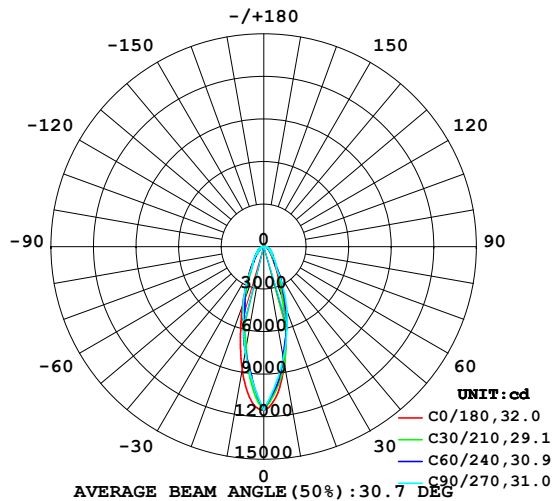


LUMINAIRE PHOTOMETRIC TEST REPORT

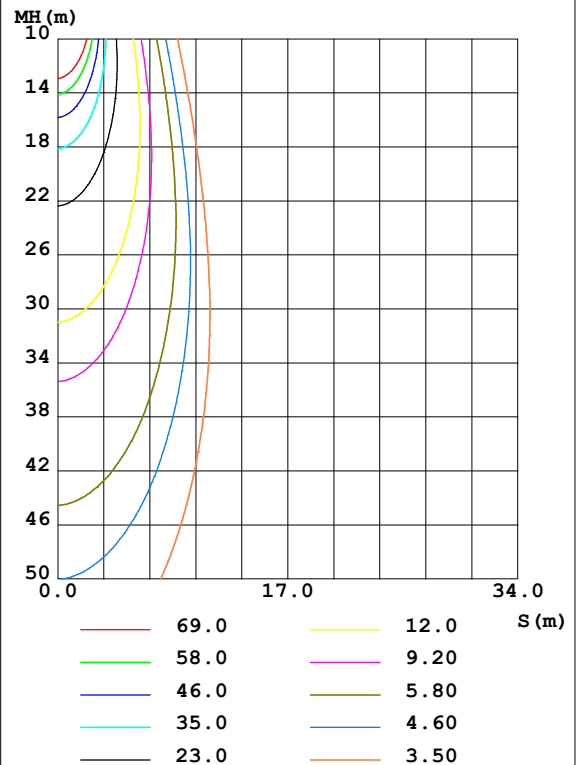
Test:U:120.92V I:0.3340A P:40.306W PF:0.9980 Freq:59.98Hz Lamp Flux:6186.8x1 lm		
NAME: GHLV-07-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:40W/5000K/30°	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

DATA OF LAMP		PHOTOMETRIC DATA Eff: 153.50 lm/W			
MODEL	GHLV-07-U	I _{max} (cd)	11524	S/MH(C0/180)	0.54
NOMINAL POWER(W)	40W	LOR(%)	100.0	S/MH(C90/270)	0.47
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	6186.8	η UP,DN(C0-180)	0.0,51.5
NOMINAL FLUX(lm)	6186.8	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,48.5
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	120	η down(%)	100.0	CIBSE SHR MAX	0.60

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:2025-03-17

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	841.5	810.1	802.3	759.4	879.3	732.4	752.1	779.6	0- 10	879.4	879.4	14.2,14.2
20	402.1	448.8	479.6	393.3	437.8	364.8	422.6	405.9	10- 20	1606	2485	40.2,40.2
30	168.1	197.5	184.5	199.5	194.4	187.2	163.8	181.6	20- 30	1302	3787	61.2,61.2
40	89.19	94.97	115.2	98.93	98.16	94.18	104.2	89.53	30- 40	826.0	4613	74.6,74.6
50	58.60	63.71	69.28	65.51	62.33	62.51	63.50	59.98	40- 50	601.5	5214	84.3,84.3
60	38.34	43.79	46.74	43.80	40.88	40.94	41.84	40.12	50- 60	463.9	5678	91.8,91.8
70	20.53	27.35	28.93	26.14	22.72	23.40	23.61	23.91	60- 70	326.2	6004	97.1,97.1
80	6.208	10.14	0	8.588	8.013	6.629	0	7.350	70- 80	166.2	6171	99.7,99.7
90	0.9494	0	0	0	1.135	0	0	0	80- 90	16.19	6187	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): 4935.3 lm

%lum = 79.8%

%lamp = 79.8%

Conical surface Flux(120deg): 5678.2 lm

%lum = 91.8%

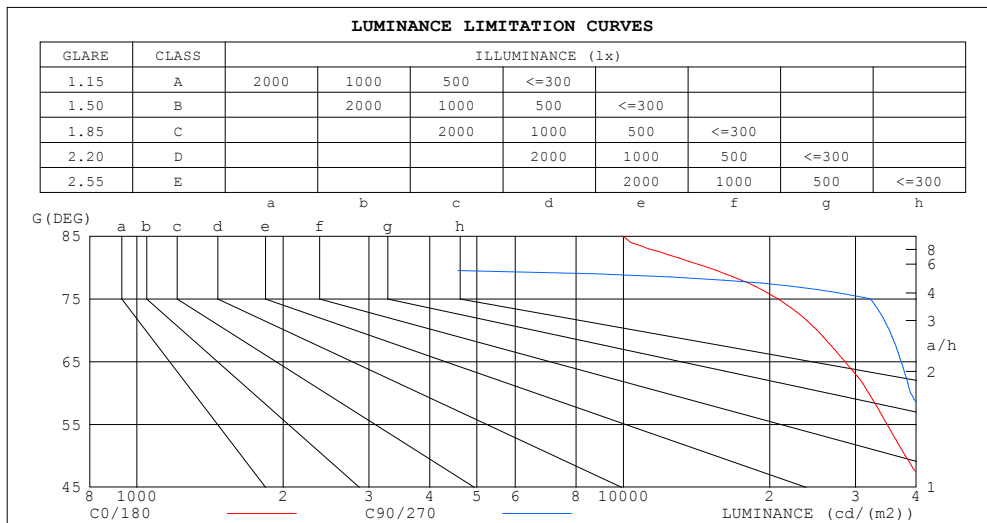
%lamp = 91.8%

$H(\beta)$ Range:-90 - 90DEG
 $H(\beta)$ Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Gu
 Test Date:2025-03-17

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:120.92V I:0.3340A P:40.306W PF:0.9980 Freq:59.98Hz Lamp Flux:6186.8x1 lm		
NAME: GHLV-07-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:40W/5000K/30°	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	9971	0
80	14896	0
75	20775	32173
70	25012	35240
65	28538	37248
60	31951	38947
55	34832	42099
50	37989	44906
45	42023	47438

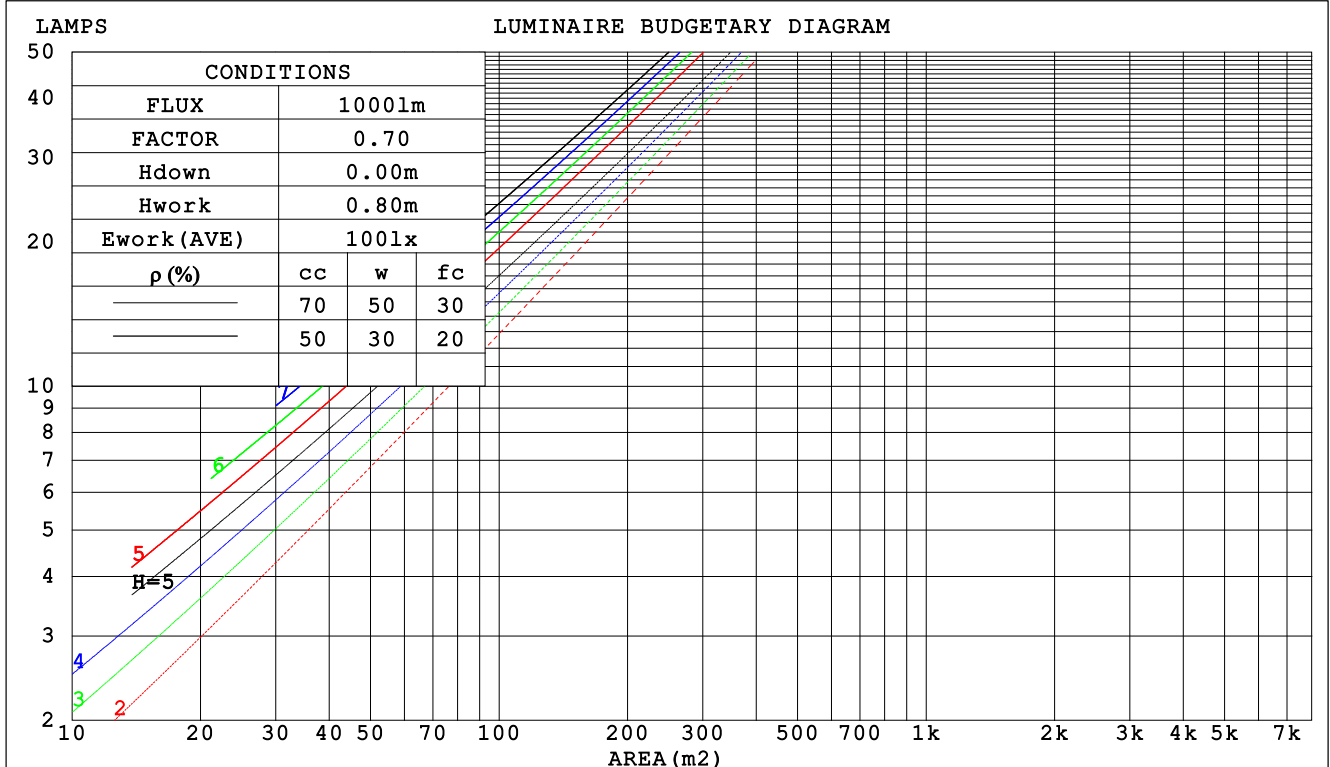
H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-03-17

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:120.92V I:0.3340A P:40.306W PF:0.9980 Freq:59.98Hz Lamp Flux:6186.8x1 lm		
NAME: GHLV-07-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:40W/5000K/30°	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	1.09	1.06	1.03	1.07	1.04	1.02	1.03	1.00	.98	.99	.97	.95	.95	.94	.93	.91
2.0	.00	.95	.91	.98	.93	.90	.94	.91	.88	.91	.88	.86	.89	.86	.84	.82
3.0	.92	.86	.81	.90	.85	.80	.87	.83	.79	.85	.81	.78	.83	.79	.77	.75
4.0	.85	.78	.73	.84	.78	.73	.81	.76	.72	.79	.75	.71	.77	.73	.70	.69
5.0	.79	.72	.67	.78	.72	.67	.76	.71	.66	.74	.69	.66	.73	.68	.65	.64
6.0	.74	.67	.62	.73	.67	.62	.71	.66	.62	.70	.65	.61	.68	.64	.61	.59
7.0	.69	.63	.58	.69	.62	.58	.67	.62	.58	.66	.61	.57	.65	.60	.57	.55
8.0	.65	.59	.54	.65	.59	.54	.64	.58	.54	.62	.57	.54	.61	.57	.54	.52
9.0	.62	.55	.51	.61	.55	.51	.60	.55	.51	.59	.54	.51	.58	.54	.51	.49
10.0	.59	.53	.48	.58	.52	.48	.57	.52	.48	.57	.52	.48	.56	.51	.48	.47



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-03-17

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:120.92V I:0.3340A P:40.306W PF:0.9980 Freq:59.98Hz Lamp Flux:6186.8x1 lm					
NAME: GHLV-07-U			TYPE:Flood Light		WEIGHT:N/A
SPEC.:40W/5000K/30°			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	.214	.122	.039	.207	.118	.038	.194	.112	.036	.183	.105	.034	.172	.100	.032		
2.0	.204	.112	.034	.199	.109	.034	.188	.104	.032	.178	.100	.031	.168	.095	.030		
3.0	.192	.102	.031	.187	.100	.030	.177	.096	.029	.169	.092	.028	.161	.089	.028		
4.0	.180	.093	.027	.175	.092	.027	.167	.089	.026	.160	.086	.026	.152	.083	.025		
5.0	.168	.086	.025	.165	.084	.025	.157	.082	.024	.151	.080	.024	.145	.077	.023		
6.0	.158	.079	.023	.155	.078	.023	.148	.076	.022	.143	.074	.022	.137	.072	.021		
7.0	.149	.074	.021	.146	.073	.021	.140	.071	.020	.135	.069	.020	.130	.068	.020		
8.0	.141	.069	.019	.138	.068	.019	.133	.066	.019	.128	.065	.019	.124	.064	.019		
9.0	.133	.064	.018	.131	.064	.018	.126	.063	.018	.122	.061	.018	.118	.060	.017		
10.0	.126	.061	.017	.124	.060	.017	.120	.059	.017	.117	.058	.016	.113	.057	.016		

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	.174	.157	.142	.149	.135	.122	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.161	.132	.109	.138	.114	.094	.094	.079	.065	.054	.046	.038	.017	.015	.013	
3.0	.149	.114	.085	.128	.098	.074	.088	.068	.052	.051	.040	.031	.016	.013	.010	
4.0	.140	.099	.069	.120	.086	.060	.082	.060	.042	.048	.035	.025	.015	.011	.008	
5.0	.131	.088	.056	.113	.076	.049	.078	.053	.035	.045	.031	.021	.014	.010	.007	
6.0	.123	.079	.047	.106	.068	.041	.073	.048	.029	.042	.028	.017	.014	.009	.006	
7.0	.117	.072	.040	.100	.062	.035	.069	.043	.025	.040	.026	.015	.013	.008	.005	
8.0	.110	.065	.034	.095	.057	.030	.066	.040	.021	.038	.023	.013	.012	.008	.004	
9.0	.105	.060	.030	.090	.052	.026	.063	.037	.019	.036	.022	.011	.012	.007	.004	
10.0	.100	.056	.026	.086	.048	.023	.060	.034	.016	.035	.020	.010	.011	.007	.003	

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-03-17

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:120.92V I:0.3340A P:40.306W PF:0.9980 Freq:59.98Hz Lamp Flux:6186.8x1 lm										
NAME: GHLV-07-U					TYPE:Flood Light			WEIGHT:N/A		
SPEC.:40W/5000K/30°					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	16.7	17.8	16.9	17.9	18.1	17.5	18.6	17.7	18.8	18.9
3H	17.8	18.8	18.0	19.0	19.2	18.8	19.8	19.1	20.0	20.3
4H	18.2	19.1	18.5	19.4	19.6	19.4	20.3	19.7	20.5	20.8
6H	18.4	19.3	18.7	19.5	19.8	19.4	20.3	19.7	20.6	20.8
8H	18.4	19.3	18.7	19.6	19.8	19.4	20.2	19.7	20.5	20.8
12H	18.4	19.3	18.8	19.5	19.8	19.3	20.2	19.7	20.4	20.7
4H 2H	17.3	18.3	17.6	18.5	18.7	18.0	18.9	18.3	19.2	19.4
3H	18.6	19.5	19.0	19.8	20.0	19.5	20.3	19.8	20.6	20.9
4H	19.2	19.9	19.5	20.2	20.6	20.2	20.9	20.5	21.2	21.5
6H	19.5	20.2	19.9	20.5	20.9	20.3	20.9	20.6	21.3	21.6
8H	19.6	20.2	20.0	20.6	21.0	20.2	20.8	20.6	21.2	21.6
12H	19.6	20.2	20.1	20.6	21.0	20.2	20.7	20.6	21.1	21.5
8H 4H	19.5	20.1	19.9	20.5	20.9	20.4	21.0	20.8	21.3	21.7
6H	20.0	20.5	20.4	20.9	21.3	20.5	21.0	20.9	21.4	21.8
8H	20.2	20.6	20.6	21.1	21.5	20.4	20.9	20.9	21.3	21.8
12H	20.3	20.7	20.7	21.1	21.6	20.4	20.8	20.9	21.2	21.7
12H 4H	19.5	20.0	19.9	20.4	20.8	20.4	20.9	20.8	21.3	21.7
6H	20.0	20.5	20.5	20.9	21.3	20.5	20.9	20.9	21.4	21.8
8H	20.2	20.6	20.6	21.0	21.5	20.4	20.8	20.9	21.3	21.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.4				
1.5H	+ 0.2 / - 0.4					+ 0.4 / - 0.3				
2.0H	+ 0.3 / - 0.6					+ 0.4 / - 0.5				

CIE Pub.117, 6187 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:2025-03-17

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:120.92V I:0.3340A P:40.306W PF:0.9980 Freq:59.98Hz Lamp Flux:6186.8x1 lm		
NAME: GHLV-07-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:40W/5000K/30°	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

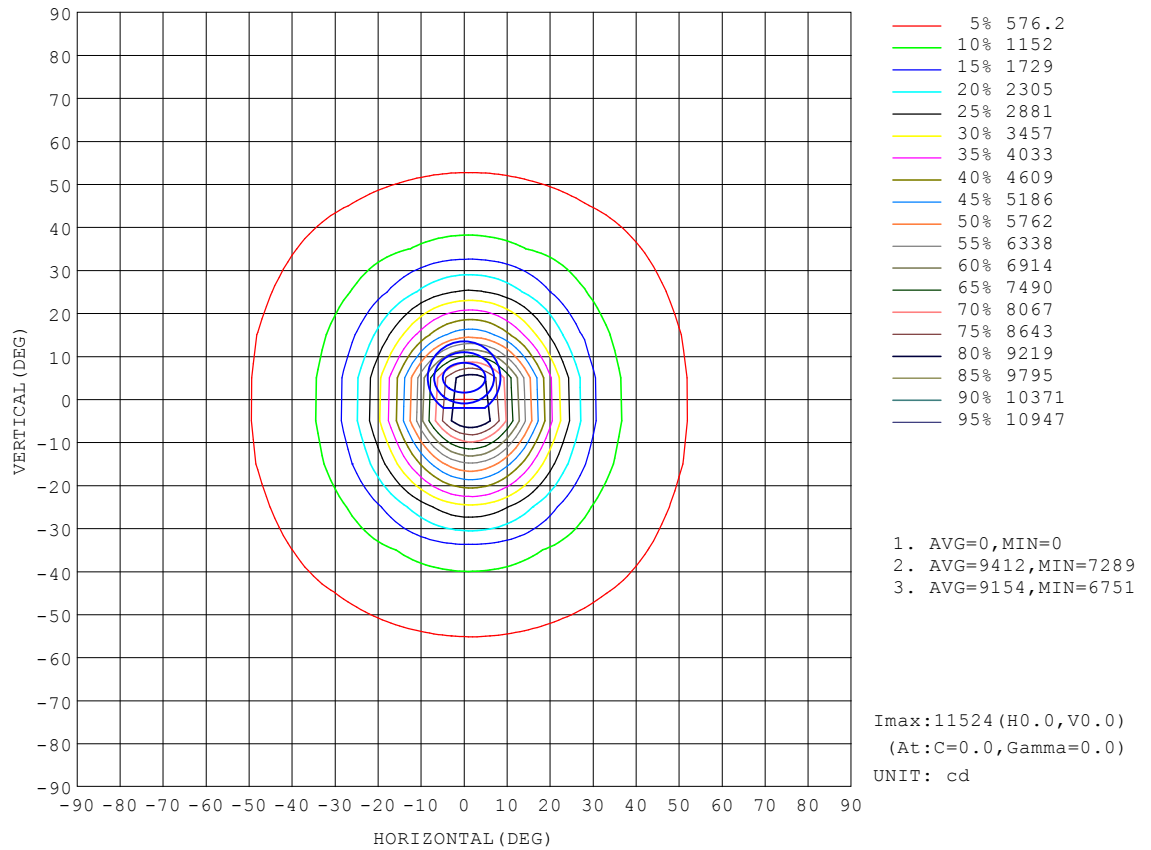
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	76	67	62	75	67	62	74	67	62	57
0.80	84	76	71	84	76	71	82	75	71	66
1.00	90	83	78	89	82	77	88	83	77	72
1.25	96	88	84	94	88	83	92	87	82	77
1.50	99	93	88	98	92	87	95	90	86	81
2.00	104	98	93	102	97	93	99	95	91	85
2.50	106	101	97	104	100	96	101	97	94	87
3.00	108	104	100	106	102	99	103	99	97	90
4.00	111	107	104	109	106	103	105	102	100	92
5.00	113	110	107	111	108	105	106	104	102	94
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:2025-03-17

$V(B)$ 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:120.92V I:0.3340A P:40.306W PF:0.9980 Freq:59.98Hz Lamp Flux:6186.8x1 lm		
NAME: GHLV-07-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:40W/5000K/30°	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

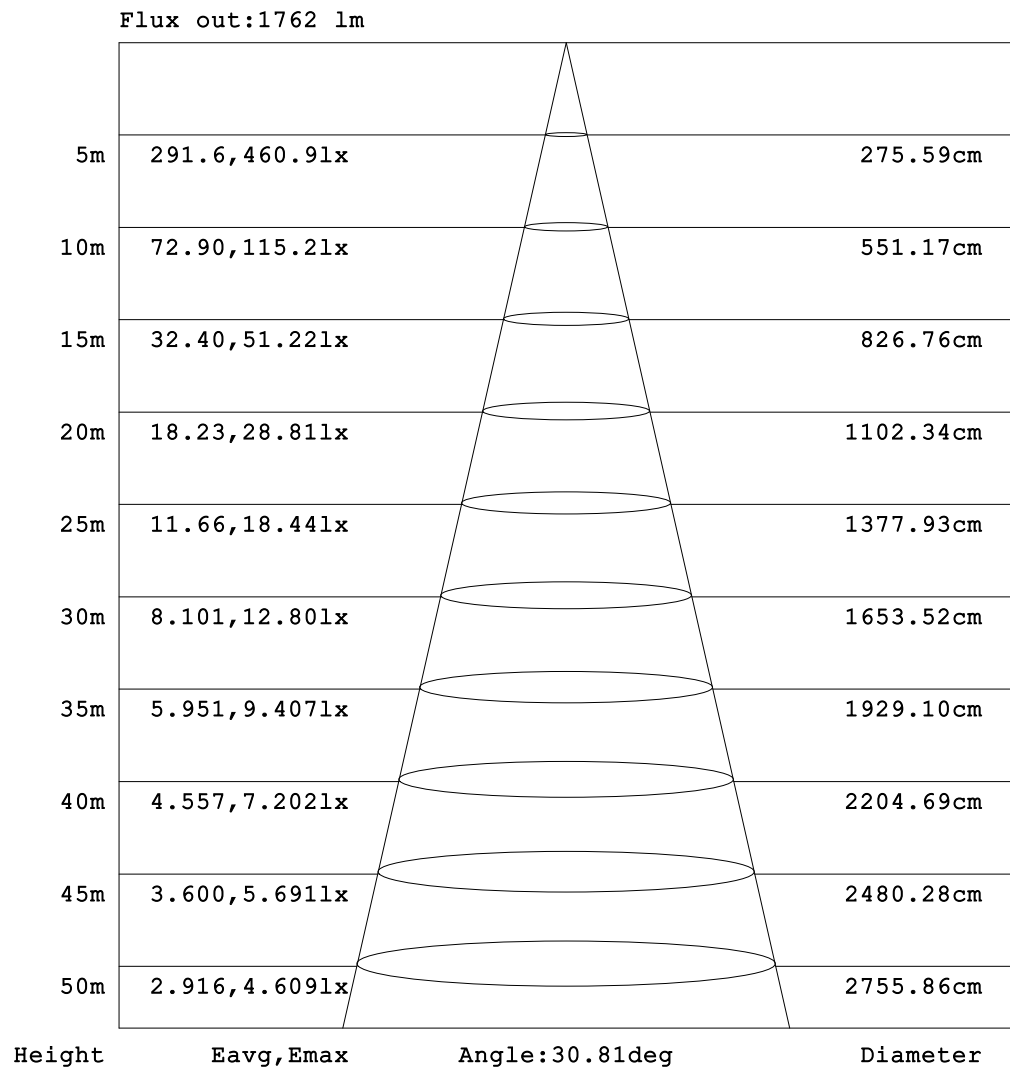


H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-03-17

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:120.92V I:0.3340A P:40.306W PF:0.9980 Freq:59.98Hz Lamp Flux:6186.8x1 lm		
NAME: GHLV-07-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:40W/5000K/30°	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A



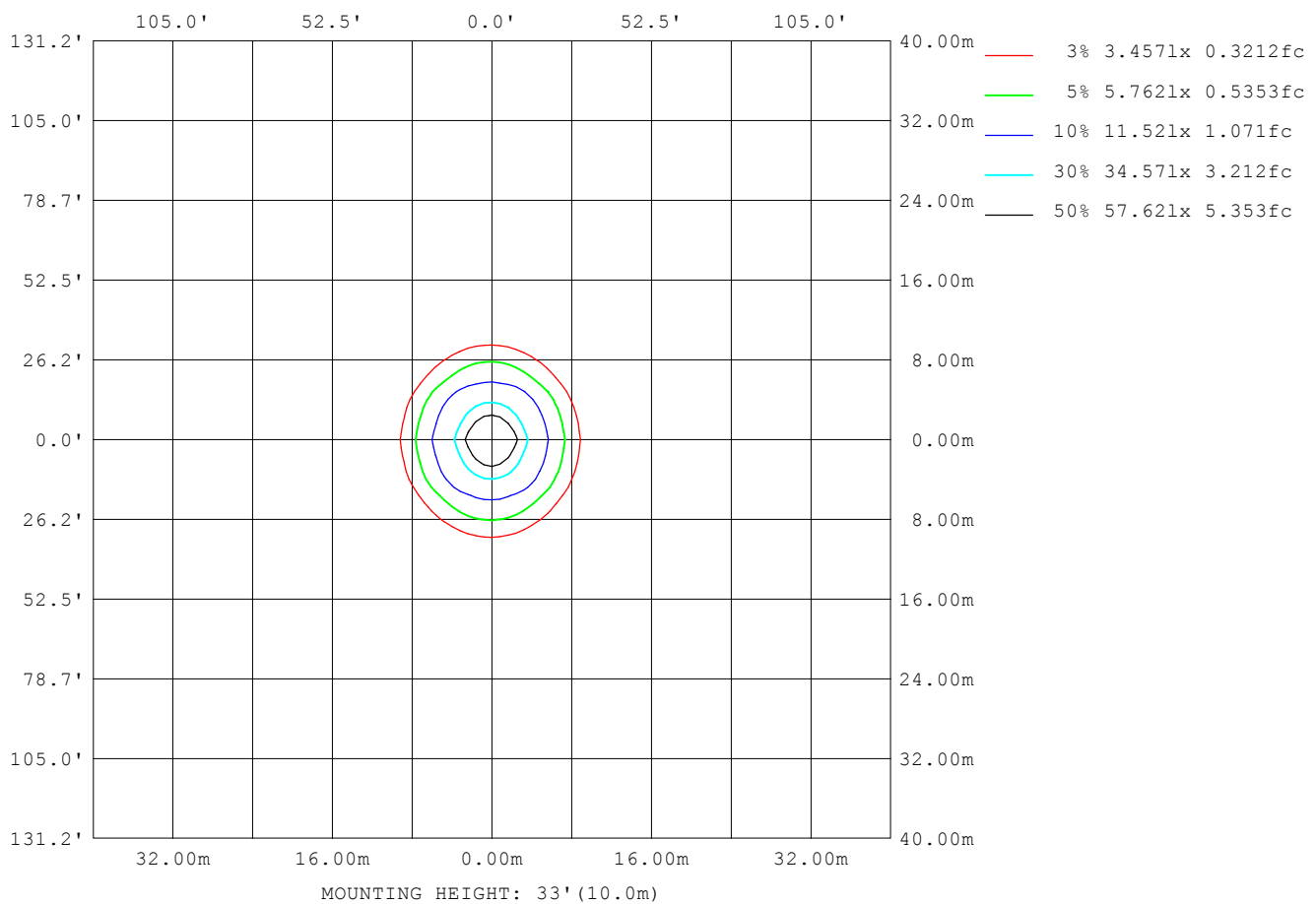
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Gu
Test Date:2025-03-17

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:120.92V I:0.3340A P:40.306W PF:0.9980 Freq:59.98Hz Lamp Flux:6186.8x1 lm		
NAME: GHLV-07-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:40W/5000K/30°	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:2025-03-17

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:120.92V I:0.3340A P:40.306W PF:0.9980 Freq:59.98Hz Lamp Flux:6186.8x1 lm		
NAME: GHLV-07-U	TYPE:Flood Light	WEIGHT:N/A
SPEC.:40W/5000K/30°	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

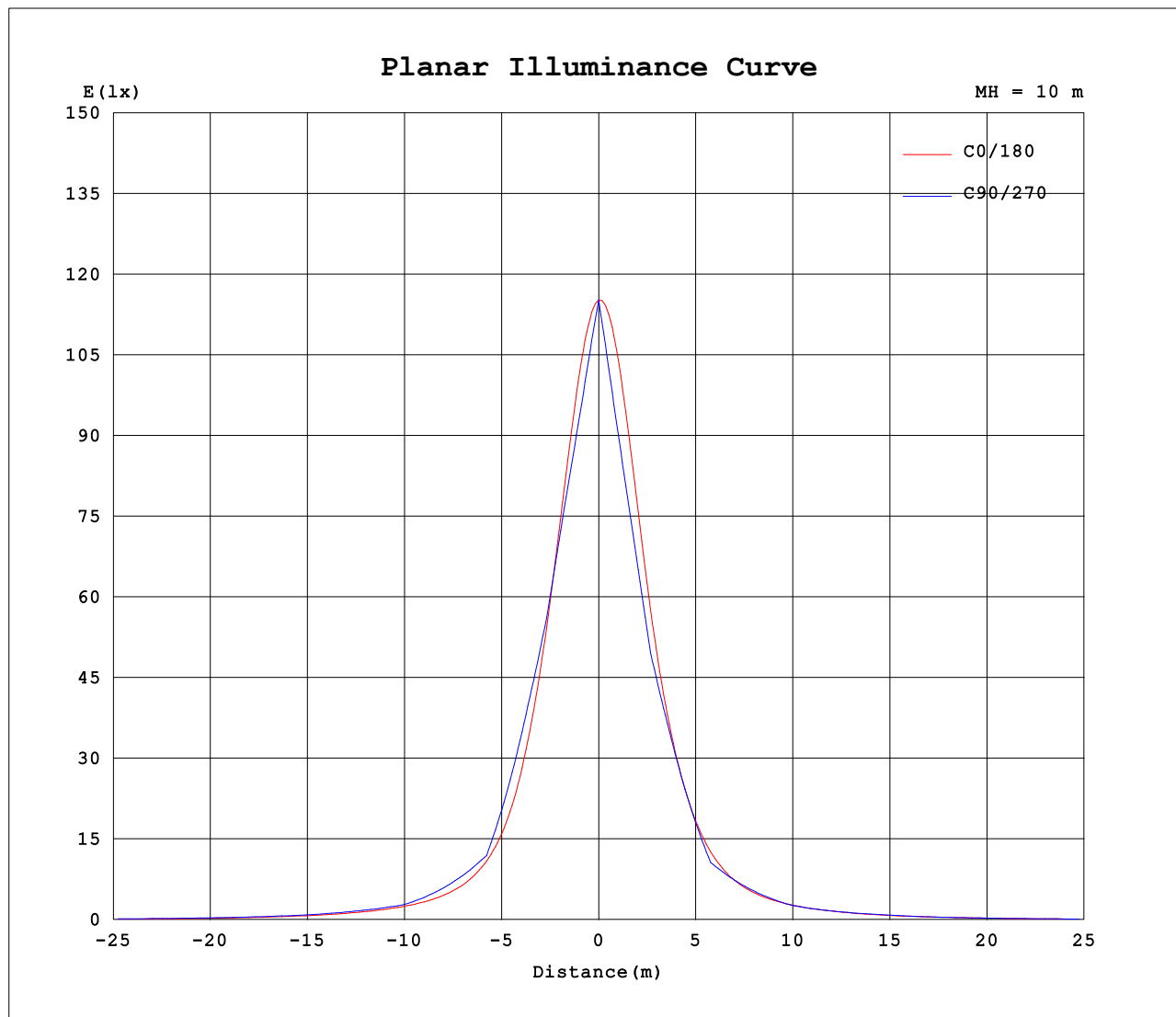
AvgL	cd/m2
L_0~180 (65) av	29773
L_0~180 (75) av	22397
L_0~180 (85) av	11880
L_90~270 (65) av	34740
L_90~270 (75) av	27731
L_90~270 (85) av	0
L_45 (65) av	33036
L_45 (75) av	27394
L_45 (85) av	0

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:2025-03-17

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:2025-03-17

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:

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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:
```

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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: