

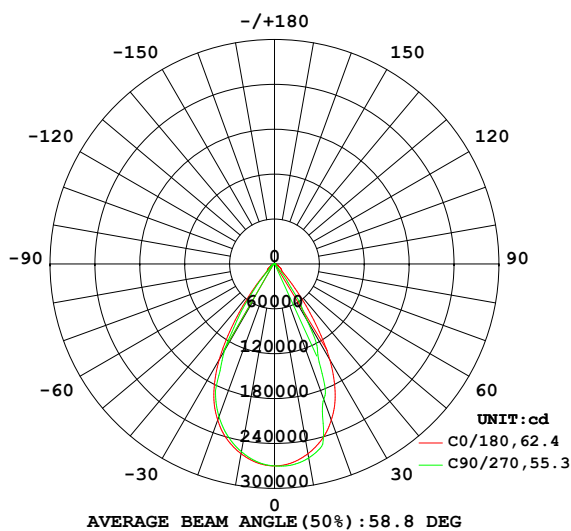
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

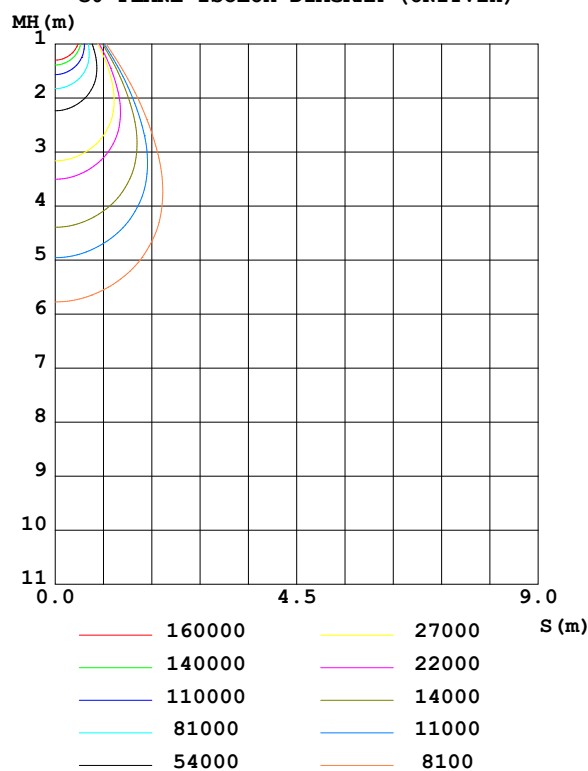
Test:U:230.0V I:7.842A P:1800.0W PF:0.998 Freq:50.00Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:239725x1 lm		
NAME: SP04-1K8-5770-F04006Z+L130	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 133.18 lm/W			
MODEL	/	I _{max} (cd)	270390	S/MH (C0/180)	0.92
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	0.88
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	239725	η UP,DN (C0-180)	0.0,46.5
NOMINAL FLUX (lm)	239725	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,53.5
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE (V)	/	η down (%)	100.0	CIBSE SHR MAX	0.90

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:LYJ
Test Date:2022-12-14

γ Range: 0 - 180DEG
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	2575	2614	2632	2614	2575	2554	2548	2554	0- 10	25222	25222	10.5,10.5
20	2220	2242	1927	2242	2220	2179	2171	2179	10- 20	67723	92945	38.8,38.8
30	1481	1189	867.2	1189	1481	1462	1336	1462	20- 30	81174	174119	72.6,72.6
40	427.3	241.2	90.23	241.2	427.3	403.5	344.2	403.5	30- 40	47711	221829	92.5,92.5
50	123.8	22.69	4.148	22.69	123.8	92.49	84.24	92.49	40- 50	10440	232269	96.9,96.9
60	60.50	2.061	1.872	2.061	60.50	49.98	40.36	49.98	50- 60	4218	236487	98.6,98.6
70	24.42	1.051	0.8428	1.051	24.42	25.11	18.44	25.11	60- 70	2238	238725	99.6,99.6
80	4.220	0.3779	0.2589	0.3779	4.220	6.039	5.095	6.039	70- 80	853.3	239578	99.9,99.9
90	0	0	0	0	0	0	0	0	80- 90	146.8	239725	100,100
100	0	0	0	0	0	0	0	0	90-100	0	239725	100,100
110	0	0	0	0	0	0	0	0	100-110	0	239725	100,100
120	0	0	0	0	0	0	0	0	110-120	0	239725	100,100
130	0	0	0	0	0	0	0	0	120-130	0	239725	100,100
140	0	0	0	0	0	0	0	0	130-140	0	239725	100,100
150	0	0	0	0	0	0	0	0	140-150	0	239725	100,100
160	0	0	0	0	0	0	0	0	150-160	0	239725	100,100
170	0	0	0	0	0	0	0	0	160-170	0	239725	100,100
180	0	0	0	0	0	0	0	0	170-180	0	239725	100,100
DEG	LUMINOUS INTENSITY:X100cd									UNIT:lm		

Conical surface Flux(90deg): 2.2903e+005 lm

%lum = 95.5%

%lamp = 95.5%

Conical surface Flux(120deg): 2.3649e+005 lm

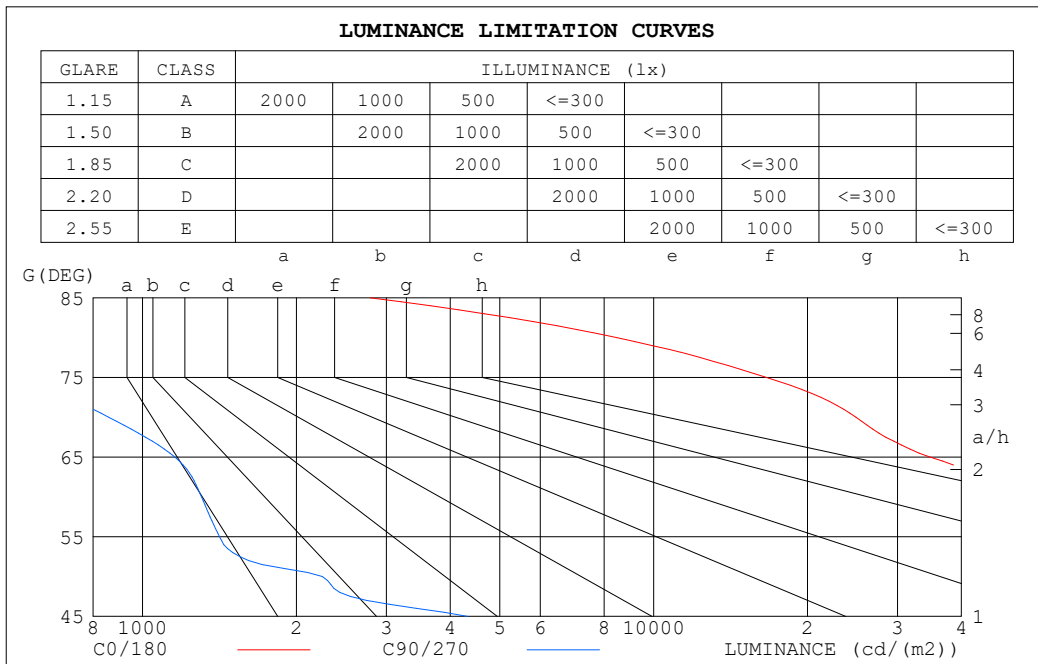
%lum = 98.6%

%lamp = 98.6%

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C Interval: 10.0DEG
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Temperature:25.3°C
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γ Range: 0 - 180DEG
 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	2788	467
80	8469	519
75	16631	628
70	24887	858
65	34743	1157
60	42169	1304
55	58111	1414
50	67136	2247
45	78271	4319

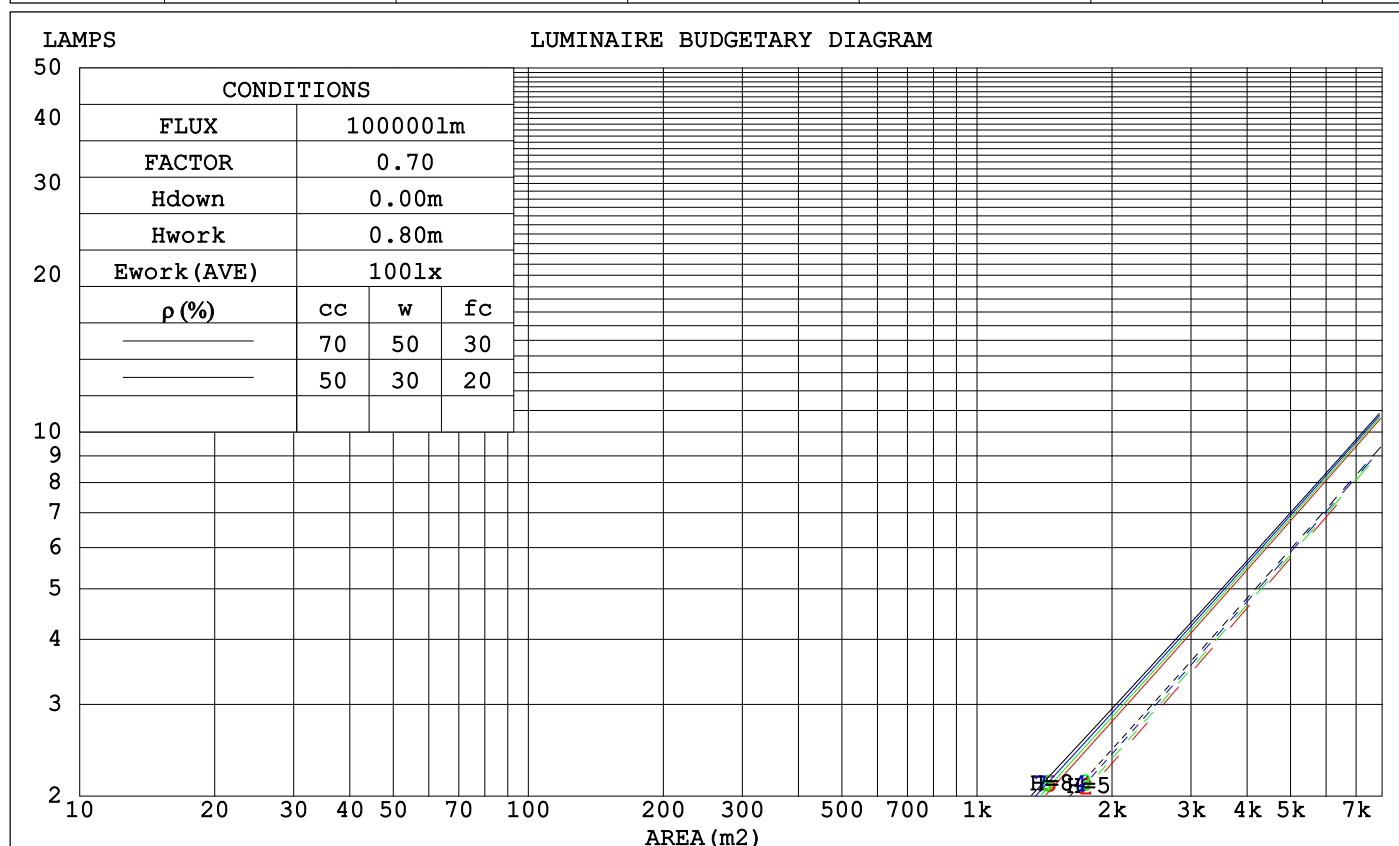
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Temperature: 25.3°C
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Test Date: 2022-12-14

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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	1.11	1.08	1.06	1.08	1.06	1.04	1.04	1.03	1.01	1.01	.99	.98	.97	.96	.95	.93
2.0	1.03	.99	.95	1.01	.97	.94	.98	.95	.92	.95	.92	.90	.92	.90	.88	.87
3.0	.96	.91	.87	.94	.90	.86	.92	.88	.85	.89	.86	.83	.87	.85	.82	.81
4.0	.90	.84	.80	.88	.83	.79	.86	.82	.78	.84	.81	.77	.82	.79	.77	.75
5.0	.84	.78	.74	.83	.78	.73	.81	.76	.73	.80	.75	.72	.78	.74	.72	.70
6.0	.79	.73	.69	.78	.72	.68	.76	.72	.68	.75	.71	.67	.74	.70	.67	.65
7.0	.74	.68	.64	.73	.68	.64	.72	.67	.63	.71	.66	.63	.70	.66	.63	.61
8.0	.70	.64	.60	.69	.64	.60	.68	.63	.59	.67	.63	.59	.66	.62	.59	.58
9.0	.66	.60	.56	.66	.60	.56	.65	.59	.56	.64	.59	.56	.63	.59	.55	.54
10.0	.62	.57	.53	.62	.57	.53	.61	.56	.53	.60	.56	.52	.60	.55	.52	.51



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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]
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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	.180	.102	.032	.173	.099	.031	.161	.092	.029	.149	.086	.028	.139	.080	.026		
2.0	.172	.095	.029	.167	.092	.028	.156	.087	.027	.146	.082	.026	.137	.078	.024		
3.0	.164	.087	.026	.159	.085	.026	.150	.081	.025	.142	.078	.024	.134	.074	.023		
4.0	.156	.081	.024	.152	.080	.024	.144	.076	.023	.137	.073	.022	.130	.071	.022		
5.0	.149	.076	.022	.145	.074	.022	.138	.072	.021	.132	.070	.021	.126	.067	.020		
6.0	.142	.071	.020	.139	.070	.020	.133	.068	.020	.127	.066	.019	.122	.064	.019		
7.0	.135	.067	.019	.133	.066	.019	.127	.064	.019	.122	.063	.018	.118	.061	.018		
8.0	.130	.063	.018	.127	.063	.018	.122	.061	.017	.118	.060	.017	.114	.058	.017		
9.0	.124	.060	.017	.122	.059	.017	.118	.058	.016	.114	.057	.016	.110	.056	.016		
10.0	.119	.057	.016	.117	.057	.016	.113	.055	.016	.109	.054	.015	.106	.053	.015		

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	.171	.157	.145	.147	.135	.124	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.156	.132	.112	.134	.114	.097	.092	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.144	.114	.089	.124	.098	.077	.085	.068	.054	.049	.040	.032	.016	.013	.010	
4.0	.134	.099	.072	.115	.085	.063	.079	.060	.044	.046	.035	.026	.015	.011	.009	
5.0	.125	.087	.059	.108	.076	.052	.074	.053	.036	.043	.031	.022	.014	.010	.007	
6.0	.118	.078	.049	.101	.068	.043	.070	.047	.030	.041	.028	.018	.013	.009	.006	
7.0	.111	.071	.042	.096	.061	.036	.066	.043	.026	.038	.025	.015	.012	.008	.005	
8.0	.106	.064	.036	.091	.056	.031	.063	.039	.022	.037	.023	.013	.012	.008	.004	
9.0	.101	.059	.031	.087	.051	.027	.060	.036	.019	.035	.021	.011	.011	.007	.004	
10.0	.096	.055	.027	.083	.048	.024	.058	.033	.017	.034	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:LYJ
 Test Date:2022-12-14

γ Range: 0 - 180DEG
 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	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
3H	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
4H	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
6H	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
8H	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
12H	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
4H 2H	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
3H	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
4H	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
6H	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
8H	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
12H	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
8H 4H	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
6H	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
8H	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
12H	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
12H 4H	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
6H	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
8H	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
CIE190: 2010										

CIE190: 2010
Area: 0.2871 m2

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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]
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EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

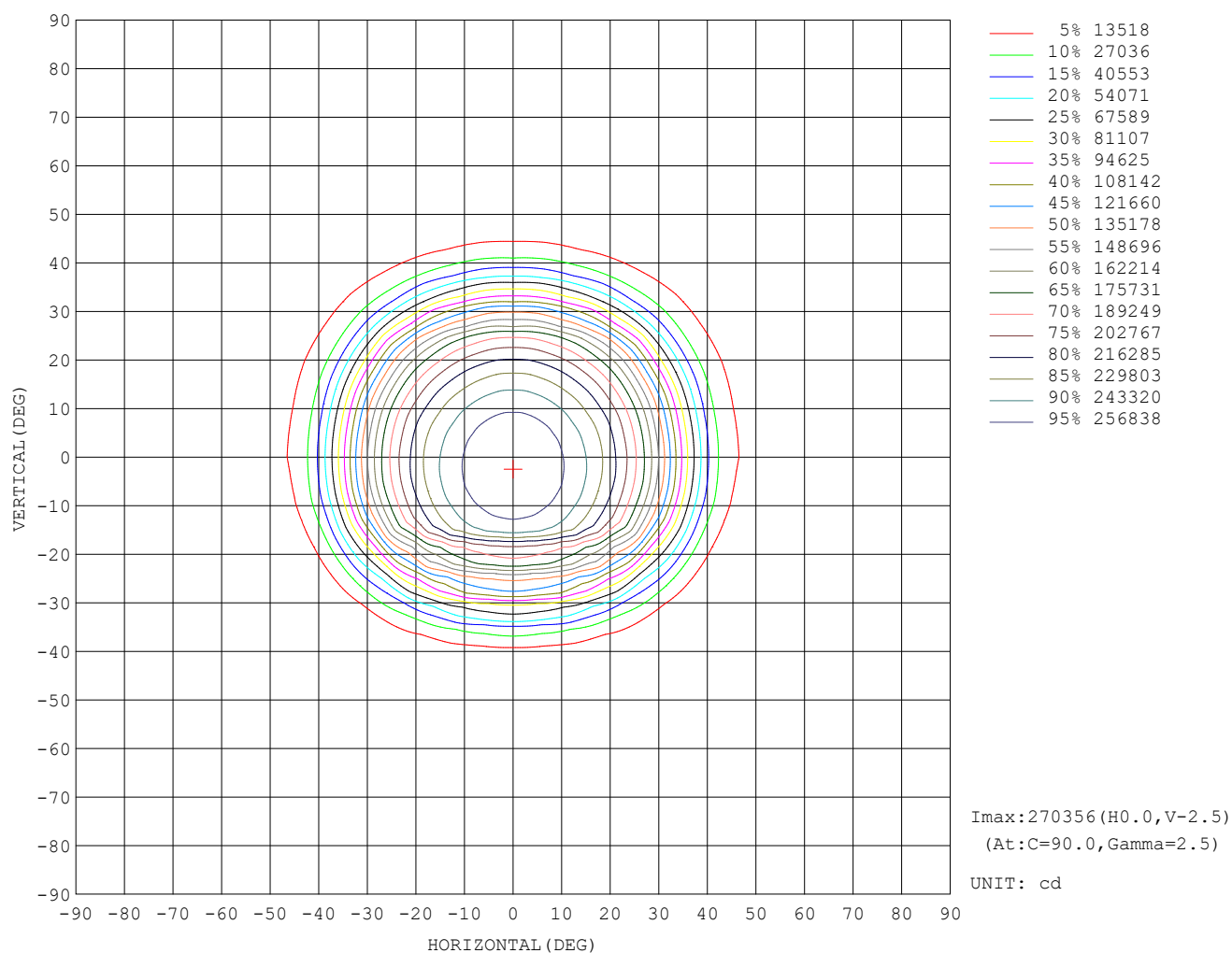
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	87	80	77	86	80	77	86	80	76	73
0.80	94	88	85	94	88	85	92	87	84	80
1.00	99	93	90	98	93	89	96	93	89	85
1.25	103	98	94	102	97	94	100	96	93	89
1.50	106	101	97	104	100	97	102	99	96	91
2.00	108	104	101	107	103	100	104	101	99	93
2.50	110	106	103	108	105	102	105	103	100	94
3.00	112	108	105	110	107	104	106	104	102	96
4.00	114	111	109	112	109	107	108	106	105	97
5.00	115	113	111	113	111	109	109	107	106	99
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004						Suspended			SHRNOM = 1.25	

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 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.465
 Humidity: 65.0%
 Test Distance: 26.000m [K=0.4548]
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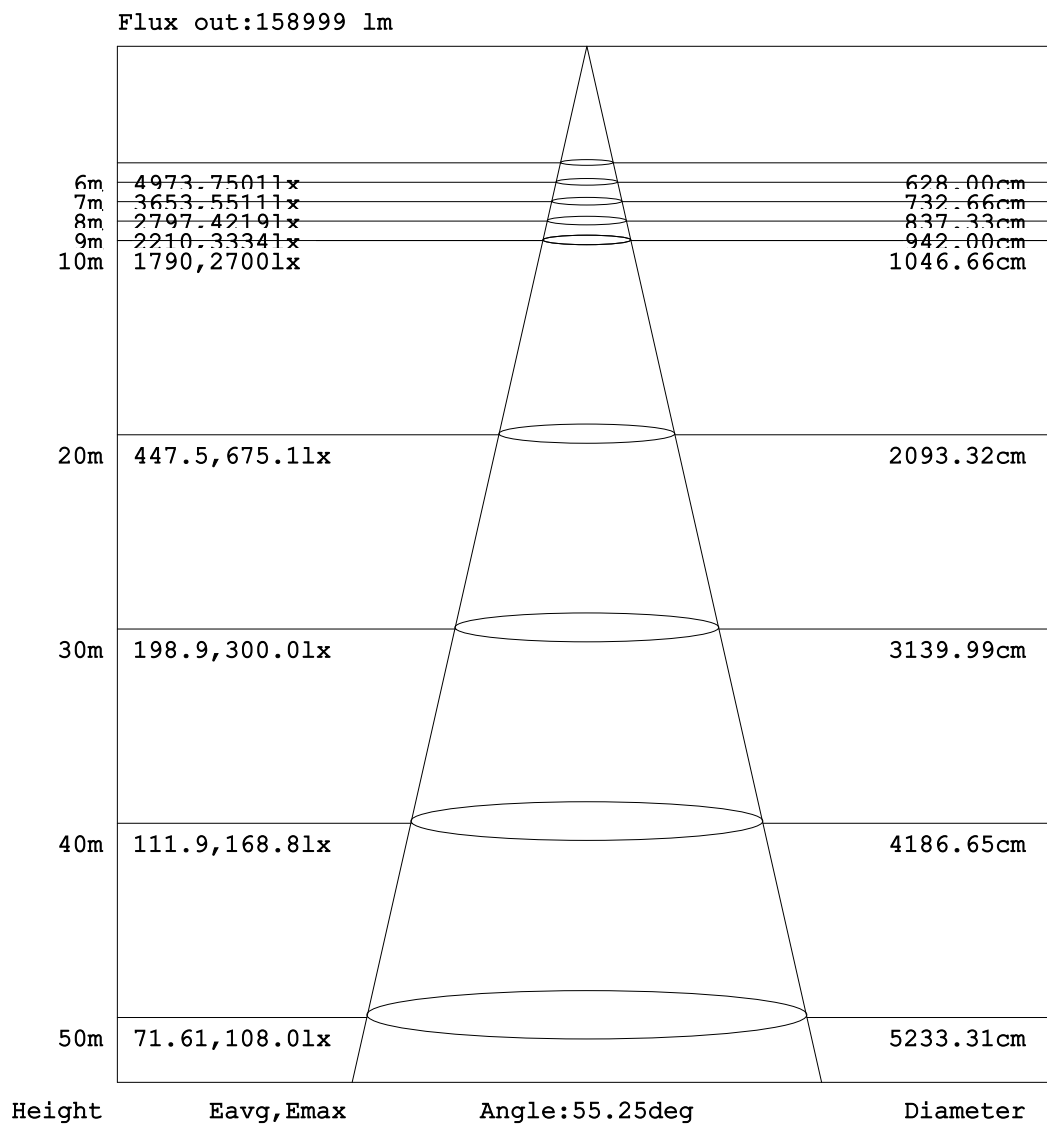
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
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Test Speed: HIGH
Temperature:25.3°C
Operators:LYJ
Test Date:2022-12-14

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

AAI Figure



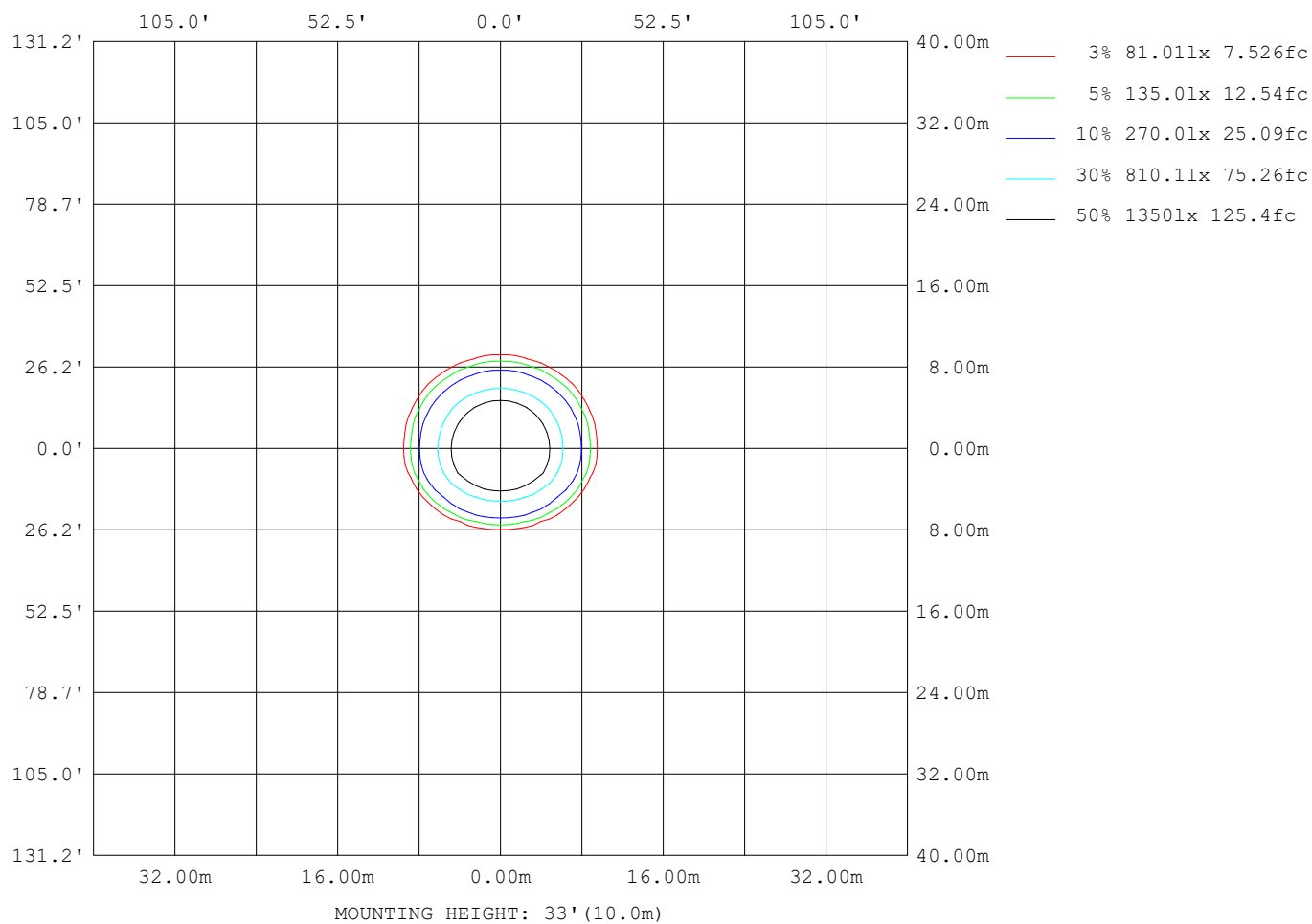
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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C Interval: 10.0DEG
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Operators: LYJ
Test Date: 2022-12-14

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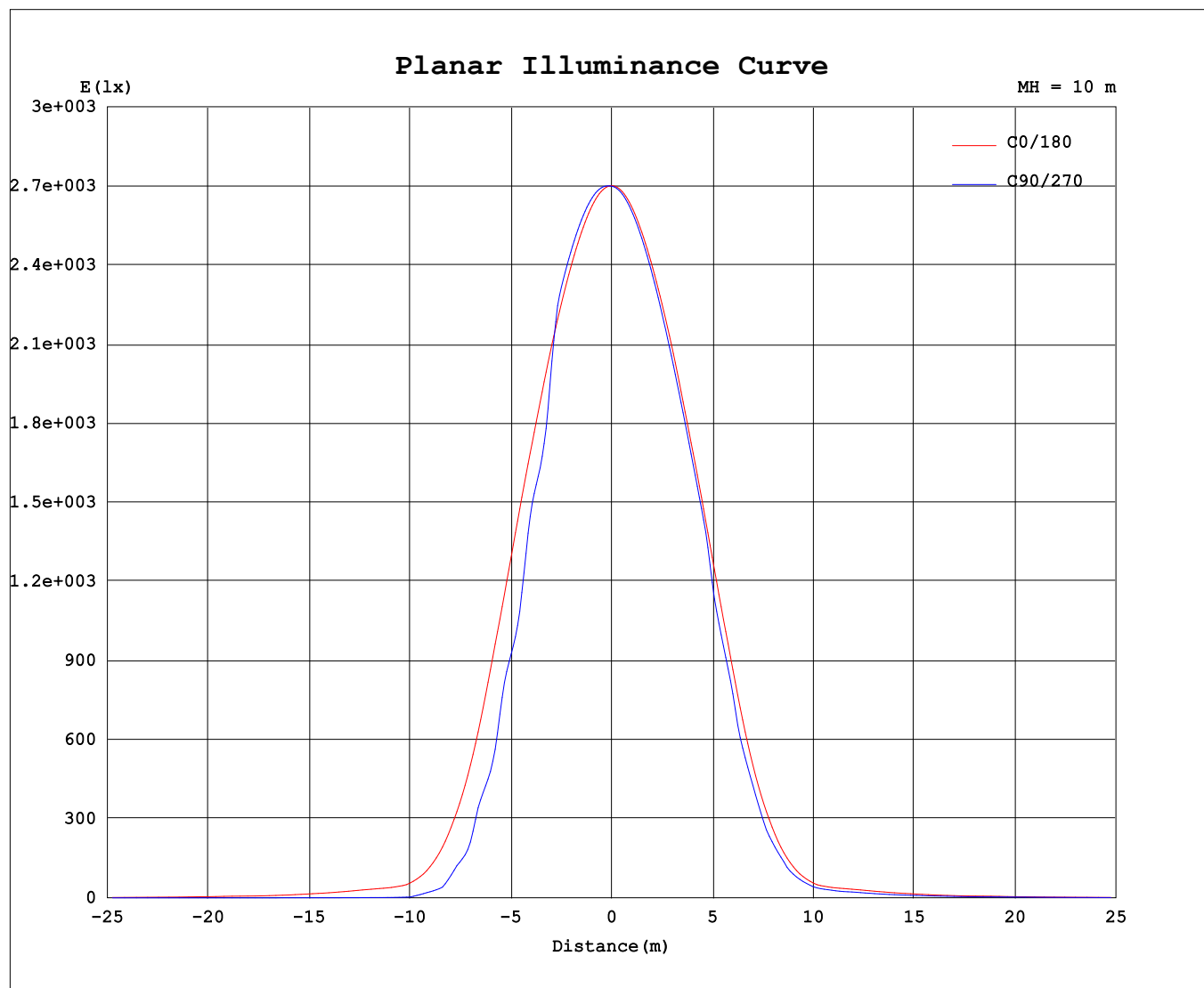
ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: LYJ
Test Date: 2022-12-14

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
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Humidity: 65.0%
Test Distance: 26.000m [K=0.4548]
Remarks:

Planar Illuminance Curve



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