

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: P1310368

Luminaire Tested: P3SQAS17R209040DE010 E3SQCA451MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1310368
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: P3SQAS17R209040DE010 E3SQCA451MW
Description: 3in Adjustable LED luminaire with, R20 optic, 4000K CCT AND, 90CRI , E3SQCA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

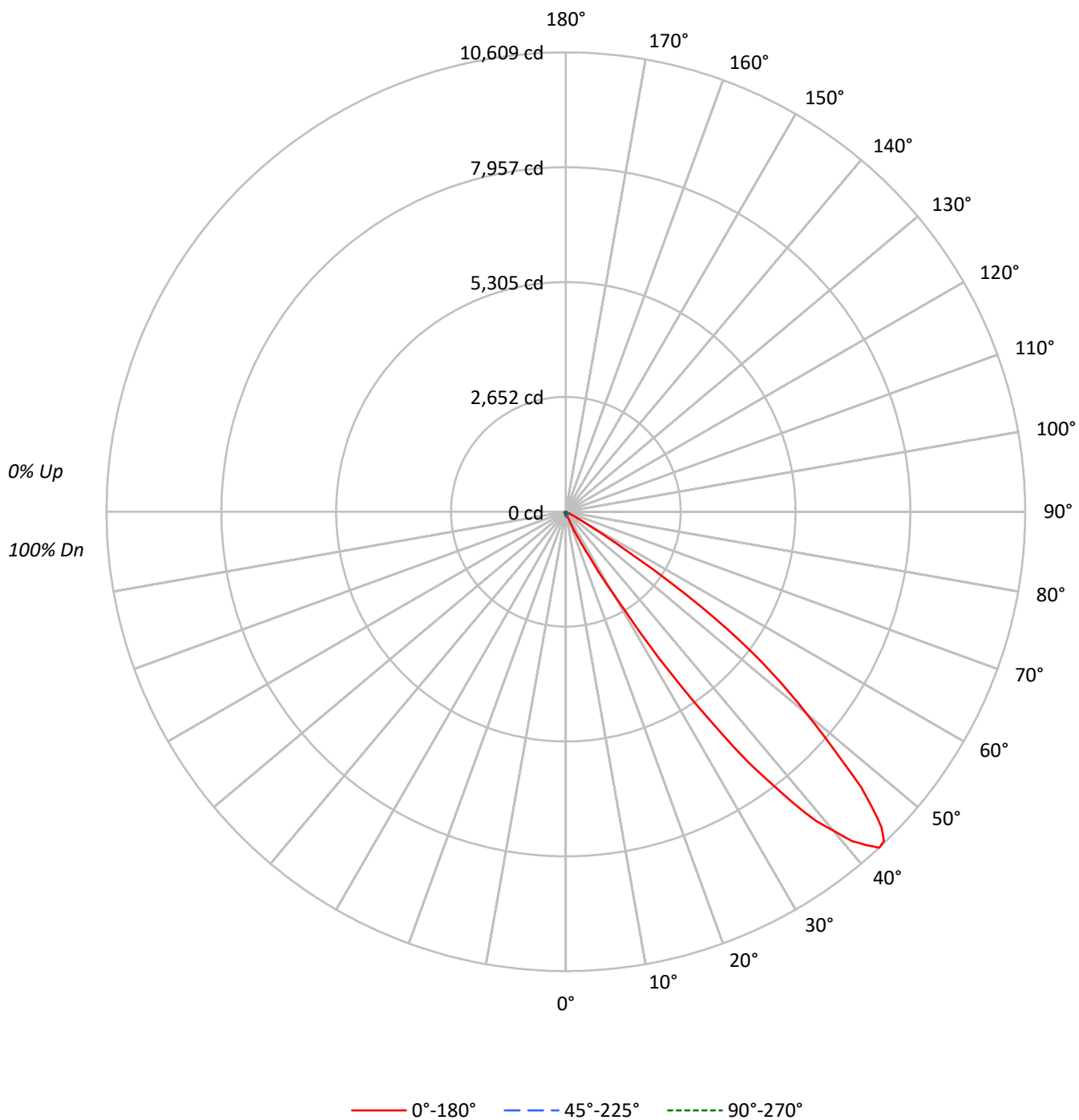
Lumens per Lamp: N/A
Luminaire Lumens: 1474.0 lumens
Efficiency: N/A
Efficacy: 69.5 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.14
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 21.2
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



TEST NUMBER: P1310368

CATALOG NUMBER: P3SQA517R209040DE010 E3SQA451MW

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°	17653	17653	17653	17653	17653
5°	20590	19155	16527	14366	13882
10°	20356	17435	13081	11140	10895
15°	17776	13337	9628	8897	9378
20°	26410	11161	7111	7624	8376
25°	113712	11573	5530	6841	8152
30°	430007	14040	4673	6602	7994
35°	1303561	16883	4373	6707	8452
40°	2161606	16817	3732	7172	9038
45°	2512488	11472	3385	7429	9791
50°	1950349	6296	3349	7797	11146
55°	1128831	4174	3333	8738	12070
60°	190857	964	2859	9059	13364
65°	14670	0	3382	10147	15241
70°	2115	0	4179	11179	17423
75°	1863	932	4591	12909	20295
80°	1389	1389	6843	13786	23307
85°	2766	2766	10868	13635	24700

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2512488 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	8.8	0.6
10°-20°	18.4	1.3
20°-30°	58.9	4.0
30°-40°	375.9	25.5
40°-50°	688.0	46.7
50°-60°	282.7	19.2
60°-70°	23.8	1.6
70°-80°	11.9	0.8
80°-90°	5.6	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°	86.1	5.8
0°-40°	462.0	31.3
0°-60°	1432.7	97.2
0°-90°	1474.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1474.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	102	102	102	102	102	
5°	119	111	96	83	80	11
15°	100	75	54	50	53	32
25°	598	61	29	36	43	393
35°	6200	80	21	32	40	3924
45°	10316	47	14	30	40	7407
55°	3760	14	11	29	40	3286
65°	36	0	8	25	37	117
75°	3	1	7	19	30	3
85°	1	1	6	7	12	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°	102.5	102.5	102.5	102.5	102.5	102.5	102.5	102.5	102.5	102.5	102.5
2.5°	112.2	112.2	112.2	110.8	110.8	112.2	110.8	110.8	110.8	110.8	109.4
5°	119.1	119.1	119.1	119.1	119.1	119.1	119.1	117.7	117.7	116.4	110.8
7.5°	121.9	121.9	121.9	121.9	120.5	120.5	120.5	120.5	119.1	117.7	108.0
10°	116.4	116.4	116.4	115.0	115.0	115.0	113.6	113.6	112.2	110.8	99.7
12.5°	105.3	105.3	105.3	105.3	103.9	103.9	102.5	102.5	101.1	99.7	87.3
15°	99.7	99.7	99.7	98.4	98.4	97.0	95.6	94.2	92.8	90.0	74.8
17.5°	108.0	108.0	106.7	106.7	103.9	101.1	99.7	95.6	92.8	88.7	66.5
20°	144.1	145.4	139.9	135.8	133.0	124.7	120.5	113.6	108.0	101.1	60.9
22.5°	290.9	285.4	275.7	260.4	242.4	227.2	199.5	177.3	162.1	141.3	59.6
25°	598.4	592.9	566.6	544.4	489.0	446.0	386.5	338.0	288.1	239.6	60.9
27.5°	1137.3	1099.9	1092.9	991.8	914.2	803.4	688.5	591.5	502.8	404.5	65.1
30°	2162.3	2119.4	1968.4	1816.0	1606.8	1370.0	1144.2	933.6	757.7	598.4	70.6
31°	2744.1	2785.7	2608.4	2302.2	1993.3	1690.0	1381.1	1113.7	886.5	688.5	73.4
32°	3607.1	3425.6	3238.6	2924.2	2475.4	2087.5	1699.7	1314.6	1015.4	785.4	76.2
33°	4423.0	4316.3	4031.0	3639.0	3100.1	2555.7	2052.9	1551.4	1173.3	903.2	77.6
34°	5292.9	5175.2	4943.8	4381.4	3789.9	3076.6	2406.1	1824.3	1361.7	1018.1	79.0
35°	6200.2	6150.4	5704.3	5216.7	4489.5	3629.3	2831.4	2123.5	1545.9	1123.4	80.3
36°	7113.1	6952.4	6603.3	5891.3	5132.2	4140.4	3277.4	2402.0	1732.9	1248.1	80.3
37°	7800.1	7764.1	7301.5	6607.5	5715.4	4686.2	3662.5	2710.9	1921.3	1354.7	80.3
38°	8557.9	8415.2	7945.6	7239.1	6263.9	5186.2	4065.6	2979.6	2100.0	1451.7	79.0
39°	9196.4	8984.5	8510.8	7812.6	6743.2	5565.8	4385.6	3240.0	2257.9	1532.0	77.6
40°	9614.8	9467.9	8973.4	8188.0	7178.2	5924.6	4709.7	3454.7	2375.6	1593.0	74.8
41°	10076.0	9832.2	9343.3	8553.7	7494.0	6240.4	4913.4	3596.0	2467.1	1633.2	72.0
42°	10351.7	10152.2	9571.8	8798.9	7719.8	6420.5	5079.6	3704.1	2522.5	1653.9	66.5
43°	10609.4	10337.9	9772.7	8941.6	7869.4	6547.9	5155.8	3753.9	2534.9	1653.9	59.6
44°	10574.7	10317.1	9731.1	8960.9	7902.6	6585.3	5187.6	3755.3	2515.5	1633.2	52.6
45°	10315.7	10059.4	9531.7	8792.0	7783.5	6511.9	5123.9	3699.9	2461.5	1597.2	47.1
46°	9840.6	9585.7	9181.2	8509.4	7561.9	6345.7	4975.7	3579.4	2371.5	1539.0	41.6
47°	9323.9	9075.9	8661.7	8053.6	7183.7	6049.2	4761.0	3410.4	2245.4	1454.5	37.4
48°	8574.5	8419.3	8003.8	7484.3	6658.7	5585.2	4384.2	3134.7	2076.4	1345.0	31.9
49°	7912.3	7748.9	7384.6	6826.3	5974.4	5044.9	3934.0	2799.5	1856.2	1223.1	27.7
50°	7279.3	7136.6	6800.0	6169.7	5356.6	4392.5	3325.9	2377.0	1579.1	1072.2	23.5
51°	6660.1	6553.4	6209.9	5630.9	4805.3	3891.1	2881.2	1979.5	1304.9	889.3	22.2
52°	6038.1	6025.7	5653.1	5067.1	4269.2	3391.0	2449.1	1670.6	1106.8	746.6	20.8
53°	5369.1	5288.7	4963.2	4436.8	3670.8	2870.2	2076.4	1408.8	953.0	635.8	18.0
54°	4607.2	4517.2	4168.1	3693.0	2999.0	2350.7	1673.3	1138.6	793.7	537.5	16.6
55°	3759.5	3605.7	3352.2	2864.6	2342.4	1793.9	1292.4	901.8	634.4	447.4	13.9
56°	2852.2	2698.4	2555.7	2196.9	1719.1	1338.1	962.7	691.2	495.9	353.2	12.5
57°	1983.6	1975.3	1741.2	1465.6	1149.7	911.5	659.4	487.6	350.5	274.3	9.7
58°	1286.9	1243.9	1094.3	935.0	752.2	569.3	423.9	331.1	238.3	187.0	8.3
59°	901.8	815.9	735.5	623.3	473.7	358.8	272.9	211.9	164.8	130.2	5.5
60°	554.1	536.1	482.1	379.5	307.5	253.5	203.6	156.5	120.5	92.8	2.8
62.5°	157.9	160.7	145.4	128.8	110.8	95.6	85.9	73.4	60.9	48.5	0.0
65°	36.0	34.6	37.4	34.6	31.9	31.9	27.7	24.9	22.2	20.8	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°	11.1	11.1	9.7	9.7	9.7	8.3	8.3	6.9	6.9	5.5	0.0
70°	4.2	4.2	4.2	4.2	4.2	2.8	2.8	2.8	1.4	1.4	0.0
72.5°	4.2	4.2	4.2	2.8	2.8	2.8	2.8	2.8	1.4	1.4	1.4
75°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4
77.5°	2.8	2.8	2.8	2.8	2.8	1.4	2.8	1.4	1.4	1.4	1.4
80°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
82.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
85°	1.4	1.4	1.4	1.4	0.0	0.0	1.4	1.4	1.4	0.0	1.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
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°	102.5	102.5	102.5	102.5	102.5	102.5
2.5°	106.7	101.1	97.0	92.8	91.4	91.4
5°	103.9	95.6	87.3	83.1	80.3	80.3
7.5°	95.6	85.9	77.6	73.4	72.0	72.0
10°	85.9	74.8	66.5	63.7	63.7	62.3
12.5°	74.8	63.7	58.2	56.8	56.8	56.8
15°	62.3	54.0	49.9	49.9	51.3	52.6
17.5°	52.6	44.3	42.9	45.7	48.5	48.5
20°	44.3	38.8	38.8	41.6	44.3	45.7
22.5°	37.4	33.2	34.6	38.8	42.9	44.3
25°	33.2	29.1	31.9	36.0	40.2	42.9
27.5°	27.7	26.3	29.1	34.6	40.2	41.6
30°	23.5	23.5	27.7	33.2	38.8	40.2
31°	22.2	22.2	27.7	33.2	38.8	40.2
32°	20.8	22.2	26.3	33.2	38.8	40.2
33°	19.4	20.8	26.3	31.9	38.8	40.2
34°	18.0	20.8	26.3	31.9	38.8	40.2
35°	16.6	20.8	26.3	31.9	38.8	40.2
36°	15.2	19.4	24.9	31.9	38.8	40.2
37°	13.9	19.4	24.9	31.9	38.8	40.2
38°	12.5	18.0	24.9	31.9	38.8	40.2
39°	12.5	18.0	23.5	31.9	37.4	40.2
40°	11.1	16.6	23.5	31.9	37.4	40.2
41°	9.7	16.6	23.5	30.5	37.4	40.2
42°	8.3	15.2	22.2	30.5	37.4	40.2
43°	6.9	15.2	22.2	30.5	37.4	40.2
44°	6.9	13.9	22.2	30.5	37.4	40.2
45°	5.5	13.9	22.2	30.5	37.4	40.2
46°	4.2	13.9	22.2	30.5	37.4	40.2
47°	4.2	12.5	20.8	30.5	37.4	40.2
48°	2.8	12.5	20.8	30.5	37.4	40.2
49°	2.8	12.5	20.8	30.5	37.4	41.6
50°	2.8	12.5	20.8	29.1	37.4	41.6
51°	1.4	12.5	20.8	29.1	37.4	41.6
52°	1.4	12.5	19.4	29.1	38.8	41.6
53°	1.4	11.1	19.4	29.1	38.8	41.6
54°	1.4	11.1	19.4	29.1	38.8	40.2
55°	1.4	11.1	19.4	29.1	37.4	40.2
56°	1.4	9.7	19.4	29.1	37.4	40.2
57°	1.4	9.7	18.0	27.7	37.4	38.8
58°	1.4	9.7	18.0	27.7	37.4	38.8
59°	1.4	9.7	18.0	27.7	36.0	38.8
60°	2.8	8.3	16.6	26.3	36.0	38.8
62.5°	2.8	8.3	16.6	26.3	34.6	37.4
65°	2.8	8.3	15.2	24.9	34.6	37.4



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.8	6.9	13.9	23.5	33.2	36.0
70°	2.8	8.3	13.9	22.2	31.9	34.6
72.5°	4.2	6.9	12.5	20.8	30.5	33.2
75°	4.2	6.9	12.5	19.4	29.1	30.5
77.5°	5.5	6.9	11.1	16.6	26.3	27.7
80°	5.5	6.9	9.7	13.9	22.2	23.5
82.5°	5.5	6.9	6.9	11.1	16.6	18.0
85°	4.2	5.5	5.5	6.9	11.1	12.5
87.5°	4.2	5.5	4.2	2.8	5.5	5.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)