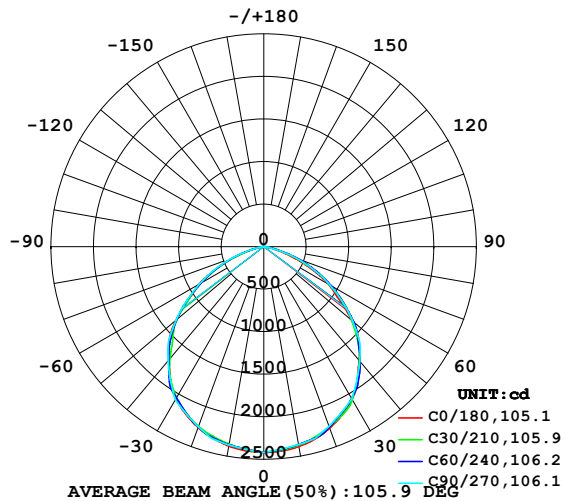


LUMINAIRE PHOTOMETRIC TEST REPORT

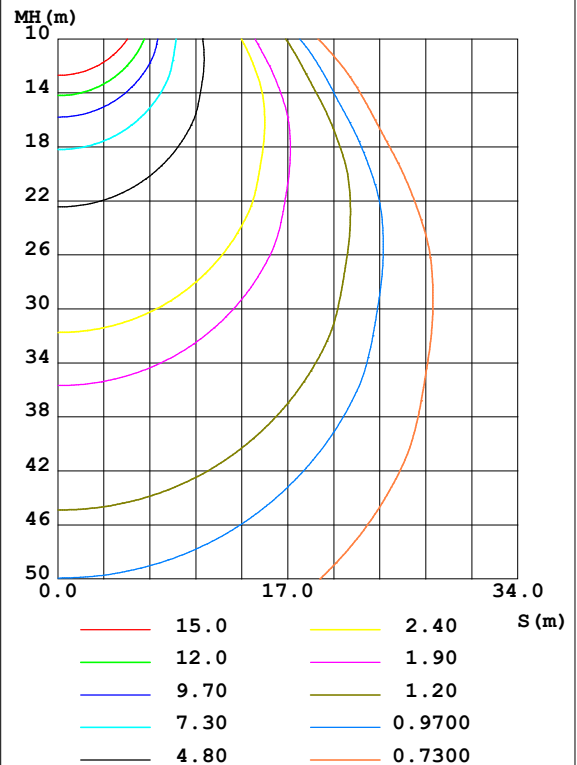
Test:U:120.88V I:0.3338A P:40.270W PF:0.9979 Freq:59.98Hz Lamp Flux:6090.7x1 lm		
NAME: GHRM-07-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:40W/3000K/110°	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

DATA OF LAMP		PHOTOMETRIC DATA Eff: 151.25 lm/W			
MODEL	GHRM-07-U	I _{max} (cd)	2418	S/MH(C0/180)	1.27
NOMINAL POWER(W)	40W	LOR(%)	100.0	S/MH(C90/270)	1.27
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	6090.7	η UP,DN(C0-180)	0.0,50.2
NOMINAL FLUX(lm)	6090.7	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.8
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	η down(%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-03-11

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:7.448m [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	2386	2364	2362	2354	2379	2358	2366	2367	0- 10	227.7	227.7	3.74,3.74
20	2271	2273	2245	2249	2261	2256	2252	2277	10- 20	655.3	883.0	14.5,14.5
30	2073	2057	2068	2029	2065	2045	2079	2061	20- 30	997.2	1880	30.9,30.9
40	1745	1768	1756	1741	1738	1763	1750	1765	30- 40	1196	3076	50.5,50.5
50	1352	1356	1365	1321	1348	1338	1345	1327	40- 50	1198	4275	70.2,70.2
60	872.6	897.6	895.4	848.3	874.8	851.5	864.1	852.2	50- 60	988.5	5263	86.4,86.4
70	353.5	421.4	422.5	367.9	358.3	358.5	392.0	374.8	60- 70	616.6	5880	96.5,96.5
80	47.98	59.15	0	40.06	49.56	36.36	0	42.48	70- 80	202.3	6082	99.9,99.9
90	0.9802	0	0	0	1.041	0	0	0	80- 90	8.526	6091	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): 3687.9 lm

