

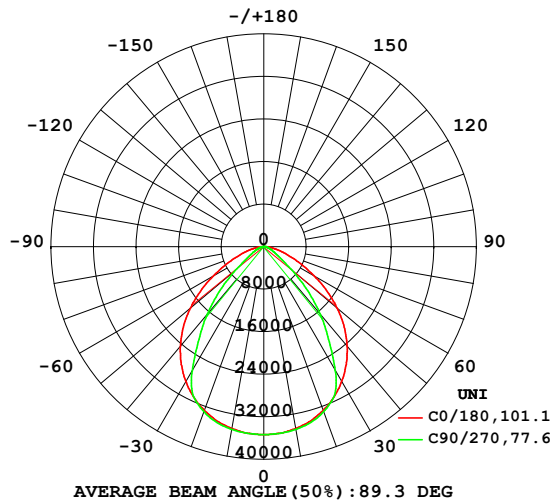
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

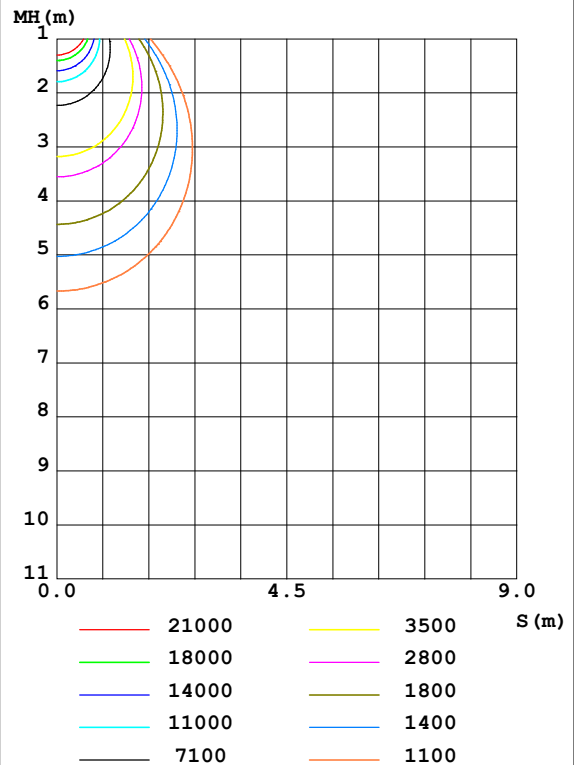
Test:U:229.7V I:2.111A P:480.1W PF:0.9900 Freq:50.01Hz UTHDi:0% ITHDi:0% Lamp Flux:72316.7x1 lm		
NAME: LHB09-480-5070-L00403	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 150.61 lm/W			
MODEL	/	I _{max} (cd)	35352	S/MH (C0/180)	1.24
NOMINAL POWER(W)	480	LOR(%)	100.0	S/MH (C90/270)	1.12
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	72316	η UP,DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	72316.7	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.0
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	100.0	CIBSE SHR MAX	1.35

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:2020-06-18

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	3471	3480	3488	3480	3471	3480	3488	3480	0- 10	3349	3349	4.63,4.63
20	3274	3300	3300	3300	3274	3300	3300	3300	10- 20	9611	12960	17.9,17.9
30	2931	2939	2694	2939	2931	2939	2694	2939	20- 30	14376	27336	37.8,37.8
40	2440	2275	1651	2275	2440	2275	1651	2275	30- 40	15755	43091	59.6,59.6
50	1804	1355	699.7	1355	1804	1355	699.7	1355	40- 50	13325	56417	78,78
60	1087	676.4	254.6	676.4	1087	676.4	254.6	676.4	50- 60	8683	65100	90,90
70	510.6	304.1	118.9	304.1	510.6	304.1	118.9	304.1	60- 70	4682	69782	96.5,96.5
80	173.4	102.2	41.61	102.2	173.4	102.2	41.61	102.2	70- 80	2078	71860	99.4,99.4
90	0.5656	0.4057	0.3153	0.4057	0.5656	0.4057	0.3153	0.4057	80- 90	456.3	72316	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): 50253 lm

%lum = 69.5%

%lamp = 69.5%

Conical surface Flux(120deg): 65100 lm

%lum = 90.0%

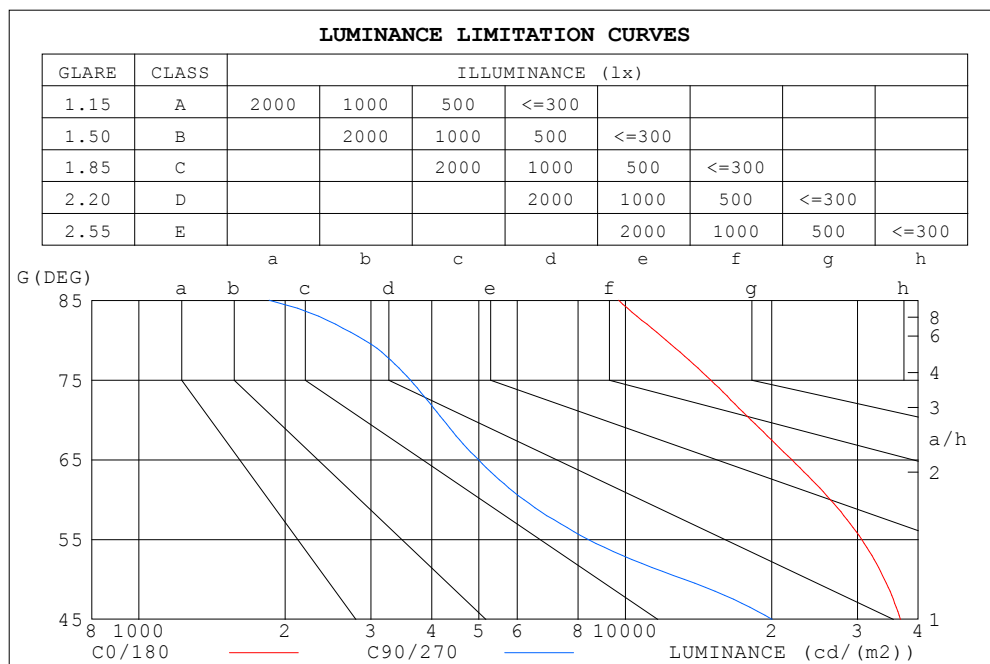
%lamp = 90.0%

C Range: 0 - 360DEG
C Interval: 10.0DEG
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Temperature:25.3DEG
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Test Date:2020-06-18

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 γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.426
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LUMINANCE LIMITATION CURVES



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	9701	1852
80	12130	2911
75	14974	3618
70	18137	4223
65	21990	4992
60	26405	6187
55	30613	8388
50	34097	13226
45	36772	20040

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 Remarks:

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Remarks:

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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	.252	.143	.045	.245	.140	.044	.232	.133	.042	.220	.127	.041	.209	.121	.039															
2.0	.243	.133	.041	.237	.131	.040	.226	.125	.039	.215	.121	.038	.206	.116	.037															
3.0	.230	.122	.037	.224	.120	.036	.215	.116	.035	.205	.113	.035	.197	.109	.034															
4.0	.216	.112	.033	.211	.111	.033	.203	.107	.032	.194	.104	.032	.187	.102	.031															
5.0	.203	.103	.030	.199	.102	.030	.191	.099	.029	.184	.097	.029	.177	.095	.028															
6.0	.190	.095	.027	.187	.094	.027	.180	.092	.027	.174	.090	.027	.168	.088	.026															
7.0	.179	.089	.025	.176	.088	.025	.170	.086	.025	.164	.084	.024	.159	.083	.024															
8.0	.169	.083	.023	.166	.082	.023	.161	.080	.023	.156	.079	.023	.151	.077	.023															
9.0	.160	.077	.022	.157	.077	.022	.152	.075	.021	.148	.074	.021	.143	.073	.021															
10.0	.151	.073	.020	.149	.072	.020	.145	.071	.020	.140	.070	.020	.136	.069	.020															

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	.176	.157	.139	.151	.134	.120	.103	.092	.083	.059	.054	.048	.019	.017	.016		
2.0	.166	.132	.104	.142	.114	.090	.097	.079	.063	.056	.046	.037	.018	.015	.012		
3.0	.157	.114	.080	.134	.098	.069	.092	.068	.049	.053	.040	.029	.017	.013	.009		
4.0	.149	.100	.063	.128	.087	.055	.088	.060	.039	.051	.035	.023	.016	.012	.008		
5.0	.141	.089	.051	.121	.077	.045	.084	.054	.031	.048	.032	.019	.016	.010	.006		
6.0	.134	.081	.042	.116	.070	.037	.080	.049	.026	.046	.029	.016	.015	.009	.005		
7.0	.128	.074	.036	.110	.064	.031	.076	.045	.022	.044	.026	.013	.014	.009	.004		
8.0	.122	.068	.031	.105	.059	.027	.073	.041	.019	.042	.024	.011	.014	.008	.004		
9.0	.117	.063	.027	.100	.055	.023	.070	.038	.017	.041	.023	.010	.013	.007	.003		
10.0	.111	.059	.024	.096	.051	.021	.067	.036	.015	.039	.021	.009	.013	.007	.003		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:LYJ
 Test Date:2020-06-18

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	24.0	25.4	24.3	25.7	26.0	15.9	17.3	16.2	17.6	17.9
3H	25.1	26.3	25.4	26.7	27.0	16.6	17.8	16.9	18.2	18.5
4H	25.4	26.6	25.8	26.9	27.3	16.8	18.0	17.2	18.3	18.7
6H	25.6	26.7	26.0	27.1	27.5	16.9	18.0	17.3	18.4	18.8
8H	25.7	26.7	26.1	27.1	27.5	17.0	18.0	17.4	18.4	18.8
12H	25.7	26.7	26.1	27.1	27.5	17.0	18.0	17.4	18.3	18.8
4H 2H	24.0	25.2	24.4	25.5	25.9	17.6	18.8	18.0	19.1	19.5
3H	25.3	26.3	25.7	26.7	27.1	18.3	19.3	18.7	19.7	20.1
4H	25.7	26.6	26.2	27.0	27.5	18.6	19.4	19.0	19.9	20.3
6H	26.1	26.8	26.5	27.3	27.7	18.7	19.5	19.2	19.9	20.4
8H	26.2	26.9	26.6	27.3	27.8	18.7	19.4	19.2	19.9	20.4
12H	26.2	26.9	26.7	27.3	27.8	18.7	19.4	19.2	19.8	20.3
8H 4H	25.7	26.4	26.2	26.9	27.4	19.3	20.0	19.8	20.5	20.9
6H	26.1	26.7	26.6	27.2	27.7	19.5	20.1	20.0	20.6	21.1
8H	26.2	26.8	26.8	27.3	27.8	19.5	20.1	20.1	20.6	21.1
12H	26.3	26.8	26.9	27.3	27.9	19.6	20.0	20.1	20.5	21.1
12H 4H	25.7	26.3	26.2	26.8	27.3	19.4	20.0	19.9	20.5	21.0
6H	26.1	26.6	26.6	27.1	27.6	19.7	20.2	20.2	20.7	21.2
8H	26.2	26.7	26.8	27.2	27.8	19.7	20.2	20.3	20.7	21.3
CIE190: 2010										

CIE190: 2010
Area: 0.823728 m2

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Temperature:25.3DEG
Operators:LYJ
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γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity:65.0%
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Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UTILIZATION FACTORS TABLE

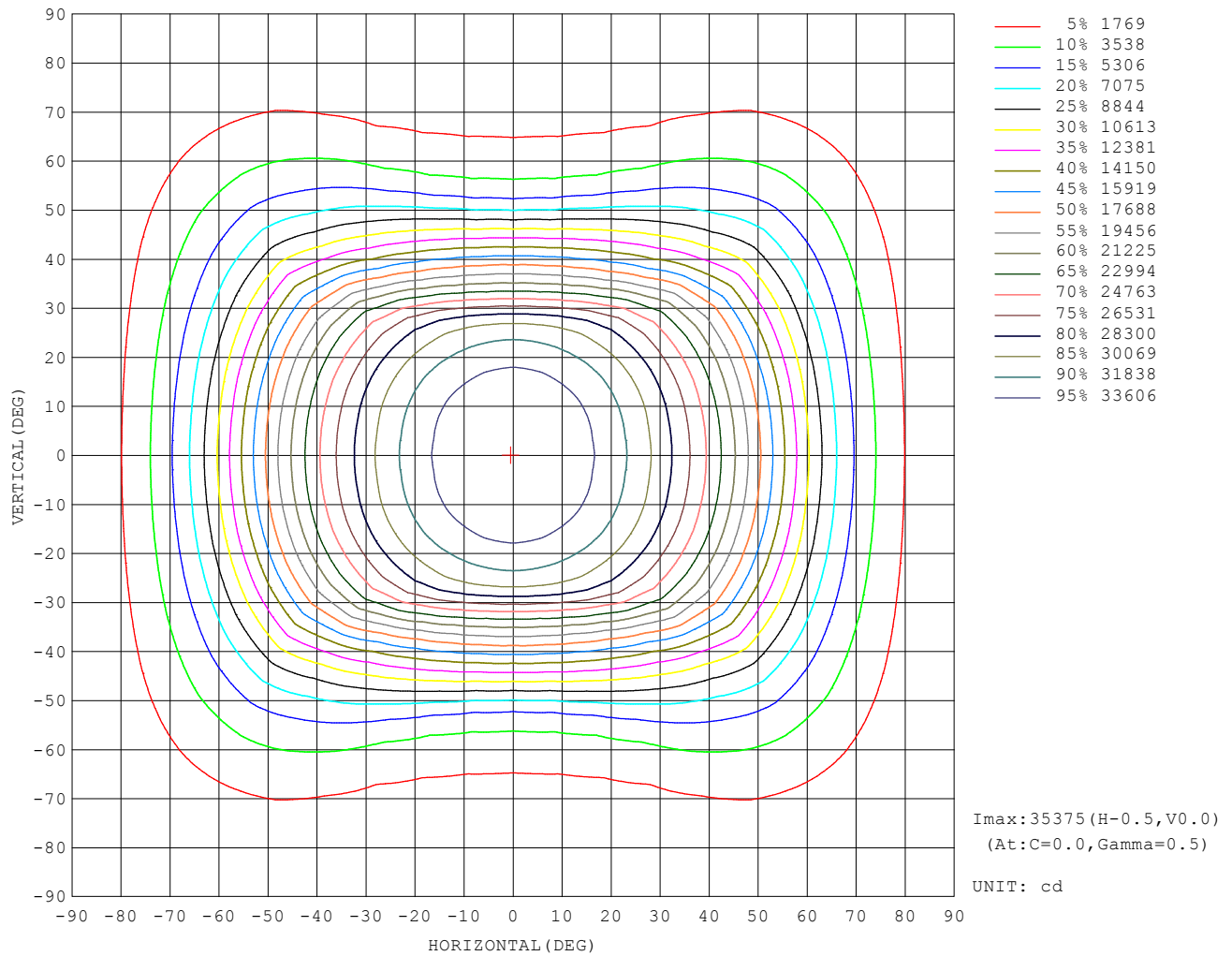
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	66	56	50	65	56	50	64	55	50	44
0.80	76	66	60	75	66	60	74	65	59	54
1.00	84	75	69	83	74	68	81	75	68	62
1.25	90	82	76	89	81	76	87	80	75	69
1.50	95	87	81	93	86	81	91	84	80	73
2.00	100	94	88	99	92	88	96	90	86	79
2.50	103	97	92	102	96	91	98	93	90	82
3.00	106	101	96	104	99	95	100	96	93	85
4.00	109	105	101	107	103	100	103	100	97	89
5.00	111	107	104	109	105	102	104	102	99	91
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:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

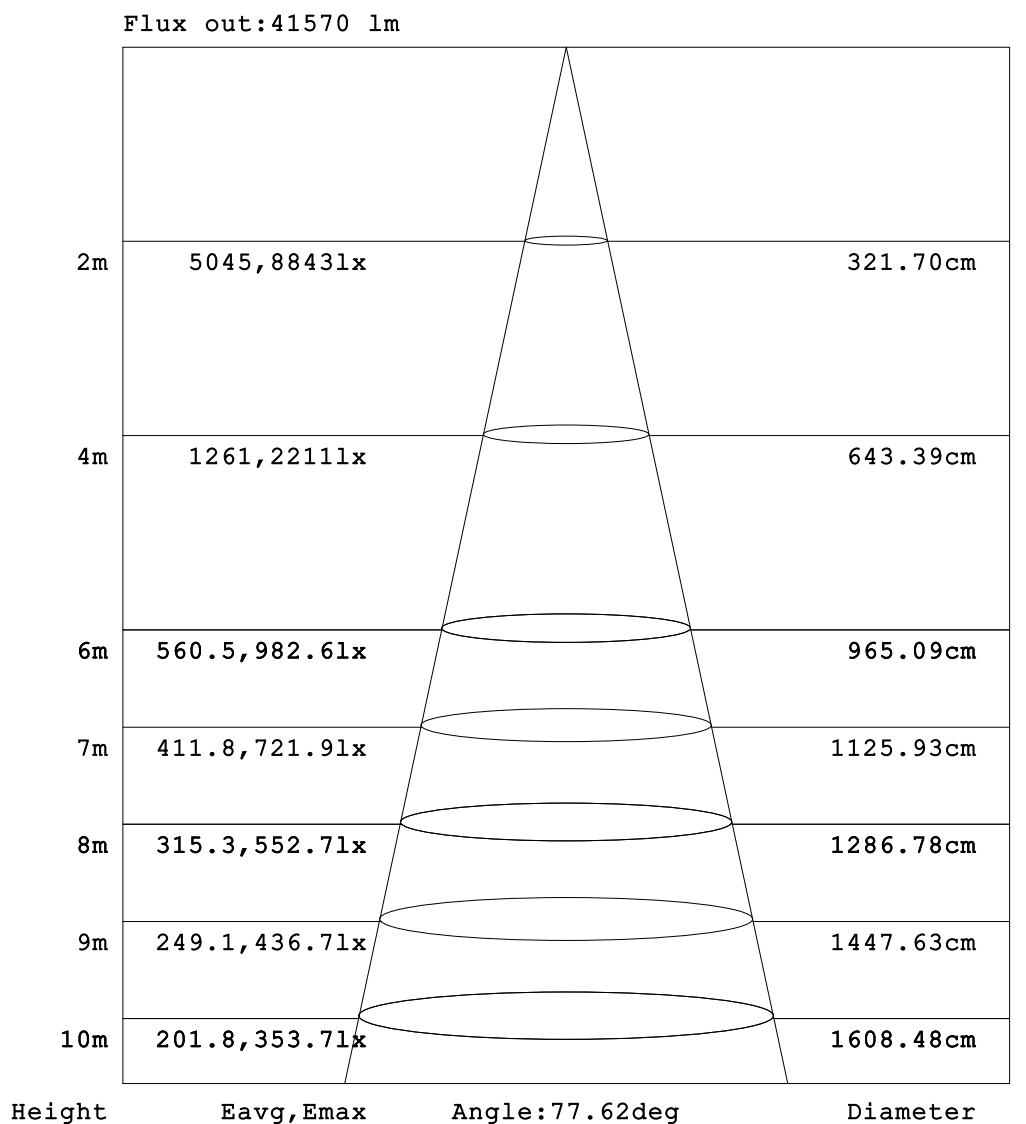
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 10.0DEG
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Temperature: 25.3DEG
Operators: LYJ
Test Date: 2020-06-18

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
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Humidity: 65.0%
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Remarks:

AAI Figure



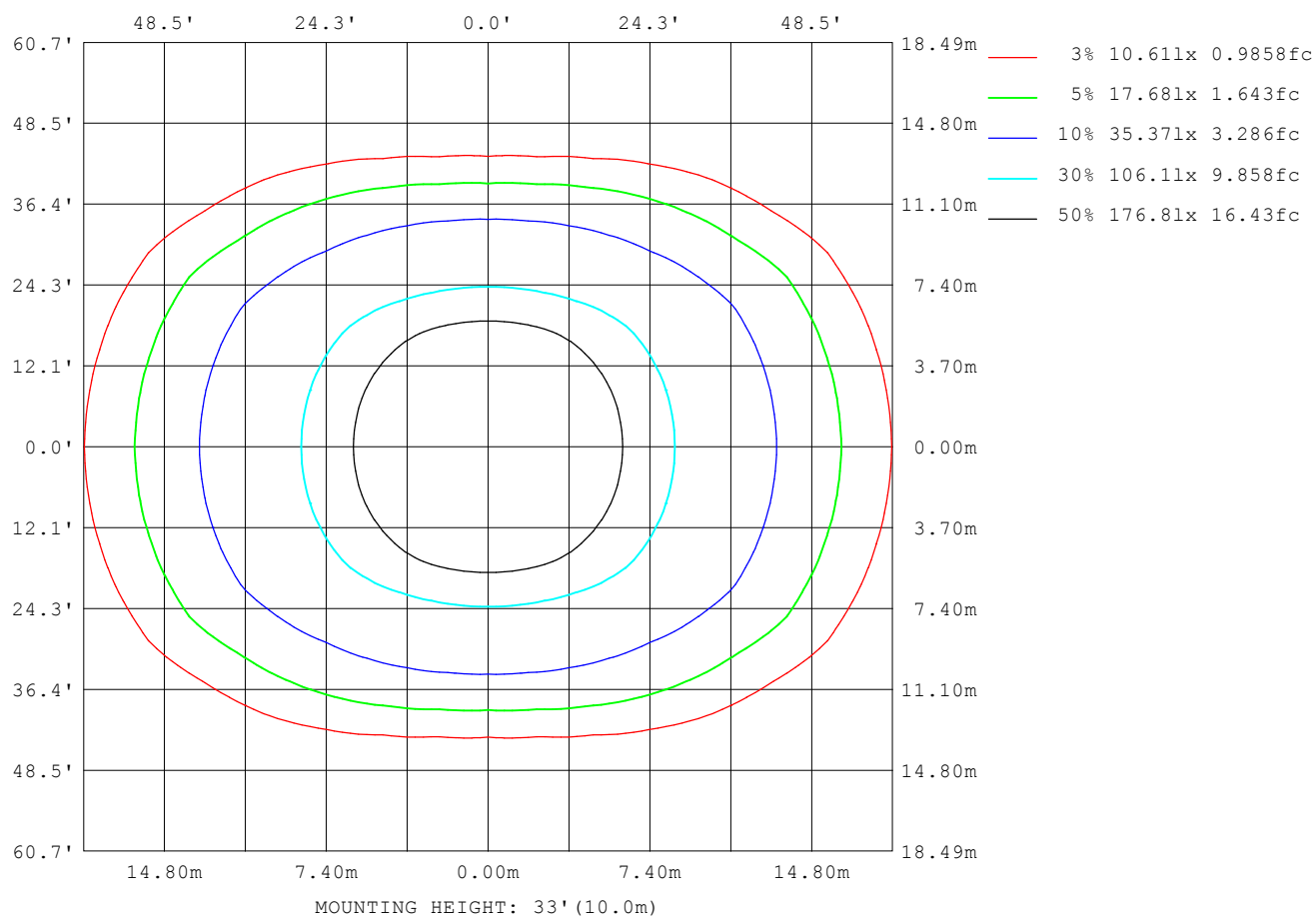
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity: 65.0%
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EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

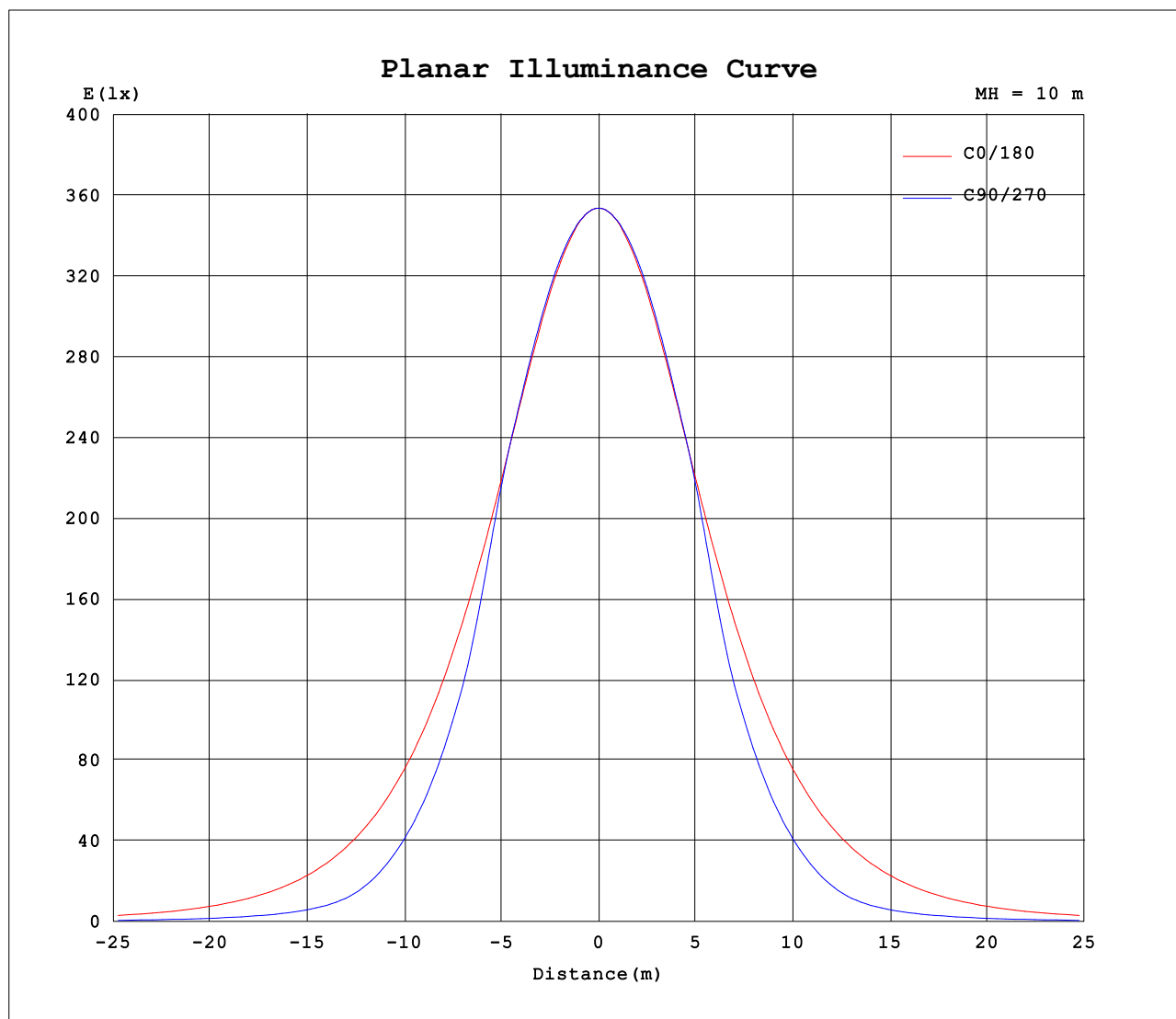
ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LYJ
Test Date: 2020-06-18

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
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Remarks:

Planar Illuminance Curve



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