

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: PORTFOLIO

Report Number: P755359

Luminaire Tested: LD4D90BD010-EU4DR3070959030-4LBS1H

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P755359
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2307-078-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/30/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PORTFOLIO
Catalog Number: LD4D90BD010-EU4DR3070959030-4LBS1H
Description: 4 INCH ROUND SHALLOW SEMI-SPECULAR CLEAR TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8835.1 lumens
Efficiency: N/A
Efficacy: 89.3 lumens/watt
Spacing Criteria (0/90/45): 0.52 / 0.52 / 0.49
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

Input Watts (W): 98.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

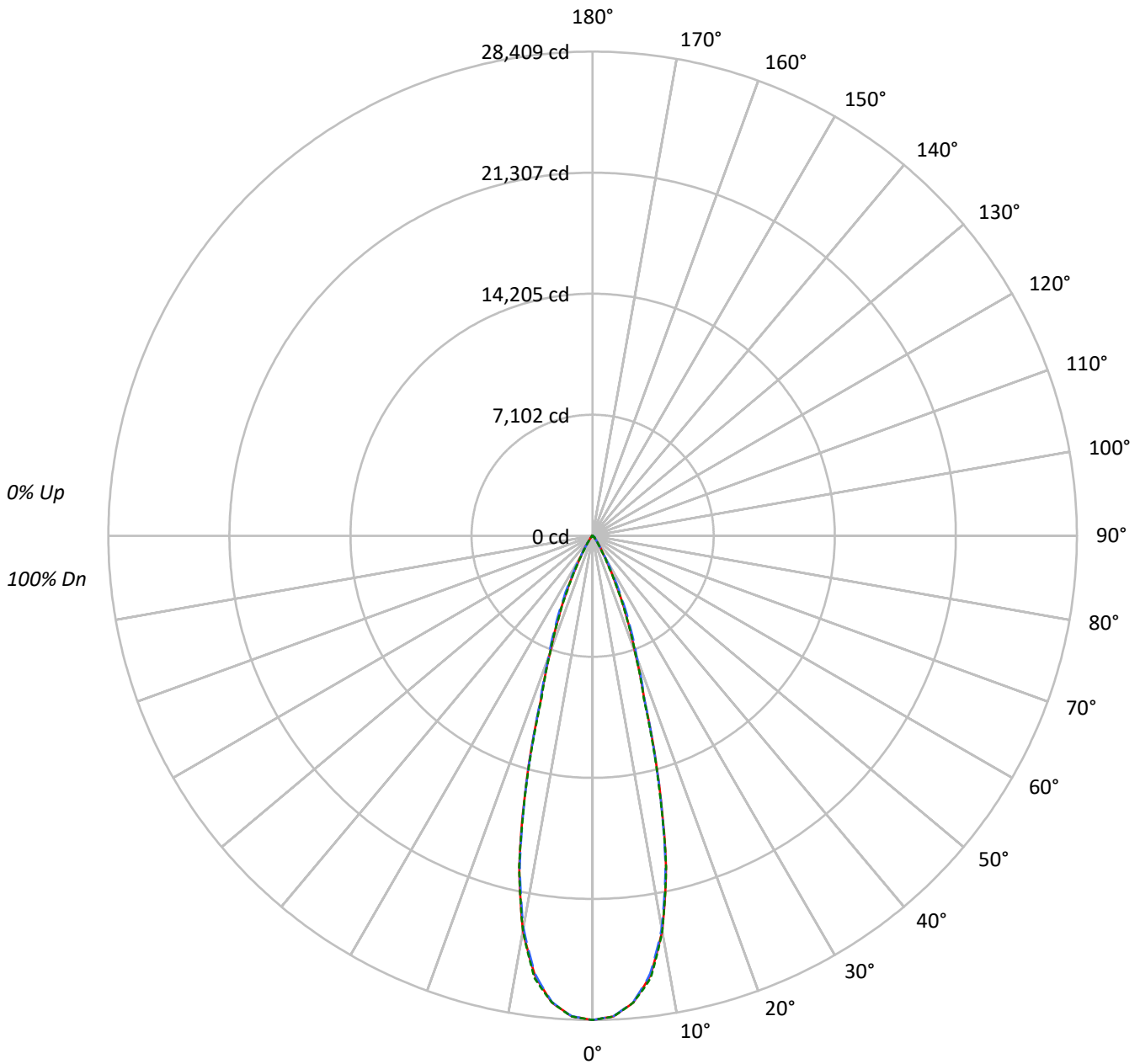


Downlight

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0													
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	115	113	111	109	112	110	109	107	106	105	104	103	102	101	99	99	98	96																			
2	111	107	104	101	109	105	102	100	102	100	98	99	97	96	97	95	94	92																			
3	107	102	98	95	105	101	97	94	98	95	93	96	93	91	94	92	90	89																			
4	103	98	93	90	102	96	93	90	94	91	89	93	90	88	91	89	87	85																			
5	100	94	89	86	98	93	89	86	91	88	85	90	86	84	88	86	83	82																			
6	97	90	85	82	95	89	85	82	88	84	81	87	83	81	85	83	80	79																			
7	94	87	82	79	92	86	82	79	85	81	78	84	81	78	83	80	78	77																			
8	91	84	79	76	90	83	79	76	82	78	76	81	78	75	80	77	75	74																			
9	88	81	76	73	87	80	76	73	80	76	73	79	75	73	78	75	73	72																			
10	85	78	74	71	85	78	74	71	77	73	71	76	73	71	76	73	70	69																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2174521	2174521	2174521
5°	2112100	2109634	2112208
10°	1829395	1816492	1828959
15°	1193590	1187179	1181212
20°	593519	615781	592721
25°	298975	337141	292844
30°	119699	130429	104294
35°	55523	53178	44572
40°	23971	26619	22582
45°	16908	20989	17060
50°	5811	15278	6145
55°	3350	6325	3536
60°	2342	2771	2342
65°	1521	1521	1521
70°	940	627	940
75°	0	414	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 20989 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2498.1	28.3
10°-20°	4023.3	45.5
20°-30°	1738.6	19.7
30°-40°	396.3	4.5
40°-50°	136.1	1.5
50°-60°	33.2	0.4
60°-70°	8.6	0.1
70°-80°	0.9	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	8260.0	93.5
0°-40°	8656.2	98.0
0°-60°	8825.5	99.9
0°-90°	8835.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8835.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	28409	28409	28409	28409	28409	
5°	27488	27462	27456	27514	27490	2500
15°	15062	14881	14981	14933	14906	4033
25°	3540	3674	3992	3580	3467	1694
35°	594	607	569	565	477	403
45°	156	194	194	194	158	111
55°	25	26	47	28	26	24
65°	8	8	8	8	8	8
75°	0	0	1	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	28409.0	28409.0	28409.0	28409.0	28409.0
2.5°	28220.7	28201.2	28212.4	28226.3	28231.9
5°	27488.5	27462.0	27456.4	27513.6	27489.9
7.5°	26011.4	25973.7	25916.5	26046.2	26167.6
10°	23537.0	23495.2	23371.0	23432.4	23531.4
12.5°	19884.1	19748.8	19746.0	19941.3	19914.8
15°	15062.3	14881.0	14981.4	14932.6	14906.1
17.5°	10128.9	10059.2	10193.1	10152.7	9978.3
20°	7286.4	7304.5	7559.7	7431.4	7276.6
22.5°	5316.9	5382.5	5685.2	5354.6	5233.2
25°	3540.0	3673.9	3991.9	3580.4	3467.4
27.5°	2177.3	2238.6	2560.8	2149.4	2088.0
30°	1354.3	1323.7	1475.7	1266.5	1180.0
32.5°	888.5	849.4	898.2	806.2	736.4
35°	594.2	606.7	569.1	564.9	477.0
37.5°	371.0	426.8	376.6	401.7	306.9
40°	239.9	309.6	266.4	294.3	226.0
42.5°	196.7	238.5	219.0	232.9	200.8
45°	156.2	193.9	193.9	193.9	157.6
47.5°	86.5	129.7	166.0	132.5	92.1
50°	48.8	65.6	128.3	68.3	51.6
52.5°	33.5	37.7	87.9	39.1	34.9
55°	25.1	26.5	47.4	27.9	26.5
57.5°	19.5	20.9	25.1	20.9	19.5
60°	15.3	15.3	18.1	16.7	15.3
62.5°	11.2	11.2	12.6	11.2	11.2
65°	8.4	8.4	8.4	8.4	8.4
67.5°	4.2	5.6	5.6	5.6	5.6
70°	4.2	2.8	2.8	2.8	4.2
72.5°	2.8	1.4	1.4	1.4	1.4
75°	0.0	0.0	1.4	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



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Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270°

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