

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: P1307226

Luminaire Tested: P3SQAS20R409027D010 E3SQCA451MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1307226
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: P3SQAS20R409027D010 E3SQCA451MW
Description: 3in Adjustable LED luminaire with, R40 optic, 2700K CCT AND, 90CRI , E3SQCA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

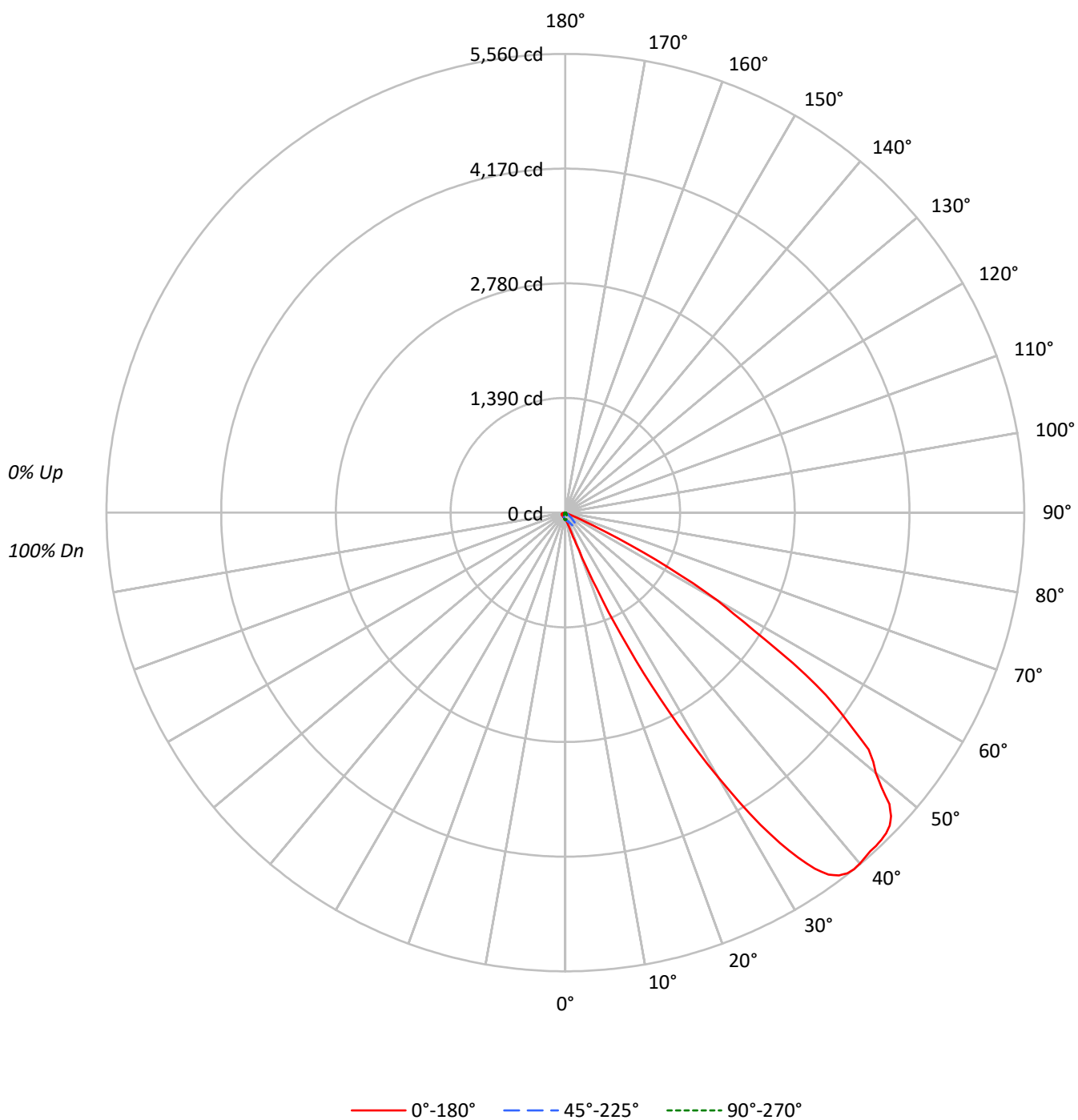
Lumens per Lamp: N/A
Luminaire Lumens: 1718.0 lumens
Efficiency: N/A
Efficacy: 59.7 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 28.8
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: P1307226

CATALOG NUMBER: P3SQAS20R409027D010 E3SQCA451MW

Luminous Intensity Polar Plot



TEST NUMBER: P1307226

CATALOG NUMBER: P3SQAS20R409027D010 E3SQCA451MW

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°	15224	15224	15224	15224	15224
5°	16908	16372	15006	13640	13364
10°	20426	17383	13798	12416	12137
15°	33484	18846	11821	10965	11251
20°	88485	22268	9824	9824	10703
25°	341193	27592	7791	8988	10489
30°	736081	36711	6284	8790	10361
35°	1107928	43458	5298	8620	10617
40°	1248227	43638	4609	8858	11353
45°	1338433	33806	4238	9231	12300
50°	1315514	21140	3805	9726	13531
55°	1157326	10419	3783	10899	15163
60°	732566	2170	4340	11952	16843
65°	149802	652	4483	12877	18664
70°	3172	806	4784	14301	21451
75°	3127	2129	5257	15770	24155
80°	3174	1587	6248	17257	28167
85°	3162	3162	12449	18772	31221

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 1362608 cd/sqm

TEST NUMBER: P1307226

CATALOG NUMBER: P3SQAS20R409027D010 E3SQCA451MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	8.3	0.5
10°-20°	27.2	1.6
20°-30°	133.5	7.8
30°-40°	434.0	25.3
40°-50°	598.3	34.8
50°-60°	416.8	24.3
60°-70°	79.0	4.6
70°-80°	14.3	0.8
80°-90°	6.6	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°	168.9	9.8
0°-40°	603.0	35.1
0°-60°	1618.1	94.2
0°-90°	1718.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1718.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	88	88	88	88	88	
5°	98	95	87	79	77	10
15°	188	106	66	62	63	68
25°	1796	145	41	47	55	924
35°	5270	207	25	41	50	3184
45°	5495	139	17	38	50	4179
55°	3854	35	13	36	50	3294
65°	368	2	11	32	46	650
75°	5	3	8	24	36	5
85°	2	2	6	10	16	1
90°	0	0	0	0	0	

TEST NUMBER: P1307226

CATALOG NUMBER: P3SQAS20R409027D010 E3SQCA451MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
2.5°	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	89.9	88.4
5°	97.8	97.8	97.8	97.8	96.2	96.2	96.2	94.7	94.7	91.5	86.8
7.5°	104.1	104.1	104.1	104.1	102.6	101.0	99.4	99.4	97.8	89.9	83.6
10°	116.8	116.8	115.2	113.6	112.0	108.9	107.3	104.1	99.4	88.4	78.9
12.5°	142.0	138.8	137.3	134.1	129.4	123.1	116.8	112.0	101.0	85.2	74.2
15°	187.8	184.6	178.3	168.8	159.4	146.7	135.7	124.6	105.7	80.5	66.3
17.5°	268.2	258.8	249.3	233.5	209.8	187.8	164.1	143.6	112.0	75.7	60.0
20°	482.8	476.5	419.7	375.5	304.5	254.0	206.7	172.0	121.5	71.0	53.6
22.5°	995.6	929.3	836.2	684.7	533.3	392.9	285.6	216.2	131.0	64.7	47.3
25°	1795.5	1691.3	1491.0	1199.1	885.1	626.4	413.4	282.4	145.2	58.4	41.0
27.5°	2718.5	2612.7	2301.9	1899.6	1386.8	945.1	590.1	373.9	164.1	52.1	36.3
30°	3701.4	3611.5	3217.0	2660.1	1954.8	1323.7	790.4	467.0	184.6	45.8	31.6
31°	4097.4	3982.2	3556.2	2963.0	2221.5	1479.9	870.9	506.5	192.5	44.2	30.0
32°	4461.9	4330.9	3889.1	3253.3	2437.6	1648.7	959.3	541.2	198.8	41.0	28.4
33°	4775.8	4622.8	4196.8	3527.8	2675.9	1806.5	1050.8	574.3	203.5	37.9	26.8
34°	5042.5	4909.9	4452.4	3803.9	2887.3	1958.0	1140.7	607.4	206.7	36.3	25.2
35°	5269.7	5149.8	4696.9	4013.8	3094.0	2104.7	1222.8	639.0	206.7	33.1	25.2
36°	5422.7	5318.6	4908.4	4228.4	3267.5	2229.4	1292.2	667.4	206.7	30.0	23.7
37°	5506.3	5405.4	5047.2	4405.1	3437.9	2352.4	1355.3	689.5	205.1	28.4	22.1
38°	5548.9	5460.6	5149.8	4548.6	3556.2	2440.8	1410.5	706.8	203.5	25.2	22.1
39°	5560.0	5485.8	5214.4	4652.8	3671.4	2529.1	1449.9	716.3	198.8	23.7	20.5
40°	5552.1	5487.4	5249.2	4745.9	3759.8	2598.5	1478.3	719.5	194.1	20.5	20.5
41°	5536.3	5485.8	5274.4	4810.5	3830.8	2642.7	1489.4	713.1	187.8	17.4	18.9
42°	5522.1	5466.9	5285.4	4854.7	3879.7	2664.8	1487.8	700.5	178.3	15.8	18.9
43°	5522.1	5459.0	5287.0	4883.1	3903.3	2666.4	1468.9	676.9	165.7	14.2	17.4
44°	5512.6	5454.3	5294.9	4902.1	3909.7	2652.2	1438.9	651.6	151.5	12.6	17.4
45°	5495.3	5433.8	5293.3	4903.6	3898.6	2617.5	1390.0	618.5	138.8	9.5	17.4
46°	5462.2	5406.9	5279.1	4892.6	3865.5	2567.0	1331.6	585.3	124.6	7.9	15.8
47°	5395.9	5353.3	5241.3	4854.7	3815.0	2492.8	1262.2	547.5	113.6	6.3	15.8
48°	5282.3	5252.3	5176.6	4771.1	3718.7	2401.3	1188.0	506.5	102.6	6.3	15.8
49°	5074.0	5050.4	5006.2	4637.0	3595.7	2289.3	1107.6	460.7	91.5	4.7	15.8
50°	4909.9	4884.7	4794.8	4411.4	3419.0	2147.3	1019.2	414.9	78.9	3.2	14.2
51°	4801.1	4760.1	4618.1	4149.5	3161.8	1958.0	923.0	369.2	66.3	3.2	14.2
52°	4663.8	4602.3	4425.6	3914.4	2926.7	1768.7	818.8	323.4	58.4	3.2	14.2
53°	4376.7	4354.6	4179.4	3661.9	2691.6	1587.2	711.6	285.6	50.5	3.2	14.2
54°	4125.8	4092.7	3854.4	3311.7	2436.0	1385.3	601.1	252.4	42.6	3.2	14.2
55°	3854.4	3789.7	3578.3	3016.6	2136.3	1199.1	495.4	217.7	34.7	3.2	12.6
56°	3512.1	3455.3	3228.1	2701.1	1860.2	1009.8	414.9	178.3	26.8	3.2	12.6
57°	3095.5	3043.5	2868.3	2313.0	1573.0	825.2	337.6	143.6	20.5	3.2	12.6
58°	2693.2	2634.8	2434.5	1940.6	1270.1	654.8	282.4	116.8	15.8	3.2	12.6
59°	2384.0	2305.1	2046.3	1629.8	994.0	497.0	224.0	93.1	11.0	3.2	12.6
60°	2126.8	2062.1	1793.9	1356.9	779.4	366.0	165.7	71.0	6.3	3.2	12.6
62.5°	1232.2	1214.9	973.5	698.9	367.6	170.4	82.0	33.1	3.2	4.7	12.6
65°	367.6	320.3	249.3	148.3	94.7	56.8	30.0	11.0	1.6	4.7	11.0



TEST NUMBER: P1307226

CATALOG NUMBER: P3SQAS20R409027D010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	11.0	11.0	11.0	11.0	11.0	11.0	6.3	3.2	1.6	4.7	11.0
70°	6.3	4.7	4.7	4.7	4.7	3.2	3.2	1.6	1.6	4.7	9.5
72.5°	4.7	4.7	4.7	4.7	3.2	3.2	3.2	1.6	3.2	4.7	7.9
75°	4.7	3.2	3.2	3.2	3.2	1.6	1.6	1.6	3.2	4.7	7.9
77.5°	3.2	3.2	3.2	3.2	1.6	1.6	1.6	1.6	3.2	4.7	7.9
80°	3.2	3.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6	4.7	6.3
82.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	4.7	6.3
85°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	4.7	6.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	4.7	4.7
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: P1307226

CATALOG NUMBER: P3SQAS20R409027D010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	88.4	88.4	88.4	88.4
2.5°	85.2	83.6	82.0	82.0
5°	82.0	78.9	78.9	77.3
7.5°	77.3	74.2	74.2	74.2
10°	72.6	71.0	71.0	69.4
12.5°	66.3	66.3	66.3	66.3
15°	61.5	61.5	63.1	63.1
17.5°	55.2	56.8	60.0	61.5
20°	50.5	53.6	56.8	58.4
22.5°	47.3	50.5	55.2	56.8
25°	42.6	47.3	53.6	55.2
27.5°	39.4	45.8	50.5	53.6
30°	36.3	44.2	48.9	52.1
31°	36.3	42.6	48.9	52.1
32°	34.7	41.0	48.9	50.5
33°	34.7	41.0	48.9	50.5
34°	33.1	41.0	47.3	50.5
35°	33.1	41.0	47.3	50.5
36°	31.6	39.4	47.3	50.5
37°	31.6	39.4	47.3	50.5
38°	30.0	39.4	47.3	50.5
39°	30.0	39.4	47.3	50.5
40°	30.0	39.4	47.3	50.5
41°	28.4	39.4	47.3	50.5
42°	28.4	39.4	47.3	50.5
43°	28.4	37.9	47.3	50.5
44°	28.4	37.9	47.3	50.5
45°	26.8	37.9	47.3	50.5
46°	26.8	37.9	47.3	50.5
47°	26.8	37.9	47.3	50.5
48°	26.8	37.9	47.3	50.5
49°	26.8	37.9	47.3	50.5
50°	25.2	36.3	47.3	50.5
51°	25.2	36.3	47.3	50.5
52°	25.2	36.3	47.3	50.5
53°	25.2	36.3	47.3	50.5
54°	23.7	36.3	47.3	50.5
55°	23.7	36.3	47.3	50.5
56°	23.7	36.3	47.3	48.9
57°	23.7	36.3	45.8	48.9
58°	23.7	34.7	45.8	48.9
59°	23.7	34.7	45.8	48.9
60°	23.7	34.7	45.8	48.9
62.5°	22.1	34.7	44.2	47.3
65°	20.5	31.6	44.2	45.8



TEST NUMBER: P1307226

CATALOG NUMBER: P3SQAS20R409027D010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	20.5	30.0	41.0	44.2
70°	18.9	28.4	39.4	42.6
72.5°	15.8	26.8	36.3	39.4
75°	14.2	23.7	33.1	36.3
77.5°	12.6	20.5	30.0	31.6
80°	11.0	17.4	25.2	28.4
82.5°	7.9	12.6	20.5	22.1
85°	6.3	9.5	14.2	15.8
87.5°	4.7	4.7	7.9	7.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)