

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: P1310497

Luminaire Tested: P3SQAS20R159040D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1310497
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: P3SQAS20R159040D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R15 optic, 4000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

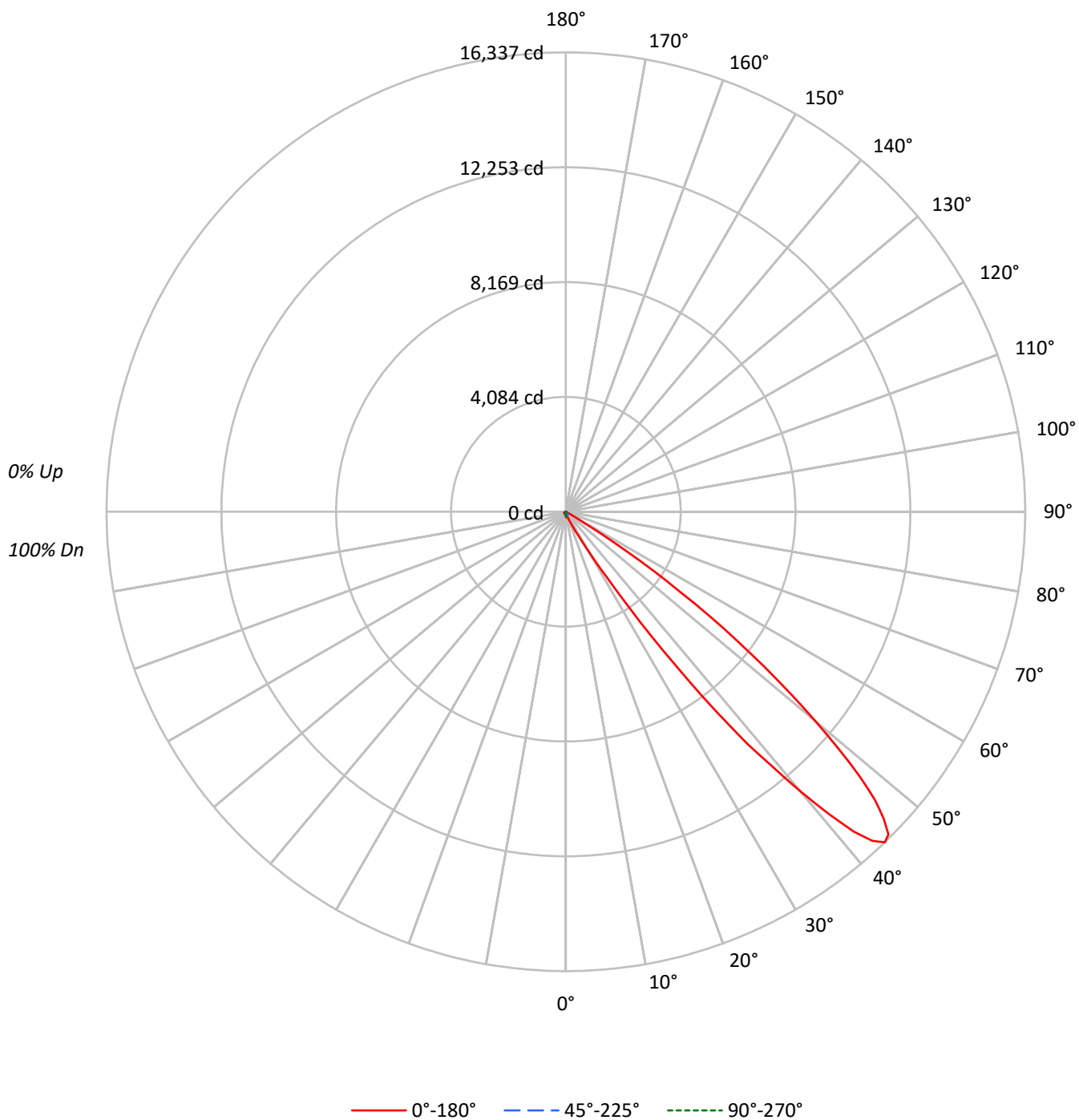
Lumens per Lamp: N/A
Luminaire Lumens: 1824.0 lumens
Efficiency: N/A
Efficacy: 63.3 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 28.8
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	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°	27883	27883	27883	27883	27883
5°	34593	30807	25154	22008	21697
10°	34032	26407	19394	17173	17488
15°	28207	18810	13943	14264	15244
20°	48990	14992	10667	12334	14002
25°	109208	17977	8646	11402	13131
30°	326597	22054	7597	11216	13742
35°	1257244	24851	6875	11479	14528
40°	2918195	21673	6542	11848	15535
45°	3952558	16392	5748	12836	16830
50°	3099130	9753	5841	13638	18514
55°	1487523	4354	5465	14743	20208
60°	135953	620	4994	15672	22561
65°	14833	0	4442	16301	24451
70°	3676	0	5489	17423	26537
75°	3660	1198	7253	19364	30276
80°	3570	3570	9025	19836	32432
85°	3557	3557	14425	17982	35964

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3952558 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.8	0.8
10°-20°	28.8	1.6
20°-30°	68.9	3.8
30°-40°	377.3	20.7
40°-50°	913.6	50.1
50°-60°	364.5	20.0
60°-70°	31.5	1.7
70°-80°	17.8	1.0
80°-90°	7.8	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°	111.5	6.1
0°-40°	488.8	26.8
0°-60°	1766.9	96.9
0°-90°	1824.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1824.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	162	162	162	162	162	
5°	200	178	146	127	126	19
15°	158	106	78	80	86	55
25°	575	95	46	60	69	347
35°	5980	118	33	55	69	4226
45°	16228	67	24	53	69	11448
55°	4954	14	18	49	67	4615
65°	36	0	11	40	60	93
75°	6	2	11	29	46	5
85°	2	2	7	9	18	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°	161.9	161.9	161.9	161.9	161.9	161.9	161.9	161.9	161.9	161.9	161.9
2.5°	181.9	181.9	183.7	181.9	181.9	181.9	181.9	180.1	180.1	180.1	174.6
5°	200.1	200.1	200.1	200.1	198.2	198.2	198.2	196.4	196.4	194.6	178.2
7.5°	207.3	207.3	205.5	205.5	203.7	203.7	201.9	200.1	198.2	196.4	171.0
10°	194.6	194.6	194.6	192.8	192.8	191.0	189.1	187.3	185.5	181.9	151.0
12.5°	172.8	172.8	174.6	172.8	171.0	169.1	165.5	163.7	161.9	158.2	125.5
15°	158.2	158.2	158.2	156.4	154.6	151.0	149.1	145.5	143.7	138.2	105.5
17.5°	201.9	201.9	200.1	196.4	189.1	183.7	174.6	167.3	158.2	147.3	90.9
20°	267.3	267.3	263.7	260.1	251.0	241.9	227.3	214.6	200.1	187.3	81.8
22.5°	387.4	392.8	381.9	369.2	356.5	334.6	314.6	294.6	269.2	247.3	83.7
25°	574.7	580.2	574.7	545.6	522.0	492.9	454.7	414.7	371.0	331.0	94.6
27.5°	931.2	934.8	925.7	854.8	816.6	740.2	672.9	607.4	534.7	461.9	103.7
30°	1642.3	1644.1	1585.9	1444.0	1318.6	1151.2	1009.4	873.0	758.4	642.0	110.9
31°	2162.4	2111.5	1987.8	1816.9	1616.8	1391.3	1196.7	1020.3	849.3	723.8	112.8
32°	2746.2	2739.0	2533.4	2237.0	1969.7	1687.8	1394.9	1169.4	973.0	802.0	114.6
33°	3519.2	3522.8	3199.1	2849.9	2411.6	2033.3	1649.6	1340.4	1104.0	894.8	118.2
34°	4726.8	4443.1	4063.0	3590.1	2993.6	2424.3	1926.0	1538.6	1222.2	983.9	118.2
35°	5979.9	5694.3	5276.0	4559.5	3741.1	2944.5	2255.2	1751.4	1364.0	1080.3	118.2
36°	7383.9	7142.0	6509.1	5594.3	4550.4	3435.5	2604.4	1996.9	1504.1	1167.6	116.4
37°	8900.7	8546.1	7844.1	6845.6	5448.8	4126.6	3030.0	2240.6	1644.1	1262.2	112.8
38°	10441.2	10121.1	9235.4	8025.9	6521.9	4855.9	3455.5	2475.3	1773.2	1333.1	107.3
39°	11608.8	11434.2	10555.7	9204.4	7378.5	5547.0	3893.8	2726.2	1909.6	1404.0	101.8
40°	12980.1	12698.2	11865.2	10193.8	8391.5	6250.9	4323.0	2948.1	2022.4	1460.4	96.4
41°	14231.3	13874.9	12823.7	11208.6	9202.6	6883.8	4730.4	3177.3	2113.3	1493.2	92.8
42°	15304.4	14889.7	13791.2	12078.0	9881.0	7389.4	5056.0	3341.0	2198.8	1520.4	87.3
43°	15999.1	15640.8	14560.5	12730.9	10461.2	7853.1	5359.7	3511.9	2251.6	1538.6	80.0
44°	16337.4	15975.5	14929.7	13140.1	10817.6	8131.4	5556.1	3630.1	2309.7	1562.3	74.6
45°	16228.3	15860.9	14849.7	13147.4	10928.6	8231.4	5639.8	3682.9	2340.7	1584.1	67.3
46°	15728.1	15469.9	14451.4	12805.5	10717.6	8124.1	5592.5	3642.9	2329.8	1584.1	60.0
47°	15026.1	14731.5	13762.1	12218.0	10206.5	7847.7	5401.5	3521.0	2262.5	1547.7	52.7
48°	14069.5	13818.5	12800.0	11285.0	9422.7	7245.7	4970.5	3322.8	2157.0	1476.8	45.5
49°	12869.1	12519.9	11572.4	10092.0	8400.6	6390.9	4404.9	2988.1	1987.8	1376.8	40.0
50°	11566.9	11135.9	10404.8	8897.1	7343.9	5479.7	3661.0	2526.2	1749.6	1245.8	36.4
51°	10292.0	9853.7	9157.2	7875.0	6216.3	4546.7	2953.6	2016.9	1440.4	1065.8	30.9
52°	8969.8	8602.4	7822.2	6814.7	5321.5	3684.7	2460.7	1705.9	1196.7	894.8	25.5
53°	7653.1	7402.1	6660.1	5639.8	4275.8	3009.9	2009.7	1460.4	1043.9	765.7	20.0
54°	6334.5	6059.9	5496.1	4586.8	3446.4	2375.2	1704.1	1222.2	905.7	667.5	18.2
55°	4954.1	4812.3	4292.1	3497.4	2611.7	1895.1	1382.2	1051.2	758.4	558.3	14.5
56°	3815.6	3655.6	3180.9	2537.1	1940.6	1484.1	1118.5	858.4	642.0	467.4	10.9
57°	2498.9	2335.2	2020.6	1771.4	1413.1	1082.1	854.8	676.6	522.0	387.4	9.1
58°	1476.8	1327.7	1278.5	1091.2	942.1	734.8	631.1	503.8	385.6	305.5	5.5
59°	678.4	689.3	612.9	574.7	522.0	467.4	383.7	336.5	263.7	220.1	3.6
60°	394.7	372.8	363.7	325.5	289.2	256.4	231.0	203.7	165.5	141.9	1.8
62.5°	134.6	129.1	132.8	120.0	112.8	109.1	100.0	85.5	70.9	58.2	0.0
65°	36.4	36.4	34.6	32.7	30.9	29.1	27.3	23.6	21.8	18.2	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°	12.7	12.7	10.9	10.9	9.1	9.1	7.3	7.3	5.5	5.5	0.0
70°	7.3	7.3	7.3	5.5	5.5	5.5	3.6	3.6	3.6	1.8	0.0
72.5°	5.5	5.5	5.5	5.5	5.5	5.5	3.6	3.6	3.6	1.8	1.8
75°	5.5	5.5	5.5	3.6	3.6	3.6	3.6	3.6	3.6	3.6	1.8
77.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
80°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	1.8	3.6
82.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3.6
85°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
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°	161.9	161.9	161.9	161.9	161.9	161.9
2.5°	167.3	160.0	151.0	145.5	143.7	141.9
5°	160.0	145.5	134.6	127.3	125.5	125.5
7.5°	143.7	127.3	116.4	112.8	110.9	110.9
10°	125.5	110.9	101.8	98.2	100.0	100.0
12.5°	105.5	92.8	89.1	89.1	90.9	92.8
15°	85.5	78.2	78.2	80.0	83.7	85.5
17.5°	70.9	67.3	69.1	72.7	76.4	80.0
20°	58.2	58.2	61.8	67.3	72.7	76.4
22.5°	49.1	50.9	56.4	61.8	69.1	72.7
25°	41.8	45.5	50.9	60.0	67.3	69.1
27.5°	36.4	41.8	49.1	58.2	65.5	69.1
30°	30.9	38.2	47.3	56.4	65.5	69.1
31°	29.1	36.4	45.5	56.4	65.5	69.1
32°	27.3	36.4	45.5	56.4	65.5	69.1
33°	25.5	34.6	45.5	54.6	65.5	69.1
34°	23.6	34.6	45.5	56.4	65.5	69.1
35°	21.8	32.7	43.6	54.6	63.7	69.1
36°	20.0	32.7	43.6	54.6	65.5	69.1
37°	18.2	32.7	43.6	54.6	63.7	69.1
38°	18.2	30.9	41.8	54.6	63.7	69.1
39°	16.4	29.1	41.8	54.6	63.7	69.1
40°	14.5	29.1	40.0	52.7	63.7	69.1
41°	12.7	27.3	40.0	52.7	63.7	69.1
42°	10.9	27.3	40.0	52.7	63.7	69.1
43°	9.1	25.5	38.2	52.7	63.7	69.1
44°	9.1	25.5	38.2	52.7	63.7	69.1
45°	7.3	23.6	36.4	52.7	63.7	69.1
46°	7.3	23.6	36.4	50.9	63.7	69.1
47°	5.5	23.6	36.4	50.9	63.7	69.1
48°	5.5	21.8	36.4	50.9	63.7	69.1
49°	3.6	21.8	36.4	50.9	63.7	69.1
50°	3.6	21.8	34.6	50.9	63.7	69.1
51°	3.6	21.8	34.6	50.9	63.7	69.1
52°	3.6	20.0	34.6	50.9	63.7	69.1
53°	3.6	20.0	34.6	50.9	63.7	69.1
54°	3.6	20.0	32.7	50.9	63.7	69.1
55°	3.6	18.2	32.7	49.1	63.7	67.3
56°	3.6	18.2	32.7	49.1	63.7	67.3
57°	3.6	18.2	30.9	49.1	63.7	67.3
58°	3.6	16.4	30.9	47.3	61.8	67.3
59°	3.6	16.4	29.1	47.3	61.8	65.5
60°	3.6	14.5	29.1	45.5	60.0	65.5
62.5°	3.6	12.7	25.5	43.6	58.2	61.8
65°	3.6	10.9	23.6	40.0	56.4	60.0



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	3.6	10.9	21.8	38.2	52.7	58.2
70°	3.6	10.9	20.0	34.6	50.9	52.7
72.5°	5.5	10.9	18.2	32.7	47.3	49.1
75°	7.3	10.9	16.4	29.1	43.6	45.5
77.5°	7.3	10.9	14.5	25.5	38.2	40.0
80°	7.3	9.1	12.7	20.0	30.9	32.7
82.5°	7.3	9.1	9.1	16.4	23.6	25.5
85°	5.5	7.3	7.3	9.1	16.4	18.2
87.5°	5.5	7.3	3.6	5.5	7.3	7.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)