

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: P1305781

Luminaire Tested: P3SQASS09R409024DE010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1305781
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: P3SQASS09R409024DE010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R40 optic, 2400K CCT AND, 90CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

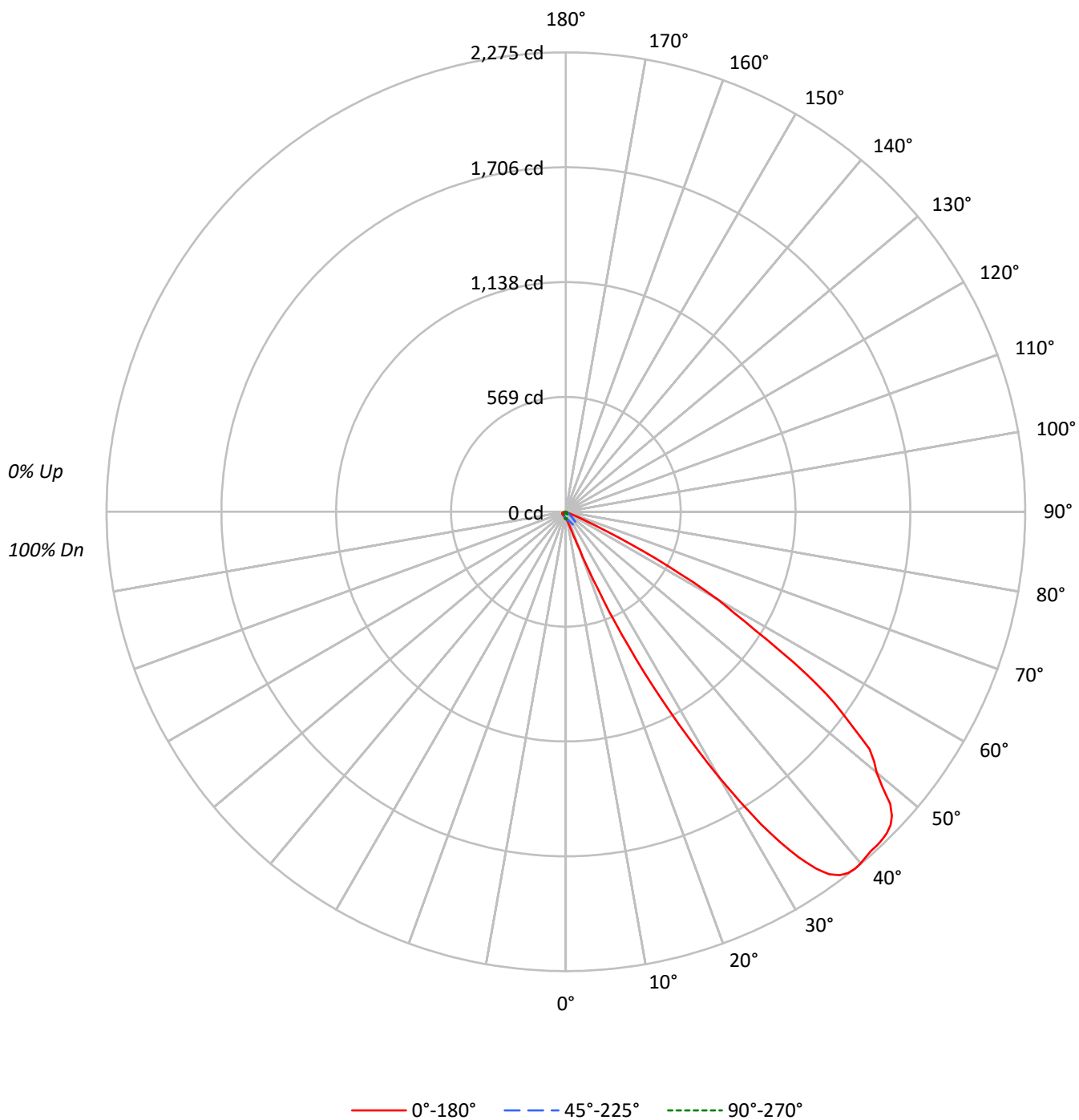
Lumens per Lamp: N/A
Luminaire Lumens: 703.0 lumens
Efficiency: N/A
Efficacy: 63.3 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1305781

CATALOG NUMBER: P3SQASS09R409024DE010 E3SQCA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1305781

CATALOG NUMBER: P3SQASS09R409024DE010 E3SQCA451MB

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
RCR																					
0	119	119	119	119		116	116	116	116		111	111	111		106	106	106		102	102	102
1	110	106	102	99		107	104	100	97		99	97	94		96	93	91		92	90	88
2	100	93	86	81		98	91	85	80		87	82	78		84	80	76		81	78	75
3	91	81	73	66		89	79	72	66		76	70	65		73	68	64		71	66	62
4	82	70	62	55		80	69	61	54		67	59	54		64	58	53		62	57	52
5	75	62	52	46		73	60	52	45		58	51	45		56	50	44		54	49	44
6	68	54	45	38		66	53	44	38		51	43	38		50	43	37		48	42	37
7	62	48	39	32		60	47	38	32		45	37	32		44	37	31		42	36	31
8	57	42	33	27		55	42	33	27		40	32	27		39	32	27		38	31	26
9	52	38	29	23		51	37	29	23		36	28	23		35	28	23		34	27	23
10	48	34	25	20		47	33	25	20		32	25	20		31	24	20		30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	6234	6234	6234	6234	6234
5°	6915	6690	6137	5584	5463
10°	8359	7118	5649	5089	4967
15°	13693	7720	4832	4493	4600
20°	36215	9109	4032	4032	4380
25°	139613	11288	3192	3687	4295
30°	301202	15014	2565	3599	4236
35°	453351	17787	2166	3532	4352
40°	510770	17851	1888	3620	4654
45°	547692	13834	1729	3775	5042
50°	538300	8654	1554	3965	5546
55°	473572	4264	1561	4444	6215
60°	299771	896	1791	4891	6889
65°	61290	245	1834	5257	7621
70°	1309	302	1964	5841	8762
75°	1264	865	2129	6455	9848
80°	1289	595	2579	7042	11505
85°	1186	1186	5138	7707	12844

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 557578 cd/sqm

TEST NUMBER: P1305781

CATALOG NUMBER: P3SQASS09R409024DE010 E3SQCA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.4	0.5
10°-20°	11.1	1.6
20°-30°	54.6	7.8
30°-40°	177.6	25.3
40°-50°	244.8	34.8
50°-60°	170.6	24.3
60°-70°	32.3	4.6
70°-80°	5.8	0.8
80°-90°	2.7	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°	69.1	9.8
0°-40°	246.7	35.1
0°-60°	662.1	94.2
0°-90°	703.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	703.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	36	36	36	36	36	
5°	40	39	36	32	32	4
15°	77	43	27	25	26	28
25°	735	59	17	19	23	378
35°	2156	85	10	17	21	1303
45°	2249	57	7	16	21	1710
55°	1577	14	5	15	21	1348
65°	150	1	4	13	19	266
75°	2	1	3	10	15	2
85°	1	1	3	4	6	1
90°	0	0	0	0	0	

TEST NUMBER: P1305781

CATALOG NUMBER: P3SQASS09R409024DE010 E3SQCA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2
2.5°	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	36.8	36.2
5°	40.0	40.0	40.0	40.0	39.4	39.4	39.4	38.7	38.7	37.4	35.5
7.5°	42.6	42.6	42.6	42.6	42.0	41.3	40.7	40.7	40.0	36.8	34.2
10°	47.8	47.8	47.1	46.5	45.8	44.5	43.9	42.6	40.7	36.2	32.3
12.5°	58.1	56.8	56.2	54.9	52.9	50.4	47.8	45.8	41.3	34.9	30.3
15°	76.8	75.5	73.0	69.1	65.2	60.0	55.5	51.0	43.3	32.9	27.1
17.5°	109.8	105.9	102.0	95.5	85.9	76.8	67.1	58.8	45.8	31.0	24.5
20°	197.6	195.0	171.7	153.7	124.6	103.9	84.6	70.4	49.7	29.1	22.0
22.5°	407.4	380.3	342.2	280.2	218.2	160.8	116.9	88.4	53.6	26.5	19.4
25°	734.7	692.1	610.1	490.7	362.2	256.3	169.1	115.6	59.4	23.9	16.8
27.5°	1112.4	1069.1	941.9	777.3	567.5	386.7	241.5	153.0	67.1	21.3	14.8
30°	1514.6	1477.8	1316.4	1088.5	799.9	541.7	323.4	191.1	75.5	18.7	12.9
31°	1676.6	1629.5	1455.2	1212.5	909.0	605.6	356.4	207.2	78.8	18.1	12.3
32°	1825.8	1772.2	1591.4	1331.2	997.5	674.7	392.5	221.4	81.3	16.8	11.6
33°	1954.3	1891.6	1717.3	1443.6	1095.0	739.2	430.0	235.0	83.3	15.5	11.0
34°	2063.4	2009.1	1821.9	1556.6	1181.5	801.2	466.8	248.6	84.6	14.8	10.3
35°	2156.3	2107.3	1922.0	1642.4	1266.0	861.2	500.3	261.5	84.6	13.6	10.3
36°	2219.0	2176.3	2008.5	1730.2	1337.1	912.2	528.8	273.1	84.6	12.3	9.7
37°	2253.2	2211.9	2065.3	1802.5	1406.8	962.6	554.6	282.1	83.9	11.6	9.0
38°	2270.6	2234.4	2107.3	1861.3	1455.2	998.8	577.2	289.2	83.3	10.3	9.0
39°	2275.1	2244.8	2133.7	1903.9	1502.3	1034.9	593.3	293.1	81.3	9.7	8.4
40°	2271.9	2245.4	2147.9	1942.0	1538.5	1063.3	604.9	294.4	79.4	8.4	8.4
41°	2265.4	2244.8	2158.3	1968.5	1567.5	1081.4	609.5	291.8	76.8	7.1	7.7
42°	2259.6	2237.0	2162.8	1986.5	1587.5	1090.4	608.8	286.6	73.0	6.5	7.7
43°	2259.6	2233.8	2163.4	1998.2	1597.2	1091.1	601.1	277.0	67.8	5.8	7.1
44°	2255.8	2231.9	2166.7	2005.9	1599.8	1085.3	588.8	266.6	62.0	5.2	7.1
45°	2248.7	2223.5	2166.0	2006.5	1595.3	1071.1	568.8	253.1	56.8	3.9	7.1
46°	2235.1	2212.5	2160.2	2002.0	1581.7	1050.4	544.9	239.5	51.0	3.2	6.5
47°	2208.0	2190.5	2144.7	1986.5	1561.1	1020.1	516.5	224.0	46.5	2.6	6.5
48°	2161.5	2149.2	2118.2	1952.3	1521.7	982.6	486.1	207.2	42.0	2.6	6.5
49°	2076.3	2066.6	2048.5	1897.4	1471.3	936.8	453.2	188.5	37.4	1.9	6.5
50°	2009.1	1998.8	1962.0	1805.1	1399.0	878.7	417.1	169.8	32.3	1.3	5.8
51°	1964.6	1947.8	1889.7	1697.9	1293.8	801.2	377.7	151.1	27.1	1.3	5.8
52°	1908.4	1883.2	1810.9	1601.8	1197.6	723.7	335.1	132.3	23.9	1.3	5.8
53°	1790.9	1781.9	1710.2	1498.5	1101.4	649.5	291.2	116.9	20.7	1.3	5.8
54°	1688.3	1674.7	1577.2	1355.1	996.8	566.8	246.0	103.3	17.4	1.3	5.8
55°	1577.2	1550.7	1464.2	1234.4	874.2	490.7	202.7	89.1	14.2	1.3	5.2
56°	1437.1	1413.9	1320.9	1105.3	761.2	413.2	169.8	73.0	11.0	1.3	5.2
57°	1266.7	1245.4	1173.7	946.5	643.7	337.7	138.2	58.8	8.4	1.3	5.2
58°	1102.1	1078.2	996.2	794.1	519.7	267.9	115.6	47.8	6.5	1.3	5.2
59°	975.5	943.2	837.4	666.9	406.7	203.4	91.7	38.1	4.5	1.3	5.2
60°	870.3	843.8	734.1	555.2	318.9	149.8	67.8	29.1	2.6	1.3	5.2
62.5°	504.2	497.1	398.3	286.0	150.4	69.7	33.6	13.6	1.3	1.9	5.2
65°	150.4	131.1	102.0	60.7	38.7	23.2	12.3	4.5	0.6	1.9	4.5



TEST NUMBER: P1305781

CATALOG NUMBER: P3SQASS09R409024DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	4.5	4.5	4.5	4.5	4.5	4.5	2.6	1.3	0.6	1.9	4.5
70°	2.6	1.9	1.9	1.9	1.9	1.3	1.3	0.6	0.6	1.9	3.9
72.5°	1.9	1.9	1.9	1.9	1.3	1.3	1.3	0.6	1.3	1.9	3.2
75°	1.9	1.3	1.3	1.3	1.3	0.6	0.6	0.6	1.3	1.9	3.2
77.5°	1.3	1.3	1.3	1.3	0.6	0.6	0.6	0.6	1.3	1.9	3.2
80°	1.3	1.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.9	2.6
82.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.9	2.6
85°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.9	2.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	1.9	1.9
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: P1305781

CATALOG NUMBER: P3SQASS09R409024DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	36.2	36.2	36.2	36.2
2.5°	34.9	34.2	33.6	33.6
5°	33.6	32.3	32.3	31.6
7.5°	31.6	30.3	30.3	30.3
10°	29.7	29.1	29.1	28.4
12.5°	27.1	27.1	27.1	27.1
15°	25.2	25.2	25.8	25.8
17.5°	22.6	23.2	24.5	25.2
20°	20.7	22.0	23.2	23.9
22.5°	19.4	20.7	22.6	23.2
25°	17.4	19.4	22.0	22.6
27.5°	16.1	18.7	20.7	22.0
30°	14.8	18.1	20.0	21.3
31°	14.8	17.4	20.0	21.3
32°	14.2	16.8	20.0	20.7
33°	14.2	16.8	20.0	20.7
34°	13.6	16.8	19.4	20.7
35°	13.6	16.8	19.4	20.7
36°	12.9	16.1	19.4	20.7
37°	12.9	16.1	19.4	20.7
38°	12.3	16.1	19.4	20.7
39°	12.3	16.1	19.4	20.7
40°	12.3	16.1	19.4	20.7
41°	11.6	16.1	19.4	20.7
42°	11.6	16.1	19.4	20.7
43°	11.6	15.5	19.4	20.7
44°	11.6	15.5	19.4	20.7
45°	11.0	15.5	19.4	20.7
46°	11.0	15.5	19.4	20.7
47°	11.0	15.5	19.4	20.7
48°	11.0	15.5	19.4	20.7
49°	11.0	15.5	19.4	20.7
50°	10.3	14.8	19.4	20.7
51°	10.3	14.8	19.4	20.7
52°	10.3	14.8	19.4	20.7
53°	10.3	14.8	19.4	20.7
54°	9.7	14.8	19.4	20.7
55°	9.7	14.8	19.4	20.7
56°	9.7	14.8	19.4	20.0
57°	9.7	14.8	18.7	20.0
58°	9.7	14.2	18.7	20.0
59°	9.7	14.2	18.7	20.0
60°	9.7	14.2	18.7	20.0
62.5°	9.0	14.2	18.1	19.4
65°	8.4	12.9	18.1	18.7



TEST NUMBER: P1305781

CATALOG NUMBER: P3SQASS09R409024DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	8.4	12.3	16.8	18.1
70°	7.7	11.6	16.1	17.4
72.5°	6.5	11.0	14.8	16.1
75°	5.8	9.7	13.6	14.8
77.5°	5.2	8.4	12.3	12.9
80°	4.5	7.1	10.3	11.6
82.5°	3.2	5.2	8.4	9.0
85°	2.6	3.9	5.8	6.5
87.5°	1.9	1.9	3.2	3.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)