

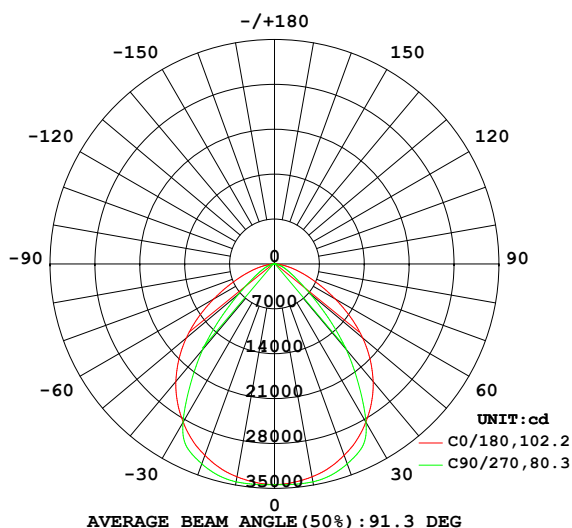
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

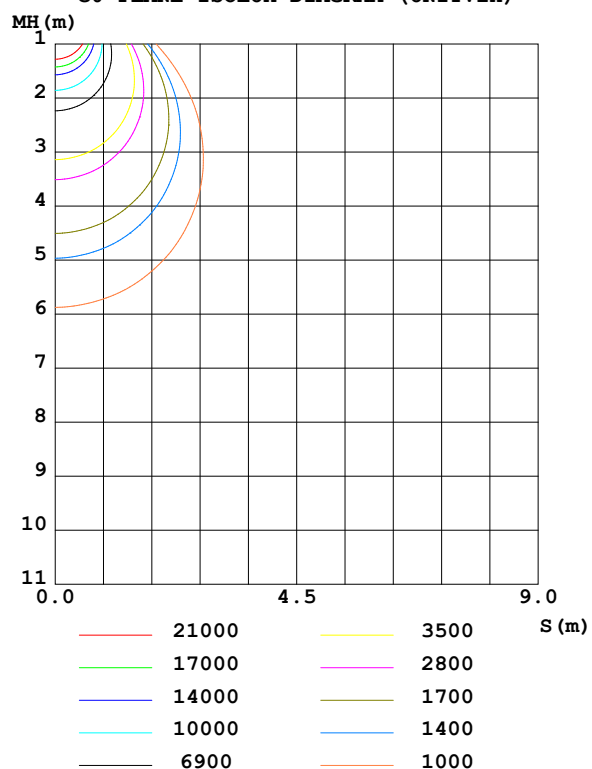
Test:U:229.9V I:1.753A P:397.6W PF:0.987 Freq:50.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:73238.2x1 lm		
NAME: LHB09-400H-5070-L00403	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 184.19 lm/W			
MODEL	/	I _{max} (cd)	34514	S/MH (C0/180)	1.23
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	1.15
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	73238	η UP, DN (C0-180)	0.0, 50.0
NOMINAL FLUX (lm)	73238.2	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.0
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	/	η down (%)	100.0	CIBSE SHR MAX	1.35

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: 2022-08-02

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	3370	3414	3449	3414	3370	3414	3449	3414	0- 10	3272	3272	4.47,4.47
20	3176	3278	3316	3278	3176	3278	3316	3278	10- 20	9479	12751	17.4,17.4
30	2848	2959	2855	2959	2848	2959	2855	2959	20- 30	14373	27124	37,37
40	2394	2379	1739	2379	2394	2379	1739	2379	30- 40	16118	43242	59,59
50	1796	1440	725.2	1440	1796	1440	725.2	1440	40- 50	13672	56914	77.7,77.7
60	1095	684.6	293.6	684.6	1095	684.6	293.6	684.6	50- 60	8928	65842	89.9,89.9
70	517.9	303.2	136.5	303.2	517.9	303.2	136.5	303.2	60- 70	4835	70677	96.5,96.5
80	169.1	98.50	43.83	98.50	169.1	98.50	43.83	98.50	70- 80	2140	72817	99.4,99.4
90	1.278	0.7908	1.261	0.7908	1.278	0.7908	1.261	0.7908	80- 90	421.3	73238	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): 50604 lm

%lum = 69.1%

%lamp = 69.1%

Conical surface Flux(120deg): 65842 lm

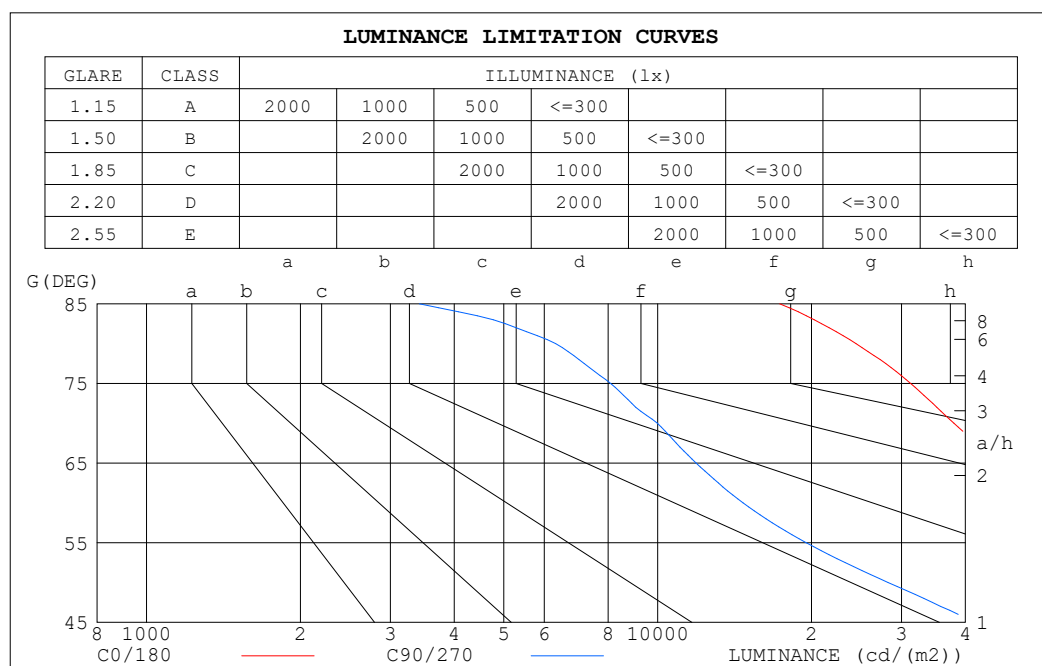
%lum = 89.9%

%lamp = 89.9%

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:LYJ
Test Date:2022-08-02

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

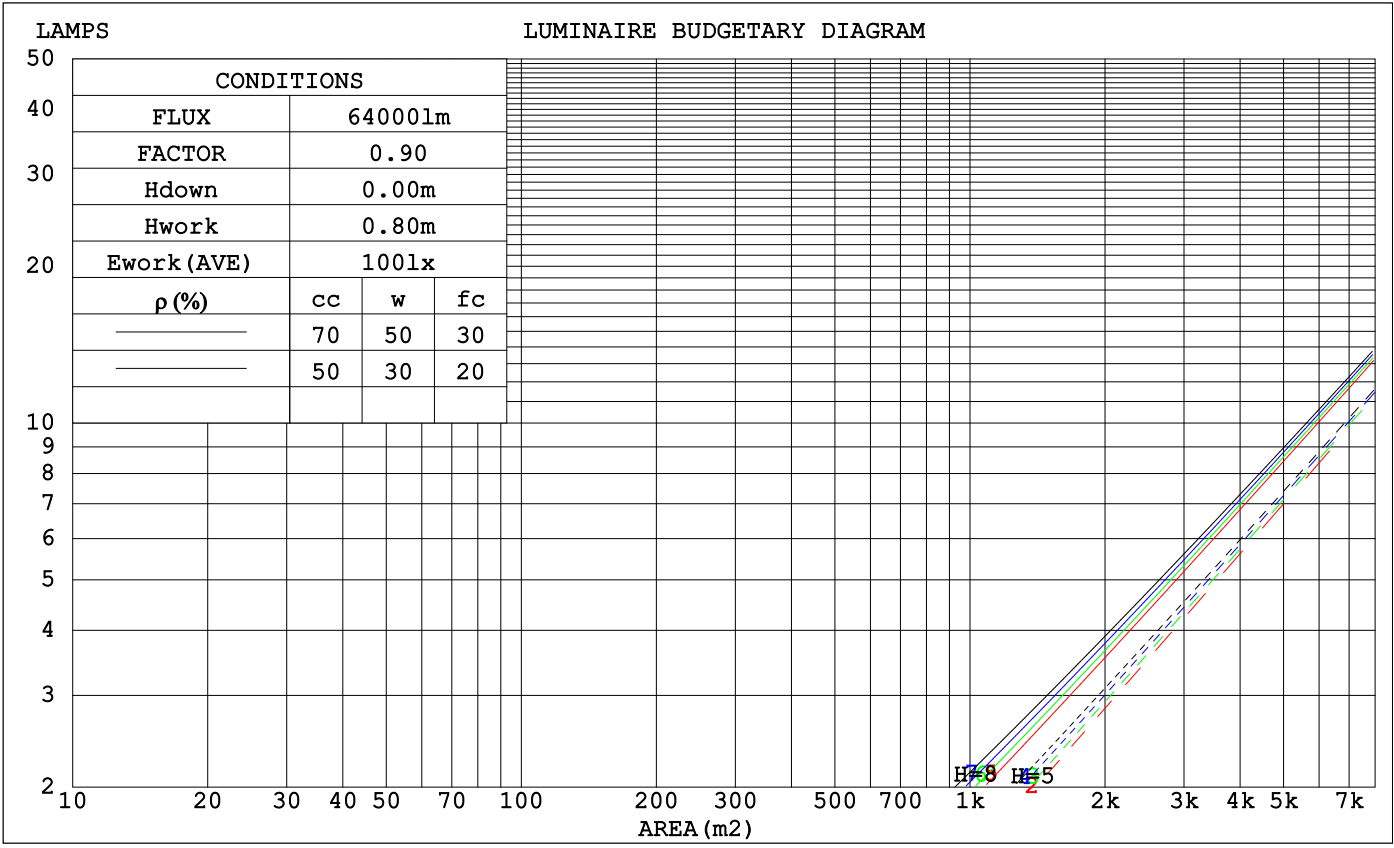


LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	17333	3420
80	24441	6316
75	31265	8090
70	37994	9988
65	46081	11893
60	54967	14694
55	63387	19531
50	70109	28230
45	74844	41726

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: LYJ
Test Date: 2022-08-02

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:

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	1.07	1.03	1.00	1.05	1.01	.99	1.00	.98	.95	.97	.95	.93	.93	.91	.90	.88
2.0	.95	.90	.85	.94	.88	.84	.90	.86	.82	.87	.83	.80	.84	.81	.78	.76
3.0	.85	.78	.73	.84	.77	.72	.81	.76	.71	.78	.74	.70	.76	.72	.69	.67
4.0	.77	.69	.63	.76	.68	.63	.73	.67	.62	.71	.66	.61	.69	.64	.61	.59
5.0	.70	.62	.56	.69	.61	.55	.67	.60	.55	.65	.59	.54	.63	.58	.54	.52
6.0	.63	.55	.50	.62	.55	.49	.61	.54	.49	.59	.53	.48	.58	.52	.48	.46
7.0	.58	.50	.44	.57	.50	.44	.56	.49	.44	.54	.48	.44	.53	.48	.43	.41
8.0	.53	.45	.40	.53	.45	.40	.51	.45	.40	.50	.44	.39	.49	.43	.39	.37
9.0	.49	.41	.36	.49	.41	.36	.47	.41	.36	.46	.40	.36	.45	.40	.36	.34
10.0	.45	.38	.33	.45	.38	.33	.44	.38	.33	.43	.37	.33	.42	.37	.33	.31



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: LYJ
Test Date: 2022-08-02

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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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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	.253	.144	.046	.246	.140	.045	.233	.134	.043	.221	.127	.041	.210	.122	.039		
2.0	.244	.134	.041	.238	.131	.040	.227	.126	.039	.216	.121	.038	.207	.117	.037		
3.0	.231	.123	.037	.226	.121	.036	.216	.117	.036	.207	.113	.035	.198	.110	.034		
4.0	.217	.113	.033	.212	.111	.033	.204	.108	.032	.196	.105	.032	.188	.102	.031		
5.0	.204	.104	.030	.200	.102	.030	.192	.100	.029	.185	.097	.029	.178	.095	.029		
6.0	.191	.096	.027	.188	.095	.027	.181	.093	.027	.175	.091	.027	.169	.089	.026		
7.0	.180	.089	.025	.177	.088	.025	.171	.086	.025	.165	.085	.025	.160	.083	.024		
8.0	.170	.083	.023	.167	.082	.023	.162	.081	.023	.156	.079	.023	.151	.078	.023		
9.0	.161	.078	.022	.158	.077	.022	.153	.076	.021	.148	.074	.021	.144	.073	.021		
10.0	.152	.073	.020	.150	.072	.020	.145	.071	.020	.141	.070	.020	.137	.069	.020		

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	.176	.157	.139	.151	.134	.120	.103	.092	.083	.059	.054	.048	.019	.017	.016	
2.0	.166	.132	.104	.142	.114	.090	.097	.079	.063	.056	.046	.037	.018	.015	.012	
3.0	.157	.114	.080	.135	.098	.069	.092	.068	.049	.053	.040	.029	.017	.013	.009	
4.0	.149	.100	.063	.128	.087	.055	.088	.060	.039	.051	.035	.023	.016	.012	.008	
5.0	.142	.090	.051	.122	.077	.044	.084	.054	.031	.049	.032	.019	.016	.010	.006	
6.0	.135	.081	.042	.116	.070	.037	.080	.049	.026	.046	.029	.016	.015	.009	.005	
7.0	.128	.074	.036	.110	.064	.031	.076	.045	.022	.044	.026	.013	.014	.009	.004	
8.0	.122	.068	.031	.105	.059	.027	.073	.041	.019	.042	.024	.011	.014	.008	.004	
9.0	.117	.063	.027	.101	.055	.023	.070	.039	.017	.041	.023	.010	.013	.007	.003	
10.0	.112	.059	.024	.096	.051	.021	.067	.036	.015	.039	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:LYJ
 Test Date:2022-08-02

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	26.6	28.0	26.9	28.3	28.7	18.9	20.3	19.3	20.7	21.0
3H	27.7	29.0	28.0	29.3	29.6	19.7	21.0	20.1	21.3	21.7
4H	28.0	29.2	28.4	29.6	29.9	19.9	21.1	20.3	21.5	21.8
6H	28.2	29.3	28.6	29.7	30.1	20.0	21.2	20.5	21.5	21.9
8H	28.3	29.3	28.7	29.7	30.1	20.1	21.1	20.5	21.5	21.9
12H	28.3	29.3	28.7	29.7	30.1	20.0	21.1	20.5	21.4	21.9
4H 2H	26.6	27.8	27.0	28.2	28.5	20.4	21.6	20.8	21.9	22.3
3H	27.9	28.9	28.3	29.3	29.7	21.2	22.2	21.6	22.6	23.0
4H	28.4	29.3	28.8	29.7	30.1	21.5	22.3	21.9	22.8	23.2
6H	28.7	29.5	29.1	29.9	30.4	21.6	22.4	22.1	22.8	23.3
8H	28.8	29.5	29.2	29.9	30.4	21.6	22.3	22.1	22.8	23.3
12H	28.8	29.4	29.3	29.9	30.4	21.6	22.3	22.1	22.7	23.2
8H 4H	28.3	29.1	28.8	29.5	30.0	22.1	22.9	22.6	23.3	23.8
6H	28.7	29.3	29.2	29.8	30.3	22.3	22.9	22.8	23.4	23.9
8H	28.8	29.4	29.4	29.9	30.4	22.4	22.9	22.9	23.4	23.9
12H	28.9	29.4	29.4	29.9	30.4	22.4	22.8	22.9	23.3	23.9
12H 4H	28.3	28.9	28.8	29.4	29.9	22.2	22.9	22.7	23.4	23.8
6H	28.7	29.2	29.2	29.7	30.2	22.5	23.0	23.0	23.5	24.0
8H	28.8	29.3	29.3	29.8	30.4	22.5	23.0	23.0	23.5	24.1
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:2022-08-02

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

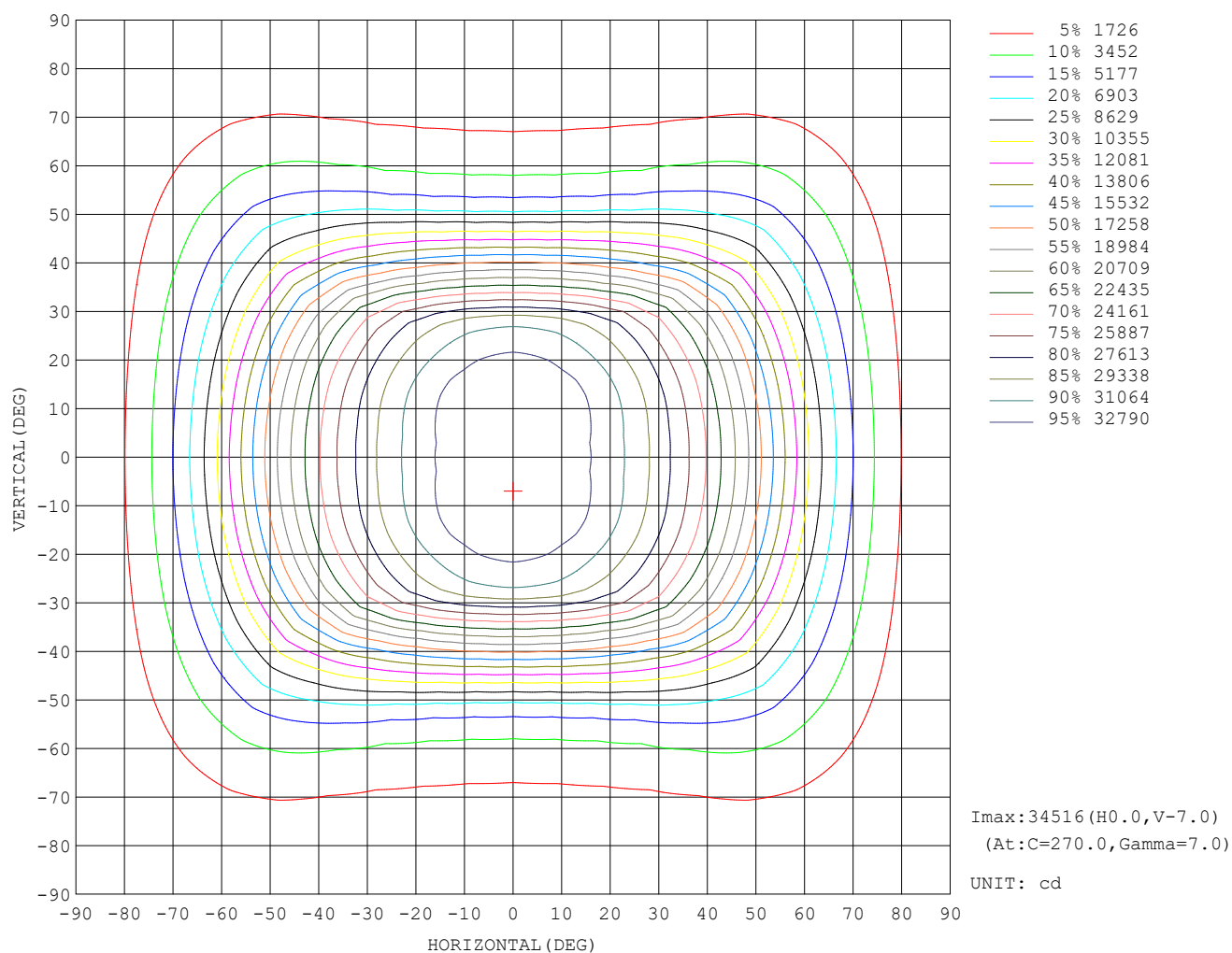
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	66	56	50	65	55	49	64	55	49	44
0.80	76	66	60	75	65	59	73	65	59	53
1.00	84	74	68	83	74	68	81	75	68	62
1.25	90	82	76	89	81	75	86	80	75	68
1.50	95	87	81	93	86	80	90	84	79	73
2.00	100	93	88	99	92	87	95	90	86	79
2.50	103	97	92	101	96	91	98	93	89	82
3.00	106	101	96	104	99	95	100	96	93	85
4.00	109	105	101	107	103	100	103	100	97	89
5.00	111	107	104	109	105	102	104	102	99	91
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004						Suspended			SHRNOM = 1.25	

C Range: 0 - 360DEG
 C Interval: 10.0DEG
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 Operators: LYJ
 Test Date: 2022-08-02

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:

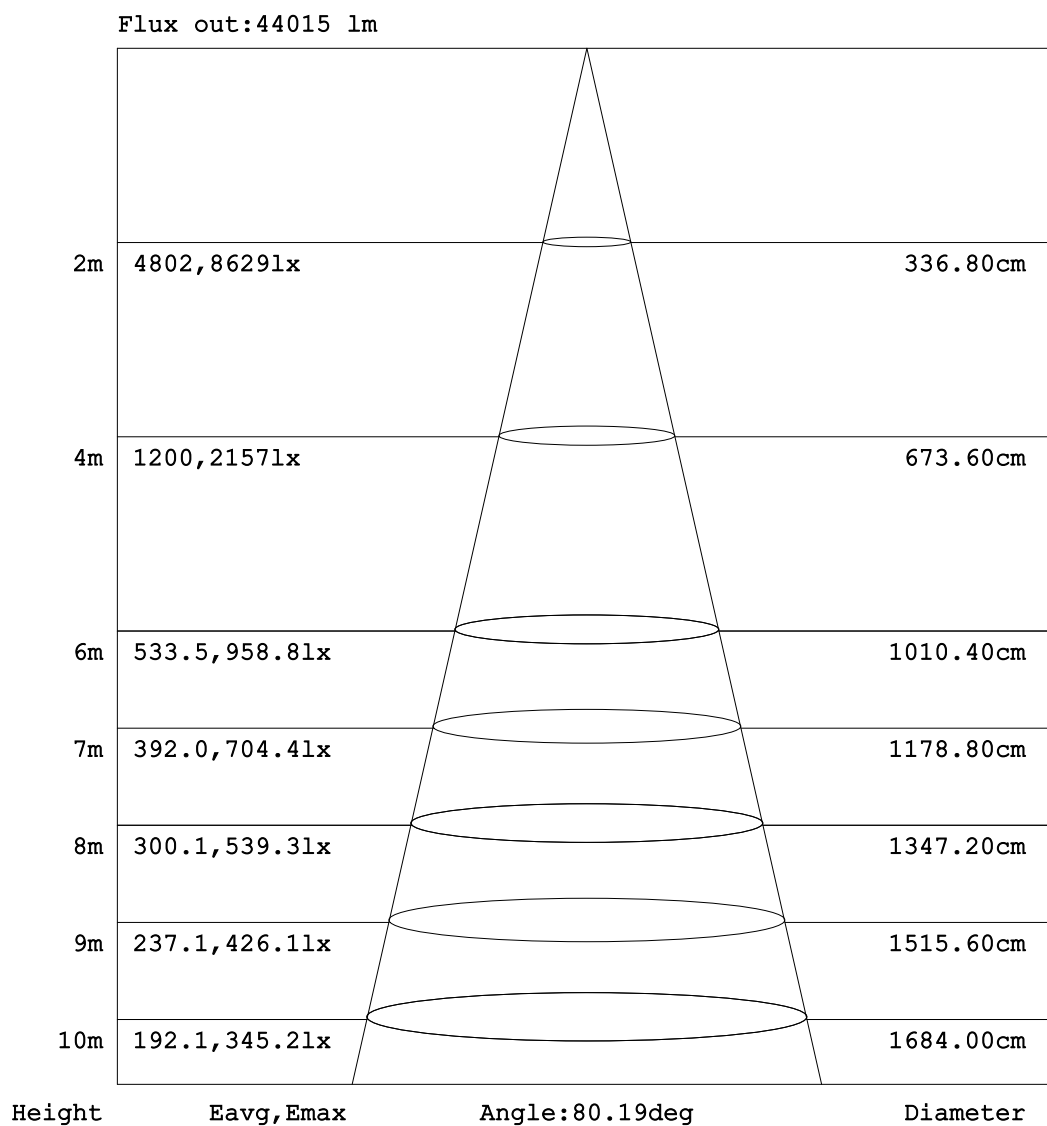
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:LYJ
Test Date:2022-08-02

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



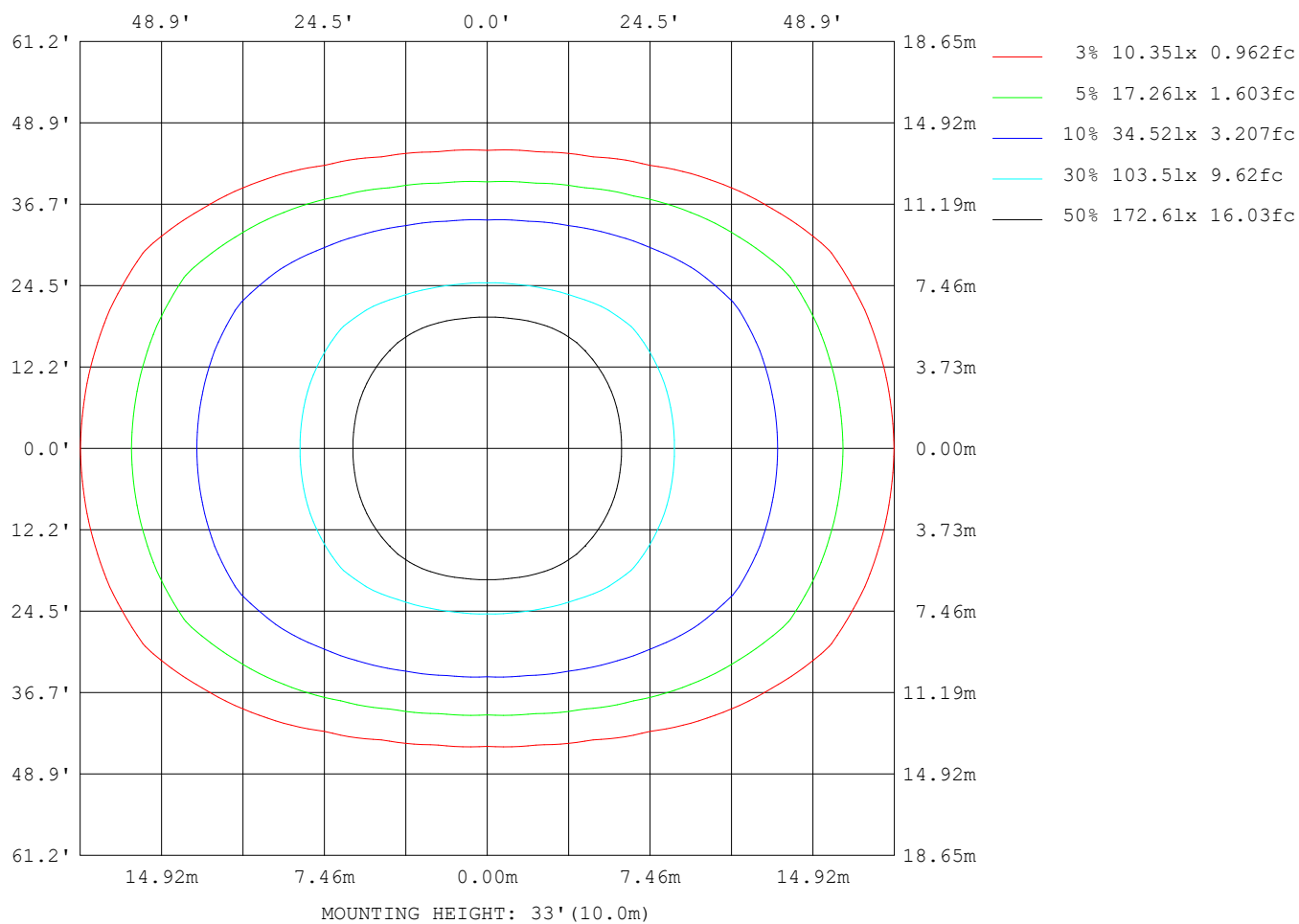
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:LYJ
Test Date:2022-08-02

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

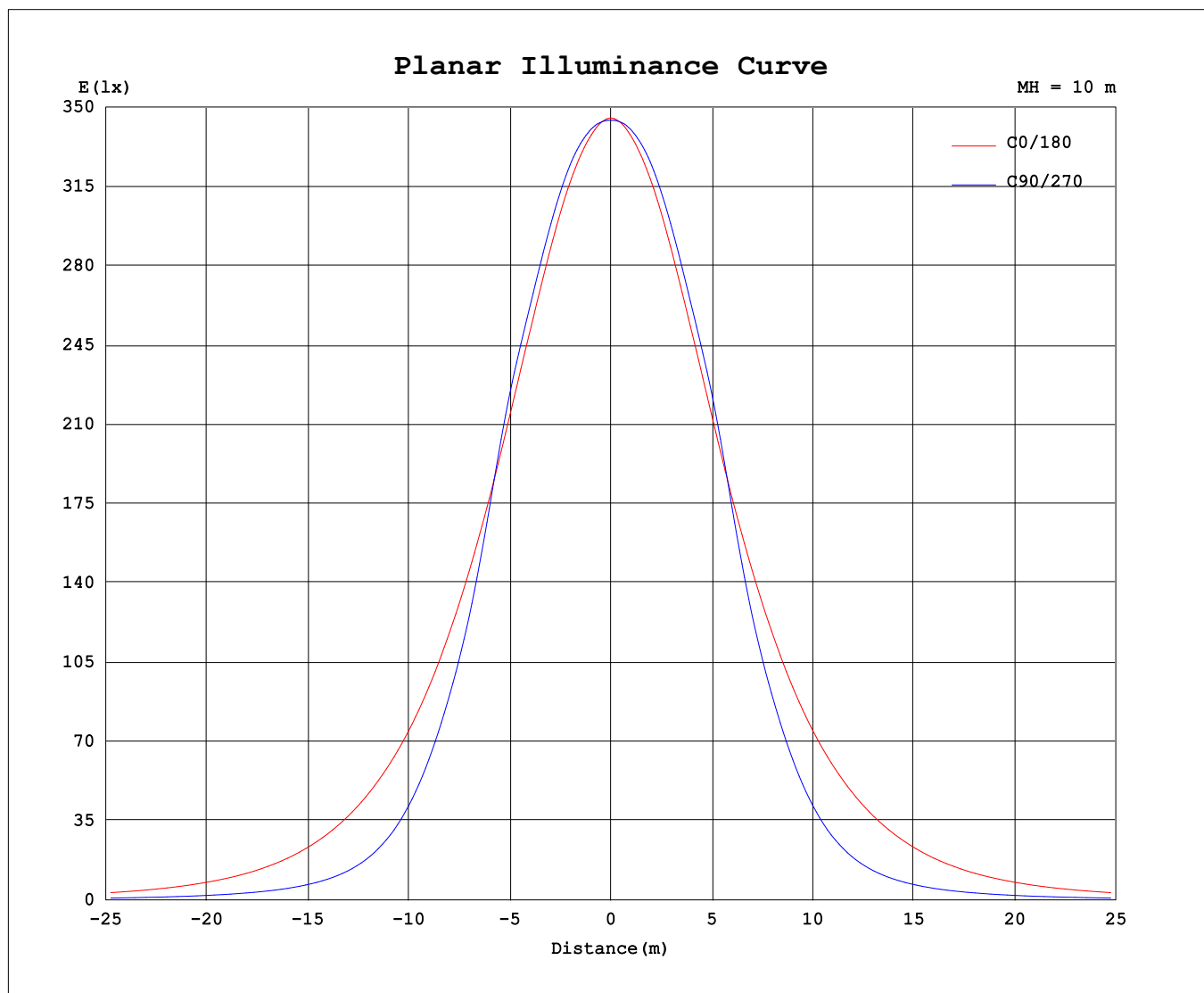
ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: LYJ
Test Date: 2022-08-02

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: 2022-08-02

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: 2022-08-02	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

UNIT: X10cd

[illegible]

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: LYJ
Test Date: 2022-08-02

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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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