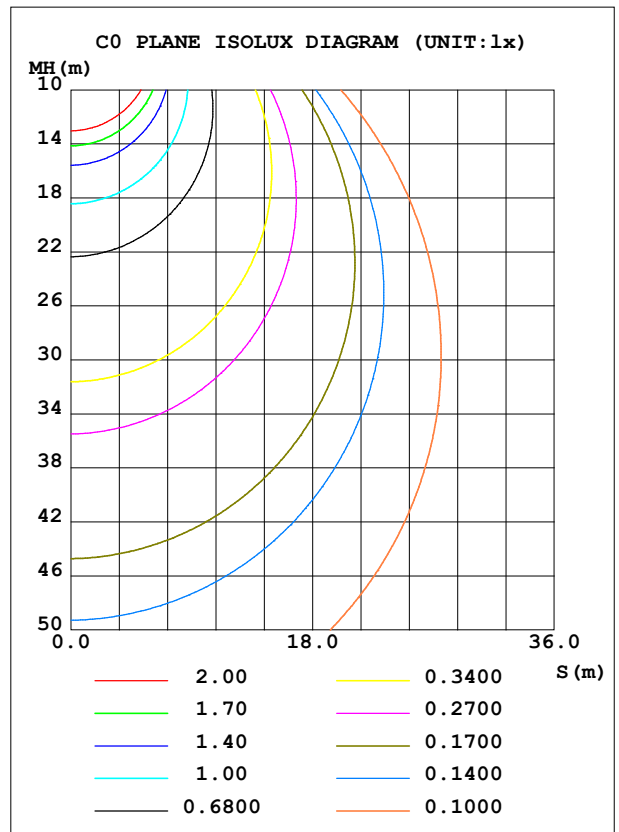
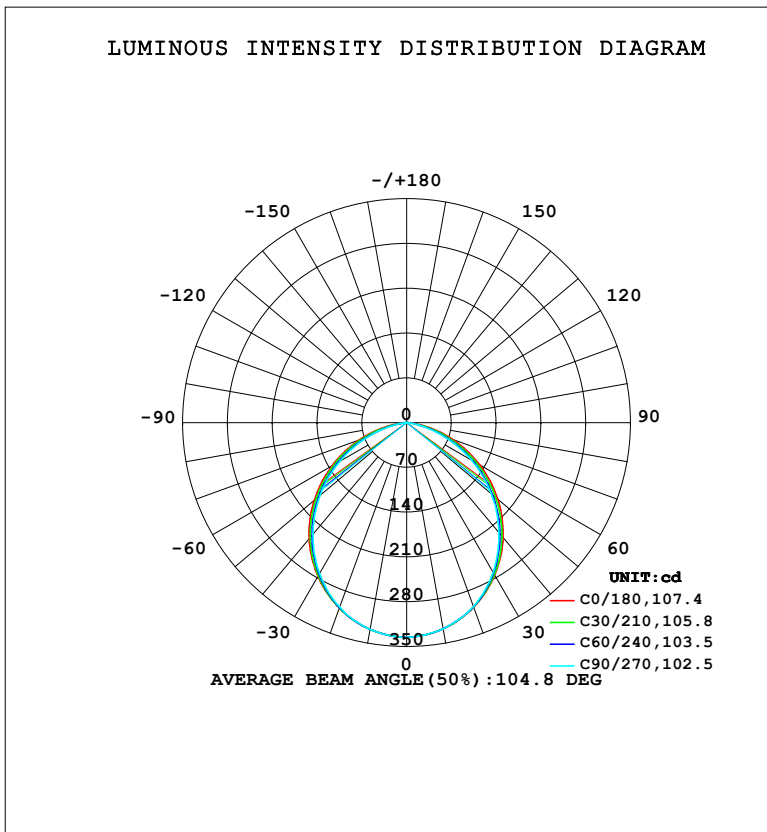


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.31V I:0.0859A P:10.059W PF:0.5317 Freq:50.00Hz Lamp Flux:856.439x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 85.14 lm/W
MODEL	116E	I <sub>max</sub> (cd)	335.3	S/MH (C0/180)	1.24	
NOMINAL POWER (W)	10	LOR (%)	100.0	S/MH (C90/270)	1.21	
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	856.44	η UP, DN (C0-180)	0.0, 49.8	
NOMINAL FLUX (lm)	856.439	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.2	
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: 2024-01-10

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:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	327.4	327.4	327.1	327.8	328.1	328.1	328.0	327.7	0- 10	31.63	31.63	3.69,3.69
20	306.9	306.7	305.8	307.4	308.3	307.7	307.0	307.2	10- 20	89.97	121.6	14.2,14.2
30	275.3	273.7	270.2	274.6	277.4	274.8	272.4	274.2	20- 30	134.5	256.1	29.9,29.9
40	234.6	229.9	224.7	231.3	237.2	231.8	228.0	231.0	30- 40	158.6	414.6	48.4,48.4
50	185.9	178.8	172.6	180.4	188.5	181.3	176.6	180.4	40- 50	159.2	573.8	67,67
60	131.7	123.5	116.8	125.2	134.3	126.1	120.5	125.2	50- 60	136.9	710.7	83,83
70	75.93	67.25	60.26	68.94	78.56	69.38	62.88	68.70	60- 70	95.97	806.7	94.2,94.2
80	24.48	16.63	10.72	17.66	26.07	16.89	11.19	16.54	70- 80	44.53	851.2	99.4,99.4
90	0.3683	0.3780	0.3079	0.3394	0.4277	0.4260	0.3682	0.4303	80- 90	5.242	856.4	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): 495.62 lm

%lum = 57.9%

%lamp = 57.9%

Conical surface Flux(130deg): 764.71 lm

%lum = 89.3%

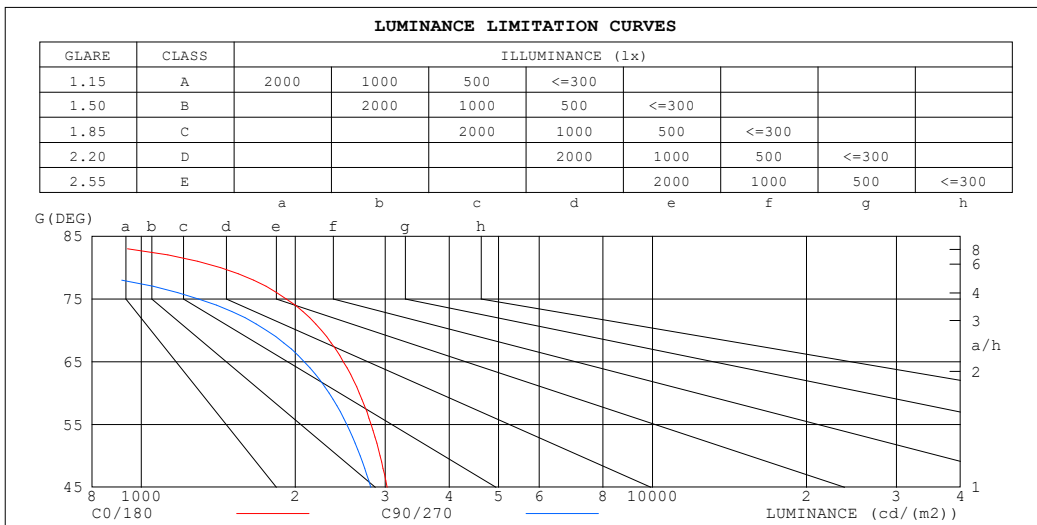
%lamp = 89.3%

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-01-10

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:220.31V I:0.0859A P:10.059W PF:0.5317 Freq:50.00Hz Lamp Flux:856.439x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	492	155
80	1429	616
75	1921	1293
70	2250	1757
65	2484	2082
60	2670	2330
55	2816	2522
50	2931	2679
45	3025	2812

