

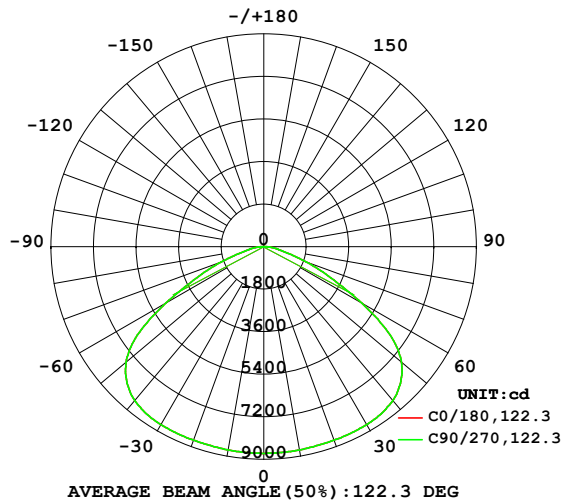
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

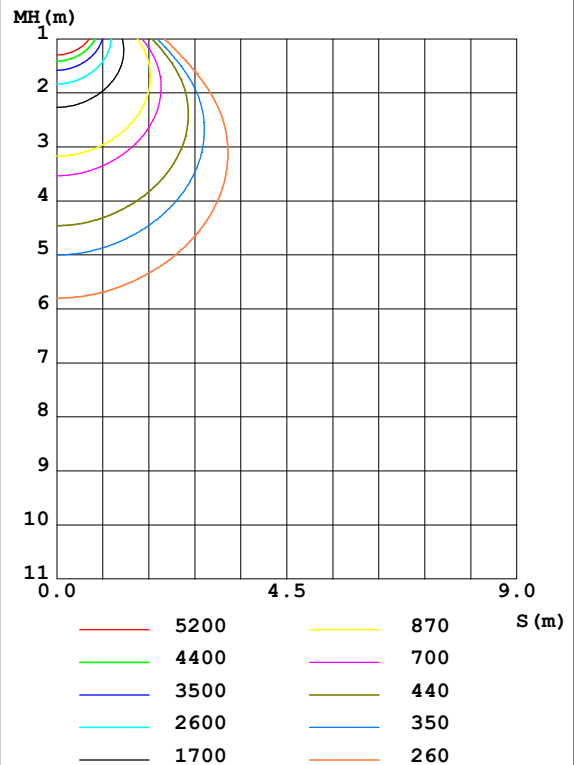
Test:U:229.6V I:0.9412A P:214.0W PF:0.9902 Freq:50.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:29351.7x1 lm		
NAME: HB38-200-5080-H00138W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 137.18 lm/W			
MODEL	/	I _{max} (cd)	8746	S/MH(C0/180)	1.51
NOMINAL POWER(W)	/	LOR(%)	100.0	S/MH(C90/270)	1.51
RATED VOLTAGE(V)	/	TOTAL FLUX(lm)	29352	η UP,DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	29351.7	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.0
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	1.55

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LYJ
Test Date:2021-06-28

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:26.000m [K=0.4551]
Remarks:

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ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	8730	8730	8730	8730	8730	8730	8730	8730	0- 10	834.1	834.1	2.84,2.84
20	8711	8711	8711	8711	8711	8711	8711	8711	10- 20	2470	3305	11.3,11.3
30	8696	8696	8696	8696	8696	8696	8696	8696	20- 30	4031	7336	25,25
40	8501	8501	8501	8501	8501	8501	8501	8501	30- 40	5416	12752	43.4,43.4
50	7605	7605	7605	7605	7605	7605	7605	7605	40- 50	6291	19043	64.9,64.9
60	4788	4788	4788	4788	4788	4788	4788	4788	50- 60	5724	24768	84.4,84.4
70	1928	1928	1928	1928	1928	1928	1928	1928	60- 70	3177	27945	95.2,95.2
80	586.6	586.6	586.6	586.6	586.6	586.6	586.6	586.6	70- 80	1139	29084	99.1,99.1
90	25.39	25.39	25.39	25.39	25.39	25.39	25.39	25.39	80- 90	268.2	29352	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:cd									UNIT:lm		

Conical surface Flux(90deg): 15846 lm

%lum = 54.0%

%lamp = 54.0%

Conical surface Flux(120deg): 24768 lm

%lum = 84.4%

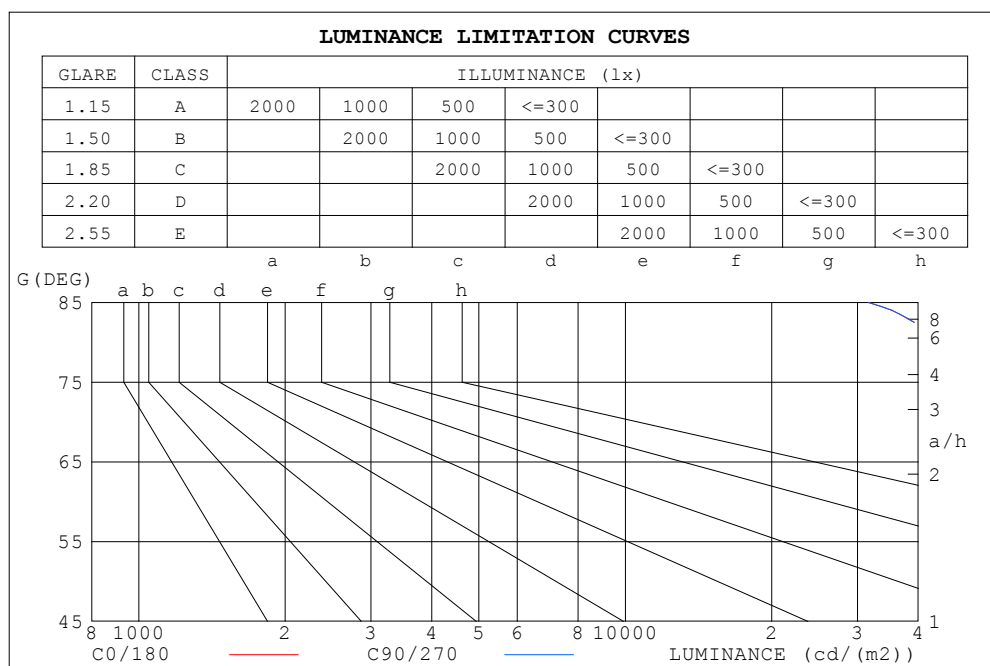
%lamp = 84.4%

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LUMINANCE LIMITATION CURVES



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	31661	31661
80	43307	43307
75	49332	49332
70	72253	72253
65	95466	95466
60	122774	122774
55	146029	146029
50	151675	151675
45	148220	148220

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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	.287	.163	.052	.280	.160	.051	.267	.153	.049	.255	.147	.047	.244	.141	.046		
2.0	.278	.152	.047	.271	.150	.046	.260	.145	.045	.249	.140	.044	.239	.135	.043		
3.0	.262	.139	.042	.256	.137	.041	.246	.133	.040	.236	.130	.040	.228	.126	.039		
4.0	.244	.127	.037	.240	.125	.037	.230	.122	.037	.222	.119	.036	.214	.116	.035		
5.0	.228	.116	.034	.224	.115	.033	.216	.112	.033	.208	.110	.033	.201	.107	.032		
6.0	.213	.107	.031	.209	.106	.030	.202	.103	.030	.195	.101	.030	.189	.099	.029		
7.0	.199	.098	.028	.195	.097	.028	.189	.096	.028	.183	.094	.027	.177	.092	.027		
8.0	.186	.091	.026	.183	.090	.025	.177	.089	.025	.172	.087	.025	.167	.086	.025		
9.0	.175	.085	.024	.172	.084	.024	.167	.083	.023	.162	.081	.023	.157	.080	.023		
10.0	.165	.079	.022	.162	.078	.022	.158	.077	.022	.153	.076	.022	.149	.075	.021		

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	.170	.132	.100	.146	.114	.086	.100	.079	.060	.058	.046	.035	.018	.015	.011		
3.0	.163	.114	.075	.140	.099	.065	.096	.068	.046	.055	.040	.027	.018	.013	.009		
4.0	.156	.101	.059	.134	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007		
5.0	.149	.090	.048	.128	.078	.041	.088	.055	.029	.051	.032	.017	.016	.010	.006		
6.0	.142	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005		
7.0	.135	.075	.033	.116	.065	.029	.080	.046	.021	.047	.027	.012	.015	.009	.004		
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.003		
9.0	.123	.065	.025	.106	.056	.022	.074	.039	.016	.043	.023	.009	.014	.008	.003		
10.0	.118	.060	.022	.101	.052	.019	.070	.037	.014	.041	.022	.008	.013	.007	.003		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:LYJ
 Test Date:2021-06-28

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.446
 Humidity:65.0%
 Test Distance:26.000m [K=0.4551]
 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	29.8	31.4	30.1	31.7	32.0	29.8	31.4	30.1	31.7	32.0
3H	30.6	32.1	31.0	32.4	32.7	30.6	32.1	31.0	32.4	32.7
4H	30.8	32.1	31.2	32.5	32.9	30.8	32.1	31.2	32.5	32.9
6H	30.8	32.1	31.3	32.5	32.9	30.8	32.1	31.3	32.5	32.9
8H	30.9	32.1	31.3	32.5	32.9	30.9	32.1	31.3	32.5	32.9
12H	30.9	32.1	31.3	32.4	32.9	30.9	32.1	31.3	32.4	32.9
4H 2H	30.1	31.5	30.5	31.8	32.2	30.1	31.5	30.5	31.8	32.2
3H	31.1	32.2	31.5	32.6	33.0	31.1	32.2	31.5	32.6	33.0
4H	31.3	32.3	31.7	32.7	33.2	31.3	32.3	31.7	32.7	33.2
6H	31.4	32.3	31.9	32.8	33.2	31.4	32.3	31.9	32.8	33.2
8H	31.5	32.3	32.0	32.8	33.2	31.5	32.3	32.0	32.8	33.2
12H	31.5	32.3	32.0	32.8	33.2	31.5	32.3	32.0	32.8	33.2
8H 4H	31.3	32.2	31.8	32.6	33.1	31.3	32.2	31.8	32.6	33.1
6H	31.6	32.2	32.0	32.7	33.2	31.6	32.2	32.0	32.7	33.2
8H	31.6	32.3	32.2	32.8	33.3	31.6	32.3	32.2	32.8	33.3
12H	31.7	32.3	32.2	32.7	33.3	31.7	32.3	32.2	32.7	33.3
12H 4H	31.3	32.1	31.8	32.6	33.0	31.3	32.1	31.8	32.6	33.0
6H	31.6	32.2	32.1	32.6	33.2	31.6	32.2	32.1	32.6	33.2
8H	31.7	32.2	32.2	32.7	33.3	31.7	32.2	32.2	32.7	33.3
CIE190: 2010										

CIE190: 2010
Area: 0.078 m2

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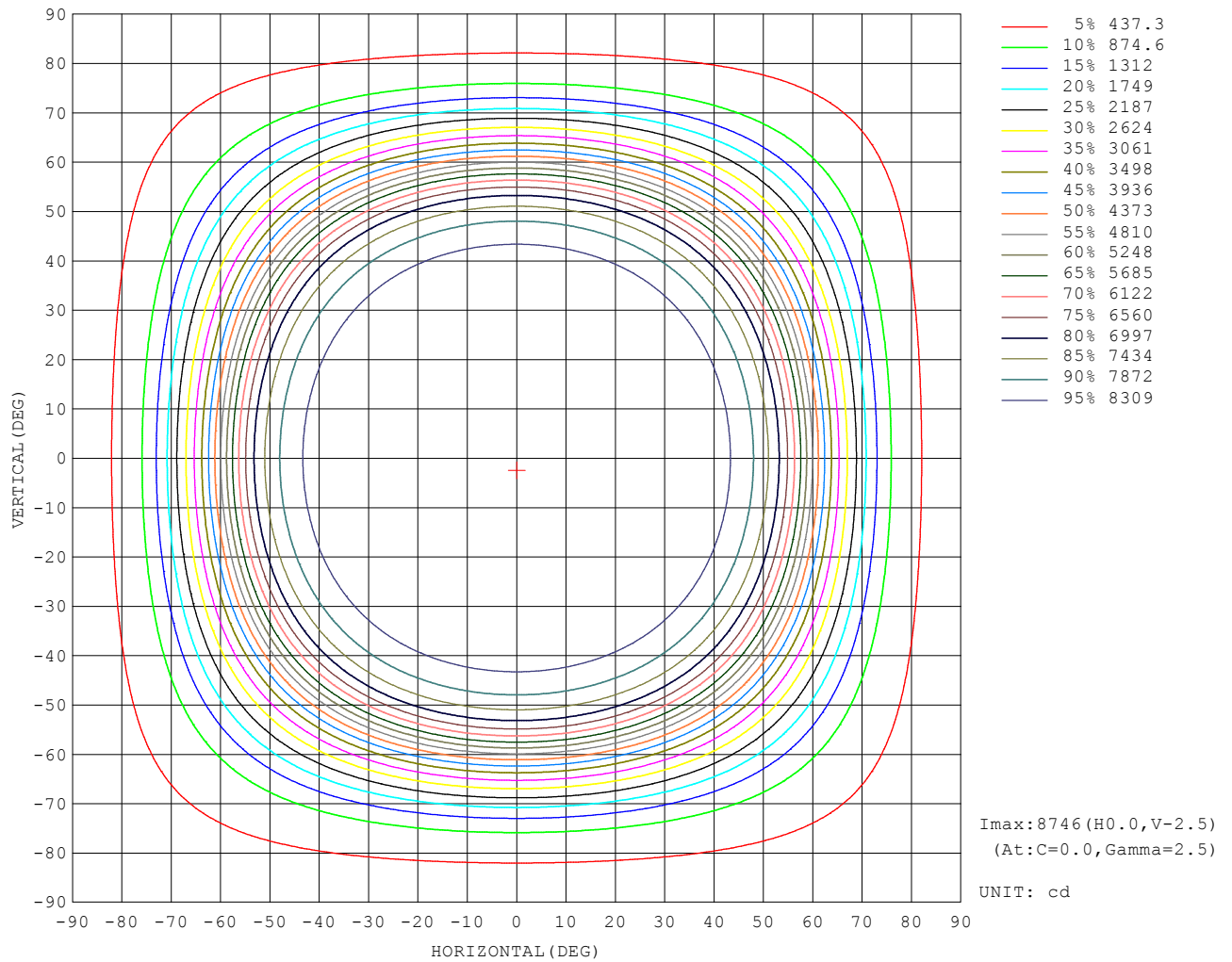
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	56	44	37	55	44	37	54	43	37	30
0.80	67	55	48	66	55	47	64	54	47	40
1.00	76	65	58	75	65	58	73	66	57	50
1.25	84	74	67	82	73	66	80	71	65	58
1.50	89	79	73	87	79	72	84	77	71	64
2.00	96	88	82	94	87	81	91	85	80	72
2.50	100	93	87	98	91	86	94	89	84	76
3.00	103	97	92	101	95	90	97	92	88	80
4.00	107	102	97	105	100	96	100	97	93	84
5.00	109	105	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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 Humidity: 65.0%
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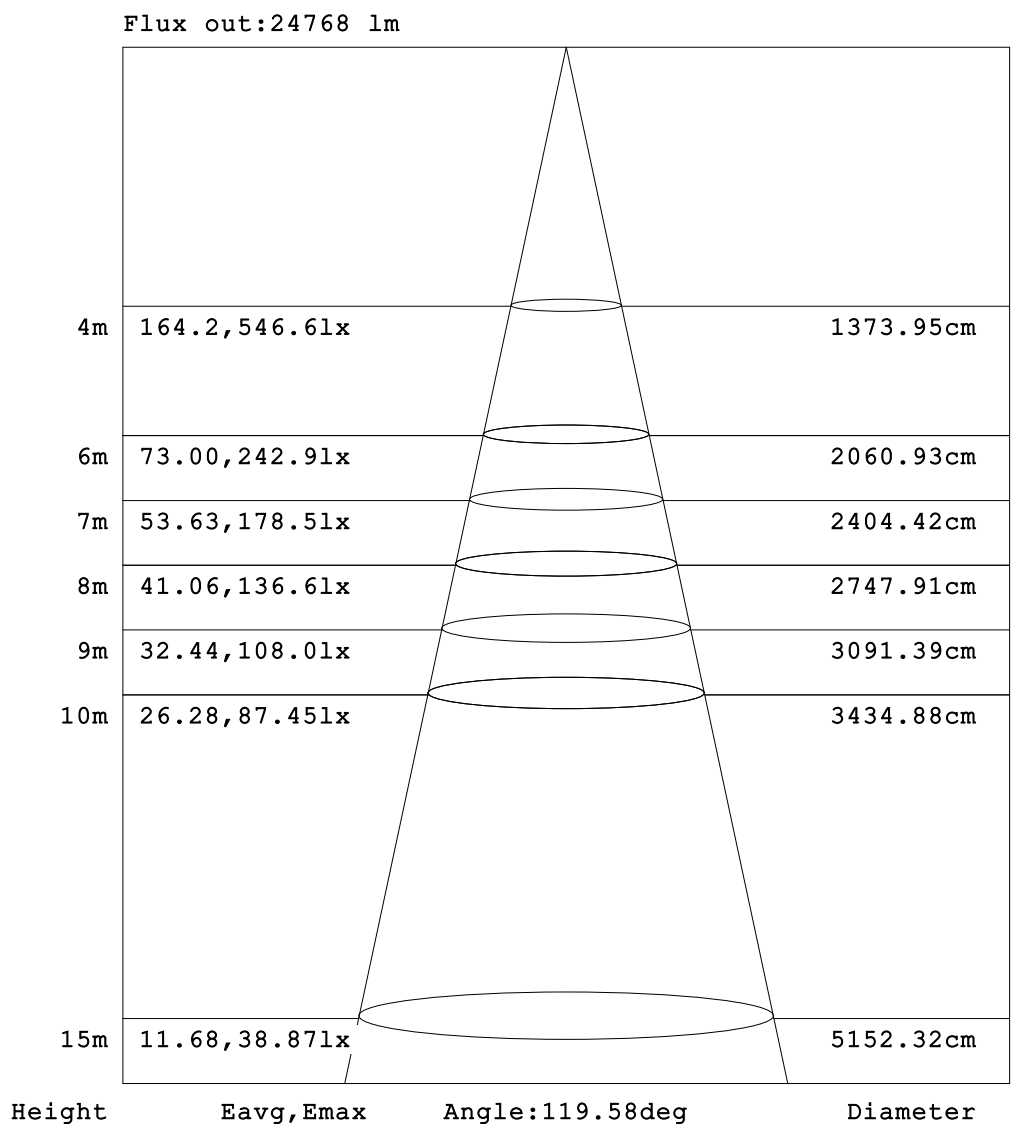
ISOCANDELA DIAGRAM



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Remarks:

AAI Figure



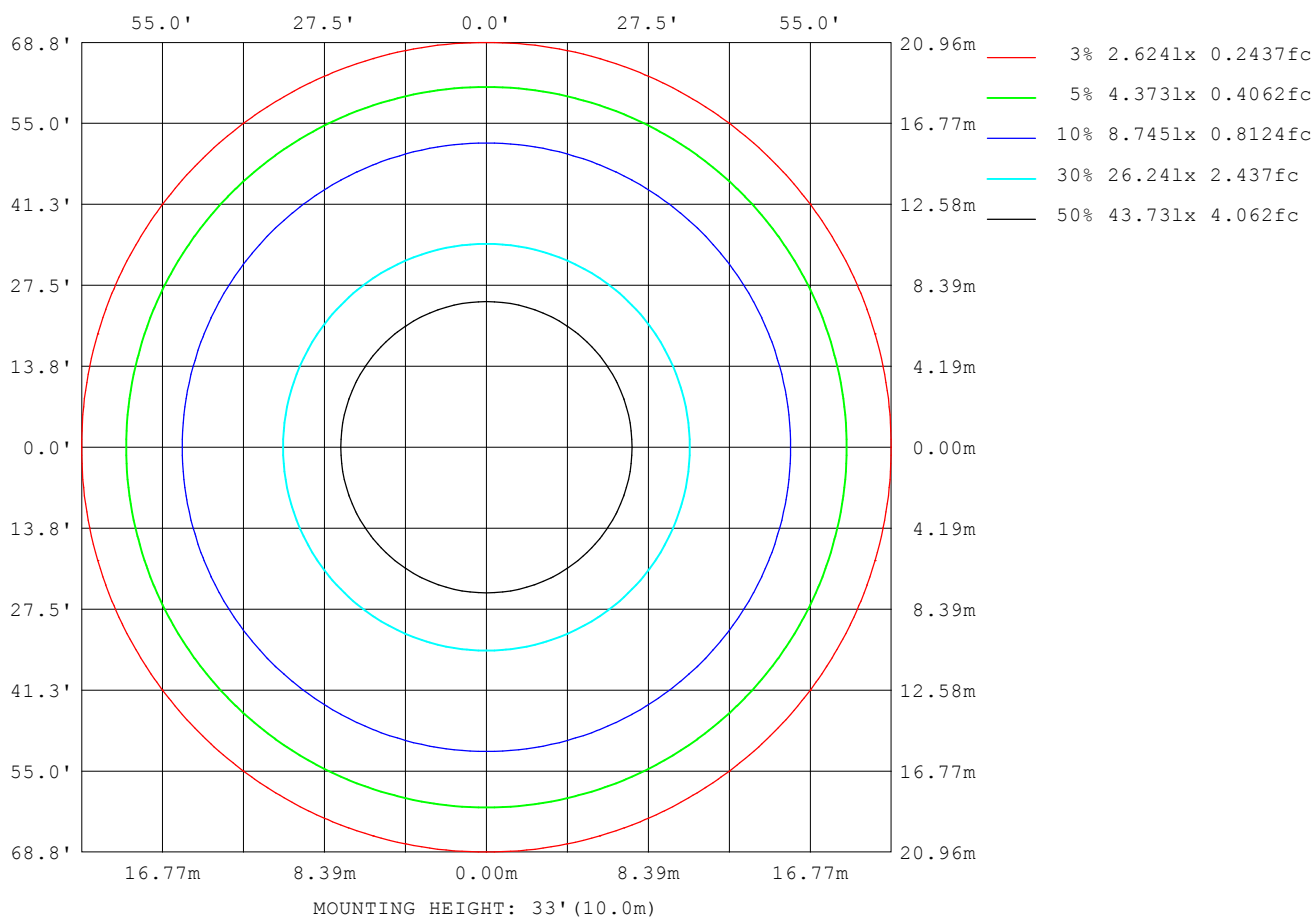
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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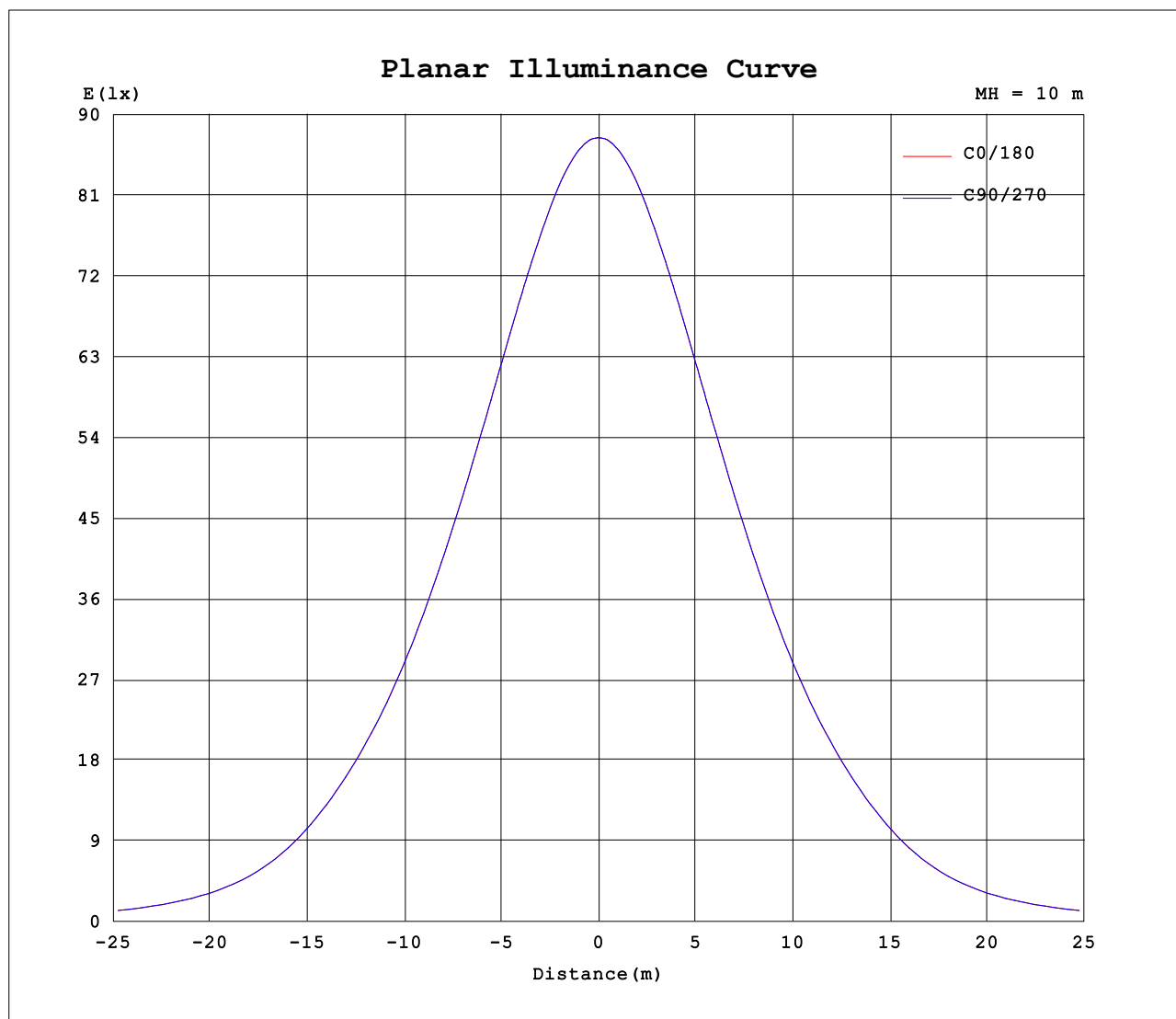
ISOLUX DIAGRAM



C Range: 0 - 360DEG
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Temperature: 25.3DEG
Operators: LYJ
Test Date: 2021-06-28

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

Planar Illuminance Curve



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