

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: P1307144

Luminaire Tested: P3SQAS20R159027D010 E3SQCA451MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1307144
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-73)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS20R159027D010 E3SQCA451MW
Description: 3in Adjustable LED luminaire with, R15 optic, 2700K CCT AND, 90CRI , E3SQCA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

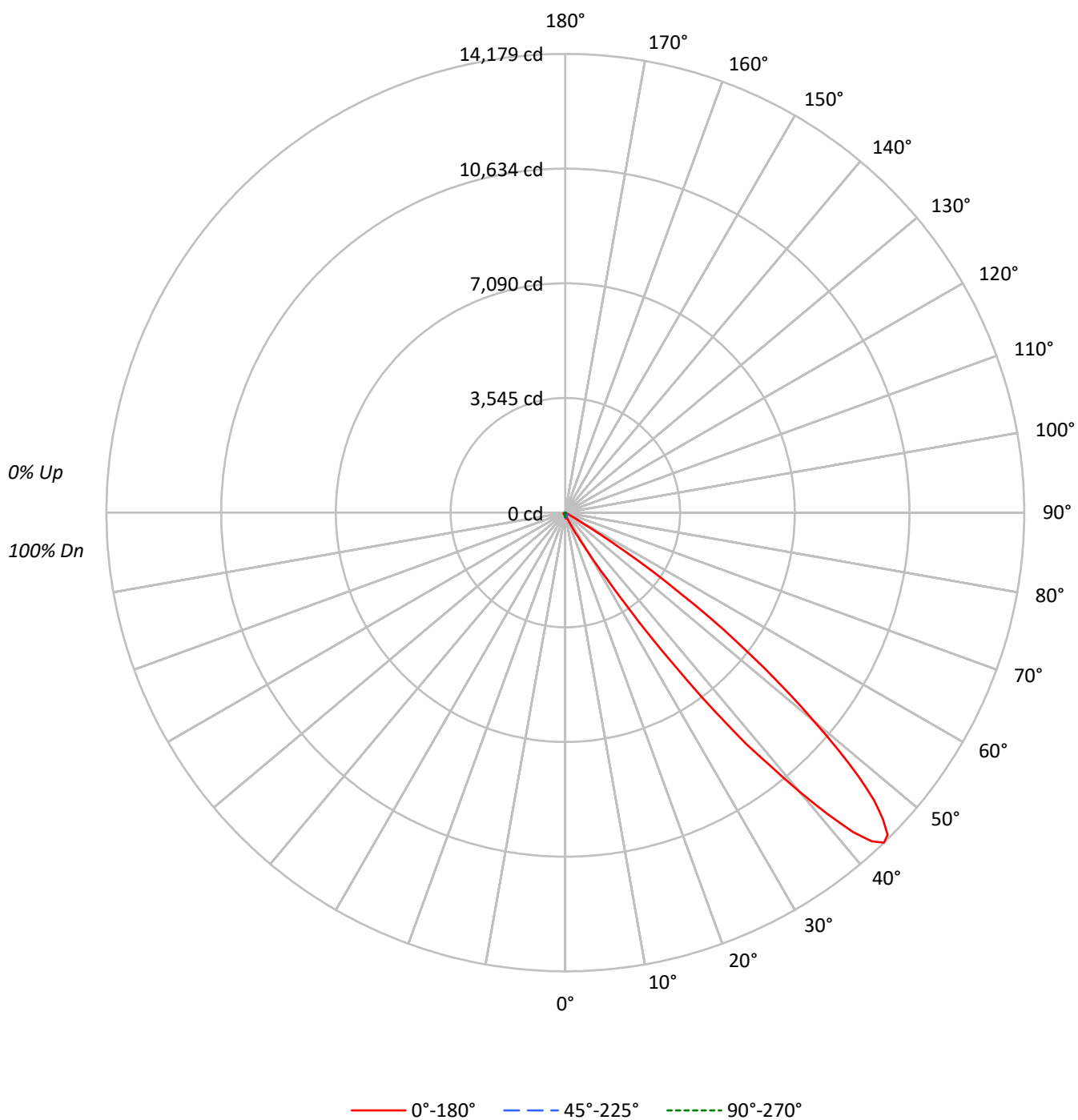
Lumens per Lamp: N/A
Luminaire Lumens: 1583.0 lumens
Efficiency: N/A
Efficacy: 55.0 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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	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	107	104	100	97	100	97	94	96	93	91	92	90	89	87		
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73		
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61		
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	53	50		
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35		
7	62	47	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29		
8	56	42	33	27	55	41	33	27	40	32	26	39	31	26	37	31	26	24		
9	52	37	28	22	50	37	28	22	35	28	22	34	27	22	33	27	22	20		
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	23	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	24197	24197	24197	24197	24197
5°	30012	26745	21835	19103	18827
10°	29537	22909	16841	14900	15180
15°	24480	16314	12106	12374	13230
20°	42520	13013	9255	10703	12151
25°	94785	15601	7506	9900	11402
30°	283443	19151	6582	9725	11932
35°	1091130	21571	5971	9966	12615
40°	2532605	18817	5688	10297	13489
45°	3430318	14224	4993	11155	14614
50°	2689651	8467	5064	11843	16076
55°	1291002	3783	4744	12791	17535
60°	117973	551	4340	13606	19564
65°	12877	0	3871	14141	21231
70°	3172	0	4784	15106	23062
75°	3127	1065	6321	16835	26284
80°	3174	3174	7835	17257	28167
85°	3162	3162	12449	15611	31221

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3430318 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	12.0	0.8
10°-20°	25.0	1.6
20°-30°	59.8	3.8
30°-40°	327.4	20.7
40°-50°	792.9	50.1
