

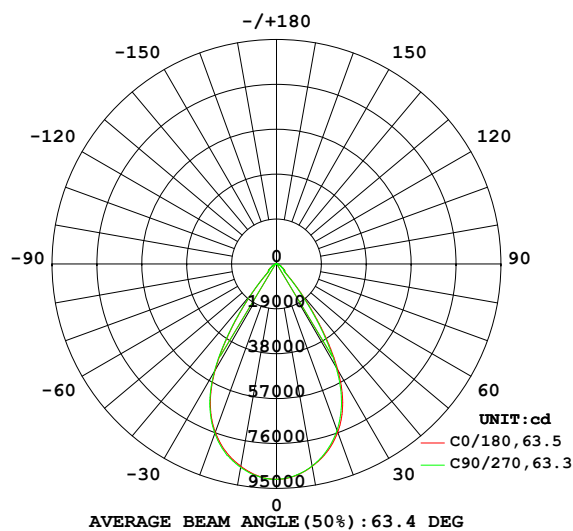
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

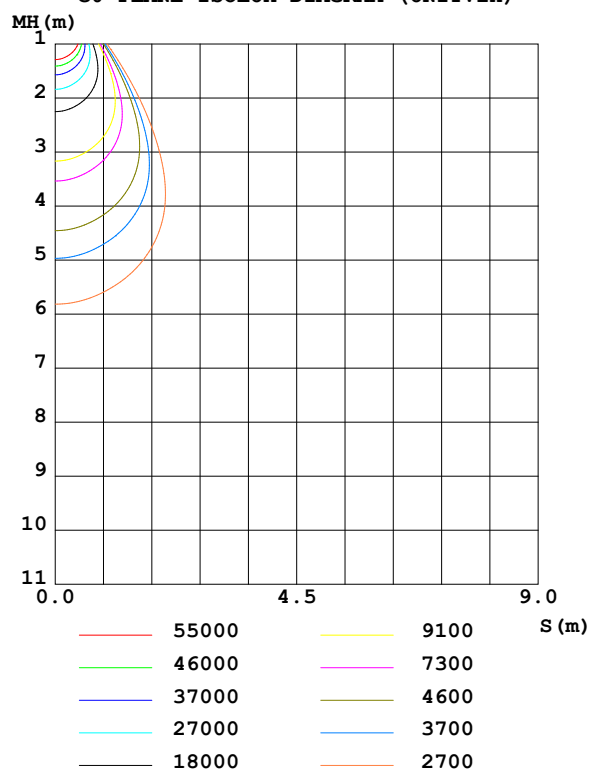
Test:U:230.0V I:2.665A P:600.0W PF:0.979 Freq:50.00Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:92275.5x1 lm		
NAME: SP04-600-5770-F04006Z	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 153.79 lm/W			
MODEL	5050	I _{max} (cd)	91161	S/MH (C0/180)	0.94
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	0.94
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	92275	η UP,DN (C0-180)	0.0,49.7
NOMINAL FLUX (lm)	92275.5	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,50.3
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	/	η down (%)	100.0	CIBSE SHR MAX	1.00

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
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:

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	8696	8682	8686	8682	8696	8721	8743	8721	0- 10	8502	8502	9.21,9.21
20	7577	7473	7493	7473	7577	7577	7626	7577	10- 20	23050	31552	34.2,34.2
30	5197	5079	5048	5079	5197	5228	5259	5228	20- 30	29742	61294	66.4,66.4
40	1603	1535	1509	1535	1603	1627	1635	1627	30- 40	20275	81569	88.4,88.4
50	450.7	368.0	439.7	368.0	450.7	373.2	443.0	373.2	40- 50	5430	86999	94.3,94.3
60	239.6	248.8	212.8	248.8	239.6	251.4	221.9	251.4	50- 60	2695	89694	97.2,97.2
70	112.3	120.1	97.18	120.1	112.3	125.9	102.0	125.9	60- 70	1738	91432	99.1,99.1
80	32.12	27.73	24.37	27.73	32.12	29.34	26.60	29.34	70- 80	730.1	92162	99.9,99.9
90	0.3575	0.2465	0.1462	0.2465	0.3575	0.3392	0.2952	0.3392	80- 90	113.2	92275	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): 85235 lm

%lum = 92.4%

%lamp = 92.4%

Conical surface Flux(120deg): 89694 lm

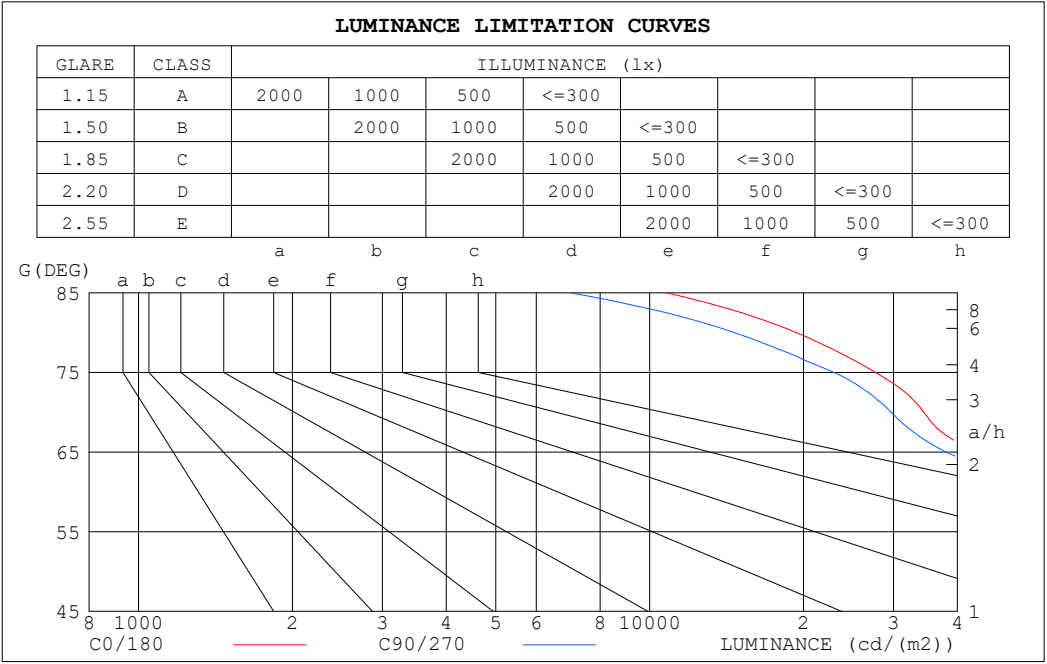
%lum = 97.2%

%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	10802	6992
80	19364	14654
75	27653	22943
70	34362	29669
65	43677	38053
60	50158	44447
55	64981	55491
50	73398	71425
45	87186	79606

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%

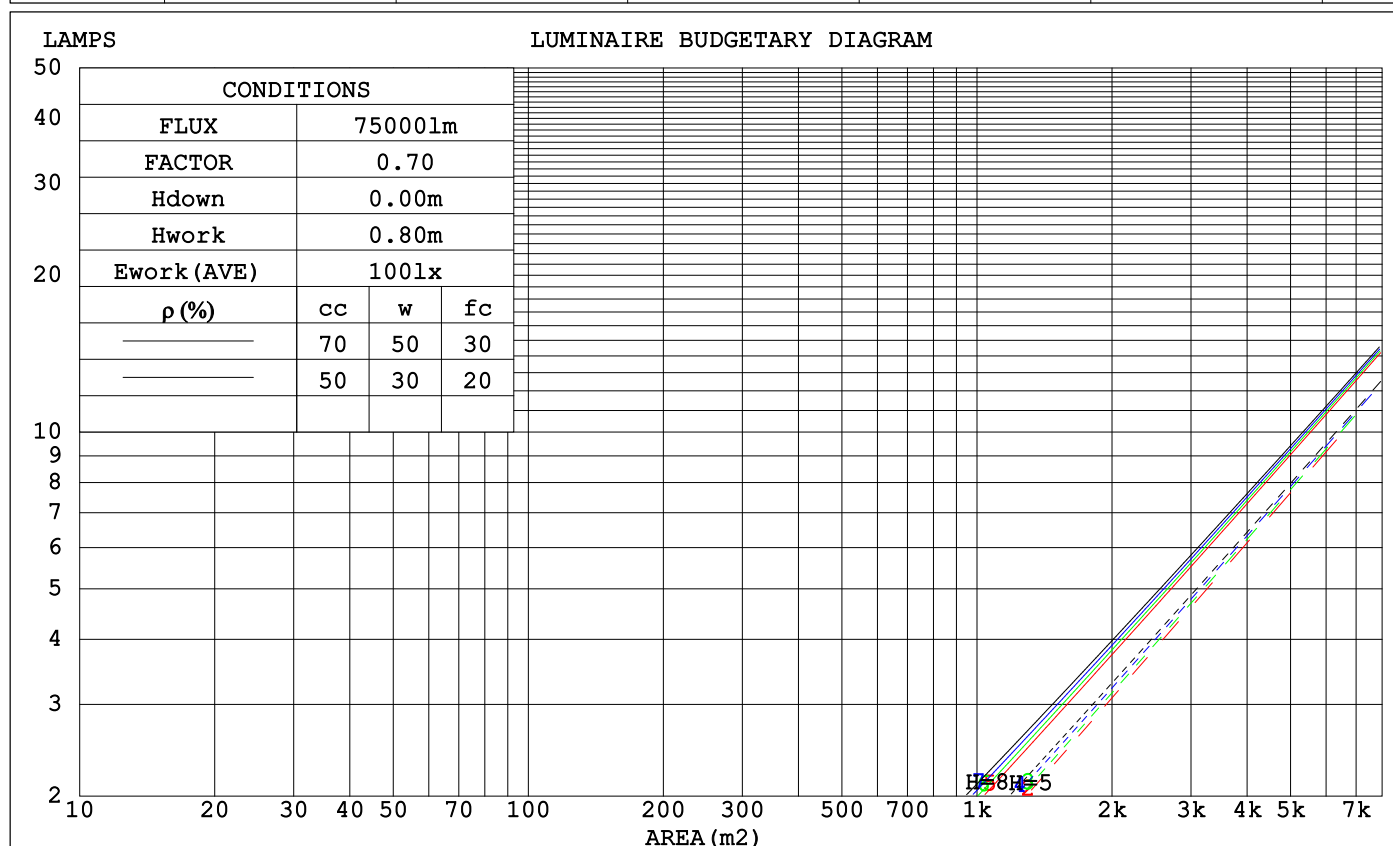
Test Distance:26.000m [K=0.4548]

Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

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	.92
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	.79	.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	.69	.65	.74	.69	.65	.72	.68	.64	.71	.67	.64	.62
7.0	.71	.65	.61	.71	.65	.60	.69	.64	.60	.68	.63	.60	.67	.63	.59	.58
8.0	.67	.61	.56	.66	.61	.56	.65	.60	.56	.64	.59	.56	.63	.59	.56	.54
9.0	.63	.57	.53	.63	.57	.53	.62	.56	.52	.61	.56	.52	.60	.55	.52	.51
10.0	.60	.53	.49	.59	.53	.49	.58	.53	.49	.57	.53	.49	.57	.52	.49	.48



C Range: 0 - 360DEG
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 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

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	.192	.109	.035	.185	.106	.034	.172	.099	.032	.161	.093	.030	.150	.087	.028		
2.0	.184	.101	.031	.178	.098	.030	.167	.093	.029	.158	.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	.082	.024	.146	.079	.024	.139	.076	.023		
5.0	.158	.080	.023	.154	.079	.023	.147	.077	.023	.140	.074	.022	.134	.072	.022		
6.0	.150	.075	.022	.147	.074	.021	.141	.072	.021	.135	.070	.021	.129	.068	.020		
7.0	.143	.071	.020	.140	.070	.020	.135	.068	.020	.129	.066	.019	.125	.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	.018	.124	.061	.017	.119	.060	.017	.116	.059	.017		
10.0	.125	.060	.017	.123	.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	.042	.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	.037	.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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 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

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	20.4	21.5	20.8	21.8	22.1	20.0	21.1	20.4	21.4	21.7
3H	21.7	22.6	22.1	22.9	23.3	21.1	22.0	21.5	22.3	22.7
4H	22.1	22.9	22.5	23.3	23.7	21.4	22.2	21.8	22.6	23.0
6H	22.2	23.0	22.6	23.4	23.8	21.5	22.2	21.9	22.6	23.0
8H	22.2	22.9	22.6	23.3	23.7	21.4	22.2	21.9	22.6	23.0
12H	22.2	22.9	22.6	23.3	23.7	21.4	22.1	21.8	22.5	22.9
4H 2H	20.9	21.8	21.3	22.1	22.5	20.6	21.5	21.0	21.8	22.2
3H	22.3	23.0	22.7	23.4	23.8	21.8	22.5	22.2	22.9	23.3
4H	22.8	23.4	23.2	23.8	24.3	22.2	22.8	22.6	23.2	23.7
6H	23.0	23.5	23.5	24.0	24.4	22.3	22.8	22.8	23.3	23.8
8H	23.0	23.5	23.5	23.9	24.4	22.3	22.8	22.8	23.2	23.7
12H	23.0	23.4	23.5	23.9	24.4	22.3	22.7	22.7	23.2	23.6
8H 4H	22.8	23.3	23.3	23.7	24.2	22.2	22.7	22.7	23.2	23.7
6H	23.1	23.4	23.6	23.9	24.4	22.4	22.8	22.9	23.3	23.8
8H	23.1	23.4	23.6	24.0	24.5	22.4	22.8	23.0	23.3	23.8
12H	23.1	23.4	23.6	23.9	24.5	22.4	22.7	22.9	23.2	23.8
12H 4H	22.7	23.2	23.2	23.7	24.1	22.2	22.6	22.7	23.1	23.6
6H	23.0	23.4	23.5	23.8	24.4	22.4	22.7	22.9	23.2	23.8
8H	23.1	23.4	23.6	23.9	24.5	22.4	22.7	22.9	23.2	23.8
CIE190: 2010										

CIE190: 2010
Area: 0.0957 m2

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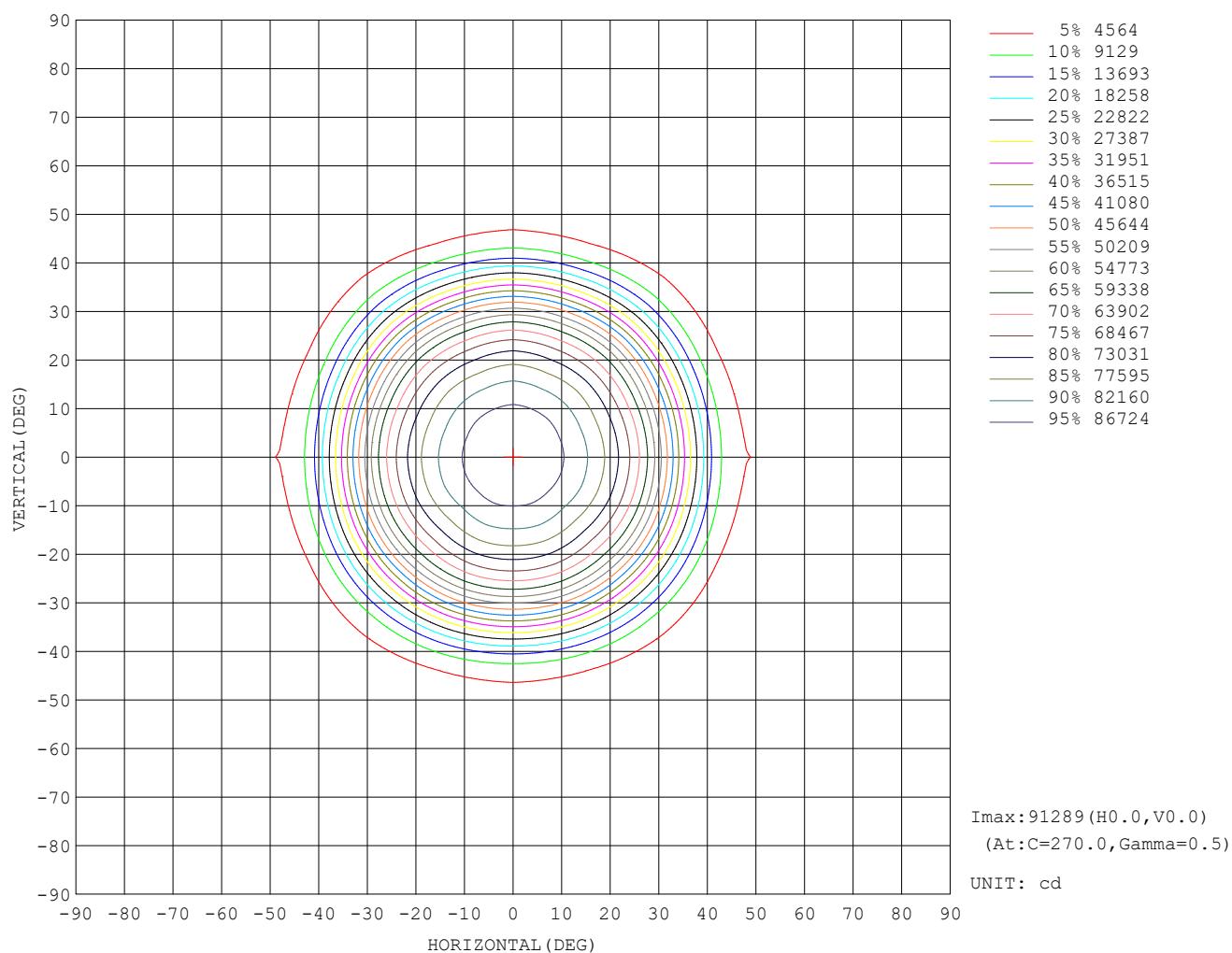
UTILIZATION FACTORS TABLE

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 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:

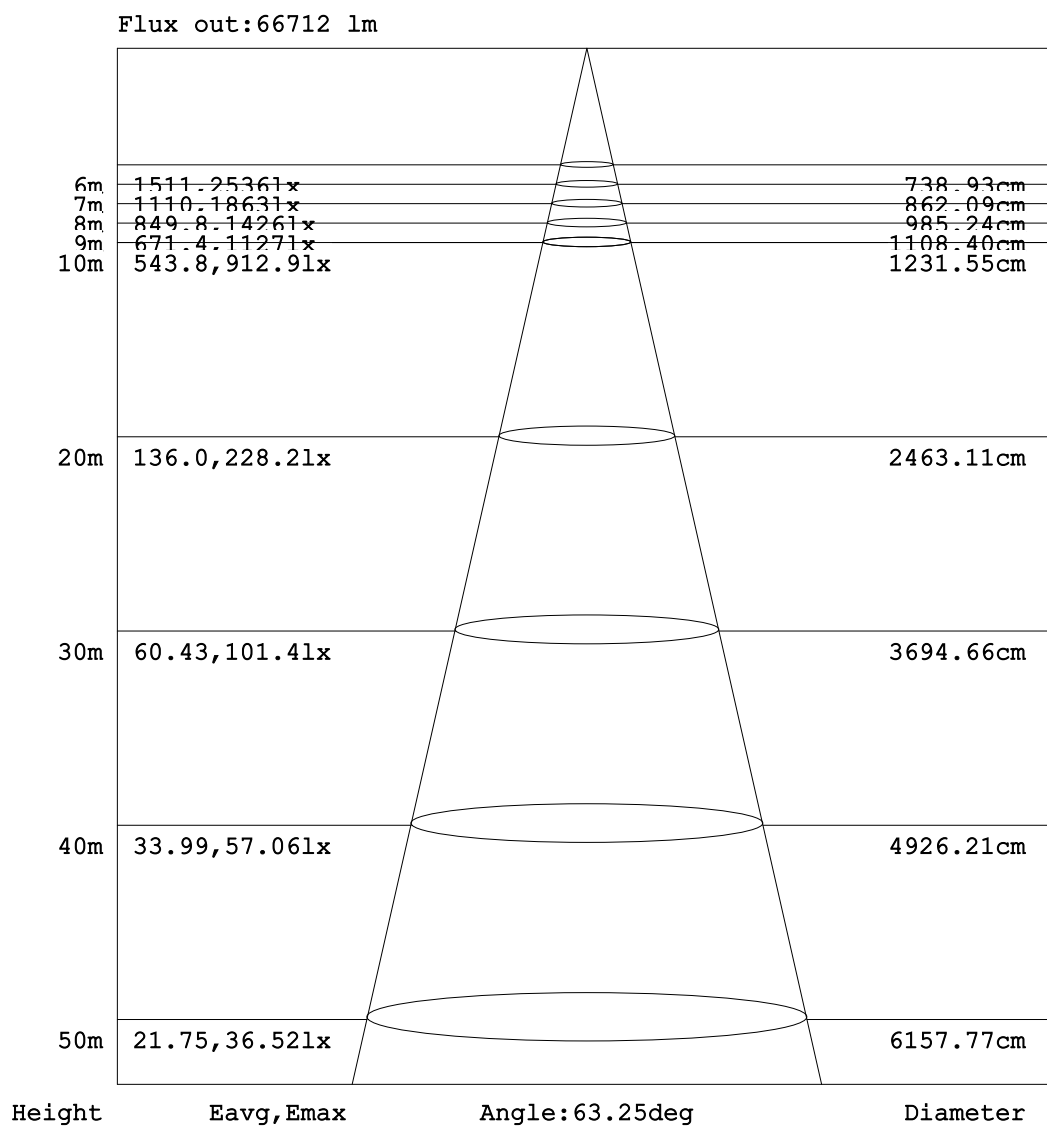
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
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:

AAI Figure



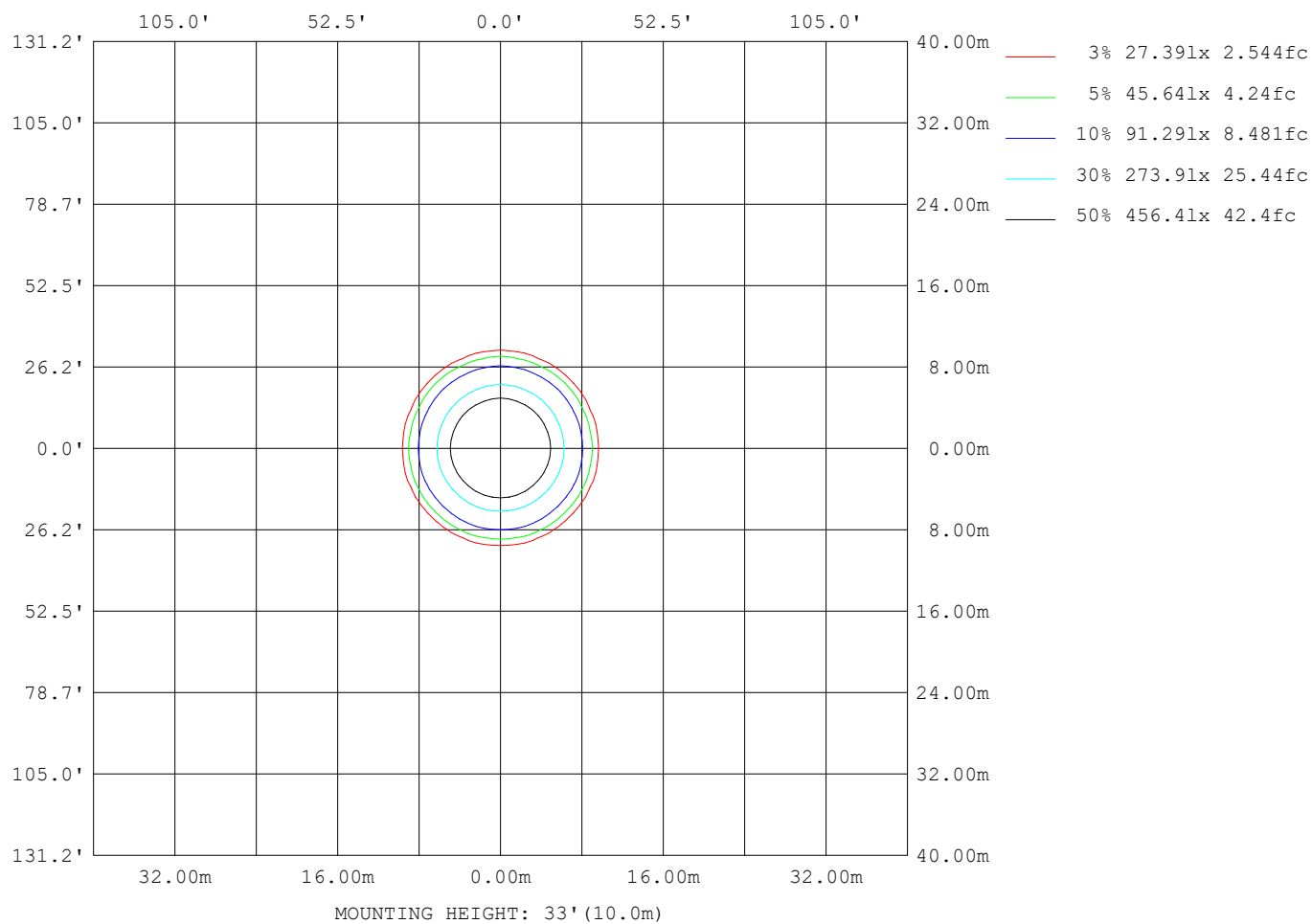
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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C Interval: 22.5DEG
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Operators: LYJ
Test Date: 2022-10-26

γ Range: 0 - 90DEG
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Humidity: 65.0%
Test Distance: 26.000m [K=0.4548]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

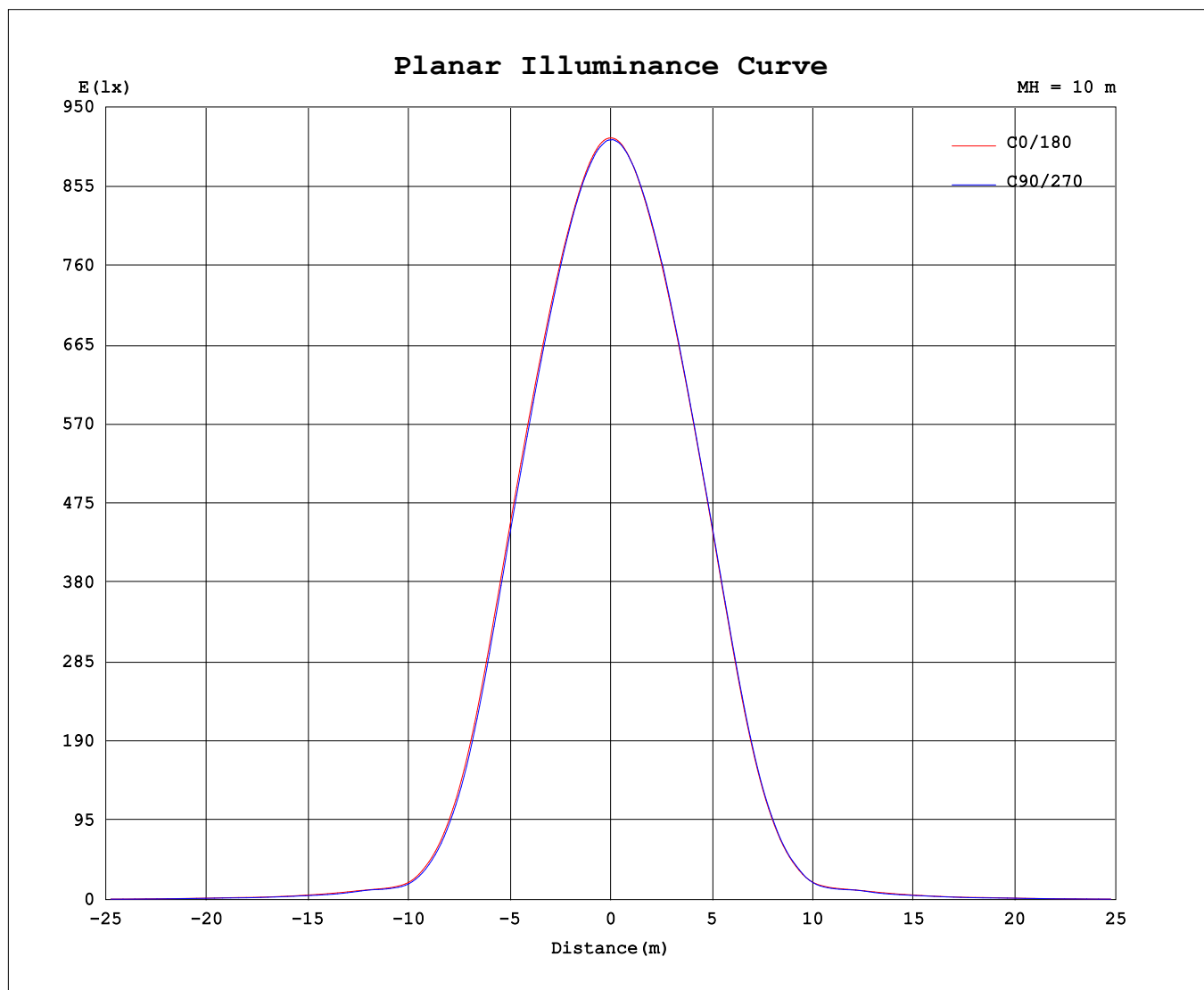
ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
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



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
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: