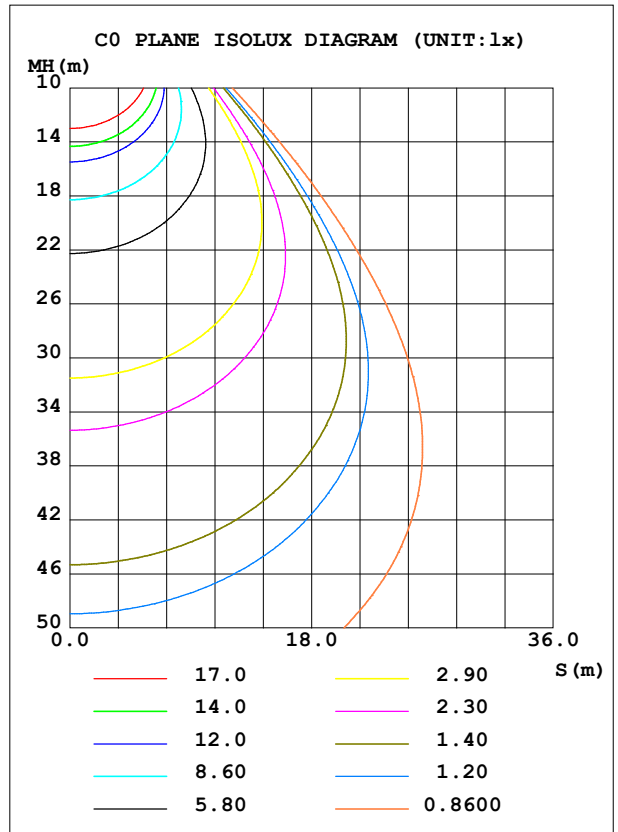
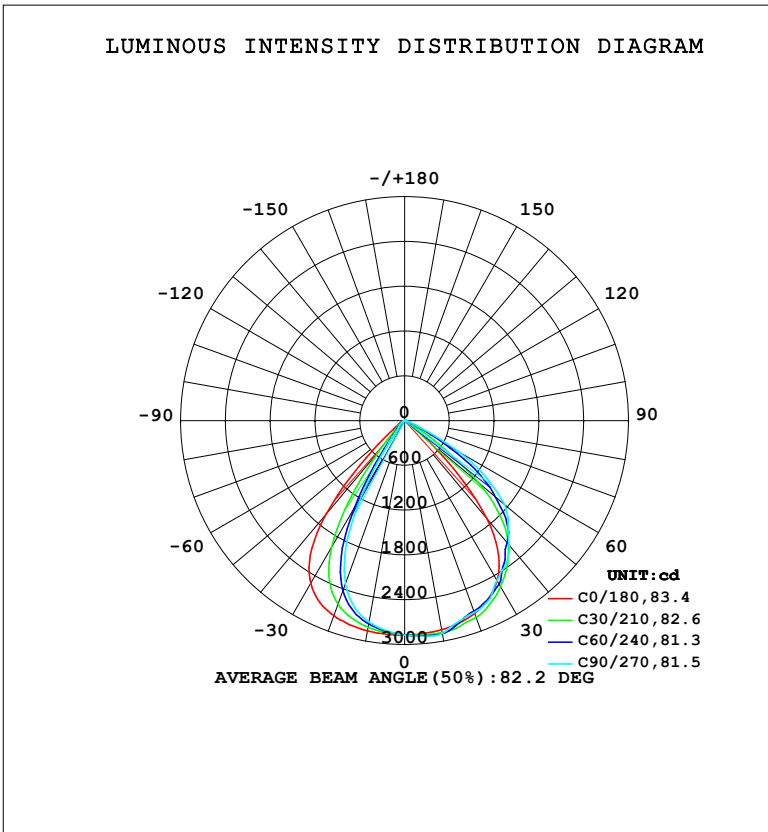


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.38V I:0.1850A P:40.109W PF:0.9840 Freq:50.00Hz Lamp Flux:4590.78x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	512	Imax (cd)	2913	S/MH (C0/180)	1.20
NOMINAL POWER (W)	40	LOR (%)	100.0	S/MH (C90/270)	0.82
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	4590.8	η UP, DN (C0-180)	0.0, 67.4
NOMINAL FLUX (lm)	4590.78	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 32.6
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	219.5	η down (%)	100.0	CIBSE SHR MAX	1.10



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 2024-01-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
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	2845	2894	2897	2904	2860	2785	2740	2769	0- 10	272.7	272.7	5.94,5.94
20	2746	2742	2734	2810	2780	2510	2319	2472	10- 20	777.7	1050	22.9,22.9
30	2476	2540	2475	2717	2518	1610	1133	1619	20- 30	1118	2168	47.2,47.2
40	1715	2172	2186	2427	1641	293.4	165.8	313.6	30- 40	1083	3251	70.8,70.8
50	367.8	1524	1747	1695	310.3	100.2	78.64	88.31	40- 50	797.6	4049	88.2,88.2
60	79.73	400.6	827.0	378.4	83.07	43.56	33.54	40.28	50- 60	417.1	4466	97.3,97.3
70	31.03	56.68	78.93	59.07	31.36	10.80	8.448	9.654	60- 70	101.6	4568	99.5,99.5
80	5.396	14.75	15.14	12.63	5.084	3.894	2.949	2.738	70- 80	19.64	4587	99.9,99.9
90	0.1684	2.875	2.251	1.519	0.2285	0.5594	0.8848	0.7957	80- 90	3.343	4591	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): 3692.4 lm

%lum = 80.4%

%lamp = 80.4%

Conical surface Flux(130deg): 4539.3 lm

%lum = 98.9%

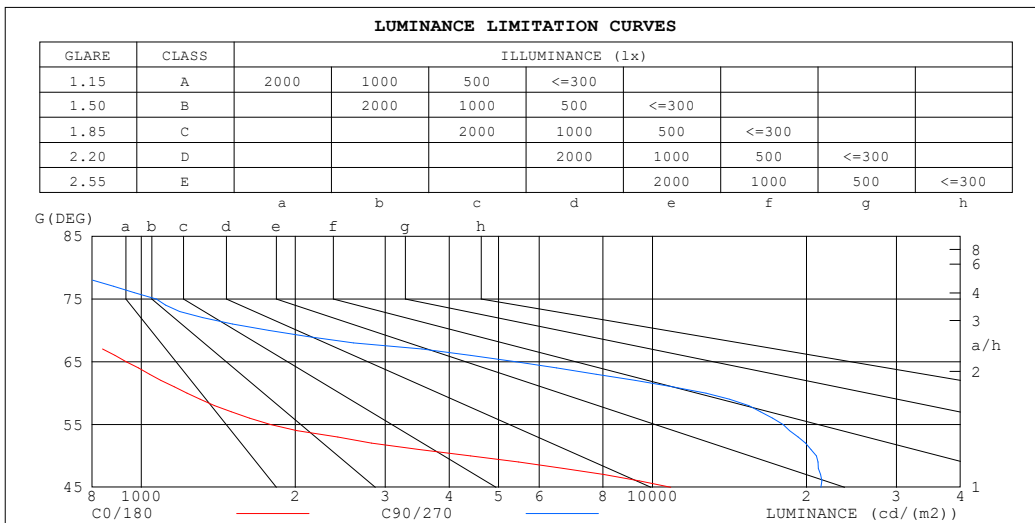
%lamp = 98.9%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:2024-01-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 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:0.1850A P:40.109W PF:0.9840 Freq:50.00Hz Lamp Flux:4590.78x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	53	408
80	239	671
75	474	1070
70	699	1776
65	934	5407
60	1228	12728
55	1790	18020
50	4406	20910
45	10851	21333

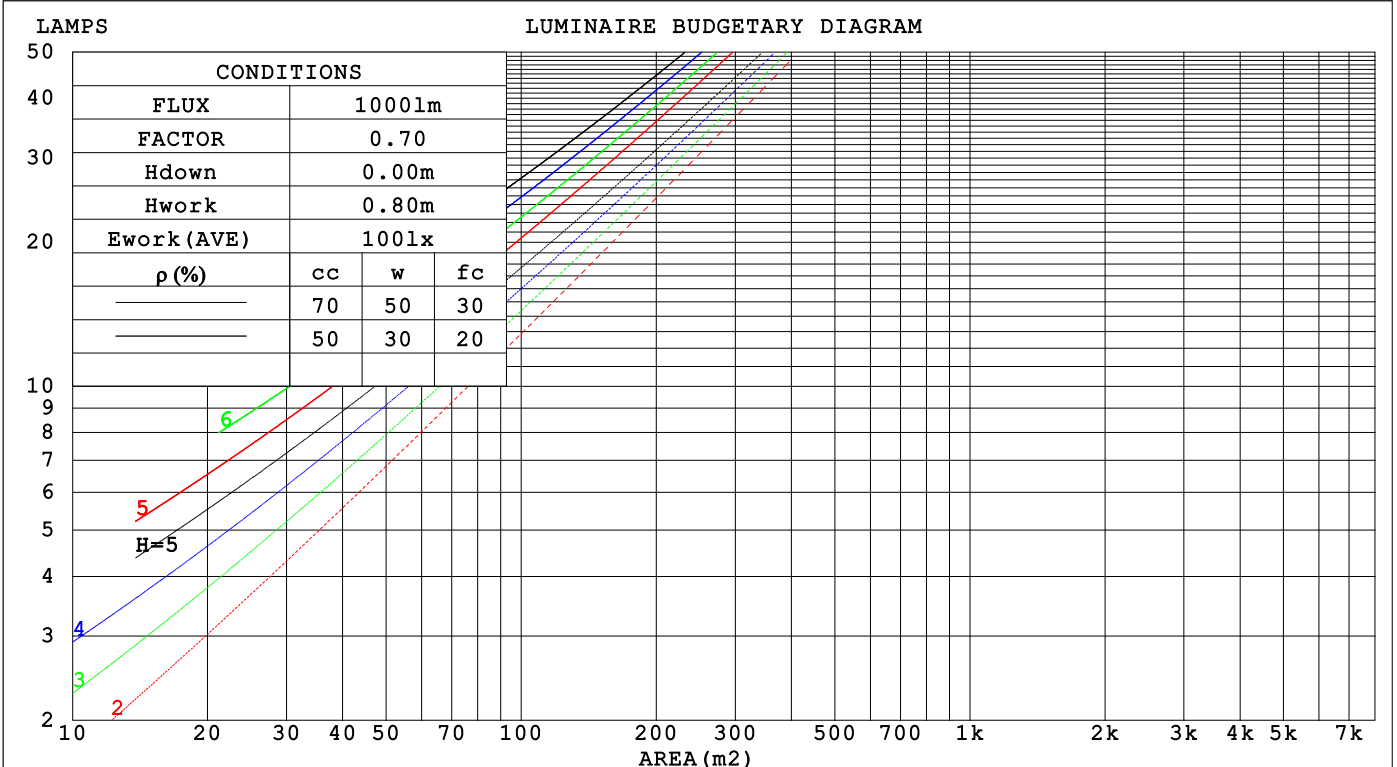
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: DAMIN
 Test Date: 2024-01-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 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:0.1850A P:40.109W PF:0.9840 Freq:50.00Hz Lamp Flux:4590.78x1 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	1.09	1.06	1.03	1.07	1.04	1.02	1.03	1.00	.98	.99	.97	.95	.95	.94	.93	.91
2.0	.99	.94	.90	.97	.93	.89	.94	.90	.87	.91	.88	.85	.88	.85	.83	.81
3.0	.90	.84	.79	.89	.83	.78	.86	.81	.77	.83	.79	.76	.81	.78	.75	.73
4.0	.82	.75	.70	.81	.75	.70	.79	.73	.69	.77	.72	.68	.75	.71	.67	.65
5.0	.75	.68	.63	.74	.68	.62	.72	.66	.62	.70	.65	.61	.69	.64	.61	.59
6.0	.69	.62	.57	.68	.61	.56	.67	.60	.56	.65	.60	.56	.64	.59	.55	.53
7.0	.64	.56	.51	.63	.56	.51	.62	.55	.51	.60	.55	.51	.59	.54	.50	.49
8.0	.59	.52	.47	.58	.51	.47	.57	.51	.46	.56	.50	.46	.55	.50	.46	.44
9.0	.55	.48	.43	.54	.47	.43	.53	.47	.43	.52	.47	.42	.51	.46	.42	.41
10.0	.51	.44	.40	.51	.44	.39	.50	.44	.39	.49	.43	.39	.48	.43	.39	.38



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:2024-01-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 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:0.1850A P:40.109W PF:0.9840 Freq:50.00Hz		
Lamp Flux:4590.78x1 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	.214	.122	.039	.208	.118	.038	.195	.112	.036	.183	.106	.034	.172	.100	.032	
2.0	.210	.115	.035	.204	.112	.035	.193	.107	.033	.183	.103	.032	.173	.098	.031	
3.0	.201	.107	.032	.196	.105	.032	.187	.101	.031	.178	.097	.030	.170	.094	.029	
4.0	.192	.100	.029	.187	.098	.029	.179	.095	.028	.171	.092	.028	.164	.089	.027	
5.0	.182	.093	.027	.178	.092	.027	.171	.089	.026	.164	.087	.026	.158	.084	.025	
6.0	.173	.087	.025	.169	.086	.025	.163	.083	.024	.157	.081	.024	.151	.080	.024	
7.0	.164	.081	.023	.161	.080	.023	.155	.078	.023	.150	.077	.022	.145	.075	.022	
8.0	.156	.076	.021	.153	.075	.021	.148	.074	.021	.143	.072	.021	.138	.071	.021	
9.0	.148	.072	.020	.146	.071	.020	.141	.070	.020	.137	.069	.020	.133	.067	.019	
10.0	.141	.068	.019	.139	.067	.019	.135	.066	.019	.131	.065	.018	.127	.064	.018	

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	.174	.157	.142	.149	.135	.122	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.161	.132	.108	.138	.114	.093	.095	.079	.065	.055	.046	.038	.018	.015	.012	
3.0	.151	.114	.084	.130	.098	.073	.089	.068	.051	.051	.040	.030	.017	.013	.010	
4.0	.143	.100	.067	.122	.086	.058	.084	.060	.041	.049	.035	.024	.016	.011	.008	
5.0	.135	.089	.054	.116	.077	.047	.080	.054	.033	.046	.031	.020	.015	.010	.007	
6.0	.128	.080	.045	.110	.069	.039	.076	.048	.028	.044	.028	.016	.014	.009	.005	
7.0	.122	.073	.038	.105	.063	.033	.073	.044	.023	.042	.026	.014	.014	.009	.005	
8.0	.117	.067	.032	.100	.058	.028	.070	.041	.020	.040	.024	.012	.013	.008	.004	
9.0	.112	.062	.028	.096	.054	.025	.067	.038	.017	.039	.022	.010	.013	.007	.003	
10.0	.107	.058	.025	.092	.050	.022	.064	.035	.015	.037	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:2024-01-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 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:0.1850A P:40.109W PF:0.9840 Freq:50.00Hz										
Lamp Flux:4590.78x1 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	14.9	16.1	15.2	16.3	16.5	18.2	19.4	18.5	19.6	19.8
3H	14.7	15.8	15.0	16.0	16.3	18.1	19.2	18.4	19.4	19.6
4H	14.7	15.7	14.9	15.9	16.2	18.0	19.1	18.3	19.3	19.5
6H	14.6	15.5	14.9	15.8	16.0	17.9	18.9	18.3	19.2	19.4
8H	14.5	15.4	14.8	15.7	16.0	17.9	18.8	18.2	19.1	19.4
12H	14.5	15.3	14.8	15.6	15.9	17.8	18.7	18.2	19.0	19.3
4H 2H	15.0	16.1	15.3	16.3	16.5	18.0	19.1	18.3	19.3	19.5
3H	14.9	15.8	15.2	16.0	16.3	17.9	18.8	18.3	19.1	19.4
4H	14.8	15.6	15.2	15.9	16.2	17.9	18.7	18.2	19.0	19.3
6H	14.7	15.4	15.1	15.8	16.1	17.8	18.5	18.2	18.8	19.2
8H	14.7	15.3	15.1	15.7	16.0	17.7	18.4	18.1	18.7	19.1
12H	14.6	15.2	15.0	15.6	16.0	17.7	18.3	18.1	18.7	19.1
8H 4H	14.7	15.3	15.1	15.7	16.1	17.7	18.4	18.1	18.7	19.1
6H	14.6	15.1	15.0	15.5	15.9	17.7	18.2	18.1	18.6	19.0
8H	14.5	15.0	15.0	15.4	15.9	17.6	18.1	18.1	18.5	18.9
12H	14.5	14.9	15.0	15.3	15.8	17.6	18.0	18.0	18.4	18.9
12H 4H	14.6	15.2	15.0	15.6	16.0	17.7	18.3	18.1	18.7	19.0
6H	14.5	15.0	15.0	15.4	15.9	17.6	18.1	18.1	18.5	18.9
8H	14.5	14.9	15.0	15.3	15.8	17.6	18.0	18.0	18.4	18.9
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 2.5 / - 8.0					+ 0.8 / - 0.9				
1.5H	+ 1.4 / - 7.8					+ 0.9 / - 1.2				
2.0H	+ 4.4 / -10.4					+ 2.3 / - 6.4				

CIE Pub.117, 4591 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 5.3)
 Area: 0.13 m2

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:2024-01-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 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:0.1850A P:40.109W PF:0.9840 Freq:50.00Hz Lamp Flux:4590.78x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

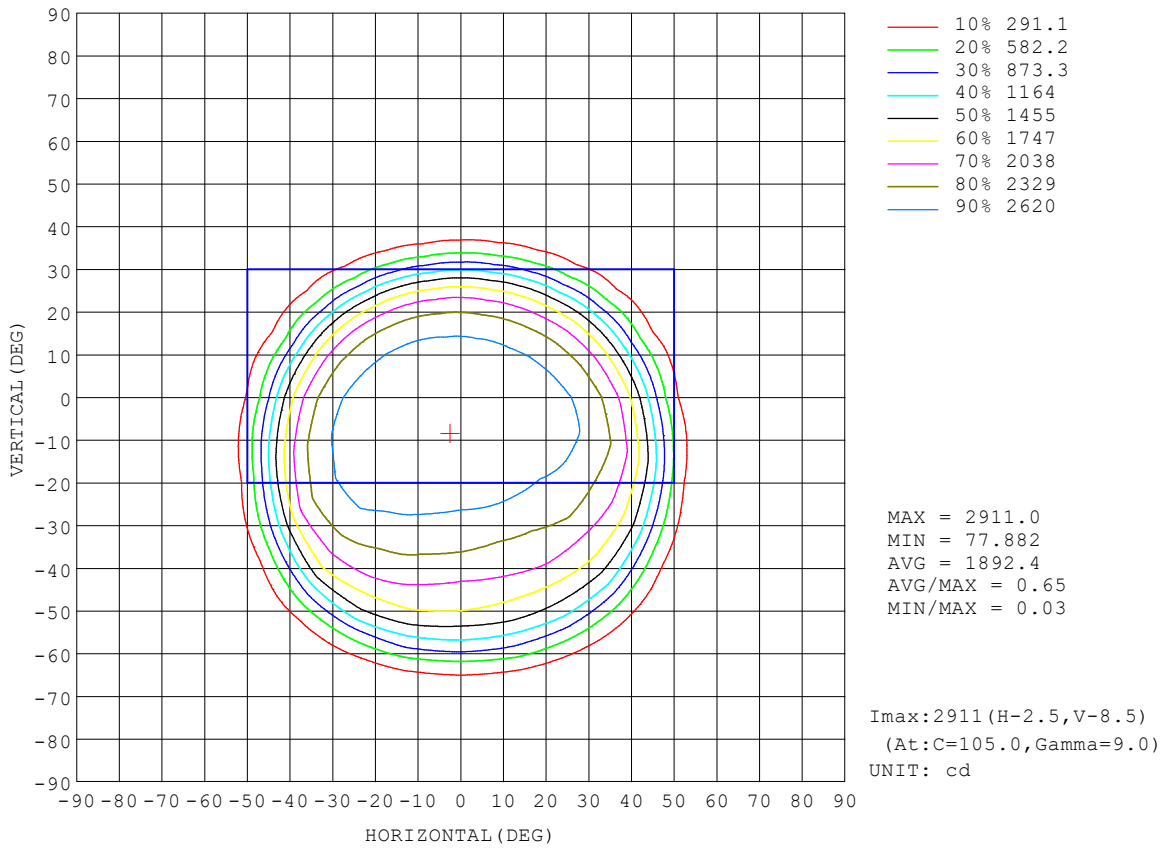
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	73	64	58	72	63	58	71	63	58	53
0.80	82	74	68	82	73	68	80	73	68	63
1.00	90	82	77	89	81	77	87	82	76	71
1.25	96	88	84	94	88	83	92	87	82	77
1.50	99	93	88	98	92	88	96	90	87	81
2.00	104	99	94	103	97	94	100	95	92	86
2.50	106	101	97	105	100	96	101	98	95	88
3.00	109	104	101	107	103	99	103	100	97	90
4.00	111	107	104	109	106	103	105	103	100	93
5.00	113	109	107	110	108	105	106	104	102	94
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:2024-01-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 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:0.1850A P:40.109W PF:0.9840 Freq:50.00Hz Lamp Flux:4590.78x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

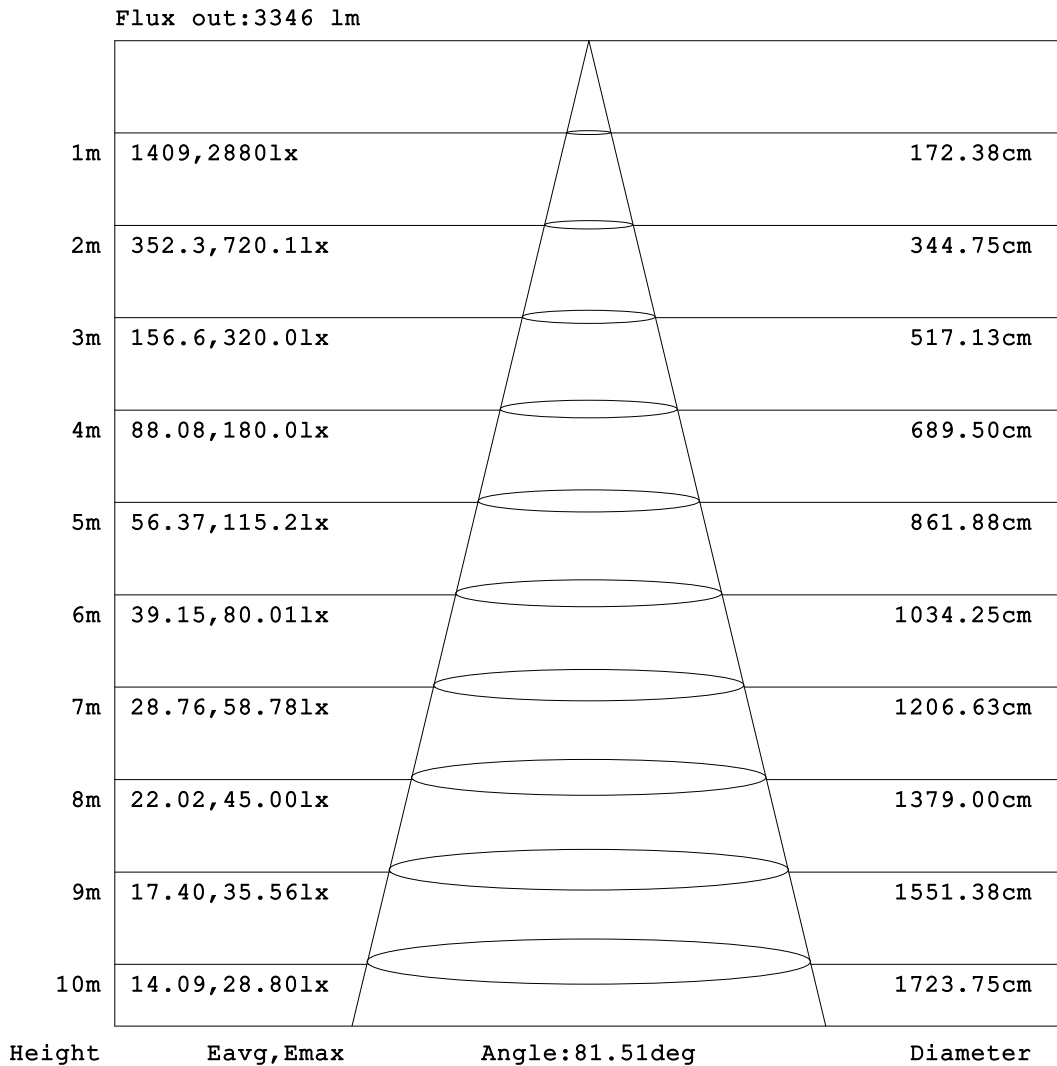


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:2024-01-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 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:0.1850A P:40.109W PF:0.9840 Freq:50.00Hz Lamp Flux:4590.78x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



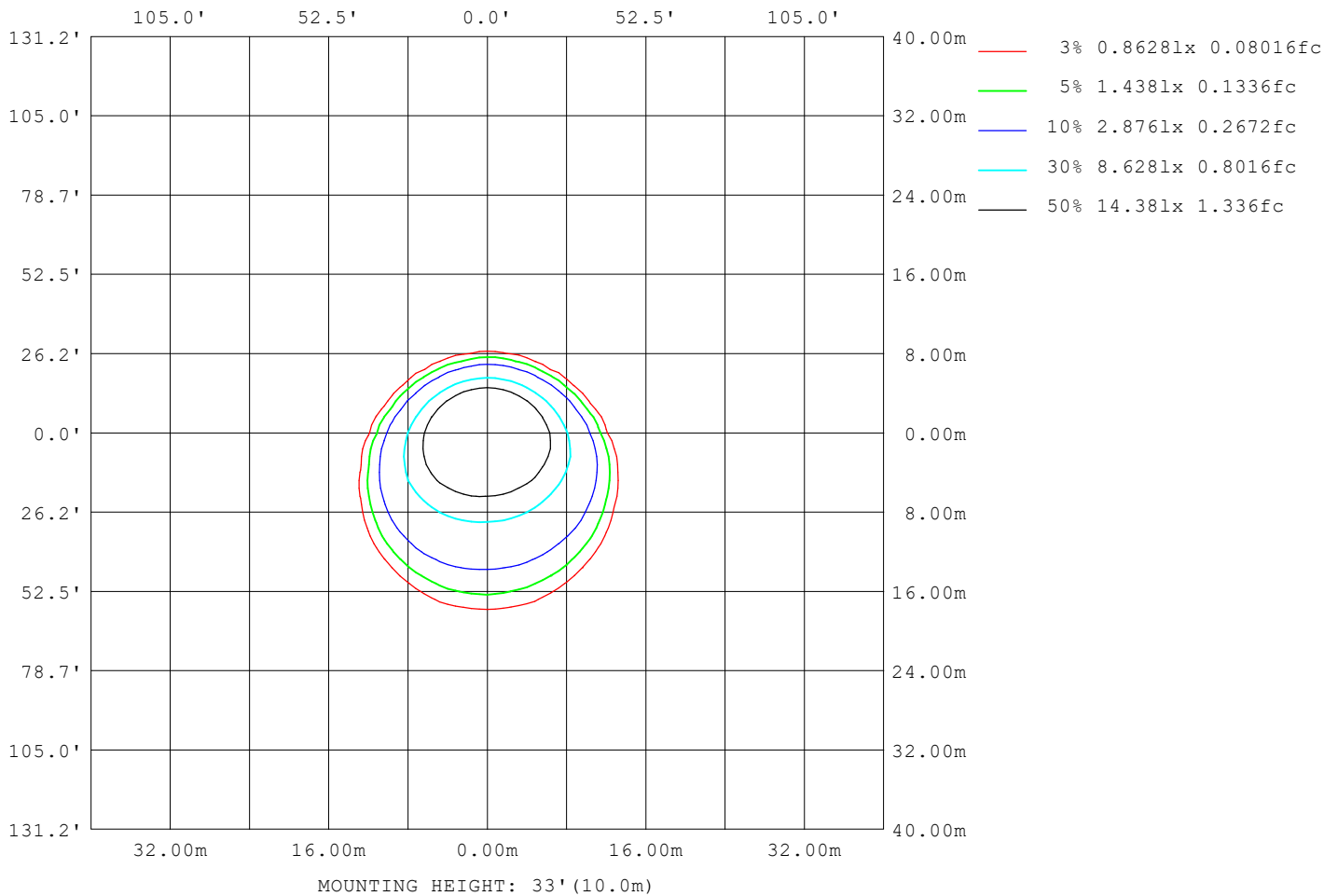
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2024-01-15

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
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:0.1850A P:40.109W PF:0.9840 Freq:50.00Hz Lamp Flux:4590.78x1 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:2024-01-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 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:0.1850A P:40.109W PF:0.9840 Freq:50.00Hz Lamp Flux:4590.78x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

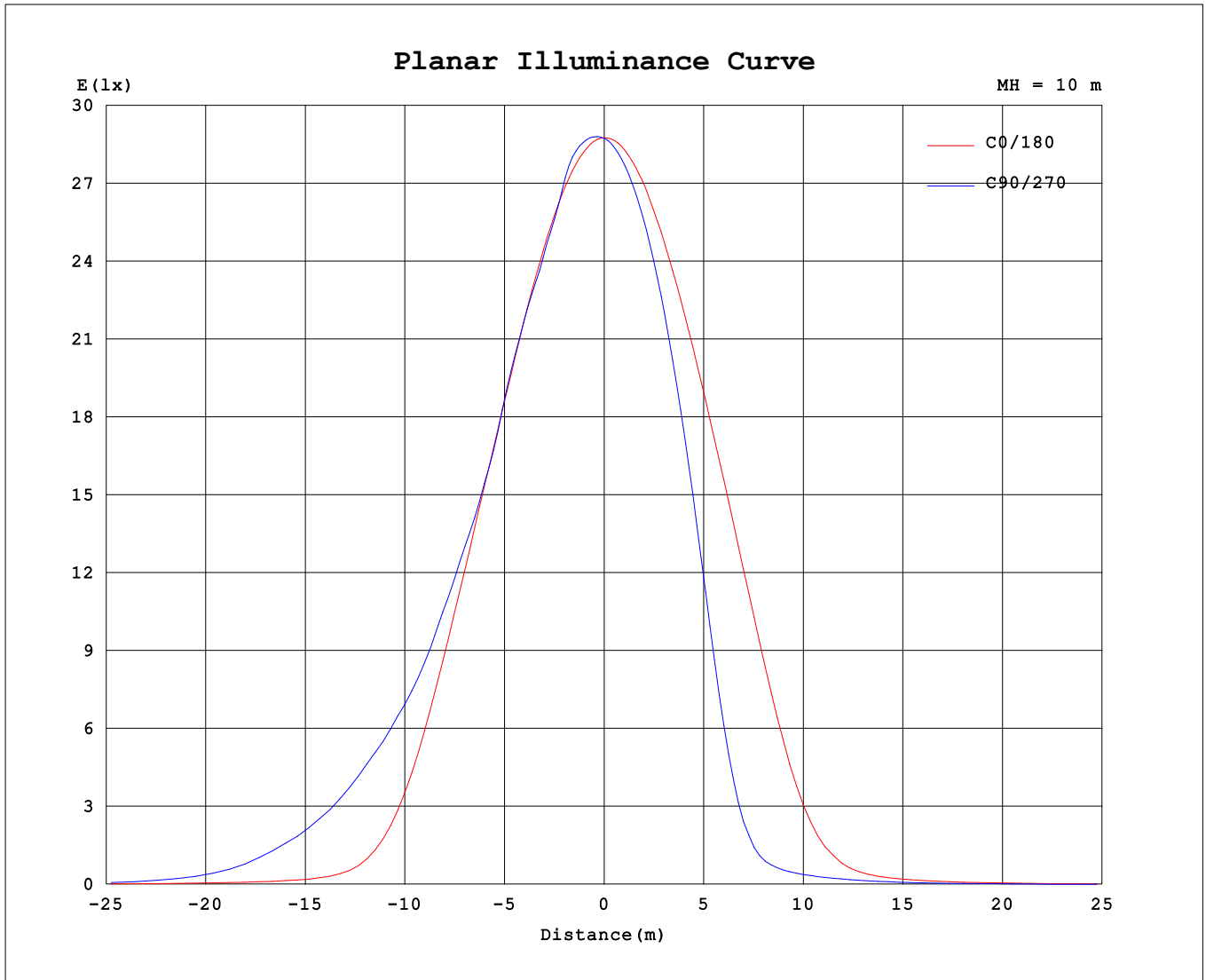
AvgL	cd/m2
L_0~180 (65) av	946
L_0~180 (75) av	477
L_0~180 (85) av	56
L_90~270 (65) av	2862
L_90~270 (75) av	618
L_90~270 (85) av	225
L_45 (65) av	1264
L_45 (75) av	511
L_45 (85) av	210

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:2024-01-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 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: 2024-01-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.473
 Humidity: 65.0%
 Test Distance: 9.401m [K=1.0000]
 Remarks:

