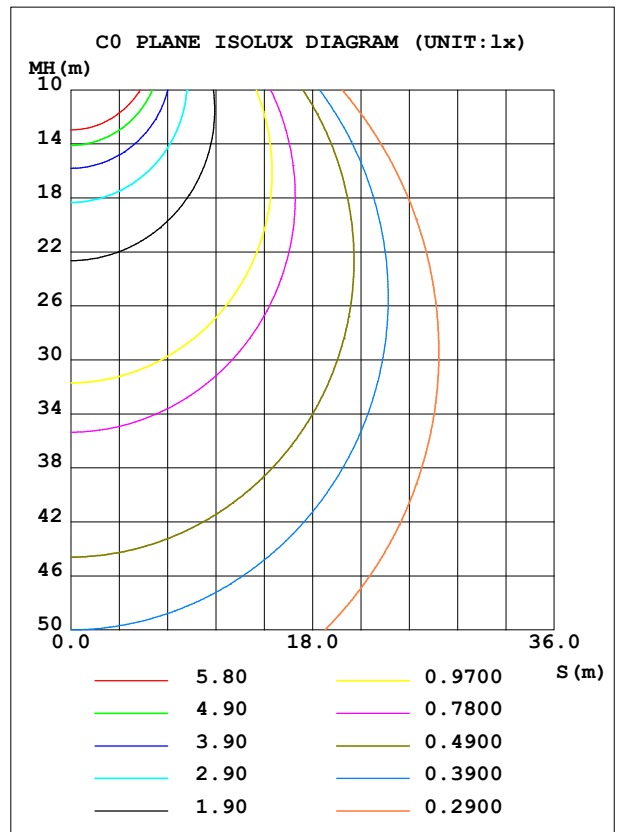
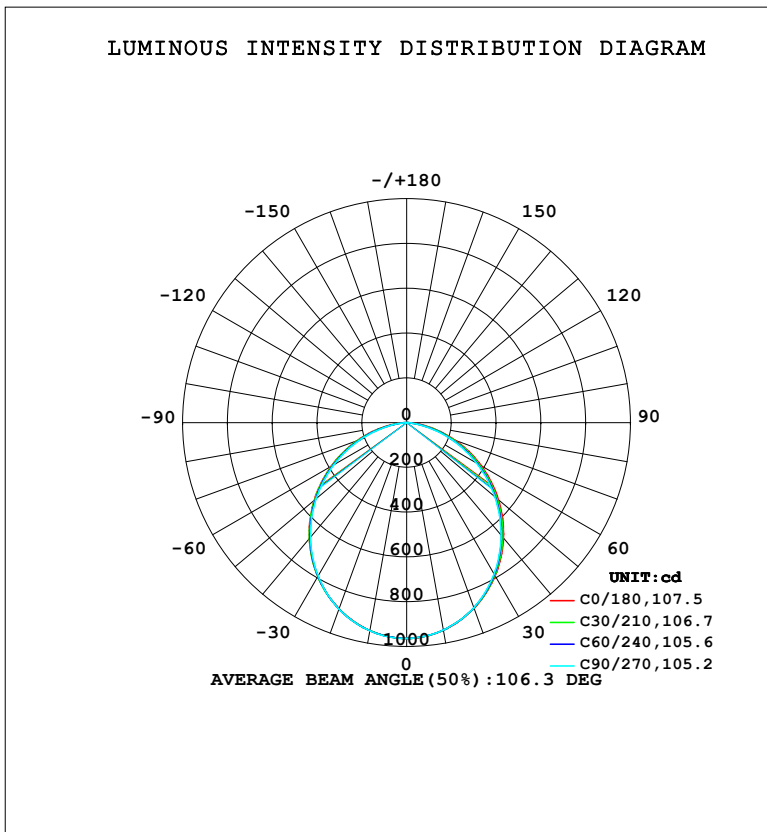


**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:120.25V I:0.2023A P:24.212W PF:0.9953 Freq:50.00Hz Lamp Flux:2538x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 129mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	OJL154	Imax (cd)	964.1	S/MH (C0/180)	1.23
NOMINAL POWER (W)	24	LOR (%)	100.0	S/MH (C90/270)	1.23
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	2538.0	η UP, DN (C0-180)	0.0,49.6
NOMINAL FLUX (lm)	2538	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: 2024-01-16

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	941.6	941.6	940.7	941.8	943.1	943.4	944.0	943.0	0- 10	90.97	90.97	3.58,3.58
20	881.8	880.8	878.8	882.0	884.4	884.6	885.7	883.9	10- 20	258.6	349.6	13.8,13.8
30	790.3	787.3	781.3	788.6	793.3	792.4	790.9	791.6	20- 30	386.9	736.5	29,29
40	672.9	665.6	656.6	666.8	676.7	672.5	668.9	671.5	30- 40	457.8	1194	47.1,47.1
50	535.1	524.4	513.9	525.4	538.8	532.2	527.8	531.1	40- 50	463.1	1657	65.3,65.3
60	385.0	372.3	360.2	372.9	388.0	379.8	374.6	378.5	50- 60	405.0	2062	81.3,81.3
70	230.8	217.9	203.4	217.7	234.6	224.4	217.1	222.9	60- 70	295.5	2358	92.9,92.9
80	86.43	72.23	57.30	71.88	89.35	76.76	65.47	75.13	70- 80	154.3	2512	99,99
90	1.518	1.513	1.461	1.476	1.625	1.748	1.582	1.803	80- 90	25.90	2538	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): 1429.3 lm

%lum = 56.3%

%lamp = 56.3%

Conical surface Flux(130deg): 2226.4 lm

%lum = 87.7%

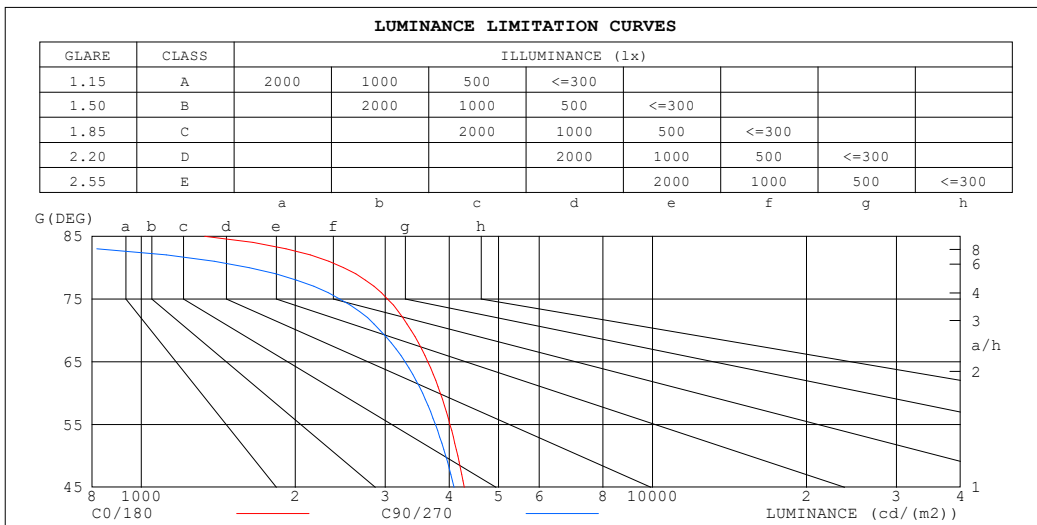
%lamp = 87.7%

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-01-16

$\gamma$  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:120.25V I:0.2023A P:24.212W PF:0.9953 Freq:50.00Hz Lamp Flux:2538x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 129mm	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1330	312
80	2486	1625
75	3032	2445
70	3371	2930
65	3633	3278
60	3845	3548
55	4016	3760
50	4158	3938
45	4281	4090

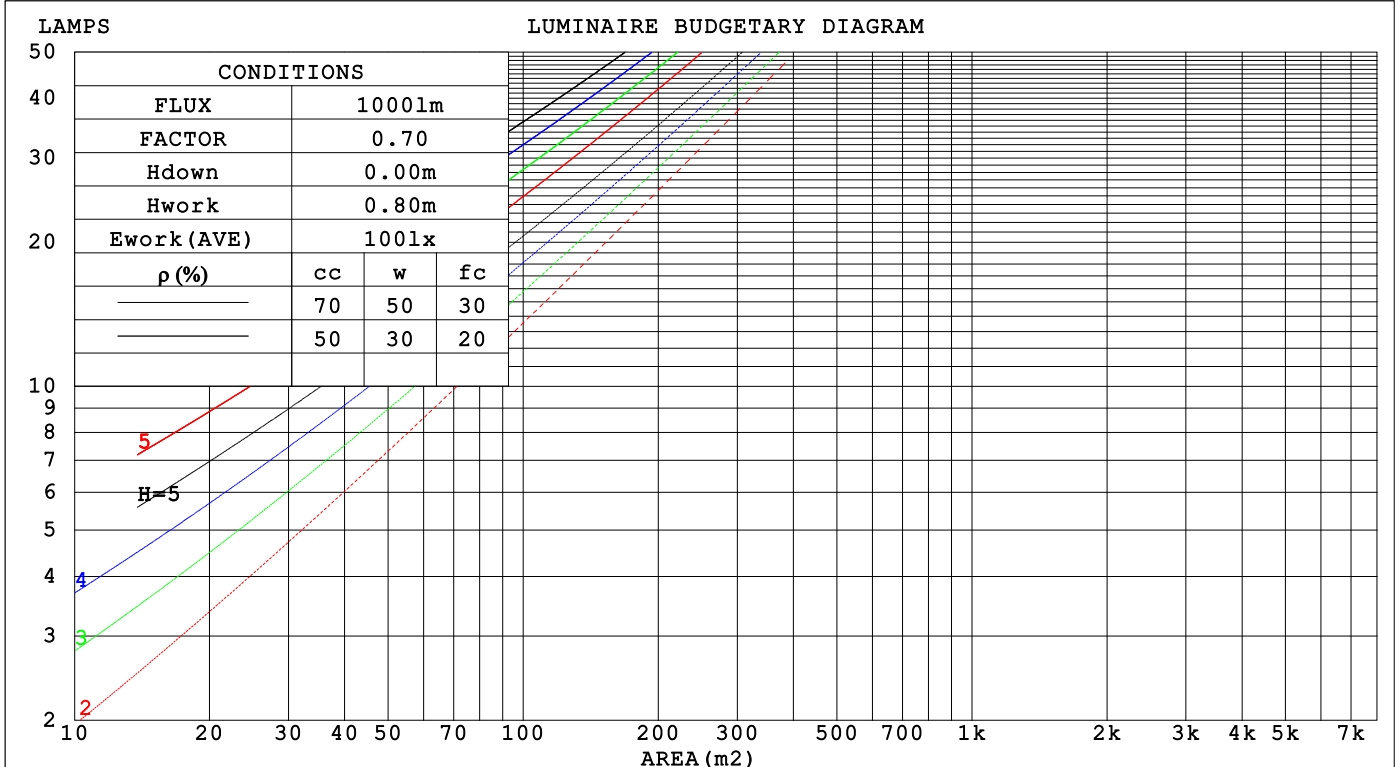
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: DAMIN  
 Test Date: 2024-01-16

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:120.25V I:0.2023A P:24.212W PF:0.9953 Freq:50.00Hz		
Lamp Flux:2538x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 129mm	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	.97	1.02	.99	.95	.98	.95	.92	.94	.92	.90	.91	.89	.87	.85
2.0	.92	.85	.79	.90	.84	.79	.86	.81	.77	.83	.79	.75	.80	.76	.73	.71
3.0	.81	.73	.66	.79	.72	.66	.76	.70	.65	.73	.68	.63	.71	.66	.62	.60
4.0	.72	.63	.56	.70	.62	.56	.68	.61	.55	.65	.59	.55	.63	.58	.54	.52
5.0	.64	.55	.49	.63	.55	.48	.61	.54	.48	.59	.52	.47	.57	.51	.47	.45
6.0	.58	.49	.43	.57	.48	.42	.55	.48	.42	.53	.47	.42	.52	.46	.41	.39
7.0	.52	.44	.38	.52	.43	.38	.50	.43	.37	.49	.42	.37	.47	.41	.37	.35
8.0	.48	.39	.34	.47	.39	.34	.46	.39	.33	.45	.38	.33	.43	.37	.33	.31
9.0	.44	.36	.30	.43	.36	.30	.42	.35	.30	.41	.35	.30	.40	.34	.30	.28
10.0	.41	.33	.28	.40	.33	.28	.39	.32	.27	.38	.32	.27	.37	.31	.27	.25



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-01-16

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:120.25V I:0.2023A P:24.212W PF:0.9953 Freq:50.00Hz								
Lamp Flux:2538x1 lm								
NAME:			TYPE:			WEIGHT:		
SPEC.:			DIM.:			SERIAL No.:		
MFR.: EVERFINE			SUR.: 129mm			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	.293	.167	.053	.286	.163	.052	.273	.157	.050	.261	.151	.048	.250	.145	.047	
2.0	.280	.154	.047	.274	.151	.047	.263	.146	.045	.252	.141	.044	.242	.137	.043	
3.0	.262	.139	.042	.256	.137	.041	.246	.133	.040	.236	.130	.040	.228	.126	.039	
4.0	.243	.126	.037	.238	.124	.037	.229	.121	.036	.220	.118	.036	.212	.115	.035	
5.0	.225	.115	.033	.221	.113	.033	.213	.111	.033	.205	.108	.032	.198	.106	.032	
6.0	.209	.105	.030	.206	.104	.030	.198	.102	.030	.192	.100	.029	.185	.098	.029	
7.0	.195	.097	.027	.192	.096	.027	.186	.094	.027	.180	.092	.027	.174	.090	.027	
8.0	.183	.089	.025	.180	.089	.025	.174	.087	.025	.169	.085	.025	.164	.084	.024	
9.0	.172	.083	.023	.169	.082	.023	.164	.081	.023	.159	.080	.023	.154	.078	.023	
10.0	.161	.077	.021	.159	.077	.021	.154	.076	.021	.150	.074	.021	.146	.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	.179	.156	.136	.153	.134	.117	.105	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.171	.132	.099	.146	.114	.086	.100	.079	.060	.058	.046	.035	.019	.015	.011	
3.0	.163	.114	.075	.140	.099	.065	.096	.068	.046	.055	.040	.027	.018	.013	.009	
4.0	.155	.101	.059	.133	.087	.052	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.148	.090	.048	.127	.078	.042	.087	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.141	.082	.040	.121	.071	.035	.084	.050	.024	.048	.029	.015	.016	.010	.005	
7.0	.134	.075	.034	.115	.065	.029	.080	.046	.021	.046	.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	.042	.023	.009	.014	.008	.003	
10.0	.116	.060	.023	.100	.052	.020	.069	.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:2024-01-16

$\gamma$  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:120.25V I:0.2023A P:24.212W PF:0.9953 Freq:50.00Hz										
Lamp Flux:2538x1 lm										
NAME:			TYPE:				WEIGHT:			
SPEC.:			DIM.:				SERIAL No.:			
MFR.: EVERFINE			SUR.: 129mm				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	14.4	15.9	14.7	16.1	16.3	14.1	15.6	14.4	15.8	16.0
3H	15.8	17.2	16.1	17.5	17.7	15.4	16.8	15.7	17.0	17.2
4H	16.4	17.7	16.7	17.9	18.2	15.8	17.1	16.1	17.4	17.6
6H	16.7	18.0	17.1	18.2	18.5	16.0	17.2	16.3	17.5	17.8
8H	16.8	18.0	17.1	18.3	18.6	16.0	17.2	16.3	17.5	17.7
12H	16.8	17.9	17.2	18.2	18.5	15.9	17.1	16.3	17.4	17.7
4H 2H	14.9	16.3	15.3	16.5	16.8	14.7	16.0	15.0	16.3	16.5
3H	16.5	17.7	16.9	18.0	18.3	16.1	17.3	16.5	17.6	17.9
4H	17.2	18.2	17.6	18.6	18.9	16.7	17.7	17.0	18.0	18.3
6H	17.6	18.6	18.0	18.9	19.3	16.9	17.9	17.3	18.2	18.6
8H	17.8	18.6	18.2	19.0	19.4	16.9	17.8	17.4	18.2	18.6
12H	17.8	18.6	18.2	19.0	19.4	16.9	17.7	17.3	18.1	18.5
8H 4H	17.4	18.2	17.8	18.6	19.0	16.9	17.7	17.3	18.1	18.5
6H	17.9	18.6	18.4	19.0	19.5	17.2	17.9	17.7	18.4	18.8
8H	18.1	18.7	18.5	19.1	19.6	17.3	17.9	17.7	18.3	18.8
12H	18.1	18.7	18.6	19.1	19.6	17.3	17.8	17.7	18.3	18.7
12H 4H	17.3	18.1	17.8	18.5	18.9	16.9	17.7	17.3	18.0	18.4
6H	17.9	18.5	18.4	19.0	19.4	17.3	17.9	17.7	18.3	18.8
8H	18.1	18.6	18.6	19.1	19.6	17.3	17.9	17.8	18.3	18.8
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.4				
2.0H	+ 0.3 / - 0.3					+ 0.3 / - 0.4				

CIE Pub.117, 2538 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.2)  
 Area: 0.2025 m2

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-01-16

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:120.25V I:0.2023A P:24.212W PF:0.9953 Freq:50.00Hz Lamp Flux:2538x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 129mm	Shielding Angle:

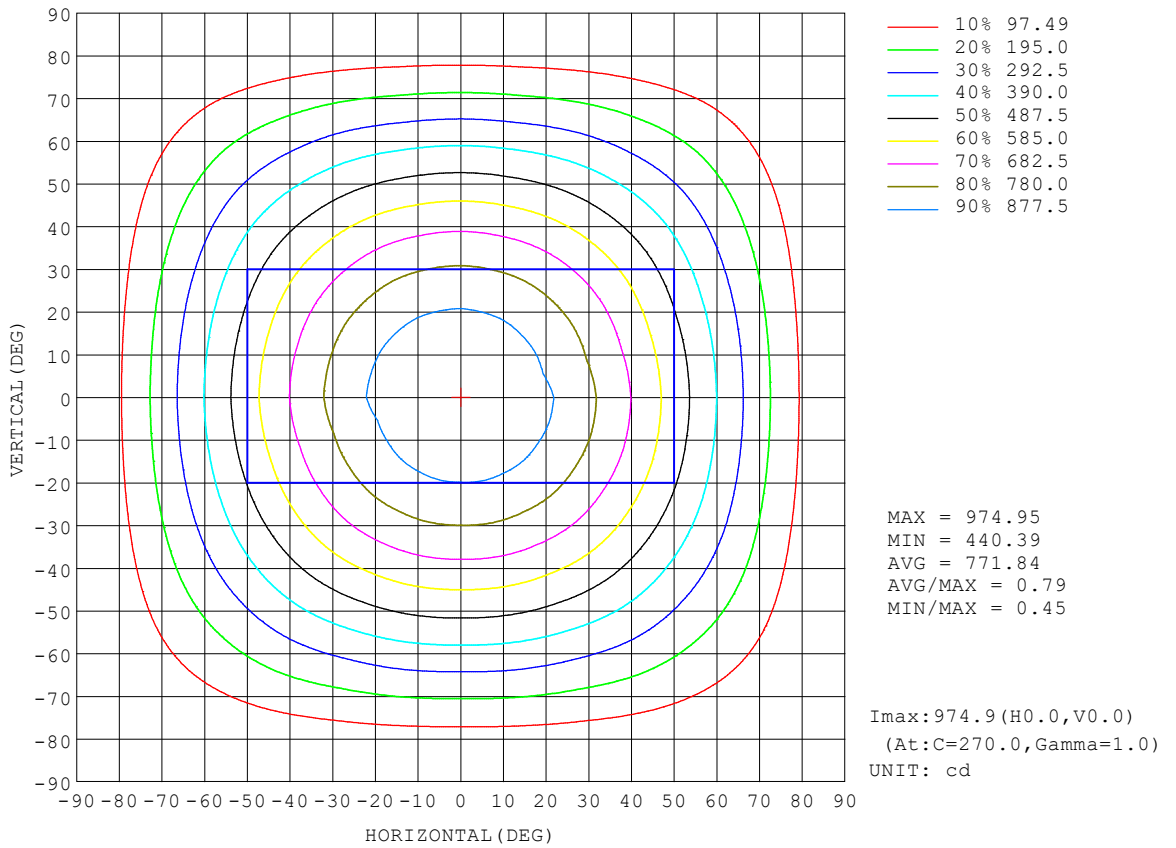
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	59	47	41	58	47	41	57	47	40	34
0.80	69	58	50	68	57	50	66	56	50	43
1.00	77	67	59	76	66	59	74	67	59	52
1.25	84	74	67	83	74	67	80	72	66	59
1.50	89	80	73	88	79	73	85	77	72	64
2.00	96	88	82	94	87	81	91	85	79	72
2.50	100	92	87	98	91	86	94	88	84	76
3.00	103	97	91	101	95	90	97	92	88	80
4.00	107	102	97	105	100	96	100	97	93	84
5.00	109	105	101	107	103	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:2024-01-16

$\gamma$  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:120.25V I:0.2023A P:24.212W PF:0.9953 Freq:50.00Hz Lamp Flux:2538x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 129mm	Shielding Angle:



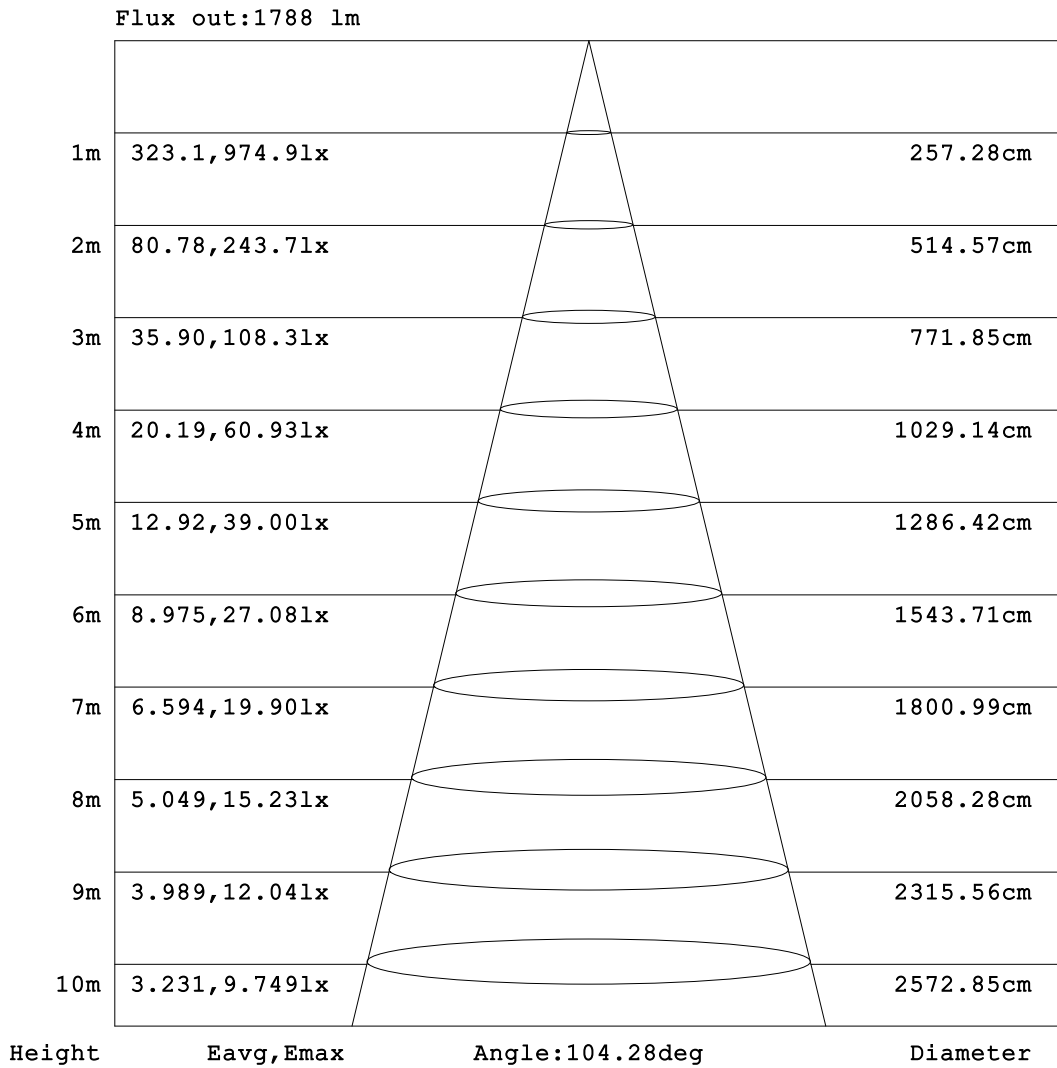
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-01-16

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:120.25V I:0.2023A P:24.212W PF:0.9953 Freq:50.00Hz Lamp Flux:2538x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 129mm	Shielding Angle:



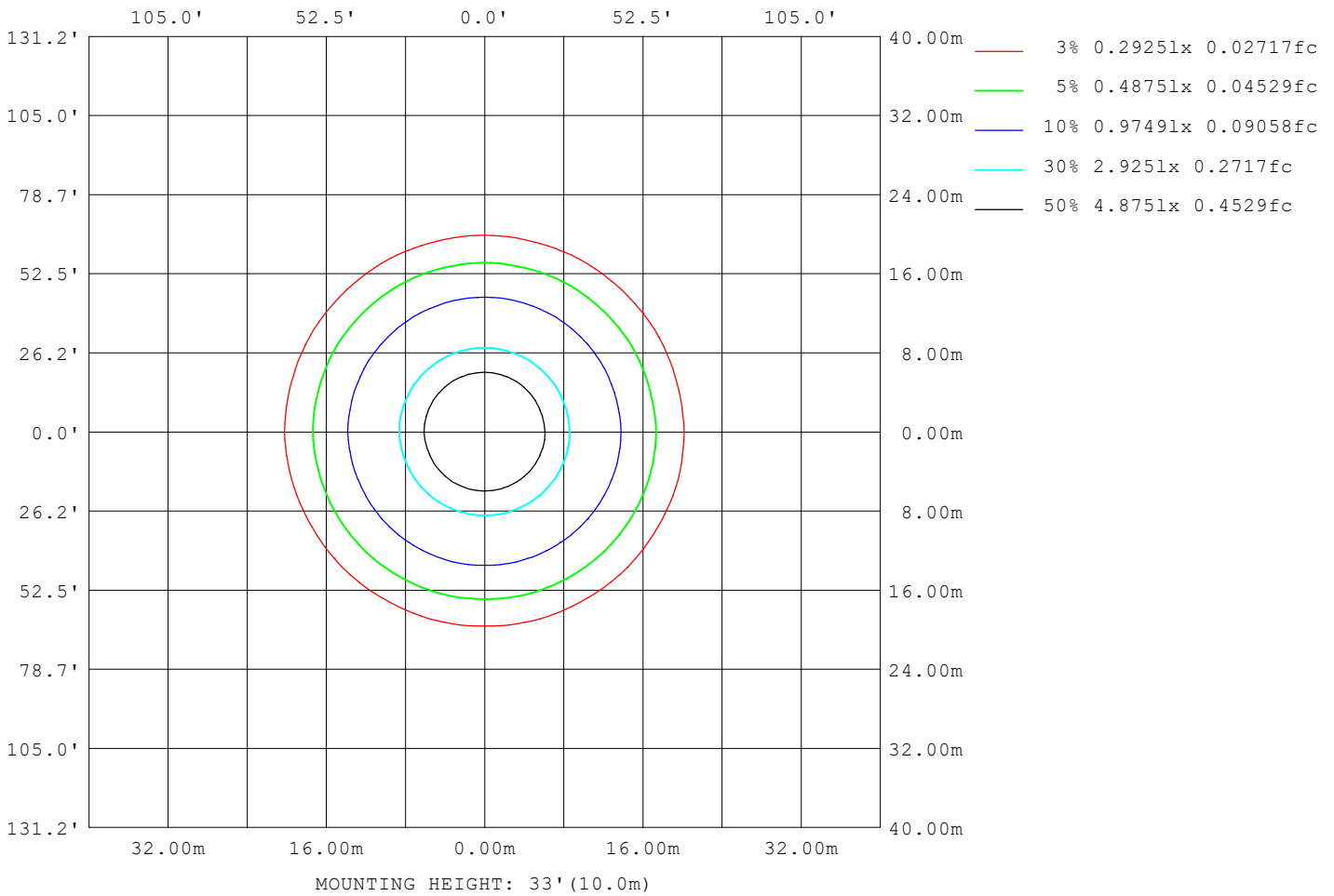
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators: DAMIN  
Test Date: 2024-01-16

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:120.25V I:0.2023A P:24.212W PF:0.9953 Freq:50.00Hz Lamp Flux:2538x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 129mm	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-01-16

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:120.25V I:0.2023A P:24.212W PF:0.9953 Freq:50.00Hz Lamp Flux:2538x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 129mm	Shielding Angle:

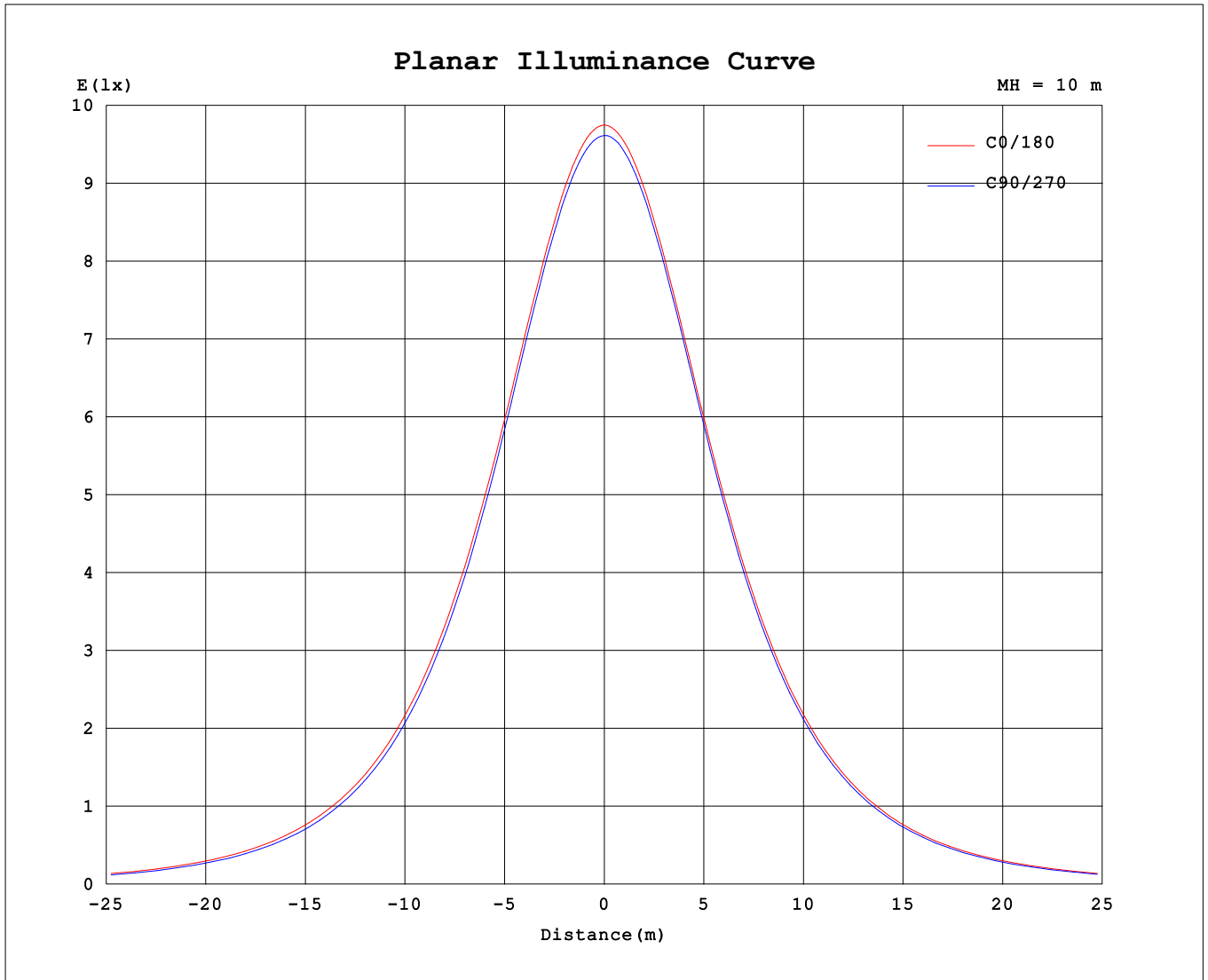
AvgL	cd/m2
L_0~180 (65) av	3615
L_0~180 (75) av	3025
L_0~180 (85) av	1389
L_90~270 (65) av	3374
L_90~270 (75) av	2554
L_90~270 (85) av	391
L_45 (65) av	3485
L_45 (75) av	2776
L_45 (85) av	808

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-01-16

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: 2024-01-16

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:



