

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: P1308423

Luminaire Tested: P3SQAS24R209030D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1308423
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: P3SQAS24R209030D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R20 optic, 3000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

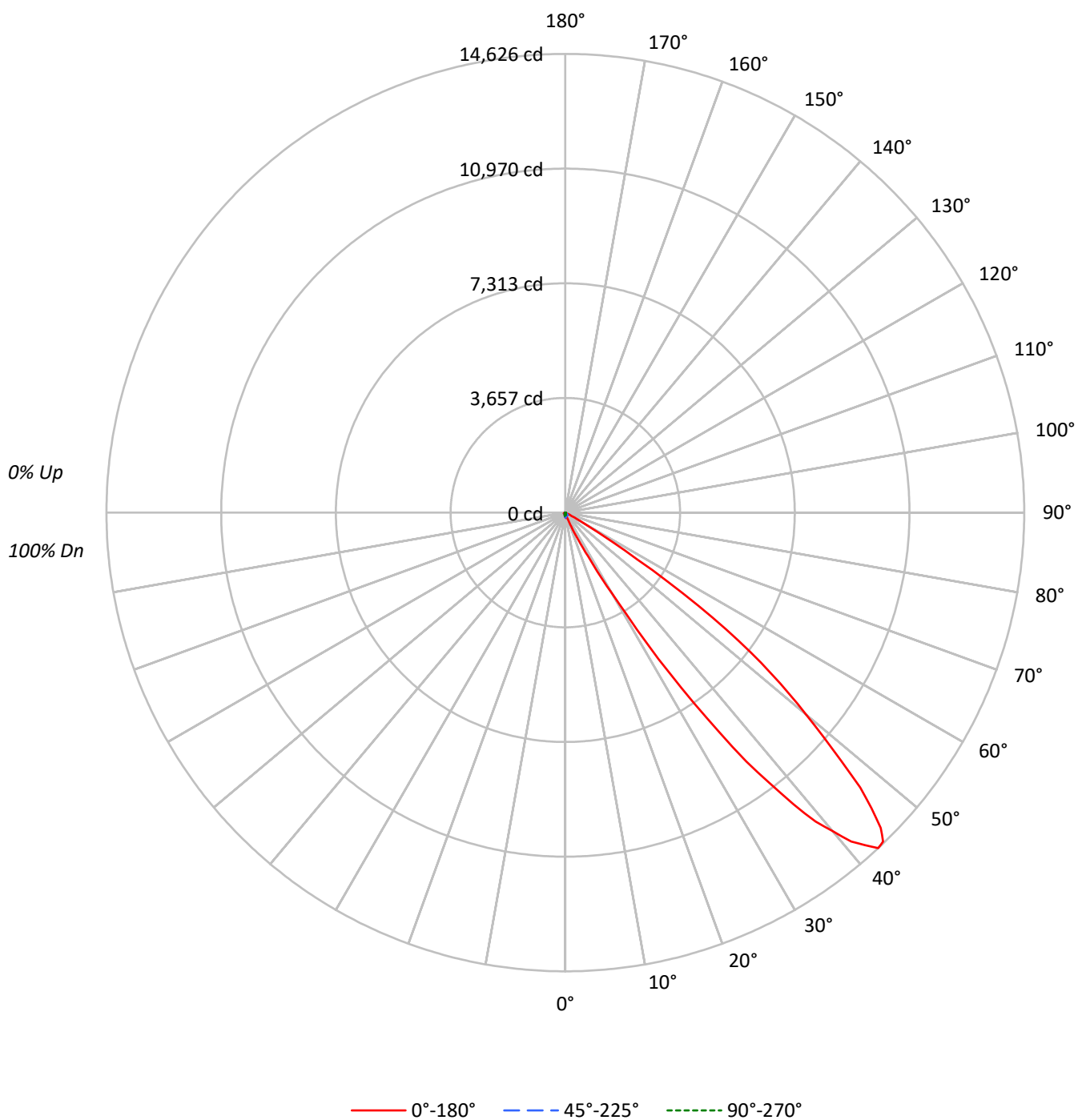
Lumens per Lamp: N/A
Luminaire Lumens: 2032.0 lumens
Efficiency: N/A
Efficacy: 70.6 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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°	24335	24335	24335	24335	24335
5°	28387	26416	22786	19812	19155
10°	28051	24046	18030	15354	15022
15°	24516	18383	13283	12249	12944
20°	36399	15395	9805	10502	11546
25°	156753	15962	7620	9425	11250
30°	592798	19370	6463	9108	11017
35°	1797048	23295	6013	9230	11648
40°	2979908	23179	5148	9870	12455
45°	3463612	15807	4652	10230	13493
50°	2688686	8708	4608	10744	15352
55°	1556163	5735	4594	12040	16634
60°	263087	1309	3961	12503	18428
65°	20213	0	4686	14018	21028
70°	2870	0	5791	15408	24019
75°	2529	1264	6321	17767	27948
80°	1884	1884	9422	18943	32233
85°	3754	3754	15018	18772	33988

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3463612 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	12.1	0.6
10°-20°	25.4	1.3
20°-30°	81.1	4.0
30°-40°	518.2	25.5
40°-50°	948.5	46.7
50°-60°	389.7	19.2
60°-70°	32.9	1.6
70°-80°	16.4	0.8
80°-90°	7.7	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°	118.7	5.8
0°-40°	636.9	31.3
0°-60°	1975.1	97.2
0°-90°	2032.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2032.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	141	141	141	141	141	
5°	164	153	132	115	111	16
15°	138	103	74	69	73	44
25°	825	84	40	50	59	542
35°	8547	111	29	44	55	5410
45°	14221	65	19	42	55	10211
55°	5183	19	15	40	55	4530
65°	50	0	12	34	52	162
75°	4	2	10	27	42	5
85°	2	2	8	10	17	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°	141.3	141.3	141.3	141.3	141.3	141.3	141.3	141.3	141.3	141.3	141.3
2.5°	154.7	154.7	154.7	152.8	152.8	154.7	152.8	152.8	152.8	152.8	150.9
5°	164.2	164.2	164.2	164.2	164.2	164.2	164.2	162.3	162.3	160.4	152.8
7.5°	168.0	168.0	168.0	168.0	166.1	166.1	166.1	166.1	164.2	162.3	148.9
10°	160.4	160.4	160.4	158.5	158.5	158.5	156.6	156.6	154.7	152.8	137.5
12.5°	145.1	145.1	145.1	145.1	143.2	143.2	141.3	141.3	139.4	137.5	120.3
15°	137.5	137.5	137.5	135.6	135.6	133.7	131.8	129.9	127.9	124.1	103.1
17.5°	148.9	148.9	147.0	147.0	143.2	139.4	137.5	131.8	127.9	122.2	91.7
20°	198.6	200.5	192.9	187.1	183.3	171.9	166.1	156.6	148.9	139.4	84.0
22.5°	401.0	393.4	380.0	359.0	334.2	313.2	275.0	244.4	223.4	194.8	82.1
25°	824.9	817.3	781.0	750.5	674.1	614.9	532.8	465.9	397.2	330.4	84.0
27.5°	1567.8	1516.2	1506.7	1367.3	1260.3	1107.6	949.1	815.4	693.2	557.6	89.8
30°	2980.9	2921.7	2713.5	2503.5	2215.1	1888.6	1577.3	1287.1	1044.6	824.9	97.4
31°	3782.9	3840.2	3595.8	3173.8	2747.9	2329.7	1903.9	1535.3	1222.1	949.1	101.2
32°	4972.6	4722.4	4464.7	4031.2	3412.5	2877.8	2343.1	1812.2	1399.7	1082.7	105.0
33°	6097.4	5950.3	5556.9	5016.5	4273.7	3523.2	2830.0	2138.8	1617.4	1245.1	106.9
34°	7296.6	7134.3	6815.4	6040.1	5224.7	4241.2	3317.0	2514.9	1877.1	1403.6	108.8
35°	8547.4	8478.6	7863.7	7191.6	6189.0	5003.2	3903.2	2927.4	2131.1	1548.7	110.8
36°	9805.8	9584.3	9103.1	8121.5	7075.1	5707.8	4518.1	3311.3	2388.9	1720.6	110.8
37°	10753.0	10703.3	10065.5	9108.8	7879.0	6460.2	5049.0	3737.1	2648.6	1867.6	110.8
38°	11797.5	11600.8	10953.5	9979.6	8635.2	7149.6	5604.7	4107.6	2895.0	2001.3	108.8
39°	12677.9	12385.7	11732.6	10770.2	9295.9	7672.8	6045.8	4466.6	3112.7	2112.0	106.9
40°	13254.6	13052.1	12370.4	11287.7	9895.6	8167.4	6492.7	4762.5	3275.0	2196.0	103.1
41°	13890.5	13554.4	12880.3	11791.8	10331.0	8602.8	6773.4	4957.3	3401.0	2251.4	99.3
42°	14270.5	13995.5	13195.4	12129.8	10642.2	8851.0	7002.5	5106.3	3477.4	2280.1	91.7
43°	14625.6	14251.4	13472.2	12326.5	10848.5	9026.7	7107.5	5175.0	3494.6	2280.1	82.1
44°	14577.9	14222.7	13415.0	12353.2	10894.3	9078.3	7151.5	5176.9	3467.8	2251.4	72.6
45°	14220.8	13867.5	13140.0	12120.3	10730.1	8977.0	7063.6	5100.5	3393.4	2201.8	64.9
46°	13565.8	13214.5	12656.8	11730.7	10424.5	8747.9	6859.3	4934.4	3269.2	2121.6	57.3
47°	12853.5	12511.7	11940.7	11102.4	9903.2	8339.2	6563.3	4701.4	3095.5	2005.1	51.6
48°	11820.4	11606.6	11033.7	10317.6	9179.5	7699.5	6043.9	4321.4	2862.5	1854.2	43.9
49°	10907.7	10682.3	10180.1	9410.5	8236.1	6954.8	5423.3	3859.3	2558.9	1686.2	38.2
50°	10035.0	9838.3	9374.2	8505.4	7384.4	6055.4	4585.0	3276.9	2176.9	1478.0	32.5
51°	9181.4	9034.3	8560.8	7762.5	6624.4	5364.1	3972.0	2728.8	1798.8	1226.0	30.6
52°	8324.0	8306.8	7793.1	6985.3	5885.4	4674.7	3376.2	2303.0	1525.8	1029.3	28.6
53°	7401.6	7290.9	6842.1	6116.5	5060.4	3956.7	2862.5	1942.1	1313.8	876.5	24.8
54°	6351.3	6227.2	5746.0	5091.0	4134.3	3240.6	2306.8	1569.7	1094.2	740.9	22.9
55°	5182.7	4970.7	4621.2	3949.1	3229.1	2472.9	1781.7	1243.2	874.6	616.8	19.1
56°	3931.9	3719.9	3523.2	3028.6	2369.8	1844.7	1327.2	952.9	683.6	486.9	17.2
57°	2734.6	2723.1	2400.4	2020.4	1585.0	1256.5	909.0	672.2	483.1	378.1	13.4
58°	1774.0	1714.8	1508.6	1289.0	1036.9	784.8	584.3	456.4	328.5	257.8	11.5
59°	1243.2	1124.8	1014.0	859.3	653.1	494.6	376.2	292.2	227.2	179.5	7.6
60°	763.8	739.0	664.5	523.2	423.9	349.5	280.7	215.8	166.1	127.9	3.8
62.5°	217.7	221.5	200.5	177.6	152.8	131.8	118.4	101.2	84.0	66.8	0.0
65°	49.6	47.7	51.6	47.7	43.9	43.9	38.2	34.4	30.6	28.6	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°	15.3	15.3	13.4	13.4	13.4	11.5	11.5	9.5	9.5	7.6	0.0
70°	5.7	5.7	5.7	5.7	5.7	3.8	3.8	3.8	1.9	1.9	0.0
72.5°	5.7	5.7	5.7	3.8	3.8	3.8	3.8	3.8	1.9	1.9	1.9
75°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	1.9	1.9	1.9	1.9
77.5°	3.8	3.8	3.8	3.8	3.8	1.9	3.8	1.9	1.9	1.9	1.9
80°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
82.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
85°	1.9	1.9	1.9	1.9	0.0	0.0	1.9	1.9	1.9	0.0	1.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9
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°	141.3	141.3	141.3	141.3	141.3	141.3
2.5°	147.0	139.4	133.7	127.9	126.0	126.0
5°	143.2	131.8	120.3	114.6	110.8	110.8
7.5°	131.8	118.4	106.9	101.2	99.3	99.3
10°	118.4	103.1	91.7	87.8	87.8	85.9
12.5°	103.1	87.8	80.2	78.3	78.3	78.3
15°	85.9	74.5	68.7	68.7	70.7	72.6
17.5°	72.6	61.1	59.2	63.0	66.8	66.8
20°	61.1	53.5	53.5	57.3	61.1	63.0
22.5°	51.6	45.8	47.7	53.5	59.2	61.1
25°	45.8	40.1	43.9	49.6	55.4	59.2
27.5°	38.2	36.3	40.1	47.7	55.4	57.3
30°	32.5	32.5	38.2	45.8	53.5	55.4
31°	30.6	30.6	38.2	45.8	53.5	55.4
32°	28.6	30.6	36.3	45.8	53.5	55.4
33°	26.7	28.6	36.3	43.9	53.5	55.4
34°	24.8	28.6	36.3	43.9	53.5	55.4
35°	22.9	28.6	36.3	43.9	53.5	55.4
36°	21.0	26.7	34.4	43.9	53.5	55.4
37°	19.1	26.7	34.4	43.9	53.5	55.4
38°	17.2	24.8	34.4	43.9	53.5	55.4
39°	17.2	24.8	32.5	43.9	51.6	55.4
40°	15.3	22.9	32.5	43.9	51.6	55.4
41°	13.4	22.9	32.5	42.0	51.6	55.4
42°	11.5	21.0	30.6	42.0	51.6	55.4
43°	9.5	21.0	30.6	42.0	51.6	55.4
44°	9.5	19.1	30.6	42.0	51.6	55.4
45°	7.6	19.1	30.6	42.0	51.6	55.4
46°	5.7	19.1	30.6	42.0	51.6	55.4
47°	5.7	17.2	28.6	42.0	51.6	55.4
48°	3.8	17.2	28.6	42.0	51.6	55.4
49°	3.8	17.2	28.6	42.0	51.6	57.3
50°	3.8	17.2	28.6	40.1	51.6	57.3
51°	1.9	17.2	28.6	40.1	51.6	57.3
52°	1.9	17.2	26.7	40.1	53.5	57.3
53°	1.9	15.3	26.7	40.1	53.5	57.3
54°	1.9	15.3	26.7	40.1	53.5	55.4
55°	1.9	15.3	26.7	40.1	51.6	55.4
56°	1.9	13.4	26.7	40.1	51.6	55.4
57°	1.9	13.4	24.8	38.2	51.6	53.5
58°	1.9	13.4	24.8	38.2	51.6	53.5
59°	1.9	13.4	24.8	38.2	49.6	53.5
60°	3.8	11.5	22.9	36.3	49.6	53.5
62.5°	3.8	11.5	22.9	36.3	47.7	51.6
65°	3.8	11.5	21.0	34.4	47.7	51.6



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	3.8	9.5	19.1	32.5	45.8	49.6
70°	3.8	11.5	19.1	30.6	43.9	47.7
72.5°	5.7	9.5	17.2	28.6	42.0	45.8
75°	5.7	9.5	17.2	26.7	40.1	42.0
77.5°	7.6	9.5	15.3	22.9	36.3	38.2
80°	7.6	9.5	13.4	19.1	30.6	32.5
82.5°	7.6	9.5	9.5	15.3	22.9	24.8
85°	5.7	7.6	7.6	9.5	15.3	17.2
87.5°	5.7	7.6	5.7	3.8	7.6	7.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)