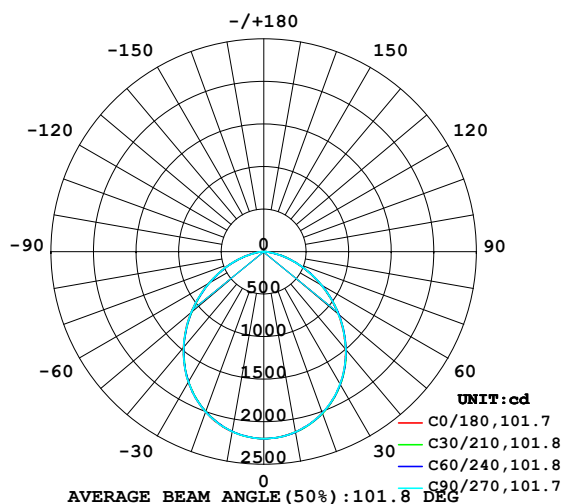


LUMINAIRE PHOTOMETRIC TEST REPORT

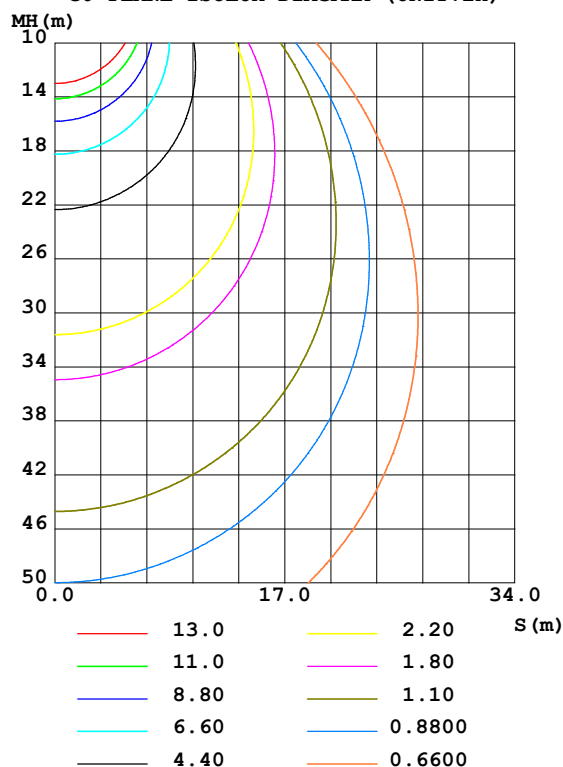
Test:U:120.26V I:0.3556A P:42.637W PF:0.9971 Freq:59.98Hz Lamp Flux:5452.64x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/3000K/110°	DIM.: 265*265mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

DATA OF LAMP		PHOTOMETRIC DATA Eff: 127.88 lm/W			
MODEL	FEL-D-45-38	Imax(cd)	2197	S/MH(C0/180)	1.21
NOMINAL POWER(W)	45	LOR(%)	100.0	S/MH(C90/270)	1.21
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	5452.6	η UP,DN(C0-180)	0.0,50.4
NOMINAL FLUX(lm)	5452.64	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:01 December 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	2151	2154	2153	2151	2148	2145	2146	2150	0- 10	207.5	207.5	3.8,3.8
20	2018	2022	2017	2009	2004	2000	2003	2011	10- 20	589.6	797.1	14.6,14.6
30	1797	1802	1796	1783	1773	1769	1772	1784	20- 30	878.3	1675	30.7,30.7
40	1496	1504	1498	1480	1468	1462	1468	1483	30- 40	1026	2701	49.5,49.5
50	1145	1155	1147	1128	1116	1109	1114	1135	40- 50	1010	3712	68.1,68.1
60	774.9	784.1	777.4	755.5	747.5	740.2	745.8	766.9	50- 60	845.6	4557	83.6,83.6
70	424.7	432.7	426.6	409.9	401.7	395.4	400.4	417.6	60- 70	577.3	5134	94.2,94.2
80	130.1	135.1	130.6	122.2	113.0	109.4	115.0	123.4	70- 80	275.2	5410	99.2,99.2
90	1.982	2.085	2.001	1.900	1.602	1.590	1.587	1.581	80- 90	43.01	5453	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): 3218.4 lm

%lum = 59.0%

%lamp = 59.0%

Conical surface Flux(120deg): 4557.2 lm

%lum = 83.6%

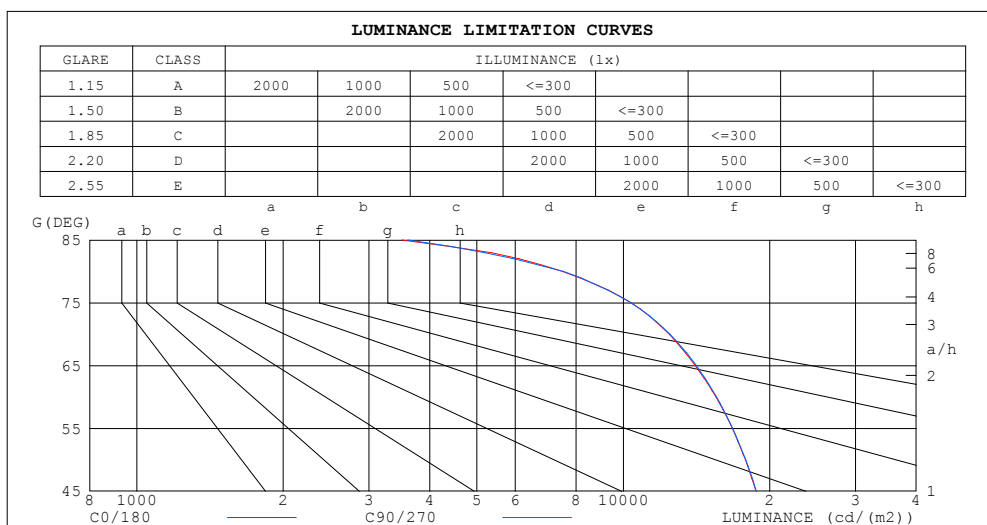
%lamp = 83.6%

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:01 December 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:120.26V I:0.3556A P:42.637W PF:0.9971 Freq:59.98Hz Lamp Flux:5452.64x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/3000K/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	3507	3602
80	7496	7522
75	10371	10364
70	12422	12472
65	14050	14127
60	15502	15547
55	16745	16778
50	17820	17849
45	18733	18766

