

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: P1315467

Luminaire Tested: P3SQAS17R209740DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1315467
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: P3SQAS17R209740DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R20 optic, 4000K CCT AND, 97CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

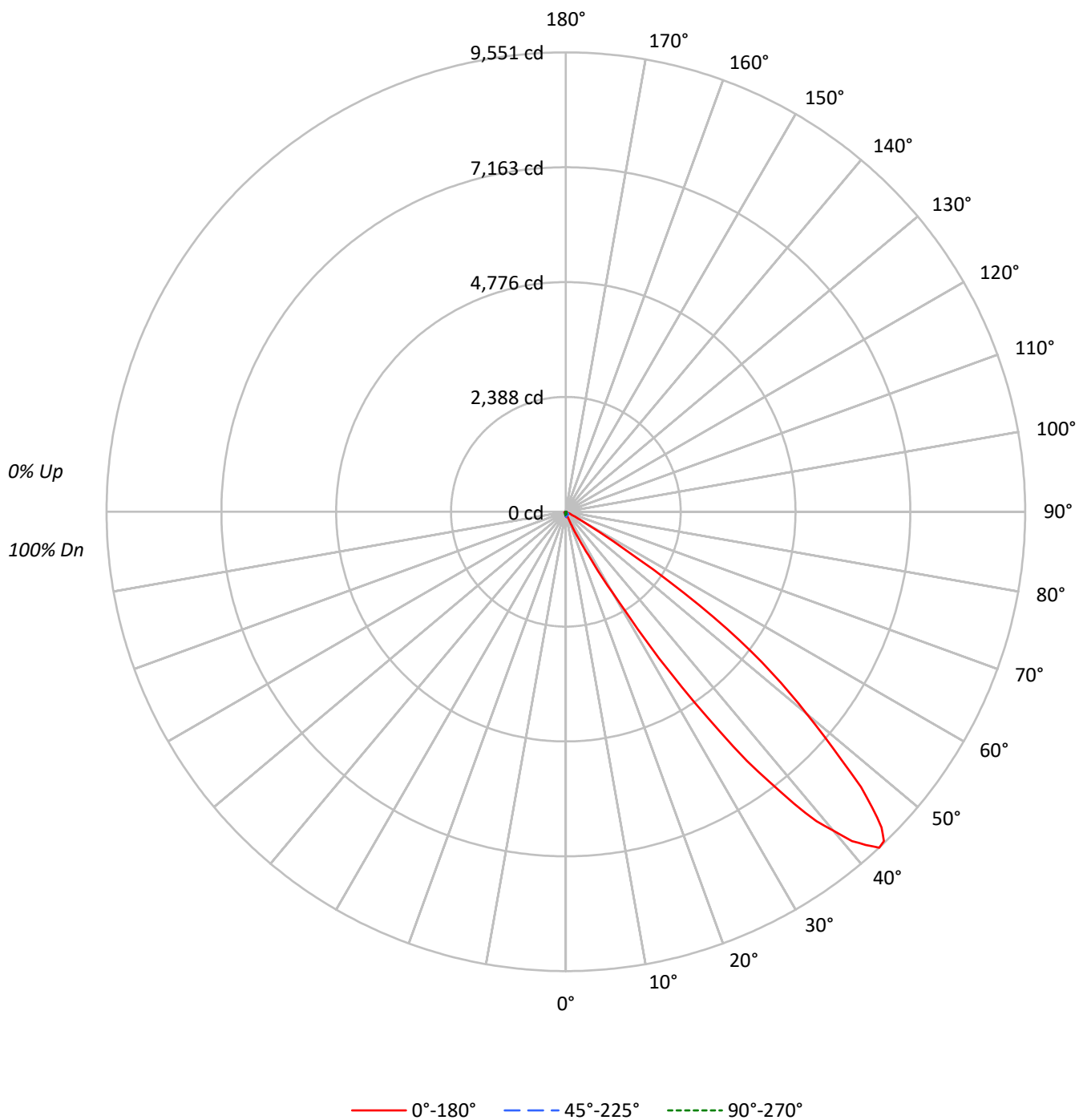
Lumens per Lamp: N/A
Luminaire Lumens: 1327.0 lumens
Efficiency: N/A
Efficacy: 62.6 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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

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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°	15896	15896	15896	15896	15896
5°	18533	17253	14868	12931	12499
10°	18327	15704	11769	10038	9811
15°	16011	11999	8665	8006	8451
20°	23771	10062	6396	6855	7551
25°	102367	10432	4979	6157	7354
30°	387132	12648	4216	5946	7199
35°	1173567	15201	3932	6034	7611
40°	1946025	15130	3372	6452	8139
45°	2261914	10327	3044	6674	8817
50°	1755831	5680	3001	7020	10021
55°	1016233	3753	3003	7867	10869
60°	171809	861	2583	8163	12021
65°	13203	0	3056	9128	13733
70°	1863	0	3777	10071	15711
75°	1664	799	4126	11645	18232
80°	1190	1190	6149	12397	21026
85°	2371	2371	9880	12251	22132

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2261914 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.9	0.6
10°-20°	16.6	1.3
20°-30°	53.0	4.0
30°-40°	338.4	25.5
40°-50°	619.4	46.7
50°-60°	254.5	19.2
60°-70°	21.5	1.6
70°-80°	10.7	0.8
80°-90°	5.0	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°	77.5	5.8
0°-40°	415.9	31.3
0°-60°	1289.8	97.2
0°-90°	1327.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1327.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	92	92	92	92	92	
5°	107	100	86	75	72	10
15°	90	67	49	45	47	29
25°	539	55	26	32	39	354
35°	5582	72	19	29	36	3533
45°	9287	42	12	27	36	6668
55°	3384	12	10	26	36	2958