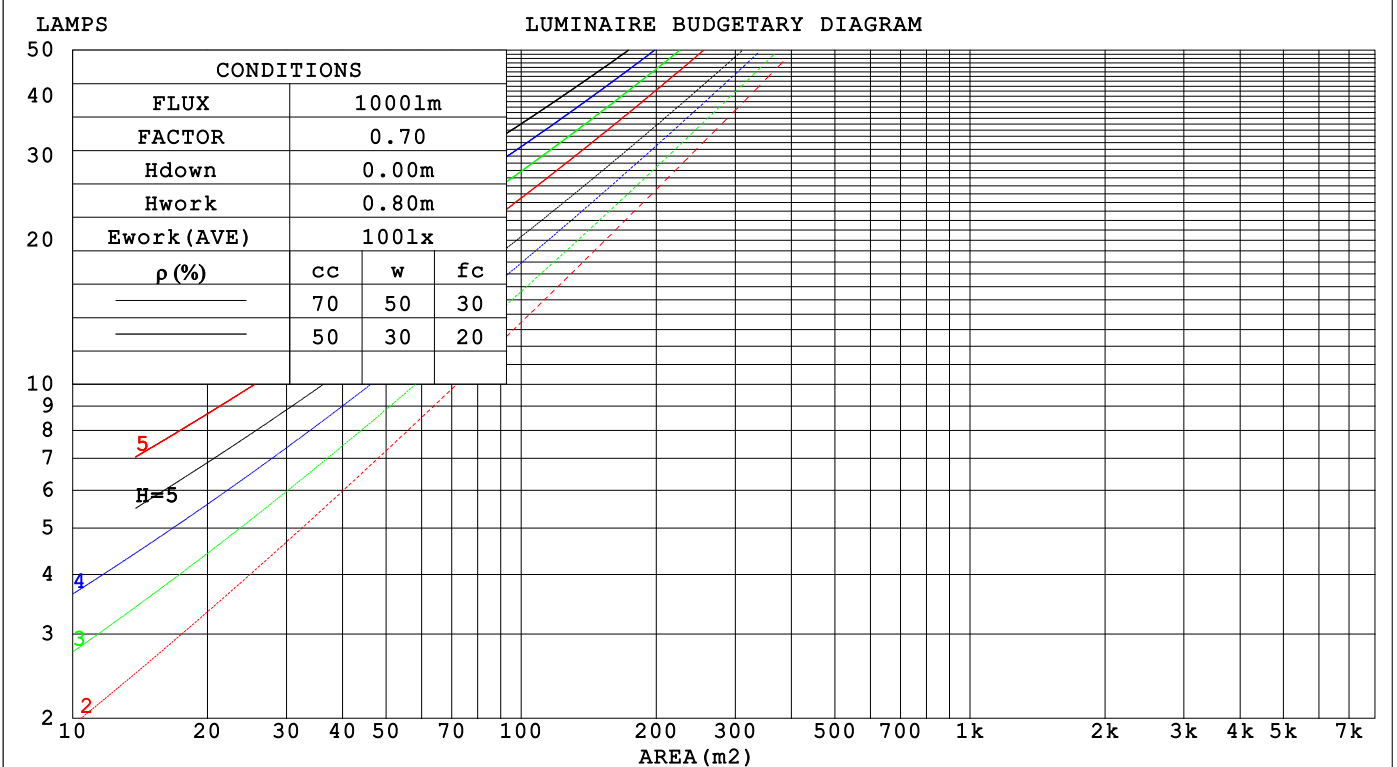
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-01-10

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:220.31V I:0.0859A P:10.059W PF:0.5317 Freq:50.00Hz Lamp Flux:856.439x1 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	1.05	1.01	.98	1.03	.99	.96	.99	.96	.93	.95	.93	.90	.91	.89	.88	.86
2.0	.92	.86	.81	.91	.85	.80	.87	.82	.78	.84	.80	.76	.81	.77	.74	.72
3.0	.82	.74	.67	.80	.73	.67	.77	.71	.66	.74	.69	.65	.72	.67	.63	.61
4.0	.72	.64	.58	.71	.63	.57	.69	.62	.56	.66	.60	.56	.64	.59	.55	.53
5.0	.65	.56	.50	.64	.56	.49	.62	.54	.49	.60	.53	.48	.58	.52	.48	.46
6.0	.59	.50	.44	.58	.49	.43	.56	.48	.43	.54	.48	.43	.53	.47	.42	.40
7.0	.53	.45	.39	.52	.44	.38	.51	.44	.38	.49	.43	.38	.48	.42	.38	.36
8.0	.49	.40	.35	.48	.40	.34	.47	.39	.34	.45	.39	.34	.44	.38	.34	.32
9.0	.45	.37	.31	.44	.36	.31	.43	.36	.31	.42	.35	.31	.41	.35	.31	.29
10.0	.41	.33	.28	.41	.33	.28	.40	.33	.28	.39	.32	.28	.38	.32	.28	.26



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-01-10

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:220.31V I:0.0859A P:10.059W PF:0.5317 Freq:50.00Hz								
Lamp Flux:856.439x1 lm								
NAME:			TYPE:			WEIGHT:		
SPEC.:			DIM.:			SERIAL No.:		
MFR.: EVERFINE			SUR.:			Shielding Angle:		

$\rho_{CC}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.283	.161	.051	.276	.158	.050	.263	.151	.048	.251	.145	.046	.240	.139	.045	
2.0	.273	.150	.046	.267	.147	.045	.255	.142	.044	.245	.137	.043	.235	.133	.042	
3.0	.256	.136	.041	.251	.134	.040	.241	.130	.040	.231	.127	.039	.222	.123	.038	
4.0	.239	.124	.036	.234	.122	.036	.225	.119	.036	.216	.116	.035	.209	.113	.035	
5.0	.222	.113	.033	.218	.112	.033	.210	.109	.032	.202	.107	.032	.195	.104	.031	
6.0	.207	.104	.030	.203	.103	.030	.196	.100	.029	.189	.098	.029	.183	.096	.029	
7.0	.193	.096	.027	.190	.095	.027	.184	.093	.027	.178	.091	.026	.172	.089	.026	
8.0	.181	.088	.025	.178	.088	.025	.172	.086	.025	.167	.085	.024	.162	.083	.024	
9.0	.170	.082	.023	.167	.082	.023	.162	.080	.023	.158	.079	.023	.153	.078	.022	
10.0	.160	.077	.021	.158	.076	.021	.153	.075	.021	.149	.074	.021	.145	.073	.021	

$\rho_{CC}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	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	.178	.156	.136	.153	.134	.117	.104	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.170	.132	.100	.145	.114	.087	.100	.079	.060	.057	.046	.035	.018	.015	.012	
3.0	.162	.114	.076	.139	.099	.066	.095	.068	.046	.055	.040	.027	.018	.013	.009	
4.0	.154	.101	.060	.132	.087	.052	.091	.061	.037	.053	.036	.022	.017	.012	.007	
5.0	.147	.090	.048	.126	.078	.042	.087	.055	.030	.050	.032	.018	.016	.010	.006	
6.0	.140	.082	.040	.120	.071	.035	.083	.050	.025	.048	.029	.015	.016	.010	.005	
7.0	.133	.075	.034	.115	.065	.030	.079	.046	.021	.046	.027	.012	.015	.009	.004	
8.0	.127	.069	.029	.109	.060	.026	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.121	.064	.026	.104	.056	.022	.072	.039	.016	.042	.023	.009	.014	.008	.003	
10.0	.116	.060	.023	.100	.052	.020	.069	.037	.014	.040	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-01-10

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:220.31V I:0.0859A P:10.059W PF:0.5317 Freq:50.00Hz										
Lamp Flux:856.439x1 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	17.0	18.4	17.2	18.6	18.9	16.4	17.9	16.7	18.1	18.3
3H	18.3	19.7	18.6	19.9	20.1	17.5	18.9	17.8	19.1	19.3
4H	18.8	20.0	19.1	20.3	20.5	17.8	19.1	18.1	19.3	19.6
6H	19.0	20.2	19.3	20.5	20.8	17.8	19.0	18.2	19.3	19.6
8H	19.0	20.2	19.4	20.5	20.8	17.8	19.0	18.1	19.2	19.5
12H	19.0	20.1	19.4	20.4	20.7	17.7	18.9	18.1	19.2	19.5
4H 2H	17.4	18.7	17.7	19.0	19.2	17.0	18.3	17.3	18.5	18.8
3H	18.9	20.0	19.3	20.3	20.6	18.2	19.3	18.6	19.6	19.9
4H	19.5	20.5	19.8	20.8	21.1	18.6	19.6	19.0	19.9	20.2
6H	19.8	20.7	20.2	21.1	21.4	18.7	19.6	19.1	19.9	20.3
8H	19.9	20.7	20.3	21.1	21.4	18.6	19.5	19.1	19.8	20.2
12H	19.8	20.6	20.3	21.0	21.4	18.6	19.4	19.0	19.8	20.2
8H 4H	19.6	20.4	20.0	20.8	21.1	18.7	19.6	19.2	19.9	20.3
6H	20.0	20.7	20.4	21.1	21.5	18.9	19.6	19.3	20.0	20.4
8H	20.1	20.7	20.5	21.1	21.5	18.9	19.5	19.3	19.9	20.3
12H	20.1	20.6	20.5	21.0	21.5	18.8	19.4	19.3	19.8	20.3
12H 4H	19.5	20.3	20.0	20.7	21.1	18.7	19.5	19.2	19.9	20.3
6H	19.9	20.6	20.4	21.0	21.4	18.9	19.5	19.3	19.9	20.4
8H	20.0	20.6	20.5	21.0	21.5	18.9	19.4	19.3	19.8	20.3
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.2 / - 0.3					+ 0.3 / - 0.3				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.4				
2.0H	+ 0.4 / - 0.4					+ 0.4 / - 0.5				

CIE Pub.117, 856.4 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.5)  
 Area: 0.1 m2

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-01-10

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:220.31V I:0.0859A P:10.059W PF:0.5317 Freq:50.00Hz Lamp Flux:856.439x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

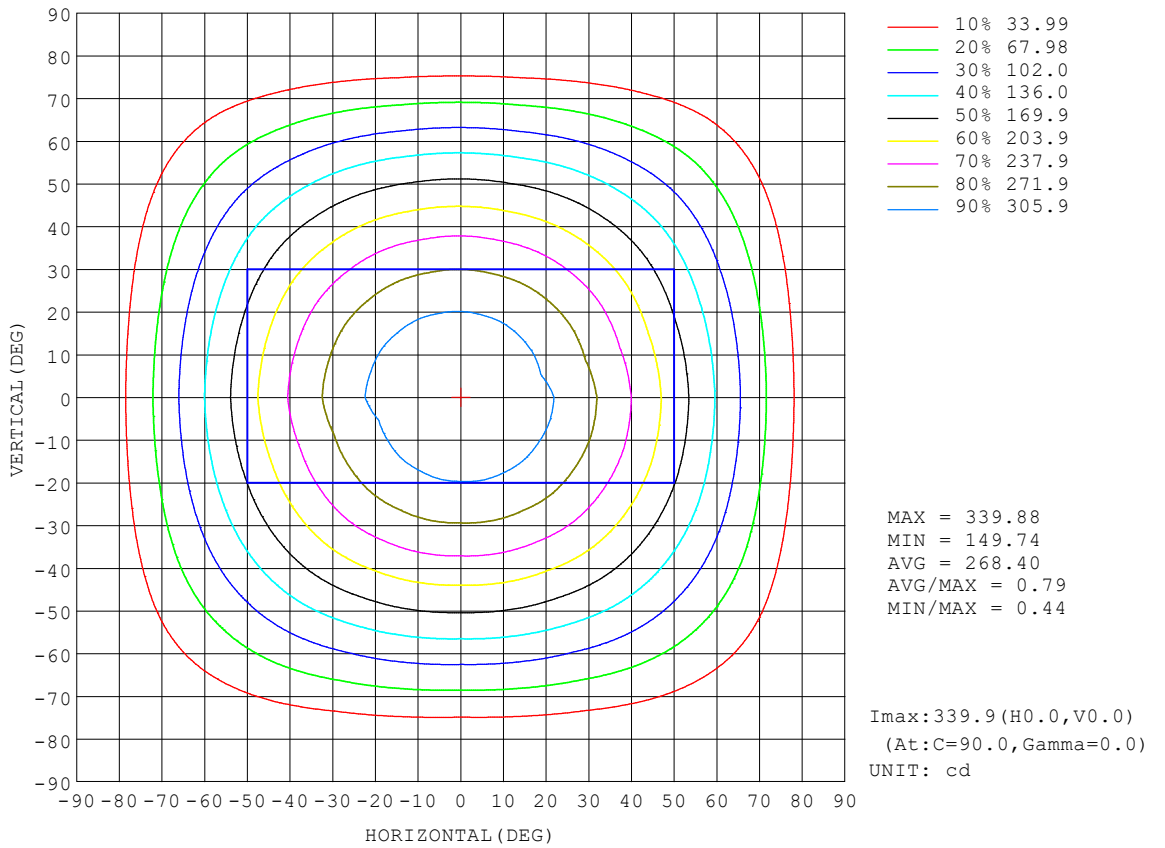
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	60	48	42	59	48	41	58	48	41	35
0.80	70	59	51	69	58	51	67	57	51	44
1.00	78	68	61	77	67	60	75	68	60	53
1.25	85	75	69	84	75	68	81	73	67	60
1.50	90	81	74	89	80	74	86	78	73	66
2.00	97	89	83	95	88	82	92	85	81	73
2.50	100	93	88	99	92	87	95	89	85	77
3.00	104	97	92	102	96	91	98	93	89	81
4.00	107	102	98	105	100	97	101	97	94	85
5.00	110	105	102	107	103	100	103	100	97	88
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:2024-01-10

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:220.31V I:0.0859A P:10.059W PF:0.5317 Freq:50.00Hz Lamp Flux:856.439x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



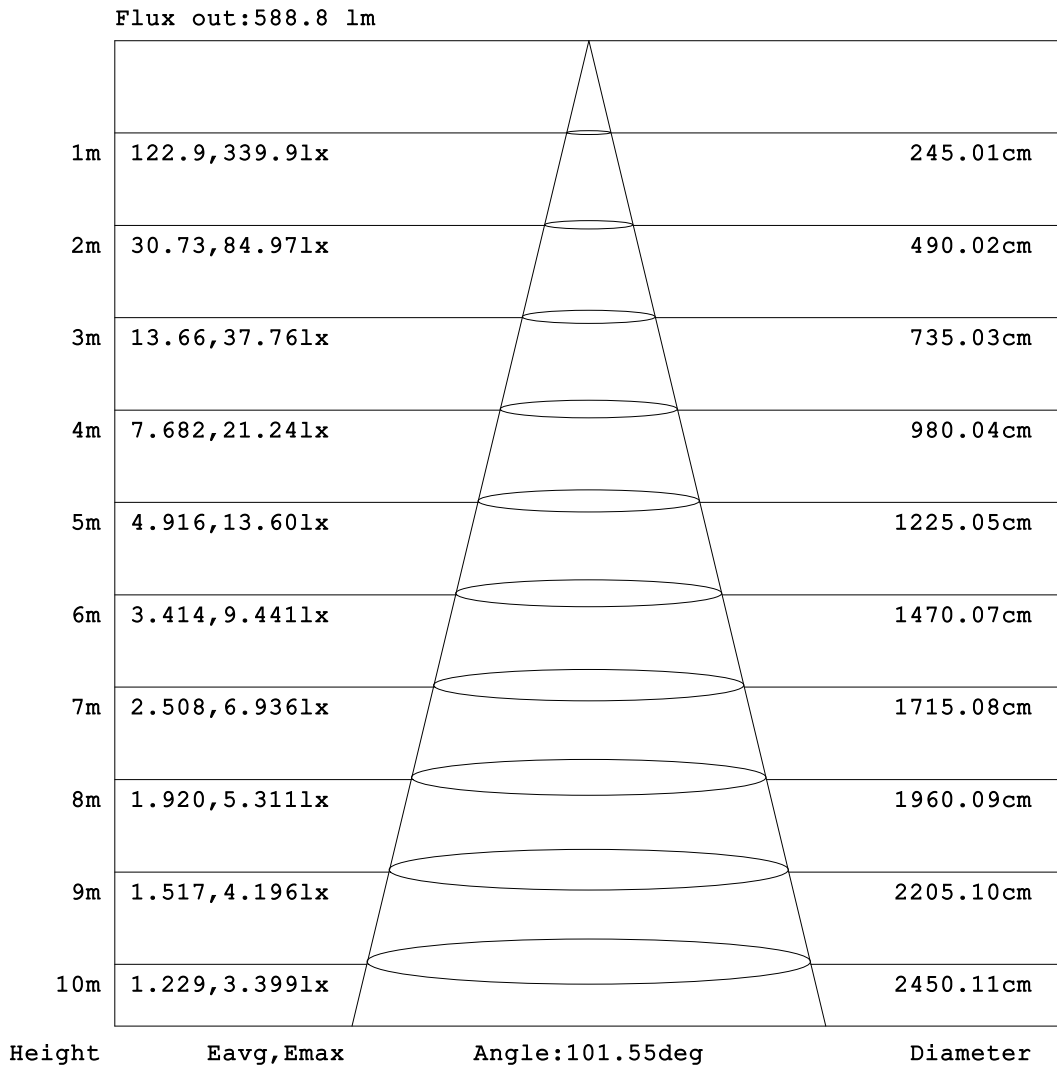
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-01-10

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:220.31V I:0.0859A P:10.059W PF:0.5317 Freq:50.00Hz Lamp Flux:856.439x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



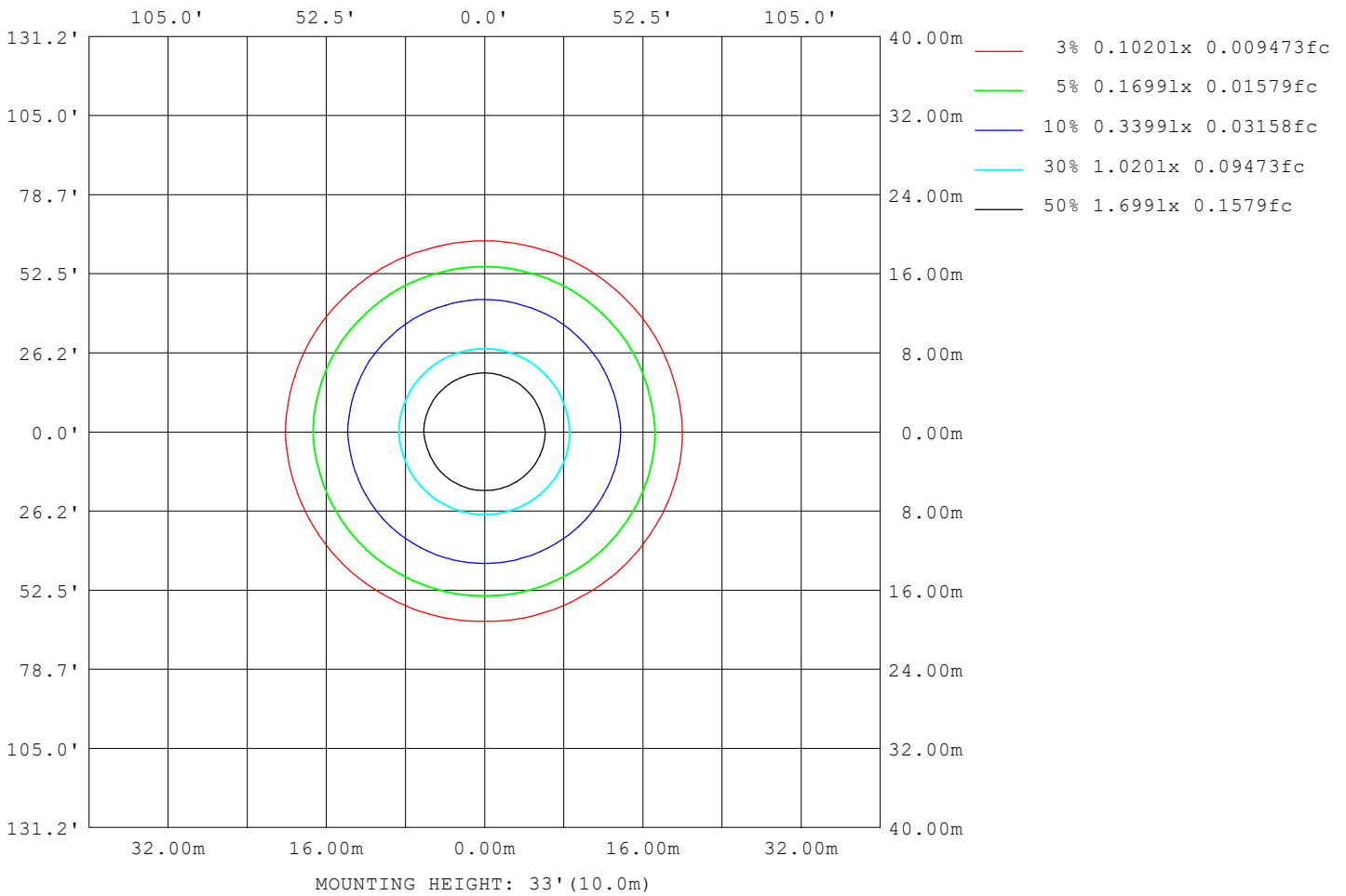
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: DAMIN  
 Test Date: 2024-01-10

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:220.31V I:0.0859A P:10.059W PF:0.5317 Freq:50.00Hz Lamp Flux:856.439x1 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:2024-01-10

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:220.31V I:0.0859A P:10.059W PF:0.5317 Freq:50.00Hz Lamp Flux:856.439x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

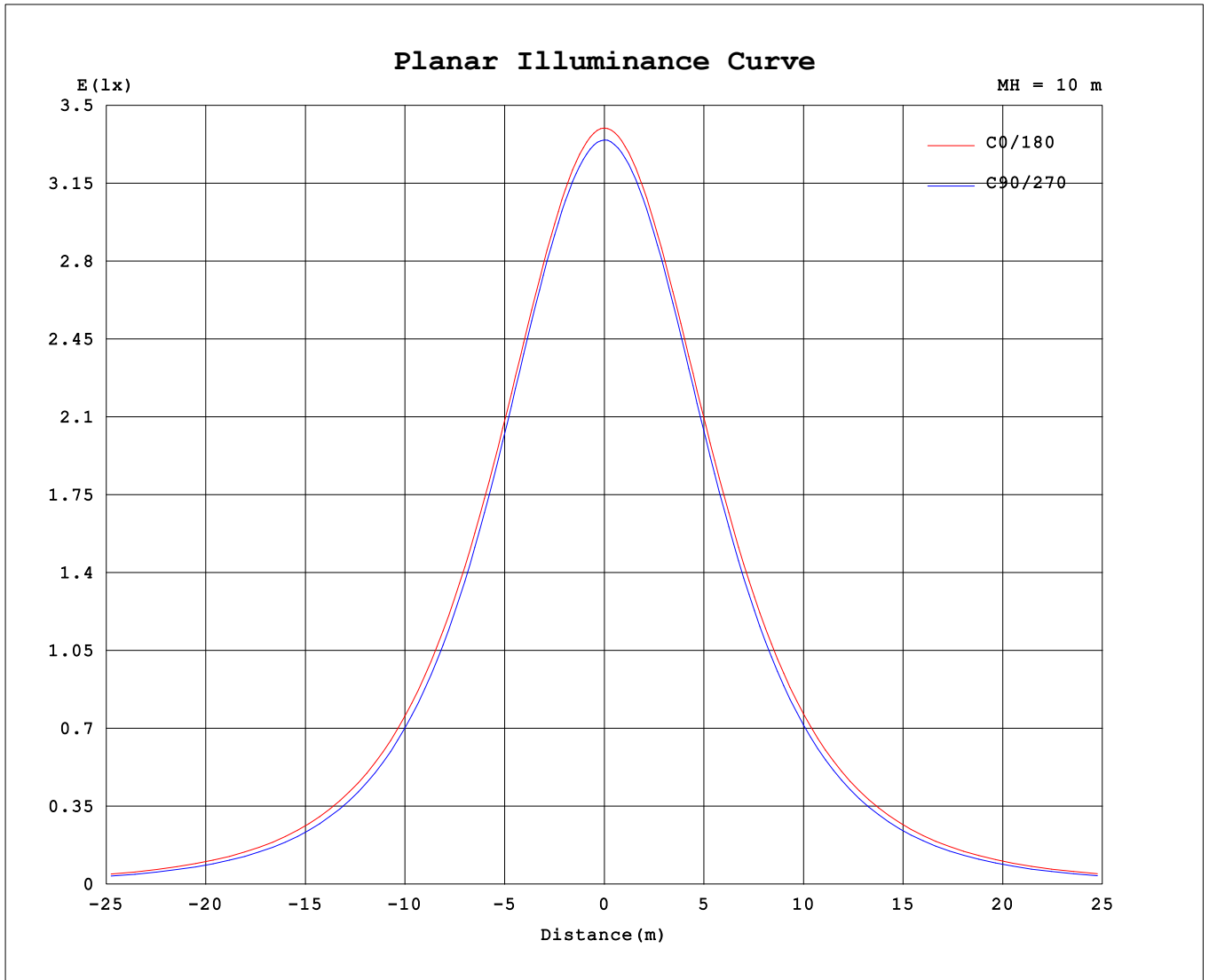
AvgL	cd/m2
L_0~180 (65) av	2483
L_0~180 (75) av	1944
L_0~180 (85) av	532
L_90~270 (65) av	2127
L_90~270 (75) av	1331
L_90~270 (85) av	161
L_45 (65) av	2288
L_45 (75) av	1600
L_45 (85) av	224

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-01-10

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: 2024-01-10

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:



