

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: P1309525

Luminaire Tested: P3SQAS24R159035D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1309525
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: P3SQAS24R159035D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R15 optic, 3500K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

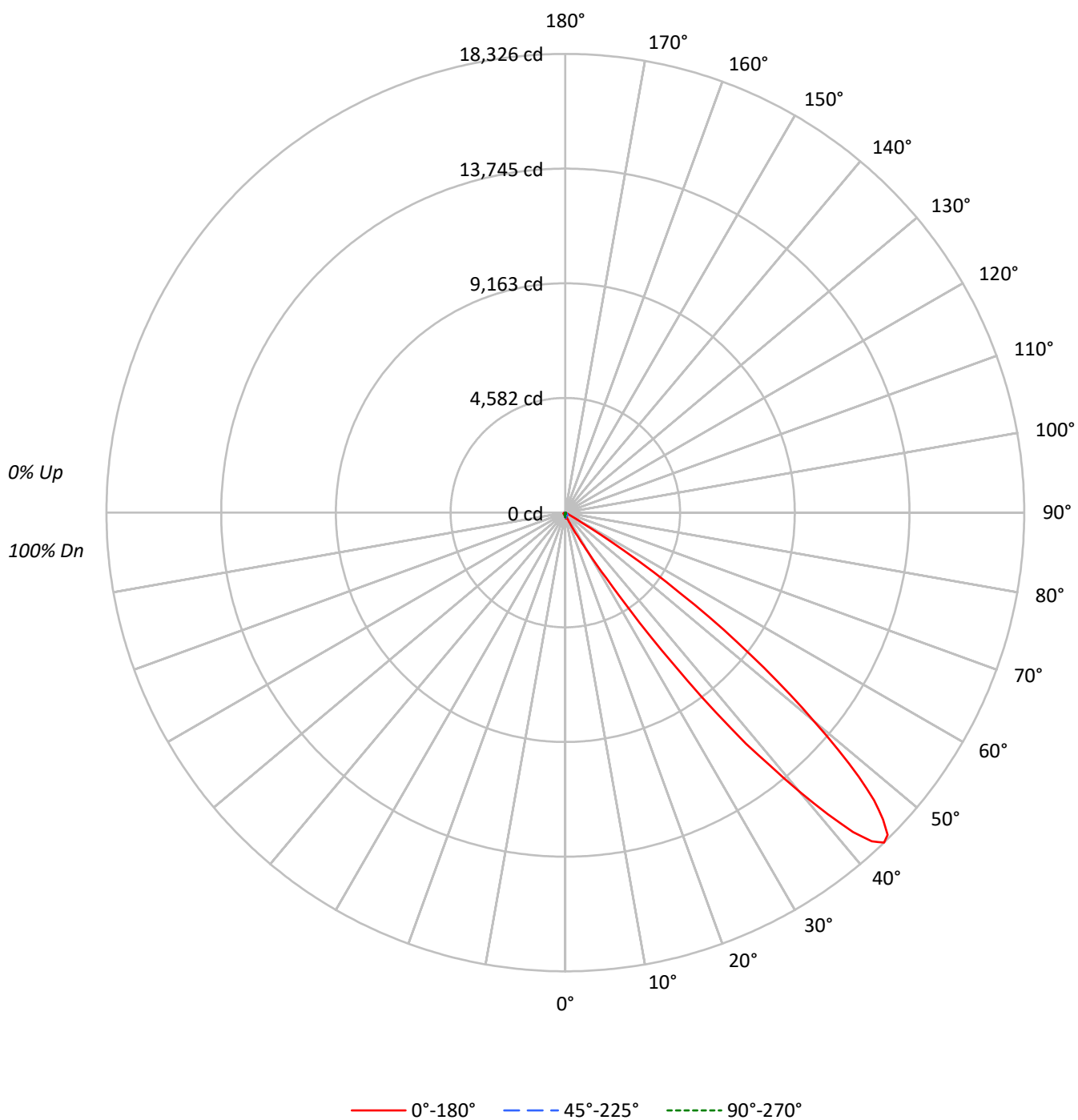
Lumens per Lamp: N/A
Luminaire Lumens: 2046.0 lumens
Efficiency: N/A
Efficacy: 71.0 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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	100	97	94	96	93	91	92	90	89	87		
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73		
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61		
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	53	50		
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35		
7	62	47	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29		
8	56	42	33	27	55	41	33	27	40	32	26	39	31	26	37	31	26	24		
9	52	37	28	22	50	37	28	22	35	28	22	34	27	22	33	27	22	20		
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	23	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	31276	31276	31276	31276	31276
5°	38794	34559	28214	24687	24342
10°	38176	29607	21755	19272	19621
15°	31648	21093	15637	16011	17099
20°	54964	16825	11968	13837	15707
25°	122510	20162	9691	12789	14727
30°	366350	24739	8511	12568	15412
35°	1410261	27878	7716	12867	16294
40°	3273367	24303	7329	13309	17424
45°	4433613	18389	6454	14419	18876
50°	3476323	10932	6564	15299	20765
55°	1668580	4894	6125	16544	22670
60°	152486	689	5614	17567	25282
65°	16627	0	4972	18297	27426
70°	4129	0	6143	19538	29810
75°	4059	1331	8118	21693	33936
80°	4066	4066	10116	22216	36399
85°	3952	3952	16203	20156	40311

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4433613 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	15.5	0.8
10°-20°	32.3	1.6
20°-30°	77.3	3.8
30°-40°	423.2	20.7
40°-50°	1024.8	50.1
50°-60°	408.8	20.0
60°-70°	35.3	1.7
70°-80°	19.9	1.0
80°-90°	8.8	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°	125.1	6.1
0°-40°	548.3	26.8
0°-60°	1981.9	96.9
0°-90°	2046.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2046.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	182	182	182	182	182	
5°	224	200	163	143	141	21
15°	178	118	88	90	96	62
25°	645	106	51	67	78	389
35°	6708	133	37	61	78	4740
45°	18203	76	26	59	78	12841
55°	5557	16	20	55	76	5177
65°	41	0	12	45	67	105
75°	6	2	12	33	51	6
85°	2	2	8	10	20	2
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°	181.6	181.6	181.6	181.6	181.6	181.6	181.6	181.6	181.6	181.6	181.6
2.5°	204.0	204.0	206.0	204.0	204.0	204.0	204.0	202.0	202.0	202.0	195.8
5°	224.4	224.4	224.4	224.4	222.4	222.4	222.4	220.3	220.3	218.3	199.9
7.5°	232.6	232.6	230.5	230.5	228.5	228.5	226.4	224.4	222.4	220.3	191.8
10°	218.3	218.3	218.3	216.2	216.2	214.2	212.2	210.1	208.1	204.0	169.3
12.5°	193.8	193.8	195.8	193.8	191.8	189.7	185.6	183.6	181.6	177.5	140.8
15°	177.5	177.5	177.5	175.4	173.4	169.3	167.3	163.2	161.2	155.0	118.3
17.5°	226.4	226.4	224.4	220.3	212.2	206.0	195.8	187.7	177.5	165.2	102.0
20°	299.9	299.9	295.8	291.7	281.5	271.3	255.0	240.7	224.4	210.1	91.8
22.5°	434.5	440.7	428.4	414.1	399.9	375.4	352.9	330.5	301.9	277.4	93.8
25°	644.7	650.8	644.7	612.0	585.5	552.9	510.0	465.1	416.2	371.3	106.1
27.5°	1044.5	1048.6	1038.4	958.8	916.0	830.3	754.8	681.4	599.8	518.2	116.3
30°	1842.2	1844.2	1778.9	1619.8	1479.0	1291.4	1132.2	979.2	850.7	720.1	124.4
31°	2425.6	2368.5	2229.8	2038.0	1813.6	1560.6	1342.4	1144.5	952.7	811.9	126.5
32°	3080.5	3072.3	2841.8	2509.3	2209.4	1893.2	1564.7	1311.8	1091.4	899.7	128.5
33°	3947.5	3951.6	3588.5	3196.8	2705.1	2280.8	1850.3	1503.5	1238.3	1003.7	132.6
34°	5302.1	4983.9	4557.5	4027.1	3357.9	2719.4	2160.4	1725.9	1370.9	1103.7	132.6
35°	6707.7	6387.4	5918.2	5114.4	4196.4	3302.8	2529.7	1964.6	1530.0	1211.8	132.6
36°	8282.6	8011.3	7301.4	6275.2	5104.2	3853.7	2921.4	2240.0	1687.1	1309.7	130.6
37°	9984.0	9586.2	8798.8	7678.8	6112.0	4628.9	3398.7	2513.3	1844.2	1415.8	126.5
38°	11712.0	11352.9	10359.4	9002.8	7315.6	5446.9	3876.1	2776.5	1989.1	1495.4	120.4
39°	13021.7	12825.8	11840.5	10324.7	8276.5	6222.2	4367.8	3058.0	2142.1	1574.9	114.2
40°	14559.9	14243.7	13309.3	11434.5	9412.8	7011.7	4849.2	3306.9	2268.5	1638.2	108.1
41°	15963.4	15563.6	14384.4	12572.9	10322.7	7721.6	5306.2	3564.0	2370.5	1674.9	104.0
42°	17167.1	16701.9	15469.7	13548.0	11083.6	8288.7	5671.4	3747.6	2466.4	1705.5	97.9
43°	17946.4	17544.5	16332.7	14280.4	11734.4	8809.0	6012.0	3939.3	2525.6	1725.9	89.8
44°	18325.8	17919.8	16746.8	14739.4	12134.2	9121.1	6232.4	4071.9	2590.9	1752.4	83.6
45°	18203.4	17791.3	16657.0	14747.6	12258.7	9233.3	6326.2	4131.1	2625.6	1776.9	75.5
46°	17642.4	17352.7	16210.3	14364.0	12022.0	9112.9	6273.2	4086.2	2613.3	1776.9	67.3
47°	16854.9	16524.4	15437.1	13705.1	11448.8	8802.8	6059.0	3949.5	2537.8	1736.1	59.2
48°	15781.9	15500.3	14357.9	12658.5	10569.5	8127.6	5575.5	3727.2	2419.5	1656.5	51.0
49°	14435.4	14043.7	12980.9	11320.3	9423.0	7168.8	4941.0	3351.8	2229.8	1544.3	44.9
50°	12974.7	12491.3	11671.2	9979.9	8237.7	6146.7	4106.6	2833.6	1962.5	1397.4	40.8
51°	11544.7	11053.0	10271.7	8833.4	6972.9	5100.1	3313.0	2262.4	1615.7	1195.5	34.7
52°	10061.5	9649.5	8774.3	7644.1	5969.2	4133.2	2760.2	1913.6	1342.4	1003.7	28.6
53°	8584.5	8303.0	7470.7	6326.2	4796.2	3376.3	2254.3	1638.2	1171.0	858.9	22.4
54°	7105.5	6797.5	6165.0	5145.0	3865.9	2664.3	1911.5	1370.9	1015.9	748.7	20.4
55°	5557.1	5398.0	4814.5	3923.0	2929.5	2125.7	1550.4	1179.2	850.7	626.3	16.3
56°	4280.0	4100.5	3568.1	2845.9	2176.7	1664.7	1254.6	962.9	720.1	524.3	12.2
57°	2803.0	2619.4	2266.5	1987.0	1585.1	1213.8	958.8	758.9	585.5	434.5	10.2
58°	1656.5	1489.2	1434.2	1224.0	1056.7	824.2	707.9	565.1	432.5	342.7	6.1
59°	760.9	773.2	687.5	644.7	585.5	524.3	430.5	377.4	295.8	246.8	4.1
60°	442.7	418.2	408.0	365.2	324.4	287.6	259.1	228.5	185.6	159.1	2.0
62.5°	151.0	144.8	148.9	134.6	126.5	122.4	112.2	95.9	79.6	65.3	0.0
65°	40.8	40.8	38.8	36.7	34.7	32.6	30.6	26.5	24.5	20.4	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°	14.3	14.3	12.2	12.2	10.2	10.2	8.2	8.2	6.1	6.1	0.0
70°	8.2	8.2	8.2	6.1	6.1	6.1	4.1	4.1	4.1	2.0	0.0
72.5°	6.1	6.1	6.1	6.1	6.1	6.1	4.1	4.1	4.1	2.0	2.0
75°	6.1	6.1	6.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	2.0
77.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
80°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	2.0	4.1
82.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.1
85°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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°	181.6	181.6	181.6	181.6	181.6	181.6
2.5°	187.7	179.5	169.3	163.2	161.2	159.1
5°	179.5	163.2	151.0	142.8	140.8	140.8
7.5°	161.2	142.8	130.6	126.5	124.4	124.4
10°	140.8	124.4	114.2	110.2	112.2	112.2
12.5°	118.3	104.0	100.0	100.0	102.0	104.0
15°	95.9	87.7	87.7	89.8	93.8	95.9
17.5°	79.6	75.5	77.5	81.6	85.7	89.8
20°	65.3	65.3	69.4	75.5	81.6	85.7
22.5°	55.1	57.1	63.2	69.4	77.5	81.6
25°	46.9	51.0	57.1	67.3	75.5	77.5
27.5°	40.8	46.9	55.1	65.3	73.4	77.5
30°	34.7	42.8	53.0	63.2	73.4	77.5
31°	32.6	40.8	51.0	63.2	73.4	77.5
32°	30.6	40.8	51.0	63.2	73.4	77.5
33°	28.6	38.8	51.0	61.2	73.4	77.5
34°	26.5	38.8	51.0	63.2	73.4	77.5
35°	24.5	36.7	49.0	61.2	71.4	77.5
36°	22.4	36.7	49.0	61.2	73.4	77.5
37°	20.4	36.7	49.0	61.2	71.4	77.5
38°	20.4	34.7	46.9	61.2	71.4	77.5
39°	18.4	32.6	46.9	61.2	71.4	77.5
40°	16.3	32.6	44.9	59.2	71.4	77.5
41°	14.3	30.6	44.9	59.2	71.4	77.5
42°	12.2	30.6	44.9	59.2	71.4	77.5
43°	10.2	28.6	42.8	59.2	71.4	77.5
44°	10.2	28.6	42.8	59.2	71.4	77.5
45°	8.2	26.5	40.8	59.2	71.4	77.5
46°	8.2	26.5	40.8	57.1	71.4	77.5
47°	6.1	26.5	40.8	57.1	71.4	77.5
48°	6.1	24.5	40.8	57.1	71.4	77.5
49°	4.1	24.5	40.8	57.1	71.4	77.5
50°	4.1	24.5	38.8	57.1	71.4	77.5
51°	4.1	24.5	38.8	57.1	71.4	77.5
52°	4.1	22.4	38.8	57.1	71.4	77.5
53°	4.1	22.4	38.8	57.1	71.4	77.5
54°	4.1	22.4	36.7	57.1	71.4	77.5
55°	4.1	20.4	36.7	55.1	71.4	75.5
56°	4.1	20.4	36.7	55.1	71.4	75.5
57°	4.1	20.4	34.7	55.1	71.4	75.5
58°	4.1	18.4	34.7	53.0	69.4	75.5
59°	4.1	18.4	32.6	53.0	69.4	73.4
60°	4.1	16.3	32.6	51.0	67.3	73.4
62.5°	4.1	14.3	28.6	49.0	65.3	69.4
65°	4.1	12.2	26.5	44.9	63.2	67.3



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	4.1	12.2	24.5	42.8	59.2	65.3
70°	4.1	12.2	22.4	38.8	57.1	59.2
72.5°	6.1	12.2	20.4	36.7	53.0	55.1
75°	8.2	12.2	18.4	32.6	49.0	51.0
77.5°	8.2	12.2	16.3	28.6	42.8	44.9
80°	8.2	10.2	14.3	22.4	34.7	36.7
82.5°	8.2	10.2	10.2	18.4	26.5	28.6
85°	6.1	8.2	8.2	10.2	18.4	20.4
87.5°	6.1	8.2	4.1	6.1	8.2	8.2
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)