

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: P1309233

Luminaire Tested: P3SQAS17R159035DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1309233
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: P3SQAS17R159035DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R15 optic, 3500K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

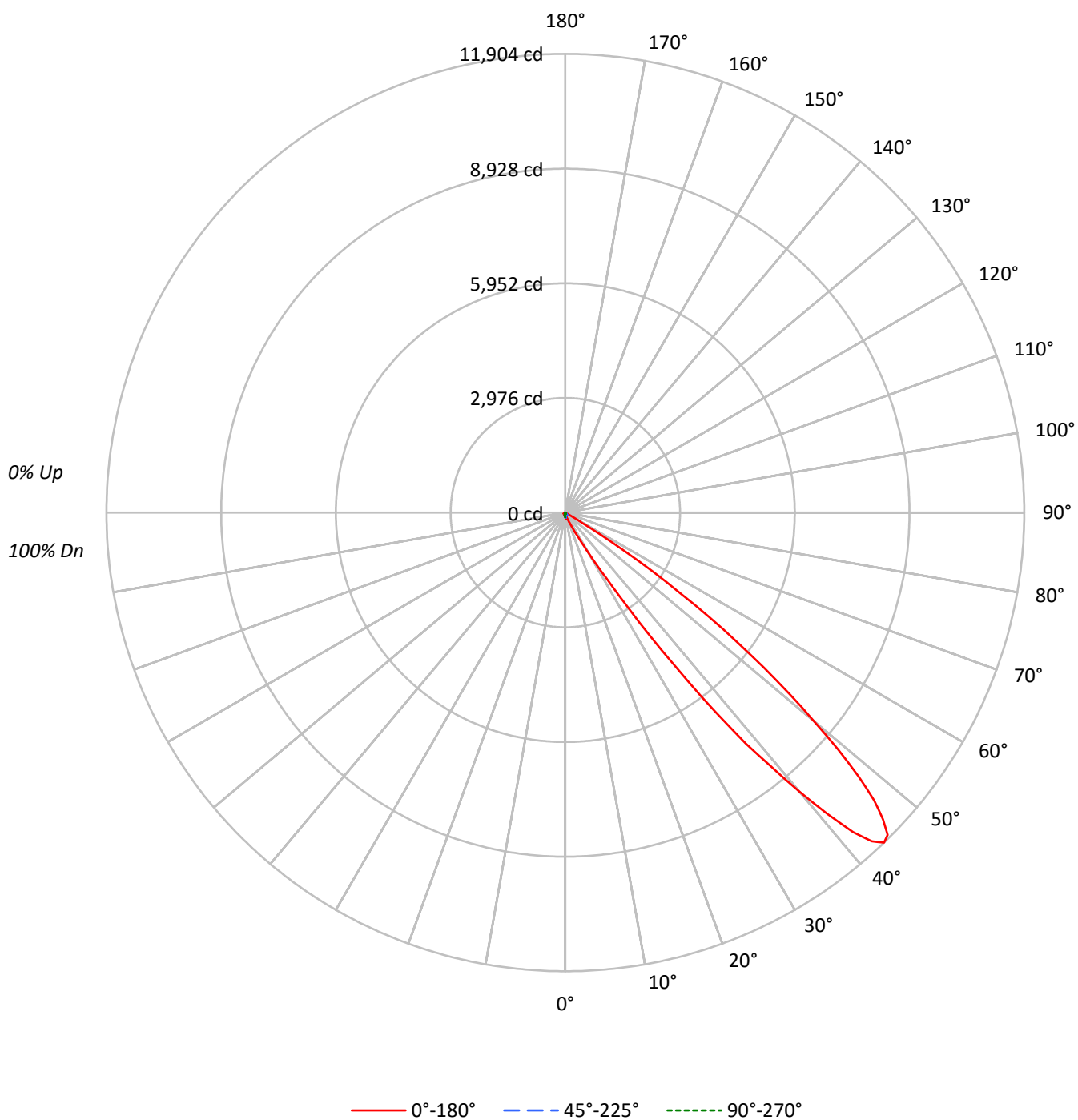
Lumens per Lamp: N/A
Luminaire Lumens: 1329.1 lumens
Efficiency: N/A
Efficacy: 62.7 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.09
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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°	20305	20305	20305	20305	20305
5°	25206	22457	18325	16043	15801
10°	24798	19237	14130	12521	12749
15°	20558	13711	10163	10395	11108
20°	35702	10923	7771	8980	10208
25°	79564	13093	6290	8304	9577
30°	237963	16068	5528	8173	10023
35°	916059	18102	5025	8368	10596
40°	2126242	15782	4766	8633	11331
45°	2879897	11934	4189	9353	12275
50°	2258095	7100	4260	9940	13504
55°	1083852	3183	3993	10749	14713
60°	99062	448	3651	11401	16430
65°	10799	0	3260	11899	17808
70°	2669	0	4028	12689	19336
75°	2662	865	5323	14107	22025
80°	2678	2678	6546	14480	23704
85°	2569	2569	10473	13042	26281

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2879897 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.1	0.8
10°-20°	21.0	1.6
20°-30°	50.2	3.8
30°-40°	274.9	20.7
40°-50°	665.7	50.1
50°-60°	265.6	20.0
60°-70°	23.0	1.7
70°-80°	13.0	1.0
80°-90°	5.7	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°	81.2	6.1
0°-40°	356.2	26.8
0°-60°	1287.4	96.9
0°-90°	1329.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1329.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	118	118	118	118	118	
5°	146	130	106	93	91	14
15°	115	77	57	58	62	40
25°	419	69	33	44	50	253
35°	4357	86	24	40	50	3079
45°	11824	49	17	38	50	8341
55°	3610	11	13	36	49	3363
65°	26	0	8	29	44	68
75°	4	1	8	21	33	4
85°	1	1	5	7	13	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°	117.9	117.9	117.9	117.9	117.9	117.9	117.9	117.9	117.9	117.9	117.9
2.5°	132.5	132.5	133.8	132.5	132.5	132.5	132.5	131.2	131.2	131.2	127.2
5°	145.8	145.8	145.8	145.8	144.4	144.4	144.4	143.1	143.1	141.8	129.9
7.5°	151.1	151.1	149.7	149.7	148.4	148.4	147.1	145.8	144.4	143.1	124.6
10°	141.8	141.8	141.8	140.5	140.5	139.1	137.8	136.5	135.2	132.5	110.0
12.5°	125.9	125.9	127.2	125.9	124.6	123.2	120.6	119.3	117.9	115.3	91.4
15°	115.3	115.3	115.3	114.0	112.6	110.0	108.7	106.0	104.7	100.7	76.9
17.5°	147.1	147.1	145.8	143.1	137.8	133.8	127.2	121.9	115.3	107.3	66.3
20°	194.8	194.8	192.1	189.5	182.9	176.2	165.6	156.4	145.8	136.5	59.6
22.5°	282.3	286.2	278.3	269.0	259.7	243.8	229.2	214.7	196.1	180.2	61.0
25°	418.7	422.7	418.7	397.5	380.3	359.1	331.3	302.1	270.3	241.2	68.9
27.5°	678.5	681.1	674.5	622.8	595.0	539.3	490.3	442.6	389.6	336.6	75.5
30°	1196.6	1197.9	1155.5	1052.2	960.7	838.8	735.5	636.1	552.6	467.8	80.8
31°	1575.6	1538.5	1448.4	1323.8	1178.0	1013.7	871.9	743.4	618.8	527.4	82.2
32°	2001.0	1995.7	1845.9	1629.9	1435.1	1229.7	1016.4	852.1	708.9	584.4	83.5
33°	2564.1	2566.8	2330.9	2076.5	1757.1	1481.5	1201.9	976.6	804.4	652.0	86.1
34°	3444.0	3237.3	2960.4	2615.8	2181.2	1766.4	1403.3	1121.1	890.5	716.9	86.1
35°	4357.1	4149.0	3844.2	3322.1	2725.8	2145.4	1643.2	1276.1	993.9	787.1	86.1
36°	5380.1	5203.8	4742.7	4076.1	3315.5	2503.2	1897.6	1455.0	1095.9	850.7	84.8
37°	6485.2	6226.8	5715.3	4987.8	3970.1	3006.7	2207.7	1632.6	1197.9	919.6	82.2
38°	7607.6	7374.4	6729.1	5847.8	4751.9	3538.1	2517.8	1803.5	1292.0	971.3	78.2
39°	8458.4	8331.1	7691.1	6706.5	5376.1	4041.7	2837.1	1986.4	1391.4	1023.0	74.2
40°	9457.5	9252.1	8645.2	7427.4	6114.2	4554.5	3149.9	2148.0	1473.6	1064.1	70.2
41°	10369.2	10109.5	9343.5	8166.8	6705.2	5015.6	3446.7	2315.0	1539.8	1087.9	67.6
42°	11151.0	10848.9	10048.5	8800.2	7199.5	5384.0	3683.9	2434.3	1602.1	1107.8	63.6
43°	11657.2	11396.2	10609.1	9276.0	7622.2	5721.9	3905.2	2558.8	1640.5	1121.1	58.3
44°	11903.7	11640.0	10878.1	9574.1	7881.9	5924.7	4048.3	2645.0	1682.9	1138.3	54.3
45°	11824.2	11556.5	10819.8	9579.4	7962.8	5997.6	4109.3	2683.4	1705.5	1154.2	49.0
46°	11459.8	11271.6	10529.5	9330.3	7809.0	5919.4	4074.8	2654.3	1697.5	1154.2	43.7
47°	10948.3	10733.6	10027.3	8902.3	7436.7	5718.0	3935.7	2565.5	1648.5	1127.7	38.4
48°	10251.3	10068.4	9326.3	8222.5	6865.5	5279.3	3621.6	2421.0	1571.6	1076.0	33.1
49°	9376.7	9122.3	8431.9	7353.2	6120.8	4656.5	3209.5	2177.2	1448.4	1003.1	29.2
50°	8427.9	8113.8	7581.1	6482.6	5350.9	3992.6	2667.5	1840.6	1274.8	907.7	26.5
51°	7499.0	7179.6	6672.1	5737.8	4529.3	3312.8	2152.0	1469.6	1049.5	776.5	22.5
52°	6535.6	6267.9	5699.4	4965.3	3877.4	2684.7	1792.9	1243.0	871.9	652.0	18.6
53°	5576.2	5393.3	4852.7	4109.3	3115.4	2193.1	1464.3	1064.1	760.6	557.9	14.6
54°	4615.5	4415.4	4004.6	3342.0	2511.1	1730.6	1241.7	890.5	659.9	486.3	13.3
55°	3609.7	3506.3	3127.3	2548.2	1902.9	1380.8	1007.1	765.9	552.6	406.8	10.6
56°	2780.1	2663.5	2317.7	1848.6	1413.9	1081.3	815.0	625.5	467.8	340.6	8.0
57°	1820.7	1701.5	1472.2	1290.7	1029.6	788.5	622.8	493.0	380.3	282.3	6.6
58°	1076.0	967.4	931.6	795.1	686.4	535.4	459.8	367.1	280.9	222.6	4.0
59°	494.3	502.2	446.6	418.7	380.3	340.6	279.6	245.2	192.1	160.3	2.7
60°	287.6	271.7	265.0	237.2	210.7	186.8	168.3	148.4	120.6	103.4	1.3
62.5°	98.1	94.1	96.7	87.5	82.2	79.5	72.9	62.3	51.7	42.4	0.0
65°	26.5	26.5	25.2	23.9	22.5	21.2	19.9	17.2	15.9	13.3	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°	9.3	9.3	8.0	8.0	6.6	6.6	5.3	5.3	4.0	4.0	0.0
70°	5.3	5.3	5.3	4.0	4.0	4.0	2.7	2.7	2.7	1.3	0.0
72.5°	4.0	4.0	4.0	4.0	4.0	4.0	2.7	2.7	2.7	1.3	1.3
75°	4.0	4.0	4.0	2.7	2.7	2.7	2.7	2.7	2.7	2.7	1.3
77.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
80°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	1.3	2.7
82.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.7
85°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
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°	117.9	117.9	117.9	117.9	117.9	117.9
2.5°	121.9	116.6	110.0	106.0	104.7	103.4
5°	116.6	106.0	98.1	92.8	91.4	91.4
7.5°	104.7	92.8	84.8	82.2	80.8	80.8
10°	91.4	80.8	74.2	71.6	72.9	72.9
12.5°	76.9	67.6	64.9	64.9	66.3	67.6
15°	62.3	57.0	57.0	58.3	61.0	62.3
17.5°	51.7	49.0	50.4	53.0	55.7	58.3
20°	42.4	42.4	45.1	49.0	53.0	55.7
22.5°	35.8	37.1	41.1	45.1	50.4	53.0
25°	30.5	33.1	37.1	43.7	49.0	50.4
27.5°	26.5	30.5	35.8	42.4	47.7	50.4
30°	22.5	27.8	34.5	41.1	47.7	50.4
31°	21.2	26.5	33.1	41.1	47.7	50.4
32°	19.9	26.5	33.1	41.1	47.7	50.4
33°	18.6	25.2	33.1	39.8	47.7	50.4
34°	17.2	25.2	33.1	41.1	47.7	50.4
35°	15.9	23.9	31.8	39.8	46.4	50.4
36°	14.6	23.9	31.8	39.8	47.7	50.4
37°	13.3	23.9	31.8	39.8	46.4	50.4
38°	13.3	22.5	30.5	39.8	46.4	50.4
39°	11.9	21.2	30.5	39.8	46.4	50.4
40°	10.6	21.2	29.2	38.4	46.4	50.4
41°	9.3	19.9	29.2	38.4	46.4	50.4
42°	8.0	19.9	29.2	38.4	46.4	50.4
43°	6.6	18.6	27.8	38.4	46.4	50.4
44°	6.6	18.6	27.8	38.4	46.4	50.4
45°	5.3	17.2	26.5	38.4	46.4	50.4
46°	5.3	17.2	26.5	37.1	46.4	50.4
47°	4.0	17.2	26.5	37.1	46.4	50.4
48°	4.0	15.9	26.5	37.1	46.4	50.4
49°	2.7	15.9	26.5	37.1	46.4	50.4
50°	2.7	15.9	25.2	37.1	46.4	50.4
51°	2.7	15.9	25.2	37.1	46.4	50.4
52°	2.7	14.6	25.2	37.1	46.4	50.4
53°	2.7	14.6	25.2	37.1	46.4	50.4
54°	2.7	14.6	23.9	37.1	46.4	50.4
55°	2.7	13.3	23.9	35.8	46.4	49.0
56°	2.7	13.3	23.9	35.8	46.4	49.0
57°	2.7	13.3	22.5	35.8	46.4	49.0
58°	2.7	11.9	22.5	34.5	45.1	49.0
59°	2.7	11.9	21.2	34.5	45.1	47.7
60°	2.7	10.6	21.2	33.1	43.7	47.7
62.5°	2.7	9.3	18.6	31.8	42.4	45.1
65°	2.7	8.0	17.2	29.2	41.1	43.7



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.7	8.0	15.9	27.8	38.4	42.4
70°	2.7	8.0	14.6	25.2	37.1	38.4
72.5°	4.0	8.0	13.3	23.9	34.5	35.8
75°	5.3	8.0	11.9	21.2	31.8	33.1
77.5°	5.3	8.0	10.6	18.6	27.8	29.2
80°	5.3	6.6	9.3	14.6	22.5	23.9
82.5°	5.3	6.6	6.6	11.9	17.2	18.6
85°	4.0	5.3	5.3	6.6	11.9	13.3
87.5°	4.0	5.3	2.7	4.0	5.3	5.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)