

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: P1310643

Luminaire Tested: P3SQAS24R159040D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1310643
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: P3SQAS24R159040D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R15 optic, 4000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

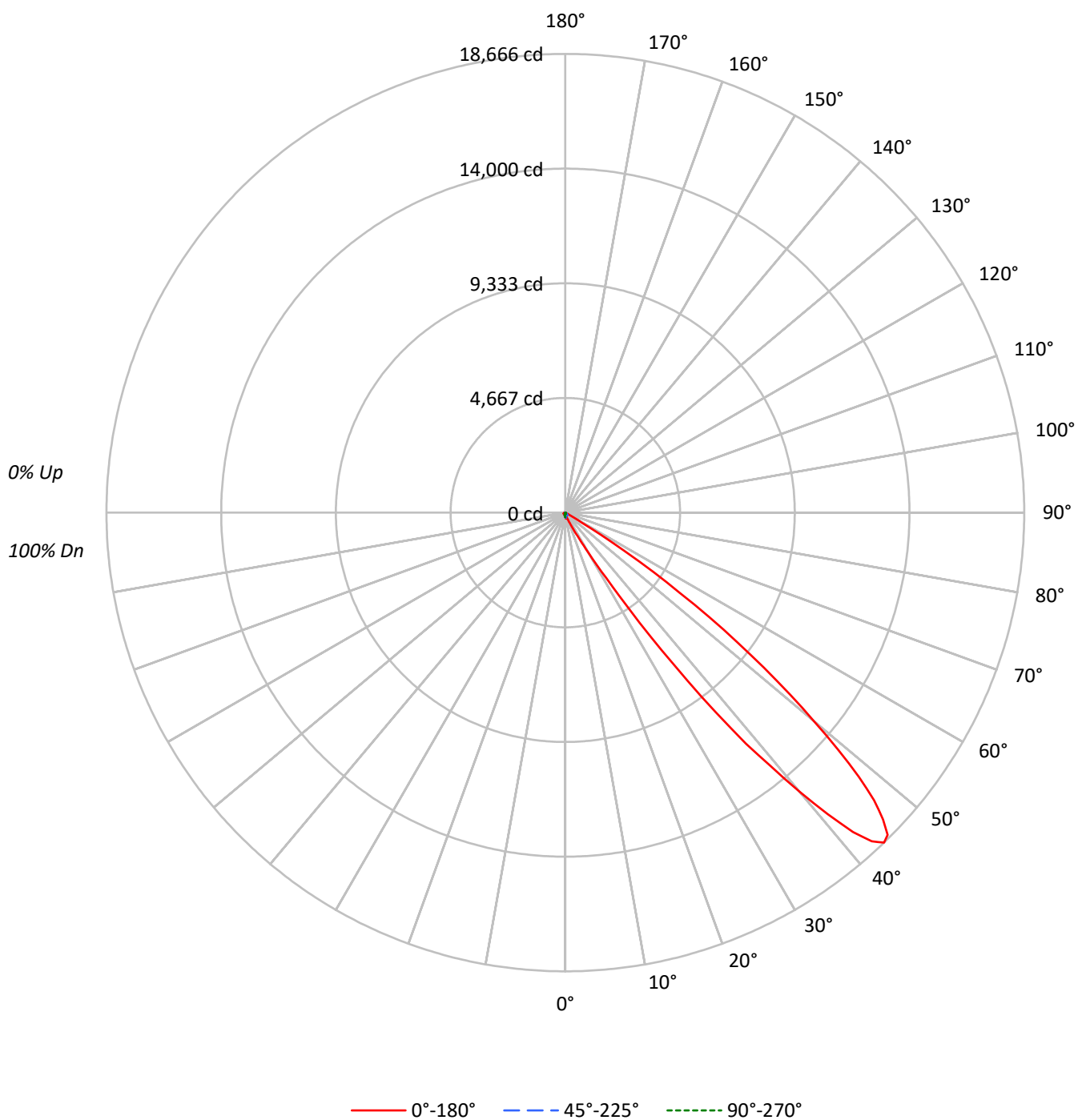
Lumens per Lamp: N/A
Luminaire Lumens: 2084.0 lumens
Efficiency: N/A
Efficacy: 72.4 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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°	31844	31844	31844	31844	31844
5°	39520	35198	28733	25154	24791
10°	38876	30167	22175	19621	19989
15°	32236	21485	15940	16296	17420
20°	55991	17136	12188	14094	16000
25°	124772	20542	9862	13036	15012
30°	373151	25216	8671	12807	15710
35°	1436457	28404	7863	13098	16609
40°	3334158	24753	7464	13557	17761
45°	4515960	18730	6576	14687	19241
50°	3540894	11146	6671	15594	21167
55°	1699567	4984	6245	16845	23090
60°	155310	723	5718	17877	25765
65°	16953	0	5094	18623	27955
70°	4179	0	6294	19890	30364
75°	4126	1397	8318	22092	34535
80°	4166	4166	10315	22712	37093
85°	4150	4150	16401	20551	41101

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4515960 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	15.8	0.8
10°-20°	32.9	1.6
20°-30°	78.7	3.8
30°-40°	431.1	20.7
40°-50°	1043.8	50.1
50°-60°	416.4	20.0
60°-70°	36.0	1.7
70°-80°	20.3	1.0
80°-90°	9.0	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°	127.4	6.1
0°-40°	558.5	26.8
0°-60°	2018.8	96.9
0°-90°	2084.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2084.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	185	185	185	185	185	
5°	229	204	166	146	143	22
15°	181	120	89	91	98	63
25°	657	108	52	69	79	396
35°	6832	135	37	62	79	4828
45°	18542	77	27	60	79	13080
55°	5660	17	21	56	77	5273
65°	42	0	12	46	69	107
75°	6	2	12	33	52	6
85°	2	2	8	10	21	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°	184.9	184.9	184.9	184.9	184.9	184.9	184.9	184.9	184.9	184.9	184.9
2.5°	207.8	207.8	209.9	207.8	207.8	207.8	207.8	205.7	205.7	205.7	199.5
5°	228.6	228.6	228.6	228.6	226.5	226.5	226.5	224.4	224.4	222.3	203.6
7.5°	236.9	236.9	234.8	234.8	232.7	232.7	230.7	228.6	226.5	224.4	195.3
10°	222.3	222.3	222.3	220.3	220.3	218.2	216.1	214.0	212.0	207.8	172.5
12.5°	197.4	197.4	199.5	197.4	195.3	193.2	189.1	187.0	184.9	180.8	143.4
15°	180.8	180.8	180.8	178.7	176.6	172.5	170.4	166.2	164.2	157.9	120.5
17.5°	230.7	230.7	228.6	224.4	216.1	209.9	199.5	191.2	180.8	168.3	103.9
20°	305.5	305.5	301.3	297.1	286.8	276.4	259.7	245.2	228.6	214.0	93.5
22.5°	442.6	448.8	436.4	421.8	407.3	382.3	359.5	336.6	307.5	282.6	95.6
25°	656.6	662.9	656.6	623.4	596.4	563.1	519.5	473.8	423.9	378.2	108.1
27.5°	1063.9	1068.1	1057.7	976.6	933.0	845.7	768.8	694.0	610.9	527.8	118.4
30°	1876.4	1878.5	1812.0	1649.9	1506.5	1315.3	1153.3	997.4	866.5	733.5	126.8
31°	2470.7	2412.5	2271.2	2075.9	1847.3	1589.6	1367.3	1165.7	970.4	827.0	128.8
32°	3137.7	3129.4	2894.6	2555.9	2250.4	1928.3	1593.8	1336.1	1111.7	916.4	130.9
33°	4020.8	4025.0	3655.1	3256.1	2755.4	2323.1	1884.7	1531.4	1261.3	1022.3	135.1
34°	5400.6	5076.4	4642.1	4101.9	3420.3	2769.9	2200.5	1757.9	1396.4	1124.2	135.1
35°	6832.3	6506.0	6028.1	5209.4	4274.3	3364.2	2576.7	2001.1	1558.5	1234.3	135.1
36°	8436.5	8160.1	7437.0	6391.8	5199.0	3925.2	2975.6	2281.6	1718.5	1334.0	133.0
37°	10169.5	9764.3	8962.2	7821.4	6225.5	4714.9	3461.9	2560.0	1878.5	1442.1	128.8
38°	11929.5	11563.8	10551.8	9170.0	7451.5	5548.1	3948.1	2828.1	2026.0	1523.1	122.6
39°	13263.5	13064.0	12060.4	10516.5	8430.2	6337.7	4448.9	3114.8	2181.8	1604.2	116.4
40°	14830.3	14508.2	13556.5	11646.9	9587.6	7141.9	4939.3	3368.3	2310.7	1668.6	110.1
41°	16259.9	15852.6	14651.6	12806.4	10514.4	7865.0	5404.7	3630.2	2414.6	1706.0	106.0
42°	17485.9	17012.1	15757.0	13799.6	11289.5	8442.7	5776.7	3817.2	2512.2	1737.2	99.7
43°	18279.7	17870.3	16636.0	14545.6	11952.3	8972.6	6123.7	4012.5	2572.5	1757.9	91.4
44°	18666.2	18252.7	17057.8	15013.1	12359.6	9290.5	6348.1	4147.6	2639.0	1785.0	85.2
45°	18541.5	18121.8	16966.4	15021.5	12486.4	9404.8	6443.7	4207.8	2674.3	1809.9	76.9
46°	17970.1	17675.0	16511.3	14630.8	12245.3	9282.2	6389.7	4162.1	2661.8	1809.9	68.6
47°	17168.0	16831.3	15723.8	13959.6	11661.4	8966.3	6171.5	4022.9	2585.0	1768.3	60.3
48°	16075.0	15788.2	14624.6	12893.6	10765.8	8278.5	5679.0	3796.4	2464.4	1687.3	51.9
49°	14703.5	14304.6	13222.0	11530.5	9598.0	7301.9	5032.8	3414.1	2271.2	1573.0	45.7
50°	13215.7	12723.3	11887.9	10165.3	8390.7	6260.8	4182.9	2886.3	1999.0	1423.4	41.6
51°	11759.1	11258.3	10462.4	8997.5	7102.4	5194.9	3374.6	2304.4	1645.7	1217.7	35.3
52°	10248.4	9828.7	8937.2	7786.1	6080.1	4209.9	2811.5	1949.1	1367.3	1022.3	29.1
53°	8744.0	8457.2	7609.4	6443.7	4885.2	3439.0	2296.1	1668.6	1192.7	874.8	22.9
54°	7237.5	6923.7	6279.5	5240.6	3937.7	2713.8	1947.0	1396.4	1034.8	762.6	20.8
55°	5660.3	5498.2	4903.9	3995.9	2983.9	2165.2	1579.2	1201.1	866.5	637.9	16.6
56°	4359.5	4176.7	3634.3	2898.7	2217.2	1695.6	1277.9	980.8	733.5	534.0	12.5
57°	2855.1	2668.1	2308.6	2023.9	1614.6	1236.4	976.6	773.0	596.4	442.6	10.4
58°	1687.3	1516.9	1460.8	1246.8	1076.4	839.5	721.0	575.6	440.5	349.1	6.2
59°	775.1	787.5	700.3	656.6	596.4	534.0	438.4	384.4	301.3	251.4	4.2
60°	450.9	426.0	415.6	372.0	330.4	293.0	263.9	232.7	189.1	162.1	2.1
62.5°	153.8	147.5	151.7	137.1	128.8	124.7	114.3	97.7	81.0	66.5	0.0
65°	41.6	41.6	39.5	37.4	35.3	33.2	31.2	27.0	24.9	20.8	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°	14.5	14.5	12.5	12.5	10.4	10.4	8.3	8.3	6.2	6.2	0.0
70°	8.3	8.3	8.3	6.2	6.2	6.2	4.2	4.2	4.2	2.1	0.0
72.5°	6.2	6.2	6.2	6.2	6.2	6.2	4.2	4.2	4.2	2.1	2.1
75°	6.2	6.2	6.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	2.1
77.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
80°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	2.1	4.2
82.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	4.2
85°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	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°	184.9	184.9	184.9	184.9	184.9	184.9
2.5°	191.2	182.9	172.5	166.2	164.2	162.1
5°	182.9	166.2	153.8	145.5	143.4	143.4
7.5°	164.2	145.5	133.0	128.8	126.8	126.8
10°	143.4	126.8	116.4	112.2	114.3	114.3
12.5°	120.5	106.0	101.8	101.8	103.9	106.0
15°	97.7	89.4	89.4	91.4	95.6	97.7
17.5°	81.0	76.9	79.0	83.1	87.3	91.4
20°	66.5	66.5	70.7	76.9	83.1	87.3
22.5°	56.1	58.2	64.4	70.7	79.0	83.1
25°	47.8	51.9	58.2	68.6	76.9	79.0
27.5°	41.6	47.8	56.1	66.5	74.8	79.0
30°	35.3	43.6	54.0	64.4	74.8	79.0
31°	33.2	41.6	51.9	64.4	74.8	79.0
32°	31.2	41.6	51.9	64.4	74.8	79.0
33°	29.1	39.5	51.9	62.3	74.8	79.0
34°	27.0	39.5	51.9	64.4	74.8	79.0
35°	24.9	37.4	49.9	62.3	72.7	79.0
36°	22.9	37.4	49.9	62.3	74.8	79.0
37°	20.8	37.4	49.9	62.3	72.7	79.0
38°	20.8	35.3	47.8	62.3	72.7	79.0
39°	18.7	33.2	47.8	62.3	72.7	79.0
40°	16.6	33.2	45.7	60.3	72.7	79.0
41°	14.5	31.2	45.7	60.3	72.7	79.0
42°	12.5	31.2	45.7	60.3	72.7	79.0
43°	10.4	29.1	43.6	60.3	72.7	79.0
44°	10.4	29.1	43.6	60.3	72.7	79.0
45°	8.3	27.0	41.6	60.3	72.7	79.0
46°	8.3	27.0	41.6	58.2	72.7	79.0
47°	6.2	27.0	41.6	58.2	72.7	79.0
48°	6.2	24.9	41.6	58.2	72.7	79.0
49°	4.2	24.9	41.6	58.2	72.7	79.0
50°	4.2	24.9	39.5	58.2	72.7	79.0
51°	4.2	24.9	39.5	58.2	72.7	79.0
52°	4.2	22.9	39.5	58.2	72.7	79.0
53°	4.2	22.9	39.5	58.2	72.7	79.0
54°	4.2	22.9	37.4	58.2	72.7	79.0
55°	4.2	20.8	37.4	56.1	72.7	76.9
56°	4.2	20.8	37.4	56.1	72.7	76.9
57°	4.2	20.8	35.3	56.1	72.7	76.9
58°	4.2	18.7	35.3	54.0	70.7	76.9
59°	4.2	18.7	33.2	54.0	70.7	74.8
60°	4.2	16.6	33.2	51.9	68.6	74.8
62.5°	4.2	14.5	29.1	49.9	66.5	70.7
65°	4.2	12.5	27.0	45.7	64.4	68.6



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	4.2	12.5	24.9	43.6	60.3	66.5
70°	4.2	12.5	22.9	39.5	58.2	60.3
72.5°	6.2	12.5	20.8	37.4	54.0	56.1
75°	8.3	12.5	18.7	33.2	49.9	51.9
77.5°	8.3	12.5	16.6	29.1	43.6	45.7
80°	8.3	10.4	14.5	22.9	35.3	37.4
82.5°	8.3	10.4	10.4	18.7	27.0	29.1
85°	6.2	8.3	8.3	10.4	18.7	20.8
87.5°	6.2	8.3	4.2	6.2	8.3	8.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)