

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: P1306107

Luminaire Tested: P3SQAS17R409024DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1306107
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: P3SQAS17R409024DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R40 optic, 2400K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

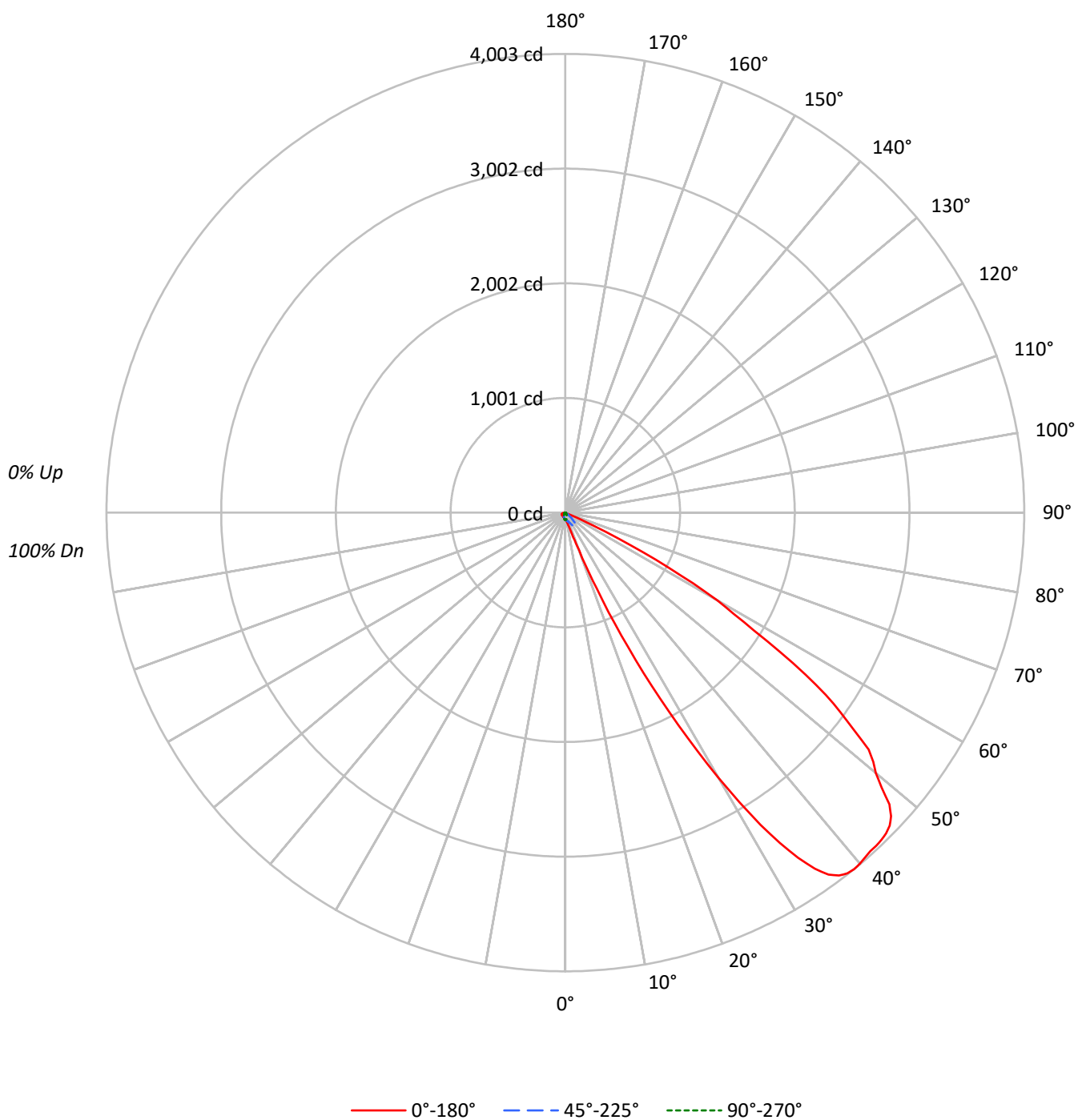
Lumens per Lamp: N/A
Luminaire Lumens: 1237.0 lumens
Efficiency: N/A
Efficacy: 58.3 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1306107

CATALOG NUMBER: P3SQAS17R409024DE010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1306107

CATALOG NUMBER: P3SQAS17R409024DE010 E3SQCA451MMS

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°	10953	10953	10953	10953	10953
5°	12171	11790	10805	9820	9629
10°	14707	12521	9933	8936	8744
15°	24106	13568	8505	7899	8095
20°	63707	16037	7074	7074	7698
25°	245666	19858	5606	6480	7563
30°	529997	26429	4514	6324	7457
35°	797733	31284	3826	6202	7653
40°	898743	31407	3327	6385	8183
45°	963692	24356	3044	6649	8866
50°	947216	15218	2733	6993	9753
55°	833314	7507	2732	7837	10930
60°	527449	1550	3134	8611	12124
65°	107869	448	3260	9251	13407
70°	2266	554	3424	10272	15459
75°	2262	1530	3793	11312	17367
80°	2281	1091	4463	12397	20233
85°	2174	2174	8892	13437	22527

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 981116 cd/sqm

TEST NUMBER: P1306107

CATALOG NUMBER: P3SQAS17R409024DE010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.9	0.5
10°-20°	19.6	1.6
20°-30°	96.1	7.8
30°-40°	312.5	25.3
40°-50°	430.8	34.8
50°-60°	300.1	24.3
60°-70°	56.9	4.6
70°-80°	10.3	0.8
80°-90°	4.7	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°	121.6	9.8
0°-40°	434.1	35.1
0°-60°	1165.1	94.2
0°-90°	1237.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1237.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	64	64	64	64	64	
5°	70	68	62	57	56	7
15°	135	76	48	44	45	49
25°	1293	104	30	34	40	666
35°	3794	149	18	30	36	2293
45°	3957	100	12	27	36	3009
55°	2775	25	9	26	36	2372
65°	265	1	8	23	33	468
75°	3	2	6	17	26	3
85°	1	1	4	7	11	1
90°	0	0	0	0	0	

TEST NUMBER: P1306107

CATALOG NUMBER: P3SQAS17R409024DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6
2.5°	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	64.8	63.6
5°	70.4	70.4	70.4	70.4	69.3	69.3	69.3	68.2	68.2	65.9	62.5
7.5°	75.0	75.0	75.0	75.0	73.8	72.7	71.6	71.6	70.4	64.8	60.2
10°	84.1	84.1	82.9	81.8	80.7	78.4	77.2	75.0	71.6	63.6	56.8
12.5°	102.2	100.0	98.8	96.6	93.2	88.6	84.1	80.7	72.7	61.3	53.4
15°	135.2	132.9	128.4	121.6	114.7	105.6	97.7	89.7	76.1	57.9	47.7
17.5°	193.1	186.3	179.5	168.1	151.1	135.2	118.1	103.4	80.7	54.5	43.2
20°	347.6	343.1	302.2	270.4	219.3	182.9	148.8	123.8	87.5	51.1	38.6
22.5°	716.8	669.1	602.1	493.0	384.0	282.9	205.6	155.6	94.3	46.6	34.1
25°	1292.8	1217.8	1073.5	863.4	637.3	451.0	297.6	203.3	104.5	42.0	29.5
27.5°	1957.3	1881.2	1657.4	1367.8	998.6	680.5	424.9	269.2	118.1	37.5	26.1
30°	2665.1	2600.3	2316.3	1915.3	1407.5	953.1	569.1	336.3	132.9	32.9	22.7
31°	2950.2	2867.3	2560.6	2133.4	1599.5	1065.6	627.1	364.7	138.6	31.8	21.6
32°	3212.6	3118.4	2800.3	2342.5	1755.1	1187.1	690.7	389.7	143.1	29.5	20.4
33°	3438.7	3328.5	3021.8	2540.1	1926.7	1300.7	756.6	413.5	146.5	27.3	19.3
34°	3630.7	3535.3	3205.8	2738.9	2078.9	1409.8	821.3	437.4	148.8	26.1	18.2
35°	3794.3	3707.9	3381.9	2890.0	2227.7	1515.4	880.4	460.1	148.8	23.9	18.2
36°	3904.5	3829.5	3534.1	3044.5	2352.7	1605.2	930.4	480.5	148.8	21.6	17.0
37°	3964.7	3892.0	3634.1	3171.7	2475.4	1693.8	975.8	496.4	147.7	20.4	15.9
38°	3995.4	3931.7	3707.9	3275.1	2560.6	1757.4	1015.6	508.9	146.5	18.2	15.9
39°	4003.3	3949.9	3754.5	3350.1	2643.5	1821.0	1044.0	515.7	143.1	17.0	14.8
40°	3997.6	3951.1	3779.5	3417.1	2707.1	1871.0	1064.4	518.0	139.7	14.8	14.8
41°	3986.3	3949.9	3797.7	3463.7	2758.2	1902.8	1072.4	513.5	135.2	12.5	13.6
42°	3976.0	3936.3	3805.6	3495.5	2793.5	1918.7	1071.3	504.4	128.4	11.4	13.6
43°	3976.0	3930.6	3806.8	3516.0	2810.5	1919.9	1057.6	487.3	119.3	10.2	12.5
44°	3969.2	3927.2	3812.5	3529.6	2815.0	1909.6	1036.0	469.2	109.1	9.1	12.5
45°	3956.7	3912.4	3811.3	3530.7	2807.1	1884.6	1000.8	445.3	100.0	6.8	12.5
46°	3932.9	3893.1	3801.1	3522.8	2783.2	1848.3	958.8	421.5	89.7	5.7	11.4
47°	3885.2	3854.5	3773.8	3495.5	2746.9	1794.9	908.8	394.2	81.8	4.5	11.4
48°	3803.4	3781.8	3727.3	3435.3	2677.6	1729.0	855.4	364.7	73.8	4.5	11.4
49°	3653.4	3636.4	3604.6	3338.7	2589.0	1648.4	797.5	331.7	65.9	3.4	11.4
50°	3535.3	3517.1	3452.3	3176.3	2461.7	1546.1	733.9	298.8	56.8	2.3	10.2
51°	3456.9	3427.3	3325.1	2987.7	2276.6	1409.8	664.6	265.8	47.7	2.3	10.2
52°	3358.1	3313.7	3186.5	2818.4	2107.3	1273.5	589.6	232.9	42.0	2.3	10.2
53°	3151.3	3135.4	3009.3	2636.7	1938.0	1142.8	512.3	205.6	36.4	2.3	10.2
54°	2970.7	2946.8	2775.3	2384.5	1754.0	997.4	432.8	181.8	30.7	2.3	10.2
55°	2775.3	2728.7	2576.5	2172.1	1538.2	863.4	356.7	156.8	25.0	2.3	9.1
56°	2528.8	2487.9	2324.3	1944.9	1339.4	727.0	298.8	128.4	19.3	2.3	9.1
57°	2228.9	2191.4	2065.3	1665.4	1132.6	594.1	243.1	103.4	14.8	2.3	9.1
58°	1939.2	1897.1	1752.9	1397.3	914.5	471.4	203.3	84.1	11.4	2.3	9.1
59°	1716.5	1659.7	1473.4	1173.5	715.7	357.8	161.3	67.0	8.0	2.3	9.1
60°	1531.3	1484.8	1291.6	977.0	561.2	263.6	119.3	51.1	4.5	2.3	9.1
62.5°	887.2	874.7	700.9	503.3	264.7	122.7	59.1	23.9	2.3	3.4	9.1
65°	264.7	230.6	179.5	106.8	68.2	40.9	21.6	8.0	1.1	3.4	8.0



TEST NUMBER: P1306107

CATALOG NUMBER: P3SQAS17R409024DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	8.0	8.0	8.0	8.0	8.0	8.0	4.5	2.3	1.1	3.4	8.0
70°	4.5	3.4	3.4	3.4	3.4	2.3	2.3	1.1	1.1	3.4	6.8
72.5°	3.4	3.4	3.4	3.4	2.3	2.3	2.3	1.1	2.3	3.4	5.7
75°	3.4	2.3	2.3	2.3	2.3	1.1	1.1	1.1	2.3	3.4	5.7
77.5°	2.3	2.3	2.3	2.3	1.1	1.1	1.1	1.1	2.3	3.4	5.7
80°	2.3	2.3	1.1	1.1	1.1	1.1	1.1	1.1	1.1	3.4	4.5
82.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	3.4	4.5
85°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	3.4	4.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	3.4	3.4
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: P1306107

CATALOG NUMBER: P3SQAS17R409024DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	63.6	63.6	63.6	63.6
2.5°	61.3	60.2	59.1	59.1
5°	59.1	56.8	56.8	55.7
7.5°	55.7	53.4	53.4	53.4
10°	52.3	51.1	51.1	50.0
12.5°	47.7	47.7	47.7	47.7
15°	44.3	44.3	45.4	45.4
17.5°	39.8	40.9	43.2	44.3
20°	36.4	38.6	40.9	42.0
22.5°	34.1	36.4	39.8	40.9
25°	30.7	34.1	38.6	39.8
27.5°	28.4	32.9	36.4	38.6
30°	26.1	31.8	35.2	37.5
31°	26.1	30.7	35.2	37.5
32°	25.0	29.5	35.2	36.4
33°	25.0	29.5	35.2	36.4
34°	23.9	29.5	34.1	36.4
35°	23.9	29.5	34.1	36.4
36°	22.7	28.4	34.1	36.4
37°	22.7	28.4	34.1	36.4
38°	21.6	28.4	34.1	36.4
39°	21.6	28.4	34.1	36.4
40°	21.6	28.4	34.1	36.4
41°	20.4	28.4	34.1	36.4
42°	20.4	28.4	34.1	36.4
43°	20.4	27.3	34.1	36.4
44°	20.4	27.3	34.1	36.4
45°	19.3	27.3	34.1	36.4
46°	19.3	27.3	34.1	36.4
47°	19.3	27.3	34.1	36.4
48°	19.3	27.3	34.1	36.4
49°	19.3	27.3	34.1	36.4
50°	18.2	26.1	34.1	36.4
51°	18.2	26.1	34.1	36.4
52°	18.2	26.1	34.1	36.4
53°	18.2	26.1	34.1	36.4
54°	17.0	26.1	34.1	36.4
55°	17.0	26.1	34.1	36.4
56°	17.0	26.1	34.1	35.2
57°	17.0	26.1	32.9	35.2
58°	17.0	25.0	32.9	35.2
59°	17.0	25.0	32.9	35.2
60°	17.0	25.0	32.9	35.2
62.5°	15.9	25.0	31.8	34.1
65°	14.8	22.7	31.8	32.9



TEST NUMBER: P1306107

CATALOG NUMBER: P3SQAS17R409024DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	14.8	21.6	29.5	31.8
70°	13.6	20.4	28.4	30.7
72.5°	11.4	19.3	26.1	28.4
75°	10.2	17.0	23.9	26.1
77.5°	9.1	14.8	21.6	22.7
80°	8.0	12.5	18.2	20.4
82.5°	5.7	9.1	14.8	15.9
85°	4.5	6.8	10.2	11.4
87.5°	3.4	3.4	5.7	5.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)