

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: P748378

Luminaire Tested: LD4D45BD010-EU4DR3040509050-4LBS1H

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P748378
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: LD4D45BD010-EU4DR3040509050-4LBS1H
Description: 4 INCH ROUND SHALLOW SEMI-SPECULAR CLEAR TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4512.6 lumens
Efficiency: N/A
Efficacy: 116.6 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

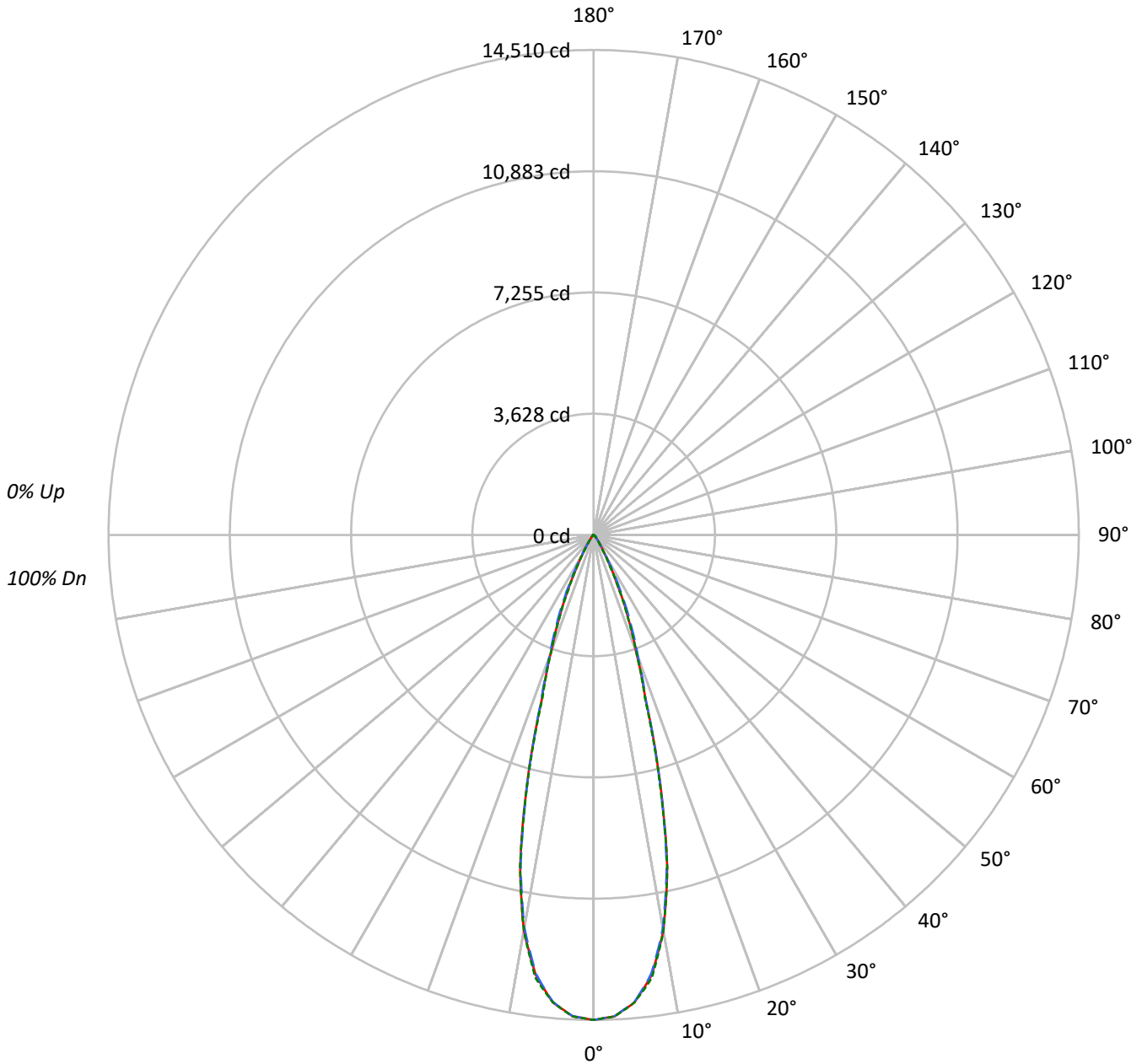
Input Watts (W): 38.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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	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°	1110660	1110660	1110660
5°	1078782	1077522	1078836
10°	934385	927794	934167
15°	609644	606364	603321
20°	303146	314517	302739
25°	152705	172198	149572
30°	61136	66616	53269
35°	28360	27164	22763
40°	12240	13599	11531
45°	8638	10717	8714
50°	2965	7800	3144
55°	1708	3229	1802
60°	1194	1424	1194
65°	779	779	779
70°	470	313	470
75°	0	207	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 10717 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1276.0	28.3
10°-20°	2054.9	45.5
20°-30°	888.0	19.7
30°-40°	202.4	4.5
40°-50°	69.5	1.5
50°-60°	17.0	0.4
60°-70°	4.4	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°	4218.9	93.5
0°-40°	4421.3	98.0
0°-60°	4507.7	99.9
0°-90°	4512.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4512.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	14510	14510	14510	14510	14510	
5°	14040	14026	14024	14053	14041	1277
15°	7693	7601	7652	7627	7614	2060
25°	1808	1876	2039	1829	1771	865
35°	304	310	291	288	244	206
45°	80	99	99	99	80	57
55°	13	14	24	14	14	12
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°	14510.2	14510.2	14510.2	14510.2	14510.2
2.5°	14414.1	14404.1	14409.8	14416.9	14419.8
5°	14040.1	14026.5	14023.7	14052.9	14040.8
7.5°	13285.6	13266.4	13237.2	13303.4	13365.4
10°	12021.8	12000.4	11937.0	11968.4	12019.0
12.5°	10156.0	10086.9	10085.5	10185.2	10171.7
15°	7693.3	7600.6	7651.9	7627.0	7613.5
17.5°	5173.5	5137.9	5206.2	5185.6	5096.5
20°	3721.6	3730.9	3861.2	3795.7	3716.6
22.5°	2715.7	2749.2	2903.8	2734.9	2672.9
25°	1808.1	1876.5	2038.9	1828.7	1771.0
27.5°	1112.1	1143.4	1308.0	1097.8	1066.5
30°	691.7	676.1	753.7	646.9	602.7
32.5°	453.8	433.9	458.8	411.8	376.1
35°	303.5	309.9	290.7	288.5	243.6
37.5°	189.5	218.0	192.3	205.2	156.7
40°	122.5	158.2	136.1	150.3	115.4
42.5°	100.4	121.8	111.8	119.0	102.6
45°	79.8	99.0	99.0	99.0	80.5
47.5°	44.2	66.3	84.8	67.7	47.0
50°	24.9	33.5	65.5	34.9	26.4
52.5°	17.1	19.2	44.9	19.9	17.8
55°	12.8	13.5	24.2	14.2	13.5
57.5°	10.0	10.7	12.8	10.7	10.0
60°	7.8	7.8	9.3	8.5	7.8
62.5°	5.7	5.7	6.4	5.7	5.7
65°	4.3	4.3	4.3	4.3	4.3
67.5°	2.1	2.8	2.8	2.8	2.8
70°	2.1	1.4	1.4	1.4	2.1
72.5°	1.4	0.7	0.7	0.7	0.7
75°	0.0	0.0	0.7	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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