

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: P1312321

Luminaire Tested: P3SQAS09R509727DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1312321
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: P3SQAS09R509727DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R50 optic, 2700K CCT AND, 97CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

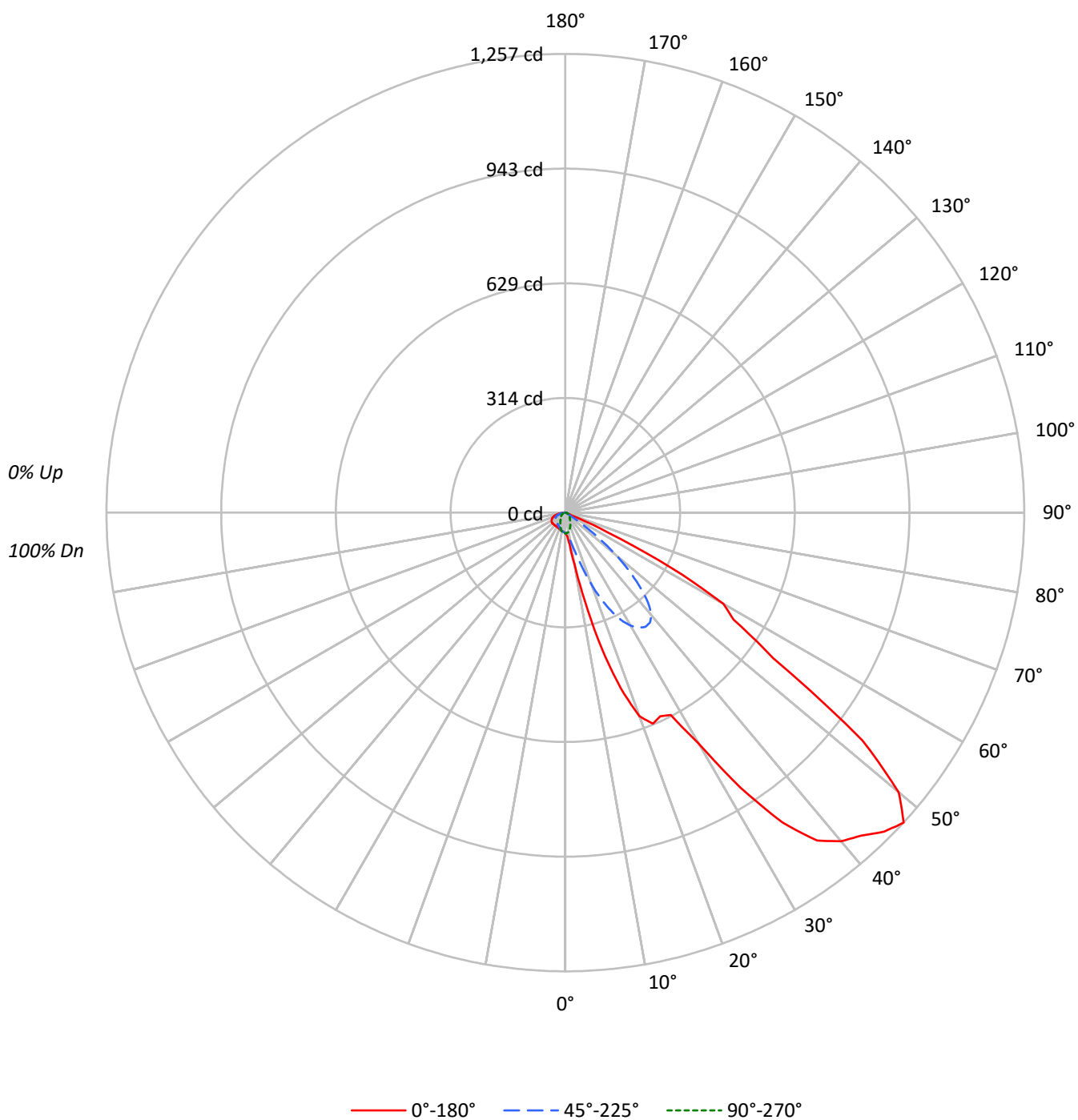
Lumens per Lamp: N/A
Luminaire Lumens: 709.0 lumens
Efficiency: N/A
Efficacy: 63.9 lumens/watt
Spacing Criteria (0/90/45): 3.58 / 0.82 / 1.91
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11.1
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

