

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: P781468

Luminaire Tested: LER4D45BD010-EC4DR3040509024-4LBS1B

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P781468
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: LER4D45BD010-EC4DR3040509024-4LBS1B
Description: 4 INCH ROUND SHALLOW SPECULAR BLACK TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3403.1 lumens
Efficiency: N/A
Efficacy: 87.9 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 (Ain): 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

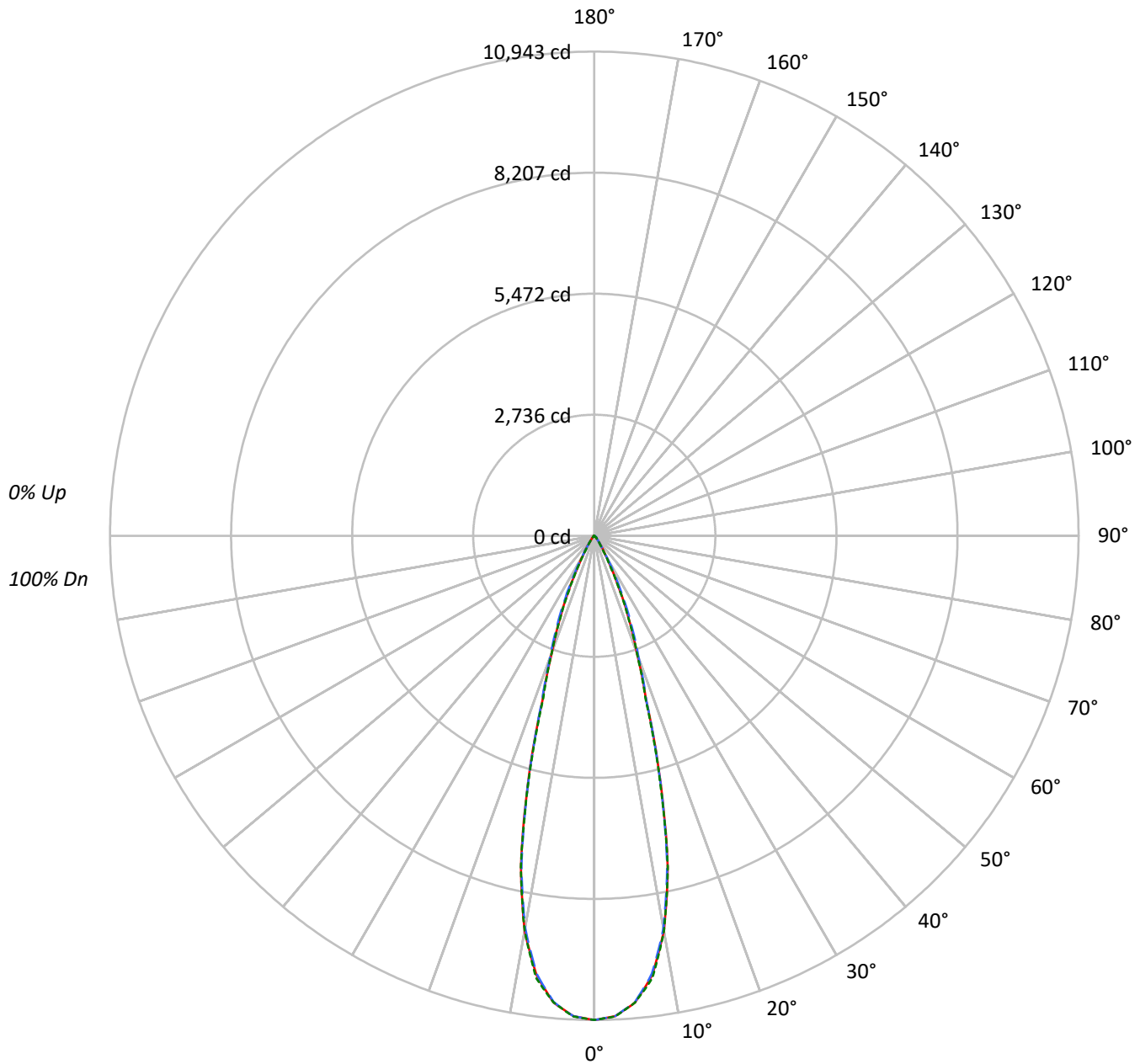


Downlight

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	837584	837584	837584
5°	813537	812592	813583
10°	704648	699681	704484
15°	459747	457283	454977
20°	228614	237191	228304
25°	115156	129860	112800
30°	46110	50238	40171
35°	21389	20483	17165
40°	9233	10252	8693
45°	6517	8086	6571
50°	2239	5883	2370
55°	1294	2442	1361
60°	903	1072	903
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: 8086 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	962.2	28.3
10°-20°	1549.7	45.5
20°-30°	669.7	19.7
30°-40°	152.6	4.5
40°-50°	52.4	1.5
50°-60°	12.8	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°	3181.6	93.5
0°-40°	3334.2	98.0
0°-60°	3399.4	99.9
0°-90°	3403.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3403.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10943	10943	10943	10943	10943	
5°	10588	10578	10576	10598	10589	963
15°	5802	5732	5771	5752	5742	1553
25°	1364	1415	1538	1379	1336	653
35°	229	234	219	218	184	155
45°	60	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10942.6	10942.6	10942.6	10942.6	10942.6
2.5°	10870.1	10862.6	10866.9	10872.2	10874.4
5°	10588.0	10577.8	10575.7	10597.7	10588.6
7.5°	10019.1	10004.6	9982.6	10032.5	10079.3
10°	9066.0	9049.9	9002.1	9025.7	9063.9
12.5°	7659.0	7606.9	7605.8	7681.0	7670.8
15°	5801.7	5731.9	5770.6	5751.8	5741.5
17.5°	3901.5	3874.6	3926.2	3910.6	3843.5
20°	2806.6	2813.6	2911.9	2862.4	2802.8
22.5°	2048.0	2073.2	2189.8	2062.5	2015.7
25°	1363.5	1415.1	1537.6	1379.1	1335.6
27.5°	838.6	862.3	986.4	827.9	804.3
30°	521.7	509.8	568.4	487.8	454.5
32.5°	342.2	327.2	346.0	310.5	283.7
35°	228.9	233.7	219.2	217.6	183.7
37.5°	142.9	164.4	145.1	154.7	118.2
40°	92.4	119.3	102.6	113.4	87.0
42.5°	75.8	91.9	84.3	89.7	77.4
45°	60.2	74.7	74.7	74.7	60.7
47.5°	33.3	50.0	63.9	51.0	35.5
50°	18.8	25.3	49.4	26.3	19.9
52.5°	12.9	14.5	33.8	15.0	13.4
55°	9.7	10.2	18.3	10.7	10.2
57.5°	7.5	8.1	9.7	8.1	7.5
60°	5.9	5.9	7.0	6.4	5.9
62.5°	4.3	4.3	4.8	4.3	4.3
65°	3.2	3.2	3.2	3.2	3.2
67.5°	1.6	2.1	2.1	2.1	2.1
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



Report Generated By 670245859 / DESKTOP-T8S5UU9





— 0°-180° - - 45°-225° - - - 90°-270°







(END OF REPORT)