

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: P1311428

Luminaire Tested: P3SQAS17R159050DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1311428
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: P3SQAS17R159050DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R15 optic, 5000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

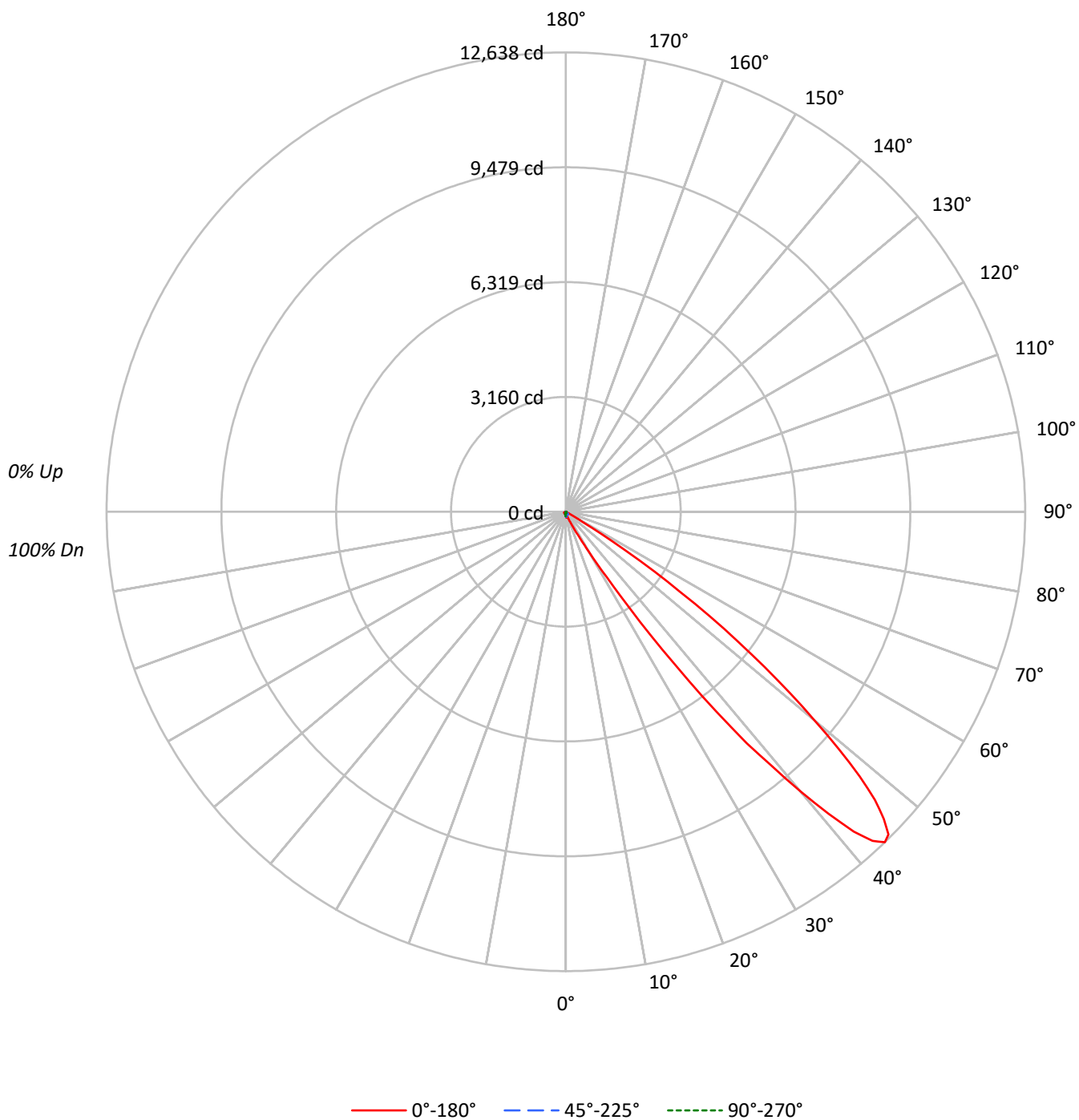
Lumens per Lamp: N/A
Luminaire Lumens: 1411.0 lumens
Efficiency: N/A
Efficacy: 66.6 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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
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	102	102	100
1	110	106	102	99	107	104	100	97	100	97	94	96	93	91	92	90	89	89	89	87
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75	75	75	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	63	63	61
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	53	53	53	50
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44	44	44	42
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	37	37	35
7	62	47	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	31	31	29
8	56	42	33	27	55	41	33	27	40	32	26	39	31	26	37	31	26	26	26	24
9	52	37	28	22	50	37	28	22	35	28	22	34	27	22	33	27	22	22	22	20
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	23	19	19	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	21562	21562	21562	21562	21562
5°	26762	23840	19466	17029	16787
10°	26319	20426	15005	13291	13536
15°	21824	14549	10787	11037	11785
20°	37901	11601	8247	9549	10832
25°	84486	13910	6689	8817	10166
30°	252639	17063	5867	8671	10639
35°	972572	19216	5319	8872	11248
40°	2257425	16772	5058	9173	12028
45°	3057598	12689	4457	9937	13030
50°	2397419	7529	4528	10556	14334
55°	1150720	3393	4234	11410	15644
60°	105159	482	3892	12124	17429
65°	11451	0	3423	12633	18909
70°	2820	0	4230	13445	20545
75°	2795	932	5590	14972	23423
80°	2777	2777	6943	15373	25092
85°	2766	2766	11066	13832	27862

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3057598 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.7	0.8
10°-20°	22.3	1.6
20°-30°	53.3	3.8
30°-40°	291.9	20.7
40°-50°	706.7	50.1
50°-60°	282.0	20.0
60°-70°	24.4	1.7
70°-80°	13.7	1.0
80°-90°	6.1	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°	86.3	6.1
0°-40°	378.1	26.8
0°-60°	1366.8	96.9
0°-90°	1411.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1411.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	125	125	125	125	125	
5°	155	138	113	98	97	15
15°	122	82	60	62	66	43
25°	445	73	35	46	54	268
35°	4626	91	25	42	54	3269
45°	12554	52	18	41	54	8856
55°	3832	11	14	38	52	3570
65°	28	0	8	31	46	72
75°	4	1	8	22	35	4
85°	1	1	6	7	14	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°	125.2	125.2	125.2	125.2	125.2	125.2	125.2	125.2	125.2	125.2	125.2
2.5°	140.7	140.7	142.1	140.7	140.7	140.7	140.7	139.3	139.3	139.3	135.1
5°	154.8	154.8	154.8	154.8	153.4	153.4	153.4	151.9	151.9	150.5	137.9
7.5°	160.4	160.4	159.0	159.0	157.6	157.6	156.2	154.8	153.4	151.9	132.2
10°	150.5	150.5	150.5	149.1	149.1	147.7	146.3	144.9	143.5	140.7	116.8
12.5°	133.7	133.7	135.1	133.7	132.2	130.8	128.0	126.6	125.2	122.4	97.1
15°	122.4	122.4	122.4	121.0	119.6	116.8	115.4	112.6	111.1	106.9	81.6
17.5°	156.2	156.2	154.8	151.9	146.3	142.1	135.1	129.4	122.4	114.0	70.3
20°	206.8	206.8	204.0	201.2	194.2	187.1	175.9	166.0	154.8	144.9	63.3
22.5°	299.7	303.9	295.4	285.6	275.8	258.9	243.4	227.9	208.2	191.3	64.7
25°	444.6	448.8	444.6	422.1	403.8	381.3	351.7	320.8	287.0	256.1	73.2
27.5°	720.3	723.1	716.1	661.2	631.7	572.6	520.6	469.9	413.6	357.4	80.2
30°	1270.4	1271.8	1226.8	1117.1	1020.0	890.6	780.8	675.3	586.7	496.6	85.8
31°	1672.8	1633.4	1537.7	1405.5	1250.7	1076.3	925.7	789.3	657.0	559.9	87.2
32°	2124.4	2118.8	1959.8	1730.5	1523.7	1305.6	1079.1	904.6	752.7	620.4	88.6
33°	2722.4	2725.2	2474.7	2204.6	1865.5	1572.9	1276.1	1036.9	854.0	692.2	91.4
34°	3656.5	3437.1	3143.0	2777.2	2315.8	1875.4	1489.9	1190.2	945.4	761.1	91.4
35°	4625.9	4405.0	4081.4	3527.1	2894.0	2277.8	1744.6	1354.8	1055.2	835.7	91.4
36°	5712.0	5524.9	5035.3	4327.6	3520.1	2657.6	2014.7	1544.8	1163.5	903.2	90.0
37°	6885.4	6611.0	6068.0	5295.6	4215.1	3192.3	2343.9	1733.3	1271.8	976.4	87.2
38°	8077.0	7829.4	7144.2	6208.6	5045.1	3756.4	2673.1	1914.8	1371.7	1031.3	83.0
39°	8980.2	8845.2	8165.6	7120.3	5707.8	4291.0	3012.2	2108.9	1477.2	1086.1	78.8
40°	10041.0	9823.0	9178.6	7885.7	6491.4	4835.5	3344.2	2280.6	1564.5	1129.7	74.6
41°	11009.0	10733.2	9920.1	8670.7	7118.9	5325.1	3659.3	2457.9	1634.8	1155.1	71.8
42°	11839.1	11518.3	10668.5	9343.2	7643.7	5716.2	3911.2	2584.5	1700.9	1176.2	67.5
43°	12376.5	12099.3	11263.6	9848.3	8092.5	6075.0	4146.1	2716.7	1741.7	1190.2	61.9
44°	12638.2	12358.2	11549.2	10164.9	8368.2	6290.2	4298.1	2808.2	1786.8	1208.5	57.7
45°	12553.8	12269.6	11487.3	10170.5	8454.1	6367.6	4362.8	2849.0	1810.7	1225.4	52.1
46°	12166.9	11967.1	11179.2	9906.0	8290.9	6284.6	4326.2	2818.0	1802.2	1225.4	46.4
47°	11623.8	11395.9	10646.0	9451.6	7895.5	6070.8	4178.5	2723.8	1750.2	1197.3	40.8
48°	10883.8	10689.6	9901.8	8729.8	7289.1	5605.1	3845.1	2570.4	1668.6	1142.4	35.2
49°	9955.2	9685.1	8952.1	7806.9	6498.5	4943.8	3407.5	2311.5	1537.7	1065.0	31.0
50°	8947.9	8614.4	8048.9	6882.6	5681.1	4239.0	2832.1	1954.2	1353.4	963.7	28.1
51°	7961.6	7622.6	7083.7	6091.9	4808.8	3517.2	2284.8	1560.3	1114.3	824.4	23.9
52°	6938.8	6654.6	6051.1	5271.7	4116.6	2850.4	1903.5	1319.7	925.7	692.2	19.7
53°	5920.2	5726.1	5152.1	4362.8	3307.6	2328.4	1554.6	1129.7	807.6	592.3	15.5
54°	4900.2	4687.8	4251.7	3548.2	2666.1	1837.4	1318.3	945.4	700.6	516.3	14.1
55°	3832.4	3722.7	3320.3	2705.5	2020.3	1466.0	1069.2	813.2	586.7	431.9	11.3
56°	2951.7	2827.9	2460.7	1962.6	1501.2	1148.0	865.2	664.1	496.6	361.6	8.4
57°	1933.1	1806.5	1563.1	1370.3	1093.2	837.1	661.2	523.4	403.8	299.7	7.0
58°	1142.4	1027.0	989.1	844.1	728.8	568.4	488.2	389.7	298.3	236.4	4.2
59°	524.8	533.2	474.1	444.6	403.8	361.6	296.9	260.3	204.0	170.2	2.8
60°	305.3	288.4	281.4	251.8	223.7	198.4	178.7	157.6	128.0	109.7	1.4
62.5°	104.1	99.9	102.7	92.9	87.2	84.4	77.4	66.1	54.9	45.0	0.0
65°	28.1	28.1	26.7	25.3	23.9	22.5	21.1	18.3	16.9	14.1	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°	9.8	9.8	8.4	8.4	7.0	7.0	5.6	5.6	4.2	4.2	0.0
70°	5.6	5.6	5.6	4.2	4.2	4.2	2.8	2.8	2.8	1.4	0.0
72.5°	4.2	4.2	4.2	4.2	4.2	4.2	2.8	2.8	2.8	1.4	1.4
75°	4.2	4.2	4.2	2.8	2.8	2.8	2.8	2.8	2.8	2.8	1.4
77.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
80°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	1.4	2.8
82.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.8
85°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
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°	125.2	125.2	125.2	125.2	125.2	125.2
2.5°	129.4	123.8	116.8	112.6	111.1	109.7
5°	123.8	112.6	104.1	98.5	97.1	97.1
7.5°	111.1	98.5	90.0	87.2	85.8	85.8
10°	97.1	85.8	78.8	76.0	77.4	77.4
12.5°	81.6	71.8	68.9	68.9	70.3	71.8
15°	66.1	60.5	60.5	61.9	64.7	66.1
17.5°	54.9	52.1	53.5	56.3	59.1	61.9
20°	45.0	45.0	47.8	52.1	56.3	59.1
22.5°	38.0	39.4	43.6	47.8	53.5	56.3
25°	32.4	35.2	39.4	46.4	52.1	53.5
27.5°	28.1	32.4	38.0	45.0	50.6	53.5
30°	23.9	29.5	36.6	43.6	50.6	53.5
31°	22.5	28.1	35.2	43.6	50.6	53.5
32°	21.1	28.1	35.2	43.6	50.6	53.5
33°	19.7	26.7	35.2	42.2	50.6	53.5
34°	18.3	26.7	35.2	43.6	50.6	53.5
35°	16.9	25.3	33.8	42.2	49.2	53.5
36°	15.5	25.3	33.8	42.2	50.6	53.5
37°	14.1	25.3	33.8	42.2	49.2	53.5
38°	14.1	23.9	32.4	42.2	49.2	53.5
39°	12.7	22.5	32.4	42.2	49.2	53.5
40°	11.3	22.5	31.0	40.8	49.2	53.5
41°	9.8	21.1	31.0	40.8	49.2	53.5
42°	8.4	21.1	31.0	40.8	49.2	53.5
43°	7.0	19.7	29.5	40.8	49.2	53.5
44°	7.0	19.7	29.5	40.8	49.2	53.5
45°	5.6	18.3	28.1	40.8	49.2	53.5
46°	5.6	18.3	28.1	39.4	49.2	53.5
47°	4.2	18.3	28.1	39.4	49.2	53.5
48°	4.2	16.9	28.1	39.4	49.2	53.5
49°	2.8	16.9	28.1	39.4	49.2	53.5
50°	2.8	16.9	26.7	39.4	49.2	53.5
51°	2.8	16.9	26.7	39.4	49.2	53.5
52°	2.8	15.5	26.7	39.4	49.2	53.5
53°	2.8	15.5	26.7	39.4	49.2	53.5
54°	2.8	15.5	25.3	39.4	49.2	53.5
55°	2.8	14.1	25.3	38.0	49.2	52.1
56°	2.8	14.1	25.3	38.0	49.2	52.1
57°	2.8	14.1	23.9	38.0	49.2	52.1
58°	2.8	12.7	23.9	36.6	47.8	52.1
59°	2.8	12.7	22.5	36.6	47.8	50.6
60°	2.8	11.3	22.5	35.2	46.4	50.6
62.5°	2.8	9.8	19.7	33.8	45.0	47.8
65°	2.8	8.4	18.3	31.0	43.6	46.4



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.8	8.4	16.9	29.5	40.8	45.0
70°	2.8	8.4	15.5	26.7	39.4	40.8
72.5°	4.2	8.4	14.1	25.3	36.6	38.0
75°	5.6	8.4	12.7	22.5	33.8	35.2
77.5°	5.6	8.4	11.3	19.7	29.5	31.0
80°	5.6	7.0	9.8	15.5	23.9	25.3
82.5°	5.6	7.0	7.0	12.7	18.3	19.7
85°	4.2	5.6	5.6	7.0	12.7	14.1
87.5°	4.2	5.6	2.8	4.2	5.6	5.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)