

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: P1314652

Luminaire Tested: P3SQAS20R209735D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1314652
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-74)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS20R209735D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R20 optic, 3500K CCT AND, 97CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

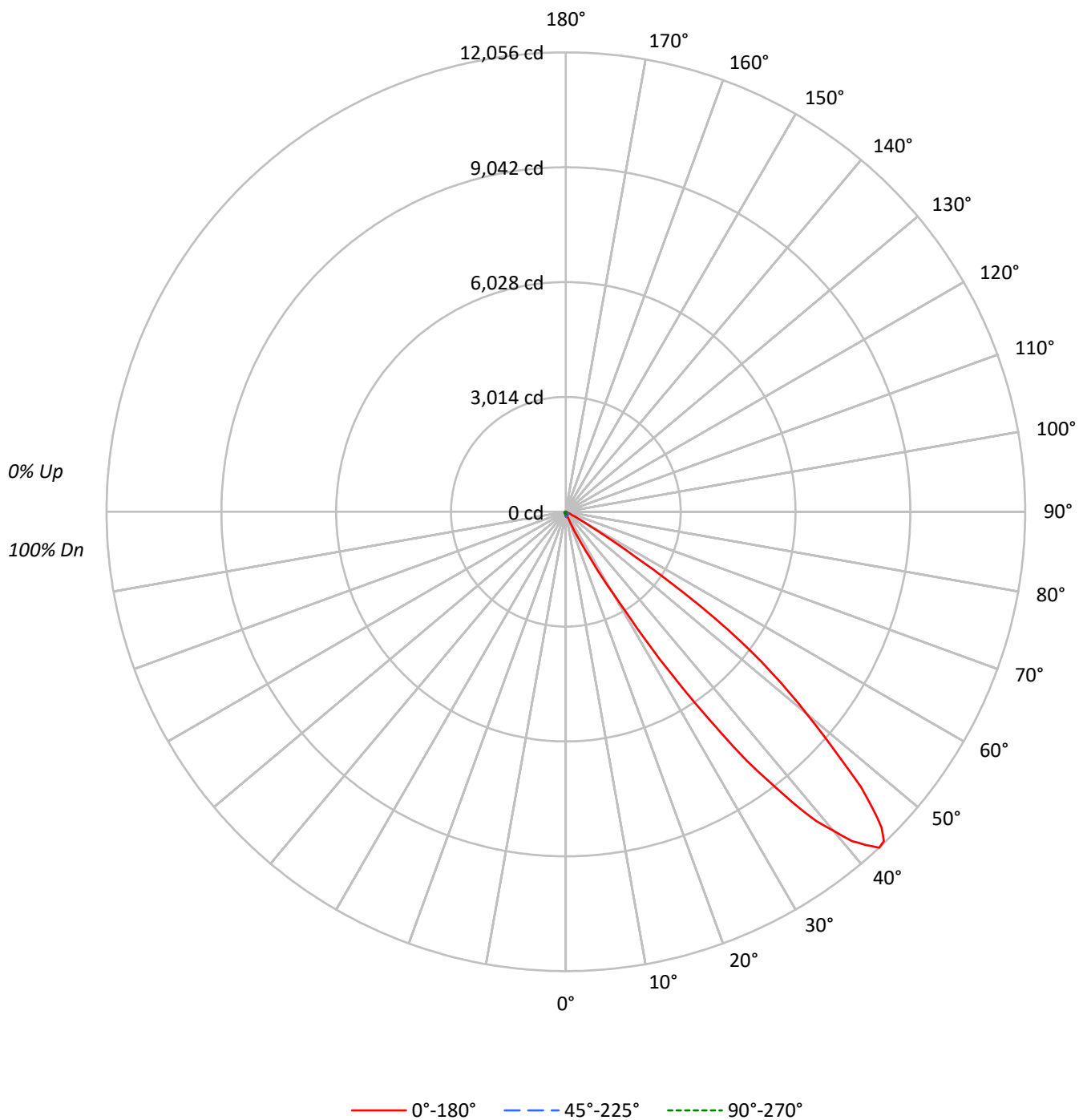
Lumens per Lamp: N/A
Luminaire Lumens: 1675.0 lumens
Efficiency: N/A
Efficacy: 58.2 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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	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	108	104	101	97	100	97	94	96	94	92	92	91	89	87		
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73		
3	92	81	74	67	89	80	73	67	77	71	66	74	69	65	72	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42		
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	38	32	46	38	32	44	37	32	43	36	31	29		
8	57	42	33	27	55	42	33	27	40	33	27	39	32	27	38	31	27	25		
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21		
10	48	34	25	20	47	33	25	20	32	25	19	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	20064	20064	20064	20064	20064
5°	23408	21766	18775	16320	15784
10°	23119	19814	14865	12661	12381
15°	20201	15155	10947	10109	10662
20°	30002	12701	8082	8651	9512
25°	129218	13169	6290	7772	9273
30°	488652	15969	5330	7517	9068
35°	1481323	19195	4962	7611	9587
40°	2456368	19110	4249	8139	10252
45°	2855103	13030	3824	8427	11106
50°	2216297	7181	3805	8869	12646
55°	1282745	4714	3783	9939	13692
60°	216863	1068	3238	10299	15190
65°	16667	0	3831	11533	17319
70°	2367	0	4733	12689	19840
75°	2063	1065	5257	14639	23023
80°	1587	1587	7835	15571	26580
85°	3162	3162	12449	15611	28060

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2855103 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.0	0.6
10°-20°	21.0	1.3
20°-30°	66.9	4.0
30°-40°	427.1	25.5
40°-50°	781.8	46.7
50°-60°	321.2	19.2
60°-70°	27.1	1.6
70°-80°	13.5	0.8
80°-90°	6.4	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°	97.9	5.8
0°-40°	525.0	31.3
0°-60°	1628.1	97.2
0°-90°	1675.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1675.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	116	116	116	116	116	
5°	135	126	109	94	91	13
15°	113	85	61	57	60	36
25°	680	69	33	41	49	447
35°	7046	91	24	36	46	4460
45°	11722	54	16	35	46	8417
55°	4272	16	13	33	46	3734
65°	41	0	9	28	42	133
75°	3	2	8	22	35	4
85°	2	2	6	8	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°	116.5	116.5	116.5	116.5	116.5	116.5	116.5	116.5	116.5	116.5	116.5
2.5°	127.5	127.5	127.5	125.9	125.9	127.5	125.9	125.9	125.9	125.9	124.4
5°	135.4	135.4	135.4	135.4	135.4	135.4	135.4	133.8	133.8	132.2	125.9
7.5°	138.5	138.5	138.5	138.5	136.9	136.9	136.9	136.9	135.4	133.8	122.8
10°	132.2	132.2	132.2	130.7	130.7	130.7	129.1	129.1	127.5	125.9	113.3
12.5°	119.6	119.6	119.6	119.6	118.1	118.1	116.5	116.5	114.9	113.3	99.2
15°	113.3	113.3	113.3	111.8	111.8	110.2	108.6	107.0	105.5	102.3	85.0
17.5°	122.8	122.8	121.2	121.2	118.1	114.9	113.3	108.6	105.5	100.7	75.6
20°	163.7	165.3	159.0	154.3	151.1	141.7	136.9	129.1	122.8	114.9	69.3
22.5°	330.6	324.3	313.2	295.9	275.5	258.2	226.7	201.5	184.2	160.6	67.7
25°	680.0	673.7	643.8	618.6	555.7	506.9	439.2	384.1	327.4	272.3	69.3
27.5°	1292.3	1249.8	1242.0	1127.1	1038.9	913.0	782.3	672.1	571.4	459.6	74.0
30°	2457.2	2408.4	2236.8	2063.7	1826.0	1556.8	1300.2	1060.9	861.0	680.0	80.3
31°	3118.3	3165.5	2964.0	2616.2	2265.1	1920.4	1569.4	1265.6	1007.4	782.3	83.4
32°	4099.0	3892.8	3680.3	3322.9	2812.9	2372.2	1931.4	1493.8	1153.8	892.5	86.6
33°	5026.1	4904.9	4580.7	4135.2	3522.9	2904.2	2332.8	1763.0	1333.3	1026.3	88.1
34°	6014.7	5880.9	5618.0	4978.9	4306.8	3496.1	2734.2	2073.1	1547.3	1157.0	89.7
35°	7045.7	6989.0	6482.2	5928.1	5101.7	4124.2	3217.5	2413.1	1756.7	1276.6	91.3
36°	8083.0	7900.4	7503.8	6694.7	5832.1	4705.0	3724.3	2729.5	1969.2	1418.3	91.3
37°	8863.8	8822.9	8297.1	7508.5	6494.8	5325.2	4161.9	3080.5	2183.3	1539.5	91.3
38°	9724.8	9562.7	9029.1	8226.3	7118.1	5893.5	4620.0	3385.9	2386.3	1649.7	89.7
39°	10450.5	10209.7	9671.3	8878.0	7662.8	6324.8	4983.6	3681.8	2565.8	1741.0	88.1
40°	10925.9	10759.0	10197.1	9304.5	8157.0	6732.5	5352.0	3925.8	2699.6	1810.2	85.0
41°	11450.1	11173.0	10617.4	9720.1	8515.9	7091.4	5583.4	4086.4	2803.5	1855.9	81.9
42°	11763.3	11536.6	10877.1	9998.7	8772.5	7296.0	5772.2	4209.2	2866.4	1879.5	75.6
43°	12056.1	11747.6	11105.3	10160.9	8942.5	7440.8	5858.8	4265.8	2880.6	1879.5	67.7
44°	12016.7	11723.9	11058.1	10182.9	8980.3	7483.3	5895.0	4267.4	2858.6	1855.9	59.8
45°	11722.4	11431.2	10831.4	9990.9	8844.9	7399.9	5822.6	4204.4	2797.2	1814.9	53.5
46°	11182.5	10892.8	10433.2	9669.7	8593.0	7211.0	5654.2	4067.5	2694.9	1748.8	47.2
47°	10595.3	10313.5	9842.9	9151.9	8163.3	6874.1	5410.2	3875.5	2551.6	1652.8	42.5
48°	9743.7	9567.4	9095.2	8504.9	7566.7	6346.8	4982.0	3562.2	2359.6	1528.5	36.2
49°	8991.3	8805.6	8391.6	7757.2	6789.1	5732.9	4470.5	3181.3	2109.3	1389.9	31.5
50°	8271.9	8109.8	7727.3	7011.1	6087.1	4991.5	3779.4	2701.2	1794.5	1218.4	26.8
51°	7568.3	7447.1	7056.7	6398.7	5460.6	4421.7	3274.1	2249.4	1482.8	1010.6	25.2
52°	6861.5	6847.4	6423.9	5758.1	4851.4	3853.4	2783.0	1898.4	1257.7	848.4	23.6
53°	6101.2	6009.9	5640.0	5041.9	4171.4	3261.5	2359.6	1600.9	1083.0	722.5	20.5
54°	5235.5	5133.2	4736.5	4196.6	3407.9	2671.3	1901.5	1293.9	902.0	610.8	18.9
55°	4272.1	4097.4	3809.3	3255.3	2661.8	2038.5	1468.6	1024.7	720.9	508.4	15.7
56°	3241.1	3066.4	2904.2	2496.5	1953.5	1520.6	1094.0	785.5	563.5	401.4	14.2
57°	2254.1	2244.7	1978.7	1665.4	1306.5	1035.8	749.3	554.1	398.2	311.7	11.0
58°	1462.3	1413.5	1243.5	1062.5	854.7	647.0	481.7	376.2	270.7	212.5	9.4
59°	1024.7	927.1	835.9	708.3	538.3	407.7	310.1	240.8	187.3	148.0	6.3
60°	629.6	609.2	547.8	431.3	349.5	288.1	231.4	177.9	136.9	105.5	3.1
62.5°	179.4	182.6	165.3	146.4	125.9	108.6	97.6	83.4	69.3	55.1	0.0
65°	40.9	39.4	42.5	39.4	36.2	36.2	31.5	28.3	25.2	23.6	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°	12.6	12.6	11.0	11.0	11.0	9.4	9.4	7.9	7.9	6.3	0.0
70°	4.7	4.7	4.7	4.7	4.7	3.1	3.1	3.1	1.6	1.6	0.0
72.5°	4.7	4.7	4.7	3.1	3.1	3.1	3.1	3.1	1.6	1.6	1.6
75°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	1.6	1.6	1.6	1.6
77.5°	3.1	3.1	3.1	3.1	3.1	1.6	3.1	1.6	1.6	1.6	1.6
80°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
82.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
85°	1.6	1.6	1.6	1.6	0.0	0.0	1.6	1.6	1.6	0.0	1.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
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°	116.5	116.5	116.5	116.5	116.5	116.5
2.5°	121.2	114.9	110.2	105.5	103.9	103.9
5°	118.1	108.6	99.2	94.4	91.3	91.3
7.5°	108.6	97.6	88.1	83.4	81.9	81.9
10°	97.6	85.0	75.6	72.4	72.4	70.8
12.5°	85.0	72.4	66.1	64.5	64.5	64.5
15°	70.8	61.4	56.7	56.7	58.2	59.8
17.5°	59.8	50.4	48.8	51.9	55.1	55.1
20°	50.4	44.1	44.1	47.2	50.4	51.9
22.5°	42.5	37.8	39.4	44.1	48.8	50.4
25°	37.8	33.1	36.2	40.9	45.6	48.8
27.5°	31.5	29.9	33.1	39.4	45.6	47.2
30°	26.8	26.8	31.5	37.8	44.1	45.6
31°	25.2	25.2	31.5	37.8	44.1	45.6
32°	23.6	25.2	29.9	37.8	44.1	45.6
33°	22.0	23.6	29.9	36.2	44.1	45.6
34°	20.5	23.6	29.9	36.2	44.1	45.6
35°	18.9	23.6	29.9	36.2	44.1	45.6
36°	17.3	22.0	28.3	36.2	44.1	45.6
37°	15.7	22.0	28.3	36.2	44.1	45.6
38°	14.2	20.5	28.3	36.2	44.1	45.6
39°	14.2	20.5	26.8	36.2	42.5	45.6
40°	12.6	18.9	26.8	36.2	42.5	45.6
41°	11.0	18.9	26.8	34.6	42.5	45.6
42°	9.4	17.3	25.2	34.6	42.5	45.6
43°	7.9	17.3	25.2	34.6	42.5	45.6
44°	7.9	15.7	25.2	34.6	42.5	45.6
45°	6.3	15.7	25.2	34.6	42.5	45.6
46°	4.7	15.7	25.2	34.6	42.5	45.6
47°	4.7	14.2	23.6	34.6	42.5	45.6
48°	3.1	14.2	23.6	34.6	42.5	45.6
49°	3.1	14.2	23.6	34.6	42.5	47.2
50°	3.1	14.2	23.6	33.1	42.5	47.2
51°	1.6	14.2	23.6	33.1	42.5	47.2
52°	1.6	14.2	22.0	33.1	44.1	47.2
53°	1.6	12.6	22.0	33.1	44.1	47.2
54°	1.6	12.6	22.0	33.1	44.1	45.6
55°	1.6	12.6	22.0	33.1	42.5	45.6
56°	1.6	11.0	22.0	33.1	42.5	45.6
57°	1.6	11.0	20.5	31.5	42.5	44.1
58°	1.6	11.0	20.5	31.5	42.5	44.1
59°	1.6	11.0	20.5	31.5	40.9	44.1
60°	3.1	9.4	18.9	29.9	40.9	44.1
62.5°	3.1	9.4	18.9	29.9	39.4	42.5
65°	3.1	9.4	17.3	28.3	39.4	42.5



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	3.1	7.9	15.7	26.8	37.8	40.9
70°	3.1	9.4	15.7	25.2	36.2	39.4
72.5°	4.7	7.9	14.2	23.6	34.6	37.8
75°	4.7	7.9	14.2	22.0	33.1	34.6
77.5°	6.3	7.9	12.6	18.9	29.9	31.5
80°	6.3	7.9	11.0	15.7	25.2	26.8
82.5°	6.3	7.9	7.9	12.6	18.9	20.5
85°	4.7	6.3	6.3	7.9	12.6	14.2
87.5°	4.7	6.3	4.7	3.1	6.3	6.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)