

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: P1308198

Luminaire Tested: P3SQAS17R409030DE010 E3SQCA451MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1308198
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: P3SQAS17R409030DE010 E3SQCA451MW
Description: 3in Adjustable LED luminaire with, R40 optic, 3000K CCT AND, 90CRI , E3SQCA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

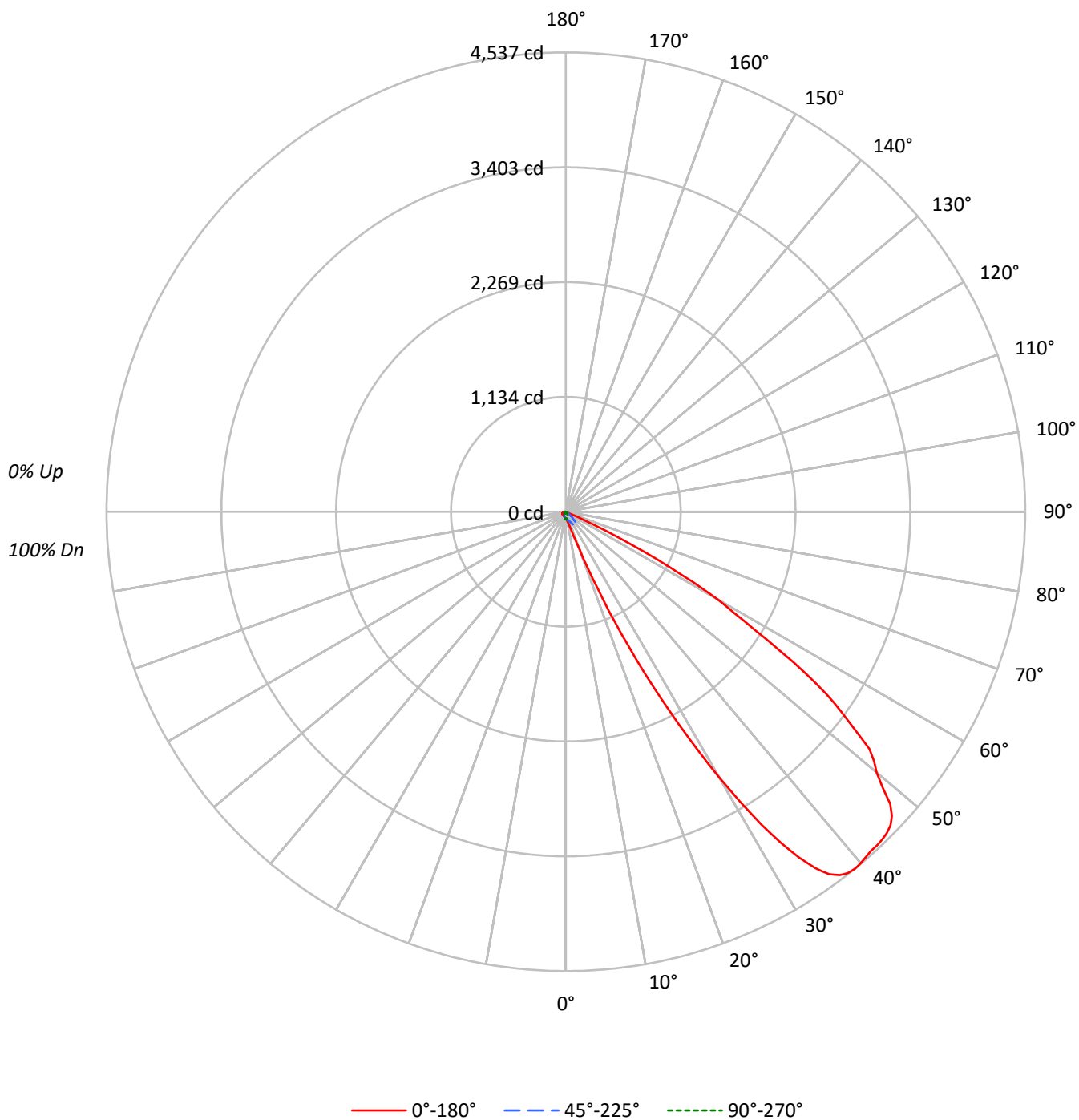
Lumens per Lamp: N/A
Luminaire Lumens: 1402.0 lumens
Efficiency: N/A
Efficacy: 66.1 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 21.2
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

TEST NUMBER: P1308198

CATALOG NUMBER: P3SQAS17R409030DE010 E3SQCA451MW

Luminous Intensity Polar Plot



TEST NUMBER: P1308198

CATALOG NUMBER: P3SQAS17R409030DE010 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	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°	12417	12417	12417	12417	12417
5°	13796	13364	12240	11134	10909
10°	16666	14183	11262	10126	9916
15°	27315	15387	9646	8951	9182
20°	72211	18163	8027	8027	8724
25°	278427	22518	6366	7335	8570
30°	600693	29949	5131	7179	8452
35°	904138	35468	4331	7043	8662
40°	1018640	35612	3755	7239	9263
45°	1092243	27595	3459	7526	10035
50°	1073545	17255	3108	7931	11039
55°	944471	8497	3093	8888	12371
60°	597819	1791	3548	9748	13743
65°	122254	530	3668	10514	15200
70°	2618	655	3877	11682	17523
75°	2595	1730	4259	12843	19696
80°	2579	1289	5157	14083	23010
85°	2569	2569	10275	15215	25491

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 1111975 cd/sqm

TEST NUMBER: P1308198

CATALOG NUMBER: P3SQAS17R409030DE010 E3SQCA451MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.7	0.5
10°-20°	22.2	1.6
20°-30°	108.9	7.8
30°-40°	354.2	25.3
40°-50°	488.3	34.8
50°-60°	340.1	24.3
60°-70°	64.5	4.6
70°-80°	11.7	0.8
80°-90°	5.4	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°	137.9	9.8
0°-40°	492.1	35.1
0°-60°	1320.5	94.2
0°-90°	1402.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1402.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	72	72	72	72	72	
5°	80	77	71	64	63	8
15°	153	86	54	50	52	56
25°	1465	118	34	39	45	754
35°	4300	169	21	34	41	2599
45°	4484	113	14	31	41	3410
55°	3146	28	10	30	41	2688
65°	300	1	9	26	37	530
75°	4	3	6	19	30	4
85°	1	1	5	8	13	1
90°	0	0	0	0	0	

TEST NUMBER: P1308198

CATALOG NUMBER: P3SQAS17R409030DE010 E3SQCA451MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1
2.5°	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	73.4	72.1
5°	79.8	79.8	79.8	79.8	78.5	78.5	78.5	77.3	77.3	74.7	70.8
7.5°	85.0	85.0	85.0	85.0	83.7	82.4	81.1	81.1	79.8	73.4	68.2
10°	95.3	95.3	94.0	92.7	91.4	88.8	87.6	85.0	81.1	72.1	64.4
12.5°	115.9	113.3	112.0	109.4	105.6	100.4	95.3	91.4	82.4	69.5	60.5
15°	153.2	150.6	145.5	137.8	130.0	119.7	110.7	101.7	86.3	65.7	54.1
17.5°	218.9	211.2	203.4	190.6	171.2	153.2	133.9	117.2	91.4	61.8	48.9
20°	394.0	388.8	342.5	306.4	248.5	207.3	168.7	140.3	99.1	57.9	43.8
22.5°	812.4	758.4	682.4	558.8	435.2	320.6	233.0	176.4	106.9	52.8	38.6
25°	1465.2	1380.2	1216.7	978.5	722.3	511.2	337.3	230.5	118.5	47.6	33.5
27.5°	2218.4	2132.2	1878.5	1550.2	1131.7	771.2	481.5	305.1	133.9	42.5	29.6
30°	3020.6	2947.2	2625.3	2170.8	1595.3	1080.2	645.1	381.1	150.6	37.3	25.8
31°	3343.7	3249.8	2902.1	2418.0	1812.9	1207.7	710.7	413.3	157.1	36.1	24.5
32°	3641.2	3534.3	3173.8	2654.9	1989.3	1345.5	782.8	441.6	162.2	33.5	23.2
33°	3897.4	3772.5	3424.9	2878.9	2183.7	1474.2	857.5	468.7	166.1	30.9	21.9
34°	4115.0	4006.8	3633.4	3104.3	2356.2	1597.8	930.9	495.7	168.7	29.6	20.6
35°	4300.4	4202.5	3833.0	3275.5	2524.9	1717.6	997.8	521.5	168.7	27.0	20.6
36°	4425.3	4340.3	4005.5	3450.6	2666.5	1819.3	1054.5	544.6	168.7	24.5	19.3
37°	4493.5	4411.1	4118.8	3594.8	2805.6	1919.7	1106.0	562.7	167.4	23.2	18.0
38°	4528.3	4456.2	4202.5	3712.0	2902.1	1991.8	1151.1	576.8	166.1	20.6	18.0
39°	4537.3	4476.8	4255.3	3797.0	2996.1	2063.9	1183.3	584.5	162.2	19.3	16.7
40°	4530.9	4478.1	4283.7	3872.9	3068.2	2120.6	1206.4	587.1	158.4	16.7	16.7
41°	4518.0	4476.8	4304.3	3925.7	3126.2	2156.6	1215.4	582.0	153.2	14.2	15.5
42°	4506.4	4461.3	4313.3	3961.8	3166.1	2174.7	1214.2	571.7	145.5	12.9	15.5
43°	4506.4	4454.9	4314.6	3984.9	3185.4	2175.9	1198.7	552.4	135.2	11.6	14.2
44°	4498.7	4451.0	4321.0	4000.4	3190.5	2164.4	1174.2	531.8	123.6	10.3	14.2
45°	4484.5	4434.3	4319.7	4001.7	3181.5	2136.0	1134.3	504.7	113.3	7.7	14.2
46°	4457.5	4412.4	4308.1	3992.7	3154.5	2094.8	1086.7	477.7	101.7	6.4	12.9
47°	4403.4	4368.6	4277.2	3961.8	3113.3	2034.3	1030.0	446.8	92.7	5.2	12.9
48°	4310.7	4286.2	4224.4	3893.5	3034.7	1959.6	969.5	413.3	83.7	5.2	12.9
49°	4140.7	4121.4	4085.4	3784.1	2934.3	1868.2	903.9	376.0	74.7	3.9	12.9
50°	4006.8	3986.2	3912.8	3600.0	2790.1	1752.3	831.8	338.6	64.4	2.6	11.6
51°	3918.0	3884.5	3768.6	3386.2	2580.2	1597.8	753.2	301.3	54.1	2.6	11.6
52°	3806.0	3755.8	3611.6	3194.4	2388.4	1443.3	668.2	263.9	47.6	2.6	11.6
53°	3571.6	3553.6	3410.7	2988.4	2196.5	1295.3	580.7	233.0	41.2	2.6	11.6
54°	3366.9	3339.9	3145.5	2702.6	1988.0	1130.5	490.6	206.0	34.8	2.6	11.6
55°	3145.5	3092.7	2920.1	2461.8	1743.3	978.5	404.3	177.7	28.3	2.6	10.3
56°	2866.1	2819.7	2634.3	2204.3	1518.0	824.0	338.6	145.5	21.9	2.6	10.3
57°	2526.2	2483.7	2340.8	1887.5	1283.7	673.4	275.5	117.2	16.7	2.6	10.3
58°	2197.8	2150.2	1986.7	1583.7	1036.5	534.3	230.5	95.3	12.9	2.6	10.3
59°	1945.5	1881.1	1669.9	1330.0	811.2	405.6	182.8	76.0	9.0	2.6	10.3
60°	1735.6	1682.8	1463.9	1107.3	636.0	298.7	135.2	57.9	5.2	2.6	10.3
62.5°	1005.6	991.4	794.4	570.4	300.0	139.1	67.0	27.0	2.6	3.9	10.3
65°	300.0	261.4	203.4	121.0	77.3	46.4	24.5	9.0	1.3	3.9	9.0



TEST NUMBER: P1308198

CATALOG NUMBER: P3SQAS17R409030DE010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	9.0	9.0	9.0	9.0	9.0	9.0	5.2	2.6	1.3	3.9	9.0
70°	5.2	3.9	3.9	3.9	3.9	2.6	2.6	1.3	1.3	3.9	7.7
72.5°	3.9	3.9	3.9	3.9	2.6	2.6	2.6	1.3	2.6	3.9	6.4
75°	3.9	2.6	2.6	2.6	2.6	1.3	1.3	1.3	2.6	3.9	6.4
77.5°	2.6	2.6	2.6	2.6	1.3	1.3	1.3	1.3	2.6	3.9	6.4
80°	2.6	2.6	1.3	1.3	1.3	1.3	1.3	1.3	1.3	3.9	5.2
82.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	3.9	5.2
85°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	3.9	5.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	3.9	3.9
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: P1308198

CATALOG NUMBER: P3SQAS17R409030DE010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	72.1	72.1	72.1	72.1
2.5°	69.5	68.2	67.0	67.0
5°	67.0	64.4	64.4	63.1
7.5°	63.1	60.5	60.5	60.5
10°	59.2	57.9	57.9	56.7
12.5°	54.1	54.1	54.1	54.1
15°	50.2	50.2	51.5	51.5
17.5°	45.1	46.4	48.9	50.2
20°	41.2	43.8	46.4	47.6
22.5°	38.6	41.2	45.1	46.4
25°	34.8	38.6	43.8	45.1
27.5°	32.2	37.3	41.2	43.8
30°	29.6	36.1	39.9	42.5
31°	29.6	34.8	39.9	42.5
32°	28.3	33.5	39.9	41.2
33°	28.3	33.5	39.9	41.2
34°	27.0	33.5	38.6	41.2
35°	27.0	33.5	38.6	41.2
36°	25.8	32.2	38.6	41.2
37°	25.8	32.2	38.6	41.2
38°	24.5	32.2	38.6	41.2
39°	24.5	32.2	38.6	41.2
40°	24.5	32.2	38.6	41.2
41°	23.2	32.2	38.6	41.2
42°	23.2	32.2	38.6	41.2
43°	23.2	30.9	38.6	41.2
44°	23.2	30.9	38.6	41.2
45°	21.9	30.9	38.6	41.2
46°	21.9	30.9	38.6	41.2
47°	21.9	30.9	38.6	41.2
48°	21.9	30.9	38.6	41.2
49°	21.9	30.9	38.6	41.2
50°	20.6	29.6	38.6	41.2
51°	20.6	29.6	38.6	41.2
52°	20.6	29.6	38.6	41.2
53°	20.6	29.6	38.6	41.2
54°	19.3	29.6	38.6	41.2
55°	19.3	29.6	38.6	41.2
56°	19.3	29.6	38.6	39.9
57°	19.3	29.6	37.3	39.9
58°	19.3	28.3	37.3	39.9
59°	19.3	28.3	37.3	39.9
60°	19.3	28.3	37.3	39.9
62.5°	18.0	28.3	36.1	38.6
65°	16.7	25.8	36.1	37.3



TEST NUMBER: P1308198

CATALOG NUMBER: P3SQAS17R409030DE010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	16.7	24.5	33.5	36.1
70°	15.5	23.2	32.2	34.8
72.5°	12.9	21.9	29.6	32.2
75°	11.6	19.3	27.0	29.6
77.5°	10.3	16.7	24.5	25.8
80°	9.0	14.2	20.6	23.2
82.5°	6.4	10.3	16.7	18.0
85°	5.2	7.7	11.6	12.9
87.5°	3.9	3.9	6.4	6.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)