



OPPLE Lighting Lab

欧普照明实验室

PHOTOMETRIC RESULTS



Name:	OPZS201705098-03002-sidaitongdeng-yuan18W-3000K		
Program:	Far-C15-G1-Downlight		
Lum. flux:	1413.36 lm	Av. Voltage:	220.1280 V
Efficacy:	79.25 lm/ W	Av. Current:	0.13961 A
Maximum:	484.678 cd	Av. Power:	17.835 W
FluxCone-90:	749.10 lm	Av. Power Factor:	0.5803
FluxCone-120:	1107.20 lm	Company:	Oppl
Date:	5/17/2017 5:26:34 PM	Operator:	SLY

Protocol

LiTG-class: A41
 UTE-class: 1.00 E
 IES-class: 47 - 78 - 96 - 100 - 100
 TM5-class: BZ4

Divergences in the plane through maximum intensity:

	Horizontal	Vertical
One half peak divergence	114.5°	114.4°
Half peak side angle (left)	-55.4°	-56.7°
Half peak side angle (right)	59.1°	57.8°
One tenth peak divergence	162.1°	162.2°
Tenth peak side angle (left)	-79.2°	-80.6°
Tenth peak side angle (right)	82.9°	81.6°

C-planes:	0.0°	15.0°	30.0°	45.0°	60.0°	75.0°	90.0°	105.0°	120.0°	135.0°
	150.0°	165.0°	180.0°	195.0°	210.0°	225.0°	240.0°	255.0°	270.0°	285.0°
	300.0°	315.0°	330.0°	345.0°						

Gamma:	0.0°	1.0°	2.0°	3.0°	4.0°	5.0°	6.0°	7.0°	8.0°	9.0°
	10.0°	11.0°	12.0°	13.0°	14.0°	15.0°	16.0°	17.0°	18.0°	19.0°
	20.0°	21.0°	22.0°	23.0°	24.0°	25.0°	26.0°	27.0°	28.0°	29.0°
	30.0°	31.0°	32.0°	33.0°	34.0°	35.0°	36.0°	37.0°	38.0°	39.0°
	40.0°	41.0°	42.0°	43.0°	44.0°	45.0°	46.0°	47.0°	48.0°	49.0°
	50.0°	51.0°	52.0°	53.0°	54.0°	55.0°	56.0°	57.0°	58.0°	59.0°
	60.0°	61.0°	62.0°	63.0°	64.0°	65.0°	66.0°	67.0°	68.0°	69.0°
	70.0°	71.0°	72.0°	73.0°	74.0°	75.0°	76.0°	77.0°	78.0°	79.0°
	80.0°	81.0°	82.0°	83.0°	84.0°	85.0°	86.0°	87.0°	88.0°	89.0°
	90.0°	91.0°	92.0°	93.0°	94.0°	95.0°	96.0°	97.0°	98.0°	99.0°
	100.0°									



OPPLE Lighting Lab

欧普照明实验室

PHOTOMETRIC RESULTS



Name:	OPZS201705098-03002-sidaitongdeng-yuan18W-3000K		
Program:	Far-C15-G1-Downlight		
Lum. flux:	1413.36 lm	Av. Voltage:	220.1280 V
Efficacy:	79.25 lm/ W	Av. Current:	0.13961 A
Maximum:	484.678 cd	Av. Power:	17.835 W
FluxCone-90:	749.10 lm	Av. Power Factor:	0.5803
FluxCone-120:	1107.20 lm	Company:	Oppl
Date:	5/17/2017 5:26:34 PM	Operator:	SLY

Electrical protocol OPZS201705098-03002-sidaitongdeng-yuan18W-3000K / C-Plane measurement

[deg]	U [V]	I [A]	P [W]	PF
0.0	220.1280	0.13959	17.831	0.5803
15.0	220.1270	0.13961	17.837	0.5804
30.0	220.1290	0.13960	17.833	0.5803
45.0	220.1290	0.13960	17.834	0.5804
60.0	220.1270	0.13961	17.833	0.5803
75.0	220.1280	0.13963	17.839	0.5804
90.0	220.1280	0.13962	17.835	0.5803
180.0	220.1280	0.13959	17.831	0.5803
195.0	220.1270	0.13961	17.837	0.5804
210.0	220.1290	0.13960	17.833	0.5803
225.0	220.1290	0.13960	17.834	0.5804
240.0	220.1270	0.13961	17.833	0.5803
255.0	220.1280	0.13963	17.839	0.5804
270.0	220.1280	0.13962	17.835	0.5803



OPPLE Lighting Lab

欧普照明实验室

PHOTOMETRIC RESULTS



Name:	OPZS201705098-03002-sidaitongdeng-yuan18W-3000K		
Program:	Far-C15-G1-Downlight		
Lum. flux:	1413.36 lm	Av. Voltage:	220.1280 V
Efficacy:	79.25 lm/ W	Av. Current:	0.13961 A
Maximum:	484.678 cd	Av. Power:	17.835 W
FluxCone-90:	749.10 lm	Av. Power Factor:	0.5803
FluxCone-120:	1107.20 lm	Company:	Oppl
Date:	5/17/2017 5:26:34 PM	Operator:	SLY

Zonal flux OPZS201705098-03002-sidaitongdeng-yuan18W-3000K / C-Plane measurement

Gamm a [°]	Imin [cd/klm]	Imax [cd/klm]	Imean [cd/klm]	Zonal flux [lm]	Sum. zonal flux [lm]	Rel. zonal flux [%]	Sum. rel. zonal flux [%]
0.0	484.3	484.6	484.5	0.00	0.00	0.00	0.00
1.0	484.1	484.7	484.4	0.46	0.46	0.03	0.03
2.0	483.5	484.7	484.2	1.39	1.85	0.10	0.13
3.0	482.8	484.6	483.9	2.32	4.17	0.16	0.29
4.0	481.9	484.4	483.3	3.24	7.41	0.23	0.52
5.0	481.0	484.0	482.7	4.16	11.56	0.29	0.82
6.0	479.8	483.4	481.8	5.07	16.63	0.36	1.18
7.0	478.4	482.5	480.7	5.97	22.61	0.42	1.60
8.0	477.0	481.7	479.5	6.87	29.48	0.49	2.09
9.0	475.3	480.6	478.1	7.76	37.24	0.55	2.63
10.0	473.4	479.4	476.6	8.64	45.88	0.61	3.25
11.0	471.4	478.0	474.9	9.51	55.39	0.67	3.92
12.0	469.2	476.4	473.0	10.36	65.75	0.73	4.65
13.0	467.0	474.8	471.0	11.20	76.95	0.79	5.44
14.0	464.4	472.9	468.8	12.03	88.98	0.85	6.30
15.0	461.7	470.7	466.5	12.84	101.82	0.91	7.20
16.0	459.1	468.6	464.0	13.63	115.45	0.96	8.17
17.0	456.2	466.3	461.3	14.41	129.86	1.02	9.19
18.0	453.2	463.7	458.6	15.17	145.03	1.07	10.26
19.0	449.9	461.0	455.6	15.90	160.93	1.13	11.39
20.0	446.6	458.2	452.5	16.62	177.55	1.18	12.56

**Zonal flux OPZS201705098-03002-sidaitongdeng-yuan18W-3000K / C-Plane measurement**

Gamm a [°]	Imin [cd/klm]	Imax [cd/klm]	Imean [cd/klm]	Zonal flux [lm]	Sum. zonal flux [lm]	Rel. zonal flux [%]	Sum. rel. zonal flux [%]
21.0	442.9	455.4	449.2	17.31	194.87	1.23	13.79
22.0	439.4	452.3	445.9	17.99	212.85	1.27	15.06
23.0	435.6	448.9	442.3	18.64	231.49	1.32	16.38
24.0	431.4	445.3	438.5	19.26	250.75	1.36	17.74
25.0	427.4	441.9	434.7	19.85	270.60	1.40	19.15
26.0	423.3	438.2	430.7	20.43	291.03	1.45	20.59
27.0	419.0	434.3	426.7	20.98	312.01	1.48	22.08
28.0	414.6	430.3	422.4	21.50	333.50	1.52	23.60
29.0	409.7	426.2	418.0	21.99	355.49	1.56	25.15
30.0	405.2	422.0	413.6	22.45	377.95	1.59	26.74
31.0	400.1	417.6	408.8	22.89	400.83	1.62	28.36
32.0	395.2	412.9	404.0	23.29	424.12	1.65	30.01
33.0	389.7	408.3	399.1	23.66	447.78	1.67	31.68
34.0	384.8	403.5	394.1	24.01	471.79	1.70	33.38
35.0	379.1	398.7	388.8	24.32	496.10	1.72	35.10
36.0	373.7	393.4	383.4	24.59	520.69	1.74	36.84
37.0	368.0	388.3	378.1	24.84	545.53	1.76	38.60
38.0	362.2	383.0	372.5	25.05	570.58	1.77	40.37
39.0	356.4	377.3	366.9	25.24	595.82	1.79	42.16
40.0	350.0	371.5	360.9	25.38	621.20	1.80	43.95
41.0	343.7	366.2	354.9	25.49	646.68	1.80	45.76
42.0	337.8	360.1	348.9	25.57	672.25	1.81	47.56
43.0	331.0	354.1	342.6	25.62	697.87	1.81	49.38
44.0	324.6	347.9	336.3	25.62	723.49	1.81	51.19
45.0	317.8	342.2	330.0	25.60	749.10	1.81	53.00
46.0	311.2	335.5	323.3	25.55	774.65	1.81	54.81
47.0	304.4	329.1	316.7	25.46	800.10	1.80	56.61
48.0	297.2	322.4	309.8	25.33	825.43	1.79	58.40
49.0	290.3	315.8	302.9	25.16	850.59	1.78	60.18
50.0	283.2	309.1	296.0	24.97	875.56	1.77	61.95
51.0	275.9	302.3	289.0	24.75	900.31	1.75	63.70
52.0	268.3	295.1	281.6	24.48	924.79	1.73	65.43
53.0	260.6	287.6	274.2	24.18	948.97	1.71	67.14
54.0	253.6	280.9	266.9	23.85	972.82	1.69	68.83
55.0	245.4	273.2	259.3	23.49	996.31	1.66	70.49
56.0	237.8	266.0	251.8	23.10	1019.41	1.63	72.13
57.0	229.8	258.3	244.0	22.67	1042.07	1.60	73.73
58.0	222.0	251.0	236.3	22.21	1064.28	1.57	75.30
59.0	214.0	242.9	228.3	21.72	1086.01	1.54	76.84
60.0	205.6	234.9	220.3	21.20	1107.20	1.50	78.34

**Zonal flux OPZS201705098-03002-sidaitongdeng-yuan18W-3000K / C-Plane measurement**

Gamm a [°]	Imin [cd/klm]	Imax [cd/klm]	Imean [cd/klm]	Zonal flux [lm]	Sum. zonal flux [lm]	Rel. zonal flux [%]	Sum. rel. zonal flux [%]
61.0	197.8	227.1	212.3	20.64	1127.85	1.46	79.80
62.0	189.5	219.7	204.3	20.07	1147.92	1.42	81.22
63.0	181.0	211.7	196.3	19.48	1167.41	1.38	82.60
64.0	172.7	203.3	187.9	18.85	1186.26	1.33	83.93
65.0	163.9	194.8	179.5	18.18	1204.44	1.29	85.22
66.0	155.9	187.2	171.2	17.50	1221.94	1.24	86.46
67.0	147.4	178.4	163.1	16.81	1238.75	1.19	87.65
68.0	139.2	170.3	154.5	16.09	1254.83	1.14	88.78
69.0	130.8	161.7	146.2	15.34	1270.18	1.09	89.87
70.0	121.7	153.8	137.6	14.58	1284.76	1.03	90.90
71.0	113.6	144.9	129.2	13.79	1298.55	0.98	91.88
72.0	105.2	136.1	120.7	13.00	1311.55	0.92	92.80
73.0	96.8	127.9	112.3	12.19	1323.73	0.86	93.66
74.0	88.7	119.6	104.2	11.38	1335.11	0.81	94.46
75.0	80.6	111.2	96.0	10.58	1345.69	0.75	95.21
76.0	72.8	102.6	87.7	9.75	1355.44	0.69	95.90
77.0	64.8	94.6	79.5	8.91	1364.35	0.63	96.53
78.0	56.7	86.4	71.7	8.09	1372.44	0.57	97.11
79.0	49.7	78.4	64.1	7.29	1379.73	0.52	97.62
80.0	42.7	70.2	56.3	6.49	1386.22	0.46	98.08
81.0	35.1	62.5	48.8	5.68	1391.91	0.40	98.48
82.0	28.4	55.0	41.7	4.90	1396.81	0.35	98.83
83.0	22.2	47.6	34.8	4.16	1400.97	0.29	99.12
84.0	16.3	40.2	27.9	3.41	1404.38	0.24	99.36
85.0	10.7	32.9	21.5	2.70	1407.08	0.19	99.56
86.0	6.0	26.7	15.6	2.03	1409.11	0.14	99.70
87.0	2.5	20.4	10.4	1.43	1410.53	0.10	99.80
88.0	0.9	14.2	6.2	0.91	1411.44	0.06	99.86
89.0	0.8	8.8	3.3	0.52	1411.97	0.04	99.90
90.0	0.8	4.8	1.7	0.28	1412.24	0.02	99.92
91.0	0.8	1.9	1.1	0.15	1412.40	0.01	99.93
92.0	0.8	1.2	1.0	0.11	1412.51	0.01	99.94
93.0	0.8	1.1	1.0	0.11	1412.62	0.01	99.95
94.0	0.8	1.1	1.0	0.11	1412.72	0.01	99.96
95.0	0.8	1.1	1.0	0.11	1412.83	0.01	99.96
96.0	0.8	1.1	1.0	0.11	1412.93	0.01	99.97
97.0	0.8	1.1	1.0	0.11	1413.04	0.01	99.98
98.0	0.8	1.1	1.0	0.11	1413.14	0.01	99.98
99.0	0.8	1.1	1.0	0.11	1413.25	0.01	99.99
100.0	0.8	1.1	1.0	0.11	1413.36	0.01	100.00



OPPLE Lighting Lab

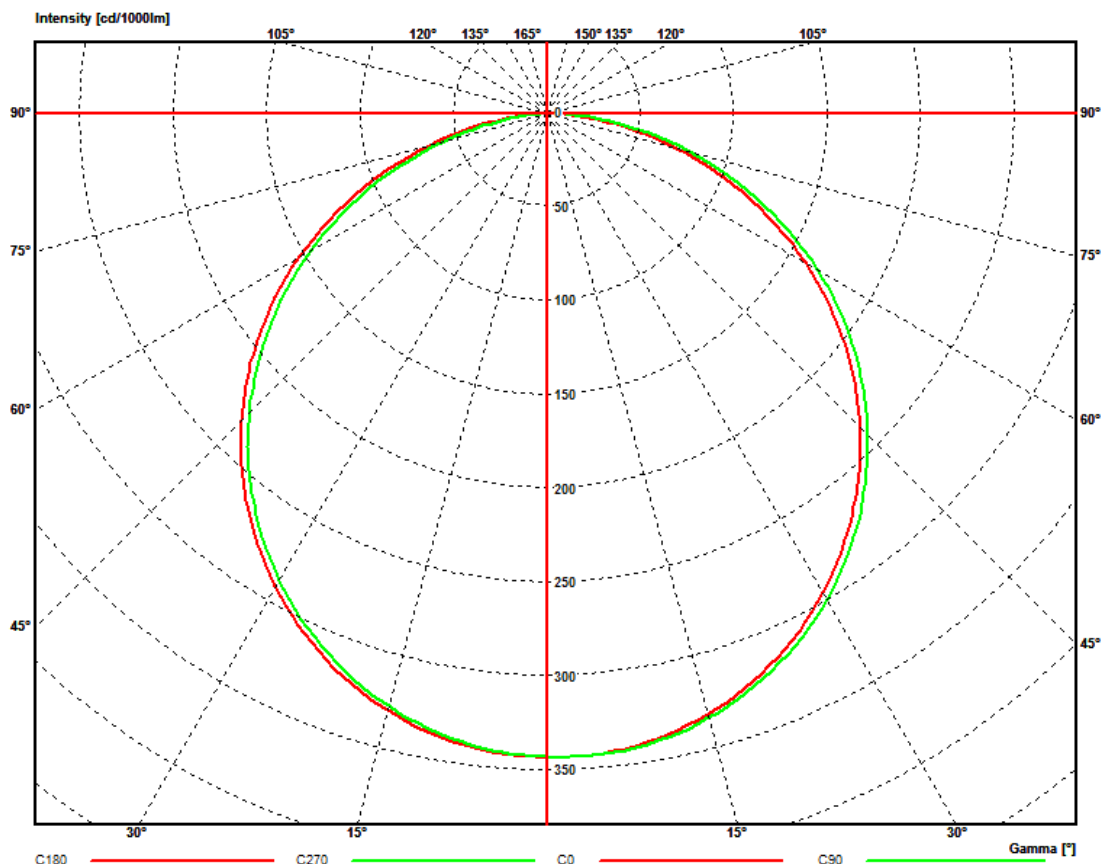
欧普照明实验室

PHOTOMETRIC RESULTS



Name:	OPZS201705098-03002-sidaitongdeng-yuan18W-3000K		
Program:	Far-C15-G1-Downlight		
Lum. flux:	1413.36 lm	Av. Voltage:	220.1280 V
Efficacy:	79.25 lm/ W	Av. Current:	0.13961 A
Maximum:	484.678 cd	Av. Power:	17.835 W
FluxCone-90:	749.10 lm	Av. Power Factor:	0.5803
FluxCone-120:	1107.20 lm	Company:	Oppl
Date:	5/17/2017 5:26:34 PM	Operator:	SLY

Polar diagram OPZS201705098-03002-sidaitongdeng-yuan18W-3000K / C-Plane measurement





OPPLE Lighting Lab

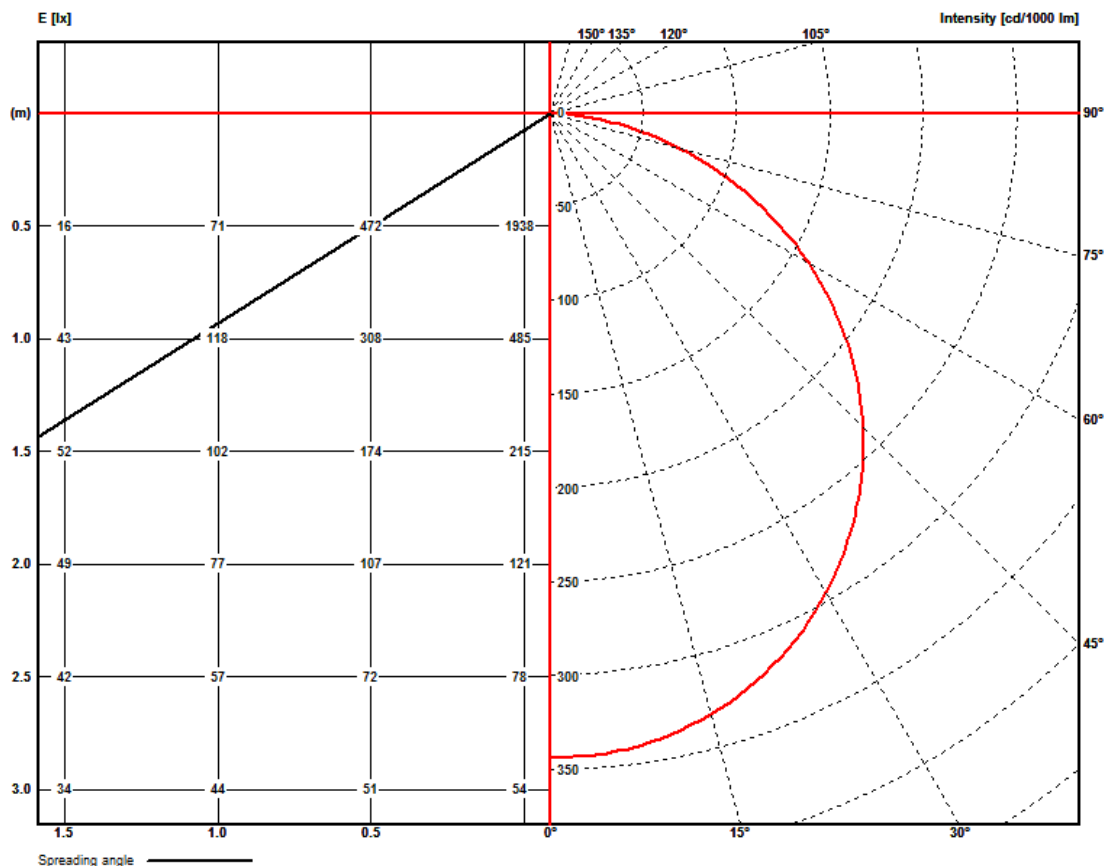
欧普照明实验室

PHOTOMETRIC RESULTS



Name:	OPZS201705098-03002-sidaitongdeng-yuan18W-3000K		
Program:	Far-C15-G1-Downlight		
Lum. flux:	1413.36 lm	Av. Voltage:	220.1280 V
Efficacy:	79.25 lm/ W	Av. Current:	0.13961 A
Maximum:	484.678 cd	Av. Power:	17.835 W
FluxCone-90:	749.10 lm	Av. Power Factor:	0.5803
FluxCone-120:	1107.20 lm	Company:	Oppl
Date:	5/17/2017 5:26:34 PM	Operator:	SLY

Illuminance and Intensity diagram OPZS201705098-03002-sidaitongdeng-yuan18W-3000K / C-Plane measurement





OPPLE Lighting Lab

欧普照明实验室

PHOTOMETRIC RESULTS



Name:	OPZS201705098-03002-sidaitongdeng-yuan18W-3000K		
Program:	Far-C15-G1-Downlight		
Lum. flux:	1413.36 lm	Av. Voltage:	220.1280 V
Efficacy:	79.25 lm/ W	Av. Current:	0.13961 A
Maximum:	484.678 cd	Av. Power:	17.835 W
FluxCone-90:	749.10 lm	Av. Power Factor:	0.5803
FluxCone-120:	1107.20 lm	Company:	Oppl
Date:	5/17/2017 5:26:34 PM	Operator:	SLY

Cartesian diagram OPZS201705098-03002-sidaitongdeng-yuan18W-3000K / C-Plane measurement

