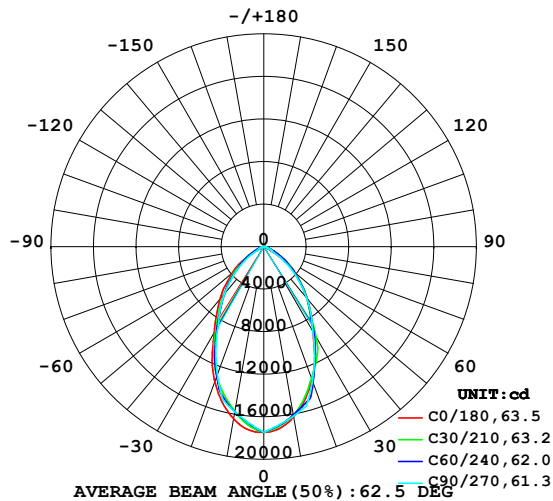


LUMINAIRE PHOTOMETRIC TEST REPORT

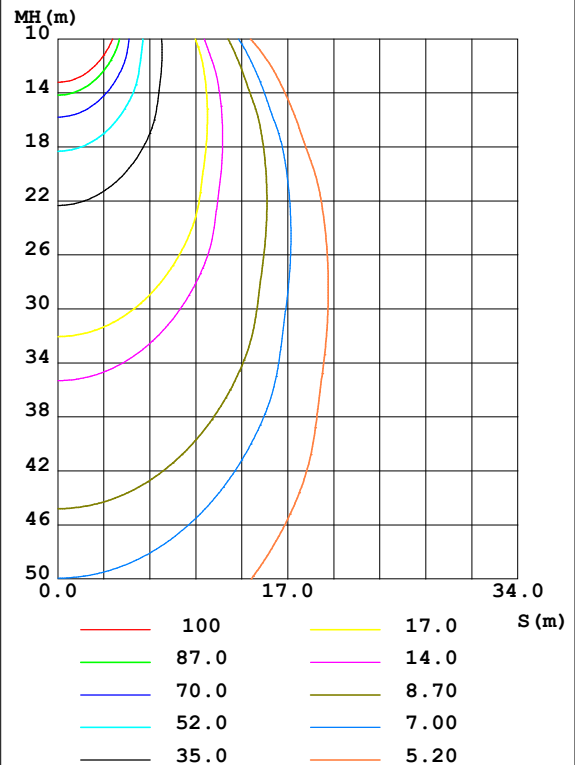
Test:U:120.16V I:1.2311A P:147.82W PF:0.9993 Freq:59.98Hz Lamp Flux:22579.2x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:150W/5000K/60°	DIM.: 280*230mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

DATA OF LAMP		PHOTOMETRIC DATA Eff: 152.75 lm/W			
MODEL	GSM-23-U	I _{max} (cd)	17467	S/MH(C0/180)	0.92
NOMINAL POWER(W)	150	LOR(%)	100.0	S/MH(C90/270)	0.87
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	22579	□ UP,DN(C0-180)	0.0,51.3
NOMINAL FLUX(lm)	22579.2	CIE CLASS	DIRECT	□ UP,DN(C180-360)	0.0,48.7
LAMPS INSIDE	1	□ up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	120	□ down(%)	100.0	CIBSE SHR MAX	1.00

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:2024-11-13

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65%
Test Distance:6.908m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

°	C0	C45	C90	C135	C180	C225	C270	C315	°	□ zone	□ total	%lum, lamp
10	1626	1604	1617	1598	1644	1573	1577	1576	0- 10	1581	1581	7,7
20	1329	1380	1342	1349	1350	1305	1280	1325	10- 20	4136	5717	25.3,25.3
30	926.7	962.9	922.2	952.0	934.6	910.5	857.3	919.0	20- 30	5127	10844	48,48
40	636.1	600.5	628.1	595.7	639.8	562.3	573.1	564.6	30- 40	4690	15534	68.8,68.8
50	391.8	377.8	354.3	374.2	390.3	341.8	311.7	345.3	40- 50	3679	19213	85.1,85.1
60	73.09	185.7	100.6	181.0	84.38	156.9	72.98	161.7	50- 60	2281	21495	95.2,95.2
70	28.76	44.34	43.16	42.27	30.35	33.58	31.92	37.69	60- 70	854.9	22350	99,99
80	6.485	6.757	0	6.197	7.368	4.683	0	5.661	70- 80	218.1	22568	99.9,99.9
90	0.2076	0	0	0	0.1935	0	0	0	80- 90	11.34	22579	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): 17533 lm

%lum = 77.7%

%lamp = 77.7%

Conical surface Flux(120deg): 21495 lm

%lum = 95.2%

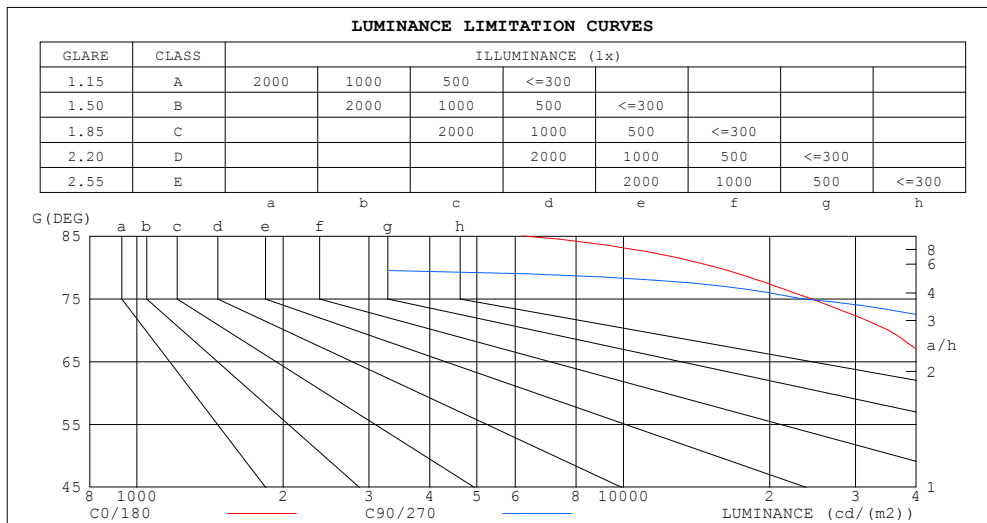
%lamp = 95.2%

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jessy
Test Date:2024-11-13

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65%
Test Distance:6.908m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.16V I:1.2311A P:147.82W PF:0.9993 Freq:59.98Hz Lamp Flux:22579.2x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:150W/5000K/60°	DIM.: 280*230mm	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	6210	0
80	15560	0
75	24304	23233
70	35037	52586
65	43962	70604
60	60906	83835
55	197081	164957
50	253986	229652
45	296883	283330

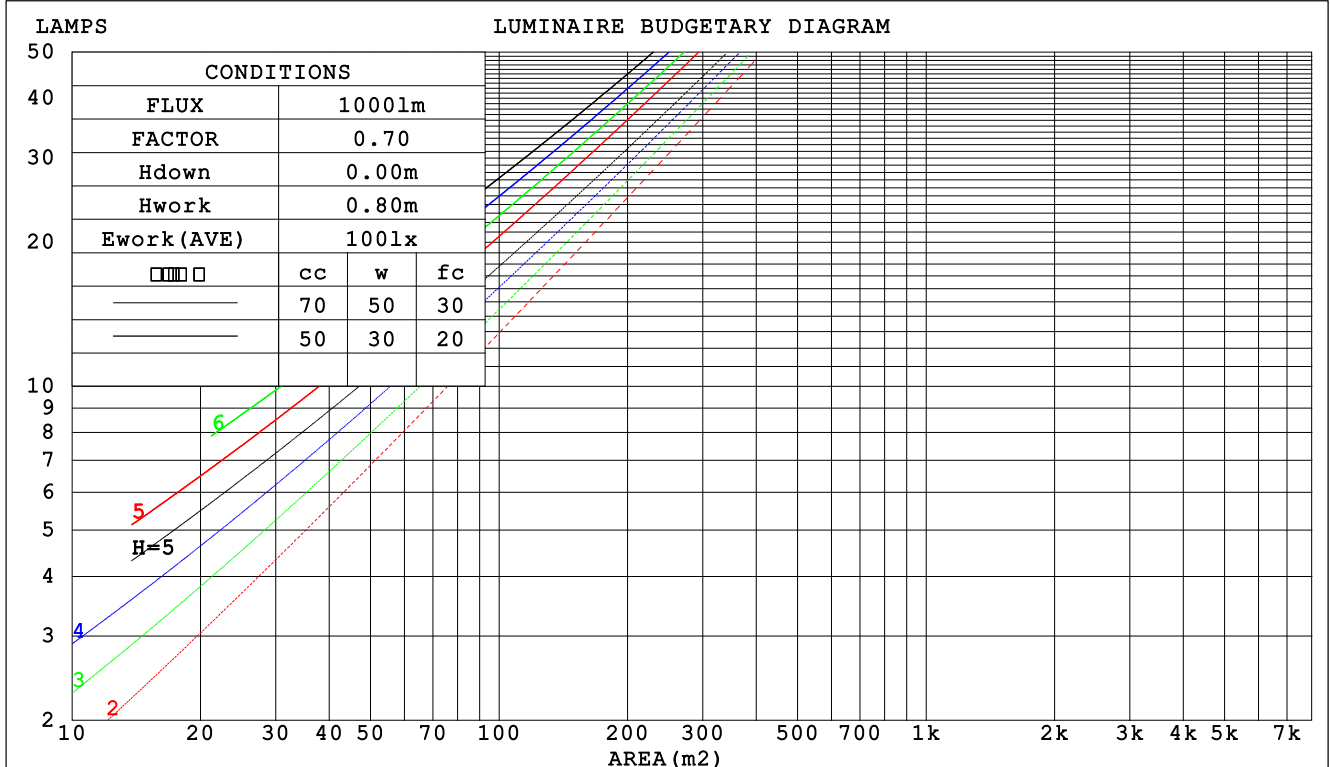
H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jessy
Test Date:2024-11-13

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65%
Test Distance:6.908m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.16V I:1.2311A P:147.82W PF:0.9993 Freq:59.98Hz Lamp Flux:22579.2x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:150W/5000K/60°	DIM.: 280*230mm	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:2024-11-13

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65%
Test Distance:6.908m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:120.16V I:1.2311A P:147.82W PF:0.9993 Freq:59.98Hz Lamp Flux:22579.2x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:150W/5000K/60°	DIM.: 280*230mm	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	.219	.125	.040	.212	.121	.039	.200	.115	.037	.188	.108	.035	.177	.103	.033		
2.0	.214	.117	.036	.208	.115	.035	.197	.110	.034	.187	.105	.033	.178	.101	.032		
3.0	.205	.109	.033	.200	.107	.032	.190	.103	.031	.181	.099	.030	.173	.096	.030		
4.0	.194	.101	.030	.190	.099	.029	.181	.096	.029	.174	.093	.028	.166	.090	.028		
5.0	.184	.094	.027	.180	.092	.027	.172	.090	.026	.166	.087	.026	.159	.085	.026		
6.0	.174	.087	.025	.170	.086	.025	.164	.084	.024	.158	.082	.024	.152	.080	.024		
7.0	.165	.081	.023	.161	.080	.023	.156	.079	.023	.150	.077	.022	.145	.075	.022		
8.0	.156	.076	.021	.153	.075	.021	.148	.074	.021	.143	.072	.021	.138	.071	.021		
9.0	.148	.072	.020	.146	.071	.020	.141	.070	.020	.136	.068	.020	.132	.067	.019		
10.0	.141	.067	.019	.138	.067	.019	.134	.066	.019	.130	.065	.018	.126	.064	.018		

□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	.174	.157	.142	.149	.135	.122	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.162	.132	.107	.139	.114	.093	.095	.079	.065	.055	.046	.038	.018	.015	.012	
3.0	.152	.114	.084	.130	.098	.072	.089	.068	.051	.052	.040	.030	.017	.013	.010	
4.0	.143	.100	.067	.123	.086	.058	.085	.060	.041	.049	.035	.024	.016	.011	.008	
5.0	.136	.089	.054	.117	.077	.047	.080	.054	.033	.046	.031	.020	.015	.010	.006	
6.0	.129	.080	.045	.111	.069	.039	.076	.048	.028	.044	.028	.016	.014	.009	.005	
7.0	.122	.073	.038	.105	.063	.033	.073	.044	.023	.042	.026	.014	.014	.009	.005	
8.0	.117	.067	.032	.100	.058	.028	.070	.041	.020	.040	.024	.012	.013	.008	.004	
9.0	.111	.062	.028	.096	.054	.025	.066	.038	.018	.039	.022	.010	.013	.007	.003	
10.0	.106	.057	.025	.092	.050	.022	.064	.035	.015	.037	.021	.009	.012	.007	.003	

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jessy
Test Date:2024-11-13

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65%
Test Distance:6.908m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.16V I:1.2311A P:147.82W PF:0.9993 Freq:59.98Hz Lamp Flux:22579.2x1 lm										
NAME: LED High Bay Light					TYPE:Flood Light			WEIGHT:N/A		
SPEC.:150W/5000K/60°					DIM.: 280*230mm			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	19.3	20.5	19.6	20.7	20.9	19.2	20.4	19.4	20.6	20.7
3H	19.3	20.4	19.5	20.6	20.8	19.4	20.5	19.7	20.7	20.9
4H	19.2	20.2	19.5	20.5	20.7	19.4	20.4	19.6	20.6	20.9
6H	19.1	20.1	19.4	20.3	20.6	19.3	20.2	19.6	20.5	20.8
8H	19.1	20.0	19.4	20.3	20.5	19.2	20.2	19.5	20.4	20.7
12H	19.0	19.9	19.4	20.2	20.5	19.2	20.1	19.5	20.3	20.6
4H 2H	19.5	20.5	19.8	20.7	21.0	19.3	20.4	19.6	20.6	20.9
3H	19.5	20.4	19.8	20.6	20.9	19.7	20.6	20.0	20.9	21.1
4H	19.4	20.2	19.8	20.5	20.9	19.7	20.5	20.0	20.8	21.1
6H	19.4	20.1	19.7	20.4	20.8	19.6	20.3	20.0	20.6	21.0
8H	19.3	20.0	19.7	20.3	20.7	19.5	20.2	19.9	20.5	20.9
12H	19.3	19.9	19.7	20.2	20.6	19.5	20.1	19.9	20.5	20.9
8H 4H	19.4	20.0	19.8	20.4	20.7	19.6	20.2	20.0	20.6	21.0
6H	19.3	19.8	19.7	20.2	20.7	19.5	20.0	19.9	20.4	20.8
8H	19.3	19.7	19.7	20.2	20.6	19.4	19.9	19.9	20.3	20.8
12H	19.2	19.6	19.7	20.1	20.5	19.4	19.8	19.9	20.2	20.7
12H 4H	19.3	19.9	19.7	20.3	20.7	19.5	20.1	19.9	20.5	20.9
6H	19.3	19.7	19.7	20.1	20.6	19.4	19.9	19.9	20.3	20.8
8H	19.2	19.6	19.7	20.1	20.5	19.4	19.8	19.9	20.2	20.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.8 / - 1.5					+ 1.0 / - 1.5				
1.5H	+ 0.6 / - 1.0					+ 0.4 / - 0.8				
2.0H	+ 2.1 / - 6.5					+ 1.9 / - 5.0				

CIE Pub.117, 22579 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 10.8)
Area: 0.024 m2

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jessy
Test Date:2024-11-13

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65%
Test Distance:6.908m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.16V I:1.2311A P:147.82W PF:0.9993 Freq:59.98Hz Lamp Flux:22579.2x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:150W/5000K/60°	DIM.: 280*230mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

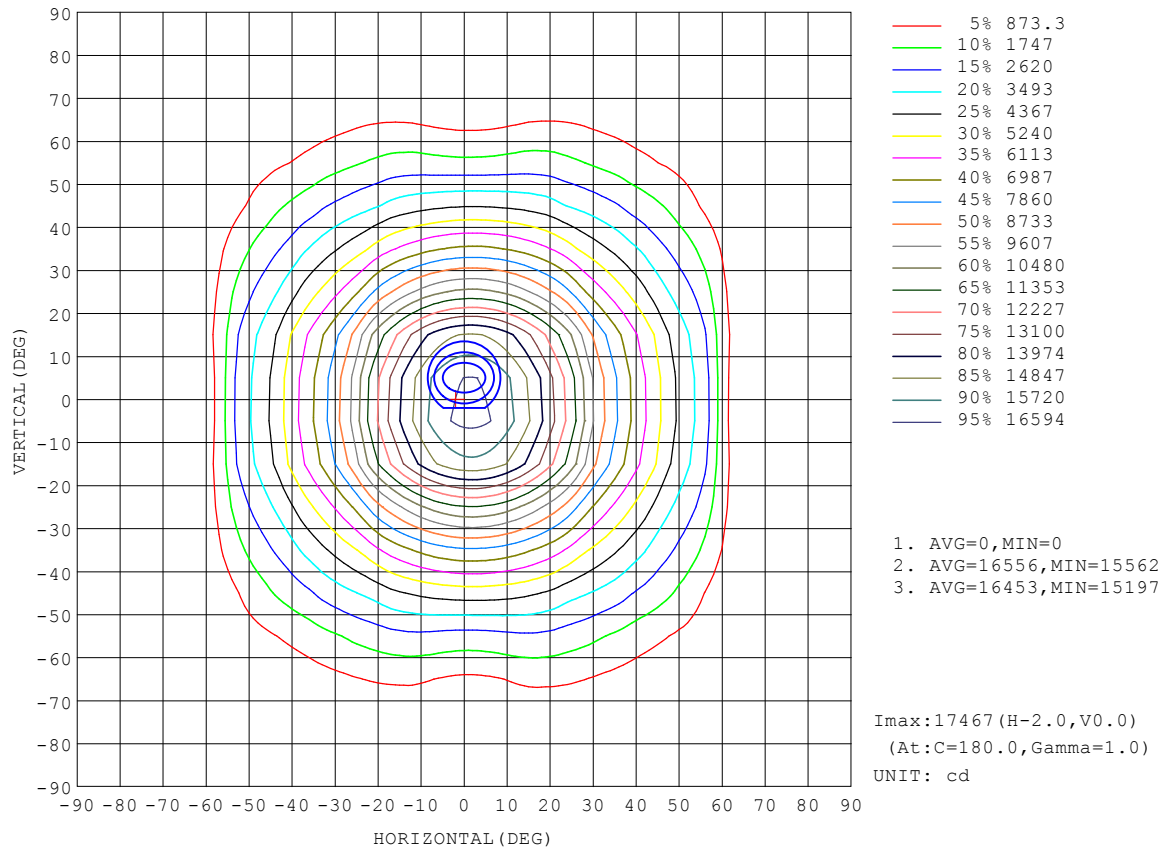
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	72	62	57	71	62	57	70	62	57	52
0.80	81	72	67	80	72	67	79	71	66	61
1.00	89	80	75	88	80	75	86	81	74	69
1.25	95	87	82	93	86	82	91	85	81	75
1.50	98	92	87	97	91	86	94	89	85	79
2.00	103	97	93	102	96	92	99	94	91	85
2.50	106	100	96	104	99	95	101	97	94	87
3.00	108	103	100	106	102	99	103	99	96	89
4.00	111	107	104	109	105	102	105	102	100	92
5.00	112	109	106	110	107	105	106	104	102	94
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:2024-11-13

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65%
Test Distance:6.908m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:120.16V I:1.2311A P:147.82W PF:0.9993 Freq:59.98Hz Lamp Flux:22579.2x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:150W/5000K/60°	DIM.: 280*230mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

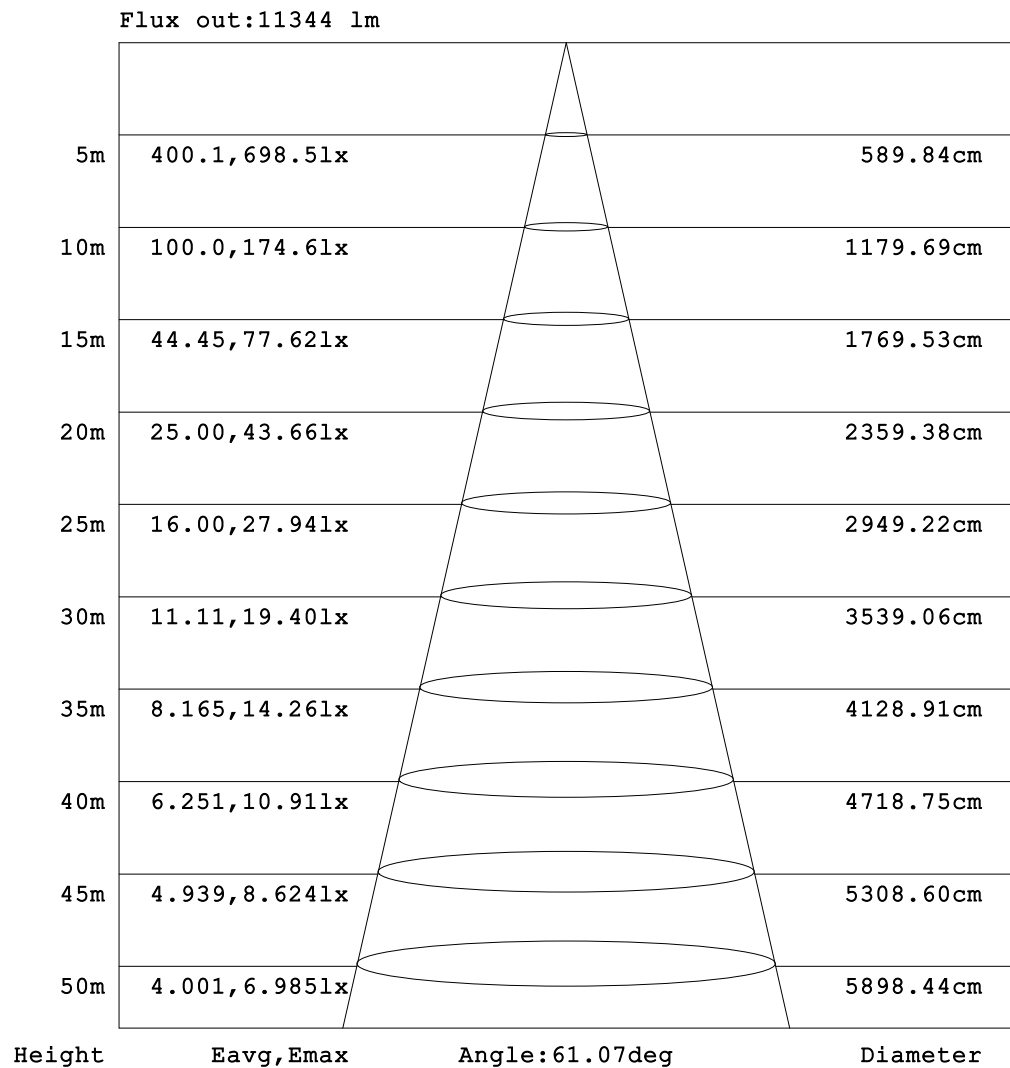


H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jessy
Test Date:2024-11-13

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65%
Test Distance:6.908m [K=1.0000]
Remarks:

AAI Figure

Test:U:120.16V I:1.2311A P:147.82W PF:0.9993 Freq:59.98Hz Lamp Flux:22579.2x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:150W/5000K/60°	DIM.: 280*230mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A



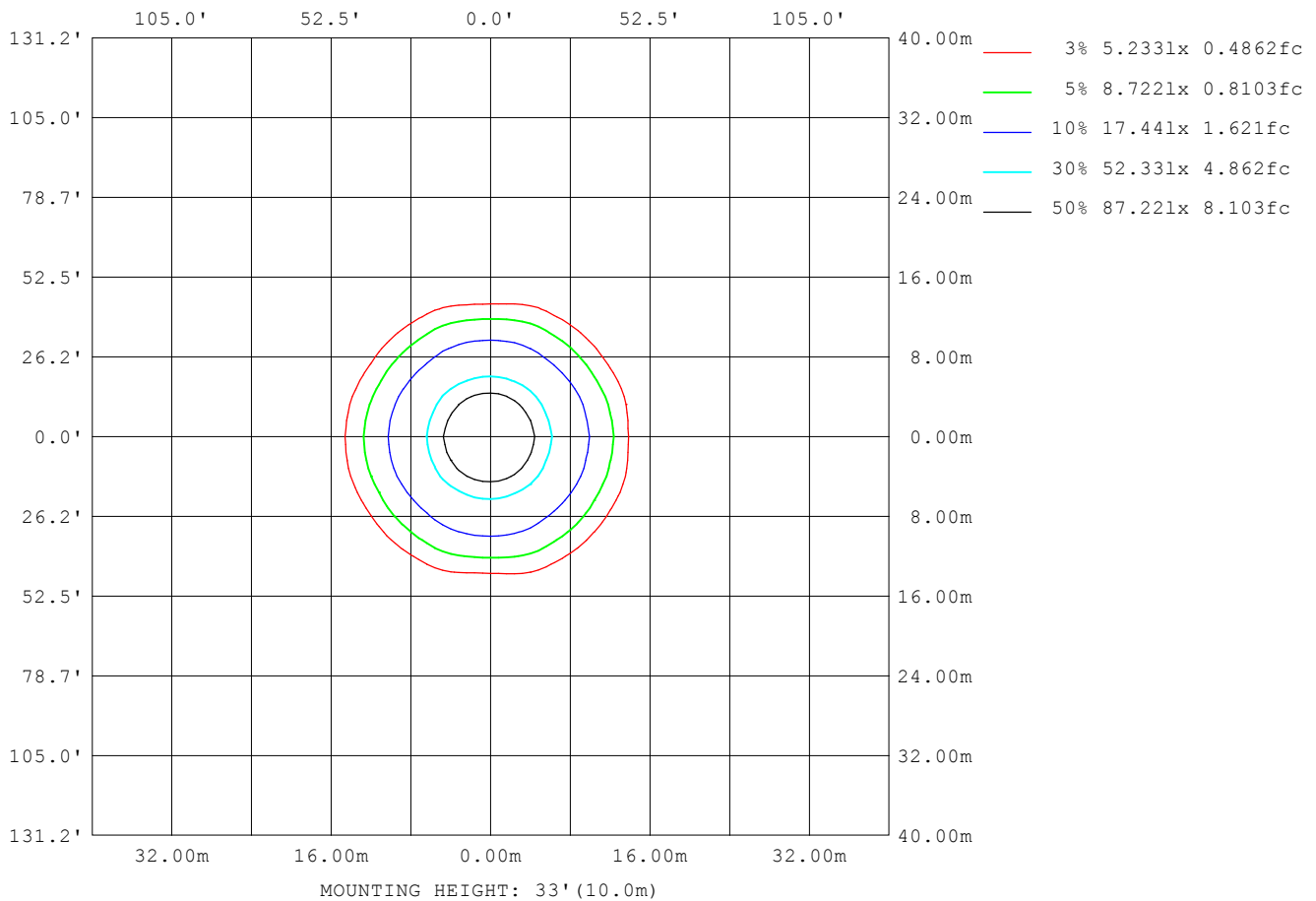
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(□) Range: -90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Jessy
Test Date: 2024-11-13

V(B) Range: -75 - 75DEG
V(B) Interval: 5.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity: 65%
Test Distance: 6.908m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:120.16V I:1.2311A P:147.82W PF:0.9993 Freq:59.98Hz Lamp Flux:22579.2x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:150W/5000K/60°	DIM.: 280*230mm	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:2024-11-13

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65%
Test Distance:6.908m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:120.16V I:1.2311A P:147.82W PF:0.9993 Freq:59.98Hz Lamp Flux:22579.2x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:150W/5000K/60°	DIM.: 280*230mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

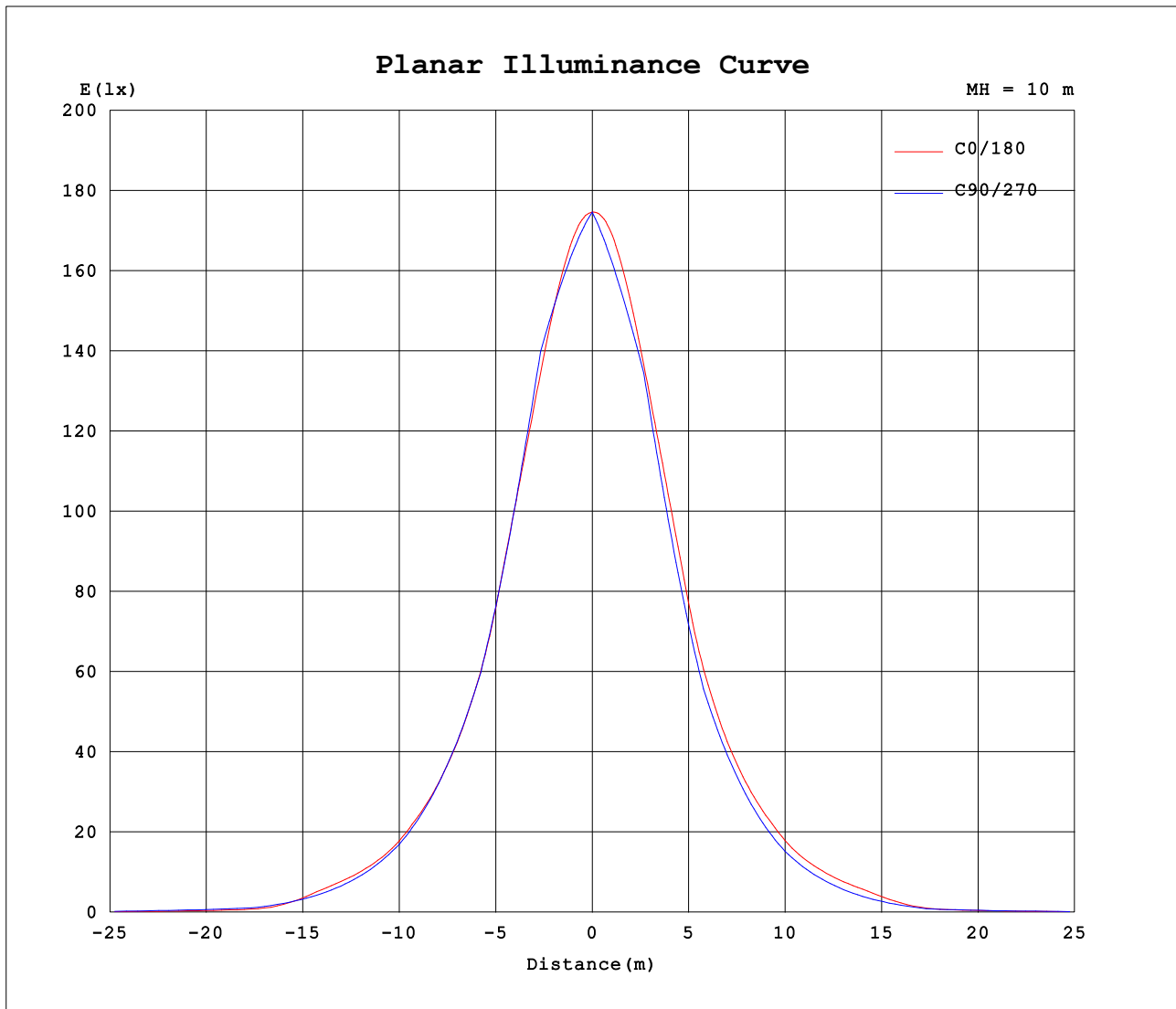
AvgL	cd/m2
L_0~180 (65) av	45041
L_0~180 (75) av	25524
L_0~180 (85) av	7410
L_90~270 (65) av	61052
L_90~270 (75) av	20773
L_90~270 (85) av	0
L_45 (65) av	90075
L_45 (75) av	33452
L_45 (85) av	0

Standard: GB/T 29293-2012

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jessy
Test Date:2024-11-13

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65%
Test Distance:6.908m [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:2024-11-13

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65%
Test Distance:6.908m [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%
Test Distance:6.908m [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%
Test Distance:6.908m [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%
Test Distance:6.908m [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%
Test Distance:6.908m [K=1.0000]
Remarks: