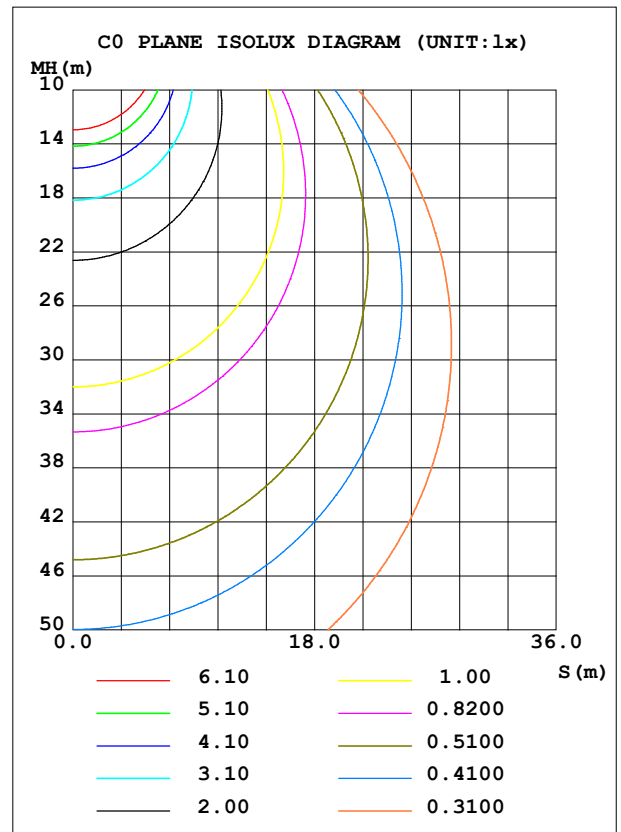
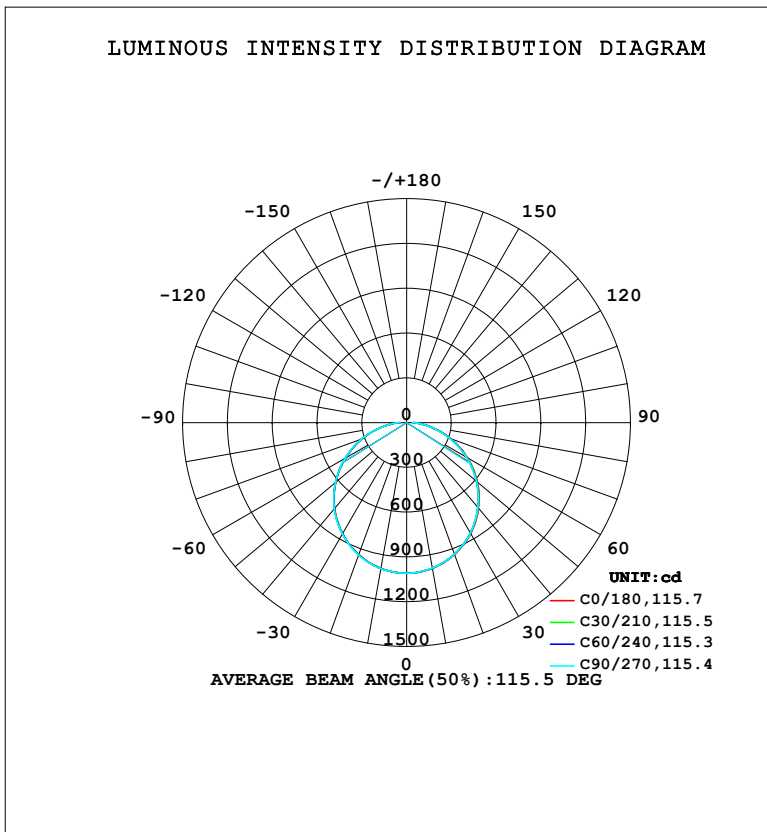


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.36V I:0.1467A P:30.844W PF:0.9545 Freq:50.00Hz Lamp Flux:3052.79x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 98.97 lm/W
MODEL	P12	I <sub>max</sub> (cd)	1009	S/MH (C0/180)	1.27	
NOMINAL POWER (W)	30	LOR (%)	100.0	S/MH (C90/270)	1.27	
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	3052.8	η UP, DN (C0-180)	0.0, 49.7	
NOMINAL FLUX (lm)	3052.79	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.3	
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: 2024-01-19

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	991.6	990.9	989.9	990.8	991.7	992.0	993.2	992.7	0- 10	95.49	95.49	3.13,3.13
20	940.4	938.8	937.0	939.0	940.7	941.0	943.5	942.7	10- 20	273.8	369.3	12.1,12.1
30	858.5	856.1	853.4	856.8	859.0	859.2	862.5	862.1	20- 30	416.2	785.5	25.7,25.7
40	750.0	746.3	743.1	747.8	751.0	750.6	754.5	754.1	30- 40	505.0	1291	42.3,42.3
50	619.0	614.7	611.0	616.2	620.2	619.8	623.8	623.5	40- 50	529.6	1820	59.6,59.6
60	471.3	466.7	462.1	467.8	472.4	472.0	476.0	475.0	50- 60	488.1	2308	75.6,75.6
70	313.8	311.4	305.2	311.2	316.1	316.1	320.2	317.6	60- 70	388.4	2697	88.3,88.3
80	162.1	160.7	156.0	159.4	163.9	166.2	167.0	165.4	70- 80	250.1	2947	96.5,96.5
90	48.40	41.79	39.74	41.37	49.29	42.27	43.92	44.69	80- 90	106.1	3053	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): 1556.4 lm

%lum = 51.0%

%lamp = 51.0%

Conical surface Flux(130deg): 2517.9 lm

%lum = 82.5%

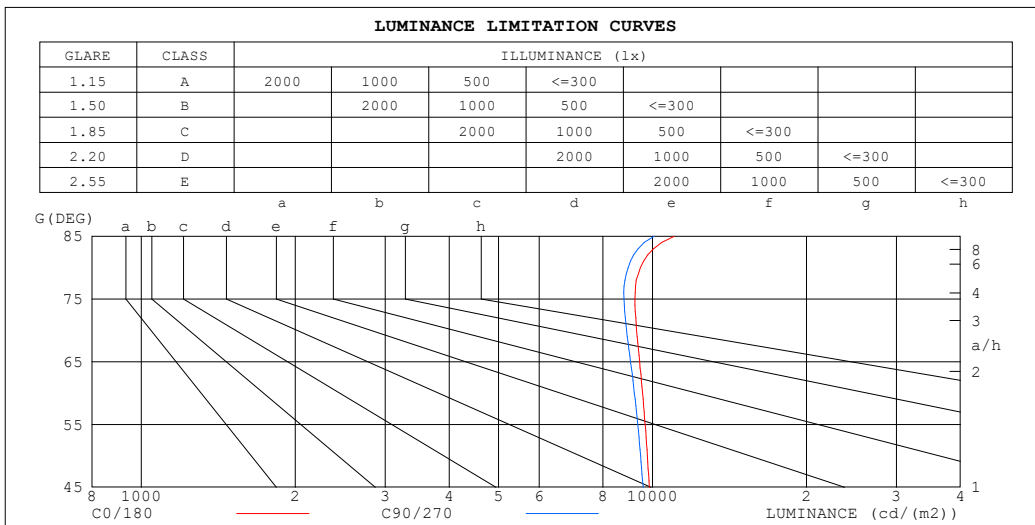
%lamp = 82.5%

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-01-19

$\gamma$  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:220.36V I:0.1467A P:30.844W PF:0.9545 Freq:50.00Hz Lamp Flux:3052.79x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/ (m2)		
G (DEG)	C0/180	C90/270
85	11035	10077
80	9471	8956
75	9236	8789
70	9306	8897
65	9433	9054
60	9562	9215
55	9669	9355
50	9769	9478
45	9857	9583

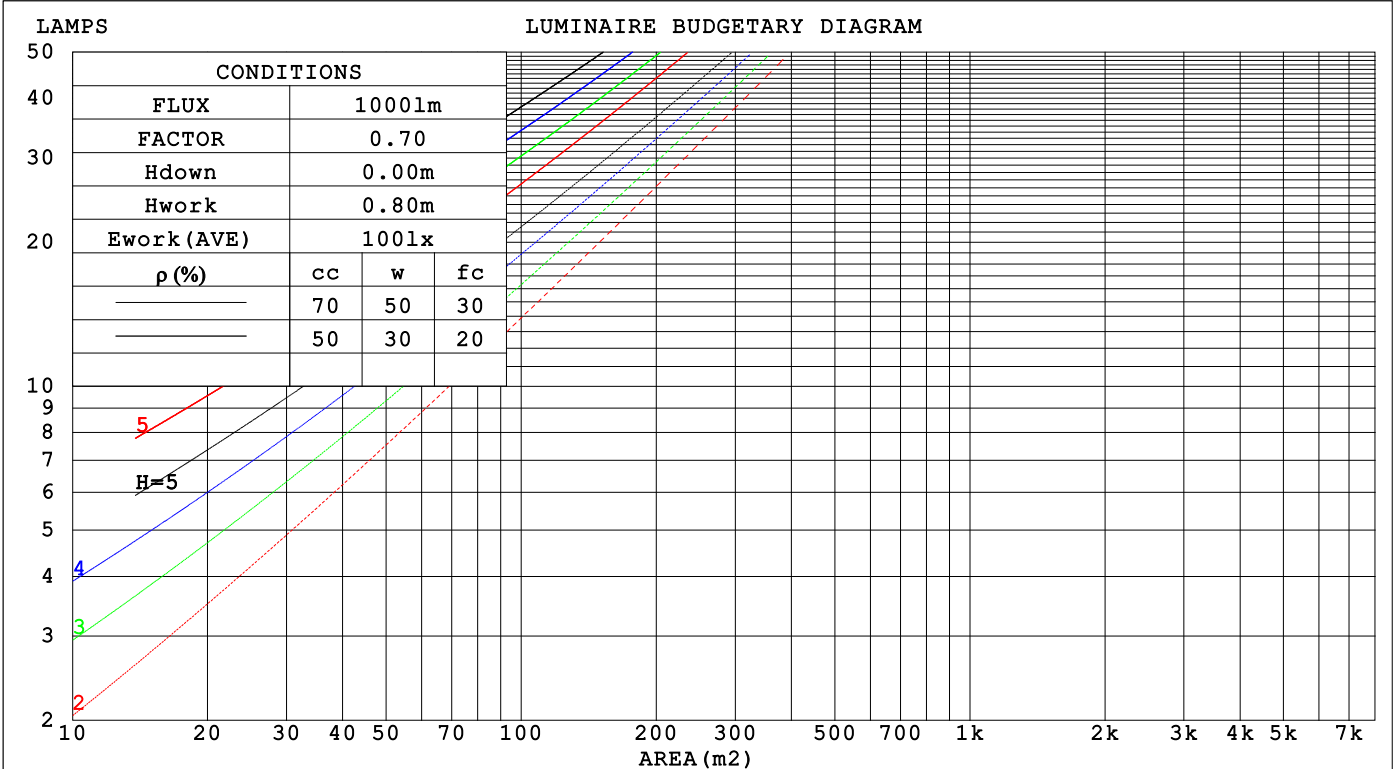
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-01-19

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:220.36V I:0.1467A P:30.844W PF:0.9545 Freq:50.00Hz Lamp Flux:3052.79x1 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      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	1.03	.98	.94	1.00	.96	.92	.96	.93	.89	.92	.89	.87	.88	.86	.84	.82
2.0	.89	.82	.76	.87	.80	.75	.83	.78	.73	.80	.75	.71	.77	.73	.70	.67
3.0	.78	.69	.62	.76	.68	.62	.73	.66	.61	.70	.65	.60	.68	.63	.59	.56
4.0	.69	.60	.53	.67	.59	.52	.65	.57	.51	.62	.56	.51	.60	.55	.50	.48
5.0	.61	.52	.45	.60	.51	.45	.58	.50	.44	.56	.49	.44	.54	.48	.43	.41
6.0	.55	.46	.39	.54	.45	.39	.52	.45	.39	.51	.44	.38	.49	.43	.38	.36
7.0	.50	.41	.35	.49	.41	.34	.47	.40	.34	.46	.39	.34	.45	.38	.34	.32
8.0	.45	.37	.31	.45	.36	.31	.43	.36	.31	.42	.35	.30	.41	.35	.30	.28
9.0	.42	.33	.28	.41	.33	.28	.40	.33	.27	.39	.32	.27	.38	.32	.27	.25
10.0	.38	.30	.25	.38	.30	.25	.37	.30	.25	.36	.29	.25	.35	.29	.25	.23



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-01-19

$\gamma$  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:

WEC AND CCEC

Test:U:220.36V I:0.1467A P:30.844W PF:0.9545 Freq:50.00Hz								
Lamp Flux:3052.79x1 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	.334	.190	.060	.327	.186	.059	.313	.180	.057	.301	.174	.056	.290	.168	.054	
2.0	.307	.168	.052	.300	.165	.051	.288	.160	.050	.277	.156	.049	.267	.151	.048	
3.0	.280	.149	.045	.275	.147	.044	.264	.143	.044	.255	.139	.043	.246	.136	.042	
4.0	.257	.133	.039	.252	.132	.039	.243	.129	.038	.234	.126	.038	.226	.123	.037	
5.0	.236	.120	.035	.232	.119	.035	.224	.116	.034	.216	.114	.034	.209	.112	.034	
6.0	.218	.109	.031	.214	.108	.031	.207	.106	.031	.200	.104	.031	.194	.102	.030	
7.0	.202	.100	.028	.199	.099	.028	.192	.097	.028	.186	.096	.028	.181	.094	.028	
8.0	.189	.092	.026	.186	.091	.026	.180	.090	.026	.174	.088	.025	.169	.087	.025	
9.0	.176	.085	.024	.174	.085	.024	.168	.083	.024	.164	.082	.023	.159	.081	.023	
10.0	.166	.079	.022	.163	.079	.022	.158	.078	.022	.154	.076	.022	.150	.075	.022	

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	.182	.156	.132	.156	.134	.114	.106	.092	.079	.061	.053	.046	.020	.017	.015	
2.0	.174	.132	.096	.149	.113	.083	.102	.079	.058	.059	.046	.034	.019	.015	.011	
3.0	.166	.114	.073	.143	.099	.063	.098	.069	.044	.057	.040	.026	.018	.013	.009	
4.0	.159	.101	.057	.136	.087	.050	.094	.061	.035	.054	.036	.021	.017	.012	.007	
5.0	.151	.091	.046	.130	.079	.040	.089	.055	.028	.052	.032	.017	.017	.011	.006	
6.0	.144	.082	.038	.124	.071	.034	.085	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.137	.076	.033	.118	.066	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.130	.070	.028	.112	.061	.025	.078	.043	.018	.045	.025	.010	.015	.008	.003	
9.0	.124	.065	.025	.107	.056	.022	.074	.040	.015	.043	.023	.009	.014	.008	.003	
10.0	.118	.061	.022	.102	.053	.019	.071	.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:2024-01-19

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:220.36V I:0.1467A P:30.844W PF:0.9545 Freq:50.00Hz										
Lamp Flux:3052.79x1 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	16.9	18.4	17.1	18.6	18.8	16.7	18.3	17.0	18.5	18.7
3H	18.6	20.0	18.9	20.3	20.5	18.4	19.8	18.7	20.1	20.3
4H	19.3	20.7	19.7	21.0	21.2	19.1	20.5	19.4	20.8	21.0
6H	20.0	21.3	20.3	21.6	21.8	19.7	21.1	20.1	21.3	21.6
8H	20.3	21.5	20.6	21.8	22.1	20.0	21.3	20.3	21.5	21.8
12H	20.5	21.7	20.8	22.0	22.3	20.2	21.4	20.6	21.7	22.0
4H 2H	17.5	18.9	17.8	19.1	19.4	17.4	18.8	17.7	19.0	19.3
3H	19.4	20.6	19.8	20.9	21.2	19.3	20.5	19.6	20.8	21.1
4H	20.3	21.4	20.7	21.7	22.1	20.1	21.2	20.5	21.6	21.9
6H	21.1	22.1	21.5	22.5	22.8	20.9	21.9	21.3	22.3	22.6
8H	21.5	22.4	21.9	22.8	23.1	21.2	22.2	21.7	22.5	22.9
12H	21.8	22.6	22.2	23.0	23.4	21.5	22.4	22.0	22.8	23.2
8H 4H	20.6	21.6	21.1	21.9	22.3	20.5	21.4	20.9	21.8	22.2
6H	21.6	22.4	22.1	22.8	23.3	21.5	22.2	21.9	22.6	23.1
8H	22.1	22.8	22.6	23.2	23.7	21.9	22.6	22.4	23.0	23.5
12H	22.6	23.2	23.1	23.6	24.1	22.3	22.9	22.8	23.4	23.9
12H 4H	20.7	21.5	21.1	21.9	22.3	20.5	21.4	21.0	21.8	22.2
6H	21.7	22.4	22.2	22.9	23.3	21.6	22.3	22.0	22.7	23.1
8H	22.3	22.9	22.8	23.3	23.8	22.1	22.7	22.6	23.1	23.6
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.1 / - 0.3					+ 0.1 / - 0.3				

CIE Pub.117, 3053 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.9)  
 Area: 0.1 m2

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-01-19

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:220.36V I:0.1467A P:30.844W PF:0.9545 Freq:50.00Hz Lamp Flux:3052.79x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

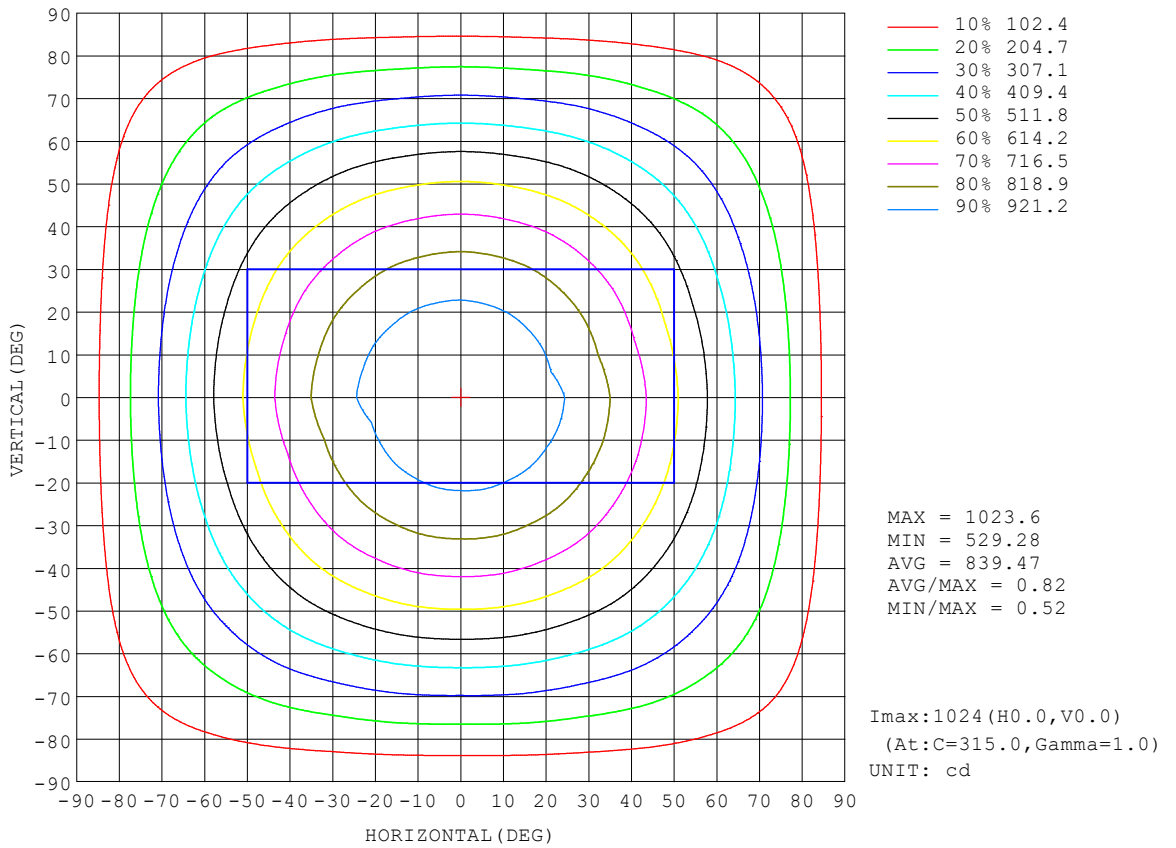
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	56	44	37	56	44	37	54	44	37	30
0.80	66	54	47	65	54	47	63	53	46	39
1.00	74	63	55	73	62	55	71	64	55	47
1.25	82	71	63	80	70	63	77	68	62	54
1.50	87	76	69	85	75	68	82	74	67	60
2.00	94	85	78	92	83	77	88	81	75	67
2.50	98	89	83	95	88	82	92	85	80	72
3.00	101	94	88	99	92	87	95	89	85	76
4.00	105	99	94	103	97	93	98	94	90	81
5.00	108	103	98	105	101	97	101	97	93	84
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:2024-01-19

$\gamma$  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:220.36V I:0.1467A P:30.844W PF:0.9545 Freq:50.00Hz Lamp Flux:3052.79x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



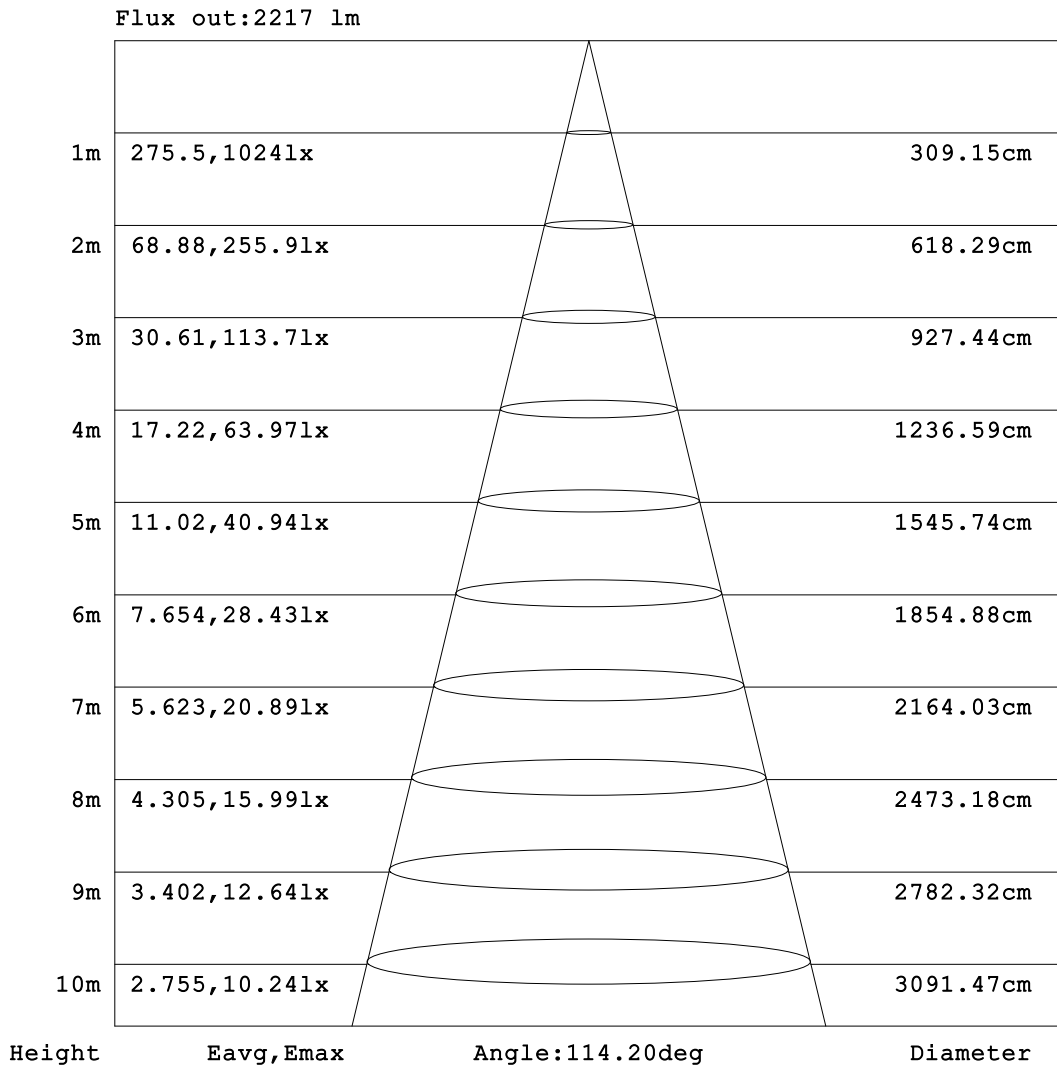
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-01-19

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:220.36V I:0.1467A P:30.844W PF:0.9545 Freq:50.00Hz Lamp Flux:3052.79x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



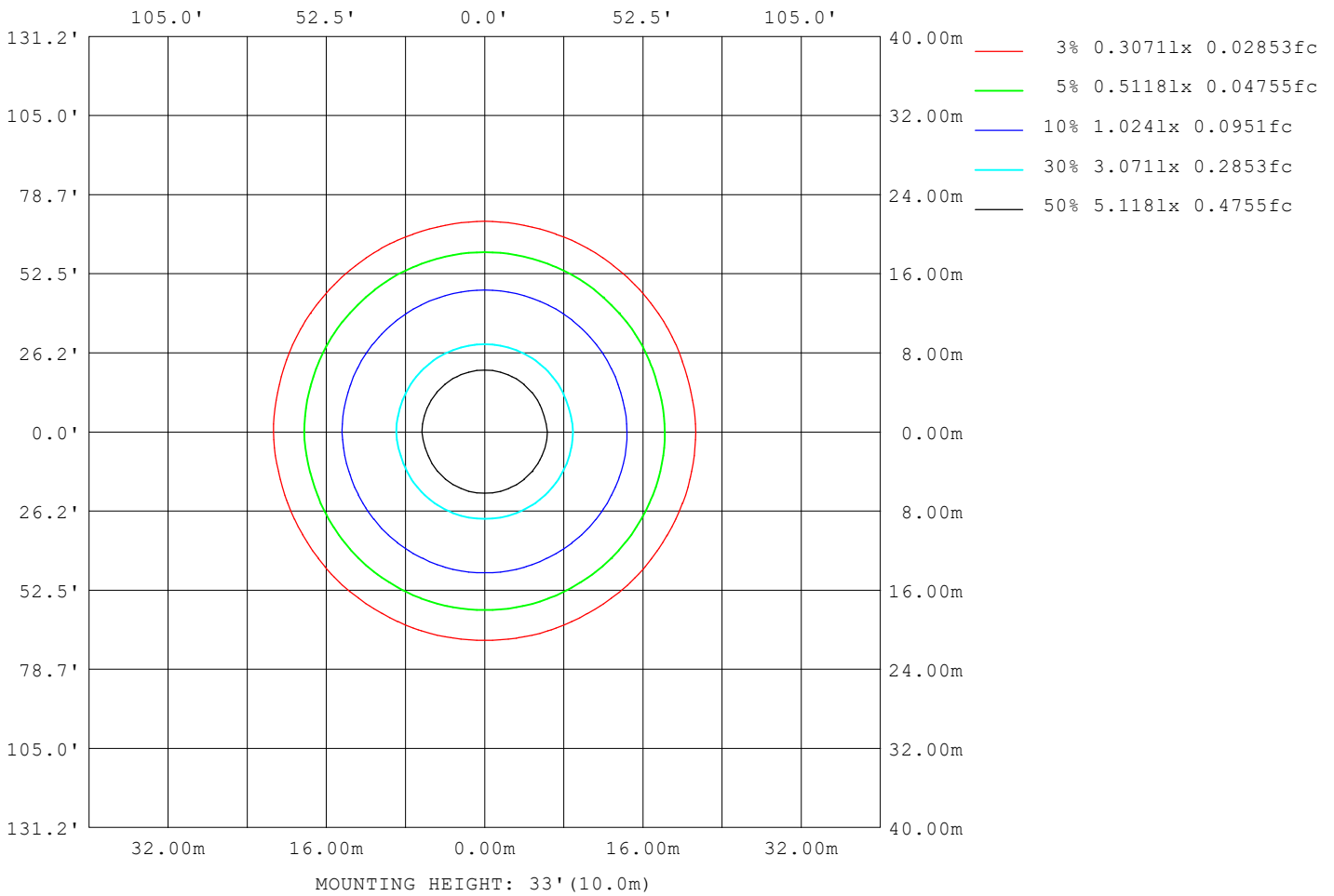
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators: DAMIN  
Test Date: 2024-01-19

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:220.36V I:0.1467A P:30.844W PF:0.9545 Freq:50.00Hz Lamp Flux:3052.79x1 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:2024-01-19

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:220.36V I:0.1467A P:30.844W PF:0.9545 Freq:50.00Hz Lamp Flux:3052.79x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

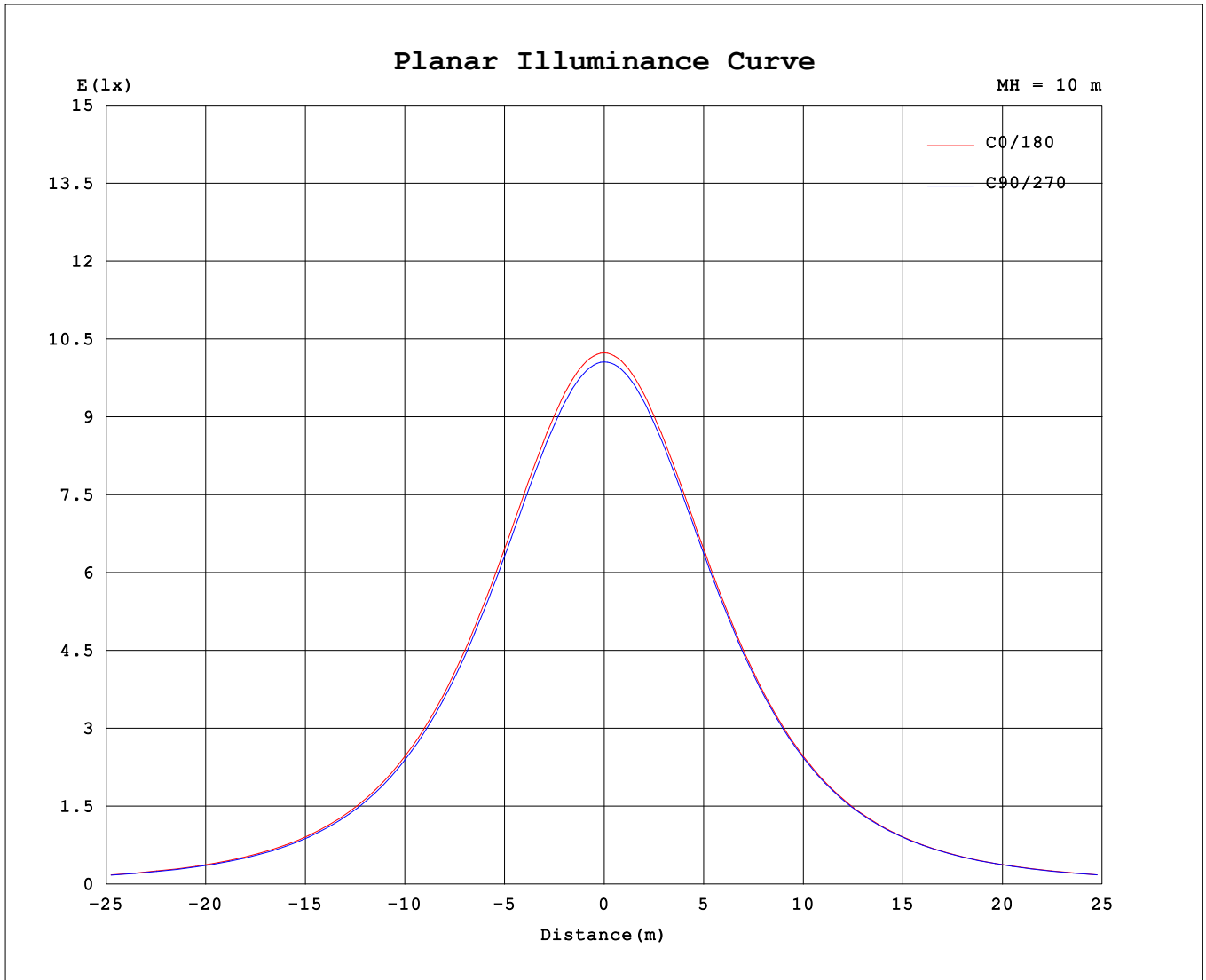
AvgL	cd/m2
L_0~180 (65) av	9314
L_0~180 (75) av	9149
L_0~180 (85) av	11014
L_90~270 (65) av	9250
L_90~270 (75) av	9081
L_90~270 (85) av	10608
L_45 (65) av	9285
L_45 (75) av	9143
L_45 (85) av	10816

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2024-01-19

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: 2024-01-19

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:



