

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: P1312270

Luminaire Tested: P3SQAS09R309727DE010 E3SQCA451MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1312270
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS09R309727DE010 E3SQCA451MW
Description: 3in Adjustable LED luminaire with, R30 optic, 2700K CCT AND, 97CRI , E3SQCA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

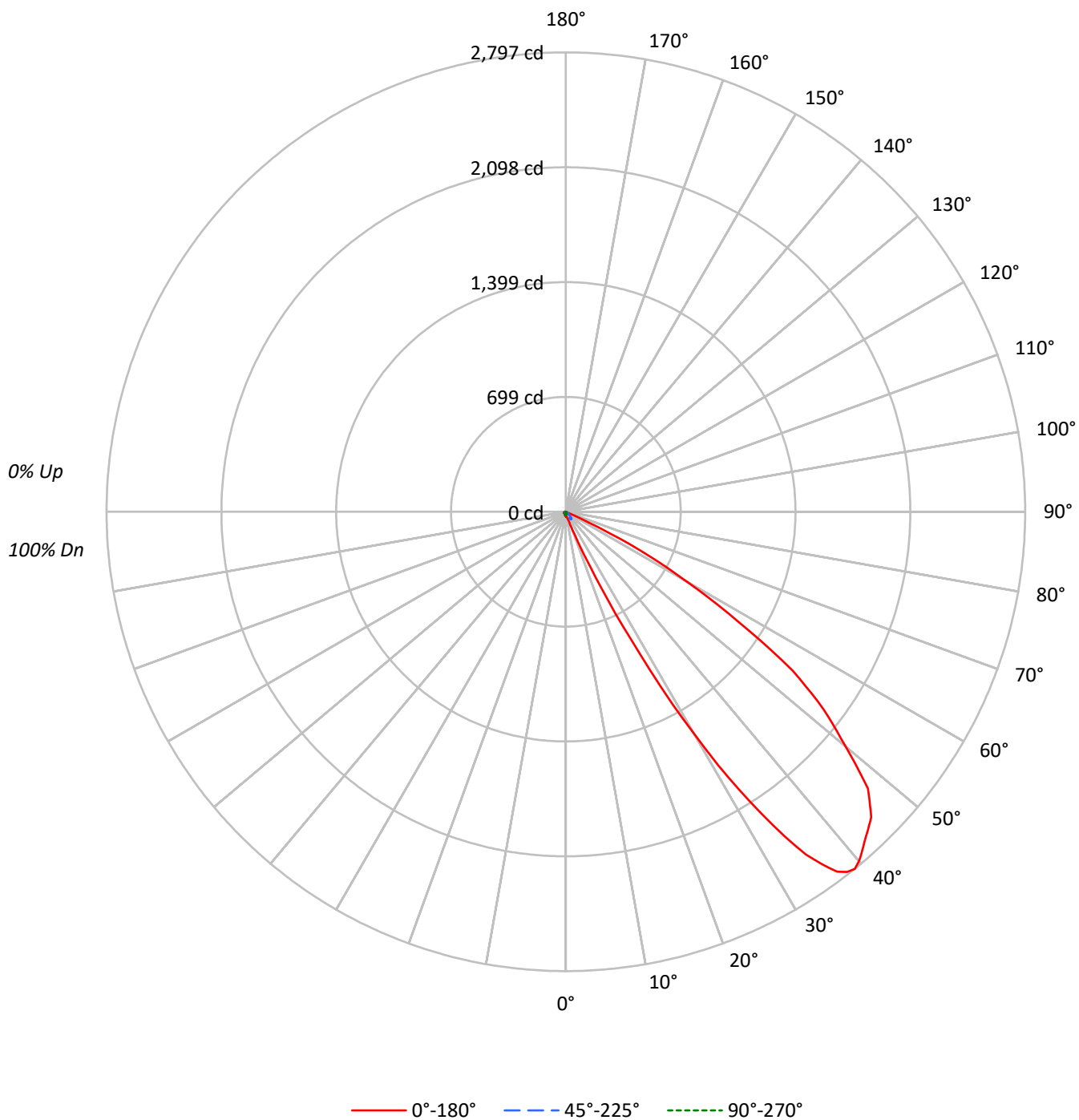
Lumens per Lamp: N/A
Luminaire Lumens: 726.9 lumens
Efficiency: N/A
Efficacy: 65.5 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1312270

CATALOG NUMBER: P3SQAS09R309727DE010 E3SQCA451MW

Luminous Intensity Polar Plot



TEST NUMBER: P1312270

CATALOG NUMBER: P3SQAS09R309727DE010 E3SQCA451MW

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	99		108	104	100	97		100	97	94		96	93	91		92	90	89
2	100	93	86	81		98	91	85	80		87	83	78		84	80	77		81	78	75
3	91	81	73	67		89	79	72	66		76	70	65		74	68	64		71	67	63
4	83	71	62	55		80	69	61	55		67	60	54		64	58	53		62	57	52
5	75	62	52	46		73	60	52	45		58	51	45		56	50	44		54	49	44
6	68	54	45	38		66	53	44	38		51	43	37		49	42	37		48	42	37
7	62	48	38	32		60	47	38	32		45	37	31		44	36	31		42	36	31
8	56	42	33	27		55	41	33	27		40	32	26		39	32	26		37	31	26
9	52	37	29	23		50	37	28	23		36	28	22		34	27	22		33	27	22
10	48	33	25	19		46	33	25	19		32	24	19		31	24	19		30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	4857	4857	4857	4857	4857
5°	5186	5083	4772	4339	4236
10°	5684	5037	4180	3742	3637
15°	8291	5028	3495	3174	3281
20°	20875	5498	2694	2694	3024
25°	96933	6860	2090	2451	2793
30°	308600	9506	1591	2307	2804
35°	535473	11585	1282	2187	2838
40°	624507	11556	967	2203	2900
45°	640464	8208	1047	2387	3142
50°	595610	4582	831	2465	3617
55°	506210	2402	931	2762	4054
60°	292365	620	1068	2962	4443
65°	59660	0	1263	3505	4972
70°	906	302	1561	4028	5841
75°	799	399	1597	4059	6920
80°	595	595	2380	4860	7934
85°	0	1186	4742	4742	9683

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 640464 cd/sqm

TEST NUMBER: P1312270

CATALOG NUMBER: P3SQAS09R309727DE010 E3SQCA451MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.5	0.4
10°-20°	7.3	1.0
20°-30°	41.9	5.8
30°-40°	195.8	26.9
40°-50°	276.9	38.1
50°-60°	170.4	23.4
60°-70°	25.9	3.6
70°-80°	4.1	0.6
80°-90°	2.0	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°	51.8	7.1
0°-40°	247.6	34.1
0°-60°	694.9	95.6
0°-90°	726.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	726.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	28	28	28	28	28	
5°	30	29	28	25	24	3
15°	46	28	20	18	18	17
25°	510	36	11	13	15	314
35°	2547	55	6	10	14	1529
45°	2630	34	4	10	13	1994
55°	1686	8	3	9	14	1435
65°	146	0	3	9	12	265
75°	1	1	2	6	10	1
85°	0	1	2	2	5	0
90°	0	0	0	0	0	

TEST NUMBER: P1312270

CATALOG NUMBER: P3SQAS09R309727DE010 E3SQCA451MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
2.5°	28.8	28.8	29.4	29.4	28.8	29.4	29.4	29.4	28.2	27.6	26.3
5°	30.0	30.0	30.0	30.6	30.0	30.0	29.4	28.8	27.6	25.7	25.1
7.5°	31.2	31.2	30.6	31.2	30.6	30.6	29.4	28.2	26.3	24.5	23.3
10°	32.5	32.5	31.8	31.8	31.2	31.2	28.8	26.9	23.9	22.0	21.4
12.5°	36.1	36.1	35.5	34.9	33.7	33.1	28.2	25.1	21.4	19.6	19.0
15°	46.5	45.9	44.7	42.9	39.8	39.2	28.2	23.3	19.6	17.8	17.8
17.5°	63.7	63.1	61.2	56.3	50.8	49.0	28.2	20.8	17.1	15.9	15.9
20°	113.9	109.0	99.8	87.6	74.7	68.0	30.0	18.4	14.7	14.1	14.7
21°	148.8	143.9	132.3	112.1	89.4	82.1	31.2	17.8	14.1	13.5	14.7
22°	202.7	197.2	173.3	145.7	113.3	100.4	31.8	16.5	12.9	12.9	14.1
23°	282.9	273.7	233.3	189.2	141.5	123.1	33.1	15.9	12.2	12.9	13.5
24°	370.5	362.5	316.6	250.5	180.7	154.3	34.3	15.3	11.6	11.6	12.9
25°	510.1	500.9	419.5	316.0	229.0	185.6	36.1	14.1	11.0	11.0	12.9
26°	690.8	648.5	540.1	407.2	282.3	232.7	38.0	13.5	10.4	11.0	12.2
27°	862.3	827.3	705.5	522.4	349.1	286.0	40.4	12.9	9.8	10.4	12.2
28°	1087.6	1038.6	884.9	660.8	439.7	346.0	42.9	12.2	9.2	10.4	11.6
29°	1339.9	1271.3	1085.8	816.3	542.0	413.4	45.3	11.6	8.6	9.8	11.6
30°	1551.8	1487.5	1301.9	1000.7	659.5	502.2	47.8	11.0	8.0	9.8	11.6
31°	1800.4	1703.1	1478.3	1156.8	760.6	591.0	50.2	9.8	7.3	9.2	11.0
32°	2001.9	1933.9	1695.1	1333.2	893.5	688.9	52.1	9.2	7.3	9.2	11.0
33°	2196.7	2105.4	1874.5	1502.2	1013.5	789.4	53.9	8.6	6.7	8.6	11.0
34°	2382.8	2298.9	2044.2	1638.8	1126.8	884.9	55.1	7.3	6.7	8.6	10.4
35°	2546.9	2449.6	2193.6	1772.3	1243.2	971.9	55.1	6.7	6.1	8.0	10.4
36°	2653.5	2583.7	2323.4	1903.9	1348.5	1054.5	55.1	6.1	5.5	8.0	9.8
37°	2744.8	2663.3	2427.5	2005.0	1426.3	1120.7	55.1	5.5	5.5	8.0	9.8
38°	2782.1	2712.3	2499.2	2094.4	1499.1	1188.0	54.5	4.9	4.9	7.3	9.8
39°	2796.8	2734.3	2553.1	2158.7	1553.0	1233.4	53.3	4.3	4.9	7.3	9.8
40°	2777.8	2730.7	2580.6	2200.3	1595.9	1266.4	51.4	3.7	4.3	7.3	9.8
42.5°	2699.4	2668.2	2574.5	2242.0	1632.6	1290.9	44.7	2.4	4.3	6.7	9.8
45°	2629.6	2595.3	2512.7	2198.5	1584.9	1242.5	33.7	1.2	4.3	6.7	9.8
47.5°	2494.3	2472.8	2407.9	2087.7	1480.2	1133.5	23.9	0.6	3.7	6.1	9.2
50°	2223.0	2202.8	2117.0	1812.7	1273.2	958.4	17.1	0.6	3.1	6.1	9.2
52.5°	1979.9	1958.4	1835.3	1507.1	978.0	702.4	11.0	0.6	3.1	6.1	9.2
55°	1685.9	1648.6	1486.9	1144.0	693.2	470.9	8.0	0.6	3.1	5.5	9.2
57.5°	1248.1	1193.6	1049.0	780.2	399.3	255.4	4.3	0.6	3.1	5.5	9.2
60°	848.8	816.3	656.5	411.5	170.2	107.8	1.8	0.6	3.1	5.5	8.6
62.5°	514.4	473.4	330.1	175.1	73.5	49.0	0.0	1.2	3.1	5.5	8.6
65°	146.4	129.8	86.3	39.8	20.8	15.9	0.0	1.2	3.1	5.5	8.6
67.5°	4.9	4.9	4.9	4.3	3.1	3.1	0.6	1.2	3.1	5.5	8.0
70°	1.8	1.8	1.8	1.2	1.2	0.6	0.6	1.2	3.1	4.9	8.0
72.5°	1.2	1.2	1.2	1.2	0.6	0.6	0.6	1.2	2.4	4.3	7.3
75°	1.2	1.2	1.2	0.6	0.6	0.6	0.6	1.8	2.4	4.3	6.1
77.5°	1.2	1.2	1.2	0.6	0.6	0.6	0.6	1.8	2.4	3.7	6.1
80°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.8	2.4	3.7	4.9



TEST NUMBER: P1312270

CATALOG NUMBER: P3SQAS09R309727DE010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.6	0.6	0.6	0.0	0.0	0.0	0.6	1.8	2.4	2.4	3.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.8	2.4	1.8	2.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.8	1.8	1.8	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

TEST NUMBER: P1312270

CATALOG NUMBER: P3SQAS09R309727DE010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	28.2	28.2
2.5°	26.3	26.3
5°	24.5	24.5
7.5°	22.7	22.7
10°	20.8	20.8
12.5°	19.6	19.6
15°	17.8	18.4
17.5°	16.5	17.1
20°	15.9	16.5
21°	15.9	16.5
22°	15.3	15.9
23°	15.3	15.9
24°	14.7	15.3
25°	14.1	14.7
26°	14.1	14.7
27°	14.1	14.7
28°	13.5	14.7
29°	13.5	14.1
30°	13.5	14.1
31°	12.9	14.1
32°	12.9	14.1
33°	12.9	13.5
34°	12.2	13.5
35°	12.2	13.5
36°	12.2	13.5
37°	12.2	12.9
38°	12.2	13.5
39°	12.2	12.9
40°	12.2	12.9
42.5°	12.2	12.9
45°	12.2	12.9
47.5°	12.2	13.5
50°	12.2	13.5
52.5°	12.2	13.5
55°	12.2	13.5
57.5°	12.2	12.9
60°	12.2	12.9
62.5°	11.6	12.9
65°	11.6	12.2
67.5°	11.6	12.2
70°	11.0	11.6
72.5°	10.4	11.0
75°	9.2	10.4
77.5°	8.6	9.2
80°	7.3	8.0



TEST NUMBER: P1312270

CATALOG NUMBER: P3SQAS09R309727DE010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	6.1	6.1
85°	4.3	4.9
87.5°	2.4	2.4
90°	0.0	0.0

(END OF REPORT)