

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: P1344398

Luminaire Tested: P3A13R259027DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344398
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: P3A13R259027DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R25 optic, 2700K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

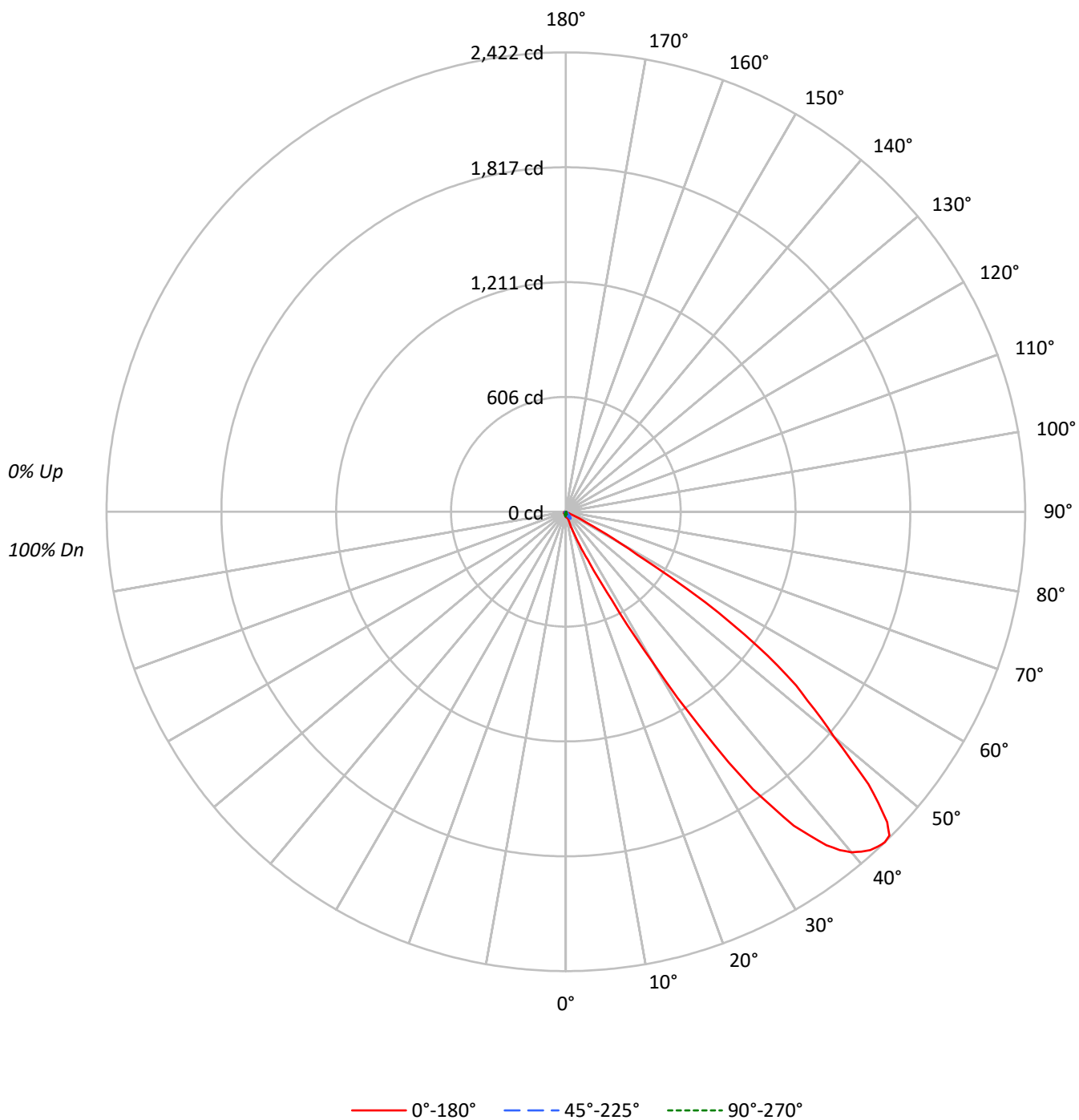
Lumens per Lamp: N/A
Luminaire Lumens: 505.0 lumens
Efficiency: N/A
Efficacy: 34.6 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	5657	5657	5657	5657	5657
5°	6449	6163	5481	4887	4799
10°	6435	5834	4654	4052	4052
15°	7174	5040	3632	3428	3632
20°	25296	4970	2800	2894	3220
25°	72803	6339	2250	2686	3121
30°	232238	9799	1798	2583	3140
35°	508669	11538	1553	2490	3212
40°	671000	10420	1260	2548	3435
45°	748295	7319	1240	2760	3721
50°	629881	3787	1228	2866	4094
55°	470922	1529	1185	3211	4588
60°	145778	395	1184	3508	5087
65°	12453	0	1401	3684	5552
70°	833	256	1410	4296	6283
75°	763	339	1864	4490	7117
80°	505	505	2778	5051	8461
85°	1006	1006	4529	5535	9057

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 748295 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.3	0.5
10°-20°	6.0	1.2
20°-30°	27.9	5.5
30°-40°	134.5	26.6
40°-50°	210.8	41.8
50°-60°	108.1	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°	36.2	7.2
0°-40°	170.7	33.8
0°-60°	489.7	97.0
0°-90°	505.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	505.0	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°	301	26	9	11	13	187
35°	1900	43	6	9	12	1153
45°	2413	24	4	9	12	1766
55°	1232	4	3	8	12	1026
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°	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8
2.5°	28.0	28.0	28.0	28.0	28.0	28.0	27.6	27.6	28.0	27.6	27.6
5°	29.3	29.3	29.3	29.3	29.3	29.3	29.3	28.9	28.9	28.9	28.0
7.5°	29.8	29.3	29.3	29.3	29.3	29.3	29.3	29.3	28.9	28.9	27.6
10°	28.9	28.9	28.9	28.9	28.4	28.4	28.4	28.0	28.0	28.0	26.2
12.5°	28.9	28.9	28.9	28.9	28.4	28.4	28.0	28.0	27.6	27.1	24.0
15°	31.6	31.6	31.6	31.1	30.7	30.2	29.8	29.3	28.9	28.0	22.2
17.5°	46.2	44.9	44.4	42.7	40.4	38.2	36.4	34.7	32.9	31.6	21.3
20°	108.4	108.0	105.8	100.4	94.7	88.0	81.3	73.8	63.1	56.0	21.3
22.5°	188.0	185.3	181.3	177.3	167.1	155.1	142.6	128.4	114.7	100.0	22.7
25°	300.9	307.1	293.7	283.1	265.3	243.5	220.0	200.4	175.5	152.4	26.2
27.5°	523.0	527.0	500.8	466.2	424.8	379.1	334.6	301.3	259.5	221.3	32.9
30°	917.2	921.2	877.2	803.5	718.1	643.0	541.3	451.9	369.7	306.2	38.7
31°	1144.7	1113.6	1062.5	991.0	883.0	769.7	647.5	539.5	435.5	352.0	40.4
32°	1342.5	1339.8	1280.3	1171.9	1063.4	923.4	771.9	631.0	503.5	398.2	41.8
33°	1575.8	1558.0	1474.0	1371.8	1228.3	1087.4	891.9	731.0	573.3	449.7	42.7
34°	1762.9	1714.9	1680.2	1563.4	1411.8	1232.3	1023.0	836.8	660.4	499.5	43.1
35°	1900.2	1890.0	1822.4	1713.6	1559.4	1375.8	1164.3	946.5	733.2	557.3	43.1
36°	2045.5	2014.0	1948.2	1849.5	1699.3	1509.6	1272.3	1041.6	818.1	609.3	42.7
37°	2136.6	2118.0	2052.6	1950.9	1803.8	1622.5	1393.2	1142.1	885.7	661.2	41.8
38°	2230.4	2192.6	2128.2	2030.9	1886.4	1716.2	1480.7	1219.4	947.9	707.0	40.4
39°	2295.3	2256.2	2190.4	2093.5	1952.2	1783.3	1550.0	1285.2	1002.1	741.2	38.7
40°	2344.1	2306.4	2239.7	2140.2	2000.6	1836.2	1607.8	1343.4	1047.4	771.0	36.4
41°	2374.4	2339.3	2273.0	2173.9	2034.0	1866.4	1645.6	1381.2	1078.1	791.0	34.2
42°	2399.7	2363.7	2296.2	2194.8	2054.4	1892.2	1668.7	1405.2	1099.0	801.2	32.4
43°	2413.9	2377.9	2312.2	2208.6	2066.8	1904.2	1681.1	1416.3	1106.1	799.9	29.3
44°	2421.9	2384.6	2318.4	2214.8	2072.2	1907.3	1682.0	1414.0	1101.2	789.2	26.7
45°	2413.0	2376.1	2312.2	2208.6	2062.8	1897.5	1673.1	1402.0	1082.5	768.3	23.6
46°	2355.3	2326.8	2268.2	2173.1	2033.5	1872.7	1650.5	1378.9	1053.6	742.6	20.0
47°	2253.5	2230.8	2173.9	2103.3	1977.1	1826.9	1608.7	1334.9	1013.2	703.9	16.0
48°	2147.3	2114.0	2061.1	1988.6	1882.0	1744.7	1539.8	1270.5	951.9	653.3	14.2
49°	1990.4	1970.9	1924.2	1843.3	1754.9	1634.0	1442.5	1187.8	876.8	598.1	12.4
50°	1846.4	1833.1	1767.8	1708.2	1614.5	1501.6	1310.5	1079.0	783.5	529.7	11.1
51°	1734.0	1718.0	1670.9	1596.7	1496.7	1365.6	1185.6	937.7	676.4	448.4	8.9
52°	1616.7	1607.8	1566.0	1489.6	1391.4	1260.7	1064.3	817.7	572.4	379.1	7.1
53°	1520.7	1507.8	1456.7	1388.7	1282.5	1147.4	932.8	706.1	484.8	318.6	6.2
54°	1380.7	1375.4	1342.5	1271.4	1156.3	1009.2	813.7	594.6	404.4	270.2	5.3
55°	1231.8	1214.1	1180.7	1124.3	1018.5	881.2	675.9	492.8	327.1	227.5	4.0
56°	1050.5	1049.6	990.1	943.0	849.2	703.5	539.9	384.8	265.7	189.8	3.6
57°	877.2	849.2	791.9	745.2	644.4	533.7	400.8	288.4	208.0	153.8	2.7
58°	648.8	634.1	619.0	550.6	457.3	378.2	286.2	202.6	153.8	117.3	1.8
59°	440.4	439.9	422.2	370.2	316.4	235.5	178.6	137.8	105.8	86.2	1.3
60°	332.4	324.4	288.9	254.6	199.1	148.9	105.8	81.3	65.8	55.5	0.9
62.5°	116.4	120.9	106.2	88.0	67.1	55.1	42.2	34.2	28.0	22.7	0.0
65°	24.0	26.2	22.7	21.3	16.9	14.7	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°	25.8	25.8	25.8	25.8	25.8	25.8
2.5°	27.1	26.2	24.9	24.4	24.0	24.0
5°	26.7	24.9	23.6	22.2	21.8	21.8
7.5°	25.3	23.1	21.3	20.4	20.0	19.6
10°	24.0	20.9	19.1	18.2	18.2	18.2
12.5°	21.3	18.7	16.9	16.4	16.9	16.9
15°	19.1	16.0	15.1	15.1	15.6	16.0
17.5°	16.4	14.2	13.3	13.8	14.2	14.7
20°	14.7	12.0	12.0	12.4	13.8	13.8
22.5°	12.9	10.7	10.7	12.0	12.9	13.3
25°	11.6	9.3	9.8	11.1	12.4	12.9
27.5°	9.8	8.0	8.9	10.7	12.0	12.4
30°	8.4	7.1	8.4	10.2	11.6	12.4
31°	8.0	6.7	8.4	9.8	11.6	12.4
32°	7.1	6.7	8.0	9.8	11.6	12.0
33°	6.7	6.2	8.0	9.8	11.6	12.0
34°	6.2	5.8	7.6	9.8	11.6	12.0
35°	5.3	5.8	7.6	9.3	11.1	12.0
36°	4.9	5.3	7.6	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°	3.6	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	3.6	6.2	8.9	11.1	12.0
47°	0.9	3.6	6.2	8.4	11.1	12.0
48°	0.9	3.6	6.2	8.4	11.1	12.0
49°	0.9	3.6	5.8	8.4	11.1	12.0
50°	0.9	3.6	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	11.6
58°	0.9	2.7	5.3	8.0	10.7	11.6
59°	0.9	2.7	5.3	8.0	10.7	11.6
60°	0.9	2.7	4.9	8.0	10.7	11.6
62.5°	0.9	2.7	4.9	7.6	10.2	11.1
65°	0.9	2.7	4.4	7.1	10.2	10.7



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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	3.6	5.3	8.0	8.4
77.5°	1.3	2.2	3.1	4.9	7.1	7.6
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	3.6
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)