the sensor turns light ON when motion gets detected



After there's no motion detected, the sensor keeps light ON 100% for holdtime.



After holdtime, sensor dims light to standby dimming level for standby period. if the standby period has been set as 0s, sensor turns light OFF automatically after holdtime.



The sensor turns OFF light automatically after the standby period when there's no motion detected.