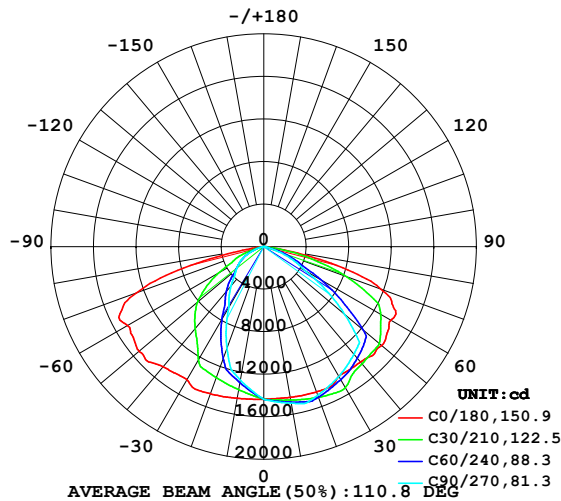


LUMINAIRE PHOTOMETRIC TEST REPORT

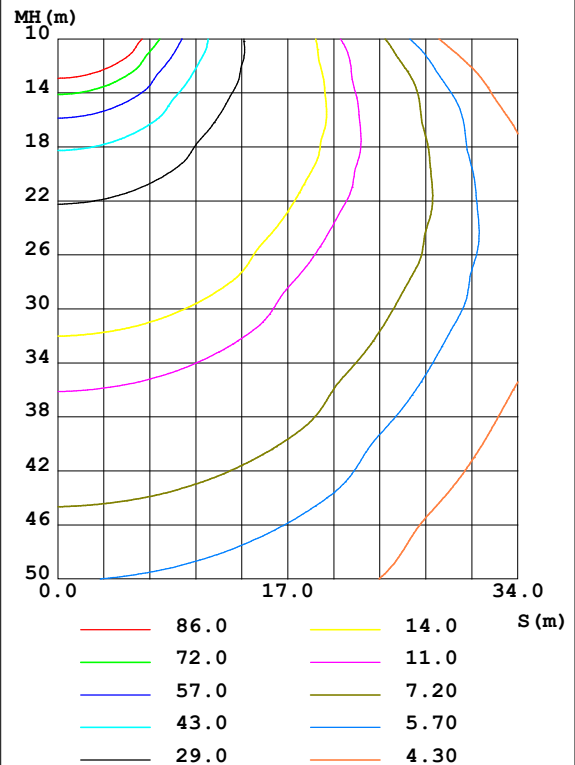
Test:U:120.56V I:2.5655A P:308.20W PF:0.9964 Freq:59.97Hz Lamp Flux:43698x1 lm		
NAME: GSM-45-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:300W/5000K	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

DATA OF LAMP		PHOTOMETRIC DATA Eff: 141.79 lm/W			
MODEL	GSM-45-U	I _{max} (cd)	16244	S/MH(C0/180)	1.56
NOMINAL POWER(W)	300	LOR(%)	100.0	S/MH(C90/270)	0.84
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	43698	□ UP,DN(C0-180)	0.0,61.9
NOMINAL FLUX(lm)	43698	CIE CLASS	DIRECT	□ UP,DN(C180-360)	0.0,38.1
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	1439	1476	1495	1487	1447	1329	1275	1324	0- 10	1352	1352	3.09, 3.09
20	1453	1526	1487	1549	1472	1237	1016	1230	10- 20	3940	5292	12.1, 12.1
30	1409	1487	1412	1514	1446	975.9	658.8	984.4	20- 30	6035	11327	25.9, 25.9
40	1416	1392	1320	1414	1475	677.5	479.6	707.3	30- 40	7385	18712	42.8, 42.8
50	1448	1295	996.9	1336	1531	469.7	339.9	483.6	40- 50	8286	26998	61.8, 61.8
60	1382	956.7	442.4	960.6	1480	259.9	239.5	266.4	50- 60	7834	34832	79.7, 79.7
70	1173	421.5	175.2	390.9	1271	117.1	95.49	121.9	60- 70	6068	40900	93.6, 93.6
80	230.7	25.72	0	21.08	204.4	11.54	0	12.99	70- 80	2655	43555	99.7, 99.7
90	2.314	0	0	0	2.391	0	0	0	80- 90	142.5	43698	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): 22790 lm

