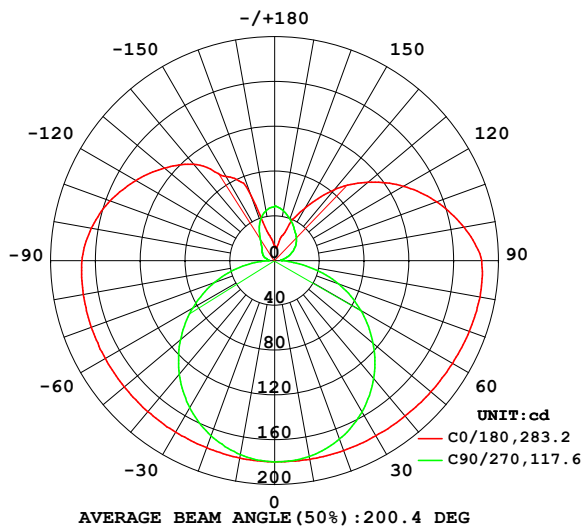


LUMINAIRE PHOTOMETRIC TEST REPORT

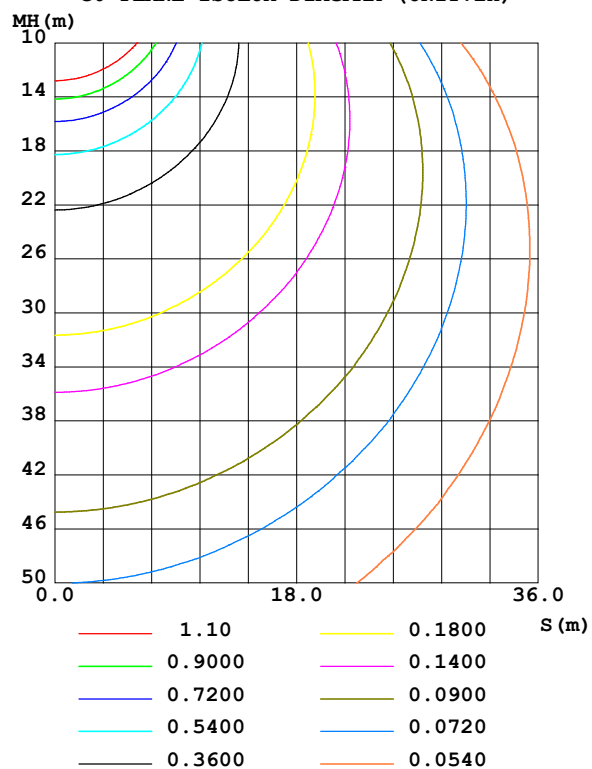
Test:U:101.40V I:0.3070A P:27.500W PF:0.8840 Freq:50.00Hz Lamp Flux:1297.29x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 47.17 lm/W
MODEL	80024-30MP	I _{max} (cd)	186.3	S/MH(C0/180)	1.55	
NOMINAL POWER(W)	15	LOR(%)	100.0	S/MH(C90/270)	1.29	
RATED VOLTAGE(V)	100	TOTAL FLUX(lm)	1297.3	η UP,DN(C0-180)	17.9,31.7	
NOMINAL FLUX(lm)	1297.29	CIE CLASS	SEMI-D.	η UP,DN(C180-360)	17.3,33.1	
LAMPS INSIDE	1	η up (%)	35.2	CIBSE SHR NOM	1.50	
TEST VOLTAGE(V)	100	η down (%)	64.8	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	179.0	175.9	180.2	177.6					0- 10	17.08	17.08	1.32,1.32
20	177.8	166.4	180.5	169.5					10- 20	49.85	66.93	5.16,5.16
30	176.8	151.8	180.7	156.1					20- 30	78.68	145.6	11.2,11.2
40	176.1	132.5	181.1	137.7					30- 40	101.5	247.2	19.1,19.1
50	175.5	109.9	182.2	114.7					40- 50	117.1	364.3	28.1,28.1
60	174.7	84.43	183.5	88.85					50- 60	125.0	489.3	37.7,37.7
70	174.3	57.40	185.0	60.66					60- 70	125.3	614.6	47.4,47.4
80	173.7	29.05	186.3	28.74					70- 80	118.6	733.2	56.5,56.5
90	172.2	6.597	184.9	7.067					80- 90	106.9	840.2	64.8,64.8
100	166.4	6.501	171.9	7.650					90-100	98.72	938.9	72.4,72.4
110	156.4	9.864	153.9	14.03					100-110	91.23	1030	79.4,79.4
120	143.3	12.59	133.0	20.02					110-120	80.19	1110	85.6,85.6
130	128.7	14.75	109.1	25.33					120-130	66.13	1176	90.7,90.7
140	112.5	18.73	82.71	29.87					130-140	50.74	1227	94.6,94.6
150	86.94	27.06	54.34	34.60					140-150	35.04	1262	97.3,97.3
160	61.46	37.91	26.79	39.86					150-160	22.23	1284	99,99
170	21.45	45.37	12.35	45.35					160-170	9.899	1294	99.8,99.8
180	13.49	47.98	13.55	49.19					170-180	2.942	1297	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 304.26 lm

%lum = 23.5%

%lamp = 23.5%

Conical surface Flux(130deg): 552.35 lm

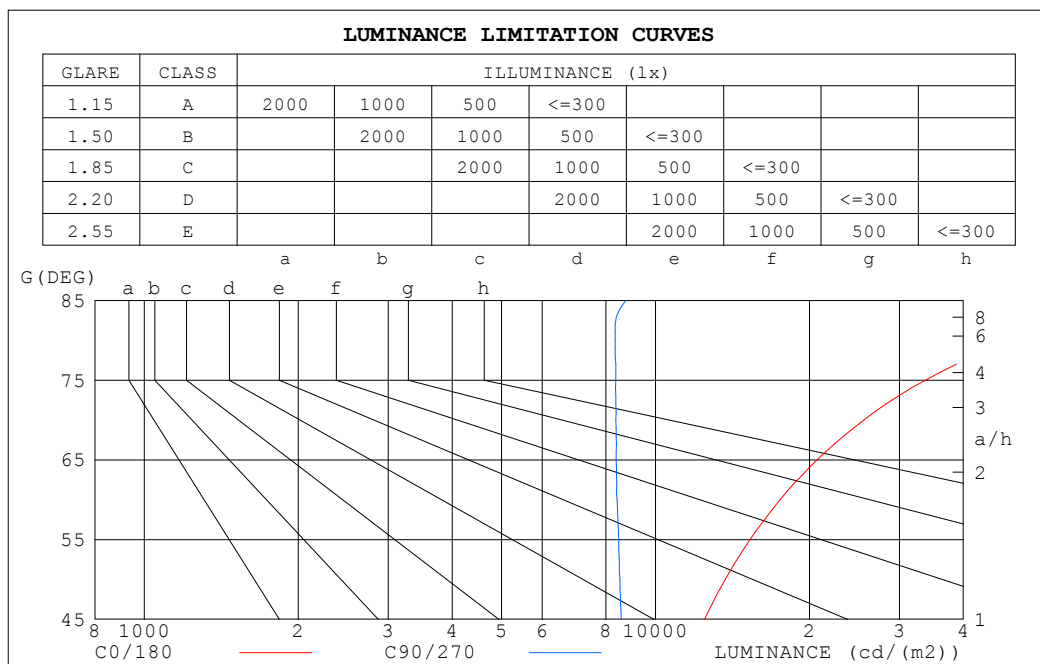
%lum = 42.6%

%lamp = 42.6%

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



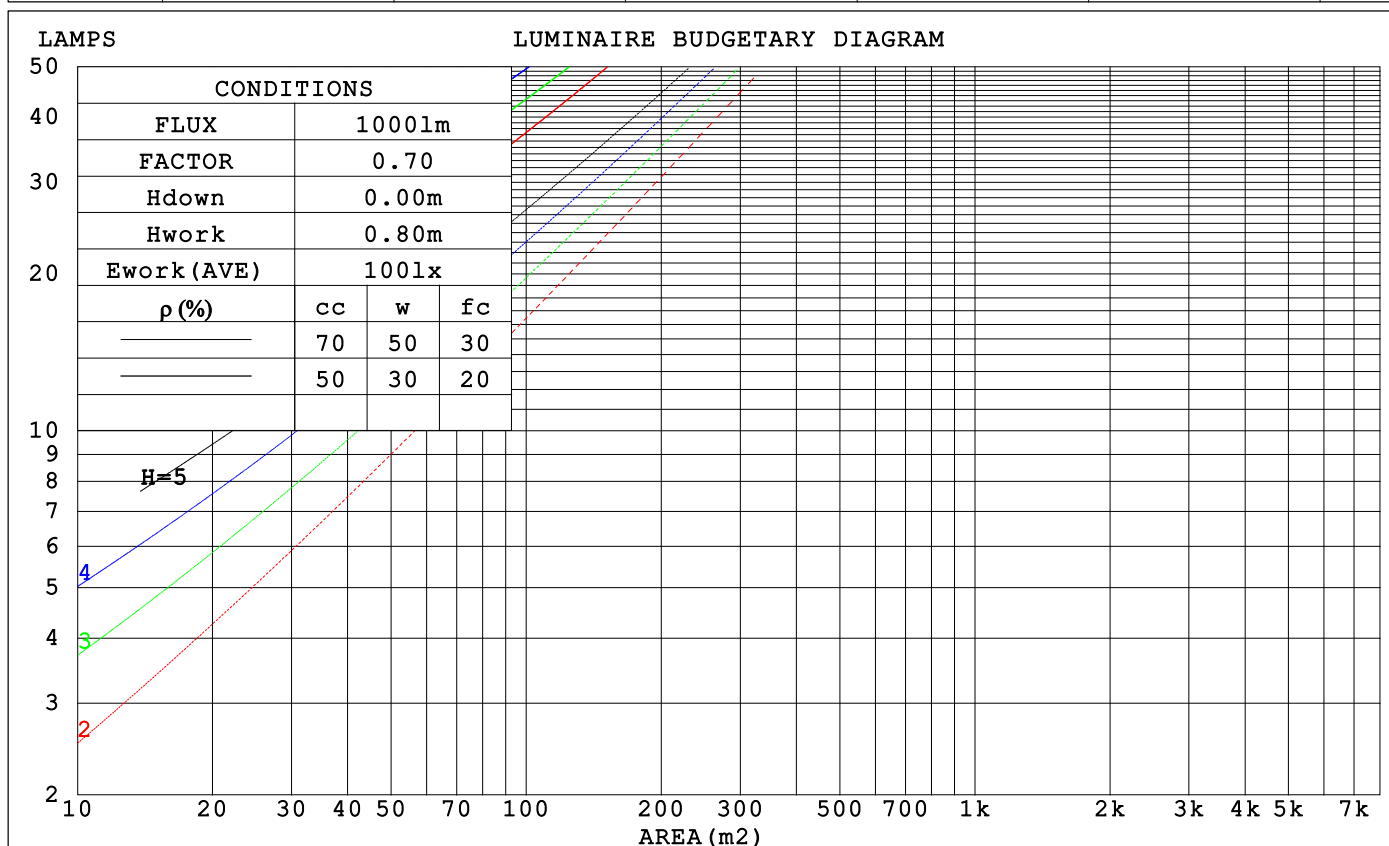
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	99620	8744
80	50171	8337
75	33710	8363
70	25556	8365
65	20692	8378
60	17528	8416
55	15306	8465
50	13695	8517
45	12465	8569

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:

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	.92	.92	.92	.80	.80	.80	.70	.70	.70	.65
1.0	.91	.86	.81	.85	.80	.76	.74	.71	.67	.65	.62	.59	.55	.53	.51	.46
2.0	.77	.70	.63	.72	.65	.59	.63	.58	.53	.55	.50	.46	.47	.43	.40	.36
3.0	.67	.58	.51	.63	.55	.48	.55	.48	.43	.47	.42	.38	.40	.36	.33	.29
4.0	.59	.49	.42	.55	.46	.40	.48	.41	.35	.41	.36	.31	.35	.31	.27	.24
5.0	.52	.42	.35	.49	.40	.34	.42	.35	.30	.37	.31	.27	.31	.27	.23	.20
6.0	.46	.37	.30	.43	.35	.29	.38	.31	.26	.33	.27	.23	.28	.24	.20	.17
7.0	.42	.33	.26	.39	.31	.25	.34	.27	.22	.30	.24	.20	.26	.21	.17	.15
8.0	.38	.29	.23	.35	.27	.22	.31	.25	.20	.27	.22	.18	.23	.19	.15	.13
9.0	.34	.26	.20	.32	.25	.19	.29	.22	.18	.25	.20	.16	.22	.17	.14	.12
10.0	.31	.23	.18	.30	.22	.17	.26	.20	.16	.23	.18	.14	.20	.16	.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	.393	.224	.071	.375	.214	.068	.342	.196	.063	.311	.179	.058	.282	.164	.053	
2.0	.335	.184	.056	.319	.175	.054	.288	.160	.050	.260	.146	.046	.234	.132	.042	
3.0	.295	.157	.047	.280	.150	.045	.252	.137	.042	.227	.124	.038	.203	.112	.035	
4.0	.264	.137	.040	.251	.131	.039	.225	.119	.036	.202	.108	.033	.180	.098	.030	
5.0	.239	.122	.035	.227	.117	.034	.204	.106	.031	.182	.096	.029	.162	.086	.026	
6.0	.219	.110	.031	.208	.105	.030	.186	.095	.028	.166	.086	.025	.147	.078	.023	
7.0	.202	.100	.028	.191	.095	.027	.171	.087	.025	.153	.078	.023	.135	.070	.021	
8.0	.187	.091	.026	.177	.087	.025	.159	.079	.023	.142	.072	.021	.125	.064	.019	
9.0	.174	.084	.023	.165	.080	.023	.148	.073	.021	.132	.066	.019	.117	.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	.459	.459	.459	.392	.392	.392	.268	.268	.268	.154	.154	.154	.049	.049	.049	
1.0	.457	.426	.398	.391	.366	.343	.267	.252	.237	.154	.146	.138	.049	.047	.045	
2.0	.450	.404	.365	.386	.348	.316	.264	.241	.220	.152	.140	.129	.049	.045	.042	
3.0	.443	.388	.345	.380	.335	.299	.261	.233	.210	.151	.136	.124	.048	.044	.040	
4.0	.436	.376	.331	.374	.325	.288	.257	.227	.203	.149	.133	.120	.048	.043	.039	
5.0	.428	.367	.322	.368	.318	.280	.253	.222	.198	.147	.130	.117	.047	.043	.039	
6.0	.421	.359	.315	.362	.311	.275	.250	.218	.194	.145	.128	.115	.047	.042	.038	
7.0	.414	.353	.310	.356	.306	.271	.246	.215	.192	.143	.126	.114	.046	.041	.038	
8.0	.408	.348	.307	.351	.302	.267	.243	.212	.190	.141	.125	.113	.046	.041	.037	
9.0	.401	.343	.304	.346	.298	.265	.240	.209	.188	.140	.124	.112	.045	.041	.037	
10.0	.396	.339	.302	.341	.295	.263	.237	.207	.187	.138	.123	.112	.045	.040	.037	

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	20.5	21.7	21.2	22.4	23.3	17.8	19.0	18.5	19.7	20.6
3H	23.7	24.8	24.4	25.5	26.5	19.6	20.7	20.3	21.5	22.4
4H	25.6	26.6	26.3	27.4	28.3	20.4	21.4	21.2	22.2	23.2
6H	27.7	28.6	28.4	29.4	30.4	21.1	22.0	21.8	22.8	23.8
8H	28.8	29.8	29.6	30.6	31.6	21.3	22.3	22.1	23.1	24.0
12H	30.2	31.1	31.0	31.9	32.9	21.5	22.4	22.3	23.2	24.2
4H 2H	21.0	22.0	21.7	22.8	23.7	19.1	20.2	19.9	20.9	21.9
3H	24.4	25.3	25.2	26.1	27.1	21.2	22.1	22.0	22.9	23.9
4H	26.4	27.2	27.2	28.1	29.1	22.2	23.0	23.0	23.9	24.9
6H	28.7	29.5	29.6	30.3	31.4	23.1	23.8	23.9	24.7	25.7
8H	30.0	30.7	30.9	31.6	32.7	23.5	24.2	24.3	25.0	26.1
12H	31.6	32.2	32.4	33.1	34.1	23.7	24.4	24.6	25.3	26.3
8H 4H	26.7	27.4	27.6	28.3	29.3	23.5	24.2	24.3	25.0	26.1
6H	29.3	29.9	30.2	30.8	31.9	24.8	25.3	25.6	26.2	27.3
8H	30.8	31.3	31.7	32.2	33.3	25.4	25.9	26.2	26.8	27.9
12H	32.6	33.0	33.5	33.9	35.1	25.9	26.3	26.8	27.3	28.4
12H 4H	26.7	27.4	27.6	28.2	29.3	23.9	24.6	24.8	25.4	26.5
6H	29.4	29.9	30.3	30.8	31.9	25.4	26.0	26.3	26.9	28.0
8H	31.0	31.4	31.9	32.4	33.5	26.2	26.7	27.1	27.6	28.7
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, 1297 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 0.9$)
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:

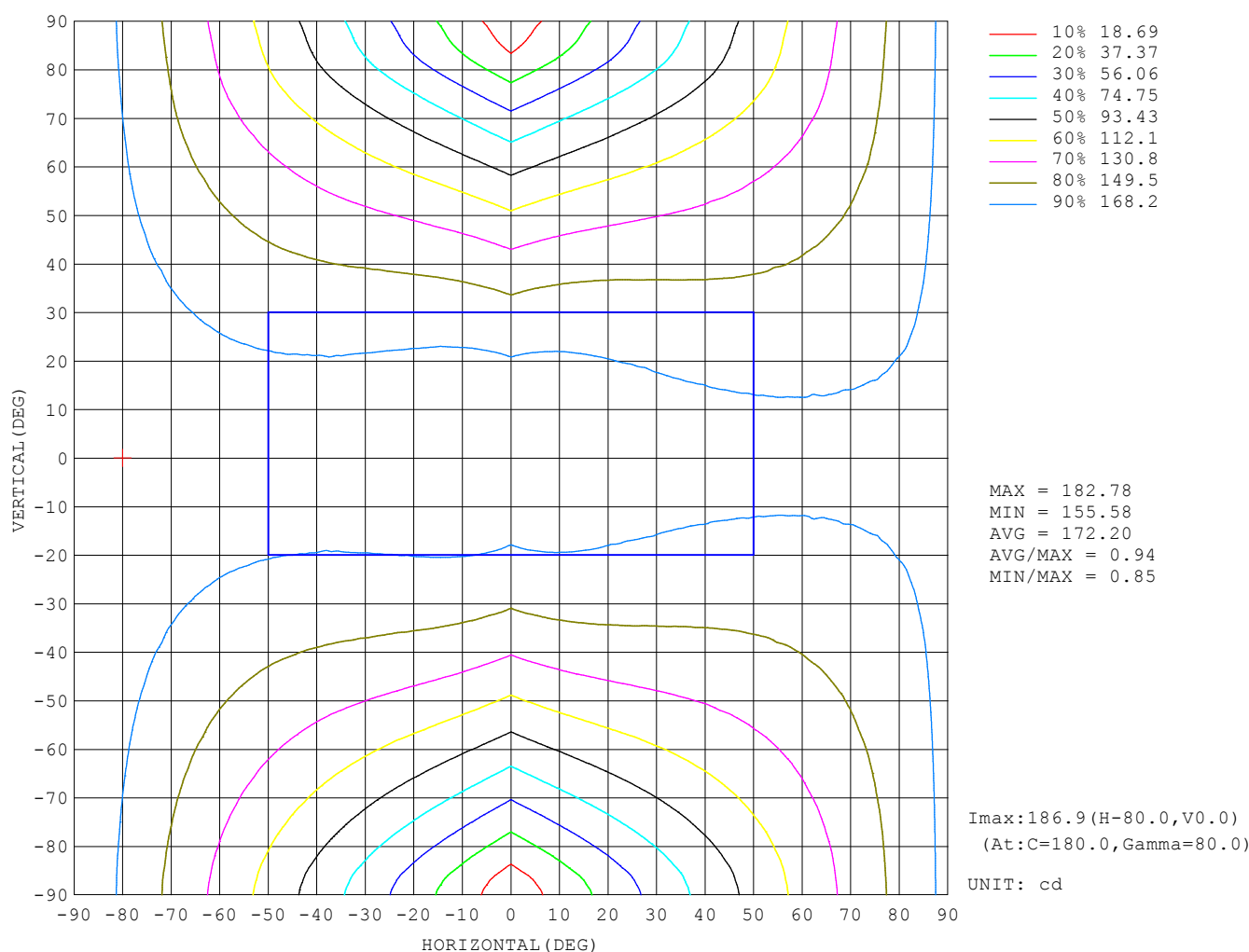
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	42	29	22	40	28	22	37	27	21	14
0.80	51	37	29	48	36	28	44	34	27	18
1.00	58	44	36	55	43	35	50	42	33	22
1.25	65	51	42	62	49	41	55	45	38	27
1.50	70	57	48	66	55	46	59	50	43	30
2.00	78	66	57	73	62	54	65	57	50	35
2.50	82	71	63	78	68	60	69	61	55	38
3.00	86	76	68	81	72	65	72	65	59	41
4.00	91	82	75	86	78	72	76	70	65	45
5.00	94	87	80	89	82	76	78	73	68	48
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:

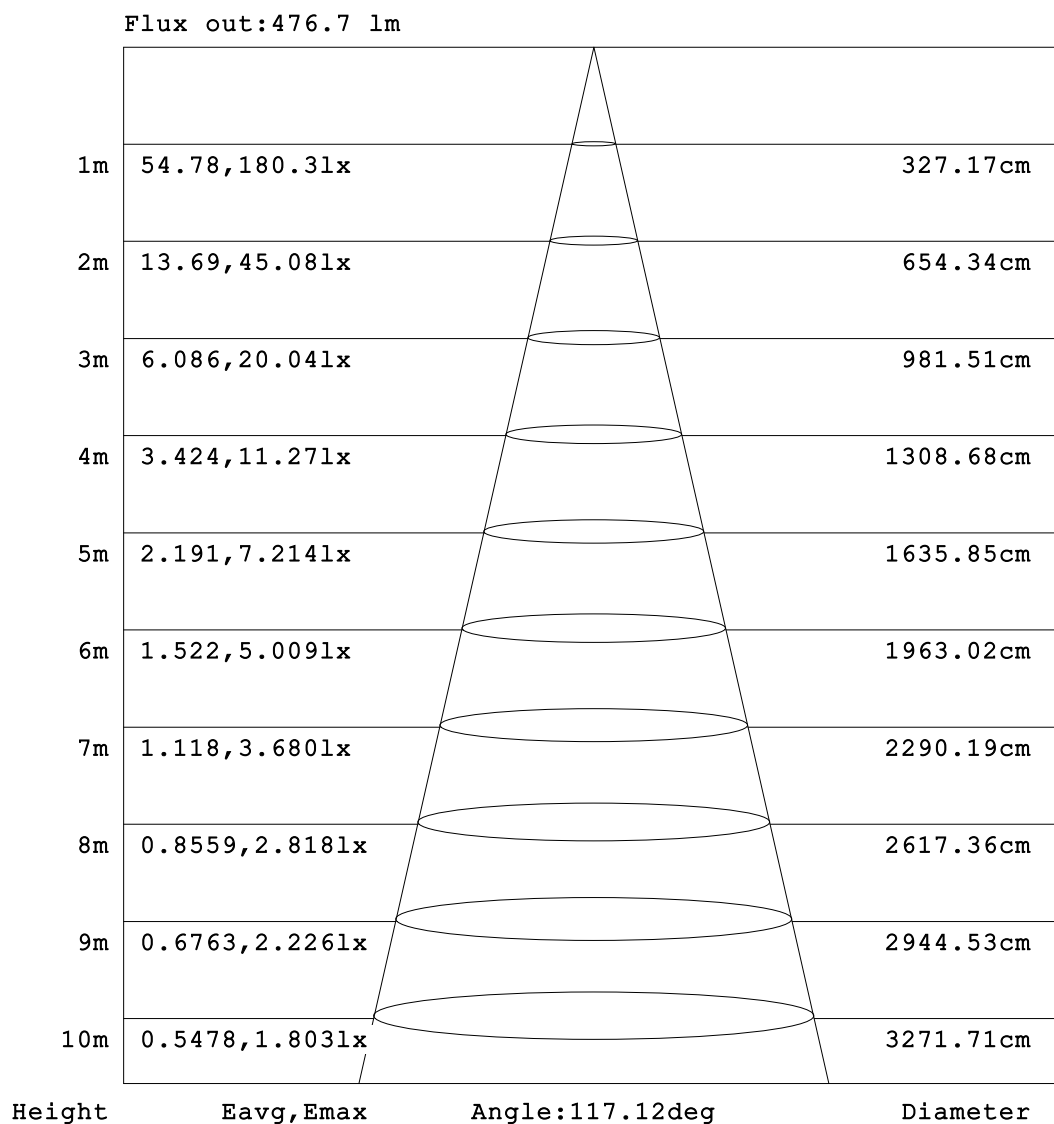
ISOCANDELA DIAGRAM



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

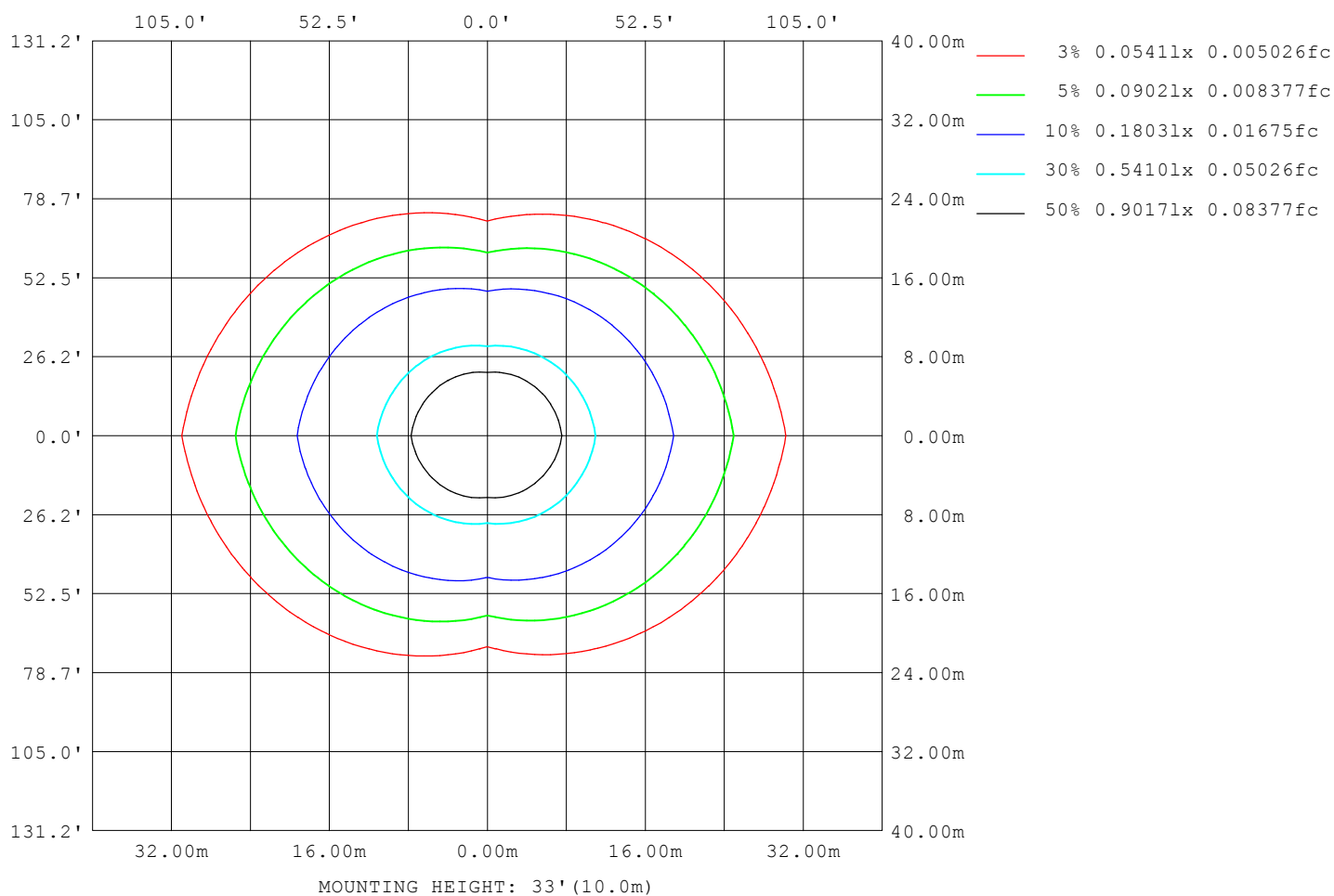


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3°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:

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:0.3070A P:27.500W PF:0.8840 Freq:50.00Hz Lamp Flux:1297.29x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

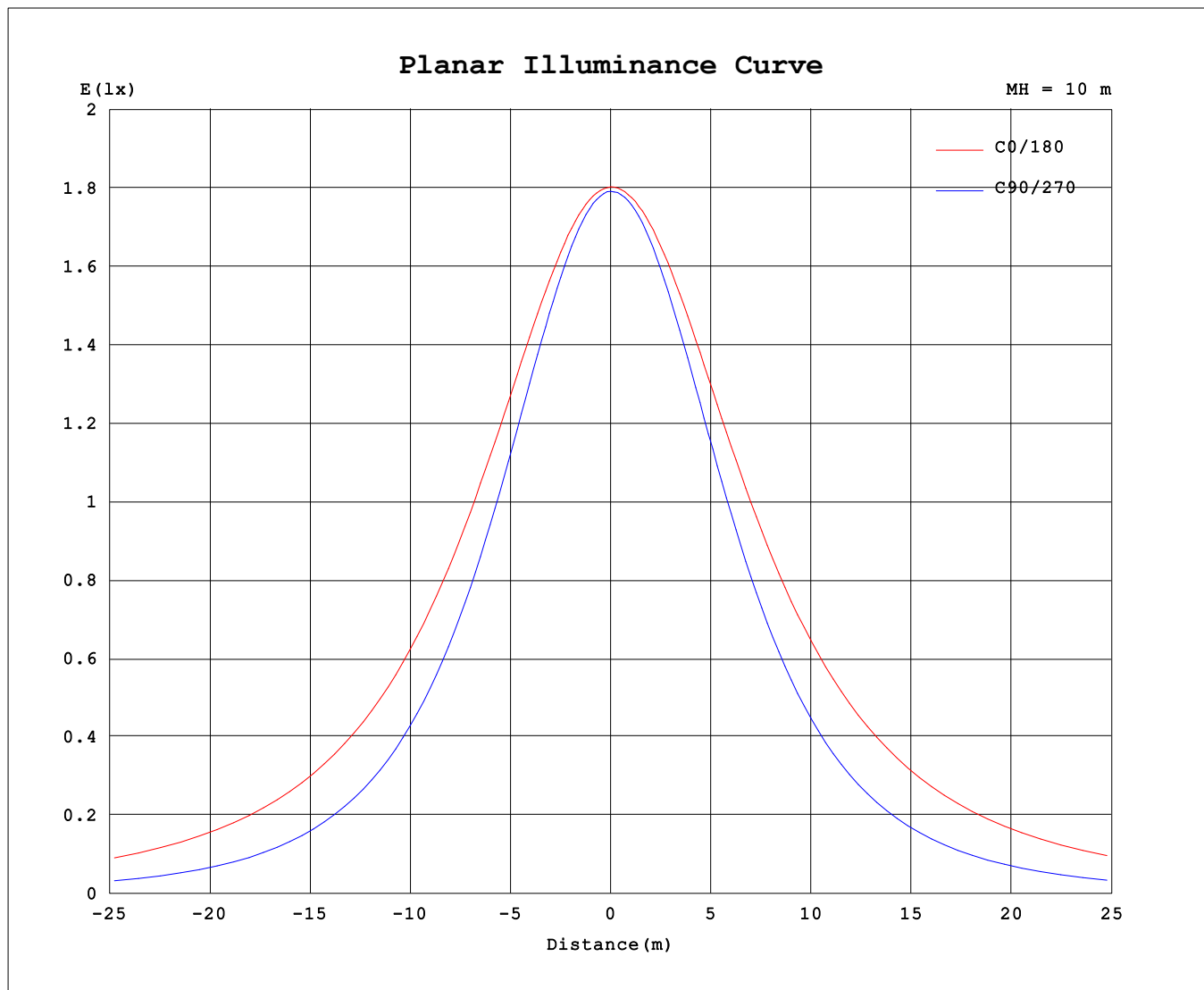
AvgL	cd/m2
L_0~180 (65) av	21215
L_0~180 (75) av	34736
L_0~180 (85) av	103019
L_90~270 (65) av	8646
L_90~270 (75) av	8549
L_90~270 (85) av	8698
L_45 (65) av	13414
L_45 (75) av	18477
L_45 (85) av	44434

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	180	180	180	180															
5	179	179	180	179															
10	179	176	180	178															
15	178	172	180	174															
20	178	166	181	169															
25	177	160	181	163															
30	177	152	181	156															
35	176	143	181	147															
40	176	132	181	138															
45	176	122	182	127															
50	175	110	182	115															
55	175	97.4	183	102															
60	175	84.4	183	88.9															
65	174	71.0	184	75.1															
70	174	57.4	185	60.7															
75	174	43.4	186	45.1															
80	174	29.0	186	28.7															
85	173	15.3	186	15.0															
90	172	6.60	185	7.07															
95	170	5.51	179	5.69															
100	166	6.50	172	7.65															
105	162	8.01	163	10.9															
110	156	9.86	154	14.0															
115	150	11.4	144	17.0															
120	143	12.6	133	20.0															
125	136	13.7	121	22.8															
130	129	14.8	109	25.3															
135	121	15.9	96.5	27.7															
140	112	18.7	82.7	29.9															
145	99.9	22.1	67.9	31.8															
150	86.9	27.1	54.3	34.6															
155	79.9	32.8	42.9	37.3															
160	61.5	37.9	26.8	39.9															
165	27.2	42.3	21.4	42.7															
170	21.4	45.4	12.4	45.3															
175	16.0	47.4	11.9	47.5															
180	13.5	48.0	13.5	49.2															

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: