

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: P1309461

Luminaire Tested: P3SQAS20R409035D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1309461
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: P3SQAS20R409035D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R40 optic, 3500K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

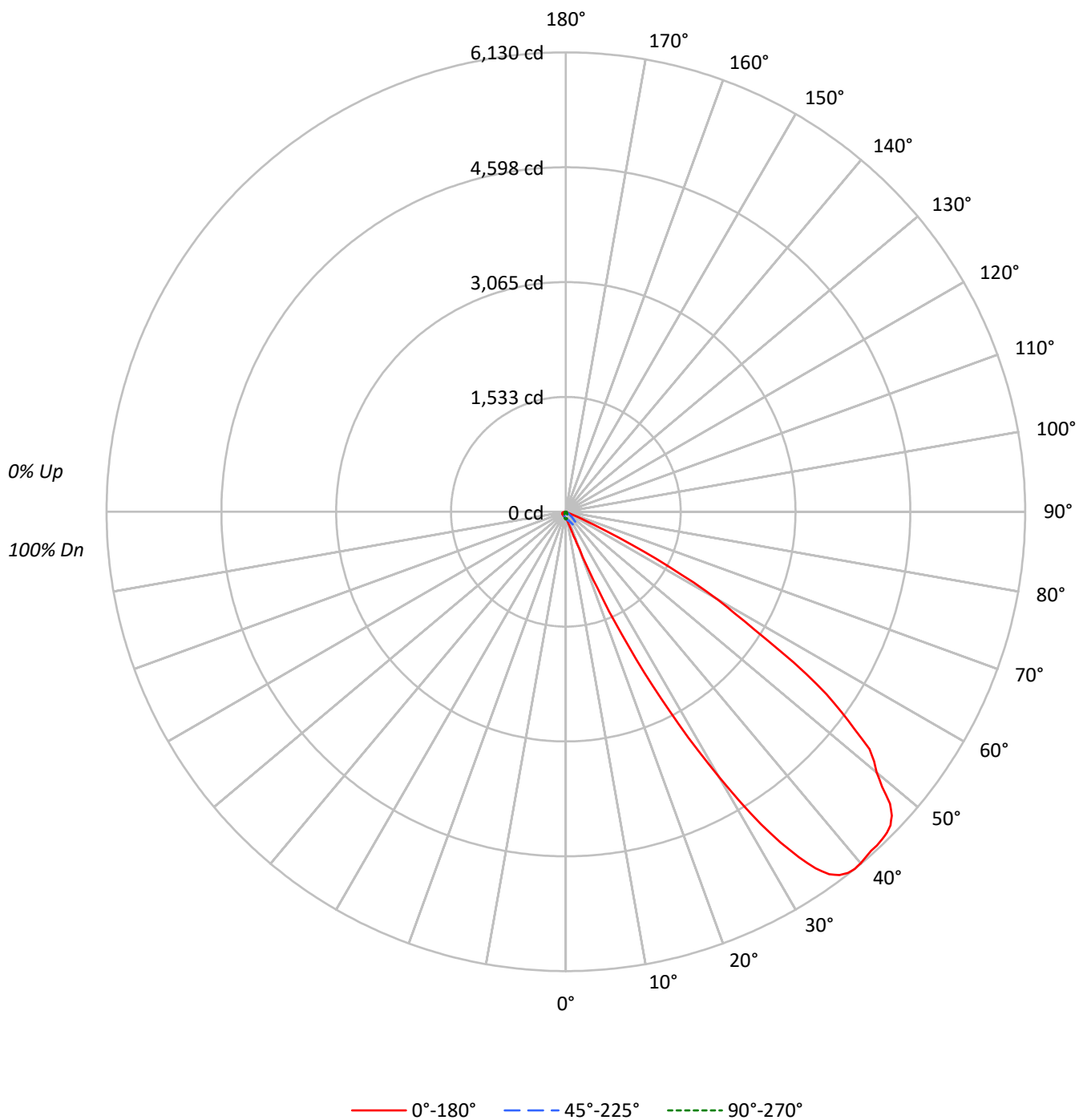
Lumens per Lamp: N/A
Luminaire Lumens: 1894.0 lumens
Efficiency: N/A
Efficacy: 65.8 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	16774	16774	16774	16774	16774
5°	18637	18049	16545	15041	14729
10°	22507	19167	15215	13693	13378
15°	36908	20772	13034	12089	12410
20°	97539	24541	10832	10832	11803
25°	376139	30404	8589	9919	11573
30°	811491	40469	6921	9685	11415
35°	1221418	47915	5845	9503	11711
40°	1376105	48089	5081	9780	12523
45°	1475533	37289	4652	10156	13566
50°	1450283	23310	4207	10717	14924
55°	1275899	11500	4174	12010	16725
60°	807621	2411	4788	13192	18566
65°	165165	693	4972	14181	20539
70°	3525	856	5237	15761	23667
75°	3460	2329	5789	17367	26617
80°	3471	1686	6943	18943	31043
85°	3359	3359	13832	20551	34383

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 1502204 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.1	0.5
10°-20°	30.0	1.6
20°-30°	147.1	7.8
30°-40°	478.5	25.3
40°-50°	659.6	34.8
50°-60°	459.5	24.3
60°-70°	87.1	4.6
70°-80°	15.8	0.8
80°-90°	7.3	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°	186.2	9.8
0°-40°	664.7	35.1
0°-60°	1783.9	94.2
0°-90°	1894.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1894.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	97	97	97	97	97	
5°	108	104	96	87	85	11
15°	207	116	73	68	70	75
25°	1979	160	45	52	61	1019
35°	5810	228	28	45	56	3511
45°	6058	153	19	42	56	4607
55°	4249	38	14	40	56	3632
65°	405	2	12	35	50	717
75°	5	4	9	26	40	5
85°	2	2	7	10	17	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°	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
2.5°	100.9	100.9	100.9	100.9	100.9	100.9	100.9	100.9	100.9	99.1	97.4
5°	107.8	107.8	107.8	107.8	106.1	106.1	106.1	104.4	104.4	100.9	95.7
7.5°	114.8	114.8	114.8	114.8	113.1	111.3	109.6	109.6	107.8	99.1	92.2
10°	128.7	128.7	127.0	125.2	123.5	120.0	118.3	114.8	109.6	97.4	87.0
12.5°	156.5	153.1	151.3	147.8	142.6	135.7	128.7	123.5	111.3	93.9	81.8
15°	207.0	203.5	196.5	186.1	175.7	161.8	149.6	137.4	116.5	88.7	73.1
17.5°	295.7	285.3	274.8	257.4	231.3	207.0	180.9	158.3	123.5	83.5	66.1
20°	532.2	525.3	462.7	414.0	335.7	280.0	227.9	189.6	133.9	78.3	59.1
22.5°	1097.5	1024.5	921.9	754.9	587.9	433.1	314.8	238.3	144.4	71.3	52.2
25°	1979.4	1864.6	1643.7	1321.9	975.8	690.5	455.7	311.3	160.0	64.4	45.2
27.5°	2996.9	2880.4	2537.7	2094.2	1528.9	1041.9	650.5	412.2	180.9	57.4	40.0
30°	4080.6	3981.4	3546.6	2932.6	2155.1	1459.3	871.4	514.9	203.5	50.4	34.8
31°	4517.2	4390.2	3920.6	3266.5	2449.0	1631.5	960.1	558.3	212.2	48.7	33.0
32°	4919.0	4774.6	4287.6	3586.6	2687.3	1817.6	1057.5	596.6	219.2	45.2	31.3
33°	5265.1	5096.4	4626.7	3889.2	2950.0	1991.6	1158.4	633.1	224.4	41.7	29.6
34°	5559.0	5412.9	4908.5	4193.6	3183.1	2158.6	1257.6	669.7	227.9	40.0	27.8
35°	5809.5	5677.3	5178.1	4425.0	3410.9	2320.3	1348.0	704.4	227.9	36.5	27.8
36°	5978.2	5863.4	5411.2	4661.5	3602.2	2457.7	1424.5	735.8	227.9	33.0	26.1
37°	6070.4	5959.1	5564.3	4856.3	3790.1	2593.4	1494.1	760.1	226.1	31.3	24.4
38°	6117.4	6020.0	5677.3	5014.6	3920.6	2690.8	1555.0	779.2	224.4	27.8	24.4
39°	6129.6	6047.8	5748.6	5129.4	4047.5	2788.2	1598.5	789.7	219.2	26.1	22.6
40°	6120.9	6049.5	5786.9	5232.0	4144.9	2864.8	1629.8	793.2	213.9	22.6	22.6
41°	6103.5	6047.8	5814.7	5303.4	4223.2	2913.5	1642.0	786.2	207.0	19.1	20.9
42°	6087.8	6026.9	5826.9	5352.1	4277.1	2937.8	1640.2	772.3	196.5	17.4	20.9
43°	6087.8	6018.2	5828.6	5383.4	4303.2	2939.5	1619.4	746.2	182.6	15.7	19.1
44°	6077.4	6013.0	5837.3	5404.2	4310.2	2923.9	1586.3	718.4	167.0	13.9	19.1
45°	6058.2	5990.4	5835.6	5406.0	4298.0	2885.6	1532.4	681.8	153.1	10.4	19.1
46°	6021.7	5960.8	5820.0	5393.8	4261.5	2830.0	1468.0	645.3	137.4	8.7	17.4
47°	5948.7	5901.7	5778.2	5352.1	4205.8	2748.2	1391.5	603.6	125.2	7.0	17.4
48°	5823.4	5790.4	5706.9	5259.9	4099.7	2647.3	1309.7	558.3	113.1	7.0	17.4
49°	5593.8	5567.7	5519.0	5112.0	3964.0	2523.8	1221.0	507.9	100.9	5.2	17.4
50°	5412.9	5385.1	5286.0	4863.3	3769.2	2367.3	1123.6	457.5	87.0	3.5	15.7
51°	5292.9	5247.7	5091.2	4574.6	3485.7	2158.6	1017.5	407.0	73.1	3.5	15.7
52°	5141.6	5073.8	4878.9	4315.4	3226.5	1949.8	902.7	356.6	64.4	3.5	15.7
53°	4825.0	4800.7	4607.6	4037.1	2967.4	1749.8	784.5	314.8	55.7	3.5	15.7
54°	4548.5	4511.9	4249.3	3650.9	2685.6	1527.2	662.7	278.3	47.0	3.5	15.7
55°	4249.3	4178.0	3944.9	3325.7	2355.1	1321.9	546.2	240.0	38.3	3.5	13.9
56°	3871.9	3809.2	3558.8	2977.8	2050.7	1113.2	457.5	196.5	29.6	3.5	13.9
57°	3412.7	3355.3	3162.2	2549.9	1734.2	909.7	372.2	158.3	22.6	3.5	13.9
58°	2969.1	2904.8	2683.9	2139.4	1400.2	721.8	311.3	128.7	17.4	3.5	13.9
59°	2628.2	2541.2	2256.0	1796.8	1095.8	547.9	247.0	102.6	12.2	3.5	13.9
60°	2344.7	2273.4	1977.7	1495.9	859.3	403.5	182.6	78.3	7.0	3.5	13.9
62.5°	1358.5	1339.3	1073.2	770.5	405.3	187.9	90.4	36.5	3.5	5.2	13.9
65°	405.3	353.1	274.8	163.5	104.4	62.6	33.0	12.2	1.7	5.2	12.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	12.2	12.2	12.2	12.2	12.2	12.2	7.0	3.5	1.7	5.2	12.2
70°	7.0	5.2	5.2	5.2	5.2	3.5	3.5	1.7	1.7	5.2	10.4
72.5°	5.2	5.2	5.2	5.2	3.5	3.5	3.5	1.7	3.5	5.2	8.7
75°	5.2	3.5	3.5	3.5	3.5	1.7	1.7	1.7	3.5	5.2	8.7
77.5°	3.5	3.5	3.5	3.5	1.7	1.7	1.7	1.7	3.5	5.2	8.7
80°	3.5	3.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7	5.2	7.0
82.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	5.2	7.0
85°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	5.2	7.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.7	5.2	5.2
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):

	112.5°	135°	157.5°	180°
0°	97.4	97.4	97.4	97.4
2.5°	93.9	92.2	90.4	90.4
5°	90.4	87.0	87.0	85.2
7.5°	85.2	81.8	81.8	81.8
10°	80.0	78.3	78.3	76.5
12.5°	73.1	73.1	73.1	73.1
15°	67.8	67.8	69.6	69.6
17.5°	60.9	62.6	66.1	67.8
20°	55.7	59.1	62.6	64.4
22.5°	52.2	55.7	60.9	62.6
25°	47.0	52.2	59.1	60.9
27.5°	43.5	50.4	55.7	59.1
30°	40.0	48.7	53.9	57.4
31°	40.0	47.0	53.9	57.4
32°	38.3	45.2	53.9	55.7
33°	38.3	45.2	53.9	55.7
34°	36.5	45.2	52.2	55.7
35°	36.5	45.2	52.2	55.7
36°	34.8	43.5	52.2	55.7
37°	34.8	43.5	52.2	55.7
38°	33.0	43.5	52.2	55.7
39°	33.0	43.5	52.2	55.7
40°	33.0	43.5	52.2	55.7
41°	31.3	43.5	52.2	55.7
42°	31.3	43.5	52.2	55.7
43°	31.3	41.7	52.2	55.7
44°	31.3	41.7	52.2	55.7
45°	29.6	41.7	52.2	55.7
46°	29.6	41.7	52.2	55.7
47°	29.6	41.7	52.2	55.7
48°	29.6	41.7	52.2	55.7
49°	29.6	41.7	52.2	55.7
50°	27.8	40.0	52.2	55.7
51°	27.8	40.0	52.2	55.7
52°	27.8	40.0	52.2	55.7
53°	27.8	40.0	52.2	55.7
54°	26.1	40.0	52.2	55.7
55°	26.1	40.0	52.2	55.7
56°	26.1	40.0	52.2	53.9
57°	26.1	40.0	50.4	53.9
58°	26.1	38.3	50.4	53.9
59°	26.1	38.3	50.4	53.9
60°	26.1	38.3	50.4	53.9
62.5°	24.4	38.3	48.7	52.2
65°	22.6	34.8	48.7	50.4



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	22.6	33.0	45.2	48.7
70°	20.9	31.3	43.5	47.0
72.5°	17.4	29.6	40.0	43.5
75°	15.7	26.1	36.5	40.0
77.5°	13.9	22.6	33.0	34.8
80°	12.2	19.1	27.8	31.3
82.5°	8.7	13.9	22.6	24.4
85°	7.0	10.4	15.7	17.4
87.5°	5.2	5.2	8.7	8.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)