

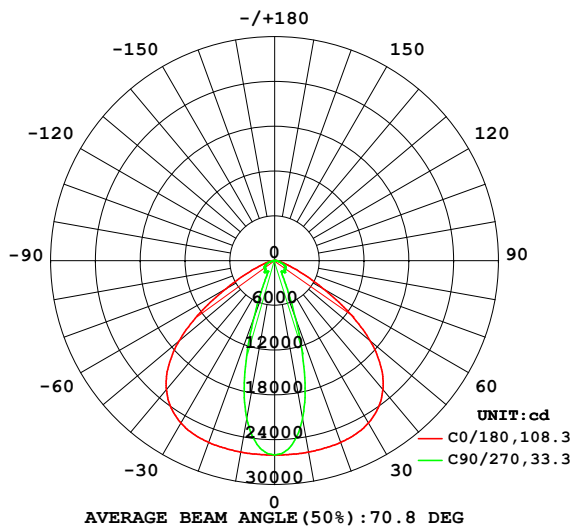
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

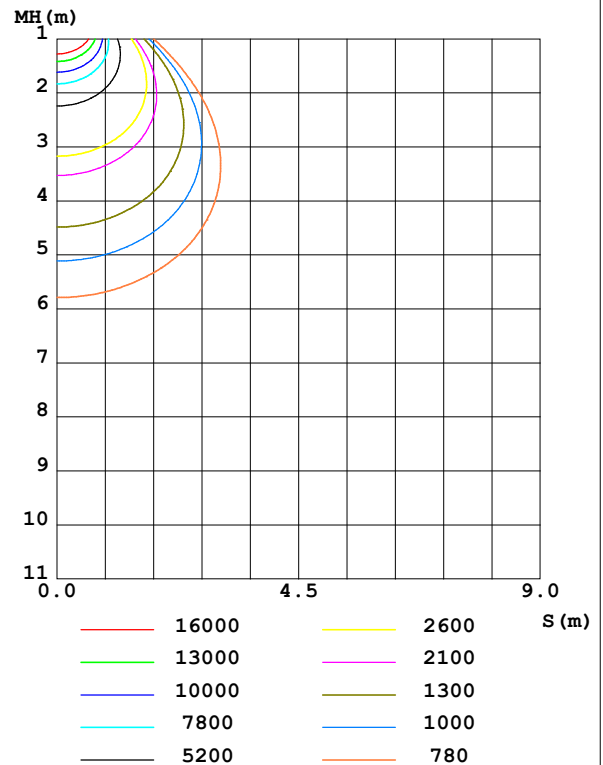
Test:U:229.9V I:0.655A P:148.9W PF:0.989 Freq:50.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:27034.1x1 lm		
NAME: LHB09-150H-5070-L00407	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 181.50 lm/W			
MODEL	/	I _{max} (cd)	26062	S/MH(C0/180)	1.43
NOMINAL POWER(W)	/	LOR(%)	100.0	S/MH(C90/270)	0.52
RATED VOLTAGE(V)	/	TOTAL FLUX(lm)	27034	η UP,DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	27034.1	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.0
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	/	η down (%)	100.0	CIBSE SHR MAX	0.60

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3℃
Operators: LYJ
Test Date: 2022-08-17

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Humidity: 65.0%
Test Distance: 26.000m [K=0.4548]
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	2604	2375	2153	2375	2604	2375	2153	2375	0- 10	2380	2380	8.8,8.8
20	2592	1545	820.2	1545	2592	1545	820.2	1545	10- 20	5660	8039	29.7,29.7
30	2513	515.2	193.6	515.2	2513	515.2	193.6	515.2	20- 30	5602	13641	50.5,50.5
40	2258	197.4	209.2	197.4	2258	197.4	209.2	197.4	30- 40	4535	18177	67.2,67.2
50	1672	152.3	176.1	152.3	1672	152.3	176.1	152.3	40- 50	3643	21820	80.7,80.7
60	757.1	116.8	160.1	116.8	757.1	116.8	160.1	116.8	50- 60	2585	24405	90.3,90.3
70	221.2	90.68	101.4	90.68	221.2	90.68	101.4	90.68	60- 70	1666	26071	96.4,96.4
80	52.73	35.77	30.84	35.77	52.73	35.77	30.84	35.77	70- 80	805.7	26877	99.4,99.4
90	0.3686	0.3332	0.7597	0.3332	0.3686	0.3332	0.7597	0.3332	80- 90	157.2	27034	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:X10cd									UNIT:lm		

Conical surface Flux(90deg): 20129 lm

%lum = 74.5%

%lamp = 74.5%

Conical surface Flux(120deg): 24405 lm

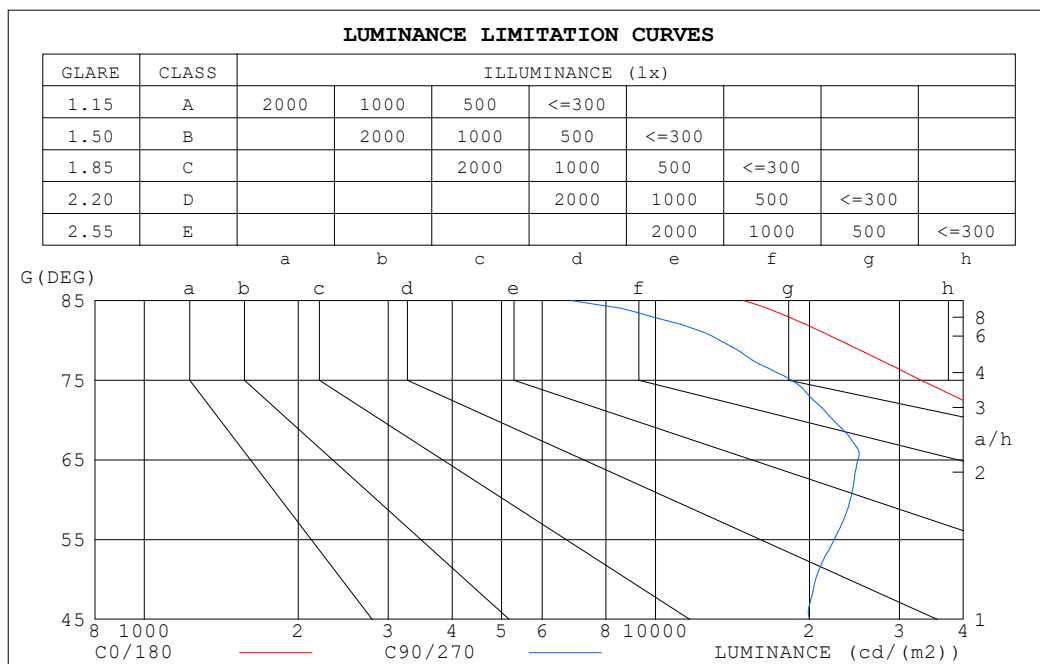
%lum = 90.3%

%lamp = 90.3%

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:LYJ
Test Date:2022-08-17

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:26.000m [K=0.4548]
Remarks:

LUMINANCE LIMITATION CURVES



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	14872	6857
80	22885	13333
75	33058	18449
70	48754	22263
65	74720	24890
60	114120	24042
55	160381	22362
50	196026	20564
45	215055	19967

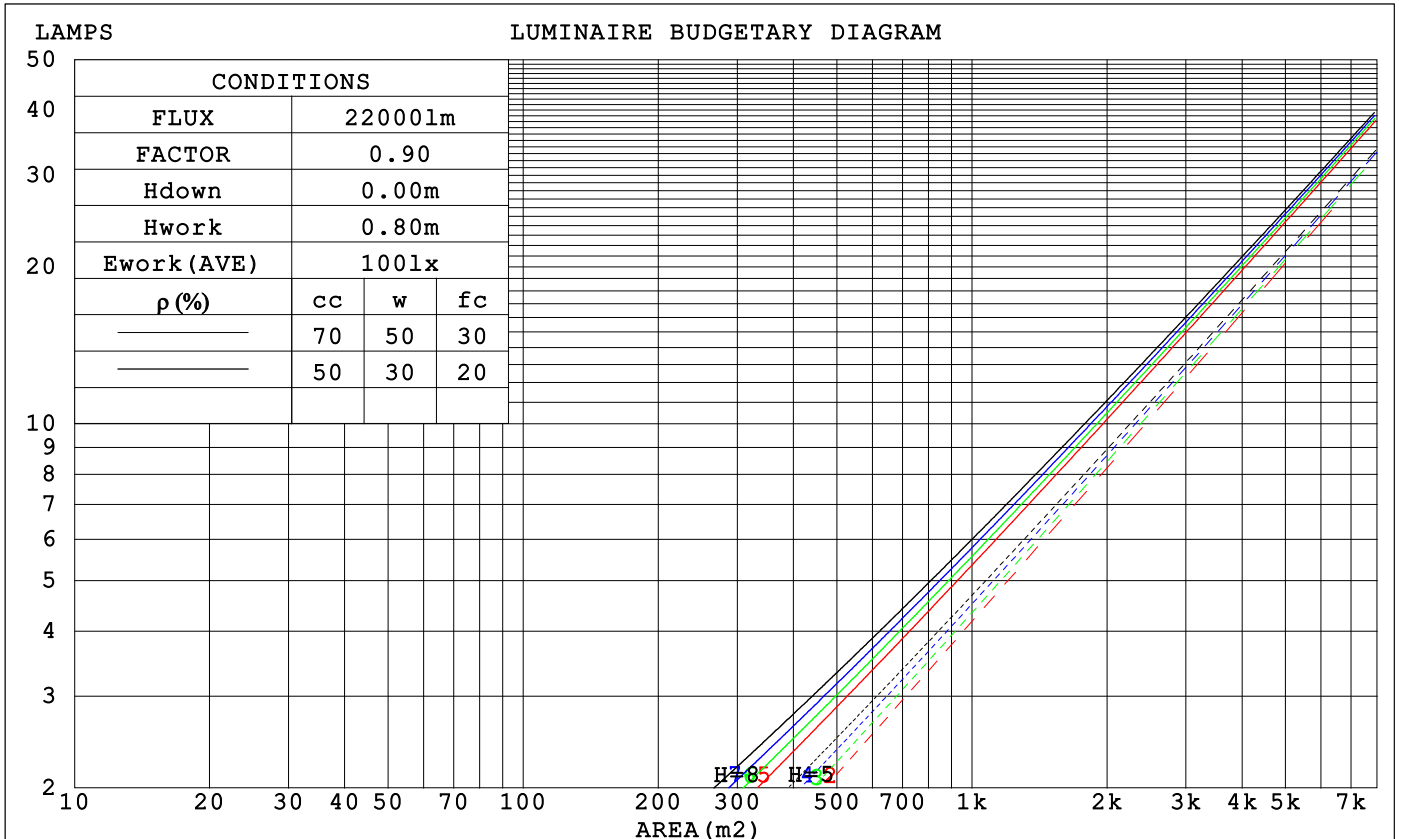
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: LYJ
Test Date: 2022-08-17

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Humidity: 65.0%
Test Distance: 26.000m [K=0.4548]
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	1.04	1.02	1.06	1.03	.00	1.01	.99	.97	.98	.96	.94	.94	.93	.91	.89
2.0	.97	.92	.88	.96	.91	.87	.92	.88	.85	.89	.86	.83	.86	.83	.81	.79
3.0	.88	.82	.77	.87	.81	.76	.84	.79	.75	.82	.77	.74	.79	.76	.73	.71
4.0	.81	.74	.68	.80	.73	.68	.77	.72	.67	.75	.70	.66	.73	.69	.65	.64
5.0	.74	.67	.62	.73	.66	.61	.71	.65	.61	.70	.64	.60	.68	.63	.60	.58
6.0	.69	.61	.56	.68	.61	.56	.66	.60	.55	.65	.59	.55	.63	.58	.55	.53
7.0	.64	.56	.51	.63	.56	.51	.62	.55	.51	.60	.55	.51	.59	.54	.50	.49
8.0	.59	.52	.47	.59	.52	.47	.58	.51	.47	.57	.51	.47	.55	.50	.47	.45
9.0	.56	.49	.44	.55	.48	.44	.54	.48	.44	.53	.48	.44	.52	.47	.43	.42
10.0	.52	.46	.41	.52	.45	.41	.51	.45	.41	.50	.45	.41	.49	.44	.41	.39



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: LYJ
Test Date: 2022-08-17

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Humidity: 65.0%
Test Distance: 26.000m [K=0.4548]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

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						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.235	.134	.042	.228	.130	.041	.216	.124	.039	.204	.117	.038	.193	.112	.036	
2.0	.225	.123	.038	.219	.121	.037	.208	.116	.036	.198	.111	.035	.188	.107	.034	
3.0	.212	.113	.034	.206	.111	.033	.197	.107	.032	.188	.103	.032	.180	.099	.031	
4.0	.198	.103	.030	.194	.101	.030	.185	.098	.029	.177	.095	.029	.170	.092	.028	
5.0	.186	.095	.027	.182	.093	.027	.174	.091	.027	.167	.088	.026	.161	.086	.026	
6.0	.174	.087	.025	.171	.086	.025	.164	.084	.024	.158	.082	.024	.152	.080	.024	
7.0	.164	.081	.023	.161	.080	.023	.155	.078	.023	.150	.077	.022	.144	.075	.022	
8.0	.155	.076	.021	.152	.075	.021	.147	.073	.021	.142	.072	.021	.137	.070	.021	
9.0	.146	.071	.020	.144	.070	.020	.139	.069	.020	.135	.068	.019	.131	.066	.019	
10.0	.139	.067	.018	.137	.066	.018	.132	.065	.018	.128	.064	.018	.125	.063	.018	

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						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	.140	.150	.135	.121	.103	.093	.083	.059	.054	.049	.019	.017	.016	
2.0	.163	.132	.106	.140	.114	.092	.096	.079	.064	.055	.046	.037	.018	.015	.012	
3.0	.153	.114	.083	.131	.098	.072	.090	.068	.050	.052	.040	.030	.017	.013	.010	
4.0	.144	.100	.066	.124	.086	.057	.085	.060	.040	.049	.035	.024	.016	.011	.008	
5.0	.136	.089	.054	.117	.077	.047	.081	.054	.033	.047	.032	.020	.015	.010	.006	
6.0	.129	.080	.045	.111	.069	.039	.076	.048	.028	.044	.029	.016	.014	.009	.005	
7.0	.122	.073	.038	.105	.063	.033	.073	.044	.023	.042	.026	.014	.014	.009	.005	
8.0	.116	.067	.033	.100	.058	.028	.069	.041	.020	.040	.024	.012	.013	.008	.004	
9.0	.111	.062	.028	.095	.053	.025	.066	.038	.018	.038	.022	.011	.012	.007	.003	
10.0	.105	.057	.025	.091	.050	.022	.063	.035	.016	.037	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:LYJ
 Test Date:2022-08-17

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.446
 Humidity:65.0%
 Test Distance:26.000m [K=0.4548]
 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	23.4	24.7	23.7	25.0	25.4	19.6	21.0	20.0	21.3	21.6
3H	26.6	27.8	27.0	28.2	28.5	22.0	23.2	22.3	23.5	23.9
4H	27.3	28.4	27.7	28.8	29.1	22.6	23.7	23.0	24.1	24.4
6H	27.6	28.6	28.0	29.0	29.4	22.9	23.9	23.3	24.3	24.7
8H	27.6	28.6	28.0	29.0	29.4	22.9	23.9	23.4	24.3	24.7
12H	27.6	28.6	28.1	28.9	29.4	22.9	23.9	23.4	24.2	24.7
4H 2H	23.4	24.5	23.8	24.9	25.2	20.1	21.2	20.5	21.5	21.9
3H	26.6	27.5	27.0	27.9	28.3	22.7	23.6	23.1	24.0	24.4
4H	27.3	28.2	27.8	28.6	29.0	23.4	24.3	23.9	24.7	25.1
6H	27.7	28.4	28.2	28.9	29.3	23.8	24.6	24.3	25.0	25.5
8H	27.8	28.5	28.3	28.9	29.4	23.9	24.6	24.4	25.0	25.5
12H	27.8	28.4	28.3	28.9	29.4	23.9	24.5	24.4	25.0	25.5
8H 4H	27.3	28.0	27.8	28.4	28.9	23.7	24.3	24.1	24.8	25.3
6H	27.8	28.3	28.3	28.8	29.3	24.2	24.7	24.7	25.2	25.7
8H	27.9	28.4	28.4	28.9	29.4	24.3	24.8	24.8	25.3	25.8
12H	27.9	28.4	28.5	28.9	29.4	24.3	24.8	24.8	25.3	25.8
12H 4H	27.3	27.9	27.8	28.4	28.8	23.7	24.3	24.2	24.8	25.2
6H	27.7	28.2	28.3	28.7	29.2	24.2	24.7	24.7	25.2	25.7
8H	27.9	28.3	28.4	28.8	29.4	24.4	24.8	24.9	25.3	25.8
CIE190: 2010										

CIE190: 2010
Area: 0.13323 m2

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:LYJ
Test Date:2022-08-17

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:26.000m [K=0.4548]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

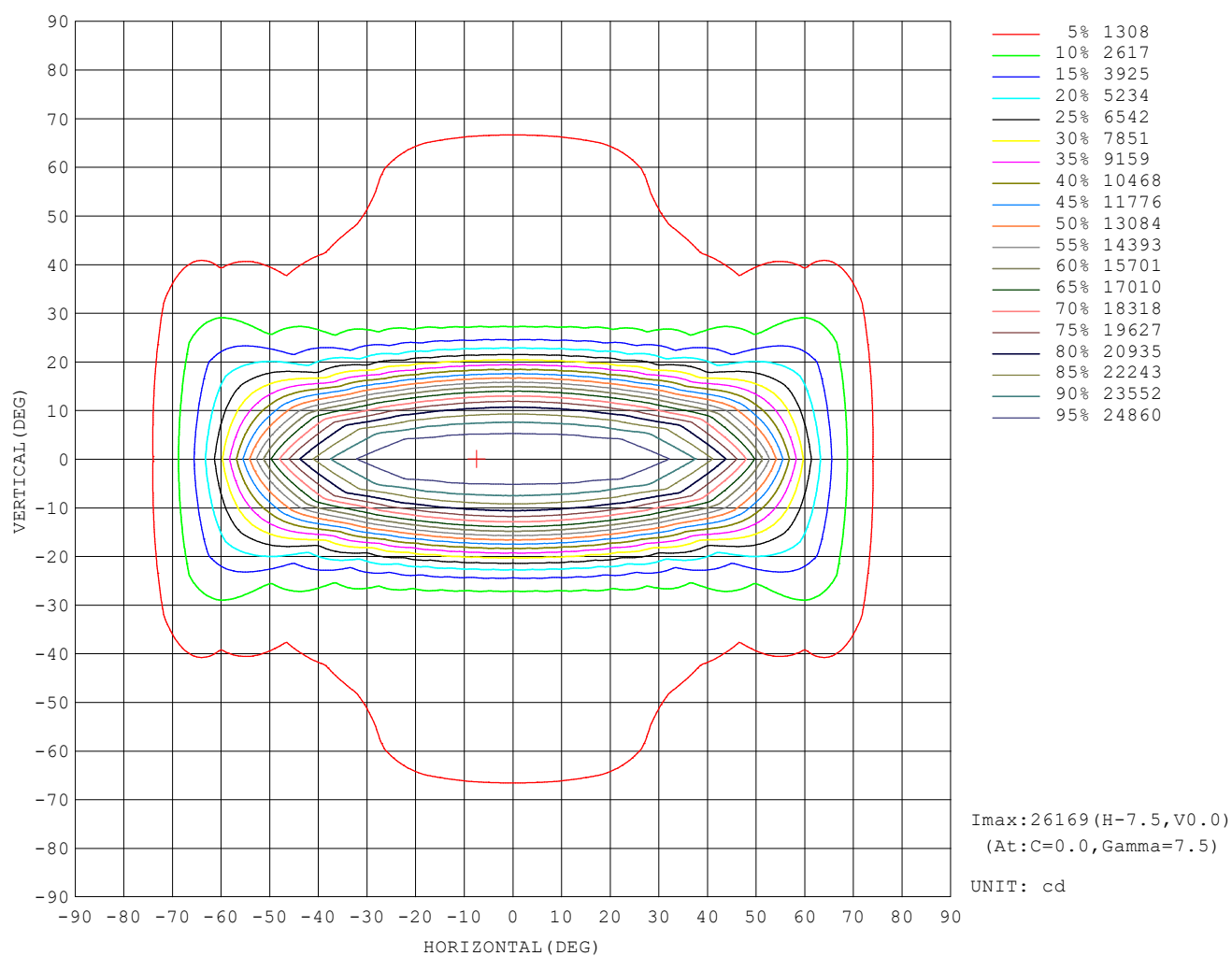
UTILIZATION FACTORS TABLE

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	71	62	56	70	61	56	51
0.80	80	71	66	79	71	66	78	70	65	60
1.00	87	79	73	86	78	73	84	79	72	67
1.25	93	85	80	92	84	79	89	83	78	73
1.50	97	90	84	95	89	84	93	87	83	77
2.00	102	96	91	100	94	90	97	92	88	82
2.50	105	99	94	103	98	93	99	95	92	85
3.00	107	102	98	105	101	97	101	98	95	87
4.00	110	106	102	108	104	101	104	101	98	90
5.00	112	108	105	110	106	104	105	103	101	92
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
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 Operators: LYJ
 Test Date: 2022-08-17

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.446
 Humidity: 65.0%
 Test Distance: 26.000m [K=0.4548]
 Remarks:

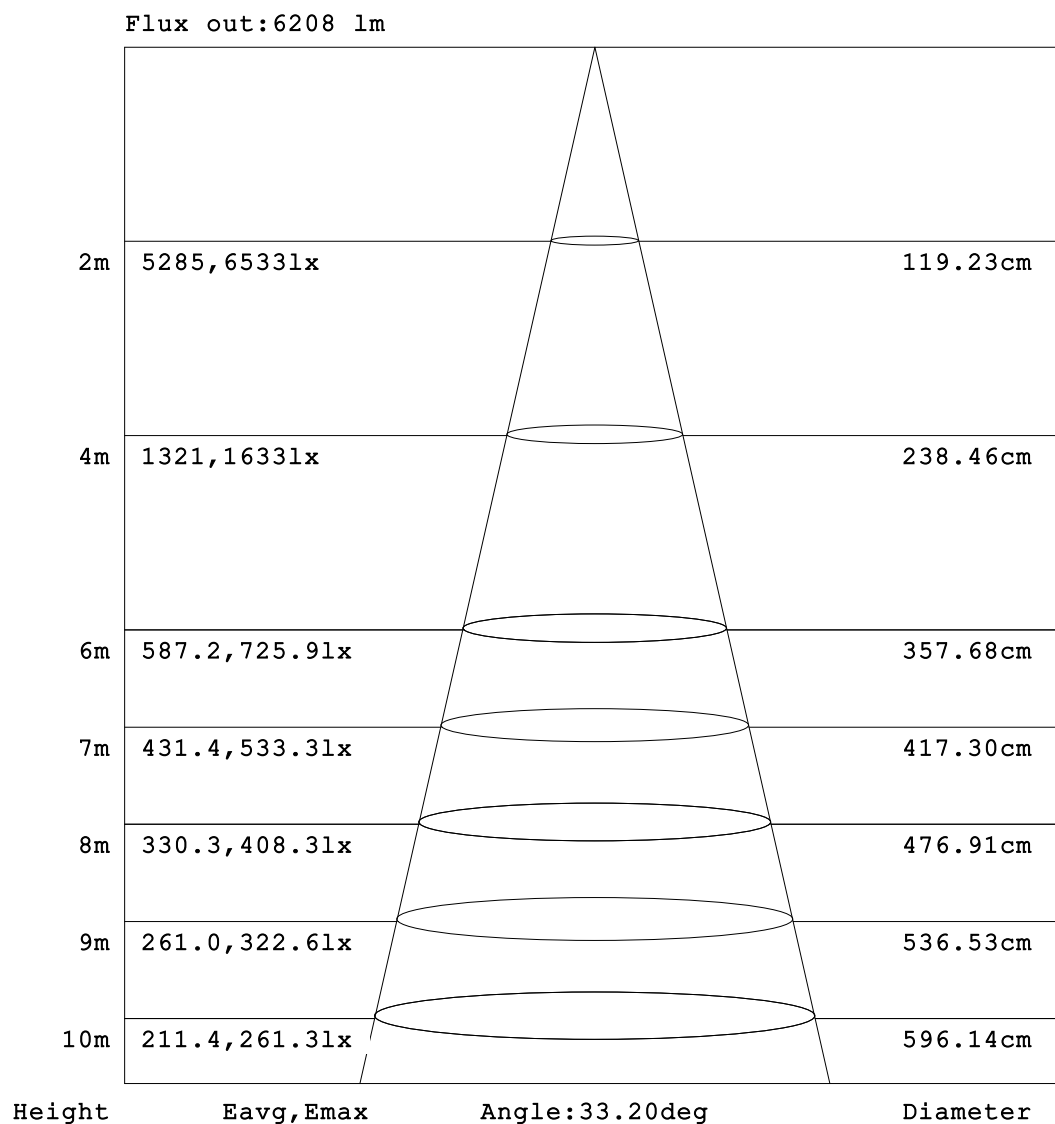
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: LYJ
Test Date: 2022-08-17

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Humidity: 65.0%
Test Distance: 26.000m [K=0.4548]
Remarks:

AAI Figure



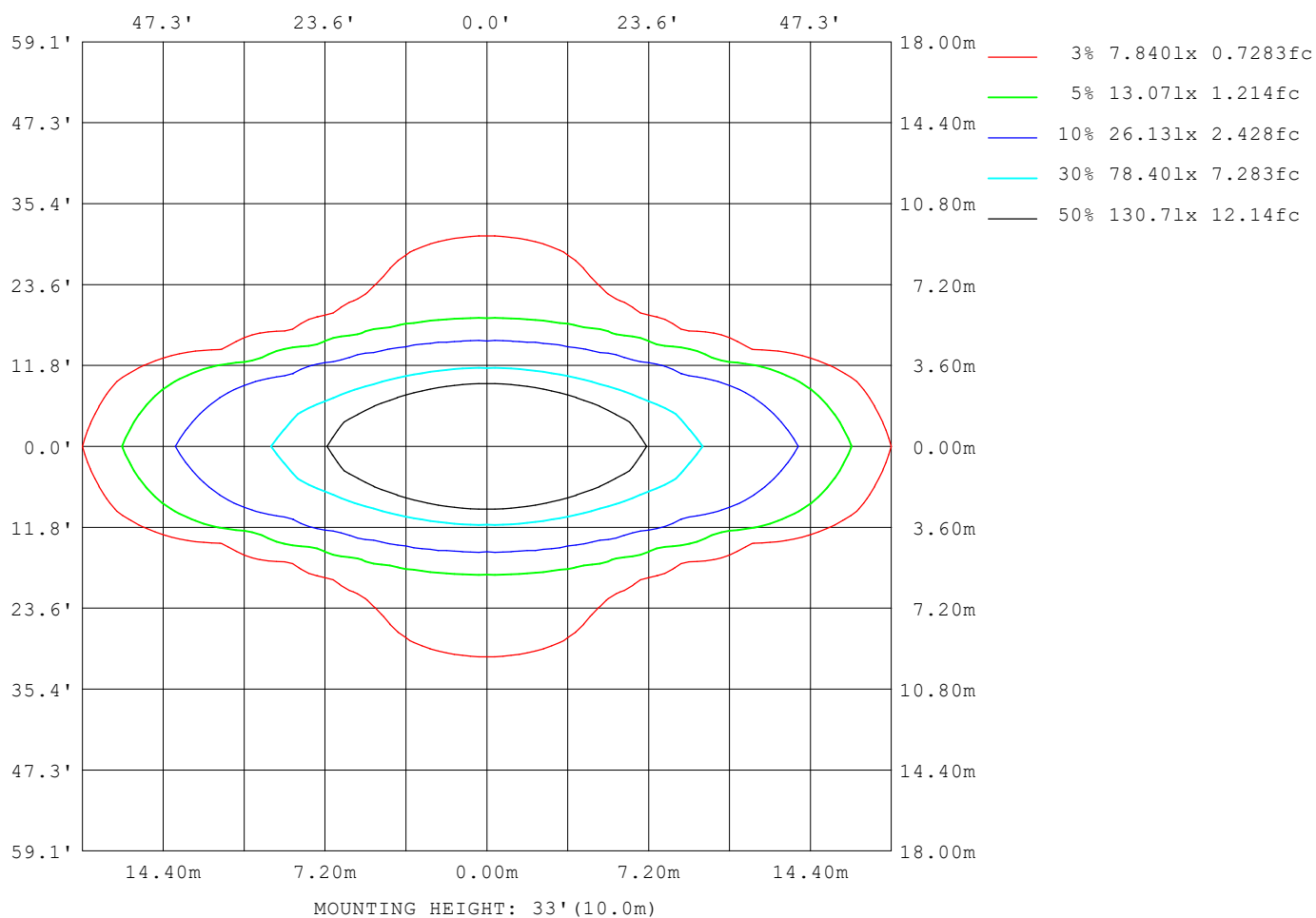
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: LYJ
Test Date: 2022-08-17

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Humidity: 65.0%
Test Distance: 26.000m [K=0.4548]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

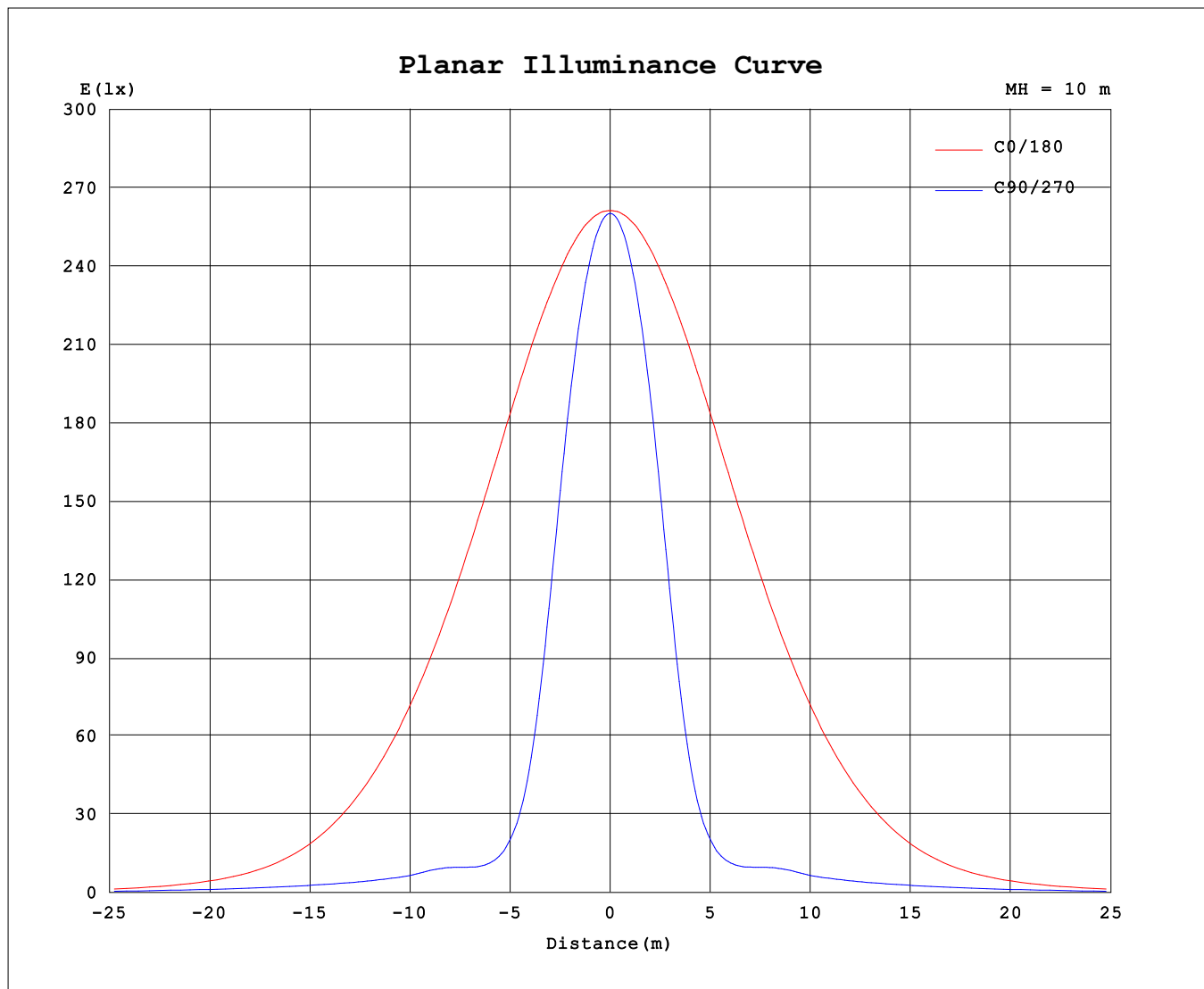
ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: LYJ
Test Date: 2022-08-17

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Humidity: 65.0%
Test Distance: 26.000m [K=0.4548]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: LYJ
Test Date: 2022-08-17

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Humidity: 65.0%
Test Distance: 26.000m [K=0.4548]
Remarks:

UNIT: X10cd

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 10.0DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Temperature: 25.3℃	Humidity: 65.0%
Operators: LYJ	Test Distance: 26.000m [K=0.4548]
Test Date: 2022-08-17	Remarks:

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γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:26.000m [K=0.4548]
Remarks:

```

UNIT: X10cd

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 10.0DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Temperature: 25.3℃	Humidity: 65.0%
Operators: LYJ	Test Distance: 26.000m [K=0.4548]
Test Date: 2022-08-17	Remarks:

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γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:26.000m [K=0.4548]
Remarks:

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