

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: P1313274

Luminaire Tested: P3SQAS09R409730DE010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1313274
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: P3SQAS09R409730DE010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R40 optic, 3000K CCT AND, 97CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

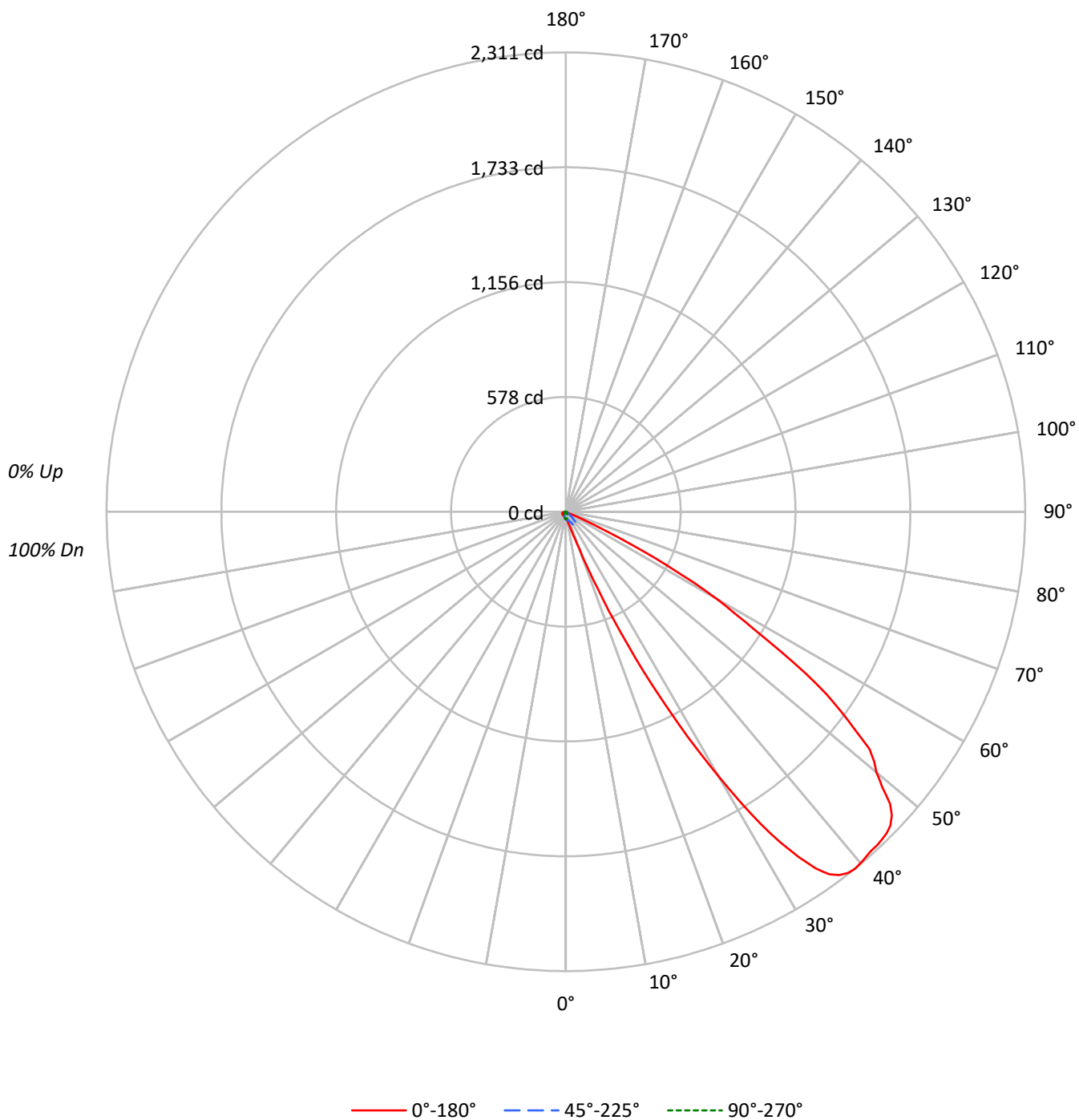
Lumens per Lamp: N/A
Luminaire Lumens: 714.0 lumens
Efficiency: N/A
Efficacy: 64.3 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1313274

CATALOG NUMBER: P3SQAS09R409730DE010 E3SQCA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1313274

CATALOG NUMBER: P3SQAS09R409730DE010 E3SQCA451MB

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°	6321	6321	6321	6321	6321
5°	7036	6794	6241	5670	5549
10°	8482	7223	5736	5159	5054
15°	13907	7827	4903	4564	4671
20°	36765	9255	4087	4087	4454
25°	141798	11459	3230	3744	4352
30°	305915	15253	2605	3659	4295
35°	460458	18060	2208	3574	4415
40°	518751	18143	1911	3687	4721
45°	556241	14053	1754	3824	5115
50°	546740	8788	1581	4046	5627
55°	480988	4324	1561	4534	6305
60°	304455	896	1791	4960	6992
65°	62268	285	1875	5338	7743
70°	1309	352	1964	5942	8913
75°	1331	865	2196	6521	10048
80°	1289	694	2579	7141	11703
85°	1383	1383	5138	7707	13042

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 566291 cd/sqm

TEST NUMBER: P1313274

CATALOG NUMBER: P3SQAS09R409730DE010 E3SQCA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.4	0.5
10°-20°	11.3	1.6
20°-30°	55.5	7.8
30°-40°	180.4	25.3
40°-50°	248.7	34.8
50°-60°	173.2	24.3
60°-70°	32.8	4.6
70°-80°	6.0	0.8
80°-90°	2.8	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°	70.2	9.8
0°-40°	250.6	35.1
0°-60°	672.5	94.2
0°-90°	714.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	714.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	37	37	37	37	37	
5°	41	39	36	33	32	4
15°	78	44	28	26	26	28
25°	746	60	17	20	23	384
35°	2190	86	10	17	21	1323
45°	2284	58	7	16	21	1737
55°	1602	14	5	15	21	1369
65°	153	1	5	13	19	270
75°	2	1	3	10	15	2
85°	1	1	3	4	7	1
90°	0	0	0	0	0	

TEST NUMBER: P1313274

CATALOG NUMBER: P3SQAS09R409730DE010 E3SQCA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7
2.5°	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	37.4	36.7
5°	40.7	40.7	40.7	40.7	40.0	40.0	40.0	39.3	39.3	38.0	36.1
7.5°	43.3	43.3	43.3	43.3	42.6	42.0	41.3	41.3	40.7	37.4	34.8
10°	48.5	48.5	47.9	47.2	46.6	45.2	44.6	43.3	41.3	36.7	32.8
12.5°	59.0	57.7	57.0	55.7	53.8	51.1	48.5	46.6	42.0	35.4	30.8
15°	78.0	76.7	74.1	70.2	66.2	61.0	56.4	51.8	43.9	33.4	27.5
17.5°	111.5	107.5	103.6	97.0	87.2	78.0	68.2	59.7	46.6	31.5	24.9
20°	200.6	198.0	174.4	156.1	126.6	105.6	85.9	71.5	50.5	29.5	22.3
22.5°	413.8	386.2	347.5	284.6	221.6	163.3	118.7	89.8	54.4	26.9	19.7
25°	746.2	702.9	619.6	498.3	367.9	260.3	171.8	117.4	60.3	24.3	17.0
27.5°	1129.8	1085.9	956.7	789.5	576.4	392.8	245.2	155.4	68.2	21.6	15.1
30°	1538.3	1500.9	1337.0	1105.5	812.4	550.1	328.5	194.1	76.7	19.0	13.1
31°	1702.9	1655.0	1478.0	1231.4	923.2	615.1	362.0	210.5	80.0	18.4	12.5
32°	1854.3	1799.9	1616.3	1352.1	1013.1	685.2	398.7	224.9	82.6	17.0	11.8
33°	1984.8	1921.2	1744.2	1466.2	1112.1	750.8	436.7	238.7	84.6	15.7	11.1
34°	2095.6	2040.6	1850.4	1580.9	1199.9	813.7	474.1	252.4	85.9	15.1	10.5
35°	2190.1	2140.2	1952.0	1668.1	1285.8	874.7	508.2	265.6	85.9	13.8	10.5
36°	2253.7	2210.4	2039.9	1757.3	1358.0	926.5	537.0	277.4	85.9	12.5	9.8
37°	2288.4	2246.5	2097.6	1830.7	1428.8	977.7	563.3	286.5	85.2	11.8	9.2
38°	2306.1	2269.4	2140.2	1890.4	1478.0	1014.4	586.2	293.8	84.6	10.5	9.2
39°	2310.7	2279.9	2167.1	1933.7	1525.8	1051.1	602.6	297.7	82.6	9.8	8.5
40°	2307.4	2280.6	2181.5	1972.4	1562.6	1080.0	614.4	299.0	80.7	8.5	8.5
41°	2300.9	2279.9	2192.0	1999.3	1592.1	1098.3	619.0	296.4	78.0	7.2	7.9
42°	2295.0	2272.0	2196.6	2017.6	1612.4	1107.5	618.3	291.1	74.1	6.6	7.9
43°	2295.0	2268.8	2197.3	2029.4	1622.2	1108.1	610.5	281.3	68.8	5.9	7.2
44°	2291.0	2266.8	2200.6	2037.3	1624.8	1102.2	598.0	270.8	62.9	5.2	7.2
45°	2283.8	2258.3	2199.9	2037.9	1620.3	1087.8	577.7	257.0	57.7	3.9	7.2
46°	2270.1	2247.1	2194.0	2033.4	1606.5	1066.8	553.4	243.3	51.8	3.3	6.6
47°	2242.5	2224.8	2178.3	2017.6	1585.5	1036.0	524.6	227.5	47.2	2.6	6.6
48°	2195.3	2182.9	2151.4	1982.9	1545.5	998.0	493.7	210.5	42.6	2.6	6.6
49°	2108.8	2098.9	2080.6	1927.1	1494.4	951.4	460.3	191.5	38.0	2.0	6.6
50°	2040.6	2030.1	1992.7	1833.4	1420.9	892.4	423.6	172.5	32.8	1.3	5.9
51°	1995.3	1978.3	1919.3	1724.5	1314.0	813.7	383.6	153.4	27.5	1.3	5.9
52°	1938.3	1912.7	1839.3	1626.8	1216.3	735.1	340.3	134.4	24.3	1.3	5.9
53°	1818.9	1809.8	1737.0	1521.9	1118.6	659.6	295.7	118.7	21.0	1.3	5.9
54°	1714.7	1700.9	1601.9	1376.3	1012.4	575.7	249.8	104.9	17.7	1.3	5.9
55°	1601.9	1575.0	1487.1	1253.7	887.8	498.3	205.9	90.5	14.4	1.3	5.2
56°	1459.6	1436.0	1341.6	1122.6	773.1	419.7	172.5	74.1	11.1	1.3	5.2
57°	1286.5	1264.9	1192.1	961.3	653.7	342.9	140.3	59.7	8.5	1.3	5.2
58°	1119.3	1095.0	1011.8	806.5	527.8	272.1	117.4	48.5	6.6	1.3	5.2
59°	990.8	958.0	850.5	677.3	413.1	206.5	93.1	38.7	4.6	1.3	5.2
60°	883.9	857.0	745.5	563.9	323.9	152.1	68.8	29.5	2.6	1.3	5.2
62.5°	512.1	504.9	404.6	290.5	152.8	70.8	34.1	13.8	1.3	2.0	5.2
65°	152.8	133.1	103.6	61.6	39.3	23.6	12.5	4.6	0.7	2.0	4.6



TEST NUMBER: P1313274

CATALOG NUMBER: P3SQAS09R409730DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	4.6	4.6	4.6	4.6	4.6	4.6	2.6	1.3	0.7	2.0	4.6
70°	2.6	2.0	2.0	2.0	2.0	1.3	1.3	0.7	0.7	2.0	3.9
72.5°	2.0	2.0	2.0	2.0	1.3	1.3	1.3	0.7	1.3	2.0	3.3
75°	2.0	1.3	1.3	1.3	1.3	0.7	0.7	0.7	1.3	2.0	3.3
77.5°	1.3	1.3	1.3	1.3	0.7	0.7	0.7	0.7	1.3	2.0	3.3
80°	1.3	1.3	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.0	2.6
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.0	2.6
85°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.0	2.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	2.0	2.0
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: P1313274

CATALOG NUMBER: P3SQAS09R409730DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	36.7	36.7	36.7	36.7
2.5°	35.4	34.8	34.1	34.1
5°	34.1	32.8	32.8	32.1
7.5°	32.1	30.8	30.8	30.8
10°	30.2	29.5	29.5	28.9
12.5°	27.5	27.5	27.5	27.5
15°	25.6	25.6	26.2	26.2
17.5°	22.9	23.6	24.9	25.6
20°	21.0	22.3	23.6	24.3
22.5°	19.7	21.0	22.9	23.6
25°	17.7	19.7	22.3	22.9
27.5°	16.4	19.0	21.0	22.3
30°	15.1	18.4	20.3	21.6
31°	15.1	17.7	20.3	21.6
32°	14.4	17.0	20.3	21.0
33°	14.4	17.0	20.3	21.0
34°	13.8	17.0	19.7	21.0
35°	13.8	17.0	19.7	21.0
36°	13.1	16.4	19.7	21.0
37°	13.1	16.4	19.7	21.0
38°	12.5	16.4	19.7	21.0
39°	12.5	16.4	19.7	21.0
40°	12.5	16.4	19.7	21.0
41°	11.8	16.4	19.7	21.0
42°	11.8	16.4	19.7	21.0
43°	11.8	15.7	19.7	21.0
44°	11.8	15.7	19.7	21.0
45°	11.1	15.7	19.7	21.0
46°	11.1	15.7	19.7	21.0
47°	11.1	15.7	19.7	21.0
48°	11.1	15.7	19.7	21.0
49°	11.1	15.7	19.7	21.0
50°	10.5	15.1	19.7	21.0
51°	10.5	15.1	19.7	21.0
52°	10.5	15.1	19.7	21.0
53°	10.5	15.1	19.7	21.0
54°	9.8	15.1	19.7	21.0
55°	9.8	15.1	19.7	21.0
56°	9.8	15.1	19.7	20.3
57°	9.8	15.1	19.0	20.3
58°	9.8	14.4	19.0	20.3
59°	9.8	14.4	19.0	20.3
60°	9.8	14.4	19.0	20.3
62.5°	9.2	14.4	18.4	19.7
65°	8.5	13.1	18.4	19.0



TEST NUMBER: P1313274

CATALOG NUMBER: P3SQAS09R409730DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	8.5	12.5	17.0	18.4
70°	7.9	11.8	16.4	17.7
72.5°	6.6	11.1	15.1	16.4
75°	5.9	9.8	13.8	15.1
77.5°	5.2	8.5	12.5	13.1
80°	4.6	7.2	10.5	11.8
82.5°	3.3	5.2	8.5	9.2
85°	2.6	3.9	5.9	6.6
87.5°	2.0	2.0	3.3	3.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)