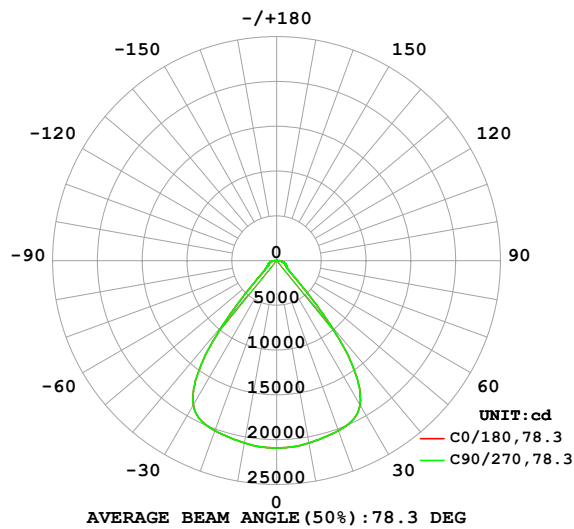


LUMINAIRE PHOTOMETRIC TEST REPORT

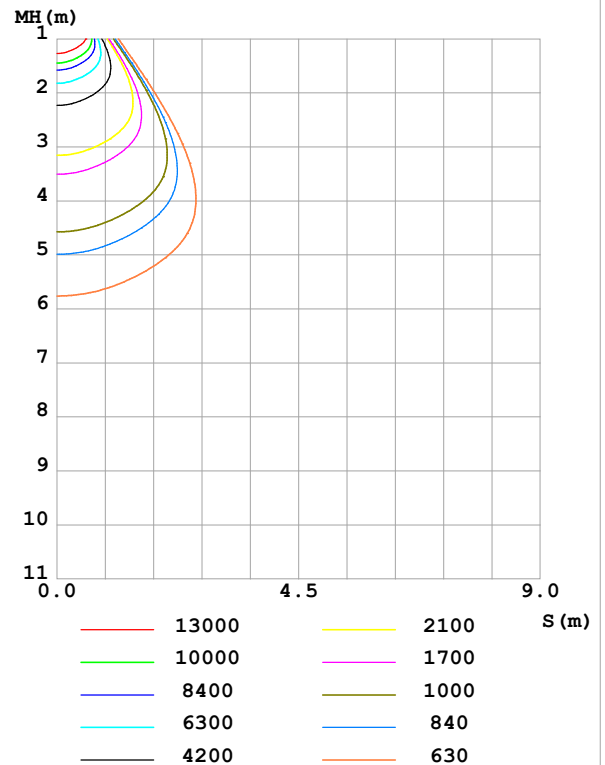
Test:U:230.20V I:0.8801A P:200.01W PF:0.9872 Freq:50.01Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:33007.5x1 lm		
NAME: HB74-200 (200W) -H42202	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 165.03 lm/W			
MODEL	/	I _{max} (cd)	20907	S/MH(C0/180)	1.14
NOMINAL POWER(W)	/	LOR(%)	100.0	S/MH(C90/270)	1.14
RATED VOLTAGE(V)	/	TOTAL FLUX(lm)	33008	η UP,DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	33007.5	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°C
Operators: LYQ
Test Date: 2026-07-21

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	2068	2068	2068	2068	2068	2068	2068	2068	0- 10	1985	1985	6.01,6.01
20	2020	2020	2020	2020	2020	2020	2020	2020	10- 20	5787	7772	23.5,23.5
30	1861	1861	1861	1861	1861	1861	1861	1861	20- 30	9084	16855	51.1,51.1
40	929.2	929.2	929.2	929.2	929.2	929.2	929.2	929.2	30- 40	9216	26071	79,79
50	199.6	199.6	199.6	199.6	199.6	199.6	199.6	199.6	40- 50	3423	29494	89.4,89.4
60	121.2	121.2	121.2	121.2	121.2	121.2	121.2	121.2	50- 60	1337	30830	93.4,93.4
70	95.38	95.38	95.38	95.38	95.38	95.38	95.38	95.38	60- 70	1062	31893	96.6,96.6
80	55.49	55.49	55.49	55.49	55.49	55.49	55.49	55.49	70- 80	824.7	32718	99.1,99.1
90	0.7084	0.7084	0.7084	0.7084	0.7084	0.7084	0.7084	0.7084	80- 90	289.9	33008	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): 28385 lm

%lum = 86.0%

%lamp = 86.0%

Conical surface Flux(120deg): 30830 lm

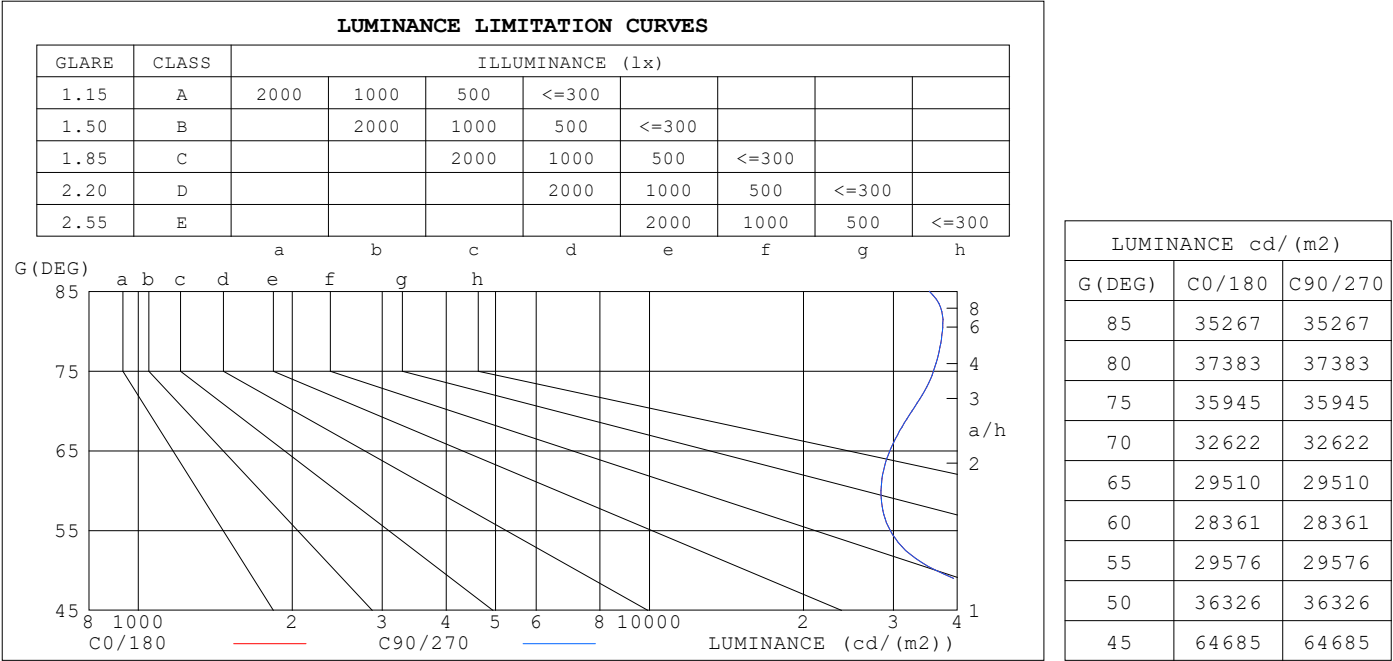
%lum = 93.4%

%lamp = 93.4%

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

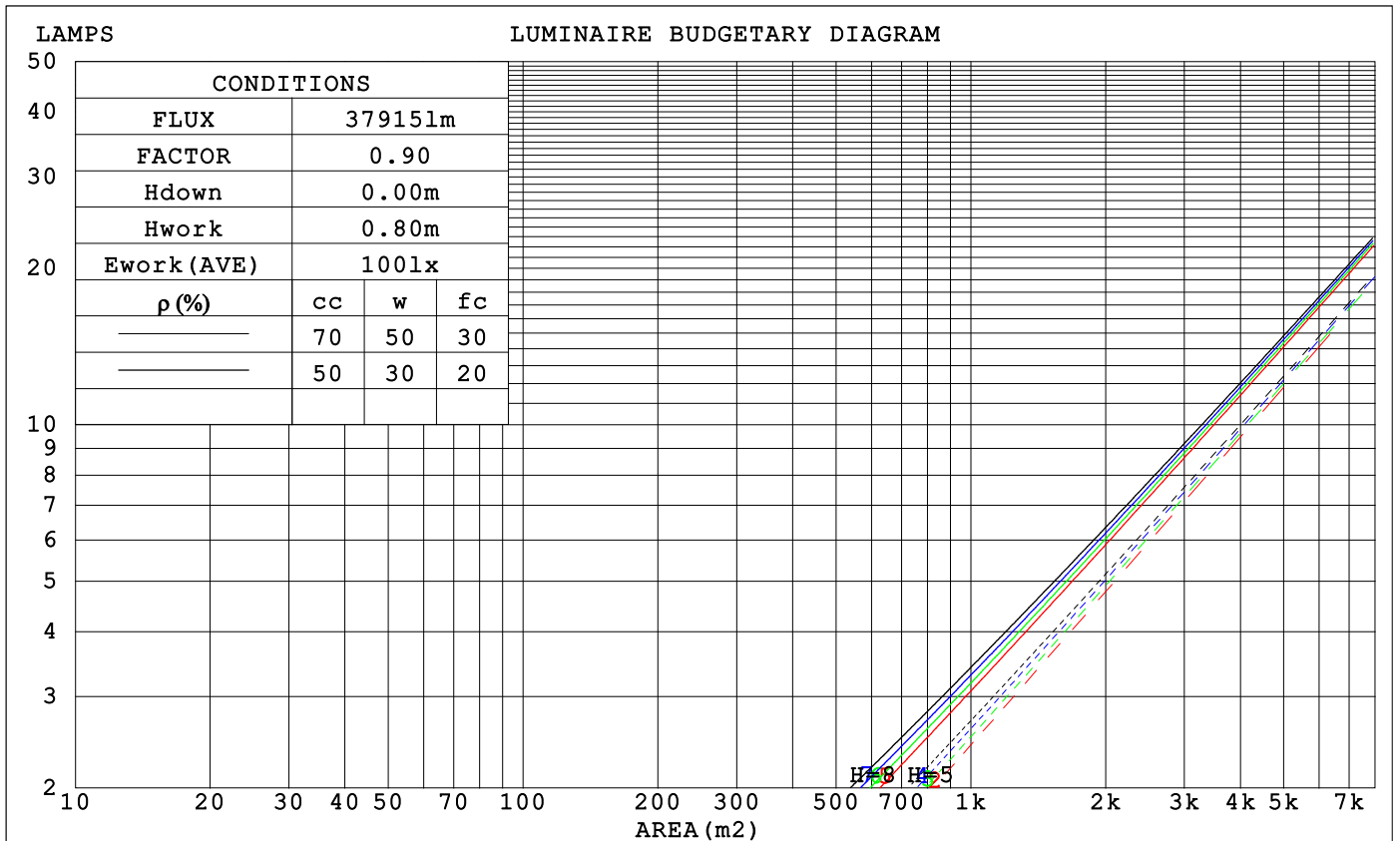
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.491
 Humidity:65.0%
 Test Distance:10.250m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES



CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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	1.05	1.02	1.06	1.03	1.01	1.02	.00	.98	.98	.96	.95	.95	.93	.92	.90
2.0	.99	.94	.89	.97	.92	.88	.93	.90	.86	.90	.87	.84	.87	.85	.83	.81
3.0	.90	.84	.79	.89	.83	.78	.86	.81	.77	.83	.79	.76	.81	.78	.75	.73
4.0	.83	.76	.71	.81	.75	.70	.79	.74	.69	.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	.63	.58	.68	.62	.57	.66	.61	.57	.65	.60	.57	.55
7.0	.65	.58	.53	.64	.58	.53	.63	.57	.53	.62	.56	.52	.60	.56	.52	.50
8.0	.60	.53	.49	.60	.53	.49	.59	.53	.48	.58	.52	.48	.56	.52	.48	.46
9.0	.56	.49	.45	.56	.49	.45	.55	.49	.45	.54	.48	.44	.53	.48	.44	.43
10.0	.53	.46	.41	.52	.46	.41	.51	.45	.41	.50	.45	.41	.50	.45	.41	.39



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

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

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	.226	.128	.041	.219	.125	.040	.206	.118	.038	.194	.112	.036	.183	.106	.034	
2.0	.214	.117	.036	.208	.115	.035	.197	.109	.034	.187	.105	.033	.177	.100	.032	
3.0	.201	.107	.032	.196	.105	.032	.187	.101	.031	.178	.097	.030	.170	.094	.029	
4.0	.190	.099	.029	.185	.097	.029	.177	.094	.028	.169	.091	.027	.162	.088	.027	
5.0	.179	.091	.026	.175	.090	.026	.168	.087	.026	.161	.085	.025	.155	.083	.025	
6.0	.169	.085	.024	.166	.084	.024	.159	.082	.024	.153	.080	.023	.148	.078	.023	
7.0	.160	.079	.022	.157	.078	.022	.152	.077	.022	.146	.075	.022	.141	.073	.022	
8.0	.152	.074	.021	.150	.074	.021	.144	.072	.021	.140	.071	.020	.135	.069	.020	
9.0	.145	.070	.020	.142	.069	.019	.138	.068	.019	.133	.067	.019	.129	.066	.019	
10.0	.138	.066	.018	.136	.066	.018	.132	.065	.018	.128	.063	.018	.124	.062	.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	.121	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.162	.132	.107	.139	.114	.093	.095	.079	.065	.055	.046	.038	.018	.015	.012	
3.0	.151	.114	.084	.130	.098	.073	.089	.068	.051	.051	.040	.030	.017	.013	.010	
4.0	.142	.100	.067	.122	.086	.058	.084	.060	.041	.049	.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	.046	.109	.069	.040	.075	.048	.028	.044	.028	.017	.014	.009	.006	
7.0	.121	.072	.038	.104	.063	.034	.072	.044	.024	.042	.026	.014	.013	.008	.005	
8.0	.115	.066	.033	.099	.058	.029	.069	.040	.020	.040	.024	.012	.013	.008	.004	
9.0	.110	.061	.029	.095	.053	.025	.066	.037	.018	.038	.022	.011	.012	.007	.004	
10.0	.105	.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℃
 Operators:LYQ
 Test Date:2026-07-21

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	2H	19.4	20.6	19.8	20.9	21.3	19.4	20.6	19.8	20.9	21.3
	3H	21.8	22.9	22.2	23.2	23.6	21.8	22.9	22.2	23.2	23.6
	4H	23.0	24.0	23.4	24.3	24.7	23.0	24.0	23.4	24.3	24.7
	6H	24.0	24.9	24.4	25.2	25.6	24.0	24.9	24.4	25.2	25.6
	8H	24.3	25.1	24.7	25.5	25.9	24.3	25.1	24.7	25.5	25.9
	12H	24.5	25.3	25.0	25.7	26.2	24.5	25.3	25.0	25.7	26.2
4H	2H	20.1	21.1	20.5	21.5	21.9	20.1	21.1	20.5	21.5	21.9
	3H	22.8	23.6	23.2	24.0	24.4	22.8	23.6	23.2	24.0	24.4
	4H	24.1	24.9	24.6	25.3	25.7	24.1	24.9	24.6	25.3	25.7
	6H	25.2	25.9	25.7	26.3	26.8	25.2	25.9	25.7	26.3	26.8
	8H	25.6	26.2	26.1	26.7	27.1	25.6	26.2	26.1	26.7	27.1
	12H	25.9	26.4	26.4	26.9	27.4	25.9	26.4	26.4	26.9	27.4
8H	4H	24.6	25.2	25.1	25.6	26.1	24.6	25.2	25.1	25.6	26.1
	6H	25.9	26.3	26.4	26.8	27.3	25.9	26.3	26.4	26.8	27.3
	8H	26.4	26.8	26.9	27.3	27.8	26.4	26.8	26.9	27.3	27.8
	12H	26.8	27.1	27.3	27.6	28.2	26.8	27.1	27.3	27.6	28.2
12H	4H	24.6	25.2	25.1	25.6	26.1	24.6	25.2	25.1	25.6	26.1
	6H	26.0	26.4	26.5	26.9	27.4	26.0	26.4	26.5	26.9	27.4
	8H	26.5	26.9	27.1	27.4	28.0	26.5	26.9	27.1	27.4	28.0
CIE190: 2010											

CIE190: 2010

Area: 0.0854865 m2

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

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:

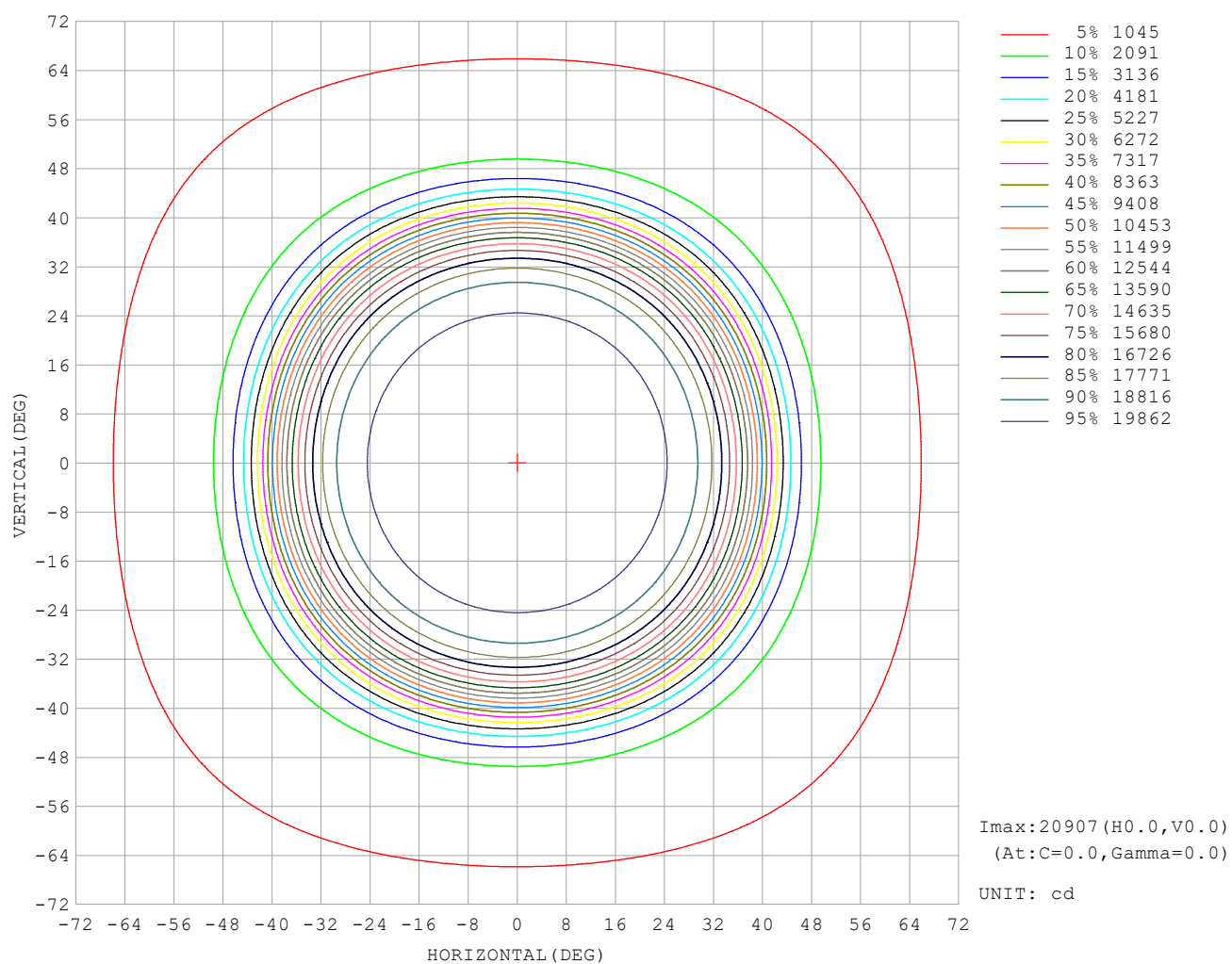
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	79	71	66	78	71	66	77	70	66	61
0.80	87	79	75	86	79	74	85	78	74	69
1.00	93	85	81	92	85	80	90	85	80	75
1.25	97	91	86	96	90	86	94	89	85	80
1.50	101	95	90	99	94	90	97	92	89	83
2.00	105	99	95	103	98	94	100	96	93	87
2.50	107	102	98	105	101	97	102	98	95	89
3.00	109	104	101	107	103	100	103	100	98	91
4.00	111	108	105	109	106	103	106	103	101	93
5.00	113	110	107	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

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:

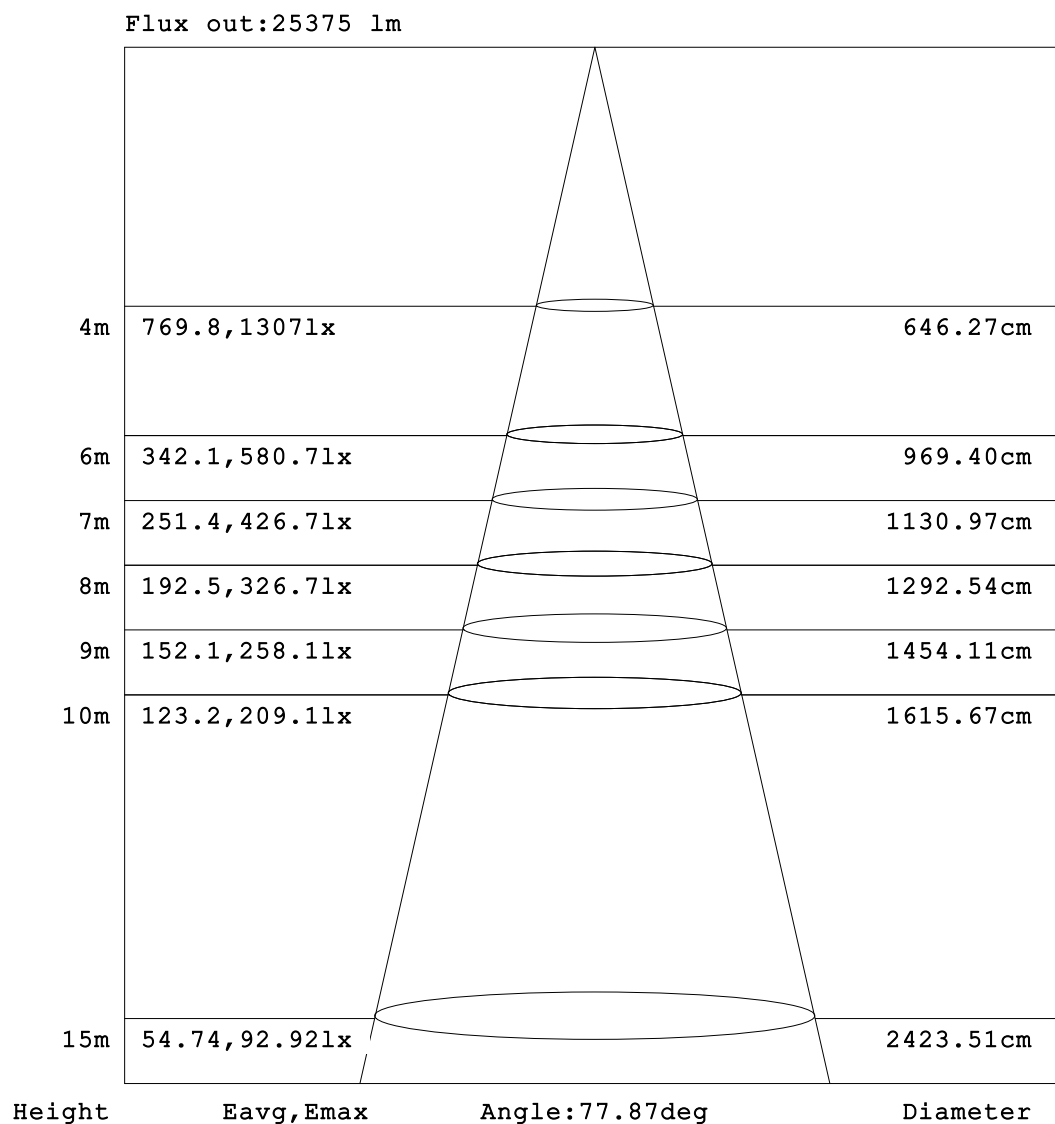
ISOCANDELA DIAGRAM



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

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

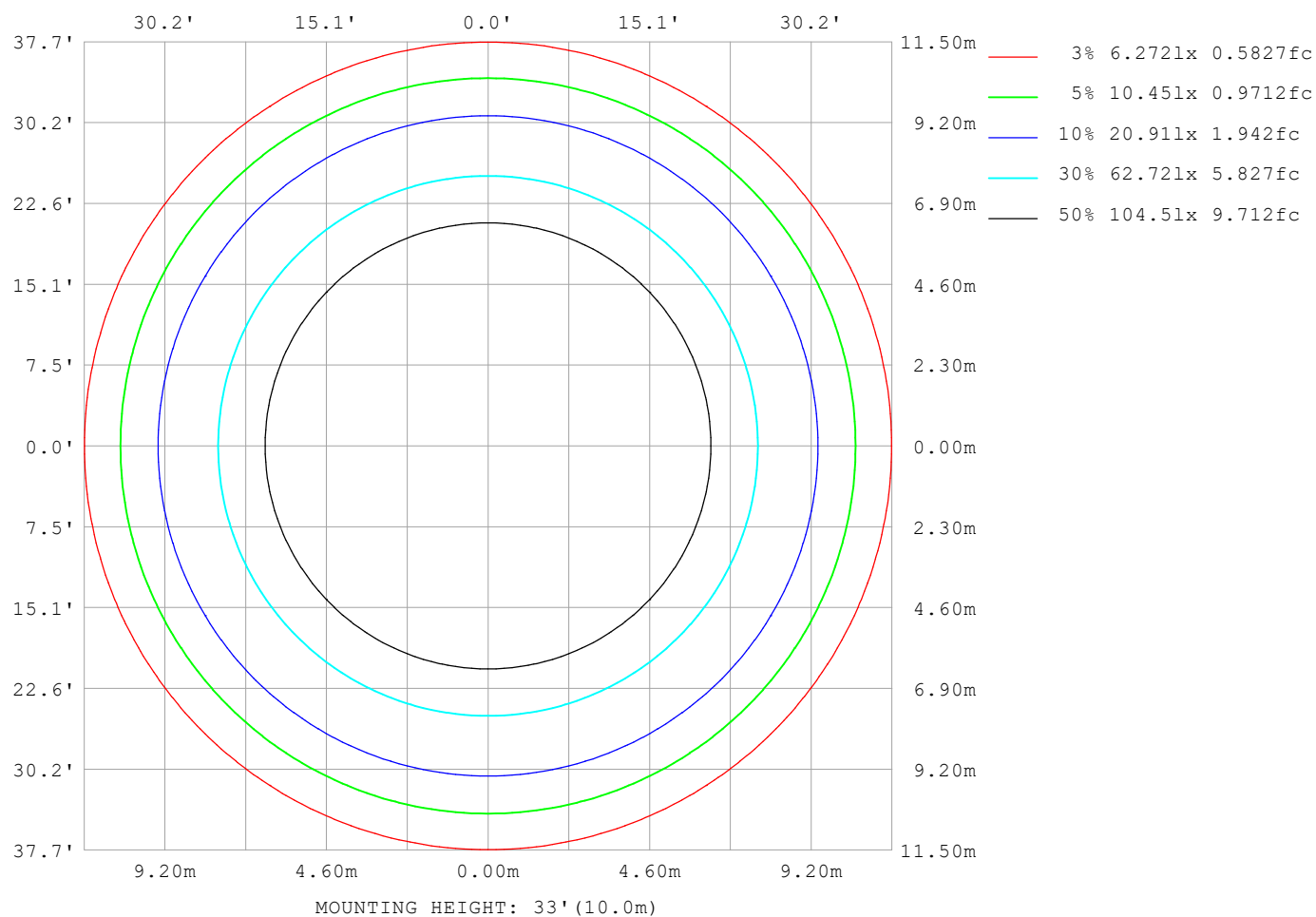


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

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:

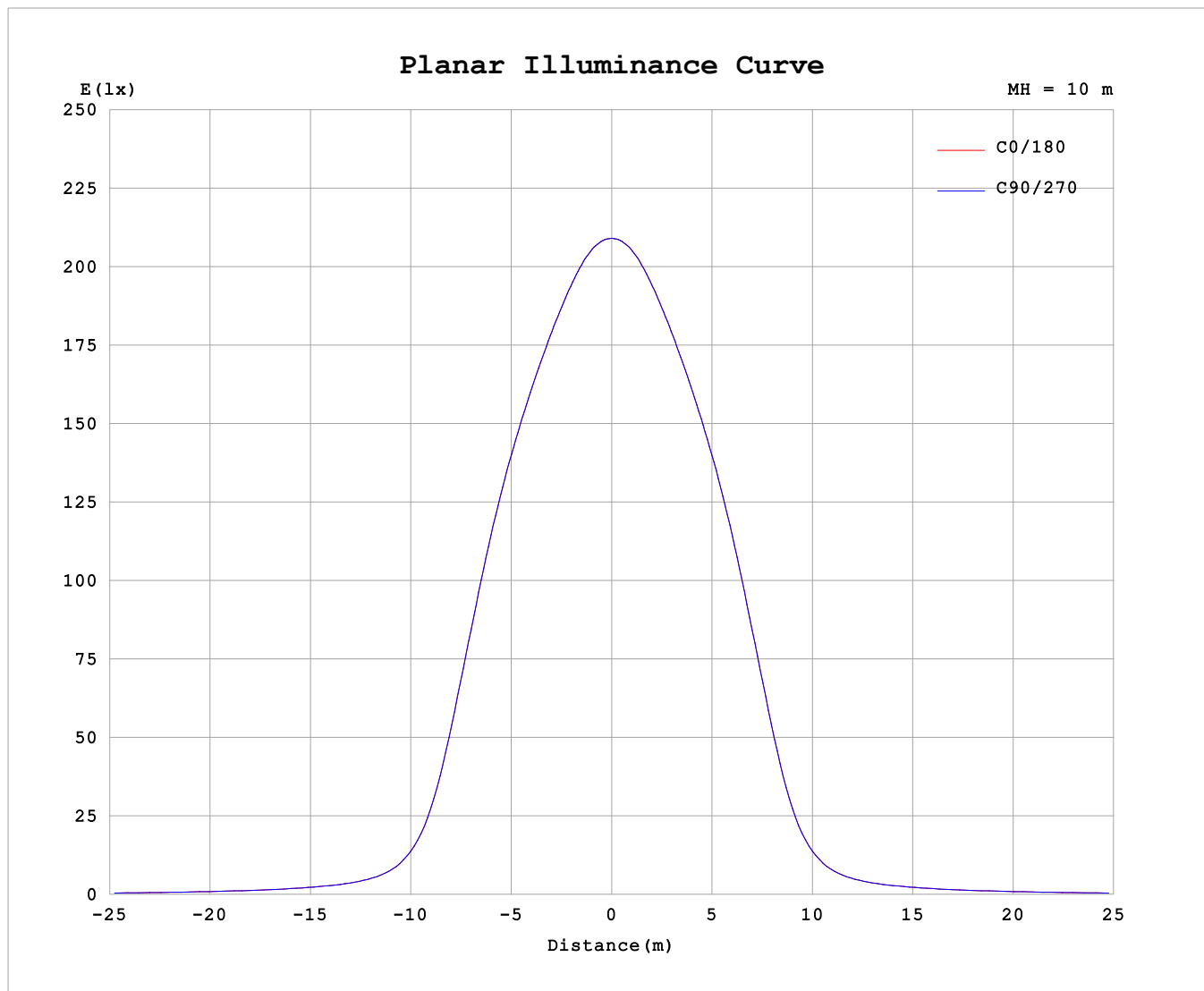
ISOLUX DIAGRAM



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

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

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: X10cd

[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: X10cd

[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:

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