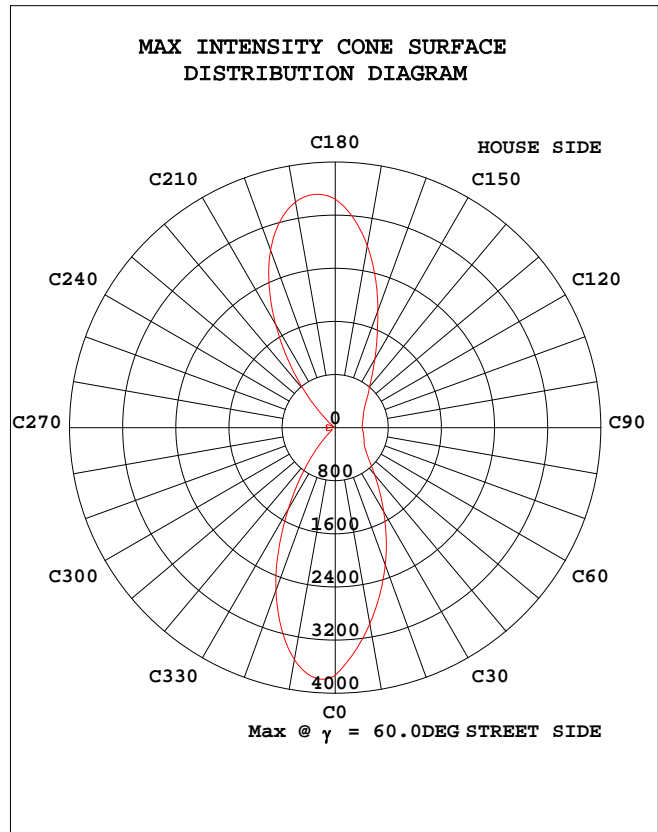
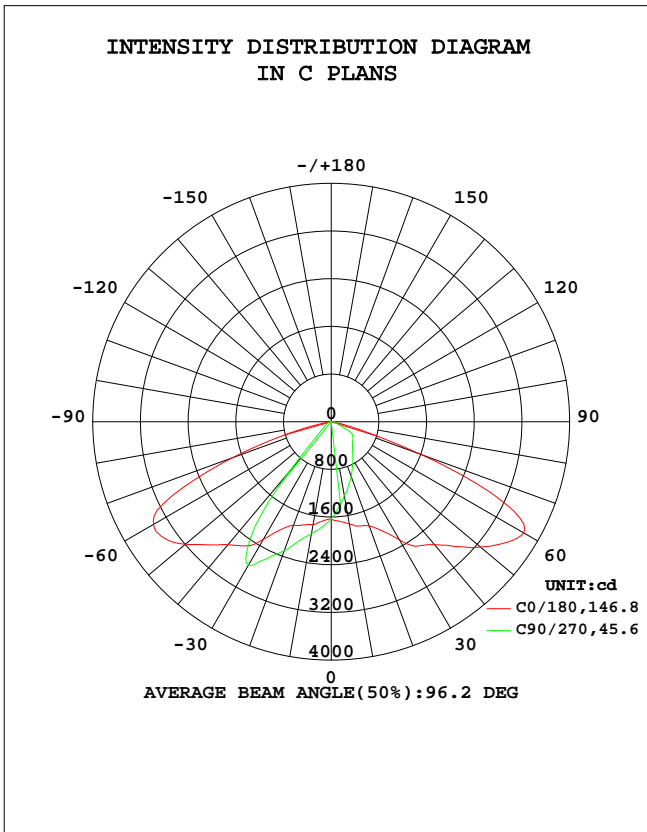


STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:27.32V I:1.830A P:50.00W PF:1.000 Freq:0Hz Lamp Flux:6365.86x1 lm		
NAME: Integrated Solar Led Street Light	TYPE:	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.: SHENZHEN LEADRAY OPTOELECTRONIC CO.,LTD.	SUR.:	Shielding Angle:N/A

DATA OF LAMP		PHOTOMETRIC DATA Eff: 127.31 lm/W			
MODEL	LRC50W	I _{max} (cd)	3729	η street_up(%)	0.1
NOMINAL POWER(W)	50	LOR(%)	100.0	η street_down(%)	52.6
RATED VOLTAGE(V)	27.5	TOTAL FLUX(lm)	6366	η house_up(%)	0.1
NOMINAL FLUX(lm)	6365.86	MAXIMUM @(C,γ)	0,60.0	η house_down(%)	47.2
LAMPS INSIDE	1	η up(%)	0.2	76 FLASHAREA(m2)	0.00100
TEST VOLTAGE(V)	27.5	η down(%)	99.8	SLI	17.540

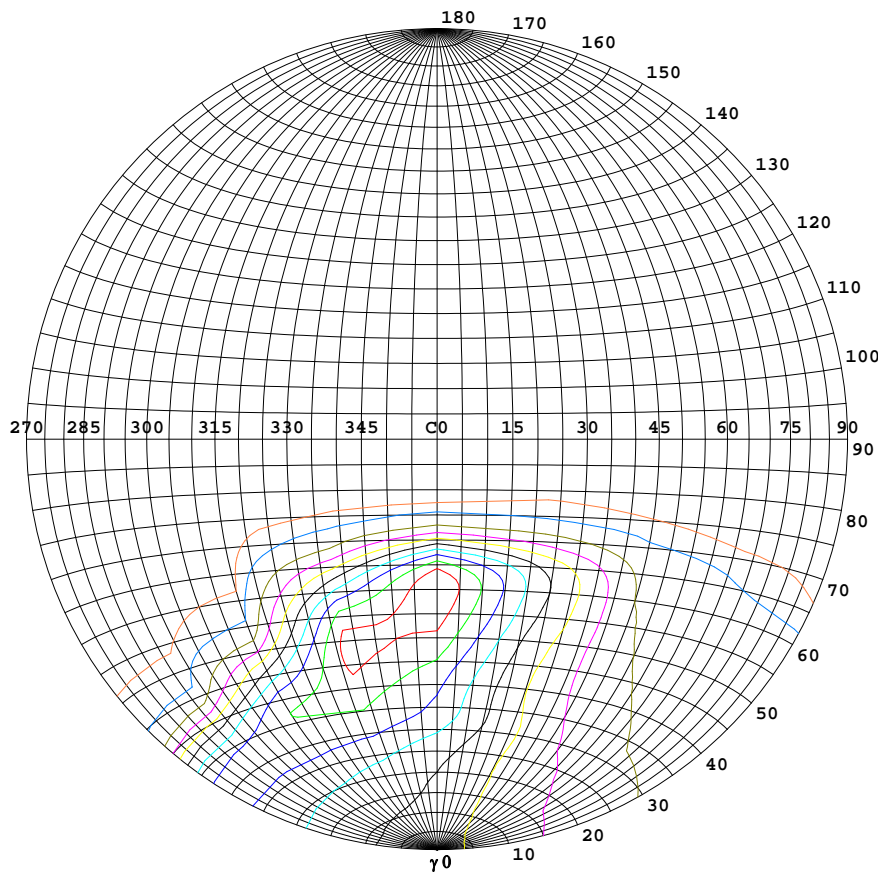


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.5DEG
 Operators:Seth
 Test Date:2016-11-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.352
 Humidity:65.7%
 Test Distance:26.000m [K=1.3361]
 Remarks:

STREETLIGHT ISOCANDELA DIAGRAM

Test:U:27.32V I:1.830A P:50.00W PF:1.000 Freq:0Hz Lamp Flux:6365.86x1 lm		
NAME: Integrated Solar Led Street Light	TYPE:	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.: SHENZHEN LEADRAY OPTOELECTRONIC CO.,LTD.	SUR.:	Shielding Angle:N/A



Classification:

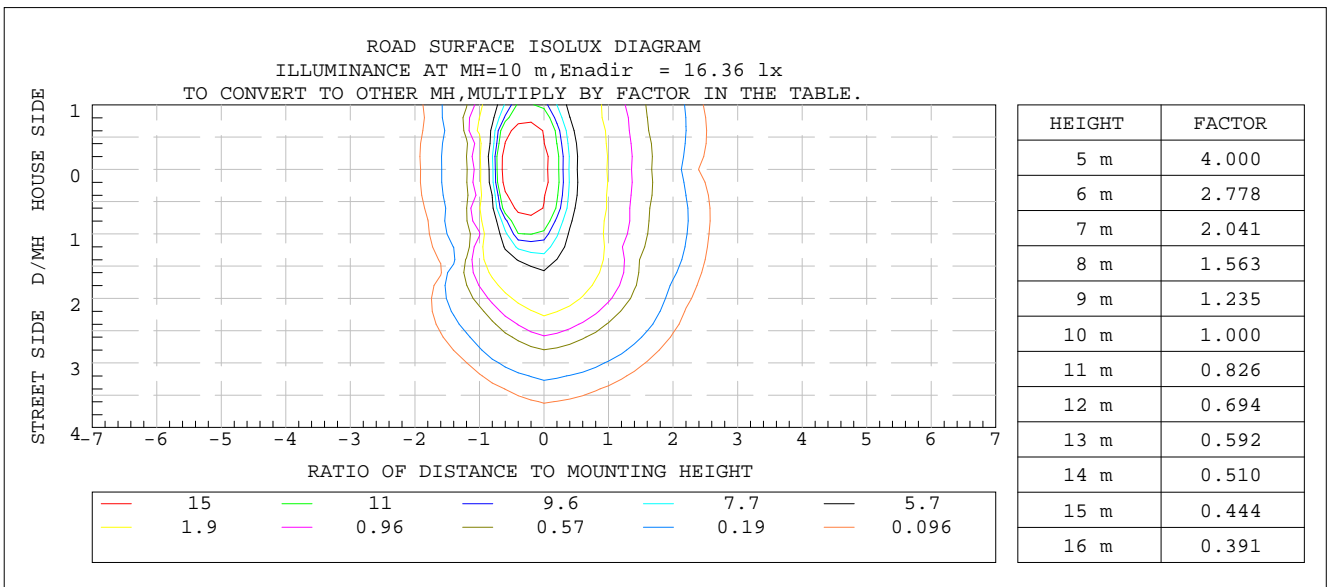
IES:Type III - Short
 CIE:Broad - Intermediate
 IES:Cut-off
 CIE:Full cut-off
 Max.At80:19.55cd/klm
 Max.At90:0.6959cd/klm
 Max.80-90:19.55cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	3729
90%	3356
80%	2983
70%	2610
60%	2237
50%	1864
40%	1492
30%	1119
20%	746
10%	373
5%	186

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.5DEG
 Operators:Seth
 Test Date:2016-11-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.352
 Humidity:65.7%
 Test Distance:26.000m [K=1.3361]
 Remarks:

COEFFICIENT OF UTILIZATION CURVE AND ISOLUX DIAGRAM



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 24.5DEG
 Operators: Seth
 Test Date: 2016-11-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.352
 Humidity: 65.7%
 Test Distance: 26.000m [K=1.3361]
 Remarks:

ZONAL FLUX DIAGRAM

Test:U:27.32V I:1.830A P:50.00W PF:1.000 Freq:0Hz Lamp Flux:6365.86x1 lm		
NAME: Integrated Solar Led Street Light	TYPE:	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.: SHENZHEN LEADRAY OPTOELECTRONIC CO.,LTD.	SUR.:	Shielding Angle:N/A

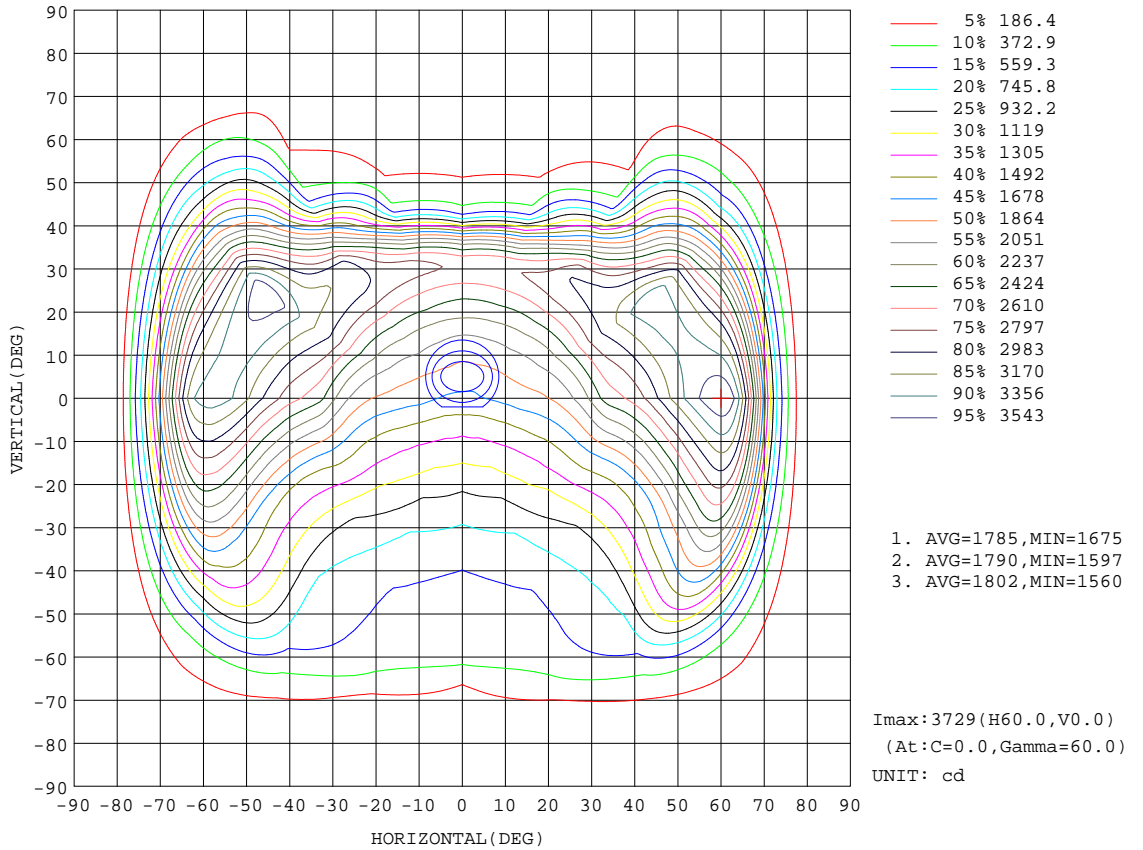
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	lum,lamp
10	1739	1404	1266	1404	1753	1908	1904	1871	0- 10	156.7	156.7	2.46,2.46
20	1865	1252	978.0	1236	1851	2270	2300	2210	10- 20	480.2	636.9	10,10
30	2289	1098	729.7	1075	2277	2839	2778	2757	20- 30	858.2	1495	23.5,23.5
40	2695	907.0	557.4	868.6	2692	3095	1125	2829	30- 40	1229	2724	42.8,42.8
50	3271	805.4	475.7	755.7	3199	1473	208.2	1110	40- 50	1236	3960	62.2,62.2
60	3729	743.9	405.6	698.5	3442	313.7	108.0	240.0	50- 60	1203	5163	81.1,81.1
70	1602	420.1	125.0	402.0	1754	145.8	58.83	112.7	60- 70	920.0	6083	95.6,95.6
80	59.68	99.05	79.97	104.2	103.6	34.71	1.764	25.85	70- 80	253.4	6336	99.5,99.5
90	1.773	2.497	0.3256	3.747	3.864	0.8917	1.052	1.413	80- 90	19.50	6356	99.8,99.8
100	0.9616	1.498	0	1.278	3.937	1.093	1.154	0.7397	90-100	1.377	6357	99.9,99.9
110	1.514	2.656	0.2669	1.278	5.848	0.5448	0.3393	0.6725	100-110	1.444	6359	99.9,99.9
120	1.514	3.880	2.716	3.227	4.672	0.5448	0.3393	0.6725	110-120	1.706	6360	99.9,99.9
130	1.380	4.496	3.674	3.631	1.993	0.5448	0.3393	0.6725	120-130	1.792	6362	99.9,99.9
140	1.238	3.339	1.493	3.093	1.855	0.6129	0.4072	0.6725	130-140	1.385	6363	100,100
150	1.170	2.928	2.104	3.228	1.719	0.8172	0.6108	0.8070	140-150	1.044	6364	100,100
160	1.102	2.386	2.172	3.229	1.445	0.8853	0.8166	1.077	150-160	0.7957	6365	100,100
170	0.9633	2.111	2.239	2.690	1.445	1.088	1.155	1.412	160-170	0.4633	6366	100,100
180	1.101	1.907	1.968	2.488	1.445	1.362	1.835	1.883	170-180	0.1622	6366	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.5DEG
 Operators:Seth
 Test Date:2016-11-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.352
 Humidity:65.7%
 Test Distance:26.000m [K=1.3361]
 Remarks:

ISOCANDELA DIAGRAM

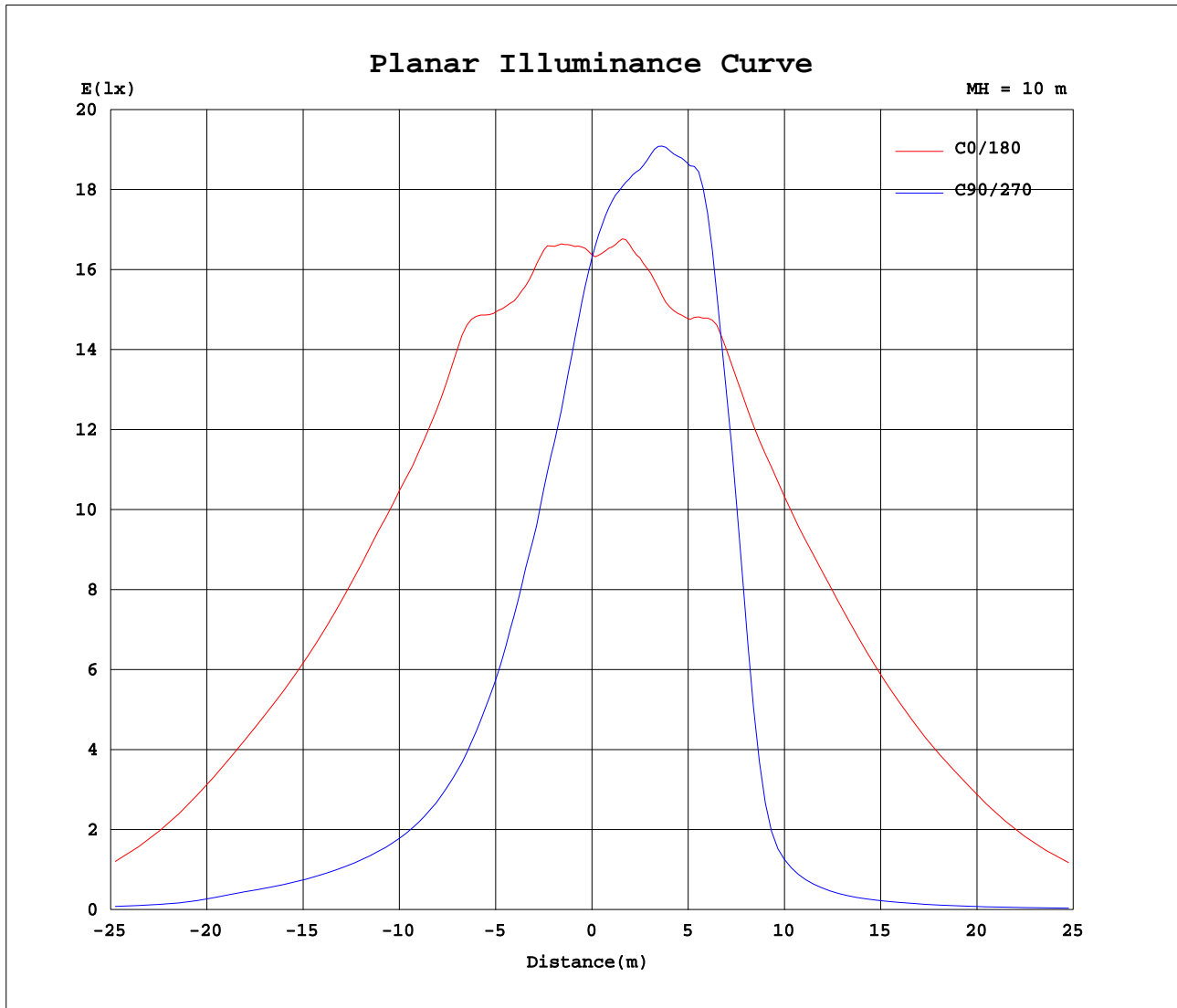
Test:U:27.32V I:1.830A P:50.00W PF:1.000 Freq:0Hz Lamp Flux:6365.86x1 lm		
NAME: Integrated Solar Led Street Light	TYPE:	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.: SHENZHEN LEADRAY OPTOELECTRONIC CO.,LTD.	SUR.:	Shielding Angle:N/A



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 24.5DEG
 Operators: Seth
 Test Date: 2016-11-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.352
 Humidity: 65.7%
 Test Distance: 26.000m [K=1.3361]
 Remarks:

Planar Illuminance Curve



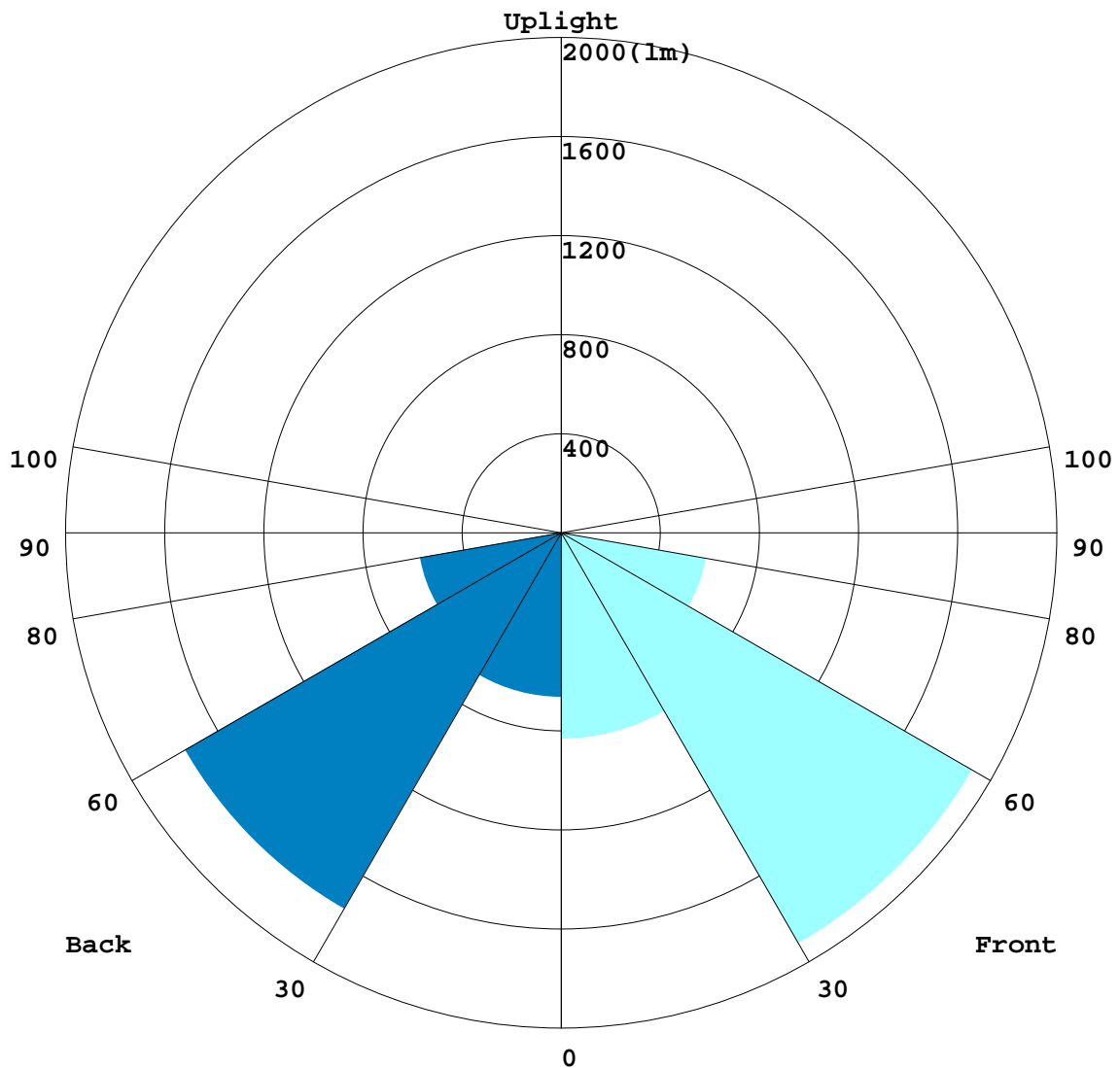
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 24.5DEG
Operators: Seth
Test Date: 2016-11-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.352
Humidity: 65.7%
Test Distance: 26.000m [K=1.3361]
Remarks:

LCS REPORT

Test:U:27.32V I:1.830A P:50.00W PF:1.000 Freq:0Hz Lamp Flux:6365.86x1 lm		
NAME: Integrated Solar Led Street Light	TYPE:	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.: SHENZHEN LEADRAY OPTOELECTRONIC CO.,LTD.	SUR.:	Shielding Angle:N/A

LUMINAIRE CLASSIFICATION SYSTEM(LCS) GRAPH



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.5DEG
 Operators:Seth
 Test Date:2016-11-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.352
 Humidity:65.7%
 Test Distance:26.000m [K=1.3361]
 Remarks:

BUG REPORT

Test:U:27.32V I:1.830A P:50.00W PF:1.000 Freq:0Hz Lamp Flux:6365.86x1 lm		
NAME: Integrated Solar Led Street Light	TYPE:	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.: SHENZHEN LEADRAY OPTOELECTRONIC CO.,LTD.	SUR.:	Shielding Angle:N/A

IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	832.09	13.1
FM - Front-Medium(30-60)	1914.6	30.1
FH - Front-High(60-80)	594.04	9.3
FVH - Front-Very High(80-90)	9.6267	0.2
Total Forward Light	3355.6	52.7

BL - Back-Low(0-30)	663.02	10.4
BM - Back-Medium(30-60)	1753.2	27.5
BH - Back-High(60-80)	579.27	9.1
BVH - Back-Very High(80-90)	9.8765	0.2
Total Back Light	3010.3	47.3

UL - Uplight-Low(90-100)	1.3774	0.0
UH - Uplight-High(100-180)	8.7922	0.1
Total Up Light	10.17	0.2

BUG(Back,Up,Glare) Rating	B2-U1-G2
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Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	3005.4	4.8934	3010.3
Street Side	3350.3	5.2762	3355.6

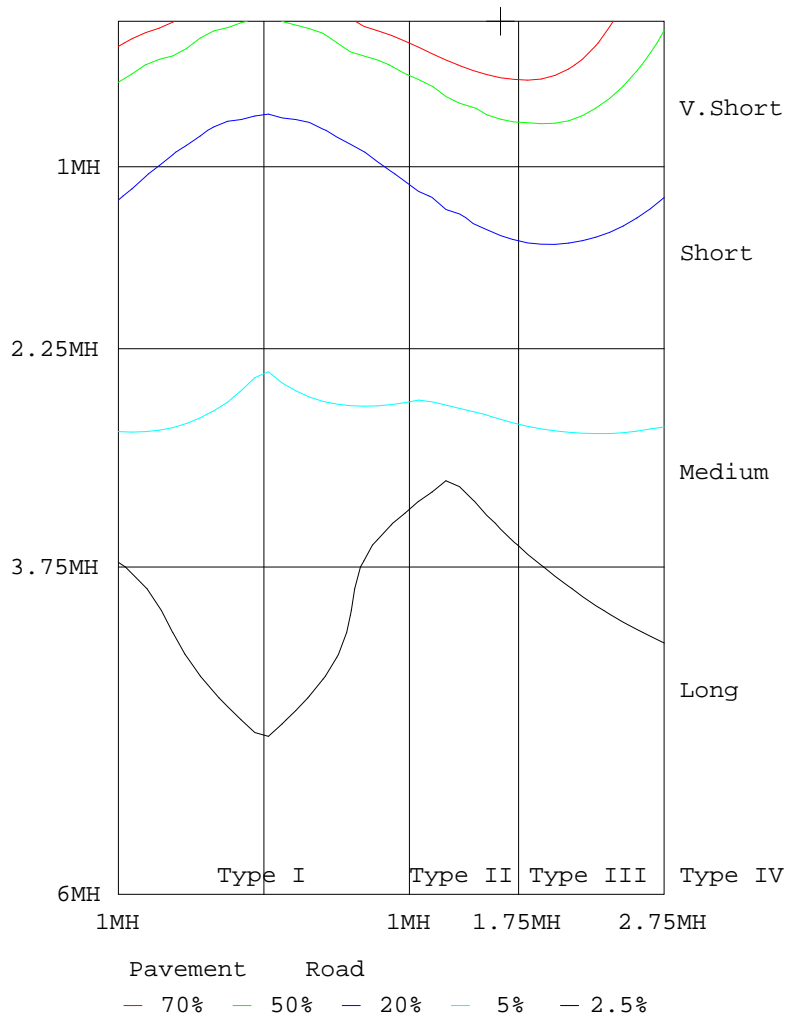
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:24.5DEG
Operators:Seth
Test Date:2016-11-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.352
Humidity:65.7%
Test Distance:26.000m [K=1.3361]
Remarks:

ROAD ISOCANDELA REPORT

Test:U:27.32V I:1.830A P:50.00W PF:1.000 Freq:0Hz Lamp Flux:6365.86x1 lm		
NAME: Integrated Solar Led Street Light	TYPE:	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.: SHENZHEN LEADRAY OPTOELECTRONIC CO.,LTD.	SUR.:	Shielding Angle:N/A

ROAD SURFACE ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.5DEG
 Operators:Seth
 Test Date:2016-11-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.352
 Humidity:65.7%
 Test Distance:26.000m [K=1.3361]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:27.32V I:1.830A P:50.00W PF:1.000 Freq:0Hz Lamp Flux:6365.86x1 lm		
NAME: Integrated Solar Led Street Light	TYPE:	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.: SHENZHEN LEADRAY OPTOELECTRONIC CO.,LTD.	SUR.:	Shielding Angle:N/A

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5			
0	1637	1636	1633	1632	1629	1629	1627	1629	1637	1636	1633	1632	1629	1629	1627	1629			
5	1677	1585	1510	1459	1446	1461	1508	1581	1672	1719	1760	1784	1775	1771	1743	1711			
10	1739	1556	1404	1302	1266	1307	1404	1554	1753	1827	1908	1928	1904	1906	1871	1824			
15	1812	1537	1319	1174	1120	1178	1312	1522	1792	1951	2071	2086	2065	2058	2022	1933			
20	1865	1535	1252	1049	978	1054	1236	1497	1851	2129	2270	2320	2300	2281	2210	2079			
25	2017	1552	1192	929	841	926	1165	1510	1996	2381	2548	2561	2524	2518	2465	2310			
30	2289	1609	1098	816	730	810	1075	1563	2277	2740	2839	2808	2778	2747	2757	2662			
35	2545	1603	995	713	631	707	968	1541	2544	3055	3073	2686	2338	2527	2968	2974			
40	2695	1579	907	635	557	625	869	1509	2692	3278	3095	1792	1125	1594	2829	3208			
45	2962	1632	844	577	505	572	795	1525	2921	3529	2403	604	355	528	2057	3435			
50	3271	1742	805	533	476	530	756	1580	3199	3686	1473	270	208	258	1110	3469			
55	3546	1905	773	500	445	500	730	1670	3410	3401	588	166	142	161	441	3124			
60	3729	2010	744	471	406	458	699	1665	3442	2619	314	123	108	118	240	2327			
65	3183	1827	645	394	225	377	599	1467	2950	1754	196	94.3	82.6	87.7	137	1417			
70	1602	994	420	240	125	187	402	914	1754	903	146	72.5	58.8	62.8	113	590			
75	457	339	197	86.7	95.9	77.4	192	372	673	356	97.7	32.7	28.8	30.4	84.6	210			
80	59.7	107	99.0	58.0	80.0	57.2	104	123	104	124	34.7	13.1	1.76	11.4	25.8	80.9			
85	1.17	2.13	5.92	31.4	43.9	33.9	14.6	2.77	3.23	2.64	0.75	0.61	0.48	0.41	0.87	1.49			
90	1.77	3.21	2.50	1.37	0.33	1.26	3.75	4.38	3.86	1.79	0.89	0.77	1.05	0.89	1.41	4.43			
95	0.28	0.47	1.42	2.25	0.00	1.62	0.92	0.40	2.06	1.15	1.63	2.10	2.64	1.08	1.21	1.22			
100	0.96	1.42	1.50	0.34	0.00	0.54	1.28	1.29	3.94	1.70	1.09	1.09	1.15	1.08	0.74	1.56			
105	1.30	2.17	1.56	0.34	0.00	0.27	1.28	1.42	5.85	2.17	0.54	1.09	1.02	1.08	0.67	1.62			
110	1.51	2.65	2.66	0.54	0.27	0.87	1.28	1.83	5.85	2.17	0.54	0.27	0.34	0.34	0.67	1.62			
115	1.51	3.06	3.27	1.77	1.96	1.28	2.08	2.17	5.43	1.96	0.54	0.27	0.34	0.34	0.67	1.62			
120	1.51	3.12	3.88	2.04	2.72	1.42	3.23	2.16	4.67	1.49	0.54	0.27	0.34	0.34	0.67	1.62			
125	1.51	2.65	4.29	3.00	4.54	3.18	3.70	2.23	3.09	1.22	0.54	0.34	0.34	0.34	0.67	1.29			
130	1.38	2.58	4.50	3.20	3.67	3.24	3.63	2.23	1.99	1.22	0.54	0.34	0.34	0.34	0.67	1.29			
135	1.31	2.38	3.95	3.20	1.97	3.11	3.43	2.23	1.93	1.22	0.54	0.34	0.41	0.34	0.67	1.29			
140	1.24	2.24	3.34	3.20	1.49	3.04	3.09	2.23	1.85	1.22	0.61	0.34	0.41	0.41	0.67	1.29			
145	1.17	1.84	3.00	3.20	1.69	2.91	3.09	2.30	1.72	1.22	0.62	0.48	0.41	0.54	0.67	1.29			
150	1.17	1.83	2.93	3.20	2.10	2.70	3.23	2.30	1.72	1.22	0.82	0.68	0.61	0.61	0.81	1.29			
155	1.10	1.77	2.79	3.27	2.17	2.70	3.23	2.30	1.65	1.22	0.89	0.82	0.81	0.81	1.01	1.29			
160	1.10	1.56	2.39	3.07	2.17	2.57	3.23	2.17	1.44	1.22	0.89	0.89	0.82	0.95	1.08	1.29			
165	0.96	1.36	2.11	2.73	2.24	2.50	2.89	1.89	1.44	1.22	0.89	0.95	1.02	1.09	1.21	1.36			
170	0.96	1.36	2.11	2.45	2.24	2.30	2.69	1.89	1.44	1.22	1.09	1.16	1.15	1.28	1.41	1.56			
175	1.10	1.36	2.18	2.18	2.24	2.23	2.62	1.89	1.44	1.22	1.29	1.50	1.36	1.55	1.62	1.96			
180	1.10	1.36	1.91	1.77	1.97	1.83	2.49	1.89	1.44	1.09	1.36	1.91	1.83	1.83	1.88	2.44			

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.5DEG
 Operators:Seth
 Test Date:2016-11-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.352
 Humidity:65.7%
 Test Distance:26.000m [K=1.3361]
 Remarks: