

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: P1312775

Luminaire Tested: P3SQAS20R409727D010 E3SQCA451MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1312775
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: P3SQAS20R409727D010 E3SQCA451MW
Description: 3in Adjustable LED luminaire with, R40 optic, 2700K CCT AND, 97CRI , E3SQCA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

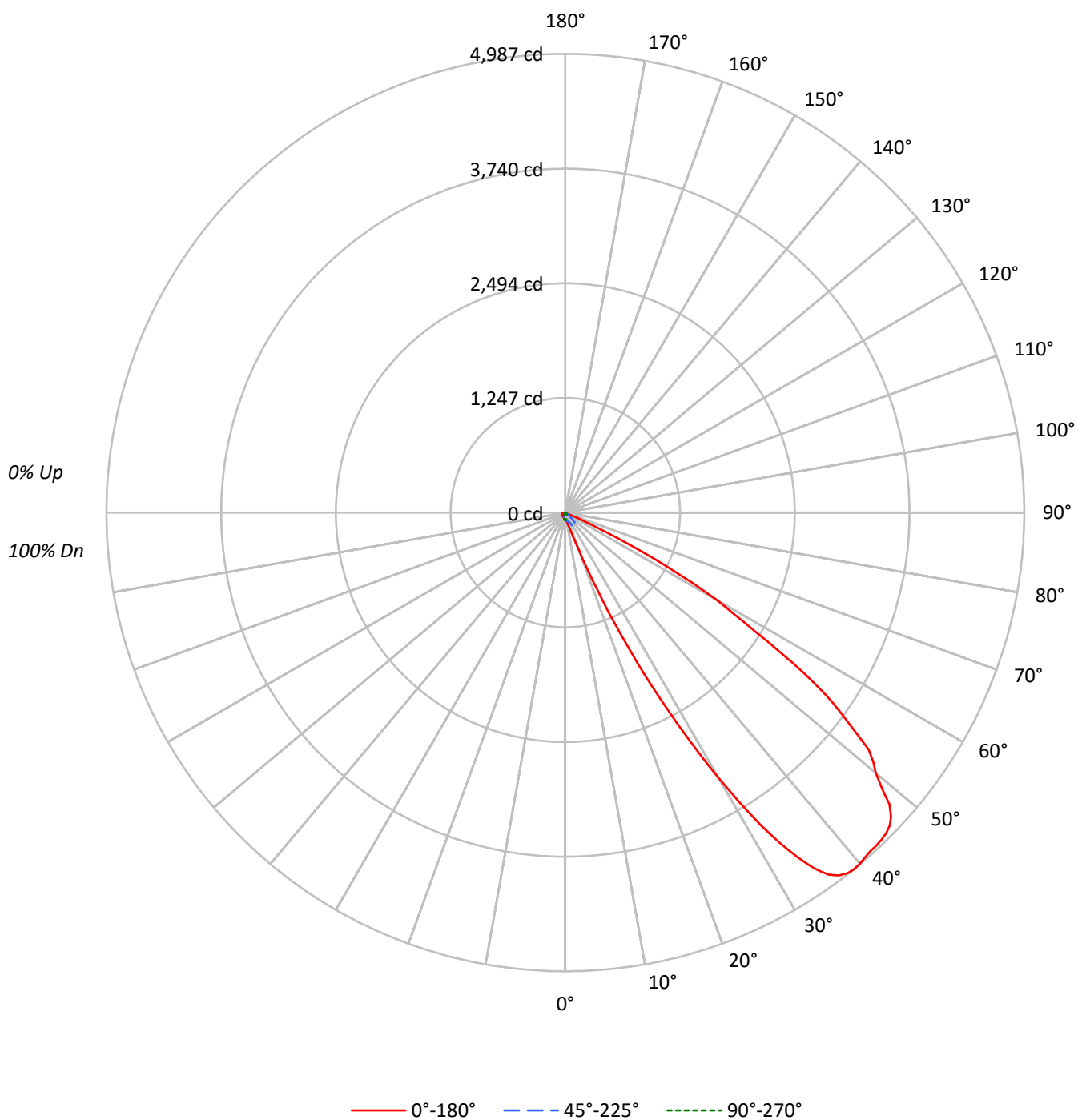
Lumens per Lamp: N/A
Luminaire Lumens: 1541.0 lumens
Efficiency: N/A
Efficacy: 53.5 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot



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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°	13657	13657	13657	13657	13657
5°	15162	14678	13450	12240	11981
10°	18310	15599	12381	11140	10895
15°	30025	16903	10591	9842	10092
20°	79358	19977	8816	8816	9604
25°	306038	24741	6993	8076	9406
30°	660234	32932	5628	7875	9287
35°	993765	38979	4752	7737	9524
40°	1119630	39141	4137	7959	10184
45°	1200530	30323	3800	8281	11033
50°	1179994	18970	3403	8708	12137
55°	1038092	9338	3393	9758	13602
60°	657098	1963	3892	10712	15121
65°	134357	571	4034	11533	16708
70°	2870	705	4280	12840	19235
75°	2795	1863	4724	14107	21626
80°	2777	1389	5653	15472	25291
85°	2766	2766	11263	16796	28060

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 1222228 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.4	0.5
10°-20°	24.4	1.6
20°-30°	119.7	7.8
30°-40°	389.3	25.3
40°-50°	536.7	34.8
50°-60°	373.8	24.3
60°-70°	70.9	4.6
70°-80°	12.8	0.8
80°-90°	5.9	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°	151.5	9.8
0°-40°	540.8	35.1
0°-60°	1451.4	94.2
0°-90°	1541.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1541.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	79	79	79	79	79	
5°	88	85	78	71	69	9
15°	168	95	59	55	57	61
25°	1610	130	37	42	50	829
35°	4727	185	23	37	45	2856
45°	4929	124	16	34	45	3748
55°	3457	31	11	32	45	2955
65°	330	1	10	28	41	583
75°	4	3	7	21	32	4
85°	1	1	6	8	14	1
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3
2.5°	82.1	82.1	82.1	82.1	82.1	82.1	82.1	82.1	82.1	80.7	79.3
5°	87.7	87.7	87.7	87.7	86.3	86.3	86.3	84.9	84.9	82.1	77.8
7.5°	93.4	93.4	93.4	93.4	92.0	90.6	89.2	89.2	87.7	80.7	75.0
10°	104.7	104.7	103.3	101.9	100.5	97.6	96.2	93.4	89.2	79.3	70.8
12.5°	127.4	124.5	123.1	120.3	116.0	110.4	104.7	100.5	90.6	76.4	66.5
15°	168.4	165.6	159.9	151.4	142.9	131.6	121.7	111.8	94.8	72.2	59.4
17.5°	240.6	232.1	223.6	209.4	188.2	168.4	147.2	128.8	100.5	67.9	53.8
20°	433.0	427.4	376.4	336.8	273.1	227.8	185.4	154.3	109.0	63.7	48.1
22.5°	893.0	833.5	750.1	614.2	478.3	352.4	256.2	193.9	117.5	58.0	42.5
25°	1610.5	1517.1	1337.4	1075.5	793.9	561.8	370.8	253.3	130.2	52.4	36.8
27.5°	2438.4	2343.6	2064.8	1703.9	1244.0	847.7	529.3	335.4	147.2	46.7	32.5
30°	3320.0	3239.4	2885.6	2386.0	1753.4	1187.3	709.0	418.9	165.6	41.0	28.3
31°	3675.3	3572.0	3189.8	2657.7	1992.6	1327.5	781.2	454.3	172.7	39.6	26.9
32°	4002.2	3884.7	3488.5	2918.1	2186.5	1478.9	860.4	485.4	178.3	36.8	25.5
33°	4283.8	4146.5	3764.4	3164.4	2400.2	1620.4	942.5	515.1	182.6	34.0	24.1
34°	4523.0	4404.1	3993.7	3412.0	2589.8	1756.3	1023.2	544.8	185.4	32.5	22.6
35°	4726.7	4619.2	4213.0	3600.3	2775.2	1887.9	1096.8	573.2	185.4	29.7	22.6
36°	4864.0	4770.6	4402.7	3792.7	2930.9	1999.7	1159.0	598.6	185.4	26.9	21.2
37°	4939.0	4848.5	4527.2	3951.2	3083.7	2110.1	1215.7	618.4	184.0	25.5	19.8
38°	4977.2	4898.0	4619.2	4080.0	3189.8	2189.3	1265.2	634.0	182.6	22.6	19.8
39°	4987.1	4920.6	4677.2	4173.4	3293.2	2268.6	1300.6	642.5	178.3	21.2	18.4
40°	4980.1	4922.0	4708.4	4256.9	3372.4	2330.8	1326.0	645.3	174.1	18.4	18.4
41°	4965.9	4920.6	4731.0	4314.9	3436.1	2370.5	1335.9	639.7	168.4	15.6	17.0
42°	4953.2	4903.6	4740.9	4354.6	3480.0	2390.3	1334.5	628.3	159.9	14.2	17.0
43°	4953.2	4896.6	4742.3	4380.0	3501.2	2391.7	1317.5	607.1	148.6	12.7	15.6
44°	4944.7	4892.3	4749.4	4397.0	3506.9	2378.9	1290.7	584.5	135.9	11.3	15.6
45°	4929.1	4873.9	4748.0	4398.4	3496.9	2347.8	1246.8	554.8	124.5	8.5	15.6
46°	4899.4	4849.9	4735.2	4388.5	3467.2	2302.5	1194.4	525.0	111.8	7.1	14.2
47°	4840.0	4801.8	4701.3	4354.6	3421.9	2236.0	1132.2	491.1	101.9	5.7	14.2
48°	4738.1	4711.2	4643.3	4279.5	3335.6	2153.9	1065.6	454.3	92.0	5.7	14.2
49°	4551.3	4530.0	4490.4	4159.3	3225.2	2053.4	993.5	413.2	82.1	4.2	14.2
50°	4404.1	4381.4	4300.8	3956.9	3066.7	1926.1	914.2	372.2	70.8	2.8	12.7
51°	4306.4	4269.6	4142.3	3722.0	2836.0	1756.3	827.9	331.2	59.4	2.8	12.7
52°	4183.3	4128.1	3969.6	3511.1	2625.2	1586.4	734.5	290.1	52.4	2.8	12.7
53°	3925.7	3905.9	3748.8	3284.7	2414.3	1423.7	638.3	256.2	45.3	2.8	12.7
54°	3700.7	3671.0	3457.3	2970.5	2185.1	1242.5	539.2	226.4	38.2	2.8	12.7
55°	3457.3	3399.3	3209.7	2705.9	1916.2	1075.5	444.4	195.3	31.1	2.8	11.3
56°	3150.2	3099.3	2895.5	2422.8	1668.5	905.7	372.2	159.9	24.1	2.8	11.3
57°	2776.6	2729.9	2572.8	2074.7	1410.9	740.1	302.9	128.8	18.4	2.8	11.3
58°	2415.7	2363.4	2183.6	1740.7	1139.2	587.3	253.3	104.7	14.2	2.8	11.3
59°	2138.4	2067.6	1835.5	1461.9	891.6	445.8	201.0	83.5	9.9	2.8	11.3
60°	1907.7	1849.7	1609.1	1217.1	699.1	328.3	148.6	63.7	5.7	2.8	11.3
62.5°	1105.3	1089.7	873.2	626.9	329.7	152.8	73.6	29.7	2.8	4.2	11.3
65°	329.7	287.3	223.6	133.0	84.9	50.9	26.9	9.9	1.4	4.2	9.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	9.9	9.9	9.9	9.9	9.9	9.9	5.7	2.8	1.4	4.2	9.9
70°	5.7	4.2	4.2	4.2	4.2	2.8	2.8	1.4	1.4	4.2	8.5
72.5°	4.2	4.2	4.2	4.2	2.8	2.8	2.8	1.4	2.8	4.2	7.1
75°	4.2	2.8	2.8	2.8	2.8	1.4	1.4	1.4	2.8	4.2	7.1
77.5°	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	2.8	4.2	7.1
80°	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4	4.2	5.7
82.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	4.2	5.7
85°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	4.2	5.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4	4.2	4.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	79.3	79.3	79.3	79.3
2.5°	76.4	75.0	73.6	73.6
5°	73.6	70.8	70.8	69.3
7.5°	69.3	66.5	66.5	66.5
10°	65.1	63.7	63.7	62.3
12.5°	59.4	59.4	59.4	59.4
15°	55.2	55.2	56.6	56.6
17.5°	49.5	50.9	53.8	55.2
20°	45.3	48.1	50.9	52.4
22.5°	42.5	45.3	49.5	50.9
25°	38.2	42.5	48.1	49.5
27.5°	35.4	41.0	45.3	48.1
30°	32.5	39.6	43.9	46.7
31°	32.5	38.2	43.9	46.7
32°	31.1	36.8	43.9	45.3
33°	31.1	36.8	43.9	45.3
34°	29.7	36.8	42.5	45.3
35°	29.7	36.8	42.5	45.3
36°	28.3	35.4	42.5	45.3
37°	28.3	35.4	42.5	45.3
38°	26.9	35.4	42.5	45.3
39°	26.9	35.4	42.5	45.3
40°	26.9	35.4	42.5	45.3
41°	25.5	35.4	42.5	45.3
42°	25.5	35.4	42.5	45.3
43°	25.5	34.0	42.5	45.3
44°	25.5	34.0	42.5	45.3
45°	24.1	34.0	42.5	45.3
46°	24.1	34.0	42.5	45.3
47°	24.1	34.0	42.5	45.3
48°	24.1	34.0	42.5	45.3
49°	24.1	34.0	42.5	45.3
50°	22.6	32.5	42.5	45.3
51°	22.6	32.5	42.5	45.3
52°	22.6	32.5	42.5	45.3
53°	22.6	32.5	42.5	45.3
54°	21.2	32.5	42.5	45.3
55°	21.2	32.5	42.5	45.3
56°	21.2	32.5	42.5	43.9
57°	21.2	32.5	41.0	43.9
58°	21.2	31.1	41.0	43.9
59°	21.2	31.1	41.0	43.9
60°	21.2	31.1	41.0	43.9
62.5°	19.8	31.1	39.6	42.5
65°	18.4	28.3	39.6	41.0



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	18.4	26.9	36.8	39.6
70°	17.0	25.5	35.4	38.2
72.5°	14.2	24.1	32.5	35.4
75°	12.7	21.2	29.7	32.5
77.5°	11.3	18.4	26.9	28.3
80°	9.9	15.6	22.6	25.5
82.5°	7.1	11.3	18.4	19.8
85°	5.7	8.5	12.7	14.2
87.5°	4.2	4.2	7.1	7.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)