

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: P1317360

Luminaire Tested: P3SQAS20R159830D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1317360
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: P3SQAS20R159830D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R15 optic, 3000K CCT AND, 98CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

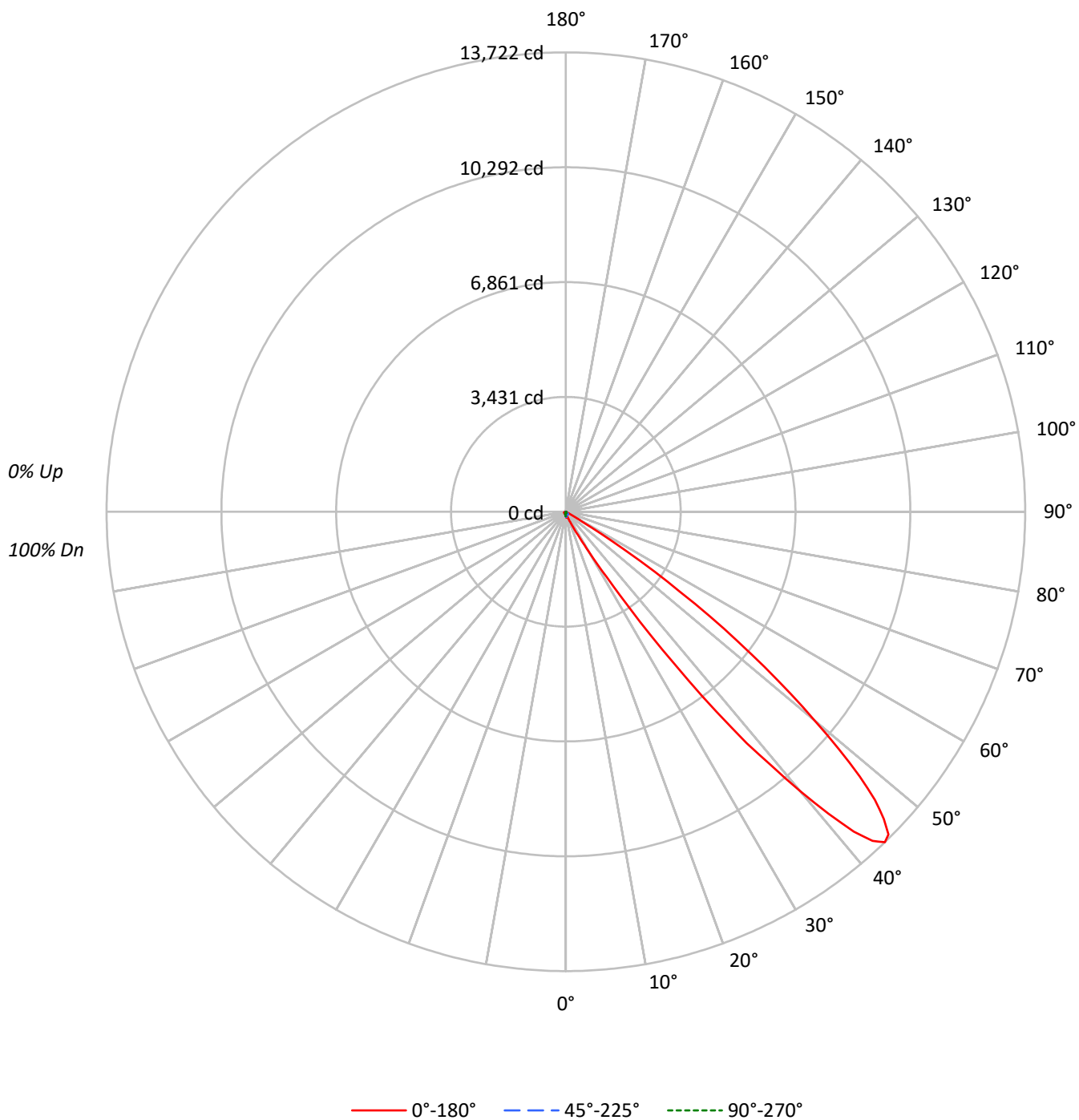
Lumens per Lamp: N/A
Luminaire Lumens: 1532.0 lumens
Efficiency: N/A
Efficacy: 55.9 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 27.4
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°	23422	23422	23422	23422	23422
5°	29044	25880	21126	18481	18222
10°	28575	22175	16299	14428	14690
15°	23696	15797	11714	11982	12802
20°	41145	12591	8962	10355	11766
25°	91726	15088	7259	9577	11022
30°	274315	18534	6384	9426	11534
35°	1055977	20877	5782	9629	12194
40°	2451018	18210	5486	9960	13040
45°	3319790	13761	4847	10790	14126
50°	2603002	8199	4903	11467	15540
55°	1249386	3663	4594	12371	16965
60°	114184	517	4202	13158	18944
65°	12470	0	3749	13692	20539
70°	3072	0	4633	14603	22307
75°	3061	998	6122	16236	25419
80°	3075	3075	7538	16662	27274
85°	2964	2964	12054	15018	30233

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3319790 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.6	0.8
10°-20°	24.2	1.6
20°-30°	57.9	3.8
30°-40°	316.9	20.7
40°-50°	767.4	50.1
50°-60°	306.1	20.0
60°-70°	26.5	1.7
70°-80°	14.9	1.0
80°-90°	6.6	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°	93.6	6.1
0°-40°	410.5	26.8
0°-60°	1484.0	96.9
0°-90°	1532.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1532.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	136	136	136	136	136	
5°	168	150	122	107	105	16
15°	133	89	66	67	72	46
25°	483	79	38	50	58	291
35°	5023	99	28	46	58	3549
45°	13630	56	20	44	58	9615
55°	4161	12	15	41	56	3876
65°	31	0	9	34	50	78
75°	5	2	9	24	38	4
85°	2	2	6	8	15	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°	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0	136.0
2.5°	152.8	152.8	154.3	152.8	152.8	152.8	152.8	151.2	151.2	151.2	146.6
5°	168.0	168.0	168.0	168.0	166.5	166.5	166.5	165.0	165.0	163.4	149.7
7.5°	174.1	174.1	172.6	172.6	171.1	171.1	169.6	168.0	166.5	165.0	143.6
10°	163.4	163.4	163.4	161.9	161.9	160.4	158.9	157.3	155.8	152.8	126.8
12.5°	145.1	145.1	146.6	145.1	143.6	142.1	139.0	137.5	136.0	132.9	105.4
15°	132.9	132.9	132.9	131.4	129.8	126.8	125.3	122.2	120.7	116.1	88.6
17.5°	169.6	169.6	168.0	165.0	158.9	154.3	146.6	140.5	132.9	123.7	76.4
20°	224.5	224.5	221.5	218.4	210.8	203.2	190.9	180.3	168.0	157.3	68.7
22.5°	325.4	330.0	320.8	310.1	299.4	281.1	264.3	247.5	226.1	207.7	70.3
25°	482.7	487.3	482.7	458.3	438.4	414.0	381.9	348.3	311.6	278.0	79.4
27.5°	782.1	785.2	777.5	717.9	685.9	621.7	565.2	510.2	449.1	388.0	87.1
30°	1379.4	1380.9	1332.0	1212.9	1107.5	966.9	847.8	733.2	637.0	539.2	93.2
31°	1816.3	1773.5	1669.6	1526.0	1358.0	1168.6	1005.1	857.0	713.4	608.0	94.7
32°	2306.6	2300.5	2127.9	1878.9	1654.3	1417.6	1171.6	982.2	817.2	673.6	96.2
33°	2955.8	2958.9	2687.0	2393.7	2025.5	1707.8	1385.5	1125.8	927.2	751.6	99.3
34°	3970.1	3731.8	3412.5	3015.4	2514.3	2036.2	1617.7	1292.3	1026.5	826.4	99.3
35°	5022.6	4782.8	4431.4	3829.6	3142.2	2473.1	1894.2	1471.0	1145.7	907.4	99.3
36°	6201.8	5998.7	5467.1	4698.7	3821.9	2885.5	2187.4	1677.2	1263.3	980.7	97.8
37°	7475.8	7177.9	6588.3	5749.7	4576.5	3466.0	2544.9	1881.9	1380.9	1060.1	94.7
38°	8769.7	8500.8	7756.9	6741.1	5477.8	4078.6	2902.3	2079.0	1489.4	1119.7	90.1
39°	9750.3	9603.7	8865.9	7730.9	6197.3	4659.0	3270.5	2289.8	1603.9	1179.3	85.5
40°	10902.1	10665.3	9965.7	8561.9	7048.1	5250.2	3631.0	2476.2	1698.6	1226.6	81.0
41°	11953.1	11653.7	10770.7	9414.3	7729.4	5781.8	3973.2	2668.6	1775.0	1254.1	77.9
42°	12854.3	12506.0	11583.4	10144.4	8299.2	6206.4	4246.6	2806.1	1846.8	1277.0	73.3
43°	13437.8	13136.9	12229.6	10692.8	8786.5	6596.0	4501.7	2949.7	1891.1	1292.3	67.2
44°	13722.0	13418.0	12539.6	11036.5	9085.9	6829.7	4666.7	3049.0	1940.0	1312.2	62.6
45°	13630.3	13321.7	12472.4	11042.6	9179.0	6913.7	4736.9	3093.3	1966.0	1330.5	56.5
46°	13210.2	12993.3	12137.9	10755.5	9001.8	6823.6	4697.2	3059.7	1956.8	1330.5	50.4
47°	12620.6	12373.1	11559.0	10262.1	8572.6	6591.4	4536.8	2957.3	1900.3	1299.9	44.3
48°	11817.1	11606.3	10750.9	9478.4	7914.2	6085.8	4174.8	2790.8	1811.7	1240.4	38.2
49°	10808.9	10515.6	9719.8	8476.4	7055.7	5367.8	3699.7	2509.8	1669.6	1156.4	33.6
50°	9715.2	9353.2	8739.1	7472.8	6168.2	4602.5	3075.0	2121.8	1469.5	1046.4	30.6
51°	8644.4	8276.3	7691.2	6614.3	5221.2	3818.9	2480.7	1694.1	1209.8	895.1	26.0
52°	7533.9	7225.3	6570.0	5723.7	4469.6	3094.8	2066.8	1432.8	1005.1	751.6	21.4
53°	6427.9	6217.1	5593.9	4736.9	3591.3	2528.1	1687.9	1226.6	876.8	643.1	16.8
54°	5320.5	5089.8	4616.3	3852.5	2894.7	1995.0	1431.3	1026.5	760.7	560.6	15.3
55°	4161.0	4041.9	3605.0	2937.5	2193.6	1591.7	1160.9	882.9	637.0	469.0	12.2
56°	3204.8	3070.4	2671.7	2130.9	1629.9	1246.5	939.4	721.0	539.2	392.6	9.2
57°	2098.9	1961.4	1697.1	1487.8	1186.9	908.9	717.9	568.2	438.4	325.4	7.6
58°	1240.4	1115.1	1073.9	916.5	791.3	617.1	530.1	423.1	323.8	256.6	4.6
59°	569.8	578.9	514.8	482.7	438.4	392.6	322.3	282.6	221.5	184.8	3.1
60°	331.5	313.1	305.5	273.4	242.9	215.4	194.0	171.1	139.0	119.1	1.5
62.5°	113.0	108.5	111.5	100.8	94.7	91.7	84.0	71.8	59.6	48.9	0.0
65°	30.6	30.6	29.0	27.5	26.0	24.4	22.9	19.9	18.3	15.3	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°	10.7	10.7	9.2	9.2	7.6	7.6	6.1	6.1	4.6	4.6	0.0
70°	6.1	6.1	6.1	4.6	4.6	4.6	3.1	3.1	3.1	1.5	0.0
72.5°	4.6	4.6	4.6	4.6	4.6	4.6	3.1	3.1	3.1	1.5	1.5
75°	4.6	4.6	4.6	3.1	3.1	3.1	3.1	3.1	3.1	3.1	1.5
77.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
80°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	1.5	3.1
82.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.1
85°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
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°	136.0	136.0	136.0	136.0	136.0	136.0
2.5°	140.5	134.4	126.8	122.2	120.7	119.1
5°	134.4	122.2	113.0	106.9	105.4	105.4
7.5°	120.7	106.9	97.8	94.7	93.2	93.2
10°	105.4	93.2	85.5	82.5	84.0	84.0
12.5°	88.6	77.9	74.8	74.8	76.4	77.9
15°	71.8	65.7	65.7	67.2	70.3	71.8
17.5°	59.6	56.5	58.0	61.1	64.2	67.2
20°	48.9	48.9	51.9	56.5	61.1	64.2
22.5°	41.2	42.8	47.4	51.9	58.0	61.1
25°	35.1	38.2	42.8	50.4	56.5	58.0
27.5°	30.6	35.1	41.2	48.9	55.0	58.0
30°	26.0	32.1	39.7	47.4	55.0	58.0
31°	24.4	30.6	38.2	47.4	55.0	58.0
32°	22.9	30.6	38.2	47.4	55.0	58.0
33°	21.4	29.0	38.2	45.8	55.0	58.0
34°	19.9	29.0	38.2	47.4	55.0	58.0
35°	18.3	27.5	36.7	45.8	53.5	58.0
36°	16.8	27.5	36.7	45.8	55.0	58.0
37°	15.3	27.5	36.7	45.8	53.5	58.0
38°	15.3	26.0	35.1	45.8	53.5	58.0
39°	13.7	24.4	35.1	45.8	53.5	58.0
40°	12.2	24.4	33.6	44.3	53.5	58.0
41°	10.7	22.9	33.6	44.3	53.5	58.0
42°	9.2	22.9	33.6	44.3	53.5	58.0
43°	7.6	21.4	32.1	44.3	53.5	58.0
44°	7.6	21.4	32.1	44.3	53.5	58.0
45°	6.1	19.9	30.6	44.3	53.5	58.0
46°	6.1	19.9	30.6	42.8	53.5	58.0
47°	4.6	19.9	30.6	42.8	53.5	58.0
48°	4.6	18.3	30.6	42.8	53.5	58.0
49°	3.1	18.3	30.6	42.8	53.5	58.0
50°	3.1	18.3	29.0	42.8	53.5	58.0
51°	3.1	18.3	29.0	42.8	53.5	58.0
52°	3.1	16.8	29.0	42.8	53.5	58.0
53°	3.1	16.8	29.0	42.8	53.5	58.0
54°	3.1	16.8	27.5	42.8	53.5	58.0
55°	3.1	15.3	27.5	41.2	53.5	56.5
56°	3.1	15.3	27.5	41.2	53.5	56.5
57°	3.1	15.3	26.0	41.2	53.5	56.5
58°	3.1	13.7	26.0	39.7	51.9	56.5
59°	3.1	13.7	24.4	39.7	51.9	55.0
60°	3.1	12.2	24.4	38.2	50.4	55.0
62.5°	3.1	10.7	21.4	36.7	48.9	51.9
65°	3.1	9.2	19.9	33.6	47.4	50.4



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	3.1	9.2	18.3	32.1	44.3	48.9
70°	3.1	9.2	16.8	29.0	42.8	44.3
72.5°	4.6	9.2	15.3	27.5	39.7	41.2
75°	6.1	9.2	13.7	24.4	36.7	38.2
77.5°	6.1	9.2	12.2	21.4	32.1	33.6
80°	6.1	7.6	10.7	16.8	26.0	27.5
82.5°	6.1	7.6	7.6	13.7	19.9	21.4
85°	4.6	6.1	6.1	7.6	13.7	15.3
87.5°	4.6	6.1	3.1	4.6	6.1	6.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)