

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: P781475

Luminaire Tested: LER4D45BD010-EC4DR3040509027-4LBS1MW

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P781475
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-EC4DR3040509027-4LBS1MW
Description: 4 INCH ROUND SHALLOW MATTE WHITE TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3908.3 lumens
Efficiency: N/A
Efficacy: 101.0 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): 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

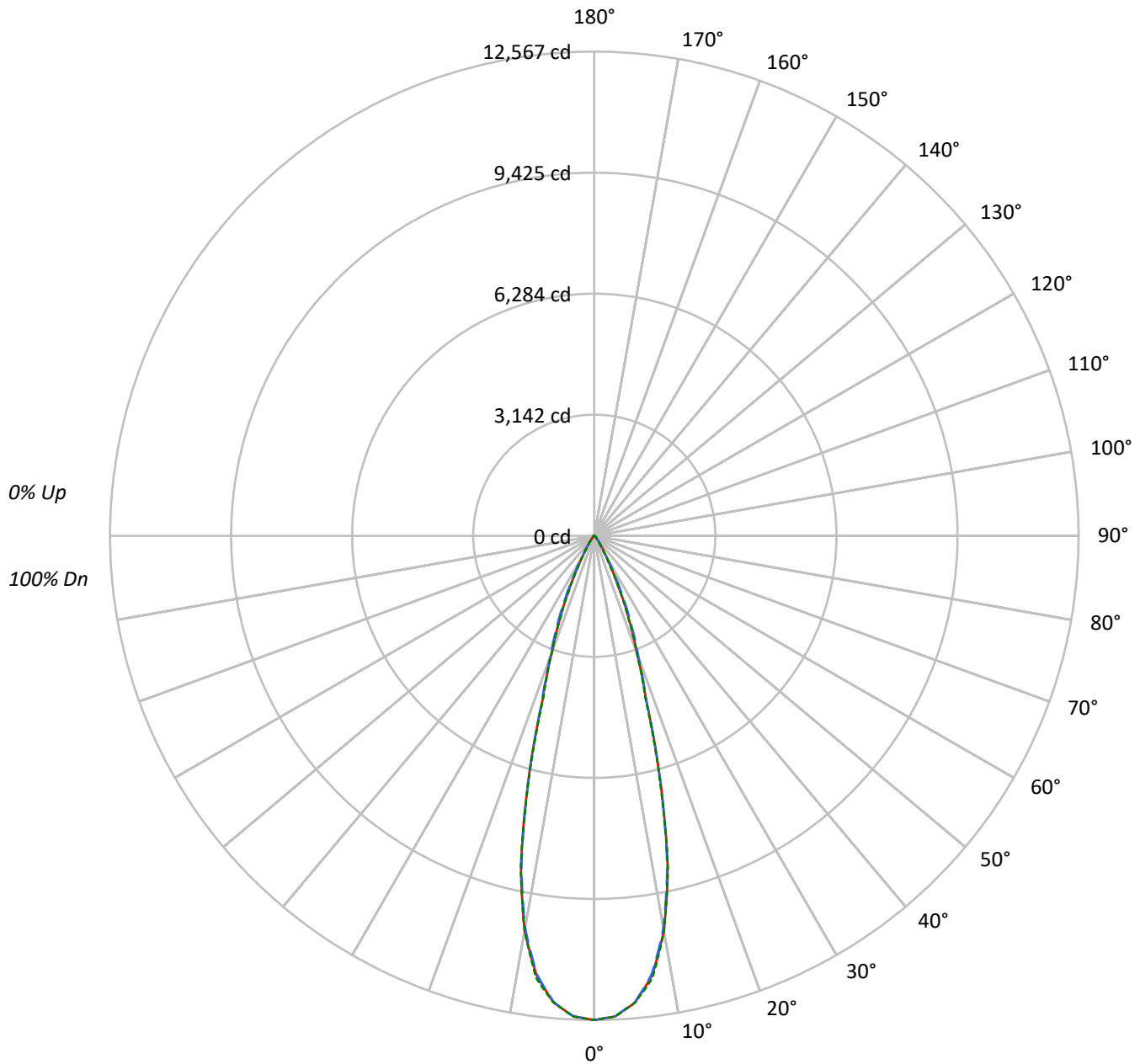


Downlight

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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°	961929	961929	961929
5°	934315	933224	934361
10°	809257	803552	809062
15°	528000	525163	522524
20°	262548	272404	262198
25°	132259	149141	129548
30°	52951	57698	46137
35°	24557	23519	19716
40°	10602	11771	9992
45°	7480	9288	7545
50°	2572	6764	2715
55°	1481	2802	1561
60°	1041	1225	1041
65°	670	670	670
70°	425	269	425
75°	0	177	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 9288 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1105.1	28.3
10°-20°	1779.8	45.5
20°-30°	769.1	19.7
30°-40°	175.3	4.5
40°-50°	60.2	1.5
50°-60°	14.7	0.4
60°-70°	3.8	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°	3653.9	93.5
0°-40°	3829.2	98.0
0°-60°	3904.1	99.9
0°-90°	3908.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3908.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12567	12567	12567	12567	12567	
5°	12160	12148	12146	12171	12160	1106
15°	6663	6583	6627	6606	6594	1784
25°	1566	1625	1766	1584	1534	750
35°	263	268	252	250	211	178
45°	69	86	86	86	70	49
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	12567.1	12567.1	12567.1	12567.1	12567.1
2.5°	12483.8	12475.2	12480.1	12486.3	12488.7
5°	12159.9	12148.2	12145.7	12171.0	12160.5
7.5°	11506.5	11489.8	11464.5	11521.9	11575.6
10°	10411.9	10393.4	10338.5	10365.6	10409.4
12.5°	8796.0	8736.1	8734.9	8821.3	8809.6
15°	6663.0	6582.8	6627.2	6605.6	6593.9
17.5°	4480.7	4449.8	4509.1	4491.2	4414.0
20°	3223.2	3231.2	3344.2	3287.4	3218.9
22.5°	2352.0	2381.0	2514.9	2368.7	2315.0
25°	1566.0	1625.2	1765.9	1583.8	1533.9
27.5°	963.1	990.3	1132.8	950.8	923.7
30°	599.1	585.5	652.8	560.2	522.0
32.5°	393.0	375.8	397.3	356.6	325.8
35°	262.8	268.4	251.7	249.9	211.0
37.5°	164.1	188.8	166.6	177.7	135.7
40°	106.1	137.0	117.8	130.2	100.0
42.5°	87.0	105.5	96.9	103.0	88.8
45°	69.1	85.8	85.8	85.8	69.7
47.5°	38.3	57.4	73.4	58.6	40.7
50°	21.6	29.0	56.8	30.2	22.8
52.5°	14.8	16.7	38.9	17.3	15.4
55°	11.1	11.7	21.0	12.3	11.7
57.5°	8.6	9.3	11.1	9.3	8.6
60°	6.8	6.8	8.0	7.4	6.8
62.5°	4.9	4.9	5.6	4.9	4.9
65°	3.7	3.7	3.7	3.7	3.7
67.5°	1.9	2.5	2.5	2.5	2.5
70°	1.9	1.2	1.2	1.2	1.9
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



Report Generated By 670245859 / DESKTOP-T8S5UU9





— 0°-180° - - 45°-225° - - - 90°-270°







(END OF REPORT)