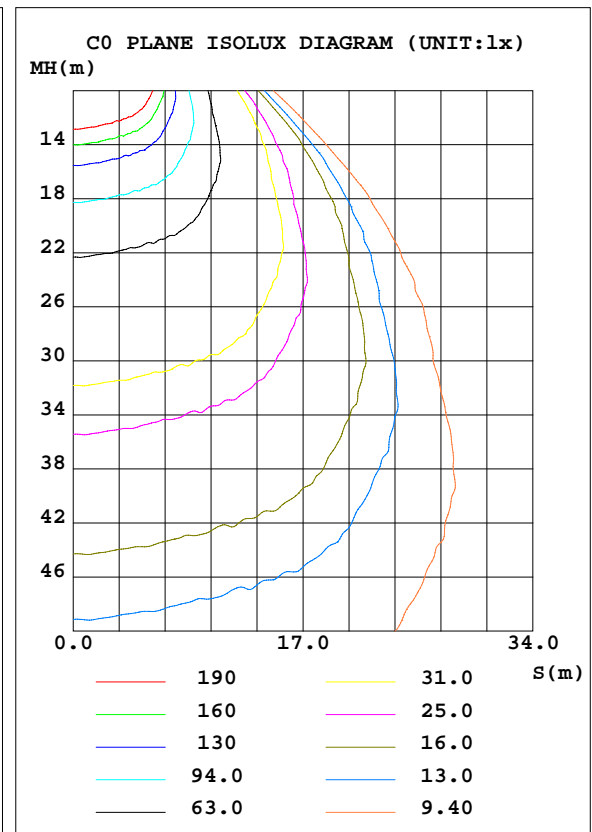
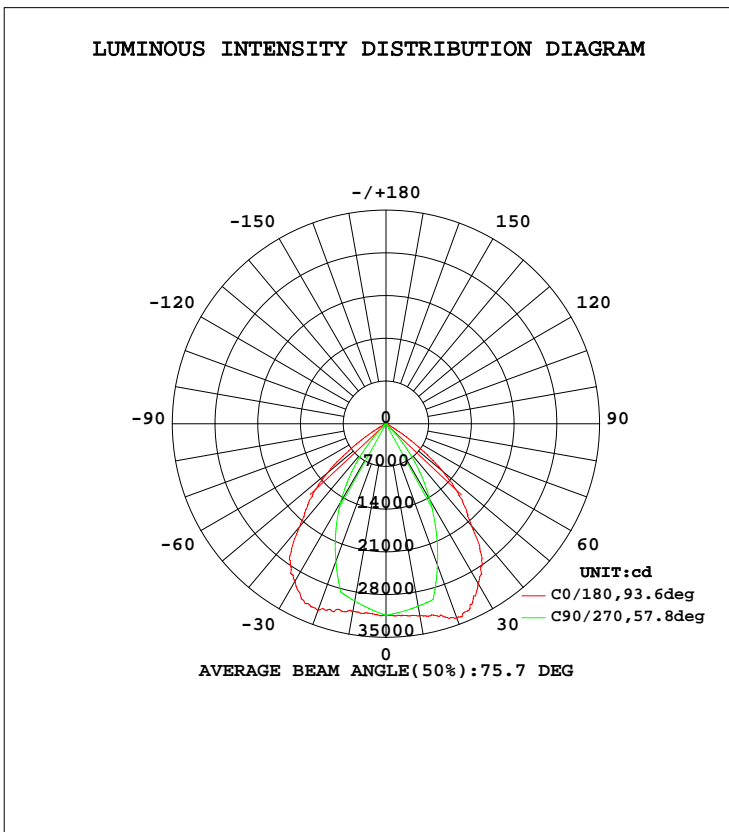


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.2V I:2.340A P:500.0W PF:0.9840 Lamp Flux:45344.5x1 lm		
NAME: LED FLOOD LIGHT	TYPE:IP65	WEIGHT:15
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.:QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	QH-FLTGC-500W	Imax(cd)	34008	S/MH(C0/180)	1.30
NOMINAL POWER(W)	500	LOR(%)	100.0	S/MH(C90/270)	0.89
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	45345	η UP, DN(C0-180)	0.0, 50.1
NOMINAL FLUX(lm)	45344.5	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 49.9
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	220.2	η down(%)	100.0	CIBSE SHR MAX	1.05



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2016-09-24

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	ℓlum
5	3119	3068	3046	3080	3149	3107	3088	3099	0- 5	743.8	743.8	1.64
10	3122	3020	2951	3053	3193	3100	3036	3089	5- 10	2202	2945	6.5
15	3152	3017	2857	3058	3260	3141	2984	3116	10- 15	3637	6582	14.5
20	3256	3054	2401	3131	3387	3203	2467	3194	15- 20	4996	11578	25.5
25	3193	2820	1946	2886	3267	2913	1950	2937	20- 25	5997	17576	38.8
30	2982	2416	1491	2471	3012	2444	1433	2441	25- 30	6431	24007	52.9
35	2737	1908	1011	1933	2733	1874	973.5	1844	30- 35	6256	30263	66.7
40	2205	1382	531.4	1379	2181	1293	514.2	1255	35- 40	5526	35789	78.9
45	1776	887.4	51.59	885.8	1765	826.5	54.92	810.3	40- 45	4211	40001	88.2
50	1251	439.8	41.73	430.5	1214	400.9	40.67	390.9	45- 50	2745	42745	94.3
55	647.3	42.12	31.86	41.66	591.5	39.64	26.42	40.82	50- 55	1593	44339	97.8
60	170.9	31.16	21.99	27.94	151.8	33.73	12.17	28.70	55- 60	702.5	45041	99.3
65	28.74	16.55	15.81	15.33	26.46	17.24	9.080	16.44	60- 65	184.7	45226	99.7
70	22.57	6.994	9.636	6.648	22.64	6.921	5.989	6.970	65- 70	61.51	45287	99.9
75	7.817	4.186	3.459	4.020	7.754	3.966	2.899	3.917	70- 75	36.68	45324	100
80	2.980	1.744	0	1.652	2.673	1.417	0	1.444	75- 80	15.14	45339	100
85	1.515	0	0	0	1.372	0	0	0	80- 85	4.536	45344	100
90	0.1460	0	0	0	0.1296	0	0	0	85- 90	0.8339	45345	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			

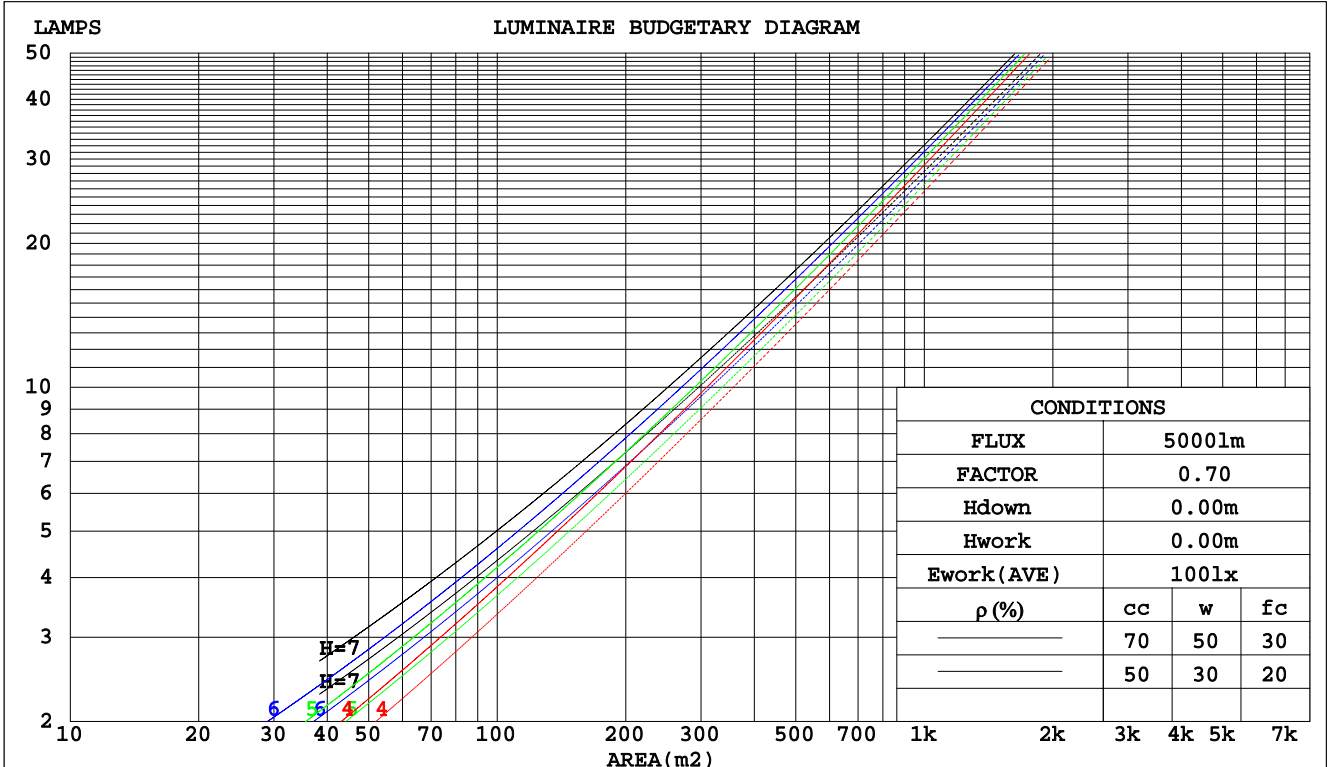
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2016-09-24

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:220.2V I:2.340A P:500.0W PF:0.9840 Lamp Flux:45344.5x1 lm		
NAME: LED FLOOD LIGHT	TYPE:IP65	WEIGHT:15
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	1.10	1.07	1.04	1.07	1.05	1.03	1.03	1.01	.99	.00	.98	.97	.96	.95	.94	.92
2.0	1.01	.96	.92	.99	.95	.91	.95	.92	.89	.92	.90	.87	.90	.87	.85	.83
3.0	.92	.87	.82	.91	.86	.81	.88	.84	.80	.86	.82	.79	.83	.80	.77	.76
4.0	.85	.78	.74	.84	.78	.73	.81	.76	.72	.79	.75	.71	.77	.74	.71	.69
5.0	.78	.71	.66	.77	.71	.66	.75	.70	.66	.74	.69	.65	.72	.68	.64	.63
6.0	.72	.65	.60	.71	.65	.60	.70	.64	.60	.68	.63	.59	.67	.62	.59	.57
7.0	.67	.60	.55	.66	.60	.55	.65	.59	.55	.63	.58	.54	.62	.58	.54	.52
8.0	.62	.55	.51	.61	.55	.50	.60	.54	.50	.59	.54	.50	.58	.53	.50	.48
9.0	.58	.51	.47	.57	.51	.46	.56	.50	.46	.55	.50	.46	.54	.50	.46	.44
10.0	.54	.47	.43	.54	.47	.43	.53	.47	.43	.52	.47	.43	.51	.46	.43	.41



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2016-09-24

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:

WEC AND CCEC

Test:U:220.2V I:2.340A P:500.0W PF:0.9840 Lamp Flux:45344.5x1 lm		
NAME: LED FLOOD LIGHT	TYPE:IP65	WEIGHT:15
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	.200	.114	.036	.193	.110	.035	.180	.103	.033	.169	.097	.031	.158	.092	.030	
2.0	.195	.107	.033	.189	.104	.032	.178	.099	.031	.168	.094	.030	.159	.090	.028	
3.0	.187	.100	.030	.182	.098	.029	.173	.094	.028	.164	.090	.028	.156	.087	.027	
4.0	.179	.093	.027	.175	.091	.027	.167	.088	.026	.159	.085	.026	.152	.083	.025	
5.0	.171	.087	.025	.167	.086	.025	.160	.083	.025	.153	.081	.024	.147	.079	.024	
6.0	.163	.082	.023	.160	.081	.023	.153	.079	.023	.147	.077	.023	.142	.075	.022	
7.0	.155	.077	.022	.152	.076	.022	.147	.074	.021	.141	.073	.021	.136	.071	.021	
8.0	.148	.072	.020	.146	.072	.020	.141	.070	.020	.136	.069	.020	.131	.067	.020	
9.0	.142	.069	.019	.139	.068	.019	.135	.067	.019	.130	.065	.019	.126	.064	.019	
10.0	.135	.065	.018	.133	.064	.018	.129	.063	.018	.125	.062	.018	.121	.061	.018	

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	.173	.157	.143	.148	.135	.123	.101	.093	.085	.058	.054	.050	.019	.017	.016	
2.0	.159	.132	.110	.136	.114	.095	.094	.079	.066	.054	.046	.039	.017	.015	.013	
3.0	.149	.114	.086	.127	.098	.075	.087	.068	.052	.050	.040	.031	.016	.013	.010	
4.0	.140	.099	.069	.120	.086	.060	.082	.060	.042	.048	.035	.025	.015	.011	.008	
5.0	.132	.088	.056	.113	.076	.049	.078	.053	.034	.045	.031	.020	.015	.010	.007	
6.0	.125	.079	.046	.108	.069	.040	.074	.048	.029	.043	.028	.017	.014	.009	.006	
7.0	.119	.072	.039	.102	.062	.034	.071	.044	.024	.041	.026	.014	.013	.008	.005	
8.0	.114	.066	.033	.098	.057	.029	.068	.040	.021	.039	.024	.012	.013	.008	.004	
9.0	.109	.061	.029	.094	.053	.025	.065	.037	.018	.038	.022	.011	.012	.007	.004	
10.0	.104	.057	.025	.090	.049	.022	.062	.035	.016	.036	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2016-09-24

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:

Uncorrected UGR Table

Test:U:220.2V I:2.340A P:500.0W PF:0.9840 Lamp Flux:45344.5x1 lm										
NAME: LED FLOOD LIGHT					TYPE:IP65			WEIGHT:15		
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	29.0	30.1	29.3	30.3	30.5	21.7	22.8	21.9	23.0	23.2
3H	28.8	29.9	29.1	30.1	30.3	21.5	22.5	21.8	22.7	22.9
4H	28.7	29.7	29.0	29.9	30.2	21.4	22.4	21.7	22.6	22.8
6H	28.6	29.5	29.0	29.8	30.1	21.3	22.2	21.6	22.5	22.7
8H	28.6	29.5	28.9	29.7	30.0	21.3	22.1	21.6	22.4	22.7
12H	28.6	29.4	28.9	29.7	29.9	21.2	22.1	21.6	22.3	22.6
4H 2H	28.7	29.7	29.0	29.9	30.2	21.7	22.7	22.0	22.9	23.2
3H	28.6	29.4	28.9	29.7	29.9	21.6	22.4	21.9	22.7	22.9
4H	28.5	29.2	28.8	29.5	29.8	21.5	22.2	21.8	22.5	22.8
6H	28.4	29.0	28.8	29.4	29.7	21.4	22.0	21.8	22.4	22.7
8H	28.3	28.9	28.7	29.3	29.7	21.3	21.9	21.7	22.3	22.7
12H	28.3	28.8	28.7	29.2	29.6	21.3	21.8	21.7	22.2	22.6
8H 4H	28.3	28.9	28.7	29.3	29.6	21.3	21.9	21.7	22.3	22.7
6H	28.2	28.7	28.7	29.1	29.5	21.2	21.7	21.7	22.1	22.5
8H	28.2	28.6	28.6	29.0	29.5	21.2	21.6	21.6	22.0	22.5
12H	28.1	28.5	28.6	28.9	29.4	21.1	21.5	21.6	21.9	22.4
12H 4H	28.3	28.8	28.7	29.2	29.6	21.3	21.8	21.7	22.2	22.6
6H	28.2	28.6	28.6	29.0	29.5	21.2	21.6	21.6	22.0	22.5
8H	28.1	28.5	28.6	28.9	29.4	21.1	21.5	21.6	21.9	22.4
Variations with the observer position at spacings:										
S = 1.0H	+ 2.1 / - 4.0					+ 3.0 / -14.5				
1.5H	+ 2.0 / - 4.5					+ 4.1 / -14.2				
2.0H	+ 5.0 / -20.8					+ 4.0 / - 4.7				

CIE Pub.117 Corrected 45345 lm Total Lamp Luminous Flux. (8log(F/F0) = 13.3)

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2016-09-24

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:

UTILIZATION FACTORS TABLE

Test:U:220.2V I:2.340A P:500.0W PF:0.9840 Lamp Flux:45344.5x1 lm		
NAME: LED FLOOD LIGHT	TYPE:IP65	WEIGHT:15
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.:QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:

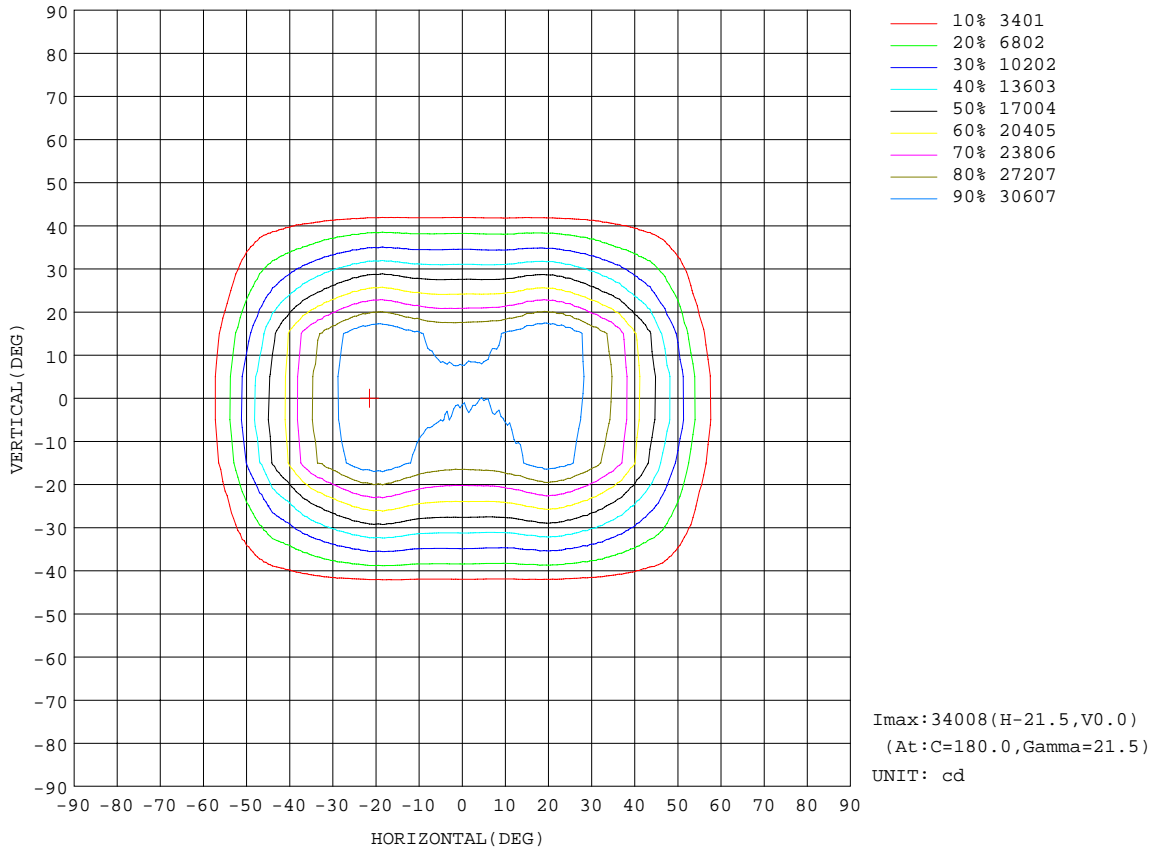
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	78	70	65	77	70	65	76	69	65	60
0.80	87	79	75	86	79	75	85	78	74	70
1.00	94	87	82	93	86	82	91	86	81	76
1.25	99	92	88	98	92	88	95	91	87	82
1.50	102	96	92	101	96	92	98	94	91	86
2.00	106	101	97	105	100	97	102	98	95	89
2.50	108	104	100	106	102	99	103	100	97	91
3.00	110	106	103	108	105	102	105	102	99	93
4.00	112	109	106	110	107	105	106	104	102	95
5.00	114	111	108	111	109	107	107	105	104	96
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:2016-09-24

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:2.340A P:500.0W PF:0.9840 Lamp Flux:45344.5x1 lm		
NAME: LED FLOOD LIGHT	TYPE:IP65	WEIGHT:15
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.:QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:



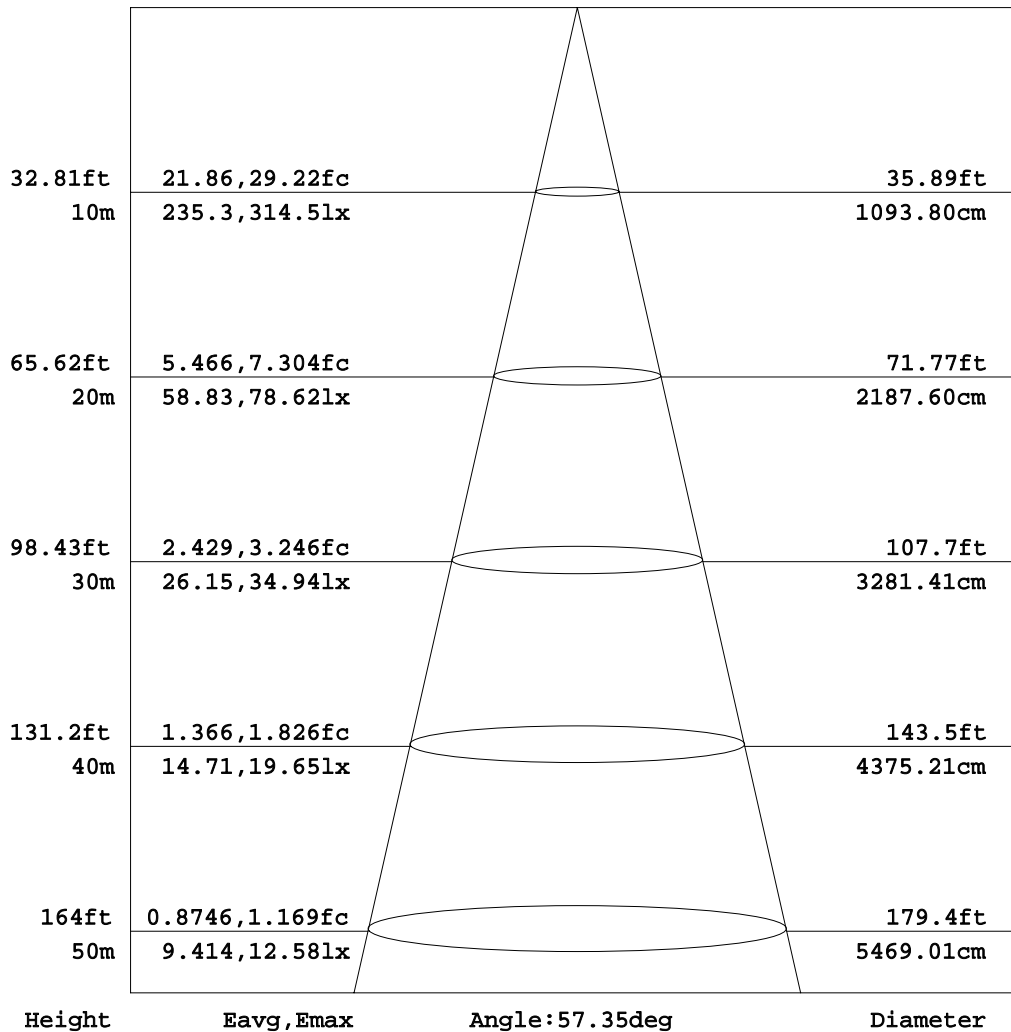
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2016-09-24

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:220.2V I:2.340A P:500.0W PF:0.9840 Lamp Flux:45344.5x1 lm		
NAME: LED FLOOD LIGHT	TYPE:IP65	WEIGHT:15
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.:QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:

Flux out:22717 lm



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

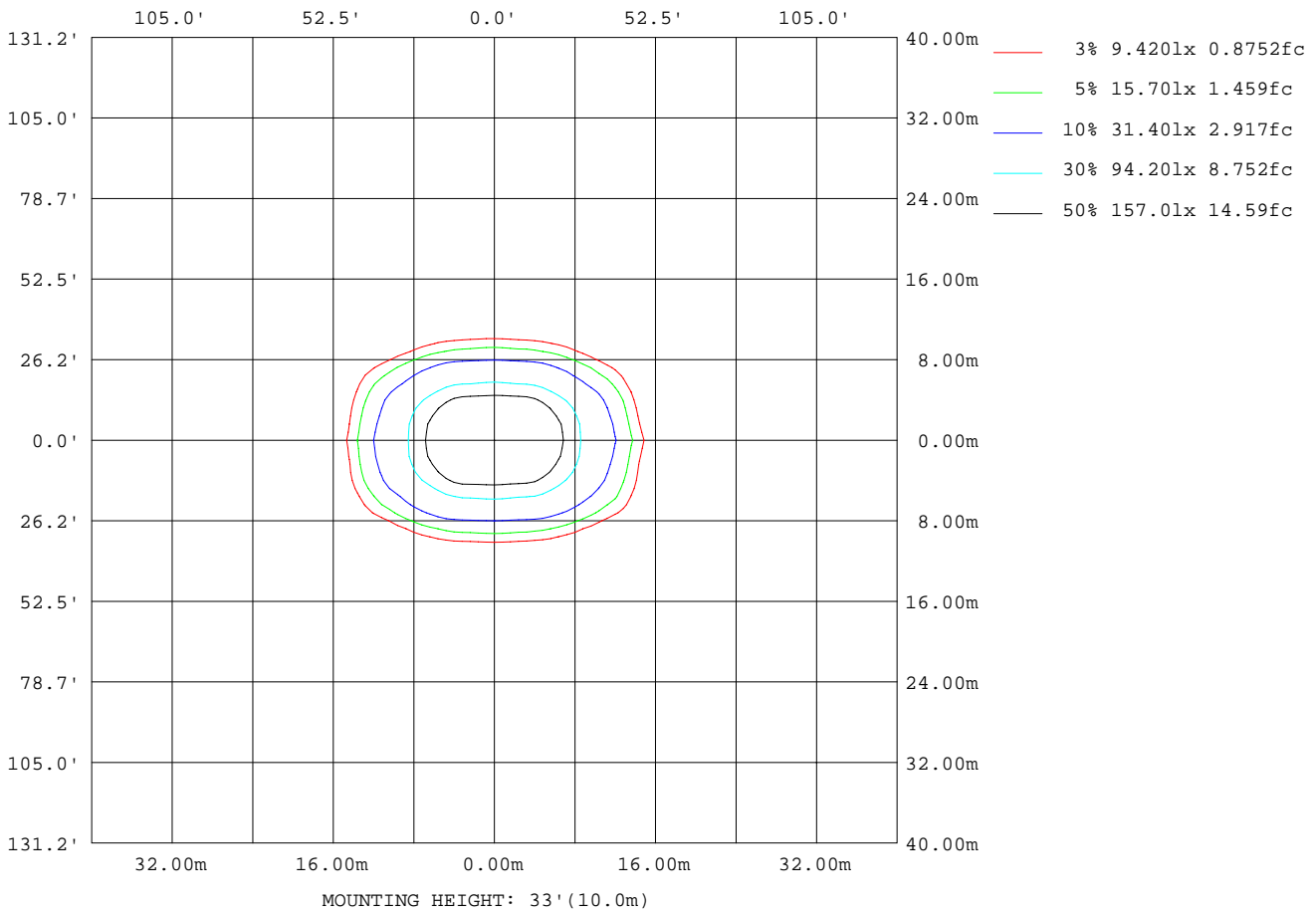
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2016-09-24

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

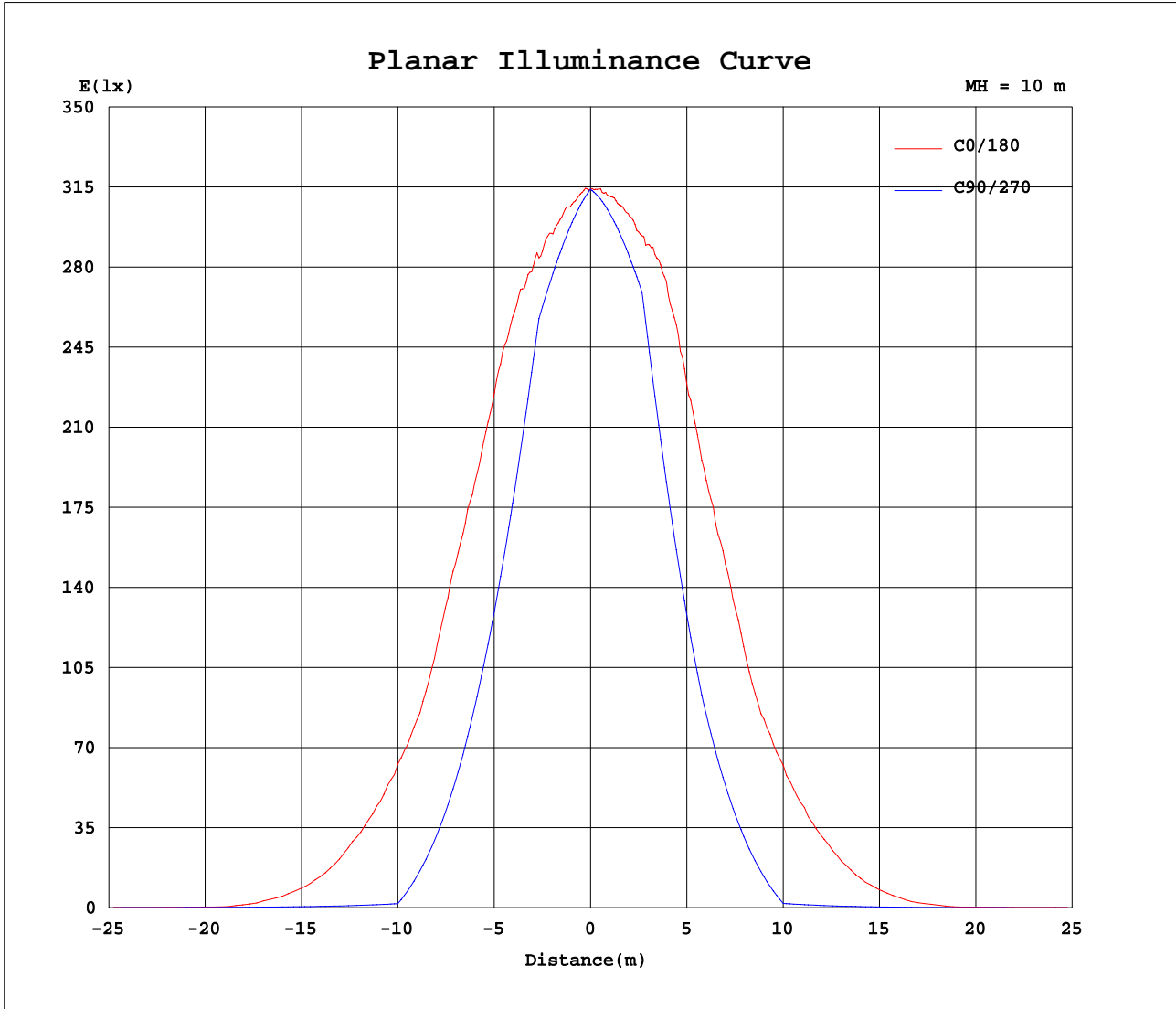
Test:U:220.2V I:2.340A P:500.0W PF:0.9840 Lamp Flux:45344.5x1 lm		
NAME: LED FLOOD LIGHT	TYPE:IP65	WEIGHT:15
SPEC.:CREE XTE	DIM.:	SERIAL No.:
MFR.:QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2016-09-24

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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: 2016-09-24

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:2.340A P:500.0W PF:0.9840 Lamp Flux:45344.5x1 lm		
NAME: LED FLOOD LIGHT	TYPE:IP65	WEIGHT:15
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	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140
5	3119	3113	3106	3099	3091	3084	3079	3074	3071	3068	3065	3062	3058	3058	3058	3055	3050	3045	3046
10	3122	3112	3102	3090	3078	3067	3052	3041	3032	3020	3003	2988	2985	2973	2969	2963	2962	2956	2951
15	3152	3145	3135	3121	3111	3099	3087	3072	3035	3017	2982	2950	2928	2910	2899	2882	2871	2865	2857
20	3256	3248	3234	3218	3200	3191	3173	3148	3111	3054	2960	2820	2704	2597	2523	2473	2435	2413	2401
25	3193	3185	3183	3181	3177	3180	3199	3210	3024	2820	2626	2443	2296	2174	2076	2010	1973	1953	1946
30	2982	2965	2962	2974	2996	3015	2950	2764	2586	2416	2235	2038	1875	1716	1611	1545	1506	1492	1491
35	2737	2704	2689	2687	2710	2643	2434	2246	2072	1908	1762	1586	1410	1273	1151	1081	1034	1014	1011
40	2205	2186	2198	2252	2274	2081	1889	1713	1536	1382	1231	1107	955	808	695	612	563	538	531
45	1776	1694	1670	1713	1618	1494	1335	1171	1042	887	744	591	452	322	221	144	91.0	62.2	51.6
50	1251	1168	1129	1113	1059	986	851	726	587	440	268	98.0	29.4	32.3	38.8	41.5	40.8	42.2	41.7
55	647	581	563	579	592	569	497	353	203	42.1	36.0	26.5	22.6	24.5	28.5	30.4	30.3	31.6	31.9
60	171	166	176	191	228	232	171	38.8	31.8	31.2	25.3	19.9	15.9	17.4	20.2	19.4	19.8	21.2	22.0
65	28.7	26.2	22.9	22.9	40.1	43.4	10.8	13.2	17.1	16.5	12.1	10.3	9.54	11.4	14.3	13.6	14.0	15.3	15.8
70	22.6	20.7	15.2	12.9	11.1	8.78	6.97	6.69	6.09	6.99	6.97	7.36	6.62	7.19	8.94	8.63	8.61	9.32	9.64
75	7.82	6.92	6.53	5.68	6.01	4.50	4.10	4.14	3.94	4.19	4.28	4.22	3.80	3.64	3.85	3.51	3.39	3.42	3.46
80	2.98	2.96	2.77	2.92	2.70	2.64	2.52	2.33	2.11	1.74	1.43	1.14	0.82	0.56	0.38	0.21	0.10	0.03	0.00
85	1.52	1.43	1.82	1.83	1.55	0.64	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	0.15	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:2016-09-24

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:2.340A P:500.0W PF:0.9840 Lamp Flux:45344.5x1 lm		
NAME: LED FLOOD LIGHT	TYPE:IP65	WEIGHT:15
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	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140
5	3049	3049	3050	3055	3061	3070	3077	3079	3080	3087	3096	3108	3118	3123	3129	3135	3142	3149	3145
10	2954	2956	2970	2974	2986	2997	3016	3033	3053	3067	3080	3100	3121	3139	3154	3168	3181	3193	3187
15	2858	2874	2883	2903	2929	2959	2982	3018	3058	3098	3132	3154	3170	3199	3221	3237	3250	3260	3256
20	2407	2435	2478	2543	2622	2730	2870	3014	3131	3182	3232	3266	3307	3320	3335	3356	3372	3387	3378
25	1953	1980	2028	2100	2202	2343	2509	2690	2886	3086	3282	3263	3264	3276	3276	3270	3261	3267	3266
30	1494	1518	1568	1641	1761	1925	2102	2287	2471	2639	2824	3008	3068	3047	3011	3001	3000	3012	3004
35	1016	1043	1098	1178	1313	1460	1608	1793	1933	2098	2275	2457	2682	2756	2745	2731	2723	2733	2717
40	539	569	622	712	837	972	1127	1245	1379	1529	1722	1921	2123	2324	2297	2215	2179	2181	2179
45	61.4	92.0	144	226	330	461	597	746	886	1015	1147	1325	1483	1660	1814	1741	1717	1765	1689
50	40.7	40.1	39.4	39.5	32.4	31.0	103	271	431	573	705	817	1003	1079	1158	1174	1168	1214	1130
55	30.5	29.9	29.1	28.2	25.0	24.9	31.8	39.5	41.7	193	342	472	533	575	596	596	565	591	555
60	20.4	19.3	19.0	19.5	16.8	16.7	22.1	25.6	27.9	28.5	32.8	163	210	180	177	158	142	152	136
65	14.7	13.6	13.0	13.5	10.4	9.14	10.4	11.9	15.3	13.9	19.0	11.7	39.2	34.5	22.2	22.2	26.1	26.5	24.0
70	8.97	8.39	8.23	8.70	6.66	6.38	6.93	6.77	6.65	5.95	7.92	7.62	8.79	10.5	12.6	14.9	19.1	22.6	18.0
75	3.36	3.33	3.44	3.76	3.45	3.63	4.07	4.13	4.02	3.84	4.08	3.91	4.60	6.11	5.69	6.33	7.22	7.75	6.83
80	0.02	0.09	0.21	0.37	0.53	0.77	1.07	1.36	1.65	2.05	2.26	2.40	2.46	2.59	2.79	2.63	2.73	2.67	2.76
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	0.59	1.43	1.67	1.60	1.37	1.37	1.37
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	0.13	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 V2.0.279  
 Temperature:25.3DEG      Humidity:65.0%  
 Operators:      Test Distance:8.000m [K=1.0000]  
 Test Date:2016-09-24      Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.2V I:2.340A P:500.0W PF:0.9840 Lamp Flux:45344.5x1 lm		
NAME: LED FLOOD LIGHT	TYPE:IP65	WEIGHT:15
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	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140
5	3141	3138	3135	3132	3125	3118	3112	3107	3108	3108	3103	3096	3092	3090	3089	3091	3088	3087	3092
10	3181	3174	3163	3150	3135	3119	3108	3100	3084	3070	3057	3052	3045	3043	3035	3036	3036	3041	3048
15	3248	3235	3224	3200	3189	3182	3151	3141	3103	3068	3041	3020	3000	2993	2986	2981	2984	2995	3005
20	3371	3359	3342	3331	3305	3275	3246	3203	3087	2934	2816	2688	2600	2533	2495	2470	2467	2482	2506
25	3277	3288	3293	3284	3305	3322	3129	2913	2706	2516	2349	2222	2105	2027	1978	1956	1950	1962	1983
30	3006	3028	3063	3093	3028	2824	2622	2444	2257	2060	1871	1704	1591	1509	1458	1441	1433	1438	1455
35	2717	2729	2749	2673	2446	2247	2051	1874	1712	1520	1383	1232	1118	1051	1001	980	974	977	995
40	2215	2291	2310	2091	1867	1666	1455	1293	1166	1058	922	785	677	597	548	523	514	519	543
45	1684	1743	1627	1463	1273	1072	951	826	697	561	434	311	214	142	94.5	66.5	54.9	63.1	89.5
50	1097	1075	1026	949	777	670	539	401	251	93.8	28.3	31.3	35.5	40.8	41.1	41.4	40.7	39.3	37.8
55	561	561	552	529	456	330	193	39.6	32.2	26.4	20.6	21.6	23.8	27.4	27.6	27.2	26.4	26.0	25.0
60	159	171	170	204	158	39.5	33.3	33.7	22.5	18.3	13.7	12.9	14.3	14.5	14.0	13.4	12.2	12.9	12.3
65	21.6	22.1	29.2	35.3	11.6	16.0	17.0	17.2	12.1	8.86	7.21	7.49	9.23	9.44	9.83	9.75	9.08	9.31	8.66
70	14.6	12.5	10.6	9.05	6.93	6.40	5.88	6.92	7.00	6.43	5.19	5.09	5.94	6.14	6.32	6.32	5.99	6.11	5.77
75	5.79	5.78	5.97	4.32	3.62	3.62	3.66	3.97	3.92	3.54	3.12	2.89	2.98	2.86	2.83	2.88	2.90	2.91	2.86
80	2.61	2.64	2.37	2.23	2.14	1.89	1.74	1.42	1.14	0.92	0.67	0.47	0.31	0.18	0.08	0.02	0.00	0.02	0.08
85	1.33	1.29	1.08	0.46	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:2016-09-24

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:2.340A P:500.0W PF:0.9840 Lamp Flux:45344.5x1 lm		
NAME: LED FLOOD LIGHT	TYPE:IP65	WEIGHT:15
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	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140	3140				
5	3097	3099	3097	3097	3098	3099	3099	3100	3100	3101	3103	3106	3110	3113	3116				
10	3050	3051	3054	3059	3065	3076	3089	3092	3092	3097	3104	3109	3113	3117	3120				
15	3013	3022	3038	3051	3061	3088	3116	3127	3149	3164	3164	3163	3165	3167	3162				
20	2549	2616	2690	2807	2943	3095	3194	3270	3266	3289	3287	3273	3271	3268	3264				
25	2032	2101	2211	2344	2511	2720	2937	3148	3339	3321	3274	3263	3231	3223	3205				
30	1502	1579	1698	1868	2048	2247	2441	2628	2827	3042	3118	3052	3015	2991	2977				
35	1041	1112	1228	1359	1493	1678	1844	2032	2239	2443	2701	2783	2745	2731	2723				
40	590	673	779	903	1029	1143	1255	1419	1642	1861	2088	2304	2271	2221	2190				
45	138	212	308	428	550	682	810	915	1030	1258	1432	1629	1765	1696	1704				
50	37.3	36.5	31.7	32.4	100	251	391	523	644	749	916	1014	1101	1149	1175				
55	25.2	24.4	22.9	25.9	34.2	39.8	40.8	181	312	428	481	529	540	543	571				
60	14.0	14.7	14.1	16.7	22.6	25.9	28.7	29.9	30.4	146	193	164	158	153	163				
65	9.28	9.53	8.46	8.29	9.85	13.1	16.4	14.2	16.6	14.7	34.5	26.3	21.5	22.6	27.5				
70	6.09	6.20	5.68	5.78	6.96	7.59	6.97	6.17	7.32	8.14	9.53	10.7	13.1	15.6	19.5				
75	2.94	3.07	3.07	3.29	3.91	4.12	3.92	4.04	3.69	3.71	4.54	6.12	5.51	6.23	6.71				
80	0.18	0.32	0.48	0.69	0.96	1.14	1.44	1.74	1.98	2.18	2.24	2.43	2.78	2.69	2.85				
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	1.07	1.30	1.33	1.36				
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:2016-09-24

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: