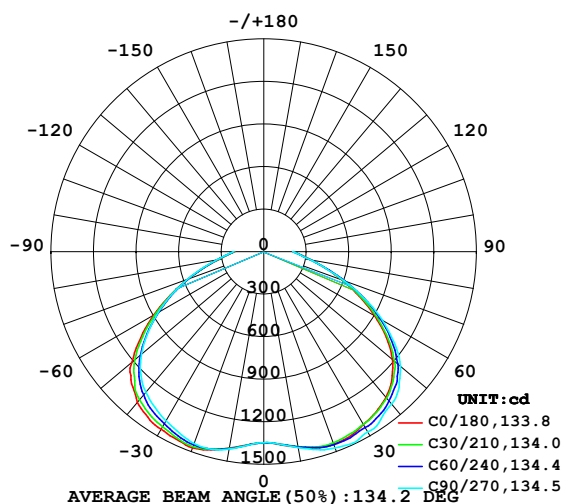


LUMINAIRE PHOTOMETRIC TEST REPORT

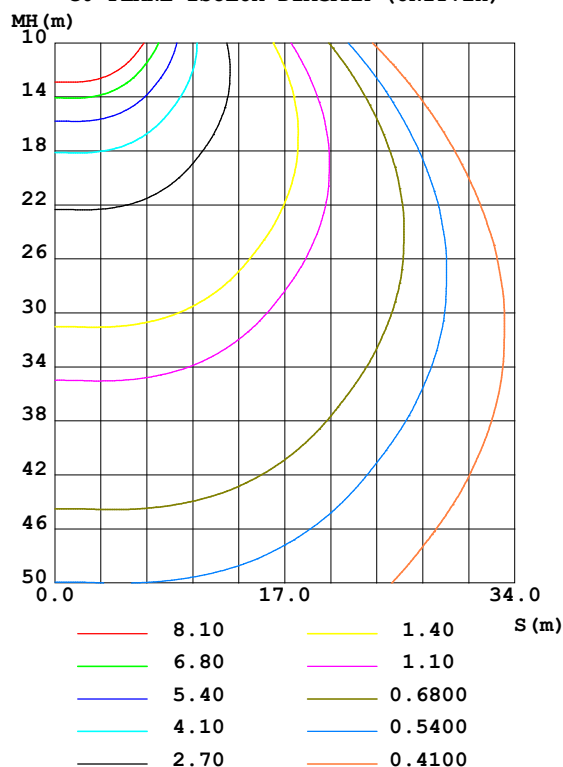
Test:U:119.99V I:0.3571A P:42.748W PF:0.9976 Freq:59.98Hz Lamp Flux:5520.76x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/Lumileds 5050/3000K	DIM.: 265*265*150mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

DATA OF LAMP		PHOTOMETRIC DATA Eff: 129.15 lm/W			
MODEL	FEL-D-45-1	I _{max} (cd)	1501	S/MH (C0/180)	1.59
NOMINAL POWER(W)	45	LOR(%)	100.0	S/MH (C90/270)	1.51
RATED VOLTAGE(V)	120	TOTAL FLUX (lm)	5520.8	η UP, DN (C0-180)	0.0, 50.9
NOMINAL FLUX (lm)	5520.76	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 49.1
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.50
TEST VOLTAGE (V)	120	η down (%)	100.0	CIBSE SHR MAX	1.55

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:29 December 2018

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	1401	1395	1404	1407	1406	1410	1413	1411	0- 10	131.8	131.8	2.39, 2.39
20	1444	1438	1473	1483	1472	1455	1440	1448	10- 20	408.2	540.0	9.78, 9.78
30	1407	1413	1467	1474	1447	1416	1379	1398	20- 30	668.3	1208	21.9, 21.9
40	1341	1358	1402	1420	1387	1342	1294	1319	30- 40	876.6	2085	37.8, 37.8
50	1184	1217	1257	1264	1215	1158	1125	1157	40- 50	996.8	3082	55.8, 55.8
60	901.4	929.3	964.3	943.6	897.2	865.8	861.5	881.5	50- 60	946.4	4028	73, 73
70	585.8	604.1	602.9	585.9	571.1	564.5	572.7	575.2	60- 70	735.4	4763	86.3, 86.3
80	337.4	334.8	332.6	325.0	325.0	331.0	335.8	336.8	70- 80	472.6	5236	94.8, 94.8
90	209.3	206.1	204.5	202.8	203.8	208.8	210.4	210.9	80- 90	284.7	5521	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): 2576.9 lm

%lum = 46.7%

%lamp = 46.7%

Conical surface Flux(120deg): 4028.1 lm

%lum = 73.0%

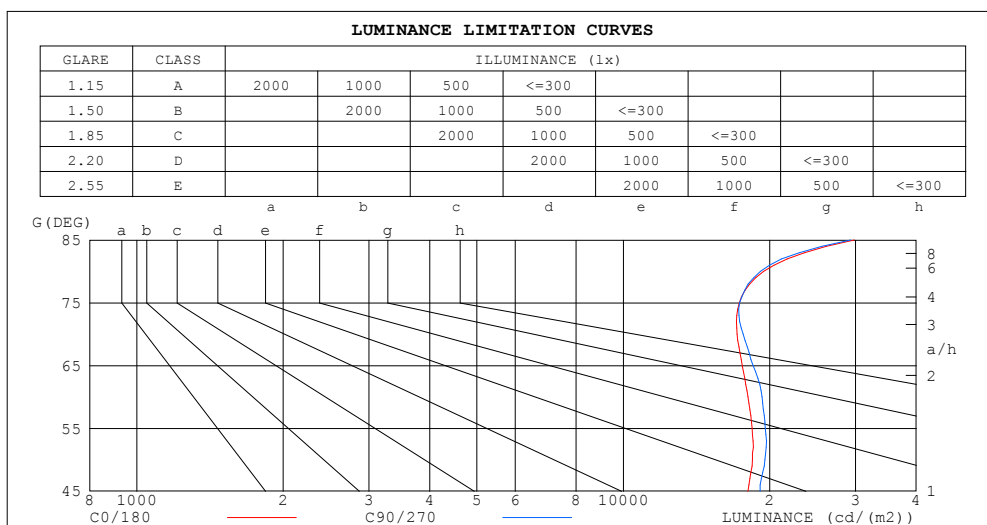
%lamp = 73.0%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:CL
 Test Date:29 December 2018

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:119.99V I:0.3571A P:42.748W PF:0.9976 Freq:59.98Hz Lamp Flux:5520.76x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/Lumileds 5050/3000K	DIM.: 265*265*150mm	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	29817	29324
80	19431	19154
75	17317	17349
70	17126	17627
65	17566	18477
60	18028	19287
55	18398	19589
50	18418	19561
45	18050	19107

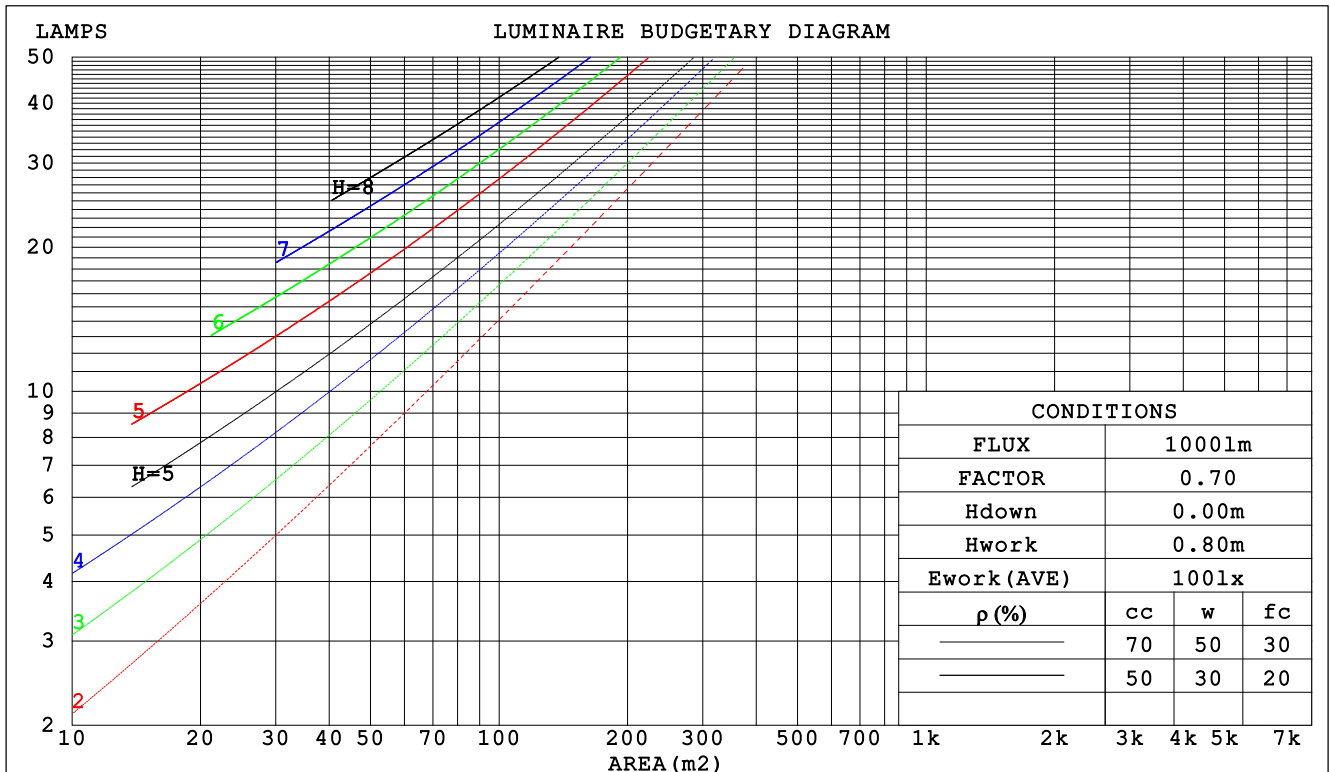
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:29 December 2018

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:119.99V I:0.3571A P:42.748W PF:0.9976 Freq:59.98Hz Lamp Flux:5520.76x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/Lumileds 5050/3000K	DIM.: 265*265*150mm	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															



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:CL
 Test Date:29 December 2018

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:119.99V I:0.3571A P:42.748W PF:0.9976 Freq:59.98Hz Lamp Flux:5520.76x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/Lumileds 5050/3000K	DIM.: 265*265*150mm	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	.359	.204	.065	.351	.200	.064	.338	.194	.062	.325	.188	.060	.314	.182	.059		
2.0	.323	.177	.054	.317	.174	.054	.305	.169	.053	.294	.165	.052	.283	.160	.051		
3.0	.293	.156	.047	.287	.154	.046	.277	.150	.046	.267	.146	.045	.258	.143	.044		
4.0	.267	.139	.041	.262	.137	.041	.253	.134	.040	.244	.131	.039	.236	.128	.039		
5.0	.245	.125	.036	.240	.123	.036	.232	.121	.036	.224	.118	.035	.217	.116	.035		
6.0	.225	.113	.032	.221	.112	.032	.214	.110	.032	.207	.108	.032	.200	.106	.031		
7.0	.209	.103	.029	.205	.102	.029	.199	.100	.029	.192	.099	.029	.186	.097	.028		
8.0	.194	.095	.027	.191	.094	.027	.185	.092	.026	.179	.091	.026	.174	.089	.026		
9.0	.181	.088	.024	.178	.087	.024	.173	.086	.024	.168	.084	.024	.163	.083	.024		
10.0	.170	.081	.023	.167	.081	.023	.163	.080	.022	.158	.078	.022	.154	.077	.022		

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	.184	.156	.131	.157	.134	.112	.107	.092	.078	.062	.053	.045	.020	.017	.015	
2.0	.176	.132	.094	.151	.113	.081	.104	.078	.057	.060	.046	.033	.019	.015	.011	
3.0	.169	.114	.071	.145	.099	.062	.099	.069	.043	.057	.040	.025	.018	.013	.008	
4.0	.161	.101	.056	.138	.088	.048	.095	.061	.034	.055	.036	.020	.018	.012	.007	
5.0	.154	.091	.045	.132	.079	.039	.091	.055	.028	.053	.032	.016	.017	.011	.005	
6.0	.146	.083	.037	.126	.072	.033	.087	.050	.023	.050	.030	.014	.016	.010	.005	
7.0	.139	.076	.032	.120	.066	.028	.083	.046	.020	.048	.027	.012	.016	.009	.004	
8.0	.132	.070	.028	.114	.061	.024	.079	.043	.017	.046	.025	.010	.015	.008	.003	
9.0	.126	.065	.024	.109	.057	.021	.075	.040	.015	.044	.024	.009	.014	.008	.003	
10.0	.120	.061	.022	.104	.053	.019	.072	.037	.013	.042	.022	.008	.014	.007	.003	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:29 December 2018

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:119.99V I:0.3571A P:42.748W PF:0.9976 Freq:59.98Hz Lamp Flux:5520.76x1 lm										
NAME: LED Explosion-proof Flood Light					TYPE:Floodlight			WEIGHT:N/A		
SPEC.:45W/Lumileds 5050/3000K					DIM.: 265*265*150mm			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	17.2	18.8	17.5	19.1	19.3	17.5	19.1	17.8	19.3	19.6
3H	18.9	20.4	19.2	20.6	20.9	19.1	20.6	19.4	20.9	21.1
4H	19.6	21.0	19.9	21.3	21.6	19.8	21.3	20.2	21.5	21.8
6H	20.3	21.7	20.7	22.0	22.2	20.5	21.8	20.8	22.1	22.4
8H	20.7	22.0	21.0	22.3	22.6	20.8	22.1	21.2	22.4	22.7
12H	21.1	22.4	21.5	22.7	23.0	21.2	22.5	21.6	22.8	23.1
4H 2H	17.9	19.3	18.2	19.6	19.9	18.1	19.6	18.5	19.8	20.1
3H	19.7	21.0	20.1	21.3	21.6	20.0	21.2	20.3	21.5	21.8
4H	20.6	21.8	21.0	22.1	22.5	20.8	22.0	21.2	22.3	22.6
6H	21.5	22.5	21.9	22.9	23.3	21.6	22.7	22.0	23.0	23.4
8H	22.0	22.9	22.4	23.3	23.7	22.1	23.0	22.5	23.4	23.8
12H	22.5	23.4	22.9	23.8	24.2	22.6	23.5	23.0	23.9	24.3
8H 4H	21.0	22.0	21.4	22.3	22.7	21.1	22.1	21.5	22.5	22.9
6H	22.1	22.9	22.5	23.3	23.7	22.2	23.0	22.6	23.4	23.8
8H	22.7	23.4	23.2	23.9	24.3	22.8	23.5	23.2	23.9	24.4
12H	23.5	24.1	23.9	24.6	25.0	23.5	24.1	24.0	24.6	25.1
12H 4H	21.0	21.9	21.5	22.3	22.7	21.2	22.1	21.6	22.5	22.9
6H	22.2	23.0	22.7	23.4	23.8	22.3	23.0	22.8	23.5	23.9
8H	22.9	23.6	23.4	24.0	24.5	23.0	23.6	23.5	24.1	24.6
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.4					+ 0.2 / - 0.4				

CIE Pub.117, 5521 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 5.9$)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:29 December 2018

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:119.99V I:0.3571A P:42.748W PF:0.9976 Freq:59.98Hz Lamp Flux:5520.76x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/Lumileds 5050/3000K	DIM.: 265*265*150mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

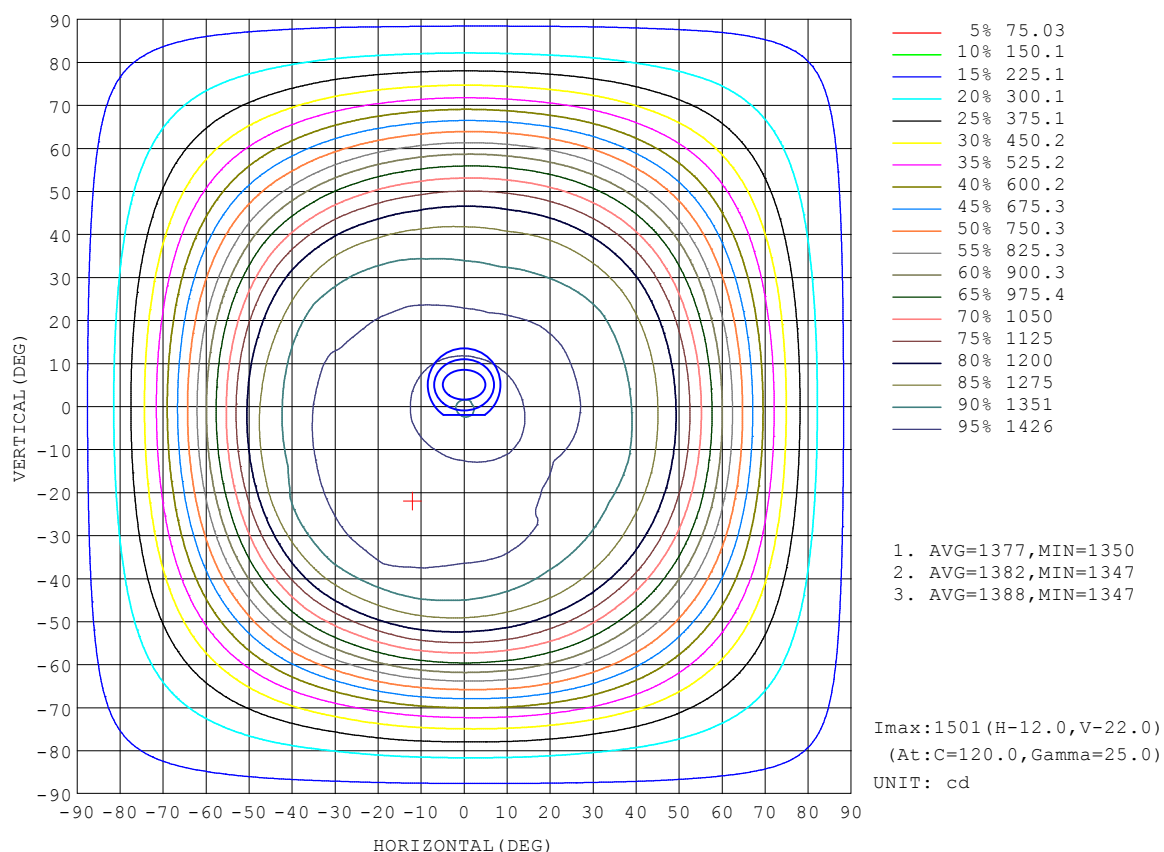
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	53	41	34	53	41	34	51	40	33	27
0.80	64	51	43	62	51	43	61	50	43	35
1.00	72	60	52	71	60	52	69	61	51	44
1.25	79	68	60	78	67	60	75	66	59	51
1.50	85	74	66	83	73	65	80	71	64	56
2.00	92	82	75	90	81	74	86	79	73	64
2.50	96	87	81	94	86	80	90	83	78	69
3.00	100	92	86	97	90	84	93	87	82	73
4.00	104	97	92	101	96	91	97	92	88	79
5.00	107	101	96	104	99	95	99	95	92	82
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHR NOM = 1.25		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:29 December 2018

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:119.99V I:0.3571A P:42.748W PF:0.9976 Freq:59.98Hz Lamp Flux:5520.76x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/Lumileds 5050/3000K	DIM.: 265*265*150mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A



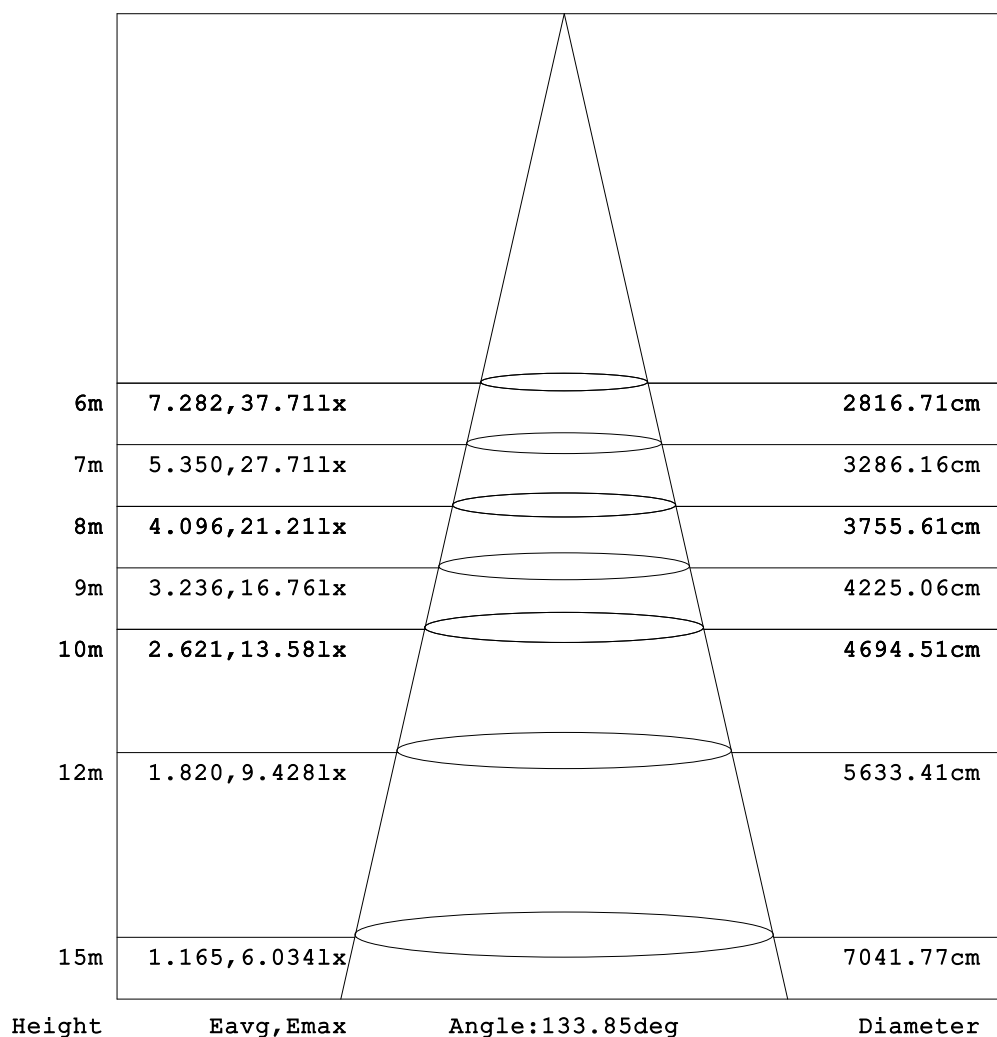
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:29 December 2018

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:119.99V I:0.3571A P:42.748W PF:0.9976 Freq:59.98Hz Lamp Flux:5520.76x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/Lumileds 5050/3000K	DIM.: 265*265*150mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

Flux out:4571 lm



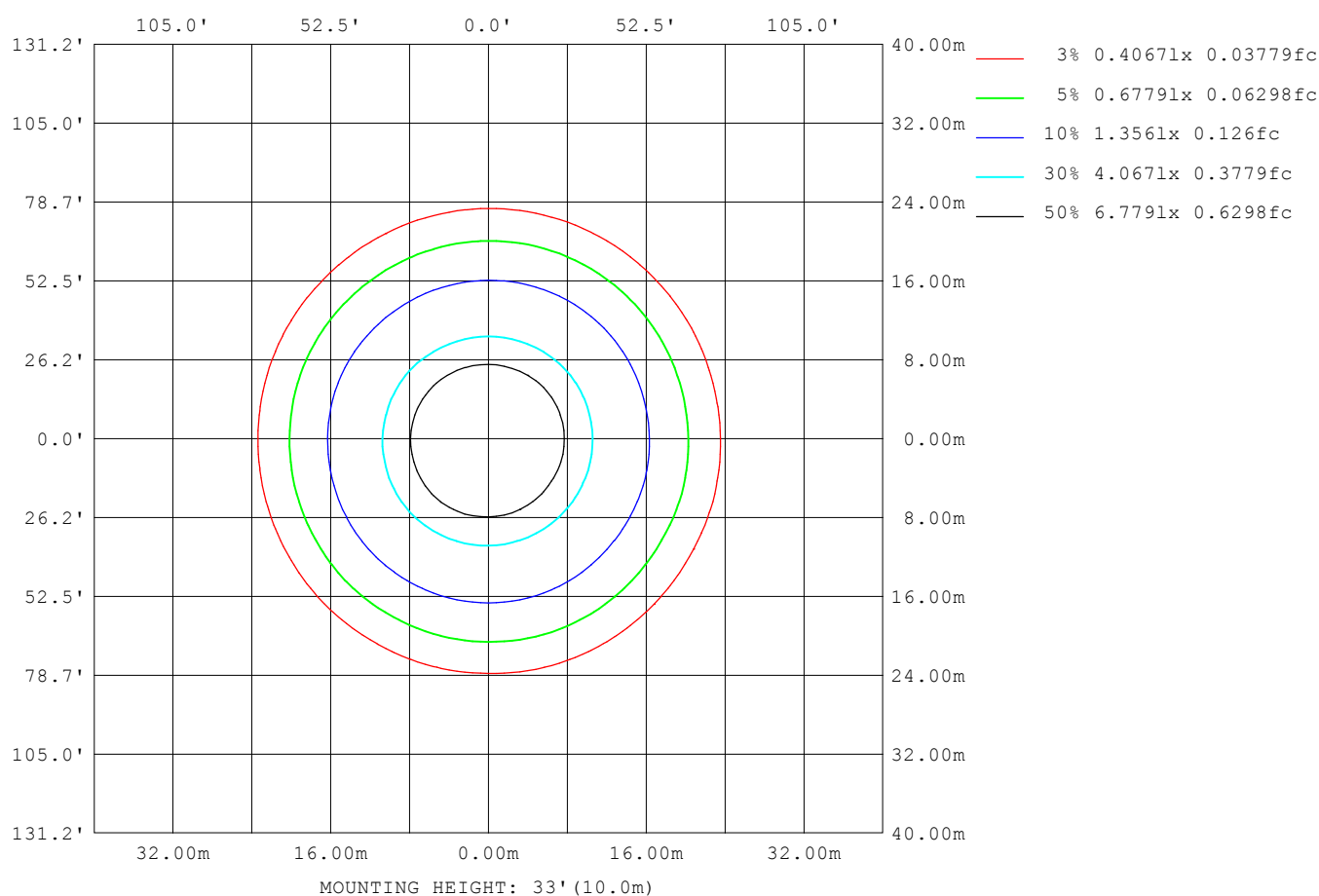
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:29 December 2018

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:119.99V I:0.3571A P:42.748W PF:0.9976 Freq:59.98Hz Lamp Flux:5520.76x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/Lumileds 5050/3000K	DIM.: 265*265*150mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:29 December 2018

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:119.99V I:0.3571A P:42.748W PF:0.9976 Freq:59.98Hz Lamp Flux:5520.76x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/Lumileds 5050/3000K	DIM.: 265*265*150mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

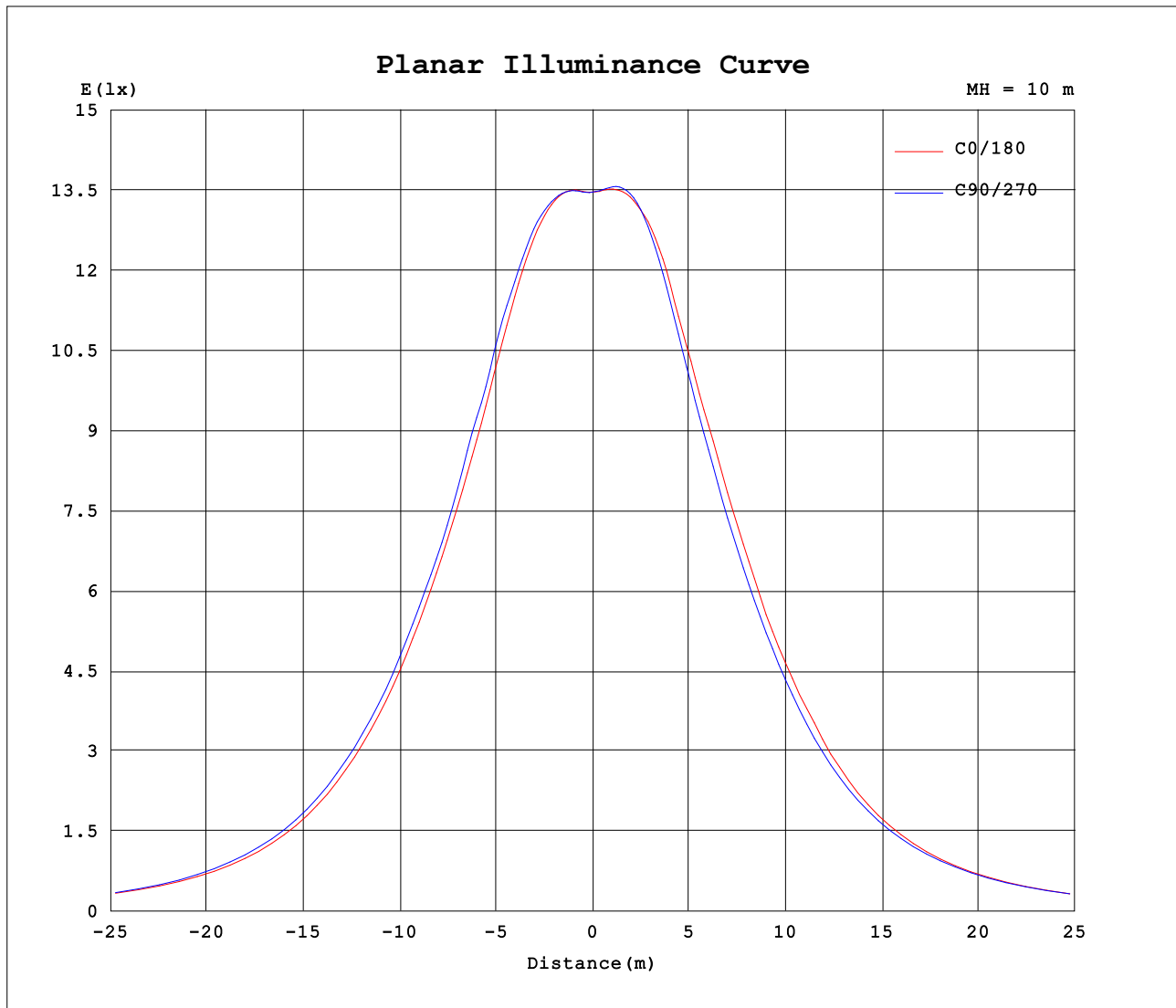
AvgL	cd/m2
L_0~180 (65) av	17390
L_0~180 (75) av	17020
L_0~180 (85) av	29366
L_90~270 (65) av	17723
L_90~270 (75) av	17206
L_90~270 (85) av	29615
L_45 (65) av	17535
L_45 (75) av	17089
L_45 (85) av	29475

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:29 December 2018

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: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: CL
 Test Date: 29 December 2018

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:119.99V I:0.3571A P:42.748W PF:0.9976 Freq:59.98Hz Lamp Flux:5520.76x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/Lumileds 5050/3000K	DIM.: 265*265*150mm	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: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: CL
Test Date: 29 December 2018

```

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:119.99V I:0.3571A P:42.748W PF:0.9976 Freq:59.98Hz Lamp Flux:5520.76x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/Lumileds 5050/3000K	DIM.: 265*265*150mm	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: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: CL
Test Date: 29 December 2018

```

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:

```