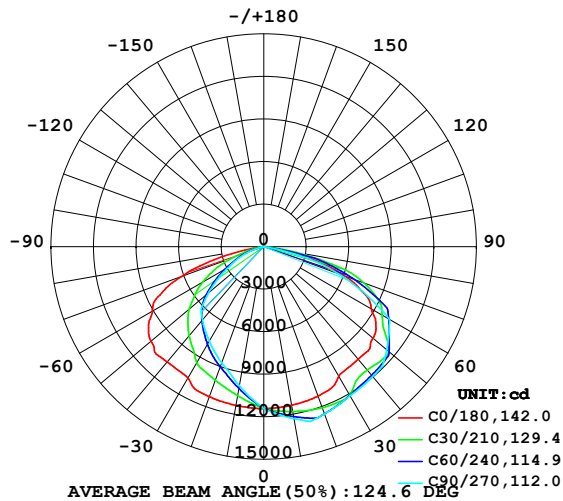


LUMINAIRE PHOTOMETRIC TEST REPORT

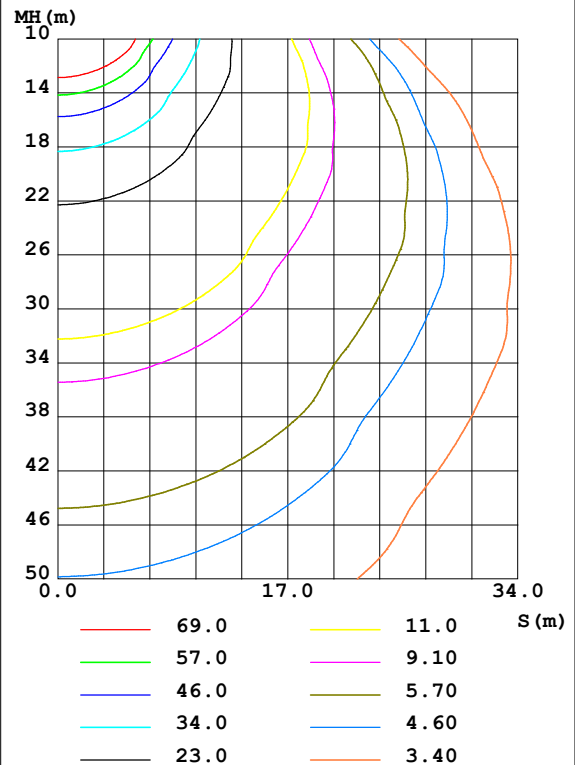
Test:U:120.57V I:2.5608A P:307.62W PF:0.9963 Freq:59.98Hz Lamp Flux:39114x1 lm		
NAME: GSM-45-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:300W/5000K	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

DATA OF LAMP		PHOTOMETRIC DATA Eff: 127.15 lm/W			
MODEL	GSM-45-U	Imax(cd)	12759	S/MH(C0/180)	1.43
NOMINAL POWER(W)	300	LOR(%)	100.0	S/MH(C90/270)	1.01
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	39114	□ UP,DN(C0-180)	0.0,62.7
NOMINAL FLUX(lm)	39114	CIE CLASS	DIRECT	□ UP,DN(C180-360)	0.0,37.3
LAMPS INSIDE	1	□ up(%)	0.0	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	□ down(%)	100.0	CIBSE SHR MAX	1.55

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-02-26

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:7.468m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

°	C0	C45	C90	C135	C180	C225	C270	C315	°	□ zone	□ total	%lum, lamp
10	1136	1200	1231	1201	1137	1038	996.2	1038	0- 10	1077	1077	2.75, 2.75
20	1121	1252	1255	1253	1126	944.9	871.8	947.3	10- 20	3141	4218	10.8, 10.8
30	1057	1210	1215	1214	1070	852.6	769.4	854.2	20- 30	4931	9149	23.4, 23.4
40	1036	1148	1196	1152	1062	707.8	673.7	710.2	30- 40	6266	15415	39.4, 39.4
50	1006	1154	1132	1173	1038	570.9	509.8	578.3	40- 50	7283	22698	58, 58
60	876.5	1028	1024	1007	907.0	380.6	277.7	389.5	50- 60	7311	30009	76.7, 76.7
70	602.9	794.5	556.1	784.6	616.2	184.3	122.0	191.4	60- 70	6030	36038	92.1, 92.1
80	131.7	280.7	0	229.0	118.3	20.39	0	21.31	70- 80	2921	38959	99.6, 99.6
90	1.470	0	0	0	1.540	0	0	0	80- 90	155.0	39114	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:×10cd									UNIT:lm		

Conical surface Flux(90deg): 18965 lm

%lum = 48.5%

%lamp = 48.5%

Conical surface Flux(120deg): 30009 lm

%lum = 76.7%

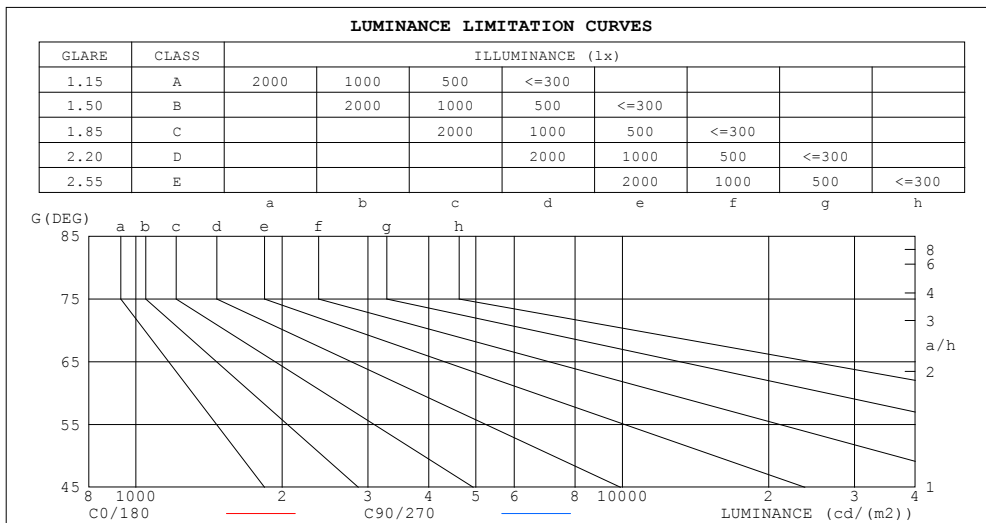
%lamp = 76.7%

H(□) Range:-90 - 90DEG
 H(□) Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Gu
 Test Date:2025-02-26

V(B) Range:-75 - 75DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
 Humidity:65.0%
 Test Distance:7.468m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.57V I:2.5608A P:307.62W PF:0.9963 Freq:59.98Hz Lamp Flux:39114x1 lm		
NAME: GSM-45-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:300W/5000K	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A



