

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: P1310451

Luminaire Tested: P3SQAS17R509040DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1310451
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: P3SQAS17R509040DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R50 optic, 4000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

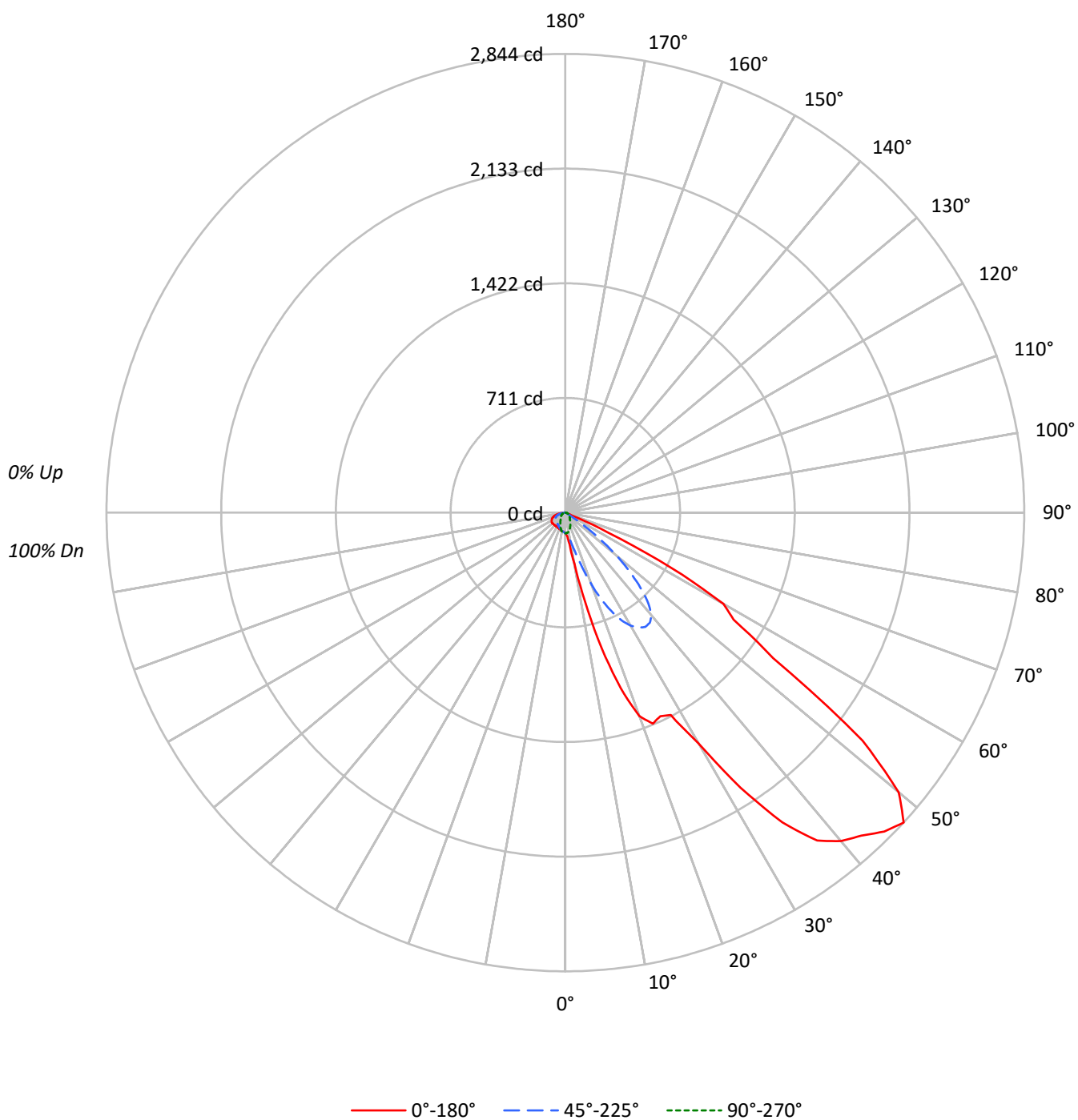
Lumens per Lamp: N/A
Luminaire Lumens: 1604.0 lumens
Efficiency: N/A
Efficacy: 75.7 lumens/watt
Spacing Criteria (0/90/45): 3.58 / 0.82 / 1.91
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 21.2
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		
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86		
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	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	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51		
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43		
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	50	43	39	37		
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31		
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27		
9	54	40	31	26	53	39	31	26	38	31	25	37	30	25	36	30	25	23		
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22	20		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	21958	21958	21958	21958	21958
5°	26105	24428	21800	20832	20590
10°	56206	30289	20828	20111	20356
15°	155618	49656	18775	19274	20005
20°	246047	87093	16257	18529	19555
25°	264593	127945	13948	17901	19744
30°	328407	160624	12131	17639	20384
35°	492856	181757	10491	17766	21550
40°	597731	186893	9353	18368	22729
45°	680944	160287	9109	19582	24965
50°	722717	110629	9270	21167	27838
55°	472160	44499	9158	22880	30777
60°	389395	7647	9059	24800	33893
65°	117445	3953	8476	26529	37247
70°	4884	4179	8359	27191	40485
75°	4591	4591	8318	27681	44250
80°	4166	4166	8232	27473	45325
85°	2766	5533	10868	27467	43868

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 725074 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.3	0.8
10°-20°	75.9	4.7
20°-30°	195.3	12.2
30°-40°	350.7	21.9
40°-50°	468.5	29.2
50°-60°	356.8	22.2
60°-70°	108.3	6.8
70°-80°	25.9	1.6
80°-90°	9.4	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°	284.5	17.7
0°-40°	635.2	39.6
0°-60°	1460.5	91.1
0°-90°	1604.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1604.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	128	128	128	128	128	
5°	151	141	126	120	119	19
15°	873	278	105	108	112	257
25°	1392	673	73	94	104	664
35°	2344	864	50	84	102	1439
45°	2796	658	37	80	102	2138
55°	1572	148	30	76	102	1564
65°	288	10	21	65	91	399
75°	7	7	12	42	66	7
85°	1	3	6	14	22	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°	127.5	127.5	127.5	127.5	127.5	127.5	127.5	127.5	127.5	127.5	127.5
2.5°	135.8	135.8	135.8	135.8	135.8	135.8	134.4	134.4	134.4	131.6	128.8
5°	151.0	152.4	151.0	151.0	148.2	148.2	145.5	145.5	141.3	133.0	126.1
7.5°	198.1	196.7	195.3	189.8	185.6	176.0	171.8	164.9	152.4	133.0	123.3
10°	321.4	313.1	307.6	295.1	268.8	252.1	230.0	207.8	173.2	133.0	119.1
12.5°	558.3	556.9	540.3	498.8	461.4	410.1	356.1	302.0	213.4	130.2	113.6
15°	872.8	860.4	836.8	788.3	721.8	641.5	544.5	448.9	278.5	126.1	105.3
17.5°	1141.6	1126.4	1108.4	1059.9	983.7	882.5	766.1	634.5	367.1	120.5	97.0
20°	1342.5	1332.8	1317.6	1278.8	1206.7	1115.3	985.0	825.7	475.2	113.6	88.7
22.5°	1415.9	1414.5	1417.3	1403.4	1367.4	1295.4	1170.7	1004.4	581.9	105.3	80.4
25°	1392.4	1391.0	1409.0	1427.0	1435.3	1406.2	1310.6	1148.5	673.3	98.4	73.4
27.5°	1414.5	1410.4	1402.1	1404.8	1428.4	1445.0	1400.7	1259.4	752.3	88.7	66.5
30°	1651.4	1627.9	1590.5	1526.8	1479.6	1475.5	1456.1	1346.6	807.7	79.0	61.0
32.5°	2021.4	1992.3	1924.4	1806.6	1694.4	1608.5	1547.5	1420.1	846.5	69.3	54.0
35°	2344.2	2323.4	2244.4	2128.0	1967.3	1806.6	1695.8	1528.1	864.5	61.0	49.9
37.5°	2563.1	2554.7	2477.2	2352.5	2189.0	1999.2	1852.3	1639.0	860.4	51.3	45.7
40°	2658.7	2633.7	2568.6	2463.3	2298.4	2128.0	1972.9	1709.6	831.3	41.6	41.6
42.5°	2715.5	2687.7	2617.1	2517.3	2355.2	2173.8	1986.7	1679.2	762.0	33.3	40.2
45°	2795.8	2766.7	2673.9	2567.2	2403.7	2193.1	1932.7	1571.1	658.1	24.9	37.4
47.5°	2844.3	2824.9	2755.6	2649.0	2450.8	2165.4	1808.0	1469.9	543.1	19.4	36.0
50°	2697.4	2678.1	2626.8	2553.4	2420.4	2072.6	1698.5	1306.5	412.9	15.2	34.6
52.5°	2322.0	2338.6	2348.3	2369.1	2272.1	1864.8	1535.1	1176.2	278.5	12.5	31.9
55°	1572.5	1597.4	1625.1	1708.2	1821.9	1659.8	1363.3	1016.9	148.2	12.5	30.5
57.5°	1235.8	1227.5	1219.2	1213.6	1302.3	1368.8	1198.4	813.3	63.7	12.5	27.7
60°	1130.5	1105.6	1089.0	1093.1	1137.4	1111.1	949.0	530.6	22.2	12.5	26.3
62.5°	741.2	760.6	798.0	861.7	831.3	713.5	551.4	210.6	11.1	12.5	23.6
65°	288.2	278.5	288.2	306.2	264.6	196.7	123.3	37.4	9.7	11.1	20.8
67.5°	38.8	34.6	26.3	16.6	15.2	13.9	11.1	9.7	9.7	11.1	19.4
70°	9.7	9.7	9.7	9.7	9.7	9.7	9.7	8.3	8.3	9.7	16.6
72.5°	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	9.7	13.9
75°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	8.3	12.5
77.5°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	6.9	9.7
80°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	5.5	8.3
82.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	4.2	4.2	5.5	6.9
85°	1.4	2.8	1.4	2.8	2.8	2.8	2.8	2.8	2.8	4.2	5.5
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°	127.5	127.5	127.5	127.5
2.5°	126.1	123.3	123.3	123.3
5°	123.3	120.5	120.5	119.1
7.5°	119.1	117.8	117.8	117.8
10°	116.4	115.0	116.4	116.4
12.5°	110.8	112.2	113.6	113.6
15°	105.3	108.1	110.8	112.2
17.5°	99.8	105.3	108.1	109.4
20°	94.2	101.1	105.3	106.7
22.5°	90.1	97.0	102.5	105.3
25°	84.5	94.2	101.1	103.9
27.5°	79.0	90.1	98.4	102.5
30°	74.8	88.7	98.4	102.5
32.5°	70.7	85.9	97.0	101.1
35°	67.9	84.5	97.0	102.5
37.5°	65.1	83.1	97.0	101.1
40°	63.7	81.7	97.0	101.1
42.5°	62.3	81.7	97.0	102.5
45°	59.6	80.4	97.0	102.5
47.5°	58.2	80.4	97.0	102.5
50°	56.8	79.0	97.0	103.9
52.5°	55.4	77.6	97.0	103.9
55°	52.6	76.2	95.6	102.5
57.5°	51.3	74.8	94.2	99.8
60°	48.5	72.0	91.4	98.4
62.5°	45.7	69.3	88.7	94.2
65°	41.6	65.1	84.5	91.4
67.5°	37.4	59.6	80.4	87.3
70°	33.3	54.0	74.8	80.4
72.5°	29.1	48.5	69.3	73.4
75°	24.9	41.6	61.0	66.5
77.5°	20.8	36.0	51.3	55.4
80°	15.2	27.7	41.6	45.7
82.5°	12.5	20.8	30.5	33.3
85°	8.3	13.9	19.4	22.2
87.5°	4.2	6.9	9.7	11.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)