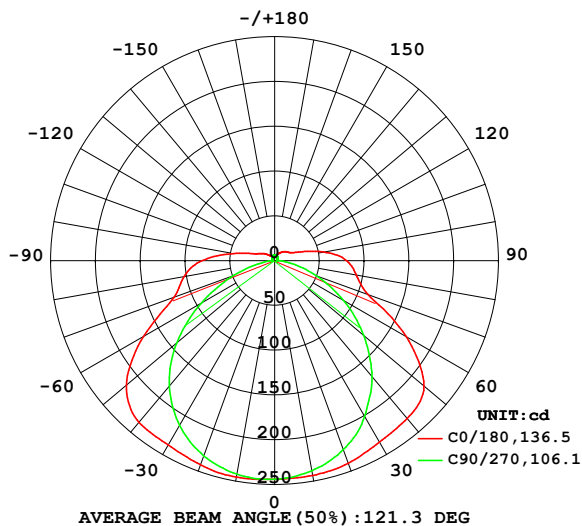


LUMINAIRE PHOTOMETRIC TEST REPORT

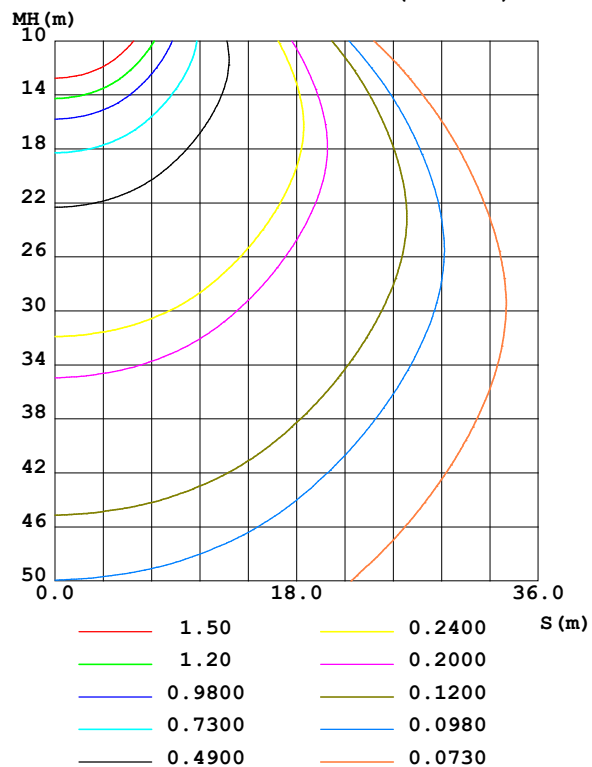
Test:U:99.000V I:0.1330A P:11.800W PF:0.9000 Freq:50.00Hz Lamp Flux:942.71x1 lm		
NAME: 2	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 79.89 lm/W			
MODEL		I _{max} (cd)	245.6	S/MH(C0/180)	1.49
NOMINAL POWER(W)	12	LOR(%)	100.0	S/MH(C90/270)	1.29
RATED VOLTAGE(V)	100	TOTAL FLUX(lm)	942.71	η UP,DN(C0-180)	5.4,44.2
NOMINAL FLUX(lm)	942.71	CIE CLASS	SEMI-D.	η UP,DN(C180-360)	4.7,45.6
LAMPS INSIDE	1	η up (%)	10.2	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	100	η down (%)	89.8	CIBSE SHR MAX	1.50

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:20 December 2023

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	243.6	238.3	245.5	241.9					0- 10	23.22	23.22	2.46,2.46
20	240.7	224.5	242.5	231.9					10- 20	67.69	90.91	9.64,9.64
30	234.2	200.9	237.7	212.3					20- 30	105.6	196.5	20.8,20.8
40	230.1	169.3	235.6	183.0					30- 40	133.7	330.2	35,35
50	217.5	129.9	216.1	142.5					40- 50	148.3	478.5	50.8,50.8
60	169.5	88.48	169.0	94.38					50- 60	138.1	616.6	65.4,65.4
70	111.1	49.73	119.4	48.71					60- 70	104.1	720.7	76.5,76.5
80	92.67	19.35	102.9	14.59					70- 80	72.46	793.2	84.1,84.1
90	80.46	3.828	81.31	3.220					80- 90	53.59	846.8	89.8,89.8
100	55.96	2.678	46.68	3.043					90-100	38.14	884.9	93.9,93.9
110	28.41	3.079	22.63	3.444					100-110	21.43	906.3	96.1,96.1
120	18.66	3.440	16.12	3.999					110-120	12.00	918.4	97.4,97.4
130	15.82	3.854	10.83	4.527					120-130	8.685	927.0	98.3,98.3
140	12.87	4.414	6.916	5.043					130-140	6.181	933.2	99,99
150	9.603	5.193	5.700	5.615					140-150	4.319	937.5	99.5,99.5
160	6.300	5.739	5.647	6.069					150-160	2.926	940.5	99.8,99.8
170	5.556	6.144	5.779	6.360					160-170	1.673	942.1	99.9,99.9
180	5.827	6.413	5.827	6.461					170-180	0.5759	942.7	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 403.8 lm

