

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: P1316515

Luminaire Tested: P3SQAS20R259827D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1316515
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: P3SQAS20R259827D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 2700K CCT AND, 98CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

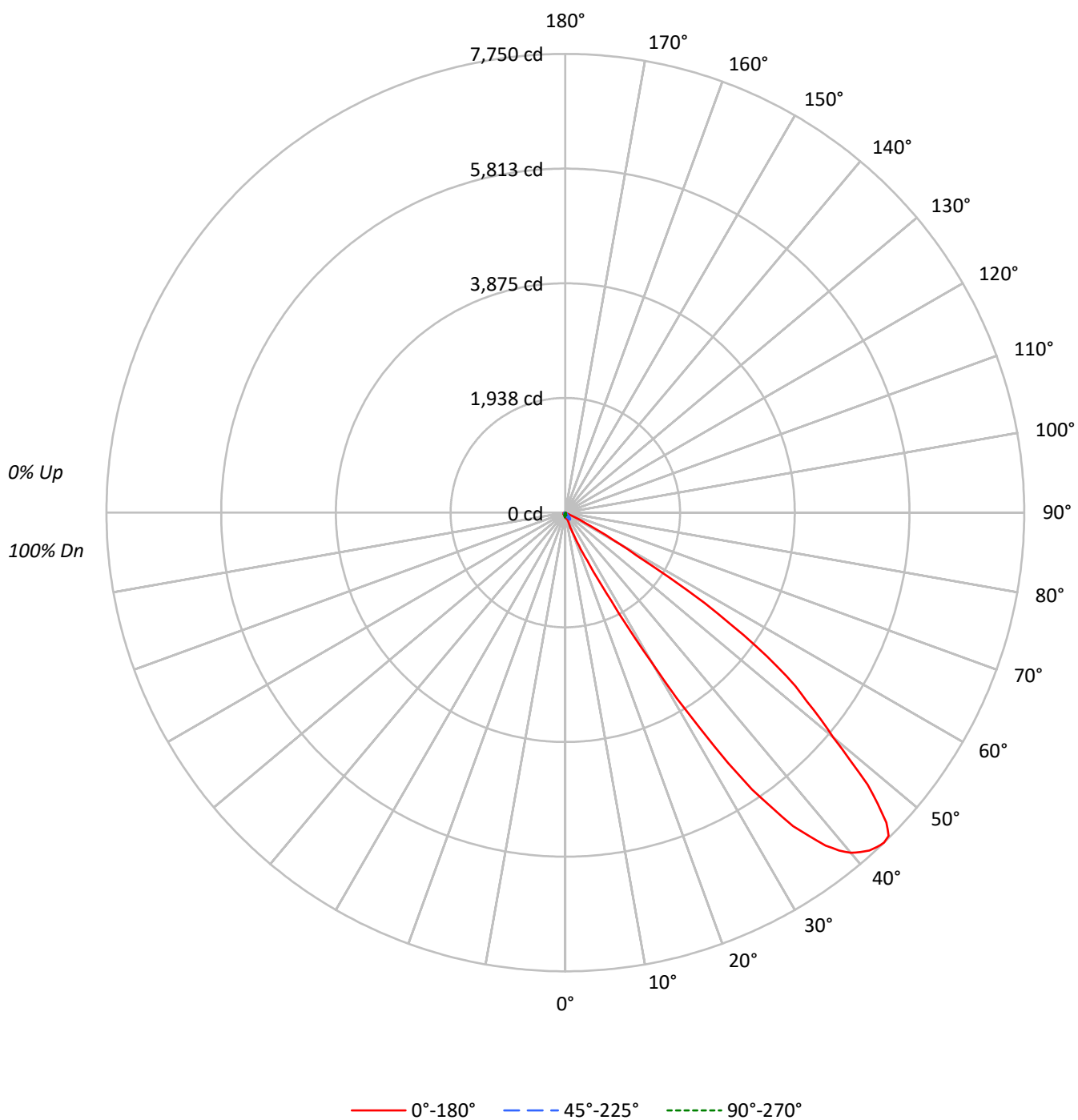
Lumens per Lamp: N/A
Luminaire Lumens: 1616.0 lumens
Efficiency: N/A
Efficacy: 59.0 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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
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°	14208	14208	14208	14208	14208
5°	16233	15490	13761	12292	12050
10°	16159	14672	11682	10195	10195
15°	18008	12677	9129	8612	9129
20°	63597	12518	7038	7294	8082
25°	182939	15943	5682	6765	7829
30°	583690	24600	4534	6503	7915
35°	1278437	28993	3890	6286	8073
40°	1686447	26214	3192	6385	8633
45°	1880694	18364	3118	6917	9353
50°	1583096	9538	3054	7234	10289
55°	1183599	3843	3003	8107	11530
60°	366386	964	2928	8818	12744
65°	31297	0	3464	9291	13896
70°	2165	705	3575	10726	15761
75°	1863	932	4724	11379	17966
80°	1389	1389	7042	12695	21125
85°	2766	2766	11263	14030	22527

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1880694 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.4	0.5
10°-20°	19.0	1.2
20°-30°	89.4	5.5
30°-40°	430.5	26.6
40°-50°	674.7	41.8
50°-60°	345.9	21.4
60°-70°	32.6	2.0
70°-80°	11.0	0.7
80°-90°	5.5	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°	115.8	7.2
0°-40°	546.3	33.8
0°-60°	1566.9	97.0
0°-90°	1616.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1616.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	82	82	82	82	82	
5°	94	90	80	71	70	9
15°	101	71	51	48	51	43
25°	963	84	30	36	41	597
35°	6081	138	18	30	38	3691
45°	7722	75	13	28	38	5650
55°	3942	13	10	27	38	3282
65°	77	0	8	23	34	241
75°	3	1	7	17	27	3
85°	1	1	6	7	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°	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5
2.5°	89.6	89.6	89.6	89.6	89.6	89.6	88.2	88.2	89.6	88.2	88.2
5°	93.9	93.9	93.9	93.9	93.9	93.9	93.9	92.4	92.4	92.4	89.6
7.5°	95.3	93.9	93.9	93.9	93.9	93.9	93.9	93.9	92.4	92.4	88.2
10°	92.4	92.4	92.4	92.4	91.0	91.0	91.0	89.6	89.6	89.6	83.9
12.5°	92.4	92.4	92.4	92.4	91.0	91.0	89.6	89.6	88.2	86.7	76.8
15°	101.0	101.0	101.0	99.5	98.1	96.7	95.3	93.9	92.4	89.6	71.1
17.5°	147.9	143.6	142.2	136.5	129.4	122.3	116.6	110.9	105.2	101.0	68.3
20°	347.0	345.6	338.4	321.4	302.9	281.6	260.2	236.1	201.9	179.2	68.3
22.5°	601.5	593.0	580.2	567.4	534.7	496.3	456.5	411.0	366.9	320.0	72.5
25°	962.7	982.6	940.0	905.8	849.0	779.3	703.9	641.3	561.7	487.8	83.9
27.5°	1673.7	1686.5	1602.6	1491.7	1359.5	1213.0	1070.8	964.1	830.5	708.2	105.2
30°	2935.1	2947.9	2807.1	2571.1	2298.0	2057.7	1732.0	1446.2	1183.1	979.8	123.7
31°	3663.2	3563.6	3400.1	3171.2	2825.6	2463.0	2071.9	1726.4	1393.6	1126.3	129.4
32°	4296.0	4287.5	4096.9	3749.9	3402.9	2955.0	2470.1	2019.3	1611.2	1274.1	133.7
33°	5042.6	4985.7	4716.9	4389.8	3930.5	3479.7	2854.0	2339.3	1834.4	1439.1	136.5
34°	5641.2	5487.7	5376.7	5002.7	4517.8	3943.3	3273.5	2677.7	2113.2	1598.4	137.9
35°	6080.7	6047.9	5831.8	5483.4	4989.9	4402.6	3725.7	3028.9	2346.4	1783.2	137.9
36°	6545.7	6444.7	6234.2	5918.5	5437.9	4830.7	4071.3	3333.3	2618.0	1949.6	136.5
37°	6837.2	6777.5	6568.4	6242.8	5772.1	5191.9	4458.1	3654.6	2834.1	2116.0	133.7
38°	7137.2	7016.4	6810.2	6498.7	6036.6	5491.9	4738.2	3902.1	3033.2	2262.5	129.4
39°	7344.8	7219.7	7009.2	6699.2	6247.0	5706.7	4960.1	4112.5	3206.7	2372.0	123.7
40°	7501.3	7380.4	7167.1	6848.6	6402.0	5875.9	5144.9	4298.8	3351.8	2467.2	116.6
41°	7598.0	7485.6	7273.7	6956.6	6508.7	5972.6	5265.8	4419.7	3449.9	2531.2	109.5
42°	7679.0	7563.8	7347.7	7023.5	6574.1	6055.1	5339.8	4496.5	3516.7	2563.9	103.8
43°	7724.5	7609.3	7398.9	7067.5	6613.9	6093.4	5379.6	4532.0	3539.5	2559.7	93.9
44°	7750.1	7630.7	7418.8	7087.5	6631.0	6103.4	5382.4	4524.9	3523.8	2525.5	85.3
45°	7721.7	7603.7	7398.9	7067.5	6601.1	6072.1	5354.0	4486.5	3464.1	2458.7	75.4
46°	7536.8	7445.8	7258.1	6953.8	6507.3	5992.5	5281.5	4412.6	3371.7	2376.2	64.0
47°	7211.2	7138.7	6956.6	6730.5	6326.7	5846.0	5147.8	4271.8	3242.3	2252.5	51.2
48°	6871.3	6764.7	6595.4	6363.6	6022.3	5582.9	4927.4	4065.6	3046.0	2090.4	45.5
49°	6369.3	6306.8	6157.4	5898.6	5615.6	5228.8	4615.9	3801.1	2805.7	1914.1	39.8
50°	5908.6	5865.9	5656.9	5466.3	5166.3	4805.1	4193.6	3452.7	2507.1	1695.1	35.6
51°	5548.8	5497.6	5346.9	5109.4	4789.4	4369.9	3794.0	3000.5	2164.3	1434.8	28.4
52°	5173.4	5144.9	5011.3	4766.7	4452.4	4034.3	3405.8	2616.6	1831.6	1213.0	22.8
53°	4866.2	4825.0	4661.5	4443.9	4104.0	3671.7	2984.9	2259.6	1551.4	1019.6	19.9
54°	4418.3	4401.2	4296.0	4068.5	3700.2	3229.5	2603.8	1902.7	1294.1	864.6	17.1
55°	3941.9	3885.0	3778.4	3597.8	3259.3	2819.9	2162.9	1577.0	1046.6	728.1	12.8
56°	3361.7	3358.9	3168.3	3017.6	2717.5	2251.1	1727.8	1231.5	850.4	607.2	11.4
57°	2807.1	2717.5	2534.1	2384.8	2062.0	1707.9	1282.7	922.9	665.5	492.0	8.5
58°	2076.2	2029.3	1980.9	1761.9	1463.3	1210.2	915.8	648.5	492.0	375.4	5.7
59°	1409.2	1407.8	1350.9	1184.6	1012.5	753.7	571.7	440.8	338.4	275.9	4.3
60°	1063.7	1038.1	924.3	814.8	637.1	476.4	338.4	260.2	210.5	177.8	2.8
62.5°	372.6	386.8	339.9	281.6	214.7	176.3	135.1	109.5	89.6	72.5	0.0
65°	76.8	83.9	72.5	68.3	54.0	46.9	41.2	35.6	29.9	25.6	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°	10.0	8.5	8.5	8.5	7.1	7.1	7.1	7.1	5.7	5.7	1.4
70°	4.3	4.3	4.3	4.3	4.3	4.3	2.8	2.8	2.8	2.8	1.4
72.5°	4.3	4.3	4.3	2.8	2.8	2.8	2.8	2.8	2.8	1.4	1.4
75°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4
77.5°	2.8	2.8	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	1.4
80°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
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	0.0	0.0	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°	82.5	82.5	82.5	82.5	82.5	82.5
2.5°	86.7	83.9	79.6	78.2	76.8	76.8
5°	85.3	79.6	75.4	71.1	69.7	69.7
7.5°	81.1	73.9	68.3	65.4	64.0	62.6
10°	76.8	66.8	61.1	58.3	58.3	58.3
12.5°	68.3	59.7	54.0	52.6	54.0	54.0
15°	61.1	51.2	48.3	48.3	49.8	51.2
17.5°	52.6	45.5	42.7	44.1	45.5	46.9
20°	46.9	38.4	38.4	39.8	44.1	44.1
22.5°	41.2	34.1	34.1	38.4	41.2	42.7
25°	37.0	29.9	31.3	35.6	39.8	41.2
27.5°	31.3	25.6	28.4	34.1	38.4	39.8
30°	27.0	22.8	27.0	32.7	37.0	39.8
31°	25.6	21.3	27.0	31.3	37.0	39.8
32°	22.8	21.3	25.6	31.3	37.0	38.4
33°	21.3	19.9	25.6	31.3	37.0	38.4
34°	19.9	18.5	24.2	31.3	37.0	38.4
35°	17.1	18.5	24.2	29.9	35.6	38.4
36°	15.6	17.1	24.2	29.9	35.6	38.4
37°	14.2	17.1	22.8	29.9	35.6	38.4
38°	12.8	15.6	22.8	29.9	35.6	38.4
39°	11.4	15.6	21.3	29.9	35.6	38.4
40°	10.0	14.2	21.3	28.4	35.6	38.4
41°	10.0	14.2	21.3	28.4	35.6	38.4
42°	8.5	14.2	21.3	28.4	35.6	38.4
43°	7.1	12.8	21.3	28.4	35.6	38.4
44°	5.7	12.8	19.9	28.4	35.6	38.4
45°	5.7	12.8	19.9	28.4	35.6	38.4
46°	4.3	11.4	19.9	28.4	35.6	38.4
47°	2.8	11.4	19.9	27.0	35.6	38.4
48°	2.8	11.4	19.9	27.0	35.6	38.4
49°	2.8	11.4	18.5	27.0	35.6	38.4
50°	2.8	11.4	18.5	27.0	35.6	38.4
51°	1.4	10.0	18.5	27.0	35.6	38.4
52°	1.4	10.0	18.5	27.0	35.6	39.8
53°	1.4	10.0	18.5	27.0	35.6	38.4
54°	1.4	10.0	17.1	27.0	35.6	38.4
55°	1.4	10.0	17.1	27.0	35.6	38.4
56°	1.4	8.5	17.1	25.6	35.6	38.4
57°	2.8	8.5	17.1	25.6	35.6	37.0
58°	2.8	8.5	17.1	25.6	34.1	37.0
59°	2.8	8.5	17.1	25.6	34.1	37.0
60°	2.8	8.5	15.6	25.6	34.1	37.0
62.5°	2.8	8.5	15.6	24.2	32.7	35.6
65°	2.8	8.5	14.2	22.8	32.7	34.1



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.8	7.1	14.2	21.3	31.3	32.7
70°	4.3	7.1	12.8	21.3	29.9	31.3
72.5°	4.3	7.1	12.8	18.5	27.0	29.9
75°	4.3	7.1	11.4	17.1	25.6	27.0
77.5°	4.3	7.1	10.0	15.6	22.8	24.2
80°	5.7	7.1	8.5	12.8	19.9	21.3
82.5°	5.7	7.1	7.1	10.0	15.6	17.1
85°	4.3	5.7	5.7	7.1	10.0	11.4
87.5°	4.3	5.7	4.3	2.8	5.7	5.7
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)