

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: P1342027

Luminaire Tested: P3A09R359827DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1342027
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: P3A09R359827DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R35 optic, 2700K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

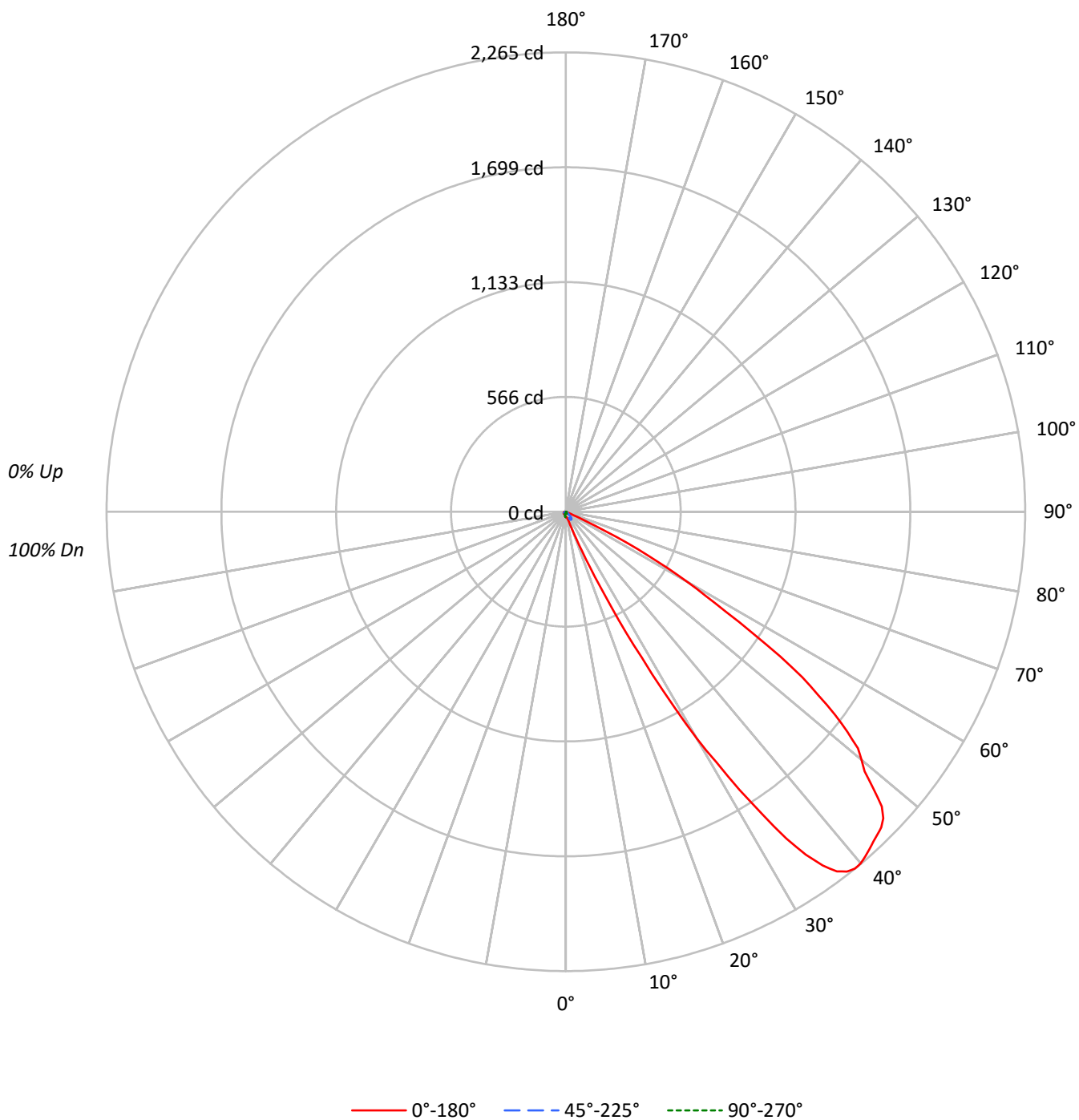
Lumens per Lamp: N/A
Luminaire Lumens: 564.0 lumens
Efficiency: N/A
Efficacy: 51.3 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	5701	5701	5701	5701	5701
5°	6163	6053	5613	5041	4931
10°	6457	5901	4988	4297	4297
15°	9240	5789	4041	3700	3814
20°	23172	6184	3197	3197	3570
25°	107547	7888	2468	2952	3315
30°	326936	10711	1924	2709	3342
35°	552517	12394	1633	2597	3266
40°	647671	12252	1317	2634	3492
45°	682055	8683	1116	2853	3783
50°	649224	5219	1058	2968	4162
55°	544019	2141	1185	3326	4855
60°	304581	439	1360	3815	5350
65°	52561	259	1297	4203	6071
70°	962	321	1603	4552	6860
75°	847	424	2118	5168	7795
80°	631	631	2526	5809	8966
85°	0	1258	5032	6290	10315

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 686891 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.3	0.4
10°-20°	6.6	1.2
20°-30°	34.6	6.1
30°-40°	149.5	26.5
40°-50°	213.2	37.8
50°-60°	132.0	23.4
60°-70°	20.1	3.6
70°-80°	3.7	0.7
80°-90°	1.9	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°	43.6	7.7
0°-40°	193.0	34.2
0°-60°	538.3	95.4
0°-90°	564.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	564.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	26	26	26	26	26	
5°	28	28	26	23	22	3
15°	41	26	18	16	17	15
25°	444	33	10	12	14	266
35°	2064	46	6	10	12	1239
45°	2199	28	4	9	12	1662
55°	1423	6	3	9	13	1212
65°	101	0	2	8	12	207
75°	1	0	2	6	9	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°	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0
2.5°	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0	26.0	25.5
5°	28.0	28.0	27.5	27.5	27.5	27.5	27.5	27.5	26.5	25.5	23.9
7.5°	28.5	28.5	28.0	28.0	28.0	28.0	27.5	27.0	26.0	23.9	22.4
10°	29.0	29.0	29.0	29.0	28.5	28.0	27.5	26.5	24.9	22.4	20.9
12.5°	32.6	32.6	32.1	31.1	30.0	29.0	28.0	26.0	22.9	20.4	18.8
15°	40.7	40.2	39.2	37.7	35.6	33.1	31.1	25.5	20.9	17.8	16.8
17.5°	57.0	56.0	54.5	49.4	44.8	40.2	36.1	25.5	18.8	15.8	14.8
20°	99.3	99.8	89.1	76.9	66.7	55.5	45.3	26.5	16.8	13.7	13.2
22.5°	207.2	199.1	173.6	144.1	110.0	85.0	64.2	29.0	14.8	11.7	11.7
25°	444.5	413.4	351.8	265.8	187.4	132.9	93.2	32.6	13.2	10.2	10.7
27.5°	811.6	783.6	659.8	496.9	329.9	200.6	126.3	37.2	11.7	8.7	9.7
30°	1291.2	1213.8	1052.4	814.6	551.4	307.0	169.5	42.3	9.7	7.6	9.2
31°	1440.8	1405.2	1208.7	942.4	646.1	364.5	187.9	43.8	9.2	7.6	8.7
32°	1618.5	1555.4	1379.2	1082.4	742.3	416.0	209.8	45.3	8.7	6.6	8.7
33°	1777.4	1716.3	1501.9	1205.6	839.6	474.5	233.2	45.8	7.6	6.6	8.1
34°	1944.4	1860.9	1648.6	1334.4	939.3	537.6	254.6	46.3	7.1	6.1	8.1
35°	2064.0	1980.5	1774.8	1436.3	1025.4	593.6	279.0	46.3	6.6	6.1	7.6
36°	2156.7	2083.4	1883.8	1541.1	1110.9	644.1	298.4	46.3	5.6	5.6	7.6
37°	2220.3	2150.6	1957.1	1631.3	1176.1	688.9	315.7	46.3	5.1	5.6	7.6
38°	2251.4	2193.3	2027.9	1696.9	1239.2	724.0	329.4	45.3	4.6	5.1	7.1
39°	2264.6	2217.3	2071.1	1752.4	1286.6	754.5	339.6	44.3	4.1	5.1	7.1
40°	2262.6	2221.3	2095.6	1790.6	1324.8	775.4	345.2	42.8	3.6	4.6	7.1
41°	2250.9	2215.2	2108.3	1823.2	1347.7	789.7	346.7	41.2	3.1	4.6	6.6
42°	2237.6	2205.0	2112.4	1840.5	1362.4	794.2	342.6	39.2	3.1	4.1	6.6
43°	2223.9	2193.8	2112.4	1846.1	1366.0	791.2	336.0	35.6	2.5	4.1	6.6
44°	2212.7	2184.2	2105.8	1844.6	1358.4	779.5	323.8	31.6	2.0	4.1	6.6
45°	2199.4	2171.4	2097.1	1834.9	1343.6	759.6	308.5	28.0	1.5	3.6	6.6
46°	2176.0	2154.1	2081.8	1815.1	1320.2	732.1	289.2	25.5	1.0	3.6	6.1
47°	2130.7	2111.9	2052.3	1785.5	1289.1	699.5	269.3	22.9	1.0	3.6	6.1
48°	2039.6	2039.1	1993.2	1730.5	1239.7	658.8	248.5	20.4	1.0	3.6	6.1
49°	1951.5	1942.3	1885.3	1633.8	1169.0	609.9	226.6	18.3	0.5	3.6	6.1
50°	1903.1	1883.3	1789.6	1519.8	1078.3	542.2	203.1	15.3	0.5	3.1	6.1
51°	1852.7	1824.2	1713.7	1416.9	970.4	477.1	177.7	12.2	0.5	3.1	5.6
52°	1761.6	1734.6	1610.9	1318.6	865.5	410.4	153.2	10.2	0.5	3.1	6.1
53°	1663.3	1624.6	1490.2	1210.7	773.4	351.3	128.3	8.7	0.5	3.1	5.6
54°	1539.6	1522.3	1368.0	1078.3	665.4	294.3	105.4	7.1	0.5	3.1	5.6
55°	1423.0	1397.6	1237.2	942.9	567.7	241.3	88.1	5.6	0.5	3.1	5.6
56°	1274.4	1236.2	1086.0	818.7	468.4	194.5	74.3	4.6	0.5	3.1	5.6
57°	1097.2	1056.4	937.8	680.7	367.6	148.2	62.1	3.6	0.5	3.1	5.6
58°	928.1	893.0	765.7	525.4	277.0	102.8	51.4	2.5	0.5	2.5	5.6
59°	801.9	763.2	636.9	404.2	192.5	75.9	38.7	2.0	0.5	3.1	5.6
60°	694.5	644.6	512.7	313.1	137.5	54.5	28.5	1.0	1.0	3.1	5.6
62.5°	400.2	353.3	244.9	127.3	56.5	28.0	13.7	0.5	1.0	3.1	5.6
65°	101.3	90.1	58.6	27.5	15.8	9.7	5.1	0.5	1.0	2.5	5.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	3.6	3.6	3.6	3.1	2.5	2.0	1.0	0.5	1.0	2.5	5.1
70°	1.5	1.5	1.5	1.0	1.0	0.5	0.5	0.5	1.0	2.5	4.6
72.5°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.5	2.5	4.1
75°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.5	2.5	4.1
77.5°	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	1.5	2.0	3.6
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.5	2.0	3.1
82.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.5	2.0	2.5
85°	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5	1.5	2.0	2.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.5	2.0	1.5
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):

	135°	157.5°	180°
0°	26.0	26.0	26.0
2.5°	24.4	24.4	24.4
5°	22.9	22.9	22.4
7.5°	21.4	20.9	20.9
10°	19.3	19.3	19.3
12.5°	17.8	17.8	17.8
15°	16.3	16.8	16.8
17.5°	14.8	15.8	15.8
20°	13.7	14.8	15.3
22.5°	12.7	13.7	14.3
25°	12.2	13.2	13.7
27.5°	11.2	12.7	13.7
30°	10.7	12.2	13.2
31°	10.7	12.2	12.7
32°	10.2	12.2	12.7
33°	10.2	12.2	12.7
34°	10.2	11.7	12.7
35°	9.7	11.7	12.2
36°	9.7	11.7	12.2
37°	9.7	11.7	12.7
38°	9.7	11.7	12.2
39°	9.2	11.7	12.2
40°	9.2	11.7	12.2
41°	9.2	11.7	12.2
42°	9.2	11.7	12.2
43°	9.2	11.7	12.2
44°	9.2	11.2	12.2
45°	9.2	11.2	12.2
46°	9.2	11.7	12.2
47°	9.2	11.7	12.7
48°	9.2	11.2	12.2
49°	8.7	11.2	12.2
50°	8.7	11.2	12.2
51°	8.7	11.7	12.7
52°	8.7	11.7	12.7
53°	8.7	11.7	12.7
54°	8.7	11.7	12.2
55°	8.7	11.7	12.7
56°	8.7	11.7	12.2
57°	8.7	11.7	12.2
58°	8.7	11.2	12.2
59°	8.7	11.2	12.2
60°	8.7	11.2	12.2
62.5°	8.1	11.2	12.2
65°	8.1	10.7	11.7



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	7.6	10.7	11.2
70°	7.1	10.2	10.7
72.5°	6.6	9.7	10.2
75°	6.1	8.7	9.2
77.5°	5.1	7.6	8.7
80°	4.6	6.6	7.1
82.5°	3.6	5.6	6.1
85°	2.5	4.1	4.1
87.5°	1.0	2.0	2.0
90°	0.0	0.0	0.0

(END OF REPORT)