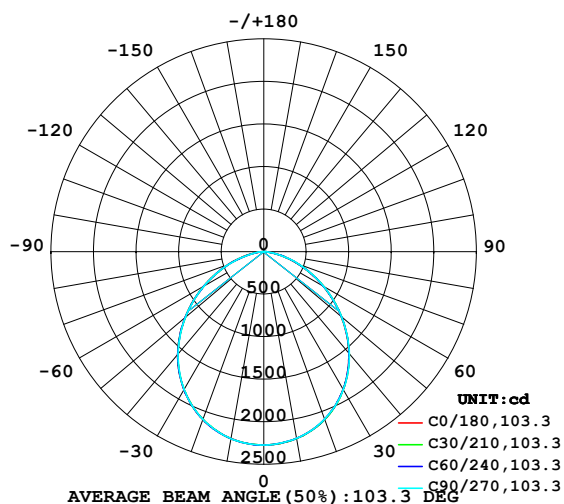


# LUMINAIRE PHOTOMETRIC TEST REPORT

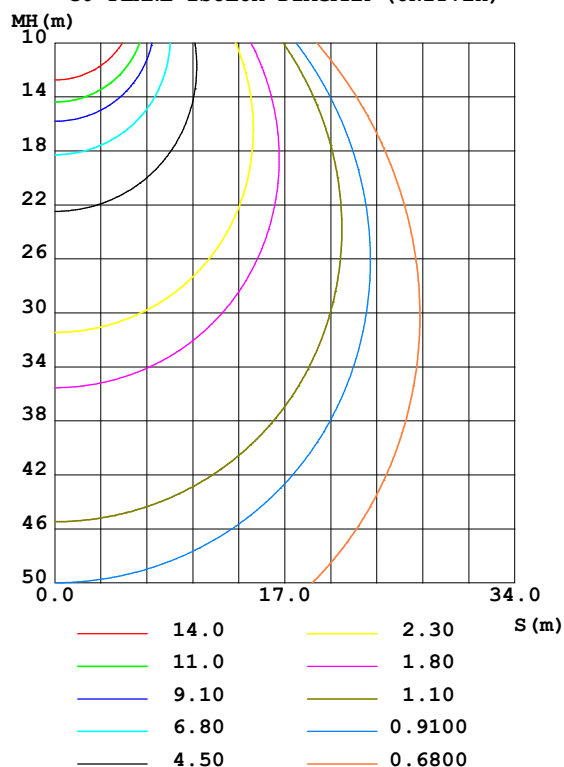
Test:U:120.22V I:0.3548A P:42.539W PF:0.9971 Freq:59.98Hz Lamp Flux:5747.58x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/5000K/110°	DIM.: 265*265mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

DATA OF LAMP		PHOTOMETRIC DATA Eff: 135.11 lm/W			
MODEL	FEL-D-45-42	I <sub>max</sub> (cd)	2273	S/MH(C0/180)	1.23
NOMINAL POWER(W)	45	LOR(%)	100.0	S/MH(C90/270)	1.23
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	5747.6	η UP,DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	5747.58	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.0
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	2229	2228	2227	2229	2230	2231	2230	2231	0- 10	214.9	214.9	3.74,3.74
20	2097	2097	2095	2095	2098	2098	2097	2098	10- 20	613.3	828.2	14.4,14.4
30	1867	1871	1871	1870	1876	1874	1873	1873	20- 30	918.7	1747	30.4,30.4
40	1557	1561	1564	1565	1574	1571	1568	1565	30- 40	1080	2827	49.2,49.2
50	1192	1195	1197	1204	1209	1207	1205	1198	40- 50	1070	3896	67.8,67.8
60	804.5	808.1	810.3	818.2	818.8	814.6	813.6	805.0	50- 60	899.6	4796	83.4,83.4
70	435.5	441.7	444.1	446.8	444.5	439.1	435.7	434.8	60- 70	615.2	5411	94.1,94.1
80	125.9	133.5	137.1	132.8	132.9	122.6	119.2	126.1	70- 80	291.8	5703	99.2,99.2
90	1.915	1.984	2.017	1.987	1.627	1.623	1.620	1.644	80- 90	44.58	5748	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): 3373.4 lm