%lum = 52.2%

%lamp = 52.2%

Conical surface Flux(120deg): 34832 lm

%lum = 79.7%

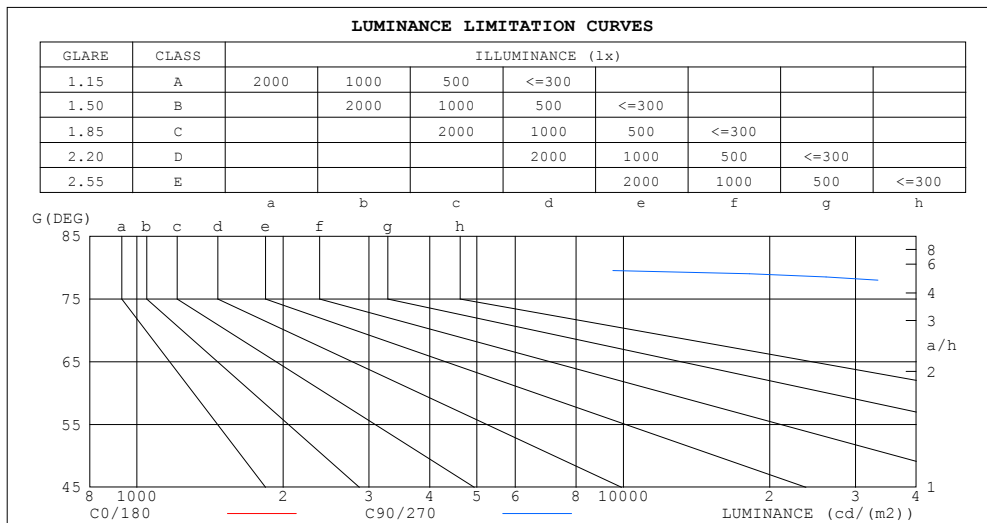
%lamp = 79.7%

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:120.56V I:2.5655A P:308.20W PF:0.9964 Freq:59.97Hz Lamp Flux:43698x1 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



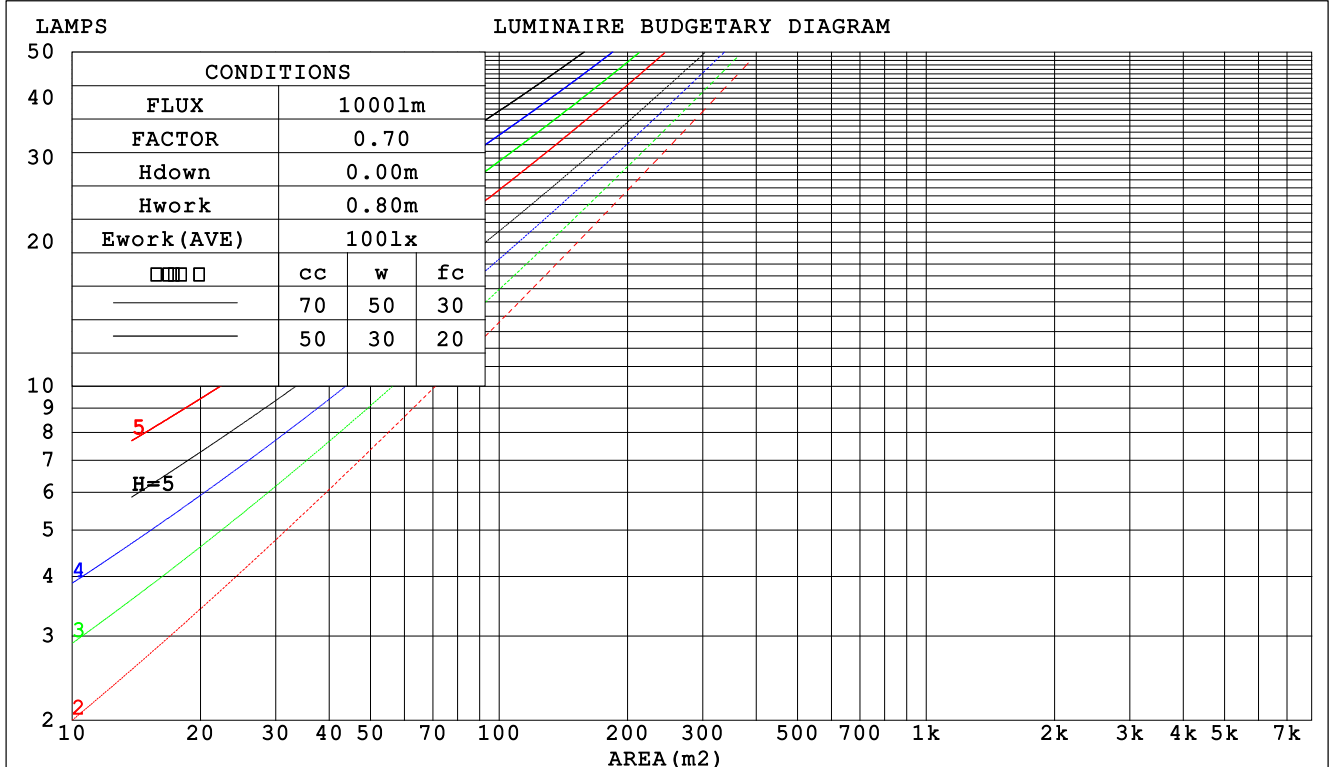
H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-02-26

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:308.20W PF:0.9964 Freq:59.97Hz Lamp Flux:43698x1 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:308.20W PF:0.9964 Freq:59.97Hz Lamp Flux:43698x1 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	.296 .168 .053	.289 .165 .052	.275 .158 .050	.263 .152 .049	.252 .146 .047	
2.0	.287 .157 .048	.280 .154 .048	.269 .149 .046	.258 .145 .045	.248 .140 .044	
3.0	.269 .143 .043	.263 .141 .042	.253 .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	.231 .118 .034	.227 .117 .034	.219 .114 .034	.211 .112 .033	.204 .109 .033	
6.0	.215 .108 .031	.211 .107 .031	.204 .105 .030	.197 .102 .030	.191 .100 .030	
7.0	.200 .099 .028	.197 .098 .028	.190 .096 .028	.184 .094 .027	.179 .093 .027	
8.0	.187 .091 .026	.184 .091 .026	.178 .089 .025	.173 .088 .025	.168 .086 .025	
9.0	.175 .085 .024	.173 .084 .024	.167 .083 .023	.163 .081 .023	.158 .080 .023	
10.0	.165 .079 .022	.162 .078 .022	.158 .077 .022	.153 .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 .135	.153 .134 .117	.105 .092 .081	.060 .053 .047	.019 .017 .015	
2.0	.172 .132 .099	.147 .114 .085	.101 .079 .059	.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 .029	.112 .060 .025	.077 .042 .018	.045 .025 .011	.015 .008 .003	
9.0	.123 .065 .025	.106 .056 .022	.074 .039 .016	.043 .023 .009	.014 .008 .003	
10.0	.118 .060 .022	.102 .052 .019	.070 .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:308.20W PF:0.9964 Freq:59.97Hz Lamp Flux:43698x1 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	26.2	27.7	26.4	27.9	28.1	21.8	23.3	22.0	23.5	23.7
3H	29.1	30.5	29.4	30.7	31.0	22.1	23.5	22.4	23.7	24.0
4H	30.1	31.4	30.4	31.7	32.0	22.0	23.4	22.4	23.6	23.9
6H	30.4	31.7	30.7	31.9	32.2	21.9	23.2	22.3	23.5	23.8
8H	30.4	31.6	30.7	31.9	32.2	21.9	23.1	22.2	23.4	23.7
12H	30.3	31.5	30.7	31.8	32.1	21.8	23.0	22.2	23.3	23.6
4H 2H	26.4	27.8	26.7	28.0	28.3	22.9	24.3	23.3	24.5	24.8
3H	29.5	30.6	29.8	30.9	31.2	23.3	24.5	23.6	24.8	25.1
4H	30.6	31.7	31.0	32.0	32.3	23.3	24.3	23.6	24.6	25.0
6H	31.0	32.0	31.4	32.3	32.7	23.2	24.1	23.6	24.5	24.8
8H	31.0	31.9	31.4	32.3	32.7	23.1	24.0	23.5	24.4	24.8
12H	31.0	31.8	31.4	32.2	32.6	23.1	23.9	23.5	24.3	24.7
8H 4H	30.5	31.4	31.0	31.8	32.2	23.9	24.7	24.3	25.1	25.5
6H	31.0	31.7	31.5	32.1	32.6	23.8	24.5	24.2	24.9	25.3
8H	31.0	31.7	31.5	32.1	32.6	23.7	24.4	24.2	24.8	25.3
12H	31.0	31.6	31.5	32.0	32.5	23.7	24.3	24.2	24.7	25.2
12H 4H	30.5	31.3	30.9	31.7	32.1	23.9	24.7	24.3	25.1	25.5
6H	31.0	31.6	31.4	32.0	32.5	23.8	24.5	24.3	24.9	25.3
8H	31.0	31.5	31.5	32.0	32.5	23.8	24.3	24.3	24.8	25.3
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.3					+ 0.3 / - 0.4				
1.5H	+ 0.4 / - 0.8					+ 0.6 / - 1.1				
2.0H	+ 0.5 / - 0.9					+ 1.1 / - 2.1				

CIE Pub.117, 43698 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 13.1)
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:308.20W PF:0.9964 Freq:59.97Hz Lamp Flux:43698x1 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

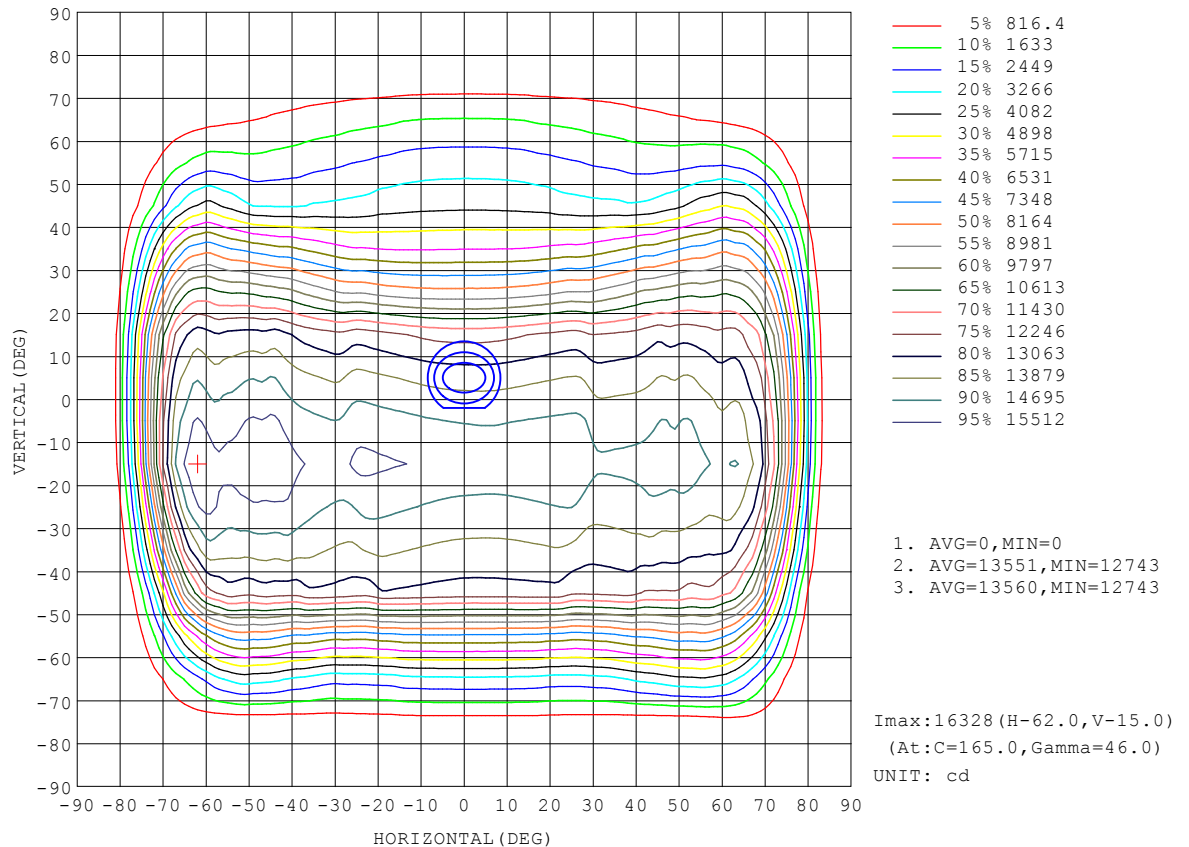
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	56	44	37	56	44	37	54	44	37	30
0.80	67	55	47	66	54	47	64	54	47	40
1.00	75	64	57	74	64	56	72	65	56	49
1.25	83	72	65	81	71	65	79	70	64	56
1.50	88	78	71	86	77	71	83	75	69	62
2.00	95	87	80	93	85	79	90	83	78	70
2.50	99	92	86	97	90	85	93	87	83	75
3.00	103	96	91	101	94	89	96	91	87	79
4.00	107	101	97	104	99	95	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					SHRNM = 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:308.20W PF:0.9964 Freq:59.97Hz Lamp Flux:43698x1 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

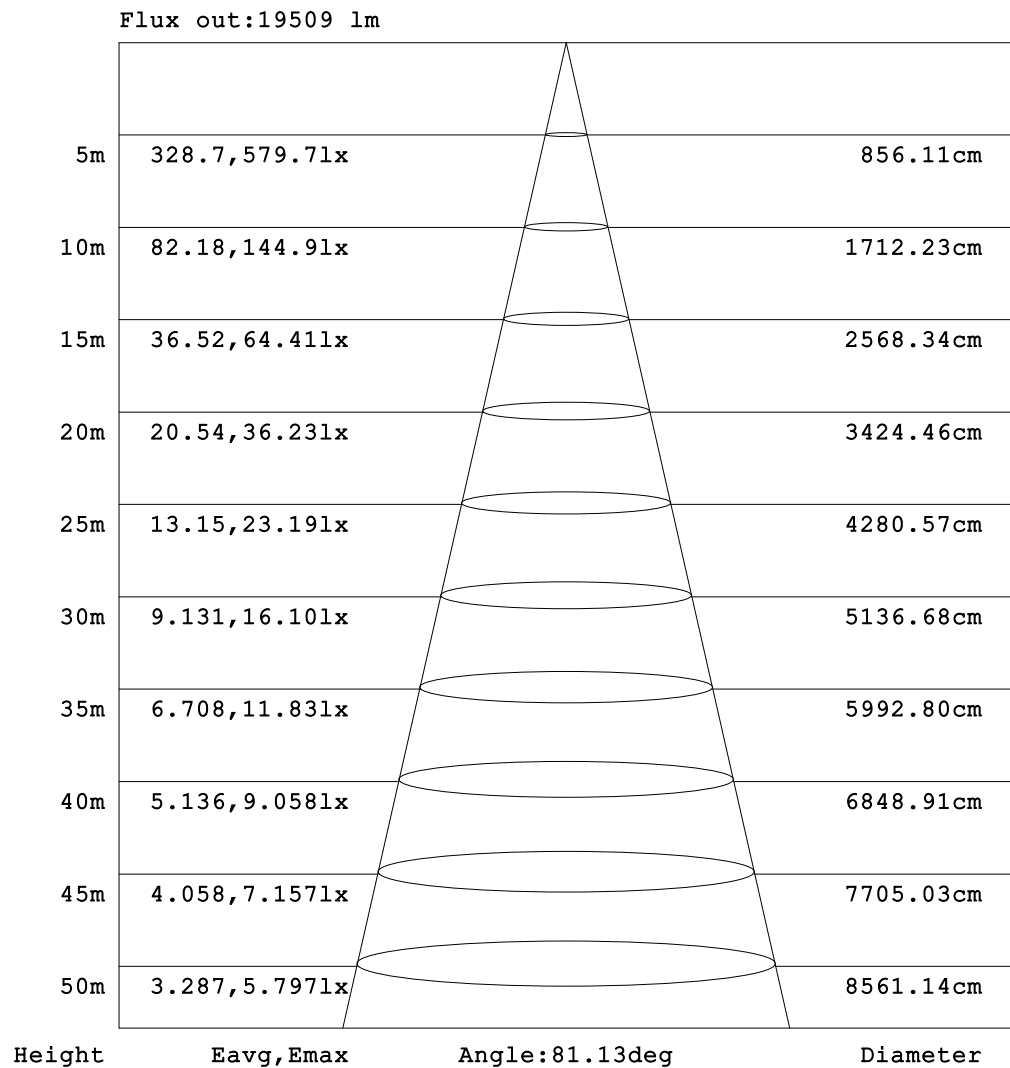


H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-02-26

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:308.20W PF:0.9964 Freq:59.97Hz Lamp Flux:43698x1 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



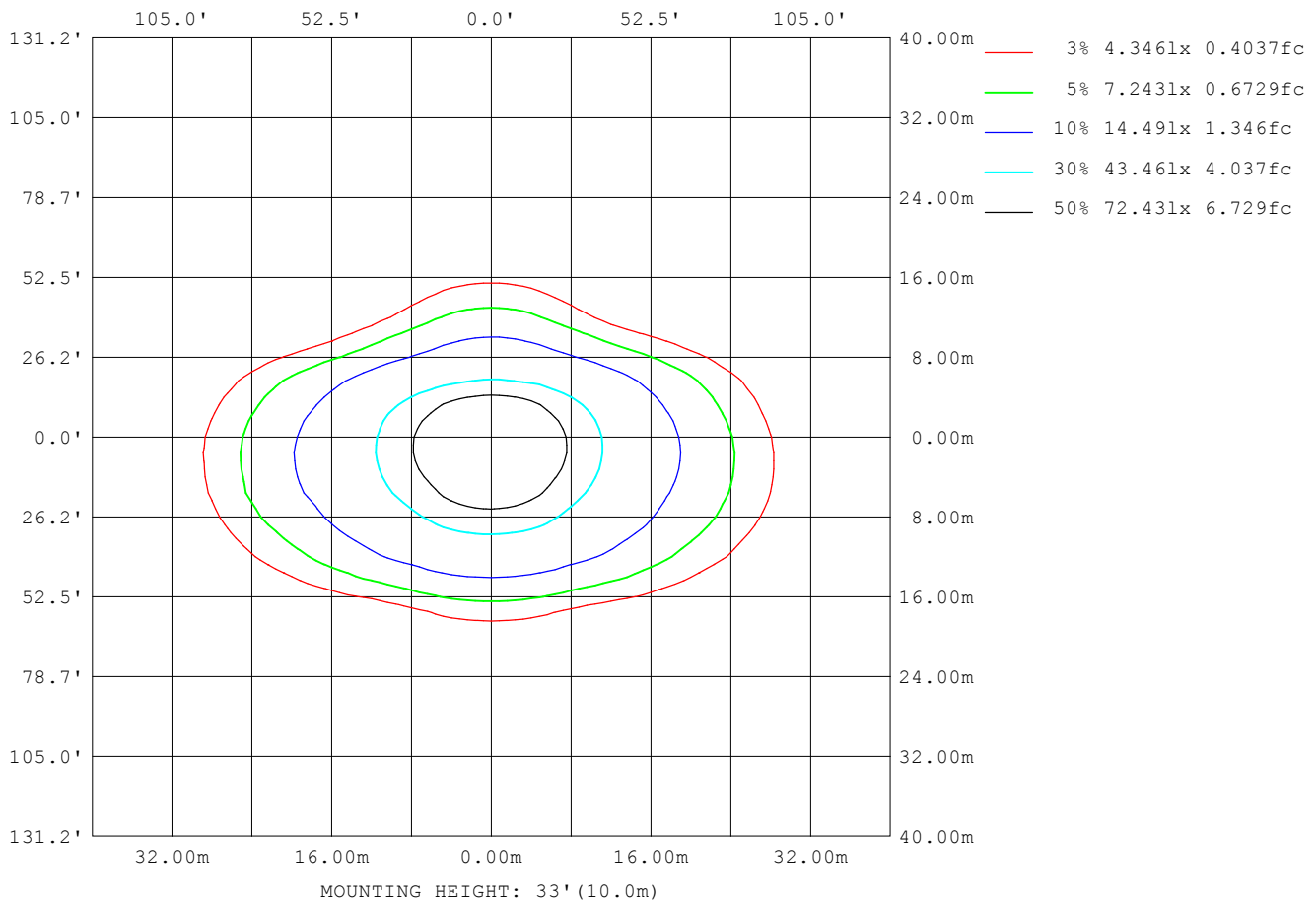
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:308.20W PF:0.9964 Freq:59.97Hz Lamp Flux:43698x1 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:308.20W PF:0.9964 Freq:59.97Hz Lamp Flux:43698x1 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

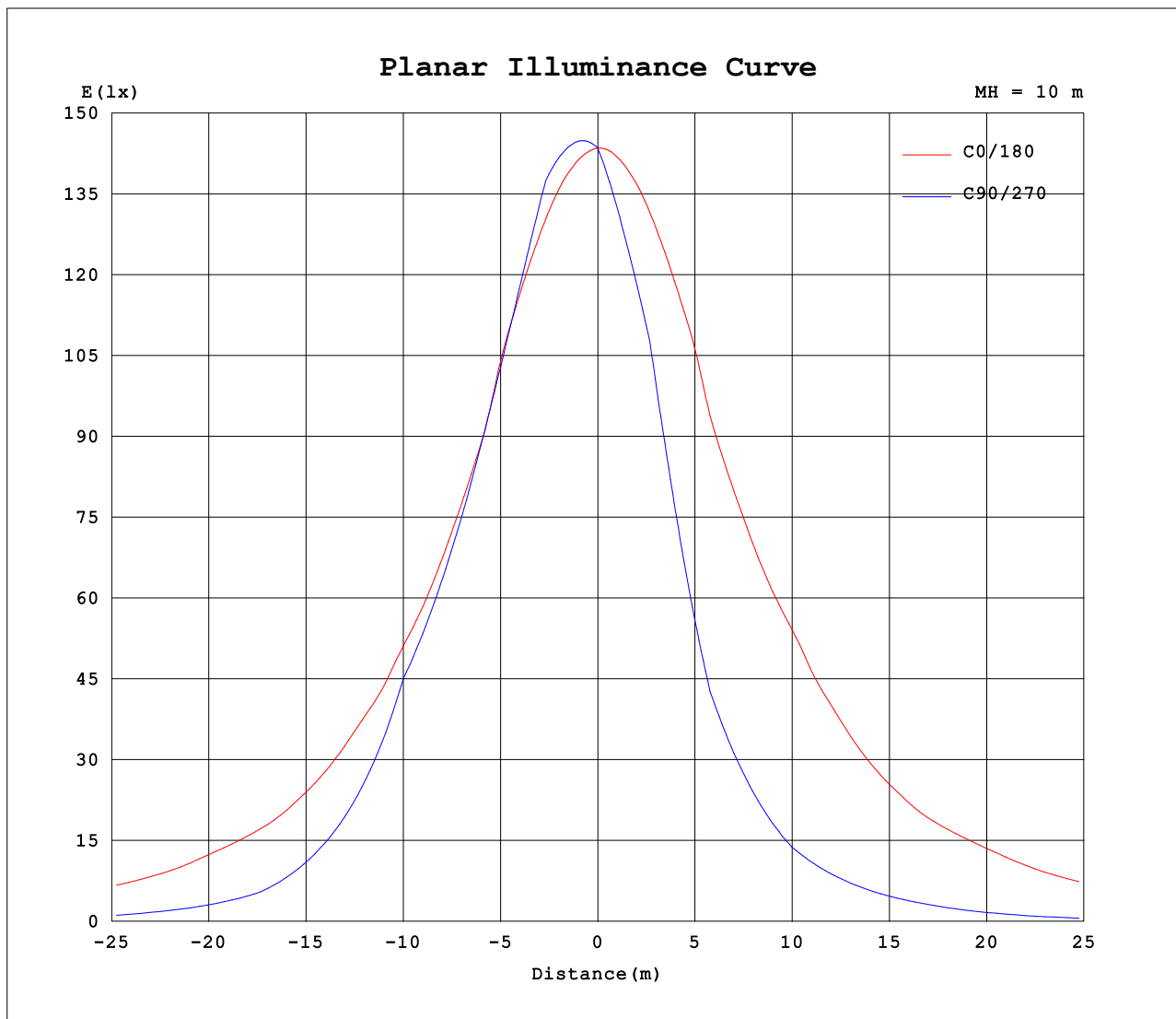
AvgL	cd/m2
L_0~180 (65) av	1398096
L_0~180 (75) av	1250127
L_0~180 (85) av	57281
L_90~270 (65) av	234791
L_90~270 (75) av	52371
L_90~270 (85) av	0
L_45 (65) av	414925
L_45 (75) av	220421
L_45 (85) av	0

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:
```