TEST NUMBER: P1312321

CATALOG NUMBER: P3SQAS09R509727DE010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1312321

CATALOG NUMBER: P3SQAS09R509727DE010 E3SQCA451MMS

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
RCR																					
0	119	119	119	119		116	116	116	116		111	111	111		106	106	106		102	102	102
1	110	106	102	98		107	103	100	97		99	96	94		95	93	91		92	90	88
2	100	93	86	81		98	91	85	80		87	82	78		84	80	76		81	78	75
3	91	81	73	67		89	80	72	66		77	70	65		74	69	64		71	67	63
4	83	71	63	56		81	70	62	56		67	60	55		65	59	54		63	58	53
5	76	63	54	47		74	62	53	47		60	52	46		58	51	46		56	50	45
6	69	56	47	40		67	55	46	40		53	45	39		51	44	39		50	43	39
7	63	50	41	34		62	49	40	34		47	39	34		46	39	34		44	38	33
8	58	44	36	30		57	44	35	29		42	35	29		41	34	29		40	34	29
9	54	40	31	26		53	39	31	26		38	31	25		37	30	25		36	30	25
10	50	36	28	23		49	36	28	22		35	27	22		34	27	22		33	27	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	9696	9696	9696	9696	9696
5°	11548	10805	9629	9215	9111
10°	24850	13378	9216	8884	8989
15°	68787	21948	8291	8523	8844
20°	108756	38506	7184	8192	8651
25°	116961	56552	6176	7905	8722
30°	145172	70995	5349	7796	9009
35°	217856	80335	4625	7863	9524
40°	264209	82599	4137	8116	10049
45°	300991	70851	4019	8646	11033
50°	319454	48897	4099	9351	12298
55°	208711	19667	4054	10119	13602
60°	172119	3376	3996	10953	14983
65°	51917	1752	3749	11736	16464
70°	2165	1863	3676	12035	17876
75°	2063	2063	3660	12244	19563
80°	1785	1785	3670	12100	20034
85°	1186	2371	4742	12054	19365

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 320488 cd/sqm

TEST NUMBER: P1312321

CATALOG NUMBER: P3SQAS09R509727DE010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.9	0.8
10°-20°	33.6	4.7
20°-30°	86.3	12.2
30°-40°	155.0	21.9
40°-50°	207.1	29.2
50°-60°	157.7	22.2
60°-70°	47.9	6.8
70°-80°	11.4	1.6
80°-90°	4.1	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°	125.7	17.7
0°-40°	280.8	39.6
0°-60°	645.6	91.1
0°-90°	709.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	709.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	56	56	56	56	56	
5°	67	62	56	53	53	9
15°	386	123	46	48	50	114
25°	616	298	32	42	46	294
35°	1036	382	22	37	45	636
45°	1236	291	16	36	45	945
55°	695	66	14	34	45	692
65°	127	4	9	29	40	176
75°	3	3	6	18	29	3
85°	1	1	2	6	10	1
90°	0	0	0	0	0	

TEST NUMBER: P1312321

CATALOG NUMBER: P3SQAS09R509727DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3
2.5°	60.0	60.0	60.0	60.0	60.0	60.0	59.4	59.4	59.4	58.2	57.0
5°	66.8	67.4	66.8	66.8	65.5	65.5	64.3	64.3	62.5	58.8	55.7
7.5°	87.6	87.0	86.3	83.9	82.1	77.8	75.9	72.9	67.4	58.8	54.5
10°	142.1	138.4	136.0	130.4	118.8	111.5	101.7	91.9	76.5	58.8	52.7
12.5°	246.8	246.2	238.8	220.5	203.9	181.3	157.4	133.5	94.3	57.6	50.2
15°	385.8	380.3	369.9	348.5	319.1	283.5	240.7	198.4	123.1	55.7	46.5
17.5°	504.6	497.9	489.9	468.5	434.8	390.1	338.7	280.5	162.3	53.3	42.9
20°	593.4	589.1	582.4	565.2	533.4	493.0	435.4	365.0	210.1	50.2	39.2
22.5°	625.9	625.3	626.5	620.4	604.4	572.6	517.5	444.0	257.2	46.5	35.5
25°	615.5	614.8	622.8	630.8	634.4	621.6	579.3	507.7	297.6	43.5	32.5
27.5°	625.3	623.4	619.7	621.0	631.4	638.7	619.1	556.7	332.5	39.2	29.4
30°	730.0	719.6	703.0	674.9	654.0	652.2	643.6	595.2	357.0	34.9	26.9
32.5°	893.5	880.6	850.6	798.6	749.0	711.0	684.0	627.7	374.2	30.6	23.9
35°	1036.2	1027.0	992.1	940.6	869.6	798.6	749.6	675.5	382.1	26.9	22.0
37.5°	1132.9	1129.2	1095.0	1039.8	967.6	883.7	818.8	724.5	380.3	22.7	20.2
40°	1175.2	1164.2	1135.4	1088.8	1016.0	940.6	872.0	755.7	367.4	18.4	18.4
42.5°	1200.3	1188.0	1156.8	1112.7	1041.1	960.8	878.2	742.2	336.8	14.7	17.8
45°	1235.8	1222.9	1181.9	1134.8	1062.5	969.4	854.3	694.5	290.9	11.0	16.5
47.5°	1257.2	1248.7	1218.0	1170.9	1083.3	957.2	799.2	649.7	240.1	8.6	15.9
50°	1192.3	1183.8	1161.1	1128.6	1069.8	916.1	750.8	577.5	182.5	6.7	15.3
52.5°	1026.4	1033.7	1038.0	1047.2	1004.3	824.3	678.5	519.9	123.1	5.5	14.1
55°	695.1	706.1	718.3	755.1	805.3	733.6	602.6	449.5	65.5	5.5	13.5
57.5°	546.3	542.6	538.9	536.5	575.6	605.0	529.7	359.5	28.2	5.5	12.2
60°	499.7	488.7	481.3	483.2	502.8	491.1	419.5	234.5	9.8	5.5	11.6
62.5°	327.6	336.2	352.7	380.9	367.4	315.4	243.7	93.1	4.9	5.5	10.4
65°	127.4	123.1	127.4	135.3	117.0	87.0	54.5	16.5	4.3	4.9	9.2
67.5°	17.1	15.3	11.6	7.3	6.7	6.1	4.9	4.3	4.3	4.9	8.6
70°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	3.7	3.7	4.3	7.3
72.5°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	4.3	6.1
75°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.7	5.5
77.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	3.1	4.3
80°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.4	3.7
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.8	1.8	2.4	3.1
85°	0.6	1.2	0.6	1.2	1.2	1.2	1.2	1.2	1.2	1.8	2.4
87.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.8	1.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1312321

CATALOG NUMBER: P3SQAS09R509727DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	56.3	56.3	56.3	56.3
2.5°	55.7	54.5	54.5	54.5
5°	54.5	53.3	53.3	52.7
7.5°	52.7	52.1	52.1	52.1
10°	51.4	50.8	51.4	51.4
12.5°	49.0	49.6	50.2	50.2
15°	46.5	47.8	49.0	49.6
17.5°	44.1	46.5	47.8	48.4
20°	41.6	44.7	46.5	47.2
22.5°	39.8	42.9	45.3	46.5
25°	37.4	41.6	44.7	45.9
27.5°	34.9	39.8	43.5	45.3
30°	33.1	39.2	43.5	45.3
32.5°	31.2	38.0	42.9	44.7
35°	30.0	37.4	42.9	45.3
37.5°	28.8	36.7	42.9	44.7
40°	28.2	36.1	42.9	44.7
42.5°	27.6	36.1	42.9	45.3
45°	26.3	35.5	42.9	45.3
47.5°	25.7	35.5	42.9	45.3
50°	25.1	34.9	42.9	45.9
52.5°	24.5	34.3	42.9	45.9
55°	23.3	33.7	42.3	45.3
57.5°	22.7	33.1	41.6	44.1
60°	21.4	31.8	40.4	43.5
62.5°	20.2	30.6	39.2	41.6
65°	18.4	28.8	37.4	40.4
67.5°	16.5	26.3	35.5	38.6
70°	14.7	23.9	33.1	35.5
72.5°	12.9	21.4	30.6	32.5
75°	11.0	18.4	26.9	29.4
77.5°	9.2	15.9	22.7	24.5
80°	6.7	12.2	18.4	20.2
82.5°	5.5	9.2	13.5	14.7
85°	3.7	6.1	8.6	9.8
87.5°	1.8	3.1	4.3	4.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)