

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: P1344428

Luminaire Tested: P3A13R259030DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344428
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: P3A13R259030DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R25 optic, 3000K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

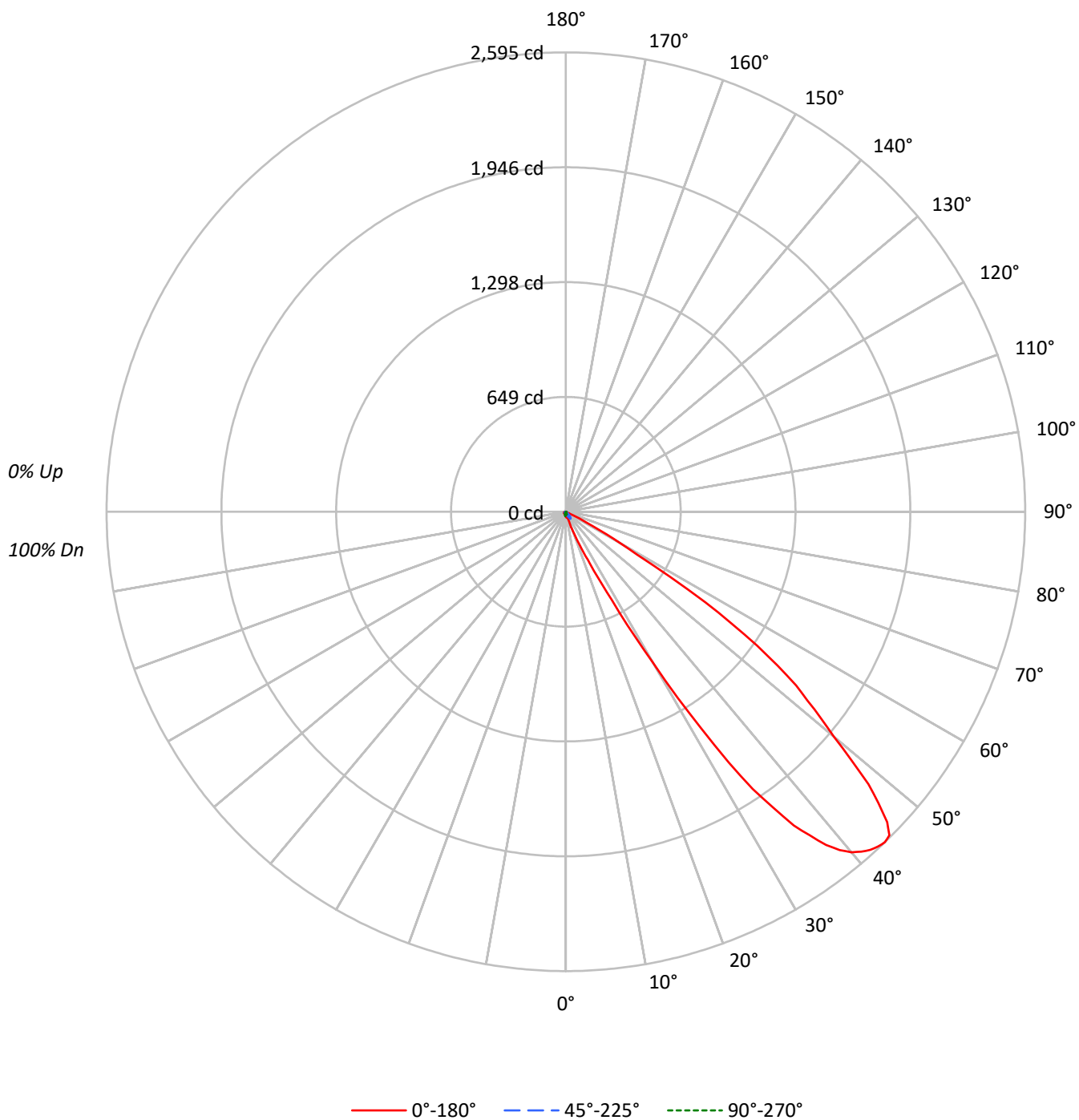
Lumens per Lamp: N/A
Luminaire Lumens: 541.0 lumens
Efficiency: N/A
Efficacy: 37.1 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.6
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	100		
1	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87		
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73		
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42		
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	39	32	46	38	32	44	37	32	43	36	32	29		
8	57	43	34	27	55	42	33	27	40	33	27	39	32	27	38	32	27	25		
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21		
10	48	34	25	20	47	33	25	20	32	25	20	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	6052	6052	6052	6052	6052
5°	6912	6604	5877	5239	5129
10°	6880	6257	4988	4342	4342
15°	7673	5403	3882	3678	3882
20°	27116	5344	3010	3104	3454
25°	77980	6799	2419	2879	3339
30°	248798	10483	1924	2760	3368
35°	544941	12367	1660	2677	3453
40°	718861	11164	1374	2719	3693
45°	801634	7815	1333	2946	4000
50°	674809	4060	1296	3070	4401
55°	504527	1644	1262	3441	4932
60°	156172	439	1272	3772	5438
65°	13335	0	1505	3943	5915
70°	898	321	1539	4552	6732
75°	847	424	2033	4829	7625
80°	631	631	3031	5430	8966
85°	1258	1258	4780	6038	9561

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 801634 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.5	0.5
10°-20°	6.4	1.2
20°-30°	29.9	5.5
30°-40°	144.1	26.6
40°-50°	225.9	41.8
50°-60°	115.8	21.4
60°-70°	10.9	2.0
70°-80°	3.7	0.7
80°-90°	1.8	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°	38.8	7.2
0°-40°	182.9	33.8
0°-60°	524.6	97.0
0°-90°	541.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	541.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	28	28	28	28	28	
5°	31	30	27	24	23	3
15°	34	24	17	16	17	14
25°	322	28	10	12	14	200
35°	2036	46	6	10	13	1236
45°	2585	25	4	10	13	1892
55°	1320	4	3	9	13	1099
65°	26	0	3	8	11	81
75°	1	0	2	6	9	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°	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6
2.5°	30.0	30.0	30.0	30.0	30.0	30.0	29.5	29.5	30.0	29.5	29.5
5°	31.4	31.4	31.4	31.4	31.4	31.4	31.4	30.9	30.9	30.9	30.0
7.5°	31.9	31.4	31.4	31.4	31.4	31.4	31.4	31.4	30.9	30.9	29.5
10°	30.9	30.9	30.9	30.9	30.5	30.5	30.5	30.0	30.0	30.0	28.1
12.5°	30.9	30.9	30.9	30.9	30.5	30.5	30.0	30.0	29.5	29.0	25.7
15°	33.8	33.8	33.8	33.3	32.8	32.4	31.9	31.4	30.9	30.0	23.8
17.5°	49.5	48.1	47.6	45.7	43.3	40.9	39.0	37.1	35.2	33.8	22.9
20°	116.2	115.7	113.3	107.6	101.4	94.3	87.1	79.0	67.6	60.0	22.9
22.5°	201.4	198.5	194.2	190.0	179.0	166.1	152.8	137.6	122.8	107.1	24.3
25°	322.3	329.0	314.7	303.3	284.2	260.9	235.7	214.7	188.0	163.3	28.1
27.5°	560.3	564.6	536.5	499.4	455.1	406.1	358.5	322.8	278.0	237.1	35.2
30°	982.6	986.9	939.8	860.7	769.3	688.9	579.8	484.2	396.1	328.0	41.4
31°	1226.3	1193.0	1138.3	1061.6	945.9	824.5	693.6	577.9	466.5	377.0	43.3
32°	1438.2	1435.3	1371.5	1255.4	1139.2	989.3	826.9	676.0	539.4	426.6	44.8
33°	1688.1	1669.1	1579.1	1469.6	1315.8	1164.9	955.5	783.1	614.1	481.8	45.7
34°	1888.6	1837.1	1800.0	1674.8	1512.5	1320.1	1095.9	896.4	707.4	535.1	46.2
35°	2035.7	2024.7	1952.4	1835.7	1670.5	1473.9	1247.3	1014.0	785.5	597.0	46.2
36°	2191.3	2157.5	2087.1	1981.4	1820.5	1617.2	1363.0	1115.9	876.4	652.7	45.7
37°	2288.9	2268.9	2199.0	2089.9	1932.4	1738.1	1492.5	1223.5	948.8	708.4	44.8
38°	2389.4	2348.9	2279.9	2175.6	2020.9	1838.6	1586.3	1306.3	1015.5	757.4	43.3
39°	2458.9	2417.0	2346.5	2242.8	2091.4	1910.5	1660.5	1376.8	1073.5	794.1	41.4
40°	2511.3	2470.8	2399.4	2292.7	2143.3	1967.1	1722.4	1439.2	1122.1	826.0	39.0
41°	2543.6	2506.0	2435.1	2328.9	2179.0	1999.5	1762.9	1479.6	1154.9	847.4	36.7
42°	2570.8	2532.2	2459.8	2351.3	2200.9	2027.1	1787.6	1505.3	1177.3	858.3	34.8
43°	2586.0	2547.4	2477.0	2366.1	2214.2	2039.9	1801.0	1517.2	1184.9	856.9	31.4
44°	2594.6	2554.6	2483.6	2372.7	2219.9	2043.3	1801.9	1514.8	1179.7	845.5	28.6
45°	2585.0	2545.5	2477.0	2366.1	2209.9	2032.8	1792.4	1502.0	1159.7	823.1	25.2
46°	2523.2	2492.7	2429.8	2328.0	2178.5	2006.1	1768.1	1477.2	1128.8	795.5	21.4
47°	2414.1	2389.9	2328.9	2253.2	2118.0	1957.1	1723.4	1430.1	1085.4	754.1	17.1
48°	2300.4	2264.7	2208.0	2130.4	2016.1	1869.0	1649.6	1361.1	1019.7	699.8	15.2
49°	2132.3	2111.4	2061.4	1974.7	1880.0	1750.5	1545.3	1272.5	939.3	640.8	13.3
50°	1978.1	1963.8	1893.8	1830.0	1729.6	1608.6	1403.9	1155.9	839.3	567.5	11.9
51°	1857.6	1840.5	1790.0	1710.5	1603.4	1463.0	1270.1	1004.5	724.6	480.4	9.5
52°	1731.9	1722.4	1677.7	1595.8	1490.6	1350.6	1140.2	876.0	613.2	406.1	7.6
53°	1629.1	1615.3	1560.5	1487.7	1373.9	1229.2	999.3	756.5	519.4	341.3	6.7
54°	1479.1	1473.4	1438.2	1362.0	1238.7	1081.1	871.7	637.0	433.2	289.4	5.7
55°	1319.7	1300.6	1264.9	1204.5	1091.1	944.0	724.1	528.0	350.4	243.7	4.3
56°	1125.4	1124.5	1060.7	1010.2	909.8	753.6	578.4	412.3	284.7	203.3	3.8
57°	939.8	909.8	848.4	798.4	690.3	571.8	429.4	309.0	222.8	164.7	2.9
58°	695.1	679.3	663.2	589.8	489.9	405.1	306.6	217.1	164.7	125.7	1.9
59°	471.8	471.3	452.3	396.6	339.0	252.3	191.4	147.6	113.3	92.4	1.4
60°	356.1	347.5	309.4	272.8	213.3	159.5	113.3	87.1	70.5	59.5	1.0
62.5°	124.7	129.5	113.8	94.3	71.9	59.0	45.2	36.7	30.0	24.3	0.0
65°	25.7	28.1	24.3	22.9	18.1	15.7	13.8	11.9	10.0	8.6	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°	3.3	2.9	2.9	2.9	2.4	2.4	2.4	2.4	1.9	1.9	0.5
70°	1.4	1.4	1.4	1.4	1.4	1.4	1.0	1.0	1.0	1.0	0.5
72.5°	1.4	1.4	1.4	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5
75°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
82.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0
85°	0.5	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
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°	27.6	27.6	27.6	27.6	27.6	27.6
2.5°	29.0	28.1	26.7	26.2	25.7	25.7
5°	28.6	26.7	25.2	23.8	23.3	23.3
7.5°	27.1	24.8	22.9	21.9	21.4	20.9
10°	25.7	22.4	20.5	19.5	19.5	19.5
12.5°	22.9	20.0	18.1	17.6	18.1	18.1
15°	20.5	17.1	16.2	16.2	16.7	17.1
17.5°	17.6	15.2	14.3	14.8	15.2	15.7
20°	15.7	12.9	12.9	13.3	14.8	14.8
22.5°	13.8	11.4	11.4	12.9	13.8	14.3
25°	12.4	10.0	10.5	11.9	13.3	13.8
27.5°	10.5	8.6	9.5	11.4	12.9	13.3
30°	9.0	7.6	9.0	10.9	12.4	13.3
31°	8.6	7.1	9.0	10.5	12.4	13.3
32°	7.6	7.1	8.6	10.5	12.4	12.9
33°	7.1	6.7	8.6	10.5	12.4	12.9
34°	6.7	6.2	8.1	10.5	12.4	12.9
35°	5.7	6.2	8.1	10.0	11.9	12.9
36°	5.2	5.7	8.1	10.0	11.9	12.9
37°	4.8	5.7	7.6	10.0	11.9	12.9
38°	4.3	5.2	7.6	10.0	11.9	12.9
39°	3.8	5.2	7.1	10.0	11.9	12.9
40°	3.3	4.8	7.1	9.5	11.9	12.9
41°	3.3	4.8	7.1	9.5	11.9	12.9
42°	2.9	4.8	7.1	9.5	11.9	12.9
43°	2.4	4.3	7.1	9.5	11.9	12.9
44°	1.9	4.3	6.7	9.5	11.9	12.9
45°	1.9	4.3	6.7	9.5	11.9	12.9
46°	1.4	3.8	6.7	9.5	11.9	12.9
47°	1.0	3.8	6.7	9.0	11.9	12.9
48°	1.0	3.8	6.7	9.0	11.9	12.9
49°	1.0	3.8	6.2	9.0	11.9	12.9
50°	1.0	3.8	6.2	9.0	11.9	12.9
51°	0.5	3.3	6.2	9.0	11.9	12.9
52°	0.5	3.3	6.2	9.0	11.9	13.3
53°	0.5	3.3	6.2	9.0	11.9	12.9
54°	0.5	3.3	5.7	9.0	11.9	12.9
55°	0.5	3.3	5.7	9.0	11.9	12.9
56°	0.5	2.9	5.7	8.6	11.9	12.9
57°	1.0	2.9	5.7	8.6	11.9	12.4
58°	1.0	2.9	5.7	8.6	11.4	12.4
59°	1.0	2.9	5.7	8.6	11.4	12.4
60°	1.0	2.9	5.2	8.6	11.4	12.4
62.5°	1.0	2.9	5.2	8.1	10.9	11.9
65°	1.0	2.9	4.8	7.6	10.9	11.4



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.0	2.4	4.8	7.1	10.5	10.9
70°	1.4	2.4	4.3	7.1	10.0	10.5
72.5°	1.4	2.4	4.3	6.2	9.0	10.0
75°	1.4	2.4	3.8	5.7	8.6	9.0
77.5°	1.4	2.4	3.3	5.2	7.6	8.1
80°	1.9	2.4	2.9	4.3	6.7	7.1
82.5°	1.9	2.4	2.4	3.3	5.2	5.7
85°	1.4	1.9	1.9	2.4	3.3	3.8
87.5°	1.4	1.9	1.4	1.0	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)