

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: P1316420

Luminaire Tested: P3SQAS17R409827DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1316420
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: P3SQAS17R409827DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R40 optic, 2700K CCT AND, 98CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

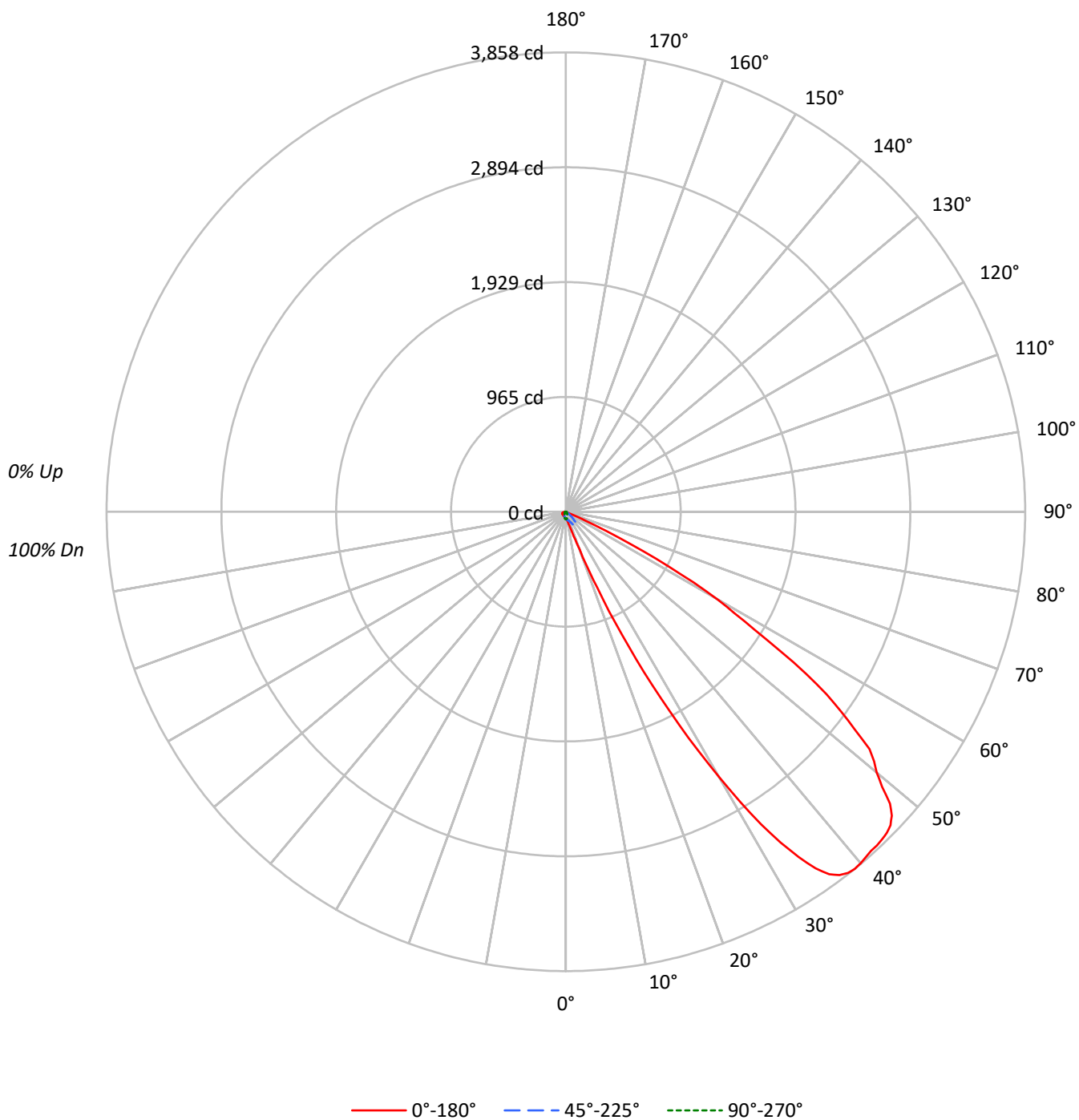
Lumens per Lamp: N/A
Luminaire Lumens: 1192.0 lumens
Efficiency: N/A
Efficacy: 58.4 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 20.4
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: P1316420

CATALOG NUMBER: P3SQAS17R409827DE010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1316420

CATALOG NUMBER: P3SQAS17R409827DE010 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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	99	107	104	100	97	99	97	94		96	93	91		92
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81
3	91	81	73	66	89	79	72	66	76	70	65		73	68	64		71
4	82	70	62	55	80	69	61	54	67	59	54		64	58	53		62
5	75	62	52	46	73	60	52	45	58	51	45		56	50	44		54
6	68	54	45	38	66	53	44	38	51	43	38		50	43	37		48
7	62	48	39	32	60	47	38	32	45	37	32		44	37	31		42
8	57	42	33	27	55	42	33	27	40	32	27		39	32	27		38
9	52	38	29	23	51	37	29	23	36	28	23		35	28	23		34
10	48	34	25	20	47	33	25	20	32	25	20		31	24	20		30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	10557	10557	10557	10557	10557
5°	11739	11358	10407	9457	9266
10°	14165	12067	9566	8622	8429
15°	23232	13069	8202	7613	7809
20°	61397	15450	6818	6818	7423
25°	236735	19136	5416	6233	7278
30°	510707	25475	4355	6105	7179
35°	768719	30149	3679	5992	7359
40°	866054	30261	3192	6160	7869
45°	928644	23455	2923	6406	8525
50°	912760	14656	2653	6752	9378
55°	802988	7236	2642	7567	10509
60°	508263	1516	3031	8301	11677
65°	103957	448	3138	8925	12918
70°	2216	554	3323	9920	14905
75°	2196	1464	3660	10913	16769
80°	2182	1091	4364	11901	19538
85°	2174	2174	8695	13042	21539

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 945409 cd/sqm

TEST NUMBER: P1316420

CATALOG NUMBER: P3SQAS17R409827DE010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.7	0.5
10°-20°	18.9	1.6
20°-30°	92.6	7.8
30°-40°	301.1	25.3
40°-50°	415.1	34.8
50°-60°	289.2	24.3
60°-70°	54.8	4.6
70°-80°	9.9	0.8
80°-90°	4.6	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°	117.2	9.8
0°-40°	418.3	35.1
0°-60°	1122.7	94.2
0°-90°	1192.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1192.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	61	61	61	61	61	
5°	68	66	60	55	54	7
15°	130	73	46	43	44	47
25°	1246	101	28	33	38	641
35°	3656	143	18	28	35	2209
45°	3813	96	12	26	35	2899
55°	2674	24	9	25	35	2286
65°	255	1	8	22	32	451
75°	3	2	6	16	25	3
85°	1	1	4	7	11	1
90°	0	0	0	0	0	

TEST NUMBER: P1316420

CATALOG NUMBER: P3SQAS17R409827DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
2.5°	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	62.4	61.3
5°	67.9	67.9	67.9	67.9	66.8	66.8	66.8	65.7	65.7	63.5	60.2
7.5°	72.2	72.2	72.2	72.2	71.2	70.1	69.0	69.0	67.9	62.4	58.0
10°	81.0	81.0	79.9	78.8	77.7	75.5	74.4	72.2	69.0	61.3	54.7
12.5°	98.5	96.3	95.2	93.0	89.8	85.4	81.0	77.7	70.1	59.1	51.5
15°	130.3	128.1	123.7	117.1	110.6	101.8	94.1	86.5	73.3	55.8	46.0
17.5°	186.1	179.5	173.0	162.0	145.6	130.3	113.8	99.6	77.7	52.5	41.6
20°	335.0	330.6	291.2	260.5	211.3	176.2	143.4	119.3	84.3	49.3	37.2
22.5°	690.7	644.8	580.2	475.1	370.0	272.6	198.1	150.0	90.9	44.9	32.8
25°	1245.8	1173.5	1034.5	832.0	614.1	434.6	286.8	195.9	100.7	40.5	28.5
27.5°	1886.1	1812.8	1597.1	1318.0	962.2	655.7	409.4	259.4	113.8	36.1	25.2
30°	2568.1	2505.7	2232.1	1845.6	1356.3	918.4	548.4	324.0	128.1	31.7	21.9
31°	2842.9	2763.0	2467.4	2055.8	1541.3	1026.8	604.3	351.4	133.6	30.7	20.8
32°	3095.8	3004.9	2698.4	2257.2	1691.3	1143.9	665.6	375.5	137.9	28.5	19.7
33°	3313.6	3207.4	2911.9	2447.7	1856.6	1253.4	729.1	398.5	141.2	26.3	18.6
34°	3498.6	3406.7	3089.2	2639.3	2003.3	1358.5	791.5	421.5	143.4	25.2	17.5
35°	3656.3	3573.1	3258.9	2784.9	2146.7	1460.3	848.4	443.3	143.4	23.0	17.5
36°	3762.4	3690.2	3405.6	2933.8	2267.1	1546.8	896.5	463.1	143.4	20.8	16.4
37°	3820.5	3750.4	3501.9	3056.4	2385.3	1632.2	940.3	478.4	142.3	19.7	15.3
38°	3850.0	3788.7	3573.1	3156.0	2467.4	1693.5	978.6	490.4	141.2	17.5	15.3
39°	3857.7	3806.2	3617.9	3228.2	2547.3	1754.8	1006.0	497.0	137.9	16.4	14.2
40°	3852.2	3807.3	3642.0	3292.8	2608.6	1802.9	1025.7	499.2	134.6	14.2	14.2
41°	3841.3	3806.2	3659.5	3337.7	2657.9	1833.6	1033.4	494.8	130.3	12.0	13.1
42°	3831.4	3793.1	3667.2	3368.3	2691.8	1848.9	1032.3	486.0	123.7	10.9	13.1
43°	3831.4	3787.6	3668.3	3388.1	2708.3	1850.0	1019.2	469.6	114.9	9.9	12.0
44°	3824.8	3784.3	3673.8	3401.2	2712.6	1840.2	998.4	452.1	105.1	8.8	12.0
45°	3812.8	3770.1	3672.7	3402.3	2705.0	1816.1	964.4	429.1	96.3	6.6	12.0
46°	3789.8	3751.5	3662.8	3394.6	2682.0	1781.1	923.9	406.1	86.5	5.5	10.9
47°	3743.8	3714.3	3636.5	3368.3	2647.0	1729.6	875.7	379.9	78.8	4.4	10.9
48°	3665.0	3644.2	3591.7	3310.3	2580.2	1666.1	824.3	351.4	71.2	4.4	10.9
49°	3520.5	3504.1	3473.4	3217.3	2494.8	1588.4	768.5	319.6	63.5	3.3	10.9
50°	3406.7	3389.1	3326.8	3060.7	2372.2	1489.9	707.2	287.9	54.7	2.2	9.9
51°	3331.1	3302.7	3204.1	2879.0	2193.8	1358.5	640.4	256.2	46.0	2.2	9.9
52°	3235.9	3193.2	3070.6	2715.9	2030.6	1227.1	568.1	224.4	40.5	2.2	9.9
53°	3036.7	3021.3	2899.8	2540.8	1867.5	1101.3	493.7	198.1	35.0	2.2	9.9
54°	2862.6	2839.6	2674.3	2297.7	1690.2	961.1	417.1	175.1	29.6	2.2	9.9
55°	2674.3	2629.4	2482.7	2093.0	1482.2	832.0	343.7	151.1	24.1	2.2	8.8
56°	2436.8	2397.4	2239.7	1874.1	1290.6	700.6	287.9	123.7	18.6	2.2	8.8
57°	2147.8	2111.6	1990.1	1604.8	1091.4	572.5	234.3	99.6	14.2	2.2	8.8
58°	1868.6	1828.1	1689.1	1346.5	881.2	454.3	195.9	81.0	10.9	2.2	8.8
59°	1654.1	1599.3	1419.8	1130.8	689.7	344.8	155.4	64.6	7.7	2.2	8.8
60°	1475.6	1430.8	1244.7	941.4	540.8	254.0	114.9	49.3	4.4	2.2	8.8
62.5°	855.0	842.9	675.4	484.9	255.1	118.2	56.9	23.0	2.2	3.3	8.8
65°	255.1	222.2	173.0	102.9	65.7	39.4	20.8	7.7	1.1	3.3	7.7



TEST NUMBER: P1316420

CATALOG NUMBER: P3SQAS17R409827DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	7.7	7.7	7.7	7.7	7.7	7.7	4.4	2.2	1.1	3.3	7.7
70°	4.4	3.3	3.3	3.3	3.3	2.2	2.2	1.1	1.1	3.3	6.6
72.5°	3.3	3.3	3.3	3.3	2.2	2.2	2.2	1.1	2.2	3.3	5.5
75°	3.3	2.2	2.2	2.2	2.2	1.1	1.1	1.1	2.2	3.3	5.5
77.5°	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	2.2	3.3	5.5
80°	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	3.3	4.4
82.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	3.3	4.4
85°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	3.3	4.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	3.3	3.3
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: P1316420

CATALOG NUMBER: P3SQAS17R409827DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	61.3	61.3	61.3	61.3
2.5°	59.1	58.0	56.9	56.9
5°	56.9	54.7	54.7	53.6
7.5°	53.6	51.5	51.5	51.5
10°	50.4	49.3	49.3	48.2
12.5°	46.0	46.0	46.0	46.0
15°	42.7	42.7	43.8	43.8
17.5°	38.3	39.4	41.6	42.7
20°	35.0	37.2	39.4	40.5
22.5°	32.8	35.0	38.3	39.4
25°	29.6	32.8	37.2	38.3
27.5°	27.4	31.7	35.0	37.2
30°	25.2	30.7	33.9	36.1
31°	25.2	29.6	33.9	36.1
32°	24.1	28.5	33.9	35.0
33°	24.1	28.5	33.9	35.0
34°	23.0	28.5	32.8	35.0
35°	23.0	28.5	32.8	35.0
36°	21.9	27.4	32.8	35.0
37°	21.9	27.4	32.8	35.0
38°	20.8	27.4	32.8	35.0
39°	20.8	27.4	32.8	35.0
40°	20.8	27.4	32.8	35.0
41°	19.7	27.4	32.8	35.0
42°	19.7	27.4	32.8	35.0
43°	19.7	26.3	32.8	35.0
44°	19.7	26.3	32.8	35.0
45°	18.6	26.3	32.8	35.0
46°	18.6	26.3	32.8	35.0
47°	18.6	26.3	32.8	35.0
48°	18.6	26.3	32.8	35.0
49°	18.6	26.3	32.8	35.0
50°	17.5	25.2	32.8	35.0
51°	17.5	25.2	32.8	35.0
52°	17.5	25.2	32.8	35.0
53°	17.5	25.2	32.8	35.0
54°	16.4	25.2	32.8	35.0
55°	16.4	25.2	32.8	35.0
56°	16.4	25.2	32.8	33.9
57°	16.4	25.2	31.7	33.9
58°	16.4	24.1	31.7	33.9
59°	16.4	24.1	31.7	33.9
60°	16.4	24.1	31.7	33.9
62.5°	15.3	24.1	30.7	32.8
65°	14.2	21.9	30.7	31.7



TEST NUMBER: P1316420

CATALOG NUMBER: P3SQAS17R409827DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	14.2	20.8	28.5	30.7
70°	13.1	19.7	27.4	29.6
72.5°	10.9	18.6	25.2	27.4
75°	9.9	16.4	23.0	25.2
77.5°	8.8	14.2	20.8	21.9
80°	7.7	12.0	17.5	19.7
82.5°	5.5	8.8	14.2	15.3
85°	4.4	6.6	9.9	10.9
87.5°	3.3	3.3	5.5	5.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)