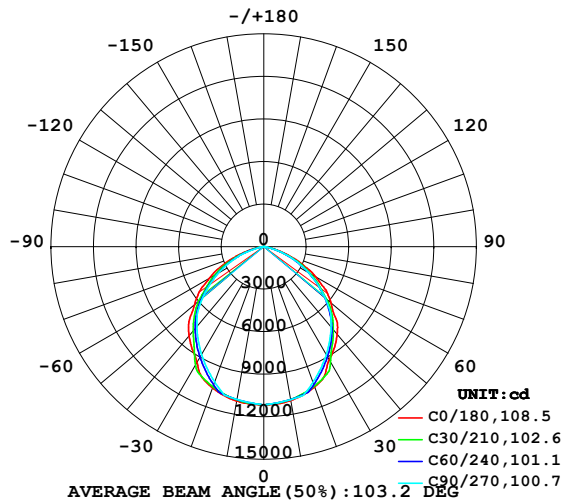


LUMINAIRE PHOTOMETRIC TEST REPORT

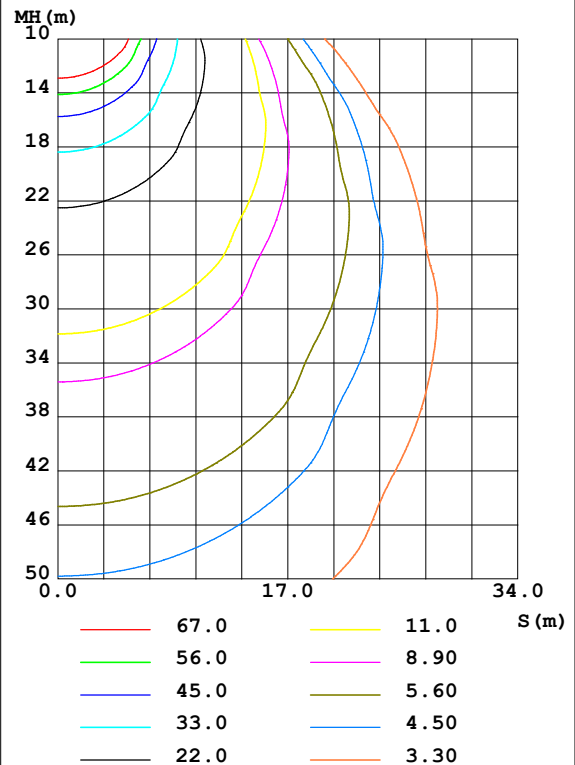
Test:U:120.09V I:1.6577A P:198.68W PF:0.9980 Freq:59.98Hz Lamp Flux:27331.4x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:200W/110°	DIM.: 210*280mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

DATA OF LAMP		PHOTOMETRIC DATA Eff: 137.57 lm/W			
MODEL	GSM-30-U	I _{max} (cd)	11156	S/MH(C0/180)	1.25
NOMINAL POWER(W)	200	LOR(%)	100.0	S/MH(C90/270)	1.18
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	27331	□ UP,DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	27331.4	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)	120	□ 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	1102	1094	1095	1096	1106	1095	1094	1093	0- 10	1054	1054	3.86, 3.86
20	1053	1054	1018	1060	1060	1057	1015	1052	10- 20	3040	4094	15, 15
30	922.9	921.5	882.6	929.9	942.9	927.0	879.2	919.7	20- 30	4539	8633	31.6, 31.6
40	806.1	733.0	739.6	750.1	820.6	745.9	734.9	731.0	30- 40	5263	13896	50.8, 50.8
50	620.8	572.1	566.4	588.6	638.9	582.4	563.6	571.2	40- 50	5258	19154	70.1, 70.1
60	420.3	363.7	362.9	386.1	441.2	383.1	365.1	366.3	50- 60	4366	23521	86.1, 86.1
70	198.8	166.2	167.6	176.2	218.1	178.1	169.1	168.6	60- 70	2782	26303	96.2, 96.2
80	33.71	20.29	0	24.33	41.78	23.41	0	22.51	70- 80	983.3	27287	99.8, 99.8
90	0.6562	0	0	0	0.6279	0	0	0	80- 90	44.86	27331	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): 16582 lm

%lum = 60.7%

%lamp = 60.7%

Conical surface Flux(120deg): 23521 lm

%lum = 86.1%

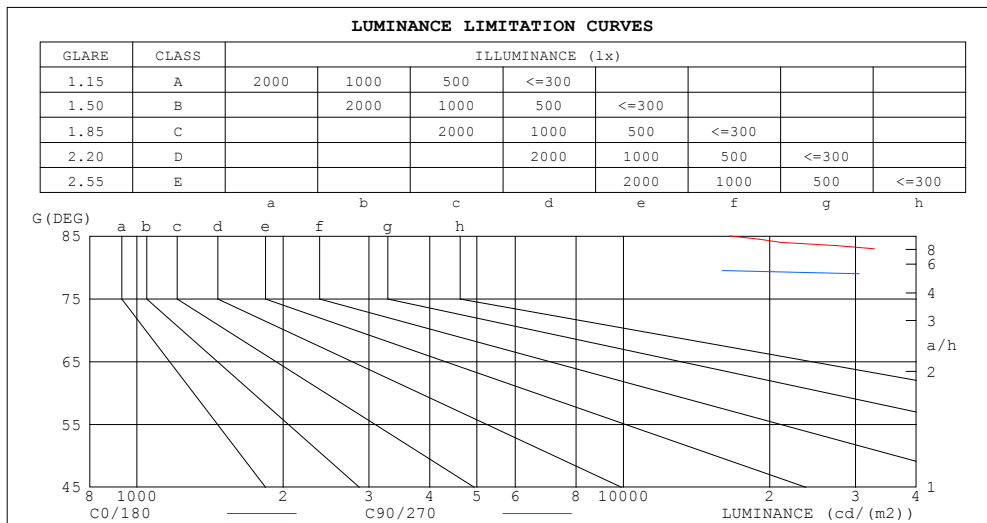
%lamp = 86.1%

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:120.09V I:1.6577A P:198.68W PF:0.9980 Freq:59.98Hz Lamp Flux:27331.4x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:200W/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	16548	0
80	80877	0
75	164390	112493
70	242201	204130
65	301878	261507
60	350267	302438
55	388455	337550
50	402433	367155
45	425758	393710

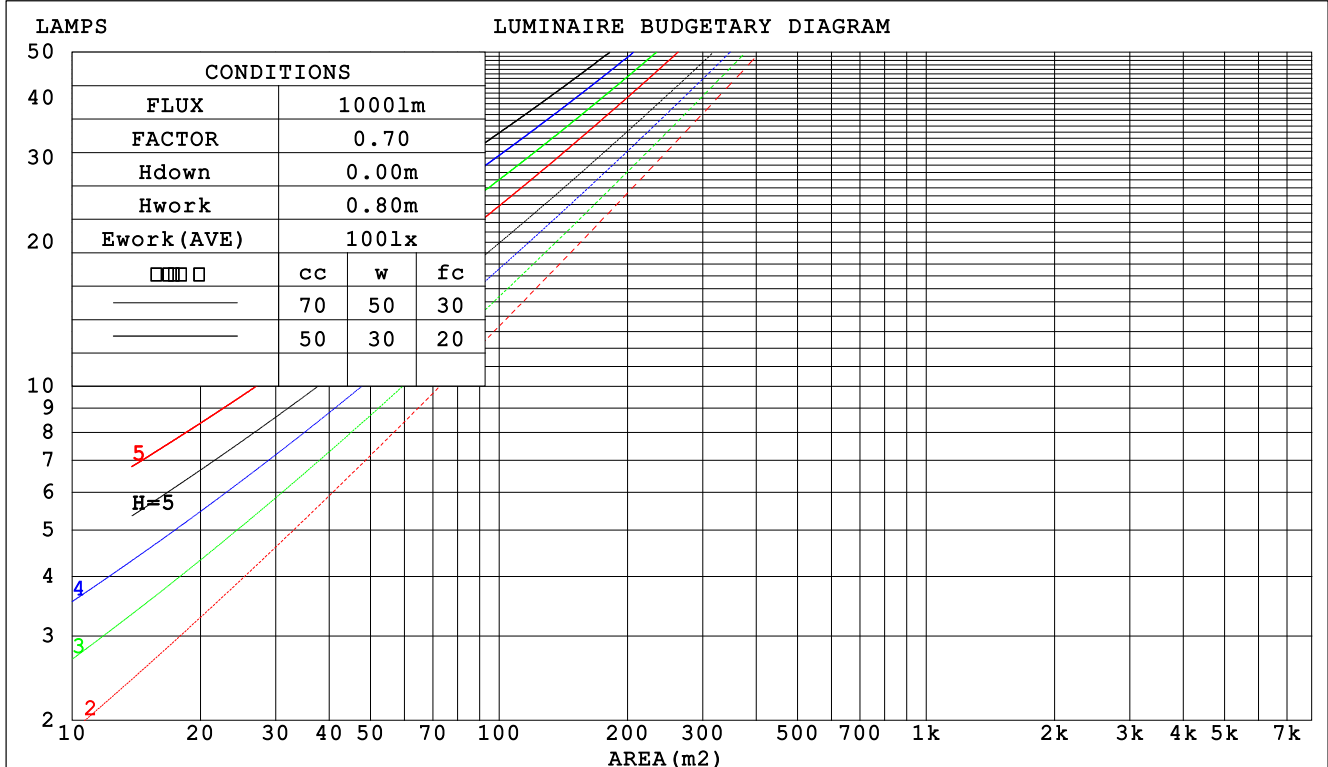
H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jessy
Test Date:2024-11-12

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:120.09V I:1.6577A P:198.68W PF:0.9980 Freq:59.98Hz Lamp Flux:27331.4x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:200W/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:120.09V I:1.6577A P:198.68W PF:0.9980 Freq:59.98Hz Lamp Flux:27331.4x1 lm					
NAME: LED High Bay Light			TYPE:Flood Light		WEIGHT:N/A
SPEC.:200W/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	.149	.047	.247	.142	.045	.235	.136	.044	.224	.130	.042		
2.0	.261	.143	.044	.255	.140	.043	.244	.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	.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	.102	.031		
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	.169	.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	.035	.082	.049	.025	.048	.029	.015	.015	.010	.005	
7.0	.132	.075	.034	.114	.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:120.09V I:1.6577A P:198.68W PF:0.9980 Freq:59.98Hz Lamp Flux:27331.4x1 lm										
NAME: LED High Bay Light					TYPE:Flood Light			WEIGHT:N/A		
SPEC.:200W/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	22.8	21.6	23.0	23.2
3H	22.8	24.1	23.1	24.3	24.6	22.2	23.5	22.5	23.7	24.0
4H	23.0	24.2	23.3	24.5	24.7	22.3	23.6	22.6	23.8	24.1
6H	23.0	24.2	23.3	24.4	24.7	22.2	23.4	22.6	23.7	24.0
8H	23.0	24.1	23.3	24.4	24.6	22.2	23.3	22.5	23.6	23.9
12H	22.9	24.0	23.3	24.3	24.6	22.1	23.2	22.5	23.5	23.8
4H 2H	22.2	23.4	22.5	23.7	23.9	21.8	23.0	22.1	23.2	23.5
3H	23.2	24.3	23.6	24.6	24.9	22.7	23.8	23.1	24.1	24.4
4H	23.5	24.5	23.9	24.8	25.1	22.9	23.9	23.3	24.2	24.5
6H	23.5	24.4	23.9	24.7	25.1	22.8	23.7	23.2	24.1	24.4
8H	23.5	24.3	23.9	24.7	25.1	22.8	23.6	23.2	24.0	24.3
12H	23.5	24.2	23.9	24.6	25.0	22.8	23.5	23.2	23.9	24.3
8H 4H	23.5	24.3	23.9	24.7	25.0	22.9	23.7	23.3	24.1	24.5
6H	23.6	24.2	24.0	24.6	25.1	22.9	23.5	23.3	23.9	24.4
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	23.3	23.7	24.2
12H 4H	23.5	24.2	23.9	24.6	25.0	22.9	23.6	23.3	24.0	24.4
6H	23.5	24.1	24.0	24.5	25.0	22.9	23.4	23.3	23.9	24.3
8H	23.5	24.0	24.0	24.5	24.9	22.8	23.3	23.3	23.8	24.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.3 / - 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, 27331 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 11.5)
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:120.09V I:1.6577A P:198.68W PF:0.9980 Freq:59.98Hz Lamp Flux:27331.4x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:200W/110°	DIM.: 210*280mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

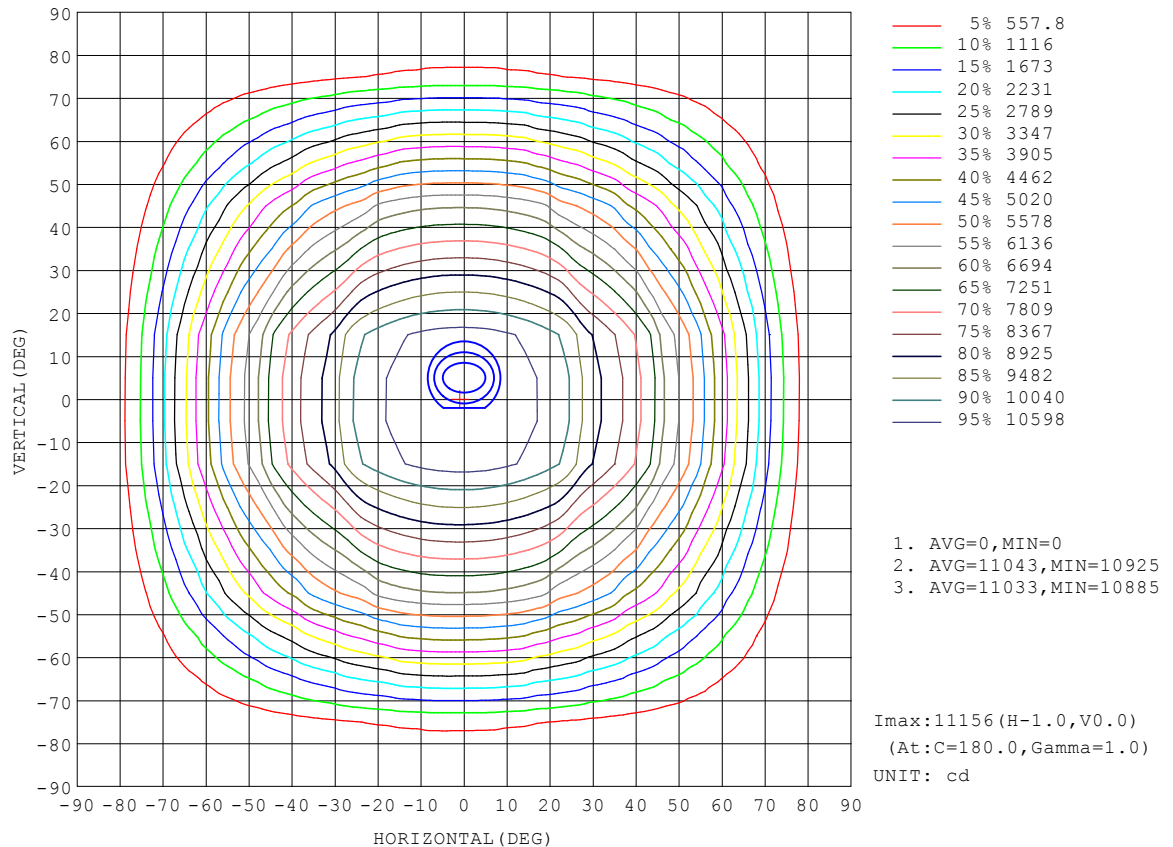
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	61	50	43	60	49	43	59	49	43	37
0.80	71	60	53	70	60	53	68	59	53	46
1.00	80	69	63	79	69	62	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	90	85	96	89	84	93	87	82	75
2.50	102	95	89	100	93	88	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:120.09V I:1.6577A P:198.68W PF:0.9980 Freq:59.98Hz Lamp Flux:27331.4x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:200W/110°	DIM.: 210*280mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

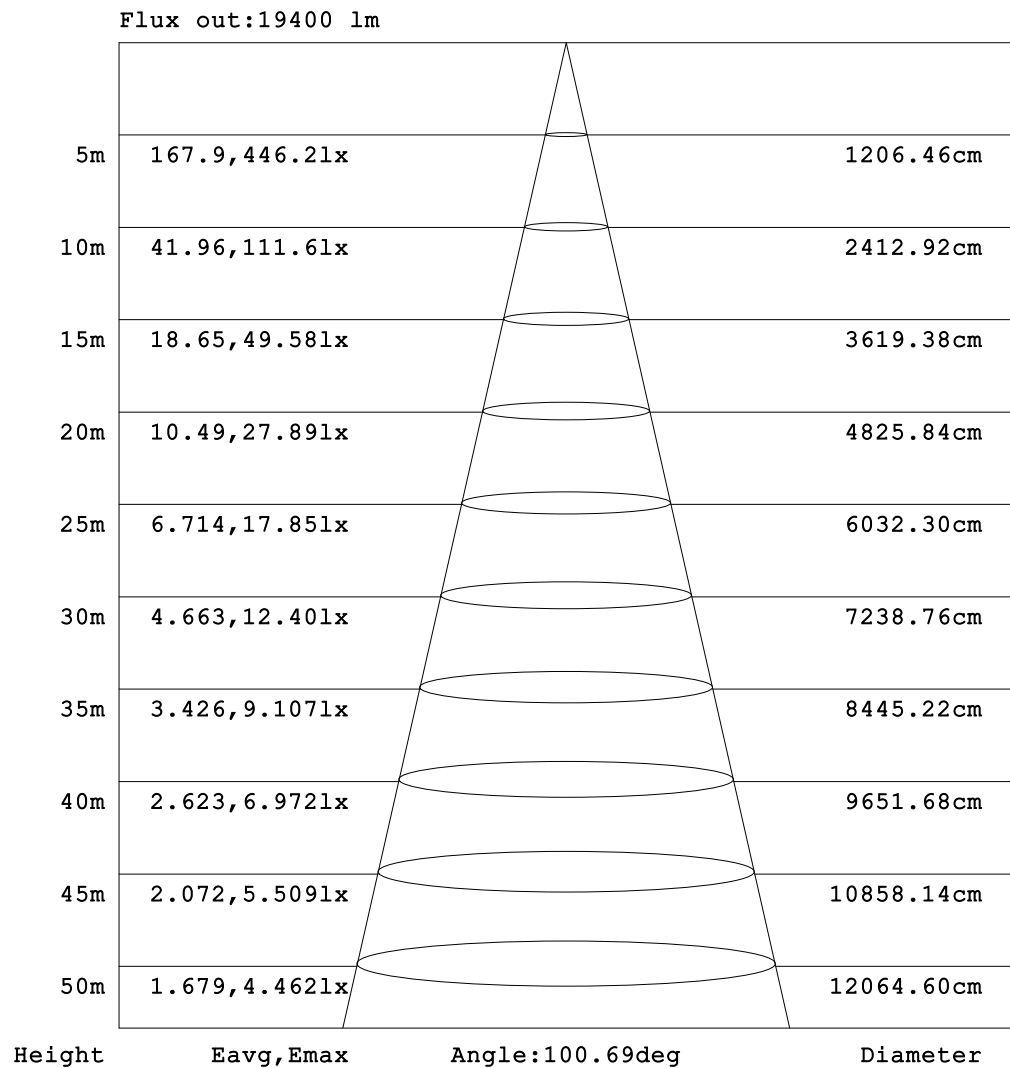


H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jessy
Test Date:2024-11-12

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:120.09V I:1.6577A P:198.68W PF:0.9980 Freq:59.98Hz Lamp Flux:27331.4x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:200W/110°	DIM.: 210*280mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A



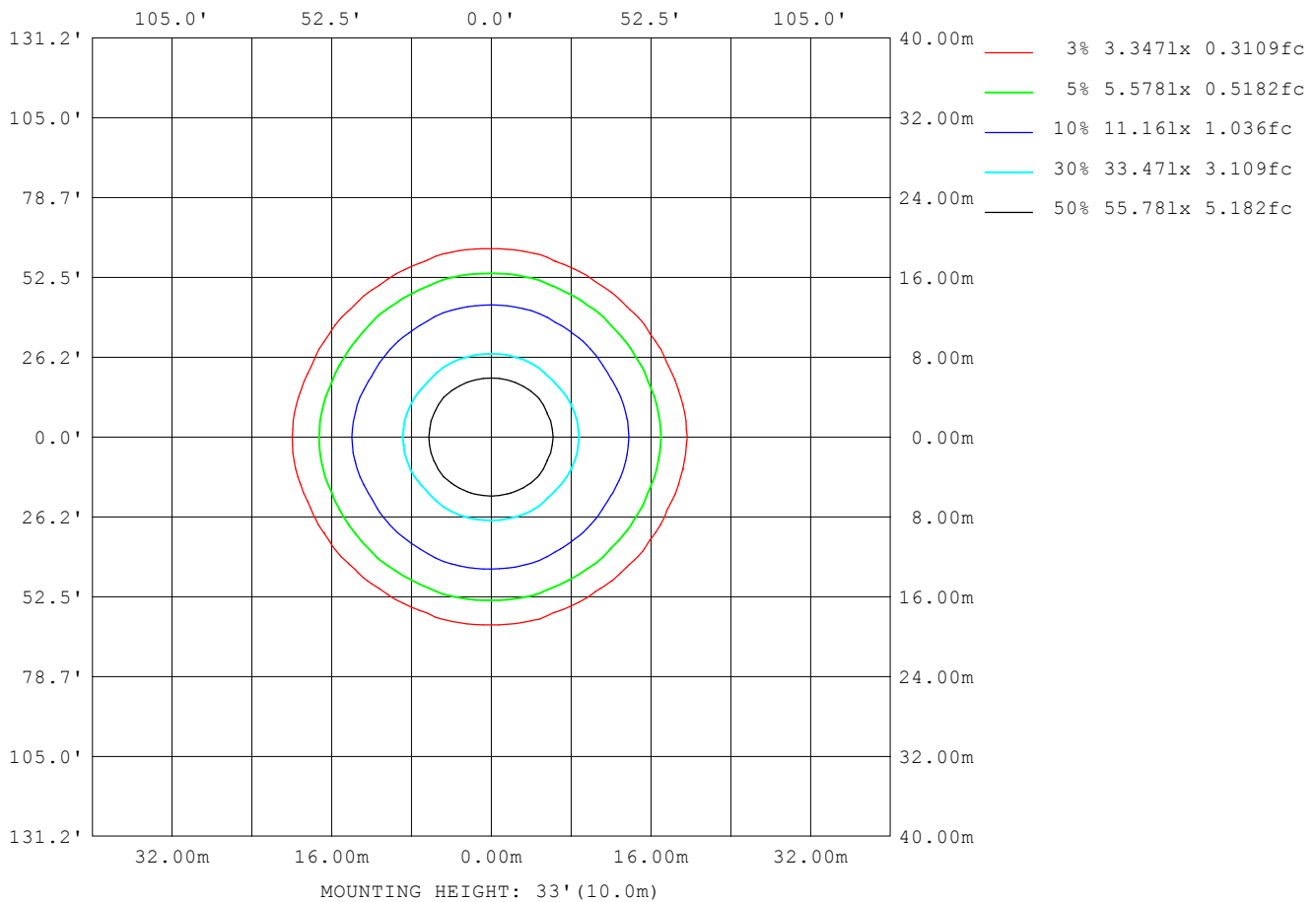
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:120.09V I:1.6577A P:198.68W PF:0.9980 Freq:59.98Hz Lamp Flux:27331.4x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:200W/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:120.09V I:1.6577A P:198.68W PF:0.9980 Freq:59.98Hz Lamp Flux:27331.4x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:200W/110°	DIM.: 210*280mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

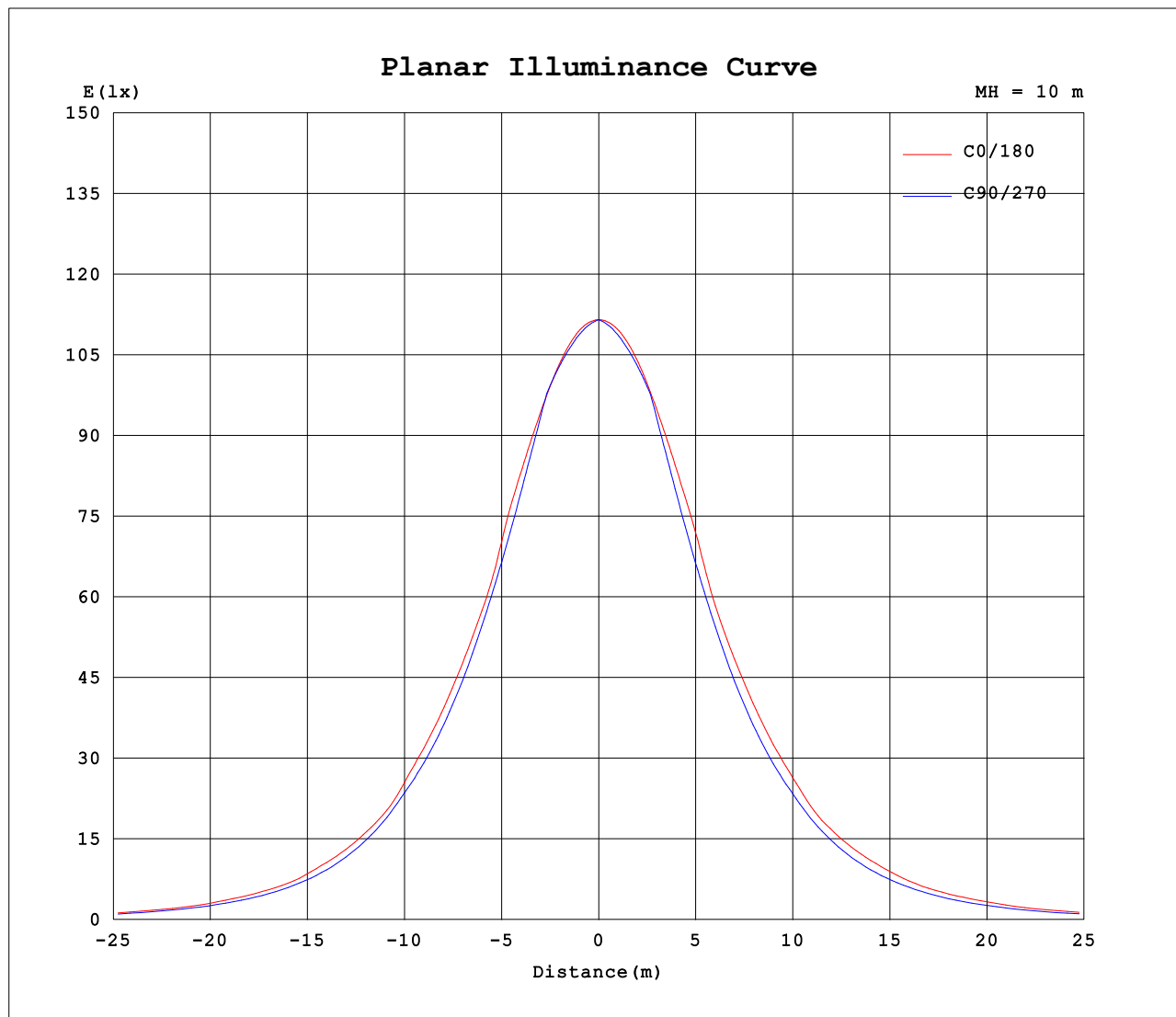
AvgL	cd/m2
L_0~180 (65) av	313106
L_0~180 (75) av	177209
L_0~180 (85) av	17984
L_90~270 (65) av	262423
L_90~270 (75) av	113413
L_90~270 (85) av	0
L_45 (65) av	262858
L_45 (75) av	150474
L_45 (85) av	0

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:
```