

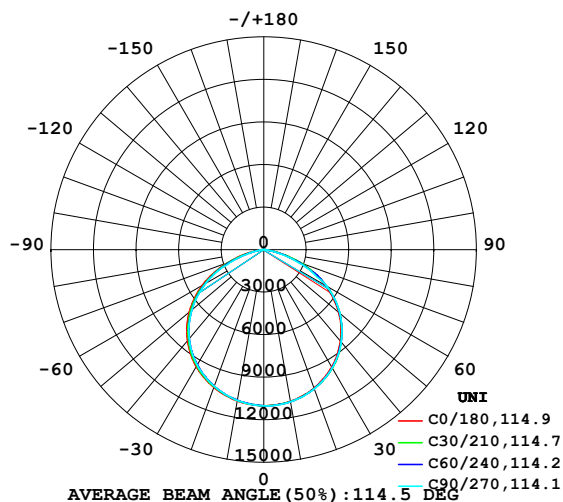
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

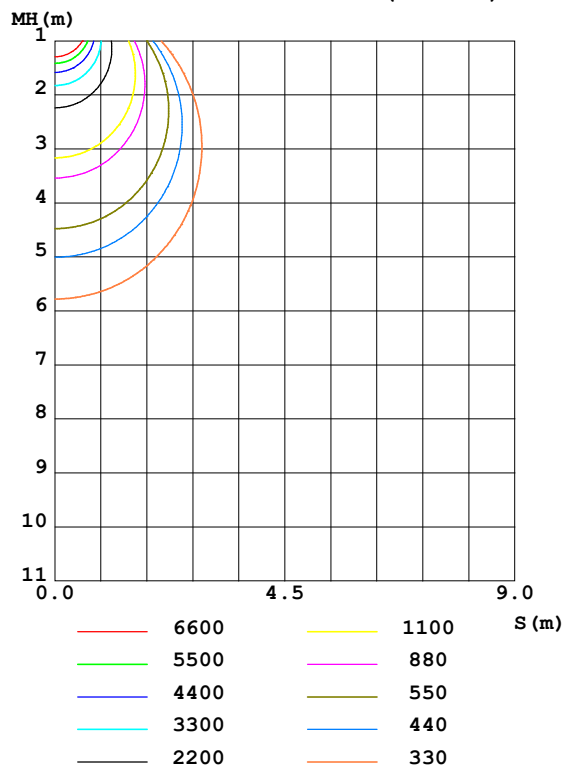
Test:U:229.7V I:0.8943A P:204.0W PF:0.9935 Freq:50.01Hz UTHDi:0% ITHDi:0% Lamp Flux:30951.5x1 lm		
NAME: FL23-200-5070-F00A23	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 151.69 lm/W			
MODEL	SMD283	I _{max} (cd)	11027	S/MH(C0/180)	1.29
NOMINAL POWER(W)	200	LOR(%)	100.0	S/MH(C90/270)	1.27
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	30951	η UP,DN(C0-180)	0.0,50.9
NOMINAL FLUX(lm)	30951.5	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.1
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: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LYJ
Test Date:2020-09-10

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=0.4574]
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	1086	1090	1090	1087	1083	1079	1079	1082	0- 10	1043	1043	3.37,3.37
20	1039	1044	1044	1040	1033	1024	1025	1030	10- 20	3004	4047	13.1,13.1
30	957.5	965.4	965.3	960.3	952.8	938.1	940.2	944.7	20- 30	4602	8649	27.9,27.9
40	841.6	850.6	850.6	847.8	837.6	818.9	819.1	825.0	30- 40	5625	14274	46.1,46.1
50	691.6	702.6	701.5	700.4	686.5	665.5	663.5	670.2	40- 50	5901	20175	65.2,65.2
60	498.9	514.2	512.0	513.0	498.5	474.4	470.1	478.9	50- 60	5305	25480	82.3,82.3
70	271.2	282.0	247.8	281.0	272.3	255.0	228.9	253.9	60- 70	3770	29250	94.5,94.5
80	57.70	56.19	44.61	58.53	59.27	46.43	38.97	44.84	70- 80	1562	30812	99.5,99.5
90	0.2049	0.2038	0.1915	0.1928	0.2154	0.2073	0.1750	0.2069	80- 90	139.6	30951	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): 17242 lm

%lum = 55.7%

%lamp = 55.7%

Conical surface Flux(120deg): 25480 lm

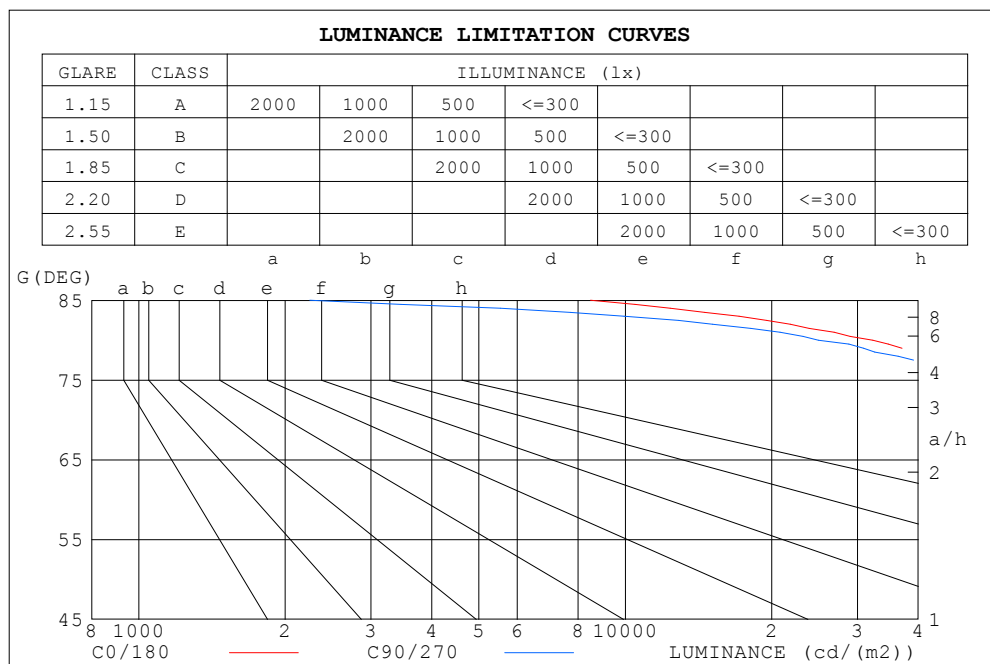
%lum = 82.3%

%lamp = 82.3%

C Range: 0 - 360DEG
C Interval: 15.0DEG
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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=0.4574]
Remarks:

LUMINANCE LIMITATION CURVES



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	8487	2246
80	32296	24946
75	56702	51475
70	77062	70359
65	89690	86138
60	96986	99428
55	101591	103591
50	104571	105971
45	105962	106997

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Remarks:

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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	.286	.163	.051	.279	.159	.051	.266	.152	.049	.254	.146	.047	.242	.141	.045															
2.0	.277	.152	.047	.271	.149	.046	.259	.144	.045	.248	.139	.044	.239	.135	.043															
3.0	.260	.138	.041	.255	.136	.041	.244	.132	.040	.235	.129	.040	.226	.125	.039															
4.0	.242	.126	.037	.238	.124	.037	.229	.121	.036	.220	.118	.036	.212	.115	.035															
5.0	.226	.115	.033	.221	.114	.033	.213	.111	.033	.206	.109	.032	.199	.106	.032															
6.0	.210	.105	.030	.206	.104	.030	.199	.102	.030	.192	.100	.029	.186	.098	.029															
7.0	.196	.097	.027	.193	.096	.027	.186	.094	.027	.180	.092	.027	.175	.091	.027															
8.0	.184	.090	.025	.181	.089	.025	.175	.087	.025	.169	.086	.025	.164	.084	.025															
9.0	.172	.083	.023	.170	.083	.023	.165	.081	.023	.160	.080	.023	.155	.079	.023															
10.0	.162	.078	.022	.160	.077	.022	.155	.076	.021	.151	.075	.021	.147	.074	.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	.076	.139	.099	.066	.096	.068	.046	.055	.040	.027	.018	.013	.009		
4.0	.155	.101	.059	.133	.087	.052	.092	.061	.036	.053	.036	.021	.017	.012	.007		
5.0	.148	.090	.048	.127	.078	.042	.088	.055	.029	.051	.032	.017	.016	.010	.006		
6.0	.141	.082	.040	.121	.071	.035	.084	.050	.024	.049	.029	.015	.016	.010	.005		
7.0	.134	.075	.034	.116	.065	.029	.080	.046	.021	.046	.027	.012	.015	.009	.004		
8.0	.128	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004		
9.0	.122	.064	.025	.105	.056	.022	.073	.039	.016	.042	.023	.009	.014	.008	.003		
10.0	.117	.060	.023	.100	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003		

C Range: 0 - 360DEG
 C Interval: 15.0DEG
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 Operators:LYJ
 Test Date:2020-09-10

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=0.4574]
 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	28.6	30.2	28.9	30.5	30.8	28.6	30.2	29.0	30.5	30.8
3H	30.1	31.6	30.5	31.9	32.3	30.0	31.5	30.4	31.8	32.1
4H	30.5	31.9	30.9	32.2	32.6	30.3	31.7	30.7	32.0	32.4
6H	30.7	31.9	31.1	32.3	32.7	30.4	31.6	30.8	32.0	32.4
8H	30.7	31.9	31.1	32.3	32.7	30.4	31.6	30.8	32.0	32.4
12H	30.6	31.8	31.1	32.2	32.6	30.3	31.5	30.8	31.9	32.3
4H 2H	29.2	30.5	29.6	30.9	31.3	29.2	30.6	29.6	30.9	31.3
3H	30.9	32.0	31.3	32.4	32.8	30.8	31.9	31.2	32.3	32.7
4H	31.4	32.4	31.8	32.8	33.3	31.1	32.1	31.6	32.6	33.0
6H	31.6	32.5	32.1	32.9	33.4	31.3	32.1	31.7	32.6	33.0
8H	31.6	32.4	32.1	32.9	33.3	31.2	32.1	31.7	32.5	33.0
12H	31.6	32.3	32.1	32.8	33.3	31.2	32.0	31.7	32.4	32.9
8H 4H	31.5	32.4	32.0	32.8	33.3	31.3	32.1	31.8	32.6	33.0
6H	31.8	32.4	32.3	32.9	33.4	31.4	32.1	31.9	32.6	33.1
8H	31.8	32.4	32.3	32.9	33.4	31.4	32.0	31.9	32.5	33.0
12H	31.8	32.3	32.3	32.8	33.4	31.4	31.9	31.9	32.4	33.0
12H 4H	31.5	32.3	32.0	32.7	33.2	31.3	32.0	31.8	32.5	33.0
6H	31.7	32.4	32.3	32.8	33.4	31.4	32.0	32.0	32.5	33.0
8H	31.8	32.3	32.3	32.8	33.4	31.4	32.0	31.9	32.5	33.0
CIE190: 2010										

CIE190: 2010
Area: 0.103 m2

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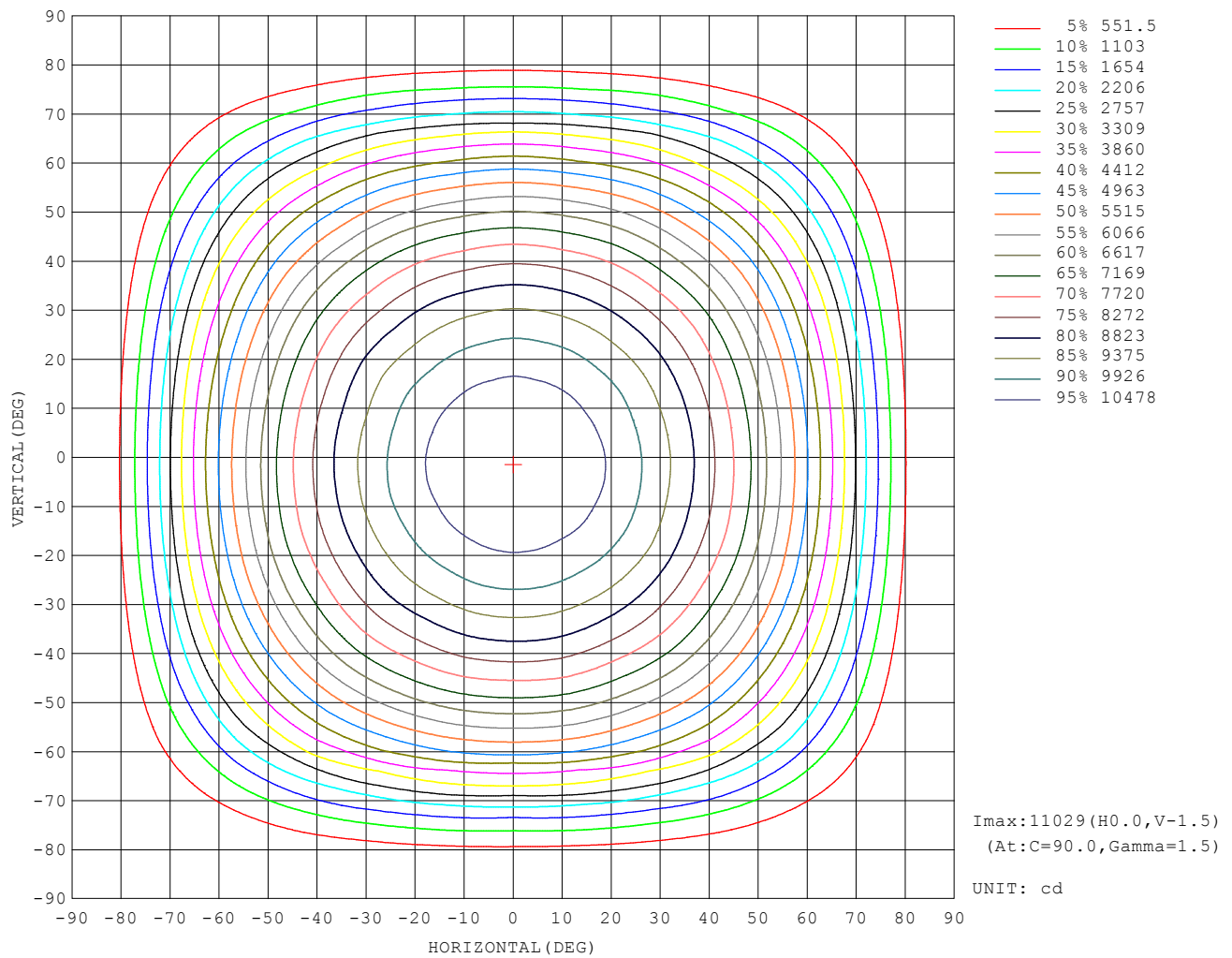
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	58	47	40	57	46	40	56	46	39	33
0.80	68	57	50	67	57	50	66	56	49	42
1.00	77	66	59	76	66	59	74	67	58	51
1.25	84	74	67	83	74	67	80	72	66	59
1.50	89	80	73	88	79	73	85	77	72	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	91	97	93	89	80
4.00	107	102	98	105	100	96	101	97	94	85
5.00	110	105	101	107	103	100	103	100	97	88
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

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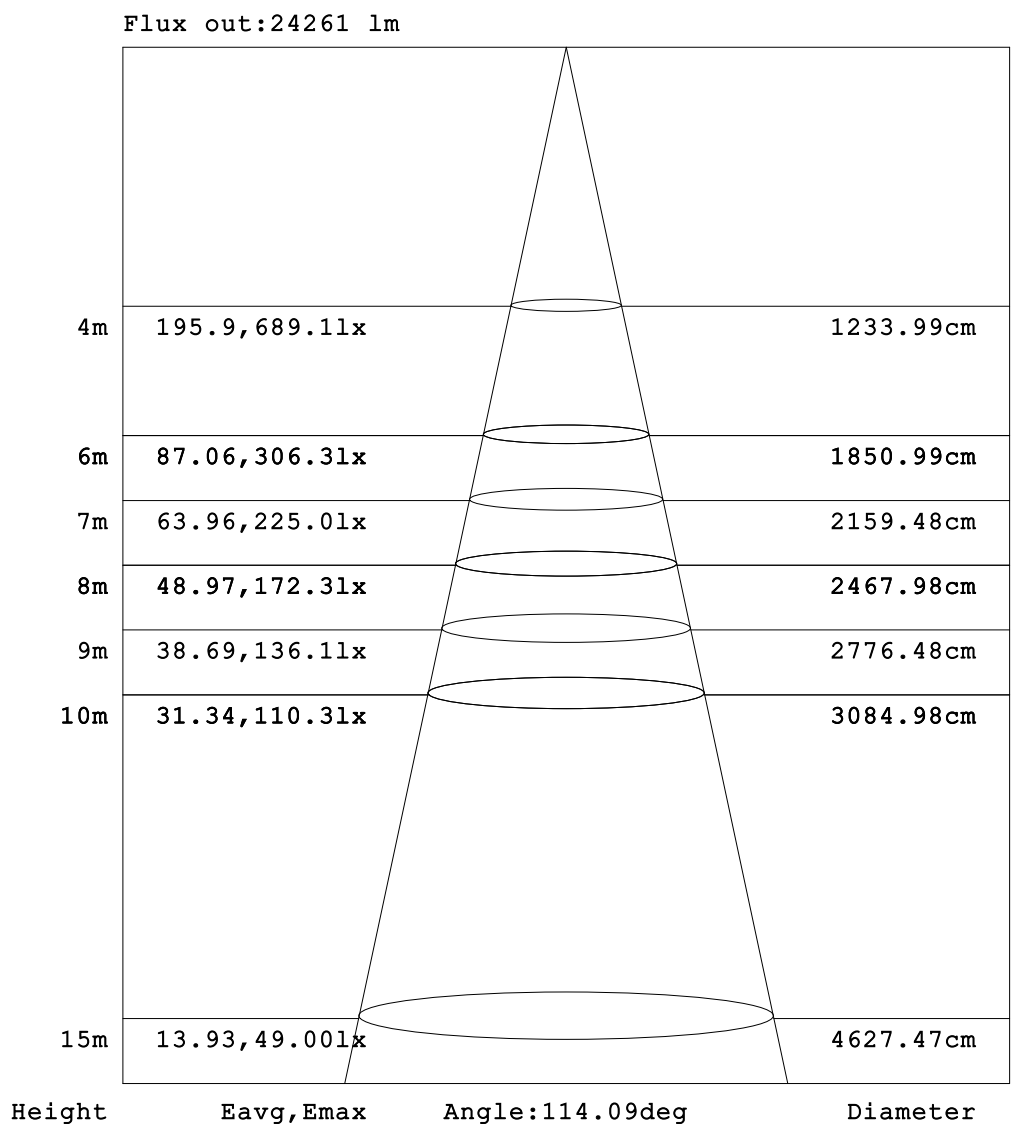
ISOCANDELA DIAGRAM



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Remarks:

AAI Figure



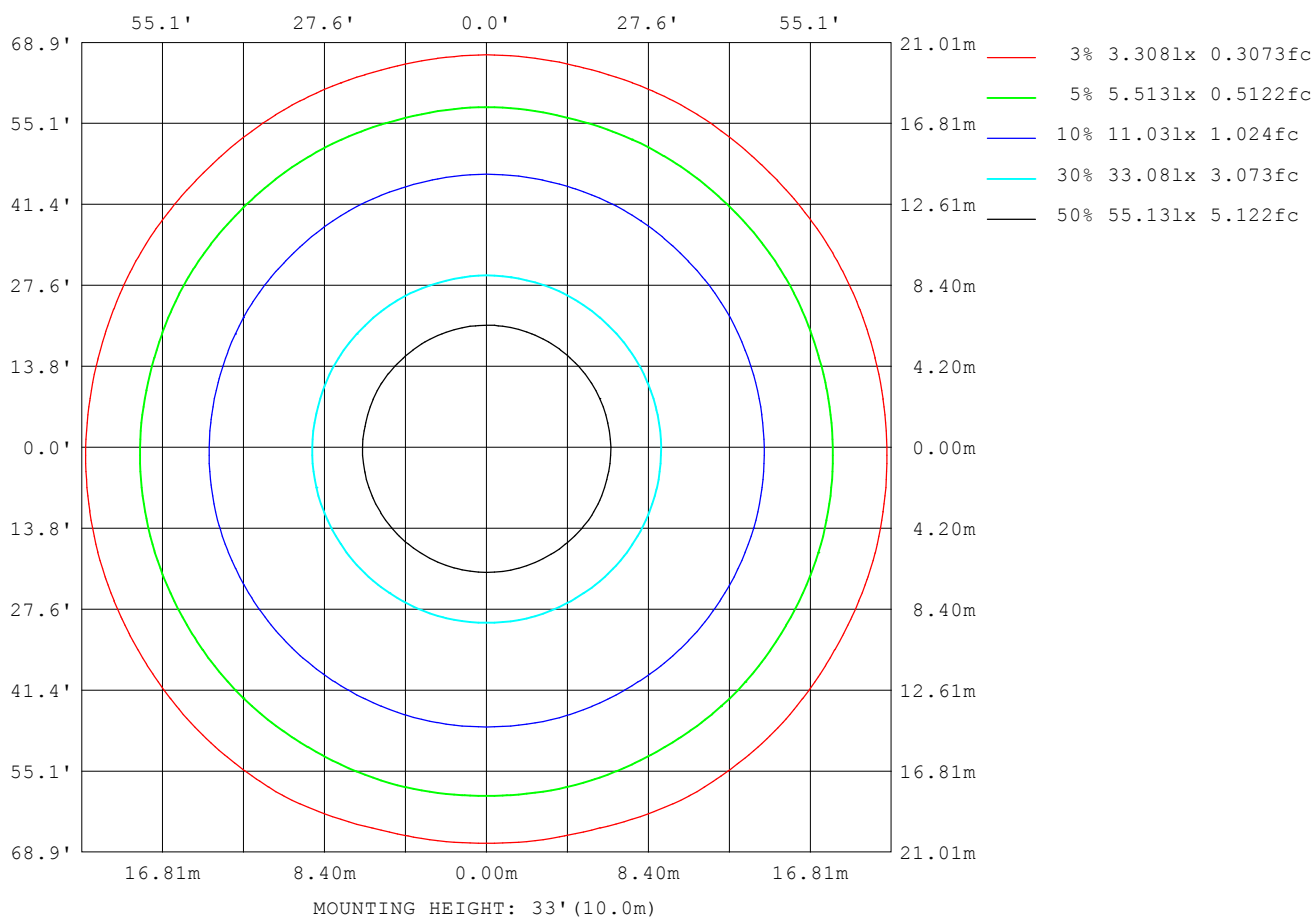
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

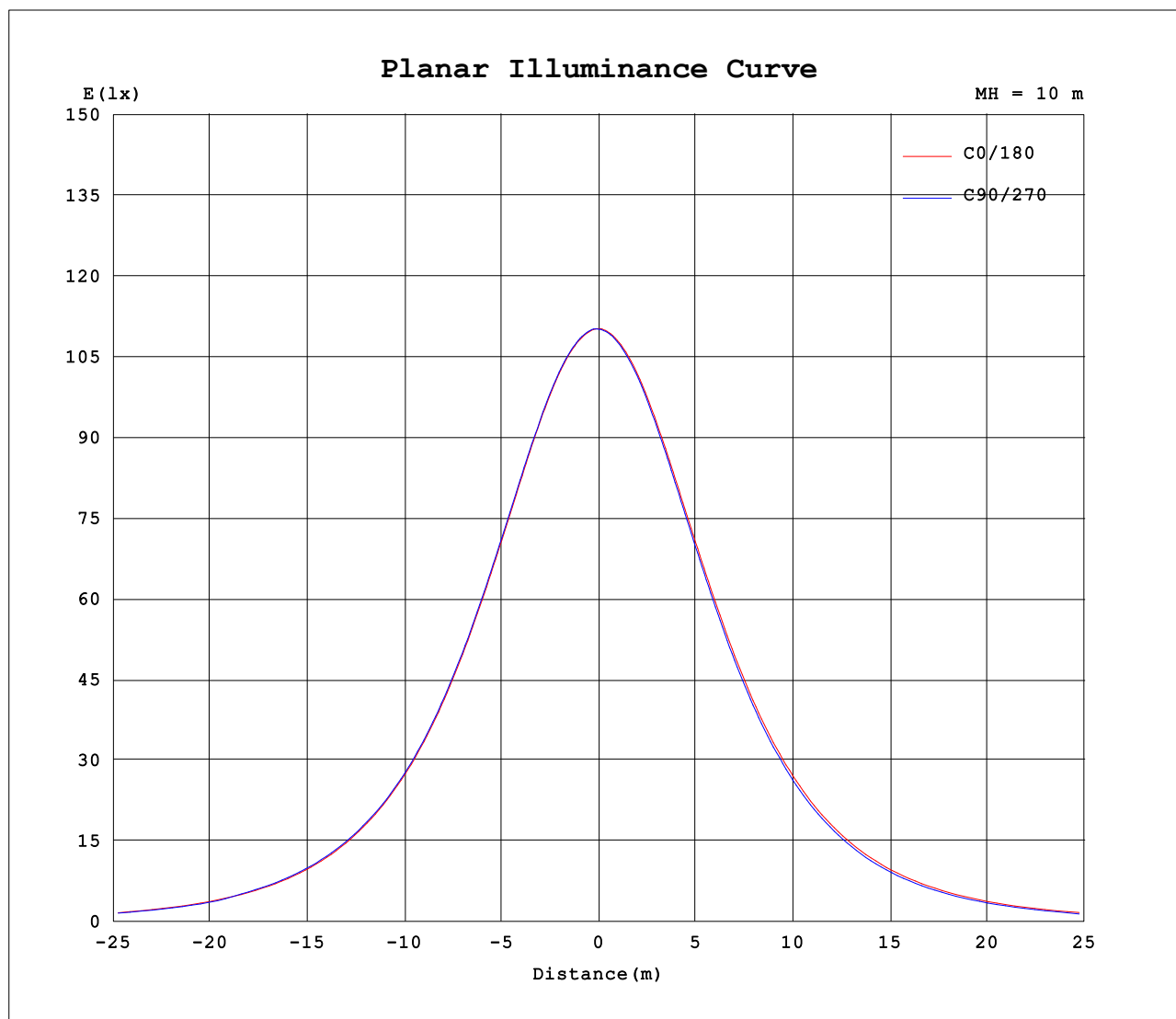
ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LYJ
Test Date: 2020-09-10

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.426
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Remarks:

Planar Illuminance Curve



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