

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: P1315185

Luminaire Tested: P3SQAS09R309740DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1315185
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: P3SQAS09R309740DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R30 optic, 4000K CCT AND, 97CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

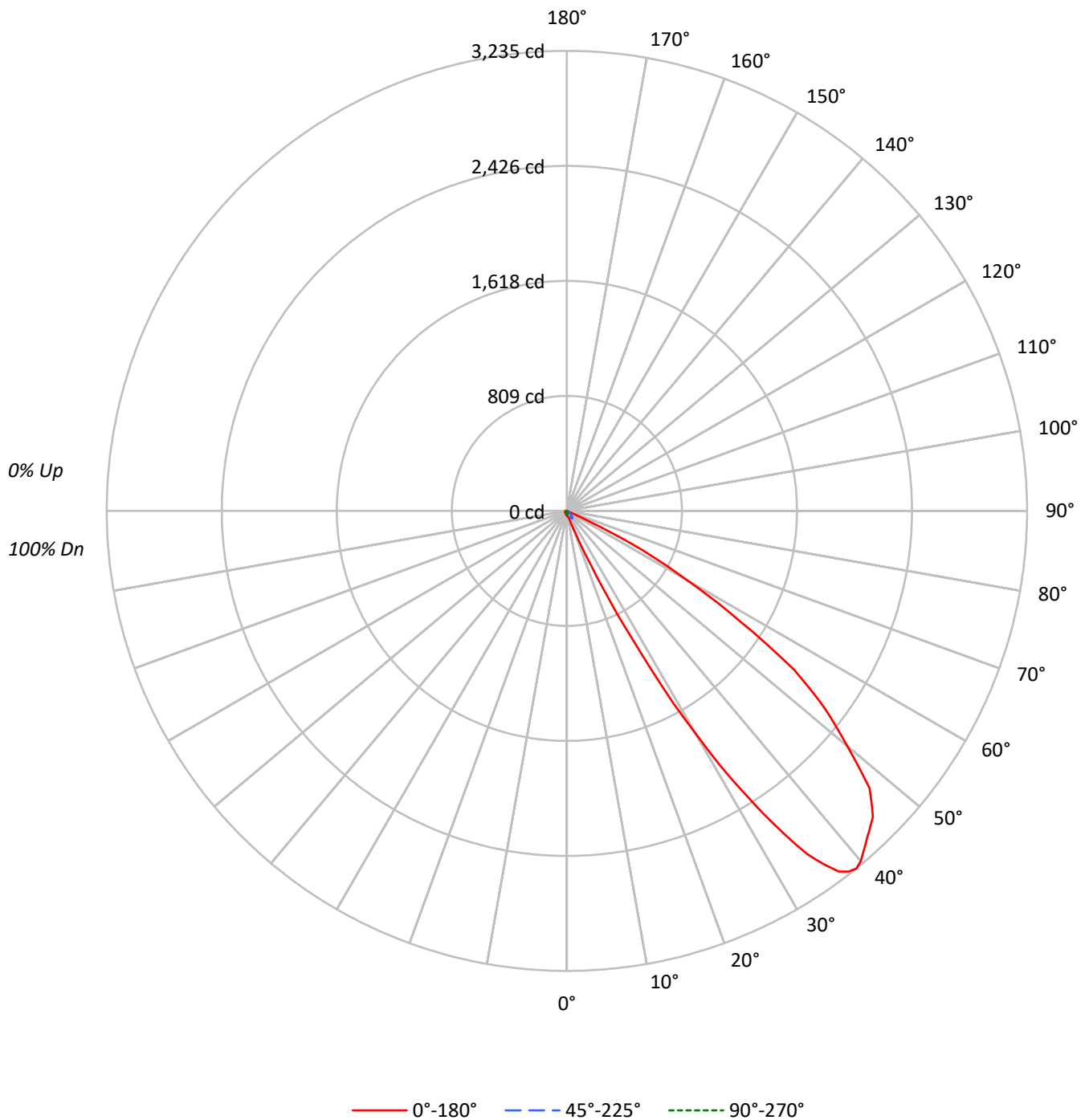
Lumens per Lamp: N/A
Luminaire Lumens: 841.0 lumens
Efficiency: N/A
Efficacy: 75.8 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1315185

CATALOG NUMBER: P3SQAS09R309740DE010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1315185

CATALOG NUMBER: P3SQAS09R309740DE010 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	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	100	97	100	97	94	96	93	91	92	90	89	87		
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73		
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61		
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	50		
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35		
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29		
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26	24		
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22	20		
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	5614	5614	5614	5614	5614
5°	5999	5878	5515	5014	4893
10°	6558	5823	4827	4337	4215
15°	9592	5813	4047	3655	3798
20°	24156	6360	3116	3116	3501
25°	112135	7943	2432	2831	3230
30°	356984	10997	1830	2685	3242
35°	619445	13414	1493	2523	3280
40°	722439	13377	1124	2540	3350
45°	740908	9499	1218	2752	3629
50°	689011	5305	938	2840	4180
55°	585599	2762	1051	3183	4684
60°	338211	723	1206	3410	5132
65°	68992	0	1426	4034	5787
70°	1057	352	1762	4633	6798
75°	932	466	1863	4724	7985
80°	694	694	2777	5653	9124
85°	0	1383	5533	5533	11263

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 740908 cd/sqm

TEST NUMBER: P1315185

CATALOG NUMBER: P3SQAS09R309740DE010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.9	0.4
10°-20°	8.5	1.0
20°-30°	48.5	5.8
30°-40°	226.5	26.9
40°-50°	320.3	38.1
50°-60°	197.1	23.4
60°-70°	30.0	3.6
70°-80°	4.7	0.6
80°-90°	2.4	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°	59.9	7.1
0°-40°	286.5	34.1
0°-60°	803.9	95.6
0°-90°	841.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	841.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	33	33	33	33	33	
5°	35	34	32	29	28	3
15°	54	33	23	20	21	19
25°	590	42	13	15	17	363
35°	2946	64	7	12	16	1768
45°	3042	39	5	11	15	2306
55°	1950	9	4	11	16	1660
65°	169	0	4	10	14	306
75°	1	1	3	7	12	1
85°	0	1	3	3	6	0
90°	0	0	0	0	0	

TEST NUMBER: P1315185

CATALOG NUMBER: P3SQAS09R309740DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6
2.5°	33.3	33.3	34.0	34.0	33.3	34.0	34.0	34.0	32.6	31.9	30.5
5°	34.7	34.7	34.7	35.4	34.7	34.7	34.0	33.3	31.9	29.8	29.0
7.5°	36.1	36.1	35.4	36.1	35.4	35.4	34.0	32.6	30.5	28.3	26.9
10°	37.5	37.5	36.8	36.8	36.1	36.1	33.3	31.2	27.6	25.5	24.8
12.5°	41.8	41.8	41.1	40.4	39.0	38.3	32.6	29.0	24.8	22.7	22.0
15°	53.8	53.1	51.7	49.6	46.0	45.3	32.6	26.9	22.7	20.5	20.5
17.5°	73.7	73.0	70.8	65.2	58.8	56.7	32.6	24.1	19.8	18.4	18.4
20°	131.8	126.1	115.5	101.3	86.4	78.6	34.7	21.3	17.0	16.3	17.0
21°	172.1	166.5	153.0	129.6	103.4	94.9	36.1	20.5	16.3	15.6	17.0
22°	234.5	228.1	200.5	168.6	131.1	116.2	36.8	19.1	14.9	14.9	16.3
23°	327.3	316.7	269.9	218.9	163.6	142.4	38.3	18.4	14.2	14.9	15.6
24°	428.6	419.4	366.3	289.7	209.0	178.5	39.7	17.7	13.5	13.5	14.9
25°	590.1	579.5	485.3	365.5	265.0	214.7	41.8	16.3	12.8	12.8	14.9
26°	799.1	750.2	624.8	471.1	326.6	269.2	43.9	15.6	12.0	12.8	14.2
27°	997.5	957.1	816.1	604.3	403.8	330.8	46.8	14.9	11.3	12.0	14.2
28°	1258.2	1201.5	1023.7	764.4	508.6	400.3	49.6	14.2	10.6	12.0	13.5
29°	1550.0	1470.7	1256.0	944.3	627.0	478.2	52.4	13.5	9.9	11.3	13.5
30°	1795.1	1720.8	1506.1	1157.6	763.0	580.9	55.3	12.8	9.2	11.3	13.5
31°	2082.8	1970.1	1710.1	1338.2	879.9	683.6	58.1	11.3	8.5	10.6	12.8
32°	2315.8	2237.2	1960.9	1542.2	1033.6	797.0	60.2	10.6	8.5	10.6	12.8
33°	2541.1	2435.6	2168.5	1737.8	1172.4	913.2	62.3	9.9	7.8	9.9	12.8
34°	2756.5	2659.4	2364.7	1895.7	1303.5	1023.7	63.8	8.5	7.8	9.9	12.0
35°	2946.3	2833.7	2537.6	2050.2	1438.1	1124.3	63.8	7.8	7.1	9.2	12.0
36°	3069.6	2988.8	2687.8	2202.5	1559.9	1219.9	63.8	7.1	6.4	9.2	11.3
37°	3175.2	3080.9	2808.2	2319.4	1649.9	1296.4	63.8	6.4	6.4	9.2	11.3
38°	3218.4	3137.6	2891.1	2422.8	1734.2	1374.3	63.0	5.7	5.7	8.5	11.3
39°	3235.4	3163.1	2953.4	2497.2	1796.6	1426.8	61.6	5.0	5.7	8.5	11.3
40°	3213.4	3158.9	2985.3	2545.4	1846.2	1465.0	59.5	4.3	5.0	8.5	11.3
42.5°	3122.7	3086.6	2978.2	2593.5	1888.7	1493.4	51.7	2.8	5.0	7.8	11.3
45°	3042.0	3002.3	2906.7	2543.2	1833.4	1437.4	39.0	1.4	5.0	7.8	11.3
47.5°	2885.4	2860.6	2785.5	2415.0	1712.3	1311.3	27.6	0.7	4.3	7.1	10.6
50°	2571.6	2548.2	2449.0	2096.9	1472.8	1108.7	19.8	0.7	3.5	7.1	10.6
52.5°	2290.3	2265.5	2123.1	1743.4	1131.4	812.6	12.8	0.7	3.5	7.1	10.6
55°	1950.3	1907.1	1720.1	1323.3	801.9	544.8	9.2	0.7	3.5	6.4	10.6
57.5°	1443.8	1380.7	1213.5	902.5	461.9	295.4	5.0	0.7	3.5	6.4	10.6
60°	981.9	944.3	759.4	476.1	196.9	124.7	2.1	0.7	3.5	6.4	9.9
62.5°	595.1	547.6	381.8	202.6	85.0	56.7	0.0	1.4	3.5	6.4	9.9
65°	169.3	150.2	99.9	46.0	24.1	18.4	0.0	1.4	3.5	6.4	9.9
67.5°	5.7	5.7	5.7	5.0	3.5	3.5	0.7	1.4	3.5	6.4	9.2
70°	2.1	2.1	2.1	1.4	1.4	0.7	0.7	1.4	3.5	5.7	9.2
72.5°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	1.4	2.8	5.0	8.5
75°	1.4	1.4	1.4	0.7	0.7	0.7	0.7	2.1	2.8	5.0	7.1
77.5°	1.4	1.4	1.4	0.7	0.7	0.7	0.7	2.1	2.8	4.3	7.1
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.1	2.8	4.3	5.7



TEST NUMBER: P1315185

CATALOG NUMBER: P3SQAS09R309740DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.7	0.7	0.7	0.0	0.0	0.0	0.7	2.1	2.8	2.8	4.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.7	2.1	2.8	2.1	2.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.7	2.1	2.1	2.1	1.4
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: P1315185

CATALOG NUMBER: P3SQAS09R309740DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	32.6	32.6
2.5°	30.5	30.5
5°	28.3	28.3
7.5°	26.2	26.2
10°	24.1	24.1
12.5°	22.7	22.7
15°	20.5	21.3
17.5°	19.1	19.8
20°	18.4	19.1
21°	18.4	19.1
22°	17.7	18.4
23°	17.7	18.4
24°	17.0	17.7
25°	16.3	17.0
26°	16.3	17.0
27°	16.3	17.0
28°	15.6	17.0
29°	15.6	16.3
30°	15.6	16.3
31°	14.9	16.3
32°	14.9	16.3
33°	14.9	15.6
34°	14.2	15.6
35°	14.2	15.6
36°	14.2	15.6
37°	14.2	14.9
38°	14.2	15.6
39°	14.2	14.9
40°	14.2	14.9
42.5°	14.2	14.9
45°	14.2	14.9
47.5°	14.2	15.6
50°	14.2	15.6
52.5°	14.2	15.6
55°	14.2	15.6
57.5°	14.2	14.9
60°	14.2	14.9
62.5°	13.5	14.9
65°	13.5	14.2
67.5°	13.5	14.2
70°	12.8	13.5
72.5°	12.0	12.8
75°	10.6	12.0
77.5°	9.9	10.6
80°	8.5	9.2



TEST NUMBER: P1315185

CATALOG NUMBER: P3SQAS09R309740DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	7.1	7.1
85°	5.0	5.7
87.5°	2.8	2.8
90°	0.0	0.0

(END OF REPORT)