

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: P1308115

Luminaire Tested: P3SQAS17R159030DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1308115
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: P3SQAS17R159030DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R15 optic, 3000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

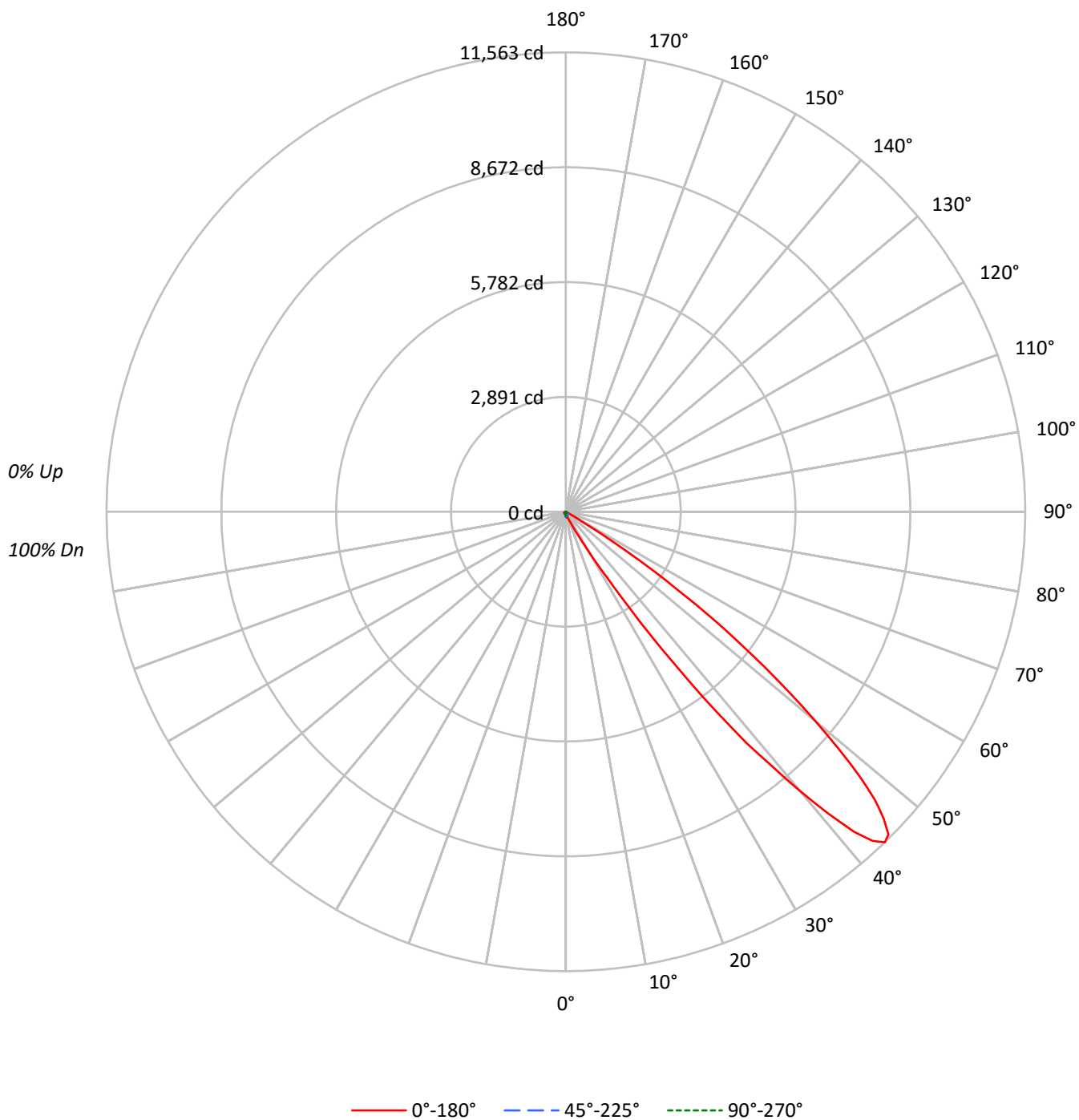
Lumens per Lamp: N/A
Luminaire Lumens: 1291.0 lumens
Efficiency: N/A
Efficacy: 60.9 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 21.2
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: P1308115

CATALOG NUMBER: P3SQAS17R159030DE010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1308115

CATALOG NUMBER: P3SQAS17R159030DE010 E3SQCA451MMS

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	0
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°	19737	19737	19737	19737	19737
5°	24480	21818	17807	15577	15352
10°	24081	18677	13728	12154	12381
15°	19969	13319	9878	10092	10787
20°	34676	10612	7551	8724	9915
25°	77303	12713	6119	8076	9292
30°	231161	15611	5369	7935	9725
35°	889862	17598	4878	8115	10281
40°	2065450	15333	4631	8386	10994
45°	2797550	11593	4067	9085	11910
50°	2193523	6886	4126	9646	13102
55°	1052865	3093	3873	10449	14292
60°	96204	448	3548	11091	15948
65°	10473	0	3138	11533	17319
70°	2568	0	3877	12337	18782
75°	2595	865	5124	13708	21426
80°	2579	2579	6347	14083	23010
85°	2569	2569	10078	12647	25491

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2797550 cd/sqm

TEST NUMBER: P1308115

CATALOG NUMBER: P3SQAS17R159030DE010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.8	0.8
10°-20°	20.4	1.6
20°-30°	48.8	3.8
30°-40°	267.0	20.7
40°-50°	646.6	50.1
50°-60°	258.0	20.0
60°-70°	22.3	1.7
70°-80°	12.6	1.0
80°-90°	5.5	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°	78.9	6.1
0°-40°	346.0	26.8
0°-60°	1250.6	96.9
0°-90°	1291.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1291.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	115	115	115	115	115	
5°	142	126	103	90	89	13
15°	112	75	55	57	60	39
25°	407	67	32	42	49	245
35°	4232	84	23	39	49	2991
45°	11486	48	17	37	49	8103
55°	3506	10	13	35	48	3267
65°	26	0	8	28	42	66
75°	4	1	8	21	32	4
85°	1	1	5	6	13	1
90°	0	0	0	0	0	

TEST NUMBER: P1308115

CATALOG NUMBER: P3SQAS17R159030DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	114.6	114.6	114.6	114.6	114.6	114.6	114.6	114.6	114.6	114.6	114.6
2.5°	128.7	128.7	130.0	128.7	128.7	128.7	128.7	127.4	127.4	127.4	123.6
5°	141.6	141.6	141.6	141.6	140.3	140.3	140.3	139.0	139.0	137.7	126.2
7.5°	146.7	146.7	145.5	145.5	144.2	144.2	142.9	141.6	140.3	139.0	121.0
10°	137.7	137.7	137.7	136.4	136.4	135.2	133.9	132.6	131.3	128.7	106.8
12.5°	122.3	122.3	123.6	122.3	121.0	119.7	117.1	115.9	114.6	112.0	88.8
15°	112.0	112.0	112.0	110.7	109.4	106.8	105.6	103.0	101.7	97.8	74.7
17.5°	142.9	142.9	141.6	139.0	133.9	130.0	123.6	118.4	112.0	104.3	64.4
20°	189.2	189.2	186.7	184.1	177.6	171.2	160.9	151.9	141.6	132.6	57.9
22.5°	274.2	278.0	270.3	261.3	252.3	236.9	222.7	208.5	190.5	175.1	59.2
25°	406.8	410.6	406.8	386.2	369.4	348.8	321.8	293.5	262.6	234.3	66.9
27.5°	659.1	661.6	655.2	605.0	578.0	523.9	476.3	429.9	378.5	327.0	73.4
30°	1162.4	1163.7	1122.5	1022.1	933.3	814.8	714.4	617.9	536.8	454.4	78.5
31°	1530.5	1494.5	1407.0	1286.0	1144.4	984.7	847.0	722.1	601.1	512.3	79.8
32°	1943.7	1938.6	1793.1	1583.3	1394.1	1194.6	987.3	827.7	688.7	567.7	81.1
33°	2490.8	2493.4	2264.3	2017.1	1706.9	1439.1	1167.5	948.7	781.4	633.3	83.7
34°	3345.6	3144.7	2875.7	2541.0	2118.8	1715.9	1363.2	1089.0	865.0	696.4	83.7
35°	4232.5	4030.4	3734.3	3227.1	2647.9	2084.1	1596.2	1239.6	965.4	764.6	83.7
36°	5226.2	5055.0	4607.1	3959.6	3220.7	2431.6	1843.3	1413.4	1064.6	826.4	82.4
37°	6299.8	6048.8	5551.9	4845.2	3856.6	2920.8	2144.6	1585.9	1163.7	893.4	79.8
38°	7390.1	7163.5	6536.6	5680.6	4616.1	3437.0	2445.8	1751.9	1255.1	943.6	75.9
39°	8216.5	8092.9	7471.2	6514.8	5222.4	3926.1	2756.0	1929.6	1351.6	993.8	72.1
40°	9187.1	8987.6	8398.0	7215.0	5939.4	4424.3	3059.8	2086.6	1431.4	1033.7	68.2
41°	10072.7	9820.4	9076.4	7933.3	6513.5	4872.2	3348.1	2248.8	1495.8	1056.8	65.6
42°	10832.2	10538.7	9761.2	8548.6	6993.6	5230.1	3578.6	2364.7	1556.3	1076.1	61.8
43°	11323.9	11070.3	10305.7	9010.7	7404.3	5558.3	3793.5	2485.7	1593.6	1089.0	56.6
44°	11563.4	11307.2	10567.0	9300.4	7656.6	5755.3	3932.5	2569.3	1634.8	1105.7	52.8
45°	11486.1	11226.1	10510.4	9305.5	7735.1	5826.1	3991.8	2606.7	1656.7	1121.2	47.6
46°	11132.1	10949.3	10228.5	9063.5	7585.8	5750.1	3958.3	2578.4	1649.0	1121.2	42.5
47°	10635.2	10426.7	9740.6	8647.7	7224.0	5554.5	3823.1	2492.1	1601.3	1095.4	37.3
48°	9958.2	9780.5	9059.7	7987.4	6669.2	5128.4	3518.1	2351.8	1526.7	1045.2	32.2
49°	9108.6	8861.4	8190.8	7142.9	5945.8	4523.4	3117.7	2114.9	1407.0	974.4	28.3
50°	8186.9	7881.8	7364.3	6297.2	5197.9	3878.5	2591.2	1788.0	1238.3	881.8	25.7
51°	7284.5	6974.3	6481.3	5573.8	4399.8	3218.1	2090.5	1427.6	1019.5	754.3	21.9
52°	6348.7	6088.7	5536.5	4823.3	3766.5	2608.0	1741.6	1207.4	847.0	633.3	18.0
53°	5416.7	5239.1	4713.9	3991.8	3026.3	2130.4	1422.4	1033.7	738.9	541.9	14.2
54°	4483.5	4289.1	3890.1	3246.4	2439.3	1681.1	1206.2	865.0	641.0	472.4	12.9
55°	3506.5	3406.1	3037.9	2475.4	1848.5	1341.3	978.3	744.0	536.8	395.2	10.3
56°	2700.6	2587.4	2251.4	1795.7	1373.5	1050.4	791.7	607.6	454.4	330.8	7.7
57°	1768.7	1652.8	1430.1	1253.8	1000.2	765.9	605.0	478.9	369.4	274.2	6.4
58°	1045.2	939.7	904.9	772.3	666.8	520.0	446.7	356.6	272.9	216.3	3.9
59°	480.1	487.9	433.8	406.8	369.4	330.8	271.6	238.1	186.7	155.8	2.6
60°	279.3	263.9	257.4	230.4	204.7	181.5	163.5	144.2	117.1	100.4	1.3
62.5°	95.3	91.4	94.0	85.0	79.8	77.2	70.8	60.5	50.2	41.2	0.0
65°	25.7	25.7	24.5	23.2	21.9	20.6	19.3	16.7	15.4	12.9	0.0



TEST NUMBER: P1308115

CATALOG NUMBER: P3SQAS17R159030DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	9.0	9.0	7.7	7.7	6.4	6.4	5.1	5.1	3.9	3.9	0.0
70°	5.1	5.1	5.1	3.9	3.9	3.9	2.6	2.6	2.6	1.3	0.0
72.5°	3.9	3.9	3.9	3.9	3.9	3.9	2.6	2.6	2.6	1.3	1.3
75°	3.9	3.9	3.9	2.6	2.6	2.6	2.6	2.6	2.6	2.6	1.3
77.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
80°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	1.3	2.6
82.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.6
85°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
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: P1308115

CATALOG NUMBER: P3SQAS17R159030DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	114.6	114.6	114.6	114.6	114.6	114.6
2.5°	118.4	113.3	106.8	103.0	101.7	100.4
5°	113.3	103.0	95.3	90.1	88.8	88.8
7.5°	101.7	90.1	82.4	79.8	78.5	78.5
10°	88.8	78.5	72.1	69.5	70.8	70.8
12.5°	74.7	65.6	63.1	63.1	64.4	65.6
15°	60.5	55.4	55.4	56.6	59.2	60.5
17.5°	50.2	47.6	48.9	51.5	54.1	56.6
20°	41.2	41.2	43.8	47.6	51.5	54.1
22.5°	34.8	36.0	39.9	43.8	48.9	51.5
25°	29.6	32.2	36.0	42.5	47.6	48.9
27.5°	25.7	29.6	34.8	41.2	46.3	48.9
30°	21.9	27.0	33.5	39.9	46.3	48.9
31°	20.6	25.7	32.2	39.9	46.3	48.9
32°	19.3	25.7	32.2	39.9	46.3	48.9
33°	18.0	24.5	32.2	38.6	46.3	48.9
34°	16.7	24.5	32.2	39.9	46.3	48.9
35°	15.4	23.2	30.9	38.6	45.1	48.9
36°	14.2	23.2	30.9	38.6	46.3	48.9
37°	12.9	23.2	30.9	38.6	45.1	48.9
38°	12.9	21.9	29.6	38.6	45.1	48.9
39°	11.6	20.6	29.6	38.6	45.1	48.9
40°	10.3	20.6	28.3	37.3	45.1	48.9
41°	9.0	19.3	28.3	37.3	45.1	48.9
42°	7.7	19.3	28.3	37.3	45.1	48.9
43°	6.4	18.0	27.0	37.3	45.1	48.9
44°	6.4	18.0	27.0	37.3	45.1	48.9
45°	5.1	16.7	25.7	37.3	45.1	48.9
46°	5.1	16.7	25.7	36.0	45.1	48.9
47°	3.9	16.7	25.7	36.0	45.1	48.9
48°	3.9	15.4	25.7	36.0	45.1	48.9
49°	2.6	15.4	25.7	36.0	45.1	48.9
50°	2.6	15.4	24.5	36.0	45.1	48.9
51°	2.6	15.4	24.5	36.0	45.1	48.9
52°	2.6	14.2	24.5	36.0	45.1	48.9
53°	2.6	14.2	24.5	36.0	45.1	48.9
54°	2.6	14.2	23.2	36.0	45.1	48.9
55°	2.6	12.9	23.2	34.8	45.1	47.6
56°	2.6	12.9	23.2	34.8	45.1	47.6
57°	2.6	12.9	21.9	34.8	45.1	47.6
58°	2.6	11.6	21.9	33.5	43.8	47.6
59°	2.6	11.6	20.6	33.5	43.8	46.3
60°	2.6	10.3	20.6	32.2	42.5	46.3
62.5°	2.6	9.0	18.0	30.9	41.2	43.8
65°	2.6	7.7	16.7	28.3	39.9	42.5



TEST NUMBER: P1308115

CATALOG NUMBER: P3SQAS17R159030DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.6	7.7	15.4	27.0	37.3	41.2
70°	2.6	7.7	14.2	24.5	36.0	37.3
72.5°	3.9	7.7	12.9	23.2	33.5	34.8
75°	5.1	7.7	11.6	20.6	30.9	32.2
77.5°	5.1	7.7	10.3	18.0	27.0	28.3
80°	5.1	6.4	9.0	14.2	21.9	23.2
82.5°	5.1	6.4	6.4	11.6	16.7	18.0
85°	3.9	5.1	5.1	6.4	11.6	12.9
87.5°	3.9	5.1	2.6	3.9	5.1	5.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)