

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: P1312692

Luminaire Tested: P3SQAS20R159727D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1312692
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: P3SQAS20R159727D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R15 optic, 2700K CCT AND, 97CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

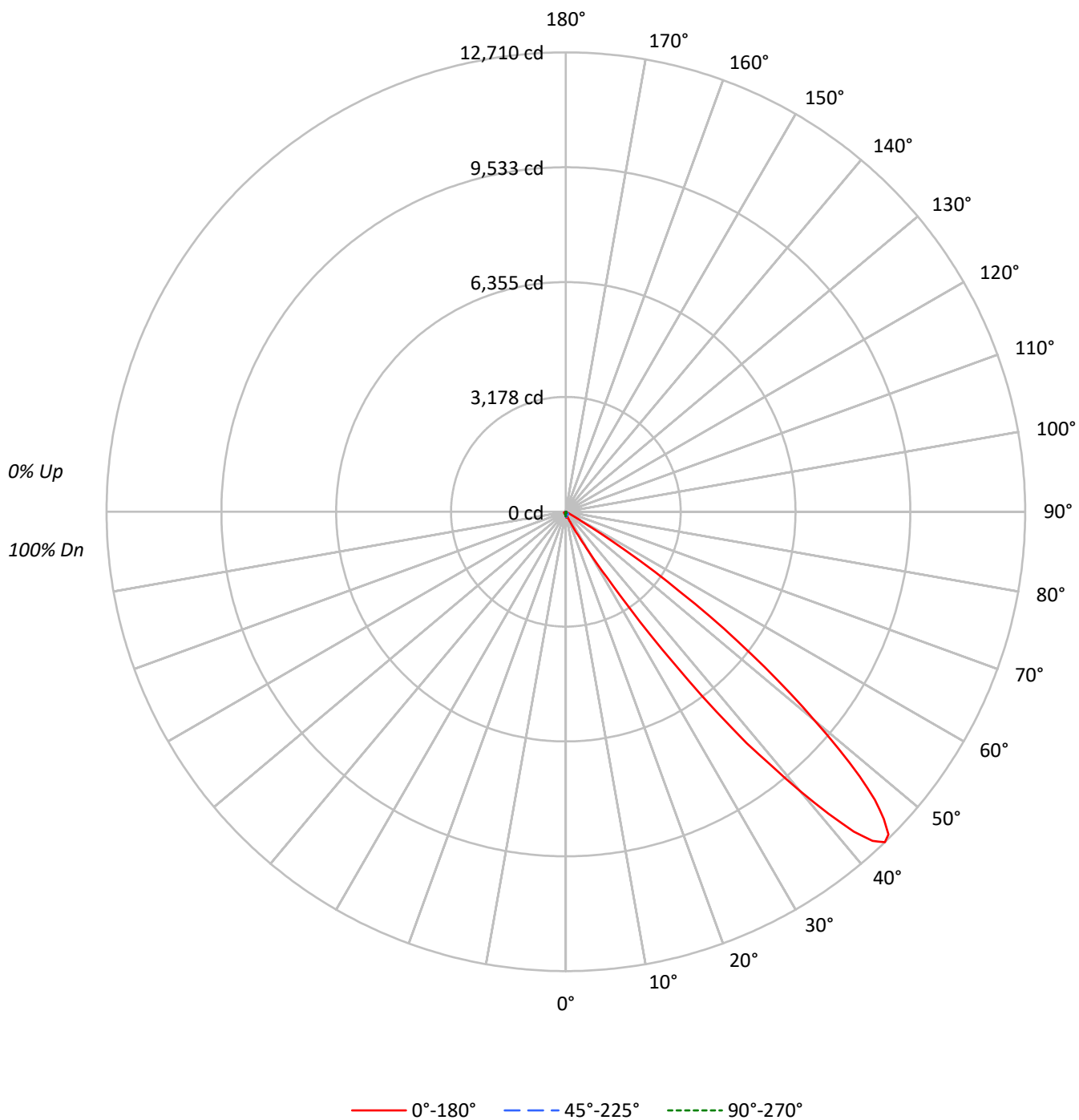
Lumens per Lamp: N/A
Luminaire Lumens: 1419.0 lumens
Efficiency: N/A
Efficacy: 49.3 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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			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°	21683	21683	21683	21683	21683
5°	26900	23979	19570	17115	16873
10°	26477	20531	15092	13361	13606
15°	21948	14638	10841	11108	11857
20°	38121	11675	8302	9604	10887
25°	84961	13986	6727	8874	10223
30°	254071	17162	5906	8730	10699
35°	978081	19343	5361	8914	11311
40°	2270239	16862	5081	9218	12095
45°	3074916	12763	4481	9986	13104
50°	2411003	7582	4555	10610	14415
55°	1157236	3393	4234	11470	15734
60°	105745	482	3892	12193	17532
65°	11533	0	3464	12674	19031
70°	2870	0	4280	13545	20645
75°	2795	932	5656	15038	23556
80°	2777	2777	7042	15472	25291
85°	2766	2766	11263	14030	27862

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3074916 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.8	0.8
10°-20°	22.4	1.6
20°-30°	53.6	3.8
30°-40°	293.5	20.7
40°-50°	710.7	50.1
50°-60°	283.6	20.0
60°-70°	24.5	1.7
70°-80°	13.8	1.0
80°-90°	6.1	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°	86.7	6.1
0°-40°	380.3	26.8
0°-60°	1374.6	96.9
0°-90°	1419.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1419.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	126	126	126	126	126	
5°	156	139	113	99	98	15
15°	123	82	61	62	66	43
25°	447	74	35	47	54	270
35°	4652	92	26	42	54	3287
45°	12625	52	18	41	54	8906
55°	3854	11	14	38	52	3590
65°	28	0	8	31	47	73
75°	4	1	8	23	35	4
85°	1	1	6	7	14	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°	125.9	125.9	125.9	125.9	125.9	125.9	125.9	125.9	125.9	125.9	125.9
2.5°	141.5	141.5	142.9	141.5	141.5	141.5	141.5	140.1	140.1	140.1	135.8
5°	155.6	155.6	155.6	155.6	154.2	154.2	154.2	152.8	152.8	151.4	138.7
7.5°	161.3	161.3	159.9	159.9	158.5	158.5	157.1	155.6	154.2	152.8	133.0
10°	151.4	151.4	151.4	150.0	150.0	148.6	147.1	145.7	144.3	141.5	117.4
12.5°	134.4	134.4	135.8	134.4	133.0	131.6	128.8	127.3	125.9	123.1	97.6
15°	123.1	123.1	123.1	121.7	120.3	117.4	116.0	113.2	111.8	107.5	82.1
17.5°	157.1	157.1	155.6	152.8	147.1	142.9	135.8	130.2	123.1	114.6	70.7
20°	208.0	208.0	205.2	202.3	195.3	188.2	176.9	167.0	155.6	145.7	63.7
22.5°	301.4	305.6	297.1	287.2	277.3	260.3	244.8	229.2	209.4	192.4	65.1
25°	447.1	451.3	447.1	424.5	406.1	383.4	353.7	322.6	288.6	257.5	73.6
27.5°	724.4	727.2	720.2	665.0	635.3	575.9	523.5	472.6	416.0	359.4	80.6
30°	1277.6	1279.0	1233.8	1123.4	1025.8	895.6	785.3	679.1	590.0	499.5	86.3
31°	1682.3	1642.7	1546.5	1413.5	1257.8	1082.4	931.0	793.7	660.7	563.1	87.7
32°	2136.5	2130.8	1970.9	1740.3	1532.3	1313.0	1085.2	909.8	757.0	624.0	89.1
33°	2737.8	2740.6	2488.8	2217.1	1876.1	1581.8	1283.3	1042.8	858.8	696.1	92.0
34°	3677.3	3456.5	3160.8	2793.0	2328.9	1886.0	1498.4	1197.0	950.8	765.4	92.0
35°	4652.1	4430.0	4104.6	3547.1	2910.4	2290.7	1754.4	1362.5	1061.2	840.4	92.0
36°	5744.4	5556.2	5063.8	4352.2	3540.0	2672.7	2026.1	1553.5	1170.1	908.4	90.6
37°	6924.4	6648.5	6102.4	5325.6	4239.0	3210.4	2357.2	1743.1	1279.0	981.9	87.7
38°	8122.8	7873.8	7184.7	6243.9	5073.7	3777.7	2688.3	1925.6	1379.5	1037.1	83.5
39°	9031.2	8895.3	8211.9	7160.7	5740.2	4315.4	3029.3	2120.9	1485.6	1092.3	79.2
40°	10098.0	9878.7	9230.7	7930.4	6528.2	4862.9	3363.2	2293.5	1573.3	1136.1	75.0
41°	11071.4	10794.1	9976.3	8719.9	7159.3	5355.3	3680.1	2471.8	1644.1	1161.6	72.2
42°	11906.2	11583.6	10729.0	9396.2	7687.0	5748.6	3933.4	2599.1	1710.6	1182.8	67.9
43°	12446.7	12167.9	11327.5	9904.1	8138.4	6109.4	4169.6	2732.1	1751.6	1197.0	62.3
44°	12709.8	12428.3	11614.7	10222.5	8415.7	6325.9	4322.4	2824.1	1796.9	1215.4	58.0
45°	12624.9	12339.1	11552.5	10228.1	8502.0	6403.7	4387.5	2865.1	1820.9	1232.4	52.4
46°	12235.9	12034.9	11242.6	9962.1	8337.9	6320.3	4350.7	2834.0	1812.5	1232.4	46.7
47°	11689.7	11460.5	10706.4	9505.1	7940.3	6105.2	4202.2	2739.2	1760.1	1204.1	41.0
48°	10945.5	10750.2	9957.9	8779.3	7330.5	5636.9	3866.9	2585.0	1678.0	1148.9	35.4
49°	10011.7	9740.0	9002.9	7851.1	6535.3	4971.9	3426.8	2324.6	1546.5	1071.1	31.1
50°	8998.6	8663.3	8094.5	6921.6	5713.3	4263.0	2848.1	1965.3	1361.1	969.2	28.3
51°	8006.8	7665.8	7123.9	6126.4	4836.0	3537.2	2297.8	1569.1	1120.6	829.1	24.1
52°	6978.2	6692.4	6085.4	5301.5	4139.9	2866.5	1914.3	1327.2	931.0	696.1	19.8
53°	5953.8	5758.5	5181.3	4387.5	3326.4	2341.6	1563.4	1136.1	812.1	595.7	15.6
54°	4928.0	4714.4	4275.8	3568.3	2681.2	1847.8	1325.7	950.8	704.6	519.3	14.1
55°	3854.1	3743.8	3339.1	2720.8	2031.8	1474.3	1075.3	817.8	590.0	434.4	11.3
56°	2968.4	2843.9	2474.6	1973.8	1509.7	1154.5	870.1	667.8	499.5	363.6	8.5
57°	1944.0	1816.7	1571.9	1378.1	1099.4	841.9	665.0	526.3	406.1	301.4	7.1
58°	1148.9	1032.9	994.7	848.9	732.9	571.6	491.0	391.9	300.0	237.7	4.2
59°	527.7	536.2	476.8	447.1	406.1	363.6	298.5	261.8	205.2	171.2	2.8
60°	307.0	290.0	283.0	253.3	225.0	199.5	179.7	158.5	128.8	110.4	1.4
62.5°	104.7	100.5	103.3	93.4	87.7	84.9	77.8	66.5	55.2	45.3	0.0
65°	28.3	28.3	26.9	25.5	24.1	22.6	21.2	18.4	17.0	14.1	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°	9.9	9.9	8.5	8.5	7.1	7.1	5.7	5.7	4.2	4.2	0.0
70°	5.7	5.7	5.7	4.2	4.2	4.2	2.8	2.8	2.8	1.4	0.0
72.5°	4.2	4.2	4.2	4.2	4.2	4.2	2.8	2.8	2.8	1.4	1.4
75°	4.2	4.2	4.2	2.8	2.8	2.8	2.8	2.8	2.8	2.8	1.4
77.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
80°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	1.4	2.8
82.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.8
85°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
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°	125.9	125.9	125.9	125.9	125.9	125.9
2.5°	130.2	124.5	117.4	113.2	111.8	110.4
5°	124.5	113.2	104.7	99.0	97.6	97.6
7.5°	111.8	99.0	90.6	87.7	86.3	86.3
10°	97.6	86.3	79.2	76.4	77.8	77.8
12.5°	82.1	72.2	69.3	69.3	70.7	72.2
15°	66.5	60.8	60.8	62.3	65.1	66.5
17.5°	55.2	52.4	53.8	56.6	59.4	62.3
20°	45.3	45.3	48.1	52.4	56.6	59.4
22.5°	38.2	39.6	43.9	48.1	53.8	56.6
25°	32.5	35.4	39.6	46.7	52.4	53.8
27.5°	28.3	32.5	38.2	45.3	50.9	53.8
30°	24.1	29.7	36.8	43.9	50.9	53.8
31°	22.6	28.3	35.4	43.9	50.9	53.8
32°	21.2	28.3	35.4	43.9	50.9	53.8
33°	19.8	26.9	35.4	42.4	50.9	53.8
34°	18.4	26.9	35.4	43.9	50.9	53.8
35°	17.0	25.5	34.0	42.4	49.5	53.8
36°	15.6	25.5	34.0	42.4	50.9	53.8
37°	14.1	25.5	34.0	42.4	49.5	53.8
38°	14.1	24.1	32.5	42.4	49.5	53.8
39°	12.7	22.6	32.5	42.4	49.5	53.8
40°	11.3	22.6	31.1	41.0	49.5	53.8
41°	9.9	21.2	31.1	41.0	49.5	53.8
42°	8.5	21.2	31.1	41.0	49.5	53.8
43°	7.1	19.8	29.7	41.0	49.5	53.8
44°	7.1	19.8	29.7	41.0	49.5	53.8
45°	5.7	18.4	28.3	41.0	49.5	53.8
46°	5.7	18.4	28.3	39.6	49.5	53.8
47°	4.2	18.4	28.3	39.6	49.5	53.8
48°	4.2	17.0	28.3	39.6	49.5	53.8
49°	2.8	17.0	28.3	39.6	49.5	53.8
50°	2.8	17.0	26.9	39.6	49.5	53.8
51°	2.8	17.0	26.9	39.6	49.5	53.8
52°	2.8	15.6	26.9	39.6	49.5	53.8
53°	2.8	15.6	26.9	39.6	49.5	53.8
54°	2.8	15.6	25.5	39.6	49.5	53.8
55°	2.8	14.1	25.5	38.2	49.5	52.4
56°	2.8	14.1	25.5	38.2	49.5	52.4
57°	2.8	14.1	24.1	38.2	49.5	52.4
58°	2.8	12.7	24.1	36.8	48.1	52.4
59°	2.8	12.7	22.6	36.8	48.1	50.9
60°	2.8	11.3	22.6	35.4	46.7	50.9
62.5°	2.8	9.9	19.8	34.0	45.3	48.1
65°	2.8	8.5	18.4	31.1	43.9	46.7



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.8	8.5	17.0	29.7	41.0	45.3
70°	2.8	8.5	15.6	26.9	39.6	41.0
72.5°	4.2	8.5	14.1	25.5	36.8	38.2
75°	5.7	8.5	12.7	22.6	34.0	35.4
77.5°	5.7	8.5	11.3	19.8	29.7	31.1
80°	5.7	7.1	9.9	15.6	24.1	25.5
82.5°	5.7	7.1	7.1	12.7	18.4	19.8
85°	4.2	5.7	5.7	7.1	12.7	14.1
87.5°	4.2	5.7	2.8	4.2	5.7	5.7
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)