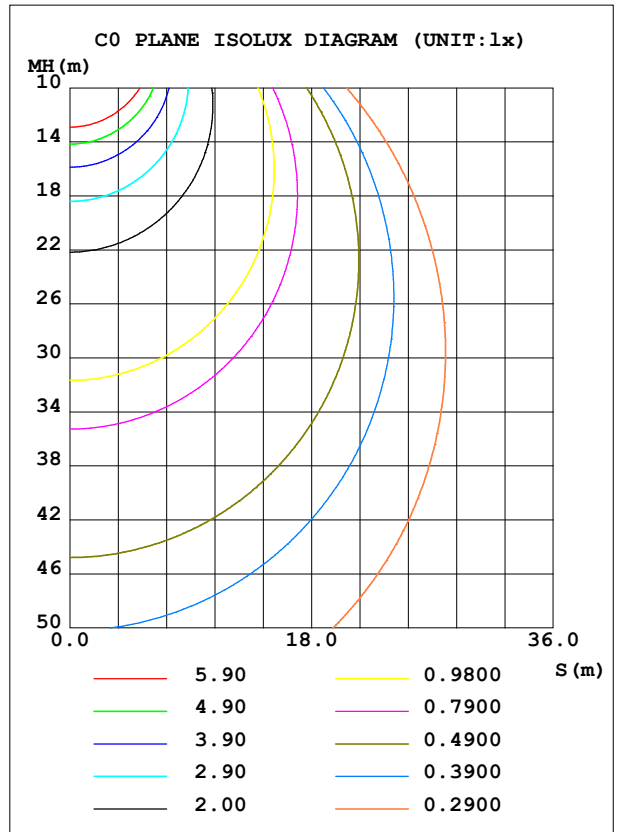
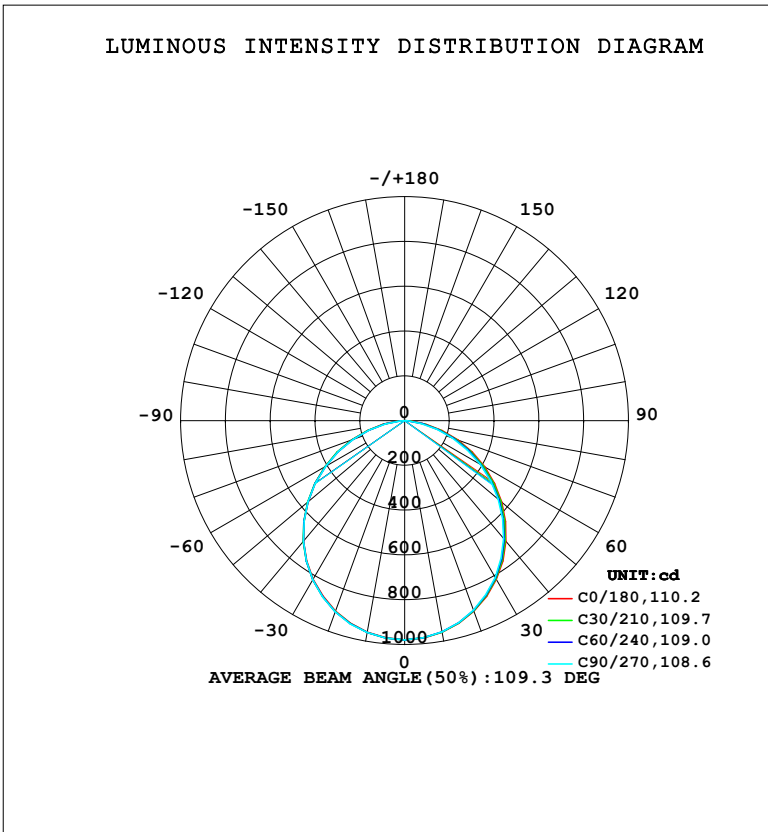


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.38V I:0.1153A P:23.327W PF:0.9179 Freq:50.00Hz Lamp Flux:2685.28x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 115.11 lm/W
MODEL	116D	I _{max} (cd)	978.9	S/MH (C0/180)	1.24	
NOMINAL POWER (W)	24	LOR (%)	100.0	S/MH (C90/270)	1.25	
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	2685.3	η UP, DN (C0-180)	0.0, 49.6	
NOMINAL FLUX (lm)	2685.28	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.4	
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	959.8	959.0	957.6	958.3	959.4	960.5	961.5	960.7	0- 10	92.51	92.51	3.45,3.45
20	905.3	903.2	900.6	902.3	904.9	906.3	908.1	906.8	10- 20	264.2	356.7	13.3,13.3
30	819.2	815.2	808.6	813.4	818.4	820.0	820.8	820.6	20- 30	398.4	755.1	28.1,28.1
40	703.9	697.1	688.2	694.6	703.1	703.7	703.5	704.5	30- 40	476.3	1231	45.9,45.9
50	566.4	556.8	546.2	553.7	565.0	564.6	563.5	565.4	40- 50	487.6	1719	64,64
60	413.2	401.7	389.9	398.5	411.5	408.9	407.4	410.0	50- 60	432.6	2152	80.1,80.1
70	252.4	241.4	227.8	238.2	251.8	246.7	244.5	247.8	60- 70	321.4	2473	92.1,92.1
80	99.82	87.51	75.27	84.96	97.93	91.48	86.52	92.65	70- 80	174.8	2648	98.6,98.6
90	1.871	1.883	1.796	1.803	2.069	2.100	2.073	2.099	80- 90	37.50	2685	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): 1478.1 lm

%lum = 55.0%

%lamp = 55.0%

Conical surface Flux(130deg): 2329 lm

%lum = 86.7%

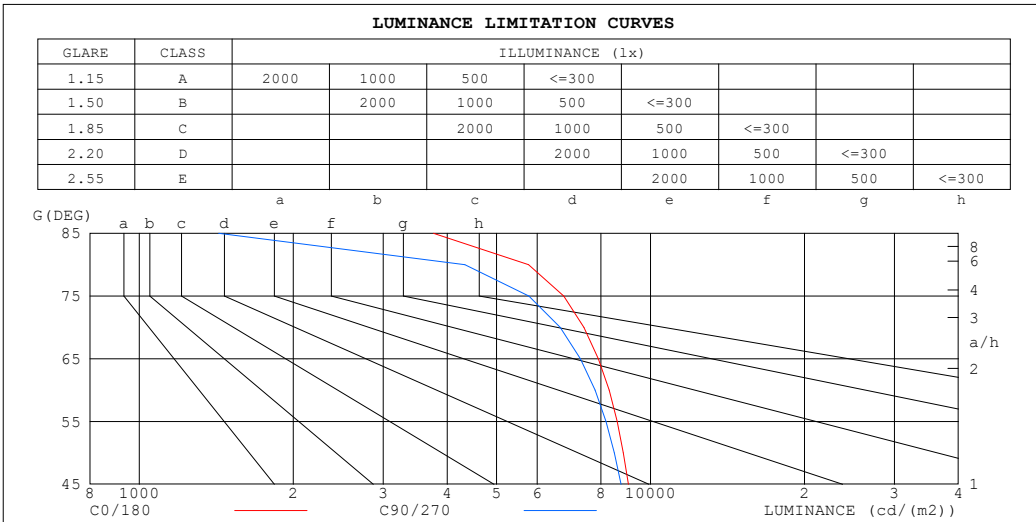
%lamp = 86.7%

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:0.1153A P:23.327W PF:0.9179 Freq:50.00Hz Lamp Flux:2685.28x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3759	1429
80	5771	4331
75	6766	5784
70	7410	6654
65	7903	7294
60	8297	7792
55	8602	8179
50	8846	8491
45	9053	8754

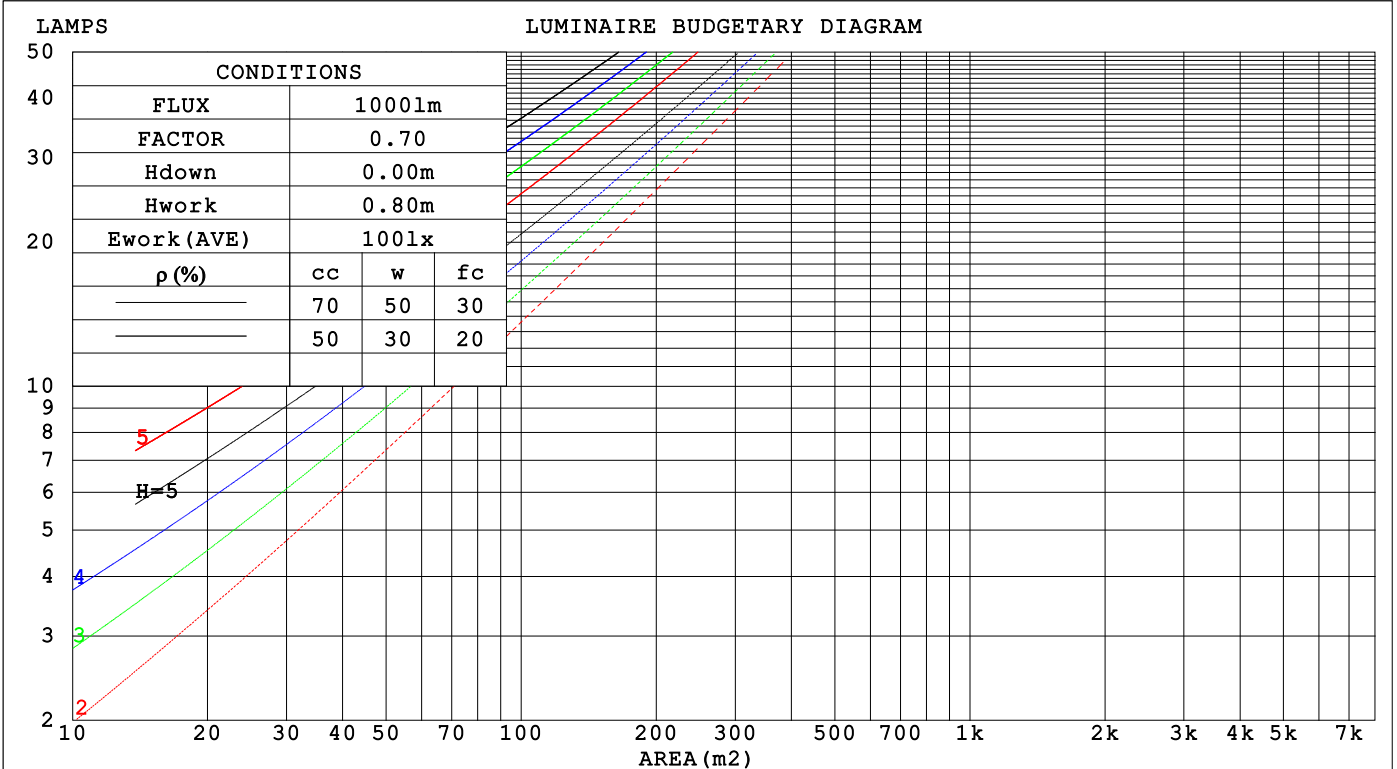
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:2024-01-24

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:0.1153A P:23.327W PF:0.9179 Freq:50.00Hz Lamp Flux:2685.28x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	1.00	.96	1.02	.98	.95	.98	.95	.92	.94	.91	.89	.90	.88	.86	.84
2.0	.91	.84	.79	.89	.83	.78	.86	.80	.76	.82	.78	.74	.79	.76	.73	.70
3.0	.80	.72	.66	.78	.71	.65	.75	.69	.64	.73	.67	.63	.70	.66	.62	.59
4.0	.71	.62	.56	.70	.61	.55	.67	.60	.54	.65	.59	.54	.63	.57	.53	.51
5.0	.63	.54	.48	.62	.54	.48	.60	.53	.47	.58	.52	.47	.56	.51	.46	.44
6.0	.57	.48	.42	.56	.48	.42	.54	.47	.41	.53	.46	.41	.51	.45	.41	.38
7.0	.52	.43	.37	.51	.43	.37	.49	.42	.37	.48	.41	.36	.47	.41	.36	.34
8.0	.47	.39	.33	.47	.39	.33	.45	.38	.33	.44	.37	.32	.43	.37	.32	.30
9.0	.43	.35	.30	.43	.35	.30	.42	.34	.29	.41	.34	.29	.40	.34	.29	.27
10.0	.40	.32	.27	.40	.32	.27	.39	.32	.27	.38	.31	.27	.37	.31	.26	.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:

WEC AND CCEC

Test:U:220.38V I:0.1153A P:23.327W PF:0.9179 Freq:50.00Hz								
Lamp Flux:2685.28x1 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	.301	.171	.054	.294	.168	.053	.281	.161	.051	.268	.155	.050	.257	.149	.048	
2.0	.286	.157	.048	.279	.154	.047	.268	.149	.046	.257	.144	.045	.247	.140	.044	
3.0	.266	.141	.042	.260	.139	.042	.250	.135	.041	.240	.132	.040	.231	.128	.040	
4.0	.246	.128	.038	.241	.126	.037	.232	.123	.037	.223	.120	.036	.215	.117	.036	
5.0	.228	.116	.034	.223	.115	.033	.215	.112	.033	.208	.110	.033	.201	.107	.032	
6.0	.211	.106	.030	.208	.105	.030	.200	.103	.030	.194	.101	.030	.187	.099	.029	
7.0	.197	.097	.028	.194	.096	.027	.187	.095	.027	.181	.093	.027	.176	.091	.027	
8.0	.184	.090	.025	.181	.089	.025	.175	.088	.025	.170	.086	.025	.165	.085	.025	
9.0	.173	.084	.023	.170	.083	.023	.165	.082	.023	.160	.080	.023	.155	.079	.023	
10.0	.163	.078	.022	.160	.077	.022	.155	.076	.021	.151	.075	.021	.147	.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	.135	.154	.134	.116	.105	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.171	.132	.099	.147	.114	.085	.101	.079	.060	.058	.046	.035	.019	.015	.011	
3.0	.164	.114	.075	.140	.099	.065	.096	.068	.046	.056	.040	.027	.018	.013	.009	
4.0	.156	.101	.059	.134	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.149	.090	.048	.128	.078	.041	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.142	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.135	.075	.033	.116	.065	.029	.080	.046	.021	.047	.027	.012	.015	.009	.004	
8.0	.128	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.122	.064	.025	.105	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.023	.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:220.38V I:0.1153A P:23.327W PF:0.9179 Freq:50.00Hz										
Lamp Flux:2685.28x1 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	18.4	17.2	18.6	18.8	16.7	18.2	16.9	18.4	18.6
3H	18.4	19.8	18.7	20.0	20.2	18.0	19.4	18.3	19.6	19.9
4H	18.9	20.2	19.2	20.5	20.8	18.5	19.8	18.8	20.0	20.3
6H	19.3	20.5	19.6	20.8	21.1	18.7	19.9	19.0	20.2	20.5
8H	19.3	20.5	19.6	20.8	21.1	18.6	19.9	19.0	20.1	20.4
12H	19.3	20.5	19.6	20.7	21.1	18.6	19.8	19.0	20.1	20.4
4H 2H	17.5	18.8	17.8	19.0	19.3	17.3	18.6	17.6	18.8	19.1
3H	19.1	20.2	19.4	20.5	20.8	18.8	19.9	19.1	20.2	20.5
4H	19.8	20.8	20.1	21.1	21.5	19.3	20.4	19.7	20.7	21.0
6H	20.2	21.1	20.6	21.5	21.9	19.6	20.6	20.0	20.9	21.3
8H	20.2	21.1	20.7	21.5	21.9	19.6	20.5	20.0	20.8	21.2
12H	20.3	21.1	20.7	21.5	21.9	19.6	20.4	20.0	20.8	21.2
8H 4H	19.9	20.8	20.4	21.2	21.6	19.6	20.4	20.0	20.8	21.2
6H	20.5	21.2	20.9	21.6	22.0	19.9	20.7	20.4	21.1	21.5
8H	20.5	21.2	21.0	21.6	22.1	19.9	20.6	20.4	21.0	21.4
12H	20.6	21.2	21.1	21.6	22.1	19.9	20.5	20.4	20.9	21.4
12H 4H	19.9	20.7	20.4	21.1	21.5	19.6	20.4	20.0	20.7	21.1
6H	20.5	21.1	20.9	21.5	22.0	19.9	20.6	20.4	21.0	21.4
8H	20.6	21.1	21.0	21.5	22.0	19.9	20.5	20.4	20.9	21.4
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.4				
2.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.5				

CIE Pub.117, 2685 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.4)
 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:220.38V I:0.1153A P:23.327W PF:0.9179 Freq:50.00Hz Lamp Flux:2685.28x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

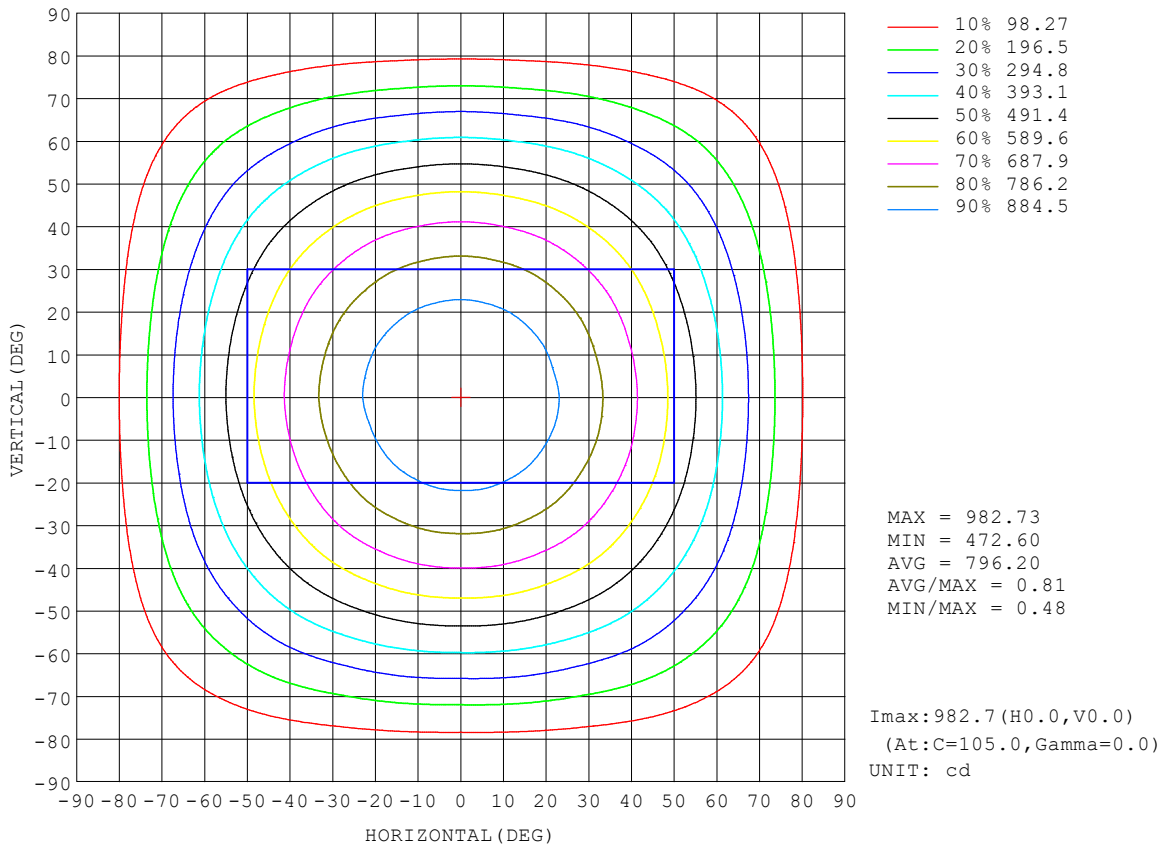
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	58	47	40	57	46	40	56	46	40	33
0.80	68	57	50	67	56	49	65	56	49	42
1.00	77	66	59	76	65	58	73	67	58	51
1.25	84	73	66	82	73	66	80	71	65	58
1.50	89	79	72	87	78	72	84	76	71	63
2.00	96	87	81	94	86	80	90	84	79	71
2.50	99	92	86	97	90	85	94	88	83	75
3.00	103	96	91	101	94	90	97	92	87	79
4.00	107	101	97	104	99	95	100	96	93	84
5.00	109	104	100	107	102	99	102	99	96	87
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:0.1153A P:23.327W PF:0.9179 Freq:50.00Hz Lamp Flux:2685.28x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

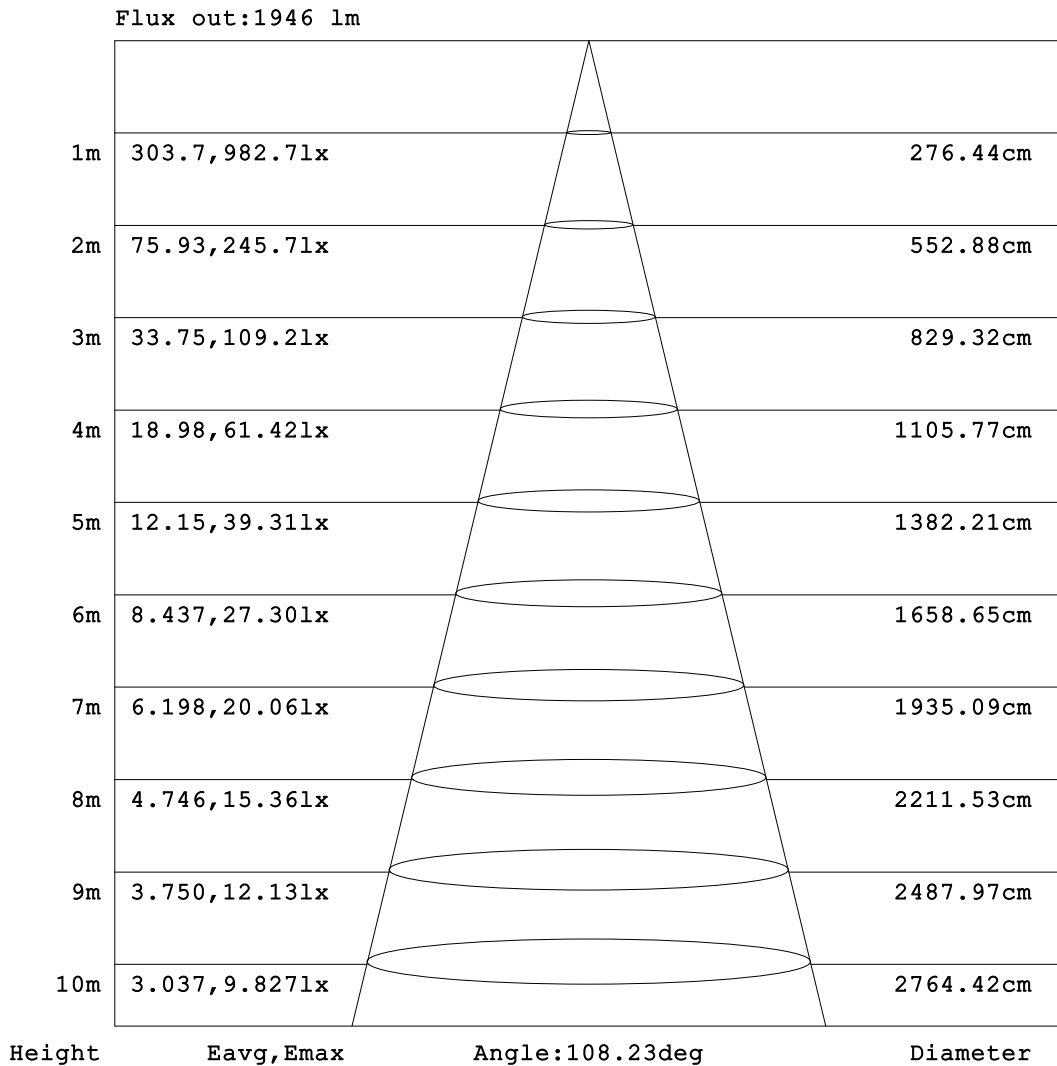


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:2024-01-24

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:0.1153A P:23.327W PF:0.9179 Freq:50.00Hz Lamp Flux:2685.28x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



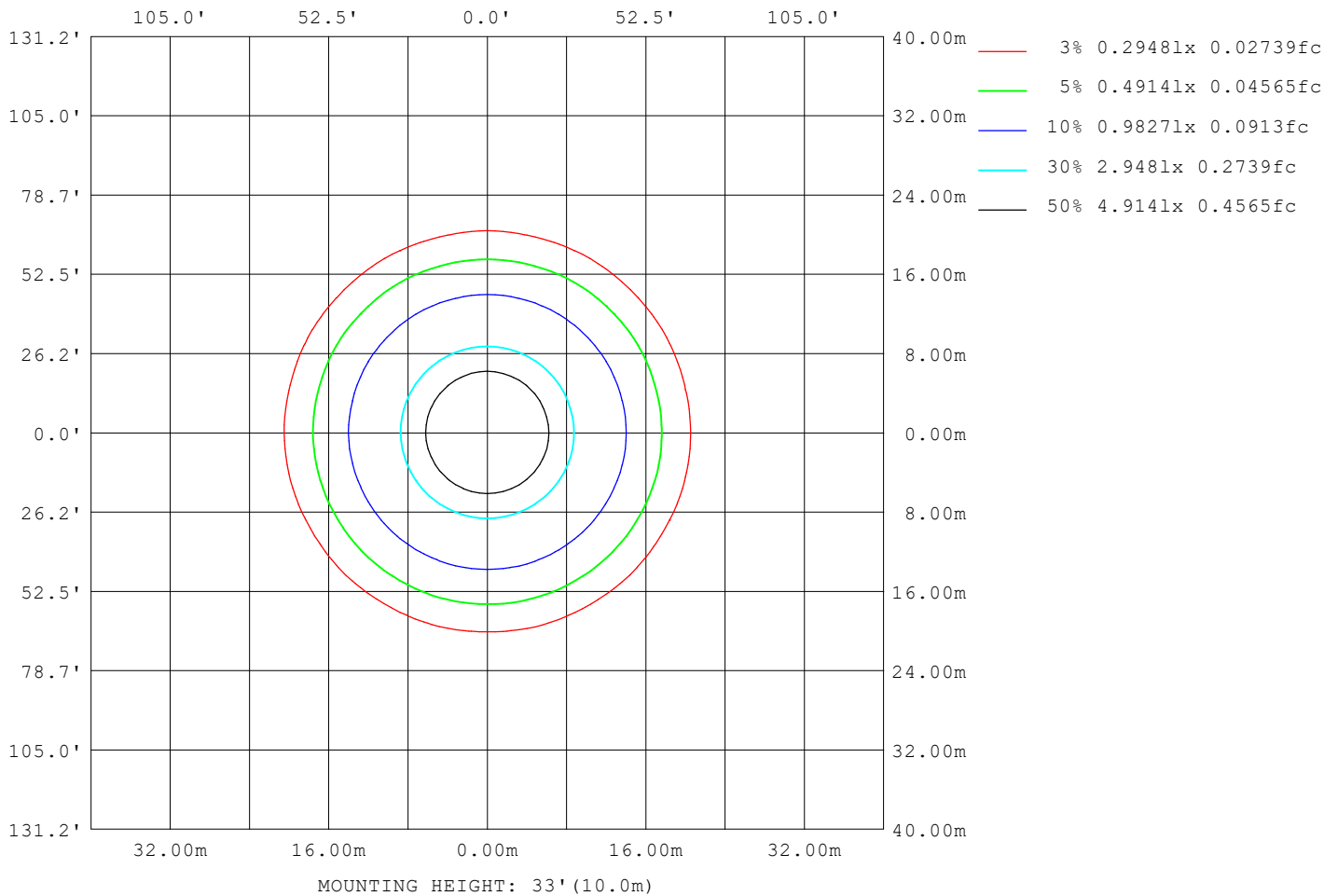
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.1153A P:23.327W PF:0.9179 Freq:50.00Hz Lamp Flux:2685.28x1 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:0.1153A P:23.327W PF:0.9179 Freq:50.00Hz Lamp Flux:2685.28x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

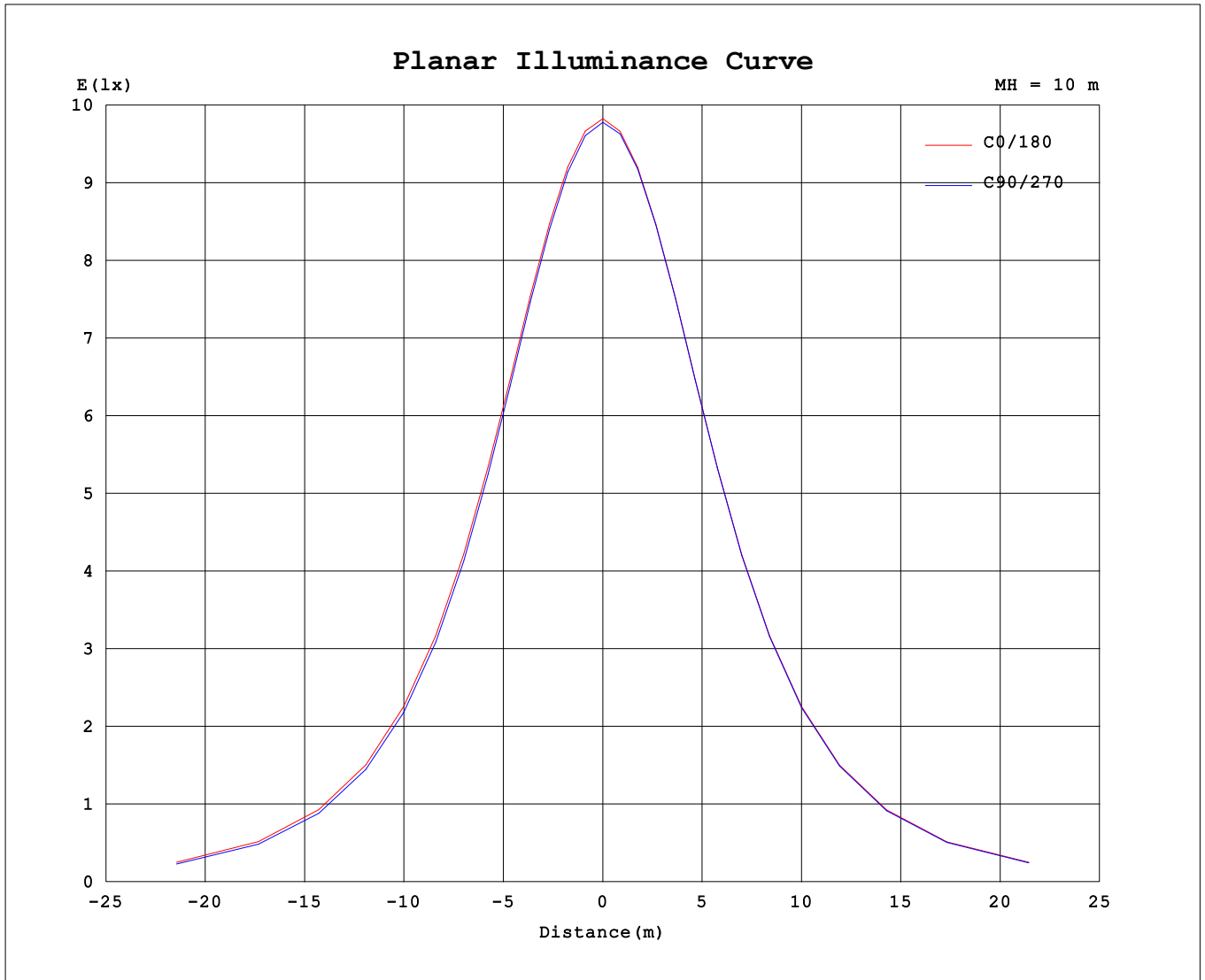
AvgL	cd/m2
L_0~180 (65) av	7868
L_0~180 (75) av	6706
L_0~180 (85) av	3671
L_90~270 (65) av	7515
L_90~270 (75) av	6053
L_90~270 (85) av	1794
L_45 (65) av	7680
L_45 (75) av	6356
L_45 (85) av	2591

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:

