

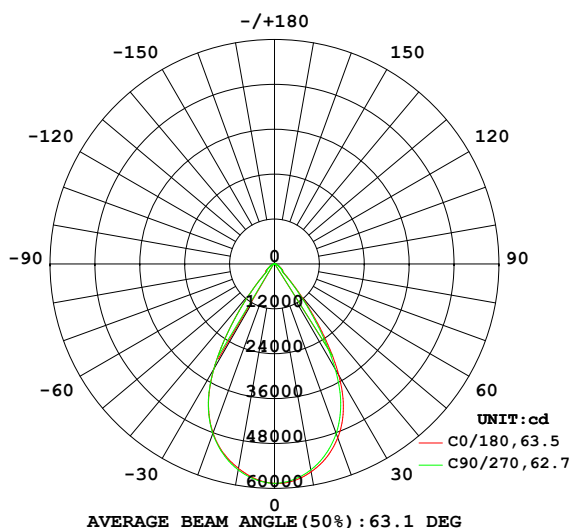
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

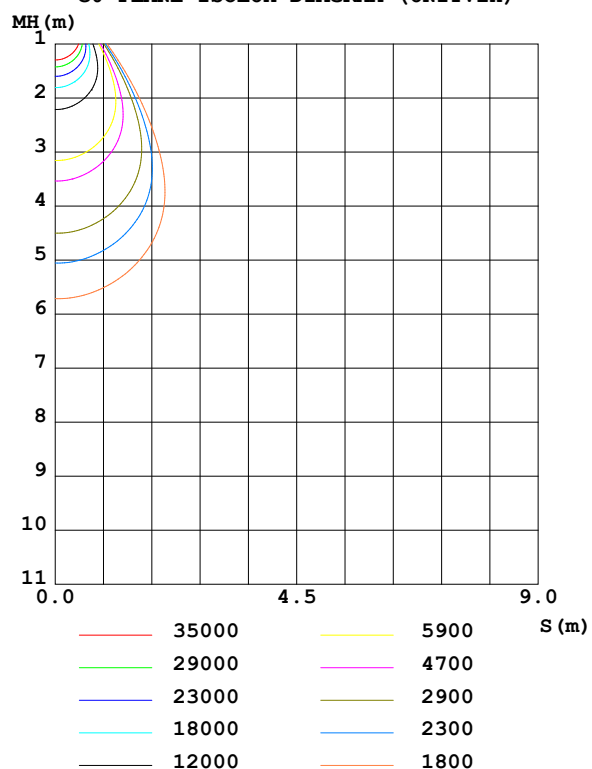
Test:U:230.0V I:1.787A P:400.0W PF:0.973 Freq:50.00Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:59008.7x1 lm		
NAME: SP04-400-5770-F04006Z	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 147.52 lm/W			
MODEL	5050	I _{max} (cd)	58672	S/MH (C0/180)	0.93
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	0.93
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	59009	η UP,DN (C0-180)	0.0,50.1
NOMINAL FLUX (lm)	59008.7	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,49.9
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE (V)	/	η down (%)	100.0	CIBSE SHR MAX	0.95

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:LYJ
Test Date:2022-10-26

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Humidity:65.0%
Test Distance:26.000m [K=0.4548]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	5642	5628	5589	5545	5550	5545	5589	5628	0- 10	5466	5466	9.26,9.26
20	4946	4876	4822	4741	4806	4741	4822	4876	10- 20	14800	20266	34.3,34.3
30	3444	3354	3248	3182	3246	3182	3248	3354	20- 30	19039	39304	66.6,66.6
40	1082	1027	971.2	949.2	981.0	949.2	971.2	1027	30- 40	12893	52198	88.5,88.5
50	286.8	238.7	282.9	234.9	293.2	234.9	282.9	238.7	40- 50	3442	55640	94.3,94.3
60	158.1	160.2	137.0	160.0	150.3	160.0	137.0	160.2	50- 60	1725	57365	97.2,97.2
70	73.77	79.16	62.54	75.38	70.71	75.38	62.54	79.16	60- 70	1110	58476	99.1,99.1
80	21.75	18.53	15.68	17.16	19.59	17.16	15.68	18.53	70- 80	462.4	58938	99.9,99.9
90	0.3268	0.1986	0.0941	0.1185	0.1332	0.1185	0.0941	0.1986	80- 90	70.76	59009	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:X10cd									UNIT:lm		

Conical surface Flux(90deg): 54516 lm

%lum = 92.4%

%lamp = 92.4%

Conical surface Flux(120deg): 57365 lm

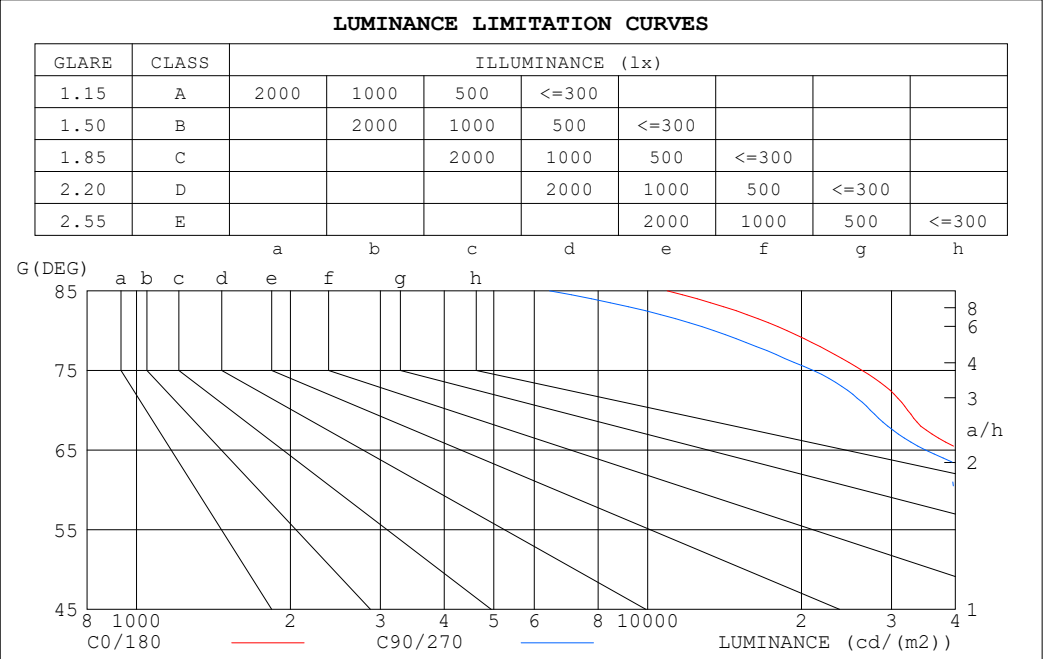
%lum = 97.2%

%lamp = 97.2%

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γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Humidity:65.0%
Test Distance:26.000m [K=0.4548]
Remarks:

LUMINANCE LIMITATION CURVES



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	10922	6428
80	18728	13472
75	26289	21092
70	32258	27275
65	41332	34982
60	47274	40860
55	59973	51012
50	66724	65661
45	83100	73182

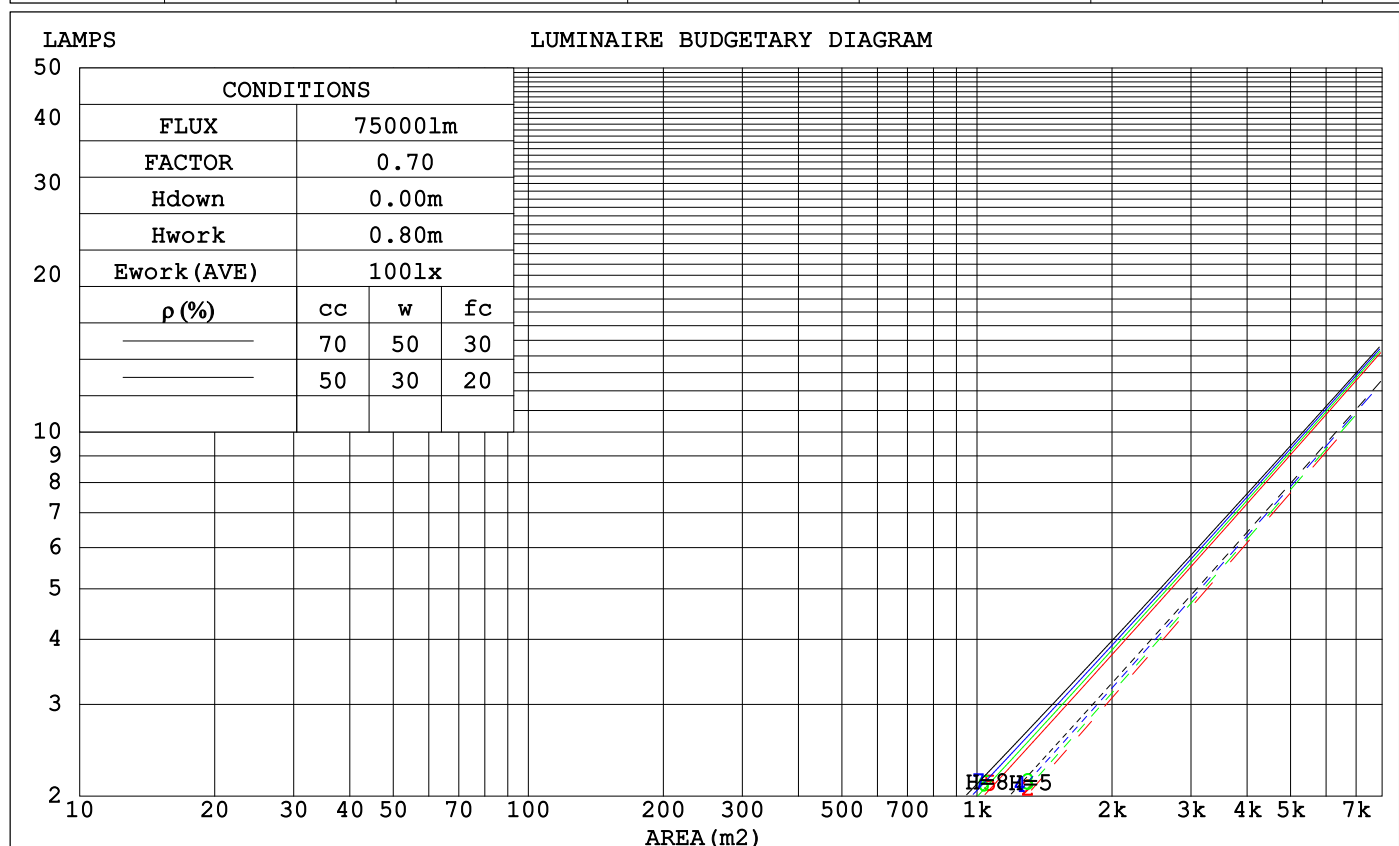
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Temperature:25.3℃
Operators:LYJ
Test Date:2022-10-26

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γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465
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Test Distance:26.000m [K=0.4548]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	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	1.10	1.07	1.05	1.08	1.05	1.03	1.04	1.02	1.00	1.00	.99	.97	.97	.95	.94	.93
2.0	1.02	.97	.94	.90	.96	.93	.97	.93	.91	.94	.91	.89	.91	.89	.87	.85
3.0	.94	.89	.85	.93	.88	.84	.90	.86	.83	.88	.84	.81	.85	.83	.80	.78
4.0	.88	.82	.77	.86	.81	.77	.84	.80	.76	.82	.78	.75	.80	.77	.74	.72
5.0	.82	.75	.71	.81	.75	.71	.79	.74	.70	.77	.73	.69	.76	.72	.69	.67
6.0	.76	.70	.65	.75	.70	.65	.74	.69	.65	.73	.68	.64	.71	.67	.64	.62
7.0	.71	.65	.61	.71	.65	.61	.69	.64	.60	.68	.63	.60	.67	.63	.60	.58
8.0	.67	.61	.57	.67	.61	.56	.65	.60	.56	.64	.60	.56	.63	.59	.56	.54
9.0	.63	.57	.53	.63	.57	.53	.62	.56	.53	.61	.56	.52	.60	.55	.52	.51
10.0	.60	.54	.50	.59	.53	.49	.58	.53	.49	.58	.53	.49	.57	.52	.49	.48



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γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
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 Humidity:65.0%
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 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)										
0.0																	
1.0	.191	.109	.034	.185	.105	.033	.172	.099	.032	.160	.093	.030	.150	.087	.028		
2.0	.184	.101	.031	.178	.098	.030	.167	.093	.029	.157	.088	.028	.148	.084	.026		
3.0	.175	.093	.028	.170	.091	.027	.161	.087	.026	.152	.083	.026	.144	.080	.025		
4.0	.166	.086	.025	.162	.085	.025	.154	.081	.024	.146	.078	.024	.139	.076	.023		
5.0	.157	.080	.023	.154	.079	.023	.147	.076	.022	.140	.074	.022	.134	.072	.022		
6.0	.150	.075	.021	.147	.074	.021	.140	.072	.021	.135	.070	.021	.129	.068	.020		
7.0	.143	.071	.020	.140	.070	.020	.134	.068	.020	.129	.066	.019	.124	.065	.019		
8.0	.136	.067	.019	.134	.066	.019	.129	.064	.018	.124	.063	.018	.120	.062	.018		
9.0	.130	.063	.018	.128	.062	.017	.123	.061	.017	.119	.060	.017	.115	.059	.017		
10.0	.125	.060	.017	.122	.059	.017	.119	.058	.016	.115	.057	.016	.111	.056	.016		

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{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	.172	.157	.144	.147	.135	.124	.101	.093	.086	.058	.054	.050	.019	.017	.016	
2.0	.158	.132	.111	.135	.114	.096	.093	.079	.067	.053	.046	.039	.017	.015	.013	
3.0	.146	.114	.088	.125	.098	.076	.086	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.136	.099	.071	.117	.086	.061	.080	.060	.043	.047	.035	.026	.015	.011	.008	
5.0	.128	.088	.058	.110	.076	.050	.076	.053	.036	.044	.031	.021	.014	.010	.007	
6.0	.121	.079	.048	.104	.068	.042	.072	.048	.030	.041	.028	.018	.013	.009	.006	
7.0	.114	.071	.041	.098	.062	.036	.068	.043	.025	.039	.025	.015	.013	.008	.005	
8.0	.109	.065	.035	.093	.056	.031	.065	.040	.022	.038	.023	.013	.012	.008	.004	
9.0	.103	.060	.030	.089	.052	.026	.062	.036	.019	.036	.022	.011	.012	.007	.004	
10.0	.099	.055	.027	.085	.048	.023	.059	.034	.017	.034	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG
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γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465
 Humidity:65.0%
 Test Distance:26.000m [K=0.4548]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

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	20.2	21.3	20.6	21.6	21.9	19.7	20.8	20.1	21.1	21.4
3H	21.5	22.4	21.9	22.7	23.1	20.8	21.7	21.2	22.0	22.4
4H	21.9	22.7	22.3	23.1	23.5	21.1	21.9	21.5	22.3	22.7
6H	22.0	22.8	22.5	23.2	23.6	21.2	21.9	21.6	22.3	22.7
8H	22.1	22.8	22.5	23.2	23.6	21.1	21.9	21.6	22.3	22.7
12H	22.0	22.7	22.5	23.1	23.5	21.1	21.8	21.5	22.2	22.6
4H 2H	20.7	21.6	21.1	21.9	22.3	20.3	21.2	20.7	21.5	21.9
3H	22.1	22.8	22.5	23.2	23.6	21.5	22.2	21.9	22.6	23.0
4H	22.6	23.2	23.0	23.6	24.1	21.9	22.5	22.3	22.9	23.4
6H	22.8	23.4	23.3	23.8	24.3	22.0	22.5	22.5	23.0	23.5
8H	22.8	23.3	23.3	23.8	24.3	22.0	22.5	22.5	22.9	23.4
12H	22.8	23.3	23.3	23.7	24.2	21.9	22.4	22.4	22.9	23.3
8H 4H	22.6	23.1	23.1	23.6	24.0	21.9	22.4	22.4	22.9	23.3
6H	22.9	23.3	23.4	23.8	24.3	22.1	22.5	22.6	23.0	23.5
8H	23.0	23.3	23.5	23.8	24.3	22.1	22.4	22.6	23.0	23.5
12H	23.0	23.3	23.5	23.8	24.3	22.1	22.4	22.6	22.9	23.5
12H 4H	22.6	23.0	23.1	23.5	24.0	21.9	22.3	22.4	22.8	23.3
6H	22.9	23.2	23.4	23.7	24.2	22.1	22.4	22.6	22.9	23.4
8H	22.9	23.2	23.5	23.7	24.3	22.1	22.4	22.6	22.9	23.5
CIE190: 2010										

CIE190: 2010
Area: 0.06699 m2

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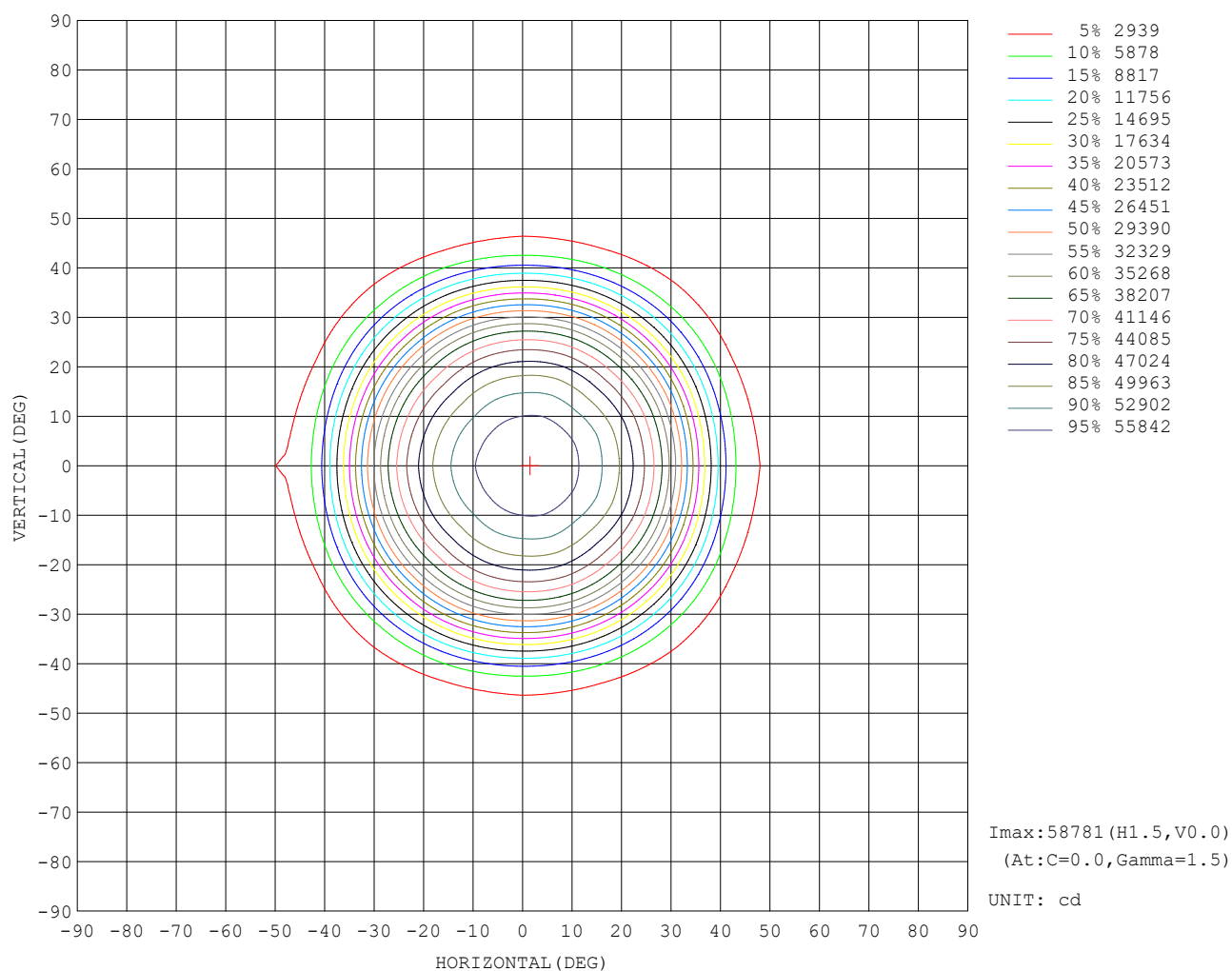
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	84	77	73	84	77	73	83	77	73	69
0.80	92	86	82	91	85	81	90	85	81	77
1.00	97	91	87	96	90	87	94	90	86	82
1.25	101	96	92	100	95	91	98	94	91	86
1.50	104	99	95	103	98	95	101	97	94	89
2.00	107	103	99	106	102	98	103	100	97	92
2.50	109	105	102	108	104	101	104	101	99	93
3.00	111	107	104	109	106	103	106	103	101	94
4.00	113	110	108	111	108	106	107	105	104	96
5.00	114	112	110	112	110	108	108	107	105	98
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004						Suspended			SHRNOM = 1.25	

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 γ Interval: 0.5DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.465
 Humidity: 65.0%
 Test Distance: 26.000m [K=0.4548]
 Remarks:

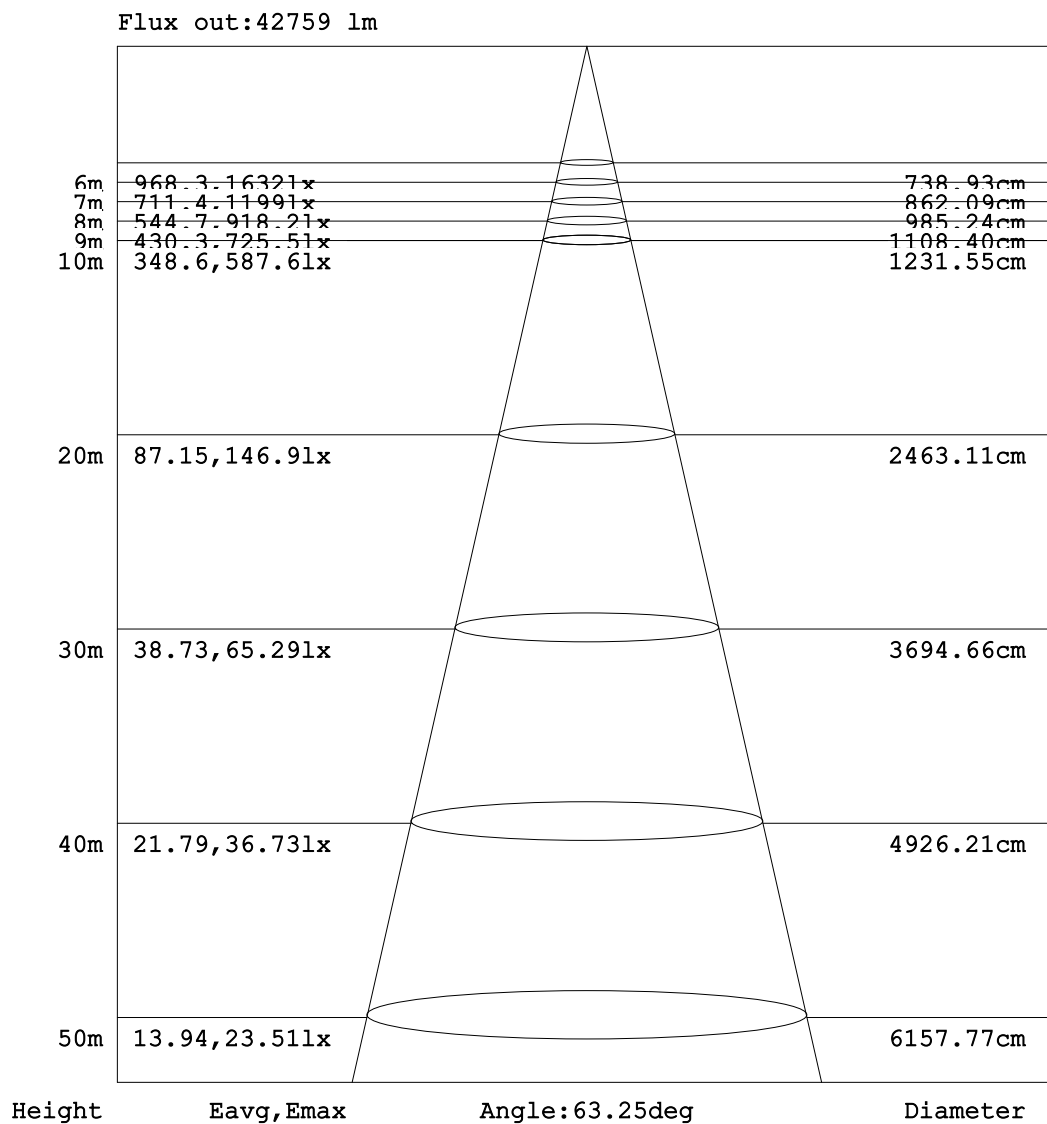
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
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Test Date: 2022-10-26

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Remarks:

AAI Figure



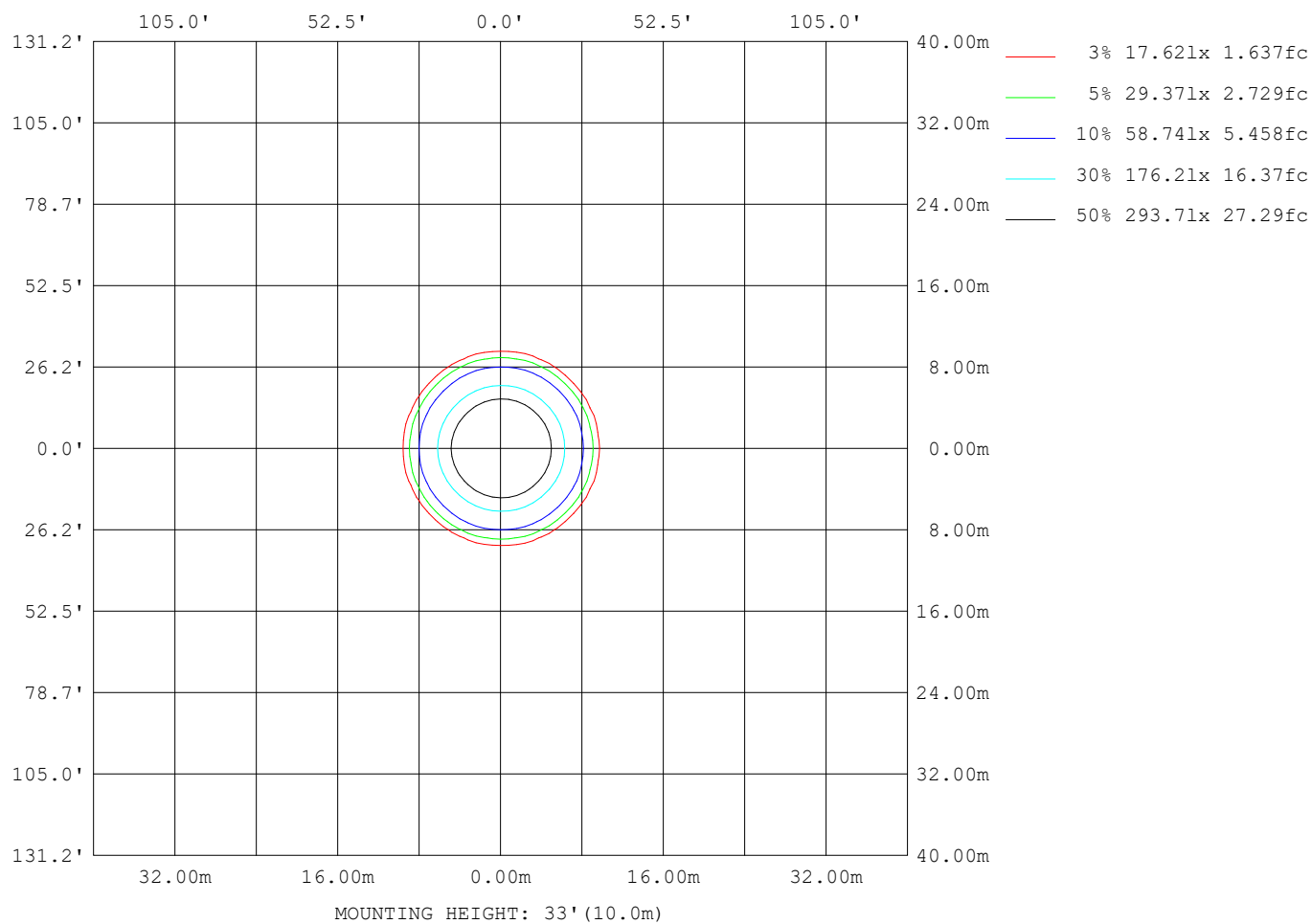
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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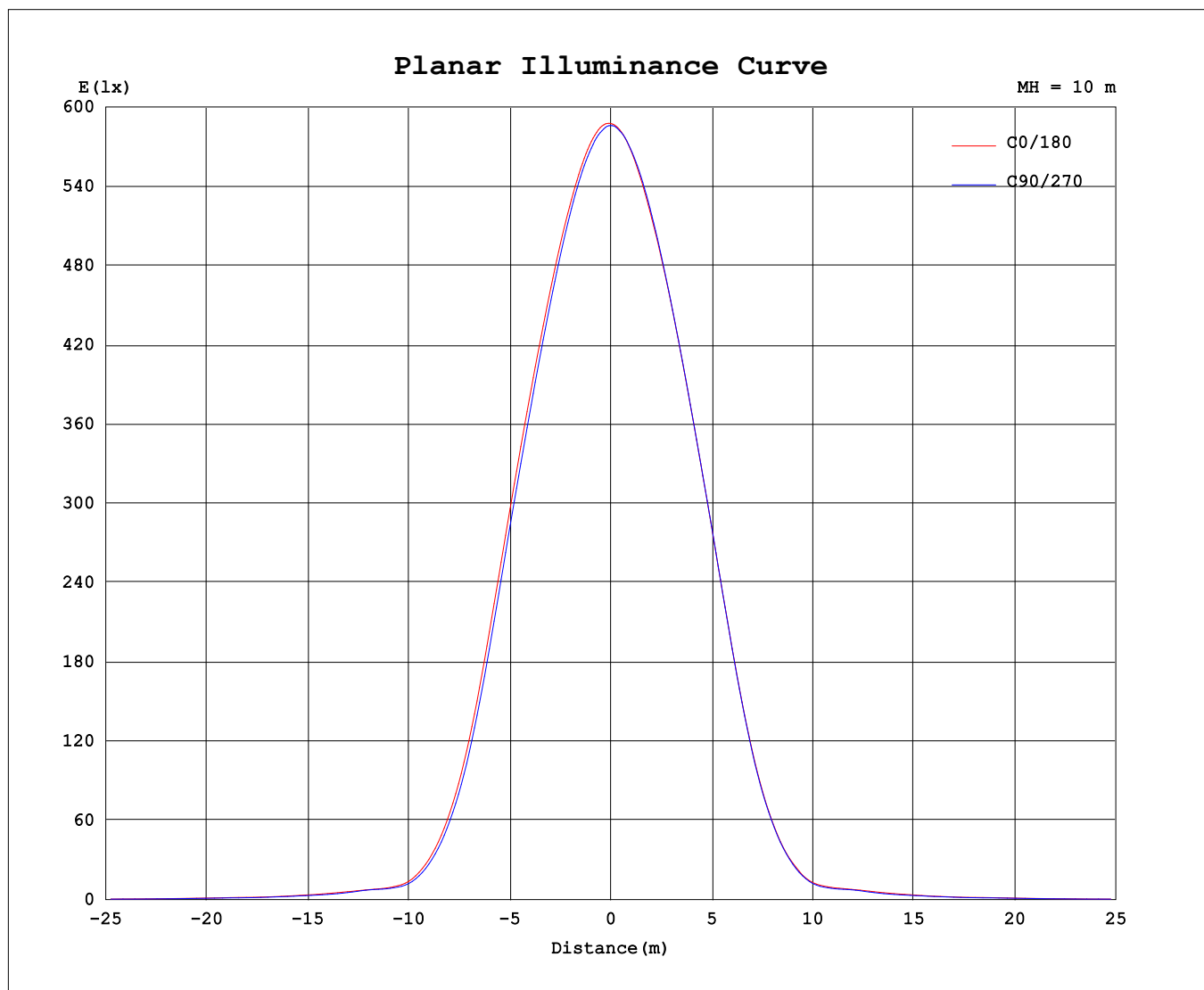
ISOLUX DIAGRAM



C Range: 0 - 360DEG
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Temperature: 25.3°C
Operators: LYJ
Test Date: 2022-10-26

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Humidity: 65.0%
Test Distance: 26.000m [K=0.4548]
Remarks:

Planar Illuminance Curve



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 γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.465
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Test Distance: 26.000m [K=0.4548]
Remarks: