

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: P1309607

Luminaire Tested: P3SQAS24R409035D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1309607
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-78)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS24R409035D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R40 optic, 3500K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

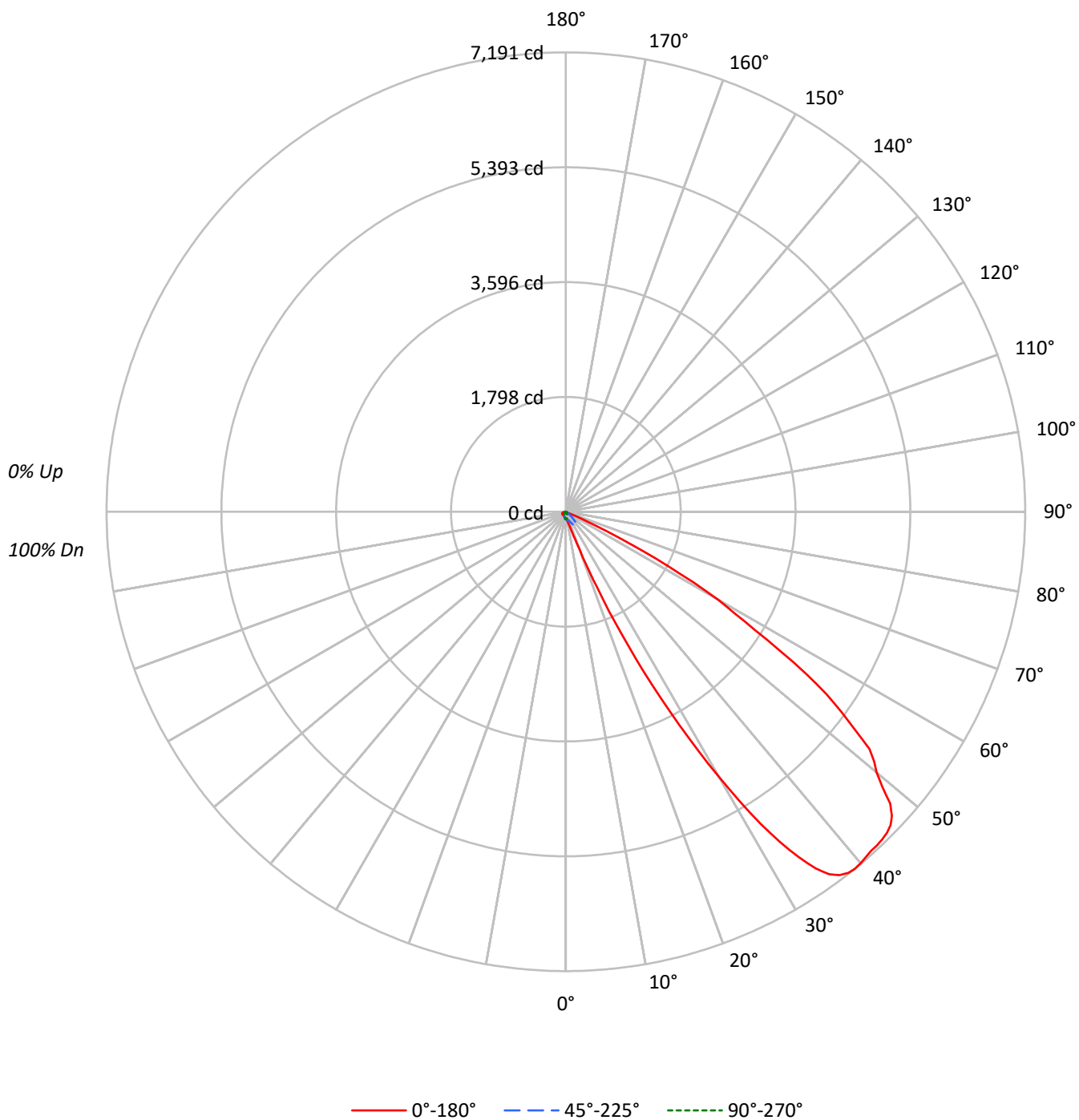
Lumens per Lamp: N/A
Luminaire Lumens: 2222.0 lumens
Efficiency: N/A
Efficacy: 77.2 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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	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	107	104	100	97	99	97	94	96	93	91	92	90	88	86		
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72		
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	60		
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50		
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35		
7	62	48	39	32	60	47	38	32	45	37	32	44	37	31	42	36	31	29		
8	57	42	33	27	55	42	33	27	40	32	27	39	32	27	38	31	26	24		
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	20	31	24	20	30	24	19	18		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	19685	19685	19685	19685	19685
5°	21869	21161	19397	17634	17288
10°	26407	22489	17838	16054	15704
15°	43291	24373	15280	14193	14549
20°	114437	28793	12719	12719	13837
25°	441280	35668	10090	11630	13568
30°	952009	47469	8114	11355	13384
35°	1432946	56198	6854	11164	13729
40°	1614415	56430	5958	11466	14681
45°	1731075	43743	5456	11934	15904
50°	1701441	27329	4930	12566	17496
55°	1496861	13482	4894	14082	19607
60°	947466	2824	5614	15466	21803
65°	193773	815	5827	16627	24125
70°	4129	1007	6143	18480	27745
75°	4059	2728	6787	20362	31208
80°	4066	1984	8133	22216	36399
85°	3952	3952	16203	24108	40311

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 1762332 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.7	0.5
10°-20°	35.2	1.6
20°-30°	172.6	7.8
30°-40°	561.4	25.3
40°-50°	773.9	34.8
50°-60°	539.1	24.3
60°-70°	102.2	4.6
70°-80°	18.5	0.8
80°-90°	8.5	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°	218.5	9.8
0°-40°	779.9	35.1
0°-60°	2092.8	94.2
0°-90°	2222.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2222.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	114	114	114	114	114	
5°	126	122	112	102	100	13
15°	243	137	86	80	82	88
25°	2322	188	53	61	71	1196
35°	6816	267	33	53	65	4119
45°	7107	180	22	49	65	5405
55°	4985	45	16	47	65	4261
65°	476	2	14	41	59	841
75°	6	4	10	31	47	6
85°	2	2	8	12	20	2
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	114.3	114.3	114.3	114.3	114.3	114.3	114.3	114.3	114.3	114.3	114.3
2.5°	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4	116.3	114.3
5°	126.5	126.5	126.5	126.5	124.5	124.5	124.5	122.4	122.4	118.4	112.2
7.5°	134.7	134.7	134.7	134.7	132.6	130.6	128.6	128.6	126.5	116.3	108.2
10°	151.0	151.0	149.0	146.9	144.9	140.8	138.8	134.7	128.6	114.3	102.0
12.5°	183.7	179.6	177.5	173.5	167.3	159.2	151.0	144.9	130.6	110.2	95.9
15°	242.8	238.7	230.6	218.3	206.1	189.8	175.5	161.2	136.7	104.1	85.7
17.5°	346.9	334.7	322.4	302.0	271.4	242.8	212.2	185.7	144.9	97.9	77.5
20°	624.4	616.3	542.8	485.7	393.8	328.5	267.3	222.4	157.1	91.8	69.4
22.5°	1287.6	1201.9	1081.5	885.6	689.7	508.1	369.3	279.6	169.4	83.7	61.2
25°	2322.2	2187.5	1928.4	1550.9	1144.8	810.1	534.6	365.3	187.7	75.5	53.1
27.5°	3516.0	3379.2	2977.2	2456.9	1793.7	1222.3	763.2	483.6	212.2	67.3	46.9
30°	4787.2	4670.9	4160.8	3440.4	2528.3	1712.1	1022.3	604.0	238.7	59.2	40.8
31°	5299.4	5150.5	4599.5	3832.2	2873.2	1914.1	1126.4	655.0	249.0	57.1	38.8
32°	5770.8	5601.4	5030.1	4207.7	3152.7	2132.4	1240.7	699.9	257.1	53.1	36.7
33°	6176.9	5979.0	5428.0	4562.8	3460.9	2336.5	1359.0	742.8	263.2	49.0	34.7
34°	6521.8	6350.3	5758.6	4919.9	3734.3	2532.4	1475.4	785.6	267.3	46.9	32.6
35°	6815.6	6660.5	6074.9	5191.3	4001.6	2722.2	1581.5	826.4	267.3	42.9	32.6
36°	7013.5	6878.9	6348.3	5468.8	4226.1	2883.4	1671.2	863.2	267.3	38.8	30.6
37°	7121.7	6991.1	6527.9	5697.4	4446.5	3042.5	1752.9	891.7	265.3	36.7	28.6
38°	7176.8	7062.5	6660.5	5883.0	4599.5	3156.8	1824.3	914.2	263.2	32.6	28.6
39°	7191.1	7095.2	6744.2	6017.7	4748.5	3271.1	1875.3	926.4	257.1	30.6	26.5
40°	7180.9	7097.2	6789.1	6138.1	4862.7	3360.9	1912.0	930.5	251.0	26.5	26.5
41°	7160.5	7095.2	6821.7	6221.8	4954.6	3418.0	1926.3	922.4	242.8	22.4	24.5
42°	7142.1	7070.7	6836.0	6278.9	5017.8	3446.6	1924.3	906.0	230.6	20.4	24.5
43°	7142.1	7060.5	6838.0	6315.7	5048.4	3448.6	1899.8	875.4	214.3	18.4	22.4
44°	7129.9	7054.3	6848.2	6340.1	5056.6	3430.2	1861.0	842.8	195.9	16.3	22.4
45°	7107.4	7027.8	6846.2	6342.2	5042.3	3385.4	1797.8	799.9	179.6	12.2	22.4
46°	7064.6	6993.1	6827.8	6327.9	4999.5	3320.1	1722.3	757.1	161.2	10.2	20.4
47°	6978.8	6923.7	6778.9	6278.9	4934.2	3224.1	1632.5	708.1	146.9	8.2	20.4
48°	6831.9	6793.2	6695.2	6170.8	4809.7	3105.8	1536.6	655.0	132.6	8.2	20.4
49°	6562.6	6532.0	6474.8	5997.3	4650.5	2960.9	1432.5	595.9	118.4	6.1	20.4
50°	6350.3	6317.7	6201.4	5705.5	4422.0	2777.3	1318.2	536.7	102.0	4.1	18.4
51°	6209.5	6156.5	5972.8	5366.8	4089.4	2532.4	1193.7	477.5	85.7	4.1	18.4
52°	6032.0	5952.4	5723.9	5062.7	3785.3	2287.5	1059.1	418.3	75.5	4.1	18.4
53°	5660.6	5632.1	5405.5	4736.2	3481.3	2052.8	920.3	369.3	65.3	4.1	18.4
54°	5336.2	5293.3	4985.2	4283.2	3150.7	1791.6	777.5	326.5	55.1	4.1	18.4
55°	4985.2	4901.5	4628.1	3901.6	2763.0	1550.9	640.7	281.6	44.9	4.1	16.3
56°	4542.4	4468.9	4175.1	3493.5	2405.9	1306.0	536.7	230.6	34.7	4.1	16.3
57°	4003.7	3936.3	3709.8	2991.5	2034.5	1067.2	436.7	185.7	26.5	4.1	16.3
58°	3483.3	3407.8	3148.6	2509.9	1642.7	846.8	365.3	151.0	20.4	4.1	16.3
59°	3083.3	2981.3	2646.7	2107.9	1285.6	642.8	289.8	120.4	14.3	4.1	16.3
60°	2750.7	2667.1	2320.2	1754.9	1008.1	473.4	214.3	91.8	8.2	4.1	16.3
62.5°	1593.7	1571.3	1259.0	904.0	475.5	220.4	106.1	42.9	4.1	6.1	16.3
65°	475.5	414.2	322.4	191.8	122.4	73.5	38.8	14.3	2.0	6.1	14.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	14.3	14.3	14.3	14.3	14.3	14.3	8.2	4.1	2.0	6.1	14.3
70°	8.2	6.1	6.1	6.1	6.1	4.1	4.1	2.0	2.0	6.1	12.2
72.5°	6.1	6.1	6.1	6.1	4.1	4.1	4.1	2.0	4.1	6.1	10.2
75°	6.1	4.1	4.1	4.1	4.1	2.0	2.0	2.0	4.1	6.1	10.2
77.5°	4.1	4.1	4.1	4.1	2.0	2.0	2.0	2.0	4.1	6.1	10.2
80°	4.1	4.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	6.1	8.2
82.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	6.1	8.2
85°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	6.1	8.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	6.1	6.1
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):

	112.5°	135°	157.5°	180°
0°	114.3	114.3	114.3	114.3
2.5°	110.2	108.2	106.1	106.1
5°	106.1	102.0	102.0	100.0
7.5°	100.0	95.9	95.9	95.9
10°	93.9	91.8	91.8	89.8
12.5°	85.7	85.7	85.7	85.7
15°	79.6	79.6	81.6	81.6
17.5°	71.4	73.5	77.5	79.6
20°	65.3	69.4	73.5	75.5
22.5°	61.2	65.3	71.4	73.5
25°	55.1	61.2	69.4	71.4
27.5°	51.0	59.2	65.3	69.4
30°	46.9	57.1	63.3	67.3
31°	46.9	55.1	63.3	67.3
32°	44.9	53.1	63.3	65.3
33°	44.9	53.1	63.3	65.3
34°	42.9	53.1	61.2	65.3
35°	42.9	53.1	61.2	65.3
36°	40.8	51.0	61.2	65.3
37°	40.8	51.0	61.2	65.3
38°	38.8	51.0	61.2	65.3
39°	38.8	51.0	61.2	65.3
40°	38.8	51.0	61.2	65.3
41°	36.7	51.0	61.2	65.3
42°	36.7	51.0	61.2	65.3
43°	36.7	49.0	61.2	65.3
44°	36.7	49.0	61.2	65.3
45°	34.7	49.0	61.2	65.3
46°	34.7	49.0	61.2	65.3
47°	34.7	49.0	61.2	65.3
48°	34.7	49.0	61.2	65.3
49°	34.7	49.0	61.2	65.3
50°	32.6	46.9	61.2	65.3
51°	32.6	46.9	61.2	65.3
52°	32.6	46.9	61.2	65.3
53°	32.6	46.9	61.2	65.3
54°	30.6	46.9	61.2	65.3
55°	30.6	46.9	61.2	65.3
56°	30.6	46.9	61.2	63.3
57°	30.6	46.9	59.2	63.3
58°	30.6	44.9	59.2	63.3
59°	30.6	44.9	59.2	63.3
60°	30.6	44.9	59.2	63.3
62.5°	28.6	44.9	57.1	61.2
65°	26.5	40.8	57.1	59.2



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	26.5	38.8	53.1	57.1
70°	24.5	36.7	51.0	55.1
72.5°	20.4	34.7	46.9	51.0
75°	18.4	30.6	42.9	46.9
77.5°	16.3	26.5	38.8	40.8
80°	14.3	22.4	32.6	36.7
82.5°	10.2	16.3	26.5	28.6
85°	8.2	12.2	18.4	20.4
87.5°	6.1	6.1	10.2	10.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)