

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: IRiS

Report Number: P1335064

Luminaire Tested: P3A02R309727DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335064
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R309727DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R30 optic, 2700K CCT AND, 97CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

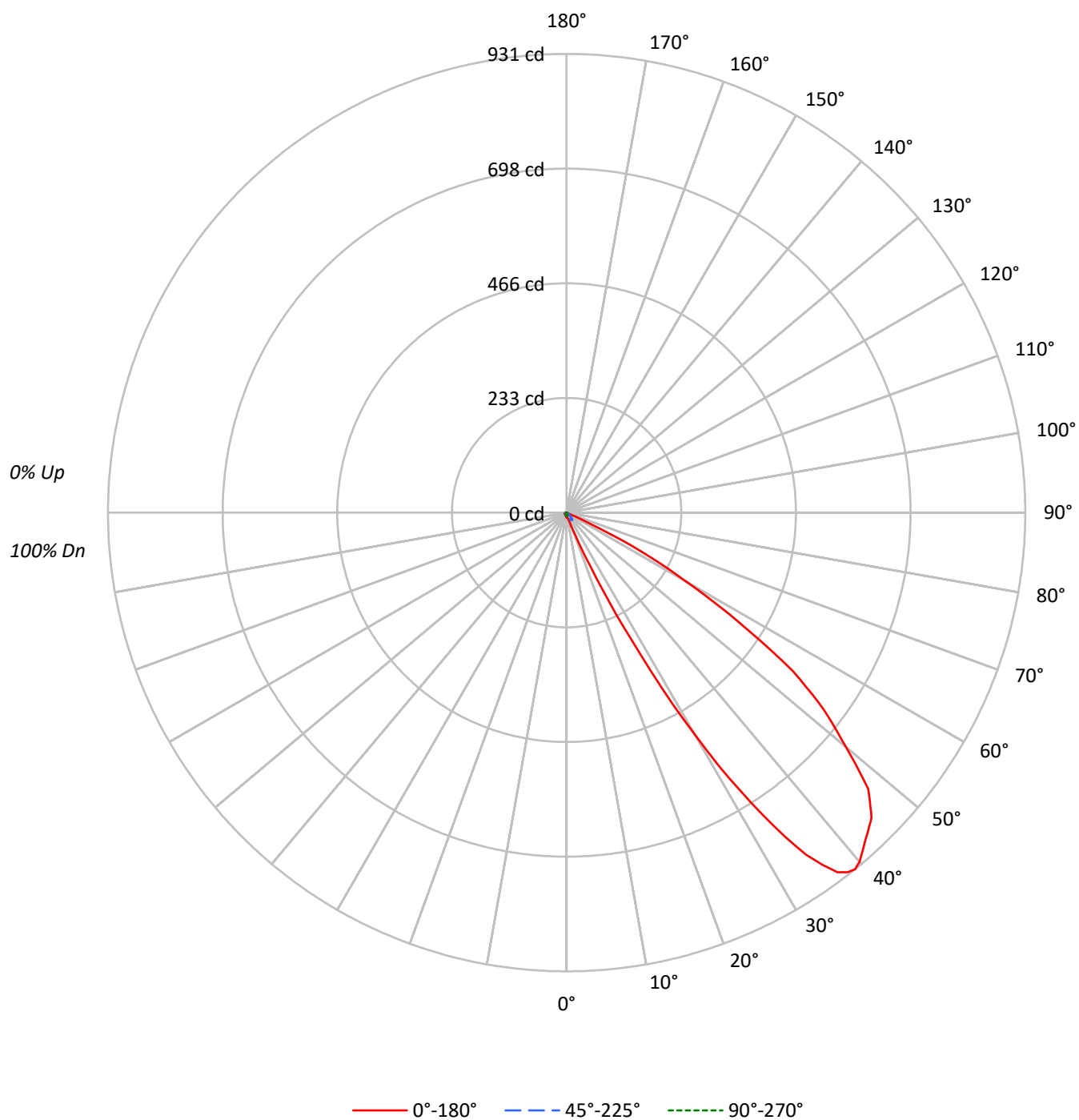
Lumens per Lamp: N/A
Luminaire Lumens: 242.0 lumens
Efficiency: N/A
Efficacy: 67.2 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 3.6
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

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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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	89	89	87
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	75	75	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	63	63	61
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	52	52	50
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	44	44	42
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	37	37	35
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	31	31	29
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26	26	26	24
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22	22	22	20
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19	19	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2061	2061	2061	2061	2061
5°	2201	2157	2025	1849	1805
10°	2405	2138	1781	1581	1536
15°	3519	2134	1476	1339	1385
20°	8844	2334	1143	1143	1283
25°	41083	2903	895	1040	1186
30°	130805	4026	684	987	1190
35°	226950	4899	535	937	1205
40°	264696	4895	401	945	1231
45°	271439	3473	434	1023	1333
50°	252444	1944	341	1058	1535
55°	214549	1032	382	1185	1720
60°	123894	263	439	1272	1886
65°	25269	0	519	1505	2127
70°	385	128	641	1731	2500
75°	339	169	678	1694	2965
80°	253	253	1010	2020	3410
85°	0	503	2013	2013	4026

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 271439 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.8	0.4
10°-20°	2.4	1.0
20°-30°	14.0	5.8
30°-40°	65.2	26.9
40°-50°	92.2	38.1
50°-60°	56.7	23.4
60°-70°	8.6	3.6
70°-80°	1.4	0.6
80°-90°	0.7	0.3
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°	17.2	7.1
0°-40°	82.4	34.1
0°-60°	231.3	95.6
0°-90°	242.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	242.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9	9	9	9	9	
5°	10	10	9	8	8	1
15°	16	9	6	6	6	6
25°	170	12	4	4	5	104
35°	848	18	2	4	4	509
45°	875	11	1	3	4	664
55°	561	3	1	3	4	478
65°	49	0	1	3	4	88
75°	0	0	1	2	4	0
85°	0	0	1	1	2	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
2.5°	9.6	9.6	9.8	9.8	9.6	9.8	9.8	9.8	9.4	9.2	8.8
5°	10.0	10.0	10.0	10.2	10.0	10.0	9.8	9.6	9.2	8.6	8.4
7.5°	10.4	10.4	10.2	10.4	10.2	10.2	9.8	9.4	8.8	8.2	7.7
10°	10.8	10.8	10.6	10.6	10.4	10.4	9.6	9.0	8.0	7.3	7.1
12.5°	12.0	12.0	11.8	11.6	11.2	11.0	9.4	8.4	7.1	6.5	6.3
15°	15.5	15.3	14.9	14.3	13.3	13.0	9.4	7.7	6.5	5.9	5.9
17.5°	21.2	21.0	20.4	18.8	16.9	16.3	9.4	6.9	5.7	5.3	5.3
20°	37.9	36.3	33.2	29.2	24.9	22.6	10.0	6.1	4.9	4.7	4.9
21°	49.5	47.9	44.0	37.3	29.8	27.3	10.4	5.9	4.7	4.5	4.9
22°	67.5	65.6	57.7	48.5	37.7	33.4	10.6	5.5	4.3	4.3	4.7
23°	94.2	91.1	77.7	63.0	47.1	41.0	11.0	5.3	4.1	4.3	4.5
24°	123.3	120.7	105.4	83.4	60.1	51.4	11.4	5.1	3.9	3.9	4.3
25°	169.8	166.7	139.6	105.2	76.2	61.8	12.0	4.7	3.7	3.7	4.3
26°	229.9	215.9	179.8	135.6	94.0	77.5	12.6	4.5	3.5	3.7	4.1
27°	287.0	275.4	234.8	173.9	116.2	95.2	13.5	4.3	3.3	3.5	4.1
28°	362.0	345.7	294.6	220.0	146.4	115.2	14.3	4.1	3.1	3.5	3.9
29°	446.0	423.2	361.4	271.7	180.4	137.6	15.1	3.9	2.9	3.3	3.9
30°	516.6	495.2	433.4	333.1	219.5	167.2	15.9	3.7	2.7	3.3	3.9
31°	599.3	566.9	492.1	385.1	253.2	196.7	16.7	3.3	2.4	3.1	3.7
32°	666.4	643.8	564.3	443.8	297.4	229.3	17.3	3.1	2.4	3.1	3.7
33°	731.2	700.8	624.0	500.0	337.4	262.8	17.9	2.9	2.2	2.9	3.7
34°	793.2	765.3	680.5	545.5	375.1	294.6	18.3	2.4	2.2	2.9	3.5
35°	847.8	815.4	730.2	589.9	413.8	323.5	18.3	2.2	2.0	2.7	3.5
36°	883.3	860.0	773.4	633.8	448.9	351.0	18.3	2.0	1.8	2.7	3.3
37°	913.7	886.5	808.1	667.4	474.8	373.0	18.3	1.8	1.8	2.7	3.3
38°	926.1	902.9	831.9	697.2	499.0	395.5	18.1	1.6	1.6	2.4	3.3
39°	931.0	910.2	849.9	718.6	517.0	410.6	17.7	1.4	1.6	2.4	3.3
40°	924.7	909.0	859.0	732.4	531.2	421.6	17.1	1.2	1.4	2.4	3.3
42.5°	898.6	888.2	857.0	746.3	543.5	429.7	14.9	0.8	1.4	2.2	3.3
45°	875.3	863.9	836.4	731.8	527.6	413.6	11.2	0.4	1.4	2.2	3.3
47.5°	830.3	823.1	801.5	694.9	492.7	377.3	8.0	0.2	1.2	2.0	3.1
50°	740.0	733.3	704.7	603.4	423.8	319.0	5.7	0.2	1.0	2.0	3.1
52.5°	659.0	651.9	610.9	501.7	325.5	233.8	3.7	0.2	1.0	2.0	3.1
55°	561.2	548.8	494.9	380.8	230.8	156.8	2.7	0.2	1.0	1.8	3.1
57.5°	415.4	397.3	349.2	259.7	132.9	85.0	1.4	0.2	1.0	1.8	3.1
60°	282.5	271.7	218.5	137.0	56.7	35.9	0.6	0.2	1.0	1.8	2.9
62.5°	171.2	157.6	109.9	58.3	24.5	16.3	0.0	0.4	1.0	1.8	2.9
65°	48.7	43.2	28.7	13.3	6.9	5.3	0.0	0.4	1.0	1.8	2.9
67.5°	1.6	1.6	1.6	1.4	1.0	1.0	0.2	0.4	1.0	1.8	2.7
70°	0.6	0.6	0.6	0.4	0.4	0.2	0.2	0.4	1.0	1.6	2.7
72.5°	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.4	0.8	1.4	2.4
75°	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.6	0.8	1.4	2.0
77.5°	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.6	0.8	1.2	2.0
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.8	1.2	1.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.2	0.2	0.2	0.0	0.0	0.0	0.2	0.6	0.8	0.8	1.2
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.8	0.6	0.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.6	0.6	0.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	9.4	9.4
2.5°	8.8	8.8
5°	8.2	8.2
7.5°	7.5	7.5
10°	6.9	6.9
12.5°	6.5	6.5
15°	5.9	6.1
17.5°	5.5	5.7
20°	5.3	5.5
21°	5.3	5.5
22°	5.1	5.3
23°	5.1	5.3
24°	4.9	5.1
25°	4.7	4.9
26°	4.7	4.9
27°	4.7	4.9
28°	4.5	4.9
29°	4.5	4.7
30°	4.5	4.7
31°	4.3	4.7
32°	4.3	4.7
33°	4.3	4.5
34°	4.1	4.5
35°	4.1	4.5
36°	4.1	4.5
37°	4.1	4.3
38°	4.1	4.5
39°	4.1	4.3
40°	4.1	4.3
42.5°	4.1	4.3
45°	4.1	4.3
47.5°	4.1	4.5
50°	4.1	4.5
52.5°	4.1	4.5
55°	4.1	4.5
57.5°	4.1	4.3
60°	4.1	4.3
62.5°	3.9	4.3
65°	3.9	4.1
67.5°	3.9	4.1
70°	3.7	3.9
72.5°	3.5	3.7
75°	3.1	3.5
77.5°	2.9	3.1
80°	2.4	2.7

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	2.0	2.0
85°	1.4	1.6
87.5°	0.8	0.8
90°	0.0	0.0

(END OF REPORT)