

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: P1315405

Luminaire Tested: P3SQAS13R509740DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1315405
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-79)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS13R509740DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R50 optic, 4000K CCT AND, 97CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

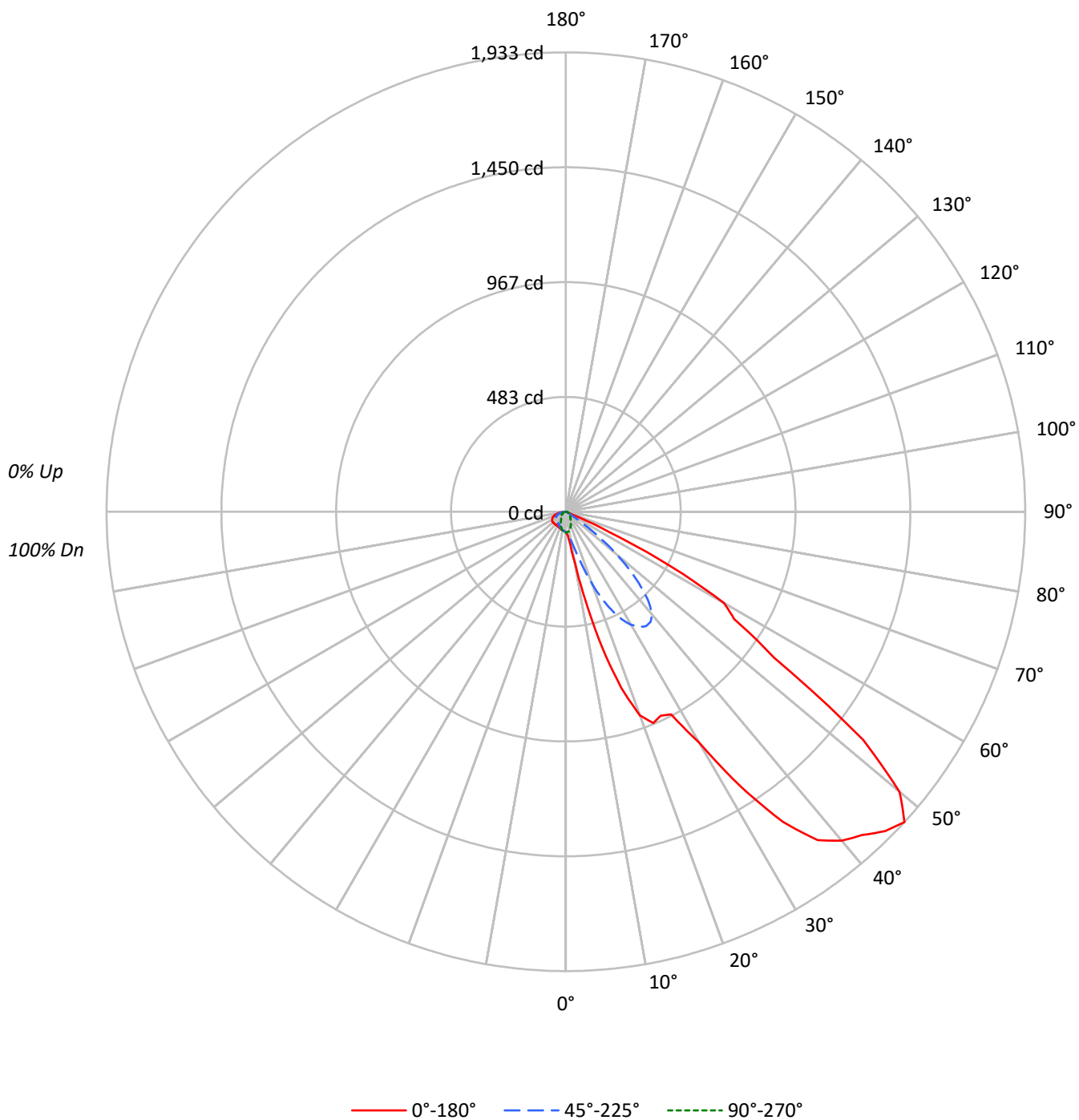
Lumens per Lamp: N/A
Luminaire Lumens: 1090.0 lumens
Efficiency: N/A
Efficacy: 74.7 lumens/watt
Spacing Criteria (0/90/45): 3.58 / 0.82 / 1.91
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.6
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	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86		
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73		
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61		
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51		
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43		
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	50	43	39	37		
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31		
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27		
9	54	40	31	26	53	39	31	26	38	31	25	37	30	25	36	30	25	23		
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22	20		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	14914	14914	14914	14914	14914
5°	17738	16597	14816	14159	14003
10°	38194	20583	14165	13658	13833
15°	105749	33734	12766	13087	13604
20°	167202	59180	11052	12591	13287
25°	179803	86956	9482	12162	13416
30°	223167	109157	8233	11992	13861
35°	334920	123519	7127	12068	14654
40°	406184	127001	6340	12478	15445
45°	462739	108920	6186	13298	16976
50°	491144	75181	6296	14388	18916
55°	320859	30236	6215	15554	20928
60°	264603	5201	6166	16878	23009
65°	79791	2690	5746	18012	25307
70°	3323	2820	5690	18480	27494
75°	3127	3127	5656	18765	30077
80°	2777	2777	5554	18646	30845
85°	1778	3754	7509	18575	29838

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 492713 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.0	0.8
10°-20°	51.6	4.7
20°-30°	132.7	12.2
30°-40°	238.3	21.9
40°-50°	318.3	29.2
50°-60°	242.5	22.2
60°-70°	73.6	6.8
70°-80°	17.6	1.6
80°-90°	6.4	0.6
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°	193.3	17.7
0°-40°	431.6	39.6
0°-60°	992.5	91.1
0°-90°	1090.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1090.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	87	87	87	87	87	
5°	103	96	86	82	81	13
15°	593	189	72	73	76	175
25°	946	458	50	64	71	451
35°	1593	588	34	57	70	978
45°	1900	447	25	55	70	1453
55°	1069	101	21	52	70	1063
65°	196	7	14	44	62	271
75°	5	5	8	28	45	5
85°	1	2	4	9	15	1
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°	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
2.5°	92.3	92.3	92.3	92.3	92.3	92.3	91.3	91.3	91.3	89.4	87.6
5°	102.6	103.6	102.6	102.6	100.7	100.7	98.9	98.9	96.0	90.4	85.7
7.5°	134.6	133.7	132.7	129.0	126.2	119.6	116.7	112.0	103.6	90.4	83.8
10°	218.4	212.8	209.0	200.5	182.6	171.3	156.3	141.2	117.7	90.4	81.0
12.5°	379.4	378.5	367.2	338.9	313.5	278.7	242.0	205.2	145.0	88.5	77.2
15°	593.1	584.7	568.7	535.7	490.5	435.9	370.0	305.0	189.2	85.7	71.6
17.5°	775.8	765.4	753.2	720.2	668.4	599.7	520.6	431.2	249.5	81.9	65.9
20°	912.3	905.7	895.3	869.0	820.0	757.9	669.4	561.1	322.9	77.2	60.3
22.5°	962.2	961.2	963.1	953.7	929.2	880.3	795.5	682.6	395.4	71.6	54.6
25°	946.2	945.2	957.5	969.7	975.4	955.6	890.6	780.5	457.6	66.8	49.9
27.5°	961.2	958.4	952.8	954.7	970.7	982.0	951.8	855.8	511.2	60.3	45.2
30°	1122.2	1106.2	1080.8	1037.5	1005.5	1002.7	989.5	915.1	548.9	53.7	41.4
32.5°	1373.6	1353.8	1307.7	1227.7	1151.4	1093.1	1051.6	965.0	575.2	47.1	36.7
35°	1593.0	1578.9	1525.2	1446.1	1336.9	1227.7	1152.4	1038.4	587.5	41.4	33.9
37.5°	1741.7	1736.1	1683.4	1598.6	1487.5	1358.5	1258.8	1113.8	584.7	34.8	31.1
40°	1806.7	1789.7	1745.5	1673.9	1561.9	1446.1	1340.7	1161.8	564.9	28.2	28.2
42.5°	1845.3	1826.5	1778.4	1710.7	1600.5	1477.2	1350.1	1141.1	517.8	22.6	27.3
45°	1899.9	1880.1	1817.0	1744.6	1633.5	1490.4	1313.4	1067.6	447.2	16.9	25.4
47.5°	1932.8	1919.7	1872.6	1800.1	1665.5	1471.5	1228.6	998.9	369.1	13.2	24.5
50°	1833.1	1819.9	1785.0	1735.1	1644.8	1408.4	1154.2	887.8	280.6	10.4	23.5
52.5°	1577.9	1589.2	1595.8	1609.9	1544.0	1267.2	1043.2	799.3	189.2	8.5	21.7
55°	1068.6	1085.5	1104.4	1160.8	1238.0	1127.9	926.4	691.0	100.7	8.5	20.7
57.5°	839.8	834.1	828.5	824.7	885.0	930.2	814.4	552.6	43.3	8.5	18.8
60°	768.2	751.3	740.0	742.8	773.0	755.1	644.9	360.6	15.1	8.5	17.9
62.5°	503.7	516.9	542.3	585.6	564.9	484.9	374.7	143.1	7.5	8.5	16.0
65°	195.8	189.2	195.8	208.1	179.8	133.7	83.8	25.4	6.6	7.5	14.1
67.5°	26.4	23.5	17.9	11.3	10.4	9.4	7.5	6.6	6.6	7.5	13.2
70°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	5.6	5.6	6.6	11.3
72.5°	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	6.6	9.4
75°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	5.6	8.5
77.5°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	4.7	6.6
80°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	3.8	5.6
82.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.8	2.8	3.8	4.7
85°	0.9	1.9	0.9	1.9	1.9	1.9	1.9	1.9	1.9	2.8	3.8
87.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.9	2.8	2.8
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°	86.6	86.6	86.6	86.6
2.5°	85.7	83.8	83.8	83.8
5°	83.8	81.9	81.9	81.0
7.5°	81.0	80.0	80.0	80.0
10°	79.1	78.1	79.1	79.1
12.5°	75.3	76.3	77.2	77.2
15°	71.6	73.4	75.3	76.3
17.5°	67.8	71.6	73.4	74.4
20°	64.0	68.7	71.6	72.5
22.5°	61.2	65.9	69.7	71.6
25°	57.4	64.0	68.7	70.6
27.5°	53.7	61.2	66.8	69.7
30°	50.8	60.3	66.8	69.7
32.5°	48.0	58.4	65.9	68.7
35°	46.1	57.4	65.9	69.7
37.5°	44.2	56.5	65.9	68.7
40°	43.3	55.5	65.9	68.7
42.5°	42.4	55.5	65.9	69.7
45°	40.5	54.6	65.9	69.7
47.5°	39.5	54.6	65.9	69.7
50°	38.6	53.7	65.9	70.6
52.5°	37.7	52.7	65.9	70.6
55°	35.8	51.8	65.0	69.7
57.5°	34.8	50.8	64.0	67.8
60°	33.0	49.0	62.1	66.8
62.5°	31.1	47.1	60.3	64.0
65°	28.2	44.2	57.4	62.1
67.5°	25.4	40.5	54.6	59.3
70°	22.6	36.7	50.8	54.6
72.5°	19.8	33.0	47.1	49.9
75°	16.9	28.2	41.4	45.2
77.5°	14.1	24.5	34.8	37.7
80°	10.4	18.8	28.2	31.1
82.5°	8.5	14.1	20.7	22.6
85°	5.6	9.4	13.2	15.1
87.5°	2.8	4.7	6.6	7.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)