

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: P1342075

Luminaire Tested: P3A09R359840DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1342075
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: P3A09R359840DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R35 optic, 4000K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

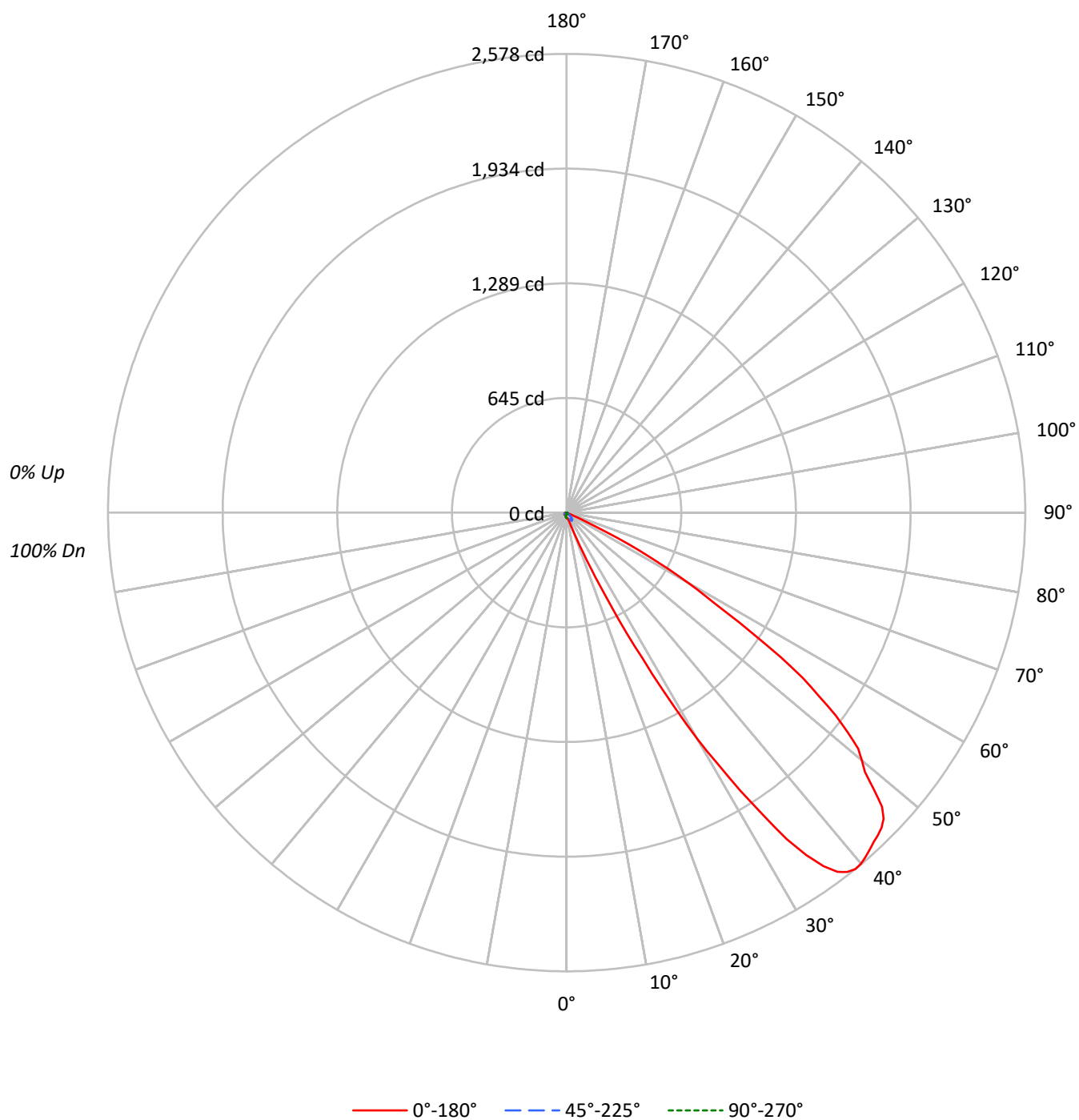
Lumens per Lamp: N/A
Luminaire Lumens: 642.0 lumens
Efficiency: N/A
Efficacy: 58.4 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	110	106	102	99	107	104	100	97	100	97	94	96	93	91	92	90	89	89	89	87
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	75	75	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	63	63	61
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	52	52	50
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44	44	44	42
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	37	37	35
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31	31	31	29
8	57	42	33	27	55	41	33	27	40	32	27	39	32	26	38	31	26	26	26	24
9	52	38	29	23	50	37	29	23	36	28	23	35	28	22	34	27	22	22	22	20
10	48	34	25	19	46	33	25	19	32	25	19	31	24	19	30	24	19	19	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	6491	6491	6491	6491	6491
5°	7022	6890	6383	5745	5613
10°	7348	6702	5678	4899	4899
15°	10534	6583	4608	4200	4336
20°	26369	7024	3640	3640	4060
25°	122402	8976	2807	3363	3774
30°	372133	12179	2203	3089	3823
35°	628943	14107	1874	2945	3721
40°	737238	13940	1489	2977	3979
45°	776391	9892	1271	3225	4311
50°	739012	5936	1194	3377	4742
55°	619256	2447	1338	3785	5543
60°	346683	526	1535	4342	6096
65°	59825	311	1505	4825	6901
70°	1090	385	1859	5193	7822
75°	1017	508	2457	5931	8811
80°	758	758	2904	6566	10229
85°	0	1510	5787	7296	11573

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 781907 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.7	0.4
10°-20°	7.6	1.2
20°-30°	39.4	6.1
30°-40°	170.1	26.5
40°-50°	242.7	37.8
50°-60°	150.3	23.4
60°-70°	22.9	3.6
70°-80°	4.3	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°	49.6	7.7
0°-40°	219.7	34.2
0°-60°	612.7	95.4
0°-90°	642.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	642.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	30	30	30	30	30	
5°	32	31	29	26	26	3
15°	46	29	20	18	19	17
25°	506	37	12	14	16	303
35°	2350	53	7	11	14	1411
45°	2504	32	4	10	14	1891
55°	1620	6	4	10	14	1380
65°	115	1	3	9	13	236
75°	1	1	3	7	10	1
85°	0	1	2	3	5	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°	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6
2.5°	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	29.6	29.0
5°	31.9	31.9	31.3	31.3	31.3	31.3	31.3	31.3	30.1	29.0	27.2
7.5°	32.5	32.5	31.9	31.9	31.9	31.9	31.3	30.7	29.6	27.2	25.5
10°	33.0	33.0	33.0	33.0	32.5	31.9	31.3	30.1	28.4	25.5	23.8
12.5°	37.1	37.1	36.5	35.4	34.2	33.0	31.9	29.6	26.1	23.2	21.4
15°	46.4	45.8	44.6	42.9	40.6	37.7	35.4	29.0	23.8	20.3	19.1
17.5°	64.9	63.7	62.0	56.2	51.0	45.8	41.1	29.0	21.4	18.0	16.8
20°	113.0	113.6	101.4	87.5	75.9	63.2	51.6	30.1	19.1	15.6	15.1
22.5°	235.9	226.6	197.6	164.0	125.2	96.8	73.0	33.0	16.8	13.3	13.3
25°	505.9	470.6	400.5	302.5	213.3	151.3	106.1	37.1	15.1	11.6	12.2
27.5°	923.8	891.9	751.1	565.6	375.5	228.3	143.7	42.3	13.3	9.9	11.0
30°	1469.7	1381.6	1197.9	927.3	627.6	349.5	193.0	48.1	11.0	8.7	10.4
31°	1640.1	1599.5	1375.8	1072.7	735.4	415.0	213.9	49.8	10.4	8.7	9.9
32°	1842.4	1770.5	1570.0	1232.1	845.0	473.5	238.8	51.6	9.9	7.5	9.9
33°	2023.2	1953.6	1709.7	1372.4	955.7	540.1	265.4	52.2	8.7	7.5	9.3
34°	2213.3	2118.2	1876.6	1519.0	1069.3	612.0	289.8	52.7	8.1	7.0	9.3
35°	2349.5	2254.4	2020.3	1634.9	1167.2	675.7	317.6	52.7	7.5	7.0	8.7
36°	2454.9	2371.5	2144.3	1754.3	1264.6	733.1	339.6	52.7	6.4	6.4	8.7
37°	2527.4	2448.0	2227.8	1856.9	1338.7	784.1	359.3	52.7	5.8	6.4	8.7
38°	2562.7	2496.7	2308.3	1931.6	1410.6	824.1	375.0	51.6	5.2	5.8	8.1
39°	2577.8	2523.9	2357.6	1994.8	1464.5	858.9	386.6	50.4	4.6	5.8	8.1
40°	2575.5	2528.5	2385.4	2038.3	1508.0	882.6	392.9	48.7	4.1	5.2	8.1
41°	2562.2	2521.6	2399.9	2075.3	1534.0	898.9	394.7	46.9	3.5	5.2	7.5
42°	2547.1	2510.0	2404.5	2095.0	1550.9	904.1	390.0	44.6	3.5	4.6	7.5
43°	2531.4	2497.2	2404.5	2101.4	1554.9	900.6	382.5	40.6	2.9	4.6	7.5
44°	2518.7	2486.2	2397.0	2099.7	1546.2	887.3	368.6	35.9	2.3	4.6	7.5
45°	2503.6	2471.7	2387.1	2088.7	1529.4	864.7	351.2	31.9	1.7	4.1	7.5
46°	2477.0	2452.0	2369.7	2066.1	1502.8	833.4	329.2	29.0	1.2	4.1	7.0
47°	2425.4	2403.9	2336.1	2032.5	1467.4	796.3	306.6	26.1	1.2	4.1	7.0
48°	2321.6	2321.1	2268.9	1969.9	1411.2	749.9	282.8	23.2	1.2	4.1	7.0
49°	2221.4	2211.0	2146.0	1859.8	1330.6	694.3	257.9	20.9	0.6	4.1	7.0
50°	2166.3	2143.7	2037.1	1729.9	1227.5	617.2	231.2	17.4	0.6	3.5	7.0
51°	2109.0	2076.5	1950.7	1612.9	1104.6	543.0	202.3	13.9	0.6	3.5	6.4
52°	2005.2	1974.5	1833.7	1501.0	985.2	467.1	174.4	11.6	0.6	3.5	7.0
53°	1893.4	1849.3	1696.3	1378.2	880.3	399.9	146.0	9.9	0.6	3.5	6.4
54°	1752.5	1732.8	1557.2	1227.5	757.5	335.0	120.0	8.1	0.6	3.5	6.4
55°	1619.8	1590.8	1408.3	1073.3	646.2	274.7	100.3	6.4	0.6	3.5	6.4
56°	1450.6	1407.1	1236.2	931.9	533.2	221.4	84.6	5.2	0.6	3.5	6.4
57°	1248.9	1202.6	1067.5	774.8	418.4	168.6	70.7	4.1	0.6	3.5	6.4
58°	1056.5	1016.5	871.6	598.1	315.3	117.1	58.5	2.9	0.6	2.9	6.4
59°	912.8	868.7	725.0	460.2	219.1	86.4	44.0	2.3	0.6	3.5	6.4
60°	790.5	733.7	583.6	356.4	156.5	62.0	32.5	1.2	1.2	3.5	6.4
62.5°	455.5	402.2	278.8	144.9	64.3	31.9	15.6	0.6	1.2	3.5	6.4
65°	115.3	102.6	66.6	31.3	18.0	11.0	5.8	0.6	1.2	2.9	5.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	4.1	4.1	4.1	3.5	2.9	2.3	1.2	0.6	1.2	2.9	5.8
70°	1.7	1.7	1.7	1.2	1.2	0.6	0.6	0.6	1.2	2.9	5.2
72.5°	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6	1.7	2.9	4.6
75°	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6	1.7	2.9	4.6
77.5°	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6	1.7	2.3	4.1
80°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.7	2.3	3.5
82.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.7	2.3	2.9
85°	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.6	1.7	2.3	2.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.7	2.3	1.7
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°	29.6	29.6	29.6
2.5°	27.8	27.8	27.8
5°	26.1	26.1	25.5
7.5°	24.3	23.8	23.8
10°	22.0	22.0	22.0
12.5°	20.3	20.3	20.3
15°	18.5	19.1	19.1
17.5°	16.8	18.0	18.0
20°	15.6	16.8	17.4
22.5°	14.5	15.6	16.2
25°	13.9	15.1	15.6
27.5°	12.7	14.5	15.6
30°	12.2	13.9	15.1
31°	12.2	13.9	14.5
32°	11.6	13.9	14.5
33°	11.6	13.9	14.5
34°	11.6	13.3	14.5
35°	11.0	13.3	13.9
36°	11.0	13.3	13.9
37°	11.0	13.3	14.5
38°	11.0	13.3	13.9
39°	10.4	13.3	13.9
40°	10.4	13.3	13.9
41°	10.4	13.3	13.9
42°	10.4	13.3	13.9
43°	10.4	13.3	13.9
44°	10.4	12.7	13.9
45°	10.4	12.7	13.9
46°	10.4	13.3	13.9
47°	10.4	13.3	14.5
48°	10.4	12.7	13.9
49°	9.9	12.7	13.9
50°	9.9	12.7	13.9
51°	9.9	13.3	14.5
52°	9.9	13.3	14.5
53°	9.9	13.3	14.5
54°	9.9	13.3	13.9
55°	9.9	13.3	14.5
56°	9.9	13.3	13.9
57°	9.9	13.3	13.9
58°	9.9	12.7	13.9
59°	9.9	12.7	13.9
60°	9.9	12.7	13.9
62.5°	9.3	12.7	13.9
65°	9.3	12.2	13.3



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	8.7	12.2	12.7
70°	8.1	11.6	12.2
72.5°	7.5	11.0	11.6
75°	7.0	9.9	10.4
77.5°	5.8	8.7	9.9
80°	5.2	7.5	8.1
82.5°	4.1	6.4	7.0
85°	2.9	4.6	4.6
87.5°	1.2	2.3	2.3
90°	0.0	0.0	0.0

(END OF REPORT)