

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: P1307873

Luminaire Tested: P3SQAS09R409030DE010 E3SQCA451MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1307873
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-78)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS09R409030DE010 E3SQCA451MW
Description: 3in Adjustable LED luminaire with, R40 optic, 3000K CCT AND, 90CRI , E3SQCA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

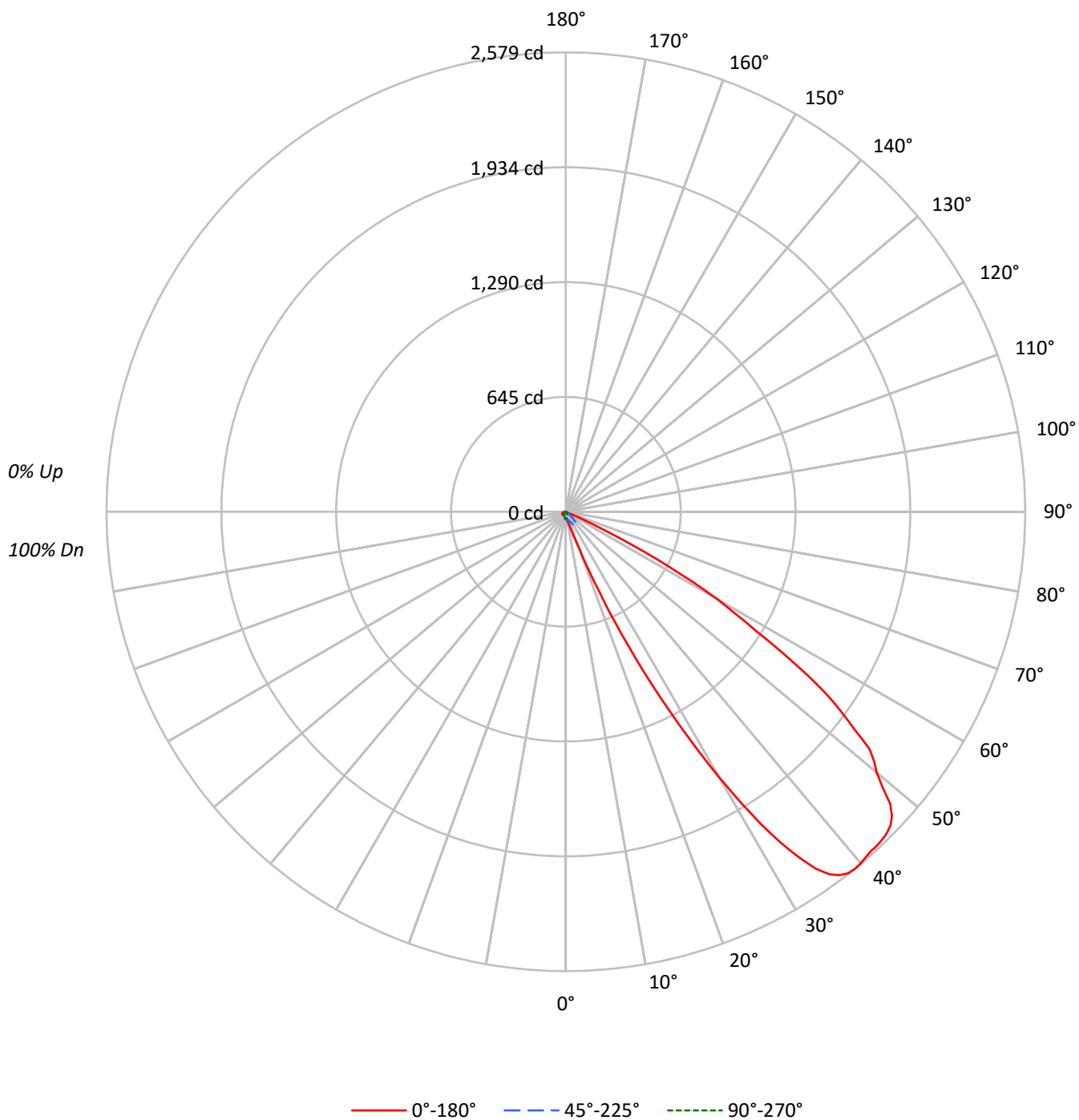
Lumens per Lamp: N/A
Luminaire Lumens: 797.0 lumens
Efficiency: N/A
Efficacy: 71.8 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1307873

CATALOG NUMBER: P3SQAS09R409030DE010 E3SQCA451MW

Luminous Intensity Polar Plot



TEST NUMBER: P1307873

CATALOG NUMBER: P3SQAS09R409030DE010 E3SQCA451MW

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	107	104	100	97	99	97	94	96	93	91	92	90	88	86		
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72		
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	60		
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50		
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35		
7	62	48	39	32	60	47	38	32	45	37	32	44	37	31	42	36	31	29		
8	57	42	33	27	55	42	33	27	40	32	27	39	32	27	38	31	26	24		
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	20	30	24	19	18		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	7061	7061	7061	7061	7061
5°	7849	7589	6967	6327	6206
10°	9478	8062	6401	5754	5631
15°	15530	8737	5474	5081	5224
20°	41054	10337	4564	4564	4967
25°	158273	12789	3611	4181	4865
30°	341472	17023	2903	4077	4813
35°	513986	20162	2460	3995	4920
40°	579071	20234	2136	4114	5261
45°	620906	15685	1973	4287	5699
50°	610293	9806	1768	4501	6270
55°	536897	4834	1772	5044	7026
60°	339830	999	2032	5546	7819
65°	69481	285	2078	5950	8639
70°	1460	352	2216	6647	9970
75°	1464	998	2462	7320	11179
80°	1488	694	2876	8034	13092
85°	1383	1383	5730	8695	14425

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 632124 cd/sqm

TEST NUMBER: P1307873

CATALOG NUMBER: P3SQAS09R409030DE010 E3SQCA451MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.8	0.5
10°-20°	12.6	1.6
20°-30°	61.9	7.8
30°-40°	201.4	25.3
40°-50°	277.6	34.8
50°-60°	193.4	24.3
60°-70°	36.6	4.6
70°-80°	6.6	0.8
80°-90°	3.1	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°	78.4	9.8
0°-40°	279.7	35.1
0°-60°	750.7	94.2
0°-90°	797.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	797.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	41	41	41	41	41	
5°	45	44	40	37	36	5
15°	87	49	31	28	29	32
25°	833	67	19	22	26	429
35°	2445	96	12	19	23	1477
45°	2549	64	8	18	23	1939
55°	1788	16	6	17	23	1528
65°	170	1	5	15	21	302
75°	2	2	4	11	17	2
85°	1	1	3	4	7	1
90°	0	0	0	0	0	

TEST NUMBER: P1307873

CATALOG NUMBER: P3SQAS09R409030DE010 E3SQCA451MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0
2.5°	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	41.7	41.0
5°	45.4	45.4	45.4	45.4	44.6	44.6	44.6	43.9	43.9	42.5	40.3
7.5°	48.3	48.3	48.3	48.3	47.6	46.8	46.1	46.1	45.4	41.7	38.8
10°	54.2	54.2	53.4	52.7	52.0	50.5	49.8	48.3	46.1	41.0	36.6
12.5°	65.9	64.4	63.7	62.2	60.0	57.1	54.2	52.0	46.8	39.5	34.4
15°	87.1	85.6	82.7	78.3	73.9	68.1	62.9	57.8	49.0	37.3	30.7
17.5°	124.4	120.0	115.6	108.3	97.3	87.1	76.1	66.6	52.0	35.1	27.8
20°	224.0	221.0	194.7	174.2	141.3	117.8	95.9	79.8	56.4	32.9	24.9
22.5°	461.9	431.1	387.9	317.7	247.4	182.3	132.5	100.3	60.8	30.0	22.0
25°	832.9	784.6	691.7	556.3	410.6	290.6	191.8	131.0	67.3	27.1	19.0
27.5°	1261.1	1212.1	1067.9	881.2	643.4	438.4	273.7	173.5	76.1	24.2	16.8
30°	1717.1	1675.4	1492.4	1234.0	906.9	614.1	366.7	216.7	85.6	21.2	14.6
31°	1900.8	1847.4	1649.8	1374.6	1030.6	686.6	404.0	235.0	89.3	20.5	13.9
32°	2069.9	2009.2	1804.2	1509.2	1130.8	764.9	445.0	251.1	92.2	19.0	13.2
33°	2215.6	2144.6	1946.9	1636.6	1241.4	838.1	487.5	266.4	94.4	17.6	12.4
34°	2339.3	2277.8	2065.5	1764.7	1339.4	908.3	529.2	281.8	95.9	16.8	11.7
35°	2444.7	2389.0	2179.0	1862.0	1435.3	976.4	567.2	296.4	95.9	15.4	11.7
36°	2515.7	2467.3	2277.0	1961.6	1515.8	1034.2	599.5	309.6	95.9	13.9	11.0
37°	2554.4	2507.6	2341.5	2043.6	1594.9	1091.3	628.7	319.9	95.2	13.2	10.2
38°	2574.2	2533.2	2389.0	2110.2	1649.8	1132.3	654.3	327.9	94.4	11.7	10.2
39°	2579.3	2544.9	2419.0	2158.5	1703.2	1173.3	672.6	332.3	92.2	11.0	9.5
40°	2575.7	2545.7	2435.1	2201.7	1744.2	1205.5	685.8	333.8	90.0	9.5	9.5
41°	2568.4	2544.9	2446.9	2231.7	1777.1	1226.0	690.9	330.8	87.1	8.1	8.8
42°	2561.8	2536.2	2452.0	2252.2	1799.8	1236.2	690.2	325.0	82.7	7.3	8.8
43°	2561.8	2532.5	2452.7	2265.3	1810.8	1237.0	681.4	314.0	76.9	6.6	8.1
44°	2557.4	2530.3	2456.4	2274.1	1813.7	1230.4	667.5	302.3	70.3	5.9	8.1
45°	2549.3	2520.8	2455.6	2274.9	1808.6	1214.3	644.8	286.9	64.4	4.4	8.1
46°	2534.0	2508.3	2449.1	2269.7	1793.2	1190.9	617.8	271.5	57.8	3.7	7.3
47°	2503.2	2483.5	2431.5	2252.2	1769.8	1156.5	585.5	254.0	52.7	2.9	7.3
48°	2450.5	2436.6	2401.5	2213.4	1725.2	1114.0	551.1	235.0	47.6	2.9	7.3
49°	2353.9	2342.9	2322.4	2151.2	1668.1	1062.0	513.8	213.7	42.5	2.2	7.3
50°	2277.8	2266.1	2224.3	2046.5	1586.1	996.2	472.8	192.5	36.6	1.5	6.6
51°	2227.3	2208.2	2142.4	1925.0	1466.8	908.3	428.2	171.3	30.7	1.5	6.6
52°	2163.6	2135.1	2053.1	1815.9	1357.7	820.5	379.9	150.0	27.1	1.5	6.6
53°	2030.4	2020.1	1938.9	1698.8	1248.7	736.3	330.1	132.5	23.4	1.5	6.6
54°	1914.0	1898.6	1788.1	1536.3	1130.1	642.6	278.9	117.1	19.8	1.5	6.6
55°	1788.1	1758.1	1660.0	1399.5	991.0	556.3	229.8	101.0	16.1	1.5	5.9
56°	1629.3	1602.9	1497.5	1253.1	862.9	468.4	192.5	82.7	12.4	1.5	5.9
57°	1436.1	1411.9	1330.7	1073.0	729.7	382.8	156.6	66.6	9.5	1.5	5.9
58°	1249.4	1222.3	1129.4	900.3	589.2	303.8	131.0	54.2	7.3	1.5	5.9
59°	1106.0	1069.4	949.3	756.1	461.1	230.6	103.9	43.2	5.1	1.5	5.9
60°	986.6	956.6	832.2	629.5	361.6	169.8	76.9	32.9	2.9	1.5	5.9
62.5°	571.6	563.6	451.6	324.2	170.5	79.0	38.1	15.4	1.5	2.2	5.9
65°	170.5	148.6	115.6	68.8	43.9	26.3	13.9	5.1	0.7	2.2	5.1



TEST NUMBER: P1307873

CATALOG NUMBER: P3SQAS09R409030DE010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	5.1	5.1	5.1	5.1	5.1	5.1	2.9	1.5	0.7	2.2	5.1
70°	2.9	2.2	2.2	2.2	2.2	1.5	1.5	0.7	0.7	2.2	4.4
72.5°	2.2	2.2	2.2	2.2	1.5	1.5	1.5	0.7	1.5	2.2	3.7
75°	2.2	1.5	1.5	1.5	1.5	0.7	0.7	0.7	1.5	2.2	3.7
77.5°	1.5	1.5	1.5	1.5	0.7	0.7	0.7	0.7	1.5	2.2	3.7
80°	1.5	1.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.2	2.9
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.2	2.9
85°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.2	2.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	2.2	2.2
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: P1307873

CATALOG NUMBER: P3SQAS09R409030DE010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	41.0	41.0	41.0	41.0
2.5°	39.5	38.8	38.1	38.1
5°	38.1	36.6	36.6	35.9
7.5°	35.9	34.4	34.4	34.4
10°	33.7	32.9	32.9	32.2
12.5°	30.7	30.7	30.7	30.7
15°	28.5	28.5	29.3	29.3
17.5°	25.6	26.3	27.8	28.5
20°	23.4	24.9	26.3	27.1
22.5°	22.0	23.4	25.6	26.3
25°	19.8	22.0	24.9	25.6
27.5°	18.3	21.2	23.4	24.9
30°	16.8	20.5	22.7	24.2
31°	16.8	19.8	22.7	24.2
32°	16.1	19.0	22.7	23.4
33°	16.1	19.0	22.7	23.4
34°	15.4	19.0	22.0	23.4
35°	15.4	19.0	22.0	23.4
36°	14.6	18.3	22.0	23.4
37°	14.6	18.3	22.0	23.4
38°	13.9	18.3	22.0	23.4
39°	13.9	18.3	22.0	23.4
40°	13.9	18.3	22.0	23.4
41°	13.2	18.3	22.0	23.4
42°	13.2	18.3	22.0	23.4
43°	13.2	17.6	22.0	23.4
44°	13.2	17.6	22.0	23.4
45°	12.4	17.6	22.0	23.4
46°	12.4	17.6	22.0	23.4
47°	12.4	17.6	22.0	23.4
48°	12.4	17.6	22.0	23.4
49°	12.4	17.6	22.0	23.4
50°	11.7	16.8	22.0	23.4
51°	11.7	16.8	22.0	23.4
52°	11.7	16.8	22.0	23.4
53°	11.7	16.8	22.0	23.4
54°	11.0	16.8	22.0	23.4
55°	11.0	16.8	22.0	23.4
56°	11.0	16.8	22.0	22.7
57°	11.0	16.8	21.2	22.7
58°	11.0	16.1	21.2	22.7
59°	11.0	16.1	21.2	22.7
60°	11.0	16.1	21.2	22.7
62.5°	10.2	16.1	20.5	22.0
65°	9.5	14.6	20.5	21.2



TEST NUMBER: P1307873

CATALOG NUMBER: P3SQAS09R409030DE010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	9.5	13.9	19.0	20.5
70°	8.8	13.2	18.3	19.8
72.5°	7.3	12.4	16.8	18.3
75°	6.6	11.0	15.4	16.8
77.5°	5.9	9.5	13.9	14.6
80°	5.1	8.1	11.7	13.2
82.5°	3.7	5.9	9.5	10.2
85°	2.9	4.4	6.6	7.3
87.5°	2.2	2.2	3.7	3.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)