

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: P1307791

Luminaire Tested: P3SQAS09R159030DE010 E3SQCA451MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1307791
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: P3SQAS09R159030DE010 E3SQCA451MW
Description: 3in Adjustable LED luminaire with, R15 optic, 3000K CCT AND, 90CRI , E3SQCA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

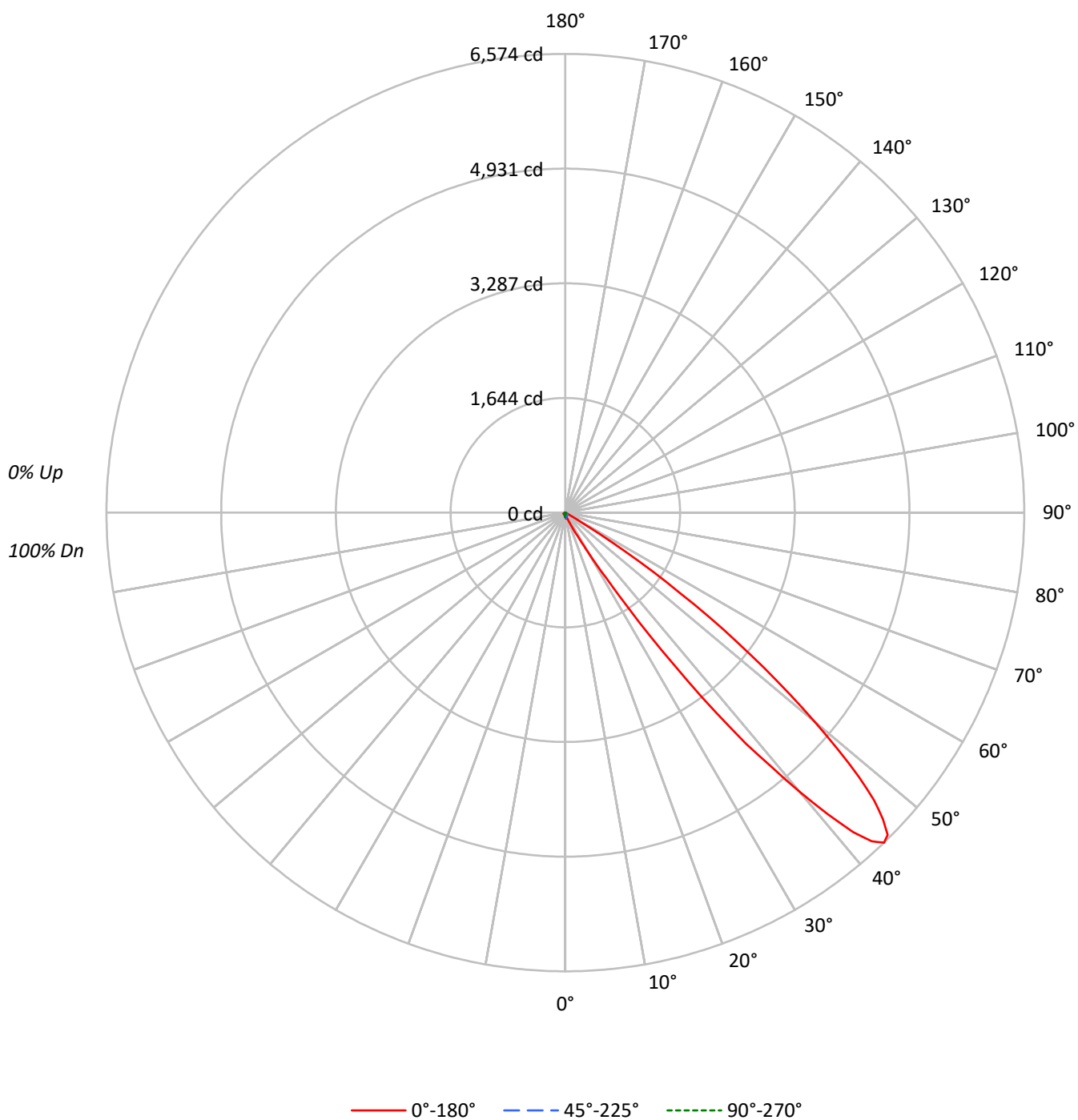
Lumens per Lamp: N/A
Luminaire Lumens: 734.0 lumens
Efficiency: N/A
Efficacy: 66.1 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.09
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1307791

CATALOG NUMBER: P3SQAS09R159030DE010 E3SQCA451MW

Luminous Intensity Polar Plot



TEST NUMBER: P1307791

CATALOG NUMBER: P3SQAS09R159030DE010 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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	99	107	104	100	97	100	97	94		96	93	91		92
2	101	93	87	81	98	91	85	80	87	83	78		84	80	77		81
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71
4	83	71	62	55	80	69	61	55	67	60	54		64	58	53		62
5	75	62	52	46	73	61	52	45	58	51	45		56	50	44		55
6	68	54	45	38	66	53	44	38	51	43	37		49	42	37		48
7	62	47	38	32	60	47	38	32	45	37	31		44	36	31		42
8	56	42	33	27	55	41	33	27	40	32	26		39	31	26		37
9	52	37	28	22	50	37	28	22	35	28	22		34	27	22		33
10	48	33	25	19	46	33	25	19	32	24	19		31	24	19		30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	11212	11212	11212	11212	11212
5°	13917	12396	10114	8851	8730
10°	13693	10615	7800	6908	7048
15°	11358	7560	5616	5741	6133
20°	19720	6030	4289	4967	5627
25°	43953	7240	3477	4599	5283
30°	131430	8869	3063	4514	5528
35°	505934	10008	2775	4625	5845
40°	1174306	8723	2630	4766	6250
45°	1590542	6600	2314	5163	6771
50°	1247138	3912	2358	5493	7448
55°	598600	1772	2192	5945	8137
60°	54698	241	2032	6303	9059
65°	5950	0	1793	6561	9862
70°	1460	0	2216	6999	10675
75°	1464	466	2928	7785	12177
80°	1488	1488	3670	8034	13092
85°	1383	1383	5730	7311	14425

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1590542 cd/sqm

TEST NUMBER: P1307791

CATALOG NUMBER: P3SQAS09R159030DE010 E3SQCA451MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.6	0.8
10°-20°	11.6	1.6
20°-30°	27.7	3.8
30°-40°	151.8	20.7
40°-50°	367.6	50.1
50°-60°	146.7	20.0
60°-70°	12.7	1.7
70°-80°	7.2	1.0
80°-90°	3.2	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°	44.9	6.1
0°-40°	196.7	26.8
0°-60°	711.0	96.9
0°-90°	734.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	734.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	65	65	65	65	65	
5°	80	72	58	51	50	8
15°	64	42	32	32	34	22
25°	231	38	18	24	28	139
35°	2406	48	13	22	28	1700
45°	6530	27	10	21	28	4607
55°	1994	6	7	20	27	1857
65°	15	0	4	16	24	38
75°	2	1	4	12	18	2
85°	1	1	3	4	7	1
90°	0	0	0	0	0	

TEST NUMBER: P1307791

CATALOG NUMBER: P3SQAS09R159030DE010 E3SQCA451MW

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1
2.5°	73.2	73.2	73.9	73.2	73.2	73.2	73.2	72.5	72.5	72.5	70.3
5°	80.5	80.5	80.5	80.5	79.8	79.8	79.8	79.0	79.0	78.3	71.7
7.5°	83.4	83.4	82.7	82.7	82.0	82.0	81.2	80.5	79.8	79.0	68.8
10°	78.3	78.3	78.3	77.6	77.6	76.8	76.1	75.4	74.7	73.2	60.7
12.5°	69.5	69.5	70.3	69.5	68.8	68.1	66.6	65.9	65.1	63.7	50.5
15°	63.7	63.7	63.7	62.9	62.2	60.7	60.0	58.5	57.8	55.6	42.4
17.5°	81.2	81.2	80.5	79.0	76.1	73.9	70.3	67.3	63.7	59.3	36.6
20°	107.6	107.6	106.1	104.7	101.0	97.3	91.5	86.4	80.5	75.4	32.9
22.5°	155.9	158.1	153.7	148.6	143.4	134.7	126.6	118.6	108.3	99.5	33.7
25°	231.3	233.5	231.3	219.6	210.0	198.3	183.0	166.9	149.3	133.2	38.1
27.5°	374.7	376.2	372.5	344.0	328.6	297.9	270.8	244.4	215.2	185.9	41.7
30°	660.9	661.6	638.2	581.1	530.6	463.3	406.2	351.3	305.2	258.3	44.6
31°	870.2	849.7	799.9	731.1	650.6	559.9	481.6	410.6	341.8	291.3	45.4
32°	1105.1	1102.2	1019.5	900.2	792.6	679.2	561.3	470.6	391.5	322.8	46.1
33°	1416.2	1417.6	1287.4	1146.8	970.5	818.2	663.8	539.4	444.2	360.1	47.6
34°	1902.1	1788.0	1635.0	1444.7	1204.7	975.6	775.0	619.2	491.8	395.9	47.6
35°	2406.4	2291.5	2123.1	1834.8	1505.5	1184.9	907.5	704.8	548.9	434.7	47.6
36°	2971.4	2874.0	2619.4	2251.2	1831.1	1382.5	1048.0	803.6	605.3	469.9	46.8
37°	3581.8	3439.0	3156.5	2754.7	2192.7	1660.6	1219.3	901.7	661.6	507.9	45.4
38°	4201.6	4072.8	3716.4	3229.7	2624.5	1954.1	1390.5	996.1	713.6	536.5	43.2
39°	4671.5	4601.2	4247.8	3704.0	2969.2	2232.2	1566.9	1097.1	768.5	565.0	41.0
40°	5223.3	5109.9	4774.7	4102.1	3376.8	2515.4	1739.6	1186.4	813.8	587.7	38.8
41°	5726.9	5583.4	5160.4	4510.5	3703.2	2770.1	1903.6	1278.6	850.4	600.9	37.3
42°	6158.7	5991.8	5549.7	4860.3	3976.2	2973.6	2034.6	1344.4	884.8	611.8	35.1
43°	6438.2	6294.1	5859.3	5123.1	4209.7	3160.2	2156.8	1413.2	906.1	619.2	32.2
44°	6574.4	6428.7	6007.9	5287.7	4353.1	3272.2	2235.9	1460.8	929.5	628.7	30.0
45°	6530.4	6382.6	5975.7	5290.7	4397.8	3312.4	2269.5	1482.0	941.9	637.5	27.1
46°	6329.2	6225.3	5815.4	5153.1	4312.9	3269.3	2250.5	1465.9	937.5	637.5	24.2
47°	6046.7	5928.1	5538.0	4916.7	4107.2	3158.0	2173.6	1416.9	910.4	622.8	21.2
48°	5661.7	5560.7	5150.9	4541.2	3791.8	2915.8	2000.2	1337.1	868.0	594.3	18.3
49°	5178.7	5038.2	4656.9	4061.1	3380.5	2571.8	1772.6	1202.5	799.9	554.0	16.1
50°	4654.7	4481.2	4187.0	3580.3	2955.3	2205.1	1473.2	1016.6	704.1	501.3	14.6
51°	4141.6	3965.3	3685.0	3169.0	2501.5	1829.7	1188.6	811.6	579.6	428.9	12.4
52°	3609.6	3461.7	3147.8	2742.3	2141.4	1482.8	990.2	686.5	481.6	360.1	10.2
53°	3079.7	2978.7	2680.1	2269.5	1720.6	1211.2	808.7	587.7	420.1	308.1	8.1
54°	2549.1	2438.6	2211.7	1845.8	1386.9	955.8	685.8	491.8	364.5	268.6	7.3
55°	1993.6	1936.5	1727.2	1407.4	1051.0	762.6	556.2	423.0	305.2	224.7	5.9
56°	1535.5	1471.1	1280.0	1021.0	780.9	597.2	450.1	345.4	258.3	188.1	4.4
57°	1005.6	939.7	813.1	712.8	568.7	435.5	344.0	272.3	210.0	155.9	3.7
58°	594.3	534.3	514.5	439.1	379.1	295.7	254.0	202.7	155.2	123.0	2.2
59°	273.0	277.4	246.6	231.3	210.0	188.1	154.4	135.4	106.1	88.6	1.5
60°	158.8	150.0	146.4	131.0	116.4	103.2	92.9	82.0	66.6	57.1	0.7
62.5°	54.2	52.0	53.4	48.3	45.4	43.9	40.3	34.4	28.5	23.4	0.0
65°	14.6	14.6	13.9	13.2	12.4	11.7	11.0	9.5	8.8	7.3	0.0



TEST NUMBER: P1307791

CATALOG NUMBER: P3SQAS09R159030DE010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	5.1	5.1	4.4	4.4	3.7	3.7	2.9	2.9	2.2	2.2	0.0
70°	2.9	2.9	2.9	2.2	2.2	2.2	1.5	1.5	1.5	0.7	0.0
72.5°	2.2	2.2	2.2	2.2	2.2	2.2	1.5	1.5	1.5	0.7	0.7
75°	2.2	2.2	2.2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.7
77.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
80°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.7	1.5
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.5
85°	0.7	0.7	0.7	0.7	0.7	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: P1307791

CATALOG NUMBER: P3SQAS09R159030DE010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	65.1	65.1	65.1	65.1	65.1	65.1
2.5°	67.3	64.4	60.7	58.5	57.8	57.1
5°	64.4	58.5	54.2	51.2	50.5	50.5
7.5°	57.8	51.2	46.8	45.4	44.6	44.6
10°	50.5	44.6	41.0	39.5	40.3	40.3
12.5°	42.4	37.3	35.9	35.9	36.6	37.3
15°	34.4	31.5	31.5	32.2	33.7	34.4
17.5°	28.5	27.1	27.8	29.3	30.7	32.2
20°	23.4	23.4	24.9	27.1	29.3	30.7
22.5°	19.8	20.5	22.7	24.9	27.8	29.3
25°	16.8	18.3	20.5	24.2	27.1	27.8
27.5°	14.6	16.8	19.8	23.4	26.3	27.8
30°	12.4	15.4	19.0	22.7	26.3	27.8
31°	11.7	14.6	18.3	22.7	26.3	27.8
32°	11.0	14.6	18.3	22.7	26.3	27.8
33°	10.2	13.9	18.3	22.0	26.3	27.8
34°	9.5	13.9	18.3	22.7	26.3	27.8
35°	8.8	13.2	17.6	22.0	25.6	27.8
36°	8.1	13.2	17.6	22.0	26.3	27.8
37°	7.3	13.2	17.6	22.0	25.6	27.8
38°	7.3	12.4	16.8	22.0	25.6	27.8
39°	6.6	11.7	16.8	22.0	25.6	27.8
40°	5.9	11.7	16.1	21.2	25.6	27.8
41°	5.1	11.0	16.1	21.2	25.6	27.8
42°	4.4	11.0	16.1	21.2	25.6	27.8
43°	3.7	10.2	15.4	21.2	25.6	27.8
44°	3.7	10.2	15.4	21.2	25.6	27.8
45°	2.9	9.5	14.6	21.2	25.6	27.8
46°	2.9	9.5	14.6	20.5	25.6	27.8
47°	2.2	9.5	14.6	20.5	25.6	27.8
48°	2.2	8.8	14.6	20.5	25.6	27.8
49°	1.5	8.8	14.6	20.5	25.6	27.8
50°	1.5	8.8	13.9	20.5	25.6	27.8
51°	1.5	8.8	13.9	20.5	25.6	27.8
52°	1.5	8.1	13.9	20.5	25.6	27.8
53°	1.5	8.1	13.9	20.5	25.6	27.8
54°	1.5	8.1	13.2	20.5	25.6	27.8
55°	1.5	7.3	13.2	19.8	25.6	27.1
56°	1.5	7.3	13.2	19.8	25.6	27.1
57°	1.5	7.3	12.4	19.8	25.6	27.1
58°	1.5	6.6	12.4	19.0	24.9	27.1
59°	1.5	6.6	11.7	19.0	24.9	26.3
60°	1.5	5.9	11.7	18.3	24.2	26.3
62.5°	1.5	5.1	10.2	17.6	23.4	24.9
65°	1.5	4.4	9.5	16.1	22.7	24.2



TEST NUMBER: P1307791

CATALOG NUMBER: P3SQAS09R159030DE010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.5	4.4	8.8	15.4	21.2	23.4
70°	1.5	4.4	8.1	13.9	20.5	21.2
72.5°	2.2	4.4	7.3	13.2	19.0	19.8
75°	2.9	4.4	6.6	11.7	17.6	18.3
77.5°	2.9	4.4	5.9	10.2	15.4	16.1
80°	2.9	3.7	5.1	8.1	12.4	13.2
82.5°	2.9	3.7	3.7	6.6	9.5	10.2
85°	2.2	2.9	2.9	3.7	6.6	7.3
87.5°	2.2	2.9	1.5	2.2	2.9	2.9
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)