

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: P1309542

Luminaire Tested: P3SQAS24R209035D010 E3SQCA451MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1309542
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: P3SQAS24R209035D010 E3SQCA451MW
Description: 3in Adjustable LED luminaire with, R20 optic, 3500K CCT AND, 90CRI , E3SQCA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

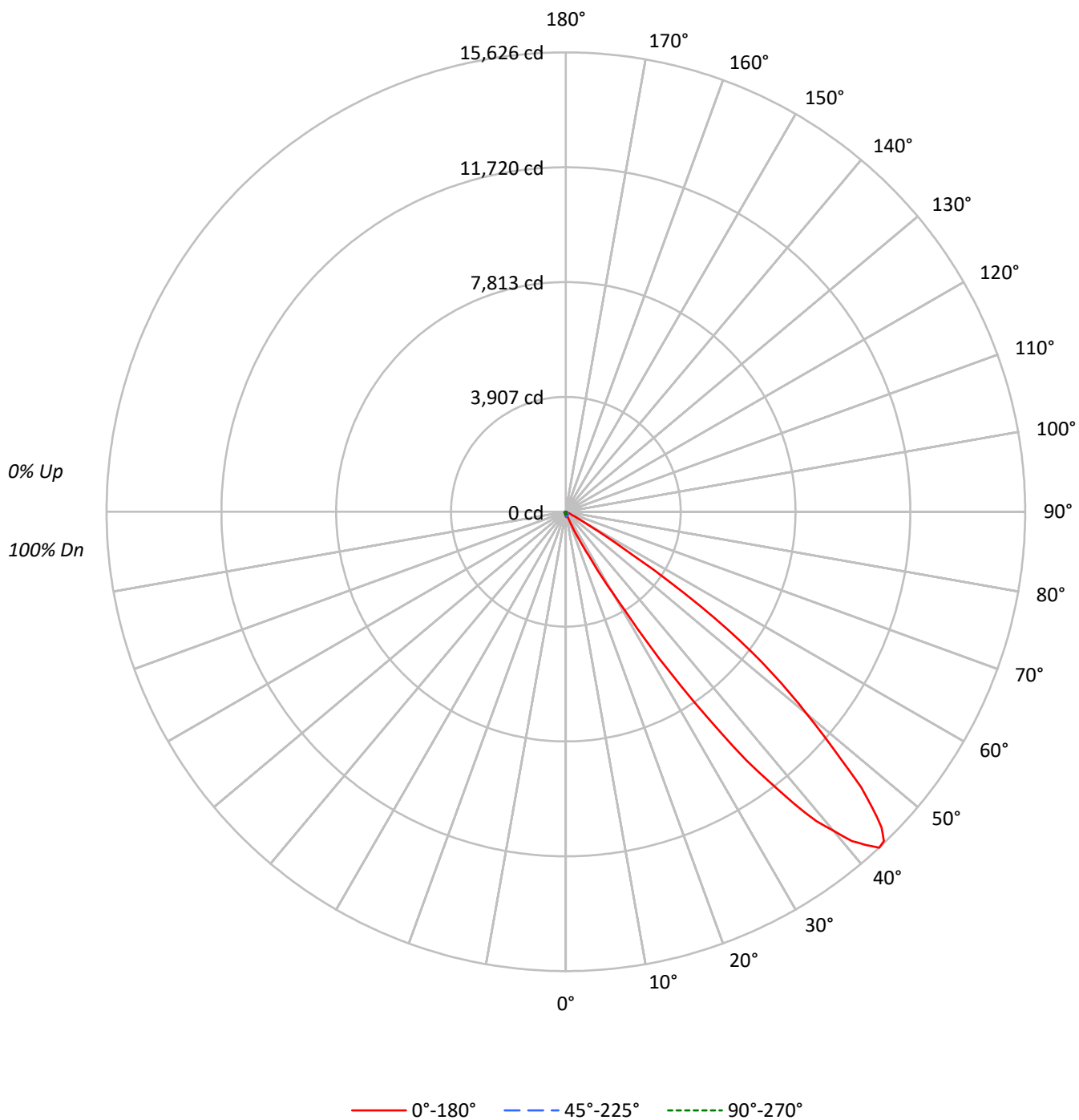
Lumens per Lamp: N/A
Luminaire Lumens: 2171.0 lumens
Efficiency: N/A
Efficacy: 75.4 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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			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°	26006	26006	26006	26006	26006
5°	30341	28214	24342	21161	20452
10°	29974	25690	19272	16421	16054
15°	26192	19648	14193	13087	13818
20°	38891	16458	10465	11216	12334
25°	167489	17064	8133	10071	12010
30°	633347	20702	6901	9744	11773
35°	1919979	24872	6433	9860	12447
40°	3183731	24775	5508	10544	13309
45°	3700547	16903	4969	10936	14419
50°	2872594	9297	4930	11467	16397
55°	1662605	6125	4894	12851	17775
60°	281102	1412	4202	13364	19668
65°	21598	0	4972	14956	22454
70°	3072	0	6143	16416	25681
75°	2728	1331	6787	19031	29877
80°	1984	1984	10116	20233	34415
85°	3952	3952	16203	20156	36359

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3700547 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.0	0.6
10°-20°	27.2	1.3
20°-30°	86.7	4.0
30°-40°	553.6	25.5
40°-50°	1013.4	46.7
50°-60°	416.4	19.2
60°-70°	35.1	1.6
70°-80°	17.5	0.8
80°-90°	8.2	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°	126.8	5.8
0°-40°	680.4	31.3
0°-60°	2110.1	97.2
0°-90°	2171.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2171.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	151	151	151	151	151	
5°	176	163	141	122	118	17
15°	147	110	80	73	78	47
25°	881	90	43	53	63	580
35°	9132	118	31	47	59	5780
45°	15194	69	20	45	59	10909
55°	5537	20	16	43	59	4840
65°	53	0	12	37	55	173
75°	4	2	10	29	45	5
85°	2	2	8	10	18	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°	151.0	151.0	151.0	151.0	151.0	151.0	151.0	151.0	151.0	151.0	151.0
2.5°	165.3	165.3	165.3	163.2	163.2	165.3	163.2	163.2	163.2	163.2	161.2
5°	175.5	175.5	175.5	175.5	175.5	175.5	175.5	173.4	173.4	171.4	163.2
7.5°	179.5	179.5	179.5	179.5	177.5	177.5	177.5	177.5	175.5	173.4	159.1
10°	171.4	171.4	171.4	169.3	169.3	169.3	167.3	167.3	165.3	163.2	146.9
12.5°	155.1	155.1	155.1	155.1	153.0	153.0	151.0	151.0	148.9	146.9	128.5
15°	146.9	146.9	146.9	144.9	144.9	142.8	140.8	138.7	136.7	132.6	110.2
17.5°	159.1	159.1	157.1	157.1	153.0	148.9	146.9	140.8	136.7	130.6	97.9
20°	212.2	214.2	206.1	199.9	195.9	183.6	177.5	167.3	159.1	148.9	89.8
22.5°	428.4	420.3	406.0	383.6	357.0	334.6	293.8	261.1	238.7	208.1	87.7
25°	881.4	873.2	834.5	801.8	720.2	657.0	569.2	497.8	424.4	353.0	89.8
27.5°	1675.0	1619.9	1609.7	1460.8	1346.6	1183.3	1014.0	871.2	740.6	595.7	95.9
30°	3184.8	3121.6	2899.2	2674.7	2366.7	2017.8	1685.2	1375.1	1116.0	881.4	104.1
31°	4041.7	4102.9	3841.8	3390.9	2935.9	2489.1	2034.1	1640.3	1305.7	1014.0	108.1
32°	5312.8	5045.5	4770.1	4306.9	3645.9	3074.6	2503.4	1936.2	1495.5	1156.8	112.2
33°	6514.5	6357.4	5937.1	5359.7	4566.0	3764.2	3023.6	2285.1	1728.1	1330.2	114.3
34°	7795.7	7622.3	7281.6	6453.2	5582.1	4531.4	3543.9	2687.0	2005.5	1499.6	116.3
35°	9132.1	9058.6	8401.7	7683.5	6612.4	5345.4	4170.2	3127.7	2276.9	1654.6	118.3
36°	10476.6	10239.9	9725.8	8677.1	7559.1	6098.2	4827.2	3537.8	2552.3	1838.2	118.3
37°	11488.5	11435.5	10754.1	9731.9	8418.0	6902.1	5394.4	3992.7	2829.8	1995.3	118.3
38°	12604.5	12394.4	11702.8	10662.2	9225.9	7638.6	5988.1	4388.5	3093.0	2138.2	116.3
39°	13545.1	13232.9	12535.2	11506.9	9931.8	8197.6	6459.4	4772.1	3325.6	2256.5	114.3
40°	14161.2	13945.0	13216.6	12059.8	10572.5	8726.1	6936.8	5088.3	3499.0	2346.3	110.2
41°	14840.6	14481.6	13761.4	12598.4	11037.6	9191.2	7236.7	5296.4	3633.7	2405.4	106.1
42°	15246.6	14952.8	14098.0	12959.5	11370.2	9456.5	7481.5	5455.6	3715.3	2436.0	97.9
43°	15626.1	15226.2	14393.8	13169.7	11590.5	9644.2	7593.7	5529.0	3733.6	2436.0	87.7
44°	15575.1	15195.6	14332.6	13198.3	11639.5	9699.3	7640.7	5531.1	3705.1	2405.4	77.5
45°	15193.6	14816.2	14038.8	12949.3	11464.1	9591.1	7546.8	5449.5	3625.5	2352.4	69.4
46°	14493.8	14118.4	13522.6	12533.1	11137.6	9346.3	7328.5	5272.0	3492.9	2266.7	61.2
47°	13732.8	13367.6	12757.6	11861.9	10580.6	8909.7	7012.3	5023.0	3307.2	2142.2	55.1
48°	12629.0	12400.5	11788.5	11023.4	9807.4	8226.2	6457.3	4617.0	3058.3	1981.1	46.9
49°	11653.8	11413.0	10876.5	10054.3	8799.5	7430.5	5794.3	4123.3	2733.9	1801.5	40.8
50°	10721.4	10511.3	10015.5	9087.2	7889.6	6469.6	4898.6	3501.0	2325.9	1579.1	34.7
51°	9809.4	9652.3	9146.4	8293.5	7077.6	5731.0	4243.7	2915.5	1921.9	1309.8	32.6
52°	8893.4	8875.0	8326.2	7463.2	6288.0	4994.5	3607.1	2460.5	1630.1	1099.7	30.6
53°	7907.9	7789.6	7310.1	6534.9	5406.6	4227.4	3058.3	2074.9	1403.7	936.5	26.5
54°	6785.8	6653.2	6139.1	5439.3	4417.1	3462.3	2464.6	1677.1	1169.1	791.6	24.5
55°	5537.2	5310.7	4937.4	4219.2	3450.0	2642.1	1903.5	1328.2	934.4	659.0	20.4
56°	4200.8	3974.4	3764.2	3235.8	2531.9	1970.9	1418.0	1018.1	730.4	520.3	18.4
57°	2921.6	2909.4	2564.6	2158.6	1693.4	1342.5	971.1	718.2	516.2	404.0	14.3
58°	1895.4	1832.1	1611.8	1377.2	1107.8	838.5	624.3	487.6	350.9	275.4	12.2
59°	1328.2	1201.7	1083.4	918.1	697.8	528.4	401.9	312.2	242.8	191.8	8.2
60°	816.1	789.6	710.0	559.0	452.9	373.4	299.9	230.5	177.5	136.7	4.1
62.5°	232.6	236.7	214.2	189.7	163.2	140.8	126.5	108.1	89.8	71.4	0.0
65°	53.0	51.0	55.1	51.0	46.9	46.9	40.8	36.7	32.6	30.6	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°	16.3	16.3	14.3	14.3	14.3	12.2	12.2	10.2	10.2	8.2	0.0
70°	6.1	6.1	6.1	6.1	6.1	4.1	4.1	4.1	2.0	2.0	0.0
72.5°	6.1	6.1	6.1	4.1	4.1	4.1	4.1	4.1	2.0	2.0	2.0
75°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	2.0	2.0	2.0	2.0
77.5°	4.1	4.1	4.1	4.1	4.1	2.0	4.1	2.0	2.0	2.0	2.0
80°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
82.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
85°	2.0	2.0	2.0	2.0	0.0	0.0	2.0	2.0	2.0	0.0	2.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
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°	151.0	151.0	151.0	151.0	151.0	151.0
2.5°	157.1	148.9	142.8	136.7	134.7	134.7
5°	153.0	140.8	128.5	122.4	118.3	118.3
7.5°	140.8	126.5	114.3	108.1	106.1	106.1
10°	126.5	110.2	97.9	93.9	93.9	91.8
12.5°	110.2	93.9	85.7	83.6	83.6	83.6
15°	91.8	79.6	73.4	73.4	75.5	77.5
17.5°	77.5	65.3	63.2	67.3	71.4	71.4
20°	65.3	57.1	57.1	61.2	65.3	67.3
22.5°	55.1	49.0	51.0	57.1	63.2	65.3
25°	49.0	42.8	46.9	53.0	59.2	63.2
27.5°	40.8	38.8	42.8	51.0	59.2	61.2
30°	34.7	34.7	40.8	49.0	57.1	59.2
31°	32.6	32.6	40.8	49.0	57.1	59.2
32°	30.6	32.6	38.8	49.0	57.1	59.2
33°	28.6	30.6	38.8	46.9	57.1	59.2
34°	26.5	30.6	38.8	46.9	57.1	59.2
35°	24.5	30.6	38.8	46.9	57.1	59.2
36°	22.4	28.6	36.7	46.9	57.1	59.2
37°	20.4	28.6	36.7	46.9	57.1	59.2
38°	18.4	26.5	36.7	46.9	57.1	59.2
39°	18.4	26.5	34.7	46.9	55.1	59.2
40°	16.3	24.5	34.7	46.9	55.1	59.2
41°	14.3	24.5	34.7	44.9	55.1	59.2
42°	12.2	22.4	32.6	44.9	55.1	59.2
43°	10.2	22.4	32.6	44.9	55.1	59.2
44°	10.2	20.4	32.6	44.9	55.1	59.2
45°	8.2	20.4	32.6	44.9	55.1	59.2
46°	6.1	20.4	32.6	44.9	55.1	59.2
47°	6.1	18.4	30.6	44.9	55.1	59.2
48°	4.1	18.4	30.6	44.9	55.1	59.2
49°	4.1	18.4	30.6	44.9	55.1	61.2
50°	4.1	18.4	30.6	42.8	55.1	61.2
51°	2.0	18.4	30.6	42.8	55.1	61.2
52°	2.0	18.4	28.6	42.8	57.1	61.2
53°	2.0	16.3	28.6	42.8	57.1	61.2
54°	2.0	16.3	28.6	42.8	57.1	59.2
55°	2.0	16.3	28.6	42.8	55.1	59.2
56°	2.0	14.3	28.6	42.8	55.1	59.2
57°	2.0	14.3	26.5	40.8	55.1	57.1
58°	2.0	14.3	26.5	40.8	55.1	57.1
59°	2.0	14.3	26.5	40.8	53.0	57.1
60°	4.1	12.2	24.5	38.8	53.0	57.1
62.5°	4.1	12.2	24.5	38.8	51.0	55.1
65°	4.1	12.2	22.4	36.7	51.0	55.1



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	4.1	10.2	20.4	34.7	49.0	53.0
70°	4.1	12.2	20.4	32.6	46.9	51.0
72.5°	6.1	10.2	18.4	30.6	44.9	49.0
75°	6.1	10.2	18.4	28.6	42.8	44.9
77.5°	8.2	10.2	16.3	24.5	38.8	40.8
80°	8.2	10.2	14.3	20.4	32.6	34.7
82.5°	8.2	10.2	10.2	16.3	24.5	26.5
85°	6.1	8.2	8.2	10.2	16.3	18.4
87.5°	6.1	8.2	6.1	4.1	8.2	8.2
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)