

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: P1312723

Luminaire Tested: P3SQAS20R259727D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1312723
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-75)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS20R259727D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 2700K CCT AND, 97CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

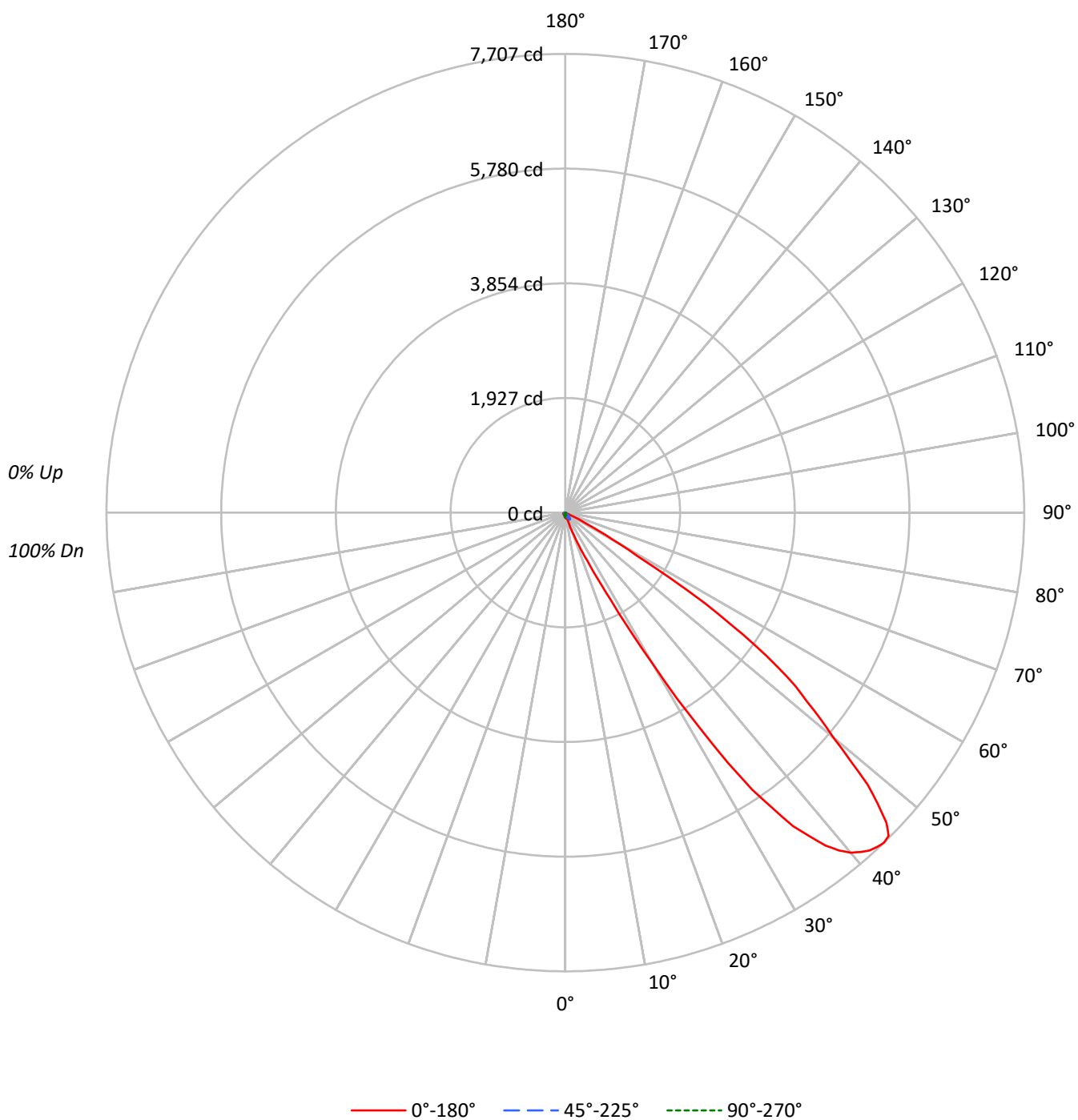
Lumens per Lamp: N/A
Luminaire Lumens: 1607.0 lumens
Efficiency: N/A
Efficacy: 55.8 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1312723

CATALOG NUMBER: P3SQAS20R259727D010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1312723

CATALOG NUMBER: P3SQAS20R259727D010 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	64	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	39	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	39	32	46	38	32	44	37	32	43	36	32	29		
8	57	43	34	27	55	42	33	27	40	33	27	39	32	27	38	32	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	20	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	14122	14122	14122	14122	14122
5°	16130	15404	13692	12223	11981
10°	16071	14585	11629	10143	10143
15°	17901	12606	9075	8576	9075
20°	63230	12444	7001	7258	8027
25°	181932	15848	5644	6727	7791
30°	580429	24460	4494	6463	7875
35°	1271310	28846	3869	6244	8031
40°	1677050	26079	3170	6362	8588
45°	1870221	18243	3093	6893	9304
50°	1574281	9485	3028	7207	10235
55°	1176993	3813	2973	8077	11470
60°	364354	964	2928	8783	12676
65°	31134	0	3464	9210	13815
70°	2115	705	3575	10675	15660
75°	1863	932	4724	11312	17900
80°	1389	1389	7042	12596	21026
85°	2766	2766	11263	14030	22329

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1870221 cd/sqm

TEST NUMBER: P1312723

CATALOG NUMBER: P3SQAS20R259727D010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.3	0.5
10°-20°	18.9	1.2
20°-30°	88.9	5.5
30°-40°	428.1	26.6
40°-50°	671.0	41.8
50°-60°	344.0	21.4
60°-70°	32.4	2.0
70°-80°	10.9	0.7
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°	115.2	7.2
0°-40°	543.2	33.8
0°-60°	1558.2	97.0
0°-90°	1607.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1607.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	82	82	82	82	82	
5°	93	89	79	71	69	9
15°	100	71	51	48	51	42
25°	957	83	30	35	41	594
35°	6047	137	18	30	38	3671
45°	7679	75	13	28	38	5619
55°	3920	13	10	27	38	3263
65°	76	0	8	23	34	239
75°	3	1	7	17	27	3
85°	1	1	6	7	11	1
90°	0	0	0	0	0	

TEST NUMBER: P1312723

CATALOG NUMBER: P3SQAS20R259727D010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
2.5°	89.1	89.1	89.1	89.1	89.1	89.1	87.7	87.7	89.1	87.7	87.7
5°	93.3	93.3	93.3	93.3	93.3	93.3	93.3	91.9	91.9	91.9	89.1
7.5°	94.7	93.3	93.3	93.3	93.3	93.3	93.3	93.3	91.9	91.9	87.7
10°	91.9	91.9	91.9	91.9	90.5	90.5	90.5	89.1	89.1	89.1	83.4
12.5°	91.9	91.9	91.9	91.9	90.5	90.5	89.1	89.1	87.7	86.3	76.4
15°	100.4	100.4	100.4	99.0	97.6	96.2	94.7	93.3	91.9	89.1	70.7
17.5°	147.1	142.8	141.4	135.8	128.7	121.6	116.0	110.3	104.6	100.4	67.9
20°	345.0	343.6	336.6	319.6	301.2	280.0	258.8	234.7	200.8	178.2	67.9
22.5°	598.2	589.7	577.0	564.2	531.7	493.5	453.9	408.7	364.8	318.2	72.1
25°	957.4	977.2	934.7	900.8	844.2	774.9	700.0	637.8	558.6	485.0	83.4
27.5°	1664.4	1677.1	1593.7	1483.4	1351.9	1206.2	1064.8	958.8	825.8	704.2	104.6
30°	2918.7	2931.5	2791.5	2556.7	2285.2	2046.2	1722.4	1438.2	1176.5	974.3	123.0
31°	3642.8	3543.8	3381.2	3153.5	2809.9	2449.3	2060.4	1716.7	1385.8	1120.0	128.7
32°	4272.1	4263.6	4074.1	3729.0	3384.0	2938.5	2456.3	2008.1	1602.2	1267.1	132.9
33°	5014.5	4957.9	4690.6	4365.4	3908.6	3460.4	2838.1	2326.2	1824.2	1431.1	135.8
34°	5609.8	5457.1	5346.8	4974.9	4492.7	3921.4	3255.3	2662.8	2101.4	1589.5	137.2
35°	6046.8	6014.3	5799.3	5452.9	4962.2	4378.1	3705.0	3012.1	2333.3	1773.3	137.2
36°	6509.2	6408.8	6199.5	5885.6	5407.6	4803.8	4048.6	3314.7	2603.4	1938.8	135.8
37°	6799.1	6739.7	6531.8	6208.0	5739.9	5163.0	4433.3	3634.3	2818.3	2104.2	132.9
38°	7097.5	6977.3	6772.2	6462.5	6002.9	5461.3	4711.9	3880.4	3016.3	2249.9	128.7
39°	7303.9	7179.5	6970.2	6661.9	6212.2	5674.9	4932.5	4089.6	3188.8	2358.8	123.0
40°	7459.5	7339.3	7127.2	6810.4	6366.4	5843.2	5116.3	4274.9	3333.1	2453.5	116.0
41°	7555.7	7443.9	7233.2	6917.9	6472.4	5939.3	5236.5	4395.1	3430.7	2517.1	108.9
42°	7636.3	7521.7	7306.8	6984.3	6537.5	6021.3	5310.0	4471.5	3497.1	2549.7	103.2
43°	7681.5	7567.0	7357.7	7028.2	6577.1	6059.5	5349.6	4506.8	3519.8	2545.4	93.3
44°	7707.0	7588.2	7377.5	7048.0	6594.1	6069.4	5352.5	4499.7	3504.2	2511.5	84.8
45°	7678.7	7561.3	7357.7	7028.2	6564.4	6038.3	5324.2	4461.6	3444.8	2445.0	74.9
46°	7494.8	7404.3	7217.7	6915.1	6471.0	5959.1	5252.0	4388.0	3352.9	2363.0	63.6
47°	7171.0	7098.9	6917.9	6693.0	6291.4	5813.5	5119.1	4248.0	3224.2	2240.0	50.9
48°	6833.0	6727.0	6558.7	6328.2	5988.8	5551.8	4899.9	4043.0	3029.0	2078.8	45.3
49°	6333.9	6271.6	6123.1	5865.8	5584.4	5199.7	4590.2	3779.9	2790.1	1903.4	39.6
50°	5875.7	5833.3	5625.4	5435.9	5137.5	4778.3	4170.2	3433.5	2493.1	1685.6	35.4
51°	5517.9	5467.0	5317.1	5080.9	4762.8	4345.6	3772.9	2983.8	2152.3	1426.8	28.3
52°	5144.6	5116.3	4983.4	4740.1	4427.6	4011.9	3386.8	2602.0	1821.4	1206.2	22.6
53°	4839.1	4798.1	4635.5	4419.1	4081.2	3651.3	2968.2	2247.0	1542.8	1013.9	19.8
54°	4393.7	4376.7	4272.1	4045.8	3679.5	3211.5	2589.3	1892.1	1286.9	859.8	17.0
55°	3919.9	3863.4	3757.3	3577.7	3241.2	2804.2	2150.9	1568.3	1040.8	724.0	12.7
56°	3343.0	3340.2	3150.7	3000.8	2702.4	2238.6	1718.2	1224.6	845.6	603.8	11.3
57°	2791.5	2702.4	2520.0	2371.5	2050.5	1698.4	1275.5	917.8	661.8	489.3	8.5
58°	2064.6	2018.0	1969.9	1752.1	1455.1	1203.4	910.7	644.8	489.3	373.3	5.7
59°	1401.4	1400.0	1343.4	1178.0	1006.9	749.5	568.5	438.4	336.6	274.3	4.2
60°	1057.8	1032.3	919.2	810.3	633.5	473.7	336.6	258.8	209.3	176.8	2.8
62.5°	370.5	384.6	338.0	280.0	213.5	175.4	134.3	108.9	89.1	72.1	0.0
65°	76.4	83.4	72.1	67.9	53.7	46.7	41.0	35.4	29.7	25.5	0.0



TEST NUMBER: P1312723

CATALOG NUMBER: P3SQAS20R259727D010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	9.9	8.5	8.5	8.5	7.1	7.1	7.1	7.1	5.7	5.7	1.4
70°	4.2	4.2	4.2	4.2	4.2	4.2	2.8	2.8	2.8	2.8	1.4
72.5°	4.2	4.2	4.2	2.8	2.8	2.8	2.8	2.8	2.8	1.4	1.4
75°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4
77.5°	2.8	2.8	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	1.4
80°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
82.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.8
85°	1.4	1.4	1.4	0.0	0.0	1.4	1.4	1.4	1.4	1.4	1.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
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: P1312723

CATALOG NUMBER: P3SQAS20R259727D010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	82.0	82.0	82.0	82.0	82.0	82.0
2.5°	86.3	83.4	79.2	77.8	76.4	76.4
5°	84.8	79.2	74.9	70.7	69.3	69.3
7.5°	80.6	73.5	67.9	65.0	63.6	62.2
10°	76.4	66.5	60.8	58.0	58.0	58.0
12.5°	67.9	59.4	53.7	52.3	53.7	53.7
15°	60.8	50.9	48.1	48.1	49.5	50.9
17.5°	52.3	45.3	42.4	43.8	45.3	46.7
20°	46.7	38.2	38.2	39.6	43.8	43.8
22.5°	41.0	33.9	33.9	38.2	41.0	42.4
25°	36.8	29.7	31.1	35.4	39.6	41.0
27.5°	31.1	25.5	28.3	33.9	38.2	39.6
30°	26.9	22.6	26.9	32.5	36.8	39.6
31°	25.5	21.2	26.9	31.1	36.8	39.6
32°	22.6	21.2	25.5	31.1	36.8	38.2
33°	21.2	19.8	25.5	31.1	36.8	38.2
34°	19.8	18.4	24.0	31.1	36.8	38.2
35°	17.0	18.4	24.0	29.7	35.4	38.2
36°	15.6	17.0	24.0	29.7	35.4	38.2
37°	14.1	17.0	22.6	29.7	35.4	38.2
38°	12.7	15.6	22.6	29.7	35.4	38.2
39°	11.3	15.6	21.2	29.7	35.4	38.2
40°	9.9	14.1	21.2	28.3	35.4	38.2
41°	9.9	14.1	21.2	28.3	35.4	38.2
42°	8.5	14.1	21.2	28.3	35.4	38.2
43°	7.1	12.7	21.2	28.3	35.4	38.2
44°	5.7	12.7	19.8	28.3	35.4	38.2
45°	5.7	12.7	19.8	28.3	35.4	38.2
46°	4.2	11.3	19.8	28.3	35.4	38.2
47°	2.8	11.3	19.8	26.9	35.4	38.2
48°	2.8	11.3	19.8	26.9	35.4	38.2
49°	2.8	11.3	18.4	26.9	35.4	38.2
50°	2.8	11.3	18.4	26.9	35.4	38.2
51°	1.4	9.9	18.4	26.9	35.4	38.2
52°	1.4	9.9	18.4	26.9	35.4	39.6
53°	1.4	9.9	18.4	26.9	35.4	38.2
54°	1.4	9.9	17.0	26.9	35.4	38.2
55°	1.4	9.9	17.0	26.9	35.4	38.2
56°	1.4	8.5	17.0	25.5	35.4	38.2
57°	2.8	8.5	17.0	25.5	35.4	36.8
58°	2.8	8.5	17.0	25.5	33.9	36.8
59°	2.8	8.5	17.0	25.5	33.9	36.8
60°	2.8	8.5	15.6	25.5	33.9	36.8
62.5°	2.8	8.5	15.6	24.0	32.5	35.4
65°	2.8	8.5	14.1	22.6	32.5	33.9



TEST NUMBER: P1312723

CATALOG NUMBER: P3SQAS20R259727D010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.8	7.1	14.1	21.2	31.1	32.5
70°	4.2	7.1	12.7	21.2	29.7	31.1
72.5°	4.2	7.1	12.7	18.4	26.9	29.7
75°	4.2	7.1	11.3	17.0	25.5	26.9
77.5°	4.2	7.1	9.9	15.6	22.6	24.0
80°	5.7	7.1	8.5	12.7	19.8	21.2
82.5°	5.7	7.1	7.1	9.9	15.6	17.0
85°	4.2	5.7	5.7	7.1	9.9	11.3
87.5°	4.2	5.7	4.2	2.8	5.7	5.7
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)