



TRFC-O

Floating Curved Back-lit LED Troffer



Designed to deliver an unprecedented uniformity and functionality, this floating curved troffer features a compact yet sturdy aluminum construction designed to blend into modern architectural spaces. Featuring a low profile form factor, it is ideal for buildings with a low plenum space and is suitable for all standard 2x2ft, 1X4ft or 2x4ft grid ceilings. This creates a soft and comfortable lighting experience for commercial and institutional spaces including open offices, classrooms, retail and healthcare facilities, goes beyond what was previously possible with traditional LED luminaires.



Feature

- Low profile design
- Uniform and soft illumination with back-lit technology
- CCT adjustable from 3500k, 4000k and 5000k
- Wattage selectable, up to 110lm/w or 125lm/w



*DesignLights Consortium Qualified and classified for DLC standard/premium, refer to www.designlights.org for details

PERFORMANCE

Model NO.	Dimension	Wattage Adjustable	Lumen@4000K	Efficacy@4000K	CCT Adjustable
TRFC-O	2'x2'	35W/30W/25W	3850lm	DLC Standard Up to 110lm/w	3500K/4000K/5000K
TRFC-O	2'x4'	50W/40W/30W	5500lm		
TRFC-O	1'x4'	35W/30W/25W	3850lm		
TRFC-O	2'x2'	35W/30W/25W	4300lm	DLC Premium Up to 125lm/w	
TRFC-O	2'x4'	50W/40W/30W	6200lm		

All efficacy is ±5% based on different CCT and wattage. Check the IES file to gain the accurate data.



TRFC-O

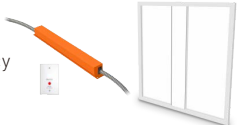
Floating Curved Back-lit LED Troffer

PRODUCT ORDERING GUIDE

Example: TRFC-O-22-DM-TWTS

TRFC-O		DM	TW	
Product Series	Size	Dimming	CCT	Efficacy
TRFC-O Floating Curved Troffer	22 2x2FT 24 2x4FT 14 1x4FT (Only DLC Standard 110LM/W)	D10 110-277V AC, Dims to 10% (Standard) <i>Tested Dimmers: Lutron® Diva-Dvtv, Leviton® IP-710-DL.</i>	TW CCT adjustable 3500K/4000K/5000K	TS DLC Standard, 110lm/w TP Make to Order DLC Premium, 125lm/w* TO Make to Order Smart Control (110lm/w or 125lm/w)*

OPTIONAL FUNCTIONS

Optional Function	
EME Emergency - External Only external 16w or 25w LED emergency driver with standard indicator available and need field-installed. 	OCC Make to Order Sensor - Built-in* We can provide a factory-installed integrated sensor system for multi-level control based on motion and/or daylight contribution. For more info or spec sheet, please contact sales. 
EMI Make to Order Emergency - Built-in Built-in 6W LED emergency driver and indicator before delivery. 	
EMF Emergency - Built-in EM, External Indicator Built-in 6W LED emergency driver before delivery. Indicator needs field-installed. 	*Make to Order means additional cost and/or lead time on customized fixtures may apply. Some fixtures require an MOQ. Please contact your sales rep for more information.

PRODUCT PERFORMANCE

Finish

Extruded aluminum housing with powder coat white finish provides long term performance and superior aesthetic.

Electrical

LED Driver	It is powered by Class 2 high efficiency LED driver, with a standard 0-10V dimming which continuous dims to 10% that works with many types of controls. Tested Dimmers: LUTRON® NTSTV-DV, LUTRON® DVSTV, LUTRON® MS-Z101, LEVITON® DD710, LEVITON® IP710, LEGRAND RH4FBL3PTC.
THD	<20%
Power Factor	>0.9
Input Voltage	Standard electronic driver is UL recognized and available for 110-277V or 110-347V* AC.

Mounting

Recessed

LED System

CRI	Minimum 80 color rendering index
CCT	CCT adjustable from 3500K and 5000K with a great color consistency
LED	life Minimum 50,000h with 87.8% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.
Thermal Management	Aluminum housing acting as the heat sink to maximize life.
Environment	Damp rated in operating ambient temperatures of -20°C~40°C .

