

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: P1317229

Luminaire Tested: P3SQAS17R209830DE010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1317229
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: P3SQAS17R209830DE010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R20 optic, 3000K CCT AND, 98CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

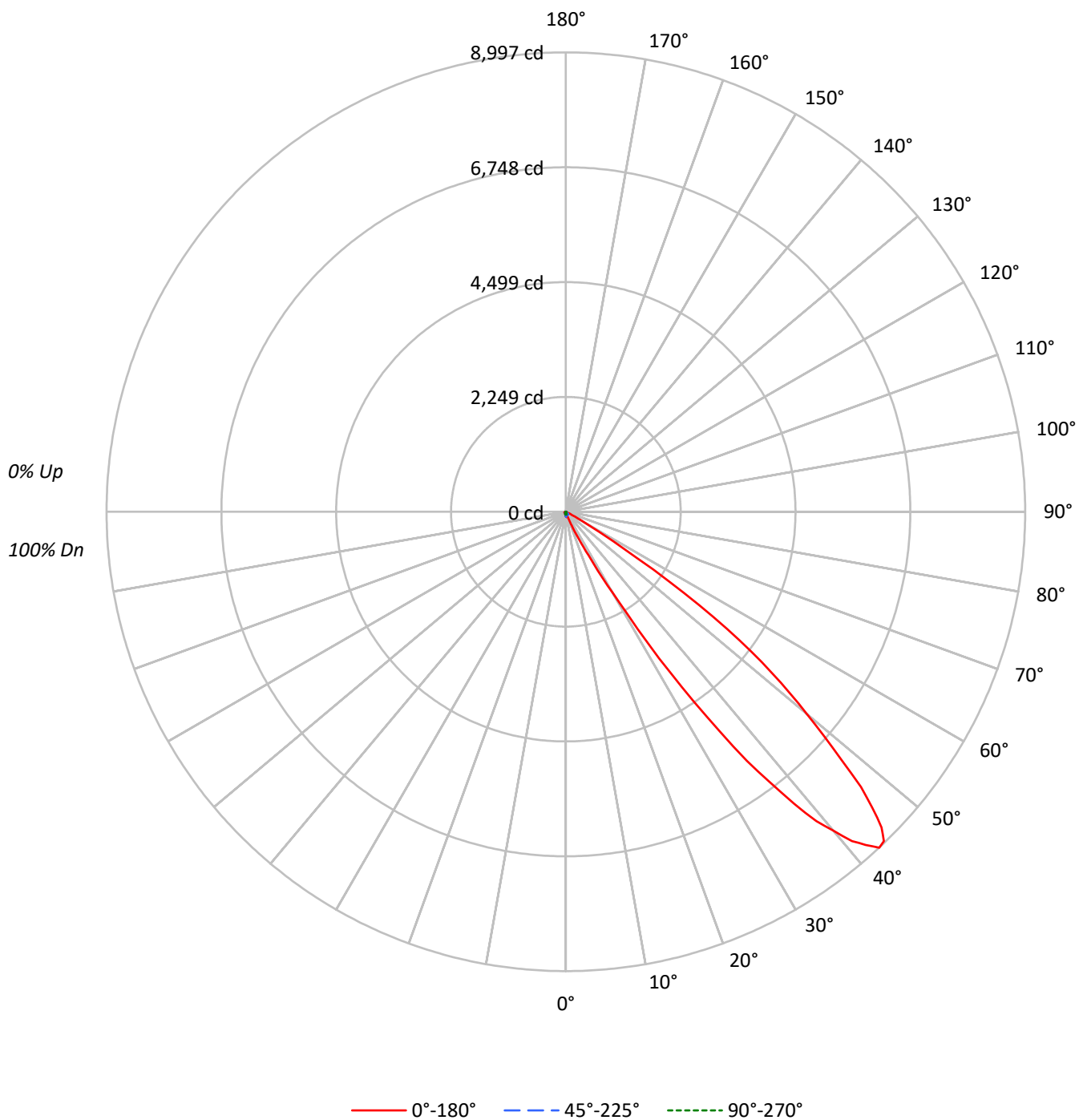
Lumens per Lamp: N/A
Luminaire Lumens: 1250.0 lumens
Efficiency: N/A
Efficacy: 61.3 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 20.4
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
RCR																			
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100
1	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87	87
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73	73
3	92	81	74	67	89	80	73	67	77	71	66	74	69	65	72	67	63	61	61
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51	51
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42	42
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35	35
7	62	48	39	32	60	47	38	32	46	38	32	44	37	32	43	36	31	29	29
8	57	42	33	27	55	42	33	27	40	33	27	39	32	27	38	31	27	25	25
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21	21
10	48	34	25	20	47	33	25	20	32	25	19	31	24	19	30	24	19	17	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	14966	14966	14966	14966	14966
5°	17461	16251	14021	12188	11773
10°	17261	14795	11087	9443	9251
15°	15084	11304	8166	7542	7952
20°	22396	9475	6030	6451	7111
25°	96439	9824	4694	5796	6917
30°	364660	11912	3977	5608	6781
35°	1105468	14318	3700	5677	7169
40°	1833098	14254	3170	6070	7666
45°	2130659	9718	2850	6284	8305
50°	1653964	5359	2840	6618	9431
55°	957292	3513	2822	7416	10239
60°	161855	792	2411	7681	11332
65°	12429	0	2853	8599	12918
70°	1762	0	3525	9467	14804
75°	1530	799	3926	10913	17168
80°	1190	1190	5852	11604	19836
85°	2371	2371	9287	11659	20946

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2130659 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.5	0.6
10°-20°	15.6	1.3
20°-30°	49.9	4.0
30°-40°	318.8	25.5
