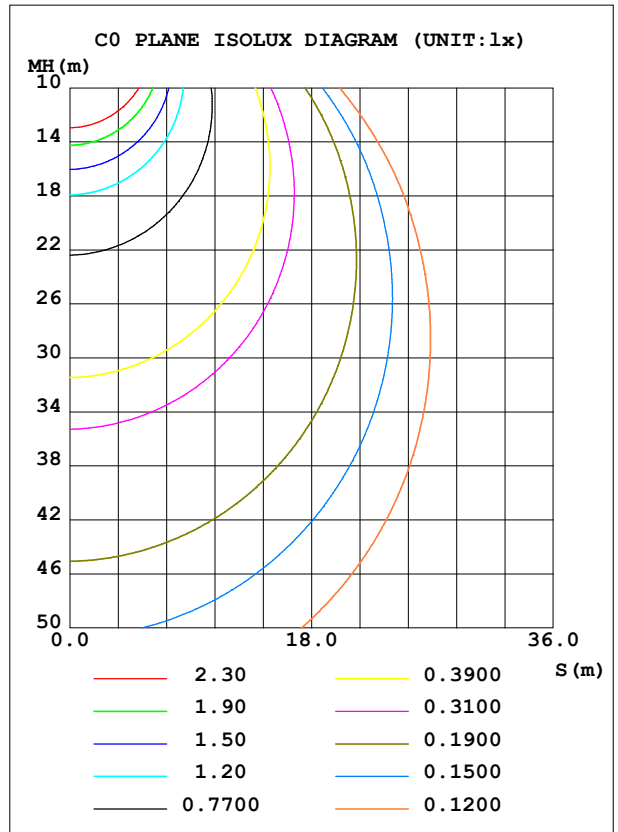
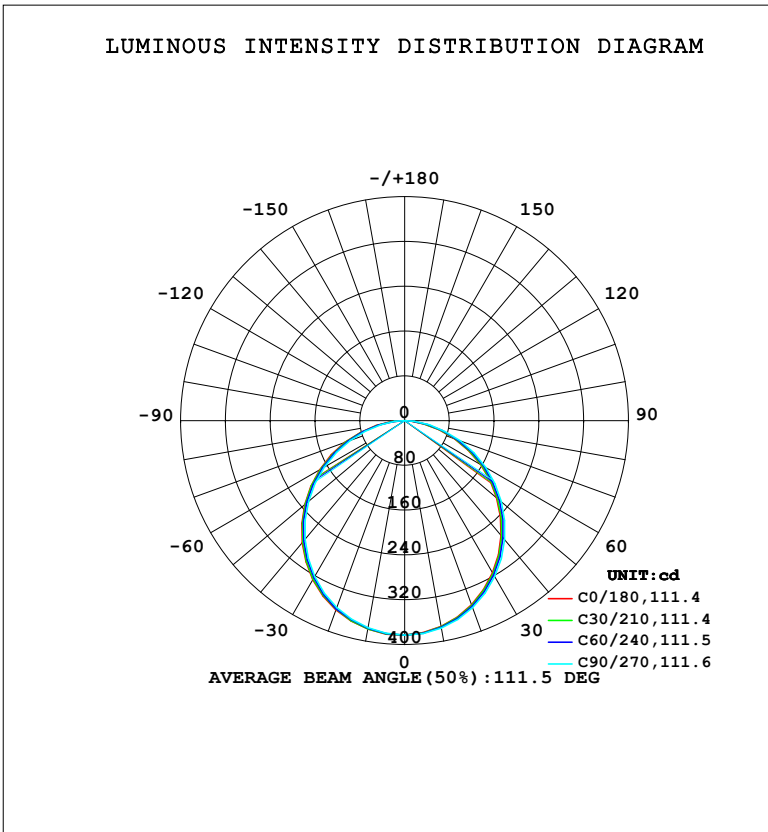


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.44V I:0.0984A P:11.913W PF:0.5493 Freq:50.00Hz Lamp Flux:1087.5x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 91.29 lm/W
MODEL	102BS	I _{max} (cd)	383.3	S/MH (C0/180)	1.27	
NOMINAL POWER (W)	12	LOR (%)	100.0	S/MH (C90/270)	1.25	
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	1087.5	η UP, DN (C0-180)	0.0, 50.0	
NOMINAL FLUX (lm)	1087.5	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.0	
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	



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	373.6	374.7	376.4	378.0	378.2	377.2	375.8	373.9	0- 10	36.24	36.24	3.33,3.33
20	349.9	353.7	355.5	359.9	359.5	357.0	355.7	350.9	10- 20	103.6	139.8	12.9,12.9
30	314.2	318.9	321.9	327.5	328.2	323.9	321.6	315.4	20- 30	156.6	296.4	27.3,27.3
40	268.2	273.6	277.9	284.2	285.1	280.3	277.1	269.9	30- 40	187.9	484.3	44.5,44.5
50	214.7	220.4	225.6	232.3	233.4	228.4	224.5	216.6	40- 50	194.1	678.5	62.4,62.4
60	156.5	161.3	168.2	174.1	175.2	171.0	165.7	158.3	50- 60	175.2	853.6	78.5,78.5
70	94.31	98.98	105.9	112.0	113.3	109.2	103.8	96.35	60- 70	134.0	987.6	90.8,90.8
80	34.75	39.43	45.62	51.17	51.76	48.91	44.07	37.48	70- 80	77.91	1066	98,98
90	0.6639	0.6679	0.6453	0.6276	4.133	0.7822	0.7900	0.8147	80- 90	21.95	1088	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): 582.23 lm

%lum = 53.5%

%lamp = 53.5%

Conical surface Flux(130deg): 926.96 lm

%lum = 85.2%

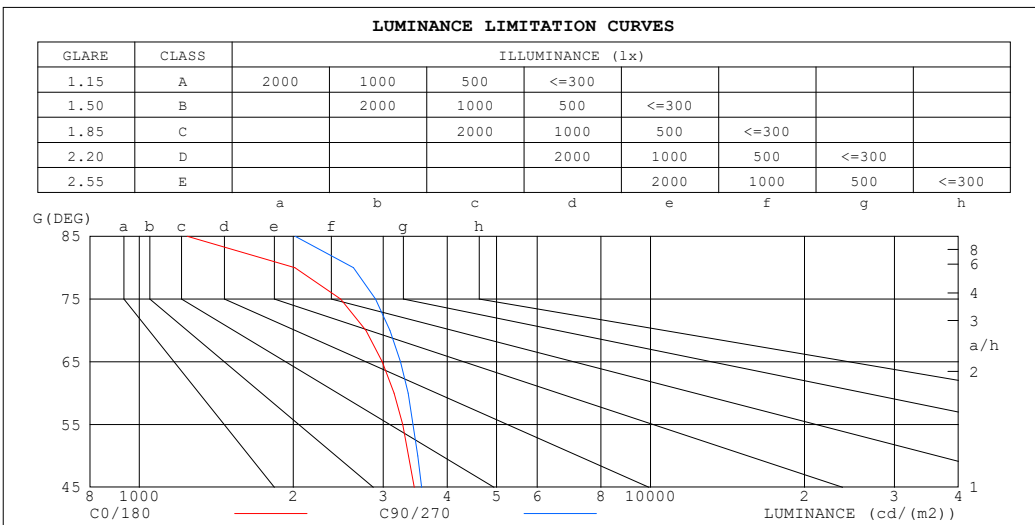
%lamp = 85.2%

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:220.44V I:0.0984A P:11.913W PF:0.5493 Freq:50.00Hz Lamp Flux:1087.5x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1240	2016
80	2014	2623
75	2477	2898
70	2776	3093
65	2988	3243
60	3151	3359
55	3277	3430
50	3363	3505
45	3451	3568

