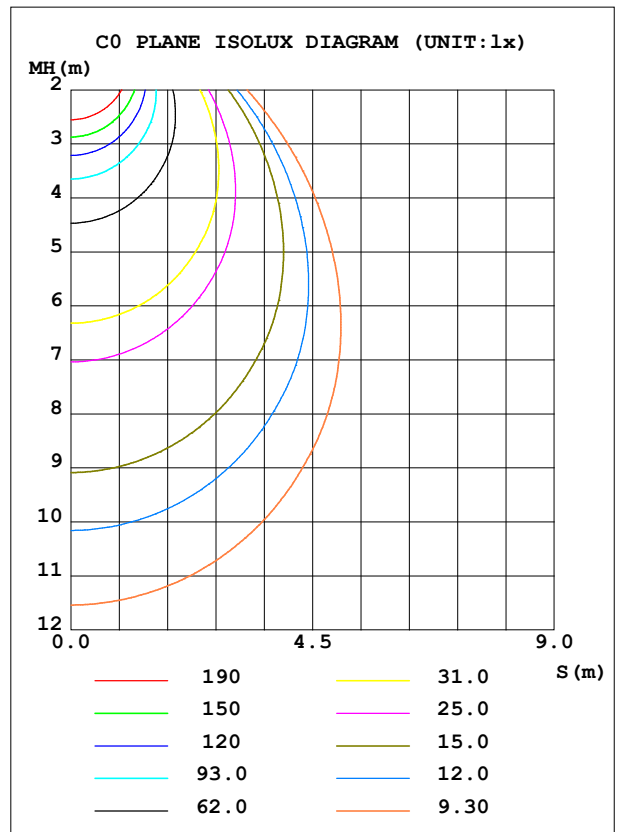
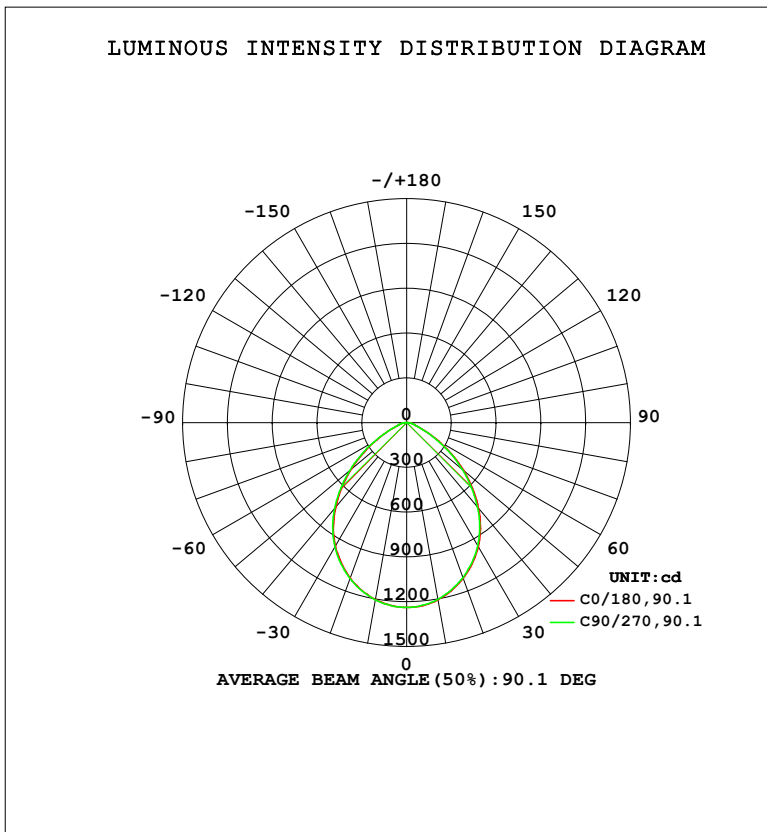


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.42V I:0.1772A P:20.744W PF:0.9803 Freq:60.01Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2474.89x1 lm		
NAME: DL254-10-40W-M-A5C5-HO	TYPE: 22W	WEIGHT:
SPEC.: 4000K	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)	1239	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)	2474.9	<input type="checkbox"/> UP, DN (C0-180)	0.0, 50.2
NOMINAL FLUX (lm)	2474.89	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	1204	1205	1206	1207	1207	1205	1202	1200	0- 10	116.6	116.6	4.71,4.71
20	1107	1108	1111	1113	1110	1107	1104	1102	10- 20	327.7	444.2	18,18
30	955.6	958.5	962.5	967.1	961.2	957.6	954.3	950.3	20- 30	477.9	922.1	37.3,37.3
40	739.6	742.0	750.5	756.8	749.8	744.8	739.5	735.9	30- 40	535.6	1458	58.9,58.9
50	482.4	489.2	496.8	504.2	499.1	491.6	485.7	480.7	40- 50	477.2	1935	78.2,78.2
60	232.5	236.4	241.3	245.3	248.1	244.2	236.3	230.4	50- 60	323.1	2258	91.2,91.2
70	74.58	74.82	76.28	77.81	79.54	80.17	77.79	75.80	60- 70	144.1	2402	97.1,97.1
80	32.90	33.03	33.67	34.47	35.43	35.50	34.94	34.27	70- 80	56.03	2458	99.3,99.3
90	0.7080	0.7080	0.6817	0.6948	1.200	1.207	1.206	1.206	80- 90	16.71	2475	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): 1710.5 lm

%lum = 69.1%

%lamp = 69.1%

Conical surface Flux(130deg): 2348.9 lm

%lum = 94.9%

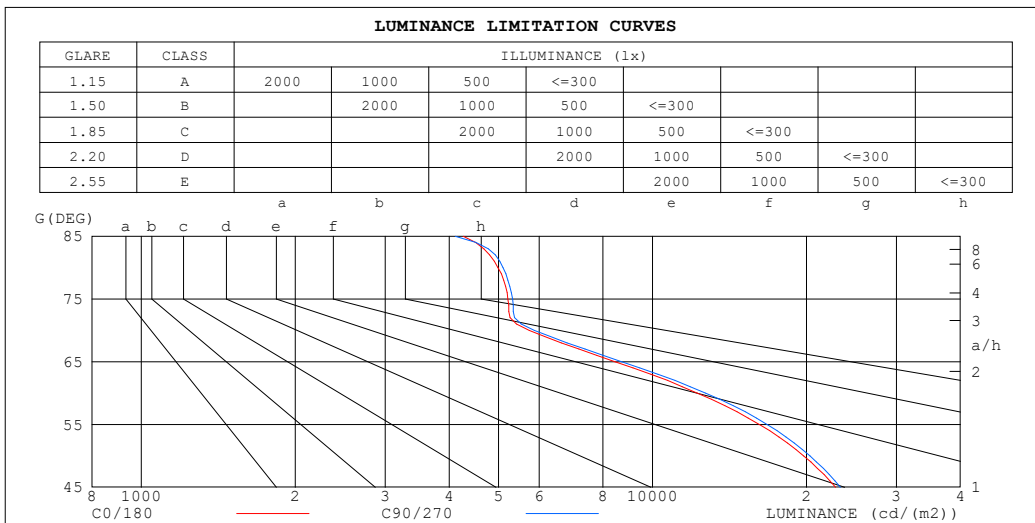
%lamp = 94.9%

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:119.42V I:0.1772A P:20.744W PF:0.9803 Freq:60.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2474.89x1 lm		
NAME: DL254-10-40W-M-A5C5-HO	TYPE: 22W	WEIGHT:
SPEC.: 4000K	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	4266	4111
80	4986	5102
75	5214	5321
70	5738	5869
65	8447	8709
60	12239	12699
55	16190	16759
50	19750	20340
45	22820	23300

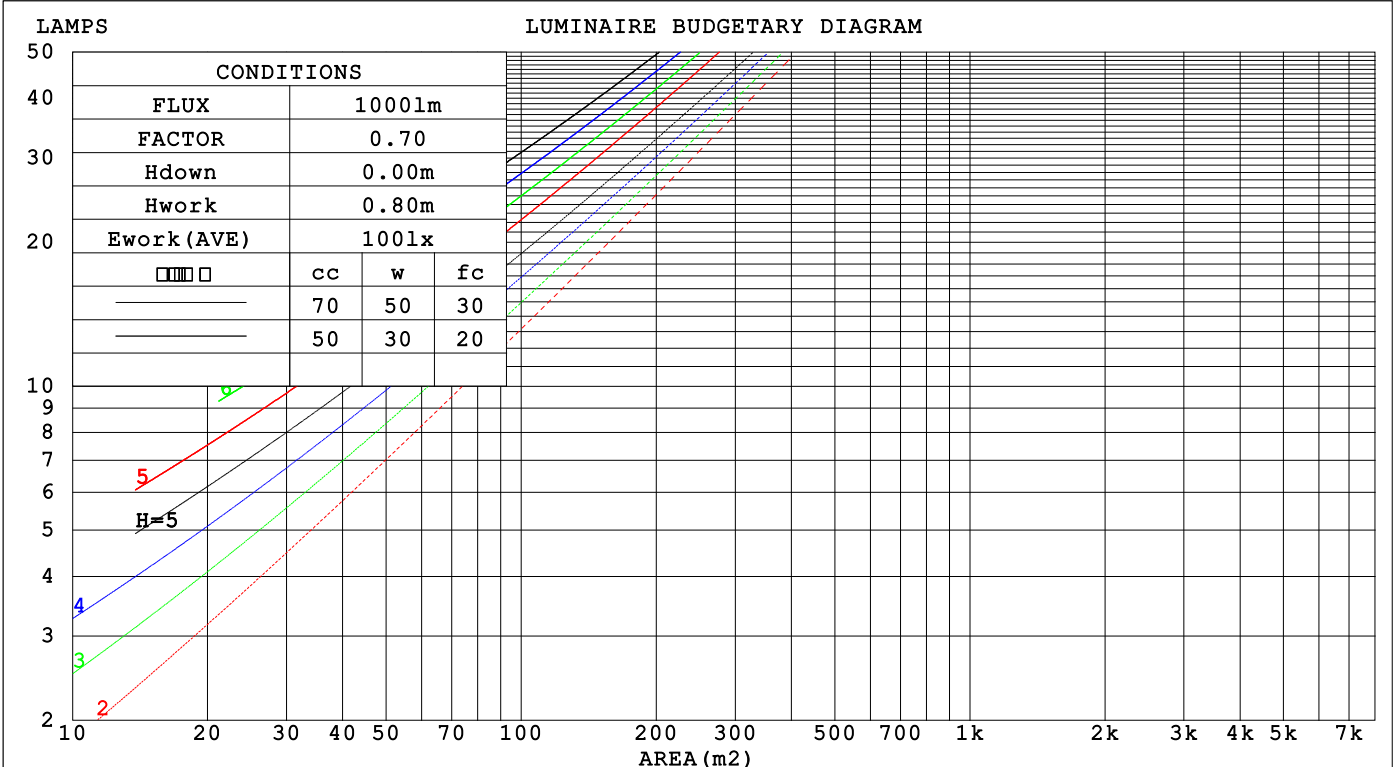
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:DAMIN  
 Test Date:2023-07-04

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:119.42V I:0.1772A P:20.744W PF:0.9803 Freq:60.01Hz		
UTHdi:0.00% ITHdi:0.00% KDisp:0 Lamp Flux:2474.89x1 lm		
NAME: DL254-10-40W-M-A5C5-HO	TYPE: 22W	WEIGHT:
SPEC.: 4000K	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	.49	.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	.34	.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:119.42V I:0.1772A P:20.744W PF:0.9803 Freq:60.01Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2474.89x1 lm		
NAME: DL254-10-40W-M-A5C5-HO	TYPE: 22W	WEIGHT:
SPEC.: 4000K	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	.217 .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	.140 .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	.190 .190 .190	.163 .163 .163	.111 .111 .111	.064 .064 .064	.020 .020 .020	
1.0	.176 .157 .139	.151 .134 .120	.103 .093 .083	.059 .054 .048	.019 .017 .016	
2.0	.165 .132 .104	.142 .114 .090	.097 .079 .063	.056 .046 .037	.018 .015 .012	
3.0	.156 .114 .080	.134 .098 .070	.092 .068 .049	.053 .040 .029	.017 .013 .009	
4.0	.148 .100 .063	.127 .087 .055	.088 .060 .039	.051 .035 .023	.016 .012 .008	
5.0	.141 .089 .051	.121 .077 .045	.083 .054 .032	.048 .032 .019	.016 .010 .006	
6.0	.134 .081 .042	.115 .070 .037	.080 .049 .026	.046 .029 .016	.015 .009 .005	
7.0	.128 .074 .036	.110 .064 .031	.076 .045 .022	.044 .026 .013	.014 .009 .004	
8.0	.122 .068 .031	.105 .059 .027	.073 .041 .019	.042 .024 .011	.014 .008 .004	
9.0	.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:119.42V I:0.1772A P:20.744W PF:0.9803 Freq:60.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2474.89x1 lm		
NAME: DL254-10-40W-M-A5C5-HO	TYPE: 22W	WEIGHT:
SPEC.: 4000K	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	21.9	23.2	22.2	23.4	23.6	22.0	23.3	22.3	23.5	23.7
3H	22.1	23.4	22.4	23.6	23.8	22.2	23.5	22.5	23.7	23.9
4H	22.2	23.3	22.5	23.6	23.8	22.3	23.5	22.6	23.7	23.9
6H	22.2	23.3	22.6	23.6	23.9	22.4	23.4	22.7	23.7	24.0
8H	22.3	23.3	22.6	23.6	23.9	22.4	23.4	22.7	23.7	24.0
12H	22.3	23.3	22.6	23.5	23.8	22.4	23.4	22.7	23.7	23.9
4H 2H	22.0	23.2	22.3	23.4	23.7	22.1	23.3	22.4	23.5	23.8
3H	22.4	23.4	22.7	23.6	23.9	22.4	23.4	22.8	23.7	24.0
4H	22.5	23.4	22.8	23.7	24.0	22.6	23.5	22.9	23.8	24.1
6H	22.6	23.4	23.0	23.8	24.1	22.7	23.5	23.1	23.9	24.2
8H	22.7	23.4	23.1	23.8	24.2	22.8	23.5	23.2	23.9	24.3
12H	22.7	23.4	23.1	23.8	24.2	22.8	23.5	23.2	23.9	24.3
8H 4H	22.5	23.2	22.9	23.6	24.0	22.6	23.3	23.0	23.7	24.0
6H	22.7	23.3	23.1	23.7	24.1	22.8	23.4	23.2	23.8	24.2
8H	22.8	23.3	23.3	23.8	24.2	22.9	23.4	23.4	23.9	24.3
12H	22.9	23.3	23.3	23.8	24.3	23.0	23.4	23.4	23.9	24.3
12H 4H	22.5	23.1	22.9	23.5	23.9	22.5	23.2	23.0	23.6	24.0
6H	22.7	23.2	23.2	23.7	24.1	22.8	23.3	23.2	23.8	24.2
8H	22.8	23.3	23.3	23.7	24.2	22.9	23.4	23.4	23.8	24.3

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, 2475 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 3.1)  
 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:119.42V I:0.1772A P:20.744W PF:0.9803 Freq:60.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2474.89x1 lm		
NAME: DL254-10-40W-M-A5C5-HO	TYPE: 22W	WEIGHT:
SPEC.: 4000K	DIM.: 0.295	SERIAL No.: 1
MFR.: Lotus LED Lights	SUR.: 0.22	Shielding Angle:

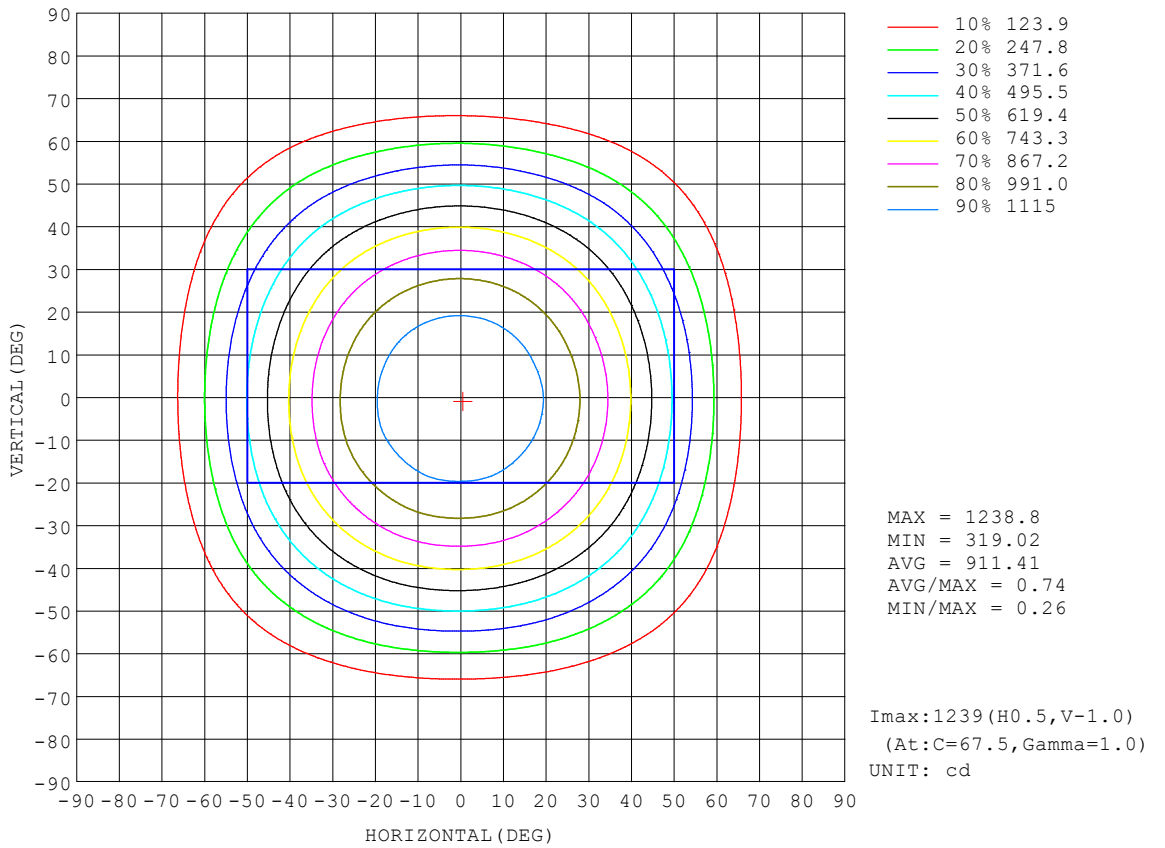
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	65	55	49	65	55	49	64	55	49	43
0.80	76	66	59	75	65	59	73	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:119.42V I:0.1772A P:20.744W PF:0.9803 Freq:60.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2474.89x1 lm		
NAME: DL254-10-40W-M-A5C5-HO	TYPE: 22W	WEIGHT:
SPEC.: 4000K	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

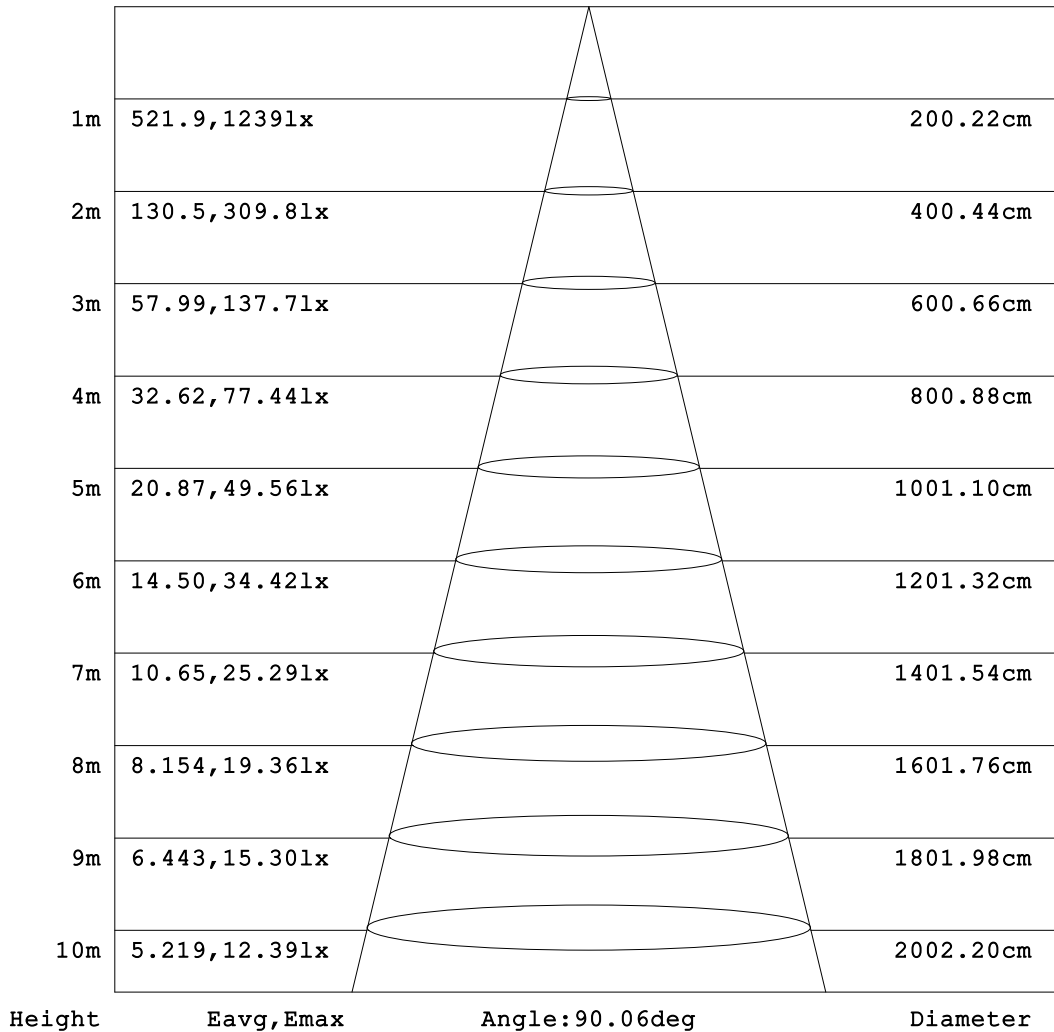
Range: 0 - 90DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.461  
 Humidity:65.0%  
 Test Distance:9.680m [K=1.0000]  
 Remarks:



**AAI Figure**

Test:U:119.42V I:0.1772A P:20.744W PF:0.9803 Freq:60.01Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2474.89x1 lm		
NAME: DL254-10-40W-M-A5C5-HO	TYPE: 22W	WEIGHT:
SPEC.: 4000K	DIM.: 0.295	SERIAL No.: 1
MFR.: Lotus LED Lights	SUR.: 0.22	Shielding Angle:

Flux out:1758 lm



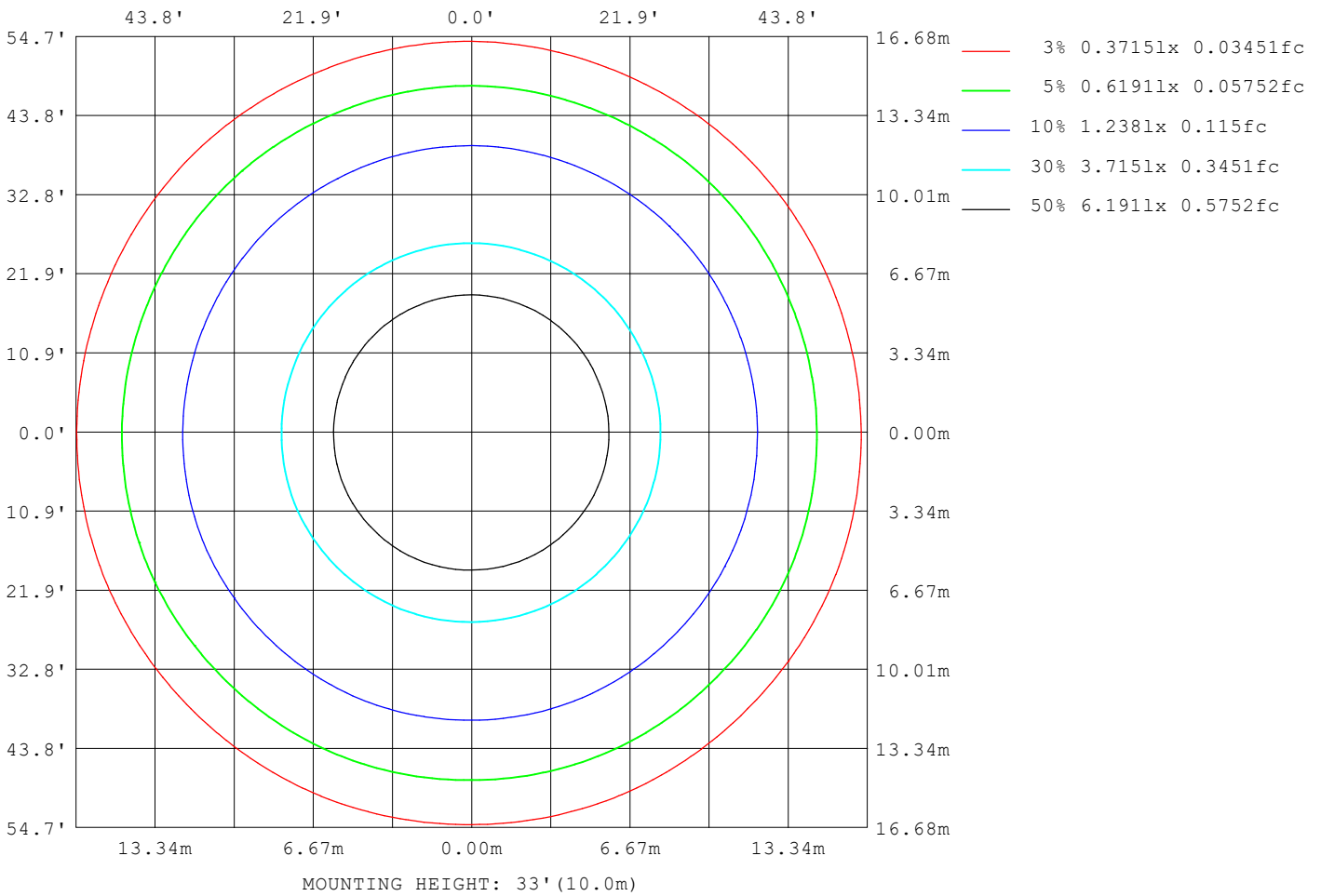
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 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:119.42V I:0.1772A P:20.744W PF:0.9803 Freq:60.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2474.89x1 lm		
NAME: DL254-10-40W-M-A5C5-HO	TYPE: 22W	WEIGHT:
SPEC.: 4000K	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:119.42V I:0.1772A P:20.744W PF:0.9803 Freq:60.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2474.89x1 lm		
NAME: DL254-10-40W-M-A5C5-HO	TYPE: 22W	WEIGHT:
SPEC.: 4000K	DIM.: 0.295	SERIAL No.: 1
MFR.: Lotus LED Lights	SUR.: 0.22	Shielding Angle:

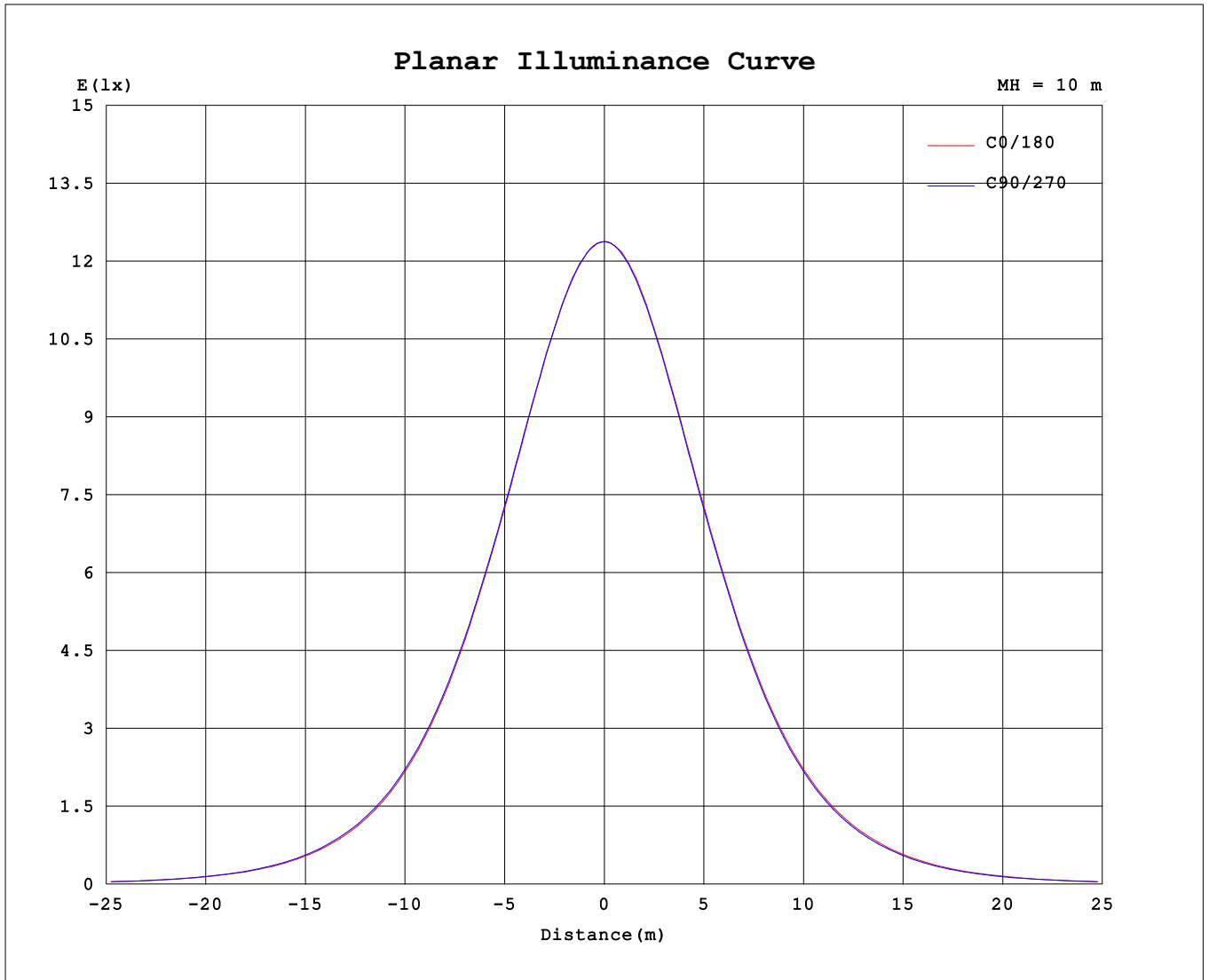
AvgL	cd/m2
L_0~180 (65) av	8733
L_0~180 (75) av	5346
L_0~180 (85) av	4617
L_90~270 (65) av	8671
L_90~270 (75) av	5360
L_90~270 (85) av	4269
L_45 (65) av	8705
L_45 (75) av	5357
L_45 (85) av	4538

Standard: GB/T 29293-2012

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:

**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:

