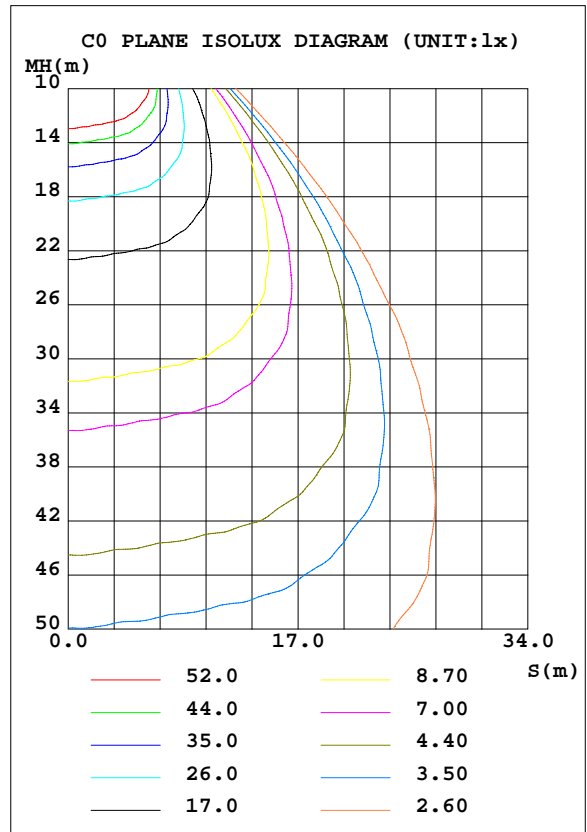
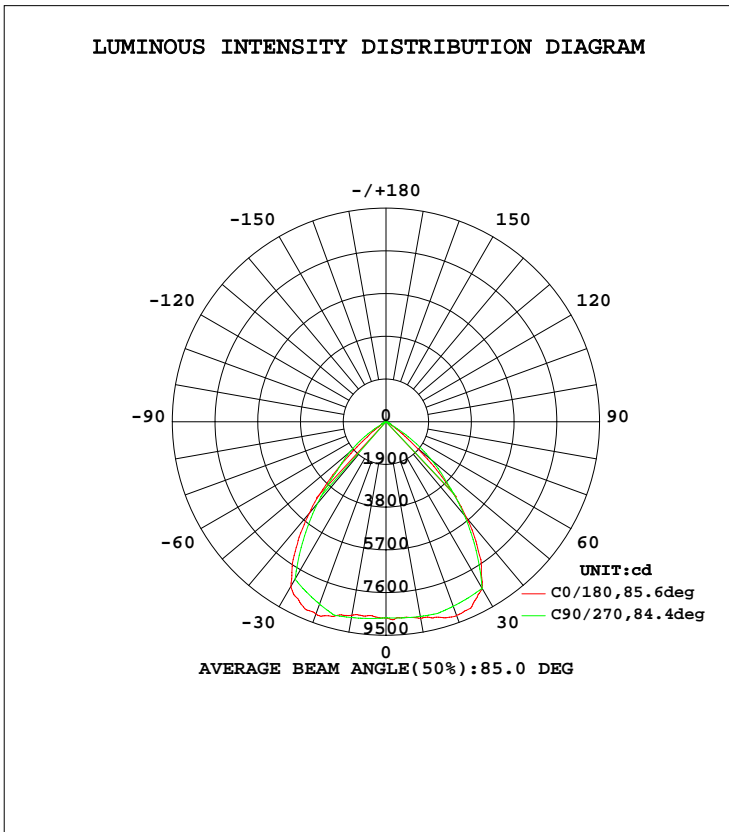


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.1V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:15247.4x1 lm		
NAME: LED FLOOD LIGHT	TYPE:	WEIGHT:5
SPEC.:PHILIPS 3030	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 102.88 lm/W			
MODEL	QH-FLXH03-150W	I _{max} (cd)	9219	S/MH(C0/180)	1.24
NOMINAL POWER(W)	150W	LOR(%)	100.0	S/MH(C90/270)	1.23
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	15247	η UP, DN(C0-180)	0.0, 48.6
NOMINAL FLUX(lm)	15247.4	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 51.4
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220.1	η down(%)	100.0	CIBSE SHR MAX	1.30



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2015-12-29

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: 90

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	lum, lamp
5	8654	8739	8781	8800	8745	8780	8756	8738	0- 5	209.4	209.4	1.37,1.37
10	8738	8769	8843	8932	8874	8843	8791	8806	5- 10	629.4	838.8	5.5,5.5
15	8957	8866	8904	9057	9001	9002	8827	9010	10- 15	1056	1895	12.4,12.4
20	9096	8891	8633	9213	9168	9099	8736	9163	15- 20	1479	3374	22.1,22.1
25	8949	8418	8361	8667	9055	8695	8645	8811	20- 25	1854	5228	34.3,34.3
30	8461	7566	8089	7838	8543	8074	8554	8115	25- 30	2137	7366	48.3,48.3
35	7037	6476	6412	6755	7253	7118	6985	7053	30- 35	2228	9593	62.9,62.9
40	5288	4985	4734	5237	5585	5703	5417	5572	35- 40	2022	11615	76.2,76.2
45	3347	3175	3057	3396	3680	3805	3848	3637	40- 45	1591	13206	86.6,86.6
50	1361	1643	2110	1864	1735	2056	2645	1963	45- 50	1037	14243	93.4,93.4
55	494.0	432.7	1164	575.8	660.3	720.6	1442	598.0	50- 55	563.2	14807	97.1,97.1
60	223.9	249.1	217.5	287.4	243.8	390.1	238.4	313.7	55- 60	258.2	15065	98.8,98.8
65	130.6	128.4	148.7	137.6	140.2	177.1	163.3	151.6	60- 65	100.7	15166	99.5,99.5
70	55.01	62.06	79.94	60.88	61.11	78.67	88.19	71.32	65- 70	52.80	15218	99.8,99.8
75	11.26	28.71	11.18	28.85	14.81	36.40	13.07	32.65	70- 75	22.99	15241	100,100
80	3.691	3.705	0	4.221	4.281	4.280	0	3.691	75- 80	5.211	15247	100,100
85	1.145	0	0	0	1.247	0	0	0	80- 85	0.7400	15247	100,100
90	0.3059	0	0	0	0.5137	0	0	0	85- 90	0.0764	15247	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:cd								UNIT:lm			

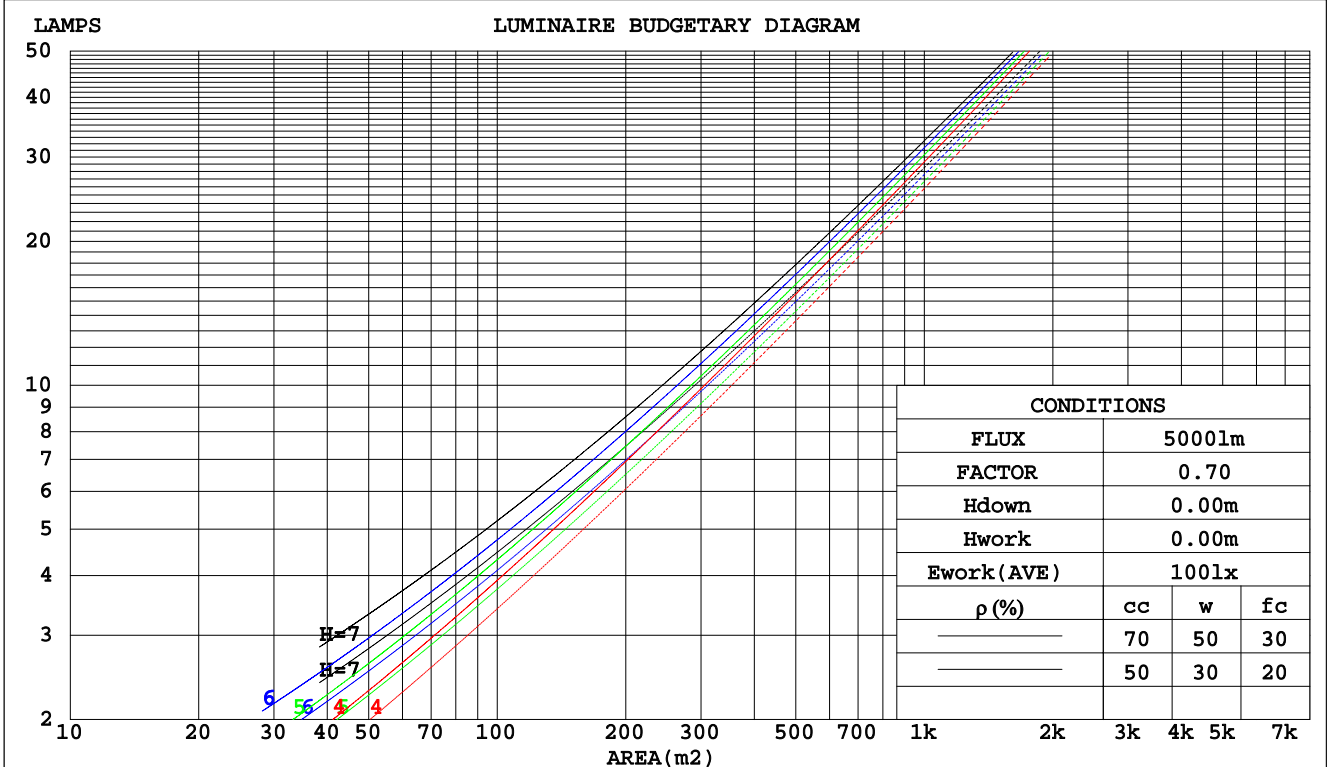
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2015-12-29

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: 90

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.1V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:15247.4x1 lm		
NAME: LED FLOOD LIGHT	TYPE:	WEIGHT:5
SPEC.:PHILIPS 3030	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	1.09	1.06	1.04	1.07	1.05	1.02	1.03	1.01	.99	.99	.98	.96	.96	.94	.93	.91
2.0	.00	.95	.91	.98	.94	.90	.95	.91	.88	.92	.89	.86	.89	.86	.84	.83
3.0	.91	.85	.81	.90	.84	.80	.87	.82	.79	.85	.81	.77	.82	.79	.76	.74
4.0	.84	.77	.72	.82	.76	.72	.80	.75	.71	.78	.73	.70	.76	.72	.69	.67
5.0	.77	.70	.65	.76	.69	.64	.74	.68	.64	.72	.67	.63	.70	.66	.63	.61
6.0	.71	.63	.58	.70	.63	.58	.68	.62	.58	.67	.61	.57	.65	.60	.57	.55
7.0	.65	.58	.53	.64	.58	.53	.63	.57	.52	.62	.56	.52	.60	.56	.52	.50
8.0	.60	.53	.48	.60	.53	.48	.58	.52	.48	.57	.52	.48	.56	.51	.47	.46
9.0	.56	.49	.44	.55	.49	.44	.54	.48	.44	.53	.48	.44	.52	.47	.44	.42
10.0	.52	.45	.41	.52	.45	.41	.51	.45	.41	.50	.44	.40	.49	.44	.40	.39



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2015-12-29

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: 90

WEC AND CCEC

Test:U:220.1V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:15247.4x1 lm		
NAME: LED FLOOD LIGHT	TYPE:	WEIGHT:5
SPEC.:PHILIPS 3030	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	.206	.117	.037	.199	.114	.036	.186	.107	.034	.175	.101	.032	.164	.095	.031	
2.0	.201	.110	.034	.195	.108	.033	.185	.103	.032	.175	.098	.031	.165	.093	.029	
3.0	.194	.103	.031	.189	.101	.030	.179	.097	.030	.170	.093	.029	.162	.090	.028	
4.0	.185	.096	.028	.181	.095	.028	.173	.091	.027	.165	.089	.027	.158	.086	.026	
5.0	.177	.090	.026	.173	.089	.026	.165	.086	.025	.159	.084	.025	.152	.081	.024	
6.0	.168	.084	.024	.165	.083	.024	.158	.081	.024	.152	.079	.023	.147	.077	.023	
7.0	.160	.079	.022	.157	.078	.022	.152	.077	.022	.146	.075	.022	.141	.073	.022	
8.0	.153	.075	.021	.150	.074	.021	.145	.072	.021	.140	.071	.020	.136	.070	.020	
9.0	.146	.071	.020	.144	.070	.020	.139	.069	.019	.134	.067	.019	.130	.066	.019	
10.0	.139	.067	.019	.137	.066	.018	.133	.065	.018	.129	.064	.018	.125	.063	.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	.049	.019	.017	.016	
2.0	.160	.132	.109	.137	.114	.094	.094	.079	.066	.054	.046	.039	.017	.015	.013	
3.0	.150	.114	.085	.128	.098	.074	.088	.068	.052	.051	.040	.031	.016	.013	.010	
4.0	.141	.100	.068	.121	.086	.059	.083	.060	.042	.048	.035	.025	.015	.011	.008	
5.0	.134	.088	.055	.115	.077	.048	.079	.053	.034	.046	.031	.020	.015	.010	.007	
6.0	.127	.080	.046	.109	.069	.040	.075	.048	.028	.044	.028	.017	.014	.009	.006	
7.0	.121	.072	.038	.104	.063	.033	.072	.044	.024	.042	.026	.014	.013	.008	.005	
8.0	.115	.067	.033	.099	.058	.029	.069	.040	.020	.040	.024	.012	.013	.008	.004	
9.0	.110	.062	.029	.095	.053	.025	.066	.038	.018	.038	.022	.011	.012	.007	.003	
10.0	.106	.057	.025	.091	.050	.022	.063	.035	.016	.037	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2015-12-29

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: 90

UGR(Unified Glare Rating) Table

Test:U:220.1V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:15247.4x1 lm										
NAME: LED FLOOD LIGHT					TYPE:			WEIGHT:5		
SPEC.:PHILIPS 3030					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	21.8	22.9	22.0	23.1	23.3	22.2	23.4	22.4	23.5	23.7
3H	21.6	22.6	21.9	22.9	23.1	22.0	23.1	22.3	23.3	23.5
4H	21.5	22.5	21.8	22.7	23.0	21.9	22.9	22.2	23.2	23.4
6H	21.4	22.3	21.7	22.6	22.8	21.9	22.8	22.2	23.0	23.3
8H	21.4	22.2	21.7	22.5	22.8	21.8	22.7	22.1	23.0	23.2
12H	21.3	22.2	21.6	22.4	22.7	21.8	22.6	22.1	22.9	23.2
4H 2H	21.5	22.5	21.8	22.8	23.0	22.0	22.9	22.2	23.2	23.4
3H	21.4	22.2	21.7	22.5	22.8	21.8	22.7	22.1	22.9	23.2
4H	21.3	22.0	21.6	22.4	22.7	21.7	22.5	22.1	22.8	23.1
6H	21.2	21.9	21.6	22.2	22.5	21.6	22.3	22.0	22.6	23.0
8H	21.1	21.8	21.5	22.1	22.5	21.6	22.2	22.0	22.6	22.9
12H	21.1	21.7	21.5	22.0	22.4	21.5	22.1	21.9	22.5	22.9
8H 4H	21.1	21.8	21.5	22.1	22.5	21.6	22.2	22.0	22.6	22.9
6H	21.0	21.6	21.5	22.0	22.4	21.5	22.0	21.9	22.4	22.8
8H	21.0	21.4	21.5	21.9	22.3	21.4	21.9	21.9	22.3	22.7
12H	21.0	21.3	21.4	21.8	22.2	21.4	21.8	21.9	22.2	22.7
12H 4H	21.1	21.7	21.5	22.0	22.4	21.5	22.1	21.9	22.5	22.9
6H	21.0	21.4	21.5	21.9	22.3	21.4	21.9	21.9	22.3	22.7
8H	21.0	21.3	21.4	21.8	22.2	21.4	21.8	21.9	22.2	22.7
Variations with the observer position at spacings:										
S = 1.0H	+ 2.5 / -10.3					+ 2.1 / - 4.9				
1.5H	+ 3.5 / - 6.9					+ 2.7 / - 4.9				
2.0H	+ 6.7 / - 9.0					+ 4.9 / -10.1				

CIE Pub.117 Corrected 15247 lm Total Lamp Luminous Flux. (8log(F/F0) = 9.5)

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2015-12-29

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: 90

UTILIZATION FACTORS TABLE

Test:U:220.1V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:15247.4x1 lm		
NAME: LED FLOOD LIGHT	TYPE:	WEIGHT:5
SPEC.:PHILIPS 3030	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	76	68	63	76	68	63	75	67	63	58
0.80	86	78	73	85	77	73	83	77	72	67
1.00	92	85	80	91	85	80	90	85	80	75
1.25	98	91	87	97	91	86	94	89	86	81
1.50	101	95	91	100	95	91	98	93	89	84
2.00	105	100	96	104	99	96	101	97	94	88
2.50	108	103	99	106	102	98	103	99	96	90
3.00	110	105	102	108	104	101	104	101	99	92
4.00	112	108	106	110	107	104	106	104	102	94
5.00	113	110	108	111	108	106	107	105	103	95
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:2015-12-29

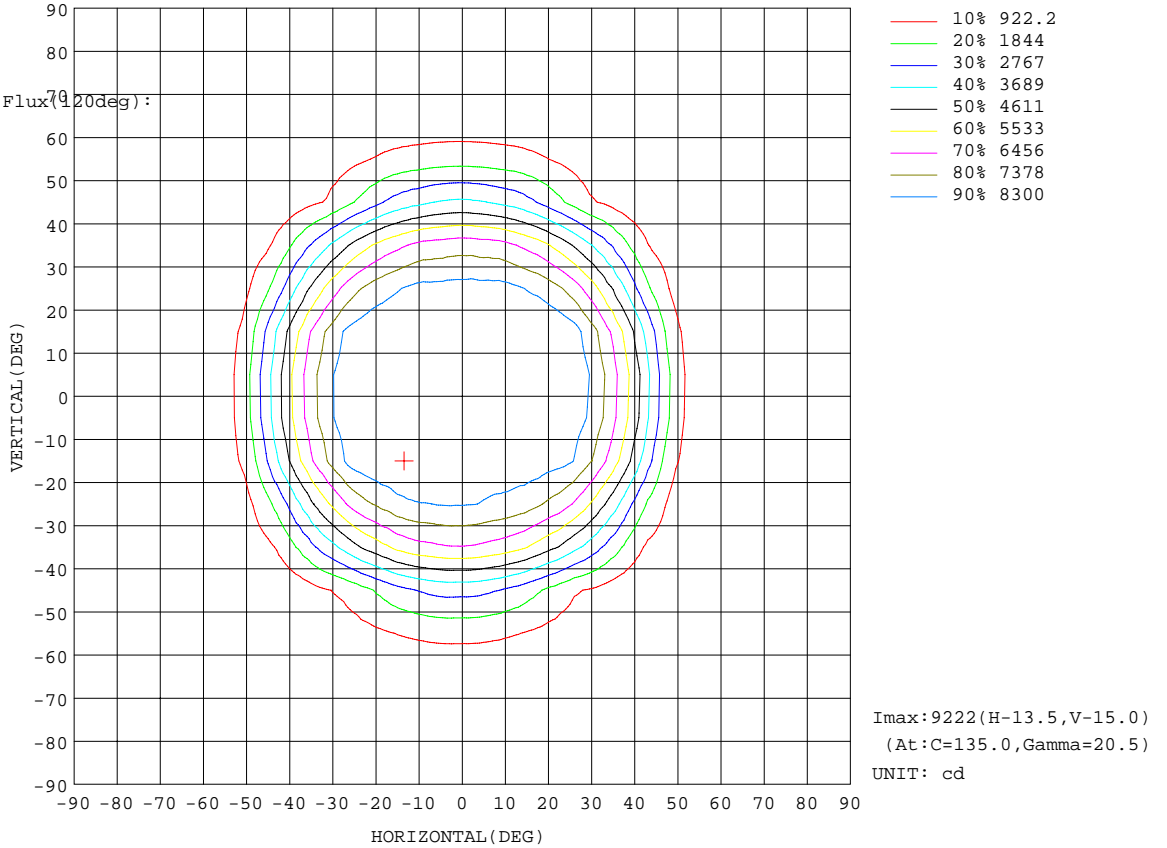
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks: 90

ISOCANDELA DIAGRAM

Test:U:220.1V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:15247.4x1 lm		
NAME: LED FLOOD LIGHT	TYPE:	WEIGHT:5
SPEC.:PHILIPS 3030	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:

Conical surface Flux(90deg):
 13206 lm
 %lum = 86.6%
 %lamp = 86.6%

Conical surface Flux(70deg):
 15065 lm
 %lum = 98.8%
 %lamp = 98.8%

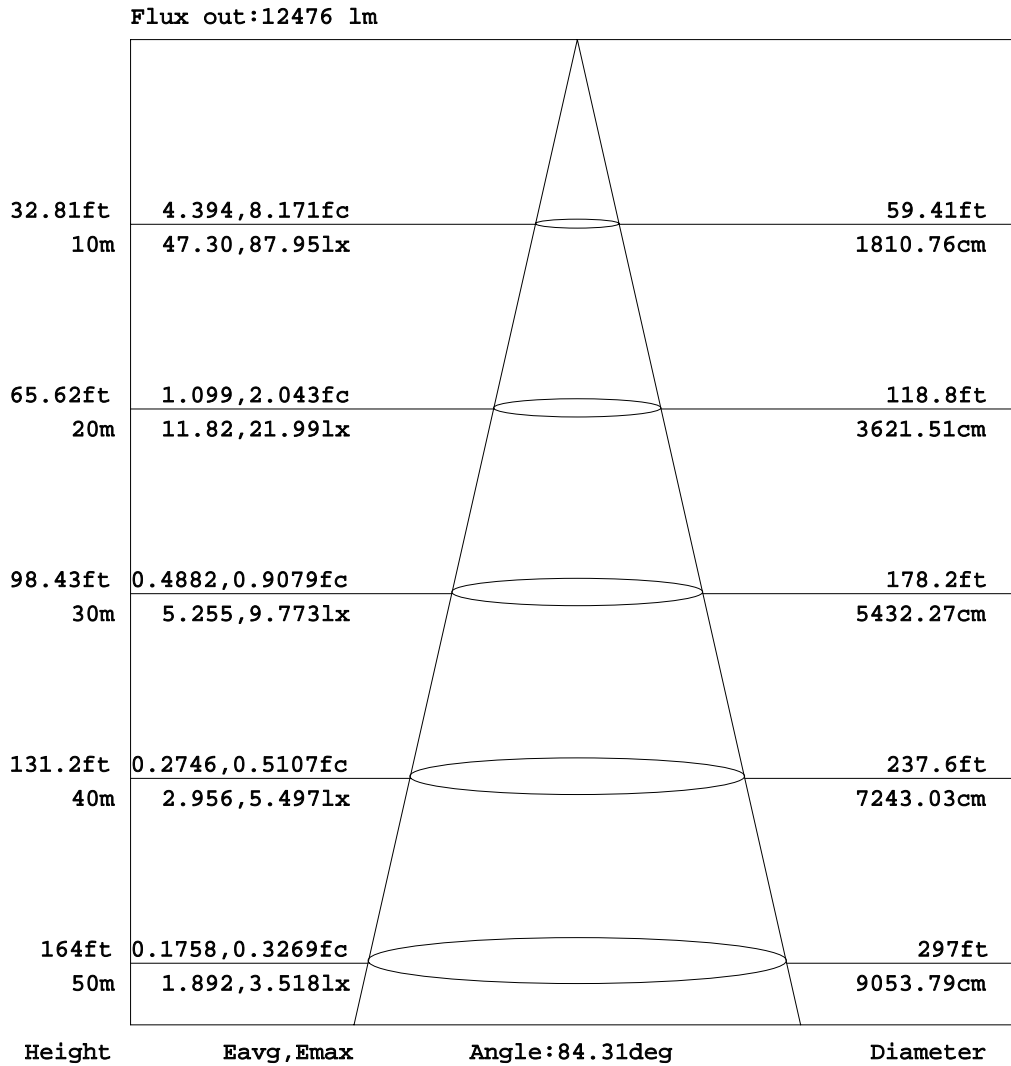


C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2015-12-29

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: 90

AAI Figure

Test:U:220.1V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:15247.4x1 lm		
NAME: LED FLOOD LIGHT	TYPE:	WEIGHT:5
SPEC.:PHILIPS 3030	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:



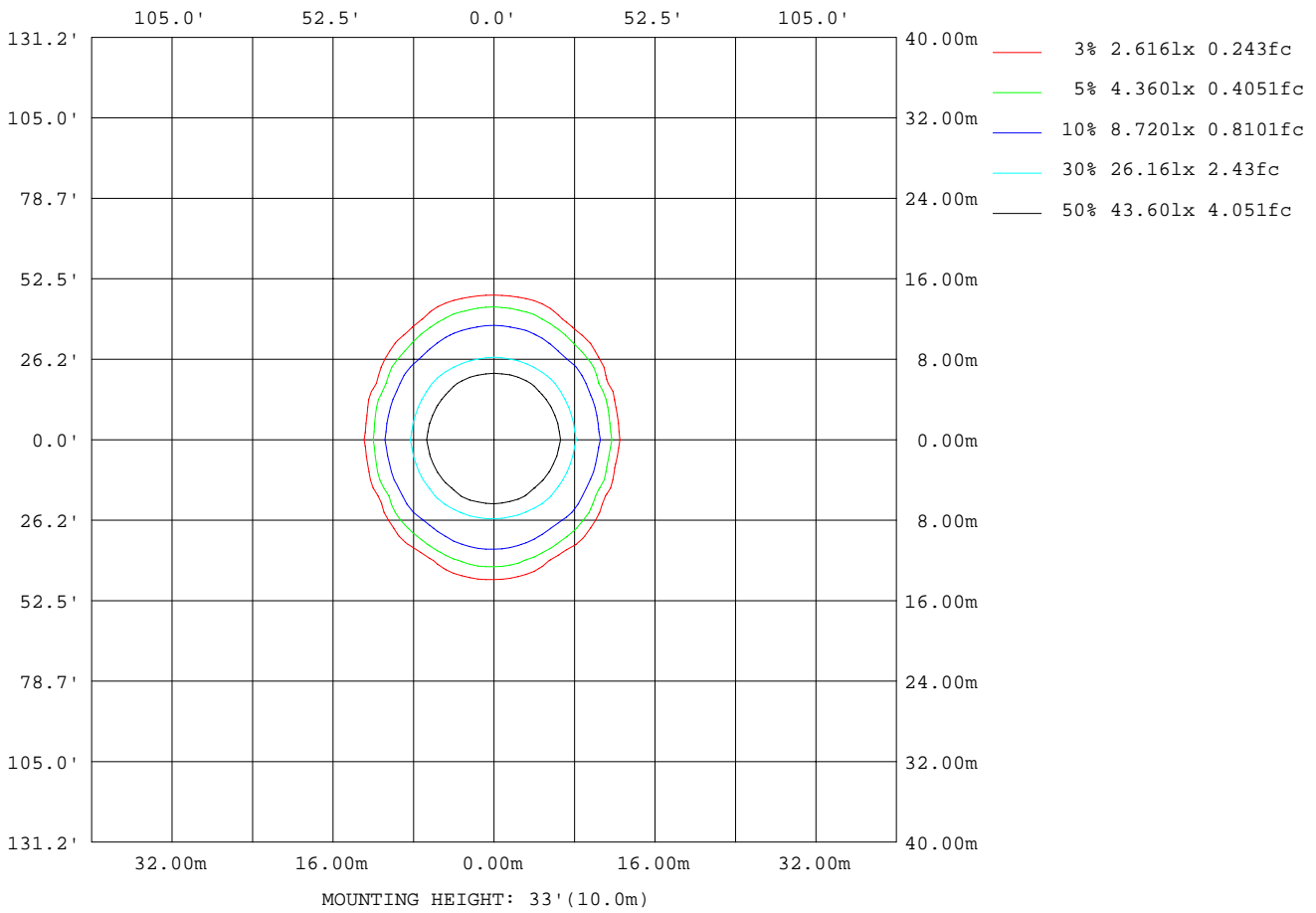
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2015-12-29

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: 90

ISOLUX DIAGRAM

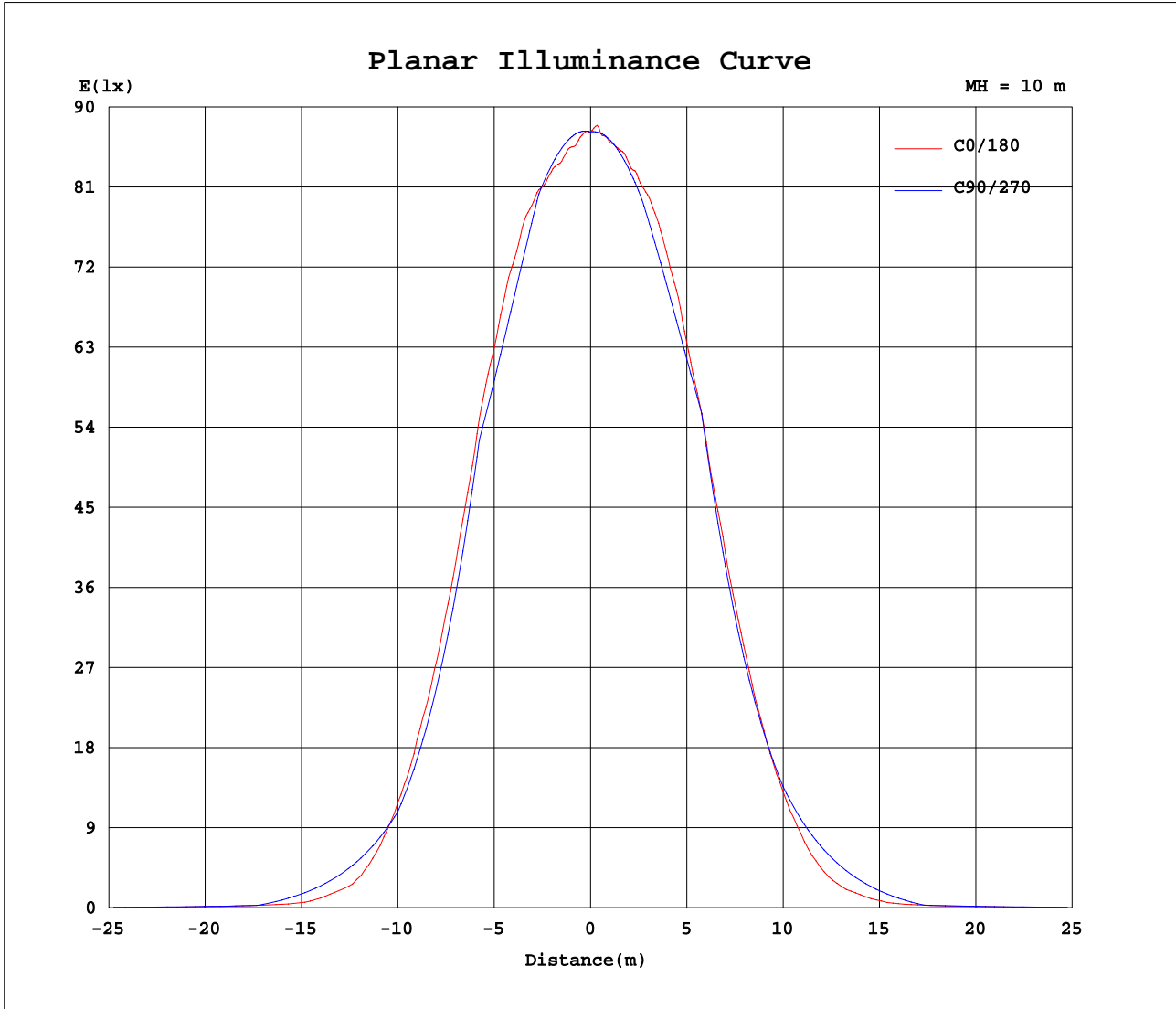
Test:U:220.1V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:15247.4x1 lm		
NAME: LED FLOOD LIGHT	TYPE:	WEIGHT:5
SPEC.:PHILIPS 3030	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2015-12-29

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: 90

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2015-12-29

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: 90

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.1V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:15247.4x1 lm		
NAME: LED FLOOD LIGHT	TYPE:	WEIGHT:5
SPEC.:PHILIPS 3030	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720
5	8654	8660	8666	8672	8677	8682	8693	8706	8722	8739	8752	8763	8771	8780	8787	8790	8788	8784	8781
10	8738	8745	8748	8748	8746	8746	8746	8750	8753	8769	8780	8789	8789	8812	8841	8848	8851	8847	8843
15	8957	8945	8927	8907	8883	8853	8846	8852	8862	8866	8842	8843	8823	8848	8874	8920	8922	8910	8904
20	9096	9049	9011	8978	8947	8923	8903	8882	8882	8891	8824	8759	8682	8627	8589	8602	8637	8630	8633
25	8949	8870	8806	8772	8752	8712	8675	8671	8508	8418	8316	8282	8238	8239	8225	8236	8295	8340	8361
30	8461	8273	8136	8062	8048	8101	8109	7879	7713	7566	7526	7562	7669	7718	7800	7854	7939	8033	8089
35	7037	6844	6758	6716	6778	6726	6592	6517	6480	6476	6547	6639	6572	6536	6442	6392	6357	6391	6412
40	5288	5072	4989	5026	5075	4914	4837	4821	4915	4985	4895	4837	4727	4695	4694	4675	4675	4719	4734
45	3347	3098	3031	3078	3015	2975	2981	3129	3183	3175	3083	2975	2897	2873	2911	2935	2983	3055	3057
50	1361	1271	1255	1307	1393	1347	1291	1532	1680	1643	1503	1202	1301	1549	1756	1909	2014	2098	2110
55	494	446	446	499	481	491	604	620	585	433	609	686	792	918	1032	1099	1140	1162	1164
60	224	216	217	216	219	217	251	223	220	249	322	379	373	399	374	330	275	233	217
65	131	124	123	126	126	124	126	130	130	128	135	126	134	139	143	146	147	148	149
70	55.0	52.2	52.0	52.6	52.4	55.3	56.3	53.4	53.2	62.1	70.2	76.6	78.7	80.3	80.5	80.6	80.3	80.0	79.9
75	11.3	10.7	11.4	11.4	14.7	15.2	12.7	18.7	25.7	28.7	29.9	29.0	26.4	23.1	19.4	16.0	13.4	11.7	11.2
80	3.69	3.55	3.49	3.78	4.05	4.60	5.27	5.84	4.77	3.71	3.15	2.60	2.07	1.57	1.10	0.67	0.32	0.08	0.00
85	1.14	1.12	1.47	1.81	1.60	0.75	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	0.31	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:2015-12-29

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: 90

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.1V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:15247.4x1 lm		
NAME: LED FLOOD LIGHT	TYPE:	WEIGHT:5
SPEC.:PHILIPS 3030	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:

Table--2

UNIT: cd

C(DEG) γ (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720
5	8792	8807	8824	8839	8847	8844	8820	8806	8800	8803	8802	8798	8792	8784	8774	8765	8755	8745	8750
10	8856	8883	8908	8915	8936	8944	8937	8934	8932	8922	8919	8916	8915	8912	8906	8897	8887	8874	8882
15	8912	8974	9035	9070	9074	9063	9059	9057	9057	9058	9066	9084	9080	9058	9041	9030	9017	9001	9006
20	8646	8719	8767	8798	8840	8901	9004	9148	9213	9181	9139	9119	9117	9131	9137	9144	9152	9168	9145
25	8371	8389	8387	8392	8439	8495	8548	8608	8667	8847	9005	8955	8923	8920	8948	8981	9008	9055	8997
30	8087	8012	7956	7974	7937	7874	7779	7808	7838	7970	8155	8419	8441	8260	8257	8303	8398	8543	8406
35	6437	6458	6512	6642	6713	6762	6855	6783	6755	6771	6782	6897	7085	7070	7027	7036	7098	7253	7131
40	4770	4782	4833	4894	4939	4966	5057	5177	5237	5169	5159	5195	5264	5436	5420	5337	5395	5585	5448
45	3110	3114	3111	3125	3106	3136	3220	3302	3396	3487	3396	3360	3364	3484	3585	3480	3489	3680	3553
50	2139	2115	2040	1951	1755	1531	1448	1649	1864	1887	1860	1618	1643	1728	1721	1625	1613	1735	1656
55	1185	1186	1173	1144	1053	914	783	729	576	707	749	711	643	582	655	641	609	660	633
60	232	276	337	396	428	430	420	395	287	229	231	292	245	230	238	238	235	244	240
65	148	146	143	140	136	132	125	145	138	132	133	130	127	130	131	132	134	140	140
70	79.6	79.3	78.9	79.1	78.8	76.9	73.7	68.8	60.9	51.4	56.0	58.3	57.5	54.9	55.9	56.5	59.5	61.1	63.3
75	11.8	13.5	16.1	19.4	23.0	26.5	28.9	29.8	28.9	26.1	19.9	14.0	16.4	16.8	13.1	13.3	14.3	14.8	16.3
80	0.08	0.32	0.68	1.15	1.68	2.22	2.83	3.48	4.22	5.54	6.82	6.18	5.35	4.68	4.48	3.98	4.02	4.28	4.45
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	0.98	2.13	2.38	1.93	1.16	1.25	1.22
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	0.51	0.00

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2015-12-29

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: 90

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.1V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:15247.4x1 lm		
NAME: LED FLOOD LIGHT	TYPE:	WEIGHT:5
SPEC.:PHILIPS 3030	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:

Table--3

UNIT: cd

C(DEG) γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720
5	8755	8760	8765	8770	8774	8778	8779	8780	8787	8801	8824	8830	8822	8805	8786	8767	8756	8760	8771
10	8887	8888	8884	8872	8859	8849	8845	8843	8831	8830	8846	8854	8864	8864	8848	8812	8791	8813	8842
15	9007	9008	9016	9030	9028	9009	9006	9002	8971	8917	8907	8889	8908	8929	8906	8856	8827	8879	8930
20	9129	9110	9081	9051	9047	9057	9071	9099	9062	8978	8902	8811	8777	8771	8795	8757	8736	8785	8795
25	8955	8918	8885	8890	8932	8956	8812	8695	8652	8632	8628	8643	8613	8594	8606	8636	8645	8678	8633
30	8313	8282	8342	8445	8385	8211	8107	8074	8048	8079	8138	8254	8389	8403	8425	8500	8554	8548	8465
35	7094	7107	7205	7217	7067	7043	7052	7118	7203	7356	7259	7156	7122	7070	6973	6959	6985	6977	7015
40	5439	5524	5574	5540	5456	5504	5603	5703	5674	5577	5515	5466	5428	5424	5398	5397	5417	5389	5396
45	3560	3753	3625	3611	3652	3786	3812	3805	3741	3732	3717	3747	3778	3746	3800	3829	3848	3809	3755
50	1716	1845	1834	1779	1904	2117	2179	2056	1928	1903	2045	2315	2470	2554	2592	2627	2645	2615	2561
55	694	688	686	736	776	882	866	721	817	1048	1241	1370	1458	1457	1442	1441	1442	1434	1427
60	249	263	254	286	346	264	292	390	463	515	566	555	490	400	316	260	238	257	311
65	143	148	149	152	155	157	155	177	180	148	154	160	162	163	164	164	163	161	160
70	63.5	66.7	68.3	72.5	74.9	72.5	69.1	78.7	84.7	89.0	91.4	91.7	91.9	91.1	90.3	89.1	88.2	87.4	87.3
75	17.1	17.6	23.0	21.1	20.5	29.4	34.0	36.4	36.4	34.5	31.4	27.2	23.2	19.7	16.6	14.2	13.1	13.4	15.0
80	4.65	5.03	4.98	5.92	7.19	8.10	5.65	4.28	3.64	3.18	2.58	2.00	1.42	0.88	0.40	0.10	0.00	0.09	0.36
85	1.30	1.40	1.24	0.70	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:2015-12-29

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: 90

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.1V I:0.6960A P:148.2W PF:0.9670 Lamp Flux:15247.4x1 lm		
NAME: LED FLOOD LIGHT	TYPE:	WEIGHT:5
SPEC.:PHILIPS 3030	DIM.:	SERIAL No.:
MFR.: QINHAN LIGHTING	SUR.:	PROTECTION ANGLE:

Table--4

UNIT: cd

C(DEG) γ (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720	8720				
5	8780	8782	8780	8773	8764	8752	8738	8724	8712	8701	8691	8684	8678	8670	8662				
10	8853	8839	8834	8828	8816	8806	8806	8799	8792	8784	8779	8778	8775	8767	8755				
15	8932	8934	8894	8911	8934	8957	9010	9029	9033	9019	8997	8979	8969	8969	8966				
20	8807	8802	8867	8934	9048	9165	9163	9097	9109	9107	9126	9132	9127	9115	9102				
25	8650	8682	8678	8675	8673	8700	8811	8940	9099	9063	9000	8967	8932	8920	8926				
30	8482	8426	8258	8166	8122	8118	8115	8176	8298	8504	8495	8306	8258	8264	8337				
35	7123	7111	7144	7263	7358	7160	7053	7011	6957	7002	7122	7035	6904	6879	6912				
40	5422	5412	5422	5462	5470	5521	5572	5472	5318	5219	5230	5361	5256	5143	5139				
45	3732	3722	3648	3579	3575	3581	3637	3679	3539	3410	3309	3303	3389	3186	3183				
50	2515	2391	2186	1911	1715	1751	1963	1952	1865	1621	1514	1555	1472	1354	1322				
55	1445	1404	1291	1128	917	764	598	716	753	686	586	533	553	501	457				
60	391	470	514	513	449	419	314	241	239	286	238	228	224	224	220				
65	157	155	152	149	141	163	152	142	141	137	134	134	133	129	128				
70	87.2	87.6	87.6	87.0	84.9	79.8	71.3	61.0	62.3	63.1	60.8	57.4	56.2	54.5	53.6				
75	17.7	21.2	25.2	29.4	32.5	33.6	32.7	29.3	22.9	14.8	16.6	16.3	12.4	12.3	11.2				
80	0.75	1.21	1.73	2.22	2.72	3.24	3.69	4.82	6.28	5.49	4.61	4.01	3.90	3.68	3.64				
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56	1.05	1.27	1.11	1.09				
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:2015-12-29

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: 90