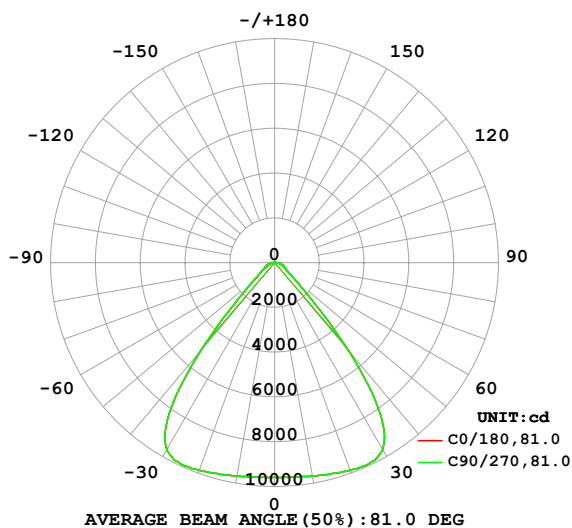


LUMINAIRE PHOTOMETRIC TEST REPORT

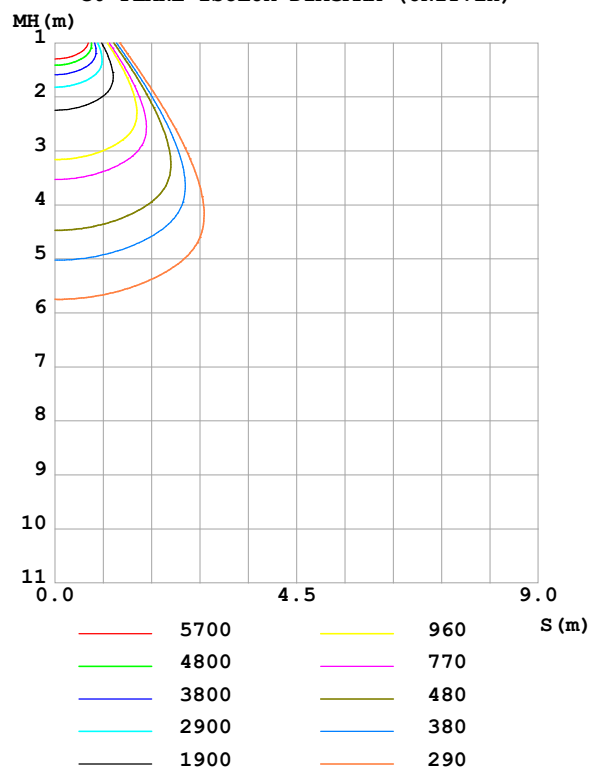
Test:U:230.28V I:0.4381A P:96.588W PF:0.9575 Freq:50.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:16730.3x1 lm		
NAME: HB74-150 (100W)-H34602	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 173.21 lm/W			
MODEL	/	I _{max} (cd)	9927	S/MH(C0/180)	1.18
NOMINAL POWER(W)	/	LOR(%)	100.0	S/MH(C90/270)	1.18
RATED VOLTAGE(V)	/	TOTAL FLUX(lm)	16730	η UP,DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	16730.3	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.0
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	/	η down (%)	100.0	CIBSE SHR MAX	1.15

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:LYQ
Test Date:2026-07-21
Stability time:0 s

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.491
Humidity:65.0%
Test Distance:10.250m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	9671	9671	9671	9671	9671	9671	9671	9671	0- 10	919.7	919.7	5.5,5.5
20	9866	9866	9866	9866	9866	9866	9866	9866	10- 20	2772	3692	22.1,22.1
30	9634	9634	9634	9634	9634	9634	9634	9634	20- 30	4564	8255	49.3,49.3
40	5137	5137	5137	5137	5137	5137	5137	5137	30- 40	4911	13167	78.7,78.7
50	1185	1185	1185	1185	1185	1185	1185	1185	40- 50	1997	15164	90.6,90.6
60	563.5	563.5	563.5	563.5	563.5	563.5	563.5	563.5	50- 60	708.0	15872	94.9,94.9
70	373.7	373.7	373.7	373.7	373.7	373.7	373.7	373.7	60- 70	453.9	16326	97.6,97.6
80	197.4	197.4	197.4	197.4	197.4	197.4	197.4	197.4	70- 80	307.5	16633	99.4,99.4
90	3.197	3.197	3.197	3.197	3.197	3.197	3.197	3.197	80- 90	96.98	16730	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): 14495 lm

%lum = 86.6%

%lamp = 86.6%

Conical surface Flux(120deg): 15872 lm

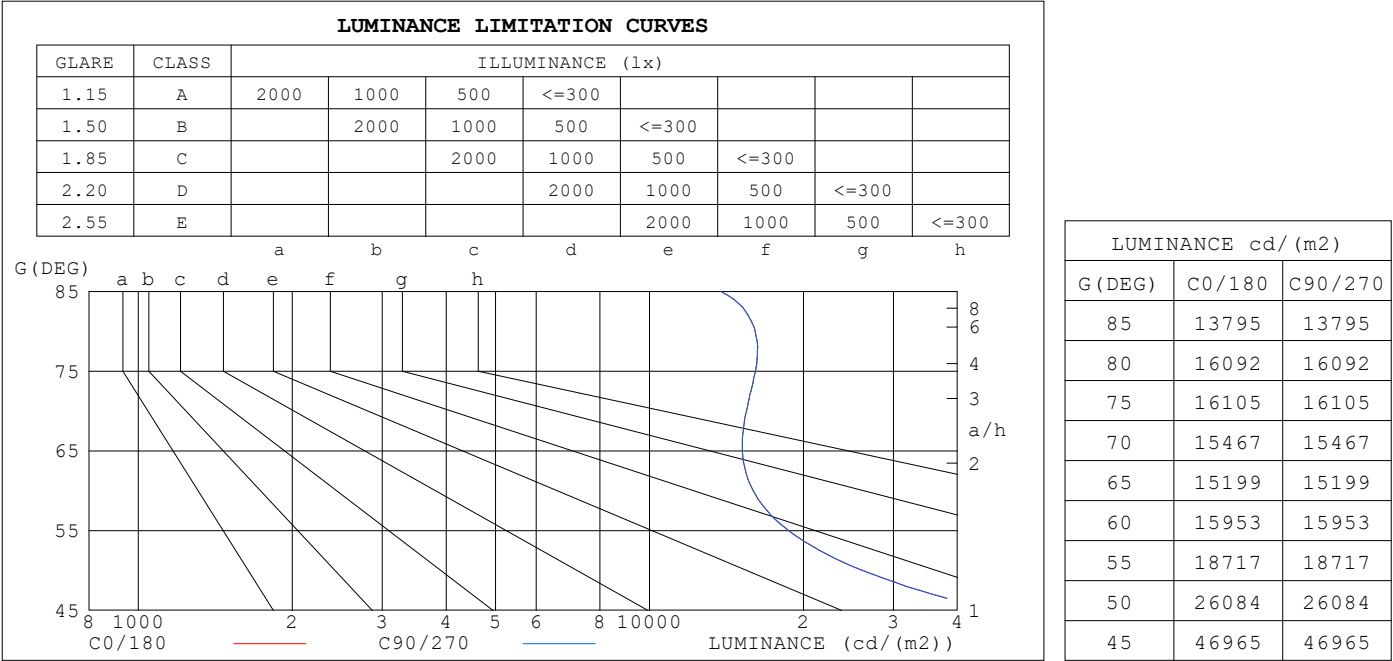
%lum = 94.9%

%lamp = 94.9%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:LYQ
 Test Date:2026-07-21
 Stability time:0 s

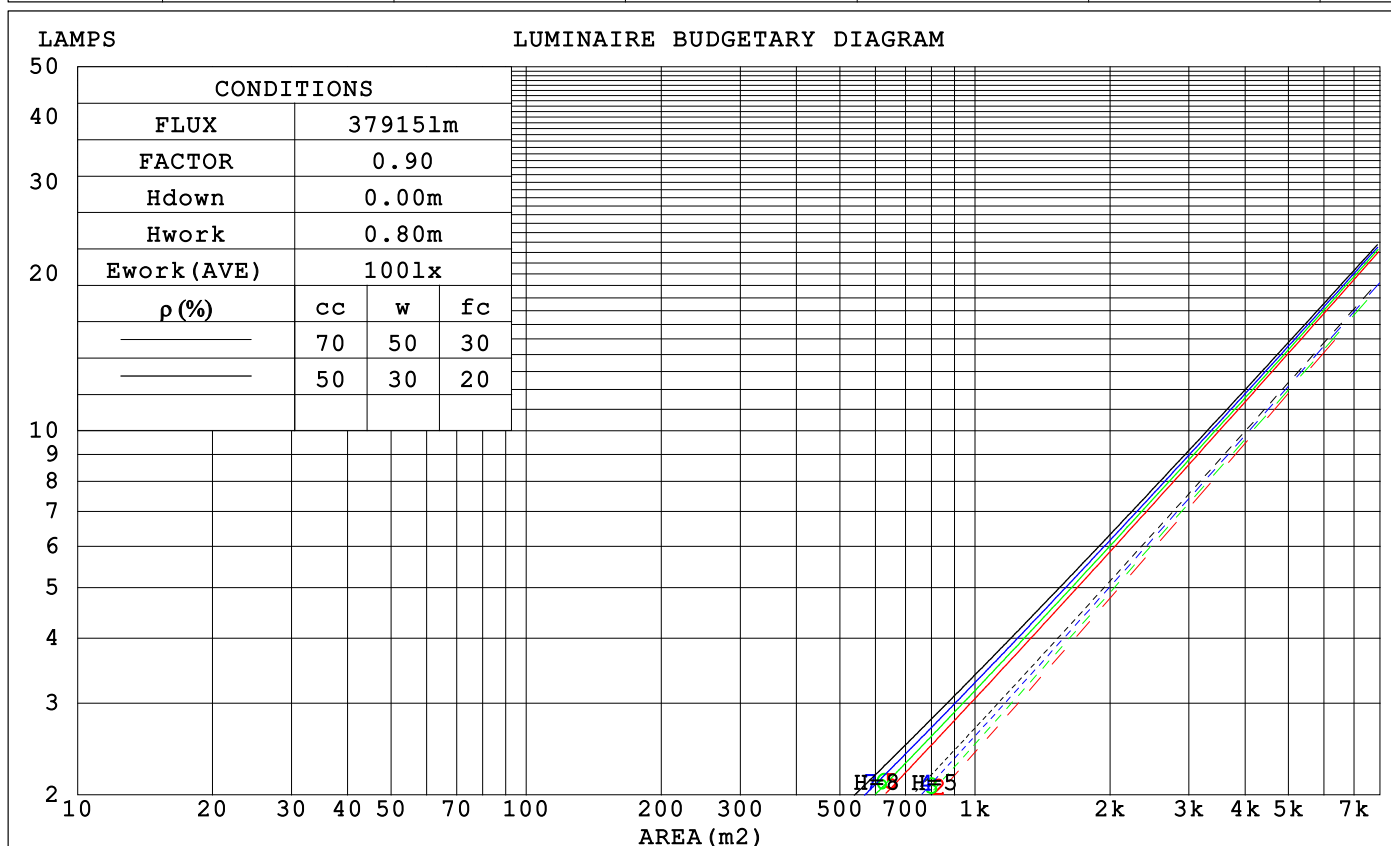
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.491
 Humidity:65.0%
 Test Distance:10.250m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES



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	1.09	1.05	1.03	1.06	1.04	1.01	1.02	1.00	.98	.98	.97	.95	.95	.94	.92	.90
2.0	.99	.94	.90	.97	.93	.89	.94	.90	.87	.91	.88	.85	.88	.85	.83	.81
3.0	.90	.84	.79	.89	.83	.79	.86	.81	.77	.84	.80	.76	.81	.78	.75	.73
4.0	.83	.76	.71	.82	.75	.70	.79	.74	.70	.77	.72	.69	.75	.71	.68	.66
5.0	.76	.69	.64	.75	.68	.64	.73	.67	.63	.71	.66	.62	.70	.65	.62	.60
6.0	.70	.63	.58	.69	.62	.58	.68	.62	.57	.66	.61	.57	.65	.60	.56	.55
7.0	.65	.58	.53	.64	.57	.52	.63	.57	.52	.61	.56	.52	.60	.55	.52	.50
8.0	.60	.53	.48	.59	.53	.48	.58	.52	.48	.57	.52	.48	.56	.51	.47	.46
9.0	.56	.49	.44	.55	.49	.44	.54	.48	.44	.53	.48	.44	.52	.47	.44	.42
10.0	.52	.45	.41	.52	.45	.41	.51	.45	.41	.50	.44	.40	.49	.44	.40	.39



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:LYQ
Test Date:2026-07-21
Stability time:0 s

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.491
Humidity:65.0%
Test Distance:10.250m [K=1.0000]
Remarks:

WEC AND CCEC

pcc	80%			70%			50%			30%			10%			0
p _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
p _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.220	.125	.040	.213	.122	.039	.201	.115	.037	.189	.109	.035	.178	.103	.033	
2.0	.211	.116	.035	.205	.113	.035	.194	.108	.034	.184	.103	.032	.175	.099	.031	
3.0	.200	.106	.032	.195	.104	.031	.185	.100	.031	.176	.097	.030	.168	.093	.029	
4.0	.189	.098	.029	.185	.097	.029	.176	.094	.028	.169	.091	.027	.161	.088	.027	
5.0	.179	.091	.026	.175	.090	.026	.168	.087	.026	.161	.085	.025	.155	.083	.025	
6.0	.170	.085	.024	.166	.084	.024	.160	.082	.024	.154	.080	.023	.148	.078	.023	
7.0	.161	.080	.023	.158	.079	.022	.152	.077	.022	.147	.075	.022	.142	.074	.022	
8.0	.153	.075	.021	.151	.074	.021	.145	.073	.021	.140	.071	.021	.136	.070	.020	
9.0	.146	.071	.020	.144	.070	.020	.139	.069	.019	.134	.067	.019	.130	.066	.019	
10.0	.139	.067	.019	.137	.066	.018	.133	.065	.018	.129	.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	.174	.157	.141	.149	.135	.122	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.161	.132	.108	.138	.114	.093	.095	.079	.065	.055	.046	.038	.018	.015	.012	
3.0	.151	.114	.084	.129	.098	.073	.089	.068	.051	.051	.040	.030	.016	.013	.010	
4.0	.142	.100	.067	.122	.086	.058	.084	.060	.041	.048	.035	.024	.016	.011	.008	
5.0	.134	.089	.055	.115	.077	.048	.079	.054	.034	.046	.031	.020	.015	.010	.007	
6.0	.127	.080	.045	.109	.069	.040	.076	.048	.028	.044	.028	.017	.014	.009	.005	
7.0	.121	.072	.038	.104	.063	.033	.072	.044	.024	.042	.026	.014	.014	.008	.005	
8.0	.116	.067	.033	.100	.058	.029	.069	.041	.020	.040	.024	.012	.013	.008	.004	
9.0	.110	.062	.029	.095	.053	.025	.066	.038	.018	.038	.022	.011	.012	.007	.003	
10.0	.106	.057	.025	.091	.050	.022	.063	.035	.016	.037	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: LYQ
 Test Date: 2026-07-21
 Stability time: 0 s

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000H_V1 SYSTEM V2.00.491
 Humidity: 65.0%
 Test Distance: 10.250m [K=1.0000]
 Remarks:

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	17.5	18.7	17.9	19.0	19.3	17.5	18.7	17.9	19.0	19.3
3H	19.2	20.3	19.6	20.6	21.0	19.2	20.3	19.6	20.6	21.0
4H	20.1	21.0	20.5	21.4	21.8	20.1	21.0	20.5	21.4	21.8
6H	20.8	21.7	21.2	22.0	22.4	20.8	21.7	21.2	22.0	22.4
8H	21.0	21.9	21.4	22.2	22.6	21.0	21.9	21.4	22.2	22.6
12H	21.2	22.0	21.6	22.3	22.8	21.2	22.0	21.6	22.3	22.8
4H 2H	18.0	19.0	18.4	19.3	19.7	18.0	19.0	18.4	19.3	19.7
3H	20.0	20.8	20.4	21.2	21.6	20.0	20.8	20.4	21.2	21.6
4H	21.0	21.7	21.5	22.2	22.6	21.0	21.7	21.5	22.2	22.6
6H	21.9	22.5	22.3	22.9	23.4	21.9	22.5	22.3	22.9	23.4
8H	22.2	22.7	22.6	23.2	23.7	22.2	22.7	22.6	23.2	23.7
12H	22.4	22.9	22.8	23.3	23.8	22.4	22.9	22.8	23.3	23.8
8H 4H	21.4	21.9	21.8	22.4	22.9	21.4	21.9	21.8	22.4	22.9
6H	22.4	22.8	22.9	23.3	23.8	22.4	22.8	22.9	23.3	23.8
8H	22.8	23.2	23.3	23.7	24.2	22.8	23.2	23.3	23.7	24.2
12H	23.0	23.4	23.6	23.9	24.5	23.0	23.4	23.6	23.9	24.5
12H 4H	21.4	21.9	21.9	22.4	22.9	21.4	21.9	21.9	22.4	22.9
6H	22.4	22.9	23.0	23.3	23.9	22.4	22.9	23.0	23.3	23.9
8H	22.9	23.3	23.4	23.8	24.3	22.9	23.3	23.4	23.8	24.3
CIE190: 2010										

CIE190: 2010

The luminaire data in the presentation of the associated IES information used by the URG calculation

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: LYQ
 Test Date: 2026-07-21
 Stability time: 0 s

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000H_V1 SYSTEM V2.00.491
 Humidity: 65.0%
 Test Distance: 10.250m [K=1.0000]
 Remarks:

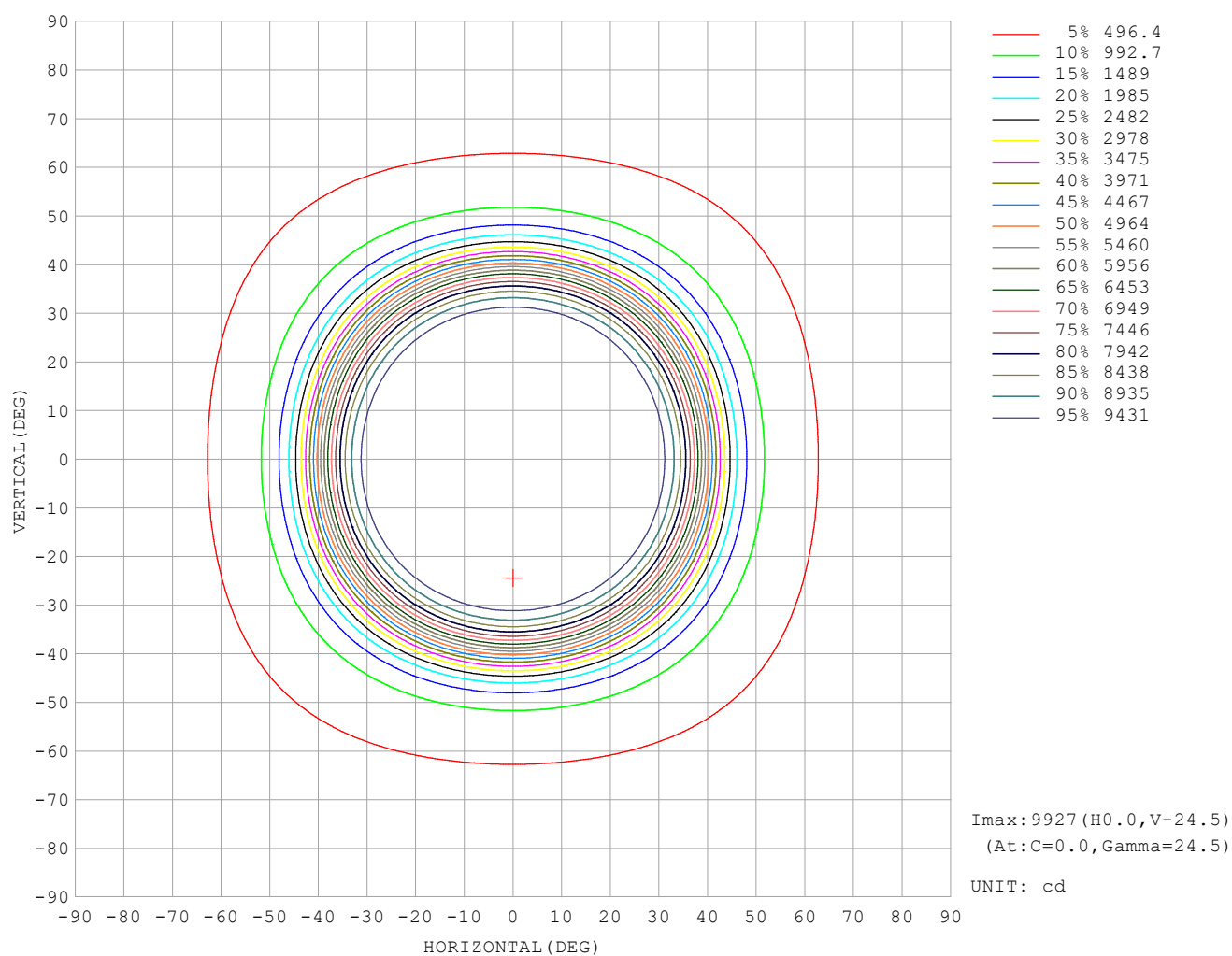
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	78	70	66	78	70	66	77	70	65	61
0.80	87	79	74	86	79	74	85	78	74	69
1.00	93	86	81	92	85	81	90	85	80	75
1.25	98	91	87	97	90	86	94	89	85	80
1.50	101	95	91	100	94	90	97	93	89	84
2.00	105	100	96	103	99	95	101	96	93	87
2.50	107	102	99	105	101	98	102	99	96	89
3.00	109	105	101	107	103	100	104	101	98	91
4.00	112	108	105	110	106	104	106	103	101	94
5.00	113	110	108	111	108	106	107	105	103	95
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: LYQ
 Test Date: 2026-07-21
 Stability time: 0 s

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000H_V1 SYSTEM V2.00.491
 Humidity: 65.0%
 Test Distance: 10.250m [K=1.0000]
 Remarks:

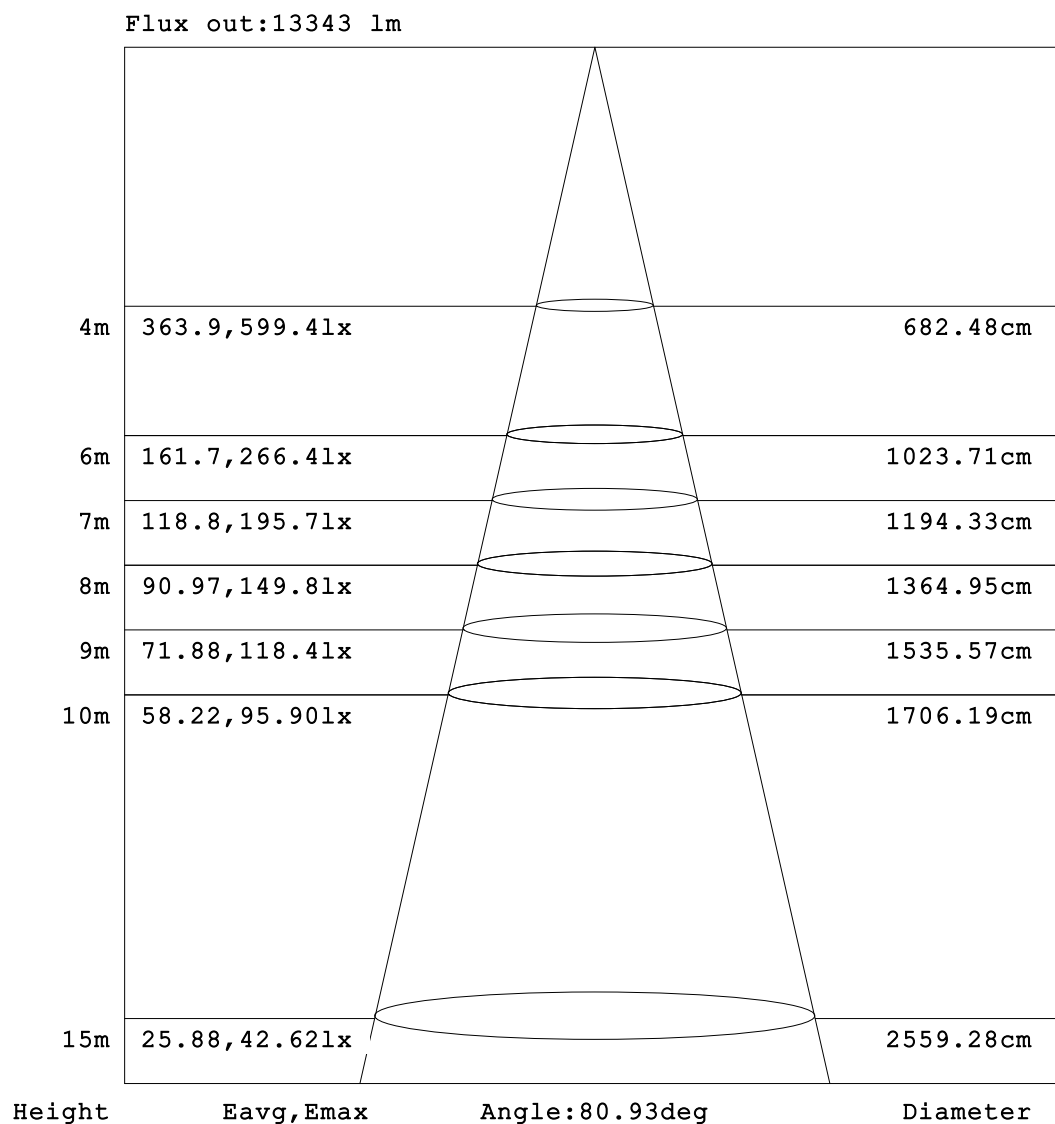
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: LYQ
Test Date: 2026-07-21
Stability time: 0 s

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.00.491
Humidity: 65.0%
Test Distance: 10.250m [K=1.0000]
Remarks:

AAI Figure

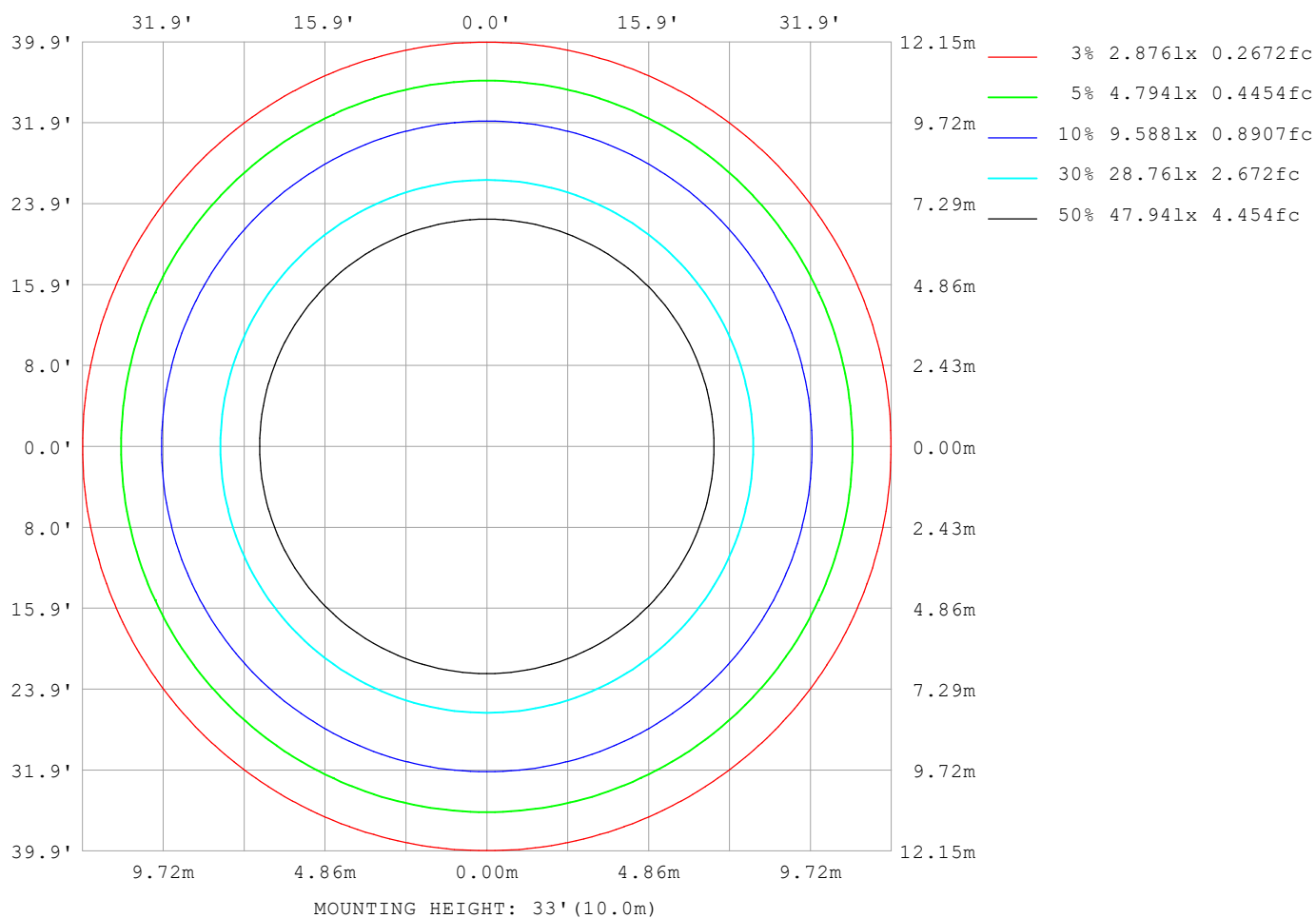


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: LYQ
Test Date: 2026-07-21
Stability time: 0 s

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.00.491
Humidity: 65.0%
Test Distance: 10.250m [K=1.0000]
Remarks:

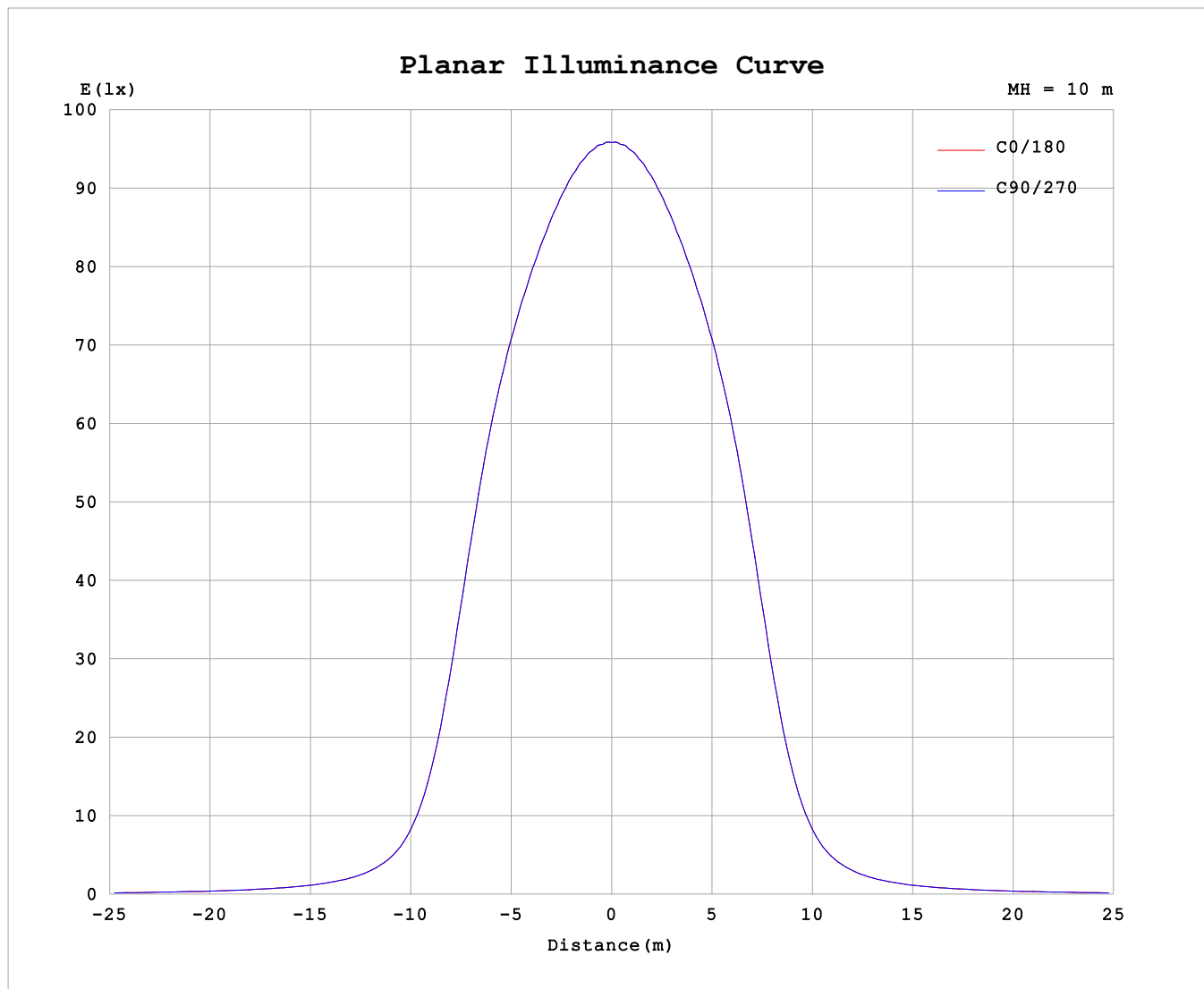
ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: LYQ
Test Date: 2026-07-21
Stability time: 0 s

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.00.491
Humidity: 65.0%
Test Distance: 10.250m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: LYQ
Test Date: 2026-07-21
Stability time: 0 s

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.00.491
Humidity: 65.0%
Test Distance: 10.250m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

UNIT: cd

[illegible]

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.491
Humidity:65.0%
Test Distance:10.250m [K=1.0000]
Remarks:

```

LUMINOUS DISTRIBUTION INTENSITY DATA

UNIT: cd

[illegible]

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.491
Humidity:65.0%
Test Distance:10.250m [K=1.0000]
Remarks:

```