

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: P1344566

Luminaire Tested: P3A13R259830DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344566
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: P3A13R259830DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R25 optic, 3000K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

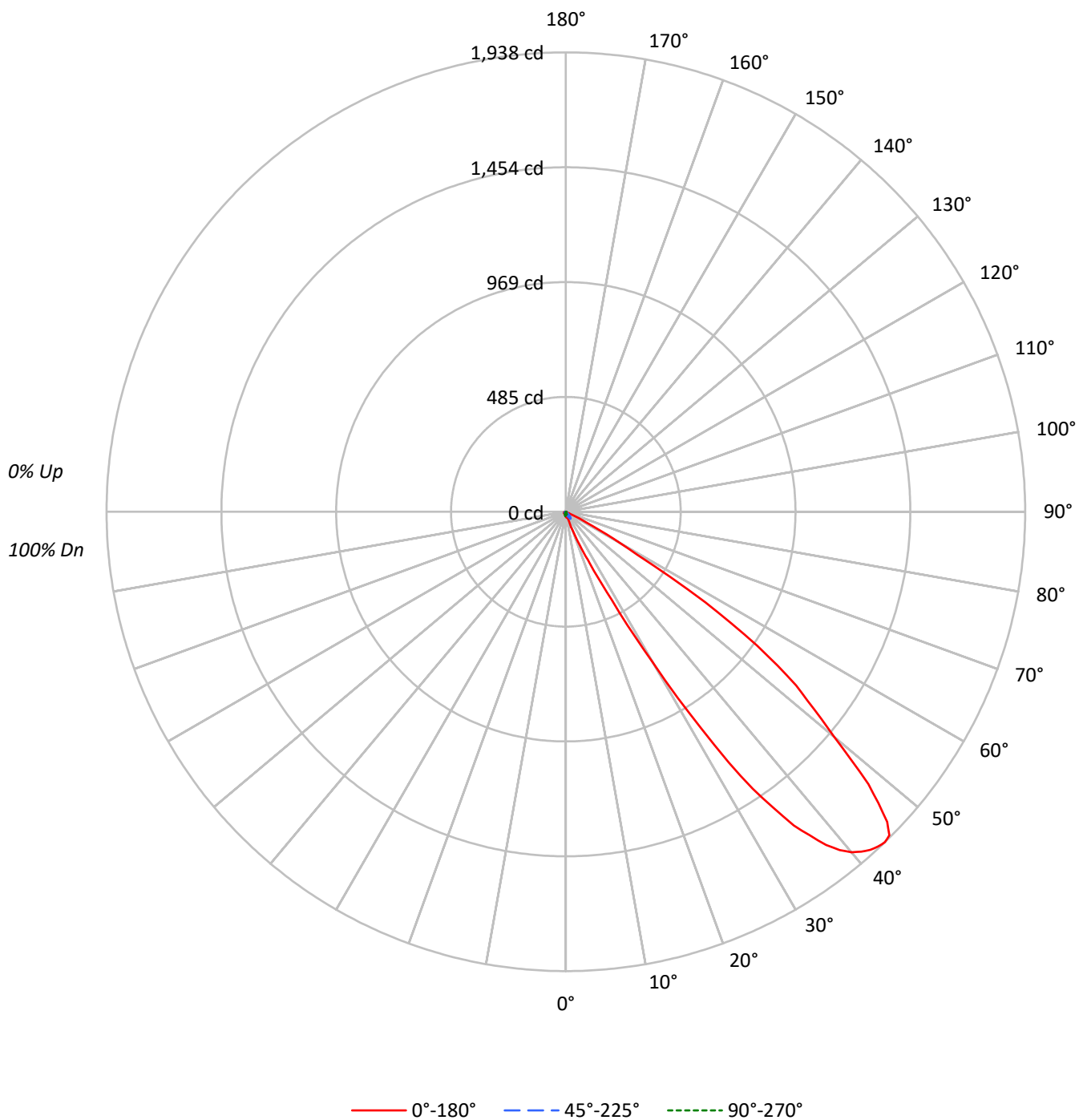
Lumens per Lamp: N/A
Luminaire Lumens: 404.0 lumens
Efficiency: N/A
Efficacy: 27.9 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.5
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°	4517	4517	4517	4517	4517
5°	5173	4931	4380	3918	3830
10°	5144	4676	3718	3251	3251
15°	5721	4041	2906	2747	2906
20°	20232	3990	2240	2334	2567
25°	58237	5081	1815	2153	2492
30°	185801	7824	1443	2076	2532
35°	406946	9235	1231	2008	2570
40°	536806	8359	1031	2032	2748
45°	598636	5830	992	2202	2977
50°	503898	3036	955	2320	3275
55°	376761	1223	956	2600	3670
60°	116613	307	921	2807	4035
65°	9962	0	1090	2958	4410
70°	705	256	1154	3398	5001
75°	593	339	1525	3643	5761
80°	505	505	2273	4041	6693
85°	1006	1006	3522	4529	7045

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 598636 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.8	0.5
10°-20°	4.8	1.2
20°-30°	22.3	5.5
30°-40°	107.6	26.6
40°-50°	168.7	41.7
50°-60°	86.5	21.4
60°-70°	8.2	2.0
70°-80°	2.8	0.7
80°-90°	1.4	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°	29.0	7.2
0°-40°	136.6	33.8
0°-60°	391.7	97.0
0°-90°	404.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	404.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	21	21	21	21	21	
5°	24	22	20	18	17	2
15°	25	18	13	12	13	11
25°	241	21	8	9	10	149
35°	1520	34	5	8	10	923
45°	1930	19	3	7	10	1413
55°	986	3	2	7	10	820
65°	19	0	2	6	8	60
75°	1	0	2	4	7	1
85°	0	0	1	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°	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6
2.5°	22.4	22.4	22.4	22.4	22.4	22.4	22.0	22.0	22.4	22.0	22.0
5°	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.1	23.1	23.1	22.4
7.5°	23.8	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.1	23.1	22.0
10°	23.1	23.1	23.1	23.1	22.8	22.8	22.8	22.4	22.4	22.4	21.0
12.5°	23.1	23.1	23.1	23.1	22.8	22.8	22.4	22.4	22.0	21.7	19.2
15°	25.2	25.2	25.2	24.9	24.5	24.2	23.8	23.5	23.1	22.4	17.8
17.5°	37.0	35.9	35.6	34.1	32.4	30.6	29.2	27.7	26.3	25.2	17.1
20°	86.7	86.4	84.6	80.3	75.7	70.4	65.1	59.0	50.5	44.8	17.1
22.5°	150.4	148.2	145.0	141.8	133.7	124.1	114.1	102.7	91.7	80.0	18.1
25°	240.7	245.7	235.0	226.5	212.2	194.8	176.0	160.3	140.4	121.9	21.0
27.5°	418.4	421.6	400.7	372.9	339.9	303.3	267.7	241.0	207.6	177.0	26.3
30°	733.8	737.0	701.8	642.8	574.5	514.4	433.0	361.6	295.8	244.9	30.9
31°	915.8	890.9	850.0	792.8	706.4	615.7	518.0	431.6	348.4	281.6	32.4
32°	1074.0	1071.9	1024.2	937.5	850.7	738.8	617.5	504.8	402.8	318.5	33.4
33°	1260.6	1246.4	1179.2	1097.5	982.6	869.9	713.5	584.8	458.6	359.8	34.1
34°	1410.3	1371.9	1344.2	1250.7	1129.5	985.8	818.4	669.4	528.3	399.6	34.5
35°	1520.2	1512.0	1457.9	1370.8	1247.5	1100.7	931.4	757.2	586.6	445.8	34.5
36°	1636.4	1611.2	1558.6	1479.6	1359.5	1207.7	1017.8	833.3	654.5	487.4	34.1
37°	1709.3	1694.4	1642.1	1560.7	1443.0	1298.0	1114.5	913.7	708.5	529.0	33.4
38°	1784.3	1754.1	1702.5	1624.7	1509.1	1373.0	1184.6	975.5	758.3	565.6	32.4
39°	1836.2	1804.9	1752.3	1674.8	1561.8	1426.7	1240.0	1028.1	801.7	593.0	30.9
40°	1875.3	1845.1	1791.8	1712.1	1600.5	1469.0	1286.2	1074.7	837.9	616.8	29.2
41°	1899.5	1871.4	1818.4	1739.2	1627.2	1493.1	1316.5	1104.9	862.5	632.8	27.4
42°	1919.8	1891.0	1836.9	1755.9	1643.5	1513.8	1334.9	1124.1	879.2	641.0	26.0
43°	1931.1	1902.3	1849.7	1766.9	1653.5	1523.4	1344.9	1133.0	884.9	639.9	23.5
44°	1937.5	1907.7	1854.7	1771.9	1657.7	1525.9	1345.6	1131.2	881.0	631.4	21.3
45°	1930.4	1900.9	1849.7	1766.9	1650.3	1518.0	1338.5	1121.6	866.0	614.7	18.8
46°	1884.2	1861.5	1814.5	1738.4	1626.8	1498.1	1320.4	1103.1	842.9	594.1	16.0
47°	1802.8	1784.7	1739.2	1682.6	1581.7	1461.5	1286.9	1068.0	810.6	563.1	12.8
48°	1717.8	1691.2	1648.9	1590.9	1505.6	1395.7	1231.8	1016.4	761.5	522.6	11.4
49°	1592.3	1576.7	1539.4	1474.7	1403.9	1307.2	1154.0	950.3	701.4	478.5	10.0
50°	1477.1	1466.5	1414.2	1366.6	1291.6	1201.3	1048.4	863.2	626.8	423.8	8.9
51°	1387.2	1374.4	1336.7	1277.3	1197.4	1092.5	948.5	750.1	541.1	358.7	7.1
52°	1293.3	1286.2	1252.8	1191.7	1113.1	1008.6	851.4	654.1	457.9	303.3	5.7
53°	1216.6	1206.2	1165.4	1111.0	1026.0	917.9	746.2	564.9	387.9	254.9	5.0
54°	1104.6	1100.3	1074.0	1017.1	925.0	807.4	650.9	475.7	323.5	216.2	4.3
55°	985.5	971.3	944.6	899.4	814.8	705.0	540.7	394.3	261.7	182.0	3.2
56°	840.4	839.7	792.1	754.4	679.4	562.8	431.9	307.9	212.6	151.8	2.8
57°	701.8	679.4	633.5	596.2	515.5	427.0	320.7	230.7	166.4	123.0	2.1
58°	519.0	507.3	495.2	440.5	365.8	302.5	228.9	162.1	123.0	93.9	1.4
59°	352.3	352.0	337.7	296.1	253.1	188.4	142.9	110.2	84.6	69.0	1.1
60°	265.9	259.5	231.1	203.7	159.3	119.1	84.6	65.1	52.6	44.4	0.7
62.5°	93.1	96.7	85.0	70.4	53.7	44.1	33.8	27.4	22.4	18.1	0.0
65°	19.2	21.0	18.1	17.1	13.5	11.7	10.3	8.9	7.5	6.4	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°	2.5	2.1	2.1	2.1	1.8	1.8	1.8	1.8	1.4	1.4	0.4
70°	1.1	1.1	1.1	1.1	1.1	1.1	0.7	0.7	0.7	0.7	0.4
72.5°	1.1	1.1	1.1	0.7	0.7	0.7	0.7	0.7	0.7	0.4	0.4
75°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4
77.5°	0.7	0.7	0.7	0.7	0.7	0.7	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	0.7
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°	20.6	20.6	20.6	20.6	20.6	20.6
2.5°	21.7	21.0	19.9	19.6	19.2	19.2
5°	21.3	19.9	18.8	17.8	17.4	17.4
7.5°	20.3	18.5	17.1	16.4	16.0	15.6
10°	19.2	16.7	15.3	14.6	14.6	14.6
12.5°	17.1	14.9	13.5	13.2	13.5	13.5
15°	15.3	12.8	12.1	12.1	12.4	12.8
17.5°	13.2	11.4	10.7	11.0	11.4	11.7
20°	11.7	9.6	9.6	10.0	11.0	11.0
22.5°	10.3	8.5	8.5	9.6	10.3	10.7
25°	9.2	7.5	7.8	8.9	10.0	10.3
27.5°	7.8	6.4	7.1	8.5	9.6	10.0
30°	6.8	5.7	6.8	8.2	9.2	10.0
31°	6.4	5.3	6.8	7.8	9.2	10.0
32°	5.7	5.3	6.4	7.8	9.2	9.6
33°	5.3	5.0	6.4	7.8	9.2	9.6
34°	5.0	4.6	6.0	7.8	9.2	9.6
35°	4.3	4.6	6.0	7.5	8.9	9.6
36°	3.9	4.3	6.0	7.5	8.9	9.6
37°	3.6	4.3	5.7	7.5	8.9	9.6
38°	3.2	3.9	5.7	7.5	8.9	9.6
39°	2.8	3.9	5.3	7.5	8.9	9.6
40°	2.5	3.6	5.3	7.1	8.9	9.6
41°	2.5	3.6	5.3	7.1	8.9	9.6
42°	2.1	3.6	5.3	7.1	8.9	9.6
43°	1.8	3.2	5.3	7.1	8.9	9.6
44°	1.4	3.2	5.0	7.1	8.9	9.6
45°	1.4	3.2	5.0	7.1	8.9	9.6
46°	1.1	2.8	5.0	7.1	8.9	9.6
47°	0.7	2.8	5.0	6.8	8.9	9.6
48°	0.7	2.8	5.0	6.8	8.9	9.6
49°	0.7	2.8	4.6	6.8	8.9	9.6
50°	0.7	2.8	4.6	6.8	8.9	9.6
51°	0.4	2.5	4.6	6.8	8.9	9.6
52°	0.4	2.5	4.6	6.8	8.9	10.0
53°	0.4	2.5	4.6	6.8	8.9	9.6
54°	0.4	2.5	4.3	6.8	8.9	9.6
55°	0.4	2.5	4.3	6.8	8.9	9.6
56°	0.4	2.1	4.3	6.4	8.9	9.6
57°	0.7	2.1	4.3	6.4	8.9	9.2
58°	0.7	2.1	4.3	6.4	8.5	9.2
59°	0.7	2.1	4.3	6.4	8.5	9.2
60°	0.7	2.1	3.9	6.4	8.5	9.2
62.5°	0.7	2.1	3.9	6.0	8.2	8.9
65°	0.7	2.1	3.6	5.7	8.2	8.5



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.7	1.8	3.6	5.3	7.8	8.2
70°	1.1	1.8	3.2	5.3	7.5	7.8
72.5°	1.1	1.8	3.2	4.6	6.8	7.5
75°	1.1	1.8	2.8	4.3	6.4	6.8
77.5°	1.1	1.8	2.5	3.9	5.7	6.0
80°	1.4	1.8	2.1	3.2	5.0	5.3
82.5°	1.4	1.8	1.8	2.5	3.9	4.3
85°	1.1	1.4	1.4	1.8	2.5	2.8
87.5°	1.1	1.4	1.1	0.7	1.4	1.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)