

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: P749147

Luminaire Tested: LD4D50D010-EU4DR3040509040-4LBS1MW

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P749147  
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-EU4DR3040509040-4LBS1MW  
Description: 4 INCH ROUND SHALLOW MATTE WHITE TRIM, WITH 30° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5001.9 lumens  
Efficiency: N/A  
Efficacy: 106.4 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

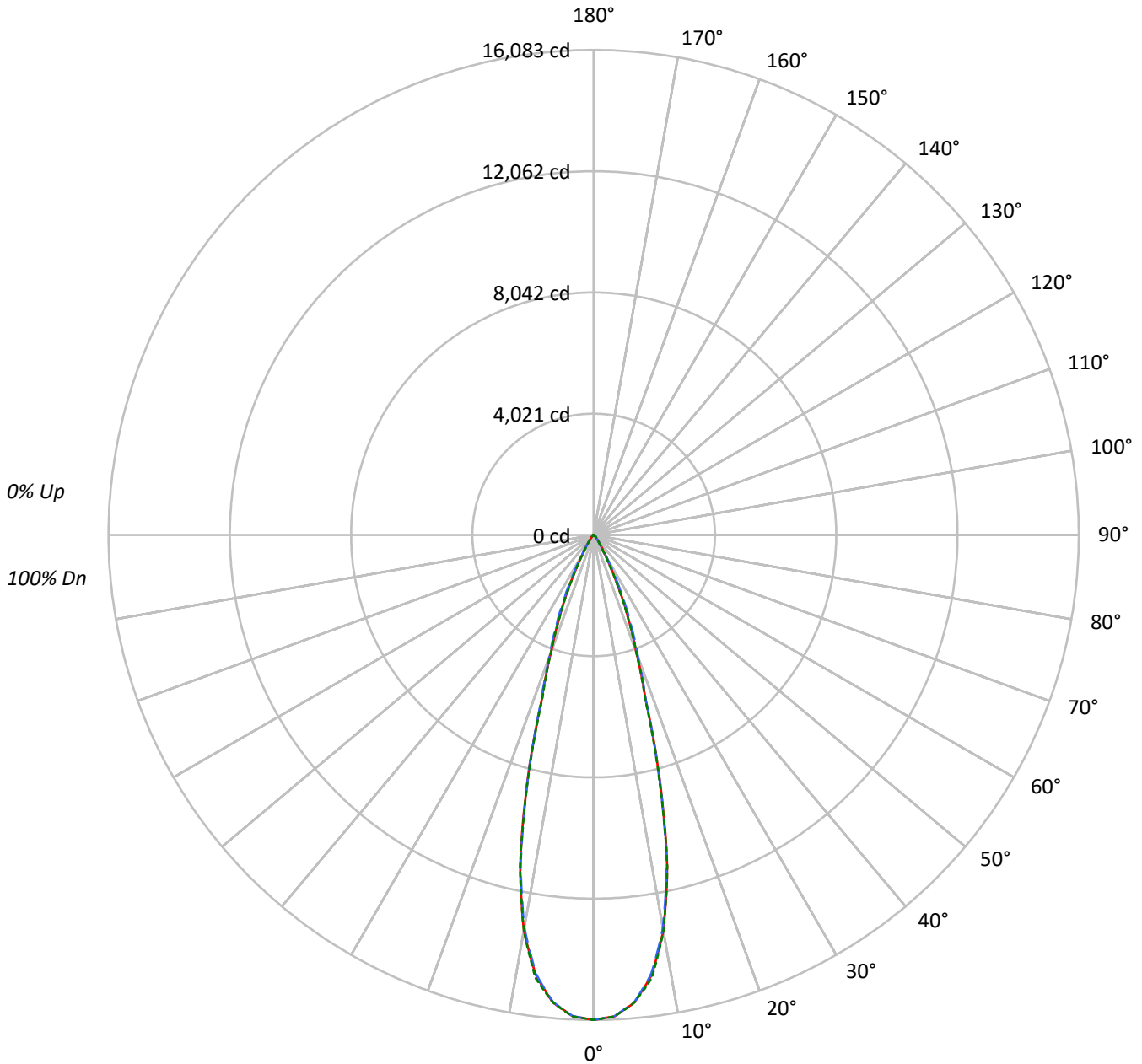
Input Watts (W): 47  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1231078	1231078	1231078
5°	1195734	1194343	1195795
10°	1035691	1028384	1035442
15°	675734	672104	668728
20°	336013	348623	335565
25°	169259	190871	165788
30°	67765	73837	59041
35°	31434	30107	25239
40°	13569	15068	12780
45°	9569	11886	9656
50°	3287	8645	3477
55°	1895	3576	2002
60°	1332	1577	1332
65°	851	851	851
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: 11886 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1414.3	28.3
10°-20°	2277.7	45.5
20°-30°	984.3	19.7
30°-40°	224.3	4.5
40°-50°	77.0	1.5
50°-60°	18.8	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°	4676.3	93.5
0°-40°	4900.6	98.0
0°-60°	4996.5	99.9
0°-90°	5001.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5001.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	16083	16083	16083	16083	16083	
5°	15562	15547	15544	15576	15563	1415
15°	8527	8425	8482	8454	8439	2283
25°	2004	2080	2260	2027	1963	959
35°	336	344	322	320	270	228
45°	88	110	110	110	89	63
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°	16083.4	16083.4	16083.4	16083.4	16083.4
2.5°	15976.8	15965.8	15972.1	15980.0	15983.1
5°	15562.2	15547.2	15544.1	15576.5	15563.0
7.5°	14726.0	14704.7	14672.3	14745.8	14814.5
10°	13325.2	13301.5	13231.2	13266.0	13322.0
12.5°	11257.1	11180.5	11178.9	11289.5	11274.5
15°	8527.3	8424.7	8481.5	8453.9	8438.9
17.5°	5734.4	5694.9	5770.7	5747.8	5649.1
20°	4125.1	4135.3	4279.9	4207.2	4119.6
22.5°	3010.1	3047.2	3218.6	3031.4	2962.7
25°	2004.1	2079.9	2260.0	2027.0	1963.0
27.5°	1232.6	1267.4	1449.8	1216.8	1182.1
30°	766.7	749.4	835.4	717.0	668.0
32.5°	503.0	480.9	508.5	456.4	416.9
35°	336.4	343.5	322.2	319.8	270.1
37.5°	210.0	241.6	213.2	227.4	173.7
40°	135.8	175.3	150.8	166.6	127.9
42.5°	111.3	135.0	124.0	131.9	113.7
45°	88.4	109.8	109.8	109.8	89.2
47.5°	49.0	73.4	94.0	75.0	52.1
50°	27.6	37.1	72.6	38.7	29.2
52.5°	19.0	21.3	49.7	22.1	19.7
55°	14.2	15.0	26.8	15.8	15.0
57.5°	11.1	11.8	14.2	11.8	11.1
60°	8.7	8.7	10.3	9.5	8.7
62.5°	6.3	6.3	7.1	6.3	6.3
65°	4.7	4.7	4.7	4.7	4.7
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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(END OF REPORT)