

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: P747584

Luminaire Tested: LD4D40BD010-EU4DR3040509040-4LBS1B

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P747584
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: LD4D40BD010-EU4DR3040509040-4LBS1B
Description: 4 INCH ROUND SHALLOW SPECULAR BLACK TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3835.1 lumens
Efficiency: N/A
Efficacy: 109.0 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

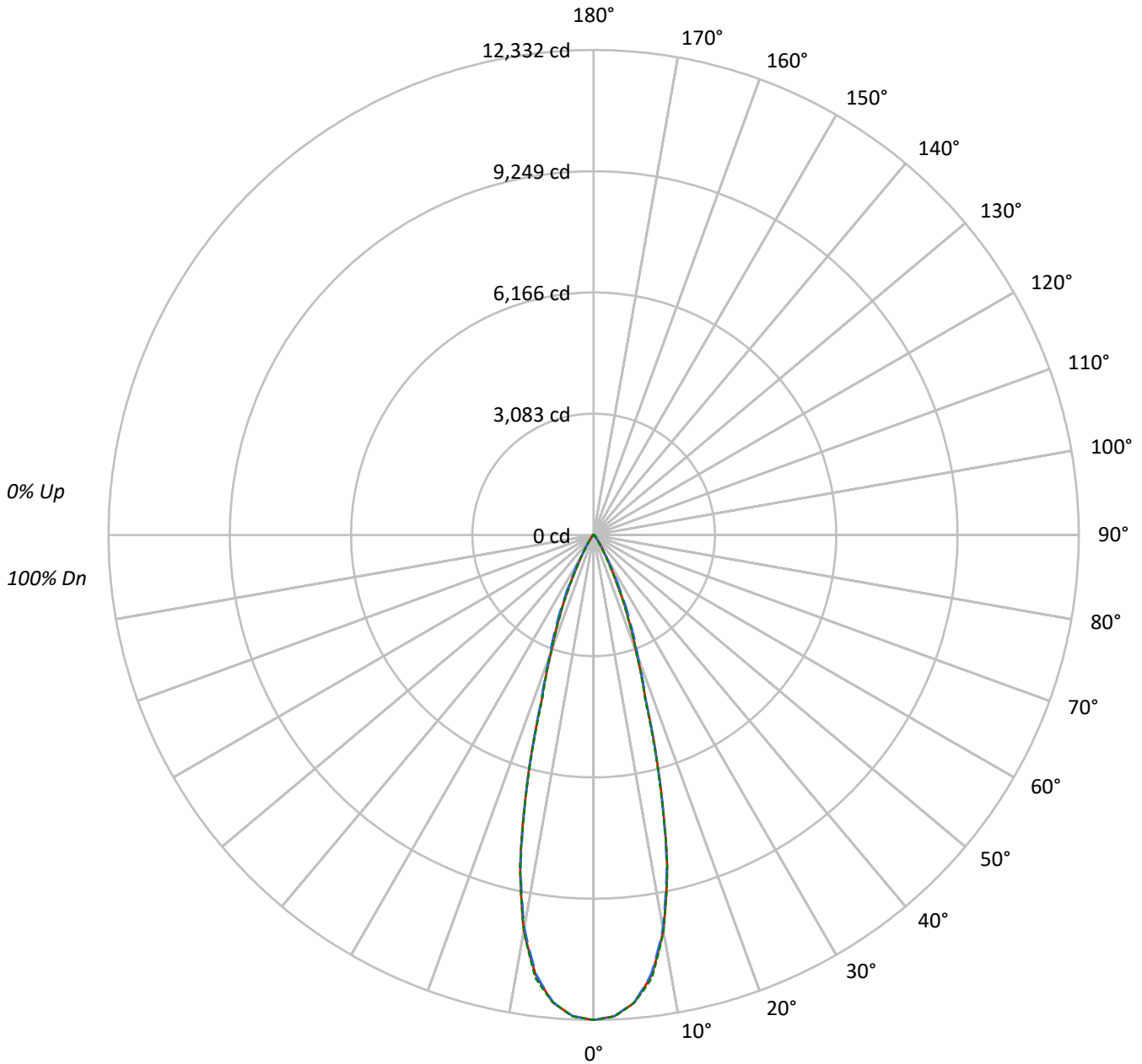
Input Watts (W): 35.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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						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°	943910	943910	943910
5°	916812	915744	916858
10°	794100	788496	793914
15°	518110	515329	512737
20°	257628	267297	257286
25°	129776	146346	127115
30°	51961	56619	45271
35°	24099	23080	19352
40°	10402	11551	9802
45°	7339	9115	7404
50°	2525	6633	2667
55°	1455	2749	1535
60°	1026	1209	1026
65°	652	652	652
70°	403	269	403
75°	0	177	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 9115 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1084.4	28.3
10°-20°	1746.4	45.5
20°-30°	754.7	19.7
30°-40°	172.0	4.5
40°-50°	59.1	1.5
50°-60°	14.4	0.4
60°-70°	3.7	0.1
70°-80°	0.4	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°	3585.5	93.5
0°-40°	3757.5	98.0
0°-60°	3831.0	99.9
0°-90°	3835.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3835.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12332	12332	12332	12332	12332	
5°	11932	11921	11918	11943	11933	1085
15°	6538	6460	6503	6482	6470	1751
25°	1537	1595	1733	1554	1505	736
35°	258	263	247	245	207	175
45°	68	84	84	84	68	48
55°	11	12	21	12	12	11
65°	4	4	4	4	4	4
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°	12331.7	12331.7	12331.7	12331.7	12331.7
2.5°	12250.0	12241.5	12246.3	12252.4	12254.8
5°	11932.1	11920.6	11918.2	11943.0	11932.7
7.5°	11290.9	11274.6	11249.8	11306.1	11358.7
10°	10216.9	10198.7	10144.8	10171.5	10214.5
12.5°	8631.2	8572.5	8571.3	8656.0	8644.5
15°	6538.2	6459.5	6503.1	6481.9	6470.4
17.5°	4396.7	4366.5	4424.6	4407.0	4331.4
20°	3162.8	3170.7	3281.5	3225.8	3158.6
22.5°	2308.0	2336.4	2467.8	2324.3	2271.6
25°	1536.6	1594.7	1732.8	1554.2	1505.1
27.5°	945.1	971.7	1111.6	933.0	906.4
30°	587.9	574.6	640.6	549.7	512.2
32.5°	385.7	368.7	389.9	349.9	319.7
35°	257.9	263.4	247.0	245.2	207.1
37.5°	161.0	185.3	163.5	174.4	133.2
40°	104.1	134.4	115.6	127.7	98.1
42.5°	85.4	103.5	95.1	101.1	87.2
45°	67.8	84.2	84.2	84.2	68.4
47.5°	37.5	56.3	72.0	57.5	40.0
50°	21.2	28.5	55.7	29.7	22.4
52.5°	14.5	16.3	38.1	17.0	15.1
55°	10.9	11.5	20.6	12.1	11.5
57.5°	8.5	9.1	10.9	9.1	8.5
60°	6.7	6.7	7.9	7.3	6.7
62.5°	4.8	4.8	5.4	4.8	4.8
65°	3.6	3.6	3.6	3.6	3.6
67.5°	1.8	2.4	2.4	2.4	2.4
70°	1.8	1.2	1.2	1.2	1.8
72.5°	1.2	0.6	0.6	0.6	0.6
75°	0.0	0.0	0.6	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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