

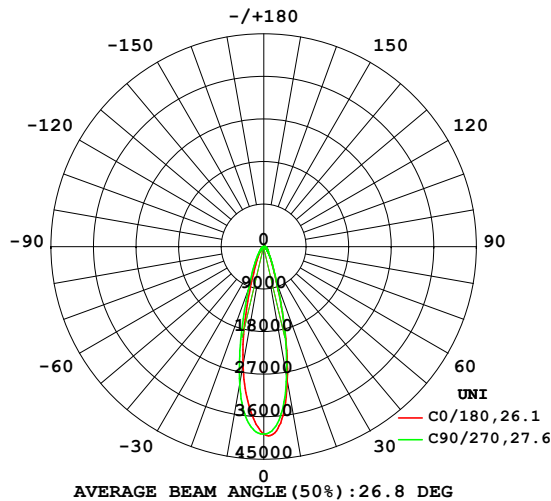
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

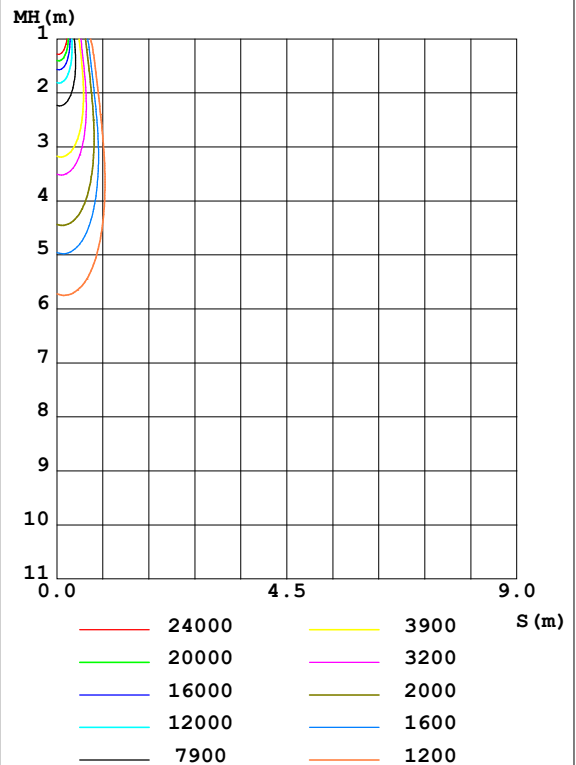
Test:U:229.8V I:0.4501A P:102.0W PF:0.9867 Freq:50.01Hz UTHDi:0% ITHDi:0% Lamp Flux:12893.4x1 lm					
NAME: FL23-100-5070-F12804		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.:		SUR.:		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA Eff: 126.36 lm/W			
MODEL	RF303	I _{max} (cd)	40117	S/MH(C0/180)	0.43
NOMINAL POWER(W)	100	LOR(%)	100.0	S/MH(C90/270)	0.47
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	12893	η UP,DN(C0-180)	0.0,48.9
NOMINAL FLUX(lm)	12893.4	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,51.1
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	1.00

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LYJ
Test Date: 2020-07-03

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity: 65.0%
Test Distance: 26.000m [K=0.4589]
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	2873	2930	2786	2611	2538	2701	2951	2948	0- 10	3215	3215	24.9,24.9
20	789.0	851.2	810.9	739.6	723.3	805.3	941.3	860.7	10- 20	4507	7722	59.9,59.9
30	280.5	293.9	295.2	259.9	262.1	291.5	348.1	306.3	20- 30	2179	9901	76.8,76.8
40	126.3	129.8	127.3	120.6	121.5	132.8	150.9	136.0	30- 40	1213	11114	86.2,86.2
50	70.87	73.03	68.56	70.36	70.35	75.27	78.25	75.17	40- 50	744.0	11858	92,92
60	45.56	44.68	41.91	43.51	45.71	46.34	47.64	45.90	50- 60	511.9	12370	95.9,95.9
70	26.20	23.60	21.60	22.92	26.46	25.77	26.77	25.33	60- 70	343.2	12713	98.6,98.6
80	7.403	5.384	3.850	5.242	7.686	7.609	8.018	7.327	70- 80	159.7	12873	99.8,99.8
90	0.0226	0.0201	0.0213	0.0188	0.0226	0.0201	0.0130	0.0177	80- 90	20.50	12893	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 11524 lm

%lum = 89.4%

%lamp = 89.4%

Conical surface Flux(120deg): 12370 lm

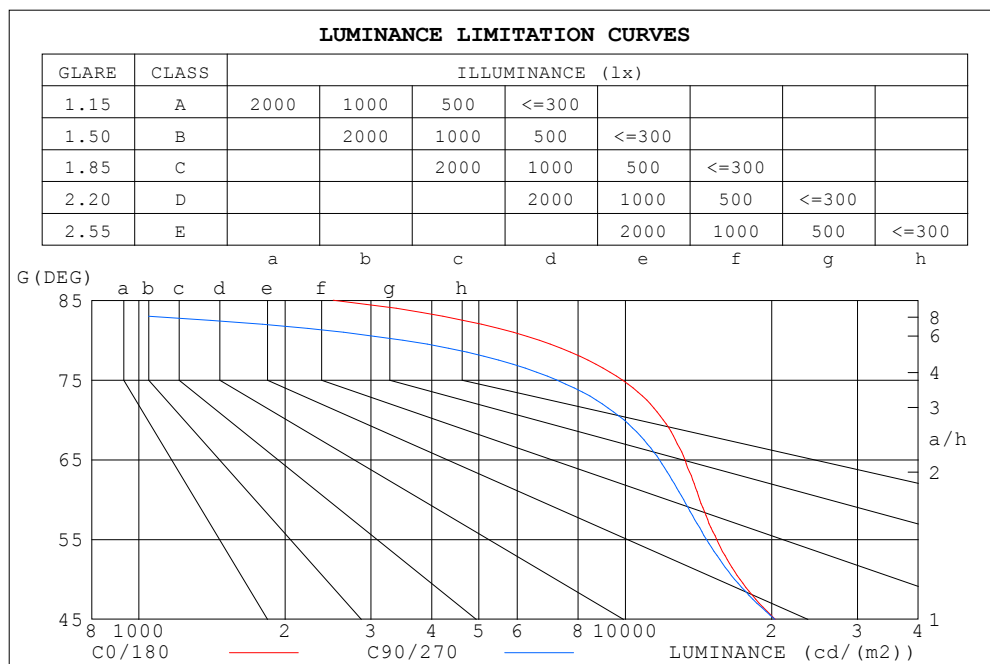
%lum = 95.9%

%lamp = 95.9%

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LYJ
Test Date:2020-07-03

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity:65.0%
Test Distance:26.000m [K=0.4589]
Remarks:

LUMINANCE LIMITATION CURVES



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2508	141
80	6656	3489
75	9858	7225
70	11959	9940
65	13257	11750
60	14228	13189
55	15421	14691
50	17215	16784
45	20331	20311

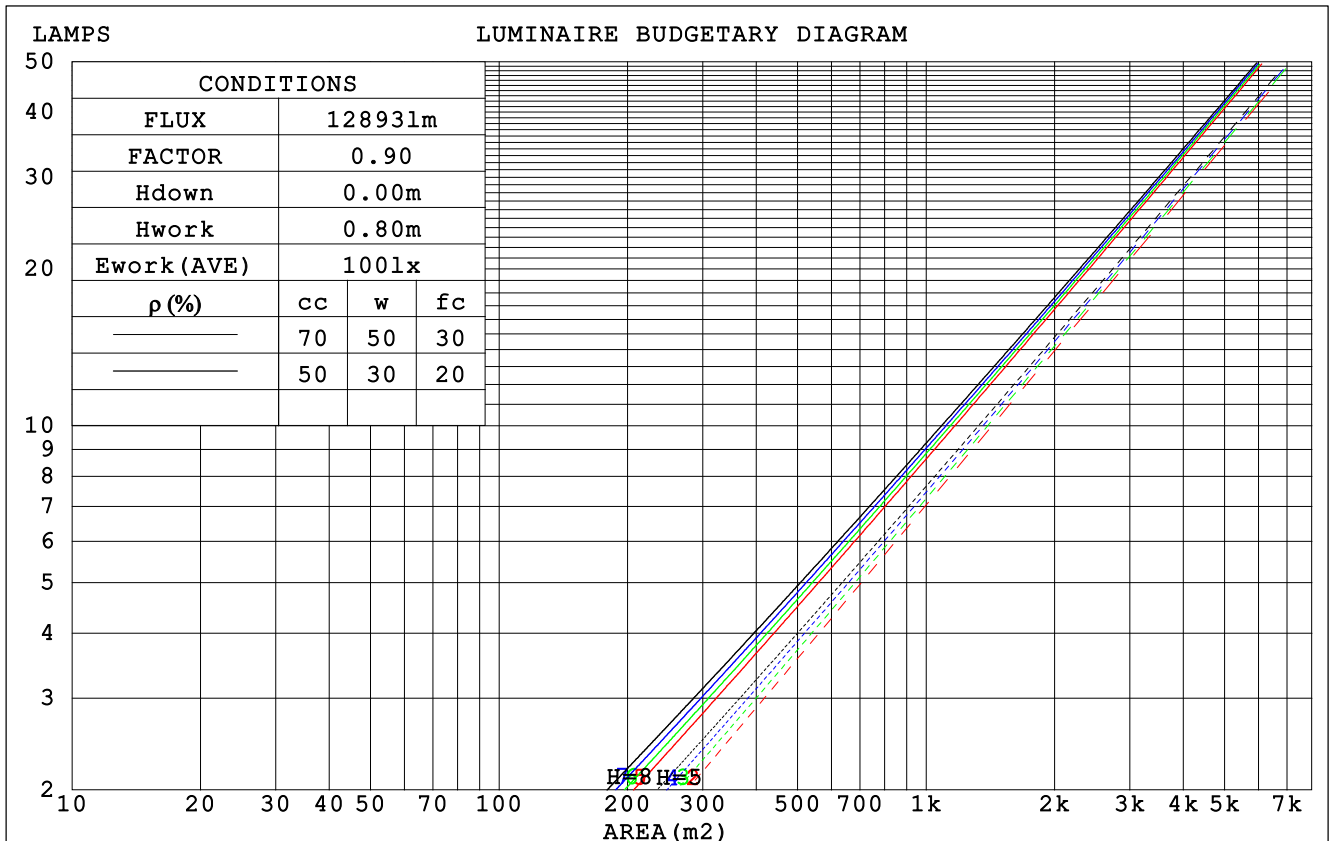
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C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LYJ
Test Date: 2020-07-03

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity: 65.0%
Test Distance: 26.000m [K=0.4589]
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	1.11	1.08	1.06	1.09	1.07	1.05	1.05	1.03	1.01	1.01	.00	.98	.98	.96	.95	.94
2.0	1.04	.00	.96	1.02	.98	.95	.99	.96	.93	.96	.93	.91	.93	.91	.89	.88
3.0	.97	.92	.89	.96	.92	.88	.93	.90	.87	.91	.88	.85	.89	.86	.84	.82
4.0	.92	.87	.83	.91	.86	.82	.89	.84	.81	.87	.83	.80	.85	.82	.79	.78
5.0	.87	.82	.78	.86	.81	.77	.84	.80	.77	.83	.79	.76	.81	.78	.75	.74
6.0	.83	.77	.73	.82	.77	.73	.81	.76	.73	.79	.75	.72	.78	.74	.72	.70
7.0	.79	.74	.70	.78	.73	.70	.77	.73	.69	.76	.72	.69	.75	.71	.69	.67
8.0	.76	.70	.67	.75	.70	.67	.74	.70	.66	.73	.69	.66	.72	.69	.66	.65
9.0	.73	.67	.64	.72	.67	.64	.71	.67	.64	.70	.66	.63	.70	.66	.63	.62
10.0	.70	.65	.61	.69	.65	.61	.69	.64	.61	.68	.64	.61	.67	.64	.61	.60



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
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Operators: LYJ
Test Date: 2020-07-03

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity: 65.0%
Test Distance: 26.000m [K=0.4589]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

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															Wall Exitance Coefficients (WEC)														
0.0																														
1.0	.176	.100	.032	.169	.096	.031	.156	.090	.029	.145	.083	.027	.134	.078	.025															
2.0	.166	.091	.028	.160	.088	.027	.150	.083	.026	.140	.079	.025	.131	.074	.023															
3.0	.155	.083	.025	.151	.081	.024	.142	.077	.023	.133	.073	.022	.126	.070	.022															
4.0	.146	.076	.022	.142	.074	.022	.134	.071	.021	.127	.068	.021	.120	.065	.020															
5.0	.137	.070	.020	.133	.068	.020	.127	.066	.019	.121	.064	.019	.115	.061	.018															
6.0	.129	.065	.019	.126	.064	.018	.120	.062	.018	.115	.060	.018	.110	.058	.017															
7.0	.122	.060	.017	.119	.059	.017	.114	.058	.017	.109	.056	.016	.105	.054	.016															
8.0	.116	.056	.016	.113	.056	.016	.109	.054	.016	.104	.053	.015	.100	.052	.015															
9.0	.110	.053	.015	.108	.052	.015	.104	.051	.015	.100	.050	.014	.096	.049	.014															
10.0	.105	.050	.014	.103	.050	.014	.099	.049	.014	.096	.048	.014	.093	.047	.013															

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						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	.146	.135	.125	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.155	.133	.113	.133	.114	.098	.091	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.142	.114	.090	.122	.098	.078	.084	.068	.055	.048	.040	.032	.016	.013	.011	
4.0	.131	.099	.074	.113	.085	.064	.078	.059	.045	.045	.035	.027	.014	.011	.009	
5.0	.122	.087	.061	.105	.075	.053	.072	.053	.038	.042	.031	.022	.013	.010	.007	
6.0	.114	.077	.051	.098	.067	.045	.067	.047	.032	.039	.028	.019	.013	.009	.006	
7.0	.106	.070	.044	.092	.060	.038	.063	.042	.027	.037	.025	.016	.012	.008	.005	
8.0	.100	.063	.038	.086	.055	.033	.060	.038	.023	.035	.023	.014	.011	.007	.005	
9.0	.094	.058	.033	.081	.050	.029	.056	.035	.020	.033	.021	.012	.011	.007	.004	
10.0	.089	.053	.029	.077	.046	.025	.053	.032	.018	.031	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:LYJ
 Test Date:2020-07-03

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:26.000m [K=0.4589]
 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	17.2	18.3	17.6	18.6	18.9	16.8	17.9	17.2	18.2	18.5
3H	18.7	19.7	19.1	20.0	20.4	18.1	19.0	18.4	19.4	19.7
4H	19.2	20.1	19.6	20.4	20.8	18.4	19.2	18.8	19.6	20.0
6H	19.4	20.2	19.8	20.6	21.0	18.4	19.2	18.8	19.6	20.0
8H	19.4	20.2	19.8	20.6	21.0	18.4	19.1	18.8	19.5	19.9
12H	19.4	20.1	19.8	20.5	20.9	18.3	19.0	18.7	19.4	19.9
4H 2H	17.6	18.5	18.0	18.9	19.3	17.3	18.2	17.7	18.5	18.9
3H	19.3	20.0	19.7	20.4	20.8	18.7	19.4	19.1	19.8	20.2
4H	19.8	20.5	20.3	20.9	21.4	19.0	19.7	19.5	20.1	20.5
6H	20.1	20.7	20.6	21.1	21.6	19.1	19.7	19.6	20.1	20.6
8H	20.1	20.6	20.6	21.1	21.6	19.1	19.6	19.5	20.0	20.5
12H	20.1	20.5	20.6	21.0	21.5	19.0	19.4	19.5	19.9	20.4
8H 4H	19.9	20.4	20.4	20.8	21.3	19.1	19.6	19.6	20.1	20.6
6H	20.2	20.6	20.7	21.1	21.6	19.2	19.6	19.7	20.1	20.6
8H	20.2	20.6	20.7	21.1	21.6	19.2	19.6	19.7	20.1	20.6
12H	20.2	20.5	20.7	21.0	21.6	19.1	19.5	19.7	20.0	20.5
12H 4H	19.8	20.3	20.3	20.8	21.2	19.1	19.5	19.6	20.0	20.5
6H	20.1	20.5	20.7	21.0	21.5	19.2	19.6	19.7	20.0	20.6
8H	20.2	20.5	20.7	21.0	21.6	19.2	19.5	19.7	20.0	20.6
CIE190: 2010										

CIE190: 2010
Area: 0.0635 m2

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Test Date:2020-07-03

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity:65.0%
Test Distance:26.000m [K=0.4589]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

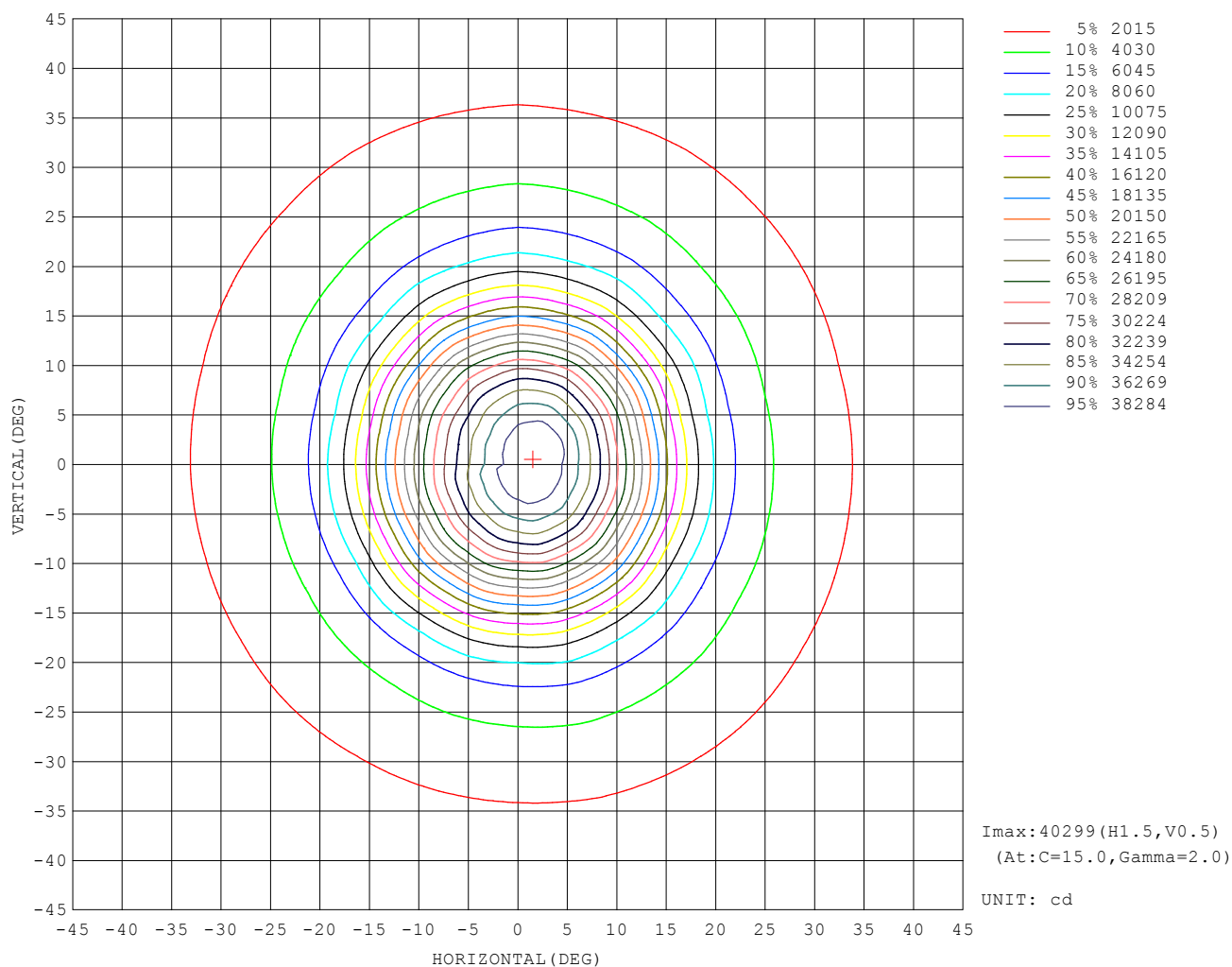
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	83	76	72	82	76	72	82	75	71	67
0.80	91	84	80	90	84	80	89	83	79	75
1.00	96	89	85	95	89	85	93	89	84	80
1.25	100	94	90	99	94	90	97	92	89	84
1.50	103	98	94	102	97	93	100	96	92	87
2.00	107	102	98	105	101	97	102	99	96	90
2.50	109	104	101	107	103	100	104	101	98	92
3.00	110	107	103	109	105	102	105	102	100	93
4.00	113	110	107	111	108	106	107	105	103	96
5.00	114	112	109	112	110	108	108	106	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 V2.00.426
 Humidity: 65.0%
 Test Distance: 26.000m [K=0.4589]
 Remarks:

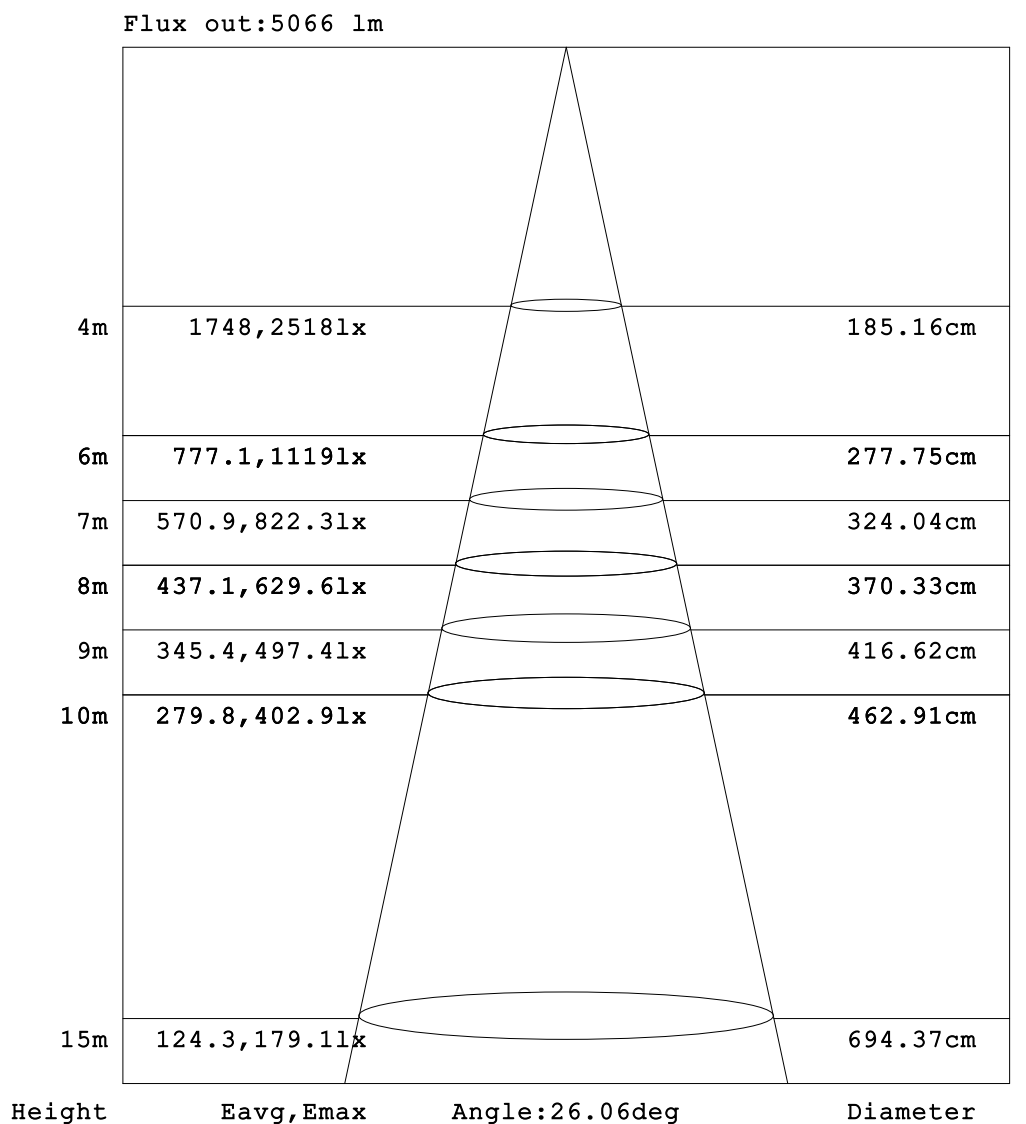
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LYJ
Test Date:2020-07-03

γ Range: 0 - 90DEG
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Test Distance:26.000m [K=0.4589]
Remarks:

AAI Figure



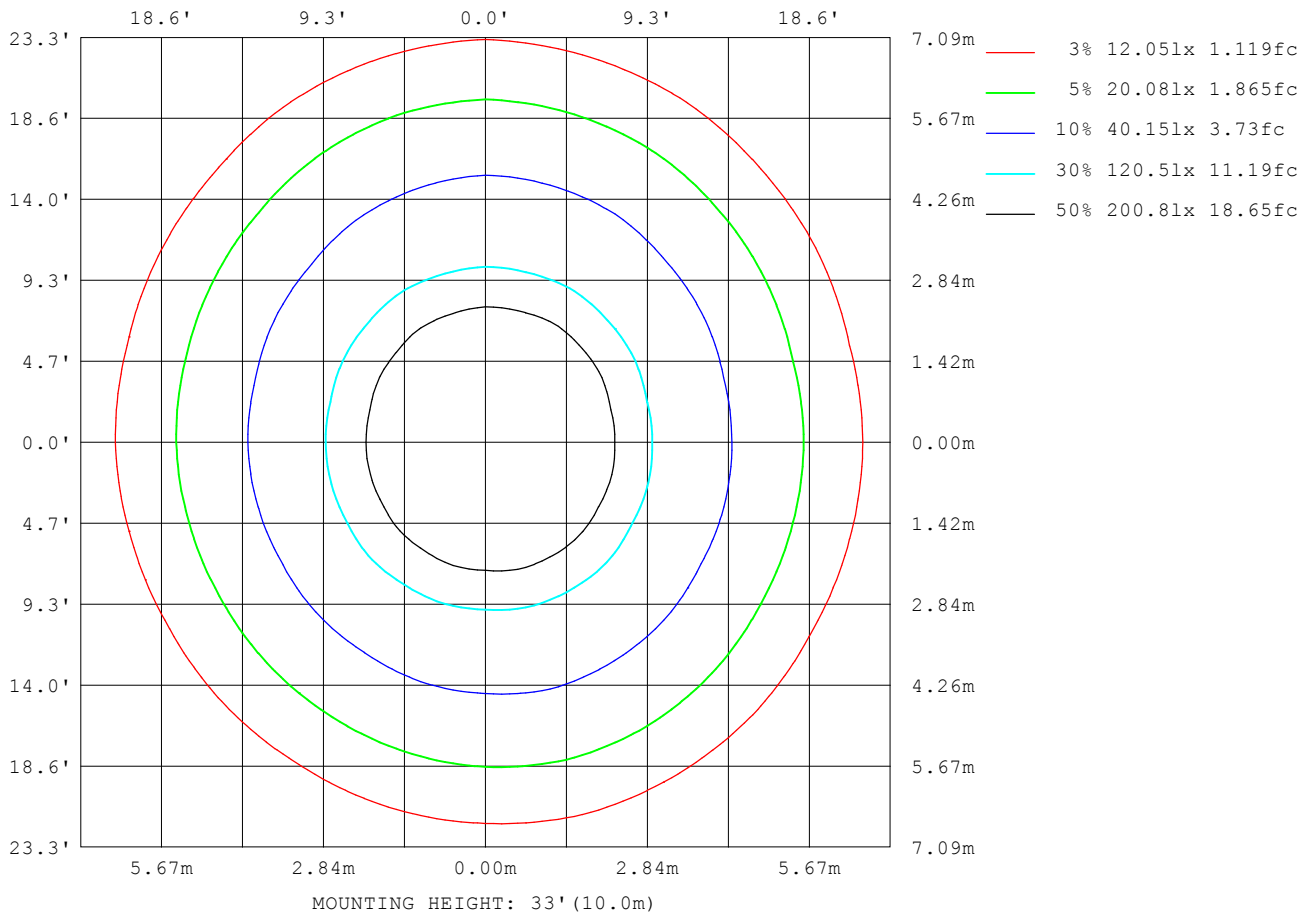
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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C Interval: 15.0DEG
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Remarks:

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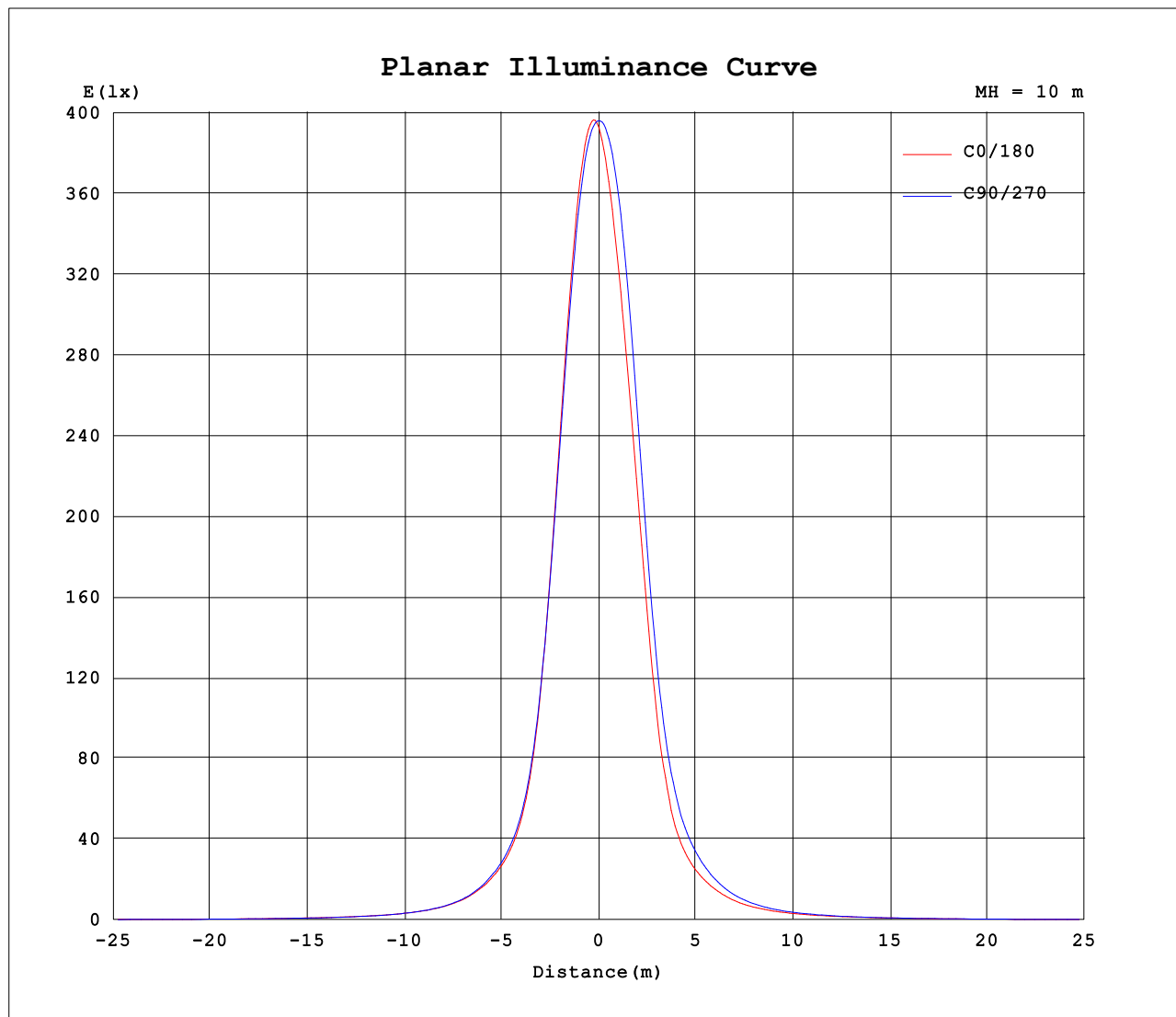
ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LYJ
Test Date: 2020-07-03

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity: 65.0%
Test Distance: 26.000m [K=0.4589]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LYJ
Test Date: 2020-07-03

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity: 65.0%
Test Distance: 26.000m [K=0.4589]
Remarks: