

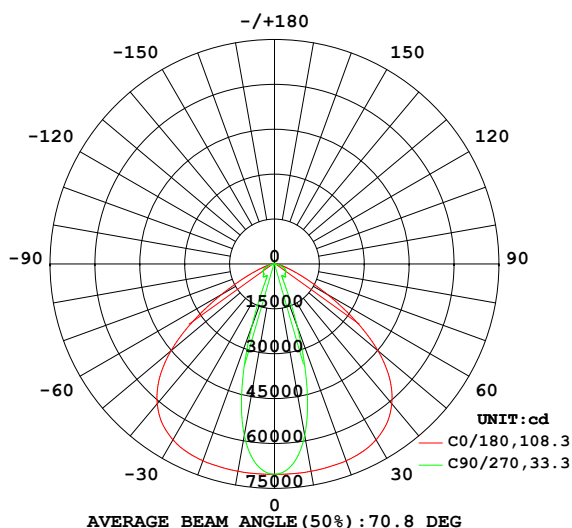
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

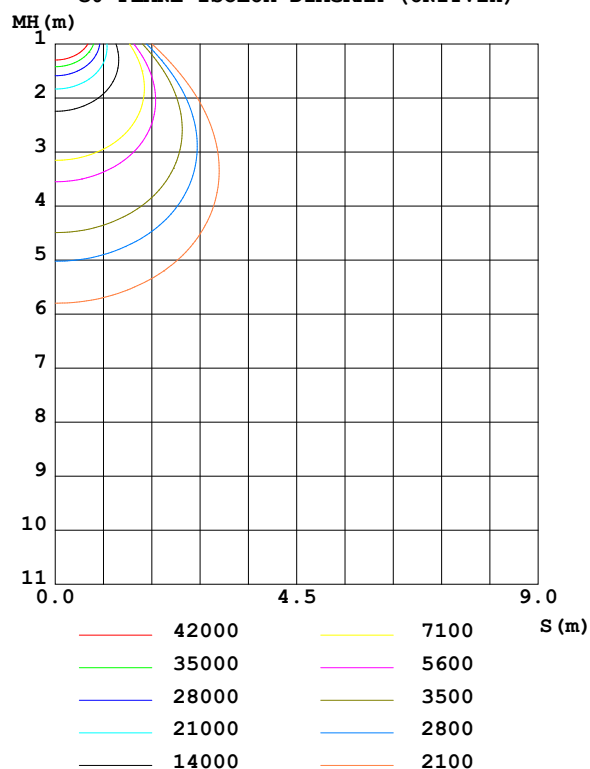
Test:U:229.9V I:1.756A P:398.4W PF:0.987 Freq:50.01Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:73006.8x1 lm		
NAME: LHB09-400H-5070-L00407	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 183.23 lm/W			
MODEL	/	I _{max} (cd)	70381	S/MH (C0/180)	1.43
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	0.52
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	73007	η UP, DN (C0-180)	0.0, 50.0
NOMINAL FLUX (lm)	73006.8	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°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

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	7033	6415	5815	6415	7033	6415	5815	6415	0- 10	6427	6427	8.8,8.8
20	6999	4173	2215	4173	6999	4173	2215	4173	10- 20	15284	21711	29.7,29.7
30	6785	1391	522.8	1391	6785	1391	522.8	1391	20- 30	15128	36839	50.5,50.5
40	6097	533.1	565.0	533.1	6097	533.1	565.0	533.1	30- 40	12248	49087	67.2,67.2
50	4515	411.3	475.6	411.3	4515	411.3	475.6	411.3	40- 50	9839	58926	80.7,80.7
60	2045	315.5	432.5	315.5	2045	315.5	432.5	315.5	50- 60	6982	65907	90.3,90.3
70	597.5	244.9	274.0	244.9	597.5	244.9	274.0	244.9	60- 70	4499	70406	96.4,96.4
80	142.4	96.60	83.30	96.60	142.4	96.60	83.30	96.60	70- 80	2176	72582	99.4,99.4
90	0.9955	0.8999	2.051	0.8999	0.9955	0.8999	2.051	0.8999	80- 90	424.6	73007	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): 54360 lm

%lum = 74.5%

%lamp = 74.5%

Conical surface Flux(120deg): 65907 lm

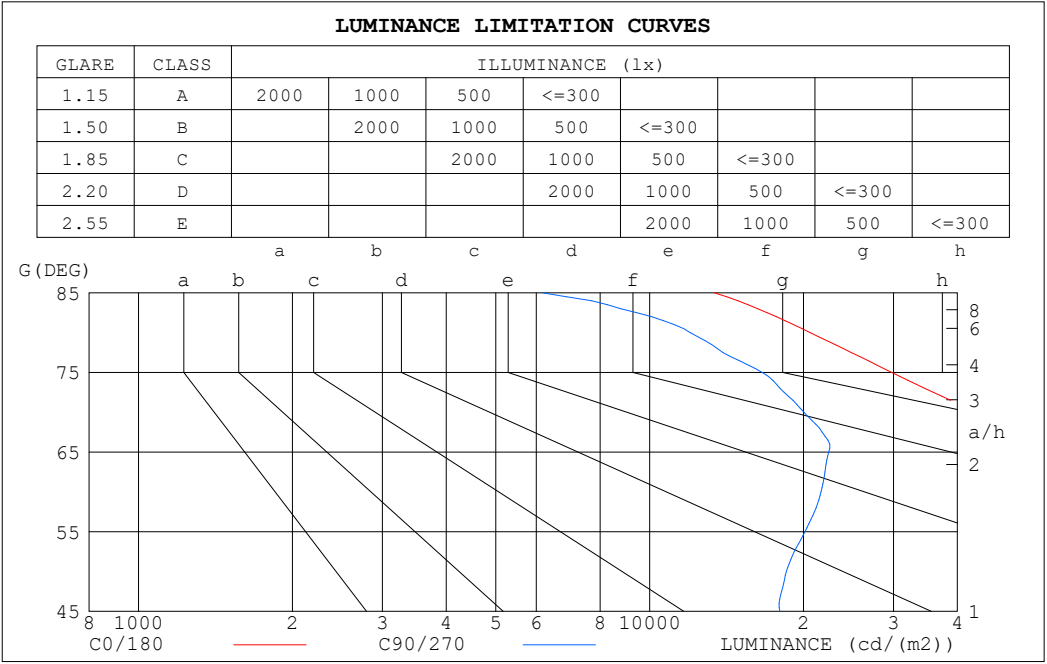
%lum = 90.3%

%lamp = 90.3%

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:

LUMINANCE LIMITATION CURVES



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	13388	6173
80	20601	12002
75	29759	16608
70	43888	20041
65	67264	22406
60	102731	21643
55	144376	20130
50	176463	18512
45	193594	17974

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%

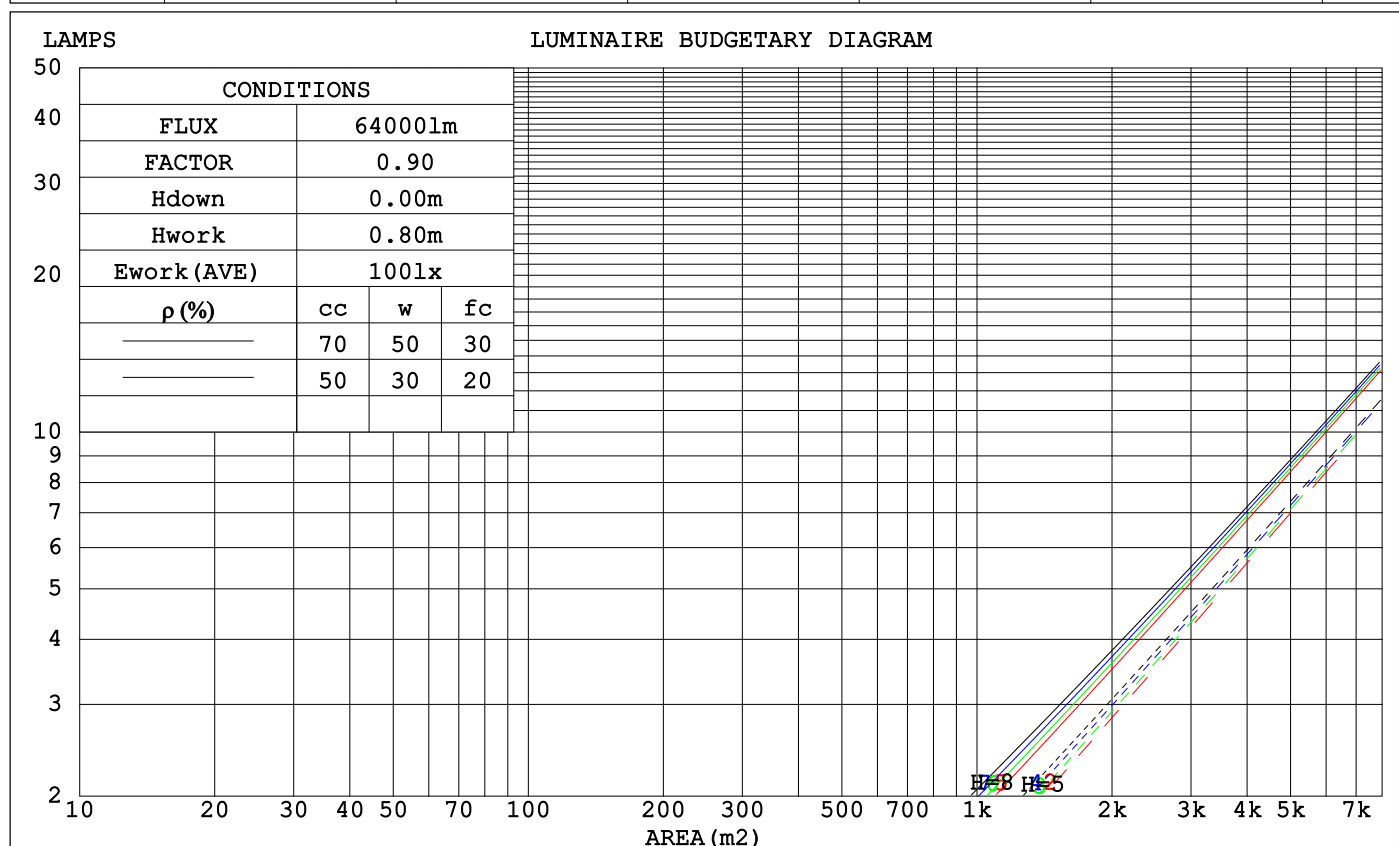
Test Distance:26.000m [K=0.4548]

Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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			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°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

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	23.0	24.4	23.4	24.7	25.0	19.3	20.6	19.6	20.9	21.2
3H	26.3	27.5	26.6	27.8	28.2	21.6	22.8	22.0	23.1	23.5
4H	26.9	28.0	27.3	28.4	28.8	22.2	23.3	22.6	23.7	24.1
6H	27.2	28.2	27.6	28.6	29.0	22.5	23.5	22.9	23.9	24.3
8H	27.3	28.2	27.7	28.6	29.0	22.6	23.5	23.0	23.9	24.3
12H	27.3	28.2	27.7	28.6	29.0	22.6	23.5	23.0	23.9	24.3
4H 2H	23.0	24.1	23.4	24.5	24.9	19.7	20.8	20.1	21.2	21.6
3H	26.2	27.2	26.7	27.6	28.0	22.3	23.3	22.7	23.7	24.1
4H	27.0	27.8	27.4	28.2	28.6	23.1	23.9	23.5	24.3	24.8
6H	27.4	28.1	27.8	28.5	29.0	23.5	24.2	23.9	24.6	25.1
8H	27.4	28.1	27.9	28.6	29.0	23.5	24.2	24.0	24.7	25.1
12H	27.5	28.1	28.0	28.6	29.0	23.6	24.2	24.0	24.6	25.1
8H 4H	27.0	27.6	27.4	28.1	28.5	23.3	24.0	23.8	24.4	24.9
6H	27.4	27.9	27.9	28.4	28.9	23.8	24.3	24.3	24.8	25.3
8H	27.5	28.0	28.0	28.5	29.0	23.9	24.4	24.4	24.9	25.4
12H	27.6	28.0	28.1	28.5	29.1	24.0	24.4	24.5	24.9	25.5
12H 4H	26.9	27.5	27.4	28.0	28.5	23.3	23.9	23.8	24.4	24.9
6H	27.4	27.9	27.9	28.3	28.9	23.8	24.3	24.4	24.8	25.3
8H	27.5	27.9	28.0	28.4	29.0	24.0	24.4	24.5	24.9	25.5
CIE190: 2010										

CIE190: 2010
Area: 0.39968 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

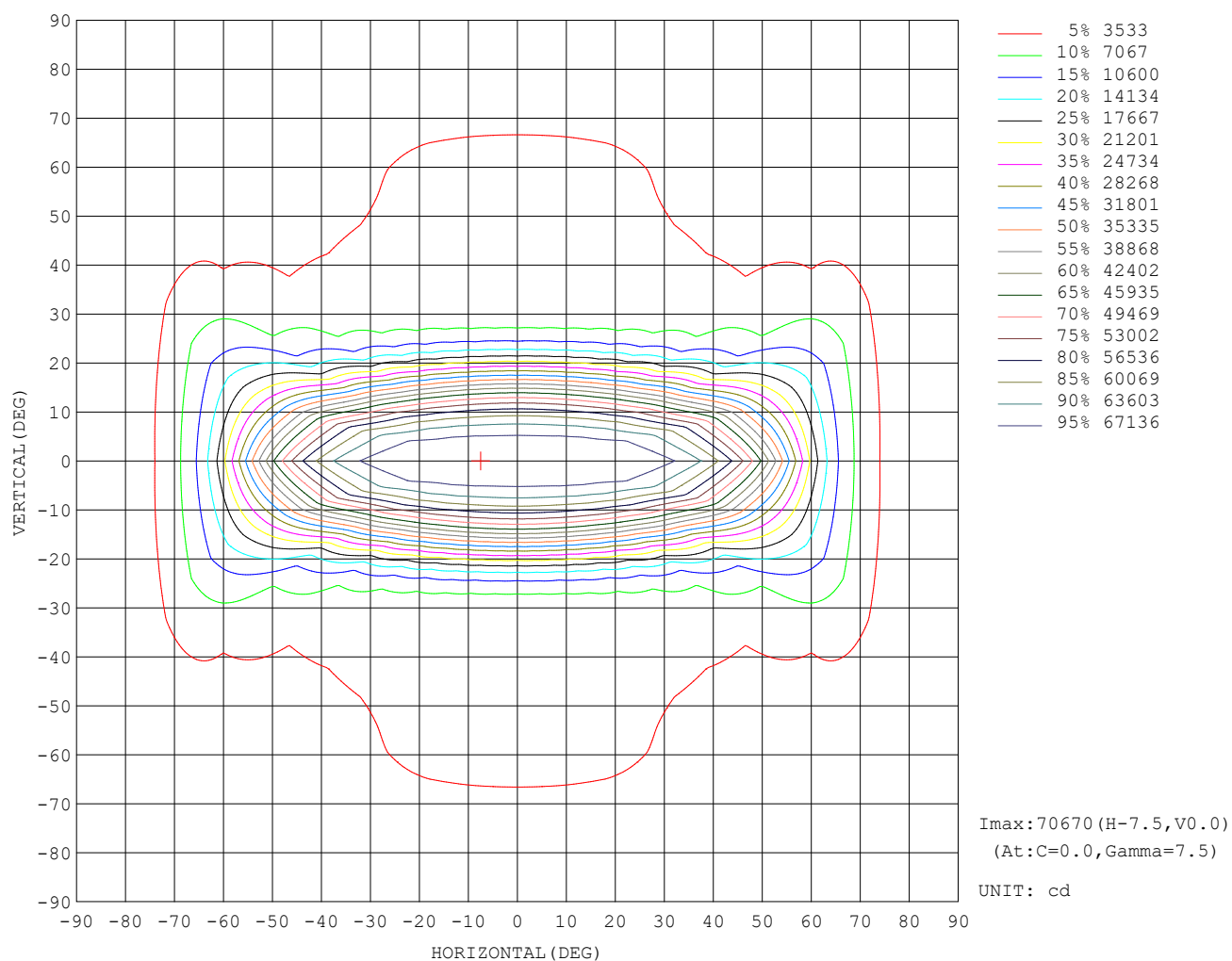
UTILIZATION FACTORS TABLE

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
 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:

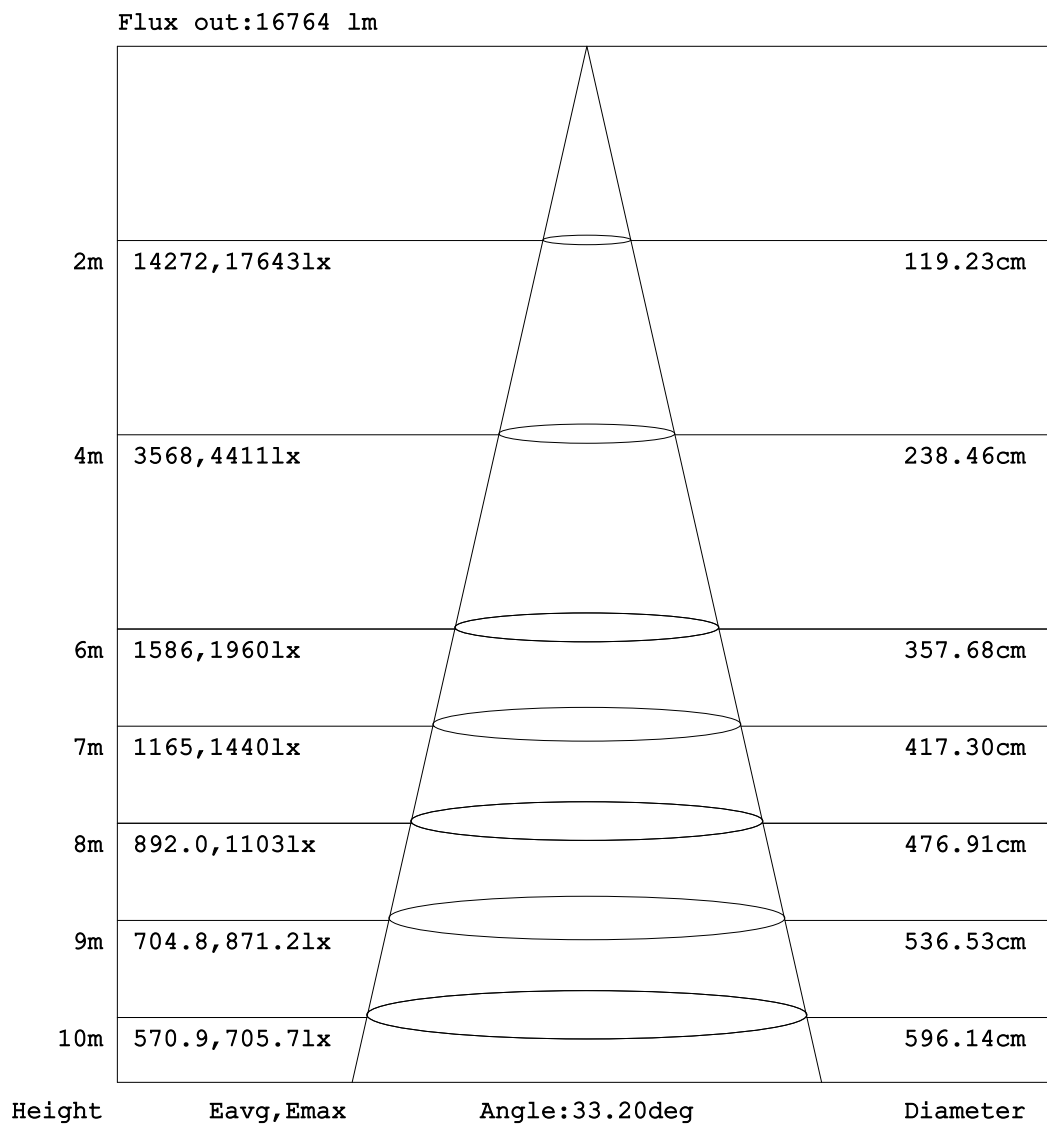
ISOCANDELA DIAGRAM



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



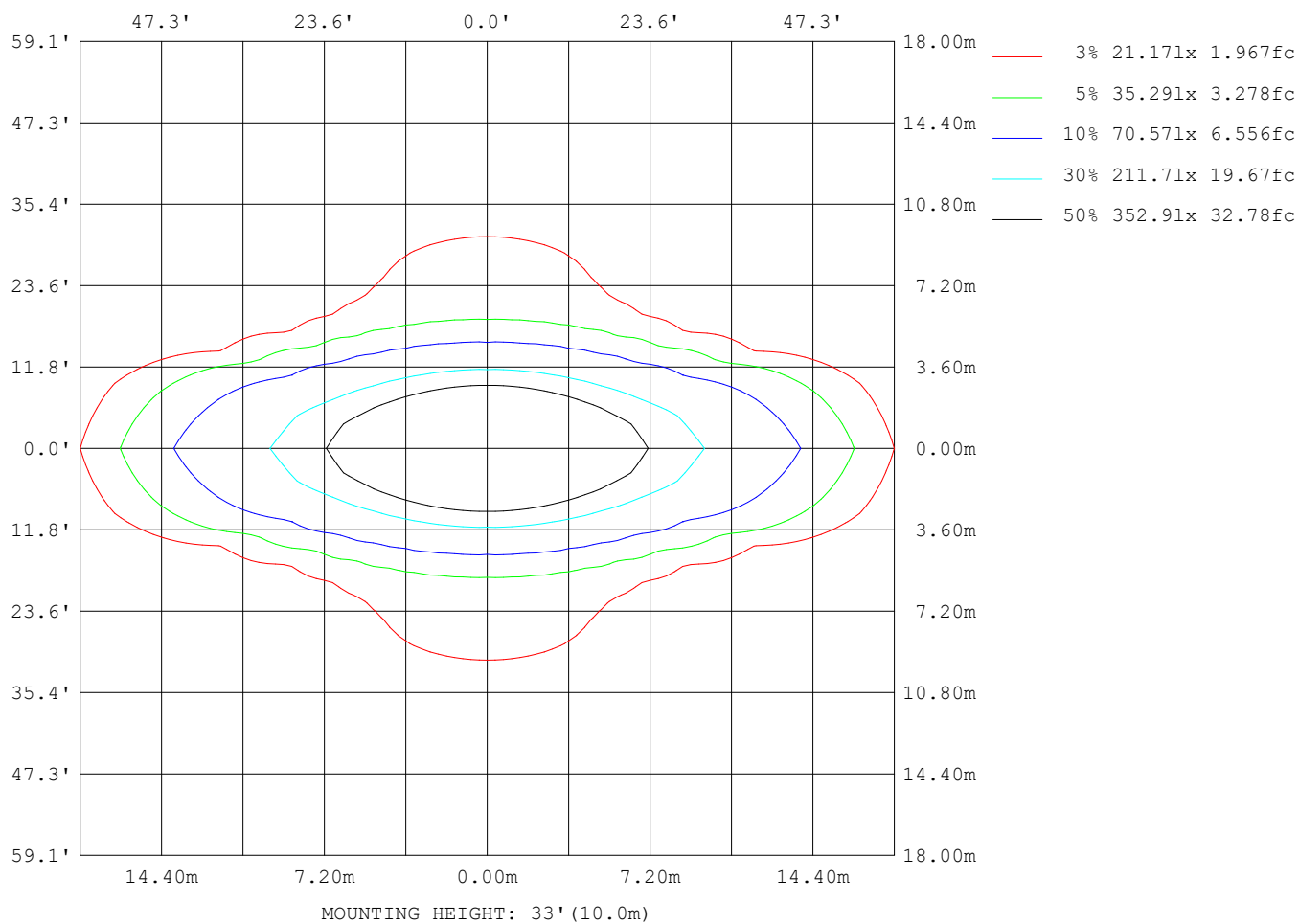
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

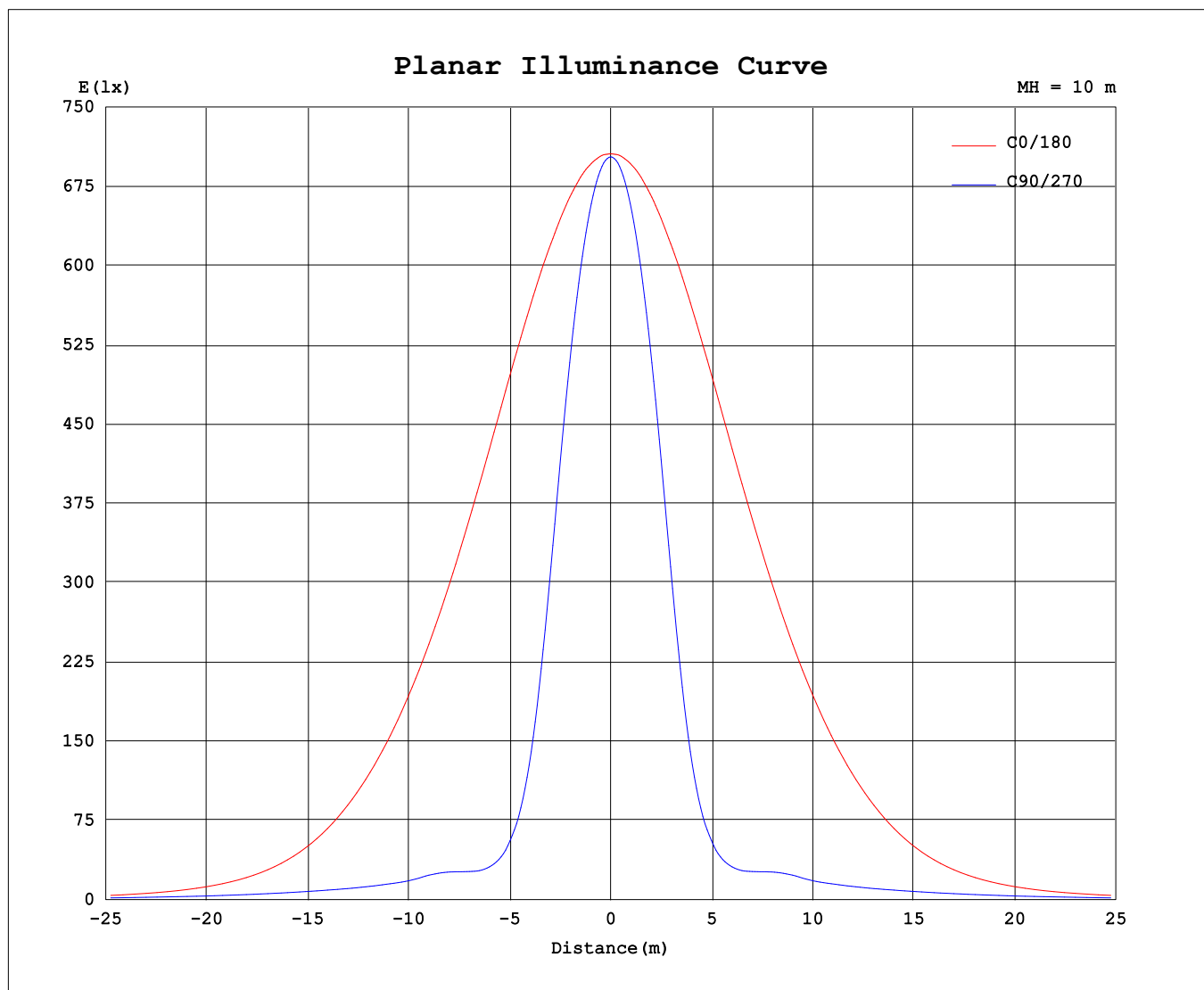
ISOLUX DIAGRAM



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°C	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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LUMINOUS DISTRIBUTION INTENSITY DATA

Table--2

UNIT: X10cd

[illegible]

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

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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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