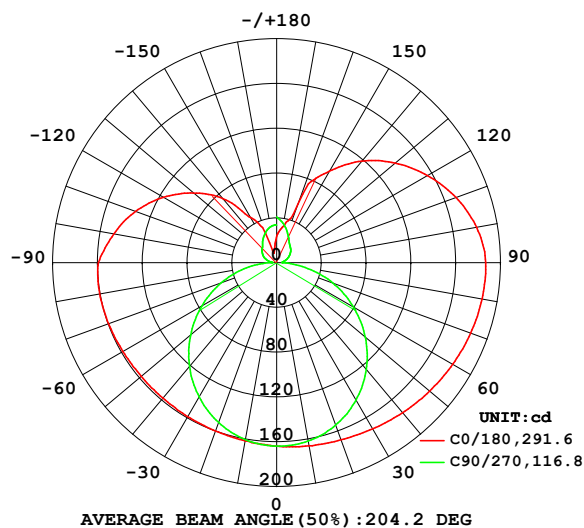


LUMINAIRE PHOTOMETRIC TEST REPORT

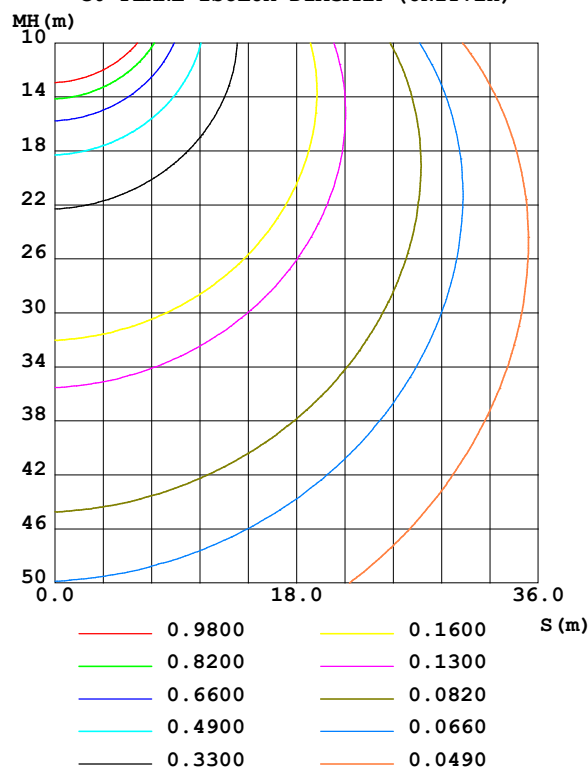
Test:U:101.40V I:0.2940A P:26.400W PF:0.8850 Freq:50.00Hz Lamp Flux:1222.19x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 46.30 lm/W
MODEL	80023-27MP	I _{max} (cd)	186.9	S/MH(C0/180)	1.63	
NOMINAL POWER(W)	15	LOR(%)	100.0	S/MH(C90/270)	1.29	
RATED VOLTAGE(V)	100	TOTAL FLUX(lm)	1222.2	η UP,DN(C0-180)	15.5,30.6	
NOMINAL FLUX(lm)	1222.19	CIE CLASS	SEMI-D.	η UP,DN(C180-360)	20.3,33.5	
LAMPS INSIDE	1	η up (%)	35.9	CIBSE SHR NOM	1.50	
TEST VOLTAGE(V)	100	η down (%)	64.1	CIBSE SHR MAX	1.55	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:02 January 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.459
Humidity:65.0%
Test Distance:8.186m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	161.7	160.6	166.2	161.8					0- 10	15.58	15.58	1.28,1.28
20	160.0	151.9	168.4	154.4					10- 20	45.53	61.11	5,5
30	158.9	138.4	171.4	141.7					20- 30	72.04	133.2	10.9,10.9
40	158.1	121.1	175.1	124.7					30- 40	93.40	226.6	18.5,18.5
50	158.1	100.2	178.6	103.6					40- 50	108.4	334.9	27.4,27.4
60	158.7	77.15	181.7	79.38					50- 60	116.3	451.2	36.9,36.9
70	159.8	52.38	184.5	53.46					60- 70	117.5	568.7	46.5,46.5
80	160.5	27.41	186.3	25.93					70- 80	112.5	681.2	55.7,55.7
90	159.2	4.722	186.8	6.589					80- 90	102.7	783.9	64.1,64.1
100	147.7	6.399	181.4	6.338					90-100	95.16	879.1	71.9,71.9
110	134.2	11.04	170.5	9.900					100-110	88.55	967.6	79.2,79.2
120	116.9	14.45	155.5	13.50					110-120	77.92	1046	85.5,85.5
130	96.87	17.20	138.3	16.56					120-130	64.08	1110	90.8,90.8
140	74.83	19.79	118.5	19.02					130-140	48.78	1158	94.8,94.8
150	46.68	24.47	94.37	22.44					140-150	33.01	1191	97.5,97.5
160	19.05	29.03	55.54	28.53					150-160	19.99	1211	99.1,99.1
170	12.33	32.60	32.76	35.47					160-170	8.041	1219	99.8,99.8
180	23.55	33.50	23.58	40.91					170-180	2.764	1222	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 279.3 lm

%lum = 22.9%

%lamp = 22.9%

Conical surface Flux(130deg): 510.19 lm

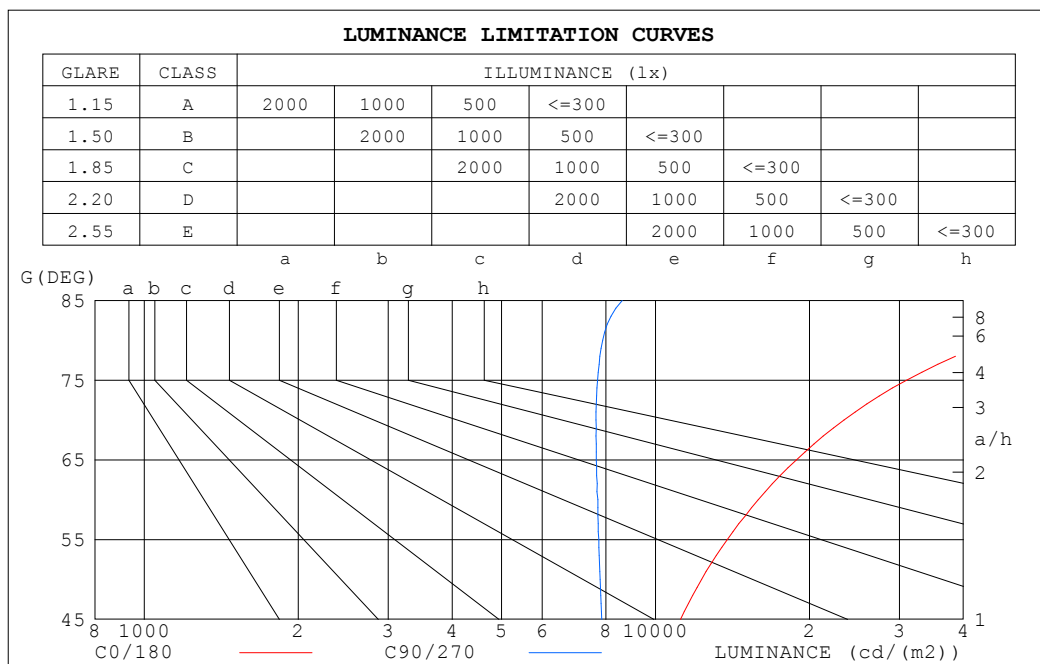
%lum = 41.7%

%lamp = 41.7%

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:02 January 2025

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.459
 Humidity:65.0%
 Test Distance:8.186m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES



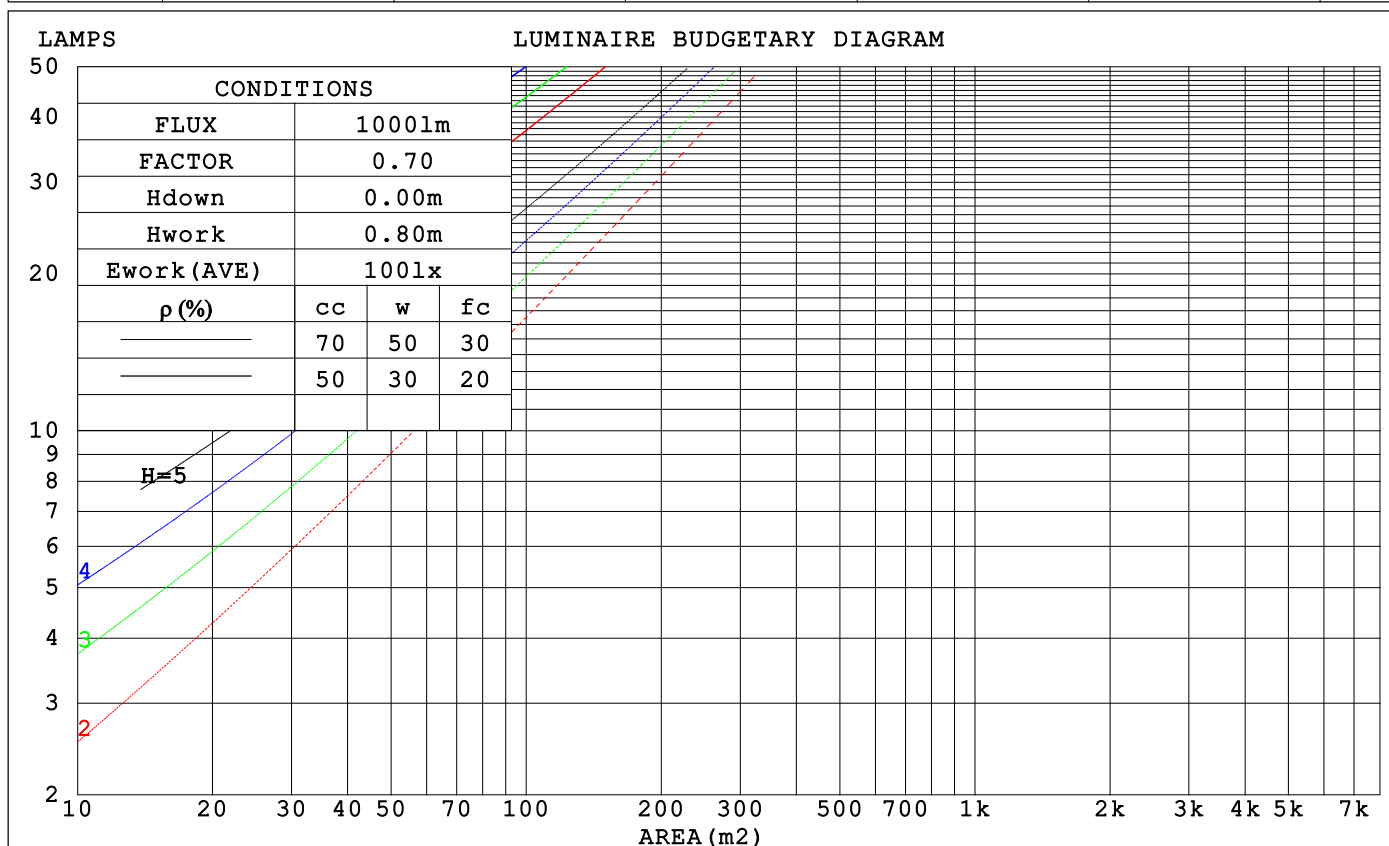
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	92038	8600
80	46269	7884
75	30984	7706
70	23387	7651
65	18859	7659
60	15885	7708
55	13817	7744
50	12308	7789
45	11190	7850

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:02 January 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.459
Humidity:65.0%
Test Distance:8.186m [K=1.0000]
Remarks:

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	1.11	1.11	1.11	1.04	1.04	1.04	.91	.91	.91	.80	.80	.80	.69	.69	.69	.64
1.0	.91	.85	.80	.85	.80	.76	.74	.70	.67	.64	.61	.58	.55	.53	.50	.46
2.0	.77	.69	.63	.72	.65	.59	.63	.57	.52	.54	.50	.46	.46	.43	.40	.35
3.0	.67	.58	.50	.62	.54	.48	.54	.48	.42	.47	.41	.37	.40	.36	.32	.28
4.0	.58	.49	.42	.55	.46	.39	.47	.41	.35	.41	.35	.31	.35	.30	.27	.23
5.0	.52	.42	.35	.48	.40	.33	.42	.35	.30	.36	.31	.26	.31	.26	.23	.20
6.0	.46	.37	.30	.43	.35	.29	.38	.31	.25	.33	.27	.22	.28	.23	.20	.17
7.0	.41	.32	.26	.39	.31	.25	.34	.27	.22	.29	.24	.20	.25	.21	.17	.14
8.0	.37	.29	.23	.35	.27	.22	.31	.24	.19	.27	.21	.17	.23	.19	.15	.13
9.0	.34	.26	.20	.32	.24	.19	.28	.22	.17	.25	.19	.15	.21	.17	.13	.11
10.0	.31	.23	.18	.29	.22	.17	.26	.20	.16	.23	.18	.14	.20	.15	.12	.10



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 02 January 2025

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.459
Humidity: 65.0%
Test Distance: 8.186m [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	.396	.225	.071	.377	.215	.068	.343	.197	.063	.312	.180	.058	.283	.164	.053		
2.0	.336	.184	.056	.320	.176	.054	.289	.160	.050	.260	.146	.046	.234	.132	.042		
3.0	.296	.157	.047	.281	.150	.045	.253	.137	.042	.226	.124	.038	.202	.112	.035		
4.0	.265	.138	.040	.251	.131	.039	.225	.119	.036	.201	.108	.033	.179	.097	.030		
5.0	.240	.122	.035	.227	.117	.034	.204	.106	.031	.182	.096	.029	.161	.086	.026		
6.0	.219	.110	.031	.208	.105	.030	.186	.095	.028	.166	.086	.025	.147	.077	.023		
7.0	.202	.100	.028	.191	.095	.027	.171	.087	.025	.152	.078	.023	.135	.070	.021		
8.0	.187	.091	.026	.177	.087	.025	.158	.079	.023	.141	.071	.021	.125	.064	.019		
9.0	.174	.084	.023	.165	.080	.023	.148	.073	.021	.131	.066	.019	.116	.059	.017		
10.0	.163	.078	.022	.154	.074	.021	.138	.068	.019	.123	.061	.017	.109	.055	.016		

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	.464	.464	.464	.396	.396	.396	.270	.270	.270	.155	.155	.155	.050	.050	.050		
1.0	.462	.431	.403	.395	.370	.347	.270	.254	.240	.156	.147	.140	.050	.047	.045		
2.0	.455	.409	.370	.390	.352	.320	.267	.244	.223	.154	.142	.131	.049	.046	.043		
3.0	.448	.393	.349	.384	.339	.303	.264	.236	.213	.152	.138	.125	.049	.045	.041		
4.0	.441	.381	.336	.378	.330	.292	.260	.230	.206	.150	.135	.122	.048	.044	.040		
5.0	.433	.372	.327	.372	.322	.284	.256	.225	.201	.148	.132	.119	.048	.043	.039		
6.0	.426	.364	.320	.366	.316	.279	.253	.221	.197	.147	.130	.117	.047	.042	.039		
7.0	.419	.358	.315	.360	.310	.275	.249	.218	.195	.145	.128	.116	.047	.042	.038		
8.0	.413	.353	.312	.355	.306	.272	.246	.215	.193	.143	.127	.115	.046	.042	.038		
9.0	.406	.348	.309	.350	.302	.269	.243	.212	.191	.141	.125	.114	.046	.041	.038		
10.0	.401	.344	.307	.345	.299	.267	.240	.210	.190	.140	.124	.113	.045	.041	.038		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 02 January 2025

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.459
Humidity: 65.0%
Test Distance: 8.186m [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	20.0	21.2	20.7	21.9	22.8	17.4	18.5	18.1	19.3	20.2
3H	23.2	24.3	24.0	25.1	26.0	19.2	20.2	19.9	21.0	21.9
4H	25.1	26.2	25.9	26.9	27.9	20.0	21.0	20.7	21.8	22.7
6H	27.3	28.2	28.0	29.0	30.0	20.7	21.6	21.4	22.4	23.4
8H	28.5	29.4	29.2	30.2	31.2	20.9	21.9	21.7	22.7	23.7
12H	29.8	30.7	30.6	31.6	32.6	21.2	22.1	21.9	22.9	23.9
4H 2H	20.5	21.5	21.2	22.3	23.3	18.7	19.7	19.4	20.5	21.4
3H	23.9	24.8	24.7	25.7	26.7	20.8	21.7	21.6	22.5	23.5
4H	26.0	26.8	26.8	27.7	28.7	21.8	22.6	22.6	23.5	24.5
6H	28.3	29.1	29.2	29.9	31.0	22.7	23.4	23.5	24.3	25.4
8H	29.7	30.3	30.5	31.2	32.3	23.1	23.8	23.9	24.6	25.7
12H	31.2	31.8	32.0	32.7	33.8	23.4	24.0	24.3	24.9	26.0
8H 4H	26.3	27.0	27.1	27.8	28.9	23.1	23.7	23.9	24.6	25.7
6H	28.9	29.5	29.8	30.4	31.5	24.4	25.0	25.3	25.9	27.0
8H	30.4	30.9	31.3	31.8	33.0	25.0	25.5	25.9	26.4	27.6
12H	32.2	32.7	33.1	33.6	34.7	25.6	26.0	26.5	26.9	28.1
12H 4H	26.3	26.9	27.2	27.8	28.9	23.5	24.1	24.4	25.0	26.1
6H	29.0	29.5	29.9	30.4	31.5	25.1	25.6	26.0	26.5	27.6
8H	30.6	31.1	31.5	32.0	33.1	25.9	26.3	26.8	27.3	28.4
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
2.0H	+ 0.3 / - 0.3					+ 0.3 / - 0.4				

CIE Pub.117, 1222 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 0.7)
Area: 0.02 m2

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:02 January 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.459
Humidity:65.0%
Test Distance:8.186m [K=1.0000]
Remarks:

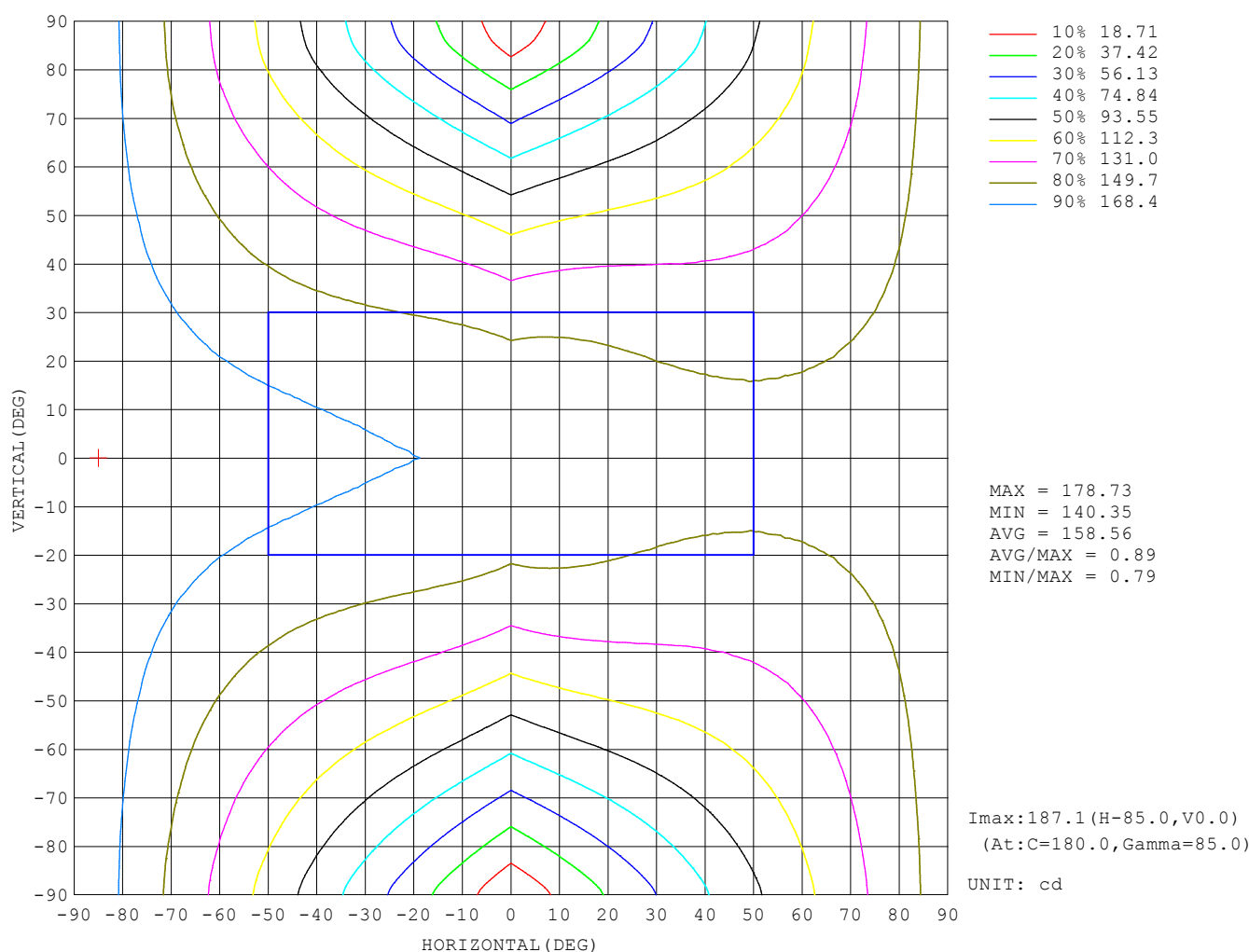
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	41	29	22	40	28	21	37	27	20	13
0.80	50	37	29	48	36	28	44	33	26	18
1.00	58	44	35	55	42	34	50	41	32	22
1.25	64	51	42	61	49	41	55	45	38	26
1.50	70	57	47	66	54	46	59	49	42	29
2.00	77	65	56	73	62	54	65	56	49	34
2.50	82	71	62	77	67	59	68	60	54	37
3.00	86	76	68	81	72	64	71	64	58	40
4.00	91	82	75	85	78	71	75	69	64	44
5.00	94	86	80	88	82	76	78	73	68	47
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: DAMIN
 Test Date: 02 January 2025

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.459
 Humidity: 65.0%
 Test Distance: 8.186m [K=1.0000]
 Remarks:

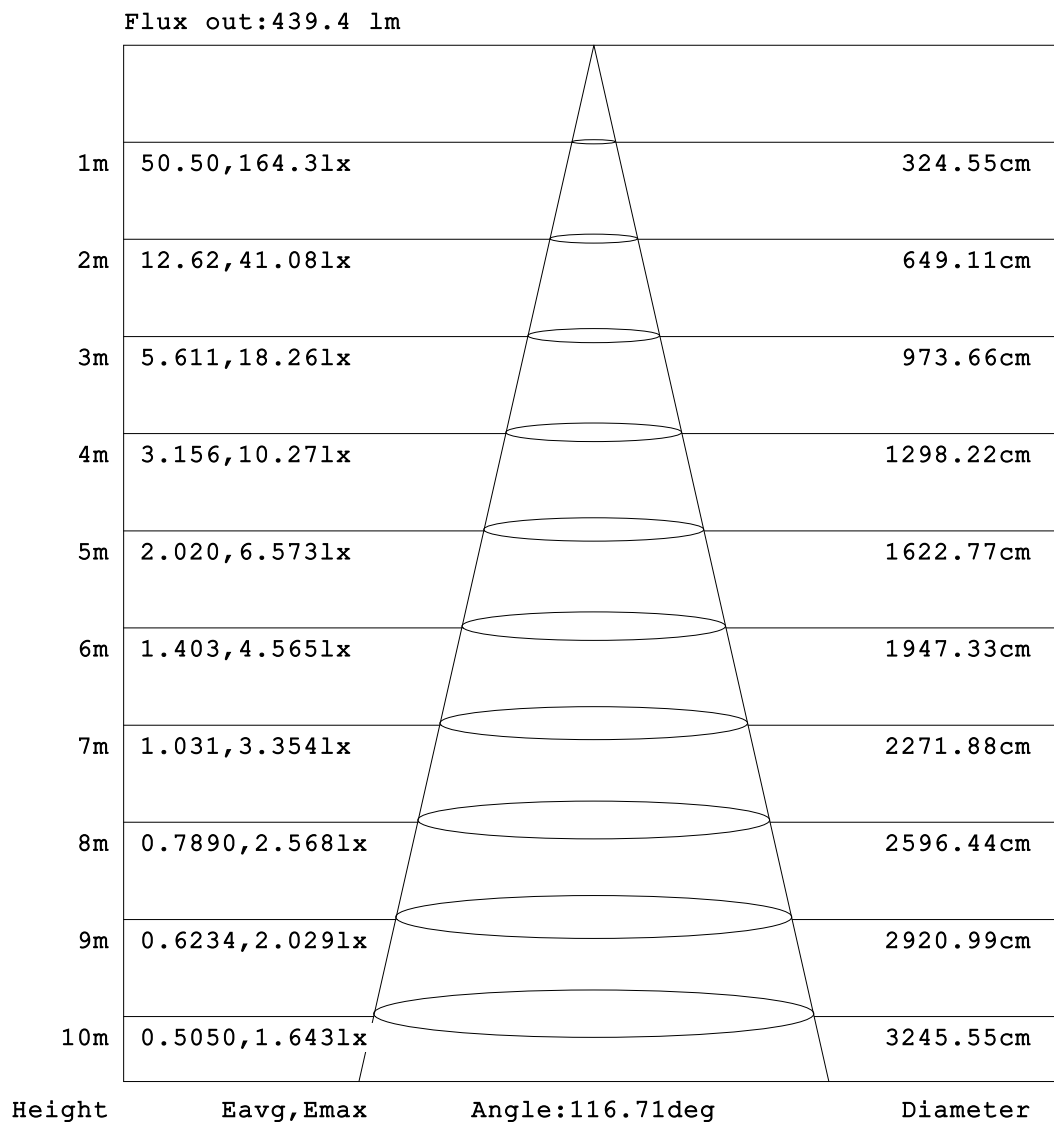
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 02 January 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.459
Humidity: 65.0%
Test Distance: 8.186m [K=1.0000]
Remarks:

AAI Figure

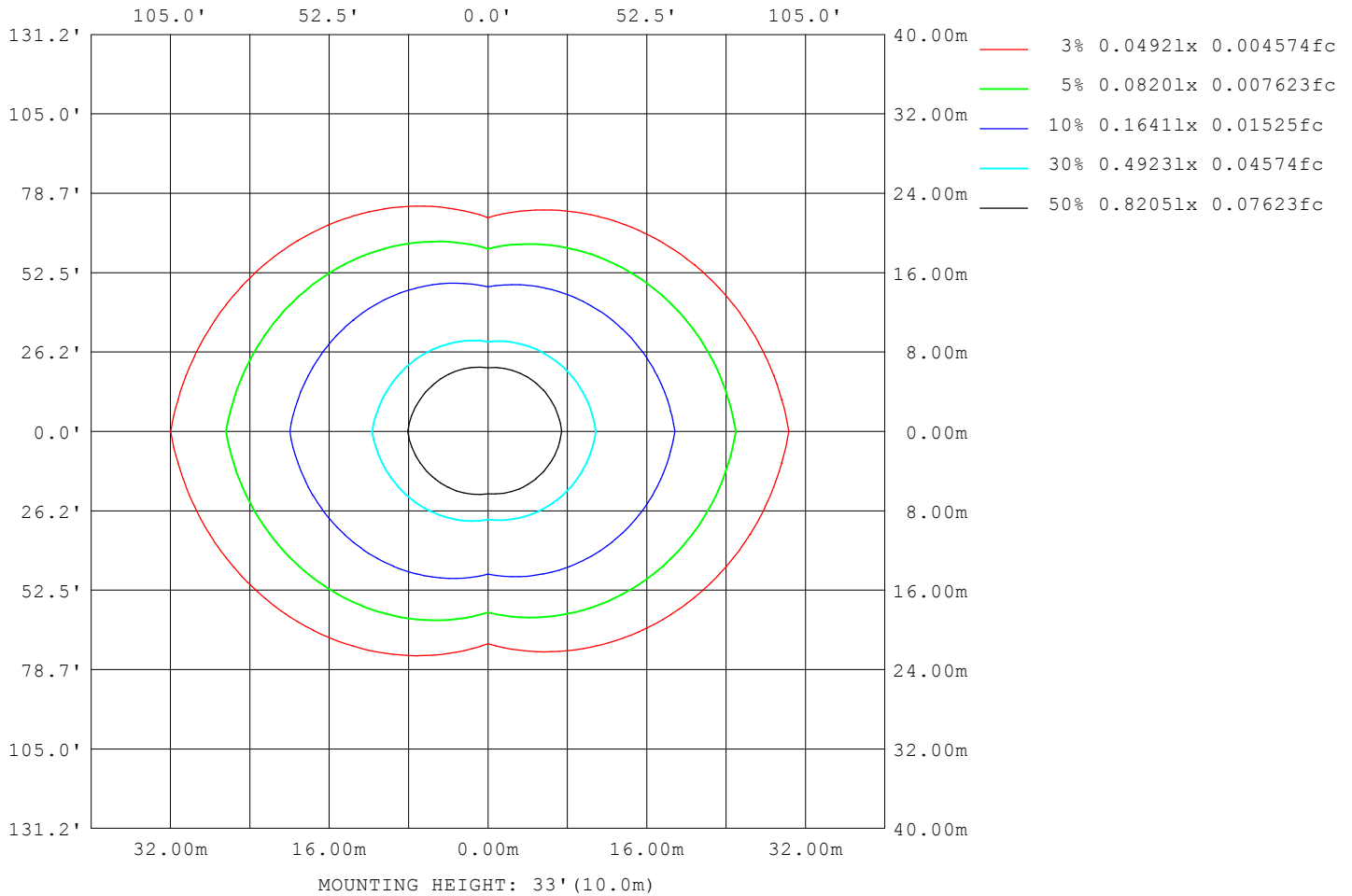


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:DAMIN
 Test Date:02 January 2025

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.459
 Humidity:65.0%
 Test Distance:8.186m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: DAMIN
 Test Date: 02 January 2025

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.459
 Humidity: 65.0%
 Test Distance: 8.186m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:101.40V I:0.2940A P:26.400W PF:0.8850 Freq:50.00Hz Lamp Flux:1222.19x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

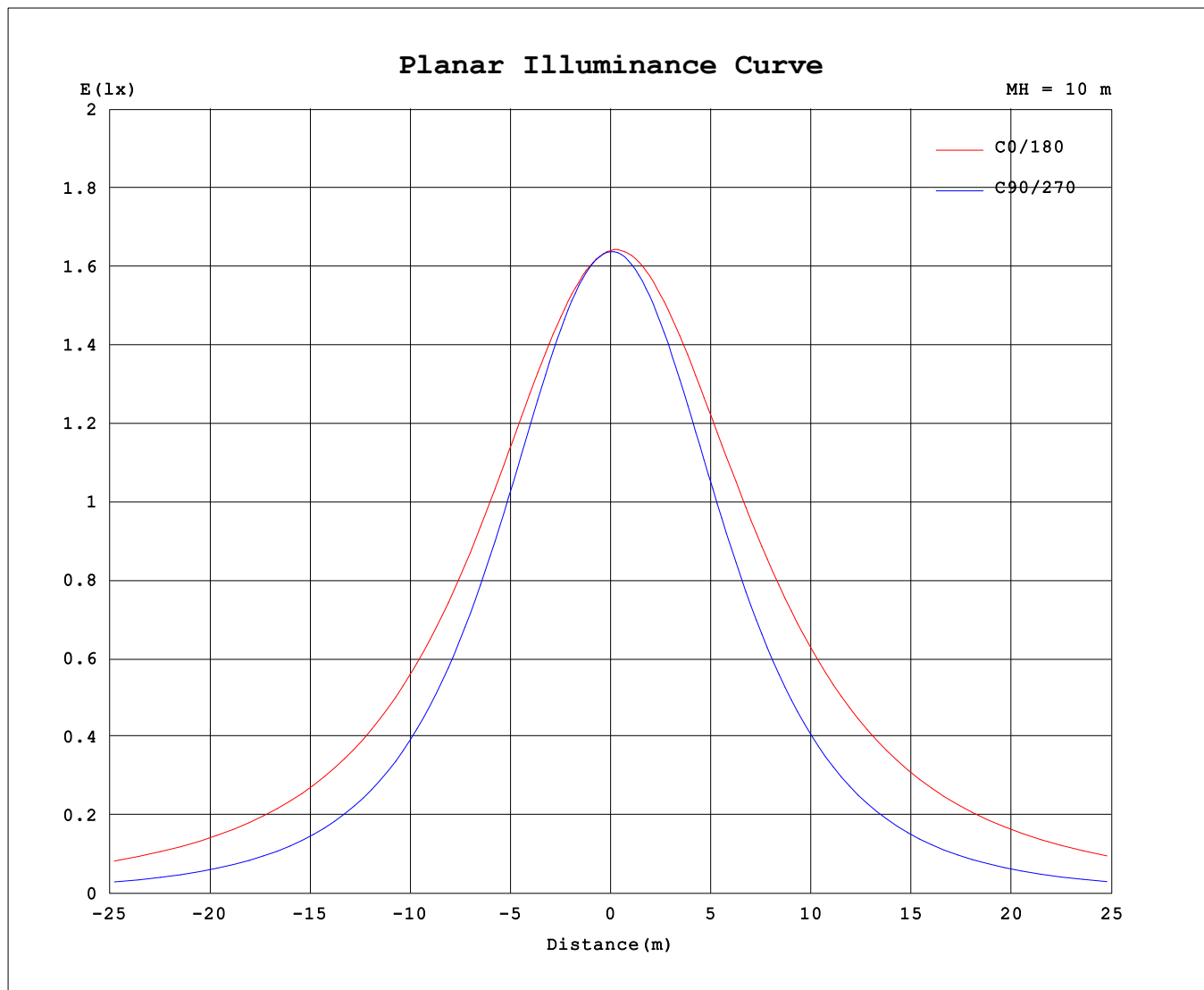
AvgL	cd/m2
L_0~180 (65) av	20257
L_0~180 (75) av	33393
L_0~180 (85) av	99590
L_90~270 (65) av	7765
L_90~270 (75) av	7717
L_90~270 (85) av	7990
L_45 (65) av	12543
L_45 (75) av	17508
L_45 (85) av	42855

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:02 January 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.459
Humidity:65.0%
Test Distance:8.186m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 02 January 2025

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.459
Humidity: 65.0%
Test Distance: 8.186m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270															
0	164	164	164	164															
5	163	163	165	164															
10	162	161	166	162															
15	161	157	167	159															
20	160	152	168	154															
25	159	146	170	149															
30	159	138	171	142															
35	158	130	173	134															
40	158	121	175	125															
45	158	111	177	115															
50	158	100	179	104															
55	158	88.9	180	91.6															
60	159	77.1	182	79.4															
65	159	64.8	183	66.5															
70	160	52.4	185	53.5															
75	160	39.9	185	40.0															
80	161	27.4	186	25.9															
85	160	15.0	187	12.8															
90	159	4.72	187	6.59															
95	154	4.22	185	5.04															
100	148	6.40	181	6.34															
105	142	8.67	177	8.10															
110	134	11.0	171	9.90															
115	126	12.8	163	11.7															
120	117	14.4	156	13.5															
125	107	15.9	147	15.1															
130	96.9	17.2	138	16.6															
135	86.4	18.4	129	17.8															
140	74.8	19.8	118	19.0															
145	60.0	22.2	107	20.3															
150	46.7	24.5	94.4	22.4															
155	39.0	26.8	83.1	25.4															
160	19.1	29.0	55.5	28.5															
165	9.41	31.0	38.7	32.1															
170	12.3	32.6	32.8	35.5															
175	17.2	33.5	28.3	38.4															
180	23.5	33.5	23.6	40.9															

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:02 January 2025

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.459
Humidity:65.0%
Test Distance:8.186m [K=1.0000]
Remarks: