

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: P1313507

Luminaire Tested: P3SQAS17R159730DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1313507
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: P3SQAS17R159730DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R15 optic, 3000K CCT AND, 97CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

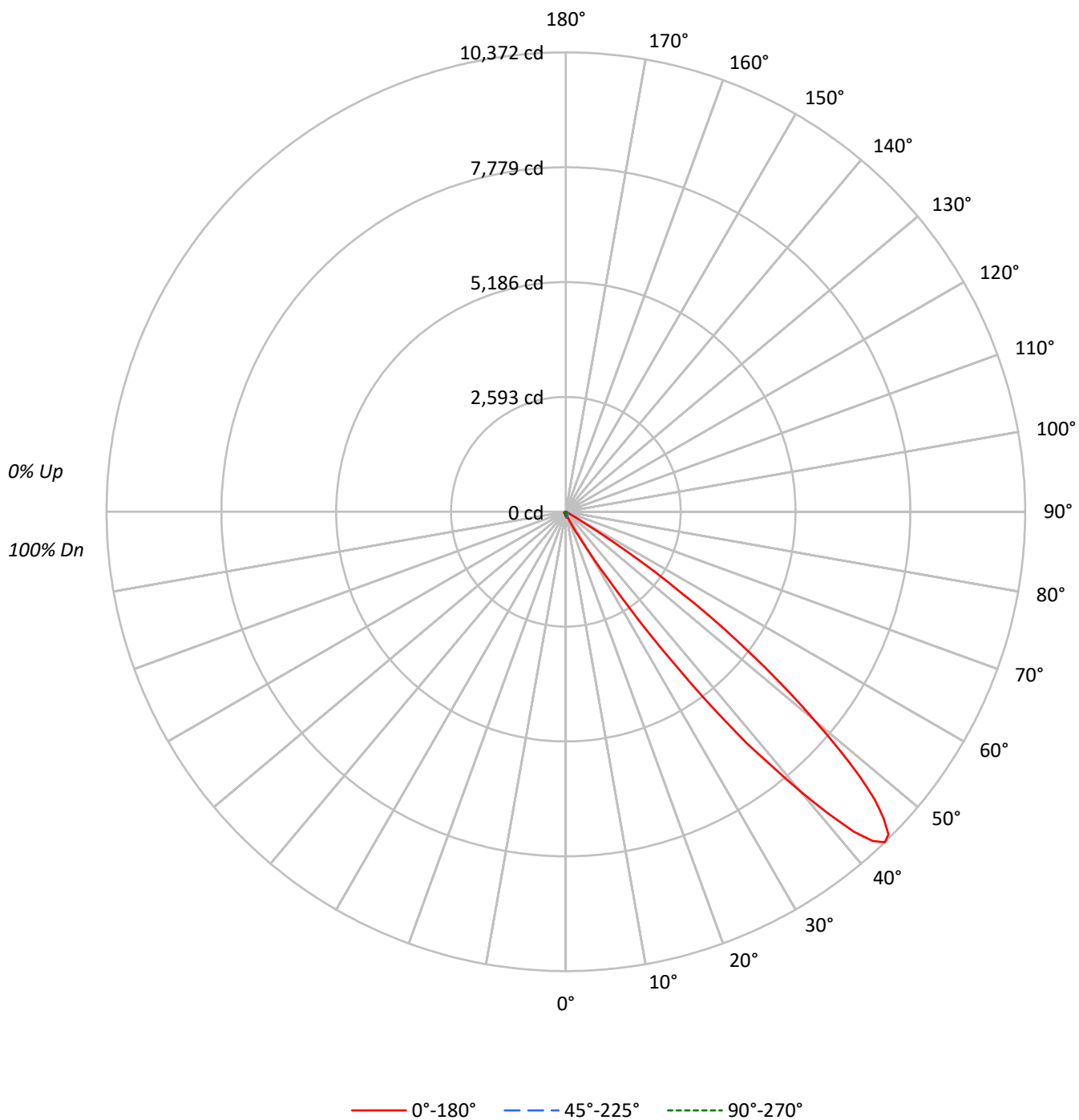
Lumens per Lamp: N/A
Luminaire Lumens: 1158.0 lumens
Efficiency: N/A
Efficacy: 54.6 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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°	17704	17704	17704	17704	17704
5°	21956	19570	15974	13969	13779
10°	21598	16753	12312	10912	11105
15°	17919	11946	8844	9058	9682
20°	31102	9530	6763	7826	8889
25°	69341	11402	5492	7240	8342
30°	207337	14000	4813	7119	8730
35°	798174	15789	4373	7274	9230
40°	1852657	13759	4159	7531	9870
45°	2509346	10400	3653	8159	10692
50°	1967550	6189	3724	8654	11762
55°	944381	2762	3453	9368	12821
60°	86318	413	3169	9954	14329
65°	9414	0	2812	10351	15526
70°	2316	0	3474	11028	16869
75°	2329	799	4591	12310	19231
80°	2281	2281	5752	12596	20629
85°	2371	2371	9090	11461	22724

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2509346 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	8.8	0.8
10°-20°	18.3	1.6
20°-30°	43.8	3.8
30°-40°	239.5	20.7
40°-50°	580.0	50.1
50°-60°	231.4	20.0
60°-70°	20.0	1.7
70°-80°	11.3	1.0
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°	70.8	6.1
0°-40°	310.3	26.8
0°-60°	1121.7	96.9
0°-90°	1158.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1158.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	103	103	103	103	103	
5°	127	113	92	81	80	12
15°	100	67	50	51	54	35
25°	365	60	29	38	44	220
35°	3796	75	21	35	44	2683
45°	10303	43	15	34	44	7268
55°	3145	9	12	31	43	2930
65°	23	0	7	25	38	59
75°	4	1	7	18	29	3
85°	1	1	5	6	12	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°	102.8	102.8	102.8	102.8	102.8	102.8	102.8	102.8	102.8	102.8	102.8
2.5°	115.5	115.5	116.6	115.5	115.5	115.5	115.5	114.3	114.3	114.3	110.8
5°	127.0	127.0	127.0	127.0	125.9	125.9	125.9	124.7	124.7	123.5	113.2
7.5°	131.6	131.6	130.5	130.5	129.3	129.3	128.2	127.0	125.9	124.7	108.5
10°	123.5	123.5	123.5	122.4	122.4	121.2	120.1	118.9	117.8	115.5	95.8
12.5°	109.7	109.7	110.8	109.7	108.5	107.4	105.1	103.9	102.8	100.5	79.7
15°	100.5	100.5	100.5	99.3	98.1	95.8	94.7	92.4	91.2	87.8	67.0
17.5°	128.2	128.2	127.0	124.7	120.1	116.6	110.8	106.2	100.5	93.5	57.7
20°	169.7	169.7	167.4	165.1	159.3	153.6	144.3	136.2	127.0	118.9	52.0
22.5°	245.9	249.4	242.5	234.4	226.3	212.5	199.8	187.1	170.9	157.0	53.1
25°	364.9	368.3	364.9	346.4	331.4	312.9	288.7	263.3	235.5	210.1	60.0
27.5°	591.2	593.5	587.7	542.7	518.4	469.9	427.2	385.6	339.5	293.3	65.8
30°	1042.6	1043.8	1006.8	916.8	837.1	730.9	640.8	554.2	481.5	407.6	70.4
31°	1372.9	1340.5	1262.0	1153.5	1026.5	883.3	759.7	647.8	539.2	459.5	71.6
32°	1743.5	1738.9	1608.4	1420.2	1250.5	1071.5	885.6	742.4	617.7	509.2	72.7
33°	2234.2	2236.5	2031.0	1809.3	1531.0	1290.9	1047.3	851.0	700.9	568.1	75.1
34°	3000.9	2820.8	2579.5	2279.2	1900.5	1539.1	1222.8	976.8	775.9	624.7	75.1
35°	3796.4	3615.2	3349.6	2894.7	2375.1	1869.4	1431.7	1111.9	866.0	685.9	75.1
36°	4687.8	4534.3	4132.4	3551.7	2888.9	2181.1	1653.4	1267.8	954.9	741.3	73.9
37°	5650.8	5425.6	4979.9	4346.0	3459.3	2619.9	1923.6	1422.5	1043.8	801.3	71.6
38°	6628.8	6425.5	5863.2	5095.4	4140.5	3082.9	2193.8	1571.5	1125.8	846.3	68.1
39°	7370.0	7259.2	6701.5	5843.6	4684.4	3521.6	2472.1	1730.8	1212.4	891.4	64.7
40°	8240.6	8061.7	7532.8	6471.7	5327.5	3968.5	2744.6	1871.7	1284.0	927.2	61.2
41°	9035.0	8808.7	8141.3	7116.0	5842.5	4370.3	3003.2	2017.1	1341.7	948.0	58.9
42°	9716.3	9453.0	8755.6	7667.9	6273.1	4691.3	3209.9	2121.1	1396.0	965.3	55.4
43°	10157.3	9929.9	9244.0	8082.4	6641.5	4985.7	3402.7	2229.6	1429.4	976.8	50.8
44°	10372.1	10142.3	9478.4	8342.2	6867.8	5162.4	3527.4	2304.7	1466.4	991.8	47.3
45°	10302.8	10069.6	9427.6	8346.9	6938.2	5225.9	3580.5	2338.1	1486.0	1005.7	42.7
46°	9985.3	9821.3	9174.7	8129.8	6804.3	5157.8	3550.5	2312.7	1479.1	1005.7	38.1
47°	9539.6	9352.5	8737.1	7756.8	6479.8	4982.2	3429.3	2235.4	1436.4	982.6	33.5
48°	8932.3	8772.9	8126.3	7164.5	5982.2	4600.1	3155.6	2109.5	1369.4	937.6	28.9
49°	8170.2	7948.5	7346.9	6407.1	5333.3	4057.4	2796.5	1897.1	1262.0	874.1	25.4
50°	7343.5	7069.8	6605.7	5648.5	4662.4	3478.9	2324.3	1603.8	1110.8	790.9	23.1
51°	6534.1	6255.8	5813.6	4999.6	3946.5	2886.6	1875.1	1280.5	914.5	676.6	19.6
52°	5694.7	5461.4	4966.1	4326.4	3378.5	2339.3	1562.2	1083.0	759.7	568.1	16.2
53°	4858.7	4699.4	4228.3	3580.5	2714.5	1910.9	1275.9	927.2	662.8	486.1	12.7
54°	4021.6	3847.2	3489.3	2912.0	2188.0	1508.0	1081.9	775.9	575.0	423.8	11.5
55°	3145.2	3055.2	2724.9	2220.4	1658.1	1203.1	877.5	667.4	481.5	354.5	9.2
56°	2422.4	2320.8	2019.5	1610.7	1232.0	942.2	710.1	545.0	407.6	296.7	6.9
57°	1586.5	1482.6	1282.8	1124.6	897.2	687.0	542.7	429.5	331.4	245.9	5.8
58°	937.6	842.9	811.7	692.8	598.1	466.5	400.7	319.8	244.8	194.0	3.5
59°	430.7	437.6	389.1	364.9	331.4	296.7	243.6	213.6	167.4	139.7	2.3
60°	250.6	236.7	230.9	206.7	183.6	162.8	146.6	129.3	105.1	90.1	1.2
62.5°	85.4	82.0	84.3	76.2	71.6	69.3	63.5	54.3	45.0	36.9	0.0
65°	23.1	23.1	21.9	20.8	19.6	18.5	17.3	15.0	13.9	11.5	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°	8.1	8.1	6.9	6.9	5.8	5.8	4.6	4.6	3.5	3.5	0.0
70°	4.6	4.6	4.6	3.5	3.5	3.5	2.3	2.3	2.3	1.2	0.0
72.5°	3.5	3.5	3.5	3.5	3.5	3.5	2.3	2.3	2.3	1.2	1.2
75°	3.5	3.5	3.5	2.3	2.3	2.3	2.3	2.3	2.3	2.3	1.2
77.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
80°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	1.2	2.3
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.3
85°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	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°	102.8	102.8	102.8	102.8	102.8	102.8
2.5°	106.2	101.6	95.8	92.4	91.2	90.1
5°	101.6	92.4	85.4	80.8	79.7	79.7
7.5°	91.2	80.8	73.9	71.6	70.4	70.4
10°	79.7	70.4	64.7	62.4	63.5	63.5
12.5°	67.0	58.9	56.6	56.6	57.7	58.9
15°	54.3	49.6	49.6	50.8	53.1	54.3
17.5°	45.0	42.7	43.9	46.2	48.5	50.8
20°	36.9	36.9	39.3	42.7	46.2	48.5
22.5°	31.2	32.3	35.8	39.3	43.9	46.2
25°	26.6	28.9	32.3	38.1	42.7	43.9
27.5°	23.1	26.6	31.2	36.9	41.6	43.9
30°	19.6	24.2	30.0	35.8	41.6	43.9
31°	18.5	23.1	28.9	35.8	41.6	43.9
32°	17.3	23.1	28.9	35.8	41.6	43.9
33°	16.2	21.9	28.9	34.6	41.6	43.9
34°	15.0	21.9	28.9	35.8	41.6	43.9
35°	13.9	20.8	27.7	34.6	40.4	43.9
36°	12.7	20.8	27.7	34.6	41.6	43.9
37°	11.5	20.8	27.7	34.6	40.4	43.9
38°	11.5	19.6	26.6	34.6	40.4	43.9
39°	10.4	18.5	26.6	34.6	40.4	43.9
40°	9.2	18.5	25.4	33.5	40.4	43.9
41°	8.1	17.3	25.4	33.5	40.4	43.9
42°	6.9	17.3	25.4	33.5	40.4	43.9
43°	5.8	16.2	24.2	33.5	40.4	43.9
44°	5.8	16.2	24.2	33.5	40.4	43.9
45°	4.6	15.0	23.1	33.5	40.4	43.9
46°	4.6	15.0	23.1	32.3	40.4	43.9
47°	3.5	15.0	23.1	32.3	40.4	43.9
48°	3.5	13.9	23.1	32.3	40.4	43.9
49°	2.3	13.9	23.1	32.3	40.4	43.9
50°	2.3	13.9	21.9	32.3	40.4	43.9
51°	2.3	13.9	21.9	32.3	40.4	43.9
52°	2.3	12.7	21.9	32.3	40.4	43.9
53°	2.3	12.7	21.9	32.3	40.4	43.9
54°	2.3	12.7	20.8	32.3	40.4	43.9
55°	2.3	11.5	20.8	31.2	40.4	42.7
56°	2.3	11.5	20.8	31.2	40.4	42.7
57°	2.3	11.5	19.6	31.2	40.4	42.7
58°	2.3	10.4	19.6	30.0	39.3	42.7
59°	2.3	10.4	18.5	30.0	39.3	41.6
60°	2.3	9.2	18.5	28.9	38.1	41.6
62.5°	2.3	8.1	16.2	27.7	36.9	39.3
65°	2.3	6.9	15.0	25.4	35.8	38.1



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.3	6.9	13.9	24.2	33.5	36.9
70°	2.3	6.9	12.7	21.9	32.3	33.5
72.5°	3.5	6.9	11.5	20.8	30.0	31.2
75°	4.6	6.9	10.4	18.5	27.7	28.9
77.5°	4.6	6.9	9.2	16.2	24.2	25.4
80°	4.6	5.8	8.1	12.7	19.6	20.8
82.5°	4.6	5.8	5.8	10.4	15.0	16.2
85°	3.5	4.6	4.6	5.8	10.4	11.5
87.5°	3.5	4.6	2.3	3.5	4.6	4.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)