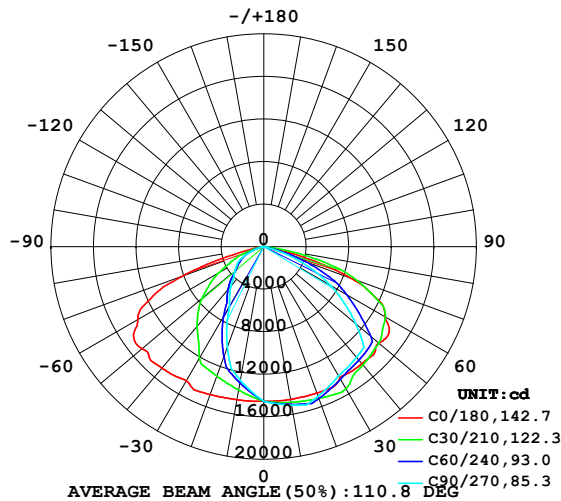


LUMINAIRE PHOTOMETRIC TEST REPORT

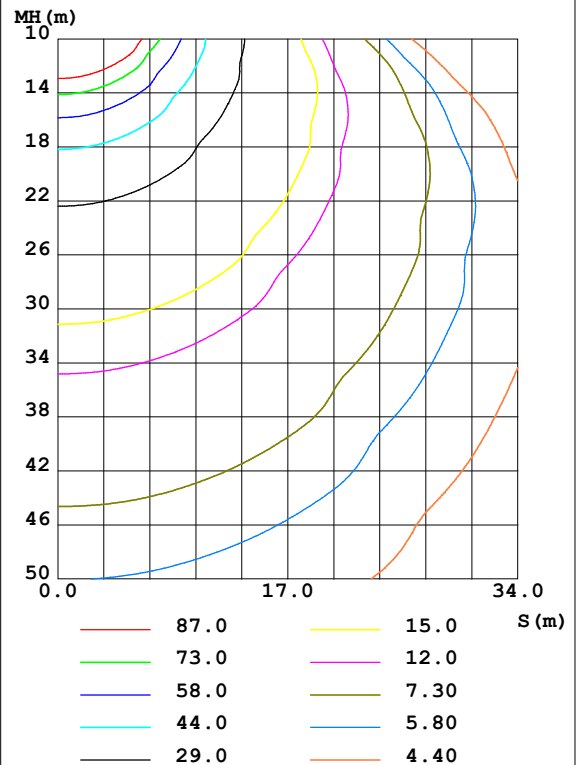
Test:U:120.56V I:2.5655A P:308.19W PF:0.9964 Freq:59.98Hz Lamp Flux:44125x1 lm		
NAME: GSM-45-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:300W/5000K	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

DATA OF LAMP		PHOTOMETRIC DATA Eff: 143.18 lm/W			
MODEL	GSM-45-U	I _{max} (cd)	16105	S/MH(C0/180)	1.56
NOMINAL POWER(W)	300	LOR(%)	100.0	S/MH(C90/270)	0.82
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	44125	□ UP,DN(C0-180)	0.0,63.8
NOMINAL FLUX(lm)	44125	CIE CLASS	DIRECT	□ UP,DN(C180-360)	0.0,36.2
LAMPS INSIDE	1	□ up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	□ down(%)	100.0	CIBSE SHR MAX	1.35

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	1458	1498	1513	1502	1461	1331	1276	1331	0- 10	1366	1366	3.1,3.1
20	1465	1539	1496	1554	1480	1213	1006	1216	10- 20	3954	5320	12.1,12.1
30	1431	1487	1405	1516	1456	942.8	644.9	954.5	20- 30	6017	11337	25.7,25.7
40	1436	1396	1358	1418	1491	635.0	480.7	662.9	30- 40	7372	18709	42.4,42.4
50	1413	1342	1130	1393	1495	453.9	355.5	465.6	40- 50	8336	27045	61.3,61.3
60	1317	1126	720.0	1144	1369	262.3	269.5	272.2	50- 60	8227	35273	79.9,79.9
70	868.8	669.3	273.1	645.8	818.5	126.8	106.6	133.9	60- 70	6390	41662	94.4,94.4
80	71.54	46.65	0	34.58	51.28	12.02	0	13.03	70- 80	2364	44026	99.8,99.8
90	1.906	0	0	0	2.035	0	0	0	80- 90	98.99	44125	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): 22803 lm

%lum = 51.7%

%lamp = 51.7%

Conical surface Flux(120deg): 35273 lm

%lum = 79.9%

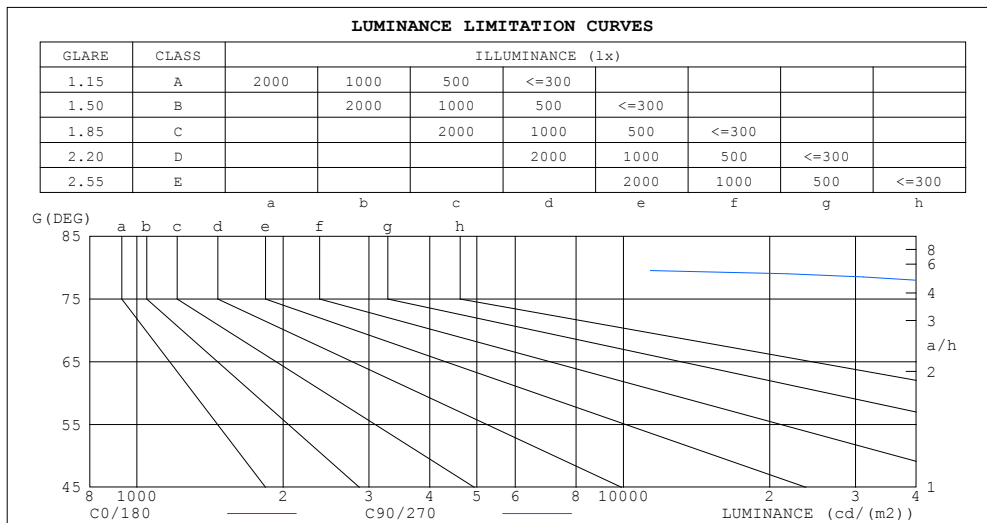
%lamp = 79.9%

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:120.56V I:2.5655A P:308.19W PF:0.9964 Freq:59.98Hz Lamp Flux:44125x1 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



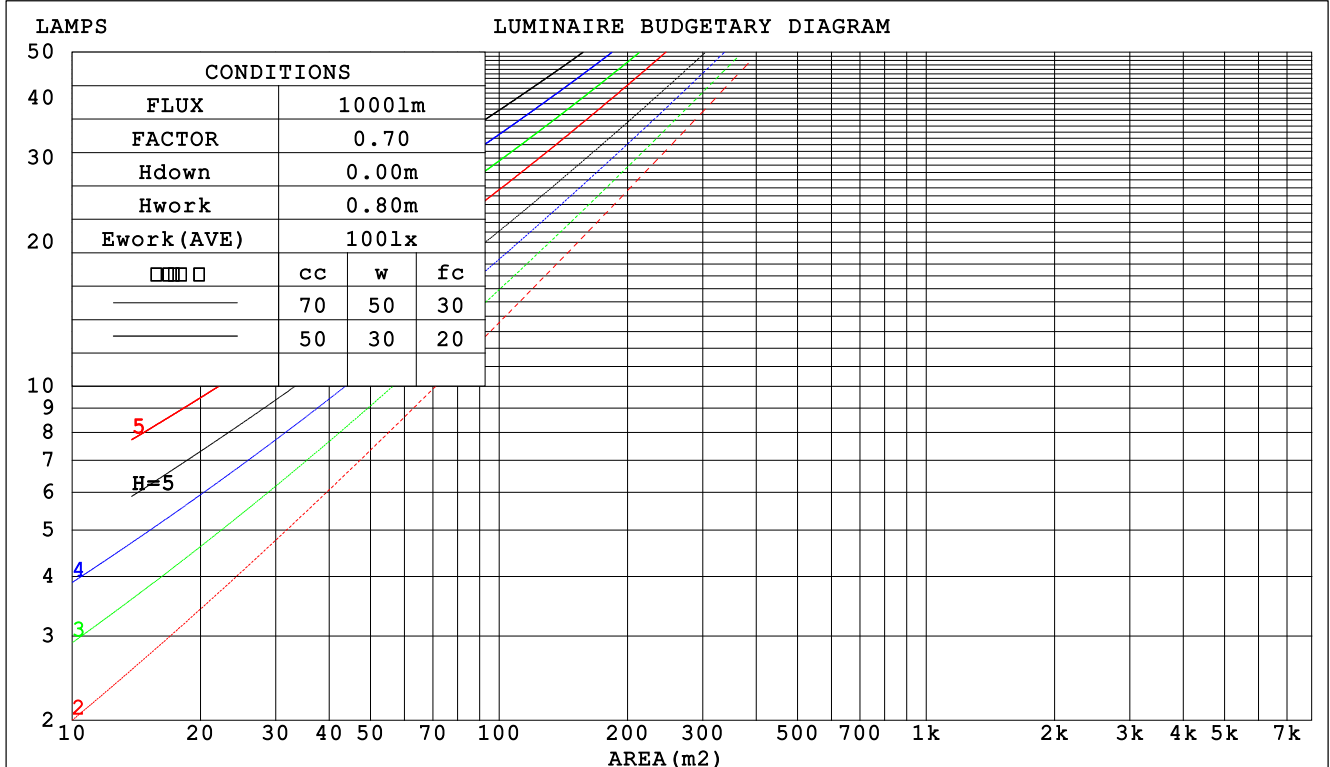
H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-02-26

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:120.56V I:2.5655A P:308.19W PF:0.9964 Freq:59.98Hz Lamp Flux:44125x1 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:120.56V I:2.5655A P:308.19W PF:0.9964 Freq:59.98Hz Lamp Flux:44125x1 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	.293	.167	.053	.286	.163	.052	.273	.157	.050	.261	.150	.048	.250	.145	.047		
2.0	.285	.156	.048	.279	.154	.047	.268	.149	.046	.257	.144	.045	.247	.140	.044		
3.0	.268	.143	.043	.263	.141	.042	.252	.137	.042	.243	.133	.041	.234	.130	.040		
4.0	.249	.130	.038	.245	.128	.038	.235	.125	.037	.227	.122	.037	.219	.119	.036		
5.0	.232	.118	.034	.227	.117	.034	.219	.114	.034	.212	.112	.033	.204	.109	.033		
6.0	.215	.108	.031	.211	.107	.031	.204	.105	.030	.197	.103	.030	.191	.101	.030		
7.0	.201	.099	.028	.197	.098	.028	.191	.096	.028	.185	.095	.028	.179	.093	.027		
8.0	.187	.092	.026	.184	.091	.026	.179	.089	.025	.173	.088	.025	.168	.086	.025		
9.0	.176	.085	.024	.173	.084	.024	.168	.083	.024	.163	.082	.023	.158	.080	.023		
10.0	.165	.079	.022	.163	.079	.022	.158	.077	.022	.154	.076	.022	.149	.075	.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	.179	.156	.136	.153	.134	.117	.105	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.171	.132	.099	.147	.114	.085	.101	.079	.060	.058	.046	.035	.019	.015	.011	
3.0	.164	.114	.075	.141	.099	.065	.097	.068	.045	.056	.040	.027	.018	.013	.009	
4.0	.157	.101	.058	.135	.087	.051	.093	.061	.036	.054	.036	.021	.017	.012	.007	
5.0	.150	.091	.047	.129	.078	.041	.089	.055	.029	.051	.032	.017	.017	.010	.006	
6.0	.143	.082	.039	.123	.071	.034	.085	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.136	.075	.033	.117	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.130	.070	.028	.112	.060	.025	.077	.042	.018	.045	.025	.010	.015	.008	.003	
9.0	.124	.065	.025	.106	.056	.022	.074	.040	.015	.043	.023	.009	.014	.008	.003	
10.0	.118	.060	.022	.102	.053	.019	.071	.037	.014	.041	.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:120.56V I:2.5655A P:308.19W PF:0.9964 Freq:59.98Hz Lamp Flux:44125x1 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	26.1	27.6	26.3	27.8	28.0	23.2	24.8	23.5	25.0	25.2
3H	28.3	29.8	28.6	30.0	30.2	23.9	25.3	24.2	25.5	25.8
4H	28.8	30.2	29.2	30.4	30.7	23.9	25.2	24.2	25.5	25.7
6H	28.8	30.1	29.2	30.4	30.7	23.8	25.0	24.1	25.3	25.6
8H	28.8	30.0	29.1	30.3	30.6	23.7	24.9	24.0	25.2	25.5
12H	28.7	29.9	29.1	30.2	30.5	23.6	24.8	24.0	25.1	25.4
4H 2H	26.6	27.9	26.9	28.2	28.4	24.4	25.8	24.8	26.0	26.3
3H	29.1	30.3	29.4	30.5	30.9	25.2	26.3	25.5	26.6	26.9
4H	29.8	30.9	30.2	31.2	31.5	25.2	26.2	25.5	26.5	26.9
6H	29.9	30.8	30.3	31.2	31.6	25.1	26.0	25.5	26.4	26.7
8H	29.9	30.7	30.3	31.1	31.5	25.0	25.9	25.4	26.3	26.6
12H	29.8	30.6	30.2	31.0	31.4	25.0	25.8	25.4	26.2	26.6
8H 4H	29.8	30.7	30.2	31.0	31.4	25.7	26.5	26.1	26.9	27.3
6H	30.0	30.7	30.5	31.1	31.6	25.6	26.3	26.0	26.7	27.1
8H	30.0	30.6	30.5	31.1	31.5	25.6	26.2	26.0	26.6	27.1
12H	30.0	30.5	30.5	31.0	31.4	25.5	26.1	26.0	26.5	27.0
12H 4H	29.8	30.6	30.2	31.0	31.4	25.7	26.5	26.1	26.9	27.3
6H	30.0	30.6	30.4	31.0	31.5	25.6	26.3	26.1	26.7	27.1
8H	30.0	30.5	30.5	31.0	31.4	25.6	26.1	26.1	26.6	27.1
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.2 / - 0.3				
1.5H	+ 0.3 / - 0.7					+ 0.4 / - 0.8				
2.0H	+ 0.5 / - 1.0					+ 0.3 / - 0.6				

CIE Pub.117, 44125 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 13.2)
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:120.56V I:2.5655A P:308.19W PF:0.9964 Freq:59.98Hz Lamp Flux:44125x1 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

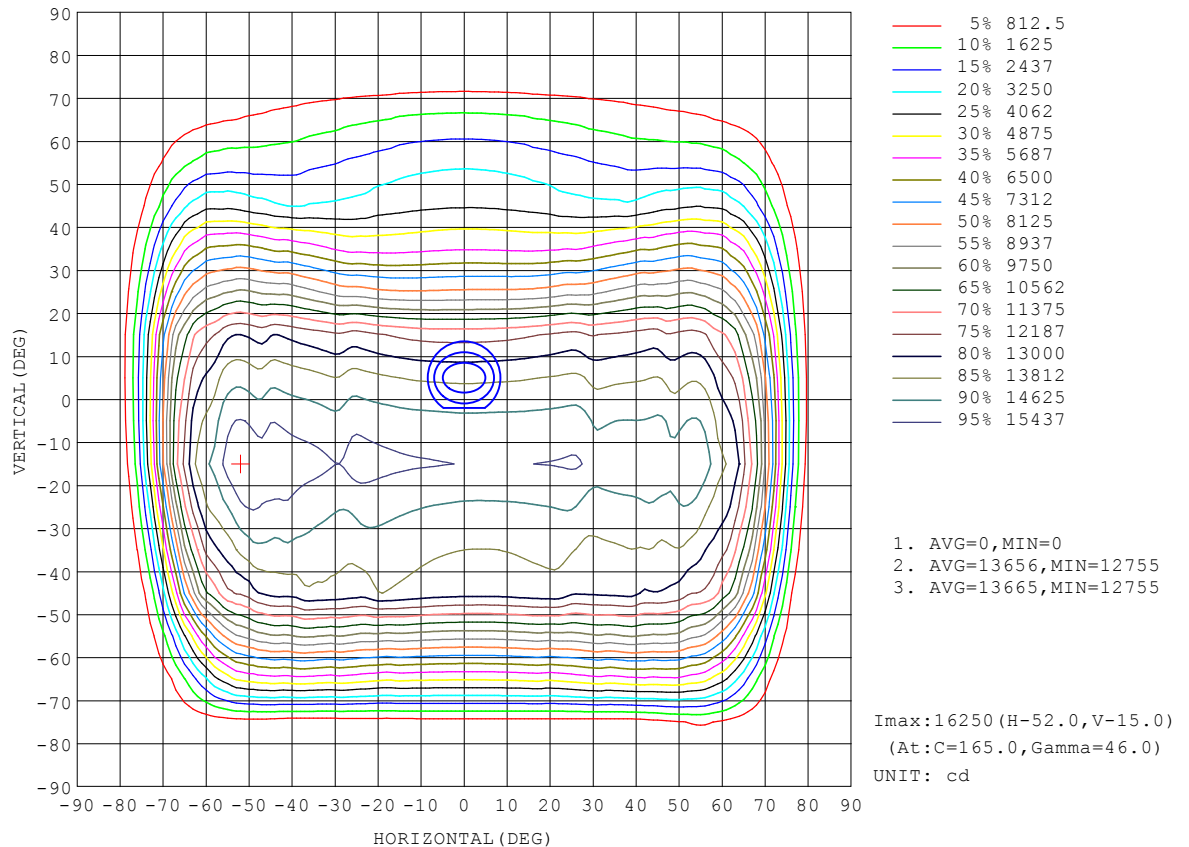
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	56	44	37	55	44	37	54	43	37	30
0.80	66	54	47	65	54	47	64	53	46	39
1.00	75	64	57	74	63	56	72	65	56	48
1.25	83	72	65	81	71	64	79	70	64	56
1.50	88	78	71	86	77	70	83	75	69	62
2.00	95	87	80	93	85	80	90	83	78	70
2.50	99	92	86	97	90	85	93	88	83	75
3.00	103	96	91	101	94	90	97	92	87	79
4.00	107	101	97	104	100	96	100	96	93	84
5.00	109	105	101	107	103	99	102	99	96	87
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:120.56V I:2.5655A P:308.19W PF:0.9964 Freq:59.98Hz Lamp Flux:44125x1 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

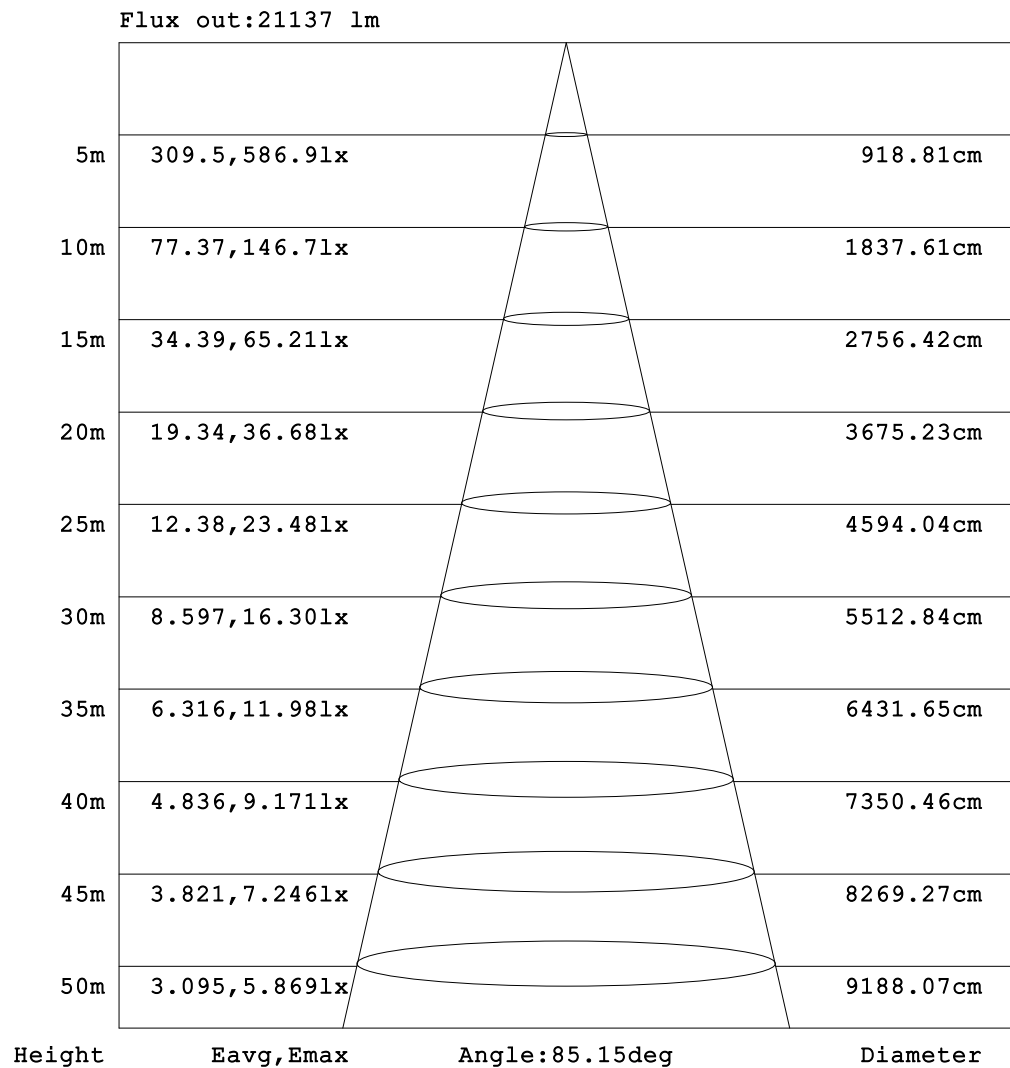


H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-02-26

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:120.56V I:2.5655A P:308.19W PF:0.9964 Freq:59.98Hz Lamp Flux:44125x1 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



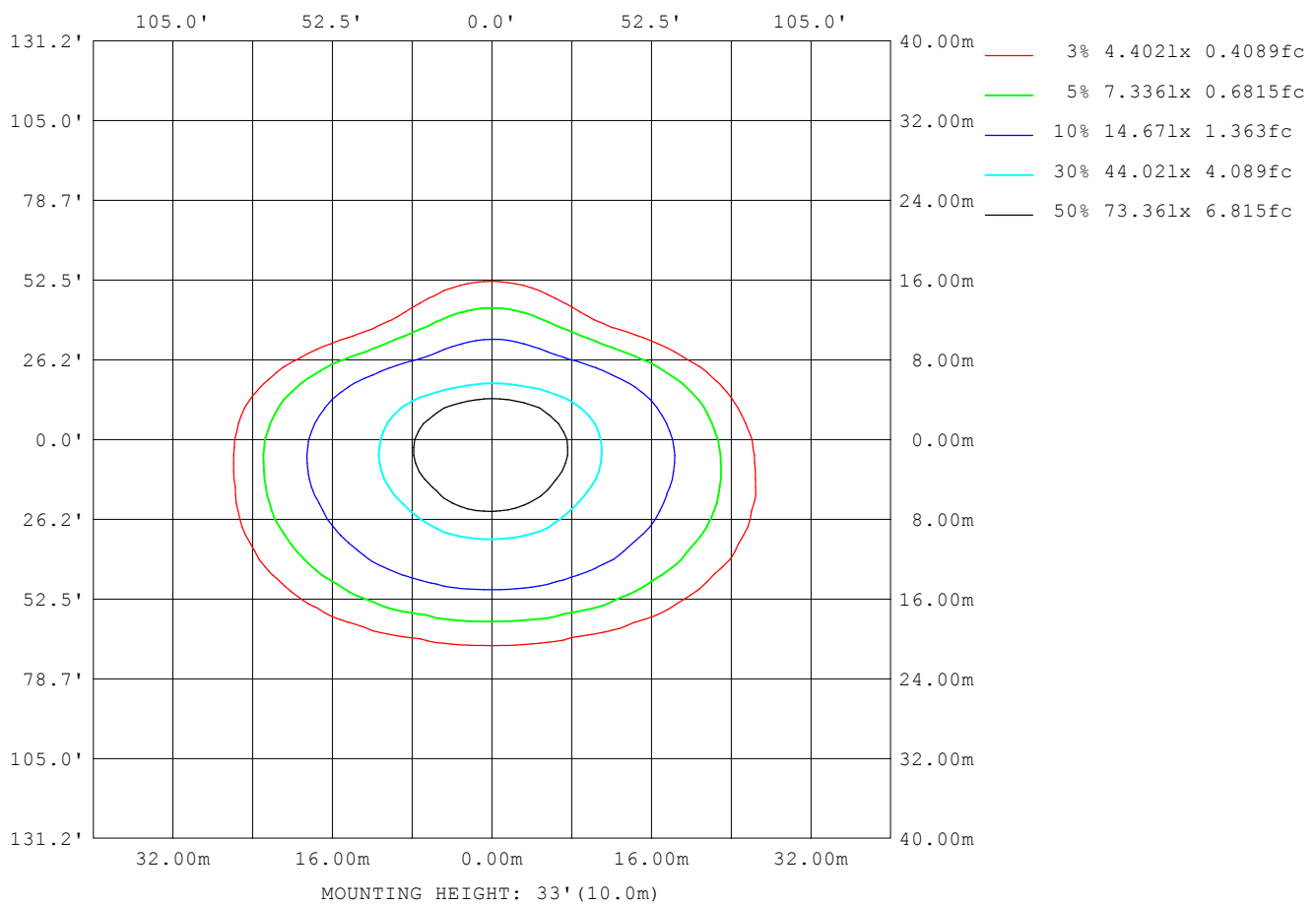
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:120.56V I:2.5655A P:308.19W PF:0.9964 Freq:59.98Hz Lamp Flux:44125x1 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:120.56V I:2.5655A P:308.19W PF:0.9964 Freq:59.98Hz Lamp Flux:44125x1 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

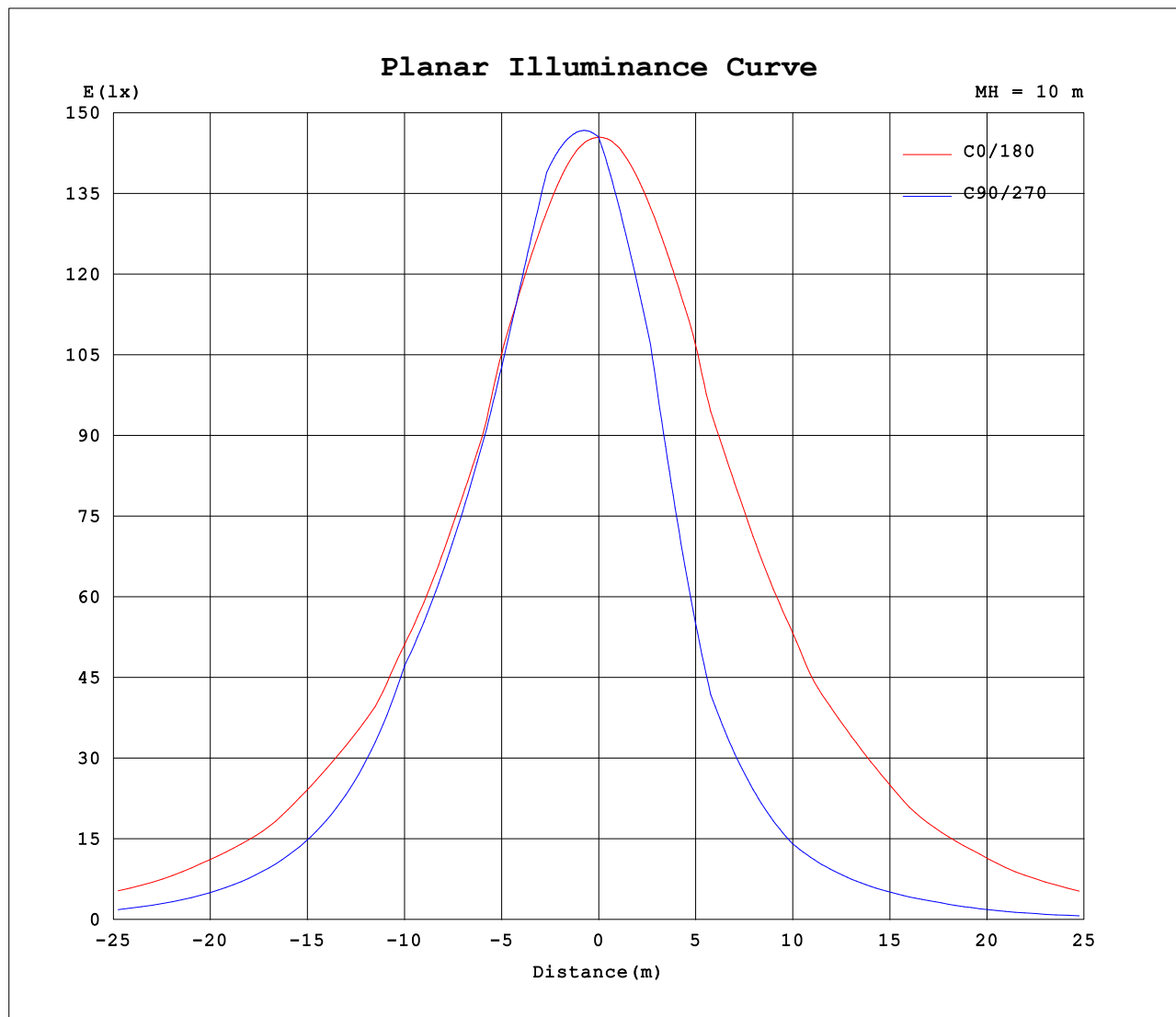
AvgL	cd/m2
L_0~180 (65) av	1170486
L_0~180 (75) av	560398
L_0~180 (85) av	34971
L_90~270 (65) av	337484
L_90~270 (75) av	60230
L_90~270 (85) av	0
L_45 (65) av	551850
L_45 (75) av	323896
L_45 (85) av	0

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:
```