

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: P781476

Luminaire Tested: LER4D45BD010-EC4DR3040509030-4LBS1B

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P781476
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-EC4DR3040509030-4LBS1B
Description: 4 INCH ROUND SHALLOW SPECULAR BLACK TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3971.5 lumens
Efficiency: N/A
Efficacy: 102.6 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

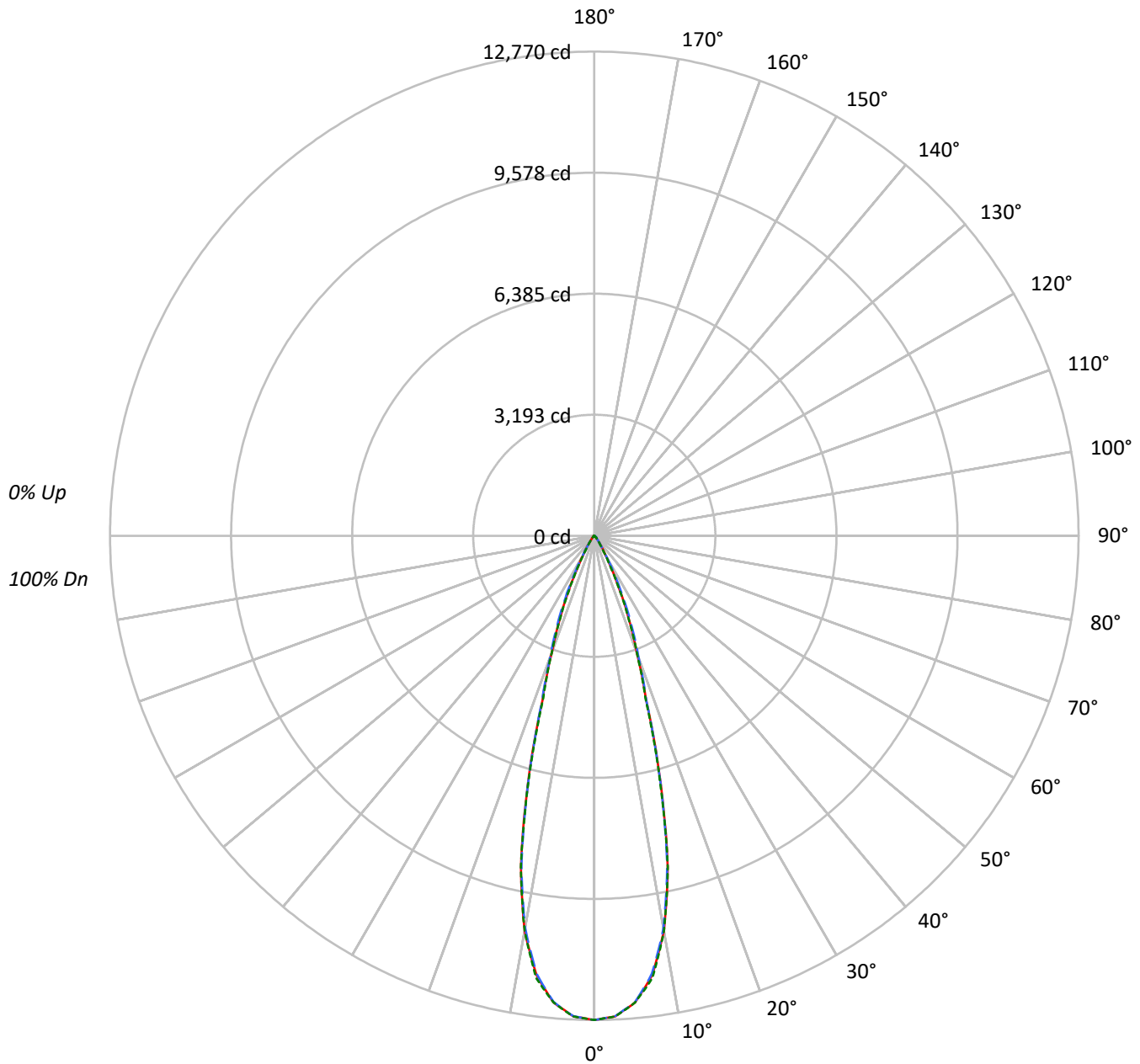


Downlight

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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°	977474	977474	977474
5°	949414	948307	949460
10°	822338	816539	822143
15°	536534	533650	530971
20°	266792	276803	266434
25°	134395	151548	131642
30°	53809	58626	46879
35°	24958	23903	20034
40°	10771	11970	10152
45°	7599	9428	7664
50°	2608	6871	2763
55°	1508	2842	1588
60°	1056	1255	1056
65°	688	688	688
70°	425	291	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: 9428 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1122.9	28.3
10°-20°	1808.5	45.5
20°-30°	781.5	19.7
30°-40°	178.1	4.5
40°-50°	61.2	1.5
50°-60°	14.9	0.4
60°-70°	3.9	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°	3713.0	93.5
0°-40°	3891.1	98.0
0°-60°	3967.2	99.9
0°-90°	3971.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3971.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12770	12770	12770	12770	12770	
5°	12356	12344	12342	12368	12357	1124
15°	6771	6689	6734	6712	6700	1813
25°	1591	1651	1794	1609	1559	762
35°	267	273	256	254	214	181
45°	70	87	87	87	71	50
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°	12770.2	12770.2	12770.2	12770.2	12770.2
2.5°	12685.5	12676.8	12681.8	12688.0	12690.6
5°	12356.4	12344.5	12342.0	12367.7	12357.0
7.5°	11692.4	11675.5	11649.8	11708.1	11762.6
10°	10580.2	10561.4	10505.6	10533.1	10577.7
12.5°	8938.1	8877.3	8876.1	8963.8	8951.9
15°	6770.7	6689.2	6734.3	6712.4	6700.5
17.5°	4553.1	4521.7	4581.9	4563.7	4485.4
20°	3275.3	3283.5	3398.2	3340.5	3270.9
22.5°	2390.0	2419.5	2555.5	2406.9	2352.4
25°	1591.3	1651.4	1794.4	1609.4	1558.7
27.5°	978.7	1006.3	1151.1	966.2	938.6
30°	608.8	595.0	663.3	569.3	530.4
32.5°	399.4	381.8	403.8	362.4	331.0
35°	267.1	272.7	255.8	253.9	214.4
37.5°	166.8	191.9	169.3	180.6	137.9
40°	107.8	139.2	119.8	132.3	101.6
42.5°	88.4	107.2	98.4	104.7	90.3
45°	70.2	87.1	87.1	87.1	70.8
47.5°	38.9	58.3	74.6	59.6	41.4
50°	21.9	29.5	57.7	30.7	23.2
52.5°	15.0	16.9	39.5	17.6	15.7
55°	11.3	11.9	21.3	12.5	11.9
57.5°	8.8	9.4	11.3	9.4	8.8
60°	6.9	6.9	8.2	7.5	6.9
62.5°	5.0	5.0	5.6	5.0	5.0
65°	3.8	3.8	3.8	3.8	3.8
67.5°	1.9	2.5	2.5	2.5	2.5
70°	1.9	1.3	1.3	1.3	1.9
72.5°	1.3	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)