

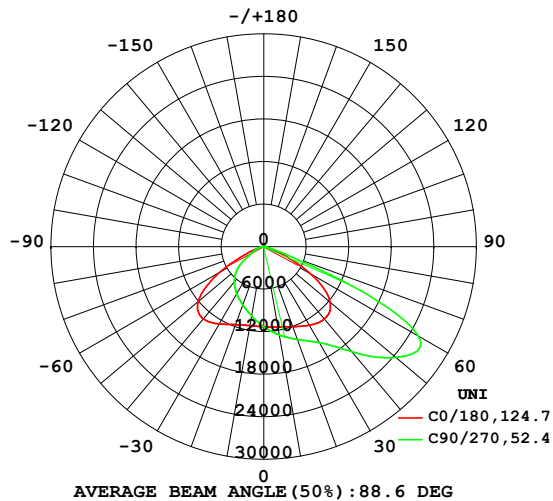
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

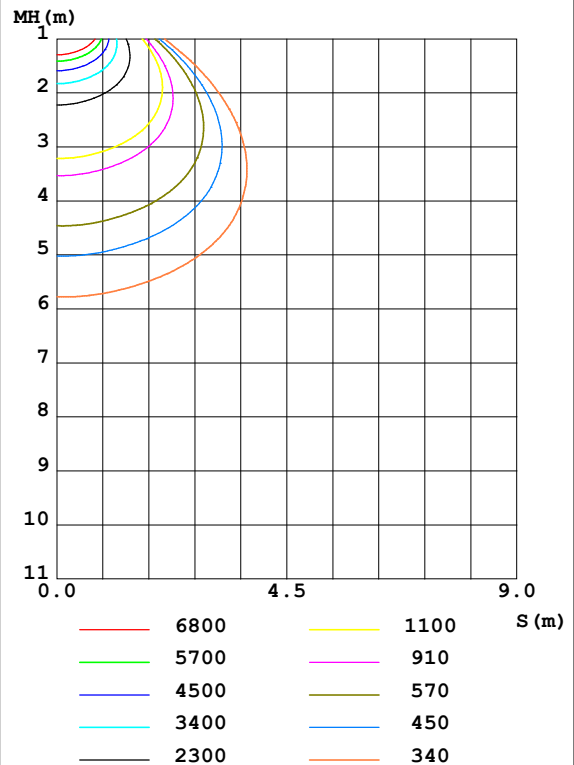
Test:U:229.5V I:1.333A P:300.1W PF:0.9814 Freq:50.01Hz UTHDi:0% ITHDi:0% Lamp Flux:46698.3x1 lm		
NAME: FL23-300-5070-F38401	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 155.58 lm/W			
MODEL	SMD283	Imax(cd)	26232	S/MH(C0/180)	1.76
NOMINAL POWER(W)	300	LOR(%)	100.0	S/MH(C90/270)	1.02
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	46698	η UP,DN(C0-180)	0.0,69.2
NOMINAL FLUX(lm)	46698.3	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,30.8
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.75
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	1.75

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:2020-08-14

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	1152	1247	1266	1225	1132	1030	994.7	1039	0- 10	1082	1082	2.32,2.32
20	1202	1394	1396	1345	1172	938.8	873.8	949.2	10- 20	3249	4331	9.27,9.27
30	1280	1588	1565	1537	1259	858.4	769.0	865.3	20- 30	5485	9816	21,21
40	1333	1864	1936	1834	1330	770.1	646.2	773.7	30- 40	7921	17737	38,38
50	1224	2100	2430	2067	1209	630.2	482.0	633.6	40- 50	10387	28124	60.2,60.2
60	752.0	1590	2514	1508	701.2	376.1	220.6	372.8	50- 60	10934	39058	83.6,83.6
70	180.8	393.2	361.4	361.0	169.6	152.2	112.9	159.8	60- 70	6355	45413	97.2,97.2
80	30.86	35.85	36.23	33.70	26.07	28.79	35.87	32.61	70- 80	1182	46595	99.8,99.8
90	0	0	0	0	0	0	0	0	80- 90	103.1	46698	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): 22666 lm

%lum = 48.5%

%lamp = 48.5%

Conical surface Flux(120deg): 39058 lm

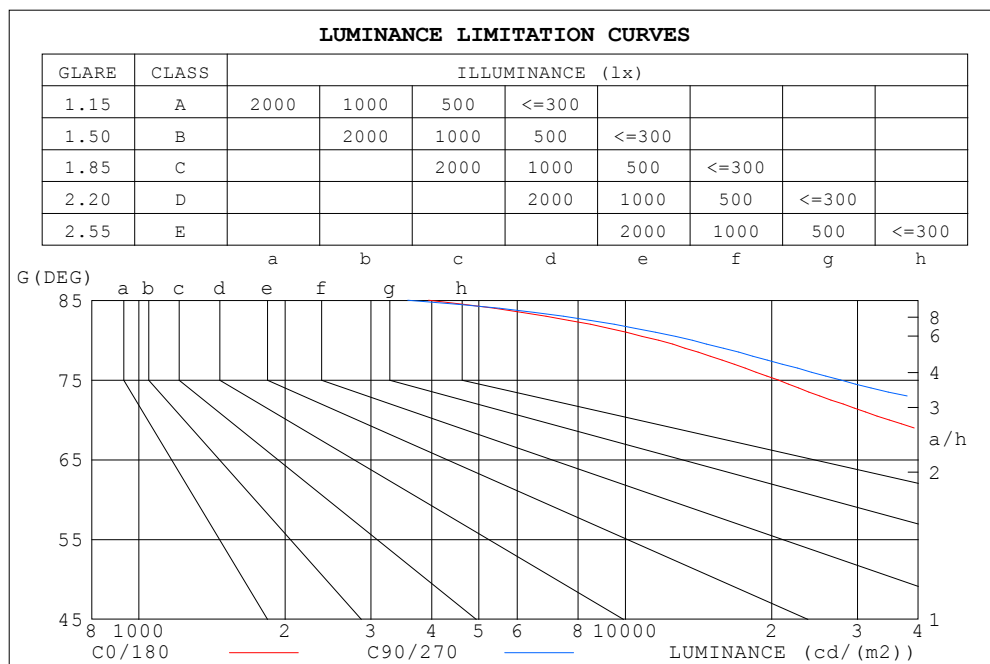
%lum = 83.6%

%lamp = 83.6%

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γ Range: 0 - 90DEG
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Humidity:65.0%
Test Distance:26.000m [K=0.4589]
Remarks:

LUMINANCE LIMITATION CURVES



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3943	3571
80	11719	13736
75	20616	27684
70	34850	69577
65	63571	257448
60	99165	331069
55	119397	298841
50	125524	248913
45	122187	204600

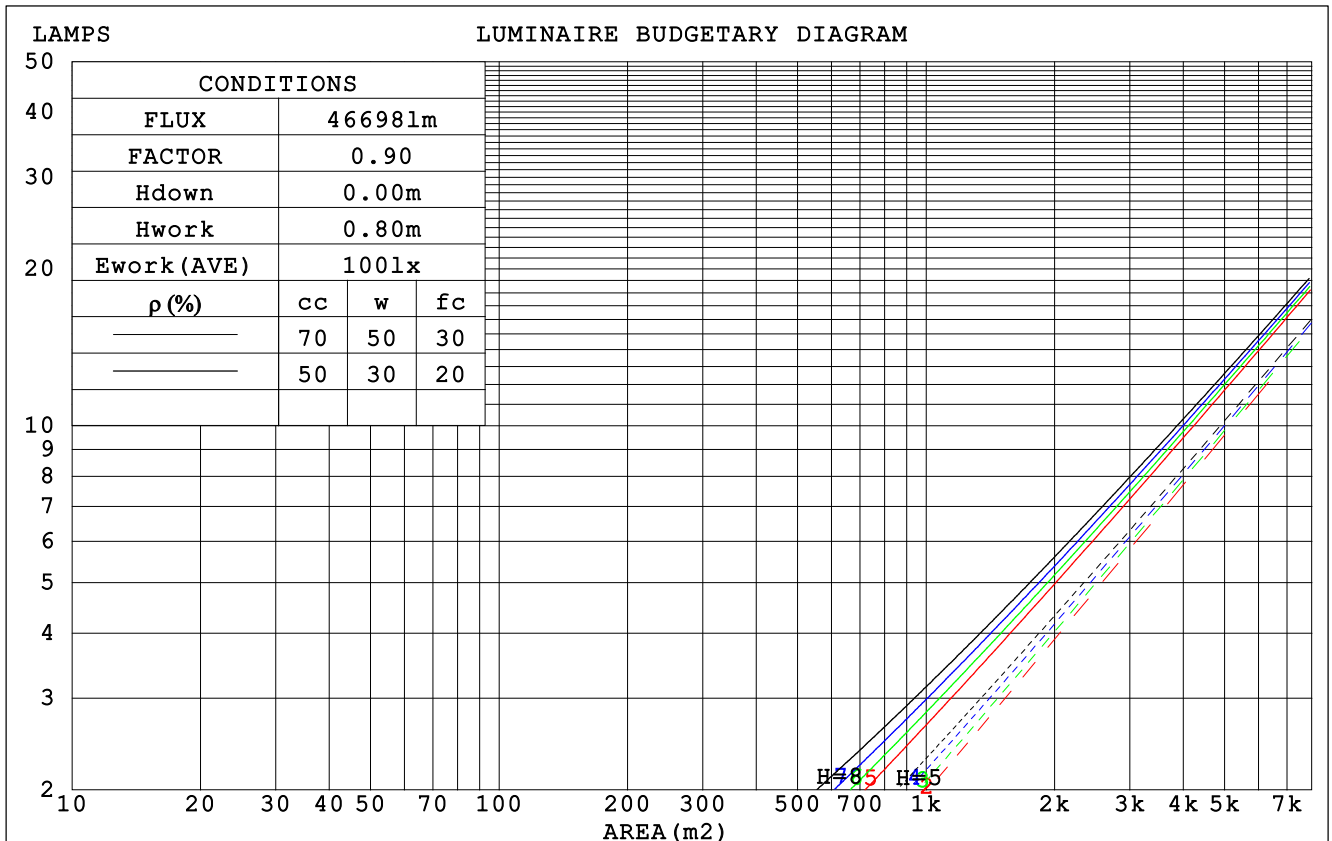
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Operators: LYJ
Test Date: 2020-08-14

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 γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.426
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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
p _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
p _{fc}	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	.00
1.0	1.05	1.01	.98	1.03	.99	.96	.99	.96	.93	.95	.92	.90	.91	.89	.87	.85
2.0	.91	.85	.79	.90	.83	.78	.86	.81	.76	.83	.78	.75	.80	.76	.73	.71
3.0	.80	.71	.65	.78	.70	.64	.75	.69	.63	.72	.67	.62	.70	.65	.61	.59
4.0	.70	.61	.54	.68	.60	.54	.66	.59	.53	.63	.57	.52	.61	.56	.51	.49
5.0	.62	.52	.45	.60	.52	.45	.58	.51	.45	.56	.49	.44	.54	.48	.44	.42
6.0	.55	.45	.39	.54	.45	.39	.52	.44	.38	.50	.43	.38	.49	.42	.38	.35
7.0	.49	.40	.34	.48	.40	.33	.47	.39	.33	.45	.38	.33	.44	.37	.33	.31
8.0	.44	.35	.29	.44	.35	.29	.42	.35	.29	.41	.34	.29	.40	.33	.29	.27
9.0	.40	.32	.26	.40	.31	.26	.38	.31	.26	.37	.30	.26	.36	.30	.25	.23
10.0	.37	.29	.23	.36	.28	.23	.35	.28	.23	.34	.28	.23	.33	.27	.23	.21



C Range: 0 - 360DEG
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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%
 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	.286	.163	.052	.279	.159	.051	.266	.153	.049	.254	.147	.047	.243	.141	.045		
2.0	.282	.155	.047	.276	.152	.047	.265	.147	.046	.254	.142	.045	.244	.138	.044		
3.0	.268	.143	.043	.263	.141	.042	.253	.137	.042	.243	.133	.041	.234	.130	.040		
4.0	.252	.131	.038	.247	.129	.038	.238	.126	.038	.229	.123	.037	.221	.120	.037		
5.0	.235	.120	.035	.231	.118	.035	.223	.116	.034	.215	.113	.034	.208	.111	.033		
6.0	.219	.110	.031	.215	.109	.031	.208	.107	.031	.201	.105	.031	.195	.103	.030		
7.0	.205	.101	.029	.201	.100	.029	.195	.098	.028	.189	.097	.028	.183	.095	.028		
8.0	.192	.094	.026	.189	.093	.026	.183	.091	.026	.177	.090	.026	.172	.088	.026		
9.0	.180	.087	.024	.177	.086	.024	.172	.085	.024	.167	.084	.024	.162	.082	.024		
10.0	.169	.081	.022	.166	.080	.022	.162	.079	.022	.157	.078	.022	.153	.077	.022		

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	.179	.156	.136	.153	.134	.117	.105	.092	.081	.060	.053	.047	.019	.017	.015		
2.0	.171	.132	.099	.146	.114	.086	.100	.079	.060	.058	.046	.035	.019	.015	.011		
3.0	.164	.114	.075	.141	.099	.065	.097	.068	.045	.056	.040	.027	.018	.013	.009		
4.0	.157	.101	.058	.135	.087	.050	.093	.061	.035	.054	.036	.021	.017	.012	.007		
5.0	.151	.091	.046	.130	.079	.040	.089	.055	.029	.052	.032	.017	.017	.011	.006		
6.0	.144	.083	.038	.124	.071	.033	.085	.050	.024	.050	.029	.014	.016	.010	.005		
7.0	.138	.076	.032	.118	.066	.028	.082	.046	.020	.048	.027	.012	.015	.009	.004		
8.0	.131	.070	.028	.113	.061	.024	.078	.043	.017	.046	.025	.010	.015	.008	.003		
9.0	.125	.065	.025	.108	.057	.021	.075	.040	.015	.044	.023	.009	.014	.008	.003		
10.0	.120	.061	.022	.103	.053	.019	.072	.037	.014	.042	.022	.008	.014	.007	.003		

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:LYJ
 Test Date:2020-08-14

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	30.4	32.1	30.7	32.4	32.7	36.2	37.9	36.5	38.2	38.5
3H	30.5	32.0	30.9	32.3	32.7	36.6	38.1	37.0	38.4	38.8
4H	30.5	31.9	30.9	32.3	32.6	36.6	38.0	37.0	38.3	38.7
6H	30.5	31.8	30.9	32.1	32.5	36.5	37.8	36.9	38.2	38.6
8H	30.4	31.7	30.9	32.1	32.5	36.5	37.8	36.9	38.1	38.5
12H	30.4	31.6	30.8	32.0	32.4	36.5	37.7	36.9	38.1	38.5
4H 2H	31.4	32.8	31.8	33.1	33.5	36.2	37.7	36.6	38.0	38.4
3H	31.5	32.7	31.9	33.1	33.5	36.8	37.9	37.2	38.3	38.7
4H	31.5	32.6	31.9	33.0	33.4	36.7	37.8	37.2	38.2	38.7
6H	31.5	32.4	31.9	32.8	33.3	36.7	37.6	37.2	38.1	38.5
8H	31.5	32.3	31.9	32.7	33.2	36.7	37.5	37.1	38.0	38.4
12H	31.4	32.2	31.9	32.7	33.1	36.7	37.4	37.1	37.9	38.4
8H 4H	31.6	32.4	32.0	32.9	33.3	36.7	37.5	37.1	38.0	38.4
6H	31.5	32.2	32.0	32.7	33.2	36.6	37.3	37.1	37.8	38.3
8H	31.5	32.1	32.0	32.6	33.1	36.6	37.2	37.1	37.7	38.2
12H	31.5	32.0	32.0	32.5	33.1	36.6	37.1	37.1	37.6	38.2
12H 4H	31.6	32.3	32.0	32.8	33.3	36.7	37.4	37.1	37.9	38.4
6H	31.5	32.2	32.0	32.6	33.1	36.6	37.2	37.1	37.7	38.2
8H	31.5	32.0	32.0	32.5	33.1	36.6	37.1	37.1	37.6	38.2
CIE190: 2010										

CIE190: 2010
Area: 0.1521 m2

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 γ Interval: 0.5DEG
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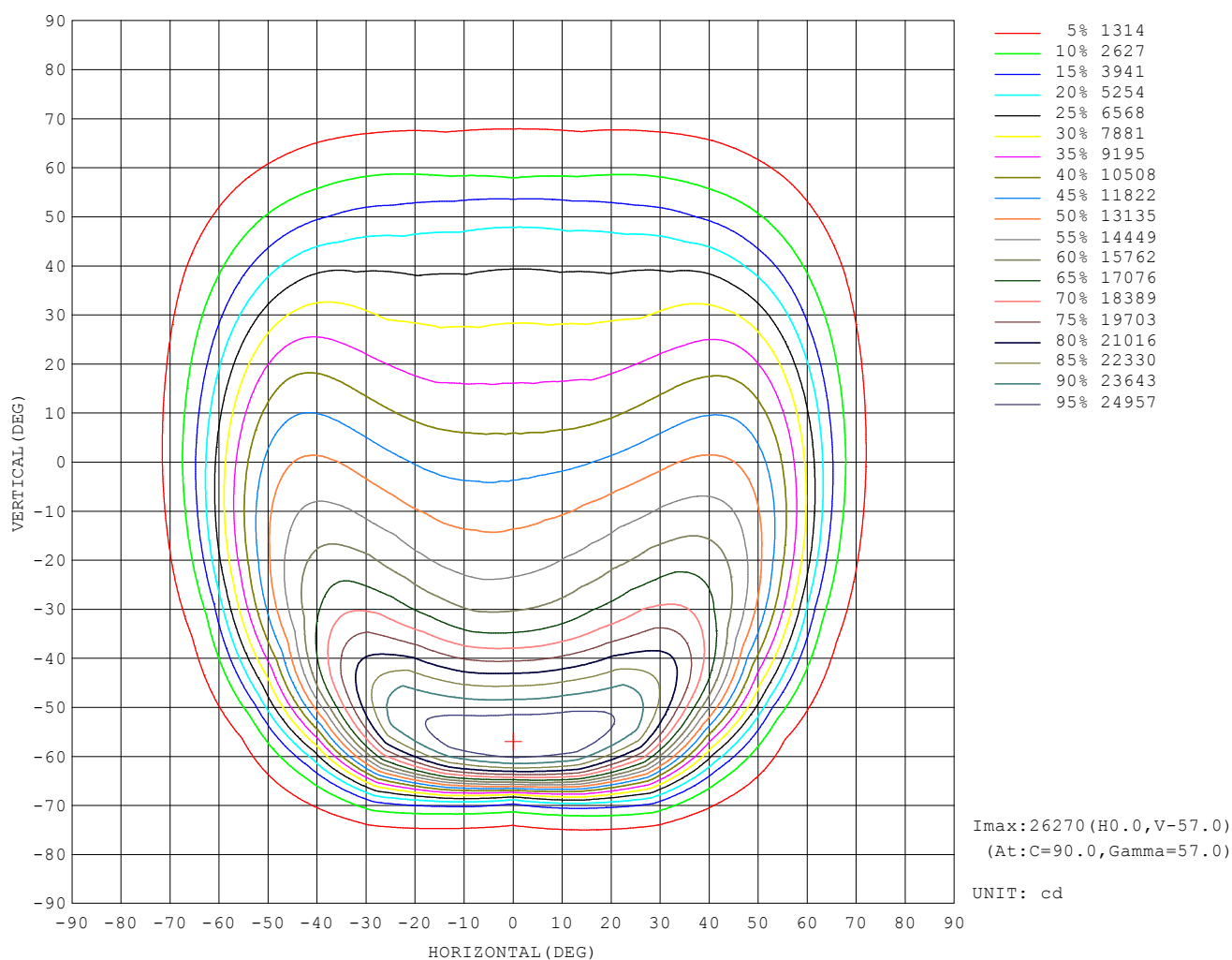
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	52	40	32	51	39	32	50	39	32	25
0.80	64	51	43	63	51	43	61	50	43	35
1.00	74	62	55	73	62	54	70	63	54	46
1.25	82	71	64	81	70	63	78	69	63	55
1.50	88	77	70	86	77	70	83	75	69	61
2.00	95	87	80	93	86	80	90	83	78	70
2.50	99	92	86	97	90	85	93	88	83	75
3.00	103	96	91	101	95	90	97	92	88	79
4.00	107	101	97	104	100	95	100	96	93	84
5.00	109	104	101	107	103	99	102	99	96	87
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

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 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:

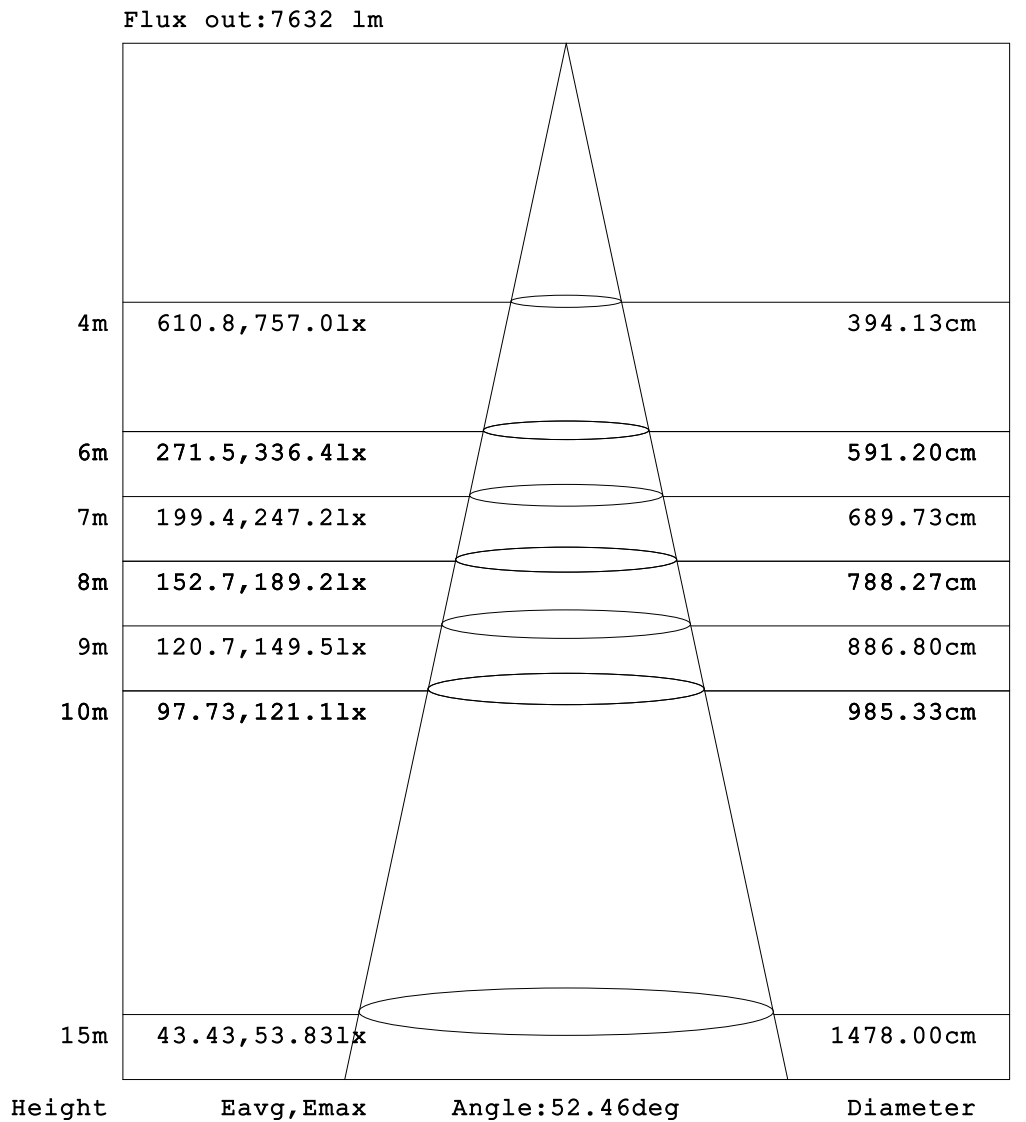
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
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Remarks:

AAI Figure



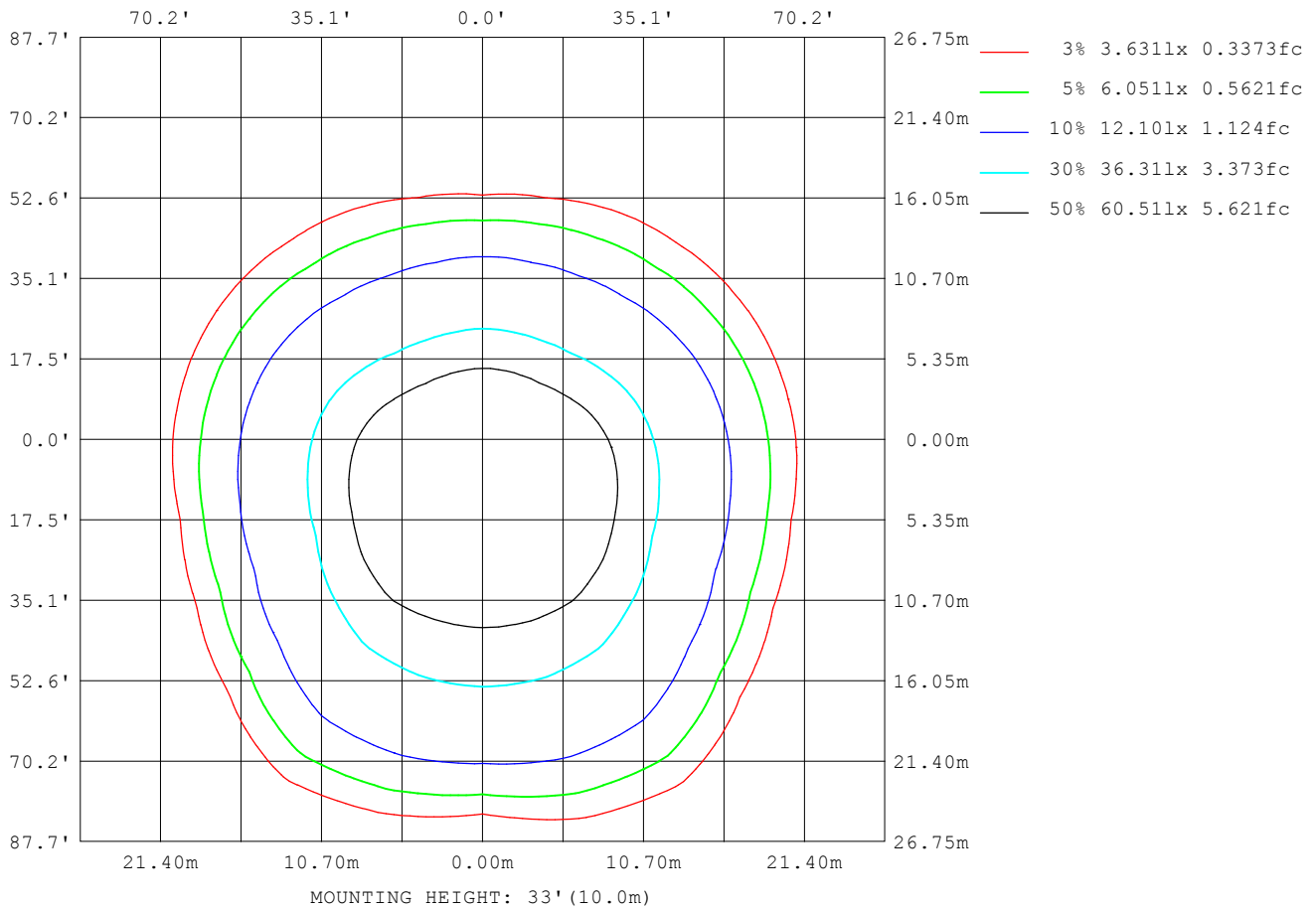
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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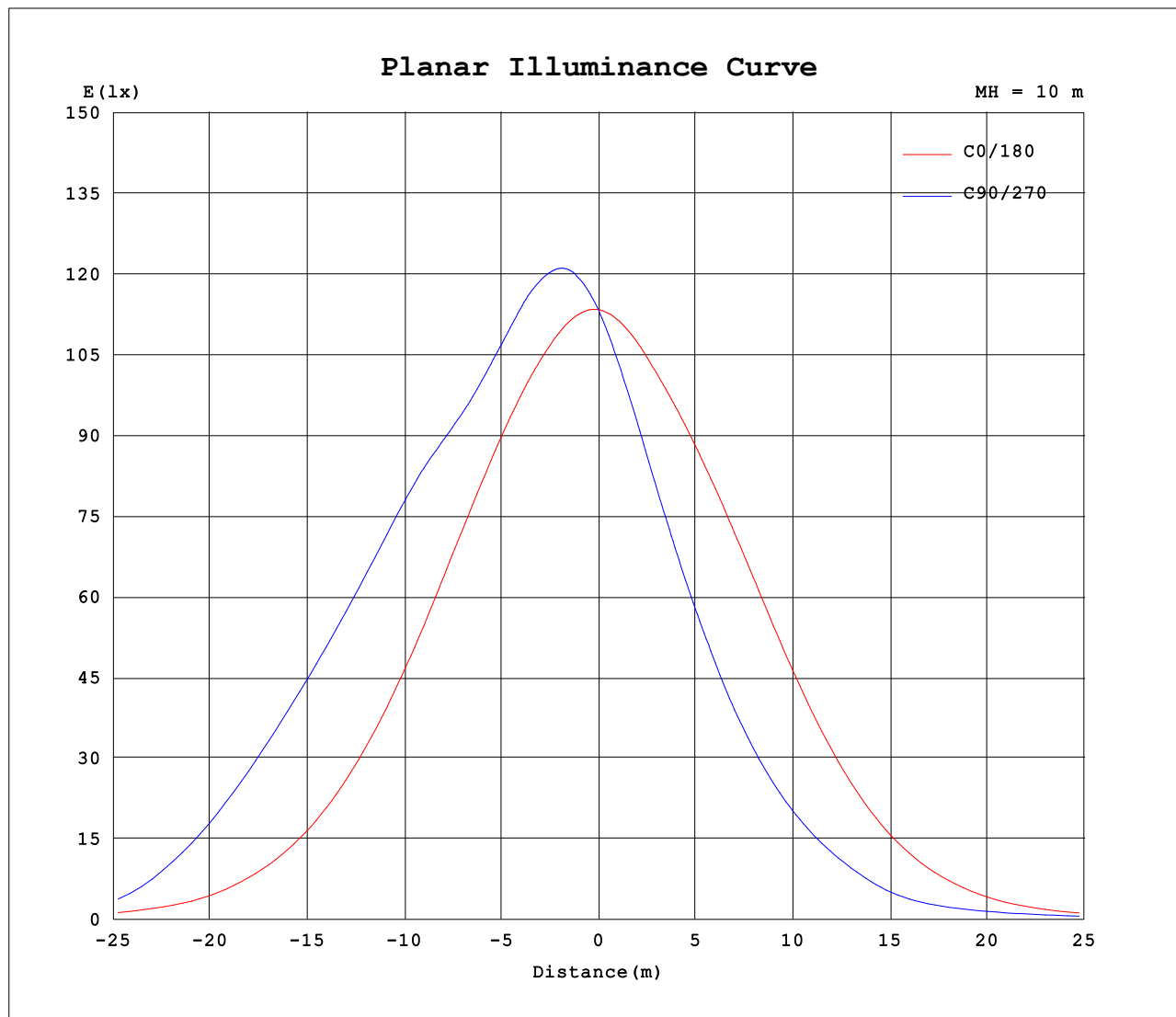
ISOLUX DIAGRAM



C Range: 0 - 360DEG
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Test Speed: HIGH
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Test Date: 2020-08-14

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 γ Interval: 0.5DEG
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Humidity: 65.0%
Test Distance: 26.000m [K=0.4589]
Remarks:

Planar Illuminance Curve



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Operators: LYJ
Test Date: 2020-08-14

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: