

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: P1315396

Luminaire Tested: P3SQAS13R459740DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1315396
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS13R459740DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R45 optic, 4000K CCT AND, 97CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

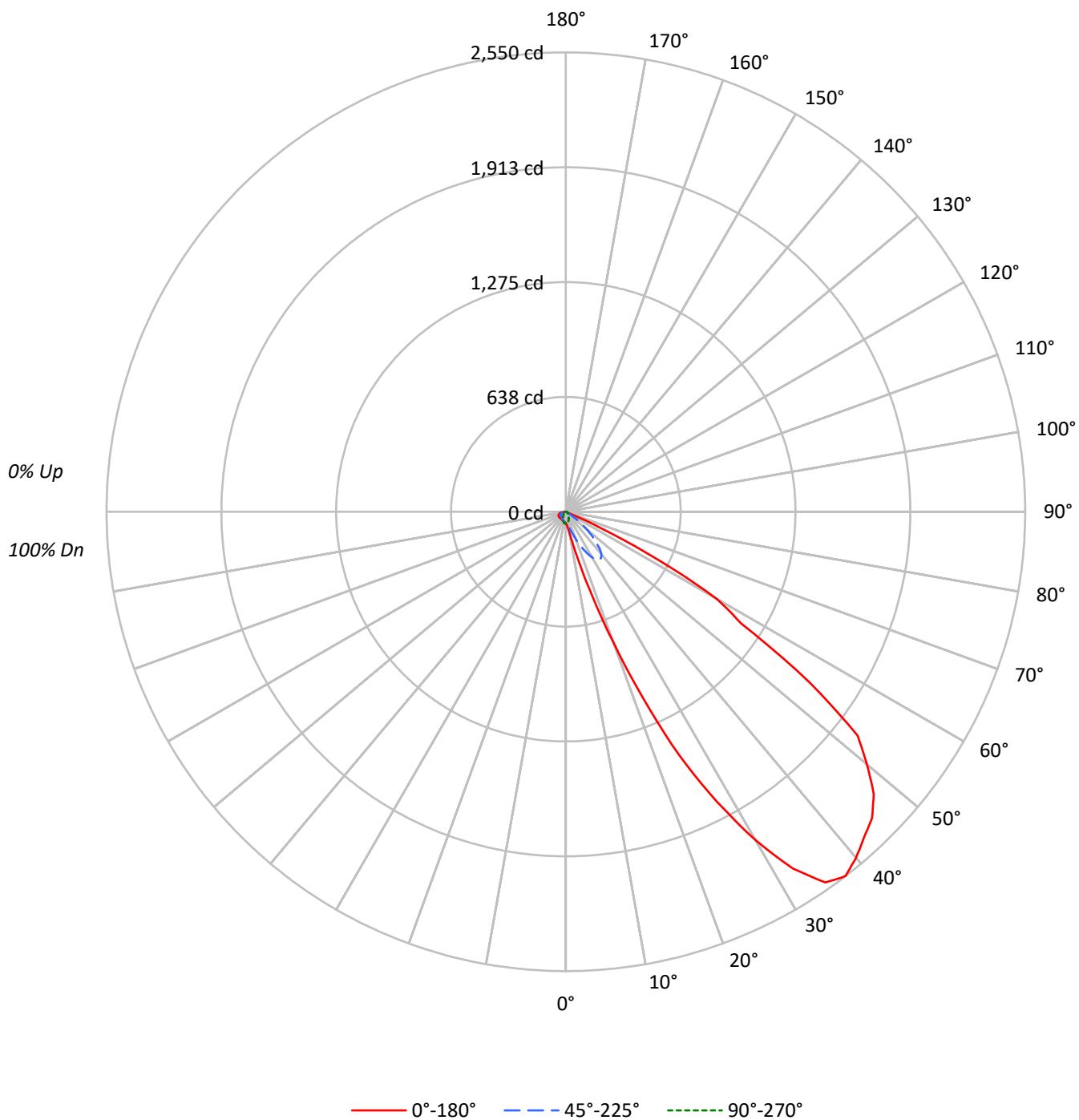
Lumens per Lamp: N/A
Luminaire Lumens: 1139.0 lumens
Efficiency: N/A
Efficacy: 78.0 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.6
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: P1315396

CATALOG NUMBER: P3SQAS13R459740DE010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1315396

CATALOG NUMBER: P3SQAS13R459740DE010 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	0
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	107	104	100	97	99	97	94		96	93	91		92	90	88	86
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		81	78	75	73
3	91	81	73	67	89	80	72	66	77	70	65		74	69	64		71	67	63	61
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		63	58	53	51
5	76	63	53	47	73	61	53	46	59	52	46		57	51	45		55	50	45	43
6	69	55	46	39	67	54	46	39	52	45	39		51	44	39		49	43	38	36
7	63	49	40	34	61	48	40	33	47	39	33		45	38	33		44	37	33	31
8	58	44	35	29	56	43	35	29	42	34	29		40	33	28		39	33	28	26
9	53	39	31	25	52	39	30	25	38	30	25		36	29	25		35	29	24	22
10	49	36	27	22	48	35	27	22	34	27	21		33	26	21		32	26	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	11349	11349	11349	11349	11349
5°	13502	12534	11220	10407	10407
10°	21563	14655	10528	9881	9881
15°	53703	19631	9557	9236	9557
20°	141434	29324	8284	8797	9310
25°	283995	43459	7145	8228	9121
30°	418672	58208	5807	8054	9367
35°	528114	68267	4941	7905	9692
40°	563446	68975	4451	8251	10364
45°	585420	57529	4116	8939	11228
50°	584491	40082	4046	9592	12620
55°	496782	17805	4234	10749	13842
60°	333905	3582	4202	11987	15879
65°	88593	1549	4238	13040	18012
70°	2367	1913	4280	14200	20394
75°	1863	1863	4392	15038	23157
80°	1884	2777	4661	15869	26183
85°	1778	3754	7509	16796	26084

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 600494 cd/sqm

TEST NUMBER: P1315396

CATALOG NUMBER: P3SQAS13R459740DE010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.5	0.6
10°-20°	32.1	2.8
20°-30°	132.5	11.6
30°-40°	279.2	24.5
40°-50°	344.5	30.2
50°-60°	258.2	22.7
60°-70°	66.5	5.8
70°-80°	13.8	1.2
80°-90°	5.6	0.5
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°	171.2	15.0
0°-40°	450.4	39.5
0°-60°	1053.2	92.5
0°-90°	1139.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1139.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	66	66	66	66	66	
5°	78	72	65	60	60	9
15°	301	110	54	52	54	110
25°	1494	229	38	43	48	696
35°	2512	325	24	38	46	1531
45°	2404	236	17	37	46	1839
55°	1654	59	14	36	46	1429
65°	217	4	10	32	44	313
75°	3	3	7	23	35	3
85°	1	2	4	8	13	1
90°	0	0	0	0	0	

TEST NUMBER: P1315396

CATALOG NUMBER: P3SQAS13R459740DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9
2.5°	69.6	69.6	69.6	69.6	69.6	69.6	69.6	68.7	67.8	65.9	64.0
5°	78.1	77.2	77.2	77.2	76.2	75.3	75.3	72.5	68.7	64.9	62.1
7.5°	92.2	92.2	91.3	89.4	88.5	86.6	84.7	77.2	68.7	63.1	59.3
10°	123.3	121.4	118.6	116.7	112.0	105.4	100.7	83.8	67.8	60.2	57.4
12.5°	184.5	188.2	178.8	169.4	156.2	144.0	128.9	95.1	67.8	57.4	54.6
15°	301.2	307.7	289.9	271.0	239.0	208.9	180.7	110.1	65.9	53.6	50.8
17.5°	492.2	500.7	470.6	426.3	376.5	316.2	264.5	130.8	64.0	49.9	48.0
20°	771.7	770.8	712.4	656.9	560.9	472.4	375.5	160.0	61.2	45.2	45.2
22.5°	1115.2	1119.0	1047.5	947.7	811.3	669.1	514.8	193.9	57.4	41.4	42.4
25°	1494.5	1462.5	1377.8	1256.4	1082.3	885.6	682.3	228.7	53.6	37.6	39.5
27.5°	1810.7	1779.7	1682.7	1538.7	1351.5	1118.1	852.7	263.5	48.9	33.9	36.7
30°	2105.3	2065.8	1949.1	1786.3	1563.2	1311.0	1012.7	292.7	43.3	29.2	33.9
32.5°	2348.1	2312.4	2179.7	1990.5	1747.7	1476.6	1148.2	315.3	37.6	26.4	32.0
35°	2511.9	2475.2	2352.8	2144.8	1880.4	1597.1	1258.3	324.7	32.9	23.5	31.1
37.5°	2549.5	2529.8	2442.2	2247.4	1971.7	1674.3	1328.9	321.9	27.3	21.6	29.2
40°	2506.2	2510.9	2469.5	2307.6	2020.6	1707.2	1358.0	306.8	22.6	19.8	28.2
42.5°	2450.7	2462.9	2460.1	2332.1	2041.3	1709.1	1345.8	276.7	17.9	17.9	27.3
45°	2403.6	2415.9	2432.8	2321.8	2027.2	1684.6	1307.2	236.2	13.2	16.9	27.3
47.5°	2318.0	2331.2	2355.6	2238.9	1955.7	1621.6	1237.6	192.0	9.4	16.0	26.4
50°	2181.5	2188.1	2181.5	2050.7	1818.3	1519.9	1124.6	149.6	6.6	15.1	26.4
52.5°	2041.3	2028.1	1973.5	1807.9	1599.9	1359.0	982.5	106.3	4.7	14.1	25.4
55°	1654.5	1633.8	1593.3	1491.7	1373.1	1161.4	794.3	59.3	4.7	14.1	24.5
57.5°	1152.9	1164.2	1178.3	1157.6	1103.0	914.8	603.3	26.4	4.7	13.2	24.5
60°	969.4	960.0	960.9	947.7	857.4	667.3	415.0	10.4	4.7	12.2	23.5
62.5°	578.8	585.4	597.6	600.4	511.0	372.7	217.4	4.7	4.7	11.3	22.6
65°	217.4	227.8	199.5	173.2	137.4	100.7	50.8	3.8	5.6	10.4	20.7
67.5°	6.6	7.5	9.4	8.5	8.5	7.5	5.6	3.8	5.6	9.4	19.8
70°	4.7	4.7	4.7	4.7	4.7	3.8	3.8	3.8	4.7	8.5	17.9
72.5°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	4.7	7.5	16.0
75°	2.8	3.8	2.8	2.8	2.8	2.8	2.8	2.8	4.7	6.6	13.2
77.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	3.8	5.6	11.3
80°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.8	3.8	4.7	9.4
82.5°	1.9	1.9	1.9	0.9	1.9	1.9	1.9	1.9	3.8	3.8	7.5
85°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.9	2.8	3.8	4.7
87.5°	0.0	0.0	0.0	0.0	0.9	0.9	0.9	1.9	2.8	2.8	2.8
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: P1315396

CATALOG NUMBER: P3SQAS13R459740DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	65.9	65.9	65.9
2.5°	62.1	62.1	62.1
5°	60.2	60.2	60.2
7.5°	58.3	58.3	58.3
10°	56.5	56.5	56.5
12.5°	54.6	54.6	55.5
15°	51.8	53.6	53.6
17.5°	49.9	51.8	52.7
20°	48.0	49.9	50.8
22.5°	45.2	48.0	49.9
25°	43.3	47.1	48.0
27.5°	41.4	46.1	48.0
30°	40.5	45.2	47.1
32.5°	38.6	44.2	46.1
35°	37.6	44.2	46.1
37.5°	37.6	43.3	46.1
40°	36.7	43.3	46.1
42.5°	36.7	43.3	46.1
45°	36.7	43.3	46.1
47.5°	35.8	43.3	47.1
50°	35.8	44.2	47.1
52.5°	35.8	44.2	47.1
55°	35.8	44.2	46.1
57.5°	34.8	43.3	46.1
60°	34.8	43.3	46.1
62.5°	32.9	42.4	45.2
65°	32.0	41.4	44.2
67.5°	30.1	40.5	42.4
70°	28.2	37.6	40.5
72.5°	25.4	35.8	38.6
75°	22.6	32.9	34.8
77.5°	19.8	29.2	31.1
80°	16.0	24.5	26.4
82.5°	12.2	18.8	19.8
85°	8.5	12.2	13.2
87.5°	3.8	5.6	6.6
90°	0.0	0.0	0.0

(END OF REPORT)