

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: P1318106

Luminaire Tested: P3SQAS17R209835DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1318106
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: P3SQAS17R209835DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R20 optic, 3500K CCT AND, 98CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

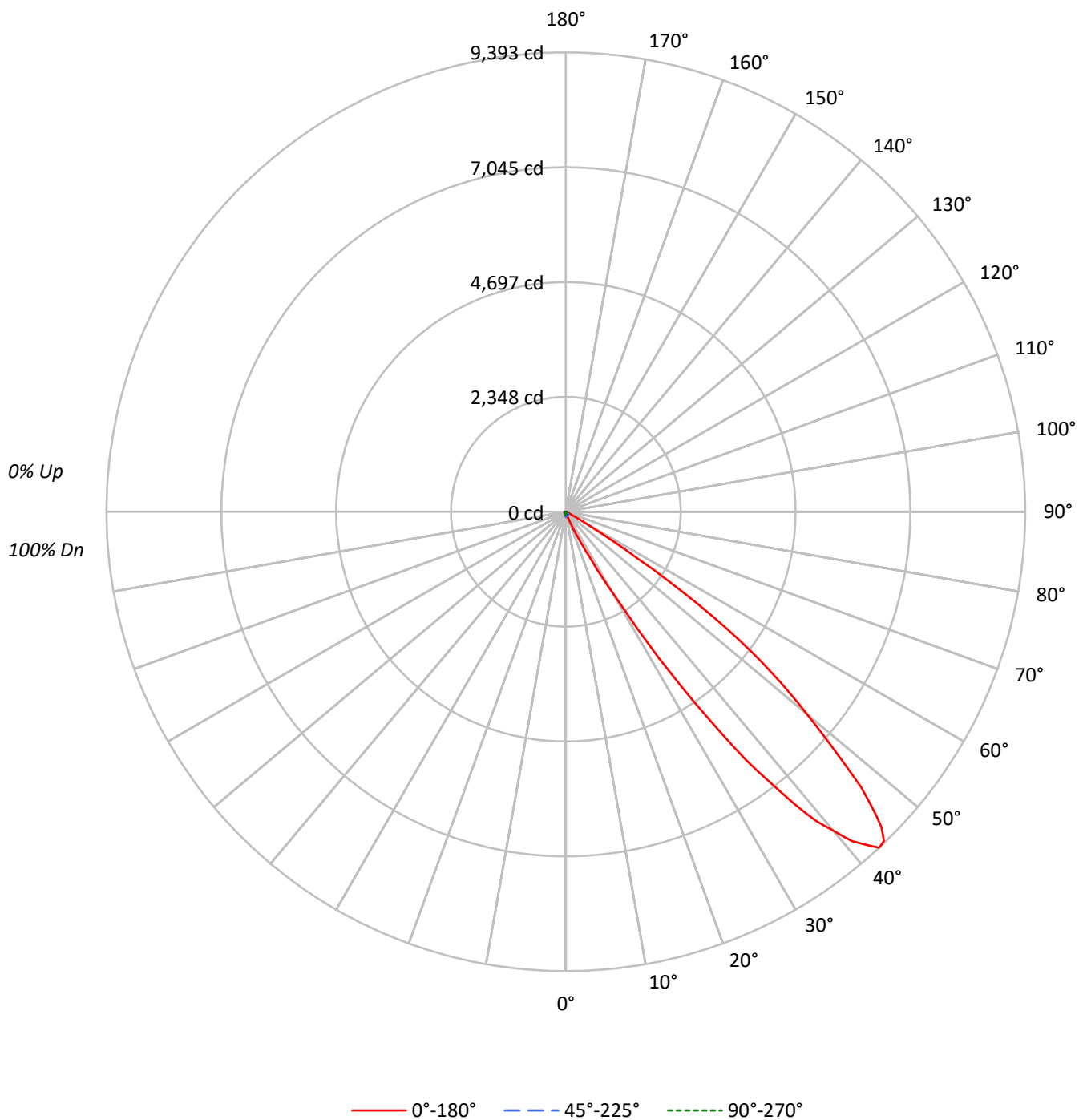
Lumens per Lamp: N/A
Luminaire Lumens: 1305.0 lumens
Efficiency: N/A
Efficacy: 64.0 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 20.4
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: P1318106

CATALOG NUMBER: P3SQAS17R209835DE010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1318106

CATALOG NUMBER: P3SQAS17R209835DE010 E3SQCA451MMS

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	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°	15638	15638	15638	15638	15638
5°	18239	16960	14626	12724	12292
10°	18013	15442	11577	9863	9653
15°	15744	11803	8523	7881	8309
20°	23368	9897	6286	6745	7423
25°	100676	10261	4903	6062	7221
30°	380708	12429	4136	5847	7080
35°	1154098	14948	3869	5929	7485
40°	1913764	14883	3305	6340	8004
45°	2224430	10156	2996	6576	8671
50°	1726734	5573	2947	6913	9860
55°	999389	3693	2943	7747	10689
60°	168985	861	2549	8026	11814
65°	13000	0	3016	9006	13489
70°	1863	0	3726	9869	15459
75°	1664	799	4059	11445	17966
80°	1190	1190	6050	12199	20629
85°	2371	2371	9683	12054	21736

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2224430 cd/sqm

TEST NUMBER: P1318106

CATALOG NUMBER: P3SQAS17R209835DE010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.8	0.6
10°-20°	16.3	1.3
20°-30°	52.1	4.0
30°-40°	332.8	25.5
40°-50°	609.1	46.7
50°-60°	250.3	19.2
60°-70°	21.1	1.6
70°-80°	10.5	0.8
80°-90°	4.9	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°	76.2	5.8
0°-40°	409.0	31.3
0°-60°	1268.4	97.2
0°-90°	1305.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1305.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	91	91	91	91	91	
5°	106	98	85	74	71	10
15°	88	66	48	44	47	28
25°	530	54	26	32	38	348
35°	5489	71	18	28	36	3474
45°	9133	42	12	27	36	6557
55°	3328	12	10	26	36	2909
65°	32	0	7	22	33	104
75°	2	1	6	17	27	3
85°	1	1	5	6	11	1
90°	0	0	0	0	0	

TEST NUMBER: P1318106

CATALOG NUMBER: P3SQAS17R209835DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8
2.5°	99.3	99.3	99.3	98.1	98.1	99.3	98.1	98.1	98.1	98.1	96.9
5°	105.5	105.5	105.5	105.5	105.5	105.5	105.5	104.2	104.2	103.0	98.1
7.5°	107.9	107.9	107.9	107.9	106.7	106.7	106.7	106.7	105.5	104.2	95.7
10°	103.0	103.0	103.0	101.8	101.8	101.8	100.6	100.6	99.3	98.1	88.3
12.5°	93.2	93.2	93.2	93.2	92.0	92.0	90.8	90.8	89.5	88.3	77.3
15°	88.3	88.3	88.3	87.1	87.1	85.8	84.6	83.4	82.2	79.7	66.2
17.5°	95.7	95.7	94.4	94.4	92.0	89.5	88.3	84.6	82.2	78.5	58.9
20°	127.5	128.8	123.9	120.2	117.7	110.4	106.7	100.6	95.7	89.5	54.0
22.5°	257.5	252.6	244.1	230.6	214.6	201.1	176.6	157.0	143.5	125.1	52.7
25°	529.8	524.9	501.6	482.0	432.9	394.9	342.2	299.2	255.1	212.2	54.0
27.5°	1006.9	973.8	967.6	878.1	809.4	711.3	609.5	523.7	445.2	358.1	57.6
30°	1914.4	1876.4	1742.7	1607.8	1422.6	1212.9	1013.0	826.6	670.8	529.8	62.5
31°	2429.5	2466.3	2309.3	2038.3	1764.8	1496.2	1222.7	986.0	784.9	609.5	65.0
32°	3193.5	3032.9	2867.3	2588.9	2191.6	1848.2	1504.8	1163.8	898.9	695.4	67.5
33°	3915.9	3821.4	3568.8	3221.7	2744.7	2262.7	1817.5	1373.6	1038.8	799.6	68.7
34°	4686.1	4581.8	4377.0	3879.1	3355.4	2723.8	2130.2	1615.2	1205.5	901.4	69.9
35°	5489.3	5445.2	5050.3	4618.6	3974.7	3213.2	2506.7	1880.1	1368.7	994.6	71.1
36°	6297.5	6155.3	5846.2	5215.9	4543.8	3665.7	2901.6	2126.6	1534.2	1105.0	71.1
37°	6905.8	6873.9	6464.3	5849.9	5060.1	4148.9	3242.6	2400.1	1701.0	1199.4	71.1
38°	7576.7	7450.3	7034.6	6409.1	5545.8	4591.6	3599.5	2638.0	1859.2	1285.3	69.9
39°	8142.0	7954.4	7535.0	6916.9	5970.1	4927.6	3882.8	2868.5	1999.0	1356.4	68.7
40°	8512.4	8382.4	7944.6	7249.2	6355.2	5245.3	4169.7	3058.6	2103.3	1410.4	66.2
41°	8920.8	8704.9	8272.0	7573.0	6634.8	5524.9	4350.0	3183.7	2184.2	1445.9	63.8
42°	9164.8	8988.2	8474.4	7790.1	6834.7	5684.3	4497.2	3279.4	2233.3	1464.3	58.9
43°	9392.9	9152.6	8652.2	7916.4	6967.1	5797.2	4564.6	3323.5	2244.3	1464.3	52.7
44°	9362.3	9134.2	8615.4	7933.5	6996.6	5830.3	4592.8	3324.8	2227.1	1445.9	46.6
45°	9133.0	8906.1	8438.8	7783.9	6891.1	5765.3	4536.4	3275.7	2179.3	1414.0	41.7
46°	8712.3	8486.6	8128.5	7533.7	6694.9	5618.1	4405.2	3169.0	2099.6	1362.5	36.8
47°	8254.9	8035.3	7668.6	7130.3	6360.1	5355.7	4215.1	3019.4	1988.0	1287.7	33.1
48°	7591.4	7454.0	7086.1	6626.2	5895.3	4944.8	3881.5	2775.3	1838.4	1190.8	28.2
49°	7005.2	6860.4	6537.9	6043.7	5289.4	4466.5	3483.0	2478.5	1643.4	1082.9	24.5
50°	6444.7	6318.4	6020.4	5462.4	4742.5	3888.9	2944.6	2104.5	1398.1	949.2	20.8
51°	5896.5	5802.1	5497.9	4985.3	4254.4	3444.9	2550.9	1752.5	1155.3	787.3	19.6
52°	5345.9	5334.8	5004.9	4486.1	3779.7	3002.2	2168.3	1479.0	979.9	661.0	18.4
53°	4753.5	4682.4	4394.2	3928.1	3249.9	2541.1	1838.4	1247.2	843.8	562.9	15.9
54°	4079.0	3999.3	3690.2	3269.6	2655.1	2081.2	1481.5	1008.1	702.7	475.8	14.7
55°	3328.4	3192.3	2967.9	2536.2	2073.8	1588.2	1144.2	798.4	561.7	396.1	12.3
56°	2525.1	2389.0	2262.7	1945.1	1522.0	1184.7	852.3	612.0	439.0	312.7	11.0
57°	1756.2	1748.8	1541.6	1297.5	1017.9	807.0	583.8	431.7	310.3	242.8	8.6
58°	1139.3	1101.3	968.9	827.8	665.9	504.0	375.3	293.1	210.9	165.6	7.4
59°	798.4	722.3	651.2	551.9	419.4	317.6	241.6	187.6	145.9	115.3	4.9
60°	490.6	474.6	426.8	336.0	272.3	224.4	180.3	138.6	106.7	82.2	2.5
62.5°	139.8	142.3	128.8	114.1	98.1	84.6	76.0	65.0	54.0	42.9	0.0
65°	31.9	30.7	33.1	30.7	28.2	28.2	24.5	22.1	19.6	18.4	0.0



TEST NUMBER: P1318106

CATALOG NUMBER: P3SQAS17R209835DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	9.8	9.8	8.6	8.6	8.6	7.4	7.4	6.1	6.1	4.9	0.0
70°	3.7	3.7	3.7	3.7	3.7	2.5	2.5	2.5	1.2	1.2	0.0
72.5°	3.7	3.7	3.7	2.5	2.5	2.5	2.5	2.5	1.2	1.2	1.2
75°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	1.2	1.2	1.2	1.2
77.5°	2.5	2.5	2.5	2.5	2.5	1.2	2.5	1.2	1.2	1.2	1.2
80°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
85°	1.2	1.2	1.2	1.2	0.0	0.0	1.2	1.2	1.2	0.0	1.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
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: P1318106

CATALOG NUMBER: P3SQAS17R209835DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	90.8	90.8	90.8	90.8	90.8	90.8
2.5°	94.4	89.5	85.8	82.2	80.9	80.9
5°	92.0	84.6	77.3	73.6	71.1	71.1
7.5°	84.6	76.0	68.7	65.0	63.8	63.8
10°	76.0	66.2	58.9	56.4	56.4	55.2
12.5°	66.2	56.4	51.5	50.3	50.3	50.3
15°	55.2	47.8	44.2	44.2	45.4	46.6
17.5°	46.6	39.2	38.0	40.5	42.9	42.9
20°	39.2	34.3	34.3	36.8	39.2	40.5
22.5°	33.1	29.4	30.7	34.3	38.0	39.2
25°	29.4	25.8	28.2	31.9	35.6	38.0
27.5°	24.5	23.3	25.8	30.7	35.6	36.8
30°	20.8	20.8	24.5	29.4	34.3	35.6
31°	19.6	19.6	24.5	29.4	34.3	35.6
32°	18.4	19.6	23.3	29.4	34.3	35.6
33°	17.2	18.4	23.3	28.2	34.3	35.6
34°	15.9	18.4	23.3	28.2	34.3	35.6
35°	14.7	18.4	23.3	28.2	34.3	35.6
36°	13.5	17.2	22.1	28.2	34.3	35.6
37°	12.3	17.2	22.1	28.2	34.3	35.6
38°	11.0	15.9	22.1	28.2	34.3	35.6
39°	11.0	15.9	20.8	28.2	33.1	35.6
40°	9.8	14.7	20.8	28.2	33.1	35.6
41°	8.6	14.7	20.8	27.0	33.1	35.6
42°	7.4	13.5	19.6	27.0	33.1	35.6
43°	6.1	13.5	19.6	27.0	33.1	35.6
44°	6.1	12.3	19.6	27.0	33.1	35.6
45°	4.9	12.3	19.6	27.0	33.1	35.6
46°	3.7	12.3	19.6	27.0	33.1	35.6
47°	3.7	11.0	18.4	27.0	33.1	35.6
48°	2.5	11.0	18.4	27.0	33.1	35.6
49°	2.5	11.0	18.4	27.0	33.1	36.8
50°	2.5	11.0	18.4	25.8	33.1	36.8
51°	1.2	11.0	18.4	25.8	33.1	36.8
52°	1.2	11.0	17.2	25.8	34.3	36.8
53°	1.2	9.8	17.2	25.8	34.3	36.8
54°	1.2	9.8	17.2	25.8	34.3	35.6
55°	1.2	9.8	17.2	25.8	33.1	35.6
56°	1.2	8.6	17.2	25.8	33.1	35.6
57°	1.2	8.6	15.9	24.5	33.1	34.3
58°	1.2	8.6	15.9	24.5	33.1	34.3
59°	1.2	8.6	15.9	24.5	31.9	34.3
60°	2.5	7.4	14.7	23.3	31.9	34.3
62.5°	2.5	7.4	14.7	23.3	30.7	33.1
65°	2.5	7.4	13.5	22.1	30.7	33.1



TEST NUMBER: P1318106

CATALOG NUMBER: P3SQAS17R209835DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.5	6.1	12.3	20.8	29.4	31.9
70°	2.5	7.4	12.3	19.6	28.2	30.7
72.5°	3.7	6.1	11.0	18.4	27.0	29.4
75°	3.7	6.1	11.0	17.2	25.8	27.0
77.5°	4.9	6.1	9.8	14.7	23.3	24.5
80°	4.9	6.1	8.6	12.3	19.6	20.8
82.5°	4.9	6.1	6.1	9.8	14.7	15.9
85°	3.7	4.9	4.9	6.1	9.8	11.0
87.5°	3.7	4.9	3.7	2.5	4.9	4.9
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)