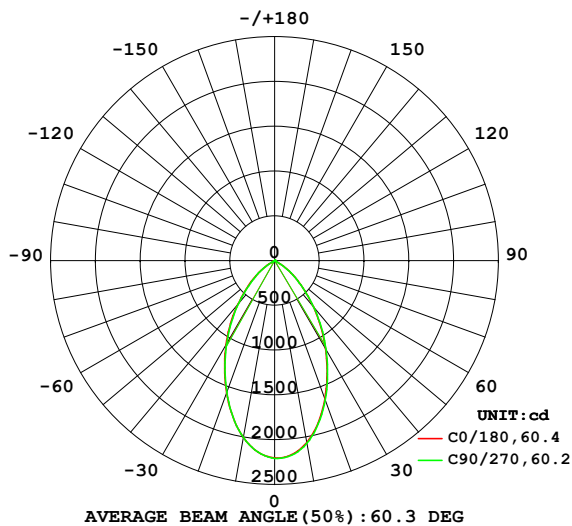


LUMINAIRE PHOTOMETRIC TEST REPORT

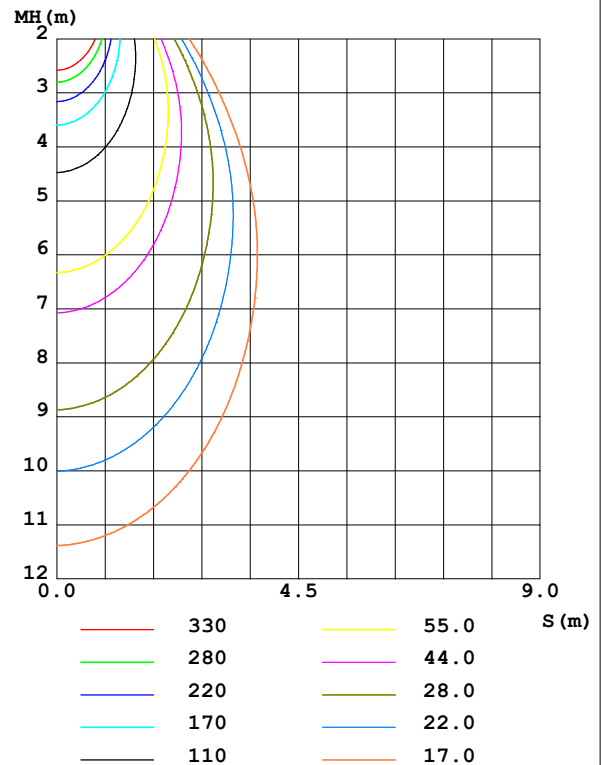
Test:U:230.04V I:0.0860A P:20W PF:0.9365 Freq:50.00Hz Lamp Flux:2400x1 lm		
NAME: 0017440235 3500K 20W 2400lm	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 120lm/W			
MODEL		I _{max} (cd)	2209	S/MH (C0/180)	0.89
NOMINAL POWER(W)		LOR (%)	100.0	S/MH (C90/270)	0.89
RATED VOLTAGE(V)		TOTAL FLUX(lm)	2400	η UP,DN (C0-180)	0.0,48.8
NOMINAL FLUX(lm)	2400	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,51.2
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)		η down (%)	100.0	CIBSE SHR MAX	0.95

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3 °C
 Operators: Testing Room
 Test Date: 2026-02-28

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000H_V1 SYSTEM V2.00.471
 Humidity: 65.0%
 Test Distance: 11.050m [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	2006	1990	2007	2033	2064	2086	2073	2045	0- 10	202.5	202.5	8.44,8.44
20	1571	1549	1565	1590	1642	1674	1655	1617	10- 20	514.3	716.9	29.9,29.9
30	1087	1065	1073	1084	1138	1160	1150	1111	20- 30	620.6	1337	55.7,55.7
40	640.9	621.8	629.5	635.5	678.2	691.2	682.9	648.5	30- 40	545.1	1883	78.4,78.4
50	295.8	280.1	283.8	289.2	313.8	319.0	316.1	298.1	40- 50	353.9	2237	93.2,93.2
60	36.43	32.20	29.06	34.39	40.58	46.41	39.94	41.55	50- 60	144.5	2381	99.2,99.2
70	4.380	4.379	4.490	4.547	4.581	4.494	4.378	4.389	60- 70	12.89	2394	99.7,99.7
80	3.095	3.110	3.224	3.267	3.215	3.073	2.987	2.980	70- 80	3.916	2398	99.9,99.9
90	0.1992	0.1779	0.1636	0.1636	0.1423	0.1352	0.1209	0.1281	80- 90	2.218	2400	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): 2085.8 lm

%lum = 86.9%

%lamp = 86.9%

Conical surface Flux(120deg): 2381 lm

%lum = 99.2%

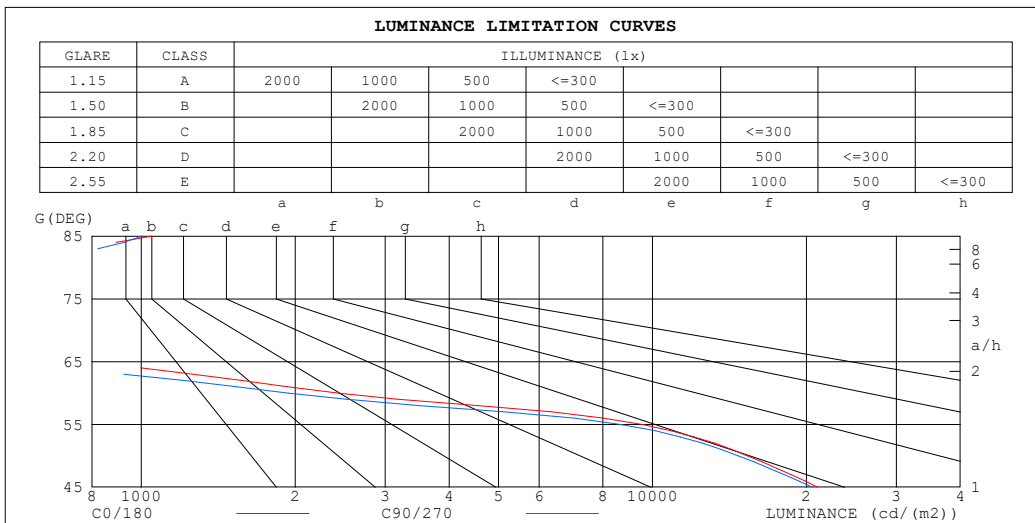
%lamp = 99.2%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:Testing Room
 Test Date:2026-02-28

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.471
 Humidity:65.0%
 Test Distance:11.050m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.04V I:0.0860A P:18.523W PF:0.9365 Freq:50.00Hz Lamp Flux:2400x1 lm		
NAME: 017440235 4000K 20W 2400lm	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1045	1000
80	594	619
75	468	482
70	427	438
65	756	540
60	2429	1937
55	9564	8664
50	15338	14717
45	21045	20550

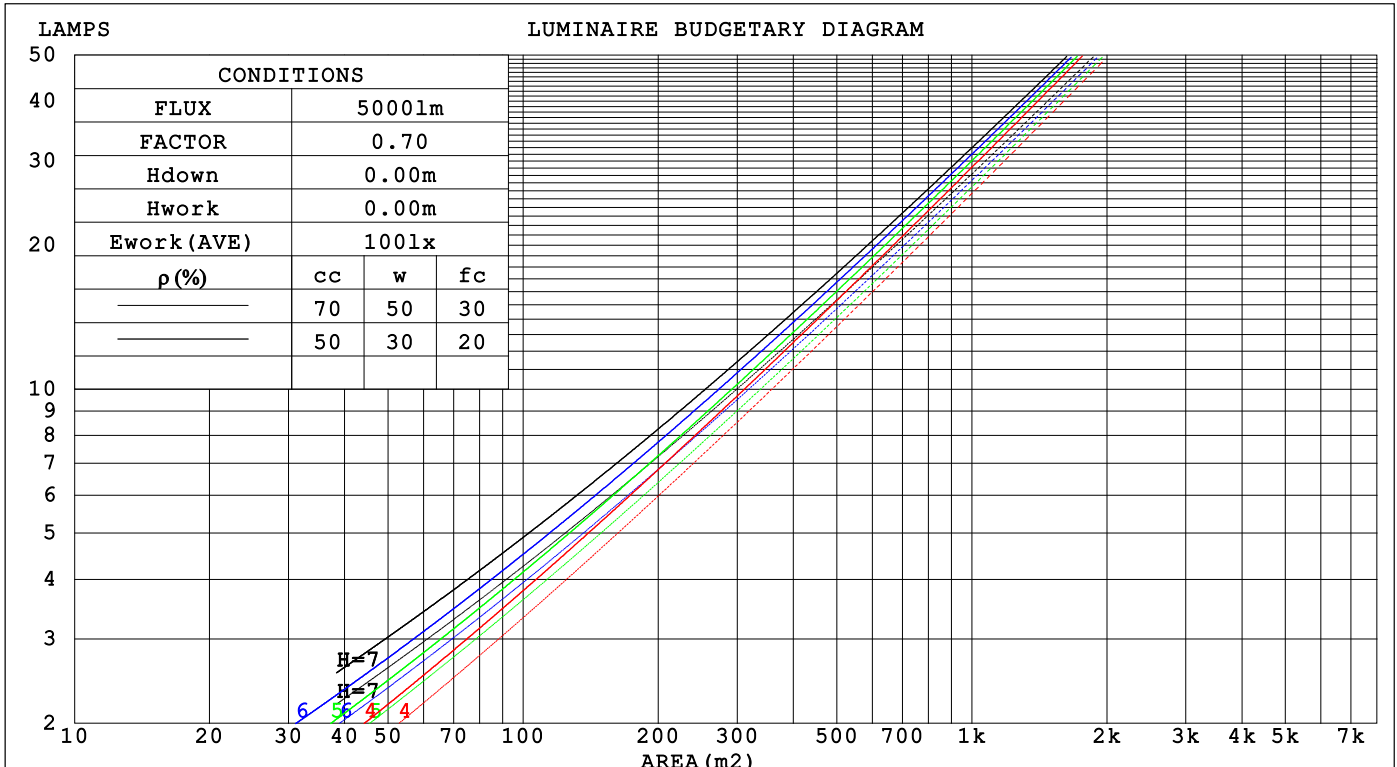
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:Testing Room
Test Date:2026-02-28

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.471
Humidity:65.0%
Test Distance:11.050m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.04V I:0.0860A P:18.523W PF:0.9365 Freq:50.00Hz		
Lamp Flux:2400x1 lm		
NAME: 017440235 4000K 20W 2400lm	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

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						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	1.10	1.07	1.04	1.08	1.05	1.03	1.03	1.01	.00	.00	.98	.97	.96	.95	.94	.92
2.0	1.01	.96	.92	.99	.95	.91	.96	.92	.89	.93	.90	.87	.90	.88	.86	.84
3.0	.93	.87	.83	.91	.86	.82	.89	.84	.81	.86	.82	.79	.84	.81	.78	.76
4.0	.85	.79	.74	.84	.78	.74	.82	.77	.73	.80	.76	.72	.78	.74	.71	.70
5.0	.79	.72	.68	.78	.72	.67	.76	.71	.67	.74	.70	.66	.73	.69	.65	.64
6.0	.73	.66	.62	.72	.66	.61	.71	.65	.61	.69	.64	.61	.68	.64	.60	.58
7.0	.68	.61	.57	.67	.61	.56	.66	.60	.56	.65	.60	.56	.64	.59	.55	.54
8.0	.63	.57	.52	.63	.56	.52	.62	.56	.52	.61	.55	.52	.60	.55	.51	.50
9.0	.59	.53	.48	.59	.53	.48	.58	.52	.48	.57	.52	.48	.56	.51	.48	.46
10.0	.56	.49	.45	.55	.49	.45	.54	.49	.45	.54	.48	.45	.53	.48	.44	.43



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:Testing Room
 Test Date:2026-02-28

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.471
 Humidity:65.0%
 Test Distance:11.050m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:230.04V I:0.0860A P:18.523W PF:0.9365 Freq:50.00Hz Lamp Flux:2400x1 lm		
NAME: 017440235 4000K 20W 2400lm	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

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															Wall Exitance Coefficients(WEC)														
0.0																														
1.0	.198	.113	.036	.191	.109	.035	.179	.102	.033	.167	.096	.031	.156	.090	.029															
2.0	.192	.105	.032	.187	.103	.032	.176	.098	.030	.166	.093	.029	.157	.089	.028															
3.0	.184	.098	.029	.180	.096	.029	.170	.092	.028	.162	.089	.027	.154	.085	.026															
4.0	.176	.092	.027	.172	.090	.027	.164	.087	.026	.156	.084	.025	.149	.081	.025															
5.0	.168	.085	.025	.164	.084	.025	.157	.082	.024	.150	.079	.024	.144	.077	.023															
6.0	.160	.080	.023	.156	.079	.023	.150	.077	.022	.144	.075	.022	.139	.073	.022															
7.0	.152	.075	.021	.149	.074	.021	.144	.073	.021	.138	.071	.021	.133	.069	.020															
8.0	.145	.071	.020	.142	.070	.020	.137	.069	.020	.133	.067	.019	.128	.066	.019															
9.0	.138	.067	.019	.136	.066	.019	.132	.065	.018	.127	.064	.018	.123	.063	.018															
10.0	.132	.063	.018	.130	.063	.018	.126	.062	.017	.122	.061	.017	.118	.060	.017															

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						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.173	.157	.143	.148	.135	.123	.101	.093	.085	.058	.054	.050	.019	.017	.016	
2.0	.159	.132	.110	.136	.114	.095	.093	.079	.066	.054	.046	.039	.017	.015	.013	
3.0	.148	.114	.086	.127	.098	.075	.087	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.139	.099	.069	.119	.086	.060	.082	.060	.042	.047	.035	.025	.015	.011	.008	
5.0	.131	.088	.056	.112	.076	.049	.077	.053	.035	.045	.031	.021	.014	.010	.007	
6.0	.124	.079	.047	.107	.069	.041	.074	.048	.029	.043	.028	.017	.014	.009	.006	
7.0	.118	.072	.040	.101	.062	.034	.070	.044	.024	.041	.026	.015	.013	.008	.005	
8.0	.112	.066	.034	.097	.057	.030	.067	.040	.021	.039	.024	.012	.013	.008	.004	
9.0	.107	.061	.029	.092	.053	.026	.064	.037	.018	.037	.022	.011	.012	.007	.004	
10.0	.102	.056	.026	.088	.049	.023	.061	.034	.016	.036	.020	.010	.012	.007	.003	

C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:Testing Room

Test Date:2026-02-28

γ Range: 0 - 90DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.471

Humidity:65.0%

Test Distance:11.050m [K=1.0000]

Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.04V I:0.0860A P:18.523W PF:0.9365 Freq:50.00Hz Lamp Flux:2400x1 lm										
NAME: 017440235 4000K 20W 2400lm					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.:					SUR.:			Shielding Angle:		
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	19.2	20.3	19.5	20.5	20.7	19.1	20.2	19.3	20.4	20.5
3H	19.1	20.1	19.3	20.3	20.5	18.9	19.9	19.2	20.1	20.3
4H	19.0	19.9	19.3	20.1	20.4	18.8	19.8	19.1	20.0	20.2
6H	18.9	19.8	19.2	20.0	20.3	18.7	19.6	19.0	19.9	20.1
8H	18.8	19.7	19.2	19.9	20.2	18.7	19.5	19.0	19.8	20.1
12H	18.8	19.6	19.1	19.9	20.2	18.7	19.5	19.0	19.7	20.0
4H 2H	19.0	20.0	19.3	20.2	20.4	18.9	19.8	19.2	20.1	20.3
3H	18.9	19.7	19.2	19.9	20.2	18.7	19.5	19.0	19.8	20.1
4H	18.8	19.5	19.1	19.8	20.1	18.6	19.4	19.0	19.7	20.0
6H	18.7	19.3	19.1	19.7	20.0	18.5	19.2	18.9	19.5	19.9
8H	18.6	19.2	19.0	19.6	19.9	18.5	19.1	18.9	19.4	19.8
12H	18.6	19.1	19.0	19.5	19.9	18.5	19.0	18.9	19.4	19.8
8H 4H	18.6	19.2	19.0	19.6	19.9	18.5	19.1	18.9	19.4	19.8
6H	18.5	19.0	19.0	19.4	19.8	18.4	18.9	18.8	19.3	19.7
8H	18.5	18.9	18.9	19.3	19.8	18.4	18.8	18.8	19.2	19.6
12H	18.5	18.8	18.9	19.3	19.7	18.3	18.7	18.8	19.1	19.6
12H 4H	18.6	19.1	19.0	19.5	19.9	18.4	19.0	18.8	19.4	19.7
6H	18.5	18.9	18.9	19.3	19.8	18.4	18.8	18.8	19.2	19.6
8H	18.4	18.8	18.9	19.3	19.7	18.3	18.7	18.8	19.1	19.6
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 2.1 / - 6.0					+ 2.2 / - 6.8				
1.5H	+ 1.9 / - 3.2					+ 1.9 / - 3.3				
2.0H	+ 4.4 / -12.6					+ 4.5 / -12.9				

CIE Pub.117, 2400 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 3.0$)
Area: 0.03 m²

C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:25.3°C

Operators:Testing Room

Test Date:2026-02-28

γ Range: 0 - 90DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.471

Humidity:65.0%

Test Distance:11.050m [K=1.0000]

Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.04V I:0.0860A P:18.523W PF:0.9365 Freq:50.00Hz Lamp Flux:2400x1 lm		
NAME: 017440235 4000K 20W 24001m	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

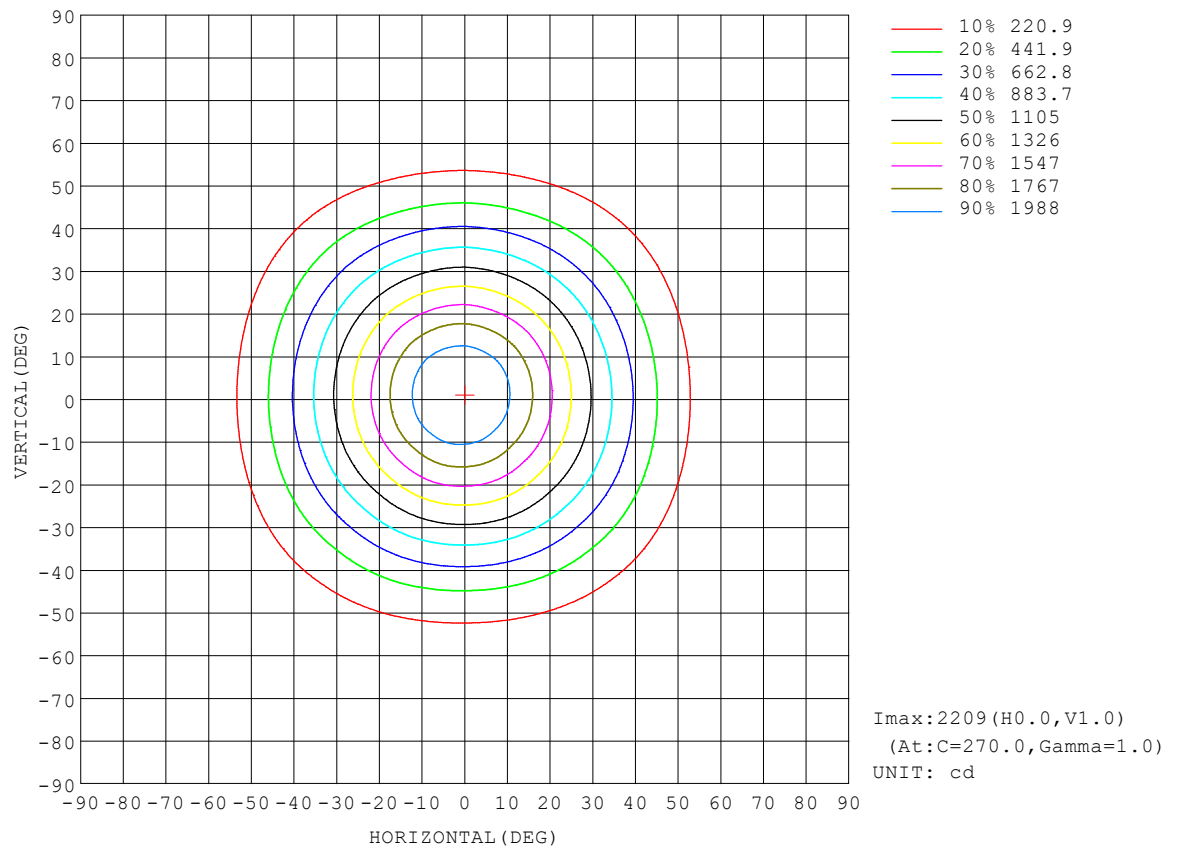
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	77	69	65	77	69	64	76	69	64	60
0.80	87	79	74	86	79	74	84	78	74	69
1.00	93	86	82	92	86	81	91	86	81	76
1.25	99	92	88	97	91	87	95	90	87	82
1.50	102	96	92	101	95	91	98	94	90	85
2.00	106	101	97	104	100	96	102	98	95	89
2.50	108	103	100	106	102	99	103	100	97	91
3.00	110	106	103	108	104	101	105	102	99	92
4.00	112	109	106	110	107	105	106	104	102	94
5.00	113	111	108	111	109	107	107	105	104	96
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: Testing Room
 Test Date: 2026-02-28

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000H_V1 SYSTEM V2.00.471
 Humidity: 65.0%
 Test Distance: 11.050m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:230.04V I:0.0860A P:18.523W PF:0.9365 Freq:50.00Hz Lamp Flux:2400x1 lm		
NAME: 017440235 4000K 20W 2400lm	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

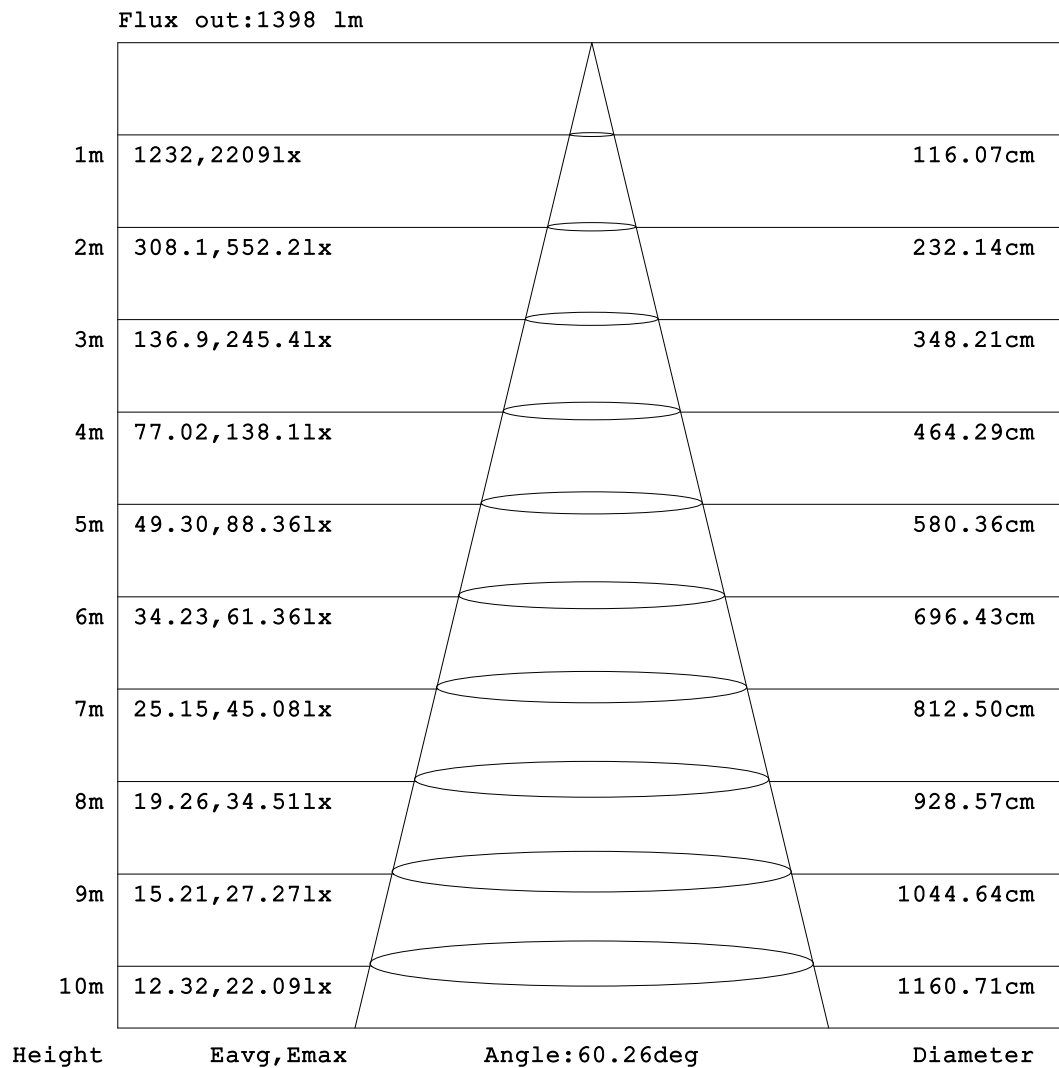


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:Testing Room
 Test Date:2026-02-28

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.471
 Humidity:65.0%
 Test Distance:11.050m [K=1.0000]
 Remarks:

AAI Figure

Test:U:230.04V I:0.0860A P:18.523W PF:0.9365 Freq:50.00Hz Lamp Flux:2400x1 lm		
NAME: 017440235 4000K 20W 2400lm	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



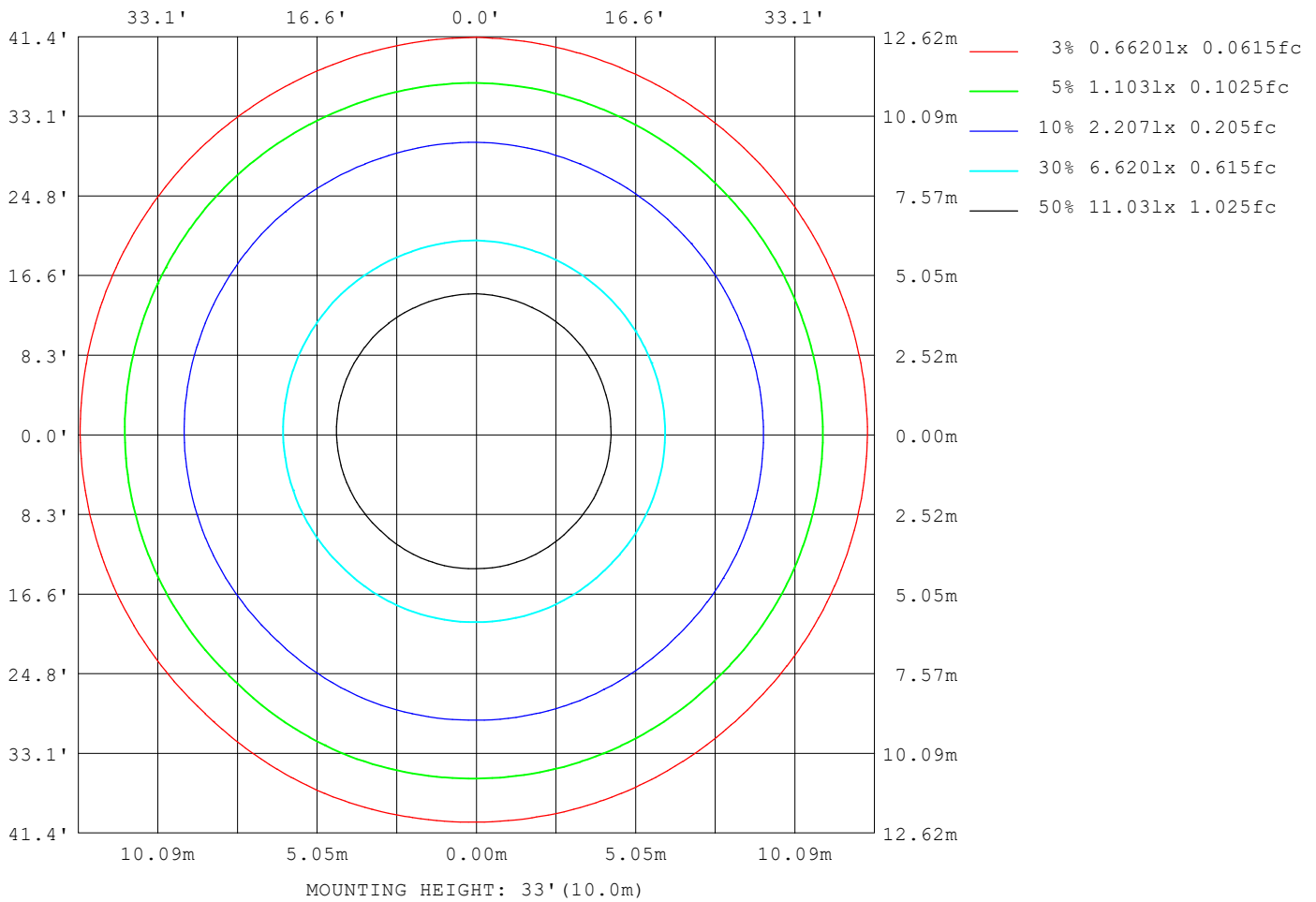
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: Testing Room
 Test Date: 2026-02-28

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000H_V1 SYSTEM V2.00.471
 Humidity: 65.0%
 Test Distance: 11.050m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.04V I:0.0860A P:18.523W PF:0.9365 Freq:50.00Hz Lamp Flux:2400x1 lm		
NAME: 017440235 4000K 20W 2400lm	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: Testing Room
 Test Date: 2026-02-28

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000H_V1 SYSTEM V2.00.471
 Humidity: 65.0%
 Test Distance: 11.050m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:230.04V I:0.0860A P:18.523W PF:0.9365 Freq:50.00Hz Lamp Flux:2400x1 lm		
NAME: 017440235 4000K 20W 2400lm	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

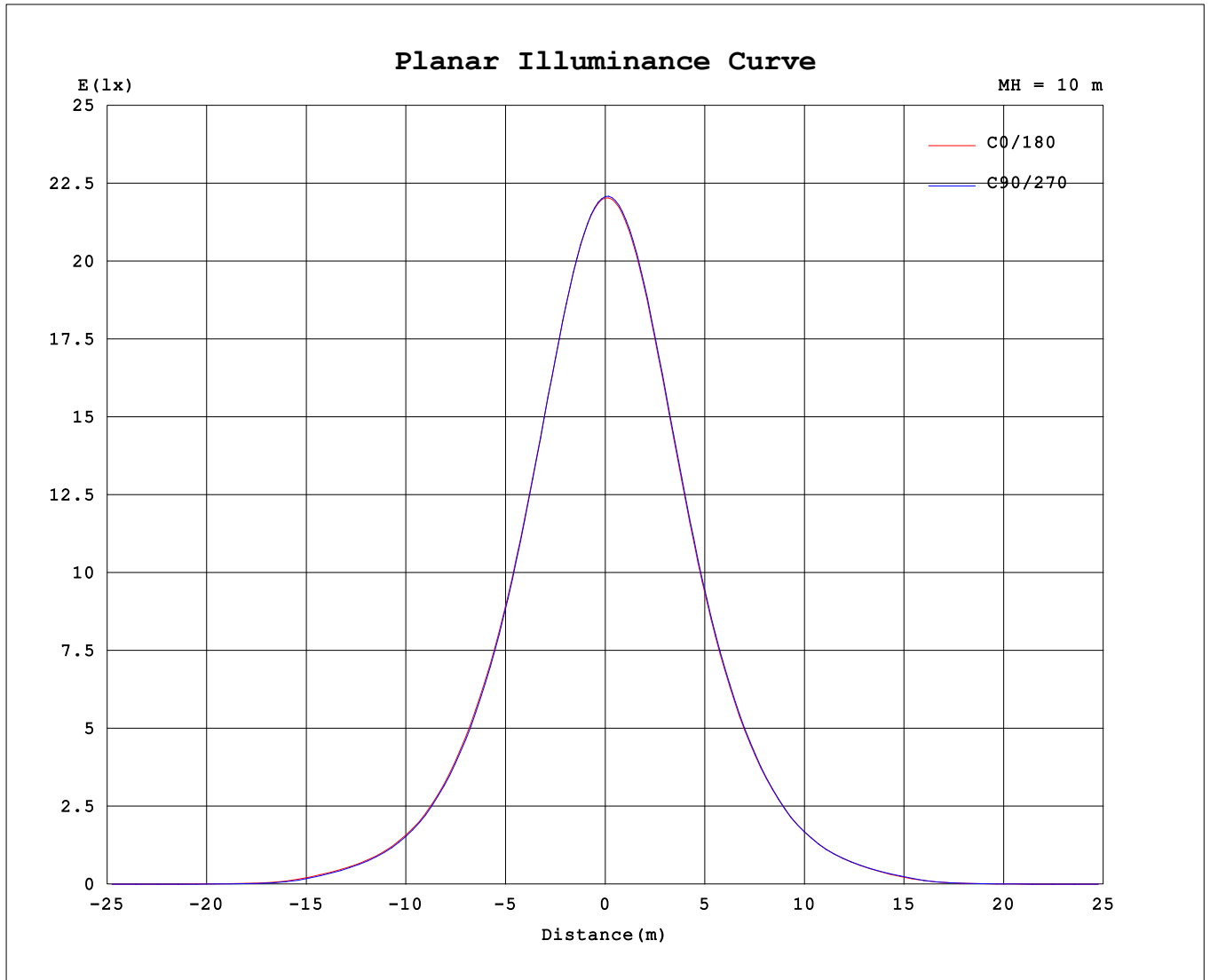
AvgL	cd/m2
L_0~180 (65) av	769
L_0~180 (75) av	477
L_0~180 (85) av	1063
L_90~270 (65) av	618
L_90~270 (75) av	470
L_90~270 (85) av	985
L_45 (65) av	787
L_45 (75) av	471
L_45 (85) av	981

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:Testing Room
 Test Date:2026-02-28

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.471
 Humidity:65.0%
 Test Distance:11.050m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3 °C
 Operators: Testing Room
 Test Date: 2026-02-28

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000H_V1 SYSTEM V2.00.471
 Humidity: 65.0%
 Test Distance: 11.050m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.04V I:0.0860A P:18.523W PF:0.9365 Freq:50.00Hz Lamp Flux:2400x1 lm		
NAME: 017440235 4000K 20W 24001m	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1

UNIT: cd

[illegible]

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: Testing Room
Test Date: 2026-02-28

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.00.471
Humidity:65.0%
Test Distance:11.050m [K=1.0000]
Remarks:

```