

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: P1313523

Luminaire Tested: P3SQAS17R209730DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1313523
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: P3SQAS17R209730DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R20 optic, 3000K CCT AND, 97CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

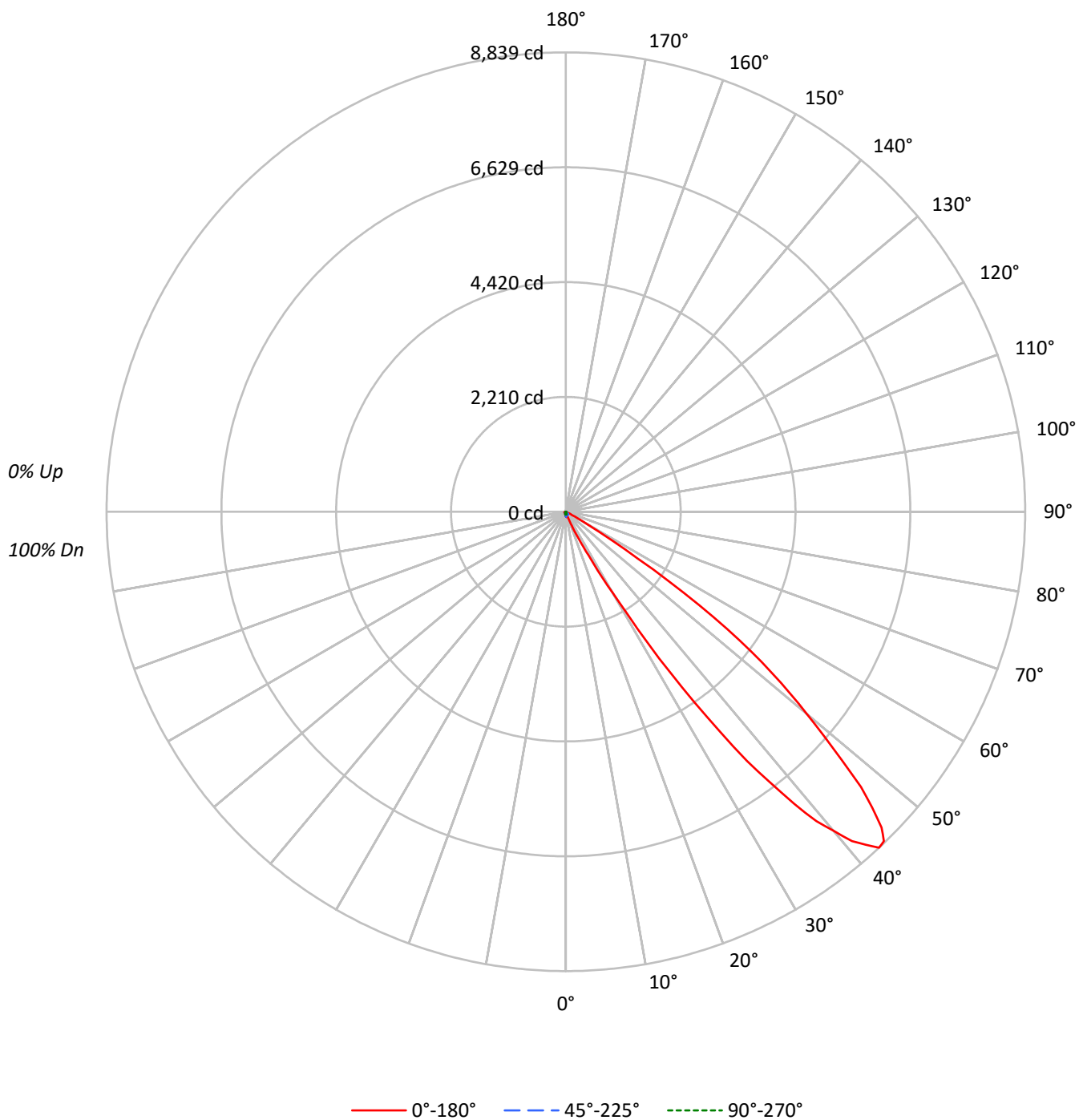
Lumens per Lamp: N/A
Luminaire Lumens: 1228.0 lumens
Efficiency: N/A
Efficacy: 57.9 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	14708	14708	14708	14708	14708
5°	17150	15957	13761	11963	11566
10°	16946	14532	10895	9286	9076
15°	14817	11108	8023	7399	7827
20°	21993	9310	5920	6341	6983
25°	94728	9653	4599	5701	6803
30°	358236	11713	3898	5509	6662
35°	1086000	14065	3637	5571	7043
40°	1800836	14006	3103	5958	7531
45°	2093176	9548	2801	6186	8159
50°	1624840	5251	2786	6484	9270
55°	940417	3453	2762	7266	10059
60°	158996	792	2377	7543	11126
65°	12225	0	2812	8476	12714
70°	1762	0	3474	9316	14552
75°	1530	799	3859	10780	16902
80°	1190	1190	5752	11406	19439
85°	2371	2371	9090	11461	20551

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2093176 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.3	0.6
10°-20°	15.4	1.3
20°-30°	49.0	4.0
30°-40°	313.1	25.5
40°-50°	573.2	46.7
50°-60°	235.5	19.2
60°-70°	19.9	1.6
70°-80°	9.9	0.8
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°	71.7	5.8
0°-40°	384.9	31.3
0°-60°	1193.6	97.2
0°-90°	1228.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1228.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	85	85	85	85	85	
5°	99	92	80	69	67	9
15°	83	62	45	42	44	26
25°	498	51	24	30	36	328
35°	5165	67	17	26	34	3269
45°	8594	39	12	25	34	6171
55°	3132	12	9	24	34	2738
65°	30	0	7	21	31	98
75°	2	1	6	16	25	3
85°	1	1	5	6	10	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°	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4
2.5°	93.5	93.5	93.5	92.3	92.3	93.5	92.3	92.3	92.3	92.3	91.2
5°	99.2	99.2	99.2	99.2	99.2	99.2	99.2	98.1	98.1	96.9	92.3
7.5°	101.6	101.6	101.6	101.6	100.4	100.4	100.4	100.4	99.2	98.1	90.0
10°	96.9	96.9	96.9	95.8	95.8	95.8	94.6	94.6	93.5	92.3	83.1
12.5°	87.7	87.7	87.7	87.7	86.6	86.6	85.4	85.4	84.2	83.1	72.7
15°	83.1	83.1	83.1	81.9	81.9	80.8	79.6	78.5	77.3	75.0	62.3
17.5°	90.0	90.0	88.9	88.9	86.6	84.2	83.1	79.6	77.3	73.9	55.4
20°	120.0	121.2	116.6	113.1	110.8	103.9	100.4	94.6	90.0	84.2	50.8
22.5°	242.3	237.7	229.7	217.0	202.0	189.3	166.2	147.7	135.0	117.7	49.6
25°	498.5	493.9	472.0	453.5	407.4	371.6	322.0	281.6	240.0	199.6	50.8
27.5°	947.5	916.3	910.5	826.3	761.7	669.3	573.6	492.8	418.9	337.0	54.2
30°	1801.4	1765.7	1639.9	1512.9	1338.7	1141.3	953.2	777.8	631.3	498.5	58.9
31°	2286.1	2320.8	2173.0	1918.0	1660.7	1407.9	1150.6	927.8	738.6	573.6	61.2
32°	3005.1	2853.9	2698.1	2436.2	2062.3	1739.1	1416.0	1095.2	845.9	654.3	63.5
33°	3684.8	3596.0	3358.2	3031.6	2582.7	2129.2	1710.3	1292.5	977.5	752.4	64.6
34°	4409.6	4311.5	4118.7	3650.2	3157.4	2563.1	2004.6	1519.9	1134.4	848.2	65.8
35°	5165.4	5123.9	4752.3	4346.1	3740.2	3023.6	2358.8	1769.1	1287.9	935.9	66.9
36°	5926.0	5792.1	5501.3	4908.1	4275.7	3449.4	2730.4	2001.1	1443.7	1039.8	66.9
37°	6498.4	6468.3	6082.9	5504.7	4761.5	3904.1	3051.3	2258.4	1600.6	1128.6	66.9
38°	7129.6	7010.7	6619.5	6031.0	5218.5	4320.7	3387.1	2482.3	1749.5	1209.4	65.8
39°	7661.6	7485.0	7090.4	6508.7	5617.8	4636.9	3653.7	2699.3	1881.1	1276.4	64.6
40°	8010.1	7887.8	7475.8	6821.5	5980.2	4935.8	3923.7	2878.2	1979.2	1327.1	62.3
41°	8394.4	8191.3	7783.9	7126.1	6243.3	5198.9	4093.4	2995.9	2055.3	1360.6	60.0
42°	8624.1	8457.9	7974.4	7330.4	6431.4	5348.9	4231.8	3085.9	2101.5	1377.9	55.4
43°	8838.7	8612.5	8141.7	7449.3	6556.1	5455.1	4295.3	3127.4	2111.9	1377.9	49.6
44°	8809.9	8595.2	8107.1	7465.4	6583.8	5486.3	4321.8	3128.6	2095.7	1360.6	43.9
45°	8594.1	8380.6	7940.9	7324.6	6484.5	5425.1	4268.8	3082.4	2050.7	1330.6	39.2
46°	8198.2	7985.9	7648.9	7089.2	6299.9	5286.6	4145.3	2982.0	1975.7	1282.1	34.6
47°	7767.8	7561.2	7216.2	6709.5	5984.8	5039.7	3966.4	2841.2	1870.7	1211.7	31.2
48°	7143.5	7014.2	6668.0	6235.2	5547.4	4653.1	3652.5	2611.6	1729.9	1120.6	26.5
49°	6591.8	6455.7	6152.1	5687.1	4977.3	4203.0	3277.5	2332.3	1546.4	1019.0	23.1
50°	6064.4	5945.6	5665.1	5140.1	4462.6	3659.4	2770.8	1980.3	1315.6	893.2	19.6
51°	5548.6	5459.7	5173.5	4691.1	4003.3	3241.7	2400.4	1649.1	1087.1	740.9	18.5
52°	5030.4	5020.0	4709.6	4221.4	3556.7	2825.1	2040.3	1391.8	922.1	622.0	17.3
53°	4473.0	4406.1	4134.9	3696.4	3058.2	2391.2	1729.9	1173.7	794.0	529.7	15.0
54°	3838.3	3763.3	3472.5	3076.6	2498.5	1958.4	1394.1	948.6	661.3	447.8	13.8
55°	3132.0	3003.9	2792.8	2386.5	1951.5	1494.5	1076.7	751.3	528.5	372.8	11.5
56°	2376.2	2248.1	2129.2	1830.3	1432.2	1114.8	802.1	575.9	413.1	294.3	10.4
57°	1652.6	1645.6	1450.6	1221.0	957.8	759.4	549.3	406.2	292.0	228.5	8.1
58°	1072.1	1036.3	911.7	779.0	626.6	474.3	353.1	275.8	198.5	155.8	6.9
59°	751.3	679.7	612.8	519.3	394.7	298.9	227.3	176.6	137.3	108.5	4.6
60°	461.6	446.6	401.6	316.2	256.2	211.2	169.6	130.4	100.4	77.3	2.3
62.5°	131.6	133.9	121.2	107.3	92.3	79.6	71.5	61.2	50.8	40.4	0.0
65°	30.0	28.9	31.2	28.9	26.5	26.5	23.1	20.8	18.5	17.3	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°	9.2	9.2	8.1	8.1	8.1	6.9	6.9	5.8	5.8	4.6	0.0
70°	3.5	3.5	3.5	3.5	3.5	2.3	2.3	2.3	1.2	1.2	0.0
72.5°	3.5	3.5	3.5	2.3	2.3	2.3	2.3	2.3	1.2	1.2	1.2
75°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	1.2	1.2	1.2	1.2
77.5°	2.3	2.3	2.3	2.3	2.3	1.2	2.3	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°	85.4	85.4	85.4	85.4	85.4	85.4
2.5°	88.9	84.2	80.8	77.3	76.2	76.2
5°	86.6	79.6	72.7	69.2	66.9	66.9
7.5°	79.6	71.5	64.6	61.2	60.0	60.0
10°	71.5	62.3	55.4	53.1	53.1	51.9
12.5°	62.3	53.1	48.5	47.3	47.3	47.3
15°	51.9	45.0	41.5	41.5	42.7	43.9
17.5°	43.9	36.9	35.8	38.1	40.4	40.4
20°	36.9	32.3	32.3	34.6	36.9	38.1
22.5°	31.2	27.7	28.9	32.3	35.8	36.9
25°	27.7	24.2	26.5	30.0	33.5	35.8
27.5°	23.1	21.9	24.2	28.9	33.5	34.6
30°	19.6	19.6	23.1	27.7	32.3	33.5
31°	18.5	18.5	23.1	27.7	32.3	33.5
32°	17.3	18.5	21.9	27.7	32.3	33.5
33°	16.2	17.3	21.9	26.5	32.3	33.5
34°	15.0	17.3	21.9	26.5	32.3	33.5
35°	13.8	17.3	21.9	26.5	32.3	33.5
36°	12.7	16.2	20.8	26.5	32.3	33.5
37°	11.5	16.2	20.8	26.5	32.3	33.5
38°	10.4	15.0	20.8	26.5	32.3	33.5
39°	10.4	15.0	19.6	26.5	31.2	33.5
40°	9.2	13.8	19.6	26.5	31.2	33.5
41°	8.1	13.8	19.6	25.4	31.2	33.5
42°	6.9	12.7	18.5	25.4	31.2	33.5
43°	5.8	12.7	18.5	25.4	31.2	33.5
44°	5.8	11.5	18.5	25.4	31.2	33.5
45°	4.6	11.5	18.5	25.4	31.2	33.5
46°	3.5	11.5	18.5	25.4	31.2	33.5
47°	3.5	10.4	17.3	25.4	31.2	33.5
48°	2.3	10.4	17.3	25.4	31.2	33.5
49°	2.3	10.4	17.3	25.4	31.2	34.6
50°	2.3	10.4	17.3	24.2	31.2	34.6
51°	1.2	10.4	17.3	24.2	31.2	34.6
52°	1.2	10.4	16.2	24.2	32.3	34.6
53°	1.2	9.2	16.2	24.2	32.3	34.6
54°	1.2	9.2	16.2	24.2	32.3	33.5
55°	1.2	9.2	16.2	24.2	31.2	33.5
56°	1.2	8.1	16.2	24.2	31.2	33.5
57°	1.2	8.1	15.0	23.1	31.2	32.3
58°	1.2	8.1	15.0	23.1	31.2	32.3
59°	1.2	8.1	15.0	23.1	30.0	32.3
60°	2.3	6.9	13.8	21.9	30.0	32.3
62.5°	2.3	6.9	13.8	21.9	28.9	31.2
65°	2.3	6.9	12.7	20.8	28.9	31.2



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.3	5.8	11.5	19.6	27.7	30.0
70°	2.3	6.9	11.5	18.5	26.5	28.9
72.5°	3.5	5.8	10.4	17.3	25.4	27.7
75°	3.5	5.8	10.4	16.2	24.2	25.4
77.5°	4.6	5.8	9.2	13.8	21.9	23.1
80°	4.6	5.8	8.1	11.5	18.5	19.6
82.5°	4.6	5.8	5.8	9.2	13.8	15.0
85°	3.5	4.6	4.6	5.8	9.2	10.4
87.5°	3.5	4.6	3.5	2.3	4.6	4.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)