Approvals

- cULus listed for damp locations
- CCEA Option
- Tested to IESNA LM-79 and LM-80
- DesignLights Consortium Qualified and classified for DLC standard/premium, refer to www.designlights.org for details
- 5 years limited warranty

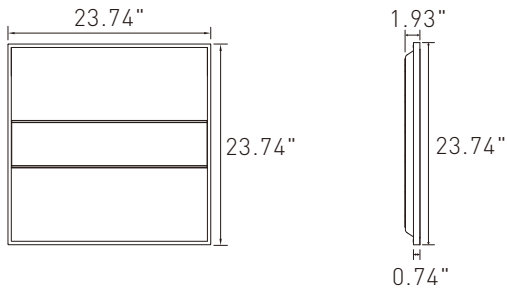


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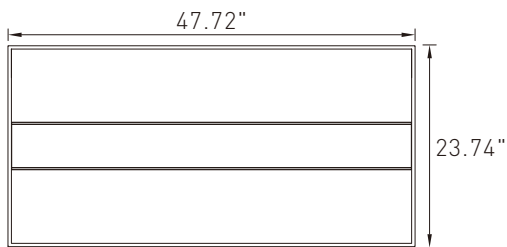
Floating Curved Back-lit LED Troffer

DIMENSION

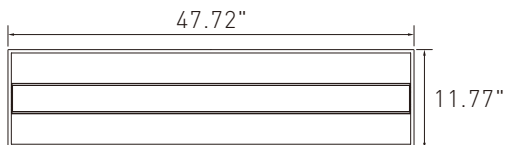
2x2ft



2x4ft



1x4ft



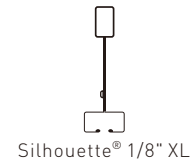
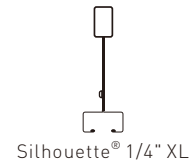
T-GRIDS CEILING COMPATIBILITY

It is architectural recessed lighting solution that compatible with most 15/16" and 9/16" t-grid systems for commercial and institutional environment. The following are only as some common examples to show.

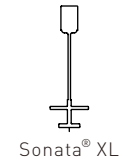
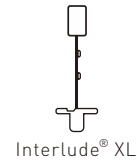
9/16" Flat



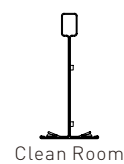
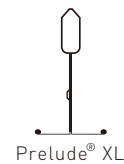
9/16" Slot



9/16" Interlude



15/16" Flat



*Please verify compatibility with factory.

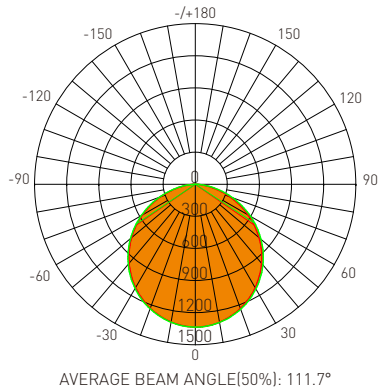


TRFC-O

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DISTRIBUTION DIAGRAM

2'X2' / 3500K
DLC Standard, 110lm/w



Lumens: 3747.4 Lm
Watts: 33.80 W
LPW: 110.86 Lm/W
CCT: 3500K

UNIT: cd
— C0/180, 110.8°
— C30/270, 112.6°

Zonal Flux Diagram

T	C0	C45	C90	C135	C180
10	1308	1309	1311	1307	1306
20	1233	1236	1242	1233	1232
30	1118	1121	1132	1118	1115
40	964.2	968.6	983.4	966.3	961.9
50	777.6	785.4	802.5	783.2	777.2
60	566.6	575.9	594.9	575.0	568.6
70	344.4	354.0	372.1	354.2	346.5
80	128.7	139.2	154.9	139.9	132.6
90	0	0	0	0	0
100	0	0	0	0	0
110	0	0	0	0	0
120	1.021	0.0582	0.0031	0.0692	0.3140
130	1.326	0.1745	1.151	0.0346	0.9394
140	1.302	0	1.281	0	1.406
150	1.213	0	0.7683	0	1.452
160	0.8069	0	0.7699	0	1.452
170	1.023	0.1111	0.7715	0	1.452
180	1.196	0.1708	0.9402	0	1.452
DEG	LUMINOUS INTENSITY:cd				

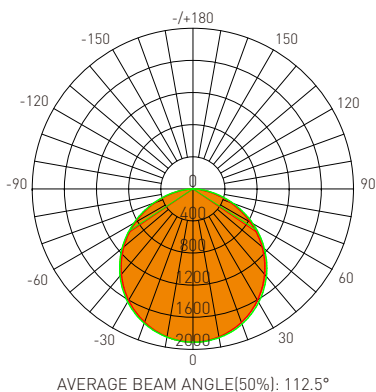
Zonal Lumens

T	Φ total
0-10	126.1
10-20	486.2
20-30	1031
30-40	1686
40-50	2364
50-60	2972
60-70	3430
70-80	3686
80-90	3745
90-100	3745
100-110	3745
110-120	3745
120-130	3746
130-140	3746
140-150	3747
150-160	3747
160-170	3747
170-180	3747
UNIT: lm	

Luminance cd/(m2)

G(DEG)	C0/180	C90/270
85	4616	6897
80	7416	8919
75	8994	10072
70	10072	10875
65	10794	11451
60	11335	11895
55	11773	12229
50	12101	12481
45	12370	12675

2'X4' / 3500K
DLC Standard, 110lm/w



Lumens: 5425.2 Lm
Watts: 48.74 W
LPW: 111.32 Lm/W
CCT: 3500K

UNIT: cd
— C0/180, 111.5°
— C30/270, 113.6°

Zonal Flux Diagram

T	C0	C45	C90	C135	C180
10	1871	1885	1882	1874	1870
20	1768	1790	1790	1772	1766
30	1605	1631	1635	1609	1603
40	1388	1414	1424	1393	1387
50	1123	1147	1161	1129	1124
60	821.0	840.5	860.8	829.1	824.3
70	500.1	515.0	538.1	508.5	504.0
80	185.1	205.2	225.2	204.5	198.1
90	0.0436	0.4280	1.015	0.3364	0
100	0	0.2581	0.7634	0	0
110	0.2049	0.3759	1.199	0.2440	0.2564
120	0.3209	0.4964	0	0.2991	0.4912
130	0.6043	0.4431	0	0.3249	0.9462
140	0.5623	0	0	0	1.032
150	0.5230	0	0	0	1.032
160	0.5951	0	0.1246	0	1.032
170	0.7622	0	0.1512	0.1108	1.032
180	0.6881	0	0.1698	0.1699	0.8602
DEG	LUMINOUS INTENSITY:cd				

Zonal Lumens

T	Φ total
0-10	180.6
10-20	697.7
20-30	1482
30-40	2429
40-50	3410
50-60	4293
60-70	4959
70-80	5333
80-90	5423
90-100	5423
100-110	5424
110-120	5424
120-130	5425
130-140	5425
140-150	5425
150-160	5425
160-170	5425
170-180	5425
UNIT: lm	

Luminance cd/(m2)

G(DEG)	C0/180	C90/270
85	7012	10530
80	10671	12962
75	13070	14547
70	14634	15729
65	15670	16562
60	16434	17211
55	17045	17696
50	17492	18060
45	17844	18351

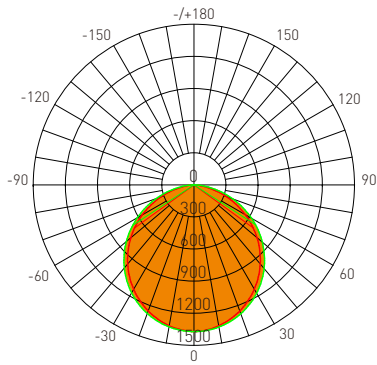


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DISTRIBUTION DIAGRAM

1'X4' / 3500K
DLC Standard, 110lm/w



Lumens: 3786.8 Lm
Watts: 33.72 W
LPW: 112.30 Lm/W
CCT: 3500K

UNIT: cd
— C0/180, 108.0°
— C30/270, 113.7°

Zonal Flux Diagram

τ	C0	C45	C90	C135	C180
10	1336	1347	1348	1340	1336
20	1254	1271	1281	1261	1252
30	1127	1150	1170	1138	1126
40	963.6	989.3	1020	978.3	964.1
50	769.5	795.2	834.4	786.5	771.1
60	551.3	576.8	620.4	571.2	554.9
70	322.2	345.0	387.4	343.2	327.4
80	102.7	128.4	159.0	128.4	111.3
90	0	0.0247	0.5103	0.0435	0
100	0	0	0.5118	0	0
110	0	0	0.5112	0	0
120	0	0.3431	0	0	0
130	0	0.5709	0	0.2935	0.2782
140	0	0.7287	0	0.4054	0.4477
150	0.0863	1.378	0	0.5128	0.6047
160	0.3184	1.551	0	1.301	0.7618
170	1.149	2.584	0.0846	0.398	1.383
180	1.209	2.671	0	2.658	1.468
DEG	LUMINOUS INTENSITY:cd				

