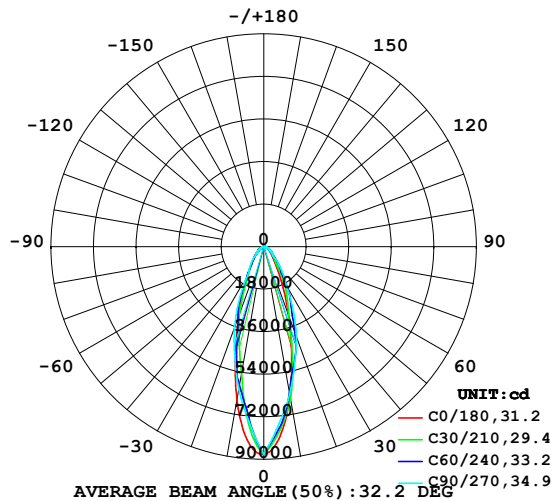


LUMINAIRE PHOTOMETRIC TEST REPORT

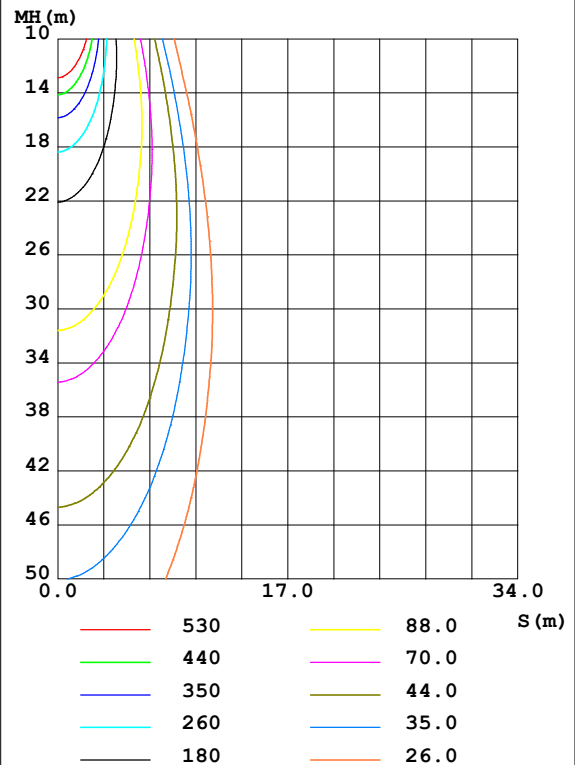
Test:U:120.56V I:2.5707A P:308.85W PF:0.9965 Freq:59.98Hz Lamp Flux:46237x1 lm		
NAME: GSM-45-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:300W/5000K	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

DATA OF LAMP		PHOTOMETRIC DATA Eff: 149.71 lm/W			
MODEL	GSM-45-U	I _{max} (cd)	87935	S/MH(C0/180)	0.52
NOMINAL POWER(W)	300	LOR(%)	100.0	S/MH(C90/270)	0.52
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	46237	□ UP,DN(C0-180)	0.0,52.2
NOMINAL FLUX(lm)	46237	CIE CLASS	DIRECT	□ UP,DN(C180-360)	0.0,47.8
LAMPS INSIDE	1	□ up(%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	120	□ down(%)	100.0	CIBSE SHR MAX	0.60

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	6395	6349	6349	5807	6557	5709	6124	6186	0- 10	6795	6795	14.7,14.7
20	3085	3706	4048	2997	3120	2917	3628	3435	10- 20	12712	19507	42.2,42.2
30	1265	1733	1893	1566	1341	1444	1305	1500	20- 30	10584	30091	65.1,65.1
40	618.0	791.0	1014	770.3	642.9	655.6	745.6	644.2	30- 40	6574	36665	79.3,79.3
50	384.7	444.1	471.7	437.1	399.3	391.9	383.3	381.7	40- 50	4208	40873	88.4,88.4
60	237.9	263.9	266.4	251.0	252.4	227.1	217.9	224.4	50- 60	2874	43747	94.6,94.6
70	114.2	135.3	142.1	118.0	127.6	101.8	103.9	105.6	60- 70	1754	45500	98.4,98.4
80	22.69	33.80	0	24.40	31.50	14.46	0	17.84	70- 80	697.8	46198	99.9,99.9
90	0.4930	0	0	0	0.4528	0	0	0	80- 90	39.05	46237	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): 39002 lm