50°-60°	316.3	20.0
60°-70°	27.3	1.7
70°-80°	15.4	1.0
80°-90°	6.8	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°	96.8	6.1
0°-40°	424.2	26.8
0°-60°	1533.4	96.9
0°-90°	1583.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1583.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	140	140	140	140	140	
5°	174	155	126	110	109	16
15°	137	92	68	69	74	48
25°	499	82	40	52	60	301
35°	5190	103	28	47	60	3667
45°	14084	58	20	46	60	9935
55°	4300	13	16	43	58	4005
65°	32	0	10	35	52	81
75°	5	2	10	25	40	5
85°	2	2	6	8	16	1
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5
2.5°	157.8	157.8	159.4	157.8	157.8	157.8	157.8	156.3	156.3	156.3	151.5
5°	173.6	173.6	173.6	173.6	172.0	172.0	172.0	170.5	170.5	168.9	154.7
7.5°	179.9	179.9	178.4	178.4	176.8	176.8	175.2	173.6	172.0	170.5	148.4
10°	168.9	168.9	168.9	167.3	167.3	165.7	164.2	162.6	161.0	157.8	131.0
12.5°	149.9	149.9	151.5	149.9	148.4	146.8	143.6	142.1	140.5	137.3	108.9
15°	137.3	137.3	137.3	135.7	134.2	131.0	129.4	126.3	124.7	120.0	91.5
17.5°	175.2	175.2	173.6	170.5	164.2	159.4	151.5	145.2	137.3	127.9	78.9
20°	232.0	232.0	228.9	225.7	217.8	209.9	197.3	186.3	173.6	162.6	71.0
22.5°	336.2	340.9	331.5	320.4	309.4	290.4	273.1	255.7	233.6	214.7	72.6
25°	498.8	503.5	498.8	473.5	453.0	427.7	394.6	359.9	322.0	287.3	82.1
27.5°	808.1	811.3	803.4	741.8	708.7	642.4	584.0	527.2	464.0	400.9	90.0
30°	1425.3	1426.9	1376.4	1253.2	1144.3	999.1	876.0	757.6	658.2	557.2	96.3
31°	1876.7	1832.5	1725.2	1576.8	1403.2	1207.5	1038.6	885.5	737.1	628.2	97.9
32°	2383.4	2377.1	2198.7	1941.4	1709.4	1464.8	1210.6	1014.9	844.4	696.1	99.4
33°	3054.2	3057.4	2776.4	2473.4	2093.0	1764.7	1431.6	1163.3	958.1	776.6	102.6
34°	4102.3	3856.0	3526.1	3115.8	2598.0	2104.0	1671.5	1335.3	1060.7	853.9	102.6
35°	5189.8	4942.0	4578.9	3957.0	3246.8	2555.4	1957.2	1520.0	1183.8	937.6	102.6
36°	6408.3	6198.4	5649.1	4855.2	3949.2	2981.6	2260.3	1733.1	1305.3	1013.3	101.0
37°	7724.7	7416.9	6807.6	5941.1	4728.9	3581.4	2629.6	1944.6	1426.9	1095.4	97.9
38°	9061.6	8783.8	8015.1	6965.5	5660.1	4214.3	2999.0	2148.2	1538.9	1157.0	93.1
39°	10074.9	9923.4	9161.0	7988.3	6403.6	4814.1	3379.4	2366.0	1657.3	1218.5	88.4
40°	11265.0	11020.4	10297.5	8846.9	7282.7	5425.0	3751.9	2558.6	1755.2	1267.5	83.7
41°	12351.0	12041.6	11129.3	9727.7	7986.7	5974.2	4105.4	2757.5	1834.1	1295.9	80.5
42°	13282.2	12922.4	11969.0	10482.2	8575.4	6413.0	4388.0	2899.5	1908.3	1319.5	75.8
43°	13885.2	13574.2	12636.7	11048.8	9079.0	6815.5	4651.5	3047.9	1954.1	1335.3	69.4
44°	14178.8	13864.7	12957.1	11403.9	9388.3	7057.0	4822.0	3150.5	2004.6	1355.8	64.7
45°	14084.1	13765.2	12887.6	11410.3	9484.6	7143.8	4894.6	3196.3	2031.4	1374.8	58.4
46°	13650.0	13425.9	12542.0	11113.5	9301.5	7050.7	4853.6	3161.5	2021.9	1374.8	52.1
47°	13040.7	12785.0	11943.8	10603.7	8858.0	6810.8	4687.8	3055.8	1963.5	1343.2	45.8
48°	12210.5	11992.7	11108.8	9794.0	8177.7	6288.3	4313.8	2883.7	1872.0	1281.7	39.5
49°	11168.8	10865.7	10043.4	8758.5	7290.6	5546.5	3822.9	2593.3	1725.2	1194.8	34.7
50°	10038.6	9664.5	9030.0	7721.5	6373.6	4755.7	3177.3	2192.4	1518.4	1081.2	31.6
51°	8932.2	8551.8	7947.2	6834.5	5395.0	3946.0	2563.3	1750.4	1250.1	924.9	26.8
52°	7784.7	7465.8	6788.7	5914.3	4618.4	3197.8	2135.6	1480.5	1038.6	776.6	22.1
53°	6641.9	6424.1	5780.1	4894.6	3710.8	2612.3	1744.1	1267.5	906.0	664.5	17.4
54°	5497.6	5259.2	4769.9	3980.7	2991.1	2061.4	1479.0	1060.7	786.0	579.3	15.8
55°	4299.6	4176.4	3725.0	3035.3	2266.6	1644.7	1199.6	912.3	658.2	484.6	12.6
56°	3311.5	3172.6	2760.6	2201.9	1684.2	1288.0	970.7	745.0	557.2	405.6	9.5
57°	2168.7	2026.7	1753.6	1537.4	1226.4	939.1	741.8	587.2	453.0	336.2	7.9
58°	1281.7	1152.2	1109.6	947.0	817.6	637.7	547.7	437.2	334.6	265.2	4.7
59°	588.7	598.2	531.9	498.8	453.0	405.6	333.0	292.0	228.9	191.0	3.2
60°	342.5	323.6	315.7	282.5	251.0	222.6	200.5	176.8	143.6	123.1	1.6
62.5°	116.8	112.1	115.2	104.2	97.9	94.7	86.8	74.2	61.6	50.5	0.0
65°	31.6	31.6	30.0	28.4	26.8	25.3	23.7	20.5	18.9	15.8	0.0



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	11.0	11.0	9.5	9.5	7.9	7.9	6.3	6.3	4.7	4.7	0.0
70°	6.3	6.3	6.3	4.7	4.7	4.7	3.2	3.2	3.2	1.6	0.0
72.5°	4.7	4.7	4.7	4.7	4.7	4.7	3.2	3.2	3.2	1.6	1.6
75°	4.7	4.7	4.7	3.2	3.2	3.2	3.2	3.2	3.2	3.2	1.6
77.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
