

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: P1307209

Luminaire Tested: P3SQAS20R359027D010 E3SQCA451MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1307209
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-77)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS20R359027D010 E3SQCA451MW
Description: 3in Adjustable LED luminaire with, R35 optic, 2700K CCT AND, 90CRI , E3SQCA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

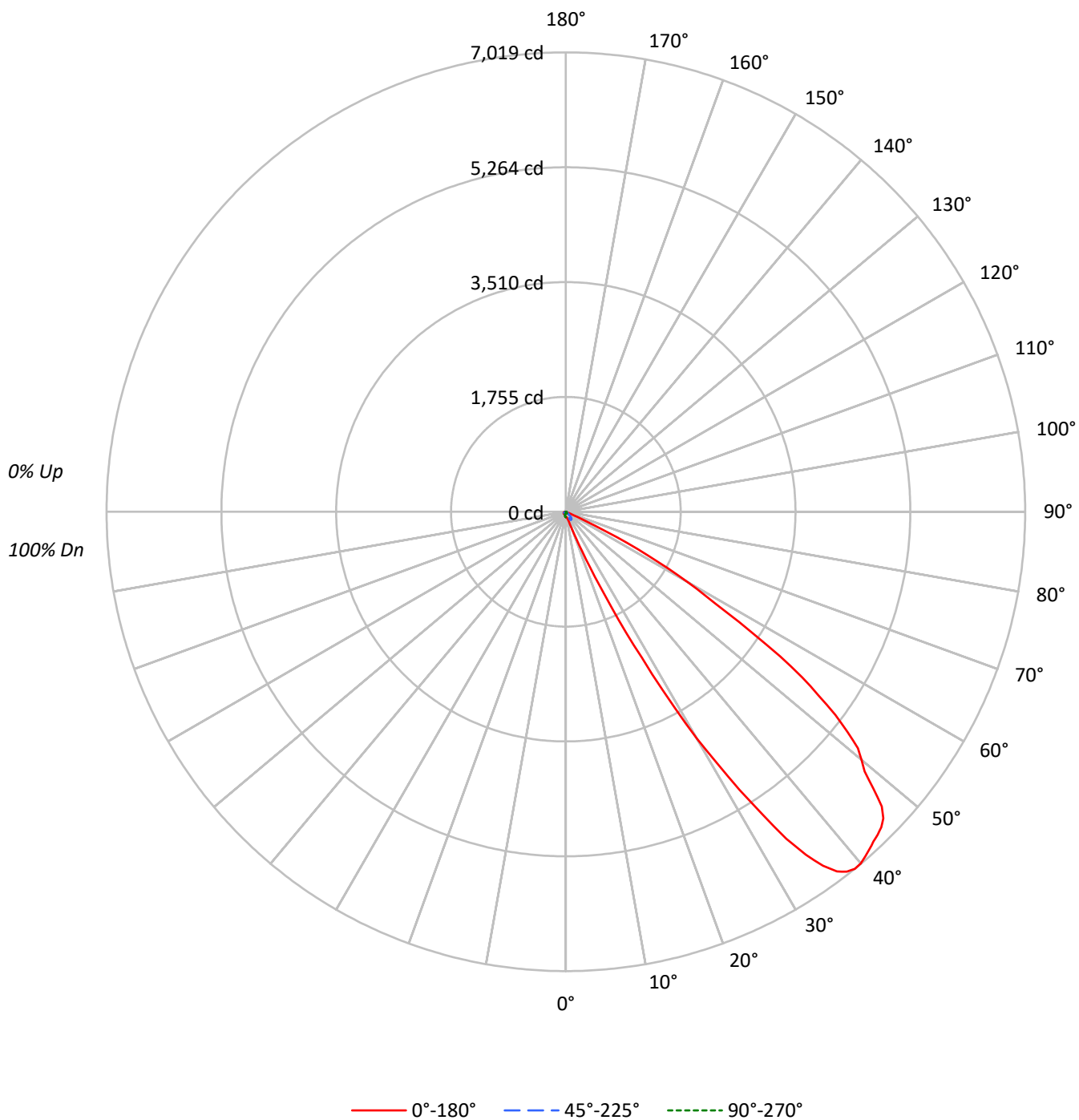
Lumens per Lamp: N/A
Luminaire Lumens: 1748.0 lumens
Efficiency: N/A
Efficacy: 60.7 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	107	104	100	97	100	97	94	96	93	91	92	90	89
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31
8	57	42	33	27	55	41	33	27	40	32	27	39	32	26	38	31	26
9	52	38	29	23	50	37	29	23	36	28	23	35	28	22	34	27	22
10	48	34	25	19	46	33	25	19	32	25	19	31	24	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	13864	13864	13864	13864	13864
5°	15006	14729	13640	12275	11998
10°	15722	14358	12137	10493	10493
15°	22501	14068	9842	9004	9289
20°	56394	15047	7808	7808	8669
25°	261762	19193	6005	7202	8095
30°	795800	26051	4713	6582	8153
35°	1344937	30191	3974	6307	7968
40°	1576533	29789	3192	6385	8521
45°	1660273	21141	2679	6917	9231
50°	1580363	12673	2545	7181	10155
55°	1324271	5225	2852	8047	11830
60°	741350	1102	3272	9231	13054
65°	127959	652	3219	10269	14793
70°	2367	806	3978	11128	16667
75°	2129	1065	5257	12576	18898
80°	1587	1587	6248	14083	21919
85°	0	3162	12449	15611	24898

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 1672026 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.3	0.4
10°-20°	20.6	1.2
20°-30°	107.3	6.1
30°-40°	463.2	26.5
40°-50°	660.7	37.8
50°-60°	409.2	23.4
60°-70°	62.3	3.6
70°-80°	11.6	0.7
80°-90°	5.8	0.3
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°	135.1	7.7
0°-40°	598.3	34.2
0°-60°	1668.3	95.4
0°-90°	1748.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1748.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	80	80	80	80	80	
5°	87	85	79	71	69	8
15°	126	79	55	50	52	45
25°	1378	101	32	38	43	824
35°	6397	144	19	30	38	3841
45°	6817	87	11	28	38	5150
55°	4410	17	10	27	39	3756
65°	314	2	8	25	36	642
75°	3	2	8	19	28	3
85°	0	2	6	8	13	1
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5
2.5°	83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.6	80.5	78.9
5°	86.8	86.8	85.2	85.2	85.2	85.2	85.2	85.2	82.1	78.9	74.2
7.5°	88.4	88.4	86.8	86.8	86.8	86.8	85.2	83.6	80.5	74.2	69.4
10°	89.9	89.9	89.9	89.9	88.4	86.8	85.2	82.1	77.3	69.4	64.7
12.5°	101.0	101.0	99.4	96.3	93.1	89.9	86.8	80.5	71.0	63.1	58.4
15°	126.2	124.7	121.5	116.8	110.5	102.6	96.3	78.9	64.7	55.2	52.1
17.5°	176.7	173.6	168.8	153.1	138.9	124.7	112.0	78.9	58.4	48.9	45.8
20°	307.7	309.3	276.1	238.3	206.7	172.0	140.4	82.1	52.1	42.6	41.0
22.5°	642.2	617.0	538.1	446.6	340.8	263.5	198.8	89.9	45.8	36.3	36.3
25°	1377.5	1281.3	1090.4	823.7	580.7	411.8	288.8	101.0	41.0	31.6	33.1
27.5°	2515.2	2428.5	2045.0	1540.1	1022.5	621.7	391.3	115.2	36.3	26.8	30.0
30°	4001.7	3761.8	3261.6	2524.7	1708.9	951.5	525.5	131.0	30.0	23.7	28.4
31°	4465.6	4355.1	3746.0	2920.8	2002.4	1129.8	582.3	135.7	28.4	23.7	26.8
32°	5016.3	4820.6	4274.7	3354.7	2300.6	1289.2	650.1	140.4	26.8	20.5	26.8
33°	5508.6	5319.2	4654.9	3736.6	2602.0	1470.6	722.7	142.0	23.7	20.5	25.2
34°	6026.2	5767.4	5109.4	4135.8	2911.3	1666.3	789.0	143.6	22.1	18.9	25.2
35°	6397.0	6138.2	5500.7	4451.4	3178.0	1839.9	864.7	143.6	20.5	18.9	23.7
36°	6684.2	6456.9	5838.4	4776.4	3443.1	1996.1	924.7	143.6	17.4	17.4	23.7
37°	6881.4	6665.2	6065.6	5055.7	3645.1	2135.0	978.3	143.6	15.8	17.4	23.7
38°	6977.7	6797.8	6285.0	5259.3	3840.7	2243.8	1020.9	140.4	14.2	15.8	22.1
39°	7018.7	6871.9	6419.1	5431.3	3987.5	2338.5	1052.5	137.3	12.6	15.8	22.1
40°	7012.4	6884.6	6494.8	5549.6	4105.8	2403.2	1069.8	132.5	11.0	14.2	22.1
41°	6976.1	6865.6	6534.3	5650.6	4176.8	2447.4	1074.6	127.8	9.5	14.2	20.5
42°	6935.1	6834.1	6546.9	5704.3	4222.6	2461.6	1062.0	121.5	9.5	12.6	20.5
43°	6892.5	6799.4	6546.9	5721.6	4233.6	2452.1	1041.4	110.5	7.9	12.6	20.5
44°	6857.7	6769.4	6526.4	5716.9	4210.0	2415.8	1003.6	97.8	6.3	12.6	20.5
45°	6816.7	6729.9	6499.6	5686.9	4164.2	2354.3	956.2	86.8	4.7	11.0	20.5
46°	6744.1	6676.3	6452.2	5625.4	4091.6	2269.1	896.3	78.9	3.2	11.0	18.9
47°	6603.7	6545.3	6360.7	5533.9	3995.4	2168.1	834.7	71.0	3.2	11.0	18.9
48°	6321.2	6319.7	6177.7	5363.4	3842.3	2041.9	770.0	63.1	3.2	11.0	18.9
49°	6048.3	6019.9	5843.1	5063.6	3623.0	1890.4	702.2	56.8	1.6	11.0	18.9
50°	5898.4	5836.8	5546.5	4710.2	3342.1	1680.5	629.6	47.3	1.6	9.5	18.9
51°	5742.1	5653.8	5311.4	4391.4	3007.6	1478.5	550.7	37.9	1.6	9.5	17.4
52°	5459.7	5376.1	4992.6	4086.9	2682.5	1271.8	475.0	31.6	1.6	9.5	18.9
53°	5155.1	5035.2	4618.6	3752.4	2396.9	1088.8	397.6	26.8	1.6	9.5	17.4
54°	4771.7	4718.1	4239.9	3342.1	2062.4	912.1	326.6	22.1	1.6	9.5	17.4
55°	4410.4	4331.5	3834.4	2922.4	1759.4	747.9	273.0	17.4	1.6	9.5	17.4
56°	3949.6	3831.2	3365.8	2537.3	1451.7	602.8	230.4	14.2	1.6	9.5	17.4
57°	3400.5	3274.2	2906.6	2109.7	1139.3	459.2	192.5	11.0	1.6	9.5	17.4
58°	2876.6	2767.7	2373.2	1628.4	858.4	318.7	159.4	7.9	1.6	7.9	17.4
59°	2485.3	2365.3	1974.0	1252.9	596.5	235.1	119.9	6.3	1.6	9.5	17.4
60°	2152.3	1997.7	1589.0	970.4	426.0	168.8	88.4	3.2	3.2	9.5	17.4
62.5°	1240.3	1095.1	759.0	394.5	175.2	86.8	42.6	1.6	3.2	9.5	17.4
65°	314.0	279.3	181.5	85.2	48.9	30.0	15.8	1.6	3.2	7.9	15.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	11.0	11.0	11.0	9.5	7.9	6.3	3.2	1.6	3.2	7.9	15.8
70°	4.7	4.7	4.7	3.2	3.2	1.6	1.6	1.6	3.2	7.9	14.2
72.5°	3.2	3.2	3.2	3.2	1.6	1.6	1.6	1.6	4.7	7.9	12.6
75°	3.2	3.2	3.2	3.2	1.6	1.6	1.6	1.6	4.7	7.9	12.6
77.5°	3.2	3.2	1.6	1.6	1.6	1.6	1.6	1.6	4.7	6.3	11.0
80°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	4.7	6.3	9.5
82.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	4.7	6.3	7.9
85°	0.0	0.0	0.0	0.0	0.0	1.6	0.0	1.6	4.7	6.3	6.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	4.7	6.3	4.7
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):

	135°	157.5°	180°
0°	80.5	80.5	80.5
2.5°	75.7	75.7	75.7
5°	71.0	71.0	69.4
7.5°	66.3	64.7	64.7
10°	60.0	60.0	60.0
12.5°	55.2	55.2	55.2
15°	50.5	52.1	52.1
17.5°	45.8	48.9	48.9
20°	42.6	45.8	47.3
22.5°	39.4	42.6	44.2
25°	37.9	41.0	42.6
27.5°	34.7	39.4	42.6
30°	33.1	37.9	41.0
31°	33.1	37.9	39.4
32°	31.6	37.9	39.4
33°	31.6	37.9	39.4
34°	31.6	36.3	39.4
35°	30.0	36.3	37.9
36°	30.0	36.3	37.9
37°	30.0	36.3	39.4
38°	30.0	36.3	37.9
39°	28.4	36.3	37.9
40°	28.4	36.3	37.9
41°	28.4	36.3	37.9
42°	28.4	36.3	37.9
43°	28.4	36.3	37.9
44°	28.4	34.7	37.9
45°	28.4	34.7	37.9
46°	28.4	36.3	37.9
47°	28.4	36.3	39.4
48°	28.4	34.7	37.9
49°	26.8	34.7	37.9
50°	26.8	34.7	37.9
51°	26.8	36.3	39.4
52°	26.8	36.3	39.4
53°	26.8	36.3	39.4
54°	26.8	36.3	37.9
55°	26.8	36.3	39.4
56°	26.8	36.3	37.9
57°	26.8	36.3	37.9
58°	26.8	34.7	37.9
59°	26.8	34.7	37.9
60°	26.8	34.7	37.9
62.5°	25.2	34.7	37.9
65°	25.2	33.1	36.3



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	23.7	33.1	34.7
70°	22.1	31.6	33.1
72.5°	20.5	30.0	31.6
75°	18.9	26.8	28.4
77.5°	15.8	23.7	26.8
80°	14.2	20.5	22.1
82.5°	11.0	17.4	18.9
85°	7.9	12.6	12.6
87.5°	3.2	6.3	6.3
90°	0.0	0.0	0.0

(END OF REPORT)