

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: P781484

Luminaire Tested: LER4D45BD010-EC4DR3040509040-4LBS1B

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P781484
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-EC4DR3040509040-4LBS1B
Description: 4 INCH ROUND SHALLOW 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: 4200.9 lumens
Efficiency: N/A
Efficacy: 108.6 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 (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

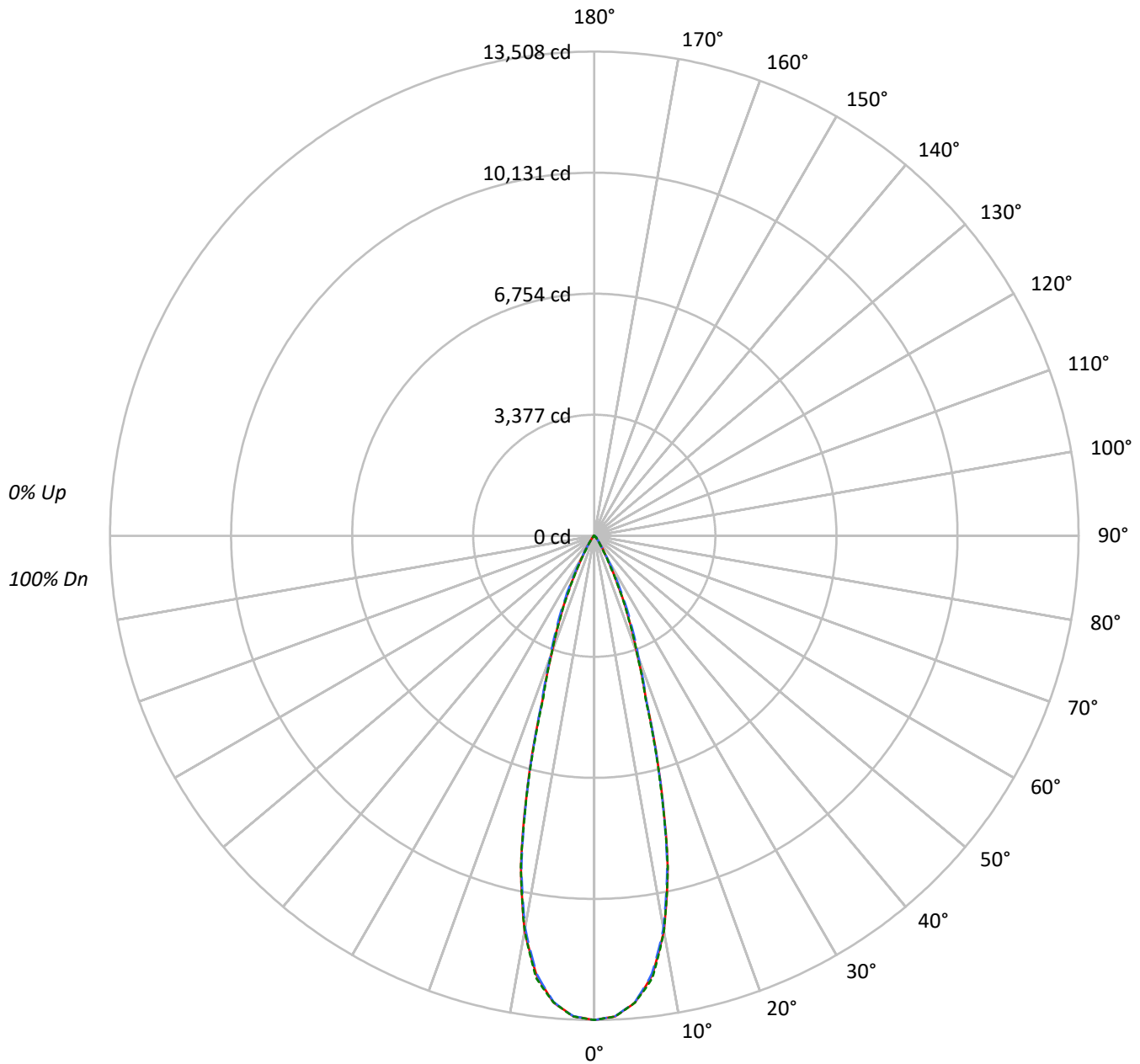


Downlight

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1033948	1033948	1033948
5°	1004267	1003091	1004320
10°	869850	863710	869641
15°	567534	564484	561647
20°	282204	292793	281829
25°	142157	160306	139243
30°	56920	62020	49593
35°	26397	25285	21193
40°	11401	12660	10731
45°	8043	9981	8108
50°	2763	7264	2917
55°	1588	3003	1681
60°	1118	1317	1118
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: 9981 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1187.8	28.3
10°-20°	1913.0	45.5
20°-30°	826.7	19.7
30°-40°	188.4	4.5
40°-50°	64.7	1.5
50°-60°	15.8	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°	3927.5	93.5
0°-40°	4115.9	98.0
0°-60°	4196.4	99.9
0°-90°	4200.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4200.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	13508	13508	13508	13508	13508	
5°	13070	13058	13055	13082	13071	1189
15°	7162	7076	7123	7100	7088	1918
25°	1683	1747	1898	1702	1649	806
35°	282	288	271	269	227	192
45°	74	92	92	92	75	53
55°	12	13	22	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°	13508.0	13508.0	13508.0	13508.0	13508.0
2.5°	13418.5	13409.2	13414.5	13421.1	13423.8
5°	13070.3	13057.7	13055.0	13082.2	13071.0
7.5°	12368.0	12350.1	12322.9	12384.6	12442.3
10°	11191.5	11171.6	11112.5	11141.7	11188.8
12.5°	9454.5	9390.2	9388.9	9481.7	9469.1
15°	7161.9	7075.7	7123.4	7100.2	7087.6
17.5°	4816.1	4783.0	4846.6	4827.4	4744.5
20°	3464.5	3473.2	3594.5	3533.5	3459.9
22.5°	2528.1	2559.3	2703.2	2546.0	2488.3
25°	1683.2	1746.9	1898.1	1702.4	1648.7
27.5°	1035.3	1064.4	1217.6	1022.0	992.8
30°	644.0	629.4	701.7	602.2	561.1
32.5°	422.5	403.9	427.1	383.3	350.2
35°	282.5	288.5	270.6	268.6	226.8
37.5°	176.4	202.9	179.1	191.0	145.9
40°	114.1	147.2	126.7	139.9	107.4
42.5°	93.5	113.4	104.1	110.8	95.5
45°	74.3	92.2	92.2	92.2	74.9
47.5°	41.1	61.7	78.9	63.0	43.8
50°	23.2	31.2	61.0	32.5	24.5
52.5°	15.9	17.9	41.8	18.6	16.6
55°	11.9	12.6	22.5	13.3	12.6
57.5°	9.3	9.9	11.9	9.9	9.3
60°	7.3	7.3	8.6	8.0	7.3
62.5°	5.3	5.3	6.0	5.3	5.3
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)