

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: P1312489

Luminaire Tested: P3SQAS13R509727DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1312489
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: P3SQAS13R509727DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R50 optic, 2700K CCT AND, 97CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

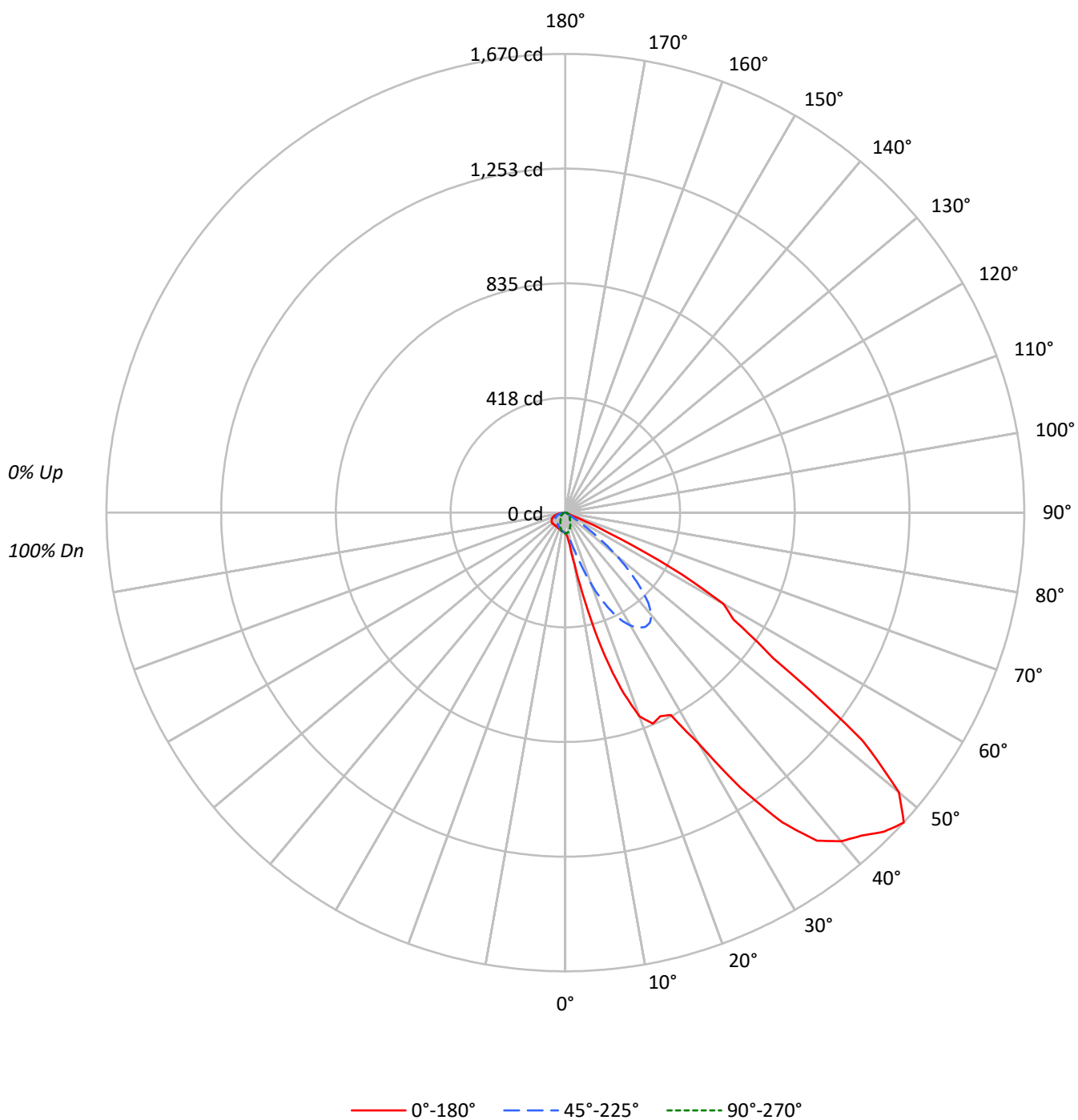
Lumens per Lamp: N/A
Luminaire Lumens: 942.0 lumens
Efficiency: N/A
Efficacy: 64.5 lumens/watt
Spacing Criteria (0/90/45): 3.58 / 0.82 / 1.91
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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			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°	12899	12899	12899	12899	12899
5°	15335	14349	12793	12240	12102
10°	33017	17785	12242	11804	11944
15°	91396	29152	11019	11322	11750
20°	144494	51152	9549	10887	11491
25°	155385	75137	8190	10508	11592
30°	192880	94342	7119	10361	11972
35°	289444	106741	6160	10428	12657
40°	351035	109757	5486	10791	13354
45°	399900	94136	5358	11496	14662
50°	424456	64973	5439	12432	16344
55°	277291	26153	5375	13452	18076
60°	228677	4478	5339	14570	19909
65°	68951	2323	4972	15567	21883
70°	2870	2467	4935	15962	23767
75°	2728	2728	4858	16236	26018
80°	2380	2380	4860	16166	26679
85°	1581	3162	6521	16006	25688

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 425821 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.8	0.8
10°-20°	44.6	4.7
20°-30°	114.7	12.2
30°-40°	206.0	21.9
40°-50°	275.1	29.2
50°-60°	209.5	22.2
60°-70°	63.6	6.8
70°-80°	15.2	1.6
80°-90°	5.5	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°	167.1	17.7
0°-40°	373.0	39.6
0°-60°	857.7	91.1
0°-90°	942.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	942.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	75	75	75	75	75	
5°	89	83	74	71	70	11
15°	513	164	62	64	66	151
25°	818	395	43	55	61	390
35°	1377	508	29	50	60	845
45°	1642	386	22	47	60	1255
55°	924	87	18	45	60	919
65°	169	6	12	38	54	234
75°	4	4	7	24	39	4
85°	1	2	3	8	13	1
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°	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9
2.5°	79.7	79.7	79.7	79.7	79.7	79.7	78.9	78.9	78.9	77.3	75.7
5°	88.7	89.5	88.7	88.7	87.1	87.1	85.4	85.4	83.0	78.1	74.0
7.5°	116.4	115.5	114.7	111.5	109.0	103.3	100.9	96.8	89.5	78.1	72.4
10°	188.8	183.9	180.6	173.3	157.8	148.1	135.1	122.0	101.7	78.1	70.0
12.5°	327.9	327.1	317.3	292.9	270.9	240.8	209.1	177.4	125.3	76.5	66.7
15°	512.6	505.3	491.4	463.0	423.9	376.7	319.8	263.6	163.5	74.0	61.8
17.5°	670.4	661.5	650.9	622.4	577.7	518.3	449.9	372.6	215.6	70.8	57.0
20°	788.4	782.7	773.8	751.0	708.7	655.0	578.5	484.9	279.1	66.7	52.1
22.5°	831.5	830.7	832.4	824.2	803.1	760.8	687.5	589.9	341.7	61.8	47.2
25°	817.7	816.9	827.5	838.1	842.9	825.8	769.7	674.5	395.4	57.8	43.1
27.5°	830.7	828.3	823.4	825.0	838.9	848.6	822.6	739.6	441.8	52.1	39.1
30°	969.9	956.0	934.1	896.6	869.0	866.5	855.1	790.9	474.4	46.4	35.8
32.5°	1187.1	1170.0	1130.1	1061.0	995.1	944.6	908.8	834.0	497.1	40.7	31.7
35°	1376.7	1364.5	1318.1	1249.8	1155.4	1061.0	995.9	897.4	507.7	35.8	29.3
37.5°	1505.2	1500.4	1454.8	1381.6	1285.6	1174.1	1087.8	962.5	505.3	30.1	26.9
40°	1561.4	1546.7	1508.5	1446.7	1349.8	1249.8	1158.6	1004.0	488.2	24.4	24.4
42.5°	1594.7	1578.5	1537.0	1478.4	1383.2	1276.6	1166.8	986.1	447.5	19.5	23.6
45°	1641.9	1624.8	1570.3	1507.7	1411.7	1288.0	1135.0	922.7	386.5	14.6	22.0
47.5°	1670.4	1659.0	1618.3	1555.7	1439.3	1271.7	1061.8	863.3	318.9	11.4	21.2
50°	1584.2	1572.8	1542.7	1499.5	1421.4	1217.2	997.5	767.3	242.5	9.0	20.3
52.5°	1363.7	1373.4	1379.1	1391.3	1334.4	1095.2	901.5	690.8	163.5	7.3	18.7
55°	923.5	938.1	954.4	1003.2	1069.9	974.7	800.6	597.2	87.1	7.3	17.9
57.5°	725.8	720.9	716.0	712.8	764.8	803.9	703.8	477.6	37.4	7.3	16.3
60°	663.9	649.3	639.5	642.0	668.0	652.5	557.3	311.6	13.0	7.3	15.5
62.5°	435.3	446.7	468.7	506.1	488.2	419.0	323.8	123.7	6.5	7.3	13.8
65°	169.2	163.5	169.2	179.8	155.4	115.5	72.4	22.0	5.7	6.5	12.2
67.5°	22.8	20.3	15.5	9.8	9.0	8.1	6.5	5.7	5.7	6.5	11.4
70°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	4.9	4.9	5.7	9.8
72.5°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	5.7	8.1
75°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.9	7.3
77.5°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	4.1	5.7
80°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	3.3	4.9
82.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.4	2.4	3.3	4.1
85°	0.8	1.6	0.8	1.6	1.6	1.6	1.6	1.6	1.6	2.4	3.3
87.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	2.4	2.4
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°	74.9	74.9	74.9	74.9
2.5°	74.0	72.4	72.4	72.4
5°	72.4	70.8	70.8	70.0
7.5°	70.0	69.2	69.2	69.2
10°	68.3	67.5	68.3	68.3
12.5°	65.1	65.9	66.7	66.7
15°	61.8	63.5	65.1	65.9
17.5°	58.6	61.8	63.5	64.3
20°	55.3	59.4	61.8	62.7
22.5°	52.9	57.0	60.2	61.8
25°	49.6	55.3	59.4	61.0
27.5°	46.4	52.9	57.8	60.2
30°	43.9	52.1	57.8	60.2
32.5°	41.5	50.4	57.0	59.4
35°	39.9	49.6	57.0	60.2
37.5°	38.2	48.8	57.0	59.4
40°	37.4	48.0	57.0	59.4
42.5°	36.6	48.0	57.0	60.2
45°	35.0	47.2	57.0	60.2
47.5°	34.2	47.2	57.0	60.2
50°	33.4	46.4	57.0	61.0
52.5°	32.5	45.6	57.0	61.0
55°	30.9	44.8	56.1	60.2
57.5°	30.1	43.9	55.3	58.6
60°	28.5	42.3	53.7	57.8
62.5°	26.9	40.7	52.1	55.3
65°	24.4	38.2	49.6	53.7
67.5°	22.0	35.0	47.2	51.3
70°	19.5	31.7	43.9	47.2
72.5°	17.1	28.5	40.7	43.1
75°	14.6	24.4	35.8	39.1
77.5°	12.2	21.2	30.1	32.5
80°	9.0	16.3	24.4	26.9
82.5°	7.3	12.2	17.9	19.5
85°	4.9	8.1	11.4	13.0
87.5°	2.4	4.1	5.7	6.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)