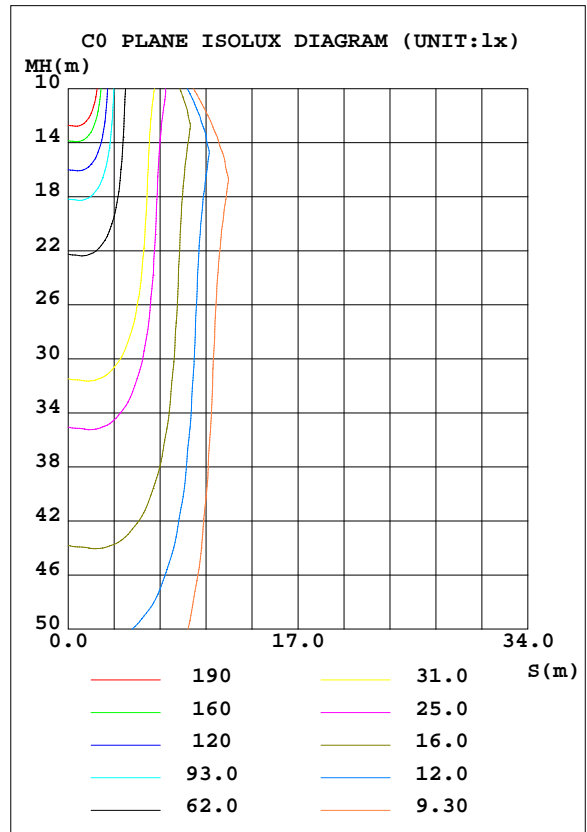
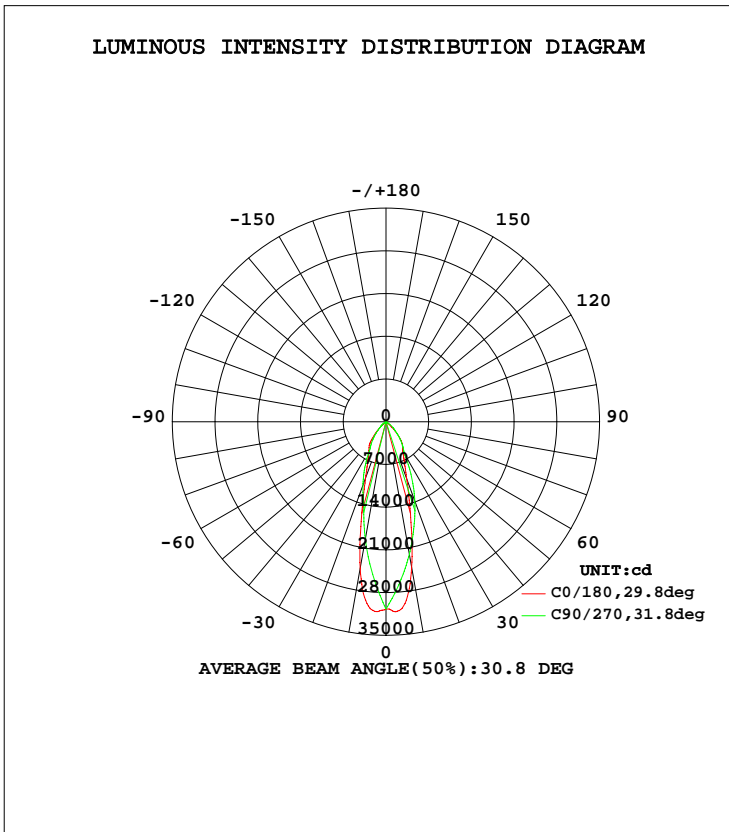


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.0V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:14806.4x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:	WEIGHT:5
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 99.91 lm/W
MODEL	QH-HBZSL-150W	Imax(cd)	31174	S/MH(C0/180)	0.50	
NOMINAL POWER(W)	150W	LOR(%)	100.0	S/MH(C90/270)	0.56	
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	14806	η UP, DN(C0-180)	0.0, 47.1	
NOMINAL FLUX(lm)	14806.4	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 52.9	
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.50	
TEST VOLTAGE(V)	220.1	η down(%)	100.0	CIBSE SHR MAX	0.55	



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-12-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks: 25度反光杯

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	lum, lamp
5	3065	2697	2512	2690	3067	2780	2637	2773	0- 5	688.0	688.0	4.65,4.65
10	2443	2111	1954	2086	2422	2245	2205	2220	5- 10	1763	2451	16.6,16.6
15	1537	1441	1396	1414	1551	1601	1773	1543	10- 15	2158	4609	31.1,31.1
20	981.2	949.3	1108	923.8	995.4	1106	1381	1029	15- 20	2056	6665	45,45
25	704.3	712.0	820.0	696.6	708.9	809.8	989.8	762.0	20- 25	1880	8545	57.7,57.7
30	563.1	557.1	532.1	554.3	556.2	619.5	598.2	603.4	25- 30	1684	10229	69.1,69.1
35	483.5	429.5	404.2	440.8	470.7	501.7	473.6	491.3	30- 35	1507	11736	79.3,79.3
40	333.3	307.1	276.3	324.9	356.9	391.7	349.0	375.6	35- 40	1315	13051	88.1,88.1
45	174.6	167.2	148.4	184.3	197.0	234.4	224.4	213.4	40- 45	944.6	13995	94.5,94.5
50	31.85	69.67	99.90	76.05	54.84	98.51	150.7	89.52	45- 50	503.5	14499	97.9,97.9
55	6.040	4.989	51.37	5.461	6.938	6.733	77.06	5.871	50- 55	196.8	14696	99.3,99.3
60	3.536	3.444	2.829	3.699	4.061	4.447	3.413	3.809	55- 60	70.23	14766	99.7,99.7
65	2.268	2.217	2.257	2.335	2.550	2.748	2.634	2.330	60- 65	16.33	14782	99.8,99.8
70	1.477	1.530	1.684	1.566	1.685	1.830	1.856	1.480	65- 70	9.966	14792	99.9,99.9
75	0.9631	1.308	1.112	1.318	1.222	1.570	1.077	1.085	70- 75	7.330	14800	100,100
80	0.7706	0.8959	0	0.9140	1.262	1.089	0	0.6279	75- 80	4.970	14805	100,100
85	0.1569	0	0	0	0.3017	0	0	0	80- 85	1.696	14806	100,100
90	0.0306	0	0	0	0.0426	0	0	0	85- 90	0.0971	14806	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:×10cd								UNIT:lm			

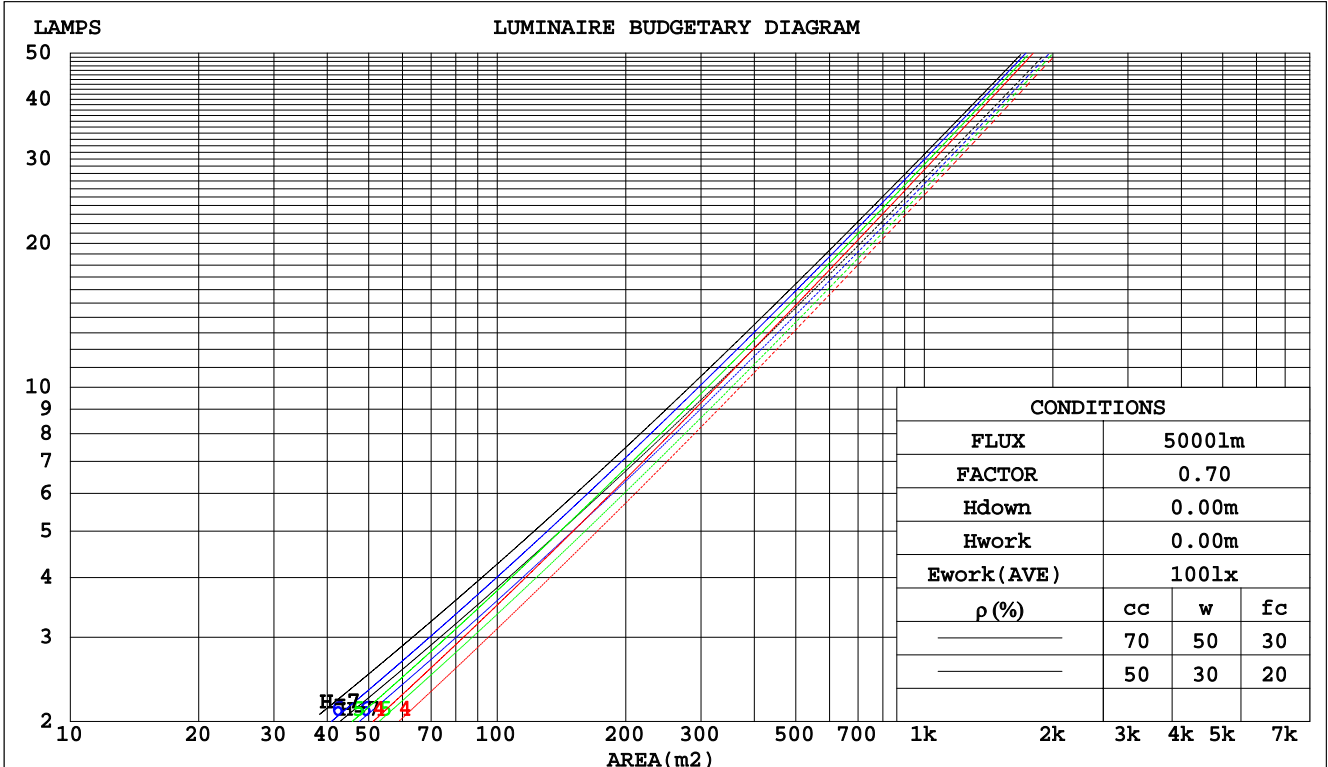
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-12-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks: 25度反光杯

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.0V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:14806.4x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:	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	1.00
1.0	1.11	1.08	1.06	1.09	1.07	1.05	1.05	1.03	1.01	1.01	.00	.98	.98	.97	.96	.94
2.0	1.03	.99	.96	1.02	.98	.95	.98	.95	.93	.95	.93	.91	.93	.91	.89	.87
3.0	.97	.92	.88	.95	.91	.87	.93	.89	.86	.90	.87	.84	.88	.85	.83	.82
4.0	.90	.85	.81	.89	.84	.80	.87	.83	.79	.85	.81	.79	.83	.80	.78	.76
5.0	.85	.79	.75	.84	.79	.75	.82	.78	.74	.81	.77	.73	.79	.76	.73	.71
6.0	.80	.74	.70	.79	.74	.70	.78	.73	.69	.76	.72	.69	.75	.71	.68	.67
7.0	.75	.70	.66	.75	.69	.65	.74	.69	.65	.72	.68	.65	.71	.67	.64	.63
8.0	.71	.66	.62	.71	.65	.61	.70	.65	.61	.69	.64	.61	.68	.64	.61	.59
9.0	.68	.62	.58	.67	.62	.58	.66	.61	.58	.65	.61	.58	.65	.60	.57	.56
10.0	.64	.59	.55	.64	.59	.55	.63	.58	.55	.62	.58	.55	.62	.58	.55	.53



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2014-12-29

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.287
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks: 25度反光杯

WEC AND CCEC

Test:U:220.0V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:14806.4x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:	WEIGHT:5
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION 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	.175	.099	.031	.168	.096	.030	.155	.089	.028	.144	.083	.027	.133	.077	.025	
2.0	.168	.092	.028	.162	.089	.027	.151	.084	.026	.142	.079	.025	.133	.075	.024	
3.0	.160	.085	.025	.155	.083	.025	.146	.079	.024	.138	.075	.023	.130	.072	.022	
4.0	.152	.079	.023	.148	.077	.023	.140	.074	.022	.133	.071	.022	.126	.069	.021	
5.0	.145	.074	.021	.141	.073	.021	.135	.070	.021	.128	.068	.020	.122	.065	.020	
6.0	.138	.069	.020	.135	.068	.020	.129	.066	.019	.123	.064	.019	.118	.062	.018	
7.0	.132	.065	.018	.129	.064	.018	.124	.063	.018	.119	.061	.018	.114	.059	.017	
8.0	.126	.062	.017	.123	.061	.017	.119	.059	.017	.114	.058	.017	.110	.057	.016	
9.0	.120	.058	.016	.118	.058	.016	.114	.056	.016	.110	.055	.016	.106	.054	.016	
10.0	.115	.055	.015	.113	.055	.015	.110	.054	.015	.106	.053	.015	.103	.052	.015	

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	.171	.157	.145	.146	.135	.125	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.156	.133	.113	.133	.114	.098	.091	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.143	.114	.090	.123	.098	.078	.084	.068	.055	.049	.040	.032	.016	.013	.011	
4.0	.133	.099	.073	.114	.085	.063	.078	.060	.045	.045	.035	.026	.015	.011	.009	
5.0	.124	.087	.060	.107	.075	.052	.073	.053	.037	.043	.031	.022	.014	.010	.007	
6.0	.117	.078	.050	.100	.067	.044	.069	.047	.031	.040	.028	.018	.013	.009	.006	
7.0	.110	.070	.042	.095	.061	.037	.065	.043	.026	.038	.025	.016	.012	.008	.005	
8.0	.104	.064	.036	.090	.056	.032	.062	.039	.022	.036	.023	.013	.012	.008	.004	
9.0	.099	.059	.032	.085	.051	.028	.059	.036	.020	.034	.021	.012	.011	.007	.004	
10.0	.094	.054	.028	.081	.047	.024	.056	.033	.017	.033	.020	.010	.011	.006	.003	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-12-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks: 25度反光杯

UGR(Unified Glare Rating) Table

Test:U:220.0V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:14806.4x1 lm										
NAME: LED HIGH BAY LIGHT					TYPE:			WEIGHT:5		
SPEC.:CREE XTE					DIM.:			SERIAL No.:		
MFR.: QINHAN LIGHTING					SUR.:			PROTECTION 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	17.9	18.8	18.1	19.0	19.1	18.2	19.1	18.4	19.3	19.4
3H	17.7	18.6	18.0	18.8	19.0	18.0	18.8	18.3	19.0	19.3
4H	17.6	18.4	17.9	18.6	18.9	17.9	18.7	18.2	18.9	19.2
6H	17.5	18.3	17.8	18.5	18.8	17.8	18.6	18.1	18.8	19.1
8H	17.5	18.2	17.8	18.5	18.7	17.8	18.5	18.1	18.8	19.0
12H	17.4	18.1	17.8	18.4	18.7	17.7	18.4	18.0	18.7	19.0
4H 2H	17.6	18.4	17.9	18.6	18.9	17.9	18.7	18.2	18.9	19.2
3H	17.4	18.1	17.8	18.4	18.7	17.7	18.4	18.0	18.7	19.0
4H	17.3	18.0	17.7	18.3	18.6	17.6	18.3	18.0	18.6	18.9
6H	17.3	17.8	17.6	18.1	18.5	17.5	18.1	17.9	18.4	18.8
8H	17.2	17.7	17.6	18.1	18.4	17.5	18.0	17.9	18.4	18.7
12H	17.2	17.6	17.6	18.0	18.4	17.4	17.9	17.9	18.3	18.7
8H 4H	17.2	17.7	17.6	18.1	18.4	17.5	18.0	17.9	18.4	18.7
6H	17.1	17.5	17.5	17.9	18.3	17.4	17.8	17.8	18.2	18.6
8H	17.1	17.4	17.5	17.8	18.3	17.3	17.7	17.8	18.1	18.6
12H	17.0	17.3	17.5	17.8	18.2	17.3	17.6	17.8	18.0	18.5
12H 4H	17.2	17.6	17.6	18.0	18.4	17.4	17.9	17.9	18.3	18.7
6H	17.1	17.4	17.5	17.8	18.3	17.3	17.7	17.8	18.1	18.6
8H	17.0	17.3	17.5	17.8	18.2	17.3	17.6	17.8	18.0	18.5
Variations with the observer position at spacings:										
S = 1.0H	+ 2.9 / -17.5					+ 2.3 / - 8.7				
1.5H	+ 4.9 / -16.5					+ 3.8 / -13.4				
2.0H	+ 8.5 / -13.0					+ 6.1 / -15.1				

CIE Pub.117 Corrected 14806 lm Total Lamp Luminous Flux. (8log(F/F0) = 9.4)

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-12-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks: 25度反光杯

UTILIZATION FACTORS TABLE

Test:U:220.0V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:14806.4x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:	WEIGHT:5
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION 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	84	77	73	83	77	73	83	76	73	69
0.80	92	86	82	91	85	81	90	85	81	77
1.00	97	91	87	96	91	87	95	91	87	82
1.25	102	96	93	101	96	92	99	94	91	87
1.50	105	100	96	103	99	96	101	97	95	90
2.00	108	103	100	106	102	99	104	100	98	92
2.50	110	106	102	108	104	102	105	102	100	94
3.00	111	108	105	109	106	104	106	104	102	95
4.00	113	110	108	111	109	107	108	106	104	97
5.00	115	112	110	112	110	109	108	107	105	98
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:
 Test Date:2014-12-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks: 25度反光杯

ISOCANDELA DIAGRAM

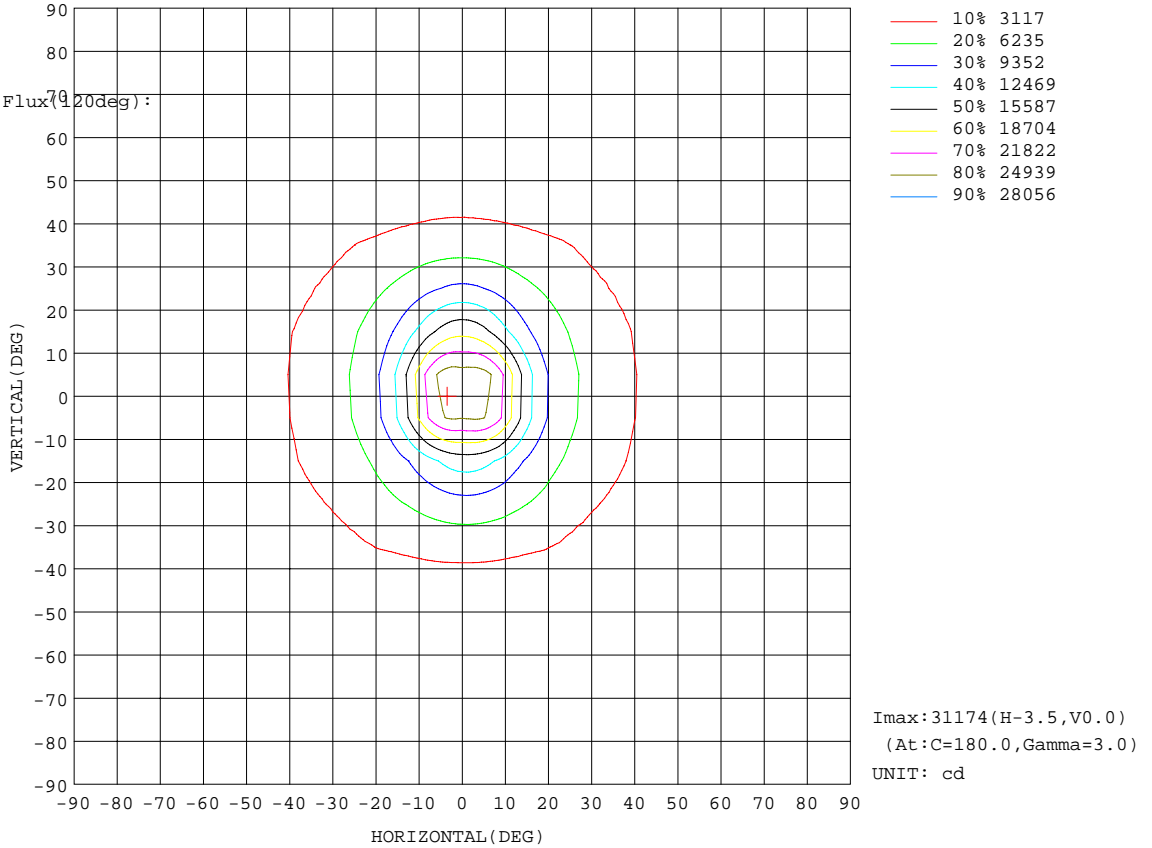
Test:U:220.0V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:14806.4x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:	WEIGHT:5
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:

Conical surface Flux(90deg):

13995 lm
 %lum = 94.5%
 %lamp = 94.5%

Conical surface Flux(70deg):

14766 lm
 %lum = 99.7%
 %lamp = 99.7%

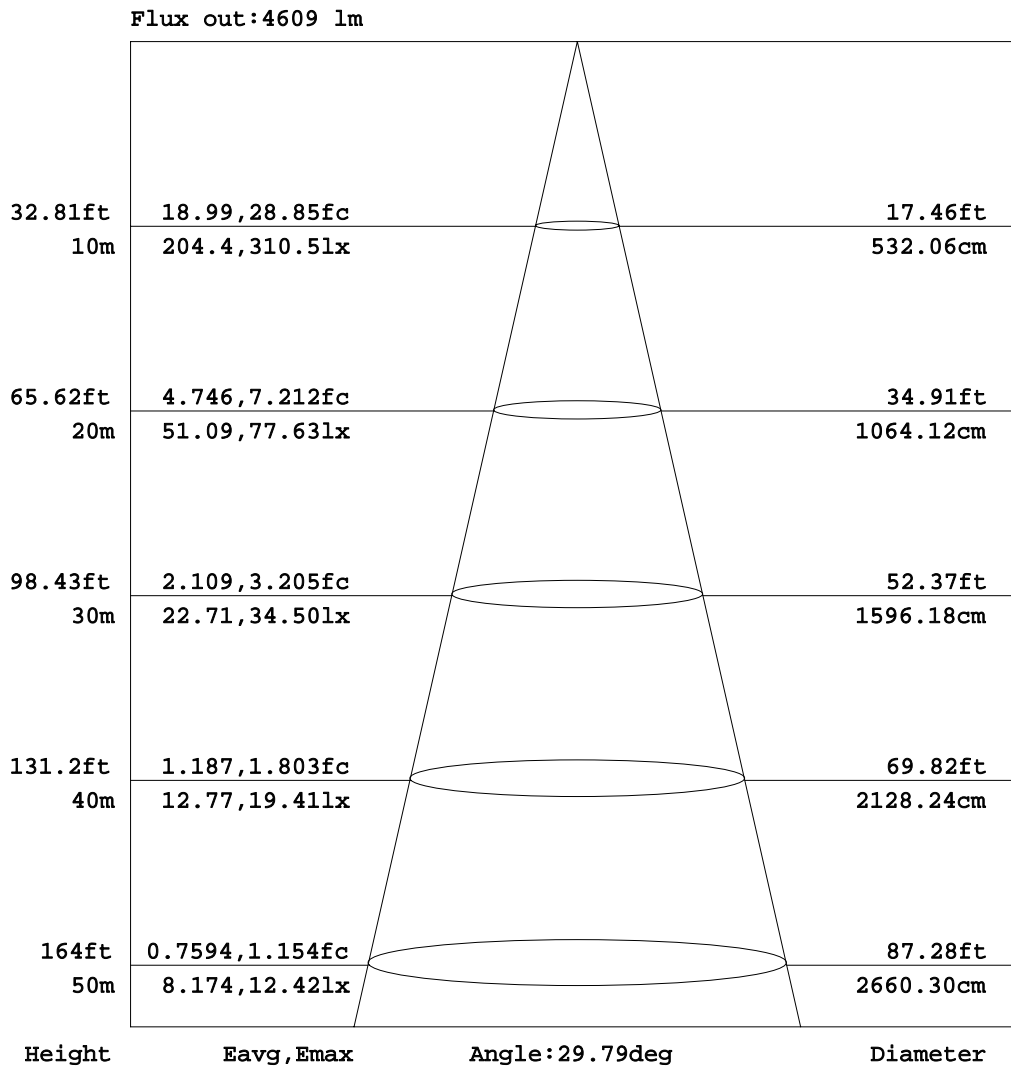


C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2014-12-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.287
 Humidity: 65.0%
 Test Distance: 8.000m [K=1.0000]
 Remarks: 25度反光杯

AAI Figure

Test:U:220.0V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:14806.4x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:	WEIGHT:5
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:



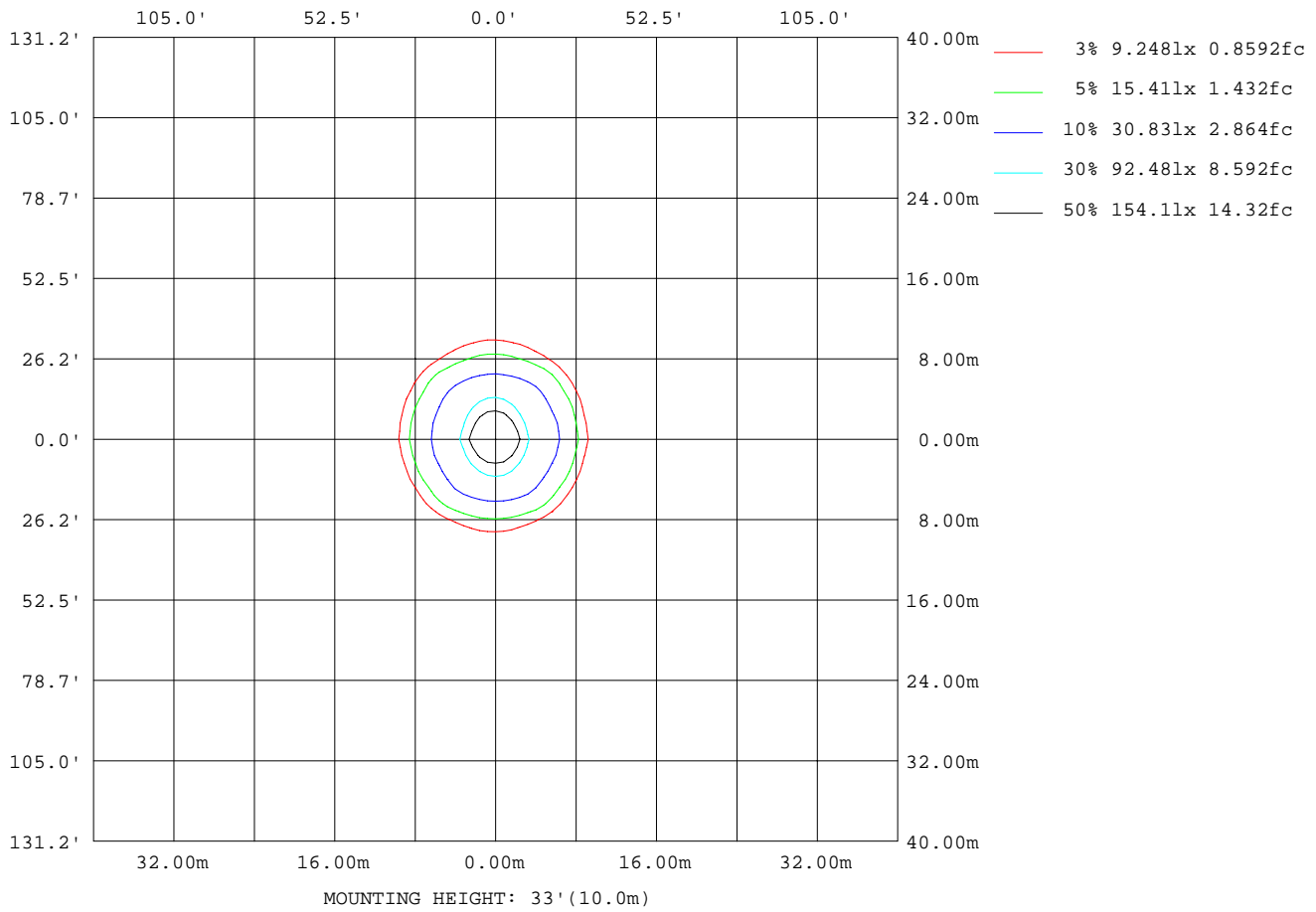
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-12-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks: 25度反光杯

ISOLUX DIAGRAM

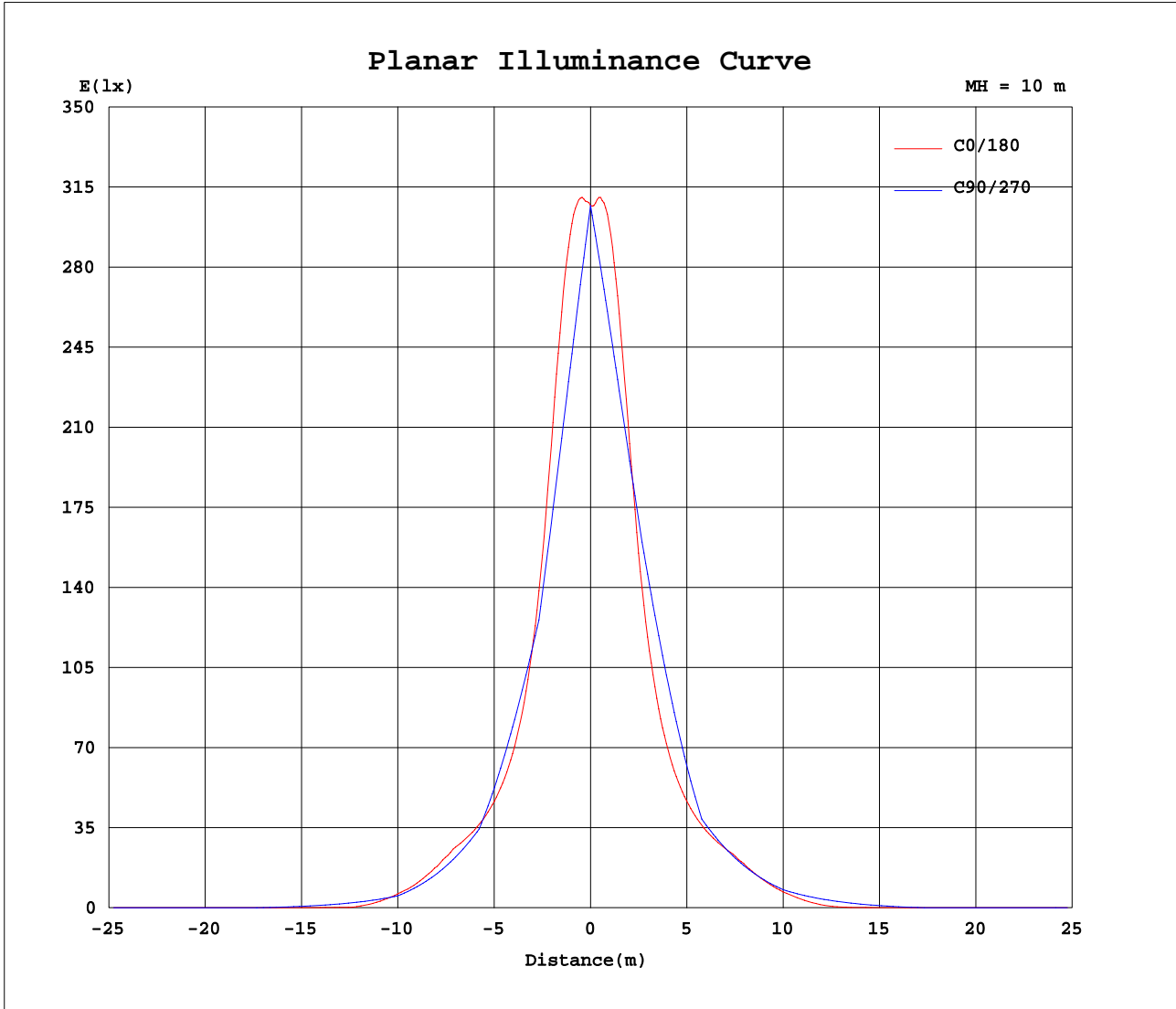
Test:U:220.0V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:14806.4x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:	WEIGHT:5
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-12-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks: 25度反光杯

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2014-12-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.287
 Humidity: 65.0%
 Test Distance: 8.000m [K=1.0000]
 Remarks: 25度反光杯

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.0V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:14806.4x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:	WEIGHT:5
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: x10cd

C(DEG)\ γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070
5	3065	3014	2966	2920	2877	2837	2797	2760	2727	2697	2667	2639	2613	2585	2561	2544	2532	2522	2512
10	2443	2371	2311	2262	2222	2191	2167	2149	2132	2111	2089	2072	2054	2033	2014	1996	1975	1964	1954
15	1537	1486	1450	1426	1411	1405	1413	1424	1428	1441	1447	1445	1438	1425	1416	1409	1405	1400	1396
20	981	952	932	922	920	922	928	936	946	949	962	986	1018	1046	1066	1086	1100	1107	1108
25	704	687	675	670	671	674	680	685	699	712	731	750	768	786	802	811	818	820	820
30	563	552	545	542	542	545	542	539	547	557	573	579	582	580	573	560	547	536	532
35	484	463	451	450	456	453	429	419	418	430	449	457	442	426	417	411	408	406	404
40	333	312	302	307	309	302	295	291	291	307	306	306	300	287	281	278	278	278	276
45	175	156	150	154	150	145	146	156	167	167	167	156	152	145	139	143	148	149	148
50	31.9	26.8	24.7	27.7	39.8	34.8	26.9	53.6	70.5	69.7	51.7	23.5	29.5	48.6	66.0	82.1	94.1	99.0	99.9
55	6.04	5.74	5.79	5.80	5.87	5.67	6.00	9.74	15.6	4.99	5.32	5.82	12.8	25.9	35.7	44.2	49.1	51.1	51.4
60	3.54	3.42	3.46	3.45	3.47	3.51	3.50	3.23	3.32	3.44	3.55	3.66	4.03	8.24	9.58	8.32	5.91	3.69	2.83
65	2.27	2.21	2.21	2.23	2.23	2.21	2.18	2.22	2.25	2.22	2.11	1.97	2.06	2.12	2.16	2.19	2.22	2.24	2.26
70	1.48	1.45	1.45	1.46	1.45	1.48	1.50	1.47	1.42	1.53	1.61	1.66	1.71	1.71	1.70	1.69	1.68	1.68	1.68
75	0.96	0.96	0.99	0.99	1.08	1.08	1.03	1.09	1.18	1.31	1.38	1.36	1.39	1.33	1.25	1.19	1.15	1.13	1.11
80	0.77	0.81	0.84	0.81	0.85	0.71	0.76	0.85	0.96	0.90	0.74	0.53	0.38	0.25	0.15	0.08	0.03	0.01	0.00
85	0.16	0.12	0.18	0.23	0.16	0.12	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	0.03	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 γ Range: 0 - 90DEG
C Interval: 5.0DEG γ Interval: 0.5DEG
Test Speed: HIGH Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.287
Temperature:25.3DEG Humidity:65.0%
Operators: Test Distance:8.000m [K=1.0000]
Test Date:2014-12-29 Remarks: 25度反光杯

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.0V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:14806.4x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:	WEIGHT:5
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:

Table--2

UNIT: x10cd

C(DEG) γ (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070
5	2512	2518	2533	2555	2580	2608	2635	2662	2690	2724	2759	2795	2834	2875	2919	2966	3016	3067	3026
10	1954	1967	1984	2001	2018	2037	2053	2071	2086	2103	2124	2147	2170	2202	2241	2289	2349	2422	2366
15	1392	1387	1386	1387	1394	1401	1410	1412	1414	1412	1407	1405	1401	1408	1425	1455	1497	1551	1512
20	1101	1086	1062	1039	1013	984	958	931	924	929	924	921	921	923	928	942	963	995	975
25	815	806	795	782	766	748	731	714	697	682	673	671	668	667	670	677	690	709	699
30	534	543	553	562	568	571	568	562	554	542	535	534	535	534	535	538	545	556	551
35	404	406	409	414	423	437	456	451	441	427	423	429	447	460	454	452	459	471	467
40	278	280	282	284	290	303	313	321	325	313	306	313	322	335	332	328	337	357	348
45	152	155	153	154	154	163	169	177	184	182	169	168	170	177	186	177	181	197	191
50	101	99.4	91.7	79.0	61.6	42.3	34.5	57.0	76.0	82.6	70.6	43.2	44.4	56.4	52.7	45.6	46.5	54.8	53.1
55	52.5	52.1	49.0	41.8	33.2	18.1	6.86	5.99	5.46	19.8	16.9	6.91	6.42	7.38	6.85	6.83	6.68	6.94	6.79
60	3.75	6.20	9.13	10.9	10.5	6.81	4.05	3.85	3.70	3.55	3.47	3.83	3.87	3.80	3.90	3.97	3.92	4.06	4.01
65	2.26	2.24	2.20	2.16	2.11	2.06	2.00	2.19	2.33	2.39	2.39	2.36	2.42	2.46	2.45	2.48	2.49	2.55	2.56
70	1.69	1.68	1.67	1.65	1.64	1.63	1.62	1.59	1.57	1.51	1.59	1.65	1.65	1.64	1.65	1.64	1.67	1.68	1.72
75	1.11	1.13	1.14	1.16	1.19	1.22	1.26	1.28	1.32	1.29	1.25	1.19	1.24	1.28	1.19	1.21	1.22	1.22	1.24
80	0.01	0.03	0.07	0.13	0.22	0.32	0.46	0.64	0.91	1.11	1.10	0.96	0.93	1.07	1.09	1.15	1.17	1.26	1.28
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	0.21	0.33	0.37	0.30	0.23	0.30	0.35
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	0.04	0.00

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2014-12-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.287
 Humidity: 65.0%
 Test Distance: 8.000m [K=1.0000]
 Remarks: 25度反光杯

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.0V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:14806.4x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:	WEIGHT:5
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:

Table--3

UNIT: x10cd

C(DEG) γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070
5	2988	2951	2918	2887	2858	2832	2806	2780	2761	2741	2720	2698	2676	2658	2645	2639	2637	2645	2653
10	2322	2290	2268	2254	2250	2247	2244	2245	2250	2250	2250	2247	2242	2235	2221	2210	2205	2209	2210
15	1486	1472	1473	1487	1513	1540	1570	1601	1630	1665	1688	1713	1732	1754	1770	1777	1773	1762	1742
20	965	965	975	993	1013	1040	1071	1106	1142	1183	1226	1273	1310	1341	1370	1382	1381	1368	1341
25	695	698	707	722	741	765	784	810	835	865	896	924	951	970	984	991	990	981	966
30	551	555	563	576	588	597	608	619	633	644	651	652	645	633	617	604	598	601	612
35	469	473	480	478	471	475	487	502	503	498	485	477	474	474	474	474	474	470	469
40	350	366	376	363	357	359	379	392	384	366	355	350	348	347	349	350	349	345	342
45	195	216	214	211	214	221	236	234	231	226	219	221	220	221	224	225	224	220	215
50	57.0	71.4	72.3	69.1	80.9	107	109	98.5	87.4	81.2	97.1	120	135	141	148	151	151	147	143
55	7.06	7.18	11.5	7.12	13.3	30.3	28.8	6.73	8.97	30.8	51.0	65.8	74.6	76.9	77.9	77.5	77.1	75.4	74.9
60	4.15	4.12	4.10	4.25	4.31	4.16	4.22	4.45	4.73	11.0	19.0	21.3	19.0	13.7	8.53	4.79	3.41	4.68	8.20
65	2.60	2.61	2.64	2.64	2.65	2.73	2.78	2.75	2.60	2.38	2.46	2.53	2.59	2.63	2.65	2.65	2.63	2.59	2.54
70	1.72	1.75	1.75	1.80	1.82	1.78	1.71	1.83	1.89	1.91	1.92	1.92	1.92	1.91	1.90	1.88	1.86	1.82	1.79
75	1.27	1.29	1.39	1.35	1.31	1.40	1.51	1.57	1.58	1.49	1.41	1.33	1.26	1.20	1.14	1.11	1.08	1.05	1.05
80	1.31	1.19	1.20	1.03	1.13	1.23	1.38	1.09	0.83	0.56	0.37	0.24	0.14	0.08	0.03	0.01	0.00	0.01	0.03
85	0.38	0.35	0.32	0.24	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:
 Test Date:2014-12-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks: 25度反光杯

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.0V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:14806.4x1 lm		
NAME: LED HIGH BAY LIGHT	TYPE:	WEIGHT:5
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:

Table--4

UNIT: x10cd

C(DEG) γ (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070	3070				
5	2661	2674	2691	2713	2730	2750	2773	2795	2820	2849	2880	2911	2946	2983	3023				
10	2217	2217	2220	2221	2219	2217	2220	2221	2223	2227	2239	2259	2289	2329	2380				
15	1713	1685	1656	1625	1596	1570	1543	1512	1488	1463	1443	1439	1447	1464	1493				
20	1305	1259	1204	1156	1107	1062	1029	1009	985	966	950	940	936	942	957				
25	943	911	881	848	817	788	762	740	725	711	700	691	685	685	692				
30	623	631	634	632	625	614	603	593	580	575	570	561	555	554	557				
35	467	468	474	484	501	505	491	475	465	465	480	488	474	468	473				
40	340	341	342	350	365	373	376	354	340	339	341	347	335	321	321				
45	215	211	209	211	213	214	213	214	199	191	180	177	185	165	164				
50	135	125	105	79.8	62.0	69.8	89.5	95.1	86.0	53.2	43.8	53.2	41.5	30.0	26.8				
55	73.3	68.4	59.0	40.8	17.9	6.90	5.87	23.4	19.5	6.92	6.17	6.24	6.08	5.97	5.79				
60	13.1	17.3	18.4	14.0	5.87	4.21	3.81	3.50	3.31	3.59	3.51	3.41	3.41	3.44	3.42				
65	2.47	2.38	2.30	2.22	2.12	2.27	2.33	2.29	2.21	2.13	2.16	2.18	2.18	2.19	2.20				
70	1.76	1.71	1.68	1.64	1.59	1.54	1.48	1.41	1.45	1.46	1.44	1.42	1.44	1.44	1.45				
75	1.06	1.06	1.08	1.10	1.10	1.10	1.08	1.07	1.03	0.98	0.96	0.96	0.94	0.95	0.94				
80	0.07	0.12	0.19	0.27	0.37	0.49	0.63	0.78	0.77	0.71	0.65	0.64	0.70	0.70	0.73				
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.20	0.20	0.21	0.15				
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
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2014-12-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks: 25度反光杯