

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: P1316338

Luminaire Tested: P3SQAS17R159827DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1316338
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: P3SQAS17R159827DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R15 optic, 2700K CCT AND, 98CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

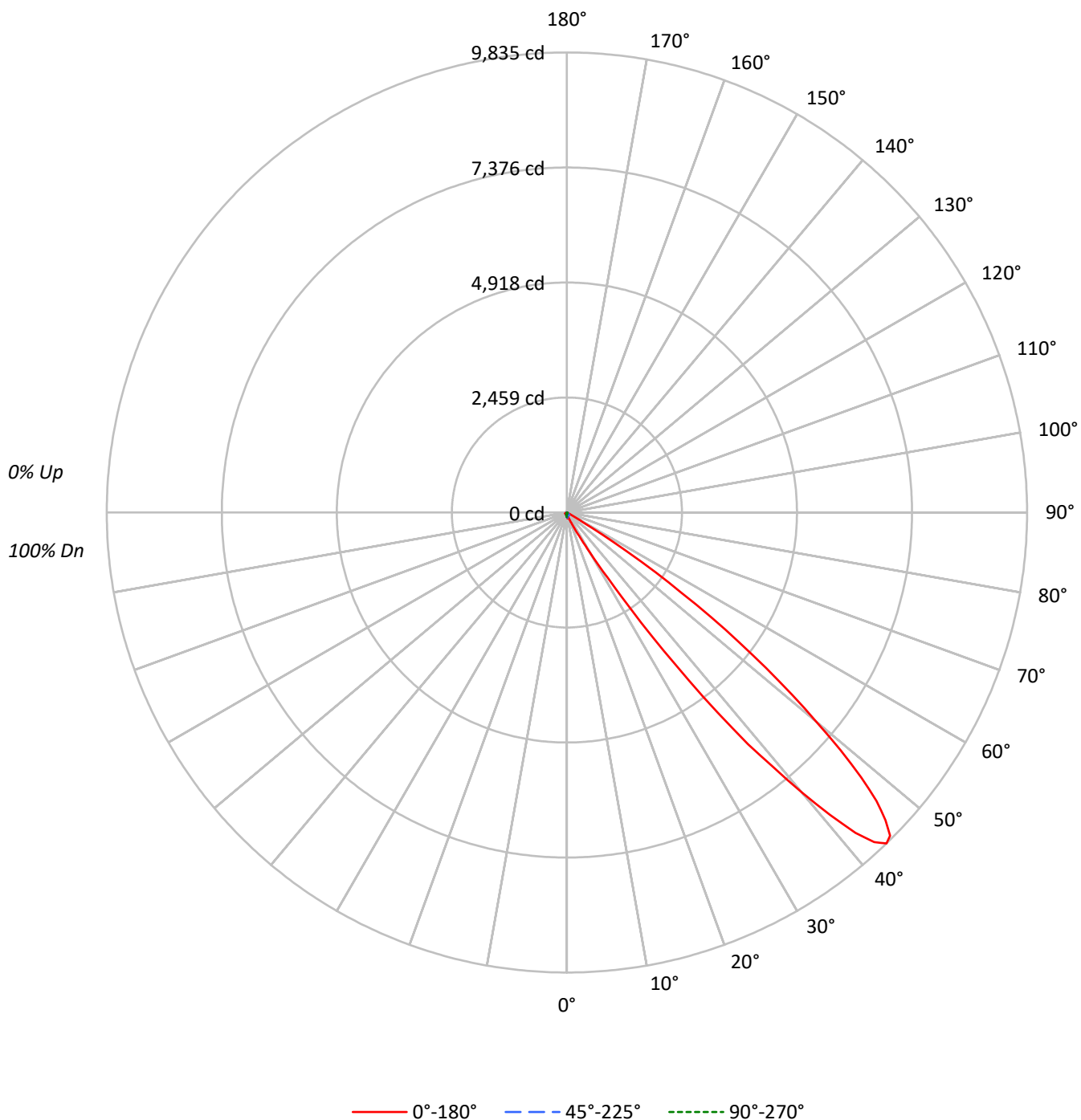
Lumens per Lamp: N/A
Luminaire Lumens: 1098.0 lumens
Efficiency: N/A
Efficacy: 53.8 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 20.4
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
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°	16774	16774	16774	16774	16774
5°	20815	18550	15144	13243	13052
10°	20478	15897	11682	10335	10528
15°	16974	11322	8398	8594	9182
20°	29489	9035	6415	7423	8431
25°	65749	10813	5207	6860	7905
30°	196599	13284	4574	6742	8273
35°	756819	14969	4142	6896	8746
40°	1756681	13040	3934	7127	9353
45°	2379334	9864	3459	7721	10132
50°	1865603	5868	3510	8225	11146
55°	895468	2642	3273	8888	12161
60°	81840	379	3031	9438	13571
65°	8925	0	2690	9821	14711
70°	2216	0	3323	10474	15962
75°	2196	732	4392	11645	18232
80°	2182	2182	5455	11901	19538
85°	2174	2174	8695	10868	21539

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2379334 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	8.3	0.8
10°-20°	17.3	1.6
20°-30°	41.5	3.8
30°-40°	227.1	20.7
40°-50°	550.0	50.1
50°-60°	219.4	20.0
60°-70°	19.0	1.7
70°-80°	10.7	1.0
80°-90°	4.7	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°	67.1	6.1
0°-40°	294.2	26.8
0°-60°	1063.6	96.9
0°-90°	1098.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1098.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	97	97	97	97	97	
5°	120	107	88	77	76	11
15°	95	64	47	48	52	33
25°	346	57	27	36	42	209
35°	3600	71	20	33	42	2544
45°	9769	40	14	32	42	6891
55°	2982	9	11	30	40	2778
65°	22	0	7	24	36	56
75°	3	1	7	18	27	3
85°	1	1	4	6	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°	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
2.5°	109.5	109.5	110.6	109.5	109.5	109.5	109.5	108.4	108.4	108.4	105.1
5°	120.4	120.4	120.4	120.4	119.3	119.3	119.3	118.2	118.2	117.1	107.3
7.5°	124.8	124.8	123.7	123.7	122.6	122.6	121.5	120.4	119.3	118.2	102.9
10°	117.1	117.1	117.1	116.0	116.0	115.0	113.9	112.8	111.7	109.5	90.9
12.5°	104.0	104.0	105.1	104.0	102.9	101.8	99.6	98.5	97.4	95.2	75.5
15°	95.2	95.2	95.2	94.2	93.1	90.9	89.8	87.6	86.5	83.2	63.5
17.5°	121.5	121.5	120.4	118.2	113.9	110.6	105.1	100.7	95.2	88.7	54.7
20°	160.9	160.9	158.7	156.6	151.1	145.6	136.9	129.2	120.4	112.8	49.3
22.5°	233.2	236.5	229.9	222.2	214.6	201.4	189.4	177.4	162.0	148.9	50.4
25°	346.0	349.2	346.0	328.4	314.2	296.7	273.7	249.6	223.3	199.3	56.9
27.5°	560.5	562.7	557.3	514.6	491.6	445.6	405.1	365.7	321.9	278.1	62.4
30°	988.6	989.7	954.7	869.3	793.7	693.0	607.6	525.5	456.5	386.5	66.8
31°	1301.7	1271.1	1196.6	1093.7	973.3	837.5	720.4	614.2	511.3	435.7	67.9
32°	1653.2	1648.8	1525.1	1346.6	1185.7	1016.0	839.7	704.0	585.7	482.8	69.0
33°	2118.5	2120.6	1925.8	1715.6	1451.7	1224.0	993.0	806.9	664.5	538.6	71.2
34°	2845.4	2674.6	2445.8	2161.2	1802.1	1459.4	1159.4	926.2	735.7	592.3	71.2
35°	3599.7	3427.8	3176.0	2744.7	2252.0	1772.5	1357.6	1054.3	821.1	650.3	71.2
36°	4444.9	4299.3	3918.3	3367.6	2739.2	2068.1	1567.8	1202.1	905.4	702.9	70.1
37°	5358.0	5144.5	4721.9	4120.9	3280.0	2484.1	1824.0	1348.8	989.7	759.8	67.9
38°	6285.3	6092.6	5559.4	4831.4	3926.0	2923.1	2080.1	1490.0	1067.4	802.5	64.6
39°	6988.2	6883.1	6354.3	5540.8	4441.6	3339.2	2344.0	1641.1	1149.5	845.2	61.3
40°	7813.7	7644.0	7142.5	6136.4	5051.5	3762.9	2602.4	1774.7	1217.4	879.1	58.0
41°	8566.9	8352.3	7719.5	6747.3	5539.7	4143.9	2847.6	1912.6	1272.2	898.8	55.8
42°	9212.8	8963.2	8301.9	7270.6	5948.1	4448.2	3043.6	2011.2	1323.6	915.3	52.6
43°	9631.0	9415.4	8765.0	7663.7	6297.3	4727.4	3226.4	2114.1	1355.4	926.2	48.2
44°	9834.7	9616.8	8987.3	7910.0	6511.9	4894.9	3344.6	2185.2	1390.4	940.4	44.9
45°	9769.0	9547.8	8939.1	7914.4	6578.7	4955.1	3395.0	2217.0	1409.0	953.6	40.5
46°	9467.9	9312.4	8699.4	7708.6	6451.7	4890.5	3366.5	2192.9	1402.5	953.6	36.1
47°	9045.3	8868.0	8284.4	7354.9	6144.1	4724.1	3251.6	2119.6	1361.9	931.7	31.7
48°	8469.4	8318.4	7705.3	6793.3	5672.2	4361.7	2992.1	2000.2	1298.4	889.0	27.4
49°	7746.9	7536.7	6966.3	6075.1	5056.9	3847.2	2651.6	1798.8	1196.6	828.8	24.1
50°	6963.0	6703.5	6263.4	5355.8	4420.8	3298.7	2203.9	1520.7	1053.2	749.9	21.9
51°	6195.5	5931.7	5512.4	4740.5	3742.1	2737.0	1778.0	1214.1	867.1	641.6	18.6
52°	5399.6	5178.4	4708.8	4102.3	3203.4	2218.1	1481.3	1026.9	720.4	538.6	15.3
53°	4607.0	4455.9	4009.2	3395.0	2573.9	1811.9	1209.8	879.1	628.4	460.9	12.0
54°	3813.2	3647.9	3308.5	2761.1	2074.7	1429.8	1025.8	735.7	545.2	401.8	10.9
55°	2982.3	2896.9	2583.7	2105.3	1572.1	1140.8	832.1	632.8	456.5	336.1	8.8
56°	2296.9	2200.6	1914.8	1527.3	1168.2	893.4	673.3	516.7	386.5	281.4	6.6
57°	1504.3	1405.7	1216.3	1066.3	850.7	651.4	514.6	407.3	314.2	233.2	5.5
58°	889.0	799.2	769.7	656.9	567.1	442.3	379.9	303.3	232.1	183.9	3.3
59°	408.4	414.9	369.0	346.0	314.2	281.4	231.0	202.5	158.7	132.5	2.2
60°	237.6	224.4	219.0	196.0	174.1	154.4	139.0	122.6	99.6	85.4	1.1
62.5°	81.0	77.7	79.9	72.3	67.9	65.7	60.2	51.5	42.7	35.0	0.0
65°	21.9	21.9	20.8	19.7	18.6	17.5	16.4	14.2	13.1	10.9	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°	7.7	7.7	6.6	6.6	5.5	5.5	4.4	4.4	3.3	3.3	0.0
70°	4.4	4.4	4.4	3.3	3.3	3.3	2.2	2.2	2.2	1.1	0.0
72.5°	3.3	3.3	3.3	3.3	3.3	3.3	2.2	2.2	2.2	1.1	1.1
75°	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	1.1
77.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
80°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	1.1	2.2
82.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.2
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°	97.4	97.4	97.4	97.4	97.4	97.4
2.5°	100.7	96.3	90.9	87.6	86.5	85.4
5°	96.3	87.6	81.0	76.6	75.5	75.5
7.5°	86.5	76.6	70.1	67.9	66.8	66.8
10°	75.5	66.8	61.3	59.1	60.2	60.2
12.5°	63.5	55.8	53.6	53.6	54.7	55.8
15°	51.5	47.1	47.1	48.2	50.4	51.5
17.5°	42.7	40.5	41.6	43.8	46.0	48.2
20°	35.0	35.0	37.2	40.5	43.8	46.0
22.5°	29.6	30.7	33.9	37.2	41.6	43.8
25°	25.2	27.4	30.7	36.1	40.5	41.6
27.5°	21.9	25.2	29.6	35.0	39.4	41.6
30°	18.6	23.0	28.5	33.9	39.4	41.6
31°	17.5	21.9	27.4	33.9	39.4	41.6
32°	16.4	21.9	27.4	33.9	39.4	41.6
33°	15.3	20.8	27.4	32.8	39.4	41.6
34°	14.2	20.8	27.4	33.9	39.4	41.6
35°	13.1	19.7	26.3	32.8	38.3	41.6
36°	12.0	19.7	26.3	32.8	39.4	41.6
37°	10.9	19.7	26.3	32.8	38.3	41.6
38°	10.9	18.6	25.2	32.8	38.3	41.6
39°	9.9	17.5	25.2	32.8	38.3	41.6
40°	8.8	17.5	24.1	31.7	38.3	41.6
41°	7.7	16.4	24.1	31.7	38.3	41.6
42°	6.6	16.4	24.1	31.7	38.3	41.6
43°	5.5	15.3	23.0	31.7	38.3	41.6
44°	5.5	15.3	23.0	31.7	38.3	41.6
45°	4.4	14.2	21.9	31.7	38.3	41.6
46°	4.4	14.2	21.9	30.7	38.3	41.6
47°	3.3	14.2	21.9	30.7	38.3	41.6
48°	3.3	13.1	21.9	30.7	38.3	41.6
49°	2.2	13.1	21.9	30.7	38.3	41.6
50°	2.2	13.1	20.8	30.7	38.3	41.6
51°	2.2	13.1	20.8	30.7	38.3	41.6
52°	2.2	12.0	20.8	30.7	38.3	41.6
53°	2.2	12.0	20.8	30.7	38.3	41.6
54°	2.2	12.0	19.7	30.7	38.3	41.6
55°	2.2	10.9	19.7	29.6	38.3	40.5
56°	2.2	10.9	19.7	29.6	38.3	40.5
57°	2.2	10.9	18.6	29.6	38.3	40.5
58°	2.2	9.9	18.6	28.5	37.2	40.5
59°	2.2	9.9	17.5	28.5	37.2	39.4
60°	2.2	8.8	17.5	27.4	36.1	39.4
62.5°	2.2	7.7	15.3	26.3	35.0	37.2
65°	2.2	6.6	14.2	24.1	33.9	36.1



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.2	6.6	13.1	23.0	31.7	35.0
70°	2.2	6.6	12.0	20.8	30.7	31.7
72.5°	3.3	6.6	10.9	19.7	28.5	29.6
75°	4.4	6.6	9.9	17.5	26.3	27.4
77.5°	4.4	6.6	8.8	15.3	23.0	24.1
80°	4.4	5.5	7.7	12.0	18.6	19.7
82.5°	4.4	5.5	5.5	9.9	14.2	15.3
85°	3.3	4.4	4.4	5.5	9.9	10.9
87.5°	3.3	4.4	2.2	3.3	4.4	4.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)