%lum = 60.5%

%lamp = 60.6%

Conical surface Flux(120deg): 5263.3 lm

%lum = 86.4%

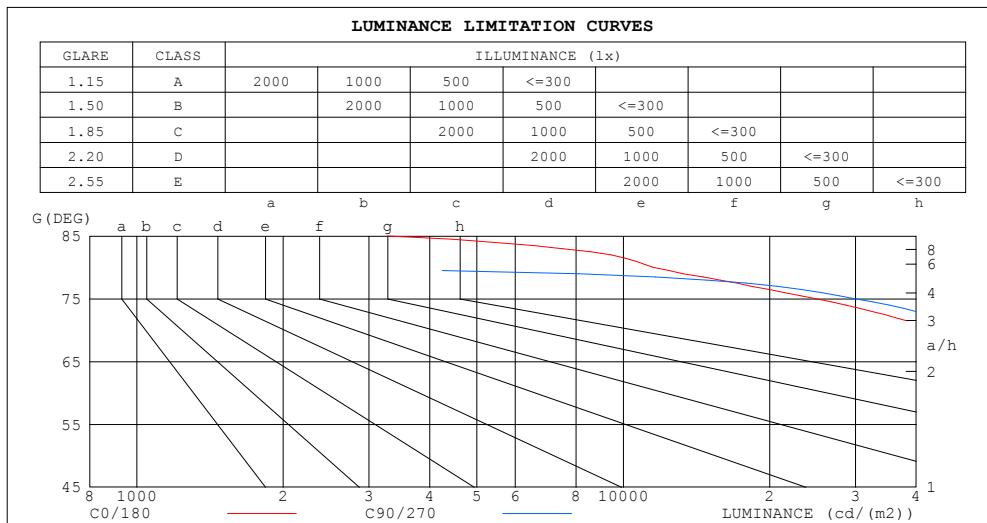
%lamp = 86.4%

$H(\beta)$ Range:-90 - 90DEG
 $H(\beta)$ Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Gu
 Test Date:2025-03-11

$V(B)$ Range:-75 - 75DEG
 $V(B)$ Interval: 5.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
 Humidity:65.0%
 Test Distance:7.448m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.88V I:0.3338A P:40.270W PF:0.9979 Freq:59.98Hz Lamp Flux:6090.7x1 lm		
NAME: GHRM-07-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:40W/3000K/110°	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	3275	0
80	11513	0
75	24861	29892
70	43067	51477
65	60067	64938
60	72721	74619
55	78034	82061
50	87615	88461
45	93247	94200

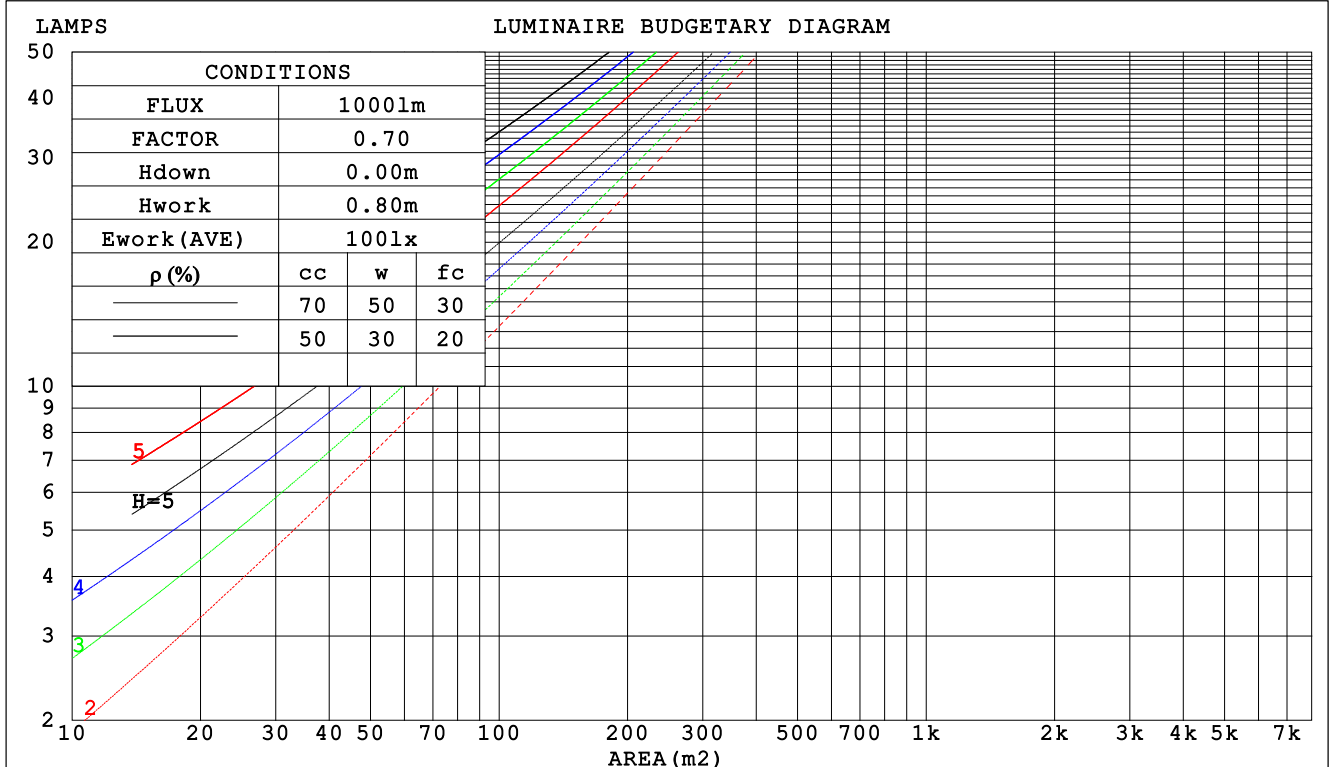
H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-03-11

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:7.448m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.88V I:0.3338A P:40.270W PF:0.9979 Freq:59.98Hz Lamp Flux:6090.7x1 lm		
NAME: GHRM-07-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:40W/3000K/110°	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	Coefficients of Utilization(CU)															
RCR:Room Cavity Ratio																
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	1.06	1.02	.99	1.04	1.01	.97	.90	.97	.94	.96	.94	.92	.92	.91	.89	.87
2.0	.94	.88	.82	.92	.86	.81	.88	.84	.80	.85	.81	.78	.82	.79	.76	.74
3.0	.83	.75	.69	.81	.74	.69	.78	.73	.68	.76	.71	.66	.73	.69	.65	.63
4.0	.74	.66	.59	.73	.65	.59	.70	.63	.58	.68	.62	.57	.66	.61	.57	.55
5.0	.66	.58	.51	.65	.57	.51	.63	.56	.51	.61	.55	.50	.59	.54	.50	.48
6.0	.60	.51	.45	.59	.51	.45	.57	.50	.45	.55	.49	.44	.54	.48	.44	.42
7.0	.54	.46	.40	.54	.46	.40	.52	.45	.40	.51	.44	.39	.49	.43	.39	.37
8.0	.50	.41	.36	.49	.41	.36	.48	.40	.35	.46	.40	.35	.45	.39	.35	.33
9.0	.46	.38	.32	.45	.37	.32	.44	.37	.32	.43	.36	.32	.42	.36	.32	.30
10.0	.42	.34	.29	.42	.34	.29	.41	.34	.29	.40	.33	.29	.39	.33	.29	.27



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-03-11

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:7.448m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:120.88V I:0.3338A P:40.270W PF:0.9979 Freq:59.98Hz Lamp Flux:6090.7x1 lm					
NAME: GHRM-07-U			TYPE:Flood Light		WEIGHT:N/A
SPEC.:40W/3000K/110°			DIM.: 190*150mm		SERIAL No.:N/A
MFR.: Grin Industrial 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	.267	.152	.048	.260	.148	.047	.247	.141	.045	.235	.135	.043	.224	.130	.042		
2.0	.261	.143	.044	.255	.140	.043	.243	.135	.042	.233	.131	.041	.223	.126	.040		
3.0	.247	.131	.039	.242	.129	.039	.232	.125	.038	.222	.122	.037	.214	.118	.037		
4.0	.232	.120	.035	.227	.119	.035	.218	.116	.035	.210	.113	.034	.202	.110	.033		
5.0	.217	.110	.032	.213	.109	.032	.205	.107	.031	.197	.104	.031	.190	.102	.031		
6.0	.203	.102	.029	.199	.101	.029	.192	.098	.029	.185	.096	.028	.179	.094	.028		
7.0	.190	.094	.027	.187	.093	.027	.181	.091	.026	.175	.090	.026	.169	.088	.026		
8.0	.179	.087	.025	.176	.086	.024	.170	.085	.024	.165	.083	.024	.160	.082	.024		
9.0	.168	.081	.023	.165	.081	.023	.160	.079	.022	.156	.078	.022	.151	.077	.022		
10.0	.159	.076	.021	.156	.075	.021	.152	.074	.021	.147	.073	.021	.143	.072	.021		

