

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: P1312616

Luminaire Tested: P3SQAS17R409727DE010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1312616
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: P3SQAS17R409727DE010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R40 optic, 2700K CCT AND, 97CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

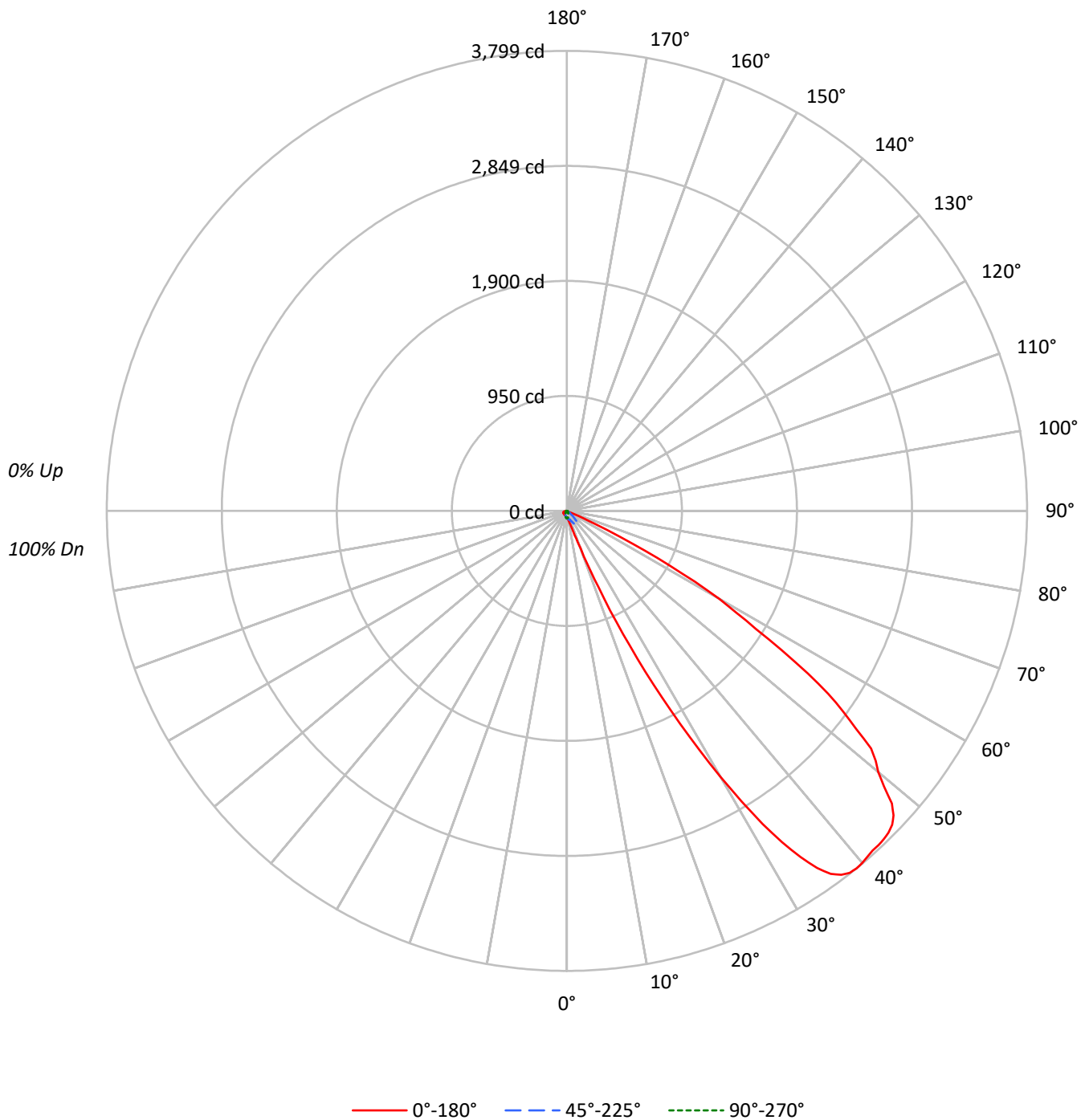
Lumens per Lamp: N/A
Luminaire Lumens: 1174.0 lumens
Efficiency: N/A
Efficacy: 55.4 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1312616

CATALOG NUMBER: P3SQAS17R409727DE010 E3SQCA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1312616

CATALOG NUMBER: P3SQAS17R409727DE010 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
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°	10402	10402	10402	10402	10402
5°	11548	11185	10252	9318	9128
10°	13955	11874	9426	8482	8289
15°	22876	12873	8077	7489	7685
20°	60463	15212	6726	6726	7313
25°	233144	18851	5321	6138	7164
30°	503011	25077	4295	6006	7080
35°	757092	29687	3637	5887	7253
40°	852970	29811	3147	6070	7756
45°	914615	23114	2898	6308	8403
50°	898962	14441	2599	6645	9244
55°	790857	7116	2582	7446	10359
60°	500617	1481	2962	8163	11504
65°	102367	448	3056	8802	12755
70°	2165	554	3273	9769	14653
75°	2129	1464	3593	10780	16502
80°	2182	1091	4265	11802	19241
85°	2174	2174	8497	12844	21341

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 931141 cd/sqm

TEST NUMBER: P1312616

CATALOG NUMBER: P3SQAS17R409727DE010 E3SQCA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.6	0.5
10°-20°	18.6	1.6
20°-30°	91.2	7.8
30°-40°	296.6	25.3
40°-50°	408.9	34.8
50°-60°	284.8	24.3
60°-70°	54.0	4.6
70°-80°	9.8	0.8
80°-90°	4.5	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°	115.4	9.8
0°-40°	412.0	35.1
0°-60°	1105.7	94.2
0°-90°	1174.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1174.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	60	60	60	60	60	
5°	67	65	59	54	53	7
15°	128	72	45	42	43	47
25°	1227	99	28	32	38	632
35°	3601	141	17	28	34	2176
45°	3755	95	12	26	34	2856
55°	2634	24	9	25	34	2251
65°	251	1	8	22	31	444
75°	3	2	5	16	25	3
85°	1	1	4	6	11	1
90°	0	0	0	0	0	

TEST NUMBER: P1312616

CATALOG NUMBER: P3SQAS17R409727DE010 E3SQCA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4
2.5°	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	61.5	60.4
5°	66.8	66.8	66.8	66.8	65.8	65.8	65.8	64.7	64.7	62.5	59.3
7.5°	71.2	71.2	71.2	71.2	70.1	69.0	67.9	67.9	66.8	61.5	57.1
10°	79.8	79.8	78.7	77.6	76.5	74.4	73.3	71.2	67.9	60.4	53.9
12.5°	97.0	94.9	93.8	91.6	88.4	84.1	79.8	76.5	69.0	58.2	50.7
15°	128.3	126.1	121.8	115.4	108.9	100.3	92.7	85.2	72.2	55.0	45.3
17.5°	183.3	176.8	170.3	159.6	143.4	128.3	112.1	98.1	76.5	51.8	41.0
20°	329.9	325.6	286.8	256.6	208.1	173.6	141.2	117.5	83.0	48.5	36.7
22.5°	680.3	635.0	571.4	467.9	364.4	268.5	195.1	147.7	89.5	44.2	32.3
25°	1226.9	1155.8	1018.9	819.4	604.8	428.0	282.5	193.0	99.2	39.9	28.0
27.5°	1857.7	1785.4	1573.0	1298.1	947.7	645.8	403.2	255.5	112.1	35.6	24.8
30°	2529.4	2467.9	2198.4	1817.8	1335.8	904.6	540.2	319.1	126.1	31.3	21.6
31°	2800.0	2721.3	2430.2	2024.8	1518.0	1011.3	595.1	346.1	131.5	30.2	20.5
32°	3049.0	2959.5	2657.7	2223.2	1665.8	1126.7	655.5	369.8	135.8	28.0	19.4
33°	3263.6	3159.0	2867.9	2410.8	1828.6	1234.5	718.1	392.4	139.1	25.9	18.3
34°	3445.8	3355.2	3042.6	2599.4	1973.0	1338.0	779.5	415.1	141.2	24.8	17.3
35°	3601.0	3519.1	3209.7	2742.8	2114.3	1438.3	835.6	436.7	141.2	22.6	17.3
36°	3705.6	3634.5	3354.1	2889.5	2232.9	1523.4	883.0	456.1	141.2	20.5	16.2
37°	3762.8	3693.8	3449.0	3010.2	2349.3	1607.5	926.1	471.2	140.2	19.4	15.1
38°	3791.9	3731.5	3519.1	3108.3	2430.2	1667.9	963.9	483.0	139.1	17.3	15.1
39°	3799.4	3748.7	3563.3	3179.5	2508.9	1728.3	990.8	489.5	135.8	16.2	14.0
40°	3794.0	3749.8	3587.0	3243.1	2569.2	1775.7	1010.2	491.6	132.6	14.0	14.0
41°	3783.2	3748.7	3604.3	3287.3	2617.8	1805.9	1017.8	487.3	128.3	11.9	12.9
42°	3773.5	3735.8	3611.8	3317.5	2651.2	1821.0	1016.7	478.7	121.8	10.8	12.9
43°	3773.5	3730.4	3612.9	3336.9	2667.4	1822.1	1003.8	462.5	113.2	9.7	11.9
44°	3767.1	3727.2	3618.3	3349.8	2671.7	1812.4	983.3	445.3	103.5	8.6	11.9
45°	3755.2	3713.2	3617.2	3350.9	2664.1	1788.7	949.9	422.6	94.9	6.5	11.9
46°	3732.6	3694.8	3607.5	3343.4	2641.5	1754.2	910.0	400.0	85.2	5.4	10.8
47°	3687.3	3658.2	3581.6	3317.5	2607.0	1703.5	862.5	374.1	77.6	4.3	10.8
48°	3609.7	3589.2	3537.4	3260.3	2541.2	1641.0	811.9	346.1	70.1	4.3	10.8
49°	3467.3	3451.2	3421.0	3168.7	2457.1	1564.4	756.9	314.8	62.5	3.2	10.8
50°	3355.2	3338.0	3276.5	3014.5	2336.4	1467.4	696.5	283.6	53.9	2.2	9.7
51°	3280.8	3252.8	3155.8	2835.5	2160.6	1338.0	630.7	252.3	45.3	2.2	9.7
52°	3187.0	3145.0	3024.2	2674.9	2000.0	1208.6	559.6	221.0	39.9	2.2	9.7
53°	2990.8	2975.7	2856.0	2502.4	1839.3	1084.6	486.2	195.1	34.5	2.2	9.7
54°	2819.4	2796.7	2633.9	2263.0	1664.7	946.6	410.8	172.5	29.1	2.2	9.7
55°	2633.9	2589.7	2445.3	2061.4	1459.8	819.4	338.5	148.8	23.7	2.2	8.6
56°	2400.0	2361.2	2205.9	1845.8	1271.1	690.0	283.6	121.8	18.3	2.2	8.6
57°	2115.3	2079.8	1960.1	1580.6	1074.9	563.9	230.7	98.1	14.0	2.2	8.6
58°	1840.4	1800.5	1663.6	1326.1	867.9	447.4	193.0	79.8	10.8	2.2	8.6
59°	1629.1	1575.2	1398.4	1113.7	679.2	339.6	153.1	63.6	7.5	2.2	8.6
60°	1453.4	1409.1	1225.9	927.2	532.6	250.1	113.2	48.5	4.3	2.2	8.6
62.5°	842.0	830.2	665.2	477.6	251.2	116.4	56.1	22.6	2.2	3.2	8.6
65°	251.2	218.9	170.3	101.3	64.7	38.8	20.5	7.5	1.1	3.2	7.5



TEST NUMBER: P1312616

CATALOG NUMBER: P3SQAS17R409727DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	7.5	7.5	7.5	7.5	7.5	7.5	4.3	2.2	1.1	3.2	7.5
70°	4.3	3.2	3.2	3.2	3.2	2.2	2.2	1.1	1.1	3.2	6.5
72.5°	3.2	3.2	3.2	3.2	2.2	2.2	2.2	1.1	2.2	3.2	5.4
75°	3.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	2.2	3.2	5.4
77.5°	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	2.2	3.2	5.4
80°	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	3.2	4.3
82.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	3.2	4.3
85°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	3.2	4.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	3.2	3.2
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: P1312616

CATALOG NUMBER: P3SQAS17R409727DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	60.4	60.4	60.4	60.4
2.5°	58.2	57.1	56.1	56.1
5°	56.1	53.9	53.9	52.8
7.5°	52.8	50.7	50.7	50.7
10°	49.6	48.5	48.5	47.4
12.5°	45.3	45.3	45.3	45.3
15°	42.0	42.0	43.1	43.1
17.5°	37.7	38.8	41.0	42.0
20°	34.5	36.7	38.8	39.9
22.5°	32.3	34.5	37.7	38.8
25°	29.1	32.3	36.7	37.7
27.5°	27.0	31.3	34.5	36.7
30°	24.8	30.2	33.4	35.6
31°	24.8	29.1	33.4	35.6
32°	23.7	28.0	33.4	34.5
33°	23.7	28.0	33.4	34.5
34°	22.6	28.0	32.3	34.5
35°	22.6	28.0	32.3	34.5
36°	21.6	27.0	32.3	34.5
37°	21.6	27.0	32.3	34.5
38°	20.5	27.0	32.3	34.5
39°	20.5	27.0	32.3	34.5
40°	20.5	27.0	32.3	34.5
41°	19.4	27.0	32.3	34.5
42°	19.4	27.0	32.3	34.5
43°	19.4	25.9	32.3	34.5
44°	19.4	25.9	32.3	34.5
45°	18.3	25.9	32.3	34.5
46°	18.3	25.9	32.3	34.5
47°	18.3	25.9	32.3	34.5
48°	18.3	25.9	32.3	34.5
49°	18.3	25.9	32.3	34.5
50°	17.3	24.8	32.3	34.5
51°	17.3	24.8	32.3	34.5
52°	17.3	24.8	32.3	34.5
53°	17.3	24.8	32.3	34.5
54°	16.2	24.8	32.3	34.5
55°	16.2	24.8	32.3	34.5
56°	16.2	24.8	32.3	33.4
57°	16.2	24.8	31.3	33.4
58°	16.2	23.7	31.3	33.4
59°	16.2	23.7	31.3	33.4
60°	16.2	23.7	31.3	33.4
62.5°	15.1	23.7	30.2	32.3
65°	14.0	21.6	30.2	31.3



TEST NUMBER: P1312616

CATALOG NUMBER: P3SQAS17R409727DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	14.0	20.5	28.0	30.2
70°	12.9	19.4	27.0	29.1
72.5°	10.8	18.3	24.8	27.0
75°	9.7	16.2	22.6	24.8
77.5°	8.6	14.0	20.5	21.6
80°	7.5	11.9	17.3	19.4
82.5°	5.4	8.6	14.0	15.1
85°	4.3	6.5	9.7	10.8
87.5°	3.2	3.2	5.4	5.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)