

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: P1314247

Luminaire Tested: P3SQAS09R409735DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1314247
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-78)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS09R409735DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R40 optic, 3500K CCT AND, 97CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

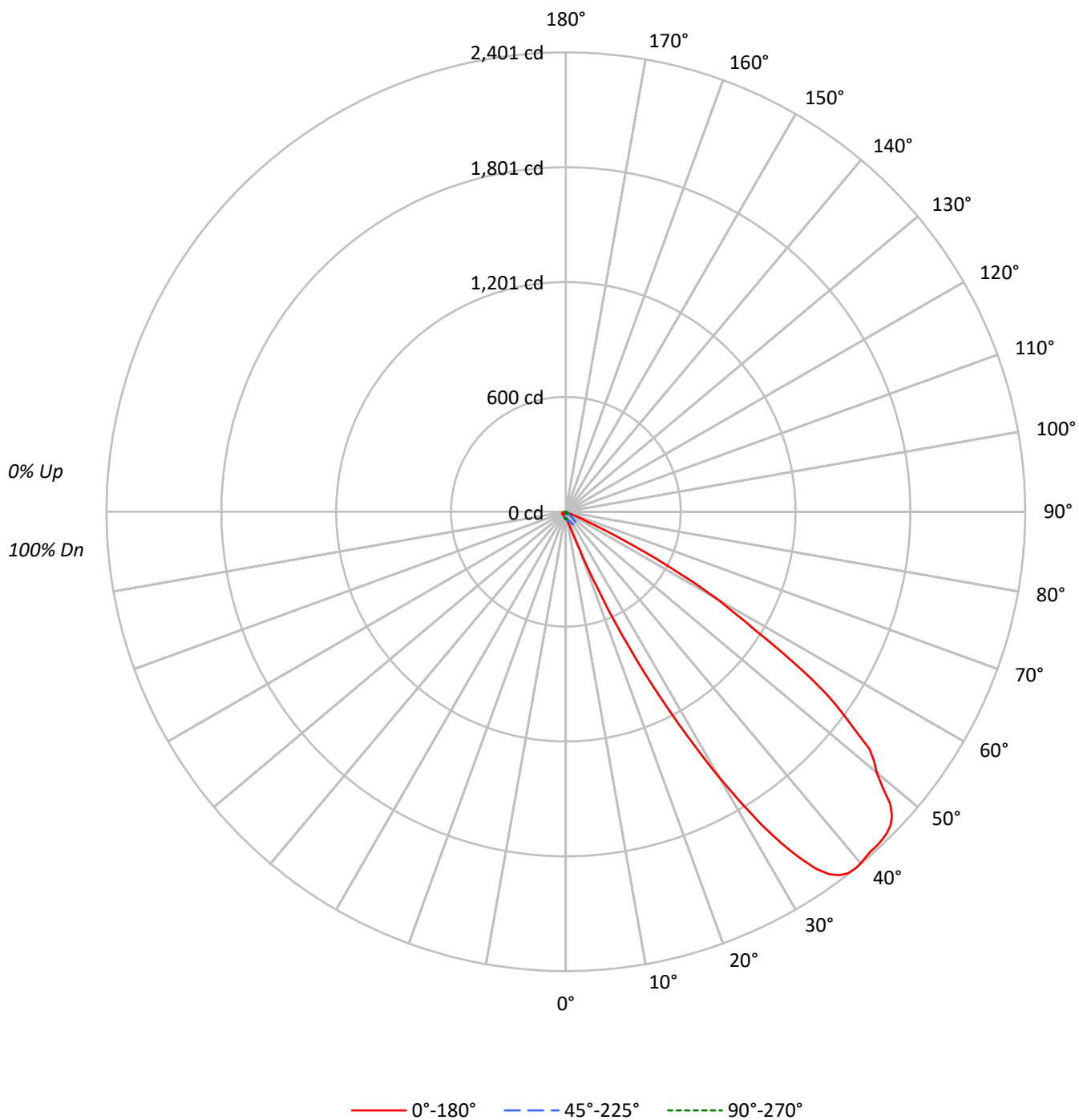
Lumens per Lamp: N/A
Luminaire Lumens: 742.0 lumens
Efficiency: N/A
Efficacy: 66.8 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11.1
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		99	97	94		96	93	91		92	90	88
2	100	93	86	81		98	91	85	80		87	82	78		84	80	76		81	78	75
3	91	81	73	66		89	79	72	66		76	70	65		73	68	64		71	66	62
4	82	70	62	55		80	69	61	54		67	59	54		64	58	53		62	57	52
5	75	62	52	46		73	60	52	45		58	51	45		56	50	44		54	49	44
6	68	54	45	38		66	53	44	38		51	43	38		50	43	37		48	42	37
7	62	48	39	32		60	47	38	32		45	37	32		44	37	31		42	36	31
8	57	42	33	27		55	42	33	27		40	32	27		39	32	27		38	31	26
9	52	38	29	23		51	37	29	23		36	28	23		35	28	23		34	27	23
10	48	34	25	20		47	33	25	20		32	25	20		31	24	20		30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	6579	6579	6579	6579	6579
5°	7296	7071	6483	5895	5774
10°	8814	7502	5963	5369	5246
15°	14460	8148	5099	4743	4868
20°	38213	9622	4252	4252	4619
25°	147366	11915	3363	3877	4523
30°	317907	15850	2705	3798	4474
35°	478518	18775	2292	3721	4583
40°	539098	18840	2001	3822	4901
45°	578064	14614	1827	3994	5310
50°	568174	9136	1634	4207	5841
55°	499845	4504	1651	4714	6546
60°	316407	930	1894	5167	7268
65°	64713	285	1956	5542	8069
70°	1360	352	2065	6194	9265
75°	1331	932	2262	6787	10447
80°	1389	694	2678	7438	12199
85°	1383	1383	5335	8102	13437

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 588513 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.6	0.5
10°-20°	11.8	1.6
20°-30°	57.6	7.8
30°-40°	187.5	25.3
40°-50°	258.4	34.8
50°-60°	180.0	24.3
60°-70°	34.1	4.6
70°-80°	6.2	0.8
80°-90°	2.8	0.4
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°	73.0	9.8
0°-40°	260.4	35.1
0°-60°	698.8	94.2
0°-90°	742.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	742.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	38	38	38	38	38	
5°	42	41	38	34	33	4
15°	81	46	29	27	27	29
25°	776	63	18	20	24	399
35°	2276	89	11	18	22	1375
45°	2373	60	8	16	22	1805
55°	1665	15	6	16	22	1423
65°	159	1	5	14	20	281
75°	2	1	3	10	16	2
85°	1	1	3	4	7	1
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2
2.5°	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	38.8	38.2
5°	42.2	42.2	42.2	42.2	41.6	41.6	41.6	40.9	40.9	39.5	37.5
7.5°	45.0	45.0	45.0	45.0	44.3	43.6	42.9	42.9	42.2	38.8	36.1
10°	50.4	50.4	49.7	49.1	48.4	47.0	46.3	45.0	42.9	38.2	34.1
12.5°	61.3	60.0	59.3	57.9	55.9	53.2	50.4	48.4	43.6	36.8	32.0
15°	81.1	79.7	77.0	72.9	68.8	63.4	58.6	53.8	45.7	34.8	28.6
17.5°	115.8	111.8	107.7	100.9	90.6	81.1	70.9	62.0	48.4	32.7	25.9
20°	208.5	205.8	181.3	162.2	131.5	109.7	89.3	74.3	52.5	30.7	23.2
22.5°	430.0	401.4	361.2	295.7	230.3	169.7	123.3	93.4	56.6	27.9	20.4
25°	775.5	730.5	643.9	517.9	382.3	270.5	178.5	122.0	62.7	25.2	17.7
27.5°	1174.1	1128.4	994.2	820.4	599.0	408.2	254.9	161.5	70.9	22.5	15.7
30°	1598.6	1559.8	1389.4	1148.9	844.3	571.7	341.4	201.7	79.7	19.8	13.6
31°	1769.7	1719.9	1535.9	1279.7	959.4	639.2	376.1	218.7	83.1	19.1	12.9
32°	1927.1	1870.5	1679.7	1405.1	1052.8	712.1	414.3	233.7	85.9	17.7	12.3
33°	2062.7	1996.6	1812.6	1523.7	1155.7	780.2	453.8	248.0	87.9	16.4	11.6
34°	2177.8	2120.6	1923.0	1642.9	1247.0	845.6	492.7	262.3	89.3	15.7	10.9
35°	2276.0	2224.2	2028.6	1733.5	1336.3	909.0	528.1	276.0	89.3	14.3	10.9
36°	2342.1	2297.1	2119.9	1826.2	1411.2	962.9	558.1	288.2	89.3	12.9	10.2
37°	2378.2	2334.6	2179.9	1902.5	1484.8	1016.0	585.3	297.8	88.6	12.3	9.5
38°	2396.6	2358.4	2224.2	1964.5	1535.9	1054.2	609.2	305.3	87.9	10.9	9.5
39°	2401.3	2369.3	2252.1	2009.5	1585.7	1092.3	626.2	309.4	85.9	10.2	8.9
40°	2397.9	2370.0	2267.1	2049.7	1623.8	1122.3	638.5	310.7	83.8	8.9	8.9
41°	2391.1	2369.3	2278.0	2077.7	1654.5	1141.4	643.3	308.0	81.1	7.5	8.2
42°	2385.0	2361.1	2282.8	2096.7	1675.6	1150.9	642.6	302.6	77.0	6.8	8.2
43°	2385.0	2357.7	2283.5	2109.0	1685.8	1151.6	634.4	292.3	71.5	6.1	7.5
44°	2380.9	2355.7	2286.9	2117.2	1688.6	1145.5	621.5	281.4	65.4	5.5	7.5
45°	2373.4	2346.8	2286.2	2117.9	1683.8	1130.5	600.3	267.1	60.0	4.1	7.5
46°	2359.1	2335.2	2280.0	2113.1	1669.5	1108.7	575.1	252.8	53.8	3.4	6.8
47°	2330.5	2312.1	2263.7	2096.7	1647.7	1076.6	545.1	236.5	49.1	2.7	6.8
48°	2281.4	2268.5	2235.8	2060.6	1606.1	1037.1	513.1	218.7	44.3	2.7	6.8
49°	2191.5	2181.2	2162.2	2002.7	1553.0	988.7	478.4	199.0	39.5	2.0	6.8
50°	2120.6	2109.7	2070.8	1905.3	1476.6	927.4	440.2	179.2	34.1	1.4	6.1
51°	2073.6	2055.9	1994.5	1792.1	1365.6	845.6	398.6	159.5	28.6	1.4	6.1
52°	2014.3	1987.7	1911.4	1690.6	1264.0	763.9	353.7	139.7	25.2	1.4	6.1
53°	1890.3	1880.7	1805.1	1581.6	1162.5	685.5	307.3	123.3	21.8	1.4	6.1
54°	1781.9	1767.6	1664.7	1430.3	1052.1	598.3	259.6	109.0	18.4	1.4	6.1
55°	1664.7	1636.8	1545.5	1302.9	922.6	517.9	214.0	94.0	15.0	1.4	5.5
56°	1516.8	1492.3	1394.2	1166.6	803.4	436.1	179.2	77.0	11.6	1.4	5.5
57°	1337.0	1314.5	1238.8	999.0	679.4	356.4	145.8	62.0	8.9	1.4	5.5
58°	1163.2	1138.0	1051.4	838.2	548.5	282.8	122.0	50.4	6.8	1.4	5.5
59°	1029.6	995.6	883.8	703.9	429.3	214.6	96.8	40.2	4.8	1.4	5.5
60°	918.6	890.6	774.8	586.0	336.6	158.1	71.5	30.7	2.7	1.4	5.5
62.5°	532.2	524.7	420.4	301.9	158.8	73.6	35.4	14.3	1.4	2.0	5.5
65°	158.8	138.3	107.7	64.1	40.9	24.5	12.9	4.8	0.7	2.0	4.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	4.8	4.8	4.8	4.8	4.8	4.8	2.7	1.4	0.7	2.0	4.8
70°	2.7	2.0	2.0	2.0	2.0	1.4	1.4	0.7	0.7	2.0	4.1
72.5°	2.0	2.0	2.0	2.0	1.4	1.4	1.4	0.7	1.4	2.0	3.4
75°	2.0	1.4	1.4	1.4	1.4	0.7	0.7	0.7	1.4	2.0	3.4
77.5°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	1.4	2.0	3.4
80°	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.0	2.7
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.0	2.7
85°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.0	2.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	2.0	2.0
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):

	112.5°	135°	157.5°	180°
0°	38.2	38.2	38.2	38.2
2.5°	36.8	36.1	35.4	35.4
5°	35.4	34.1	34.1	33.4
7.5°	33.4	32.0	32.0	32.0
10°	31.3	30.7	30.7	30.0
12.5°	28.6	28.6	28.6	28.6
15°	26.6	26.6	27.3	27.3
17.5°	23.8	24.5	25.9	26.6
20°	21.8	23.2	24.5	25.2
22.5°	20.4	21.8	23.8	24.5
25°	18.4	20.4	23.2	23.8
27.5°	17.0	19.8	21.8	23.2
30°	15.7	19.1	21.1	22.5
31°	15.7	18.4	21.1	22.5
32°	15.0	17.7	21.1	21.8
33°	15.0	17.7	21.1	21.8
34°	14.3	17.7	20.4	21.8
35°	14.3	17.7	20.4	21.8
36°	13.6	17.0	20.4	21.8
37°	13.6	17.0	20.4	21.8
38°	12.9	17.0	20.4	21.8
39°	12.9	17.0	20.4	21.8
40°	12.9	17.0	20.4	21.8
41°	12.3	17.0	20.4	21.8
42°	12.3	17.0	20.4	21.8
43°	12.3	16.4	20.4	21.8
44°	12.3	16.4	20.4	21.8
45°	11.6	16.4	20.4	21.8
46°	11.6	16.4	20.4	21.8
47°	11.6	16.4	20.4	21.8
48°	11.6	16.4	20.4	21.8
49°	11.6	16.4	20.4	21.8
50°	10.9	15.7	20.4	21.8
51°	10.9	15.7	20.4	21.8
52°	10.9	15.7	20.4	21.8
53°	10.9	15.7	20.4	21.8
54°	10.2	15.7	20.4	21.8
55°	10.2	15.7	20.4	21.8
56°	10.2	15.7	20.4	21.1
57°	10.2	15.7	19.8	21.1
58°	10.2	15.0	19.8	21.1
59°	10.2	15.0	19.8	21.1
60°	10.2	15.0	19.8	21.1
62.5°	9.5	15.0	19.1	20.4
65°	8.9	13.6	19.1	19.8



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	8.9	12.9	17.7	19.1
70°	8.2	12.3	17.0	18.4
72.5°	6.8	11.6	15.7	17.0
75°	6.1	10.2	14.3	15.7
77.5°	5.5	8.9	12.9	13.6
80°	4.8	7.5	10.9	12.3
82.5°	3.4	5.5	8.9	9.5
85°	2.7	4.1	6.1	6.8
87.5°	2.0	2.0	3.4	3.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)