

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: P1306704

Luminaire Tested: P3SQAS09R259027DE010 E3SQCA451MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1306704
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: P3SQAS09R259027DE010 E3SQCA451MW
Description: 3in Adjustable LED luminaire with, R25 optic, 2700K CCT AND, 90CRI , E3SQCA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

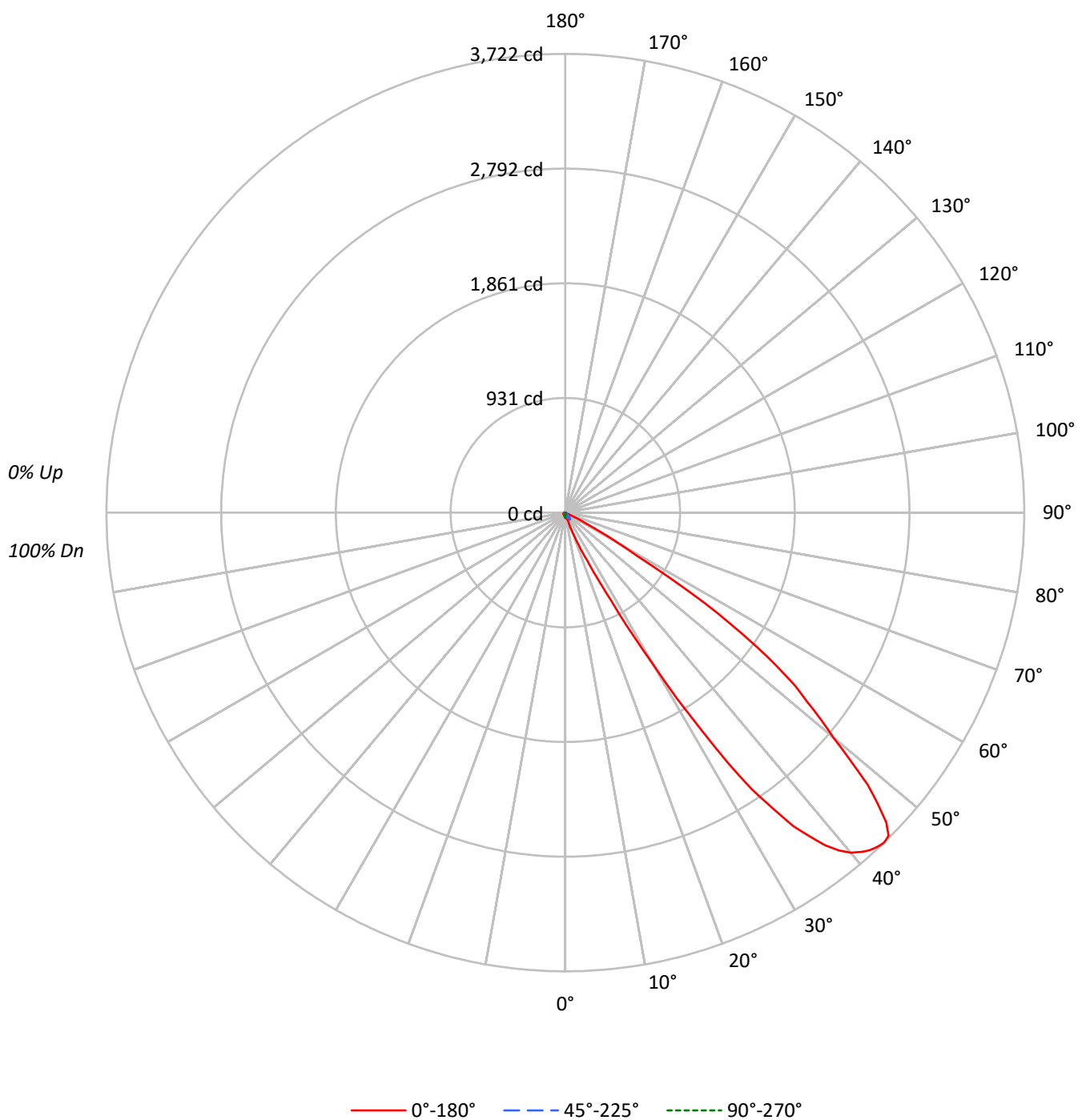
Lumens per Lamp: N/A
Luminaire Lumens: 776.0 lumens
Efficiency: N/A
Efficacy: 69.9 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1306704

CATALOG NUMBER: P3SQAS09R259027DE010 E3SQCA451MW

Luminous Intensity Polar Plot



TEST NUMBER: P1306704

CATALOG NUMBER: P3SQAS09R259027DE010 E3SQCA451MW

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°	6820	6820	6820	6820	6820
5°	7797	7434	6604	5895	5791
10°	7765	7048	5614	4897	4897
15°	8647	6080	4386	4137	4386
20°	30534	6011	3372	3501	3885
25°	87849	7658	2717	3249	3763
30°	280281	11813	2168	3122	3798
35°	613894	13918	1871	3007	3869
40°	809827	12590	1529	3080	4137
45°	903095	8817	1486	3337	4481
50°	760200	4582	1474	3483	4930
55°	568364	1832	1441	3903	5525
60°	175943	482	1412	4237	6131
65°	15037	0	1671	4442	6683
70°	1007	352	1712	5136	7553
75°	932	466	2262	5456	8650
80°	694	694	3372	6050	10116
85°	1383	1383	5335	6719	10868

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 903095 cd/sqm

TEST NUMBER: P1306704

CATALOG NUMBER: P3SQAS09R259027DE010 E3SQCA451MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.5	0.5
10°-20°	9.1	1.2
20°-30°	42.9	5.5
30°-40°	206.7	26.6
40°-50°	324.0	41.8
50°-60°	166.1	21.4
60°-70°	15.7	2.0
70°-80°	5.3	0.7
80°-90°	2.6	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°	55.6	7.2
0°-40°	262.3	33.8
0°-60°	752.4	97.0
0°-90°	776.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	776.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	40	40	40	40	40	
5°	45	43	38	34	34	4
15°	48	34	25	23	25	20
25°	462	40	14	17	20	287
35°	2920	66	9	14	18	1772
45°	3708	36	6	14	18	2713
55°	1893	6	5	13	18	1576
65°	37	0	4	11	16	116
75°	1	1	3	8	13	2
85°	1	1	3	3	6	0
90°	0	0	0	0	0	

TEST NUMBER: P1306704

CATALOG NUMBER: P3SQAS09R259027DE010 E3SQCA451MW

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6
2.5°	43.0	43.0	43.0	43.0	43.0	43.0	42.3	42.3	43.0	42.3	42.3
5°	45.1	45.1	45.1	45.1	45.1	45.1	45.1	44.4	44.4	44.4	43.0
7.5°	45.8	45.1	45.1	45.1	45.1	45.1	45.1	45.1	44.4	44.4	42.3
10°	44.4	44.4	44.4	44.4	43.7	43.7	43.7	43.0	43.0	43.0	40.3
12.5°	44.4	44.4	44.4	44.4	43.7	43.7	43.0	43.0	42.3	41.7	36.9
15°	48.5	48.5	48.5	47.8	47.1	46.4	45.8	45.1	44.4	43.0	34.1
17.5°	71.0	69.0	68.3	65.6	62.1	58.7	56.0	53.3	50.5	48.5	32.8
20°	166.6	165.9	162.5	154.3	145.4	135.2	125.0	113.4	97.0	86.0	32.8
22.5°	288.9	284.8	278.6	272.5	256.8	238.3	219.2	197.3	176.2	153.6	34.8
25°	462.3	471.9	451.4	435.0	407.7	374.2	338.0	308.0	269.7	234.2	40.3
27.5°	803.7	809.9	769.6	716.3	652.8	582.5	514.2	463.0	398.8	340.1	50.5
30°	1409.4	1415.6	1348.0	1234.6	1103.5	988.1	831.7	694.5	568.1	470.5	59.4
31°	1759.1	1711.3	1632.7	1522.8	1356.8	1182.7	994.9	829.0	669.2	540.8	62.1
32°	2062.9	2058.8	1967.3	1800.7	1634.1	1419.0	1186.1	969.7	773.7	611.8	64.2
33°	2421.4	2394.1	2265.1	2108.0	1887.4	1671.0	1370.5	1123.3	880.9	691.1	65.6
34°	2708.9	2635.2	2581.9	2402.3	2169.5	1893.6	1571.9	1285.8	1014.7	767.5	66.2
35°	2919.9	2904.2	2800.4	2633.1	2396.2	2114.1	1789.1	1454.5	1126.7	856.3	66.2
36°	3143.2	3094.7	2993.7	2842.1	2611.3	2319.7	1955.0	1600.6	1257.1	936.2	65.6
37°	3283.2	3254.5	3154.1	2997.8	2771.7	2493.1	2140.8	1755.0	1360.9	1016.1	64.2
38°	3427.3	3369.2	3270.2	3120.7	2898.7	2637.2	2275.3	1873.8	1456.5	1086.4	62.1
39°	3527.0	3466.9	3365.8	3217.0	2999.8	2740.3	2381.8	1974.8	1539.9	1139.0	59.4
40°	3602.1	3544.1	3441.6	3288.7	3074.2	2821.6	2470.6	2064.3	1609.5	1184.8	56.0
41°	3648.5	3594.6	3492.8	3340.6	3125.5	2868.0	2528.6	2122.3	1656.6	1215.5	52.6
42°	3687.5	3632.1	3528.3	3372.7	3156.9	2907.6	2564.1	2159.2	1688.7	1231.2	49.8
43°	3709.3	3654.0	3552.9	3393.8	3176.0	2926.1	2583.3	2176.3	1699.6	1229.2	45.1
44°	3721.6	3664.2	3562.5	3403.4	3184.2	2930.8	2584.6	2172.9	1692.1	1212.8	41.0
45°	3707.9	3651.3	3552.9	3393.8	3169.8	2915.8	2571.0	2154.4	1663.5	1180.7	36.2
46°	3619.2	3575.5	3485.3	3339.2	3124.8	2877.6	2536.1	2118.9	1619.1	1141.1	30.7
47°	3462.8	3428.0	3340.6	3232.0	3038.1	2807.2	2472.0	2051.3	1556.9	1081.7	24.6
48°	3299.6	3248.4	3167.1	3055.8	2891.9	2680.9	2366.1	1952.3	1462.7	1003.8	21.9
49°	3058.5	3028.5	2956.8	2832.5	2696.6	2510.9	2216.6	1825.3	1347.3	919.1	19.1
50°	2837.3	2816.8	2716.4	2624.9	2480.8	2307.4	2013.8	1658.0	1203.9	814.0	17.1
51°	2664.5	2639.9	2567.6	2453.5	2299.9	2098.4	1821.9	1440.8	1039.3	689.0	13.7
52°	2484.3	2470.6	2406.4	2289.0	2138.0	1937.3	1635.5	1256.5	879.5	582.5	10.9
53°	2336.8	2316.9	2238.4	2133.9	1970.7	1763.1	1433.3	1085.1	745.0	489.6	9.6
54°	2121.7	2113.5	2062.9	1953.7	1776.8	1550.8	1250.3	913.7	621.4	415.2	8.2
55°	1892.9	1865.6	1814.4	1727.6	1565.1	1354.1	1038.6	757.3	502.6	349.6	6.1
56°	1614.3	1612.9	1521.4	1449.0	1304.9	1081.0	829.7	591.4	408.4	291.6	5.5
57°	1348.0	1304.9	1216.9	1145.2	990.1	820.1	615.9	443.2	319.6	236.3	4.1
58°	997.0	974.4	951.2	846.1	702.7	581.1	439.8	311.4	236.3	180.3	2.7
59°	676.7	676.0	648.7	568.8	486.2	361.9	274.5	211.7	162.5	132.5	2.0
60°	510.8	498.5	443.9	391.3	305.9	228.8	162.5	125.0	101.1	85.4	1.4
62.5°	178.9	185.7	163.2	135.2	103.1	84.7	64.9	52.6	43.0	34.8	0.0
65°	36.9	40.3	34.8	32.8	25.9	22.5	19.8	17.1	14.3	12.3	0.0



TEST NUMBER: P1306704

CATALOG NUMBER: P3SQAS09R259027DE010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	4.8	4.1	4.1	4.1	3.4	3.4	3.4	3.4	2.7	2.7	0.7
70°	2.0	2.0	2.0	2.0	2.0	2.0	1.4	1.4	1.4	1.4	0.7
72.5°	2.0	2.0	2.0	1.4	1.4	1.4	1.4	1.4	1.4	0.7	0.7
75°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7
77.5°	1.4	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.4
85°	0.7	0.7	0.7	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
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: P1306704

CATALOG NUMBER: P3SQAS09R259027DE010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	39.6	39.6	39.6	39.6	39.6	39.6
2.5°	41.7	40.3	38.2	37.6	36.9	36.9
5°	41.0	38.2	36.2	34.1	33.5	33.5
7.5°	38.9	35.5	32.8	31.4	30.7	30.0
10°	36.9	32.1	29.4	28.0	28.0	28.0
12.5°	32.8	28.7	25.9	25.3	25.9	25.9
15°	29.4	24.6	23.2	23.2	23.9	24.6
17.5°	25.3	21.9	20.5	21.2	21.9	22.5
20°	22.5	18.4	18.4	19.1	21.2	21.2
22.5°	19.8	16.4	16.4	18.4	19.8	20.5
25°	17.8	14.3	15.0	17.1	19.1	19.8
27.5°	15.0	12.3	13.7	16.4	18.4	19.1
30°	13.0	10.9	13.0	15.7	17.8	19.1
31°	12.3	10.2	13.0	15.0	17.8	19.1
32°	10.9	10.2	12.3	15.0	17.8	18.4
33°	10.2	9.6	12.3	15.0	17.8	18.4
34°	9.6	8.9	11.6	15.0	17.8	18.4
35°	8.2	8.9	11.6	14.3	17.1	18.4
36°	7.5	8.2	11.6	14.3	17.1	18.4
37°	6.8	8.2	10.9	14.3	17.1	18.4
38°	6.1	7.5	10.9	14.3	17.1	18.4
39°	5.5	7.5	10.2	14.3	17.1	18.4
40°	4.8	6.8	10.2	13.7	17.1	18.4
41°	4.8	6.8	10.2	13.7	17.1	18.4
42°	4.1	6.8	10.2	13.7	17.1	18.4
43°	3.4	6.1	10.2	13.7	17.1	18.4
44°	2.7	6.1	9.6	13.7	17.1	18.4
45°	2.7	6.1	9.6	13.7	17.1	18.4
46°	2.0	5.5	9.6	13.7	17.1	18.4
47°	1.4	5.5	9.6	13.0	17.1	18.4
48°	1.4	5.5	9.6	13.0	17.1	18.4
49°	1.4	5.5	8.9	13.0	17.1	18.4
50°	1.4	5.5	8.9	13.0	17.1	18.4
51°	0.7	4.8	8.9	13.0	17.1	18.4
52°	0.7	4.8	8.9	13.0	17.1	19.1
53°	0.7	4.8	8.9	13.0	17.1	18.4
54°	0.7	4.8	8.2	13.0	17.1	18.4
55°	0.7	4.8	8.2	13.0	17.1	18.4
56°	0.7	4.1	8.2	12.3	17.1	18.4
57°	1.4	4.1	8.2	12.3	17.1	17.8
58°	1.4	4.1	8.2	12.3	16.4	17.8
59°	1.4	4.1	8.2	12.3	16.4	17.8
60°	1.4	4.1	7.5	12.3	16.4	17.8
62.5°	1.4	4.1	7.5	11.6	15.7	17.1
65°	1.4	4.1	6.8	10.9	15.7	16.4



TEST NUMBER: P1306704

CATALOG NUMBER: P3SQAS09R259027DE010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.4	3.4	6.8	10.2	15.0	15.7
70°	2.0	3.4	6.1	10.2	14.3	15.0
72.5°	2.0	3.4	6.1	8.9	13.0	14.3
75°	2.0	3.4	5.5	8.2	12.3	13.0
77.5°	2.0	3.4	4.8	7.5	10.9	11.6
80°	2.7	3.4	4.1	6.1	9.6	10.2
82.5°	2.7	3.4	3.4	4.8	7.5	8.2
85°	2.0	2.7	2.7	3.4	4.8	5.5
87.5°	2.0	2.7	2.0	1.4	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)