

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: P1311271

Luminaire Tested: P3SQAS13R159050DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1311271
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: P3SQAS13R159050DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R15 optic, 5000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

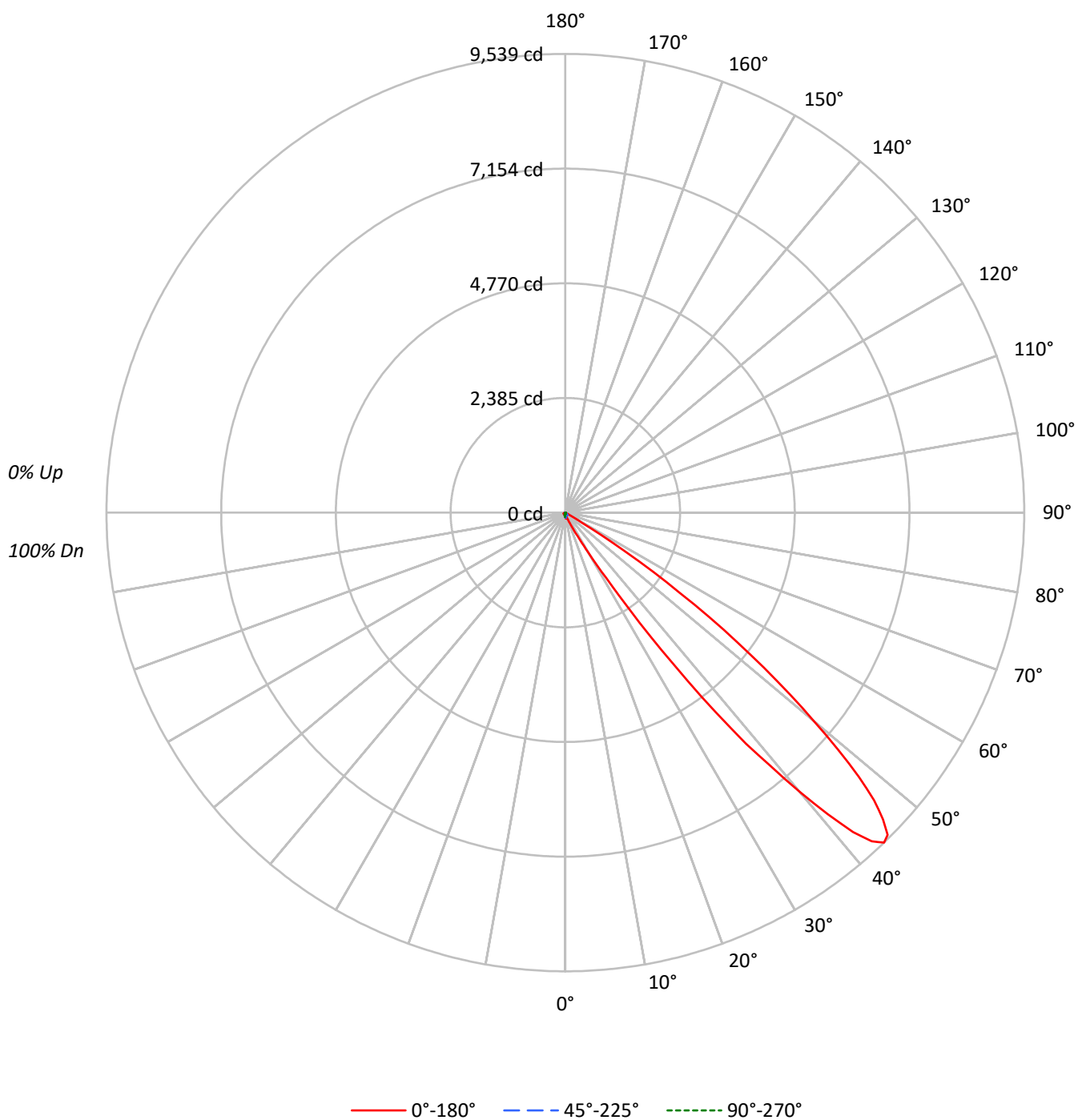
Lumens per Lamp: N/A
Luminaire Lumens: 1065.0 lumens
Efficiency: N/A
Efficacy: 72.9 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.6
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	0
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°	16275	16275	16275	16275	16275
5°	20192	17997	14695	12845	12672
10°	19866	15407	11332	10021	10213
15°	16475	10983	8148	8327	8897
20°	28609	8761	6231	7203	8174
25°	63773	10489	5036	6651	7677
30°	190692	12886	4435	6543	8034
35°	734070	14507	4016	6707	8494
40°	1703871	12657	3822	6924	9083
45°	2307825	9572	3361	7502	9840
50°	1809525	5680	3403	7958	10824
55°	868535	2552	3183	8617	11800
60°	79360	379	2928	9128	13158
65°	8639	0	2608	9536	14263
70°	2115	0	3223	10172	15509
75°	2129	732	4259	11312	17634
80°	2083	2083	5256	11604	18943
85°	2174	2174	8299	10473	20946

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2307825 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	8.1	0.8
10°-20°	16.8	1.6
20°-30°	40.2	3.8
30°-40°	220.3	20.7
40°-50°	533.4	50.1
50°-60°	212.8	20.0
60°-70°	18.4	1.7
70°-80°	10.4	1.0
80°-90°	4.6	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°	65.1	6.1
0°-40°	285.4	26.8
0°-60°	1031.7	96.9
0°-90°	1065.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1065.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	94	94	94	94	94	
5°	117	104	85	74	73	11
15°	92	62	46	47	50	32
25°	336	55	26	35	40	202
35°	3492	69	19	32	40	2467
45°	9475	39	14	31	40	6684
55°	2893	8	11	29	39	2695
65°	21	0	6	23	35	54
75°	3	1	6	17	26	3
85°	1	1	4	5	11	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°	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5
2.5°	106.2	106.2	107.3	106.2	106.2	106.2	106.2	105.1	105.1	105.1	101.9
5°	116.8	116.8	116.8	116.8	115.7	115.7	115.7	114.7	114.7	113.6	104.1
7.5°	121.1	121.1	120.0	120.0	118.9	118.9	117.9	116.8	115.7	114.7	99.8
10°	113.6	113.6	113.6	112.6	112.6	111.5	110.4	109.4	108.3	106.2	88.1
12.5°	100.9	100.9	101.9	100.9	99.8	98.8	96.6	95.6	94.5	92.4	73.3
15°	92.4	92.4	92.4	91.3	90.3	88.1	87.1	85.0	83.9	80.7	61.6
17.5°	117.9	117.9	116.8	114.7	110.4	107.3	101.9	97.7	92.4	86.0	53.1
20°	156.1	156.1	154.0	151.9	146.5	141.2	132.7	125.3	116.8	109.4	47.8
22.5°	226.2	229.4	223.0	215.6	208.1	195.4	183.7	172.0	157.2	144.4	48.8
25°	335.6	338.7	335.6	318.6	304.8	287.8	265.5	242.1	216.6	193.3	55.2
27.5°	543.7	545.8	540.5	499.1	476.8	432.2	392.9	354.7	312.2	269.7	60.5
30°	958.9	960.0	926.0	843.2	769.9	672.2	589.4	509.7	442.8	374.9	64.8
31°	1262.6	1232.9	1160.7	1060.8	944.0	812.4	698.7	595.7	495.9	422.6	65.8
32°	1603.5	1599.2	1479.2	1306.1	1150.0	985.4	814.5	682.8	568.1	468.3	66.9
33°	2054.8	2056.9	1867.9	1664.0	1408.1	1187.2	963.1	782.6	644.6	522.5	69.0
34°	2759.9	2594.2	2372.3	2096.2	1747.9	1415.5	1124.6	898.4	713.6	574.5	69.0
35°	3491.5	3324.8	3080.6	2662.2	2184.3	1719.2	1316.8	1022.6	796.4	630.8	69.0
36°	4311.3	4170.1	3800.6	3266.4	2656.9	2005.9	1520.6	1166.0	878.2	681.7	68.0
37°	5197.0	4989.9	4580.0	3997.0	3181.5	2409.5	1769.1	1308.3	960.0	737.0	65.8
38°	6096.4	5909.5	5392.4	4686.2	3808.0	2835.3	2017.6	1445.3	1035.4	778.4	62.7
39°	6778.1	6676.2	6163.3	5374.3	4308.1	3238.8	2273.5	1591.8	1115.0	819.8	59.5
40°	7578.8	7414.2	6927.9	5952.0	4899.6	3649.8	2524.1	1721.3	1180.8	852.7	56.3
41°	8309.4	8101.3	7487.5	6544.5	5373.2	4019.3	2762.0	1855.1	1233.9	871.8	54.2
42°	8935.9	8693.8	8052.4	7052.1	5769.3	4314.5	2952.1	1950.7	1283.8	887.8	51.0
43°	9341.6	9132.4	8501.6	7433.3	6108.1	4585.3	3129.4	2050.5	1314.6	898.4	46.7
44°	9539.1	9327.8	8717.2	7672.3	6316.2	4747.8	3244.1	2119.6	1348.6	912.2	43.5
45°	9475.4	9260.9	8670.5	7676.5	6381.0	4806.2	3293.0	2150.4	1366.7	924.9	39.3
46°	9183.4	9032.6	8437.9	7476.9	6257.8	4743.5	3265.4	2127.0	1360.3	924.9	35.0
47°	8773.5	8601.4	8035.4	7133.9	5959.4	4582.1	3153.9	2055.8	1321.0	903.7	30.8
48°	8214.9	8068.4	7473.7	6589.1	5501.7	4230.6	2902.2	1940.1	1259.4	862.3	26.5
49°	7514.0	7310.2	6756.9	5892.5	4904.9	3731.5	2571.9	1744.7	1160.7	803.9	23.4
50°	6753.7	6502.0	6075.2	5194.8	4288.0	3199.5	2137.6	1475.0	1021.6	727.4	21.2
51°	6009.3	5753.4	5346.7	4598.0	3629.6	2654.8	1724.5	1177.7	841.0	622.3	18.1
52°	5237.3	5022.8	4567.3	3979.0	3107.1	2151.4	1436.8	996.1	698.7	522.5	14.9
53°	4468.5	4322.0	3888.7	3293.0	2496.5	1757.5	1173.4	852.7	609.5	447.1	11.7
54°	3698.6	3538.3	3209.1	2678.1	2012.3	1386.8	995.0	713.6	528.8	389.7	10.6
55°	2892.6	2809.8	2506.1	2042.0	1524.9	1106.5	807.0	613.8	442.8	326.0	8.5
56°	2227.9	2134.4	1857.3	1481.4	1133.1	866.5	653.1	501.2	374.9	272.9	6.4
57°	1459.1	1363.5	1179.8	1034.3	825.1	631.8	499.1	395.0	304.8	226.2	5.3
58°	862.3	775.2	746.5	637.1	550.1	429.0	368.5	294.1	225.1	178.4	3.2
59°	396.1	402.5	357.9	335.6	304.8	272.9	224.1	196.5	154.0	128.5	2.1
60°	230.4	217.7	212.4	190.1	168.8	149.7	134.9	118.9	96.6	82.8	1.1
62.5°	78.6	75.4	77.5	70.1	65.8	63.7	58.4	49.9	41.4	34.0	0.0
65°	21.2	21.2	20.2	19.1	18.1	17.0	15.9	13.8	12.7	10.6	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°	7.4	7.4	6.4	6.4	5.3	5.3	4.2	4.2	3.2	3.2	0.0
70°	4.2	4.2	4.2	3.2	3.2	3.2	2.1	2.1	2.1	1.1	0.0
72.5°	3.2	3.2	3.2	3.2	3.2	3.2	2.1	2.1	2.1	1.1	1.1
75°	3.2	3.2	3.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.1
77.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
80°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.1	2.1
82.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.1
85°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
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°	94.5	94.5	94.5	94.5	94.5	94.5
2.5°	97.7	93.4	88.1	85.0	83.9	82.8
5°	93.4	85.0	78.6	74.3	73.3	73.3
7.5°	83.9	74.3	68.0	65.8	64.8	64.8
10°	73.3	64.8	59.5	57.3	58.4	58.4
12.5°	61.6	54.2	52.0	52.0	53.1	54.2
15°	49.9	45.7	45.7	46.7	48.8	49.9
17.5°	41.4	39.3	40.4	42.5	44.6	46.7
20°	34.0	34.0	36.1	39.3	42.5	44.6
22.5°	28.7	29.7	32.9	36.1	40.4	42.5
25°	24.4	26.5	29.7	35.0	39.3	40.4
27.5°	21.2	24.4	28.7	34.0	38.2	40.4
30°	18.1	22.3	27.6	32.9	38.2	40.4
31°	17.0	21.2	26.5	32.9	38.2	40.4
32°	15.9	21.2	26.5	32.9	38.2	40.4
33°	14.9	20.2	26.5	31.9	38.2	40.4
34°	13.8	20.2	26.5	32.9	38.2	40.4
35°	12.7	19.1	25.5	31.9	37.2	40.4
36°	11.7	19.1	25.5	31.9	38.2	40.4
37°	10.6	19.1	25.5	31.9	37.2	40.4
38°	10.6	18.1	24.4	31.9	37.2	40.4
39°	9.6	17.0	24.4	31.9	37.2	40.4
40°	8.5	17.0	23.4	30.8	37.2	40.4
41°	7.4	15.9	23.4	30.8	37.2	40.4
42°	6.4	15.9	23.4	30.8	37.2	40.4
43°	5.3	14.9	22.3	30.8	37.2	40.4
44°	5.3	14.9	22.3	30.8	37.2	40.4
45°	4.2	13.8	21.2	30.8	37.2	40.4
46°	4.2	13.8	21.2	29.7	37.2	40.4
47°	3.2	13.8	21.2	29.7	37.2	40.4
48°	3.2	12.7	21.2	29.7	37.2	40.4
49°	2.1	12.7	21.2	29.7	37.2	40.4
50°	2.1	12.7	20.2	29.7	37.2	40.4
51°	2.1	12.7	20.2	29.7	37.2	40.4
52°	2.1	11.7	20.2	29.7	37.2	40.4
53°	2.1	11.7	20.2	29.7	37.2	40.4
54°	2.1	11.7	19.1	29.7	37.2	40.4
55°	2.1	10.6	19.1	28.7	37.2	39.3
56°	2.1	10.6	19.1	28.7	37.2	39.3
57°	2.1	10.6	18.1	28.7	37.2	39.3
58°	2.1	9.6	18.1	27.6	36.1	39.3
59°	2.1	9.6	17.0	27.6	36.1	38.2
60°	2.1	8.5	17.0	26.5	35.0	38.2
62.5°	2.1	7.4	14.9	25.5	34.0	36.1
65°	2.1	6.4	13.8	23.4	32.9	35.0



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.1	6.4	12.7	22.3	30.8	34.0
70°	2.1	6.4	11.7	20.2	29.7	30.8
72.5°	3.2	6.4	10.6	19.1	27.6	28.7
75°	4.2	6.4	9.6	17.0	25.5	26.5
77.5°	4.2	6.4	8.5	14.9	22.3	23.4
80°	4.2	5.3	7.4	11.7	18.1	19.1
82.5°	4.2	5.3	5.3	9.6	13.8	14.9
85°	3.2	4.2	4.2	5.3	9.6	10.6
87.5°	3.2	4.2	2.1	3.2	4.2	4.2
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)