

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: P781488

Luminaire Tested: LER4D45BD010-EC4DR3040509050-4LBS1B

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P781488
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-EC4DR3040509050-4LBS1B
Description: 4 INCH ROUND SHALLOW SPECULAR BLACK TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4230.9 lumens
Efficiency: N/A
Efficacy: 109.3 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

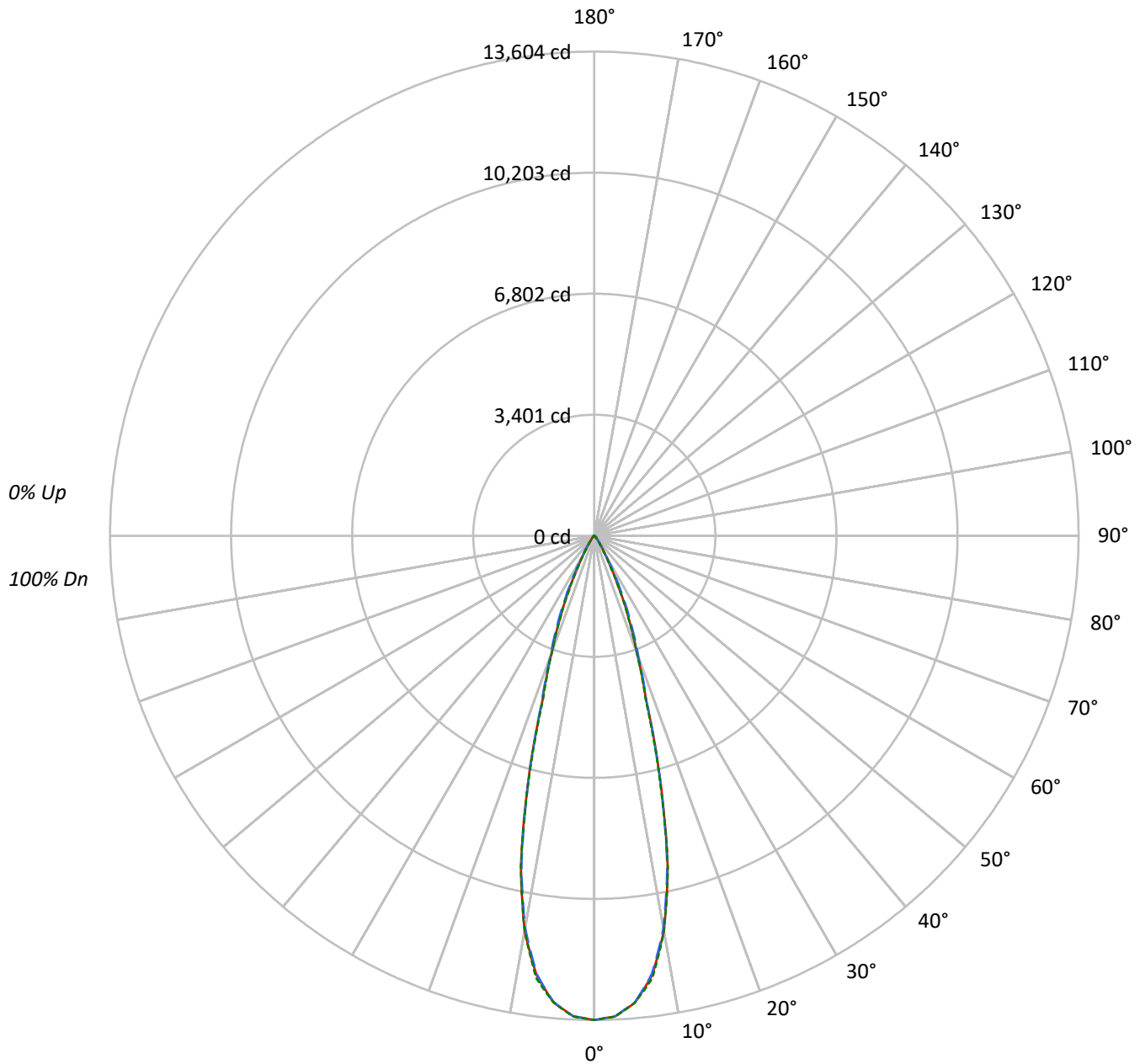


Downlight

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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°	1041335	1041335	1041335
5°	1011443	1010260	1011489
10°	876061	869881	875851
15°	571584	568517	565656
20°	284224	294886	283841
25°	143170	161447	140240
30°	57326	62461	49946
35°	26584	25463	21342
40°	11481	12750	10811
45°	8097	10045	8173
50°	2786	7323	2941
55°	1601	3029	1695
60°	1118	1332	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: 10045 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1196.3	28.3
10°-20°	1926.7	45.5
20°-30°	832.6	19.7
30°-40°	189.8	4.5
40°-50°	65.2	1.5
50°-60°	15.9	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°	3955.5	93.5
0°-40°	4145.3	98.0
0°-60°	4226.4	99.9
0°-90°	4230.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4230.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	13604	13604	13604	13604	13604	
5°	13164	13151	13148	13176	13164	1197
15°	7213	7126	7174	7151	7138	1931
25°	1695	1759	1912	1715	1660	811
35°	284	291	272	270	228	193
45°	75	93	93	93	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°	13604.5	13604.5	13604.5	13604.5	13604.5
2.5°	13514.3	13505.0	13510.3	13517.0	13519.7
5°	13163.7	13151.0	13148.3	13175.7	13164.3
7.5°	12456.3	12438.3	12410.9	12473.0	12531.1
10°	11271.4	11251.4	11191.9	11221.3	11268.7
12.5°	9522.1	9457.3	9456.0	9549.5	9536.8
15°	7213.0	7126.2	7174.3	7150.9	7138.2
17.5°	4850.5	4817.1	4881.3	4861.9	4778.4
20°	3489.3	3498.0	3620.2	3558.8	3484.6
22.5°	2546.2	2577.6	2722.5	2564.2	2506.1
25°	1695.2	1759.3	1911.6	1714.6	1660.5
27.5°	1042.6	1072.0	1226.3	1029.3	999.9
30°	648.6	633.9	706.7	606.5	565.1
32.5°	425.5	406.8	430.2	386.1	352.7
35°	284.5	290.6	272.5	270.5	228.4
37.5°	177.7	204.4	180.3	192.4	146.9
40°	114.9	148.3	127.6	140.9	108.2
42.5°	94.2	114.2	104.9	111.5	96.2
45°	74.8	92.8	92.8	92.8	75.5
47.5°	41.4	62.1	79.5	63.5	44.1
50°	23.4	31.4	61.5	32.7	24.7
52.5°	16.0	18.0	42.1	18.7	16.7
55°	12.0	12.7	22.7	13.4	12.7
57.5°	9.4	10.0	12.0	10.0	9.4
60°	7.3	7.3	8.7	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)