

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: P1317376

Luminaire Tested: P3SQAS20R209830D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1317376
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: P3SQAS20R209830D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R20 optic, 3000K CCT AND, 98CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

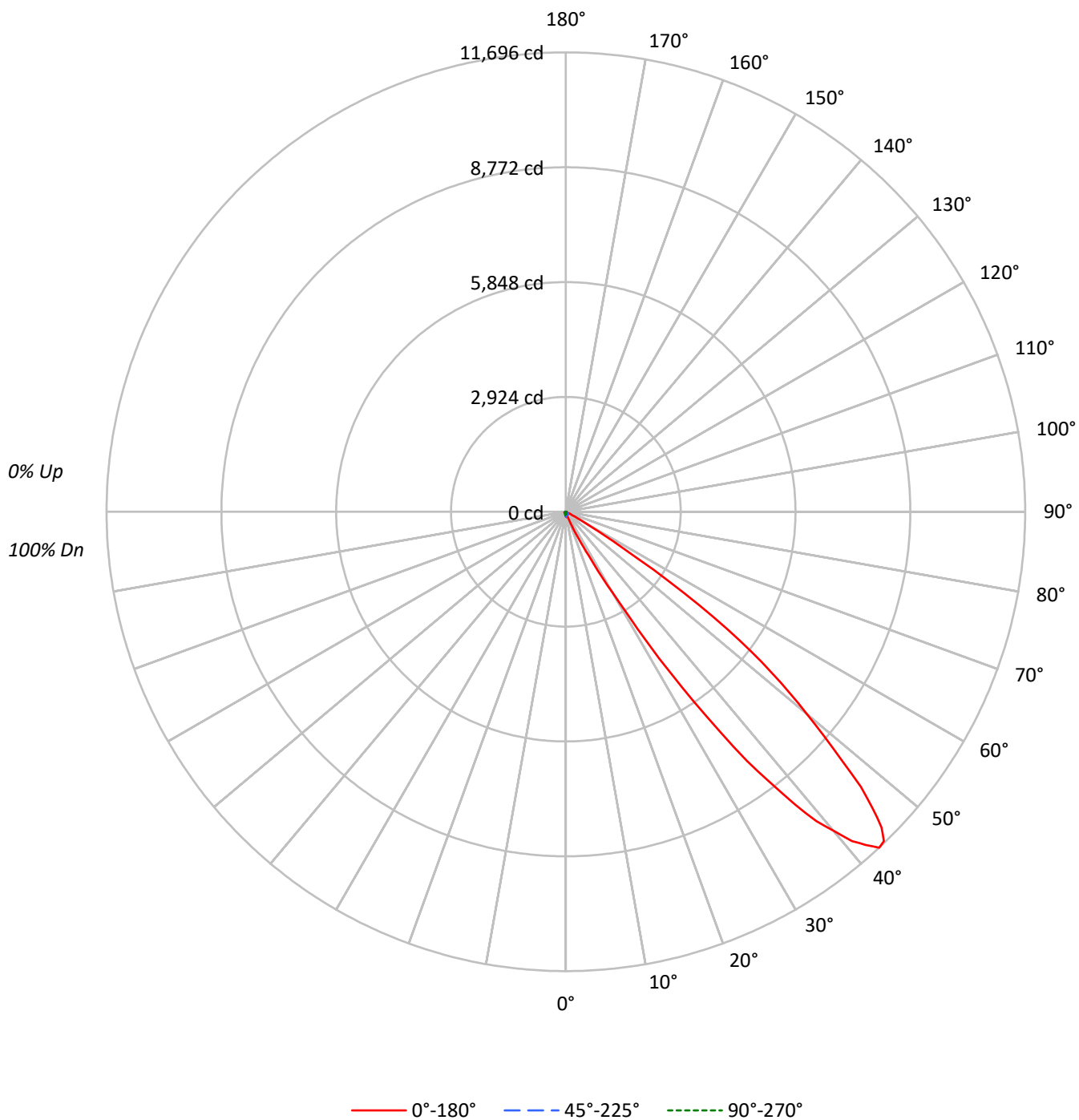
Lumens per Lamp: N/A
Luminaire Lumens: 1625.0 lumens
Efficiency: N/A
Efficacy: 59.3 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1317376

CATALOG NUMBER: P3SQAS20R209830D010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1317376

CATALOG NUMBER: P3SQAS20R209830D010 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°	19461	19461	19461	19461	19461
5°	22699	21126	18222	15836	15317
10°	22437	19237	14428	12277	12014
15°	19613	14710	10627	9806	10341
20°	29104	12316	7844	8394	9237
25°	125361	12770	6100	7544	8988
30°	474056	15492	5171	7298	8810
35°	1437109	18628	4815	7380	9314
40°	2383032	18548	4114	7891	9960
45°	2769881	12641	3726	8184	10790
50°	2150145	6966	3671	8601	12271
55°	1244462	4594	3663	9638	13302
60°	210387	1068	3169	9989	14742
65°	16178	0	3749	11207	16790
70°	2316	0	4633	12287	19235
75°	2063	998	5057	14240	22358
80°	1488	1488	7538	15174	25787
85°	2964	2964	12054	15018	27072

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2769881 cd/sqm

TEST NUMBER: P1317376

CATALOG NUMBER: P3SQAS20R209830D010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.7	0.6
10°-20°	20.3	1.3
20°-30°	64.9	4.0
30°-40°	414.4	25.5
40°-50°	758.5	46.7
50°-60°	311.6	19.2
60°-70°	26.3	1.6
70°-80°	13.1	0.8
80°-90°	6.2	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°	94.9	5.8
0°-40°	509.3	31.3
0°-60°	1579.5	97.2
0°-90°	1625.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1625.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	113	113	113	113	113	
5°	131	122	105	92	89	12
15°	110	82	60	55	58	35
25°	660	67	32	40	47	434
35°	6835	89	23	35	44	4326
45°	11372	52	15	34	44	8165
55°	4145	15	12	32	44	3623
65°	40	0	9	28	41	129
75°	3	2	8	21	34	4
85°	2	2	6	8	14	1
90°	0	0	0	0	0	

TEST NUMBER: P1317376

CATALOG NUMBER: P3SQAS20R209830D010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0
2.5°	123.7	123.7	123.7	122.2	122.2	123.7	122.2	122.2	122.2	122.2	120.6
5°	131.3	131.3	131.3	131.3	131.3	131.3	131.3	129.8	129.8	128.3	122.2
7.5°	134.4	134.4	134.4	134.4	132.9	132.9	132.9	132.9	131.3	129.8	119.1
10°	128.3	128.3	128.3	126.8	126.8	126.8	125.2	125.2	123.7	122.2	110.0
12.5°	116.1	116.1	116.1	116.1	114.5	114.5	113.0	113.0	111.5	110.0	96.2
15°	110.0	110.0	110.0	108.4	108.4	106.9	105.4	103.8	102.3	99.3	82.5
17.5°	119.1	119.1	117.6	117.6	114.5	111.5	110.0	105.4	102.3	97.7	73.3
20°	158.8	160.3	154.2	149.7	146.6	137.4	132.9	125.2	119.1	111.5	67.2
22.5°	320.7	314.6	303.9	287.1	267.2	250.4	219.9	195.5	178.7	155.8	65.7
25°	659.7	653.6	624.6	600.2	539.1	491.7	426.1	372.6	317.6	264.2	67.2
27.5°	1253.8	1212.5	1204.9	1093.4	1007.9	885.7	759.0	652.1	554.3	445.9	71.8
30°	2383.8	2336.5	2170.0	2002.1	1771.5	1510.3	1261.4	1029.3	835.3	659.7	77.9
31°	3025.2	3071.0	2875.6	2538.1	2197.5	1863.1	1522.5	1227.8	977.4	759.0	80.9
32°	3976.6	3776.6	3570.4	3223.7	2729.0	2301.4	1873.8	1449.2	1119.4	865.9	84.0
33°	4876.1	4758.5	4443.9	4011.7	3417.7	2817.5	2263.2	1710.4	1293.5	995.7	85.5
34°	5835.1	5705.3	5450.3	4830.3	4178.2	3391.7	2652.6	2011.2	1501.2	1122.4	87.0
35°	6835.4	6780.4	6288.7	5751.1	4949.4	4001.1	3121.4	2341.1	1704.3	1238.5	88.6
36°	7841.8	7664.6	7279.8	6494.8	5658.0	4564.6	3613.2	2648.0	1910.4	1375.9	88.6
37°	8599.2	8559.5	8049.4	7284.4	6300.9	5166.2	4037.7	2988.6	2118.1	1493.5	88.6
38°	9434.5	9277.2	8759.6	7980.7	6905.6	5717.5	4482.1	3284.8	2315.1	1600.4	87.0
39°	10138.5	9904.9	9382.6	8612.9	7434.0	6136.0	4834.9	3571.9	2489.2	1689.0	85.5
40°	10599.7	10437.9	9892.7	9026.8	7913.5	6531.5	5192.2	3808.6	2619.0	1756.2	82.5
41°	11108.3	10839.5	10300.4	9430.0	8261.7	6879.7	5416.7	3964.4	2719.8	1800.5	79.4
42°	11412.2	11192.3	10552.4	9700.3	8510.6	7078.2	5599.9	4083.5	2780.9	1823.4	73.3
43°	11696.2	11396.9	10773.8	9857.6	8675.6	7218.7	5683.9	4138.5	2794.6	1823.4	65.7
44°	11658.0	11374.0	10728.0	9878.9	8712.2	7259.9	5719.1	4140.0	2773.2	1800.5	58.0
45°	11372.5	11089.9	10508.1	9692.6	8580.9	7179.0	5648.8	4078.9	2713.7	1760.8	51.9
46°	10848.7	10567.7	10121.7	9381.1	8336.5	6995.7	5485.4	3946.1	2614.4	1696.6	45.8
47°	10279.0	10005.7	9549.1	8878.7	7919.6	6668.9	5248.7	3759.8	2475.5	1603.5	41.2
48°	9452.9	9281.8	8823.7	8251.0	7340.9	6157.3	4833.3	3455.9	2289.2	1482.8	35.1
49°	8722.9	8542.7	8141.1	7525.6	6586.5	5561.8	4337.0	3086.3	2046.3	1348.4	30.5
50°	8025.0	7867.7	7496.6	6801.8	5905.4	4842.5	3666.6	2620.5	1740.9	1182.0	26.0
51°	7342.4	7224.8	6846.1	6207.7	5297.6	4289.7	3176.4	2182.3	1438.5	980.4	24.4
52°	6656.7	6643.0	6232.2	5586.2	4706.6	3738.4	2699.9	1841.7	1220.2	823.1	22.9
53°	5919.1	5830.5	5471.7	4891.4	4046.9	3164.2	2289.2	1553.1	1050.7	700.9	19.9
54°	5079.2	4979.9	4595.1	4071.3	3306.2	2591.5	1844.8	1255.3	875.0	592.5	18.3
55°	4144.6	3975.1	3695.6	3158.1	2582.4	1977.6	1424.8	994.2	699.4	493.3	15.3
56°	3144.3	2974.8	2817.5	2422.0	1895.2	1475.2	1061.3	762.0	546.7	389.4	13.7
57°	2186.8	2177.7	1919.6	1615.7	1267.5	1004.8	726.9	537.5	386.4	302.4	10.7
58°	1418.7	1371.4	1206.4	1030.8	829.2	627.6	467.3	365.0	262.7	206.2	9.2
59°	994.2	899.5	810.9	687.2	522.3	395.5	300.8	233.6	181.7	143.5	6.1
60°	610.8	591.0	531.4	418.4	339.0	279.5	224.5	172.6	132.9	102.3	3.1
62.5°	174.1	177.1	160.3	142.0	122.2	105.4	94.7	80.9	67.2	53.4	0.0
65°	39.7	38.2	41.2	38.2	35.1	35.1	30.5	27.5	24.4	22.9	0.0



TEST NUMBER: P1317376

CATALOG NUMBER: P3SQAS20R209830D010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	12.2	12.2	10.7	10.7	10.7	9.2	9.2	7.6	7.6	6.1	0.0
70°	4.6	4.6	4.6	4.6	4.6	3.1	3.1	3.1	1.5	1.5	0.0
72.5°	4.6	4.6	4.6	3.1	3.1	3.1	3.1	3.1	1.5	1.5	1.5
75°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	1.5	1.5	1.5	1.5
77.5°	3.1	3.1	3.1	3.1	3.1	1.5	3.1	1.5	1.5	1.5	1.5
80°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
82.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
85°	1.5	1.5	1.5	1.5	0.0	0.0	1.5	1.5	1.5	0.0	1.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
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: P1317376

CATALOG NUMBER: P3SQAS20R209830D010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	113.0	113.0	113.0	113.0	113.0	113.0
2.5°	117.6	111.5	106.9	102.3	100.8	100.8
5°	114.5	105.4	96.2	91.6	88.6	88.6
7.5°	105.4	94.7	85.5	80.9	79.4	79.4
10°	94.7	82.5	73.3	70.2	70.2	68.7
12.5°	82.5	70.2	64.1	62.6	62.6	62.6
15°	68.7	59.6	55.0	55.0	56.5	58.0
17.5°	58.0	48.9	47.3	50.4	53.4	53.4
20°	48.9	42.8	42.8	45.8	48.9	50.4
22.5°	41.2	36.7	38.2	42.8	47.3	48.9
25°	36.7	32.1	35.1	39.7	44.3	47.3
27.5°	30.5	29.0	32.1	38.2	44.3	45.8
30°	26.0	26.0	30.5	36.7	42.8	44.3
31°	24.4	24.4	30.5	36.7	42.8	44.3
32°	22.9	24.4	29.0	36.7	42.8	44.3
33°	21.4	22.9	29.0	35.1	42.8	44.3
34°	19.9	22.9	29.0	35.1	42.8	44.3
35°	18.3	22.9	29.0	35.1	42.8	44.3
36°	16.8	21.4	27.5	35.1	42.8	44.3
37°	15.3	21.4	27.5	35.1	42.8	44.3
38°	13.7	19.9	27.5	35.1	42.8	44.3
39°	13.7	19.9	26.0	35.1	41.2	44.3
40°	12.2	18.3	26.0	35.1	41.2	44.3
41°	10.7	18.3	26.0	33.6	41.2	44.3
42°	9.2	16.8	24.4	33.6	41.2	44.3
43°	7.6	16.8	24.4	33.6	41.2	44.3
44°	7.6	15.3	24.4	33.6	41.2	44.3
45°	6.1	15.3	24.4	33.6	41.2	44.3
46°	4.6	15.3	24.4	33.6	41.2	44.3
47°	4.6	13.7	22.9	33.6	41.2	44.3
48°	3.1	13.7	22.9	33.6	41.2	44.3
49°	3.1	13.7	22.9	33.6	41.2	45.8
50°	3.1	13.7	22.9	32.1	41.2	45.8
51°	1.5	13.7	22.9	32.1	41.2	45.8
52°	1.5	13.7	21.4	32.1	42.8	45.8
53°	1.5	12.2	21.4	32.1	42.8	45.8
54°	1.5	12.2	21.4	32.1	42.8	44.3
55°	1.5	12.2	21.4	32.1	41.2	44.3
56°	1.5	10.7	21.4	32.1	41.2	44.3
57°	1.5	10.7	19.9	30.5	41.2	42.8
58°	1.5	10.7	19.9	30.5	41.2	42.8
59°	1.5	10.7	19.9	30.5	39.7	42.8
60°	3.1	9.2	18.3	29.0	39.7	42.8
62.5°	3.1	9.2	18.3	29.0	38.2	41.2
65°	3.1	9.2	16.8	27.5	38.2	41.2



TEST NUMBER: P1317376

CATALOG NUMBER: P3SQAS20R209830D010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	3.1	7.6	15.3	26.0	36.7	39.7
70°	3.1	9.2	15.3	24.4	35.1	38.2
72.5°	4.6	7.6	13.7	22.9	33.6	36.7
75°	4.6	7.6	13.7	21.4	32.1	33.6
77.5°	6.1	7.6	12.2	18.3	29.0	30.5
80°	6.1	7.6	10.7	15.3	24.4	26.0
82.5°	6.1	7.6	7.6	12.2	18.3	19.9
85°	4.6	6.1	6.1	7.6	12.2	13.7
87.5°	4.6	6.1	4.6	3.1	6.1	6.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)