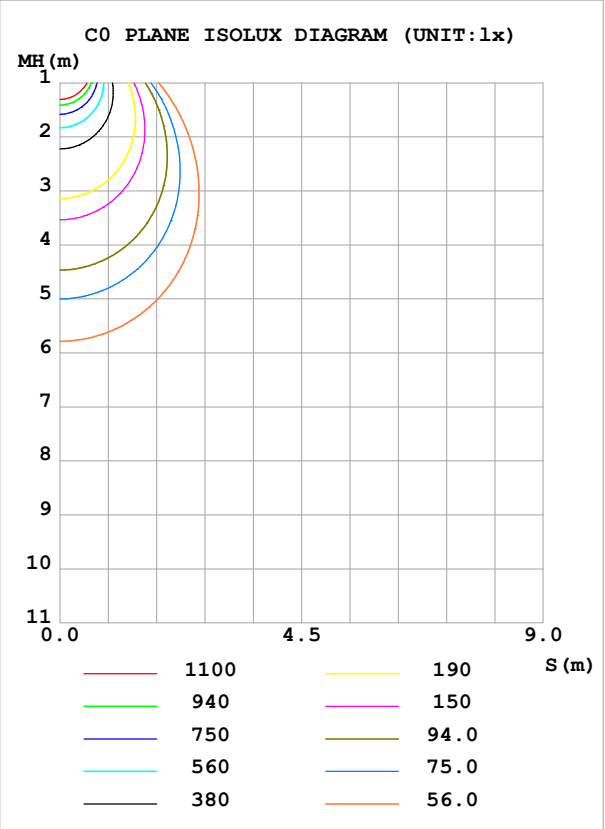
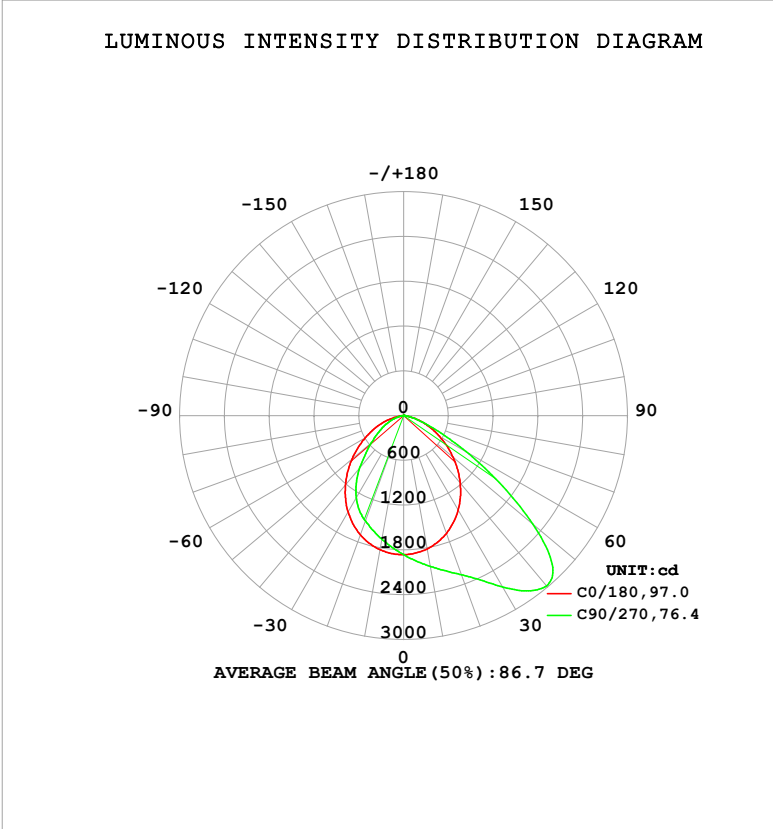


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:229.6V I:0.1649A P:36.9W PF:0.9743 Freq:50.01Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0Lamp Flux:5433.76x1 lm		
NAME: X500-457KA-9060 (37W 5700K)	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 147.30 lm/W
MODEL	/	I _{max} (cd)	2977	S/MH (C0/180)	1.20	
NOMINAL POWER(W)	/	LOR (%)	100.0	S/MH (C90/270)	1.05	
RATED VOLTAGE(V)	/	TOTAL FLUX(lm)	5433.8	η UP,DN (C0-180)	0.0,65.8	
NOMINAL FLUX(lm)	5433.76	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,34.2	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.50	
TEST VOLTAGE(V)	/	η down (%)	100.0	CIBSE SHR MAX	1.50	



C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 22.5DEG	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:2024-11-11	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	1815	1971	2050	1974	1825	1716	1682	1712	0- 10	176.9	176.9	3.26,3.26
20	1680	2042	2270	2048	1699	1536	1502	1529	10- 20	514.4	691.3	12.7,12.7
30	1463	2116	2650	2109	1491	1328	1271	1315	20- 30	810.7	1502	27.6,27.6
40	1181	2278	2977	2255	1216	1063	921.2	1039	30- 40	1050	2552	47,47
50	865.5	2296	2259	2336	903.0	740.4	565.1	706.3	40- 50	1151	3703	68.1,68.1
60	554.9	1532	967.7	1664	594.4	425.3	334.0	393.4	50- 60	944.1	4647	85.5,85.5
70	286.3	616.0	287.3	716.8	326.2	201.8	160.4	180.4	60- 70	554.7	5202	95.7,95.7
80	49.72	108.1	63.89	143.7	76.85	47.92	24.05	33.17	70- 80	209.0	5411	99.6,99.6
90	1.827	1.161	1.410	1.691	1.535	2.364	1.782	2.713	80- 90	23.13	5434	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): 3131.3 lm

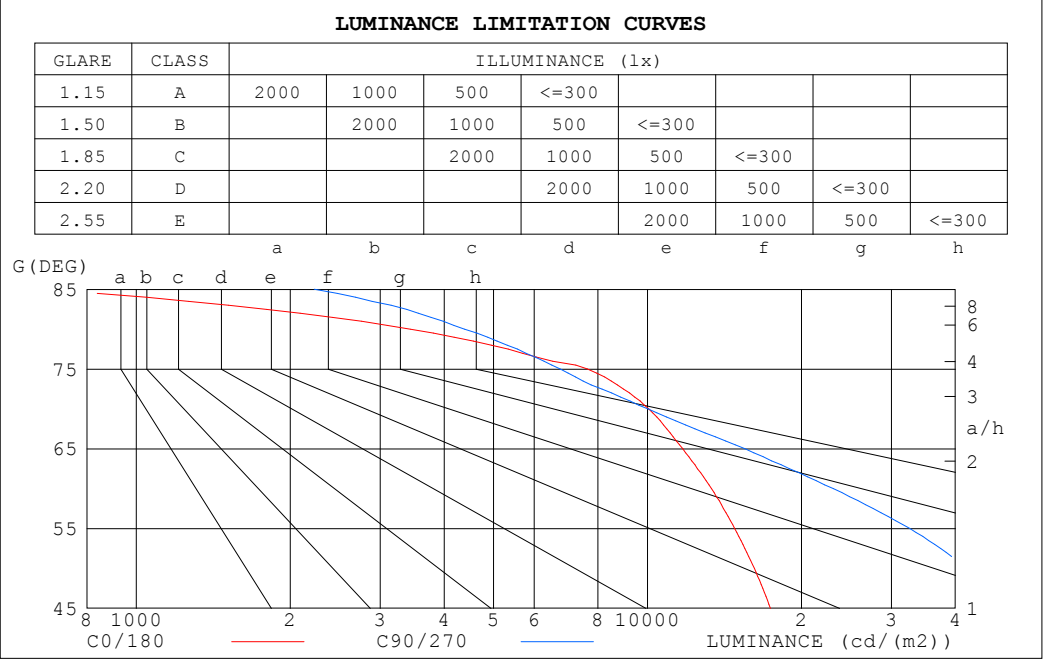
%lum = 57.6%
%lamp = 57.6%

Conical surface Flux(120deg): 4647 lm

%lum = 85.5%
%lamp = 85.5%

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 22.5DEG	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:2024-11-11	Remarks:

LUMINANCE LIMITATION CURVES



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	658	2229
80	3440	4390
75	7629	6747
70	10057	10023
65	11713	15489
60	13332	23092
55	14810	32569
50	16176	41940
45	17404	47511

C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:HXL

Test Date:2024-11-11

γ Range: 0 - 90DEG

γ Interval: 0.5DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.487

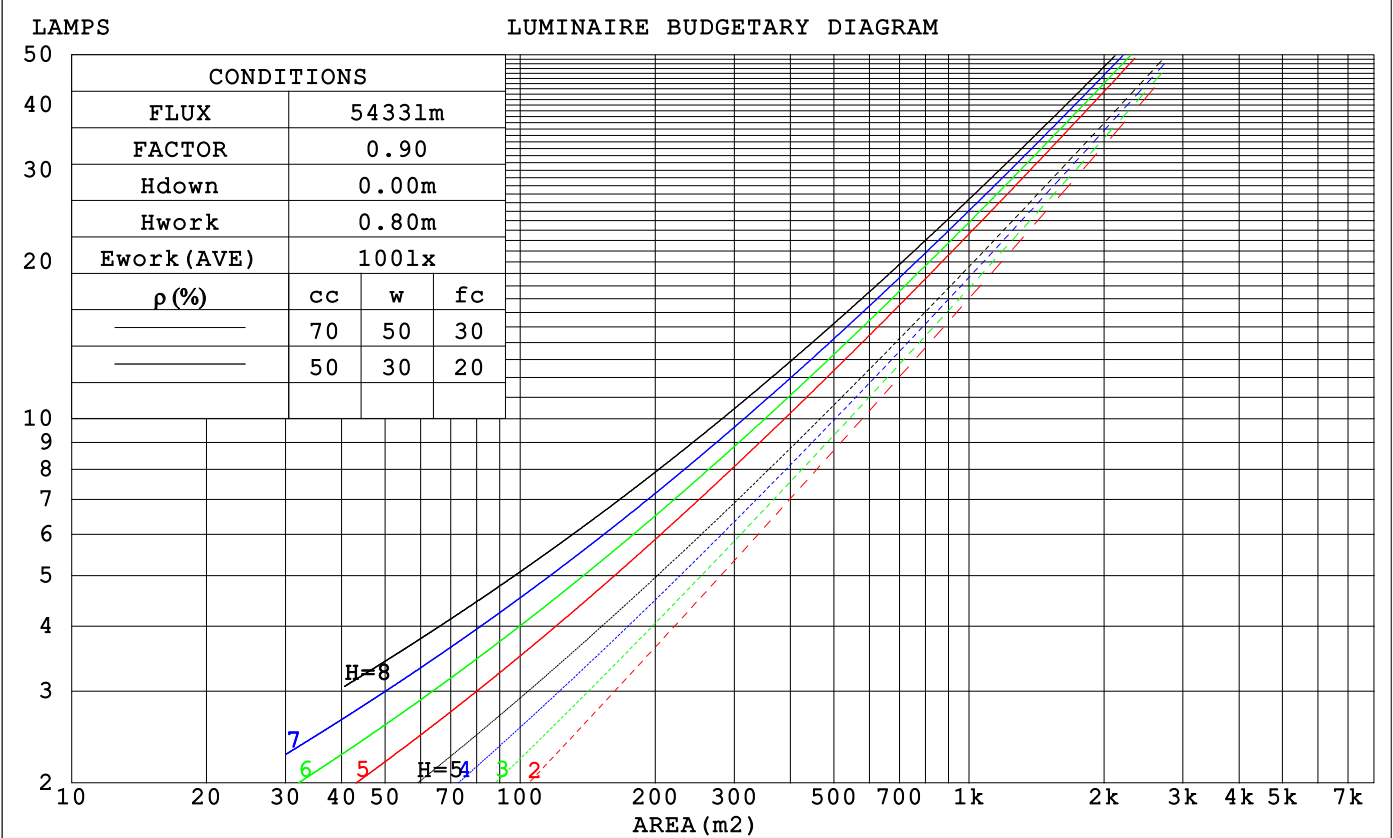
Humidity:65.0%

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
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	1.06	1.02	.98	1.03	.00	.97	.99	.96	.94	.95	.93	.91	.92	.90	.88	.86
2.0	.93	.86	.81	.91	.85	.80	.87	.83	.78	.84	.80	.77	.81	.78	.75	.73
3.0	.82	.74	.68	.80	.73	.67	.77	.71	.66	.75	.69	.65	.72	.68	.64	.62
4.0	.73	.64	.58	.71	.63	.57	.69	.62	.57	.67	.61	.56	.64	.59	.55	.53
5.0	.65	.56	.50	.64	.56	.49	.62	.54	.49	.60	.53	.48	.58	.52	.48	.46
6.0	.58	.50	.43	.57	.49	.43	.56	.48	.43	.54	.47	.42	.52	.47	.42	.40
7.0	.53	.44	.38	.52	.44	.38	.50	.43	.38	.49	.42	.37	.48	.42	.37	.35
8.0	.48	.40	.34	.47	.39	.34	.46	.39	.34	.45	.38	.33	.44	.38	.33	.31
9.0	.44	.36	.30	.43	.36	.30	.42	.35	.30	.41	.35	.30	.40	.34	.30	.28
10.0	.40	.33	.27	.40	.32	.27	.39	.32	.27	.38	.32	.27	.37	.31	.27	.25



C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:25.3°C

Operators:HXL

Test Date:2024-11-11

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

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	.276	.157	.050	.269	.154	.049	.256	.147	.047	.244	.141	.045	.233	.135	.044	
2.0	.269	.147	.045	.263	.145	.045	.251	.140	.043	.241	.135	.042	.231	.131	.041	
3.0	.254	.135	.040	.249	.133	.040	.238	.129	.039	.229	.126	.039	.220	.122	.038	
4.0	.238	.124	.036	.233	.122	.036	.224	.119	.035	.216	.116	.035	.208	.113	.034	
5.0	.222	.113	.033	.218	.112	.033	.210	.109	.032	.203	.107	.032	.196	.104	.031	
6.0	.208	.104	.030	.204	.103	.030	.197	.101	.029	.190	.099	.029	.184	.097	.029	
7.0	.194	.096	.027	.191	.095	.027	.185	.093	.027	.179	.092	.027	.173	.090	.026	
8.0	.182	.089	.025	.179	.088	.025	.174	.087	.025	.168	.085	.025	.163	.084	.024	
9.0	.172	.083	.023	.169	.082	.023	.164	.081	.023	.159	.080	.023	.154	.078	.023	
10.0	.162	.078	.022	.159	.077	.021	.155	.076	.021	.150	.075	.021	.146	.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	.178	.156	.137	.152	.134	.118	.104	.092	.082	.060	.053	.047	.019	.017	.015	
2.0	.169	.132	.101	.145	.114	.087	.099	.079	.061	.057	.046	.036	.018	.015	.012	
3.0	.161	.114	.077	.138	.099	.066	.095	.068	.047	.055	.040	.027	.018	.013	.009	
4.0	.154	.101	.060	.132	.087	.052	.091	.061	.037	.053	.036	.022	.017	.012	.007	
5.0	.147	.090	.048	.126	.078	.042	.087	.055	.030	.050	.032	.018	.016	.010	.006	
6.0	.140	.082	.040	.121	.071	.035	.083	.050	.025	.048	.029	.015	.016	.010	.005	
7.0	.134	.075	.034	.115	.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	.116	.060	.023	.100	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: HXL
 Test Date: 2024-11-11

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

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	23.7	25.3	24.1	25.6	25.9	25.8	27.4	26.2	27.8	28.1
3H	25.0	26.4	25.4	26.7	27.1	26.2	27.6	26.6	28.0	28.3
4H	25.3	26.6	25.7	27.0	27.4	26.2	27.6	26.6	27.9	28.3
6H	25.4	26.6	25.8	27.0	27.4	26.2	27.5	26.6	27.8	28.2
8H	25.3	26.5	25.8	26.9	27.3	26.2	27.4	26.6	27.8	28.2
12H	25.3	26.4	25.7	26.8	27.3	26.2	27.3	26.6	27.7	28.1
4H 2H	24.9	26.3	25.3	26.6	27.0	26.6	28.0	27.0	28.3	28.7
3H	26.4	27.5	26.8	27.9	28.3	27.2	28.3	27.6	28.7	29.1
4H	26.8	27.8	27.2	28.2	28.6	27.2	28.2	27.7	28.6	29.1
6H	26.9	27.8	27.4	28.2	28.7	27.3	28.1	27.7	28.6	29.0
8H	26.9	27.7	27.3	28.1	28.6	27.2	28.0	27.7	28.5	28.9
12H	26.9	27.6	27.3	28.1	28.5	27.2	27.9	27.7	28.4	28.9
8H 4H	26.9	27.7	27.3	28.1	28.6	27.4	28.2	27.9	28.7	29.2
6H	27.1	27.7	27.6	28.2	28.7	27.5	28.1	28.0	28.6	29.1
8H	27.1	27.6	27.6	28.2	28.6	27.4	28.0	28.0	28.5	29.0
12H	27.0	27.6	27.5	28.0	28.6	27.4	28.0	27.9	28.4	29.0
12H 4H	26.9	27.6	27.3	28.1	28.5	27.4	28.2	27.9	28.6	29.1
6H	27.0	27.6	27.6	28.1	28.6	27.5	28.1	28.0	28.5	29.1
8H	27.0	27.6	27.6	28.1	28.6	27.5	28.0	28.0	28.5	29.0
CIE190: 2010										

CIE190: 2010
Area: 0.08378 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators: HXL
Test Date:2024-11-11

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

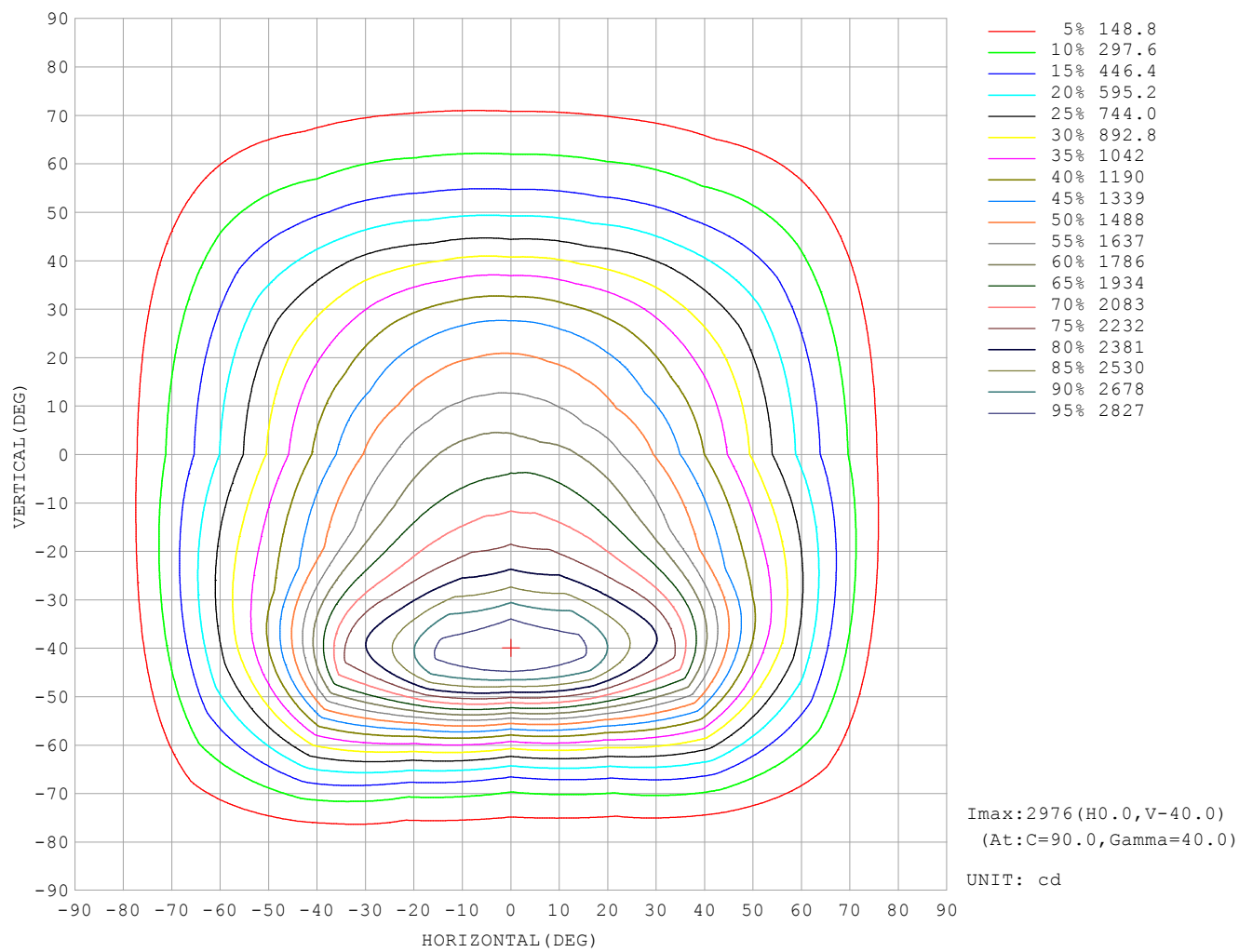
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	58	47	40	57	46	40	56	46	40	33
0.80	69	58	50	68	57	50	66	56	50	43
1.00	78	67	60	77	67	60	75	68	60	53
1.25	85	75	69	84	75	68	81	73	68	61
1.50	90	81	75	89	80	74	86	79	73	66
2.00	97	89	83	95	88	83	92	86	81	74
2.50	101	94	88	99	92	87	95	90	85	77
3.00	104	98	93	102	96	92	98	93	89	81
4.00	108	102	98	105	101	97	101	97	94	86
5.00	110	105	102	107	103	100	103	100	97	88
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: HXL
Test Date: 2024-11-11

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 γ Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.487
Humidity: 65.0%
Test Distance: 9.990m [K=1.0000]
Remarks:

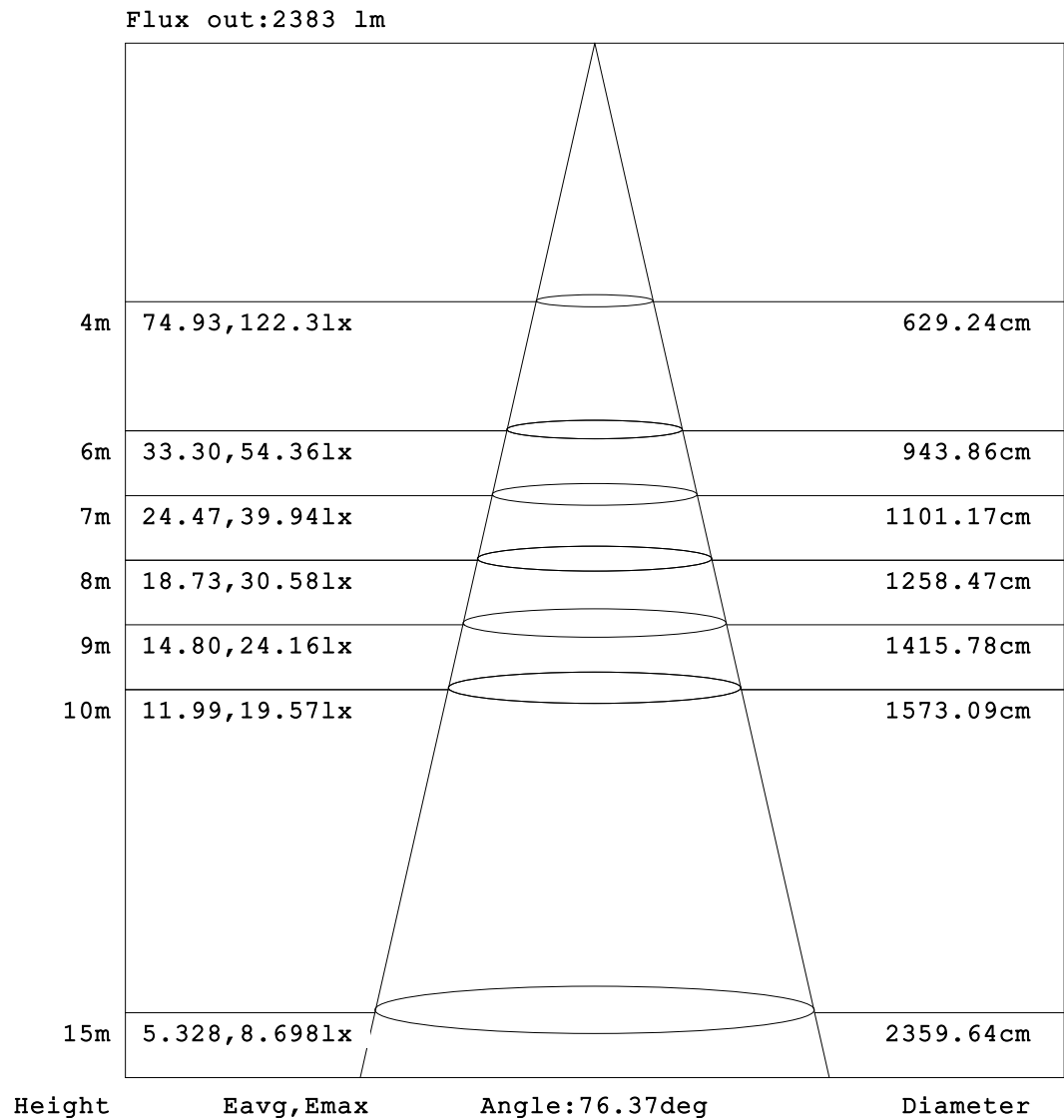
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:HXL
Test Date:2024-11-11

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:

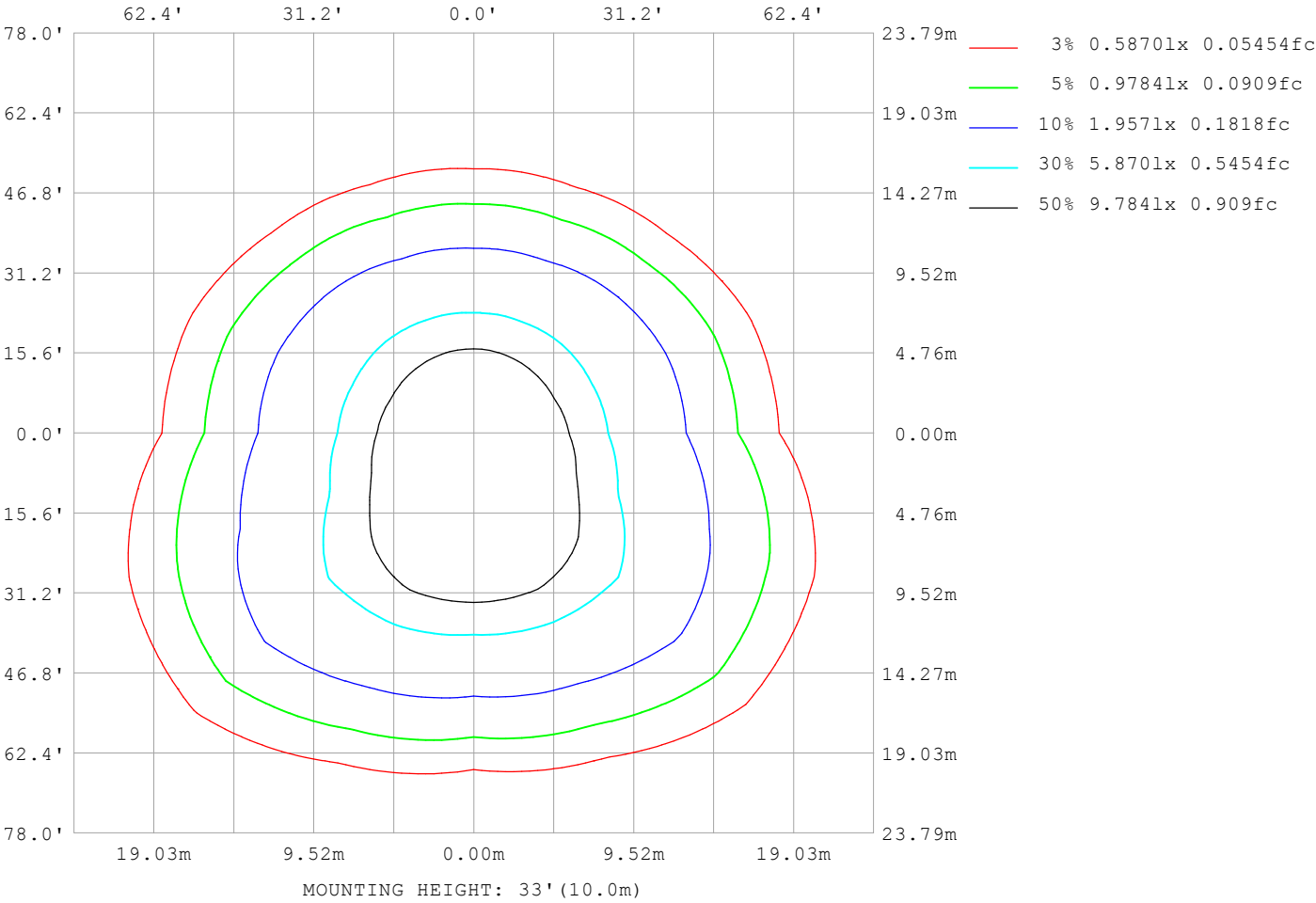
AAI Figure



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

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

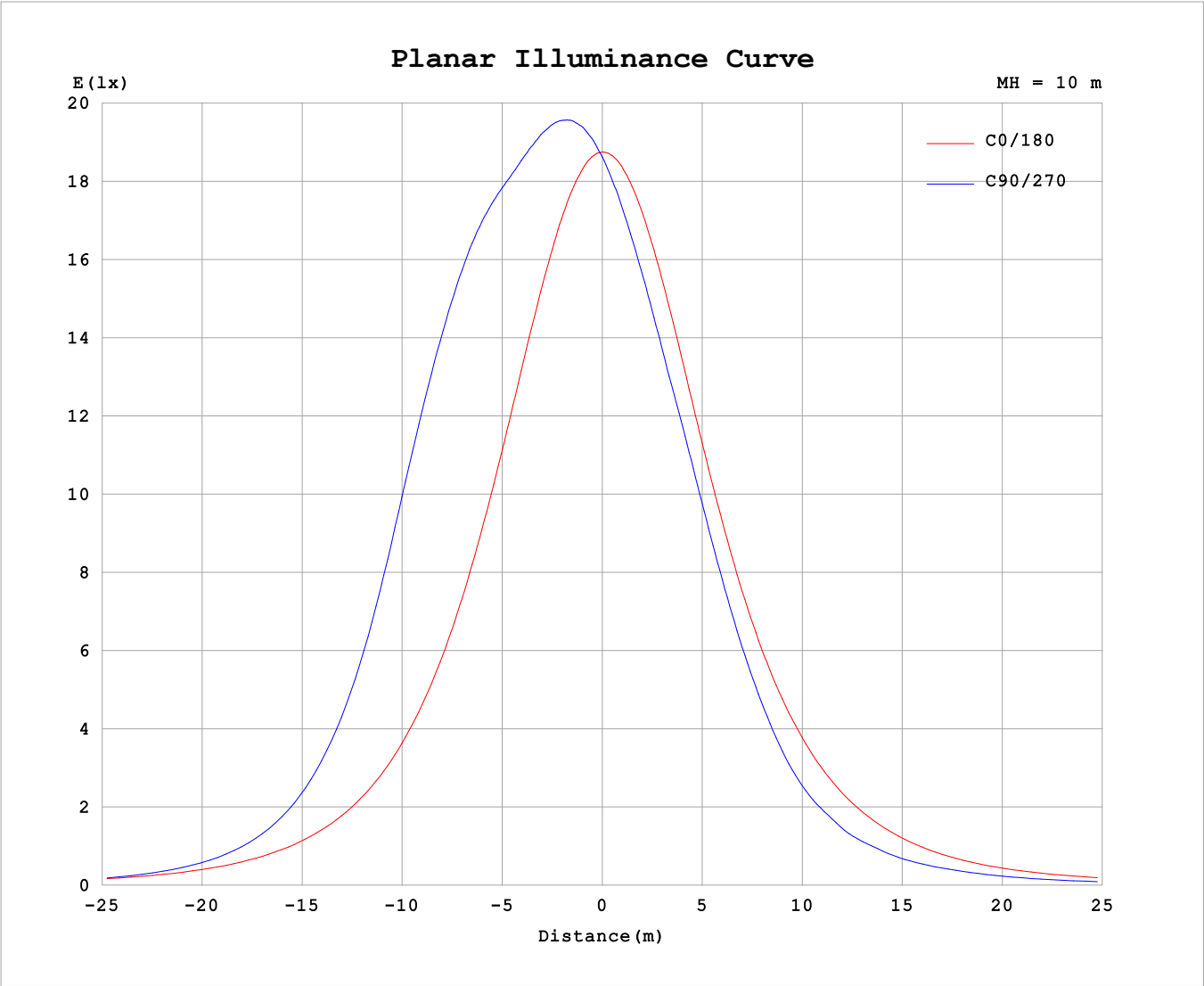
ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:HXL
Test Date:2024-11-11

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
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:HXL
Test Date:2024-11-11

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: