

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: P1309314

Luminaire Tested: P3SQAS17R409035DE010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1309314
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: P3SQAS17R409035DE010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R40 optic, 3500K CCT AND, 90CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

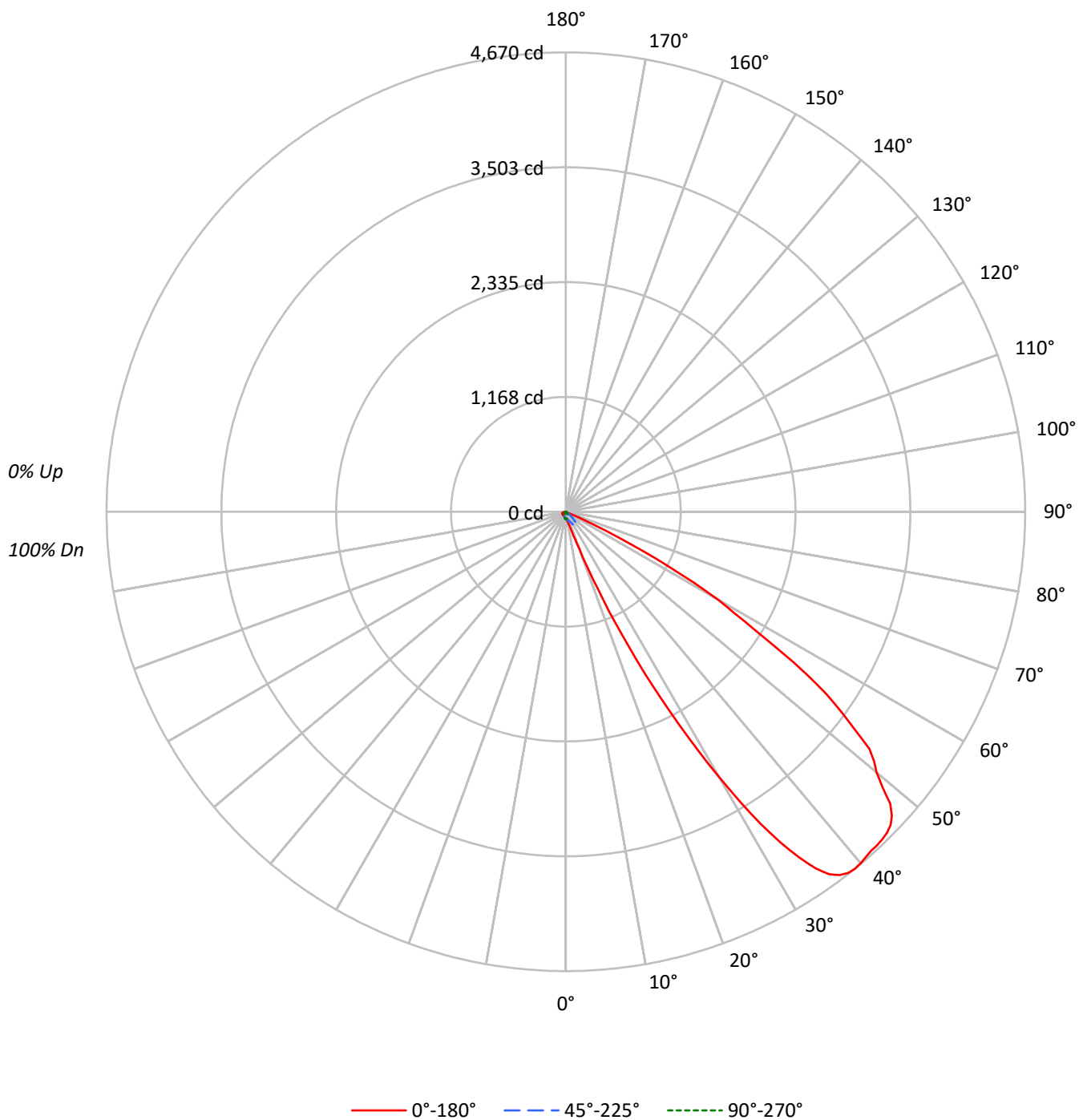
Lumens per Lamp: N/A
Luminaire Lumens: 1443.0 lumens
Efficiency: N/A
Efficacy: 68.1 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1309314

CATALOG NUMBER: P3SQAS17R409035DE010 E3SQCA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1309314

CATALOG NUMBER: P3SQAS17R409035DE010 E3SQCA451MB

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	12779	12779	12779	12779	12779
5°	14211	13744	12603	11462	11220
10°	17156	14602	11595	10423	10195
15°	28118	15833	9931	9218	9450
20°	74318	18694	8266	8266	8980
25°	286579	23164	6556	7563	8817
30°	618253	30824	5270	7378	8690
35°	930587	36499	4457	7253	8914
40°	1048429	36646	3867	7442	9532
45°	1124198	28399	3556	7745	10327
50°	1104947	17764	3188	8172	11360
55°	972095	8768	3183	9158	12731
60°	615317	1826	3651	10058	14157
65°	125840	530	3790	10799	15649
70°	2669	655	4028	12035	18027
75°	2662	1797	4392	13242	20295
80°	2678	1289	5256	14480	23704
85°	2569	2569	10473	15808	26281

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 1144500 cd/sqm

TEST NUMBER: P1309314

CATALOG NUMBER: P3SQAS17R409035DE010 E3SQCA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.9	0.5
10°-20°	22.9	1.6
20°-30°	112.1	7.8
30°-40°	364.6	25.3
40°-50°	502.6	34.8
50°-60°	350.1	24.3
60°-70°	66.4	4.6
70°-80°	12.0	0.8
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°	141.9	9.8
0°-40°	506.5	35.1
0°-60°	1359.1	94.2
0°-90°	1443.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1443.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	74	74	74	74	74	
5°	82	80	73	66	65	8
15°	158	89	56	52	53	57
25°	1508	122	34	40	46	776
35°	4426	174	21	34	42	2675
45°	4616	117	15	32	42	3510
55°	3238	29	11	30	42	2767
65°	309	1	9	26	38	546
75°	4	3	7	20	30	4
85°	1	1	5	8	13	1
90°	0	0	0	0	0	

TEST NUMBER: P1309314

CATALOG NUMBER: P3SQAS17R409035DE010 E3SQCA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
2.5°	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	75.5	74.2
5°	82.2	82.2	82.2	82.2	80.8	80.8	80.8	79.5	79.5	76.9	72.9
7.5°	87.5	87.5	87.5	87.5	86.1	84.8	83.5	83.5	82.2	75.5	70.2
10°	98.1	98.1	96.7	95.4	94.1	91.4	90.1	87.5	83.5	74.2	66.3
12.5°	119.3	116.6	115.3	112.6	108.7	103.4	98.1	94.1	84.8	71.6	62.3
15°	157.7	155.0	149.7	141.8	133.8	123.2	114.0	104.7	88.8	67.6	55.7
17.5°	225.3	217.3	209.4	196.1	176.3	157.7	137.8	120.6	94.1	63.6	50.4
20°	405.5	400.2	352.5	315.4	255.8	213.4	173.6	144.4	102.0	59.6	45.1
22.5°	836.2	780.5	702.4	575.1	447.9	330.0	239.9	181.6	110.0	54.3	39.8
25°	1508.1	1420.6	1252.3	1007.1	743.4	526.1	347.2	237.2	121.9	49.0	34.5
27.5°	2283.3	2194.5	1933.5	1595.5	1164.8	793.8	495.6	314.1	137.8	43.7	30.5
30°	3108.9	3033.4	2702.1	2234.3	1641.9	1111.8	663.9	392.3	155.0	38.4	26.5
31°	3441.5	3344.8	2987.0	2488.7	1865.9	1243.0	731.5	425.4	161.7	37.1	25.2
32°	3747.7	3637.7	3266.6	2732.6	2047.4	1384.8	805.7	454.5	167.0	34.5	23.9
33°	4011.4	3882.8	3525.0	2963.1	2247.5	1517.3	882.6	482.4	171.0	31.8	22.5
34°	4235.3	4124.0	3739.7	3195.0	2425.1	1644.6	958.1	510.2	173.6	30.5	21.2
35°	4426.2	4325.4	3945.1	3371.3	2598.7	1767.8	1027.0	536.7	173.6	27.8	21.2
36°	4554.7	4467.2	4122.7	3551.5	2744.5	1872.5	1085.3	560.6	173.6	25.2	19.9
37°	4624.9	4540.1	4239.3	3699.9	2887.6	1975.9	1138.3	579.1	172.3	23.9	18.6
38°	4660.7	4586.5	4325.4	3820.5	2987.0	2050.1	1184.7	593.7	171.0	21.2	18.6
39°	4670.0	4607.7	4379.8	3908.0	3083.7	2124.3	1217.9	601.6	167.0	19.9	17.2
40°	4663.4	4609.0	4408.9	3986.2	3157.9	2182.6	1241.7	604.3	163.0	17.2	17.2
41°	4650.1	4607.7	4430.1	4040.5	3217.6	2219.7	1251.0	599.0	157.7	14.6	15.9
42°	4638.2	4591.8	4439.4	4077.6	3258.7	2238.3	1249.7	588.4	149.7	13.3	15.9
43°	4638.2	4585.2	4440.7	4101.5	3278.5	2239.6	1233.8	568.5	139.1	11.9	14.6
44°	4630.2	4581.2	4447.4	4117.4	3283.8	2227.7	1208.6	547.3	127.2	10.6	14.6
45°	4615.7	4564.0	4446.0	4118.7	3274.6	2198.5	1167.5	519.5	116.6	8.0	14.6
46°	4587.8	4541.4	4434.1	4109.4	3246.7	2156.1	1118.5	491.6	104.7	6.6	13.3
47°	4532.2	4496.4	4402.3	4077.6	3204.3	2093.8	1060.2	459.8	95.4	5.3	13.3
48°	4436.8	4411.6	4348.0	4007.4	3123.5	2016.9	997.9	425.4	86.1	5.3	13.3
49°	4261.8	4241.9	4204.8	3894.7	3020.1	1922.9	930.3	387.0	76.9	4.0	13.3
50°	4124.0	4102.8	4027.3	3705.2	2871.7	1803.6	856.1	348.5	66.3	2.7	11.9
51°	4032.6	3998.1	3878.8	3485.3	2655.7	1644.6	775.2	310.1	55.7	2.7	11.9
52°	3917.3	3865.6	3717.2	3287.8	2458.2	1485.5	687.8	271.7	49.0	2.7	11.9
53°	3676.1	3657.5	3510.4	3075.8	2260.8	1333.1	597.7	239.9	42.4	2.7	11.9
54°	3465.4	3437.6	3237.5	2781.6	2046.1	1163.5	504.9	212.0	35.8	2.7	11.9
55°	3237.5	3183.1	3005.5	2533.8	1794.3	1007.1	416.1	182.9	29.2	2.7	10.6
56°	2949.9	2902.2	2711.3	2268.7	1562.4	848.1	348.5	149.7	22.5	2.7	10.6
57°	2600.0	2556.3	2409.2	1942.7	1321.2	693.1	283.6	120.6	17.2	2.7	10.6
58°	2262.1	2213.1	2044.8	1630.0	1066.8	550.0	237.2	98.1	13.3	2.7	10.6
59°	2002.4	1936.1	1718.8	1368.9	834.9	417.4	188.2	78.2	9.3	2.7	10.6
60°	1786.4	1732.0	1506.7	1139.7	654.6	307.4	139.1	59.6	5.3	2.7	10.6
62.5°	1035.0	1020.4	817.6	587.1	308.8	143.1	68.9	27.8	2.7	4.0	10.6
65°	308.8	269.0	209.4	124.6	79.5	47.7	25.2	9.3	1.3	4.0	9.3



TEST NUMBER: P1309314

CATALOG NUMBER: P3SQAS17R409035DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	9.3	9.3	9.3	9.3	9.3	9.3	5.3	2.7	1.3	4.0	9.3
70°	5.3	4.0	4.0	4.0	4.0	2.7	2.7	1.3	1.3	4.0	8.0
72.5°	4.0	4.0	4.0	4.0	2.7	2.7	2.7	1.3	2.7	4.0	6.6
75°	4.0	2.7	2.7	2.7	2.7	1.3	1.3	1.3	2.7	4.0	6.6
77.5°	2.7	2.7	2.7	2.7	1.3	1.3	1.3	1.3	2.7	4.0	6.6
80°	2.7	2.7	1.3	1.3	1.3	1.3	1.3	1.3	1.3	4.0	5.3
82.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	4.0	5.3
85°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	4.0	5.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	4.0	4.0
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: P1309314

CATALOG NUMBER: P3SQAS17R409035DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	74.2	74.2	74.2	74.2
2.5°	71.6	70.2	68.9	68.9
5°	68.9	66.3	66.3	64.9
7.5°	64.9	62.3	62.3	62.3
10°	61.0	59.6	59.6	58.3
12.5°	55.7	55.7	55.7	55.7
15°	51.7	51.7	53.0	53.0
17.5°	46.4	47.7	50.4	51.7
20°	42.4	45.1	47.7	49.0
22.5°	39.8	42.4	46.4	47.7
25°	35.8	39.8	45.1	46.4
27.5°	33.1	38.4	42.4	45.1
30°	30.5	37.1	41.1	43.7
31°	30.5	35.8	41.1	43.7
32°	29.2	34.5	41.1	42.4
33°	29.2	34.5	41.1	42.4
34°	27.8	34.5	39.8	42.4
35°	27.8	34.5	39.8	42.4
36°	26.5	33.1	39.8	42.4
37°	26.5	33.1	39.8	42.4
38°	25.2	33.1	39.8	42.4
39°	25.2	33.1	39.8	42.4
40°	25.2	33.1	39.8	42.4
41°	23.9	33.1	39.8	42.4
42°	23.9	33.1	39.8	42.4
43°	23.9	31.8	39.8	42.4
44°	23.9	31.8	39.8	42.4
45°	22.5	31.8	39.8	42.4
46°	22.5	31.8	39.8	42.4
47°	22.5	31.8	39.8	42.4
48°	22.5	31.8	39.8	42.4
49°	22.5	31.8	39.8	42.4
50°	21.2	30.5	39.8	42.4
51°	21.2	30.5	39.8	42.4
52°	21.2	30.5	39.8	42.4
53°	21.2	30.5	39.8	42.4
54°	19.9	30.5	39.8	42.4
55°	19.9	30.5	39.8	42.4
56°	19.9	30.5	39.8	41.1
57°	19.9	30.5	38.4	41.1
58°	19.9	29.2	38.4	41.1
59°	19.9	29.2	38.4	41.1
60°	19.9	29.2	38.4	41.1
62.5°	18.6	29.2	37.1	39.8
65°	17.2	26.5	37.1	38.4



TEST NUMBER: P1309314

CATALOG NUMBER: P3SQAS17R409035DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	17.2	25.2	34.5	37.1
70°	15.9	23.9	33.1	35.8
72.5°	13.3	22.5	30.5	33.1
75°	11.9	19.9	27.8	30.5
77.5°	10.6	17.2	25.2	26.5
80°	9.3	14.6	21.2	23.9
82.5°	6.6	10.6	17.2	18.6
85°	5.3	8.0	11.9	13.3
87.5°	4.0	4.0	6.6	6.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)