

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: P1344518

Luminaire Tested: P3A13R259735DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344518
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: P3A13R259735DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R25 optic, 3500K CCT AND, 97CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

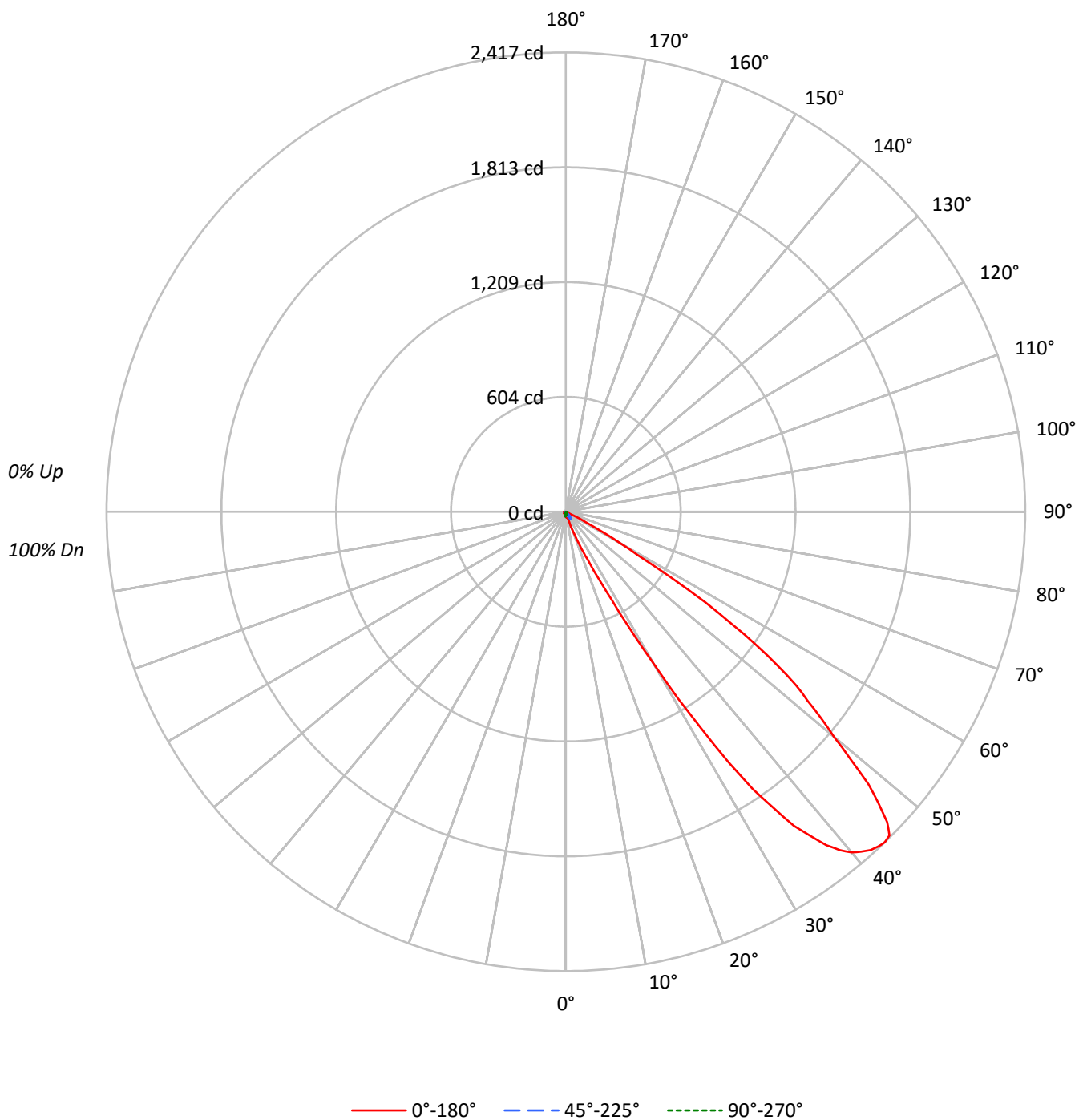
Lumens per Lamp: N/A
Luminaire Lumens: 504.0 lumens
Efficiency: N/A
Efficacy: 34.5 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.6
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	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°	5636	5636	5636	5636	5636
5°	6449	6141	5459	4887	4777
10°	6413	5834	4631	4052	4052
15°	7151	5040	3632	3428	3632
20°	25249	4970	2800	2894	3197
25°	72657	6339	2250	2686	3121
30°	231782	9774	1798	2583	3140
35°	507652	11511	1553	2490	3212
40°	669683	10420	1260	2548	3435
45°	746806	7288	1240	2760	3721
50°	628653	3787	1194	2866	4094
55°	470005	1529	1185	3211	4588
60°	145471	395	1184	3508	5043
65°	12401	0	1401	3684	5500
70°	833	256	1410	4296	6283
75°	763	339	1864	4490	7117
80°	505	505	2778	5051	8461
85°	1006	1006	4529	5535	8806

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 746806 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.3	0.5
10°-20°	5.9	1.2
20°-30°	27.9	5.5
30°-40°	134.3	26.6
40°-50°	210.4	41.8
50°-60°	107.9	21.4
60°-70°	10.2	2.0
70°-80°	3.4	0.7
80°-90°	1.7	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°	36.1	7.2
0°-40°	170.4	33.8
0°-60°	488.7	97.0
0°-90°	504.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	504.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	26	26	26	26	26	
5°	29	28	25	22	22	3
15°	32	22	16	15	16	13
25°	300	26	9	11	13	186
35°	1896	43	6	9	12	1151
45°	2408	24	4	9	12	1762
55°	1229	4	3	8	12	1023
65°	24	0	3	7	11	75
75°	1	0	2	5	8	1
85°	0	0	2	2	4	0
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°	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7
2.5°	27.9	27.9	27.9	27.9	27.9	27.9	27.5	27.5	27.9	27.5	27.5
5°	29.3	29.3	29.3	29.3	29.3	29.3	29.3	28.8	28.8	28.8	27.9
7.5°	29.7	29.3	29.3	29.3	29.3	29.3	29.3	29.3	28.8	28.8	27.5
10°	28.8	28.8	28.8	28.8	28.4	28.4	28.4	27.9	27.9	27.9	26.2
12.5°	28.8	28.8	28.8	28.8	28.4	28.4	27.9	27.9	27.5	27.1	23.9
15°	31.5	31.5	31.5	31.0	30.6	30.2	29.7	29.3	28.8	27.9	22.2
17.5°	46.1	44.8	44.4	42.6	40.4	38.1	36.4	34.6	32.8	31.5	21.3
20°	108.2	107.8	105.6	100.2	94.5	87.8	81.2	73.6	63.0	55.9	21.3
22.5°	187.6	184.9	181.0	177.0	166.8	154.8	142.4	128.2	114.4	99.8	22.6
25°	300.3	306.5	293.2	282.5	264.8	243.0	219.5	200.0	175.2	152.1	26.2
27.5°	522.0	526.0	499.8	465.2	424.0	378.3	334.0	300.7	259.0	220.9	32.8
30°	915.4	919.4	875.5	801.9	716.7	641.8	540.2	451.0	369.0	305.6	38.6
31°	1142.5	1111.4	1060.4	989.0	881.3	768.2	646.2	538.4	434.6	351.3	40.4
32°	1339.8	1337.2	1277.7	1169.5	1061.3	921.6	770.4	629.8	502.5	397.4	41.7
33°	1572.7	1554.9	1471.1	1369.1	1225.9	1085.3	890.1	729.6	572.1	448.8	42.6
34°	1759.4	1711.5	1676.9	1560.3	1409.0	1229.8	1021.0	835.1	659.1	498.5	43.0
35°	1896.4	1886.2	1818.8	1710.2	1556.3	1373.1	1162.0	944.7	731.8	556.2	43.0
36°	2041.5	2010.0	1944.3	1845.9	1696.0	1506.6	1269.8	1039.6	816.5	608.0	42.6
37°	2132.4	2113.8	2048.6	1947.0	1800.2	1619.2	1390.4	1139.8	883.9	659.9	41.7
38°	2226.0	2188.3	2124.0	2026.8	1882.7	1712.8	1477.8	1217.0	946.0	705.6	40.4
39°	2290.7	2251.7	2186.1	2089.4	1948.3	1779.8	1547.0	1282.6	1000.1	739.8	38.6
40°	2339.5	2301.8	2235.3	2135.9	1996.7	1832.6	1604.6	1340.7	1045.3	769.5	36.4
41°	2369.7	2334.6	2268.5	2169.6	2029.9	1862.7	1642.3	1378.4	1076.0	789.4	34.2
42°	2394.9	2359.0	2291.6	2190.5	2050.3	1888.5	1665.4	1402.4	1096.8	799.6	32.4
43°	2409.1	2373.2	2307.6	2204.2	2062.8	1900.4	1677.8	1413.5	1103.9	798.3	29.3
44°	2417.1	2379.9	2313.8	2210.4	2068.1	1903.5	1678.7	1411.2	1099.0	787.7	26.6
45°	2408.2	2371.4	2307.6	2204.2	2058.8	1893.8	1669.8	1399.3	1080.4	766.8	23.5
46°	2350.6	2322.2	2263.7	2168.8	2029.5	1868.9	1647.2	1376.2	1051.6	741.1	20.0
47°	2249.0	2226.4	2169.6	2099.1	1973.2	1823.3	1605.5	1332.3	1011.2	702.5	16.0
48°	2143.0	2109.8	2057.0	1984.7	1878.3	1741.2	1536.8	1268.0	950.0	652.0	14.2
49°	1986.5	1967.0	1920.4	1839.7	1751.4	1630.8	1439.6	1185.5	875.0	597.0	12.4
50°	1842.8	1829.5	1764.3	1704.8	1611.3	1498.6	1307.9	1076.8	781.9	528.7	11.1
51°	1730.6	1714.6	1667.6	1593.5	1493.7	1362.9	1183.3	935.8	675.0	447.5	8.9
52°	1613.5	1604.6	1562.9	1486.6	1388.6	1258.2	1062.2	816.1	571.2	378.3	7.1
53°	1517.7	1504.8	1453.8	1386.0	1280.0	1145.1	930.9	704.7	483.9	318.0	6.2
54°	1378.0	1372.7	1339.8	1268.9	1154.0	1007.2	812.1	593.4	403.6	269.7	5.3
55°	1229.4	1211.7	1178.4	1122.1	1016.5	879.5	674.6	491.9	326.4	227.1	4.0
56°	1048.5	1047.6	988.1	941.1	847.5	702.1	538.9	384.1	265.2	189.4	3.5
57°	875.5	847.5	790.3	743.8	643.1	532.7	400.0	287.8	207.6	153.5	2.7
58°	647.5	632.9	617.8	549.5	456.4	377.4	285.6	202.2	153.5	117.1	1.8
59°	439.5	439.1	421.3	369.4	315.8	235.1	178.3	137.5	105.6	86.0	1.3
60°	331.7	323.8	288.3	254.1	198.7	148.6	105.6	81.2	65.6	55.4	0.9
62.5°	116.2	120.6	106.0	87.8	67.0	55.0	42.1	34.2	27.9	22.6	0.0
65°	23.9	26.2	22.6	21.3	16.9	14.6	12.9	11.1	9.3	8.0	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°	3.1	2.7	2.7	2.7	2.2	2.2	2.2	2.2	1.8	1.8	0.4
70°	1.3	1.3	1.3	1.3	1.3	1.3	0.9	0.9	0.9	0.9	0.4
72.5°	1.3	1.3	1.3	0.9	0.9	0.9	0.9	0.9	0.9	0.4	0.4
75°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.4	0.4	0.4	0.4
77.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.4	0.4	0.4	0.4	0.4
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
82.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9
85°	0.4	0.4	0.4	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	25.7	25.7	25.7	25.7	25.7	25.7
2.5°	27.1	26.2	24.8	24.4	23.9	23.9
5°	26.6	24.8	23.5	22.2	21.7	21.7
7.5°	25.3	23.1	21.3	20.4	20.0	19.5
10°	23.9	20.8	19.1	18.2	18.2	18.2
12.5°	21.3	18.6	16.9	16.4	16.9	16.9
15°	19.1	16.0	15.1	15.1	15.5	16.0
17.5°	16.4	14.2	13.3	13.7	14.2	14.6
20°	14.6	12.0	12.0	12.4	13.7	13.7
22.5°	12.9	10.6	10.6	12.0	12.9	13.3
25°	11.5	9.3	9.8	11.1	12.4	12.9
27.5°	9.8	8.0	8.9	10.6	12.0	12.4
30°	8.4	7.1	8.4	10.2	11.5	12.4
31°	8.0	6.7	8.4	9.8	11.5	12.4
32°	7.1	6.7	8.0	9.8	11.5	12.0
33°	6.7	6.2	8.0	9.8	11.5	12.0
34°	6.2	5.8	7.5	9.8	11.5	12.0
35°	5.3	5.8	7.5	9.3	11.1	12.0
36°	4.9	5.3	7.5	9.3	11.1	12.0
37°	4.4	5.3	7.1	9.3	11.1	12.0
38°	4.0	4.9	7.1	9.3	11.1	12.0
39°	3.5	4.9	6.7	9.3	11.1	12.0
40°	3.1	4.4	6.7	8.9	11.1	12.0
41°	3.1	4.4	6.7	8.9	11.1	12.0
42°	2.7	4.4	6.7	8.9	11.1	12.0
43°	2.2	4.0	6.7	8.9	11.1	12.0
44°	1.8	4.0	6.2	8.9	11.1	12.0
45°	1.8	4.0	6.2	8.9	11.1	12.0
46°	1.3	3.5	6.2	8.9	11.1	12.0
47°	0.9	3.5	6.2	8.4	11.1	12.0
48°	0.9	3.5	6.2	8.4	11.1	12.0
49°	0.9	3.5	5.8	8.4	11.1	12.0
50°	0.9	3.5	5.8	8.4	11.1	12.0
51°	0.4	3.1	5.8	8.4	11.1	12.0
52°	0.4	3.1	5.8	8.4	11.1	12.4
53°	0.4	3.1	5.8	8.4	11.1	12.0
54°	0.4	3.1	5.3	8.4	11.1	12.0
55°	0.4	3.1	5.3	8.4	11.1	12.0
56°	0.4	2.7	5.3	8.0	11.1	12.0
57°	0.9	2.7	5.3	8.0	11.1	11.5
58°	0.9	2.7	5.3	8.0	10.6	11.5
59°	0.9	2.7	5.3	8.0	10.6	11.5
60°	0.9	2.7	4.9	8.0	10.6	11.5
62.5°	0.9	2.7	4.9	7.5	10.2	11.1
65°	0.9	2.7	4.4	7.1	10.2	10.6



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.9	2.2	4.4	6.7	9.8	10.2
70°	1.3	2.2	4.0	6.7	9.3	9.8
72.5°	1.3	2.2	4.0	5.8	8.4	9.3
75°	1.3	2.2	3.5	5.3	8.0	8.4
77.5°	1.3	2.2	3.1	4.9	7.1	7.5
80°	1.8	2.2	2.7	4.0	6.2	6.7
82.5°	1.8	2.2	2.2	3.1	4.9	5.3
85°	1.3	1.8	1.8	2.2	3.1	3.5
87.5°	1.3	1.8	1.3	0.9	1.8	1.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)