

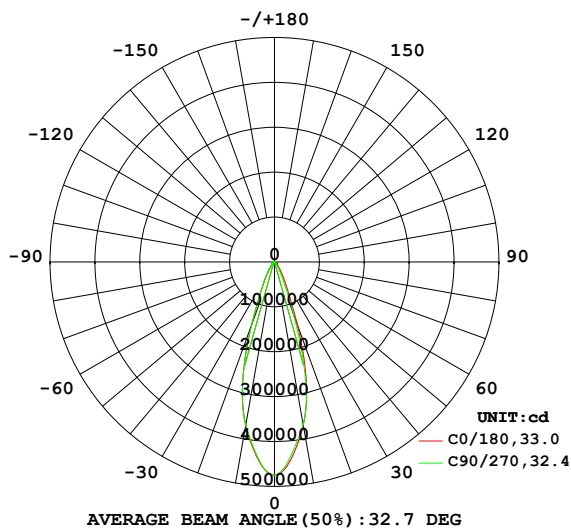
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

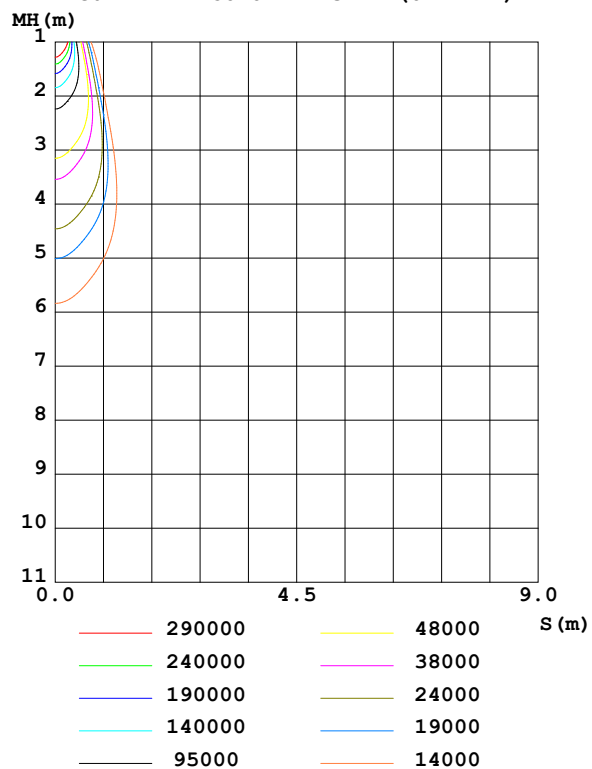
Test:U:230.0V I:5.324A P:1200.0W PF:0.980 Freq:50.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:171516x1 lm		
NAME: SP04-1K2-5770-F04003Z+L130	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 142.93 lm/W			
MODEL	/	Imax (cd)	474493	S/MH (C0/180)	0.52
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	0.52
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	171516	η UP,DN (C0-180)	0.0,46.8
NOMINAL FLUX (lm)	171516	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	3695	3697	3677	3697	3695	3687	3694	3687	0- 10	39429	39429	23,23
20	1494	1463	1253	1463	1494	1506	1487	1506	10- 20	72009	111438	65,65
30	381.6	345.7	235.2	345.7	381.6	448.9	410.0	448.9	20- 30	33324	144761	84.4,84.4
40	124.4	91.51	50.07	91.51	124.4	158.8	137.1	158.8	30- 40	13393	158155	92.2,92.2
50	74.08	33.68	8.242	33.68	74.08	87.01	76.43	87.01	40- 50	6343	164498	95.9,95.9
60	47.07	5.176	0.4166	5.176	47.07	50.12	45.01	50.12	50- 60	3941	168439	98.2,98.2
70	21.94	0.5356	0.2243	0.5356	21.94	22.92	17.84	22.92	60- 70	2135	170575	99.5,99.5
80	4.659	0.1451	0.0310	0.1451	4.659	6.008	5.672	6.008	70- 80	809.7	171384	99.9,99.9
90	0	0	0	0	0	0	0	0	80- 90	132.1	171516	100,100
100	0	0	0	0	0	0	0	0	90-100	0	171516	100,100
110	0	0	0	0	0	0	0	0	100-110	0	171516	100,100
120	0	0	0	0	0	0	0	0	110-120	0	171516	100,100
130	0	0	0	0	0	0	0	0	120-130	0	171516	100,100
140	0	0	0	0	0	0	0	0	130-140	0	171516	100,100
150	0	0	0	0	0	0	0	0	140-150	0	171516	100,100
160	0	0	0	0	0	0	0	0	150-160	0	171516	100,100
170	0	0	0	0	0	0	0	0	160-170	0	171516	100,100
180	0	0	0	0	0	0	0	0	170-180	0	171516	100,100
DEG	LUMINOUS INTENSITY:X100cd									UNIT:lm		

Conical surface Flux(90deg): 1.6172e+005 lm

%lum = 94.3%

%lamp = 94.3%

Conical surface Flux(120deg): 1.6844e+005 lm

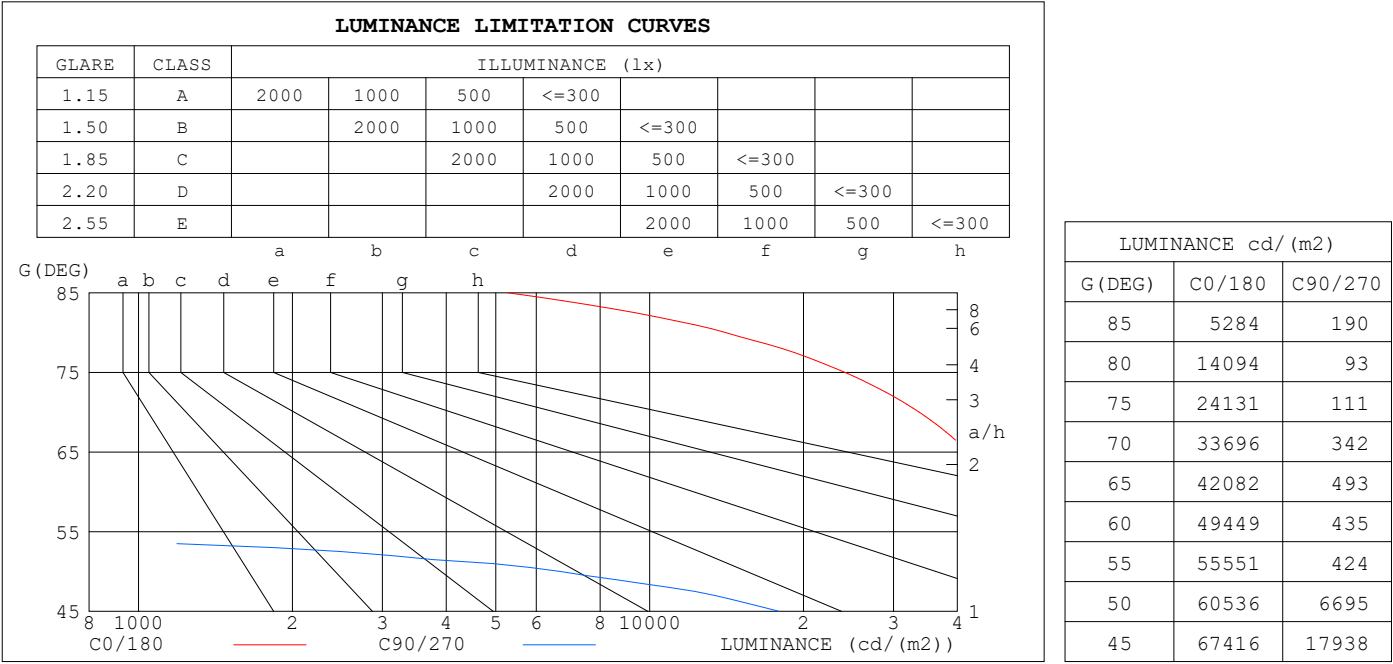
%lum = 98.2%

%lamp = 98.2%

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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



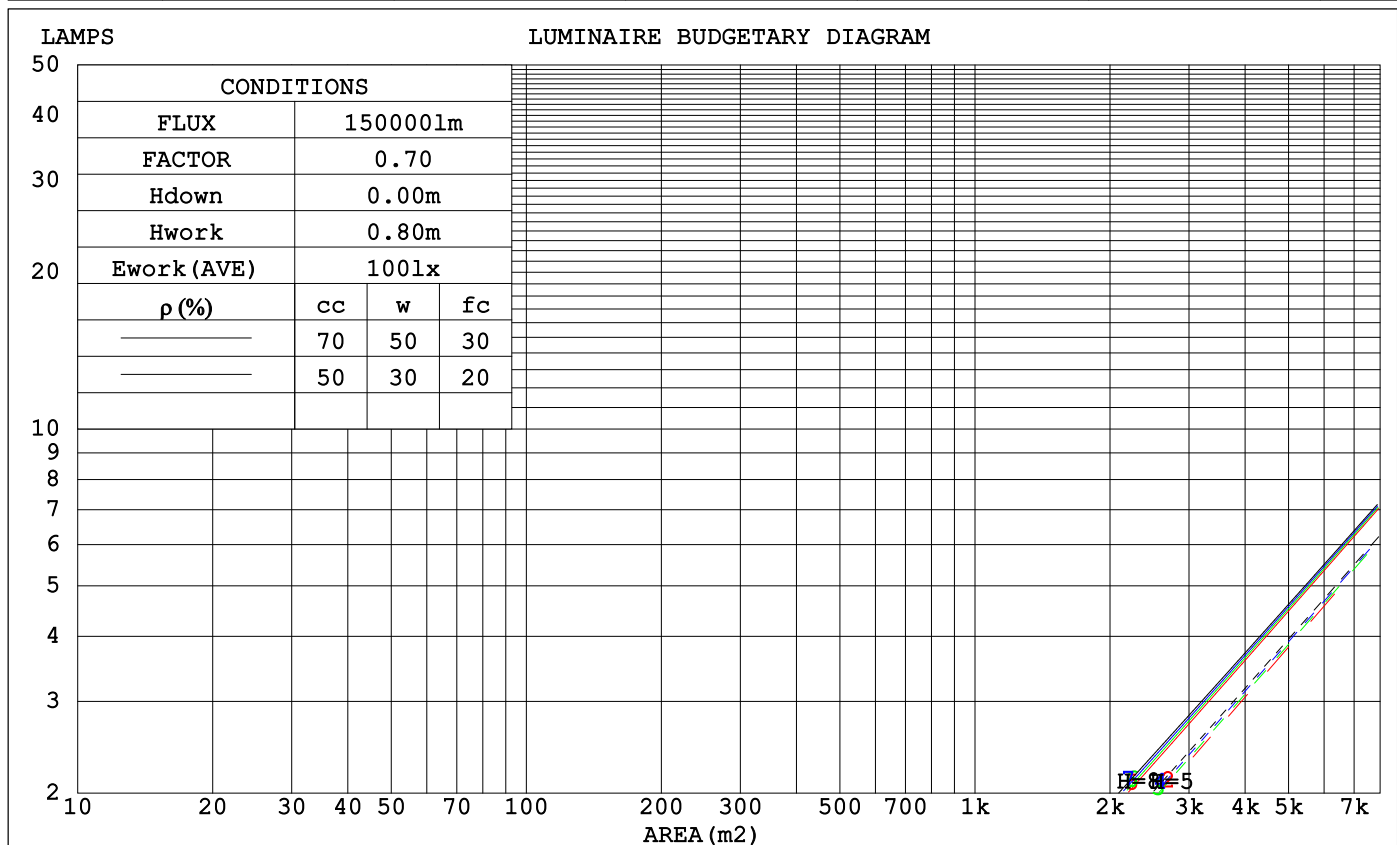
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Operators:LYJ
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Remarks:

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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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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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	.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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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	2H	18.6	19.6	19.0	20.0	20.3	17.9	17.9	17.9	17.9	17.9
	3H	19.6	20.4	19.9	20.8	21.1	17.9	17.9	17.9	17.9	17.9
	4H	19.7	20.5	20.1	20.9	21.3	17.9	17.9	17.9	17.9	17.9
	6H	19.7	20.5	20.2	20.9	21.3	17.9	17.9	17.9	17.9	17.9
	8H	19.7	20.4	20.1	20.8	21.2	17.9	17.9	17.9	17.9	17.9
	12H	19.7	20.3	20.1	20.7	21.1	17.9	17.9	17.9	17.9	17.9
	4H	2H	18.3	19.2	18.8	19.5	19.9	17.9	17.9	17.9	17.9
	3H	19.2	19.9	19.7	20.3	20.7	17.9	17.9	17.9	17.9	17.9
	4H	19.4	20.0	19.8	20.4	20.9	17.9	17.9	17.9	17.9	17.9
	6H	19.4	19.9	19.9	20.4	20.9	17.9	17.9	17.9	17.9	17.9
	8H	19.4	19.9	19.9	20.3	20.8	17.9	17.9	17.9	17.9	17.9
	12H	19.3	19.7	19.8	20.2	20.7	17.9	17.9	17.9	17.9	17.9
	8H	4H	19.2	19.7	19.7	20.1	20.6	17.9	17.9	17.9	17.9
	6H	19.2	19.6	19.7	20.1	20.6	17.9	17.9	17.9	17.9	17.9
	8H	19.2	19.5	19.7	20.0	20.5	17.9	17.9	17.9	17.9	17.9
	12H	19.2	19.4	19.7	19.9	20.5	17.9	17.9	17.9	17.9	17.9
	12H	4H	19.1	19.6	19.6	20.0	20.5	17.9	17.9	17.9	17.9
	6H	19.2	19.5	19.7	20.0	20.5	17.9	17.9	17.9	17.9	17.9
	8H	19.1	19.4	19.7	19.9	20.5	17.9	17.9	17.9	17.9	17.9
CIE190: 2010											

CIE190: 2010
Area: 0.1914 m2

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
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γ Range: 0 - 180DEG
γ Interval: 0.5DEG
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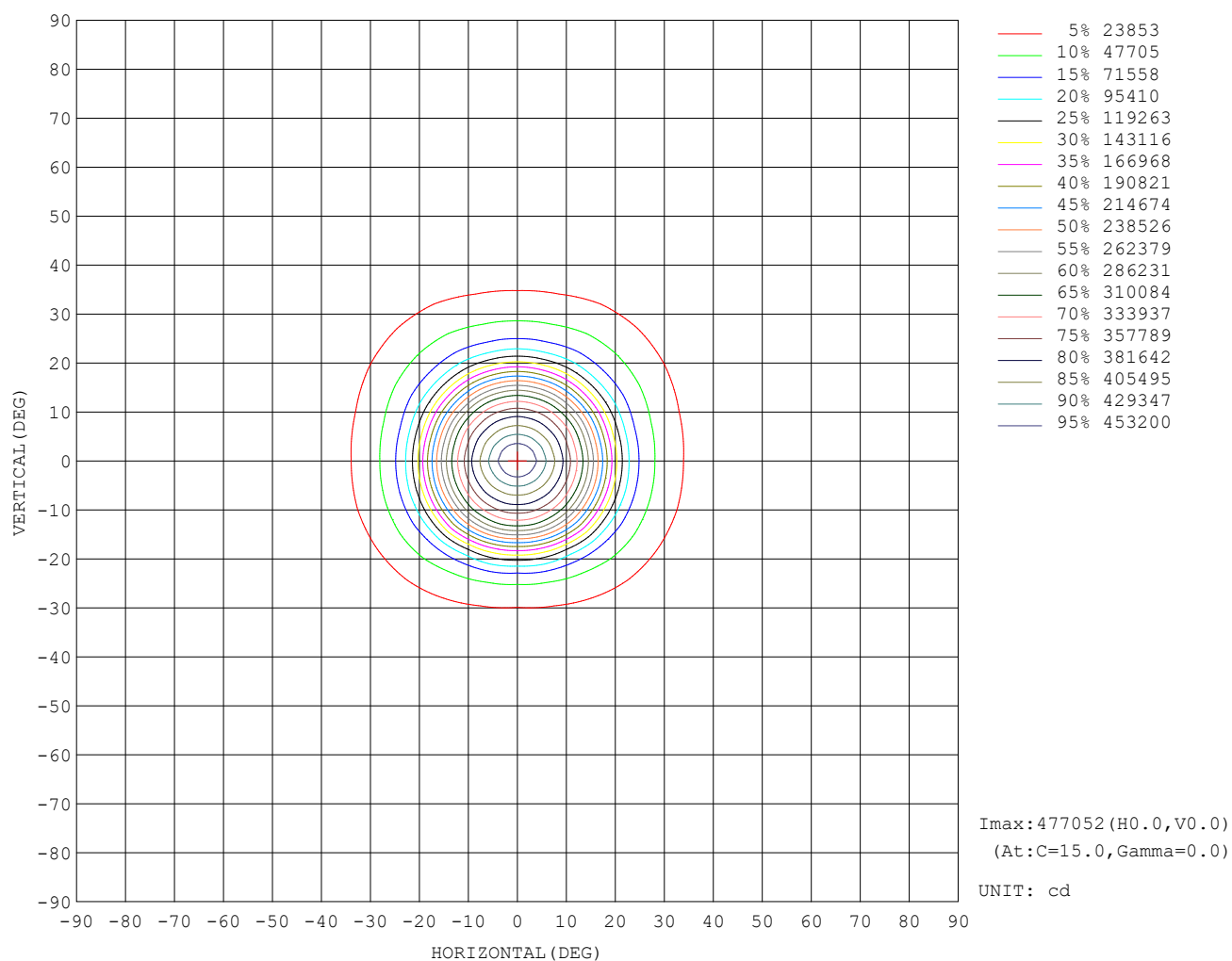
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	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%
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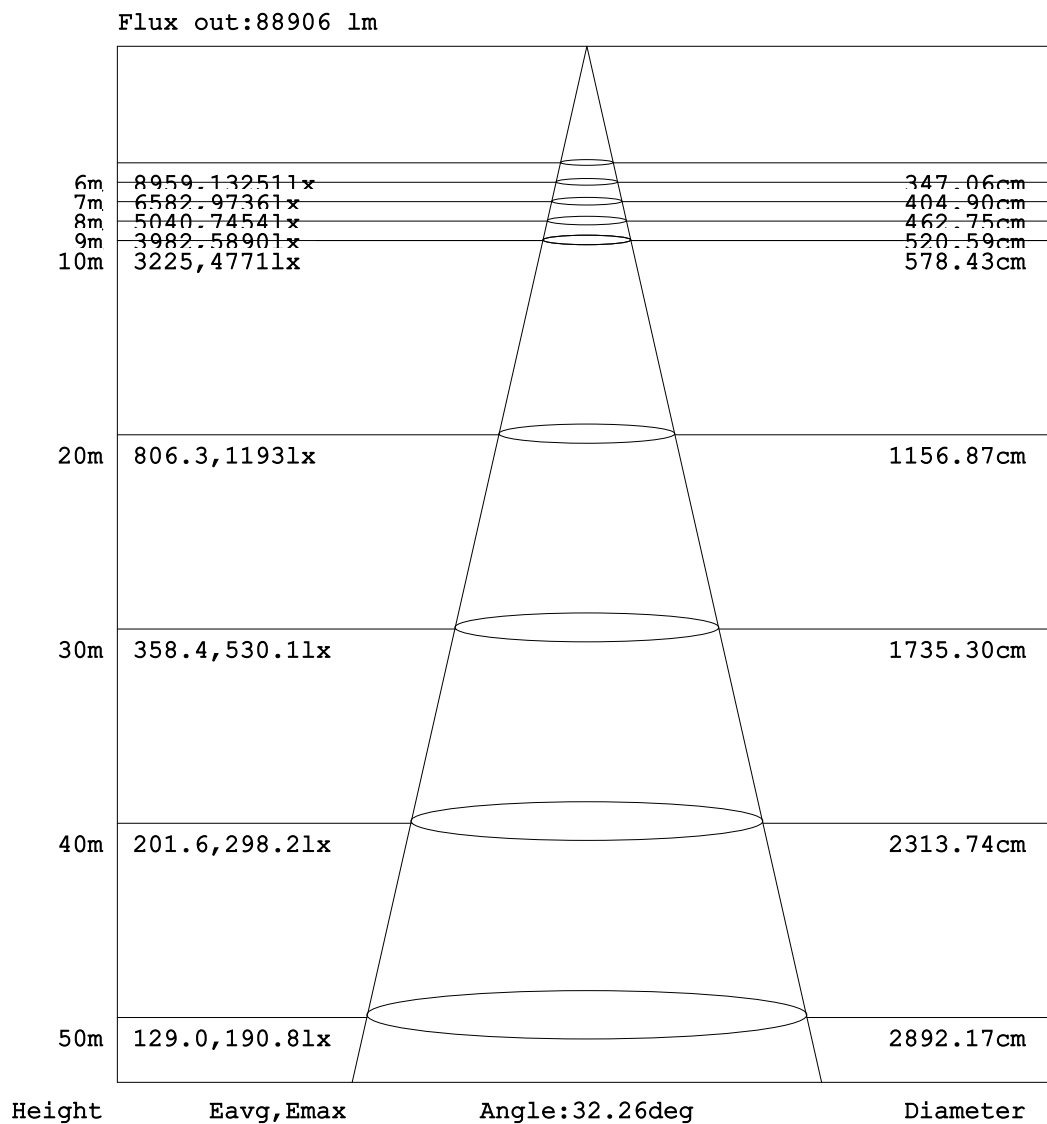
ISOCANDELA DIAGRAM



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Remarks:

AAI Figure



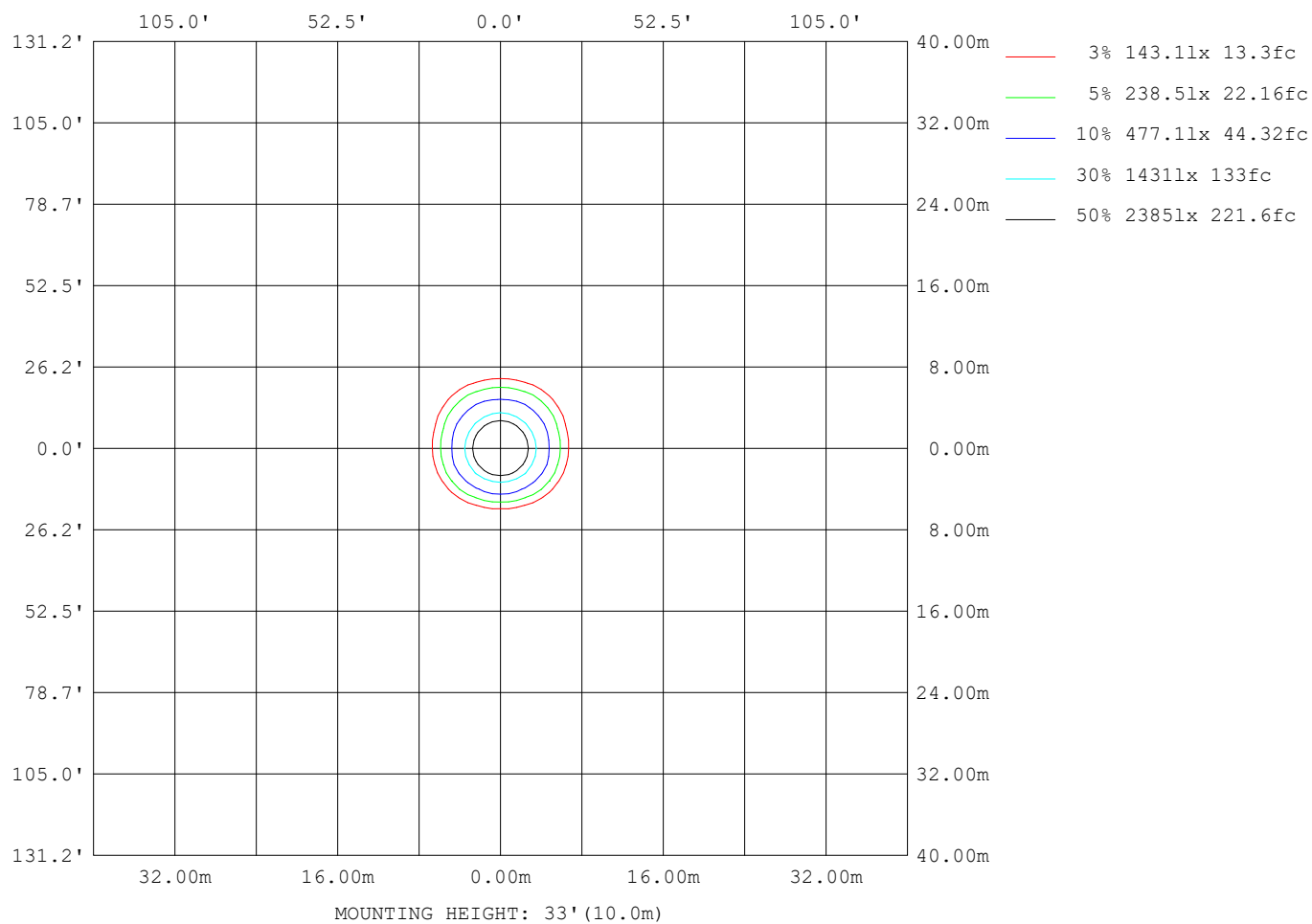
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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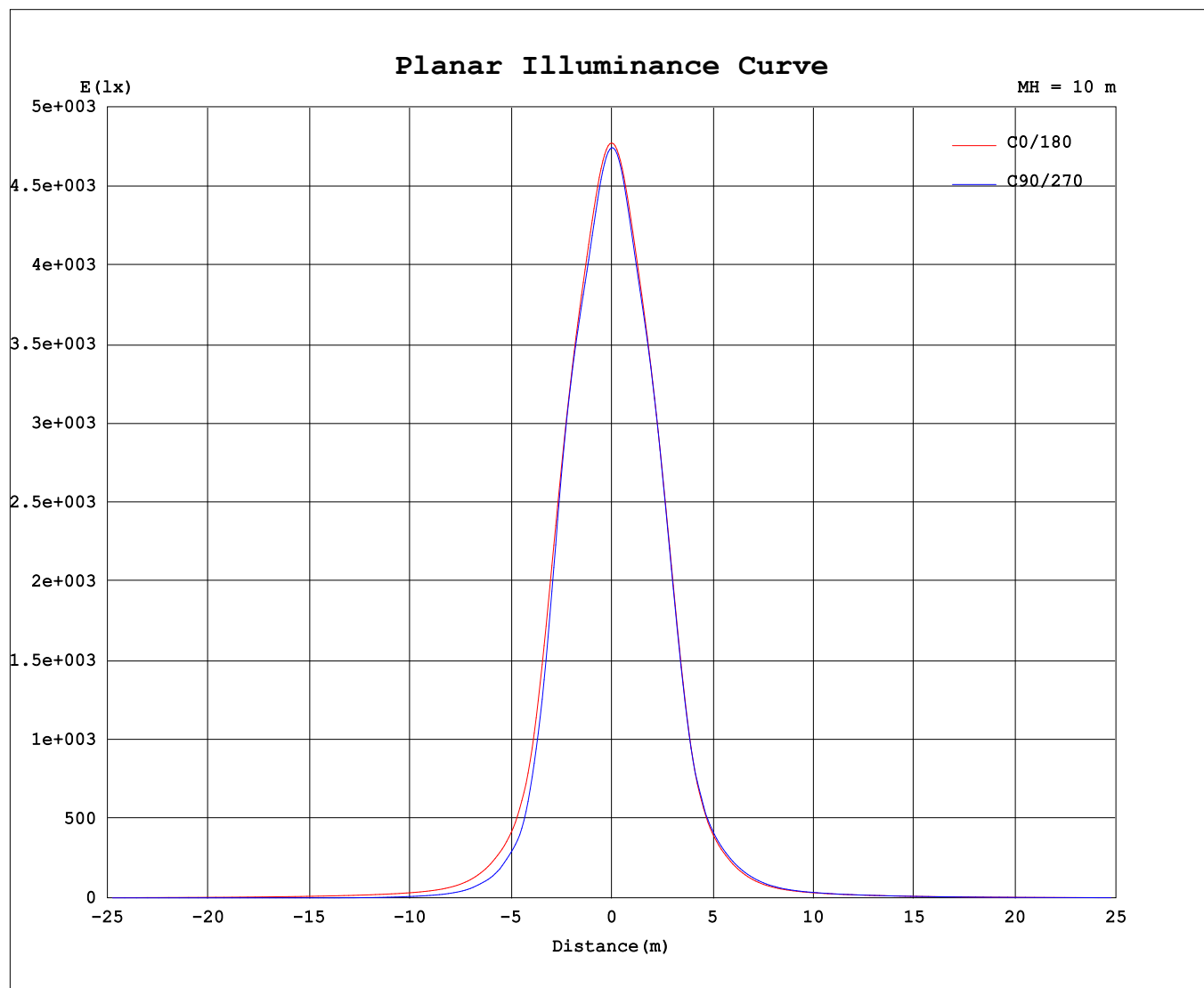
ISOLUX DIAGRAM



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%
Test Distance: 26.000m [K=0.4556]
Remarks:

Planar Illuminance Curve



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Remarks: