

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: P1310433

Luminaire Tested: P3SQAS17R409040DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1310433
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-78)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS17R409040DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R40 optic, 4000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

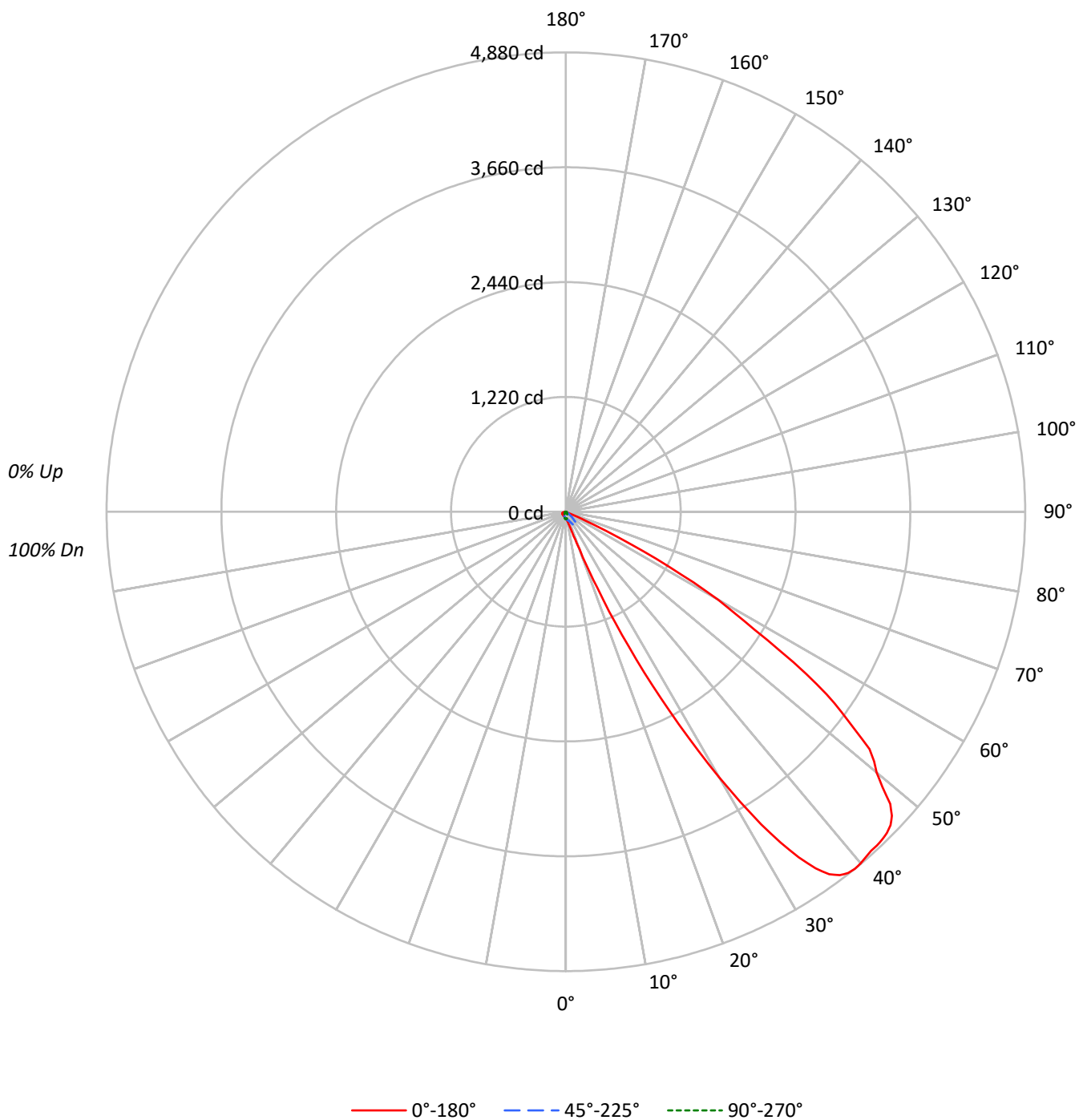
Lumens per Lamp: N/A
Luminaire Lumens: 1508.0 lumens
Efficiency: N/A
Efficacy: 71.1 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1310433

CATALOG NUMBER: P3SQAS17R409040DE010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1310433

CATALOG NUMBER: P3SQAS17R409040DE010 E3SQCA451MMS

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	102	102	100
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	88	88	86
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	75	75	72
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	62	62	60
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	52	52	50
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	44	44	42
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	37	37	35
7	62	48	39	32	60	47	38	32	45	37	32	44	37	31	42	36	31	31	31	29
8	57	42	33	27	55	42	33	27	40	32	27	39	32	27	38	31	26	26	26	24
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	23	23	21
10	48	34	25	20	47	33	25	20	32	25	20	31	24	20	30	24	19	19	19	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	13364	13364	13364	13364	13364
5°	14850	14366	13173	11963	11739
10°	17925	15249	12102	10895	10650
15°	29384	16546	10377	9628	9878
20°	77672	19537	8632	8632	9384
25°	299482	24209	6841	7886	9216
30°	646094	32216	5509	7716	9088
35°	972488	38138	4667	7569	9314
40°	1095641	38287	4047	7779	9960
45°	1174834	29690	3702	8086	10790
50°	1154728	18541	3349	8547	11869
55°	1015873	9158	3333	9578	13302
60°	643010	1894	3823	10506	14777
65°	131505	571	3953	11288	16382
70°	2769	705	4179	12538	18833
75°	2795	1863	4591	13841	21227
80°	2777	1389	5455	15075	24696
85°	2766	2766	10868	16401	27269

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 1196041 cd/sqm

TEST NUMBER: P1310433

CATALOG NUMBER: P3SQAS17R409040DE010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.2	0.5
10°-20°	23.9	1.6
20°-30°	117.1	7.8
30°-40°	381.0	25.3
40°-50°	525.2	34.8
50°-60°	365.9	24.3
60°-70°	69.4	4.6
70°-80°	12.6	0.8
80°-90°	5.8	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°	148.3	9.8
0°-40°	529.3	35.1
0°-60°	1420.3	94.2
0°-90°	1508.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1508.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	78	78	78	78	78	
5°	86	83	76	69	68	9
15°	165	93	58	54	55	60
25°	1576	127	36	42	48	811
35°	4626	181	22	36	44	2795
45°	4824	122	15	33	44	3668
55°	3383	30	11	32	44	2892
65°	323	1	10	28	40	571
75°	4	3	7	21	32	4
85°	1	1	6	8	14	1
90°	0	0	0	0	0	

TEST NUMBER: P1310433

CATALOG NUMBER: P3SQAS17R409040DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6
2.5°	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	78.9	77.6
5°	85.9	85.9	85.9	85.9	84.5	84.5	84.5	83.1	83.1	80.3	76.2
7.5°	91.4	91.4	91.4	91.4	90.0	88.6	87.2	87.2	85.9	78.9	73.4
10°	102.5	102.5	101.1	99.7	98.3	95.6	94.2	91.4	87.2	77.6	69.2
12.5°	124.6	121.9	120.5	117.7	113.6	108.0	102.5	98.3	88.6	74.8	65.1
15°	164.8	162.0	156.5	148.2	139.9	128.8	119.1	109.4	92.8	70.6	58.2
17.5°	235.4	227.1	218.8	205.0	184.2	164.8	144.0	126.0	98.3	66.5	52.6
20°	423.8	418.2	368.4	329.6	267.3	223.0	181.4	151.0	106.6	62.3	47.1
22.5°	873.9	815.7	734.0	601.0	468.1	344.8	250.7	189.7	114.9	56.8	41.5
25°	1576.0	1484.6	1308.7	1052.5	776.9	549.8	362.8	247.9	127.4	51.2	36.0
27.5°	2386.2	2293.4	2020.6	1667.4	1217.3	829.5	517.9	328.2	144.0	45.7	31.9
30°	3248.9	3170.0	2823.8	2334.9	1715.9	1161.9	693.8	409.9	162.0	40.2	27.7
31°	3596.6	3495.5	3121.5	2600.8	1949.9	1299.0	764.5	444.5	169.0	38.8	26.3
32°	3916.5	3801.5	3413.7	2855.6	2139.7	1447.2	842.0	475.0	174.5	36.0	24.9
33°	4192.1	4057.7	3683.8	3096.6	2348.8	1585.7	922.3	504.1	178.7	33.2	23.5
34°	4426.1	4309.8	3908.2	3339.0	2534.3	1718.6	1001.3	533.2	181.4	31.9	22.2
35°	4625.5	4520.3	4122.8	3523.2	2715.8	1847.4	1073.3	560.9	181.4	29.1	22.2
36°	4759.9	4668.5	4308.4	3711.5	2868.1	1956.8	1134.2	585.8	181.4	26.3	20.8
37°	4833.3	4744.6	4430.3	3866.6	3017.7	2064.9	1189.6	605.2	180.0	24.9	19.4
38°	4870.7	4793.1	4520.3	3992.6	3121.5	2142.4	1238.1	620.4	178.7	22.2	19.4
39°	4880.3	4815.3	4577.1	4084.0	3222.6	2220.0	1272.7	628.7	174.5	20.8	18.0
40°	4873.4	4816.6	4607.5	4165.7	3300.2	2280.9	1297.6	631.5	170.3	18.0	18.0
41°	4859.6	4815.3	4629.7	4222.5	3362.5	2319.7	1307.3	626.0	164.8	15.2	16.6
42°	4847.1	4798.6	4639.4	4261.3	3405.4	2339.1	1305.9	614.9	156.5	13.8	16.6
43°	4847.1	4791.7	4640.8	4286.2	3426.2	2340.5	1289.3	594.1	145.4	12.5	15.2
44°	4838.8	4787.6	4647.7	4302.8	3431.8	2328.0	1263.0	572.0	132.9	11.1	15.2
45°	4823.6	4769.6	4646.3	4304.2	3422.1	2297.5	1220.1	542.9	121.9	8.3	15.2
46°	4794.5	4746.0	4633.8	4294.5	3393.0	2253.2	1168.8	513.8	109.4	6.9	13.8
47°	4736.3	4698.9	4600.6	4261.3	3348.7	2188.1	1107.9	480.6	99.7	5.5	13.8
48°	4636.6	4610.3	4543.8	4187.9	3264.2	2107.8	1042.8	444.5	90.0	5.5	13.8
49°	4453.8	4433.0	4394.3	4070.2	3156.2	2009.5	972.2	404.4	80.3	4.2	13.8
50°	4309.8	4287.6	4208.7	3872.1	3001.1	1884.8	894.6	364.2	69.2	2.8	12.5
51°	4214.2	4178.2	4053.6	3642.3	2775.3	1718.6	810.2	324.1	58.2	2.8	12.5
52°	4093.7	4039.7	3884.6	3435.9	2569.0	1552.5	718.8	283.9	51.2	2.8	12.5
53°	3841.7	3822.3	3668.6	3214.3	2362.6	1393.2	624.6	250.7	44.3	2.8	12.5
54°	3621.5	3592.4	3383.3	2906.9	2138.3	1215.9	527.6	221.6	37.4	2.8	12.5
55°	3383.3	3326.5	3140.9	2647.9	1875.1	1052.5	434.9	191.1	30.5	2.8	11.1
56°	3082.8	3032.9	2833.5	2370.9	1632.8	886.3	364.2	156.5	23.5	2.8	11.1
57°	2717.2	2671.4	2517.7	2030.2	1380.7	724.3	296.4	126.0	18.0	2.8	11.1
58°	2364.0	2312.8	2136.9	1703.4	1114.8	574.7	247.9	102.5	13.8	2.8	11.1
59°	2092.6	2023.3	1796.2	1430.6	872.5	436.2	196.7	81.7	9.7	2.8	11.1
60°	1866.8	1810.0	1574.6	1191.0	684.1	321.3	145.4	62.3	5.5	2.8	11.1
62.5°	1081.6	1066.4	854.5	613.5	322.7	149.6	72.0	29.1	2.8	4.2	11.1
65°	322.7	281.1	218.8	130.2	83.1	49.9	26.3	9.7	1.4	4.2	9.7



TEST NUMBER: P1310433

CATALOG NUMBER: P3SQAS17R409040DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	9.7	9.7	9.7	9.7	9.7	9.7	5.5	2.8	1.4	4.2	9.7
70°	5.5	4.2	4.2	4.2	4.2	2.8	2.8	1.4	1.4	4.2	8.3
72.5°	4.2	4.2	4.2	4.2	2.8	2.8	2.8	1.4	2.8	4.2	6.9
75°	4.2	2.8	2.8	2.8	2.8	1.4	1.4	1.4	2.8	4.2	6.9
77.5°	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	2.8	4.2	6.9
80°	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4	4.2	5.5
82.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	4.2	5.5
85°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	4.2	5.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4	4.2	4.2
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: P1310433

CATALOG NUMBER: P3SQAS17R409040DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	77.6	77.6	77.6	77.6
2.5°	74.8	73.4	72.0	72.0
5°	72.0	69.2	69.2	67.9
7.5°	67.9	65.1	65.1	65.1
10°	63.7	62.3	62.3	60.9
12.5°	58.2	58.2	58.2	58.2
15°	54.0	54.0	55.4	55.4
17.5°	48.5	49.9	52.6	54.0
20°	44.3	47.1	49.9	51.2
22.5°	41.5	44.3	48.5	49.9
25°	37.4	41.5	47.1	48.5
27.5°	34.6	40.2	44.3	47.1
30°	31.9	38.8	42.9	45.7
31°	31.9	37.4	42.9	45.7
32°	30.5	36.0	42.9	44.3
33°	30.5	36.0	42.9	44.3
34°	29.1	36.0	41.5	44.3
35°	29.1	36.0	41.5	44.3
36°	27.7	34.6	41.5	44.3
37°	27.7	34.6	41.5	44.3
38°	26.3	34.6	41.5	44.3
39°	26.3	34.6	41.5	44.3
40°	26.3	34.6	41.5	44.3
41°	24.9	34.6	41.5	44.3
42°	24.9	34.6	41.5	44.3
43°	24.9	33.2	41.5	44.3
44°	24.9	33.2	41.5	44.3
45°	23.5	33.2	41.5	44.3
46°	23.5	33.2	41.5	44.3
47°	23.5	33.2	41.5	44.3
48°	23.5	33.2	41.5	44.3
49°	23.5	33.2	41.5	44.3
50°	22.2	31.9	41.5	44.3
51°	22.2	31.9	41.5	44.3
52°	22.2	31.9	41.5	44.3
53°	22.2	31.9	41.5	44.3
54°	20.8	31.9	41.5	44.3
55°	20.8	31.9	41.5	44.3
56°	20.8	31.9	41.5	42.9
57°	20.8	31.9	40.2	42.9
58°	20.8	30.5	40.2	42.9
59°	20.8	30.5	40.2	42.9
60°	20.8	30.5	40.2	42.9
62.5°	19.4	30.5	38.8	41.5
65°	18.0	27.7	38.8	40.2



TEST NUMBER: P1310433

CATALOG NUMBER: P3SQAS17R409040DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	18.0	26.3	36.0	38.8
70°	16.6	24.9	34.6	37.4
72.5°	13.8	23.5	31.9	34.6
75°	12.5	20.8	29.1	31.9
77.5°	11.1	18.0	26.3	27.7
80°	9.7	15.2	22.2	24.9
82.5°	6.9	11.1	18.0	19.4
85°	5.5	8.3	12.5	13.8
87.5°	4.2	4.2	6.9	6.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)