

Floating Curved Troffer

Back-lit LED | CCT & Wattage Adjustable



ARCHITECTURAL LIGHTING SOLUTIONS



Designed to deliver an unprecedented uniformity and functionality, this back-lit panel 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



PERFORMANCE

Model NO.	Dimension	Wattage Selectable	Lumen @ 4000K	Efficacy@4000K	CCT Adjustable
TVR22-DM-TWPS	2'x2'	35W/30W/25W	3850lm	DLC Standard Up to 110lm/w	3500K/4000K/5000K
TVR24-DM-TWPS	2'x4'	50W/40W/30W	5500lm		
TVR14-DM-TWPS	1'x4'	35W/30W/25W	3850lm		
TVR22-DM-TWPP	2'x2'	35W/30W/25W	4300lm	DLC Premium Up to 125lm/w	
TVR24-DM-TWPP	2'x4'	50W/40W/30W	6200lm		

All efficacy is $\pm 5\%$ base on different CCT. Check the IES file to gain the accurate data .

PRODUCT ORDERING GUIDE

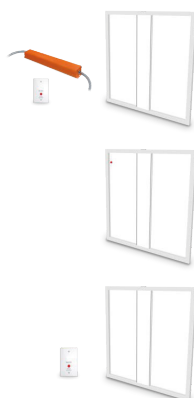
Example: TVR22-DM-TWPS

TVR		DM	TW	
Product Series	Size	Dimming	CCT	Efficacy
Back-lit LED Panels	2x2FT 2x4FT 1x4FT	110-277V AC, Dims to 10% (Standard) <i>Tested Dimmers: Lutron® Diva-Dvtr, Leviton® IP-710-DL.</i> *Additional cost and/or lead time on customized fixtures may apply. Some fixtures require an MOQ. Please contact your sales rep for more information.	CCT adjustable 3500K/4000K/5000K	- DLC Standard, 110lm/w - DLC Premium , 125lm/w - Smart Control (110lm/w or 125lm/w)

OPTIONAL FUNCTIONS

Optional Function

- Emergency - External
Only external 8w or 25w LED emergency driver with standard indicator available and need field-installed.
- Emergency - Built-in
Built-in 6W LED emergency driver and indicator before delivery.
- Emergency - Built-in EM, External Indicator
Built-in 6W LED emergency driver before delivery. Indicator needs field-installed.



- 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.



*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 1-10V 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

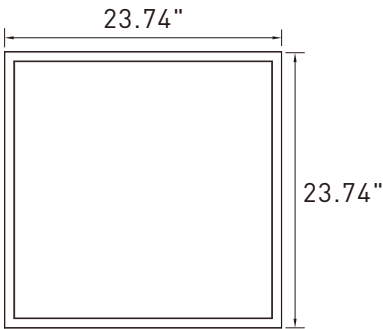
CRI	Minimum 80 color rendering index
CCT	CCT adjustable from 3500K, 4000K and 5000K with a great color consistency
LED	life Minimum 50,000h with 87.8% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.
Thermal Management	Aluminum housing acting as the heat sink to maximize life.
Environment	Damp rated in operating ambient temperatures of -20°C~40°C .

Approvals

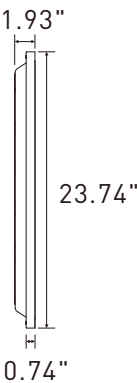
- cULus listed for damp locations
 - Tested to IESNA LM-79 and LM-80
 - DesignLights Consortium Qualified and classified for DLC
 - standard/premium, refer to www.designlights.org for details
- 5 years limited warranty

DIMENSION

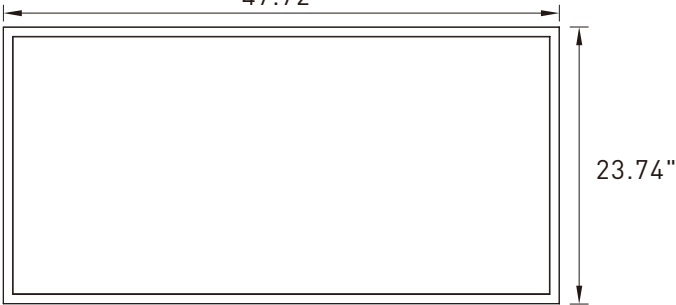
2x2ft



2x4ft

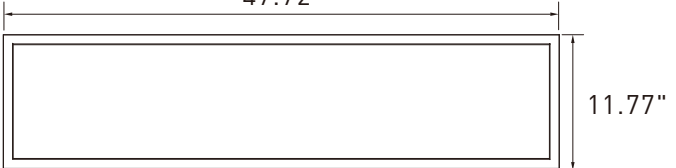


47.72"



1x4ft

47.72"



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

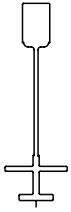


Suprafine® XL

9/16" Interlude



Interlude® XL



Sonata® XL

9/16" Slot



Silhouette® 1/4" XL

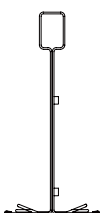


Silhouette® 1/8" XL

15/16" Flat



Prelude® XL



Clean Room

*Please verify compatibility with factory.

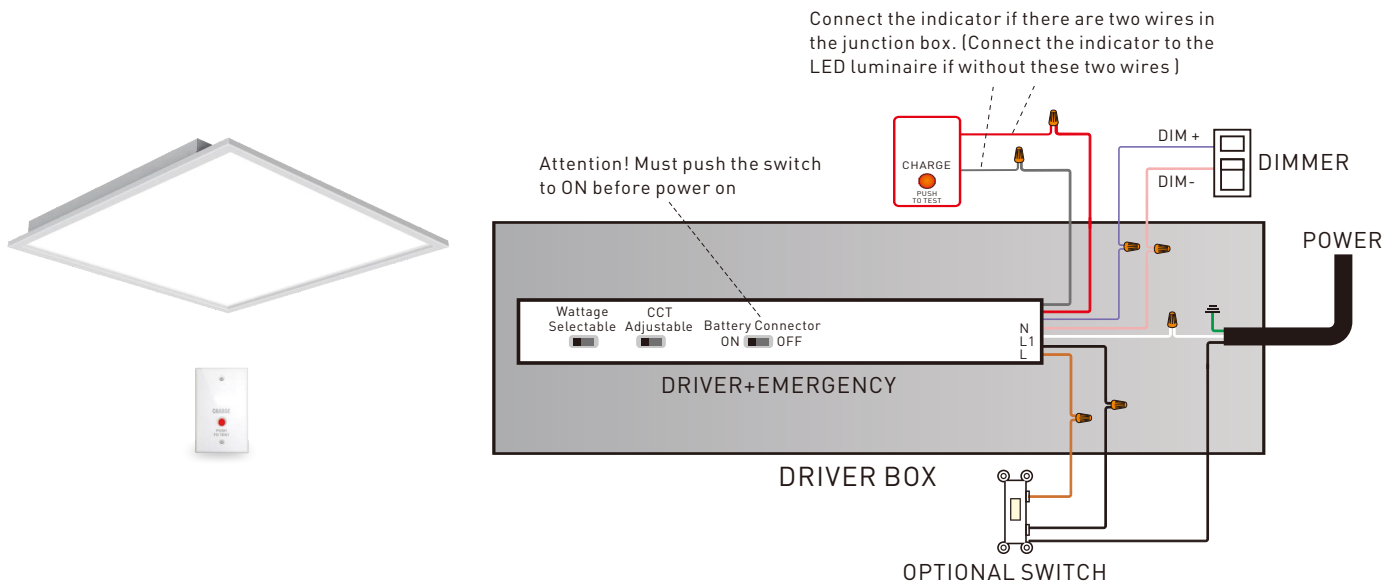
EMERGENCY WIRING

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

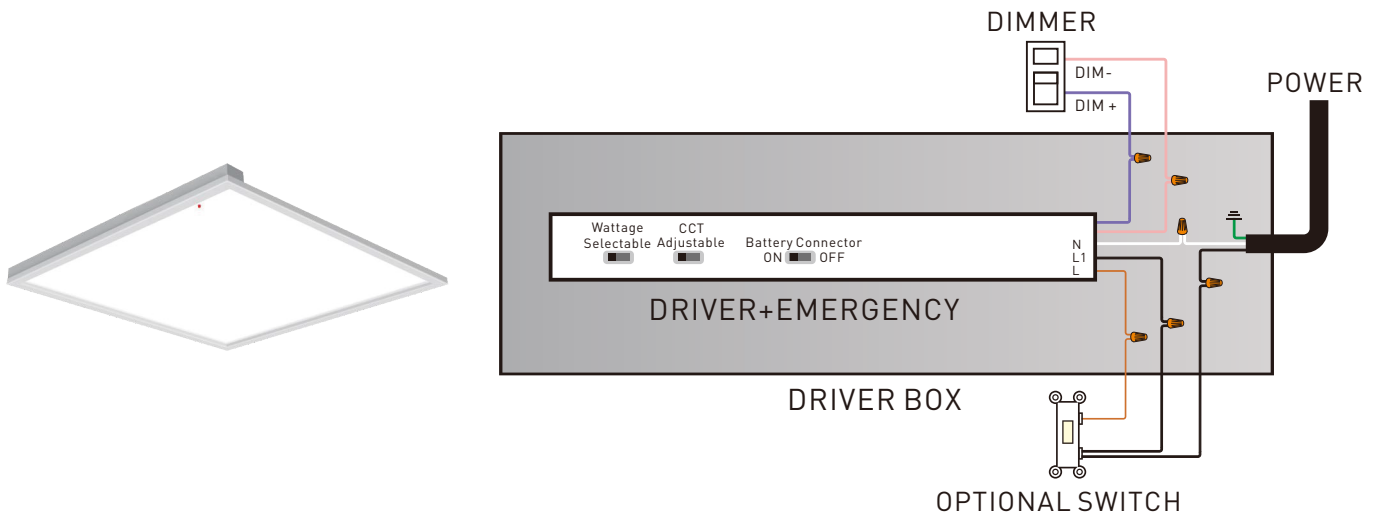
Built-in 6W LED emergency driver before delivery. Indicator needs field-installed.



EMI

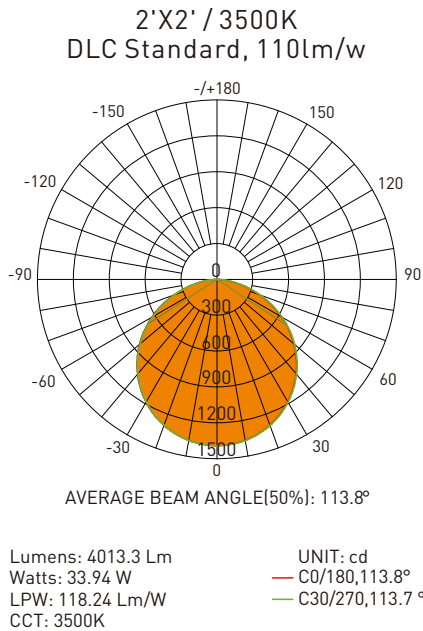
Emergency - Built-in

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



VBack-lit LED Panels Back-lit LED | CCT & Wattage Adjustable

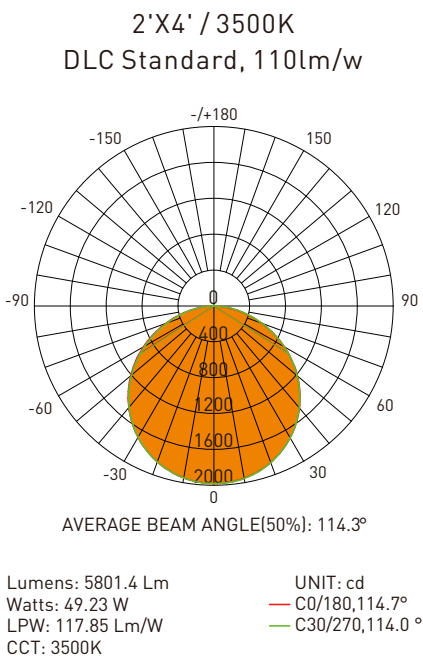
DISTRIBUTION DIAGRAM



Zonal Flux Diagram					
Y	C0	C45	C90	C135	C180
10	1366	1367	1368	1368	1368
20	1297	1298	1300	1299	1299
30	1183	1186	1188	1187	1186
40	1030	1034	1036	1036	1033
50	841.1	847.6	848.8	850.5	846.0
60	621.6	629.5	628.2	633.3	627.7
70	379.4	387.7	388.3	391.6	387.0
80	142.9	150.2	156.7	154.6	149.9
90	0.0014	0.0844	0.0842	0.2041	0
100	0.1674	0.0878	0	0	0
110	0.5039	0.3689	0.0844	0.3705	0.1662
120	1.347	0.9283	0.4783	0.7703	0.6749
130	1.335	0.9984	1.255	0.7183	1.264
140	1.302	0.2535	1.201	0.4218	1.433
150	1.269	0	1.114	0	1.433
160	1.134	0	1.043	0	1.433
170	1.369	0	1.093	0	1.433
180	1.433	0.2531	1.266	0	1.433
DEG	LUMINOUS INTENSITY:cd				

Zonal Lumens	
Y	φ total
0-10	131.6
10-20	509.1
20-30	1083
30-40	1779
40-50	2506
50-60	3165
60-70	3666
70-80	3945
80-90	4010
90-100	4010
100-110	4010
110-120	4010
120-130	4011
130-140	4012
140-150	4013
150-160	4013
160-170	4013
170-180	4013
UNIT: lm	

Luminance cd/(m2)		
G(DEG)	C0/180	C90/270
85	5710	6959
80	8237	9024
75	9886	10364
70	11104	11353
65	11904	12049
60	12443	12564
55	12825	12951
50	13097	13207
45	13302	13388



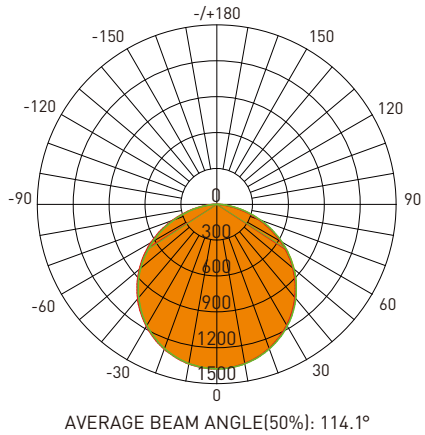
Zonal Flux Diagram					
Y	C0	C45	C90	C135	C180
10	1949	1959	1952	1946	1946
20	1856	1870	1857	1848	1849
30	1699	1713	1698	1688	1692
40	1483	1496	1481	1470	1477
50	1215	1226	1211	1204	1211
60	904.3	913.2	900.7	897.6	903.8
70	570.0	577.5	570.1	568.0	572.8
80	235.3	248.8	251.8	247.7	247.6
90	0.2569	0.6989	1.349	6.798	0
100	0	0.4724	1.151	2.045	0
110	0	0.4982	1.137	0.7072	0.2640
120	0.6089	0.6486	0	0.5700	0.6816
130	0.8588	0.6124	0	0.6712	0.8550
140	0.8223	0	0	0	0.9294
150	0.7007	0	0	0	1.004
160	0.4954	0	0.0904	0	1.162
170	0.6586	0.0877	0.1390	0	1.237
180	0.6998	0.0877	0.1730	0	1.225
DEG	LUMINOUS INTENSITY:cd				

Zonal Lumens	
Y	φ total
0-10	187.5
10-20	726.2
20-30	1547
30-40	2544
40-50	3585
50-60	4530
60-70	5257
70-80	5683
80-90	5798
90-100	5799
100-110	5800
110-120	5800
120-130	5801
130-140	5801
140-150	5801
150-160	5801
160-170	5801
170-180	5801
UNIT: lm	

Luminance cd/(m2)		
G(DEG)	C0/180	C90/270
85	10468	12586
80	13573	14498
75	15495	15700
70	16691	16666
65	17496	17408
60	18115	18012
55	18587	18470
50	18938	18834
45	19204	19112

DISTRIBUTION DIAGRAM

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



Lumens: 3990.5 Lm
Watts: 34.55 W
LPW: 115.49 Lm/W
CCT: 3500K

UNIT: cd
C0/180,114.3°
C30/270,114.0°

Zonal Flux Diagram

Y	C0	C45	C90	C135	C180
10	1351	1358	1354	1354	1354
20	1281	1292	1286	1286	1287
30	1169	1181	1177	1176	1178
40	1017	1028	1028	1026	1030
50	830.9	840.8	841.5	842.5	847.1
60	612.8	623.2	626.8	630.5	633.6
70	372.2	383.8	392.4	394.6	395.0
80	138.2	149.9	161.7	161.5	162.0
90	0	0.0331	0.6591	0.0620	0
100	0	0	0.5908	0	0
110	0	0	0.5158	0	0
120	0	0.2073	0	0.0848	0.0059
130	0	0.4226	0	0.3418	0.2402
140	0	0.5277	0	0.5738	0.5204
150	0	0.7773	0	0.5253	0.6219
160	0	1.271	0	1.286	0.7974
170	1.299	2.162	0	1.954	1.301
180	1.386	2.508	0	2.232	1.473
DEG	LUMINOUS INTENSITY:cd				

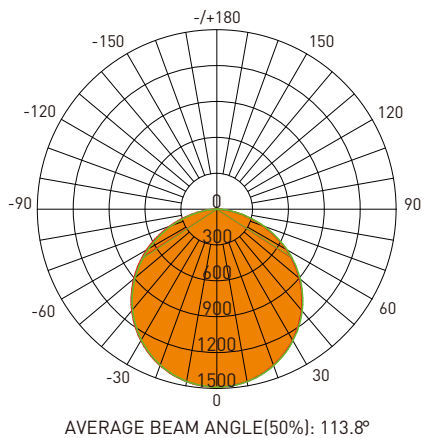
Zonal Lumens

Y	φ total
0-10	130.2
10-20	504.1
20-30	1073
30-40	1763
40-50	2484
50-60	3138
60-70	3638
70-80	3919
80-90	3988
90-100	3988
100-110	3988
110-120	3988
120-130	3989
130-140	3989
140-150	3990
150-160	3990
160-170	3990
170-180	3990
UNIT: lm	

Luminance cd/(m2)

G(DEG)	C0/180	C90/270
85	5493	7431
80	7963	9312
75	9731	10582
70	10893	11473
65	11695	12099
60	12268	12534
55	12661	12846
50	12939	13091
45	13141	13271

2'X2' / 3500K
DLC Premium, 125lm/w



Lumens: 4301.4 Lm
Watts: 33.84 W
LPW: 127.11 Lm/W
CCT: 3500K

UNIT: cd
C0/180,114.0°
C30/270,113.7°

Zonal Flux Diagram

Y	C0	C45	C90	C135	C180
10	1462	1463	1464	1464	1463
20	1387	1388	1391	1390	1390
30	1265	1267	1272	1270	1269
40	1102	1105	1109	1108	1106
50	899.5	907.2	910.1	911.1	906.2
60	667.5	676.4	678.0	681.3	675.2
70	412.2	421.3	420.7	426.6	422.6
80	158.4	163.0	167.5	169.2	168.8
90	0.0021	0.0827	0	0	0
100	0	0	0	0	0
110	0.5865	0.2873	0.2653	0.3728	0.0009
120	1.272	0.8185	0.6473	1.081	0.7099
130	1.333	0.8461	1.252	0.9871	1.351
140	1.352	0.3354	1.263	0.4227	1.606
150	1.293	0	1.396	0	1.606
160	1.014	0	1.293	0	1.606
170	1.204	0	1.279	0	1.606
180	1.268	0	1.269	0	1.690
DEG	LUMINOUS INTENSITY:cd				

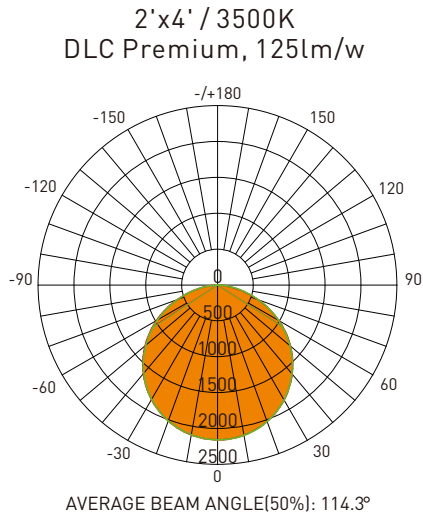
Zonal Lumens

Y	φ total
0-10	140.8
10-20	544.7
20-30	1159
30-40	1903
40-50	2680
50-60	3386
60-70	3925
70-80	4228
80-90	4298
90-100	4298
100-110	4298
110-120	4298
120-130	4299
130-140	4300
140-150	4301
150-160	4301
160-170	4301
170-180	4301
UNIT: lm	

Luminance cd/(m2)

G(DEG)	C0/180	C90/270
85	6318	7326
80	9129	9642
75	10863	11205
70	12056	12298
65	12824	13021
60	13356	13558
55	13736	13909
50	14000	14156
45	14213	14341

DISTRIBUTION DIAGRAM



Lumens: 6273.1 Lm
Watts: 48.04 W
LPW: 130.57 Lm/W
CCT: 3500K

UNIT: cd
— C0/180, 114.6°
— C30/270, 113.9°

Zonal Flux Diagram

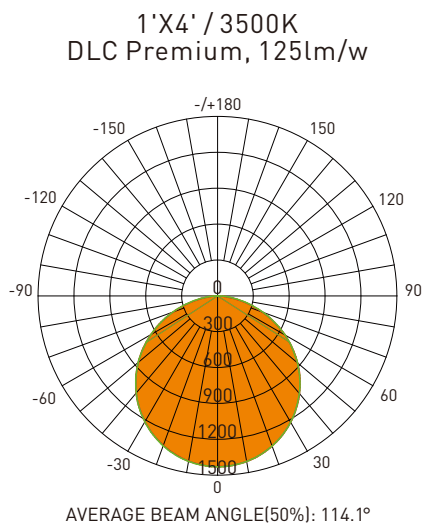
Y	C0	C45	C90	C135	C180
10	2124	2135	2126	2120	2120
20	2022	2038	2023	2013	2015
30	1852	1868	1850	1839	1843
40	1619	1633	1614	1604	1610
50	1327	1338	1320	1313	1320
60	984.1	993.5	976.9	975.5	980.9
70	602.2	614.9	607.2	604.3	605.0
80	225.5	244.8	252.7	246.0	242.0
90	0.4017	0.9521	1.566	1.256	1.279
100	0	0.4857	1.158	0.3439	0
110	0.0869	0.9575	1.246	1.041	0.4367
120	0.5235	1.143	0.0874	1.134	0.9131
130	1.144	0.7854	0	0.8596	1.194
140	1.201	0	0	0.0900	1.340
150	0.7834	0	0.0859	0	1.381
160	0.7090	0	0.0859	0	1.385
170	1.101	0	0.0859	0	1.388
180	1.304	0	0.1718	0	1.391
DEG	LUMINOUS INTENSITY:cd				

Zonal Lumens

Y	φ total
0-10	204.2
10-20	791.0
20-30	1685
30-40	2772
40-50	3906
50-60	4936
60-70	5719
70-80	6160
80-90	6269
90-100	6270
100-110	6271
110-120	6272
120-130	6272
130-140	6272
140-150	6273
150-160	6273
160-170	6273
170-180	6273
UNIT: lm	

Luminance cd/(m2)

G(DEG)	C0/180	C90/270
85	9299	11943
80	12997	14553
75	15728	16352
70	17621	17758
65	18850	18783
60	19696	19544
55	20273	20124
50	20657	20541
45	20935	20842



Lumens: 4145.4 Lm
Watts: 32.59 W
LPW: 127.20 Lm/W
CCT: 3500K

UNIT: cd
— C0/180, 114.2°
— C30/270, 114.1°

Zonal Flux Diagram

Y	C0	C45	C90	C135	C180
10	1406	1411	1405	1403	1403
20	1336	1344	1335	1331	1330
30	1221	1230	1221	1214	1215
40	1066	1072	1065	1056	1060
50	874.3	879.1	872.2	863.9	867.20
60	649.4	654.7	648.9	643.3	642.9
70	400.5	406.8	406.7	398.2	395.7
80	156.2	163.9	168.1	158.9	156.9
90	0	0.0354	0.6583	0.0612	0
100	0	0	0.8837	0	0
110	0	0	0.8582	0	0
120	0	0.4148	0	0.2001	0.1895
130	0	0.6647	0	0.4461	0.3629
140	0.0833	0.9221	0	0.6321	0.5047
150	0.0833	1.118	0	0.8234	0.6617
160	0.0833	1.427	0	1.288	0.8186
170	1.165	2.292	0	2.643	1.499
180	1.333	2.496	0	2.643	1.250
DEG	LUMINOUS INTENSITY:cd				

Zonal Lumens

Y	φ total
0-10	135.2
10-20	523.4
20-30	1114
30-40	1830
40-50	2578
50-60	3258
60-70	3777
70-80	4070
80-90	4142
90-100	4143
100-110	4143
110-120	4143
120-130	4143
130-140	4144
140-150	4144
150-160	4145
160-170	4145
170-180	4145
UNIT: lm	

Luminance cd/(m2)

G(DEG)	C0/180	C90/270
85	6865	7756
80	9004	9676
75	10654	10966
70	11722	11891
65	12470	12531
60	12999	12977
55	13355	13311
50	13615	13566
45	13794	13750