

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: P1307013

Luminaire Tested: P3SQAS17R209027DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1307013
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: P3SQAS17R209027DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R20 optic, 2700K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

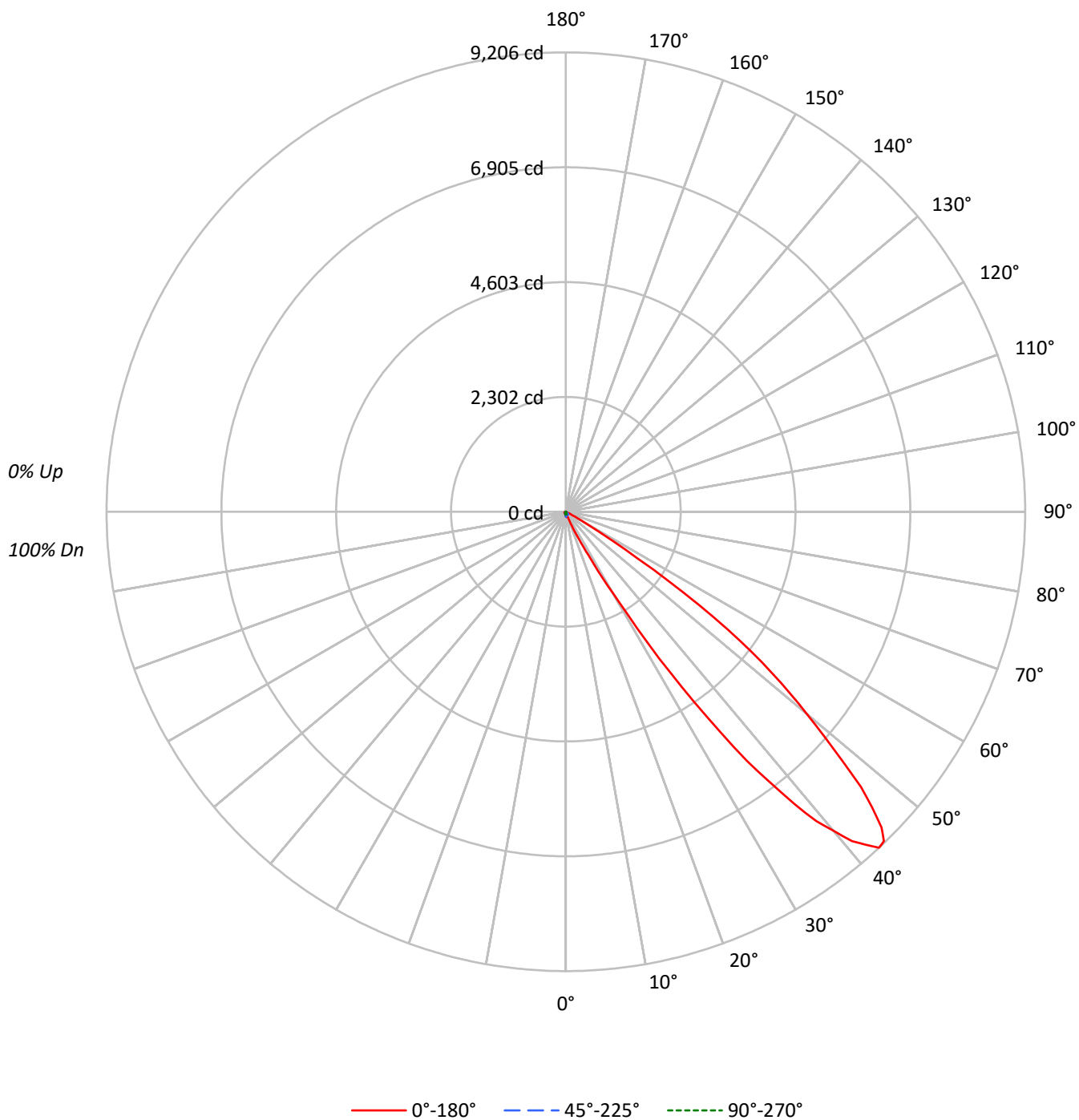
Lumens per Lamp: N/A
Luminaire Lumens: 1279.0 lumens
Efficiency: N/A
Efficacy: 60.3 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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



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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	50	30	10
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	108	104	101	97	100	97	94	96	94	92	92	91	89	87		
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73		
3	92	81	74	67	89	80	73	67	77	71	66	74	69	65	72	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42		
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	38	32	46	38	32	44	37	32	43	36	31	29		
8	57	42	33	27	55	42	33	27	40	33	27	39	32	27	38	31	27	25		
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	19	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	15311	15311	15311	15311	15311
5°	17876	16631	14332	12465	12050
10°	17663	15127	11350	9671	9461
15°	15423	11572	8362	7720	8148
20°	22909	9695	6176	6616	7276
25°	98662	10052	4789	5948	7088
30°	373131	12190	4057	5727	6940
35°	1131118	14654	3784	5803	7338
40°	1875634	14591	3237	6205	7846
45°	2180102	9962	2923	6430	8500
50°	1692332	5466	2894	6752	9672
55°	979481	3603	2883	7567	10479
60°	165609	827	2480	7853	11608
65°	12755	0	2934	8802	13244
70°	1813	0	3626	9668	15106
75°	1597	799	3993	11179	17567
80°	1190	1190	5951	11901	20233
85°	2371	2371	9485	11856	21341

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2180102 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.6	0.6
10°-20°	16.0	1.3
20°-30°	51.1	4.0
30°-40°	326.1	25.5
40°-50°	597.0	46.7
50°-60°	245.3	19.2
60°-70°	20.7	1.6
70°-80°	10.3	0.8
80°-90°	4.8	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°	74.7	5.8
0°-40°	400.9	31.3
0°-60°	1243.1	97.2
0°-90°	1279.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1279.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	89	89	89	89	89	
5°	103	96	83	72	70	10
15°	86	65	47	43	46	27
25°	519	53	25	31	37	341
35°	5380	70	18	28	35	3405
45°	8951	41	12	26	35	6427
55°	3262	12	10	25	35	2851
65°	31	0	7	22	32	102
75°	2	1	6	17	26	3
85°	1	1	5	6	11	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°	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9
2.5°	97.4	97.4	97.4	96.2	96.2	97.4	96.2	96.2	96.2	96.2	95.0
5°	103.4	103.4	103.4	103.4	103.4	103.4	103.4	102.2	102.2	101.0	96.2
7.5°	105.8	105.8	105.8	105.8	104.6	104.6	104.6	104.6	103.4	102.2	93.8
10°	101.0	101.0	101.0	99.8	99.8	99.8	98.6	98.6	97.4	96.2	86.5
12.5°	91.3	91.3	91.3	91.3	90.1	90.1	88.9	88.9	87.7	86.5	75.7
15°	86.5	86.5	86.5	85.3	85.3	84.1	82.9	81.7	80.5	78.1	64.9
17.5°	93.8	93.8	92.6	92.6	90.1	87.7	86.5	82.9	80.5	76.9	57.7
20°	125.0	126.2	121.4	117.8	115.4	108.2	104.6	98.6	93.8	87.7	52.9
22.5°	252.4	247.6	239.2	226.0	210.3	197.1	173.1	153.9	140.6	122.6	51.7
25°	519.2	514.4	491.6	472.4	424.3	387.0	335.3	293.3	250.0	207.9	52.9
27.5°	986.8	954.4	948.3	860.6	793.3	697.1	597.4	513.2	436.3	351.0	56.5
30°	1876.3	1839.0	1708.0	1575.8	1394.3	1188.7	992.8	810.1	657.5	519.2	61.3
31°	2381.1	2417.1	2263.3	1997.7	1729.6	1466.4	1198.4	966.4	769.3	597.4	63.7
32°	3129.9	2972.4	2810.2	2537.3	2147.9	1811.4	1474.8	1140.7	881.0	681.5	66.1
33°	3837.9	3745.3	3497.7	3157.5	2690.0	2217.6	1781.3	1346.2	1018.1	783.7	67.3
34°	4592.7	4490.5	4289.8	3801.8	3288.6	2669.6	2087.8	1583.0	1181.5	883.4	68.5
35°	5380.0	5336.7	4949.7	4526.6	3895.6	3149.1	2456.8	1842.6	1341.4	974.8	69.7
36°	6172.1	6032.6	5729.7	5111.9	4453.3	3592.7	2843.8	2084.2	1503.7	1083.0	69.7
37°	6768.2	6737.0	6335.5	5733.3	4959.3	4066.2	3178.0	2352.2	1667.1	1175.5	69.7
38°	7425.7	7301.9	6894.4	6281.4	5435.3	4500.1	3527.8	2585.4	1822.2	1259.7	68.5
39°	7979.8	7795.9	7384.8	6779.1	5851.1	4829.5	3805.4	2811.4	1959.2	1329.4	67.3
40°	8342.8	8215.4	7786.3	7104.8	6228.6	5140.8	4086.7	2997.7	2061.4	1382.3	64.9
41°	8743.1	8531.5	8107.2	7422.1	6502.6	5414.8	4263.4	3120.3	2140.7	1417.1	62.5
42°	8982.2	8809.2	8305.5	7634.8	6698.5	5571.1	4407.6	3214.0	2188.8	1435.1	57.7
43°	9205.8	8970.2	8479.8	7758.7	6828.3	5681.7	4473.7	3257.3	2199.6	1435.1	51.7
44°	9175.8	8952.2	8443.8	7775.5	6857.2	5714.1	4501.3	3258.5	2182.8	1417.1	45.7
45°	8951.0	8728.6	8270.7	7628.8	6753.8	5650.4	4446.0	3210.4	2135.9	1385.9	40.9
46°	8538.7	8317.6	7966.6	7383.6	6561.5	5506.2	4317.4	3105.9	2057.8	1335.4	36.1
47°	8090.4	7875.2	7515.9	6988.2	6233.4	5249.0	4131.1	2959.2	1948.4	1262.1	32.5
48°	7440.1	7305.5	6944.9	6494.2	5777.8	4846.3	3804.2	2720.0	1801.7	1167.1	27.6
49°	6865.6	6723.8	6407.6	5923.3	5184.1	4377.5	3413.6	2429.2	1610.6	1061.3	24.0
50°	6316.3	6192.5	5900.4	5353.5	4648.0	3811.4	2885.9	2062.6	1370.2	930.3	20.4
51°	5779.0	5686.5	5388.4	4886.0	4169.6	3376.3	2500.1	1717.6	1132.2	771.7	19.2
52°	5239.3	5228.5	4905.2	4396.8	3704.4	2942.4	2125.1	1449.6	960.4	647.9	18.0
53°	4658.8	4589.1	4306.6	3849.9	3185.2	2490.5	1801.7	1222.4	826.9	551.7	15.6
54°	3997.7	3919.6	3616.7	3204.4	2602.2	2039.7	1452.0	988.0	688.7	466.4	14.4
55°	3262.1	3128.7	2908.7	2485.7	2032.5	1556.5	1121.4	782.5	550.5	388.2	12.0
56°	2474.8	2341.4	2217.6	1906.3	1491.6	1161.1	835.4	599.8	430.3	306.5	10.8
57°	1721.2	1714.0	1510.9	1271.7	997.6	790.9	572.1	423.1	304.1	238.0	8.4
58°	1116.6	1079.4	949.5	811.3	652.7	494.0	367.8	287.3	206.7	162.3	7.2
59°	782.5	708.0	638.2	540.9	411.1	311.3	236.8	183.9	143.0	113.0	4.8
60°	480.8	465.2	418.3	329.3	266.8	220.0	176.7	135.8	104.6	80.5	2.4
62.5°	137.0	139.4	126.2	111.8	96.2	82.9	74.5	63.7	52.9	42.1	0.0
65°	31.3	30.0	32.5	30.0	27.6	27.6	24.0	21.6	19.2	18.0	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°	9.6	9.6	8.4	8.4	8.4	7.2	7.2	6.0	6.0	4.8	0.0
70°	3.6	3.6	3.6	3.6	3.6	2.4	2.4	2.4	1.2	1.2	0.0
72.5°	3.6	3.6	3.6	2.4	2.4	2.4	2.4	2.4	1.2	1.2	1.2
75°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	1.2	1.2	1.2	1.2
77.5°	2.4	2.4	2.4	2.4	2.4	1.2	2.4	1.2	1.2	1.2	1.2
80°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
85°	1.2	1.2	1.2	1.2	0.0	0.0	1.2	1.2	1.2	0.0	1.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
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°	88.9	88.9	88.9	88.9	88.9	88.9
2.5°	92.6	87.7	84.1	80.5	79.3	79.3
5°	90.1	82.9	75.7	72.1	69.7	69.7
7.5°	82.9	74.5	67.3	63.7	62.5	62.5
10°	74.5	64.9	57.7	55.3	55.3	54.1
12.5°	64.9	55.3	50.5	49.3	49.3	49.3
15°	54.1	46.9	43.3	43.3	44.5	45.7
17.5°	45.7	38.5	37.3	39.7	42.1	42.1
20°	38.5	33.7	33.7	36.1	38.5	39.7
22.5°	32.5	28.8	30.0	33.7	37.3	38.5
25°	28.8	25.2	27.6	31.3	34.9	37.3
27.5°	24.0	22.8	25.2	30.0	34.9	36.1
30°	20.4	20.4	24.0	28.8	33.7	34.9
31°	19.2	19.2	24.0	28.8	33.7	34.9
32°	18.0	19.2	22.8	28.8	33.7	34.9
33°	16.8	18.0	22.8	27.6	33.7	34.9
34°	15.6	18.0	22.8	27.6	33.7	34.9
35°	14.4	18.0	22.8	27.6	33.7	34.9
36°	13.2	16.8	21.6	27.6	33.7	34.9
37°	12.0	16.8	21.6	27.6	33.7	34.9
38°	10.8	15.6	21.6	27.6	33.7	34.9
39°	10.8	15.6	20.4	27.6	32.5	34.9
40°	9.6	14.4	20.4	27.6	32.5	34.9
41°	8.4	14.4	20.4	26.4	32.5	34.9
42°	7.2	13.2	19.2	26.4	32.5	34.9
43°	6.0	13.2	19.2	26.4	32.5	34.9
44°	6.0	12.0	19.2	26.4	32.5	34.9
45°	4.8	12.0	19.2	26.4	32.5	34.9
46°	3.6	12.0	19.2	26.4	32.5	34.9
47°	3.6	10.8	18.0	26.4	32.5	34.9
48°	2.4	10.8	18.0	26.4	32.5	34.9
49°	2.4	10.8	18.0	26.4	32.5	36.1
50°	2.4	10.8	18.0	25.2	32.5	36.1
51°	1.2	10.8	18.0	25.2	32.5	36.1
52°	1.2	10.8	16.8	25.2	33.7	36.1
53°	1.2	9.6	16.8	25.2	33.7	36.1
54°	1.2	9.6	16.8	25.2	33.7	34.9
55°	1.2	9.6	16.8	25.2	32.5	34.9
56°	1.2	8.4	16.8	25.2	32.5	34.9
57°	1.2	8.4	15.6	24.0	32.5	33.7
58°	1.2	8.4	15.6	24.0	32.5	33.7
59°	1.2	8.4	15.6	24.0	31.3	33.7
60°	2.4	7.2	14.4	22.8	31.3	33.7
62.5°	2.4	7.2	14.4	22.8	30.0	32.5
65°	2.4	7.2	13.2	21.6	30.0	32.5



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.4	6.0	12.0	20.4	28.8	31.3
70°	2.4	7.2	12.0	19.2	27.6	30.0
72.5°	3.6	6.0	10.8	18.0	26.4	28.8
75°	3.6	6.0	10.8	16.8	25.2	26.4
77.5°	4.8	6.0	9.6	14.4	22.8	24.0
80°	4.8	6.0	8.4	12.0	19.2	20.4
82.5°	4.8	6.0	6.0	9.6	14.4	15.6
85°	3.6	4.8	4.8	6.0	9.6	10.8
87.5°	3.6	4.8	3.6	2.4	4.8	4.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)