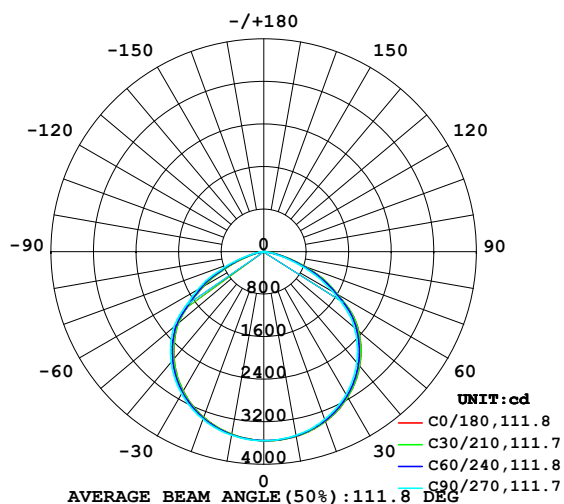


# LUMINAIRE PHOTOMETRIC TEST REPORT

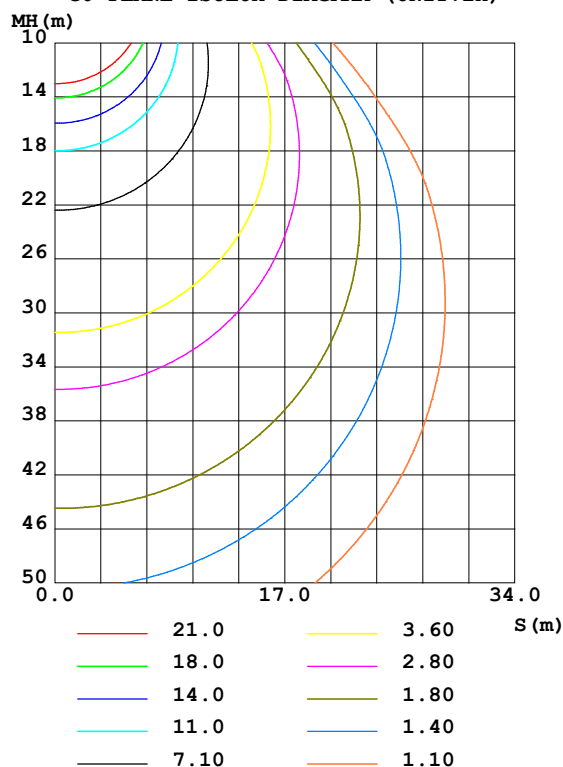
Test:U:120.18V I:0.5480A P:65.715W PF:0.9978 Freq:59.98Hz Lamp Flux:9671.71x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:65W/4000K/110°	DIM.: 265*265mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

DATA OF LAMP		PHOTOMETRIC DATA Eff: 147.18 lm/W			
MODEL	FEL-D-65-45	I <sub>max</sub> (cd)	3557	S/MH(C0/180)	1.27
NOMINAL POWER(W)	65	LOR(%)	100.0	S/MH(C90/270)	1.29
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	9671.7	η UP,DN(C0-180)	0.0,50.4
NOMINAL FLUX(lm)	9671.71	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.6
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	η down(%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:30 November 2017

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [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,lamp
10	3526	3521	3507	3491	3485	3489	3504	3519	0- 10	336.9	336.9	3.48,3.48
20	3397	3388	3358	3324	3314	3323	3352	3384	10- 20	972.5	1309	13.5,13.5
30	3159	3147	3098	3048	3030	3044	3088	3141	20- 30	1493	2803	29,29
40	2807	2790	2723	2655	2628	2649	2711	2781	30- 40	1827	4629	47.9,47.9
50	2331	2306	2223	2136	2101	2118	2207	2300	40- 50	1913	6543	67.6,67.6
60	1591	1593	1487	1355	1313	1345	1441	1567	50- 60	1652	8195	84.7,84.7
70	819.6	797.7	688.4	597.0	527.9	548.6	662.3	768.4	60- 70	1062	9256	95.7,95.7
80	176.2	167.6	115.8	74.05	57.05	65.15	100.3	155.4	70- 80	378.8	9635	99.6,99.6
90	5.733	4.434	2.433	2.512	2.656	2.557	2.336	3.581	80- 90	36.69	9672	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 5592.6 lm

%lum = 57.8%

%lamp = 57.8%

Conical surface Flux(120deg): 8194.7 lm

%lum = 84.7%

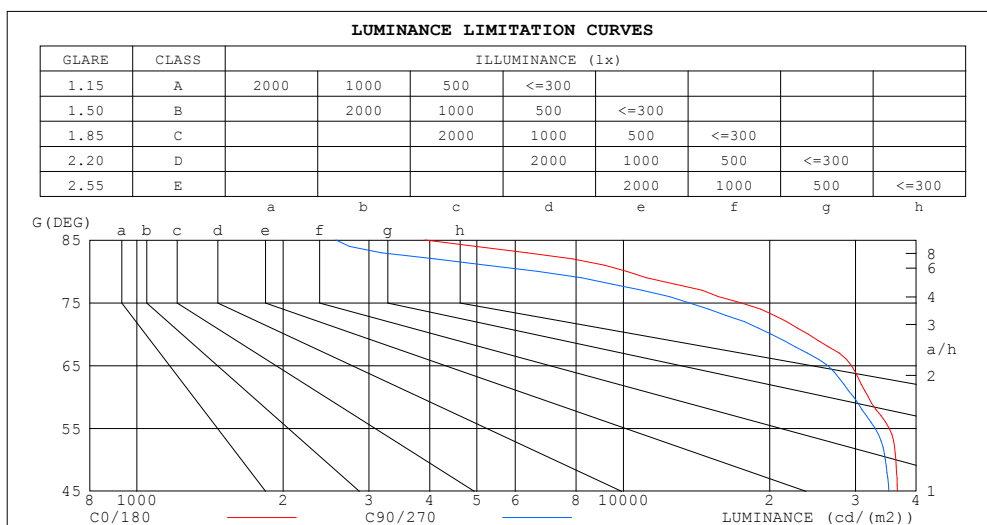
%lamp = 84.7%

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:30 November 2017

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [K=1.0000]  
Remarks:

### LUMINANCE LIMITATION CURVES

Test:U:120.18V I:0.5480A P:65.715W PF:0.9978 Freq:59.98Hz Lamp Flux:9671.71x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:65W/4000K/110°	DIM.: 265*265mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3912	2567
80	10164	6667
75	17414	13627
70	24000	20116
65	29443	26328
60	31868	29725
55	35214	32931
50	36319	34558
45	36613	35166

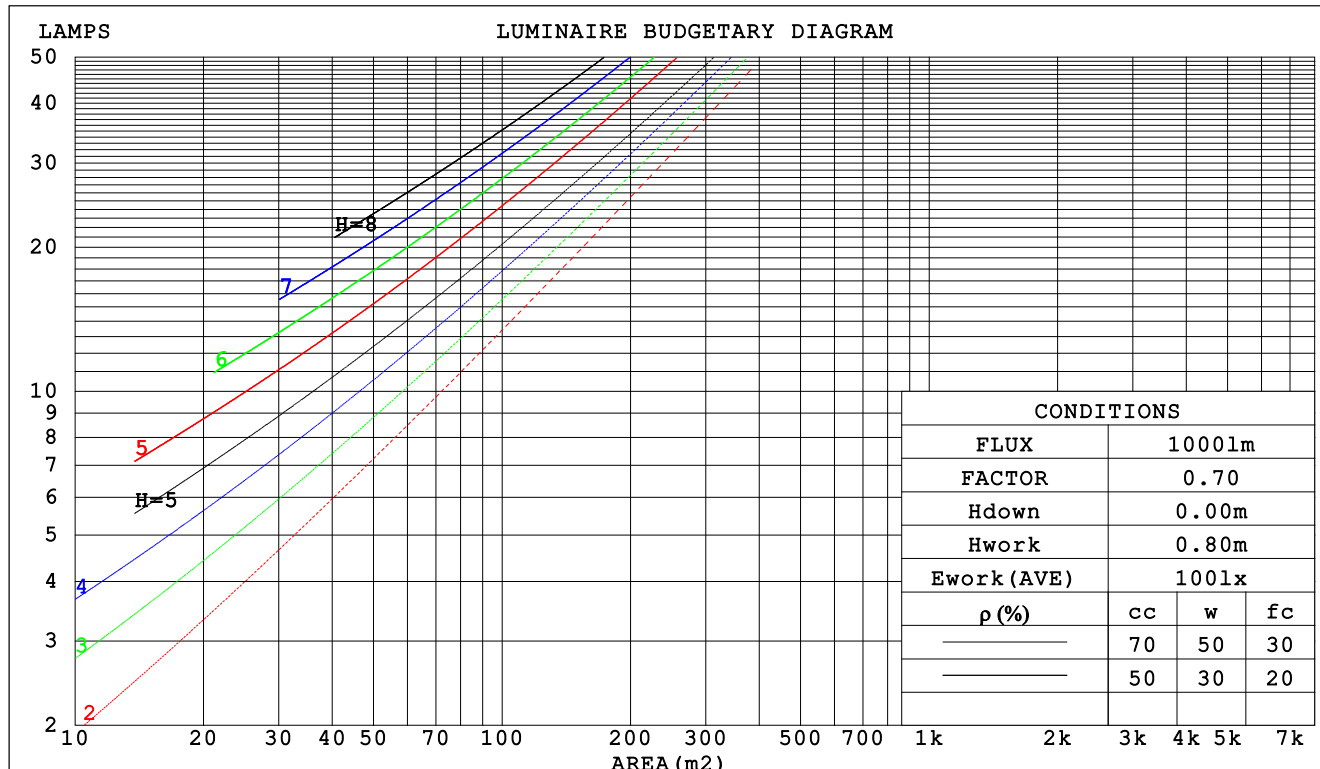
C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:30 November 2017

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [K=1.0000]  
Remarks:

### CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.18V I:0.5480A P:65.715W PF:0.9978 Freq:59.98Hz Lamp Flux:9671.71x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:65W/4000K/110°	DIM.: 265*265mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

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	1.06	1.02	.98	1.03	.00	.97	.99	.96	.94	.95	.93	.91	.92	.90	.88	.86
2.0	.93	.87	.81	.91	.85	.80	.87	.83	.78	.84	.80	.77	.81	.78	.75	.73
3.0	.82	.74	.68	.80	.73	.67	.77	.71	.66	.75	.69	.65	.72	.68	.64	.62
4.0	.73	.64	.58	.71	.64	.57	.69	.62	.57	.67	.61	.56	.65	.59	.55	.53
5.0	.65	.56	.50	.64	.56	.50	.62	.55	.49	.60	.54	.49	.58	.53	.48	.46
6.0	.59	.50	.44	.58	.49	.43	.56	.48	.43	.54	.48	.43	.53	.47	.42	.40
7.0	.53	.45	.38	.52	.44	.38	.51	.43	.38	.49	.43	.38	.48	.42	.38	.36
8.0	.48	.40	.34	.48	.40	.34	.46	.39	.34	.45	.39	.34	.44	.38	.34	.32
9.0	.44	.36	.31	.44	.36	.31	.43	.36	.31	.42	.35	.30	.41	.35	.30	.28
10.0	.41	.33	.28	.40	.33	.28	.39	.33	.28	.38	.32	.28	.38	.32	.27	.26



C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:CL  
 Test Date:30 November 2017

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:6.010m [K=1.0000]  
 Remarks:

### WEC AND CCEC

Test:U:120.18V I:0.5480A P:65.715W PF:0.9978 Freq:59.98Hz Lamp Flux:9671.71x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:65W/4000K/110°	DIM.: 265*265mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

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						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.276	.157	.050	.269	.154	.049	.256	.147	.047	.244	.141	.045	.233	.135	.044	
2.0	.269	.147	.045	.263	.145	.045	.251	.140	.043	.241	.135	.042	.231	.131	.041	
3.0	.254	.135	.040	.248	.133	.040	.238	.129	.039	.229	.125	.038	.220	.122	.038	
4.0	.237	.123	.036	.232	.122	.036	.223	.119	.035	.215	.116	.035	.207	.113	.034	
5.0	.221	.113	.033	.217	.112	.032	.209	.109	.032	.202	.106	.032	.195	.104	.031	
6.0	.207	.104	.030	.203	.103	.030	.196	.100	.029	.189	.098	.029	.183	.096	.029	
7.0	.194	.096	.027	.190	.095	.027	.184	.093	.027	.178	.091	.027	.172	.089	.026	
8.0	.182	.089	.025	.179	.088	.025	.173	.086	.025	.167	.085	.024	.162	.083	.024	
9.0	.171	.083	.023	.168	.082	.023	.163	.081	.023	.158	.079	.023	.153	.078	.023	
10.0	.161	.077	.021	.158	.077	.021	.154	.075	.021	.149	.074	.021	.145	.073	.021	

