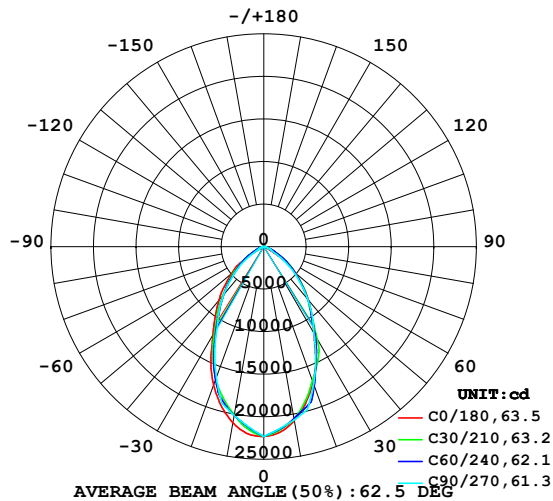


LUMINAIRE PHOTOMETRIC TEST REPORT

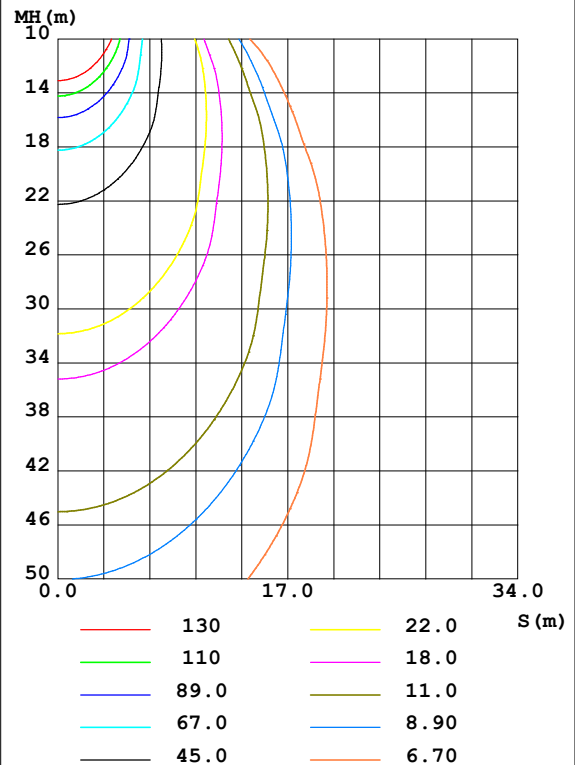
Test:U:120.09V I:1.6591A P:198.85W PF:0.9980 Freq:59.98Hz Lamp Flux:28895.4x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:200W/60°	DIM.: 210*280mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

DATA OF LAMP		PHOTOMETRIC DATA Eff: 145.31 lm/W			
MODEL	GSM-30-U	I _{max} (cd)	22305	S/MH(C0/180)	0.92
NOMINAL POWER(W)	200	LOR(%)	100.0	S/MH(C90/270)	0.87
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	28895	□ UP,DN(C0-180)	0.0,51.3
NOMINAL FLUX(lm)	28895.4	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	2075	2049	2066	2042	2101	2009	2013	2011	0- 10	2019	2019	6.99,6.99
20	1695	1763	1716	1727	1727	1668	1635	1692	10- 20	5285	7304	25.3,25.3
30	1183	1230	1180	1219	1197	1165	1096	1173	20- 30	6554	13858	48,48
40	811.9	767.6	804.6	763.5	819.9	719.6	733.5	721.0	30- 40	5999	19857	68.7,68.7
50	499.6	483.6	454.8	480.5	500.3	438.6	400.0	441.4	40- 50	4709	24567	85,85
60	93.28	238.4	130.5	233.0	114.1	202.0	95.36	207.5	50- 60	2925	27492	95.1,95.1
70	37.39	57.50	56.06	54.77	39.72	44.28	41.99	49.34	60- 70	1104	28595	99,99
80	8.474	8.859	0	8.124	9.770	6.332	0	7.606	70- 80	285.1	28880	99.9,99.9
90	0.2702	0	0	0	0.2502	0	0	0	80- 90	15.02	28895	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): 22415 lm

%lum = 77.6%

%lamp = 77.6%

Conical surface Flux(120deg): 27492 lm

%lum = 95.1%

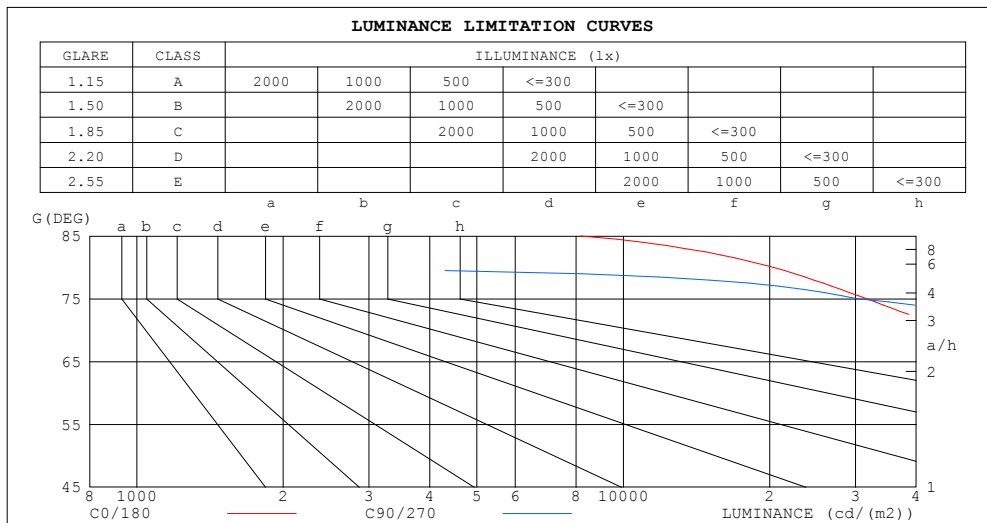
%lamp = 95.1%

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:120.09V I:1.6591A P:198.85W PF:0.9980 Freq:59.98Hz Lamp Flux:28895.4x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:200W/60°	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	8156	0
80	20333	0
75	31663	30313
70	45549	68290
65	56968	91626
60	77733	108723
55	248452	212274
50	323835	294808
45	378430	363372

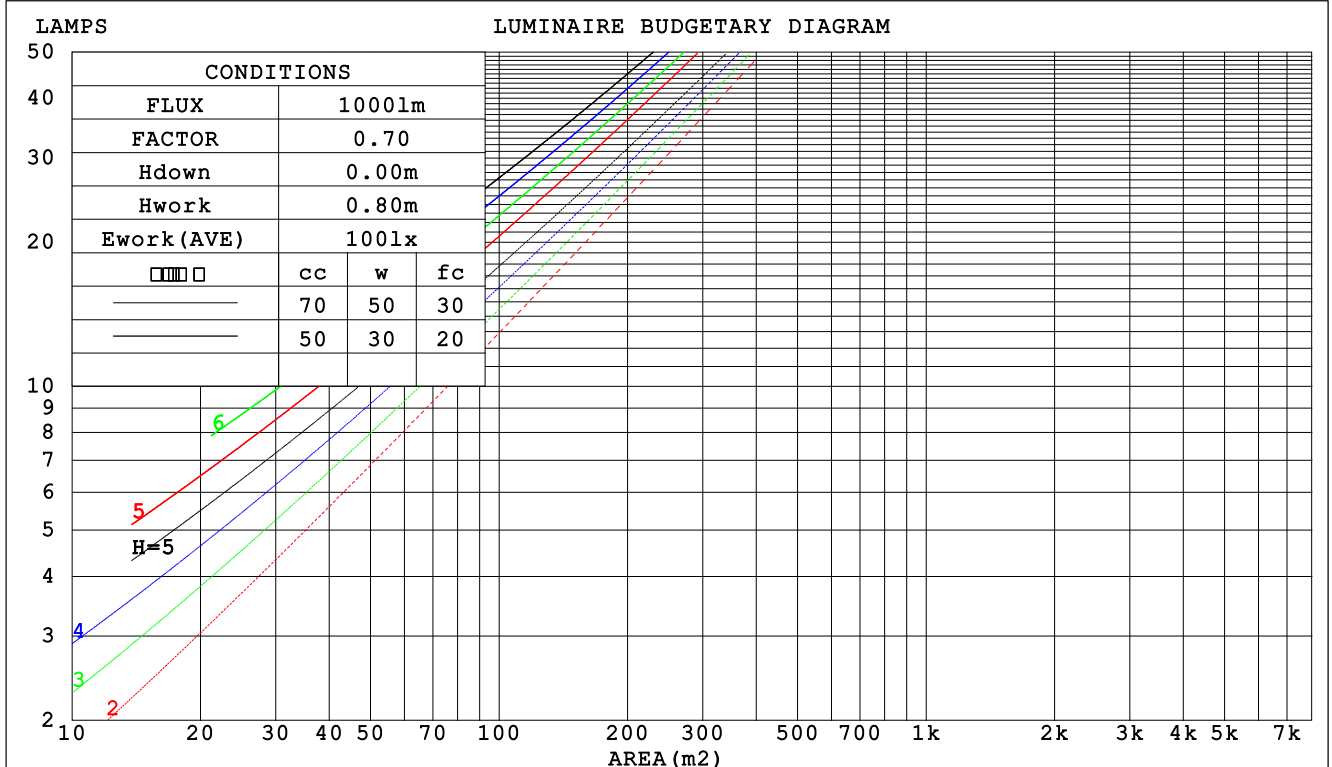
H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jessy
Test Date:2024-11-13

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:120.09V I:1.6591A P:198.85W PF:0.9980 Freq:59.98Hz Lamp Flux:28895.4x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:200W/60°	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	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	1.06	1.04	1.01	1.02	1.00	.98	.98	.97	.95	.95	.94	.92	.90
2.0	.98	.93	.89	.97	.92	.88	.93	.90	.86	.90	.87	.84	.87	.85	.83	.81
3.0	.90	.83	.78	.88	.82	.78	.85	.80	.76	.83	.79	.75	.80	.77	.74	.72
4.0	.82	.75	.69	.80	.74	.69	.78	.73	.68	.76	.71	.67	.74	.70	.67	.65
5.0	.75	.68	.62	.74	.67	.62	.72	.66	.61	.70	.65	.61	.68	.64	.60	.58
6.0	.69	.61	.56	.68	.61	.56	.66	.60	.56	.65	.59	.55	.63	.58	.55	.53
7.0	.64	.56	.51	.63	.56	.51	.61	.55	.51	.60	.55	.50	.59	.54	.50	.48
8.0	.59	.52	.47	.58	.51	.47	.57	.51	.46	.56	.50	.46	.55	.50	.46	.44
9.0	.55	.48	.43	.54	.48	.43	.53	.47	.43	.52	.47	.43	.51	.46	.42	.41
10.0	.51	.44	.40	.51	.44	.40	.50	.44	.40	.49	.43	.40	.48	.43	.39	.38



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:120.09V I:1.6591A P:198.85W PF:0.9980 Freq:59.98Hz Lamp Flux:28895.4x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:200W/60°	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	.220	.125	.040	.213	.121	.039	.200	.115	.037	.188	.109	.035	.177	.103	.033		
2.0	.214	.118	.036	.209	.115	.035	.198	.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	.173	.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	.162	.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	.068	.019	.139	.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	.066	.123	.086	.058	.085	.060	.041	.049	.035	.024	.016	.011	.008	
5.0	.136	.089	.054	.117	.077	.047	.080	.054	.033	.047	.031	.020	.015	.010	.006	
6.0	.129	.080	.045	.111	.069	.039	.076	.048	.028	.044	.029	.016	.014	.009	.005	
7.0	.123	.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	.017	.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:120.09V I:1.6591A P:198.85W PF:0.9980 Freq:59.98Hz Lamp Flux:28895.4x1 lm										
NAME: LED High Bay Light					TYPE:Flood Light			WEIGHT:N/A		
SPEC.:200W/60°					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	19.3	20.5	19.5	20.7	20.9	19.2	20.4	19.4	20.6	20.8
3H	19.2	20.3	19.5	20.6	20.8	19.4	20.5	19.7	20.7	21.0
4H	19.2	20.2	19.5	20.5	20.7	19.4	20.4	19.7	20.7	20.9
6H	19.1	20.1	19.4	20.3	20.6	19.3	20.3	19.6	20.5	20.8
8H	19.1	20.0	19.4	20.3	20.5	19.2	20.2	19.6	20.4	20.7
12H	19.0	19.9	19.3	20.2	20.5	19.2	20.1	19.5	20.4	20.7
4H 2H	19.5	20.5	19.8	20.7	21.0	19.4	20.4	19.7	20.6	20.9
3H	19.5	20.4	19.8	20.6	20.9	19.7	20.6	20.0	20.9	21.2
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	20.7	21.0
8H	19.3	20.0	19.7	20.3	20.7	19.6	20.2	20.0	20.6	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	19.3	20.0	19.7	20.4	20.7	19.6	20.3	20.0	20.6	21.0
6H	19.3	19.8	19.7	20.2	20.7	19.5	20.1	19.9	20.5	20.9
8H	19.3	19.7	19.7	20.2	20.6	19.5	19.9	19.9	20.4	20.8
12H	19.2	19.6	19.7	20.1	20.5	19.4	19.8	19.9	20.3	20.7
12H 4H	19.3	19.9	19.7	20.3	20.7	19.5	20.2	20.0	20.5	20.9
6H	19.3	19.7	19.7	20.1	20.6	19.5	19.9	19.9	20.4	20.8
8H	19.2	19.6	19.7	20.1	20.5	19.4	19.8	19.9	20.3	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 / - 6.4					+ 1.9 / - 4.9				

CIE Pub.117, 28895 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 11.7)
Area: 0.024 m2

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

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:120.09V I:1.6591A P:198.85W PF:0.9980 Freq:59.98Hz Lamp Flux:28895.4x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:200W/60°	DIM.: 210*280mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

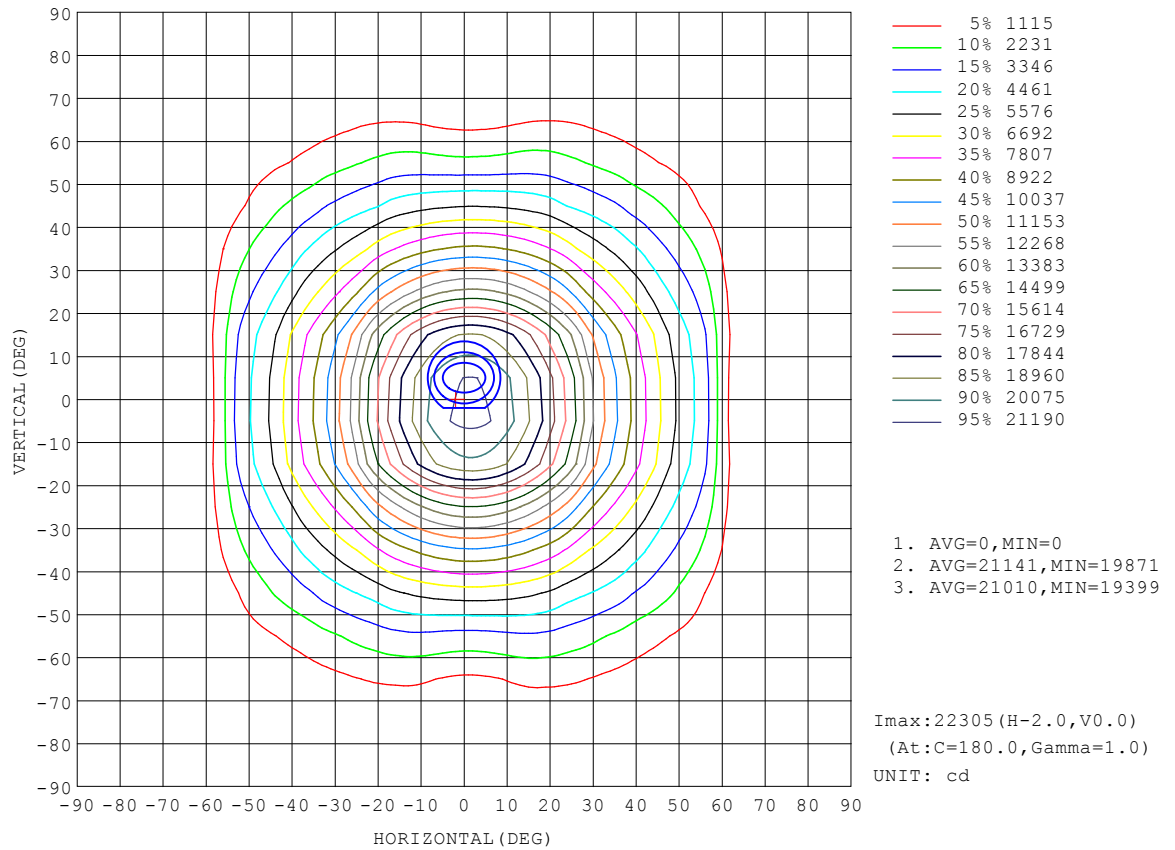
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	71	62	57	71	62	57	70	62	57	51
0.80	81	72	67	80	72	67	79	71	66	61
1.00	89	80	75	88	80	75	86	80	74	69
1.25	94	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	84
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	93
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:120.09V I:1.6591A P:198.85W PF:0.9980 Freq:59.98Hz Lamp Flux:28895.4x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:200W/60°	DIM.: 210*280mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

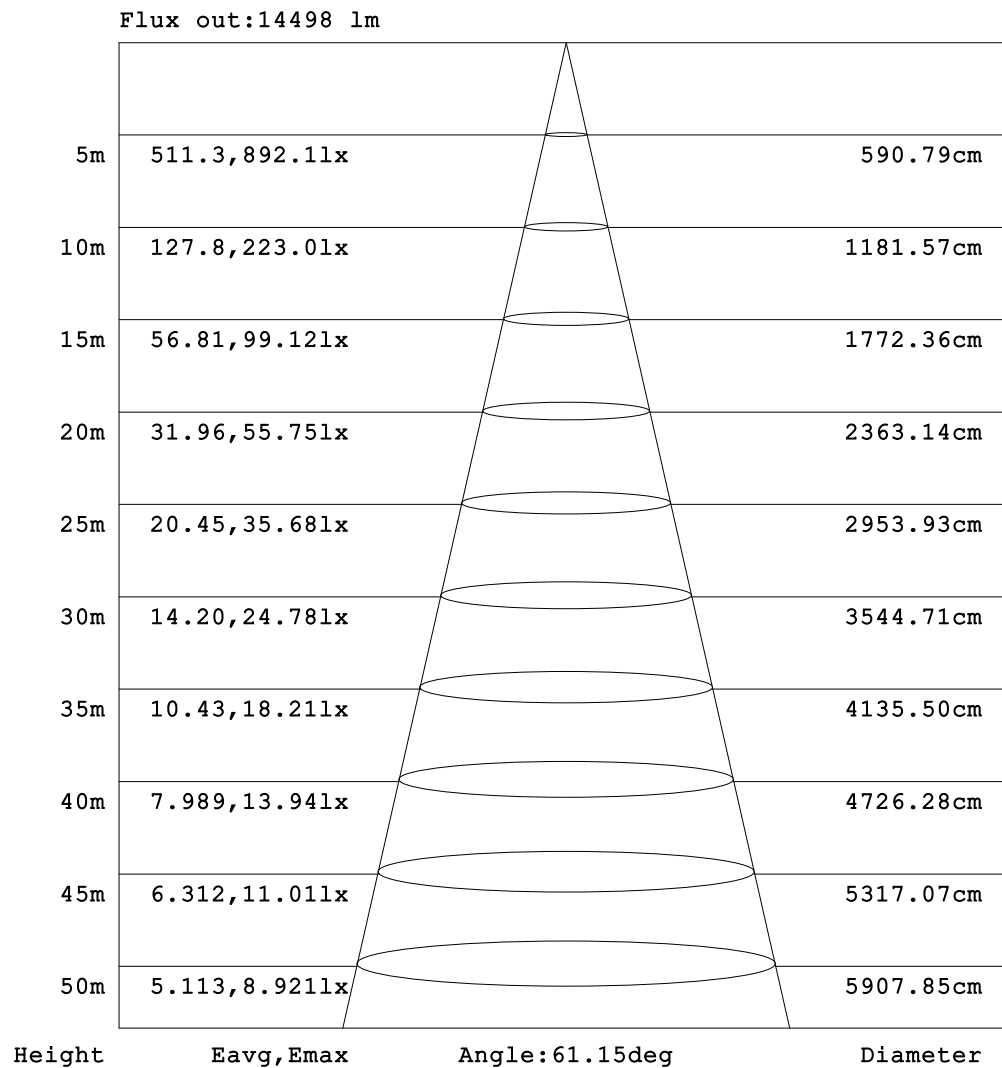


H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jessy
Test Date:2024-11-13

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:120.09V I:1.6591A P:198.85W PF:0.9980 Freq:59.98Hz Lamp Flux:28895.4x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:200W/60°	DIM.: 210*280mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A



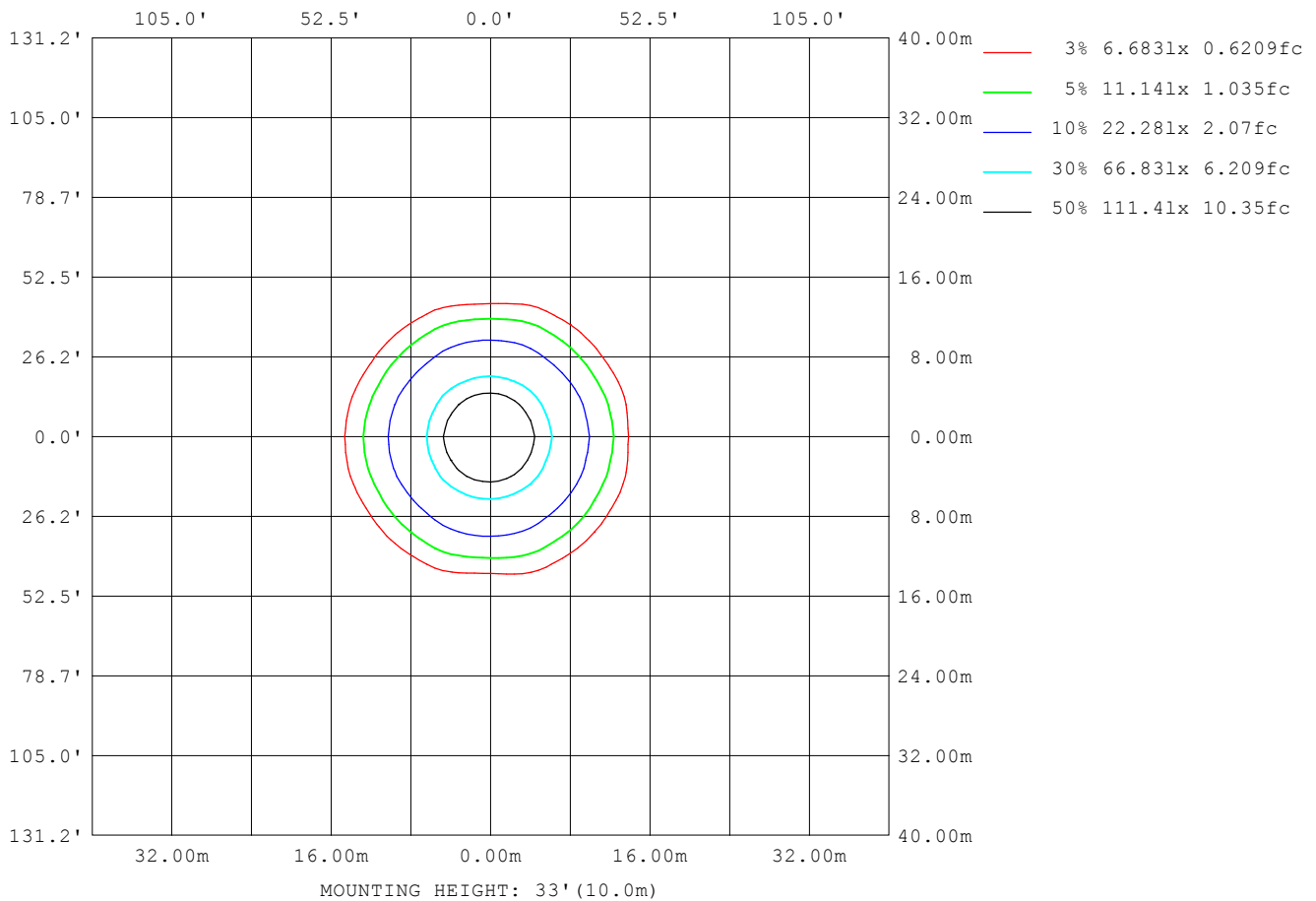
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

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:120.09V I:1.6591A P:198.85W PF:0.9980 Freq:59.98Hz Lamp Flux:28895.4x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:200W/60°	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:2024-11-13

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:120.09V I:1.6591A P:198.85W PF:0.9980 Freq:59.98Hz Lamp Flux:28895.4x1 lm		
NAME: LED High Bay Light	TYPE:Flood Light	WEIGHT:N/A
SPEC.:200W/60°	DIM.: 210*280mm	SERIAL No.:N/A
MFR.: Grin Industrial Co., Ltd.	SUR.:N/A	Shielding Angle:N/A

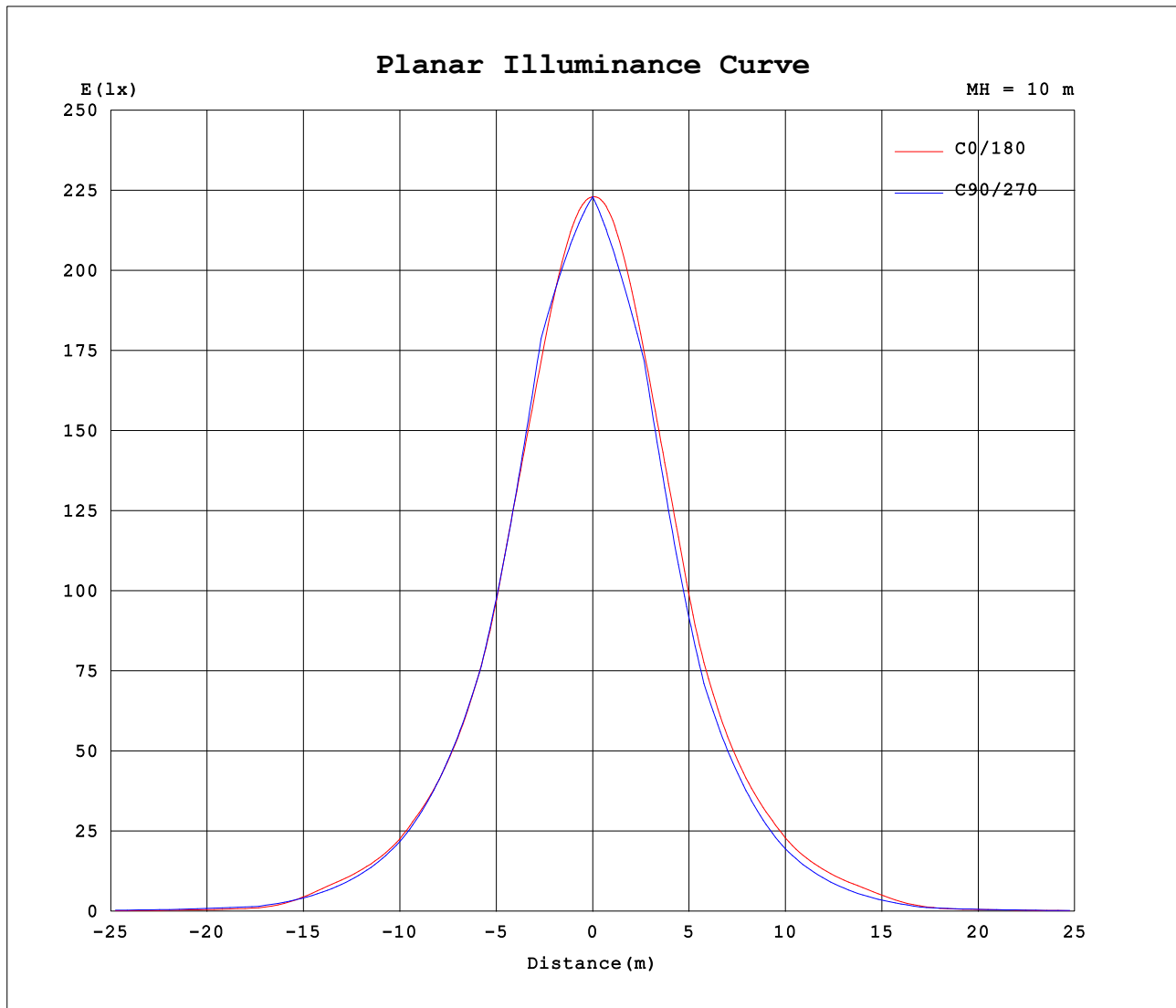
AvgL	cd/m2
L_0~180 (65) av	58581
L_0~180 (75) av	33438
L_0~180 (85) av	9879
L_90~270 (65) av	79534
L_90~270 (75) av	27462
L_90~270 (85) av	0
L_45 (65) av	116274
L_45 (75) av	43834
L_45 (85) av	0

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:

```
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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:

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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%
Test Distance:6.908m [K=1.0000]
Remarks:
```