%lum = 42.8%

%lamp = 42.8%

Conical surface Flux(130deg): 673.73 lm

%lum = 71.5%

%lamp = 71.5%

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:20 December 2023

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

Test:U:99.000V I:0.1330A P:11.800W PF:0.9000 Freq:50.00Hz

Lamp Flux:942.71x1 lm

NAME: 2

TYPE:

WEIGHT:

SPEC.:

DIM.:

SERIAL No.:

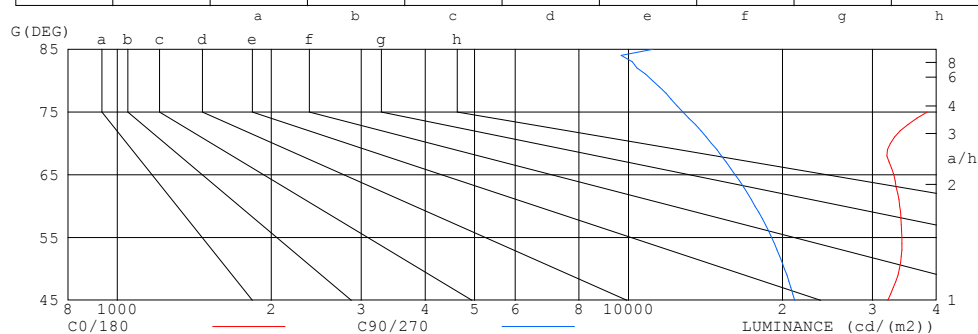
MFR.: EVERFINE

SUR.:

Shielding Angle:

LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	100257	11162
80	53405	11135
75	38396	12779
70	32520	14530
65	33025	16156
60	33930	17683
55	34266	19054
50	33866	20188
45	32148	21146

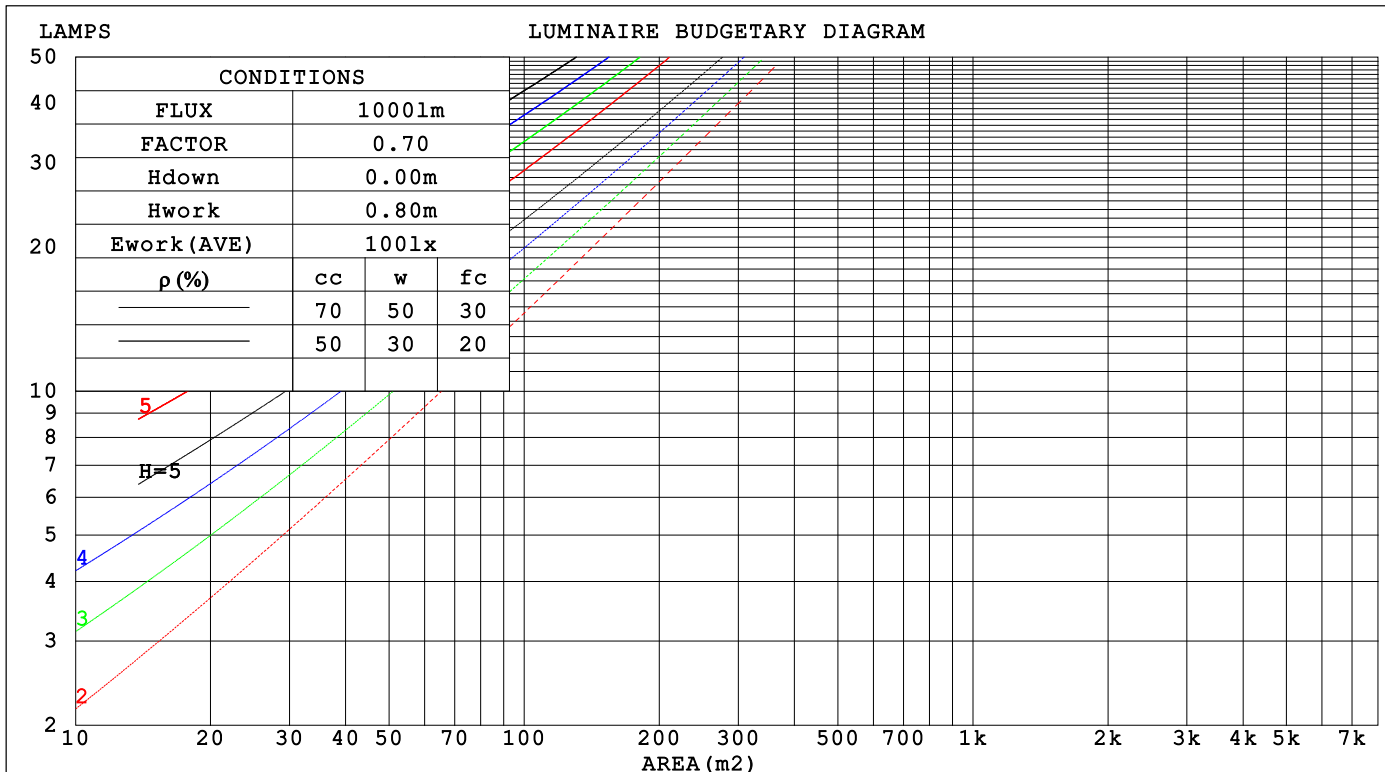
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:20 December 2023

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

Test:U:99.000V I:0.1330A P:11.800W PF:0.9000 Freq:50.00Hz Lamp Flux:942.71x1 lm		
NAME: 2	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	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															Coefficients of Utilization(CU)														
0.0	1.17	1.17	1.17	1.13	1.13	1.13	1.05	1.05	1.05	.99	.99	.99	.93	.93	.93	.90														
1.0	.99	.94	.90	.96	.91	.87	.90	.86	.83	.84	.81	.78	.79	.76	.74	.71														
2.0	.85	.78	.72	.83	.76	.70	.77	.72	.67	.73	.68	.64	.68	.64	.61	.58														
3.0	.75	.66	.59	.72	.64	.58	.68	.61	.55	.64	.58	.53	.60	.55	.51	.48														
4.0	.66	.56	.49	.64	.55	.49	.60	.53	.47	.56	.50	.45	.53	.48	.43	.41														
5.0	.58	.49	.42	.57	.48	.41	.53	.46	.40	.50	.44	.39	.47	.42	.37	.35														
6.0	.52	.43	.37	.51	.42	.36	.48	.40	.35	.45	.39	.34	.43	.37	.33	.30														
7.0	.47	.38	.32	.46	.38	.32	.43	.36	.31	.41	.35	.30	.39	.33	.29	.27														
8.0	.43	.34	.28	.42	.34	.28	.40	.32	.27	.38	.31	.26	.36	.30	.26	.24														
9.0	.39	.31	.25	.38	.30	.25	.36	.29	.24	.35	.28	.24	.33	.27	.23	.21														
10.0	.36	.28	.23	.35	.28	.23	.34	.27	.22	.32	.26	.21	.30	.25	.21	.19														



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:20 December 2023

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

Test:U:99.000V I:0.1330A P:11.800W PF:0.9000 Freq:50.00Hz Lamp Flux:942.71x1 lm		
NAME: 2	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	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	.355	.202	.064	.345	.197	.062	.326	.187	.060	.308	.178	.057	.292	.169	.055		
2.0	.316	.173	.053	.307	.169	.052	.289	.161	.050	.273	.153	.048	.259	.146	.046		
3.0	.285	.152	.045	.277	.148	.045	.261	.142	.043	.247	.135	.041	.233	.129	.040		
4.0	.259	.135	.040	.252	.132	.039	.238	.126	.038	.225	.121	.036	.213	.116	.035		
5.0	.237	.121	.035	.231	.118	.035	.218	.114	.033	.206	.109	.032	.195	.104	.031		
6.0	.219	.110	.031	.213	.107	.031	.201	.103	.030	.191	.099	.029	.181	.095	.028		
7.0	.203	.100	.028	.197	.098	.028	.187	.094	.027	.177	.091	.026	.168	.087	.026		
8.0	.189	.092	.026	.184	.090	.026	.174	.087	.025	.165	.084	.024	.157	.081	.023		
9.0	.176	.085	.024	.172	.084	.023	.163	.081	.023	.155	.078	.022	.147	.075	.022		
10.0	.165	.079	.022	.161	.078	.022	.153	.075	.021	.146	.072	.021	.139	.070	.020		

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	.268	.268	.268	.229	.229	.229	.156	.156	.156	.090	.090	.090	.029	.029	.029		
1.0	.262	.234	.209	.224	.201	.180	.153	.138	.124	.088	.080	.072	.028	.026	.023		
2.0	.254	.210	.174	.218	.181	.150	.149	.125	.105	.086	.073	.061	.028	.024	.020		
3.0	.246	.194	.151	.211	.167	.131	.145	.116	.092	.084	.068	.054	.027	.022	.018		
4.0	.239	.181	.136	.205	.156	.118	.141	.109	.083	.082	.064	.049	.026	.021	.016		
5.0	.231	.171	.126	.199	.148	.109	.137	.103	.077	.079	.061	.046	.026	.020	.015		
6.0	.224	.163	.118	.193	.141	.103	.133	.099	.073	.077	.058	.043	.025	.019	.014		
7.0	.217	.156	.113	.187	.135	.098	.129	.095	.070	.075	.056	.041	.024	.018	.014		
8.0	.210	.150	.109	.181	.130	.095	.125	.091	.067	.073	.054	.040	.024	.018	.013		
9.0	.204	.145	.105	.176	.126	.092	.122	.089	.065	.071	.052	.039	.023	.017	.013		
10.0	.199	.141	.103	.171	.123	.090	.119	.086	.064	.069	.051	.038	.022	.017	.013		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:20 December 2023

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

Test:U:99.000V I:0.1330A P:11.800W PF:0.9000 Freq:50.00Hz Lamp Flux:942.7lx1 lm										
NAME: 2			TYPE:			WEIGHT:				
SPEC.:			DIM.:			SERIAL No.:				
MFR.: EVERFINE			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	24.7	26.1	25.1	26.5	26.9	22.4	23.8	22.8	24.2	24.6
3H	26.4	27.8	26.9	28.2	28.6	23.5	24.8	23.9	25.2	25.7
4H	27.4	28.7	27.9	29.1	29.6	23.9	25.2	24.4	25.6	26.1
6H	28.7	29.9	29.2	30.4	30.9	24.2	25.4	24.7	25.9	26.4
8H	29.6	30.7	30.0	31.2	31.7	24.3	25.5	24.8	25.9	26.5
12H	30.5	31.7	31.0	32.1	32.6	24.4	25.5	24.9	26.0	26.5
4H 2H	25.0	26.3	25.5	26.7	27.2	23.3	24.5	23.7	25.0	25.4
3H	27.0	28.1	27.5	28.6	29.1	24.6	25.7	25.1	26.2	26.7
4H	28.2	29.2	28.7	29.7	30.2	25.2	26.2	25.7	26.7	27.3
6H	29.7	30.6	30.3	31.2	31.7	25.7	26.6	26.3	27.1	27.7
8H	30.7	31.5	31.2	32.1	32.7	25.9	26.7	26.5	27.3	27.9
12H	31.9	32.6	32.4	33.2	33.8	26.0	26.8	26.6	27.4	28.0
8H 4H	28.4	29.2	29.0	29.8	30.4	25.9	26.7	26.4	27.3	27.9
6H	30.2	30.9	30.8	31.5	32.1	26.7	27.4	27.3	28.0	28.6
8H	31.4	32.0	32.0	32.6	33.3	27.1	27.7	27.7	28.3	29.0
12H	32.8	33.4	33.4	34.0	34.7	27.4	28.0	28.0	28.6	29.3
12H 4H	28.4	29.2	29.0	29.7	30.4	26.1	26.9	26.7	27.4	28.1
6H	30.3	30.9	30.9	31.5	32.2	27.1	27.7	27.7	28.3	29.0
8H	31.5	32.1	32.2	32.7	33.4	27.6	28.2	28.2	28.8	29.5
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.1					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.3 / - 0.4				
2.0H	+ 0.2 / - 0.4					+ 0.2 / - 0.5				

CIE Pub.117, 942.7 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = -0.2)
Area: 0.01 m2

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:20 December 2023

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

Test:U:99.000V I:0.1330A P:11.800W PF:0.9000 Freq:50.00Hz Lamp Flux:942.71x1 lm		
NAME: 2	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

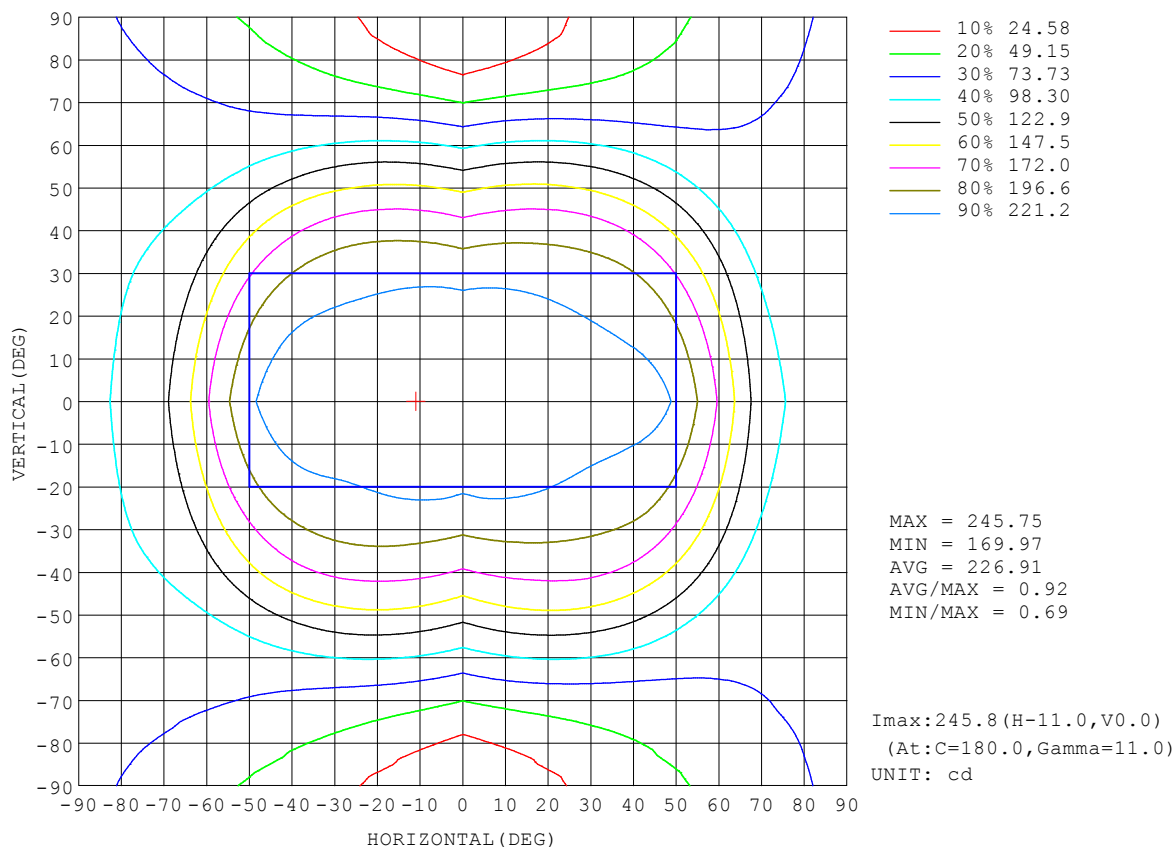
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	51	39	32	50	39	32	49	38	32	25
0.80	61	49	41	60	48	41	57	47	40	32
1.00	69	57	49	68	56	49	65	57	48	40
1.25	76	65	57	75	64	56	71	62	55	46
1.50	82	70	62	79	69	62	75	66	60	51
2.00	89	79	71	86	77	70	81	74	68	58
2.50	93	84	76	90	82	75	85	78	72	62
3.00	96	88	81	93	86	80	88	82	77	65
4.00	101	94	88	97	91	86	92	86	82	70
5.00	103	97	92	100	95	90	94	89	86	73
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: 20 December 2023

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

Test:U:99.000V I:0.1330A P:11.800W PF:0.9000 Freq:50.00Hz Lamp Flux:942.71x1 lm		
NAME: 2	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

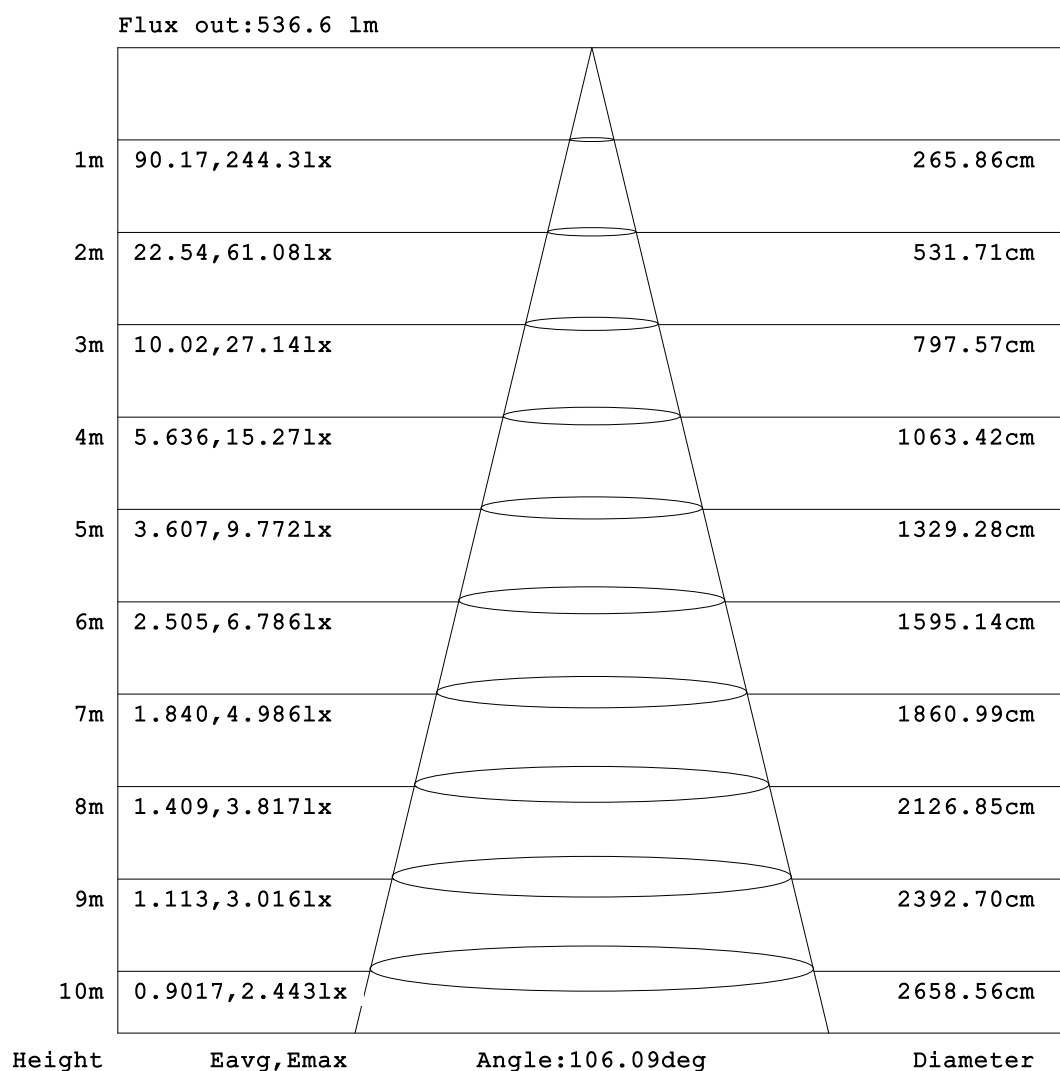


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 20 December 2023

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

Test:U:99.000V I:0.1330A P:11.800W PF:0.9000 Freq:50.00Hz Lamp Flux:942.71x1 lm		
NAME: 2	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



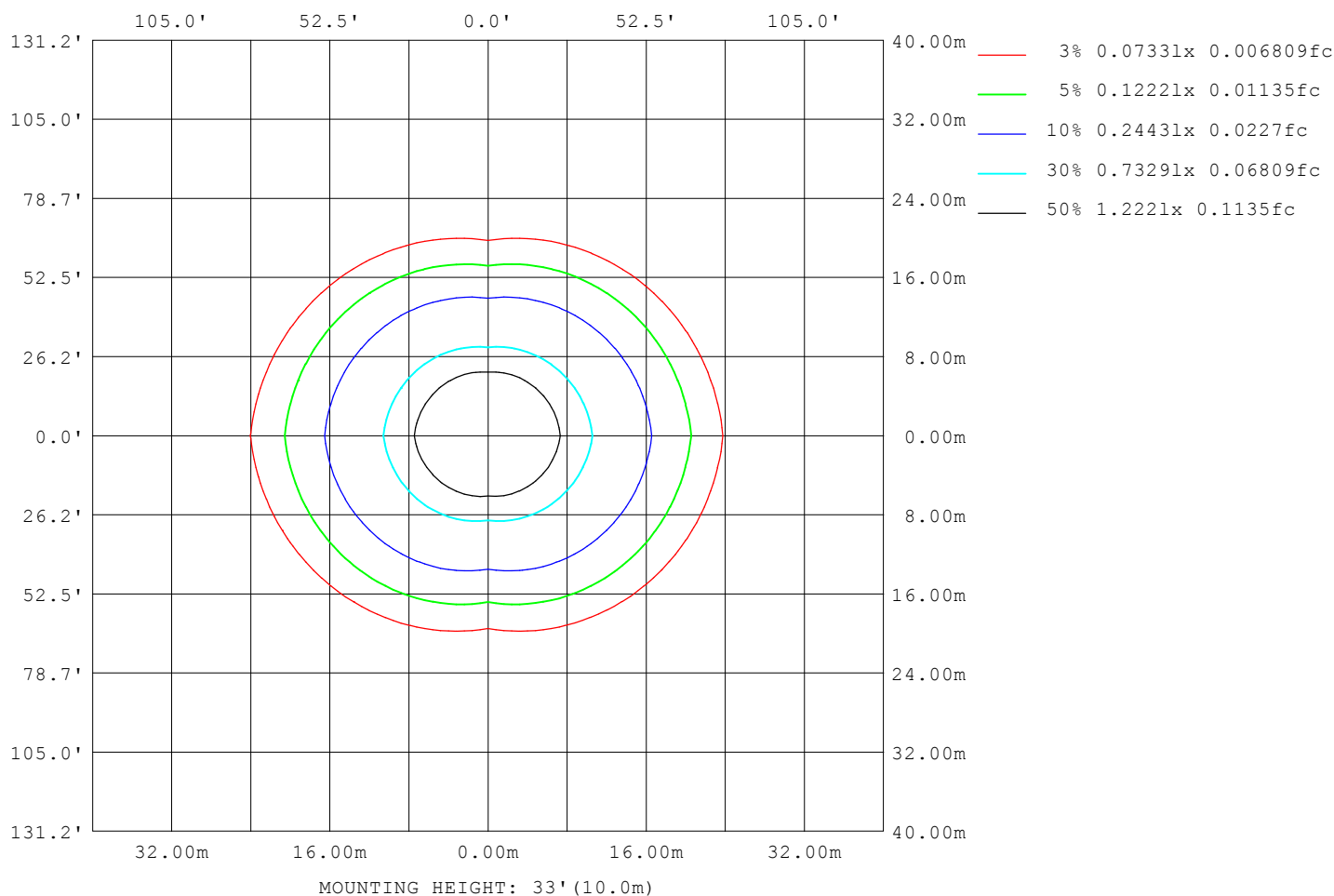
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:20 December 2023

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

Test:U:99.000V I:0.1330A P:11.800W PF:0.9000 Freq:50.00Hz Lamp Flux:942.71x1 lm		
NAME: 2	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:20 December 2023

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:99.000V I:0.1330A P:11.800W PF:0.9000 Freq:50.00Hz Lamp Flux:942.71x1 lm		
NAME: 2	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

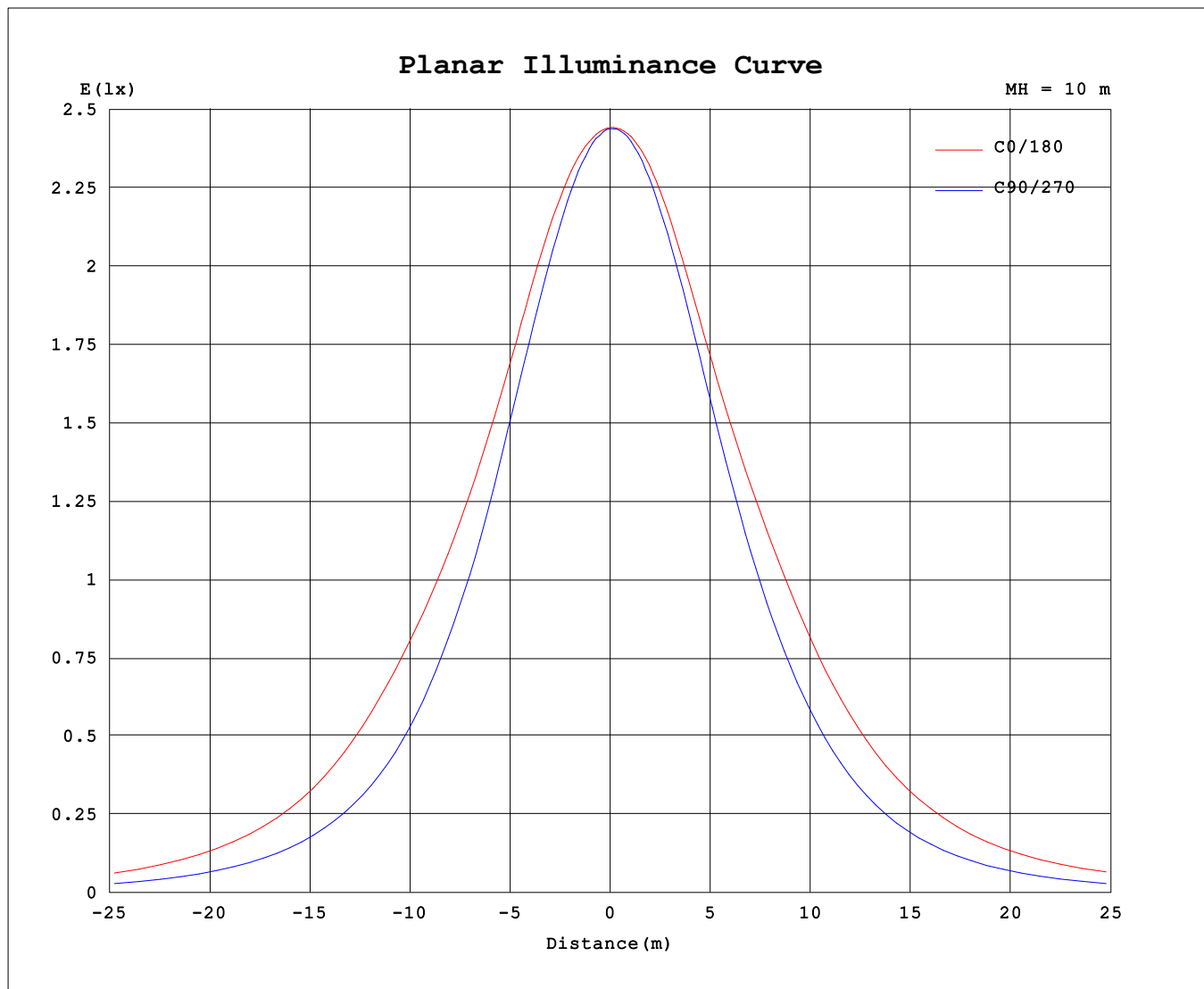
AvgL	cd/m2
L_0~180 (65) av	33182
L_0~180 (75) av	40421
L_0~180 (85) av	103838
L_90~270 (65) av	16404
L_90~270 (75) av	12119
L_90~270 (85) av	8499
L_45 (65) av	22712
L_45 (75) av	22869
L_45 (85) av	44510

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:20 December 2023

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: 20 December 2023

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

Test:U:99.000V I:0.1330A P:11.800W PF:0.9000 Freq:50.00Hz Lamp Flux:942.71x1 lm		
NAME: 2	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270														
0	244	244	244	244														
5	244	242	245	244														
10	244	238	245	242														
15	243	232	245	238														
20	241	224	242	232														
25	237	215	240	223														
30	234	201	238	212														
35	232	185	237	199														
40	230	169	236	183														
45	227	150	229	164														
50	218	130	216	142														
55	196	109	195	118														
60	170	88.5	169	94.4														
65	139	68.3	141	70.3														
70	111	49.7	119	48.7														
75	99.3	33.1	110	29.6														
80	92.7	19.3	103	14.6														
85	87.3	9.74	93.7	5.08														
90	80.5	3.83	81.3	3.22														
95	70.5	2.50	64.8	3.00														
100	56.0	2.68	46.7	3.04														
105	41.2	2.88	32.6	3.23														
110	28.4	3.08	22.6	3.44														
115	21.6	3.25	18.9	3.73														
120	18.7	3.44	16.1	4.00														
125	17.2	3.63	13.6	4.27														
130	15.8	3.85	10.8	4.53														
135	14.3	4.15	8.42	4.78														
140	12.9	4.41	6.92	5.04														
145	11.0	4.80	6.22	5.30														
150	9.60	5.19	5.70	5.62														
155	8.27	5.50	5.61	5.86														
160	6.30	5.74	5.65	6.07														
165	5.70	5.97	5.73	6.23														
170	5.56	6.14	5.78	6.36														
175	5.73	6.29	5.81	6.43														
180	5.83	6.41	5.83	6.46														

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:20 December 2023

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: