

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: P1335736

Luminaire Tested: P3A02R409727DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335736
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-78)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R409727DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R40 optic, 2700K CCT AND, 97CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

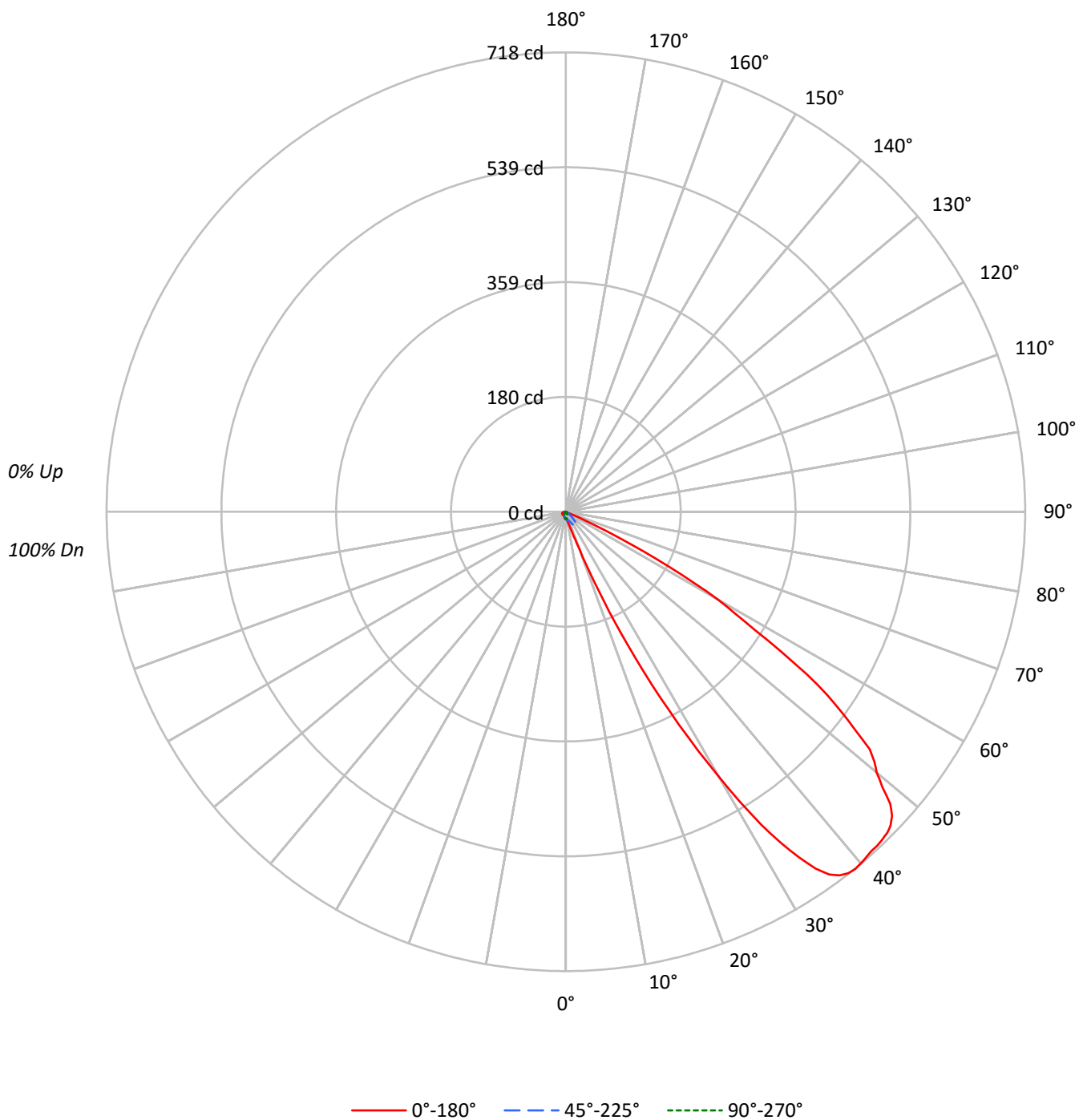
Lumens per Lamp: N/A
Luminaire Lumens: 222.0 lumens
Efficiency: N/A
Efficacy: 61.7 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.55
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
RCR																					
0	119	119	119	119		116	116	116	116		111	111	111		106	106	106		102	102	102
1	110	106	102	99		107	104	100	97		99	97	94		96	93	91		92	90	88
2	100	93	86	81		98	91	85	80		87	82	78		84	80	76		81	78	75
3	91	81	73	66		89	79	72	66		76	70	65		73	68	64		71	66	62
4	82	70	62	55		80	69	61	54		67	59	54		64	58	53		62	57	52
5	75	62	52	46		73	60	52	45		58	51	45		56	50	44		54	49	44
6	68	54	45	38		66	53	44	38		51	43	38		50	43	37		48	42	37
7	62	48	39	32		60	47	38	32		45	37	32		44	37	31		42	36	31
8	57	42	33	27		55	42	33	27		40	32	27		39	32	27		38	31	26
9	52	38	29	23		51	37	29	23		36	28	23		35	28	23		34	27	23
10	48	34	25	20		47	33	25	20		32	25	20		31	24	20		30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2500	2500	2500	2500	2500
5°	2773	2685	2465	2245	2201
10°	3362	2850	2271	2049	2004
15°	5516	3110	1952	1816	1862
20°	14561	3664	1610	1610	1750
25°	56132	4549	1282	1476	1718
30°	121107	6052	1038	1443	1696
35°	182272	7147	883	1419	1740
40°	205356	7185	773	1460	1861
45°	220209	5551	682	1520	2016
50°	216453	3480	614	1603	2217
55°	190426	1720	612	1797	2485
60°	120517	351	702	1974	2763
65°	24646	104	726	2127	3061
70°	513	128	769	2372	3526
75°	508	339	847	2626	3982
80°	505	253	1010	2778	4672
85°	503	503	2013	3019	5032

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 224201 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.1	0.5
10°-20°	3.5	1.6
20°-30°	17.2	7.8
30°-40°	56.1	25.3
40°-50°	77.3	34.8
50°-60°	53.9	24.3
60°-70°	10.2	4.6
70°-80°	1.8	0.8
80°-90°	0.8	0.4
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°	21.8	9.8
0°-40°	77.9	35.1
0°-60°	209.1	94.2
0°-90°	222.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	222.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	11	11	11	11	11	
5°	13	12	11	10	10	1
15°	24	14	9	8	8	9
25°	232	19	5	6	7	119
35°	681	27	3	5	6	411
45°	710	18	2	5	6	540
55°	498	4	2	5	6	426
65°	48	0	1	4	6	84
75°	1	0	1	3	5	1
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°	25°	30°	35°	45°	67.5°	90°
0°	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4
2.5°	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.6	11.4
5°	12.6	12.6	12.6	12.6	12.4	12.4	12.4	12.2	12.2	11.8	11.2
7.5°	13.5	13.5	13.5	13.5	13.3	13.0	12.8	12.8	12.6	11.6	10.8
10°	15.1	15.1	14.9	14.7	14.5	14.1	13.9	13.5	12.8	11.4	10.2
12.5°	18.3	17.9	17.7	17.3	16.7	15.9	15.1	14.5	13.0	11.0	9.6
15°	24.3	23.9	23.0	21.8	20.6	19.0	17.5	16.1	13.7	10.4	8.6
17.5°	34.7	33.4	32.2	30.2	27.1	24.3	21.2	18.6	14.5	9.8	7.7
20°	62.4	61.6	54.2	48.5	39.3	32.8	26.7	22.2	15.7	9.2	6.9
22.5°	128.6	120.1	108.1	88.5	68.9	50.8	36.9	27.9	16.9	8.4	6.1
25°	232.0	218.6	192.7	154.9	114.4	80.9	53.4	36.5	18.8	7.5	5.3
27.5°	351.3	337.6	297.5	245.5	179.2	122.1	76.2	48.3	21.2	6.7	4.7
30°	478.3	466.7	415.7	343.7	252.6	171.1	102.1	60.3	23.9	5.9	4.1
31°	529.5	514.6	459.5	382.9	287.1	191.2	112.5	65.4	24.9	5.7	3.9
32°	576.6	559.6	502.6	420.4	315.0	213.1	124.0	69.9	25.7	5.3	3.7
33°	617.1	597.4	542.3	455.9	345.8	233.4	135.8	74.2	26.3	4.9	3.5
34°	651.6	634.5	575.3	491.5	373.1	253.0	147.4	78.5	26.7	4.7	3.3
35°	680.9	665.5	606.9	518.7	399.8	272.0	158.0	82.6	26.7	4.3	3.3
36°	700.7	687.3	634.3	546.4	422.2	288.1	167.0	86.2	26.7	3.9	3.1
37°	711.5	698.5	652.2	569.2	444.2	304.0	175.1	89.1	26.5	3.7	2.9
38°	717.0	705.6	665.5	587.8	459.5	315.4	182.3	91.3	26.3	3.3	2.9
39°	718.5	708.9	673.8	601.2	474.4	326.8	187.4	92.6	25.7	3.1	2.7
40°	717.4	709.1	678.3	613.3	485.8	335.8	191.0	93.0	25.1	2.7	2.7
41°	715.4	708.9	681.6	621.6	495.0	341.5	192.5	92.2	24.3	2.2	2.4
42°	713.6	706.4	683.0	627.3	501.3	344.3	192.3	90.5	23.0	2.0	2.4
43°	713.6	705.4	683.2	631.0	504.4	344.6	189.8	87.5	21.4	1.8	2.2
44°	712.3	704.8	684.2	633.4	505.2	342.7	185.9	84.2	19.6	1.6	2.2
45°	710.1	702.1	684.0	633.6	503.8	338.2	179.6	79.9	17.9	1.2	2.2
46°	705.8	698.7	682.2	632.2	499.5	331.7	172.1	75.6	16.1	1.0	2.0
47°	697.3	691.8	677.3	627.3	493.0	322.1	163.1	70.7	14.7	0.8	2.0
48°	682.6	678.7	668.9	616.5	480.5	310.3	153.5	65.4	13.3	0.8	2.0
49°	655.7	652.6	646.9	599.2	464.6	295.8	143.1	59.5	11.8	0.6	2.0
50°	634.5	631.2	619.6	570.0	441.8	277.5	131.7	53.6	10.2	0.4	1.8
51°	620.4	615.1	596.7	536.2	408.6	253.0	119.3	47.7	8.6	0.4	1.8
52°	602.7	594.7	571.9	505.8	378.2	228.5	105.8	41.8	7.5	0.4	1.8
53°	565.6	562.7	540.1	473.2	347.8	205.1	91.9	36.9	6.5	0.4	1.8
54°	533.1	528.9	498.1	427.9	314.8	179.0	77.7	32.6	5.5	0.4	1.8
55°	498.1	489.7	462.4	389.8	276.0	154.9	64.0	28.1	4.5	0.4	1.6
56°	453.8	446.5	417.1	349.0	240.4	130.5	53.6	23.0	3.5	0.4	1.6
57°	400.0	393.3	370.6	298.9	203.3	106.6	43.6	18.6	2.7	0.4	1.6
58°	348.0	340.5	314.6	250.8	164.1	84.6	36.5	15.1	2.0	0.4	1.6
59°	308.1	297.9	264.4	210.6	128.4	64.2	29.0	12.0	1.4	0.4	1.6
60°	274.8	266.5	231.8	175.3	100.7	47.3	21.4	9.2	0.8	0.4	1.6
62.5°	159.2	157.0	125.8	90.3	47.5	22.0	10.6	4.3	0.4	0.6	1.6
65°	47.5	41.4	32.2	19.2	12.2	7.3	3.9	1.4	0.2	0.6	1.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	1.4	1.4	1.4	1.4	1.4	1.4	0.8	0.4	0.2	0.6	1.4
70°	0.8	0.6	0.6	0.6	0.6	0.4	0.4	0.2	0.2	0.6	1.2
72.5°	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.2	0.4	0.6	1.0
75°	0.6	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.4	0.6	1.0
77.5°	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.4	0.6	1.0
80°	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.8
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.8
85°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.6	0.6
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):

	112.5°	135°	157.5°	180°
0°	11.4	11.4	11.4	11.4
2.5°	11.0	10.8	10.6	10.6
5°	10.6	10.2	10.2	10.0
7.5°	10.0	9.6	9.6	9.6
10°	9.4	9.2	9.2	9.0
12.5°	8.6	8.6	8.6	8.6
15°	8.0	8.0	8.2	8.2
17.5°	7.1	7.3	7.7	8.0
20°	6.5	6.9	7.3	7.5
22.5°	6.1	6.5	7.1	7.3
25°	5.5	6.1	6.9	7.1
27.5°	5.1	5.9	6.5	6.9
30°	4.7	5.7	6.3	6.7
31°	4.7	5.5	6.3	6.7
32°	4.5	5.3	6.3	6.5
33°	4.5	5.3	6.3	6.5
34°	4.3	5.3	6.1	6.5
35°	4.3	5.3	6.1	6.5
36°	4.1	5.1	6.1	6.5
37°	4.1	5.1	6.1	6.5
38°	3.9	5.1	6.1	6.5
39°	3.9	5.1	6.1	6.5
40°	3.9	5.1	6.1	6.5
41°	3.7	5.1	6.1	6.5
42°	3.7	5.1	6.1	6.5
43°	3.7	4.9	6.1	6.5
44°	3.7	4.9	6.1	6.5
45°	3.5	4.9	6.1	6.5
46°	3.5	4.9	6.1	6.5
47°	3.5	4.9	6.1	6.5
48°	3.5	4.9	6.1	6.5
49°	3.5	4.9	6.1	6.5
50°	3.3	4.7	6.1	6.5
51°	3.3	4.7	6.1	6.5
52°	3.3	4.7	6.1	6.5
53°	3.3	4.7	6.1	6.5
54°	3.1	4.7	6.1	6.5
55°	3.1	4.7	6.1	6.5
56°	3.1	4.7	6.1	6.3
57°	3.1	4.7	5.9	6.3
58°	3.1	4.5	5.9	6.3
59°	3.1	4.5	5.9	6.3
60°	3.1	4.5	5.9	6.3
62.5°	2.9	4.5	5.7	6.1
65°	2.7	4.1	5.7	5.9



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	2.7	3.9	5.3	5.7
70°	2.4	3.7	5.1	5.5
72.5°	2.0	3.5	4.7	5.1
75°	1.8	3.1	4.3	4.7
77.5°	1.6	2.7	3.9	4.1
80°	1.4	2.2	3.3	3.7
82.5°	1.0	1.6	2.7	2.9
85°	0.8	1.2	1.8	2.0
87.5°	0.6	0.6	1.0	1.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)