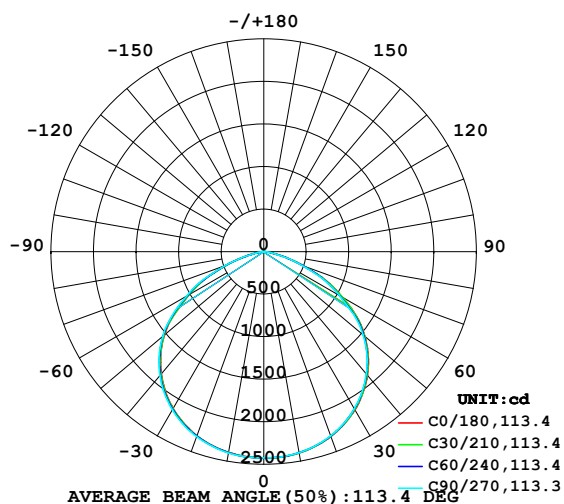


LUMINAIRE PHOTOMETRIC TEST REPORT

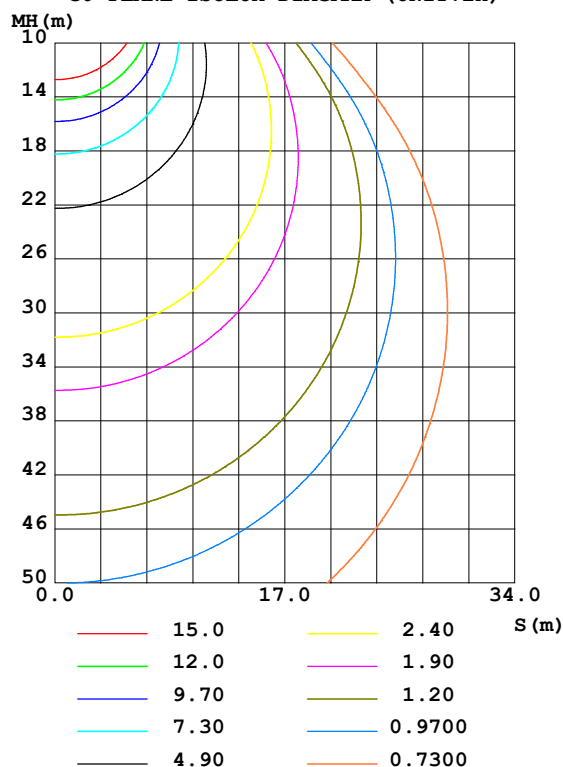
Test:U:120.19V I:0.3557A P:42.633W PF:0.9972 Freq:59.98Hz Lamp Flux:6740.24x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/5000K/110°	DIM.: 265*265mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

DATA OF LAMP		PHOTOMETRIC DATA Eff: 158.10 lm/W			
MODEL	FEL-D-45-41	Imax(cd)	2425	S/MH(C0/180)	1.30
NOMINAL POWER(W)	45	LOR(%)	100.0	S/MH(C90/270)	1.31
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	6740.2	η UP,DN(C0-180)	0.0,49.9
NOMINAL FLUX(lm)	6740.24	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.1
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	2402	2400	2398	2395	2396	2398	2402	2404	0- 10	230.4	230.4	3.42,3.42
20	2310	2307	2303	2298	2301	2306	2312	2314	10- 20	667.2	897.6	13.3,13.3
30	2145	2138	2131	2128	2130	2138	2148	2151	20- 30	1029	1927	28.6,28.6
40	1896	1884	1876	1871	1874	1887	1901	1902	30- 40	1266	3193	47.4,47.4
50	1552	1541	1525	1518	1526	1538	1551	1556	40- 50	1329	4521	67.1,67.1
60	1061	1050	1020	1023	1015	1033	1049	1038	50- 60	1161	5682	84.3,84.3
70	507.2	495.3	484.6	466.2	471.4	467.3	481.3	515.5	60- 70	760.0	6442	95.6,95.6
80	89.74	91.18	86.01	74.82	72.79	71.63	78.75	88.00	70- 80	273.0	6715	99.6,99.6
90	1.931	1.964	1.833	1.850	1.732	1.705	1.680	1.703	80- 90	25.27	6740	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): 3861.5 lm

