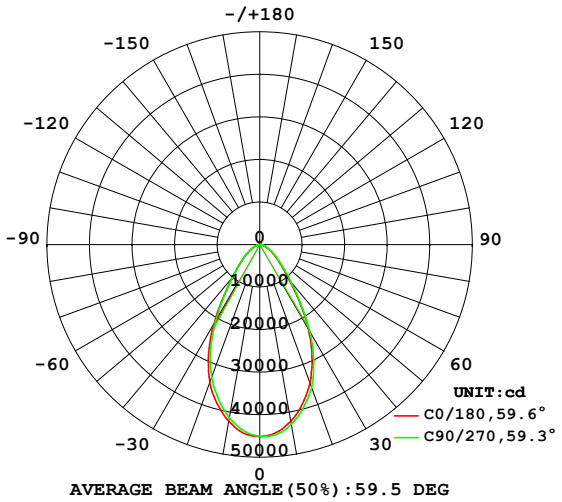
LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: LED High Bay	TYPE:	WEIGHT:
DIM.: Φ400*170MM	SPEC.:	SERIAL No.:
MFR.:	SUR.:Φ0.4	PROTECTION ANGLE:

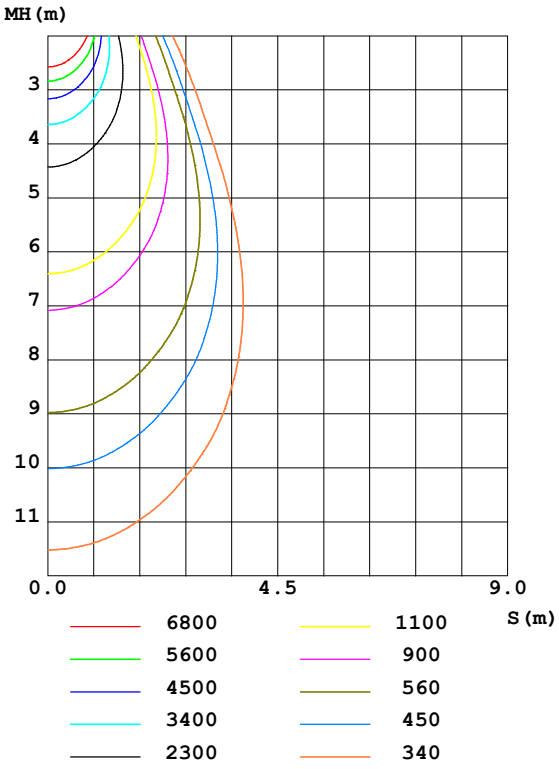
DATA OF LAMP		PHOTOMETRIC DATA Eff: 210.74 lm/W			
MODEL	UFO240-60D	Imax(cd)	45131	S/MH(C0/180)	0.91
NOMINAL POWER(W)	239.5	LOR(%)	100.0	S/MH(C90/270)	0.92
RATED VOLTAGE(V)	236	TOTAL FLUX(lm)	50472	η UP,DN(C0-180)	0.0,52.0
NOMINAL FLUX(lm)	50471.7	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,48.0
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	235.2	η down(%)	100.0	CIBSE SHR MAX	0.95

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE BEAM ANGLE(50%):59.5 DEG

C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:chen xue chang
Test Date:2022-05-17

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:8.100m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum,lamp
10	4215	4286	4215	4131					0- 10	4164	4164	8.25,8.25
20	3459	3572	3438	3311					10- 20	10820	14983	29.7,29.7
30	2287	2349	2164	2079					20- 30	13077	28060	55.6,55.6
40	1072	1140	985.9	989.0					30- 40	9759	37819	74.9,74.9
50	554.7	588.8	507.9	509.8					40- 50	5820	43639	86.5,86.5
60	288.9	308.1	258.7	254.7					50- 60	3548	47187	93.5,93.5
70	145.0	151.8	125.3	123.3					60- 70	1970	49157	97.4,97.4
80	65.01	66.55	51.83	50.85					70- 80	986.5	50143	99.3,99.3
90	16.97	17.04	13.75	13.73					80- 90	328.3	50472	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		

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γ Range: 0 - 90DEG
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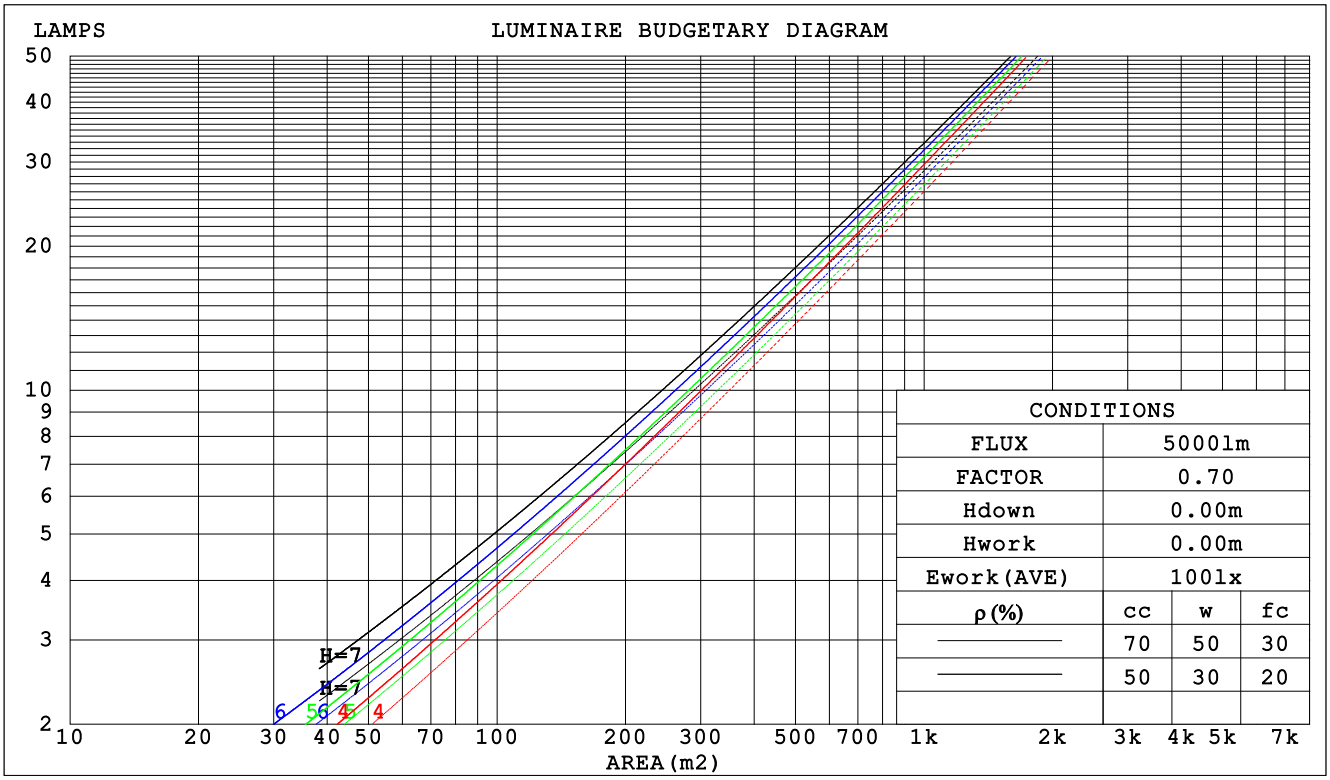
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:8.100m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: LED High Bay	TYPE:	WEIGHT:
DIM.: Φ400*170MM	SPEC.:	SERIAL No.:
MFR.:	SUR.:Φ0.4	PROTECTION ANGLE:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Coefficients of Utilization(CU)												
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	1.05	1.03	1.06	1.04	1.01	1.02	.00	.98	.98	.97	.95	.95	.94	.92	.90
2.0	.99	.94	.90	.97	.93	.89	.94	.90	.87	.91	.88	.85	.88	.85	.83	.81
3.0	.91	.84	.80	.89	.83	.79	.86	.82	.78	.84	.80	.76	.81	.78	.75	.73
4.0	.83	.77	.71	.82	.76	.71	.80	.74	.70	.78	.73	.69	.76	.72	.68	.67
5.0	.77	.70	.65	.76	.69	.64	.74	.68	.64	.72	.67	.63	.70	.66	.63	.61
6.0	.71	.64	.59	.70	.64	.59	.69	.63	.58	.67	.62	.58	.66	.61	.58	.56
7.0	.66	.59	.54	.66	.59	.54	.64	.58	.54	.63	.58	.54	.62	.57	.53	.52
8.0	.62	.55	.50	.61	.55	.50	.60	.54	.50	.59	.54	.50	.58	.53	.49	.48
9.0	.58	.51	.47	.57	.51	.47	.56	.51	.46	.55	.50	.46	.55	.50	.46	.45
10.0	.54	.48	.44	.54	.48	.43	.53	.47	.43	.52	.47	.43	.51	.47	.43	.42



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:chen xue chang
Test Date:2022-05-17

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:8.100m [K=1.0000]
Remarks:

WEC AND CCEC

NAME: LED High Bay	TYPE:	WEIGHT:
DIM.: Φ400*170MM	SPEC.:	SERIAL No.:
MFR.:	SUR.:Φ0.4	PROTECTION ANGLE:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coeffcients(WEC)									
0.0																
1.0	.221	.125	.040	.214	.122	.039	.201	.115	.037	.189	.109	.035	.178	.103	.033	
2.0	.210	.115	.035	.205	.113	.035	.194	.108	.033	.183	.103	.032	.174	.098	.031	
3.0	.198	.106	.032	.193	.104	.031	.184	.100	.030	.175	.096	.029	.167	.092	.029	
4.0	.187	.097	.029	.183	.096	.028	.174	.092	.028	.167	.089	.027	.159	.087	.026	
5.0	.176	.090	.026	.172	.088	.026	.165	.086	.025	.158	.083	.025	.152	.081	.024	
6.0	.166	.083	.024	.163	.082	.024	.156	.080	.023	.150	.078	.023	.145	.076	.023	
7.0	.157	.078	.022	.154	.077	.022	.148	.075	.022	.143	.073	.021	.138	.072	.021	
8.0	.149	.073	.020	.146	.072	.020	.141	.071	.020	.136	.069	.020	.132	.068	.020	
9.0	.142	.068	.019	.139	.068	.019	.135	.067	.019	.130	.065	.019	.126	.064	.019	
10.0	.135	.065	.018	.132	.064	.018	.128	.063	.018	.124	.062	.018	.121	.061	.017	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	.141	.149	.135	.122	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.161	.132	.108	.138	.114	.093	.095	.079	.065	.055	.046	.038	.018	.015	.012	
3.0	.151	.114	.084	.129	.098	.073	.089	.068	.051	.051	.040	.030	.016	.013	.010	
4.0	.141	.100	.068	.121	.086	.059	.083	.060	.041	.048	.035	.024	.016	.011	.008	
5.0	.133	.088	.055	.115	.077	.048	.079	.053	.034	.046	.031	.020	.015	.010	.007	
6.0	.126	.079	.046	.108	.069	.040	.075	.048	.028	.043	.028	.017	.014	.009	.006	
7.0	.120	.072	.039	.103	.063	.034	.071	.044	.024	.041	.026	.014	.013	.008	.005	
8.0	.114	.066	.033	.098	.057	.029	.068	.040	.021	.039	.024	.012	.013	.008	.004	
9.0	.108	.061	.029	.093	.053	.025	.065	.037	.018	.038	.022	.011	.012	.007	.004	
10.0	.104	.057	.026	.089	.049	.022	.062	.035	.016	.036	.020	.009	.012	.007	.003	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
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γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:8.100m [K=1.0000]
Remarks:

Uncorrected UGR Table

NAME: LED High Bay	TYPE:	WEIGHT:
DIM.: Φ400*170MM	SPEC.:	SERIAL No.:
MFR.:	SUR.:Φ0.4	PROTECTION ANGLE:

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	25.2	26.4	25.5	26.6	26.7	25.4	26.6	25.7	26.8	26.9
3H	25.8	26.8	26.0	27.0	27.3	26.0	27.0	26.3	27.3	27.5
4H	26.0	27.0	26.3	27.2	27.5	26.2	27.2	26.5	27.5	27.7
6H	26.2	27.1	26.5	27.4	27.6	26.4	27.3	26.7	27.6	27.9
8H	26.3	27.2	26.6	27.4	27.7	26.5	27.4	26.8	27.7	27.9
12H	26.3	27.2	26.7	27.5	27.8	26.5	27.4	26.9	27.7	28.0
4H 2H	25.4	26.4	25.7	26.7	26.9	25.6	26.6	25.9	26.8	27.1
3H	26.1	27.0	26.5	27.3	27.6	26.3	27.2	26.7	27.5	27.8
4H	26.5	27.3	26.8	27.6	27.9	26.7	27.5	27.0	27.8	28.1
6H	26.8	27.5	27.2	27.8	28.2	27.0	27.7	27.4	28.0	28.4
8H	26.9	27.6	27.3	27.9	28.3	27.1	27.8	27.5	28.1	28.5
12H	27.0	27.6	27.4	28.0	28.4	27.2	27.8	27.6	28.2	28.6
8H 4H	26.6	27.2	27.0	27.6	28.0	26.8	27.4	27.2	27.8	28.1
6H	27.0	27.5	27.4	27.9	28.4	27.2	27.7	27.6	28.1	28.5
8H	27.2	27.7	27.7	28.1	28.6	27.4	27.9	27.9	28.3	28.7
12H	27.4	27.8	27.9	28.2	28.7	27.6	28.0	28.0	28.4	28.9
12H 4H	26.6	27.2	27.0	27.5	27.9	26.7	27.3	27.2	27.7	28.1
6H	27.0	27.5	27.5	27.9	28.4	27.2	27.7	27.7	28.1	28.5
8H	27.3	27.7	27.8	28.1	28.6	27.5	27.9	27.9	28.3	28.8
Variations with the observer position at spacings:										
S = 1.0H	+ 0.6 / - 0.8					+ 0.6 / - 0.8				
1.5H	+ 0.8 / - 0.5					+ 0.8 / - 0.4				
2.0H	+ 1.1 / - 0.8					+ 1.2 / - 0.8				

CIE Pub.117 Corrected 50472 lm Total Lamp Luminous Flux.(8log(F/F0) = 13.6)

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γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:8.100m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

NAME: LED High Bay	TYPE:	WEIGHT:
DIM.: Φ400*170MM	SPEC.:	SERIAL No.:
MFR.:	SUR.:Φ0.4	PROTECTION ANGLE:

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) x RCR = 5									
k = 0.60	76	67	62	75	67	62	74	67	62	58
0.80	85	77	71	84	76	71	82	76	71	66
1.00	91	83	78	90	83	78	88	83	77	72
1.25	96	89	84	95	88	84	93	87	83	78
1.50	100	93	89	98	92	88	96	91	87	81
2.00	104	98	94	102	97	93	99	95	92	86
2.50	106	101	97	105	100	96	101	97	94	88
3.00	109	104	100	107	102	99	103	100	97	90
4.00	111	107	104	109	106	103	105	102	100	93
5.00	113	110	107	111	108	105	106	104	102	94
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004				Suspended					SHRNOM = 1.25	

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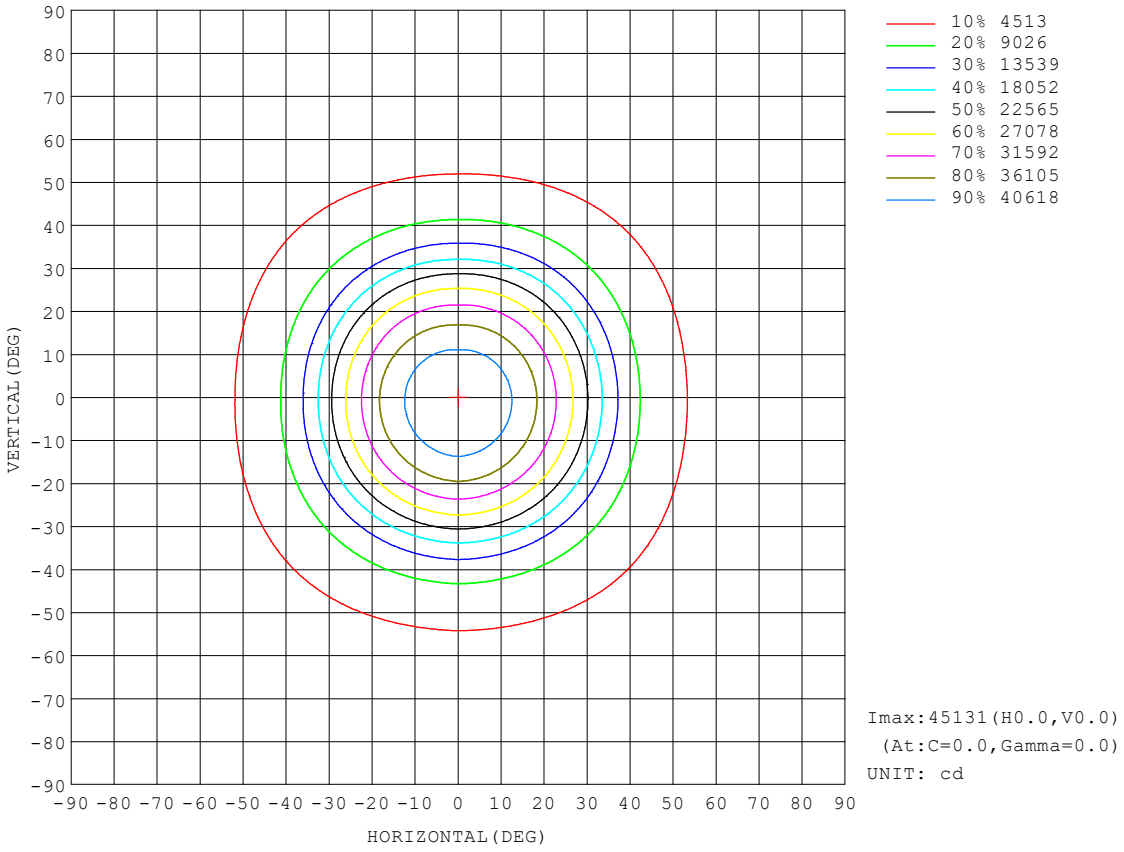
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:8.100m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

NAME: LED High Bay	TYPE:	WEIGHT:
DIM.: Φ400*170MM	SPEC.:	SERIAL No.:
MFR.:	SUR.:Φ0.4	PROTECTION ANGLE:



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Remarks:

AAI Figure

NAME: LED High Bay	TYPE:	WEIGHT:
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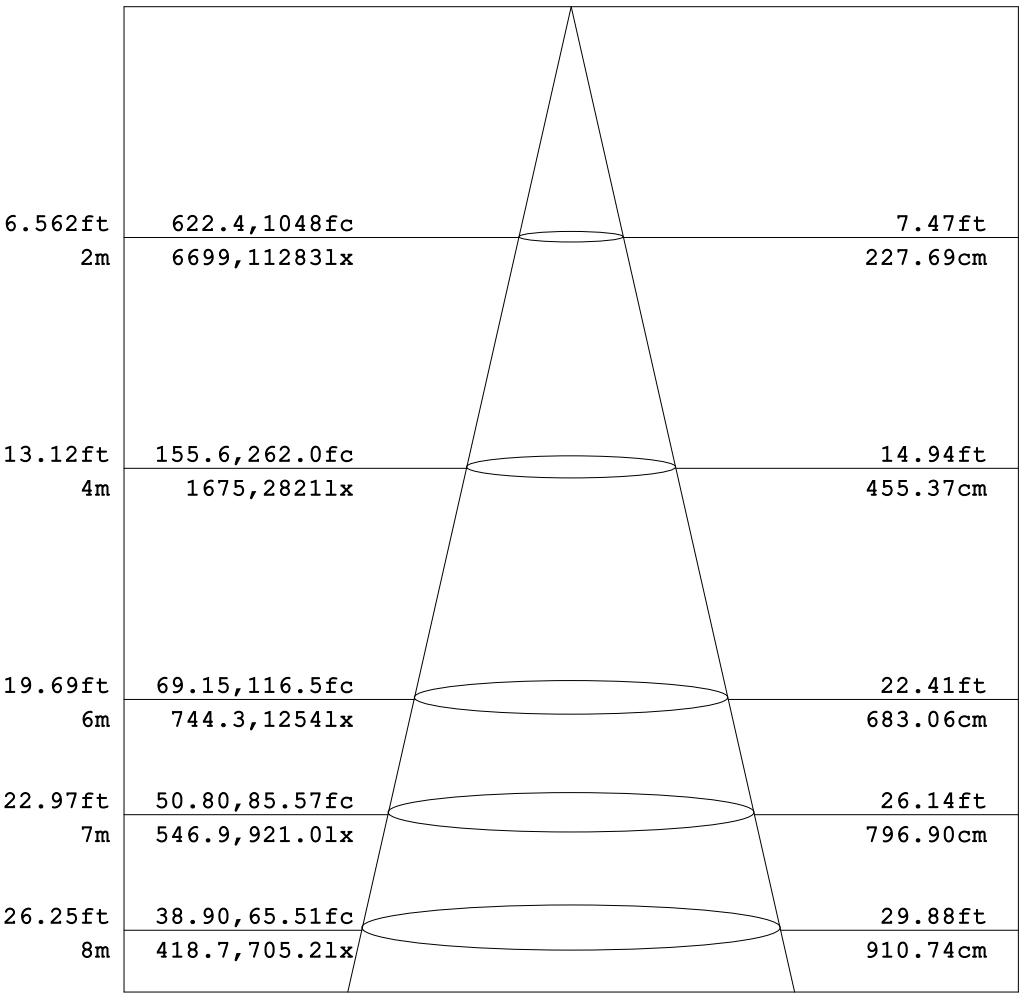
Flux out:28060 lm



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

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γ Interval: 1.0DEG
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Remarks:

ISOLUX DIAGRAM

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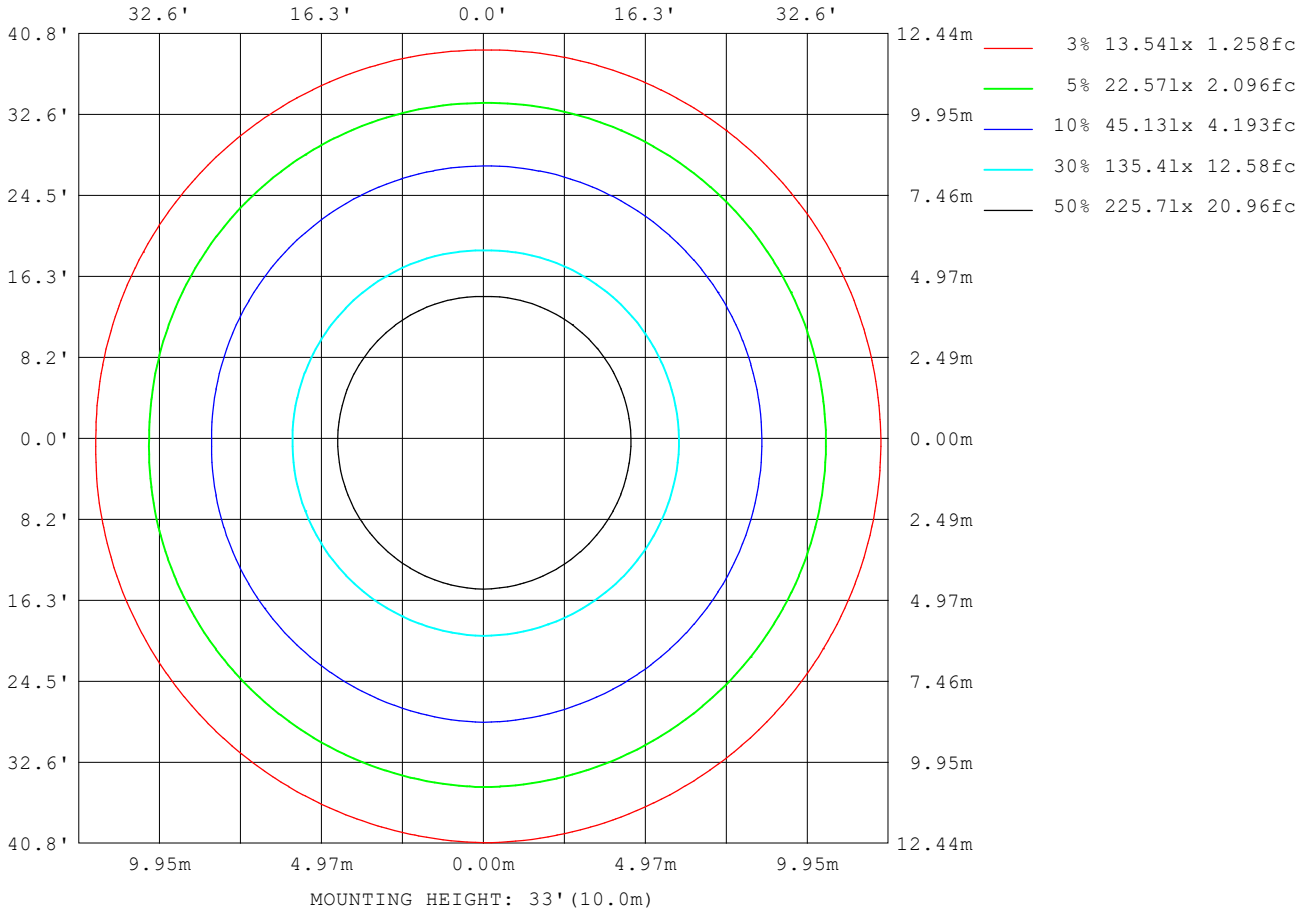
MFR.:	SUR.:Φ0.4	PROTECTION ANGLE:



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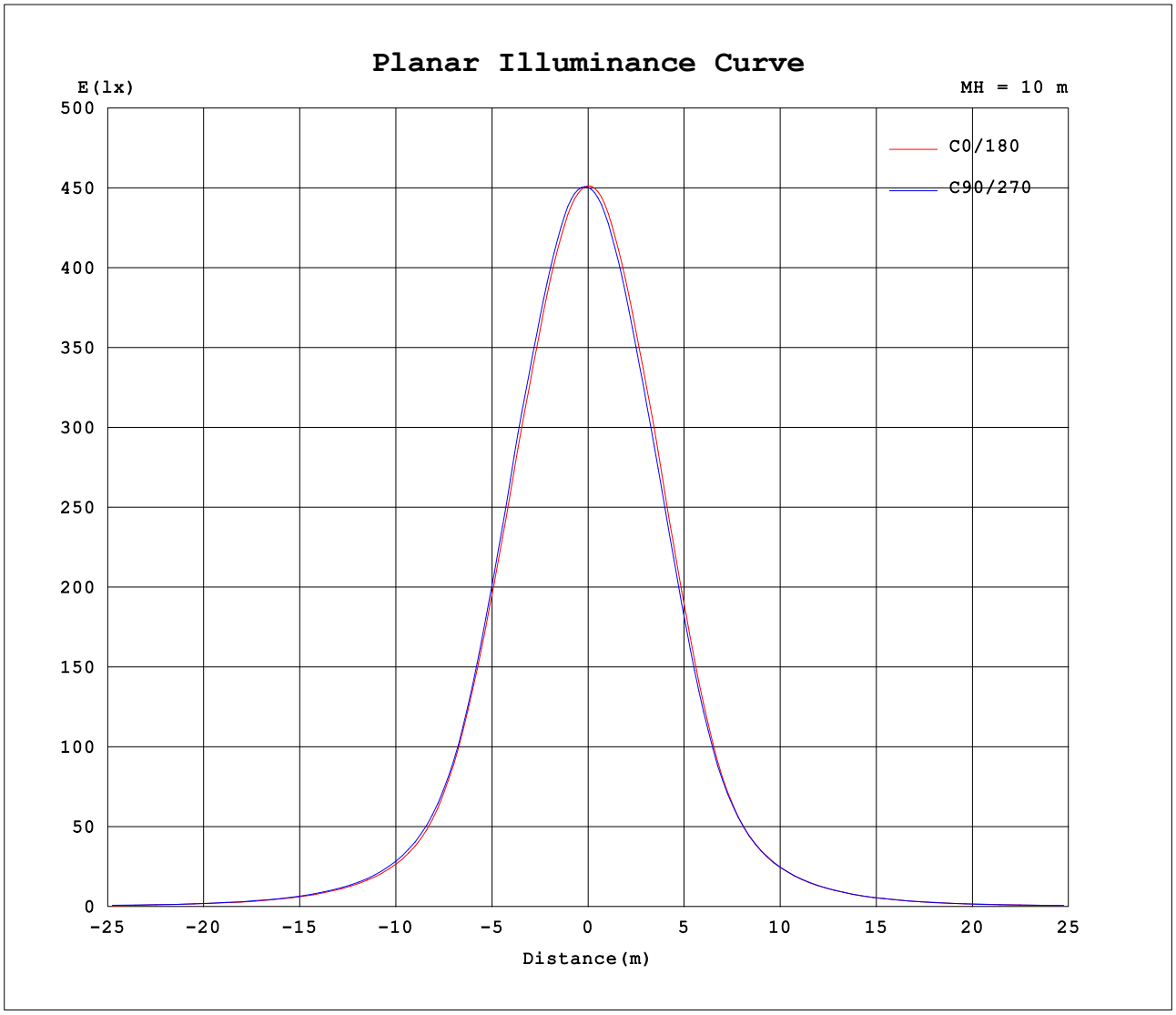
Remarks:

Planar Illuminance Curve



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Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

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DIM.: Φ400*170MM	SPEC.:	SERIAL No.:
MFR.:	SUR.:Φ0.4	PROTECTION ANGLE:

Table--1 UNIT: ×10cd

C(DEG) / γ (DEG)	0	90	180	270
0	4513	4504	4513	4504
5	4438	4481	4449	4391
10	4215	4286	4215	4131
15	3879	3973	3872	3760
20	3459	3572	3438	3311
25	2918	3007	2852	2743
30	2287	2349	2164	2079
35	1613	1660	1473	1444
40	1072	1140	986	989
45	757	808	697	702
50	555	589	508	510
55	405	430	367	366
60	289	308	259	255
65	205	217	182	178
70	145	152	125	123
75	98.6	103	83.1	81.0
80	65.0	66.6	51.8	50.9
85	31.5	33.0	20.1	19.6
90	17.0	17.0	13.8	13.7

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