

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: P1311575

Luminaire Tested: P3SQAS20R159050D010 E3SQCA451MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1311575
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: P3SQAS20R159050D010 E3SQCA451MW
Description: 3in Adjustable LED luminaire with, R15 optic, 5000K CCT AND, 90CRI , E3SQCA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

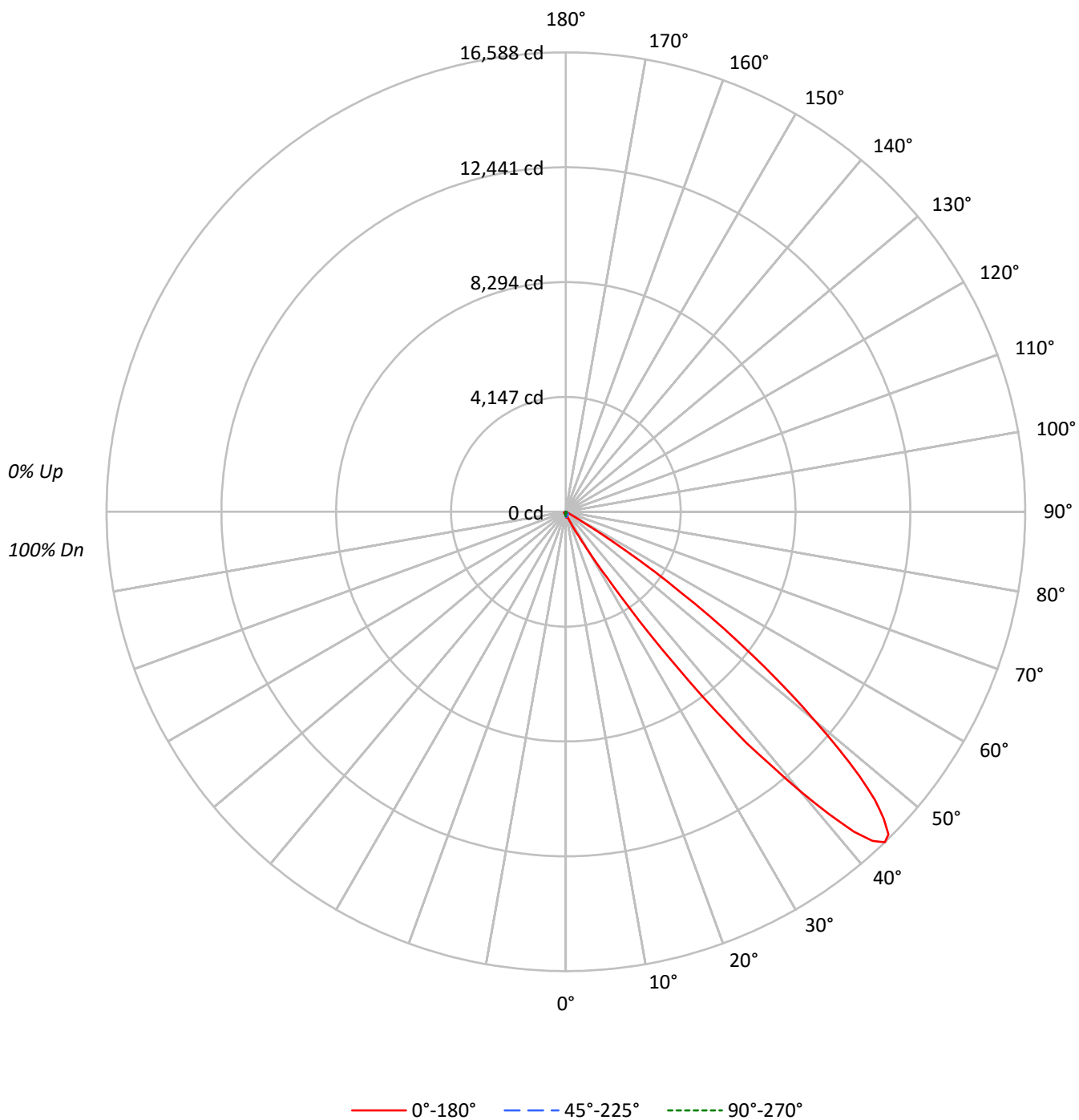
Lumens per Lamp: N/A
Luminaire Lumens: 1852.0 lumens
Efficiency: N/A
Efficacy: 64.3 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1311575

CATALOG NUMBER: P3SQAS20R159050D010 E3SQCA451MW

Luminous Intensity Polar Plot



TEST NUMBER: P1311575

CATALOG NUMBER: P3SQAS20R159050D010 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	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°	28296	28296	28296	28296	28296
5°	35112	31291	25534	22353	22025
10°	34556	26809	19691	17435	17768
15°	28652	19096	14157	14496	15476
20°	49759	15230	10832	12518	14222
25°	110881	18243	8779	11573	13340
30°	331608	22392	7716	11375	13960
35°	1276545	25229	6980	11648	14759
40°	2962979	22010	6632	12050	15782
45°	4013229	16635	5845	13055	17098
50°	3146714	9887	5948	13852	18809
55°	1510373	4444	5555	14983	20508
60°	138019	620	5098	15913	22906
65°	15037	0	4523	16545	24818
70°	3726	0	5589	17674	26990
75°	3660	1198	7386	19630	30742
80°	3670	3670	9124	20133	32927
85°	3557	3557	14623	18180	36557

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4013229 cd/sqm

TEST NUMBER: P1311575

CATALOG NUMBER: P3SQAS20R159050D010 E3SQCA451MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	14.0	0.8
10°-20°	29.2	1.6
20°-30°	70.0	3.8
30°-40°	383.1	20.7
40°-50°	927.6	50.1
50°-60°	370.1	20.0
60°-70°	32.0	1.7
70°-80°	18.0	1.0
80°-90°	7.9	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°	113.2	6.1
0°-40°	496.3	26.8
0°-60°	1794.0	96.9
0°-90°	1852.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1852.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	164	164	164	164	164	
5°	203	181	148	129	127	19
15°	161	107	79	81	87	56
25°	584	96	46	61	70	352
35°	6072	120	33	55	70	4290
45°	16477	68	24	54	70	11624
55°	5030	15	18	50	68	4686
65°	37	0	11	41	61	95
75°	6	2	11	30	46	5
85°	2	2	7	9	18	1
90°	0	0	0	0	0	

TEST NUMBER: P1311575

CATALOG NUMBER: P3SQAS20R159050D010 E3SQCA451MW

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	164.3	164.3	164.3	164.3	164.3	164.3	164.3	164.3	164.3	164.3	164.3
2.5°	184.7	184.7	186.5	184.7	184.7	184.7	184.7	182.8	182.8	182.8	177.3
5°	203.1	203.1	203.1	203.1	201.3	201.3	201.3	199.4	199.4	197.6	181.0
7.5°	210.5	210.5	208.7	208.7	206.8	206.8	205.0	203.1	201.3	199.4	173.6
10°	197.6	197.6	197.6	195.7	195.7	193.9	192.0	190.2	188.4	184.7	153.3
12.5°	175.4	175.4	177.3	175.4	173.6	171.7	168.0	166.2	164.3	160.7	127.4
15°	160.7	160.7	160.7	158.8	157.0	153.3	151.4	147.7	145.9	140.3	107.1
17.5°	205.0	205.0	203.1	199.4	192.0	186.5	177.3	169.9	160.7	149.6	92.3
20°	271.5	271.5	267.8	264.1	254.8	245.6	230.8	217.9	203.1	190.2	83.1
22.5°	393.3	398.9	387.8	374.9	361.9	339.8	319.5	299.2	273.3	251.1	84.9
25°	583.5	589.1	583.5	554.0	530.0	500.4	461.7	421.0	376.7	336.1	96.0
27.5°	945.5	949.2	939.9	867.9	829.1	751.6	683.2	616.8	542.9	469.0	105.3
30°	1667.5	1669.3	1610.3	1466.2	1338.8	1168.9	1024.9	886.4	770.0	651.9	112.6
31°	2195.6	2143.9	2018.4	1844.8	1641.6	1412.7	1215.1	1036.0	862.4	735.0	114.5
32°	2788.4	2781.0	2572.3	2271.3	1999.9	1713.7	1416.4	1187.4	987.9	814.4	116.3
33°	3573.2	3576.9	3248.2	2893.7	2448.6	2064.5	1674.9	1361.0	1120.9	908.5	120.0
34°	4799.4	4511.3	4125.3	3645.2	3039.5	2461.5	1955.6	1562.2	1240.9	999.0	120.0
35°	6071.7	5781.8	5357.0	4629.5	3798.5	2989.7	2289.8	1778.3	1385.0	1096.9	120.0
36°	7497.3	7251.7	6609.0	5680.2	4620.2	3488.3	2644.4	2027.6	1527.2	1185.5	118.2
37°	9037.3	8677.3	7964.5	6950.7	5532.5	4190.0	3076.5	2275.0	1669.3	1281.6	114.5
38°	10601.4	10276.4	9377.1	8149.1	6622.0	4930.5	3508.6	2513.2	1800.5	1353.6	109.0
39°	11787.0	11609.7	10717.8	9345.7	7491.7	5632.2	3953.6	2768.1	1938.9	1425.6	103.4
40°	13179.3	12893.1	12047.3	10350.3	8520.3	6346.8	4389.4	2993.4	2053.4	1482.8	97.9
41°	14449.8	14087.9	13020.5	11380.7	9343.9	6989.5	4803.1	3226.0	2145.8	1516.1	94.2
42°	15539.3	15118.3	14002.9	12263.4	10032.7	7502.8	5133.6	3392.2	2232.6	1543.8	88.6
43°	16244.7	15880.9	14784.0	12926.3	10621.7	7973.7	5442.0	3565.8	2286.1	1562.2	81.3
44°	16588.2	16220.7	15158.9	13341.8	10983.7	8256.2	5641.4	3685.9	2345.2	1586.2	75.7
45°	16477.4	16104.4	15077.6	13349.2	11096.3	8357.8	5726.4	3739.4	2376.6	1608.4	68.3
46°	15969.6	15707.3	14673.2	13002.0	10882.1	8248.8	5678.4	3698.8	2365.5	1608.4	60.9
47°	15256.8	14957.6	13973.4	12405.6	10363.2	7968.2	5484.5	3575.1	2297.2	1571.5	53.6
48°	14285.4	14030.6	12996.5	11458.3	9567.3	7356.9	5046.8	3373.8	2190.1	1499.5	46.2
49°	13066.7	12712.1	11750.0	10246.9	8529.5	6489.0	4472.5	3034.0	2018.4	1397.9	40.6
50°	11744.5	11306.8	10564.5	9033.7	7456.6	5563.9	3717.2	2565.0	1776.4	1264.9	36.9
51°	10450.0	10005.0	9297.7	7995.9	6311.7	4616.5	2998.9	2047.9	1462.5	1082.1	31.4
52°	9107.5	8734.5	7942.3	6919.3	5403.2	3741.2	2498.5	1732.1	1215.1	908.5	25.9
53°	7770.6	7515.7	6762.3	5726.4	4341.4	3056.2	2040.5	1482.8	1060.0	777.4	20.3
54°	6431.8	6152.9	5580.5	4657.2	3499.3	2411.7	1730.3	1240.9	919.6	677.7	18.5
55°	5030.2	4886.2	4358.0	3551.0	2651.7	1924.2	1403.4	1067.3	770.0	566.9	14.8
56°	3874.2	3711.7	3229.7	2576.0	1970.3	1506.8	1135.7	871.6	651.9	474.6	11.1
57°	2537.3	2371.1	2051.6	1798.6	1434.8	1098.7	867.9	686.9	530.0	393.3	9.2
58°	1499.5	1348.0	1298.2	1108.0	956.5	746.0	640.8	511.5	391.5	310.2	5.5
59°	688.8	699.9	622.3	583.5	530.0	474.6	389.6	341.6	267.8	223.4	3.7
60°	400.7	378.6	369.3	330.5	293.6	260.4	234.5	206.8	168.0	144.0	1.8
62.5°	136.6	131.1	134.8	121.9	114.5	110.8	101.6	86.8	72.0	59.1	0.0
65°	36.9	36.9	35.1	33.2	31.4	29.5	27.7	24.0	22.2	18.5	0.0



TEST NUMBER: P1311575

CATALOG NUMBER: P3SQAS20R159050D010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	12.9	12.9	11.1	11.1	9.2	9.2	7.4	7.4	5.5	5.5	0.0
70°	7.4	7.4	7.4	5.5	5.5	5.5	3.7	3.7	3.7	1.8	0.0
72.5°	5.5	5.5	5.5	5.5	5.5	5.5	3.7	3.7	3.7	1.8	1.8
75°	5.5	5.5	5.5	3.7	3.7	3.7	3.7	3.7	3.7	3.7	1.8
77.5°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
80°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	1.8	3.7
82.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3.7
85°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
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: P1311575

CATALOG NUMBER: P3SQAS20R159050D010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	164.3	164.3	164.3	164.3	164.3	164.3
2.5°	169.9	162.5	153.3	147.7	145.9	144.0
5°	162.5	147.7	136.6	129.3	127.4	127.4
7.5°	145.9	129.3	118.2	114.5	112.6	112.6
10°	127.4	112.6	103.4	99.7	101.6	101.6
12.5°	107.1	94.2	90.5	90.5	92.3	94.2
15°	86.8	79.4	79.4	81.3	84.9	86.8
17.5°	72.0	68.3	70.2	73.9	77.6	81.3
20°	59.1	59.1	62.8	68.3	73.9	77.6
22.5°	49.9	51.7	57.2	62.8	70.2	73.9
25°	42.5	46.2	51.7	60.9	68.3	70.2
27.5°	36.9	42.5	49.9	59.1	66.5	70.2
30°	31.4	38.8	48.0	57.2	66.5	70.2
31°	29.5	36.9	46.2	57.2	66.5	70.2
32°	27.7	36.9	46.2	57.2	66.5	70.2
33°	25.9	35.1	46.2	55.4	66.5	70.2
34°	24.0	35.1	46.2	57.2	66.5	70.2
35°	22.2	33.2	44.3	55.4	64.6	70.2
36°	20.3	33.2	44.3	55.4	66.5	70.2
37°	18.5	33.2	44.3	55.4	64.6	70.2
38°	18.5	31.4	42.5	55.4	64.6	70.2
39°	16.6	29.5	42.5	55.4	64.6	70.2
40°	14.8	29.5	40.6	53.6	64.6	70.2
41°	12.9	27.7	40.6	53.6	64.6	70.2
42°	11.1	27.7	40.6	53.6	64.6	70.2
43°	9.2	25.9	38.8	53.6	64.6	70.2
44°	9.2	25.9	38.8	53.6	64.6	70.2
45°	7.4	24.0	36.9	53.6	64.6	70.2
46°	7.4	24.0	36.9	51.7	64.6	70.2
47°	5.5	24.0	36.9	51.7	64.6	70.2
48°	5.5	22.2	36.9	51.7	64.6	70.2
49°	3.7	22.2	36.9	51.7	64.6	70.2
50°	3.7	22.2	35.1	51.7	64.6	70.2
51°	3.7	22.2	35.1	51.7	64.6	70.2
52°	3.7	20.3	35.1	51.7	64.6	70.2
53°	3.7	20.3	35.1	51.7	64.6	70.2
54°	3.7	20.3	33.2	51.7	64.6	70.2
55°	3.7	18.5	33.2	49.9	64.6	68.3
56°	3.7	18.5	33.2	49.9	64.6	68.3
57°	3.7	18.5	31.4	49.9	64.6	68.3
58°	3.7	16.6	31.4	48.0	62.8	68.3
59°	3.7	16.6	29.5	48.0	62.8	66.5
60°	3.7	14.8	29.5	46.2	60.9	66.5
62.5°	3.7	12.9	25.9	44.3	59.1	62.8
65°	3.7	11.1	24.0	40.6	57.2	60.9



TEST NUMBER: P1311575

CATALOG NUMBER: P3SQAS20R159050D010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	3.7	11.1	22.2	38.8	53.6	59.1
70°	3.7	11.1	20.3	35.1	51.7	53.6
72.5°	5.5	11.1	18.5	33.2	48.0	49.9
75°	7.4	11.1	16.6	29.5	44.3	46.2
77.5°	7.4	11.1	14.8	25.9	38.8	40.6
80°	7.4	9.2	12.9	20.3	31.4	33.2
82.5°	7.4	9.2	9.2	16.6	24.0	25.9
85°	5.5	7.4	7.4	9.2	16.6	18.5
87.5°	5.5	7.4	3.7	5.5	7.4	7.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)