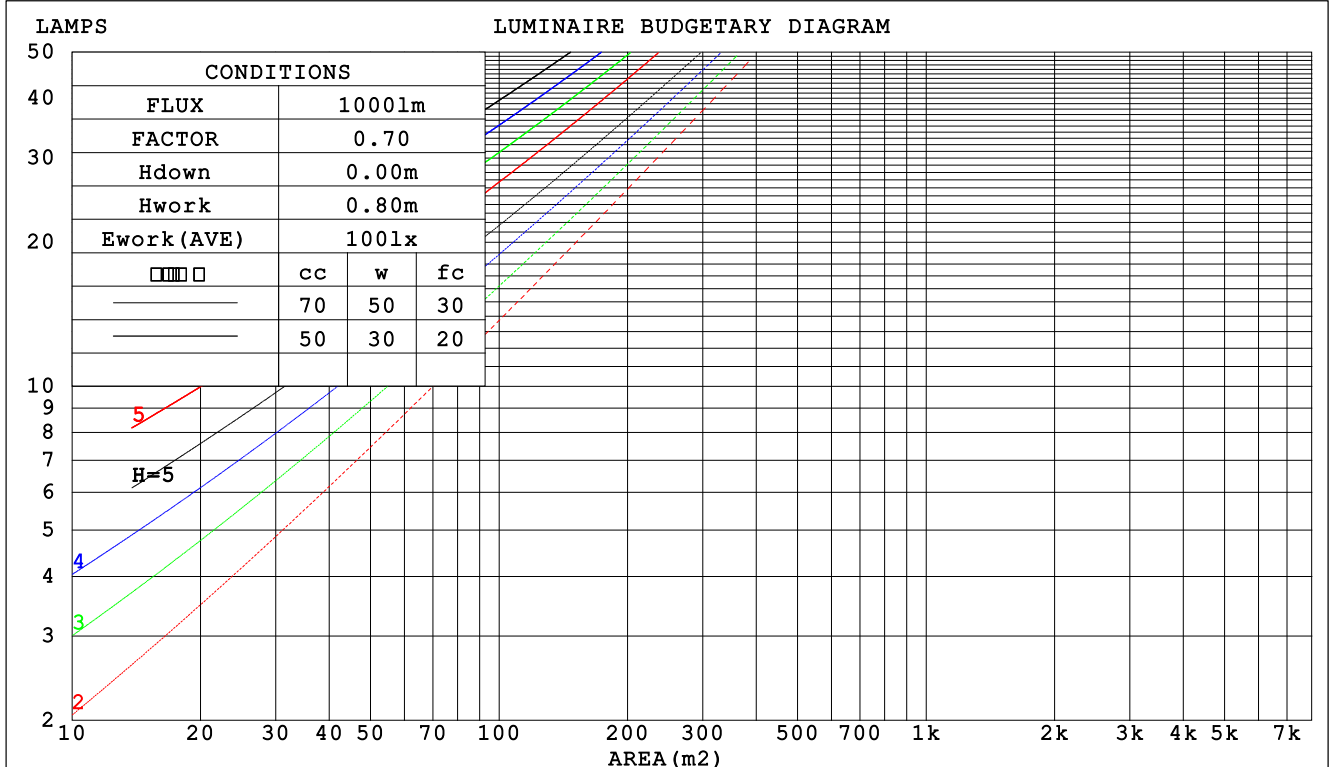
H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-02-26

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:7.468m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.57V I:2.5608A P:307.62W PF:0.9963 Freq:59.98Hz Lamp Flux:39114x1 lm		
NAME: GSM-45-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:300W/5000K	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

□cc	80%			70%			50%			30%			10%			0
□w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
□fc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															



H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-02-26

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:7.468m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:120.57V I:2.5608A P:307.62W PF:0.9963 Freq:59.98Hz Lamp Flux:39114x1 lm					
NAME: GSM-45-U			TYPE:Flood Light		WEIGHT:N/A
SPEC.:300W/5000K			DIM.: 190*150mm		SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.			SUR.:N/A		Shielding Angle:N/A

□cc	80%			70%			50%			30%			10%			0	
□w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
□fc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)										
0.0																	
1.0	.309	.176	.056	.302	.172	.055	.289	.166	.053	.277	.160	.051	.265	.154	.050		
2.0	.299	.164	.050	.292	.161	.050	.281	.156	.048	.270	.151	.047	.260	.147	.046		
3.0	.279	.148	.044	.273	.146	.044	.263	.142	.043	.253	.139	.043	.244	.135	.042		
4.0	.258	.134	.039	.253	.132	.039	.243	.129	.039	.235	.126	.038	.227	.123	.038		
5.0	.238	.121	.035	.234	.120	.035	.226	.117	.035	.218	.115	.034	.211	.113	.034		
6.0	.221	.111	.032	.217	.110	.032	.209	.107	.031	.203	.105	.031	.196	.103	.031		
7.0	.205	.101	.029	.202	.100	.029	.195	.099	.028	.189	.097	.028	.183	.095	.028		
8.0	.191	.093	.026	.188	.093	.026	.182	.091	.026	.177	.090	.026	.171	.088	.026		
9.0	.179	.087	.024	.176	.086	.024	.171	.084	.024	.166	.083	.024	.161	.082	.024		
10.0	.168	.081	.022	.165	.080	.022	.161	.079	.022	.156	.078	.022	.152	.076	.022		

□cc	80%			70%			50%			30%			10%			0
□w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
□fc	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	.180	.156	.134	.154	.134	.116	.105	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.173	.132	.097	.148	.114	.084	.102	.079	.059	.059	.046	.034	.019	.015	.011	
3.0	.166	.114	.073	.142	.099	.063	.098	.069	.044	.056	.040	.026	.018	.013	.009	
4.0	.159	.101	.057	.136	.087	.050	.094	.061	.035	.054	.036	.021	.017	.012	.007	
5.0	.152	.091	.046	.130	.079	.040	.090	.055	.028	.052	.032	.017	.017	.011	.006	
6.0	.145	.083	.038	.124	.072	.033	.086	.050	.023	.050	.029	.014	.016	.010	.005	
7.0	.138	.076	.032	.119	.066	.028	.082	.046	.020	.048	.027	.012	.015	.009	.004	
8.0	.131	.070	.028	.113	.061	.024	.078	.043	.017	.045	.025	.010	.015	.008	.003	
9.0	.125	.065	.025	.108	.056	.021	.075	.040	.015	.043	.023	.009	.014	.008	.003	
10.0	.119	.061	.022	.103	.053	.019	.071	.037	.014	.042	.022	.008	.013	.007	.003	

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-02-26

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:7.468m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.57V I:2.5608A P:307.62W PF:0.9963 Freq:59.98Hz Lamp Flux:39114x1 lm										
NAME: GSM-45-U					TYPE:Flood Light			WEIGHT:N/A		
SPEC.:300W/5000K					DIM.: 190*150mm			SERIAL No.:N/A		
MFR.: Grin Industrial 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	24.5	26.1	24.7	26.3	26.5	24.9	26.5	25.2	26.7	26.9
3H	26.5	27.9	26.8	28.2	28.4	26.5	28.0	26.8	28.2	28.5
4H	27.0	28.4	27.4	28.7	28.9	27.0	28.3	27.3	28.6	28.9
6H	27.2	28.5	27.5	28.8	29.1	27.0	28.3	27.3	28.5	28.8
8H	27.2	28.4	27.5	28.7	29.0	26.9	28.2	27.3	28.5	28.7
12H	27.1	28.3	27.5	28.6	28.9	26.9	28.1	27.2	28.4	28.7
4H 2H	25.5	26.9	25.8	27.2	27.4	25.8	27.2	26.1	27.5	27.7
3H	27.7	28.9	28.1	29.2	29.5	27.6	28.8	28.0	29.1	29.4
4H	28.4	29.5	28.8	29.8	30.1	28.2	29.3	28.5	29.6	29.9
6H	28.6	29.6	29.0	29.9	30.3	28.2	29.2	28.6	29.5	29.9
8H	28.6	29.5	29.0	29.9	30.2	28.1	29.1	28.6	29.4	29.8
12H	28.5	29.4	29.0	29.8	30.2	28.1	28.9	28.5	29.3	29.7
8H 4H	28.8	29.7	29.2	30.1	30.5	28.6	29.5	29.0	29.9	30.3
6H	29.1	29.9	29.6	30.3	30.7	28.7	29.5	29.2	29.9	30.3
8H	29.2	29.8	29.6	30.2	30.7	28.7	29.4	29.2	29.8	30.2
12H	29.1	29.7	29.6	30.1	30.6	28.7	29.2	29.1	29.7	30.2
12H 4H	28.8	29.6	29.2	30.0	30.4	28.6	29.5	29.1	29.9	30.3
6H	29.1	29.8	29.6	30.2	30.7	28.8	29.4	29.2	29.8	30.3
8H	29.2	29.7	29.6	30.2	30.7	28.7	29.3	29.2	29.7	30.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.1 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.5					+ 0.6 / - 0.9				

CIE Pub.117, 39114 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 12.7)
Area: 0.024 m2

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-02-26

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:7.468m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.57V I:2.5608A P:307.62W PF:0.9963 Freq:59.98Hz Lamp Flux:39114x1 lm		
NAME: GSM-45-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:300W/5000K	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

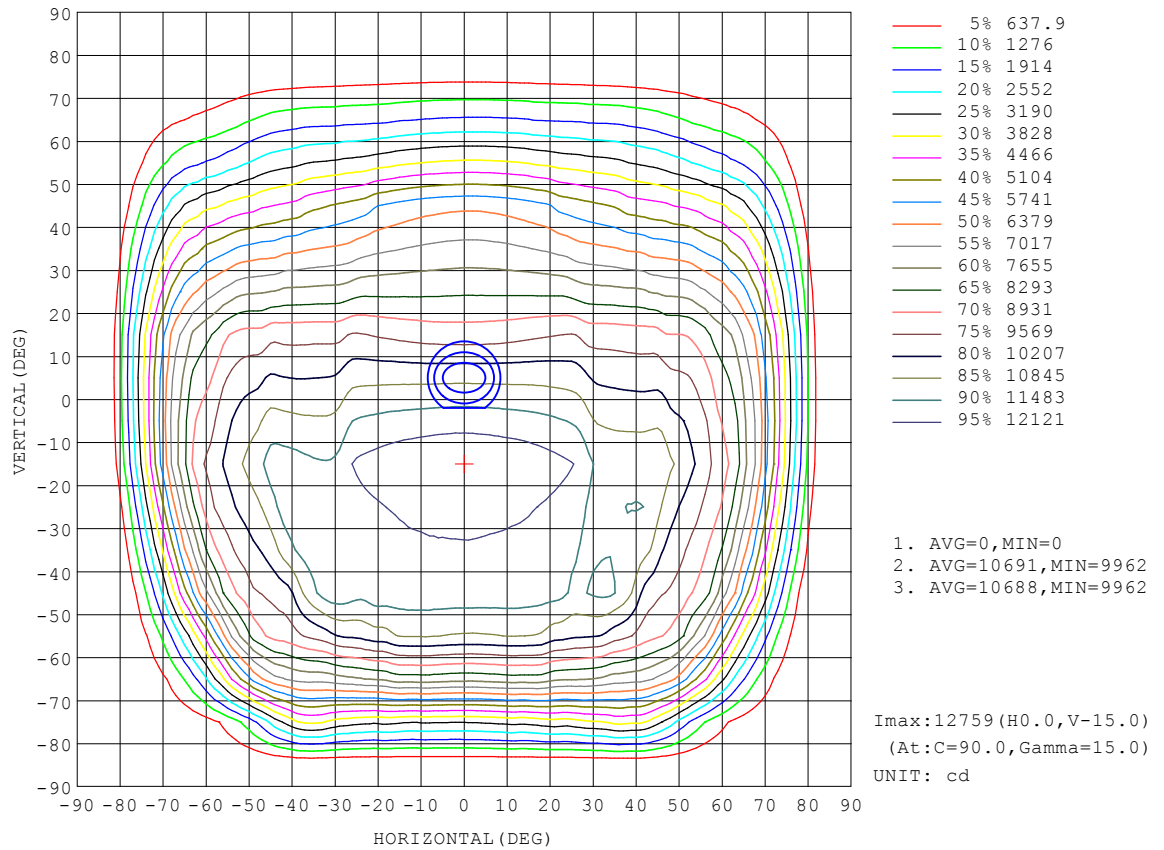
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	54	42	35	54	42	35	52	41	35	28
0.80	65	52	45	64	52	45	62	51	44	37
1.00	74	62	54	72	61	54	70	63	53	46
1.25	81	70	62	80	69	62	77	68	61	54
1.50	86	76	69	85	75	68	82	73	67	59
2.00	94	85	78	92	84	77	88	81	76	68
2.50	98	90	84	96	89	83	92	86	81	73
3.00	102	95	89	100	93	88	95	90	86	77
4.00	106	100	96	104	99	94	99	95	92	83
5.00	109	104	100	106	102	98	102	98	95	86
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-02-26

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:7.468m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:120.57V I:2.5608A P:307.62W PF:0.9963 Freq:59.98Hz Lamp Flux:39114x1 lm		
NAME: GSM-45-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:300W/5000K	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

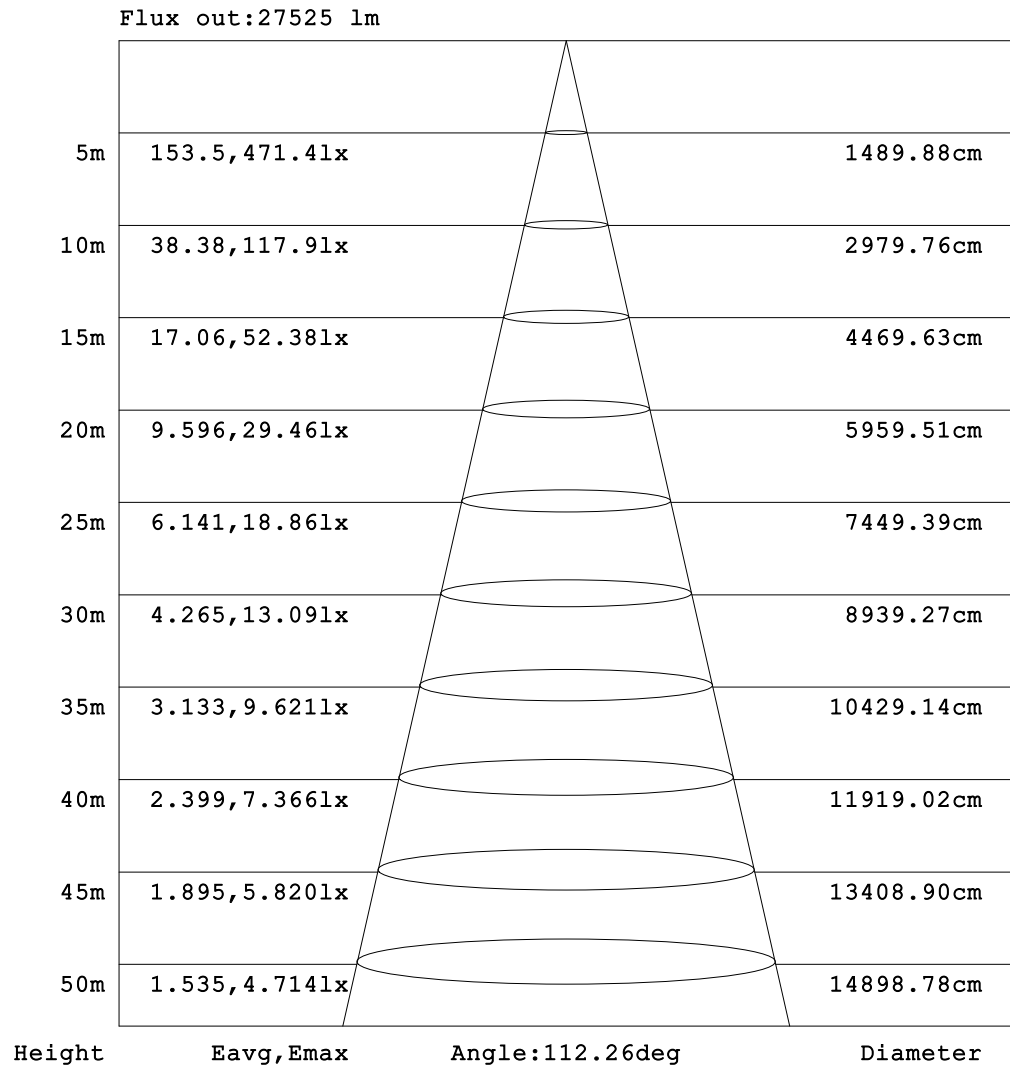


H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-02-26

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:7.468m [K=1.0000]
Remarks:

AAI Figure

Test:U:120.57V I:2.5608A P:307.62W PF:0.9963 Freq:59.98Hz Lamp Flux:39114x1 lm		
NAME: GSM-45-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:300W/5000K	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A



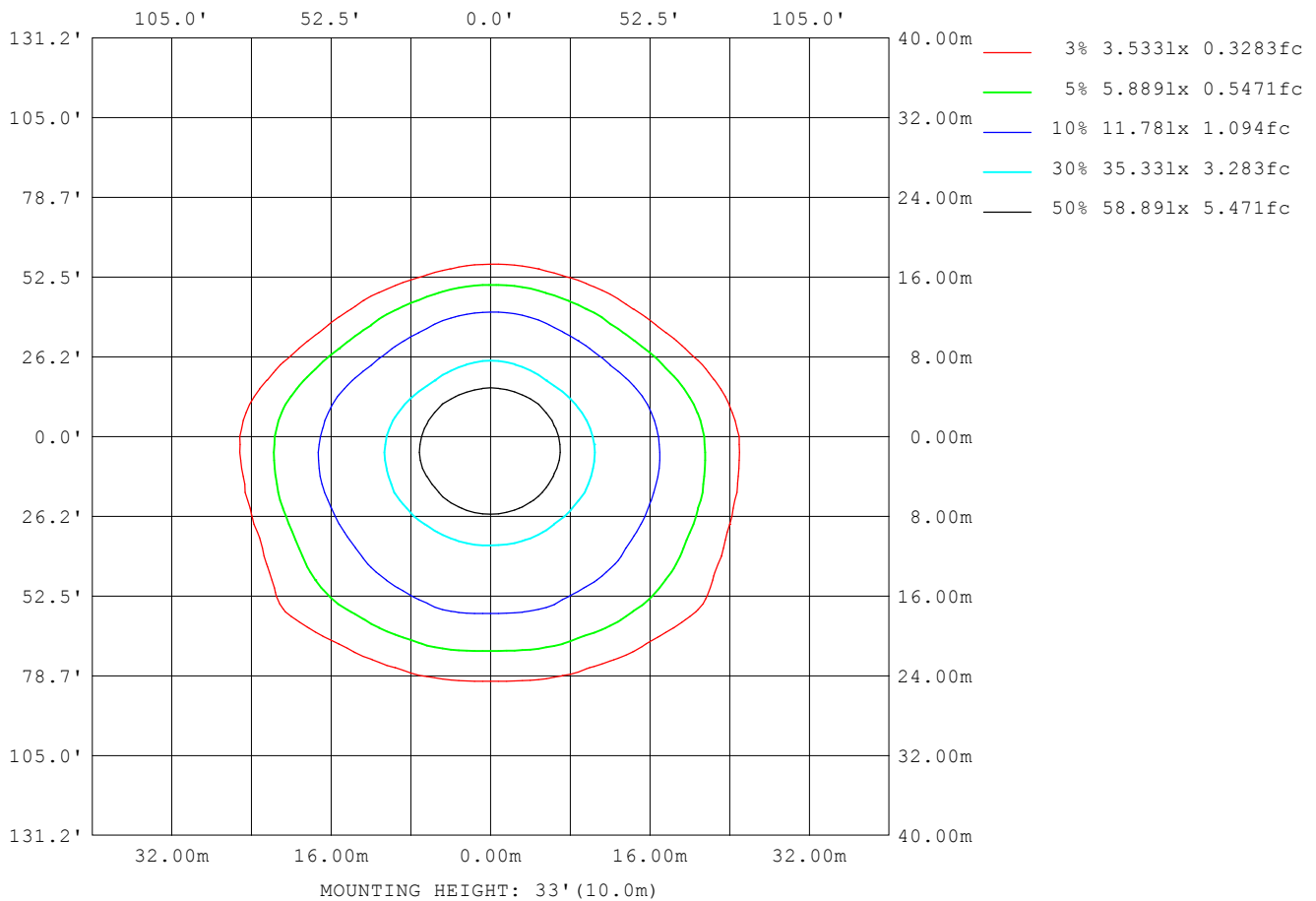
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-02-26

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:7.468m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:120.57V I:2.5608A P:307.62W PF:0.9963 Freq:59.98Hz Lamp Flux:39114x1 lm		
NAME: GSM-45-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:300W/5000K	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A



H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-02-26

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:7.468m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:120.57V I:2.5608A P:307.62W PF:0.9963 Freq:59.98Hz Lamp Flux:39114x1 lm		
NAME: GSM-45-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:300W/5000K	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

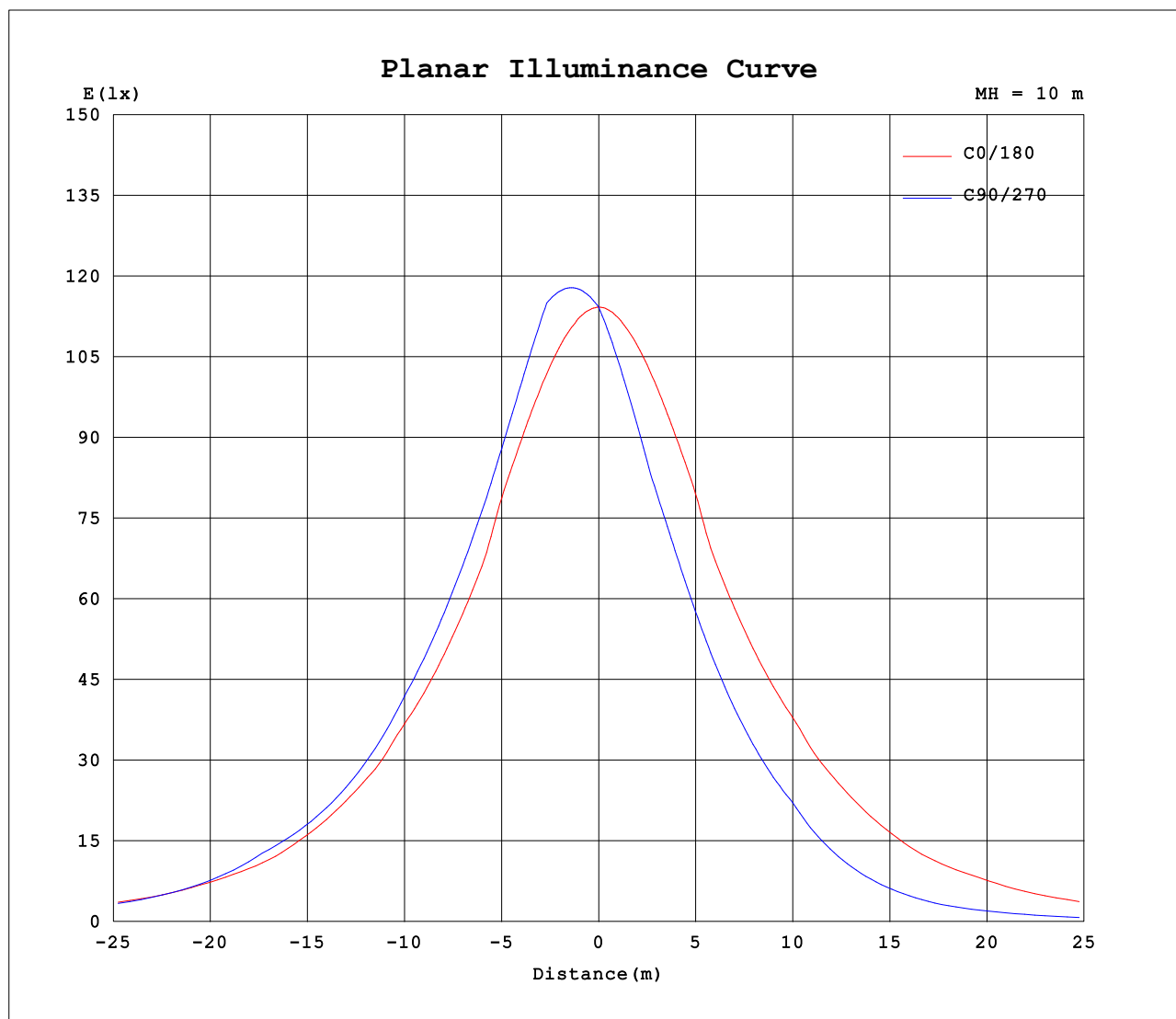
AvgL	cd/m2
L_0~180 (65) av	782725
L_0~180 (75) av	594875
L_0~180 (85) av	35213
L_90~270 (65) av	487867
L_90~270 (75) av	295125
L_90~270 (85) av	0
L_45 (65) av	595563
L_45 (75) av	521429
L_45 (85) av	0

Standard: GB/T 29293-2012

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-02-26

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:7.468m [K=1.0000]
Remarks:

Planar Illuminance Curve



H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-02-26

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:7.468m [K=1.0000]
Remarks:

```
V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:7.468m [K=1.0000]
Remarks:
```

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:7.468m [K=1.0000]
Remarks:

```
V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:7.468m [K=1.0000]
Remarks:
```

```
V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:7.468m [K=1.0000]
Remarks:
```