

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: P1314637

Luminaire Tested: P3SQAS20R159735D010 E3SQCA451MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1314637
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: P3SQAS20R159735D010 E3SQCA451MW
Description: 3in Adjustable LED luminaire with, R15 optic, 3500K CCT AND, 97CRI , E3SQCA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

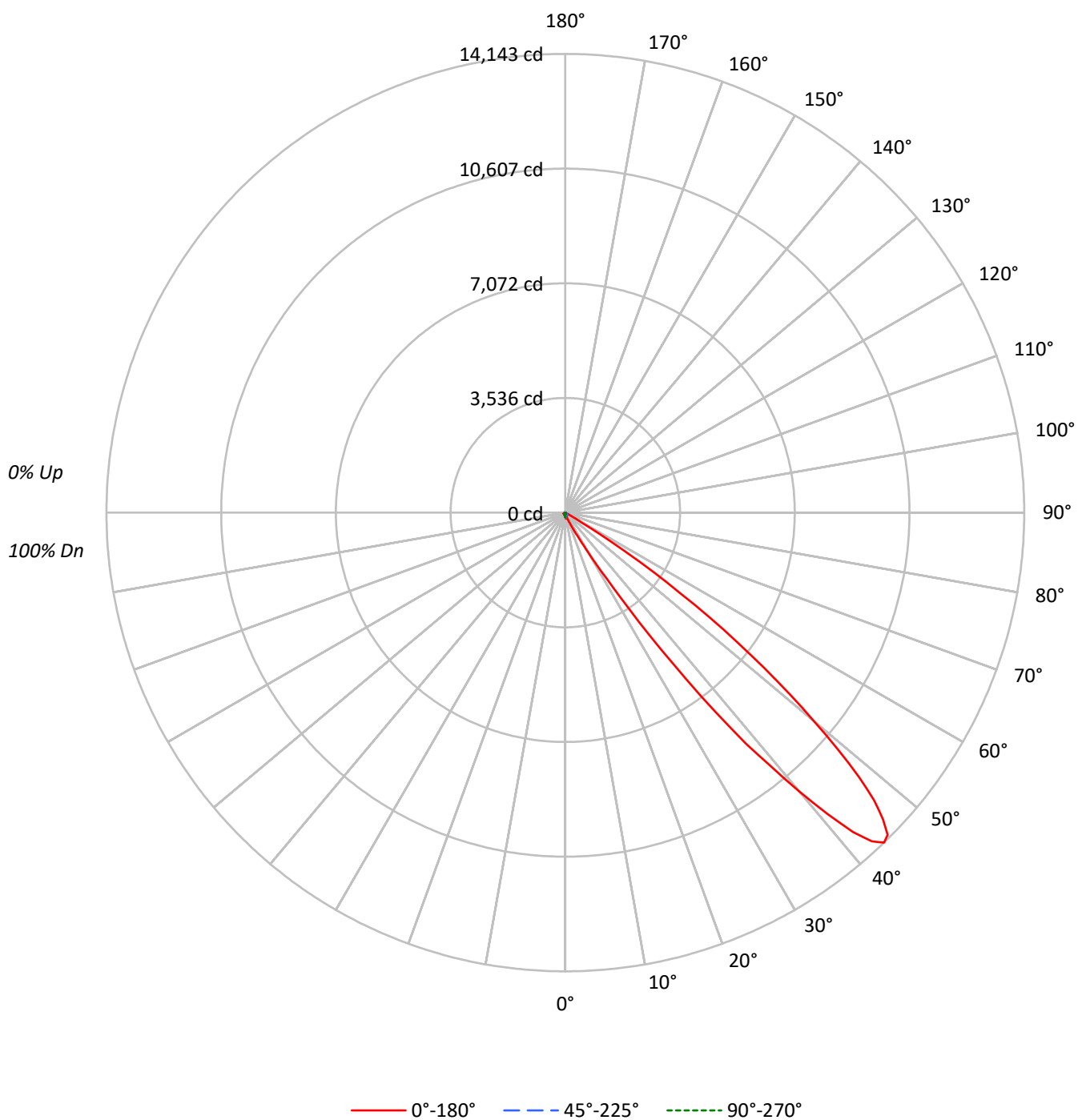
Lumens per Lamp: N/A
Luminaire Lumens: 1579.0 lumens
Efficiency: N/A
Efficacy: 54.8 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 28.8
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: P1314637

CATALOG NUMBER: P3SQAS20R159735D010 E3SQCA451MW

Luminous Intensity Polar Plot



TEST NUMBER: P1314637

CATALOG NUMBER: P3SQAS20R159735D010 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	100	100
1	110	106	102	99	107	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73	73	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61	61	61
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	53	50	50	50
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44	42	42	42
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35	35	35
7	62	47	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29	29	29
8	56	42	33	27	55	41	33	27	40	32	26	39	31	26	37	31	26	24	24	24
9	52	37	28	22	50	37	28	22	35	28	22	34	27	22	33	27	22	20	20	20
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	23	19	17	17	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	24128	24128	24128	24128	24128
5°	29943	26675	21783	19051	18775
10°	29467	22857	16788	14865	15145
15°	24427	16279	12071	12356	13194
20°	42410	12976	9237	10685	12115
25°	94538	15563	7487	9881	11364
30°	282727	19091	6582	9705	11892
35°	1088375	21508	5950	9924	12573
40°	2526220	18750	5665	10274	13444
45°	3421647	14200	4993	11131	14565
50°	2682872	8440	5064	11816	16022
55°	1287729	3783	4714	12761	17505
60°	117663	551	4340	13571	19530
65°	12837	0	3831	14100	21191
70°	3172	0	4733	15056	23012
75°	3127	1065	6255	16769	26217
80°	3075	3075	7835	17158	28068
85°	3162	3162	12449	15611	31024

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3421647 cd/sqm

TEST NUMBER: P1314637

CATALOG NUMBER: P3SQAS20R159735D010 E3SQCA451MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	12.0	0.8
10°-20°	24.9	1.6
20°-30°	59.7	3.8
30°-40°	326.6	20.7
40°-50°	790.9	50.1
50°-60°	315.5	20.0
60°-70°	27.3	1.7
70°-80°	15.4	1.0
80°-90°	6.8	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°	96.5	6.1
0°-40°	423.1	26.8
0°-60°	1529.6	96.9
0°-90°	1579.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1579.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	140	140	140	140	140	
5°	173	154	126	110	109	16
15°	137	91	68	69	74	48
25°	498	82	39	52	60	300
35°	5177	102	28	47	60	3658
45°	14048	58	20	46	60	9910
55°	4289	13	16	42	58	3995
65°	32	0	9	35	52	81
75°	5	2	9	25	39	5
85°	2	2	6	8	16	1
90°	0	0	0	0	0	

TEST NUMBER: P1314637

CATALOG NUMBER: P3SQAS20R159735D010 E3SQCA451MW

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	140.1	140.1	140.1	140.1	140.1	140.1	140.1	140.1	140.1	140.1	140.1
2.5°	157.4	157.4	159.0	157.4	157.4	157.4	157.4	155.9	155.9	155.9	151.1
5°	173.2	173.2	173.2	173.2	171.6	171.6	171.6	170.0	170.0	168.5	154.3
7.5°	179.5	179.5	177.9	177.9	176.3	176.3	174.8	173.2	171.6	170.0	148.0
10°	168.5	168.5	168.5	166.9	166.9	165.3	163.7	162.2	160.6	157.4	130.7
12.5°	149.6	149.6	151.1	149.6	148.0	146.4	143.3	141.7	140.1	137.0	108.6
15°	137.0	137.0	137.0	135.4	133.8	130.7	129.1	126.0	124.4	119.7	91.3
17.5°	174.8	174.8	173.2	170.0	163.7	159.0	151.1	144.8	137.0	127.5	78.7
20°	231.4	231.4	228.3	225.1	217.3	209.4	196.8	185.8	173.2	162.2	70.8
22.5°	335.3	340.1	330.6	319.6	308.6	289.7	272.4	255.1	233.0	214.1	72.4
25°	497.5	502.2	497.5	472.3	451.9	426.7	393.6	359.0	321.2	286.5	81.9
27.5°	806.1	809.2	801.4	740.0	706.9	640.8	582.5	525.9	462.9	399.9	89.7
30°	1421.7	1423.3	1372.9	1250.1	1141.4	996.6	873.8	755.7	656.5	555.8	96.0
31°	1872.0	1827.9	1720.8	1572.8	1399.7	1204.4	1036.0	883.2	735.3	626.6	97.6
32°	2377.4	2371.1	2193.2	1936.5	1705.1	1461.1	1207.6	1012.3	842.3	694.3	99.2
33°	3046.5	3049.6	2769.4	2467.1	2087.7	1760.2	1428.0	1160.3	955.7	774.6	102.3
34°	4091.9	3846.3	3517.2	3107.9	2591.5	2098.7	1667.3	1332.0	1058.0	851.8	102.3
35°	5176.7	4929.5	4567.4	3947.0	3238.6	2549.0	1952.3	1516.2	1180.8	935.2	102.3
36°	6392.1	6182.7	5634.8	4842.9	3939.2	2974.1	2254.6	1728.7	1302.0	1010.8	100.8
37°	7705.2	7398.2	6790.4	5926.1	4716.9	3572.3	2623.0	1939.7	1423.3	1092.6	97.6
38°	9038.7	8761.6	7994.9	6947.9	5645.8	4203.7	2991.4	2142.8	1535.1	1154.0	92.9
39°	10049.5	9898.3	9137.9	7968.1	6387.4	4802.0	3370.8	2360.0	1653.1	1215.4	88.2
40°	11236.6	10992.5	10271.5	8824.6	7264.3	5411.3	3742.4	2552.1	1750.7	1264.3	83.4
41°	12319.8	12011.2	11101.2	9703.1	7966.5	5959.1	4095.0	2750.5	1829.5	1292.6	80.3
42°	13248.7	12889.7	11938.8	10455.7	8553.8	6396.8	4376.9	2892.2	1903.5	1316.2	75.6
43°	13850.1	13539.9	12604.7	11020.9	9056.0	6798.3	4639.8	3040.2	1949.1	1332.0	69.3
44°	14142.9	13829.6	12924.3	11375.1	9364.6	7039.2	4809.8	3142.5	1999.5	1352.4	64.6
45°	14048.5	13730.4	12855.1	11381.4	9460.6	7125.8	4882.3	3188.2	2026.3	1371.3	58.3
46°	13615.5	13391.9	12510.3	11085.4	9278.0	7032.9	4841.3	3153.5	2016.8	1371.3	52.0
47°	13007.8	12752.7	11913.6	10576.9	8835.6	6793.6	4676.0	3048.1	1958.6	1339.8	45.7
48°	12179.6	11962.4	11080.7	9769.2	8157.0	6272.5	4302.9	2876.4	1867.3	1278.4	39.4
49°	11140.5	10838.2	10018.0	8736.4	7272.2	5532.5	3813.2	2586.8	1720.8	1191.8	34.6
50°	10013.3	9640.1	9007.2	7702.0	6357.5	4743.7	3169.3	2186.9	1514.6	1078.5	31.5
51°	8909.6	8530.2	7927.2	6817.2	5381.3	3936.0	2556.8	1746.0	1246.9	922.6	26.8
52°	7765.0	7447.0	6771.5	5899.3	4606.7	3189.8	2130.2	1476.8	1036.0	774.6	22.0
53°	6625.1	6407.9	5765.5	4882.3	3701.4	2605.7	1739.7	1264.3	903.7	662.8	17.3
54°	5483.7	5245.9	4757.9	3970.7	2983.5	2056.2	1475.2	1058.0	784.1	577.8	15.7
55°	4288.7	4165.9	3715.6	3027.6	2260.9	1640.5	1196.6	910.0	656.5	483.3	12.6
56°	3303.1	3164.6	2753.6	2196.3	1679.9	1284.7	968.3	743.1	555.8	404.6	9.4
57°	2163.2	2021.5	1749.2	1533.5	1223.3	936.8	740.0	585.7	451.9	335.3	7.9
58°	1278.4	1149.3	1106.8	944.6	815.5	636.1	546.3	436.1	333.8	264.5	4.7
59°	587.3	596.7	530.6	497.5	451.9	404.6	332.2	291.3	228.3	190.5	3.1
60°	341.6	322.8	314.9	281.8	250.3	222.0	200.0	176.3	143.3	122.8	1.6
62.5°	116.5	111.8	114.9	103.9	97.6	94.5	86.6	74.0	61.4	50.4	0.0
65°	31.5	31.5	29.9	28.3	26.8	25.2	23.6	20.5	18.9	15.7	0.0



TEST NUMBER: P1314637

CATALOG NUMBER: P3SQAS20R159735D010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	11.0	11.0	9.4	9.4	7.9	7.9	6.3	6.3	4.7	4.7	0.0
70°	6.3	6.3	6.3	4.7	4.7	4.7	3.1	3.1	3.1	1.6	0.0
72.5°	4.7	4.7	4.7	4.7	4.7	4.7	3.1	3.1	3.1	1.6	1.6
75°	4.7	4.7	4.7	3.1	3.1	3.1	3.1	3.1	3.1	3.1	1.6
77.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
80°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	1.6	3.1
82.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	3.1
85°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
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: P1314637

CATALOG NUMBER: P3SQAS20R159735D010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	140.1	140.1	140.1	140.1	140.1	140.1
2.5°	144.8	138.5	130.7	126.0	124.4	122.8
5°	138.5	126.0	116.5	110.2	108.6	108.6
7.5°	124.4	110.2	100.8	97.6	96.0	96.0
10°	108.6	96.0	88.2	85.0	86.6	86.6
12.5°	91.3	80.3	77.1	77.1	78.7	80.3
15°	74.0	67.7	67.7	69.3	72.4	74.0
17.5°	61.4	58.3	59.8	63.0	66.1	69.3
20°	50.4	50.4	53.5	58.3	63.0	66.1
22.5°	42.5	44.1	48.8	53.5	59.8	63.0
25°	36.2	39.4	44.1	52.0	58.3	59.8
27.5°	31.5	36.2	42.5	50.4	56.7	59.8
30°	26.8	33.1	40.9	48.8	56.7	59.8
31°	25.2	31.5	39.4	48.8	56.7	59.8
32°	23.6	31.5	39.4	48.8	56.7	59.8
33°	22.0	29.9	39.4	47.2	56.7	59.8
34°	20.5	29.9	39.4	48.8	56.7	59.8
35°	18.9	28.3	37.8	47.2	55.1	59.8
36°	17.3	28.3	37.8	47.2	56.7	59.8
37°	15.7	28.3	37.8	47.2	55.1	59.8
38°	15.7	26.8	36.2	47.2	55.1	59.8
39°	14.2	25.2	36.2	47.2	55.1	59.8
40°	12.6	25.2	34.6	45.7	55.1	59.8
41°	11.0	23.6	34.6	45.7	55.1	59.8
42°	9.4	23.6	34.6	45.7	55.1	59.8
43°	7.9	22.0	33.1	45.7	55.1	59.8
44°	7.9	22.0	33.1	45.7	55.1	59.8
45°	6.3	20.5	31.5	45.7	55.1	59.8
46°	6.3	20.5	31.5	44.1	55.1	59.8
47°	4.7	20.5	31.5	44.1	55.1	59.8
48°	4.7	18.9	31.5	44.1	55.1	59.8
49°	3.1	18.9	31.5	44.1	55.1	59.8
50°	3.1	18.9	29.9	44.1	55.1	59.8
51°	3.1	18.9	29.9	44.1	55.1	59.8
52°	3.1	17.3	29.9	44.1	55.1	59.8
53°	3.1	17.3	29.9	44.1	55.1	59.8
54°	3.1	17.3	28.3	44.1	55.1	59.8
55°	3.1	15.7	28.3	42.5	55.1	58.3
56°	3.1	15.7	28.3	42.5	55.1	58.3
57°	3.1	15.7	26.8	42.5	55.1	58.3
58°	3.1	14.2	26.8	40.9	53.5	58.3
59°	3.1	14.2	25.2	40.9	53.5	56.7
60°	3.1	12.6	25.2	39.4	52.0	56.7
62.5°	3.1	11.0	22.0	37.8	50.4	53.5
65°	3.1	9.4	20.5	34.6	48.8	52.0



TEST NUMBER: P1314637

CATALOG NUMBER: P3SQAS20R159735D010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	3.1	9.4	18.9	33.1	45.7	50.4
70°	3.1	9.4	17.3	29.9	44.1	45.7
72.5°	4.7	9.4	15.7	28.3	40.9	42.5
75°	6.3	9.4	14.2	25.2	37.8	39.4
77.5°	6.3	9.4	12.6	22.0	33.1	34.6
80°	6.3	7.9	11.0	17.3	26.8	28.3
82.5°	6.3	7.9	7.9	14.2	20.5	22.0
85°	4.7	6.3	6.3	7.9	14.2	15.7
87.5°	4.7	6.3	3.1	4.7	6.3	6.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)