

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: P1342059

Luminaire Tested: P3A09R359835DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1342059
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: P3A09R359835DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R35 optic, 3500K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

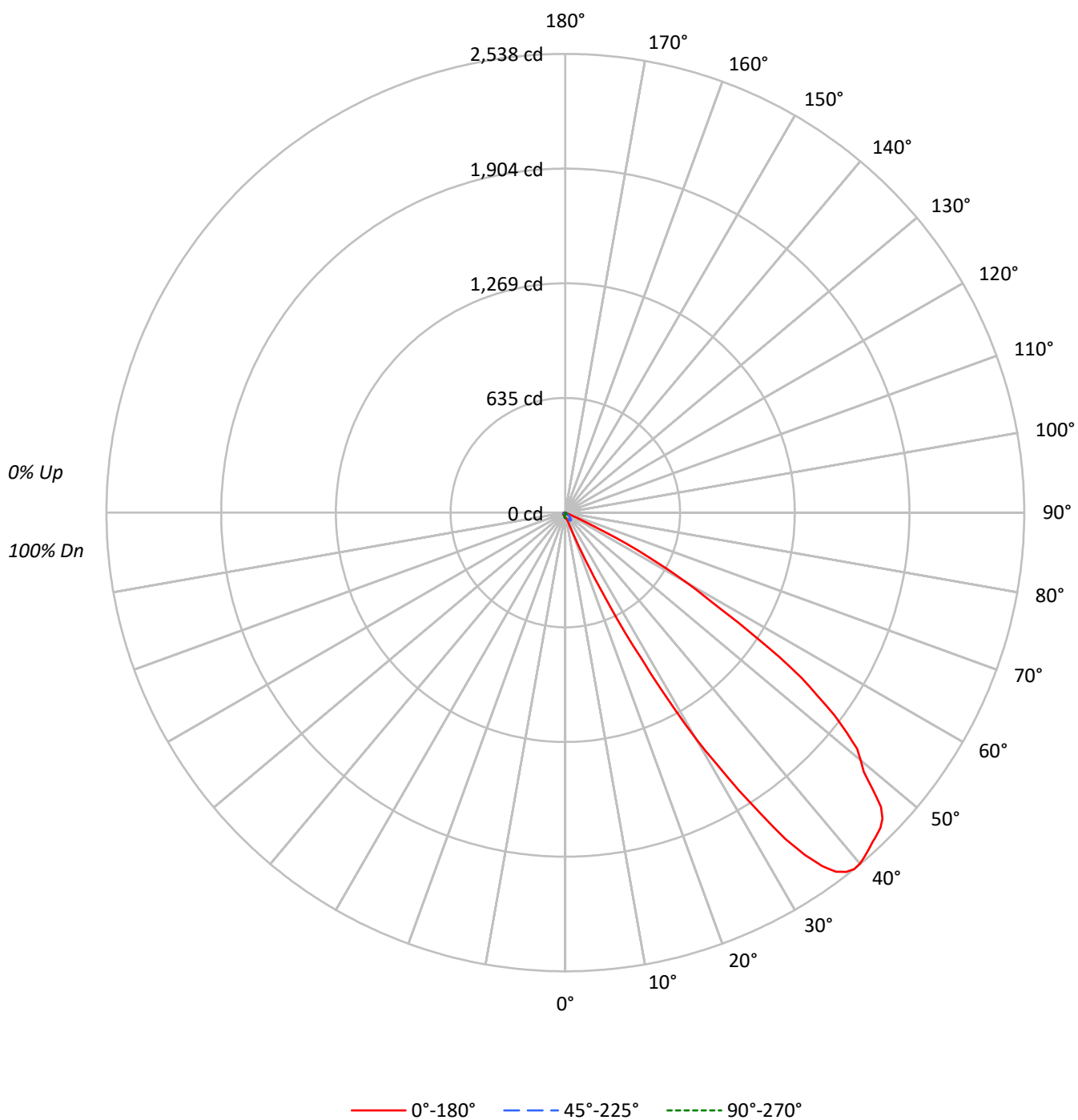
Lumens per Lamp: N/A
Luminaire Lumens: 632.0 lumens
Efficiency: N/A
Efficacy: 57.5 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	6381	6381	6381	6381	6381
5°	6912	6780	6273	5657	5525
10°	7237	6613	5589	4832	4832
15°	10352	6470	4540	4154	4268
20°	25972	6931	3594	3594	3990
25°	120515	8831	2758	3315	3726
30°	366335	12002	2178	3038	3747
35°	619145	13893	1820	2891	3667
40°	725760	13711	1460	2948	3922
45°	764296	9737	1240	3194	4249
50°	727516	5833	1160	3309	4674
55°	609622	2409	1300	3708	5467
60°	341288	482	1491	4254	6008
65°	58891	311	1505	4722	6797
70°	1090	385	1859	5129	7694
75°	932	508	2457	5761	8727
80°	758	758	2904	6440	10102
85°	0	1510	5787	7296	11573

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 769722 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.6	0.4
10°-20°	7.4	1.2
20°-30°	38.8	6.1
30°-40°	167.5	26.5
40°-50°	238.9	37.8
50°-60°	148.0	23.4
60°-70°	22.5	3.6
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°	48.9	7.7
0°-40°	216.3	34.2
0°-60°	603.2	95.4
0°-90°	632.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	632.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	29	29	29	29	29	
5°	31	31	28	26	25	3
15°	46	28	20	18	19	16
25°	498	36	11	14	15	298
35°	2313	52	7	11	14	1389
45°	2465	31	4	10	14	1862
55°	1595	6	3	10	14	1358
65°	114	1	3	9	13	232
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°	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1
2.5°	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	29.1	28.5
5°	31.4	31.4	30.8	30.8	30.8	30.8	30.8	30.8	29.7	28.5	26.8
7.5°	31.9	31.9	31.4	31.4	31.4	31.4	30.8	30.2	29.1	26.8	25.1
10°	32.5	32.5	32.5	32.5	31.9	31.4	30.8	29.7	28.0	25.1	23.4
12.5°	36.5	36.5	35.9	34.8	33.7	32.5	31.4	29.1	25.7	22.8	21.1
15°	45.6	45.1	43.9	42.2	39.9	37.1	34.8	28.5	23.4	20.0	18.8
17.5°	63.9	62.8	61.0	55.3	50.2	45.1	40.5	28.5	21.1	17.7	16.5
20°	111.3	111.8	99.8	86.1	74.7	62.2	50.8	29.7	18.8	15.4	14.8
22.5°	232.2	223.1	194.5	161.5	123.2	95.3	71.9	32.5	16.5	13.1	13.1
25°	498.1	463.3	394.2	297.8	209.9	148.9	104.4	36.5	14.8	11.4	12.0
27.5°	909.4	878.0	739.4	556.8	369.7	224.8	141.5	41.6	13.1	9.7	10.8
30°	1446.8	1360.1	1179.3	912.8	617.9	344.0	190.0	47.4	10.8	8.6	10.3
31°	1614.6	1574.6	1354.4	1056.0	724.0	408.5	210.5	49.1	10.3	8.6	9.7
32°	1813.7	1742.9	1545.5	1212.9	831.8	466.1	235.1	50.8	9.7	7.4	9.7
33°	1991.7	1923.2	1683.0	1351.0	940.8	531.7	261.3	51.3	8.6	7.4	9.1
34°	2178.8	2085.2	1847.3	1495.3	1052.6	602.5	285.3	51.9	8.0	6.8	9.1
35°	2312.9	2219.3	1988.8	1609.4	1149.0	665.2	312.6	51.9	7.4	6.8	8.6
36°	2416.7	2334.5	2110.9	1726.9	1244.9	721.7	334.3	51.9	6.3	6.3	8.6
37°	2488.0	2409.9	2193.1	1827.9	1317.9	771.9	353.7	51.9	5.7	6.3	8.6
38°	2522.8	2457.8	2272.4	1901.5	1388.6	811.3	369.1	50.8	5.1	5.7	8.0
39°	2537.7	2484.6	2320.9	1963.7	1441.7	845.5	380.5	49.6	4.6	5.7	8.0
40°	2535.4	2489.2	2348.2	2006.5	1484.5	868.9	386.8	47.9	4.0	5.1	8.0
41°	2522.2	2482.3	2362.5	2043.0	1510.2	884.9	388.5	46.2	3.4	5.1	7.4
42°	2507.4	2470.9	2367.1	2062.4	1526.7	890.0	384.0	43.9	3.4	4.6	7.4
43°	2492.0	2458.4	2367.1	2068.7	1530.7	886.6	376.5	39.9	2.9	4.6	7.4
44°	2479.5	2447.5	2359.7	2067.0	1522.1	873.5	362.8	35.4	2.3	4.6	7.4
45°	2464.6	2433.2	2350.0	2056.1	1505.6	851.2	345.7	31.4	1.7	4.0	7.4
46°	2438.4	2413.9	2332.8	2033.9	1479.3	820.4	324.1	28.5	1.1	4.0	6.8
47°	2387.6	2366.5	2299.7	2000.8	1444.5	783.9	301.8	25.7	1.1	4.0	6.8
48°	2285.5	2284.9	2233.6	1939.2	1389.2	738.2	278.4	22.8	1.1	4.0	6.8
49°	2186.8	2176.5	2112.6	1830.8	1309.9	683.5	253.9	20.5	0.6	4.0	6.8
50°	2132.6	2110.3	2005.4	1703.0	1208.4	607.6	227.6	17.1	0.6	3.4	6.8
51°	2076.1	2044.2	1920.4	1587.7	1087.4	534.6	199.1	13.7	0.6	3.4	6.3
52°	1974.0	1943.7	1805.1	1477.6	969.9	459.8	171.7	11.4	0.6	3.4	6.8
53°	1863.9	1820.5	1669.9	1356.7	866.6	393.7	143.8	9.7	0.6	3.4	6.3
54°	1725.2	1705.8	1533.0	1208.4	745.7	329.8	118.1	8.0	0.6	3.4	6.3
55°	1594.6	1566.1	1386.4	1056.6	636.1	270.4	98.7	6.3	0.6	3.4	6.3
56°	1428.0	1385.2	1216.9	917.4	524.9	217.9	83.3	5.1	0.6	3.4	6.3
57°	1229.5	1183.8	1050.9	762.8	411.9	166.0	69.6	4.0	0.6	3.4	6.3
58°	1040.0	1000.7	858.1	588.8	310.4	115.2	57.6	2.9	0.6	2.9	6.3
59°	898.6	855.2	713.7	453.0	215.7	85.0	43.4	2.3	0.6	3.4	6.3
60°	778.2	722.3	574.5	350.9	154.0	61.0	31.9	1.1	1.1	3.4	6.3
62.5°	448.4	395.9	274.4	142.6	63.3	31.4	15.4	0.6	1.1	3.4	6.3
65°	113.5	101.0	65.6	30.8	17.7	10.8	5.7	0.6	1.1	2.9	5.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	4.0	4.0	4.0	3.4	2.9	2.3	1.1	0.6	1.1	2.9	5.7
70°	1.7	1.7	1.7	1.1	1.1	0.6	0.6	0.6	1.1	2.9	5.1
72.5°	1.1	1.1	1.1	1.1	0.6	0.6	0.6	0.6	1.7	2.9	4.6
75°	1.1	1.1	1.1	1.1	0.6	0.6	0.6	0.6	1.7	2.9	4.6
77.5°	1.1	1.1	0.6	0.6	0.6	0.6	0.6	0.6	1.7	2.3	4.0
80°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.7	2.3	3.4
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°	29.1	29.1	29.1
2.5°	27.4	27.4	27.4
5°	25.7	25.7	25.1
7.5°	24.0	23.4	23.4
10°	21.7	21.7	21.7
12.5°	20.0	20.0	20.0
15°	18.3	18.8	18.8
17.5°	16.5	17.7	17.7
20°	15.4	16.5	17.1
22.5°	14.3	15.4	16.0
25°	13.7	14.8	15.4
27.5°	12.6	14.3	15.4
30°	12.0	13.7	14.8
31°	12.0	13.7	14.3
32°	11.4	13.7	14.3
33°	11.4	13.7	14.3
34°	11.4	13.1	14.3
35°	10.8	13.1	13.7
36°	10.8	13.1	13.7
37°	10.8	13.1	14.3
38°	10.8	13.1	13.7
39°	10.3	13.1	13.7
40°	10.3	13.1	13.7
41°	10.3	13.1	13.7
42°	10.3	13.1	13.7
43°	10.3	13.1	13.7
44°	10.3	12.6	13.7
45°	10.3	12.6	13.7
46°	10.3	13.1	13.7
47°	10.3	13.1	14.3
48°	10.3	12.6	13.7
49°	9.7	12.6	13.7
50°	9.7	12.6	13.7
51°	9.7	13.1	14.3
52°	9.7	13.1	14.3
53°	9.7	13.1	14.3
54°	9.7	13.1	13.7
55°	9.7	13.1	14.3
56°	9.7	13.1	13.7
57°	9.7	13.1	13.7
58°	9.7	12.6	13.7
59°	9.7	12.6	13.7
60°	9.7	12.6	13.7
62.5°	9.1	12.6	13.7
65°	9.1	12.0	13.1



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	8.6	12.0	12.6
70°	8.0	11.4	12.0
72.5°	7.4	10.8	11.4
75°	6.8	9.7	10.3
77.5°	5.7	8.6	9.7
80°	5.1	7.4	8.0
82.5°	4.0	6.3	6.8
85°	2.9	4.6	4.6
87.5°	1.1	2.3	2.3
90°	0.0	0.0	0.0

(END OF REPORT)