

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: P1314495

Luminaire Tested: P3SQAS17R209735DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1314495
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: P3SQAS17R209735DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R20 optic, 3500K CCT AND, 97CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

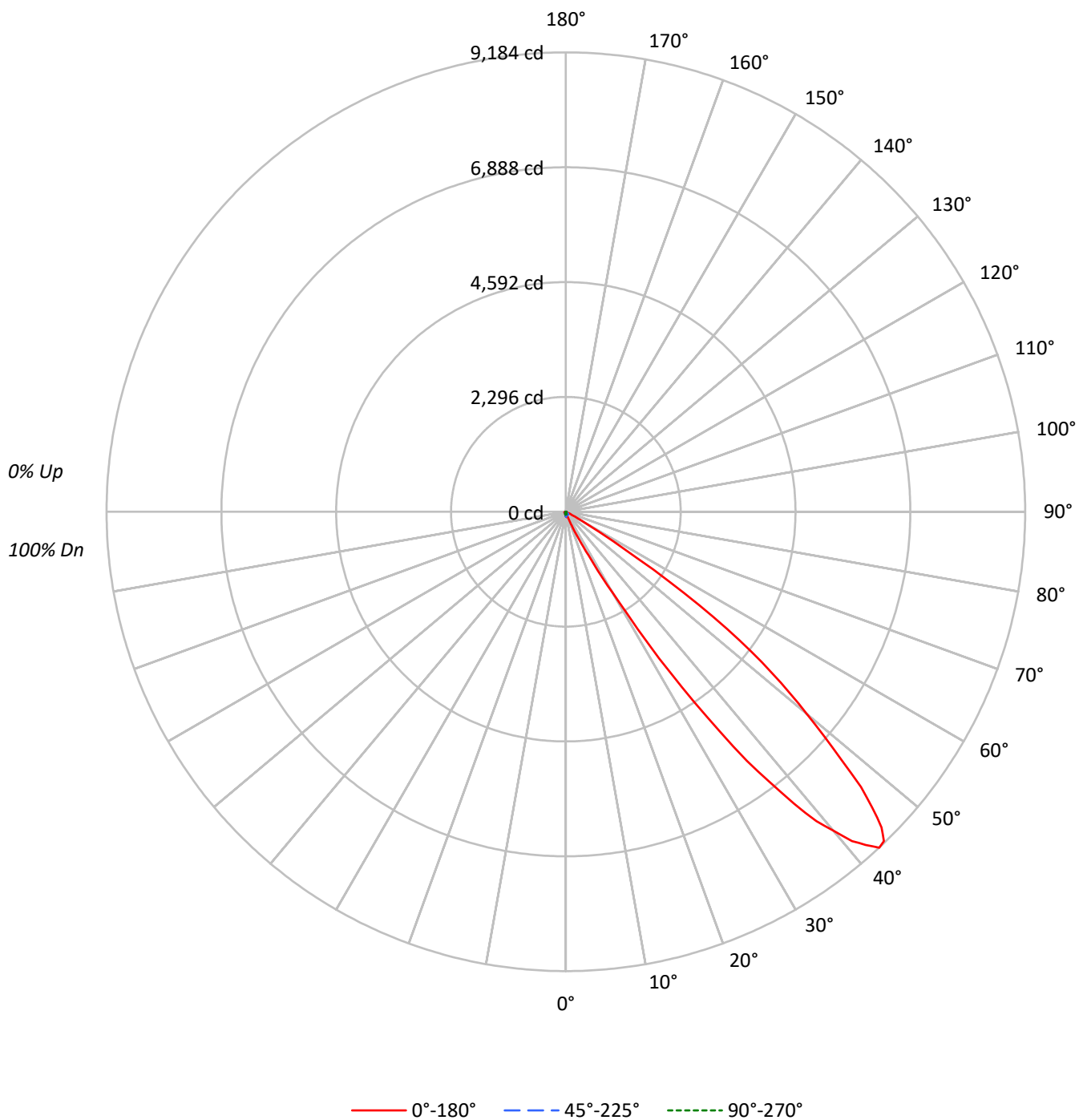
Lumens per Lamp: N/A
Luminaire Lumens: 1276.1 lumens
Efficiency: N/A
Efficacy: 60.2 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.14
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 21.2
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°	15276	15276	15276	15276	15276
5°	17824	16579	14297	12430	12032
10°	17610	15092	11332	9653	9443
15°	15387	11554	8344	7702	8130
20°	22854	9677	6158	6598	7258
25°	98434	10033	4789	5929	7069
30°	372256	12171	4057	5727	6921
35°	1128469	14633	3784	5803	7317
40°	1871228	14568	3237	6205	7824
45°	2174987	9937	2923	6430	8476
50°	1688366	5466	2894	6752	9646
55°	977199	3603	2883	7567	10449
60°	165230	827	2480	7853	11573
65°	12714	0	2934	8802	13203
70°	1813	0	3626	9668	15106
75°	1597	799	3993	11179	17567
80°	1190	1190	5951	11901	20233
85°	2371	2371	9485	11856	21341

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2174987 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.6	0.6
10°-20°	16.0	1.3
20°-30°	51.0	4.0
30°-40°	325.4	25.5
40°-50°	595.6	46.7
50°-60°	244.7	19.2
60°-70°	20.6	1.6
70°-80°	10.3	0.8
80°-90°	4.8	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°	74.6	5.8
0°-40°	400.0	31.3
0°-60°	1240.3	97.2
0°-90°	1276.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1276.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	89	89	89	89	89	
5°	103	96	83	72	70	10
15°	86	65	47	43	46	27
25°	518	53	25	31	37	341
35°	5367	70	18	28	35	3397
45°	8930	41	12	26	35	6412
55°	3254	12	10	25	35	2845
65°	31	0	7	22	32	102
75°	2	1	6	17	26	3
85°	1	1	5	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°	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
2.5°	97.1	97.1	97.1	95.9	95.9	97.1	95.9	95.9	95.9	95.9	94.7
5°	103.1	103.1	103.1	103.1	103.1	103.1	103.1	101.9	101.9	100.7	95.9
7.5°	105.5	105.5	105.5	105.5	104.3	104.3	104.3	104.3	103.1	101.9	93.5
10°	100.7	100.7	100.7	99.5	99.5	99.5	98.3	98.3	97.1	95.9	86.3
12.5°	91.1	91.1	91.1	91.1	89.9	89.9	88.7	88.7	87.5	86.3	75.5
15°	86.3	86.3	86.3	85.1	85.1	83.9	82.7	81.5	80.3	77.9	64.8
17.5°	93.5	93.5	92.3	92.3	89.9	87.5	86.3	82.7	80.3	76.7	57.6
20°	124.7	125.9	121.1	117.5	115.1	107.9	104.3	98.3	93.5	87.5	52.8
22.5°	251.8	247.0	238.6	225.4	209.8	196.7	172.7	153.5	140.3	122.3	51.6
25°	518.0	513.2	490.4	471.3	423.3	386.1	334.6	292.6	249.4	207.5	52.8
27.5°	984.5	952.1	946.1	858.6	791.4	695.5	596.0	512.0	435.3	350.1	56.4
30°	1871.9	1834.7	1704.0	1572.1	1391.0	1185.9	990.5	808.2	655.9	518.0	61.2
31°	2375.5	2411.5	2258.0	1993.0	1725.6	1463.0	1195.5	964.1	767.4	596.0	63.6
32°	3122.6	2965.5	2803.6	2531.4	2142.9	1807.1	1471.3	1138.0	879.0	679.9	66.0
33°	3828.9	3736.5	3489.5	3150.1	2683.7	2212.4	1777.1	1343.0	1015.7	781.8	67.2
34°	4581.9	4480.0	4279.7	3792.9	3280.8	2663.3	2082.9	1579.3	1178.8	881.4	68.4
35°	5367.4	5324.2	4938.1	4516.0	3886.4	3141.7	2451.0	1838.3	1338.2	972.5	69.6
36°	6157.6	6018.5	5716.3	5099.9	4442.8	3584.2	2837.2	2079.3	1500.1	1080.4	69.6
37°	6752.4	6721.2	6320.7	5719.9	4947.7	4056.7	3170.5	2346.7	1663.2	1172.8	69.6
38°	7408.3	7284.8	6878.3	6266.7	5422.5	4489.6	3519.5	2579.4	1817.9	1256.7	68.4
39°	7961.1	7777.6	7367.5	6763.2	5837.4	4818.1	3796.5	2804.8	1954.6	1326.2	67.2
40°	8323.2	8196.1	7768.0	7088.1	6213.9	5128.7	4077.1	2990.7	2056.5	1379.0	64.8
41°	8722.5	8511.5	8088.2	7404.7	6487.4	5402.1	4253.4	3113.0	2135.7	1413.8	62.4
42°	8961.2	8788.5	8286.1	7616.9	6682.8	5558.0	4397.2	3206.5	2183.6	1431.8	57.6
43°	9184.2	8949.2	8459.9	7740.5	6812.3	5668.3	4463.2	3249.7	2194.4	1431.8	51.6
44°	9154.2	8931.2	8424.0	7757.2	6841.1	5700.7	4490.8	3250.9	2177.6	1413.8	45.6
45°	8930.0	8708.2	8251.3	7610.9	6738.0	5637.2	4435.6	3202.9	2130.9	1382.6	40.8
46°	8518.7	8298.1	7947.9	7366.3	6546.1	5493.3	4307.3	3098.6	2052.9	1332.2	36.0
47°	8071.4	7856.8	7498.2	6971.8	6218.7	5236.6	4121.4	2952.3	1943.8	1259.1	32.4
48°	7422.7	7288.4	6928.6	6479.0	5764.3	4834.9	3795.3	2713.7	1797.5	1164.4	27.6
49°	6849.5	6708.0	6392.6	5909.4	5171.9	4367.3	3405.6	2423.5	1606.8	1058.8	24.0
50°	6301.5	6178.0	5886.6	5341.0	4637.1	3802.5	2879.1	2057.7	1367.0	928.1	20.4
51°	5765.5	5673.1	5375.7	4874.5	4159.8	3368.4	2494.2	1713.6	1129.6	769.8	19.2
52°	5227.1	5216.3	4893.7	4386.5	3695.8	2935.5	2120.1	1446.2	958.1	646.3	18.0
53°	4647.9	4578.3	4296.5	3840.8	3177.7	2484.6	1797.5	1219.5	825.0	550.4	15.6
54°	3988.3	3910.4	3608.2	3196.9	2596.1	2034.9	1448.6	985.7	687.1	465.3	14.4
55°	3254.5	3121.4	2901.9	2479.8	2027.7	1552.9	1118.8	780.6	549.2	387.3	12.0
56°	2469.0	2335.9	2212.4	1901.8	1488.1	1158.4	833.4	598.4	429.3	305.8	10.8
57°	1717.2	1710.0	1507.3	1268.7	995.3	789.0	570.8	422.1	303.4	237.4	8.4
58°	1114.0	1076.8	947.3	809.4	651.1	492.8	366.9	286.6	206.3	161.9	7.2
59°	780.6	706.3	636.7	539.6	410.1	310.6	236.2	183.5	142.7	112.7	4.8
60°	479.7	464.1	417.3	328.6	266.2	219.4	176.3	135.5	104.3	80.3	2.4
62.5°	136.7	139.1	125.9	111.5	95.9	82.7	74.3	63.6	52.8	42.0	0.0
65°	31.2	30.0	32.4	30.0	27.6	27.6	24.0	21.6	19.2	18.0	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°	9.6	9.6	8.4	8.4	8.4	7.2	7.2	6.0	6.0	4.8	0.0
70°	3.6	3.6	3.6	3.6	3.6	2.4	2.4	2.4	1.2	1.2	0.0
72.5°	3.6	3.6	3.6	2.4	2.4	2.4	2.4	2.4	1.2	1.2	1.2
75°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	1.2	1.2	1.2	1.2
77.5°	2.4	2.4	2.4	2.4	2.4	1.2	2.4	1.2	1.2	1.2	1.2
80°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
85°	1.2	1.2	1.2	1.2	0.0	0.0	1.2	1.2	1.2	0.0	1.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
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°	88.7	88.7	88.7	88.7	88.7	88.7
2.5°	92.3	87.5	83.9	80.3	79.1	79.1
5°	89.9	82.7	75.5	71.9	69.6	69.6
7.5°	82.7	74.3	67.2	63.6	62.4	62.4
10°	74.3	64.8	57.6	55.2	55.2	54.0
12.5°	64.8	55.2	50.4	49.2	49.2	49.2
15°	54.0	46.8	43.2	43.2	44.4	45.6
17.5°	45.6	38.4	37.2	39.6	42.0	42.0
20°	38.4	33.6	33.6	36.0	38.4	39.6
22.5°	32.4	28.8	30.0	33.6	37.2	38.4
25°	28.8	25.2	27.6	31.2	34.8	37.2
27.5°	24.0	22.8	25.2	30.0	34.8	36.0
30°	20.4	20.4	24.0	28.8	33.6	34.8
31°	19.2	19.2	24.0	28.8	33.6	34.8
32°	18.0	19.2	22.8	28.8	33.6	34.8
33°	16.8	18.0	22.8	27.6	33.6	34.8
34°	15.6	18.0	22.8	27.6	33.6	34.8
35°	14.4	18.0	22.8	27.6	33.6	34.8
36°	13.2	16.8	21.6	27.6	33.6	34.8
37°	12.0	16.8	21.6	27.6	33.6	34.8
38°	10.8	15.6	21.6	27.6	33.6	34.8
39°	10.8	15.6	20.4	27.6	32.4	34.8
40°	9.6	14.4	20.4	27.6	32.4	34.8
41°	8.4	14.4	20.4	26.4	32.4	34.8
42°	7.2	13.2	19.2	26.4	32.4	34.8
43°	6.0	13.2	19.2	26.4	32.4	34.8
44°	6.0	12.0	19.2	26.4	32.4	34.8
45°	4.8	12.0	19.2	26.4	32.4	34.8
46°	3.6	12.0	19.2	26.4	32.4	34.8
47°	3.6	10.8	18.0	26.4	32.4	34.8
48°	2.4	10.8	18.0	26.4	32.4	34.8
49°	2.4	10.8	18.0	26.4	32.4	36.0
50°	2.4	10.8	18.0	25.2	32.4	36.0
51°	1.2	10.8	18.0	25.2	32.4	36.0
52°	1.2	10.8	16.8	25.2	33.6	36.0
53°	1.2	9.6	16.8	25.2	33.6	36.0
54°	1.2	9.6	16.8	25.2	33.6	34.8
55°	1.2	9.6	16.8	25.2	32.4	34.8
56°	1.2	8.4	16.8	25.2	32.4	34.8
57°	1.2	8.4	15.6	24.0	32.4	33.6
58°	1.2	8.4	15.6	24.0	32.4	33.6
59°	1.2	8.4	15.6	24.0	31.2	33.6
60°	2.4	7.2	14.4	22.8	31.2	33.6
62.5°	2.4	7.2	14.4	22.8	30.0	32.4
65°	2.4	7.2	13.2	21.6	30.0	32.4



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.4	6.0	12.0	20.4	28.8	31.2
70°	2.4	7.2	12.0	19.2	27.6	30.0
72.5°	3.6	6.0	10.8	18.0	26.4	28.8
75°	3.6	6.0	10.8	16.8	25.2	26.4
77.5°	4.8	6.0	9.6	14.4	22.8	24.0
80°	4.8	6.0	8.4	12.0	19.2	20.4
82.5°	4.8	6.0	6.0	9.6	14.4	15.6
85°	3.6	4.8	4.8	6.0	9.6	10.8
87.5°	3.6	4.8	3.6	2.4	4.8	4.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)