

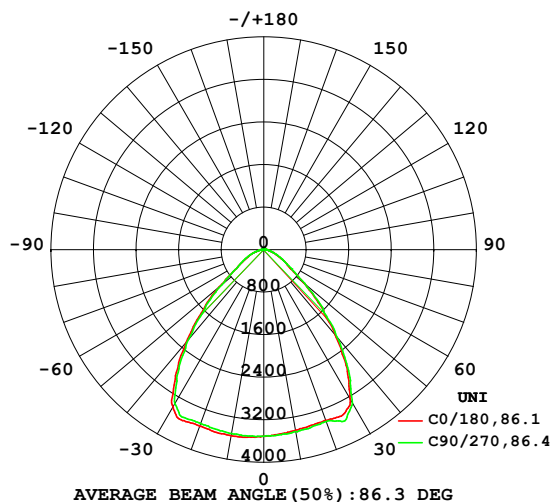
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

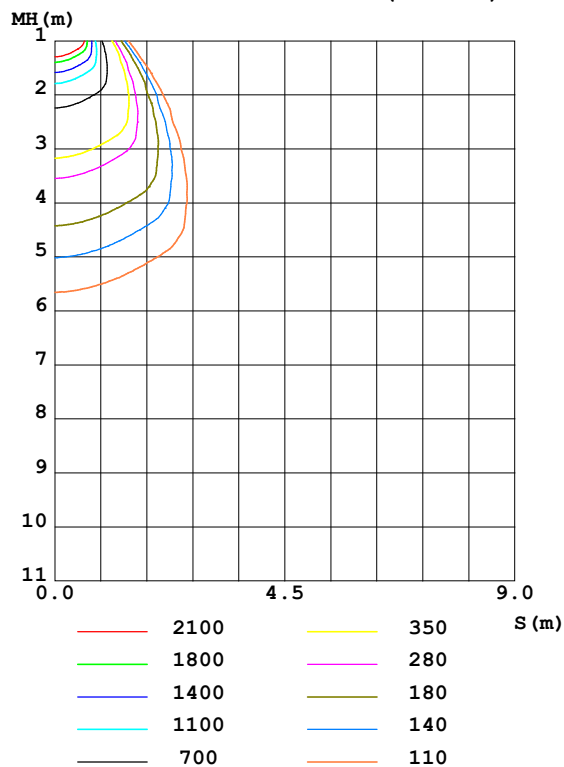
Test:U:229.9V I:0.2245A P:49.92W PF:0.9675 Freq:50.01Hz UTHDi:0% ITHDi:0% Lamp Flux:7230.87x1 lm		
NAME: 950-024_5000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 144.84 lm/W			
MODEL	/	I _{max} (cd)	3669	S/MH (C0/180)	1.25
NOMINAL POWER(W)	50	LOR(%)	100.0	S/MH (C90/270)	1.23
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	7230.9	η UP,DN(C0-180)	1.3,48.2
NOMINAL FLUX(lm)	7230.87	CIE CLASS	DIRECT	η UP,DN(C180-360)	1.3,49.2
LAMPS INSIDE	1	η up (%)	2.6	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230	η down (%)	97.4	CIBSE SHR MAX	1.30

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:26.6DEG
Operators:LYJ
Test Date:2020-10-21

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity:49.8%
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	3449	3448	3470	3515	3550	3555	3510	3458	0- 10	334.3	334.3	4.62,4.62
20	3418	3416	3443	3470	3535	3517	3480	3427	10- 20	984.9	1319	18.2,18.2
30	3255	3270	3342	3391	3411	3511	3346	3329	20- 30	1615	2934	40.6,40.6
40	2095	2155	2141	2169	2270	2274	2202	2132	30- 40	1727	4661	64.5,64.5
50	1023	963.0	1021	980.5	1103	1044	1034	963.1	40- 50	1212	5873	81.2,81.2
60	455.7	464.5	452.3	468.2	460.7	477.6	476.2	467.6	50- 60	604.4	6478	89.6,89.6
70	209.7	215.8	223.1	241.7	238.4	238.1	242.5	208.4	60- 70	336.7	6814	94.2,94.2
80	88.39	92.17	94.96	98.95	104.6	104.6	100.0	90.99	70- 80	161.2	6976	96.5,96.5
90	35.31	35.12	35.23	40.23	38.20	39.00	37.76	35.62	80- 90	69.03	7045	97.4,97.4
100	31.32	31.80	31.83	30.16	29.09	28.95	30.15	28.99	90-100	34.02	7079	97.9,97.9
110	29.50	33.40	29.48	30.00	28.70	28.55	31.02	29.15	100-110	31.33	7110	98.3,98.3
120	34.48	32.52	32.66	31.53	29.78	32.20	30.74	32.19	110-120	30.98	7141	98.8,98.8
130	29.23	30.17	29.02	28.00	28.87	28.98	29.09	28.57	120-130	26.79	7168	99.1,99.1
140	27.24	30.14	28.90	28.47	28.55	28.44	27.91	28.47	130-140	22.55	7190	99.4,99.4
150	25.71	27.56	27.38	27.12	26.74	27.06	26.29	25.52	140-150	17.35	7208	99.7,99.7
160	26.23	27.99	28.29	27.66	27.47	27.38	27.15	26.13	150-160	12.36	7220	99.9,99.9
170	28.75	29.96	31.03	30.56	29.99	30.08	29.19	28.25	160-170	8.069	7228	100,100
180	29.47	30.86	30.08	29.58	29.55	30.56	30.56	29.73	170-180	2.769	7231	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 5353.5 lm

%lum = 74.0%

%lamp = 74.0%

Conical surface Flux(120deg): 6477.7 lm

%lum = 89.6%

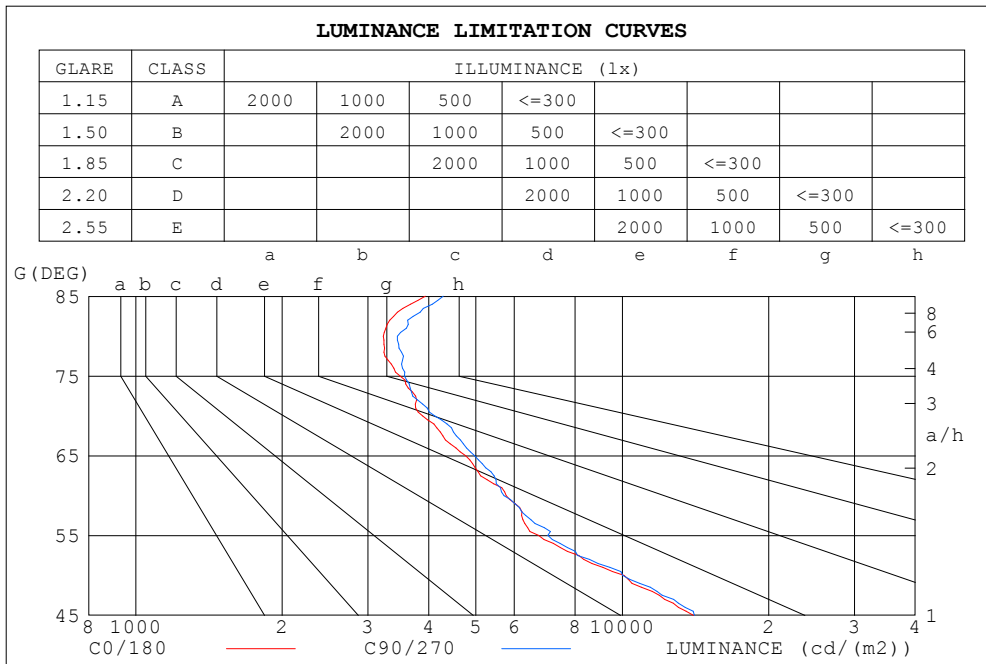
%lamp = 89.6%

C Range: 0 - 360DEG
C Interval: 15.0DEG
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Operators:LYJ
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γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity:49.8%
Test Distance:26.000m [K=0.4594]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINANCE LIMITATION CURVES



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3936	4281
80	3227	3452
75	3494	3566
70	3887	4118
65	4764	4968
60	5777	5710
55	6728	7031
50	10088	10024
45	14009	14064

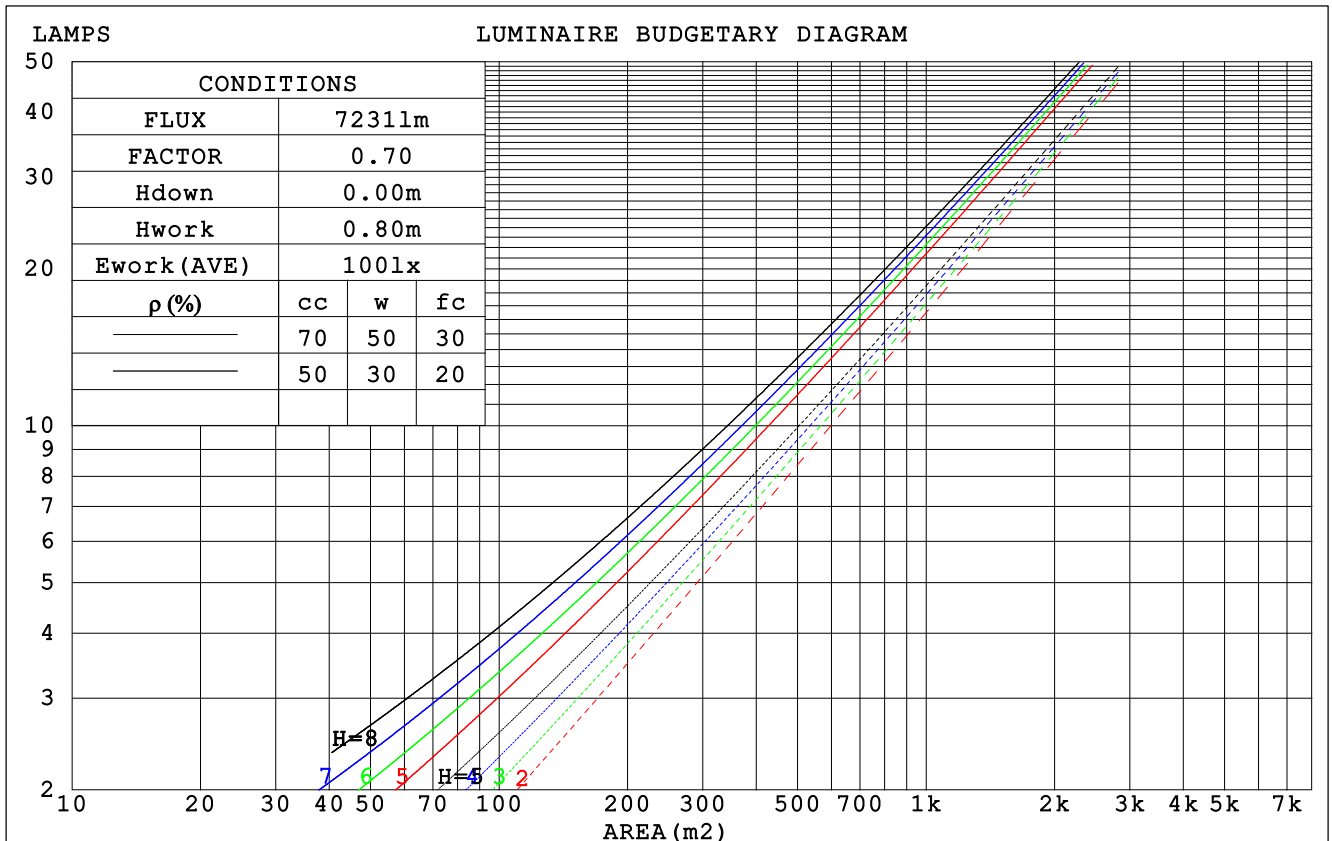
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EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Coefficients of Utilization(CU)												
0.0	1.18	1.18	1.18	1.15	1.15	1.15	1.10	1.10	1.10	1.04	1.04	1.04	.00	.00	.00	.97
1.0	1.07	1.03	1.00	1.04	1.01	.98	.00	.97	.95	.95	.93	.92	.91	.90	.88	.86
2.0	.96	.91	.86	.94	.89	.85	.90	.86	.82	.87	.83	.80	.83	.81	.78	.76
3.0	.87	.80	.75	.85	.79	.74	.82	.77	.72	.79	.74	.71	.76	.72	.69	.67
4.0	.79	.71	.66	.77	.70	.65	.74	.69	.64	.72	.67	.63	.70	.65	.62	.60
5.0	.71	.64	.58	.70	.63	.58	.68	.62	.57	.66	.60	.56	.64	.59	.55	.54
6.0	.65	.58	.52	.64	.57	.52	.62	.56	.51	.61	.55	.51	.59	.54	.50	.48
7.0	.60	.52	.47	.59	.52	.47	.57	.51	.46	.56	.50	.46	.54	.49	.45	.43
8.0	.55	.48	.43	.54	.47	.42	.53	.47	.42	.52	.46	.42	.50	.45	.41	.40
9.0	.51	.44	.39	.50	.43	.39	.49	.43	.38	.48	.42	.38	.47	.42	.38	.36
10.0	.47	.40	.36	.47	.40	.35	.46	.39	.35	.45	.39	.35	.44	.38	.35	.33



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γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity:49.8%
Test Distance:26.000m [K=0.4594]
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	.243	.138	.044	.235	.134	.043	.221	.127	.040	.208	.120	.038	.196	.113	.037															
2.0	.232	.127	.039	.225	.124	.038	.213	.118	.037	.201	.113	.035	.191	.108	.034															
3.0	.219	.117	.035	.213	.114	.034	.202	.110	.033	.192	.105	.032	.183	.101	.031															
4.0	.206	.107	.032	.201	.105	.031	.191	.101	.030	.182	.098	.030	.174	.095	.029															
5.0	.194	.099	.029	.190	.097	.028	.181	.094	.028	.173	.091	.027	.165	.088	.027															
6.0	.183	.092	.026	.179	.090	.026	.171	.088	.026	.164	.085	.025	.157	.083	.025															
7.0	.173	.085	.024	.169	.084	.024	.162	.082	.024	.156	.080	.023	.149	.078	.023															
8.0	.163	.080	.022	.160	.079	.022	.154	.077	.022	.148	.075	.022	.142	.073	.021															
9.0	.155	.075	.021	.152	.074	.021	.146	.072	.020	.141	.071	.020	.136	.069	.020															
10.0	.147	.071	.020	.144	.070	.019	.139	.068	.019	.134	.067	.019	.130	.065	.019															

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	.210	.210	.210	.180	.180	.180	.123	.123	.123	.070	.070	.070	.023	.023	.023		
1.0	.195	.177	.159	.167	.151	.137	.114	.104	.095	.066	.060	.055	.021	.019	.018		
2.0	.184	.152	.125	.158	.131	.108	.108	.091	.075	.062	.053	.044	.020	.017	.014		
3.0	.175	.134	.102	.150	.116	.088	.103	.080	.062	.059	.047	.036	.019	.015	.012		
4.0	.166	.120	.085	.143	.104	.074	.098	.072	.052	.057	.042	.031	.018	.014	.010		
5.0	.159	.109	.073	.136	.095	.063	.094	.066	.045	.054	.039	.027	.018	.013	.009		
6.0	.152	.101	.064	.131	.087	.056	.090	.061	.039	.052	.036	.023	.017	.012	.008		
7.0	.146	.094	.057	.125	.081	.050	.087	.057	.035	.050	.034	.021	.016	.011	.007		
8.0	.140	.088	.052	.121	.076	.045	.083	.053	.032	.049	.032	.019	.016	.010	.006		
9.0	.135	.083	.048	.116	.072	.042	.080	.051	.030	.047	.030	.018	.015	.010	.006		
10.0	.130	.079	.045	.112	.068	.039	.078	.048	.028	.045	.028	.017	.015	.009	.005		

C Range: 0 - 360DEG
 C Interval: 15.0DEG
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 Operators:LYJ
 Test Date:2020-10-21

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.426
 Humidity:49.8%
 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	16.2	17.5	16.6	17.8	18.2	16.0	17.3	16.5	17.7	18.1
3H	17.2	18.4	17.6	18.8	19.2	17.2	18.3	17.6	18.7	19.1
4H	17.6	18.7	18.0	19.1	19.5	17.5	18.6	18.0	19.0	19.5
6H	17.9	18.9	18.3	19.3	19.7	17.8	18.8	18.3	19.3	19.7
8H	18.0	18.9	18.5	19.4	19.8	18.0	18.9	18.5	19.4	19.8
12H	18.1	19.0	18.6	19.4	19.9	18.1	19.0	18.6	19.5	19.9
4H 2H	16.5	17.6	17.0	18.0	18.4	16.4	17.5	16.9	17.9	18.3
3H	17.7	18.6	18.1	19.0	19.5	17.7	18.6	18.2	19.0	19.5
4H	18.2	19.0	18.7	19.4	19.9	18.2	19.0	18.7	19.4	19.9
6H	18.6	19.3	19.1	19.8	20.3	18.6	19.3	19.1	19.8	20.3
8H	18.8	19.4	19.3	19.9	20.4	18.8	19.5	19.3	20.0	20.5
12H	18.9	19.5	19.5	20.0	20.6	19.0	19.6	19.6	20.1	20.7
8H 4H	18.3	18.9	18.8	19.4	20.0	18.3	19.0	18.9	19.5	20.0
6H	18.8	19.4	19.4	19.9	20.4	18.9	19.4	19.5	20.0	20.5
8H	19.1	19.6	19.7	20.1	20.7	19.2	19.7	19.8	20.2	20.8
12H	19.4	19.8	19.9	20.3	21.0	19.5	20.0	20.1	20.5	21.1
12H 4H	18.3	18.9	18.8	19.4	19.9	18.3	18.9	18.9	19.4	20.0
6H	18.9	19.3	19.4	19.9	20.5	19.0	19.4	19.5	20.0	20.6
8H	19.2	19.6	19.8	20.2	20.8	19.3	19.7	19.9	20.3	20.9
CIE190: 2010										

CIE190: 2010
Area: 0.15834 m2

C Range: 0 - 360DEG
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γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity:49.8%
Test Distance:26.000m [K=0.4594]
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EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

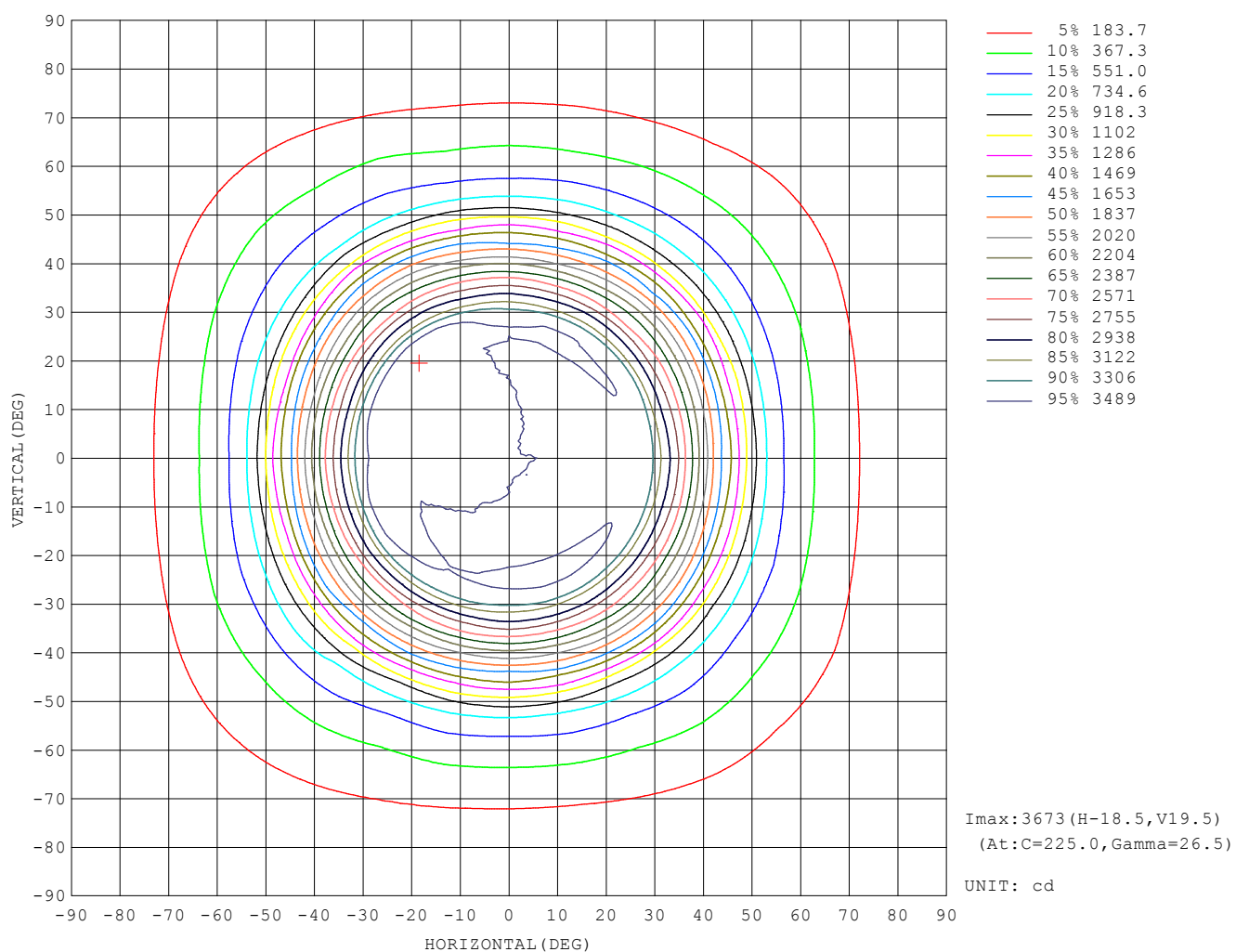
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	69	60	54	69	60	54	67	59	54	49
0.80	79	70	64	78	69	64	76	68	63	58
1.00	86	77	72	85	77	71	83	77	71	65
1.25	92	84	78	90	83	78	88	82	77	71
1.50	96	88	83	94	88	83	91	86	81	75
2.00	101	95	90	99	93	89	96	91	87	80
2.50	104	98	93	102	96	92	98	94	90	82
3.00	106	101	97	104	99	96	100	96	93	85
4.00	109	105	101	107	103	100	102	99	97	88
5.00	111	107	104	108	105	102	104	101	99	90
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: 49.8%
 Test Distance: 26.000m [K=0.4594]
 Remarks:

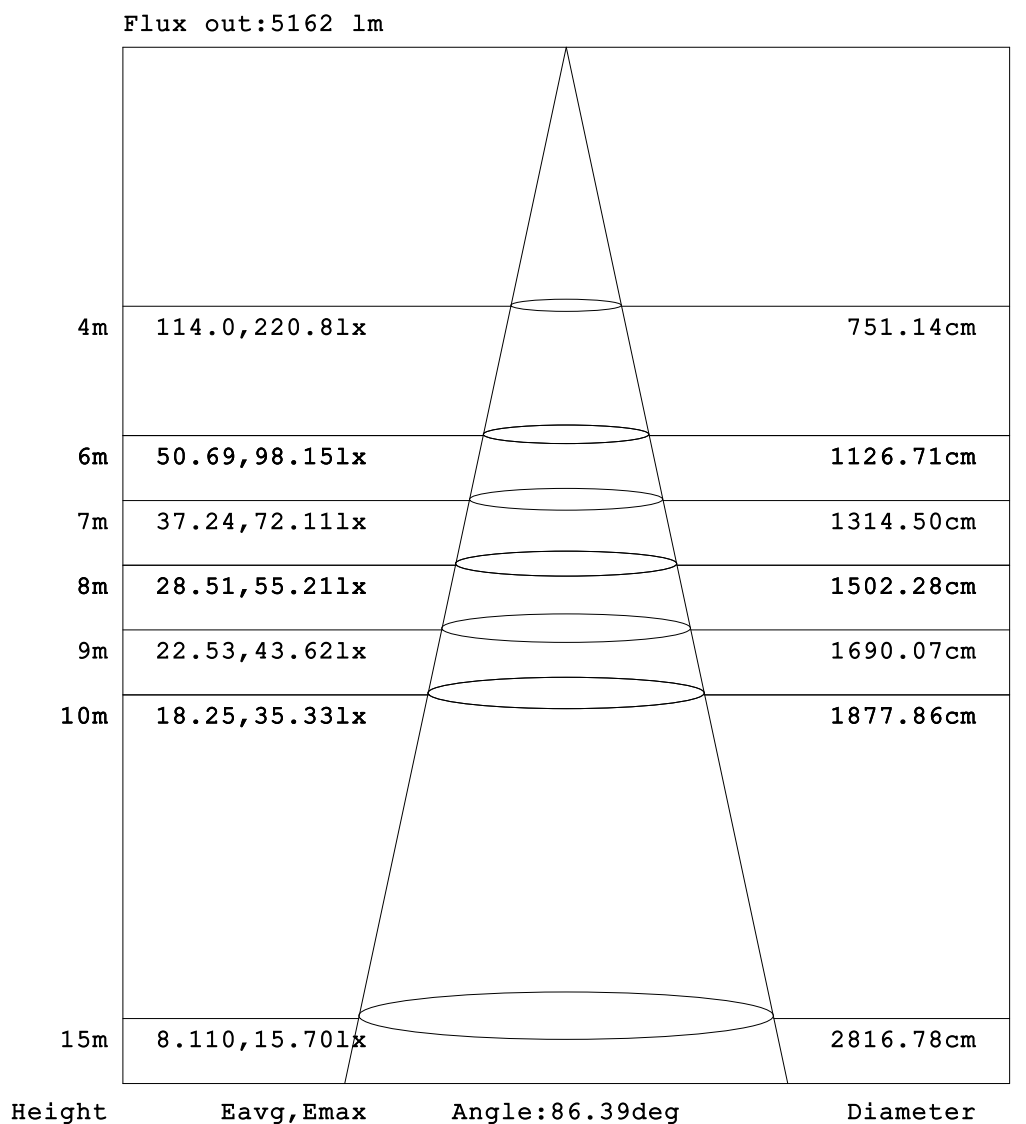
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
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Test Speed: HIGH
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 γ Interval: 0.5DEG
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Remarks:

AAI Figure



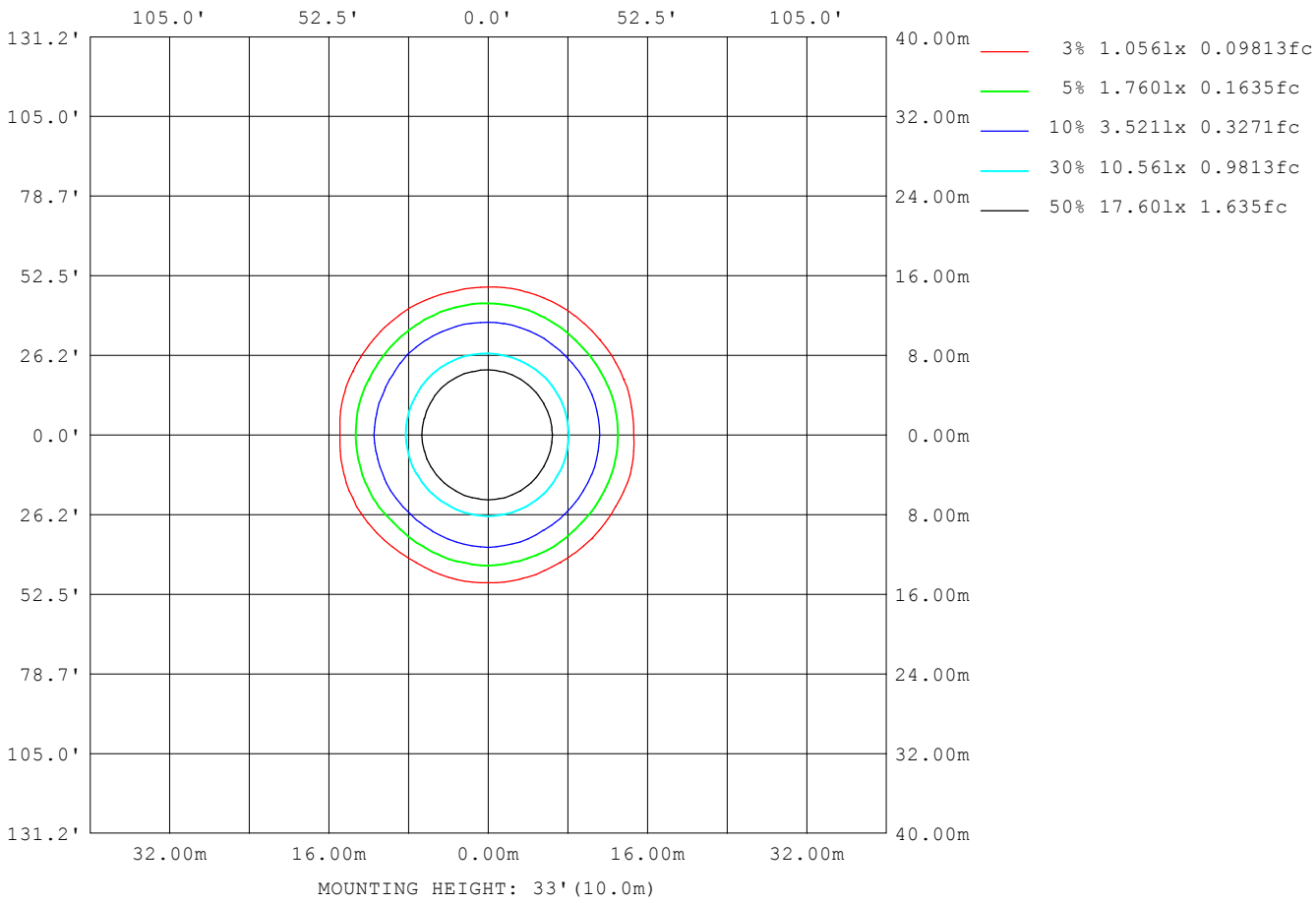
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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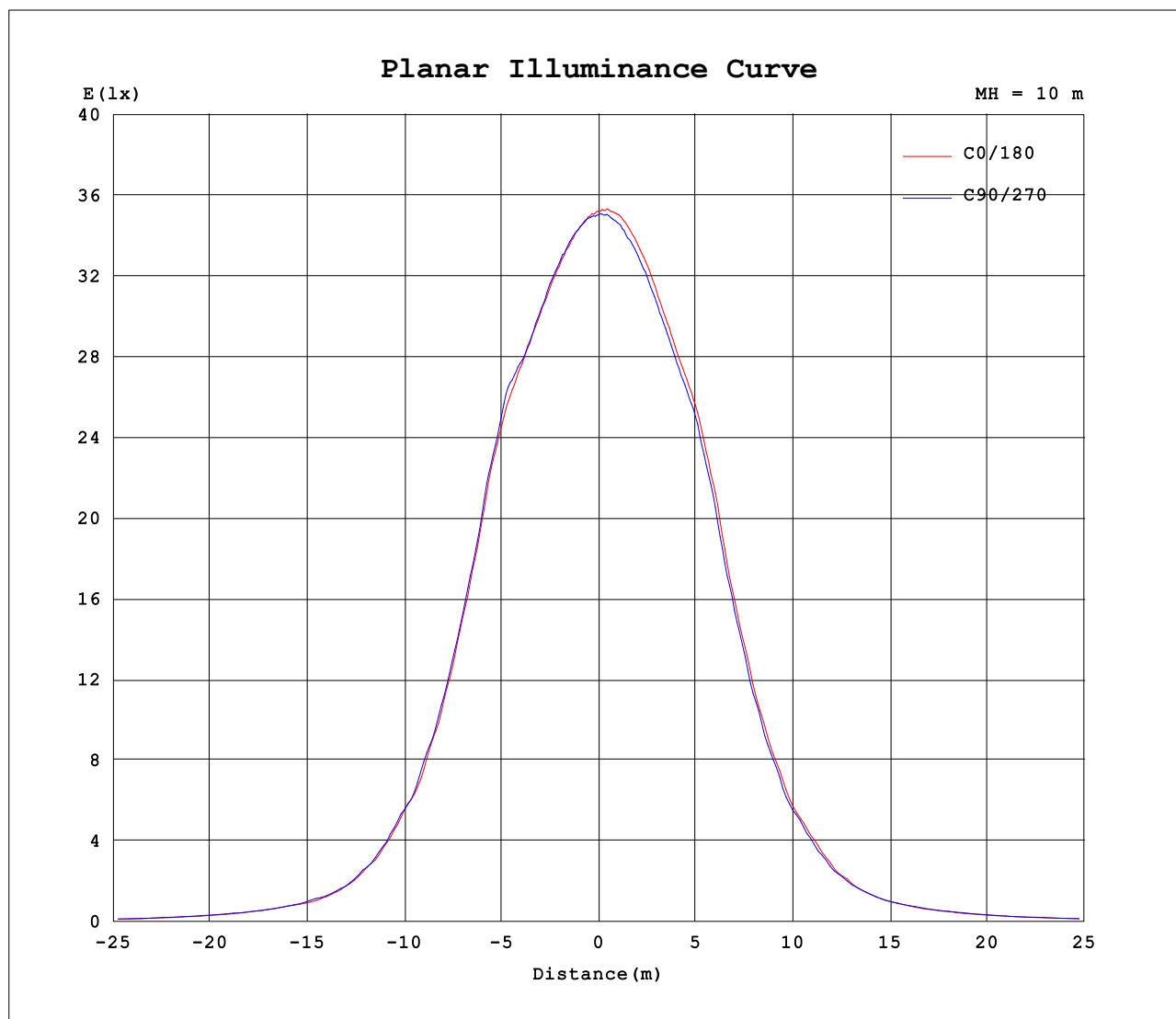
ISOLUX DIAGRAM



C Range: 0 - 360DEG
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Temperature: 26.6DEG
Operators: LYJ
Test Date: 2020-10-21

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 γ Interval: 0.5DEG
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Humidity: 49.8%
Test Distance: 26.000m [K=0.4594]
Remarks:

Planar Illuminance Curve



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Test Speed: HIGH
Temperature: 26.6DEG
Operators: LYJ
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Remarks: