

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: P1309249

Luminaire Tested: P3SQAS17R209035DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1309249
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-74)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS17R209035DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R20 optic, 3500K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

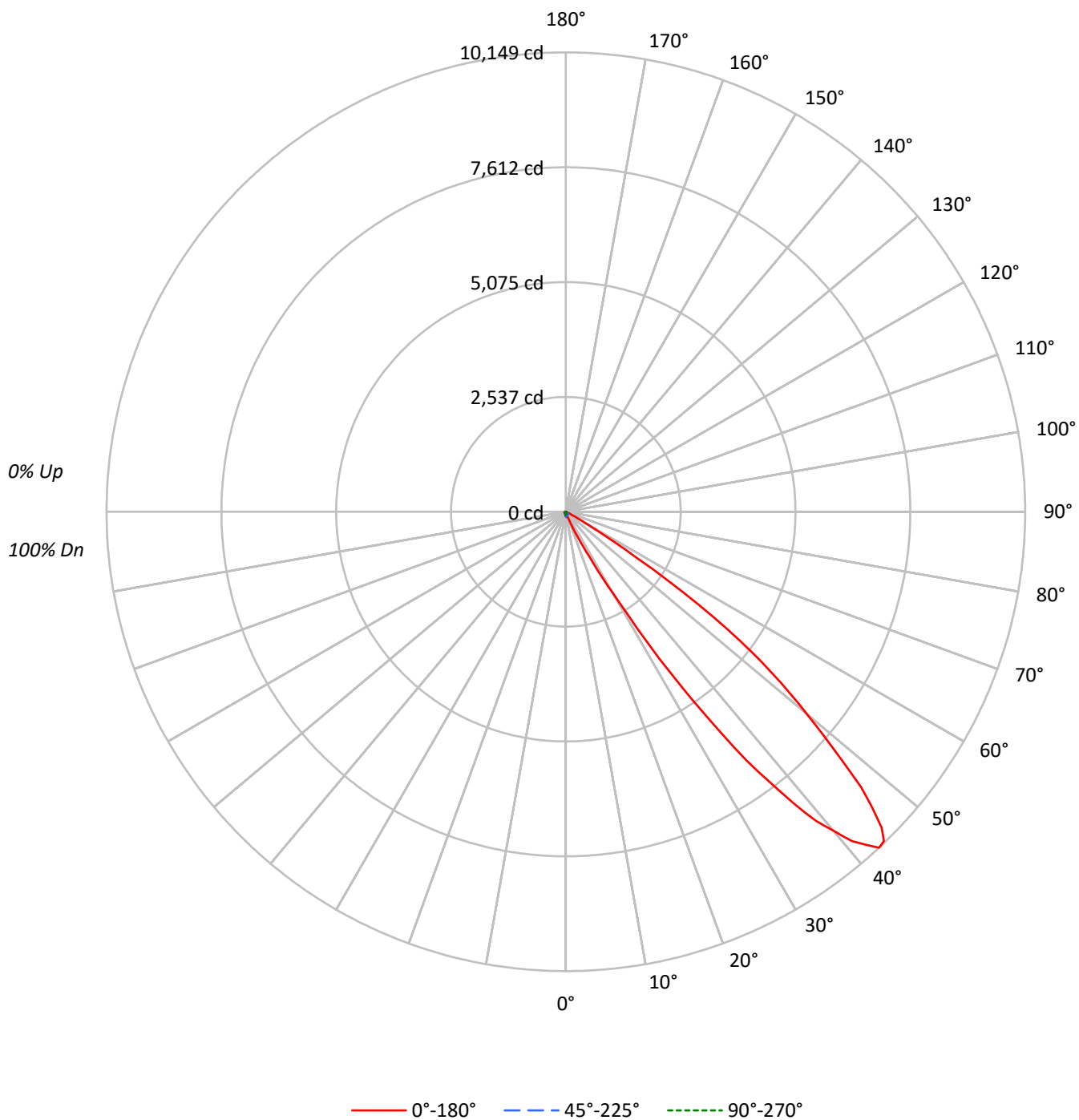
Lumens per Lamp: N/A
Luminaire Lumens: 1410.0 lumens
Efficiency: N/A
Efficacy: 66.5 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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
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	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87		
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73		
3	92	81	74	67	89	80	73	67	77	71	66	74	69	65	72	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42		
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	38	32	46	38	32	44	37	32	43	36	31	29		
8	57	42	33	27	55	42	33	27	40	33	27	39	32	27	38	31	27	25		
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21		
10	48	34	25	20	47	33	25	20	32	25	19	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	16895	16895	16895	16895	16895
5°	19708	18325	15801	13744	13295
10°	19464	16683	12521	10668	10423
15°	17010	12766	9218	8505	8986
20°	25255	10685	6800	7294	8009
25°	108771	11079	5283	6556	7810
30°	411334	13443	4474	6324	7636
35°	1246963	16168	4184	6412	8073
40°	2067743	16097	3575	6857	8633
45°	2403397	10985	3239	7112	9353
50°	1865656	6028	3188	7448	10664
55°	1079799	3993	3183	8347	11530
60°	182556	930	2756	8680	12779
65°	14059	0	3260	9740	14589
70°	2014	0	4028	10675	16667
75°	1797	865	4392	12377	19430
80°	1289	1289	6546	13191	22315
85°	2569	2569	10473	13042	23515

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2403397 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	8.4	0.6
10°-20°	17.6	1.3
20°-30°	56.3	4.0
30°-40°	359.6	25.5
40°-50°	658.2	46.7
50°-60°	270.4	19.2
60°-70°	22.8	1.6
70°-80°	11.4	0.8
80°-90°	5.3	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°	82.4	5.8
0°-40°	441.9	31.3
0°-60°	1370.5	97.2
0°-90°	1410.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1410.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	98	98	98	98	98	
5°	114	106	91	80	77	11
15°	95	72	52	48	50	30
25°	572	58	28	34	41	376
35°	5931	77	20	30	38	3754
45°	9868	45	13	29	38	7085
55°	3596	13	11	28	38	3144
65°	34	0	8	24	36	112
75°	3	1	7	19	29	3
85°	1	1	5	7	12	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°	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
2.5°	107.3	107.3	107.3	106.0	106.0	107.3	106.0	106.0	106.0	106.0	104.7
5°	114.0	114.0	114.0	114.0	114.0	114.0	114.0	112.6	112.6	111.3	106.0
7.5°	116.6	116.6	116.6	116.6	115.3	115.3	115.3	115.3	114.0	112.6	103.4
10°	111.3	111.3	111.3	110.0	110.0	110.0	108.7	108.7	107.3	106.0	95.4
12.5°	100.7	100.7	100.7	100.7	99.4	99.4	98.1	98.1	96.7	95.4	83.5
15°	95.4	95.4	95.4	94.1	94.1	92.8	91.4	90.1	88.8	86.1	71.6
17.5°	103.4	103.4	102.0	102.0	99.4	96.7	95.4	91.4	88.8	84.8	63.6
20°	137.8	139.1	133.8	129.9	127.2	119.3	115.3	108.7	103.4	96.7	58.3
22.5°	278.3	273.0	263.7	249.1	231.9	217.3	190.8	169.6	155.0	135.2	57.0
25°	572.4	567.1	542.0	520.8	467.7	426.7	369.7	323.3	275.6	229.2	58.3
27.5°	1087.9	1052.1	1045.5	948.7	874.5	768.5	658.6	565.8	481.0	386.9	62.3
30°	2068.4	2027.4	1882.9	1737.2	1537.1	1310.5	1094.5	893.1	724.8	572.4	67.6
31°	2625.0	2664.7	2495.1	2202.3	1906.8	1616.6	1321.1	1065.4	848.0	658.6	70.2
32°	3450.5	3276.9	3098.0	2797.2	2367.9	1996.9	1625.9	1257.5	971.3	751.3	72.9
33°	4230.9	4128.9	3856.0	3481.0	2965.5	2444.8	1963.8	1484.1	1122.3	863.9	74.2
34°	5063.1	4950.5	4729.2	4191.2	3625.4	2943.0	2301.6	1745.1	1302.5	973.9	75.5
35°	5931.0	5883.3	5456.6	4990.2	4294.5	3471.7	2708.4	2031.3	1478.8	1074.6	76.9
36°	6804.2	6650.5	6316.6	5635.5	4909.4	3960.6	3135.1	2297.7	1657.7	1193.9	76.9
37°	7461.5	7427.0	6984.4	6320.6	5467.2	4482.7	3503.5	2593.2	1837.9	1295.9	76.9
38°	8186.3	8049.8	7600.6	6924.8	5992.0	4961.1	3889.1	2850.2	2008.8	1388.7	75.5
39°	8797.1	8594.4	8141.2	7473.4	6450.4	5324.1	4195.2	3099.3	2159.9	1465.5	74.2
40°	9197.3	9056.8	8583.8	7832.5	6866.5	5667.3	4505.2	3304.7	2272.5	1523.8	71.6
41°	9638.6	9405.3	8937.6	8182.3	7168.6	5969.4	4700.0	3439.9	2359.9	1562.3	68.9
42°	9902.2	9711.4	9156.2	8416.8	7384.6	6141.7	4859.0	3543.2	2413.0	1582.1	63.6
43°	10148.7	9889.0	9348.4	8553.3	7527.7	6263.6	4931.9	3590.9	2424.9	1582.1	57.0
44°	10115.6	9869.1	9308.6	8571.9	7559.5	6299.4	4962.4	3592.3	2406.3	1562.3	50.4
45°	9867.8	9622.7	9117.8	8410.2	7445.6	6229.1	4901.4	3539.3	2354.6	1527.8	45.1
46°	9413.3	9169.5	8782.6	8139.9	7233.6	6070.1	4759.6	3424.0	2268.5	1472.2	39.8
47°	8919.0	8681.9	8285.7	7704.0	6871.8	5786.6	4554.3	3262.3	2147.9	1391.3	35.8
48°	8202.2	8053.8	7656.2	7159.3	6369.6	5342.7	4193.8	2998.6	1986.3	1286.6	30.5
49°	7568.8	7412.4	7063.9	6529.9	5715.0	4825.9	3763.2	2678.0	1775.6	1170.0	26.5
50°	6963.2	6826.8	6504.8	5901.9	5124.0	4201.8	3181.5	2273.8	1510.6	1025.6	22.5
51°	6370.9	6268.9	5940.3	5386.4	4596.7	3722.1	2756.1	1893.5	1248.2	850.7	21.2
52°	5776.0	5764.1	5407.6	4847.1	4083.9	3243.8	2342.7	1598.0	1058.7	714.2	19.9
53°	5136.0	5059.1	4747.7	4244.2	3511.4	2745.5	1986.3	1347.6	911.6	608.2	17.2
54°	4407.2	4321.1	3987.1	3532.6	2868.8	2248.6	1600.7	1089.2	759.3	514.1	15.9
55°	3596.2	3449.2	3206.7	2740.2	2240.7	1716.0	1236.3	862.6	606.9	428.0	13.3
56°	2728.3	2581.2	2444.8	2101.6	1644.4	1280.0	920.9	661.2	474.4	337.9	11.9
57°	1897.5	1889.5	1665.6	1401.9	1099.8	871.9	630.7	466.4	335.2	262.4	9.3
58°	1231.0	1189.9	1046.8	894.4	719.5	544.6	405.5	316.7	227.9	178.9	8.0
59°	862.6	780.5	703.6	596.3	453.2	343.2	261.0	202.7	157.7	124.6	5.3
60°	530.0	512.8	461.1	363.1	294.2	242.5	194.8	149.7	115.3	88.8	2.7
62.5°	151.1	153.7	139.1	123.2	106.0	91.4	82.2	70.2	58.3	46.4	0.0
65°	34.5	33.1	35.8	33.1	30.5	30.5	26.5	23.9	21.2	19.9	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°	10.6	10.6	9.3	9.3	9.3	8.0	8.0	6.6	6.6	5.3	0.0
70°	4.0	4.0	4.0	4.0	4.0	2.7	2.7	2.7	1.3	1.3	0.0
72.5°	4.0	4.0	4.0	2.7	2.7	2.7	2.7	2.7	1.3	1.3	1.3
75°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	1.3	1.3	1.3	1.3
77.5°	2.7	2.7	2.7	2.7	2.7	1.3	2.7	1.3	1.3	1.3	1.3
80°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
82.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
85°	1.3	1.3	1.3	1.3	0.0	0.0	1.3	1.3	1.3	0.0	1.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
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°	98.1	98.1	98.1	98.1	98.1	98.1
2.5°	102.0	96.7	92.8	88.8	87.5	87.5
5°	99.4	91.4	83.5	79.5	76.9	76.9
7.5°	91.4	82.2	74.2	70.2	68.9	68.9
10°	82.2	71.6	63.6	61.0	61.0	59.6
12.5°	71.6	61.0	55.7	54.3	54.3	54.3
15°	59.6	51.7	47.7	47.7	49.0	50.4
17.5°	50.4	42.4	41.1	43.7	46.4	46.4
20°	42.4	37.1	37.1	39.8	42.4	43.7
22.5°	35.8	31.8	33.1	37.1	41.1	42.4
25°	31.8	27.8	30.5	34.5	38.4	41.1
27.5°	26.5	25.2	27.8	33.1	38.4	39.8
30°	22.5	22.5	26.5	31.8	37.1	38.4
31°	21.2	21.2	26.5	31.8	37.1	38.4
32°	19.9	21.2	25.2	31.8	37.1	38.4
33°	18.6	19.9	25.2	30.5	37.1	38.4
34°	17.2	19.9	25.2	30.5	37.1	38.4
35°	15.9	19.9	25.2	30.5	37.1	38.4
36°	14.6	18.6	23.9	30.5	37.1	38.4
37°	13.3	18.6	23.9	30.5	37.1	38.4
38°	11.9	17.2	23.9	30.5	37.1	38.4
39°	11.9	17.2	22.5	30.5	35.8	38.4
40°	10.6	15.9	22.5	30.5	35.8	38.4
41°	9.3	15.9	22.5	29.2	35.8	38.4
42°	8.0	14.6	21.2	29.2	35.8	38.4
43°	6.6	14.6	21.2	29.2	35.8	38.4
44°	6.6	13.3	21.2	29.2	35.8	38.4
45°	5.3	13.3	21.2	29.2	35.8	38.4
46°	4.0	13.3	21.2	29.2	35.8	38.4
47°	4.0	11.9	19.9	29.2	35.8	38.4
48°	2.7	11.9	19.9	29.2	35.8	38.4
49°	2.7	11.9	19.9	29.2	35.8	39.8
50°	2.7	11.9	19.9	27.8	35.8	39.8
51°	1.3	11.9	19.9	27.8	35.8	39.8
52°	1.3	11.9	18.6	27.8	37.1	39.8
53°	1.3	10.6	18.6	27.8	37.1	39.8
54°	1.3	10.6	18.6	27.8	37.1	38.4
55°	1.3	10.6	18.6	27.8	35.8	38.4
56°	1.3	9.3	18.6	27.8	35.8	38.4
57°	1.3	9.3	17.2	26.5	35.8	37.1
58°	1.3	9.3	17.2	26.5	35.8	37.1
59°	1.3	9.3	17.2	26.5	34.5	37.1
60°	2.7	8.0	15.9	25.2	34.5	37.1
62.5°	2.7	8.0	15.9	25.2	33.1	35.8
65°	2.7	8.0	14.6	23.9	33.1	35.8



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.7	6.6	13.3	22.5	31.8	34.5
70°	2.7	8.0	13.3	21.2	30.5	33.1
72.5°	4.0	6.6	11.9	19.9	29.2	31.8
75°	4.0	6.6	11.9	18.6	27.8	29.2
77.5°	5.3	6.6	10.6	15.9	25.2	26.5
80°	5.3	6.6	9.3	13.3	21.2	22.5
82.5°	5.3	6.6	6.6	10.6	15.9	17.2
85°	4.0	5.3	5.3	6.6	10.6	11.9
87.5°	4.0	5.3	4.0	2.7	5.3	5.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)