

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: P1310831

Luminaire Tested: P3SQAS02R259050DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1310831
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-75)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS02R259050DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 5000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

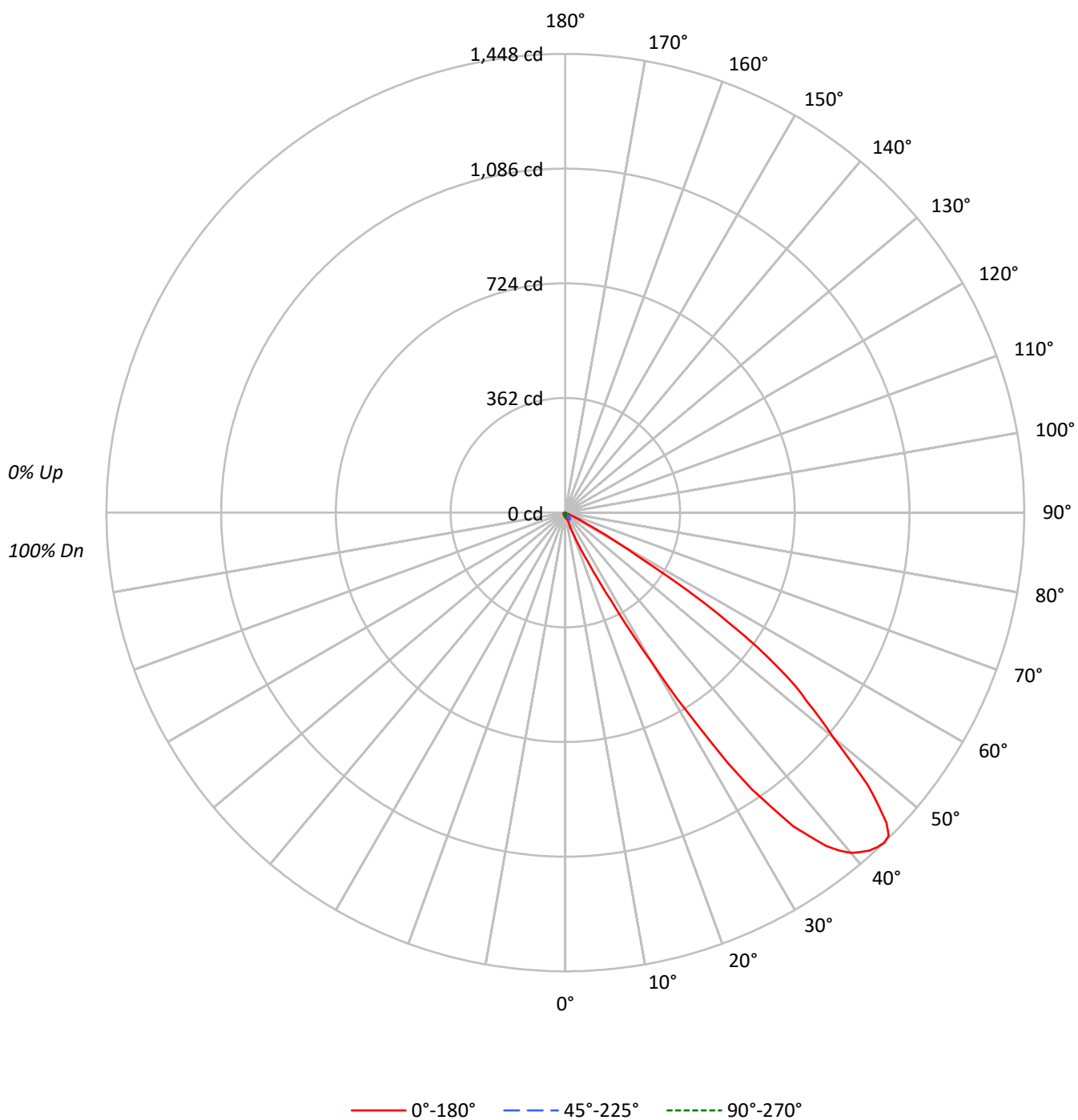
Lumens per Lamp: N/A
Luminaire Lumens: 302.0 lumens
Efficiency: N/A
Efficacy: 83.9 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 3.6
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	64	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	39	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	39	32	46	38	32	44	37	32	43	36	32	29		
8	57	43	34	27	55	42	33	27	40	33	27	39	32	27	38	32	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	20	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2652	2652	2652	2652	2652
5°	3025	2887	2576	2299	2247
10°	3025	2746	2186	1906	1906
15°	3370	2371	1712	1605	1712
20°	11876	2346	1320	1356	1503
25°	34186	2983	1064	1254	1463
30°	109078	4594	855	1213	1472
35°	238922	5424	736	1177	1514
40°	315154	4901	607	1192	1619
45°	351456	3434	585	1291	1754
50°	295849	1768	563	1340	1929
55°	221202	721	570	1501	2162
60°	68476	172	551	1653	2377
65°	5868	0	652	1752	2608
70°	403	151	655	2014	2921
75°	333	200	865	2129	3327
80°	298	298	1289	2380	3967
85°	593	593	2174	2569	4150

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 351456 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.4	0.5
10°-20°	3.6	1.2
20°-30°	16.7	5.5
30°-40°	80.4	26.6
40°-50°	126.1	41.7
50°-60°	64.6	21.4
60°-70°	6.1	2.0
70°-80°	2.1	0.7
80°-90°	1.0	0.3
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°	21.6	7.2
0°-40°	102.1	33.8
0°-60°	292.8	97.0
0°-90°	302.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	302.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	15	15	15	15	15	
5°	18	17	15	13	13	2
15°	19	13	10	9	10	8
25°	180	16	6	7	8	112
35°	1136	26	4	6	7	690
45°	1443	14	2	5	7	1056
55°	737	2	2	5	7	613
65°	14	0	2	4	6	45
75°	0	0	1	3	5	1
85°	0	0	1	1	2	0
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°	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4
2.5°	16.7	16.7	16.7	16.7	16.7	16.7	16.5	16.5	16.7	16.5	16.5
5°	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.3	17.3	17.3	16.7
7.5°	17.8	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.3	17.3	16.5
10°	17.3	17.3	17.3	17.3	17.0	17.0	17.0	16.7	16.7	16.7	15.7
12.5°	17.3	17.3	17.3	17.3	17.0	17.0	16.7	16.7	16.5	16.2	14.4
15°	18.9	18.9	18.9	18.6	18.3	18.1	17.8	17.5	17.3	16.7	13.3
17.5°	27.6	26.8	26.6	25.5	24.2	22.9	21.8	20.7	19.7	18.9	12.8
20°	64.8	64.6	63.2	60.1	56.6	52.6	48.6	44.1	37.7	33.5	12.8
22.5°	112.4	110.8	108.4	106.0	99.9	92.7	85.3	76.8	68.6	59.8	13.6
25°	179.9	183.6	175.7	169.3	158.7	145.6	131.5	119.9	105.0	91.2	15.7
27.5°	312.8	315.2	299.5	278.8	254.1	226.7	200.1	180.2	155.2	132.3	19.7
30°	548.5	550.9	524.6	480.5	429.5	384.5	323.7	270.3	221.1	183.1	23.1
31°	684.6	666.0	635.4	592.6	528.1	460.3	387.2	322.6	260.4	210.5	24.2
32°	802.8	801.2	765.6	700.8	635.9	552.2	461.6	377.4	301.1	238.1	25.0
33°	942.4	931.7	881.5	820.4	734.5	650.3	533.4	437.2	342.8	268.9	25.5
34°	1054.2	1025.5	1004.8	934.9	844.3	736.9	611.8	500.4	394.9	298.7	25.8
35°	1136.4	1130.2	1089.9	1024.7	932.5	822.8	696.3	566.1	438.5	333.3	25.8
36°	1223.3	1204.4	1165.1	1106.1	1016.2	902.8	760.9	622.9	489.3	364.3	25.5
37°	1277.7	1266.6	1227.5	1166.7	1078.7	970.3	833.1	683.0	529.6	395.4	25.0
38°	1333.8	1311.2	1272.7	1214.5	1128.1	1026.3	885.5	729.2	566.9	422.8	24.2
39°	1372.6	1349.2	1309.9	1252.0	1167.5	1066.5	926.9	768.6	599.3	443.3	23.1
40°	1401.8	1379.3	1339.4	1279.9	1196.4	1098.1	961.5	803.4	626.4	461.1	21.8
41°	1419.9	1398.9	1359.3	1300.1	1216.4	1116.2	984.1	826.0	644.7	473.0	20.5
42°	1435.1	1413.5	1373.1	1312.6	1228.6	1131.6	997.9	840.3	657.2	479.2	19.4
43°	1443.6	1422.0	1382.7	1320.8	1236.0	1138.8	1005.3	847.0	661.5	478.4	17.5
44°	1448.4	1426.0	1386.4	1324.5	1239.2	1140.6	1005.9	845.6	658.5	472.0	15.9
45°	1443.0	1421.0	1382.7	1320.8	1233.6	1134.8	1000.6	838.5	647.4	459.5	14.1
46°	1408.5	1391.5	1356.4	1299.5	1216.1	1119.9	987.0	824.6	630.1	444.1	12.0
47°	1347.6	1334.1	1300.1	1257.8	1182.3	1092.5	962.0	798.3	605.9	421.0	9.6
48°	1284.1	1264.2	1232.6	1189.2	1125.5	1043.3	920.8	759.8	569.2	390.7	8.5
49°	1190.3	1178.6	1150.7	1102.3	1049.5	977.2	862.6	710.4	524.3	357.7	7.4
50°	1104.2	1096.2	1057.2	1021.6	965.5	898.0	783.7	645.2	468.5	316.8	6.6
51°	1037.0	1027.4	999.2	954.9	895.1	816.7	709.0	560.7	404.5	268.1	5.3
52°	966.8	961.5	936.5	890.8	832.1	753.9	636.5	489.0	342.3	226.7	4.3
53°	909.4	901.7	871.1	830.5	767.0	686.2	557.8	422.3	289.9	190.5	3.7
54°	825.7	822.5	802.8	760.3	691.5	603.5	486.6	355.6	241.8	161.6	3.2
55°	736.7	726.0	706.1	672.4	609.1	527.0	404.2	294.7	195.6	136.1	2.4
56°	628.2	627.7	592.1	563.9	507.9	420.7	322.9	230.1	158.9	113.5	2.1
57°	524.6	507.9	473.6	445.7	385.3	319.2	239.7	172.5	124.4	92.0	1.6
58°	388.0	379.2	370.2	329.3	273.5	226.2	171.1	121.2	92.0	70.2	1.1
59°	263.4	263.1	252.5	221.4	189.2	140.8	106.8	82.4	63.2	51.6	0.8
60°	198.8	194.0	172.7	152.3	119.1	89.0	63.2	48.6	39.3	33.2	0.5
62.5°	69.6	72.3	63.5	52.6	40.1	33.0	25.2	20.5	16.7	13.6	0.0
65°	14.4	15.7	13.6	12.8	10.1	8.8	7.7	6.6	5.6	4.8	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°	1.9	1.6	1.6	1.6	1.3	1.3	1.3	1.3	1.1	1.1	0.3
70°	0.8	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.3
72.5°	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3
75°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3
77.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3
80°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
82.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5
85°	0.3	0.3	0.3	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
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°	15.4	15.4	15.4	15.4	15.4	15.4
2.5°	16.2	15.7	14.9	14.6	14.4	14.4
5°	15.9	14.9	14.1	13.3	13.0	13.0
7.5°	15.1	13.8	12.8	12.2	12.0	11.7
10°	14.4	12.5	11.4	10.9	10.9	10.9
12.5°	12.8	11.2	10.1	9.8	10.1	10.1
15°	11.4	9.6	9.0	9.0	9.3	9.6
17.5°	9.8	8.5	8.0	8.2	8.5	8.8
20°	8.8	7.2	7.2	7.4	8.2	8.2
22.5°	7.7	6.4	6.4	7.2	7.7	8.0
25°	6.9	5.6	5.8	6.6	7.4	7.7
27.5°	5.8	4.8	5.3	6.4	7.2	7.4
30°	5.0	4.3	5.0	6.1	6.9	7.4
31°	4.8	4.0	5.0	5.8	6.9	7.4
32°	4.3	4.0	4.8	5.8	6.9	7.2
33°	4.0	3.7	4.8	5.8	6.9	7.2
34°	3.7	3.5	4.5	5.8	6.9	7.2
35°	3.2	3.5	4.5	5.6	6.6	7.2
36°	2.9	3.2	4.5	5.6	6.6	7.2
37°	2.7	3.2	4.3	5.6	6.6	7.2
38°	2.4	2.9	4.3	5.6	6.6	7.2
39°	2.1	2.9	4.0	5.6	6.6	7.2
40°	1.9	2.7	4.0	5.3	6.6	7.2
41°	1.9	2.7	4.0	5.3	6.6	7.2
42°	1.6	2.7	4.0	5.3	6.6	7.2
43°	1.3	2.4	4.0	5.3	6.6	7.2
44°	1.1	2.4	3.7	5.3	6.6	7.2
45°	1.1	2.4	3.7	5.3	6.6	7.2
46°	0.8	2.1	3.7	5.3	6.6	7.2
47°	0.5	2.1	3.7	5.0	6.6	7.2
48°	0.5	2.1	3.7	5.0	6.6	7.2
49°	0.5	2.1	3.5	5.0	6.6	7.2
50°	0.5	2.1	3.5	5.0	6.6	7.2
51°	0.3	1.9	3.5	5.0	6.6	7.2
52°	0.3	1.9	3.5	5.0	6.6	7.4
53°	0.3	1.9	3.5	5.0	6.6	7.2
54°	0.3	1.9	3.2	5.0	6.6	7.2
55°	0.3	1.9	3.2	5.0	6.6	7.2
56°	0.3	1.6	3.2	4.8	6.6	7.2
57°	0.5	1.6	3.2	4.8	6.6	6.9
58°	0.5	1.6	3.2	4.8	6.4	6.9
59°	0.5	1.6	3.2	4.8	6.4	6.9
60°	0.5	1.6	2.9	4.8	6.4	6.9
62.5°	0.5	1.6	2.9	4.5	6.1	6.6
65°	0.5	1.6	2.7	4.3	6.1	6.4



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.5	1.3	2.7	4.0	5.8	6.1
70°	0.8	1.3	2.4	4.0	5.6	5.8
72.5°	0.8	1.3	2.4	3.5	5.0	5.6
75°	0.8	1.3	2.1	3.2	4.8	5.0
77.5°	0.8	1.3	1.9	2.9	4.3	4.5
80°	1.1	1.3	1.6	2.4	3.7	4.0
82.5°	1.1	1.3	1.3	1.9	2.9	3.2
85°	0.8	1.1	1.1	1.3	1.9	2.1
87.5°	0.8	1.1	0.8	0.5	1.1	1.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)