

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: P1308908

Luminaire Tested: P3SQAS09R159035DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1308908
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: P3SQAS09R159035DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R15 optic, 3500K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

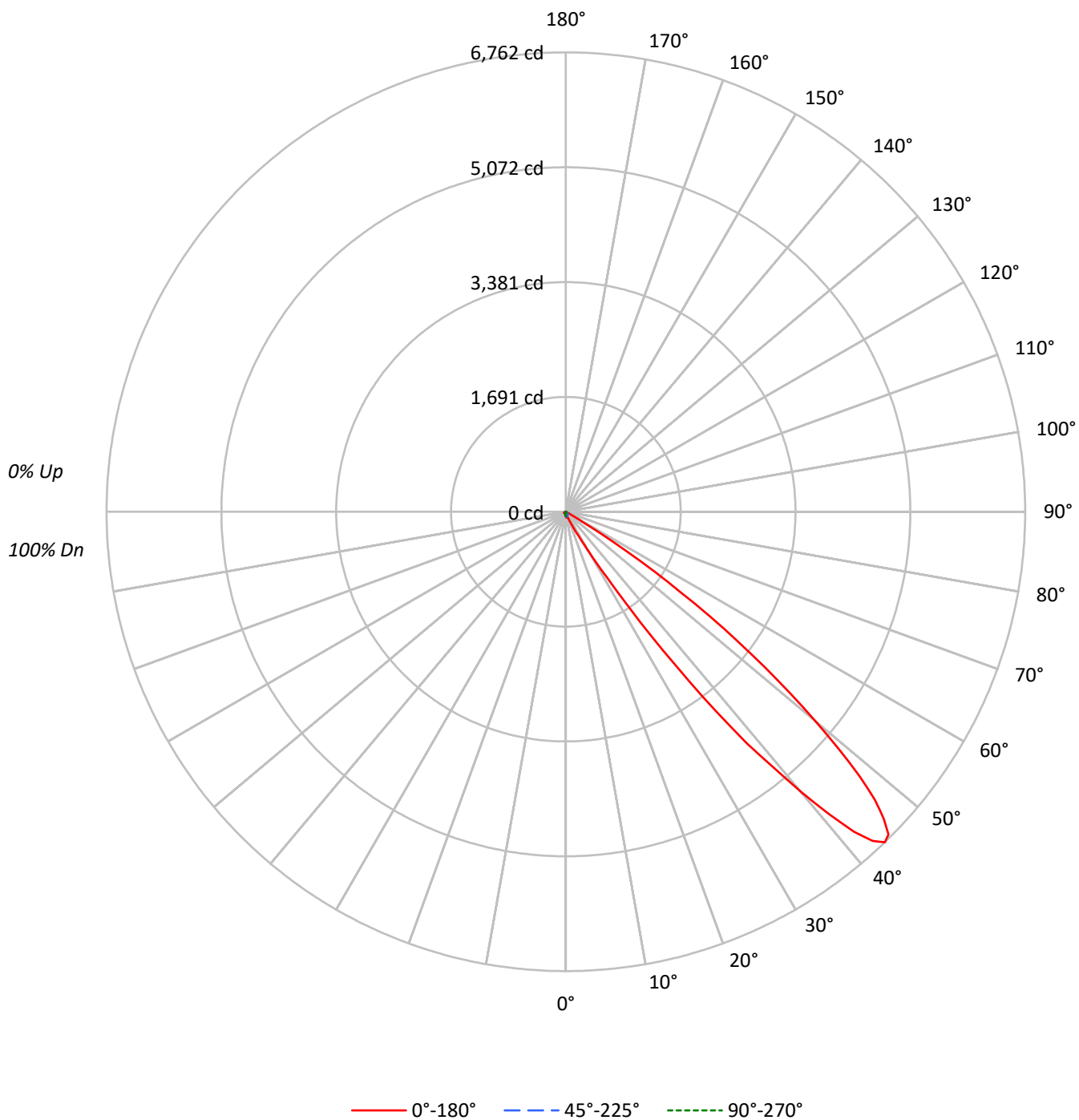
Lumens per Lamp: N/A
Luminaire Lumens: 755.0 lumens
Efficiency: N/A
Efficacy: 68.0 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	11539	11539	11539	11539	11539
5°	14315	12759	10407	9111	8972
10°	14095	10930	8027	7118	7240
15°	11679	7792	5777	5902	6312
20°	20289	6213	4417	5113	5792
25°	45207	7430	3573	4713	5435
30°	135189	9128	3142	4634	5688
35°	520398	10281	2859	4752	6013
40°	1207917	8970	2698	4901	6430
45°	1636063	6795	2387	5310	6966
50°	1282799	4046	2411	5653	7663
55°	615715	1802	2252	6095	8377
60°	56282	276	2067	6476	9334
65°	6153	0	1834	6765	10106
70°	1511	0	2266	7201	10977
75°	1530	532	2994	7985	12510
80°	1488	1488	3769	8232	13488
85°	1581	1581	5928	7509	14820

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1636063 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.7	0.8
10°-20°	11.9	1.6
20°-30°	28.5	3.8
30°-40°	156.2	20.7
40°-50°	378.2	50.1
50°-60°	150.9	20.0
60°-70°	13.0	1.7
70°-80°	7.4	1.0
80°-90°	3.3	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°	46.2	6.1
0°-40°	202.3	26.8
0°-60°	731.4	96.9
0°-90°	755.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	755.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	67	67	67	67	67	
5°	83	74	60	53	52	8
15°	66	44	32	33	35	23
25°	238	39	19	25	29	143
35°	2475	49	14	23	29	1749
45°	6717	28	10	22	29	4739
55°	2051	6	8	20	28	1910
65°	15	0	4	17	25	39
75°	2	1	4	12	19	2
85°	1	1	3	4	8	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°	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0
2.5°	75.3	75.3	76.0	75.3	75.3	75.3	75.3	74.5	74.5	74.5	72.3
5°	82.8	82.8	82.8	82.8	82.1	82.1	82.1	81.3	81.3	80.6	73.8
7.5°	85.8	85.8	85.1	85.1	84.3	84.3	83.6	82.8	82.1	81.3	70.8
10°	80.6	80.6	80.6	79.8	79.8	79.0	78.3	77.5	76.8	75.3	62.5
12.5°	71.5	71.5	72.3	71.5	70.8	70.0	68.5	67.8	67.0	65.5	51.9
15°	65.5	65.5	65.5	64.7	64.0	62.5	61.7	60.2	59.5	57.2	43.7
17.5°	83.6	83.6	82.8	81.3	78.3	76.0	72.3	69.3	65.5	61.0	37.6
20°	110.7	110.7	109.2	107.7	103.9	100.1	94.1	88.8	82.8	77.5	33.9
22.5°	160.3	162.6	158.1	152.8	147.5	138.5	130.2	122.0	111.4	102.4	34.6
25°	237.9	240.1	237.9	225.8	216.1	204.0	188.2	171.6	153.6	137.0	39.1
27.5°	385.4	386.9	383.2	353.8	338.0	306.4	278.5	251.4	221.3	191.2	42.9
30°	679.8	680.5	656.4	597.7	545.8	476.5	417.8	361.3	313.9	265.7	45.9
31°	895.1	874.0	822.8	752.1	669.2	575.9	495.3	422.3	351.6	299.6	46.7
32°	1136.7	1133.7	1048.7	926.0	815.3	698.6	577.4	484.1	402.8	332.0	47.4
33°	1456.7	1458.2	1324.2	1179.6	998.2	841.6	682.8	554.8	457.0	370.4	48.9
34°	1956.5	1839.1	1681.8	1486.0	1239.1	1003.5	797.2	636.9	505.9	407.3	48.9
35°	2475.2	2357.0	2183.9	1887.3	1548.5	1218.8	933.5	725.0	564.6	447.2	48.9
36°	3056.4	2956.3	2694.3	2315.6	1883.5	1422.1	1078.0	826.6	622.6	483.3	48.2
37°	3684.2	3537.4	3246.9	2833.6	2255.4	1708.1	1254.2	927.5	680.5	522.4	46.7
38°	4321.9	4189.4	3822.7	3322.1	2699.6	2010.0	1430.3	1024.6	734.0	551.8	44.4
39°	4805.2	4732.9	4369.3	3810.0	3054.1	2296.1	1611.8	1128.5	790.4	581.2	42.2
40°	5372.8	5256.1	4911.3	4219.5	3473.4	2587.4	1789.4	1220.3	837.1	604.5	39.9
41°	5890.7	5743.2	5308.0	4639.5	3809.2	2849.4	1958.0	1315.2	874.8	618.1	38.4
42°	6334.9	6163.2	5708.5	4999.4	4090.0	3058.7	2092.8	1382.9	910.1	629.3	36.1
43°	6622.4	6474.1	6027.0	5269.6	4330.1	3250.6	2218.5	1453.7	932.0	636.9	33.1
44°	6762.5	6612.6	6179.8	5439.0	4477.7	3365.8	2299.8	1502.6	956.1	646.7	30.9
45°	6717.3	6565.2	6146.7	5442.0	4523.6	3407.2	2334.5	1524.4	968.9	655.7	27.9
46°	6510.3	6403.4	5981.8	5300.5	4436.3	3362.8	2314.9	1507.9	964.3	655.7	24.8
47°	6219.7	6097.7	5696.5	5057.4	4224.7	3248.4	2235.8	1457.4	936.5	640.6	21.8
48°	5823.7	5719.8	5298.2	4671.2	3900.3	2999.2	2057.4	1375.4	892.8	611.3	18.8
49°	5326.9	5182.3	4790.1	4177.3	3477.2	2645.4	1823.3	1236.9	822.8	569.9	16.6
50°	4787.8	4609.4	4306.8	3682.7	3039.8	2268.2	1515.4	1045.6	724.2	515.7	15.1
51°	4260.1	4078.7	3790.4	3259.7	2573.1	1882.0	1222.6	834.9	596.2	441.1	12.8
52°	3712.8	3560.8	3237.8	2820.8	2202.7	1525.2	1018.5	706.1	495.3	370.4	10.5
53°	3167.8	3063.9	2756.8	2334.5	1769.8	1245.9	831.9	604.5	432.1	316.9	8.3
54°	2622.0	2508.3	2275.0	1898.6	1426.6	983.2	705.4	505.9	374.9	276.3	7.5
55°	2050.6	1991.9	1776.6	1447.6	1081.0	784.4	572.1	435.1	313.9	231.1	6.0
56°	1579.4	1513.1	1316.7	1050.2	803.2	614.3	463.0	355.3	265.7	193.5	4.5
57°	1034.4	966.6	836.4	733.2	584.9	447.9	353.8	280.0	216.1	160.3	3.8
58°	611.3	549.5	529.2	451.7	390.0	304.1	261.2	208.5	159.6	126.5	2.3
59°	280.8	285.3	253.7	237.9	216.1	193.5	158.8	139.3	109.2	91.1	1.5
60°	163.4	154.3	150.6	134.8	119.7	106.1	95.6	84.3	68.5	58.7	0.8
62.5°	55.7	53.4	55.0	49.7	46.7	45.2	41.4	35.4	29.4	24.1	0.0
65°	15.1	15.1	14.3	13.6	12.8	12.0	11.3	9.8	9.0	7.5	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	5.3	4.5	4.5	3.8	3.8	3.0	3.0	2.3	2.3	0.0
70°	3.0	3.0	3.0	2.3	2.3	2.3	1.5	1.5	1.5	0.8	0.0
72.5°	2.3	2.3	2.3	2.3	2.3	2.3	1.5	1.5	1.5	0.8	0.8
75°	2.3	2.3	2.3	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.8
77.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
80°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.8	1.5
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	0.8	0.8	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°	67.0	67.0	67.0	67.0	67.0	67.0
2.5°	69.3	66.2	62.5	60.2	59.5	58.7
5°	66.2	60.2	55.7	52.7	51.9	51.9
7.5°	59.5	52.7	48.2	46.7	45.9	45.9
10°	51.9	45.9	42.2	40.7	41.4	41.4
12.5°	43.7	38.4	36.9	36.9	37.6	38.4
15°	35.4	32.4	32.4	33.1	34.6	35.4
17.5°	29.4	27.9	28.6	30.1	31.6	33.1
20°	24.1	24.1	25.6	27.9	30.1	31.6
22.5°	20.3	21.1	23.3	25.6	28.6	30.1
25°	17.3	18.8	21.1	24.8	27.9	28.6
27.5°	15.1	17.3	20.3	24.1	27.1	28.6
30°	12.8	15.8	19.6	23.3	27.1	28.6
31°	12.0	15.1	18.8	23.3	27.1	28.6
32°	11.3	15.1	18.8	23.3	27.1	28.6
33°	10.5	14.3	18.8	22.6	27.1	28.6
34°	9.8	14.3	18.8	23.3	27.1	28.6
35°	9.0	13.6	18.1	22.6	26.3	28.6
36°	8.3	13.6	18.1	22.6	27.1	28.6
37°	7.5	13.6	18.1	22.6	26.3	28.6
38°	7.5	12.8	17.3	22.6	26.3	28.6
39°	6.8	12.0	17.3	22.6	26.3	28.6
40°	6.0	12.0	16.6	21.8	26.3	28.6
41°	5.3	11.3	16.6	21.8	26.3	28.6
42°	4.5	11.3	16.6	21.8	26.3	28.6
43°	3.8	10.5	15.8	21.8	26.3	28.6
44°	3.8	10.5	15.8	21.8	26.3	28.6
45°	3.0	9.8	15.1	21.8	26.3	28.6
46°	3.0	9.8	15.1	21.1	26.3	28.6
47°	2.3	9.8	15.1	21.1	26.3	28.6
48°	2.3	9.0	15.1	21.1	26.3	28.6
49°	1.5	9.0	15.1	21.1	26.3	28.6
50°	1.5	9.0	14.3	21.1	26.3	28.6
51°	1.5	9.0	14.3	21.1	26.3	28.6
52°	1.5	8.3	14.3	21.1	26.3	28.6
53°	1.5	8.3	14.3	21.1	26.3	28.6
54°	1.5	8.3	13.6	21.1	26.3	28.6
55°	1.5	7.5	13.6	20.3	26.3	27.9
56°	1.5	7.5	13.6	20.3	26.3	27.9
57°	1.5	7.5	12.8	20.3	26.3	27.9
58°	1.5	6.8	12.8	19.6	25.6	27.9
59°	1.5	6.8	12.0	19.6	25.6	27.1
60°	1.5	6.0	12.0	18.8	24.8	27.1
62.5°	1.5	5.3	10.5	18.1	24.1	25.6
65°	1.5	4.5	9.8	16.6	23.3	24.8



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.5	4.5	9.0	15.8	21.8	24.1
70°	1.5	4.5	8.3	14.3	21.1	21.8
72.5°	2.3	4.5	7.5	13.6	19.6	20.3
75°	3.0	4.5	6.8	12.0	18.1	18.8
77.5°	3.0	4.5	6.0	10.5	15.8	16.6
80°	3.0	3.8	5.3	8.3	12.8	13.6
82.5°	3.0	3.8	3.8	6.8	9.8	10.5
85°	2.3	3.0	3.0	3.8	6.8	7.5
87.5°	2.3	3.0	1.5	2.3	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)