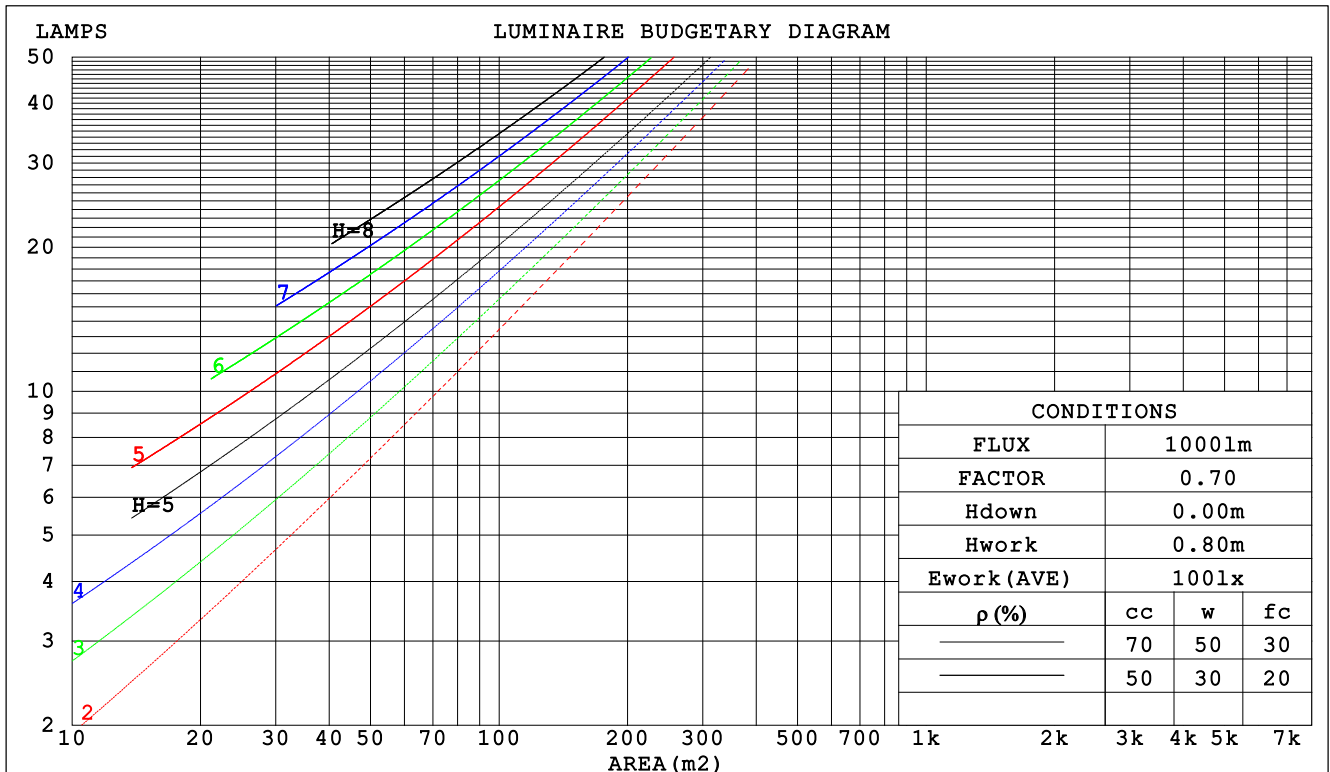
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:01 December 2017

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:120.26V I:0.3556A P:42.637W PF:0.9971 Freq:59.98Hz Lamp Flux:5452.64x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/3000K/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	Coefficients of Utilization(CU)															
RCR:Room Cavity Ratio																
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	1.05	1.01	.98	1.03	.90	.96	.99	.96	.93	.95	.93	.90	.91	.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	.75	.69	.65	.72	.68	.64	.62
4.0	.73	.64	.58	.72	.64	.58	.69	.62	.57	.67	.61	.56	.65	.60	.55	.53
5.0	.65	.57	.50	.64	.56	.50	.62	.55	.50	.60	.54	.49	.58	.53	.48	.46
6.0	.59	.50	.44	.58	.50	.44	.56	.49	.44	.55	.48	.43	.53	.47	.43	.41
7.0	.54	.45	.39	.53	.45	.39	.51	.44	.39	.50	.43	.39	.49	.43	.38	.36
8.0	.49	.41	.35	.48	.40	.35	.47	.40	.35	.46	.39	.35	.45	.39	.34	.33
9.0	.45	.37	.32	.45	.37	.32	.43	.36	.31	.42	.36	.31	.41	.35	.31	.29
10.0	.42	.34	.29	.41	.34	.29	.40	.33	.29	.39	.33	.28	.38	.33	.28	.27



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:01 December 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:120.26V I:0.3556A P:42.637W PF:0.9971 Freq:59.98Hz Lamp Flux:5452.64x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/3000K/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	.282	.160	.051	.275	.157	.050	.262	.150	.048	.250	.144	.046	.239	.138	.045		
2.0	.271	.148	.046	.265	.146	.045	.253	.141	.044	.243	.136	.043	.233	.132	.042		
3.0	.254	.135	.040	.249	.133	.040	.238	.129	.039	.229	.125	.038	.220	.122	.038		
4.0	.236	.123	.036	.232	.121	.036	.223	.118	.035	.214	.115	.035	.207	.112	.034		
5.0	.220	.112	.032	.216	.111	.032	.208	.108	.032	.201	.106	.031	.194	.103	.031		
6.0	.205	.103	.029	.202	.102	.029	.194	.100	.029	.188	.098	.029	.182	.096	.028		
7.0	.192	.095	.027	.189	.094	.027	.182	.092	.027	.176	.090	.026	.171	.089	.026		
8.0	.180	.088	.025	.177	.087	.025	.171	.086	.024	.166	.084	.024	.161	.083	.024		
9.0	.169	.082	.023	.166	.081	.023	.161	.080	.023	.156	.078	.022	.152	.077	.022		
10.0	.159	.076	.021	.157	.076	.021	.152	.075	.021	.148	.073	.021	.144	.072	.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	.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	.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	.052	.036	.022	.017	.012	.007	
5.0	.146	.090	.049	.126	.078	.042	.087	.055	.030	.050	.032	.018	.016	.010	.006	
6.0	.139	.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:01 December 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:120.26V I:0.3556A P:42.637W PF:0.9971 Freq:59.98Hz Lamp Flux:5452.64x1 lm										
NAME: LED Explosion-proof Flood Light					TYPE:Floodlight			WEIGHT:N/A		
SPEC.:45W/3000K/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	16.7	18.1	17.0	18.3	18.5	16.7	18.2	17.0	18.4	18.6
3H	17.8	19.2	18.1	19.4	19.7	17.9	19.2	18.2	19.4	19.7
4H	18.2	19.5	18.6	19.8	20.0	18.2	19.5	18.6	19.8	20.0
6H	18.4	19.6	18.8	19.9	20.2	18.4	19.6	18.8	19.9	20.2
8H	18.5	19.6	18.8	19.9	20.2	18.4	19.6	18.8	19.9	20.2
12H	18.4	19.5	18.8	19.8	20.1	18.4	19.5	18.8	19.8	20.1
4H 2H	17.2	18.5	17.5	18.7	19.0	17.2	18.5	17.5	18.7	19.0
3H	18.5	19.6	18.9	19.9	20.2	18.5	19.6	18.9	19.9	20.2
4H	19.0	20.0	19.4	20.3	20.7	19.0	20.0	19.4	20.4	20.7
6H	19.3	20.2	19.7	20.5	20.9	19.3	20.2	19.7	20.5	20.9
8H	19.4	20.2	19.8	20.5	20.9	19.3	20.2	19.8	20.5	20.9
12H	19.3	20.1	19.8	20.5	20.9	19.3	20.1	19.8	20.5	20.9
8H 4H	19.2	20.0	19.6	20.4	20.8	19.2	20.0	19.6	20.4	20.8
6H	19.6	20.2	20.0	20.6	21.1	19.5	20.2	20.0	20.6	21.1
8H	19.6	20.3	20.1	20.7	21.1	19.6	20.2	20.1	20.7	21.1
12H	19.7	20.2	20.1	20.6	21.1	19.6	20.2	20.1	20.6	21.1
12H 4H	19.2	19.9	19.6	20.3	20.7	19.2	19.9	19.6	20.3	20.7
6H	19.6	20.2	20.0	20.6	21.0	19.6	20.2	20.0	20.6	21.0
8H	19.7	20.2	20.1	20.6	21.1	19.7	20.2	20.1	20.6	21.1
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 / - 0.4				
2.0H	+ 0.4 / - 0.4					+ 0.4 / - 0.4				

CIE Pub.117, 5453 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 5.9)

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:01 December 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:120.26V I:0.3556A P:42.637W PF:0.9971 Freq:59.98Hz Lamp Flux:5452.64x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/3000K/110°	DIM.: 265*265mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

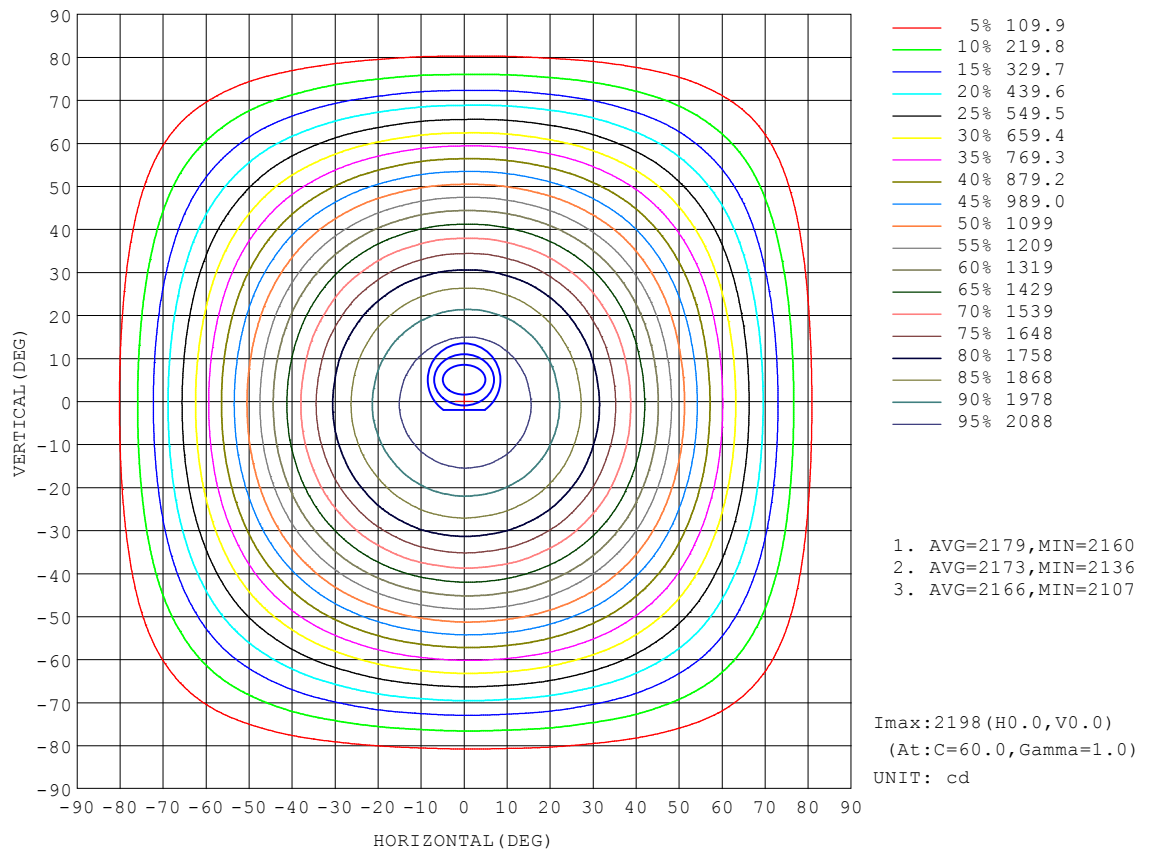
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	60	49	42	59	49	42	58	48	42	36
0.80	70	59	52	69	59	52	68	58	52	45
1.00	79	68	61	78	68	61	75	69	61	54
1.25	86	76	69	84	75	69	82	74	68	61
1.50	91	81	75	89	81	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	77
3.00	104	98	93	102	96	91	98	93	89	81
4.00	108	102	98	105	101	97	101	97	94	86
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:01 December 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:120.26V I:0.3556A P:42.637W PF:0.9971 Freq:59.98Hz Lamp Flux:5452.64x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/3000K/110°	DIM.: 265*265mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A



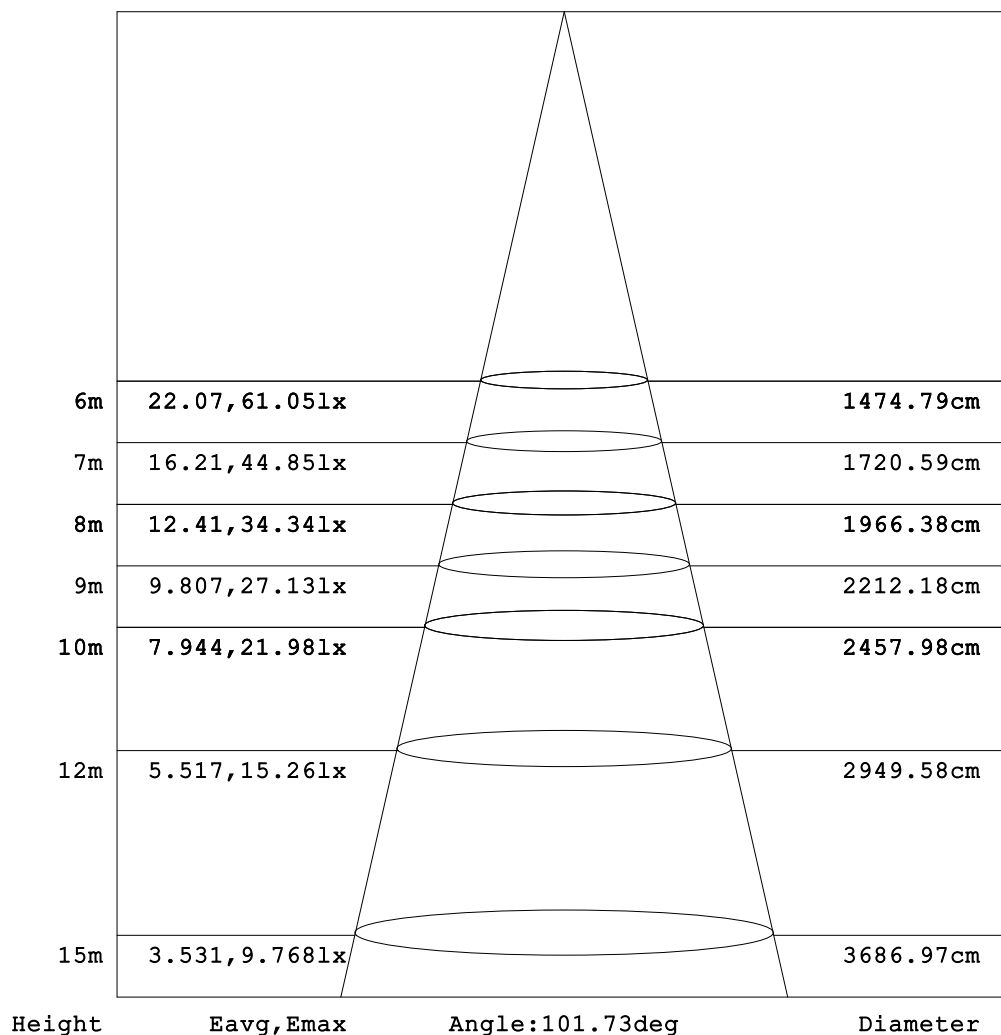
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:01 December 2017

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:120.26V I:0.3556A P:42.637W PF:0.9971 Freq:59.98Hz Lamp Flux:5452.64x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/3000K/110°	DIM.: 265*265mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

Flux out:3806 lm



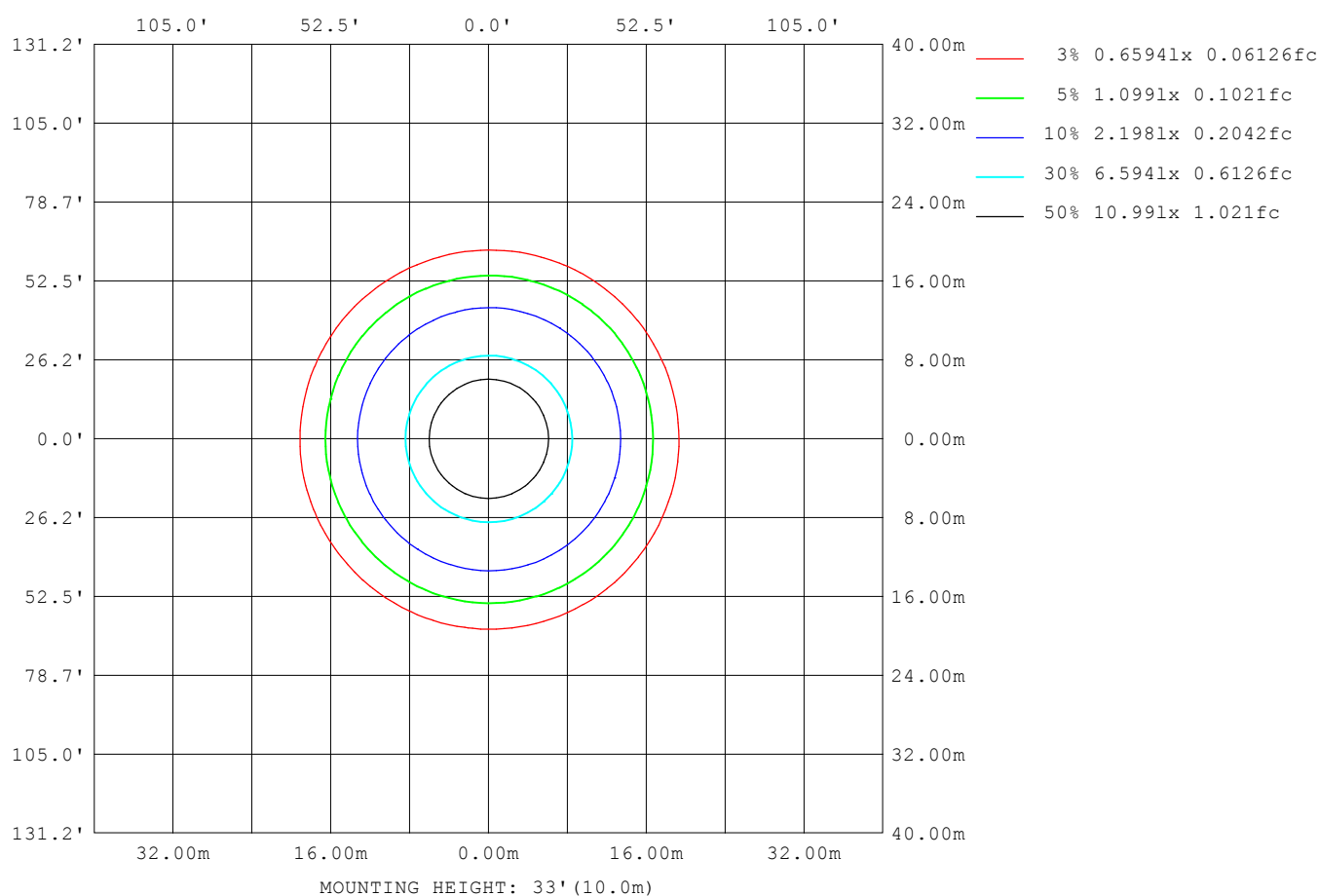
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:01 December 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:120.26V I:0.3556A P:42.637W PF:0.9971 Freq:59.98Hz Lamp Flux:5452.64x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/3000K/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:01 December 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:120.26V I:0.3556A P:42.637W PF:0.9971 Freq:59.98Hz Lamp Flux:5452.64x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/3000K/110°	DIM.: 265*265mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

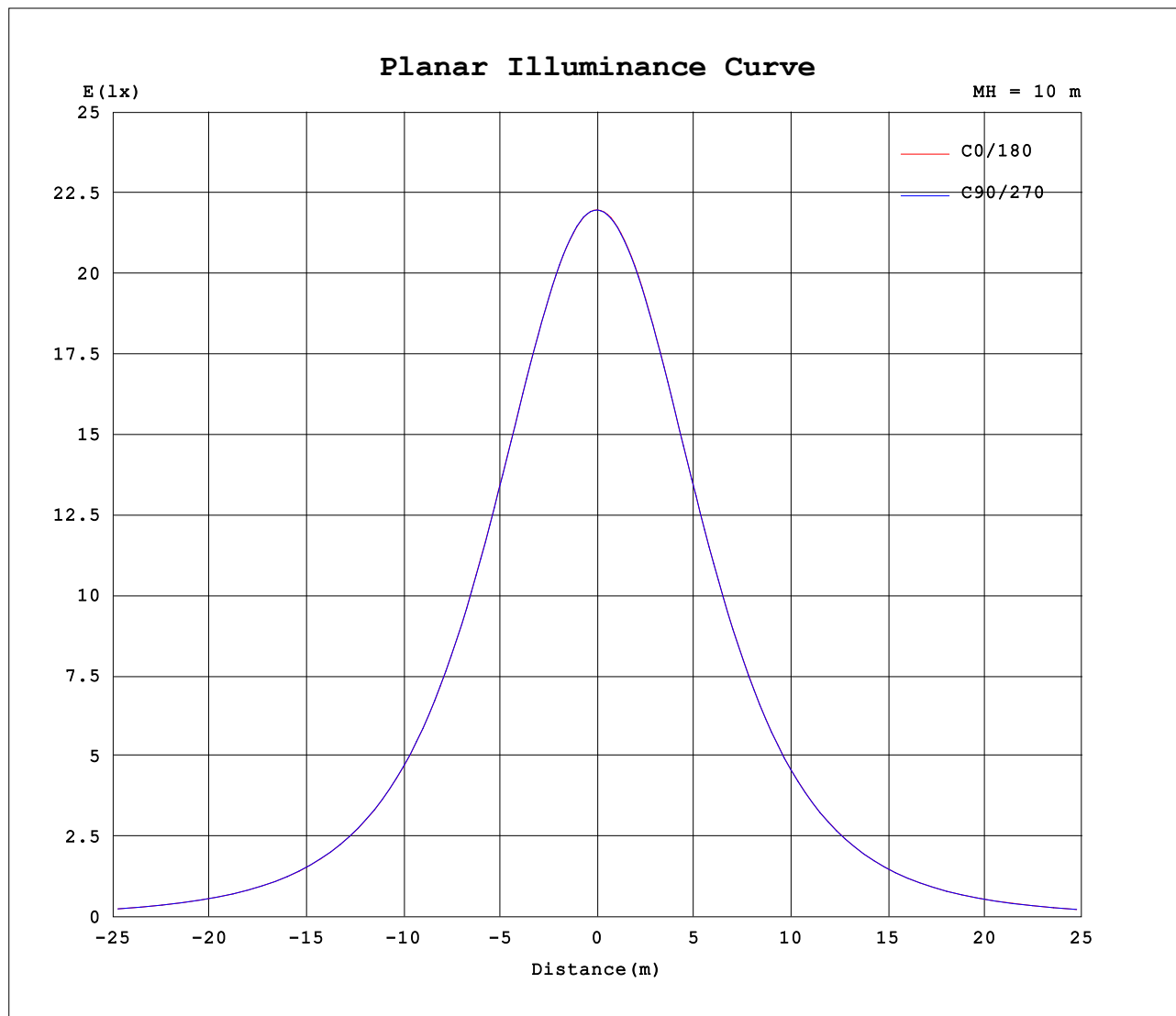
AvgL	cd/m2
L_0~180 (65) av	13761
L_0~180 (75) av	9946
L_0~180 (85) av	3085
L_90~270 (65) av	13768
L_90~270 (75) av	9945
L_90~270 (85) av	3081
L_45 (65) av	13773
L_45 (75) av	9984
L_45 (85) av	3140

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:01 December 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: 01 December 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:120.26V I:0.3556A P:42.637W PF:0.9971 Freq:59.98Hz Lamp Flux:5452.64x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/3000K/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: 01 December 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:120.26V I:0.3556A P:42.637W PF:0.9971 Freq:59.98Hz Lamp Flux:5452.64x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/3000K/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:01 December 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:

```