65°	32	0	8	22	34	106
75°	2	1	6	18	27	3
85°	1	1	5	6	11	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°	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
2.5°	101.0	101.0	101.0	99.8	99.8	101.0	99.8	99.8	99.8	99.8	98.5
5°	107.2	107.2	107.2	107.2	107.2	107.2	107.2	106.0	106.0	104.8	99.8
7.5°	109.7	109.7	109.7	109.7	108.5	108.5	108.5	108.5	107.2	106.0	97.3
10°	104.8	104.8	104.8	103.5	103.5	103.5	102.3	102.3	101.0	99.8	89.8
12.5°	94.8	94.8	94.8	94.8	93.5	93.5	92.3	92.3	91.0	89.8	78.6
15°	89.8	89.8	89.8	88.5	88.5	87.3	86.0	84.8	83.6	81.1	67.3
17.5°	97.3	97.3	96.0	96.0	93.5	91.0	89.8	86.0	83.6	79.8	59.9
20°	129.7	130.9	126.0	122.2	119.7	112.2	108.5	102.3	97.3	91.0	54.9
22.5°	261.9	256.9	248.2	234.4	218.2	204.5	179.6	159.6	145.9	127.2	53.6
25°	538.7	533.7	510.1	490.1	440.2	401.6	347.9	304.3	259.4	215.7	54.9
27.5°	1023.8	990.2	983.9	892.9	823.1	723.3	619.8	532.5	452.7	364.1	58.6
30°	1946.7	1908.0	1772.1	1634.9	1446.6	1233.4	1030.1	840.5	682.1	538.7	63.6
31°	2470.4	2507.9	2348.2	2072.6	1794.5	1521.4	1243.3	1002.6	798.1	619.8	66.1
32°	3247.4	3084.0	2915.6	2632.6	2228.5	1879.3	1530.2	1183.5	914.1	707.1	68.6
33°	3981.9	3885.9	3629.0	3276.0	2790.9	2300.8	1848.2	1396.7	1056.3	813.1	69.8
34°	4765.0	4659.0	4450.8	3944.5	3412.0	2769.7	2166.2	1642.4	1225.9	916.6	71.1
35°	5581.9	5537.0	5135.4	4696.5	4041.7	3267.3	2549.0	1911.8	1391.7	1011.4	72.3
36°	6403.7	6259.0	5944.8	5303.8	4620.4	3727.5	2950.6	2162.4	1560.1	1123.6	72.3
37°	7022.2	6989.8	6573.3	5948.5	5145.4	4218.8	3297.2	2440.5	1729.7	1219.6	72.3
38°	7704.4	7575.9	7153.2	6517.2	5639.2	4669.0	3660.1	2682.4	1890.6	1306.9	71.1
39°	8279.3	8088.5	7662.0	7033.5	6070.7	5010.7	3948.2	2916.9	2032.7	1379.3	69.8
40°	8655.9	8523.7	8078.5	7371.4	6462.3	5333.7	4240.0	3110.2	2138.7	1434.1	67.3
41°	9071.2	8851.7	8411.5	7700.6	6746.6	5618.0	4423.4	3237.4	2221.0	1470.3	64.8
42°	9319.3	9139.8	8617.2	7921.4	6949.9	5780.2	4573.0	3334.7	2270.9	1489.0	59.9
43°	9551.3	9306.9	8798.1	8049.8	7084.6	5894.9	4641.6	3379.6	2282.1	1489.0	53.6
44°	9520.1	9288.2	8760.7	8067.3	7114.5	5928.6	4670.3	3380.8	2264.7	1470.3	47.4
45°	9286.9	9056.2	8581.1	7915.1	7007.3	5862.5	4612.9	3330.9	2216.0	1437.9	42.4
46°	8859.2	8629.7	8265.6	7660.7	6807.7	5712.8	4479.5	3222.4	2135.0	1385.5	37.4
47°	8394.0	8170.8	7797.9	7250.5	6467.3	5445.9	4286.2	3070.3	2021.5	1309.4	33.7
48°	7719.4	7579.7	7205.6	6737.9	5994.7	5028.2	3947.0	2822.1	1869.4	1210.9	28.7
49°	7123.3	6976.1	6648.1	6145.6	5378.6	4541.8	3541.7	2520.3	1671.1	1101.2	24.9
50°	6553.3	6424.9	6121.9	5554.4	4822.4	3954.5	2994.2	2140.0	1421.7	965.2	21.2
51°	5995.9	5899.9	5590.6	5069.3	4326.1	3503.0	2593.9	1782.1	1174.7	800.6	20.0
52°	5436.0	5424.7	5089.3	4561.8	3843.5	3052.8	2204.8	1504.0	996.4	672.2	18.7
53°	4833.6	4761.3	4468.2	3994.4	3304.7	2583.9	1869.4	1268.3	858.0	572.4	16.2
54°	4147.7	4066.7	3752.4	3324.7	2699.9	2116.3	1506.5	1025.1	714.6	483.9	15.0
55°	3384.5	3246.1	3017.9	2578.9	2108.8	1615.0	1163.5	811.8	571.2	402.8	12.5
56°	2567.7	2429.3	2300.8	1977.9	1547.6	1204.7	866.7	622.3	446.5	318.0	11.2
57°	1785.8	1778.3	1567.6	1319.4	1035.1	820.6	593.6	439.0	315.5	246.9	8.7
58°	1158.5	1119.9	985.2	841.8	677.2	512.5	381.6	298.0	214.5	168.4	7.5
59°	811.8	734.5	662.2	561.2	426.5	323.0	245.7	190.8	148.4	117.2	5.0
60°	498.8	482.6	434.0	341.7	276.8	228.2	183.3	140.9	108.5	83.6	2.5
62.5°	142.2	144.7	130.9	116.0	99.8	86.0	77.3	66.1	54.9	43.6	0.0
65°	32.4	31.2	33.7	31.2	28.7	28.7	24.9	22.4	20.0	18.7	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°	10.0	10.0	8.7	8.7	8.7	7.5	7.5	6.2	6.2	5.0	0.0
70°	3.7	3.7	3.7	3.7	3.7	2.5	2.5	2.5	1.2	1.2	0.0
72.5°	3.7	3.7	3.7	2.5	2.5	2.5	2.5	2.5	1.2	1.2	1.2
75°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	1.2	1.2	1.2	1.2
77.5°	2.5	2.5	2.5	2.5	2.5	1.2	2.5	1.2	1.2	1.2	1.2
80°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
85°	1.2	1.2	1.2	1.2	0.0	0.0	1.2	1.2	1.2	0.0	1.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	92.3	92.3	92.3	92.3	92.3	92.3
2.5°	96.0	91.0	87.3	83.6	82.3	82.3
5°	93.5	86.0	78.6	74.8	72.3	72.3
7.5°	86.0	77.3	69.8	66.1	64.8	64.8
10°	77.3	67.3	59.9	57.4	57.4	56.1
12.5°	67.3	57.4	52.4	51.1	51.1	51.1
15°	56.1	48.6	44.9	44.9	46.1	47.4
17.5°	47.4	39.9	38.7	41.2	43.6	43.6
20°	39.9	34.9	34.9	37.4	39.9	41.2
22.5°	33.7	29.9	31.2	34.9	38.7	39.9
25°	29.9	26.2	28.7	32.4	36.2	38.7
27.5°	24.9	23.7	26.2	31.2	36.2	37.4
30°	21.2	21.2	24.9	29.9	34.9	36.2
31°	20.0	20.0	24.9	29.9	34.9	36.2
32°	18.7	20.0	23.7	29.9	34.9	36.2
33°	17.5	18.7	23.7	28.7	34.9	36.2
34°	16.2	18.7	23.7	28.7	34.9	36.2
35°	15.0	18.7	23.7	28.7	34.9	36.2
36°	13.7	17.5	22.4	28.7	34.9	36.2
37°	12.5	17.5	22.4	28.7	34.9	36.2
38°	11.2	16.2	22.4	28.7	34.9	36.2
39°	11.2	16.2	21.2	28.7	33.7	36.2
40°	10.0	15.0	21.2	28.7	33.7	36.2
41°	8.7	15.0	21.2	27.4	33.7	36.2
42°	7.5	13.7	20.0	27.4	33.7	36.2
43°	6.2	13.7	20.0	27.4	33.7	36.2
44°	6.2	12.5	20.0	27.4	33.7	36.2
45°	5.0	12.5	20.0	27.4	33.7	36.2
46°	3.7	12.5	20.0	27.4	33.7	36.2
47°	3.7	11.2	18.7	27.4	33.7	36.2
48°	2.5	11.2	18.7	27.4	33.7	36.2
49°	2.5	11.2	18.7	27.4	33.7	37.4
50°	2.5	11.2	18.7	26.2	33.7	37.4
51°	1.2	11.2	18.7	26.2	33.7	37.4
52°	1.2	11.2	17.5	26.2	34.9	37.4
53°	1.2	10.0	17.5	26.2	34.9	37.4
54°	1.2	10.0	17.5	26.2	34.9	36.2
55°	1.2	10.0	17.5	26.2	33.7	36.2
56°	1.2	8.7	17.5	26.2	33.7	36.2
57°	1.2	8.7	16.2	24.9	33.7	34.9
58°	1.2	8.7	16.2	24.9	33.7	34.9
59°	1.2	8.7	16.2	24.9	32.4	34.9
60°	2.5	7.5	15.0	23.7	32.4	34.9
62.5°	2.5	7.5	15.0	23.7	31.2	33.7
65°	2.5	7.5	13.7	22.4	31.2	33.7



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.5	6.2	12.5	21.2	29.9	32.4
70°	2.5	7.5	12.5	20.0	28.7	31.2
72.5°	3.7	6.2	11.2	18.7	27.4	29.9
75°	3.7	6.2	11.2	17.5	26.2	27.4
77.5°	5.0	6.2	10.0	15.0	23.7	24.9
80°	5.0	6.2	8.7	12.5	20.0	21.2
82.5°	5.0	6.2	6.2	10.0	15.0	16.2
85°	3.7	5.0	5.0	6.2	10.0	11.2
87.5°	3.7	5.0	3.7	2.5	5.0	5.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)