

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: P1312551

Luminaire Tested: P3SQAS17R209727DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1312551
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-74)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS17R209727DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R20 optic, 2700K CCT AND, 97CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

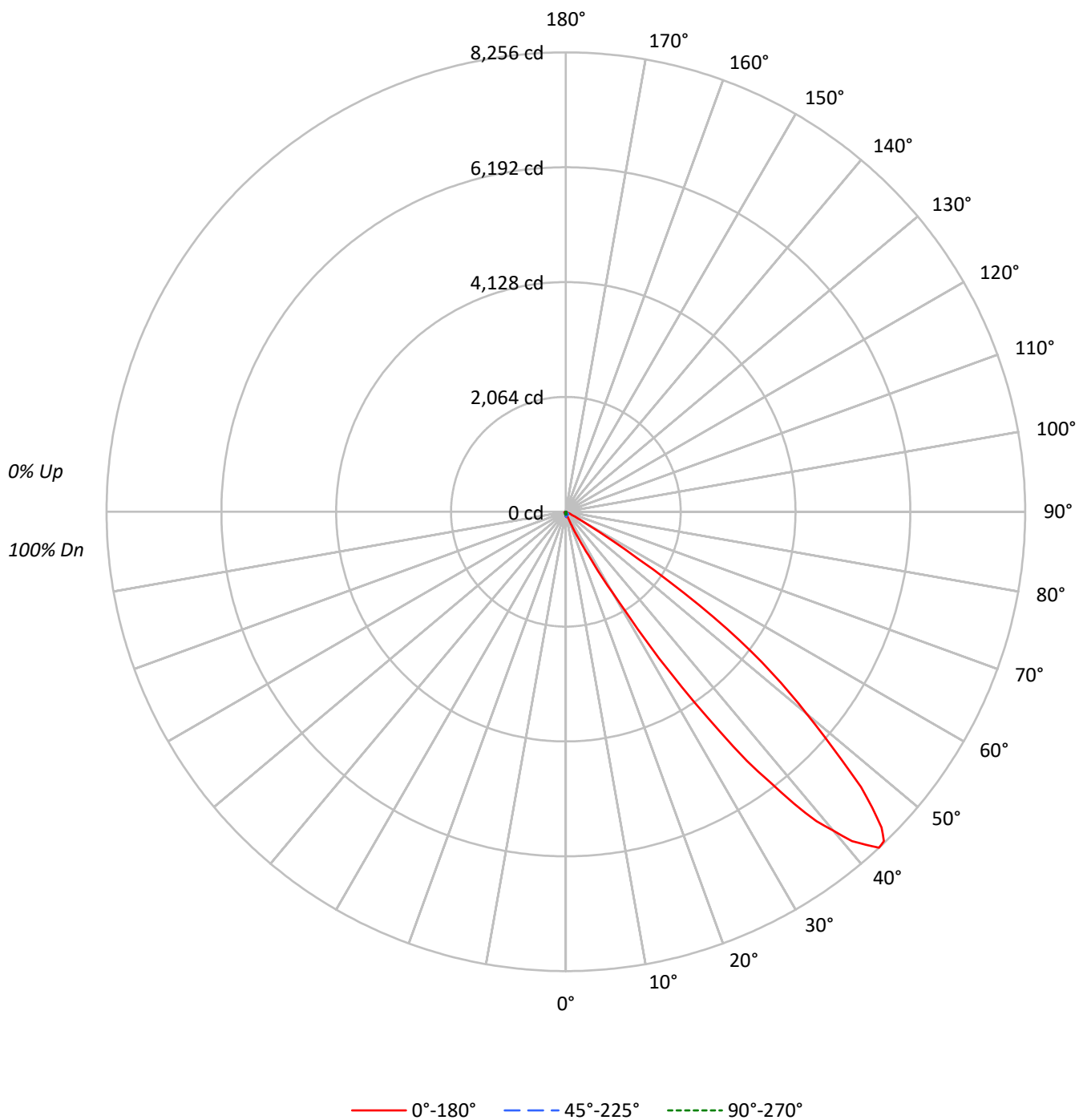
Lumens per Lamp: N/A
Luminaire Lumens: 1147.0 lumens
Efficiency: N/A
Efficacy: 54.1 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1312551

CATALOG NUMBER: P3SQAS17R209727DE010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1312551

CATALOG NUMBER: P3SQAS17R209727DE010 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	100		
1	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87		
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73		
3	92	81	74	67	89	80	73	67	77	71	66	74	69	65	72	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42		
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	38	32	46	38	32	44	37	32	43	36	31	29		
8	57	42	33	27	55	42	33	27	40	33	27	39	32	27	38	31	27	25		
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	19	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	13743	13743	13743	13743	13743
5°	16026	14902	12862	11185	10805
10°	15827	13571	10178	8674	8482
15°	13836	10377	7489	6918	7310
20°	20545	8687	5535	5920	6525
25°	88495	9007	4295	5321	6347
30°	334611	10938	3639	5151	6224
35°	1014369	13140	3406	5214	6581
40°	1682063	13085	2900	5576	7037
45°	1955102	8914	2630	5772	7623
50°	1517668	4903	2599	6055	8654
55°	878384	3243	2582	6786	9398
60°	148525	758	2239	7061	10402
65°	11410	0	2649	7906	11859
70°	1611	0	3273	8661	13545
75°	1464	732	3593	10048	15770
80°	1091	1091	5356	10711	18150
85°	2174	2174	8497	10671	19168

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1955102 cd/sqm

TEST NUMBER: P1312551

CATALOG NUMBER: P3SQAS17R209727DE010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.9	0.6
10°-20°	14.4	1.3
20°-30°	45.8	4.0
30°-40°	292.5	25.5
40°-50°	535.4	46.7
50°-60°	220.0	19.2
60°-70°	18.6	1.6
70°-80°	9.2	0.8
80°-90°	4.4	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°	67.0	5.8
0°-40°	359.5	31.3
0°-60°	1114.9	97.2
0°-90°	1147.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1147.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	80	80	80	80	80	
5°	93	86	74	65	62	9
15°	78	58	42	39	41	25
25°	466	47	23	28	33	306
35°	4825	62	16	25	31	3054
45°	8027	37	11	24	31	5764
55°	2925	11	9	23	31	2557
65°	28	0	6	19	29	91
75°	2	1	5	15	24	3
85°	1	1	4	5	10	1
90°	0	0	0	0	0	

TEST NUMBER: P1312551

CATALOG NUMBER: P3SQAS17R209727DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8
2.5°	87.3	87.3	87.3	86.2	86.2	87.3	86.2	86.2	86.2	86.2	85.2
5°	92.7	92.7	92.7	92.7	92.7	92.7	92.7	91.6	91.6	90.5	86.2
7.5°	94.9	94.9	94.9	94.9	93.8	93.8	93.8	93.8	92.7	91.6	84.1
10°	90.5	90.5	90.5	89.5	89.5	89.5	88.4	88.4	87.3	86.2	77.6
12.5°	81.9	81.9	81.9	81.9	80.8	80.8	79.8	79.8	78.7	77.6	67.9
15°	77.6	77.6	77.6	76.5	76.5	75.5	74.4	73.3	72.2	70.1	58.2
17.5°	84.1	84.1	83.0	83.0	80.8	78.7	77.6	74.4	72.2	69.0	51.7
20°	112.1	113.2	108.9	105.6	103.5	97.0	93.8	88.4	84.1	78.7	47.4
22.5°	226.4	222.0	214.5	202.6	188.6	176.8	155.2	138.0	126.1	109.9	46.4
25°	465.7	461.3	440.9	423.6	380.5	347.1	300.7	263.0	224.2	186.5	47.4
27.5°	885.0	855.9	850.5	771.8	711.4	625.2	535.7	460.3	391.3	314.7	50.7
30°	1682.6	1649.2	1531.7	1413.1	1250.4	1066.1	890.4	726.5	589.6	465.7	55.0
31°	2135.3	2167.7	2029.7	1791.5	1551.1	1315.1	1074.7	866.6	689.9	535.7	57.1
32°	2806.9	2665.7	2520.2	2275.5	1926.2	1624.4	1322.6	1022.9	790.1	611.2	59.3
33°	3441.8	3358.8	3136.7	2831.7	2412.4	1988.7	1597.5	1207.3	913.0	702.8	60.4
34°	4118.7	4027.1	3847.1	3409.4	2949.2	2394.0	1872.3	1419.6	1059.6	792.3	61.4
35°	4824.7	4785.9	4438.8	4059.4	3493.5	2824.1	2203.2	1652.4	1202.9	874.2	62.5
36°	5535.1	5410.0	5138.4	4584.4	3993.7	3221.9	2550.3	1869.1	1348.5	971.2	62.5
37°	6069.7	6041.7	5681.7	5141.6	4447.5	3646.6	2850.0	2109.5	1495.1	1054.2	62.5
38°	6659.3	6548.3	6182.9	5633.2	4874.3	4035.7	3163.7	2318.6	1634.1	1129.7	61.4
39°	7156.2	6991.3	6622.7	6079.4	5247.3	4331.0	3412.7	2521.2	1757.0	1192.2	60.4
40°	7481.8	7367.5	6982.7	6371.5	5585.7	4610.2	3664.9	2688.3	1848.6	1239.6	58.2
41°	7840.7	7651.0	7270.5	6656.1	5831.5	4856.0	3823.3	2798.3	1919.8	1270.9	56.1
42°	8055.2	7900.0	7448.4	6846.9	6007.2	4996.1	3952.7	2882.3	1962.9	1287.0	51.7
43°	8255.7	8044.4	7604.7	6957.9	6123.6	5095.3	4012.0	2921.1	1972.6	1287.0	46.4
44°	8228.8	8028.3	7572.3	6973.0	6149.5	5124.4	4036.8	2922.2	1957.5	1270.9	41.0
45°	8027.2	7827.8	7417.1	6841.5	6056.8	5067.3	3987.2	2879.1	1915.4	1242.8	36.6
46°	7657.5	7459.1	7144.4	6621.6	5884.3	4937.9	3871.9	2785.3	1845.4	1197.6	32.3
47°	7255.4	7062.5	6740.2	6267.0	5590.0	4707.2	3704.8	2653.8	1747.3	1131.8	29.1
48°	6672.3	6551.5	6228.2	5824.0	5181.5	4346.1	3411.6	2439.3	1615.8	1046.7	24.8
49°	6157.0	6029.8	5746.3	5311.9	4649.0	3925.8	3061.3	2178.5	1444.4	951.8	21.6
50°	5664.4	5553.4	5291.5	4801.0	4168.3	3418.1	2588.1	1849.7	1228.8	834.3	18.3
51°	5182.6	5099.6	4832.3	4381.7	3739.3	3027.9	2242.1	1540.3	1015.4	692.0	17.2
52°	4698.6	4688.9	4399.0	3943.0	3322.1	2638.7	1905.7	1300.0	861.3	581.0	16.2
53°	4178.0	4115.5	3862.2	3452.5	2856.5	2233.4	1615.8	1096.2	741.6	494.8	14.0
54°	3585.1	3515.1	3243.4	2873.7	2333.7	1829.2	1302.1	886.0	617.6	418.2	12.9
55°	2925.4	2805.8	2608.5	2229.1	1822.7	1395.9	1005.7	701.7	493.7	348.2	10.8
56°	2219.4	2099.8	1988.7	1709.6	1337.7	1041.3	749.1	537.9	385.9	274.9	9.7
57°	1543.6	1537.1	1354.9	1140.4	894.7	709.3	513.1	379.4	272.7	213.4	7.5
58°	1001.4	968.0	851.5	727.6	585.3	443.0	329.8	257.6	185.4	145.5	6.5
59°	701.7	634.9	572.4	485.1	368.6	279.2	212.3	164.9	128.3	101.3	4.3
60°	431.2	417.2	375.1	295.3	239.3	197.3	158.5	121.8	93.8	72.2	2.2
62.5°	122.9	125.0	113.2	100.2	86.2	74.4	66.8	57.1	47.4	37.7	0.0
65°	28.0	26.9	29.1	26.9	24.8	24.8	21.6	19.4	17.2	16.2	0.0



TEST NUMBER: P1312551

CATALOG NUMBER: P3SQAS17R209727DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	8.6	8.6	7.5	7.5	7.5	6.5	6.5	5.4	5.4	4.3	0.0
70°	3.2	3.2	3.2	3.2	3.2	2.2	2.2	2.2	1.1	1.1	0.0
72.5°	3.2	3.2	3.2	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1
75°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1
77.5°	2.2	2.2	2.2	2.2	2.2	1.1	2.2	1.1	1.1	1.1	1.1
80°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
82.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
85°	1.1	1.1	1.1	1.1	0.0	0.0	1.1	1.1	1.1	0.0	1.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
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: P1312551

CATALOG NUMBER: P3SQAS17R209727DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	79.8	79.8	79.8	79.8	79.8	79.8
2.5°	83.0	78.7	75.5	72.2	71.1	71.1
5°	80.8	74.4	67.9	64.7	62.5	62.5
7.5°	74.4	66.8	60.4	57.1	56.1	56.1
10°	66.8	58.2	51.7	49.6	49.6	48.5
12.5°	58.2	49.6	45.3	44.2	44.2	44.2
15°	48.5	42.0	38.8	38.8	39.9	41.0
17.5°	41.0	34.5	33.4	35.6	37.7	37.7
20°	34.5	30.2	30.2	32.3	34.5	35.6
22.5°	29.1	25.9	26.9	30.2	33.4	34.5
25°	25.9	22.6	24.8	28.0	31.3	33.4
27.5°	21.6	20.5	22.6	26.9	31.3	32.3
30°	18.3	18.3	21.6	25.9	30.2	31.3
31°	17.2	17.2	21.6	25.9	30.2	31.3
32°	16.2	17.2	20.5	25.9	30.2	31.3
33°	15.1	16.2	20.5	24.8	30.2	31.3
34°	14.0	16.2	20.5	24.8	30.2	31.3
35°	12.9	16.2	20.5	24.8	30.2	31.3
36°	11.9	15.1	19.4	24.8	30.2	31.3
37°	10.8	15.1	19.4	24.8	30.2	31.3
38°	9.7	14.0	19.4	24.8	30.2	31.3
39°	9.7	14.0	18.3	24.8	29.1	31.3
40°	8.6	12.9	18.3	24.8	29.1	31.3
41°	7.5	12.9	18.3	23.7	29.1	31.3
42°	6.5	11.9	17.2	23.7	29.1	31.3
43°	5.4	11.9	17.2	23.7	29.1	31.3
44°	5.4	10.8	17.2	23.7	29.1	31.3
45°	4.3	10.8	17.2	23.7	29.1	31.3
46°	3.2	10.8	17.2	23.7	29.1	31.3
47°	3.2	9.7	16.2	23.7	29.1	31.3
48°	2.2	9.7	16.2	23.7	29.1	31.3
49°	2.2	9.7	16.2	23.7	29.1	32.3
50°	2.2	9.7	16.2	22.6	29.1	32.3
51°	1.1	9.7	16.2	22.6	29.1	32.3
52°	1.1	9.7	15.1	22.6	30.2	32.3
53°	1.1	8.6	15.1	22.6	30.2	32.3
54°	1.1	8.6	15.1	22.6	30.2	31.3
55°	1.1	8.6	15.1	22.6	29.1	31.3
56°	1.1	7.5	15.1	22.6	29.1	31.3
57°	1.1	7.5	14.0	21.6	29.1	30.2
58°	1.1	7.5	14.0	21.6	29.1	30.2
59°	1.1	7.5	14.0	21.6	28.0	30.2
60°	2.2	6.5	12.9	20.5	28.0	30.2
62.5°	2.2	6.5	12.9	20.5	26.9	29.1
65°	2.2	6.5	11.9	19.4	26.9	29.1



TEST NUMBER: P1312551

CATALOG NUMBER: P3SQAS17R209727DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.2	5.4	10.8	18.3	25.9	28.0
70°	2.2	6.5	10.8	17.2	24.8	26.9
72.5°	3.2	5.4	9.7	16.2	23.7	25.9
75°	3.2	5.4	9.7	15.1	22.6	23.7
77.5°	4.3	5.4	8.6	12.9	20.5	21.6
80°	4.3	5.4	7.5	10.8	17.2	18.3
82.5°	4.3	5.4	5.4	8.6	12.9	14.0
85°	3.2	4.3	4.3	5.4	8.6	9.7
87.5°	3.2	4.3	3.2	2.2	4.3	4.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)