

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: P749107

Luminaire Tested: LD4D50D010-EU4DR3040509027-4LBS1LI

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P749107  
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: LD4D50D010-EU4DR3040509027-4LBS1LI  
Description: 4 INCH ROUND SHALLOW SPECULAR CLEAR TRIM, WITH 30° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5070.1 lumens  
Efficiency: N/A  
Efficacy: 107.9 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

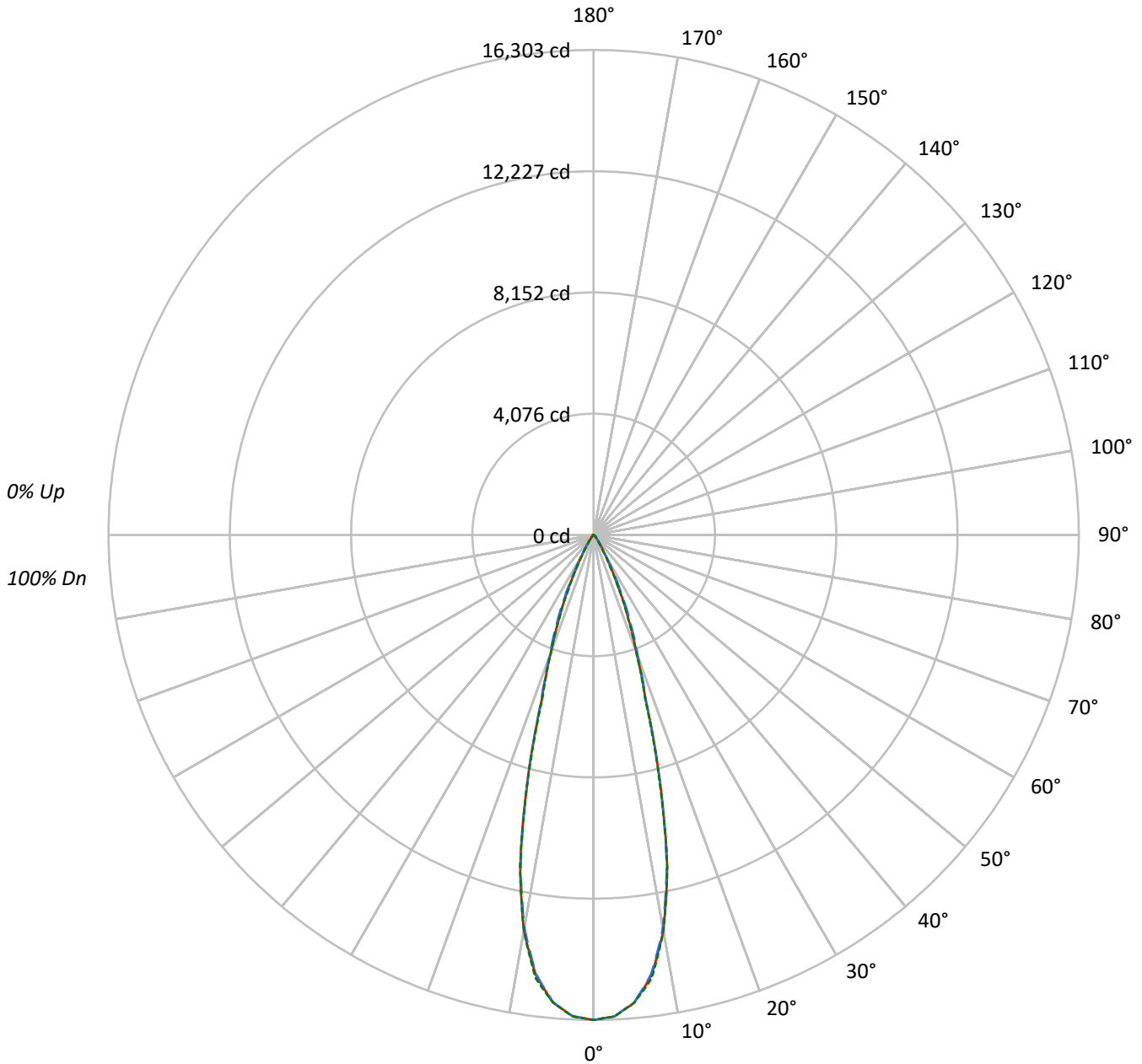
Input Watts (W): 47  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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	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°	1247887	1247887	1247887
5°	1212061	1210648	1212123
10°	1049829	1042429	1049580
15°	684965	681281	677857
20°	340599	353380	340143
25°	171573	193472	168051
30°	68693	74844	59854
35°	31864	30518	25575
40°	13759	15278	12960
45°	9699	12048	9786
50°	3334	8764	3525
55°	1922	3630	2028
60°	1347	1592	1347
65°	869	869	869
70°	537	358	537
75°	0	237	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 12048 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1433.6	28.3
10°-20°	2308.8	45.5
20°-30°	997.7	19.7
30°-40°	227.4	4.5
40°-50°	78.1	1.5
50°-60°	19.1	0.4
60°-70°	4.9	0.1
70°-80°	0.5	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°	4740.1	93.5
0°-40°	4967.5	98.0
0°-60°	5064.7	99.9
0°-90°	5070.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5070.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	16303	16303	16303	16303	16303	
5°	15775	15760	15756	15789	15776	1435
15°	8644	8540	8597	8569	8554	2314
25°	2032	2108	2291	2055	1990	972
35°	341	348	327	324	274	231
45°	90	111	111	111	90	64
55°	14	15	27	16	15	14
65°	5	5	5	5	5	5
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°	16303.0	16303.0	16303.0	16303.0	16303.0
2.5°	16194.9	16183.7	16190.1	16198.1	16201.3
5°	15774.7	15759.5	15756.3	15789.1	15775.5
7.5°	14927.1	14905.5	14872.6	14947.1	15016.7
10°	13507.1	13483.1	13411.9	13447.1	13503.9
12.5°	11410.8	11333.2	11331.6	11443.6	11428.4
15°	8643.8	8539.7	8597.3	8569.3	8554.1
17.5°	5812.7	5772.6	5849.5	5826.3	5726.2
20°	4181.4	4191.8	4338.3	4264.6	4175.8
22.5°	3051.2	3088.8	3262.5	3072.8	3003.2
25°	2031.5	2108.3	2290.8	2054.7	1989.8
27.5°	1249.5	1284.7	1469.6	1233.5	1198.2
30°	777.2	759.6	846.8	726.8	677.2
32.5°	509.9	487.5	515.5	462.6	422.6
35°	341.0	348.2	326.6	324.2	273.7
37.5°	212.9	244.9	216.1	230.5	176.1
40°	137.7	177.7	152.9	168.9	129.7
42.5°	112.9	136.9	125.7	133.7	115.3
45°	89.6	111.3	111.3	111.3	90.4
47.5°	49.6	74.4	95.3	76.0	52.8
50°	28.0	37.6	73.6	39.2	29.6
52.5°	19.2	21.6	50.4	22.4	20.0
55°	14.4	15.2	27.2	16.0	15.2
57.5°	11.2	12.0	14.4	12.0	11.2
60°	8.8	8.8	10.4	9.6	8.8
62.5°	6.4	6.4	7.2	6.4	6.4
65°	4.8	4.8	4.8	4.8	4.8
67.5°	2.4	3.2	3.2	3.2	3.2
70°	2.4	1.6	1.6	1.6	2.4
72.5°	1.6	0.8	0.8	0.8	0.8
75°	0.0	0.0	0.8	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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