

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: P1307390

Luminaire Tested: P3SQAS24R509027D010 E3SQCA451MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1307390
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: P3SQAS24R509027D010 E3SQCA451MW
Description: 3in Adjustable LED luminaire with, R50 optic, 2700K CCT AND, 90CRI , E3SQCA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

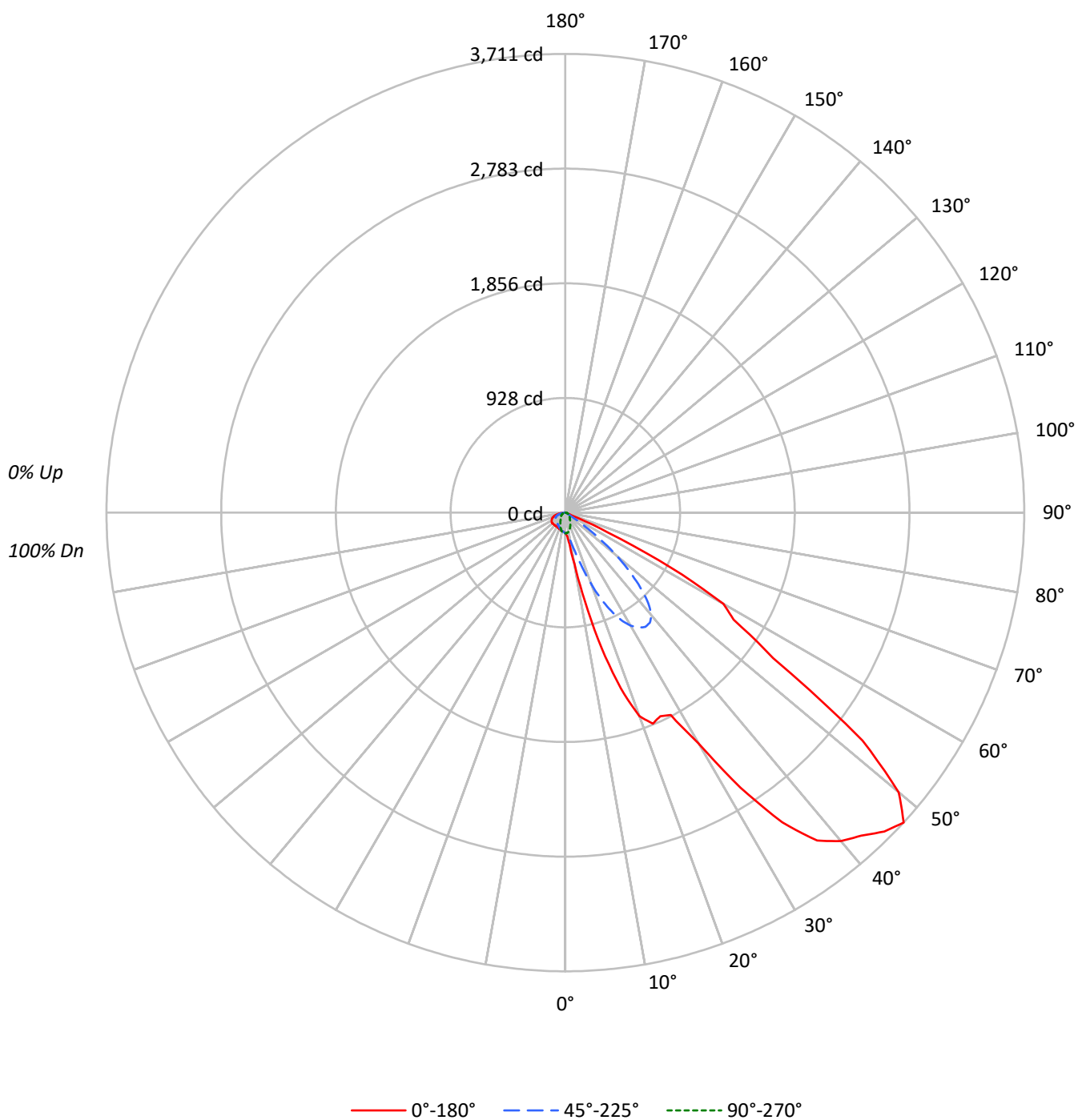
Lumens per Lamp: N/A
Luminaire Lumens: 2093.0 lumens
Efficiency: N/A
Efficacy: 72.7 lumens/watt
Spacing Criteria (0/90/45): 3.58 / 0.83 / 1.91
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1307390

CATALOG NUMBER: P3SQAS24R509027D010 E3SQCA451MW

Luminous Intensity Polar Plot



TEST NUMBER: P1307390

CATALOG NUMBER: P3SQAS24R509027D010 E3SQCA451MW

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°	28641	28641	28641	28641	28641
5°	34075	31879	28439	27194	26883
10°	73344	39523	27194	26232	26564
15°	203064	64793	24498	25140	26103
20°	321062	113649	21205	24192	25512
25°	345240	166957	18205	23354	25768
30°	428535	209604	15810	23009	26608
35°	643097	237177	13687	23190	28131
40°	779948	243863	12185	23988	29676
45°	888554	209145	11886	25549	32588
50°	943063	144334	12110	27597	36331
55°	616106	58070	11950	29846	40175
60°	508126	9954	11814	32378	44227
65°	153225	5175	11044	34639	48616
70°	6395	5438	10927	35500	52822
75°	5989	5989	10846	36066	57758
80°	5356	5356	10711	35903	59210
85°	3557	7114	14227	35766	57107

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 946117 cd/sqm

TEST NUMBER: P1307390

CATALOG NUMBER: P3SQAS24R509027D010 E3SQCA451MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.3	0.8
10°-20°	99.1	4.7
20°-30°	254.8	12.2
30°-40°	457.6	21.9
40°-50°	611.3	29.2
50°-60°	465.6	22.2
60°-70°	141.3	6.8
70°-80°	33.8	1.6
80°-90°	12.2	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°	371.2	17.7
0°-40°	828.8	39.6
0°-60°	1905.7	91.1
0°-90°	2093.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2093.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	166	166	166	166	166	
5°	197	184	164	157	156	25
15°	1139	363	137	141	146	335
25°	1817	879	96	123	136	867
35°	3059	1128	65	110	134	1878
45°	3648	859	49	105	134	2789
55°	2052	193	40	99	134	2041
65°	376	13	27	85	119	520
75°	9	9	16	54	87	10
85°	2	4	7	18	29	3
90°	0	0	0	0	0	

TEST NUMBER: P1307390

CATALOG NUMBER: P3SQAS24R509027D010 E3SQCA451MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	166.3	166.3	166.3	166.3	166.3	166.3	166.3	166.3	166.3	166.3	166.3
2.5°	177.2	177.2	177.2	177.2	177.2	177.2	175.4	175.4	175.4	171.7	168.1
5°	197.1	198.9	197.1	197.1	193.4	193.4	189.8	189.8	184.4	173.5	164.5
7.5°	258.5	256.7	254.9	247.7	242.2	229.6	224.2	215.1	198.9	173.5	160.9
10°	419.4	408.6	401.3	385.1	350.7	329.0	300.1	271.2	226.0	173.5	155.5
12.5°	728.5	726.7	705.0	650.8	602.0	535.1	464.6	394.1	278.4	169.9	148.2
15°	1138.9	1122.6	1091.9	1028.6	941.9	837.0	710.5	585.7	363.4	164.5	137.4
17.5°	1489.6	1469.7	1446.2	1383.0	1283.5	1151.6	999.7	828.0	479.1	157.3	126.5
20°	1751.8	1739.1	1719.2	1668.6	1574.6	1455.3	1285.4	1077.5	620.1	148.2	115.7
22.5°	1847.6	1845.8	1849.4	1831.3	1784.3	1690.3	1527.6	1310.7	759.3	137.4	104.9
25°	1816.8	1815.0	1838.5	1862.0	1872.9	1834.9	1710.2	1498.7	878.6	128.4	95.8
27.5°	1845.8	1840.3	1829.5	1833.1	1863.8	1885.5	1827.7	1643.3	981.6	115.7	86.8
30°	2154.9	2124.2	2075.4	1992.2	1930.7	1925.3	1900.0	1757.2	1054.0	103.0	79.5
32.5°	2637.6	2599.6	2511.0	2357.4	2210.9	2098.9	2019.3	1853.0	1104.6	90.4	70.5
35°	3058.8	3031.7	2928.6	2776.8	2567.1	2357.4	2212.8	1994.0	1128.1	79.5	65.1
37.5°	3344.4	3333.6	3232.4	3069.7	2856.3	2608.7	2417.0	2138.6	1122.6	66.9	59.7
40°	3469.2	3436.6	3351.7	3214.3	2999.2	2776.8	2574.3	2230.8	1084.7	54.2	54.2
42.5°	3543.3	3507.1	3414.9	3284.8	3073.3	2836.4	2592.4	2191.1	994.3	43.4	52.4
45°	3648.2	3610.2	3489.1	3349.9	3136.5	2861.8	2521.9	2050.1	858.7	32.5	48.8
47.5°	3711.4	3686.1	3595.7	3456.5	3198.0	2825.6	2359.2	1918.1	708.7	25.3	47.0
50°	3519.8	3494.5	3427.6	3331.8	3158.2	2704.5	2216.4	1704.8	538.7	19.9	45.2
52.5°	3029.9	3051.6	3064.2	3091.3	2964.8	2433.3	2003.0	1534.8	363.4	16.3	41.6
55°	2051.9	2084.4	2120.6	2229.0	2377.3	2165.8	1778.9	1326.9	193.4	16.3	39.8
57.5°	1612.6	1601.7	1590.9	1583.6	1699.3	1786.1	1563.8	1061.2	83.2	16.3	36.2
60°	1475.2	1442.6	1420.9	1426.4	1484.2	1449.9	1238.3	692.4	28.9	16.3	34.3
62.5°	967.2	992.5	1041.3	1124.5	1084.7	931.0	719.5	274.8	14.5	16.3	30.7
65°	376.0	363.4	376.0	399.5	345.3	256.7	160.9	48.8	12.7	14.5	27.1
67.5°	50.6	45.2	34.3	21.7	19.9	18.1	14.5	12.7	12.7	14.5	25.3
70°	12.7	12.7	12.7	12.7	12.7	12.7	12.7	10.8	10.8	12.7	21.7
72.5°	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	12.7	18.1
75°	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	10.8	16.3
77.5°	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	9.0	12.7
80°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	7.2	10.8
82.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	5.4	5.4	7.2	9.0
85°	1.8	3.6	1.8	3.6	3.6	3.6	3.6	3.6	3.6	5.4	7.2
87.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3.6	5.4	5.4
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: P1307390

CATALOG NUMBER: P3SQAS24R509027D010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	166.3	166.3	166.3	166.3
2.5°	164.5	160.9	160.9	160.9
5°	160.9	157.3	157.3	155.5
7.5°	155.5	153.7	153.7	153.7
10°	151.9	150.0	151.9	151.9
12.5°	144.6	146.4	148.2	148.2
15°	137.4	141.0	144.6	146.4
17.5°	130.2	137.4	141.0	142.8
20°	122.9	132.0	137.4	139.2
22.5°	117.5	126.5	133.8	137.4
25°	110.3	122.9	132.0	135.6
27.5°	103.0	117.5	128.4	133.8
30°	97.6	115.7	128.4	133.8
32.5°	92.2	112.1	126.5	132.0
35°	88.6	110.3	126.5	133.8
37.5°	85.0	108.5	126.5	132.0
40°	83.2	106.7	126.5	132.0
42.5°	81.4	106.7	126.5	133.8
45°	77.7	104.9	126.5	133.8
47.5°	75.9	104.9	126.5	133.8
50°	74.1	103.0	126.5	135.6
52.5°	72.3	101.2	126.5	135.6
55°	68.7	99.4	124.7	133.8
57.5°	66.9	97.6	122.9	130.2
60°	63.3	94.0	119.3	128.4
62.5°	59.7	90.4	115.7	122.9
65°	54.2	85.0	110.3	119.3
67.5°	48.8	77.7	104.9	113.9
70°	43.4	70.5	97.6	104.9
72.5°	38.0	63.3	90.4	95.8
75°	32.5	54.2	79.5	86.8
77.5°	27.1	47.0	66.9	72.3
80°	19.9	36.2	54.2	59.7
82.5°	16.3	27.1	39.8	43.4
85°	10.8	18.1	25.3	28.9
87.5°	5.4	9.0	12.7	14.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)