

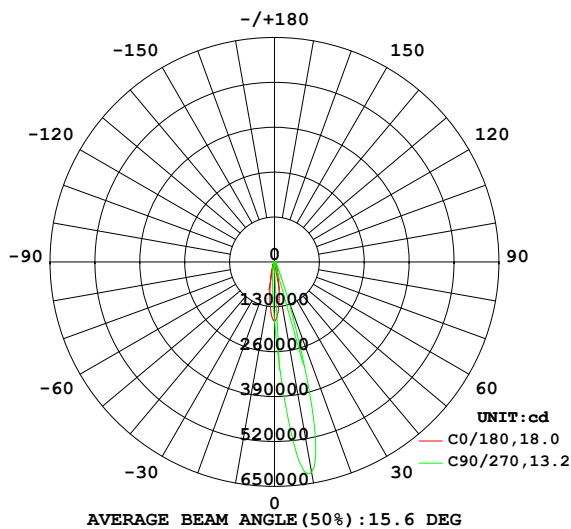
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

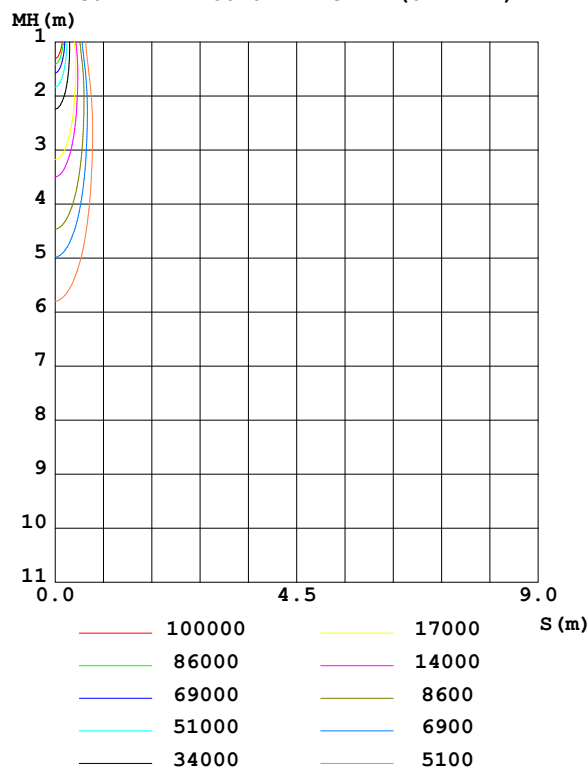
Test:U:230.0V I:2.140A P:480.0W PF:0.975 Freq:50.01Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:64602.4x1 lm		
NAME: SP04-480-5770-F04011XV	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 134.59 lm/W			
MODEL	/	Imax (cd)	621104	S/MH (C0/180)	0.31
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	0.12
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	64602	η UP,DN (C0-180)	0.0,79.0
NOMINAL FLUX (lm)	64602.4	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,21.0
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE (V)	/	η down (%)	100.0	CIBSE SHR MAX	0.00

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:LYJ
Test Date:2023-03-09

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=0.4556]
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	747.1	2700	6183	2700	747.1	383.2	302.9	383.2	0- 10	18042	18042	27.9,27.9
20	196.7	514.7	1167	514.7	196.7	110.7	93.06	110.7	10- 20	26259	44301	68.6,68.6
30	74.23	139.8	187.9	139.8	74.23	57.53	52.89	57.53	20- 30	8101	52403	81.1,81.1
40	44.13	54.48	63.41	54.48	44.13	39.63	38.05	39.63	30- 40	4190	56593	87.6,87.6
50	32.55	34.35	35.00	34.35	32.55	31.68	28.83	31.68	40- 50	3007	59600	92.3,92.3
60	22.33	24.61	23.19	24.61	22.33	22.64	17.71	22.64	50- 60	2460	62060	96.1,96.1
70	12.17	14.27	13.13	14.27	12.17	10.78	7.423	10.78	60- 70	1691	63751	98.7,98.7
80	3.437	3.993	3.780	3.993	3.437	2.222	1.638	2.222	70- 80	744.8	64496	99.8,99.8
90	0	0	0	0	0	0	0	0	80- 90	106.3	64602	100,100
100	0	0	0	0	0	0	0	0	90-100	0	64602	100,100
110	0	0	0	0	0	0	0	0	100-110	0	64602	100,100
120	0	0	0	0	0	0	0	0	110-120	0	64602	100,100
130	0	0	0	0	0	0	0	0	120-130	0	64602	100,100
140	0	0	0	0	0	0	0	0	130-140	0	64602	100,100
150	0	0	0	0	0	0	0	0	140-150	0	64602	100,100
160	0	0	0	0	0	0	0	0	150-160	0	64602	100,100
170	0	0	0	0	0	0	0	0	160-170	0	64602	100,100
180	0	0	0	0	0	0	0	0	170-180	0	64602	100,100
DEG	LUMINOUS INTENSITY:X100cd									UNIT:lm		

Conical surface Flux(90deg): 58166 lm

%lum = 90.0%

%lamp = 90.0%

Conical surface Flux(120deg): 62060 lm

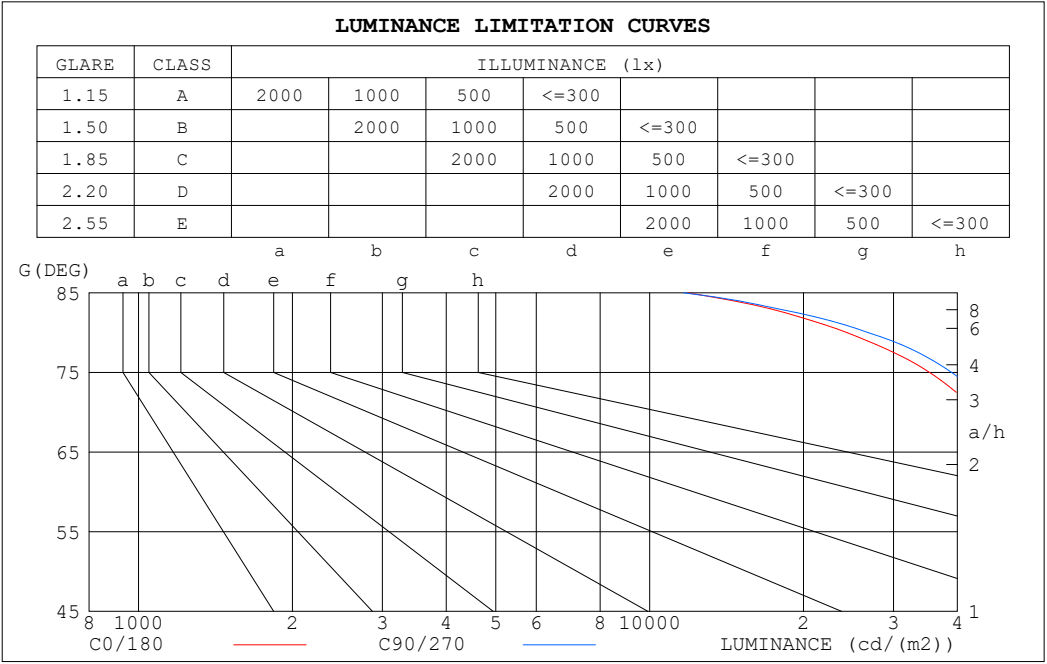
%lum = 96.1%

%lamp = 96.1%

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:LYJ
Test Date:2023-03-09

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=0.4556]
Remarks:

LUMINANCE LIMITATION CURVES



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	11888	11659
80	24328	26757
75	35297	39000
70	43740	47175
65	49876	52552
60	54903	57022
55	58991	61984
50	62254	66942
45	64911	79196

C Range: 0 - 360DEG

C Interval: 5.0DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:LYJ

Test Date:2023-03-09

γ Range: 0 - 180DEG

γ Interval: 0.5DEG

Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465

Humidity:65.0%

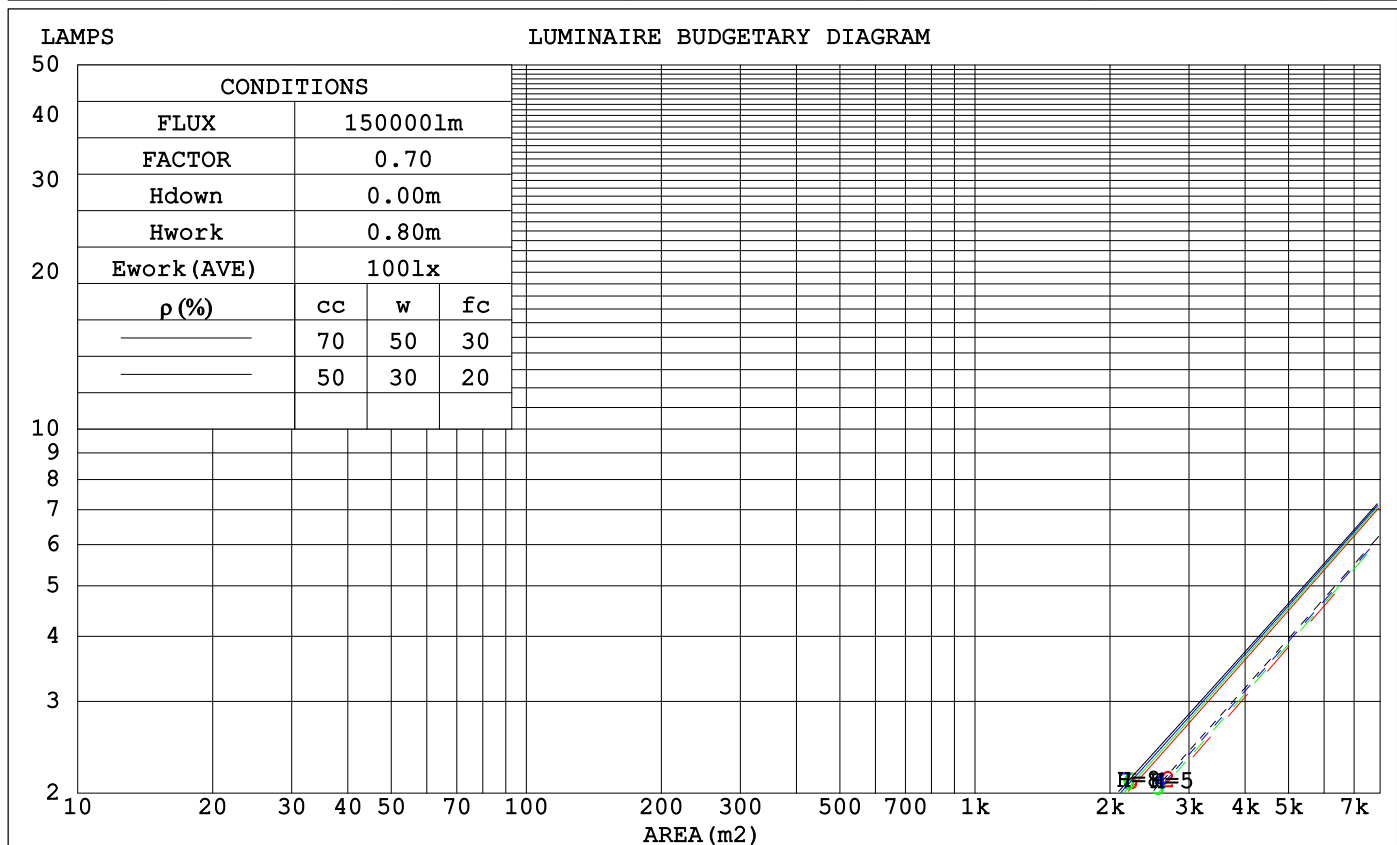
Test Distance:26.000m [K=0.4556]

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	1.09	1.07	1.09	1.07	1.05	1.05	1.03	1.02	1.01	1.00	.99	.98	.97	.96	.94
2.0	1.04	1.01	.98	1.03	.99	.96	.99	.97	.94	.97	.94	.92	.94	.92	.90	.89
3.0	.98	.94	.90	.97	.93	.90	.95	.91	.88	.92	.89	.87	.90	.88	.86	.84
4.0	.93	.89	.85	.92	.88	.84	.90	.86	.83	.88	.85	.82	.86	.84	.81	.80
5.0	.89	.84	.80	.88	.83	.80	.86	.82	.79	.85	.81	.78	.83	.80	.78	.76
6.0	.85	.80	.76	.84	.80	.76	.83	.79	.76	.82	.78	.75	.80	.77	.75	.73
7.0	.82	.77	.73	.81	.76	.73	.80	.76	.72	.79	.75	.72	.78	.74	.72	.71
8.0	.79	.74	.70	.78	.73	.70	.77	.73	.70	.76	.72	.69	.75	.72	.69	.68
9.0	.76	.71	.68	.75	.71	.67	.74	.70	.67	.74	.70	.67	.73	.69	.67	.66
10.0	.73	.68	.65	.73	.68	.65	.72	.68	.65	.71	.68	.65	.71	.67	.65	.64



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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=0.4556]
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	.168	.096	.030	.161	.092	.029	.149	.085	.027	.137	.079	.025	.127	.073	.024	
2.0	.158	.087	.027	.152	.084	.026	.142	.079	.024	.132	.074	.023	.123	.070	.022	
3.0	.147	.078	.023	.143	.076	.023	.134	.073	.022	.126	.069	.021	.118	.065	.020	
4.0	.138	.072	.021	.134	.070	.021	.126	.067	.020	.119	.064	.019	.113	.061	.019	
5.0	.129	.066	.019	.126	.064	.019	.119	.062	.018	.113	.060	.018	.107	.057	.017	
6.0	.121	.061	.017	.118	.060	.017	.113	.058	.017	.107	.056	.016	.103	.054	.016	
7.0	.115	.057	.016	.112	.056	.016	.107	.054	.016	.102	.052	.015	.098	.051	.015	
8.0	.109	.053	.015	.106	.052	.015	.102	.051	.015	.098	.050	.014	.094	.048	.014	
9.0	.103	.050	.014	.101	.049	.014	.097	.048	.014	.093	.047	.013	.090	.046	.013	
10.0	.098	.047	.013	.096	.047	.013	.093	.046	.013	.090	.045	.013	.087	.044	.012	

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	.146	.146	.135	.125	.100	.093	.087	.057	.054	.050	.018	.017	.016	
2.0	.154	.133	.114	.132	.114	.099	.091	.079	.069	.052	.046	.040	.017	.015	.013	
3.0	.141	.113	.092	.121	.098	.079	.083	.068	.056	.048	.040	.033	.015	.013	.011	
4.0	.129	.099	.075	.111	.085	.065	.076	.059	.046	.044	.035	.027	.014	.011	.009	
5.0	.120	.087	.062	.103	.075	.054	.071	.052	.038	.041	.031	.023	.013	.010	.007	
6.0	.111	.077	.052	.095	.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	.097	.062	.039	.084	.054	.034	.058	.038	.024	.034	.022	.014	.011	.007	.005	
9.0	.091	.057	.034	.079	.049	.029	.055	.035	.021	.032	.020	.012	.010	.007	.004	
10.0	.086	.052	.030	.074	.045	.026	.052	.032	.018	.030	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
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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=0.4556]
 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	22.1	23.2	22.5	23.5	23.8	22.4	23.4	22.7	23.7	24.0
3H	23.4	24.4	23.8	24.7	25.1	23.8	24.8	24.2	25.1	25.5
4H	23.8	24.7	24.2	25.0	25.4	24.3	25.1	24.7	25.5	25.9
6H	24.0	24.8	24.4	25.1	25.5	24.4	25.2	24.9	25.6	26.0
8H	24.0	24.7	24.4	25.1	25.5	24.5	25.2	24.9	25.6	26.0
12H	24.0	24.7	24.4	25.1	25.5	24.4	25.1	24.9	25.5	26.0
4H 2H	22.7	23.6	23.1	23.9	24.3	22.9	23.8	23.3	24.1	24.5
3H	24.2	24.9	24.6	25.3	25.7	24.5	25.3	25.0	25.7	26.1
4H	24.7	25.3	25.1	25.7	26.2	25.0	25.7	25.5	26.1	26.6
6H	24.9	25.4	25.4	25.9	26.4	25.3	25.9	25.8	26.3	26.8
8H	24.9	25.4	25.4	25.9	26.3	25.3	25.8	25.8	26.3	26.8
12H	24.9	25.3	25.4	25.8	26.3	25.3	25.7	25.8	26.2	26.7
8H 4H	24.8	25.3	25.3	25.8	26.3	25.2	25.7	25.6	26.1	26.6
6H	25.1	25.5	25.6	26.0	26.5	25.5	25.9	26.0	26.4	26.9
8H	25.2	25.5	25.7	26.0	26.5	25.5	25.9	26.1	26.4	26.9
12H	25.2	25.5	25.7	26.0	26.5	25.5	25.8	26.0	26.3	26.9
12H 4H	24.8	25.2	25.3	25.7	26.2	25.1	25.6	25.6	26.1	26.5
6H	25.1	25.5	25.6	25.9	26.5	25.5	25.8	26.0	26.3	26.8
8H	25.2	25.5	25.7	26.0	26.5	25.5	25.8	26.1	26.3	26.9
CIE190: 2010										

CIE190: 2010
Area: 0.08135 m2

C Range: 0 - 360DEG
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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=0.4556]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

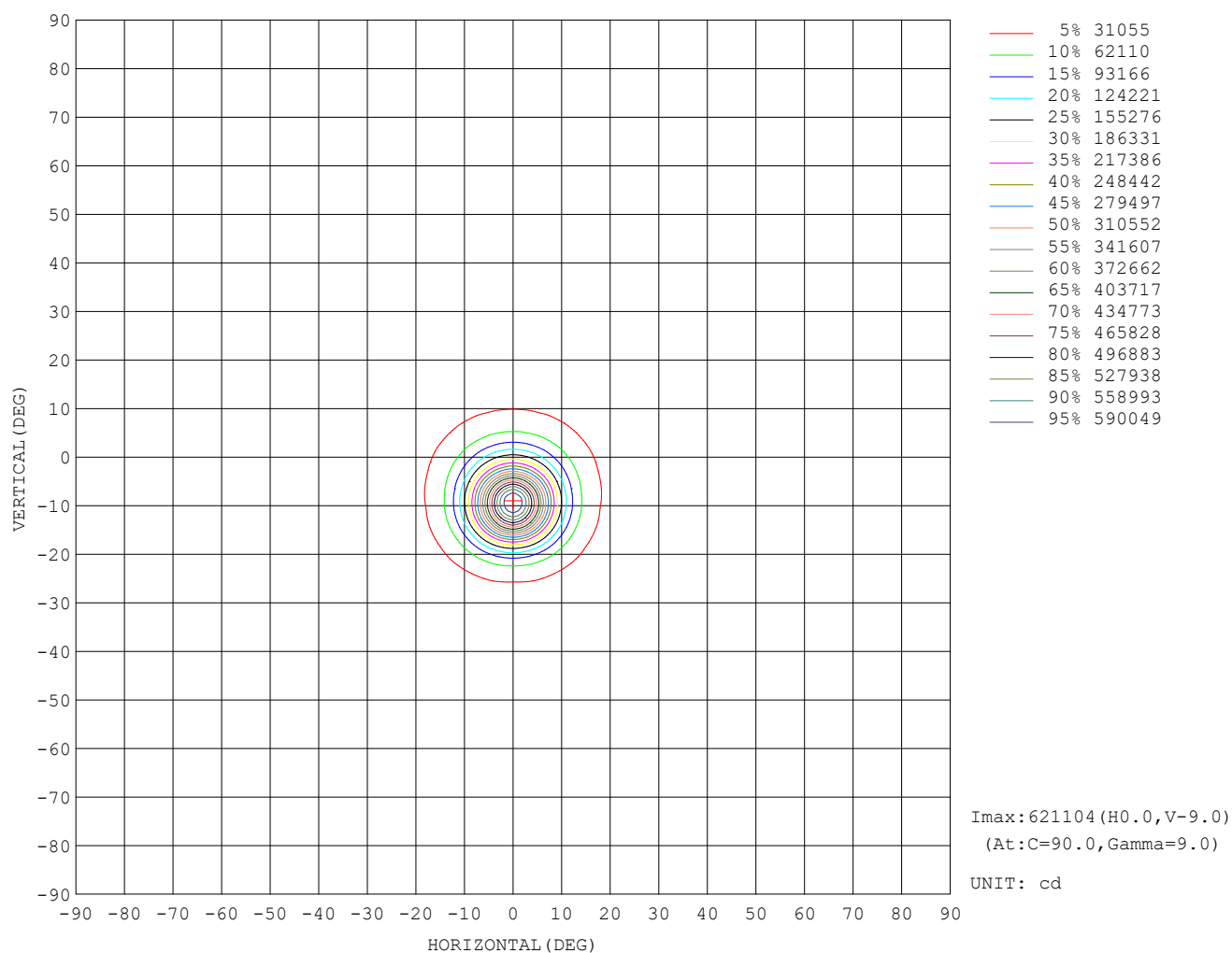
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	84	77	73	83	77	73	83	76	73	69
0.80	92	85	81	91	85	81	90	84	80	76
1.00	96	90	86	95	90	86	94	90	85	81
1.25	101	95	91	100	94	91	98	93	90	85
1.50	104	98	95	102	98	94	100	96	93	88
2.00	107	102	99	105	101	98	103	99	96	91
2.50	109	105	101	107	103	100	104	101	98	92
3.00	111	107	104	109	105	103	105	103	100	94
4.00	113	110	107	111	108	106	107	105	103	96
5.00	114	112	110	112	110	108	108	107	105	97
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=0.4556]
 Remarks:

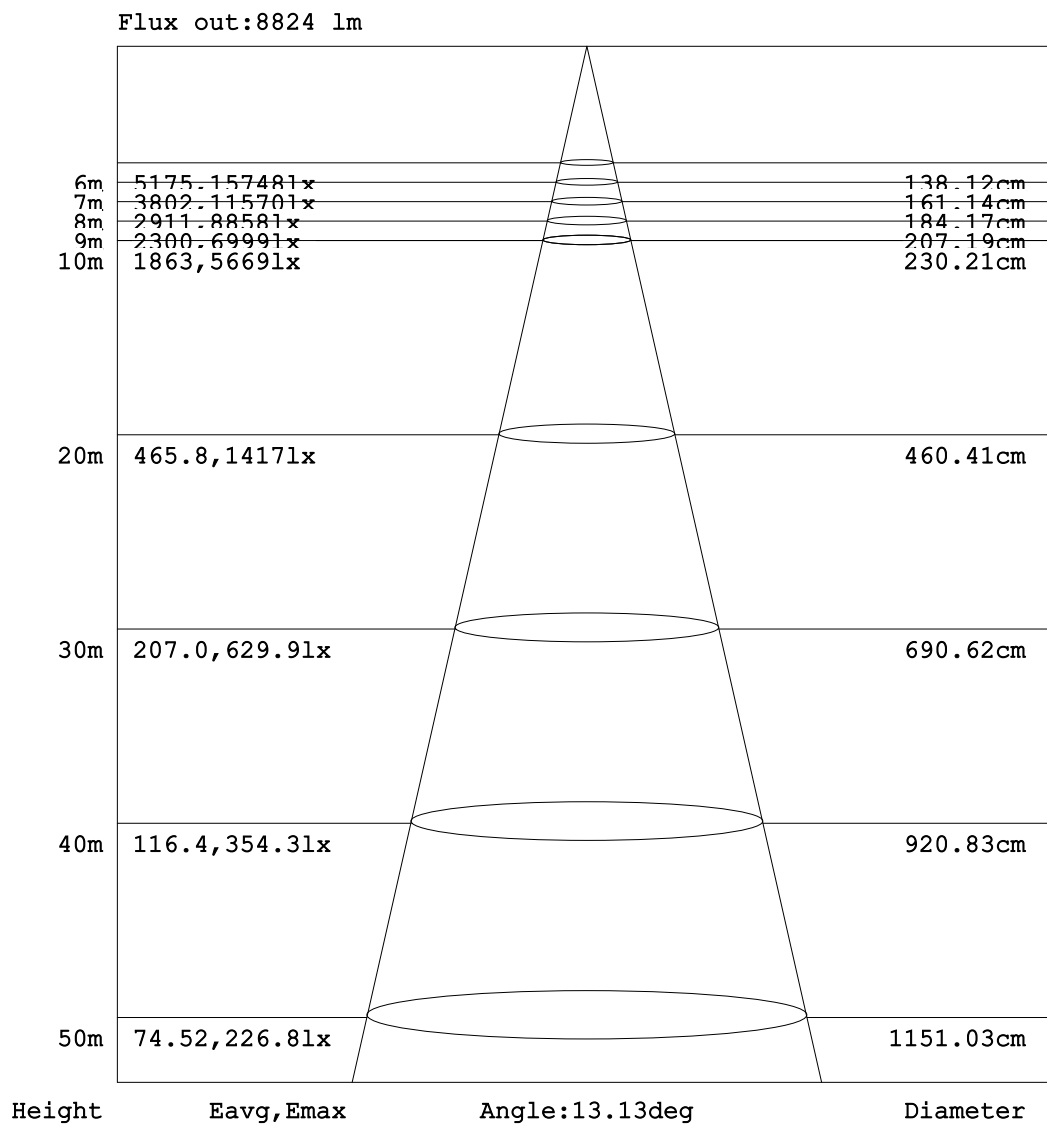
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:LYJ
Test Date:2023-03-09

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Remarks:

AAI Figure



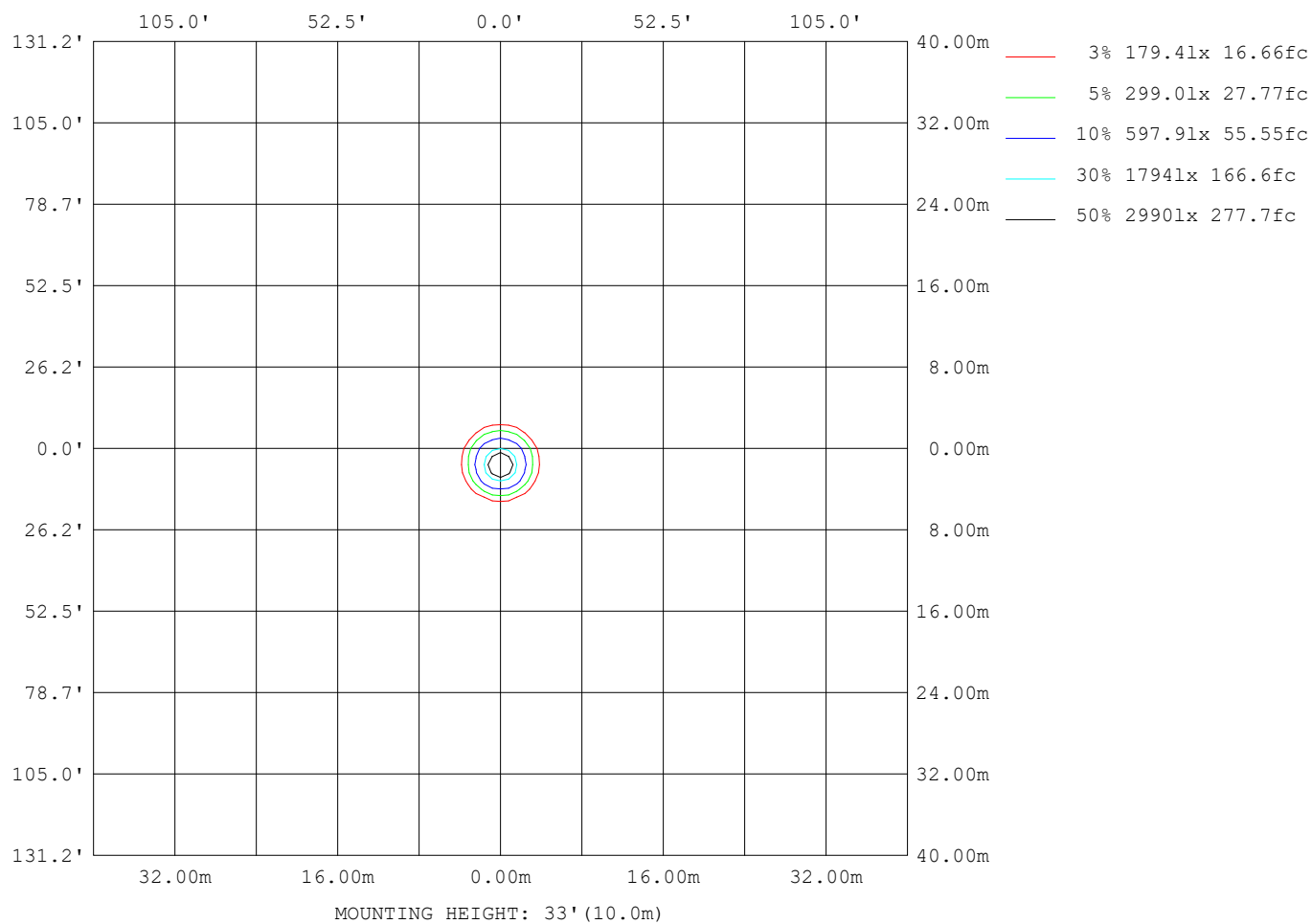
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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C Interval: 5.0DEG
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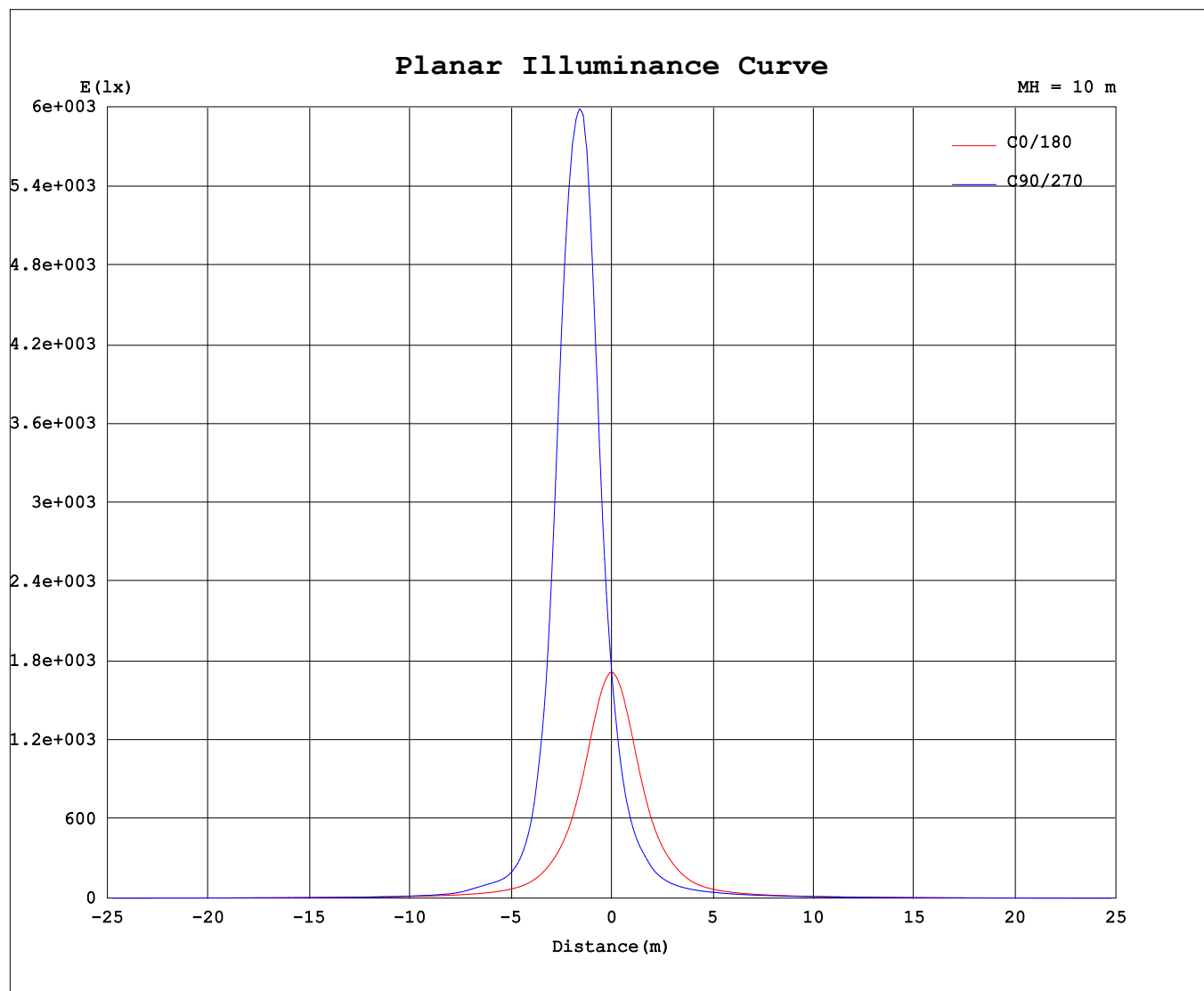
ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: LYJ
Test Date: 2023-03-09

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.465
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Test Distance: 26.000m [K=0.4556]
Remarks:

Planar Illuminance Curve



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Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.465
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