

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: P1311120

Luminaire Tested: P3SQAS09R209050DE010 E3SQCA451MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1311120
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: P3SQAS09R209050DE010 E3SQCA451MW
Description: 3in Adjustable LED luminaire with, R20 optic, 5000K CCT AND, 90CRI , E3SQCA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

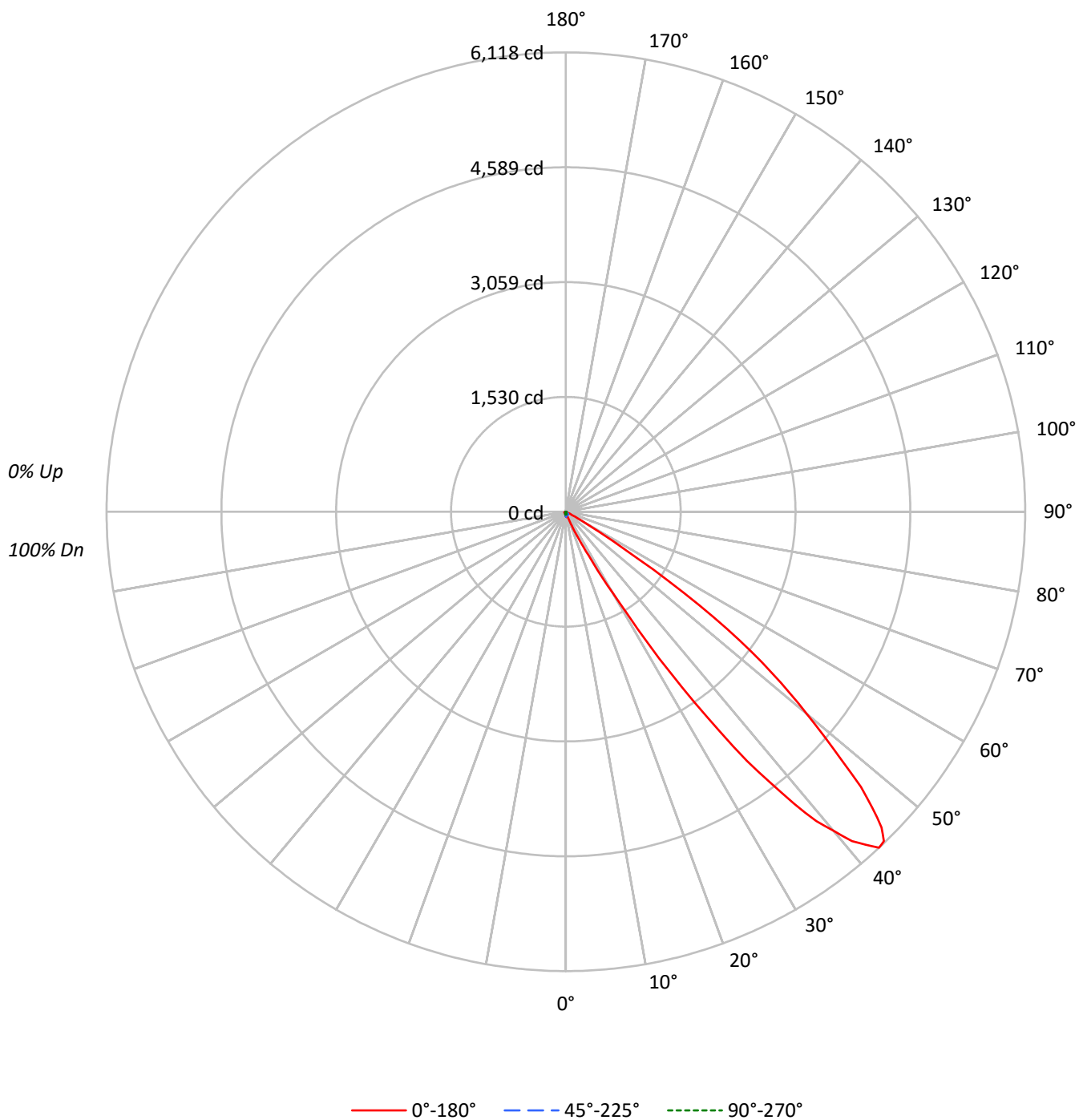
Lumens per Lamp: N/A
Luminaire Lumens: 850.1 lumens
Efficiency: N/A
Efficacy: 76.6 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11.1
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	0
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°	10178	10178	10178	10178	10178
5°	11877	11047	9526	8281	8004
10°	11734	10056	7537	6418	6278
15°	10252	7685	5563	5135	5420
20°	15230	6433	4105	4399	4838
25°	65578	6670	3192	3953	4713
30°	247965	8094	2705	3818	4614
35°	751710	9734	2523	3869	4878
40°	1246518	9690	2158	4137	5216
45°	1448863	6625	1948	4287	5651
50°	1124693	3644	1929	4501	6430
55°	650936	2402	1922	5044	6966
60°	110050	551	1653	5236	7716
65°	8476	0	1956	5868	8802
70°	1209	0	2417	6445	10071
75°	1065	532	2662	7453	11711
80°	793	793	3967	7934	13488
85°	1581	1581	6323	7904	14227

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1448863 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.1	0.6
10°-20°	10.6	1.3
20°-30°	34.0	4.0
30°-40°	216.8	25.5
40°-50°	396.8	46.7
50°-60°	163.0	19.2
60°-70°	13.8	1.6
70°-80°	6.9	0.8
80°-90°	3.2	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°	49.7	5.8
0°-40°	266.4	31.3
0°-60°	826.2	97.2
0°-90°	850.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	850.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	59	59	59	59	59	
5°	69	64	55	48	46	7
15°	58	43	31	29	30	18
25°	345	35	17	21	25	227
35°	3575	46	12	18	23	2263
45°	5949	27	8	18	23	4271
55°	2168	8	6	17	23	1895
65°	21	0	5	14	22	68
75°	2	1	4	11	18	2
85°	1	1	3	4	7	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°	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1
2.5°	64.7	64.7	64.7	63.9	63.9	64.7	63.9	63.9	63.9	63.9	63.1
5°	68.7	68.7	68.7	68.7	68.7	68.7	68.7	67.9	67.9	67.1	63.9
7.5°	70.3	70.3	70.3	70.3	69.5	69.5	69.5	69.5	68.7	67.9	62.3
10°	67.1	67.1	67.1	66.3	66.3	66.3	65.5	65.5	64.7	63.9	57.5
12.5°	60.7	60.7	60.7	60.7	59.9	59.9	59.1	59.1	58.3	57.5	50.3
15°	57.5	57.5	57.5	56.7	56.7	55.9	55.1	54.3	53.5	51.9	43.1
17.5°	62.3	62.3	61.5	61.5	59.9	58.3	57.5	55.1	53.5	51.1	38.3
20°	83.1	83.9	80.7	78.3	76.7	71.9	69.5	65.5	62.3	58.3	35.1
22.5°	167.7	164.6	159.0	150.2	139.8	131.0	115.0	102.2	93.5	81.5	34.3
25°	345.1	341.9	326.7	313.9	282.0	257.2	222.9	194.9	166.2	138.2	35.1
27.5°	655.8	634.2	630.3	571.9	527.2	463.3	397.0	341.1	290.0	233.2	37.5
30°	1246.9	1222.2	1135.1	1047.2	926.6	790.0	659.8	538.4	436.9	345.1	40.7
31°	1582.4	1606.4	1504.1	1327.6	1149.5	974.5	796.4	642.2	511.2	397.0	42.3
32°	2080.1	1975.4	1867.6	1686.3	1427.5	1203.8	980.1	758.1	585.5	452.9	43.9
33°	2550.6	2489.1	2324.5	2098.4	1787.7	1473.8	1183.8	894.7	676.6	520.8	44.7
34°	3052.2	2984.3	2850.9	2526.6	2185.5	1774.1	1387.5	1052.0	785.2	587.1	45.5
35°	3575.4	3546.7	3289.5	3008.3	2588.9	2092.9	1632.7	1224.6	891.5	647.8	46.3
36°	4101.8	4009.2	3807.9	3397.3	2959.6	2387.6	1890.0	1385.1	999.3	719.7	46.3
37°	4498.0	4477.3	4210.5	3810.3	3295.9	2702.3	2112.0	1563.3	1107.9	781.2	46.3
38°	4935.0	4852.7	4581.9	4174.5	3612.2	2990.7	2344.5	1718.2	1211.0	837.1	45.5
39°	5303.2	5181.0	4907.8	4505.2	3888.6	3209.6	2529.0	1868.4	1302.0	883.5	44.7
40°	5544.5	5459.8	5174.6	4721.7	4139.4	3416.5	2715.9	1992.2	1369.9	918.6	43.1
41°	5810.5	5669.9	5387.9	4932.6	4321.5	3598.6	2833.3	2073.7	1422.7	941.8	41.5
42°	5969.4	5854.4	5519.7	5074.0	4451.7	3702.4	2929.2	2136.0	1454.6	953.8	38.3
43°	6118.0	5961.4	5635.5	5156.3	4538.0	3775.9	2973.1	2164.7	1461.8	953.8	34.3
44°	6098.0	5949.5	5611.6	5167.4	4557.2	3797.5	2991.5	2165.5	1450.6	941.8	30.4
45°	5948.7	5800.9	5496.5	5070.0	4488.5	3755.2	2954.8	2133.6	1419.5	921.0	27.2
46°	5674.7	5527.7	5294.4	4907.0	4360.7	3659.3	2869.3	2064.1	1367.5	887.5	24.0
47°	5376.7	5233.7	4994.9	4644.2	4142.6	3488.4	2745.5	1966.6	1294.9	838.7	21.6
48°	4944.6	4855.1	4615.5	4315.9	3839.8	3220.8	2528.2	1807.7	1197.4	775.6	18.4
49°	4562.7	4468.5	4258.4	3936.5	3445.2	2909.2	2268.6	1614.4	1070.4	705.3	16.0
50°	4197.7	4115.4	3921.3	3557.9	3089.0	2533.0	1917.9	1370.7	910.6	618.3	13.6
51°	3840.6	3779.1	3581.0	3247.1	2771.0	2243.8	1661.5	1141.5	752.5	512.8	12.8
52°	3482.0	3474.8	3259.9	2922.0	2461.9	1955.5	1412.3	963.4	638.2	430.6	12.0
53°	3096.2	3049.8	2862.1	2558.6	2116.8	1655.1	1197.4	812.4	549.6	366.6	10.4
54°	2656.8	2604.9	2403.6	2129.6	1729.4	1355.6	965.0	656.6	457.7	309.9	9.6
55°	2167.9	2079.3	1933.1	1651.9	1350.8	1034.4	745.3	520.0	365.9	258.0	8.0
56°	1644.7	1556.1	1473.8	1266.9	991.3	771.6	555.2	398.6	286.0	203.7	7.2
57°	1143.9	1139.1	1004.1	845.1	663.0	525.6	380.2	281.2	202.1	158.2	5.6
58°	742.1	717.3	631.1	539.2	433.7	328.3	244.4	190.9	137.4	107.8	4.8
59°	520.0	470.5	424.2	359.5	273.2	206.9	157.4	122.2	95.1	75.1	3.2
60°	319.5	309.1	278.0	218.9	177.3	146.2	117.4	90.3	69.5	53.5	1.6
62.5°	91.1	92.7	83.9	74.3	63.9	55.1	49.5	42.3	35.1	28.0	0.0
65°	20.8	20.0	21.6	20.0	18.4	18.4	16.0	14.4	12.8	12.0	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°	6.4	6.4	5.6	5.6	5.6	4.8	4.8	4.0	4.0	3.2	0.0
70°	2.4	2.4	2.4	2.4	2.4	1.6	1.6	1.6	0.8	0.8	0.0
72.5°	2.4	2.4	2.4	1.6	1.6	1.6	1.6	1.6	0.8	0.8	0.8
75°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8
77.5°	1.6	1.6	1.6	1.6	1.6	0.8	1.6	0.8	0.8	0.8	0.8
80°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
82.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
85°	0.8	0.8	0.8	0.8	0.0	0.0	0.8	0.8	0.8	0.0	0.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
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°	59.1	59.1	59.1	59.1	59.1	59.1
2.5°	61.5	58.3	55.9	53.5	52.7	52.7
5°	59.9	55.1	50.3	47.9	46.3	46.3
7.5°	55.1	49.5	44.7	42.3	41.5	41.5
10°	49.5	43.1	38.3	36.7	36.7	35.9
12.5°	43.1	36.7	33.5	32.8	32.8	32.8
15°	35.9	31.2	28.8	28.8	29.6	30.4
17.5°	30.4	25.6	24.8	26.4	28.0	28.0
20°	25.6	22.4	22.4	24.0	25.6	26.4
22.5°	21.6	19.2	20.0	22.4	24.8	25.6
25°	19.2	16.8	18.4	20.8	23.2	24.8
27.5°	16.0	15.2	16.8	20.0	23.2	24.0
30°	13.6	13.6	16.0	19.2	22.4	23.2
31°	12.8	12.8	16.0	19.2	22.4	23.2
32°	12.0	12.8	15.2	19.2	22.4	23.2
33°	11.2	12.0	15.2	18.4	22.4	23.2
34°	10.4	12.0	15.2	18.4	22.4	23.2
35°	9.6	12.0	15.2	18.4	22.4	23.2
36°	8.8	11.2	14.4	18.4	22.4	23.2
37°	8.0	11.2	14.4	18.4	22.4	23.2
38°	7.2	10.4	14.4	18.4	22.4	23.2
39°	7.2	10.4	13.6	18.4	21.6	23.2
40°	6.4	9.6	13.6	18.4	21.6	23.2
41°	5.6	9.6	13.6	17.6	21.6	23.2
42°	4.8	8.8	12.8	17.6	21.6	23.2
43°	4.0	8.8	12.8	17.6	21.6	23.2
44°	4.0	8.0	12.8	17.6	21.6	23.2
45°	3.2	8.0	12.8	17.6	21.6	23.2
46°	2.4	8.0	12.8	17.6	21.6	23.2
47°	2.4	7.2	12.0	17.6	21.6	23.2
48°	1.6	7.2	12.0	17.6	21.6	23.2
49°	1.6	7.2	12.0	17.6	21.6	24.0
50°	1.6	7.2	12.0	16.8	21.6	24.0
51°	0.8	7.2	12.0	16.8	21.6	24.0
52°	0.8	7.2	11.2	16.8	22.4	24.0
53°	0.8	6.4	11.2	16.8	22.4	24.0
54°	0.8	6.4	11.2	16.8	22.4	23.2
55°	0.8	6.4	11.2	16.8	21.6	23.2
56°	0.8	5.6	11.2	16.8	21.6	23.2
57°	0.8	5.6	10.4	16.0	21.6	22.4
58°	0.8	5.6	10.4	16.0	21.6	22.4
59°	0.8	5.6	10.4	16.0	20.8	22.4
60°	1.6	4.8	9.6	15.2	20.8	22.4
62.5°	1.6	4.8	9.6	15.2	20.0	21.6
65°	1.6	4.8	8.8	14.4	20.0	21.6



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.6	4.0	8.0	13.6	19.2	20.8
70°	1.6	4.8	8.0	12.8	18.4	20.0
72.5°	2.4	4.0	7.2	12.0	17.6	19.2
75°	2.4	4.0	7.2	11.2	16.8	17.6
77.5°	3.2	4.0	6.4	9.6	15.2	16.0
80°	3.2	4.0	5.6	8.0	12.8	13.6
82.5°	3.2	4.0	4.0	6.4	9.6	10.4
85°	2.4	3.2	3.2	4.0	6.4	7.2
87.5°	2.4	3.2	2.4	1.6	3.2	3.2
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)