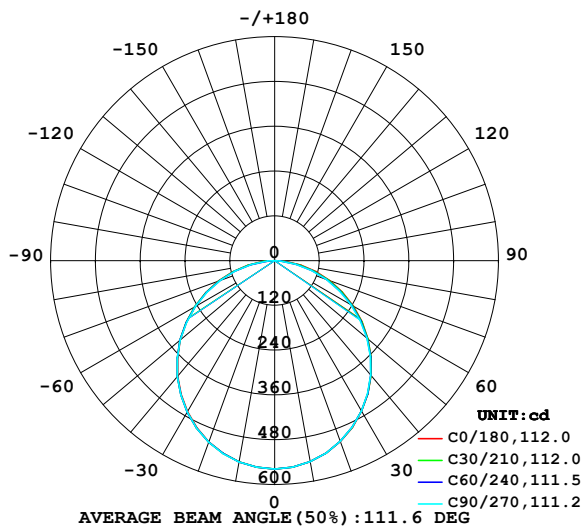


LUMINAIRE PHOTOMETRIC TEST REPORT

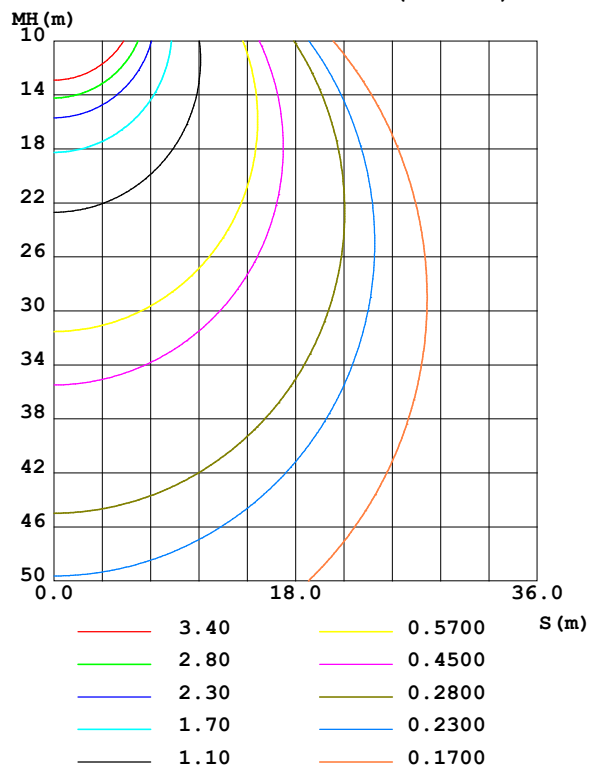
Test:U:220.38V I:0.1065A P:13.894W PF:0.5923 Freq:50.00Hz Lamp Flux:1587.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 114.29 lm/W			
MODEL	116C	Imax (cd)	558.5	S/MH(C0/180)	1.25
NOMINAL POWER(W)	15	LOR(%)	100.0	S/MH(C90/270)	1.25
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	1587.9	η UP,DN(C0-180)	0.0,49.7
NOMINAL FLUX(lm)	1587.94	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.3
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	219.5	η down (%)	100.0	CIBSE SHR MAX	1.35

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: DAMIN
Test Date: 2024-01-24

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity: 65.0%
Test Distance: 9.401m [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	547.0	547.1	546.8	547.4	547.6	547.6	547.9	547.3	0- 10	52.77	52.77	3.32,3.32
20	515.5	515.8	515.1	516.0	516.8	516.8	517.5	516.2	10- 20	150.7	203.5	12.8,12.8
30	466.1	466.7	465.5	466.9	467.9	468.2	469.1	467.3	20- 30	227.6	431.1	27.1,27.1
40	402.0	402.5	400.2	402.4	404.1	404.8	405.8	403.4	30- 40	273.3	704.4	44.4,44.4
50	326.6	327.4	322.4	327.3	330.1	329.2	330.6	327.9	40- 50	282.8	987.2	62.2,62.2
60	243.6	242.3	236.3	242.2	246.9	244.8	244.9	243.4	50- 60	255.8	1243	78.3,78.3
70	158.1	153.0	147.2	153.1	160.3	157.2	154.8	155.8	60- 70	197.1	1440	90.7,90.7
80	72.01	64.42	57.26	64.80	74.23	68.32	63.71	66.79	70- 80	116.6	1557	98,98
90	1.116	1.110	1.087	1.085	1.240	1.242	1.244	1.243	80- 90	31.26	1588	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): 846.89 lm

%lum = 53.3%

%lamp = 53.3%

Conical surface Flux(130deg): 1350.5 lm

%lum = 85.0%

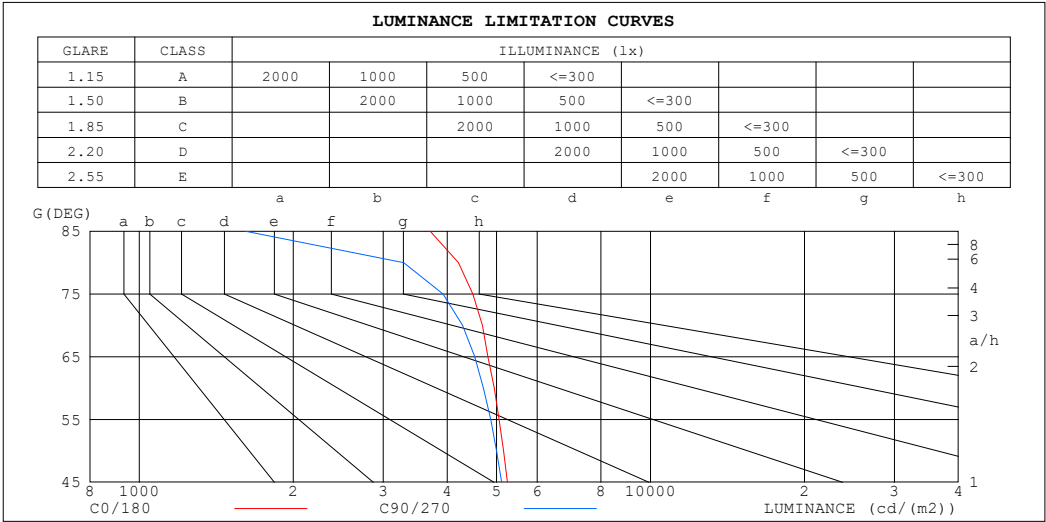
%lamp = 85.0%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:2024-01-24

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
 Humidity:65.0%
 Test Distance:9.401m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.38V I:0.1065A P:13.894W PF:0.5923 Freq:50.00Hz Lamp Flux:1587.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3710	1616
80	4208	3287
75	4491	3926
70	4689	4291
65	4810	4529
60	4944	4711
55	5057	4867
50	5156	5000
45	5244	5114

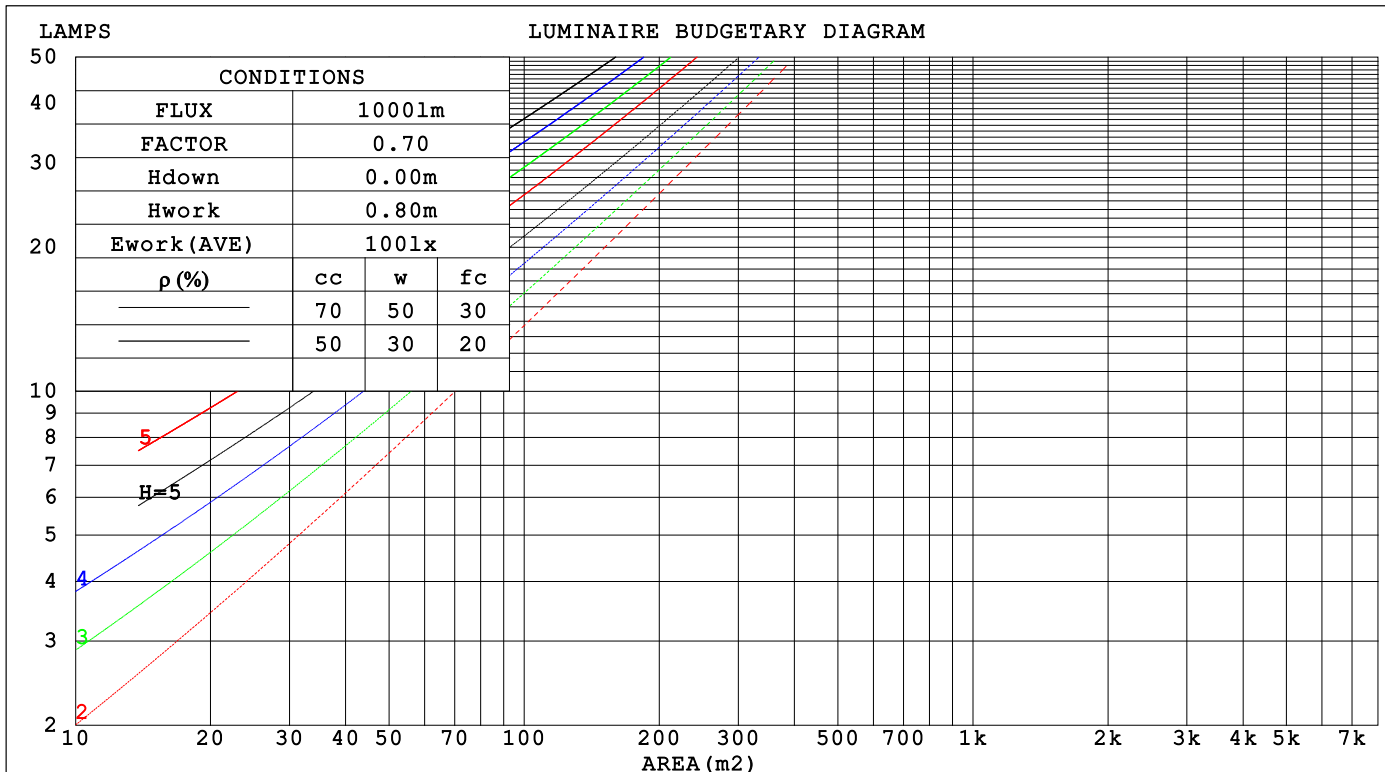
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2024-01-24

γ Range: 0 - 90DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.38V I:0.1065A P:13.894W PF:0.5923 Freq:50.00Hz Lamp Flux:1587.94x1 lm		
NAME:	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	1.19	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	1.04	.99	.95	1.01	.98	.94	.97	.94	.91	.93	.91	.88	.90	.88	.86	.83														
2.0	.90	.83	.78	.88	.82	.77	.85	.79	.75	.81	.77	.73	.78	.75	.71	.69														
3.0	.79	.71	.64	.78	.70	.64	.75	.68	.63	.72	.66	.61	.69	.64	.60	.58														
4.0	.70	.61	.54	.69	.60	.54	.66	.59	.53	.64	.58	.52	.62	.56	.52	.50														
5.0	.63	.53	.47	.61	.53	.47	.59	.52	.46	.57	.51	.45	.55	.50	.45	.43														
6.0	.56	.47	.41	.55	.47	.41	.54	.46	.40	.52	.45	.40	.50	.44	.39	.37														
7.0	.51	.42	.36	.50	.42	.36	.49	.41	.36	.47	.40	.35	.46	.40	.35	.33														
8.0	.47	.38	.32	.46	.38	.32	.45	.37	.32	.43	.37	.32	.42	.36	.31	.29														
9.0	.43	.34	.29	.42	.34	.29	.41	.34	.29	.40	.33	.28	.39	.33	.28	.26														
10.0	.39	.31	.26	.39	.31	.26	.38	.31	.26	.37	.30	.26	.36	.30	.26	.24														



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-01-24

γ Range: 0 - 90DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:220.38V I:0.1065A P:13.894W PF:0.5923 Freq:50.00Hz Lamp Flux:1587.94x1 lm		
NAME:	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	.312	.178	.056	.305	.174	.055	.292	.168	.054	.280	.161	.052	.269	.156	.050		
2.0	.294	.161	.049	.287	.158	.049	.276	.153	.048	.265	.149	.047	.255	.144	.045		
3.0	.271	.144	.043	.266	.142	.043	.255	.138	.042	.246	.135	.041	.237	.131	.041		
4.0	.250	.130	.038	.245	.128	.038	.236	.125	.037	.228	.122	.037	.220	.119	.036		
5.0	.231	.118	.034	.227	.116	.034	.219	.114	.034	.211	.111	.033	.204	.109	.033		
6.0	.214	.107	.031	.210	.106	.031	.203	.104	.030	.196	.102	.030	.190	.100	.030		
7.0	.199	.099	.028	.196	.098	.028	.189	.096	.028	.183	.094	.027	.178	.092	.027		
8.0	.186	.091	.026	.183	.090	.025	.177	.089	.025	.172	.087	.025	.167	.086	.025		
9.0	.174	.084	.024	.172	.084	.023	.166	.082	.023	.161	.081	.023	.157	.080	.023		
10.0	.164	.079	.022	.161	.078	.022	.157	.077	.022	.152	.076	.021	.148	.074	.021		

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	.180	.156	.134	.154	.134	.115	.106	.092	.080	.061	.053	.046	.019	.017	.015		
2.0	.172	.132	.098	.148	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011		
3.0	.165	.114	.074	.141	.099	.064	.097	.069	.045	.056	.040	.027	.018	.013	.009		
4.0	.157	.101	.058	.135	.087	.051	.093	.061	.036	.054	.036	.021	.017	.012	.007		
5.0	.150	.091	.047	.129	.078	.041	.089	.055	.029	.051	.032	.017	.017	.010	.006		
6.0	.142	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005		
7.0	.136	.075	.033	.117	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004		
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.003		
9.0	.123	.065	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003		
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-01-24

γ Range: 0 - 90DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.38V I:0.1065A P:13.894W PF:0.5923 Freq:50.00Hz Lamp Flux:1587.94x1 lm										
NAME:			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	16.9	18.5	17.2	18.7	18.9	16.7	18.3	17.0	18.5	18.7
3H	18.5	19.9	18.8	20.2	20.4	18.2	19.7	18.5	19.9	20.1
4H	19.2	20.5	19.5	20.8	21.1	18.8	20.2	19.1	20.4	20.7
6H	19.7	21.0	20.0	21.2	21.5	19.2	20.4	19.5	20.7	21.0
8H	19.8	21.1	20.2	21.3	21.6	19.2	20.4	19.5	20.7	21.0
12H	19.9	21.1	20.3	21.4	21.7	19.1	20.3	19.5	20.6	20.9
4H 2H	17.5	18.9	17.8	19.1	19.4	17.4	18.7	17.7	19.0	19.2
3H	19.3	20.5	19.7	20.8	21.1	19.1	20.2	19.4	20.5	20.8
4H	20.1	21.2	20.5	21.5	21.8	19.8	20.8	20.1	21.2	21.5
6H	20.7	21.7	21.1	22.0	22.4	20.2	21.2	20.6	21.5	21.9
8H	20.9	21.8	21.3	22.2	22.6	20.2	21.1	20.6	21.5	21.9
12H	21.0	21.9	21.5	22.2	22.6	20.2	21.0	20.6	21.4	21.8
8H 4H	20.4	21.3	20.8	21.6	22.0	20.1	20.9	20.5	21.3	21.7
6H	21.1	21.8	21.5	22.2	22.7	20.6	21.3	21.0	21.7	22.2
8H	21.3	22.0	21.8	22.4	22.9	20.6	21.3	21.1	21.7	22.2
12H	21.5	22.1	22.0	22.5	23.0	20.7	21.2	21.1	21.7	22.2
12H 4H	20.4	21.2	20.8	21.6	22.0	20.1	20.9	20.5	21.3	21.7
6H	21.1	21.8	21.6	22.2	22.6	20.6	21.3	21.1	21.7	22.1
8H	21.4	21.9	21.9	22.4	22.9	20.7	21.3	21.2	21.7	22.2
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.1 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.4				

CIE Pub.117, 1588 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 1.6)
Area: 0.1 m2

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-01-24

γ Range: 0 - 90DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.38V I:0.1065A P:13.894W PF:0.5923 Freq:50.00Hz Lamp Flux:1587.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

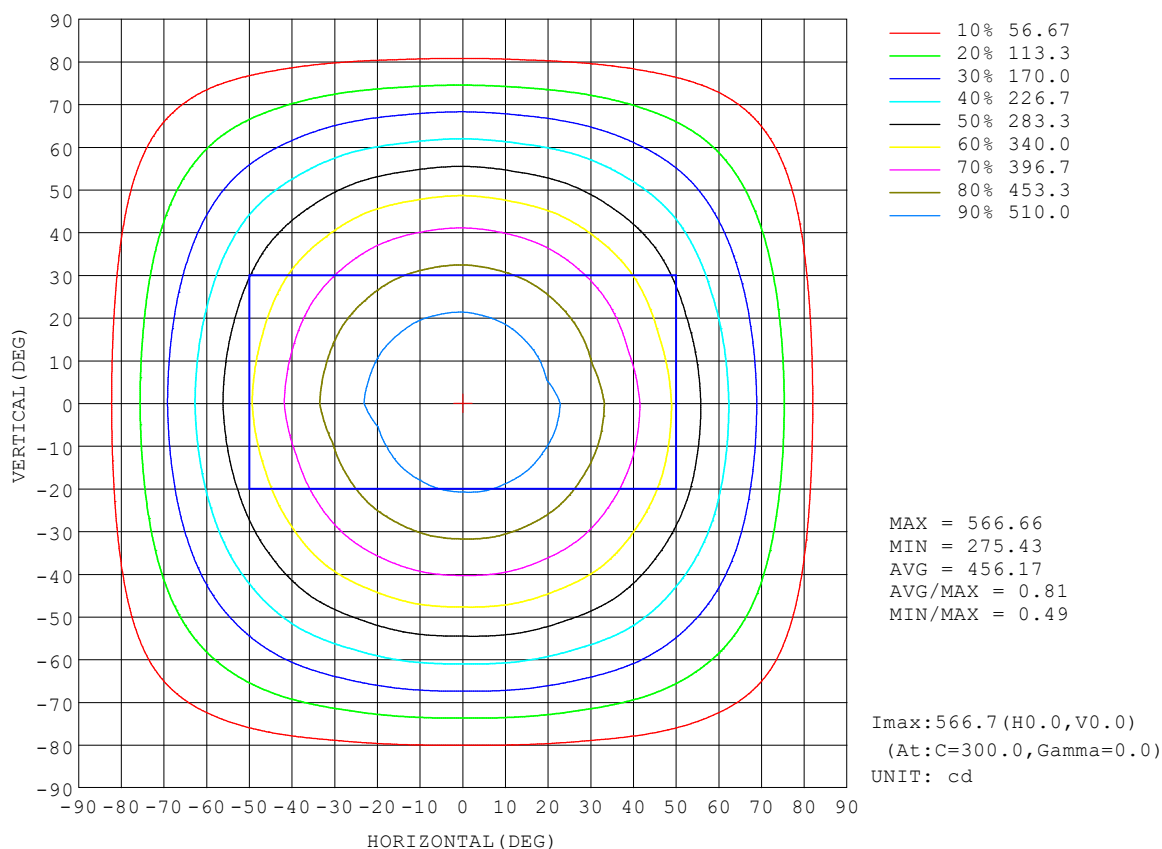
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	57	46	39	57	46	39	55	45	38	32
0.80	67	56	48	66	55	48	65	55	48	41
1.00	76	65	57	75	64	57	72	65	56	49
1.25	83	72	65	81	72	65	79	70	64	57
1.50	88	78	71	86	77	70	83	75	69	62
2.00	95	86	80	93	85	79	89	83	77	69
2.50	99	91	85	97	89	84	93	87	82	74
3.00	102	95	90	100	94	89	96	91	86	78
4.00	106	100	96	104	99	94	99	95	92	83
5.00	109	104	100	106	102	98	102	98	95	86
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: DAMIN
Test Date: 2024-01-24

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity: 65.0%
Test Distance: 9.401m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:220.38V I:0.1065A P:13.894W PF:0.5923 Freq:50.00Hz Lamp Flux:1587.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

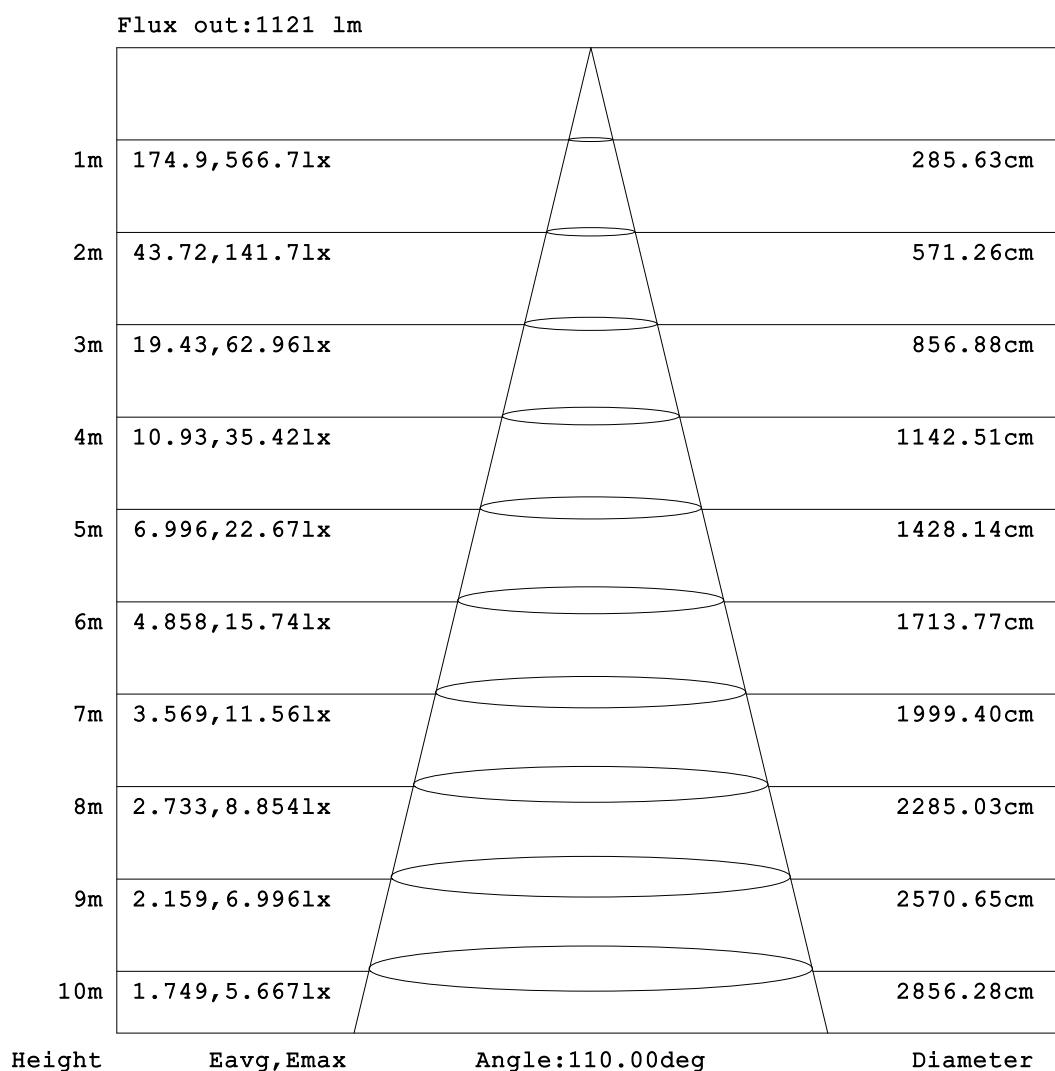


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2024-01-24

γ Range: 0 - 90DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks:

AAI Figure

Test:U:220.38V I:0.1065A P:13.894W PF:0.5923 Freq:50.00Hz Lamp Flux:1587.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



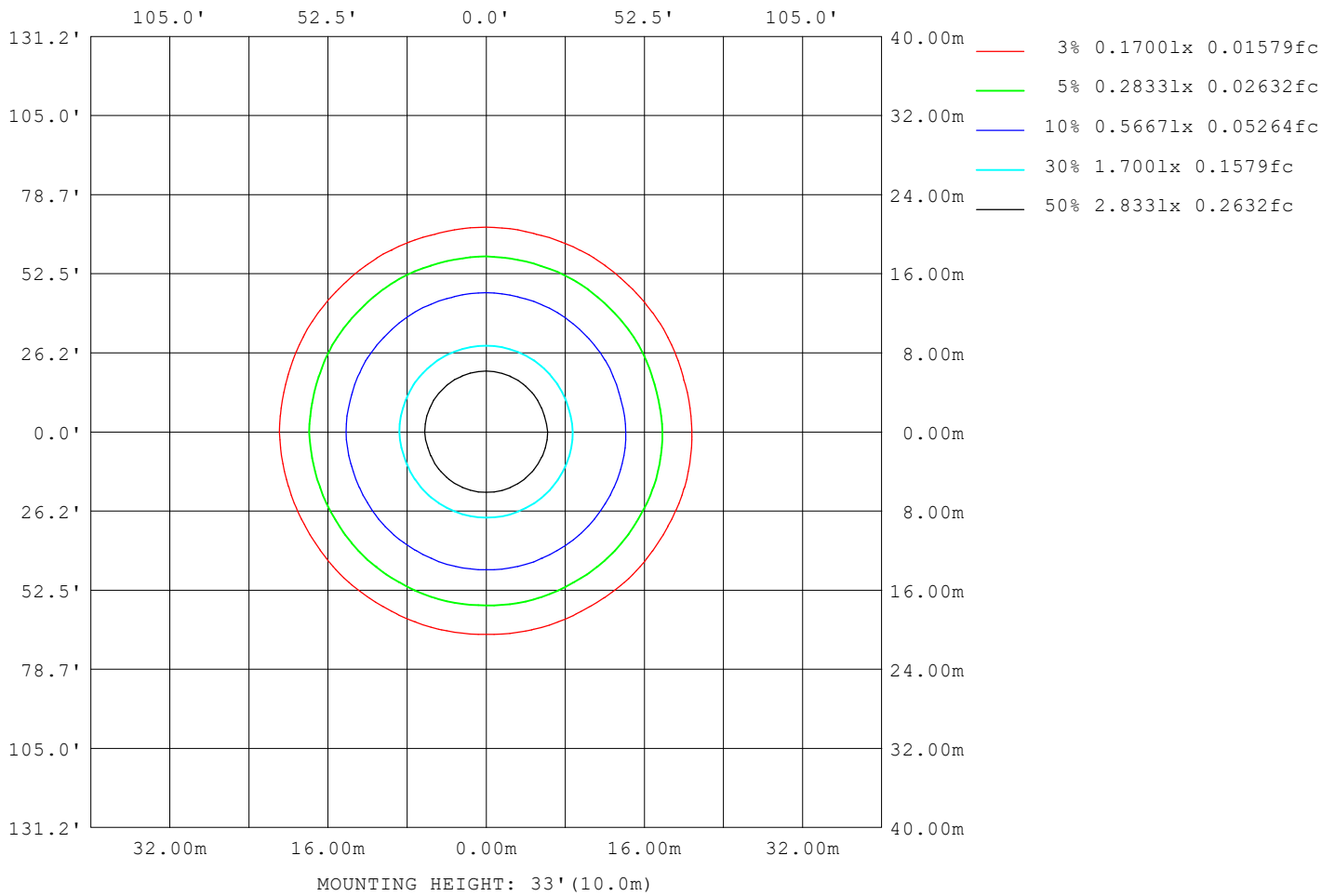
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2024-01-24

γ Range: 0 - 90DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:220.38V I:0.1065A P:13.894W PF:0.5923 Freq:50.00Hz Lamp Flux:1587.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2024-01-24

γ Range: 0 - 90DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:220.38V I:0.1065A P:13.894W PF:0.5923 Freq:50.00Hz Lamp Flux:1587.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

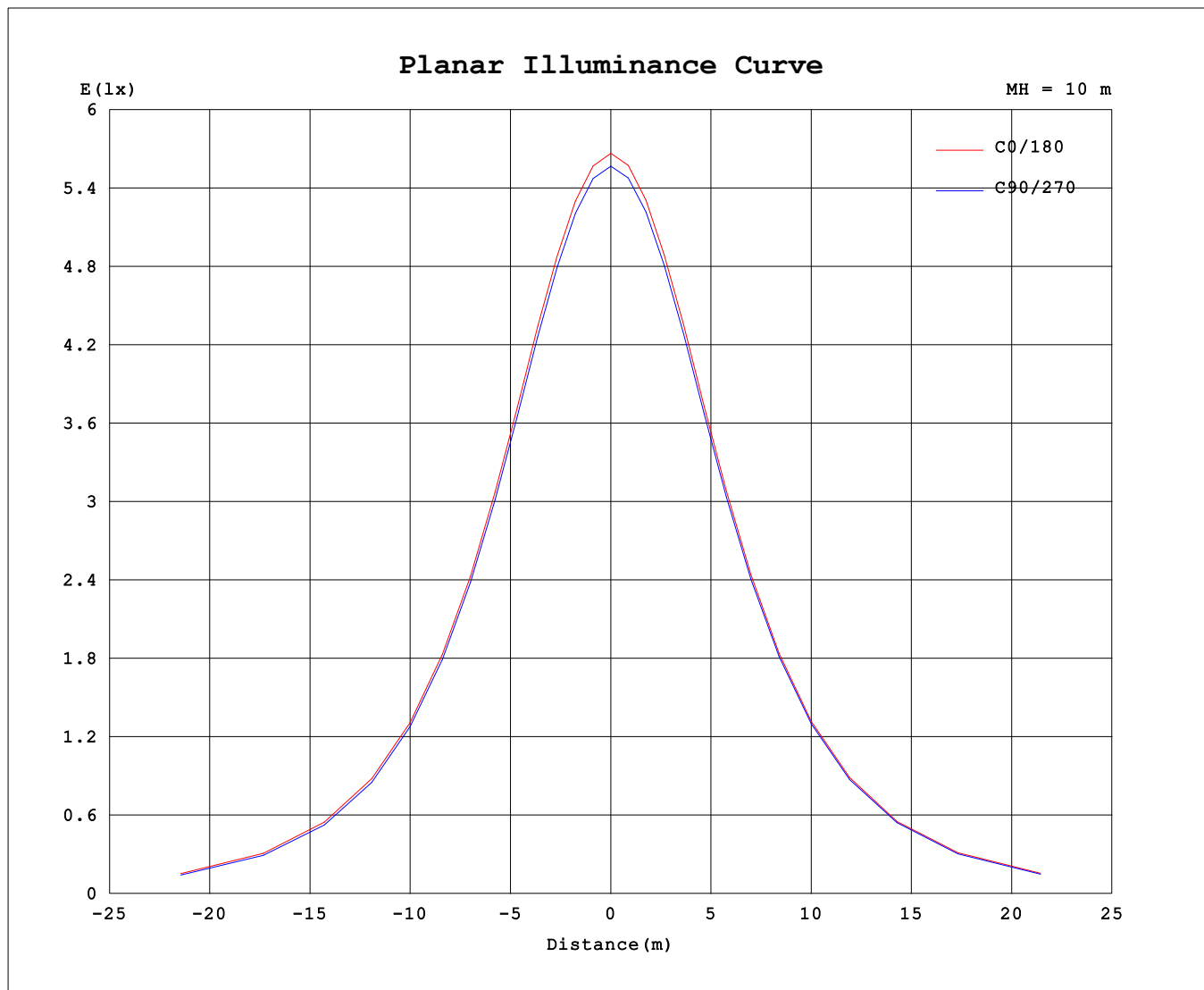
AvgL	cd/m2
L_0~180 (65) av	4780
L_0~180 (75) av	4470
L_0~180 (85) av	3770
L_90~270 (65) av	4639
L_90~270 (75) av	4079
L_90~270 (85) av	1928
L_45 (65) av	4709
L_45 (75) av	4255
L_45 (85) av	2601

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-01-24

γ Range: 0 - 90DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: DAMIN
 Test Date: 2024-01-24

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.473
 Humidity: 65.0%
 Test Distance: 9.401m [K=1.0000]
 Remarks:

Test:U:220.38V I:0.1065A P:13.894W PF:0.5923 Freq:50.00Hz Lamp Flux:1587.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

UNIT: cd

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 2024-01-24

```

γ Range: 0 - 90DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks:

```