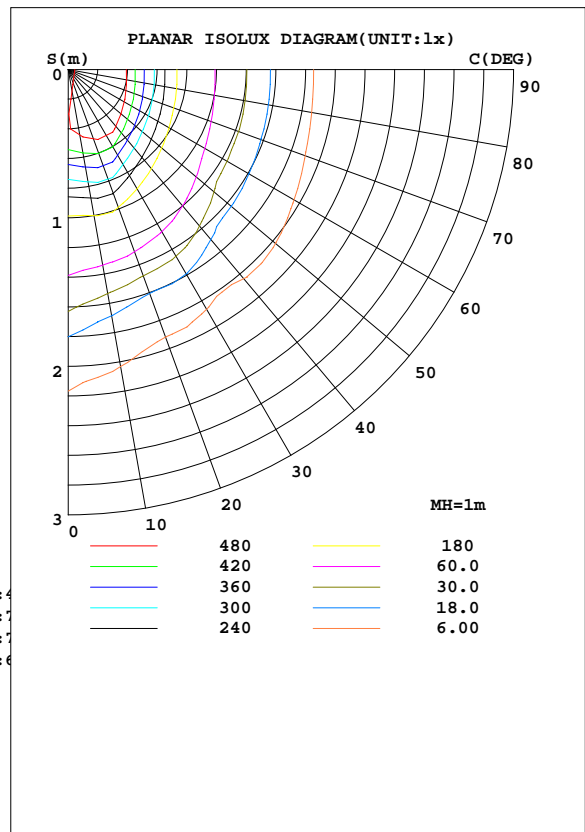
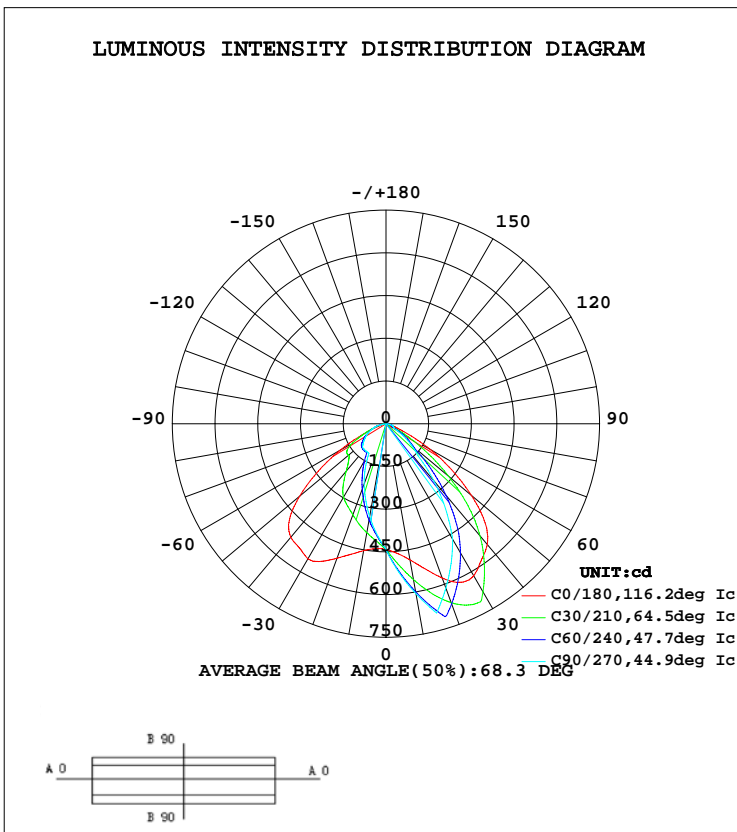


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:11.55V I:0.5536A P:6.393W PF:1.000 Lamp Flux:1037.2x1 lm		
NAME: Integrated Solar Street Light	TYPE:Cool White	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Shenzhen Spark Co., Ltd.	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 162.25 lm/W			
MODEL	SPWTL002-07	I _{max} (cd)	721.5	S/MH(C0/180)	1.66
NOMINAL POWER(W)	7	LOR(%)	100.0	S/MH(C90/270)	0.62
RATED VOLTAGE(V)	11.548	TOTAL FLUX(lm)	1037.2	η UP, DN(C0-180)	0.0,60.3
NOMINAL FLUX(lm)	1037.2	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,39.7
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	11.548	η down(%)	100.0	CIBSE SHR MAX	1.00



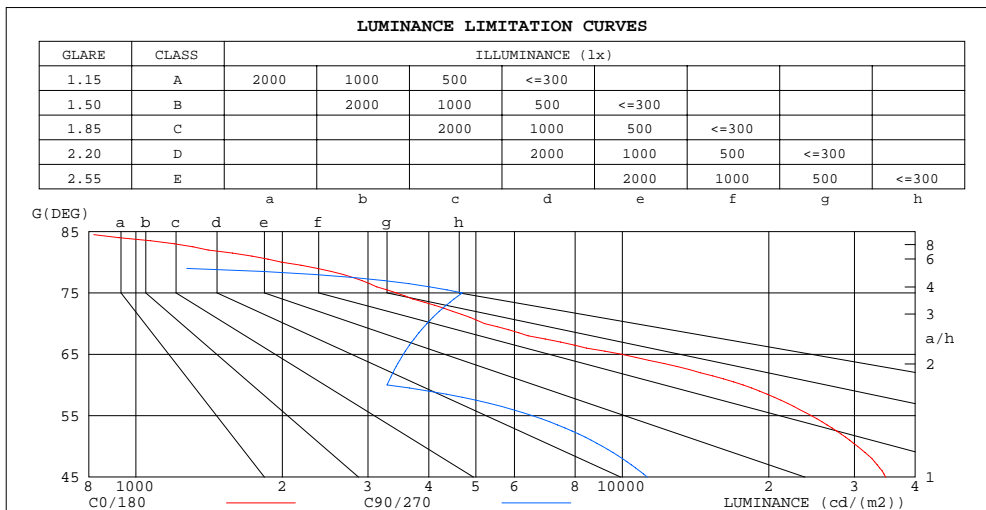
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Grace
 Test Date:2018-06-06

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:11.010m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM
AND LUMINANCE LIMITATION CURVES

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	lum, lamp
5	457.1	509.3	523.6	495.7	440.7	400.2	386.4	410.2	0- 5	10.73	10.73	1.03,1.03
10	485.3	580.9	605.7	551.5	452.6	362.4	331.3	378.9	5- 10	33.03	43.77	4.22,4.22
15	526.9	651.0	687.8	603.9	474.6	322.2	276.3	344.7	10- 15	56.67	100.4	9.68,9.68
20	576.2	713.1	614.4	650.9	502.3	276.7	224.3	307.4	15- 20	79.63	180.1	17.4,17.4
25	614.3	665.0	541.1	607.2	532.7	241.9	172.4	279.4	20- 25	97.68	277.8	26.8,26.8
30	616.7	588.1	467.7	544.7	548.2	212.4	120.4	245.5	25- 30	110.0	387.8	37.4,37.4
35	584.3	502.4	364.9	476.0	531.6	175.4	119.4	191.6	30- 35	114.8	502.6	48.5,48.5
40	553.5	409.7	262.0	397.1	520.5	131.8	118.4	134.8	35- 40	113.3	615.9	59.4,59.4
45	491.9	306.2	159.1	300.3	480.2	129.1	117.3	129.3	40- 45	106.3	722.2	69.6,69.6
50	391.5	200.2	117.0	200.7	395.9	127.4	104.1	123.4	45- 50	93.82	816.0	78.7,78.7
55	280.6	98.76	74.94	104.2	290.5	121.4	90.83	112.5	50- 55	76.99	893.0	86.1,86.1
60	177.1	64.88	32.84	70.03	186.1	97.93	77.57	92.21	55- 60	57.20	950.2	91.6,91.6
65	84.12	35.38	29.98	38.72	92.48	70.23	63.14	68.32	60- 65	37.68	987.9	95.2,95.2
70	35.67	18.78	27.13	20.33	35.29	46.64	48.70	46.81	65- 70	23.42	1011	97.5,97.5
75	17.77	14.05	24.27	15.68	19.17	32.10	34.26	31.13	70- 75	15.33	1027	99,99
80	6.921	8.026	0	9.373	8.124	16.04	0	14.14	75- 80	8.747	1035	99.8,99.8
85	1.208	0	0	0	1.347	0	0	0	80- 85	1.766	1037	100,100
90	0	0	0	0	0.0000	0	0	0	85- 90	0.1111	1037	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	693	0
80	1993	0
75	3434	4689
70	5214	3966
65	9953	3547
60	17708	3284
55	24465	6532
50	30457	9104
45	34784	11253

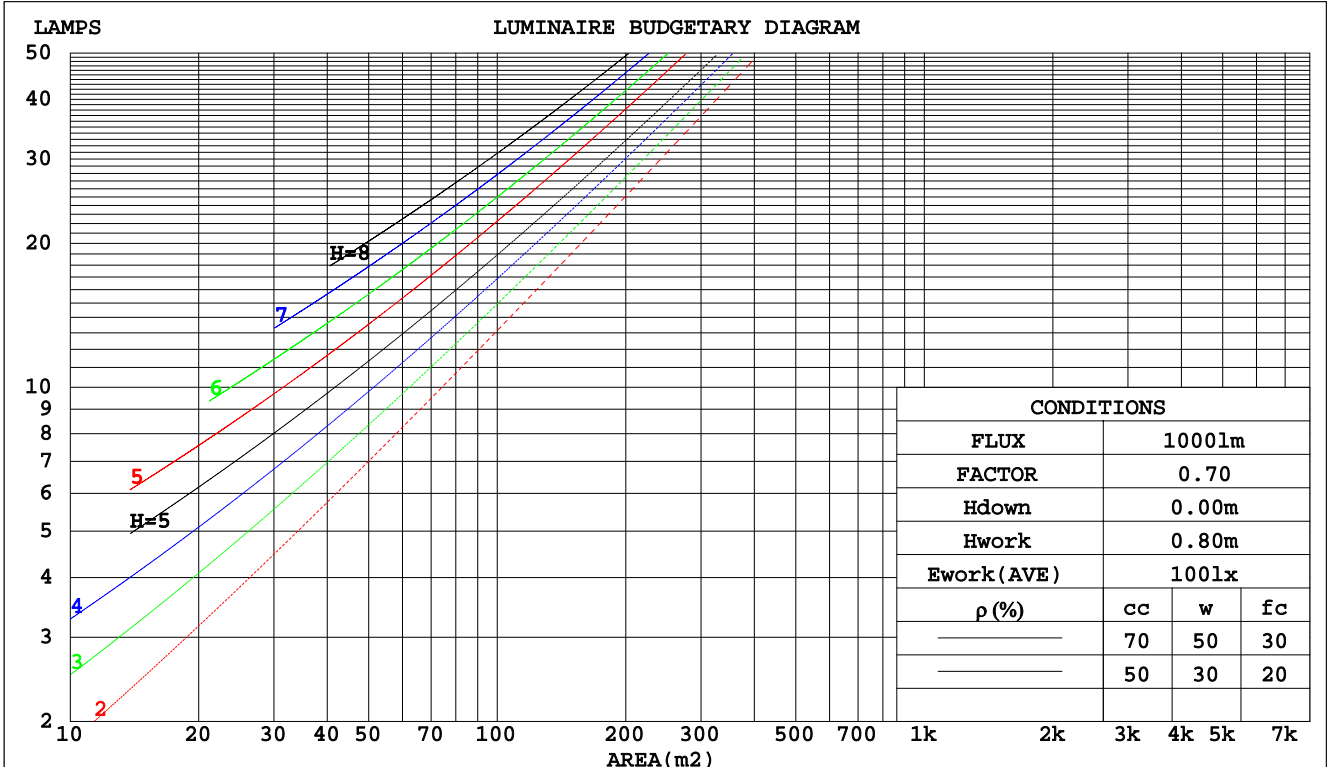
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Grace
 Test Date:2018-06-06

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:11.010m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:11.55V I:0.5536A P:6.393W PF:1.000 Lamp Flux:1037.2x1 lm		
NAME: Integrated Solar Street Light	TYPE:Cool White	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Shenzhen Spark Co., Ltd.	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															
	Coefficients of Utilization(CU)															
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.07	1.04	1.01	1.05	1.02	.99	1.01	.98	.96	.97	.95	.93	.94	.92	.90	.88
2.0	.96	.90	.86	.94	.89	.85	.91	.86	.83	.88	.84	.81	.85	.82	.79	.77
3.0	.86	.79	.74	.85	.78	.73	.82	.76	.72	.79	.74	.70	.77	.73	.69	.67
4.0	.77	.70	.64	.76	.69	.64	.74	.68	.63	.72	.66	.62	.70	.65	.61	.59
5.0	.70	.62	.56	.69	.62	.56	.67	.60	.55	.65	.59	.55	.63	.58	.54	.52
6.0	.64	.56	.50	.63	.55	.50	.61	.54	.49	.59	.54	.49	.58	.53	.49	.47
7.0	.58	.50	.45	.57	.50	.45	.56	.49	.44	.55	.49	.44	.53	.48	.44	.42
8.0	.53	.46	.40	.53	.45	.40	.52	.45	.40	.50	.44	.40	.49	.44	.40	.38
9.0	.49	.42	.37	.49	.41	.36	.48	.41	.36	.47	.41	.36	.46	.40	.36	.34
10.0	.46	.38	.33	.45	.38	.33	.44	.38	.33	.43	.37	.33	.42	.37	.33	.31



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Grace
 Test Date:2018-06-06

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:11.010m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:11.55V I:0.5536A P:6.393W PF:1.000 Lamp Flux:1037.2x1 lm		
NAME: Integrated Solar Street Light	TYPE:Cool White	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Shenzhen Spark Co., Ltd.	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.245	.139	.044	.238	.136	.043	.225	.129	.041	.213	.123	.039	.202	.117	.038	
2.0	.239	.131	.040	.233	.128	.040	.222	.123	.038	.211	.119	.037	.202	.114	.036	
3.0	.227	.121	.036	.222	.119	.036	.212	.115	.035	.203	.111	.034	.195	.108	.033	
4.0	.215	.112	.033	.210	.110	.032	.201	.107	.032	.193	.104	.031	.186	.101	.031	
5.0	.202	.103	.030	.198	.102	.030	.190	.099	.029	.183	.097	.029	.176	.094	.028	
6.0	.190	.095	.027	.187	.094	.027	.180	.092	.027	.173	.090	.026	.167	.088	.026	
7.0	.179	.089	.025	.176	.088	.025	.170	.086	.025	.164	.084	.025	.159	.083	.024	
8.0	.169	.083	.023	.166	.082	.023	.161	.080	.023	.156	.079	.023	.151	.077	.023	
9.0	.160	.077	.022	.158	.077	.022	.153	.075	.021	.148	.074	.021	.144	.073	.021	
10.0	.152	.073	.020	.149	.072	.020	.145	.071	.020	.141	.070	.020	.137	.069	.020	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.176	.157	.140	.150	.135	.120	.103	.093	.083	.059	.054	.048	.019	.017	.016	
2.0	.165	.132	.104	.142	.114	.090	.097	.079	.063	.056	.046	.037	.018	.015	.012	
3.0	.156	.114	.080	.134	.098	.070	.092	.068	.049	.053	.040	.029	.017	.013	.009	
4.0	.148	.100	.063	.127	.087	.055	.088	.060	.039	.051	.035	.023	.016	.012	.008	
5.0	.141	.089	.051	.121	.077	.045	.083	.054	.032	.048	.032	.019	.016	.010	.006	
6.0	.134	.081	.043	.115	.070	.037	.080	.049	.026	.046	.029	.016	.015	.009	.005	
7.0	.128	.074	.036	.110	.064	.031	.076	.045	.022	.044	.026	.013	.014	.009	.004	
8.0	.122	.068	.031	.105	.059	.027	.073	.041	.019	.042	.024	.011	.014	.008	.004	
9.0	.117	.063	.027	.101	.055	.023	.070	.038	.017	.041	.023	.010	.013	.007	.003	
10.0	.112	.059	.024	.096	.051	.021	.067	.036	.015	.039	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Grace
 Test Date:2018-06-06

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:11.010m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:11.55V I:0.5536A P:6.393W PF:1.000 Lamp Flux:1037.2x1 lm										
NAME: Integrated Solar Street Light					TYPE:Cool White			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: Shenzhen Spark Co., Ltd.					SUR.:			Shielding Angle:		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	23.8	25.2	24.1	25.4	25.6	18.9	20.3	19.2	20.5	20.7
3H	23.8	25.0	24.1	25.3	25.5	19.1	20.3	19.4	20.6	20.8
4H	23.8	24.9	24.1	25.2	25.4	19.3	20.5	19.6	20.7	21.0
6H	23.7	24.8	24.0	25.0	25.3	19.3	20.4	19.6	20.7	20.9
8H	23.7	24.7	24.0	25.0	25.2	19.3	20.3	19.6	20.6	20.9
12H	23.6	24.6	23.9	24.9	25.2	19.2	20.2	19.6	20.5	20.8
4H 2H	23.6	24.8	23.9	25.0	25.2	19.1	20.2	19.4	20.5	20.7
3H	23.6	24.6	24.0	24.9	25.2	19.3	20.3	19.7	20.6	20.9
4H	23.6	24.5	24.0	24.8	25.1	19.7	20.6	20.0	20.9	21.2
6H	23.6	24.3	23.9	24.7	25.1	19.7	20.5	20.1	20.8	21.2
8H	23.5	24.3	23.9	24.6	25.0	19.7	20.4	20.1	20.8	21.1
12H	23.5	24.2	23.9	24.5	24.9	19.6	20.3	20.0	20.7	21.1
8H 4H	23.5	24.2	23.9	24.6	25.0	19.6	20.4	20.1	20.7	21.1
6H	23.5	24.1	23.9	24.5	24.9	19.7	20.3	20.1	20.7	21.1
8H	23.5	24.0	23.9	24.4	24.9	19.7	20.2	20.1	20.6	21.1
12H	23.4	23.9	23.9	24.3	24.8	19.6	20.1	20.1	20.5	21.0
12H 4H	23.4	24.1	23.9	24.5	24.9	19.6	20.3	20.0	20.7	21.1
6H	23.4	24.0	23.9	24.4	24.8	19.7	20.2	20.1	20.6	21.1
8H	23.4	23.9	23.9	24.3	24.8	19.6	20.1	20.1	20.5	21.0
Variations with the observer position at spacings:										
S = 1.0H	+ 1.3 / - 2.2					+ 1.4 / - 2.3				
1.5H	+ 1.8 / - 2.8					+ 1.5 / - 1.6				
2.0H	+ 3.9 / - 7.4					+ 1.8 / - 2.6				

CIE Pub.117 Corrected 1037 lm Total Lamp Luminous Flux.(8log(F/F0) = 0.1)

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Grace
 Test Date:2018-06-06

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:11.010m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:11.55V I:0.5536A P:6.393W PF:1.000 Lamp Flux:1037.2x1 lm		
NAME: Integrated Solar Street Light	TYPE:Cool White	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Shenzhen Spark Co., Ltd.	SUR.:	Shielding Angle:

REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	66	56	49	65	55	49	64	55	49	44
0.80	76	66	60	75	66	60	73	65	59	53
1.00	84	75	69	83	74	69	81	75	68	62
1.25	91	82	76	89	82	76	87	80	75	69
1.50	95	87	82	94	86	81	91	85	80	74
2.00	101	94	89	99	93	88	96	91	87	80
2.50	104	98	93	102	96	92	98	94	90	83
3.00	106	101	97	104	100	96	101	97	94	86
4.00	109	105	101	107	103	100	103	100	97	89
5.00	111	107	104	109	106	103	105	102	100	91
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Grace
 Test Date:2018-06-06

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:11.010m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

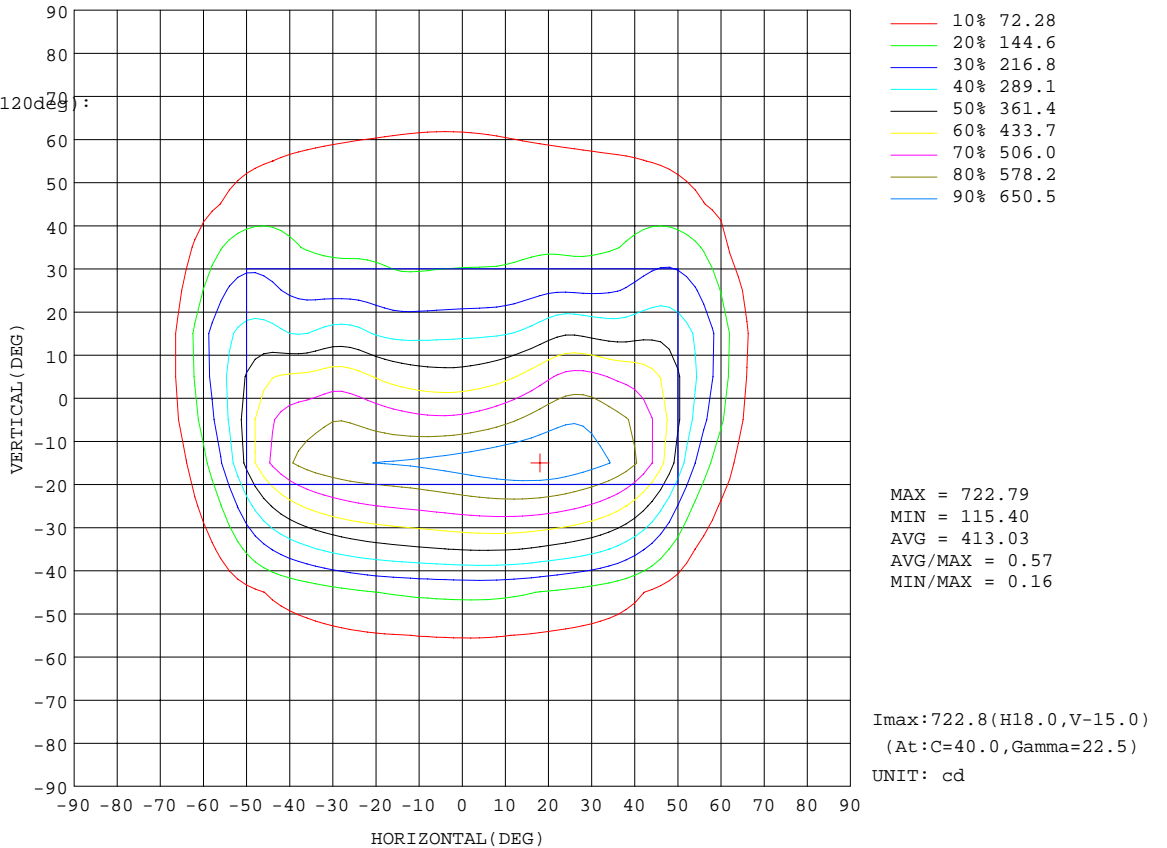
Test:U:11.55V I:0.5536A P:6.393W PF:1.000 Lamp Flux:1037.2x1 lm		
NAME: Integrated Solar Street Light	TYPE:Cool White	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Shenzhen Spark Co., Ltd.	SUR.:	Shielding Angle:

Conical surface Flux(90deg):

722.18 lm
%lum = 69.6%
%lamp = 69.6%

Conical surface Flux(120deg):

950.19 lm
%lum = 91.6%
%lamp = 91.6%

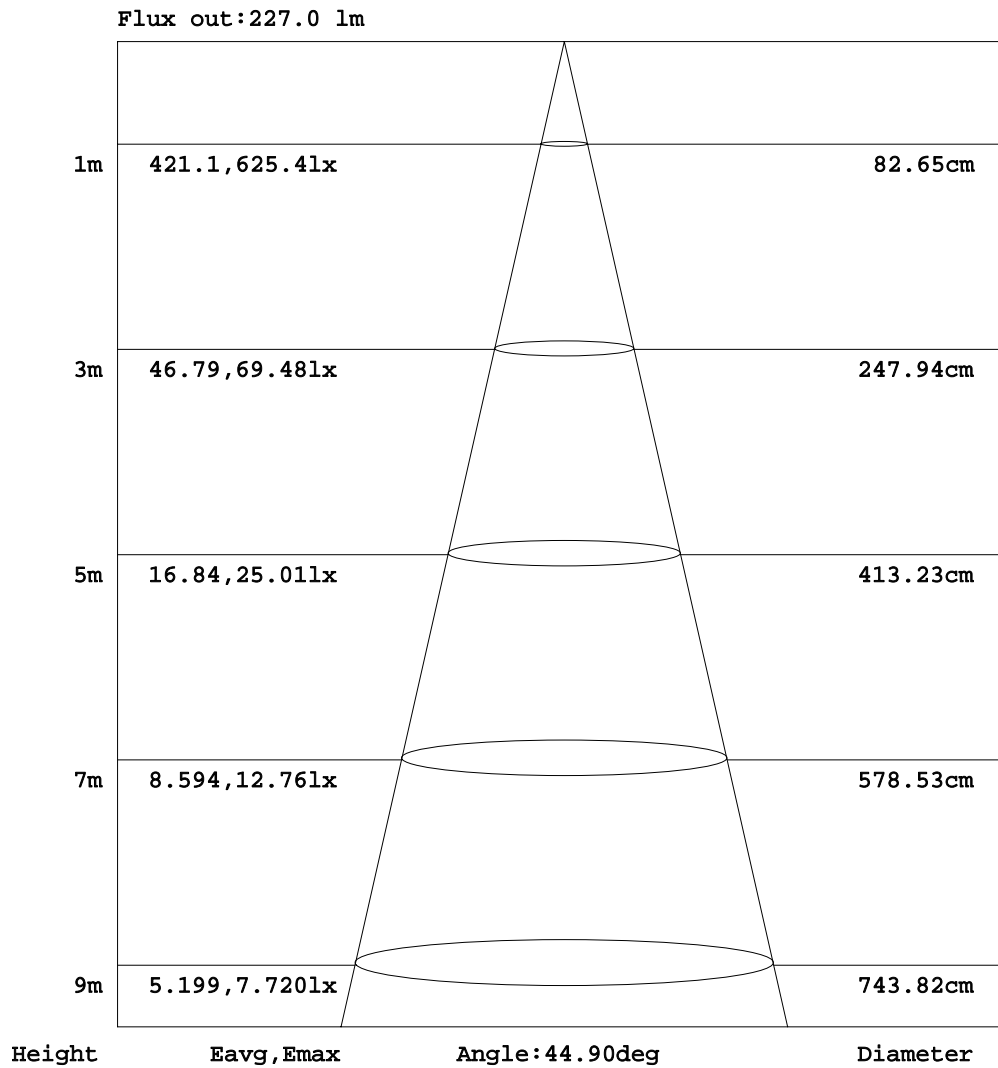


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Grace
Test Date: 2018-06-06

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 11.010m [K=1.0000]
Remarks:

AAI Figure

Test:U:11.55V I:0.5536A P:6.393W PF:1.000 Lamp Flux:1037.2x1 lm		
NAME: Integrated Solar Street Light	TYPE:Cool White	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Shenzhen Spark Co., Ltd.	SUR.:	Shielding Angle:



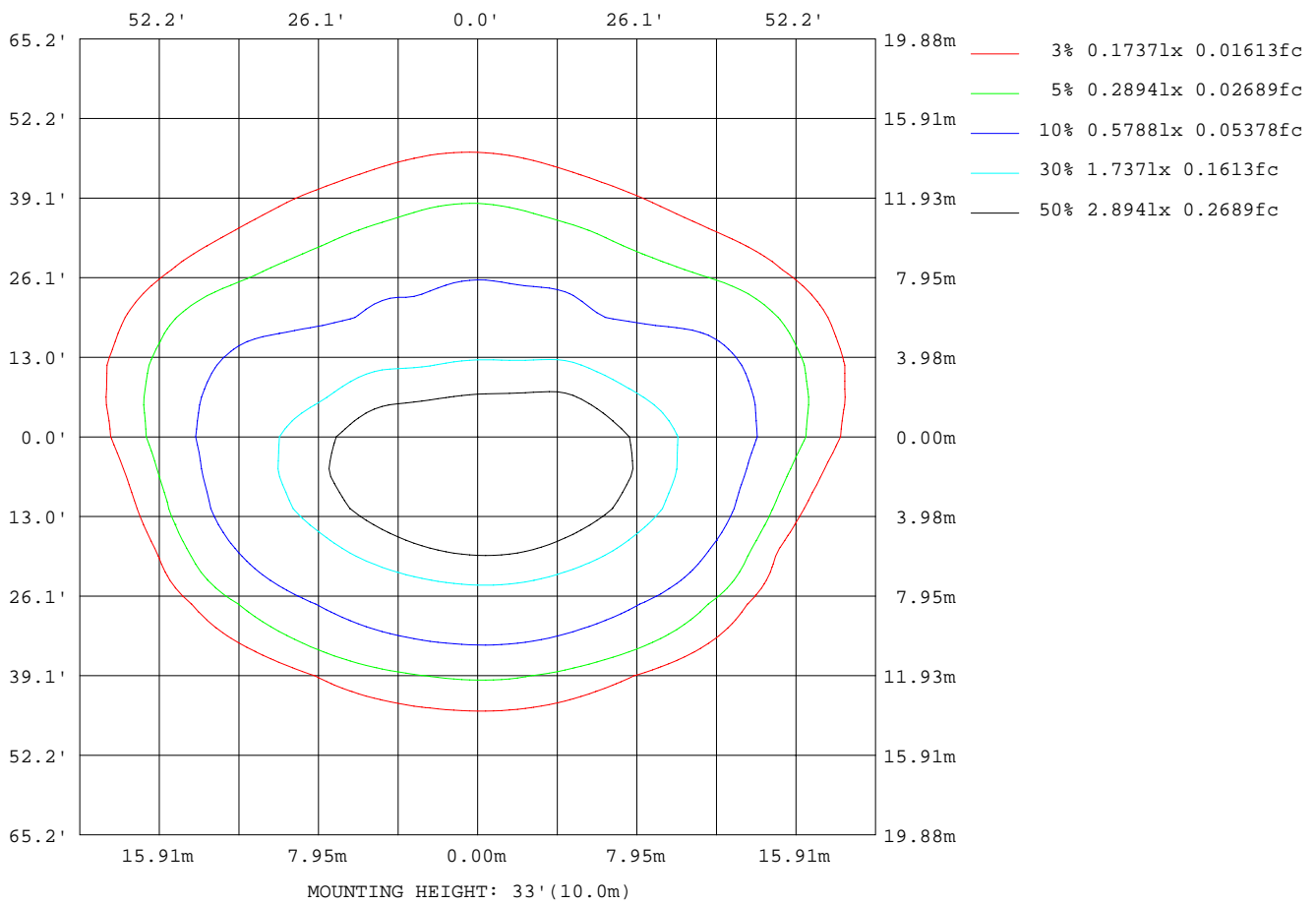
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Grace
 Test Date:2018-06-06

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:11.010m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:11.55V I:0.5536A P:6.393W PF:1.000 Lamp Flux:1037.2x1 lm		
NAME: Integrated Solar Street Light	TYPE:Cool White	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Shenzhen Spark Co., Ltd.	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Grace
 Test Date:2018-06-06

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:11.010m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:11.55V I:0.5536A P:6.393W PF:1.000 Lamp Flux:1037.2x1 lm		
NAME: Integrated Solar Street Light	TYPE:Cool White	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Shenzhen Spark Co., Ltd.	SUR.:	Shielding Angle:

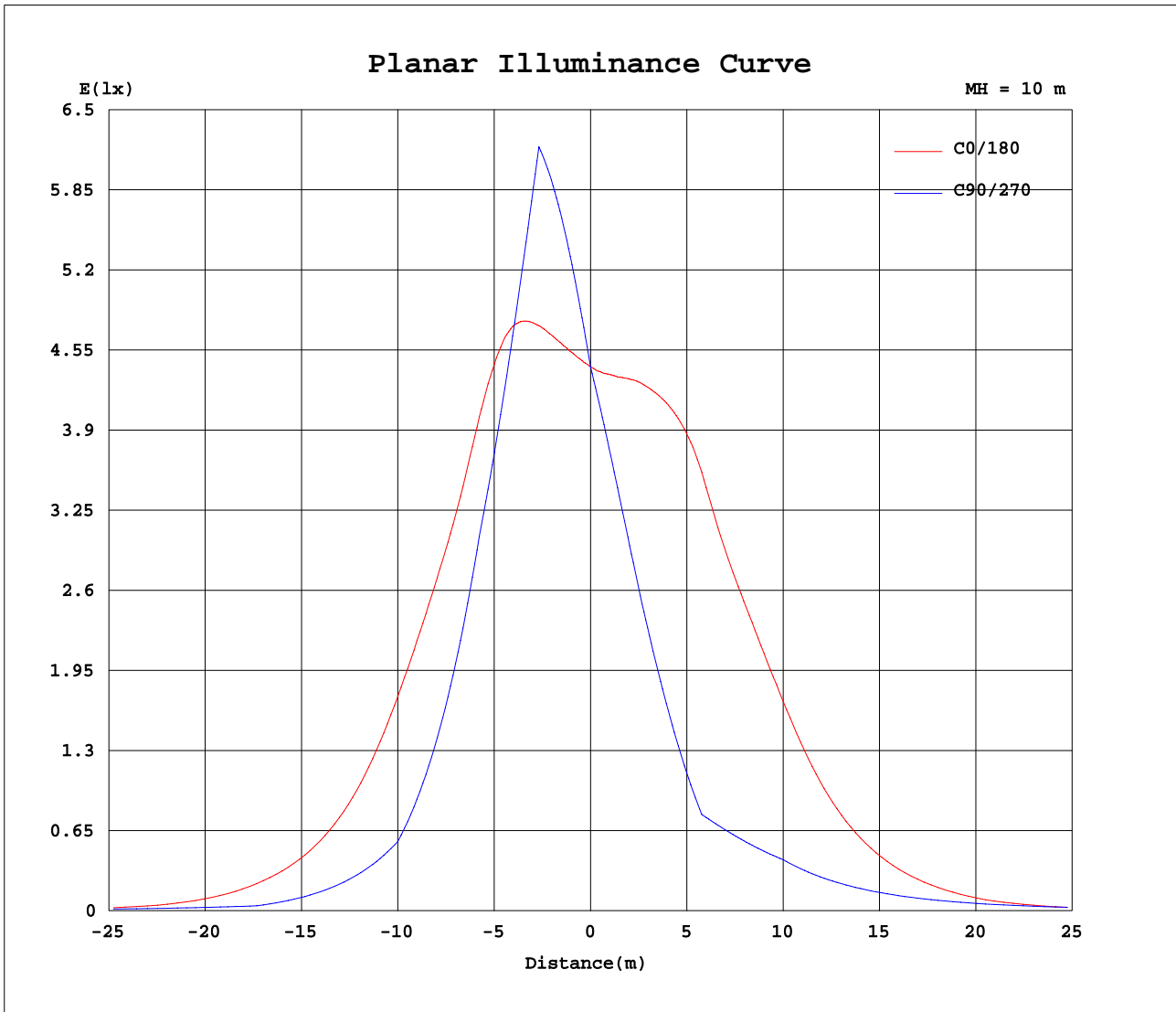
AvgL	cd/m2
L_0~180(65)av	10447
L_0~180(75)av	3569
L_0~180(85)av	733
L_90~270(65)av	5508
L_90~270(75)av	5654
L_90~270(85)av	0
L_45(65)av	6290
L_45(75)av	4490
L_45(85)av	0

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Grace
 Test Date:2018-06-06

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:11.010m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Grace
 Test Date: 2018-06-06

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 11.010m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:11.55V I:0.5536A P:6.393W PF:1.000 Lamp Flux:1037.2x1 lm		
NAME: Integrated Solar Street Light	TYPE:Cool White	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Shenzhen Spark Co., Ltd.	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	441	441	441	441	441	441	441	441	441	441	441	441	441	441	441	441	441	441	441
5	457	464	471	478	484	490	495	500	505	509	513	516	519	521	523	524	524	524	524
10	485	499	511	523	535	545	555	565	573	581	588	594	599	603	605	607	608	607	606
15	527	544	560	575	589	603	616	628	640	651	661	670	677	683	688	691	691	690	688
20	576	593	609	624	639	653	668	683	698	713	709	690	674	659	646	635	626	619	614
25	614	628	641	655	669	685	702	720	692	665	641	620	602	586	572	561	552	546	541
30	617	629	642	656	672	688	681	647	616	588	563	541	523	508	495	485	477	471	468
35	584	599	616	636	656	644	602	565	532	502	476	454	433	415	399	386	376	369	365
40	553	564	580	601	605	557	514	475	441	410	379	351	328	309	294	281	272	265	262
45	492	493	505	527	490	447	408	372	339	306	274	246	222	202	188	176	167	162	159
50	392	375	375	374	346	317	287	262	232	200	169	140	127	124	123	121	119	118	117
55	281	247	229	211	196	183	175	155	127	98.8	96.7	93.1	88.7	85.0	82.0	79.3	77.2	75.7	74.9
60	177	144	121	103	86.0	87.7	81.7	60.8	63.9	64.9	62.1	57.3	51.8	46.6	42.0	38.0	35.1	33.3	32.8
65	84.1	66.5	56.9	45.4	42.4	37.3	31.8	35.1	37.2	35.4	30.1	25.0	25.9	26.8	27.7	28.4	29.0	29.7	30.0
70	35.7	30.1	26.7	24.4	22.2	20.6	20.5	20.2	18.3	18.8	19.7	20.9	22.0	23.3	24.4	25.3	25.9	26.8	27.1
75	17.8	16.8	15.9	15.1	14.6	14.1	13.1	13.3	13.5	14.0	15.2	16.7	18.2	19.7	21.2	22.2	22.8	23.9	24.3
80	6.92	8.01	8.83	9.59	8.58	6.92	5.27	8.59	8.78	8.03	7.08	6.18	5.00	3.76	2.58	1.51	0.68	0.18	0.00
85	1.21	2.15	3.21	4.55	3.58	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Grace
 Test Date:2018-06-06

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:11.010m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:11.55V I:0.5536A P:6.393W PF:1.000 Lamp Flux:1037.2x1 lm		
NAME: Integrated Solar Street Light	TYPE:Cool White	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Shenzhen Spark Co., Ltd.	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C(DEG) γ (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	441	441	441	441	441	441	441	441	441	441	441	441	441	441	441	441	441	441	441
5	523	521	519	516	513	509	505	501	496	490	485	479	473	467	461	454	447	441	436
10	603	600	595	590	583	576	569	560	551	542	532	522	511	500	489	477	465	453	442
15	684	678	670	662	652	641	629	617	604	591	577	564	550	536	521	506	491	475	456
20	612	611	612	616	622	629	639	652	651	634	618	602	586	569	553	537	520	502	475
25	538	538	540	545	552	561	574	589	607	628	651	633	615	598	582	566	550	533	498
30	465	466	468	473	481	493	507	524	545	569	596	627	632	614	597	580	564	548	503
35	364	367	373	383	397	415	436	454	476	502	531	565	603	613	591	570	550	532	476
40	262	266	274	285	300	319	342	368	397	425	456	492	533	580	575	553	536	520	456
45	160	165	174	186	202	221	244	270	300	333	369	405	446	491	530	507	490	480	425
50	117	118	121	124	129	133	144	171	201	234	269	304	340	376	411	409	395	396	365
55	75.3	76.9	79.7	83.6	88.3	92.9	97.0	101	104	136	170	201	224	244	261	273	273	290	286
60	33.5	35.5	38.7	43.2	48.5	54.1	59.8	65.1	70.0	73.9	77.2	107	123	126	135	147	160	186	199
65	30.0	29.6	29.1	28.8	28.1	27.2	26.3	31.9	38.7	44.1	46.5	44.8	52.1	58.2	59.8	67.6	75.3	92.5	102
70	27.1	26.6	26.0	25.5	24.7	23.5	22.4	21.3	20.3	19.7	24.0	25.6	24.9	26.4	29.1	30.0	31.6	35.3	41.8
75	24.3	23.6	22.8	22.3	21.4	19.8	18.4	17.0	15.7	15.0	14.7	14.8	16.0	16.8	17.5	18.0	18.2	19.2	21.3
80	0.18	0.71	1.55	2.73	4.11	5.51	6.97	8.26	9.37	10.4	10.1	10.2	10.8	11.3	12.0	12.6	10.7	8.12	9.92
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.55	5.93	6.64	5.02	3.47	1.35	1.84
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Grace
 Test Date:2018-06-06

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:11.010m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:11.55V I:0.5536A P:6.393W PF:1.000 Lamp Flux:1037.2x1 lm		
NAME: Integrated Solar Street Light	TYPE:Cool White	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Shenzhen Spark Co., Ltd.	SUR.:	Shielding Angle:

Table--3

UNIT: cd

C(DEG) γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	441	441	441	441	441	441	441	441	441	441	441	441	441	441	441	441	441	441	441
5	431	426	421	416	412	408	404	400	397	394	392	389	388	387	386	386	386	387	389
10	431	420	409	399	388	379	370	362	355	349	344	339	336	333	331	331	331	333	335
15	437	419	400	382	365	349	335	322	311	301	294	288	283	279	277	276	276	277	280
20	448	420	393	366	340	317	296	277	263	253	244	237	232	228	225	224	224	226	229
25	462	426	390	354	319	285	262	242	224	209	197	188	182	177	174	172	172	174	177
30	458	415	374	334	298	268	239	212	189	169	152	140	132	126	123	121	120	122	126
35	423	373	327	292	262	231	202	175	151	130	121	116	116	117	118	119	119	120	120
40	393	330	278	248	218	186	154	132	130	127	122	117	115	116	117	118	118	118	117
45	371	310	265	224	186	149	137	129	125	123	119	116	115	116	117	117	117	116	115
50	334	298	260	216	172	150	136	127	122	118	113	108	106	105	105	105	104	103	102
55	285	264	237	203	168	143	129	121	111	103	97.7	94.3	92.6	92.0	91.8	91.4	90.8	89.8	88.8
60	212	197	185	161	136	118	108	97.9	90.0	84.5	81.2	79.5	78.8	78.7	78.6	78.3	77.6	76.6	75.5
65	111	111	110	96.8	86.6	83.3	76.8	70.2	65.6	63.8	64.2	64.3	64.2	64.1	64.0	63.7	63.1	62.4	61.6
70	46.1	50.9	51.2	51.4	52.4	48.9	44.6	46.6	48.0	48.8	49.3	49.5	49.5	49.4	49.2	49.0	48.7	48.3	47.7
75	23.7	26.3	27.6	28.1	27.5	28.6	30.1	32.1	33.4	34.2	34.6	34.8	34.8	34.8	34.5	34.4	34.3	34.2	33.8
80	11.9	12.6	13.4	13.9	14.4	15.0	16.4	16.0	14.0	11.4	8.71	6.20	4.05	2.30	1.02	0.26	0.00	0.25	1.00
85	2.19	2.85	2.72	1.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Grace
 Test Date:2018-06-06

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:11.010m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:11.55V I:0.5536A P:6.393W PF:1.000 Lamp Flux:1037.2x1 lm		
NAME: Integrated Solar Street Light	TYPE:Cool White	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Shenzhen Spark Co., Ltd.	SUR.:	Shielding Angle:

Table--4

UNIT: cd

C(DEG) γ (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	441	441	441	441	441	441	441	441	441	441	441	441	441	441	441				
5	390	393	395	398	402	406	410	415	420	425	430	436	441	446	452				
10	338	342	347	354	361	370	379	389	400	412	424	436	449	461	473				
15	284	289	296	305	317	330	345	362	380	400	421	442	464	485	506				
20	233	240	248	259	272	288	307	332	359	389	420	451	483	515	546				
25	183	191	202	216	234	255	279	307	337	375	414	453	493	533	574				
30	132	142	156	174	194	218	245	275	307	339	375	419	464	513	564				
35	121	125	131	138	146	167	192	220	251	284	319	362	414	469	526				
40	118	120	125	130	133	133	135	161	199	237	277	319	375	435	494				
45	113	113	115	119	121	123	129	140	157	204	253	302	350	400	446				
50	101	101	103	107	111	116	123	136	155	185	235	283	321	349	369				
55	87.8	87.8	89.2	92.1	96.6	103	113	124	144	174	211	243	268	287	281				
60	74.4	73.9	74.5	76.2	79.4	84.6	92.2	102	111	134	160	182	193	205	189				
65	60.7	60.2	60.0	60.2	60.7	63.3	68.3	74.9	81.0	84.4	96.1	108	109	105	94.3				
70	47.0	46.6	46.3	46.3	46.5	46.8	46.8	46.6	50.6	53.8	53.5	22.4	48.2	46.8	40.9				
75	33.4	33.1	32.7	32.4	32.2	32.0	31.1	30.4	29.7	28.3	24.8	21.1	25.2	22.6	19.6				
80	2.21	3.84	5.82	8.10	10.6	12.9	14.1	14.5	8.40	9.82	11.8	12.1	11.1	9.86	8.39				
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.49	2.25	2.30	2.01	1.45			
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 5.0DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
Temperature:25.3DEG	Humidity:65.0%
Operators:Grace	Test Distance:11.010m [K=1.0000]
Test Date:2018-06-06	Remarks: