

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: P1345538

Luminaire Tested: P3A13R359735DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1345538
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-77)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A13R359735DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R35 optic, 3500K CCT AND, 97CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

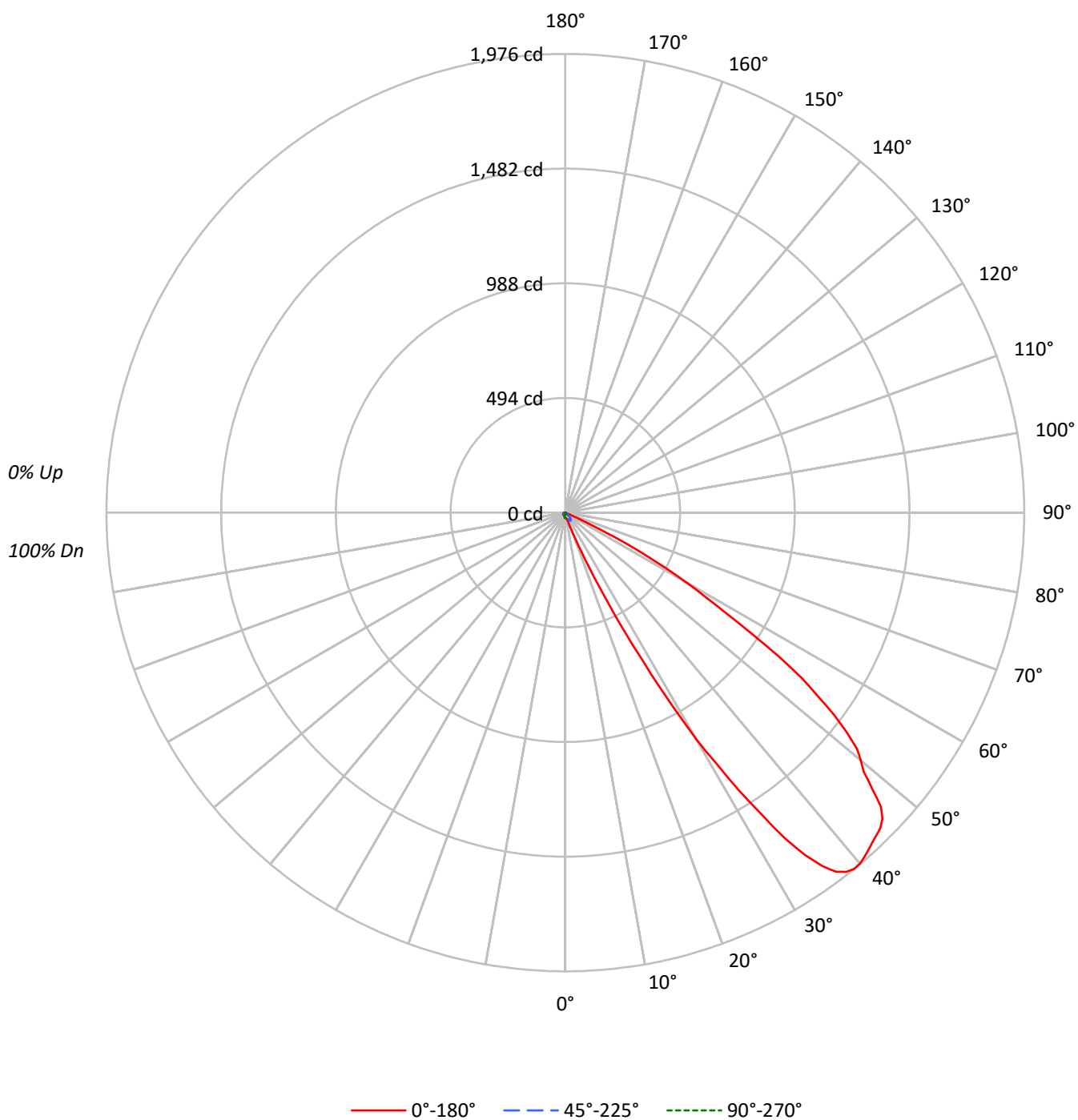
Lumens per Lamp: N/A
Luminaire Lumens: 492.0 lumens
Efficiency: N/A
Efficacy: 33.7 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	102	102	100
1	110	106	102	99	107	104	100	97	100	97	94	96	93	91	92	90	89	89	89	87
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	75	75	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	63	63	61
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	52	52	50
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44	44	44	42
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	37	37	35
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31	31	31	29
8	57	42	33	27	55	41	33	27	40	32	27	39	32	26	38	31	26	26	26	24
9	52	38	29	23	50	37	29	23	36	28	23	35	28	22	34	27	22	22	22	20
10	48	34	25	19	46	33	25	19	32	25	19	31	24	19	30	24	19	19	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	4978	4978	4978	4978	4978
5°	5371	5283	4887	4402	4292
10°	5633	5144	4342	3763	3763
15°	8059	5040	3519	3224	3337
20°	20208	5390	2800	2800	3104
25°	93804	6871	2153	2589	2903
30°	285183	9343	1696	2355	2912
35°	481980	10815	1419	2249	2864
40°	564973	10677	1145	2290	3063
45°	595007	7567	961	2481	3318
50°	566361	4537	921	2593	3650
55°	474592	1873	1032	2906	4244
60°	265680	395	1184	3333	4693
65°	45867	208	1141	3684	5292
70°	833	256	1410	3975	5963
75°	763	339	1864	4490	6778
80°	505	505	2273	5051	7829
85°	0	1006	4529	5535	9057

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 599199 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.0	0.4
10°-20°	5.8	1.2
20°-30°	30.2	6.1
30°-40°	130.4	26.5
40°-50°	186.0	37.8
50°-60°	115.2	23.4
60°-70°	17.5	3.6
70°-80°	3.3	0.7
80°-90°	1.6	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°	38.0	7.7
0°-40°	168.4	34.2
0°-60°	469.6	95.4
0°-90°	492.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	492.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	23	23	23	23	23	
5°	24	24	22	20	20	2
15°	36	22	16	14	15	13
25°	388	28	9	11	12	232
35°	1800	40	5	8	11	1081
45°	1919	24	3	8	11	1450
55°	1241	5	3	8	11	1057
65°	88	0	2	7	10	181
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°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
2.5°	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	22.7	22.2
5°	24.4	24.4	24.0	24.0	24.0	24.0	24.0	24.0	23.1	22.2	20.9
7.5°	24.9	24.9	24.4	24.4	24.4	24.4	24.0	23.5	22.7	20.9	19.5
10°	25.3	25.3	25.3	25.3	24.9	24.4	24.0	23.1	21.8	19.5	18.2
12.5°	28.4	28.4	28.0	27.1	26.2	25.3	24.4	22.7	20.0	17.8	16.4
15°	35.5	35.1	34.2	32.9	31.1	28.9	27.1	22.2	18.2	15.5	14.7
17.5°	49.7	48.9	47.5	43.1	39.1	35.1	31.5	22.2	16.4	13.8	12.9
20°	86.6	87.1	77.7	67.1	58.2	48.4	39.5	23.1	14.7	12.0	11.5
22.5°	180.8	173.7	151.5	125.7	95.9	74.2	56.0	25.3	12.9	10.2	10.2
25°	387.7	360.6	306.9	231.8	163.4	115.9	81.3	28.4	11.5	8.9	9.3
27.5°	708.0	683.5	575.6	433.5	287.8	175.0	110.1	32.4	10.2	7.6	8.4
30°	1126.3	1058.8	918.0	710.6	481.0	267.8	147.9	36.9	8.4	6.7	8.0
31°	1256.9	1225.8	1054.4	822.1	563.6	318.0	163.9	38.2	8.0	6.7	7.6
32°	1411.9	1356.8	1203.2	944.2	647.5	362.9	183.0	39.5	7.6	5.8	7.6
33°	1550.5	1497.2	1310.2	1051.7	732.4	413.9	203.4	40.0	6.7	5.8	7.1
34°	1696.2	1623.3	1438.1	1164.1	819.4	469.0	222.1	40.4	6.2	5.3	7.1
35°	1800.5	1727.7	1548.3	1252.9	894.5	517.9	243.4	40.4	5.8	5.3	6.7
36°	1881.4	1817.4	1643.3	1344.4	969.1	561.8	260.3	40.4	4.9	4.9	6.7
37°	1936.9	1876.0	1707.3	1423.0	1026.0	600.9	275.4	40.4	4.4	4.9	6.7
38°	1964.0	1913.3	1769.0	1480.3	1081.0	631.6	287.4	39.5	4.0	4.4	6.2
39°	1975.5	1934.2	1806.7	1528.7	1122.3	658.2	296.2	38.6	3.6	4.4	6.2
40°	1973.7	1937.8	1828.1	1562.0	1155.6	676.4	301.1	37.3	3.1	4.0	6.2
41°	1963.5	1932.4	1839.2	1590.4	1175.6	688.9	302.5	36.0	2.7	4.0	5.8
42°	1952.0	1923.6	1842.7	1605.5	1188.5	692.9	298.9	34.2	2.7	3.6	5.8
43°	1940.0	1913.8	1842.7	1610.4	1191.6	690.2	293.1	31.1	2.2	3.6	5.8
44°	1930.2	1905.3	1836.9	1609.1	1185.0	680.0	282.5	27.5	1.8	3.6	5.8
45°	1918.7	1894.2	1829.4	1600.7	1172.1	662.6	269.1	24.4	1.3	3.1	5.8
46°	1898.2	1879.1	1816.1	1583.3	1151.6	638.7	252.3	22.2	0.9	3.1	5.3
47°	1858.7	1842.3	1790.3	1557.6	1124.6	610.2	234.9	20.0	0.9	3.1	5.3
48°	1779.2	1778.8	1738.8	1509.6	1081.5	574.7	216.7	17.8	0.9	3.1	5.3
49°	1702.4	1694.4	1644.6	1425.2	1019.7	532.1	197.6	16.0	0.4	3.1	5.3
50°	1660.2	1642.9	1561.1	1325.7	940.7	473.0	177.2	13.3	0.4	2.7	5.3
51°	1616.2	1591.3	1495.0	1236.0	846.5	416.2	155.0	10.7	0.4	2.7	4.9
52°	1536.7	1513.2	1405.2	1150.3	755.0	358.0	133.7	8.9	0.4	2.7	5.3
53°	1451.0	1417.2	1300.0	1056.2	674.6	306.5	111.9	7.6	0.4	2.7	4.9
54°	1343.1	1328.0	1193.4	940.7	580.5	256.7	91.9	6.2	0.4	2.7	4.9
55°	1241.4	1219.2	1079.2	822.5	495.2	210.5	76.8	4.9	0.4	2.7	4.9
56°	1111.7	1078.4	947.3	714.2	408.6	169.7	64.8	4.0	0.4	2.7	4.9
57°	957.1	921.6	818.1	593.8	320.7	129.2	54.2	3.1	0.4	2.7	4.9
58°	809.7	779.0	668.0	458.3	241.6	89.7	44.9	2.2	0.4	2.2	4.9
59°	699.5	665.8	555.6	352.6	167.9	66.2	33.8	1.8	0.4	2.7	4.9
60°	605.8	562.3	447.2	273.1	119.9	47.5	24.9	0.9	0.9	2.7	4.9
62.5°	349.1	308.2	213.6	111.0	49.3	24.4	12.0	0.4	0.9	2.7	4.9
65°	88.4	78.6	51.1	24.0	13.8	8.4	4.4	0.4	0.9	2.2	4.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	3.1	3.1	3.1	2.7	2.2	1.8	0.9	0.4	0.9	2.2	4.4
70°	1.3	1.3	1.3	0.9	0.9	0.4	0.4	0.4	0.9	2.2	4.0
72.5°	0.9	0.9	0.9	0.9	0.4	0.4	0.4	0.4	1.3	2.2	3.6
75°	0.9	0.9	0.9	0.9	0.4	0.4	0.4	0.4	1.3	2.2	3.6
77.5°	0.9	0.9	0.4	0.4	0.4	0.4	0.4	0.4	1.3	1.8	3.1
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.3	1.8	2.7
82.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.3	1.8	2.2
85°	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.4	1.3	1.8	1.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.3	1.8	1.3
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):

	135°	157.5°	180°
0°	22.7	22.7	22.7
2.5°	21.3	21.3	21.3
5°	20.0	20.0	19.5
7.5°	18.7	18.2	18.2
10°	16.9	16.9	16.9
12.5°	15.5	15.5	15.5
15°	14.2	14.7	14.7
17.5°	12.9	13.8	13.8
20°	12.0	12.9	13.3
22.5°	11.1	12.0	12.4
25°	10.7	11.5	12.0
27.5°	9.8	11.1	12.0
30°	9.3	10.7	11.5
31°	9.3	10.7	11.1
32°	8.9	10.7	11.1
33°	8.9	10.7	11.1
34°	8.9	10.2	11.1
35°	8.4	10.2	10.7
36°	8.4	10.2	10.7
37°	8.4	10.2	11.1
38°	8.4	10.2	10.7
39°	8.0	10.2	10.7
40°	8.0	10.2	10.7
41°	8.0	10.2	10.7
42°	8.0	10.2	10.7
43°	8.0	10.2	10.7
44°	8.0	9.8	10.7
45°	8.0	9.8	10.7
46°	8.0	10.2	10.7
47°	8.0	10.2	11.1
48°	8.0	9.8	10.7
49°	7.6	9.8	10.7
50°	7.6	9.8	10.7
51°	7.6	10.2	11.1
52°	7.6	10.2	11.1
53°	7.6	10.2	11.1
54°	7.6	10.2	10.7
55°	7.6	10.2	11.1
56°	7.6	10.2	10.7
57°	7.6	10.2	10.7
58°	7.6	9.8	10.7
59°	7.6	9.8	10.7
60°	7.6	9.8	10.7
62.5°	7.1	9.8	10.7
65°	7.1	9.3	10.2



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	6.7	9.3	9.8
70°	6.2	8.9	9.3
72.5°	5.8	8.4	8.9
75°	5.3	7.6	8.0
77.5°	4.4	6.7	7.6
80°	4.0	5.8	6.2
82.5°	3.1	4.9	5.3
85°	2.2	3.6	3.6
87.5°	0.9	1.8	1.8
90°	0.0	0.0	0.0

(END OF REPORT)