%lum = 84.4%

%lamp = 84.4%

Conical surface Flux(120deg): 43747 lm

%lum = 94.6%

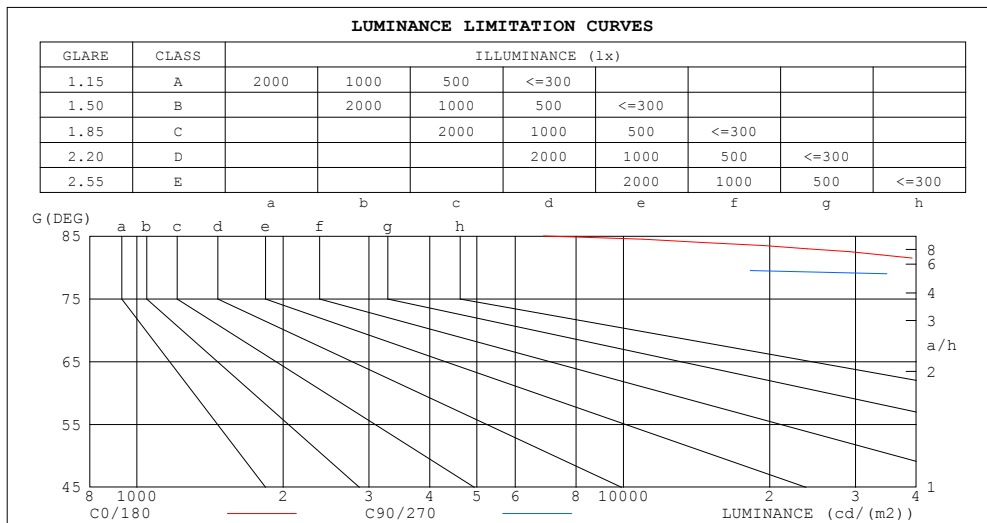
%lamp = 94.6%

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:2.5707A P:308.85W PF:0.9965 Freq:59.98Hz Lamp Flux:46237x1 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



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	6853	0
80	54450	0
75	101334	128450
70	139091	173138
65	171019	200941
60	198234	221966
55	222126	267517
50	249351	305744
45	283172	337722

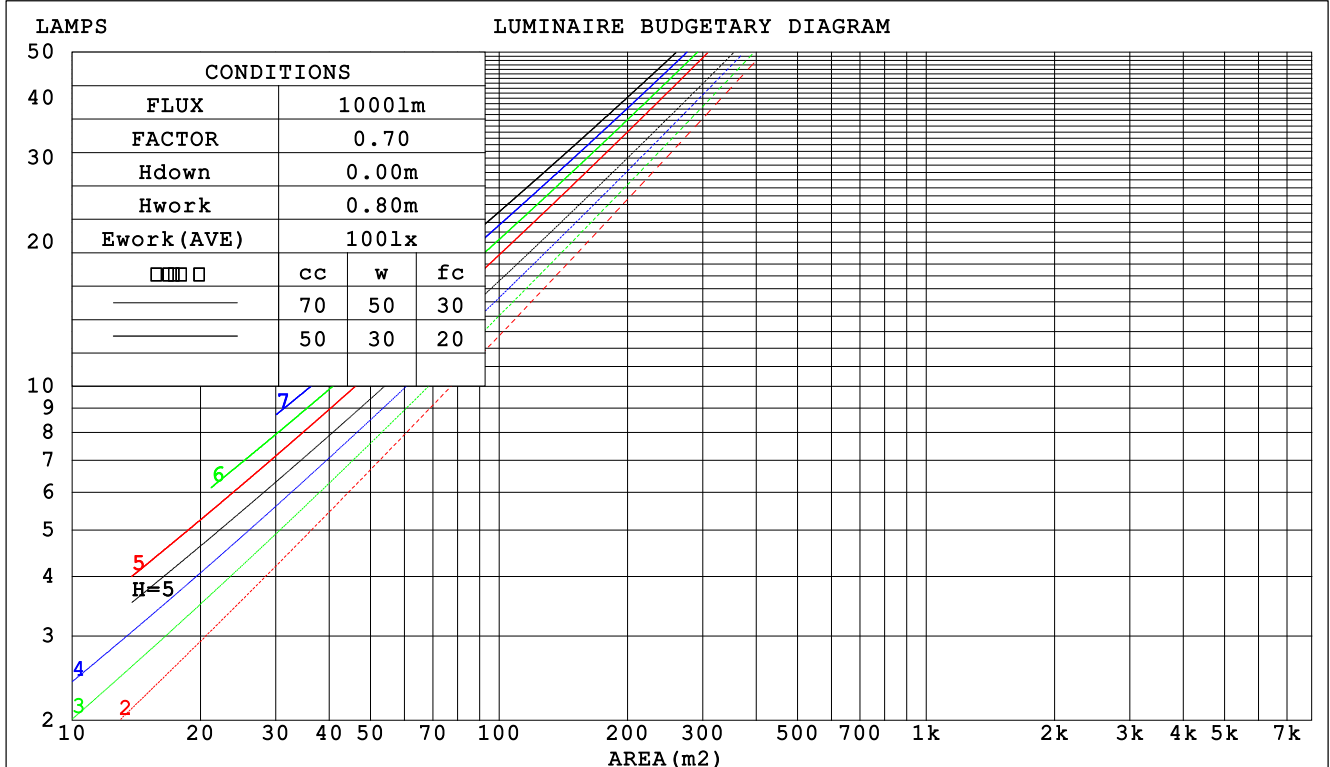
H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-02-26

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:2.5707A P:308.85W PF:0.9965 Freq:59.98Hz Lamp Flux:46237x1 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:2.5707A P:308.85W PF:0.9965 Freq:59.98Hz Lamp Flux:46237x1 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	.199	.113	.036	.192	.110	.035	.179	.103	.033	.168	.097	.031	.157	.091	.029		
2.0	.191	.105	.032	.185	.102	.031	.174	.097	.030	.164	.092	.029	.155	.088	.028		
3.0	.180	.096	.029	.175	.094	.028	.166	.090	.027	.157	.086	.026	.150	.083	.026		
4.0	.170	.088	.026	.165	.087	.026	.157	.084	.025	.150	.081	.024	.143	.078	.024		
5.0	.160	.081	.024	.156	.080	.023	.149	.078	.023	.143	.075	.022	.137	.073	.022		
6.0	.151	.076	.022	.148	.075	.021	.142	.073	.021	.136	.071	.021	.130	.069	.020		
7.0	.143	.071	.020	.140	.070	.020	.134	.068	.020	.129	.066	.019	.124	.065	.019		
8.0	.135	.066	.019	.133	.065	.018	.128	.064	.018	.123	.062	.018	.119	.061	.018		
9.0	.129	.062	.017	.126	.062	.017	.122	.060	.017	.118	.059	.017	.114	.058	.017		
10.0	.122	.059	.016	.120	.058	.016	.116	.057	.016	.113	.056	.016	.109	.055	.016		

□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	.173	.157	.143	.148	.135	.123	.101	.093	.085	.058	.054	.050	.019	.017	.016	
2.0	.159	.132	.110	.136	.114	.095	.093	.079	.066	.054	.046	.039	.017	.015	.013	
3.0	.147	.114	.087	.126	.098	.075	.087	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.137	.099	.070	.118	.086	.061	.081	.060	.043	.047	.035	.025	.015	.011	.008	
5.0	.129	.088	.058	.110	.076	.050	.076	.053	.035	.044	.031	.021	.014	.010	.007	
6.0	.121	.079	.048	.104	.068	.042	.072	.048	.030	.042	.028	.018	.013	.009	.006	
7.0	.114	.071	.041	.098	.062	.036	.068	.043	.025	.039	.025	.015	.013	.008	.005	
8.0	.108	.065	.035	.093	.056	.031	.064	.040	.022	.037	.023	.013	.012	.008	.004	
9.0	.103	.060	.031	.088	.052	.027	.061	.036	.019	.036	.021	.011	.012	.007	.004	
10.0	.098	.055	.027	.084	.048	.023	.058	.034	.017	.034	.020	.010	.011	.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:2.5707A P:308.85W PF:0.9965 Freq:59.98Hz Lamp Flux:46237x1 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	15.9	16.9	16.1	17.1	17.3	17.0	18.1	17.3	18.2	18.4
3H	16.7	17.7	17.0	17.9	18.1	17.8	18.7	18.0	18.9	19.1
4H	16.9	17.8	17.2	18.1	18.3	18.0	18.9	18.2	19.1	19.3
6H	17.0	17.9	17.3	18.1	18.4	17.9	18.8	18.2	19.0	19.3
8H	17.0	17.8	17.3	18.1	18.3	17.9	18.7	18.2	19.0	19.2
12H	16.9	17.7	17.3	18.0	18.3	17.8	18.6	18.2	18.9	19.2
4H 2H	16.3	17.2	16.6	17.5	17.7	17.3	18.2	17.6	18.4	18.6
3H	17.3	18.1	17.6	18.4	18.6	18.2	19.0	18.5	19.2	19.5
4H	17.6	18.3	18.0	18.6	19.0	18.4	19.2	18.8	19.5	19.8
6H	17.8	18.4	18.1	18.7	19.1	18.4	19.1	18.8	19.4	19.8
8H	17.7	18.3	18.1	18.7	19.0	18.4	19.0	18.8	19.3	19.7
12H	17.7	18.2	18.1	18.6	19.0	18.3	18.9	18.8	19.3	19.6
8H 4H	17.7	18.3	18.1	18.7	19.0	18.5	19.1	18.9	19.4	19.8
6H	17.9	18.4	18.4	18.8	19.2	18.5	19.0	18.9	19.4	19.8
8H	17.9	18.4	18.4	18.8	19.2	18.5	18.9	18.9	19.3	19.7
12H	17.9	18.3	18.4	18.7	19.2	18.4	18.8	18.9	19.2	19.7
12H 4H	17.7	18.2	18.1	18.6	19.0	18.5	19.0	18.9	19.4	19.8
6H	17.9	18.3	18.3	18.7	19.2	18.5	18.9	18.9	19.3	19.8
8H	17.9	18.3	18.4	18.7	19.2	18.4	18.8	18.9	19.2	19.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.6 / - 0.8					+ 0.7 / - 1.0				
1.5H	+ 0.3 / - 0.7					+ 1.3 / - 0.7				
2.0H	+ 0.7 / - 1.0					+ 0.8 / - 0.9				

CIE Pub.117, 46237 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 13.3)
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:2.5707A P:308.85W PF:0.9965 Freq:59.98Hz Lamp Flux:46237x1 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

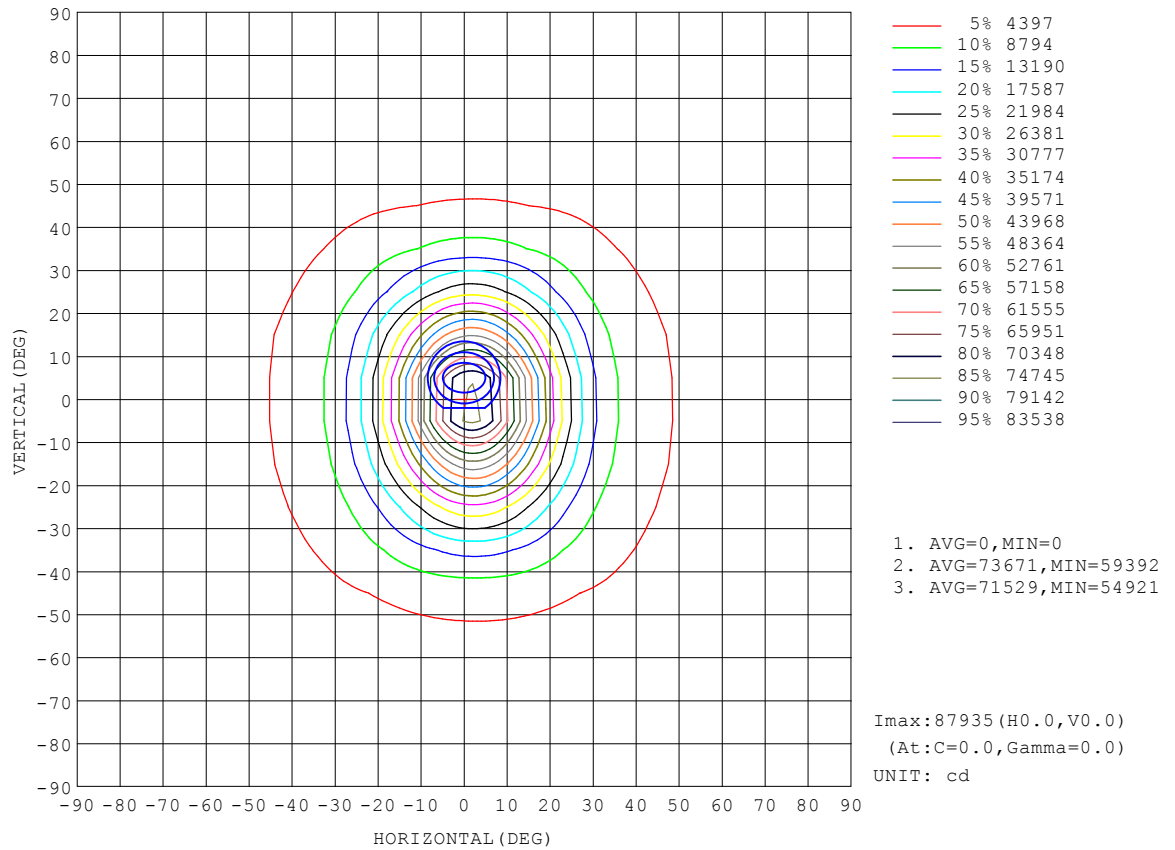
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	79	71	66	78	71	66	77	70	66	61
0.80	87	79	75	86	79	75	85	78	74	70
1.00	93	86	81	92	85	81	90	85	80	75
1.25	98	91	87	97	91	86	94	89	85	80
1.50	101	95	91	100	94	90	97	93	89	84
2.00	105	100	96	104	99	95	101	97	93	88
2.50	107	103	99	106	101	98	102	99	96	89
3.00	109	105	102	108	104	101	104	101	98	92
4.00	112	108	106	110	107	104	106	104	102	94
5.00	113	111	108	111	109	107	107	105	104	96
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:2.5707A P:308.85W PF:0.9965 Freq:59.98Hz Lamp Flux:46237x1 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

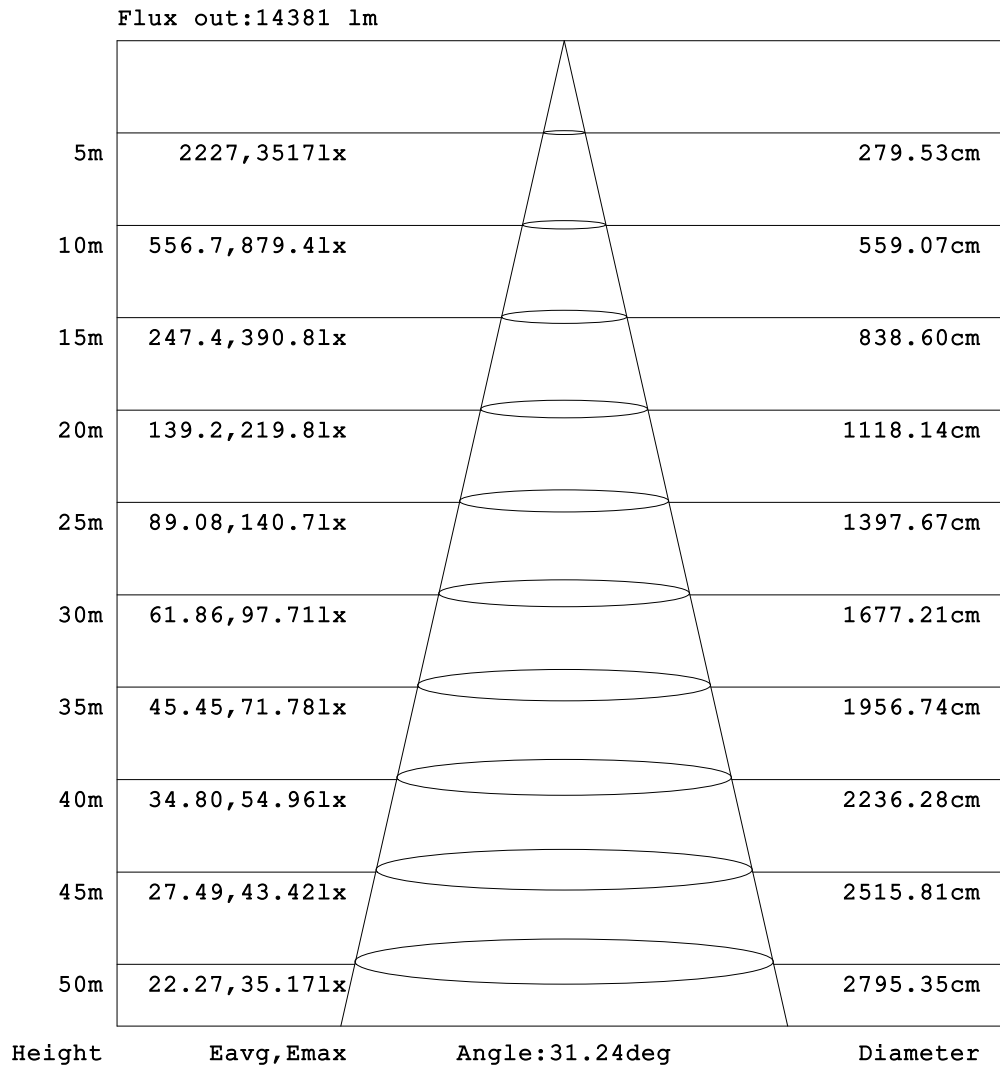


H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-02-26

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:2.5707A P:308.85W PF:0.9965 Freq:59.98Hz Lamp Flux:46237x1 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



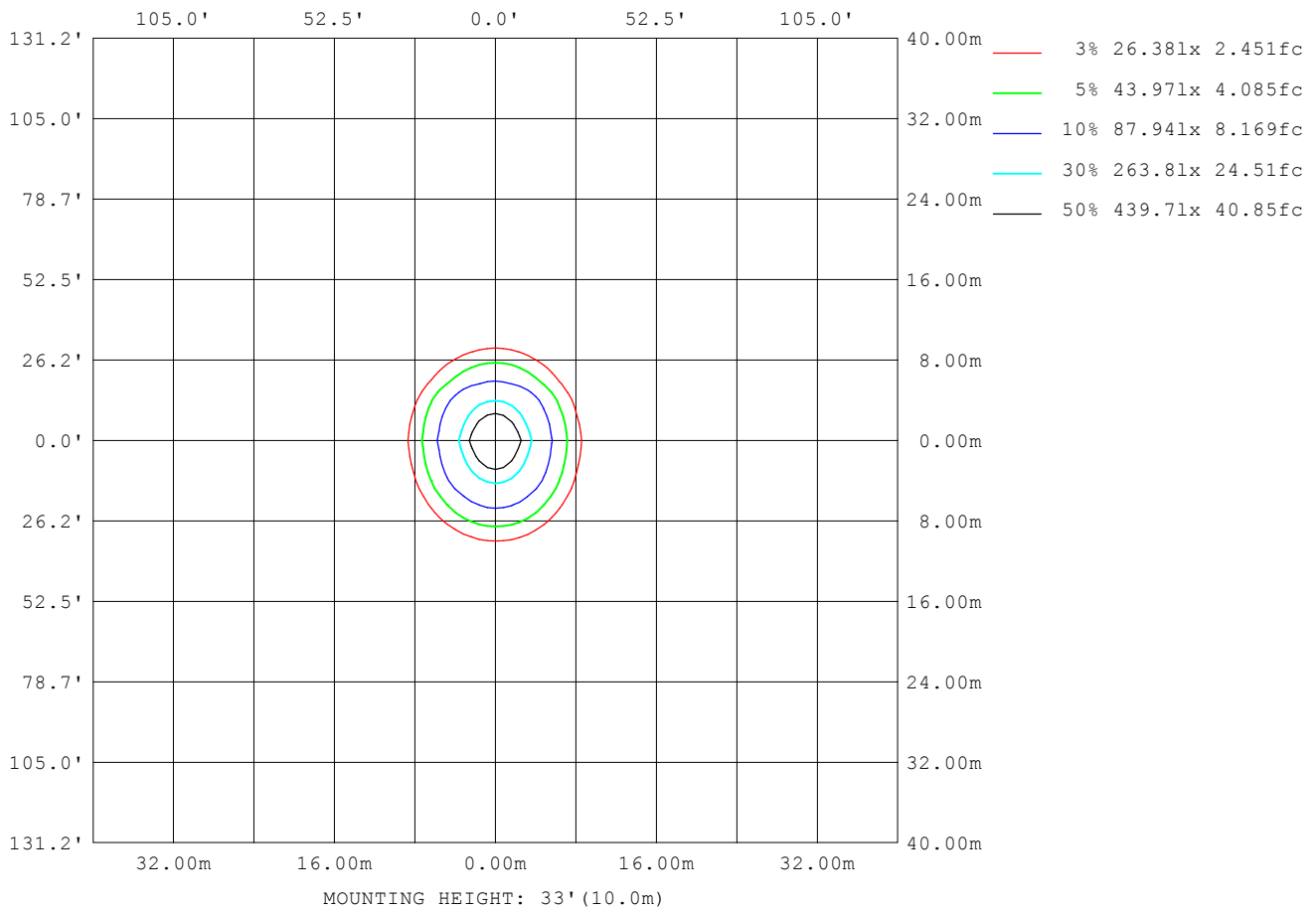
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:2.5707A P:308.85W PF:0.9965 Freq:59.98Hz Lamp Flux:46237x1 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:2.5707A P:308.85W PF:0.9965 Freq:59.98Hz Lamp Flux:46237x1 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

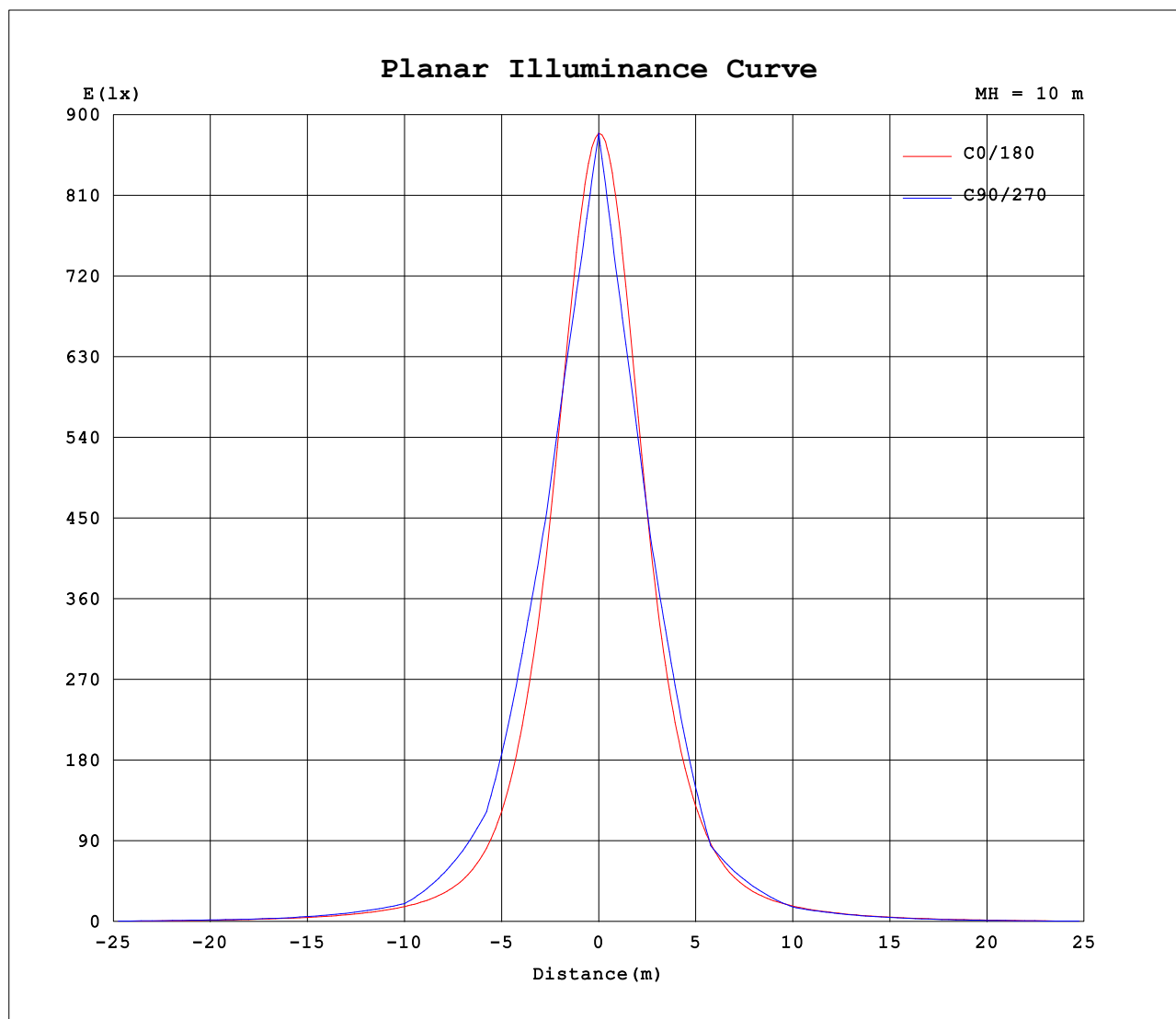
AvgL	cd/m2
L_0~180 (65) av	178535
L_0~180 (75) av	110867
L_0~180 (85) av	13943
L_90~270 (65) av	179608
L_90~270 (75) av	101769
L_90~270 (85) av	0
L_45 (65) av	170699
L_45 (75) av	108554
L_45 (85) av	0

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:
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