

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: P1341023

Luminaire Tested: P3A09R259830DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1341023
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: P3A09R259830DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 3000K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

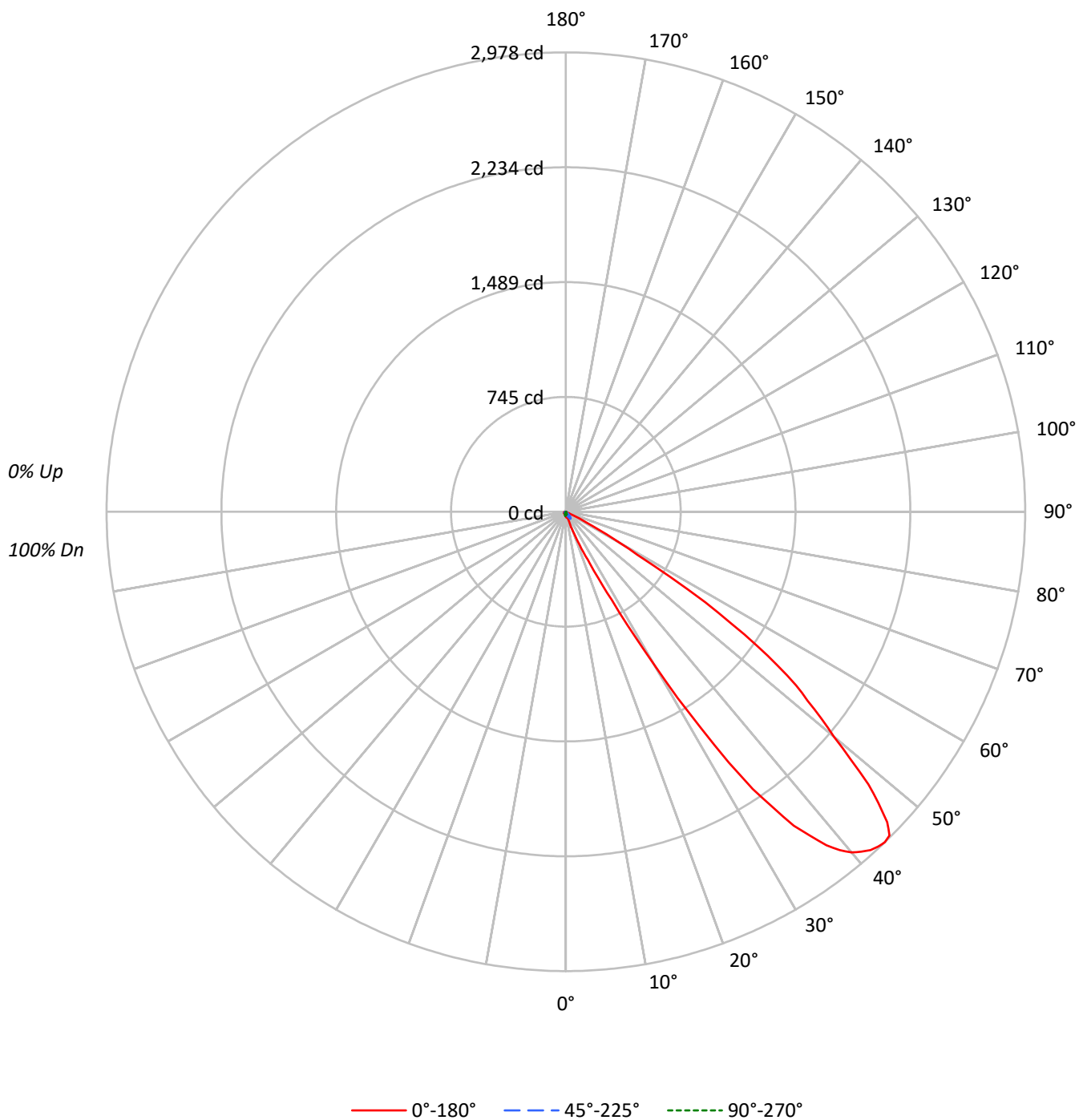
Lumens per Lamp: N/A
Luminaire Lumens: 621.0 lumens
Efficiency: N/A
Efficacy: 56.5 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11
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			0
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°	6951	6951	6951	6951	6951
5°	7946	7572	6736	6009	5899
10°	7905	7170	5722	4988	4988
15°	8808	6198	4472	4222	4472
20°	31106	6114	3454	3570	3944
25°	89521	7791	2782	3315	3823
30°	285588	12027	2203	3190	3874
35°	625517	14188	1901	3078	3962
40°	825146	12824	1574	3120	4237
45°	920189	8993	1520	3380	4590
50°	774593	4674	1501	3548	5049
55°	579114	1873	1453	3976	5658
60°	179284	482	1447	4298	6228
65°	15306	0	1712	4514	6797
70°	1026	321	1731	5257	7694
75°	932	424	2288	5592	8811
80°	631	631	3410	6188	10355
85°	1258	1258	5535	6793	11070

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 920189 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.8	0.5
10°-20°	7.3	1.2
20°-30°	34.4	5.5
30°-40°	165.4	26.6
40°-50°	259.3	41.8
50°-60°	132.9	21.4
60°-70°	12.5	2.0
70°-80°	4.2	0.7
80°-90°	2.1	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°	44.5	7.2
0°-40°	209.9	33.8
0°-60°	602.1	97.0
0°-90°	621.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	621.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	32	32	32	32	32	
5°	36	34	31	27	27	3
15°	39	27	20	19	20	16
25°	370	32	12	14	16	229
35°	2337	53	7	12	15	1418
45°	2967	29	5	11	15	2171
55°	1515	5	4	10	15	1261
65°	30	0	3	9	13	92
75°	1	0	3	7	10	1
85°	0	0	2	3	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°	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7
2.5°	34.4	34.4	34.4	34.4	34.4	34.4	33.9	33.9	34.4	33.9	33.9
5°	36.1	36.1	36.1	36.1	36.1	36.1	36.1	35.5	35.5	35.5	34.4
7.5°	36.6	36.1	36.1	36.1	36.1	36.1	36.1	36.1	35.5	35.5	33.9
10°	35.5	35.5	35.5	35.5	35.0	35.0	35.0	34.4	34.4	34.4	32.2
12.5°	35.5	35.5	35.5	35.5	35.0	35.0	34.4	34.4	33.9	33.3	29.5
15°	38.8	38.8	38.8	38.3	37.7	37.2	36.6	36.1	35.5	34.4	27.3
17.5°	56.8	55.2	54.6	52.5	49.7	47.0	44.8	42.6	40.4	38.8	26.2
20°	133.3	132.8	130.1	123.5	116.4	108.2	100.0	90.7	77.6	68.9	26.2
22.5°	231.2	227.9	223.0	218.0	205.5	190.7	175.4	157.9	141.0	123.0	27.9
25°	370.0	377.6	361.2	348.1	326.2	299.5	270.5	246.5	215.9	187.4	32.2
27.5°	643.2	648.1	615.9	573.2	522.4	466.1	411.5	370.5	319.1	272.1	40.4
30°	1127.9	1132.8	1078.7	988.0	883.1	790.7	665.6	555.8	454.7	376.5	47.5
31°	1407.7	1369.4	1306.6	1218.6	1085.8	946.5	796.2	663.4	535.5	432.8	49.7
32°	1650.9	1647.6	1574.4	1441.0	1307.7	1135.6	949.2	776.0	619.1	489.6	51.4
33°	1937.8	1915.9	1812.6	1686.9	1510.4	1337.2	1096.8	898.9	704.9	553.0	52.5
34°	2167.8	2108.8	2066.2	1922.5	1736.1	1515.3	1258.0	1029.0	812.0	614.2	53.0
35°	2336.7	2324.1	2241.1	2107.2	1917.5	1691.9	1431.7	1164.0	901.7	685.3	53.0
36°	2515.4	2476.6	2395.7	2274.4	2089.7	1856.3	1564.5	1280.9	1006.0	749.2	52.5
37°	2627.4	2604.5	2524.1	2399.0	2218.1	1995.1	1713.2	1404.4	1089.1	813.1	51.4
38°	2742.7	2696.3	2617.0	2497.3	2319.7	2110.4	1820.8	1499.5	1165.6	869.4	49.7
39°	2822.5	2774.4	2693.5	2574.4	2400.6	2193.0	1906.1	1580.4	1232.3	911.5	47.5
40°	2882.6	2836.2	2754.2	2631.8	2460.2	2258.0	1977.1	1652.0	1288.0	948.1	44.8
41°	2919.8	2876.6	2795.2	2673.3	2501.2	2295.2	2023.6	1698.4	1325.7	972.7	42.1
42°	2950.9	2906.6	2823.6	2699.0	2526.3	2326.8	2052.0	1727.9	1351.4	985.3	39.9
43°	2968.4	2924.1	2843.3	2715.9	2541.6	2341.6	2067.3	1741.6	1360.2	983.6	36.1
44°	2978.2	2932.3	2850.9	2723.6	2548.2	2345.4	2068.4	1738.9	1354.1	970.5	32.8
45°	2967.3	2922.0	2843.3	2715.9	2536.7	2333.4	2057.4	1724.1	1331.2	944.8	29.0
46°	2896.3	2861.3	2789.2	2672.2	2500.6	2302.8	2029.6	1695.7	1295.7	913.1	24.6
47°	2771.1	2743.3	2673.3	2586.4	2431.2	2246.5	1978.2	1641.6	1245.9	865.6	19.7
48°	2640.5	2599.5	2534.5	2445.4	2314.3	2145.4	1893.5	1562.3	1170.5	803.3	17.5
49°	2447.6	2423.6	2366.2	2266.7	2158.0	2009.4	1773.8	1460.7	1078.2	735.5	15.3
50°	2270.6	2254.2	2173.8	2100.6	1985.3	1846.5	1611.5	1326.8	963.4	651.4	13.7
51°	2132.3	2112.6	2054.7	1963.5	1840.5	1679.3	1458.0	1153.0	831.7	551.4	10.9
52°	1988.0	1977.1	1925.7	1831.8	1711.0	1550.3	1308.8	1005.5	703.8	466.1	8.7
53°	1870.0	1854.2	1791.3	1707.7	1577.1	1411.0	1147.0	868.3	596.2	391.8	7.7
54°	1697.9	1691.3	1650.9	1563.4	1421.9	1241.0	1000.6	731.2	497.3	332.3	6.6
55°	1514.8	1492.9	1452.0	1382.6	1252.5	1083.6	831.2	606.0	402.2	279.8	4.9
56°	1291.8	1290.8	1217.5	1159.6	1044.3	865.1	664.0	473.2	326.8	233.3	4.4
57°	1078.7	1044.3	973.8	916.4	792.4	656.3	492.9	354.7	255.7	189.1	3.3
58°	797.8	779.8	761.2	677.1	562.3	465.0	351.9	249.2	189.1	144.3	2.2
59°	541.5	541.0	519.1	455.2	389.1	289.6	219.7	169.4	130.1	106.0	1.6
60°	408.8	398.9	355.2	313.1	244.8	183.1	130.1	100.0	80.9	68.3	1.1
62.5°	143.2	148.6	130.6	108.2	82.5	67.8	51.9	42.1	34.4	27.9	0.0
65°	29.5	32.2	27.9	26.2	20.8	18.0	15.8	13.7	11.5	9.8	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°	3.8	3.3	3.3	3.3	2.7	2.7	2.7	2.7	2.2	2.2	0.5
70°	1.6	1.6	1.6	1.6	1.6	1.6	1.1	1.1	1.1	1.1	0.5
72.5°	1.6	1.6	1.6	1.1	1.1	1.1	1.1	1.1	1.1	0.5	0.5
75°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.5	0.5	0.5	0.5
77.5°	1.1	1.1	1.1	1.1	1.1	1.1	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	1.1
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°	31.7	31.7	31.7	31.7	31.7	31.7
2.5°	33.3	32.2	30.6	30.1	29.5	29.5
5°	32.8	30.6	29.0	27.3	26.8	26.8
7.5°	31.1	28.4	26.2	25.1	24.6	24.0
10°	29.5	25.7	23.5	22.4	22.4	22.4
12.5°	26.2	23.0	20.8	20.2	20.8	20.8
15°	23.5	19.7	18.6	18.6	19.1	19.7
17.5°	20.2	17.5	16.4	16.9	17.5	18.0
20°	18.0	14.8	14.8	15.3	16.9	16.9
22.5°	15.8	13.1	13.1	14.8	15.8	16.4
25°	14.2	11.5	12.0	13.7	15.3	15.8
27.5°	12.0	9.8	10.9	13.1	14.8	15.3
30°	10.4	8.7	10.4	12.6	14.2	15.3
31°	9.8	8.2	10.4	12.0	14.2	15.3
32°	8.7	8.2	9.8	12.0	14.2	14.8
33°	8.2	7.7	9.8	12.0	14.2	14.8
34°	7.7	7.1	9.3	12.0	14.2	14.8
35°	6.6	7.1	9.3	11.5	13.7	14.8
36°	6.0	6.6	9.3	11.5	13.7	14.8
37°	5.5	6.6	8.7	11.5	13.7	14.8
38°	4.9	6.0	8.7	11.5	13.7	14.8
39°	4.4	6.0	8.2	11.5	13.7	14.8
40°	3.8	5.5	8.2	10.9	13.7	14.8
41°	3.8	5.5	8.2	10.9	13.7	14.8
42°	3.3	5.5	8.2	10.9	13.7	14.8
43°	2.7	4.9	8.2	10.9	13.7	14.8
44°	2.2	4.9	7.7	10.9	13.7	14.8
45°	2.2	4.9	7.7	10.9	13.7	14.8
46°	1.6	4.4	7.7	10.9	13.7	14.8
47°	1.1	4.4	7.7	10.4	13.7	14.8
48°	1.1	4.4	7.7	10.4	13.7	14.8
49°	1.1	4.4	7.1	10.4	13.7	14.8
50°	1.1	4.4	7.1	10.4	13.7	14.8
51°	0.5	3.8	7.1	10.4	13.7	14.8
52°	0.5	3.8	7.1	10.4	13.7	15.3
53°	0.5	3.8	7.1	10.4	13.7	14.8
54°	0.5	3.8	6.6	10.4	13.7	14.8
55°	0.5	3.8	6.6	10.4	13.7	14.8
56°	0.5	3.3	6.6	9.8	13.7	14.8
57°	1.1	3.3	6.6	9.8	13.7	14.2
58°	1.1	3.3	6.6	9.8	13.1	14.2
59°	1.1	3.3	6.6	9.8	13.1	14.2
60°	1.1	3.3	6.0	9.8	13.1	14.2
62.5°	1.1	3.3	6.0	9.3	12.6	13.7
65°	1.1	3.3	5.5	8.7	12.6	13.1



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.1	2.7	5.5	8.2	12.0	12.6
70°	1.6	2.7	4.9	8.2	11.5	12.0
72.5°	1.6	2.7	4.9	7.1	10.4	11.5
75°	1.6	2.7	4.4	6.6	9.8	10.4
77.5°	1.6	2.7	3.8	6.0	8.7	9.3
80°	2.2	2.7	3.3	4.9	7.7	8.2
82.5°	2.2	2.7	2.7	3.8	6.0	6.6
85°	1.6	2.2	2.2	2.7	3.8	4.4
87.5°	1.6	2.2	1.6	1.1	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)