

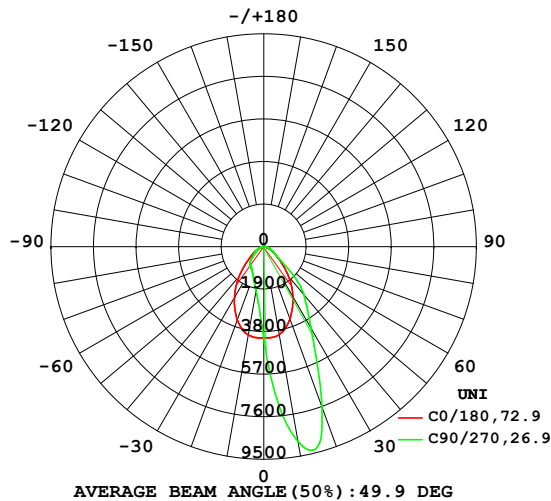
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

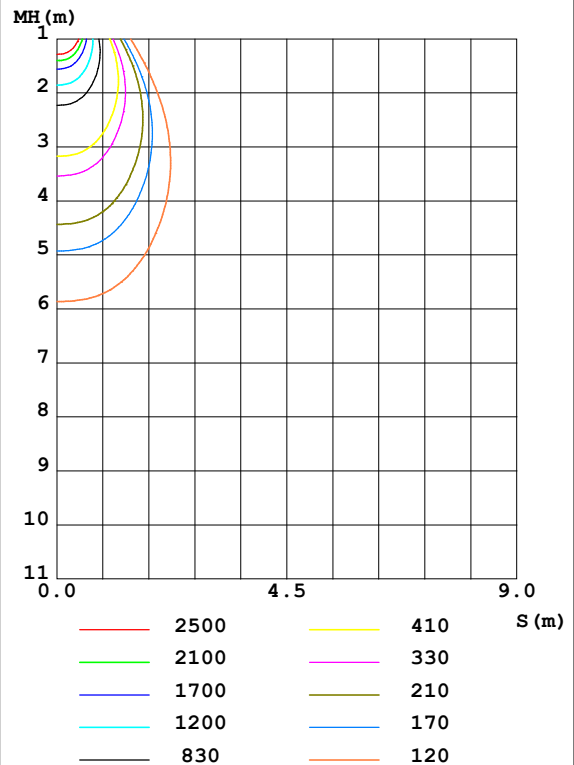
Test:U:229.9V I:0.2291A P:50.26W PF:0.9543 Freq:50.00Hz UTHDi:0% ITHDi:0% Lamp Flux:7288.56x1 lm					
NAME: FL23-050-5070-F06403			TYPE:		WEIGHT:
SPEC.:			DIM.:		SERIAL No.:
MFR.:			SUR.:		Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 145.01 lm/W			
MODEL	-	I _{max} (cd)	9349	S/MH (C0/180)	1.02
NOMINAL POWER(W)	50	LOR(%)	100.0	S/MH (C90/270)	0.31
RATED VOLTAGE(V)	230	TOTAL FLUX (lm)	7288.6	η UP,DN (C0-180)	0.0, 67.3
NOMINAL FLUX (lm)	7288.56	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0, 32.7
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	230	η down (%)	100.0	CIBSE SHR MAX	0.65

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: 2020-08-31

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:

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	3995	7656	8830	7708	4010	2341	2008	2366	0- 10	437.8	437.8	6.01,6.01
20	3433	8077	7625	7945	3474	1762	1397	1792	10- 20	1367	1805	24.8,24.8
30	2617	4888	4246	4729	2628	1441	1127	1467	20- 30	1667	3471	47.6,47.6
40	1724	2593	2787	2519	1698	1251	968.1	1279	30- 40	1431	4902	67.3,67.3
50	909.7	1563	1075	1550	879.0	1013	597.8	1083	40- 50	1128	6031	82.7,82.7
60	488.3	684.3	494.1	651.9	480.8	578.2	425.7	637.6	50- 60	743.7	6774	92.9,92.9
70	204.6	202.0	263.0	200.1	195.7	220.1	223.5	232.7	60- 70	368.8	7143	98,98
80	84.34	48.04	71.29	46.16	71.94	48.81	70.96	53.55	70- 80	130.3	7274	99.8,99.8
90	0	0	0	0	0	0	0	0	80- 90	14.89	7289	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): 5512.3 lm

%lum = 75.6%

%lamp = 75.6%

Conical surface Flux(120deg): 6774.5 lm

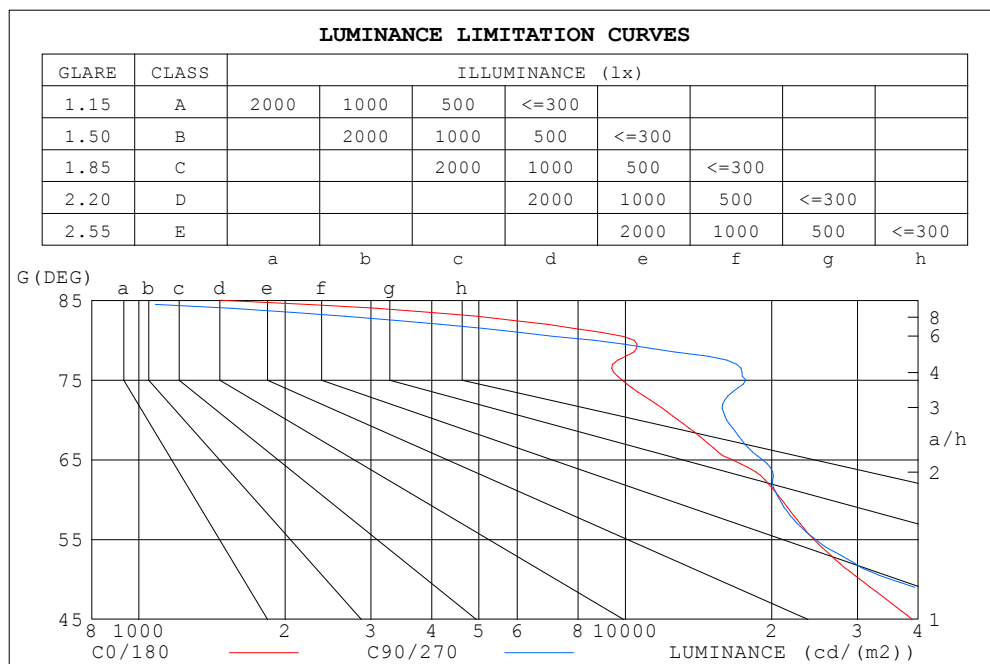
%lum = 92.9%

%lamp = 92.9%

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LYJ
Test Date:2020-08-31

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	1467	705
80	10432	8629
75	9838	17694
70	12848	16163
65	16583	19134
60	20976	20771
55	24424	24608
50	30398	35158
45	38865	60171

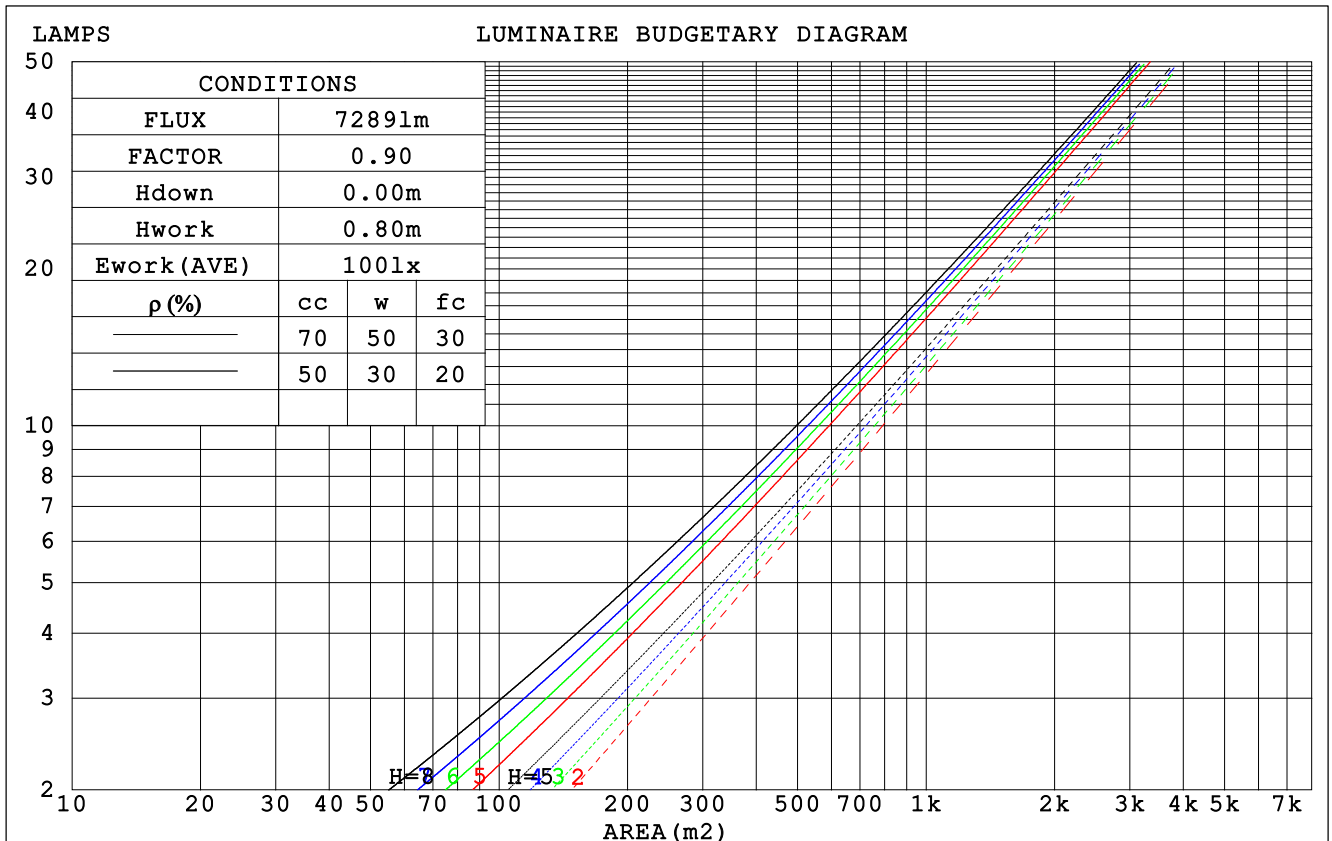
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C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LYJ
Test Date: 2020-08-31

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:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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			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	1.00
1.0	1.08	1.05	1.02	1.06	1.03	1.00	1.02	.99	.97	.98	.96	.94	.94	.93	.92	.90
2.0	.98	.92	.88	.96	.91	.87	.93	.89	.85	.89	.86	.83	.87	.84	.81	.80
3.0	.89	.82	.77	.87	.81	.76	.84	.79	.75	.82	.77	.74	.79	.76	.73	.71
4.0	.81	.74	.68	.79	.73	.68	.77	.71	.67	.75	.70	.66	.73	.69	.65	.63
5.0	.74	.66	.61	.73	.66	.61	.71	.65	.60	.69	.64	.59	.67	.63	.59	.57
6.0	.68	.60	.55	.67	.60	.55	.65	.59	.54	.64	.58	.54	.62	.57	.54	.52
7.0	.63	.55	.50	.62	.55	.50	.60	.54	.50	.59	.53	.49	.58	.53	.49	.47
8.0	.58	.51	.46	.57	.50	.46	.56	.50	.45	.55	.49	.45	.54	.49	.45	.43
9.0	.54	.47	.42	.53	.47	.42	.52	.46	.42	.51	.46	.42	.50	.45	.41	.40
10.0	.50	.44	.39	.50	.43	.39	.49	.43	.39	.48	.43	.39	.47	.42	.38	.37



C Range: 0 - 360DEG
C Interval: 10.0DEG
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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:

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	.229	.130	.041	.222	.127	.040	.209	.120	.038	.197	.114	.036	.186	.108	.035	
2.0	.222	.122	.037	.216	.119	.037	.205	.114	.035	.195	.109	.034	.185	.105	.033	
3.0	.211	.112	.034	.206	.110	.033	.196	.106	.032	.187	.103	.031	.179	.099	.031	
4.0	.199	.103	.030	.195	.102	.030	.186	.099	.029	.178	.096	.029	.171	.093	.028	
5.0	.188	.096	.028	.184	.094	.027	.176	.092	.027	.169	.089	.027	.163	.087	.026	
6.0	.177	.089	.025	.174	.088	.025	.167	.086	.025	.161	.084	.025	.155	.082	.024	
7.0	.167	.083	.023	.164	.082	.023	.158	.080	.023	.153	.078	.023	.148	.077	.023	
8.0	.158	.077	.022	.155	.077	.022	.150	.075	.021	.145	.074	.021	.141	.072	.021	
9.0	.150	.073	.020	.148	.072	.020	.143	.071	.020	.138	.069	.020	.134	.068	.020	
10.0	.142	.068	.019	.140	.068	.019	.136	.067	.019	.132	.065	.019	.128	.064	.018	

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	.175	.157	.141	.149	.135	.121	.102	.093	.084	.059	.054	.049	.019	.017	.016		
2.0	.163	.132	.106	.140	.114	.092	.096	.079	.064	.055	.046	.038	.018	.015	.012		
3.0	.153	.114	.083	.131	.098	.072	.090	.068	.050	.052	.040	.030	.017	.013	.010		
4.0	.145	.100	.066	.124	.086	.057	.085	.060	.040	.049	.035	.024	.016	.011	.008		
5.0	.137	.089	.053	.118	.077	.047	.081	.054	.033	.047	.032	.019	.015	.010	.006		
6.0	.130	.080	.044	.112	.069	.039	.077	.049	.027	.045	.029	.016	.014	.009	.005		
7.0	.124	.073	.038	.106	.063	.033	.073	.044	.023	.043	.026	.014	.014	.009	.005		
8.0	.118	.067	.032	.101	.058	.028	.070	.041	.020	.041	.024	.012	.013	.008	.004		
9.0	.112	.062	.028	.097	.054	.024	.067	.038	.017	.039	.022	.010	.013	.007	.003		
10.0	.107	.058	.025	.092	.050	.022	.064	.035	.015	.037	.021	.009	.012	.007	.003		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:LYJ
 Test Date:2020-08-31

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:

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	20.8	22.1	21.1	22.4	22.7	21.5	22.8	21.9	23.2	23.5
3H	21.6	22.8	22.0	23.1	23.5	22.3	23.5	22.7	23.8	24.2
4H	21.8	22.9	22.2	23.3	23.6	22.6	23.7	23.0	24.0	24.4
6H	21.9	22.9	22.3	23.3	23.7	22.7	23.7	23.1	24.1	24.5
8H	21.9	22.9	22.4	23.3	23.7	22.7	23.7	23.1	24.1	24.5
12H	21.9	22.8	22.3	23.2	23.6	22.7	23.6	23.1	24.0	24.4
4H 2H	21.2	22.3	21.6	22.6	23.0	21.8	22.9	22.2	23.2	23.6
3H	22.2	23.1	22.6	23.5	23.9	22.6	23.5	23.1	23.9	24.3
4H	22.4	23.2	22.8	23.6	24.1	23.0	23.8	23.4	24.2	24.6
6H	22.5	23.2	23.0	23.7	24.1	23.1	23.8	23.6	24.3	24.7
8H	22.5	23.2	23.0	23.6	24.1	23.1	23.8	23.6	24.2	24.7
12H	22.5	23.1	23.0	23.6	24.0	23.1	23.6	23.6	24.1	24.6
8H 4H	22.4	23.1	22.9	23.5	24.0	23.0	23.6	23.4	24.0	24.5
6H	22.6	23.1	23.1	23.6	24.1	23.1	23.7	23.6	24.2	24.7
8H	22.6	23.1	23.1	23.6	24.1	23.1	23.6	23.6	24.1	24.6
12H	22.6	23.0	23.1	23.5	24.0	23.1	23.5	23.6	24.0	24.6
12H 4H	22.4	23.0	22.9	23.4	23.9	22.9	23.5	23.4	24.0	24.4
6H	22.5	23.0	23.1	23.5	24.0	23.1	23.6	23.6	24.0	24.6
8H	22.6	23.0	23.1	23.5	24.0	23.1	23.5	23.6	24.0	24.6
CIE190: 2010										

CIE190: 2010
Area: 0.04708 m2

C Range: 0 - 360DEG
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Operators:LYJ
Test Date:2020-08-31

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:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UTILIZATION FACTORS TABLE

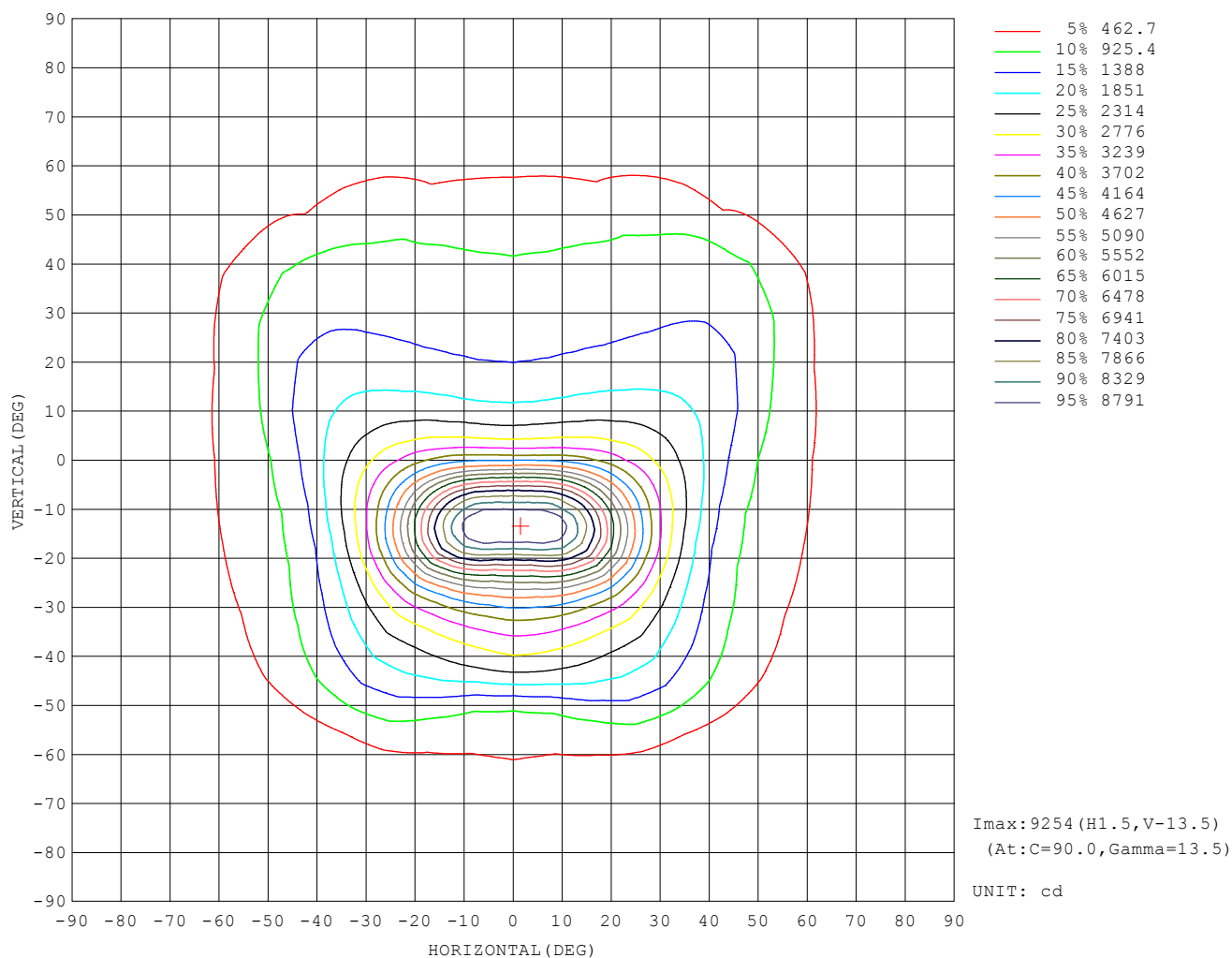
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	71	62	56	70	61	56	69	61	56	51
0.80	80	71	66	79	71	66	78	70	65	60
1.00	88	79	74	87	79	73	85	79	73	67
1.25	94	86	81	92	85	80	90	84	79	74
1.50	98	90	85	96	90	85	93	88	84	78
2.00	103	96	92	101	95	91	98	93	89	83
2.50	105	100	95	103	98	94	100	96	92	86
3.00	108	103	99	106	101	98	102	98	95	88
4.00	110	106	103	108	105	102	104	101	99	91
5.00	112	109	106	110	107	104	106	103	101	93
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

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

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

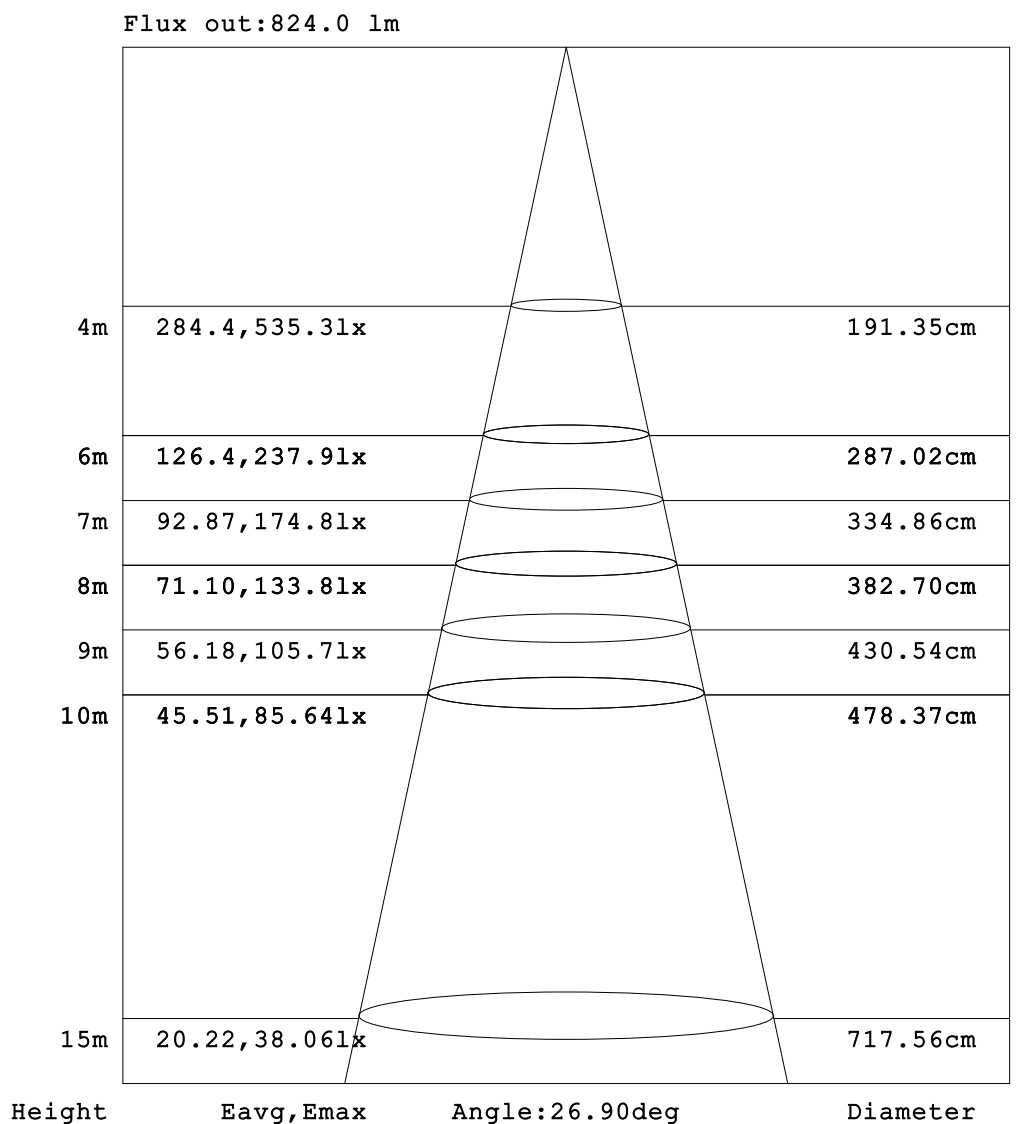
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LYJ
Test Date: 2020-08-31

γ Range: 0 - 90DEG
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Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity: 65.0%
Test Distance: 26.000m [K=0.4574]
Remarks:

AAI Figure



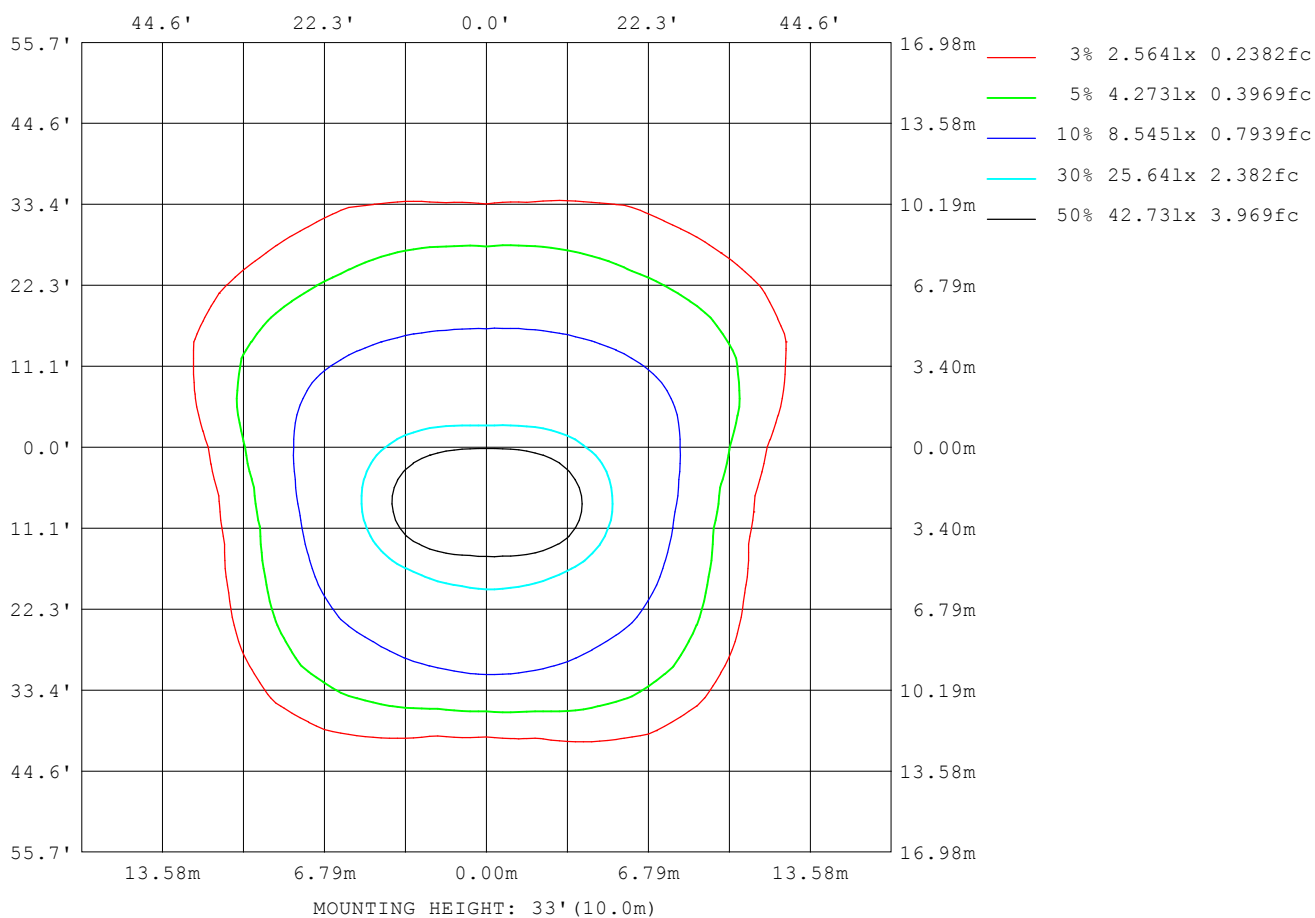
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

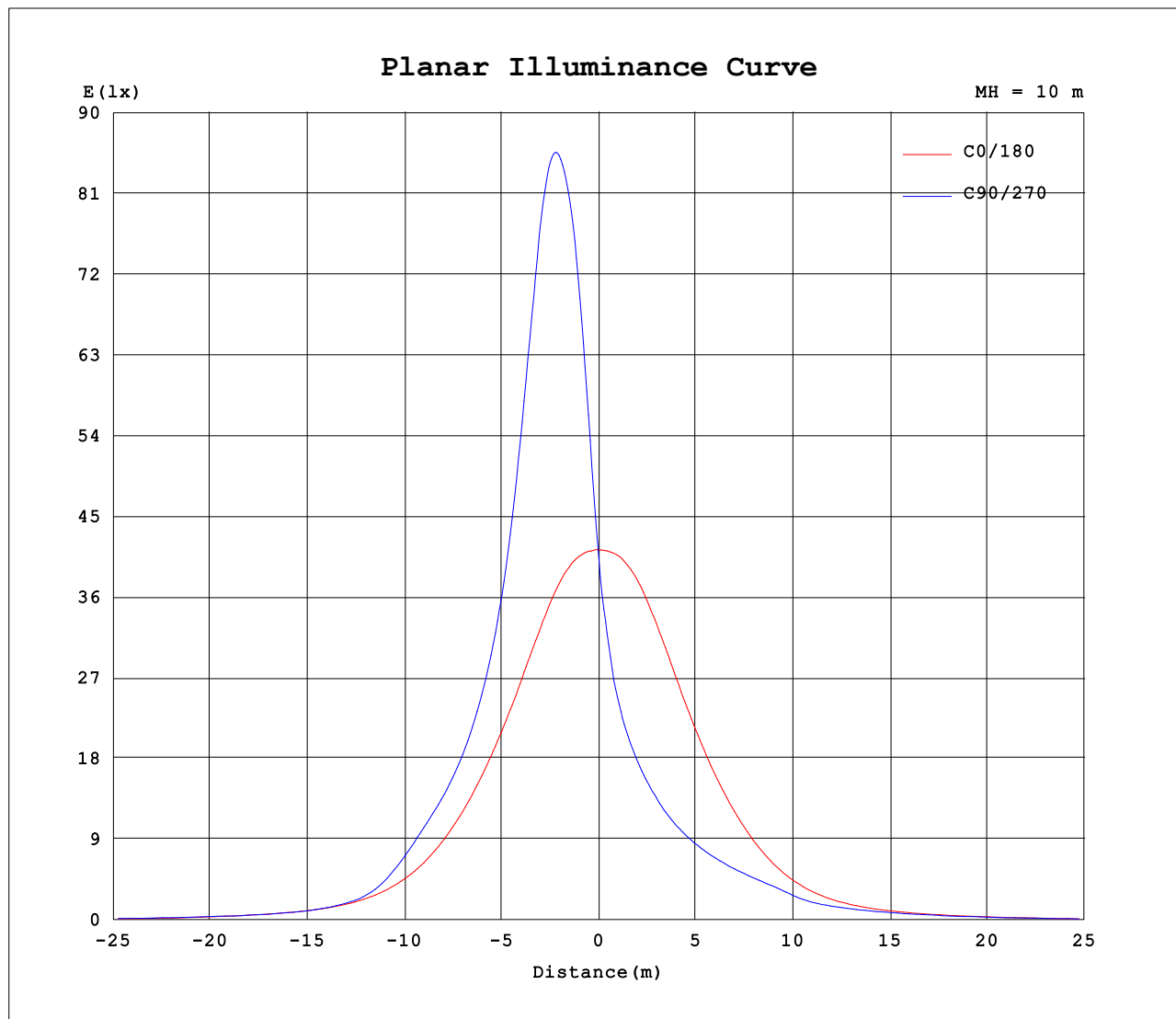
ISOLUX DIAGRAM



C Range: 0 - 360DEG
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Test Speed: HIGH
Temperature: 25.3DEG
Operators: LYJ
Test Date: 2020-08-31

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:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LYJ
Test Date: 2020-08-31

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: