

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: P1310659

Luminaire Tested: P3SQAS24R209040D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1310659
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: P3SQAS24R209040D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R20 optic, 4000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

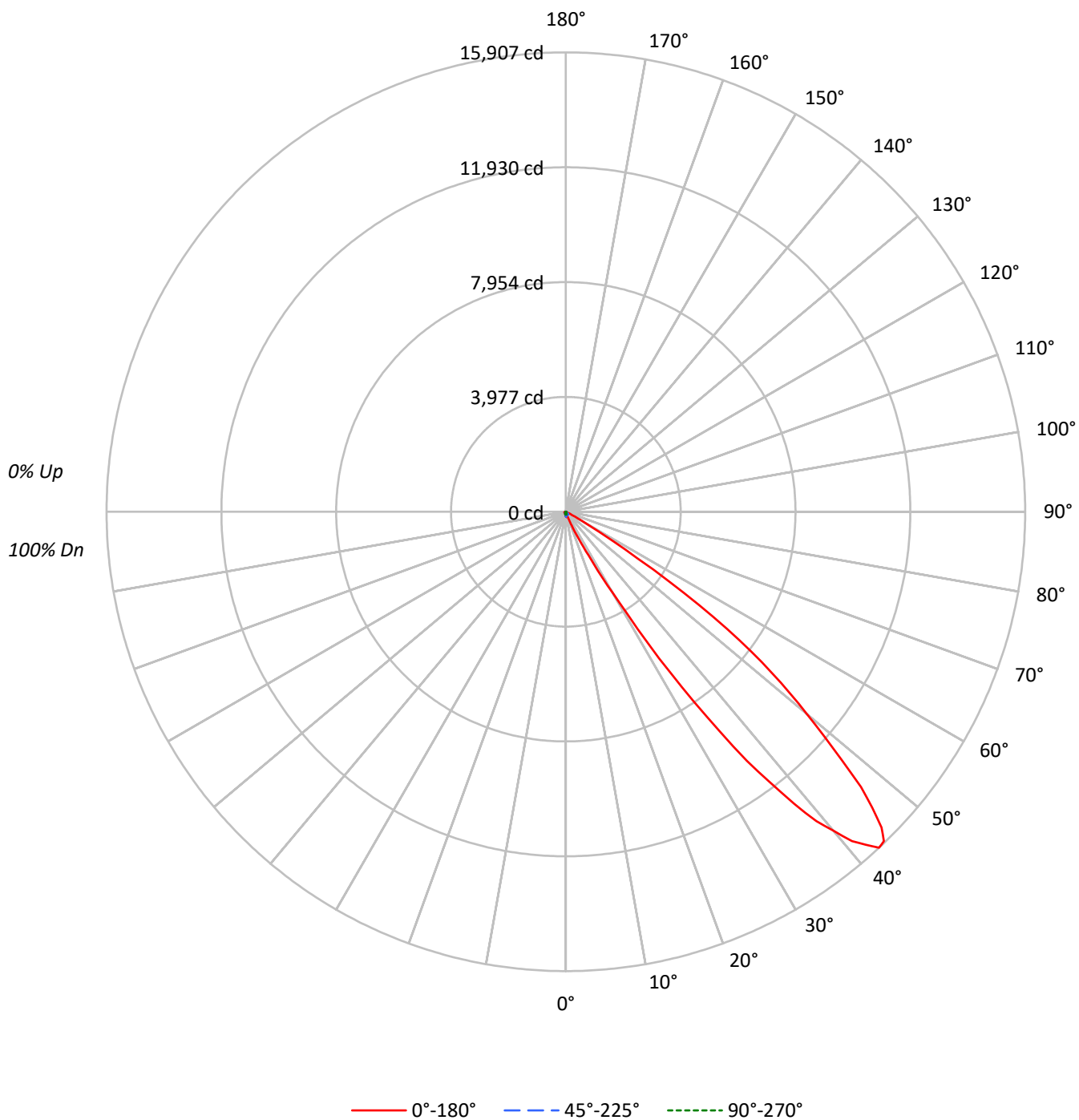
Lumens per Lamp: N/A
Luminaire Lumens: 2210.0 lumens
Efficiency: N/A
Efficacy: 76.7 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 28.8
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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75
3	92	81	74	67	89	80	73	67	77	71	66	74	69	65	72	67	63
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37
7	62	48	39	32	60	47	38	32	46	38	32	44	37	32	43	36	31
8	57	42	33	27	55	42	33	27	40	33	27	39	32	27	38	31	27
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23
10	48	34	25	20	47	33	25	20	32	25	19	31	24	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	26471	26471	26471	26471	26471
5°	30876	28733	24774	21541	20832
10°	30516	26144	19621	16701	16351
15°	26656	20005	14442	13337	14068
20°	39588	16751	10667	11418	12554
25°	170492	17368	8285	10261	12238
30°	644722	21060	7020	9904	11972
35°	1954459	25335	6560	10050	12657
40°	3240925	25225	5598	10746	13534
45°	3767014	17195	5066	11131	14662
50°	2924197	9458	5010	11682	16692
55°	1692481	6245	4984	13091	18076
60°	286165	1447	4306	13606	20047
65°	22006	0	5094	15241	22862
70°	3122	0	6294	16718	26134
75°	2795	1397	6920	19364	30410
80°	2083	2083	10315	20629	35010
85°	4150	4150	16401	20551	36952

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3767014 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.2	0.6
10°-20°	27.7	1.3
20°-30°	88.3	4.0
30°-40°	563.6	25.5
40°-50°	1031.6	46.7
50°-60°	423.8	19.2
60°-70°	35.8	1.6
70°-80°	17.8	0.8
80°-90°	8.4	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°	129.1	5.8
0°-40°	692.7	31.3
0°-60°	2148.1	97.2
0°-90°	2210.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2210.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	154	154	154	154	154	
5°	179	166	143	125	120	17
15°	150	112	81	75	79	47
25°	897	91	44	54	64	590
35°	9296	120	31	48	60	5884
45°	15466	71	21	46	60	11105
55°	5637	21	17	44	60	4927
65°	54	0	12	37	56	176
75°	4	2	10	29	46	5
85°	2	2	8	10	19	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°	153.7	153.7	153.7	153.7	153.7	153.7	153.7	153.7	153.7	153.7	153.7
2.5°	168.2	168.2	168.2	166.2	166.2	168.2	166.2	166.2	166.2	166.2	164.1
5°	178.6	178.6	178.6	178.6	178.6	178.6	178.6	176.5	176.5	174.5	166.2
7.5°	182.8	182.8	182.8	182.8	180.7	180.7	180.7	180.7	178.6	176.5	162.0
10°	174.5	174.5	174.5	172.4	172.4	172.4	170.3	170.3	168.2	166.2	149.5
12.5°	157.8	157.8	157.8	157.8	155.8	155.8	153.7	153.7	151.6	149.5	130.8
15°	149.5	149.5	149.5	147.5	147.5	145.4	143.3	141.2	139.2	135.0	112.2
17.5°	162.0	162.0	159.9	159.9	155.8	151.6	149.5	143.3	139.2	132.9	99.7
20°	216.0	218.1	209.8	203.5	199.4	186.9	180.7	170.3	162.0	151.6	91.4
22.5°	436.1	427.8	413.3	390.5	363.5	340.6	299.1	265.8	243.0	211.8	89.3
25°	897.2	888.9	849.4	816.2	733.1	668.8	579.4	506.8	432.0	359.3	91.4
27.5°	1705.1	1649.0	1638.7	1487.0	1370.7	1204.6	1032.2	886.8	753.9	606.4	97.6
30°	3242.0	3177.6	2951.2	2722.8	2409.2	2054.0	1715.5	1399.8	1136.1	897.2	105.9
31°	4114.3	4176.6	3910.8	3451.8	2988.6	2533.8	2070.7	1669.8	1329.2	1032.2	110.1
32°	5408.2	5136.1	4855.7	4384.3	3711.4	3129.9	2548.3	1971.0	1522.4	1177.6	114.2
33°	6631.5	6471.6	6043.7	5456.0	4648.1	3831.8	3077.9	2326.1	1759.1	1354.1	116.3
34°	7935.8	7759.2	7412.4	6569.2	5682.3	4612.8	3607.5	2735.3	2041.6	1526.5	118.4
35°	9296.1	9221.4	8552.6	7821.5	6731.2	5441.4	4245.1	3183.9	2317.8	1684.4	120.5
36°	10664.8	10423.9	9900.5	8833.0	7694.8	6207.8	4913.9	3601.3	2598.2	1871.3	120.5
37°	11694.9	11640.9	10947.2	9906.7	8569.2	7026.1	5491.3	4064.5	2880.6	2031.2	120.5
38°	12831.0	12617.1	11913.0	10853.8	9391.7	7775.8	6095.6	4467.4	3148.6	2176.6	118.4
39°	13788.4	13470.7	12760.4	11713.6	10110.3	8344.9	6575.4	4857.8	3385.3	2297.0	116.3
40°	14415.6	14195.5	13454.0	12276.4	10762.4	8882.8	7061.4	5179.7	3561.9	2388.4	112.2
41°	15107.2	14741.7	14008.6	12824.7	11235.9	9356.4	7366.7	5391.6	3698.9	2448.6	108.0
42°	15520.5	15221.5	14351.2	13192.3	11574.5	9626.3	7615.9	5553.6	3782.0	2479.8	99.7
43°	15906.8	15499.8	14652.4	13406.3	11798.8	9817.4	7730.2	5628.3	3800.7	2479.8	89.3
44°	15854.9	15468.6	14590.1	13435.3	11848.6	9873.5	7777.9	5630.4	3771.6	2448.6	78.9
45°	15466.5	15082.3	14291.0	13182.0	11670.0	9763.4	7682.4	5547.3	3690.6	2394.6	70.6
46°	14754.2	14372.0	13765.6	12758.3	11337.7	9514.2	7460.2	5366.7	3555.6	2307.4	62.3
47°	13979.5	13607.7	12986.7	12075.0	10770.7	9069.7	7138.2	5113.3	3366.6	2180.7	56.1
48°	12855.9	12623.3	12000.2	11221.4	9983.6	8374.0	6573.3	4700.0	3113.2	2016.7	47.8
49°	11863.1	11618.1	11071.9	10234.9	8957.6	7564.0	5898.3	4197.4	2783.0	1833.9	41.5
50°	10914.0	10700.1	10195.4	9250.4	8031.3	6585.8	4986.6	3563.9	2367.6	1607.5	35.3
51°	9985.6	9825.7	9310.7	8442.5	7204.7	5834.0	4319.9	2967.9	1956.4	1333.4	33.2
52°	9053.1	9034.4	8475.8	7597.2	6400.9	5084.2	3671.9	2504.7	1659.4	1119.4	31.2
53°	8050.0	7929.5	7441.5	6652.3	5503.7	4303.3	3113.2	2112.2	1428.9	953.3	27.0
54°	6907.7	6772.7	6249.3	5537.0	4496.4	3524.5	2508.9	1707.2	1190.1	805.8	24.9
55°	5636.7	5406.1	5026.1	4295.0	3512.0	2689.6	1937.7	1352.0	951.2	670.8	20.8
56°	4276.3	4045.8	3831.8	3293.9	2577.4	2006.3	1443.4	1036.4	743.5	529.6	18.7
57°	2974.1	2961.6	2610.6	2197.3	1723.8	1366.6	988.6	731.1	525.5	411.2	14.5
58°	1929.4	1865.0	1640.7	1401.9	1127.7	853.6	635.5	496.4	357.2	280.4	12.5
59°	1352.0	1223.3	1102.8	934.6	710.3	537.9	409.1	317.8	247.1	195.2	8.3
60°	830.8	803.8	722.8	569.1	461.1	380.1	305.3	234.7	180.7	139.2	4.2
62.5°	236.8	240.9	218.1	193.1	166.2	143.3	128.8	110.1	91.4	72.7	0.0
65°	54.0	51.9	56.1	51.9	47.8	47.8	41.5	37.4	33.2	31.2	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°	16.6	16.6	14.5	14.5	14.5	12.5	12.5	10.4	10.4	8.3	0.0
70°	6.2	6.2	6.2	6.2	6.2	4.2	4.2	4.2	2.1	2.1	0.0
72.5°	6.2	6.2	6.2	4.2	4.2	4.2	4.2	4.2	2.1	2.1	2.1
75°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	2.1	2.1	2.1	2.1
77.5°	4.2	4.2	4.2	4.2	4.2	2.1	4.2	2.1	2.1	2.1	2.1
80°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
82.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
85°	2.1	2.1	2.1	2.1	0.0	0.0	2.1	2.1	2.1	0.0	2.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
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°	153.7	153.7	153.7	153.7	153.7	153.7
2.5°	159.9	151.6	145.4	139.2	137.1	137.1
5°	155.8	143.3	130.8	124.6	120.5	120.5
7.5°	143.3	128.8	116.3	110.1	108.0	108.0
10°	128.8	112.2	99.7	95.5	95.5	93.5
12.5°	112.2	95.5	87.2	85.2	85.2	85.2
15°	93.5	81.0	74.8	74.8	76.8	78.9
17.5°	78.9	66.5	64.4	68.5	72.7	72.7
20°	66.5	58.2	58.2	62.3	66.5	68.5
22.5°	56.1	49.8	51.9	58.2	64.4	66.5
25°	49.8	43.6	47.8	54.0	60.2	64.4
27.5°	41.5	39.5	43.6	51.9	60.2	62.3
30°	35.3	35.3	41.5	49.8	58.2	60.2
31°	33.2	33.2	41.5	49.8	58.2	60.2
32°	31.2	33.2	39.5	49.8	58.2	60.2
33°	29.1	31.2	39.5	47.8	58.2	60.2
34°	27.0	31.2	39.5	47.8	58.2	60.2
35°	24.9	31.2	39.5	47.8	58.2	60.2
36°	22.8	29.1	37.4	47.8	58.2	60.2
37°	20.8	29.1	37.4	47.8	58.2	60.2
38°	18.7	27.0	37.4	47.8	58.2	60.2
39°	18.7	27.0	35.3	47.8	56.1	60.2
40°	16.6	24.9	35.3	47.8	56.1	60.2
41°	14.5	24.9	35.3	45.7	56.1	60.2
42°	12.5	22.8	33.2	45.7	56.1	60.2
43°	10.4	22.8	33.2	45.7	56.1	60.2
44°	10.4	20.8	33.2	45.7	56.1	60.2
45°	8.3	20.8	33.2	45.7	56.1	60.2
46°	6.2	20.8	33.2	45.7	56.1	60.2
47°	6.2	18.7	31.2	45.7	56.1	60.2
48°	4.2	18.7	31.2	45.7	56.1	60.2
49°	4.2	18.7	31.2	45.7	56.1	62.3
50°	4.2	18.7	31.2	43.6	56.1	62.3
51°	2.1	18.7	31.2	43.6	56.1	62.3
52°	2.1	18.7	29.1	43.6	58.2	62.3
53°	2.1	16.6	29.1	43.6	58.2	62.3
54°	2.1	16.6	29.1	43.6	58.2	60.2
55°	2.1	16.6	29.1	43.6	56.1	60.2
56°	2.1	14.5	29.1	43.6	56.1	60.2
57°	2.1	14.5	27.0	41.5	56.1	58.2
58°	2.1	14.5	27.0	41.5	56.1	58.2
59°	2.1	14.5	27.0	41.5	54.0	58.2
60°	4.2	12.5	24.9	39.5	54.0	58.2
62.5°	4.2	12.5	24.9	39.5	51.9	56.1
65°	4.2	12.5	22.8	37.4	51.9	56.1



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	4.2	10.4	20.8	35.3	49.8	54.0
70°	4.2	12.5	20.8	33.2	47.8	51.9
72.5°	6.2	10.4	18.7	31.2	45.7	49.8
75°	6.2	10.4	18.7	29.1	43.6	45.7
77.5°	8.3	10.4	16.6	24.9	39.5	41.5
80°	8.3	10.4	14.5	20.8	33.2	35.3
82.5°	8.3	10.4	10.4	16.6	24.9	27.0
85°	6.2	8.3	8.3	10.4	16.6	18.7
87.5°	6.2	8.3	6.2	4.2	8.3	8.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)