

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: P749160

Luminaire Tested: LD4D50D010-EU4DR3040509050-4LBS1MW

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P749160
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-EU4DR3040509050-4LBS1MW
Description: 4 INCH ROUND SHALLOW MATTE WHITE TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5037.6 lumens
Efficiency: N/A
Efficacy: 107.2 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

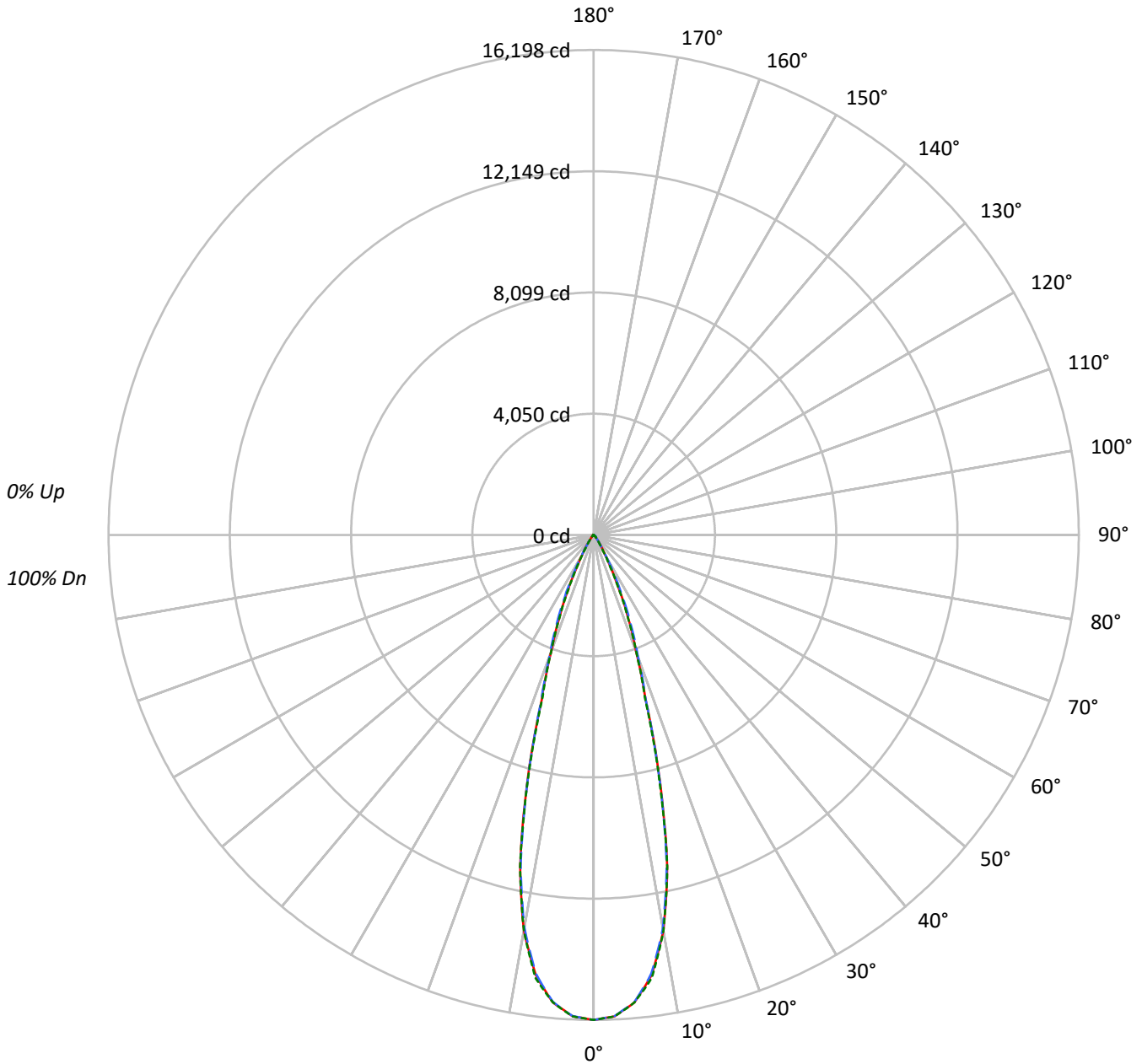
Input Watts (W): 47
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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°	1239873	1239873	1239873
5°	1204278	1202872	1204339
10°	1043090	1035729	1042841
15°	680559	676906	673507
20°	338408	351107	337960
25°	170467	192231	166979
30°	68251	74367	59465
35°	31658	30322	25416
40°	13669	15178	12870
45°	9645	11961	9732
50°	3310	8717	3501
55°	1908	3603	2015
60°	1332	1577	1332
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: 11961 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1424.4	28.3
10°-20°	2294.0	45.5
20°-30°	991.3	19.7
30°-40°	225.9	4.5
40°-50°	77.6	1.5
50°-60°	18.9	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°	4709.7	93.5
0°-40°	4935.6	98.0
0°-60°	5032.1	99.9
0°-90°	5037.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5037.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	16198	16198	16198	16198	16198	
5°	15673	15658	15655	15688	15674	1426
15°	8588	8485	8542	8514	8499	2300
25°	2018	2095	2276	2042	1977	966
35°	339	346	324	322	272	230
45°	89	110	110	110	90	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°	16198.3	16198.3	16198.3	16198.3	16198.3
2.5°	16090.9	16079.8	16086.2	16094.1	16097.3
5°	15673.4	15658.3	15655.1	15687.7	15674.2
7.5°	14831.2	14809.7	14777.1	14851.1	14920.3
10°	13420.4	13396.5	13325.7	13360.7	13417.2
12.5°	11337.5	11260.4	11258.8	11370.1	11355.0
15°	8588.2	8484.9	8542.1	8514.3	8499.2
17.5°	5775.3	5735.6	5811.9	5788.9	5689.4
20°	4154.5	4164.9	4310.4	4237.3	4149.0
22.5°	3031.6	3069.0	3241.6	3053.1	2983.9
25°	2018.4	2094.8	2276.1	2041.5	1977.1
27.5°	1241.4	1276.4	1460.1	1225.5	1190.5
30°	772.2	754.7	841.4	722.1	672.8
32.5°	506.6	484.3	512.2	459.7	419.9
35°	338.8	345.9	324.5	322.1	272.0
37.5°	211.5	243.4	214.7	229.0	175.0
40°	136.8	176.6	151.9	167.8	128.8
42.5°	112.1	136.0	124.9	132.8	114.5
45°	89.1	110.5	110.5	110.5	89.9
47.5°	49.3	74.0	94.6	75.6	52.5
50°	27.8	37.4	73.2	39.0	29.4
52.5°	19.1	21.5	50.1	22.3	19.9
55°	14.3	15.1	27.0	15.9	15.1
57.5°	11.1	11.9	14.3	11.9	11.1
60°	8.7	8.7	10.3	9.5	8.7
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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