%lum = 57.3%

%lamp = 57.3%

Conical surface Flux(120deg): 5682 lm

%lum = 84.3%

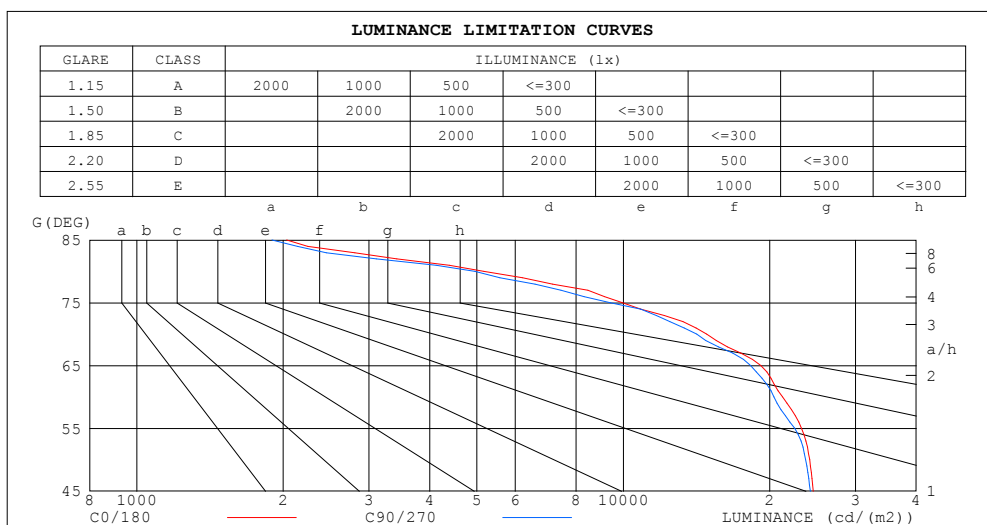
%lamp = 84.3%

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:120.19V I:0.3557A P:42.633W PF:0.9972 Freq:59.98Hz Lamp Flux:6740.24x1 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	2034	1896
80	5171	4952
75	9961	9407
70	14839	14164
65	19177	18264
60	21237	20404
55	23228	22492
50	24156	23712
45	24576	24229

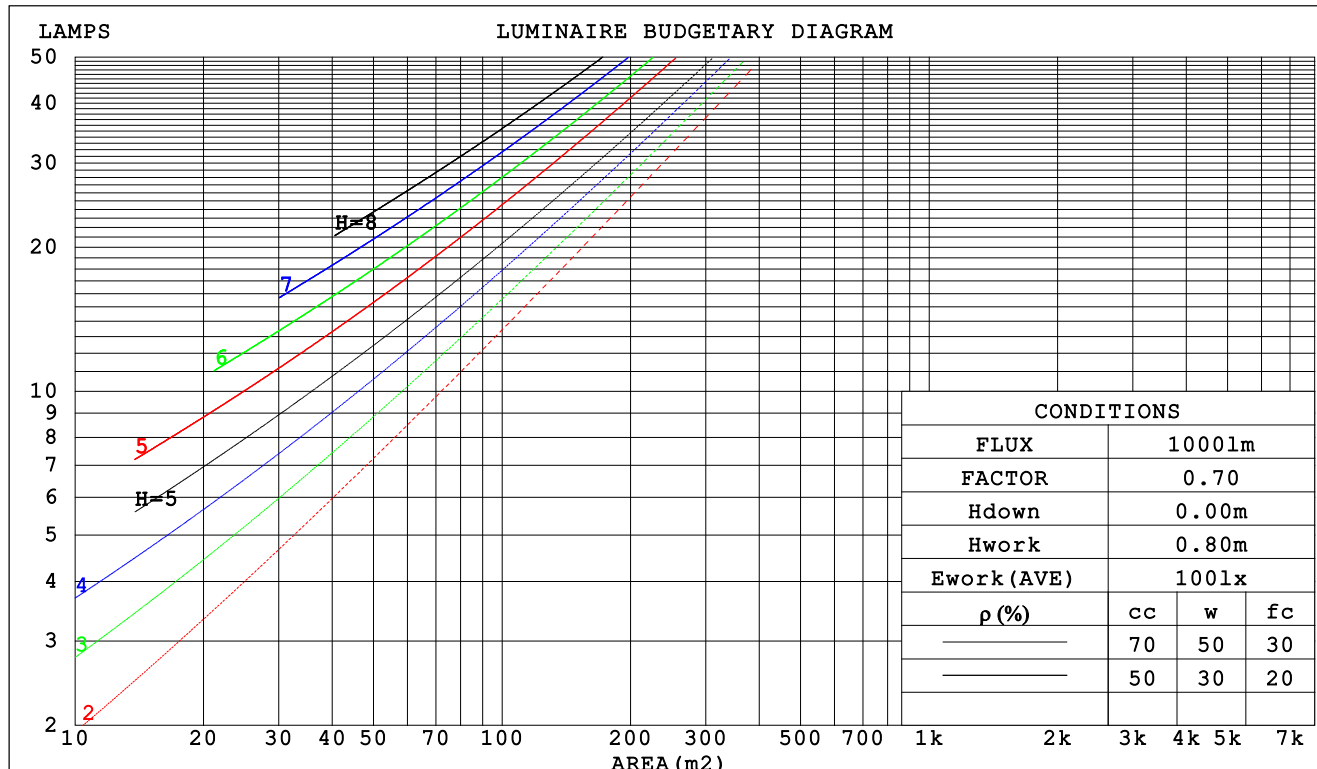
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:30 November 2017

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:120.19V I:0.3557A P:42.633W PF:0.9972 Freq:59.98Hz Lamp Flux:6740.24x1 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	.00
1.0	1.06	1.02	.98	1.03	.90	.97	.99	.96	.94	.95	.93	.91	.92	.90	.88	.86
2.0	.93	.86	.81	.91	.85	.80	.87	.82	.78	.84	.80	.76	.81	.78	.75	.73
3.0	.82	.74	.68	.80	.73	.67	.77	.71	.66	.74	.69	.65	.72	.68	.64	.62
4.0	.72	.64	.58	.71	.63	.57	.69	.62	.56	.66	.60	.56	.64	.59	.55	.53
5.0	.65	.56	.50	.64	.55	.49	.62	.54	.49	.60	.53	.48	.58	.52	.48	.46
6.0	.58	.50	.43	.57	.49	.43	.56	.48	.43	.54	.47	.42	.52	.47	.42	.40
7.0	.53	.44	.38	.52	.44	.38	.50	.43	.38	.49	.42	.37	.48	.42	.37	.35
8.0	.48	.40	.34	.47	.39	.34	.46	.39	.34	.45	.38	.33	.44	.38	.33	.31
9.0	.44	.36	.31	.44	.36	.30	.42	.35	.30	.41	.35	.30	.40	.34	.30	.28
10.0	.41	.33	.28	.40	.33	.28	.39	.32	.27	.38	.32	.27	.37	.31	.27	.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:

WEC AND CCEC

Test:U:120.19V I:0.3557A P:42.633W PF:0.9972 Freq:59.98Hz Lamp Flux:6740.24x1 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	.278	.158	.050	.271	.155	.049	.258	.148	.047	.246	.142	.045	.235	.136	.044		
2.0	.270	.148	.045	.264	.146	.045	.253	.141	.044	.242	.136	.043	.232	.131	.041		
3.0	.255	.136	.041	.250	.134	.040	.239	.130	.039	.230	.126	.039	.221	.123	.038		
4.0	.238	.124	.036	.234	.122	.036	.225	.119	.036	.216	.116	.035	.208	.113	.035		
5.0	.222	.113	.033	.218	.112	.033	.210	.109	.032	.203	.107	.032	.196	.105	.031		
6.0	.208	.104	.030	.204	.103	.030	.197	.101	.029	.190	.099	.029	.184	.097	.029		
7.0	.194	.096	.027	.191	.095	.027	.185	.093	.027	.179	.092	.027	.173	.090	.026		
8.0	.182	.089	.025	.179	.088	.025	.173	.087	.025	.168	.085	.025	.163	.084	.024		
9.0	.171	.083	.023	.169	.082	.023	.163	.081	.023	.158	.079	.023	.154	.078	.023		
10.0	.161	.077	.021	.159	.077	.021	.154	.076	.021	.150	.074	.021	.146	.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	.081	.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	.162	.114	.076	.139	.099	.066	.095	.068	.046	.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	.121	.071	.035	.083	.050	.025	.048	.029	.015	.016	.010	.005	
7.0	.134	.075	.034	.115	.065	.029	.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	.122	.064	.026	.105	.056	.022	.073	.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:120.19V I:0.3557A P:42.633W PF:0.9972 Freq:59.98Hz Lamp Flux:6740.24x1 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	17.3	18.7	17.5	18.9	19.1	17.1	18.6	17.4	18.8	19.0
3H	18.3	19.6	18.6	19.9	20.1	18.1	19.5	18.4	19.7	19.9
4H	18.5	19.8	18.8	20.0	20.3	18.3	19.6	18.6	19.8	20.1
6H	18.5	19.7	18.8	20.0	20.2	18.3	19.5	18.6	19.8	20.0
8H	18.5	19.6	18.8	19.9	20.2	18.3	19.4	18.6	19.7	20.0
12H	18.4	19.5	18.8	19.8	20.1	18.2	19.3	18.6	19.6	19.9
4H 2H	17.7	19.0	18.1	19.3	19.5	17.6	18.9	17.9	19.1	19.4
3H	18.9	20.0	19.2	20.3	20.6	18.7	19.8	19.1	20.1	20.4
4H	19.1	20.1	19.5	20.4	20.8	19.0	20.0	19.3	20.3	20.6
6H	19.2	20.1	19.6	20.4	20.8	19.0	19.9	19.4	20.2	20.6
8H	19.2	20.0	19.6	20.3	20.7	19.0	19.8	19.4	20.2	20.6
12H	19.1	19.9	19.5	20.3	20.7	18.9	19.7	19.4	20.1	20.5
8H 4H	19.2	20.0	19.6	20.4	20.7	19.0	19.8	19.4	20.2	20.6
6H	19.3	19.9	19.7	20.3	20.8	19.1	19.8	19.5	20.2	20.6
8H	19.2	19.8	19.7	20.3	20.7	19.1	19.7	19.5	20.1	20.6
12H	19.2	19.7	19.7	20.2	20.7	19.1	19.6	19.5	20.0	20.5
12H 4H	19.1	19.9	19.5	20.3	20.7	19.0	19.7	19.4	20.1	20.5
6H	19.2	19.8	19.7	20.3	20.7	19.1	19.7	19.5	20.1	20.5
8H	19.2	19.7	19.7	20.2	20.7	19.1	19.6	19.5	20.0	20.5
Variations with the observer position at spacings:										
S = 1.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.4				
1.5H	+ 0.3 / - 0.5					+ 0.3 / - 0.6				
2.0H	+ 0.5 / - 0.5					+ 0.6 / - 0.5				

CIE Pub.117, 6740 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 6.6$)

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:120.19V I:0.3557A P:42.633W PF:0.9972 Freq:59.98Hz Lamp Flux:6740.24x1 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

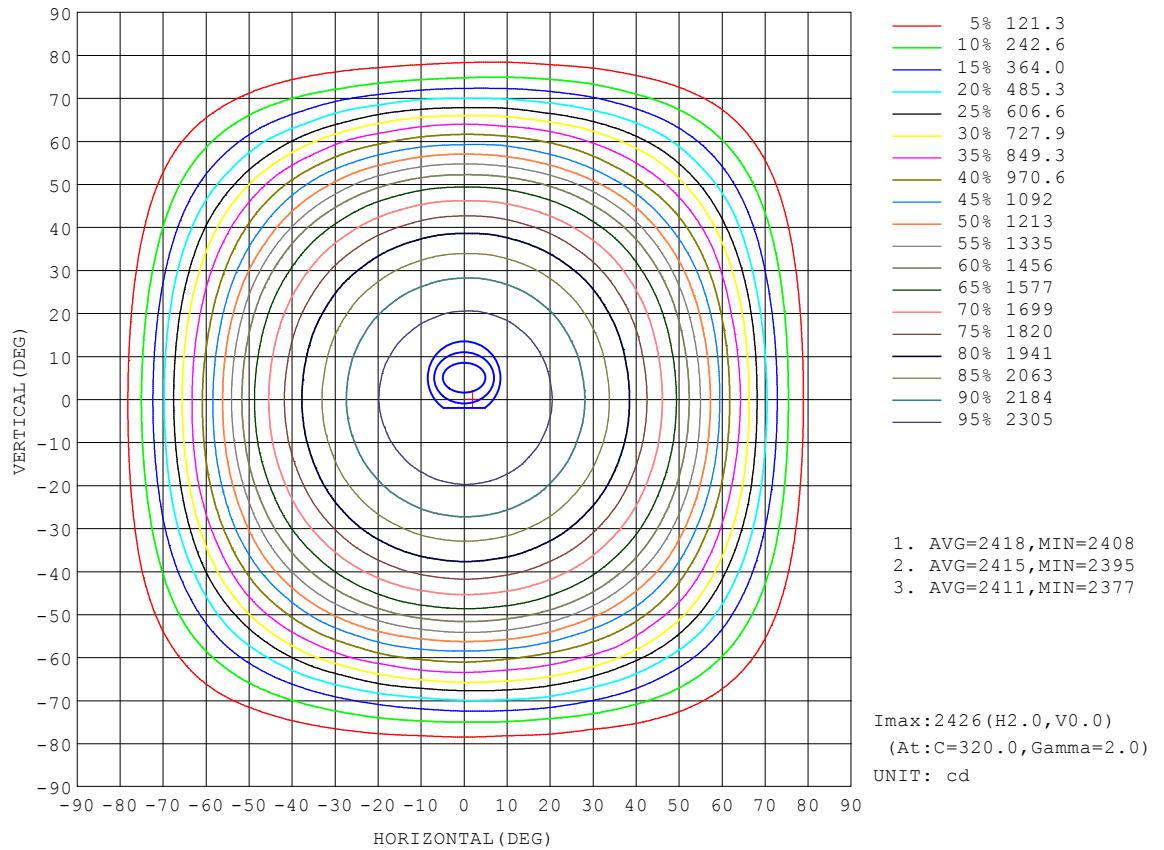
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	59	47	40	58	47	40	57	47	40	34
0.80	69	58	51	68	57	51	66	57	50	43
1.00	78	67	60	77	67	60	75	68	60	53
1.25	85	75	69	84	75	68	81	73	67	60
1.50	90	81	74	89	80	74	86	78	73	66
2.00	97	89	83	95	88	82	92	86	81	73
2.50	101	94	88	99	92	87	95	90	85	77
3.00	104	98	93	102	96	92	98	93	89	81
4.00	108	102	98	105	101	97	101	97	94	86
5.00	110	105	102	107	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:120.19V I:0.3557A P:42.633W PF:0.9972 Freq:59.98Hz Lamp Flux:6740.24x1 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



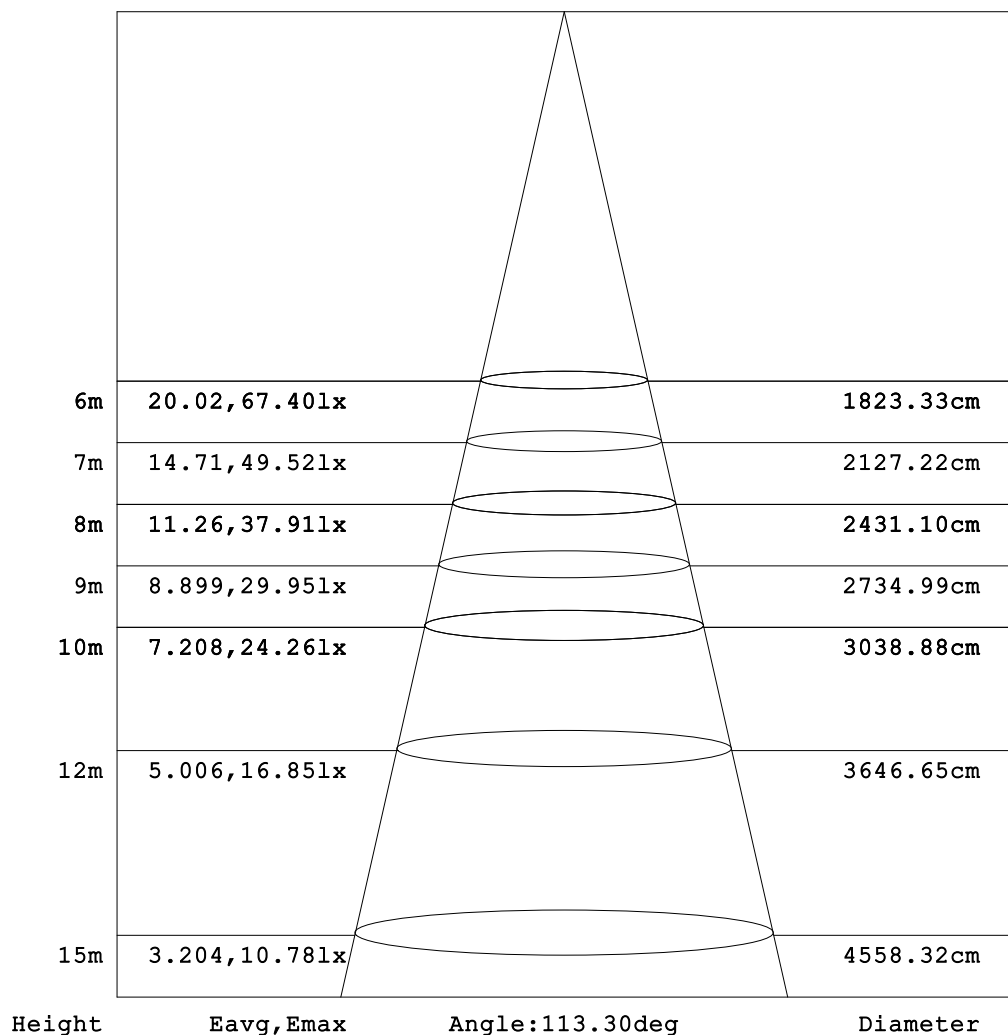
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:30 November 2017

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:120.19V I:0.3557A P:42.633W PF:0.9972 Freq:59.98Hz Lamp Flux:6740.24x1 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:5369 lm



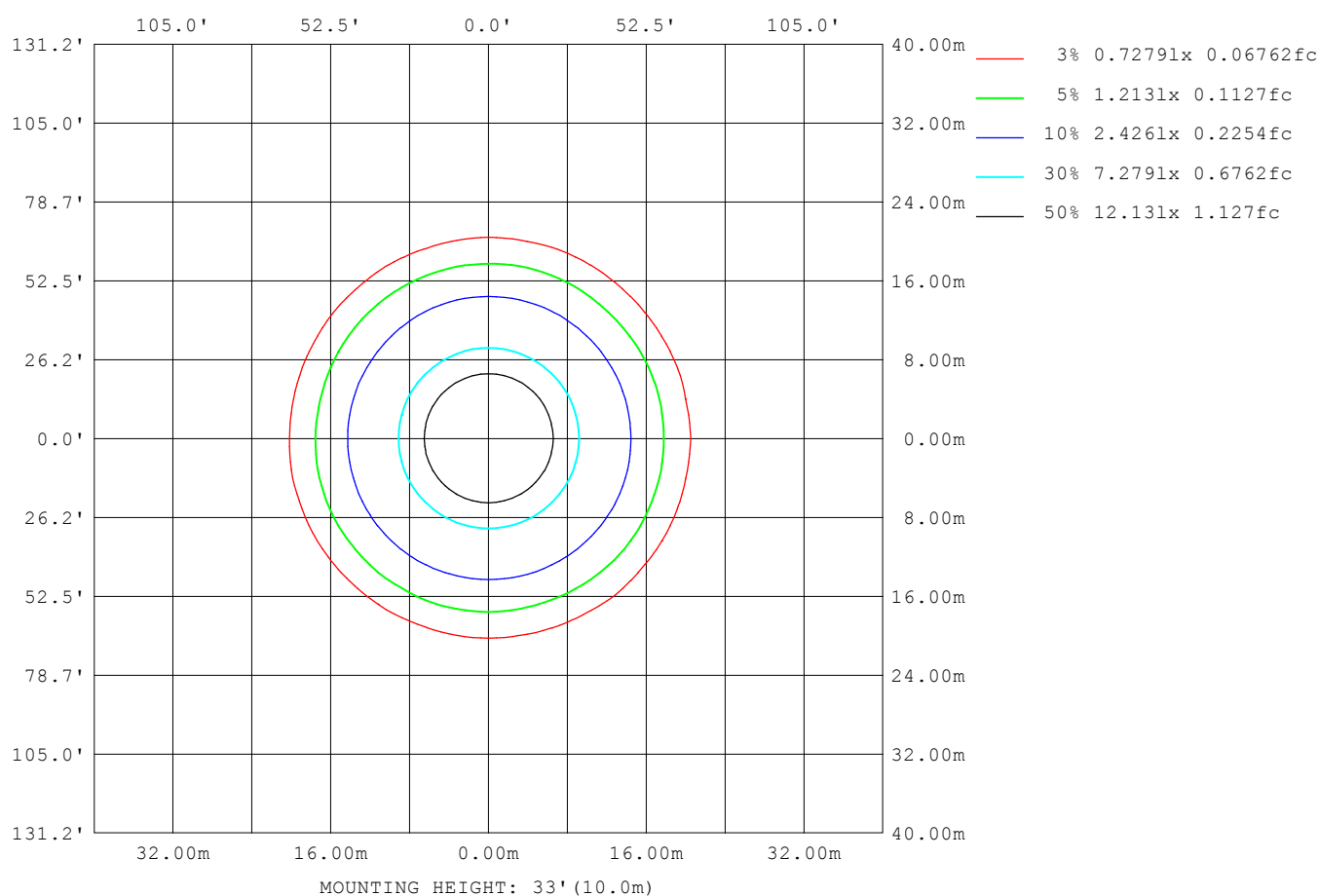
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:120.19V I:0.3557A P:42.633W PF:0.9972 Freq:59.98Hz Lamp Flux:6740.24x1 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:120.19V I:0.3557A P:42.633W PF:0.9972 Freq:59.98Hz Lamp Flux:6740.24x1 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

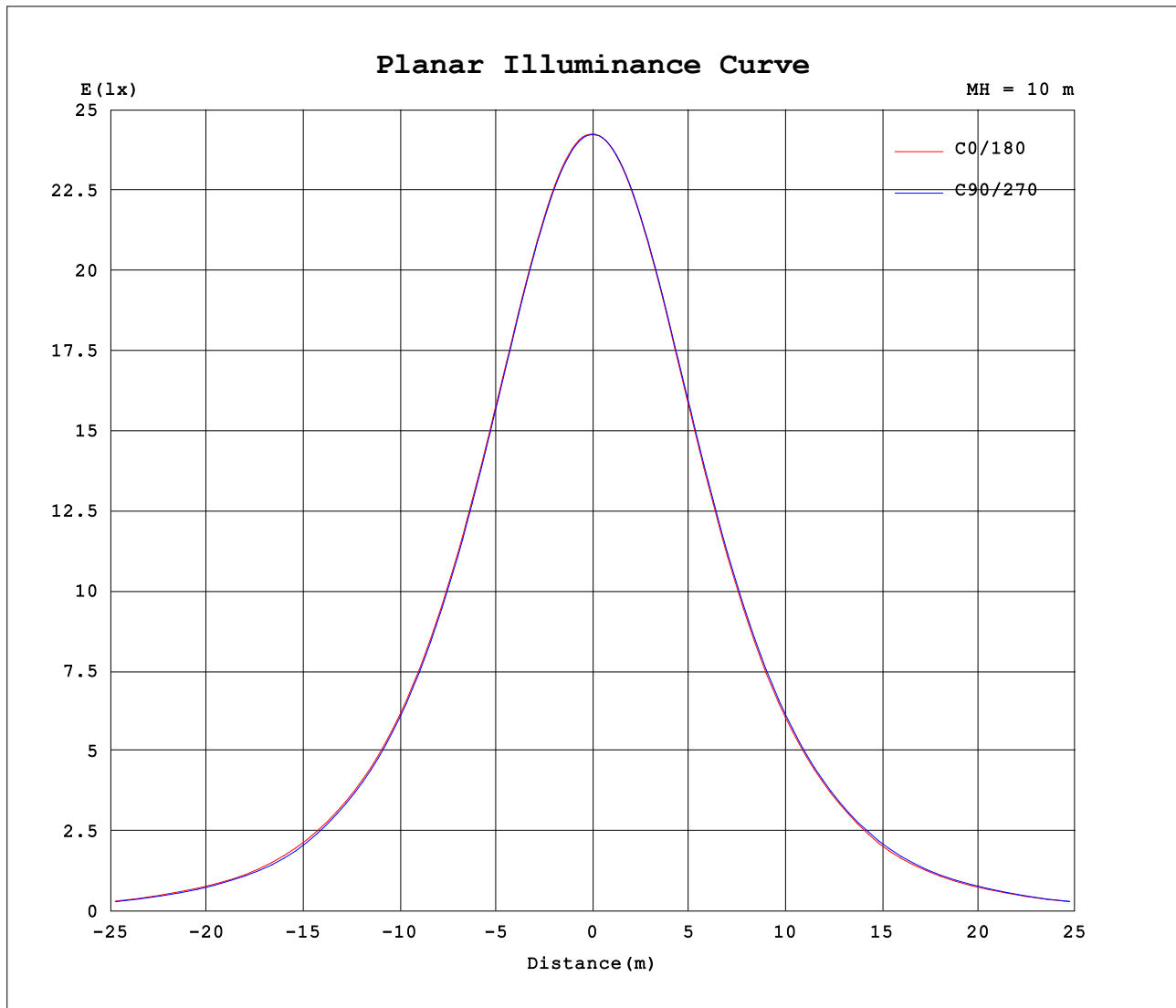
AvgL	cd/m2
L_0~180 (65) av	18592
L_0~180 (75) av	9705
L_0~180 (85) av	1765
L_90~270 (65) av	18476
L_90~270 (75) av	9184
L_90~270 (85) av	1776
L_45 (65) av	18476
L_45 (75) av	9641
L_45 (85) av	1775

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

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:120.19V I:0.3557A P:42.633W PF:0.9972 Freq:59.98Hz Lamp Flux:6740.24x1 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:120.19V I:0.3557A P:42.633W PF:0.9972 Freq:59.98Hz Lamp Flux:6740.24x1 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:

```