Zonal Lumens

τ	φ total
0-10	129.4
10-20	498.5
20-30	1056
30-40	1724
40-50	2412
50-60	3025
60-70	3482
70-80	3729
80-90	3784
90-100	3784
100-110	3785
110-120	3785
120-130	3785
130-140	3785
140-150	3786
150-160	3786
160-170	3787
170-180	3787
UNIT: lm	

Luminance cd/(m2)

θ(DEG)	C0/180	C90/270
85	4497	7271
80	5915	9158
75	8087	10431
70	9427	11330
65	10340	11958
60	11033	12412
55	11548	12744
50	11979	12985
45	12309	13172

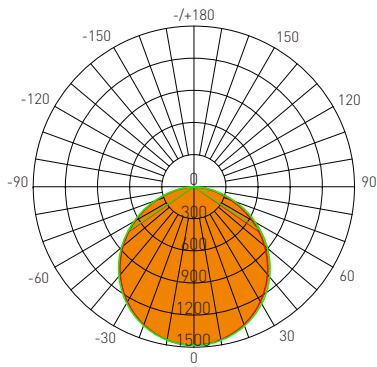


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DISTRIBUTION DIAGRAM

2'x2' / 3500K
DLC Premium, 125lm/w



Lumens: 4150.6 Lm
Watts: 33.33 W
LPW: 124.53 Lm/W
CCT: 3500K

UNIT: cd
— C0/180, 110.5°
— C90/270, 112.8°

Zonal Flux Diagram

°	C0	C45	C90	C135	C180
10	1450	1453	1457	1453	1453
20	1370	1373	1384	1374	1372
30	1241	1247	1264	1248	1243
40	1070	1078	1101	1079	1072
50	860.4	872.3	897.3	873.8	864.0
60	624.0	635.7	660.6	638.2	629.9
70	372.8	383.4	406.9	386.8	377.2
80	133.4	143.2	161.2	144.8	137.7
90	0.0021	0.0154	0	0.0186	0
100	0	0.0855	0.0843	0	0
110	0.3419	0.3454	0.2090	0.1235	0
120	1.234	0.7687	0.4805	0.6007	0.5619
130	1.357	0.7823	1.200	0.7923	1.112
140	1.363	0.0046	1.456	0.1699	1.539
150	1.370	0	1.029	0	1.539
160	0.9420	0	1.029	0	1.539
170	1.227	0	1.030	0	1.539
180	1.368	0	1.285	0	1.539
DEG	LUMINOUS INTENSITY:cd				

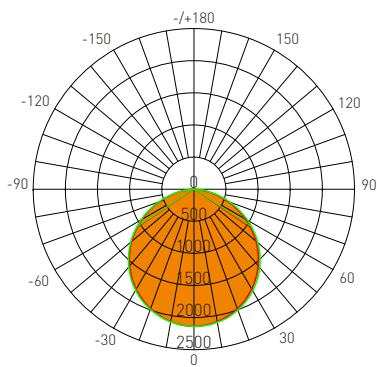
Zonal Lumens

°	Φ total
0-10	140.1
10-20	540.7
20-30	1147
30-40	1878
40-50	2633
50-60	3309
60-70	3813
70-80	4087
80-90	4147
90-100	4147
100-110	4147
110-120	4148
120-130	4148
130-140	4149
140-150	4150
150-160	4150
160-170	4151
170-180	4151
UNIT: lm	

Luminance cd/(m2)

G(DEG)	C0/180	C90/270
85	4593	6975
80	7692	9281
75	9546	10793
70	10911	11889
65	11823	12647
60	12493	13205
55	13012	13623
50	13399	13952
45	13717	14196