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						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.178	.156	.137	.152	.134	.118	.104	.092	.082	.060	.053	.047	.019	.017	.015	
2.0	.169	.132	.101	.145	.114	.087	.099	.079	.061	.057	.046	.036	.018	.015	.012	
3.0	.161	.114	.077	.138	.099	.066	.095	.068	.047	.055	.040	.027	.018	.013	.009	
4.0	.154	.101	.060	.132	.087	.052	.091	.061	.037	.053	.036	.022	.017	.012	.007	
5.0	.147	.090	.048	.126	.078	.042	.087	.055	.030	.050	.032	.018	.016	.010	.006	
6.0	.140	.082	.040	.120	.071	.035	.083	.050	.025	.048	.029	.015	.016	.010	.005	
7.0	.133	.075	.034	.115	.065	.030	.079	.046	.021	.046	.027	.012	.015	.009	.004	
8.0	.127	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.121	.064	.026	.105	.056	.022	.072	.039	.016	.042	.023	.009	.014	.008	.003	
10.0	.116	.060	.023	.100	.052	.020	.069	.037	.014	.040	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:CL  
 Test Date:30 November 2017

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:6.010m [K=1.0000]  
 Remarks:

### UGR(Unified Glare Rating) Table

Test:U:120.18V I:0.5480A P:65.715W PF:0.9978 Freq:59.98Hz Lamp Flux:9671.71x1 lm										
NAME: LED Explosion-proof Flood Light					TYPE:Floodlight			WEIGHT:N/A		
SPEC.:65W/4000K/110°					DIM.: 265*265mm			SERIAL No.:N/A		
MFR.: NJZ Lighting Technology Co.,Ltd					SUR.:N/A			Shielding Angle:N/A		
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	17.6	19.1	17.9	19.3	19.5	17.4	18.8	17.6	19.0	19.2
3H	18.8	20.1	19.0	20.3	20.6	18.3	19.7	18.6	19.9	20.1
4H	19.0	20.3	19.3	20.6	20.8	18.5	19.8	18.8	20.0	20.3
6H	19.1	20.3	19.4	20.5	20.8	18.5	19.7	18.8	20.0	20.2
8H	19.1	20.2	19.4	20.5	20.8	18.5	19.6	18.8	19.9	20.2
12H	19.0	20.1	19.4	20.4	20.7	18.4	19.5	18.8	19.8	20.1
4H 2H	18.1	19.4	18.4	19.6	19.9	17.9	19.2	18.2	19.4	19.7
3H	19.4	20.5	19.7	20.8	21.1	19.0	20.1	19.3	20.4	20.7
4H	19.7	20.7	20.1	21.0	21.4	19.2	20.3	19.6	20.6	20.9
6H	19.8	20.7	20.2	21.1	21.4	19.3	20.2	19.7	20.5	20.9
8H	19.8	20.6	20.2	21.0	21.4	19.3	20.1	19.7	20.5	20.8
12H	19.8	20.5	20.2	20.9	21.3	19.2	20.0	19.7	20.4	20.8
8H 4H	19.8	20.6	20.2	21.0	21.4	19.3	20.2	19.7	20.5	20.9
6H	19.9	20.6	20.4	21.0	21.4	19.4	20.1	19.9	20.5	20.9
8H	20.0	20.6	20.4	21.0	21.4	19.4	20.0	19.9	20.4	20.9
12H	19.9	20.4	20.4	20.9	21.4	19.4	19.9	19.9	20.4	20.8
12H 4H	19.8	20.5	20.2	20.9	21.3	19.3	20.1	19.7	20.4	20.8
6H	19.9	20.5	20.4	20.9	21.4	19.4	20.0	19.9	20.4	20.9
8H	19.9	20.4	20.4	20.9	21.4	19.4	19.9	19.9	20.4	20.8
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.3					+ 0.3 / - 0.4				
1.5H	+ 0.3 / - 0.5					+ 0.3 / - 0.6				
2.0H	+ 0.5 / - 0.5					+ 0.5 / - 0.6				

CIE Pub.117, 9672 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 7.9)

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:30 November 2017

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:120.18V I:0.5480A P:65.715W PF:0.9978 Freq:59.98Hz Lamp Flux:9671.71x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:65W/4000K/110°	DIM.: 265*265mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

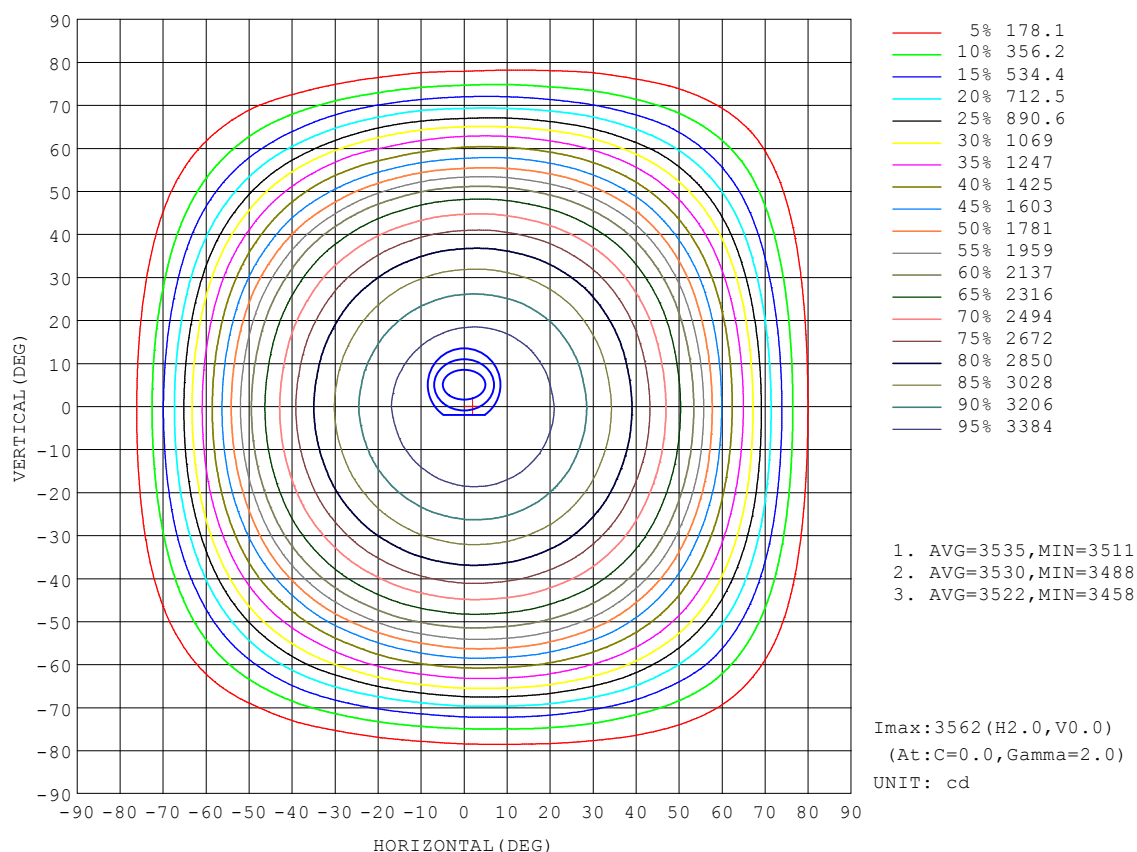
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	59	48	41	58	47	41	57	47	40	34
0.80	69	58	51	68	58	51	67	57	51	44
1.00	78	68	61	77	67	60	75	68	60	53
1.25	85	76	69	84	75	68	81	73	68	61
1.50	90	81	75	89	80	74	86	79	73	66
2.00	97	89	83	95	88	83	92	86	81	74
2.50	101	94	88	99	92	87	95	90	85	78
3.00	104	98	93	102	96	92	98	93	90	81
4.00	108	103	98	105	101	97	101	98	94	86
5.00	110	106	102	108	104	100	103	100	97	88
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNM = 1.25		

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:CL  
 Test Date:30 November 2017

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:6.010m [K=1.0000]  
 Remarks:

# ISOCANDELA DIAGRAM

Test:U:120.18V I:0.5480A P:65.715W PF:0.9978 Freq:59.98Hz Lamp Flux:9671.71x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:65W/4000K/110°	DIM.: 265*265mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:30 November 2017

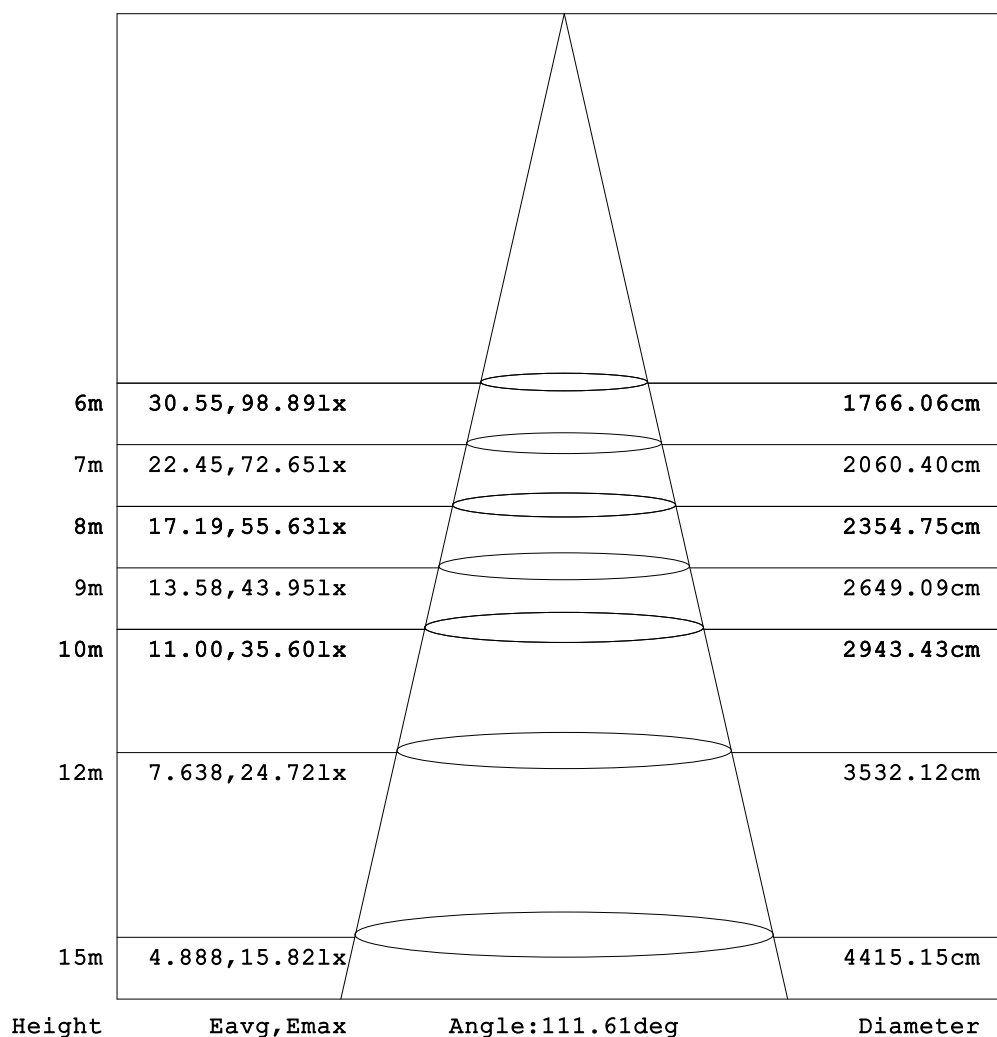
γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [K=1.0000]  
Remarks:



### AAI Figure

Test:U:120.18V I:0.5480A P:65.715W PF:0.9978 Freq:59.98Hz Lamp Flux:9671.71x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:65W/4000K/110°	DIM.: 265*265mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

Flux out:7595 lm



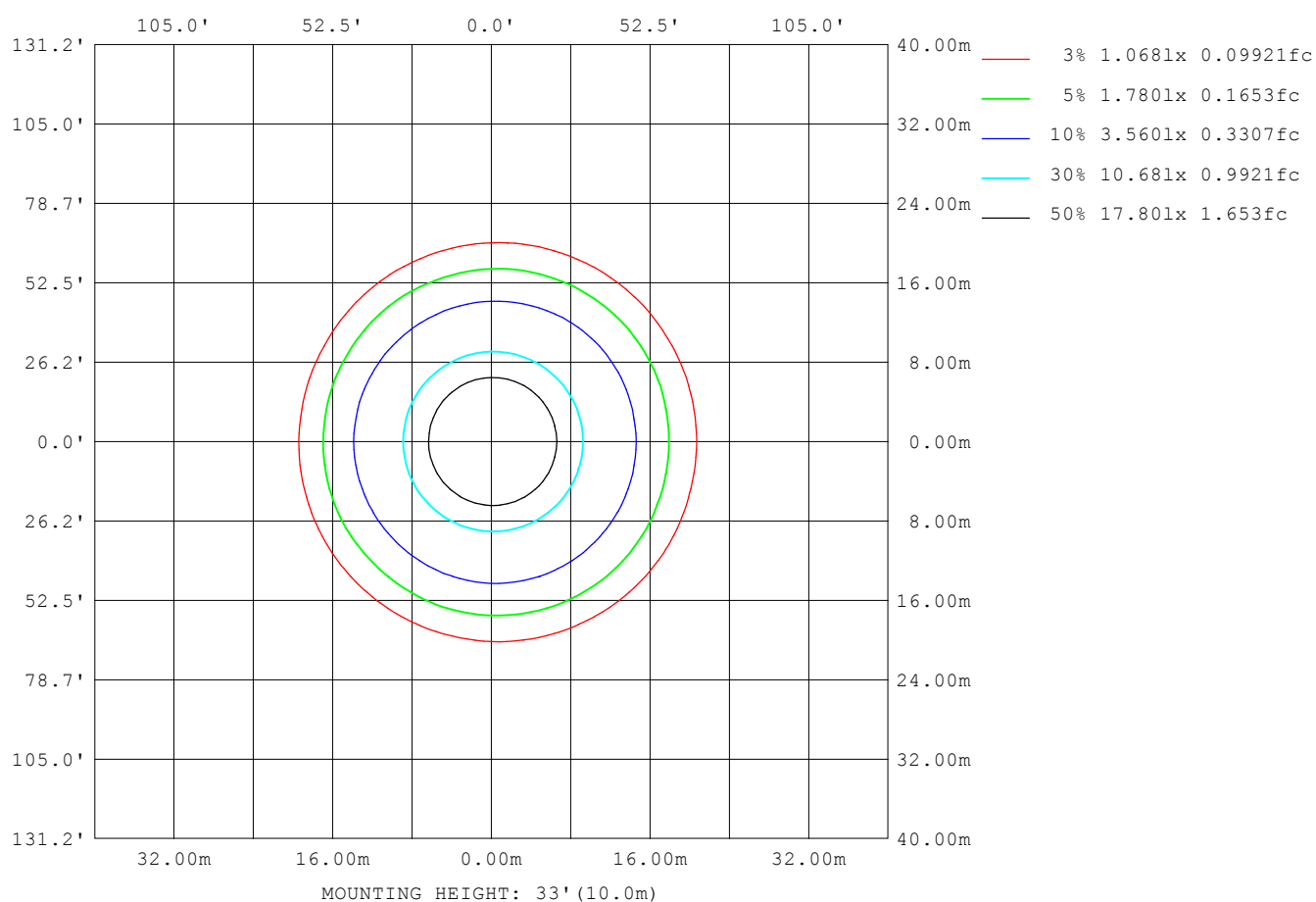
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:30 November 2017

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [K=1.0000]  
Remarks:

### ISOLUX DIAGRAM

Test:U:120.18V I:0.5480A P:65.715W PF:0.9978 Freq:59.98Hz Lamp Flux:9671.71x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:65W/4000K/110°	DIM.: 265*265mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:30 November 2017

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [K=1.0000]  
Remarks:

### LED Avg.L Report

Test:U:120.18V I:0.5480A P:65.715W PF:0.9978 Freq:59.98Hz Lamp Flux:9671.71x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:65W/4000K/110°	DIM.: 265*265mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

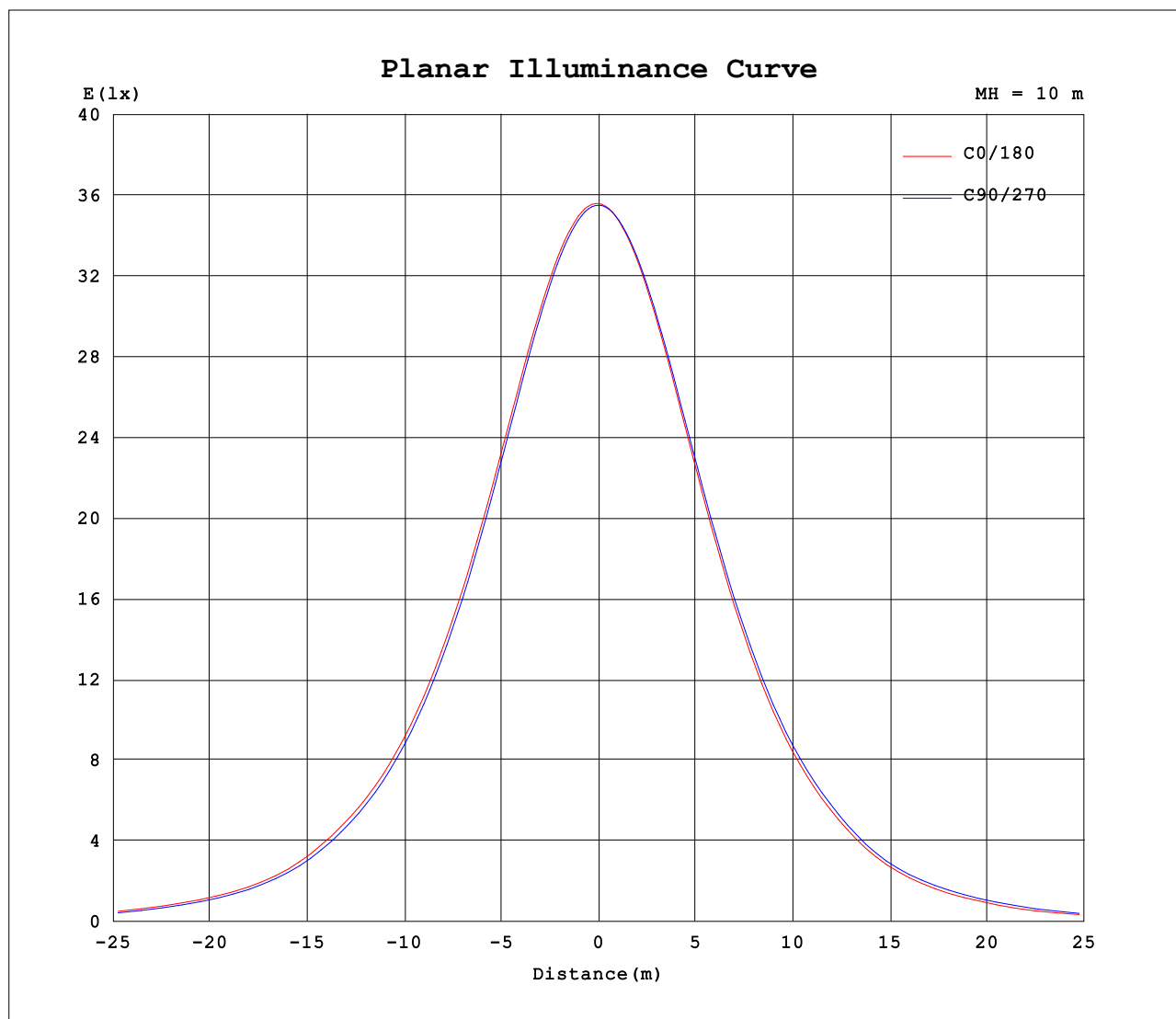
AvgL	cd/m2
L_0~180 (65) av	25383
L_0~180 (75) av	13062
L_0~180 (85) av	2583
L_90~270 (65) av	25785
L_90~270 (75) av	13265
L_90~270 (85) av	2334
L_45 (65) av	25656
L_45 (75) av	13090
L_45 (85) av	2393

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:30 November 2017

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [K=1.0000]  
Remarks:

### Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: CL  
 Test Date: 30 November 2017

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 6.010m [K=1.0000]  
 Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.18V I:0.5480A P:65.715W PF:0.9978 Freq:59.98Hz Lamp Flux:9671.71x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:65W/4000K/110°	DIM.: 265*265mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

Table--1

UNIT: cd

[illegible]

```
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:30 November 2017
```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:6.010m [K=1.0000]
Remarks:

```

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.18V I:0.5480A P:65.715W PF:0.9978 Freq:59.98Hz Lamp Flux:9671.71x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:65W/4000K/110°	DIM.: 265*265mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

Table--2

UNIT: cd

[illegible]

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: CL  
Test Date: 30 November 2017

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:6.010m [K=1.0000]
Remarks:

```