80°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	1.6	3.2
82.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	3.2
85°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	140.5	140.5	140.5	140.5	140.5	140.5
2.5°	145.2	138.9	131.0	126.3	124.7	123.1
5°	138.9	126.3	116.8	110.5	108.9	108.9
7.5°	124.7	110.5	101.0	97.9	96.3	96.3
10°	108.9	96.3	88.4	85.2	86.8	86.8
12.5°	91.5	80.5	77.3	77.3	78.9	80.5
15°	74.2	67.9	67.9	69.4	72.6	74.2
17.5°	61.6	58.4	60.0	63.1	66.3	69.4
20°	50.5	50.5	53.7	58.4	63.1	66.3
22.5°	42.6	44.2	48.9	53.7	60.0	63.1
25°	36.3	39.5	44.2	52.1	58.4	60.0
27.5°	31.6	36.3	42.6	50.5	56.8	60.0
30°	26.8	33.1	41.0	48.9	56.8	60.0
31°	25.3	31.6	39.5	48.9	56.8	60.0
32°	23.7	31.6	39.5	48.9	56.8	60.0
33°	22.1	30.0	39.5	47.4	56.8	60.0
34°	20.5	30.0	39.5	48.9	56.8	60.0
35°	18.9	28.4	37.9	47.4	55.2	60.0
36°	17.4	28.4	37.9	47.4	56.8	60.0
37°	15.8	28.4	37.9	47.4	55.2	60.0
38°	15.8	26.8	36.3	47.4	55.2	60.0
39°	14.2	25.3	36.3	47.4	55.2	60.0
40°	12.6	25.3	34.7	45.8	55.2	60.0
41°	11.0	23.7	34.7	45.8	55.2	60.0
42°	9.5	23.7	34.7	45.8	55.2	60.0
43°	7.9	22.1	33.1	45.8	55.2	60.0
44°	7.9	22.1	33.1	45.8	55.2	60.0
45°	6.3	20.5	31.6	45.8	55.2	60.0
46°	6.3	20.5	31.6	44.2	55.2	60.0
47°	4.7	20.5	31.6	44.2	55.2	60.0
48°	4.7	18.9	31.6	44.2	55.2	60.0
49°	3.2	18.9	31.6	44.2	55.2	60.0
50°	3.2	18.9	30.0	44.2	55.2	60.0
51°	3.2	18.9	30.0	44.2	55.2	60.0
52°	3.2	17.4	30.0	44.2	55.2	60.0
53°	3.2	17.4	30.0	44.2	55.2	60.0
54°	3.2	17.4	28.4	44.2	55.2	60.0
55°	3.2	15.8	28.4	42.6	55.2	58.4
56°	3.2	15.8	28.4	42.6	55.2	58.4
57°	3.2	15.8	26.8	42.6	55.2	58.4
58°	3.2	14.2	26.8	41.0	53.7	58.4
59°	3.2	14.2	25.3	41.0	53.7	56.8
60°	3.2	12.6	25.3	39.5	52.1	56.8
62.5°	3.2	11.0	22.1	37.9	50.5	53.7
65°	3.2	9.5	20.5	34.7	48.9	52.1



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	3.2	9.5	18.9	33.1	45.8	50.5
70°	3.2	9.5	17.4	30.0	44.2	45.8
72.5°	4.7	9.5	15.8	28.4	41.0	42.6
75°	6.3	9.5	14.2	25.3	37.9	39.5
77.5°	6.3	9.5	12.6	22.1	33.1	34.7
80°	6.3	7.9	11.0	17.4	26.8	28.4
82.5°	6.3	7.9	7.9	14.2	20.5	22.1
85°	4.7	6.3	6.3	7.9	14.2	15.8
87.5°	4.7	6.3	3.2	4.7	6.3	6.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)