

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: P781487

Luminaire Tested: LER4D45BD010-EC4DR3040509040-4LBS1MW

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P781487
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-EC4DR3040509040-4LBS1MW
Description: 4 INCH ROUND SHALLOW MATTE WHITE TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4259.1 lumens
Efficiency: N/A
Efficacy: 110.1 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

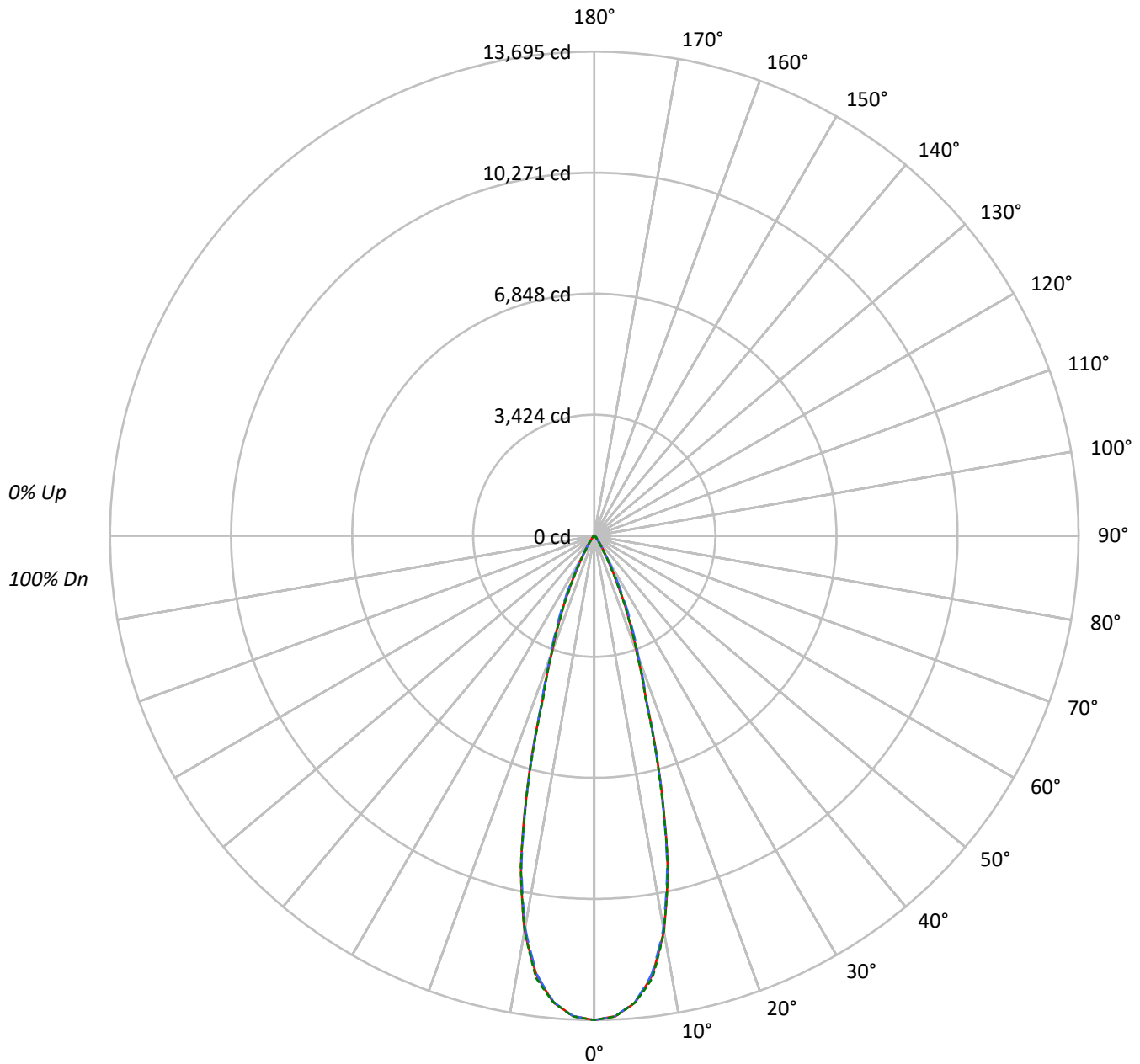


Downlight

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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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	115	113	111	109	112	110	109	107	106	105	104	103	102	101	99	99	98
2	111	107	104	101	109	105	102	100	102	100	98	99	97	96	97	95	94
3	107	102	98	95	105	101	97	94	98	95	93	96	93	91	94	92	90
4	103	98	93	90	102	96	93	90	94	91	89	93	90	88	91	89	87
5	100	94	89	86	98	93	89	86	91	88	85	90	86	84	88	86	83
6	97	90	85	82	95	89	85	82	88	84	81	87	83	81	85	83	80
7	94	87	82	79	92	86	82	79	85	81	78	84	81	78	83	80	78
8	91	84	79	76	90	83	79	76	82	78	76	81	78	75	80	77	75
9	88	81	76	73	87	80	76	73	80	76	73	79	75	73	78	75	73
10	85	78	74	71	85	78	74	71	77	73	71	76	73	71	76	73	70

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1048254	1048254	1048254
5°	1018159	1016975	1018212
10°	881882	875664	881672
15°	575387	572297	569420
20°	286113	296849	285731
25°	144125	162519	141169
30°	57706	62877	50273
35°	26762	25631	21492
40°	11551	12830	10881
45°	8151	10121	8227
50°	2798	7371	2965
55°	1615	3056	1708
60°	1133	1332	1133
65°	724	724	724
70°	448	291	448
75°	0	207	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 10121 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1204.3	28.3
10°-20°	1939.5	45.5
20°-30°	838.1	19.7
30°-40°	191.0	4.5
40°-50°	65.6	1.5
50°-60°	16.0	0.4
60°-70°	4.1	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°	3981.8	93.5
0°-40°	4172.8	98.0
0°-60°	4254.5	99.9
0°-90°	4259.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4259.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	13695	13695	13695	13695	13695	
5°	13251	13238	13236	13263	13252	1205
15°	7261	7174	7222	7198	7186	1944
25°	1706	1771	1924	1726	1672	817
35°	286	292	274	272	230	194
45°	75	94	94	94	76	53
55°	12	13	23	13	13	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	13694.9	13694.9	13694.9	13694.9	13694.9
2.5°	13604.1	13594.7	13600.1	13606.8	13609.5
5°	13251.1	13238.4	13235.7	13263.2	13251.8
7.5°	12539.1	12520.9	12493.4	12555.9	12614.4
10°	11346.3	11326.1	11266.3	11295.9	11343.6
12.5°	9585.4	9520.1	9518.8	9612.9	9600.2
15°	7261.0	7173.6	7222.0	7198.4	7185.7
17.5°	4882.8	4849.2	4913.7	4894.2	4810.2
20°	3512.5	3521.2	3644.3	3582.4	3507.8
22.5°	2563.1	2594.7	2740.6	2581.2	2522.7
25°	1706.5	1771.0	1924.3	1726.0	1671.5
27.5°	1049.6	1079.2	1234.5	1036.1	1006.5
30°	652.9	638.1	711.4	610.5	568.8
32.5°	428.3	409.5	433.0	388.6	355.0
35°	286.4	292.5	274.3	272.3	230.0
37.5°	178.9	205.7	181.5	193.6	147.9
40°	115.6	149.3	128.4	141.9	108.9
42.5°	94.8	115.0	105.6	112.3	96.8
45°	75.3	93.5	93.5	93.5	76.0
47.5°	41.7	62.5	80.0	63.9	44.4
50°	23.5	31.6	61.9	32.9	24.9
52.5°	16.1	18.2	42.4	18.8	16.8
55°	12.1	12.8	22.9	13.4	12.8
57.5°	9.4	10.1	12.1	10.1	9.4
60°	7.4	7.4	8.7	8.1	7.4
62.5°	5.4	5.4	6.1	5.4	5.4
65°	4.0	4.0	4.0	4.0	4.0
67.5°	2.0	2.7	2.7	2.7	2.7
70°	2.0	1.3	1.3	1.3	2.0
72.5°	1.3	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



Report Generated By 670245859 / DESKTOP-T8S5UU9





— 0°-180° - - 45°-225° - - - 90°-270°







(END OF REPORT)