

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: P780194

Luminaire Tested: LER4D20D010-EC4DR3020359050-4LBS1LI

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P780194
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: LER4D20D010-EC4DR3020359050-4LBS1LI
Description: 4 INCH ROUND SHALLOW SPECULAR CLEAR TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2133.7 lumens
Efficiency: N/A
Efficacy: 92.4 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): 23.1
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



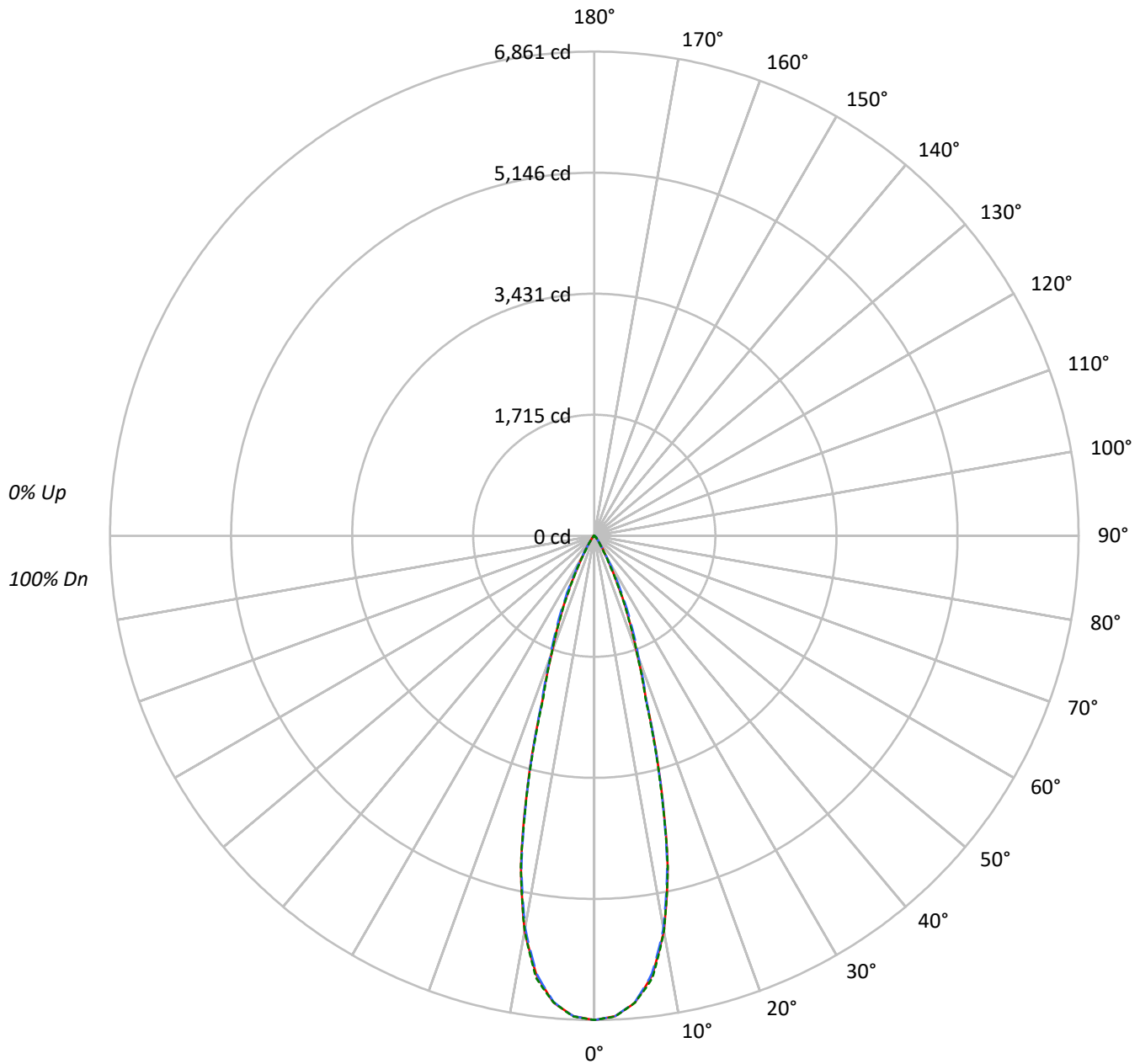
Downlight



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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°	525149	525149	525149
5°	510067	509475	510097
10°	441800	438683	441699
15°	288256	286703	285261
20°	143330	148714	143142
25°	72202	81416	70724
30°	28911	31500	25190
35°	13409	12848	10765
40°	5785	6425	5446
45°	4081	5066	4113
50°	1405	3691	1489
55°	814	1535	854
60°	566	674	566
65°	362	362	362
70°	224	157	224
75°	0	89	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 5066 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	603.3	28.3
10°-20°	971.6	45.5
20°-30°	419.9	19.7
30°-40°	95.7	4.5
40°-50°	32.9	1.5
50°-60°	8.0	0.4
60°-70°	2.1	0.1
70°-80°	0.2	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°	1994.8	93.5
0°-40°	2090.5	98.0
0°-60°	2131.4	99.9
0°-90°	2133.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2133.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6861	6861	6861	6861	6861	
5°	6638	6632	6631	6644	6639	604
15°	3638	3594	3618	3606	3600	974
25°	855	887	964	865	837	409
35°	144	146	138	136	115	97
45°	38	47	47	47	38	27
55°	6	6	12	7	6	6
65°	2	2	2	2	2	2
75°	0	0	0	0	0	0
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°	6860.8	6860.8	6860.8	6860.8	6860.8
2.5°	6815.3	6810.6	6813.3	6816.7	6818.0
5°	6638.4	6632.1	6630.7	6644.5	6638.8
7.5°	6281.8	6272.7	6258.9	6290.2	6319.5
10°	5684.2	5674.1	5644.1	5658.9	5682.9
12.5°	4802.0	4769.4	4768.7	4815.8	4809.4
15°	3637.6	3593.8	3618.0	3606.2	3599.8
17.5°	2446.2	2429.3	2461.6	2451.9	2409.8
20°	1759.6	1764.1	1825.7	1794.7	1757.3
22.5°	1284.0	1299.9	1373.0	1293.1	1263.8
25°	854.9	887.2	964.0	864.7	837.4
27.5°	525.8	540.6	618.4	519.1	504.3
30°	327.1	319.6	356.4	305.8	285.0
32.5°	214.6	205.1	216.9	194.7	177.8
35°	143.5	146.5	137.5	136.4	115.2
37.5°	89.6	103.1	90.9	97.0	74.1
40°	57.9	74.8	64.3	71.0	54.5
42.5°	47.5	57.6	52.9	56.3	48.5
45°	37.7	46.8	46.8	46.8	38.0
47.5°	20.9	31.3	40.1	32.0	22.2
50°	11.8	15.8	31.0	16.5	12.5
52.5°	8.1	9.1	21.2	9.5	8.4
55°	6.1	6.4	11.5	6.8	6.4
57.5°	4.7	5.0	6.1	5.0	4.7
60°	3.7	3.7	4.4	4.1	3.7
62.5°	2.7	2.7	3.0	2.7	2.7
65°	2.0	2.0	2.0	2.0	2.0
67.5°	1.0	1.4	1.4	1.4	1.4
70°	1.0	0.7	0.7	0.7	1.0
72.5°	0.7	0.3	0.3	0.3	0.3
75°	0.0	0.0	0.3	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)