

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: P1308131

Luminaire Tested: P3SQAS17R209030DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1308131
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: P3SQAS17R209030DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R20 optic, 3000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

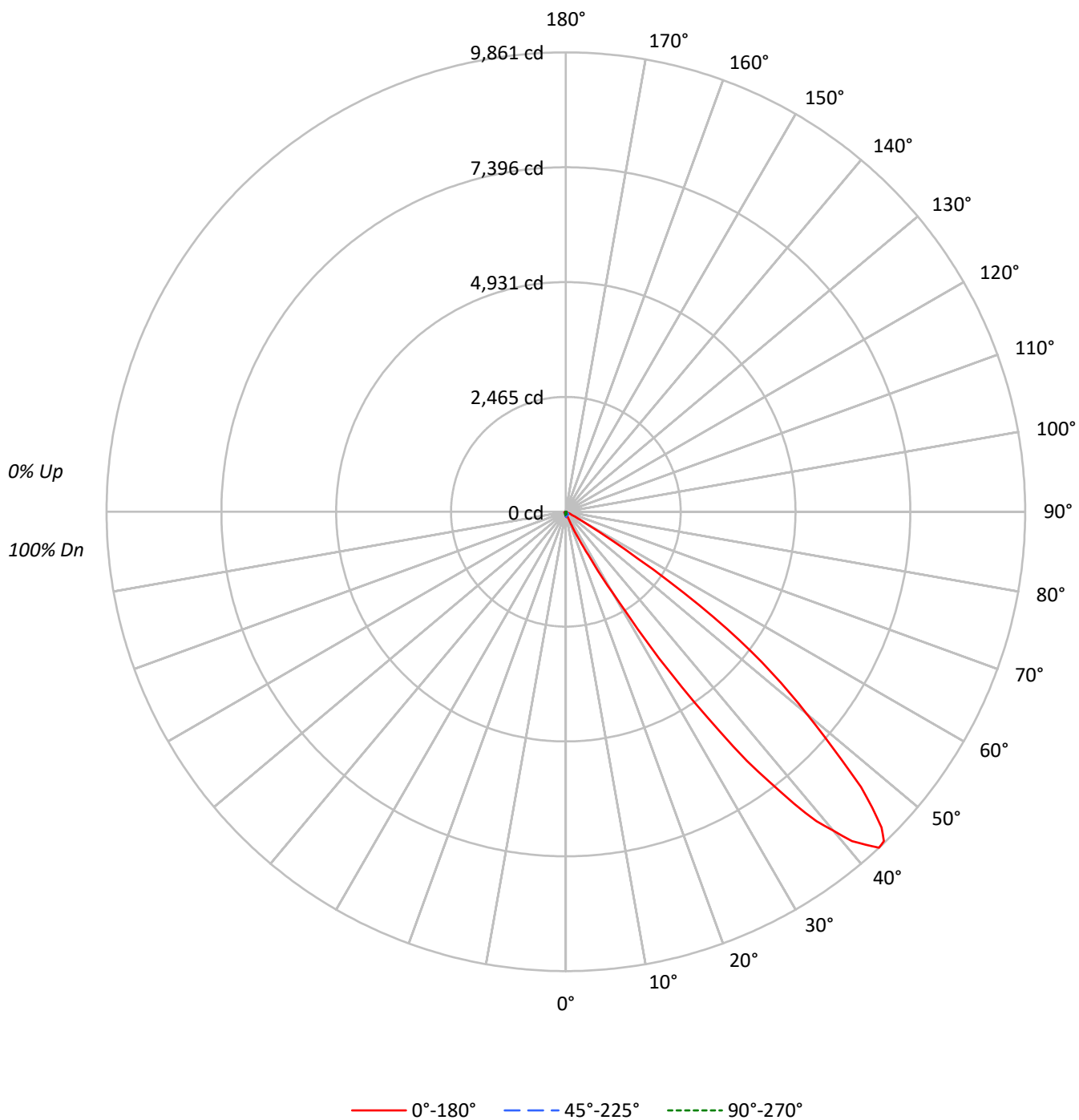
Lumens per Lamp: N/A
Luminaire Lumens: 1370.0 lumens
Efficiency: N/A
Efficacy: 64.6 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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
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°	16413	16413	16413	16413	16413
5°	19138	17807	15352	13346	12914
10°	18904	16211	12154	10353	10126
15°	16528	12392	8951	8255	8719
20°	24541	10373	6598	7074	7789
25°	105693	10756	5131	6366	7582
30°	399680	13065	4355	6145	7418
35°	1211600	15705	4058	6223	7842
40°	2009088	15625	3462	6655	8386
45°	2335225	10668	3142	6893	9085
50°	1812740	5868	3108	7234	10342
55°	1049172	3873	3093	8107	11200
60°	177389	896	2652	8439	12400
65°	13652	0	3138	9454	14181
70°	1964	0	3877	10373	16214
75°	1730	865	4259	11978	18831
80°	1289	1289	6347	12794	21720
85°	2569	2569	10078	12647	22922

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2335225 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	8.2	0.6
10°-20°	17.1	1.3
20°-30°	54.7	4.0
30°-40°	349.4	25.5
40°-50°	639.5	46.7
50°-60°	262.7	19.2
60°-70°	22.2	1.6
70°-80°	11.0	0.8
80°-90°	5.2	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°	80.0	5.8
0°-40°	429.4	31.3
0°-60°	1331.6	97.2
0°-90°	1370.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1370.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	95	95	95	95	95	
5°	111	103	89	77	75	10
15°	93	70	50	46	49	29
25°	556	57	27	34	40	366
35°	5763	75	19	30	37	3648
45°	9588	44	13	28	37	6884
55°	3494	13	10	27	37	3054
65°	34	0	8	23	35	109
75°	3	1	6	18	28	3
85°	1	1	5	6	12	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°	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
2.5°	104.3	104.3	104.3	103.0	103.0	104.3	103.0	103.0	103.0	103.0	101.7
5°	110.7	110.7	110.7	110.7	110.7	110.7	110.7	109.4	109.4	108.1	103.0
7.5°	113.3	113.3	113.3	113.3	112.0	112.0	112.0	112.0	110.7	109.4	100.4
10°	108.1	108.1	108.1	106.9	106.9	106.9	105.6	105.6	104.3	103.0	92.7
12.5°	97.8	97.8	97.8	97.8	96.6	96.6	95.3	95.3	94.0	92.7	81.1
15°	92.7	92.7	92.7	91.4	91.4	90.1	88.8	87.5	86.3	83.7	69.5
17.5°	100.4	100.4	99.1	99.1	96.6	94.0	92.7	88.8	86.3	82.4	61.8
20°	133.9	135.2	130.0	126.2	123.6	115.9	112.0	105.6	100.4	94.0	56.6
22.5°	270.4	265.2	256.2	242.0	225.3	211.1	185.4	164.8	150.6	131.3	55.4
25°	556.2	551.0	526.6	506.0	454.5	414.6	359.2	314.1	267.8	222.7	56.6
27.5°	1057.0	1022.3	1015.8	921.8	849.7	746.7	639.9	549.8	467.4	375.9	60.5
30°	2009.8	1969.8	1829.5	1687.9	1493.5	1273.3	1063.5	867.8	704.3	556.2	65.7
31°	2550.5	2589.1	2424.3	2139.8	1852.7	1570.7	1283.6	1035.1	824.0	639.9	68.2
32°	3352.6	3183.9	3010.1	2717.9	2300.7	1940.2	1579.7	1221.8	943.7	730.0	70.8
33°	4110.9	4011.8	3746.6	3382.2	2881.4	2375.4	1908.0	1442.0	1090.5	839.4	72.1
34°	4919.5	4810.0	4595.0	4072.3	3522.5	2859.5	2236.4	1695.6	1265.6	946.3	73.4
35°	5762.8	5716.4	5301.8	4848.6	4172.7	3373.2	2631.6	1973.7	1436.8	1044.1	74.7
36°	6611.2	6461.9	6137.4	5475.6	4770.1	3848.3	3046.2	2232.5	1610.6	1160.0	74.7
37°	7249.8	7216.3	6786.3	6141.3	5312.1	4355.5	3404.1	2519.6	1785.7	1259.2	74.7
38°	7954.0	7821.4	7385.0	6728.4	5822.0	4820.3	3778.7	2769.4	1951.8	1349.3	73.4
39°	8547.6	8350.6	7910.3	7261.4	6267.4	5173.1	4076.2	3011.4	2098.6	1424.0	72.1
40°	8936.4	8799.9	8340.3	7610.3	6671.7	5506.5	4377.4	3211.0	2208.0	1480.6	69.5
41°	9365.1	9138.5	8684.0	7950.2	6965.3	5800.1	4566.7	3342.3	2293.0	1517.9	66.9
42°	9621.3	9435.9	8896.5	8178.1	7175.1	5967.5	4721.2	3442.7	2344.5	1537.2	61.8
43°	9860.8	9608.5	9083.2	8310.7	7314.2	6085.9	4792.0	3489.1	2356.1	1537.2	55.4
44°	9828.6	9589.1	9044.5	8328.7	7345.1	6120.7	4821.6	3490.4	2338.1	1517.9	48.9
45°	9587.9	9349.7	8859.1	8171.6	7234.3	6052.4	4762.4	3438.9	2287.8	1484.5	43.8
46°	9146.2	8909.4	8533.4	7909.0	7028.3	5897.9	4624.6	3326.8	2204.2	1430.4	38.6
47°	8666.0	8435.6	8050.6	7485.4	6676.9	5622.4	4425.1	3169.8	2087.0	1351.9	34.8
48°	7969.5	7825.3	7439.1	6956.2	6188.9	5191.1	4074.9	2913.6	1929.9	1250.1	29.6
49°	7354.1	7202.2	6863.5	6344.7	5552.9	4689.0	3656.4	2602.0	1725.2	1136.8	25.7
50°	6765.7	6633.1	6320.2	5734.4	4978.7	4082.6	3091.2	2209.3	1467.7	996.5	21.9
51°	6190.2	6091.1	5771.8	5233.6	4466.3	3616.5	2678.0	1839.8	1212.8	826.6	20.6
52°	5612.1	5600.5	5254.2	4709.6	3968.0	3151.7	2276.3	1552.7	1028.7	694.0	19.3
53°	4990.3	4915.6	4613.0	4123.8	3411.8	2667.7	1929.9	1309.4	885.8	591.0	16.7
54°	4282.2	4198.5	3874.0	3432.4	2787.4	2184.9	1555.3	1058.3	737.7	499.5	15.4
55°	3494.2	3351.3	3115.7	2662.5	2177.1	1667.3	1201.2	838.1	589.7	415.9	12.9
56°	2650.9	2508.0	2375.4	2041.9	1597.8	1243.7	894.8	642.5	460.9	328.3	11.6
57°	1843.7	1835.9	1618.4	1362.2	1068.6	847.2	612.8	453.2	325.7	254.9	9.0
58°	1196.1	1156.2	1017.1	869.0	699.1	529.2	394.0	307.7	221.4	173.8	7.7
59°	838.1	758.3	683.7	579.4	440.3	333.5	253.6	197.0	153.2	121.0	5.1
60°	515.0	498.3	448.0	352.8	285.8	235.6	189.3	145.5	112.0	86.3	2.6
62.5°	146.8	149.3	135.2	119.7	103.0	88.8	79.8	68.2	56.6	45.1	0.0
65°	33.5	32.2	34.8	32.2	29.6	29.6	25.7	23.2	20.6	19.3	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°	10.3	10.3	9.0	9.0	9.0	7.7	7.7	6.4	6.4	5.1	0.0
70°	3.9	3.9	3.9	3.9	3.9	2.6	2.6	2.6	1.3	1.3	0.0
72.5°	3.9	3.9	3.9	2.6	2.6	2.6	2.6	2.6	1.3	1.3	1.3
75°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	1.3	1.3	1.3	1.3
77.5°	2.6	2.6	2.6	2.6	2.6	1.3	2.6	1.3	1.3	1.3	1.3
80°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
82.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
85°	1.3	1.3	1.3	1.3	0.0	0.0	1.3	1.3	1.3	0.0	1.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
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°	95.3	95.3	95.3	95.3	95.3	95.3
2.5°	99.1	94.0	90.1	86.3	85.0	85.0
5°	96.6	88.8	81.1	77.2	74.7	74.7
7.5°	88.8	79.8	72.1	68.2	66.9	66.9
10°	79.8	69.5	61.8	59.2	59.2	57.9
12.5°	69.5	59.2	54.1	52.8	52.8	52.8
15°	57.9	50.2	46.3	46.3	47.6	48.9
17.5°	48.9	41.2	39.9	42.5	45.1	45.1
20°	41.2	36.0	36.0	38.6	41.2	42.5
22.5°	34.8	30.9	32.2	36.0	39.9	41.2
25°	30.9	27.0	29.6	33.5	37.3	39.9
27.5°	25.7	24.5	27.0	32.2	37.3	38.6
30°	21.9	21.9	25.7	30.9	36.0	37.3
31°	20.6	20.6	25.7	30.9	36.0	37.3
32°	19.3	20.6	24.5	30.9	36.0	37.3
33°	18.0	19.3	24.5	29.6	36.0	37.3
34°	16.7	19.3	24.5	29.6	36.0	37.3
35°	15.4	19.3	24.5	29.6	36.0	37.3
36°	14.2	18.0	23.2	29.6	36.0	37.3
37°	12.9	18.0	23.2	29.6	36.0	37.3
38°	11.6	16.7	23.2	29.6	36.0	37.3
39°	11.6	16.7	21.9	29.6	34.8	37.3
40°	10.3	15.4	21.9	29.6	34.8	37.3
41°	9.0	15.4	21.9	28.3	34.8	37.3
42°	7.7	14.2	20.6	28.3	34.8	37.3
43°	6.4	14.2	20.6	28.3	34.8	37.3
44°	6.4	12.9	20.6	28.3	34.8	37.3
45°	5.1	12.9	20.6	28.3	34.8	37.3
46°	3.9	12.9	20.6	28.3	34.8	37.3
47°	3.9	11.6	19.3	28.3	34.8	37.3
48°	2.6	11.6	19.3	28.3	34.8	37.3
49°	2.6	11.6	19.3	28.3	34.8	38.6
50°	2.6	11.6	19.3	27.0	34.8	38.6
51°	1.3	11.6	19.3	27.0	34.8	38.6
52°	1.3	11.6	18.0	27.0	36.0	38.6
53°	1.3	10.3	18.0	27.0	36.0	38.6
54°	1.3	10.3	18.0	27.0	36.0	37.3
55°	1.3	10.3	18.0	27.0	34.8	37.3
56°	1.3	9.0	18.0	27.0	34.8	37.3
57°	1.3	9.0	16.7	25.7	34.8	36.0
58°	1.3	9.0	16.7	25.7	34.8	36.0
59°	1.3	9.0	16.7	25.7	33.5	36.0
60°	2.6	7.7	15.4	24.5	33.5	36.0
62.5°	2.6	7.7	15.4	24.5	32.2	34.8
65°	2.6	7.7	14.2	23.2	32.2	34.8



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.6	6.4	12.9	21.9	30.9	33.5
70°	2.6	7.7	12.9	20.6	29.6	32.2
72.5°	3.9	6.4	11.6	19.3	28.3	30.9
75°	3.9	6.4	11.6	18.0	27.0	28.3
77.5°	5.1	6.4	10.3	15.4	24.5	25.7
80°	5.1	6.4	9.0	12.9	20.6	21.9
82.5°	5.1	6.4	6.4	10.3	15.4	16.7
85°	3.9	5.1	5.1	6.4	10.3	11.6
87.5°	3.9	5.1	3.9	2.6	5.1	5.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)