

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: P1316354

Luminaire Tested: P3SQAS17R209827DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1316354
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: P3SQAS17R209827DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R20 optic, 2700K CCT AND, 98CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

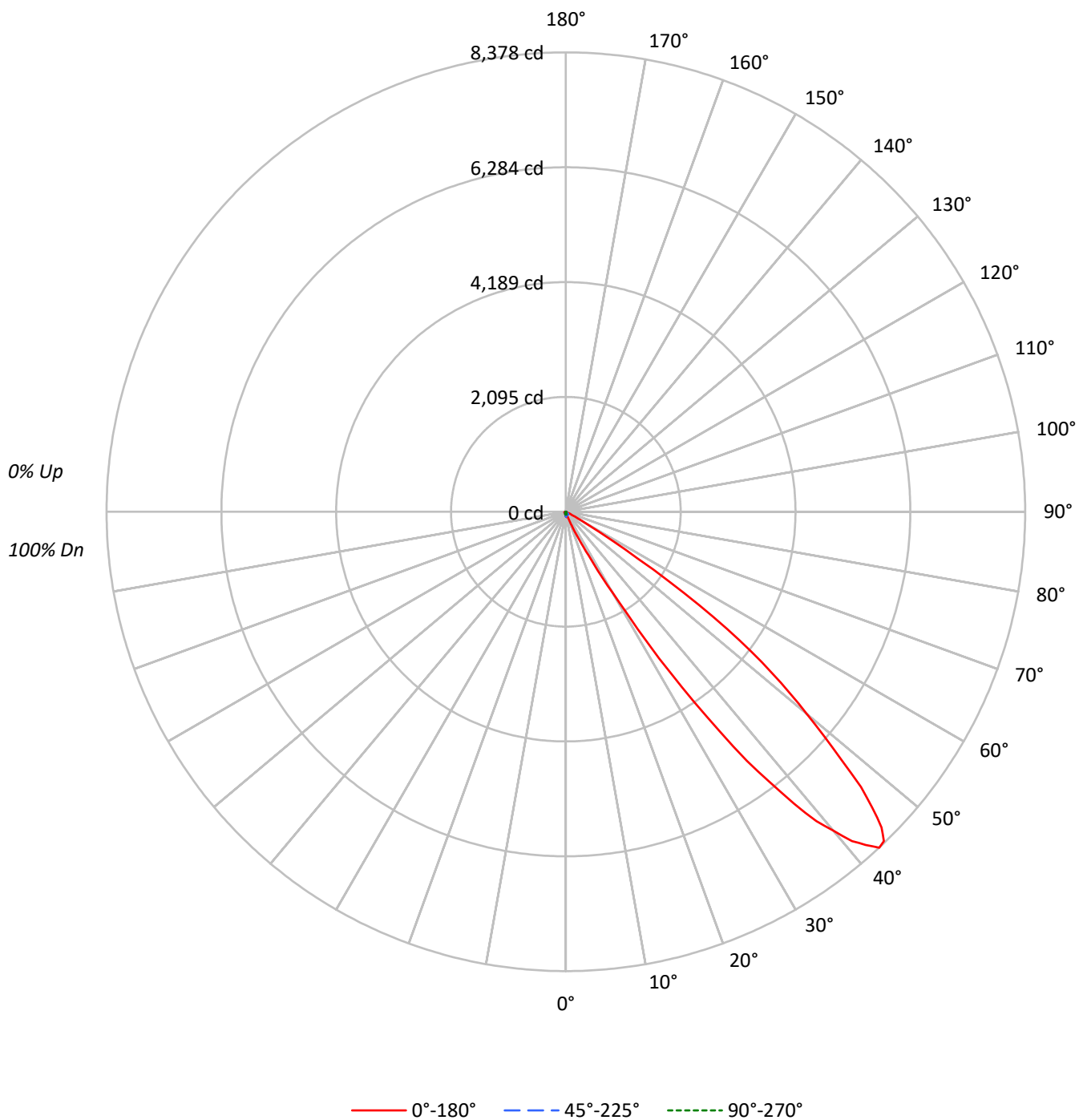
Lumens per Lamp: N/A
Luminaire Lumens: 1164.0 lumens
Efficiency: N/A
Efficacy: 57.1 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.14
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 20.4
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			0
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°	13933	13933	13933	13933	13933
5°	16268	15127	13052	11341	10961
10°	16071	13781	10335	8796	8604
15°	14050	10537	7613	7025	7417
20°	20857	8816	5608	6011	6616
25°	89807	9140	4371	5397	6442
30°	339583	11097	3699	5230	6304
35°	1029402	13330	3448	5298	6665
40°	1706996	13287	2945	5665	7127
45°	1984085	9060	2655	5870	7721
50°	1540174	4984	2626	6162	8788
55°	891415	3273	2642	6906	9518
60°	150729	758	2273	7164	10540
65°	11573	0	2690	8028	12022
70°	1662	0	3323	8812	13747
75°	1464	732	3660	10181	16037
80°	1091	1091	5455	10811	18447
85°	2174	2174	8695	10868	19365

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1984085 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.0	0.6
10°-20°	14.6	1.3
20°-30°	46.5	4.0
30°-40°	296.8	25.5
40°-50°	543.3	46.7
50°-60°	223.2	19.2
60°-70°	18.8	1.6
70°-80°	9.4	0.8
80°-90°	4.4	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°	68.0	5.8
0°-40°	364.8	31.3
0°-60°	1131.4	97.2
0°-90°	1164.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1164.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	81	81	81	81	81	
5°	94	88	76	66	63	9
15°	79	59	43	39	42	25
25°	473	48	23	28	34	311
35°	4896	63	16	25	32	3099
45°	8146	37	11	24	32	5849
55°	2969	11	9	23	32	2595
65°	28	0	7	20	30	93
75°	2	1	6	15	24	3
85°	1	1	4	6	10	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°	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9
2.5°	88.6	88.6	88.6	87.5	87.5	88.6	87.5	87.5	87.5	87.5	86.4
5°	94.1	94.1	94.1	94.1	94.1	94.1	94.1	93.0	93.0	91.9	87.5
7.5°	96.3	96.3	96.3	96.3	95.2	95.2	95.2	95.2	94.1	93.0	85.3
10°	91.9	91.9	91.9	90.8	90.8	90.8	89.7	89.7	88.6	87.5	78.8
12.5°	83.1	83.1	83.1	83.1	82.0	82.0	80.9	80.9	79.9	78.8	68.9
15°	78.8	78.8	78.8	77.7	77.7	76.6	75.5	74.4	73.3	71.1	59.1
17.5°	85.3	85.3	84.2	84.2	82.0	79.9	78.8	75.5	73.3	70.0	52.5
20°	113.8	114.9	110.5	107.2	105.0	98.4	95.2	89.7	85.3	79.9	48.1
22.5°	229.7	225.3	217.7	205.7	191.4	179.4	157.5	140.0	128.0	111.6	47.0
25°	472.6	468.2	447.4	429.9	386.1	352.2	305.2	266.9	227.5	189.2	48.1
27.5°	898.1	868.5	863.1	783.2	722.0	634.5	543.7	467.1	397.1	319.4	51.4
30°	1707.6	1673.6	1554.4	1434.1	1268.9	1081.9	903.6	737.3	598.4	472.6	55.8
31°	2167.0	2199.8	2059.8	1818.0	1574.1	1334.5	1090.6	879.5	700.1	543.7	58.0
32°	2848.5	2705.2	2557.5	2309.2	1954.8	1648.5	1342.2	1038.1	801.8	620.2	60.2
33°	3492.8	3408.6	3183.2	2873.6	2448.1	2018.2	1621.1	1225.2	926.5	713.2	61.3
34°	4179.7	4086.8	3904.1	3460.0	2992.9	2429.5	1900.1	1440.6	1075.3	804.0	62.4
35°	4896.2	4856.9	4504.6	4119.6	3545.3	2866.0	2235.9	1676.9	1220.8	887.1	63.4
36°	5617.1	5490.2	5214.6	4652.3	4052.9	3269.6	2588.1	1896.8	1368.5	985.6	63.4
37°	6159.7	6131.2	5765.9	5217.8	4513.4	3700.6	2892.2	2140.7	1517.2	1069.8	63.4
38°	6758.0	6645.4	6274.5	5716.7	4946.6	4095.5	3210.6	2353.0	1658.3	1146.4	62.4
39°	7262.3	7094.9	6720.8	6169.5	5325.0	4395.2	3463.2	2558.6	1783.0	1209.8	61.3
40°	7592.7	7476.7	7086.2	6466.0	5668.5	4678.6	3719.2	2728.2	1876.0	1258.0	59.1
41°	7956.9	7764.4	7378.3	6754.8	5917.9	4928.0	3880.0	2839.7	1948.2	1289.7	56.9
42°	8174.6	8017.1	7558.8	6948.4	6096.2	5070.2	4011.3	2925.1	1992.0	1306.1	52.5
43°	8378.1	8163.7	7717.4	7061.0	6214.4	5170.8	4071.4	2964.4	2001.8	1306.1	47.0
44°	8350.7	8147.3	7684.6	7076.4	6240.6	5200.3	4096.6	2965.5	1986.5	1289.7	41.6
45°	8146.2	7943.8	7527.0	6942.9	6146.5	5142.4	4046.3	2921.8	1943.8	1261.3	37.2
46°	7771.0	7569.7	7250.3	6719.7	5971.5	5011.1	3929.2	2826.6	1872.7	1215.3	32.8
47°	7363.0	7167.1	6840.1	6359.9	5672.9	4777.0	3759.7	2693.1	1773.2	1148.6	29.5
48°	6771.2	6648.6	6320.5	5910.3	5258.3	4410.6	3462.2	2475.5	1639.7	1062.2	25.2
49°	6248.3	6119.2	5831.5	5390.7	4717.9	3983.9	3106.6	2210.7	1465.8	965.9	21.9
50°	5748.4	5635.7	5369.9	4872.2	4230.1	3468.7	2626.4	1877.1	1247.0	846.7	18.6
51°	5259.4	5175.2	4903.9	4446.6	3794.7	3072.7	2275.3	1563.2	1030.4	702.3	17.5
52°	4768.3	4758.4	4464.2	4001.4	3371.4	2677.8	1934.0	1319.2	874.0	589.6	16.4
53°	4239.9	4176.5	3919.4	3503.7	2898.8	2266.5	1639.7	1112.5	752.6	502.1	14.2
54°	3638.3	3567.2	3291.5	2916.3	2368.3	1856.3	1321.4	899.2	626.8	424.4	13.1
55°	2968.8	2847.4	2647.2	2262.2	1849.8	1416.6	1020.6	712.1	501.0	353.3	10.9
56°	2252.3	2130.9	2018.2	1734.9	1357.5	1056.7	760.3	545.8	391.6	278.9	9.8
57°	1566.4	1559.9	1375.0	1157.3	907.9	719.8	520.7	385.0	276.8	216.6	7.7
58°	1016.2	982.3	864.2	738.4	594.0	449.6	334.7	261.4	188.1	147.7	6.6
59°	712.1	644.3	580.9	492.2	374.1	283.3	215.5	167.4	130.2	102.8	4.4
60°	437.6	423.3	380.7	299.7	242.8	200.2	160.8	123.6	95.2	73.3	2.2
62.5°	124.7	126.9	114.9	101.7	87.5	75.5	67.8	58.0	48.1	38.3	0.0
65°	28.4	27.3	29.5	27.3	25.2	25.2	21.9	19.7	17.5	16.4	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°	8.8	8.8	7.7	7.7	7.7	6.6	6.6	5.5	5.5	4.4	0.0
70°	3.3	3.3	3.3	3.3	3.3	2.2	2.2	2.2	1.1	1.1	0.0
72.5°	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1
75°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1
77.5°	2.2	2.2	2.2	2.2	2.2	1.1	2.2	1.1	1.1	1.1	1.1
80°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
82.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
85°	1.1	1.1	1.1	1.1	0.0	0.0	1.1	1.1	1.1	0.0	1.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
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°	80.9	80.9	80.9	80.9	80.9	80.9
2.5°	84.2	79.9	76.6	73.3	72.2	72.2
5°	82.0	75.5	68.9	65.6	63.4	63.4
7.5°	75.5	67.8	61.3	58.0	56.9	56.9
10°	67.8	59.1	52.5	50.3	50.3	49.2
12.5°	59.1	50.3	45.9	44.8	44.8	44.8
15°	49.2	42.7	39.4	39.4	40.5	41.6
17.5°	41.6	35.0	33.9	36.1	38.3	38.3
20°	35.0	30.6	30.6	32.8	35.0	36.1
22.5°	29.5	26.3	27.3	30.6	33.9	35.0
25°	26.3	23.0	25.2	28.4	31.7	33.9
27.5°	21.9	20.8	23.0	27.3	31.7	32.8
30°	18.6	18.6	21.9	26.3	30.6	31.7
31°	17.5	17.5	21.9	26.3	30.6	31.7
32°	16.4	17.5	20.8	26.3	30.6	31.7
33°	15.3	16.4	20.8	25.2	30.6	31.7
34°	14.2	16.4	20.8	25.2	30.6	31.7
35°	13.1	16.4	20.8	25.2	30.6	31.7
36°	12.0	15.3	19.7	25.2	30.6	31.7
37°	10.9	15.3	19.7	25.2	30.6	31.7
38°	9.8	14.2	19.7	25.2	30.6	31.7
39°	9.8	14.2	18.6	25.2	29.5	31.7
40°	8.8	13.1	18.6	25.2	29.5	31.7
41°	7.7	13.1	18.6	24.1	29.5	31.7
42°	6.6	12.0	17.5	24.1	29.5	31.7
43°	5.5	12.0	17.5	24.1	29.5	31.7
44°	5.5	10.9	17.5	24.1	29.5	31.7
45°	4.4	10.9	17.5	24.1	29.5	31.7
46°	3.3	10.9	17.5	24.1	29.5	31.7
47°	3.3	9.8	16.4	24.1	29.5	31.7
48°	2.2	9.8	16.4	24.1	29.5	31.7
49°	2.2	9.8	16.4	24.1	29.5	32.8
50°	2.2	9.8	16.4	23.0	29.5	32.8
51°	1.1	9.8	16.4	23.0	29.5	32.8
52°	1.1	9.8	15.3	23.0	30.6	32.8
53°	1.1	8.8	15.3	23.0	30.6	32.8
54°	1.1	8.8	15.3	23.0	30.6	31.7
55°	1.1	8.8	15.3	23.0	29.5	31.7
56°	1.1	7.7	15.3	23.0	29.5	31.7
57°	1.1	7.7	14.2	21.9	29.5	30.6
58°	1.1	7.7	14.2	21.9	29.5	30.6
59°	1.1	7.7	14.2	21.9	28.4	30.6
60°	2.2	6.6	13.1	20.8	28.4	30.6
62.5°	2.2	6.6	13.1	20.8	27.3	29.5
65°	2.2	6.6	12.0	19.7	27.3	29.5



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.2	5.5	10.9	18.6	26.3	28.4
70°	2.2	6.6	10.9	17.5	25.2	27.3
72.5°	3.3	5.5	9.8	16.4	24.1	26.3
75°	3.3	5.5	9.8	15.3	23.0	24.1
77.5°	4.4	5.5	8.8	13.1	20.8	21.9
80°	4.4	5.5	7.7	10.9	17.5	18.6
82.5°	4.4	5.5	5.5	8.8	13.1	14.2
85°	3.3	4.4	4.4	5.5	8.8	9.8
87.5°	3.3	4.4	3.3	2.2	4.4	4.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)