%lum = 58.7%

%lamp = 58.7%

Conical surface Flux(120deg): 4796 lm

%lum = 83.4%

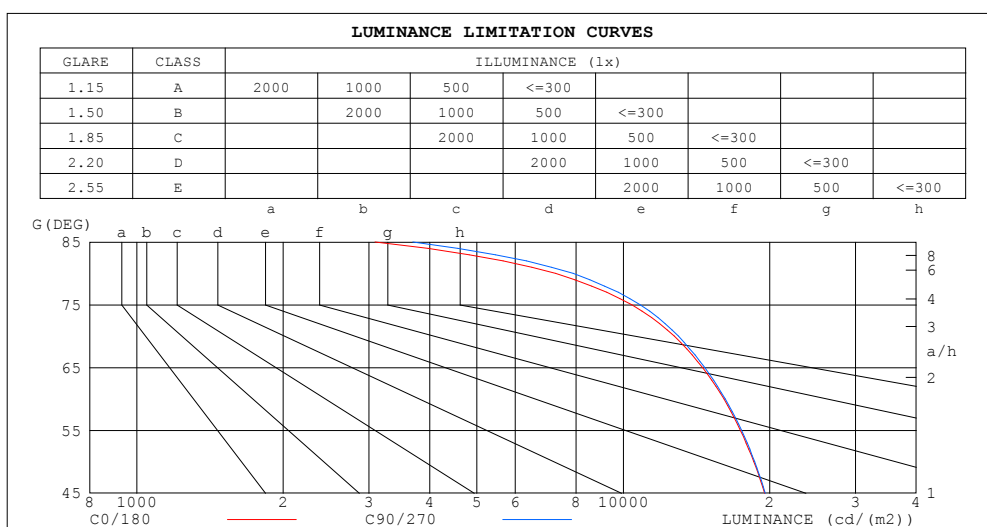
%lamp = 83.4%

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:120.22V I:0.3548A P:42.539W PF:0.9971 Freq:59.98Hz Lamp Flux:5747.58x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/5000K/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	3090	3695
80	7256	7893
75	10409	10834
70	12737	12984
65	14549	14704
60	16097	16206
55	17405	17503
50	18545	18623
45	19515	19574

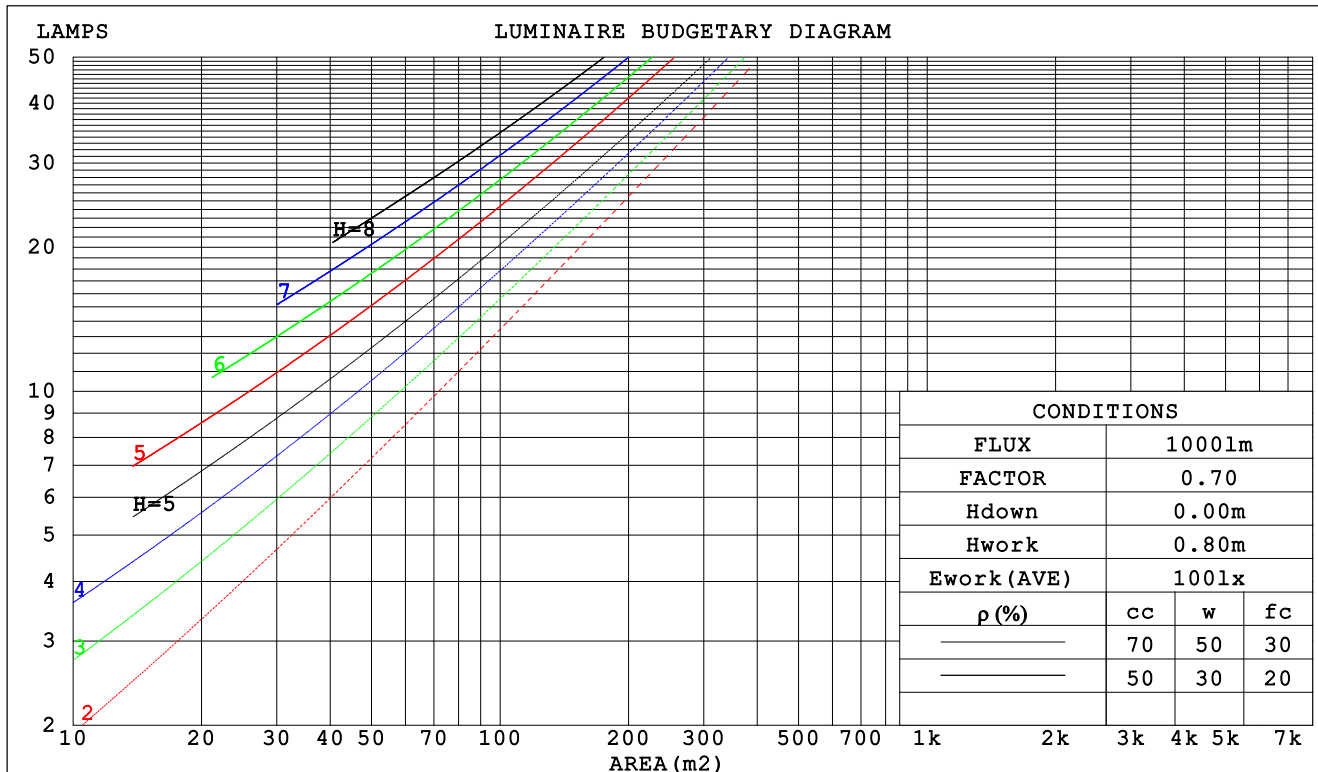
C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:30 November 2017

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:120.22V I:0.3548A P:42.539W PF:0.9971 Freq:59.98Hz Lamp Flux:5747.58x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/5000K/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	1.05	1.01	.98	1.03	.99	.96	.99	.96	.93	.95	.93	.90	.91	.89	.88	.86
2.0	.93	.86	.81	.91	.85	.80	.87	.82	.78	.84	.80	.76	.81	.78	.74	.72
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	.57	.50	.64	.56	.50	.62	.55	.49	.60	.54	.49	.58	.53	.48	.46
6.0	.59	.50	.44	.58	.50	.44	.56	.49	.43	.54	.48	.43	.53	.47	.43	.41
7.0	.54	.45	.39	.53	.45	.39	.51	.44	.39	.50	.43	.38	.48	.43	.38	.36
8.0	.49	.41	.35	.48	.40	.35	.47	.40	.35	.46	.39	.34	.45	.39	.34	.32
9.0	.45	.37	.31	.44	.37	.31	.43	.36	.31	.42	.36	.31	.41	.35	.31	.29
10.0	.42	.34	.29	.41	.34	.29	.40	.33	.28	.39	.33	.28	.38	.32	.28	.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:120.22V I:0.3548A P:42.539W PF:0.9971 Freq:59.98Hz Lamp Flux:5747.58x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/5000K/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	.283	.161	.051	.276	.157	.050	.262	.151	.048	.250	.144	.046	.239	.139	.045	
2.0	.272	.149	.046	.266	.146	.045	.254	.141	.044	.243	.137	.043	.234	.132	.042	
3.0	.255	.136	.041	.249	.133	.040	.239	.130	.039	.230	.126	.039	.221	.122	.038	
4.0	.237	.123	.036	.232	.122	.036	.223	.118	.035	.215	.115	.035	.207	.113	.034	
5.0	.221	.113	.033	.217	.111	.032	.209	.109	.032	.201	.106	.032	.194	.104	.031	
6.0	.206	.103	.030	.202	.102	.029	.195	.100	.029	.188	.098	.029	.182	.096	.028	
7.0	.192	.095	.027	.189	.094	.027	.183	.092	.027	.177	.091	.026	.171	.089	.026	
8.0	.180	.088	.025	.177	.087	.025	.172	.086	.024	.166	.084	.024	.161	.083	.024	
9.0	.169	.082	.023	.167	.081	.023	.162	.080	.023	.157	.079	.023	.152	.077	.022	
10.0	.160	.077	.021	.157	.076	.021	.153	.075	.021	.148	.074	.021	.144	.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	.153	.134	.117	.104	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.170	.132	.100	.145	.114	.087	.100	.079	.061	.057	.046	.036	.018	.015	.012	
3.0	.162	.114	.076	.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	.049	.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	.015	.010	.005	
7.0	.133	.075	.034	.114	.065	.030	.079	.045	.021	.046	.027	.013	.015	.009	.004	
8.0	.127	.069	.029	.109	.060	.026	.075	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.121	.064	.026	.104	.056	.022	.072	.039	.016	.042	.023	.010	.014	.008	.003	
10.0	.115	.060	.023	.099	.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:120.22V I:0.3548A P:42.539W PF:0.9971 Freq:59.98Hz Lamp Flux:5747.58x1 lm										
NAME: LED Explosion-proof Flood Light					TYPE:Floodlight			WEIGHT:N/A		
SPEC.:45W/5000K/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	16.6	18.0	16.8	18.2	18.4	16.6	18.0	16.8	18.2	18.4
3H	17.7	19.1	18.0	19.3	19.5	17.7	19.1	18.0	19.3	19.5
4H	18.1	19.4	18.4	19.6	19.9	18.1	19.4	18.4	19.6	19.9
6H	18.3	19.5	18.6	19.7	20.0	18.3	19.5	18.6	19.8	20.1
8H	18.3	19.4	18.6	19.7	20.0	18.3	19.5	18.7	19.8	20.1
12H	18.2	19.3	18.6	19.6	19.9	18.3	19.4	18.7	19.7	20.0
4H 2H	17.1	18.3	17.4	18.6	18.8	17.1	18.4	17.4	18.6	18.9
3H	18.4	19.5	18.7	19.8	20.1	18.4	19.5	18.7	19.8	20.1
4H	18.8	19.9	19.2	20.2	20.5	18.9	19.9	19.3	20.2	20.5
6H	19.1	20.0	19.5	20.3	20.7	19.2	20.1	19.6	20.4	20.8
8H	19.1	20.0	19.5	20.3	20.7	19.2	20.0	19.6	20.4	20.8
12H	19.1	19.9	19.5	20.3	20.7	19.2	20.0	19.6	20.3	20.7
8H 4H	19.0	19.8	19.4	20.2	20.6	19.0	19.9	19.4	20.2	20.6
6H	19.3	20.0	19.8	20.4	20.8	19.4	20.1	19.8	20.5	20.9
8H	19.4	20.0	19.8	20.4	20.9	19.5	20.1	19.9	20.5	21.0
12H	19.4	19.9	19.9	20.4	20.8	19.5	20.0	20.0	20.5	20.9
12H 4H	19.0	19.7	19.4	20.1	20.5	19.0	19.8	19.4	20.2	20.6
6H	19.3	19.9	19.8	20.4	20.8	19.4	20.0	19.9	20.4	20.9
8H	19.4	19.9	19.9	20.4	20.9	19.5	20.0	20.0	20.5	20.9
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
1.5H	+ 0.2 / - 0.4					+ 0.2 / - 0.3				
2.0H	+ 0.4 / - 0.4					+ 0.4 / - 0.4				

CIE Pub.117, 5748 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 6.1$ )

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:120.22V I:0.3548A P:42.539W PF:0.9971 Freq:59.98Hz Lamp Flux:5747.58x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/5000K/110°	DIM.: 265*265mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

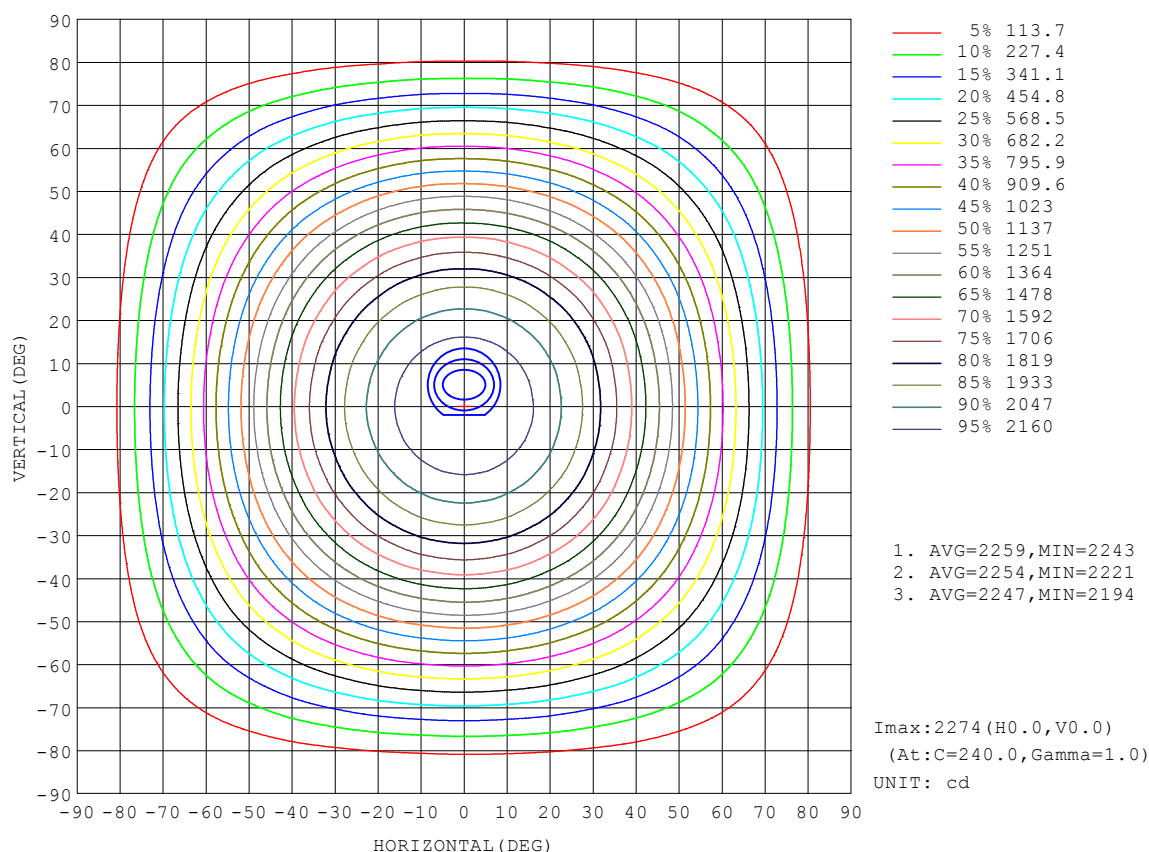
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	60	49	42	59	49	42	58	48	42	36
0.80	70	59	52	69	59	52	67	58	52	45
1.00	79	68	61	77	68	61	75	69	60	54
1.25	86	76	69	84	75	69	82	74	68	61
1.50	90	81	75	89	80	74	86	79	73	66
2.00	97	89	83	95	88	82	92	86	81	73
2.50	101	93	88	99	92	87	95	90	85	77
3.00	104	98	92	102	96	91	98	93	89	81
4.00	108	102	98	105	101	97	101	97	94	85
5.00	110	105	102	107	103	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

$\gamma$  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:

### ISOCANDELA DIAGRAM

Test:U:120.22V I:0.3548A P:42.539W PF:0.9971 Freq:59.98Hz Lamp Flux:5747.58x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/5000K/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

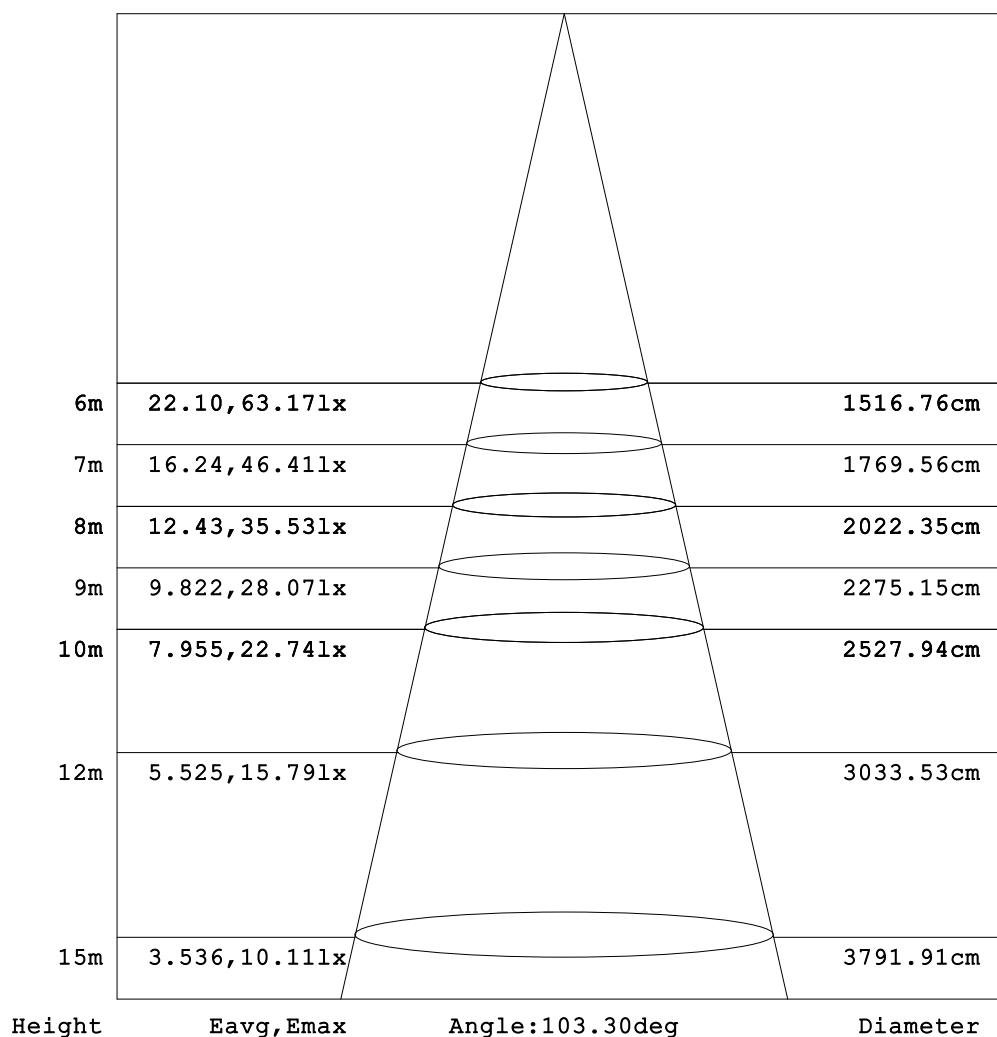
γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [K=1.0000]  
Remarks:



### AAI Figure

Test:U:120.22V I:0.3548A P:42.539W PF:0.9971 Freq:59.98Hz Lamp Flux:5747.58x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/5000K/110°	DIM.: 265*265mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

Flux out:4094 lm



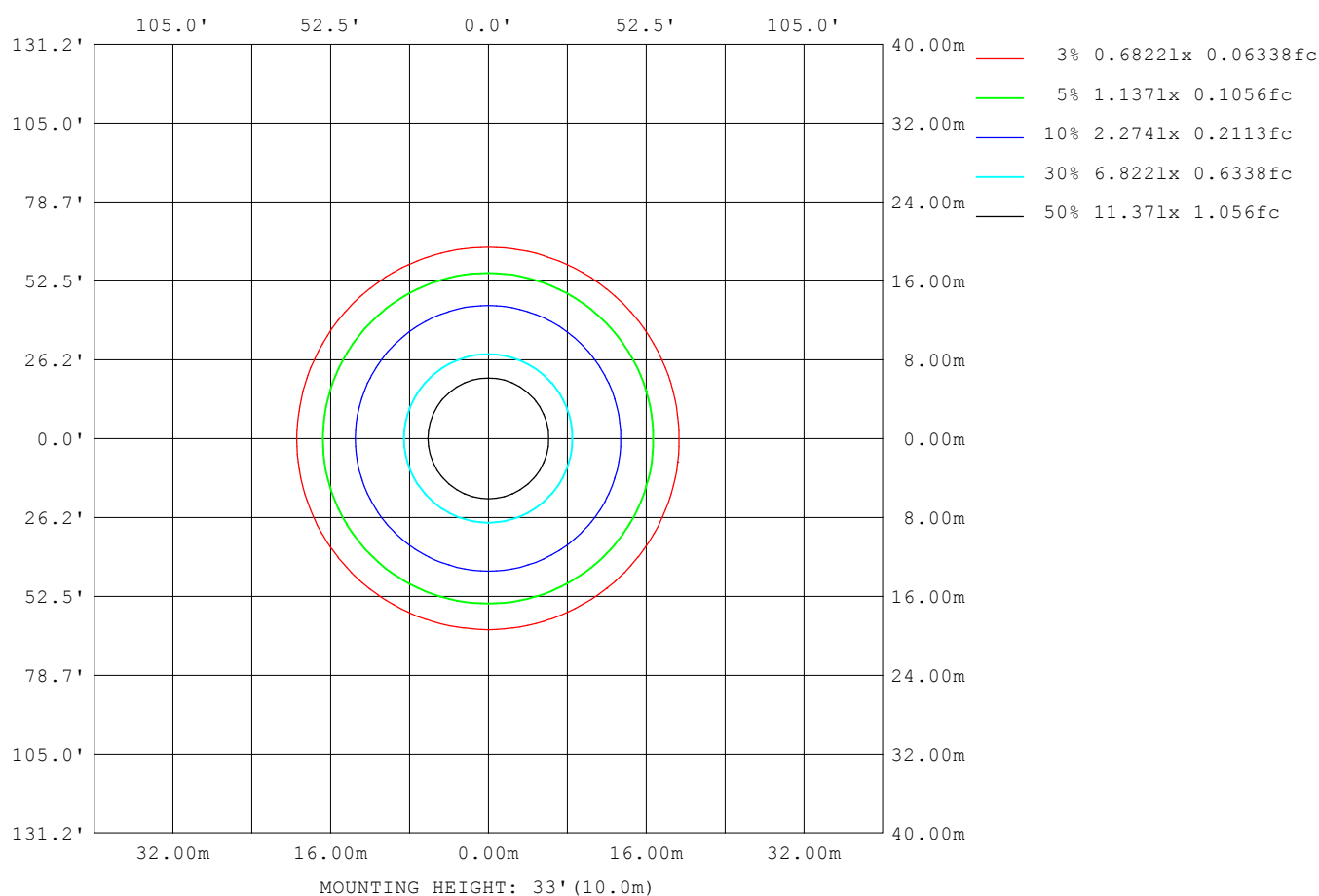
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:120.22V I:0.3548A P:42.539W PF:0.9971 Freq:59.98Hz Lamp Flux:5747.58x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/5000K/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:120.22V I:0.3548A P:42.539W PF:0.9971 Freq:59.98Hz Lamp Flux:5747.58x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/5000K/110°	DIM.: 265*265mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

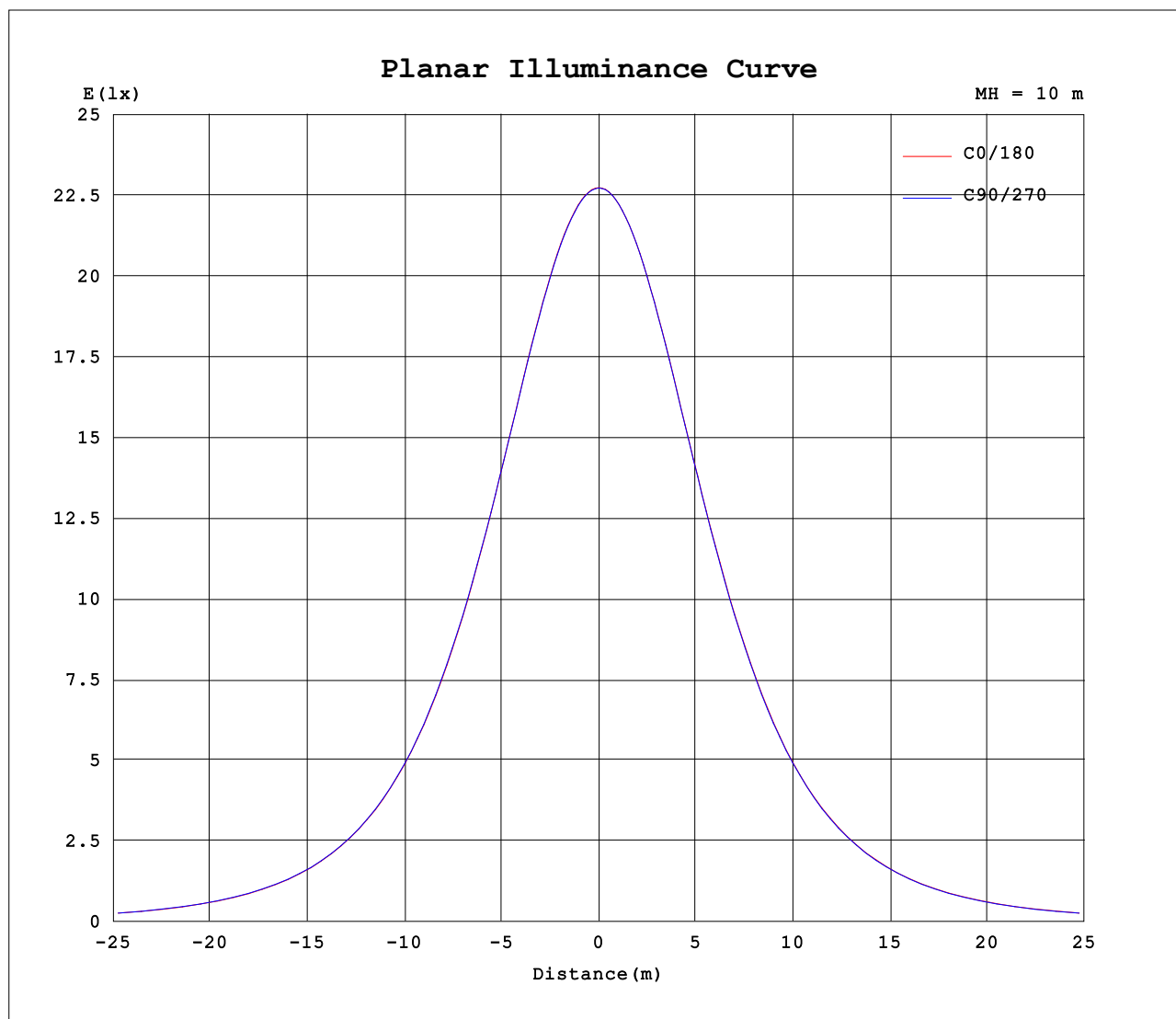
AvgL	cd/m2
L_0~180 (65) av	14671
L_0~180 (75) av	10557
L_0~180 (85) av	3103
L_90~270 (65) av	14675
L_90~270 (75) av	10528
L_90~270 (85) av	3192
L_45 (65) av	14677
L_45 (75) av	10591
L_45 (85) av	3192

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:120.22V I:0.3548A P:42.539W PF:0.9971 Freq:59.98Hz Lamp Flux:5747.58x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/5000K/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:120.22V I:0.3548A P:42.539W PF:0.9971 Freq:59.98Hz Lamp Flux:5747.58x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/5000K/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:

```