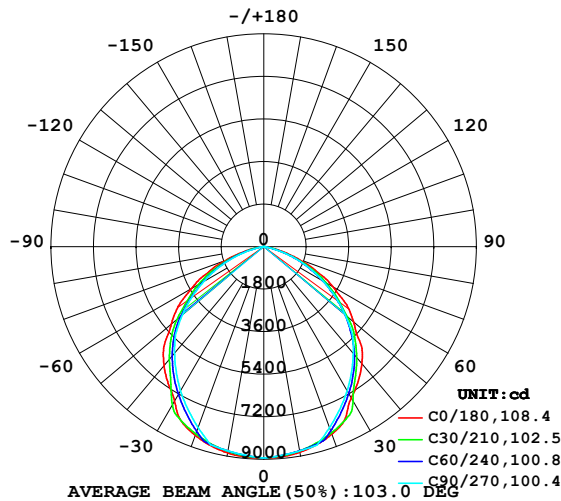


LUMINAIRE PHOTOMETRIC TEST REPORT

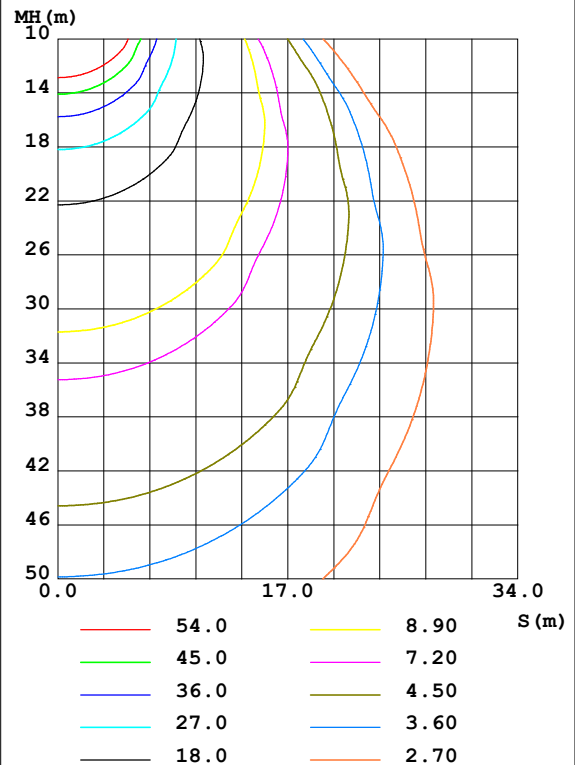
Test:U:120.16V I:1.2597A P:151.24W PF:0.9992 Freq:59.98Hz Lamp Flux:21857x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:150W/110°	DIM.: 210*280mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

DATA OF LAMP		PHOTOMETRIC DATA Eff: 144.51 lm/W			
MODEL	GSM-23-U	I _{max} (cd)	8943	S/MH(C0/180)	1.25
NOMINAL POWER(W)	150	LOR(%)	100.0	S/MH(C90/270)	1.18
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	21857	□ UP,DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	21857	CIE CLASS	DIRECT	□ UP,DN(C180-360)	0.0,50.0
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:2024-11-12

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	8834	8765	8776	8785	8861	8782	8772	8763	0- 10	844.6	844.6	3.86, 3.86
20	8440	8440	8148	8484	8493	8477	8142	8437	10- 20	2436	3281	15, 15
30	7398	7376	7059	7439	7552	7433	7053	7374	20- 30	3637	6918	31.6, 31.6
40	6459	5862	5899	5990	6568	5983	5877	5861	30- 40	4214	11132	50.9, 50.9
50	4971	4565	4507	4685	5109	4656	4498	4559	40- 50	4202	15334	70.2, 70.2
60	3366	2899	2882	3064	3523	3059	2917	2919	50- 60	3484	18818	86.1, 86.1
70	1594	1325	1327	1395	1741	1424	1354	1346	60- 70	2218	21036	96.2, 96.2
80	275.4	163.1	0	190.3	335.0	189.6	0	182.0	70- 80	785.1	21821	99.8, 99.8
90	5.263	0	0	0	5.022	0	0	0	80- 90	36.15	21857	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): 13279 lm

%lum = 60.8%

%lamp = 60.8%

Conical surface Flux(120deg): 18818 lm

%lum = 86.1%

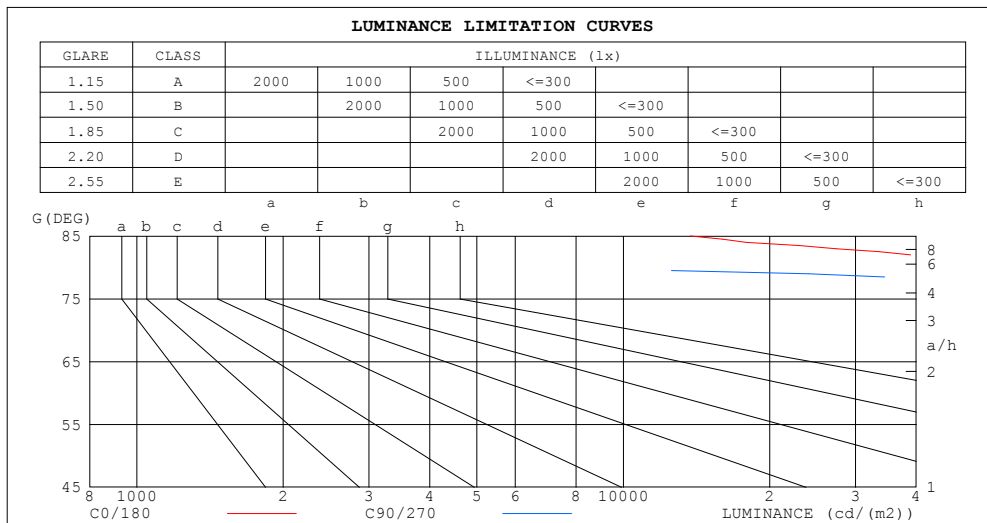
%lamp = 86.1%

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jessy
Test Date:2024-11-12

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:1.2597A P:151.24W PF:0.9992 Freq:59.98Hz Lamp Flux:21857x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:150W/110°	DIM.: 210*280mm	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	13736	0
80	66075	0
75	132474	88439
70	194209	161664
65	240862	207503
60	280520	240194
55	311078	268397
50	322246	292158
45	341412	313453

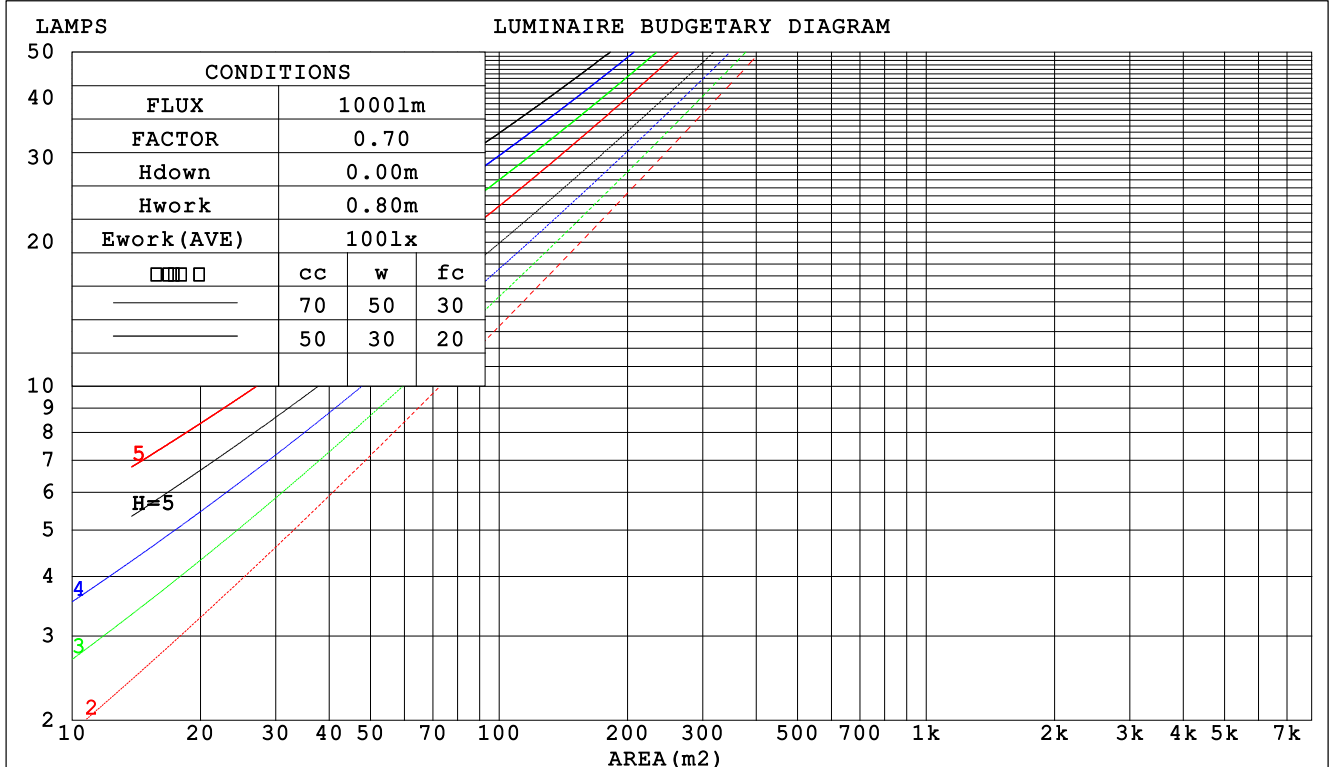
H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jessy
Test Date:2024-11-12

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:1.2597A P:151.24W PF:0.9992 Freq:59.98Hz Lamp Flux:21857x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:150W/110°	DIM.: 210*280mm	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:2024-11-12

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:1.2597A P:151.24W PF:0.9992 Freq:59.98Hz Lamp Flux:21857x1 lm					
NAME: LED High Bay Light			TYPE:Flood Light		WEIGHT:N/A
SPEC.:150W/110°			DIM.: 210*280mm		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	.267	.152	.048	.260	.148	.047	.247	.142	.045	.235	.136	.044	.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	.241	.129	.039	.231	.125	.038	.222	.122	.037	.213	.118	.037		
4.0	.231	.120	.035	.227	.119	.035	.218	.115	.034	.209	.112	.034	.202	.110	.033		
5.0	.216	.110	.032	.212	.109	.032	.204	.106	.031	.197	.104	.031	.190	.101	.030		
6.0	.202	.101	.029	.199	.100	.029	.192	.098	.029	.185	.096	.028	.179	.094	.028		
7.0	.190	.094	.027	.186	.093	.026	.180	.091	.026	.174	.089	.026	.168	.088	.026		
8.0	.178	.087	.024	.175	.086	.024	.169	.085	.024	.164	.083	.024	.159	.082	.024		
9.0	.168	.081	.023	.165	.080	.023	.160	.079	.022	.155	.078	.022	.151	.076	.022		
10.0	.158	.076	.021	.156	.075	.021	.151	.074	.021	.147	.073	.021	.143	.072	.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	.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	.152	.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	.138	.082	.041	.119	.071	.036	.082	.049	.025	.048	.029	.015	.015	.010	.005	
7.0	.132	.075	.034	.113	.065	.030	.078	.045	.021	.046	.027	.013	.015	.009	.004	
8.0	.126	.069	.030	.108	.060	.026	.075	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.120	.064	.026	.103	.055	.023	.072	.039	.016	.042	.023	.010	.014	.008	.003	
10.0	.115	.060	.023	.099	.052	.020	.069	.036	.014	.040	.022	.009	.013	.007	.003	

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jessy
Test Date:2024-11-12

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:1.2597A P:151.24W PF:0.9992 Freq:59.98Hz Lamp Flux:21857x1 lm										
NAME: LED High Bay Light					TYPE:Flood Light			WEIGHT:N/A		
SPEC.:150W/110°					DIM.: 210*280mm			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	21.8	23.3	22.1	23.5	23.7	21.3	22.7	21.6	22.9	23.1
3H	22.8	24.1	23.1	24.3	24.6	22.2	23.5	22.4	23.7	23.9
4H	23.0	24.2	23.3	24.5	24.7	22.3	23.5	22.6	23.8	24.0
6H	23.0	24.2	23.3	24.4	24.7	22.2	23.4	22.5	23.6	23.9
8H	23.0	24.1	23.3	24.4	24.7	22.2	23.3	22.5	23.6	23.8
12H	22.9	24.0	23.3	24.3	24.6	22.1	23.2	22.4	23.5	23.8
4H 2H	22.2	23.4	22.5	23.7	23.9	21.7	23.0	22.0	23.2	23.5
3H	23.2	24.3	23.6	24.6	24.9	22.7	23.8	23.0	24.1	24.4
4H	23.5	24.5	23.9	24.8	25.1	22.8	23.8	23.2	24.1	24.5
6H	23.5	24.4	23.9	24.8	25.1	22.8	23.7	23.2	24.0	24.4
8H	23.5	24.3	23.9	24.7	25.1	22.8	23.6	23.2	23.9	24.3
12H	23.5	24.2	23.9	24.6	25.0	22.7	23.4	23.1	23.8	24.2
8H 4H	23.5	24.3	23.9	24.7	25.0	22.9	23.7	23.3	24.0	24.4
6H	23.6	24.2	24.0	24.6	25.1	22.8	23.5	23.3	23.9	24.3
8H	23.6	24.1	24.0	24.6	25.0	22.8	23.4	23.3	23.8	24.3
12H	23.5	24.0	24.0	24.5	24.9	22.8	23.3	23.2	23.7	24.2
12H 4H	23.5	24.2	23.9	24.6	25.0	22.8	23.6	23.3	24.0	24.4
6H	23.5	24.1	24.0	24.5	25.0	22.8	23.4	23.3	23.8	24.3
8H	23.5	24.0	24.0	24.5	24.9	22.8	23.3	23.3	23.7	24.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.3					+ 0.4 / - 0.5				
1.5H	+ 0.3 / - 0.4					+ 0.2 / - 0.5				
2.0H	+ 0.7 / - 0.6					+ 0.7 / - 0.8				

CIE Pub.117, 21857 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 10.7)
Area: 0.024 m2

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jessy
Test Date:2024-11-12

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:1.2597A P:151.24W PF:0.9992 Freq:59.98Hz Lamp Flux:21857x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:150W/110°	DIM.: 210*280mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

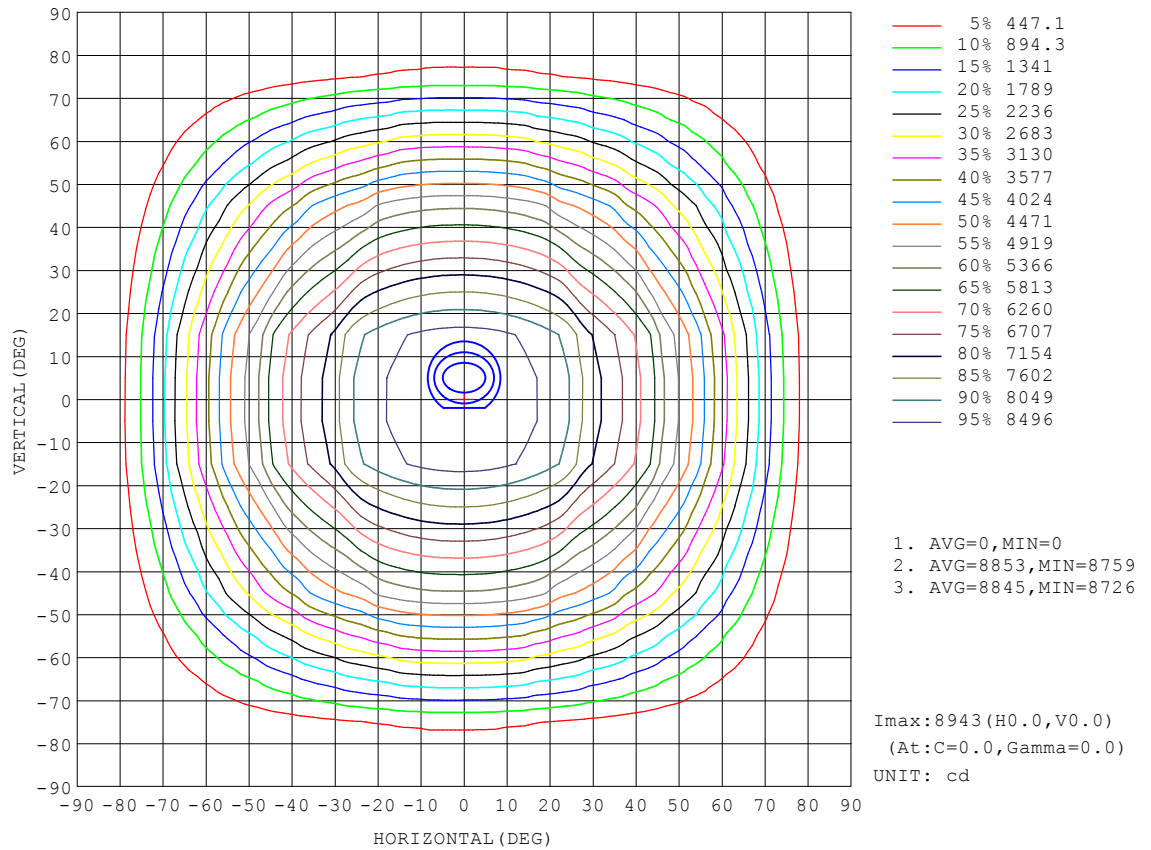
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	61	50	43	60	50	43	59	49	43	37
0.80	71	60	53	70	60	53	68	59	53	46
1.00	80	70	63	79	69	63	76	70	62	55
1.25	87	77	71	85	77	70	83	75	70	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(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jessy
Test Date:2024-11-12

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:1.2597A P:151.24W PF:0.9992 Freq:59.98Hz Lamp Flux:21857x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:150W/110°	DIM.: 210*280mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

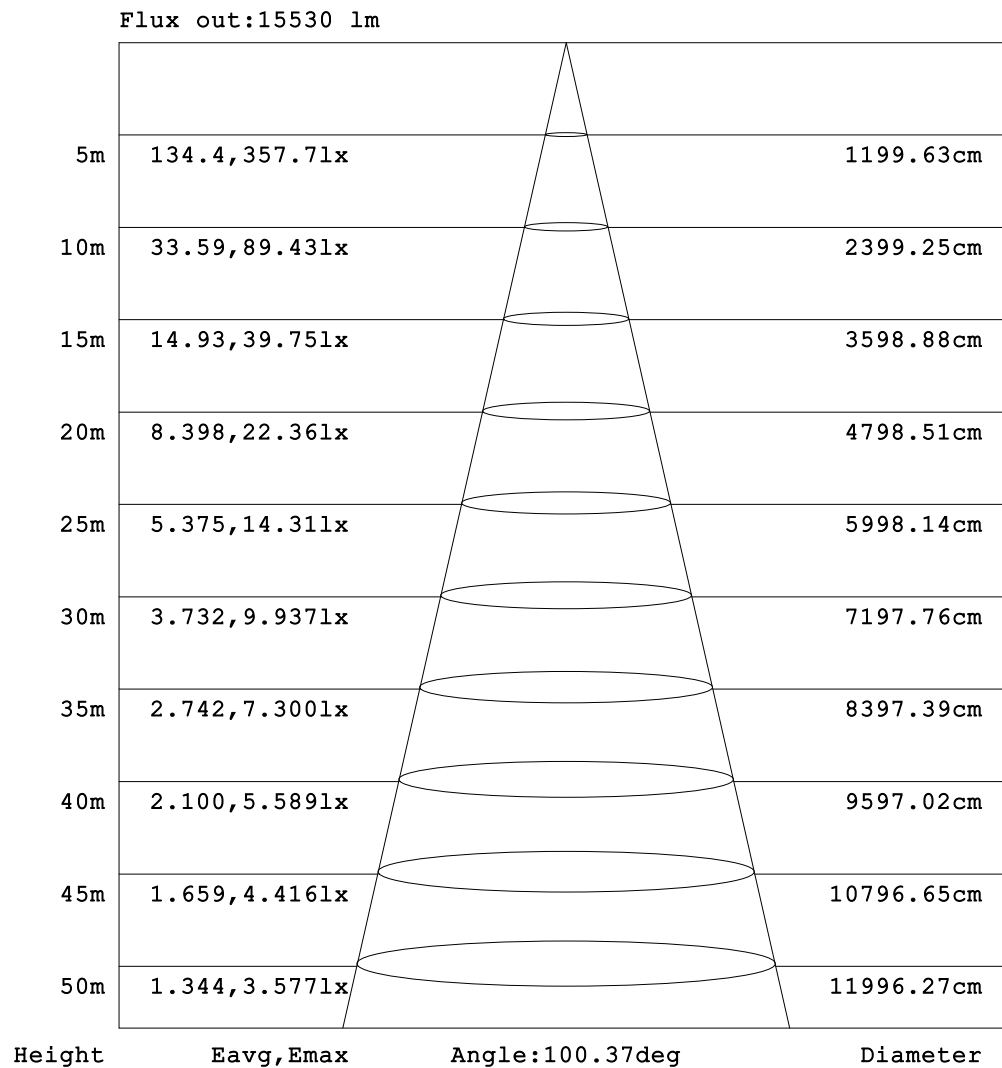


H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jessy
Test Date:2024-11-12

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:1.2597A P:151.24W PF:0.9992 Freq:59.98Hz Lamp Flux:21857x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:150W/110°	DIM.: 210*280mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A



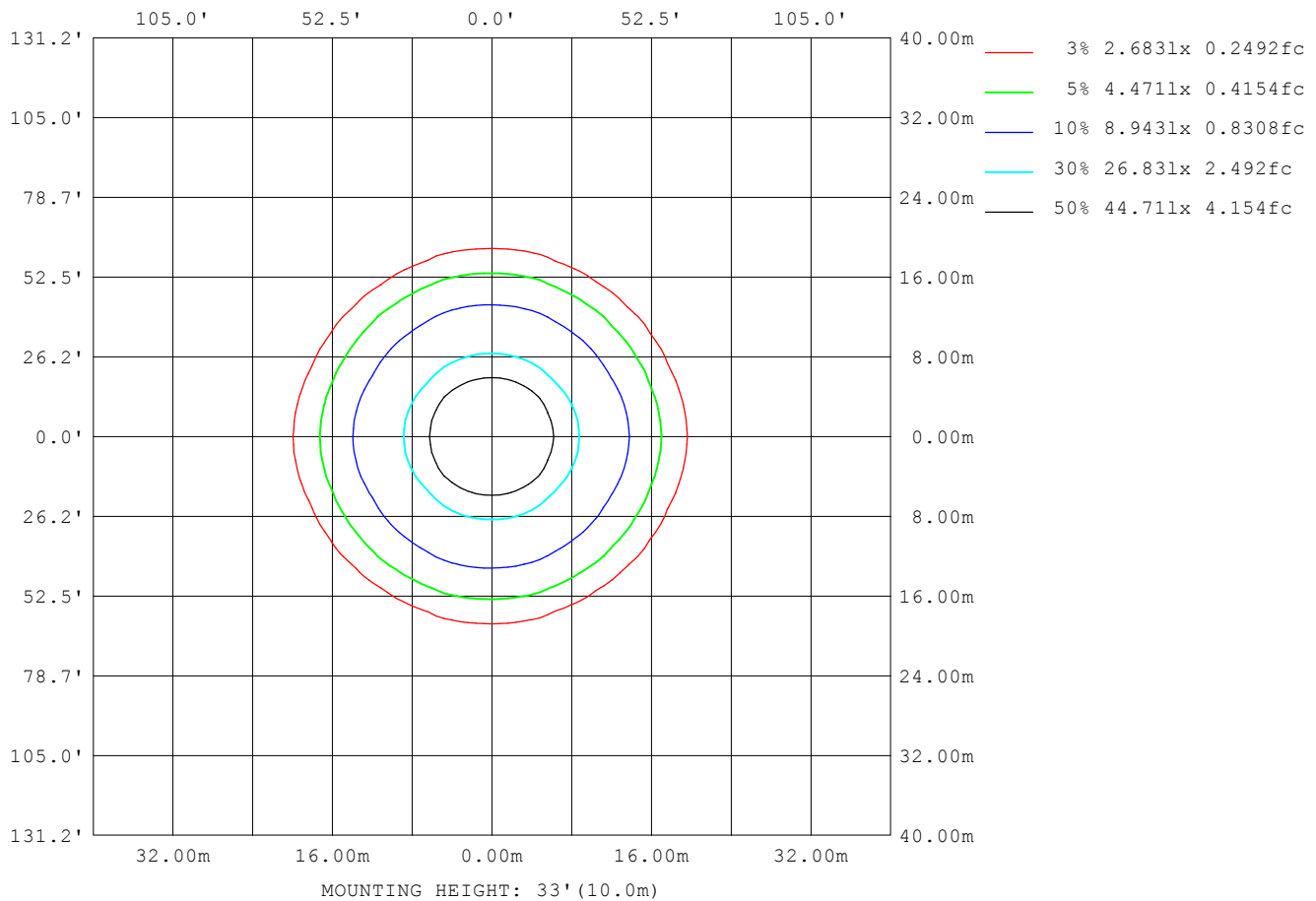
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jessy
Test Date:2024-11-12

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:1.2597A P:151.24W PF:0.9992 Freq:59.98Hz Lamp Flux:21857x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:150W/110°	DIM.: 210*280mm	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:2024-11-12

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:1.2597A P:151.24W PF:0.9992 Freq:59.98Hz Lamp Flux:21857x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:150W/110°	DIM.: 210*280mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

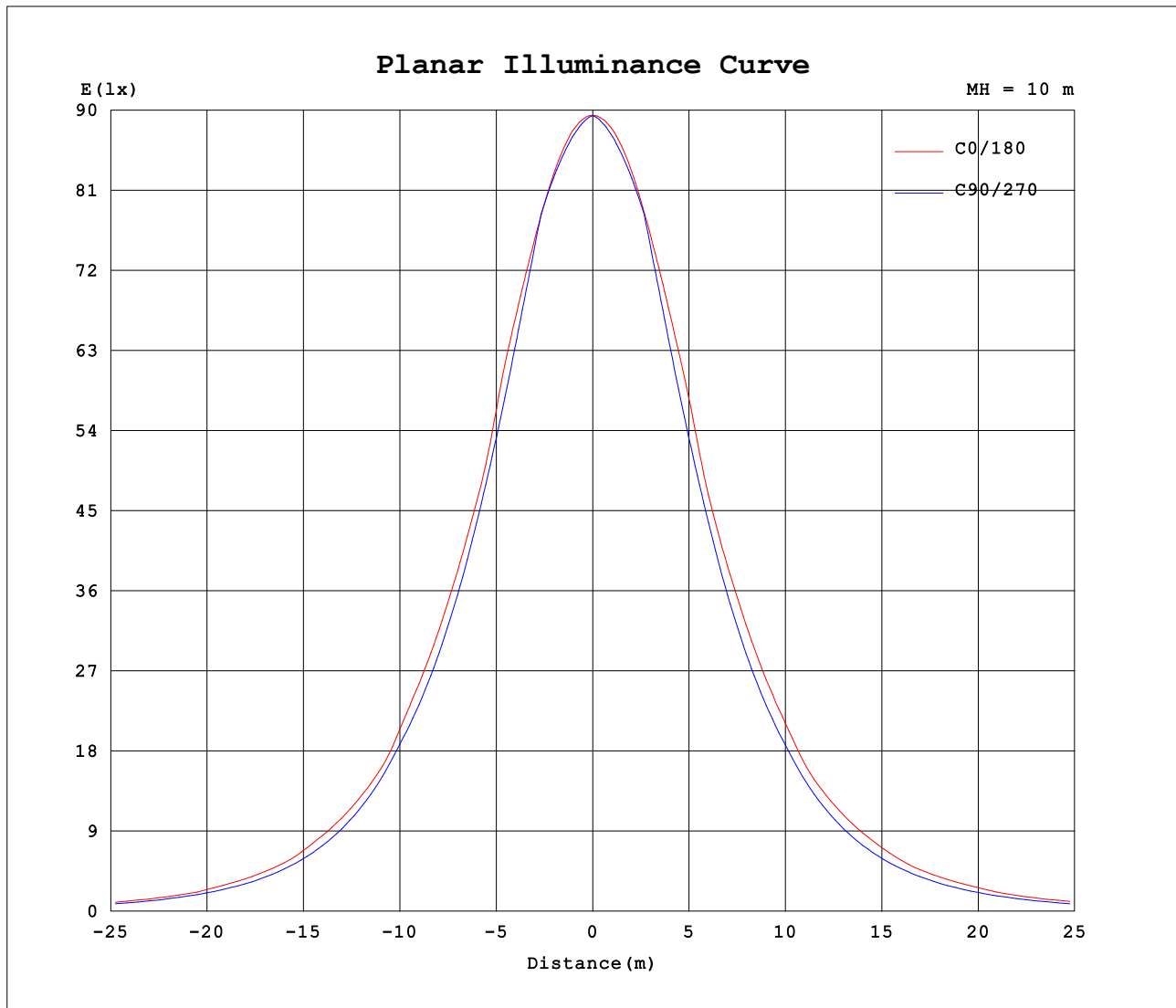
AvgL	cd/m2
L_0~180 (65) av	249934
L_0~180 (75) av	142134
L_0~180 (85) av	14790
L_90~270 (65) av	209034
L_90~270 (75) av	90353
L_90~270 (85) av	0
L_45 (65) av	209374
L_45 (75) av	120003
L_45 (85) av	0

Standard: GB/T 29293-2012

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jessy
Test Date:2024-11-12

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:2024-11-12

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: