

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: P1335704

Luminaire Tested: P3A02R409040DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335704
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: P3A02R409040DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R40 optic, 4000K CCT AND, 90CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

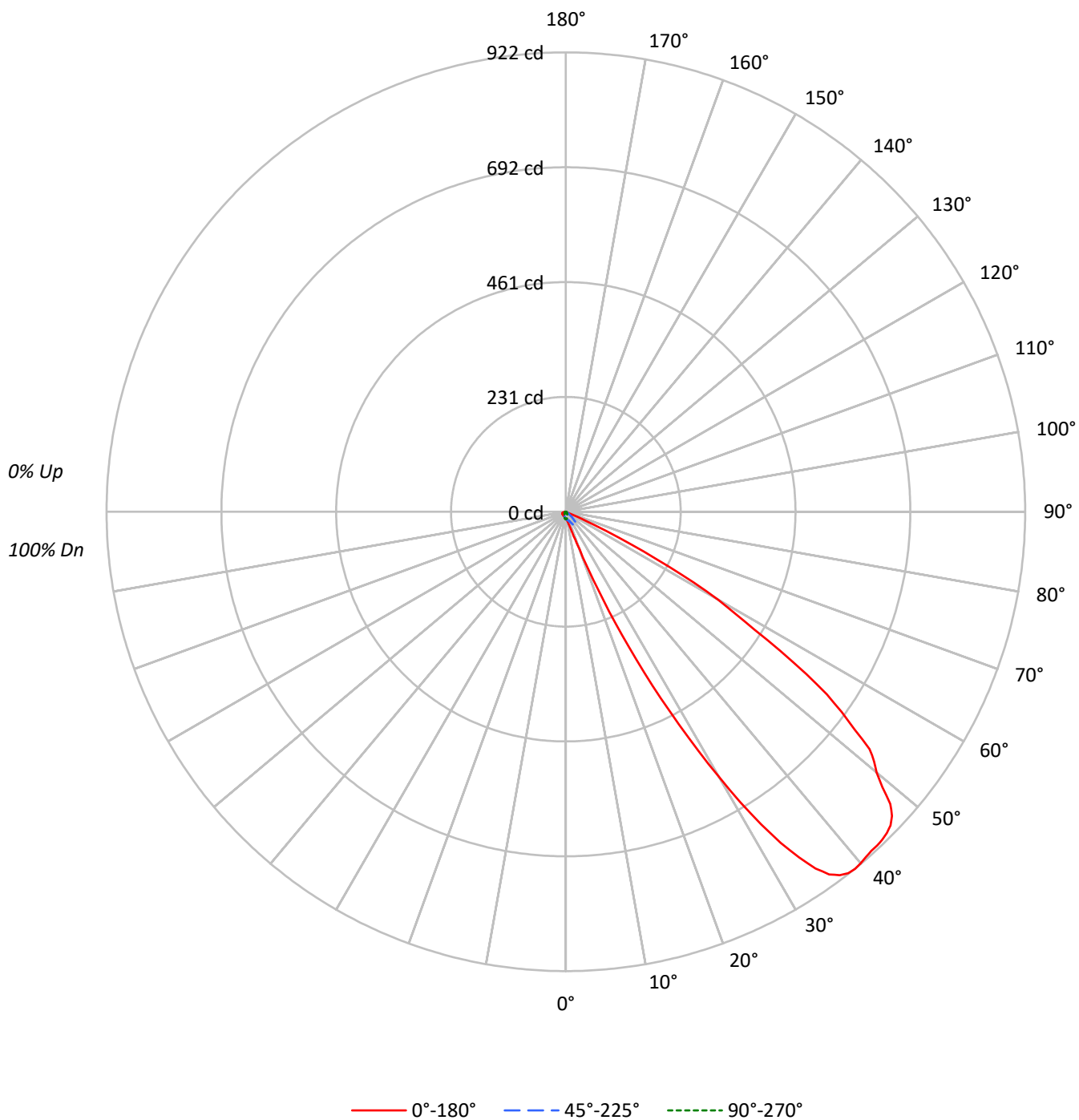
Lumens per Lamp: N/A
Luminaire Lumens: 285.0 lumens
Efficiency: N/A
Efficacy: 79.2 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	3223	3223	3223	3223	3223
5°	3566	3456	3170	2884	2818
10°	4320	3674	2917	2627	2561
15°	7060	3973	2497	2316	2384
20°	18692	4714	2077	2077	2264
25°	72077	5831	1645	1911	2226
30°	155467	7748	1317	1848	2178
35°	234017	9182	1124	1820	2249
40°	263637	9217	973	1861	2405
45°	282696	7133	899	1954	2605
50°	277859	4469	819	2047	2866
55°	244445	2217	803	2294	3211
60°	154724	439	921	2544	3552
65°	31651	156	934	2698	3943
70°	641	192	1026	3013	4552
75°	678	424	1101	3304	5083
80°	631	379	1263	3662	5935
85°	755	755	2516	4026	6542

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 287799 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.4	0.5
10°-20°	4.5	1.6
20°-30°	22.1	7.8
30°-40°	72.0	25.3
40°-50°	99.3	34.8
50°-60°	69.1	24.3
60°-70°	13.1	4.6
70°-80°	2.4	0.8
80°-90°	1.1	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°	28.0	9.8
0°-40°	100.0	35.1
0°-60°	268.4	94.2
0°-90°	285.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	285.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	15	15	15	15	15	
5°	16	16	14	13	13	2
15°	31	18	11	10	10	11
25°	298	24	7	8	9	153
35°	874	34	4	7	8	528
45°	912	23	3	6	8	693
55°	639	6	2	6	8	547
65°	61	0	2	5	8	108
75°	1	0	1	4	6	1
85°	0	0	1	2	3	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°	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7
2.5°	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	14.9	14.7
5°	16.2	16.2	16.2	16.2	16.0	16.0	16.0	15.7	15.7	15.2	14.4
7.5°	17.3	17.3	17.3	17.3	17.0	16.8	16.5	16.5	16.2	14.9	13.9
10°	19.4	19.4	19.1	18.8	18.6	18.1	17.8	17.3	16.5	14.7	13.1
12.5°	23.6	23.0	22.8	22.2	21.5	20.4	19.4	18.6	16.8	14.1	12.3
15°	31.1	30.6	29.6	28.0	26.4	24.3	22.5	20.7	17.5	13.3	11.0
17.5°	44.5	42.9	41.4	38.7	34.8	31.1	27.2	23.8	18.6	12.6	9.9
20°	80.1	79.0	69.6	62.3	50.5	42.1	34.3	28.5	20.2	11.8	8.9
22.5°	165.2	154.2	138.7	113.6	88.5	65.2	47.4	35.9	21.7	10.7	7.9
25°	297.9	280.6	247.3	198.9	146.8	103.9	68.6	46.9	24.1	9.7	6.8
27.5°	451.0	433.4	381.9	315.1	230.1	156.8	97.9	62.0	27.2	8.6	6.0
30°	614.0	599.1	533.7	441.3	324.3	219.6	131.1	77.5	30.6	7.6	5.2
31°	679.7	660.6	589.9	491.5	368.5	245.5	144.5	84.0	31.9	7.3	5.0
32°	740.2	718.5	645.2	539.7	404.4	273.5	159.1	89.8	33.0	6.8	4.7
33°	792.3	766.9	696.2	585.2	443.9	299.7	174.3	95.3	33.8	6.3	4.4
34°	836.5	814.5	738.6	631.0	479.0	324.8	189.2	100.8	34.3	6.0	4.2
35°	874.2	854.3	779.2	665.8	513.3	349.2	202.8	106.0	34.3	5.5	4.2
36°	899.6	882.3	814.3	701.4	542.0	369.8	214.4	110.7	34.3	5.0	3.9
37°	913.4	896.7	837.3	730.8	570.3	390.2	224.8	114.4	34.0	4.7	3.7
38°	920.5	905.9	854.3	754.6	589.9	404.9	234.0	117.3	33.8	4.2	3.7
39°	922.3	910.0	865.0	771.9	609.1	419.6	240.5	118.8	33.0	3.9	3.4
40°	921.0	910.3	870.8	787.3	623.7	431.1	245.2	119.4	32.2	3.4	3.4
41°	918.4	910.0	875.0	798.0	635.5	438.4	247.1	118.3	31.1	2.9	3.1
42°	916.1	906.9	876.8	805.4	643.6	442.1	246.8	116.2	29.6	2.6	3.1
43°	916.1	905.6	877.1	810.1	647.5	442.3	243.7	112.3	27.5	2.4	2.9
44°	914.5	904.8	878.4	813.2	648.6	440.0	238.7	108.1	25.1	2.1	2.9
45°	911.6	901.4	878.1	813.5	646.7	434.2	230.6	102.6	23.0	1.6	2.9
46°	906.1	897.0	875.8	811.6	641.2	425.8	220.9	97.1	20.7	1.3	2.6
47°	895.1	888.1	869.5	805.4	632.9	413.5	209.4	90.8	18.8	1.0	2.6
48°	876.3	871.3	858.7	791.5	616.9	398.4	197.1	84.0	17.0	1.0	2.6
49°	841.7	837.8	830.5	769.2	596.5	379.8	183.7	76.4	15.2	0.8	2.6
50°	814.5	810.3	795.4	731.8	567.2	356.2	169.1	68.8	13.1	0.5	2.4
51°	796.5	789.6	766.1	688.4	524.5	324.8	153.1	61.2	11.0	0.5	2.4
52°	773.7	763.5	734.2	649.4	485.5	293.4	135.8	53.7	9.7	0.5	2.4
53°	726.0	722.4	693.3	607.5	446.5	263.3	118.0	47.4	8.4	0.5	2.4
54°	684.4	678.9	639.4	549.4	404.1	229.8	99.7	41.9	7.1	0.5	2.4
55°	639.4	628.7	593.6	500.4	354.4	198.9	82.2	36.1	5.8	0.5	2.1
56°	582.6	573.2	535.5	448.1	308.6	167.5	68.8	29.6	4.4	0.5	2.1
57°	513.5	504.9	475.8	383.7	260.9	136.9	56.0	23.8	3.4	0.5	2.1
58°	446.8	437.1	403.9	321.9	210.7	108.6	46.9	19.4	2.6	0.5	2.1
59°	395.5	382.4	339.5	270.4	164.9	82.4	37.2	15.4	1.8	0.5	2.1
60°	352.8	342.1	297.6	225.1	129.3	60.7	27.5	11.8	1.0	0.5	2.1
62.5°	204.4	201.5	161.5	115.9	61.0	28.3	13.6	5.5	0.5	0.8	2.1
65°	61.0	53.1	41.4	24.6	15.7	9.4	5.0	1.8	0.3	0.8	1.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.0	0.5	0.3	0.8	1.8
70°	1.0	0.8	0.8	0.8	0.8	0.5	0.5	0.3	0.3	0.8	1.6
72.5°	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.3	0.5	0.8	1.3
75°	0.8	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.5	0.8	1.3
77.5°	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.5	0.8	1.3
80°	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.0
82.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.0
85°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.8	0.8
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°	14.7	14.7	14.7	14.7
2.5°	14.1	13.9	13.6	13.6
5°	13.6	13.1	13.1	12.8
7.5°	12.8	12.3	12.3	12.3
10°	12.0	11.8	11.8	11.5
12.5°	11.0	11.0	11.0	11.0
15°	10.2	10.2	10.5	10.5
17.5°	9.2	9.4	9.9	10.2
20°	8.4	8.9	9.4	9.7
22.5°	7.9	8.4	9.2	9.4
25°	7.1	7.9	8.9	9.2
27.5°	6.5	7.6	8.4	8.9
30°	6.0	7.3	8.1	8.6
31°	6.0	7.1	8.1	8.6
32°	5.8	6.8	8.1	8.4
33°	5.8	6.8	8.1	8.4
34°	5.5	6.8	7.9	8.4
35°	5.5	6.8	7.9	8.4
36°	5.2	6.5	7.9	8.4
37°	5.2	6.5	7.9	8.4
38°	5.0	6.5	7.9	8.4
39°	5.0	6.5	7.9	8.4
40°	5.0	6.5	7.9	8.4
41°	4.7	6.5	7.9	8.4
42°	4.7	6.5	7.9	8.4
43°	4.7	6.3	7.9	8.4
44°	4.7	6.3	7.9	8.4
45°	4.4	6.3	7.9	8.4
46°	4.4	6.3	7.9	8.4
47°	4.4	6.3	7.9	8.4
48°	4.4	6.3	7.9	8.4
49°	4.4	6.3	7.9	8.4
50°	4.2	6.0	7.9	8.4
51°	4.2	6.0	7.9	8.4
52°	4.2	6.0	7.9	8.4
53°	4.2	6.0	7.9	8.4
54°	3.9	6.0	7.9	8.4
55°	3.9	6.0	7.9	8.4
56°	3.9	6.0	7.9	8.1
57°	3.9	6.0	7.6	8.1
58°	3.9	5.8	7.6	8.1
59°	3.9	5.8	7.6	8.1
60°	3.9	5.8	7.6	8.1
62.5°	3.7	5.8	7.3	7.9
65°	3.4	5.2	7.3	7.6



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	3.4	5.0	6.8	7.3
70°	3.1	4.7	6.5	7.1
72.5°	2.6	4.4	6.0	6.5
75°	2.4	3.9	5.5	6.0
77.5°	2.1	3.4	5.0	5.2
80°	1.8	2.9	4.2	4.7
82.5°	1.3	2.1	3.4	3.7
85°	1.0	1.6	2.4	2.6
87.5°	0.8	0.8	1.3	1.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)