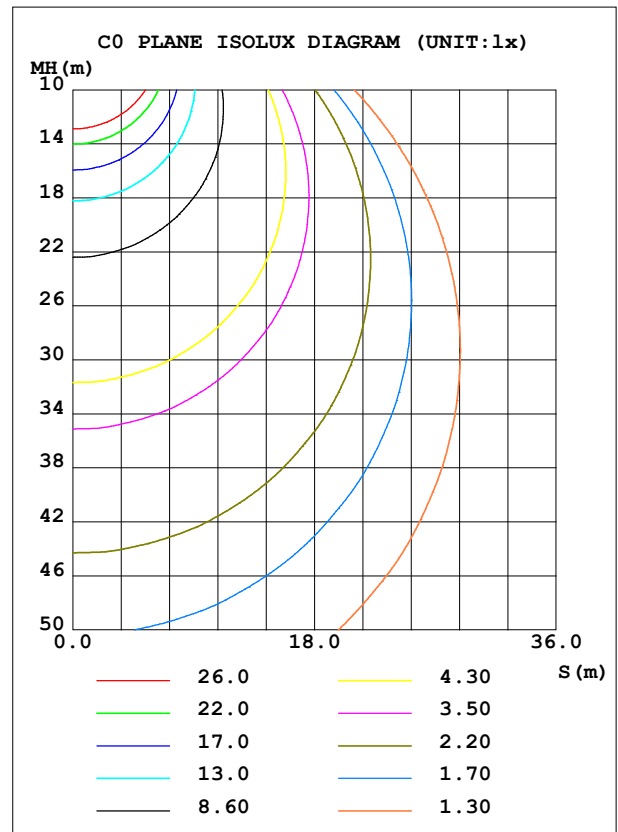
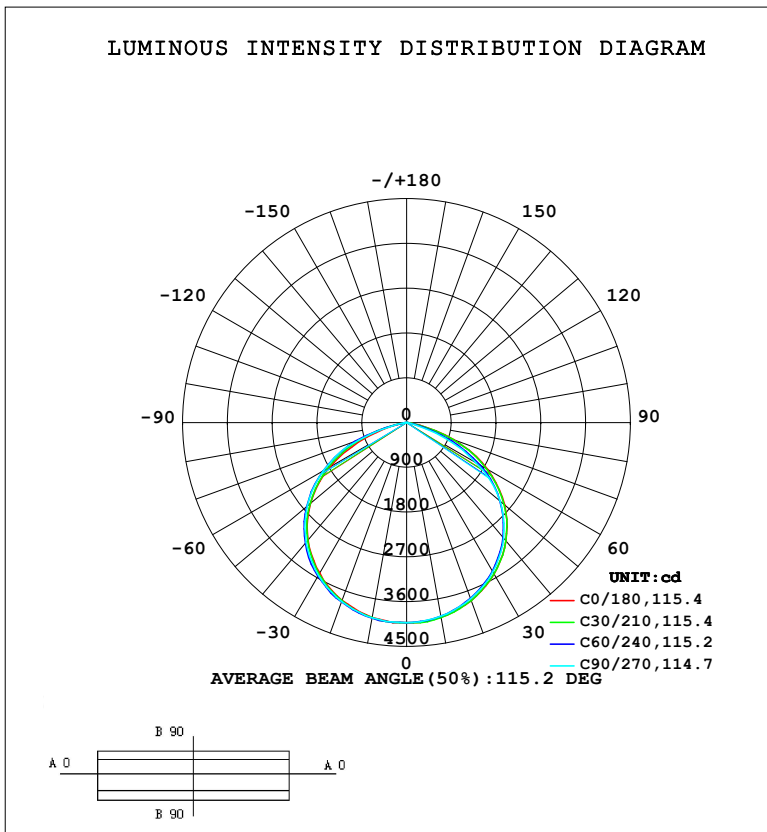


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.51V I:0.4214A P:87.417W PF:0.9408 Freq:49.99Hz Lamp Flux:11274.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 128.97 lm/W
MODEL	DFL-100W	I _{max} (cd)	4032	S/MH (C0/180)	1.29	
NOMINAL POWER (W)	100	LOR (%)	100.0	S/MH (C90/270)	1.31	
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	11274	η UP, DN (C0-180)	0.0, 48.5	
NOMINAL FLUX (lm)	11274.3	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 51.5	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE (V)	220	η down (%)	100.0	CIBSE SHR MAX	1.35	



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3 °C
 Operators:
 Test Date: 2024-04-10

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity: 65.0%
 Test Distance: 9.410m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	3971	3966	3954	3958	3976	3985	3988	3994	0- 10	382.1	382.1	3.39,3.39
20	3806	3782	3763	3774	3799	3819	3825	3832	10- 20	1102	1484	13.2,13.2
30	3518	3479	3466	3467	3496	3542	3548	3564	20- 30	1693	3177	28.2,28.2
40	3108	3060	3030	3020	3087	3131	3144	3172	30- 40	2077	5254	46.6,46.6
50	2569	2500	2451	2438	2518	2578	2604	2640	40- 50	2185	7438	66,66
60	1878	1781	1608	1678	1788	1879	1927	1969	50- 60	1962	9400	83.4,83.4
70	1007	859.2	619.2	754.1	839.5	1027	1016	1160	60- 70	1370	10770	95.5,95.5
80	152.1	68.49	20.87	39.42	81.53	140.7	61.31	182.9	70- 80	479.8	11250	99.8,99.8
90	4.144	4.527	4.618	4.809	2.466	2.240	1.834	2.221	80- 90	24.58	11274	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): 6571.3 lm

%lum = 58.3%

%lamp = 58.3%

Conical surface Flux(130deg): 10315 lm

%lum = 91.5%

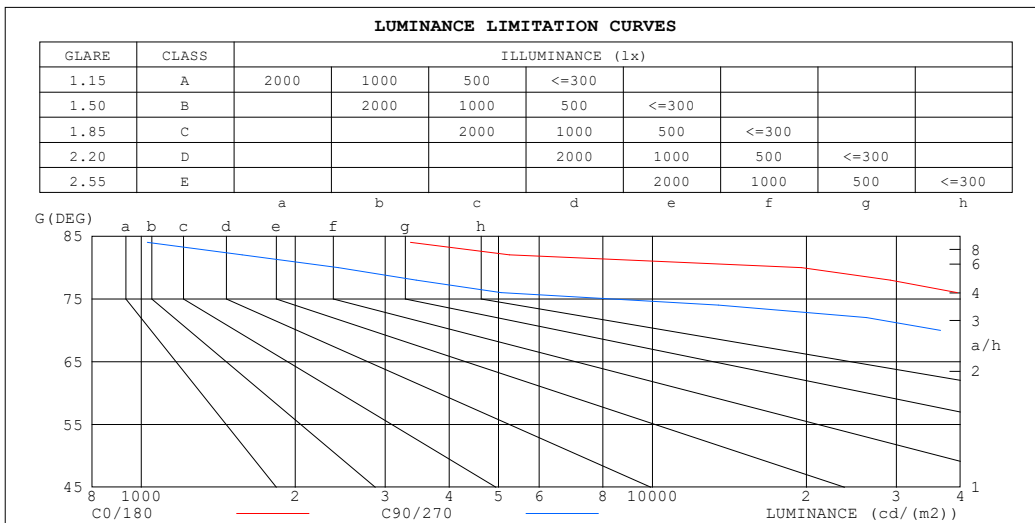
%lamp = 91.5%

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2024-04-10

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity:65.0%
 Test Distance:9.410m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.51V I:0.4214A P:87.417W PF:0.9408 Freq:49.99Hz Lamp Flux:11274.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	4033	1233
80	19574	2430
75	53604	14335
70	65818	36613
65	82524	60038
60	83955	65043
55	90064	76487
50	89304	77129
45	91934	80529

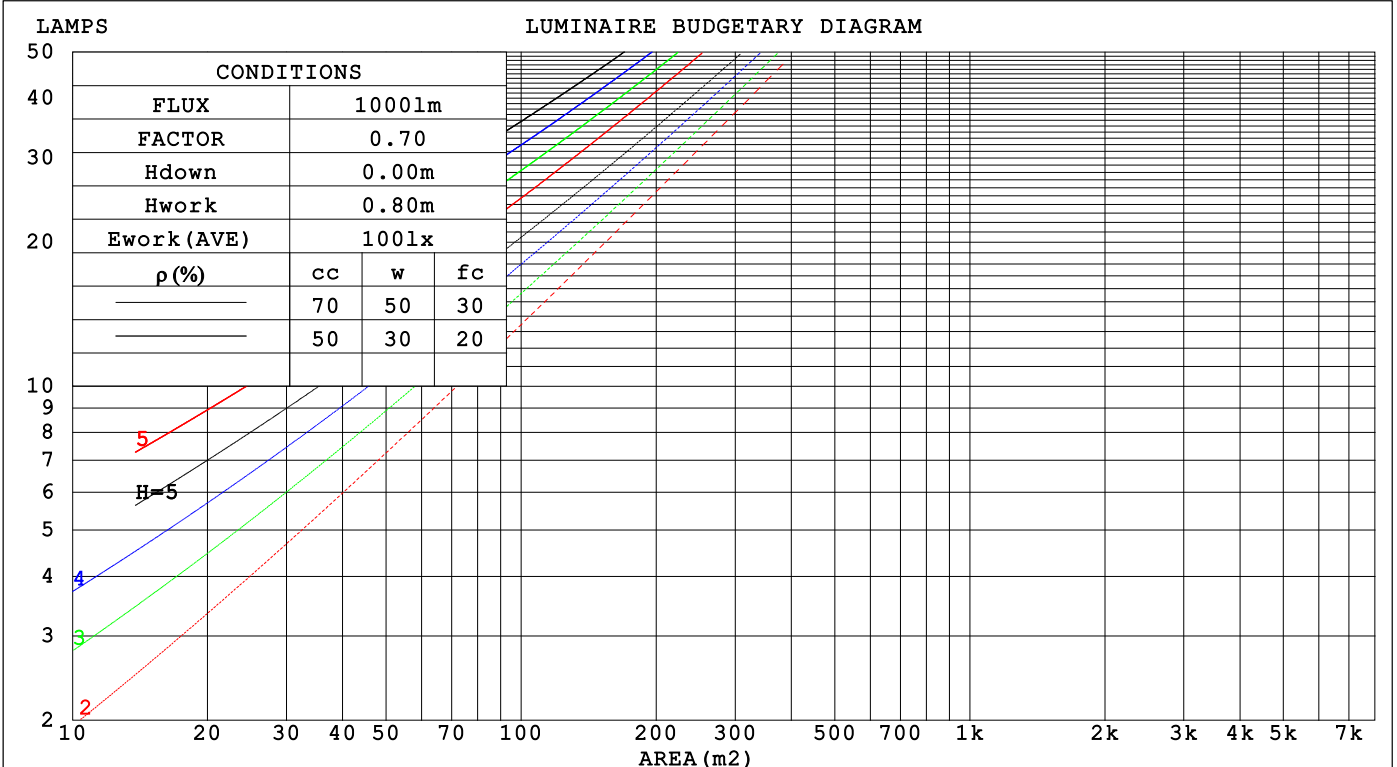
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3 °C
 Operators:
 Test Date:2024-04-10

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity:65.0%
 Test Distance:9.410m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.51V I:0.4214A P:87.417W PF:0.9408 Freq:49.99Hz Lamp Flux:11274.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	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	1.02	.98	1.03	.90	.96	.99	.96	.93	.95	.93	.91	.92	.90	.88	.86
2.0	.92	.86	.81	.91	.85	.80	.87	.82	.78	.84	.80	.76	.81	.77	.74	.72
3.0	.81	.74	.67	.80	.73	.67	.77	.71	.65	.74	.69	.64	.72	.67	.63	.61
4.0	.72	.64	.57	.71	.63	.57	.68	.61	.56	.66	.60	.55	.64	.59	.54	.52
5.0	.64	.56	.49	.63	.55	.49	.61	.54	.48	.59	.53	.48	.57	.52	.47	.45
6.0	.58	.49	.43	.57	.49	.43	.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	.33	.46	.38	.33	.45	.38	.33	.43	.37	.33	.31
9.0	.44	.36	.30	.43	.35	.30	.42	.35	.30	.41	.34	.30	.40	.34	.30	.28
10.0	.40	.33	.27	.40	.32	.27	.39	.32	.27	.38	.32	.27	.37	.31	.27	.25



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2024-04-10

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity:65.0%
 Test Distance:9.410m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:220.51V I:0.4214A P:87.417W PF:0.9408 Freq:49.99Hz		
Lamp Flux:11274.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

ρ_{CC}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.280	.159	.050	.273	.155	.049	.259	.149	.048	.247	.143	.046	.236	.137	.044	
2.0	.273	.149	.046	.267	.147	.045	.255	.142	.044	.244	.137	.043	.235	.133	.042	
3.0	.257	.137	.041	.252	.135	.041	.242	.131	.040	.232	.127	.039	.223	.124	.038	
4.0	.240	.125	.037	.236	.123	.036	.226	.120	.036	.218	.117	.035	.210	.114	.035	
5.0	.224	.114	.033	.220	.113	.033	.212	.110	.032	.204	.108	.032	.197	.105	.032	
6.0	.209	.105	.030	.205	.104	.030	.198	.101	.030	.191	.099	.029	.185	.097	.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	.086	.025	.164	.084	.024	
9.0	.172	.083	.023	.169	.082	.023	.164	.081	.023	.159	.080	.023	.155	.079	.023	
10.0	.162	.078	.022	.160	.077	.021	.155	.076	.021	.150	.075	.021	.146	.074	.021	

ρ_{CC}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{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	.137	.152	.134	.118	.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	.155	.101	.060	.133	.087	.052	.091	.061	.036	.053	.036	.022	.017	.012	.007	
5.0	.148	.090	.048	.127	.078	.042	.087	.055	.030	.051	.032	.018	.016	.010	.006	
6.0	.141	.082	.040	.121	.071	.035	.083	.050	.025	.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	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3 °C
 Operators:
 Test Date:2024-04-10

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity:65.0%
 Test Distance:9.410m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.51V I:0.4214A P:87.417W PF:0.9408 Freq:49.99Hz										
Lamp Flux:11274.3x1 lm										
NAME:			TYPE:			WEIGHT:				
SPEC.:			DIM.:			SERIAL No.:				
MFR.:			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	20.3	21.8	20.6	22.0	22.2	19.3	20.8	19.6	21.0	21.2
3H	21.6	23.0	21.9	23.2	23.4	20.1	21.5	20.4	21.7	21.9
4H	21.9	23.2	22.2	23.4	23.7	20.1	21.4	20.4	21.6	21.9
6H	21.9	23.1	22.2	23.4	23.6	20.0	21.2	20.3	21.5	21.7
8H	21.8	23.0	22.2	23.3	23.6	19.9	21.1	20.3	21.4	21.7
12H	21.8	22.9	22.1	23.2	23.5	19.9	21.0	20.2	21.3	21.6
4H 2H	20.8	22.1	21.1	22.3	22.6	20.0	21.3	20.3	21.5	21.8
3H	22.2	23.3	22.5	23.6	23.9	20.8	21.9	21.2	22.2	22.5
4H	22.5	23.5	22.9	23.8	24.2	20.8	21.8	21.2	22.2	22.5
6H	22.5	23.4	22.9	23.8	24.1	20.7	21.6	21.1	22.0	22.3
8H	22.5	23.3	22.9	23.7	24.1	20.7	21.5	21.1	21.9	22.3
12H	22.4	23.2	22.9	23.6	24.0	20.6	21.4	21.1	21.8	22.2
8H 4H	22.5	23.3	22.9	23.7	24.0	20.9	21.7	21.3	22.1	22.5
6H	22.5	23.2	23.0	23.6	24.0	20.8	21.5	21.2	21.9	22.3
8H	22.5	23.1	22.9	23.5	24.0	20.8	21.4	21.2	21.8	22.2
12H	22.4	23.0	22.9	23.4	23.9	20.7	21.2	21.2	21.7	22.2
12H 4H	22.4	23.2	22.8	23.6	24.0	20.8	21.6	21.3	22.0	22.4
6H	22.5	23.1	22.9	23.5	24.0	20.8	21.4	21.2	21.8	22.2
8H	22.4	23.0	22.9	23.4	23.9	20.7	21.2	21.2	21.7	22.2
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.2 / - 0.3					+ 0.4 / - 0.4				
1.5H	+ 0.2 / - 0.5					+ 0.4 / - 0.7				
2.0H	+ 0.4 / - 0.6					+ 0.5 / - 0.7				

CIE Pub.117, 11274 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 8.4)
 Area: 0.048 m2

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2024-04-10

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity:65.0%
 Test Distance:9.410m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.51V I:0.4214A P:87.417W PF:0.9408 Freq:49.99Hz Lamp Flux:11274.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

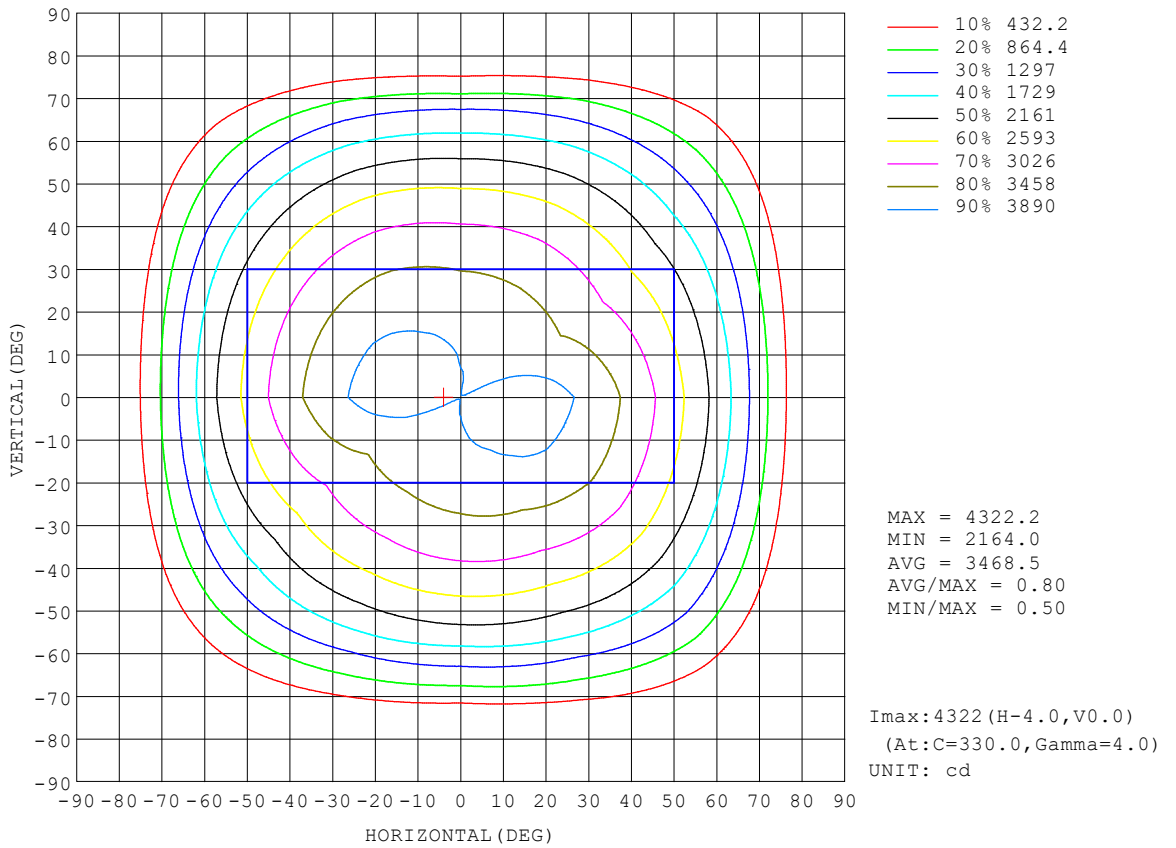
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	58	47	40	58	47	40	56	46	40	33
0.80	69	57	50	68	57	50	66	56	50	43
1.00	78	67	60	76	66	59	74	68	59	52
1.25	85	75	68	83	74	68	81	73	67	60
1.50	90	80	74	88	80	73	85	78	72	65
2.00	97	89	83	95	88	82	92	85	80	73
2.50	100	93	88	98	92	87	95	89	85	77
3.00	104	97	92	102	96	91	98	93	89	81
4.00	108	102	98	105	101	97	101	97	94	85
5.00	110	105	102	107	104	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: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3 °C
 Operators:
 Test Date:2024-04-10

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity:65.0%
 Test Distance:9.410m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.51V I:0.4214A P:87.417W PF:0.9408 Freq:49.99Hz Lamp Flux:11274.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

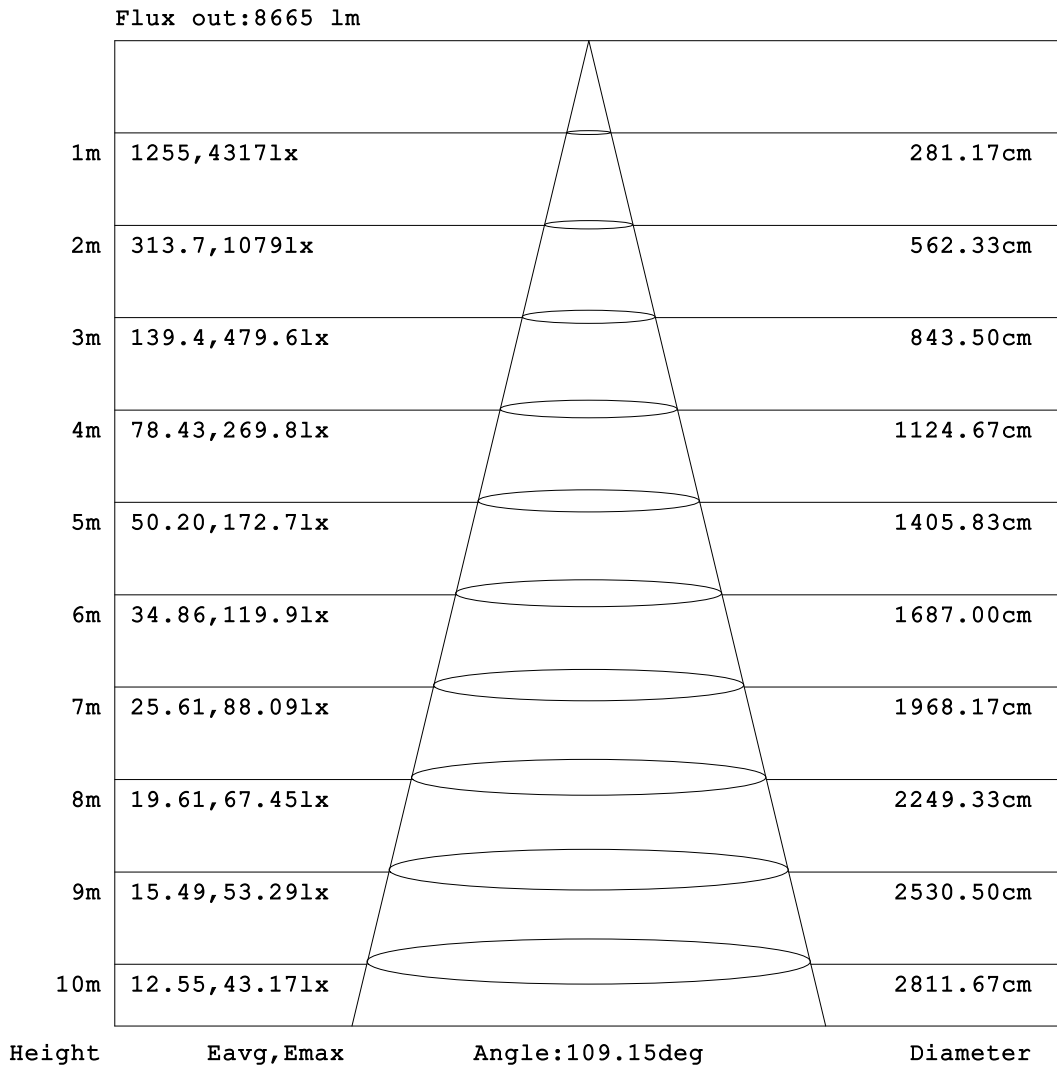


C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2024-04-10

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity:65.0%
 Test Distance:9.410m [K=1.0000]
 Remarks:

AAI Figure

Test:U:220.51V I:0.4214A P:87.417W PF:0.9408 Freq:49.99Hz Lamp Flux:11274.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



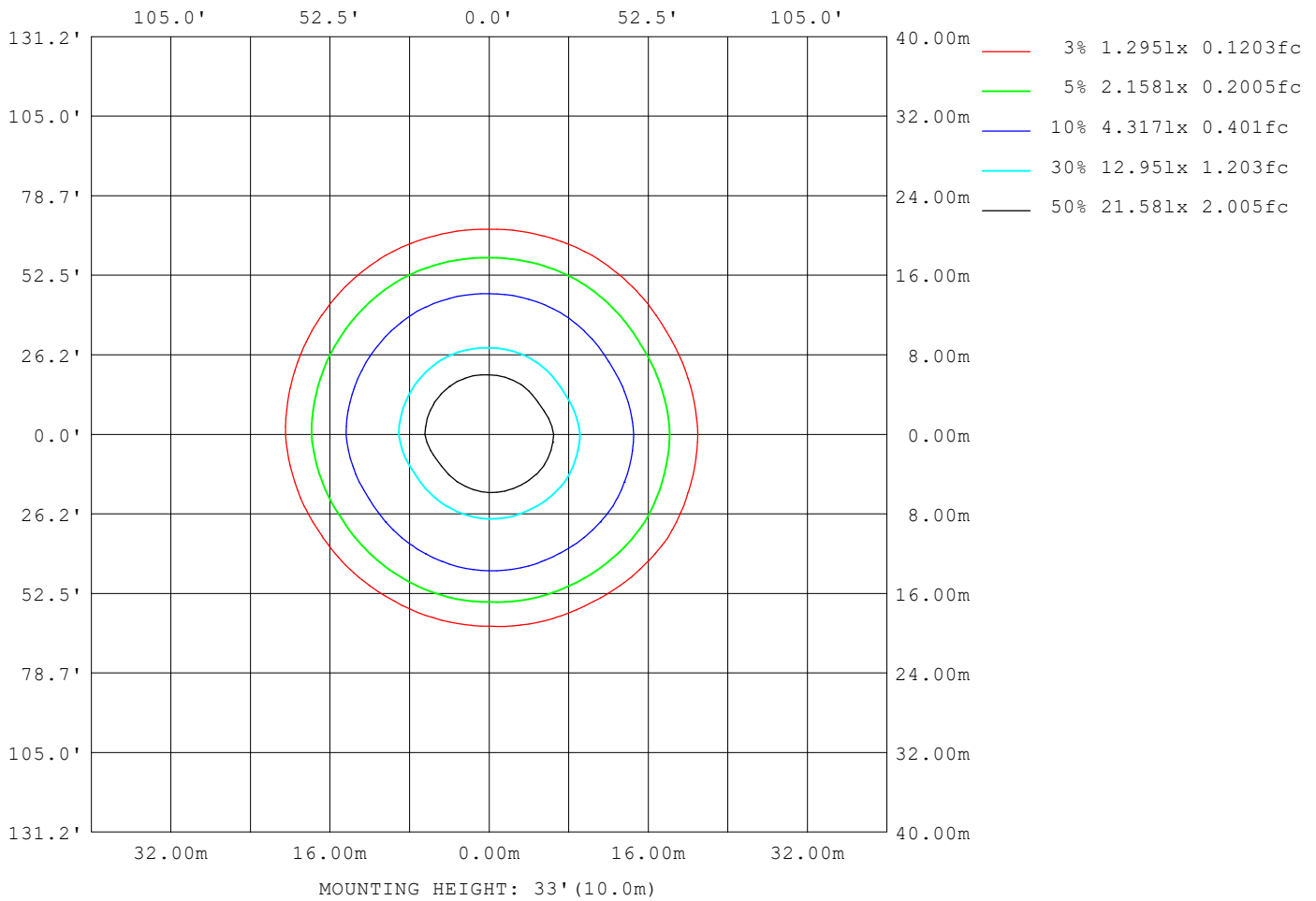
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3 °C
 Operators:
 Test Date:2024-04-10

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity:65.0%
 Test Distance:9.410m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:220.51V I:0.4214A P:87.417W PF:0.9408 Freq:49.99Hz Lamp Flux:11274.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2024-04-10

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity:65.0%
 Test Distance:9.410m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:220.51V I:0.4214A P:87.417W PF:0.9408 Freq:49.99Hz Lamp Flux:11274.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

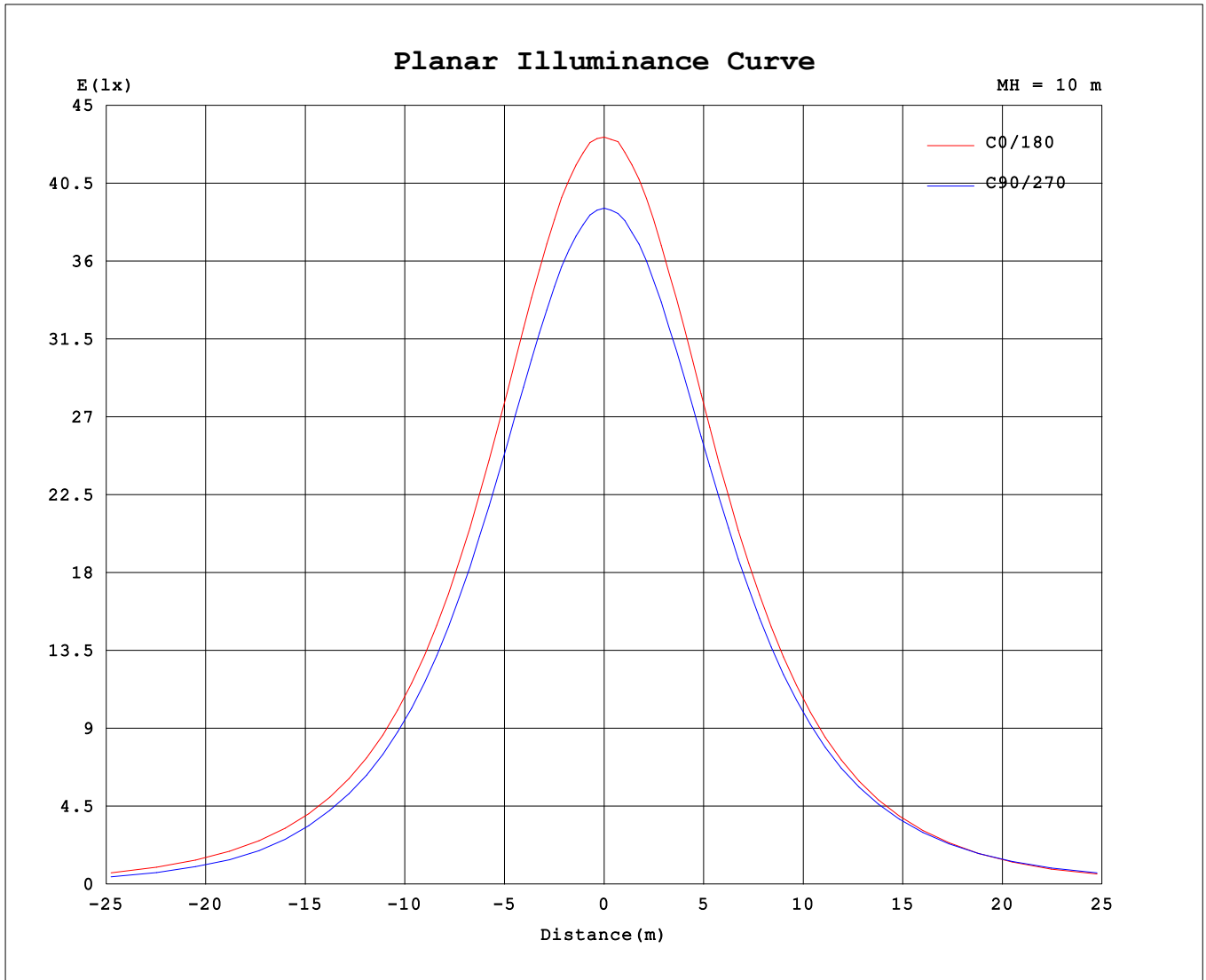
AvgL	cd/m2
L_0~180 (65) av	68676
L_0~180 (75) av	37384
L_0~180 (85) av	2117
L_90~270 (65) av	66005
L_90~270 (75) av	22900
L_90~270 (85) av	2038
L_45 (65) av	69487
L_45 (75) av	37003
L_45 (85) av	2662

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:
 Test Date:2024-04-10

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity:65.0%
 Test Distance:9.410m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3 °C
 Operators:
 Test Date: 2024-04-10

γ Range: 0 - 90DEG
 γ Interval: 2.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.458
 Humidity: 65.0%
 Test Distance: 9.410m [K=1.0000]
 Remarks:

