

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: P1308939

Luminaire Tested: P3SQAS09R259035DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1308939
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-75)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS09R259035DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 3500K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

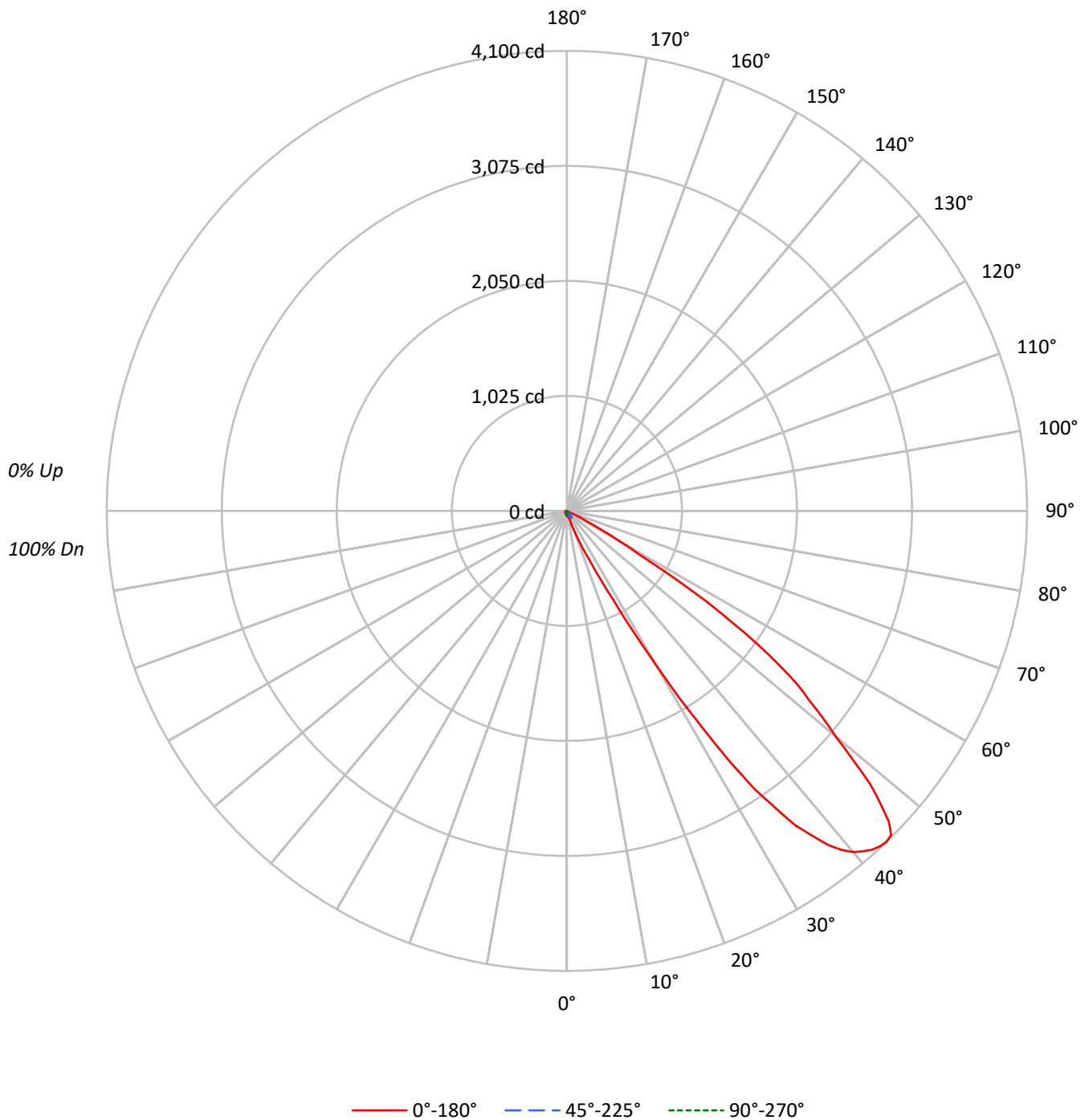
Lumens per Lamp: N/A
Luminaire Lumens: 855.0 lumens
Efficiency: N/A
Efficacy: 77.0 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11.1
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	50	30
RCR																			
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100
1	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87	87
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73	73
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61	61
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51	51
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42	42
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35	35
7	62	48	39	32	60	47	39	32	46	38	32	44	37	32	43	36	32	29	29
8	57	43	34	27	55	42	33	27	40	33	27	39	32	27	38	32	27	25	25
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21	21
10	48	34	25	20	47	33	25	20	32	25	20	31	24	19	30	24	19	17	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	7509	7509	7509	7509	7509
5°	8592	8195	7278	6500	6379
10°	8552	7765	6191	5386	5386
15°	9521	6704	4832	4564	4832
20°	33649	6616	3720	3867	4270
25°	96800	8437	3002	3573	4143
30°	308818	13026	2386	3440	4196
35°	676400	15348	2060	3322	4268
40°	892268	13871	1686	3372	4564
45°	995038	9718	1656	3653	4944
50°	837579	5037	1608	3831	5439
55°	626224	2042	1591	4294	6095
60°	193854	517	1550	4650	6751
65°	16545	0	1834	4890	7376
70°	1158	403	1913	5690	8359
75°	998	532	2529	5989	9515
80°	793	793	3769	6744	11207
85°	1581	1581	5928	7509	11856

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 995038 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.9	0.5
10°-20°	10.1	1.2
20°-30°	47.3	5.5
30°-40°	227.7	26.6
40°-50°	357.0	41.7
50°-60°	183.0	21.4
60°-70°	17.3	2.0
70°-80°	5.8	0.7
80°-90°	2.9	0.3
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°	61.3	7.2
0°-40°	289.0	33.8
0°-60°	829.0	97.0
0°-90°	855.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	855.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	44	44	44	44	44	
5°	50	47	42	38	37	5
15°	53	38	27	26	27	23
25°	509	44	16	19	22	316
35°	3217	73	10	16	20	1953
45°	4085	40	7	15	20	2989
55°	2086	7	5	14	20	1736
65°	41	0	4	12	18	127
75°	2	1	4	9	14	2
85°	1	1	3	4	6	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°	43.6	43.6	43.6	43.6	43.6	43.6	43.6	43.6	43.6	43.6	43.6
2.5°	47.4	47.4	47.4	47.4	47.4	47.4	46.6	46.6	47.4	46.6	46.6
5°	49.7	49.7	49.7	49.7	49.7	49.7	49.7	48.9	48.9	48.9	47.4
7.5°	50.4	49.7	49.7	49.7	49.7	49.7	49.7	49.7	48.9	48.9	46.6
10°	48.9	48.9	48.9	48.9	48.2	48.2	48.2	47.4	47.4	47.4	44.4
12.5°	48.9	48.9	48.9	48.9	48.2	48.2	47.4	47.4	46.6	45.9	40.6
15°	53.4	53.4	53.4	52.7	51.9	51.2	50.4	49.7	48.9	47.4	37.6
17.5°	78.2	76.0	75.2	72.2	68.5	64.7	61.7	58.7	55.7	53.4	36.1
20°	183.6	182.8	179.1	170.0	160.3	149.0	137.7	124.9	106.8	94.8	36.1
22.5°	318.3	313.7	307.0	300.2	282.9	262.6	241.5	217.4	194.1	169.3	38.4
25°	509.4	519.9	497.3	479.3	449.2	412.3	372.4	339.3	297.2	258.1	44.4
27.5°	885.6	892.3	847.9	789.2	719.3	641.8	566.5	510.1	439.4	374.7	55.7
30°	1552.9	1559.7	1485.2	1360.3	1215.8	1088.7	916.4	765.2	626.0	518.4	65.5
31°	1938.1	1885.5	1798.9	1677.8	1495.0	1303.1	1096.2	913.4	737.3	595.9	68.5
32°	2272.9	2268.4	2167.6	1984.0	1800.4	1563.4	1306.9	1068.4	852.4	674.1	70.7
33°	2667.9	2637.8	2495.6	2322.6	2079.6	1841.1	1510.0	1237.7	970.6	761.4	72.2
34°	2984.7	2903.4	2844.7	2646.9	2390.3	2086.3	1732.0	1416.7	1118.0	845.7	73.0
35°	3217.2	3199.9	3085.5	2901.2	2640.1	2329.4	1971.2	1602.6	1241.4	943.5	73.0
36°	3463.2	3409.8	3298.4	3131.4	2877.1	2555.8	2154.1	1763.6	1385.1	1031.5	72.2
37°	3617.4	3585.8	3475.2	3302.9	3053.9	2746.9	2358.7	1933.6	1499.5	1119.5	70.7
38°	3776.2	3712.2	3603.1	3438.4	3193.9	2905.7	2506.9	2064.5	1604.8	1197.0	68.5
39°	3886.0	3819.8	3708.5	3544.5	3305.2	3019.3	2624.3	2175.9	1696.6	1255.0	65.5
40°	3968.8	3904.9	3792.0	3623.5	3387.2	3108.8	2722.1	2274.4	1773.4	1305.4	61.7
41°	4020.0	3960.5	3848.4	3680.6	3443.6	3160.0	2786.1	2338.4	1825.3	1339.2	57.9
42°	4062.9	4001.9	3887.5	3716.0	3478.3	3203.6	2825.2	2379.0	1860.6	1356.5	54.9
43°	4086.9	4026.0	3914.6	3739.3	3499.3	3223.9	2846.3	2397.8	1872.7	1354.3	49.7
44°	4100.5	4037.3	3925.2	3749.9	3508.3	3229.2	2847.8	2394.1	1864.4	1336.2	45.1
45°	4085.4	4023.0	3914.6	3739.3	3492.5	3212.7	2832.7	2373.8	1832.8	1300.9	39.9
46°	3987.6	3939.5	3840.1	3679.1	3442.9	3170.5	2794.3	2334.6	1783.9	1257.2	33.9
47°	3815.3	3776.9	3680.6	3561.0	3347.3	3093.0	2723.6	2260.1	1715.4	1191.8	27.1
48°	3635.5	3579.1	3489.5	3366.9	3186.3	2953.8	2607.0	2151.1	1611.6	1106.0	24.1
49°	3369.9	3336.8	3257.8	3120.9	2971.1	2766.5	2442.2	2011.1	1484.4	1012.7	21.1
50°	3126.1	3103.6	2993.0	2892.1	2733.4	2542.3	2218.8	1826.8	1326.4	896.8	18.8
51°	2935.8	2908.7	2828.9	2703.3	2534.0	2312.1	2007.3	1587.5	1145.1	759.2	15.0
52°	2737.2	2722.1	2651.4	2522.0	2355.7	2134.5	1801.9	1384.4	969.1	641.8	12.0
53°	2574.6	2552.8	2466.3	2351.2	2171.4	1942.6	1579.2	1195.5	820.8	539.5	10.5
54°	2337.6	2328.6	2272.9	2152.6	1957.7	1708.7	1377.6	1006.7	684.7	457.4	9.0
55°	2085.6	2055.5	1999.1	1903.5	1724.5	1492.0	1144.4	834.4	553.8	385.2	6.8
56°	1778.6	1777.1	1676.3	1596.6	1437.8	1191.0	914.1	651.6	449.9	321.3	6.0
57°	1485.2	1437.8	1340.7	1261.7	1091.0	903.6	678.6	488.3	352.1	260.3	4.5
58°	1098.5	1073.6	1048.1	932.2	774.2	640.3	484.5	343.1	260.3	198.6	3.0
59°	745.6	744.9	714.8	626.7	535.7	398.8	302.5	233.2	179.1	146.0	2.3
60°	562.8	549.2	489.0	431.1	337.1	252.0	179.1	137.7	111.4	94.0	1.5
62.5°	197.1	204.6	179.8	149.0	113.6	93.3	71.5	57.9	47.4	38.4	0.0
65°	40.6	44.4	38.4	36.1	28.6	24.8	21.8	18.8	15.8	13.5	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°	5.3	4.5	4.5	4.5	3.8	3.8	3.8	3.8	3.0	3.0	0.8
70°	2.3	2.3	2.3	2.3	2.3	2.3	1.5	1.5	1.5	1.5	0.8
72.5°	2.3	2.3	2.3	1.5	1.5	1.5	1.5	1.5	1.5	0.8	0.8
75°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.8	0.8	0.8	0.8
77.5°	1.5	1.5	1.5	1.5	1.5	1.5	0.8	0.8	0.8	0.8	0.8
80°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
82.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.5
85°	0.8	0.8	0.8	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
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°	43.6	43.6	43.6	43.6	43.6	43.6
2.5°	45.9	44.4	42.1	41.4	40.6	40.6
5°	45.1	42.1	39.9	37.6	36.9	36.9
7.5°	42.9	39.1	36.1	34.6	33.9	33.1
10°	40.6	35.4	32.4	30.8	30.8	30.8
12.5°	36.1	31.6	28.6	27.8	28.6	28.6
15°	32.4	27.1	25.6	25.6	26.3	27.1
17.5°	27.8	24.1	22.6	23.3	24.1	24.8
20°	24.8	20.3	20.3	21.1	23.3	23.3
22.5°	21.8	18.1	18.1	20.3	21.8	22.6
25°	19.6	15.8	16.6	18.8	21.1	21.8
27.5°	16.6	13.5	15.0	18.1	20.3	21.1
30°	14.3	12.0	14.3	17.3	19.6	21.1
31°	13.5	11.3	14.3	16.6	19.6	21.1
32°	12.0	11.3	13.5	16.6	19.6	20.3
33°	11.3	10.5	13.5	16.6	19.6	20.3
34°	10.5	9.8	12.8	16.6	19.6	20.3
35°	9.0	9.8	12.8	15.8	18.8	20.3
36°	8.3	9.0	12.8	15.8	18.8	20.3
37°	7.5	9.0	12.0	15.8	18.8	20.3
38°	6.8	8.3	12.0	15.8	18.8	20.3
39°	6.0	8.3	11.3	15.8	18.8	20.3
40°	5.3	7.5	11.3	15.0	18.8	20.3
41°	5.3	7.5	11.3	15.0	18.8	20.3
42°	4.5	7.5	11.3	15.0	18.8	20.3
43°	3.8	6.8	11.3	15.0	18.8	20.3
44°	3.0	6.8	10.5	15.0	18.8	20.3
45°	3.0	6.8	10.5	15.0	18.8	20.3
46°	2.3	6.0	10.5	15.0	18.8	20.3
47°	1.5	6.0	10.5	14.3	18.8	20.3
48°	1.5	6.0	10.5	14.3	18.8	20.3
49°	1.5	6.0	9.8	14.3	18.8	20.3
50°	1.5	6.0	9.8	14.3	18.8	20.3
51°	0.8	5.3	9.8	14.3	18.8	20.3
52°	0.8	5.3	9.8	14.3	18.8	21.1
53°	0.8	5.3	9.8	14.3	18.8	20.3
54°	0.8	5.3	9.0	14.3	18.8	20.3
55°	0.8	5.3	9.0	14.3	18.8	20.3
56°	0.8	4.5	9.0	13.5	18.8	20.3
57°	1.5	4.5	9.0	13.5	18.8	19.6
58°	1.5	4.5	9.0	13.5	18.1	19.6
59°	1.5	4.5	9.0	13.5	18.1	19.6
60°	1.5	4.5	8.3	13.5	18.1	19.6
62.5°	1.5	4.5	8.3	12.8	17.3	18.8
65°	1.5	4.5	7.5	12.0	17.3	18.1



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.5	3.8	7.5	11.3	16.6	17.3
70°	2.3	3.8	6.8	11.3	15.8	16.6
72.5°	2.3	3.8	6.8	9.8	14.3	15.8
75°	2.3	3.8	6.0	9.0	13.5	14.3
77.5°	2.3	3.8	5.3	8.3	12.0	12.8
80°	3.0	3.8	4.5	6.8	10.5	11.3
82.5°	3.0	3.8	3.8	5.3	8.3	9.0
85°	2.3	3.0	3.0	3.8	5.3	6.0
87.5°	2.3	3.0	2.3	1.5	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)