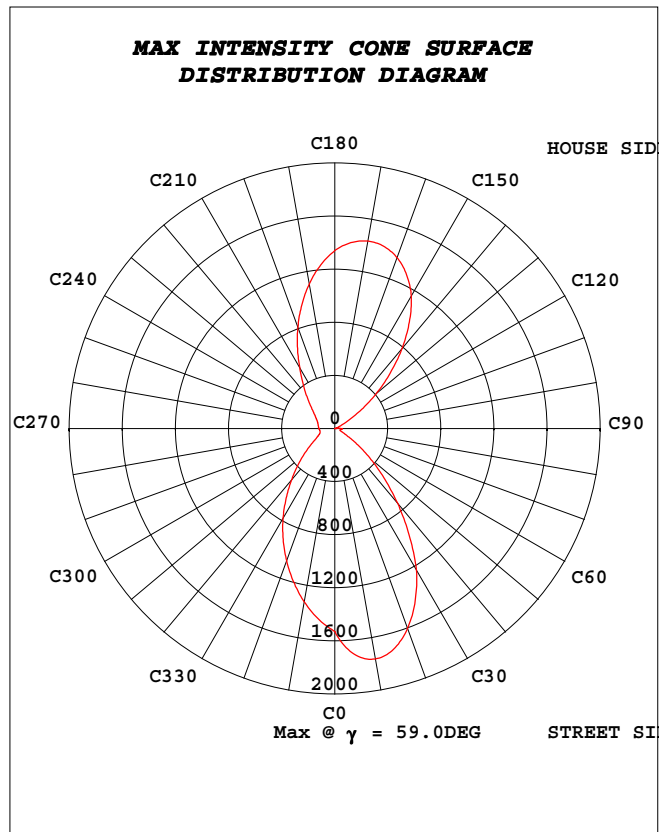
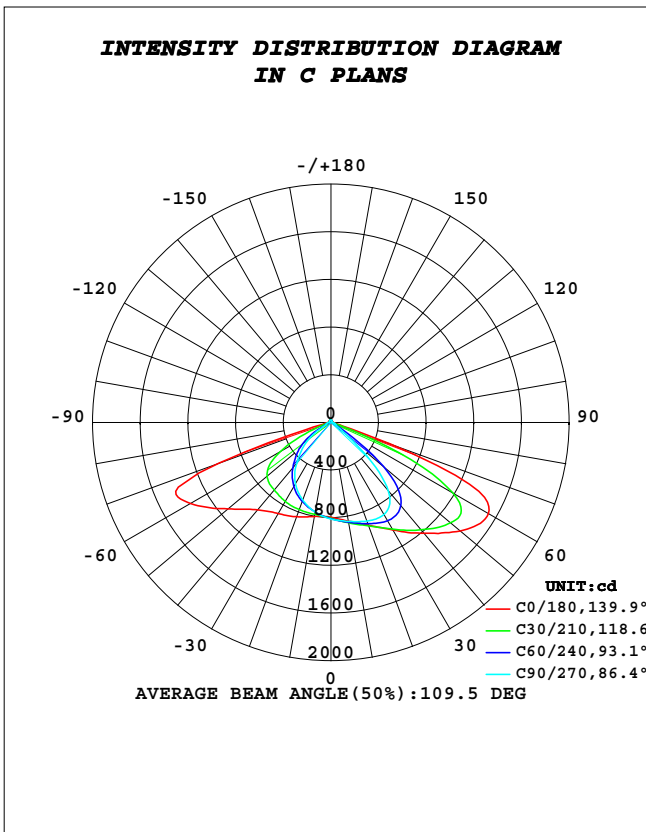


STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:30.00V I:0.6600A P:20.00W PF:1.000 Lamp Flux:3079.78x1 lm		
NAME: 40PCS MODULE-20W	TYPE:CREE 3030 LED	
MFR.: HITECHLED		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 153.99 lm/W			
MODEL	HT-SWD-4020	Imax(cd)	1529	η street_up(%)	1.8
NOMINAL POWER(W)	20	LOR(%)	100.0	η street_down(%)	55.0
RATED VOLTAGE(V)	30	TOTAL FLUX(lm)	3080	η house_up(%)	1.3
NOMINAL FLUX(lm)	3079.78	MAXIMUM @(C, γ)	0,59.0	η house_down(%)	41.8
LAMPS INSIDE	1	η up(%)	3.2	76 FLASHAREA(m2)	
TEST VOLTAGE(V)	30	η down(%)	96.8	SLI	



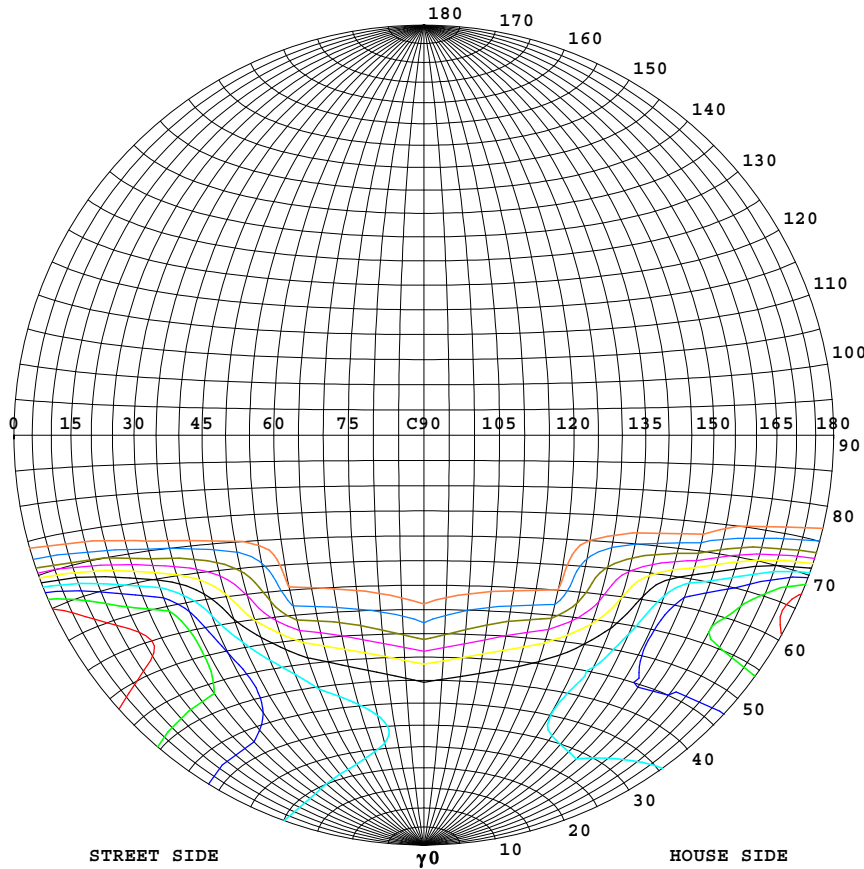
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2018-06-09

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.267
Humidity: 65.0%
Test Distance: 8.000m [K=0.7063]
Remarks:

Note: SLI: Specific Luminaire Index

STREETLIGHT ISOCANDELA DIAGRAM

Test:U:30.00V I:0.6600A P:20.00W PF:1.000 Lamp Flux:3079.78x1 lm		
NAME: 40PCS MODULE-20W	TYPE:CREE 3030 LED	
MFR.: HITECHLED		



Classification:

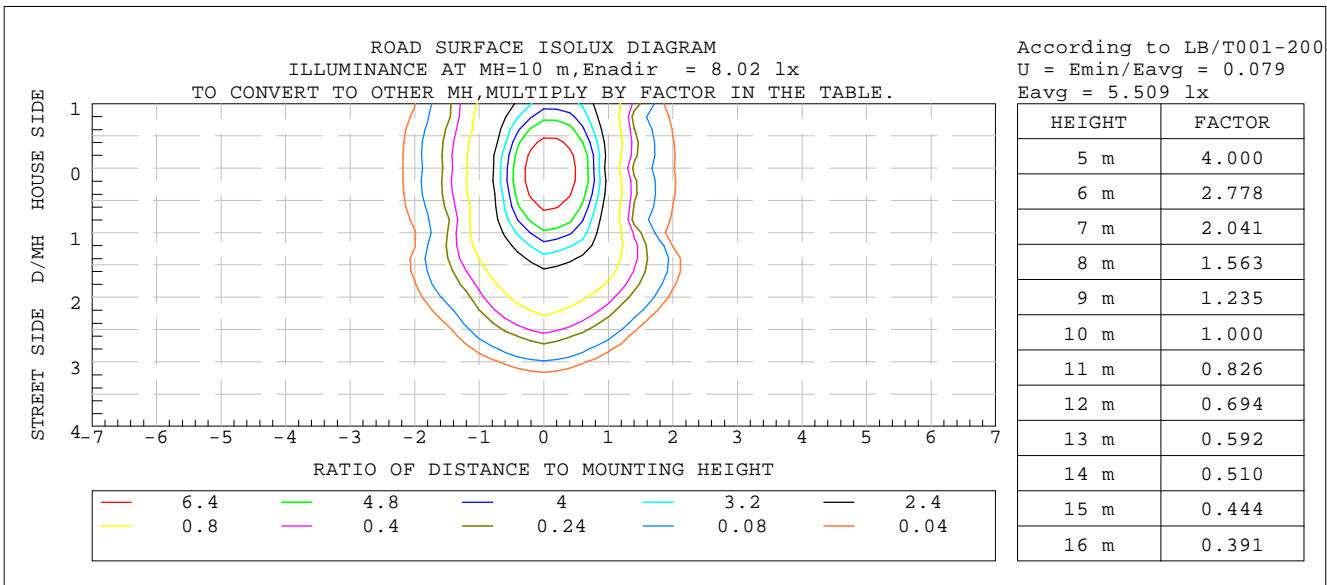
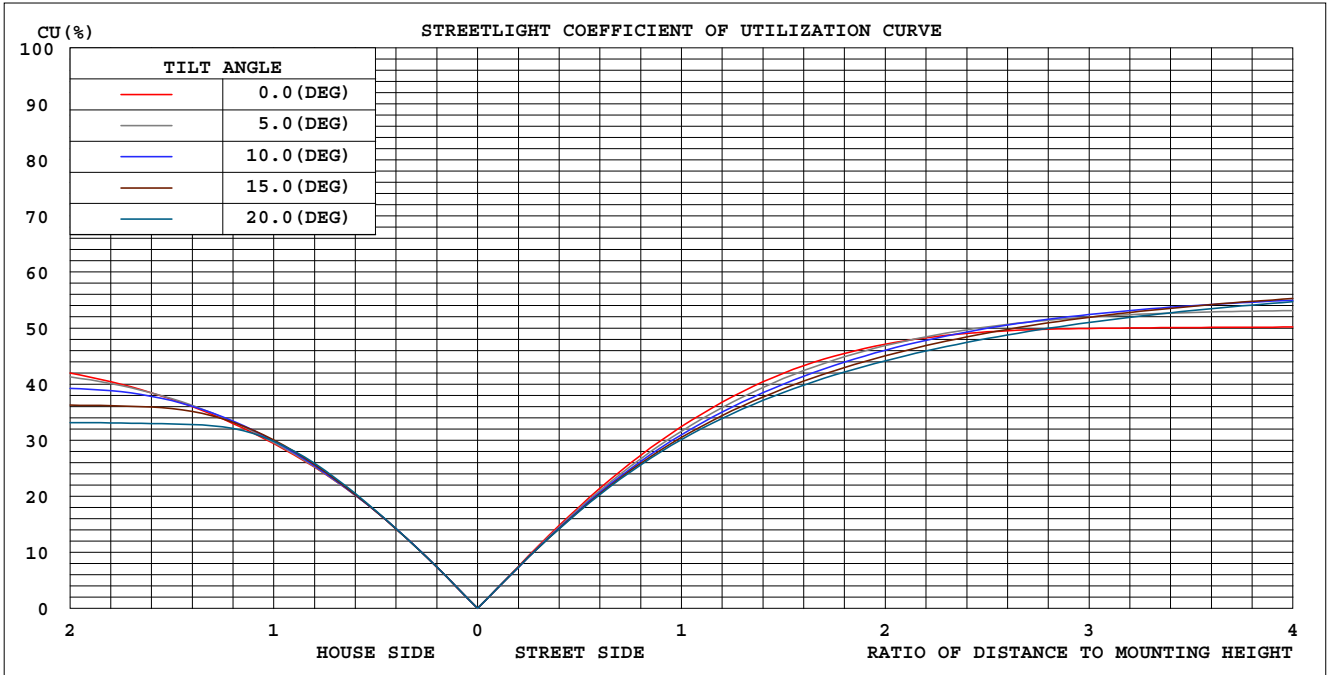
IES:Type III - Short
 CIE:Broad - Short
 IES:Cut-off
 CIE:Full cut-off
 Max.At80:17.98cd/klm
 Max.At90:5.449cd/klm
 Max.80-90:17.98cd/klm
 NRB 5101:Limited[1.2%]

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	1529
— 90%	1376
— 80%	1223
— 70%	1070
— 60%	917
— 50%	765
— 40%	612
— 30%	459
— 20%	306
— 10%	153
— 5%	76

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2018-06-09

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.267
Humidity:65.0%
Test Distance:8.000m [K=0.7063]
Remarks:

COEFFICIENT OF UTILIZATION CURVE
AND ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2018-06-09

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.267
Humidity: 65.0%
Test Distance: 8.000m [K=0.7063]
Remarks:

ZONAL FLUX DIAGRAM

Test:U:30.00V I:0.6600A P:20.00W PF:1.000 Lamp Flux:3079.78x1 lm		
NAME: 40PCS MODULE-20W	TYPE:CREE 3030 LED	
MFR.: HITECHLED		

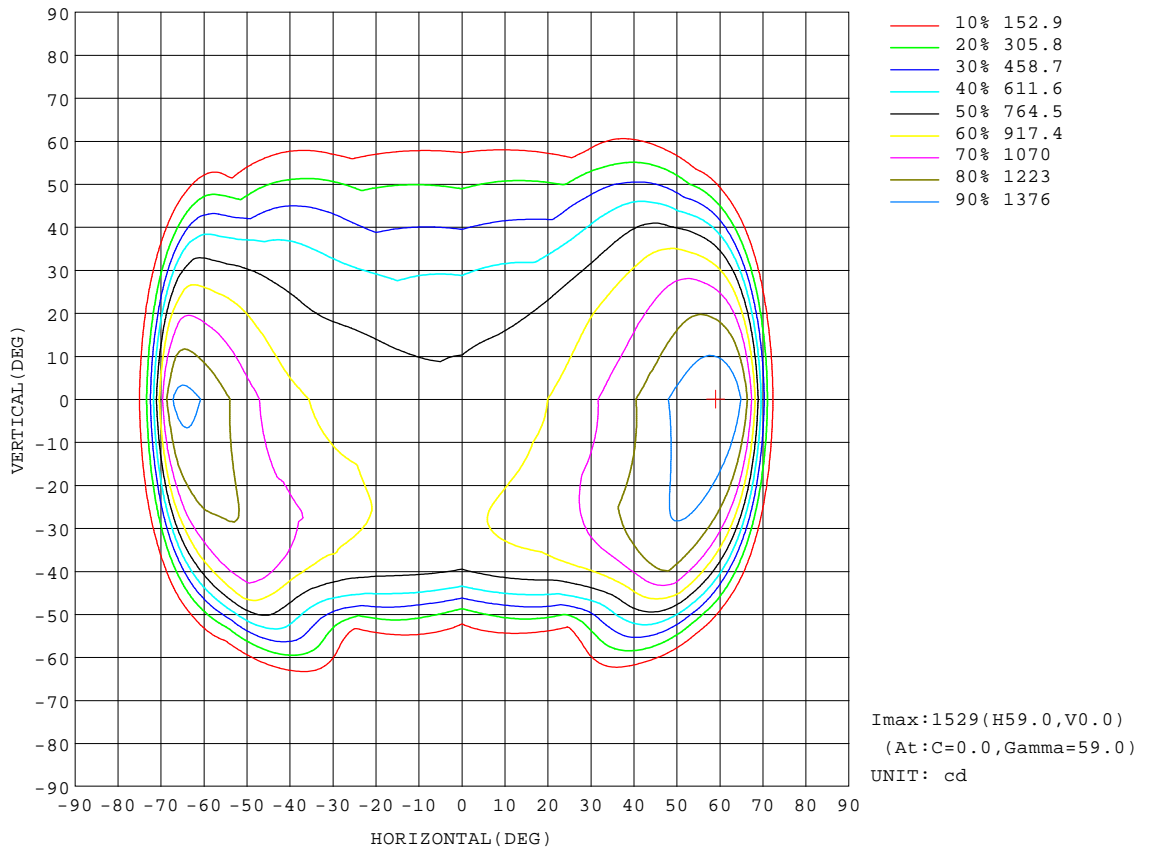
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	841.4	853.3	843.7	832.0	801.7	774.4	766.0	804.9	0- 10	77.39	77.39	2.51,2.51
20	918.3	913.9	881.1	876.6	842.7	742.3	693.8	798.0	10- 20	233.9	311.2	10.1,10.1
30	1042	993.4	892.2	914.2	883.9	695.2	597.2	780.1	20- 30	389.9	701.1	22.8,22.8
40	1214	1045	750.6	933.3	957.9	620.5	448.8	740.6	30- 40	532.0	1233	40,40
50	1417	942.9	235.7	861.2	1129	525.5	288.5	662.4	40- 50	622.0	1855	60.2,60.2
60	1526	630.8	54.62	601.8	1361	317.4	102.2	441.9	50- 60	604.8	2460	79.9,79.9
70	525.5	107.2	34.43	150.3	1002	72.07	43.63	92.02	60- 70	426.6	2887	93.7,93.7
80	31.14	25.33	19.46	25.50	55.37	29.53	29.36	32.52	70- 80	74.33	2961	96.1,96.1
90	9.928	10.39	11.32	10.24	14.13	13.90	16.78	15.33	80- 90	21.43	2982	96.8,96.8
100	10.70	10.31	10.47	10.37	13.38	13.88	15.95	15.10	90-100	13.89	2996	97.3,97.3
110	13.71	10.49	9.426	10.68	16.49	14.19	14.21	15.46	100-110	13.31	3010	97.7,97.7
120	15.91	12.24	10.58	12.40	19.39	15.98	15.34	17.39	110-120	13.72	3023	98.2,98.2
130	16.76	14.46	12.49	13.81	20.40	17.20	17.16	19.26	120-130	13.94	3037	98.6,98.6
140	18.14	16.39	14.94	15.35	21.17	18.09	18.91	20.40	130-140	13.22	3050	99,99
150	19.92	18.27	17.23	17.51	22.54	19.71	19.96	21.23	140-150	11.66	3062	99.4,99.4
160	20.91	20.04	19.64	19.63	23.44	21.63	21.85	22.28	150-160	9.359	3071	99.7,99.7
170	22.46	21.79	21.85	21.57	23.65	22.70	23.43	23.13	160-170	6.164	3078	99.9,99.9
180	23.49	22.90	23.36	23.05	23.40	22.91	23.42	23.09	170-180	2.173	3080	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2018-06-09

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.267
 Humidity:65.0%
 Test Distance:8.000m [K=0.7063]
 Remarks:

ISOCANDELA DIAGRAM

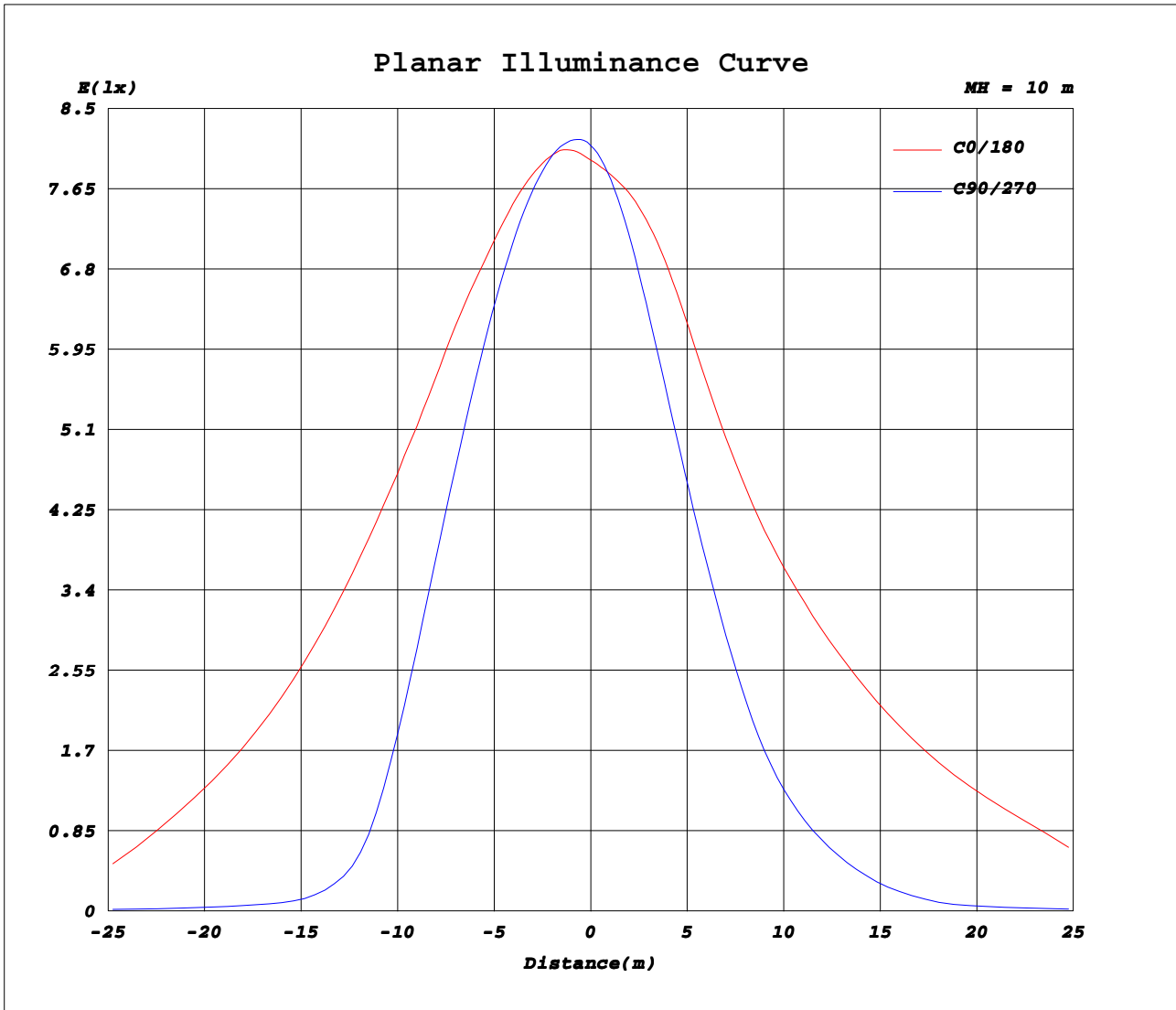
Test:U:30.00V I:0.6600A P:20.00W PF:1.000 Lamp Flux:3079.78x1 lm		
NAME: 40PCS MODULE-20W	TYPE:CREE 3030 LED	
MFR.: HITECHLED		



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2018-06-09

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.267
Humidity: 65.0%
Test Distance: 8.000m [K=0.7063]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2018-06-09

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.267
Humidity: 65.0%
Test Distance: 8.000m [K=0.7063]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:30.00V I:0.6600A P:20.00W PF:1.000 Lamp Flux:3079.78x1 lm		
NAME: 40PCS MODULE-20W	TYPE:CREE 3030 LED	
MFR.: HITECHLED		

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330							
0	796	804	808	811	811	804	796	804	808	811	811	804							
5	815	827	828	826	822	811	792	791	788	792	801	809							
10	841	856	851	844	837	827	802	784	764	766	790	820							
15	875	887	877	862	857	850	820	782	737	733	774	833							
20	918	924	904	881	878	876	843	779	706	694	749	847							
25	973	973	932	895	894	902	864	775	670	650	715	867							
30	1042	1034	953	892	904	925	884	768	623	597	671	889							
35	1128	1106	952	855	897	957	913	754	567	532	618	913							
40	1214	1177	912	751	864	1003	958	741	500	449	549	932							
45	1312	1250	805	532	773	1090	1030	730	425	365	471	943							
50	1417	1311	575	236	577	1145	1129	700	351	288	389	936							
55	1500	1332	238	93.6	264	1194	1247	635	257	200	277	895							
60	1526	1179	82.9	54.6	77.1	1126	1361	492	143	102	147	737							
65	1369	741	51.5	42.8	49.8	840	1435	285	61.7	55.8	62.2	455							
70	526	175	39.6	34.4	40.5	260	1002	100	43.6	43.6	45.3	139							
75	64.0	43.8	30.5	26.6	30.4	48.1	154	47.1	35.4	37.6	38.5	50.8							
80	31.1	28.2	22.4	19.5	21.4	29.6	55.4	31.1	27.9	29.4	31.2	33.8							
85	16.3	16.4	15.3	13.0	14.4	16.9	28.3	21.9	20.4	21.5	22.2	23.7							
90	9.93	10.1	10.6	11.3	10.2	10.3	14.1	13.5	14.3	16.8	16.2	14.5							
95	11.0	10.4	10.9	11.5	10.5	10.7	14.8	13.7	14.3	17.0	16.1	14.4							
100	10.7	10.3	10.3	10.5	9.92	10.8	13.4	13.8	13.9	15.9	15.7	14.5							
105	12.3	10.4	9.96	9.63	9.66	10.9	15.0	14.3	13.3	14.7	15.2	14.8							
110	13.7	11.0	9.94	9.43	9.77	11.6	16.5	15.0	13.4	14.2	15.4	15.5							
115	15.0	12.3	10.2	9.74	10.2	12.9	18.1	16.1	13.9	14.5	16.0	16.8							
120	15.9	13.6	10.9	10.6	11.0	13.8	19.4	17.2	14.8	15.3	16.9	17.8							
125	16.4	14.7	11.9	11.3	12.0	14.3	20.1	17.7	15.5	16.2	17.9	18.7							
130	16.8	15.7	13.2	12.5	13.1	14.5	20.4	17.9	16.5	17.2	19.2	19.4							
135	17.3	16.5	14.4	13.8	14.1	14.9	20.7	18.1	17.1	18.2	20.0	19.8							
140	18.1	17.3	15.5	14.9	15.0	15.7	21.2	18.7	17.5	18.9	20.7	20.1							
145	19.1	18.1	16.5	16.0	16.0	16.7	22.0	19.7	17.9	19.4	21.1	20.5							
150	19.9	18.9	17.6	17.2	17.1	17.9	22.5	20.6	18.8	20.0	21.5	21.0							
155	20.5	19.7	18.7	18.5	18.4	18.9	23.0	21.5	19.9	20.8	21.9	21.5							
160	20.9	20.4	19.7	19.6	19.5	19.8	23.4	22.2	21.0	21.9	22.6	22.0							
165	21.6	21.1	20.7	20.8	20.6	20.6	23.7	22.8	21.9	22.8	23.2	22.4							
170	22.5	22.0	21.6	21.8	21.7	21.5	23.7	23.0	22.4	23.4	23.6	22.7							
175	23.0	22.7	22.2	22.7	22.6	22.2	23.6	23.2	22.6	23.6	23.6	22.8							
180	23.5	23.1	22.7	23.4	23.4	22.7	23.4	23.2	22.6	23.4	23.4	22.8							

C Range: 0 - 360DEG
C Interval: 30.0DEG
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γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.267
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Test Distance:8.000m [K=0.7063]
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