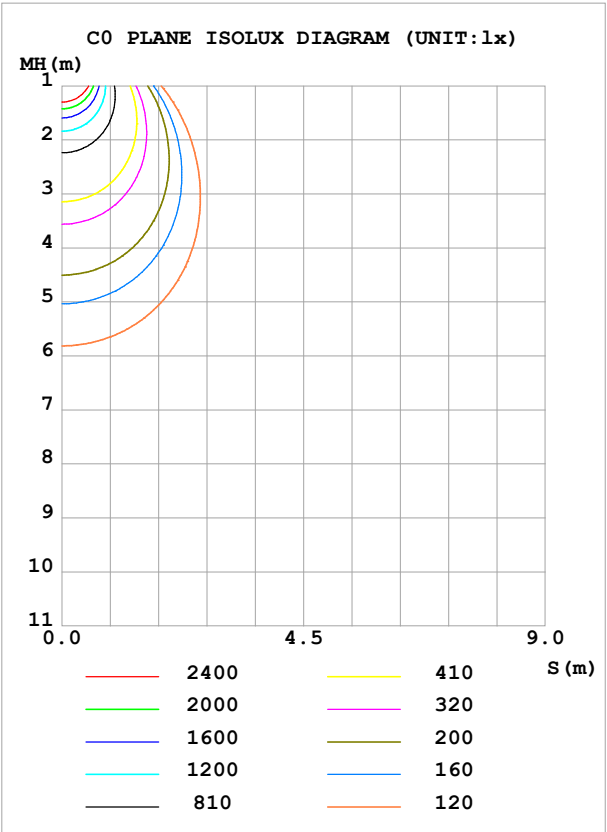
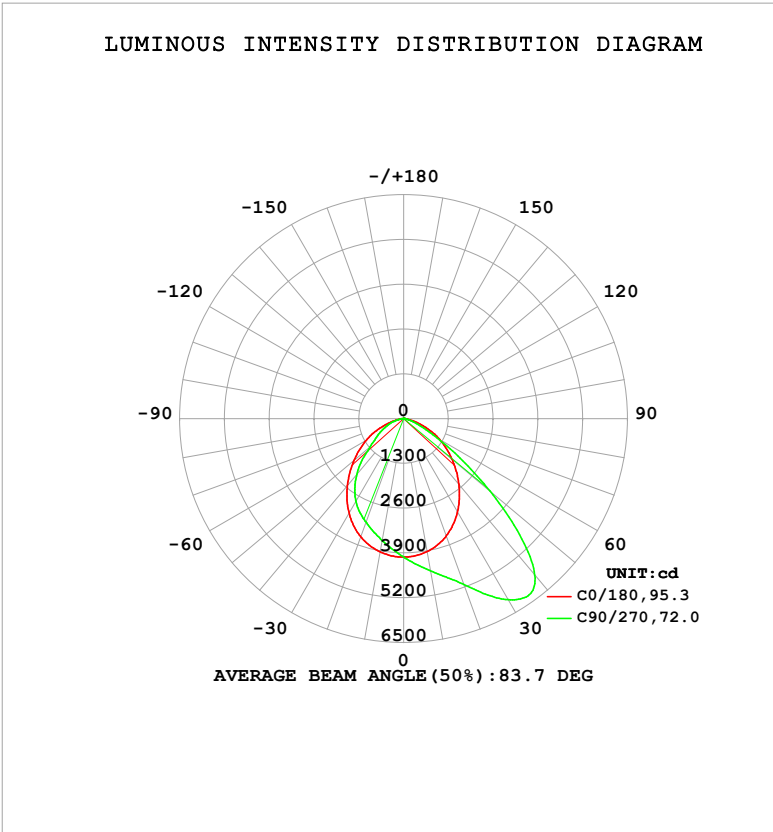


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:229.6V I:0.3643A P:74.0W PF:0.8845 Freq:50.00Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:11117.1x1 lm		
NAME: X501-457KA-9060 (75W 5700K)	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 150.27 lm/W
MODEL	/	I <sub>max</sub> (cd)	6283	S/MH (C0/180)	1.18	
NOMINAL POWER(W)	/	LOR (%)	100.0	S/MH (C90/270)	1.05	
RATED VOLTAGE(V)	/	TOTAL FLUX(lm)	11117	η UP,DN (C0-180)	0.0,63.5	
NOMINAL FLUX(lm)	11117.1	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,36.5	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE(V)	/	η down (%)	100.0	CIBSE SHR MAX	1.35	



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	3922	4296	4483	4292	3930	3665	3596	3672	0- 10	381.9	381.9	3.44,3.44
20	3624	4535	5127	4511	3650	3252	3200	3263	10- 20	1115	1497	13.5,13.5
30	3130	4886	6067	4815	3173	2812	2775	2813	20- 30	1784	3281	29.5,29.5
40	2501	5229	5923	5221	2543	2289	2120	2267	30- 40	2314	5596	50.3,50.3
50	1836	4505	3278	4727	1881	1652	1275	1618	40- 50	2372	7967	71.7,71.7
60	1205	2410	1116	2676	1250	958.6	778.7	929.8	50- 60	1761	9728	87.5,87.5
70	577.5	802.3	345.5	952.4	625.1	477.7	421.1	449.7	60- 70	990.1	10718	96.4,96.4
80	120.6	98.26	60.71	129.4	146.8	131.2	106.1	111.6	70- 80	356.5	11074	99.6,99.6
90	10.15	9.023	8.536	8.884	9.456	10.73	9.123	10.66	80- 90	42.67	11117	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): 6823.5 lm

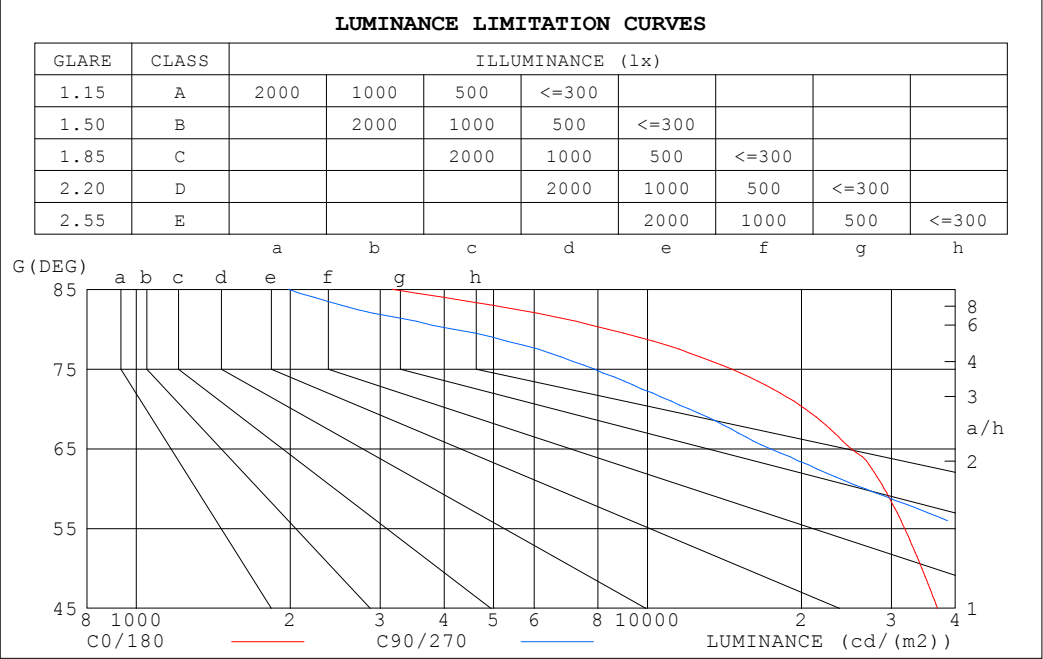
%lum = 61.4%  
%lamp = 61.4%

Conical surface Flux(120deg): 9727.9 lm

%lum = 87.5%  
%lamp = 87.5%

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



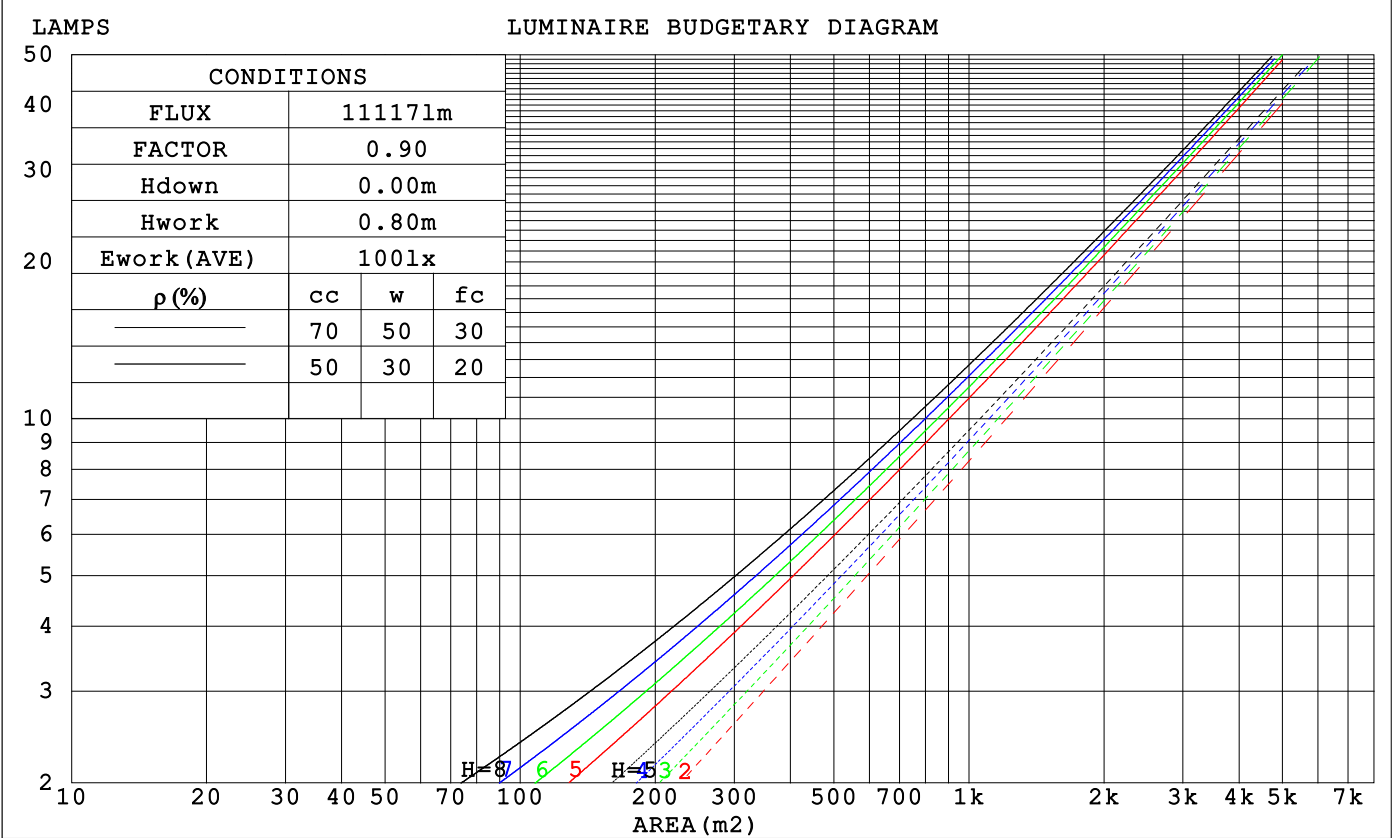
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3166	1986
80	8365	4176
75	14578	7854
70	20342	12067
65	24999	17368
60	29036	26657
55	31846	41749
50	34416	60911
45	36906	80508

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	1.00
1.0	1.06	1.02	.99	1.04	1.00	.97	.00	.97	.94	.96	.94	.92	.92	.90	.89	.87
2.0	.94	.88	.82	.92	.86	.81	.88	.84	.80	.85	.81	.78	.82	.79	.76	.74
3.0	.83	.76	.70	.81	.75	.69	.79	.73	.68	.76	.71	.67	.73	.69	.65	.63
4.0	.74	.66	.59	.73	.65	.59	.70	.64	.58	.68	.62	.57	.66	.61	.57	.55
5.0	.66	.58	.51	.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	.29	.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	.267	.152	.048	.260	.148	.047	.247	.142	.045	.235	.136	.044	.224	.130	.042	
2.0	.260	.143	.044	.254	.140	.043	.243	.135	.042	.232	.130	.041	.222	.126	.040	
3.0	.246	.131	.039	.241	.129	.039	.231	.125	.038	.222	.122	.037	.213	.118	.037	
4.0	.231	.120	.035	.227	.119	.035	.218	.115	.034	.210	.113	.034	.202	.110	.033	
5.0	.217	.110	.032	.213	.109	.032	.205	.107	.031	.197	.104	.031	.190	.102	.031	
6.0	.203	.102	.029	.199	.101	.029	.192	.099	.029	.186	.097	.028	.180	.095	.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	.171	.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	26.6	28.2	27.0	28.5	28.8	25.2	26.8	25.6	27.1	27.4
3H	27.6	28.9	27.9	29.3	29.6	25.5	26.9	25.9	27.2	27.5
4H	27.7	29.0	28.1	29.4	29.8	25.5	26.8	25.9	27.1	27.5
6H	27.8	29.0	28.2	29.3	29.7	25.5	26.7	25.9	27.0	27.4
8H	27.8	28.9	28.2	29.3	29.7	25.4	26.6	25.9	27.0	27.4
12H	27.7	28.8	28.2	29.2	29.6	25.4	26.5	25.8	26.9	27.3
4H 2H	27.1	28.4	27.5	28.8	29.2	26.3	27.6	26.7	27.9	28.3
3H	28.4	29.5	28.8	29.9	30.3	26.6	27.7	27.0	28.1	28.5
4H	28.7	29.6	29.1	30.1	30.5	26.6	27.6	27.1	28.0	28.4
6H	28.8	29.6	29.2	30.1	30.5	26.6	27.4	27.1	27.9	28.3
8H	28.8	29.5	29.2	30.0	30.4	26.6	27.4	27.0	27.8	28.3
12H	28.7	29.4	29.2	29.9	30.4	26.6	27.2	27.0	27.7	28.2
8H 4H	28.7	29.4	29.1	29.9	30.4	26.9	27.6	27.3	28.1	28.5
6H	28.8	29.4	29.3	29.9	30.4	26.8	27.5	27.3	28.0	28.4
8H	28.7	29.3	29.3	29.8	30.3	26.8	27.4	27.3	27.9	28.4
12H	28.7	29.2	29.2	29.7	30.3	26.8	27.3	27.3	27.8	28.3
12H 4H	28.6	29.3	29.1	29.8	30.3	26.9	27.5	27.3	28.0	28.5
6H	28.7	29.3	29.3	29.8	30.3	26.8	27.4	27.4	27.9	28.4
8H	28.7	29.2	29.2	29.7	30.3	26.8	27.3	27.3	27.8	28.4
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

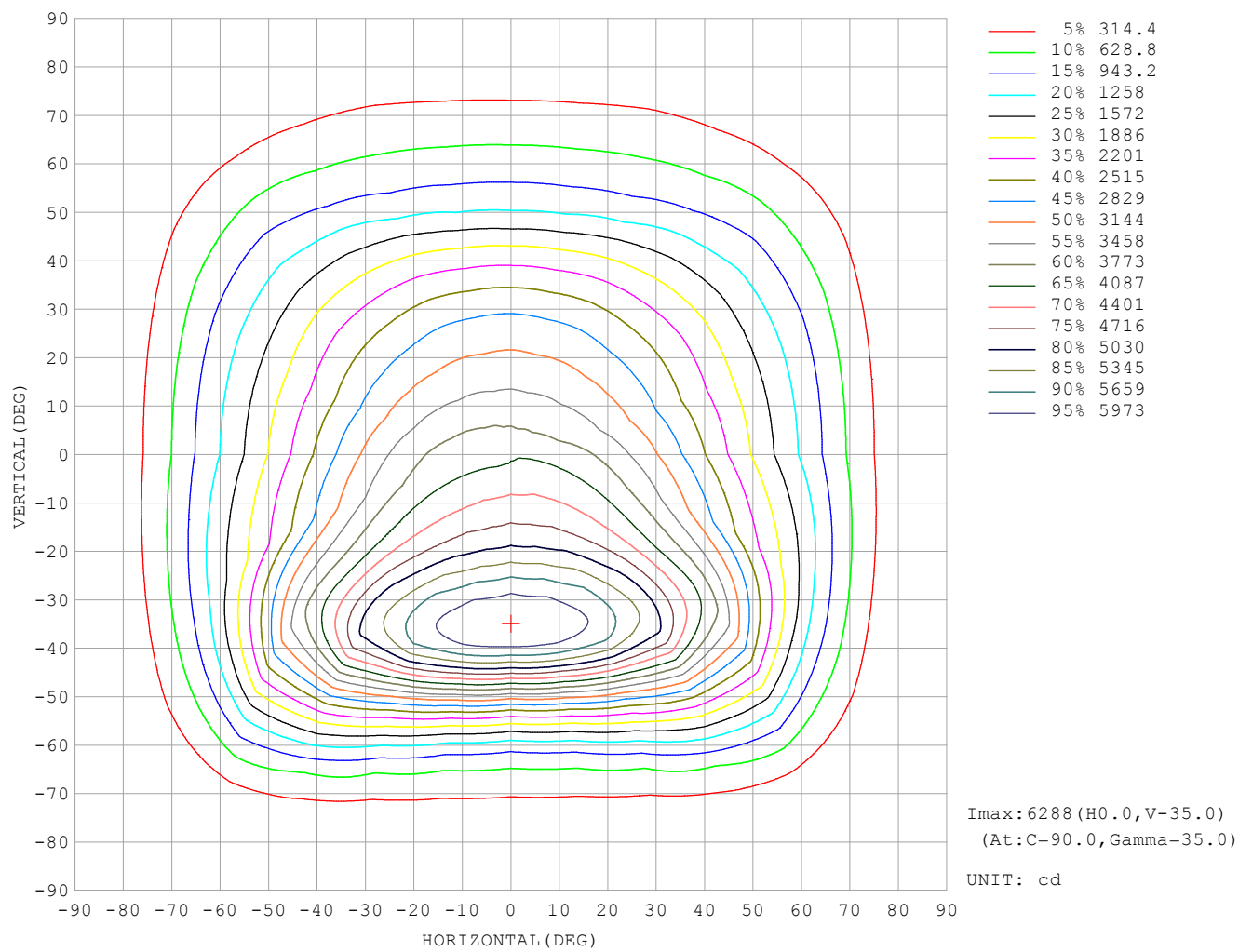
UTILIZATION FACTORS TABLE

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	76	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	96	90	84	93	87	83	76
2.50	102	95	90	100	93	89	96	91	87	79
3.00	105	99	94	103	97	93	99	94	91	83
4.00	108	103	99	106	101	98	102	98	95	87
5.00	110	106	102	108	104	101	103	100	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:

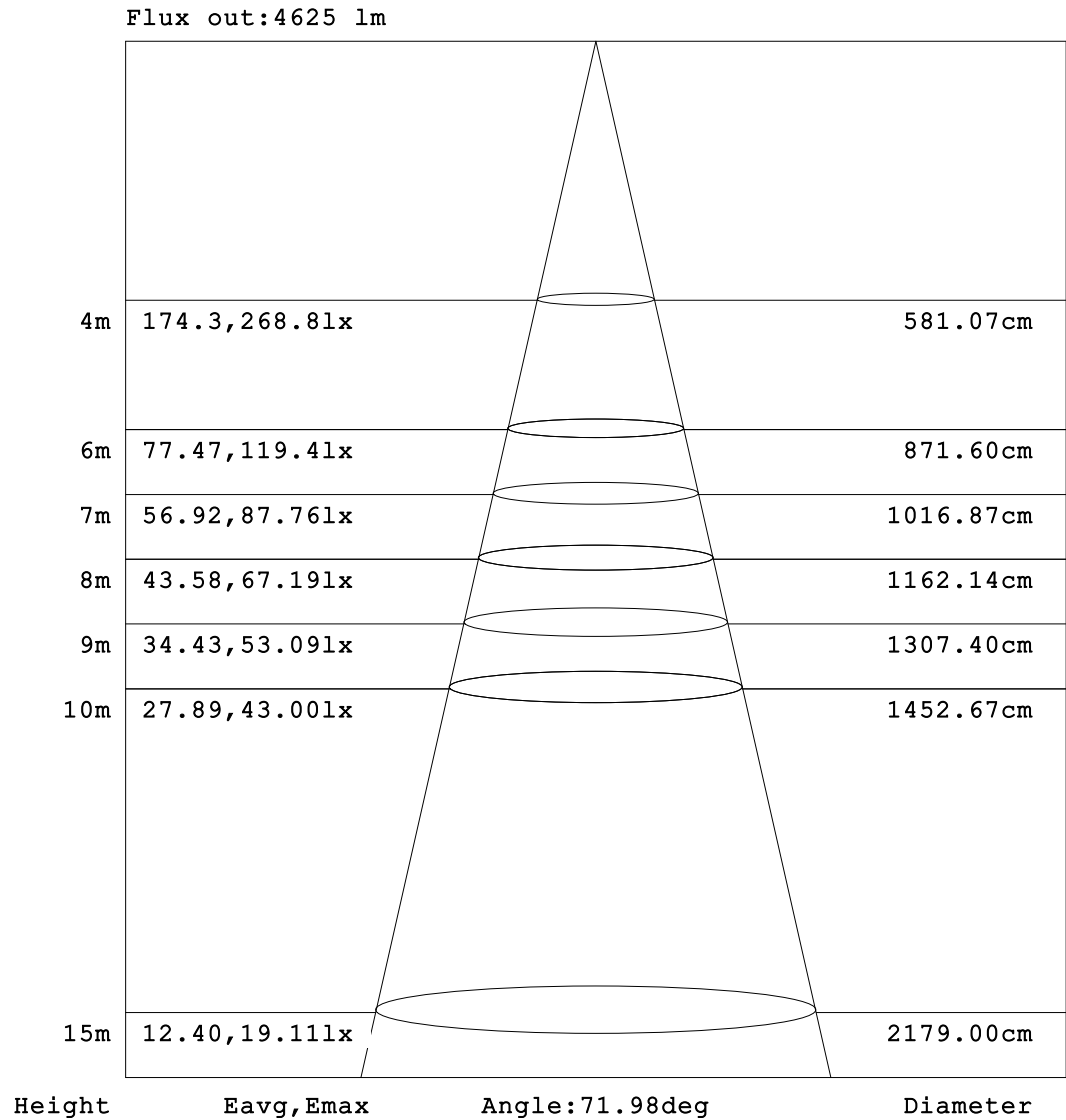
ISOCANDELA DIAGRAM



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:



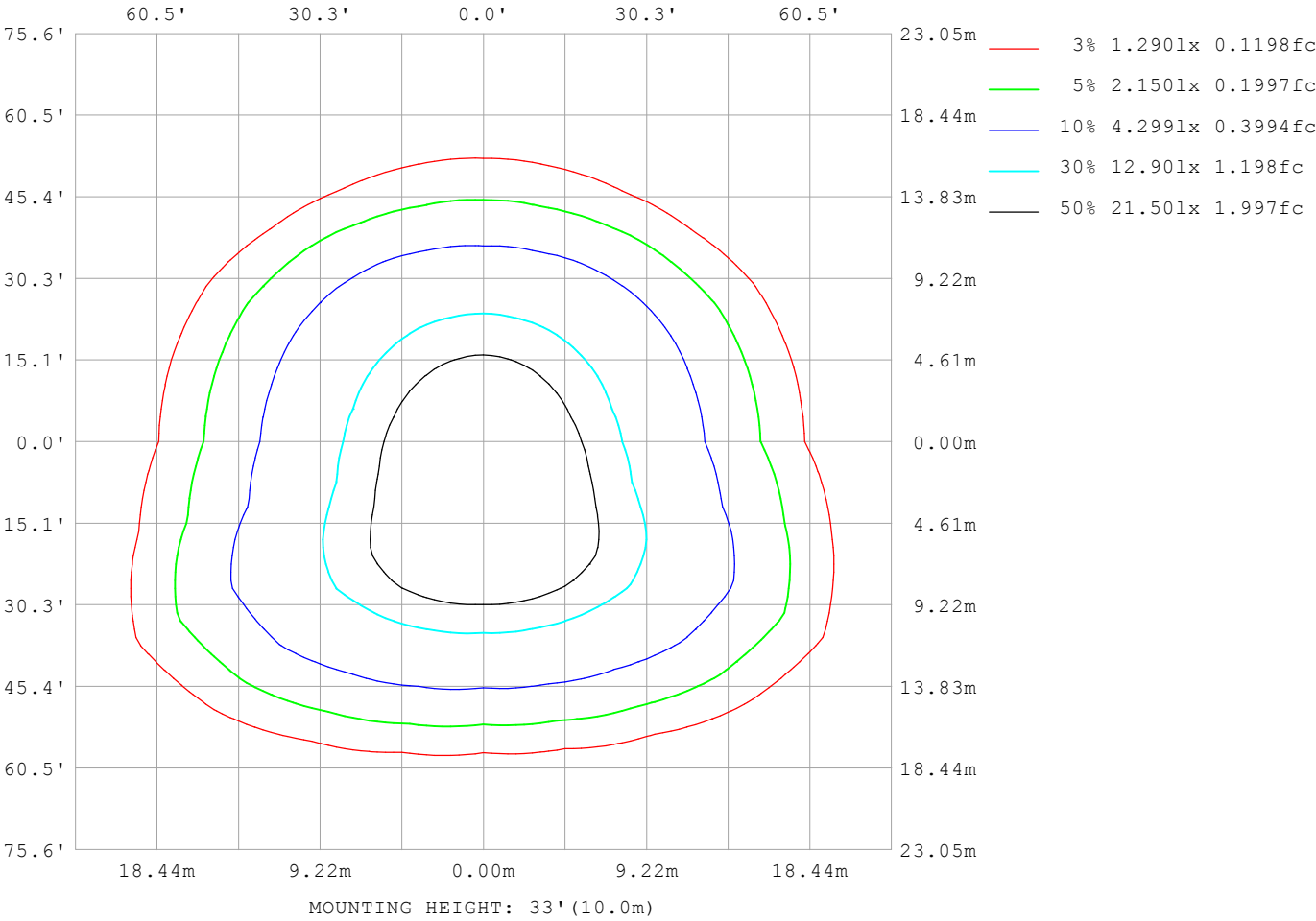
AAI Figure



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

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

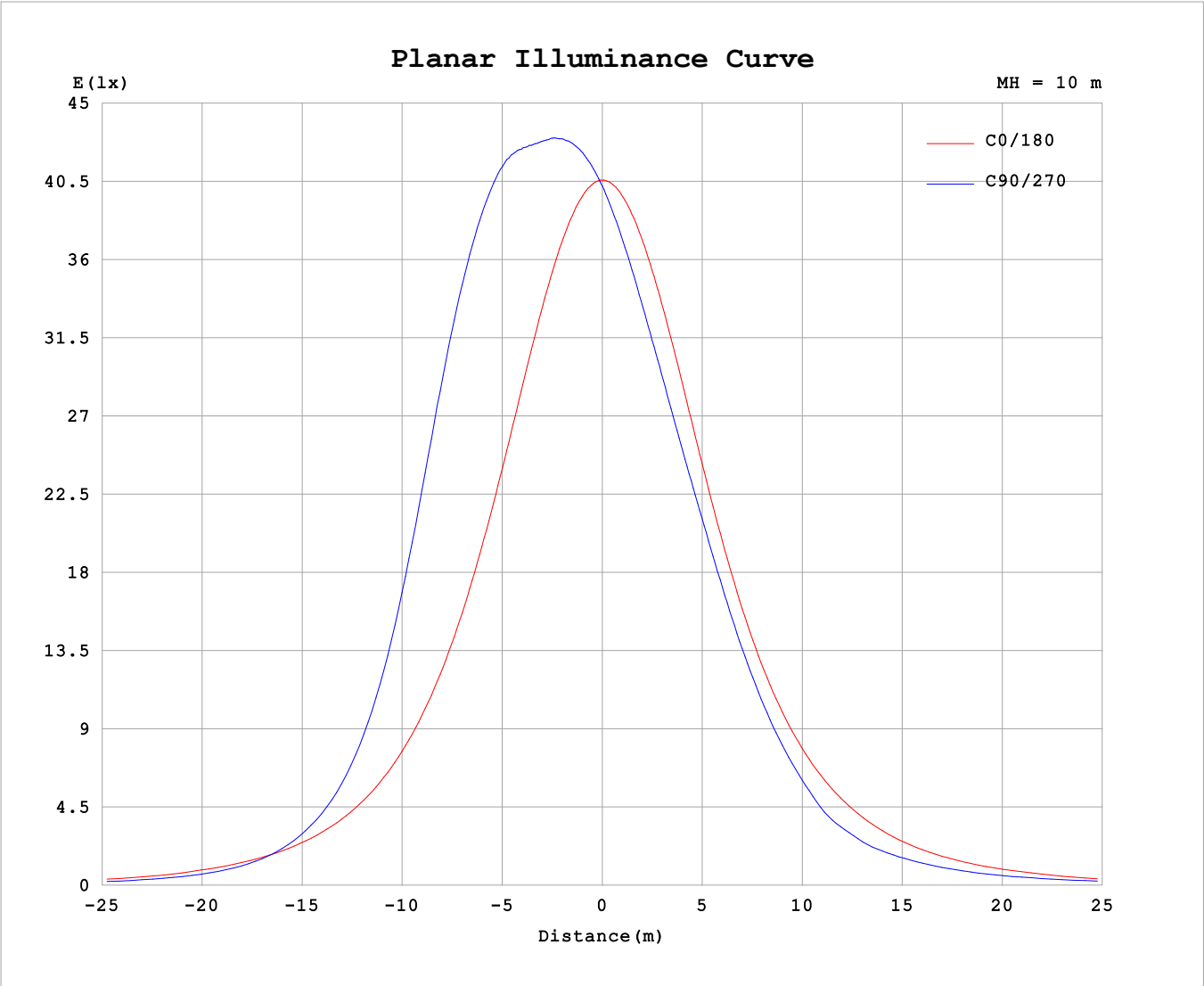
ISOLUX DIAGRAM



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: