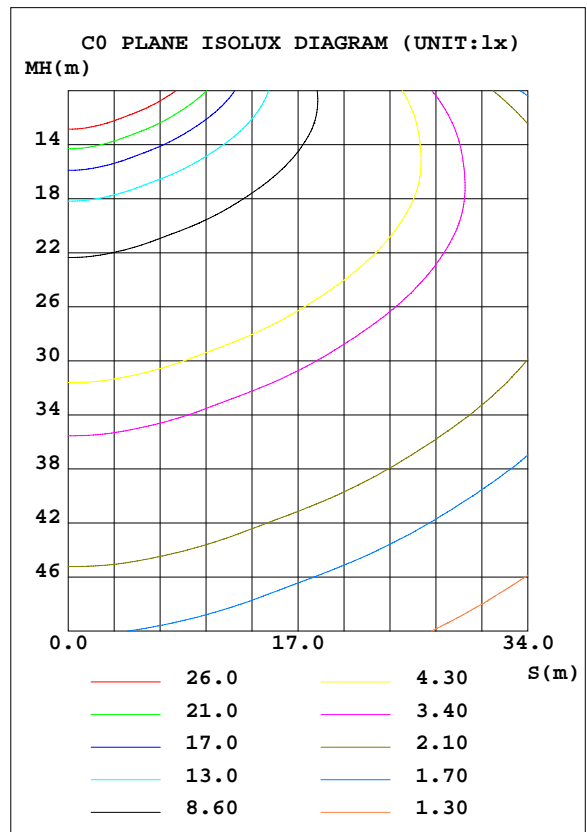
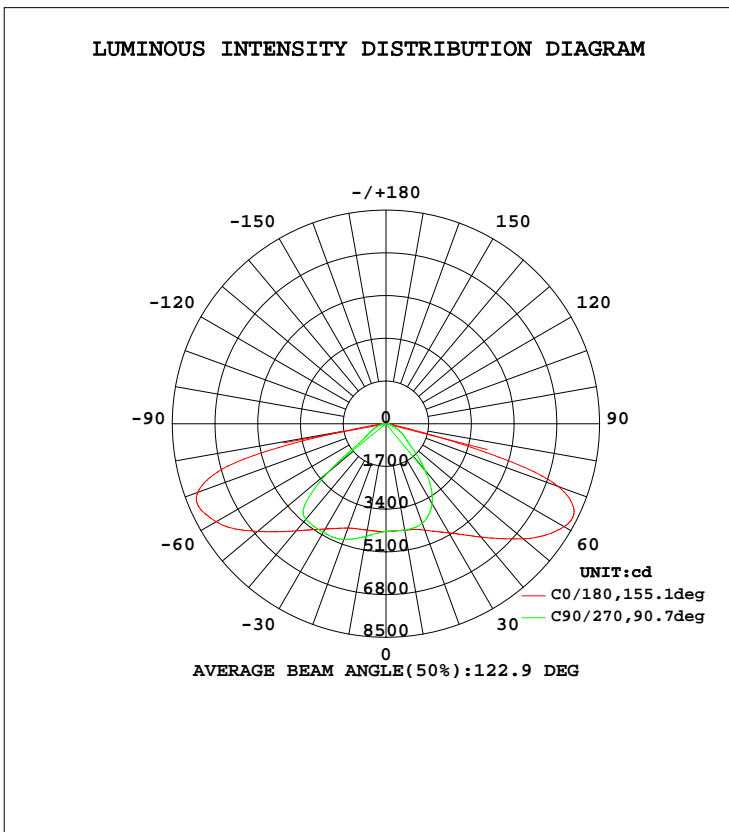


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:219.9V I:0.7140A P:152.2W PF:0.9680 Lamp Flux:18864.5x1 lm		
NAME: LED STREET LIGHT	TYPE:IP66	WEIGHT:5
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 123.95 lm/W			
MODEL	QH-STL-LD120S-150W	I _{max} (cd)	9604	S/MH(C0/180)	2.01
NOMINAL POWER(W)	152	LOR(%)	100.0	S/MH(C90/270)	1.59
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	18864	η UP, DN(C0-180)	0.0, 58.9
NOMINAL FLUX(lm)	18864.5	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 41.1
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.75
TEST VOLTAGE(V)	219.9	η down(%)	100.0	CIBSE SHR MAX	1.75



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-03-17

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: LED:XTE R5 5700K

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum
5	4293	4350	4378	4325	4276	4270	4280	4285	0- 5	102.7	102.7	0.54
10	4298	4447	4549	4411	4299	4305	4300	4302	5- 10	310.3	413.0	2.19
15	4335	4572	4734	4572	4357	4344	4288	4319	10- 15	522.3	935.3	4.96
20	4417	4737	4902	4798	4507	4402	4215	4338	15- 20	740.3	1676	8.88
25	4596	4976	4984	5094	4734	4473	4009	4371	20- 25	965.3	2641	14
30	4840	5267	4985	5503	5018	4509	3671	4392	25- 30	1194	3835	20.3
35	5152	5634	4995	5955	5395	4438	3134	4359	30- 35	1424	5259	27.9
40	5563	6072	4957	6531	5887	4059	2429	4130	35- 40	1651	6910	36.6
45	6076	6745	4565	7488	6461	3354	1716	3631	40- 45	1876	8786	46.6
50	6669	7598	2999	8200	7122	2370	1157	2848	45- 50	2038	10824	57.4
55	7305	6698	1143	6415	7735	1256	916.4	1773	50- 55	2003	12827	68
60	7800	3304	821.0	2621	8188	872.8	699.3	1028	55- 60	1803	14631	77.6
65	8119	946.8	594.8	721.5	8258	630.2	478.3	805.8	60- 65	1547	16178	85.8
70	7966	485.5	430.8	356.2	7272	318.1	327.0	440.6	65- 70	1272	17450	92.5
75	6507	281.6	261.4	235.1	2949	204.3	180.9	245.2	70- 75	882.2	18332	97.2
80	1555	193.5	172.5	152.3	296.0	133.7	140.6	162.6	75- 80	366.9	18699	99.1
85	236.0	125.8	89.83	86.45	132.8	78.03	83.81	109.8	80- 85	114.2	18813	99.7
90	81.97	56.92	13.77	35.79	31.51	31.55	30.67	55.53	85- 90	51.15	18864	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			

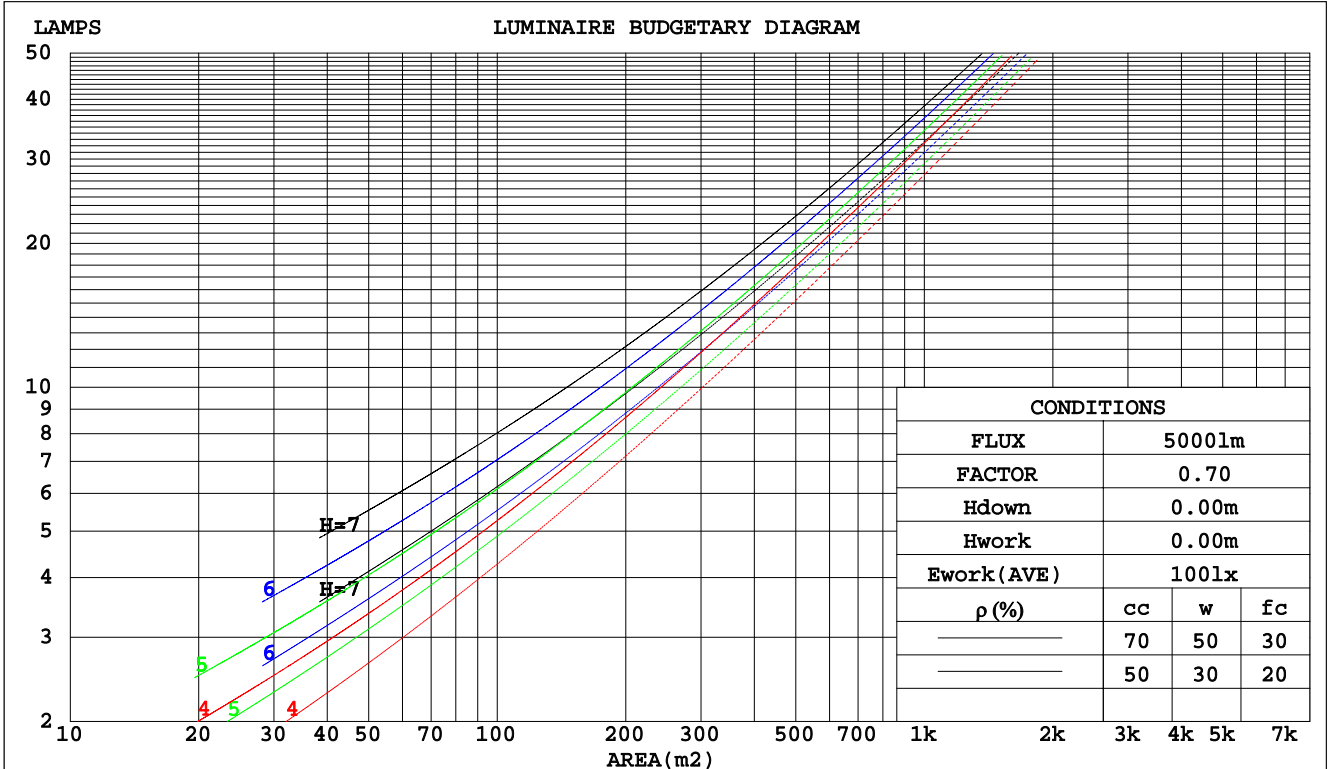
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-03-17

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: LED:XTE R5 5700K

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:219.9V I:0.7140A P:152.2W PF:0.9680 Lamp Flux:18864.5x1 lm		
NAME: LED STREET LIGHT	TYPE:IP66	WEIGHT:5
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION 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	.00
1.0	1.04	.99	.95	1.01	.97	.94	.97	.94	.91	.93	.91	.88	.90	.87	.85	.83
2.0	.89	.82	.76	.87	.81	.75	.84	.78	.74	.81	.76	.72	.78	.74	.70	.68
3.0	.78	.69	.62	.76	.68	.62	.73	.66	.60	.70	.64	.59	.67	.63	.58	.56
4.0	.68	.59	.51	.66	.58	.51	.64	.56	.50	.61	.55	.50	.59	.54	.49	.47
5.0	.60	.50	.43	.59	.50	.43	.56	.49	.43	.54	.48	.42	.53	.46	.42	.39
6.0	.53	.44	.37	.52	.43	.37	.50	.42	.36	.49	.42	.36	.47	.41	.36	.34
7.0	.48	.39	.32	.47	.38	.32	.45	.37	.32	.44	.37	.31	.42	.36	.31	.29
8.0	.43	.34	.28	.42	.34	.28	.41	.33	.28	.40	.33	.28	.39	.32	.27	.25
9.0	.39	.31	.25	.39	.30	.25	.37	.30	.25	.36	.29	.24	.35	.29	.24	.22
10.0	.36	.28	.22	.35	.27	.22	.34	.27	.22	.33	.27	.22	.33	.26	.22	.20

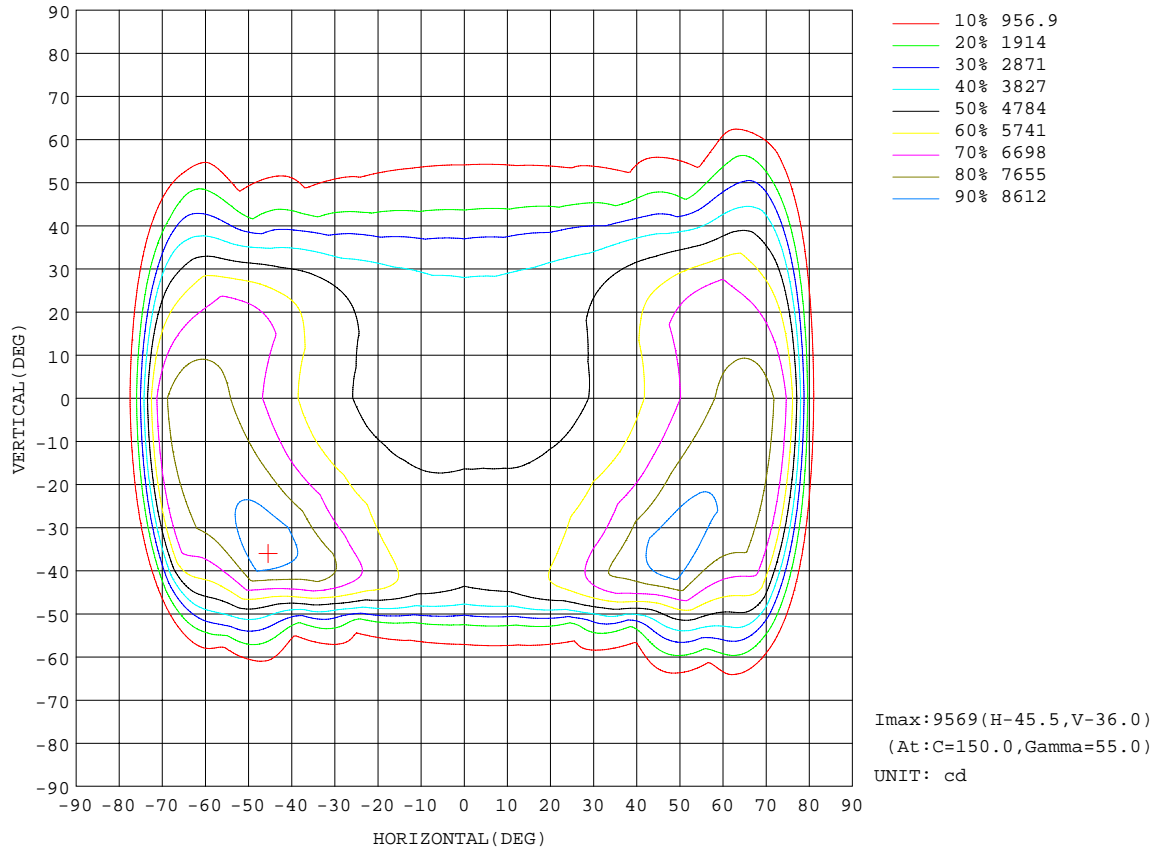


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2014-03-17

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: LED:XTE R5 5700K

ISOCANDELA DIAGRAM

Test:U:219.9V I:0.7140A P:152.2W PF:0.9680 Lamp Flux:18864.5x1 lm		
NAME: LED STREET LIGHT	TYPE:IP66	WEIGHT:5
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:

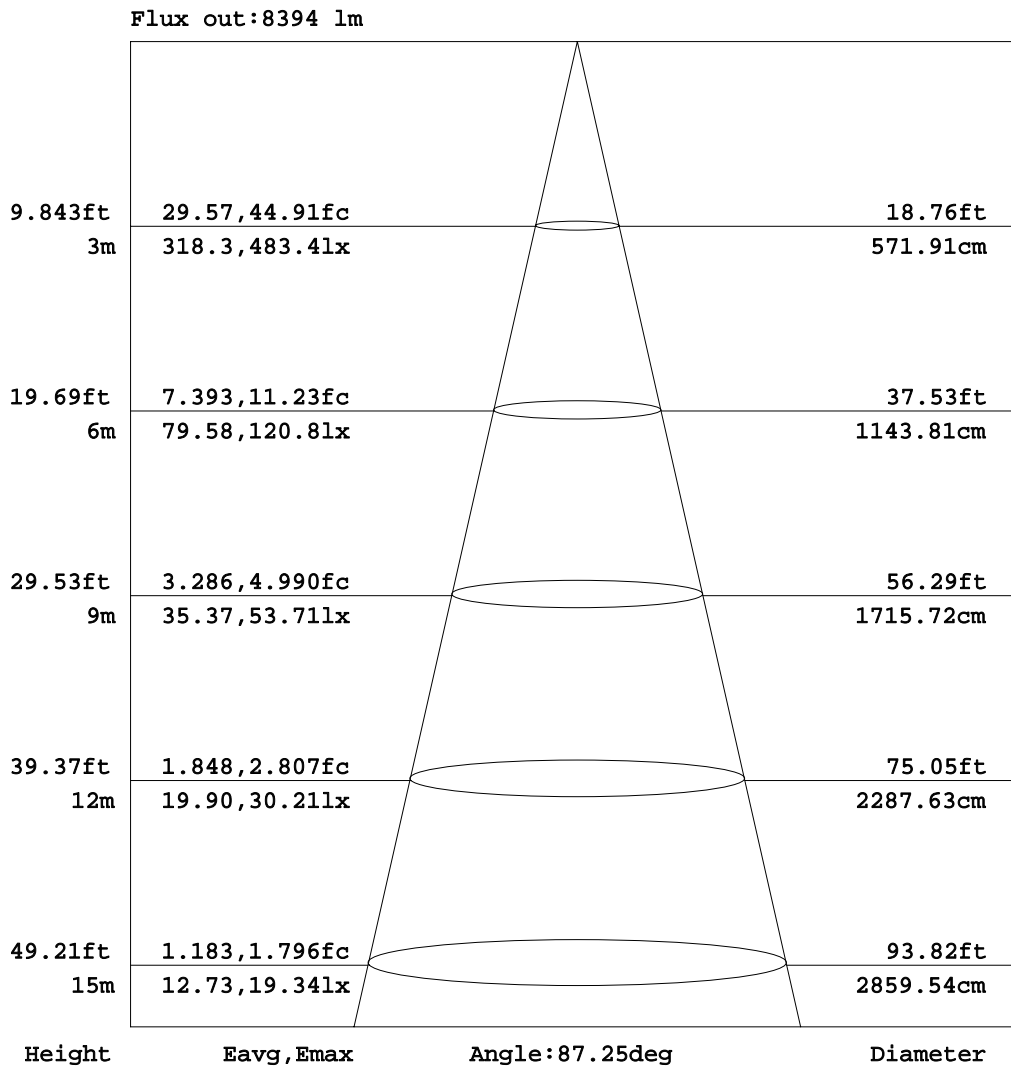


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-03-17

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: LED:XTE R5 5700K

AAI Figure

Test:U:219.9V I:0.7140A P:152.2W PF:0.9680 Lamp Flux:18864.5x1 lm		
NAME: LED STREET LIGHT	TYPE:IP66	WEIGHT:5
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:



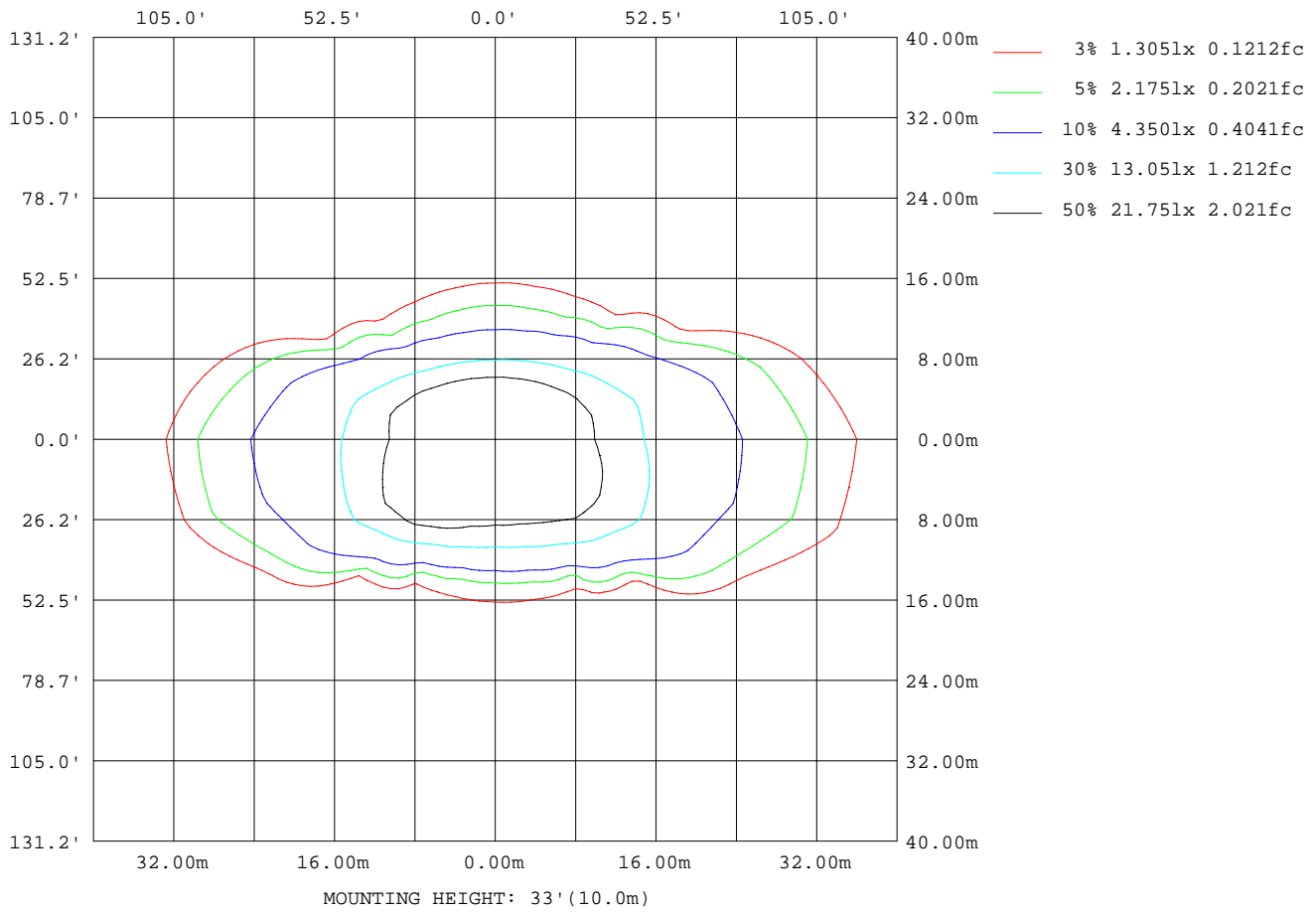
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-03-17

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: LED:XTE R5 5700K

ISOLUX DIAGRAM

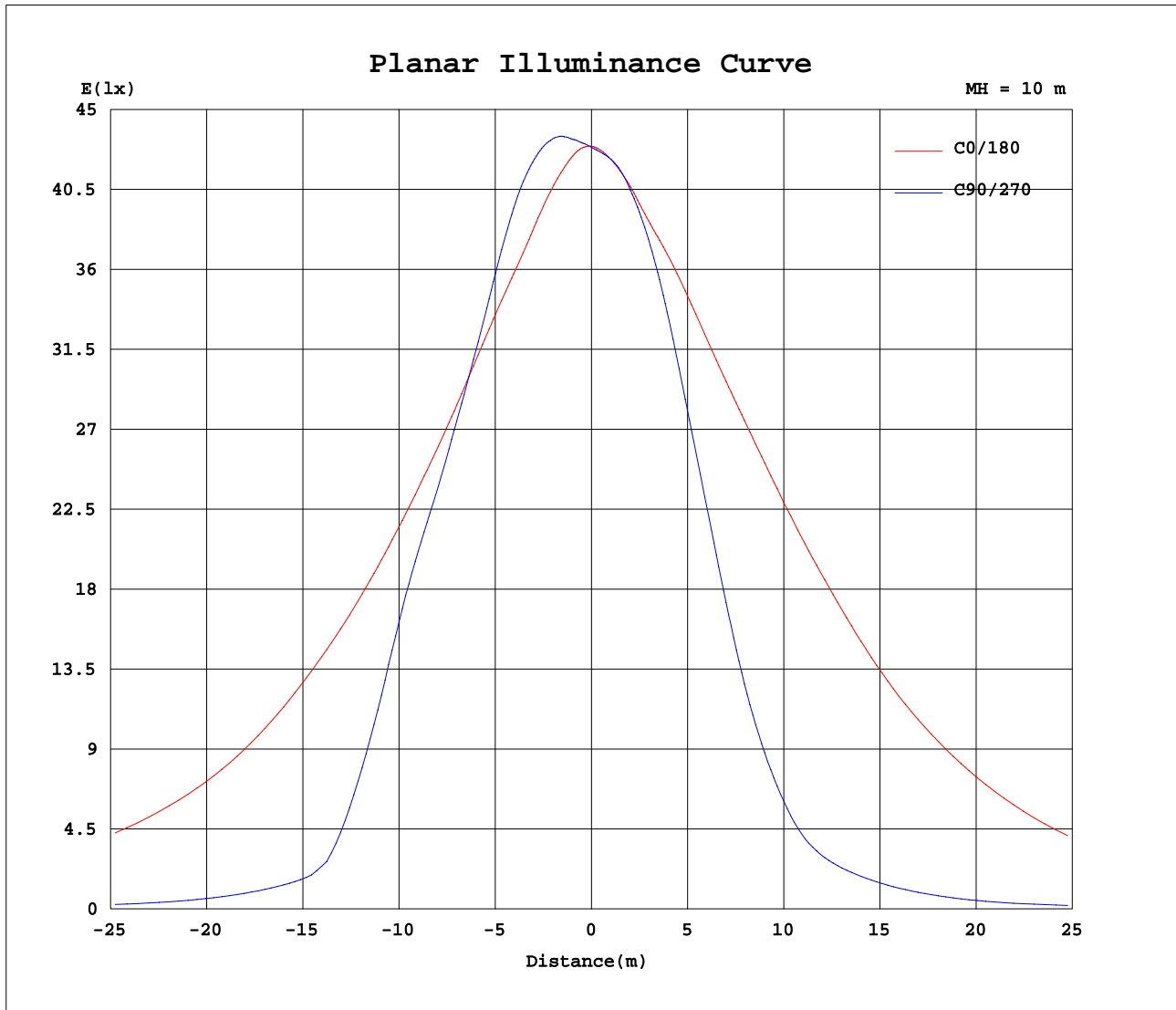
Test:U:219.9V I:0.7140A P:152.2W PF:0.9680 Lamp Flux:18864.5x1 lm		
NAME: LED STREET LIGHT	TYPE:IP66	WEIGHT:5
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-03-17

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: LED:XTE R5 5700K

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2014-03-17

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: LED:XTE R5 5700K

