

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: P1307174

Luminaire Tested: P3SQAS20R259027D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1307174
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-75)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS20R259027D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 2700K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

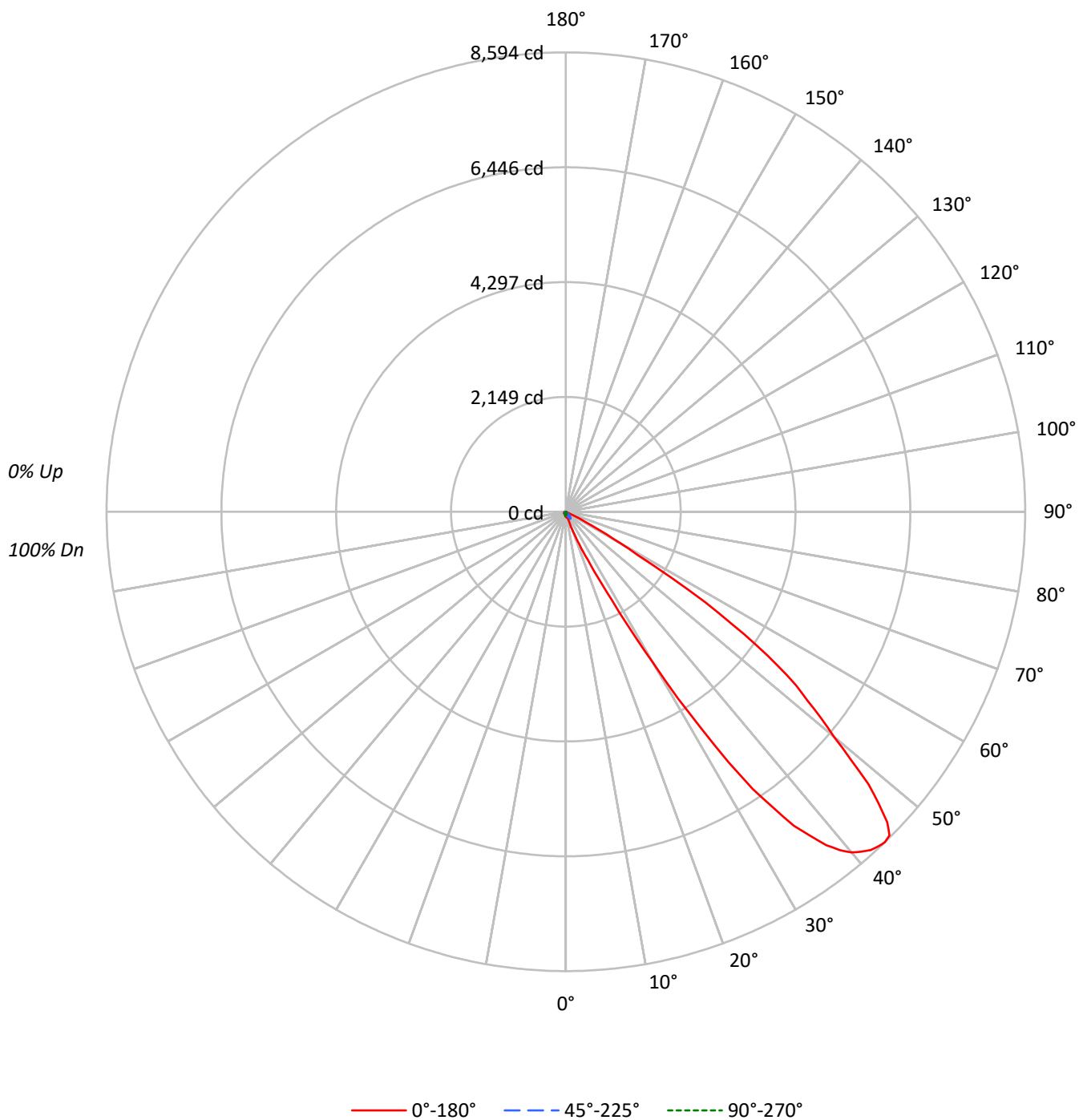
Lumens per Lamp: N/A
Luminaire Lumens: 1792.0 lumens
Efficiency: N/A
Efficacy: 62.2 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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	64	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	39	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	39	32	46	38	32	44	37	32	43	36	32	29		
8	57	43	34	27	55	42	33	27	40	33	27	39	32	27	38	32	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	20	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	15758	15758	15758	15758	15758
5°	17997	17167	15265	13623	13364
10°	17925	16264	12959	11315	11315
15°	19969	14050	10127	9557	10127
20°	70524	13874	7808	8101	8962
25°	202872	17672	6290	7487	8684
30°	647268	27284	5011	7219	8790
35°	1417661	32167	4310	6959	8956
40°	1870103	29069	3552	7082	9577
45°	2085528	20362	3459	7672	10376
50°	1755510	10556	3376	8038	11414
55°	1312501	4264	3303	9008	12791
60°	406273	1102	3272	9782	14122
65°	34720	0	3871	10269	15404
70°	2367	806	3978	11934	17473
75°	2129	1065	5257	12576	19963
80°	1587	1587	7835	14083	23505
85°	3162	3162	12449	15611	24898

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2085528 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	8.2	0.5
10°-20°	21.1	1.2
20°-30°	99.1	5.5
30°-40°	477.3	26.6
40°-50°	748.2	41.8
50°-60°	383.6	21.4
60°-70°	36.2	2.0
70°-80°	12.2	0.7
80°-90°	6.1	0.3
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°	128.5	7.2
0°-40°	605.8	33.8
0°-60°	1737.5	97.0
0°-90°	1792.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1792.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	92	92	92	92	92	
5°	104	99	88	79	77	10
15°	112	79	57	54	57	47
25°	1068	93	33	39	46	662
35°	6743	153	20	33	43	4093
45°	8563	84	14	32	43	6266
55°	4371	14	11	30	43	3639
65°	85	0	10	25	38	267
75°	3	2	8	19	30	4
85°	2	2	6	8	13	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°	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5
2.5°	99.3	99.3	99.3	99.3	99.3	99.3	97.8	97.8	99.3	97.8	97.8
5°	104.1	104.1	104.1	104.1	104.1	104.1	104.1	102.5	102.5	102.5	99.3
7.5°	105.7	104.1	104.1	104.1	104.1	104.1	104.1	104.1	102.5	102.5	97.8
10°	102.5	102.5	102.5	102.5	100.9	100.9	100.9	99.3	99.3	99.3	93.0
12.5°	102.5	102.5	102.5	102.5	100.9	100.9	99.3	99.3	97.8	96.2	85.2
15°	112.0	112.0	112.0	110.4	108.8	107.2	105.7	104.1	102.5	99.3	78.8
17.5°	164.0	159.3	157.7	151.4	143.5	135.6	129.3	123.0	116.7	112.0	75.7
20°	384.8	383.2	375.3	356.4	335.9	312.2	288.6	261.8	223.9	198.7	75.7
22.5°	667.0	657.6	643.4	629.2	592.9	550.3	506.2	455.7	406.8	354.8	80.4
25°	1067.6	1089.7	1042.3	1004.5	941.4	864.2	780.6	711.2	622.9	540.9	93.0
27.5°	1856.0	1870.2	1777.2	1654.2	1507.5	1345.1	1187.4	1069.2	920.9	785.3	116.7
30°	3254.8	3269.0	3112.8	2851.1	2548.3	2281.8	1920.7	1603.7	1312.0	1086.5	137.2
31°	4062.1	3951.8	3770.4	3516.5	3133.3	2731.2	2297.6	1914.4	1545.4	1248.9	143.5
32°	4763.9	4754.4	4543.1	4158.3	3773.6	3276.8	2739.1	2239.2	1786.6	1412.9	148.2
33°	5591.8	5528.7	5230.6	4867.9	4358.6	3858.7	3164.9	2594.0	2034.2	1595.8	151.4
34°	6255.6	6085.3	5962.3	5547.6	5009.9	4372.8	3630.1	2969.3	2343.3	1772.5	153.0
35°	6742.9	6706.6	6466.9	6080.6	5533.4	4882.1	4131.5	3358.8	2601.9	1977.5	153.0
36°	7258.6	7146.6	6913.2	6563.1	6030.1	5356.8	4514.7	3696.3	2903.1	2162.0	151.4
37°	7581.8	7515.6	7283.8	6922.7	6400.7	5757.3	4943.6	4052.7	3142.8	2346.5	148.2
38°	7914.6	7780.5	7551.9	7206.5	6694.0	6090.1	5254.3	4327.1	3363.6	2508.9	143.5
39°	8144.8	8006.0	7772.6	7428.9	6927.4	6328.2	5500.3	4560.4	3555.9	2630.3	137.2
40°	8318.2	8184.2	7947.7	7594.4	7099.3	6515.8	5705.3	4767.0	3716.8	2736.0	129.3
41°	8425.5	8300.9	8065.9	7714.3	7217.6	6623.1	5839.3	4901.1	3825.6	2806.9	121.4
42°	8515.4	8387.6	8147.9	7788.4	7290.1	6714.5	5921.3	4986.2	3899.7	2843.2	115.1
43°	8565.8	8438.1	8204.7	7837.3	7334.2	6757.1	5965.5	5025.6	3924.9	2838.5	104.1
44°	8594.2	8461.7	8226.8	7859.4	7353.2	6768.1	5968.6	5017.8	3907.6	2800.6	94.6
45°	8562.7	8431.8	8204.7	7837.3	7320.1	6733.4	5937.1	4975.2	3841.4	2726.5	83.6
46°	8357.7	8256.7	8048.6	7711.1	7216.0	6645.1	5856.7	4893.2	3738.9	2635.0	71.0
47°	7996.6	7916.1	7714.3	7463.6	7015.7	6482.7	5708.4	4737.1	3595.4	2497.8	56.8
48°	7619.7	7501.4	7313.7	7056.7	6678.2	6191.0	5464.0	4508.4	3377.8	2318.1	50.5
49°	7063.0	6993.6	6828.1	6541.1	6227.2	5798.3	5118.7	4215.1	3111.3	2122.5	44.2
50°	6552.1	6504.8	6273.0	6061.7	5728.9	5328.4	4650.3	3828.8	2780.1	1879.7	39.4
51°	6153.1	6096.4	5929.2	5665.9	5311.1	4845.9	4207.2	3327.3	2400.1	1591.1	31.5
52°	5736.8	5705.3	5557.1	5285.8	4937.3	4473.7	3776.7	2901.5	2031.1	1345.1	25.2
53°	5396.2	5350.5	5169.1	4927.9	4551.0	4071.6	3310.0	2505.7	1720.4	1130.7	22.1
54°	4899.5	4880.6	4763.9	4511.6	4103.1	3581.2	2887.3	2109.9	1435.0	958.8	18.9
55°	4371.2	4308.1	4189.9	3989.6	3614.3	3127.0	2398.5	1748.8	1160.6	807.4	14.2
56°	3727.8	3724.7	3513.4	3346.2	3013.5	2496.3	1916.0	1365.6	943.0	673.3	12.6
57°	3112.8	3013.5	2810.1	2644.5	2286.5	1893.9	1422.4	1023.4	738.0	545.6	9.5
58°	2302.3	2250.3	2196.6	1953.8	1622.6	1342.0	1015.5	719.1	545.6	416.3	6.3
59°	1562.7	1561.1	1498.1	1313.6	1122.8	835.8	633.9	488.8	375.3	305.9	4.7
60°	1179.5	1151.2	1025.0	903.6	706.5	528.3	375.3	288.6	233.4	197.1	3.2
62.5°	413.2	428.9	376.9	312.2	238.1	195.5	149.8	121.4	99.3	80.4	0.0
65°	85.2	93.0	80.4	75.7	59.9	52.0	45.7	39.4	33.1	28.4	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°	11.0	9.5	9.5	9.5	7.9	7.9	7.9	7.9	6.3	6.3	1.6
70°	4.7	4.7	4.7	4.7	4.7	4.7	3.2	3.2	3.2	3.2	1.6
72.5°	4.7	4.7	4.7	3.2	3.2	3.2	3.2	3.2	3.2	1.6	1.6
75°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	1.6	1.6	1.6	1.6
77.5°	3.2	3.2	3.2	3.2	3.2	3.2	1.6	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	3.2
85°	1.6	1.6	1.6	0.0	0.0	1.6	1.6	1.6	1.6	1.6	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°	91.5	91.5	91.5	91.5	91.5	91.5
2.5°	96.2	93.0	88.3	86.7	85.2	85.2
5°	94.6	88.3	83.6	78.8	77.3	77.3
7.5°	89.9	82.0	75.7	72.5	71.0	69.4
10°	85.2	74.1	67.8	64.7	64.7	64.7
12.5°	75.7	66.2	59.9	58.3	59.9	59.9
15°	67.8	56.8	53.6	53.6	55.2	56.8
17.5°	58.3	50.5	47.3	48.9	50.5	52.0
20°	52.0	42.6	42.6	44.2	48.9	48.9
22.5°	45.7	37.8	37.8	42.6	45.7	47.3
25°	41.0	33.1	34.7	39.4	44.2	45.7
27.5°	34.7	28.4	31.5	37.8	42.6	44.2
30°	30.0	25.2	30.0	36.3	41.0	44.2
31°	28.4	23.7	30.0	34.7	41.0	44.2
32°	25.2	23.7	28.4	34.7	41.0	42.6
33°	23.7	22.1	28.4	34.7	41.0	42.6
34°	22.1	20.5	26.8	34.7	41.0	42.6
35°	18.9	20.5	26.8	33.1	39.4	42.6
36°	17.3	18.9	26.8	33.1	39.4	42.6
37°	15.8	18.9	25.2	33.1	39.4	42.6
38°	14.2	17.3	25.2	33.1	39.4	42.6
39°	12.6	17.3	23.7	33.1	39.4	42.6
40°	11.0	15.8	23.7	31.5	39.4	42.6
41°	11.0	15.8	23.7	31.5	39.4	42.6
42°	9.5	15.8	23.7	31.5	39.4	42.6
43°	7.9	14.2	23.7	31.5	39.4	42.6
44°	6.3	14.2	22.1	31.5	39.4	42.6
45°	6.3	14.2	22.1	31.5	39.4	42.6
46°	4.7	12.6	22.1	31.5	39.4	42.6
47°	3.2	12.6	22.1	30.0	39.4	42.6
48°	3.2	12.6	22.1	30.0	39.4	42.6
49°	3.2	12.6	20.5	30.0	39.4	42.6
50°	3.2	12.6	20.5	30.0	39.4	42.6
51°	1.6	11.0	20.5	30.0	39.4	42.6
52°	1.6	11.0	20.5	30.0	39.4	44.2
53°	1.6	11.0	20.5	30.0	39.4	42.6
54°	1.6	11.0	18.9	30.0	39.4	42.6
55°	1.6	11.0	18.9	30.0	39.4	42.6
56°	1.6	9.5	18.9	28.4	39.4	42.6
57°	3.2	9.5	18.9	28.4	39.4	41.0
58°	3.2	9.5	18.9	28.4	37.8	41.0
59°	3.2	9.5	18.9	28.4	37.8	41.0
60°	3.2	9.5	17.3	28.4	37.8	41.0
62.5°	3.2	9.5	17.3	26.8	36.3	39.4
65°	3.2	9.5	15.8	25.2	36.3	37.8



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	3.2	7.9	15.8	23.7	34.7	36.3
70°	4.7	7.9	14.2	23.7	33.1	34.7
72.5°	4.7	7.9	14.2	20.5	30.0	33.1
75°	4.7	7.9	12.6	18.9	28.4	30.0
77.5°	4.7	7.9	11.0	17.3	25.2	26.8
80°	6.3	7.9	9.5	14.2	22.1	23.7
82.5°	6.3	7.9	7.9	11.0	17.3	18.9
85°	4.7	6.3	6.3	7.9	11.0	12.6
87.5°	4.7	6.3	4.7	3.2	6.3	6.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)