

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: P1316531

Luminaire Tested: P3SQAS20R309827D010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1316531
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS20R309827D010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R30 optic, 2700K CCT AND, 98CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

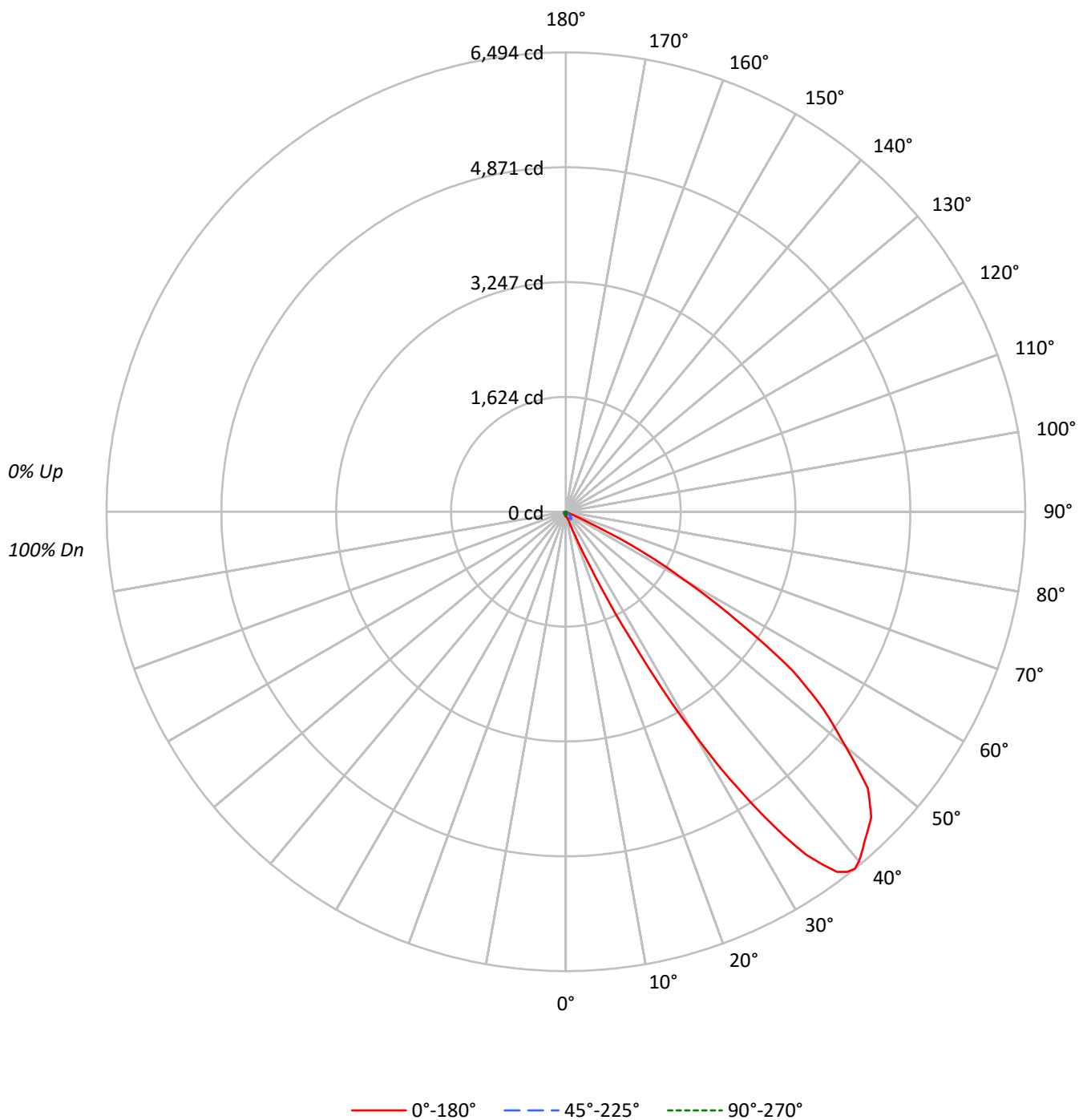
Lumens per Lamp: N/A
Luminaire Lumens: 1688.0 lumens
Efficiency: N/A
Efficacy: 61.6 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 27.4
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: P1316531

CATALOG NUMBER: P3SQAS20R309827D010 E3SQCA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1316531

CATALOG NUMBER: P3SQAS20R309827D010 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	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	108	104	100	97	100	97	94	96	93	91	92	90	89	87		
2	100	93	86	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	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	37	49	42	37	48	42	37	35		
7	62	48	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	32	26	37	31	26	24		
9	52	37	29	23	50	37	28	23	36	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	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	11263	11263	11263	11263	11263
5°	12050	11808	11064	10079	9837
10°	13186	11682	9706	8709	8447
15°	19274	11661	8113	7346	7613
20°	48476	12774	6250	6250	7038
25°	225068	15943	4865	5682	6480
30°	716533	22054	3679	5369	6503
35°	1243326	26911	2985	5088	6581
40°	1450026	26844	2248	5126	6722
45°	1487077	19046	2436	5553	7282
50°	1382925	10664	1902	5707	8386
55°	1175372	5555	2132	6396	9398
60°	678833	1481	2446	6854	10299
65°	138473	0	2893	8110	11573
70°	2165	705	3575	9316	13596
75°	1863	932	3793	9449	16103
80°	1389	1389	5653	11306	18348
85°	0	2766	11263	11263	22527

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1487077 cd/sqm

TEST NUMBER: P1316531

CATALOG NUMBER: P3SQAS20R309827D010 E3SQCA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.9	0.4
10°-20°	17.0	1.0
20°-30°	97.3	5.8
30°-40°	454.7	26.9
40°-50°	643.0	38.1
50°-60°	395.5	23.4
60°-70°	60.2	3.6
70°-80°	9.5	0.6
80°-90°	4.8	0.3
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°	120.3	7.1
0°-40°	574.9	34.1
0°-60°	1613.4	95.6
0°-90°	1688.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1688.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	65	65	65	65	65	
5°	70	68	64	58	57	7
15°	108	65	46	41	43	39
25°	1184	84	26	30	34	729
35°	5914	128	14	24	31	3549
45°	6106	78	10	23	30	4629
55°	3914	18	7	21	31	3331
65°	340	0	7	20	28	615
75°	3	1	6	14	24	3
85°	0	1	6	6	11	1
90°	0	0	0	0	0	

TEST NUMBER: P1316531

CATALOG NUMBER: P3SQAS20R309827D010 E3SQCA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4
2.5°	66.8	66.8	68.3	68.3	66.8	68.3	68.3	68.3	65.4	64.0	61.1
5°	69.7	69.7	69.7	71.1	69.7	69.7	68.3	66.8	64.0	59.7	58.3
7.5°	72.5	72.5	71.1	72.5	71.1	71.1	68.3	65.4	61.1	56.9	54.0
10°	75.4	75.4	73.9	73.9	72.5	72.5	66.8	62.6	55.5	51.2	49.8
12.5°	83.9	83.9	82.5	81.0	78.2	76.8	65.4	58.3	49.8	45.5	44.1
15°	108.1	106.6	103.8	99.5	92.4	91.0	65.4	54.0	45.5	41.2	41.2
17.5°	147.9	146.5	142.2	130.8	118.0	113.8	65.4	48.3	39.8	37.0	37.0
20°	264.5	253.1	231.8	203.3	173.5	157.8	69.7	42.7	34.1	32.7	34.1
21°	345.5	334.1	307.1	260.2	207.6	190.5	72.5	41.2	32.7	31.3	34.1
22°	470.6	457.9	402.4	338.4	263.1	233.2	73.9	38.4	29.9	29.9	32.7
23°	656.9	635.6	541.7	439.4	328.5	285.8	76.8	37.0	28.4	29.9	31.3
24°	860.2	841.8	735.1	581.6	419.5	358.3	79.6	35.5	27.0	27.0	29.9
25°	1184.4	1163.1	974.0	733.7	531.8	430.8	83.9	32.7	25.6	25.6	29.9
26°	1603.9	1505.8	1254.1	945.6	655.5	540.3	88.2	31.3	24.2	25.6	28.4
27°	2002.0	1921.0	1638.0	1212.9	810.5	664.0	93.8	29.9	22.8	24.2	28.4
28°	2525.3	2411.5	2054.6	1534.2	1020.9	803.4	99.5	28.4	21.3	24.2	27.0
29°	3111.1	2951.9	2521.0	1895.4	1258.4	959.8	105.2	27.0	19.9	22.8	27.0
30°	3603.1	3453.8	3023.0	2323.4	1531.4	1166.0	110.9	25.6	18.5	22.8	27.0
31°	4180.4	3954.3	3432.5	2686.0	1766.0	1372.1	116.6	22.8	17.1	21.3	25.6
32°	4648.2	4490.4	3935.8	3095.5	2074.6	1599.6	120.9	21.3	17.1	21.3	25.6
33°	5100.4	4888.5	4352.4	3487.9	2353.2	1832.8	125.1	19.9	15.6	19.9	25.6
34°	5532.6	5337.8	4746.3	3805.0	2616.3	2054.6	128.0	17.1	15.6	19.9	24.2
35°	5913.7	5687.6	5093.2	4115.0	2886.5	2256.6	128.0	15.6	14.2	18.5	24.2
36°	6161.1	5999.0	5394.7	4420.7	3131.0	2448.5	128.0	14.2	12.8	18.5	22.8
37°	6373.0	6183.8	5636.4	4655.3	3311.6	2602.1	128.0	12.8	12.8	18.5	22.8
38°	6459.7	6297.6	5802.8	4862.9	3480.8	2758.5	126.5	11.4	11.4	17.1	22.8
39°	6493.8	6348.8	5927.9	5012.2	3605.9	2863.7	123.7	10.0	11.4	17.1	22.8
40°	6449.7	6340.3	5991.9	5108.9	3705.5	2940.5	119.4	8.5	10.0	17.1	22.8
42.5°	6267.7	6195.2	5977.7	5205.6	3790.8	2997.4	103.8	5.7	10.0	15.6	22.8
45°	6105.6	6026.0	5834.1	5104.6	3679.9	2885.0	78.2	2.8	10.0	15.6	22.8
47.5°	5791.4	5741.6	5590.9	4847.3	3436.7	2631.9	55.5	1.4	8.5	14.2	21.3
50°	5161.5	5114.6	4915.5	4208.8	2956.1	2225.3	39.8	1.4	7.1	14.2	21.3
52.5°	4597.0	4547.2	4261.4	3499.3	2270.8	1630.9	25.6	1.4	7.1	14.2	21.3
55°	3914.5	3827.8	3452.4	2656.1	1609.6	1093.4	18.5	1.4	7.1	12.8	21.3
57.5°	2897.8	2771.3	2435.7	1811.5	927.1	592.9	10.0	1.4	7.1	12.8	21.3
60°	1970.8	1895.4	1524.3	955.5	395.3	250.3	4.3	1.4	7.1	12.8	19.9
62.5°	1194.4	1099.1	766.4	406.7	170.6	113.8	0.0	2.8	7.1	12.8	19.9
65°	339.8	301.4	200.5	92.4	48.3	37.0	0.0	2.8	7.1	12.8	19.9
67.5°	11.4	11.4	11.4	10.0	7.1	7.1	1.4	2.8	7.1	12.8	18.5
70°	4.3	4.3	4.3	2.8	2.8	1.4	1.4	2.8	7.1	11.4	18.5
72.5°	2.8	2.8	2.8	2.8	1.4	1.4	1.4	2.8	5.7	10.0	17.1
75°	2.8	2.8	2.8	1.4	1.4	1.4	1.4	4.3	5.7	10.0	14.2
77.5°	2.8	2.8	2.8	1.4	1.4	1.4	1.4	4.3	5.7	8.5	14.2
80°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	4.3	5.7	8.5	11.4



TEST NUMBER: P1316531

CATALOG NUMBER: P3SQAS20R309827D010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	1.4	1.4	1.4	0.0	0.0	0.0	1.4	4.3	5.7	5.7	8.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	1.4	4.3	5.7	4.3	5.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.4	4.3	4.3	4.3	2.8
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: P1316531

CATALOG NUMBER: P3SQAS20R309827D010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	65.4	65.4
2.5°	61.1	61.1
5°	56.9	56.9
7.5°	52.6	52.6
10°	48.3	48.3
12.5°	45.5	45.5
15°	41.2	42.7
17.5°	38.4	39.8
20°	37.0	38.4
21°	37.0	38.4
22°	35.5	37.0
23°	35.5	37.0
24°	34.1	35.5
25°	32.7	34.1
26°	32.7	34.1
27°	32.7	34.1
28°	31.3	34.1
29°	31.3	32.7
30°	31.3	32.7
31°	29.9	32.7
32°	29.9	32.7
33°	29.9	31.3
34°	28.4	31.3
35°	28.4	31.3
36°	28.4	31.3
37°	28.4	29.9
38°	28.4	31.3
39°	28.4	29.9
40°	28.4	29.9
42.5°	28.4	29.9
45°	28.4	29.9
47.5°	28.4	31.3
50°	28.4	31.3
52.5°	28.4	31.3
55°	28.4	31.3
57.5°	28.4	29.9
60°	28.4	29.9
62.5°	27.0	29.9
65°	27.0	28.4
67.5°	27.0	28.4
70°	25.6	27.0
72.5°	24.2	25.6
75°	21.3	24.2
77.5°	19.9	21.3
80°	17.1	18.5



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CATALOG NUMBER: P3SQAS20R309827D010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	14.2	14.2
85°	10.0	11.4
87.5°	5.7	5.7
90°	0.0	0.0

(END OF REPORT)