

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: P1311134

Luminaire Tested: P3SQAS09R259050DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1311134
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: P3SQAS09R259050DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 5000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

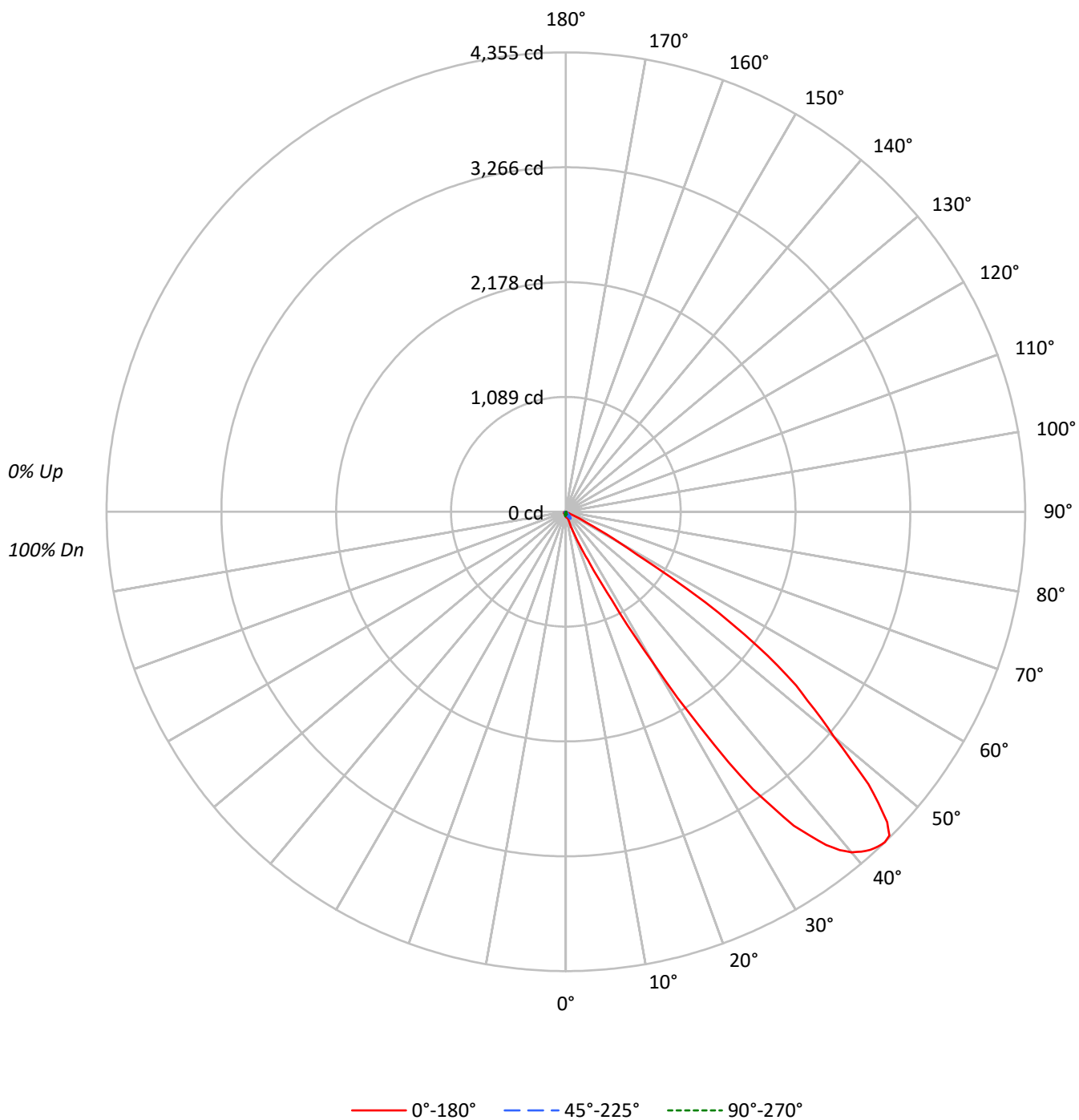
Lumens per Lamp: N/A
Luminaire Lumens: 908.1 lumens
Efficiency: N/A
Efficacy: 81.8 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1311134

CATALOG NUMBER: P3SQAS09R259050DE010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1311134

CATALOG NUMBER: P3SQAS09R259050DE010 E3SQCA451MMS

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	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°	7974	7974	7974	7974	7974
5°	9111	8696	7728	6915	6777
10°	9076	8237	6575	5736	5736
15°	10109	7132	5135	4850	5135
20°	35739	7038	3959	4105	4545
25°	102785	8950	3192	3801	4409
30°	327969	13821	2545	3659	4455
35°	718323	16294	2187	3532	4541
40°	947574	14726	1799	3597	4856
45°	1056732	10303	1754	3897	5261
50°	889504	5359	1715	4073	5787
55°	665048	2162	1681	4564	6486
60°	205875	551	1653	4960	7164
65°	17564	0	1956	5216	7824
70°	1209	403	2014	6043	8862
75°	1065	532	2662	6388	10114
80°	793	793	3967	7141	11901
85°	1581	1581	6323	7904	12647

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1056732 cd/sqm

TEST NUMBER: P1311134

CATALOG NUMBER: P3SQAS09R259050DE010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.2	0.5
10°-20°	10.7	1.2
20°-30°	50.2	5.5
30°-40°	241.9	26.6
40°-50°	379.1	41.8
50°-60°	194.4	21.4
60°-70°	18.3	2.0
70°-80°	6.2	0.7
80°-90°	3.1	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°	65.1	7.2
0°-40°	307.0	33.8
0°-60°	880.4	97.0
0°-90°	908.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	908.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	46	46	46	46	46	
5°	53	50	45	40	39	5
15°	57	40	29	27	29	24
25°	541	47	17	20	23	336
35°	3417	78	10	17	22	2074
45°	4339	42	7	16	22	3175
55°	2215	7	6	15	22	1844
65°	43	0	5	13	19	135
75°	2	1	4	10	15	2
85°	1	1	3	4	6	1
90°	0	0	0	0	0	

TEST NUMBER: P1311134

CATALOG NUMBER: P3SQAS09R259050DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3
2.5°	50.3	50.3	50.3	50.3	50.3	50.3	49.5	49.5	50.3	49.5	49.5
5°	52.7	52.7	52.7	52.7	52.7	52.7	52.7	51.9	51.9	51.9	50.3
7.5°	53.5	52.7	52.7	52.7	52.7	52.7	52.7	52.7	51.9	51.9	49.5
10°	51.9	51.9	51.9	51.9	51.1	51.1	51.1	50.3	50.3	50.3	47.1
12.5°	51.9	51.9	51.9	51.9	51.1	51.1	50.3	50.3	49.5	48.7	43.1
15°	56.7	56.7	56.7	55.9	55.1	54.3	53.5	52.7	51.9	50.3	40.0
17.5°	83.1	80.7	79.9	76.7	72.7	68.7	65.5	62.3	59.1	56.7	38.4
20°	195.0	194.2	190.2	180.6	170.2	158.2	146.2	132.6	113.5	100.7	38.4
22.5°	338.0	333.2	326.0	318.8	300.4	278.9	256.5	230.9	206.1	179.8	40.7
25°	540.9	552.1	528.2	509.0	477.0	437.9	395.5	360.4	315.6	274.1	47.1
27.5°	940.4	947.6	900.5	838.2	763.9	681.6	601.7	541.7	466.6	397.9	59.1
30°	1649.2	1656.4	1577.3	1444.6	1291.2	1156.2	973.2	812.6	664.8	550.5	69.5
31°	2058.3	2002.3	1910.5	1781.8	1587.7	1383.9	1164.2	970.0	783.0	632.8	72.7
32°	2413.8	2409.0	2302.0	2107.0	1912.1	1660.4	1387.9	1134.6	905.3	715.9	75.1
33°	2833.3	2801.4	2650.3	2466.6	2208.5	1955.2	1603.6	1314.4	1030.7	808.6	76.7
34°	3169.7	3083.4	3021.1	2810.9	2538.5	2215.7	1839.3	1504.6	1187.3	898.1	77.5
35°	3416.6	3398.2	3276.8	3081.0	2803.8	2473.8	2093.4	1701.9	1318.4	1002.0	77.5
36°	3677.9	3621.2	3502.9	3325.5	3055.4	2714.3	2287.6	1872.9	1471.0	1095.5	76.7
37°	3841.7	3808.1	3690.7	3507.7	3243.2	2917.2	2504.9	2053.5	1592.4	1188.9	75.1
38°	4010.3	3942.4	3826.5	3651.5	3391.8	3085.8	2662.3	2192.5	1704.3	1271.2	72.7
39°	4126.9	4056.6	3938.4	3764.2	3510.1	3206.5	2787.0	2310.8	1801.8	1332.8	69.5
40°	4214.8	4146.9	4027.1	3848.1	3597.2	3301.5	2890.8	2415.4	1883.3	1386.3	65.5
41°	4269.2	4206.0	4087.0	3908.8	3657.1	3355.9	2958.8	2483.3	1938.4	1422.3	61.5
42°	4314.7	4250.0	4128.5	3946.4	3693.9	3402.2	3000.3	2526.5	1976.0	1440.6	58.3
43°	4340.3	4275.5	4157.3	3971.1	3716.2	3423.8	3022.7	2546.5	1988.8	1438.2	52.7
44°	4354.7	4287.5	4168.5	3982.3	3725.8	3429.4	3024.3	2542.5	1980.0	1419.1	47.9
45°	4338.7	4272.4	4157.3	3971.1	3709.0	3411.8	3008.3	2520.9	1946.4	1381.5	42.3
46°	4234.8	4183.7	4078.2	3907.2	3656.3	3367.1	2967.6	2479.4	1894.5	1335.2	36.0
47°	4051.8	4011.1	3908.8	3781.8	3554.8	3284.8	2892.4	2400.3	1821.8	1265.6	28.8
48°	3860.9	3800.9	3705.8	3575.6	3383.8	3136.9	2768.6	2284.4	1711.5	1174.6	25.6
49°	3578.8	3543.6	3459.8	3314.3	3155.3	2938.0	2593.6	2135.8	1576.5	1075.5	22.4
50°	3319.9	3296.0	3178.5	3071.4	2902.8	2699.9	2356.3	1940.0	1408.7	952.4	20.0
51°	3117.8	3089.0	3004.3	2870.9	2691.1	2455.4	2131.8	1685.9	1216.1	806.2	16.0
52°	2906.8	2890.8	2815.7	2678.3	2501.7	2266.8	1913.6	1470.2	1029.1	681.6	12.8
53°	2734.2	2711.1	2619.2	2496.9	2306.0	2063.1	1677.1	1269.6	871.7	572.9	11.2
54°	2482.6	2473.0	2413.8	2286.0	2079.0	1814.6	1463.0	1069.1	727.1	485.8	9.6
55°	2214.9	2182.9	2123.0	2021.5	1831.4	1584.5	1215.3	886.1	588.1	409.1	7.2
56°	1888.9	1887.3	1780.2	1695.5	1526.9	1264.8	970.8	692.0	477.8	341.2	6.4
57°	1577.3	1526.9	1423.9	1340.0	1158.6	959.6	720.7	518.6	373.9	276.5	4.8
58°	1166.6	1140.2	1113.0	990.0	822.2	680.0	514.6	364.4	276.5	210.9	3.2
59°	791.8	791.0	759.1	665.6	568.9	423.5	321.2	247.7	190.2	155.0	2.4
60°	597.7	583.3	519.4	457.8	358.0	267.7	190.2	146.2	118.3	99.9	1.6
62.5°	209.3	217.3	191.0	158.2	120.7	99.1	75.9	61.5	50.3	40.7	0.0
65°	43.1	47.1	40.7	38.4	30.4	26.4	23.2	20.0	16.8	14.4	0.0



TEST NUMBER: P1311134

CATALOG NUMBER: P3SQAS09R259050DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	5.6	4.8	4.8	4.8	4.0	4.0	4.0	4.0	3.2	3.2	0.8
70°	2.4	2.4	2.4	2.4	2.4	2.4	1.6	1.6	1.6	1.6	0.8
72.5°	2.4	2.4	2.4	1.6	1.6	1.6	1.6	1.6	1.6	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	1.6	0.8	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	1.6
85°	0.8	0.8	0.8	0.0	0.0	0.8	0.8	0.8	0.8	0.8	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

TEST NUMBER: P1311134

CATALOG NUMBER: P3SQAS09R259050DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	46.3	46.3	46.3	46.3	46.3	46.3
2.5°	48.7	47.1	44.7	43.9	43.1	43.1
5°	47.9	44.7	42.3	40.0	39.2	39.2
7.5°	45.5	41.5	38.4	36.8	36.0	35.2
10°	43.1	37.6	34.4	32.8	32.8	32.8
12.5°	38.4	33.6	30.4	29.6	30.4	30.4
15°	34.4	28.8	27.2	27.2	28.0	28.8
17.5°	29.6	25.6	24.0	24.8	25.6	26.4
20°	26.4	21.6	21.6	22.4	24.8	24.8
22.5°	23.2	19.2	19.2	21.6	23.2	24.0
25°	20.8	16.8	17.6	20.0	22.4	23.2
27.5°	17.6	14.4	16.0	19.2	21.6	22.4
30°	15.2	12.8	15.2	18.4	20.8	22.4
31°	14.4	12.0	15.2	17.6	20.8	22.4
32°	12.8	12.0	14.4	17.6	20.8	21.6
33°	12.0	11.2	14.4	17.6	20.8	21.6
34°	11.2	10.4	13.6	17.6	20.8	21.6
35°	9.6	10.4	13.6	16.8	20.0	21.6
36°	8.8	9.6	13.6	16.8	20.0	21.6
37°	8.0	9.6	12.8	16.8	20.0	21.6
38°	7.2	8.8	12.8	16.8	20.0	21.6
39°	6.4	8.8	12.0	16.8	20.0	21.6
40°	5.6	8.0	12.0	16.0	20.0	21.6
41°	5.6	8.0	12.0	16.0	20.0	21.6
42°	4.8	8.0	12.0	16.0	20.0	21.6
43°	4.0	7.2	12.0	16.0	20.0	21.6
44°	3.2	7.2	11.2	16.0	20.0	21.6
45°	3.2	7.2	11.2	16.0	20.0	21.6
46°	2.4	6.4	11.2	16.0	20.0	21.6
47°	1.6	6.4	11.2	15.2	20.0	21.6
48°	1.6	6.4	11.2	15.2	20.0	21.6
49°	1.6	6.4	10.4	15.2	20.0	21.6
50°	1.6	6.4	10.4	15.2	20.0	21.6
51°	0.8	5.6	10.4	15.2	20.0	21.6
52°	0.8	5.6	10.4	15.2	20.0	22.4
53°	0.8	5.6	10.4	15.2	20.0	21.6
54°	0.8	5.6	9.6	15.2	20.0	21.6
55°	0.8	5.6	9.6	15.2	20.0	21.6
56°	0.8	4.8	9.6	14.4	20.0	21.6
57°	1.6	4.8	9.6	14.4	20.0	20.8
58°	1.6	4.8	9.6	14.4	19.2	20.8
59°	1.6	4.8	9.6	14.4	19.2	20.8
60°	1.6	4.8	8.8	14.4	19.2	20.8
62.5°	1.6	4.8	8.8	13.6	18.4	20.0
65°	1.6	4.8	8.0	12.8	18.4	19.2



TEST NUMBER: P1311134

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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.6	4.0	8.0	12.0	17.6	18.4
70°	2.4	4.0	7.2	12.0	16.8	17.6
72.5°	2.4	4.0	7.2	10.4	15.2	16.8
75°	2.4	4.0	6.4	9.6	14.4	15.2
77.5°	2.4	4.0	5.6	8.8	12.8	13.6
80°	3.2	4.0	4.8	7.2	11.2	12.0
82.5°	3.2	4.0	4.0	5.6	8.8	9.6
85°	2.4	3.2	3.2	4.0	5.6	6.4
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)