

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: P1311444

Luminaire Tested: P3SQAS17R209050DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1311444
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-74)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS17R209050DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R20 optic, 5000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

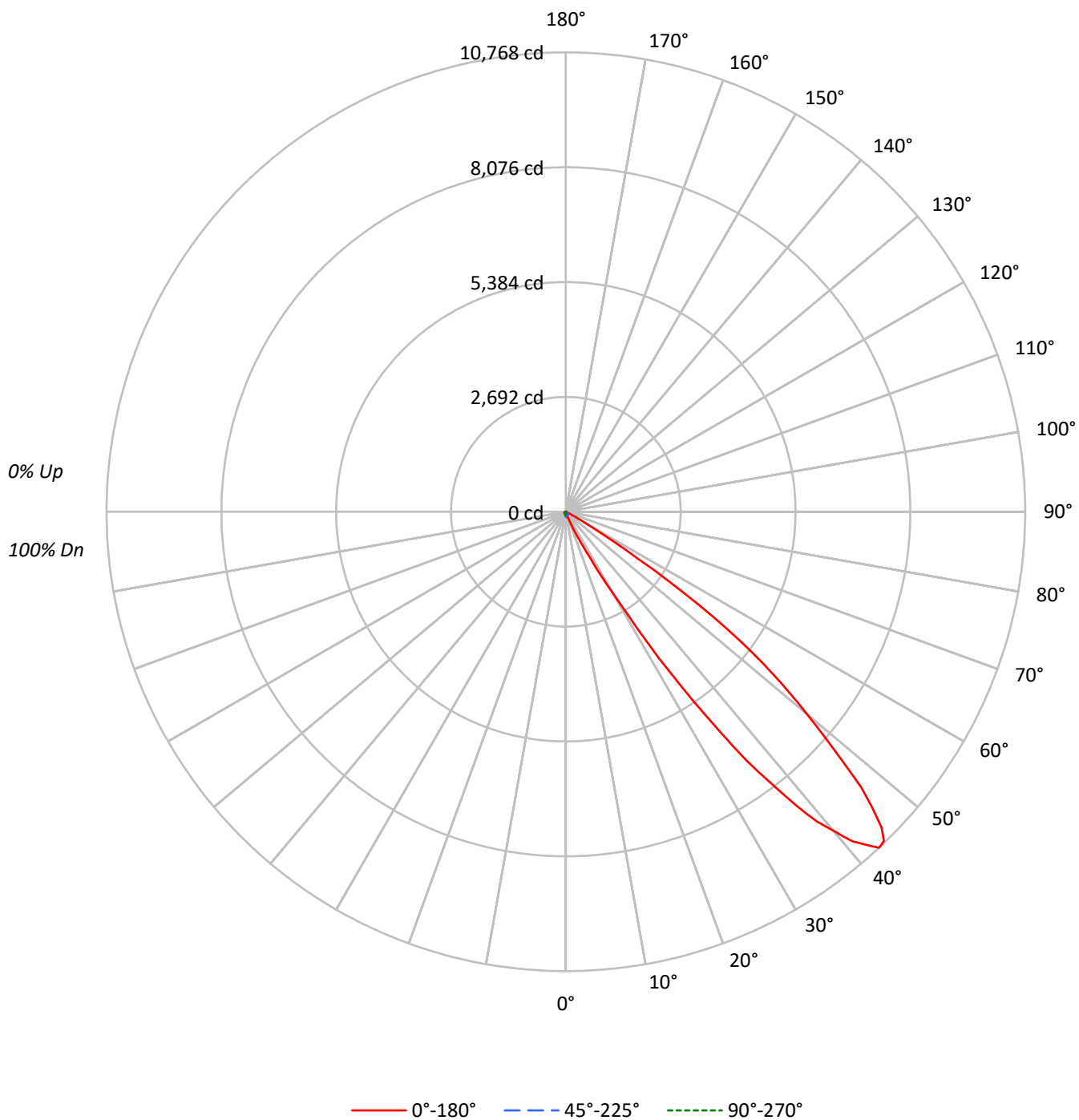
Lumens per Lamp: N/A
Luminaire Lumens: 1496.0 lumens
Efficiency: N/A
Efficacy: 70.6 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1311444

CATALOG NUMBER: P3SQAS17R209050DE010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1311444

CATALOG NUMBER: P3SQAS17R209050DE010 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	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	108	104	101	97	100	97	94	96	94	92	92	91	89	87		
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73		
3	92	81	74	67	89	80	73	67	77	71	66	74	69	65	72	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42		
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	38	32	46	38	32	44	37	32	43	36	31	29		
8	57	42	33	27	55	42	33	27	40	33	27	39	32	27	38	31	27	25		
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	19	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	17911	17911	17911	17911	17911
5°	20901	19449	16769	14591	14090
10°	20653	17698	13273	11315	11070
15°	18044	13533	9771	9022	9521
20°	26795	11345	7221	7734	8504
25°	115403	11763	5606	6955	8285
30°	436430	14259	4753	6702	8114
35°	1323030	17135	4436	6791	8578
40°	2193868	17064	3799	7262	9173
45°	2549996	11642	3434	7526	9937
50°	1979446	6404	3403	7904	11307
55°	1145676	4234	3363	8858	12251
60°	193716	964	2893	9197	13571
65°	14915	0	3423	10310	15486
70°	2115	0	4230	11330	17674
75°	1863	932	4658	13109	20561
80°	1389	1389	6943	13984	23704
85°	2766	2766	11066	13832	25096

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2549996 cd/sqm

TEST NUMBER: P1311444

CATALOG NUMBER: P3SQAS17R209050DE010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	8.9	0.6
10°-20°	18.7	1.3
20°-30°	59.7	4.0
30°-40°	381.5	25.5
40°-50°	698.3	46.7
50°-60°	286.9	19.2
60°-70°	24.2	1.6
70°-80°	12.0	0.8
80°-90°	5.7	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°	87.4	5.8
0°-40°	468.9	31.3
0°-60°	1454.1	97.2
0°-90°	1496.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1496.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	104	104	104	104	104	
5°	121	112	97	84	82	11
15°	101	76	55	51	53	32
25°	607	62	30	37	44	399
35°	6293	82	21	32	41	3983
45°	10470	48	14	31	41	7517
55°	3816	14	11	30	41	3335
65°	37	0	8	25	38	119
75°	3	1	7	20	31	3
85°	1	1	6	7	13	1
90°	0	0	0	0	0	

TEST NUMBER: P1311444

CATALOG NUMBER: P3SQAS17R209050DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0
2.5°	113.9	113.9	113.9	112.5	112.5	113.9	112.5	112.5	112.5	112.5	111.1
5°	120.9	120.9	120.9	120.9	120.9	120.9	120.9	119.5	119.5	118.1	112.5
7.5°	123.7	123.7	123.7	123.7	122.3	122.3	122.3	122.3	120.9	119.5	109.7
10°	118.1	118.1	118.1	116.7	116.7	116.7	115.3	115.3	113.9	112.5	101.2
12.5°	106.8	106.8	106.8	106.8	105.4	105.4	104.0	104.0	102.6	101.2	88.6
15°	101.2	101.2	101.2	99.8	99.8	98.4	97.0	95.6	94.2	91.4	75.9
17.5°	109.7	109.7	108.3	108.3	105.4	102.6	101.2	97.0	94.2	90.0	67.5
20°	146.2	147.6	142.0	137.8	135.0	126.5	122.3	115.3	109.7	102.6	61.9
22.5°	295.2	289.6	279.8	264.3	246.0	230.6	202.4	180.0	164.5	143.4	60.5
25°	607.3	601.7	575.0	552.5	496.3	452.7	392.2	343.0	292.4	243.2	61.9
27.5°	1154.2	1116.3	1109.2	1006.6	927.9	815.4	698.7	600.3	510.3	410.5	66.1
30°	2194.6	2151.0	1997.8	1843.1	1630.8	1390.4	1161.3	947.6	769.0	607.3	71.7
31°	2785.1	2827.2	2647.3	2336.6	2023.1	1715.2	1401.7	1130.3	899.8	698.7	74.5
32°	3660.9	3476.8	3287.0	2967.8	2512.3	2118.7	1725.0	1334.2	1030.5	797.1	77.3
33°	4489.0	4380.7	4091.1	3693.3	3146.4	2593.9	2083.5	1574.6	1190.8	916.6	78.7
34°	5371.9	5252.4	5017.6	4446.8	3846.5	3122.5	2442.0	1851.6	1382.0	1033.3	80.1
35°	6292.8	6242.1	5789.5	5294.6	4556.5	3683.4	2873.6	2155.2	1569.0	1140.2	81.5
36°	7219.2	7056.2	6701.9	5979.2	5208.8	4202.2	3326.3	2437.8	1758.8	1266.7	81.5
37°	7916.6	7880.0	7410.4	6706.1	5800.7	4756.1	3717.2	2751.3	1950.0	1375.0	81.5
38°	8685.6	8540.8	8064.2	7347.2	6357.4	5263.6	4126.3	3024.1	2131.3	1473.4	80.1
39°	9333.7	9118.6	8637.8	7929.2	6843.9	5648.9	4451.0	3288.4	2291.6	1554.9	78.7
40°	9758.3	9609.3	9107.3	8310.2	7285.3	6013.0	4780.0	3506.3	2411.1	1616.8	75.9
41°	10226.4	9979.0	9482.7	8681.4	7605.9	6333.5	4986.7	3649.7	2503.9	1657.5	73.1
42°	10506.2	10303.8	9714.7	8930.2	7835.0	6516.3	5155.4	3759.3	2560.1	1678.6	67.5
43°	10767.7	10492.1	9918.5	9075.0	7986.9	6645.6	5232.7	3810.0	2572.8	1678.6	60.5
44°	10732.6	10471.1	9876.4	9094.7	8020.6	6683.6	5265.1	3811.4	2553.1	1657.5	53.4
45°	10469.7	10209.6	9673.9	8923.2	7899.7	6609.1	5200.4	3755.1	2498.3	1621.0	47.8
46°	9987.4	9728.8	9318.2	8636.4	7674.7	6440.4	5050.0	3632.8	2406.9	1561.9	42.2
47°	9463.0	9211.4	8791.0	8173.8	7290.9	6139.5	4832.0	3461.3	2278.9	1476.2	38.0
48°	8702.5	8545.0	8123.2	7596.0	6758.1	5668.5	4449.6	3181.5	2107.4	1365.1	32.3
49°	8030.4	7864.5	7494.8	6928.2	6063.6	5120.2	3992.7	2841.3	1883.9	1241.4	28.1
50°	7387.9	7243.1	6901.5	6261.8	5436.6	4458.1	3375.5	2412.5	1602.7	1088.2	23.9
51°	6759.5	6651.3	6302.6	5714.9	4877.0	3949.1	2924.2	2009.0	1324.3	902.6	22.5
52°	6128.3	6115.6	5737.4	5142.7	4332.9	3441.6	2485.6	1695.5	1123.3	757.8	21.1
53°	5449.2	5367.7	5037.3	4503.1	3725.6	2913.0	2107.4	1429.8	967.3	645.3	18.3
54°	4676.0	4584.6	4230.3	3748.1	3043.7	2385.8	1698.3	1155.6	805.6	545.5	16.9
55°	3815.6	3659.5	3402.3	2907.4	2377.4	1820.6	1311.7	915.2	643.9	454.1	14.1
56°	2894.7	2738.7	2593.9	2229.7	1744.7	1358.1	977.1	701.5	503.3	358.5	12.7
57°	2013.2	2004.8	1767.2	1487.4	1166.9	925.1	669.2	494.9	355.7	278.4	9.8
58°	1306.1	1262.5	1110.7	949.0	763.4	577.8	430.2	336.0	241.8	189.8	8.4
59°	915.2	828.1	746.5	632.6	480.8	364.1	277.0	215.1	167.3	132.2	5.6
60°	562.4	544.1	489.2	385.2	312.1	257.3	206.7	158.9	122.3	94.2	2.8
62.5°	160.3	163.1	147.6	130.7	112.5	97.0	87.2	74.5	61.9	49.2	0.0
65°	36.6	35.1	38.0	35.1	32.3	32.3	28.1	25.3	22.5	21.1	0.0



TEST NUMBER: P1311444

CATALOG NUMBER: P3SQAS17R209050DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	11.2	11.2	9.8	9.8	9.8	8.4	8.4	7.0	7.0	5.6	0.0
70°	4.2	4.2	4.2	4.2	4.2	2.8	2.8	2.8	1.4	1.4	0.0
72.5°	4.2	4.2	4.2	2.8	2.8	2.8	2.8	2.8	1.4	1.4	1.4
75°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4
77.5°	2.8	2.8	2.8	2.8	2.8	1.4	2.8	1.4	1.4	1.4	1.4
80°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
82.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
85°	1.4	1.4	1.4	1.4	0.0	0.0	1.4	1.4	1.4	0.0	1.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
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: P1311444

CATALOG NUMBER: P3SQAS17R209050DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	104.0	104.0	104.0	104.0	104.0	104.0
2.5°	108.3	102.6	98.4	94.2	92.8	92.8
5°	105.4	97.0	88.6	84.4	81.5	81.5
7.5°	97.0	87.2	78.7	74.5	73.1	73.1
10°	87.2	75.9	67.5	64.7	64.7	63.3
12.5°	75.9	64.7	59.0	57.6	57.6	57.6
15°	63.3	54.8	50.6	50.6	52.0	53.4
17.5°	53.4	45.0	43.6	46.4	49.2	49.2
20°	45.0	39.4	39.4	42.2	45.0	46.4
22.5°	38.0	33.7	35.1	39.4	43.6	45.0
25°	33.7	29.5	32.3	36.6	40.8	43.6
27.5°	28.1	26.7	29.5	35.1	40.8	42.2
30°	23.9	23.9	28.1	33.7	39.4	40.8
31°	22.5	22.5	28.1	33.7	39.4	40.8
32°	21.1	22.5	26.7	33.7	39.4	40.8
33°	19.7	21.1	26.7	32.3	39.4	40.8
34°	18.3	21.1	26.7	32.3	39.4	40.8
35°	16.9	21.1	26.7	32.3	39.4	40.8
36°	15.5	19.7	25.3	32.3	39.4	40.8
37°	14.1	19.7	25.3	32.3	39.4	40.8
38°	12.7	18.3	25.3	32.3	39.4	40.8
39°	12.7	18.3	23.9	32.3	38.0	40.8
40°	11.2	16.9	23.9	32.3	38.0	40.8
41°	9.8	16.9	23.9	30.9	38.0	40.8
42°	8.4	15.5	22.5	30.9	38.0	40.8
43°	7.0	15.5	22.5	30.9	38.0	40.8
44°	7.0	14.1	22.5	30.9	38.0	40.8
45°	5.6	14.1	22.5	30.9	38.0	40.8
46°	4.2	14.1	22.5	30.9	38.0	40.8
47°	4.2	12.7	21.1	30.9	38.0	40.8
48°	2.8	12.7	21.1	30.9	38.0	40.8
49°	2.8	12.7	21.1	30.9	38.0	42.2
50°	2.8	12.7	21.1	29.5	38.0	42.2
51°	1.4	12.7	21.1	29.5	38.0	42.2
52°	1.4	12.7	19.7	29.5	39.4	42.2
53°	1.4	11.2	19.7	29.5	39.4	42.2
54°	1.4	11.2	19.7	29.5	39.4	40.8
55°	1.4	11.2	19.7	29.5	38.0	40.8
56°	1.4	9.8	19.7	29.5	38.0	40.8
57°	1.4	9.8	18.3	28.1	38.0	39.4
58°	1.4	9.8	18.3	28.1	38.0	39.4
59°	1.4	9.8	18.3	28.1	36.6	39.4
60°	2.8	8.4	16.9	26.7	36.6	39.4
62.5°	2.8	8.4	16.9	26.7	35.1	38.0
65°	2.8	8.4	15.5	25.3	35.1	38.0



TEST NUMBER: P1311444

CATALOG NUMBER: P3SQAS17R209050DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.8	7.0	14.1	23.9	33.7	36.6
70°	2.8	8.4	14.1	22.5	32.3	35.1
72.5°	4.2	7.0	12.7	21.1	30.9	33.7
75°	4.2	7.0	12.7	19.7	29.5	30.9
77.5°	5.6	7.0	11.2	16.9	26.7	28.1
80°	5.6	7.0	9.8	14.1	22.5	23.9
82.5°	5.6	7.0	7.0	11.2	16.9	18.3
85°	4.2	5.6	5.6	7.0	11.2	12.7
87.5°	4.2	5.6	4.2	2.8	5.6	5.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)