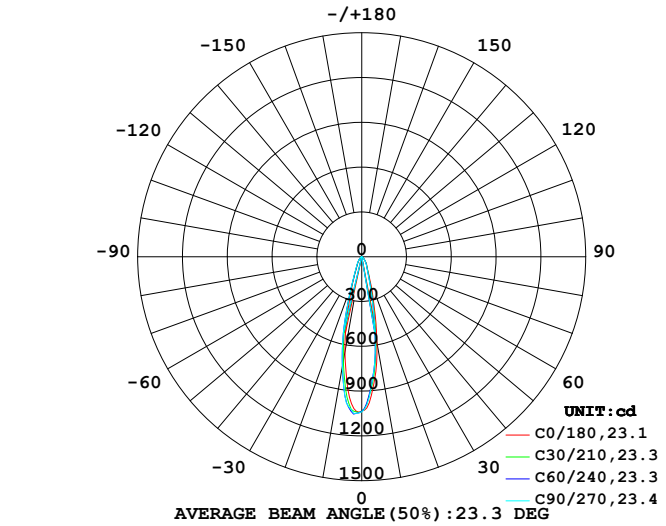
LUMINAIRE PHOTOMETRIC TEST REPORT

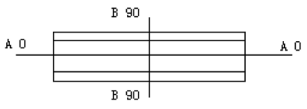
Test:U:220.04V I:0.0597A P:4.6469W PF:0.9537 Freq:50.00Hz Lamp Flux:274.549x1 lm		
NAME: 6711	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: NORDECOR	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA		Eff: 59.08 lm/W	
MODEL		Imax(cd)	1057	S/MH(C0/180)	0.41
NOMINAL POWER(W)	--	LOR(%)	100.0	S/MH(C90/270)	0.44
RATED VOLTAGE(V)	--	TOTAL FLUX(lm)	274.55	η UP,DN(C0-180)	0.0,45.6
NOMINAL FLUX(lm)	274.549	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,54.4
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	--	η down(%)	100.0	CIBSE SHR MAX	0.30

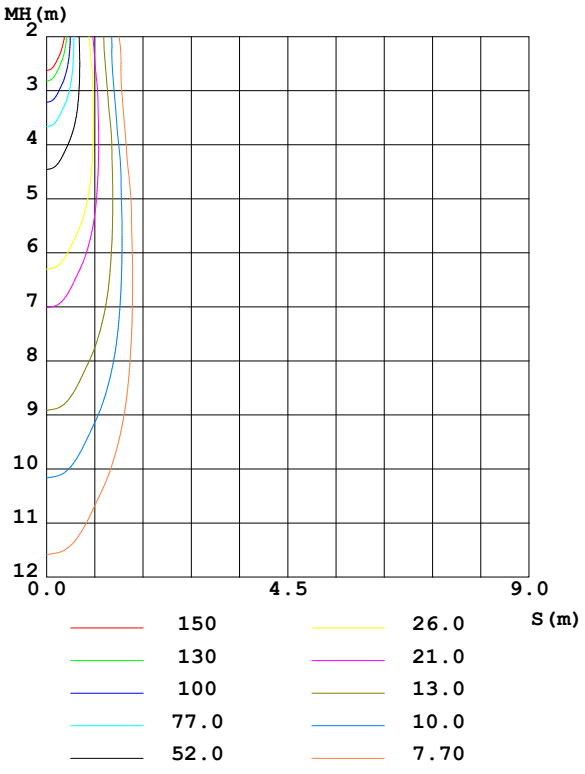
LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE BEAM ANGLE(50%):23.3 DEG



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: 10.0deg/s
Temperature:25.3℃
Operators:
Test Date:2024-08-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.00.463
Humidity:65.0%
Test Distance:9.000m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	590.1	535.1	515.8	568.0	650.8	726.6	750.2	686.2	0- 10	78.17	78.17	28.5,28.5
20	155.7	136.8	131.1	145.6	165.0	172.3	184.1	178.3	10- 20	93.00	171.2	62.3,62.3
30	68.49	65.45	63.56	62.87	61.09	60.65	67.00	70.15	20- 30	44.37	215.5	78.5,78.5
40	34.78	32.69	31.64	30.14	29.72	31.80	33.21	35.47	30- 40	29.54	245.1	89.3,89.3
50	15.46	14.46	13.89	13.49	13.53	14.33	15.10	15.72	40- 50	17.02	262.1	95.5,95.5
60	6.612	5.606	5.298	5.482	6.094	6.805	7.149	7.216	50- 60	9.029	271.1	98.8,98.8
70	1.137	0.8734	0.8357	0.9321	1.174	1.360	1.402	1.312	60- 70	3.018	274.1	99.8,99.8
80	0.0071	0.0070	0.0110	0.0070	0.0150	0.0393	0.0439	0.0193	70- 80	0.4034	274.5	100,100
90	0.0060	0.0100	0.0120	0.0120	0.0040	0.0070	0.0080	0.0060	80- 90	0.0100	274.5	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): 254.91 lm

%lum = 92.8%
%lamp = 92.8%

Conical surface Flux(120deg): 271.12 lm

%lum = 98.8%
%lamp = 98.8%

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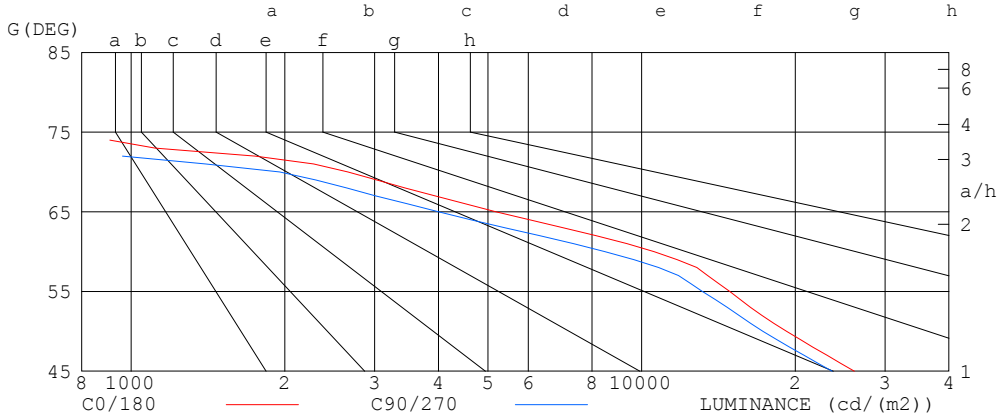
Operators:
Test Date:2024-08-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.00.463
Humidity:65.0%
Test Distance:9.000m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	138	83
80	32	51
75	772	519
70	2659	1955
65	5186	4004
60	10579	8476
55	14889	13162
50	19236	17293
45	26109	23622

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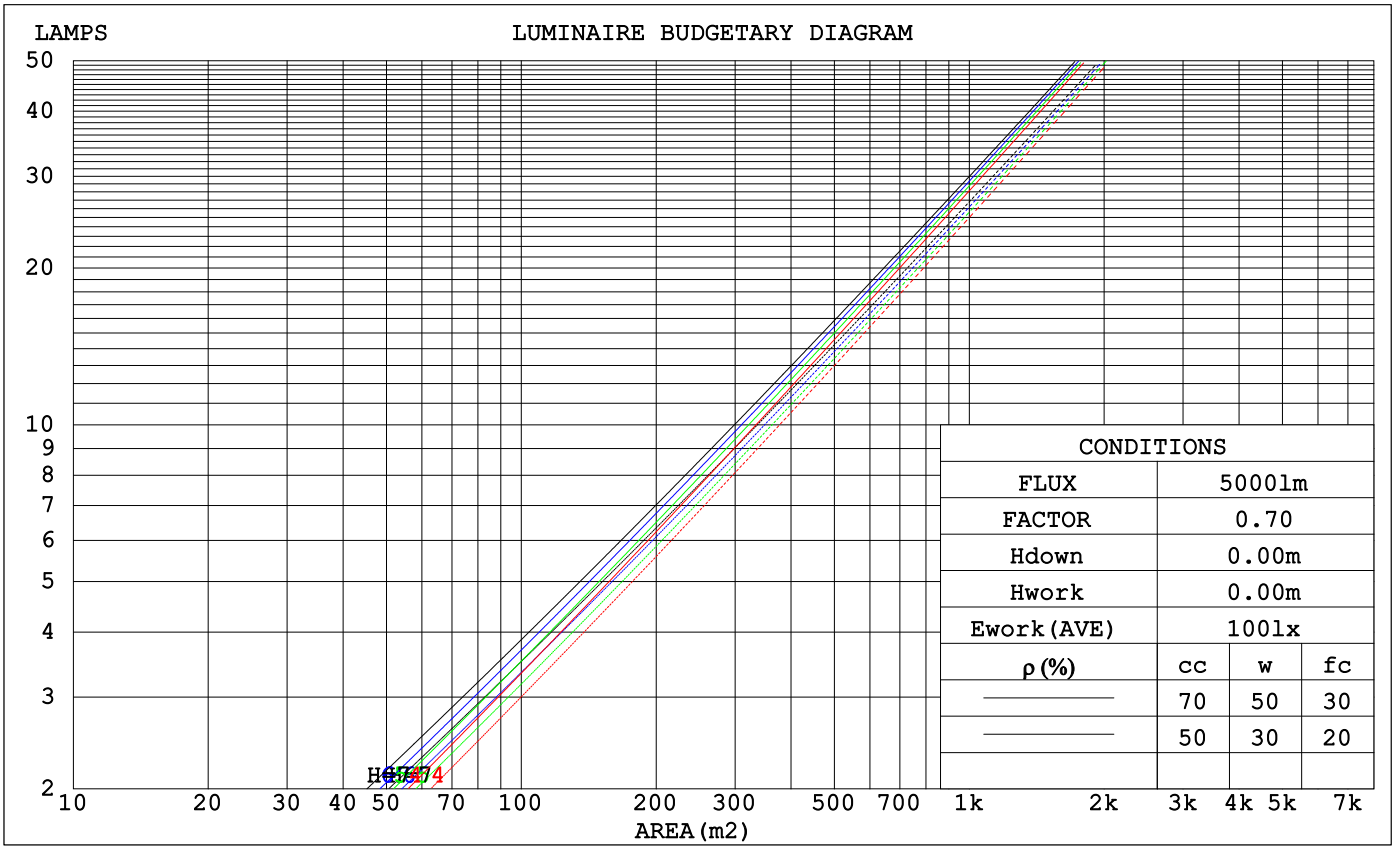
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.00.463
Humidity:65.0%
Test Distance:9.000m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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	1.12	1.09	1.07	1.09	1.07	1.06	1.05	1.04	1.02	1.02	1.01	.99	.98	.97	.97	.95
2.0	1.05	1.01	.98	1.03	.00	.97	1.00	.97	.95	.97	.95	.93	.94	.93	.91	.90
3.0	.99	.95	.91	.98	.94	.90	.95	.92	.89	.93	.90	.88	.91	.88	.86	.85
4.0	.94	.89	.85	.93	.88	.85	.91	.87	.84	.89	.85	.83	.87	.84	.82	.80
5.0	.89	.84	.80	.88	.84	.80	.87	.82	.79	.85	.81	.79	.83	.80	.78	.77
6.0	.85	.80	.76	.84	.79	.76	.83	.79	.75	.82	.78	.75	.80	.77	.74	.73
7.0	.81	.76	.73	.81	.76	.72	.80	.75	.72	.78	.75	.72	.77	.74	.71	.70
8.0	.78	.73	.69	.77	.73	.69	.76	.72	.69	.76	.72	.69	.75	.71	.69	.67
9.0	.75	.70	.67	.75	.70	.67	.74	.69	.66	.73	.69	.66	.72	.69	.66	.65
10.0	.72	.67	.64	.72	.67	.64	.71	.67	.64	.70	.67	.64	.70	.66	.64	.63



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γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.00.463
Humidity:65.0%
Test Distance:9.000m [K=1.0000]
Remarks:

WEC AND CCEC

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	.161	.092	.029	.154	.088	.028	.142	.081	.026	.130	.075	.024	.120	.069	.022	
2.0	.153	.084	.026	.147	.081	.025	.137	.076	.024	.127	.071	.022	.118	.067	.021	
3.0	.144	.077	.023	.140	.075	.022	.131	.071	.022	.123	.067	.021	.115	.064	.020	
4.0	.136	.071	.021	.132	.069	.020	.125	.066	.020	.118	.063	.019	.111	.060	.018	
5.0	.129	.066	.019	.125	.064	.019	.119	.062	.018	.113	.059	.018	.107	.057	.017	
6.0	.122	.061	.017	.119	.060	.017	.113	.058	.017	.108	.056	.016	.103	.054	.016	
7.0	.115	.057	.016	.113	.056	.016	.108	.055	.016	.103	.053	.015	.099	.051	.015	
8.0	.110	.054	.015	.108	.053	.015	.103	.052	.015	.099	.050	.014	.095	.049	.014	
9.0	.105	.051	.014	.103	.050	.014	.099	.049	.014	.095	.048	.014	.092	.046	.013	
10.0	.100	.048	.013	.098	.047	.013	.095	.046	.013	.091	.045	.013	.088	.044	.013	

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	.170	.157	.146	.145	.135	.126	.099	.093	.087	.057	.054	.051	.018	.017	.016	
2.0	.154	.133	.115	.132	.114	.099	.090	.079	.069	.052	.046	.041	.017	.015	.013	
3.0	.140	.113	.092	.120	.098	.080	.083	.068	.056	.048	.040	.033	.015	.013	.011	
4.0	.129	.098	.075	.111	.085	.065	.076	.059	.046	.044	.035	.027	.014	.011	.009	
5.0	.119	.087	.062	.103	.075	.054	.071	.052	.038	.041	.031	.023	.013	.010	.007	
6.0	.111	.077	.052	.096	.067	.046	.066	.047	.032	.038	.027	.019	.012	.009	.006	
7.0	.104	.069	.045	.089	.060	.039	.062	.042	.028	.036	.025	.016	.012	.008	.005	
8.0	.098	.063	.038	.084	.054	.033	.058	.038	.024	.034	.022	.014	.011	.007	.005	
9.0	.092	.057	.033	.079	.050	.029	.055	.035	.021	.032	.021	.012	.010	.007	.004	
10.0	.087	.052	.029	.075	.046	.026	.052	.032	.018	.030	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: 10.0deg/s
Temperature:25.3℃
Operators:
Test Date:2024-08-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.00.463
Humidity:65.0%
Test Distance:9.000m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

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	18.2	19.0	18.4	19.2	19.3	17.7	18.5	17.9	18.7	18.8
3H	18.2	18.9	18.4	19.1	19.3	17.6	18.4	17.9	18.6	18.7
4H	18.1	18.8	18.3	19.0	19.2	17.5	18.2	17.8	18.5	18.7
6H	18.0	18.7	18.3	18.9	19.1	17.4	18.1	17.7	18.3	18.6
8H	17.9	18.6	18.2	18.8	19.1	17.4	18.0	17.7	18.3	18.5
12H	17.9	18.5	18.2	18.8	19.1	17.3	18.0	17.7	18.2	18.5
4H 2H	18.1	18.9	18.4	19.1	19.3	17.7	18.4	17.9	18.6	18.8
3H	18.1	18.7	18.4	19.0	19.2	17.6	18.2	17.9	18.5	18.7
4H	18.0	18.6	18.3	18.9	19.2	17.5	18.0	17.8	18.3	18.6
6H	17.9	18.4	18.3	18.7	19.1	17.4	17.9	17.7	18.2	18.5
8H	17.8	18.3	18.2	18.7	19.0	17.3	17.8	17.7	18.1	18.5
12H	17.8	18.2	18.2	18.6	19.0	17.3	17.7	17.7	18.1	18.5
8H 4H	17.8	18.3	18.2	18.7	19.0	17.3	17.8	17.7	18.1	18.5
6H	17.7	18.1	18.2	18.5	18.9	17.2	17.6	17.6	18.0	18.4
8H	17.7	18.0	18.1	18.4	18.9	17.2	17.5	17.6	17.9	18.4
12H	17.6	17.9	18.1	18.4	18.8	17.1	17.4	17.6	17.8	18.3
12H 4H	17.8	18.2	18.2	18.6	19.0	17.3	17.7	17.7	18.1	18.5
6H	17.7	18.0	18.1	18.4	18.9	17.2	17.5	17.6	17.9	18.4
8H	17.6	17.9	18.1	18.4	18.8	17.1	17.4	17.6	17.8	18.3
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 1.6 / - 2.8					+ 1.6 / - 2.9				
1.5H	+ 2.2 / - 1.6					+ 2.1 / - 1.5				
2.0H	+ 3.0 / - 5.3					+ 2.9 / - 5.4				

CIE Pub.117, 274.5 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = -4.5)
Area: 0.00125 m2

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Temperature:25.3℃
Operators:
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γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.00.463
Humidity:65.0%
Test Distance:9.000m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

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	85	78	74	84	78	74	83	77	74	70
0.80	93	86	82	92	86	82	91	85	82	78
1.00	98	92	88	97	91	87	95	91	87	83
1.25	102	96	93	101	96	92	99	95	91	87
1.50	105	100	96	104	99	96	101	97	95	90
2.00	108	103	100	106	102	99	104	100	98	92
2.50	110	106	102	108	104	102	105	102	100	94
3.00	111	108	105	109	106	104	106	104	102	95
4.00	113	110	108	111	109	107	108	106	104	97
5.00	115	112	110	113	110	109	109	107	106	98
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004	Suspended								SHRNOM = 1.25	

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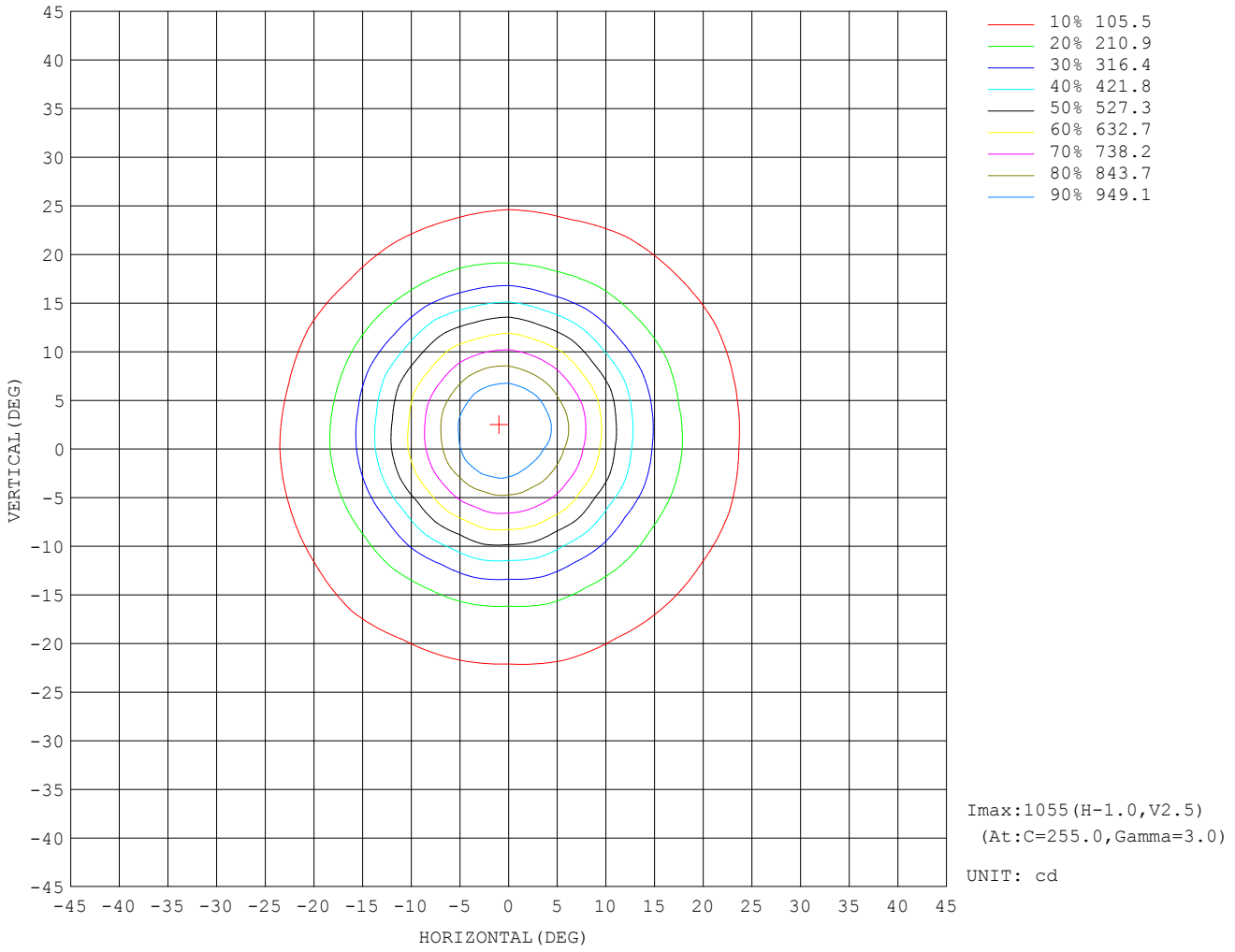
ISOCANDELA DIAGRAM



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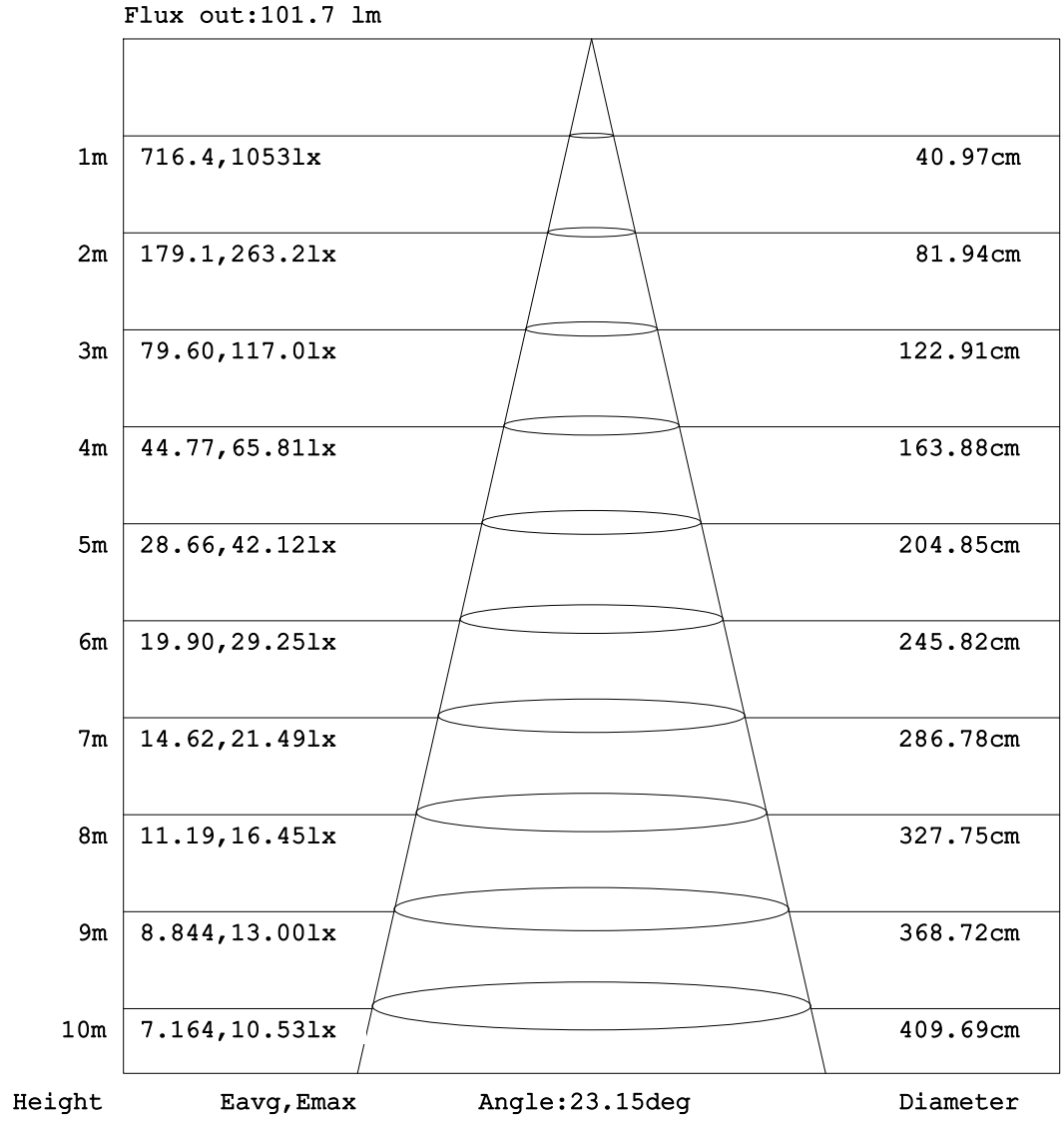
Remarks:

AAI Figure



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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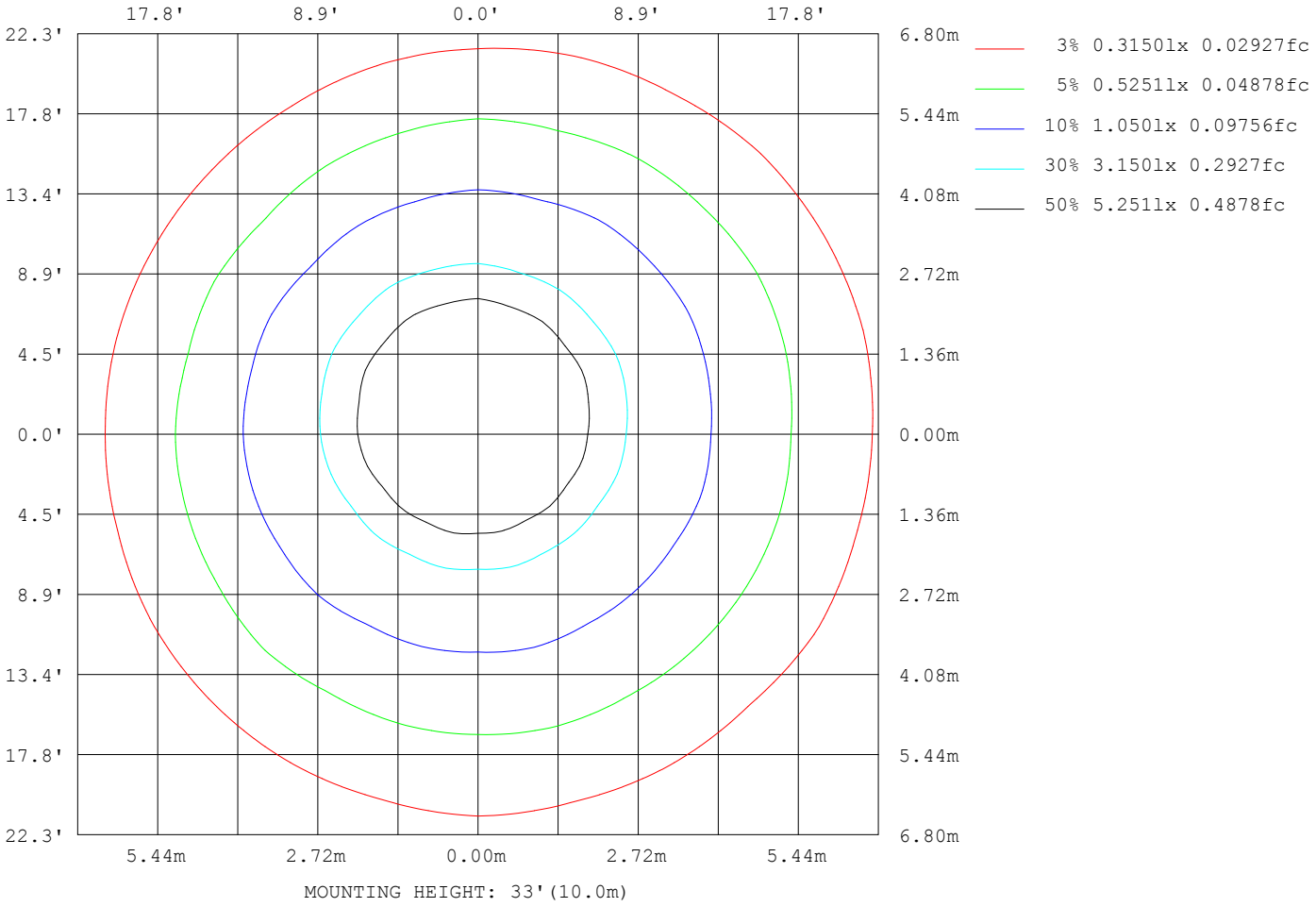
Remarks:

ISOLUX DIAGRAM



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Humidity:65.0%
Test Distance:9.000m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:220.04V I:0.0597A P:4.6469W PF:0.3537 Freq:50.00Hz Lamp Flux:274.549x1 lm		
NAME: MG-MQ5W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

AvgL	cd/m2
L_0~180(65)av	5149
L_0~180(75)av	859
L_0~180(85)av	106
L_90~270(65)av	5191
L_90~270(75)av	869
L_90~270(85)av	83
L_45(65)av	5129
L_45(75)av	827
L_45(85)av	85

Standard: GB/T 29293-2012

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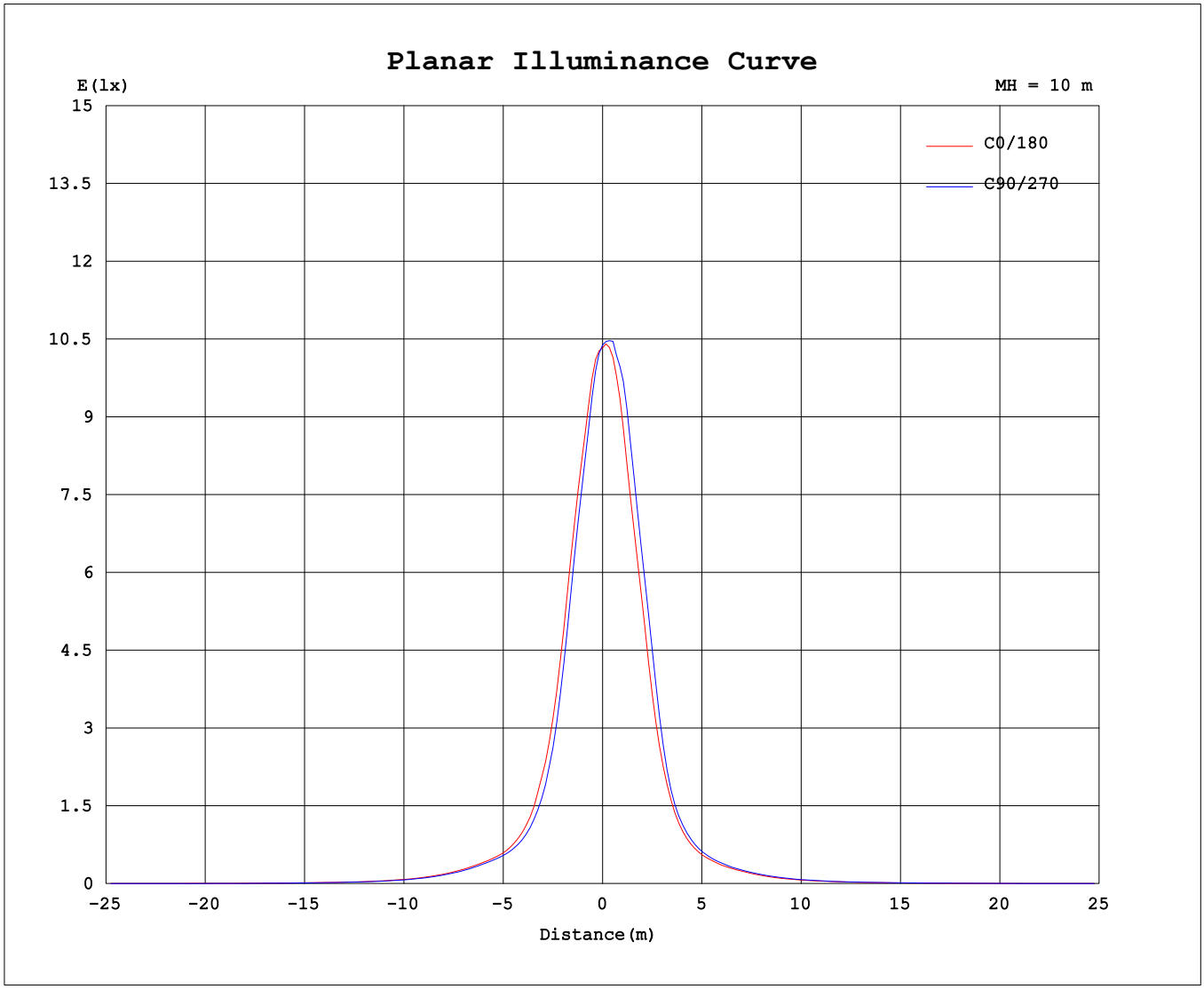
Remarks:

Planar Illuminance Curve



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LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1 UNIT: cd

γ (DEG) \ C(DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	1033	1032	1032	1031	1033	1036	1039	1040	1039	1039	1039	1039	1033	1032	1032	1031	1033	1036	1039
5	878	858	845	835	822	827	828	839	847	872	895	930	946	964	988	998	1013	1008	1009
10	590	574	537	535	511	520	516	536	536	568	581	623	651	669	710	727	750	753	750
15	304	292	273	263	256	257	252	258	266	282	291	321	347	367	403	411	438	424	429
20	156	153	141	137	132	135	131	134	134	146	148	157	165	167	176	172	180	179	184
25	93.5	92.8	89.1	86.8	84.7	85.4	83.7	84.0	83.6	88.0	86.8	87.8	90.3	89.5	92.9	90.8	95.5	97.5	101
30	68.5	67.9	67.1	65.5	63.9	63.6	63.6	62.6	61.7	62.9	61.2	61.0	61.1	60.4	61.6	60.7	63.5	64.4	67.0
35	50.5	49.6	49.7	46.9	46.7	45.7	46.1	45.1	45.3	45.1	44.7	43.8	44.1	44.7	44.8	45.5	45.8	47.2	48.0
40	34.8	34.0	34.0	32.7	32.2	31.4	31.6	30.8	30.8	30.1	30.1	29.6	29.7	30.5	31.0	31.8	32.1	32.8	33.2
45	23.1	22.7	22.3	21.7	21.3	21.0	20.9	20.6	20.4	20.1	19.9	19.8	19.9	20.1	20.5	21.1	21.4	21.9	22.4
50	15.5	15.1	14.8	14.5	14.1	13.9	13.9	13.8	13.6	13.5	13.5	13.5	13.5	13.7	14.0	14.3	14.5	14.9	15.1
55	10.7	10.3	10.1	9.88	9.66	9.48	9.44	9.40	9.24	9.25	9.32	9.35	9.46	9.56	9.72	9.92	10.0	10.2	10.5
60	6.61	6.23	5.90	5.61	5.42	5.29	5.30	5.33	5.36	5.48	5.68	5.85	6.09	6.32	6.55	6.80	6.94	7.06	7.15
65	2.74	2.55	2.38	2.23	2.14	2.09	2.11	2.14	2.16	2.25	2.37	2.52	2.70	2.87	3.01	3.16	3.26	3.32	3.37
70	1.14	1.04	0.94	0.87	0.83	0.81	0.84	0.85	0.88	0.93	1.01	1.07	1.17	1.25	1.31	1.36	1.39	1.39	1.40
75	0.25	0.21	0.18	0.16	0.15	0.15	0.17	0.17	0.19	0.20	0.23	0.25	0.31	0.33	0.35	0.38	0.39	0.40	0.39
80	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.02	0.02	0.03	0.04	0.05	0.05	0.04
85	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
90	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: 10.0deg/s
Temperature:25.3℃
Operators:
Test Date:2024-08-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.00.463
Humidity:65.0%
Test Distance:9.000m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--2 UNIT: cd

γ (DEG) \ C(DEG)	285	300	315	330	345														
0	1040	1039	1039	1039	1039														
5	1009	1000	977	953	919														
10	731	713	686	664	625														
15	402	393	366	356	327														
20	179	184	178	177	165														
25	98.8	103	102	102	97.9														
30	66.6	69.2	70.2	72.0	70.9														
35	49.7	50.2	52.1	52.1	51.9														
40	34.3	34.7	35.5	35.6	35.7														
45	22.8	23.1	23.6	23.8	23.6														
50	15.3	15.6	15.7	15.9	15.9														
55	10.7	10.7	10.9	11.1	11.0														
60	7.27	7.26	7.22	7.20	6.96														
65	3.39	3.28	3.19	3.12	2.95														
70	1.41	1.35	1.31	1.30	1.23														
75	0.39	0.35	0.33	0.31	0.28														
80	0.04	0.03	0.02	0.02	0.02														
85	0.01	0.01	0.01	0.01	0.01														
90	0.01	0.01	0.01	0.01	0.01														

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: 10.0deg/s
Temperature:25.3℃
Operators:
Test Date:2024-08-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.00.463
Humidity:65.0%
Test Distance:9.000m [K=1.0000]
Remarks: