

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: P1310027

Luminaire Tested: P3SQAS09R159040DE010 E3SQCA451MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1310027
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-73)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS09R159040DE010 E3SQCA451MW
Description: 3in Adjustable LED luminaire with, R15 optic, 4000K CCT AND, 90CRI , E3SQCA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

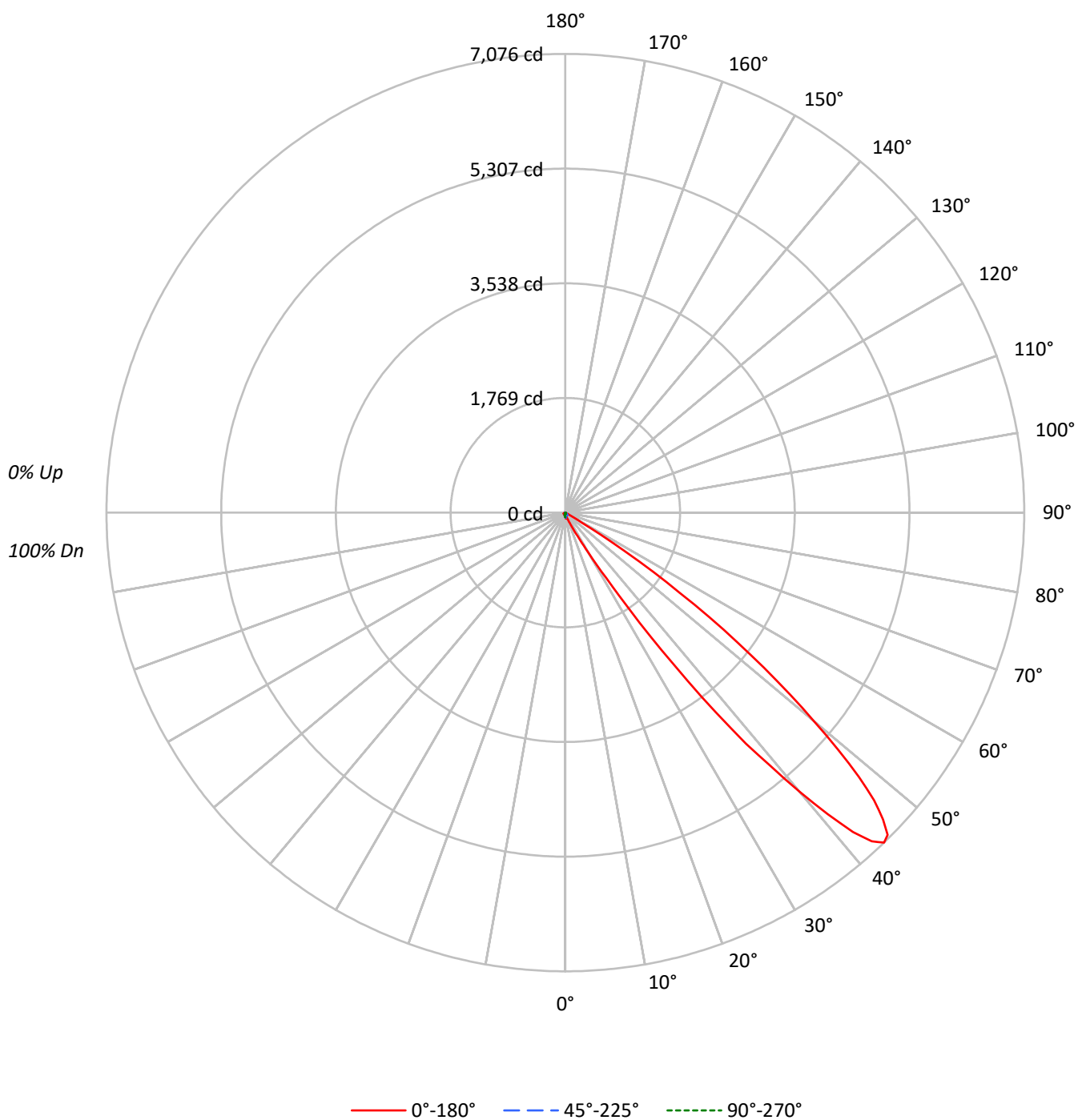
Lumens per Lamp: N/A
Luminaire Lumens: 790.0 lumens
Efficiency: N/A
Efficacy: 71.2 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1310027

CATALOG NUMBER: P3SQAS09R159040DE010 E3SQCA451MW

Luminous Intensity Polar Plot



TEST NUMBER: P1310027

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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	107	104	100	97	100	97	94	96	93	91	92	90	89	87		
2	101	93	87	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	53	50		
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35		
7	62	47	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	31	26	37	31	26	24		
9	52	37	28	22	50	37	28	22	35	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	23	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	12073	12073	12073	12073	12073
5°	14971	13346	10891	9526	9405
10°	14742	11437	8394	7432	7572
15°	12213	8148	6044	6187	6597
20°	21223	6488	4619	5333	6066
25°	47298	7791	3744	4941	5682
30°	141453	9546	3281	4852	5946
35°	544535	10765	2985	4962	6286
40°	1263897	9375	2833	5126	6722
45°	1711907	7088	2484	5553	7282
50°	1342280	4233	2545	5921	8011
55°	644270	1892	2372	6396	8738
60°	58866	276	2170	6786	9782
65°	6439	0	1915	7050	10595
70°	1611	0	2367	7553	11481
75°	1597	532	3127	8384	13109
80°	1587	1587	3868	8629	14083
85°	1581	1581	6323	7707	15611

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1711907 cd/sqm

TEST NUMBER: P1310027

CATALOG NUMBER: P3SQAS09R159040DE010 E3SQCA451MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.0	0.8
10°-20°	12.5	1.6
20°-30°	29.8	3.8
30°-40°	163.4	20.7
40°-50°	395.7	50.1
50°-60°	157.9	20.0
60°-70°	13.6	1.7
70°-80°	7.7	1.0
80°-90°	3.4	0.4
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°	48.3	6.1
0°-40°	211.7	26.8
0°-60°	765.3	96.9
0°-90°	790.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	790.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	70	70	70	70	70	
5°	87	77	63	55	54	8
15°	68	46	34	35	37	24
25°	249	41	20	26	30	150
35°	2590	51	14	24	30	1830
45°	7029	29	10	23	30	4958
55°	2146	6	8	21	29	1999
65°	16	0	5	17	26	40
75°	2	1	5	13	20	2
85°	1	1	3	4	8	1
90°	0	0	0	0	0	

TEST NUMBER: P1310027

CATALOG NUMBER: P3SQAS09R159040DE010 E3SQCA451MW

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1
2.5°	78.8	78.8	79.6	78.8	78.8	78.8	78.8	78.0	78.0	78.0	75.6
5°	86.6	86.6	86.6	86.6	85.9	85.9	85.9	85.1	85.1	84.3	77.2
7.5°	89.8	89.8	89.0	89.0	88.2	88.2	87.4	86.6	85.9	85.1	74.0
10°	84.3	84.3	84.3	83.5	83.5	82.7	81.9	81.1	80.3	78.8	65.4
12.5°	74.8	74.8	75.6	74.8	74.0	73.3	71.7	70.9	70.1	68.5	54.4
15°	68.5	68.5	68.5	67.7	67.0	65.4	64.6	63.0	62.2	59.9	45.7
17.5°	87.4	87.4	86.6	85.1	81.9	79.6	75.6	72.5	68.5	63.8	39.4
20°	115.8	115.8	114.2	112.6	108.7	104.8	98.5	92.9	86.6	81.1	35.4
22.5°	167.8	170.1	165.4	159.9	154.4	144.9	136.3	127.6	116.6	107.1	36.2
25°	248.9	251.3	248.9	236.3	226.1	213.5	196.9	179.6	160.7	143.4	41.0
27.5°	403.3	404.9	400.9	370.2	353.7	320.6	291.5	263.1	231.6	200.1	44.9
30°	711.3	712.1	686.9	625.4	571.1	498.6	437.2	378.1	328.5	278.1	48.0
31°	936.6	914.5	861.0	786.9	700.3	602.6	518.3	441.9	367.9	313.5	48.8
32°	1189.4	1186.3	1097.3	968.9	853.1	731.0	604.2	506.5	421.4	347.4	49.6
33°	1524.2	1525.8	1385.6	1234.3	1044.5	880.7	714.4	580.5	478.1	387.6	51.2
34°	2047.2	1924.4	1759.7	1554.9	1296.6	1050.0	834.2	666.4	529.3	426.1	51.2
35°	2590.0	2466.3	2285.1	1974.8	1620.3	1275.3	976.8	758.6	590.8	467.9	51.2
36°	3198.1	3093.3	2819.2	2423.0	1970.8	1488.0	1128.0	864.9	651.4	505.7	50.4
37°	3855.0	3701.4	3397.4	2964.9	2360.0	1787.3	1312.3	970.5	712.1	546.7	48.8
38°	4522.2	4383.6	4000.0	3476.1	2824.7	2103.2	1496.6	1072.1	768.0	577.4	46.5
39°	5027.9	4952.3	4571.8	3986.6	3195.7	2402.5	1686.5	1180.8	827.1	608.1	44.1
40°	5621.8	5499.8	5139.0	4415.1	3634.5	2707.3	1872.4	1276.9	875.9	632.5	41.7
41°	6163.8	6009.4	5554.1	4854.6	3985.8	2981.5	2048.8	1376.1	915.3	646.7	40.2
42°	6628.5	6448.9	5973.2	5231.1	4279.6	3200.4	2189.8	1447.0	952.3	658.5	37.8
43°	6929.4	6774.3	6306.4	5513.9	4530.9	3401.3	2321.4	1521.1	975.2	666.4	34.7
44°	7075.9	6919.2	6466.3	5691.2	4685.3	3521.8	2406.4	1572.3	1000.4	676.6	32.3
45°	7028.7	6869.6	6431.6	5694.3	4733.3	3565.1	2442.7	1595.1	1013.8	686.1	29.1
46°	6812.1	6700.2	6259.1	5546.2	4641.9	3518.7	2422.2	1577.8	1009.0	686.1	26.0
47°	6508.0	6380.4	5960.6	5291.8	4420.6	3398.9	2339.5	1525.0	979.9	670.3	22.8
48°	6093.7	5985.0	5543.9	4887.7	4081.1	3138.2	2152.8	1439.1	934.2	639.6	19.7
49°	5573.8	5422.6	5012.2	4371.0	3638.4	2768.0	1907.8	1294.2	861.0	596.3	17.3
50°	5009.8	4823.1	4506.5	3853.4	3180.8	2373.4	1585.6	1094.1	757.8	539.6	15.8
51°	4457.6	4267.8	3966.1	3410.8	2692.4	1969.3	1279.2	873.6	623.9	461.6	13.4
52°	3885.0	3725.8	3387.9	2951.5	2304.8	1595.9	1065.8	738.9	518.3	387.6	11.0
53°	3314.7	3206.0	2884.6	2442.7	1851.9	1303.7	870.4	632.5	452.1	331.6	8.7
54°	2743.6	2624.6	2380.4	1986.6	1492.7	1028.7	738.1	529.3	392.3	289.1	7.9
55°	2145.7	2084.3	1859.0	1514.8	1131.1	820.8	598.7	455.3	328.5	241.8	6.3
56°	1652.6	1583.3	1377.7	1098.8	840.5	642.8	484.4	371.8	278.1	202.4	4.7
57°	1082.3	1011.4	875.1	767.2	612.0	468.7	370.2	293.0	226.1	167.8	3.9
58°	639.6	575.0	553.8	472.6	408.0	318.2	273.3	218.2	167.0	132.3	2.4
59°	293.8	298.5	265.5	248.9	226.1	202.4	166.2	145.7	114.2	95.3	1.6
60°	170.9	161.5	157.5	141.0	125.2	111.1	100.0	88.2	71.7	61.4	0.8
62.5°	58.3	55.9	57.5	52.0	48.8	47.3	43.3	37.0	30.7	25.2	0.0
65°	15.8	15.8	15.0	14.2	13.4	12.6	11.8	10.2	9.5	7.9	0.0



TEST NUMBER: P1310027

CATALOG NUMBER: P3SQAS09R159040DE010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	5.5	5.5	4.7	4.7	3.9	3.9	3.2	3.2	2.4	2.4	0.0
70°	3.2	3.2	3.2	2.4	2.4	2.4	1.6	1.6	1.6	0.8	0.0
72.5°	2.4	2.4	2.4	2.4	2.4	2.4	1.6	1.6	1.6	0.8	0.8
75°	2.4	2.4	2.4	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.8
77.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
80°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.8	1.6
82.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6
85°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
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: P1310027

CATALOG NUMBER: P3SQAS09R159040DE010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	70.1	70.1	70.1	70.1	70.1	70.1
2.5°	72.5	69.3	65.4	63.0	62.2	61.4
5°	69.3	63.0	58.3	55.1	54.4	54.4
7.5°	62.2	55.1	50.4	48.8	48.0	48.0
10°	54.4	48.0	44.1	42.5	43.3	43.3
12.5°	45.7	40.2	38.6	38.6	39.4	40.2
15°	37.0	33.9	33.9	34.7	36.2	37.0
17.5°	30.7	29.1	29.9	31.5	33.1	34.7
20°	25.2	25.2	26.8	29.1	31.5	33.1
22.5°	21.3	22.1	24.4	26.8	29.9	31.5
25°	18.1	19.7	22.1	26.0	29.1	29.9
27.5°	15.8	18.1	21.3	25.2	28.4	29.9
30°	13.4	16.5	20.5	24.4	28.4	29.9
31°	12.6	15.8	19.7	24.4	28.4	29.9
32°	11.8	15.8	19.7	24.4	28.4	29.9
33°	11.0	15.0	19.7	23.6	28.4	29.9
34°	10.2	15.0	19.7	24.4	28.4	29.9
35°	9.5	14.2	18.9	23.6	27.6	29.9
36°	8.7	14.2	18.9	23.6	28.4	29.9
37°	7.9	14.2	18.9	23.6	27.6	29.9
38°	7.9	13.4	18.1	23.6	27.6	29.9
39°	7.1	12.6	18.1	23.6	27.6	29.9
40°	6.3	12.6	17.3	22.8	27.6	29.9
41°	5.5	11.8	17.3	22.8	27.6	29.9
42°	4.7	11.8	17.3	22.8	27.6	29.9
43°	3.9	11.0	16.5	22.8	27.6	29.9
44°	3.9	11.0	16.5	22.8	27.6	29.9
45°	3.2	10.2	15.8	22.8	27.6	29.9
46°	3.2	10.2	15.8	22.1	27.6	29.9
47°	2.4	10.2	15.8	22.1	27.6	29.9
48°	2.4	9.5	15.8	22.1	27.6	29.9
49°	1.6	9.5	15.8	22.1	27.6	29.9
50°	1.6	9.5	15.0	22.1	27.6	29.9
51°	1.6	9.5	15.0	22.1	27.6	29.9
52°	1.6	8.7	15.0	22.1	27.6	29.9
53°	1.6	8.7	15.0	22.1	27.6	29.9
54°	1.6	8.7	14.2	22.1	27.6	29.9
55°	1.6	7.9	14.2	21.3	27.6	29.1
56°	1.6	7.9	14.2	21.3	27.6	29.1
57°	1.6	7.9	13.4	21.3	27.6	29.1
58°	1.6	7.1	13.4	20.5	26.8	29.1
59°	1.6	7.1	12.6	20.5	26.8	28.4
60°	1.6	6.3	12.6	19.7	26.0	28.4
62.5°	1.6	5.5	11.0	18.9	25.2	26.8
65°	1.6	4.7	10.2	17.3	24.4	26.0



TEST NUMBER: P1310027

CATALOG NUMBER: P3SQAS09R159040DE010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.6	4.7	9.5	16.5	22.8	25.2
70°	1.6	4.7	8.7	15.0	22.1	22.8
72.5°	2.4	4.7	7.9	14.2	20.5	21.3
75°	3.2	4.7	7.1	12.6	18.9	19.7
77.5°	3.2	4.7	6.3	11.0	16.5	17.3
80°	3.2	3.9	5.5	8.7	13.4	14.2
82.5°	3.2	3.9	3.9	7.1	10.2	11.0
85°	2.4	3.2	3.2	3.9	7.1	7.9
87.5°	2.4	3.2	1.6	2.4	3.2	3.2
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)