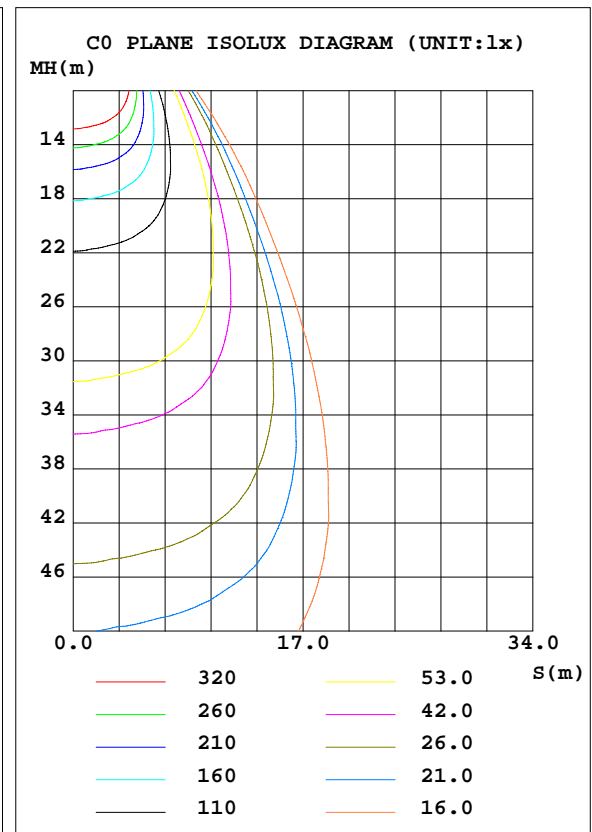
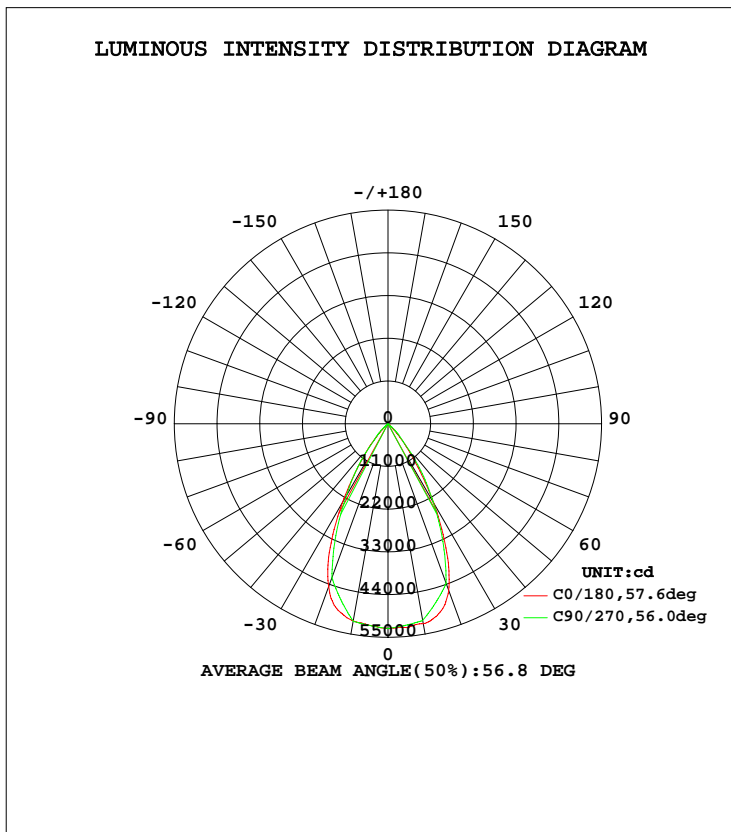


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:219.6V I:2.211A P:480.0W PF:0.9820 Lamp Flux:44380.4x1 lm		
NAME: HIGH BAY	TYPE:	WEIGHT:13
SPEC.:	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 92.46 lm/W			
MODEL	QH-HBL-500W	I _{max} (cd)	52750	S/MH(C0/180)	0.86
NOMINAL POWER(W)	480	LOR(%)	100.0	S/MH(C90/270)	0.83
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	44380	η UP, DN(C0-180)	0.0, 48.9
NOMINAL FLUX(lm)	44380.4	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 51.1
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	219.6	η down(%)	100.0	CIBSE SHR MAX	0.90



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-02-28

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:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum
5	5214	5182	5218	5232	5268	5212	5209	5194	0- 5	1251	1251	2.82
10	5153	5065	5163	5201	5227	5126	5145	5149	5- 10	3706	4957	11.2
15	4972	4775	4693	5009	5059	4911	4762	4972	10- 15	5956	10913	24.6
20	4469	4023	4222	4351	4567	4204	4379	4441	15- 20	7588	18501	41.7
25	3520	3089	3180	3422	3529	3310	3349	3611	20- 25	8094	26596	59.9
30	2352	2073	2137	2316	2360	2287	2318	2524	25- 30	7095	33691	75.9
35	1301	1194	1345	1293	1285	1330	1476	1472	30- 35	5181	38872	87.6
40	629.4	556.3	552.7	540.0	615.9	634.8	634.4	665.4	35- 40	3141	42013	94.7
45	190.6	225.0	298.6	220.0	191.1	257.3	339.3	274.8	40- 45	1475	43489	98
50	46.23	38.20	44.47	49.49	44.38	40.31	44.09	53.68	45- 50	512.8	44001	99.1
55	25.22	23.78	29.59	28.43	24.28	24.87	29.37	31.03	50- 55	164.6	44166	99.5
60	14.57	13.12	14.71	14.81	14.02	13.64	14.64	16.06	55- 60	93.29	44259	99.7
65	8.333	7.787	9.746	9.091	8.048	7.964	9.549	9.617	60- 65	55.21	44314	99.9
70	4.685	4.318	4.783	5.153	4.579	4.309	4.460	5.343	65- 70	33.22	44348	99.9
75	2.466	2.246	3.163	2.708	2.426	2.193	2.700	2.734	70- 75	18.68	44366	100
80	1.038	1.335	1.543	1.591	1.012	1.032	0.9387	1.290	75- 80	9.923	44376	100
85	0.2765	0.3727	0	0.4354	0.2780	0.1839	0	0.2261	80- 85	3.765	44380	100
90	0.0877	0	0	0	0.0762	0	0	0	85- 90	0.3973	44380	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:×10cd								UNIT:lm			

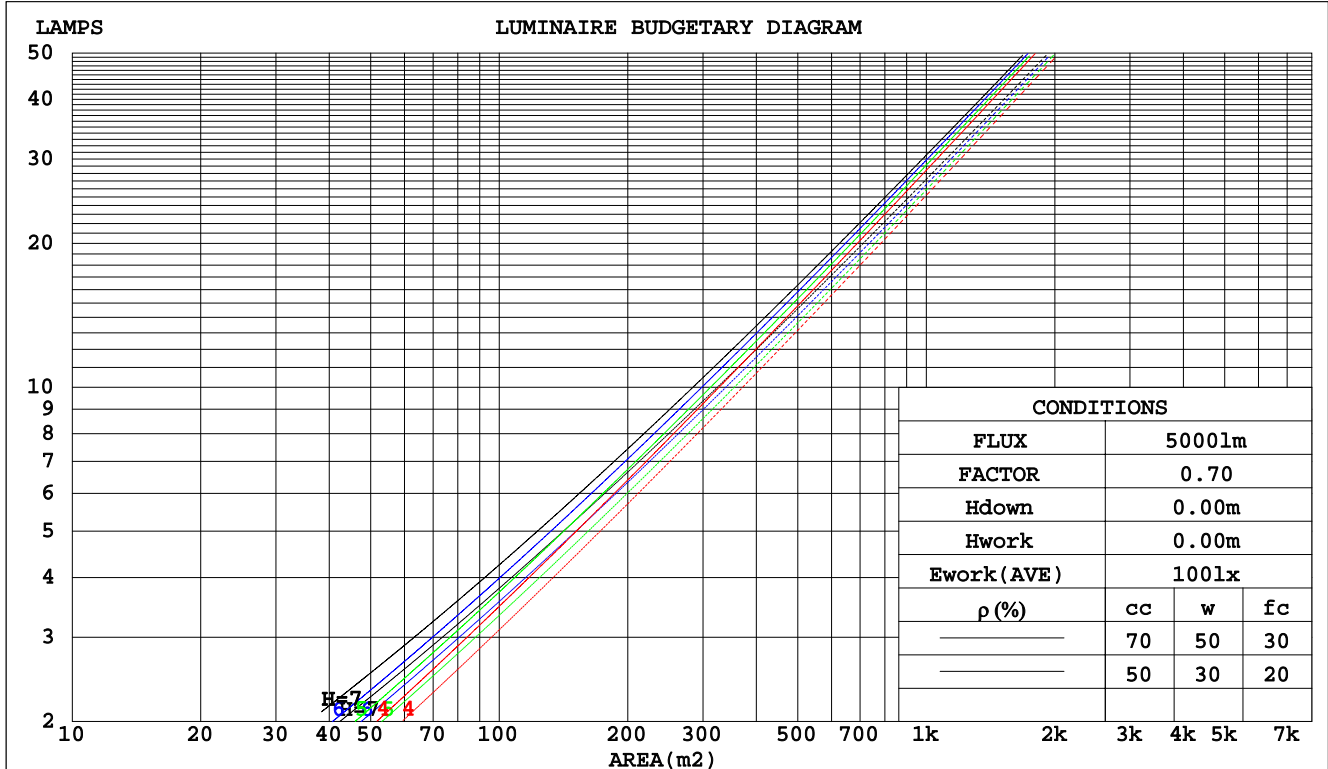
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-02-28

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:219.6V I:2.211A P:480.0W PF:0.9820 Lamp Flux:44380.4x1 lm		
NAME: HIGH BAY	TYPE:	WEIGHT:13
SPEC.:	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	1.11	1.09	1.06	1.09	1.07	1.05	1.05	1.03	1.02	1.01	.00	.99	.98	.97	.96	.94
2.0	1.04	.00	.96	1.02	.98	.95	.99	.96	.93	.96	.93	.91	.93	.91	.89	.88
3.0	.97	.92	.88	.96	.91	.88	.93	.89	.86	.91	.87	.85	.88	.86	.84	.82
4.0	.91	.86	.81	.90	.85	.81	.88	.83	.80	.86	.82	.79	.84	.81	.78	.77
5.0	.85	.80	.76	.84	.79	.75	.83	.78	.75	.81	.77	.74	.79	.76	.73	.72
6.0	.80	.75	.70	.80	.74	.70	.78	.73	.70	.77	.72	.69	.75	.72	.69	.67
7.0	.76	.70	.66	.75	.70	.66	.74	.69	.65	.73	.68	.65	.72	.68	.65	.63
8.0	.72	.66	.62	.71	.66	.62	.70	.65	.61	.69	.64	.61	.68	.64	.61	.60
9.0	.68	.62	.58	.67	.62	.58	.66	.61	.58	.65	.61	.58	.65	.60	.57	.56
10.0	.64	.59	.55	.64	.58	.55	.63	.58	.55	.62	.58	.54	.61	.57	.54	.53

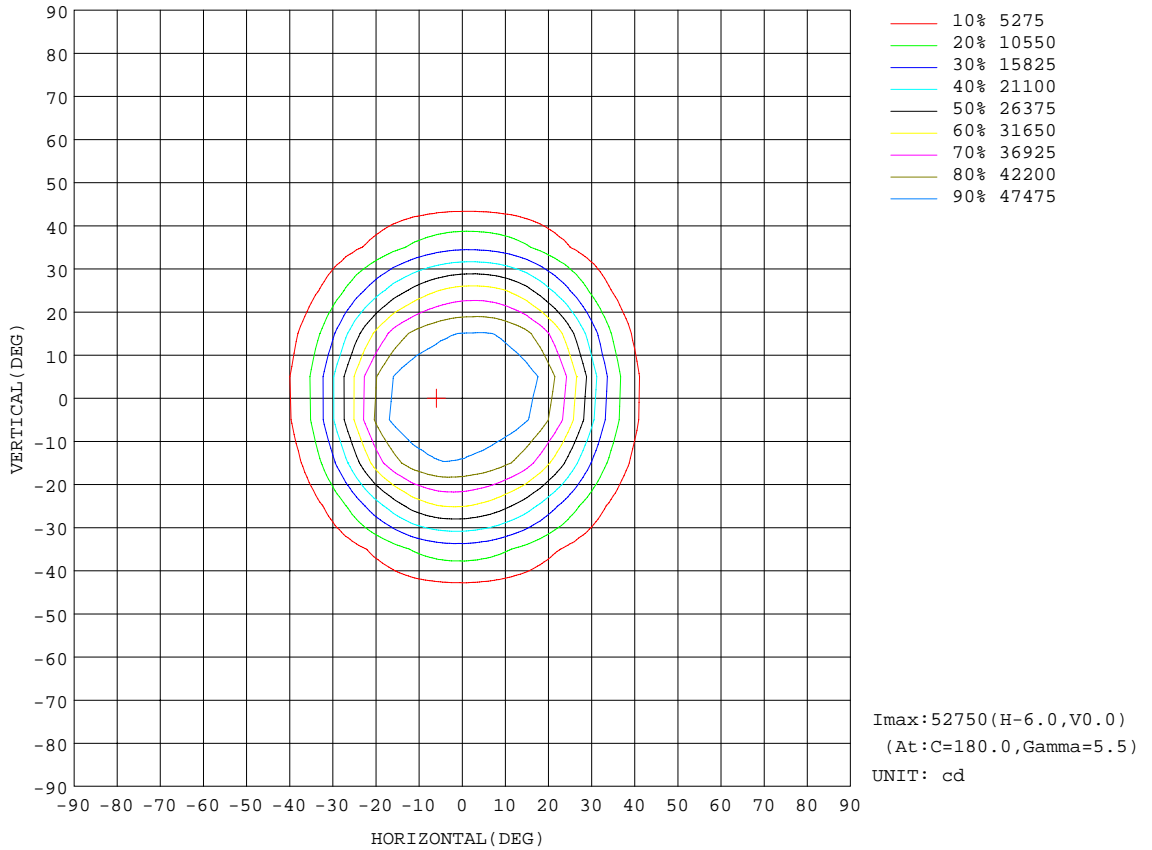


C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-02-28

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:219.6V I:2.211A P:480.0W PF:0.9820 Lamp Flux:44380.4x1 lm		
NAME: HIGH BAY	TYPE:	WEIGHT:13
SPEC.:	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:

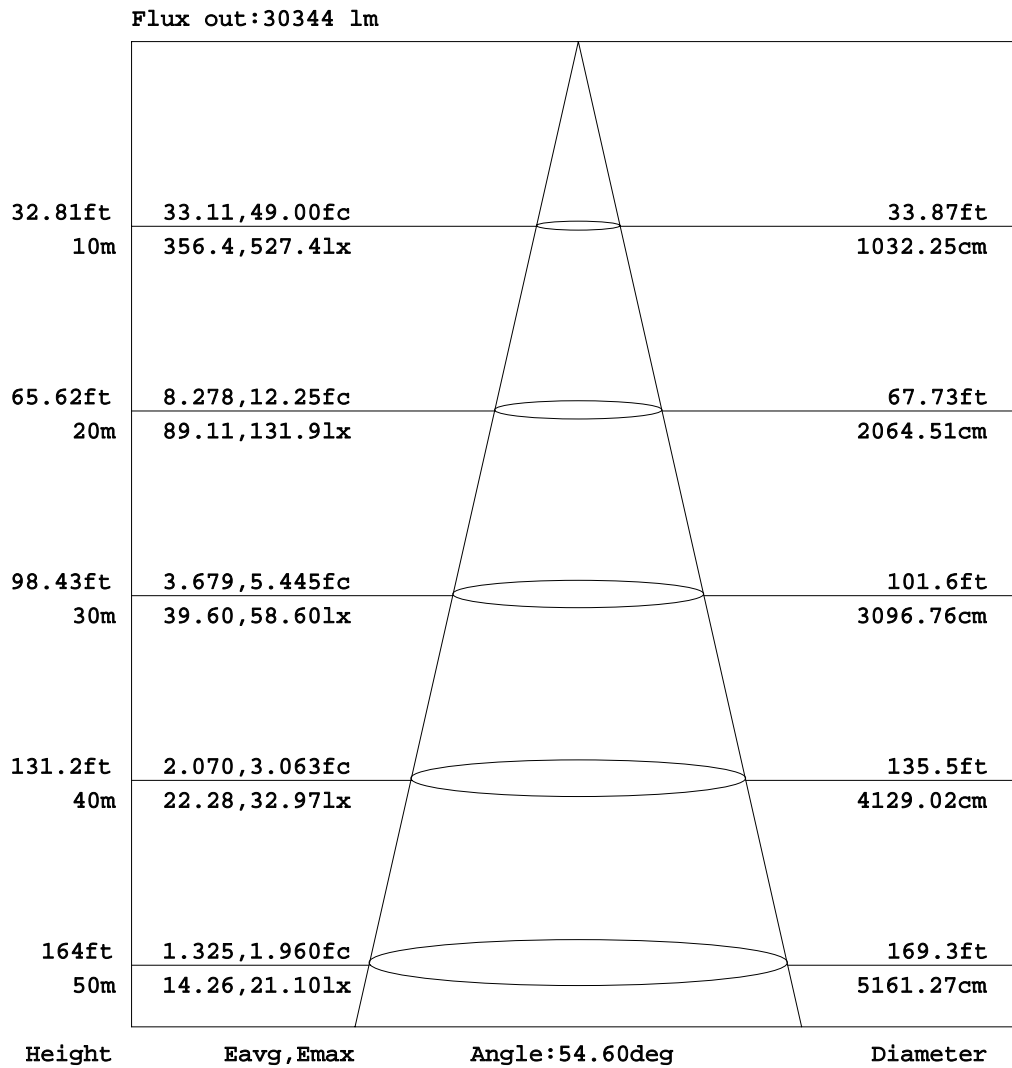


C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2014-02-28

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:

AAI Figure

Test:U:219.6V I:2.211A P:480.0W PF:0.9820 Lamp Flux:44380.4x1 lm		
NAME: HIGH BAY	TYPE:	WEIGHT:13
SPEC.:	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:



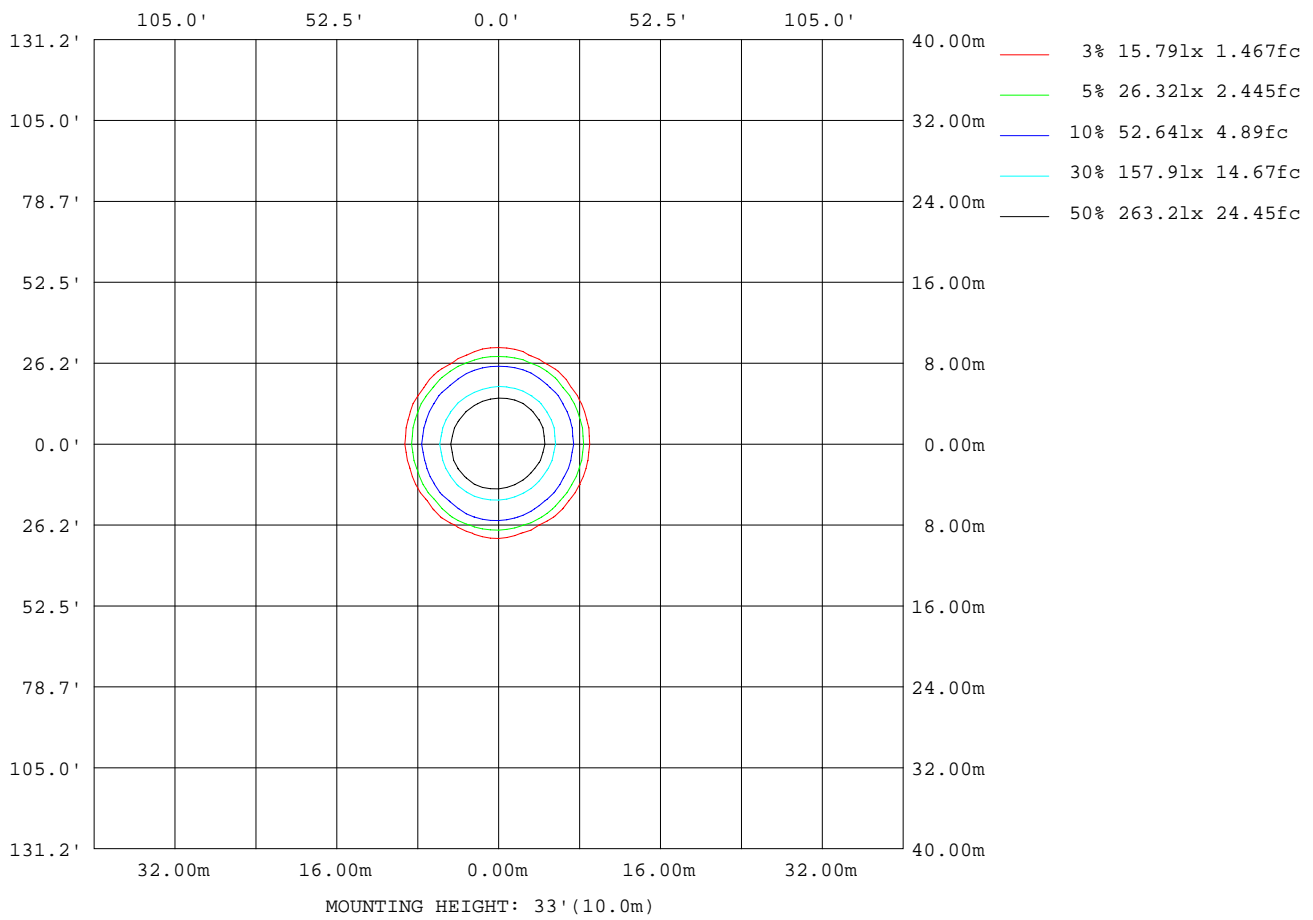
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-02-28

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:

ISOLUX DIAGRAM

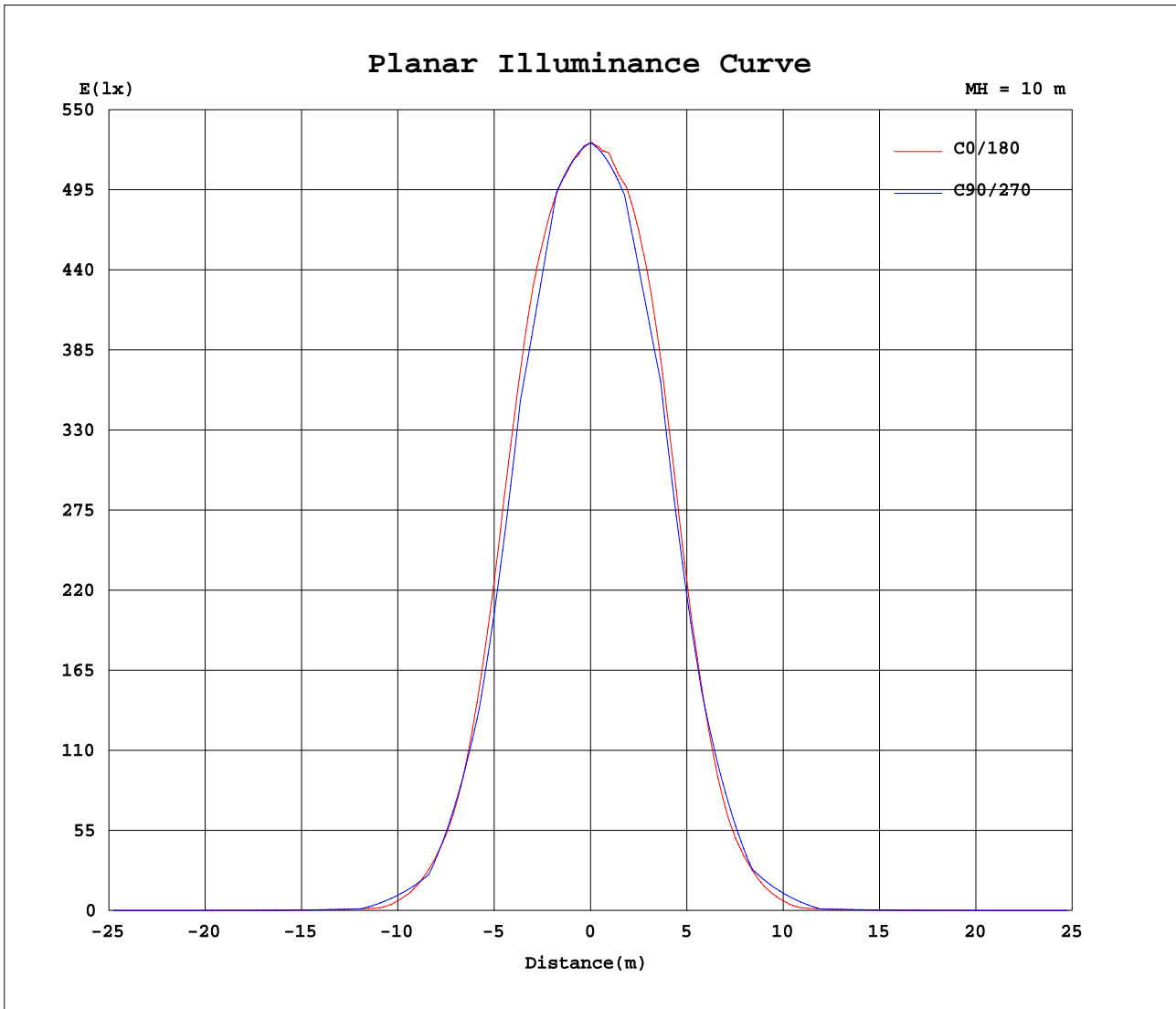
Test:U:219.6V I:2.211A P:480.0W PF:0.9820 Lamp Flux:44380.4x1 lm		
NAME: HIGH BAY	TYPE:	WEIGHT:13
SPEC.:	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-02-28

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:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2014-02-28

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