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	.177	.157	.138	.152	.134	.119	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.168	.132	.102	.144	.114	.088	.099	.079	.061	.057	.046	.036	.018	.015	.012	
3.0	.160	.114	.078	.137	.098	.067	.094	.068	.047	.054	.040	.028	.017	.013	.009	
4.0	.153	.101	.061	.131	.087	.053	.090	.061	.037	.052	.035	.022	.017	.012	.007	
5.0	.145	.090	.049	.125	.078	.043	.086	.054	.030	.050	.032	.018	.016	.010	.006	
6.0	.139	.082	.041	.119	.071	.035	.082	.049	.025	.048	.029	.015	.015	.010	.005	
7.0	.132	.075	.034	.114	.065	.030	.079	.045	.021	.046	.027	.013	.015	.009	.004	
8.0	.126	.069	.030	.109	.060	.026	.075	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.120	.064	.026	.104	.055	.023	.072	.039	.016	.042	.023	.010	.014	.008	.003	
10.0	.115	.060	.023	.099	.052	.020	.069	.036	.014	.040	.022	.008	.013	.007	.003	

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-03-11

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:7.448m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.88V I:0.3338A P:40.270W PF:0.9979 Freq:59.98Hz Lamp Flux:6090.7x1 lm										
NAME: GHRM-07-U					TYPE:Flood Light			WEIGHT:N/A		
SPEC.:40W/3000K/110°					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	21.9	23.3	22.1	23.5	23.7	22.0	23.4	22.3	23.6	23.8
3H	22.7	24.0	23.0	24.2	24.5	22.9	24.3	23.2	24.5	24.7
4H	22.8	24.1	23.1	24.3	24.6	23.1	24.3	23.4	24.6	24.8
6H	22.8	23.9	23.1	24.2	24.5	23.0	24.2	23.3	24.4	24.7
8H	22.7	23.9	23.1	24.1	24.4	23.0	24.1	23.3	24.4	24.7
12H	22.7	23.8	23.0	24.1	24.4	22.9	24.0	23.3	24.3	24.6
4H 2H	22.3	23.6	22.6	23.8	24.1	22.4	23.7	22.7	23.9	24.2
3H	23.3	24.4	23.6	24.7	24.9	23.5	24.6	23.9	24.9	25.2
4H	23.5	24.4	23.8	24.8	25.1	23.7	24.7	24.1	25.0	25.3
6H	23.5	24.3	23.9	24.7	25.0	23.7	24.5	24.1	24.9	25.2
8H	23.4	24.2	23.8	24.6	25.0	23.6	24.4	24.0	24.8	25.2
12H	23.4	24.1	23.8	24.5	24.9	23.6	24.3	24.0	24.7	25.1
8H 4H	23.5	24.3	23.9	24.7	25.1	23.8	24.6	24.2	24.9	25.3
6H	23.6	24.2	24.0	24.6	25.1	23.7	24.4	24.2	24.8	25.2
8H	23.6	24.1	24.0	24.6	25.0	23.7	24.3	24.2	24.7	25.1
12H	23.5	24.0	24.0	24.5	24.9	23.7	24.1	24.1	24.6	25.1
12H 4H	23.5	24.2	23.9	24.6	25.0	23.7	24.4	24.1	24.8	25.2
6H	23.5	24.1	24.0	24.5	25.0	23.7	24.3	24.2	24.7	25.2
8H	23.5	24.0	24.0	24.5	24.9	23.7	24.2	24.1	24.6	25.1
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.5					+ 0.3 / - 0.4				
1.5H	+ 0.3 / - 0.6					+ 0.2 / - 0.5				
2.0H	+ 0.6 / - 0.6					+ 0.6 / - 0.6				

CIE Pub.117, 6091 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 6.3)
Area: 0.024 m2

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-03-11

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:7.448m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.88V I:0.3338A P:40.270W PF:0.9979 Freq:59.98Hz Lamp Flux:6090.7x1 lm		
NAME: GHRM-07-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:40W/3000K/110°	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

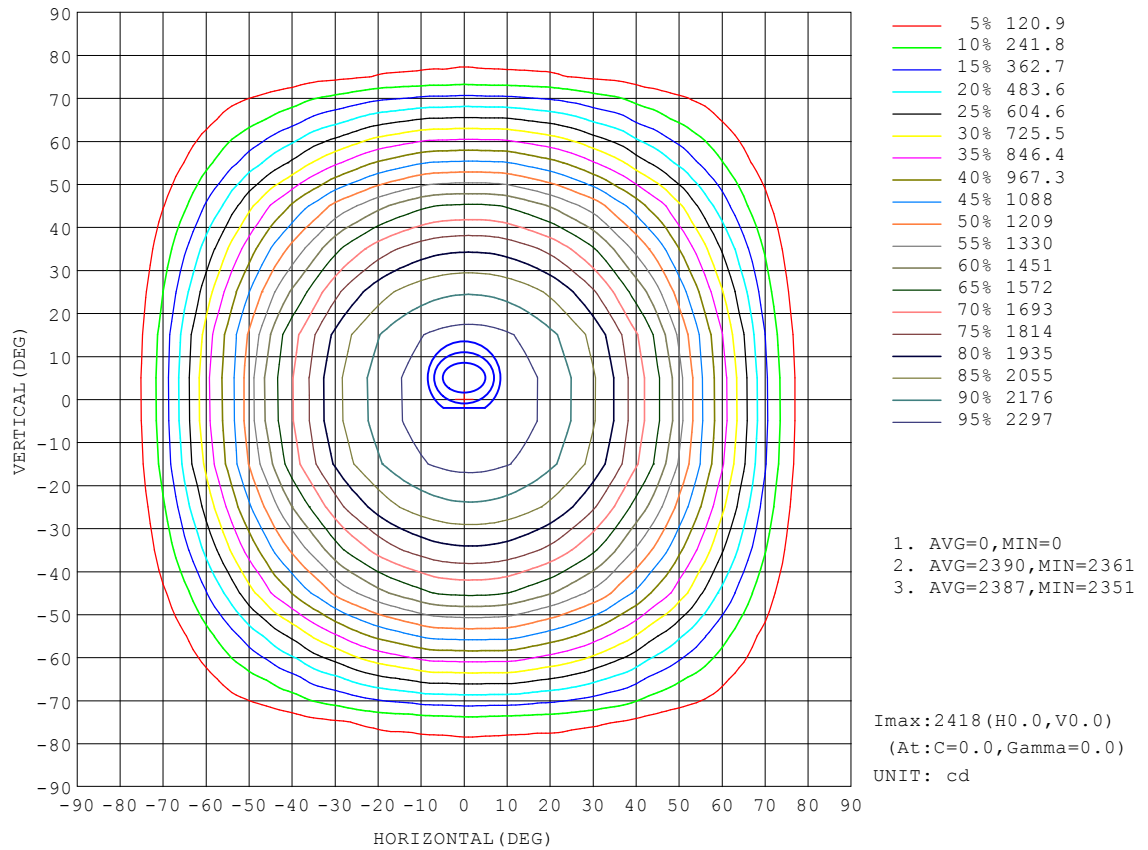
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	60	49	43	60	49	43	59	49	42	36
0.80	71	60	53	70	60	53	68	59	53	46
1.00	80	69	63	78	69	62	76	70	62	55
1.25	87	77	71	85	76	70	83	75	69	63
1.50	92	83	76	90	82	76	87	80	75	68
2.00	98	91	85	96	89	84	93	87	83	75
2.50	102	95	89	100	93	89	96	91	87	79
3.00	105	99	94	103	97	93	99	94	91	83
4.00	108	103	99	106	102	98	102	98	95	87
5.00	110	106	103	108	104	101	104	101	98	89
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

$H(\beta)$ Range:-90 - 90DEG
 $H(\beta)$ Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Gu
 Test Date:2025-03-11

$V(B)$ Range:-75 - 75DEG
 $V(B)$ Interval: 5.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
 Humidity:65.0%
 Test Distance:7.448m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.88V I:0.3338A P:40.270W PF:0.9979 Freq:59.98Hz Lamp Flux:6090.7x1 lm		
NAME: GHRM-07-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:40W/3000K/110°	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

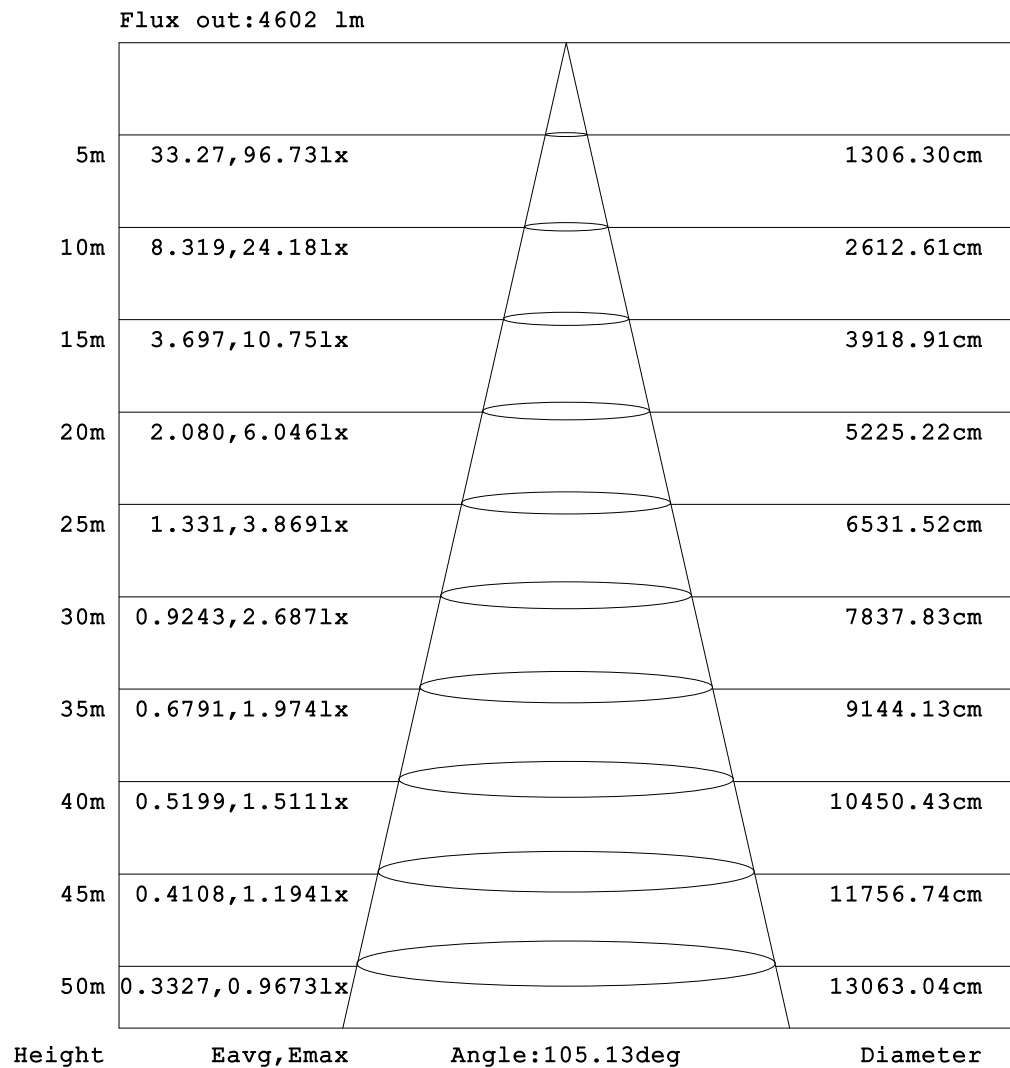


H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-03-11

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:7.448m [K=1.0000]
Remarks:

AAI Figure

Test:U:120.88V I:0.3338A P:40.270W PF:0.9979 Freq:59.98Hz Lamp Flux:6090.7x1 lm		
NAME: GHRM-07-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:40W/3000K/110°	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A



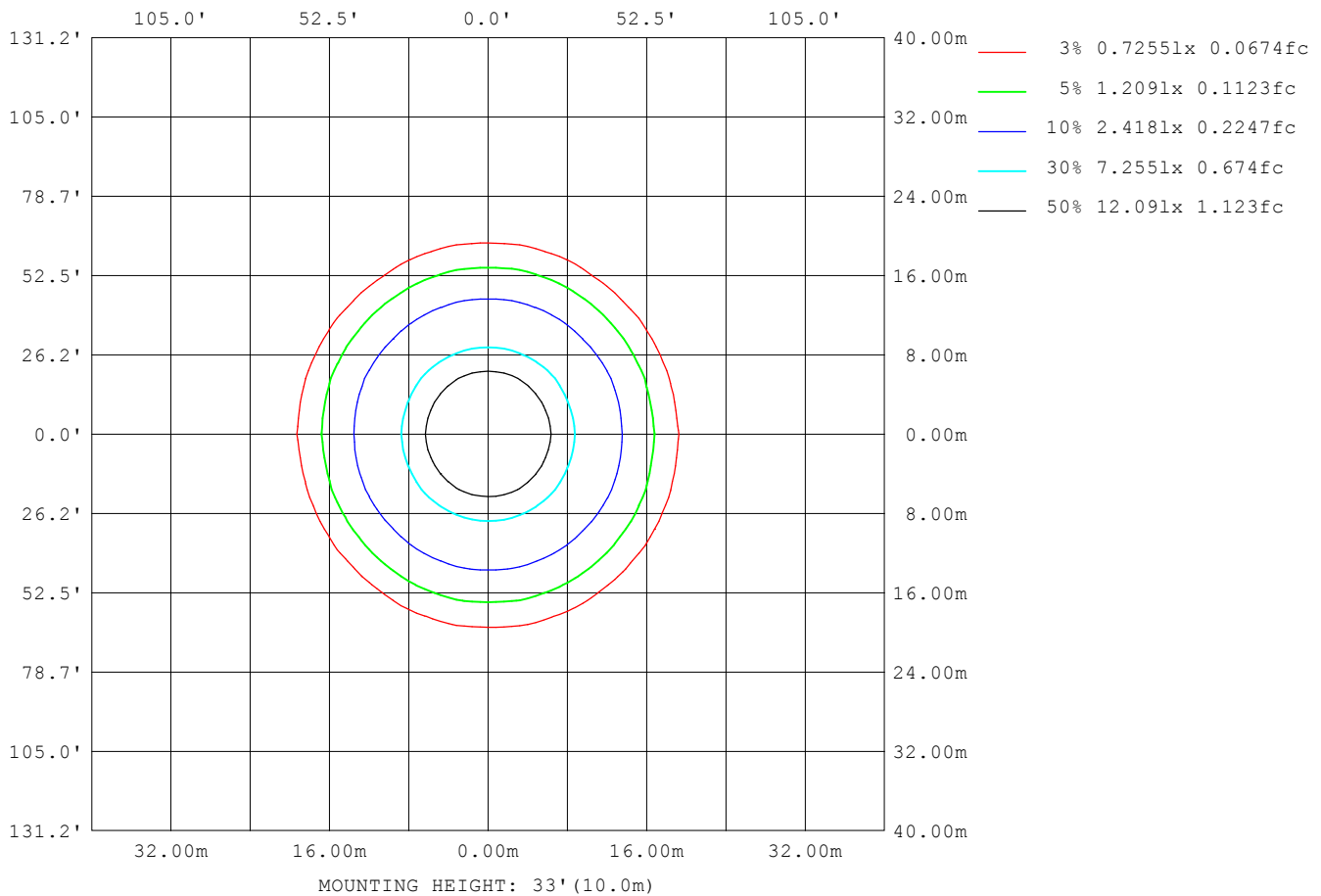
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-03-11

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:7.448m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:120.88V I:0.3338A P:40.270W PF:0.9979 Freq:59.98Hz Lamp Flux:6090.7x1 lm		
NAME: GHRM-07-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:40W/3000K/110°	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-03-11

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:7.448m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:120.88V I:0.3338A P:40.270W PF:0.9979 Freq:59.98Hz Lamp Flux:6090.7x1 lm		
NAME: GHRM-07-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:40W/3000K/110°	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

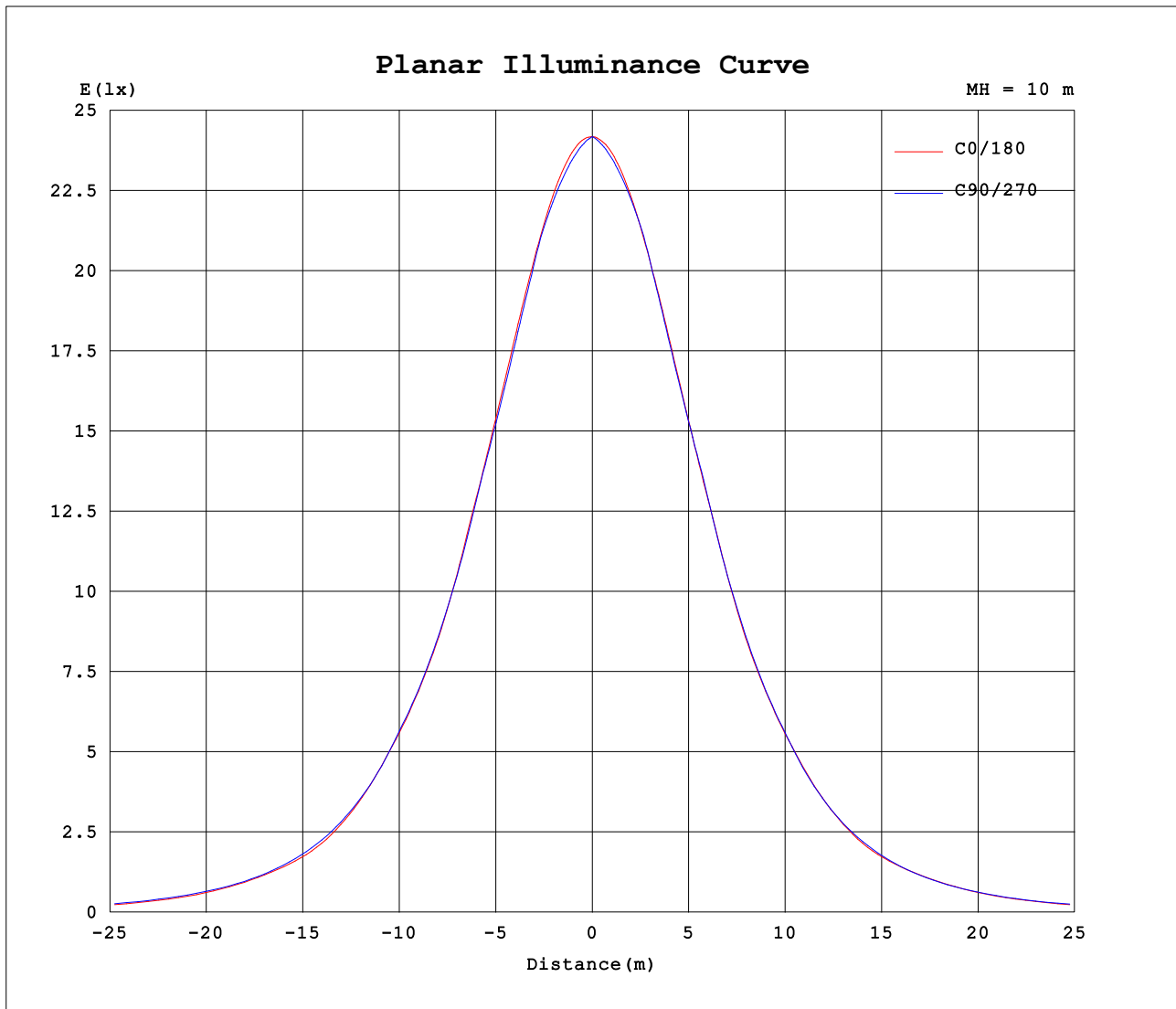
AvgL	cd/m2
L_0~180 (65) av	60151
L_0~180 (75) av	25305
L_0~180 (85) av	3501
L_90~270 (65) av	63427
L_90~270 (75) av	27545
L_90~270 (85) av	0
L_45 (65) av	59537
L_45 (75) av	32340
L_45 (85) av	0

Standard: GB/T 29293-2012

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-03-11

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:7.448m [K=1.0000]
Remarks:

Planar Illuminance Curve



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-03-11

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:7.448m [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:7.448m [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:7.448m [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:7.448m [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:7.448m [K=1.0000]
Remarks: