

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: P1306931

Luminaire Tested: P3SQAS13R459027DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1306931
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: P3SQAS13R459027DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R45 optic, 2700K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

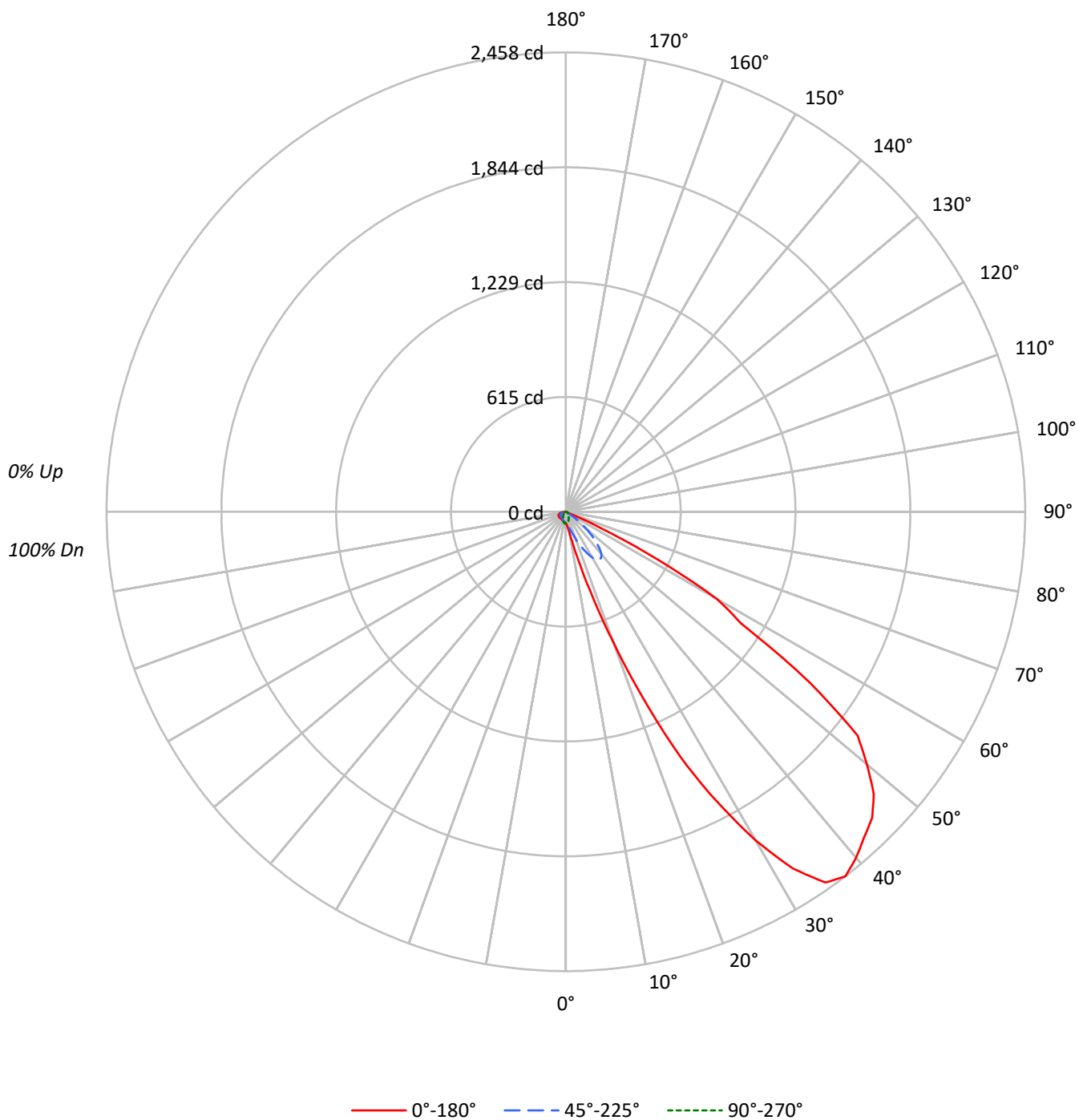
Lumens per Lamp: N/A
Luminaire Lumens: 1098.0 lumens
Efficiency: N/A
Efficacy: 75.2 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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

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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
RW	70	50	30	10	70	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
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38
7	63	49	40	34	61	48	40	33	47	39	33	45	38	33	44	37	33
8	58	44	35	29	56	43	35	29	42	34	29	40	33	28	39	33	28
9	53	39	31	25	52	39	30	25	38	30	25	36	29	25	35	29	24
10	49	36	27	22	48	35	27	22	34	27	21	33	26	21	32	26	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	10936	10936	10936	10936	10936
5°	13018	12084	10822	10044	10044
10°	20776	14113	10160	9513	9513
15°	51760	18917	9218	8897	9218
20°	136339	28261	7972	8486	8980
25°	273771	41901	6898	7924	8798
30°	403598	56120	5588	7756	9028
35°	509108	65807	4773	7632	9356
40°	543167	66502	4294	7959	10005
45°	564352	55459	3970	8622	10838
50°	563459	38662	3885	9244	12164
55°	478886	17175	4084	10359	13362
60°	321884	3444	4064	11573	15328
65°	85415	1467	4075	12551	17360
70°	2266	1813	4129	13696	19638
75°	1797	1797	4259	14506	22358
80°	1785	2678	4463	15274	25191
85°	1778	3557	7114	16203	25096

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 578876 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.3	0.6
10°-20°	31.0	2.8
20°-30°	127.7	11.6
30°-40°	269.2	24.5
40°-50°	332.1	30.2
50°-60°	248.9	22.7
60°-70°	64.1	5.8
70°-80°	13.3	1.2
80°-90°	5.4	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°	165.0	15.0
0°-40°	434.2	39.5
0°-60°	1015.3	92.5
0°-90°	1098.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1098.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	64	64	64	64	64	
5°	75	70	63	58	58	8
15°	290	106	52	50	52	106
25°	1441	220	36	42	46	671
35°	2422	313	23	36	44	1476
45°	2317	228	16	35	44	1773
55°	1595	57	14	34	44	1377
65°	210	4	10	31	43	302
75°	3	3	6	22	34	3
85°	1	2	4	8	13	1
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5
2.5°	67.1	67.1	67.1	67.1	67.1	67.1	67.1	66.2	65.3	63.5	61.7
5°	75.3	74.4	74.4	74.4	73.5	72.6	72.6	69.9	66.2	62.6	59.9
7.5°	88.9	88.9	88.0	86.2	85.3	83.5	81.7	74.4	66.2	60.8	57.2
10°	118.8	117.0	114.3	112.5	108.0	101.6	97.1	80.7	65.3	58.1	55.3
12.5°	177.8	181.5	172.4	163.3	150.6	138.8	124.3	91.6	65.3	55.3	52.6
15°	290.3	296.7	279.4	261.3	230.4	201.4	174.2	106.1	63.5	51.7	49.0
17.5°	474.5	482.7	453.6	411.0	362.9	304.8	254.9	126.1	61.7	48.1	46.3
20°	743.9	743.0	686.8	633.3	540.7	455.4	362.0	154.2	59.0	43.5	43.5
22.5°	1075.1	1078.7	1009.8	913.6	782.1	645.1	496.3	186.9	55.3	39.9	40.8
25°	1440.7	1409.9	1328.2	1211.2	1043.3	853.7	657.8	220.5	51.7	36.3	38.1
27.5°	1745.6	1715.6	1622.2	1483.4	1302.8	1077.8	822.0	254.0	47.2	32.7	35.4
30°	2029.5	1991.4	1878.9	1722.0	1506.9	1263.8	976.2	282.2	41.7	28.1	32.7
32.5°	2263.6	2229.1	2101.2	1918.8	1684.8	1423.5	1106.8	303.9	36.3	25.4	30.8
35°	2421.5	2386.1	2268.1	2067.6	1812.7	1539.6	1213.0	313.0	31.8	22.7	29.9
37.5°	2457.7	2438.7	2354.3	2166.5	1900.7	1614.0	1281.0	310.3	26.3	20.9	28.1
40°	2416.0	2420.5	2380.6	2224.6	1947.9	1645.8	1309.2	295.8	21.8	19.1	27.2
42.5°	2362.5	2374.3	2371.6	2248.2	1967.8	1647.6	1297.4	266.7	17.2	17.2	26.3
45°	2317.1	2328.9	2345.2	2238.2	1954.2	1624.0	1260.2	227.7	12.7	16.3	26.3
47.5°	2234.6	2247.3	2270.8	2158.3	1885.3	1563.2	1193.0	185.1	9.1	15.4	25.4
50°	2103.0	2109.4	2103.0	1976.9	1752.8	1465.2	1084.2	144.3	6.4	14.5	25.4
52.5°	1967.8	1955.1	1902.5	1742.8	1542.3	1310.1	947.2	102.5	4.5	13.6	24.5
55°	1594.9	1575.0	1536.0	1438.0	1323.7	1119.5	765.7	57.2	4.5	13.6	23.6
57.5°	1111.4	1122.3	1135.9	1115.9	1063.3	881.8	581.5	25.4	4.5	12.7	23.6
60°	934.5	925.4	926.3	913.6	826.5	643.2	400.1	10.0	4.5	11.8	22.7
62.5°	558.0	564.3	576.1	578.8	492.6	359.3	209.6	4.5	4.5	10.9	21.8
65°	209.6	219.6	192.3	166.9	132.5	97.1	49.0	3.6	5.4	10.0	20.0
67.5°	6.4	7.3	9.1	8.2	8.2	7.3	5.4	3.6	5.4	9.1	19.1
70°	4.5	4.5	4.5	4.5	4.5	3.6	3.6	3.6	4.5	8.2	17.2
72.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	4.5	7.3	15.4
75°	2.7	3.6	2.7	2.7	2.7	2.7	2.7	2.7	4.5	6.4	12.7
77.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.6	5.4	10.9
80°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.7	3.6	4.5	9.1
82.5°	1.8	1.8	1.8	0.9	1.8	1.8	1.8	1.8	3.6	3.6	7.3
85°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.8	2.7	3.6	4.5
87.5°	0.0	0.0	0.0	0.0	0.9	0.9	0.9	1.8	2.7	2.7	2.7
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):

	135°	157.5°	180°
0°	63.5	63.5	63.5
2.5°	59.9	59.9	59.9
5°	58.1	58.1	58.1
7.5°	56.2	56.2	56.2
10°	54.4	54.4	54.4
12.5°	52.6	52.6	53.5
15°	49.9	51.7	51.7
17.5°	48.1	49.9	50.8
20°	46.3	48.1	49.0
22.5°	43.5	46.3	48.1
25°	41.7	45.4	46.3
27.5°	39.9	44.5	46.3
30°	39.0	43.5	45.4
32.5°	37.2	42.6	44.5
35°	36.3	42.6	44.5
37.5°	36.3	41.7	44.5
40°	35.4	41.7	44.5
42.5°	35.4	41.7	44.5
45°	35.4	41.7	44.5
47.5°	34.5	41.7	45.4
50°	34.5	42.6	45.4
52.5°	34.5	42.6	45.4
55°	34.5	42.6	44.5
57.5°	33.6	41.7	44.5
60°	33.6	41.7	44.5
62.5°	31.8	40.8	43.5
65°	30.8	39.9	42.6
67.5°	29.0	39.0	40.8
70°	27.2	36.3	39.0
72.5°	24.5	34.5	37.2
75°	21.8	31.8	33.6
77.5°	19.1	28.1	29.9
80°	15.4	23.6	25.4
82.5°	11.8	18.1	19.1
85°	8.2	11.8	12.7
87.5°	3.6	5.4	6.4
90°	0.0	0.0	0.0

(END OF REPORT)