

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: P1306254

Luminaire Tested: P3SQAS20R409024D010 E3SQCA451MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1306254
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: P3SQAS20R409024D010 E3SQCA451MW
Description: 3in Adjustable LED luminaire with, R40 optic, 2400K CCT AND, 90CRI , E3SQCA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

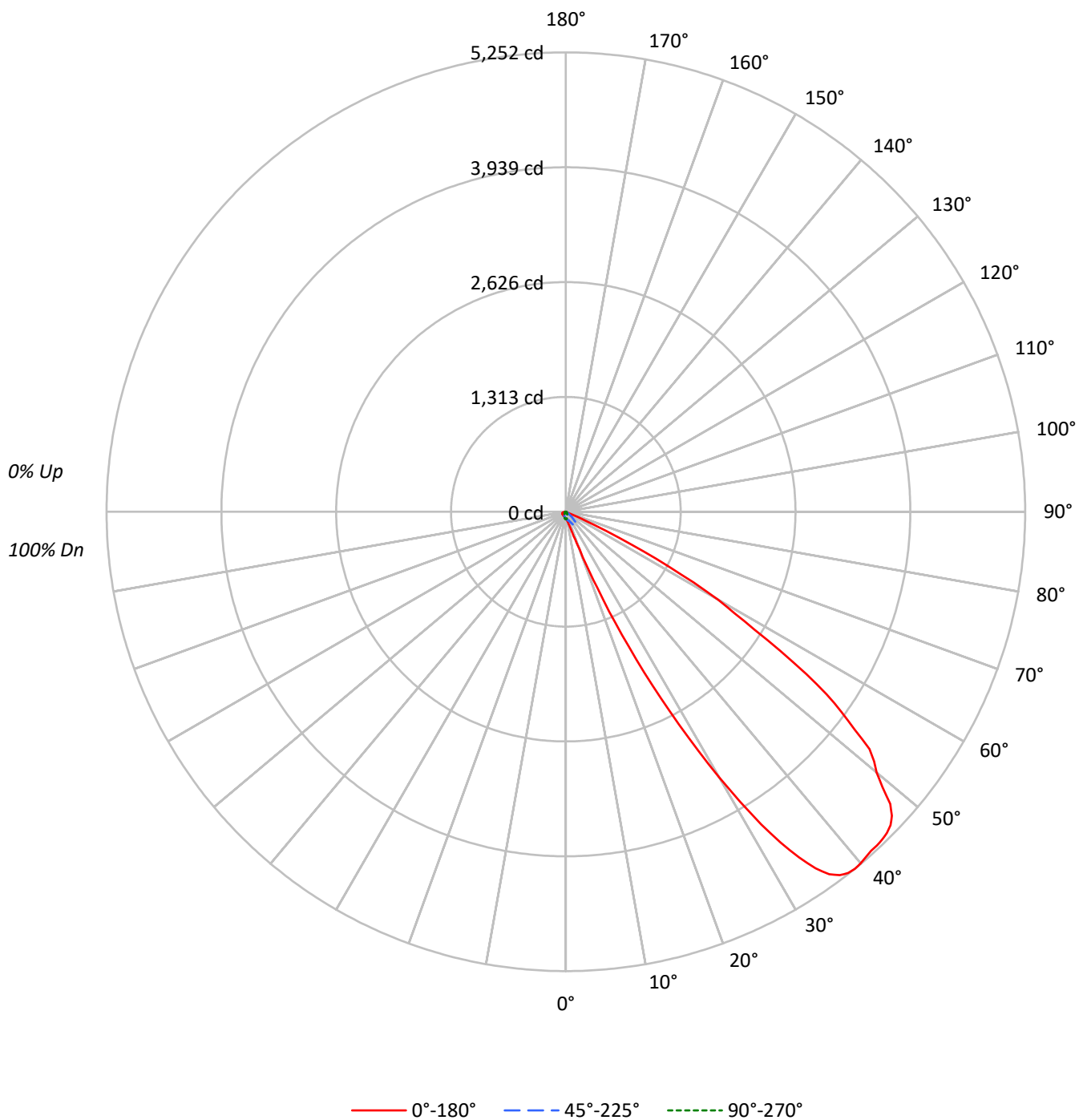
Lumens per Lamp: N/A
Luminaire Lumens: 1623.0 lumens
Efficiency: N/A
Efficacy: 56.4 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1306254

CATALOG NUMBER: P3SQAS20R409024D010 E3SQCA451MW

Luminous Intensity Polar Plot



TEST NUMBER: P1306254

CATALOG NUMBER: P3SQAS20R409024D010 E3SQCA451MW

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
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°	14381	14381	14381	14381	14381
5°	15974	15456	14176	12880	12620
10°	19289	16421	13029	11734	11472
15°	31630	17812	11161	10359	10627
20°	83592	21040	9292	9292	10098
25°	322323	26053	7373	8494	9919
30°	695373	34682	5926	8293	9784
35°	1046663	41061	5004	8158	10029
40°	1179207	41210	4362	8386	10724
45°	1264415	31955	3994	8719	11618
50°	1242771	19961	3590	9190	12780
55°	1093340	9849	3573	10299	14322
60°	692059	2067	4099	11298	15913
65°	141529	611	4238	12144	17605
70°	3021	755	4482	13495	20243
75°	2994	1996	4991	14905	22824
80°	2975	1488	5951	16265	26580
85°	2964	2964	11856	17587	29443

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 1287254 cd/sqm

TEST NUMBER: P1306254

CATALOG NUMBER: P3SQAS20R409024D010 E3SQCA451MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.8	0.5
10°-20°	25.7	1.6
20°-30°	126.1	7.8
30°-40°	410.0	25.3
40°-50°	565.2	34.8
50°-60°	393.7	24.3
60°-70°	74.6	4.6
70°-80°	13.5	0.8
80°-90°	6.3	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°	159.6	9.8
0°-40°	569.6	35.1
0°-60°	1528.6	94.2
0°-90°	1623.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1623.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	84	84	84	84	84	
5°	92	89	82	74	73	9
15°	177	100	63	58	60	64
25°	1696	137	39	45	52	873
35°	4978	195	24	39	48	3008
45°	5191	131	16	36	48	3948
55°	3641	33	12	34	48	3112
65°	347	2	10	30	43	614
75°	4	3	8	22	34	4
85°	2	2	6	9	15	1
90°	0	0	0	0	0	

TEST NUMBER: P1306254

CATALOG NUMBER: P3SQAS20R409024D010 E3SQCA451MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5
2.5°	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4	85.0	83.5
5°	92.4	92.4	92.4	92.4	90.9	90.9	90.9	89.4	89.4	86.4	82.0
7.5°	98.4	98.4	98.4	98.4	96.9	95.4	93.9	93.9	92.4	85.0	79.0
10°	110.3	110.3	108.8	107.3	105.8	102.8	101.4	98.4	93.9	83.5	74.5
12.5°	134.1	131.2	129.7	126.7	122.2	116.3	110.3	105.8	95.4	80.5	70.1
15°	177.4	174.4	168.4	159.5	150.5	138.6	128.2	117.7	99.9	76.0	62.6
17.5°	253.4	244.4	235.5	220.6	198.2	177.4	155.0	135.6	105.8	71.5	56.6
20°	456.1	450.1	396.5	354.7	287.7	240.0	195.3	162.5	114.8	67.1	50.7
22.5°	940.5	877.9	790.0	646.9	503.8	371.1	269.8	204.2	123.7	61.1	44.7
25°	1696.2	1597.8	1408.5	1132.8	836.2	591.7	390.5	266.8	137.1	55.1	38.8
27.5°	2568.1	2468.3	2174.6	1794.6	1310.1	892.8	557.4	353.2	155.0	49.2	34.3
30°	3496.7	3411.8	3039.1	2513.0	1846.7	1250.5	746.7	441.2	174.4	43.2	29.8
31°	3870.8	3762.0	3359.6	2799.2	2098.6	1398.1	822.8	478.5	181.8	41.7	28.3
32°	4215.1	4091.4	3674.1	3073.4	2302.8	1557.6	906.2	511.2	187.8	38.8	26.8
33°	4511.7	4367.2	3964.7	3332.8	2527.9	1706.6	992.7	542.5	192.3	35.8	25.3
34°	4763.6	4638.4	4206.2	3593.6	2727.6	1849.7	1077.6	573.8	195.3	34.3	23.8
35°	4978.3	4865.0	4437.2	3791.8	2922.9	1988.3	1155.1	603.7	195.3	31.3	23.8
36°	5122.8	5024.5	4636.9	3994.5	3086.8	2106.1	1220.7	630.5	195.3	28.3	22.4
37°	5201.8	5106.5	4768.1	4161.5	3247.8	2222.3	1280.3	651.3	193.8	26.8	20.9
38°	5242.1	5158.6	4865.0	4297.1	3359.6	2305.8	1332.5	667.7	192.3	23.8	20.9
39°	5252.5	5182.5	4926.1	4395.5	3468.4	2389.3	1369.8	676.7	187.8	22.4	19.4
40°	5245.1	5184.0	4958.9	4483.4	3551.9	2454.9	1396.6	679.7	183.3	19.4	19.4
41°	5230.2	5182.5	4982.7	4544.5	3618.9	2496.6	1407.0	673.7	177.4	16.4	17.9
42°	5216.7	5164.6	4993.2	4586.3	3665.1	2517.5	1405.5	661.8	168.4	14.9	17.9
43°	5216.7	5157.1	4994.7	4613.1	3687.5	2518.9	1387.7	639.4	156.5	13.4	16.4
44°	5207.8	5152.7	5002.1	4631.0	3693.5	2505.5	1359.3	615.6	143.1	11.9	16.4
45°	5191.4	5133.3	5000.6	4632.5	3683.0	2472.7	1313.1	584.3	131.2	8.9	16.4
46°	5160.1	5107.9	4987.2	4622.0	3651.7	2425.0	1258.0	553.0	117.7	7.5	14.9
47°	5097.5	5057.3	4951.4	4586.3	3604.0	2355.0	1192.4	517.2	107.3	6.0	14.9
48°	4990.2	4961.9	4890.3	4507.3	3513.1	2268.5	1122.3	478.5	96.9	6.0	14.9
49°	4793.4	4771.1	4729.4	4380.6	3396.8	2162.7	1046.3	435.2	86.4	4.5	14.9
50°	4638.4	4614.6	4529.6	4167.4	3229.9	2028.6	962.9	392.0	74.5	3.0	13.4
51°	4535.6	4496.8	4362.7	3920.0	2987.0	1849.7	871.9	348.8	62.6	3.0	13.4
52°	4405.9	4347.8	4180.9	3697.9	2764.9	1670.9	773.6	305.6	55.1	3.0	13.4
53°	4134.6	4113.8	3948.3	3459.5	2542.8	1499.4	672.2	269.8	47.7	3.0	13.4
54°	3897.7	3866.4	3641.3	3128.6	2301.3	1308.7	567.9	238.5	40.2	3.0	13.4
55°	3641.3	3580.2	3380.5	2849.8	2018.1	1132.8	468.0	205.7	32.8	3.0	11.9
56°	3317.9	3264.2	3049.6	2551.7	1757.3	953.9	392.0	168.4	25.3	3.0	11.9
57°	2924.4	2875.2	2709.7	2185.1	1486.0	779.5	319.0	135.6	19.4	3.0	11.9
58°	2544.3	2489.1	2299.8	1833.3	1199.9	618.6	266.8	110.3	14.9	3.0	11.9
59°	2252.1	2177.6	1933.2	1539.7	939.0	469.5	211.7	87.9	10.4	3.0	11.9
60°	2009.2	1948.1	1694.7	1281.8	736.3	345.8	156.5	67.1	6.0	3.0	11.9
62.5°	1164.1	1147.7	919.6	660.3	347.3	161.0	77.5	31.3	3.0	4.5	11.9
65°	347.3	302.6	235.5	140.1	89.4	53.7	28.3	10.4	1.5	4.5	10.4



TEST NUMBER: P1306254

CATALOG NUMBER: P3SQAS20R409024D010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	10.4	10.4	10.4	10.4	10.4	10.4	6.0	3.0	1.5	4.5	10.4
70°	6.0	4.5	4.5	4.5	4.5	3.0	3.0	1.5	1.5	4.5	8.9
72.5°	4.5	4.5	4.5	4.5	3.0	3.0	3.0	1.5	3.0	4.5	7.5
75°	4.5	3.0	3.0	3.0	3.0	1.5	1.5	1.5	3.0	4.5	7.5
77.5°	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5	3.0	4.5	7.5
80°	3.0	3.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	4.5	6.0
82.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	4.5	6.0
85°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	4.5	6.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	4.5	4.5
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: P1306254

CATALOG NUMBER: P3SQAS20R409024D010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	83.5	83.5	83.5	83.5
2.5°	80.5	79.0	77.5	77.5
5°	77.5	74.5	74.5	73.0
7.5°	73.0	70.1	70.1	70.1
10°	68.6	67.1	67.1	65.6
12.5°	62.6	62.6	62.6	62.6
15°	58.1	58.1	59.6	59.6
17.5°	52.2	53.7	56.6	58.1
20°	47.7	50.7	53.7	55.1
22.5°	44.7	47.7	52.2	53.7
25°	40.2	44.7	50.7	52.2
27.5°	37.3	43.2	47.7	50.7
30°	34.3	41.7	46.2	49.2
31°	34.3	40.2	46.2	49.2
32°	32.8	38.8	46.2	47.7
33°	32.8	38.8	46.2	47.7
34°	31.3	38.8	44.7	47.7
35°	31.3	38.8	44.7	47.7
36°	29.8	37.3	44.7	47.7
37°	29.8	37.3	44.7	47.7
38°	28.3	37.3	44.7	47.7
39°	28.3	37.3	44.7	47.7
40°	28.3	37.3	44.7	47.7
41°	26.8	37.3	44.7	47.7
42°	26.8	37.3	44.7	47.7
43°	26.8	35.8	44.7	47.7
44°	26.8	35.8	44.7	47.7
45°	25.3	35.8	44.7	47.7
46°	25.3	35.8	44.7	47.7
47°	25.3	35.8	44.7	47.7
48°	25.3	35.8	44.7	47.7
49°	25.3	35.8	44.7	47.7
50°	23.8	34.3	44.7	47.7
51°	23.8	34.3	44.7	47.7
52°	23.8	34.3	44.7	47.7
53°	23.8	34.3	44.7	47.7
54°	22.4	34.3	44.7	47.7
55°	22.4	34.3	44.7	47.7
56°	22.4	34.3	44.7	46.2
57°	22.4	34.3	43.2	46.2
58°	22.4	32.8	43.2	46.2
59°	22.4	32.8	43.2	46.2
60°	22.4	32.8	43.2	46.2
62.5°	20.9	32.8	41.7	44.7
65°	19.4	29.8	41.7	43.2



TEST NUMBER: P1306254

CATALOG NUMBER: P3SQAS20R409024D010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	19.4	28.3	38.8	41.7
70°	17.9	26.8	37.3	40.2
72.5°	14.9	25.3	34.3	37.3
75°	13.4	22.4	31.3	34.3
77.5°	11.9	19.4	28.3	29.8
80°	10.4	16.4	23.8	26.8
82.5°	7.5	11.9	19.4	20.9
85°	6.0	8.9	13.4	14.9
87.5°	4.5	4.5	7.5	7.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)