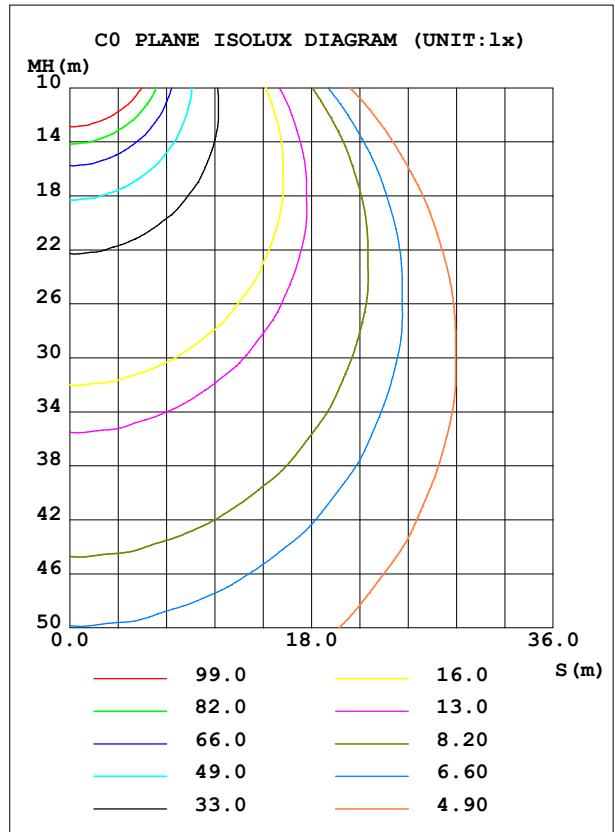
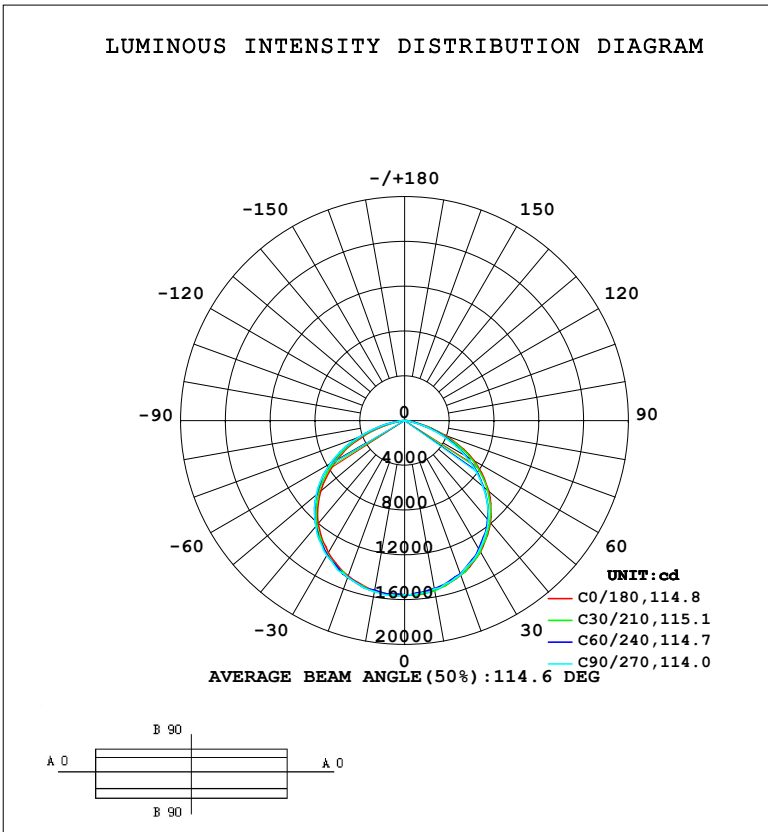


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:236.22V I:1.5448A P:344.76W PF:0.9448 Freq:49.98Hz Lamp Flux:44237.5x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	DFL-400W	Imax (cd)	15683	S/MH (C0/180)	1.30
NOMINAL POWER (W)	400	LOR (%)	100.0	S/MH (C90/270)	1.32
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	44237	η UP, DN (C0-180)	0.0,48.0
NOMINAL FLUX (lm)	44237.5	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0,52.0
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	1536	1534	1527	1533	1543	1543	1552	1549	0- 10	1480	1480	3.35,3.35
20	1467	1461	1464	1462	1476	1489	1487	1487	10- 20	4271	5751	13,13
30	1357	1339	1337	1333	1365	1381	1394	1378	20- 30	6556	12306	27.8,27.8
40	1195	1169	1162	1171	1204	1226	1233	1226	30- 40	8032	20338	46,46
50	981.0	942.8	911.6	935.4	980.1	1014	1032	1021	40- 50	8442	28780	65.1,65.1
60	713.7	664.2	622.9	640.4	700.5	743.6	766.8	763.3	50- 60	7547	36327	82.1,82.1
70	387.3	335.2	306.2	307.7	366.6	418.1	437.5	437.8	60- 70	5362	41689	94.2,94.2
80	90.41	60.25	42.97	43.65	71.82	101.4	115.9	121.6	70- 80	2305	43994	99.5,99.5
90	1.779	1.930	2.019	1.979	1.056	0.9567	0.9898	1.051	80- 90	243.0	44237	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:X10cd									UNIT:lm		

Conical surface Flux(90deg): 25436 lm

%lum = 57.5%

%lamp = 57.5%

Conical surface Flux(130deg): 39890 lm

%lum = 90.2%

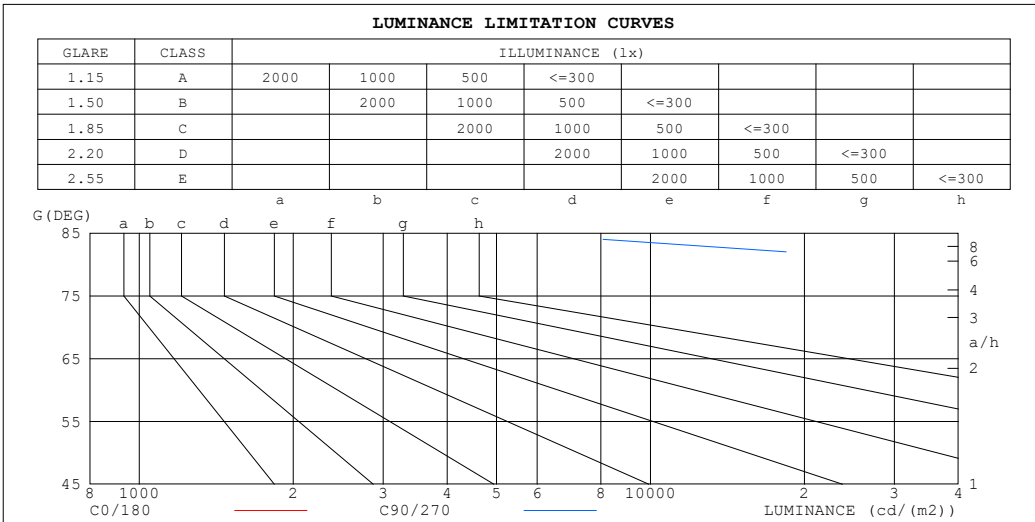
%lamp = 90.2%

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:236.22V I:1.5448A P:344.76W PF:0.9448 Freq:49.98Hz Lamp Flux:44237.5x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	62020	9685
80	114115	51436
75	213271	148915
70	248166	186060
65	306530	245389
60	312852	258919
55	336228	290265
50	334489	294771
45	343282	314473

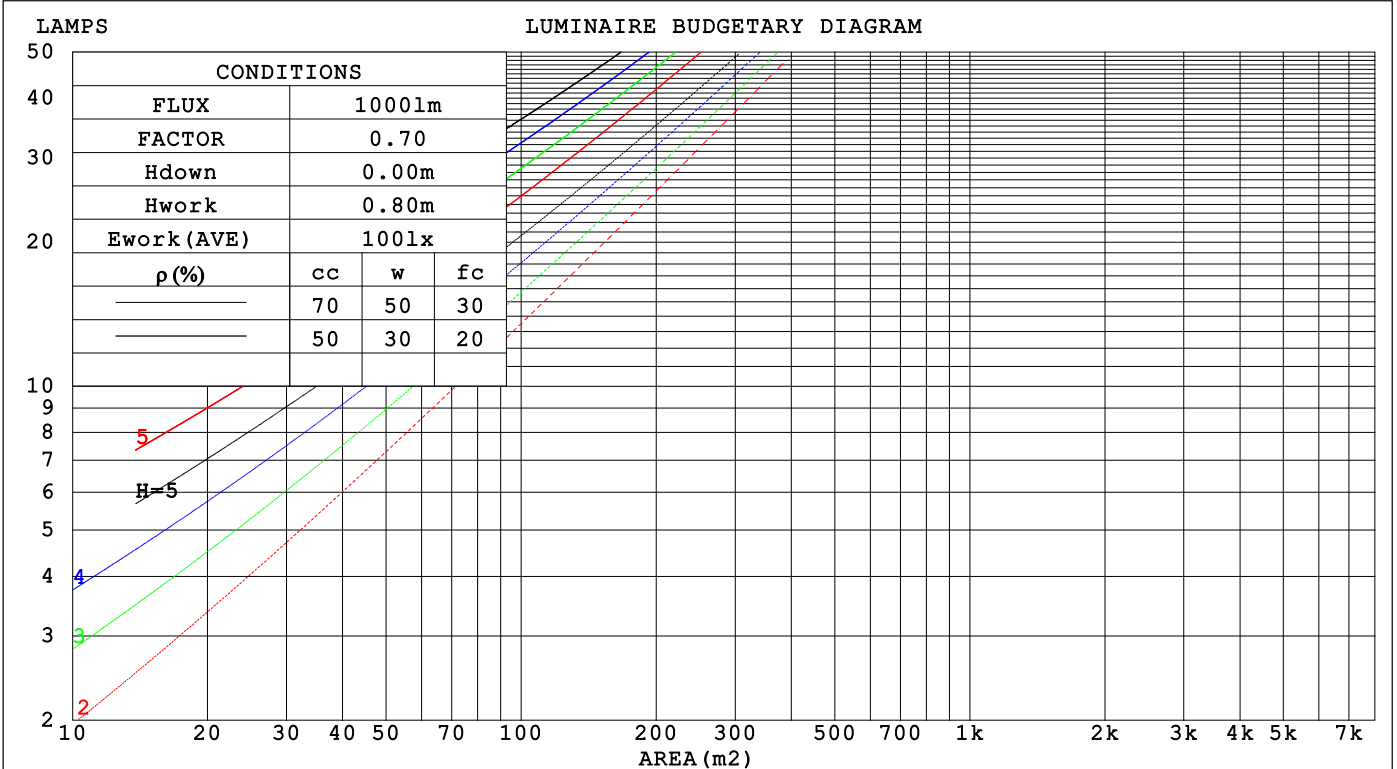
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3 °C
 Operators:
 Test Date:2024-04-10

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:236.22V I:1.5448A P:344.76W PF:0.9448 Freq:49.98Hz		
Lamp Flux:44237.5x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	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	1.03	.99	.96	.99	.96	.93	.95	.92	.90	.91	.89	.87	.85
2.0	.92	.85	.80	.90	.84	.79	.86	.81	.77	.83	.79	.75	.80	.77	.74	.71
3.0	.81	.73	.67	.79	.72	.66	.76	.70	.65	.74	.68	.64	.71	.66	.63	.60
4.0	.72	.63	.56	.70	.62	.56	.68	.61	.55	.65	.59	.54	.63	.58	.54	.52
5.0	.64	.55	.48	.63	.54	.48	.61	.53	.48	.59	.52	.47	.57	.51	.47	.45
6.0	.57	.49	.42	.57	.48	.42	.55	.47	.42	.53	.46	.41	.51	.46	.41	.39
7.0	.52	.43	.37	.51	.43	.37	.50	.42	.37	.48	.42	.37	.47	.41	.36	.34
8.0	.47	.39	.33	.47	.39	.33	.45	.38	.33	.44	.38	.33	.43	.37	.32	.31
9.0	.44	.35	.30	.43	.35	.30	.42	.35	.30	.41	.34	.29	.40	.34	.29	.27
10.0	.40	.32	.27	.40	.32	.27	.39	.32	.27	.38	.31	.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:236.22V I:1.5448A P:344.76W PF:0.9448 Freq:49.98Hz		
Lamp Flux:44237.5x1 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	.288	.163	.052	.280	.160	.051	.267	.153	.049	.255	.147	.047	.244	.141	.046	
2.0	.278	.152	.047	.272	.150	.046	.260	.145	.045	.250	.140	.044	.240	.136	.043	
3.0	.261	.139	.042	.255	.137	.041	.245	.133	.040	.236	.129	.040	.227	.126	.039	
4.0	.243	.126	.037	.238	.125	.037	.229	.121	.036	.221	.118	.036	.213	.116	.035	
5.0	.226	.115	.033	.222	.114	.033	.214	.111	.033	.206	.109	.032	.199	.106	.032	
6.0	.210	.105	.030	.207	.104	.030	.199	.102	.030	.193	.100	.029	.186	.098	.029	
7.0	.196	.097	.028	.193	.096	.027	.187	.094	.027	.181	.093	.027	.175	.091	.027	
8.0	.184	.090	.025	.181	.089	.025	.175	.087	.025	.170	.086	.025	.165	.084	.025	
9.0	.173	.083	.023	.170	.083	.023	.165	.081	.023	.160	.080	.023	.155	.079	.023	
10.0	.162	.078	.022	.160	.077	.022	.155	.076	.021	.151	.075	.021	.147	.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	.179	.156	.136	.153	.134	.117	.105	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.170	.132	.100	.146	.114	.086	.100	.079	.060	.058	.046	.035	.019	.015	.011	
3.0	.163	.114	.076	.140	.099	.066	.096	.068	.046	.055	.040	.027	.018	.013	.009	
4.0	.155	.101	.059	.133	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.148	.090	.048	.127	.078	.042	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.141	.082	.040	.121	.071	.034	.084	.050	.024	.049	.029	.015	.016	.010	.005	
7.0	.135	.075	.034	.116	.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	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.023	.101	.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:236.22V I:1.5448A P:344.76W PF:0.9448 Freq:49.98Hz										
Lamp Flux:44237.5x1 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	20.0	21.5	20.3	21.7	21.9	19.2	20.7	19.5	20.9	21.1
3H	21.2	22.6	21.5	22.8	23.0	20.2	21.6	20.5	21.8	22.1
4H	21.5	22.8	21.8	23.1	23.3	20.4	21.7	20.7	22.0	22.2
6H	21.6	22.8	21.9	23.1	23.4	20.4	21.6	20.7	21.9	22.2
8H	21.6	22.8	21.9	23.1	23.4	20.4	21.5	20.7	21.8	22.1
12H	21.6	22.7	21.9	23.0	23.3	20.3	21.4	20.7	21.7	22.0
4H 2H	20.4	21.7	20.7	22.0	22.2	19.8	21.1	20.1	21.4	21.6
3H	21.7	22.9	22.1	23.2	23.5	20.9	22.1	21.3	22.4	22.7
4H	22.1	23.2	22.5	23.5	23.8	21.2	22.2	21.6	22.6	22.9
6H	22.3	23.2	22.7	23.6	23.9	21.2	22.1	21.6	22.5	22.8
8H	22.3	23.1	22.7	23.5	23.9	21.2	22.0	21.6	22.4	22.8
12H	22.3	23.0	22.7	23.4	23.8	21.1	21.9	21.5	22.3	22.7
8H 4H	22.2	23.0	22.6	23.4	23.8	21.3	22.1	21.7	22.5	22.9
6H	22.4	23.1	22.8	23.5	23.9	21.3	22.0	21.8	22.4	22.9
8H	22.4	23.0	22.9	23.4	23.9	21.3	21.9	21.8	22.3	22.8
12H	22.4	22.9	22.8	23.3	23.8	21.3	21.8	21.7	22.2	22.7
12H 4H	22.1	22.9	22.6	23.3	23.7	21.3	22.0	21.7	22.4	22.8
6H	22.4	23.0	22.8	23.4	23.8	21.3	21.9	21.8	22.4	22.8
8H	22.4	22.9	22.8	23.3	23.8	21.3	21.8	21.8	22.3	22.7
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.2 / - 0.3					+ 0.3 / - 0.4				
1.5H	+ 0.2 / - 0.4					+ 0.3 / - 0.5				
2.0H	+ 0.4 / - 0.6					+ 0.4 / - 0.5				

CIE Pub.117, 44237 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 13.2)
 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:236.22V I:1.5448A P:344.76W PF:0.9448 Freq:49.98Hz Lamp Flux:44237.5x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

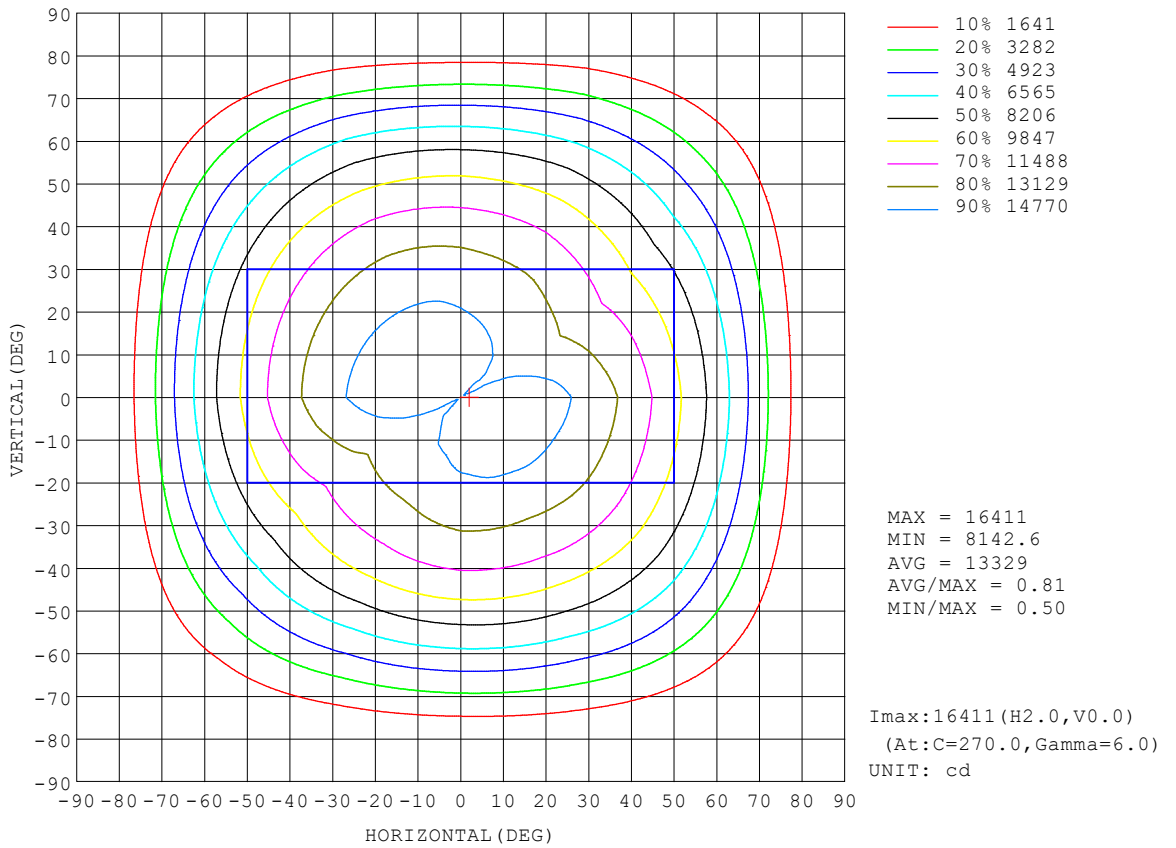
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	58	47	40	57	46	39	56	46	39	33
0.80	68	57	50	67	56	49	66	56	49	42
1.00	77	66	59	76	66	59	74	67	58	51
1.25	84	74	67	83	73	67	80	72	66	59
1.50	89	80	73	88	79	73	85	77	71	64
2.00	96	88	82	94	87	81	91	85	80	72
2.50	100	93	87	98	91	86	94	89	84	76
3.00	103	97	92	101	95	91	97	92	88	80
4.00	107	102	98	105	100	96	101	97	93	85
5.00	109	105	101	107	103	100	103	99	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:236.22V I:1.5448A P:344.76W PF:0.9448 Freq:49.98Hz Lamp Flux:44237.5x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



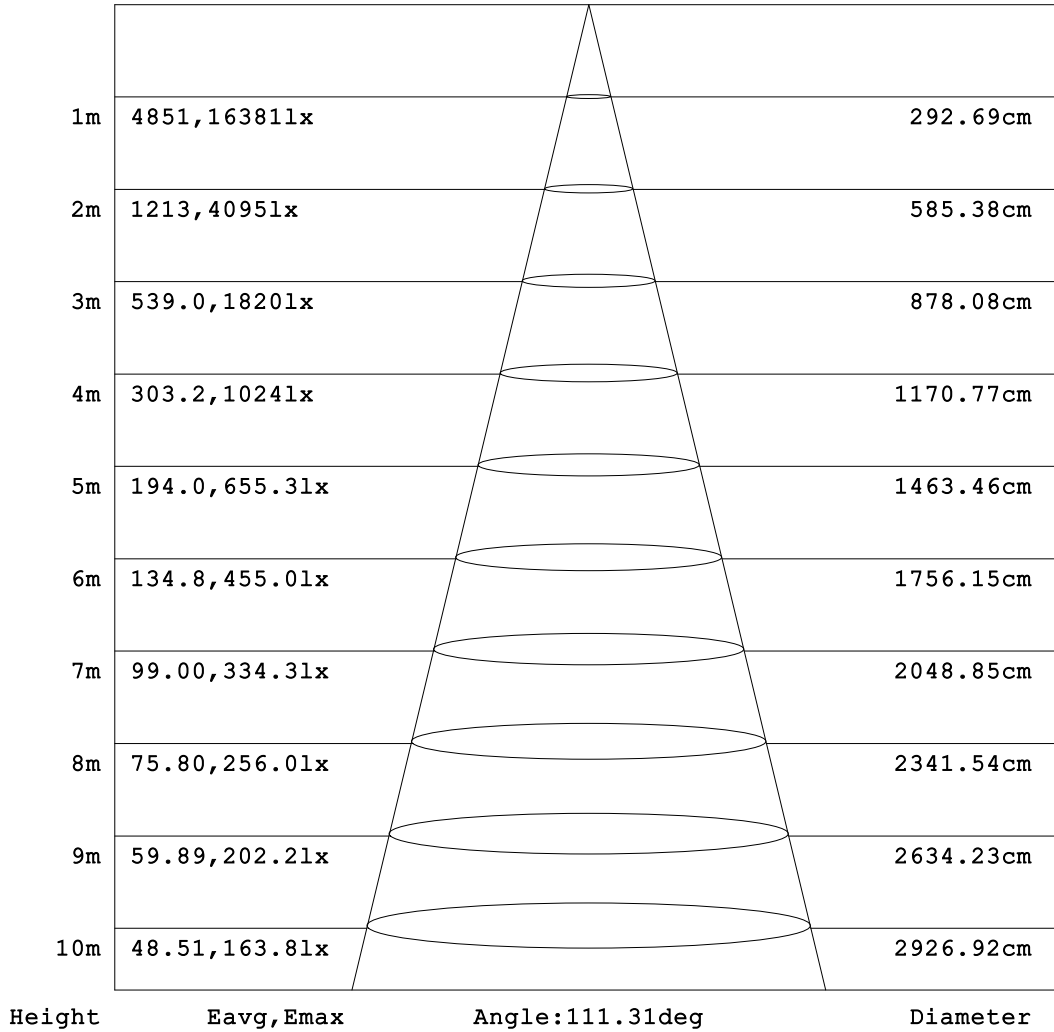
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:2024-04-10

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:236.22V I:1.5448A P:344.76W PF:0.9448 Freq:49.98Hz Lamp Flux:44237.5x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Flux out:33498 lm



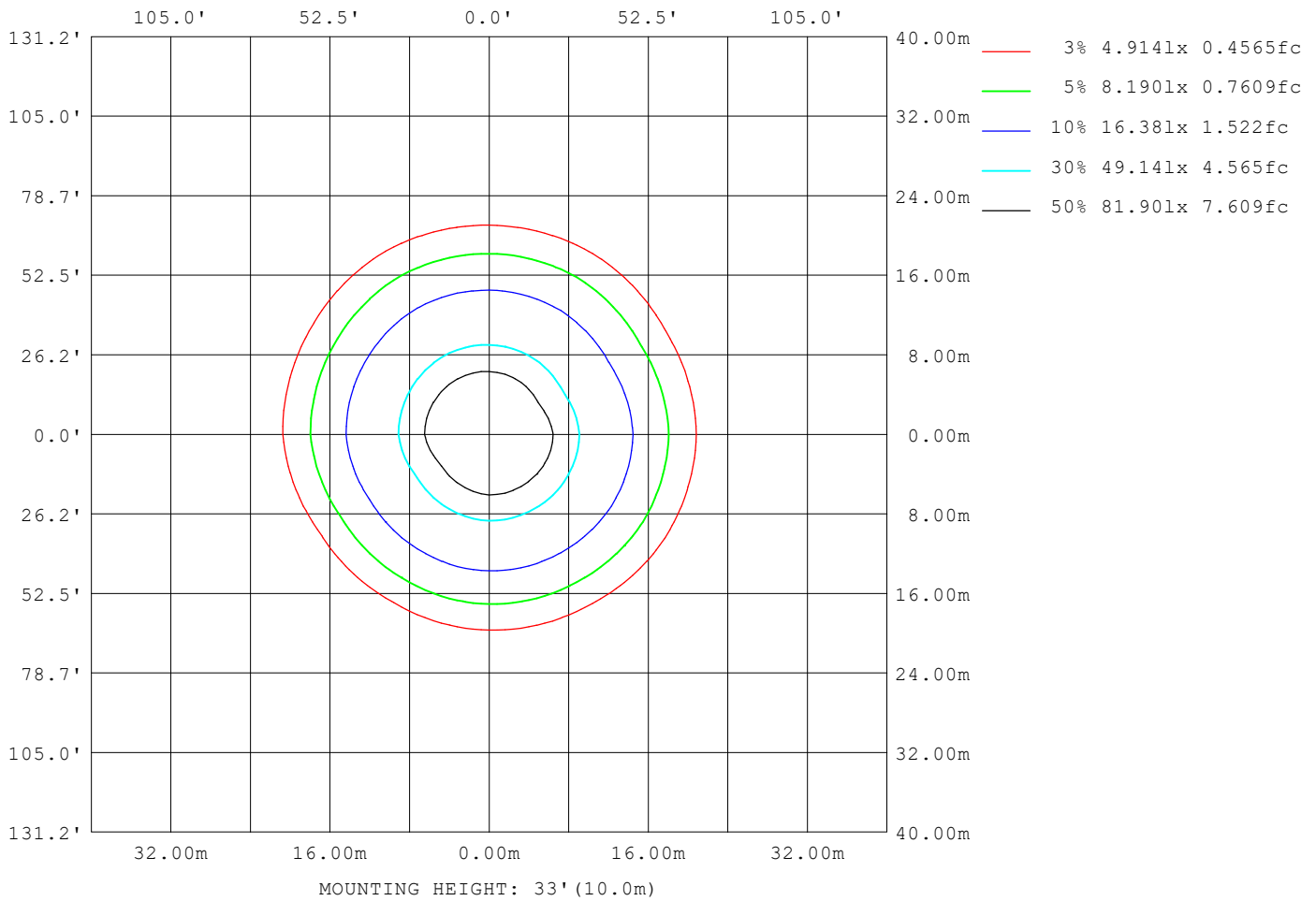
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:236.22V I:1.5448A P:344.76W PF:0.9448 Freq:49.98Hz Lamp Flux:44237.5x1 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:236.22V I:1.5448A P:344.76W PF:0.9448 Freq:49.98Hz Lamp Flux:44237.5x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

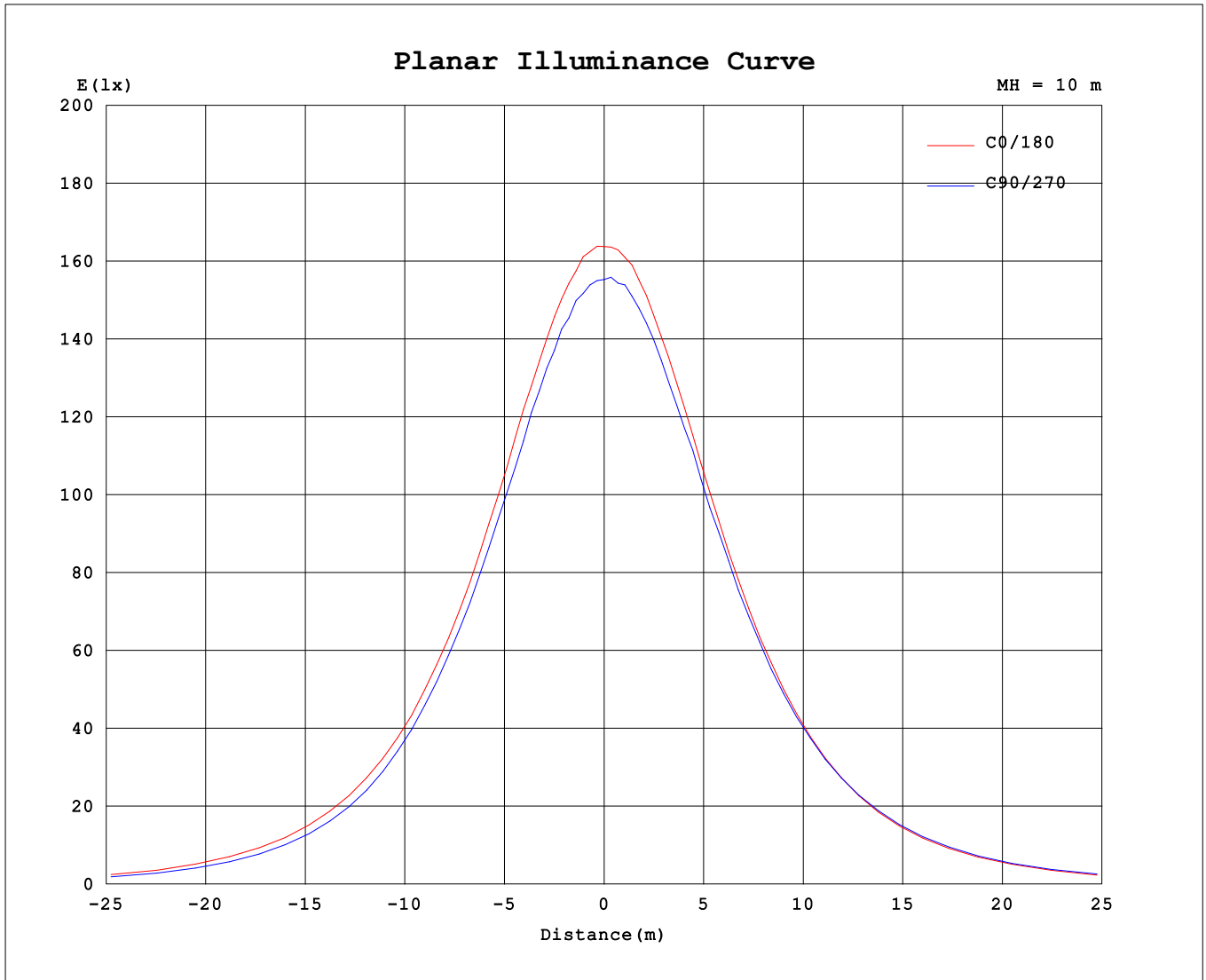
AvgL	cd/m2
L_0~180 (65) av	270339
L_0~180 (75) av	170433
L_0~180 (85) av	25893
L_90~270 (65) av	263851
L_90~270 (75) av	172550
L_90~270 (85) av	17568
L_45 (65) av	269904
L_45 (75) av	173376
L_45 (85) av	26310

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:

