

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: P1315451

Luminaire Tested: P3SQAS17R159740DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1315451
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: P3SQAS17R159740DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R15 optic, 4000K CCT AND, 97CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

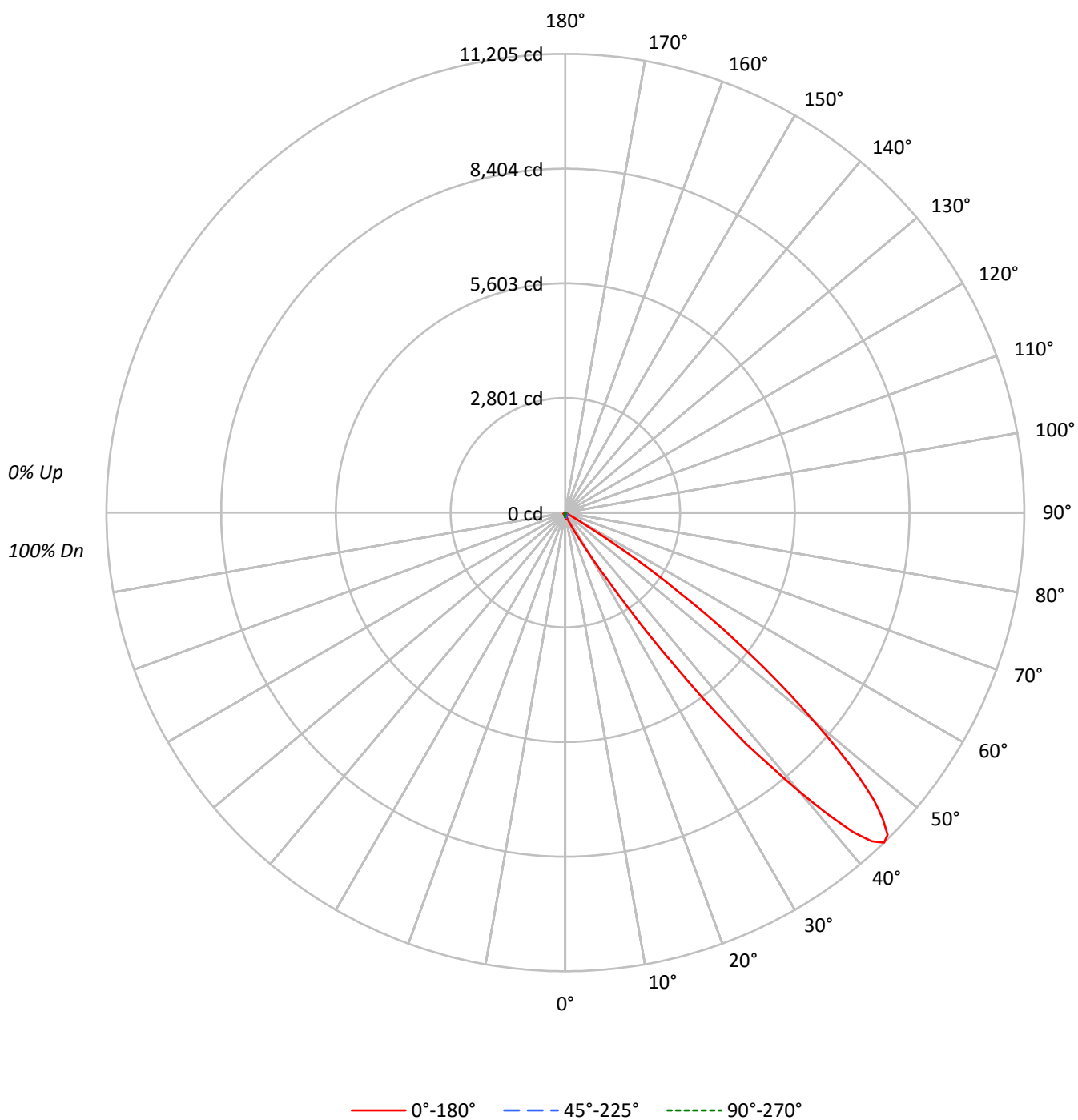
Lumens per Lamp: N/A
Luminaire Lumens: 1251.0 lumens
Efficiency: N/A
Efficacy: 59.0 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 21.2
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°	19117	19117	19117	19117	19117
5°	23719	21126	17253	15092	14885
10°	23346	18100	13308	11787	11997
15°	19345	12891	9557	9789	10448
20°	33613	10282	7313	8467	9604
25°	74909	12333	5929	7829	9007
30°	224002	15134	5210	7696	9426
35°	862278	17051	4731	7863	9966
40°	2001444	14861	4496	8139	10657
45°	2710867	11252	3946	8817	11545
50°	2125549	6671	4019	9351	12700
55°	1020227	3003	3753	10119	13872
60°	93241	413	3444	10747	15466
65°	10147	0	3056	11166	16790
70°	2518	0	3777	11934	18228
75°	2462	799	4991	13308	20761
80°	2479	2479	6149	13588	22315
85°	2371	2371	9880	12251	24700

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2710867 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.5	0.8
10°-20°	19.7	1.6
20°-30°	47.3	3.8
30°-40°	258.8	20.7
40°-50°	626.6	50.1
50°-60°	250.0	20.0
60°-70°	21.6	1.7
70°-80°	12.2	1.0
80°-90°	5.4	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°	76.5	6.1
0°-40°	335.2	26.8
0°-60°	1211.8	96.9
0°-90°	1251.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1251.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	111	111	111	111	111	
5°	137	122	100	87	86	13
15°	108	72	54	55	59	38
25°	394	65	31	41	47	238
35°	4101	81	22	37	47	2898
45°	11130	46	16	36	47	7852
55°	3398	10	12	34	46	3165
65°	25	0	8	27	41	64
75°	4	1	8	20	31	4
85°	1	1	5	6	12	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°	111.0	111.0	111.0	111.0	111.0	111.0	111.0	111.0	111.0	111.0	111.0
2.5°	124.7	124.7	126.0	124.7	124.7	124.7	124.7	123.5	123.5	123.5	119.7
5°	137.2	137.2	137.2	137.2	136.0	136.0	136.0	134.7	134.7	133.5	122.2
7.5°	142.2	142.2	141.0	141.0	139.7	139.7	138.5	137.2	136.0	134.7	117.3
10°	133.5	133.5	133.5	132.2	132.2	131.0	129.7	128.5	127.2	124.7	103.5
12.5°	118.5	118.5	119.7	118.5	117.3	116.0	113.5	112.3	111.0	108.5	86.1
15°	108.5	108.5	108.5	107.3	106.0	103.5	102.3	99.8	98.5	94.8	72.3
17.5°	138.5	138.5	137.2	134.7	129.7	126.0	119.7	114.8	108.5	101.0	62.4
20°	183.4	183.4	180.9	178.4	172.1	165.9	155.9	147.2	137.2	128.5	56.1
22.5°	265.7	269.4	261.9	253.2	244.5	229.5	215.8	202.1	184.6	169.6	57.4
25°	394.2	397.9	394.2	374.2	358.0	338.0	311.8	284.4	254.5	227.0	64.9
27.5°	638.7	641.1	634.9	586.3	560.1	507.7	461.5	416.6	366.7	316.8	71.1
30°	1126.4	1127.6	1087.7	990.4	904.3	789.6	692.3	598.7	520.2	440.3	76.1
31°	1483.1	1448.2	1363.4	1246.1	1108.9	954.2	820.8	699.8	582.5	496.5	77.3
32°	1883.5	1878.5	1737.6	1534.3	1350.9	1157.6	956.7	802.1	667.3	550.1	78.6
33°	2413.7	2416.1	2194.1	1954.6	1654.0	1394.6	1131.4	919.3	757.2	613.7	81.1
34°	3241.9	3047.3	2786.6	2462.3	2053.2	1662.7	1321.0	1055.3	838.2	674.8	81.1
35°	4101.3	3905.5	3618.6	3127.1	2565.8	2019.5	1546.7	1201.2	935.5	740.9	81.1
36°	5064.3	4898.4	4464.3	3836.9	3120.9	2356.3	1786.2	1369.6	1031.6	800.8	79.8
37°	6104.6	5861.4	5379.9	4695.1	3737.1	2830.3	2078.1	1536.8	1127.6	865.7	77.3
38°	7161.1	6941.6	6334.1	5504.6	4473.0	3330.5	2370.0	1697.7	1216.2	914.3	73.6
39°	7961.9	7842.2	7239.7	6312.9	5060.6	3804.5	2670.6	1869.8	1309.7	963.0	69.9
40°	8902.4	8709.1	8137.8	6991.5	5755.3	4287.2	2965.0	2022.0	1387.1	1001.6	66.1
41°	9760.6	9516.1	8795.2	7687.5	6311.7	4721.3	3244.4	2179.1	1449.4	1024.1	63.6
42°	10496.6	10212.2	9458.8	8283.7	6776.9	5068.0	3467.7	2291.4	1508.1	1042.8	59.9
43°	10973.1	10727.3	9986.4	8731.6	7174.8	5386.1	3676.0	2408.7	1544.2	1055.3	54.9
44°	11205.1	10956.9	10239.6	9012.2	7419.3	5577.0	3810.7	2489.7	1584.2	1071.5	51.1
45°	11130.2	10878.3	10184.7	9017.2	7495.4	5645.6	3868.1	2525.9	1605.4	1086.5	46.2
46°	10787.2	10610.1	9911.6	8782.7	7350.7	5572.0	3835.6	2498.5	1597.9	1086.5	41.2
47°	10305.7	10103.7	9438.8	8379.8	7000.2	5382.4	3704.7	2414.9	1551.7	1061.5	36.2
48°	9649.6	9477.5	8779.0	7739.9	6462.6	4969.5	3409.0	2278.9	1479.4	1012.9	31.2
49°	8826.4	8586.9	7937.0	6921.6	5761.6	4383.2	3021.1	2049.4	1363.4	944.3	27.4
50°	7933.2	7637.6	7136.2	6102.1	5036.9	3758.3	2510.9	1732.6	1200.0	854.4	24.9
51°	7058.8	6758.2	6280.5	5401.1	4263.5	3118.4	2025.7	1383.3	987.9	731.0	21.2
52°	6152.0	5900.0	5364.9	4673.9	3649.8	2527.2	1687.7	1170.0	820.8	613.7	17.5
53°	5248.9	5076.8	4567.8	3868.1	2932.6	2064.4	1378.3	1001.6	716.0	525.1	13.7
54°	4344.6	4156.2	3769.5	3145.9	2363.8	1629.1	1168.8	838.2	621.2	457.8	12.5
55°	3397.8	3300.5	2943.8	2398.7	1791.2	1299.8	948.0	721.0	520.2	382.9	10.0
56°	2617.0	2507.2	2181.6	1740.1	1330.9	1017.8	767.1	588.8	440.3	320.6	7.5
57°	1713.9	1601.6	1385.8	1214.9	969.2	742.2	586.3	464.0	358.0	265.7	6.2
58°	1012.9	910.6	876.9	748.4	646.1	503.9	432.8	345.5	264.4	209.6	3.7
59°	465.3	472.8	420.4	394.2	358.0	320.6	263.2	230.8	180.9	150.9	2.5
60°	270.7	255.7	249.5	223.3	198.3	175.9	158.4	139.7	113.5	97.3	1.2
62.5°	92.3	88.6	91.1	82.3	77.3	74.8	68.6	58.6	48.6	39.9	0.0
65°	24.9	24.9	23.7	22.5	21.2	20.0	18.7	16.2	15.0	12.5	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°	8.7	8.7	7.5	7.5	6.2	6.2	5.0	5.0	3.7	3.7	0.0
70°	5.0	5.0	5.0	3.7	3.7	3.7	2.5	2.5	2.5	1.2	0.0
72.5°	3.7	3.7	3.7	3.7	3.7	3.7	2.5	2.5	2.5	1.2	1.2
75°	3.7	3.7	3.7	2.5	2.5	2.5	2.5	2.5	2.5	2.5	1.2
77.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
80°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	1.2	2.5
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.5
85°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
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°	111.0	111.0	111.0	111.0	111.0	111.0
2.5°	114.8	109.8	103.5	99.8	98.5	97.3
5°	109.8	99.8	92.3	87.3	86.1	86.1
7.5°	98.5	87.3	79.8	77.3	76.1	76.1
10°	86.1	76.1	69.9	67.4	68.6	68.6
12.5°	72.3	63.6	61.1	61.1	62.4	63.6
15°	58.6	53.6	53.6	54.9	57.4	58.6
17.5°	48.6	46.2	47.4	49.9	52.4	54.9
20°	39.9	39.9	42.4	46.2	49.9	52.4
22.5°	33.7	34.9	38.7	42.4	47.4	49.9
25°	28.7	31.2	34.9	41.2	46.2	47.4
27.5°	24.9	28.7	33.7	39.9	44.9	47.4
30°	21.2	26.2	32.4	38.7	44.9	47.4
31°	20.0	24.9	31.2	38.7	44.9	47.4
32°	18.7	24.9	31.2	38.7	44.9	47.4
33°	17.5	23.7	31.2	37.4	44.9	47.4
34°	16.2	23.7	31.2	38.7	44.9	47.4
35°	15.0	22.5	29.9	37.4	43.7	47.4
36°	13.7	22.5	29.9	37.4	44.9	47.4
37°	12.5	22.5	29.9	37.4	43.7	47.4
38°	12.5	21.2	28.7	37.4	43.7	47.4
39°	11.2	20.0	28.7	37.4	43.7	47.4
40°	10.0	20.0	27.4	36.2	43.7	47.4
41°	8.7	18.7	27.4	36.2	43.7	47.4
42°	7.5	18.7	27.4	36.2	43.7	47.4
43°	6.2	17.5	26.2	36.2	43.7	47.4
44°	6.2	17.5	26.2	36.2	43.7	47.4
45°	5.0	16.2	24.9	36.2	43.7	47.4
46°	5.0	16.2	24.9	34.9	43.7	47.4
47°	3.7	16.2	24.9	34.9	43.7	47.4
48°	3.7	15.0	24.9	34.9	43.7	47.4
49°	2.5	15.0	24.9	34.9	43.7	47.4
50°	2.5	15.0	23.7	34.9	43.7	47.4
51°	2.5	15.0	23.7	34.9	43.7	47.4
52°	2.5	13.7	23.7	34.9	43.7	47.4
53°	2.5	13.7	23.7	34.9	43.7	47.4
54°	2.5	13.7	22.5	34.9	43.7	47.4
55°	2.5	12.5	22.5	33.7	43.7	46.2
56°	2.5	12.5	22.5	33.7	43.7	46.2
57°	2.5	12.5	21.2	33.7	43.7	46.2
58°	2.5	11.2	21.2	32.4	42.4	46.2
59°	2.5	11.2	20.0	32.4	42.4	44.9
60°	2.5	10.0	20.0	31.2	41.2	44.9
62.5°	2.5	8.7	17.5	29.9	39.9	42.4
65°	2.5	7.5	16.2	27.4	38.7	41.2



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.5	7.5	15.0	26.2	36.2	39.9
70°	2.5	7.5	13.7	23.7	34.9	36.2
72.5°	3.7	7.5	12.5	22.5	32.4	33.7
75°	5.0	7.5	11.2	20.0	29.9	31.2
77.5°	5.0	7.5	10.0	17.5	26.2	27.4
80°	5.0	6.2	8.7	13.7	21.2	22.5
82.5°	5.0	6.2	6.2	11.2	16.2	17.5
85°	3.7	5.0	5.0	6.2	11.2	12.5
87.5°	3.7	5.0	2.5	3.7	5.0	5.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)