

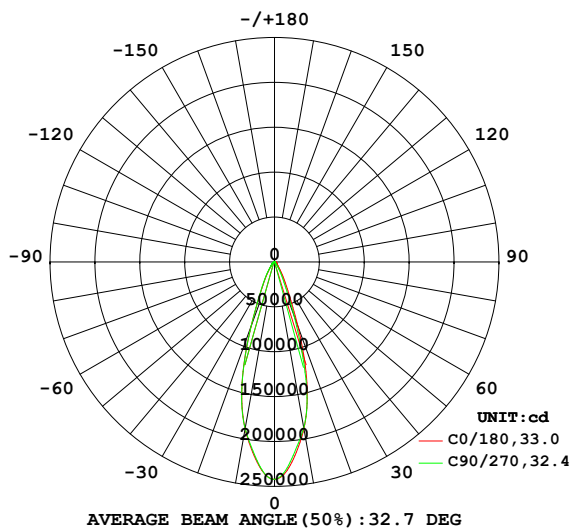
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

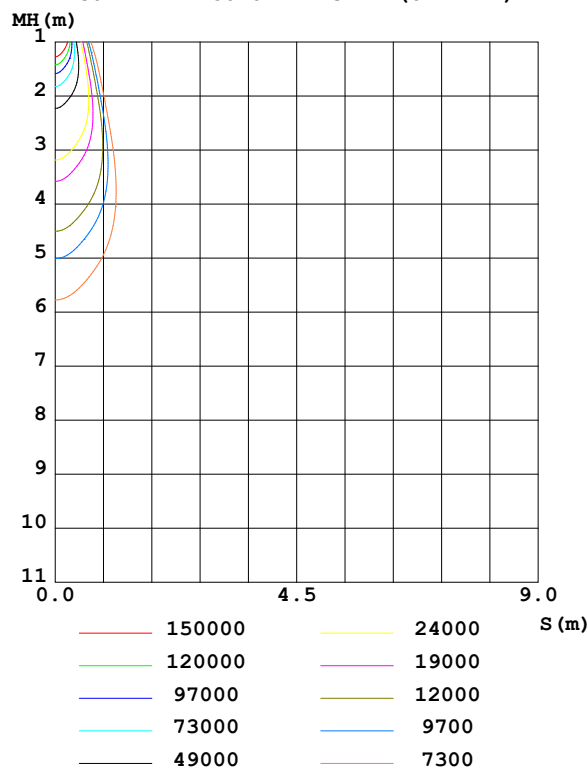
Test:U:230.0V I:2.665A P:600.0W PF:0.979 Freq:50.01Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:87515.3x1 lm		
NAME: SP04-600-5770-F04003Z+L130	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 145.86 lm/W			
MODEL	/	I _{max} (cd)	242107	S/MH (C0/180)	0.52
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	0.52
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	87515	η UP,DN (C0-180)	0.0,46.8
NOMINAL FLUX (lm)	87515.3	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,53.2
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	/	η down (%)	100.0	CIBSE SHR MAX	0.50

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:LYJ
Test Date:2023-03-07

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	1885	1886	1876	1886	1885	1882	1885	1882	0- 10	20118	20118	23,23
20	762.4	746.5	639.4	746.5	762.4	768.2	758.8	768.2	10- 20	36742	56860	65,65
30	194.7	176.4	120.0	176.4	194.7	229.0	209.2	229.0	20- 30	17003	73864	84.4,84.4
40	63.48	46.69	25.55	46.69	63.48	81.00	69.94	81.00	30- 40	6834	80698	92.2,92.2
50	37.80	17.19	4.206	17.19	37.80	44.40	39.00	44.40	40- 50	3237	83934	95.9,95.9
60	24.02	2.641	0.2126	2.641	24.02	25.58	22.97	25.58	50- 60	2011	85945	98.2,98.2
70	11.19	0.2733	0.1144	0.2733	11.19	11.69	9.101	11.69	60- 70	1089	87035	99.5,99.5
80	2.377	0.0740	0.0158	0.0740	2.377	3.066	2.894	3.066	70- 80	413.1	87448	99.9,99.9
90	0	0	0	0	0	0	0	0	80- 90	67.41	87515	100,100
100	0	0	0	0	0	0	0	0	90-100	0	87515	100,100
110	0	0	0	0	0	0	0	0	100-110	0	87515	100,100
120	0	0	0	0	0	0	0	0	110-120	0	87515	100,100
130	0	0	0	0	0	0	0	0	120-130	0	87515	100,100
140	0	0	0	0	0	0	0	0	130-140	0	87515	100,100
150	0	0	0	0	0	0	0	0	140-150	0	87515	100,100
160	0	0	0	0	0	0	0	0	150-160	0	87515	100,100
170	0	0	0	0	0	0	0	0	160-170	0	87515	100,100
180	0	0	0	0	0	0	0	0	170-180	0	87515	100,100
DEG	LUMINOUS INTENSITY:X100cd									UNIT:lm		

Conical surface Flux(90deg): 82514 lm

%lum = 94.3%

%lamp = 94.3%

Conical surface Flux(120deg): 85945 lm

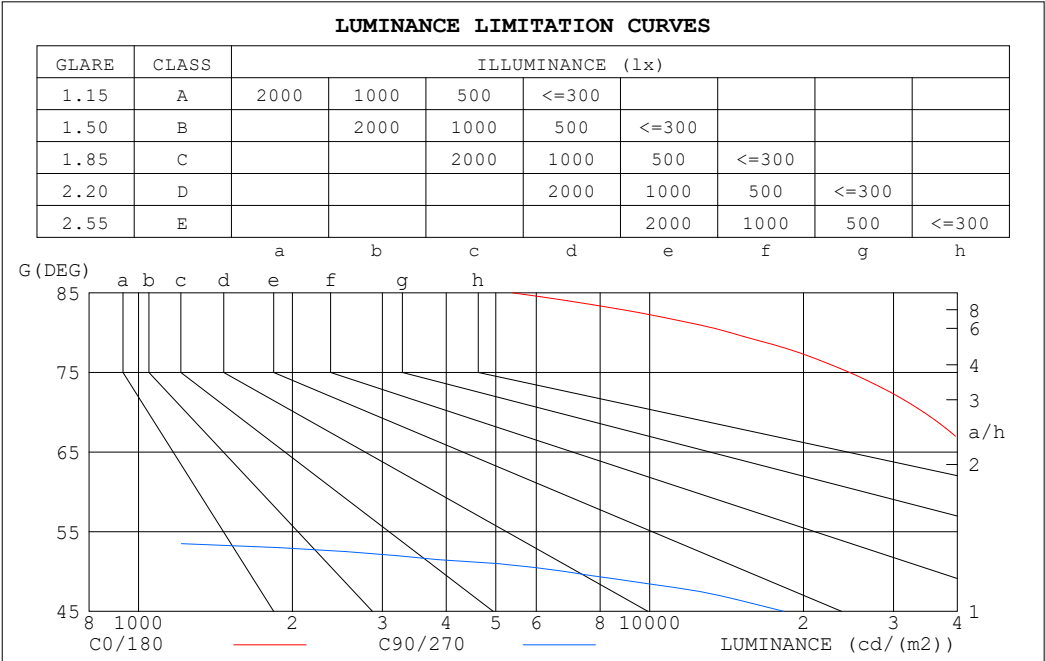
%lum = 98.2%

%lamp = 98.2%

C Range: 0 - 360DEG
C Interval: 15.0DEG
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Operators:LYJ
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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:

LUMINANCE LIMITATION CURVES



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	5393	193
80	14382	95
75	24625	113
70	34386	349
65	42944	504
60	50463	444
55	56690	432
50	61776	6832
45	68798	18305

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature:25.3°C

Operators:LYJ

Test Date:2023-03-07

γ Range: 0 - 180DEG

γ Interval: 0.5DEG

Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465

Humidity:65.0%

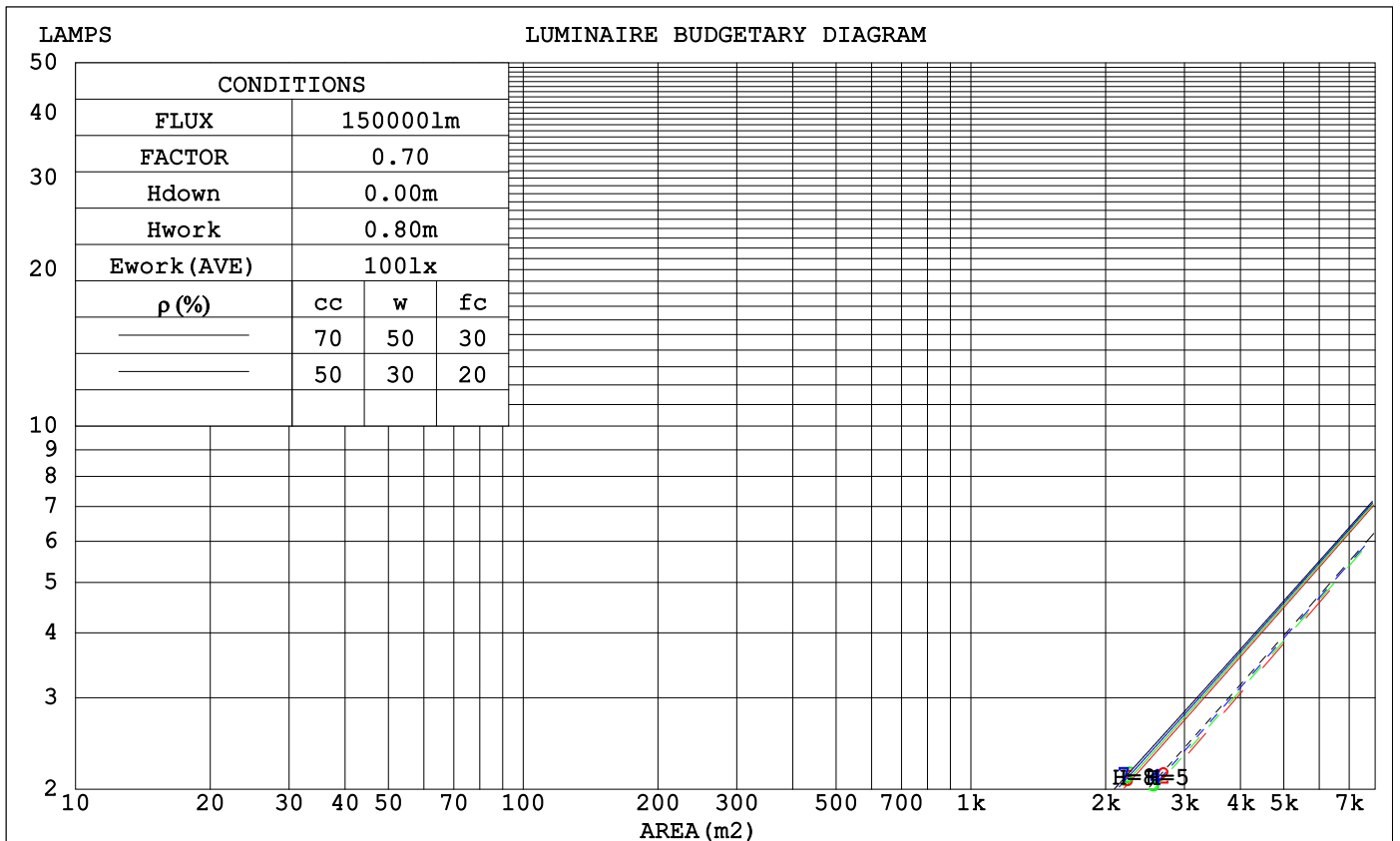
Test Distance:26.000m [K=0.4556]

Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	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	1.00	.97	1.00	.97	.95	.97	.95	.93	.94	.93	.91	.90
3.0	.99	.95	.91	.98	.94	.91	.95	.92	.89	.93	.90	.88	.91	.88	.87	.85
4.0	.94	.89	.86	.93	.89	.85	.91	.87	.84	.89	.86	.83	.87	.85	.82	.81
5.0	.90	.85	.81	.89	.84	.81	.87	.83	.80	.85	.82	.79	.84	.81	.78	.77
6.0	.85	.80	.77	.85	.80	.77	.83	.79	.76	.82	.78	.76	.81	.78	.75	.74
7.0	.82	.77	.73	.81	.76	.73	.80	.76	.73	.79	.75	.72	.78	.74	.72	.71
8.0	.78	.73	.70	.78	.73	.70	.77	.73	.70	.76	.72	.69	.75	.72	.69	.68
9.0	.75	.70	.67	.75	.70	.67	.74	.70	.67	.73	.69	.67	.73	.69	.66	.65
10.0	.73	.68	.65	.72	.68	.64	.71	.67	.64	.71	.67	.64	.70	.67	.64	.63



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 C Interval: 15.0DEG
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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%
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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	.161	.092	.029	.155	.088	.028	.142	.082	.026	.131	.075	.024	.120	.070	.022		
2.0	.152	.083	.026	.146	.081	.025	.136	.076	.023	.126	.071	.022	.118	.066	.021		
3.0	.143	.076	.023	.138	.074	.022	.129	.070	.021	.121	.066	.020	.114	.063	.019		
4.0	.134	.070	.021	.131	.068	.020	.123	.065	.019	.116	.062	.019	.109	.059	.018		
5.0	.127	.065	.019	.124	.063	.018	.117	.061	.018	.111	.059	.017	.105	.056	.017		
6.0	.120	.060	.017	.117	.059	.017	.112	.057	.017	.106	.055	.016	.101	.053	.016		
7.0	.114	.056	.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	.104	.050	.014	.102	.050	.014	.098	.048	.014	.094	.047	.014	.091	.046	.013		
10.0	.099	.048	.013	.098	.047	.013	.094	.046	.013	.091	.045	.013	.088	.044	.013		

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	.170	.157	.146	.145	.135	.126	.100	.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	.082	.068	.056	.048	.040	.033	.015	.013	.011	
4.0	.129	.098	.075	.110	.085	.065	.076	.059	.046	.044	.035	.027	.014	.011	.009	
5.0	.119	.086	.063	.102	.075	.054	.070	.052	.038	.041	.031	.023	.013	.010	.008	
6.0	.111	.077	.053	.095	.067	.046	.066	.047	.032	.038	.027	.019	.012	.009	.006	
7.0	.103	.069	.045	.089	.060	.039	.061	.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	.092	.057	.033	.079	.049	.029	.055	.035	.021	.032	.021	.012	.010	.007	.004	
10.0	.087	.052	.029	.075	.045	.026	.052	.032	.018	.030	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
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 Operators:LYJ
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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:

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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	18.7	19.7	19.1	20.0	20.3	15.5	15.5	15.5	15.5	15.5
3H	19.6	20.5	20.0	20.8	21.2	15.5	15.5	15.5	15.5	15.5
4H	19.8	20.6	20.2	20.9	21.3	15.5	15.5	15.5	15.5	15.5
6H	19.8	20.6	20.2	20.9	21.3	15.5	15.5	15.5	15.5	15.5
8H	19.8	20.5	20.2	20.9	21.3	15.5	15.5	15.5	15.5	15.5
12H	19.7	20.4	20.2	20.8	21.2	15.5	15.5	15.5	15.5	15.5
4H 2H	18.4	19.2	18.8	19.6	20.0	15.5	15.5	15.5	15.5	15.5
3H	19.3	20.0	19.7	20.4	20.8	15.5	15.5	15.5	15.5	15.5
4H	19.5	20.1	19.9	20.5	20.9	15.5	15.5	15.5	15.5	15.5
6H	19.5	20.0	20.0	20.5	20.9	15.5	15.5	15.5	15.5	15.5
8H	19.5	19.9	19.9	20.4	20.9	15.5	15.5	15.5	15.5	15.5
12H	19.4	19.8	19.9	20.3	20.8	15.5	15.5	15.5	15.5	15.5
8H 4H	19.3	19.8	19.8	20.2	20.7	15.5	15.5	15.5	15.5	15.5
6H	19.3	19.7	19.8	20.2	20.7	15.5	15.5	15.5	15.5	15.5
8H	19.3	19.6	19.8	20.1	20.6	15.5	15.5	15.5	15.5	15.5
12H	19.2	19.5	19.7	20.0	20.6	15.5	15.5	15.5	15.5	15.5
12H 4H	19.2	19.6	19.7	20.1	20.6	15.5	15.5	15.5	15.5	15.5
6H	19.2	19.6	19.8	20.0	20.6	15.5	15.5	15.5	15.5	15.5
8H	19.2	19.5	19.7	20.0	20.6	15.5	15.5	15.5	15.5	15.5
CIE190: 2010										

CIE190: 2010
Area: 0.0957 m2

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:LYJ
Test Date:2023-03-07

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

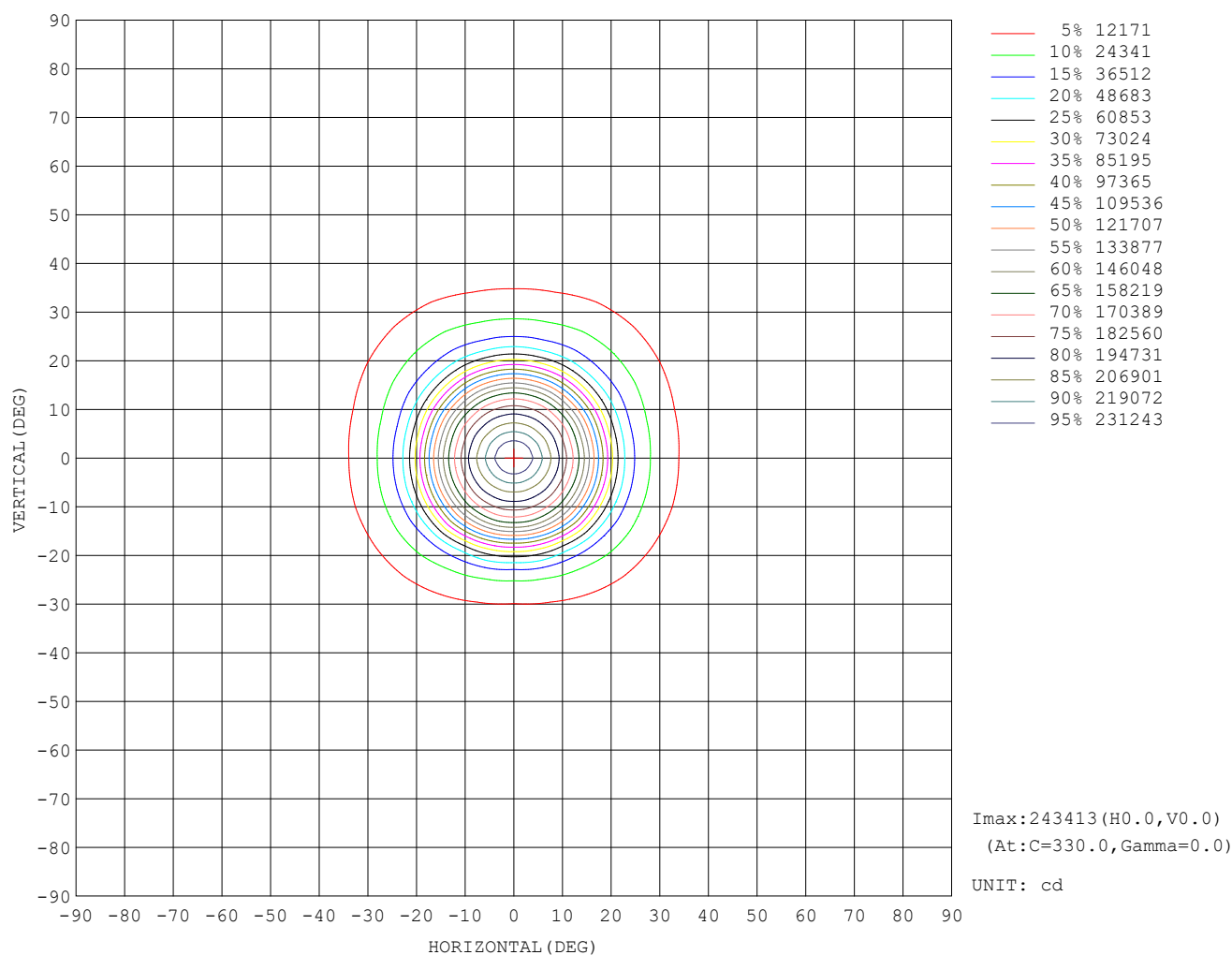
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	87	80	76	86	80	76	85	80	76	72
0.80	94	88	84	93	88	84	92	87	84	80
1.00	99	93	89	98	92	89	96	92	88	84
1.25	103	97	94	102	97	93	100	96	93	88
1.50	105	101	97	104	100	97	102	98	96	91
2.00	108	104	101	107	103	100	104	101	98	93
2.50	110	106	103	108	105	102	105	102	100	94
3.00	112	108	105	110	107	104	106	104	102	96
4.00	114	111	109	112	109	107	108	106	104	97
5.00	115	113	111	113	111	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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 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.465
 Humidity: 65.0%
 Test Distance: 26.000m [K=0.4556]
 Remarks:

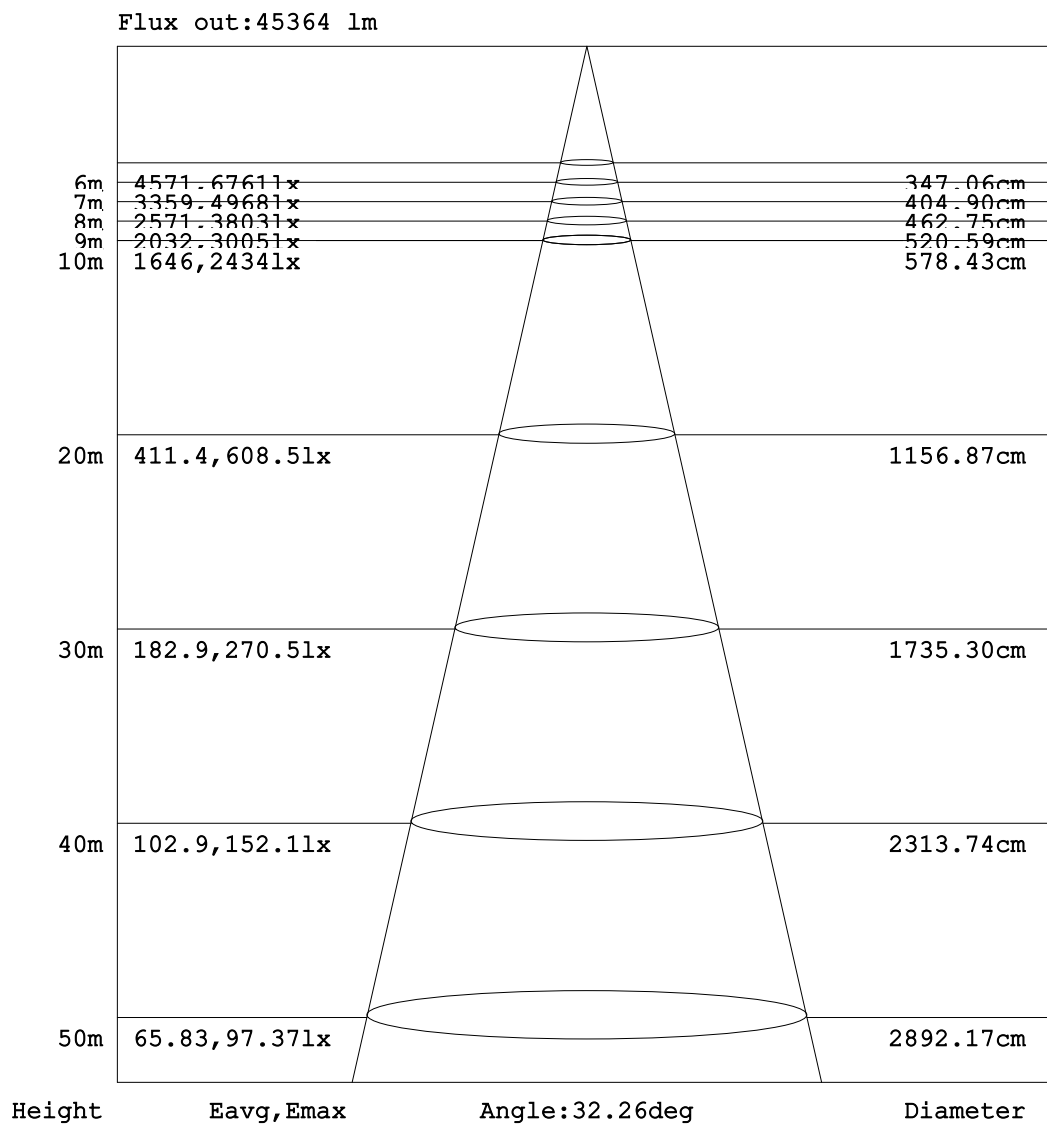
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
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Test Date:2023-03-07

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Remarks:

AAI Figure



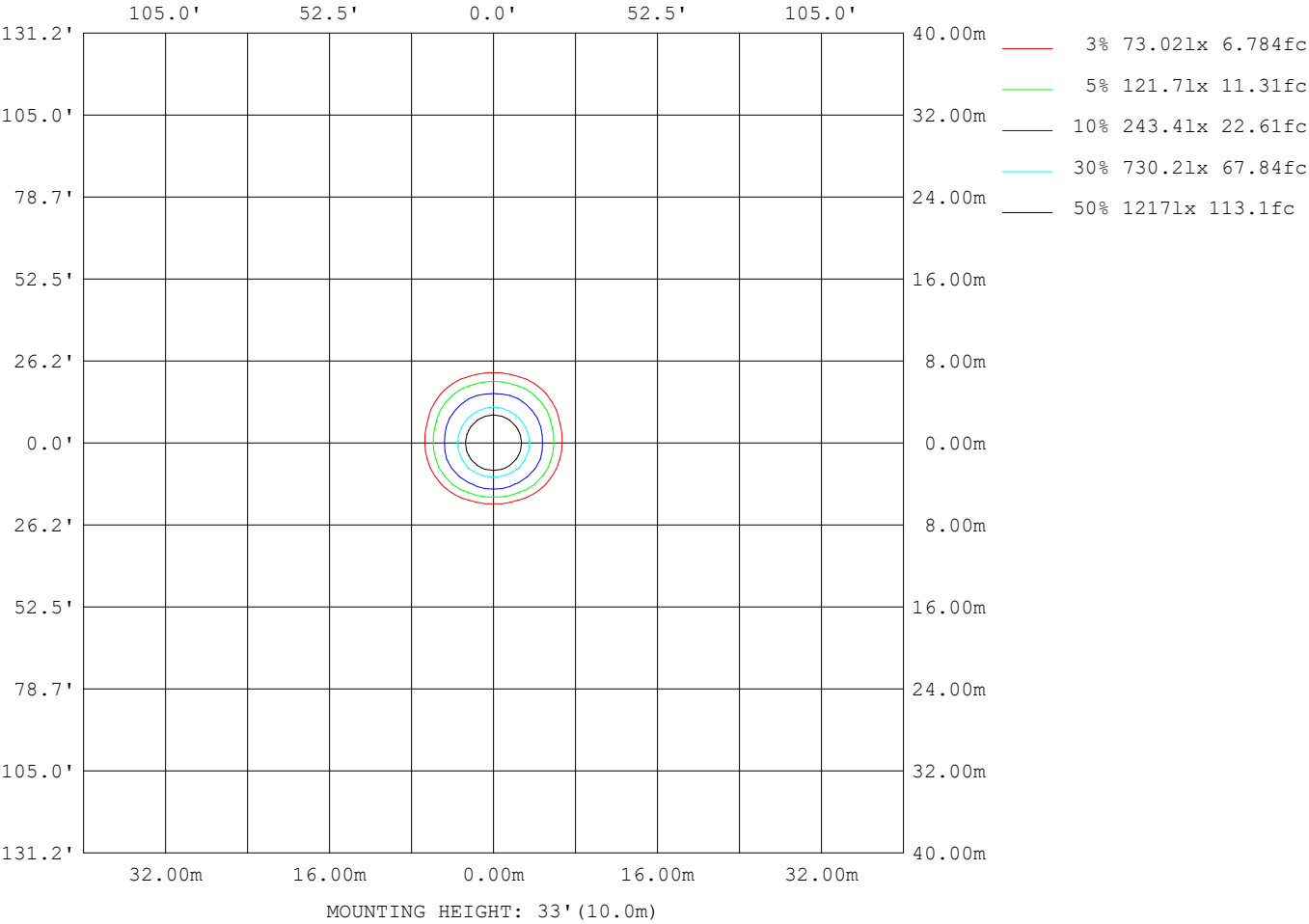
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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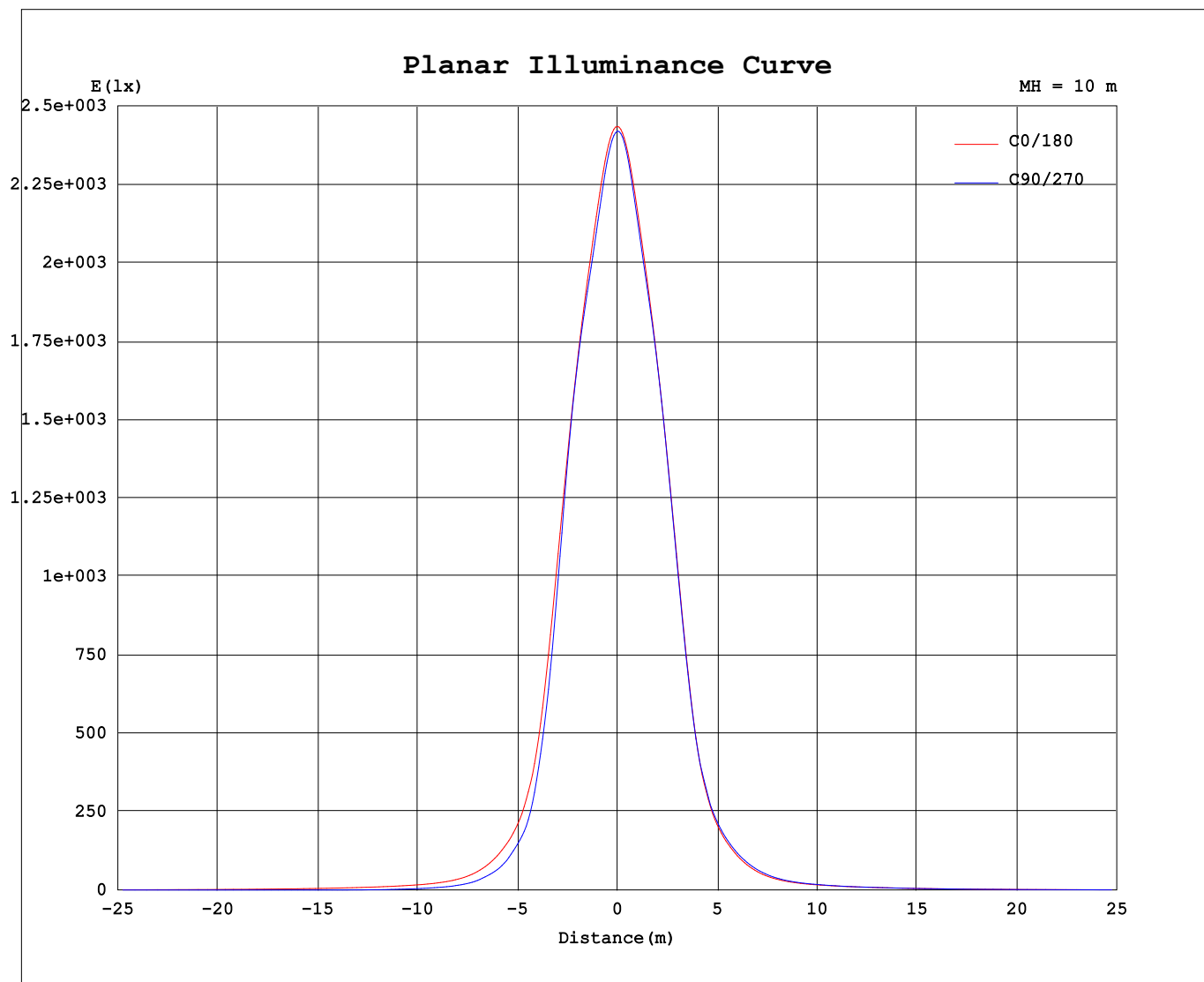
ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:LYJ
Test Date:2023-03-07

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Humidity:65.0%
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Remarks:

Planar Illuminance Curve



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Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Humidity: 65.0%
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Remarks: