

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: P1315219

Luminaire Tested: P3SQAS09R409740DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1315219
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: P3SQAS09R409740DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R40 optic, 4000K CCT AND, 97CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

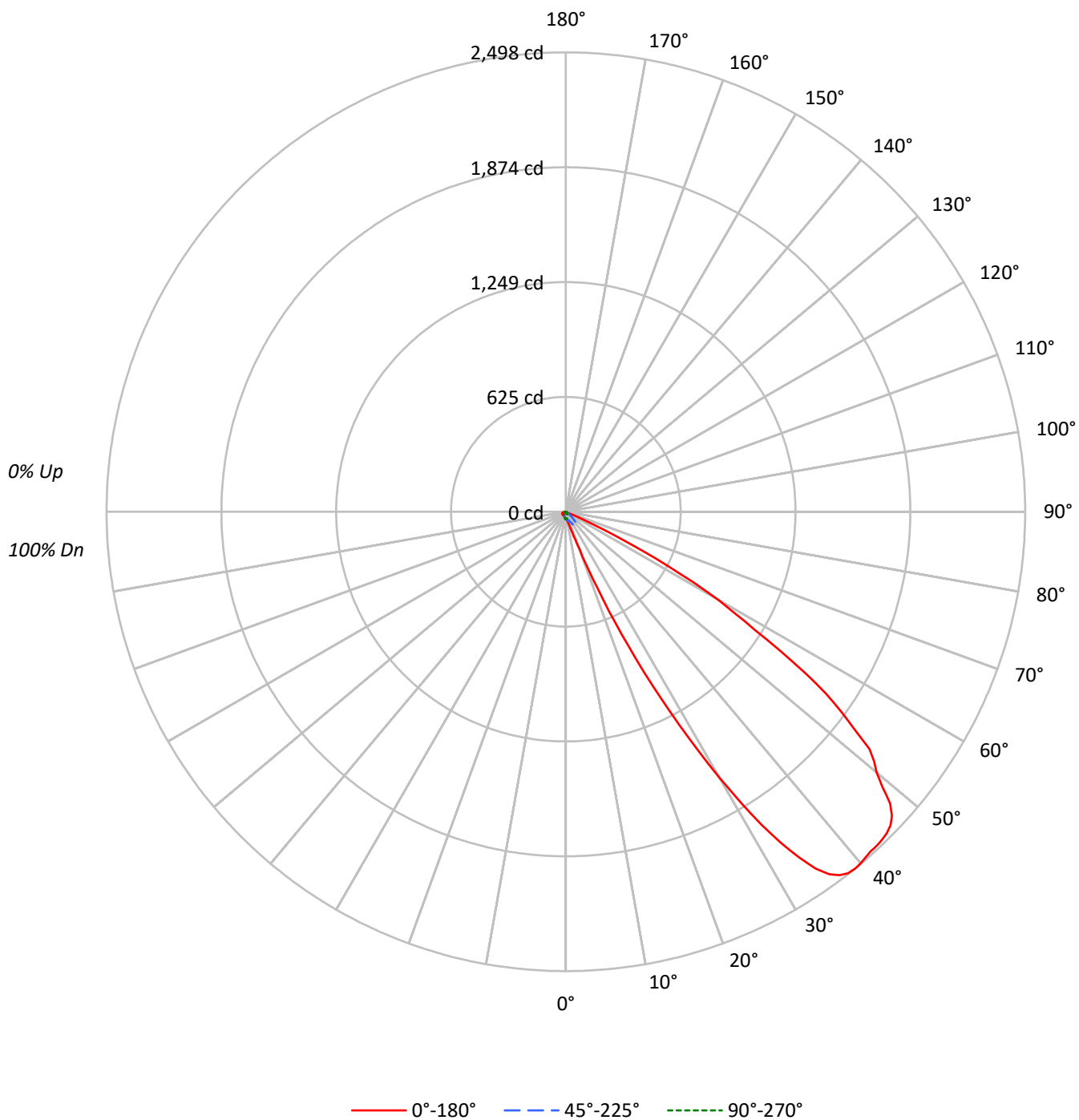
Lumens per Lamp: N/A
Luminaire Lumens: 772.0 lumens
Efficiency: N/A
Efficacy: 69.5 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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			0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
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	107	104	100	97	99	97	94		96	93	91		92	90	88	86
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81	78	75	72
3	91	81	73	66	89	79	72	66	76	70	65		73	68	64		71	66	62	60
4	82	70	62	55	80	69	61	54	67	59	54		64	58	53		62	57	52	50
5	75	62	52	46	73	60	52	45	58	51	45		56	50	44		54	49	44	42
6	68	54	45	38	66	53	44	38	51	43	38		50	43	37		48	42	37	35
7	62	48	39	32	60	47	38	32	45	37	32		44	37	31		42	36	31	29
8	57	42	33	27	55	42	33	27	40	32	27		39	32	27		38	31	26	24
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	20		30	24	19	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	6837	6837	6837	6837	6837
5°	7607	7347	6742	6120	5999
10°	9181	7817	6191	5579	5456
15°	15048	8469	5313	4939	5064
20°	39752	10007	4417	4417	4802
25°	153314	12390	3496	4048	4713
30°	330773	16506	2824	3957	4653
35°	497860	19532	2376	3869	4773
40°	560905	19604	2068	3979	5103
45°	601446	15198	1900	4141	5529
50°	591136	9485	1715	4367	6082
55°	520052	4684	1711	4894	6816
60°	329186	964	1963	5373	7578
65°	67321	285	2038	5787	8395
70°	1410	352	2165	6445	9618
75°	1397	932	2329	7053	10846
80°	1389	694	2777	7736	12695
85°	1383	1383	5533	8497	14030

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 612301 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.7	0.5
10°-20°	12.2	1.6
20°-30°	60.0	7.8
30°-40°	195.0	25.3
40°-50°	268.9	34.8
50°-60°	187.3	24.3
60°-70°	35.5	4.6
70°-80°	6.4	0.8
80°-90°	3.0	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°	75.9	9.8
0°-40°	271.0	35.1
0°-60°	727.1	94.2
0°-90°	772.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	772.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	40	40	40	40	40	
5°	44	42	39	35	35	4
15°	84	48	30	28	28	31
25°	807	65	18	21	25	415
35°	2368	93	11	18	23	1431
45°	2469	62	8	17	23	1878
55°	1732	16	6	16	23	1480
65°	165	1	5	14	21	292
75°	2	1	4	11	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°	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7
2.5°	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	40.4	39.7
5°	44.0	44.0	44.0	44.0	43.2	43.2	43.2	42.5	42.5	41.1	39.0
7.5°	46.8	46.8	46.8	46.8	46.1	45.4	44.7	44.7	44.0	40.4	37.6
10°	52.5	52.5	51.8	51.0	50.3	48.9	48.2	46.8	44.7	39.7	35.4
12.5°	63.8	62.4	61.7	60.3	58.1	55.3	52.5	50.3	45.4	38.3	33.3
15°	84.4	83.0	80.1	75.9	71.6	65.9	61.0	56.0	47.5	36.2	29.8
17.5°	120.5	116.3	112.0	104.9	94.3	84.4	73.7	64.5	50.3	34.0	26.9
20°	216.9	214.1	188.6	168.7	136.8	114.1	92.9	77.3	54.6	31.9	24.1
22.5°	447.4	417.6	375.8	307.7	239.6	176.5	128.3	97.1	58.8	29.1	21.3
25°	806.8	760.0	670.0	538.8	397.7	281.5	185.8	126.9	65.2	26.2	18.4
27.5°	1221.6	1174.1	1034.4	853.6	623.2	424.7	265.2	168.0	73.7	23.4	16.3
30°	1663.3	1622.8	1445.6	1195.3	878.4	594.8	355.2	209.9	83.0	20.6	14.2
31°	1841.2	1789.5	1598.0	1331.5	998.2	665.0	391.4	227.6	86.5	19.9	13.5
32°	2005.0	1946.1	1747.6	1461.9	1095.4	740.9	431.1	243.2	89.3	18.4	12.8
33°	2146.1	2077.3	1885.9	1585.3	1202.4	811.8	472.2	258.1	91.5	17.0	12.1
34°	2265.9	2206.3	2000.7	1709.3	1297.4	879.8	512.6	273.0	92.9	16.3	11.3
35°	2368.0	2314.1	2110.6	1803.6	1390.3	945.8	549.5	287.1	92.9	14.9	11.3
36°	2436.7	2390.0	2205.6	1900.1	1468.3	1001.8	580.7	299.9	92.9	13.5	10.6
37°	2474.3	2428.9	2268.0	1979.5	1544.9	1057.1	609.0	309.8	92.2	12.8	9.9
38°	2493.5	2453.8	2314.1	2044.0	1598.0	1096.8	633.8	317.6	91.5	11.3	9.9
39°	2498.4	2465.1	2343.2	2090.8	1649.8	1136.5	651.5	321.9	89.3	10.6	9.2
40°	2494.9	2465.8	2358.8	2132.6	1689.5	1167.7	664.3	323.3	87.2	9.2	9.2
41°	2487.8	2465.1	2370.1	2161.7	1721.4	1187.5	669.3	320.5	84.4	7.8	8.5
42°	2481.4	2456.6	2375.1	2181.5	1743.4	1197.5	668.6	314.8	80.1	7.1	8.5
43°	2481.4	2453.1	2375.8	2194.3	1754.0	1198.2	660.1	304.2	74.4	6.4	7.8
44°	2477.2	2450.9	2379.3	2202.8	1756.8	1191.8	646.6	292.8	68.1	5.7	7.8
45°	2469.4	2441.7	2378.6	2203.5	1751.9	1176.2	624.6	277.9	62.4	4.3	7.8
46°	2454.5	2429.7	2372.2	2198.5	1737.0	1153.5	598.4	263.0	56.0	3.5	7.1
47°	2424.7	2405.6	2355.2	2181.5	1714.3	1120.2	567.2	246.0	51.0	2.8	7.1
48°	2373.6	2360.2	2326.1	2143.9	1671.1	1079.1	533.9	227.6	46.1	2.8	7.1
49°	2280.1	2269.4	2249.6	2083.7	1615.8	1028.7	497.7	207.0	41.1	2.1	7.1
50°	2206.3	2195.0	2154.6	1982.3	1536.3	964.9	458.0	186.5	35.4	1.4	6.4
51°	2157.4	2139.0	2075.2	1864.6	1420.8	879.8	414.8	165.9	29.8	1.4	6.4
52°	2095.7	2068.1	1988.7	1759.0	1315.1	794.8	368.0	145.3	26.2	1.4	6.4
53°	1966.7	1956.8	1878.1	1645.5	1209.5	713.2	319.7	128.3	22.7	1.4	6.4
54°	1854.0	1839.1	1732.0	1488.1	1094.7	622.5	270.1	113.4	19.1	1.4	6.4
55°	1732.0	1703.0	1608.0	1355.6	960.0	538.8	222.6	97.8	15.6	1.4	5.7
56°	1578.2	1552.7	1450.6	1213.8	835.9	453.7	186.5	80.1	12.1	1.4	5.7
57°	1391.0	1367.6	1288.9	1039.4	706.8	370.8	151.7	64.5	9.2	1.4	5.7
58°	1210.2	1184.0	1093.9	872.0	570.7	294.2	126.9	52.5	7.1	1.4	5.7
59°	1071.3	1035.8	919.5	732.4	446.7	223.3	100.7	41.8	5.0	1.4	5.7
60°	955.7	926.6	806.1	609.7	350.2	164.5	74.4	31.9	2.8	1.4	5.7
62.5°	553.7	545.9	437.4	314.1	165.2	76.6	36.9	14.9	1.4	2.1	5.7
65°	165.2	143.9	112.0	66.6	42.5	25.5	13.5	5.0	0.7	2.1	5.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	5.0	5.0	5.0	5.0	5.0	5.0	2.8	1.4	0.7	2.1	5.0
70°	2.8	2.1	2.1	2.1	2.1	1.4	1.4	0.7	0.7	2.1	4.3
72.5°	2.1	2.1	2.1	2.1	1.4	1.4	1.4	0.7	1.4	2.1	3.5
75°	2.1	1.4	1.4	1.4	1.4	0.7	0.7	0.7	1.4	2.1	3.5
77.5°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	1.4	2.1	3.5
80°	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.1	2.8
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.1	2.8
85°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.1	2.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	2.1	2.1
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°	39.7	39.7	39.7	39.7
2.5°	38.3	37.6	36.9	36.9
5°	36.9	35.4	35.4	34.7
7.5°	34.7	33.3	33.3	33.3
10°	32.6	31.9	31.9	31.2
12.5°	29.8	29.8	29.8	29.8
15°	27.7	27.7	28.4	28.4
17.5°	24.8	25.5	26.9	27.7
20°	22.7	24.1	25.5	26.2
22.5°	21.3	22.7	24.8	25.5
25°	19.1	21.3	24.1	24.8
27.5°	17.7	20.6	22.7	24.1
30°	16.3	19.9	22.0	23.4
31°	16.3	19.1	22.0	23.4
32°	15.6	18.4	22.0	22.7
33°	15.6	18.4	22.0	22.7
34°	14.9	18.4	21.3	22.7
35°	14.9	18.4	21.3	22.7
36°	14.2	17.7	21.3	22.7
37°	14.2	17.7	21.3	22.7
38°	13.5	17.7	21.3	22.7
39°	13.5	17.7	21.3	22.7
40°	13.5	17.7	21.3	22.7
41°	12.8	17.7	21.3	22.7
42°	12.8	17.7	21.3	22.7
43°	12.8	17.0	21.3	22.7
44°	12.8	17.0	21.3	22.7
45°	12.1	17.0	21.3	22.7
46°	12.1	17.0	21.3	22.7
47°	12.1	17.0	21.3	22.7
48°	12.1	17.0	21.3	22.7
49°	12.1	17.0	21.3	22.7
50°	11.3	16.3	21.3	22.7
51°	11.3	16.3	21.3	22.7
52°	11.3	16.3	21.3	22.7
53°	11.3	16.3	21.3	22.7
54°	10.6	16.3	21.3	22.7
55°	10.6	16.3	21.3	22.7
56°	10.6	16.3	21.3	22.0
57°	10.6	16.3	20.6	22.0
58°	10.6	15.6	20.6	22.0
59°	10.6	15.6	20.6	22.0
60°	10.6	15.6	20.6	22.0
62.5°	9.9	15.6	19.9	21.3
65°	9.2	14.2	19.9	20.6



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	9.2	13.5	18.4	19.9
70°	8.5	12.8	17.7	19.1
72.5°	7.1	12.1	16.3	17.7
75°	6.4	10.6	14.9	16.3
77.5°	5.7	9.2	13.5	14.2
80°	5.0	7.8	11.3	12.8
82.5°	3.5	5.7	9.2	9.9
85°	2.8	4.3	6.4	7.1
87.5°	2.1	2.1	3.5	3.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)