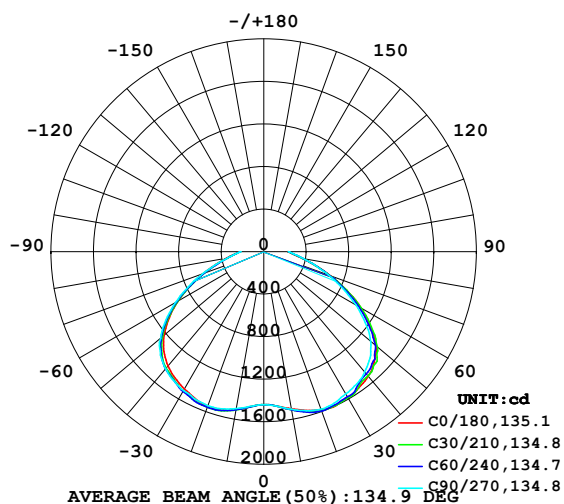


LUMINAIRE PHOTOMETRIC TEST REPORT

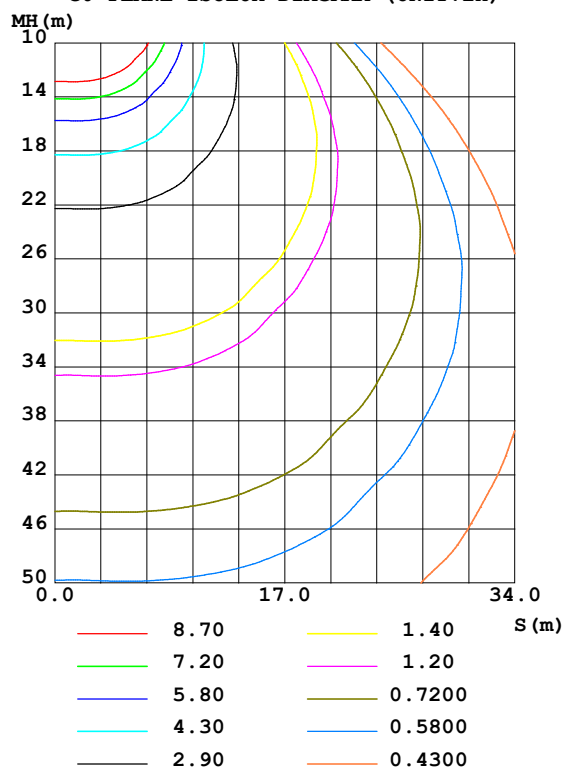
Test:U:119.84V I:0.3544A P:42.371W PF:0.9976 Freq:59.98Hz Lamp Flux:5963.25x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/Lumileds 5050/4000K	DIM.: 265*265*150mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

DATA OF LAMP		PHOTOMETRIC DATA Eff: 140.74 lm/W			
MODEL	FEL-D-45-2	I _{max} (cd)	1601	S/MH(C0/180)	1.53
NOMINAL POWER(W)	45	LOR(%)	100.0	S/MH(C90/270)	1.56
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	5963.2	η UP,DN(C0-180)	0.0,50.6
NOMINAL FLUX(lm)	5963.25	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.4
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	1501	1510	1505	1498	1505	1512	1498	1491	0- 10	140.8	140.8	2.36,2.36
20	1581	1594	1577	1536	1545	1558	1540	1544	10- 20	436.7	577.5	9.68,9.68
30	1581	1582	1545	1495	1492	1518	1510	1534	20- 30	717.3	1295	21.7,21.7
40	1529	1506	1477	1411	1402	1432	1437	1489	30- 40	942.0	2237	37.5,37.5
50	1377	1391	1315	1222	1222	1250	1268	1335	40- 50	1076	3313	55.6,55.6
60	1055	1042	997.3	939.0	932.4	936.6	959.5	1026	50- 60	1028	4341	72.8,72.8
70	669.0	663.4	649.7	627.9	609.1	592.5	613.9	651.8	60- 70	800.9	5141	86.2,86.2
80	366.9	373.9	376.6	368.4	354.7	343.7	343.0	352.6	70- 80	514.0	5655	94.8,94.8
90	223.1	227.1	232.1	229.7	223.3	217.8	215.7	218.0	80- 90	307.8	5963	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): 2767 lm

%lum = 46.4%

%lamp = 46.4%

Conical surface Flux(120deg): 4340.6 lm

%lum = 72.8%

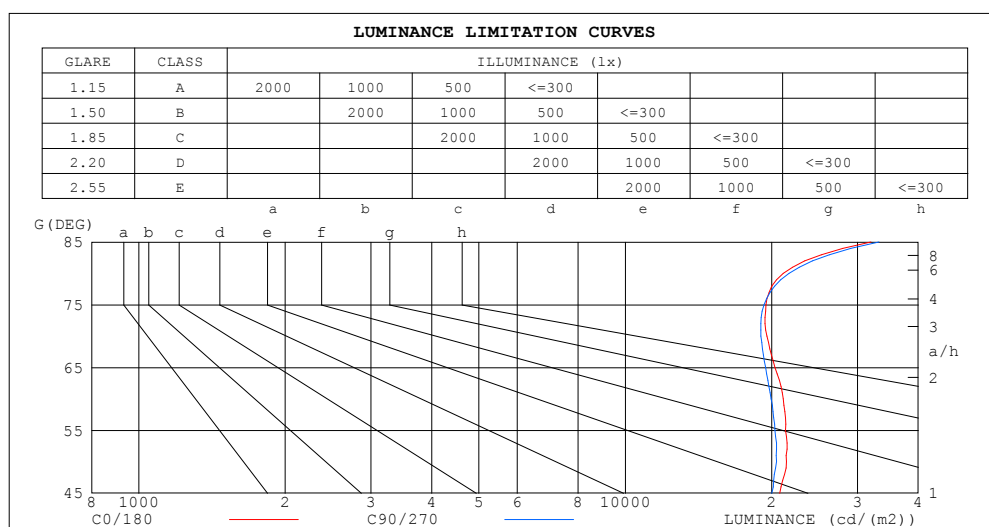
%lamp = 72.8%

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:119.84V I:0.3544A P:42.371W PF:0.9976 Freq:59.98Hz Lamp Flux:5963.25x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/Lumileds 5050/4000K	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	31967	33212
80	21132	21690
75	19456	19279
70	19559	18996
65	20312	19423
60	21106	19947
55	21360	20316
50	21429	20459
45	20779	20001

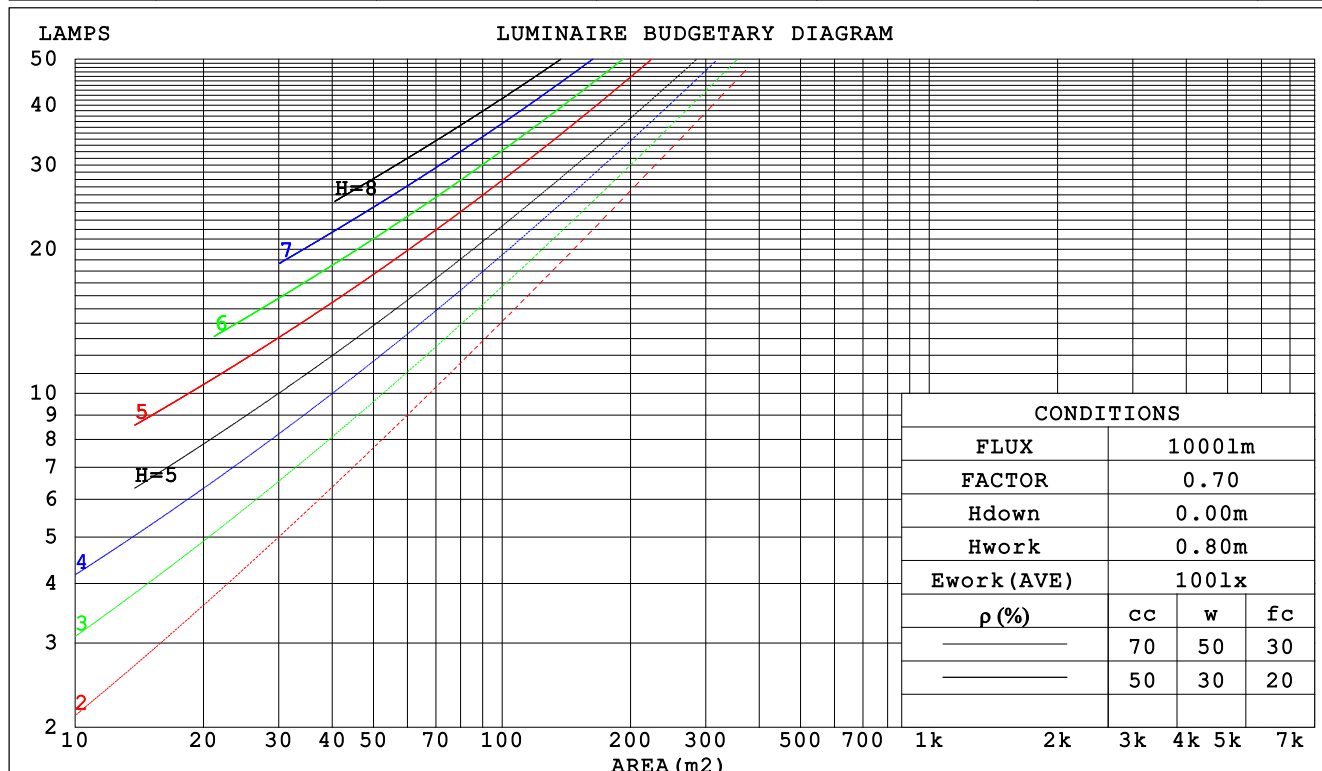
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:29 December 2018

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:119.84V I:0.3544A P:42.371W PF:0.9976 Freq:59.98Hz Lamp Flux:5963.25x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/Lumileds 5050/4000K	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						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	1.01	.96	.92	.99	.94	.90	.95	.91	.87	.91	.88	.85	.87	.84	.82	.80
2.0	.87	.79	.73	.85	.78	.72	.82	.76	.70	.78	.73	.69	.75	.71	.67	.65
3.0	.76	.67	.60	.74	.66	.59	.71	.64	.58	.68	.62	.57	.65	.60	.56	.54
4.0	.66	.57	.50	.65	.56	.49	.62	.55	.49	.60	.53	.48	.58	.52	.47	.45
5.0	.59	.49	.42	.58	.49	.42	.56	.48	.41	.54	.46	.41	.52	.45	.40	.38
6.0	.53	.43	.36	.52	.43	.36	.50	.42	.36	.48	.41	.35	.46	.40	.35	.33
7.0	.47	.38	.32	.47	.38	.32	.45	.37	.31	.44	.36	.31	.42	.36	.31	.29
8.0	.43	.34	.28	.42	.34	.28	.41	.33	.28	.40	.33	.28	.39	.32	.27	.25
9.0	.39	.31	.25	.39	.31	.25	.38	.30	.25	.36	.30	.25	.35	.29	.24	.23
10.0	.36	.28	.22	.36	.28	.22	.35	.27	.22	.34	.27	.22	.33	.27	.22	.20



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:119.84V I:0.3544A P:42.371W PF:0.9976 Freq:59.98Hz Lamp Flux:5963.25x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/Lumileds 5050/4000K	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	.352	.201	.064	.339	.194	.062	.326	.188	.060	.315	.182	.059		
2.0	.324	.177	.054	.317	.175	.054	.305	.170	.053	.294	.165	.052	.284	.161	.051		
3.0	.294	.156	.047	.288	.154	.046	.277	.150	.046	.267	.147	.045	.258	.143	.044		
4.0	.267	.139	.041	.262	.137	.041	.253	.134	.040	.244	.131	.040	.236	.128	.039		
5.0	.245	.125	.036	.241	.124	.036	.232	.121	.036	.224	.118	.035	.217	.116	.035		
6.0	.226	.113	.032	.222	.112	.032	.214	.110	.032	.207	.108	.032	.201	.106	.031		
7.0	.209	.103	.029	.206	.102	.029	.199	.101	.029	.193	.099	.029	.187	.097	.029		
8.0	.194	.095	.027	.191	.094	.027	.185	.093	.026	.180	.091	.026	.174	.090	.026		
9.0	.181	.088	.025	.179	.087	.024	.173	.086	.024	.168	.084	.024	.164	.083	.024		
10.0	.170	.082	.023	.168	.081	.023	.163	.080	.022	.158	.079	.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	.130	.157	.134	.112	.108	.092	.078	.062	.053	.045	.020	.017	.015	
2.0	.177	.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	.133	.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:119.84V I:0.3544A P:42.371W PF:0.9976 Freq:59.98Hz Lamp Flux:5963.25x1 lm										
NAME: LED Explosion-proof Flood Light					TYPE:Floodlight			WEIGHT:N/A		
SPEC.:45W/Lumileds 5050/4000K					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	17.7	19.3	18.0	19.5	19.7	17.5	19.1	17.7	19.3	19.5
3H	19.3	20.8	19.6	21.0	21.3	19.1	20.6	19.4	20.8	21.1
4H	20.0	21.4	20.3	21.7	22.0	19.8	21.3	20.1	21.5	21.8
6H	20.7	22.0	21.0	22.3	22.6	20.5	21.9	20.9	22.2	22.5
8H	21.0	22.3	21.3	22.6	22.9	20.9	22.2	21.3	22.5	22.8
12H	21.4	22.7	21.7	23.0	23.3	21.3	22.6	21.7	22.9	23.2
4H 2H	18.3	19.7	18.6	20.0	20.3	18.1	19.6	18.5	19.8	20.1
3H	20.1	21.4	20.5	21.7	22.0	19.9	21.2	20.3	21.5	21.8
4H	21.0	22.1	21.3	22.5	22.8	20.8	22.0	21.2	22.3	22.7
6H	21.8	22.8	22.2	23.2	23.6	21.7	22.8	22.1	23.1	23.5
8H	22.2	23.2	22.6	23.6	24.0	22.2	23.2	22.6	23.5	23.9
12H	22.7	23.6	23.2	24.0	24.4	22.7	23.6	23.2	24.0	24.4
8H 4H	21.3	22.3	21.7	22.6	23.0	21.2	22.2	21.6	22.5	22.9
6H	22.4	23.2	22.8	23.6	24.0	22.3	23.1	22.7	23.5	24.0
8H	22.9	23.7	23.4	24.1	24.6	22.9	23.7	23.4	24.1	24.5
12H	23.7	24.3	24.1	24.8	25.2	23.7	24.3	24.2	24.8	25.3
12H 4H	21.3	22.2	21.8	22.6	23.0	21.2	22.1	21.7	22.5	22.9
6H	22.5	23.2	23.0	23.7	24.1	22.4	23.2	22.9	23.6	24.1
8H	23.2	23.8	23.7	24.3	24.7	23.2	23.8	23.6	24.2	24.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.4					+ 0.2 / - 0.4				
2.0H	+ 0.2 / - 0.4					+ 0.2 / - 0.4				

CIE Pub.117, 5963 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 6.2$)

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:119.84V I:0.3544A P:42.371W PF:0.9976 Freq:59.98Hz Lamp Flux:5963.25x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/Lumileds 5050/4000K	DIM.: 265*265*150mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

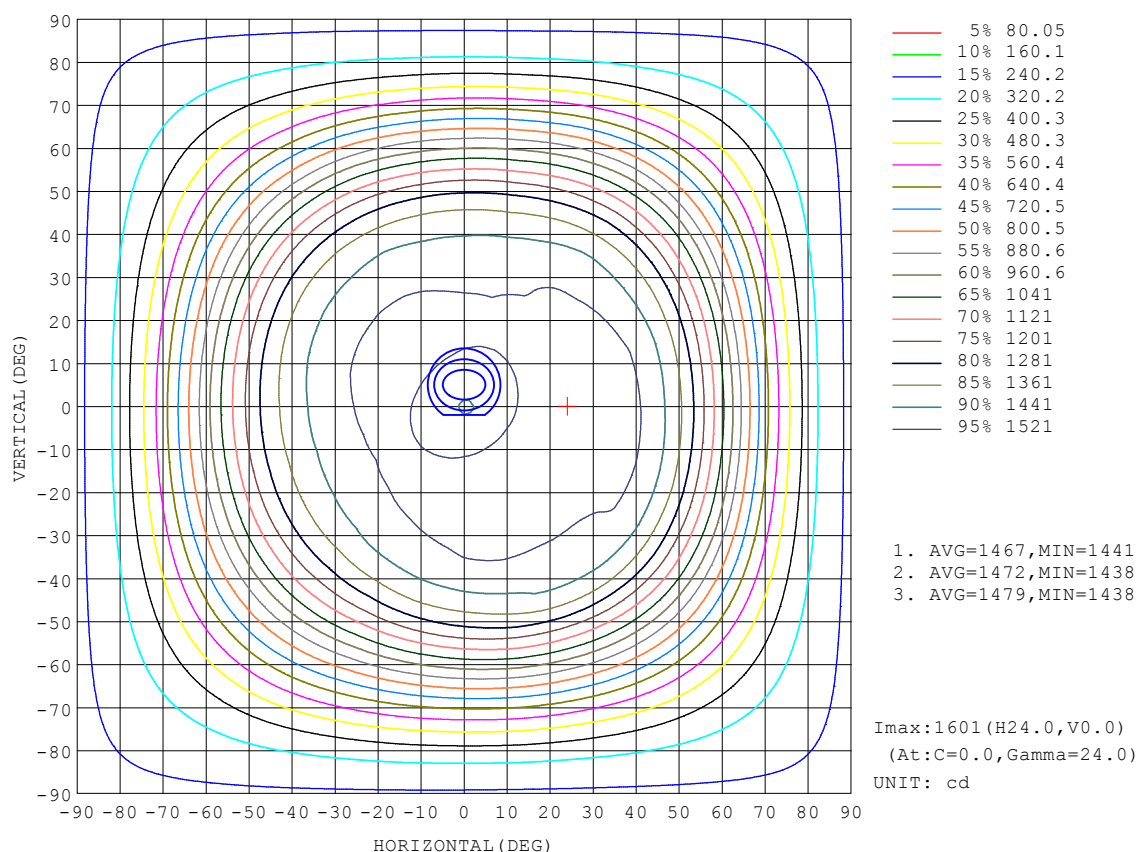
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	53	41	34	53	41	33	51	40	33	26
0.80	63	51	43	62	50	43	60	50	42	35
1.00	72	60	52	71	59	52	68	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	80	94	86	79	90	83	78	69
3.00	100	92	85	97	90	84	93	87	82	73
4.00	104	97	92	101	96	91	97	92	88	78
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					SHRNOM = 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:119.84V I:0.3544A P:42.371W PF:0.9976 Freq:59.98Hz Lamp Flux:5963.25x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/Lumileds 5050/4000K	DIM.: 265*265*150mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A



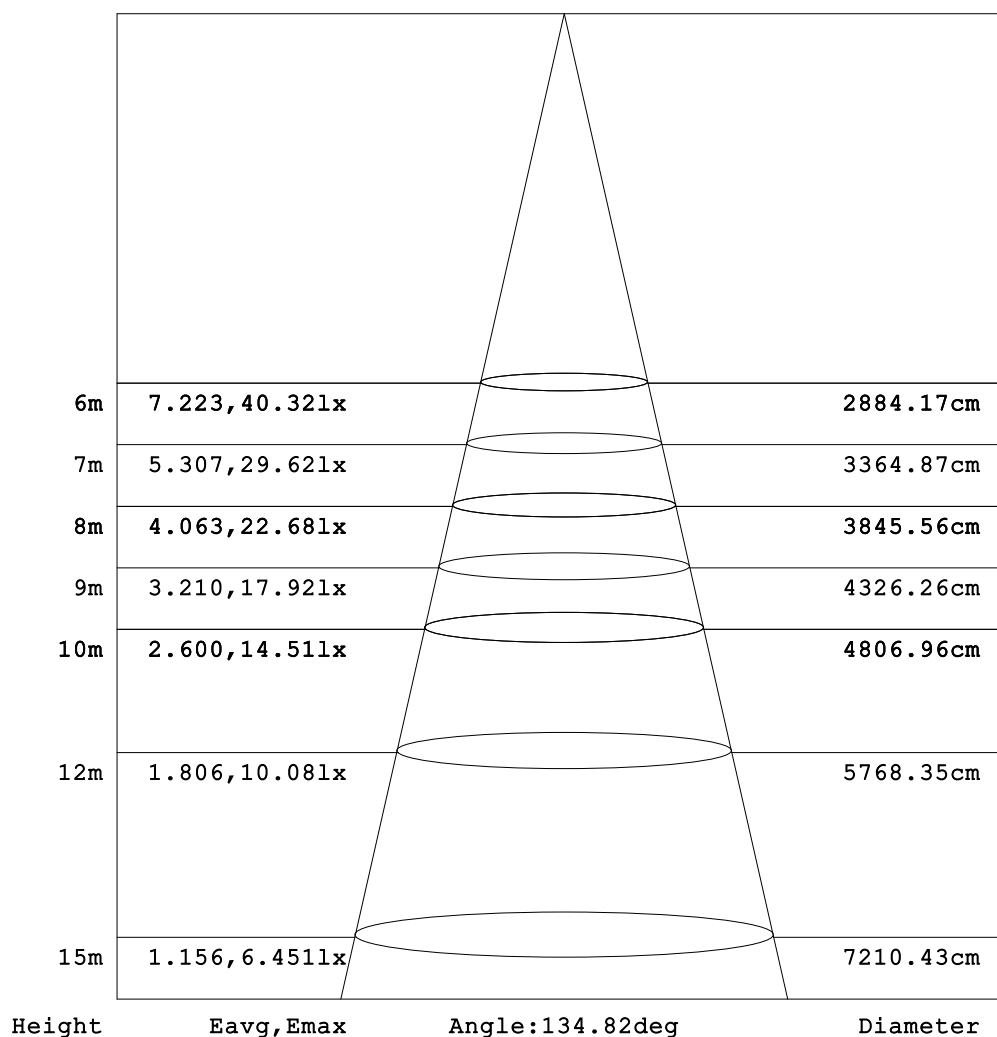
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CL
Test Date:29 December 2018

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:119.84V I:0.3544A P:42.371W PF:0.9976 Freq:59.98Hz Lamp Flux:5963.25x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/Lumileds 5050/4000K	DIM.: 265*265*150mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

Flux out:5005 lm



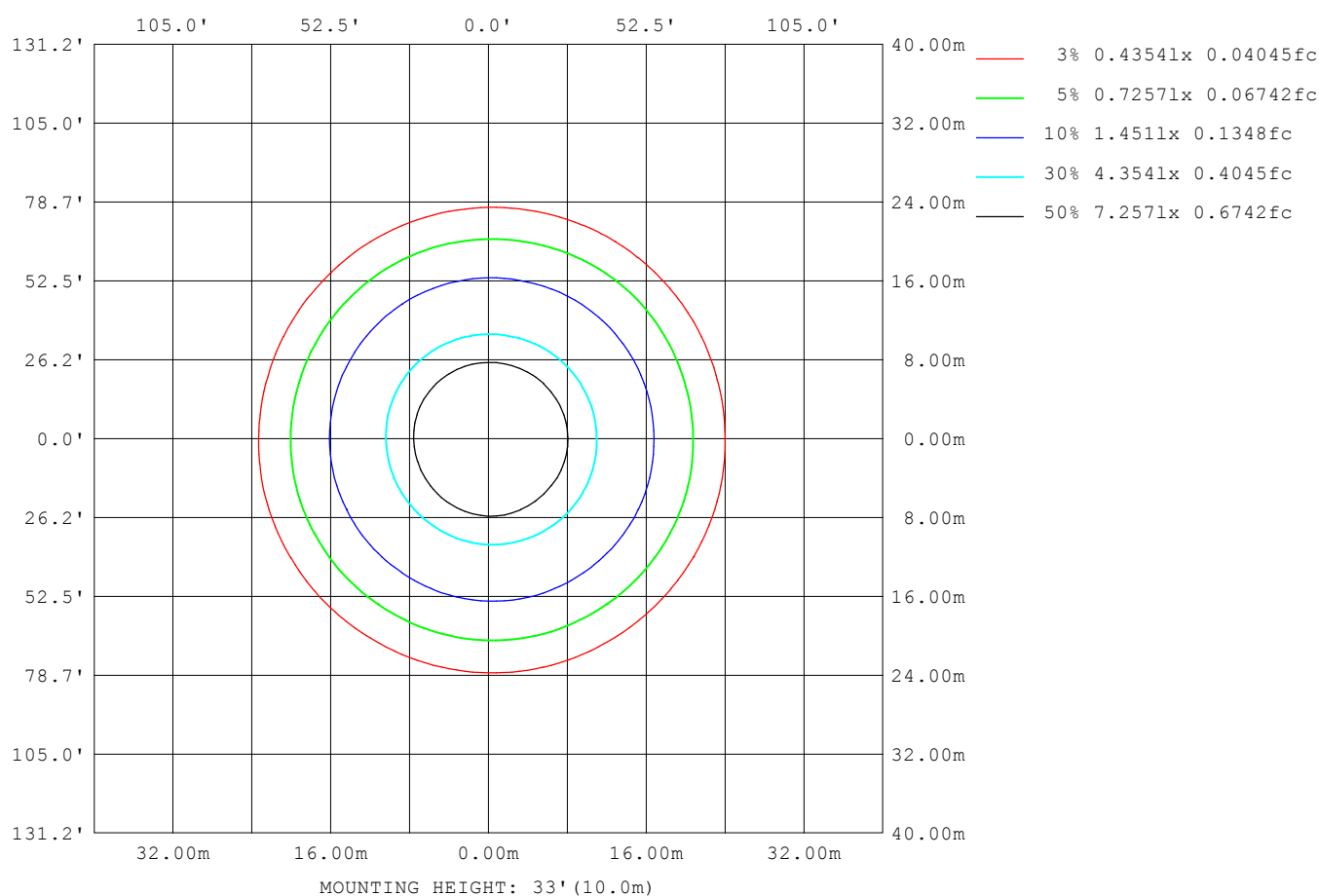
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:119.84V I:0.3544A P:42.371W PF:0.9976 Freq:59.98Hz Lamp Flux:5963.25x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/Lumileds 5050/4000K	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:119.84V I:0.3544A P:42.371W PF:0.9976 Freq:59.98Hz Lamp Flux:5963.25x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/Lumileds 5050/4000K	DIM.: 265*265*150mm	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

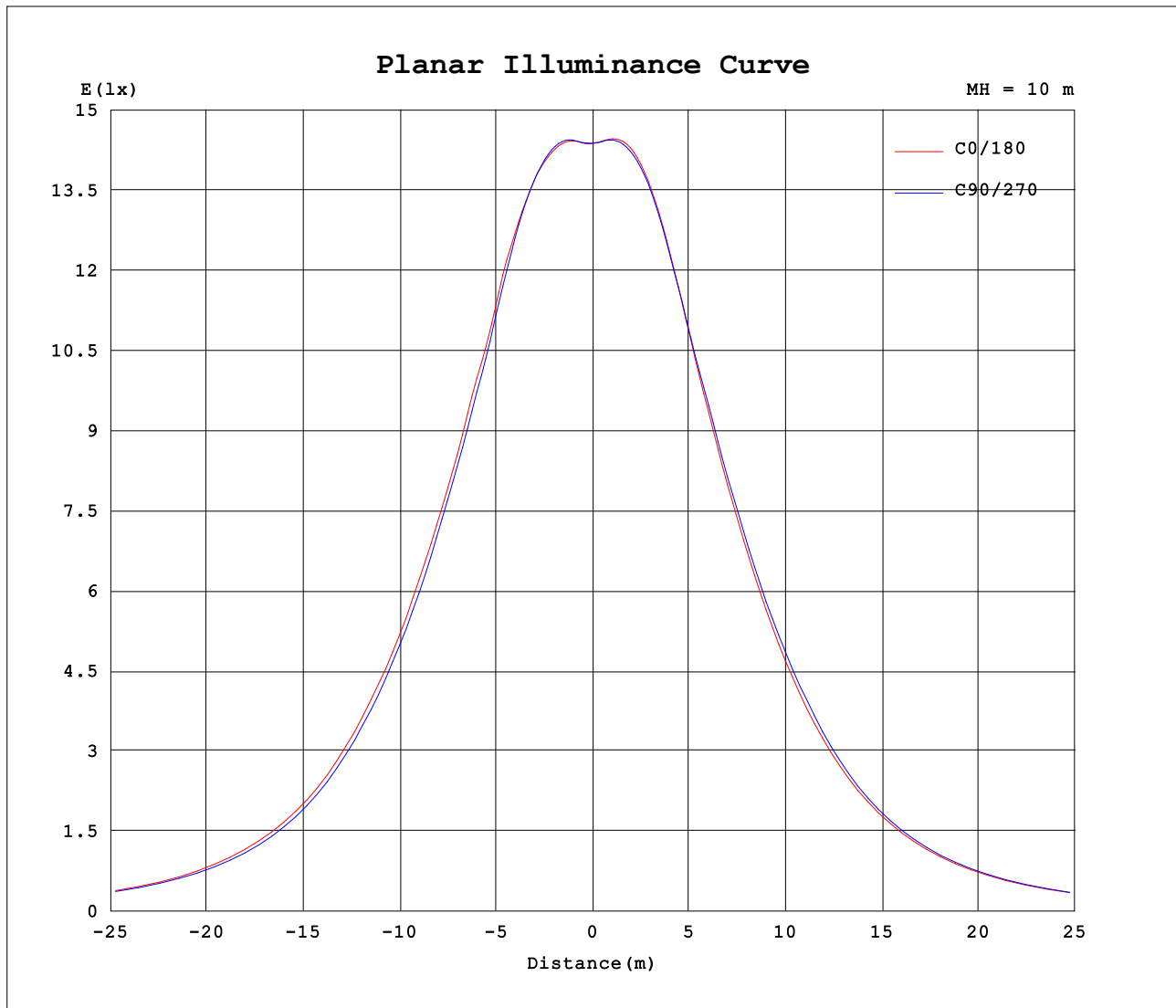
AvgL	cd/m2
L_0~180 (65) av	19248
L_0~180 (75) av	18751
L_0~180 (85) av	31829
L_90~270 (65) av	18988
L_90~270 (75) av	18549
L_90~270 (85) av	31848
L_45 (65) av	19114
L_45 (75) av	18584
L_45 (85) av	31788

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:119.84V I:0.3544A P:42.371W PF:0.9976 Freq:59.98Hz Lamp Flux:5963.25x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/Lumileds 5050/4000K	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:119.84V I:0.3544A P:42.371W PF:0.9976 Freq:59.98Hz Lamp Flux:5963.25x1 lm		
NAME: LED Explosion-proof Flood Light	TYPE:Floodlight	WEIGHT:N/A
SPEC.:45W/Lumileds 5050/4000K	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:

```