40°-50°	583.4	46.7
50°-60°	239.7	19.2
60°-70°	20.2	1.6
70°-80°	10.1	0.8
80°-90°	4.8	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°	73.0	5.8
0°-40°	391.8	31.3
0°-60°	1215.0	97.2
0°-90°	1250.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1250.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	87	87	87	87	87	
5°	101	94	81	70	68	10
15°	85	63	46	42	45	27
25°	508	52	25	30	36	334
35°	5258	68	18	27	34	3328
45°	8748	40	12	26	34	6281
55°	3188	12	9	25	34	2787
65°	30	0	7	21	32	99
75°	2	1	6	16	26	3
85°	1	1	5	6	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°	86.9	86.9	86.9	86.9	86.9	86.9	86.9	86.9	86.9	86.9	86.9
2.5°	95.2	95.2	95.2	94.0	94.0	95.2	94.0	94.0	94.0	94.0	92.8
5°	101.0	101.0	101.0	101.0	101.0	101.0	101.0	99.9	99.9	98.7	94.0
7.5°	103.4	103.4	103.4	103.4	102.2	102.2	102.2	102.2	101.0	99.9	91.6
10°	98.7	98.7	98.7	97.5	97.5	97.5	96.3	96.3	95.2	94.0	84.6
12.5°	89.3	89.3	89.3	89.3	88.1	88.1	86.9	86.9	85.8	84.6	74.0
15°	84.6	84.6	84.6	83.4	83.4	82.2	81.1	79.9	78.7	76.4	63.4
17.5°	91.6	91.6	90.5	90.5	88.1	85.8	84.6	81.1	78.7	75.2	56.4
20°	122.2	123.3	118.6	115.1	112.8	105.7	102.2	96.3	91.6	85.8	51.7
22.5°	246.7	242.0	233.8	220.8	205.6	192.7	169.2	150.4	137.4	119.8	50.5
25°	507.5	502.8	480.5	461.7	414.7	378.3	327.7	286.6	244.3	203.2	51.7
27.5°	964.4	932.7	926.8	841.1	775.3	681.3	583.8	501.6	426.4	343.0	55.2
30°	1833.7	1797.3	1669.3	1540.0	1362.7	1161.8	970.3	791.8	642.6	507.5	59.9
31°	2327.1	2362.3	2212.0	1952.4	1690.4	1433.1	1171.2	944.5	751.8	583.8	62.3
32°	3058.9	2905.0	2746.5	2479.8	2099.2	1770.3	1441.4	1114.8	861.1	666.1	64.6
33°	3750.8	3660.4	3418.4	3086.0	2629.0	2167.3	1740.9	1315.7	995.0	765.9	65.8
34°	4488.6	4388.7	4192.5	3715.6	3214.0	2609.0	2040.5	1547.1	1154.7	863.4	67.0
35°	5258.0	5215.7	4837.4	4423.9	3807.2	3077.7	2401.1	1800.8	1311.0	952.7	68.1
36°	6032.1	5895.9	5599.8	4996.0	4352.3	3511.2	2779.4	2036.9	1469.6	1058.4	68.1
37°	6614.8	6584.2	6191.9	5603.4	4846.8	3974.0	3105.9	2298.9	1629.3	1148.9	68.1
38°	7257.3	7136.3	6738.1	6139.0	5312.0	4398.1	3447.8	2526.8	1780.9	1231.1	67.0
39°	7798.9	7619.1	7217.4	6625.3	5718.5	4720.0	3719.1	2747.6	1914.8	1299.2	65.8
40°	8153.6	8029.1	7609.7	6943.7	6087.3	5024.2	3994.0	2929.7	2014.6	1350.9	63.4
41°	8544.8	8338.1	7923.4	7253.8	6355.2	5292.1	4166.7	3049.5	2092.2	1385.0	61.1
42°	8778.6	8609.4	8117.2	7461.7	6546.6	5444.8	4307.6	3141.2	2139.1	1402.6	56.4
43°	8997.1	8766.8	8287.6	7582.7	6673.5	5552.8	4372.3	3183.5	2149.7	1402.6	50.5
44°	8967.7	8749.2	8252.3	7599.2	6701.7	5584.6	4399.3	3184.6	2133.3	1385.0	44.6
45°	8748.0	8530.7	8083.2	7455.9	6600.7	5522.3	4345.2	3137.6	2087.5	1354.4	39.9
46°	8345.1	8129.0	7786.0	7216.2	6412.7	5381.3	4219.5	3035.4	2011.1	1305.1	35.2
47°	7907.0	7696.7	7345.4	6829.7	6092.0	5129.9	4037.5	2892.1	1904.2	1233.4	31.7
48°	7271.4	7139.9	6787.5	6346.9	5646.8	4736.4	3717.9	2658.4	1760.9	1140.6	27.0
49°	6709.9	6571.3	6262.4	5789.0	5066.5	4278.3	3336.2	2374.1	1574.1	1037.3	23.5
50°	6173.1	6052.1	5766.6	5232.1	4542.6	3725.0	2820.5	2015.8	1339.2	909.2	20.0
51°	5648.0	5557.5	5266.2	4775.2	4075.1	3299.8	2443.4	1678.7	1106.6	754.2	18.8
52°	5120.5	5110.0	4794.0	4297.1	3620.4	2875.7	2076.9	1416.7	938.6	633.2	17.6
53°	4553.2	4485.0	4209.0	3762.6	3113.0	2434.0	1760.9	1194.7	808.2	539.2	15.3
54°	3907.1	3830.7	3534.7	3131.8	2543.2	1993.5	1419.0	965.6	673.1	455.8	14.1
55°	3188.2	3057.8	2842.8	2429.3	1986.4	1521.2	1096.0	764.7	538.0	379.4	11.7
56°	2418.7	2288.3	2167.3	1863.1	1457.8	1134.8	816.4	586.2	420.5	299.6	10.6
57°	1682.2	1675.1	1476.6	1242.8	975.0	773.0	559.2	413.5	297.2	232.6	8.2
58°	1091.3	1054.9	928.0	792.9	637.9	482.8	359.5	280.8	202.0	158.6	7.0
59°	764.7	691.9	623.8	528.6	401.7	304.2	231.4	179.7	139.8	110.4	4.7
60°	469.9	454.6	408.8	321.9	260.8	215.0	172.7	132.7	102.2	78.7	2.3
62.5°	133.9	136.3	123.3	109.2	94.0	81.1	72.8	62.3	51.7	41.1	0.0
65°	30.5	29.4	31.7	29.4	27.0	27.0	23.5	21.1	18.8	17.6	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°	9.4	9.4	8.2	8.2	8.2	7.0	7.0	5.9	5.9	4.7	0.0
70°	3.5	3.5	3.5	3.5	3.5	2.3	2.3	2.3	1.2	1.2	0.0
72.5°	3.5	3.5	3.5	2.3	2.3	2.3	2.3	2.3	1.2	1.2	1.2
75°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	1.2	1.2	1.2	1.2
77.5°	2.3	2.3	2.3	2.3	2.3	1.2	2.3	1.2	1.2	1.2	1.2
80°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
85°	1.2	1.2	1.2	1.2	0.0	0.0	1.2	1.2	1.2	0.0	1.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	86.9	86.9	86.9	86.9	86.9	86.9
2.5°	90.5	85.8	82.2	78.7	77.5	77.5
5°	88.1	81.1	74.0	70.5	68.1	68.1
7.5°	81.1	72.8	65.8	62.3	61.1	61.1
10°	72.8	63.4	56.4	54.0	54.0	52.9
12.5°	63.4	54.0	49.3	48.2	48.2	48.2
15°	52.9	45.8	42.3	42.3	43.5	44.6
17.5°	44.6	37.6	36.4	38.8	41.1	41.1
20°	37.6	32.9	32.9	35.2	37.6	38.8
22.5°	31.7	28.2	29.4	32.9	36.4	37.6
25°	28.2	24.7	27.0	30.5	34.1	36.4
27.5°	23.5	22.3	24.7	29.4	34.1	35.2
30°	20.0	20.0	23.5	28.2	32.9	34.1
31°	18.8	18.8	23.5	28.2	32.9	34.1
32°	17.6	18.8	22.3	28.2	32.9	34.1
33°	16.4	17.6	22.3	27.0	32.9	34.1
34°	15.3	17.6	22.3	27.0	32.9	34.1
35°	14.1	17.6	22.3	27.0	32.9	34.1
36°	12.9	16.4	21.1	27.0	32.9	34.1
37°	11.7	16.4	21.1	27.0	32.9	34.1
38°	10.6	15.3	21.1	27.0	32.9	34.1
39°	10.6	15.3	20.0	27.0	31.7	34.1
40°	9.4	14.1	20.0	27.0	31.7	34.1
41°	8.2	14.1	20.0	25.8	31.7	34.1
42°	7.0	12.9	18.8	25.8	31.7	34.1
43°	5.9	12.9	18.8	25.8	31.7	34.1
44°	5.9	11.7	18.8	25.8	31.7	34.1
45°	4.7	11.7	18.8	25.8	31.7	34.1
46°	3.5	11.7	18.8	25.8	31.7	34.1
47°	3.5	10.6	17.6	25.8	31.7	34.1
48°	2.3	10.6	17.6	25.8	31.7	34.1
49°	2.3	10.6	17.6	25.8	31.7	35.2
50°	2.3	10.6	17.6	24.7	31.7	35.2
51°	1.2	10.6	17.6	24.7	31.7	35.2
52°	1.2	10.6	16.4	24.7	32.9	35.2
53°	1.2	9.4	16.4	24.7	32.9	35.2
54°	1.2	9.4	16.4	24.7	32.9	34.1
55°	1.2	9.4	16.4	24.7	31.7	34.1
56°	1.2	8.2	16.4	24.7	31.7	34.1
57°	1.2	8.2	15.3	23.5	31.7	32.9
58°	1.2	8.2	15.3	23.5	31.7	32.9
59°	1.2	8.2	15.3	23.5	30.5	32.9
60°	2.3	7.0	14.1	22.3	30.5	32.9
62.5°	2.3	7.0	14.1	22.3	29.4	31.7
65°	2.3	7.0	12.9	21.1	29.4	31.7



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.3	5.9	11.7	20.0	28.2	30.5
70°	2.3	7.0	11.7	18.8	27.0	29.4
72.5°	3.5	5.9	10.6	17.6	25.8	28.2
75°	3.5	5.9	10.6	16.4	24.7	25.8
77.5°	4.7	5.9	9.4	14.1	22.3	23.5
80°	4.7	5.9	8.2	11.7	18.8	20.0
82.5°	4.7	5.9	5.9	9.4	14.1	15.3
85°	3.5	4.7	4.7	5.9	9.4	10.6
87.5°	3.5	4.7	3.5	2.3	4.7	4.7
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)