

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: P1344486

Luminaire Tested: P3A13R259727DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344486
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: P3A13R259727DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R25 optic, 2700K CCT AND, 97CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

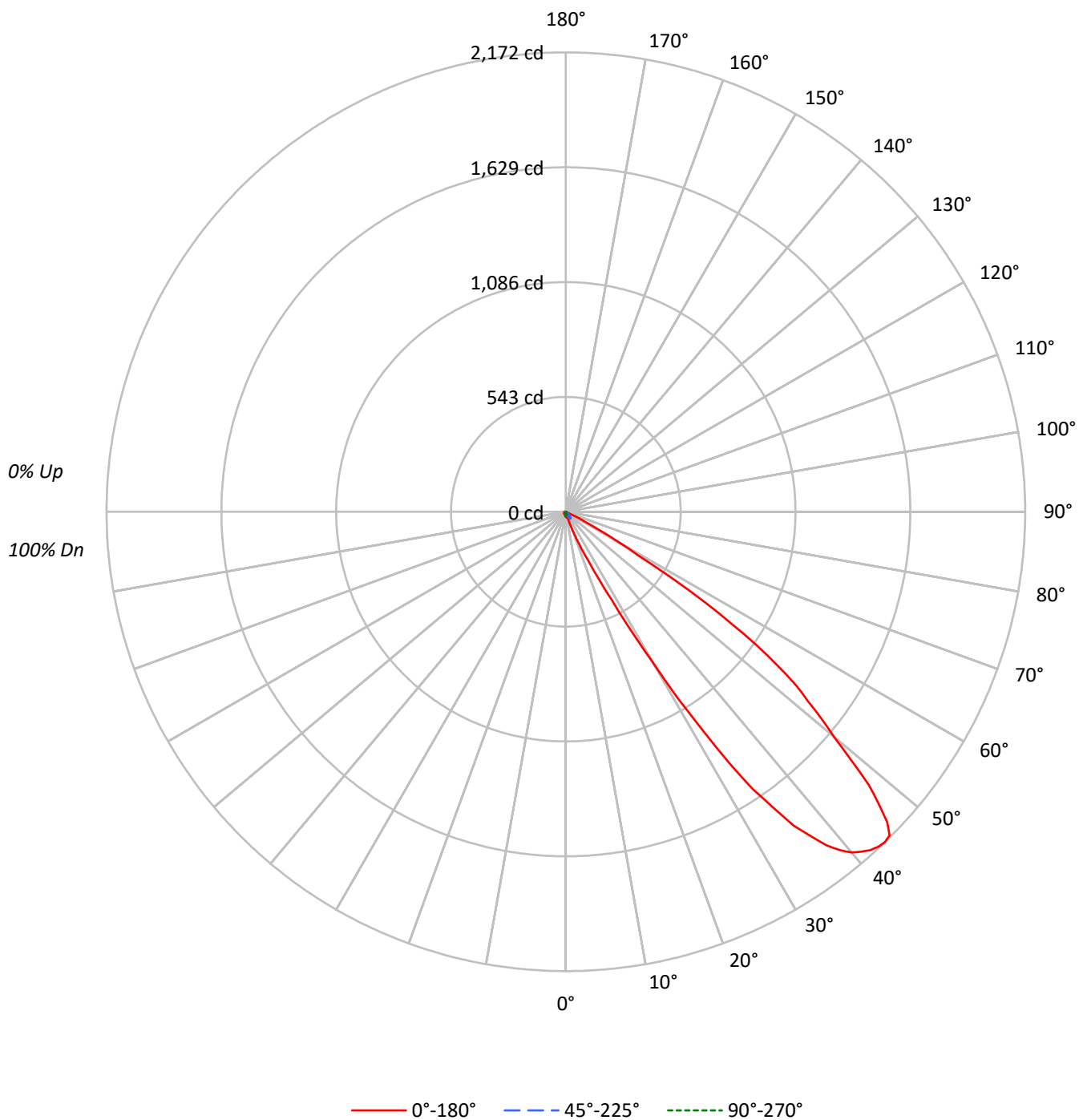
Lumens per Lamp: N/A
Luminaire Lumens: 453.1 lumens
Efficiency: N/A
Efficacy: 31.0 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	5065	5065	5065	5065	5065
5°	5789	5525	4909	4380	4292
10°	5767	5233	4164	3629	3629
15°	6425	4518	3269	3087	3269
20°	22705	4457	2520	2614	2894
25°	65302	5686	2032	2419	2807
30°	208336	8786	1621	2329	2836
35°	456281	10360	1392	2249	2891
40°	601928	9360	1145	2290	3092
45°	671263	6543	1116	2481	3349
50°	565030	3411	1092	2593	3684
55°	422446	1376	1070	2906	4129
60°	130779	351	1053	3158	4561
65°	11156	0	1245	3321	4981
70°	769	256	1282	3847	5642
75°	678	339	1694	4067	6439
80°	505	505	2526	4546	7577
85°	1006	1006	4026	5032	8051

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 671263 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.1	0.5
10°-20°	5.3	1.2
20°-30°	25.1	5.5
30°-40°	120.7	26.6
40°-50°	189.1	41.7
50°-60°	97.0	21.4
60°-70°	9.2	2.0
70°-80°	3.1	0.7
80°-90°	1.5	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°	32.5	7.2
0°-40°	153.2	33.8
0°-60°	439.3	97.0
0°-90°	453.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	453.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	23	23	23	23	23	
5°	26	25	22	20	20	2
15°	28	20	14	14	14	12
25°	270	24	8	10	12	167
35°	1704	39	5	8	11	1035
45°	2165	21	4	8	11	1584
55°	1105	4	3	8	11	920
65°	22	0	2	6	10	67
75°	1	0	2	5	8	1
85°	0	0	2	2	3	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°	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1
2.5°	25.1	25.1	25.1	25.1	25.1	25.1	24.7	24.7	25.1	24.7	24.7
5°	26.3	26.3	26.3	26.3	26.3	26.3	26.3	25.9	25.9	25.9	25.1
7.5°	26.7	26.3	26.3	26.3	26.3	26.3	26.3	26.3	25.9	25.9	24.7
10°	25.9	25.9	25.9	25.9	25.5	25.5	25.5	25.1	25.1	25.1	23.5
12.5°	25.9	25.9	25.9	25.9	25.5	25.5	25.1	25.1	24.7	24.3	21.5
15°	28.3	28.3	28.3	27.9	27.5	27.1	26.7	26.3	25.9	25.1	19.9
17.5°	41.5	40.3	39.9	38.3	36.3	34.3	32.7	31.1	29.5	28.3	19.1
20°	97.3	96.9	94.9	90.1	84.9	78.9	72.9	66.2	56.6	50.2	19.1
22.5°	168.6	166.2	162.6	159.1	149.9	139.1	128.0	115.2	102.8	89.7	20.3
25°	269.9	275.5	263.5	253.9	238.0	218.4	197.3	179.8	157.5	136.7	23.5
27.5°	469.2	472.8	449.3	418.2	381.1	340.0	300.2	270.3	232.8	198.5	29.5
30°	822.8	826.4	786.9	720.7	644.2	576.8	485.5	405.4	331.7	274.7	34.7
31°	1026.9	999.0	953.1	888.9	792.1	690.4	580.8	483.9	390.7	315.7	36.3
32°	1204.3	1201.9	1148.5	1051.2	953.9	828.4	692.4	566.1	451.6	357.2	37.5
33°	1413.5	1397.6	1322.3	1230.6	1101.8	975.4	800.0	655.7	514.2	403.4	38.3
34°	1581.4	1538.3	1507.2	1402.4	1266.4	1105.4	917.6	750.6	592.4	448.1	38.7
35°	1704.5	1695.4	1634.8	1537.1	1398.8	1234.2	1044.4	849.1	657.7	499.9	38.7
36°	1834.9	1806.6	1747.6	1659.1	1524.4	1354.1	1141.3	934.4	733.9	546.5	38.3
37°	1916.6	1899.9	1841.3	1750.0	1618.0	1455.4	1249.7	1024.5	794.5	593.2	37.5
38°	2000.7	1966.8	1909.0	1821.7	1692.2	1539.5	1328.2	1093.8	850.3	634.2	36.3
39°	2058.9	2023.8	1964.8	1877.9	1751.2	1599.7	1390.4	1152.8	898.9	664.9	34.7
40°	2102.8	2068.9	2009.1	1919.8	1794.6	1647.1	1442.2	1205.1	939.6	691.6	32.7
41°	2129.9	2098.4	2039.0	1950.1	1824.5	1674.2	1476.1	1238.9	967.1	709.6	30.7
42°	2152.6	2120.3	2059.7	1968.8	1842.9	1697.4	1496.9	1260.5	985.8	718.7	29.1
43°	2165.4	2133.1	2074.1	1981.2	1854.0	1708.1	1508.0	1270.4	992.2	717.5	26.3
44°	2172.5	2139.0	2079.6	1986.8	1858.8	1710.9	1508.8	1268.4	987.8	708.0	23.9
45°	2164.6	2131.5	2074.1	1981.2	1850.4	1702.1	1500.8	1257.7	971.1	689.2	21.1
46°	2112.7	2087.2	2034.6	1949.3	1824.1	1679.8	1480.5	1236.9	945.2	666.1	17.9
47°	2021.4	2001.1	1950.1	1886.7	1773.5	1638.8	1443.0	1197.5	908.9	631.4	14.4
48°	1926.2	1896.3	1848.8	1783.9	1688.2	1565.0	1381.3	1139.7	853.9	586.0	12.8
49°	1785.5	1767.9	1726.1	1653.5	1574.2	1465.8	1294.0	1065.5	786.5	536.6	11.2
50°	1656.3	1644.3	1585.7	1532.3	1448.2	1347.0	1175.6	967.9	702.8	475.2	10.0
51°	1555.5	1541.1	1498.8	1432.3	1342.6	1225.0	1063.5	841.1	606.7	402.2	8.0
52°	1450.2	1442.2	1404.8	1336.2	1248.1	1130.9	954.7	733.5	513.4	340.0	6.4
53°	1364.1	1352.5	1306.7	1245.7	1150.4	1029.3	836.7	633.4	434.9	285.8	5.6
54°	1238.5	1233.8	1204.3	1140.5	1037.2	905.3	729.9	533.4	362.8	242.4	4.8
55°	1105.0	1089.1	1059.2	1008.5	913.7	790.5	606.3	442.1	293.4	204.1	3.6
56°	942.4	941.6	888.1	845.9	761.8	631.0	484.3	345.2	238.4	170.2	3.2
57°	786.9	761.8	710.4	668.5	578.0	478.8	359.6	258.7	186.6	137.9	2.4
58°	582.0	568.8	555.3	493.9	410.2	339.2	256.7	181.8	137.9	105.2	1.6
59°	395.0	394.6	378.7	332.1	283.8	211.3	160.2	123.6	94.9	77.3	1.2
60°	298.2	291.0	259.1	228.4	178.6	133.5	94.9	72.9	59.0	49.8	0.8
62.5°	104.4	108.4	95.3	78.9	60.2	49.4	37.9	30.7	25.1	20.3	0.0
65°	21.5	23.5	20.3	19.1	15.1	13.2	11.6	10.0	8.4	7.2	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°	2.8	2.4	2.4	2.4	2.0	2.0	2.0	2.0	1.6	1.6	0.4
70°	1.2	1.2	1.2	1.2	1.2	1.2	0.8	0.8	0.8	0.8	0.4
72.5°	1.2	1.2	1.2	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.4
75°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4
77.5°	0.8	0.8	0.8	0.8	0.8	0.8	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	0.8
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°	23.1	23.1	23.1	23.1	23.1	23.1
2.5°	24.3	23.5	22.3	21.9	21.5	21.5
5°	23.9	22.3	21.1	19.9	19.5	19.5
7.5°	22.7	20.7	19.1	18.3	17.9	17.5
10°	21.5	18.7	17.1	16.3	16.3	16.3
12.5°	19.1	16.7	15.1	14.7	15.1	15.1
15°	17.1	14.4	13.6	13.6	14.0	14.4
17.5°	14.7	12.8	12.0	12.4	12.8	13.2
20°	13.2	10.8	10.8	11.2	12.4	12.4
22.5°	11.6	9.6	9.6	10.8	11.6	12.0
25°	10.4	8.4	8.8	10.0	11.2	11.6
27.5°	8.8	7.2	8.0	9.6	10.8	11.2
30°	7.6	6.4	7.6	9.2	10.4	11.2
31°	7.2	6.0	7.6	8.8	10.4	11.2
32°	6.4	6.0	7.2	8.8	10.4	10.8
33°	6.0	5.6	7.2	8.8	10.4	10.8
34°	5.6	5.2	6.8	8.8	10.4	10.8
35°	4.8	5.2	6.8	8.4	10.0	10.8
36°	4.4	4.8	6.8	8.4	10.0	10.8
37°	4.0	4.8	6.4	8.4	10.0	10.8
38°	3.6	4.4	6.4	8.4	10.0	10.8
39°	3.2	4.4	6.0	8.4	10.0	10.8
40°	2.8	4.0	6.0	8.0	10.0	10.8
41°	2.8	4.0	6.0	8.0	10.0	10.8
42°	2.4	4.0	6.0	8.0	10.0	10.8
43°	2.0	3.6	6.0	8.0	10.0	10.8
44°	1.6	3.6	5.6	8.0	10.0	10.8
45°	1.6	3.6	5.6	8.0	10.0	10.8
46°	1.2	3.2	5.6	8.0	10.0	10.8
47°	0.8	3.2	5.6	7.6	10.0	10.8
48°	0.8	3.2	5.6	7.6	10.0	10.8
49°	0.8	3.2	5.2	7.6	10.0	10.8
50°	0.8	3.2	5.2	7.6	10.0	10.8
51°	0.4	2.8	5.2	7.6	10.0	10.8
52°	0.4	2.8	5.2	7.6	10.0	11.2
53°	0.4	2.8	5.2	7.6	10.0	10.8
54°	0.4	2.8	4.8	7.6	10.0	10.8
55°	0.4	2.8	4.8	7.6	10.0	10.8
56°	0.4	2.4	4.8	7.2	10.0	10.8
57°	0.8	2.4	4.8	7.2	10.0	10.4
58°	0.8	2.4	4.8	7.2	9.6	10.4
59°	0.8	2.4	4.8	7.2	9.6	10.4
60°	0.8	2.4	4.4	7.2	9.6	10.4
62.5°	0.8	2.4	4.4	6.8	9.2	10.0
65°	0.8	2.4	4.0	6.4	9.2	9.6



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.8	2.0	4.0	6.0	8.8	9.2
70°	1.2	2.0	3.6	6.0	8.4	8.8
72.5°	1.2	2.0	3.6	5.2	7.6	8.4
75°	1.2	2.0	3.2	4.8	7.2	7.6
77.5°	1.2	2.0	2.8	4.4	6.4	6.8
80°	1.6	2.0	2.4	3.6	5.6	6.0
82.5°	1.6	2.0	2.0	2.8	4.4	4.8
85°	1.2	1.6	1.6	2.0	2.8	3.2
87.5°	1.2	1.6	1.2	0.8	1.6	1.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)