

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: P1307305

Luminaire Tested: P3SQAS24R209027D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1307305
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: P3SQAS24R209027D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R20 optic, 2700K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

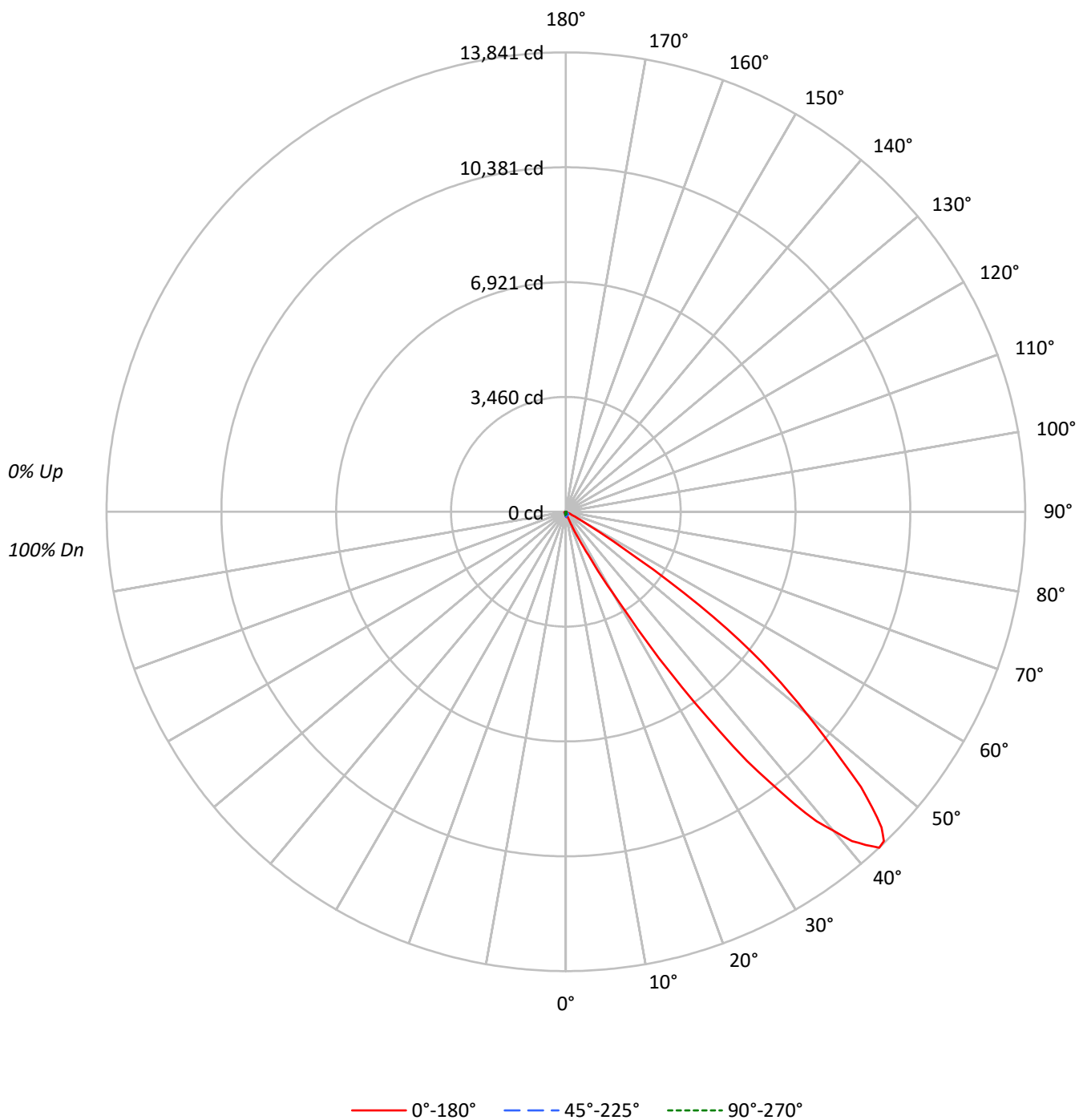
Lumens per Lamp: N/A
Luminaire Lumens: 1923.0 lumens
Efficiency: N/A
Efficacy: 66.8 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	23026	23026	23026	23026	23026
5°	26866	24999	21558	18740	18118
10°	26547	22752	17068	14532	14218
15°	23197	17402	12570	11607	12249
20°	34437	14570	9274	9934	10923
25°	148354	15107	7221	8931	10641
30°	561000	18335	6105	8631	10421
35°	1700651	22034	5698	8746	11017
40°	2820061	21942	4879	9353	11781
45°	3277825	14955	4408	9694	12763
50°	2544459	8225	4367	10181	14522
55°	1472690	5435	4354	11410	15734
60°	248999	1240	3720	11814	17429
65°	19153	0	4401	13244	19887
70°	2719	0	5438	14552	22760
75°	2396	1198	5989	16835	26484
80°	1785	1785	8926	17951	30448
85°	3557	3557	14227	17784	32209

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3277825 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.5	0.6
10°-20°	24.1	1.3
20°-30°	76.8	4.0
30°-40°	490.4	25.5
40°-50°	897.6	46.7
50°-60°	368.8	19.2
60°-70°	31.1	1.6
70°-80°	15.5	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°	112.3	5.8
0°-40°	602.7	31.3
0°-60°	1869.1	97.2
0°-90°	1923.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1923.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	134	134	134	134	134	
5°	155	145	125	108	105	15
15°	130	98	70	65	69	41
25°	781	80	38	47	56	513
35°	8089	105	27	42	52	5120
45°	13458	61	18	40	52	9663
55°	4905	18	14	38	52	4287
65°	47	0	11	32	49	153
75°	4	2	9	25	40	4
85°	2	2	7	9	16	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°	133.7	133.7	133.7	133.7	133.7	133.7	133.7	133.7	133.7	133.7	133.7
2.5°	146.4	146.4	146.4	144.6	144.6	146.4	144.6	144.6	144.6	144.6	142.8
5°	155.4	155.4	155.4	155.4	155.4	155.4	155.4	153.6	153.6	151.8	144.6
7.5°	159.0	159.0	159.0	159.0	157.2	157.2	157.2	157.2	155.4	153.6	141.0
10°	151.8	151.8	151.8	150.0	150.0	150.0	148.2	148.2	146.4	144.6	130.1
12.5°	137.3	137.3	137.3	137.3	135.5	135.5	133.7	133.7	131.9	130.1	113.9
15°	130.1	130.1	130.1	128.3	128.3	126.5	124.7	122.9	121.1	117.5	97.6
17.5°	141.0	141.0	139.2	139.2	135.5	131.9	130.1	124.7	121.1	115.7	86.7
20°	187.9	189.8	182.5	177.1	173.5	162.6	157.2	148.2	141.0	131.9	79.5
22.5°	379.5	372.3	359.6	339.7	316.3	296.4	260.2	231.3	211.4	184.3	77.7
25°	780.7	773.5	739.1	710.2	637.9	581.9	504.2	440.9	375.9	312.6	79.5
27.5°	1483.7	1434.9	1425.9	1293.9	1192.7	1048.2	898.2	771.7	656.0	527.7	84.9
30°	2821.0	2765.0	2568.0	2369.2	2096.3	1787.3	1492.7	1218.0	988.5	780.7	92.2
31°	3580.0	3634.2	3402.9	3003.5	2600.5	2204.7	1801.7	1453.0	1156.6	898.2	95.8
32°	4705.9	4469.1	4225.2	3814.9	3229.4	2723.4	2217.4	1715.0	1324.7	1024.7	99.4
33°	5770.3	5631.1	5258.9	4747.4	4044.4	3334.2	2678.2	2024.0	1530.7	1178.3	101.2
34°	6905.2	6751.6	6449.8	5716.1	4944.4	4013.7	3139.1	2380.0	1776.4	1328.3	103.0
35°	8088.9	8023.8	7441.9	6805.8	5857.0	4734.8	3693.9	2770.4	2016.8	1465.6	104.8
36°	9279.8	9070.2	8614.8	7685.9	6695.6	5401.6	4275.8	3133.6	2260.8	1628.3	104.8
37°	10176.2	10129.2	9525.6	8620.2	7456.4	6113.7	4778.2	3536.6	2506.5	1767.4	104.8
38°	11164.7	10978.5	10365.9	9444.3	8172.0	6766.0	5304.0	3887.2	2739.7	1893.9	103.0
39°	11997.8	11721.3	11103.2	10192.4	8797.3	7261.2	5721.5	4227.0	2945.7	1998.7	101.2
40°	12543.6	12352.0	11706.8	10682.2	9364.7	7729.3	6144.4	4507.1	3099.3	2078.2	97.6
41°	13145.3	12827.3	12189.4	11159.3	9776.8	8141.3	6410.0	4691.4	3218.6	2130.7	94.0
42°	13505.0	13244.7	12487.5	11479.1	10071.4	8376.2	6626.9	4832.4	3290.9	2157.8	86.7
43°	13841.1	13486.9	12749.6	11665.3	10266.5	8542.5	6726.3	4897.4	3307.1	2157.8	77.7
44°	13795.9	13459.8	12695.4	11690.6	10309.9	8591.3	6767.8	4899.2	3281.8	2130.7	68.7
45°	13458.0	13123.7	12435.1	11470.1	10154.5	8495.5	6684.7	4826.9	3211.3	2083.7	61.4
46°	12838.1	12505.6	11977.9	11101.4	9865.3	8278.6	6491.3	4669.7	3093.9	2007.8	54.2
47°	12164.1	11840.6	11300.2	10506.9	9372.0	7891.9	6211.2	4449.2	2929.4	1897.5	48.8
48°	11186.4	10984.0	10441.8	9764.1	8687.1	7286.5	5719.7	4089.6	2708.9	1754.8	41.6
49°	10322.5	10109.3	9634.0	8905.7	7794.3	6581.7	5132.4	3652.3	2421.6	1595.7	36.1
50°	9496.7	9310.5	8871.4	8049.1	6988.3	5730.5	4339.0	3101.1	2060.2	1398.7	30.7
51°	8688.9	8549.7	8101.5	7346.1	6269.1	5076.3	3758.9	2582.4	1702.4	1160.2	28.9
52°	7877.4	7861.2	7375.1	6610.6	5569.7	4423.9	3195.1	2179.4	1443.9	974.1	27.1
53°	7004.6	6899.8	6475.1	5788.4	4789.0	3744.5	2708.9	1837.9	1243.3	829.5	23.5
54°	6010.6	5893.2	5437.8	4817.9	3912.5	3066.8	2183.1	1485.5	1035.5	701.2	21.7
55°	4904.7	4704.1	4373.3	3737.2	3055.9	2340.3	1686.1	1176.5	827.7	583.7	18.1
56°	3721.0	3520.4	3334.2	2866.2	2242.7	1745.7	1256.0	901.8	647.0	460.8	16.3
57°	2587.9	2577.0	2271.6	1912.0	1499.9	1189.1	860.2	636.1	457.2	357.8	12.7
58°	1678.9	1622.8	1427.7	1219.8	981.3	742.7	553.0	431.9	310.8	244.0	10.8
59°	1176.5	1064.4	959.6	813.2	618.1	468.1	356.0	276.5	215.1	169.9	7.2
60°	722.9	699.4	628.9	495.2	401.2	330.7	265.7	204.2	157.2	121.1	3.6
62.5°	206.0	209.6	189.8	168.1	144.6	124.7	112.0	95.8	79.5	63.3	0.0
65°	47.0	45.2	48.8	45.2	41.6	41.6	36.1	32.5	28.9	27.1	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°	14.5	14.5	12.7	12.7	12.7	10.8	10.8	9.0	9.0	7.2	0.0
70°	5.4	5.4	5.4	5.4	5.4	3.6	3.6	3.6	1.8	1.8	0.0
72.5°	5.4	5.4	5.4	3.6	3.6	3.6	3.6	3.6	1.8	1.8	1.8
75°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	1.8	1.8	1.8	1.8
77.5°	3.6	3.6	3.6	3.6	3.6	1.8	3.6	1.8	1.8	1.8	1.8
80°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
82.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
85°	1.8	1.8	1.8	1.8	0.0	0.0	1.8	1.8	1.8	0.0	1.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
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°	133.7	133.7	133.7	133.7	133.7	133.7
2.5°	139.2	131.9	126.5	121.1	119.3	119.3
5°	135.5	124.7	113.9	108.4	104.8	104.8
7.5°	124.7	112.0	101.2	95.8	94.0	94.0
10°	112.0	97.6	86.7	83.1	83.1	81.3
12.5°	97.6	83.1	75.9	74.1	74.1	74.1
15°	81.3	70.5	65.1	65.1	66.9	68.7
17.5°	68.7	57.8	56.0	59.6	63.3	63.3
20°	57.8	50.6	50.6	54.2	57.8	59.6
22.5°	48.8	43.4	45.2	50.6	56.0	57.8
25°	43.4	38.0	41.6	47.0	52.4	56.0
27.5°	36.1	34.3	38.0	45.2	52.4	54.2
30°	30.7	30.7	36.1	43.4	50.6	52.4
31°	28.9	28.9	36.1	43.4	50.6	52.4
32°	27.1	28.9	34.3	43.4	50.6	52.4
33°	25.3	27.1	34.3	41.6	50.6	52.4
34°	23.5	27.1	34.3	41.6	50.6	52.4
35°	21.7	27.1	34.3	41.6	50.6	52.4
36°	19.9	25.3	32.5	41.6	50.6	52.4
37°	18.1	25.3	32.5	41.6	50.6	52.4
38°	16.3	23.5	32.5	41.6	50.6	52.4
39°	16.3	23.5	30.7	41.6	48.8	52.4
40°	14.5	21.7	30.7	41.6	48.8	52.4
41°	12.7	21.7	30.7	39.8	48.8	52.4
42°	10.8	19.9	28.9	39.8	48.8	52.4
43°	9.0	19.9	28.9	39.8	48.8	52.4
44°	9.0	18.1	28.9	39.8	48.8	52.4
45°	7.2	18.1	28.9	39.8	48.8	52.4
46°	5.4	18.1	28.9	39.8	48.8	52.4
47°	5.4	16.3	27.1	39.8	48.8	52.4
48°	3.6	16.3	27.1	39.8	48.8	52.4
49°	3.6	16.3	27.1	39.8	48.8	54.2
50°	3.6	16.3	27.1	38.0	48.8	54.2
51°	1.8	16.3	27.1	38.0	48.8	54.2
52°	1.8	16.3	25.3	38.0	50.6	54.2
53°	1.8	14.5	25.3	38.0	50.6	54.2
54°	1.8	14.5	25.3	38.0	50.6	52.4
55°	1.8	14.5	25.3	38.0	48.8	52.4
56°	1.8	12.7	25.3	38.0	48.8	52.4
57°	1.8	12.7	23.5	36.1	48.8	50.6
58°	1.8	12.7	23.5	36.1	48.8	50.6
59°	1.8	12.7	23.5	36.1	47.0	50.6
60°	3.6	10.8	21.7	34.3	47.0	50.6
62.5°	3.6	10.8	21.7	34.3	45.2	48.8
65°	3.6	10.8	19.9	32.5	45.2	48.8



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	3.6	9.0	18.1	30.7	43.4	47.0
70°	3.6	10.8	18.1	28.9	41.6	45.2
72.5°	5.4	9.0	16.3	27.1	39.8	43.4
75°	5.4	9.0	16.3	25.3	38.0	39.8
77.5°	7.2	9.0	14.5	21.7	34.3	36.1
80°	7.2	9.0	12.7	18.1	28.9	30.7
82.5°	7.2	9.0	9.0	14.5	21.7	23.5
85°	5.4	7.2	7.2	9.0	14.5	16.3
87.5°	5.4	7.2	5.4	3.6	7.2	7.2
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)