

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: P1312535

Luminaire Tested: P3SQAS17R159727DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1312535
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-73)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS17R159727DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R15 optic, 2700K CCT AND, 97CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

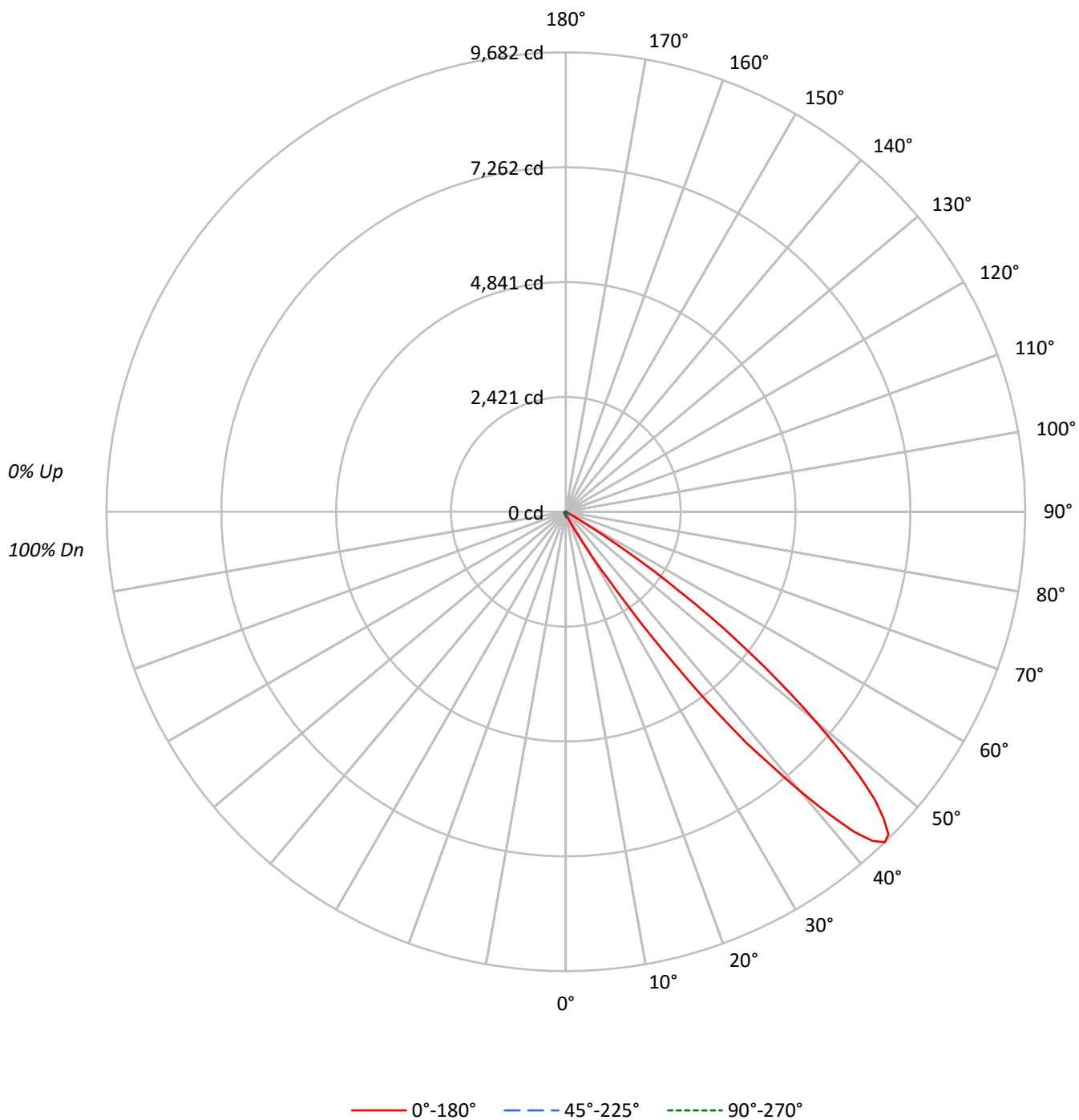
Lumens per Lamp: N/A
Luminaire Lumens: 1081.0 lumens
Efficiency: N/A
Efficacy: 51.0 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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	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	100	97	94		96	93	91		92	90	89	87
2	101	93	87	81	98	91	85	80	87	83	78		84	80	77		81	78	75	73
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71	67	63	61
4	83	71	62	55	80	69	61	55	67	60	54		64	58	53		62	57	53	50
5	75	62	52	46	73	61	52	45	58	51	45		56	50	44		55	49	44	42
6	68	54	45	38	66	53	44	38	51	43	37		49	42	37		48	42	37	35
7	62	47	38	32	60	47	38	32	45	37	31		44	36	31		42	36	31	29
8	56	42	33	27	55	41	33	27	40	32	26		39	31	26		37	31	26	24
9	52	37	28	22	50	37	28	22	35	28	22		34	27	22		33	27	22	20
10	48	33	25	19	46	33	25	19	32	24	19		31	24	19		30	23	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	16516	16516	16516	16516	16516
5°	20504	18256	14902	13052	12862
10°	20164	15652	11490	10178	10370
15°	16724	11144	8255	8451	9040
20°	29031	8889	6323	7313	8302
25°	64723	10641	5112	6765	7791
30°	193556	13065	4494	6642	8153
35°	745108	14738	4079	6791	8620
40°	1729478	12837	3867	7037	9218
45°	2342483	9718	3410	7623	9986
50°	1836720	5787	3456	8092	10985
55°	881596	2582	3243	8738	11980
60°	80566	379	2962	9266	13364
65°	8802	0	2649	9658	14507
70°	2165	0	3273	10323	15761
75°	2129	732	4325	11445	17900
80°	2182	2182	5356	11802	19241
85°	2174	2174	8497	10671	21341

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2342483 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	8.2	0.8
10°-20°	17.0	1.6
20°-30°	40.8	3.8
30°-40°	223.6	20.7
40°-50°	541.5	50.1
50°-60°	216.0	20.0
60°-70°	18.7	1.7
70°-80°	10.5	1.0
80°-90°	4.7	0.4
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°	66.1	6.1
0°-40°	289.7	26.8
0°-60°	1047.2	96.9
0°-90°	1081.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1081.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	96	96	96	96	96	
5°	119	106	86	76	74	11
15°	94	62	46	47	51	33
25°	341	56	27	36	41	205
35°	3544	70	19	32	41	2504
45°	9618	40	14	31	41	6785
55°	2936	9	11	29	40	2735
65°	22	0	6	24	36	55
75°	3	1	6	17	27	3
85°	1	1	4	5	11	1
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9
2.5°	107.8	107.8	108.9	107.8	107.8	107.8	107.8	106.7	106.7	106.7	103.5
5°	118.6	118.6	118.6	118.6	117.5	117.5	117.5	116.4	116.4	115.3	105.6
7.5°	122.9	122.9	121.8	121.8	120.7	120.7	119.6	118.6	117.5	116.4	101.3
10°	115.3	115.3	115.3	114.3	114.3	113.2	112.1	111.0	109.9	107.8	89.5
12.5°	102.4	102.4	103.5	102.4	101.3	100.2	98.1	97.0	95.9	93.8	74.4
15°	93.8	93.8	93.8	92.7	91.6	89.5	88.4	86.2	85.2	81.9	62.5
17.5°	119.6	119.6	118.6	116.4	112.1	108.9	103.5	99.2	93.8	87.3	53.9
20°	158.4	158.4	156.3	154.1	148.7	143.4	134.7	127.2	118.6	111.0	48.5
22.5°	229.6	232.8	226.4	218.8	211.3	198.3	186.5	174.6	159.5	146.6	49.6
25°	340.6	343.8	340.6	323.4	309.3	292.1	269.5	245.8	219.9	196.2	56.0
27.5°	551.9	554.0	548.6	506.6	484.0	438.7	398.8	360.0	316.9	273.8	61.4
30°	973.3	974.4	939.9	855.8	781.4	682.3	598.2	517.4	449.5	380.5	65.7
31°	1281.6	1251.4	1178.1	1076.8	958.2	824.6	709.2	604.7	503.4	429.0	66.8
32°	1627.6	1623.3	1501.5	1325.8	1167.3	1000.3	826.7	693.1	576.7	475.3	67.9
33°	2085.7	2087.8	1896.0	1689.0	1429.2	1205.0	977.6	794.4	654.3	530.3	70.1
34°	2801.4	2633.2	2407.9	2127.7	1774.2	1436.8	1141.5	911.9	724.3	583.1	70.1
35°	3544.0	3374.8	3126.9	2702.2	2217.2	1745.1	1336.5	1038.0	808.4	640.2	70.1
36°	4376.1	4232.8	3857.7	3315.5	2696.8	2036.1	1543.5	1183.5	891.4	692.0	69.0
37°	5275.0	5064.9	4648.8	4057.1	3229.3	2445.7	1795.7	1327.9	974.4	748.0	66.8
38°	6188.0	5998.3	5473.4	4756.6	3865.2	2877.9	2047.9	1467.0	1050.9	790.1	63.6
39°	6880.0	6776.5	6255.9	5455.0	4372.9	3287.5	2307.7	1615.7	1131.8	832.1	60.4
40°	7692.7	7525.6	7032.0	6041.4	4973.2	3704.6	2562.1	1747.2	1198.6	865.5	57.1
41°	8434.2	8223.0	7600.0	6642.8	5454.0	4079.7	2803.5	1883.0	1252.5	884.9	55.0
42°	9070.2	8824.4	8173.4	7158.1	5856.0	4379.3	2996.4	1980.0	1303.1	901.1	51.7
43°	9481.9	9269.6	8629.3	7545.0	6199.8	4654.2	3176.4	2081.3	1334.4	911.9	47.4
44°	9682.4	9467.9	8848.1	7787.5	6411.1	4819.1	3292.9	2151.4	1368.9	925.9	44.2
45°	9617.7	9400.0	8800.7	7791.8	6476.9	4878.4	3342.4	2182.7	1387.2	938.8	39.9
46°	9321.3	9168.3	8564.7	7589.2	6351.8	4814.8	3314.4	2159.0	1380.7	938.8	35.6
47°	8905.3	8730.7	8156.2	7241.1	6048.9	4651.0	3201.2	2086.7	1340.9	917.3	31.3
48°	8338.3	8189.6	7586.0	6688.1	5584.4	4294.2	2945.8	1969.2	1278.3	875.2	26.9
49°	7626.9	7420.0	6858.4	5981.0	4978.6	3787.6	2610.6	1770.9	1178.1	815.9	23.7
50°	6855.2	6599.7	6166.4	5272.9	4352.4	3247.6	2169.7	1497.1	1036.9	738.3	21.6
51°	6099.6	5839.8	5427.0	4667.1	3684.1	2694.6	1750.4	1195.3	853.7	631.6	18.3
52°	5316.0	5098.3	4635.9	4038.7	3153.8	2183.7	1458.3	1011.0	709.2	530.3	15.1
53°	4535.6	4386.9	3947.1	3342.4	2534.0	1783.9	1191.0	865.5	618.7	453.8	11.9
54°	3754.2	3591.4	3257.3	2718.4	2042.5	1407.7	1010.0	724.3	536.8	395.6	10.8
55°	2936.1	2852.0	2543.7	2072.7	1547.8	1123.1	819.2	623.0	449.5	330.9	8.6
56°	2261.3	2166.5	1885.2	1503.6	1150.1	879.5	662.9	508.7	380.5	277.0	6.5
57°	1481.0	1384.0	1197.5	1049.8	837.5	641.3	506.6	401.0	309.3	229.6	5.4
58°	875.2	786.8	757.7	646.7	558.3	435.5	374.0	298.6	228.5	181.1	3.2
59°	402.0	408.5	363.2	340.6	309.3	277.0	227.4	199.4	156.3	130.4	2.2
60°	233.9	221.0	215.6	192.9	171.4	152.0	136.9	120.7	98.1	84.1	1.1
62.5°	79.8	76.5	78.7	71.1	66.8	64.7	59.3	50.7	42.0	34.5	0.0
65°	21.6	21.6	20.5	19.4	18.3	17.2	16.2	14.0	12.9	10.8	0.0



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	7.5	7.5	6.5	6.5	5.4	5.4	4.3	4.3	3.2	3.2	0.0
70°	4.3	4.3	4.3	3.2	3.2	3.2	2.2	2.2	2.2	1.1	0.0
72.5°	3.2	3.2	3.2	3.2	3.2	3.2	2.2	2.2	2.2	1.1	1.1
75°	3.2	3.2	3.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	1.1
77.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
80°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	1.1	2.2
82.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.2
85°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	95.9	95.9	95.9	95.9	95.9	95.9
2.5°	99.2	94.9	89.5	86.2	85.2	84.1
5°	94.9	86.2	79.8	75.5	74.4	74.4
7.5°	85.2	75.5	69.0	66.8	65.7	65.7
10°	74.4	65.7	60.4	58.2	59.3	59.3
12.5°	62.5	55.0	52.8	52.8	53.9	55.0
15°	50.7	46.3	46.3	47.4	49.6	50.7
17.5°	42.0	39.9	41.0	43.1	45.3	47.4
20°	34.5	34.5	36.6	39.9	43.1	45.3
22.5°	29.1	30.2	33.4	36.6	41.0	43.1
25°	24.8	26.9	30.2	35.6	39.9	41.0
27.5°	21.6	24.8	29.1	34.5	38.8	41.0
30°	18.3	22.6	28.0	33.4	38.8	41.0
31°	17.2	21.6	26.9	33.4	38.8	41.0
32°	16.2	21.6	26.9	33.4	38.8	41.0
33°	15.1	20.5	26.9	32.3	38.8	41.0
34°	14.0	20.5	26.9	33.4	38.8	41.0
35°	12.9	19.4	25.9	32.3	37.7	41.0
36°	11.9	19.4	25.9	32.3	38.8	41.0
37°	10.8	19.4	25.9	32.3	37.7	41.0
38°	10.8	18.3	24.8	32.3	37.7	41.0
39°	9.7	17.2	24.8	32.3	37.7	41.0
40°	8.6	17.2	23.7	31.3	37.7	41.0
41°	7.5	16.2	23.7	31.3	37.7	41.0
42°	6.5	16.2	23.7	31.3	37.7	41.0
43°	5.4	15.1	22.6	31.3	37.7	41.0
44°	5.4	15.1	22.6	31.3	37.7	41.0
45°	4.3	14.0	21.6	31.3	37.7	41.0
46°	4.3	14.0	21.6	30.2	37.7	41.0
47°	3.2	14.0	21.6	30.2	37.7	41.0
48°	3.2	12.9	21.6	30.2	37.7	41.0
49°	2.2	12.9	21.6	30.2	37.7	41.0
50°	2.2	12.9	20.5	30.2	37.7	41.0
51°	2.2	12.9	20.5	30.2	37.7	41.0
52°	2.2	11.9	20.5	30.2	37.7	41.0
53°	2.2	11.9	20.5	30.2	37.7	41.0
54°	2.2	11.9	19.4	30.2	37.7	41.0
55°	2.2	10.8	19.4	29.1	37.7	39.9
56°	2.2	10.8	19.4	29.1	37.7	39.9
57°	2.2	10.8	18.3	29.1	37.7	39.9
58°	2.2	9.7	18.3	28.0	36.6	39.9
59°	2.2	9.7	17.2	28.0	36.6	38.8
60°	2.2	8.6	17.2	26.9	35.6	38.8
62.5°	2.2	7.5	15.1	25.9	34.5	36.6
65°	2.2	6.5	14.0	23.7	33.4	35.6



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.2	6.5	12.9	22.6	31.3	34.5
70°	2.2	6.5	11.9	20.5	30.2	31.3
72.5°	3.2	6.5	10.8	19.4	28.0	29.1
75°	4.3	6.5	9.7	17.2	25.9	26.9
77.5°	4.3	6.5	8.6	15.1	22.6	23.7
80°	4.3	5.4	7.5	11.9	18.3	19.4
82.5°	4.3	5.4	5.4	9.7	14.0	15.1
85°	3.2	4.3	4.3	5.4	9.7	10.8
87.5°	3.2	4.3	2.2	3.2	4.3	4.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)