

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: P1312793

Luminaire Tested: P3SQAS20R509727D010 E3SQCA451MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1312793
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-79)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS20R509727D010 E3SQCA451MW
Description: 3in Adjustable LED luminaire with, R50 optic, 2700K CCT AND, 97CRI , E3SQCA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

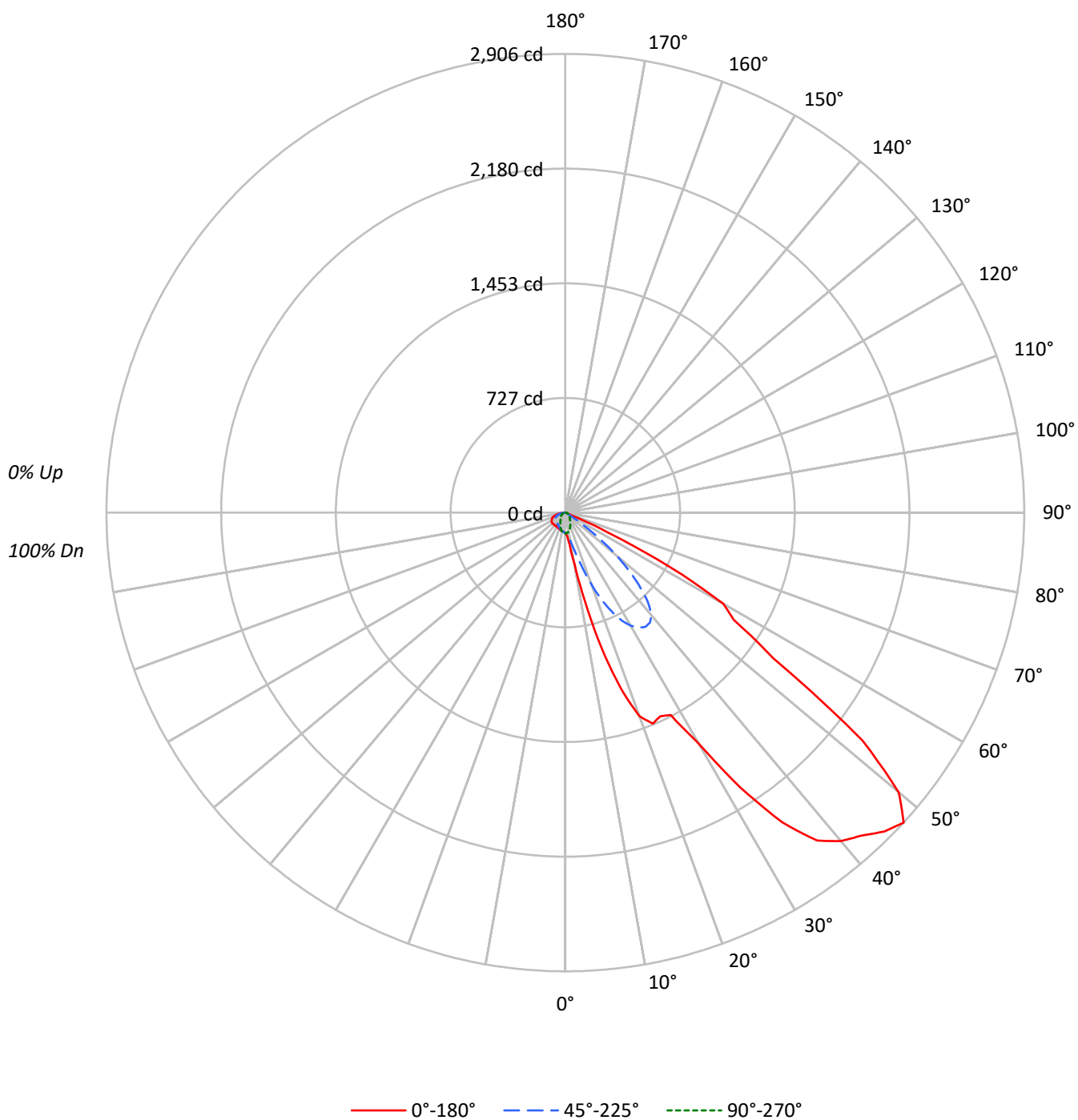
Lumens per Lamp: N/A
Luminaire Lumens: 1639.0 lumens
Efficiency: N/A
Efficacy: 56.9 lumens/watt
Spacing Criteria (0/90/45): 3.58 / 0.82 / 1.91
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot



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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	100	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86	86	86
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73	73	73
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61	61	61
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51	51	51
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43	43	43
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	50	43	39	37	37	37
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31	31	31
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27	27	27
9	54	40	31	26	53	39	31	26	38	31	25	37	30	25	36	30	25	23	23	23
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22	20	20	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	22423	22423	22423	22423	22423
5°	26675	24964	22267	21299	21040
10°	57430	30954	21283	20548	20793
15°	159024	50726	19185	19684	20451
20°	251417	88999	16605	18932	19977
25°	270351	130738	14252	18300	20181
30°	335586	164124	12389	18017	20841
35°	503600	185730	10722	18165	22034
40°	610770	190963	9555	18773	23224
45°	695801	163769	9304	19996	25525
50°	738498	113040	9485	21622	28454
55°	482459	45490	9338	23390	31467
60°	397903	7819	9266	25351	34617
65°	120013	4034	8639	27100	38062
70°	4985	4280	8560	27796	41341
75°	4724	4724	8451	28280	45248
80°	4166	4166	8430	28068	46317
85°	2766	5533	11263	28060	44856

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 740905 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.6	0.8
10°-20°	77.6	4.7
20°-30°	199.5	12.2
30°-40°	358.4	21.9
40°-50°	478.7	29.2
50°-60°	364.6	22.2
60°-70°	110.7	6.8
70°-80°	26.4	1.6
80°-90°	9.5	0.6
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°	290.7	17.7
0°-40°	649.1	39.6
0°-60°	1492.3	91.1
0°-90°	1639.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1639.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	130	130	130	130	130	
5°	154	144	129	123	122	20
15°	892	284	108	110	115	262
25°	1423	688	75	96	106	679
35°	2395	883	51	86	105	1471
45°	2857	672	38	82	105	2184
55°	1607	152	31	78	105	1599
65°	294	10	21	66	93	407
75°	7	7	13	42	68	7
85°	1	3	6	14	23	2
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2
2.5°	138.7	138.7	138.7	138.7	138.7	138.7	137.3	137.3	137.3	134.5	131.7
5°	154.3	155.7	154.3	154.3	151.5	151.5	148.6	148.6	144.4	135.9	128.8
7.5°	202.4	201.0	199.6	193.9	189.7	179.8	175.5	168.5	155.7	135.9	126.0
10°	328.4	319.9	314.3	301.5	274.6	257.7	235.0	212.4	177.0	135.9	121.7
12.5°	570.5	569.1	552.1	509.6	471.4	419.0	363.8	308.6	218.0	133.1	116.1
15°	891.9	879.1	855.1	805.5	737.6	655.5	556.4	458.7	284.5	128.8	107.6
17.5°	1166.5	1150.9	1132.5	1083.0	1005.1	901.8	782.9	648.4	375.2	123.2	99.1
20°	1371.8	1361.9	1346.3	1306.7	1233.0	1139.6	1006.5	843.7	485.6	116.1	90.6
22.5°	1446.8	1445.4	1448.2	1434.1	1397.3	1323.7	1196.2	1026.4	594.6	107.6	82.1
25°	1422.7	1421.3	1439.7	1458.1	1466.6	1436.9	1339.2	1173.6	688.0	100.5	75.0
27.5°	1445.4	1441.2	1432.7	1435.5	1459.6	1476.5	1431.2	1286.8	768.7	90.6	68.0
30°	1687.5	1663.4	1625.2	1560.1	1511.9	1507.7	1487.9	1376.0	825.3	80.7	62.3
32.5°	2065.5	2035.7	1966.4	1846.0	1731.4	1643.6	1581.3	1451.1	865.0	70.8	55.2
35°	2395.3	2374.1	2293.4	2174.5	2010.2	1846.0	1732.8	1561.5	883.4	62.3	51.0
37.5°	2619.0	2610.5	2531.2	2403.8	2236.8	2042.8	1892.7	1674.7	879.1	52.4	46.7
40°	2716.7	2691.2	2624.6	2517.1	2348.6	2174.5	2015.9	1746.9	849.4	42.5	42.5
42.5°	2774.7	2746.4	2674.2	2572.3	2406.6	2221.2	2030.1	1715.8	778.6	34.0	41.1
45°	2856.8	2827.1	2732.2	2623.2	2456.2	2241.0	1974.9	1605.4	672.4	25.5	38.2
47.5°	2906.4	2886.5	2815.8	2706.8	2504.3	2212.7	1847.4	1502.0	554.9	19.8	36.8
50°	2756.3	2736.5	2684.1	2609.1	2473.2	2117.8	1735.6	1335.0	421.9	15.6	35.4
52.5°	2372.7	2389.6	2399.6	2420.8	2321.7	1905.5	1568.6	1201.9	284.5	12.7	32.6
55°	1606.8	1632.3	1660.6	1745.5	1861.6	1696.0	1393.0	1039.1	151.5	12.7	31.1
57.5°	1262.8	1254.3	1245.8	1240.1	1330.7	1398.7	1224.6	831.0	65.1	12.7	28.3
60°	1155.2	1129.7	1112.7	1117.0	1162.3	1135.4	969.7	542.2	22.7	12.7	26.9
62.5°	757.4	777.2	815.4	880.5	849.4	729.1	563.4	215.2	11.3	12.7	24.1
65°	294.5	284.5	294.5	312.9	270.4	201.0	126.0	38.2	9.9	11.3	21.2
67.5°	39.6	35.4	26.9	17.0	15.6	14.2	11.3	9.9	9.9	11.3	19.8
70°	9.9	9.9	9.9	9.9	9.9	9.9	9.9	8.5	8.5	9.9	17.0
72.5°	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	9.9	14.2
75°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	8.5	12.7
77.5°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	7.1	9.9
80°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	5.7	8.5
82.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	4.2	4.2	5.7	7.1
85°	1.4	2.8	1.4	2.8	2.8	2.8	2.8	2.8	2.8	4.2	5.7
87.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.8	4.2	4.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	130.2	130.2	130.2	130.2
2.5°	128.8	126.0	126.0	126.0
5°	126.0	123.2	123.2	121.7
7.5°	121.7	120.3	120.3	120.3
10°	118.9	117.5	118.9	118.9
12.5°	113.3	114.7	116.1	116.1
15°	107.6	110.4	113.3	114.7
17.5°	101.9	107.6	110.4	111.8
20°	96.3	103.3	107.6	109.0
22.5°	92.0	99.1	104.8	107.6
25°	86.4	96.3	103.3	106.2
27.5°	80.7	92.0	100.5	104.8
30°	76.4	90.6	100.5	104.8
32.5°	72.2	87.8	99.1	103.3
35°	69.4	86.4	99.1	104.8
37.5°	66.5	84.9	99.1	103.3
40°	65.1	83.5	99.1	103.3
42.5°	63.7	83.5	99.1	104.8
45°	60.9	82.1	99.1	104.8
47.5°	59.5	82.1	99.1	104.8
50°	58.0	80.7	99.1	106.2
52.5°	56.6	79.3	99.1	106.2
55°	53.8	77.9	97.7	104.8
57.5°	52.4	76.4	96.3	101.9
60°	49.5	73.6	93.4	100.5
62.5°	46.7	70.8	90.6	96.3
65°	42.5	66.5	86.4	93.4
67.5°	38.2	60.9	82.1	89.2
70°	34.0	55.2	76.4	82.1
72.5°	29.7	49.5	70.8	75.0
75°	25.5	42.5	62.3	68.0
77.5°	21.2	36.8	52.4	56.6
80°	15.6	28.3	42.5	46.7
82.5°	12.7	21.2	31.1	34.0
85°	8.5	14.2	19.8	22.7
87.5°	4.2	7.1	9.9	11.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)