2'x4' / 3500K
DLC Premium, 125lm/w



Lumens: 6069.9 Lm
Watts: 48.04 W
LPW: 126.34 Lm/W
CCT: 3500K

UNIT: cd
— C0/180, 111.8°
— C30/270, 113.6°

Zonal Flux Diagram

°	C0	C45	C90	C135	C180
10	2094	2110	2106	2095	2093
20	1979	2006	2002	1983	1978
30	1797	1827	1830	1802	1798
40	1555	1584	1593	1562	1558
50	1259	1285	1300	1268	1267
60	919.8	941.1	964.0	933.4	932.7
70	556.8	573.5	599.4	572.1	571.6
80	201.0	221.6	243.3	222.2	216.3
90	0.1136	0.7697	1.433	0.5891	0
100	0	0.7102	1.305	0.4701	0
110	0.3406	1.044	1.359	0.9808	0.6507
120	1.235	1.248	0.2519	1.237	1.040
130	1.347	1.061	0.1689	1.118	1.372
140	1.370	0.1701	0.1689	1.118	1.372
150	1.113	0	0.1689	0	1.455
160	0.9550	0	0.1689	0.0001	1.455
170	1.444	0	0.1689	0	1.455
180	1.370	0	0.1689	0	1.455
DEG	LUMINOUS INTENSITY:cd				

Zonal Lumens

°	Φ total
0-10	202.0
10-20	780.6
20-30	1659
30-40	2719
40-50	3819
50-60	4809
60-70	5556
70-80	5969
80-90	6065
90-100	6066
100-110	6067
110-120	6068
120-130	6068
130-140	6069
140-150	6069
150-160	6070
160-170	6070
170-180	6070
UNIT: lm	

Luminance cd/(m2)

G(DEG)	C0/180	C90/270
85	7292	11045
80	11592	14002
75	14422	16033
70	16302	17511
65	17525	18515
60	18421	19266
55	19103	19801
50	19614	20210
45	20004	20531



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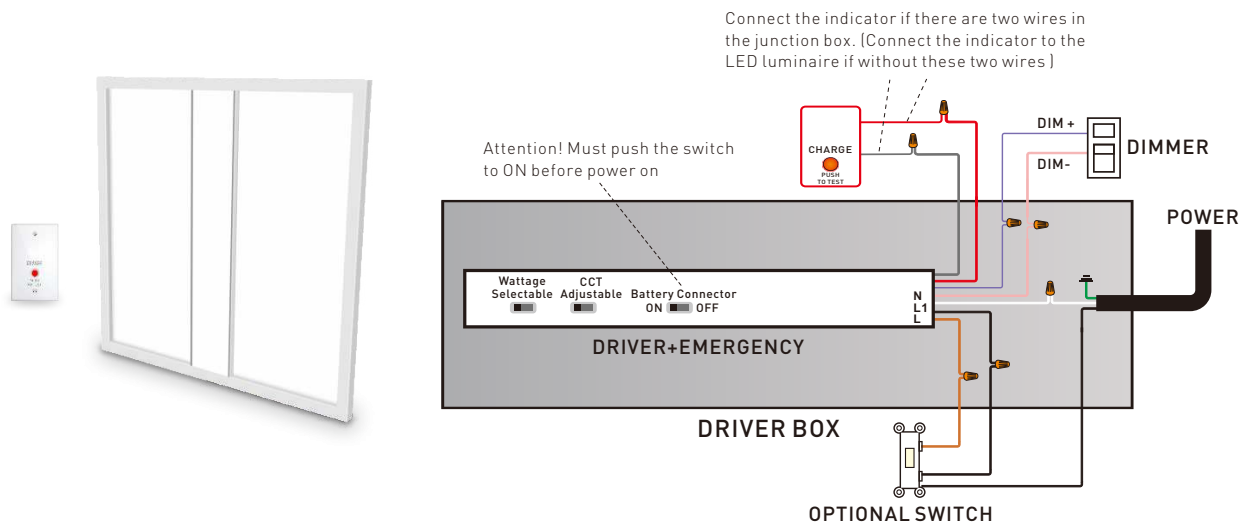
EMERGENCY WIRING

Longer driver box with built-in LED emergency driver with the same package as standard.
Save your labor cost with simple wiring.

EMF

Emergency - Built-in EM, External Indicator

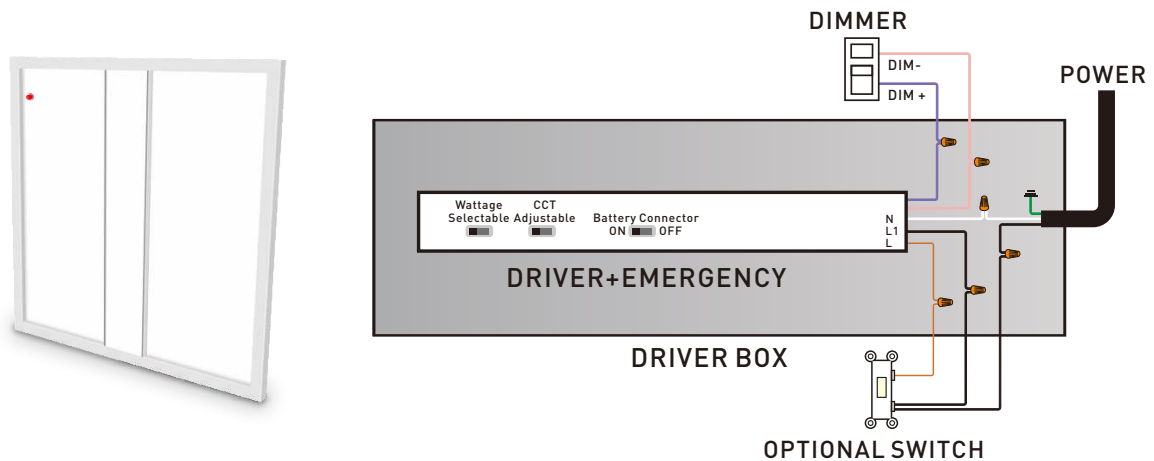
Built-in 6W LED emergency driver before delivery. Indicator needs field-installed.



EMI

Emergency - Built-in

Built-in 6W LED emergency driver and indicator before delivery.



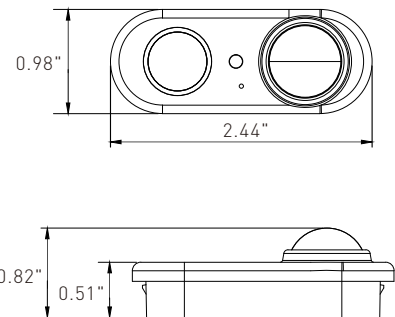


TRFC-O

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IFS108E



MODEL	DESCRIPTION
IFS108E	Fixture Integrated PIR & Daylight Harvesting Sensor

There are no Bluetooth* Chip built-in the Eco Sensors, it has to work with FA102 or Smart Driver.\ Network function will be available only when FA102 connected



PRODUCT OVERVIEW

ECO-Sensor Family, Powered By Fixture Adapter or Smart Driver

The ECO-Sensors are designed as Cost-effective Network control solution for OEM customers, combine occupancy sensing, daylight harvesting, 0-10V dimming into a mini size that fits into various luminaires.

System Features

This function will be available only FA102 device connected.

Network Technology For Bluetooth* enabled iOS or Android smartphone

Flexible Grouping and Zoning: Wirelessly group luminaires to act in sync with each other.

Wireless Commissioning: Convenient commission via smartphone or wireless wall switch, ON/OFF/DIM.

Fixture Integrated: The node/sensor is fixture-integrated, allow for faster installation and lower cost for luminaire manufacturers.

Colour Tuning / CCT Selectable: When work with colour tunable luminaires, Keilton support manually colour tuning and CCT selections.

Scene Control: Pre-set various colour and brightness for individual or group of luminaires under different scene buttons, arouse all settings with one button.

Scheduling: Schedule various scene in different time, repeat weekly.

QR Code for Admin / Guest Control Authority: The system will automatically generate Admin and Guest QR codes for each zone, by scanning the QR code, a second phone will copy all settings.

PIR Occupancy Sensor: Support setting delay time and dimming level for a group of sensors through APP, support unique sensor linkage reaction.

Microwave Occupancy Sensor: Support setting delay time and dimming level for a group of sensors through APP, support unique sensor linkage reaction.

Daylight harvesting: Ambient daylight sensor allows for continuous dimming with natural light, wireless calibration available.

Linkage Brightness: In a lighting group, when a sensor is triggered, it will become master, other members in the same group will become slaves, and turn on light at linkage brightness.

SPECIFICATIONS AND FEATURES

Input Voltage: 12V DC

Rated Current: 25mA

Detection Range: 48-80ft

Mounting Height: 15ft

Detection Speed: 1-20ft./sec.
(0.3~3m/sec)

Op.temperature:-40 °F ~131 °F

Op. humidity: IP40



Disclaimer:

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