

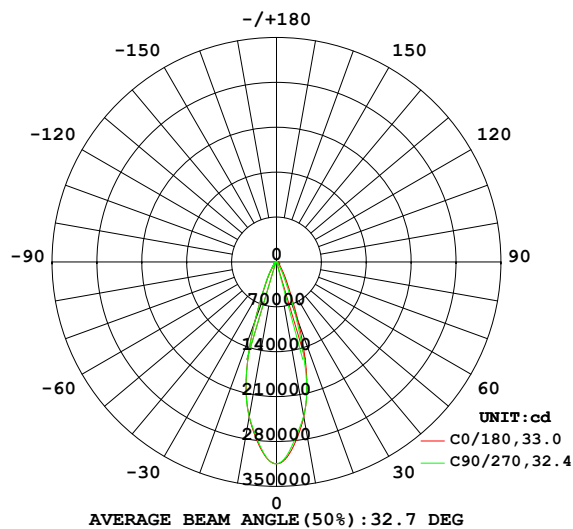
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

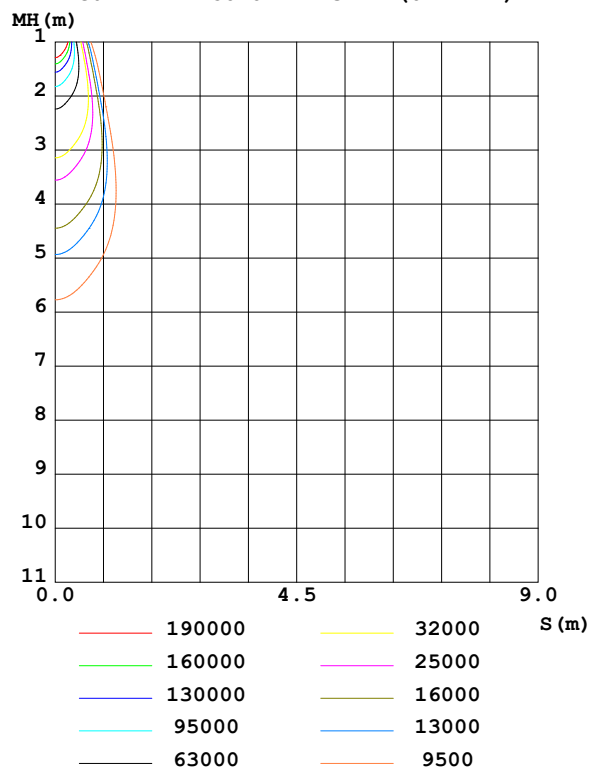
Test:U:230.0V I:3.571A P:800.0W PF:0.974 Freq:50.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:113770x1 lm		
NAME: SP04-800-5770-F04003Z+L130	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 142.21 lm/W			
MODEL	/	I _{max} (cd)	314740	S/MH (C0/180)	0.52
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	0.52
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	113770	η UP,DN (C0-180)	0.0,46.8
NOMINAL FLUX (lm)	113770	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	2451	2452	2439	2452	2451	2446	2450	2446	0- 10	26154	26154	23,23
20	991.1	970.5	831.2	970.5	991.1	998.7	986.4	998.7	10- 20	47765	73919	65,65
30	253.1	229.3	156.0	229.3	253.1	297.7	271.9	297.7	20- 30	22104	96023	84.4,84.4
40	82.52	60.70	33.21	60.70	82.52	105.3	90.92	105.3	30- 40	8884	104907	92.2,92.2
50	49.14	22.34	5.467	22.34	49.14	57.72	50.69	57.72	40- 50	4208	109115	95.9,95.9
60	31.22	3.433	0.2763	3.433	31.22	33.25	29.86	33.25	50- 60	2614	111729	98.2,98.2
70	14.55	0.3553	0.1488	0.3553	14.55	15.20	11.83	15.20	60- 70	1416	113145	99.5,99.5
80	3.090	0.0963	0.0205	0.0963	3.090	3.985	3.762	3.985	70- 80	537.1	113682	99.9,99.9
90	0	0	0	0	0	0	0	0	80- 90	87.64	113770	100,100
100	0	0	0	0	0	0	0	0	90-100	0	113770	100,100
110	0	0	0	0	0	0	0	0	100-110	0	113770	100,100
120	0	0	0	0	0	0	0	0	110-120	0	113770	100,100
130	0	0	0	0	0	0	0	0	120-130	0	113770	100,100
140	0	0	0	0	0	0	0	0	130-140	0	113770	100,100
150	0	0	0	0	0	0	0	0	140-150	0	113770	100,100
160	0	0	0	0	0	0	0	0	150-160	0	113770	100,100
170	0	0	0	0	0	0	0	0	160-170	0	113770	100,100
180	0	0	0	0	0	0	0	0	170-180	0	113770	100,100
DEG	LUMINOUS INTENSITY:X100cd									UNIT:lm		

Conical surface Flux(90deg): 1.0727e+005 lm

%lum = 94.3%

%lamp = 94.3%

Conical surface Flux(120deg): 1.1173e+005 lm

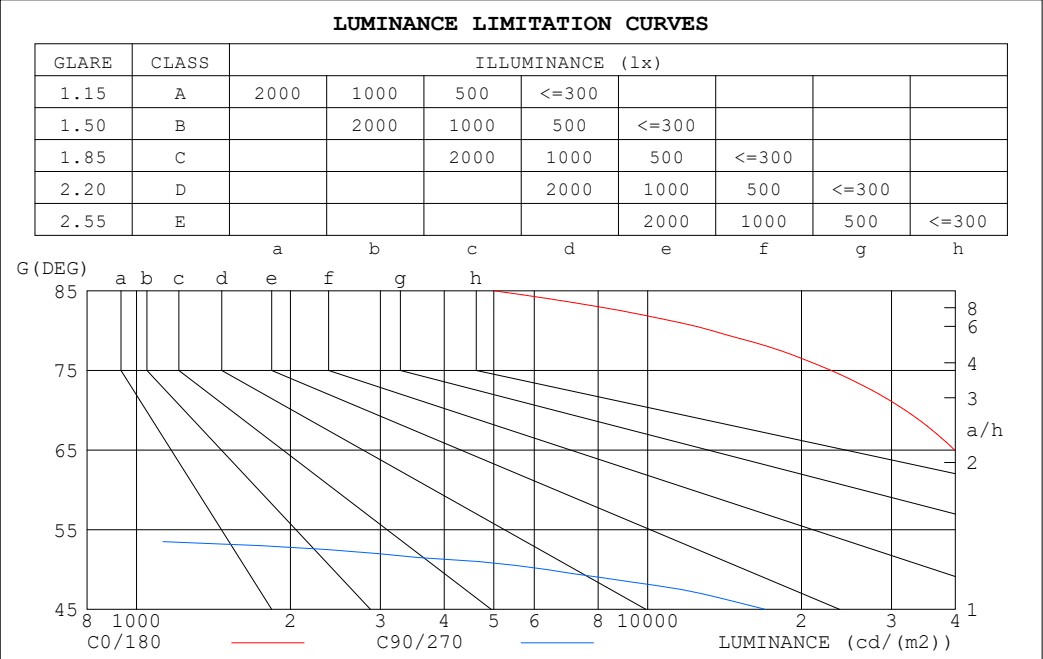
%lum = 98.2%

%lamp = 98.2%

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
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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	5007	180
80	13353	88
75	22863	105
70	31925	324
65	39871	468
60	46851	412
55	52633	401
50	57355	6343
45	63874	16995

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%

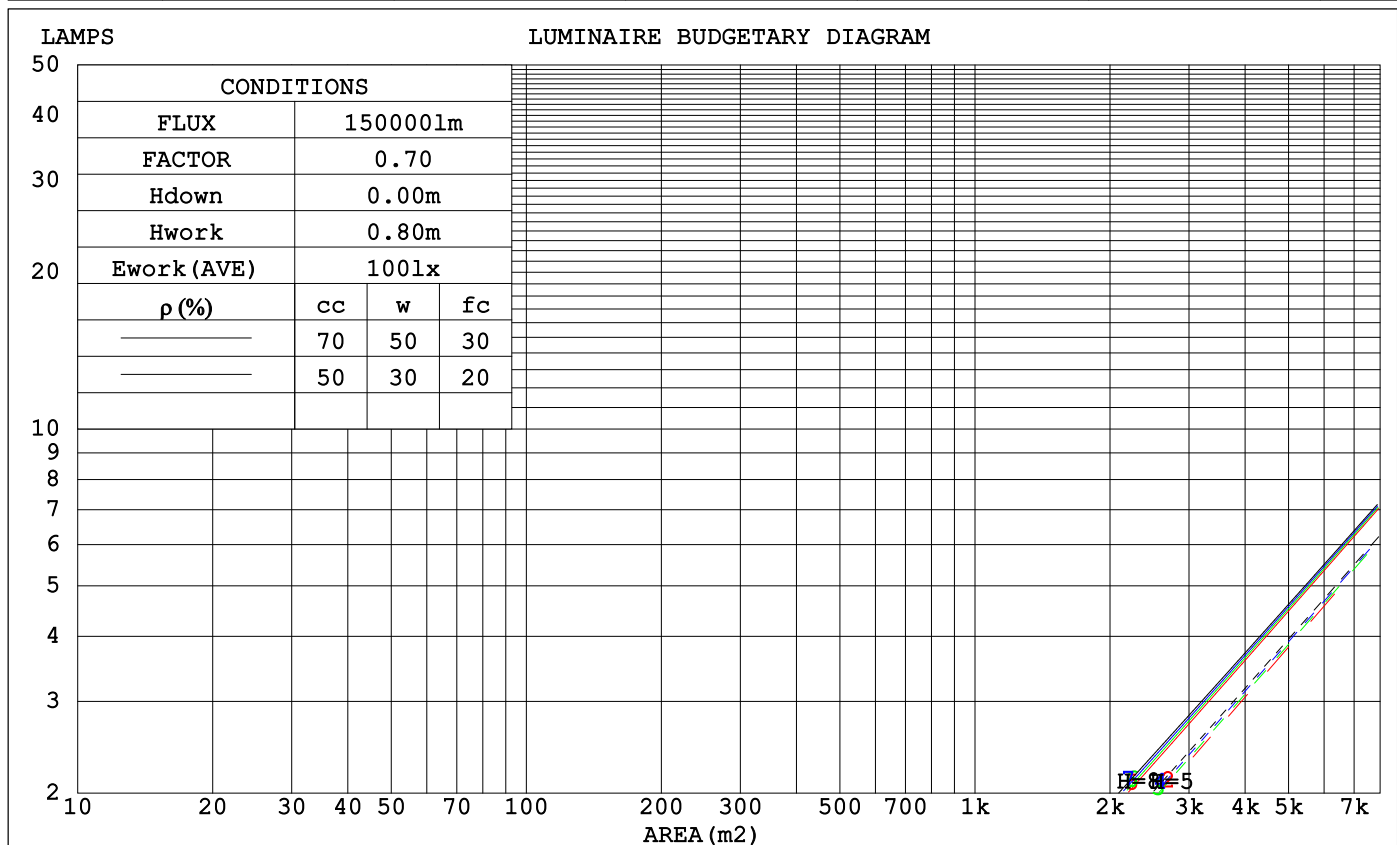
Test Distance:26.000m [K=0.4556]

Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

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 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
 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:

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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	2H	18.5	19.5	18.8	19.8	20.1	16.4	16.4	16.4	16.4	16.4
	3H	19.4	20.2	19.8	20.6	20.9	16.4	16.4	16.4	16.4	16.4
	4H	19.5	20.3	19.9	20.7	21.1	16.4	16.4	16.4	16.4	16.4
	6H	19.6	20.3	20.0	20.7	21.1	16.4	16.4	16.4	16.4	16.4
	8H	19.5	20.2	20.0	20.6	21.0	16.4	16.4	16.4	16.4	16.4
	12H	19.5	20.1	19.9	20.5	21.0	16.4	16.4	16.4	16.4	16.4
4H	2H	18.2	19.0	18.6	19.3	19.7	16.4	16.4	16.4	16.4	16.4
	3H	19.1	19.7	19.5	20.1	20.5	16.4	16.4	16.4	16.4	16.4
	4H	19.2	19.8	19.6	20.2	20.7	16.4	16.4	16.4	16.4	16.4
	6H	19.2	19.7	19.7	20.2	20.7	16.4	16.4	16.4	16.4	16.4
	8H	19.2	19.7	19.7	20.1	20.6	16.4	16.4	16.4	16.4	16.4
	12H	19.1	19.6	19.6	20.0	20.5	16.4	16.4	16.4	16.4	16.4
8H	4H	19.0	19.5	19.5	19.9	20.4	16.4	16.4	16.4	16.4	16.4
	6H	19.0	19.4	19.6	19.9	20.4	16.4	16.4	16.4	16.4	16.4
	8H	19.0	19.3	19.5	19.9	20.4	16.4	16.4	16.4	16.4	16.4
	12H	19.0	19.2	19.5	19.7	20.3	16.4	16.4	16.4	16.4	16.4
12H	4H	19.0	19.4	19.5	19.9	20.3	16.4	16.4	16.4	16.4	16.4
	6H	19.0	19.3	19.5	19.8	20.3	16.4	16.4	16.4	16.4	16.4
	8H	18.9	19.2	19.5	19.7	20.3	16.4	16.4	16.4	16.4	16.4
CIE190: 2010											

CIE190: 2010
Area: 0.134 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

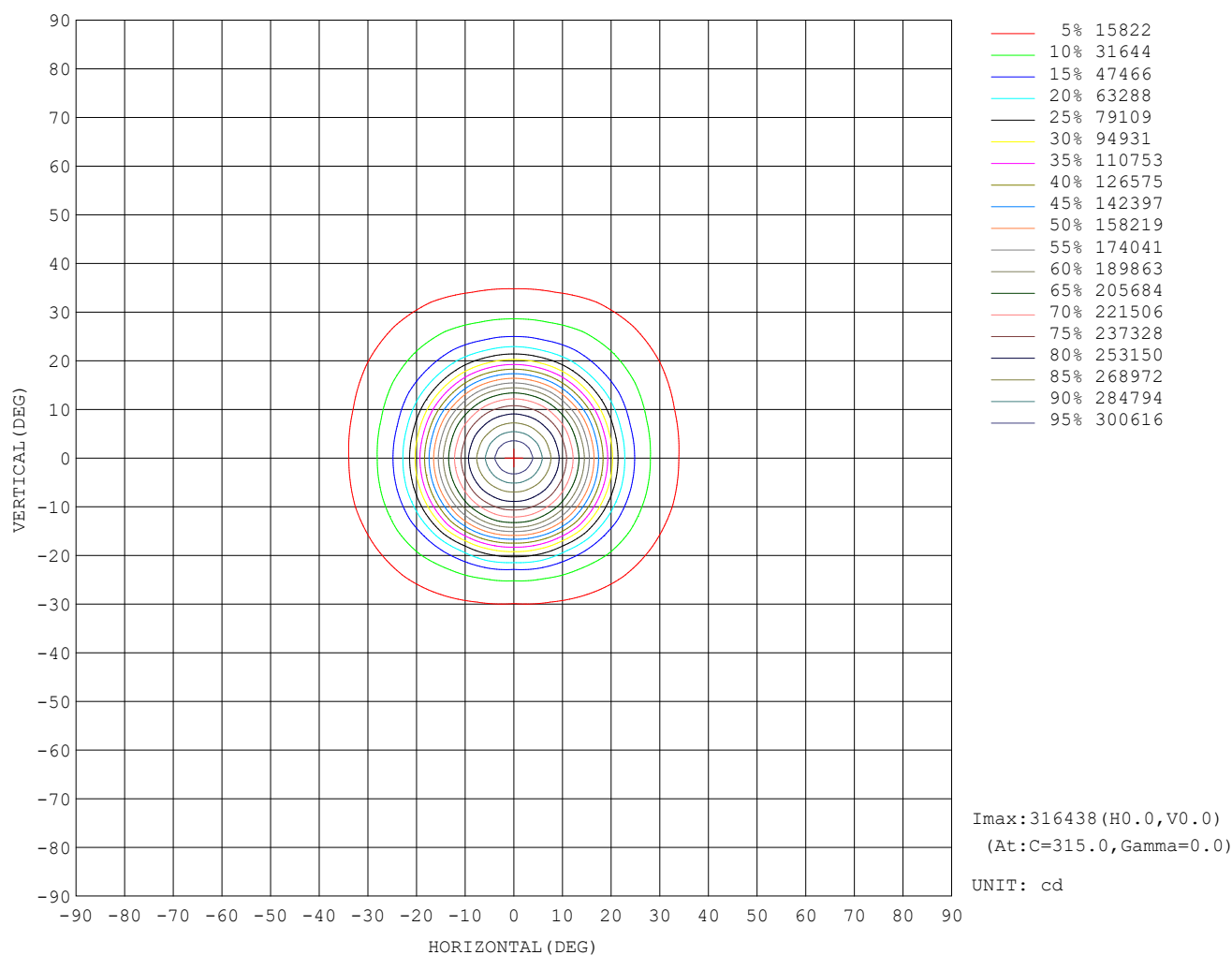
UTILIZATION FACTORS TABLE

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:

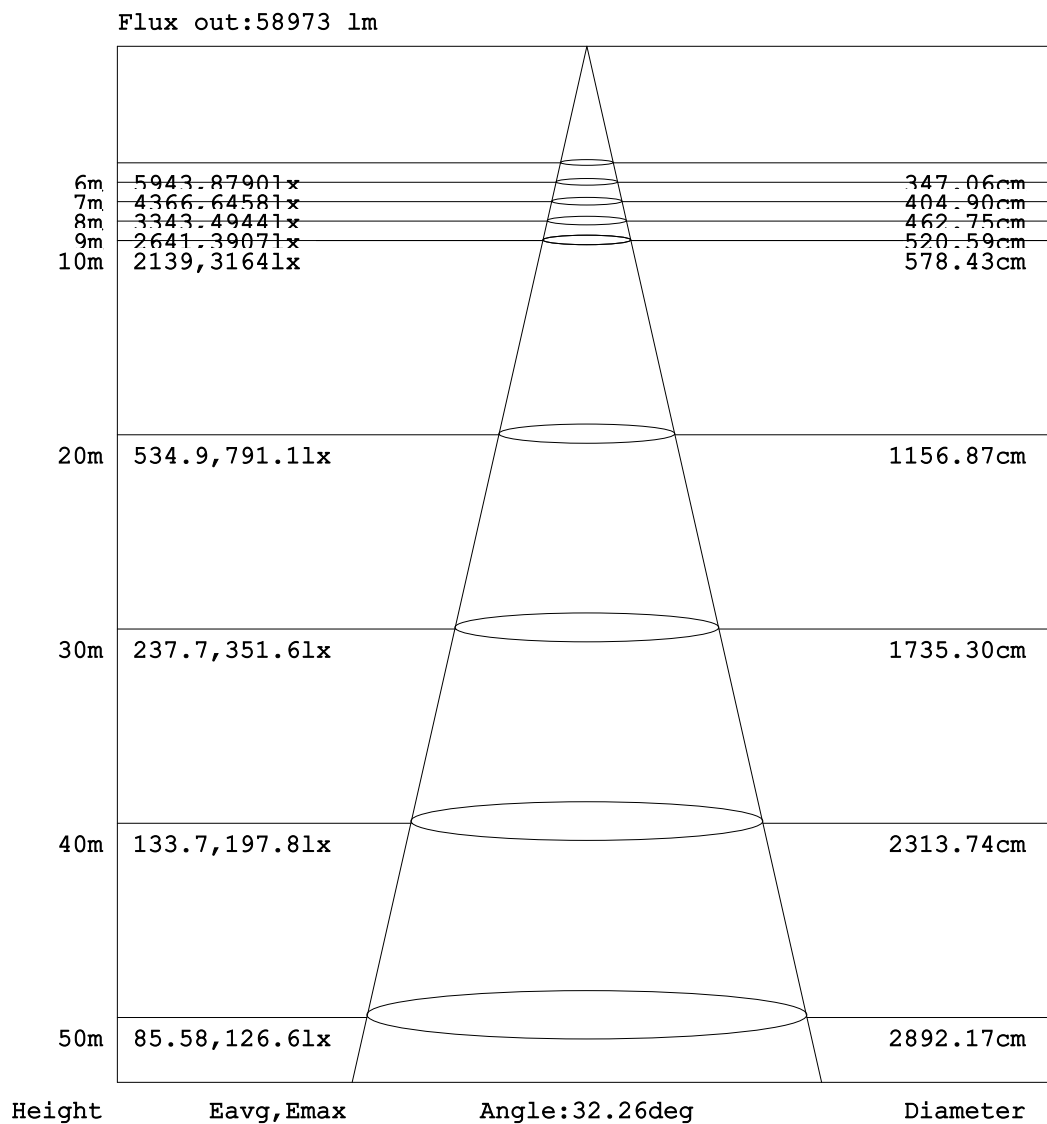
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
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:

AAI Figure



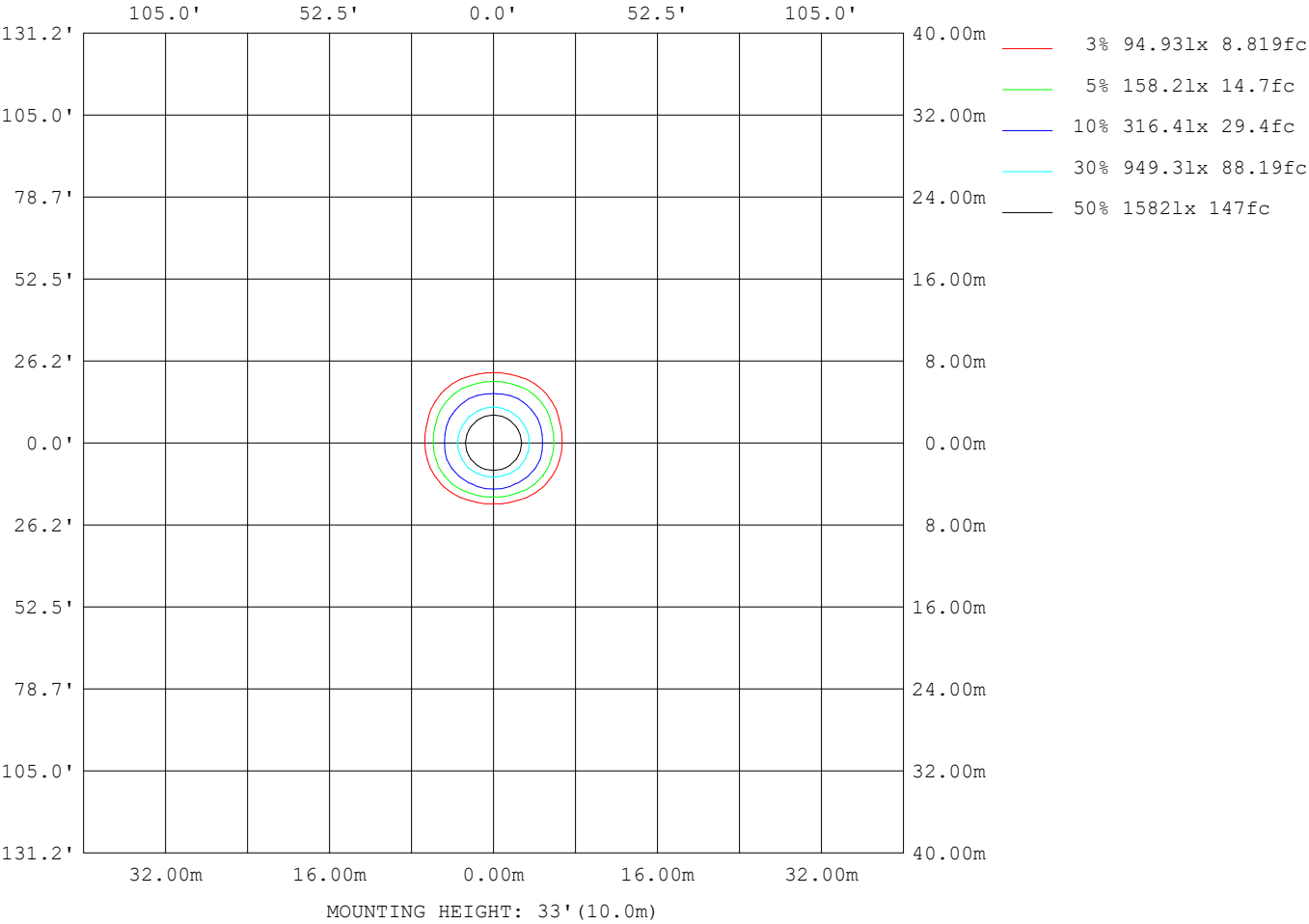
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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C Interval: 15.0DEG
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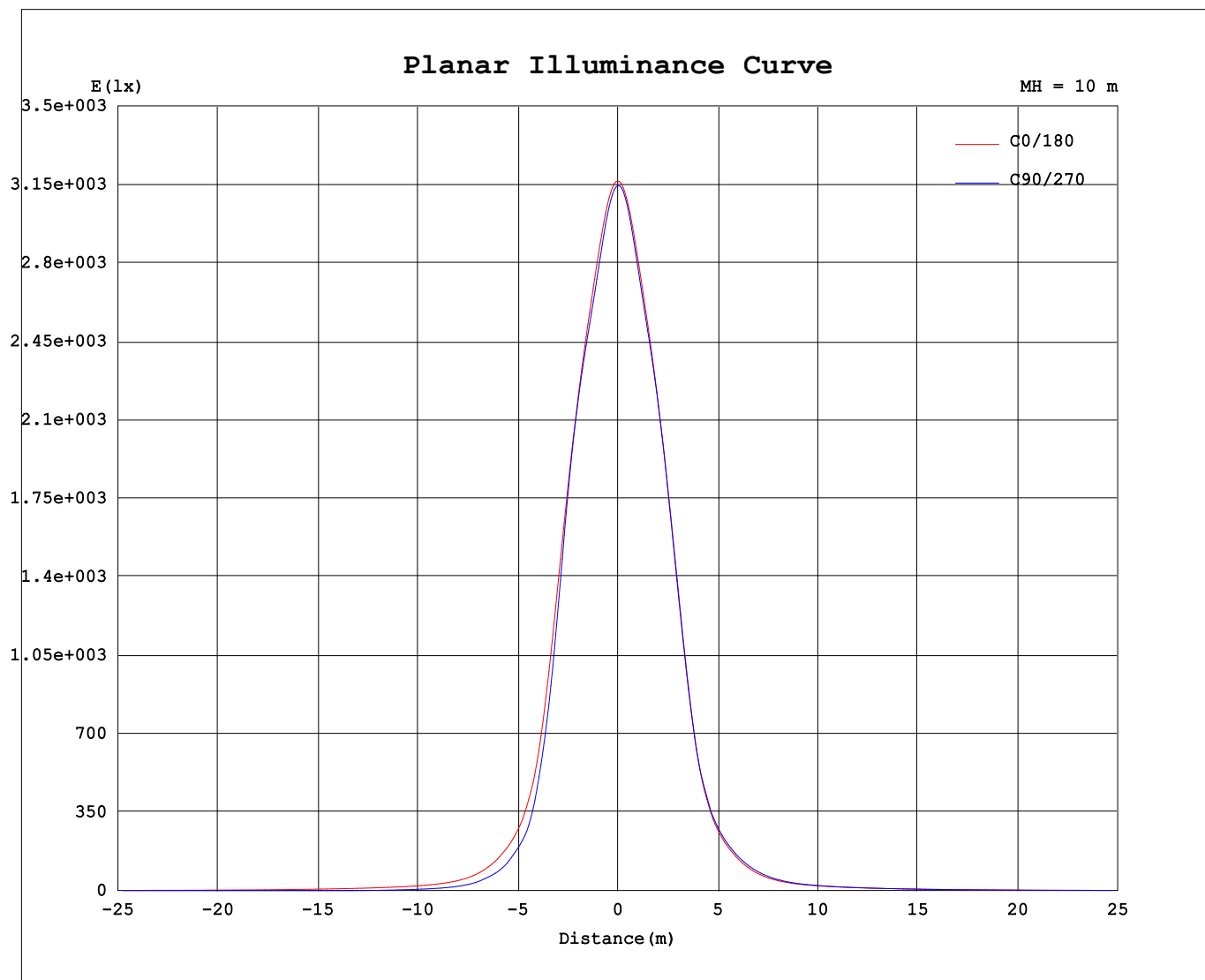
ISOLUX DIAGRAM



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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γ Range: 0 - 180DEG
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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: