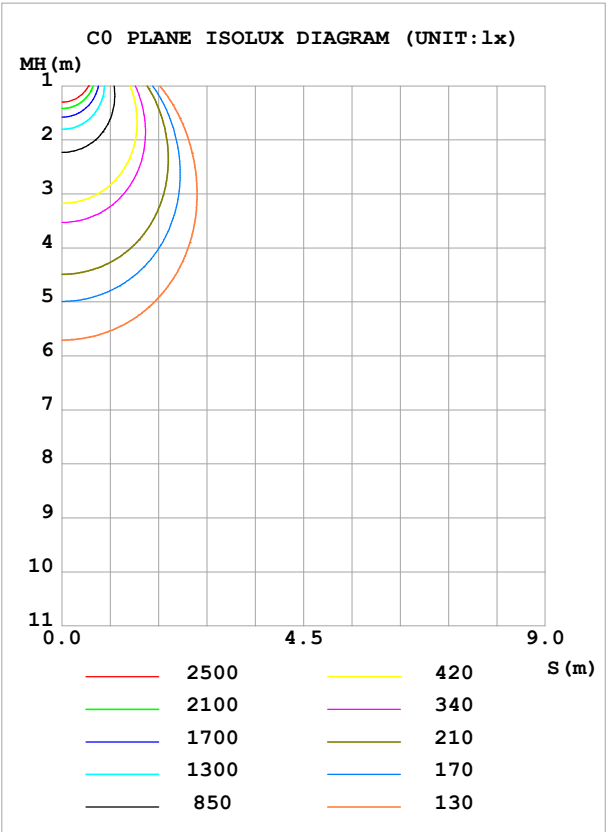
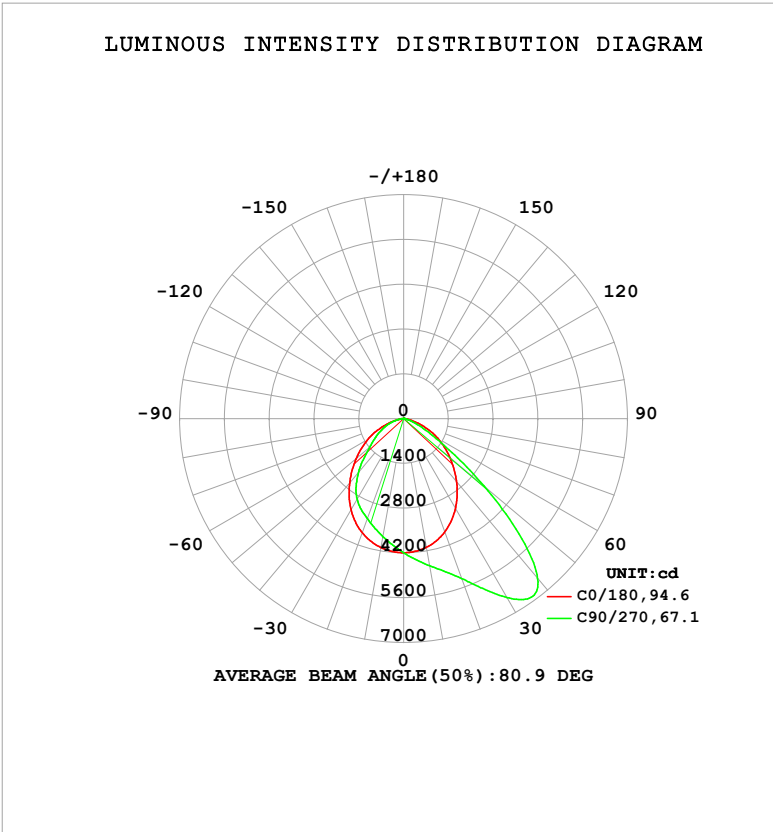


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:229.5V I:0.3614A P:73.2W PF:0.8823 Freq:50.01Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:11641.2x1 lm		
NAME: X501-457KA-9060 (75W 4000K)	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 159.05 lm/W
MODEL	/	I <sub>max</sub> (cd)	6863	S/MH (C0/180)	1.18	
NOMINAL POWER(W)	/	LOR (%)	100.0	S/MH (C90/270)	1.05	
RATED VOLTAGE(V)	/	TOTAL FLUX(lm)	11641	η UP,DN (C0-180)	0.0,63.3	
NOMINAL FLUX(lm)	11641.2	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,36.7	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE(V)	/	η down (%)	100.0	CIBSE SHR MAX	1.30	



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:HXL  
Test Date:2024-10-28

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.487  
Humidity:65.0%  
Test Distance:9.990m [K=1.0000]  
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	4086	4476	4671	4469	4094	3822	3747	3825	0- 10	398.1	398.1	3.42,3.42
20	3770	4713	5324	4686	3797	3389	3330	3395	10- 20	1161	1559	13.4,13.4
30	3243	5091	6460	5009	3293	2931	2915	2927	20- 30	1858	3417	29.3,29.3
40	2579	5613	6516	5571	2629	2407	2201	2379	30- 40	2445	5862	50.4,50.4
50	1889	4961	3296	5205	1937	1723	1380	1685	40- 50	2520	8382	72,72
60	1240	2463	1021	2790	1288	1042	898.1	1013	50- 60	1835	10217	87.8,87.8
70	590.2	742.1	302.4	869.8	643.7	551.8	489.1	519.2	60- 70	1018	11235	96.5,96.5
80	119.1	72.62	41.28	109.0	147.7	159.5	137.4	136.4	70- 80	366.6	11602	99.7,99.7
90	3.910	2.898	2.475	2.694	3.166	4.579	2.804	4.226	80- 90	39.52	11641	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): 7169.5 lm

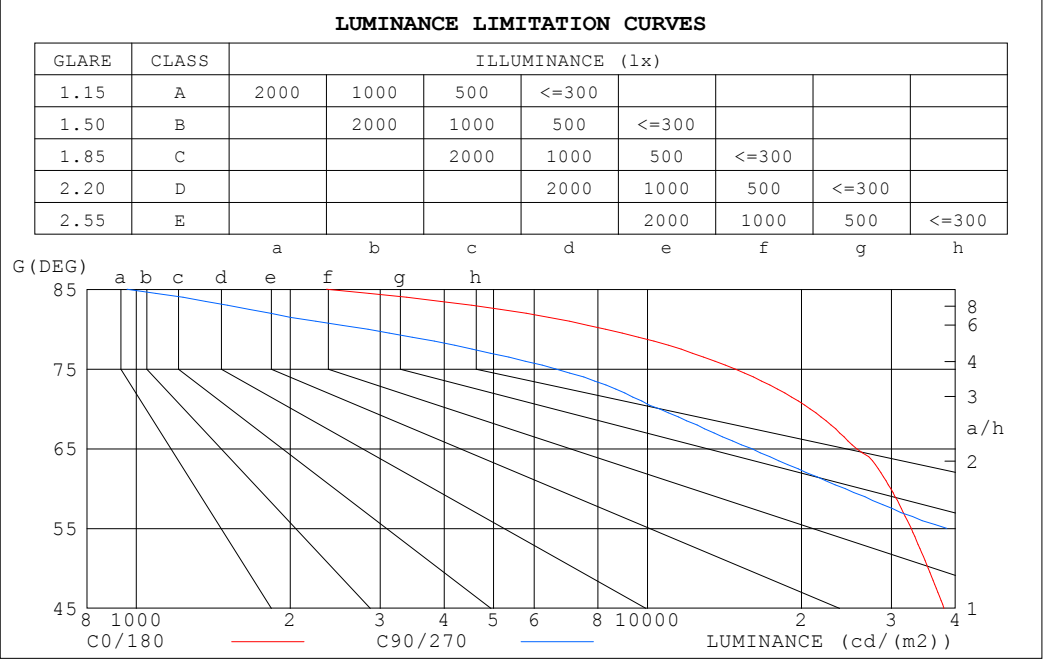
%lum = 61.6%  
%lamp = 61.6%

Conical surface Flux(120deg): 10217 lm

%lum = 87.8%  
%lamp = 87.8%

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 15.0DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.487
Temperature:25.3℃	Humidity:65.0%
Operators:HXL	Test Distance:9.990m [K=1.0000]
Test Date:2024-10-28	Remarks:

LUMINANCE LIMITATION CURVES



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2356	959
80	8272	2838
75	14827	6613
70	20806	10557
65	25626	16006
60	29897	24377
55	32793	38511
50	35430	61231
45	38026	86218

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:HXL

Test Date:2024-10-28

γ Range: 0 - 90DEG

γ Interval: 0.5DEG

Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.487

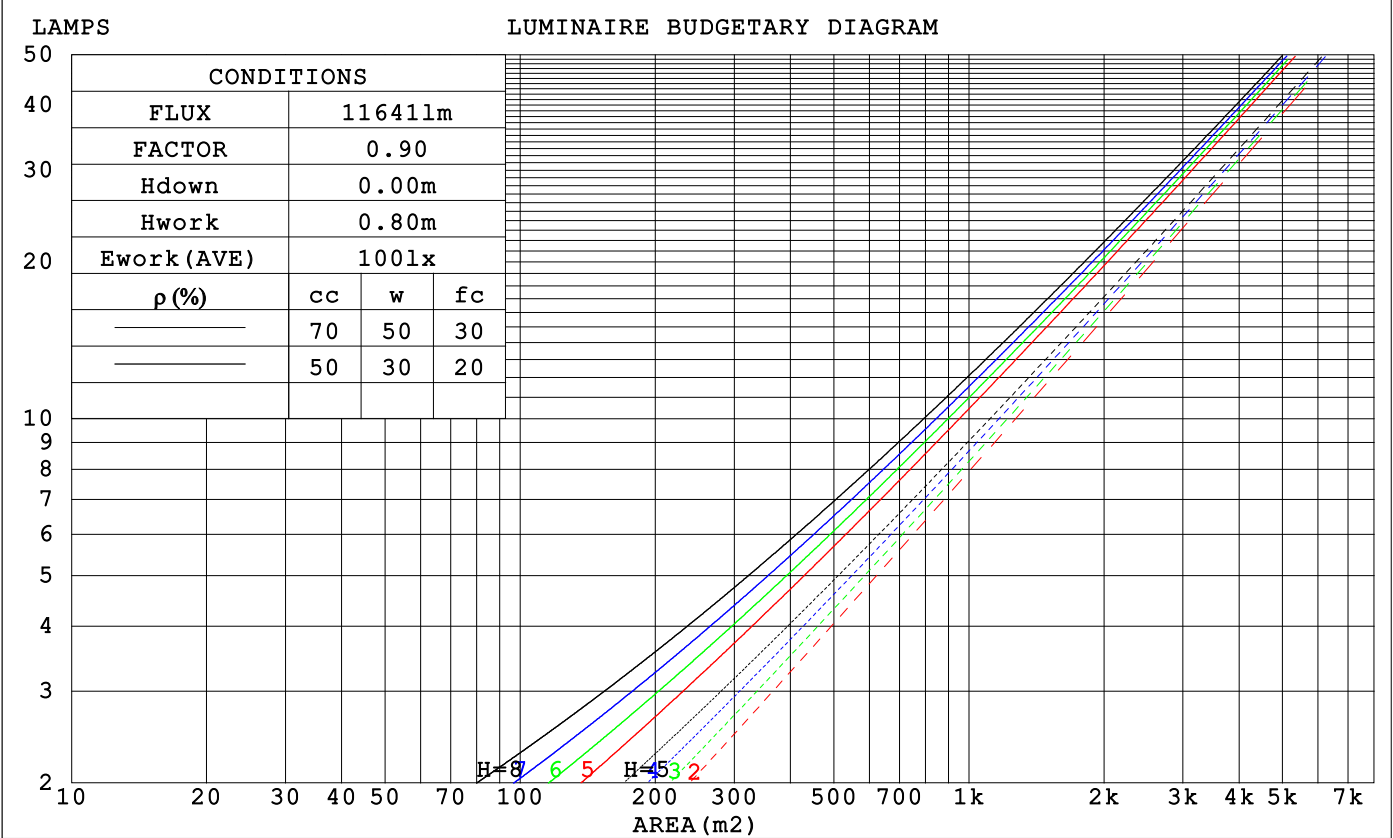
Humidity:65.0%

Test Distance:9.990m [K=1.0000]

Remarks:

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
pf <sub>c</sub>	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	1.06	1.02	.99	1.04	1.01	.98	.00	.97	.94	.96	.94	.92	.92	.91	.89	.87
2.0	.94	.88	.83	.92	.86	.82	.88	.84	.80	.85	.81	.78	.82	.79	.76	.74
3.0	.83	.76	.70	.82	.75	.69	.79	.73	.68	.76	.71	.67	.73	.69	.66	.63
4.0	.74	.66	.60	.73	.65	.59	.70	.64	.58	.68	.62	.58	.66	.61	.57	.55
5.0	.66	.58	.52	.65	.57	.51	.63	.56	.51	.61	.55	.50	.59	.54	.50	.48
6.0	.60	.51	.45	.59	.51	.45	.57	.50	.44	.55	.49	.44	.54	.48	.44	.42
7.0	.54	.46	.40	.53	.45	.40	.52	.45	.39	.50	.44	.39	.49	.43	.39	.37
8.0	.49	.41	.35	.49	.41	.35	.47	.40	.35	.46	.40	.35	.45	.39	.35	.33
9.0	.45	.37	.32	.45	.37	.32	.44	.37	.32	.42	.36	.31	.41	.36	.31	.30
10.0	.42	.34	.29	.41	.34	.29	.40	.33	.29	.39	.33	.28	.38	.33	.28	.27



C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:HXL

Test Date:2024-10-28

γ Range: 0 - 90DEG

γ Interval: 0.5DEG

Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.487

Humidity:65.0%

Test Distance:9.990m [K=1.0000]

Remarks:

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## WEC AND CCEC

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.266	.151	.048	.259	.148	.047	.246	.141	.045	.234	.135	.043	.223	.129	.042	
2.0	.260	.142	.044	.253	.140	.043	.242	.135	.042	.232	.130	.041	.222	.125	.040	
3.0	.246	.131	.039	.241	.129	.039	.231	.125	.038	.221	.121	.037	.213	.118	.036	
4.0	.231	.120	.035	.226	.118	.035	.217	.115	.034	.209	.112	.034	.201	.109	.033	
5.0	.217	.110	.032	.212	.109	.032	.204	.106	.031	.197	.104	.031	.190	.102	.031	
6.0	.203	.102	.029	.199	.101	.029	.192	.099	.029	.186	.096	.028	.179	.094	.028	
7.0	.191	.094	.027	.187	.093	.027	.181	.091	.026	.175	.090	.026	.169	.088	.026	
8.0	.179	.088	.025	.176	.087	.025	.170	.085	.024	.165	.084	.024	.160	.082	.024	
9.0	.169	.082	.023	.166	.081	.023	.161	.080	.023	.156	.078	.022	.152	.077	.022	
10.0	.159	.076	.021	.157	.076	.021	.152	.075	.021	.148	.073	.021	.144	.072	.021	

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	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	.177	.157	.138	.152	.134	.119	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.168	.132	.102	.144	.114	.088	.099	.079	.061	.057	.046	.036	.018	.015	.012	
3.0	.160	.114	.078	.137	.098	.067	.094	.068	.047	.054	.040	.028	.017	.013	.009	
4.0	.152	.101	.061	.131	.087	.053	.090	.061	.037	.052	.035	.022	.017	.012	.007	
5.0	.145	.090	.049	.125	.078	.043	.086	.054	.030	.050	.032	.018	.016	.010	.006	
6.0	.139	.082	.041	.119	.071	.035	.082	.049	.025	.048	.029	.015	.015	.010	.005	
7.0	.132	.075	.034	.114	.065	.030	.079	.045	.021	.046	.027	.013	.015	.009	.004	
8.0	.126	.069	.030	.109	.060	.026	.075	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.121	.064	.026	.104	.056	.023	.072	.039	.016	.042	.023	.010	.014	.008	.003	
10.0	.115	.060	.023	.099	.052	.020	.069	.037	.014	.040	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3℃  
 Operators: HXL  
 Test Date:2024-10-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.487  
 Humidity:65.0%  
 Test Distance:9.990m [K=1.0000]  
 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	26.8	28.3	27.1	28.6	29.0	24.3	25.9	24.7	26.2	26.5
3H	27.7	29.1	28.1	29.4	29.8	24.6	26.0	25.0	26.3	26.6
4H	27.9	29.2	28.3	29.5	29.9	24.6	25.9	25.0	26.2	26.6
6H	27.9	29.1	28.3	29.5	29.9	24.6	25.7	25.0	26.1	26.5
8H	27.9	29.0	28.3	29.4	29.8	24.5	25.7	24.9	26.0	26.4
12H	27.9	28.9	28.3	29.3	29.7	24.5	25.6	24.9	26.0	26.4
4H 2H	27.1	28.4	27.5	28.8	29.1	25.5	26.7	25.9	27.1	27.5
3H	28.3	29.4	28.7	29.8	30.2	25.8	26.8	26.2	27.2	27.6
4H	28.6	29.6	29.0	30.0	30.4	25.8	26.7	26.2	27.2	27.6
6H	28.7	29.5	29.1	29.9	30.4	25.8	26.6	26.2	27.0	27.5
8H	28.7	29.4	29.1	29.9	30.3	25.7	26.5	26.2	26.9	27.4
12H	28.6	29.3	29.1	29.8	30.3	25.7	26.4	26.2	26.9	27.3
8H 4H	28.6	29.3	29.0	29.8	30.3	26.1	26.8	26.5	27.3	27.7
6H	28.6	29.3	29.1	29.8	30.2	26.0	26.6	26.5	27.1	27.6
8H	28.6	29.2	29.1	29.7	30.2	26.0	26.5	26.5	27.0	27.5
12H	28.6	29.1	29.1	29.6	30.2	25.9	26.4	26.4	26.9	27.5
12H 4H	28.5	29.2	29.0	29.7	30.2	26.1	26.7	26.5	27.2	27.7
6H	28.6	29.2	29.1	29.6	30.2	26.0	26.6	26.5	27.0	27.6
8H	28.6	29.1	29.1	29.6	30.2	26.0	26.5	26.5	27.0	27.5
CIE190: 2010										

CIE190: 2010  
Area: 0.08378 m2

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:HXL  
Test Date:2024-10-28

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.487  
Humidity:65.0%  
Test Distance:9.990m [K=1.0000]  
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

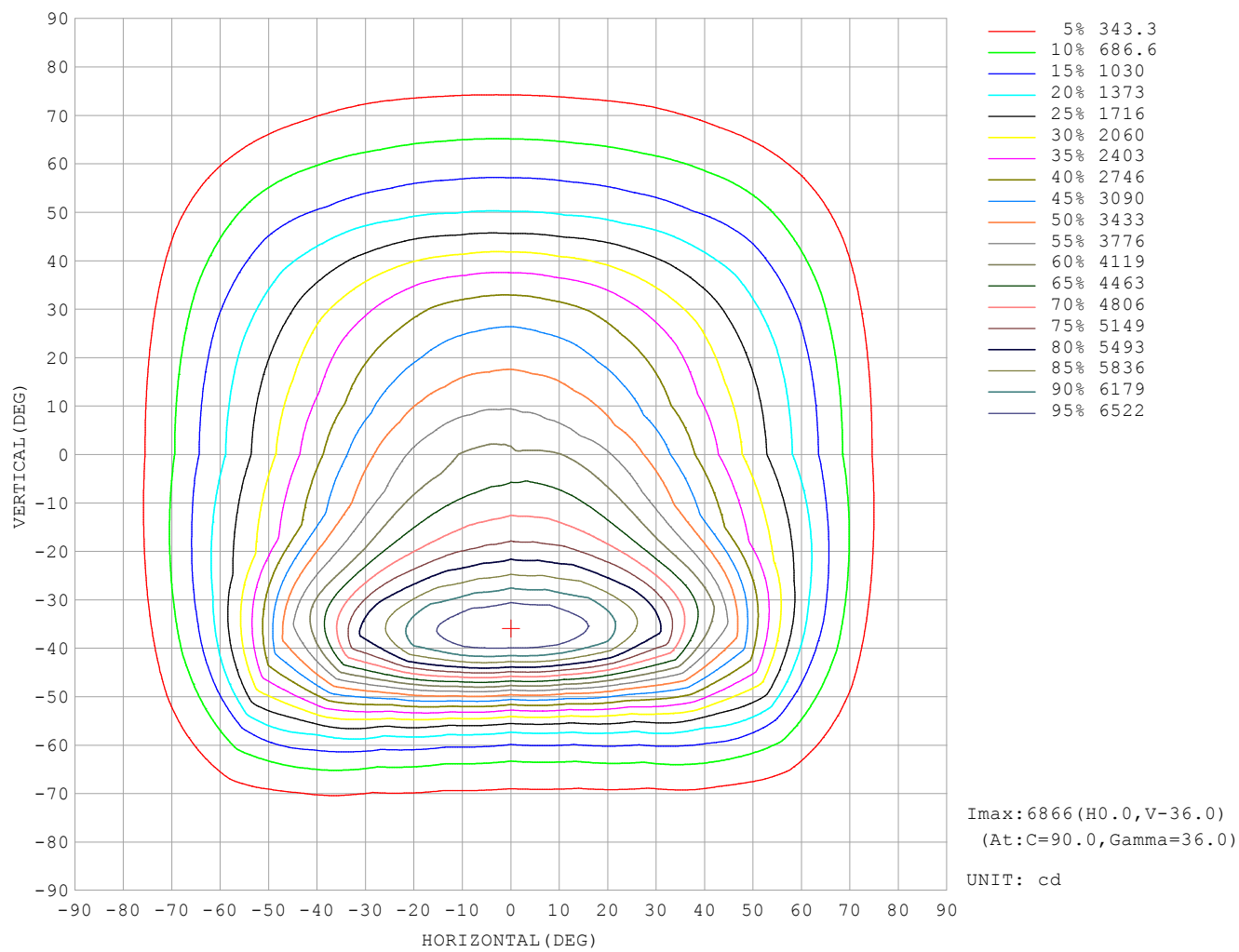
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	60	49	42	60	49	42	58	48	42	36
0.80	71	60	53	70	60	53	68	59	52	46
1.00	80	70	63	79	69	63	77	70	62	55
1.25	87	77	71	86	77	71	83	75	70	63
1.50	92	83	77	90	82	76	87	80	75	68
2.00	98	91	85	97	90	84	93	87	83	76
2.50	102	95	90	100	94	89	96	91	87	79
3.00	105	99	94	103	97	93	99	94	91	83
4.00	108	103	99	106	102	98	102	98	95	87
5.00	110	106	103	108	104	101	103	101	98	89
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators: HXL  
Test Date: 2024-10-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 $\gamma$  Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.487  
Humidity: 65.0%  
Test Distance: 9.990m [K=1.0000]  
Remarks:

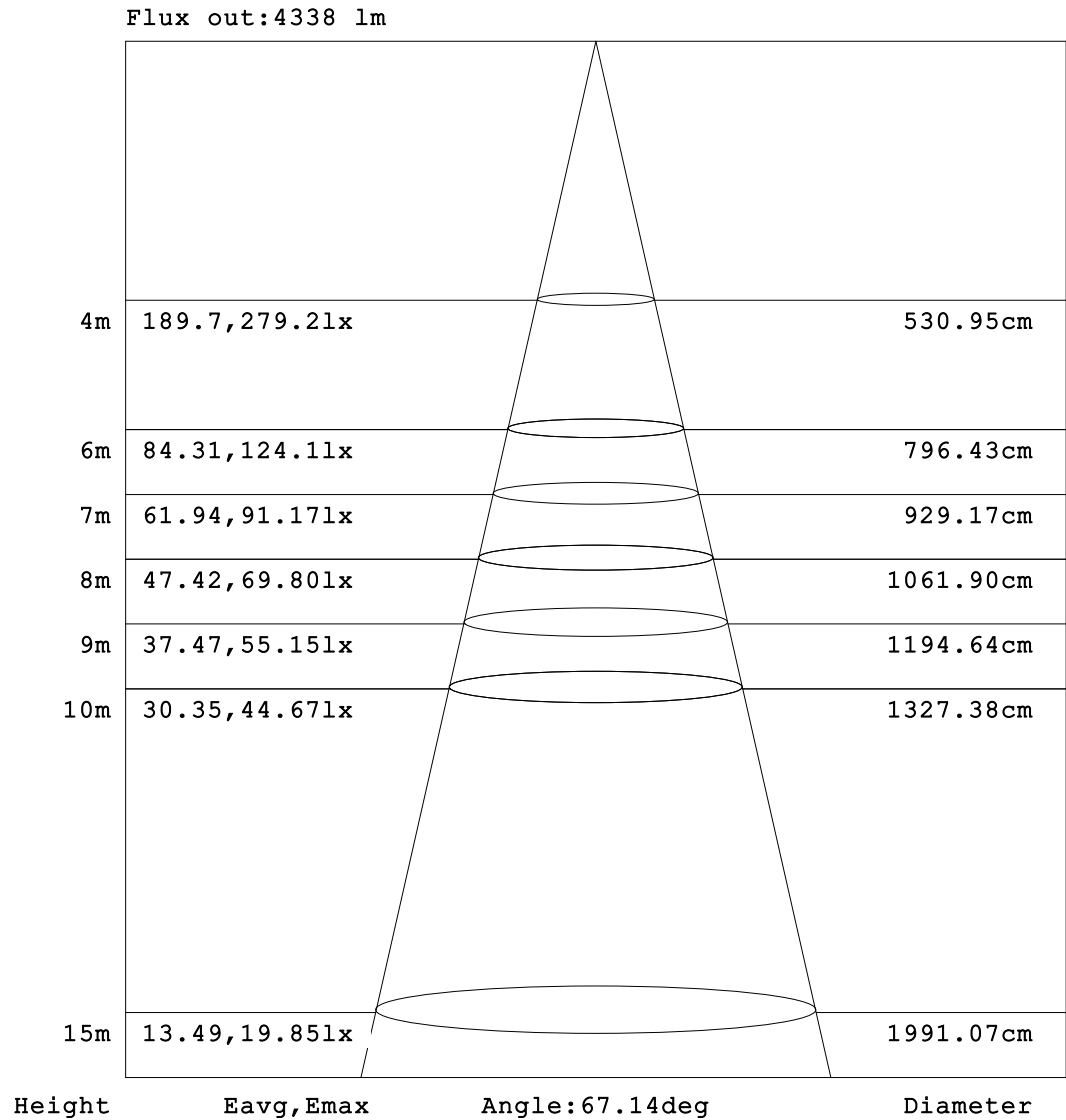
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 15.0DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.487
Temperature: 25.3°C	Humidity: 65.0%
Operators: HXL	Test Distance: 9.990m [K=1.0000]
Test Date: 2024-10-28	Remarks:



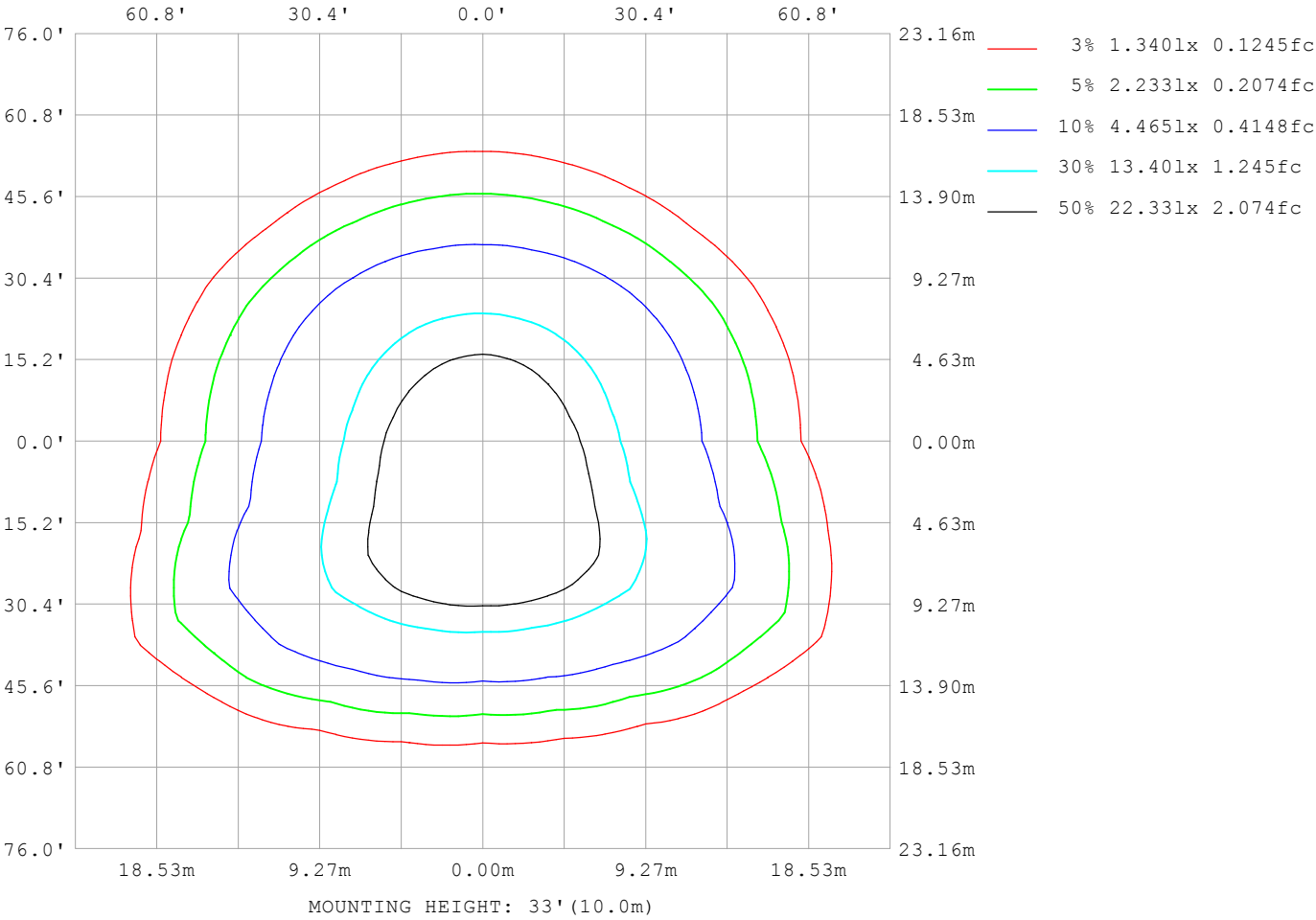
AAI Figure



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

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

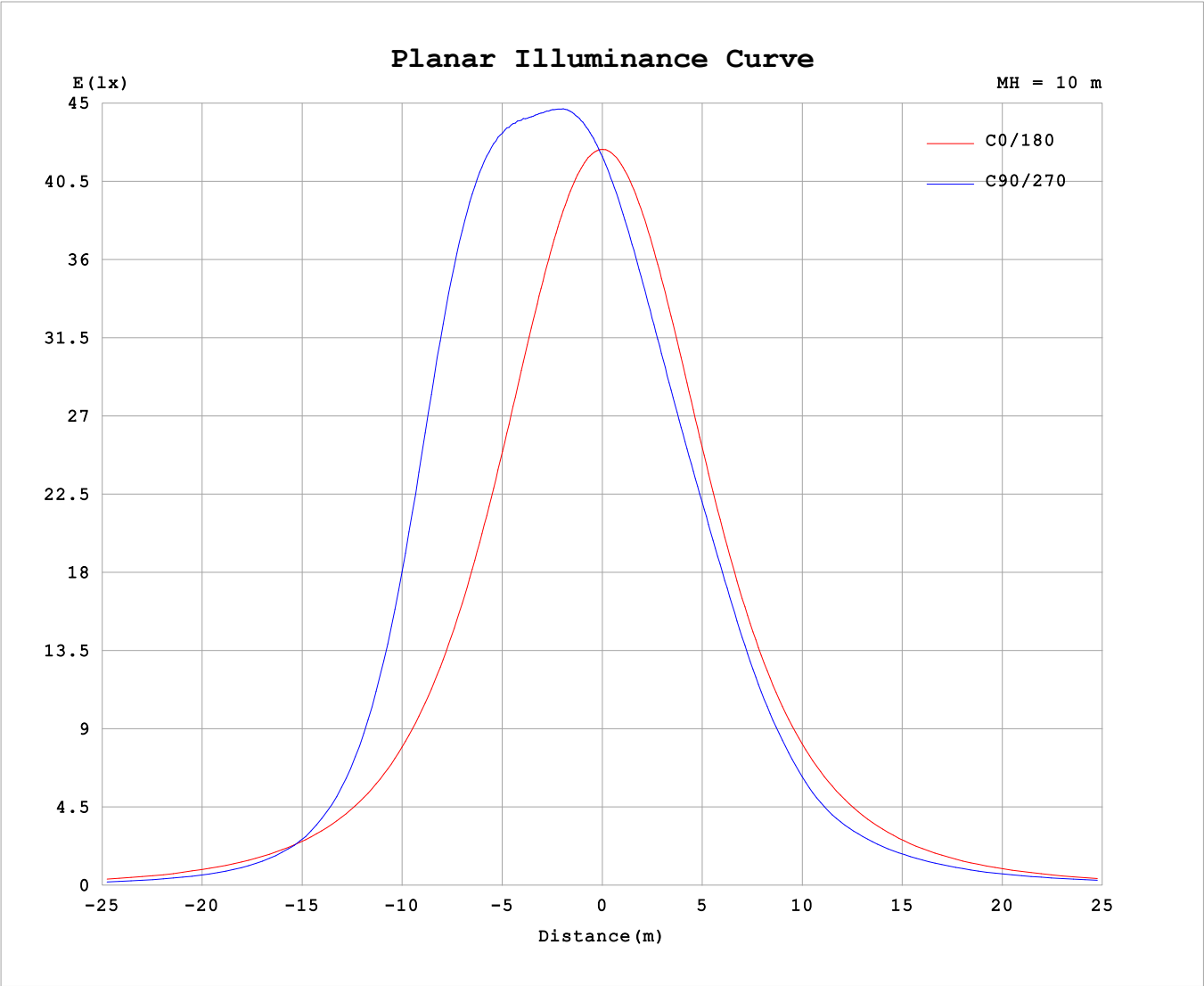
ISOLUX DIAGRAM



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators: HXL  
Test Date: 2024-10-28

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.487  
Humidity: 65.0%  
Test Distance: 9.990m [K=1.0000]  
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 15.0DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.487
Temperature:25.3℃	Humidity:65.0%
Operators:HXL	Test Distance:9.990m [K=1.0000]
Test Date:2024-10-28	Remarks: