

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: P1315655

Luminaire Tested: P3SQAS20R309740D010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1315655
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: P3SQAS20R309740D010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R30 optic, 4000K CCT AND, 97CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

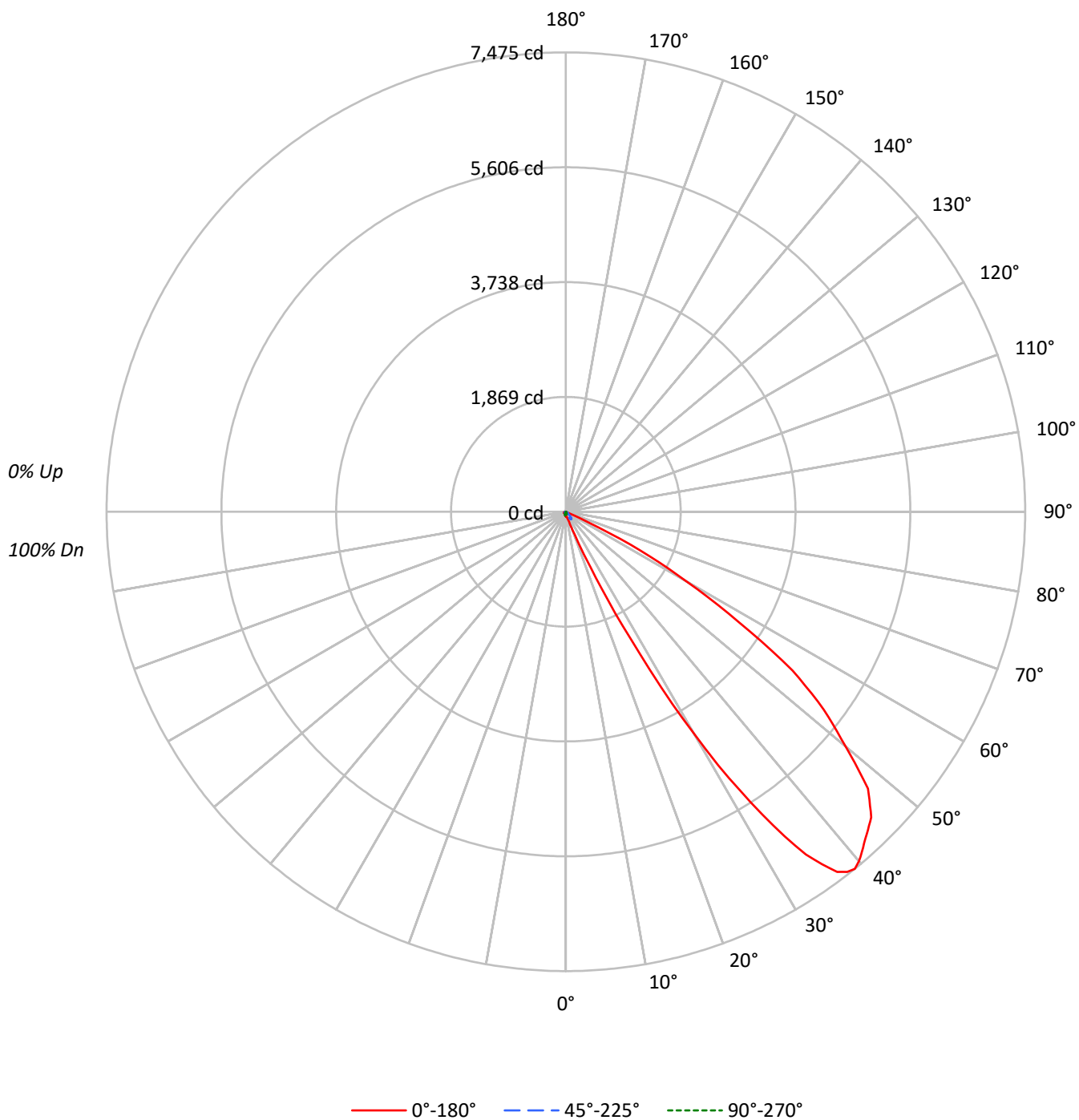
Lumens per Lamp: N/A
Luminaire Lumens: 1943.0 lumens
Efficiency: N/A
Efficacy: 67.5 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1315655

CATALOG NUMBER: P3SQAS20R309740D010 E3SQCA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1315655

CATALOG NUMBER: P3SQAS20R309740D010 E3SQCA451MB

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	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°	12968	12968	12968	12968	12968
5°	13865	13588	12741	11600	11324
10°	15162	13448	11157	10021	9723
15°	22180	13426	9343	8469	8754
20°	55789	14699	7203	7203	8101
25°	259082	18357	5606	6537	7468
30°	824775	25395	4236	6185	7477
35°	1431138	30969	3448	5845	7569
40°	1669091	30913	2585	5890	7734
45°	1711737	21920	2801	6381	8378
50°	1591831	12271	2197	6591	9646
55°	1352916	6396	2462	7386	10809
60°	781374	1688	2824	7888	11849
65°	159419	0	3342	9332	13326
70°	2467	806	4129	10726	15660
75°	2196	1065	4325	10913	18499
80°	1587	1587	6447	12992	21125
85°	0	3162	12844	12844	25886

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1711737 cd/sqm

TEST NUMBER: P1315655

CATALOG NUMBER: P3SQAS20R309740D010 E3SQCA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.8	0.4
10°-20°	19.6	1.0
20°-30°	112.1	5.8
30°-40°	523.3	26.9
40°-50°	740.1	38.1
50°-60°	455.3	23.4
60°-70°	69.3	3.6
70°-80°	11.0	0.6
80°-90°	5.5	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°	138.4	7.1
0°-40°	661.8	34.1
0°-60°	1857.2	95.6
0°-90°	1943.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1943.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	75	75	75	75	75	
5°	80	79	74	67	66	8
15°	124	75	52	48	49	44
25°	1363	97	30	34	39	839
35°	6807	147	16	28	36	4085
45°	7028	90	12	26	34	5328
55°	4506	21	8	25	36	3834
65°	391	0	8	23	33	708
75°	3	2	6	16	28	3
85°	0	2	6	6	13	1
90°	0	0	0	0	0	

TEST NUMBER: P1315655

CATALOG NUMBER: P3SQAS20R309740D010 E3SQCA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3
2.5°	76.9	76.9	78.6	78.6	76.9	78.6	78.6	78.6	75.3	73.7	70.4
5°	80.2	80.2	80.2	81.8	80.2	80.2	78.6	76.9	73.7	68.7	67.1
7.5°	83.5	83.5	81.8	83.5	81.8	81.8	78.6	75.3	70.4	65.5	62.2
10°	86.7	86.7	85.1	85.1	83.5	83.5	76.9	72.0	63.8	58.9	57.3
12.5°	96.6	96.6	94.9	93.3	90.0	88.4	75.3	67.1	57.3	52.4	50.7
15°	124.4	122.8	119.5	114.6	106.4	104.7	75.3	62.2	52.4	47.5	47.5
17.5°	170.2	168.6	163.7	150.6	135.8	130.9	75.3	55.6	45.8	42.6	42.6
20°	304.4	291.3	266.8	234.0	199.7	181.7	80.2	49.1	39.3	37.6	39.3
21°	397.7	384.6	353.5	299.5	239.0	219.3	83.5	47.5	37.6	36.0	39.3
22°	541.7	527.0	463.2	389.5	302.8	268.4	85.1	44.2	34.4	34.4	37.6
23°	756.2	731.6	623.6	505.7	378.1	329.0	88.4	42.6	32.7	34.4	36.0
24°	990.2	968.9	846.2	669.4	482.8	412.4	91.7	40.9	31.1	31.1	34.4
25°	1363.4	1338.8	1121.1	844.5	612.1	495.9	96.6	37.6	29.5	29.5	34.4
26°	1846.2	1733.3	1443.6	1088.4	754.5	621.9	101.5	36.0	27.8	29.5	32.7
27°	2304.5	2211.2	1885.5	1396.1	932.9	764.3	108.0	34.4	26.2	27.8	32.7
28°	2906.8	2775.8	2365.0	1766.0	1175.2	924.7	114.6	32.7	24.6	27.8	31.1
29°	3581.1	3397.8	2901.9	2181.7	1448.5	1104.8	121.1	31.1	22.9	26.2	31.1
30°	4147.4	3975.5	3479.6	2674.4	1762.7	1342.1	127.7	29.5	21.3	26.2	31.1
31°	4811.9	4551.7	3951.0	3091.7	2032.8	1579.4	134.2	26.2	19.6	24.6	29.5
32°	5350.4	5168.7	4530.4	3563.1	2387.9	1841.3	139.1	24.6	19.6	24.6	29.5
33°	5870.8	5627.0	5009.9	4014.8	2708.7	2109.7	144.0	22.9	18.0	22.9	29.5
34°	6368.4	6144.2	5463.3	4379.8	3011.5	2365.0	147.3	19.6	18.0	22.9	27.8
35°	6807.0	6546.8	5862.7	4736.6	3322.5	2597.4	147.3	18.0	16.4	21.3	27.8
36°	7091.8	6905.2	6209.6	5088.5	3604.0	2818.4	147.3	16.4	14.7	21.3	26.2
37°	7335.7	7118.0	6487.9	5358.6	3811.9	2995.2	147.3	14.7	14.7	21.3	26.2
38°	7435.5	7248.9	6679.4	5597.5	4006.6	3175.2	145.7	13.1	13.1	19.6	26.2
39°	7474.8	7307.9	6823.4	5769.4	4150.7	3296.3	142.4	11.5	13.1	19.6	26.2
40°	7424.1	7298.1	6897.1	5880.7	4265.2	3384.7	137.5	9.8	11.5	19.6	26.2
42.5°	7214.6	7131.1	6880.7	5992.0	4363.4	3450.2	119.5	6.5	11.5	18.0	26.2
45°	7028.0	6936.3	6715.4	5875.8	4235.8	3320.9	90.0	3.3	11.5	18.0	26.2
47.5°	6666.3	6609.0	6435.5	5579.5	3955.9	3029.5	63.8	1.6	9.8	16.4	24.6
50°	5941.2	5887.2	5658.1	4844.6	3402.7	2561.4	45.8	1.6	8.2	16.4	24.6
52.5°	5291.5	5234.2	4905.2	4027.9	2613.8	1877.3	29.5	1.6	8.2	16.4	24.6
55°	4505.8	4406.0	3973.9	3057.4	1852.7	1258.6	21.3	1.6	8.2	14.7	24.6
57.5°	3335.6	3189.9	2803.7	2085.2	1067.1	682.5	11.5	1.6	8.2	14.7	24.6
60°	2268.5	2181.7	1754.5	1099.9	455.0	288.1	4.9	1.6	8.2	14.7	22.9
62.5°	1374.8	1265.2	882.2	468.1	196.4	130.9	0.0	3.3	8.2	14.7	22.9
65°	391.2	347.0	230.8	106.4	55.6	42.6	0.0	3.3	8.2	14.7	22.9
67.5°	13.1	13.1	13.1	11.5	8.2	8.2	1.6	3.3	8.2	14.7	21.3
70°	4.9	4.9	4.9	3.3	3.3	1.6	1.6	3.3	8.2	13.1	21.3
72.5°	3.3	3.3	3.3	3.3	1.6	1.6	1.6	3.3	6.5	11.5	19.6
75°	3.3	3.3	3.3	1.6	1.6	1.6	1.6	4.9	6.5	11.5	16.4
77.5°	3.3	3.3	3.3	1.6	1.6	1.6	1.6	4.9	6.5	9.8	16.4
80°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	4.9	6.5	9.8	13.1



TEST NUMBER: P1315655

CATALOG NUMBER: P3SQAS20R309740D010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	1.6	1.6	1.6	0.0	0.0	0.0	1.6	4.9	6.5	6.5	9.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	4.9	6.5	4.9	6.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	4.9	4.9	4.9	3.3
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: P1315655

CATALOG NUMBER: P3SQAS20R309740D010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	75.3	75.3
2.5°	70.4	70.4
5°	65.5	65.5
7.5°	60.6	60.6
10°	55.6	55.6
12.5°	52.4	52.4
15°	47.5	49.1
17.5°	44.2	45.8
20°	42.6	44.2
21°	42.6	44.2
22°	40.9	42.6
23°	40.9	42.6
24°	39.3	40.9
25°	37.6	39.3
26°	37.6	39.3
27°	37.6	39.3
28°	36.0	39.3
29°	36.0	37.6
30°	36.0	37.6
31°	34.4	37.6
32°	34.4	37.6
33°	34.4	36.0
34°	32.7	36.0
35°	32.7	36.0
36°	32.7	36.0
37°	32.7	34.4
38°	32.7	36.0
39°	32.7	34.4
40°	32.7	34.4
42.5°	32.7	34.4
45°	32.7	34.4
47.5°	32.7	36.0
50°	32.7	36.0
52.5°	32.7	36.0
55°	32.7	36.0
57.5°	32.7	34.4
60°	32.7	34.4
62.5°	31.1	34.4
65°	31.1	32.7
67.5°	31.1	32.7
70°	29.5	31.1
72.5°	27.8	29.5
75°	24.6	27.8
77.5°	22.9	24.6
80°	19.6	21.3



TEST NUMBER: P1315655

CATALOG NUMBER: P3SQAS20R309740D010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	16.4	16.4
85°	11.5	13.1
87.5°	6.5	6.5
90°	0.0	0.0

(END OF REPORT)