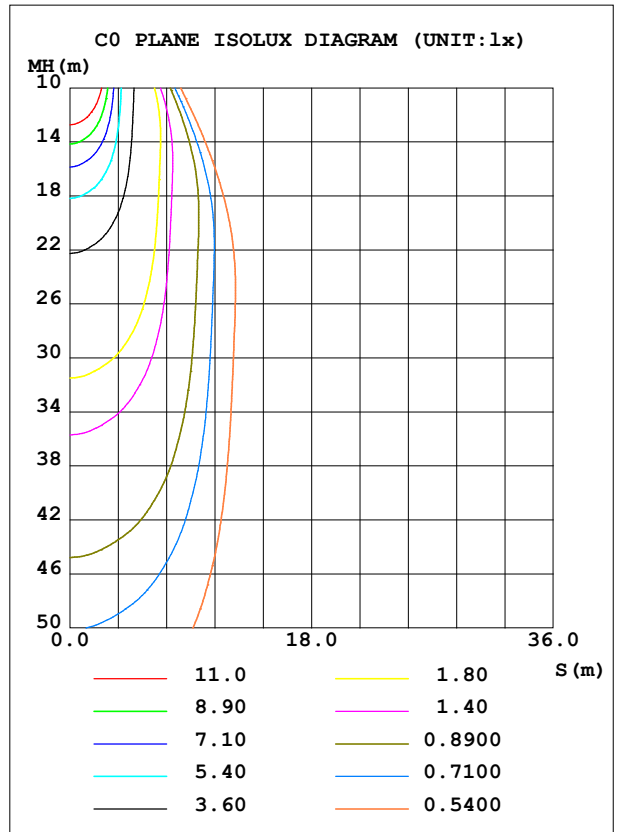
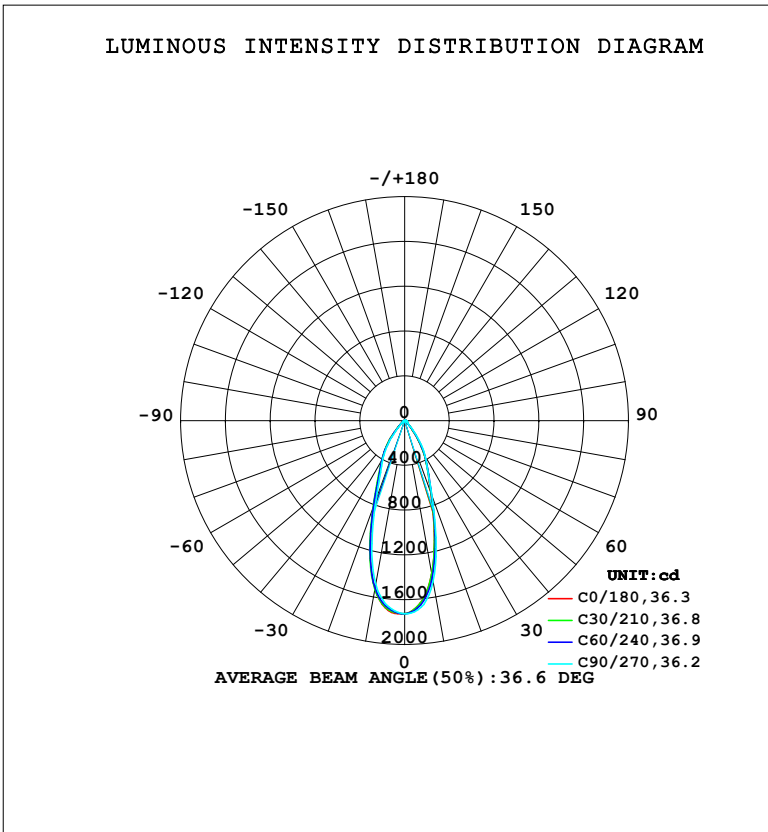


**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:220.29V I:0.1009A P:12.204W PF:0.5489 Freq:50.00Hz Lamp Flux:957.56x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 78.46 lm/W
MODEL	315B	I <sub>max</sub> (cd)	1728	S/MH (C0/180)	0.63	
NOMINAL POWER (W)	12	LOR (%)	100.0	S/MH (C90/270)	0.61	
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	957.56	η UP, DN (C0-180)	0.0,49.1	
NOMINAL FLUX (lm)	957.56	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0,50.9	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50	
TEST VOLTAGE (V)	219.5	η down (%)	100.0	CIBSE SHR MAX	0.60	



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators: DAMIN  
Test Date: 2024-06-13

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	1395	1412	1463	1520	1528	1522	1484	1419	0- 10	153.0	153.0	16,16
20	688.2	708.0	712.8	750.3	801.3	823.1	750.4	687.2	10- 20	302.2	455.2	47.5,47.5
30	350.0	361.7	371.0	394.3	403.2	410.7	389.1	359.0	20- 30	239.4	694.6	72.5,72.5
40	106.5	113.1	134.3	168.8	180.1	168.0	140.8	111.7	30- 40	158.5	853.1	89.1,89.1
50	32.89	33.80	33.91	39.94	47.82	45.04	36.40	31.71	40- 50	57.85	910.9	95.1,95.1
60	14.65	15.19	16.25	18.39	20.46	19.24	16.19	14.94	50- 60	22.03	933.0	97.4,97.4
70	8.717	9.106	10.77	12.96	13.08	11.71	10.25	9.282	60- 70	13.37	946.3	98.8,98.8
80	4.178	4.353	5.730	7.761	7.716	6.733	5.693	4.760	70- 80	8.821	955.2	99.7,99.7
90	0	0	0	0	0.0232	0.0299	0.0061	0.0061	80- 90	2.401	957.6	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): 890.22 lm

%lum = 93.0%

%lamp = 93.0%

Conical surface Flux(130deg): 940.26 lm

%lum = 98.2%

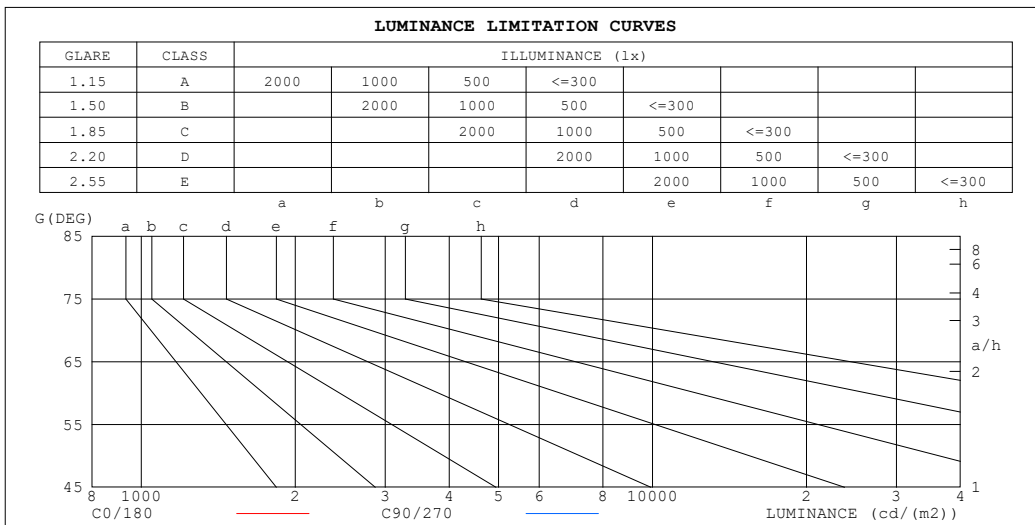
%lamp = 98.2%

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-06-13

$\gamma$  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:220.29V I:0.1009A P:12.204W PF:0.5489 Freq:50.00Hz Lamp Flux:957.56x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	21	81
80	249	328
75	259	322
70	264	313
65	276	313
60	304	323
55	375	377
50	530	524
45	816	887

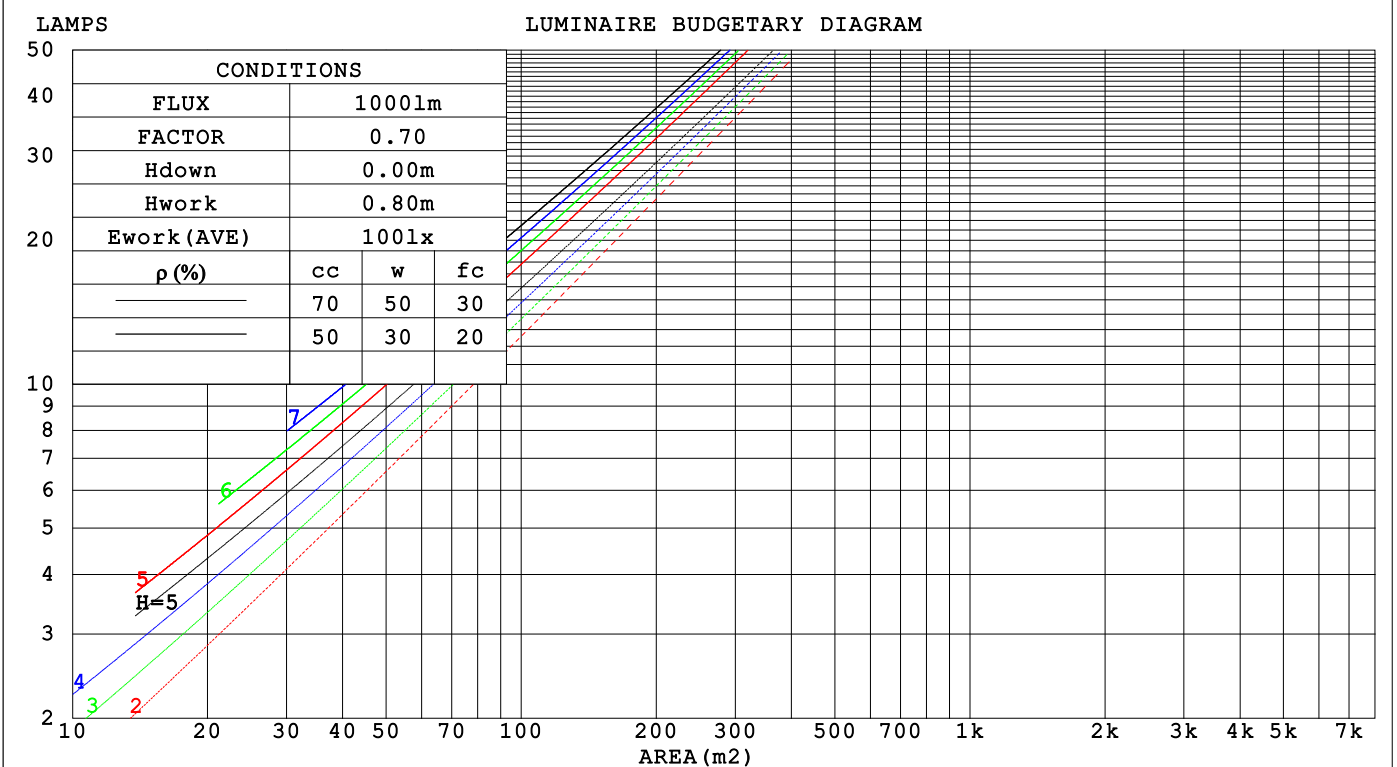
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-06-13

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:220.29V I:0.1009A P:12.204W PF:0.5489 Freq:50.00Hz Lamp Flux:957.56x1 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	1.11	1.08	1.06	1.08	1.06	1.04	1.04	1.03	1.01	1.01	.99	.98	.97	.96	.95	.93
2.0	1.03	.99	.95	1.01	.98	.94	.98	.95	.92	.95	.93	.90	.92	.90	.88	.87
3.0	.96	.91	.87	.95	.90	.87	.92	.88	.85	.90	.87	.84	.88	.85	.83	.81
4.0	.90	.85	.81	.89	.84	.80	.87	.83	.79	.85	.81	.78	.83	.80	.77	.76
5.0	.85	.79	.75	.84	.79	.75	.82	.77	.74	.80	.76	.73	.79	.75	.73	.71
6.0	.80	.74	.70	.79	.74	.70	.78	.73	.69	.76	.72	.69	.75	.71	.68	.67
7.0	.76	.70	.66	.75	.70	.66	.74	.69	.65	.73	.68	.65	.72	.68	.65	.63
8.0	.72	.66	.62	.71	.66	.62	.70	.65	.62	.69	.65	.61	.68	.64	.61	.60
9.0	.68	.63	.59	.68	.62	.59	.67	.62	.59	.66	.62	.58	.65	.61	.58	.57
10.0	.65	.60	.56	.65	.59	.56	.64	.59	.56	.63	.59	.55	.62	.58	.55	.54



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-06-13

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:220.29V I:0.1009A P:12.204W PF:0.5489 Freq:50.00Hz																	
Lamp Flux:957.56x1 lm																	
NAME:						TYPE:						WEIGHT:					
SPEC.:						DIM.:						SERIAL No.:					
MFR.: EVERFINE						SUR.:						Shielding Angle:					

ρ <sub>CC</sub>	80%			70%			50%			30%			10%			0		
ρ <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0		
ρ <sub>fc</sub>	20%			20%			20%			20%			20%			0		
RCR	RCR:Room Cavity Ratio									Wall Exitance Coefficients(WEC)								
0.0																		
1.0	.181	.103	.033	.175	.100	.032	.162	.093	.030	.150	.087	.028	.140	.081	.026			
2.0	.172	.094	.029	.166	.092	.028	.156	.087	.027	.146	.082	.026	.137	.077	.024			
3.0	.162	.086	.026	.157	.084	.025	.148	.080	.024	.140	.077	.024	.132	.073	.023			
4.0	.153	.080	.023	.149	.078	.023	.141	.075	.022	.134	.072	.022	.127	.069	.021			
5.0	.145	.074	.021	.142	.073	.021	.135	.070	.021	.128	.068	.020	.123	.065	.020			
6.0	.138	.069	.020	.135	.068	.020	.129	.066	.019	.123	.064	.019	.118	.062	.018			
7.0	.131	.065	.018	.128	.064	.018	.123	.062	.018	.118	.061	.018	.113	.059	.017			
8.0	.125	.061	.017	.122	.060	.017	.118	.059	.017	.113	.057	.017	.109	.056	.016			
9.0	.119	.058	.016	.117	.057	.016	.113	.056	.016	.109	.055	.016	.105	.053	.015			
10.0	.114	.055	.015	.112	.054	.015	.108	.053	.015	.105	.052	.015	.101	.051	.015			

ρ <sub>CC</sub>	80%			70%			50%			30%			10%			0		
ρ <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0		
ρ <sub>fc</sub>	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	.171	.157	.145	.147	.135	.124	.100	.093	.086	.058	.054	.050	.018	.017	.016			
2.0	.156	.132	.113	.134	.114	.097	.092	.079	.068	.053	.046	.040	.017	.015	.013			
3.0	.144	.114	.090	.123	.098	.078	.085	.068	.054	.049	.040	.032	.016	.013	.011			
4.0	.133	.099	.073	.114	.085	.063	.079	.060	.044	.045	.035	.026	.015	.011	.009			
5.0	.124	.087	.060	.107	.075	.052	.074	.053	.037	.043	.031	.022	.014	.010	.007			
6.0	.117	.078	.050	.100	.067	.044	.069	.047	.031	.040	.028	.018	.013	.009	.006			
7.0	.110	.070	.042	.094	.061	.037	.065	.043	.026	.038	.025	.016	.012	.008	.005			
8.0	.104	.064	.036	.089	.055	.032	.062	.039	.023	.036	.023	.013	.012	.008	.004			
9.0	.099	.059	.032	.085	.051	.028	.059	.036	.020	.034	.021	.012	.011	.007	.004			
10.0	.094	.054	.028	.081	.047	.024	.056	.033	.017	.033	.020	.010	.011	.006	.003			

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-06-13

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:220.29V I:0.1009A P:12.204W PF:0.5489 Freq:50.00Hz										
Lamp Flux:957.56x1 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	7.0	7.9	7.2	8.1	8.3	7.4	8.3	7.6	8.4	8.6
3H	7.2	8.0	7.4	8.2	8.4	7.6	8.4	7.8	8.6	8.8
4H	7.3	8.1	7.6	8.3	8.6	7.8	8.6	8.0	8.8	9.0
6H	7.4	8.2	7.7	8.4	8.7	8.0	8.7	8.3	9.0	9.2
8H	7.5	8.2	7.8	8.5	8.7	8.0	8.8	8.3	9.0	9.3
12H	7.4	8.1	7.8	8.4	8.7	8.0	8.7	8.3	9.0	9.3
4H 2H	6.9	7.7	7.2	8.0	8.2	7.3	8.1	7.6	8.3	8.5
3H	7.3	8.0	7.6	8.2	8.5	7.6	8.3	8.0	8.6	8.9
4H	7.5	8.1	7.8	8.4	8.7	7.9	8.6	8.3	8.9	9.2
6H	7.7	8.3	8.1	8.6	8.9	8.2	8.8	8.6	9.1	9.5
8H	7.8	8.3	8.2	8.6	9.0	8.3	8.9	8.7	9.2	9.6
12H	7.7	8.2	8.1	8.6	9.0	8.4	8.8	8.8	9.2	9.6
8H 4H	7.5	8.0	7.9	8.4	8.8	7.9	8.5	8.3	8.8	9.2
6H	7.8	8.3	8.2	8.6	9.1	8.3	8.8	8.8	9.2	9.6
8H	7.9	8.3	8.4	8.7	9.2	8.5	8.9	9.0	9.3	9.8
12H	7.9	8.2	8.4	8.7	9.2	8.5	8.9	9.0	9.3	9.8
12H 4H	7.5	8.0	7.9	8.3	8.7	7.9	8.4	8.3	8.8	9.2
6H	7.8	8.2	8.3	8.6	9.1	8.3	8.7	8.8	9.1	9.6
8H	8.0	8.3	8.4	8.7	9.2	8.5	8.8	9.0	9.3	9.8
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 1.7 / - 2.0					+ 2.0 / - 2.1				
1.5H	+ 3.2 / - 1.8					+ 3.7 / - 1.9				
2.0H	+ 2.1 / - 1.1					+ 2.3 / - 0.8				

CIE Pub.117, 957.6 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.2)  
 Area: 0.1 m2

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-06-13

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:220.29V I:0.1009A P:12.204W PF:0.5489 Freq:50.00Hz Lamp Flux:957.56x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

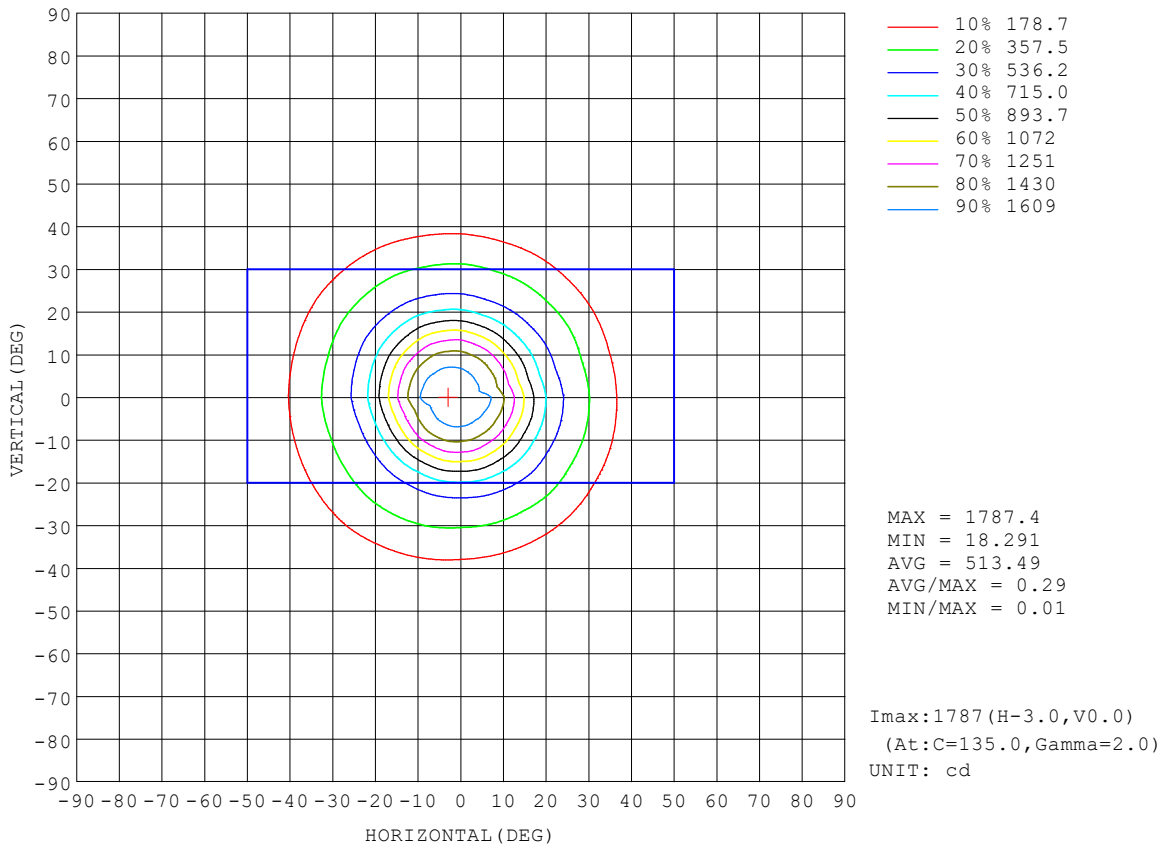
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	85	78	74	84	78	74	83	77	74	70
0.80	92	86	82	92	86	82	91	85	82	78
1.00	97	91	87	96	91	87	95	91	86	82
1.25	102	96	92	100	95	92	98	94	91	87
1.50	104	99	96	103	99	95	101	97	94	89
2.00	107	103	99	106	102	99	103	100	97	92
2.50	109	105	102	108	104	101	104	102	99	93
3.00	111	107	104	109	106	103	106	103	101	94
4.00	113	110	108	111	108	106	107	105	104	96
5.00	114	112	110	112	110	108	108	107	105	98
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:2024-06-13

$\gamma$  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:220.29V I:0.1009A P:12.204W PF:0.5489 Freq:50.00Hz Lamp Flux:957.56x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



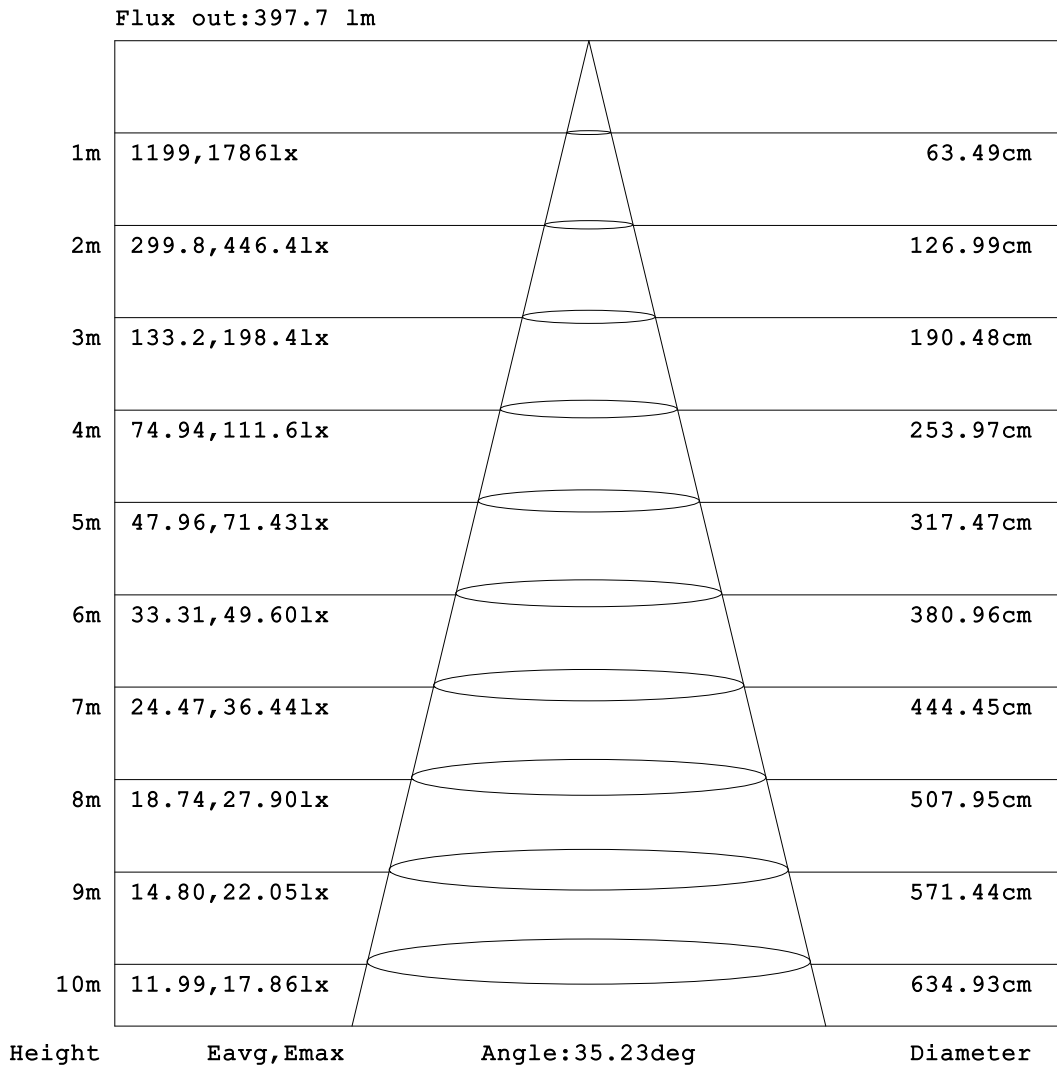
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-06-13

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:220.29V I:0.1009A P:12.204W PF:0.5489 Freq:50.00Hz Lamp Flux:957.56x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



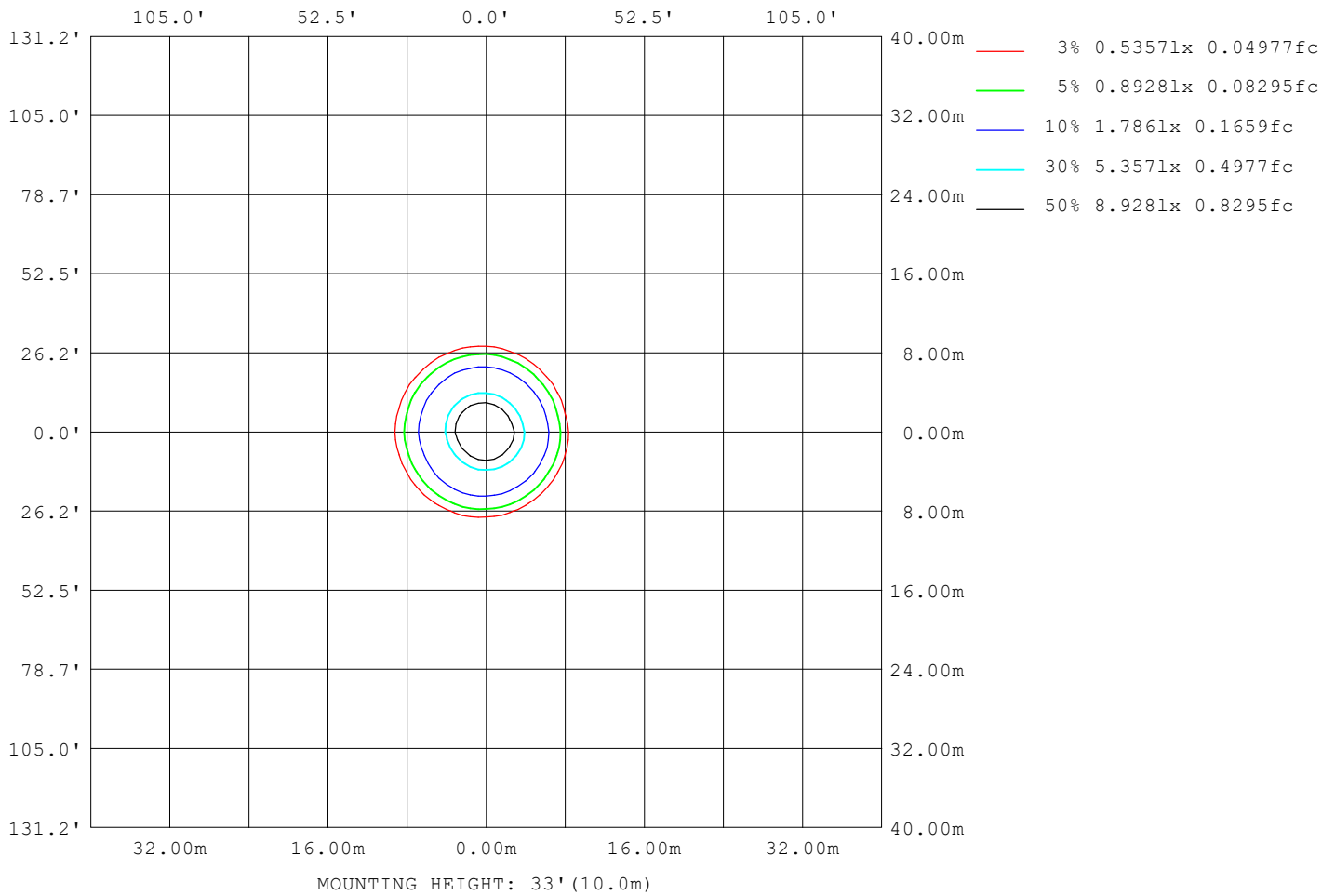
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:DAMIN  
Test Date:2024-06-13

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:220.29V I:0.1009A P:12.204W PF:0.5489 Freq:50.00Hz Lamp Flux:957.56x1 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:2024-06-13

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:220.29V I:0.1009A P:12.204W PF:0.5489 Freq:50.00Hz Lamp Flux:957.56x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

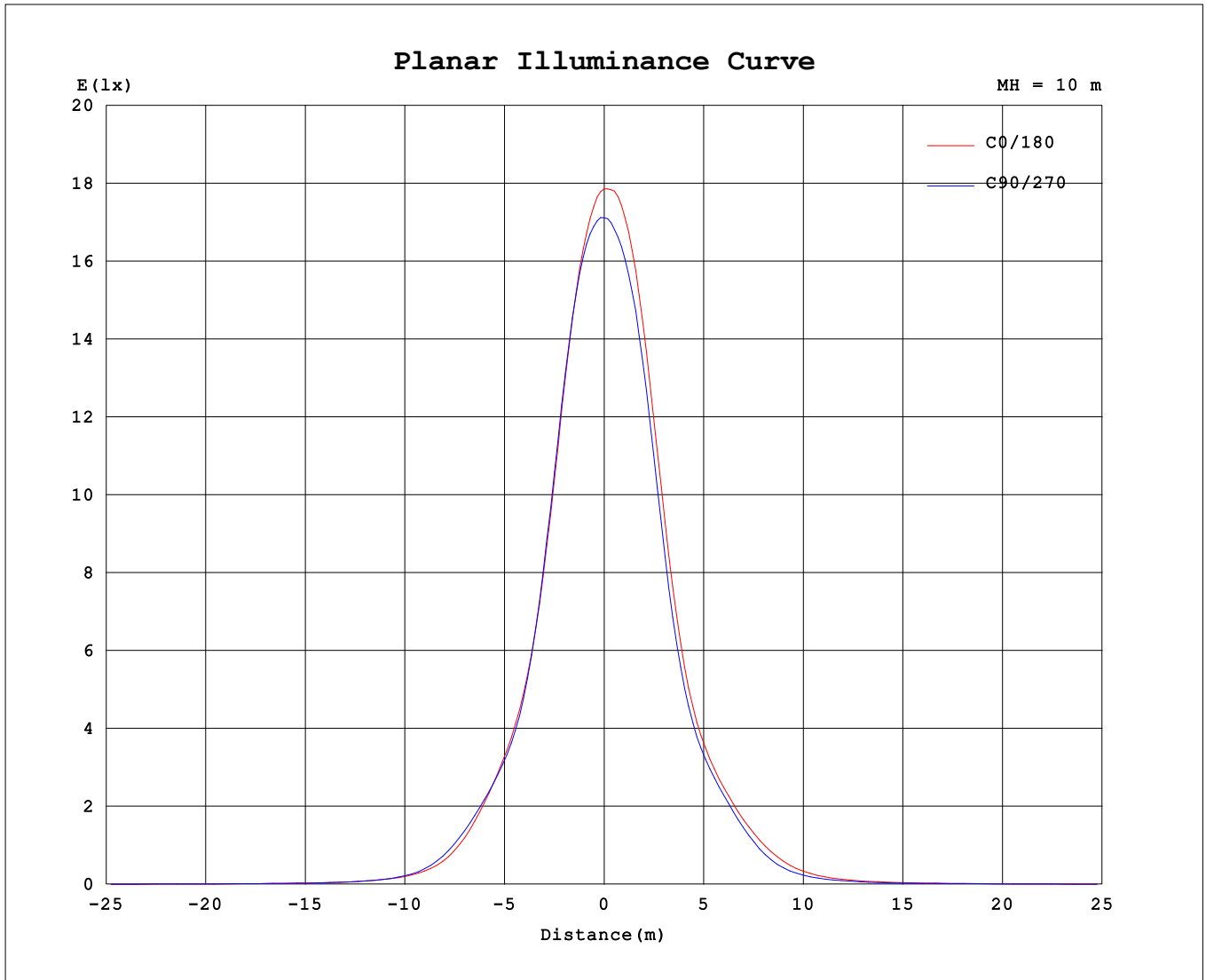
AvgL	cd/m2
L_0~180 (65) av	321
L_0~180 (75) av	327
L_0~180 (85) av	218
L_90~270 (65) av	310
L_90~270 (75) av	317
L_90~270 (85) av	171
L_45 (65) av	316
L_45 (75) av	325
L_45 (85) av	199

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-06-13

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: 2024-06-13

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:



