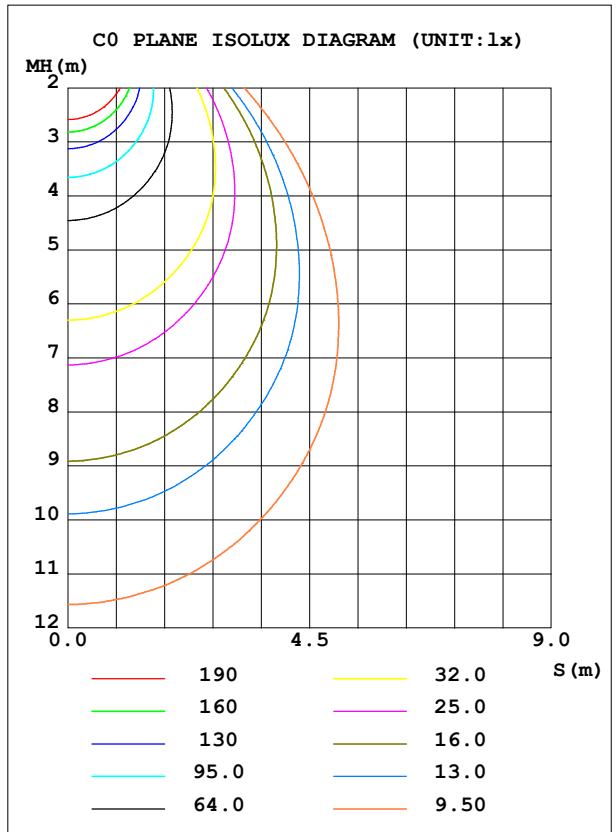
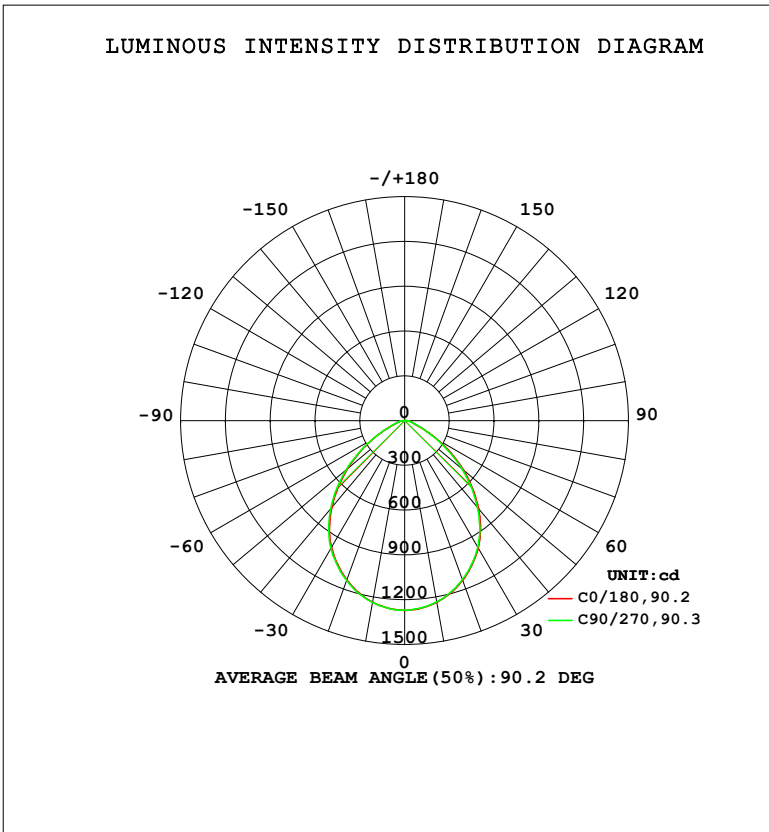


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.43V I:0.1772A P:20.749W PF:0.9803 Freq:60.01Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2541.63x1 lm		
NAME: DL254-10-40W-M-A5C5-HO	TYPE: 22W	WEIGHT:
SPEC.: 5000K	DIM.: 0.295	SERIAL No.: 1
MFR.: Lotus LED Lights	SUR.: 0.22	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	DL254-10-40W-M-A5C5-HO	Imax (cd)	1272	S/MH (C0/180)	1.16
NOMINAL POWER (W)	22	LOR (%)	100.0	S/MH (C90/270)	1.16
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	2541.6	<input type="checkbox"/> UP, DN (C0-180)	0.0, 50.2
NOMINAL FLUX (lm)	2541.63	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.0, 49.8
LAMPS INSIDE	1	<input type="checkbox"/> up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	120	<input type="checkbox"/> down (%)	100.0	CIBSE SHR MAX	1.25



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: DAMIN  
 Test Date: 2023-07-04

Range: 0 - 90DEG  
 Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.461  
 Humidity: 65.0%  
 Test Distance: 9.680m [K=1.0000]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

°	C0	C45	C90	C135	C180	C225	C270	C315	°	□ zone	□ total	%lum, lamp
10	1235	1235	1237	1239	1236	1236	1234	1232	0- 10	119.6	119.6	4.71,4.71
20	1134	1137	1140	1142	1139	1136	1133	1131	10- 20	336.1	455.7	17.9,17.9
30	980.6	982.9	987.8	992.8	986.7	984.5	980.2	975.7	20- 30	490.4	946.2	37.2,37.2
40	759.7	762.9	770.9	777.9	770.5	766.5	760.1	756.5	30- 40	550.2	1496	58.9,58.9
50	496.3	503.2	510.5	518.2	513.2	506.4	499.6	494.7	40- 50	490.8	1987	78.2,78.2
60	238.3	242.0	247.1	251.4	254.0	250.3	242.7	236.4	50- 60	332.1	2319	91.2,91.2
70	76.70	76.85	78.31	79.98	81.62	82.33	80.07	77.94	60- 70	147.6	2467	97.1,97.1
80	33.87	33.97	34.61	35.49	36.44	36.54	35.97	35.30	70- 80	57.64	2524	99.3,99.3
90	0.7145	0.7276	0.6948	0.7080	1.239	1.240	1.239	1.245	80- 90	17.19	2542	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): 1756.3 lm

%lum = 69.1%

%lamp = 69.1%

Conical surface Flux(130deg): 2412.2 lm

%lum = 94.9%

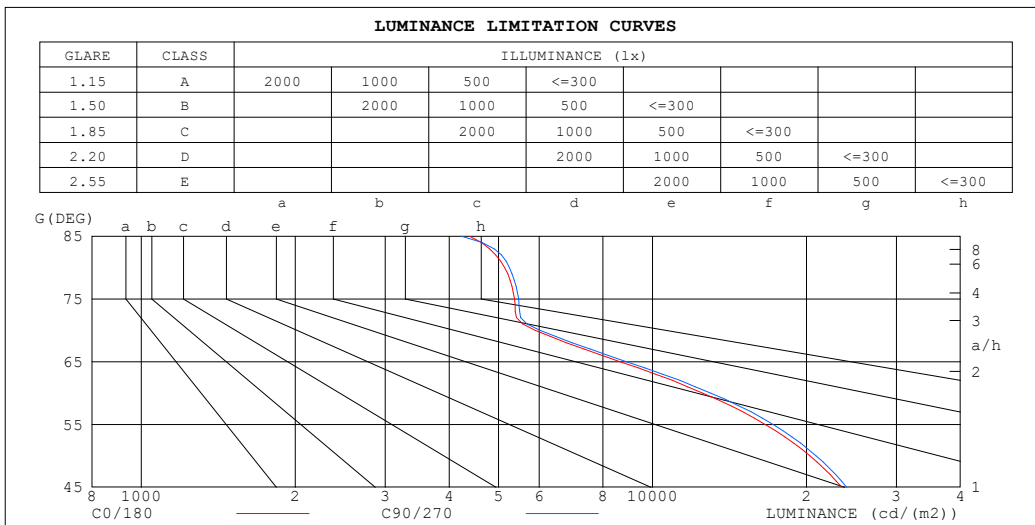
%lamp = 94.9%

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2023-07-04

□ Range: 0 - 90DEG  
 □ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.461  
 Humidity:65.0%  
 Test Distance:9.680m [K=1.0000]  
 Remarks:

**LUMINANCE LIMITATION CURVES**

Test:U:119.43V I:0.1772A P:20.749W PF:0.9803 Freq:60.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2541.63x1 lm		
NAME: DL254-10-40W-M-A5C5-HO	TYPE: 22W	WEIGHT:
SPEC.: 5000K	DIM.: 0.295	SERIAL No.: 1
MFR.: Lotus LED Lights	SUR.: 0.22	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	4389	4234
80	5132	5245
75	5368	5468
70	5902	6026
65	8647	8899
60	12543	13007
55	16617	17216
50	20320	20898
45	23463	23941

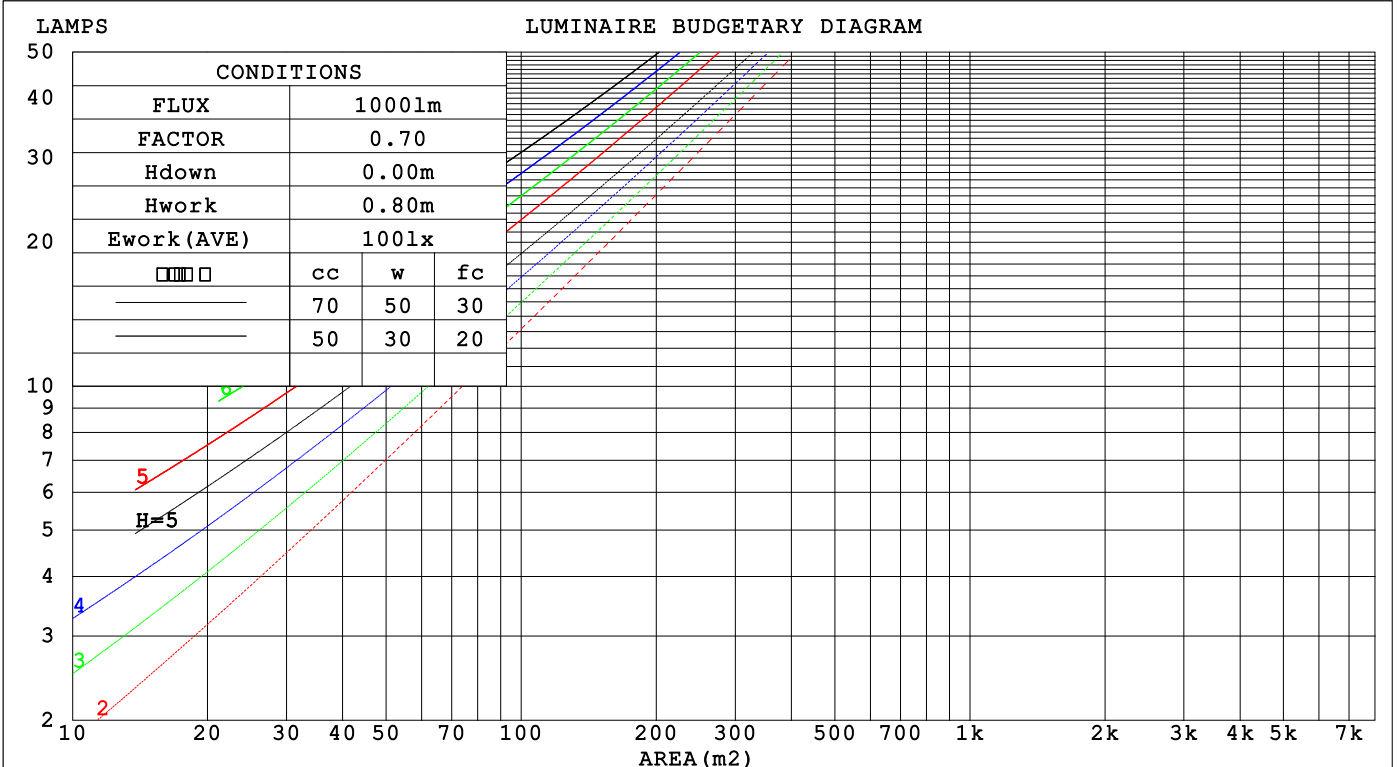
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2023-07-04

Range: 0 - 90DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.461  
 Humidity:65.0%  
 Test Distance:9.680m [K=1.0000]  
 Remarks:

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:119.43V I:0.1772A P:20.749W PF:0.9803 Freq:60.01Hz		
UTHdi:0.00% ITHdi:0.00% KDisp:0 Lamp Flux:2541.63x1 lm		
NAME: DL254-10-40W-M-A5C5-HO	TYPE: 22W	WEIGHT:
SPEC.: 5000K	DIM.: 0.295	SERIAL No.: 1
MFR.: Lotus LED Lights	SUR.: 0.22	Shielding Angle:

□cc	80%			70%			50%			30%			10%			0
□w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
□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	1.07	1.04	1.00	1.05	1.02	.99	1.01	.98	.96	.97	.95	.93	.93	.92	.90	.88
2.0	.96	.90	.85	.94	.89	.84	.90	.86	.82	.87	.84	.81	.84	.81	.79	.77
3.0	.86	.79	.73	.84	.78	.73	.81	.76	.71	.79	.74	.70	.76	.72	.69	.67
4.0	.77	.70	.64	.76	.69	.63	.74	.67	.63	.71	.66	.62	.69	.65	.61	.59
5.0	.70	.62	.56	.69	.61	.56	.67	.60	.55	.65	.59	.55	.63	.58	.54	.52
6.0	.64	.56	.50	.63	.55	.50	.61	.54	.49	.59	.53	.49	.58	.53	.48	.47
7.0	.58	.50	.45	.57	.50	.45	.56	.49	.44	.55	.49	.44	.53	.48	.44	.42
8.0	.53	.46	.40	.53	.45	.40	.52	.45	.40	.50	.44	.40	.49	.44	.40	.38
9.0	.49	.42	.37	.49	.42	.37	.48	.41	.36	.47	.41	.36	.46	.40	.36	.34
10.0	.46	.38	.33	.45	.38	.33	.44	.38	.33	.43	.37	.33	.43	.37	.33	.31



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2023-07-04

□ Range: 0 - 90DEG  
 □ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.461  
 Humidity:65.0%  
 Test Distance:9.680m [K=1.0000]  
 Remarks:

**WEC AND CCEC**

Test:U:119.43V I:0.1772A P:20.749W PF:0.9803 Freq:60.01Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2541.63x1 lm		
NAME: DL254-10-40W-M-A5C5-HO	TYPE: 22W	WEIGHT:
SPEC.: 5000K	DIM.: 0.295	SERIAL No.: 1
MFR.: Lotus LED Lights	SUR.: 0.22	Shielding Angle:

<input type="checkbox"/> cc	80%			70%			50%			30%			10%			0
<input type="checkbox"/> w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
<input type="checkbox"/> fc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.249	.142	.045	.242	.138	.044	.229	.132	.042	.218	.125	.040	.207	.120	.039	
2.0	.241	.132	.041	.235	.129	.040	.224	.124	.039	.213	.120	.037	.204	.115	.036	
3.0	.228	.122	.036	.223	.120	.036	.213	.116	.035	.204	.112	.034	.196	.108	.034	
4.0	.215	.112	.033	.211	.110	.033	.202	.107	.032	.194	.104	.031	.186	.101	.031	
5.0	.202	.103	.030	.198	.102	.030	.191	.099	.029	.183	.097	.029	.177	.094	.028	
6.0	.190	.095	.027	.187	.094	.027	.180	.092	.027	.174	.090	.027	.168	.088	.026	
7.0	.179	.089	.025	.176	.088	.025	.170	.086	.025	.164	.084	.025	.159	.083	.024	
8.0	.169	.083	.023	.166	.082	.023	.161	.080	.023	.156	.079	.023	.151	.077	.023	
9.0	.160	.077	.022	.157	.077	.022	.152	.075	.021	.148	.074	.021	.143	.073	.021	
10.0	.152	.073	.020	.149	.072	.020	.145	.071	.020	.141	.070	.020	.137	.069	.020	

<input type="checkbox"/> cc	80%			70%			50%			30%			10%			0
<input type="checkbox"/> w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
<input type="checkbox"/> fc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0																
1.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
2.0	.176	.157	.139	.151	.134	.120	.103	.093	.083	.059	.054	.048	.019	.017	.016	
3.0	.165	.132	.104	.142	.114	.090	.097	.079	.063	.056	.046	.037	.018	.015	.012	
4.0	.156	.114	.080	.134	.098	.070	.092	.068	.049	.053	.040	.029	.017	.013	.009	
5.0	.148	.100	.063	.127	.087	.055	.088	.060	.039	.051	.035	.023	.016	.012	.008	
6.0	.141	.089	.051	.121	.077	.045	.084	.054	.032	.048	.032	.019	.016	.010	.006	
7.0	.134	.081	.042	.116	.070	.037	.080	.049	.026	.046	.029	.016	.015	.009	.005	
8.0	.128	.074	.036	.110	.064	.031	.076	.045	.022	.044	.026	.013	.014	.009	.004	
9.0	.122	.068	.031	.105	.059	.027	.073	.041	.019	.042	.024	.011	.014	.008	.004	
10.0	.117	.063	.027	.100	.055	.023	.070	.038	.017	.041	.023	.010	.013	.007	.003	
10.0	.111	.059	.024	.096	.051	.021	.067	.036	.015	.039	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2023-07-04

Range: 0 - 90DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.461  
 Humidity:65.0%  
 Test Distance:9.680m [K=1.0000]  
 Remarks:

**UGR(Unified Glare Rating) Table**

Test:U:119.43V I:0.1772A P:20.749W PF:0.9803 Freq:60.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2541.63x1 lm		
NAME: DL254-10-40W-M-A5C5-HO	TYPE: 22W	WEIGHT:
SPEC.: 5000K	DIM.: 0.295	SERIAL No.: 1
MFR.: Lotus LED Lights	SUR.: 0.22	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	22.0	23.3	22.2	23.5	23.7	22.1	23.4	22.4	23.6	23.8
3H	22.2	23.4	22.5	23.7	23.9	22.3	23.6	22.6	23.8	24.0
4H	22.3	23.4	22.6	23.7	23.9	22.4	23.5	22.7	23.8	24.0
6H	22.3	23.4	22.7	23.7	23.9	22.4	23.5	22.8	23.8	24.1
8H	22.3	23.4	22.7	23.7	23.9	22.5	23.5	22.8	23.8	24.1
12H	22.3	23.3	22.7	23.6	23.9	22.5	23.5	22.8	23.7	24.0
4H 2H	22.1	23.3	22.4	23.5	23.8	22.2	23.4	22.5	23.6	23.9
3H	22.4	23.4	22.8	23.7	24.0	22.5	23.5	22.9	23.8	24.1
4H	22.6	23.5	22.9	23.8	24.1	22.7	23.6	23.0	23.9	24.2
6H	22.7	23.5	23.1	23.9	24.2	22.8	23.6	23.2	24.0	24.3
8H	22.8	23.5	23.2	23.9	24.2	22.9	23.6	23.3	24.0	24.3
12H	22.8	23.5	23.2	23.8	24.2	22.9	23.6	23.3	23.9	24.3
8H 4H	22.6	23.3	23.0	23.7	24.0	22.7	23.4	23.1	23.8	24.1
6H	22.8	23.4	23.2	23.8	24.2	22.9	23.5	23.3	23.9	24.3
8H	22.9	23.4	23.3	23.8	24.3	23.0	23.5	23.4	23.9	24.4
12H	23.0	23.4	23.4	23.9	24.3	23.1	23.5	23.5	24.0	24.4
12H 4H	22.5	23.2	23.0	23.6	24.0	22.6	23.3	23.1	23.7	24.1
6H	22.8	23.3	23.2	23.7	24.2	22.9	23.4	23.3	23.8	24.3
8H	22.9	23.4	23.4	23.8	24.3	23.0	23.5	23.5	23.9	24.4

Variations with the observer position at spacings(CIE Pub.117):		
S = 1.0H	+ 0.7 / - 0.8	+ 0.6 / - 0.8
1.5H	+ 0.3 / - 0.4	+ 0.3 / - 0.4
2.0H	+ 1.3 / - 1.7	+ 1.3 / - 1.8

CIE Pub.117, 2542 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 3.2)  
 Area: 0.038 m2

C Range: 0 - 360DEG	<input type="checkbox"/> Range: 0 - 90DEG
C Interval: 22.5DEG	<input type="checkbox"/> Interval: 1.0DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.461
Temperature:25.3°C	Humidity:65.0%
Operators:DAMIN	Test Distance:9.680m [K=1.0000]
Test Date:2023-07-04	Remarks:

**UTILIZATION FACTORS TABLE**

Test:U:119.43V I:0.1772A P:20.749W PF:0.9803 Freq:60.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2541.63x1 lm		
NAME: DL254-10-40W-M-A5C5-HO	TYPE: 22W	WEIGHT:
SPEC.: 5000K	DIM.: 0.295	SERIAL No.: 1
MFR.: Lotus LED Lights	SUR.: 0.22	Shielding Angle:

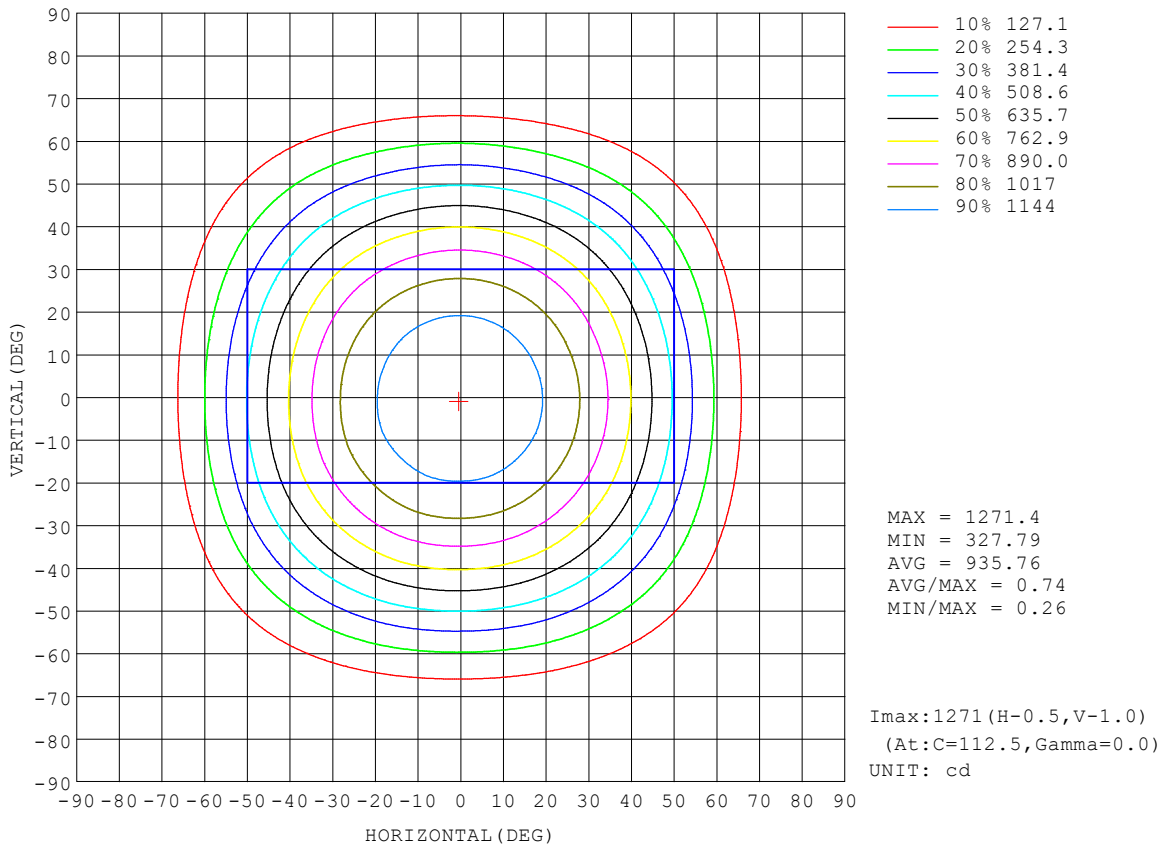
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	65	55	49	65	55	49	64	54	49	43
0.80	76	66	59	75	65	59	73	65	59	53
1.00	84	75	69	83	74	68	81	75	68	62
1.25	90	82	76	89	81	76	87	80	75	69
1.50	95	87	81	93	86	81	91	84	80	73
2.00	101	94	89	99	93	88	96	90	86	80
2.50	103	97	93	102	96	92	98	93	90	82
3.00	106	101	96	104	99	95	100	96	93	85
4.00	109	105	101	107	103	100	103	100	97	89
5.00	111	107	104	109	105	102	104	102	99	91
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:25.3°C  
 Operators:DAMIN  
 Test Date:2023-07-04

Range: 0 - 90DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.461  
 Humidity:65.0%  
 Test Distance:9.680m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

Test:U:119.43V I:0.1772A P:20.749W PF:0.9803 Freq:60.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2541.63x1 lm		
NAME: DL254-10-40W-M-A5C5-HO	TYPE: 22W	WEIGHT:
SPEC.: 5000K	DIM.: 0.295	SERIAL No.: 1
MFR.: Lotus LED Lights	SUR.: 0.22	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2023-07-04

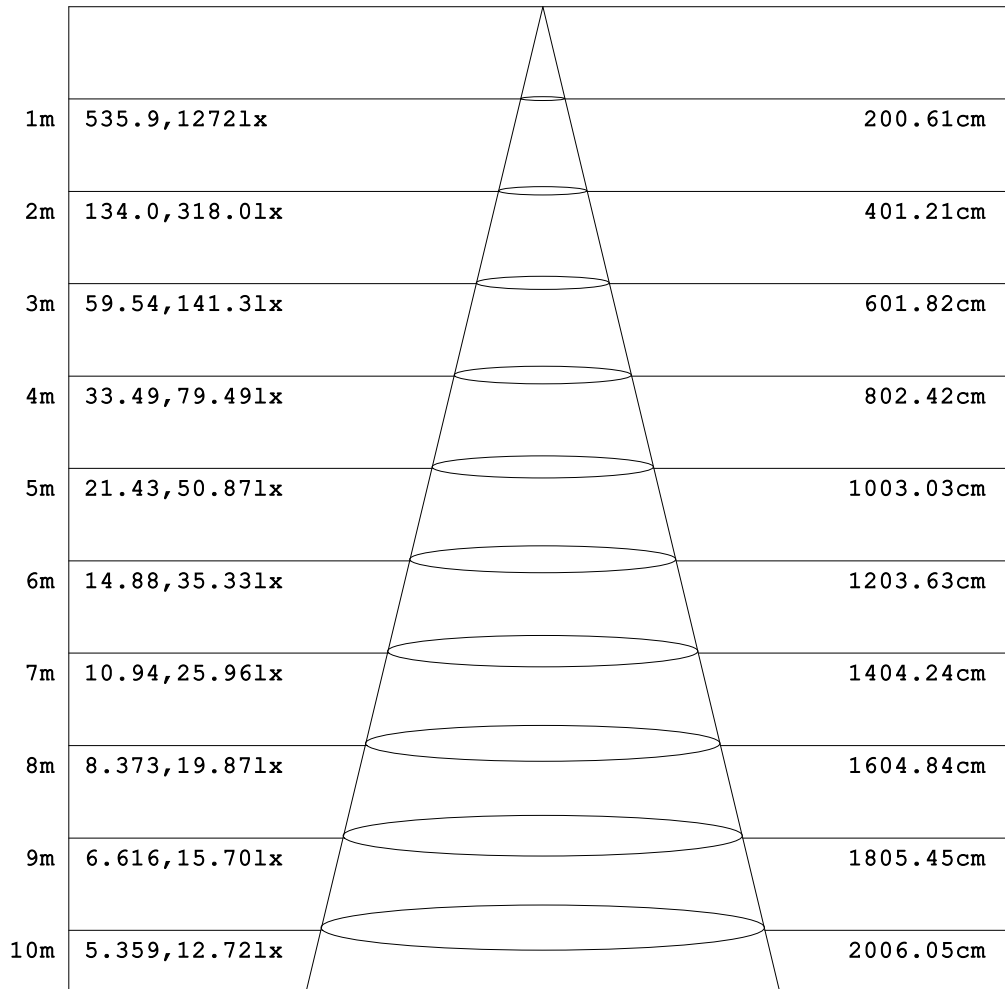
Range: 0 - 90DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.461  
 Humidity:65.0%  
 Test Distance:9.680m [K=1.0000]  
 Remarks:



**AAI Figure**

Test:U:119.43V I:0.1772A P:20.749W PF:0.9803 Freq:60.01Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2541.63x1 lm		
NAME: DL254-10-40W-M-A5C5-HO	TYPE: 22W	WEIGHT:
SPEC.: 5000K	DIM.: 0.295	SERIAL No.: 1
MFR.: Lotus LED Lights	SUR.: 0.22	Shielding Angle:

Flux out:1805 lm



Angle:90.17deg

Height

Eavg, Emax

Diameter

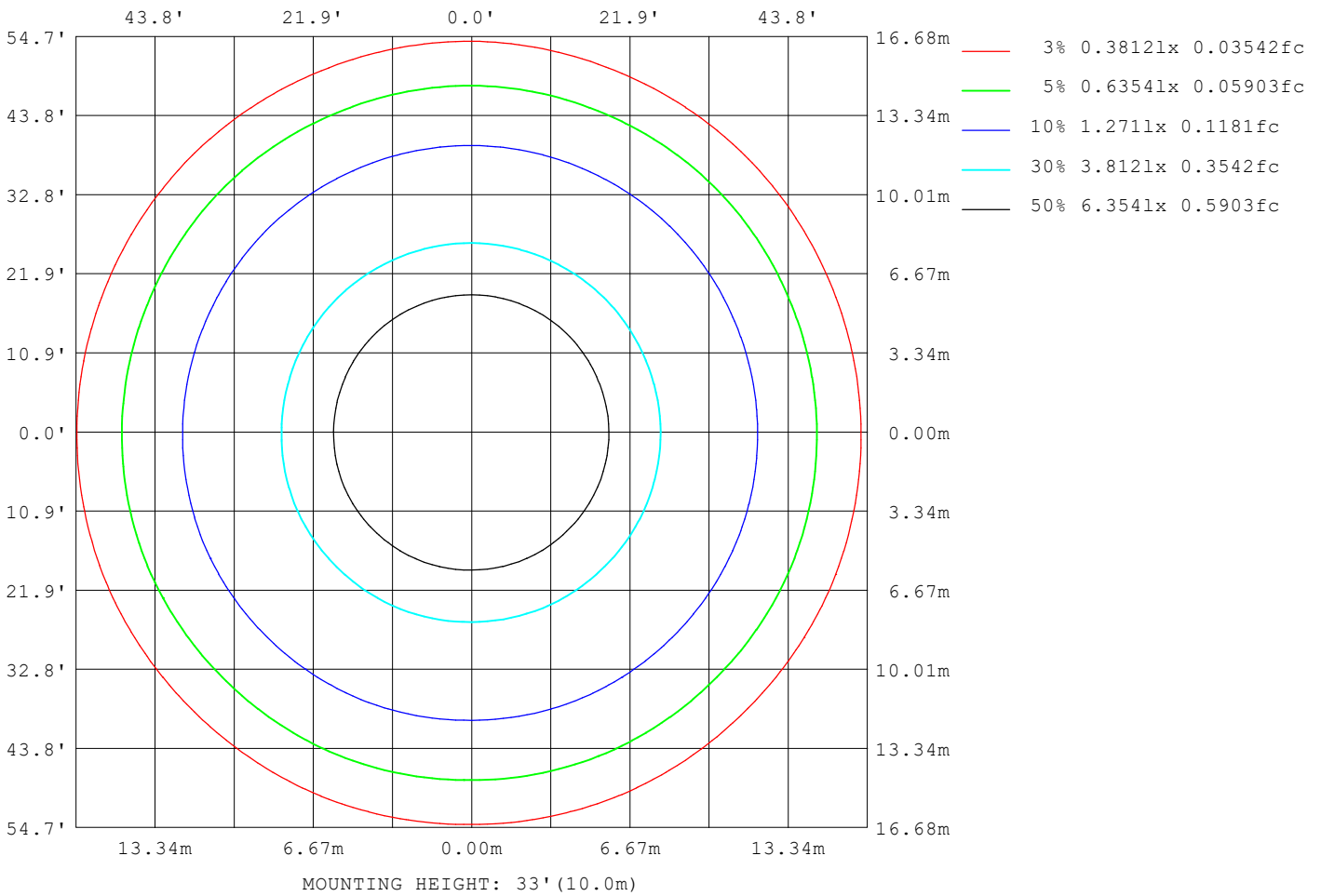
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2023-07-04

Range: 0 - 90DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.461  
 Humidity:65.0%  
 Test Distance:9.680m [K=1.0000]  
 Remarks:

**ISOLUX DIAGRAM**

Test:U:119.43V I:0.1772A P:20.749W PF:0.9803 Freq:60.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2541.63x1 lm		
NAME: DL254-10-40W-M-A5C5-HO	TYPE: 22W	WEIGHT:
SPEC.: 5000K	DIM.: 0.295	SERIAL No.: 1
MFR.: Lotus LED Lights	SUR.: 0.22	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2023-07-04

Range: 0 - 90DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.461  
 Humidity:65.0%  
 Test Distance:9.680m [K=1.0000]  
 Remarks:

**LED Avg.L Report**

Test:U:119.43V I:0.1772A P:20.749W PF:0.9803 Freq:60.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2541.63x1 lm		
NAME: DL254-10-40W-M-A5C5-HO	TYPE: 22W	WEIGHT:
SPEC.: 5000K	DIM.: 0.295	SERIAL No.: 1
MFR.: Lotus LED Lights	SUR.: 0.22	Shielding Angle:

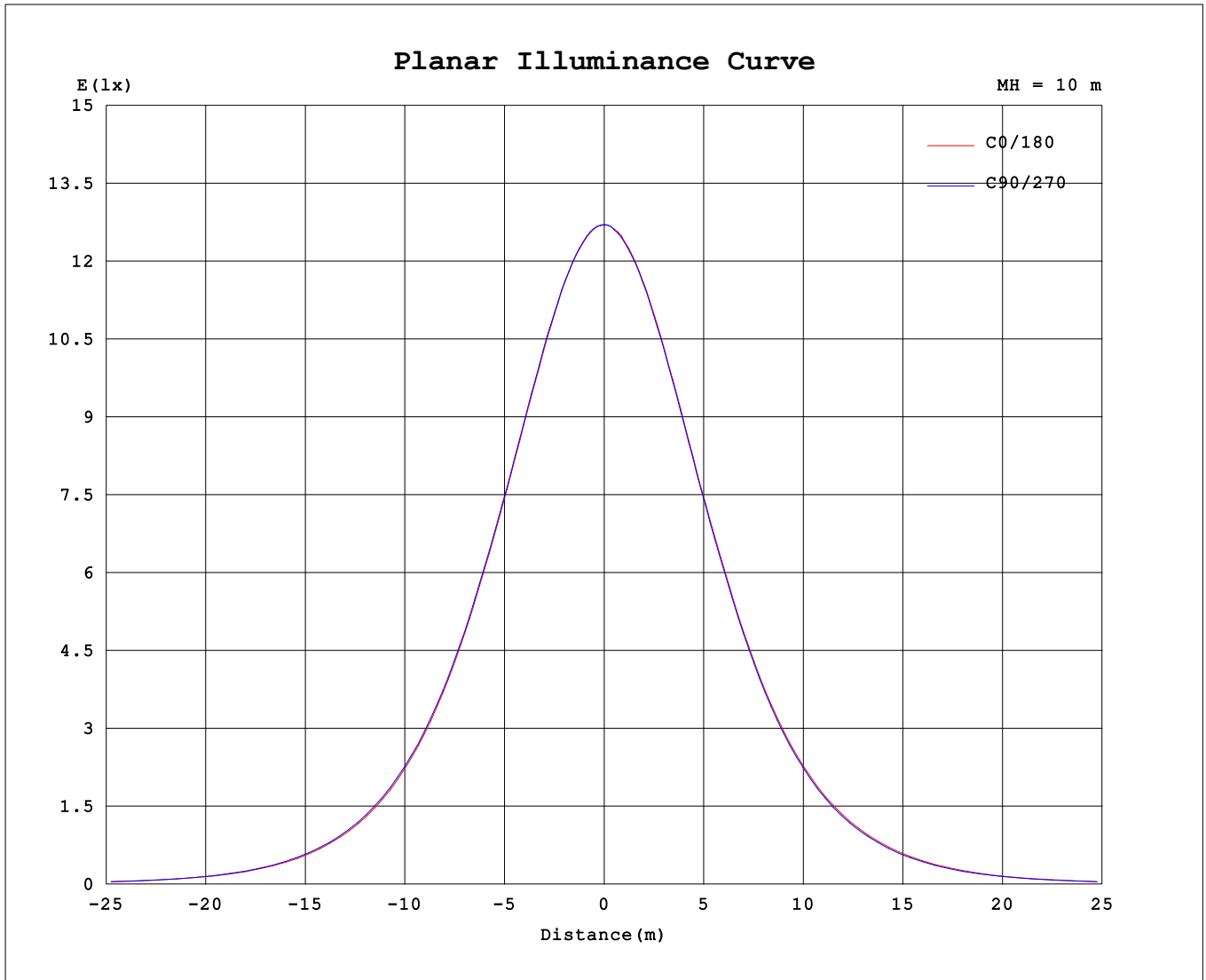
AvgL	cd/m2
L_0~180 (65) av	8933
L_0~180 (75) av	5503
L_0~180 (85) av	4746
L_90~270 (65) av	8869
L_90~270 (75) av	5512
L_90~270 (85) av	4399
L_45 (65) av	8908
L_45 (75) av	5511
L_45 (85) av	4669

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3℃  
 Operators:DAMIN  
 Test Date:2023-07-04

Range: 0 - 90DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.461  
 Humidity:65.0%  
 Test Distance:9.680m [K=1.0000]  
 Remarks:

**Planar Illuminance Curve**



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: DAMIN  
 Test Date: 2023-07-04

Range: 0 - 90DEG  
 Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.461  
 Humidity: 65.0%  
 Test Distance: 9.680m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:119.43V I:0.1772A P:20.749W PF:0.9803 Freq:60.01Hz
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2541.63x1 lm
NAME: DL254-10-40W-M-A5C5-HO TYPE: 22W WEIGHT:
SPEC.: 5000K DIM.: 0.295 SERIAL No.: 1
MFR.: Lotus LED Lights SUR.: 0.22 Shielding Angle:

Table--1

UNIT: cd

Table with columns for C (DEG) and I (DEG) ranging from 0 to 90 degrees. The table contains numerical data representing luminous intensity at various angles.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2023-07-04

I Range: 0 - 90DEG
I Interval: 1.0DEG
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.461
Humidity:65.0%
Test Distance:9.680m [K=1.0000]
Remarks: