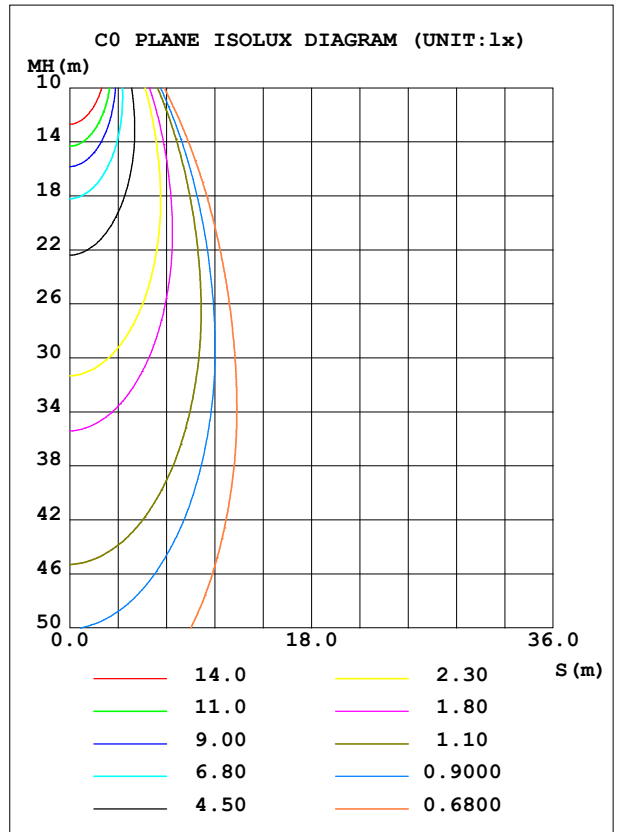
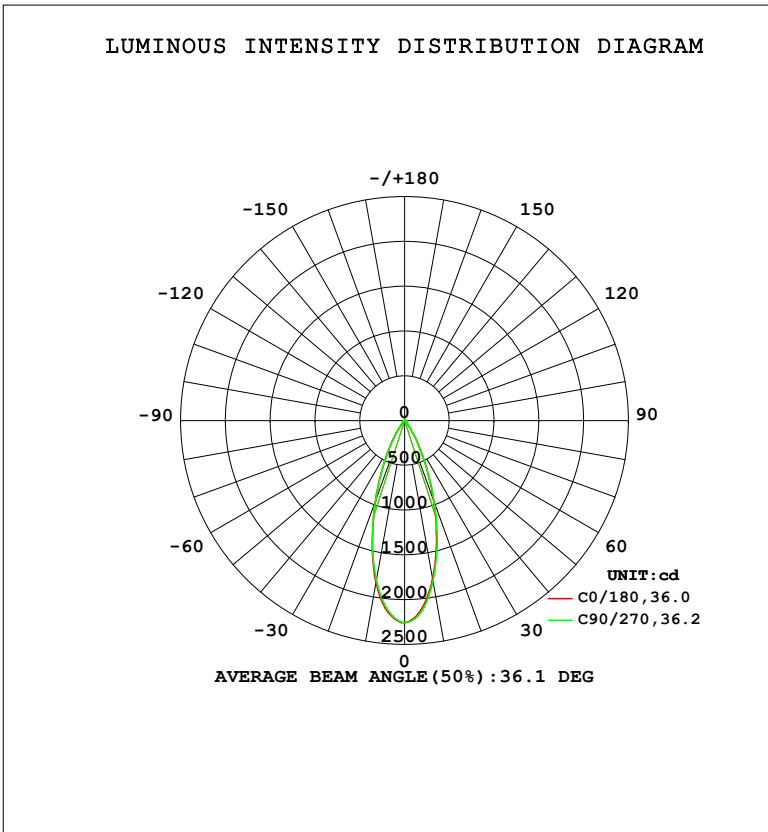


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.28V I:0.1170A P:13.839W PF:0.9831 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:993.033x1 lm		
NAME: DLDM-4-CCT-15W	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: DLL	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 71.76 lm/W
MODEL	DLDM-4-CCT-15W	I <sub>max</sub> (cd)	2255	S/MH (C0/180)	0.59	
NOMINAL POWER (W)	15	LOR (%)	100.0	S/MH (C90/270)	0.59	
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	993.03	η UP, DN (C0-180)	0.0, 50.3	
NOMINAL FLUX (lm)	993.033	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 49.7	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50	
TEST VOLTAGE (V)	120	η down (%)	100.0	CIBSE SHR MAX	0.60	



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 24.3 °C  
 Operators:  
 Test Date: 2024-06-19

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity: 65.0%  
 Test Distance: 3.080m [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	1798	1824	1822	1849	1842	1814	1816	1806	0- 10	193.8	193.8	19.5,19.5
20	956.7	987.0	969.3	965.2	960.4	942.7	960.6	956.7	10- 20	382.3	576.1	58,58
30	313.7	311.8	305.4	306.0	320.7	309.2	309.6	317.5	20- 30	268.8	844.9	85.1,85.1
40	51.34	52.68	52.54	49.71	49.87	49.66	50.44	49.88	30- 40	88.80	933.7	94,94
50	25.90	26.06	26.72	27.00	25.55	26.17	26.45	27.56	40- 50	27.54	961.2	96.8,96.8
60	12.84	13.50	14.72	14.99	13.48	14.24	14.98	15.13	50- 60	17.65	978.9	98.6,98.6
70	5.292	5.550	6.239	6.013	5.665	5.753	6.435	5.914	60- 70	9.357	988.3	99.5,99.5
80	1.423	1.734	2.281	2.059	1.838	2.011	2.485	1.877	70- 80	4.092	992.3	99.9,99.9
90	0.0517	0.0566	0.0614	0.0496	0.0436	0.0329	0.0499	0.0396	80- 90	0.6859	993.0	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): 949.14 lm

%lum = 95.6%  
 %lamp = 95.6%

Conical surface Flux(130deg): 984.58 lm

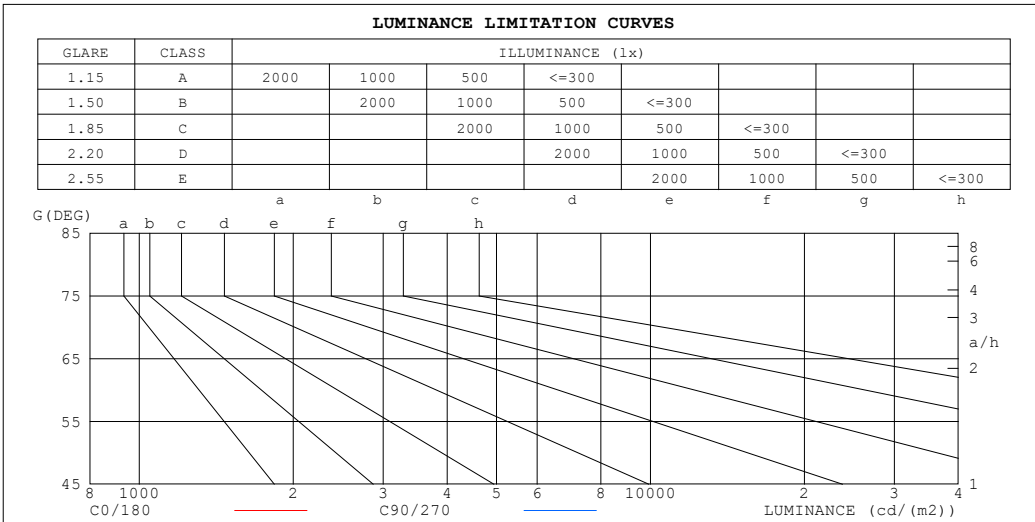
%lum = 99.1%  
 %lamp = 99.1%

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3°C  
 Operators:  
 Test Date:2024-06-19

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

**LUMINANCE LIMITATION CURVES**

Test:U:120.28V I:0.1170A P:13.839W PF:0.9831 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:993.033x1 lm		
NAME: DLDM-4-CCT-15W	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: DLL	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	11	67
80	74	118
75	112	151
70	140	164
65	163	211
60	232	265
55	286	308
50	363	374
45	440	445

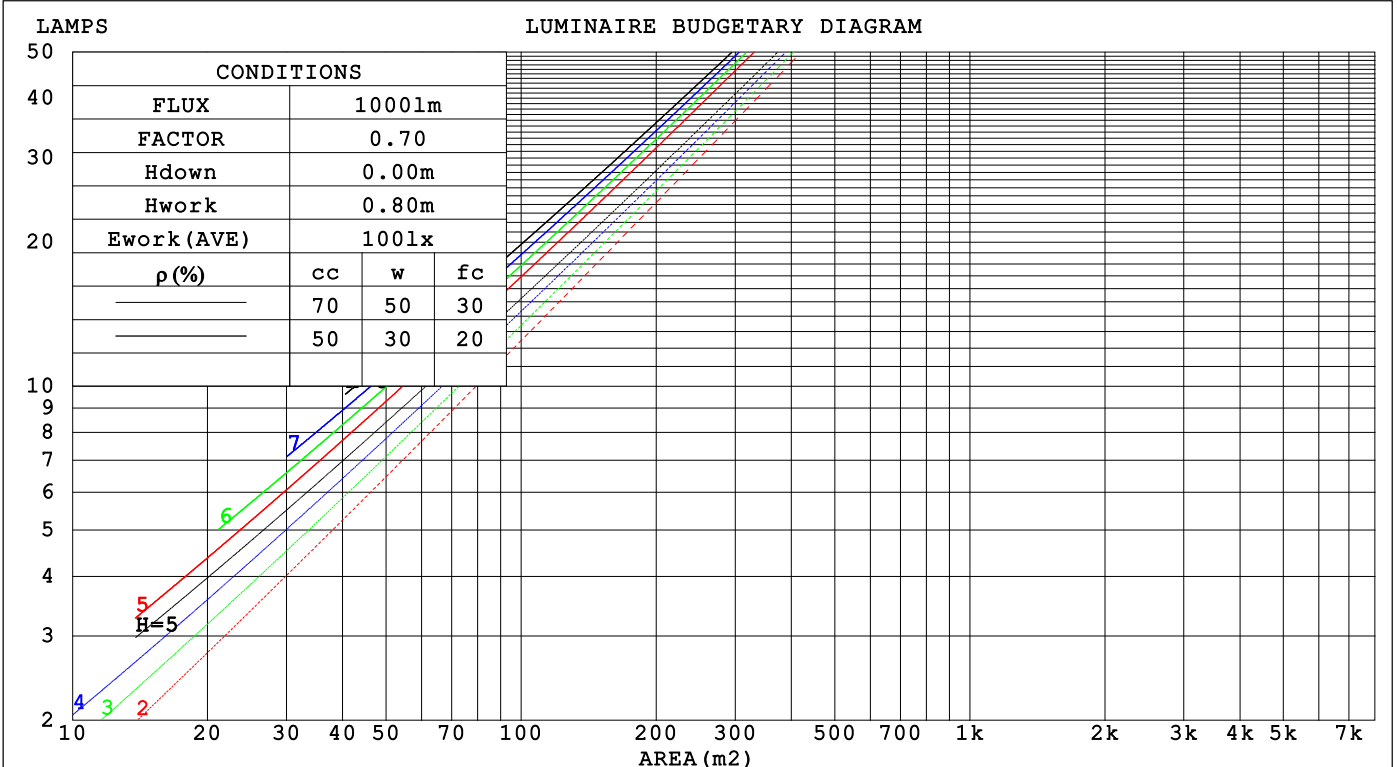
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 24.3°C  
 Operators:  
 Test Date: 2024-06-19

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity: 65.0%  
 Test Distance: 3.080m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.28V I:0.1170A P:13.839W PF:0.9831 Freq:59.98Hz		
UTHdi:0.00% ITHdi:0.00% KDisp:0 Lamp Flux:993.033x1 lm		
NAME: DLDM-4-CCT-15W	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: DLL	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	1.12	1.09	1.07	1.09	1.07	1.05	1.05	1.04	1.02	1.02	1.00	.99	.98	.97	.96	.95
2.0	1.05	1.01	.98	1.03	.90	.97	.90	.97	.95	.97	.95	.93	.94	.92	.91	.89
3.0	.99	.94	.91	.97	.93	.90	.95	.91	.89	.93	.90	.87	.90	.88	.86	.85
4.0	.93	.89	.85	.92	.88	.84	.90	.86	.83	.88	.85	.82	.87	.84	.82	.80
5.0	.89	.84	.80	.88	.83	.80	.86	.82	.79	.85	.81	.78	.83	.80	.77	.76
6.0	.84	.79	.76	.84	.79	.75	.82	.78	.75	.81	.77	.74	.80	.76	.74	.73
7.0	.81	.75	.72	.80	.75	.71	.79	.74	.71	.78	.74	.71	.77	.73	.70	.69
8.0	.77	.72	.68	.76	.72	.68	.75	.71	.68	.74	.70	.68	.74	.70	.67	.66
9.0	.74	.69	.65	.73	.68	.65	.72	.68	.65	.72	.68	.65	.71	.67	.64	.63
10.0	.71	.66	.62	.70	.66	.62	.70	.65	.62	.69	.65	.62	.68	.65	.62	.61



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3℃  
 Operators:  
 Test Date:2024-06-19

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:120.28V I:0.1170A P:13.839W PF:0.9831 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:993.033x1 lm		
NAME: DLDM-4-CCT-15W	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: DLL	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						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.164	.093	.029	.157	.089	.028	.144	.083	.026	.133	.077	.025	.122	.071	.023	
2.0	.154	.085	.026	.149	.082	.025	.138	.077	.024	.129	.072	.023	.120	.068	.021	
3.0	.145	.077	.023	.141	.075	.023	.132	.071	.022	.124	.068	.021	.116	.064	.020	
4.0	.137	.071	.021	.133	.070	.021	.126	.067	.020	.119	.064	.019	.112	.061	.019	
5.0	.130	.066	.019	.127	.065	.019	.120	.063	.018	.114	.060	.018	.108	.058	.017	
6.0	.124	.062	.018	.121	.061	.018	.115	.059	.017	.110	.057	.017	.105	.055	.016	
7.0	.118	.058	.016	.115	.057	.016	.110	.056	.016	.105	.054	.016	.101	.052	.015	
8.0	.112	.055	.015	.110	.054	.015	.106	.053	.015	.101	.051	.015	.097	.050	.015	
9.0	.107	.052	.015	.105	.051	.014	.101	.050	.014	.098	.049	.014	.094	.048	.014	
10.0	.103	.049	.014	.101	.049	.014	.098	.048	.013	.094	.047	.013	.091	.046	.013	

$\rho_{CC}$	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	.170	.157	.146	.146	.135	.126	.100	.093	.087	.057	.054	.051	.018	.017	.016	
2.0	.154	.133	.115	.132	.114	.099	.090	.079	.069	.052	.046	.041	.017	.015	.013	
3.0	.140	.113	.092	.120	.098	.080	.083	.068	.056	.048	.040	.033	.015	.013	.011	
4.0	.129	.098	.075	.111	.085	.065	.076	.059	.046	.044	.035	.027	.014	.011	.009	
5.0	.120	.087	.062	.103	.075	.054	.071	.052	.038	.041	.031	.023	.013	.010	.007	
6.0	.112	.077	.052	.096	.067	.045	.066	.047	.032	.038	.027	.019	.012	.009	.006	
7.0	.105	.069	.044	.090	.060	.039	.062	.042	.027	.036	.025	.016	.012	.008	.005	
8.0	.099	.063	.038	.085	.054	.033	.059	.038	.024	.034	.023	.014	.011	.007	.005	
9.0	.093	.057	.033	.080	.050	.029	.056	.035	.020	.032	.021	.012	.011	.007	.004	
10.0	.089	.053	.029	.076	.046	.025	.053	.032	.018	.031	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3℃  
 Operators:  
 Test Date:2024-06-19

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

**UGR(Unified Glare Rating) Table**

Test:U:120.28V I:0.1170A P:13.839W PF:0.9831 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:993.033x1 lm		
NAME: DLDM-4-CCT-15W	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: DLL	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	3.6	4.4	3.8	4.5	4.7	3.8	4.7	4.0	4.8	5.0
3H	3.7	4.5	4.0	4.7	4.9	4.1	4.8	4.3	5.0	5.2
4H	3.7	4.5	4.0	4.7	4.9	4.2	4.9	4.4	5.1	5.3
6H	3.7	4.4	4.0	4.7	4.9	4.2	4.9	4.5	5.1	5.4
8H	3.7	4.4	4.0	4.6	4.9	4.2	4.9	4.5	5.1	5.4
12H	3.7	4.3	4.0	4.6	4.8	4.2	4.8	4.5	5.1	5.3
4H 2H	3.6	4.3	3.8	4.5	4.7	3.8	4.6	4.1	4.8	5.0
3H	3.8	4.4	4.1	4.7	5.0	4.2	4.8	4.5	5.1	5.3
4H	3.9	4.5	4.2	4.8	5.1	4.3	4.9	4.7	5.2	5.5
6H	3.9	4.4	4.3	4.8	5.1	4.4	4.9	4.8	5.3	5.6
8H	3.9	4.4	4.3	4.7	5.1	4.4	4.9	4.8	5.3	5.6
12H	3.8	4.3	4.2	4.6	5.0	4.4	4.8	4.8	5.2	5.6
8H 4H	3.9	4.3	4.3	4.7	5.1	4.3	4.8	4.7	5.1	5.5
6H	3.9	4.3	4.3	4.7	5.1	4.4	4.8	4.9	5.2	5.6
8H	3.9	4.2	4.3	4.7	5.1	4.4	4.8	4.9	5.2	5.6
12H	3.8	4.1	4.3	4.6	5.0	4.4	4.7	4.9	5.2	5.6
12H 4H	3.8	4.3	4.2	4.6	5.0	4.2	4.7	4.6	5.0	5.4
6H	3.9	4.2	4.3	4.6	5.1	4.4	4.7	4.8	5.1	5.6
8H	3.9	4.2	4.3	4.6	5.1	4.4	4.7	4.9	5.1	5.6

Variations with the observer position at spacings(CIE Pub.117):		
S = 1.0H	+ 1.5 / - 1.4	+ 1.2 / - 1.2
1.5H	+ 2.4 / - 0.9	+ 2.0 / - 0.8
2.0H	+ 1.4 / - 1.6	+ 1.1 / - 1.1

CIE Pub.117, 993.0 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.0)  
 Area: 0.111 m2

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 22.5DEG	γ Interval: 1.0DEG
Test Speed: HIGH	Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Temperature:24.3℃	Humidity:65.0%
Operators:	Test Distance:3.080m [K=1.0000]
Test Date:2024-06-19	Remarks:

**UTILIZATION FACTORS TABLE**

Test:U:120.28V I:0.1170A P:13.839W PF:0.9831 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:993.033x1 lm		
NAME: DLDM-4-CCT-15W	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: DLL	SUR.:	Shielding Angle:

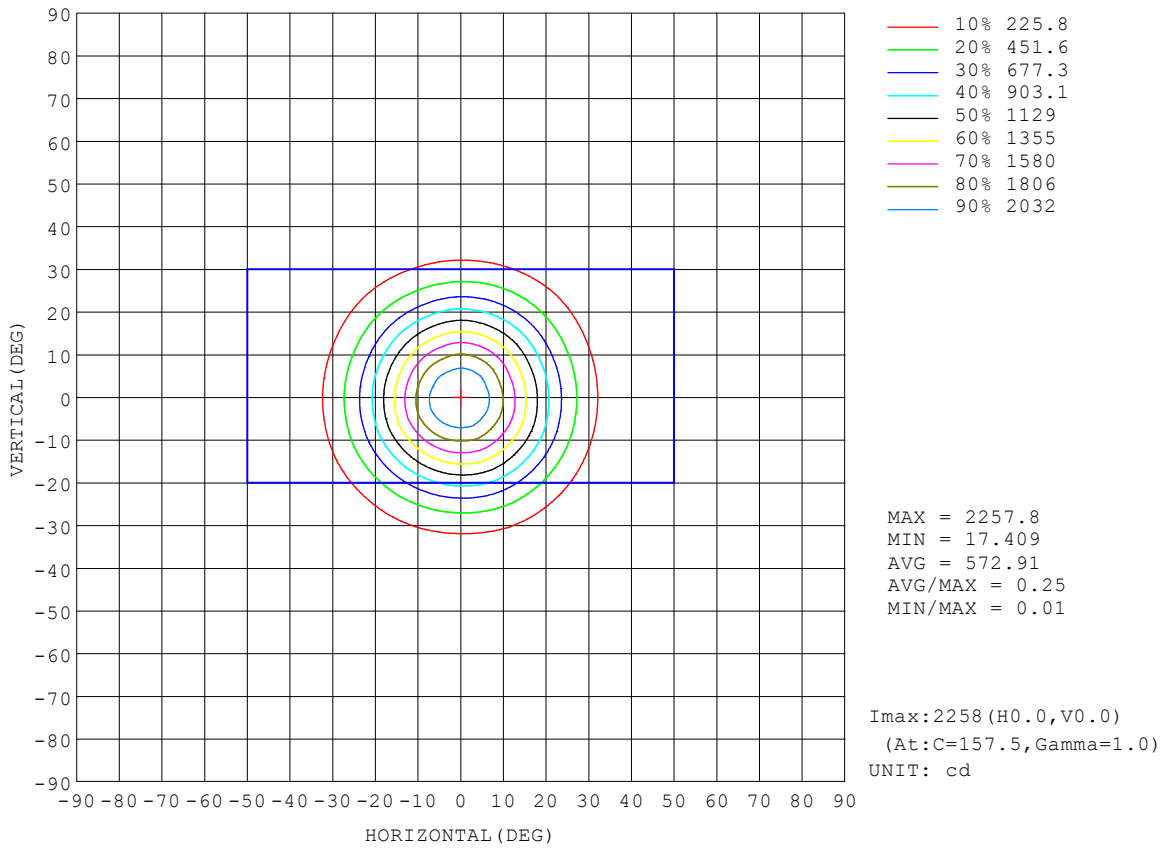
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	88	82	78	87	81	78	87	81	78	74
0.80	95	89	86	94	89	86	93	88	85	82
1.00	99	94	90	99	93	90	97	93	89	86
1.25	103	98	95	102	98	94	100	96	94	89
1.50	106	101	98	105	101	98	103	99	96	92
2.00	109	104	101	107	103	101	104	101	99	94
2.50	110	106	104	109	105	103	106	103	101	95
3.00	112	108	106	110	107	105	107	104	102	96
4.00	114	111	109	112	109	108	108	106	105	98
5.00	115	113	111	113	111	109	109	108	106	99
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 24.3°C  
 Operators:  
 Test Date: 2024-06-19

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity: 65.0%  
 Test Distance: 3.080m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

Test:U:120.28V I:0.1170A P:13.839W PF:0.9831 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:993.033x1 lm		
NAME: DLDM-4-CCT-15W	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: DLL	SUR.:	Shielding Angle:



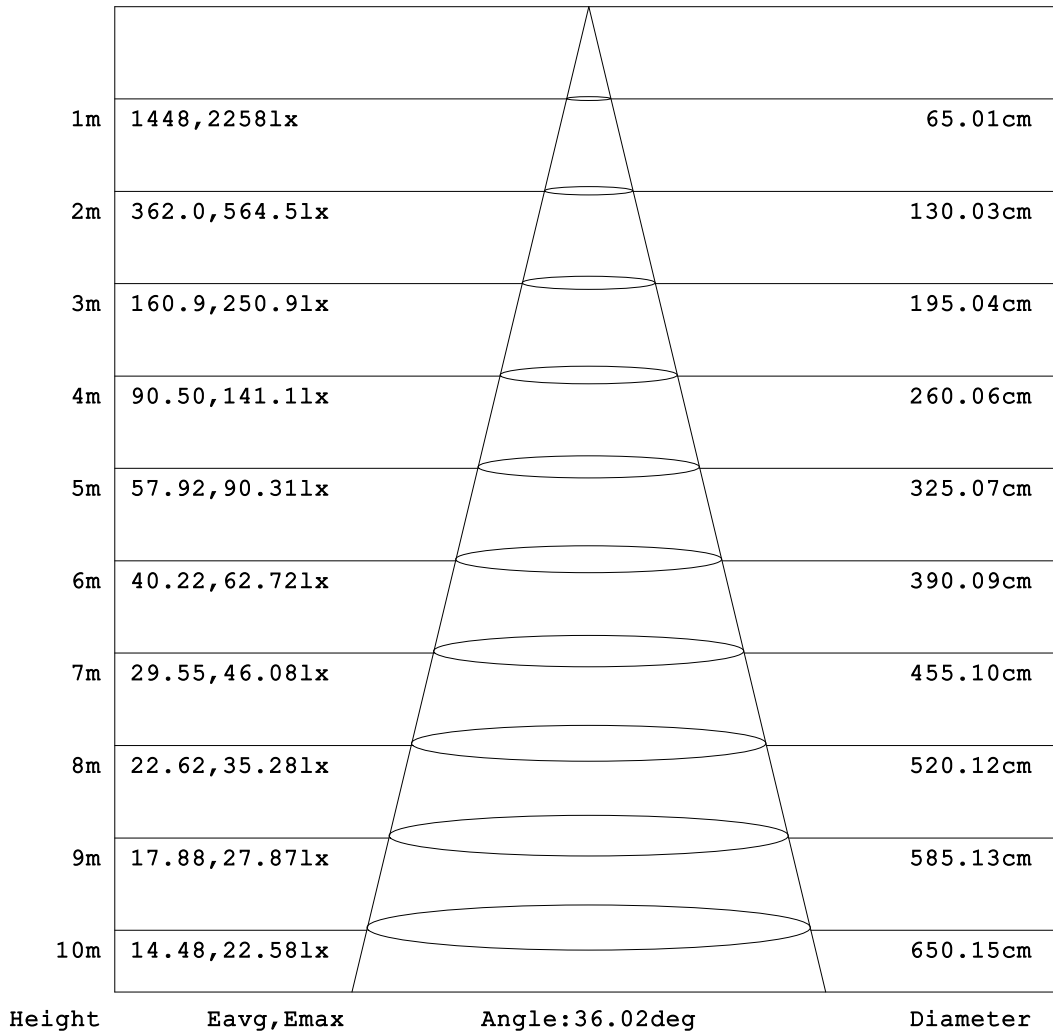
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3 °C  
 Operators:  
 Test Date:2024-06-19

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

**AAI Figure**

Test:U:120.28V I:0.1170A P:13.839W PF:0.9831 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:993.033x1 lm		
NAME: DLDM-4-CCT-15W	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: DLL	SUR.:	Shielding Angle:

Flux out:539.3 lm



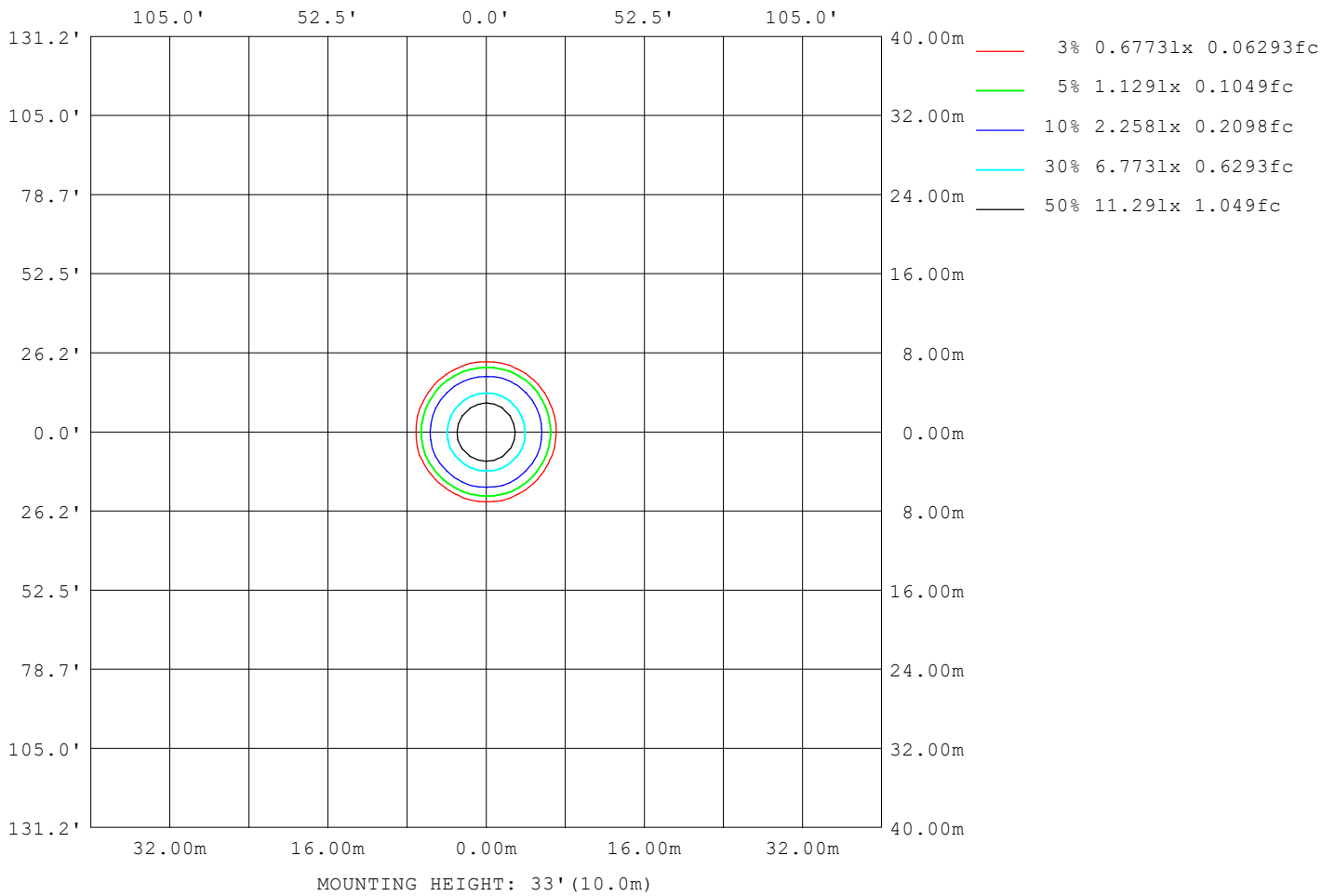
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:24.3°C  
Operators:  
Test Date:2024-06-19

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
Humidity:65.0%  
Test Distance:3.080m [K=1.0000]  
Remarks:

**ISOLUX DIAGRAM**

Test:U:120.28V I:0.1170A P:13.839W PF:0.9831 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:993.033x1 lm		
NAME: DLDM-4-CCT-15W	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: DLL	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3°C  
 Operators:  
 Test Date:2024-06-19

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

**LED Avg.L Report**

Test:U:120.28V I:0.1170A P:13.839W PF:0.9831 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:993.033x1 lm		
NAME: DLDM-4-CCT-15W	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: DLL	SUR.:	Shielding Angle:

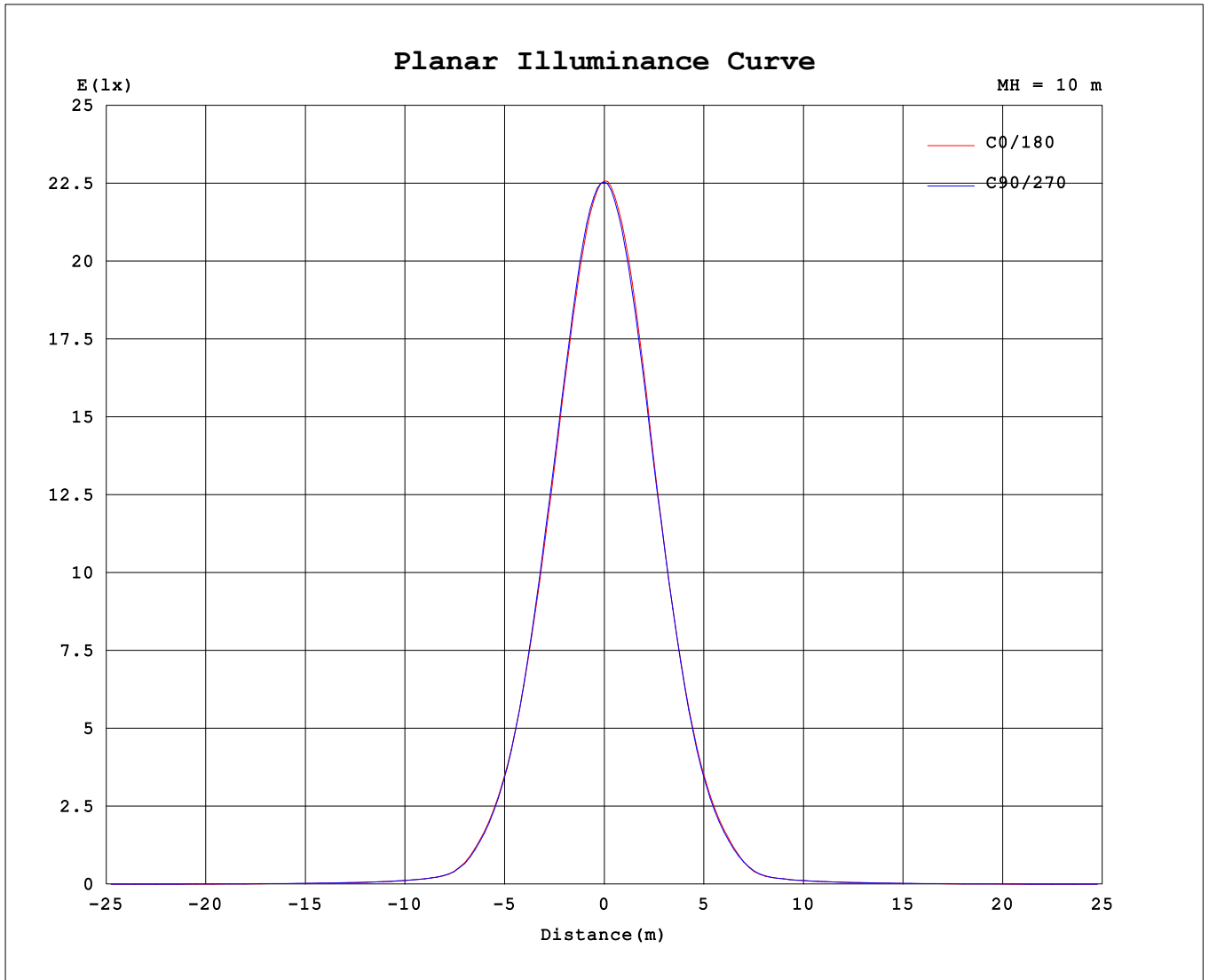
AvgL	cd/m2
L_0~180 (65) av	170
L_0~180 (75) av	120
L_0~180 (85) av	23
L_90~270 (65) av	215
L_90~270 (75) av	153
L_90~270 (85) av	75
L_45 (65) av	201
L_45 (75) av	135
L_45 (85) av	33

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:24.3℃  
 Operators:  
 Test Date:2024-06-19

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity:65.0%  
 Test Distance:3.080m [K=1.0000]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 24.3 °C  
 Operators:  
 Test Date: 2024-06-19

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.460  
 Humidity: 65.0%  
 Test Distance: 3.080m [K=1.0000]  
 Remarks:

