

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: P1315624

Luminaire Tested: P3SQAS20R209740D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1315624
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-74)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS20R209740D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R20 optic, 4000K CCT AND, 97CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

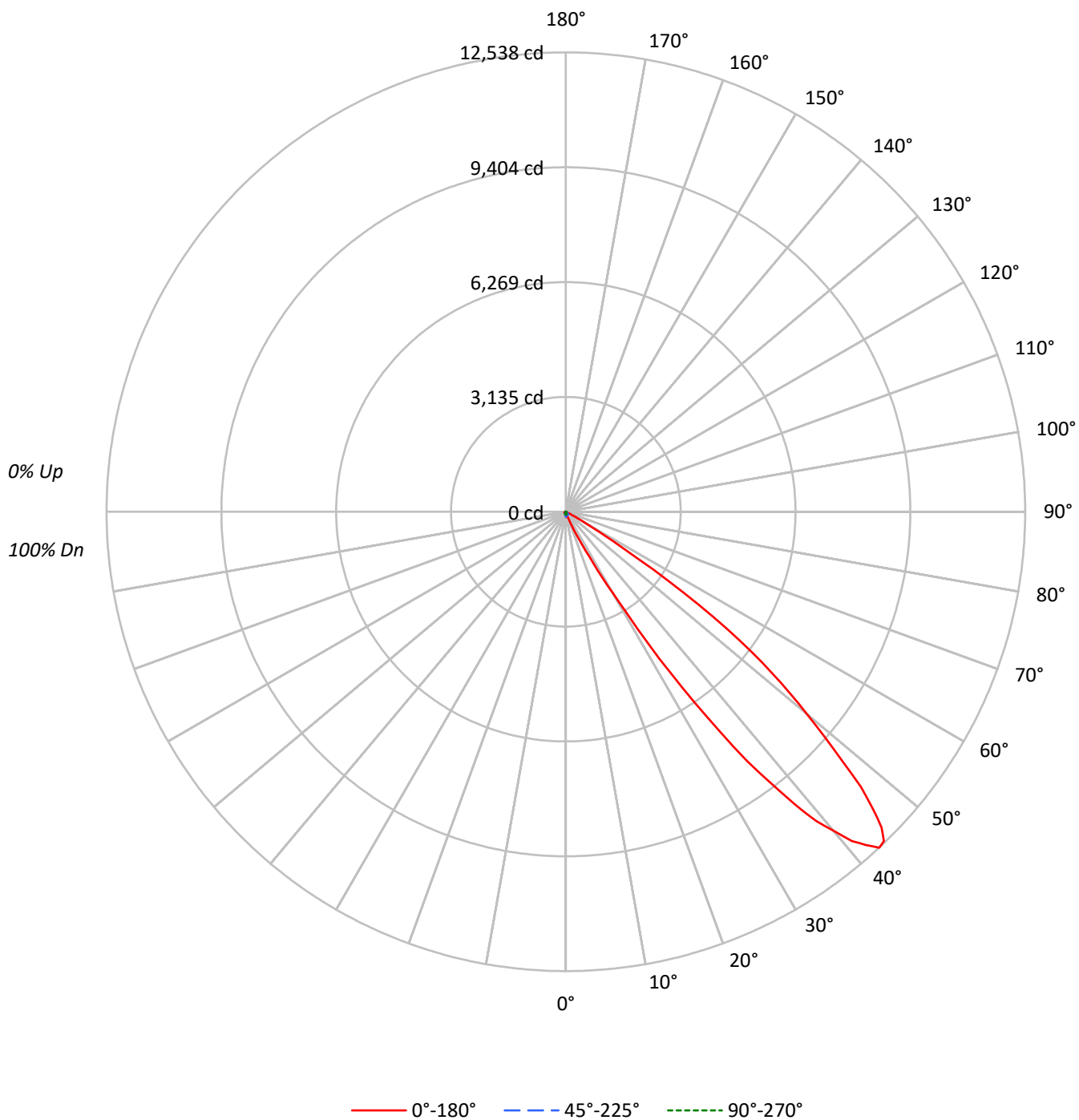
Lumens per Lamp: N/A
Luminaire Lumens: 1742.0 lumens
Efficiency: N/A
Efficacy: 60.5 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.14
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 28.8
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	108	104	101	97	100	97	94	96	94	92	92	91	89
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75
3	92	81	74	67	89	80	73	67	77	71	66	74	69	65	72	67	63
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37
7	62	48	39	32	60	47	38	32	46	38	32	44	37	32	43	36	31
8	57	42	33	27	55	42	33	27	40	33	27	39	32	27	38	31	27
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	19	31	24	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	20856	20856	20856	20856	20856
5°	24342	22647	19535	16977	16424
10°	24046	20618	15459	13168	12889
15°	21021	15762	11375	10502	11090
20°	31212	13196	8394	8999	9897
25°	134387	13682	6537	8095	9634
30°	508201	16605	5528	7815	9446
35°	1540570	19973	5172	7926	9987
40°	2554615	19874	4406	8476	10679
45°	2969308	13566	3994	8768	11569
50°	2304956	7448	3939	9217	13155
55°	1334060	4924	3933	10329	14262
60°	225543	1137	3376	10712	15776
65°	17360	0	3994	12022	18012
70°	2467	0	4935	13193	20595
75°	2196	1065	5456	15238	23955
80°	1587	1587	8133	16265	27572
85°	3162	3162	12844	16203	29048

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2969308 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.4	0.6
10°-20°	21.8	1.3
20°-30°	69.6	4.0
30°-40°	444.2	25.5
40°-50°	813.1	46.7
50°-60°	334.1	19.2
60°-70°	28.2	1.6
70°-80°	14.0	0.8
80°-90°	6.6	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°	101.8	5.8
0°-40°	546.0	31.3
0°-60°	1693.2	97.2
0°-90°	1742.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1742.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	121	121	121	121	121	
5°	141	131	113	98	95	13
15°	118	88	64	59	62	37
25°	707	72	34	43	51	465
35°	7328	95	25	38	48	4638
45°	12191	56	16	36	48	8753
55°	4443	16	13	34	48	3884
65°	43	0	10	30	44	139
75°	3	2	8	23	36	4
85°	2	2	6	8	15	1
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	121.1	121.1	121.1	121.1	121.1	121.1	121.1	121.1	121.1	121.1	121.1
2.5°	132.6	132.6	132.6	131.0	131.0	132.6	131.0	131.0	131.0	131.0	129.3
5°	140.8	140.8	140.8	140.8	140.8	140.8	140.8	139.2	139.2	137.5	131.0
7.5°	144.1	144.1	144.1	144.1	142.4	142.4	142.4	142.4	140.8	139.2	127.7
10°	137.5	137.5	137.5	135.9	135.9	135.9	134.2	134.2	132.6	131.0	117.9
12.5°	124.4	124.4	124.4	124.4	122.8	122.8	121.1	121.1	119.5	117.9	103.1
15°	117.9	117.9	117.9	116.2	116.2	114.6	113.0	111.3	109.7	106.4	88.4
17.5°	127.7	127.7	126.1	126.1	122.8	119.5	117.9	113.0	109.7	104.8	78.6
20°	170.3	171.9	165.3	160.4	157.2	147.3	142.4	134.2	127.7	119.5	72.0
22.5°	343.8	337.2	325.8	307.8	286.5	268.5	235.7	209.5	191.5	167.0	70.4
25°	707.2	700.7	669.6	643.4	577.9	527.1	456.7	399.4	340.5	283.2	72.0
27.5°	1344.0	1299.8	1291.6	1172.1	1080.5	949.5	813.6	699.0	594.3	478.0	76.9
30°	2555.5	2504.7	2326.3	2146.2	1899.0	1619.1	1352.2	1103.4	895.5	707.2	83.5
31°	3243.0	3292.1	3082.6	2720.8	2355.7	1997.2	1632.2	1316.2	1047.7	813.6	86.8
32°	4262.9	4048.5	3827.5	3455.9	2925.4	2467.1	2008.7	1553.6	1200.0	928.2	90.0
33°	5227.2	5101.1	4763.9	4300.6	3663.8	3020.4	2426.1	1833.5	1386.6	1067.4	91.7
34°	6255.2	6116.1	5842.7	5178.1	4479.0	3635.9	2843.6	2156.0	1609.2	1203.2	93.3
35°	7327.5	7268.6	6741.5	6165.2	5305.7	4289.1	3346.2	2509.6	1827.0	1327.7	95.0
36°	8406.4	8216.5	7803.9	6962.5	6065.3	4893.2	3873.3	2838.7	2048.0	1475.0	95.0
37°	9218.3	9175.8	8629.0	7808.8	6754.6	5538.2	4328.4	3203.7	2270.6	1601.1	95.0
38°	10113.8	9945.2	9390.2	8555.3	7402.8	6129.2	4804.8	3521.3	2481.8	1715.7	93.3
39°	10868.5	10618.0	10058.2	9233.1	7969.3	6577.8	5183.0	3829.1	2668.4	1810.6	91.7
40°	11362.9	11189.4	10604.9	9676.7	8483.3	7001.8	5566.0	4082.9	2807.6	1882.6	88.4
41°	11908.1	11619.9	11042.0	10108.9	8856.6	7375.0	5806.7	4249.8	2915.6	1930.1	85.1
42°	12233.8	11998.1	11312.2	10398.7	9123.4	7587.8	6003.1	4377.5	2981.1	1954.7	78.6
43°	12538.3	12217.5	11549.5	10567.3	9300.2	7738.4	6093.2	4436.5	2995.8	1954.7	70.4
44°	12497.4	12192.9	11500.4	10590.2	9339.5	7782.6	6130.8	4438.1	2972.9	1930.1	62.2
45°	12191.3	11888.4	11264.7	10390.5	9198.7	7695.9	6055.5	4372.6	2909.1	1887.5	55.7
46°	11629.8	11328.5	10850.5	10056.5	8936.8	7499.4	5880.4	4230.2	2802.7	1818.8	49.1
47°	11019.1	10726.1	10236.6	9517.9	8489.9	7149.1	5626.6	4030.5	2653.7	1718.9	44.2
48°	10133.5	9950.1	9459.0	8845.1	7869.4	6600.7	5181.3	3704.7	2454.0	1589.6	37.7
49°	9351.0	9157.8	8727.2	8067.5	7060.7	5962.2	4649.3	3308.5	2193.7	1445.5	32.7
50°	8602.8	8434.2	8036.4	7291.5	6330.6	5191.2	3930.6	2809.2	1866.3	1267.1	27.8
51°	7871.0	7745.0	7339.0	6654.7	5679.0	4598.5	3405.1	2339.4	1542.1	1051.0	26.2
52°	7136.0	7121.3	6680.9	5988.4	5045.5	4007.6	2894.3	1974.3	1308.0	882.4	24.6
53°	6345.3	6250.3	5865.6	5243.5	4338.2	3392.0	2454.0	1664.9	1126.3	751.4	21.3
54°	5444.9	5338.5	4925.9	4364.4	3544.3	2778.1	1977.6	1345.7	938.0	635.2	19.6
55°	4443.0	4261.3	3961.7	3385.5	2768.3	2120.0	1527.4	1065.7	749.8	528.8	16.4
56°	3370.7	3189.0	3020.4	2596.4	2031.6	1581.4	1137.8	816.9	586.1	417.5	14.7
57°	2344.3	2334.5	2057.8	1732.0	1358.8	1077.2	779.2	576.2	414.2	324.1	11.5
58°	1520.8	1470.1	1293.3	1105.0	888.9	672.8	500.9	391.3	281.6	221.0	9.8
59°	1065.7	964.2	869.3	736.7	559.9	424.0	322.5	250.5	194.8	153.9	6.5
60°	654.8	633.5	569.7	448.6	363.4	299.6	240.6	185.0	142.4	109.7	3.3
62.5°	186.6	189.9	171.9	152.2	131.0	113.0	101.5	86.8	72.0	57.3	0.0
65°	42.6	40.9	44.2	40.9	37.7	37.7	32.7	29.5	26.2	24.6	0.0



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	13.1	13.1	11.5	11.5	11.5	9.8	9.8	8.2	8.2	6.5	0.0
70°	4.9	4.9	4.9	4.9	4.9	3.3	3.3	3.3	1.6	1.6	0.0
72.5°	4.9	4.9	4.9	3.3	3.3	3.3	3.3	3.3	1.6	1.6	1.6
75°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	1.6	1.6	1.6	1.6
77.5°	3.3	3.3	3.3	3.3	3.3	1.6	3.3	1.6	1.6	1.6	1.6
80°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
82.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
85°	1.6	1.6	1.6	1.6	0.0	0.0	1.6	1.6	1.6	0.0	1.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	121.1	121.1	121.1	121.1	121.1	121.1
2.5°	126.1	119.5	114.6	109.7	108.0	108.0
5°	122.8	113.0	103.1	98.2	95.0	95.0
7.5°	113.0	101.5	91.7	86.8	85.1	85.1
10°	101.5	88.4	78.6	75.3	75.3	73.7
12.5°	88.4	75.3	68.8	67.1	67.1	67.1
15°	73.7	63.8	58.9	58.9	60.6	62.2
17.5°	62.2	52.4	50.7	54.0	57.3	57.3
20°	52.4	45.8	45.8	49.1	52.4	54.0
22.5°	44.2	39.3	40.9	45.8	50.7	52.4
25°	39.3	34.4	37.7	42.6	47.5	50.7
27.5°	32.7	31.1	34.4	40.9	47.5	49.1
30°	27.8	27.8	32.7	39.3	45.8	47.5
31°	26.2	26.2	32.7	39.3	45.8	47.5
32°	24.6	26.2	31.1	39.3	45.8	47.5
33°	22.9	24.6	31.1	37.7	45.8	47.5
34°	21.3	24.6	31.1	37.7	45.8	47.5
35°	19.6	24.6	31.1	37.7	45.8	47.5
36°	18.0	22.9	29.5	37.7	45.8	47.5
37°	16.4	22.9	29.5	37.7	45.8	47.5
38°	14.7	21.3	29.5	37.7	45.8	47.5
39°	14.7	21.3	27.8	37.7	44.2	47.5
40°	13.1	19.6	27.8	37.7	44.2	47.5
41°	11.5	19.6	27.8	36.0	44.2	47.5
42°	9.8	18.0	26.2	36.0	44.2	47.5
43°	8.2	18.0	26.2	36.0	44.2	47.5
44°	8.2	16.4	26.2	36.0	44.2	47.5
45°	6.5	16.4	26.2	36.0	44.2	47.5
46°	4.9	16.4	26.2	36.0	44.2	47.5
47°	4.9	14.7	24.6	36.0	44.2	47.5
48°	3.3	14.7	24.6	36.0	44.2	47.5
49°	3.3	14.7	24.6	36.0	44.2	49.1
50°	3.3	14.7	24.6	34.4	44.2	49.1
51°	1.6	14.7	24.6	34.4	44.2	49.1
52°	1.6	14.7	22.9	34.4	45.8	49.1
53°	1.6	13.1	22.9	34.4	45.8	49.1
54°	1.6	13.1	22.9	34.4	45.8	47.5
55°	1.6	13.1	22.9	34.4	44.2	47.5
56°	1.6	11.5	22.9	34.4	44.2	47.5
57°	1.6	11.5	21.3	32.7	44.2	45.8
58°	1.6	11.5	21.3	32.7	44.2	45.8
59°	1.6	11.5	21.3	32.7	42.6	45.8
60°	3.3	9.8	19.6	31.1	42.6	45.8
62.5°	3.3	9.8	19.6	31.1	40.9	44.2
65°	3.3	9.8	18.0	29.5	40.9	44.2



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	3.3	8.2	16.4	27.8	39.3	42.6
70°	3.3	9.8	16.4	26.2	37.7	40.9
72.5°	4.9	8.2	14.7	24.6	36.0	39.3
75°	4.9	8.2	14.7	22.9	34.4	36.0
77.5°	6.5	8.2	13.1	19.6	31.1	32.7
80°	6.5	8.2	11.5	16.4	26.2	27.8
82.5°	6.5	8.2	8.2	13.1	19.6	21.3
85°	4.9	6.5	6.5	8.2	13.1	14.7
87.5°	4.9	6.5	4.9	3.3	6.5	6.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)