

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: P1344585

Luminaire Tested: P3A13R259835DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344585
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-75)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A13R259835DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 3500K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

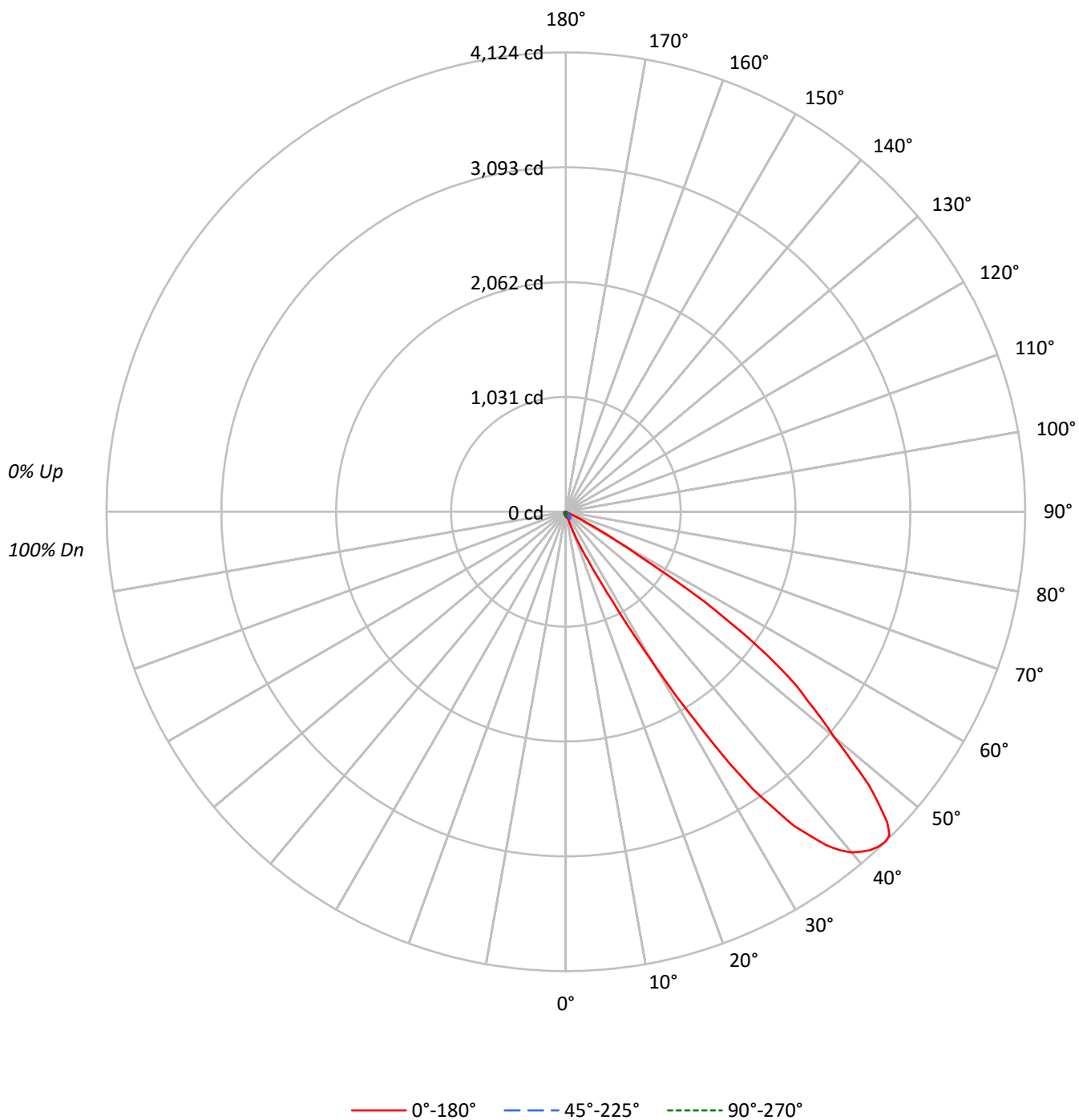
Lumens per Lamp: N/A
Luminaire Lumens: 860.0 lumens
Efficiency: N/A
Efficacy: 59.3 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.5
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	108	104	101	97	100	97	94	96	94	92	92	91	89
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37
7	62	48	39	32	60	47	39	32	46	38	32	44	37	32	43	36	32
8	57	43	34	27	55	42	33	27	40	33	27	39	32	27	38	32	27
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	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	9626	9626	9626	9626	9626
5°	10984	10500	9333	8320	8166
10°	10955	9953	7927	6903	6903
15°	12191	8581	6175	5834	6175
20°	43100	8471	4760	4947	5484
25°	123951	10815	3847	4573	5299
30°	395504	16661	3064	4406	5368
35°	866252	19649	2623	4256	5461
40°	1142712	17776	2176	4322	5840
45°	1274334	12435	2109	4683	6326
50°	1072681	6448	2081	4912	6959
55°	801998	2600	2026	5505	7799
60°	248270	658	1974	5964	8640
65°	21221	0	2335	6278	9443
70°	1475	513	2436	7309	10643
75°	1271	678	3219	7710	12200
80°	1010	1010	4799	8587	14396
85°	2013	2013	7548	9561	15347

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1274334 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.9	0.5
10°-20°	10.1	1.2
20°-30°	47.6	5.5
30°-40°	229.1	26.6
40°-50°	359.1	41.8
50°-60°	184.1	21.4
60°-70°	17.4	2.0
70°-80°	5.9	0.7
80°-90°	2.9	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°	61.6	7.2
0°-40°	290.7	33.8
0°-60°	833.9	97.0
0°-90°	860.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	860.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	44	44	44	44	44	
5°	50	48	42	38	37	5
15°	54	38	27	26	27	23
25°	512	45	16	19	22	318
35°	3236	73	10	16	20	1964
45°	4109	40	7	15	20	3007
55°	2098	7	5	14	20	1746
65°	41	0	4	12	18	128
75°	2	1	4	9	14	2
85°	1	1	3	4	6	1
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9
2.5°	47.7	47.7	47.7	47.7	47.7	47.7	46.9	46.9	47.7	46.9	46.9
5°	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.2	49.2	49.2	47.7
7.5°	50.7	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.2	49.2	46.9
10°	49.2	49.2	49.2	49.2	48.4	48.4	48.4	47.7	47.7	47.7	44.7
12.5°	49.2	49.2	49.2	49.2	48.4	48.4	47.7	47.7	46.9	46.2	40.9
15°	53.7	53.7	53.7	53.0	52.2	51.5	50.7	49.9	49.2	47.7	37.8
17.5°	78.7	76.4	75.7	72.7	68.9	65.1	62.1	59.0	56.0	53.7	36.3
20°	184.7	183.9	180.1	171.0	161.2	149.8	138.5	125.6	107.5	95.4	36.3
22.5°	320.1	315.6	308.8	302.0	284.5	264.1	242.9	218.7	195.2	170.3	38.6
25°	512.3	522.9	500.2	482.1	451.8	414.7	374.6	341.3	298.9	259.6	44.7
27.5°	890.7	897.5	852.9	793.9	723.5	645.5	569.9	513.1	442.0	376.9	56.0
30°	1562.0	1568.8	1493.9	1368.3	1223.0	1095.1	921.8	769.6	629.6	521.4	65.8
31°	1949.5	1896.5	1809.5	1687.6	1503.7	1310.7	1102.6	918.7	741.6	599.4	68.9
32°	2286.2	2281.7	2180.3	1995.6	1811.0	1572.6	1314.5	1074.6	857.4	678.1	71.1
33°	2683.5	2653.3	2510.2	2336.2	2091.7	1851.8	1518.9	1244.9	976.2	765.9	72.7
34°	3002.1	2920.4	2861.4	2662.4	2404.3	2098.6	1742.1	1425.0	1124.6	850.6	73.4
35°	3236.0	3218.6	3103.6	2918.1	2655.5	2343.0	1982.8	1611.9	1248.7	949.0	73.4
36°	3483.5	3429.7	3317.7	3149.7	2893.9	2570.8	2166.7	1773.9	1393.2	1037.5	72.7
37°	3638.6	3606.8	3495.6	3322.3	3071.8	2763.0	2372.5	1944.9	1508.3	1126.1	71.1
38°	3798.3	3734.0	3624.2	3458.5	3212.5	2922.7	2521.6	2076.6	1614.2	1204.0	68.9
39°	3908.8	3842.2	3730.2	3565.2	3324.5	3037.0	2639.6	2188.6	1706.5	1262.3	65.8
40°	3992.0	3927.7	3814.2	3644.7	3407.0	3127.0	2738.0	2287.7	1783.7	1313.0	62.1
41°	4043.5	3983.7	3870.9	3702.2	3463.8	3178.5	2802.4	2352.1	1835.9	1347.1	58.3
42°	4086.6	4025.3	3910.3	3737.7	3498.6	3222.4	2841.7	2392.9	1871.5	1364.5	55.2
43°	4110.8	4049.5	3937.5	3761.2	3519.8	3242.8	2862.9	2411.9	1883.6	1362.2	49.9
44°	4124.4	4060.9	3948.1	3771.8	3528.9	3248.1	2864.4	2408.1	1875.3	1344.0	45.4
45°	4109.3	4046.5	3937.5	3761.2	3513.0	3231.4	2849.3	2387.6	1843.5	1308.5	40.1
46°	4010.9	3962.5	3862.6	3700.7	3463.0	3189.1	2810.7	2348.3	1794.3	1264.6	34.1
47°	3837.6	3799.0	3702.2	3581.8	3366.9	3111.1	2739.5	2273.4	1725.5	1198.7	27.2
48°	3656.8	3600.0	3509.9	3386.6	3205.0	2971.1	2622.2	2163.6	1621.0	1112.5	24.2
49°	3389.6	3356.3	3276.9	3139.1	2988.5	2782.7	2456.5	2022.9	1493.1	1018.6	21.2
50°	3144.4	3121.7	3010.5	2909.1	2749.4	2557.2	2231.7	1837.5	1334.2	902.1	18.9
51°	2953.0	2925.7	2845.5	2719.1	2548.8	2325.6	2019.1	1596.8	1151.8	763.6	15.1
52°	2753.2	2738.0	2666.9	2536.7	2369.5	2147.0	1812.5	1392.5	974.7	645.5	12.1
53°	2589.7	2567.8	2480.7	2364.9	2184.1	1954.0	1588.5	1202.5	825.6	542.6	10.6
54°	2351.3	2342.2	2286.2	2165.1	1969.1	1718.6	1385.7	1012.6	688.7	460.1	9.1
55°	2097.8	2067.5	2010.8	1914.7	1734.5	1500.7	1151.1	839.3	557.0	387.5	6.8
56°	1789.0	1787.5	1686.1	1605.9	1446.2	1198.0	919.5	655.4	452.6	323.1	6.1
57°	1493.9	1446.2	1348.6	1269.1	1097.3	908.9	682.6	491.2	354.2	261.8	4.5
58°	1104.9	1079.9	1054.2	937.7	778.7	644.0	487.4	345.1	261.8	199.8	3.0
59°	750.0	749.2	718.9	630.4	538.8	401.1	304.2	234.6	180.1	146.8	2.3
60°	566.1	552.4	491.9	433.6	339.0	253.5	180.1	138.5	112.0	94.6	1.5
62.5°	198.3	205.8	180.9	149.8	114.3	93.8	71.9	58.3	47.7	38.6	0.0
65°	40.9	44.7	38.6	36.3	28.8	25.0	21.9	18.9	15.9	13.6	0.0



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	5.3	4.5	4.5	4.5	3.8	3.8	3.8	3.8	3.0	3.0	0.8
70°	2.3	2.3	2.3	2.3	2.3	2.3	1.5	1.5	1.5	1.5	0.8
72.5°	2.3	2.3	2.3	1.5	1.5	1.5	1.5	1.5	1.5	0.8	0.8
75°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.8	0.8	0.8	0.8
77.5°	1.5	1.5	1.5	1.5	1.5	1.5	0.8	0.8	0.8	0.8	0.8
80°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
82.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.5
85°	0.8	0.8	0.8	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	43.9	43.9	43.9	43.9	43.9	43.9
2.5°	46.2	44.7	42.4	41.6	40.9	40.9
5°	45.4	42.4	40.1	37.8	37.1	37.1
7.5°	43.1	39.4	36.3	34.8	34.1	33.3
10°	40.9	35.6	32.5	31.0	31.0	31.0
12.5°	36.3	31.8	28.8	28.0	28.8	28.8
15°	32.5	27.2	25.7	25.7	26.5	27.2
17.5°	28.0	24.2	22.7	23.5	24.2	25.0
20°	25.0	20.4	20.4	21.2	23.5	23.5
22.5°	21.9	18.2	18.2	20.4	21.9	22.7
25°	19.7	15.9	16.6	18.9	21.2	21.9
27.5°	16.6	13.6	15.1	18.2	20.4	21.2
30°	14.4	12.1	14.4	17.4	19.7	21.2
31°	13.6	11.4	14.4	16.6	19.7	21.2
32°	12.1	11.4	13.6	16.6	19.7	20.4
33°	11.4	10.6	13.6	16.6	19.7	20.4
34°	10.6	9.8	12.9	16.6	19.7	20.4
35°	9.1	9.8	12.9	15.9	18.9	20.4
36°	8.3	9.1	12.9	15.9	18.9	20.4
37°	7.6	9.1	12.1	15.9	18.9	20.4
38°	6.8	8.3	12.1	15.9	18.9	20.4
39°	6.1	8.3	11.4	15.9	18.9	20.4
40°	5.3	7.6	11.4	15.1	18.9	20.4
41°	5.3	7.6	11.4	15.1	18.9	20.4
42°	4.5	7.6	11.4	15.1	18.9	20.4
43°	3.8	6.8	11.4	15.1	18.9	20.4
44°	3.0	6.8	10.6	15.1	18.9	20.4
45°	3.0	6.8	10.6	15.1	18.9	20.4
46°	2.3	6.1	10.6	15.1	18.9	20.4
47°	1.5	6.1	10.6	14.4	18.9	20.4
48°	1.5	6.1	10.6	14.4	18.9	20.4
49°	1.5	6.1	9.8	14.4	18.9	20.4
50°	1.5	6.1	9.8	14.4	18.9	20.4
51°	0.8	5.3	9.8	14.4	18.9	20.4
52°	0.8	5.3	9.8	14.4	18.9	21.2
53°	0.8	5.3	9.8	14.4	18.9	20.4
54°	0.8	5.3	9.1	14.4	18.9	20.4
55°	0.8	5.3	9.1	14.4	18.9	20.4
56°	0.8	4.5	9.1	13.6	18.9	20.4
57°	1.5	4.5	9.1	13.6	18.9	19.7
58°	1.5	4.5	9.1	13.6	18.2	19.7
59°	1.5	4.5	9.1	13.6	18.2	19.7
60°	1.5	4.5	8.3	13.6	18.2	19.7
62.5°	1.5	4.5	8.3	12.9	17.4	18.9
65°	1.5	4.5	7.6	12.1	17.4	18.2



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.5	3.8	7.6	11.4	16.6	17.4
70°	2.3	3.8	6.8	11.4	15.9	16.6
72.5°	2.3	3.8	6.8	9.8	14.4	15.9
75°	2.3	3.8	6.1	9.1	13.6	14.4
77.5°	2.3	3.8	5.3	8.3	12.1	12.9
80°	3.0	3.8	4.5	6.8	10.6	11.4
82.5°	3.0	3.8	3.8	5.3	8.3	9.1
85°	2.3	3.0	3.0	3.8	5.3	6.1
87.5°	2.3	3.0	2.3	1.5	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)