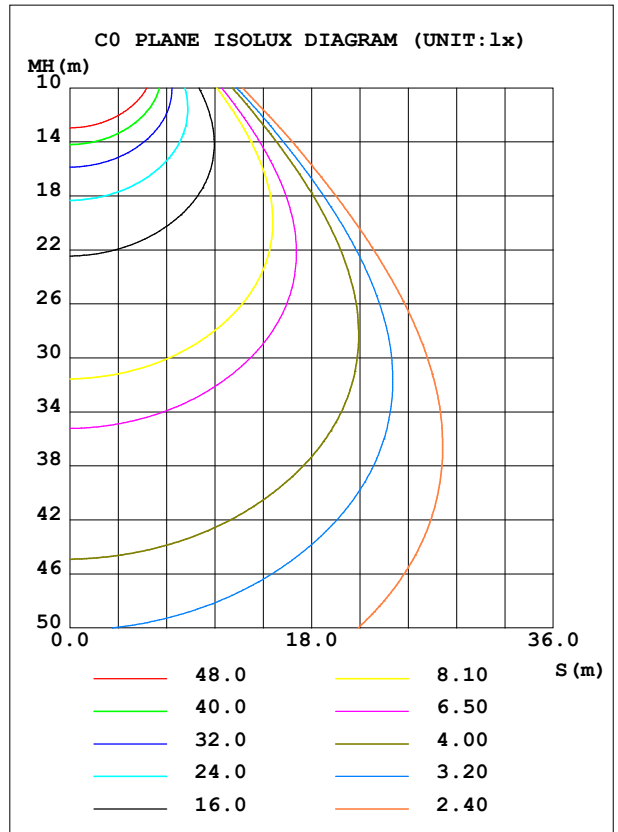
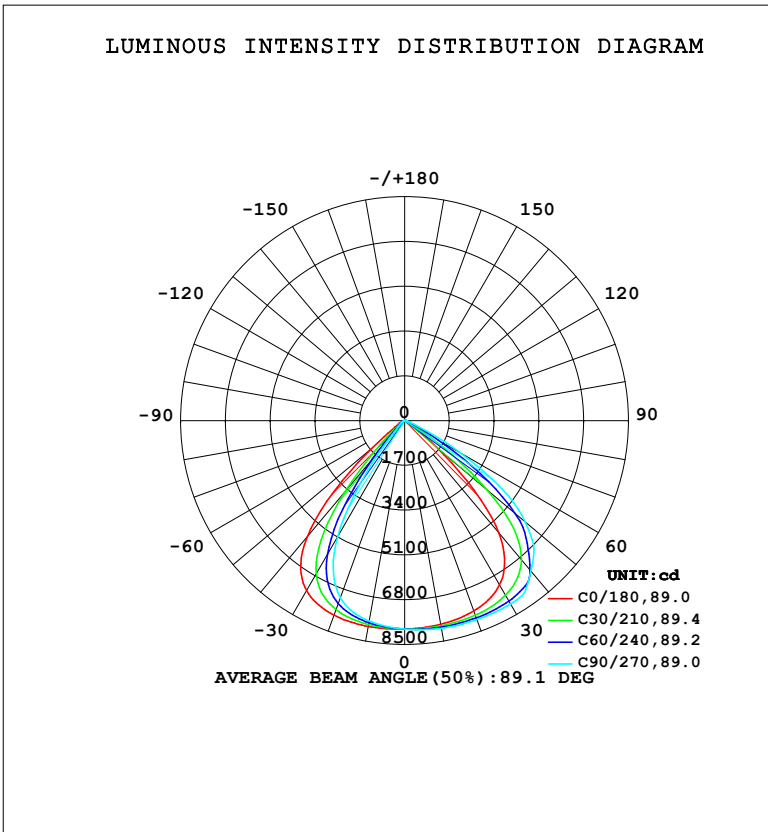


**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:220.41V I:0.5503A P:118.71W PF:0.9787 Freq:50.00Hz Lamp Flux:14823x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 229*180mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	512	Imax (cd)	8066	S/MH (C0/180)	1.30
NOMINAL POWER (W)	120	LOR (%)	100.0	S/MH (C90/270)	0.96
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	14823	η UP, DN (C0-180)	0.0, 65.2
NOMINAL FLUX (lm)	14823	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 34.8
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	219.5	η down (%)	100.0	CIBSE SHR MAX	1.30



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	7852	7940	8006	7996	7932	7822	7729	7744	0- 10	753.7	753.7	5.08,5.08
20	7687	7919	8028	8037	7856	7494	7146	7272	10- 20	2208	2962	20,20
30	7205	7807	8038	7995	7447	6248	5100	5732	20- 30	3410	6372	43,43
40	5563	7316	7445	7631	5758	2514	1150	1938	30- 40	3766	10138	68.4,68.4
50	1658	4981	5963	5619	1597	397.7	285.3	325.9	40- 50	2855	12993	87.7,87.7
60	298.7	978.1	2414	1343	303.2	173.9	125.3	156.4	50- 60	1409	14402	97.2,97.2
70	128.6	191.1	261.3	207.7	125.8	62.59	34.76	55.66	60- 70	320.9	14723	99.3,99.3
80	33.38	57.68	69.03	68.08	31.86	17.83	14.83	15.80	70- 80	81.36	14804	99.9,99.9
90	1.559	4.154	6.313	3.519	2.043	5.876	7.110	8.220	80- 90	19.02	14823	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): 11722 lm

%lum = 79.1%

%lamp = 79.1%

Conical surface Flux(130deg): 14626 lm

%lum = 98.7%

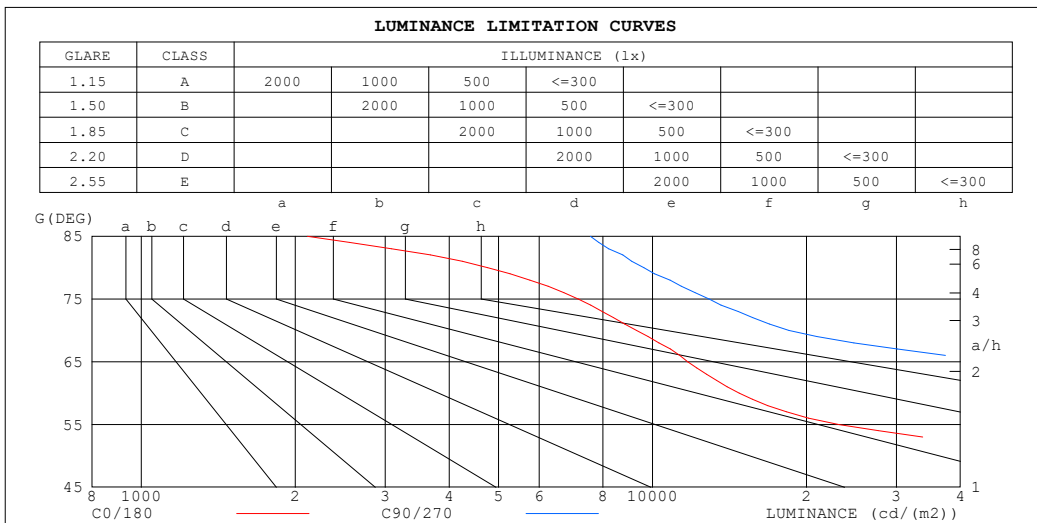
%lamp = 98.7%

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:220.41V I:0.5503A P:118.71W PF:0.9787 Freq:50.00Hz Lamp Flux:14823x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 229*180mm	Shielding Angle:



LUMINANCE cd/ (m2)		
G (DEG)	C0/180	C90/270
85	2113	7557
80	4758	9617
75	7154	12900
70	9304	18482
65	11724	46803
60	14784	116817
55	23155	191183
50	63839	224450
45	130350	237421

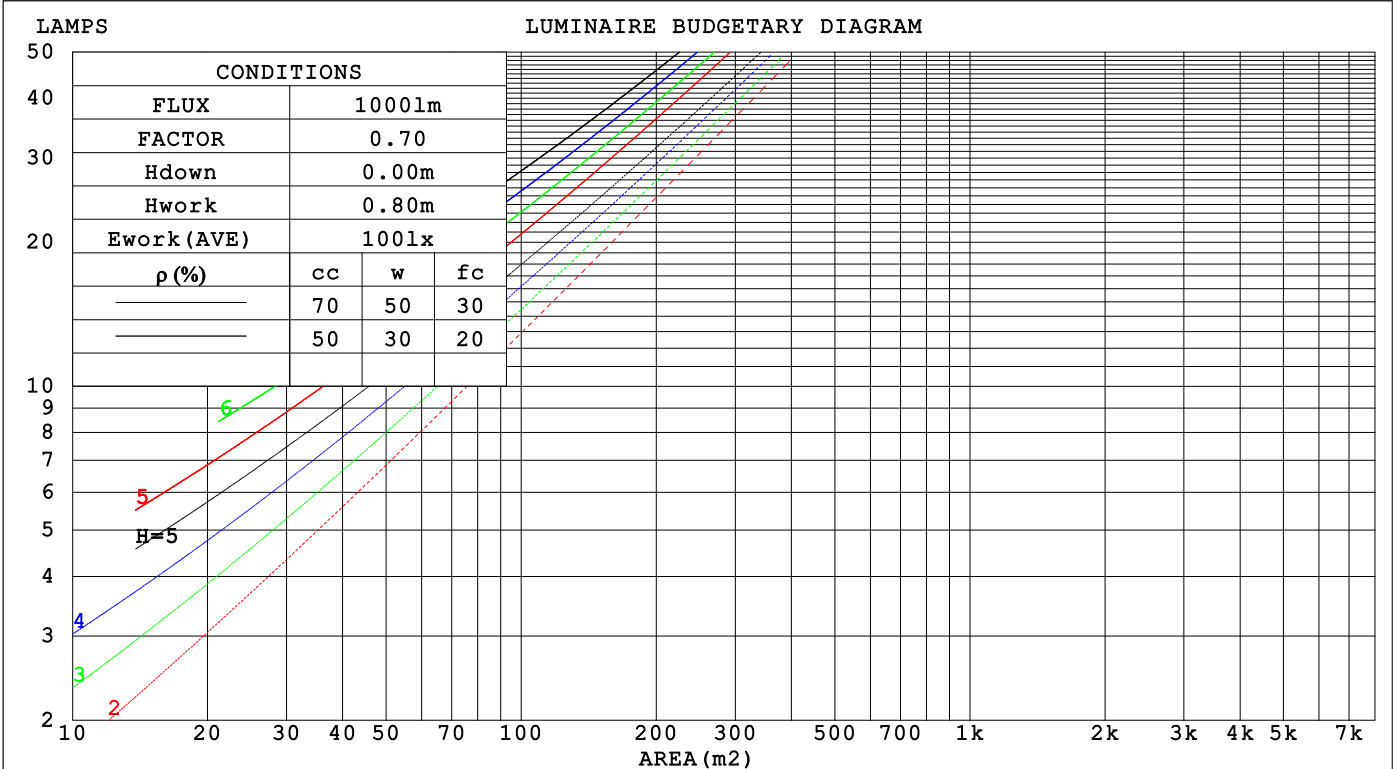
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-01-16

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:220.41V I:0.5503A P:118.71W PF:0.9787 Freq:50.00Hz Lamp Flux:14823x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 229*180mm	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	1.06	1.04	1.01	1.02	1.00	.98	.98	.97	.95	.95	.94	.92	.90
2.0	.98	.93	.89	.97	.92	.88	.93	.89	.86	.90	.87	.84	.87	.85	.82	.81
3.0	.89	.83	.78	.88	.82	.77	.85	.80	.76	.82	.78	.75	.80	.77	.74	.72
4.0	.81	.74	.69	.80	.73	.68	.78	.72	.68	.75	.71	.67	.73	.69	.66	.64
5.0	.74	.67	.61	.73	.66	.61	.71	.65	.60	.69	.64	.60	.67	.63	.59	.57
6.0	.68	.60	.55	.67	.60	.55	.65	.59	.54	.64	.58	.54	.62	.57	.53	.52
7.0	.62	.55	.49	.61	.54	.49	.60	.54	.49	.59	.53	.49	.57	.52	.48	.47
8.0	.57	.50	.45	.57	.50	.45	.55	.49	.45	.54	.49	.44	.53	.48	.44	.42
9.0	.53	.46	.41	.52	.46	.41	.51	.45	.41	.50	.45	.40	.49	.44	.40	.39
10.0	.49	.42	.38	.49	.42	.37	.48	.42	.37	.47	.41	.37	.46	.41	.37	.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:

**WEC AND CCEC**

Test:U:220.41V I:0.5503A P:118.71W PF:0.9787 Freq:50.00Hz								
Lamp Flux:14823x1 lm								
NAME:			TYPE:			WEIGHT:		
SPEC.:			DIM.:			SERIAL No.:		
MFR.: EVERFINE			SUR.: 229*180mm			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	.220	.125	.040	.213	.121	.039	.200	.115	.037	.188	.109	.035	.177	.103	.033	
2.0	.215	.118	.036	.209	.115	.036	.198	.110	.034	.188	.106	.033	.179	.101	.032	
3.0	.206	.110	.033	.201	.108	.032	.192	.104	.032	.183	.100	.031	.175	.097	.030	
4.0	.197	.102	.030	.192	.101	.030	.184	.098	.029	.176	.095	.029	.169	.092	.028	
5.0	.187	.095	.028	.183	.094	.027	.176	.091	.027	.169	.089	.026	.162	.087	.026	
6.0	.177	.089	.025	.174	.088	.025	.167	.086	.025	.161	.084	.025	.155	.082	.024	
7.0	.168	.083	.024	.165	.082	.023	.159	.081	.023	.154	.079	.023	.149	.077	.023	
8.0	.160	.078	.022	.157	.077	.022	.152	.076	.022	.147	.074	.021	.142	.073	.021	
9.0	.152	.074	.021	.150	.073	.020	.145	.072	.020	.140	.070	.020	.136	.069	.020	
10.0	.145	.069	.019	.143	.069	.019	.138	.068	.019	.134	.067	.019	.130	.066	.019	

$\rho_{CC}$	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	.174	.157	.141	.149	.135	.122	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.162	.132	.107	.139	.114	.093	.095	.079	.065	.055	.046	.038	.018	.015	.012	
3.0	.152	.114	.083	.131	.098	.072	.090	.068	.051	.052	.040	.030	.017	.013	.010	
4.0	.144	.100	.066	.124	.086	.057	.085	.060	.040	.049	.035	.024	.016	.011	.008	
5.0	.137	.089	.054	.117	.077	.047	.081	.054	.033	.047	.032	.020	.015	.010	.006	
6.0	.130	.080	.044	.112	.069	.039	.077	.049	.027	.045	.029	.016	.014	.009	.005	
7.0	.124	.073	.037	.107	.063	.033	.074	.044	.023	.043	.026	.014	.014	.009	.005	
8.0	.118	.067	.032	.102	.058	.028	.070	.041	.020	.041	.024	.012	.013	.008	.004	
9.0	.113	.062	.028	.097	.054	.024	.068	.038	.017	.039	.022	.010	.013	.007	.003	
10.0	.108	.058	.024	.093	.050	.021	.065	.035	.015	.038	.021	.009	.012	.007	.003	

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

$\gamma$  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:220.41V I:0.5503A P:118.71W PF:0.9787 Freq:50.00Hz Lamp Flux:14823x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 229*180mm	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	19.0	20.2	19.2	20.4	20.6	22.2	23.4	22.4	23.6	23.8
3H	18.8	20.0	19.1	20.2	20.4	22.0	23.2	22.3	23.4	23.6
4H	18.8	19.8	19.1	20.1	20.3	22.0	23.0	22.3	23.3	23.5
6H	18.7	19.7	19.0	19.9	20.2	21.9	22.9	22.2	23.1	23.4
8H	18.6	19.6	18.9	19.8	20.1	21.8	22.8	22.2	23.0	23.3
12H	18.6	19.5	18.9	19.8	20.1	21.8	22.7	22.1	23.0	23.3
4H 2H	19.0	20.1	19.3	20.3	20.6	22.0	23.0	22.3	23.3	23.5
3H	18.9	19.8	19.2	20.1	20.4	21.8	22.8	22.2	23.0	23.3
4H	18.8	19.6	19.2	19.9	20.3	21.8	22.6	22.1	22.9	23.2
6H	18.7	19.5	19.1	19.8	20.2	21.7	22.4	22.1	22.8	23.1
8H	18.7	19.4	19.1	19.7	20.1	21.7	22.3	22.1	22.7	23.0
12H	18.7	19.3	19.1	19.6	20.0	21.6	22.2	22.0	22.6	23.0
8H 4H	18.7	19.4	19.1	19.7	20.1	21.6	22.3	22.0	22.7	23.0
6H	18.6	19.2	19.1	19.6	20.0	21.6	22.1	22.0	22.5	22.9
8H	18.6	19.1	19.0	19.5	19.9	21.5	22.0	22.0	22.4	22.9
12H	18.5	19.0	19.0	19.4	19.9	21.5	21.9	22.0	22.3	22.8
12H 4H	18.7	19.3	19.1	19.6	20.0	21.6	22.2	22.0	22.6	23.0
6H	18.6	19.1	19.0	19.5	19.9	21.5	22.0	22.0	22.4	22.9
8H	18.6	19.0	19.0	19.4	19.9	21.5	21.9	22.0	22.3	22.8

Variations with the observer position at spacings(CIE Pub.117):		
S = 1.0H	+ 2.6 / - 7.7	+ 0.9 / - 0.8
1.5H	+ 1.6 / - 6.5	+ 0.9 / - 1.3
2.0H	+ 4.3 / - 9.3	+ 2.7 / - 9.0

CIE Pub.117, 14823 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 9.4)  
Area: 0.0412 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:220.41V I:0.5503A P:118.71W PF:0.9787 Freq:50.00Hz Lamp Flux:14823x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 229*180mm	Shielding Angle:

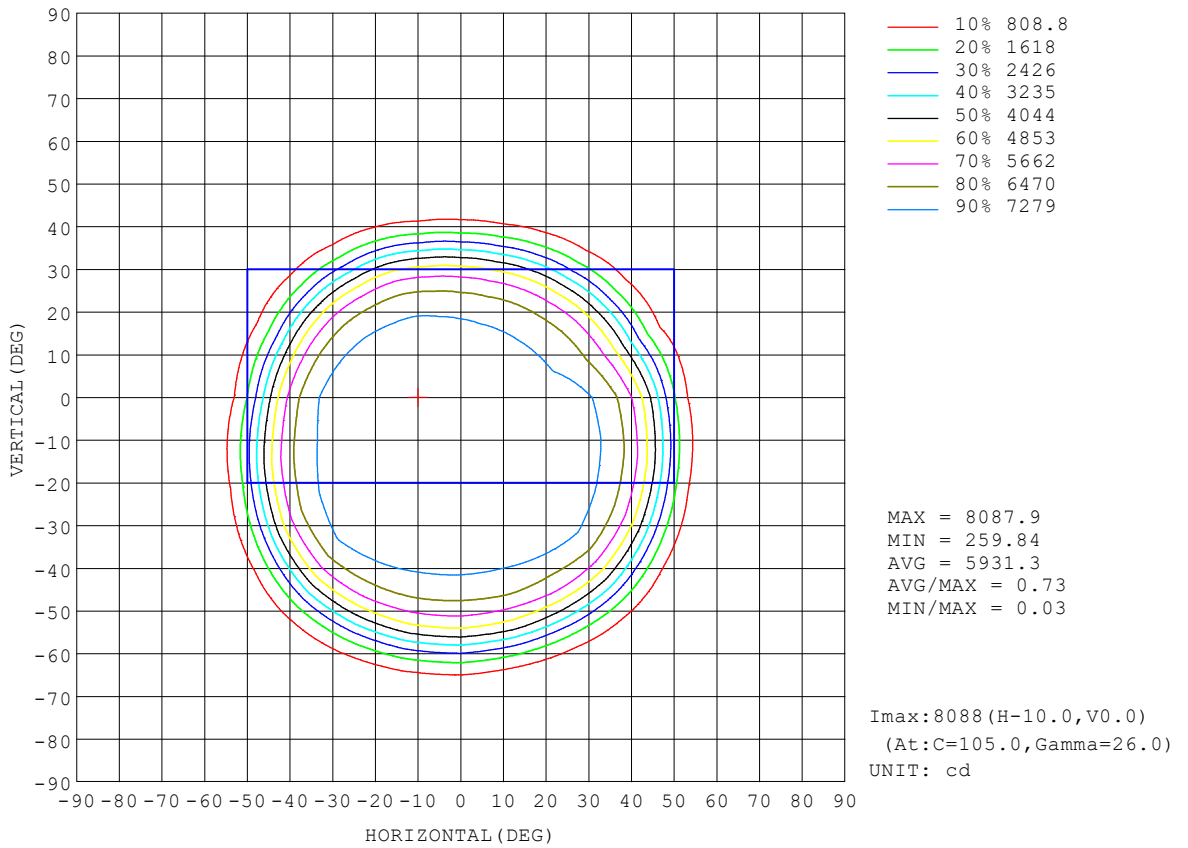
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	71	62	56	70	62	56	69	61	56	51
0.80	81	72	67	80	72	67	79	71	66	61
1.00	89	81	75	88	80	75	86	81	75	69
1.25	95	87	82	94	87	82	91	86	81	76
1.50	99	92	87	97	91	87	95	90	86	80
2.00	104	98	94	102	97	93	99	95	91	85
2.50	106	101	97	104	100	96	101	97	94	87
3.00	108	104	100	106	102	99	103	99	97	90
4.00	111	107	104	109	105	102	105	102	100	92
5.00	112	109	106	110	107	105	106	104	102	93
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:220.41V I:0.5503A P:118.71W PF:0.9787 Freq:50.00Hz Lamp Flux:14823x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 229*180mm	Shielding Angle:



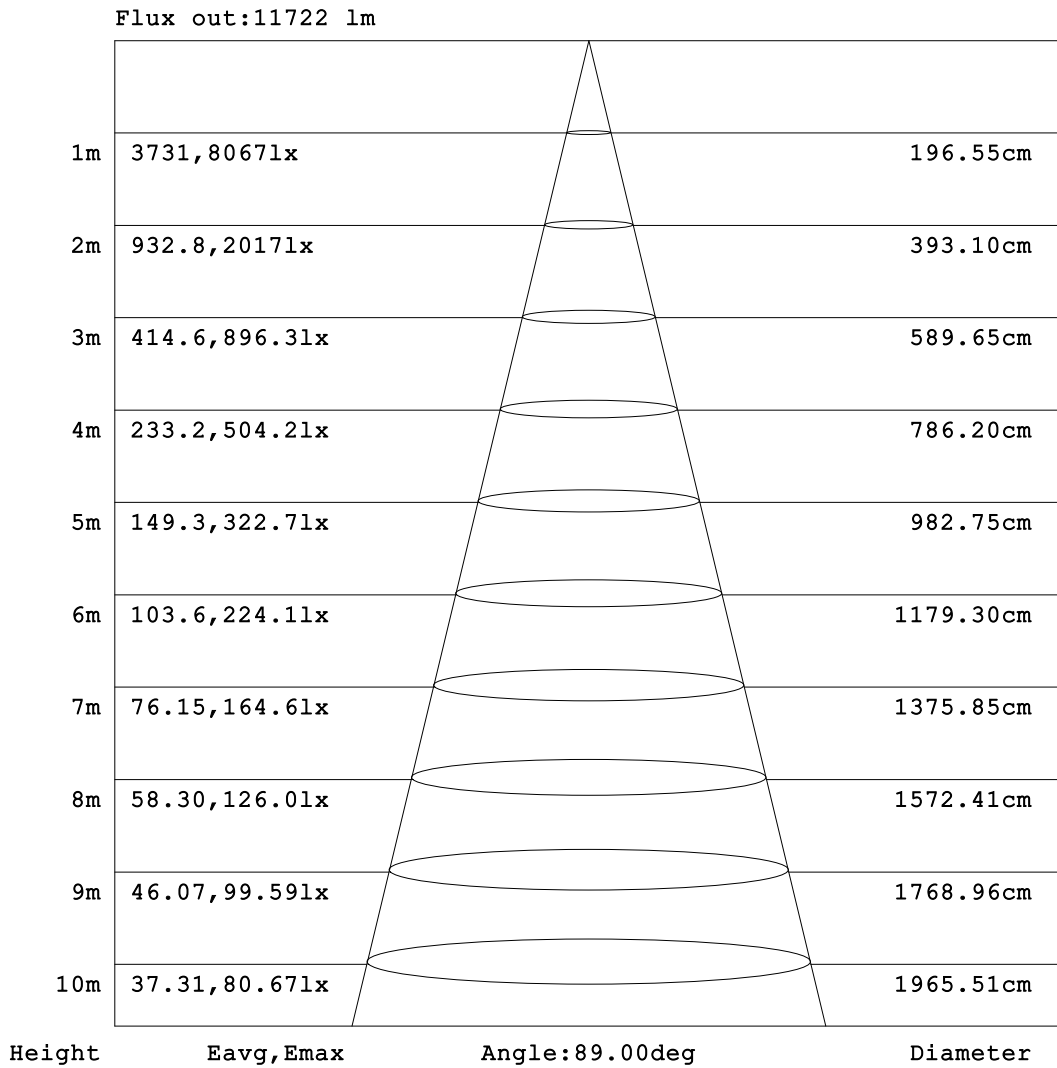
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-01-16

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:220.41V I:0.5503A P:118.71W PF:0.9787 Freq:50.00Hz Lamp Flux:14823x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 229*180mm	Shielding Angle:



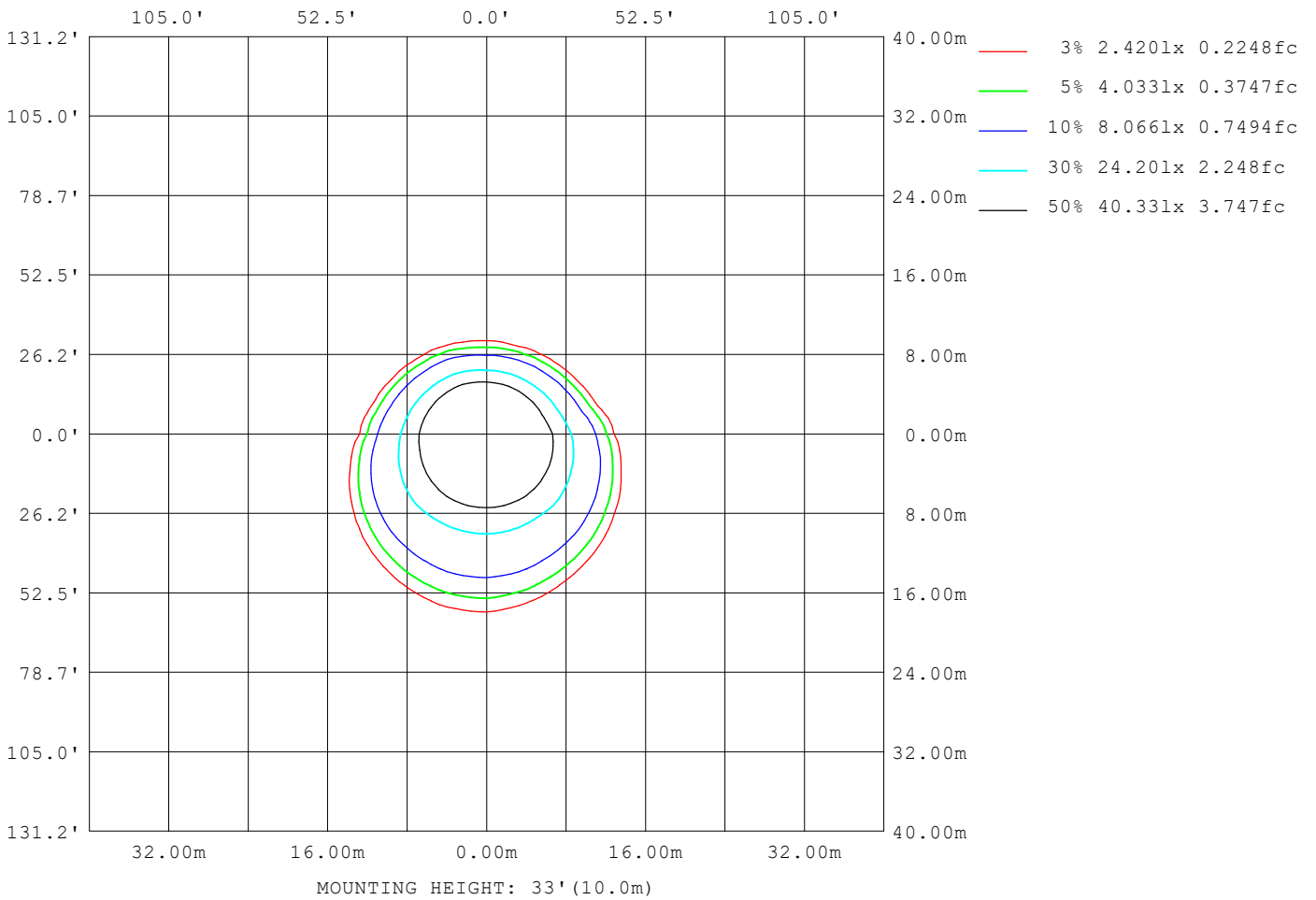
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:220.41V I:0.5503A P:118.71W PF:0.9787 Freq:50.00Hz Lamp Flux:14823x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 229*180mm	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:220.41V I:0.5503A P:118.71W PF:0.9787 Freq:50.00Hz Lamp Flux:14823x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 229*180mm	Shielding Angle:

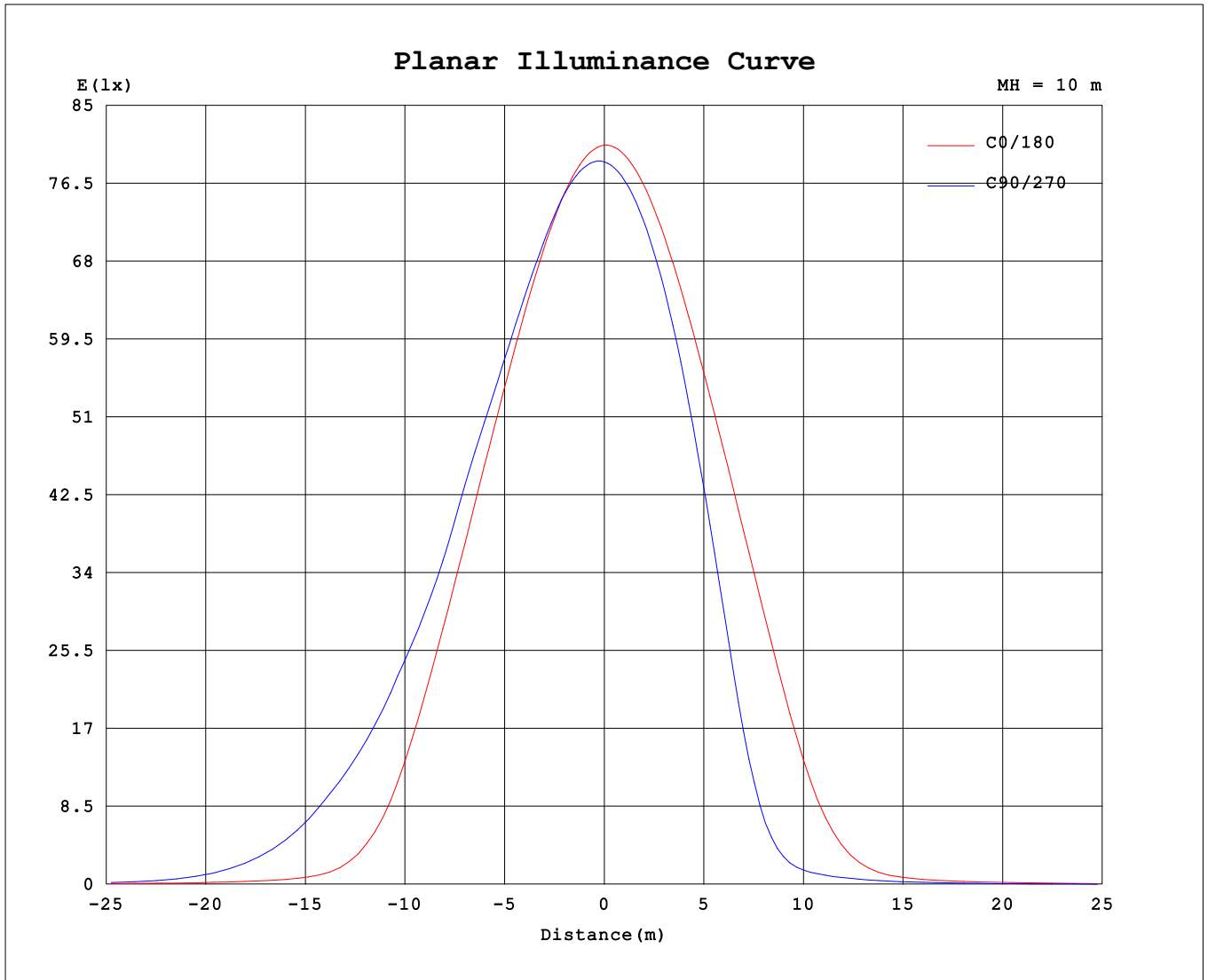
AvgL	cd/m2
L_0~180 (65) av	11593
L_0~180 (75) av	6916
L_0~180 (85) av	1952
L_90~270 (65) av	25654
L_90~270 (75) av	7454
L_90~270 (85) av	4431
L_45 (65) av	14141
L_45 (75) av	6937
L_45 (85) av	5080

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:



