

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: P748360

Luminaire Tested: LD4D45BD010-EU4DR3040509040-4LBDP1B

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P748360
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-EU4DR3040509040-4LBDP1B
Description: 4 INCH ROUND DEEP 45° CUTOFF 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: 3426.9 lumens
Efficiency: N/A
Efficacy: 88.6 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

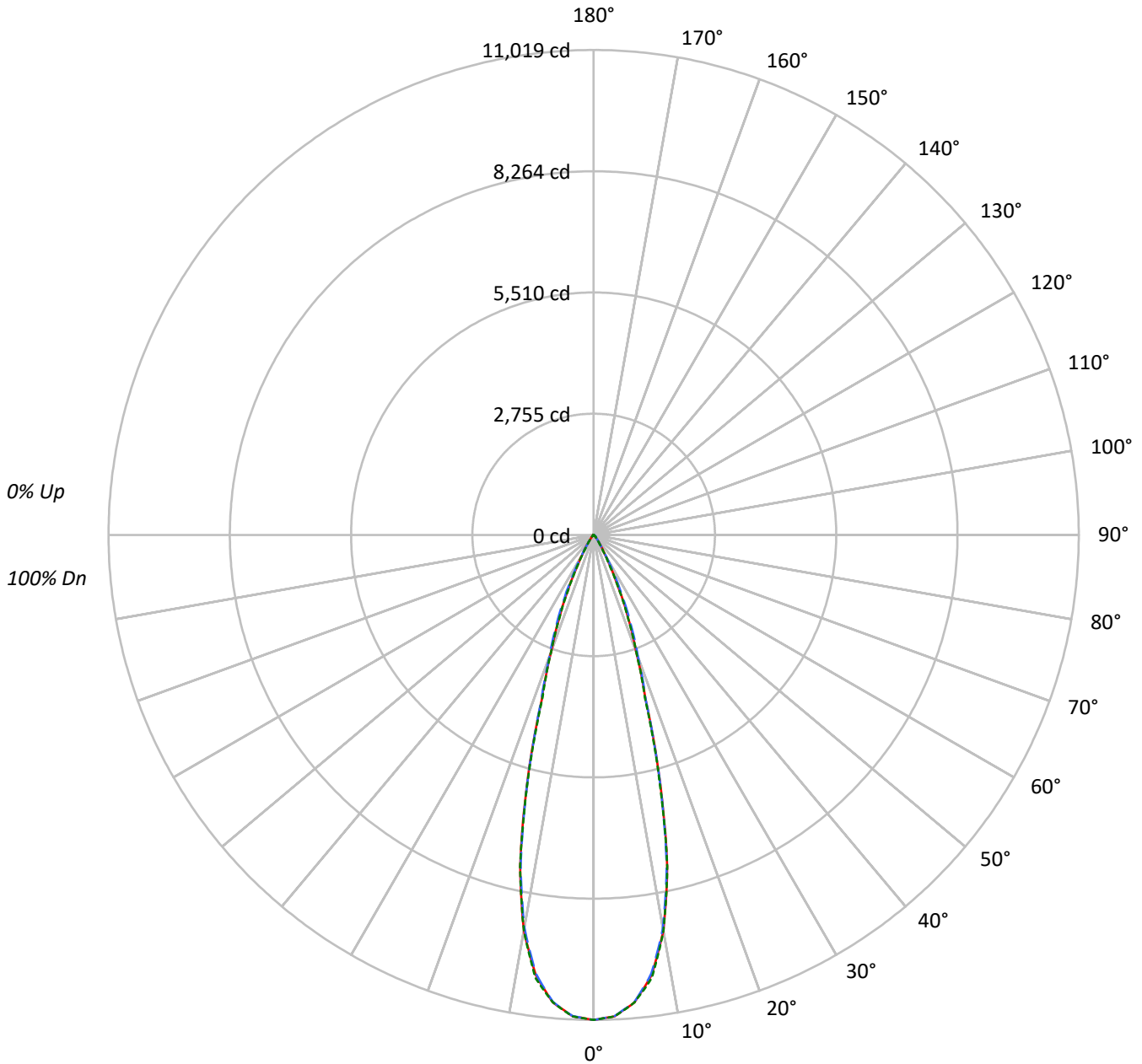
Input Watts (W): 38.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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					70					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°	843455	843455	843455
5°	819238	818286	819285
10°	709583	704585	709420
15°	462973	460484	458170
20°	230210	238853	229901
25°	115967	130772	113585
30°	46428	50591	40454
35°	21538	20623	17287
40°	9303	10322	8753
45°	6560	8140	6614
50°	2251	5930	2382
55°	1294	2455	1375
60°	919	1072	919
65°	580	580	580
70°	358	246	358
75°	0	148	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 8140 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	969.0	28.3
10°-20°	1560.6	45.5
20°-30°	674.4	19.7
30°-40°	153.7	4.5
40°-50°	52.8	1.5
50°-60°	12.9	0.4
60°-70°	3.3	0.1
70°-80°	0.3	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°	3203.9	93.5
0°-40°	3357.6	98.0
0°-60°	3423.2	99.9
0°-90°	3426.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3426.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11019	11019	11019	11019	11019	
5°	10662	10652	10650	10672	10663	970
15°	5842	5772	5811	5792	5782	1564
25°	1373	1425	1548	1389	1345	657
35°	230	235	221	219	185	156
45°	61	75	75	75	61	43
55°	10	10	18	11	10	9
65°	3	3	3	3	3	3
75°	0	0	0	0	0	0
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°	11019.3	11019.3	11019.3	11019.3	11019.3
2.5°	10946.2	10938.7	10943.0	10948.4	10950.6
5°	10662.2	10651.9	10649.8	10672.0	10662.8
7.5°	10089.3	10074.7	10052.5	10102.8	10149.9
10°	9129.5	9113.3	9065.2	9089.0	9127.4
12.5°	7712.6	7660.2	7659.1	7734.8	7724.5
15°	5842.4	5772.0	5811.0	5792.0	5781.8
17.5°	3928.8	3901.8	3953.7	3938.0	3870.4
20°	2826.2	2833.3	2932.3	2882.5	2822.4
22.5°	2062.3	2087.8	2205.2	2076.9	2029.9
25°	1373.1	1425.0	1548.4	1388.8	1344.9
27.5°	844.5	868.3	993.3	833.7	809.9
30°	525.3	513.4	572.4	491.2	457.7
32.5°	344.6	329.5	348.4	312.7	285.7
35°	230.5	235.3	220.7	219.1	185.0
37.5°	143.9	165.5	146.1	155.8	119.0
40°	93.1	120.1	103.3	114.2	87.6
42.5°	76.3	92.5	84.9	90.3	77.9
45°	60.6	75.2	75.2	75.2	61.1
47.5°	33.5	50.3	64.4	51.4	35.7
50°	18.9	25.4	49.8	26.5	20.0
52.5°	13.0	14.6	34.1	15.1	13.5
55°	9.7	10.3	18.4	10.8	10.3
57.5°	7.6	8.1	9.7	8.1	7.6
60°	6.0	6.0	7.0	6.5	6.0
62.5°	4.3	4.3	4.9	4.3	4.3
65°	3.2	3.2	3.2	3.2	3.2
67.5°	1.6	2.2	2.2	2.2	2.2
70°	1.6	1.1	1.1	1.1	1.6
72.5°	1.1	0.5	0.5	0.5	0.5
75°	0.0	0.0	0.5	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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