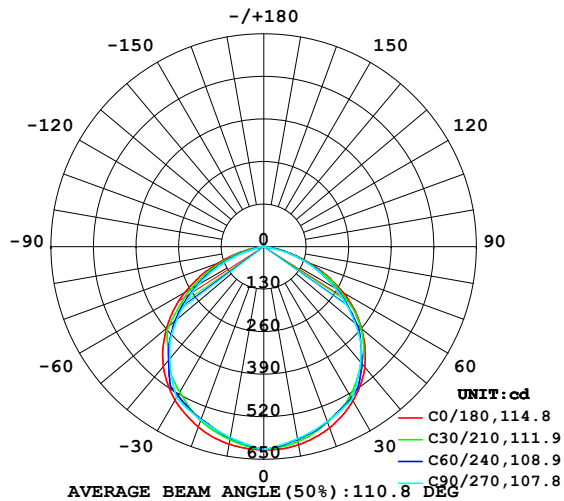


## LUMINAIRE PHOTOMETRIC TEST REPORT

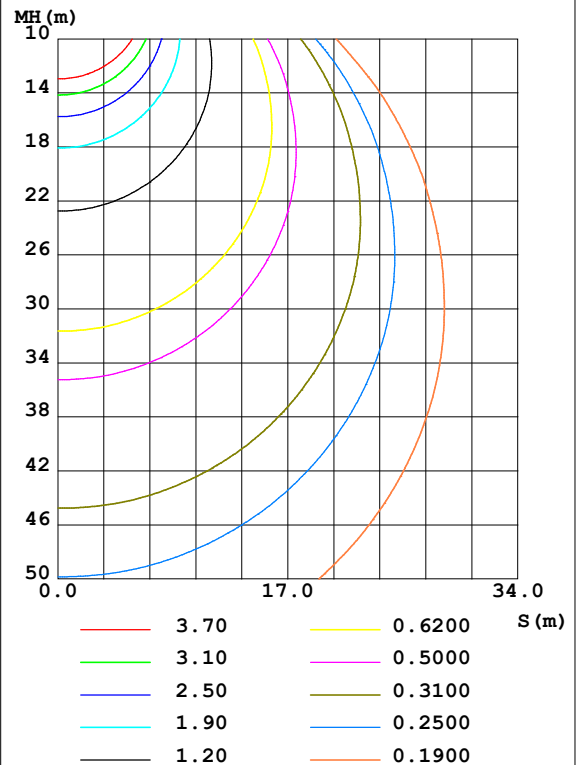
Test:U:42.200V I:0.1890A P:7.9760W PF:0.9744 Freq:59.98Hz Lamp Flux:1662.4x1 lm		
NAME: LED Explosion-proof Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:45W/5000K	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

DATA OF LAMP		PHOTOMETRIC DATA Eff: 208.43 lm/W			
MODEL	GHLV-08-U-E9W	Imax(cd)	621.1	S/MH(C0/180)	1.30
NOMINAL POWER(W)	45	LOR(%)	100.0	S/MH(C90/270)	1.26
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1662.4	□ UP,DN(C0-180)	0.0,50.8
NOMINAL FLUX(lm)	1662.4	CIE CLASS	DIRECT	□ UP,DN(C180-360)	0.0,49.2
LAMPS INSIDE	1	□ up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220	□ 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:Jessy  
Test Date:2025-02-13

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:7.258m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

°	C0	C45	C90	C135	C180	C225	C270	C315	°	□ zone	□ total	%lum, lamp
10	614.4	600.6	595.7	598.1	612.5	595.4	592.0	597.8	0- 10	58.00	58.00	3.49,3.49
20	588.9	570.4	568.3	565.4	586.1	560.3	562.8	565.1	10- 20	165.4	223.4	13.4,13.4
30	544.7	527.9	538.5	523.4	542.3	519.4	533.3	523.2	20- 30	253.8	477.2	28.7,28.7
40	480.3	474.8	460.2	470.3	477.6	466.2	447.8	467.4	30- 40	311.3	788.6	47.4,47.4
50	390.3	373.4	364.5	373.5	388.0	363.2	346.2	361.9	40- 50	321.5	1110	66.8,66.8
60	280.8	257.2	251.3	258.0	277.5	245.0	228.5	245.3	50- 60	278.3	1388	83.5,83.5
70	151.5	137.7	135.7	137.3	148.1	125.1	106.8	127.0	60- 70	190.0	1578	94.9,94.9
80	35.12	34.82	0	32.86	34.18	15.32	0	19.76	70- 80	78.90	1657	99.7,99.7
90	1.495	0	0	0	1.573	0	0	0	80- 90	5.177	1662	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): 951.22 lm

%lum = 57.2%

%lamp = 57.2%

Conical surface Flux(120deg): 1388.4 lm

%lum = 83.5%

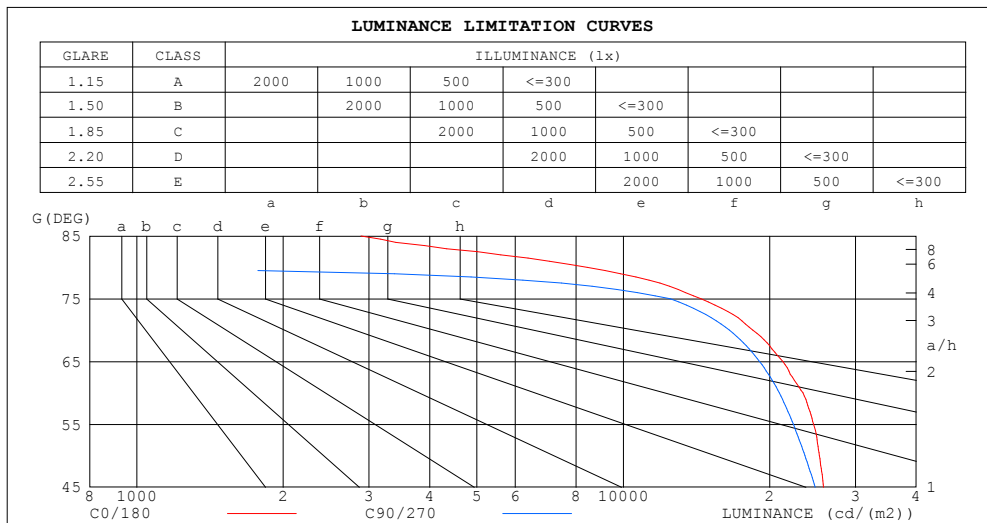
%lamp = 83.5%

H(□) Range:-90 - 90DEG  
H(□) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jessy  
Test Date:2025-02-13

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:7.258m [K=1.0000]  
Remarks:

## LUMINANCE LIMITATION CURVES

Test:U:42.200V I:0.1890A P:7.9760W PF:0.9744 Freq:59.98Hz Lamp Flux:1662.4x1 lm		
NAME: LED Explosion-proof Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:45W/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	2890	0
80	8426	0
75	14438	12493
70	18457	16535
65	21293	19065
60	23399	20941
55	24623	22362
50	25301	23626
45	25787	24805

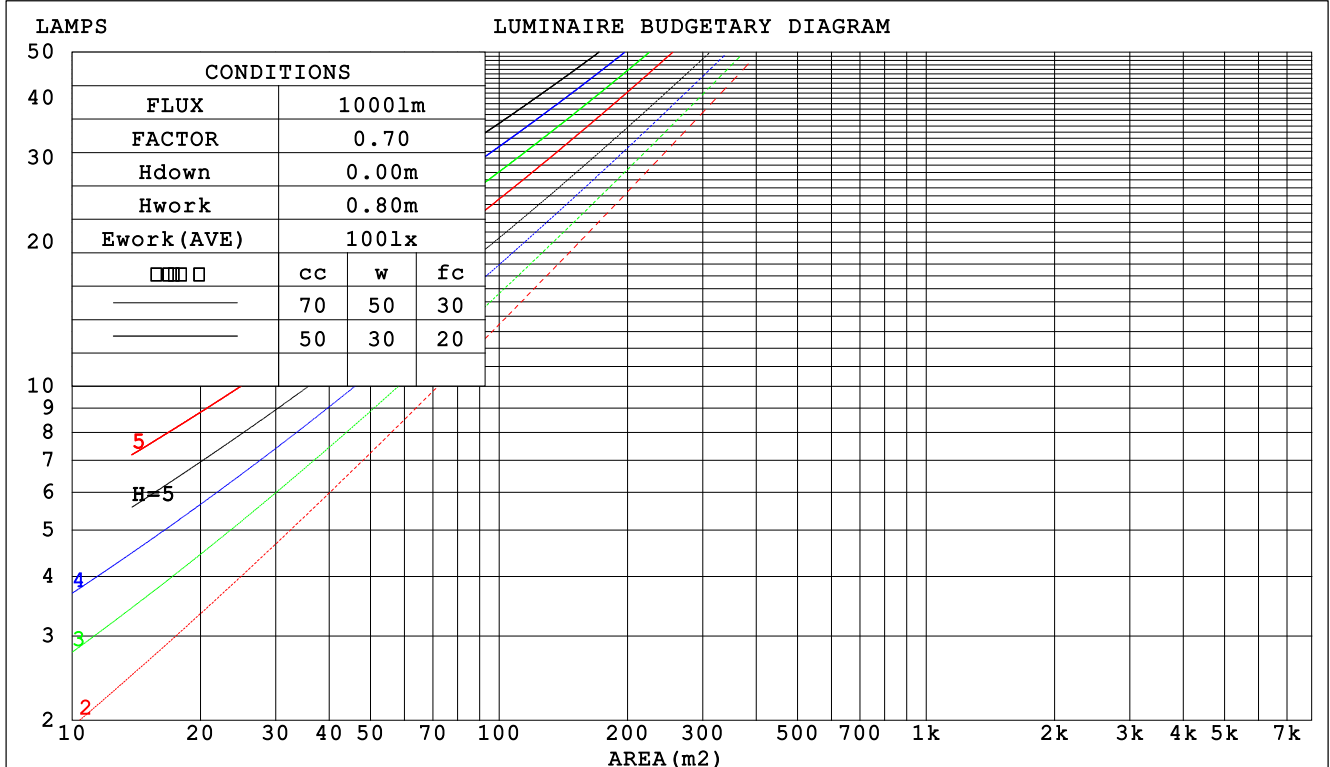
H(□) Range:-90 - 90DEG  
H(□) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jessy  
Test Date:2025-02-13

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:7.258m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:42.200V I:0.1890A P:7.9760W PF:0.9744 Freq:59.98Hz Lamp Flux:1662.4x1 lm		
NAME: LED Explosion-proof Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:45W/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:Jessy  
Test Date:2025-02-13

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:7.258m [K=1.0000]  
Remarks:

## WEC AND CCEC

Test:U:42.200V I:0.1890A P:7.9760W PF:0.9744 Freq:59.98Hz Lamp Flux:1662.4x1 lm					
NAME: LED Explosion-proof Light			TYPE:Flood Light		WEIGHT:N/A
SPEC.:45W/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	.280	.159	.050	.273	.156	.050	.260	.149	.048	.248	.143	.046	.237	.137	.044		
2.0	.272	.149	.046	.266	.147	.045	.255	.142	.044	.244	.137	.043	.234	.132	.042		
3.0	.256	.136	.041	.251	.134	.040	.241	.130	.040	.231	.127	.039	.223	.123	.038		
4.0	.239	.124	.037	.235	.123	.036	.225	.120	.036	.217	.117	.035	.209	.114	.035		
5.0	.223	.114	.033	.219	.112	.033	.211	.110	.032	.203	.107	.032	.196	.105	.032		
6.0	.208	.104	.030	.204	.103	.030	.197	.101	.029	.190	.099	.029	.184	.097	.029		
7.0	.194	.096	.027	.191	.095	.027	.185	.093	.027	.179	.092	.027	.173	.090	.026		
8.0	.182	.089	.025	.179	.088	.025	.173	.087	.025	.168	.085	.025	.163	.084	.024		
9.0	.171	.083	.023	.168	.082	.023	.163	.081	.023	.158	.079	.023	.154	.078	.023		
10.0	.161	.077	.021	.159	.077	.021	.154	.076	.021	.150	.074	.021	.146	.073	.021		

□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	.178	.156	.137	.153	.134	.118	.104	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.170	.132	.100	.145	.114	.087	.100	.079	.061	.057	.046	.035	.018	.015	.012	
3.0	.162	.114	.076	.139	.099	.066	.095	.068	.046	.055	.040	.027	.018	.013	.009	
4.0	.154	.101	.060	.133	.087	.052	.091	.061	.037	.053	.036	.022	.017	.012	.007	
5.0	.147	.090	.048	.126	.078	.042	.087	.055	.030	.050	.032	.018	.016	.010	.006	
6.0	.140	.082	.040	.121	.071	.035	.083	.050	.025	.048	.029	.015	.016	.010	.005	
7.0	.134	.075	.034	.115	.065	.029	.079	.046	.021	.046	.027	.012	.015	.009	.004	
8.0	.128	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.122	.064	.026	.105	.056	.022	.073	.039	.016	.042	.023	.009	.014	.008	.003	
10.0	.116	.060	.023	.100	.052	.020	.069	.037	.014	.040	.022	.008	.013	.007	.003	

H(□) Range:-90 - 90DEG  
H(□) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jessy  
Test Date:2025-02-13

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:7.258m [K=1.0000]  
Remarks:

UGR(Unified Glare Rating) Table

Test:U:42.200V I:0.1890A P:7.9760W PF:0.9744 Freq:59.98Hz Lamp Flux:1662.4x1 lm										
NAME: LED Explosion-proof Light					TYPE:Flood Light			WEIGHT:N/A		
SPEC.:45W/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	22.4	23.8	22.6	24.0	24.2	22.0	23.5	22.3	23.7	23.9
3H	23.6	24.9	23.9	25.2	25.4	23.2	24.5	23.5	24.7	25.0
4H	23.9	25.2	24.2	25.5	25.7	23.5	24.8	23.8	25.0	25.3
6H	24.1	25.3	24.4	25.5	25.8	23.5	24.7	23.8	24.9	25.2
8H	24.0	25.2	24.4	25.5	25.8	23.4	24.6	23.8	24.9	25.1
12H	24.0	25.1	24.4	25.4	25.7	23.4	24.5	23.7	24.8	25.1
4H 2H	22.8	24.1	23.1	24.4	24.6	22.5	23.8	22.9	24.1	24.3
3H	24.2	25.3	24.6	25.6	25.9	23.9	25.0	24.2	25.3	25.6
4H	24.7	25.7	25.0	26.0	26.3	24.3	25.3	24.6	25.6	25.9
6H	24.9	25.8	25.3	26.1	26.5	24.3	25.2	24.7	25.5	25.9
8H	24.9	25.7	25.3	26.1	26.4	24.2	25.1	24.6	25.4	25.8
12H	24.8	25.6	25.3	26.0	26.4	24.2	25.0	24.6	25.3	25.7
8H 4H	24.8	25.6	25.2	26.0	26.4	24.4	25.2	24.8	25.6	26.0
6H	25.1	25.7	25.5	26.2	26.6	24.5	25.1	24.9	25.5	26.0
8H	25.1	25.7	25.6	26.1	26.6	24.4	25.0	24.9	25.4	25.9
12H	25.1	25.6	25.6	26.1	26.5	24.4	24.9	24.9	25.3	25.8
12H 4H	24.7	25.5	25.2	25.9	26.3	24.4	25.1	24.8	25.5	25.9
6H	25.0	25.6	25.5	26.1	26.5	24.4	25.0	24.9	25.5	25.9
8H	25.1	25.6	25.6	26.0	26.5	24.4	24.9	24.9	25.4	25.8
Variations with the observer position at spacings:										
S = 1.0H	+ 0.3 / - 0.2					+ 0.3 / - 0.3				
1.5H	+ 0.3 / - 0.4					+ 0.2 / - 0.4				
2.0H	+ 0.3 / - 0.4					+ 0.4 / - 0.4				

CIE Pub.117, 1662 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 1.8$ )  
Area: 0.024 m<sup>2</sup>

H(□) Range:-90 - 90DEG  
H(□) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jessy  
Test Date:2025-02-13

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:7.258m [K=1.0000]  
Remarks:

## UTILIZATION FACTORS TABLE

Test:U:42.200V I:0.1890A P:7.9760W PF:0.9744 Freq:59.98Hz Lamp Flux:1662.4x1 lm		
NAME: LED Explosion-proof Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:45W/5000K	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

