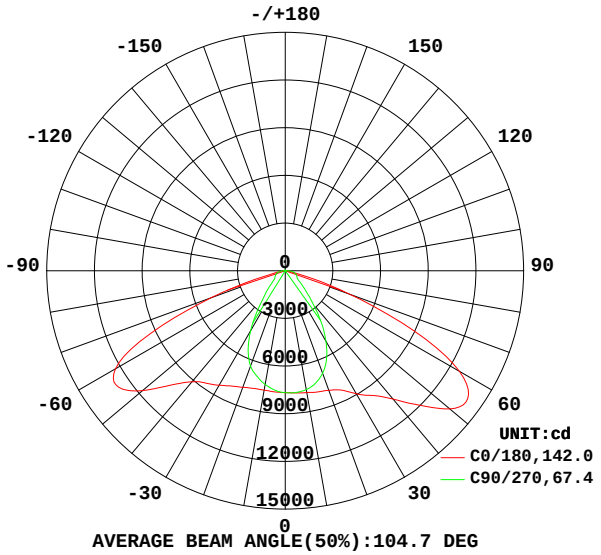
STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:0V I:0A P:40.0W PF:0 Freq:0Hz Lamp Flux:6955x1 lm		
NAME: Solar Light	TYPE:LED	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.: Shenzhen Beatles Energy Technology Co.,Ltd.	SUR.:	Shielding Angle:N/A

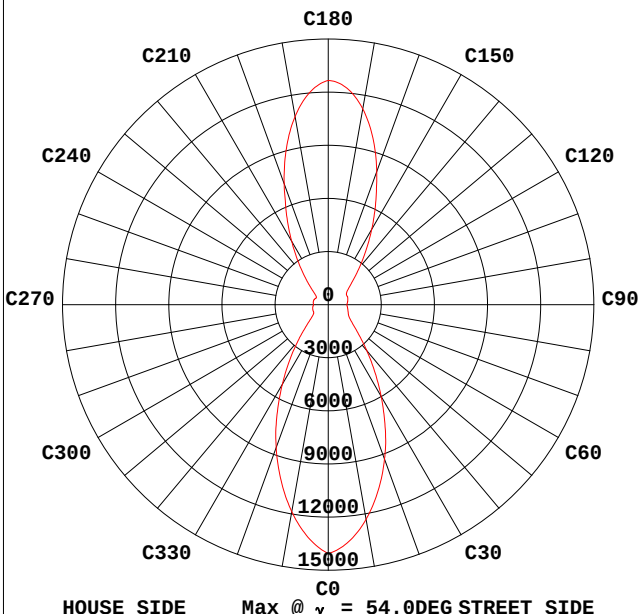
DATA OF LAMP		PHOTOMETRIC DATA Eff: 173.9lm/W			
MODEL	JKC-ZC-40W	Imax(cd)	4638	η street_up(%)	0.2
NOMINAL POWER(W)	40	LOR(%)	100.0	η street_down(%)	52.4
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	6955	η house_up(%)	0.2
NOMINAL FLUX(lm)	6955	MAXIMUM @(C,γ)	0,54.0	η house_down(%)	47.2
LAMPS INSIDE	1	η up(%)	0.5	76 FLASHAREA(m2)	0.05000
TEST VOLTAGE(V)	24	η down(%)	99.5	SLI	21.768

INTENSITY DISTRIBUTION DIAGRAM
IN C PLANS



AVERAGE BEAM ANGLE(50%):104.7 DEG

MAX INTENSITY CONE SURFACE
DISTRIBUTION DIAGRAM



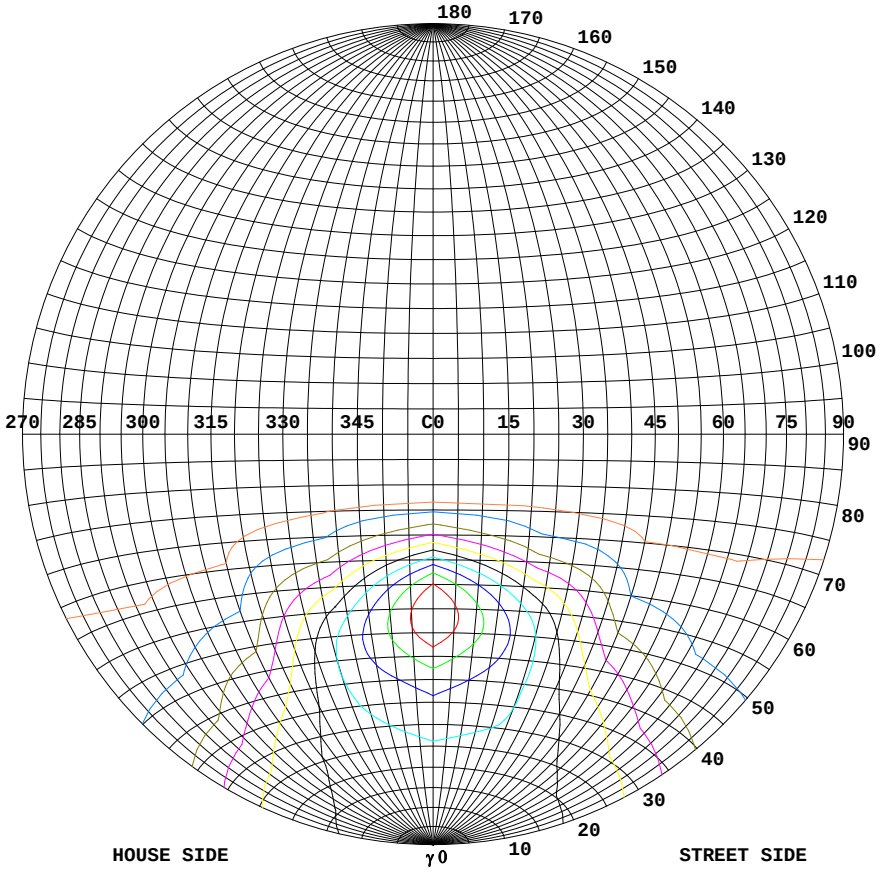
HOUSE SIDE Max @ γ = 54.0DEG STREET SIDE

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:24.5DEG
Operators:William
Test Date:2020-12-02

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
Humidity:56.4%
Test Distance:26.000m [K=1.4046]
Remarks:

STREETLIGHT ISOCANDELA DIAGRAM

Test:U:0V I:0A P:40.0W PF:0 Freq:0Hz Lamp Flux:6955x1 lm		
NAME: Solar Light	TYPE:LED	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.: Shenzhen Beatles Energy Technology Co.,Ltd.	SUR.:	Shielding Angle:N/A



Classification:

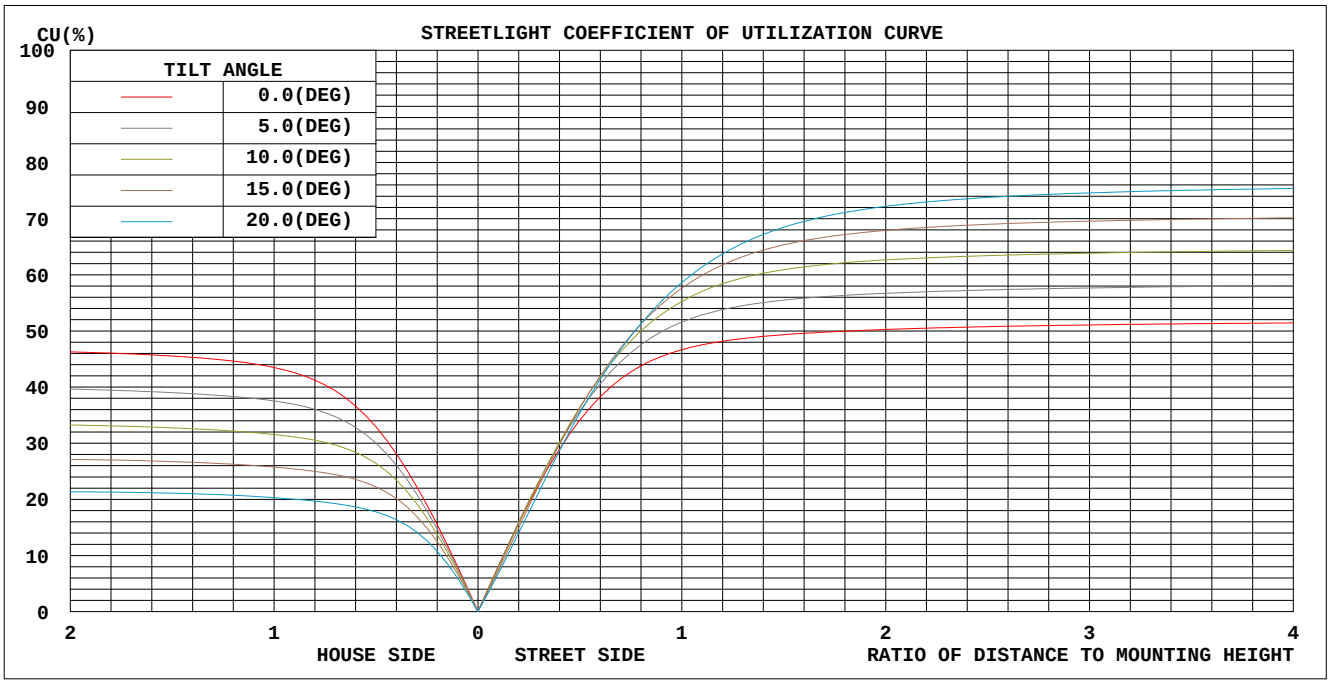
IES:Type I - Short
CIE:Narrow - Short
IES:Cut-off
CIE:Full cut-off
Max.At80:8.715cd/klm
Max.At90:1.109cd/klm
Max.80-90:8.715cd/klm

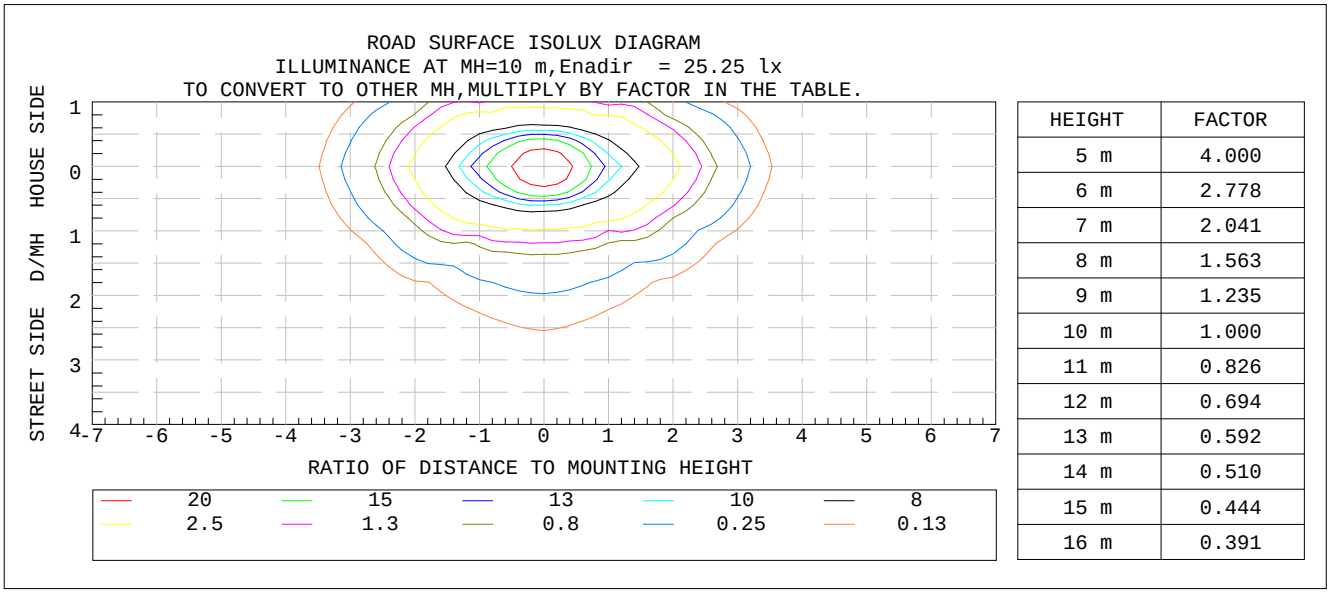
ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	4638
90%	4174
80%	3711
70%	3247
60%	2783
50%	2319
40%	1855
30%	1391
20%	928
10%	464
5%	232

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:24.5DEG
Operators:William
Test Date:2020-12-02

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
Humidity:56.4%
Test Distance:26.000m [K=1.4046]
Remarks:

COEFFICIENT OF UTILIZATION CURVE AND ISOLUX DIAGRAM





HEIGHT	FACTOR
5 m	4.000
6 m	2.778
7 m	2.041
8 m	1.563
9 m	1.235
10 m	1.000
11 m	0.826
12 m	0.694
13 m	0.592
14 m	0.510
15 m	0.444
16 m	0.391

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:24.5DEG
Operators:William
Test Date:2020-12-02

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
Humidity:56.4%
Test Distance:26.000m [K=1.4046]
Remarks:

ZONAL FLUX DIAGRAM

Test:U:0V I:0A P:40.0W PF:0 Freq:0Hz Lamp Flux:6955x1 lm		
NAME: Solar Light	TYPE:LED	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.: Shenzhen Beatles Energy Technology Co.,Ltd.	SUR.:	Shielding Angle:N/A

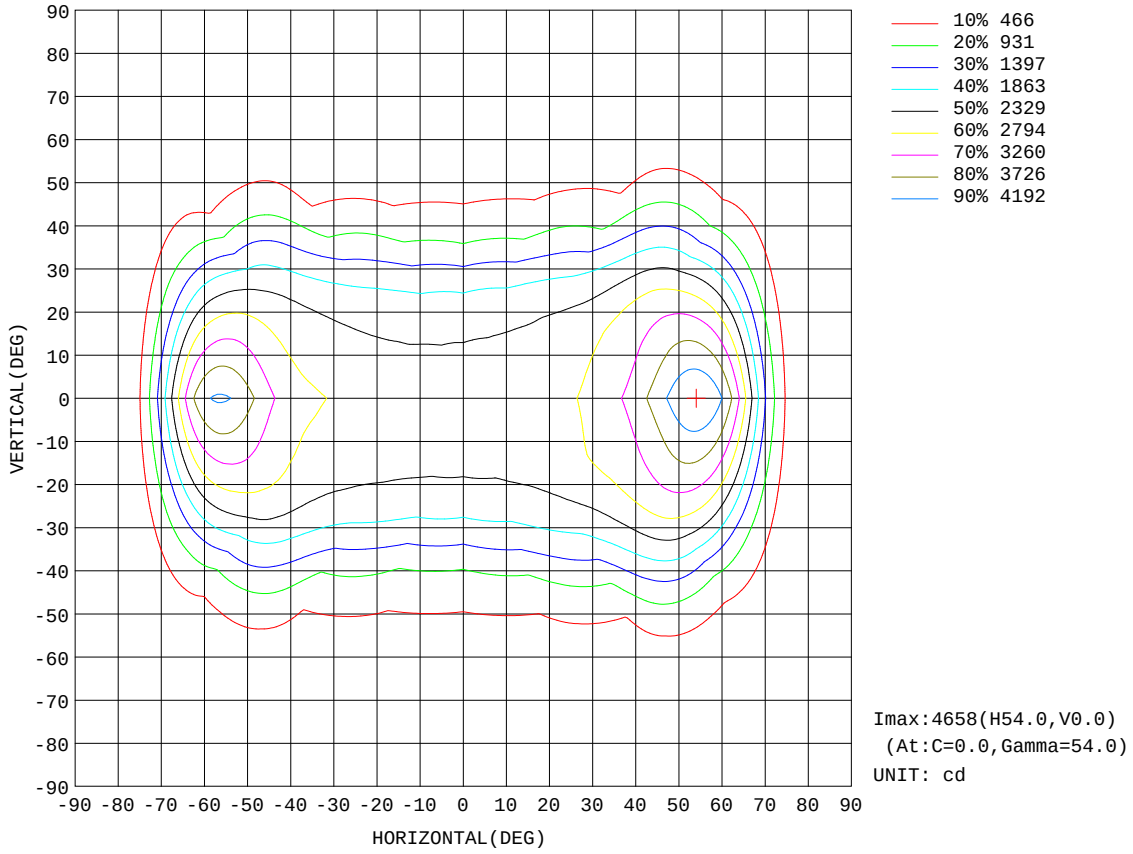
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	256.9	253.7	250.6	252.5	251.8	244.1	240.0	248.2	0- 10	240.1	240.1	3.45,3.45
20	264.3	247.4	226.4	244.7	257.6	228.7	210.8	238.9	10- 20	694	934	13.4,13.4
30	294.9	232.5	169.1	223.5	274.3	204.3	144.0	222.1	20- 30	1066	1999	28.7,28.7
40	348	190.7	90.7	173.2	301.1	150.9	66.6	168.2	30- 40	1275	3275	47.1,47.1
50	446	115.4	45.0	94.6	387	70.9	32.31	85.6	40- 50	1332	4607	66.2,66.2
60	417	46.1	28.65	41.1	407	27.63	24.43	35.4	50- 60	1247	5854	84.1,84.1
70	142.1	23.40	24.84	21.29	163.0	16.87	19.66	19.27	60- 70	766	6619	95.1,95.1
80	11.48	13.55	18.38	12.32	13.80	8.35	11.77	9.40	70- 80	245.1	6864	98.7,98.7
90	0.1449	0.858	2.503	0.409	0.375	0.0515	0.0719	0.0496	80- 90	60.5	6925	99.5,99.5
100	0.1400	0.0695	0.1215	0.0592	0.2028	0.0957	0.0994	0.0843	90-100	1.139	6926	99.5,99.5
110	0.335	0.1566	0.945	0.1583	0.523	0.2580	0.479	0.2010	100-110	2.106	6928	99.6,99.6
120	0.510	0.3110	1.627	0.3119	0.734	0.545	0.747	0.389	110-120	4.42	6933	99.6,99.6
130	0.722	0.528	1.070	0.530	0.746	0.792	1.326	0.591	120-130	6.00	6939	99.7,99.7
140	0.803	0.723	1.154	0.721	0.680	0.893	1.651	0.716	130-140	6.59	6945	99.8,99.8
150	0.791	0.971	0.861	0.924	0.677	0.890	1.202	0.736	140-150	5.64	6951	99.9,99.9
160	0.756	0.860	0.839	0.786	0.703	0.801	0.901	0.828	150-160	4.01	6955	100,100
170	0.783	0.879	0.993	0.760	0.720	0.752	1.053	0.868	160-170	2.330	6957	100,100
180	0.835	0.917	1.035	0.756	0.820	0.858	1.045	0.875	170-180	0.816	6958	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:24.5DEG
Operators:William
Test Date:2020-12-02

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
Humidity:56.4%
Test Distance:26.000m [K=1.4046]
Remarks:

ISOCANDELA DIAGRAM

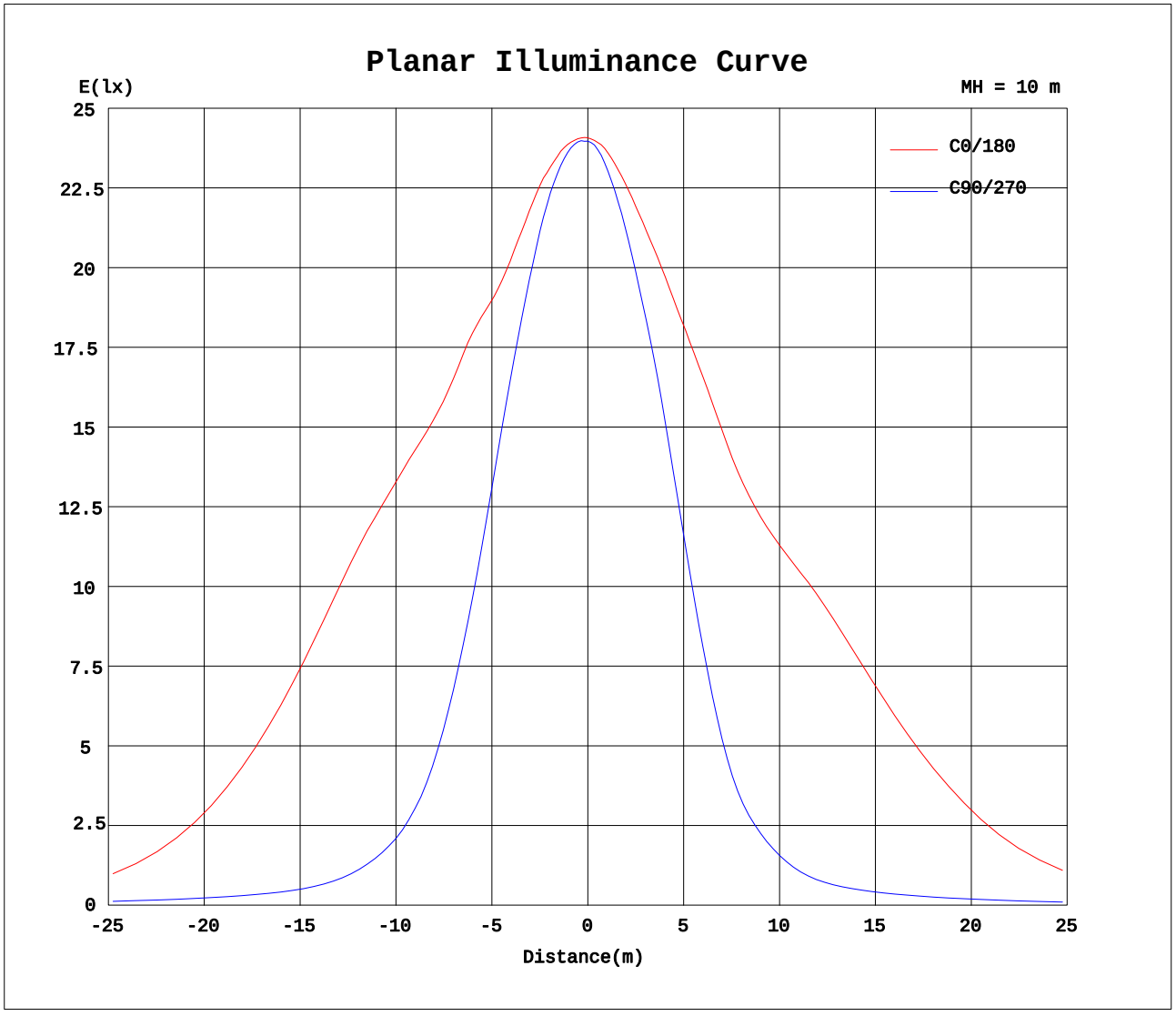
Test:U:0V I:0A P:40.0W PF:0 Freq:0Hz Lamp Flux:6955x1 lm		
NAME: Solar Light	TYPE:LED	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.: Shenzhen Beatles Energy Technology Co.,Ltd.	SUR.:	Shielding Angle:N/A



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:24.5DEG
Operators:William
Test Date:2020-12-02

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
Humidity:56.4%
Test Distance:26.000m [K=1.4046]
Remarks:

Planar Illuminance Curve



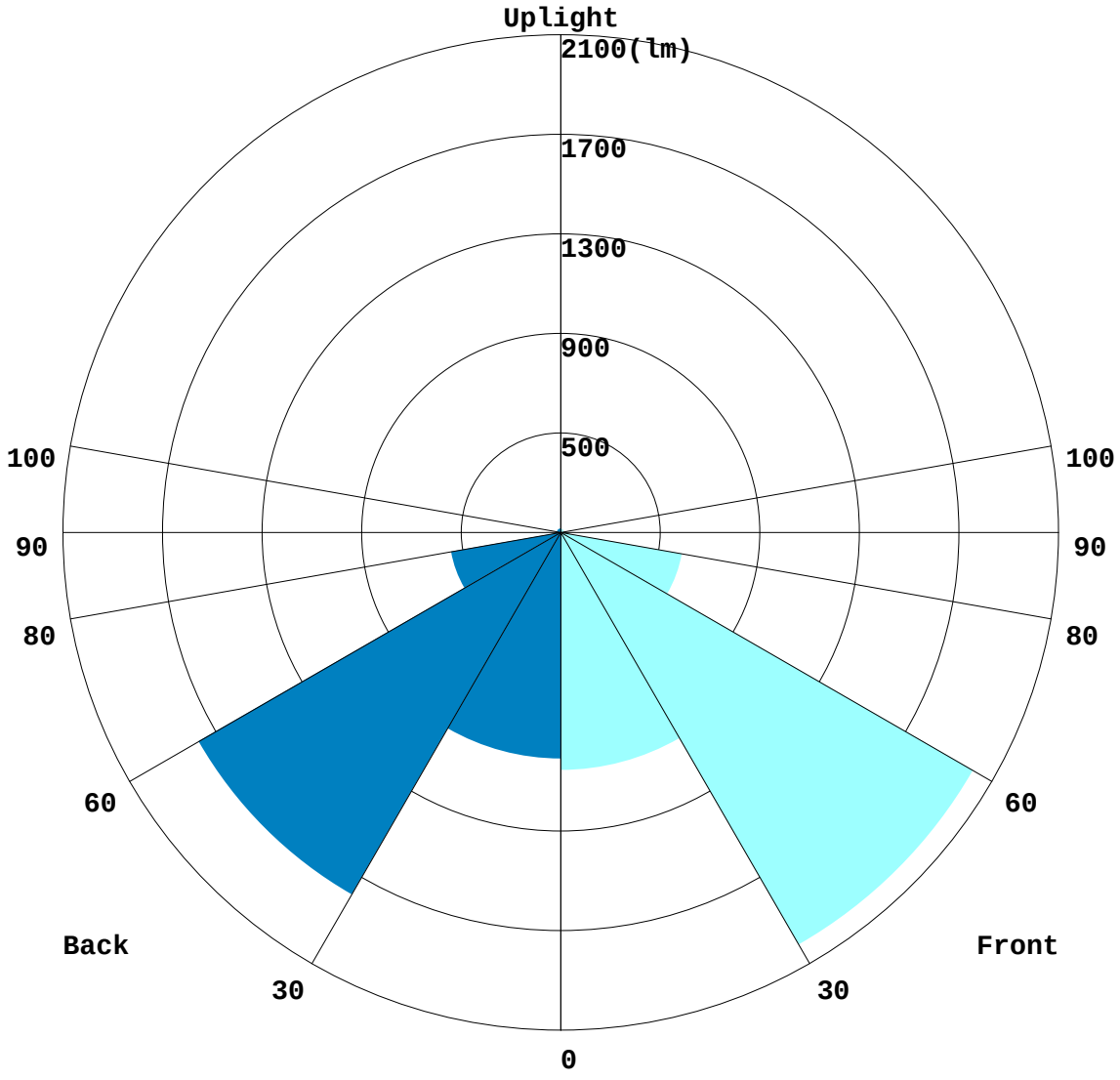
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:24.5DEG
Operators:William
Test Date:2020-12-02

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
Humidity:56.4%
Test Distance:26.000m [K=1.4046]
Remarks:

LCS REPORT

Test:U:0V I:0A P:40.0W PF:0 Freq:0Hz Lamp Flux:6955x1 lm		
NAME: Solar Light	TYPE:LED	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.: Shenzhen Beatles Energy Technology 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:William
Test Date:2020-12-02

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
Humidity:56.4%
Test Distance:26.000m [K=1.4046]
Remarks:

BUG REPORT

Test:U:0V I:0A P:40.0W PF:0 Freq:0Hz Lamp Flux:6955x1 lm		
NAME: Solar Light	TYPE:LED	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.: Shenzhen Beatles Energy Technology Co.,Ltd.	SUR.:	Shielding Angle:N/A

IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	1024.5	14.7
FM - Front-Medium(30-60)	2051.9	29.5
FH - Front-High(60-80)	530.7	7.6
FVH - Front-Very High(80-90)	36.9	0.5
Total Forward Light	3660	52.6
BL - Back-Low(0-30)	975.0	14.0
BM - Back-Medium(30-60)	1802.5	25.9
BH - Back-High(60-80)	479.8	6.9
BVH - Back-Very High(80-90)	23.6	0.3
Total Back Light	3298.1	47.4
UL - Uplight-Low(90-100)	1.1	0.0
UH - Uplight-High(100-180)	31.9	0.5
Total Up Light	33.1	0.5

BUG(Back,Up,Glare) Rating	B4-U3-G3

Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	3280.9	17.2	3298.1
Street Side	3644.2	15.9	3661.1

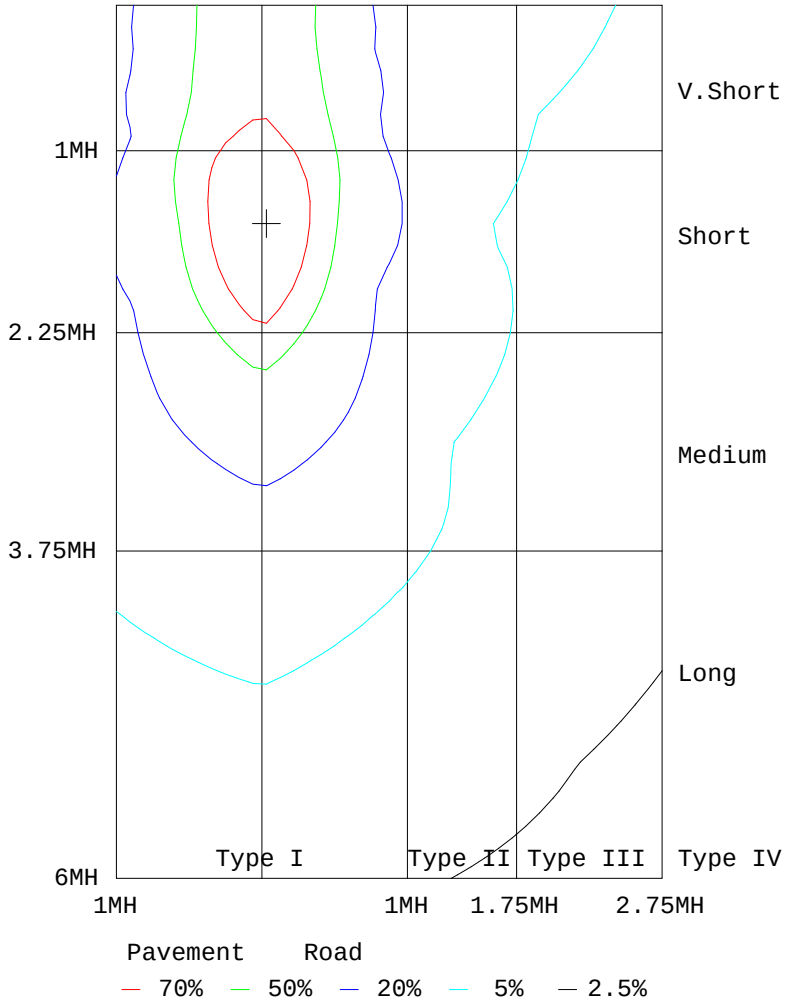
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:24.5DEG
Operators:William
Test Date:2020-12-02

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
Humidity:56.4%
Test Distance:26.000m [K=1.4046]
Remarks:

ROAD ISOCANDELA REPORT

Test:U:0V I:0A P:40.0W PF:0 Freq:0Hz Lamp Flux:6955x1 lm		
NAME: Solar Light	TYPE:LED	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.: Shenzhen Beatles Energy Technology 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:William
Test Date:2020-12-02

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
Humidity:56.4%
Test Distance:26.000m [K=1.4046]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:0V I:0A P:40.0W PF:0 Freq:0Hz Lamp Flux:6955x1 lm		
NAME: Solar Light	TYPE:LED	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.: Shenzhen Beatles Energy Technology Co.,Ltd.	SUR.:	Shielding Angle:N/A

Table--1 UNIT: ×10cd

γ (DEG) \ C (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	253	253	253	253	253	253	253	253	253	253	253	253	253	253	253	253			
5	255	254	254	254	254	254	253	253	252	252	250	249	249	250	252	253			
10	257	256	254	252	251	251	252	253	252	250	244	240	240	243	248	254			
15	261	258	251	245	242	245	250	254	253	247	236	229	227	234	244	253			
20	264	260	248	233	226	232	245	256	258	245	229	214	211	222	239	254			
25	274	265	241	215	203	212	237	259	264	245	219	192	182	201	234	258			
30	295	276	233	189	169	183	223	262	274	247	204	160	144	169	222	269			
35	316	285	217	156	130	146	204	264	285	249	182	121	100	128	200	279			
40	348	293	191	117	91	106	173	267	301	250	151	81	67	86	168	291			
45	395	301	157	81	63	73	136	269	336	247	111	54	47	59	127	298			
50	446	300	116	55	45	51	95	260	387	234	71	36	32.3	41	85	287			
55	463	271	76	38	33	37	62	226	422	200	43	26.9	26.6	29.1	56	245			
60	417	207	46	29.4	28.6	28.4	41	166	407	139	27.6	23.0	24.4	24.2	35	176			
65	295	118	30.3	25.5	26.6	24.4	27.7	97	309	71	21.2	20.0	22.5	21.0	24.6	100			
70	142	51	23.4	22.5	24.8	21.4	21.3	45	163	31.0	16.9	16.4	19.7	17.6	19.3	45			
75	39	24.8	18.5	18.1	21.5	17.2	16.8	21.9	45	17.4	12.9	11.9	17.2	13.1	14.7	22.3			
80	11.5	14.7	13.6	12.4	18.4	11.8	12.3	12.6	13.8	10.2	8.3	8.0	11.8	8.7	9.4	12.6			
85	3.5	6.8	6.9	6.8	10.9	6.5	5.9	5.2	3.19	3.4	3.08	4.3	5.4	4.6	3.4	4.6			
90	0.15	0.48	0.86	1.85	2.50	1.32	0.41	0.16	0.37	0.06	0.05	0.06	0.07	0.06	0.05	0.07			
95	0.10	0.07	0.06	0.06	0.07	0.06	0.06	0.07	0.10	0.08	0.06	0.07	0.07	0.06	0.06	0.07			
100	0.14	0.07	0.07	0.07	0.12	0.06	0.06	0.08	0.20	0.15	0.10	0.10	0.10	0.09	0.09	0.13			
105	0.24	0.12	0.10	0.10	0.60	0.10	0.10	0.11	0.36	0.28	0.16	0.17	0.21	0.15	0.14	0.22			
110	0.33	0.18	0.16	0.20	0.94	0.19	0.16	0.19	0.52	0.42	0.26	0.28	0.48	0.23	0.20	0.34			
115	0.41	0.26	0.23	0.30	1.60	0.31	0.23	0.28	0.66	0.56	0.39	0.43	0.56	0.33	0.29	0.45			
120	0.51	0.35	0.31	0.39	1.63	0.42	0.31	0.36	0.74	0.67	0.54	0.62	0.75	0.47	0.39	0.54			
125	0.64	0.51	0.41	0.59	1.26	0.64	0.41	0.54	0.75	0.75	0.63	0.74	1.08	0.60	0.45	0.59			
130	0.72	0.77	0.53	0.79	1.07	0.80	0.53	0.76	0.75	0.84	0.79	1.05	1.33	0.73	0.59	0.71			
135	0.74	0.86	0.63	0.76	0.74	0.75	0.64	0.84	0.71	0.85	0.89	1.24	1.39	0.86	0.68	0.75			
140	0.80	0.91	0.72	0.84	1.16	0.81	0.72	0.91	0.68	0.86	0.89	1.26	1.65	0.92	0.72	0.75			
145	0.80	0.90	0.90	0.85	0.90	0.77	0.87	0.86	0.66	0.73	0.90	1.29	1.61	0.97	0.74	0.71			
150	0.79	0.88	0.97	0.84	0.86	0.74	0.92	0.83	0.68	0.72	0.89	1.15	1.20	0.97	0.74	0.71			
155	0.78	0.85	0.86	0.92	1.07	0.91	0.82	0.79	0.70	0.72	0.87	1.14	1.28	1.14	0.70	0.71			
160	0.76	0.76	0.86	0.83	0.84	0.78	0.79	0.70	0.70	0.71	0.80	1.06	0.90	0.88	0.83	0.68			
165	0.77	0.76	0.85	0.94	0.96	0.87	0.78	0.69	0.71	0.71	0.73	0.98	1.03	0.96	0.87	0.67			
170	0.78	0.83	0.88	0.97	0.99	0.87	0.76	0.71	0.72	0.72	0.75	0.89	1.05	0.91	0.87	0.69			
175	0.84	0.87	0.96	1.02	0.97	0.83	0.78	0.76	0.79	0.79	0.80	0.89	1.05	0.94	0.88	0.72			
180	0.83	0.86	0.92	1.05	1.04	0.87	0.76	0.73	0.82	0.83	0.86	0.93	1.05	1.03	0.87	0.75			

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:24.5DEG
Operators:William
Test Date:2020-12-02

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
Humidity:56.4%
Test Distance:26.000m [K=1.4046]
Remarks: