

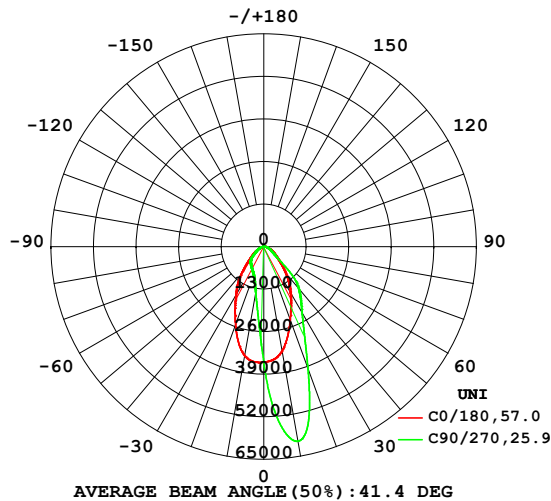
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

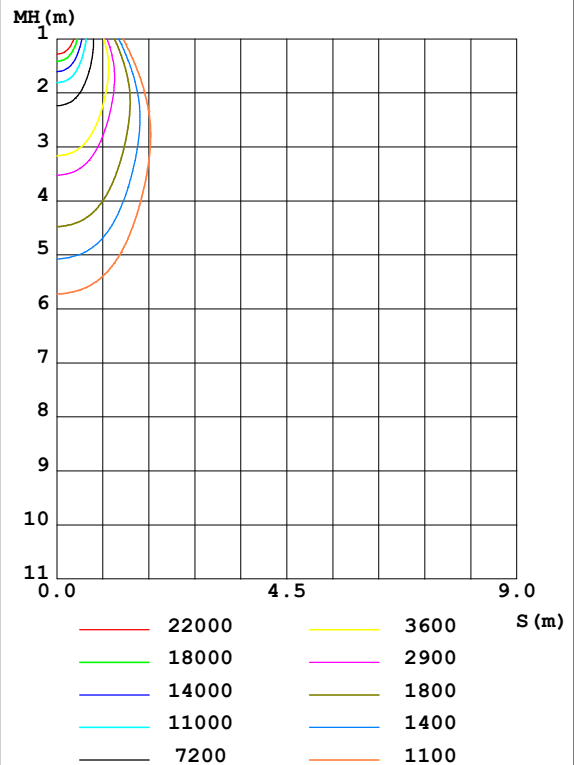
Test:U:229.5V I:1.350A P:304.2W PF:0.9820 Freq:50.00Hz UTHDi:0% ITHDi:0% Lamp Flux:46010.3x1 lm					
NAME: FL23-300-5070-F38403			TYPE:		WEIGHT:
SPEC.:			DIM.:		SERIAL No.:
MFR.:			SUR.:		Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 151.25 lm/W			
MODEL	-	I _{max} (cd)	60415	S/MH (C0/180)	0.84
NOMINAL POWER(W)	300	LOR(%)	100.0	S/MH (C90/270)	0.24
RATED VOLTAGE(V)	230	TOTAL FLUX (lm)	46010	η UP,DN (C0-180)	0.0,65.9
NOMINAL FLUX(lm)	46010.3	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,34.1
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	230	η down (%)	100.0	CIBSE SHR MAX	0.60

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LYJ
Test Date:2020-09-01

γ Range: 0 - 90DEG
γ Interval: 0.1DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity:65.0%
Test Distance:26.000m [K=0.4594]
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	3238	5600	6036	5705	3386	1752	1446	1728	0- 10	3463	3463	7.53,7.53
20	2379	4887	3957	4883	2532	1149	932.9	1141	10- 20	9103	12566	27.3,27.3
30	1638	2654	2355	2613	1712	893.9	759.4	899.7	20- 30	9833	22399	48.7,48.7
40	1032	1602	1653	1614	1047	759.0	642.7	768.0	30- 40	8630	31029	67.4,67.4
50	545.7	973.8	553.8	1003	532.7	650.2	452.7	662.0	40- 50	6967	37996	82.6,82.6
60	303.0	410.4	251.1	414.7	299.0	484.6	261.4	496.5	50- 60	4594	42590	92.6,92.6
70	143.6	113.8	132.0	115.3	141.9	153.5	139.1	159.3	60- 70	2395	44985	97.8,97.8
80	51.28	30.66	41.30	31.02	50.23	40.75	46.61	42.01	70- 80	890.9	45875	99.7,99.7
90	0	0	0	0	0	0	0	0	80- 90	134.8	46010	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): 34790 lm

%lum = 75.6%

%lamp = 75.6%

Conical surface Flux(120deg): 42590 lm

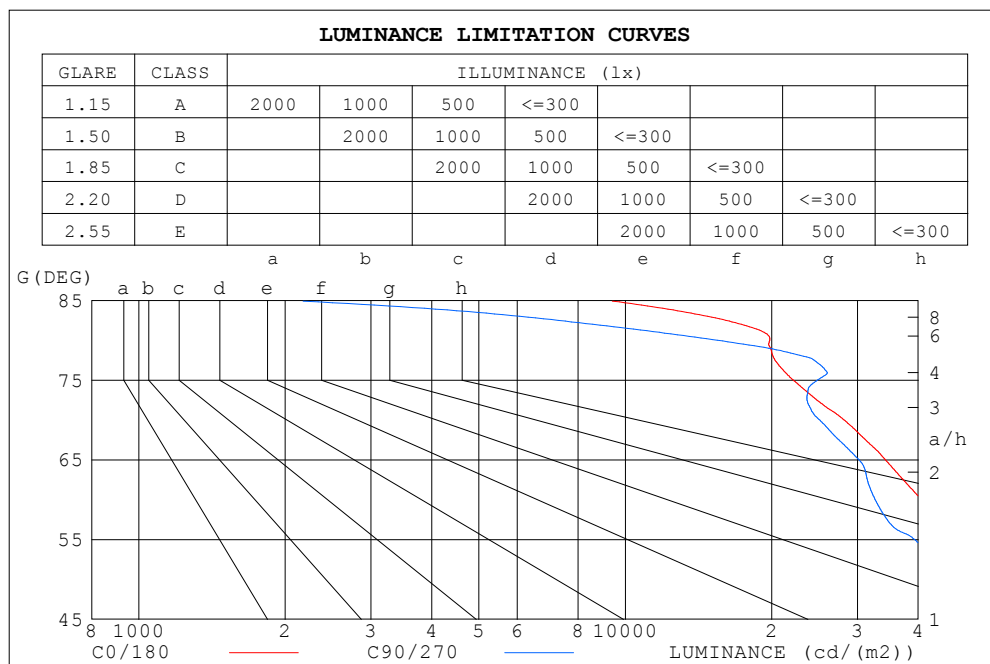
%lum = 92.6%

%lamp = 92.6%

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γ Range: 0 - 90DEG
 γ Interval: 0.1DEG
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Humidity:65.0%
Test Distance:26.000m [K=0.4594]
Remarks:

LUMINANCE LIMITATION CURVES



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	9591	2218
80	19977	16012
75	22388	24868
70	28429	25308
65	34501	30425
60	40903	32795
55	47469	39571
50	57302	56835
45	71997	112792

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 γ Interval: 0.1DEG
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Humidity: 65.0%
Test Distance: 26.000m [K=0.4594]
Remarks:

LUMINAIRE BUDGETARY DIAGRAM

LAMPS

CONDITIONS

FLUX	46010lm		
FACTOR	0.90		
Hdown	0.00m		
Hwork	0.80m		
Ework (AVE)	100lx		
ρ (%)	cc	w	fc
—	70	50	30
—	50	30	20

AREA (m²)

7k 5k 4k 3k 2k 1k 700

H58 H55 H50 H40 H35 H30 H25 H20 H15 H10 H5 H0

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	.228	.130	.041	.221	.126	.040	.208	.120	.038	.197	.113	.036	.186	.108	.035															
2.0	.221	.121	.037	.215	.118	.036	.204	.113	.035	.194	.109	.034	.184	.104	.033															
3.0	.209	.111	.033	.204	.109	.033	.194	.105	.032	.186	.102	.031	.177	.098	.030															
4.0	.197	.102	.030	.193	.101	.030	.184	.098	.029	.176	.095	.029	.169	.092	.028															
5.0	.186	.095	.027	.182	.093	.027	.174	.091	.027	.167	.088	.026	.161	.086	.026															
6.0	.175	.088	.025	.172	.087	.025	.165	.085	.025	.159	.082	.024	.153	.081	.024															
7.0	.165	.082	.023	.162	.081	.023	.156	.079	.023	.151	.077	.022	.146	.076	.022															
8.0	.156	.076	.021	.153	.076	.021	.148	.074	.021	.143	.073	.021	.139	.071	.021															
9.0	.148	.072	.020	.145	.071	.020	.141	.070	.020	.136	.068	.020	.132	.067	.019															
10.0	.140	.067	.019	.138	.067	.019	.134	.066	.018	.130	.064	.018	.126	.063	.018															

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	.175	.157	.141	.149	.135	.121	.102	.093	.084	.059	.054	.049	.019	.017	.016		
2.0	.163	.132	.107	.139	.114	.092	.096	.079	.064	.055	.046	.038	.018	.015	.012		
3.0	.153	.114	.083	.131	.098	.072	.090	.068	.050	.052	.040	.030	.017	.013	.010		
4.0	.144	.100	.066	.124	.086	.057	.085	.060	.040	.049	.035	.024	.016	.011	.008		
5.0	.136	.089	.054	.117	.077	.047	.081	.054	.033	.047	.032	.020	.015	.010	.006		
6.0	.129	.080	.045	.111	.069	.039	.077	.048	.028	.044	.029	.016	.014	.009	.005		
7.0	.123	.073	.038	.106	.063	.033	.073	.044	.023	.042	.026	.014	.014	.009	.005		
8.0	.117	.067	.032	.101	.058	.028	.070	.041	.020	.040	.024	.012	.013	.008	.004		
9.0	.111	.062	.028	.096	.054	.025	.066	.038	.018	.039	.022	.010	.013	.007	.003		
10.0	.106	.057	.025	.092	.050	.022	.064	.035	.015	.037	.021	.009	.012	.007	.003		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
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γ Range: 0 - 90DEG
 γ Interval: 0.1DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:26.000m [K=0.4594]
 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	23.0	24.4	23.4	24.7	25.0	22.5	23.8	22.8	24.1	24.4
3H	24.1	25.3	24.4	25.6	25.9	23.3	24.5	23.7	24.8	25.2
4H	24.3	25.4	24.7	25.8	26.2	23.6	24.7	24.0	25.0	25.4
6H	24.5	25.5	24.9	25.9	26.3	23.8	24.8	24.2	25.2	25.6
8H	24.5	25.5	25.0	25.9	26.3	23.8	24.7	24.2	25.1	25.5
12H	24.5	25.4	25.0	25.8	26.3	23.7	24.6	24.2	25.0	25.5
4H 2H	23.3	24.4	23.7	24.8	25.2	22.8	23.9	23.2	24.3	24.6
3H	24.5	25.4	24.9	25.8	26.2	23.8	24.7	24.2	25.1	25.5
4H	24.9	25.7	25.3	26.1	26.5	24.1	24.9	24.5	25.3	25.8
6H	25.1	25.8	25.5	26.2	26.7	24.3	25.0	24.8	25.5	25.9
8H	25.1	25.8	25.6	26.2	26.7	24.3	24.9	24.8	25.4	25.9
12H	25.1	25.7	25.6	26.2	26.6	24.3	24.8	24.7	25.3	25.8
8H 4H	24.9	25.5	25.3	26.0	26.4	24.2	24.8	24.6	25.3	25.7
6H	25.1	25.6	25.6	26.1	26.6	24.4	24.9	24.9	25.4	25.9
8H	25.2	25.6	25.7	26.1	26.6	24.4	24.8	24.9	25.4	25.9
12H	25.2	25.6	25.7	26.1	26.7	24.3	24.8	24.9	25.3	25.8
12H 4H	24.8	25.4	25.3	25.9	26.4	24.1	24.7	24.6	25.2	25.7
6H	25.1	25.5	25.6	26.0	26.5	24.4	24.8	24.9	25.3	25.8
8H	25.1	25.6	25.6	26.0	26.6	24.4	24.8	24.9	25.3	25.8
CIE190: 2010										

CIE190: 2010
Area: 0.1521 m2

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Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.426
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UTILIZATION FACTORS TABLE

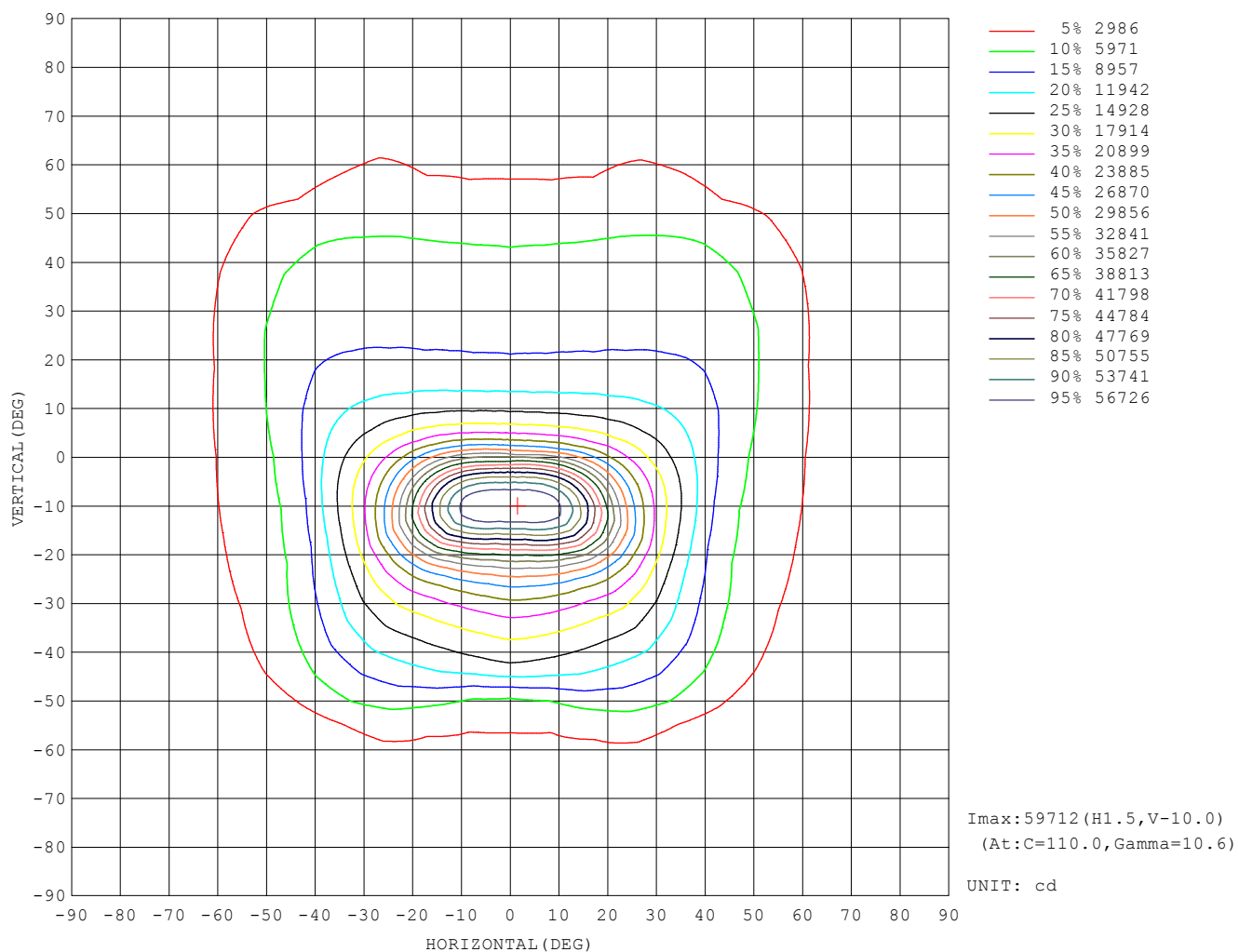
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	71	62	56	70	62	56	69	61	56	51
0.80	80	72	66	80	71	66	78	70	65	60
1.00	88	79	74	87	79	74	85	79	73	67
1.25	94	86	81	92	85	80	90	84	79	74
1.50	97	90	85	96	90	85	93	88	84	78
2.00	102	96	92	101	95	91	98	93	89	83
2.50	105	100	95	103	98	94	100	96	92	85
3.00	108	103	99	106	101	98	102	98	95	88
4.00	110	106	103	108	105	102	104	101	99	91
5.00	112	109	106	110	107	104	106	103	101	93
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

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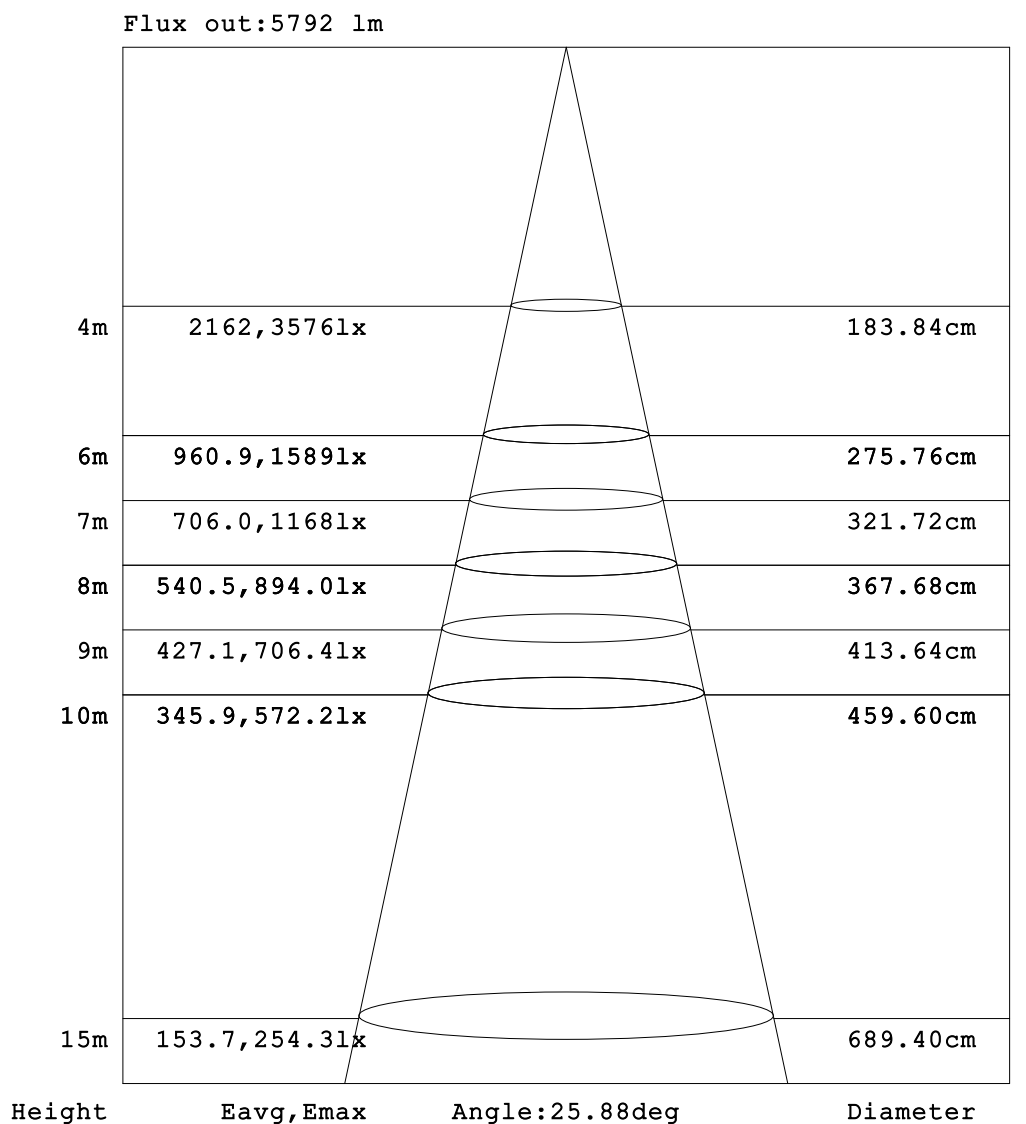
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
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Test Date: 2020-09-01

γ Range: 0 - 90DEG
 γ Interval: 0.1DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity: 65.0%
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Remarks:

AAI Figure



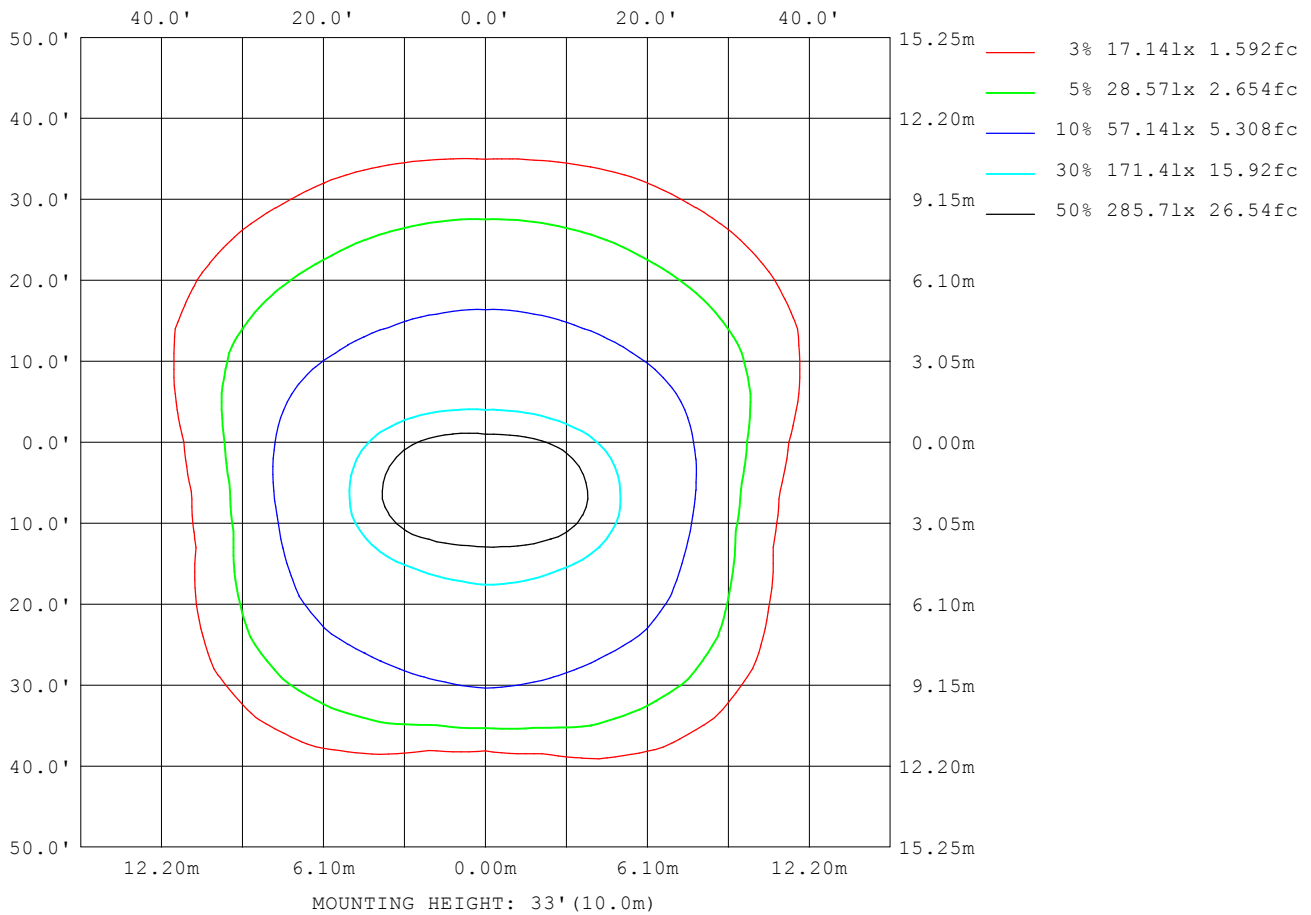
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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γ Range: 0 - 90 DEG
 γ Interval: 0.1 DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity: 65.0%
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EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

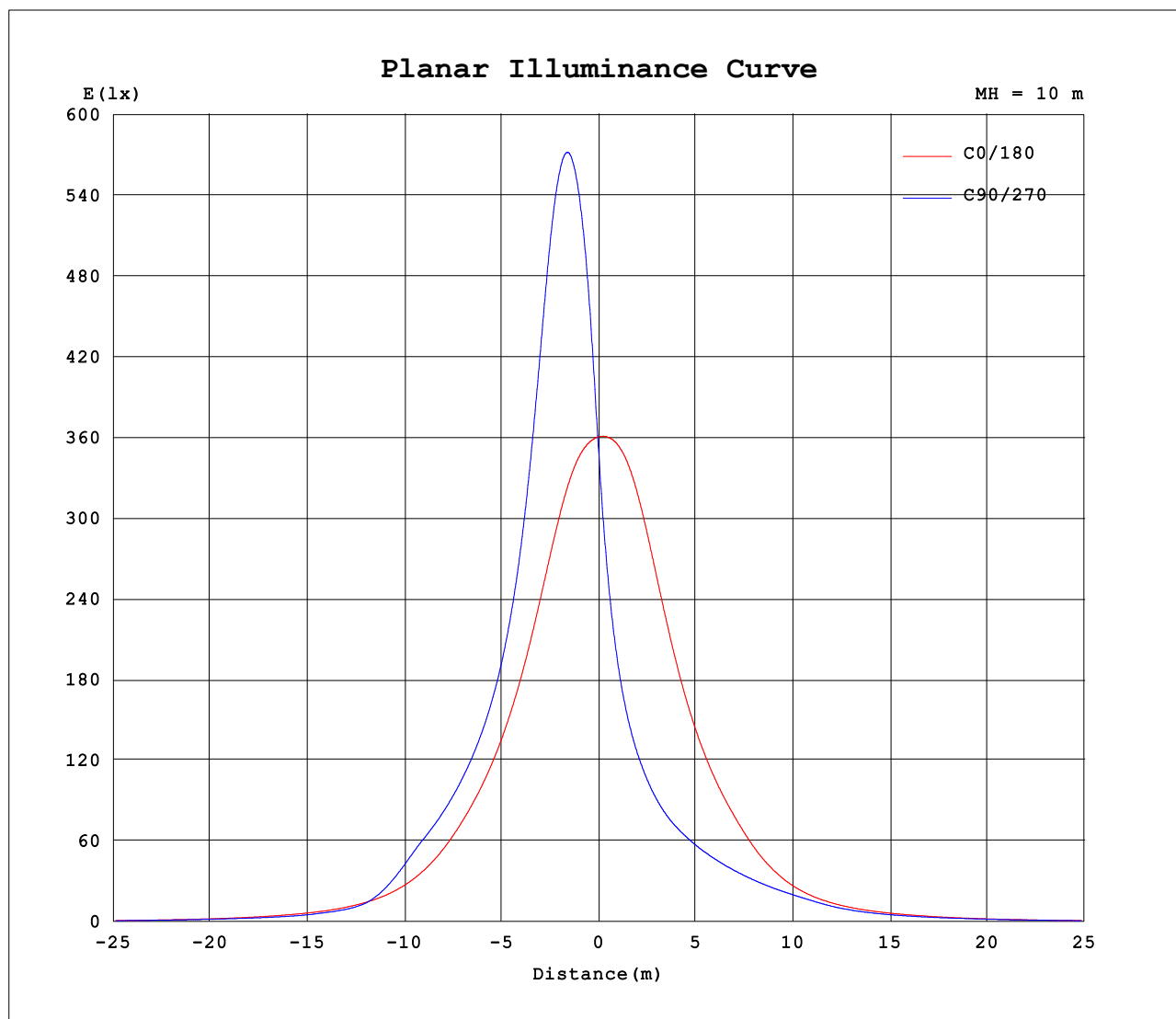
ISOLUX DIAGRAM



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 γ Interval: 0.1DEG
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Remarks:

Planar Illuminance Curve



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