

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: P1307079

Luminaire Tested: P3SQAS17R409027DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1307079
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: P3SQAS17R409027DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R40 optic, 2700K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

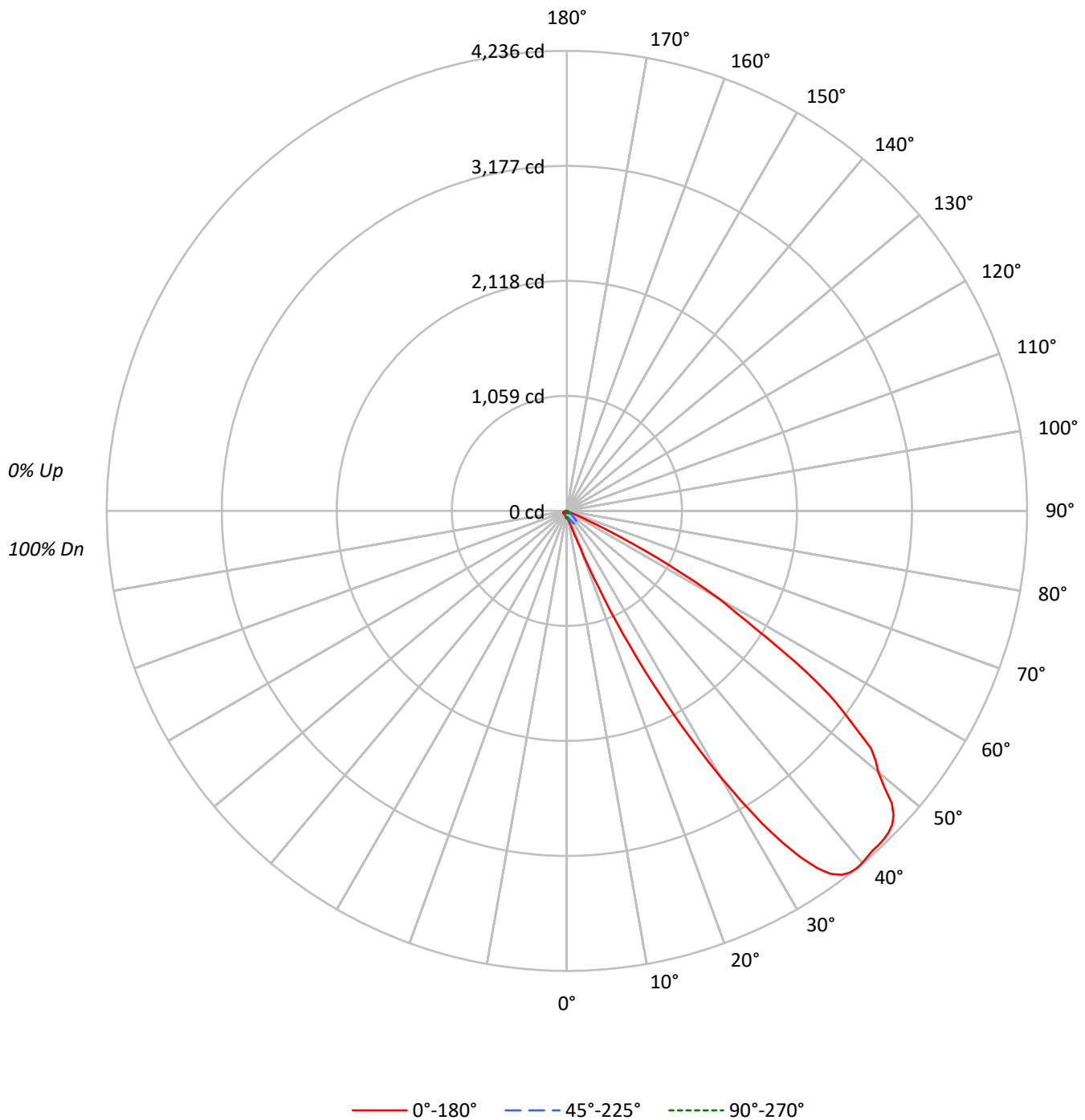
Lumens per Lamp: N/A
Luminaire Lumens: 1309.0 lumens
Efficiency: N/A
Efficacy: 61.7 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	11591	11591	11591	11591	11591
5°	12880	12465	11427	10390	10183
10°	15564	13238	10510	9461	9251
15°	25514	14353	9004	8362	8576
20°	67427	16971	7496	7496	8156
25°	259956	21017	5948	6860	8000
30°	560841	27960	4773	6702	7895
35°	844155	33114	4037	6581	8094
40°	951059	33251	3507	6767	8656
45°	1019784	25769	3215	7039	9377
50°	1002329	16103	2894	7395	10315
55°	881807	7927	2883	8287	11560
60°	558174	1653	3307	9093	12848
65°	114145	489	3423	9780	14222
70°	2417	604	3626	10877	16365
75°	2396	1597	3993	11978	18366
80°	2380	1190	4761	13092	21423
85°	2371	2371	9485	14227	23712

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 1038212 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.3	0.5
10°-20°	20.7	1.6
20°-30°	101.7	7.8
30°-40°	330.7	25.3
40°-50°	455.9	34.8
50°-60°	317.6	24.3
60°-70°	60.2	4.6
70°-80°	10.9	0.8
80°-90°	5.0	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°	128.7	9.8
0°-40°	459.4	35.1
0°-60°	1232.9	94.2
0°-90°	1309.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1309.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	67	67	67	67	67	
5°	74	72	66	60	59	8
15°	143	80	50	47	48	52
25°	1368	111	31	36	42	704
35°	4015	158	19	31	38	2426
45°	4187	106	13	29	38	3184
55°	2937	26	10	28	38	2510
65°	280	1	8	24	35	495
75°	4	2	6	18	28	3
85°	1	1	5	7	12	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°	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
2.5°	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	68.5	67.3
5°	74.5	74.5	74.5	74.5	73.3	73.3	73.3	72.1	72.1	69.7	66.1
7.5°	79.3	79.3	79.3	79.3	78.1	76.9	75.7	75.7	74.5	68.5	63.7
10°	89.0	89.0	87.8	86.6	85.4	82.9	81.7	79.3	75.7	67.3	60.1
12.5°	108.2	105.8	104.6	102.2	98.6	93.8	89.0	85.4	76.9	64.9	56.5
15°	143.1	140.6	135.8	128.6	121.4	111.8	103.4	95.0	80.5	61.3	50.5
17.5°	204.4	197.2	189.9	177.9	159.9	143.1	125.0	109.4	85.4	57.7	45.7
20°	367.9	363.0	319.8	286.1	232.0	193.5	157.5	131.0	92.6	54.1	40.9
22.5°	758.5	708.1	637.1	521.7	406.3	299.3	217.6	164.7	99.8	49.3	36.1
25°	1368.0	1288.7	1136.0	913.6	674.4	477.2	315.0	215.2	110.6	44.5	31.3
27.5°	2071.3	1990.7	1753.9	1447.4	1056.7	720.1	449.6	284.9	125.0	39.7	27.6
30°	2820.2	2751.7	2451.2	2026.8	1489.4	1008.6	602.3	355.8	140.6	34.9	24.0
31°	3121.9	3034.2	2709.6	2257.6	1692.6	1127.6	663.6	385.9	146.7	33.7	22.8
32°	3399.6	3299.9	2963.3	2478.8	1857.3	1256.2	730.9	412.3	151.5	31.3	21.6
33°	3638.9	3522.3	3197.7	2688.0	2038.8	1376.4	800.6	437.6	155.1	28.9	20.4
34°	3842.0	3741.0	3392.4	2898.3	2199.9	1491.8	869.1	462.8	157.5	27.6	19.2
35°	4015.1	3923.8	3578.8	3058.2	2357.4	1603.6	931.7	486.9	157.5	25.2	19.2
36°	4131.7	4052.4	3739.8	3221.7	2489.6	1698.6	984.5	508.5	157.5	22.8	18.0
37°	4195.4	4118.5	3845.6	3356.4	2619.5	1792.4	1032.6	525.3	156.3	21.6	16.8
38°	4227.9	4160.6	3923.8	3465.8	2709.6	1859.7	1074.7	538.6	155.1	19.2	16.8
39°	4236.3	4179.8	3973.1	3545.1	2797.4	1927.0	1104.8	545.8	151.5	18.0	15.6
40°	4230.3	4181.0	3999.5	3616.0	2864.7	1979.9	1126.4	548.2	147.9	15.6	15.6
41°	4218.3	4179.8	4018.7	3665.3	2918.8	2013.6	1134.8	543.4	143.1	13.2	14.4
42°	4207.5	4165.4	4027.2	3699.0	2956.0	2030.4	1133.6	533.7	135.8	12.0	14.4
43°	4207.5	4159.4	4028.4	3720.6	2974.1	2031.6	1119.2	515.7	126.2	10.8	13.2
44°	4200.3	4155.8	4034.4	3735.0	2978.9	2020.8	1096.3	496.5	115.4	9.6	13.2
45°	4187.0	4140.2	4033.2	3736.2	2970.5	1994.3	1059.1	471.2	105.8	7.2	13.2
46°	4161.8	4119.7	4022.3	3727.8	2945.2	1955.9	1014.6	446.0	95.0	6.0	12.0
47°	4111.3	4078.8	3993.5	3699.0	2906.8	1899.4	961.7	417.1	86.6	4.8	12.0
48°	4024.7	4001.9	3944.2	3635.3	2833.4	1829.6	905.2	385.9	78.1	4.8	12.0
49°	3866.1	3848.0	3814.4	3533.1	2739.7	1744.3	843.9	351.0	69.7	3.6	12.0
50°	3741.0	3721.8	3653.3	3361.2	2605.0	1636.1	776.6	316.2	60.1	2.4	10.8
51°	3658.1	3626.8	3518.6	3161.6	2409.1	1491.8	703.2	281.3	50.5	2.4	10.8
52°	3553.5	3506.6	3372.0	2982.5	2230.0	1347.6	623.9	246.4	44.5	2.4	10.8
53°	3334.7	3317.9	3184.5	2790.2	2050.8	1209.3	542.2	217.6	38.5	2.4	10.8
54°	3143.6	3118.3	2936.8	2523.3	1856.1	1055.5	458.0	192.3	32.5	2.4	10.8
55°	2936.8	2887.5	2726.4	2298.5	1627.7	913.6	377.5	165.9	26.4	2.4	9.6
56°	2676.0	2632.7	2459.6	2058.1	1417.3	769.4	316.2	135.8	20.4	2.4	9.6
57°	2358.6	2318.9	2185.5	1762.3	1198.5	628.7	257.3	109.4	15.6	2.4	9.6
58°	2052.0	2007.6	1854.9	1478.6	967.7	498.9	215.2	89.0	12.0	2.4	9.6
59°	1816.4	1756.3	1559.2	1241.8	757.3	378.7	170.7	70.9	8.4	2.4	9.6
60°	1620.5	1571.2	1366.8	1033.8	593.9	278.9	126.2	54.1	4.8	2.4	9.6
62.5°	938.9	925.6	741.7	532.5	280.1	129.8	62.5	25.2	2.4	3.6	9.6
65°	280.1	244.0	189.9	113.0	72.1	43.3	22.8	8.4	1.2	3.6	8.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	8.4	8.4	8.4	8.4	8.4	8.4	4.8	2.4	1.2	3.6	8.4
70°	4.8	3.6	3.6	3.6	3.6	2.4	2.4	1.2	1.2	3.6	7.2
72.5°	3.6	3.6	3.6	3.6	2.4	2.4	2.4	1.2	2.4	3.6	6.0
75°	3.6	2.4	2.4	2.4	2.4	1.2	1.2	1.2	2.4	3.6	6.0
77.5°	2.4	2.4	2.4	2.4	1.2	1.2	1.2	1.2	2.4	3.6	6.0
80°	2.4	2.4	1.2	1.2	1.2	1.2	1.2	1.2	1.2	3.6	4.8
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	3.6	4.8
85°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	3.6	4.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	3.6	3.6
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):

	112.5°	135°	157.5°	180°
0°	67.3	67.3	67.3	67.3
2.5°	64.9	63.7	62.5	62.5
5°	62.5	60.1	60.1	58.9
7.5°	58.9	56.5	56.5	56.5
10°	55.3	54.1	54.1	52.9
12.5°	50.5	50.5	50.5	50.5
15°	46.9	46.9	48.1	48.1
17.5°	42.1	43.3	45.7	46.9
20°	38.5	40.9	43.3	44.5
22.5°	36.1	38.5	42.1	43.3
25°	32.5	36.1	40.9	42.1
27.5°	30.1	34.9	38.5	40.9
30°	27.6	33.7	37.3	39.7
31°	27.6	32.5	37.3	39.7
32°	26.4	31.3	37.3	38.5
33°	26.4	31.3	37.3	38.5
34°	25.2	31.3	36.1	38.5
35°	25.2	31.3	36.1	38.5
36°	24.0	30.1	36.1	38.5
37°	24.0	30.1	36.1	38.5
38°	22.8	30.1	36.1	38.5
39°	22.8	30.1	36.1	38.5
40°	22.8	30.1	36.1	38.5
41°	21.6	30.1	36.1	38.5
42°	21.6	30.1	36.1	38.5
43°	21.6	28.9	36.1	38.5
44°	21.6	28.9	36.1	38.5
45°	20.4	28.9	36.1	38.5
46°	20.4	28.9	36.1	38.5
47°	20.4	28.9	36.1	38.5
48°	20.4	28.9	36.1	38.5
49°	20.4	28.9	36.1	38.5
50°	19.2	27.6	36.1	38.5
51°	19.2	27.6	36.1	38.5
52°	19.2	27.6	36.1	38.5
53°	19.2	27.6	36.1	38.5
54°	18.0	27.6	36.1	38.5
55°	18.0	27.6	36.1	38.5
56°	18.0	27.6	36.1	37.3
57°	18.0	27.6	34.9	37.3
58°	18.0	26.4	34.9	37.3
59°	18.0	26.4	34.9	37.3
60°	18.0	26.4	34.9	37.3
62.5°	16.8	26.4	33.7	36.1
65°	15.6	24.0	33.7	34.9



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	15.6	22.8	31.3	33.7
70°	14.4	21.6	30.1	32.5
72.5°	12.0	20.4	27.6	30.1
75°	10.8	18.0	25.2	27.6
77.5°	9.6	15.6	22.8	24.0
80°	8.4	13.2	19.2	21.6
82.5°	6.0	9.6	15.6	16.8
85°	4.8	7.2	10.8	12.0
87.5°	3.6	3.6	6.0	6.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)