

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: P1307821

Luminaire Tested: P3SQAS09R259030DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1307821
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: P3SQAS09R259030DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 3000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

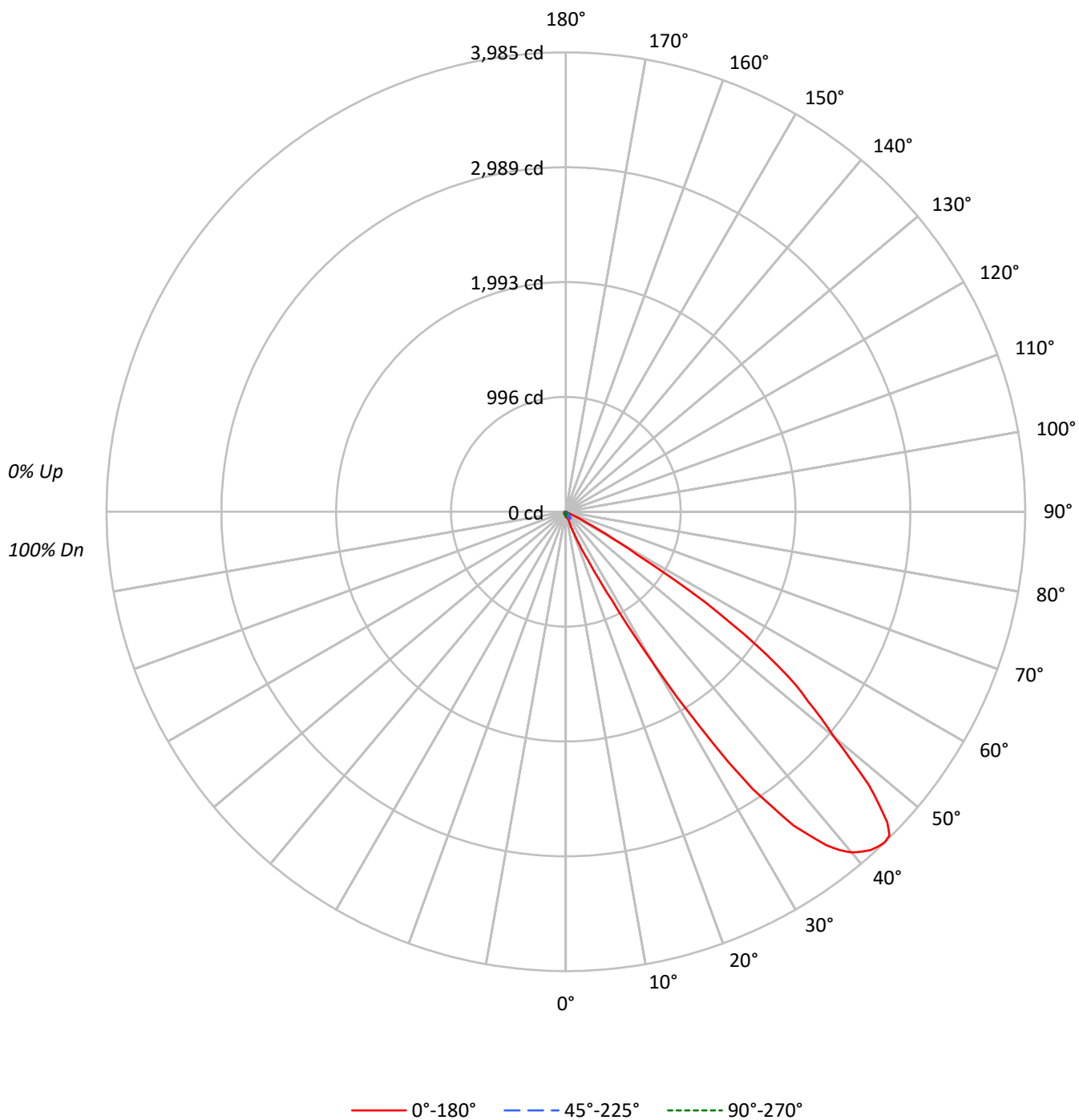
Lumens per Lamp: N/A
Luminaire Lumens: 831.0 lumens
Efficiency: N/A
Efficacy: 74.9 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1307821

CATALOG NUMBER: P3SQAS09R259030DE010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1307821

CATALOG NUMBER: P3SQAS09R259030DE010 E3SQCA451MMS

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	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°	7302	7302	7302	7302	7302
5°	8350	7970	7088	6327	6189
10°	8307	7537	6016	5246	5246
15°	9254	6526	4689	4440	4689
20°	32696	6433	3611	3757	4160
25°	94082	8190	2926	3477	4029
30°	300148	12648	2327	3341	4077
35°	657415	14906	1997	3238	4142
40°	867223	13489	1641	3282	4429
45°	967102	9450	1607	3556	4798
50°	814081	4903	1581	3724	5278
55°	608659	1982	1531	4174	5915
60°	188412	517	1516	4547	6544
65°	16097	0	1793	4768	7172
70°	1108	352	1863	5539	8107
75°	998	466	2462	5856	9249
80°	694	694	3670	6546	10910
85°	1383	1383	5730	7311	11659

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 967102 cd/sqm

TEST NUMBER: P1307821

CATALOG NUMBER: P3SQAS09R259030DE010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.8	0.5
10°-20°	9.8	1.2
20°-30°	46.0	5.5
30°-40°	221.4	26.6
40°-50°	347.0	41.8
50°-60°	177.9	21.4
60°-70°	16.8	2.0
70°-80°	5.7	0.7
80°-90°	2.8	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°	59.6	7.2
0°-40°	280.9	33.8
0°-60°	805.8	97.0
0°-90°	831.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	831.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	42	42	42	42	42	
5°	48	46	41	37	36	5
15°	52	37	26	25	26	22
25°	495	43	15	18	21	307
35°	3127	71	10	15	20	1898
45°	3971	39	7	15	20	2906
55°	2027	7	5	14	20	1688
65°	40	0	4	12	18	124
75°	2	1	4	9	14	2
85°	1	1	3	4	6	0
90°	0	0	0	0	0	

TEST NUMBER: P1307821

CATALOG NUMBER: P3SQAS09R259030DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4
2.5°	46.1	46.1	46.1	46.1	46.1	46.1	45.3	45.3	46.1	45.3	45.3
5°	48.3	48.3	48.3	48.3	48.3	48.3	48.3	47.5	47.5	47.5	46.1
7.5°	49.0	48.3	48.3	48.3	48.3	48.3	48.3	48.3	47.5	47.5	45.3
10°	47.5	47.5	47.5	47.5	46.8	46.8	46.8	46.1	46.1	46.1	43.1
12.5°	47.5	47.5	47.5	47.5	46.8	46.8	46.1	46.1	45.3	44.6	39.5
15°	51.9	51.9	51.9	51.2	50.5	49.7	49.0	48.3	47.5	46.1	36.6
17.5°	76.1	73.9	73.1	70.2	66.5	62.9	60.0	57.0	54.1	51.9	35.1
20°	178.4	177.7	174.0	165.3	155.8	144.8	133.8	121.4	103.8	92.1	35.1
22.5°	309.3	304.9	298.4	291.8	275.0	255.2	234.7	211.3	188.7	164.5	37.3
25°	495.1	505.3	483.4	465.8	436.6	400.7	362.0	329.8	288.8	250.8	43.1
27.5°	860.7	867.3	824.1	767.1	699.1	623.8	550.6	495.8	427.1	364.2	54.1
30°	1509.3	1515.9	1443.5	1322.1	1181.7	1058.1	890.7	743.7	608.4	503.8	63.6
31°	1883.7	1832.5	1748.4	1630.7	1453.0	1266.5	1065.4	887.8	716.6	579.2	66.5
32°	2209.1	2204.8	2106.8	1928.3	1749.9	1519.6	1270.2	1038.4	828.5	655.2	68.7
33°	2593.0	2563.8	2425.6	2257.4	2021.2	1789.4	1467.6	1202.9	943.3	740.0	70.2
34°	2900.9	2821.9	2764.9	2572.6	2323.2	2027.8	1683.4	1377.0	1086.7	821.9	70.9
35°	3126.9	3110.1	2998.9	2819.7	2566.0	2264.0	1915.9	1557.6	1206.6	917.0	70.9
36°	3366.0	3314.1	3205.8	3043.5	2796.3	2484.1	2093.6	1714.1	1346.3	1002.6	70.2
37°	3515.9	3485.2	3377.7	3210.2	2968.2	2669.8	2292.5	1879.3	1457.4	1088.1	68.7
38°	3670.2	3608.0	3502.0	3341.9	3104.2	2824.1	2436.6	2006.6	1559.8	1163.4	66.5
39°	3777.0	3712.6	3604.4	3445.0	3212.4	2934.5	2550.6	2114.8	1649.0	1219.7	63.6
40°	3857.4	3795.2	3685.6	3521.8	3292.1	3021.6	2645.7	2210.6	1723.6	1268.7	60.0
41°	3907.1	3849.4	3740.4	3577.3	3347.0	3071.3	2707.9	2272.8	1774.0	1301.6	56.3
42°	3948.8	3889.6	3778.4	3611.7	3380.6	3113.7	2745.9	2312.2	1808.4	1318.5	53.4
43°	3972.2	3913.0	3804.7	3634.4	3401.1	3133.5	2766.4	2330.5	1820.1	1316.3	48.3
44°	3985.4	3923.9	3815.0	3644.6	3409.9	3138.6	2767.8	2326.9	1812.1	1298.7	43.9
45°	3970.7	3910.0	3804.7	3634.4	3394.5	3122.5	2753.2	2307.1	1781.4	1264.3	38.8
46°	3875.7	3828.9	3732.4	3575.9	3346.2	3081.5	2715.9	2269.1	1733.8	1221.9	32.9
47°	3708.2	3670.9	3577.3	3461.1	3253.4	3006.2	2647.2	2196.7	1667.3	1158.3	26.3
48°	3533.5	3478.6	3391.6	3272.4	3096.9	2870.9	2533.8	2090.7	1566.4	1075.0	23.4
49°	3275.3	3243.1	3166.4	3033.3	2887.7	2688.8	2373.7	1954.7	1442.8	984.3	20.5
50°	3038.4	3016.4	2909.0	2811.0	2656.7	2470.9	2156.5	1775.5	1289.2	871.7	18.3
51°	2853.4	2827.1	2749.5	2627.4	2462.9	2247.2	1951.0	1543.0	1113.0	737.8	14.6
52°	2660.3	2645.7	2577.0	2451.2	2289.6	2074.6	1751.4	1345.5	941.9	623.8	11.7
53°	2502.4	2481.2	2397.1	2285.2	2110.4	1888.1	1534.9	1162.0	797.8	524.3	10.2
54°	2272.0	2263.3	2209.1	2092.1	1902.7	1660.7	1338.9	978.4	665.4	444.6	8.8
55°	2027.1	1997.8	1943.0	1850.1	1676.0	1450.1	1112.2	811.0	538.2	374.4	6.6
56°	1728.7	1727.2	1629.2	1551.7	1397.4	1157.6	888.5	633.3	437.3	312.2	5.9
57°	1443.5	1397.4	1303.1	1226.3	1060.3	878.2	659.6	474.6	342.2	253.0	4.4
58°	1067.6	1043.5	1018.6	906.0	752.5	622.3	470.9	333.5	253.0	193.1	2.9
59°	724.7	723.9	694.7	609.1	520.7	387.6	294.0	226.7	174.0	141.9	2.2
60°	547.0	533.8	475.3	419.0	327.6	245.0	174.0	133.8	108.2	91.4	1.5
62.5°	191.6	198.9	174.8	144.8	110.4	90.7	69.5	56.3	46.1	37.3	0.0
65°	39.5	43.1	37.3	35.1	27.8	24.1	21.2	18.3	15.4	13.2	0.0



TEST NUMBER: P1307821

CATALOG NUMBER: P3SQAS09R259030DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	5.1	4.4	4.4	4.4	3.7	3.7	3.7	3.7	2.9	2.9	0.7
70°	2.2	2.2	2.2	2.2	2.2	2.2	1.5	1.5	1.5	1.5	0.7
72.5°	2.2	2.2	2.2	1.5	1.5	1.5	1.5	1.5	1.5	0.7	0.7
75°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.7	0.7	0.7	0.7
77.5°	1.5	1.5	1.5	1.5	1.5	1.5	0.7	0.7	0.7	0.7	0.7
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.5
85°	0.7	0.7	0.7	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
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: P1307821

CATALOG NUMBER: P3SQAS09R259030DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	42.4	42.4	42.4	42.4	42.4	42.4
2.5°	44.6	43.1	41.0	40.2	39.5	39.5
5°	43.9	41.0	38.8	36.6	35.8	35.8
7.5°	41.7	38.0	35.1	33.6	32.9	32.2
10°	39.5	34.4	31.4	30.0	30.0	30.0
12.5°	35.1	30.7	27.8	27.1	27.8	27.8
15°	31.4	26.3	24.9	24.9	25.6	26.3
17.5°	27.1	23.4	21.9	22.7	23.4	24.1
20°	24.1	19.7	19.7	20.5	22.7	22.7
22.5°	21.2	17.6	17.6	19.7	21.2	21.9
25°	19.0	15.4	16.1	18.3	20.5	21.2
27.5°	16.1	13.2	14.6	17.6	19.7	20.5
30°	13.9	11.7	13.9	16.8	19.0	20.5
31°	13.2	11.0	13.9	16.1	19.0	20.5
32°	11.7	11.0	13.2	16.1	19.0	19.7
33°	11.0	10.2	13.2	16.1	19.0	19.7
34°	10.2	9.5	12.4	16.1	19.0	19.7
35°	8.8	9.5	12.4	15.4	18.3	19.7
36°	8.0	8.8	12.4	15.4	18.3	19.7
37°	7.3	8.8	11.7	15.4	18.3	19.7
38°	6.6	8.0	11.7	15.4	18.3	19.7
39°	5.9	8.0	11.0	15.4	18.3	19.7
40°	5.1	7.3	11.0	14.6	18.3	19.7
41°	5.1	7.3	11.0	14.6	18.3	19.7
42°	4.4	7.3	11.0	14.6	18.3	19.7
43°	3.7	6.6	11.0	14.6	18.3	19.7
44°	2.9	6.6	10.2	14.6	18.3	19.7
45°	2.9	6.6	10.2	14.6	18.3	19.7
46°	2.2	5.9	10.2	14.6	18.3	19.7
47°	1.5	5.9	10.2	13.9	18.3	19.7
48°	1.5	5.9	10.2	13.9	18.3	19.7
49°	1.5	5.9	9.5	13.9	18.3	19.7
50°	1.5	5.9	9.5	13.9	18.3	19.7
51°	0.7	5.1	9.5	13.9	18.3	19.7
52°	0.7	5.1	9.5	13.9	18.3	20.5
53°	0.7	5.1	9.5	13.9	18.3	19.7
54°	0.7	5.1	8.8	13.9	18.3	19.7
55°	0.7	5.1	8.8	13.9	18.3	19.7
56°	0.7	4.4	8.8	13.2	18.3	19.7
57°	1.5	4.4	8.8	13.2	18.3	19.0
58°	1.5	4.4	8.8	13.2	17.6	19.0
59°	1.5	4.4	8.8	13.2	17.6	19.0
60°	1.5	4.4	8.0	13.2	17.6	19.0
62.5°	1.5	4.4	8.0	12.4	16.8	18.3
65°	1.5	4.4	7.3	11.7	16.8	17.6



TEST NUMBER: P1307821

CATALOG NUMBER: P3SQAS09R259030DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.5	3.7	7.3	11.0	16.1	16.8
70°	2.2	3.7	6.6	11.0	15.4	16.1
72.5°	2.2	3.7	6.6	9.5	13.9	15.4
75°	2.2	3.7	5.9	8.8	13.2	13.9
77.5°	2.2	3.7	5.1	8.0	11.7	12.4
80°	2.9	3.7	4.4	6.6	10.2	11.0
82.5°	2.9	3.7	3.7	5.1	8.0	8.8
85°	2.2	2.9	2.9	3.7	5.1	5.9
87.5°	2.2	2.9	2.2	1.5	2.9	2.9
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)