

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: P1306997

Luminaire Tested: P3SQAS17R159027DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1306997
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-73)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS17R159027DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R15 optic, 2700K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

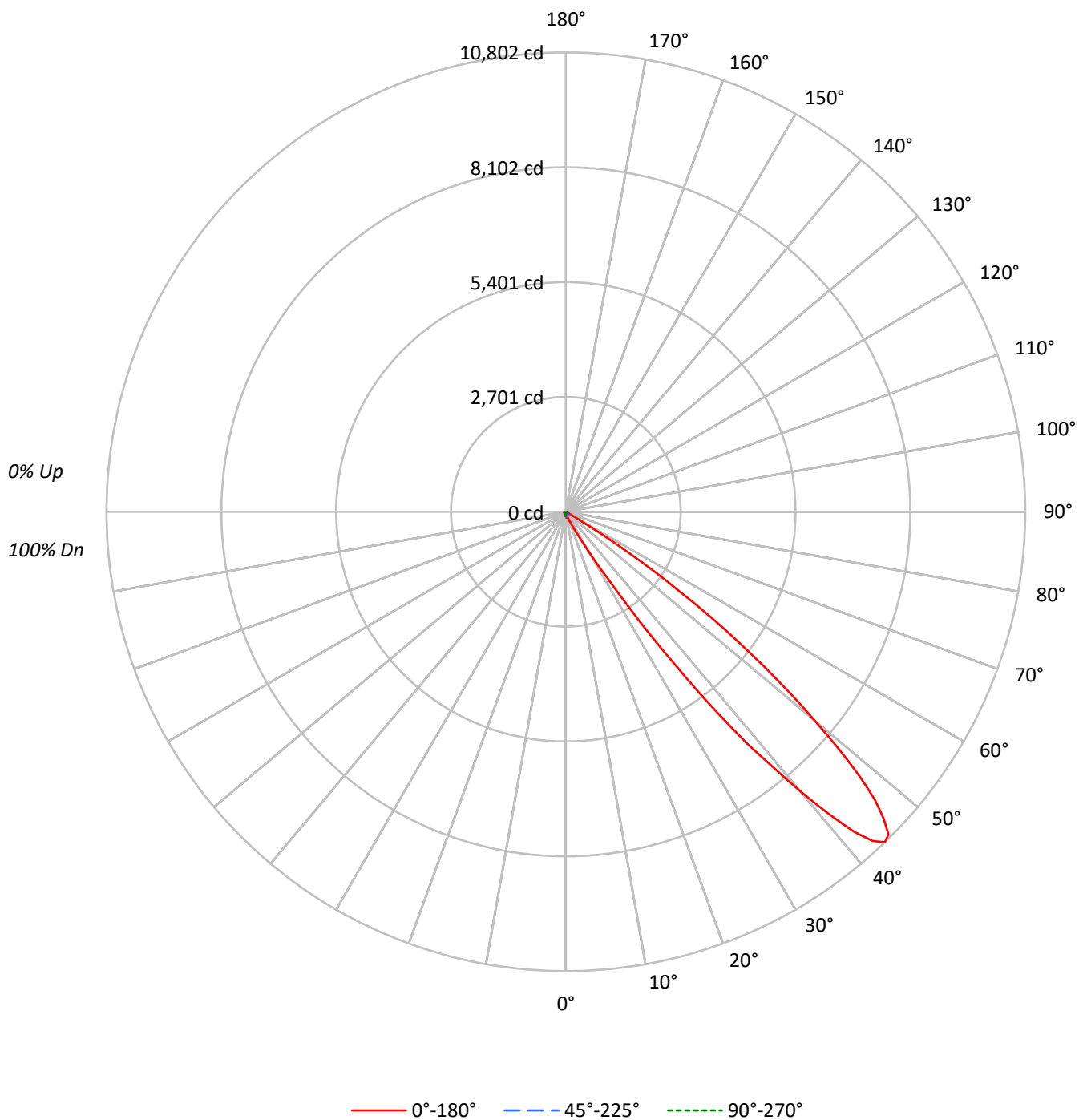
Lumens per Lamp: N/A
Luminaire Lumens: 1206.0 lumens
Efficiency: N/A
Efficacy: 56.9 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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	100	100
1	110	106	102	99	107	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73	73	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61	61	61
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	53	50	50	50
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44	42	42	42
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35	35	35
7	62	47	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29	29	29
8	56	42	33	27	55	41	33	27	40	32	26	39	31	26	37	31	26	24	24	24
9	52	37	28	22	50	37	28	22	35	28	22	34	27	22	33	27	22	20	20	20
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	23	19	17	17	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	18428	18428	18428	18428	18428
5°	22872	20365	16631	14557	14349
10°	22507	17453	12836	11350	11560
15°	18650	12427	9218	9432	10074
20°	32403	9915	7056	8156	9255
25°	72210	11877	5720	7544	8684
30°	215948	14597	5031	7418	9088
35°	831267	16441	4541	7590	9608
40°	1929456	14321	4317	7846	10274
45°	2613370	10838	3800	8500	11131
50°	2049108	6430	3858	9029	12244
55°	983535	2883	3603	9758	13362
60°	89866	413	3307	10368	14914
65°	9780	0	2934	10799	16178
70°	2417	0	3626	11481	17574
75°	2396	799	4791	12776	20029
80°	2380	2380	5951	13092	21423
85°	2371	2371	9485	11856	23712

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2613370 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.1	0.8
10°-20°	19.0	1.6
20°-30°	45.6	3.8
30°-40°	249.5	20.7
40°-50°	604.1	50.1
50°-60°	241.0	20.0
60°-70°	20.8	1.7
70°-80°	11.7	1.0
80°-90°	5.2	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°	73.7	6.1
0°-40°	323.2	26.8
0°-60°	1168.2	96.9
0°-90°	1206.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1206.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	107	107	107	107	107	
5°	132	118	96	84	83	13
15°	105	70	52	53	56	36
25°	380	62	30	40	46	229
35°	3954	78	22	36	46	2794
45°	10730	44	16	35	46	7569
55°	3276	10	12	32	44	3051
65°	24	0	7	26	40	62
75°	4	1	7	19	30	3
85°	1	1	5	6	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°	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0
2.5°	120.2	120.2	121.5	120.2	120.2	120.2	120.2	119.0	119.0	119.0	115.4
5°	132.3	132.3	132.3	132.3	131.1	131.1	131.1	129.9	129.9	128.7	117.8
7.5°	137.1	137.1	135.9	135.9	134.7	134.7	133.5	132.3	131.1	129.9	113.0
10°	128.7	128.7	128.7	127.5	127.5	126.3	125.1	123.9	122.7	120.2	99.8
12.5°	114.2	114.2	115.4	114.2	113.0	111.8	109.4	108.2	107.0	104.6	83.0
15°	104.6	104.6	104.6	103.4	102.2	99.8	98.6	96.2	95.0	91.4	69.7
17.5°	133.5	133.5	132.3	129.9	125.1	121.5	115.4	110.6	104.6	97.4	60.1
20°	176.8	176.8	174.4	172.0	165.9	159.9	150.3	141.9	132.3	123.9	54.1
22.5°	256.1	259.7	252.5	244.1	235.7	221.3	208.0	194.8	178.0	163.5	55.3
25°	380.0	383.6	380.0	360.7	345.1	325.9	300.6	274.2	245.3	218.9	62.5
27.5°	615.7	618.1	612.1	565.2	539.9	489.4	444.9	401.6	353.5	305.4	68.5
30°	1085.9	1087.1	1048.6	954.8	871.8	761.2	667.4	577.2	501.4	424.5	73.4
31°	1429.8	1396.1	1314.3	1201.3	1069.0	919.9	791.2	674.6	561.6	478.6	74.6
32°	1815.8	1811.0	1675.1	1479.1	1302.3	1115.9	922.3	773.2	643.3	530.3	75.8
33°	2326.8	2329.2	2115.2	1884.3	1594.5	1344.4	1090.7	886.2	729.9	591.6	78.2
34°	3125.3	2937.7	2686.4	2373.7	1979.3	1602.9	1273.4	1017.3	808.1	650.6	78.2
35°	3953.8	3765.0	3488.4	3014.7	2473.5	1946.8	1491.1	1158.0	901.9	714.3	78.2
36°	4882.1	4722.2	4303.7	3698.9	3008.6	2271.5	1722.0	1320.3	994.5	772.0	77.0
37°	5885.0	5650.5	5186.4	4526.2	3602.7	2728.5	2003.4	1481.5	1087.1	834.5	74.6
38°	6903.5	6691.9	6106.3	5306.6	4312.1	3210.7	2284.7	1636.6	1172.4	881.4	70.9
39°	7675.5	7560.1	6979.3	6085.8	4878.5	3667.6	2574.5	1802.5	1262.6	928.3	67.3
40°	8582.2	8395.8	7845.1	6740.0	5548.3	4133.0	2858.3	1949.2	1337.2	965.6	63.7
41°	9409.5	9173.8	8478.8	7411.0	6084.6	4551.4	3127.7	2100.8	1397.3	987.2	61.3
42°	10119.0	9844.8	9118.5	7985.8	6533.2	4885.7	3342.9	2209.0	1453.8	1005.3	57.7
43°	10578.4	10341.5	9627.2	8417.5	6916.8	5192.4	3543.8	2322.0	1488.7	1017.3	52.9
44°	10802.0	10562.7	9871.3	8688.0	7152.4	5376.4	3673.6	2400.2	1527.2	1032.9	49.3
45°	10729.9	10487.0	9818.4	8692.8	7225.8	5442.5	3728.9	2435.1	1547.6	1047.4	44.5
46°	10399.2	10228.4	9555.0	8466.8	7086.3	5371.5	3697.7	2408.6	1540.4	1047.4	39.7
47°	9935.0	9740.2	9099.3	8078.4	6748.4	5188.8	3571.4	2328.0	1495.9	1023.3	34.9
48°	9302.5	9136.6	8463.2	7461.5	6230.1	4790.7	3286.4	2197.0	1426.2	976.4	30.1
49°	8508.9	8278.0	7651.5	6672.6	5554.3	4225.6	2912.4	1975.7	1314.3	910.3	26.5
50°	7647.9	7362.9	6879.5	5882.6	4855.7	3623.1	2420.6	1670.3	1156.8	823.7	24.0
51°	6804.9	6515.1	6054.6	5206.8	4110.1	3006.2	1952.9	1333.6	952.4	704.7	20.4
52°	5930.7	5687.8	5171.9	4505.8	3518.5	2436.3	1627.0	1127.9	791.2	591.6	16.8
53°	5060.1	4894.2	4403.5	3728.9	2827.1	1990.1	1328.8	965.6	690.2	506.3	13.2
54°	4188.3	4006.7	3633.9	3032.7	2278.7	1570.5	1126.7	808.1	598.8	441.3	12.0
55°	3275.6	3181.8	2837.9	2312.4	1726.8	1253.0	913.9	695.0	501.4	369.2	9.6
56°	2522.8	2417.0	2103.2	1677.5	1283.1	981.2	739.5	567.6	424.5	309.0	7.2
57°	1652.2	1544.0	1336.0	1171.2	934.3	715.5	565.2	447.3	345.1	256.1	6.0
58°	976.4	877.8	845.4	721.5	622.9	485.8	417.3	333.1	254.9	202.0	3.6
59°	448.5	455.7	405.2	380.0	345.1	309.0	253.7	222.5	174.4	145.5	2.4
60°	260.9	246.5	240.5	215.2	191.2	169.6	152.7	134.7	109.4	93.8	1.2
62.5°	89.0	85.4	87.8	79.4	74.6	72.1	66.1	56.5	46.9	38.5	0.0
65°	24.0	24.0	22.8	21.6	20.4	19.2	18.0	15.6	14.4	12.0	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°	8.4	8.4	7.2	7.2	6.0	6.0	4.8	4.8	3.6	3.6	0.0
70°	4.8	4.8	4.8	3.6	3.6	3.6	2.4	2.4	2.4	1.2	0.0
72.5°	3.6	3.6	3.6	3.6	3.6	3.6	2.4	2.4	2.4	1.2	1.2
75°	3.6	3.6	3.6	2.4	2.4	2.4	2.4	2.4	2.4	2.4	1.2
77.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
80°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	1.2	2.4
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.4
85°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	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°	107.0	107.0	107.0	107.0	107.0	107.0
2.5°	110.6	105.8	99.8	96.2	95.0	93.8
5°	105.8	96.2	89.0	84.2	83.0	83.0
7.5°	95.0	84.2	77.0	74.6	73.4	73.4
10°	83.0	73.4	67.3	64.9	66.1	66.1
12.5°	69.7	61.3	58.9	58.9	60.1	61.3
15°	56.5	51.7	51.7	52.9	55.3	56.5
17.5°	46.9	44.5	45.7	48.1	50.5	52.9
20°	38.5	38.5	40.9	44.5	48.1	50.5
22.5°	32.5	33.7	37.3	40.9	45.7	48.1
25°	27.7	30.1	33.7	39.7	44.5	45.7
27.5°	24.0	27.7	32.5	38.5	43.3	45.7
30°	20.4	25.3	31.3	37.3	43.3	45.7
31°	19.2	24.0	30.1	37.3	43.3	45.7
32°	18.0	24.0	30.1	37.3	43.3	45.7
33°	16.8	22.8	30.1	36.1	43.3	45.7
34°	15.6	22.8	30.1	37.3	43.3	45.7
35°	14.4	21.6	28.9	36.1	42.1	45.7
36°	13.2	21.6	28.9	36.1	43.3	45.7
37°	12.0	21.6	28.9	36.1	42.1	45.7
38°	12.0	20.4	27.7	36.1	42.1	45.7
39°	10.8	19.2	27.7	36.1	42.1	45.7
40°	9.6	19.2	26.5	34.9	42.1	45.7
41°	8.4	18.0	26.5	34.9	42.1	45.7
42°	7.2	18.0	26.5	34.9	42.1	45.7
43°	6.0	16.8	25.3	34.9	42.1	45.7
44°	6.0	16.8	25.3	34.9	42.1	45.7
45°	4.8	15.6	24.0	34.9	42.1	45.7
46°	4.8	15.6	24.0	33.7	42.1	45.7
47°	3.6	15.6	24.0	33.7	42.1	45.7
48°	3.6	14.4	24.0	33.7	42.1	45.7
49°	2.4	14.4	24.0	33.7	42.1	45.7
50°	2.4	14.4	22.8	33.7	42.1	45.7
51°	2.4	14.4	22.8	33.7	42.1	45.7
52°	2.4	13.2	22.8	33.7	42.1	45.7
53°	2.4	13.2	22.8	33.7	42.1	45.7
54°	2.4	13.2	21.6	33.7	42.1	45.7
55°	2.4	12.0	21.6	32.5	42.1	44.5
56°	2.4	12.0	21.6	32.5	42.1	44.5
57°	2.4	12.0	20.4	32.5	42.1	44.5
58°	2.4	10.8	20.4	31.3	40.9	44.5
59°	2.4	10.8	19.2	31.3	40.9	43.3
60°	2.4	9.6	19.2	30.1	39.7	43.3
62.5°	2.4	8.4	16.8	28.9	38.5	40.9
65°	2.4	7.2	15.6	26.5	37.3	39.7



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.4	7.2	14.4	25.3	34.9	38.5
70°	2.4	7.2	13.2	22.8	33.7	34.9
72.5°	3.6	7.2	12.0	21.6	31.3	32.5
75°	4.8	7.2	10.8	19.2	28.9	30.1
77.5°	4.8	7.2	9.6	16.8	25.3	26.5
80°	4.8	6.0	8.4	13.2	20.4	21.6
82.5°	4.8	6.0	6.0	10.8	15.6	16.8
85°	3.6	4.8	4.8	6.0	10.8	12.0
87.5°	3.6	4.8	2.4	3.6	4.8	4.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)