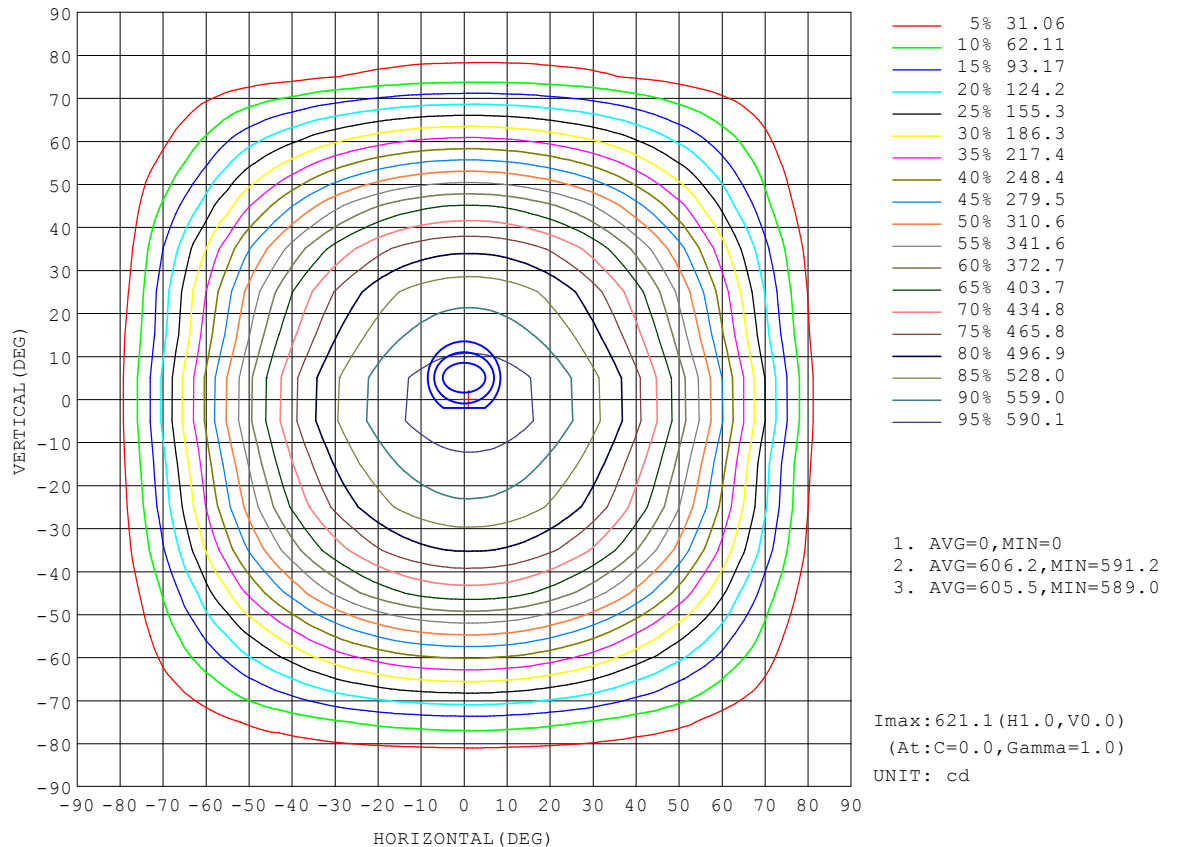
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	59	47	41	58	47	40	57	47	40	34
0.80	69	58	51	68	57	51	66	57	50	43
1.00	78	67	60	77	67	60	75	68	59	53
1.25	85	75	68	84	74	68	81	73	67	60
1.50	90	81	74	88	80	74	86	78	73	65
2.00	97	89	83	95	88	82	92	85	81	73
2.50	101	93	88	99	92	87	95	89	85	77
3.00	104	97	92	102	96	91	98	93	89	81
4.00	108	102	98	105	101	97	101	97	94	85
5.00	110	105	102	107	103	100	103	100	97	88
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:Jessy  
 Test Date:2025-02-13

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:7.258m [K=1.0000]  
 Remarks:

## ISOCANDELA DIAGRAM

Test:U:42.200V I:0.1890A P:7.9760W PF:0.9744 Freq:59.98Hz Lamp Flux:1662.4x1 lm		
NAME: LED Explosion-proof Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:45W/5000K	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A



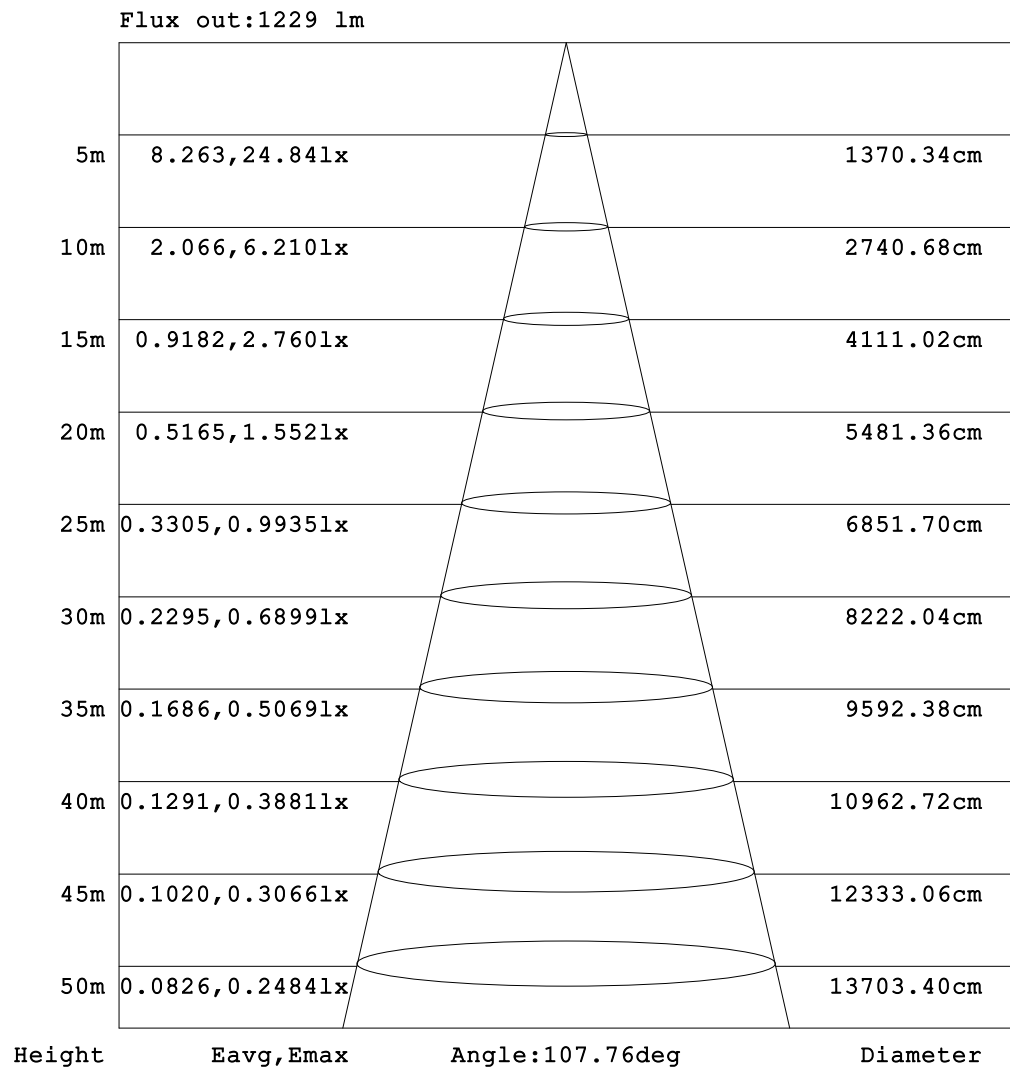
H(□) Range:-90 - 90DEG  
H(□) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jessy  
Test Date:2025-02-13

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:7.258m [K=1.0000]  
Remarks:



## AAI Figure

Test:U:42.200V I:0.1890A P:7.9760W PF:0.9744 Freq:59.98Hz Lamp Flux:1662.4x1 lm		
NAME: LED Explosion-proof Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:45W/5000K	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A



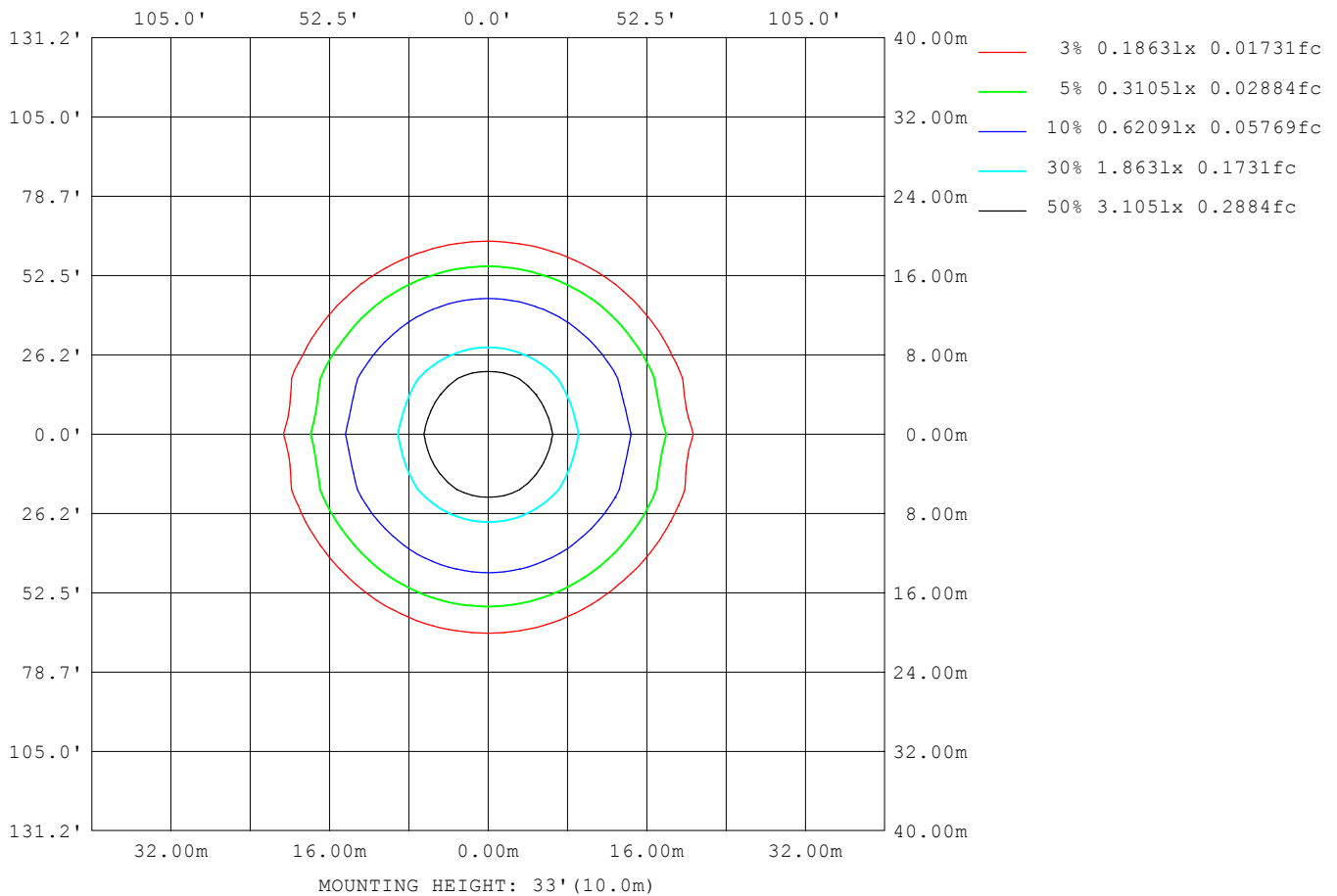
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(□) Range:-90 - 90DEG  
H(□) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jessy  
Test Date:2025-02-13

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:7.258m [K=1.0000]  
Remarks:

## ISOLUX DIAGRAM

Test:U:42.200V I:0.1890A P:7.9760W PF:0.9744 Freq:59.98Hz Lamp Flux:1662.4x1 lm		
NAME: LED Explosion-proof Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:45W/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:Jessy  
Test Date:2025-02-13

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:7.258m [K=1.0000]  
Remarks:

## LED Avg.L Report

Test:U:42.200V I:0.1890A P:7.9760W PF:0.9744 Freq:59.98Hz Lamp Flux:1662.4x1 lm		
NAME: LED Explosion-proof Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:45W/5000K	DIM.: 190*150mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

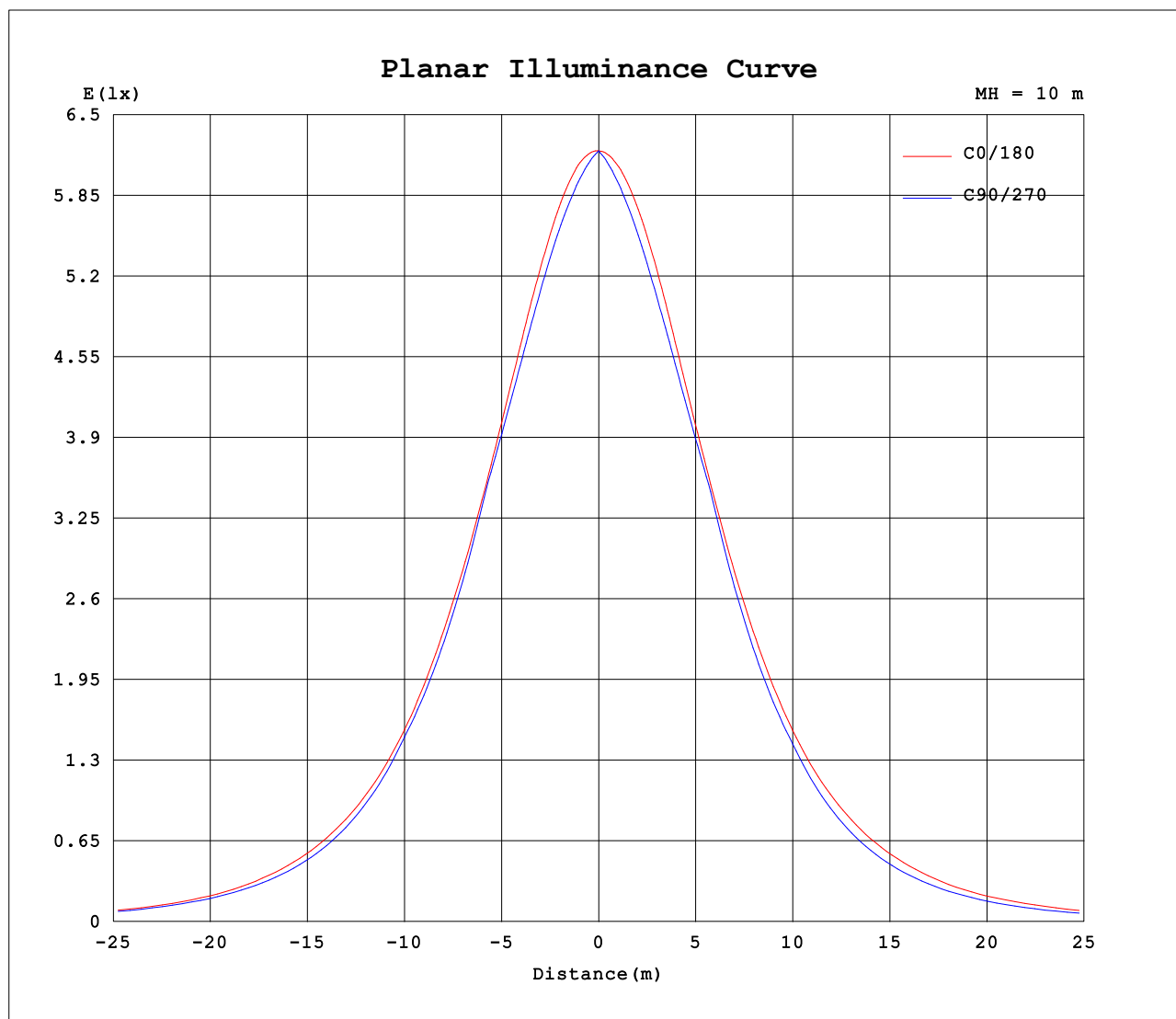
AvgL	cd/m2
L_0~180 (65) av	21243
L_0~180 (75) av	14199
L_0~180 (85) av	2973
L_90~270 (65) av	17790
L_90~270 (75) av	9933
L_90~270 (85) av	0
L_45 (65) av	18731
L_45 (75) av	12429
L_45 (85) av	0

Standard: GB/T 29293-2012

H(□) Range:-90 - 90DEG  
H(□) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jessy  
Test Date:2025-02-13

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:7.258m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



H(□) Range:-90 - 90DEG  
H(□) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jessy  
Test Date:2025-02-13

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:7.258m [K=1.0000]  
Remarks:

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