

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: P1309900

Luminaire Tested: P3SQAS05R259040DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1309900
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: P3SQAS05R259040DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 4000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

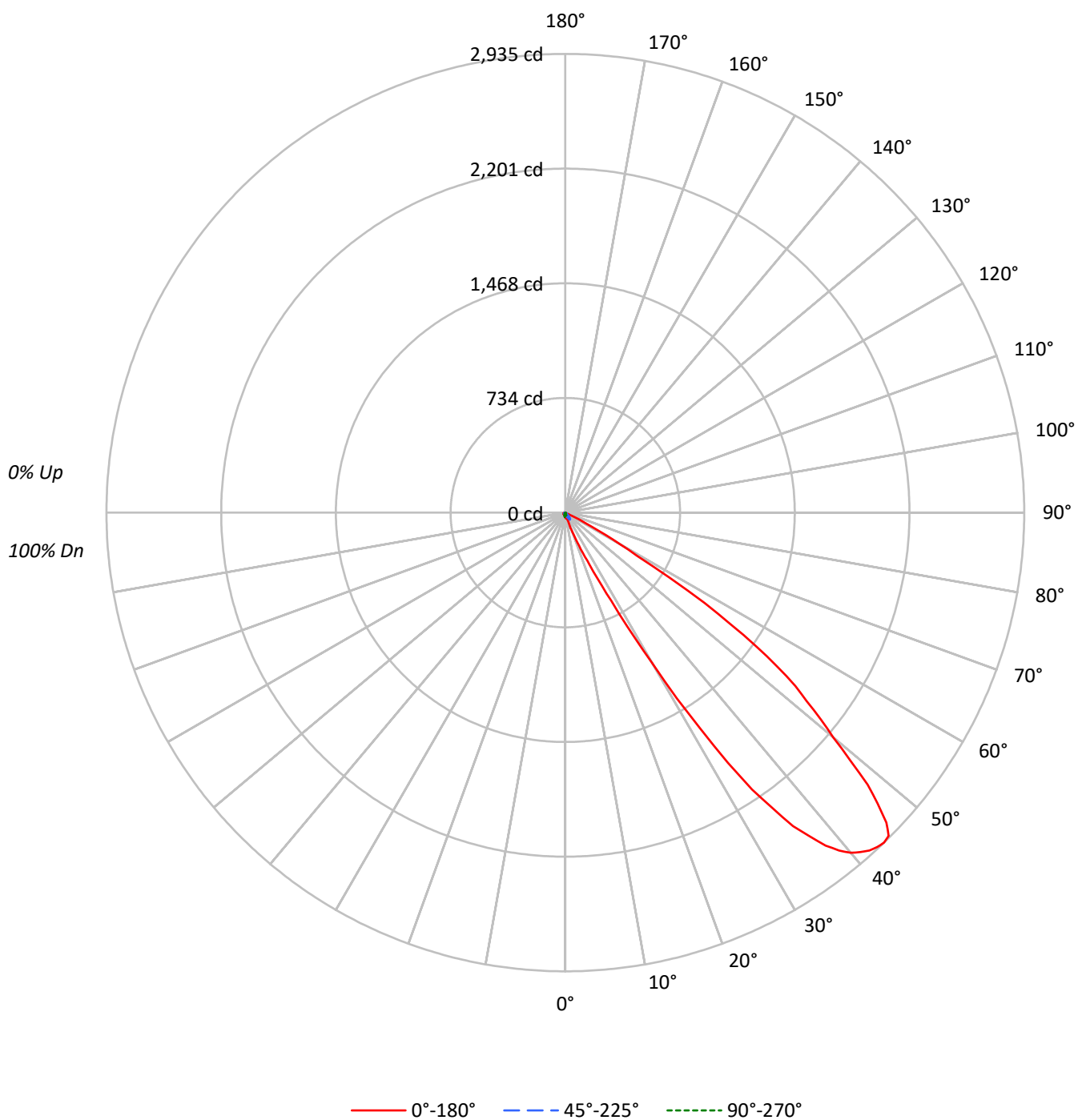
Lumens per Lamp: N/A
Luminaire Lumens: 612.0 lumens
Efficiency: N/A
Efficacy: 85.0 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 7.2
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	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°	5373	5373	5373	5373	5373
5°	6137	5861	5221	4650	4564
10°	6121	5561	4424	3865	3865
15°	6811	4796	3459	3263	3459
20°	24082	4747	2657	2767	3061
25°	69284	6043	2147	2565	2964
30°	221059	9327	1710	2466	3003
35°	484152	10975	1472	2376	3049
40°	638671	9937	1214	2428	3260
45°	712241	6941	1169	2630	3532
50°	599549	3617	1152	2733	3885
55°	448230	1441	1141	3063	4354
60°	138743	379	1102	3341	4822
65°	11859	0	1304	3505	5257
70°	806	252	1360	4079	5942
75°	732	333	1797	4325	6787
80°	496	496	2678	4761	8034
85°	988	988	4347	5335	8497

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 712241 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.8	0.5
10°-20°	7.2	1.2
20°-30°	33.9	5.5
30°-40°	163.0	26.6
40°-50°	255.5	41.8
50°-60°	131.0	21.4
60°-70°	12.4	2.0
70°-80°	4.1	0.7
80°-90°	2.1	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°	43.9	7.2
0°-40°	206.9	33.8
0°-60°	593.4	97.0
0°-90°	612.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	612.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	31	31	31	31	31	
5°	36	34	30	27	26	3
15°	38	27	19	18	19	16
25°	365	32	11	14	16	226
35°	2303	52	7	11	14	1398
45°	2924	28	5	11	14	2140
55°	1493	5	4	10	14	1243
65°	29	0	3	9	13	91
75°	1	0	3	6	10	1
85°	0	0	2	3	4	0
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°	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2
2.5°	33.9	33.9	33.9	33.9	33.9	33.9	33.4	33.4	33.9	33.4	33.4
5°	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.0	35.0	35.0	33.9
7.5°	36.1	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.0	35.0	33.4
10°	35.0	35.0	35.0	35.0	34.5	34.5	34.5	33.9	33.9	33.9	31.8
12.5°	35.0	35.0	35.0	35.0	34.5	34.5	33.9	33.9	33.4	32.9	29.1
15°	38.2	38.2	38.2	37.7	37.2	36.6	36.1	35.5	35.0	33.9	26.9
17.5°	56.0	54.4	53.9	51.7	49.0	46.3	44.2	42.0	39.9	38.2	25.9
20°	131.4	130.9	128.2	121.7	114.7	106.6	98.6	89.4	76.5	67.9	25.9
22.5°	227.8	224.6	219.7	214.9	202.5	188.0	172.9	155.6	138.9	121.2	27.5
25°	364.6	372.1	356.0	343.1	321.5	295.1	266.6	242.9	212.7	184.7	31.8
27.5°	633.9	638.7	606.9	564.9	514.8	459.4	405.5	365.1	314.5	268.2	39.9
30°	1111.6	1116.4	1063.1	973.7	870.3	779.3	655.9	547.7	448.1	371.1	46.9
31°	1387.3	1349.6	1287.7	1201.0	1070.1	932.8	784.7	653.8	527.8	426.5	49.0
32°	1626.9	1623.7	1551.5	1420.1	1288.7	1119.1	935.5	764.7	610.2	482.5	50.6
33°	1909.7	1888.1	1786.4	1662.5	1488.5	1317.8	1080.9	885.9	694.7	545.0	51.7
34°	2136.4	2078.2	2036.2	1894.6	1711.0	1493.4	1239.7	1014.1	800.3	605.3	52.2
35°	2302.8	2290.4	2208.6	2076.6	1889.8	1667.3	1411.0	1147.1	888.6	675.3	52.2
36°	2478.9	2440.7	2361.0	2241.4	2059.4	1829.4	1541.9	1262.4	991.5	738.3	51.7
37°	2589.3	2566.7	2487.5	2364.2	2186.0	1966.2	1688.3	1384.1	1073.3	801.4	50.6
38°	2703.0	2657.2	2579.1	2461.2	2286.1	2079.9	1794.4	1477.8	1148.7	856.8	49.0
39°	2781.6	2734.2	2654.5	2537.1	2365.8	2161.2	1878.4	1557.5	1214.4	898.3	46.9
40°	2840.8	2795.1	2714.3	2593.6	2424.5	2225.3	1948.5	1628.0	1269.4	934.4	44.2
41°	2877.4	2834.9	2754.7	2634.6	2464.9	2261.9	1994.2	1673.8	1306.5	958.6	41.5
42°	2908.1	2864.5	2782.7	2659.9	2489.7	2293.1	2022.2	1702.9	1331.8	971.0	39.3
43°	2925.4	2881.8	2802.1	2676.6	2504.8	2307.7	2037.3	1716.3	1340.4	969.4	35.5
44°	2935.1	2889.8	2809.6	2684.1	2511.2	2311.4	2038.4	1713.7	1334.5	956.5	32.3
45°	2924.3	2879.6	2802.1	2676.6	2499.9	2299.6	2027.6	1699.1	1311.9	931.1	28.5
46°	2854.3	2819.8	2748.7	2633.5	2464.4	2269.4	2000.2	1671.1	1276.9	899.9	24.2
47°	2731.0	2703.5	2634.6	2548.9	2396.0	2214.0	1949.5	1617.8	1227.9	853.1	19.4
48°	2602.3	2561.9	2497.8	2410.0	2280.7	2114.3	1866.1	1539.7	1153.6	791.7	17.2
49°	2412.1	2388.4	2331.9	2233.9	2126.7	1980.2	1748.1	1439.5	1062.6	724.9	15.1
50°	2237.7	2221.5	2142.3	2070.2	1956.5	1819.7	1588.2	1307.6	949.5	641.9	13.5
51°	2101.4	2082.0	2024.9	1935.0	1813.8	1655.0	1436.8	1136.3	819.7	543.4	10.8
52°	1959.2	1948.5	1897.8	1805.2	1686.2	1527.9	1289.8	990.9	693.6	459.4	8.6
53°	1842.9	1827.3	1765.4	1683.0	1554.2	1390.5	1130.4	855.7	587.6	386.1	7.5
54°	1673.3	1666.8	1626.9	1540.8	1401.3	1223.0	986.1	720.6	490.1	327.4	6.5
55°	1492.8	1471.3	1430.9	1362.5	1234.3	1067.9	819.1	597.2	396.4	275.7	4.8
56°	1273.1	1272.0	1199.9	1142.8	1029.2	852.5	654.3	466.4	322.1	230.0	4.3
57°	1063.1	1029.2	959.7	903.1	780.9	646.8	485.8	349.5	252.0	186.3	3.2
58°	786.3	768.5	750.2	667.3	554.2	458.3	346.8	245.6	186.3	142.2	2.2
59°	533.7	533.2	511.6	448.6	383.4	285.4	216.5	166.9	128.2	104.5	1.6
60°	402.8	393.1	350.1	308.6	241.3	180.4	128.2	98.6	79.7	67.3	1.1
62.5°	141.1	146.5	128.7	106.6	81.3	66.8	51.2	41.5	33.9	27.5	0.0
65°	29.1	31.8	27.5	25.9	20.5	17.8	15.6	13.5	11.3	9.7	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°	3.8	3.2	3.2	3.2	2.7	2.7	2.7	2.7	2.2	2.2	0.5
70°	1.6	1.6	1.6	1.6	1.6	1.6	1.1	1.1	1.1	1.1	0.5
72.5°	1.6	1.6	1.6	1.1	1.1	1.1	1.1	1.1	1.1	0.5	0.5
75°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.5	0.5	0.5	0.5
77.5°	1.1	1.1	1.1	1.1	1.1	1.1	0.5	0.5	0.5	0.5	0.5
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
82.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.1
85°	0.5	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
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°	31.2	31.2	31.2	31.2	31.2	31.2
2.5°	32.9	31.8	30.2	29.6	29.1	29.1
5°	32.3	30.2	28.5	26.9	26.4	26.4
7.5°	30.7	28.0	25.9	24.8	24.2	23.7
10°	29.1	25.3	23.2	22.1	22.1	22.1
12.5°	25.9	22.6	20.5	19.9	20.5	20.5
15°	23.2	19.4	18.3	18.3	18.8	19.4
17.5°	19.9	17.2	16.2	16.7	17.2	17.8
20°	17.8	14.5	14.5	15.1	16.7	16.7
22.5°	15.6	12.9	12.9	14.5	15.6	16.2
25°	14.0	11.3	11.8	13.5	15.1	15.6
27.5°	11.8	9.7	10.8	12.9	14.5	15.1
30°	10.2	8.6	10.2	12.4	14.0	15.1
31°	9.7	8.1	10.2	11.8	14.0	15.1
32°	8.6	8.1	9.7	11.8	14.0	14.5
33°	8.1	7.5	9.7	11.8	14.0	14.5
34°	7.5	7.0	9.2	11.8	14.0	14.5
35°	6.5	7.0	9.2	11.3	13.5	14.5
36°	5.9	6.5	9.2	11.3	13.5	14.5
37°	5.4	6.5	8.6	11.3	13.5	14.5
38°	4.8	5.9	8.6	11.3	13.5	14.5
39°	4.3	5.9	8.1	11.3	13.5	14.5
40°	3.8	5.4	8.1	10.8	13.5	14.5
41°	3.8	5.4	8.1	10.8	13.5	14.5
42°	3.2	5.4	8.1	10.8	13.5	14.5
43°	2.7	4.8	8.1	10.8	13.5	14.5
44°	2.2	4.8	7.5	10.8	13.5	14.5
45°	2.2	4.8	7.5	10.8	13.5	14.5
46°	1.6	4.3	7.5	10.8	13.5	14.5
47°	1.1	4.3	7.5	10.2	13.5	14.5
48°	1.1	4.3	7.5	10.2	13.5	14.5
49°	1.1	4.3	7.0	10.2	13.5	14.5
50°	1.1	4.3	7.0	10.2	13.5	14.5
51°	0.5	3.8	7.0	10.2	13.5	14.5
52°	0.5	3.8	7.0	10.2	13.5	15.1
53°	0.5	3.8	7.0	10.2	13.5	14.5
54°	0.5	3.8	6.5	10.2	13.5	14.5
55°	0.5	3.8	6.5	10.2	13.5	14.5
56°	0.5	3.2	6.5	9.7	13.5	14.5
57°	1.1	3.2	6.5	9.7	13.5	14.0
58°	1.1	3.2	6.5	9.7	12.9	14.0
59°	1.1	3.2	6.5	9.7	12.9	14.0
60°	1.1	3.2	5.9	9.7	12.9	14.0
62.5°	1.1	3.2	5.9	9.2	12.4	13.5
65°	1.1	3.2	5.4	8.6	12.4	12.9



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.1	2.7	5.4	8.1	11.8	12.4
70°	1.6	2.7	4.8	8.1	11.3	11.8
72.5°	1.6	2.7	4.8	7.0	10.2	11.3
75°	1.6	2.7	4.3	6.5	9.7	10.2
77.5°	1.6	2.7	3.8	5.9	8.6	9.2
80°	2.2	2.7	3.2	4.8	7.5	8.1
82.5°	2.2	2.7	2.7	3.8	5.9	6.5
85°	1.6	2.2	2.2	2.7	3.8	4.3
87.5°	1.6	2.2	1.6	1.1	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)