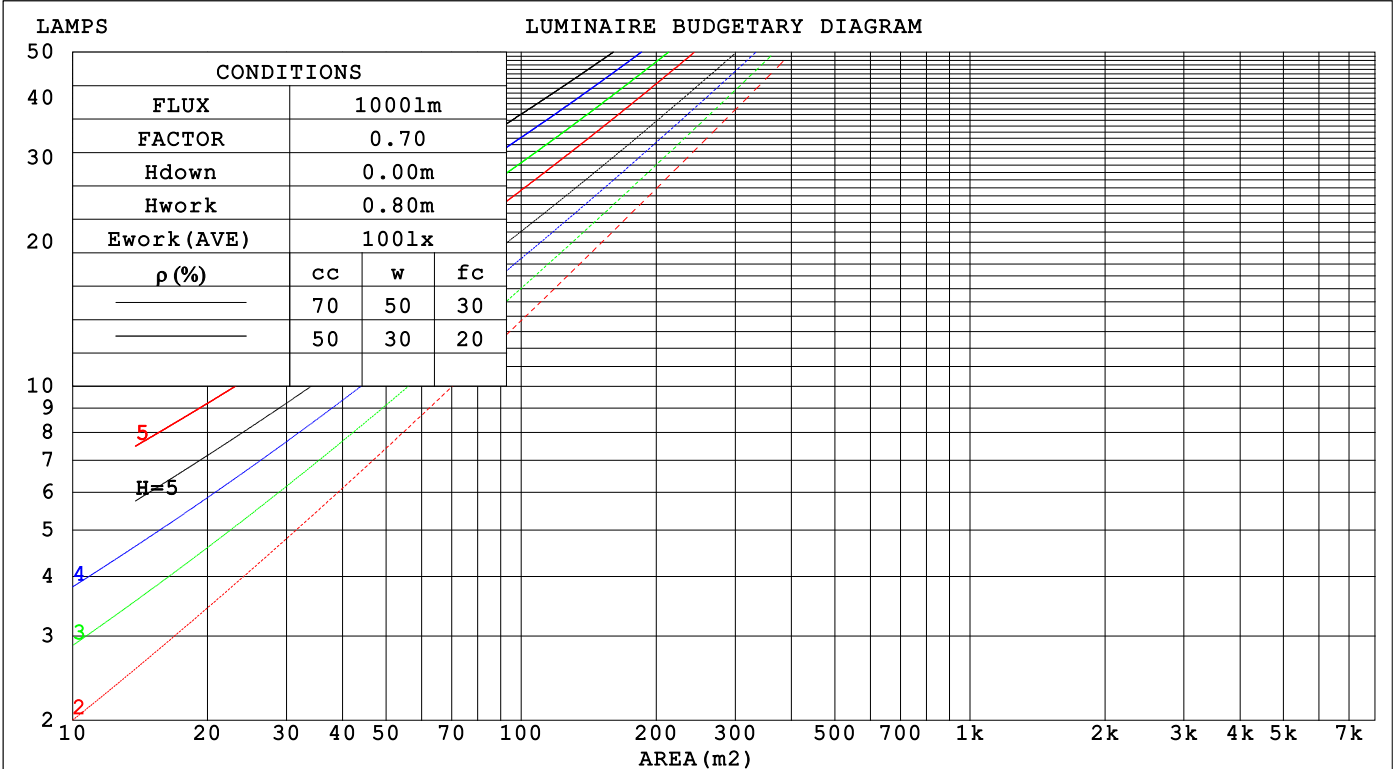
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:2024-01-24

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:220.44V I:0.0984A P:11.913W PF:0.5493 Freq:50.00Hz Lamp Flux:1087.5x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

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	1.19	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	.96	1.01	.98	.94	.97	.94	.91	.93	.91	.88	.90	.88	.86	.83
2.0	.90	.83	.78	.88	.82	.77	.85	.80	.75	.82	.77	.73	.79	.75	.72	.69
3.0	.79	.71	.64	.78	.70	.64	.75	.68	.63	.72	.66	.62	.69	.65	.61	.58
4.0	.70	.61	.55	.69	.61	.54	.66	.59	.53	.64	.58	.53	.62	.56	.52	.50
5.0	.63	.54	.47	.62	.53	.47	.59	.52	.46	.57	.51	.46	.56	.50	.45	.43
6.0	.56	.47	.41	.55	.47	.41	.54	.46	.40	.52	.45	.40	.50	.44	.40	.38
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	.30
9.0	.43	.35	.29	.42	.34	.29	.41	.34	.29	.40	.33	.29	.39	.33	.28	.27
10.0	.39	.32	.26	.39	.31	.26	.38	.31	.26	.37	.31	.26	.36	.30	.26	.24



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:

WEC AND CCEC

Test:U:220.44V I:0.0984A P:11.913W PF:0.5493 Freq:50.00Hz								
Lamp Flux:1087.5x1 lm								
NAME:			TYPE:			WEIGHT:		
SPEC.:			DIM.:			SERIAL No.:		
MFR.: EVERFINE			SUR.:			Shielding Angle:		

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	.312	.177	.056	.305	.174	.055	.291	.167	.053	.279	.161	.052	.268	.155	.050	
2.0	.293	.161	.049	.287	.158	.049	.275	.153	.047	.264	.148	.046	.254	.144	.045	
3.0	.271	.144	.043	.265	.142	.043	.255	.138	.042	.245	.134	.041	.236	.131	.041	
4.0	.250	.130	.038	.245	.128	.038	.236	.125	.037	.227	.122	.037	.219	.119	.036	
5.0	.231	.118	.034	.226	.116	.034	.218	.114	.033	.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	.098	.028	.196	.097	.028	.189	.096	.028	.183	.094	.027	.177	.092	.027	
8.0	.186	.091	.026	.183	.090	.025	.177	.088	.025	.172	.087	.025	.166	.085	.025	
9.0	.174	.084	.024	.171	.084	.023	.166	.082	.023	.161	.081	.023	.157	.080	.023	
10.0	.164	.078	.022	.161	.078	.022	.157	.077	.022	.152	.076	.021	.148	.074	.021	

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.180	.156	.134	.154	.134	.116	.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	.128	.078	.041	.088	.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	.135	.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°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:

UGR(Unified Glare Rating) Table

Test:U:220.44V I:0.0984A P:11.913W PF:0.5493 Freq:50.00Hz										
Lamp Flux:1087.5x1 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	16.6	18.1	16.8	18.3	18.5	16.8	18.3	17.1	18.5	18.7
3H	18.0	19.4	18.3	19.6	19.9	18.3	19.8	18.6	20.0	20.2
4H	18.5	19.9	18.8	20.1	20.4	19.0	20.3	19.3	20.6	20.8
6H	18.8	20.1	19.1	20.3	20.6	19.4	20.7	19.7	20.9	21.2
8H	18.8	20.0	19.1	20.3	20.6	19.5	20.7	19.8	21.0	21.3
12H	18.8	20.0	19.2	20.3	20.6	19.5	20.7	19.9	21.0	21.3
4H 2H	17.2	18.5	17.5	18.8	19.0	17.4	18.7	17.7	19.0	19.2
3H	18.8	20.0	19.1	20.3	20.6	19.1	20.3	19.4	20.6	20.9
4H	19.4	20.5	19.8	20.8	21.1	19.8	20.9	20.2	21.2	21.5
6H	19.8	20.7	20.2	21.1	21.5	20.4	21.3	20.8	21.7	22.0
8H	19.8	20.7	20.2	21.1	21.5	20.5	21.4	20.9	21.7	22.1
12H	19.8	20.7	20.3	21.0	21.5	20.6	21.4	21.0	21.8	22.2
8H 4H	19.7	20.5	20.1	20.9	21.3	20.0	20.9	20.4	21.3	21.7
6H	20.1	20.9	20.6	21.3	21.7	20.7	21.4	21.1	21.8	22.2
8H	20.2	20.9	20.7	21.3	21.7	20.8	21.5	21.3	21.9	22.4
12H	20.3	20.8	20.8	21.3	21.8	21.0	21.5	21.5	22.0	22.5
12H 4H	19.7	20.5	20.1	20.9	21.3	20.0	20.8	20.4	21.2	21.6
6H	20.2	20.8	20.6	21.2	21.7	20.7	21.3	21.1	21.8	22.2
8H	20.3	20.8	20.7	21.3	21.8	20.9	21.4	21.4	21.9	22.4
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.1 / - 0.3				
2.0H	+ 0.3 / - 0.4					+ 0.2 / - 0.3				

CIE Pub.117, 1088 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.3)
 Area: 0.1 m2

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:

UTILIZATION FACTORS TABLE

Test:U:220.44V I:0.0984A P:11.913W PF:0.5493 Freq:50.00Hz Lamp Flux:1087.5x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

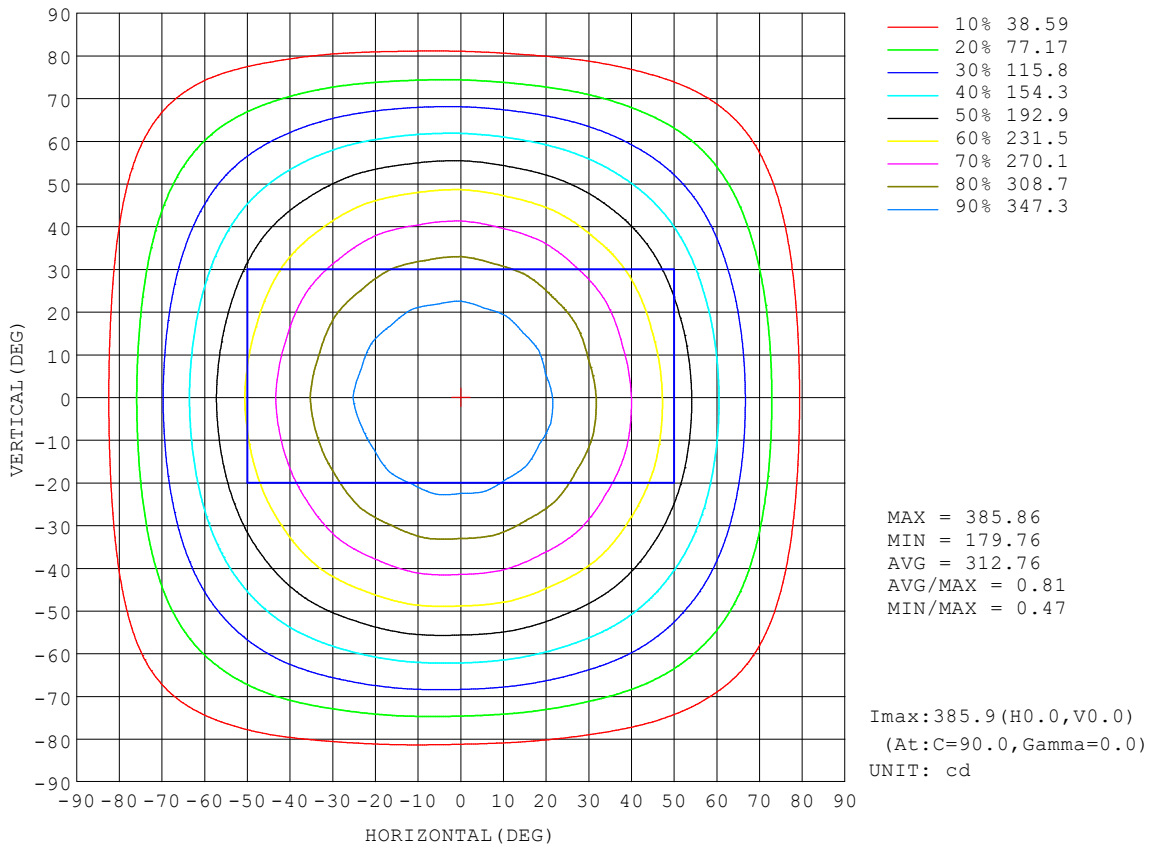
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	57	46	39	57	46	39	56	45	39	32
0.80	68	56	48	66	55	48	65	55	48	41
1.00	76	65	57	75	64	57	72	66	57	49
1.25	83	72	65	82	72	65	79	70	64	57
1.50	88	78	71	86	77	71	83	75	69	62
2.00	95	86	80	93	85	79	89	83	77	70
2.50	99	91	85	97	90	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	100	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:220.44V I:0.0984A P:11.913W PF:0.5493 Freq:50.00Hz Lamp Flux:1087.5x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

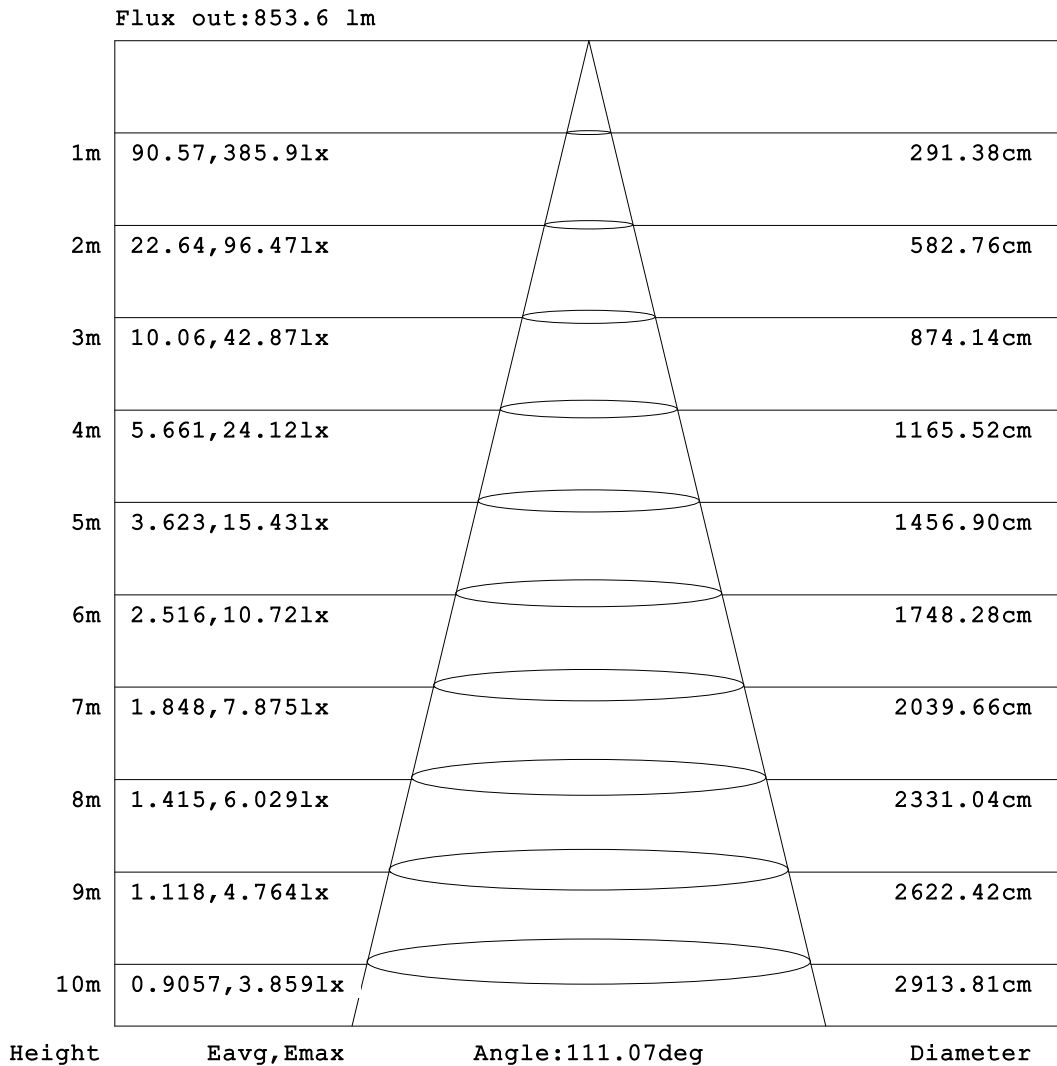


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:2024-01-24

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:220.44V I:0.0984A P:11.913W PF:0.5493 Freq:50.00Hz Lamp Flux:1087.5x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



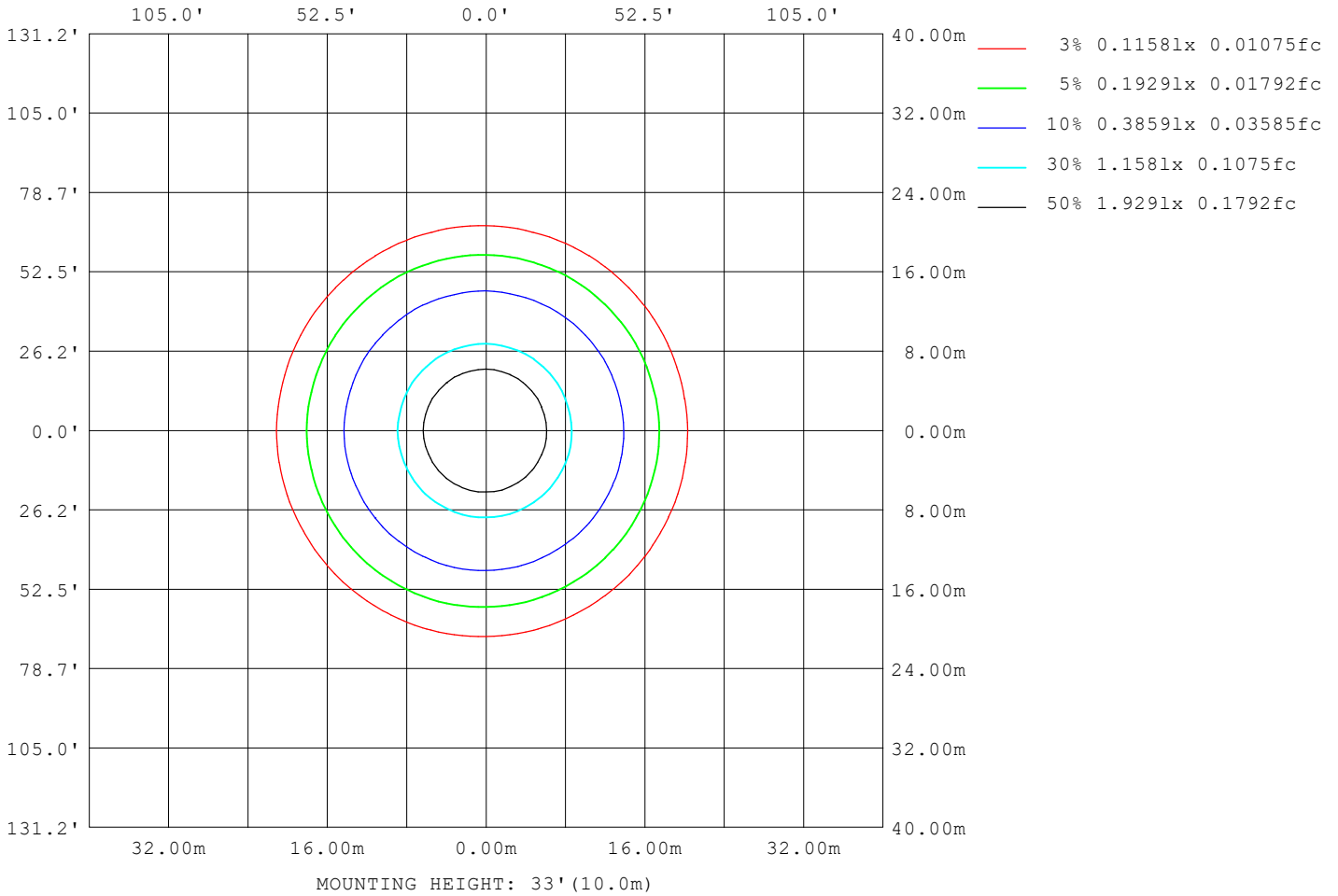
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:220.44V I:0.0984A P:11.913W PF:0.5493 Freq:50.00Hz Lamp Flux:1087.5x1 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:220.44V I:0.0984A P:11.913W PF:0.5493 Freq:50.00Hz Lamp Flux:1087.5x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

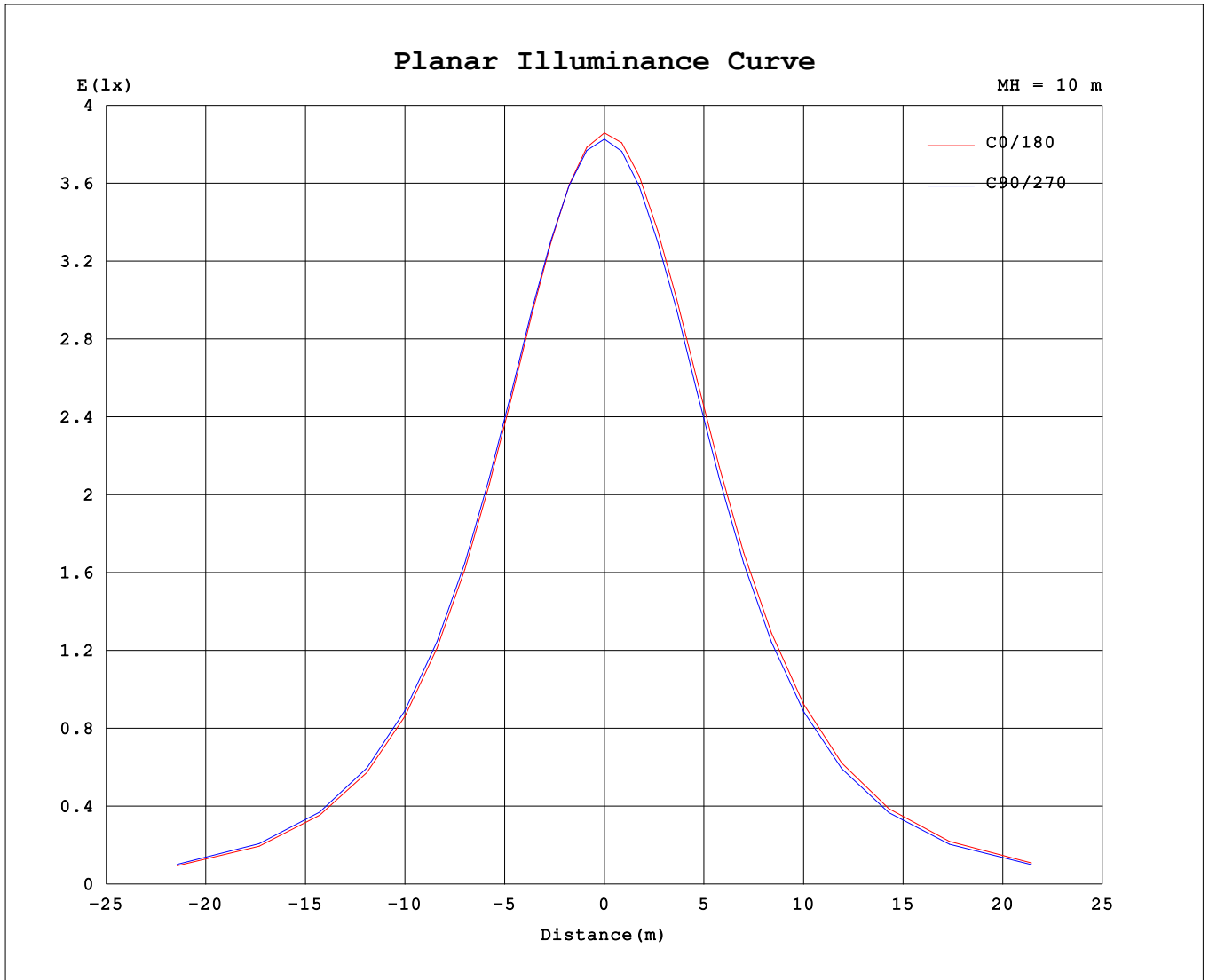
AvgL	cd/m2
L_0~180 (65) av	3194
L_0~180 (75) av	2818
L_0~180 (85) av	2014
L_90~270 (65) av	3220
L_90~270 (75) av	2865
L_90~270 (85) av	2036
L_45 (65) av	3202
L_45 (75) av	2836
L_45 (85) av	2030

Standard: GB/T 29293-2012

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:

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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.44V I:0.0984A P:11.913W PF:0.5493 Freq:50.00Hz Lamp Flux:1087.5x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345												
0	383	383	383	383	383												
5	381	381	380	380	380												
10	375	375	374	374	373												
15	366	365	364	364	364												
20	353	353	351	352	350												
25	337	337	335	336	334												
30	318	318	315	316	314												
35	297	297	294	295	292												
40	273	273	270	271	268												
45	248	248	244	245	242												
50	221	220	217	217	215												
55	192	191	189	188	187												
60	163	161	158	158	156												
65	132	130	127	127	125												
70	101	99.0	96.3	95.5	94.2												
75	70.3	68.5	66.0	65.0	63.7												
80	41.7	39.9	37.5	36.0	34.7												
85	16.2	15.2	13.3	12.0	10.7												
90	0.81	0.81	0.81	0.81	0.82												

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: