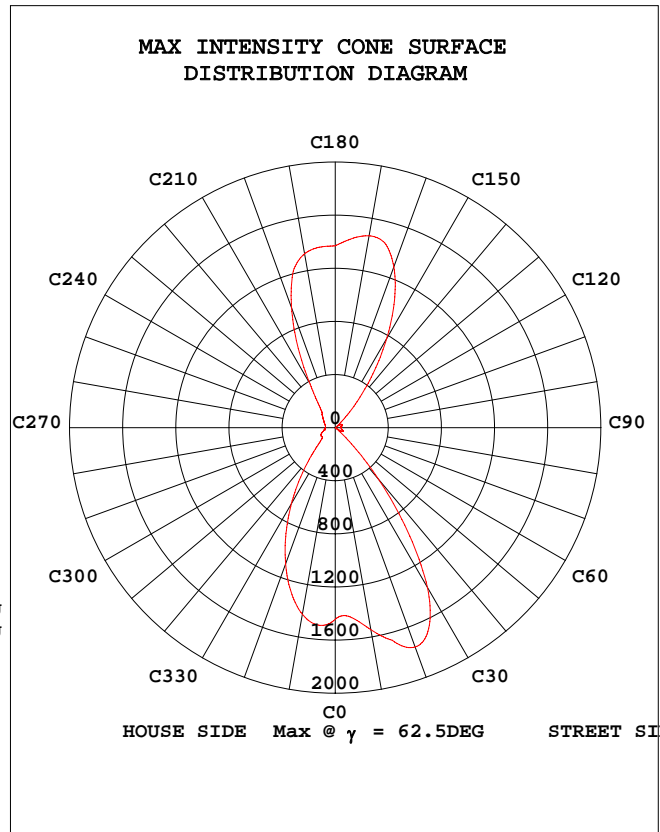
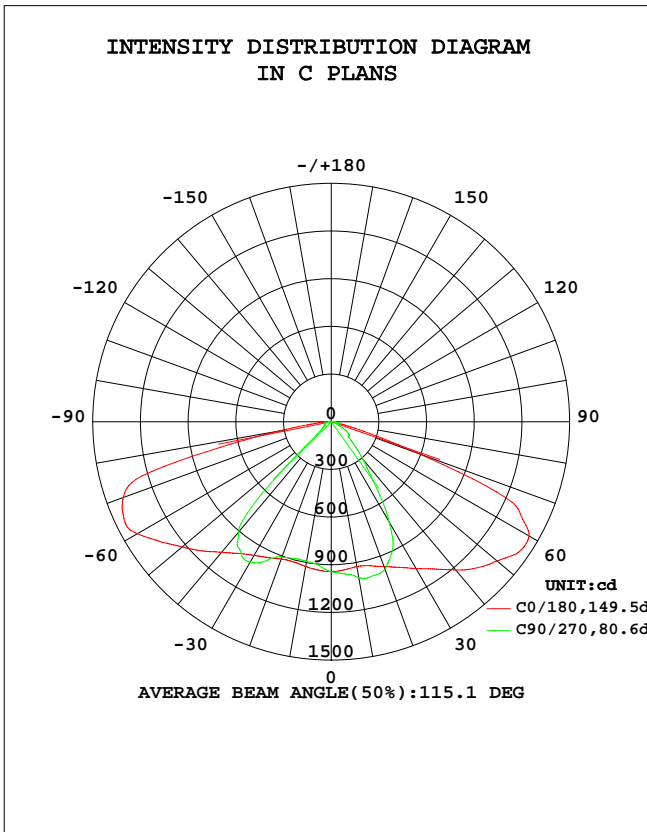


STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:220.2V I:0.1480A P:30.60W PF:0.9360 Lamp Flux:3360.01x1 lm		
NAME: LED STREET LIGHT	TYPE:IP66	WEIGHT:1.5
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 109.80 lm/W			
MODEL	QH-STL-LD30S-30W	I _{max} (cd)	1658	η street_up(%)	0.0
NOMINAL POWER(W)	30	LOR(%)	100.0	η street_down(%)	56.0
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	3360	η house_up(%)	0.0
NOMINAL FLUX(lm)	3360.01	MAXIMUM @(C,γ)	15,62.5	η house_down(%)	44.0
LAMPS INSIDE	1	η up(%)	0.0	76 FLASHAREA(m2)	0.00100
TEST VOLTAGE(V)	220.1	η down(%)	100.0	SLI	19.479

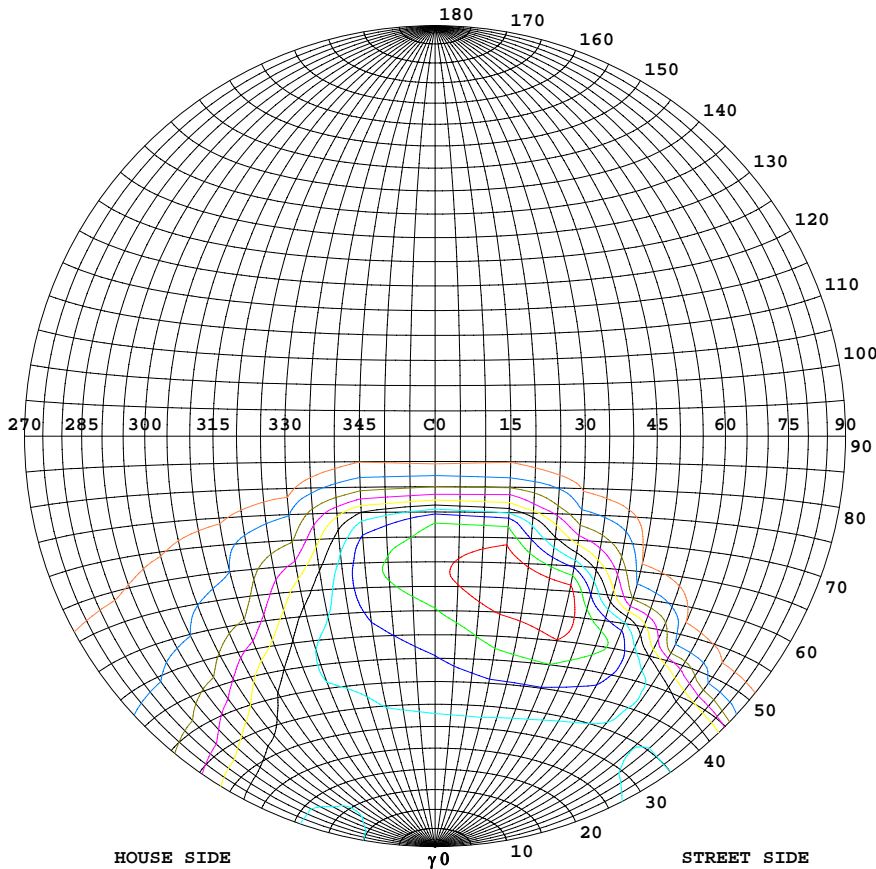


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-07-23

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.279
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks:

STREETLIGHT ISOCANDELA DIAGRAM

Test:U:220.2V I:0.1480A P:30.60W PF:0.9360 Lamp Flux:3360.01x1 lm		
NAME: LED STREET LIGHT	TYPE:IP66	WEIGHT:1.5
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:



Classification:

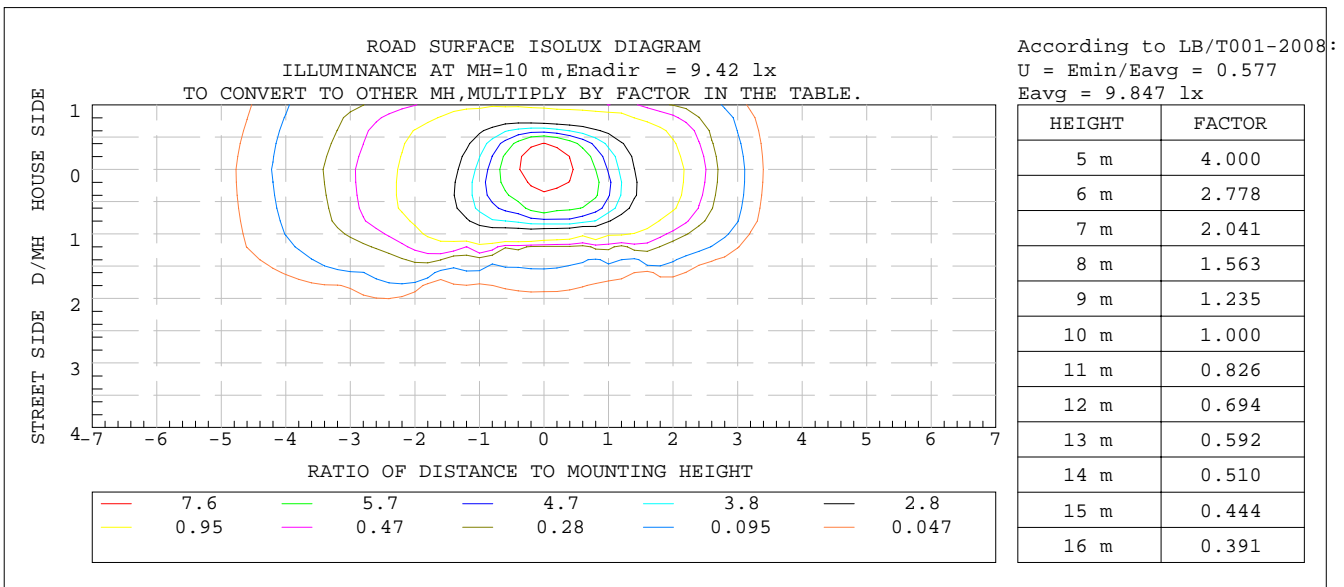
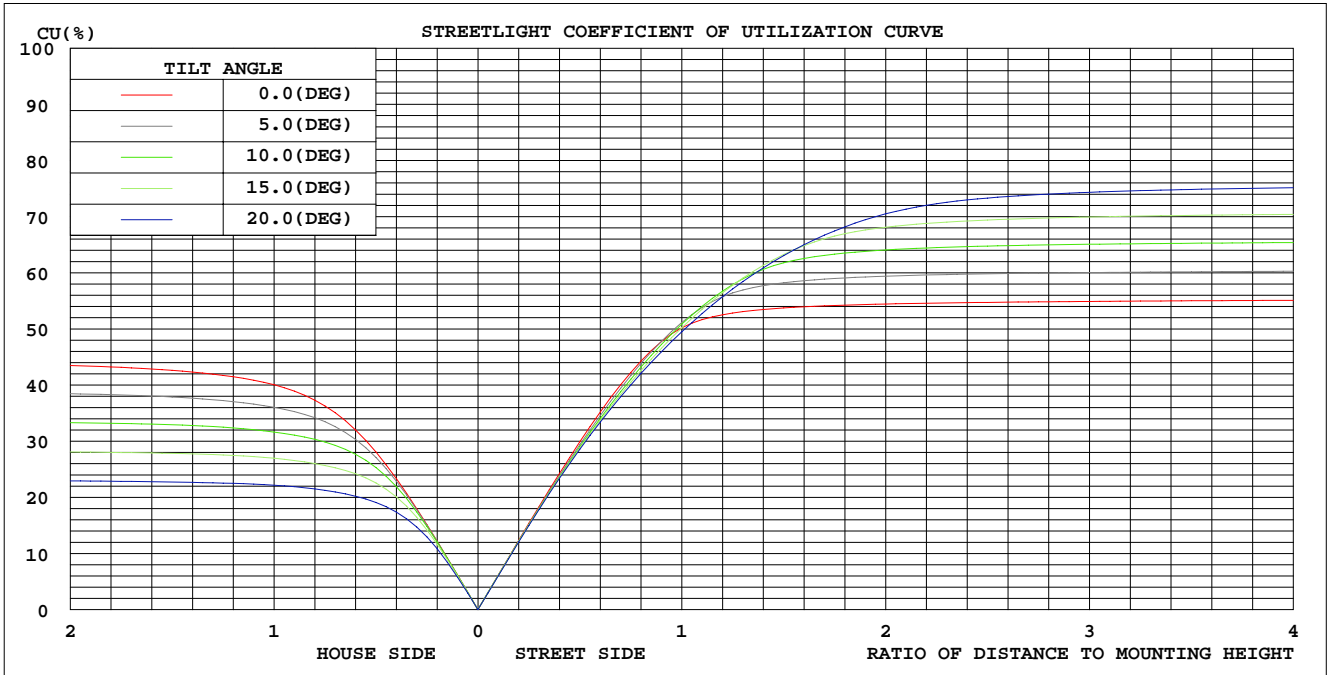
IES:Type I - Short
 CIE:Narrow - Intermediate
 IES:Cut-off
 CIE:Semi-cut-off
 Max.At80:98.83cd/klm
 Max.At90:11.25cd/klm
 Max.80-90:98.83cd/klm
 NRB 5101:Semi limited[29.8%]

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	1658
— 90%	1492
— 80%	1326
— 70%	1160
— 60%	995
— 50%	829
— 40%	663
— 30%	497
— 20%	332
— 10%	166
— 5%	83

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-07-23

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.279
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks:

COEFFICIENT OF UTILIZATION CURVE
AND ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2014-07-23

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.279
Humidity: 65.0%
Test Distance: 8.000m [K=1.000]
Remarks:

ZONAL FLUX DIAGRAM

Test:U:220.2V I:0.1480A P:30.60W PF:0.9360 Lamp Flux:3360.01x1 lm		
NAME: LED STREET LIGHT	TYPE:IP66	WEIGHT:1.5
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:

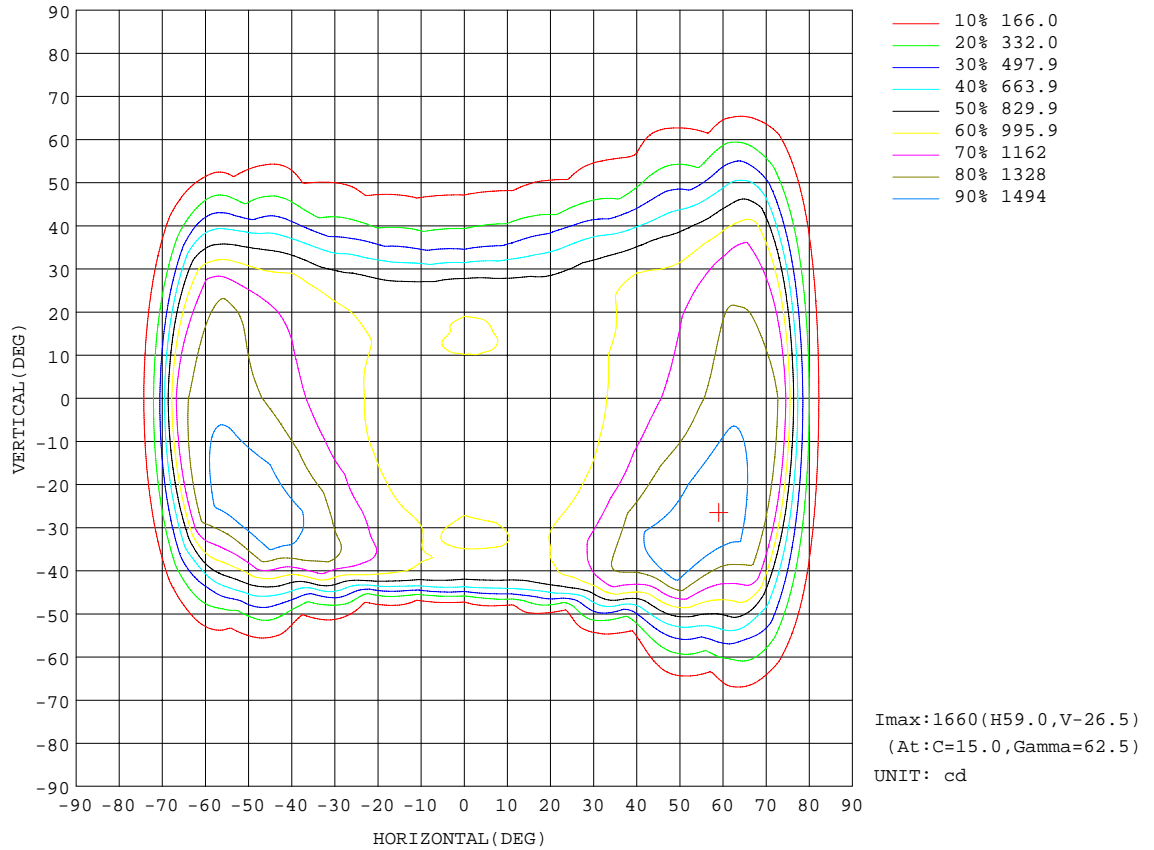
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum
5	936.7	918.3	906.9	918.2	935.7	949.8	960.8	952.5	0- 5	22.44	22.44	0.67
10	924.9	891.2	892.6	893.1	925.3	954.1	995.5	958.6	5- 10	66.59	89.03	2.65
15	913.4	882.8	890.5	898.6	937.8	973.2	1004	977.2	10- 15	110.5	199.6	5.94
20	919.0	880.5	905.5	927.7	969.4	970.1	988.1	965.0	15- 20	154.4	353.9	10.5
25	943.4	899.7	963.9	980.0	1011	964.1	904.5	949.4	20- 25	197.9	551.8	16.4
30	971.4	932.5	1021	1058	1066	942.2	728.3	916.1	25- 30	241.1	792.9	23.6
35	1013	1005	995.8	1170	1132	899.9	475.3	898.6	30- 35	279.9	1073	31.9
40	1072	1110	905.0	1273	1217	775.9	311.6	843.2	35- 40	313.5	1386	41.3
45	1149	1201	472.2	1375	1299	587.5	201.0	746.1	40- 45	340.3	1726	51.4
50	1226	1300	94.15	1215	1363	392.0	143.0	560.3	45- 50	331.6	2058	61.3
55	1314	1016	63.56	500.8	1435	231.1	135.8	360.8	50- 55	313.8	2372	70.6
60	1409	311.5	50.55	144.9	1436	159.0	95.28	219.6	55- 60	293.5	2665	79.3
65	1439	103.4	42.55	63.80	1297	121.2	58.93	165.6	60- 65	260.9	2926	87.1
70	1392	55.76	40.05	50.45	579.5	69.46	32.31	134.5	65- 70	202.9	3129	93.1
75	1088	49.74	46.20	39.23	127.6	37.89	34.35	71.56	70- 75	130.0	3259	97
80	332.1	38.89	27.51	30.41	39.87	21.88	58.86	39.23	75- 80	64.14	3323	98.9
85	74.72	30.21	14.55	18.64	20.12	15.69	27.83	23.18	80- 85	24.80	3348	99.6
90	29.22	20.75	0.1878	8.446	11.79	8.197	2.303	17.67	85- 90	12.04	3360	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			

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-07-23

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.279
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

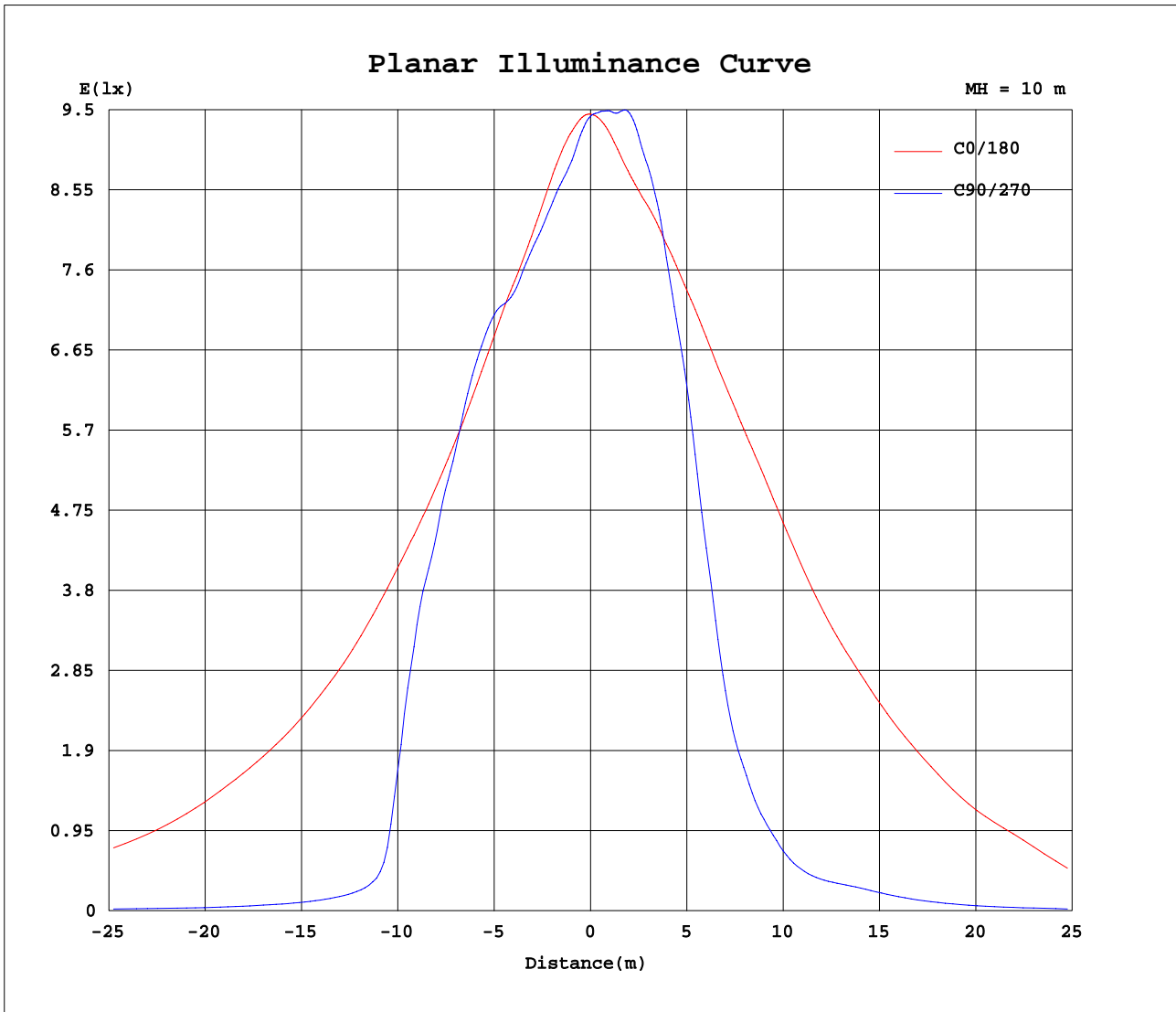
Test:U:220.2V I:0.1480A P:30.60W PF:0.9360 Lamp Flux:3360.01x1 lm		
NAME: LED STREET LIGHT	TYPE:IP66	WEIGHT:1.5
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
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 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.279
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2014-07-23

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.279
 Humidity: 65.0%
 Test Distance: 8.000m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.2V I:0.1480A P:30.60W PF:0.9360 Lamp Flux:3360.01x1 lm		
NAME: LED STREET LIGHT	TYPE:IP66	WEIGHT:1.5
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

γ (DEG) \ C (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	943	943	943	943	943	943	943	943	943	943	943	943	943	943	943	943	943	943	943
5	937	931	924	918	912	909	907	909	912	918	924	931	936	940	945	950	955	959	961
10	925	913	898	891	892	893	893	890	891	893	904	918	925	930	941	954	975	990	995
15	913	898	883	883	886	890	890	887	887	899	912	931	938	938	948	973	990	996	1004
20	919	899	885	880	894	904	906	897	907	928	948	961	969	964	977	970	973	980	988
25	943	924	904	900	908	942	964	928	944	980	1007	1012	1011	1004	995	964	925	900	905
30	971	964	947	932	946	998	1021	975	1016	1058	1106	1092	1066	1049	1016	942	846	742	728
35	1013	1030	1030	1005	974	999	996	983	1073	1170	1227	1196	1132	1092	1032	900	678	509	475
40	1072	1137	1153	1110	978	930	905	972	1141	1273	1371	1327	1217	1141	1045	776	465	321	312
45	1149	1268	1323	1201	966	676	472	582	994	1375	1503	1454	1299	1209	1030	587	286	200	201
50	1226	1377	1487	1300	566	116	94.1	101	260	1215	1593	1546	1363	1275	948	392	178	143	143
55	1314	1504	1589	1016	108	68.4	63.6	62.6	81.1	501	1482	1616	1435	1323	779	231	137	118	136
60	1409	1628	1561	311	63.3	52.3	50.6	51.5	53.6	145	1044	1542	1436	1314	520	159	112	94.3	95.3
65	1439	1617	1124	103	50.8	43.7	42.6	45.3	48.3	63.8	498	1313	1297	1057	267	121	83.9	62.6	58.9
70	1392	1432	585	55.8	43.1	46.1	40.0	52.2	38.1	50.4	149	597	580	488	121	69.5	51.4	32.9	32.3
75	1088	978	206	49.7	35.8	53.1	46.2	50.9	30.8	39.2	60.7	129	128	131	46.3	37.9	33.1	26.8	34.3
80	332	319	76.5	38.9	29.8	40.5	27.5	35.6	25.0	30.4	38.8	48.6	39.9	48.2	29.3	21.9	24.4	21.4	58.9
85	74.7	81.0	47.2	30.2	24.7	23.0	14.6	16.9	17.7	18.6	24.5	25.1	20.1	21.2	18.6	15.7	16.7	14.6	27.8
90	29.2	37.8	33.2	20.7	17.4	11.7	0.19	7.60	7.72	8.45	8.72	12.1	11.8	12.5	10.7	8.20	8.14	7.66	2.30

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-07-23

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.279
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.2V I:0.1480A P:30.60W PF:0.9360 Lamp Flux:3360.01x1 lm		
NAME: LED STREET LIGHT	TYPE:IP66	WEIGHT:1.5
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:

Table--2

UNIT: cd

C(DEG) γ (DEG)	285	300	315	330	345													
0	943	943	943	943	943													
5	960	958	952	947	942													
10	993	978	959	946	934													
15	1005	999	977	941	922													
20	989	982	965	951	924													
25	914	935	949	949	941													
30	778	870	916	945	968													
35	555	740	899	952	997													
40	375	572	843	985	1029													
45	232	398	746	1009	1074													
50	157	241	560	981	1128													
55	129	163	361	886	1188													
60	106	135	220	746	1260													
65	73.5	112	166	544	1280													
70	45.6	77.0	135	317	1184													
75	28.7	46.3	71.6	159	837													
80	23.1	31.8	39.2	59.2	273													
85	18.0	22.5	23.2	32.0	81.0													
90	11.3	16.4	17.7	21.3	35.5													

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-07-23

γ Range: 0 - 90DEG
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