

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: P1340056

Luminaire Tested: P3A09R159840DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1340056
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-73)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A09R159840DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R15 optic, 4000K CCT AND, 98CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

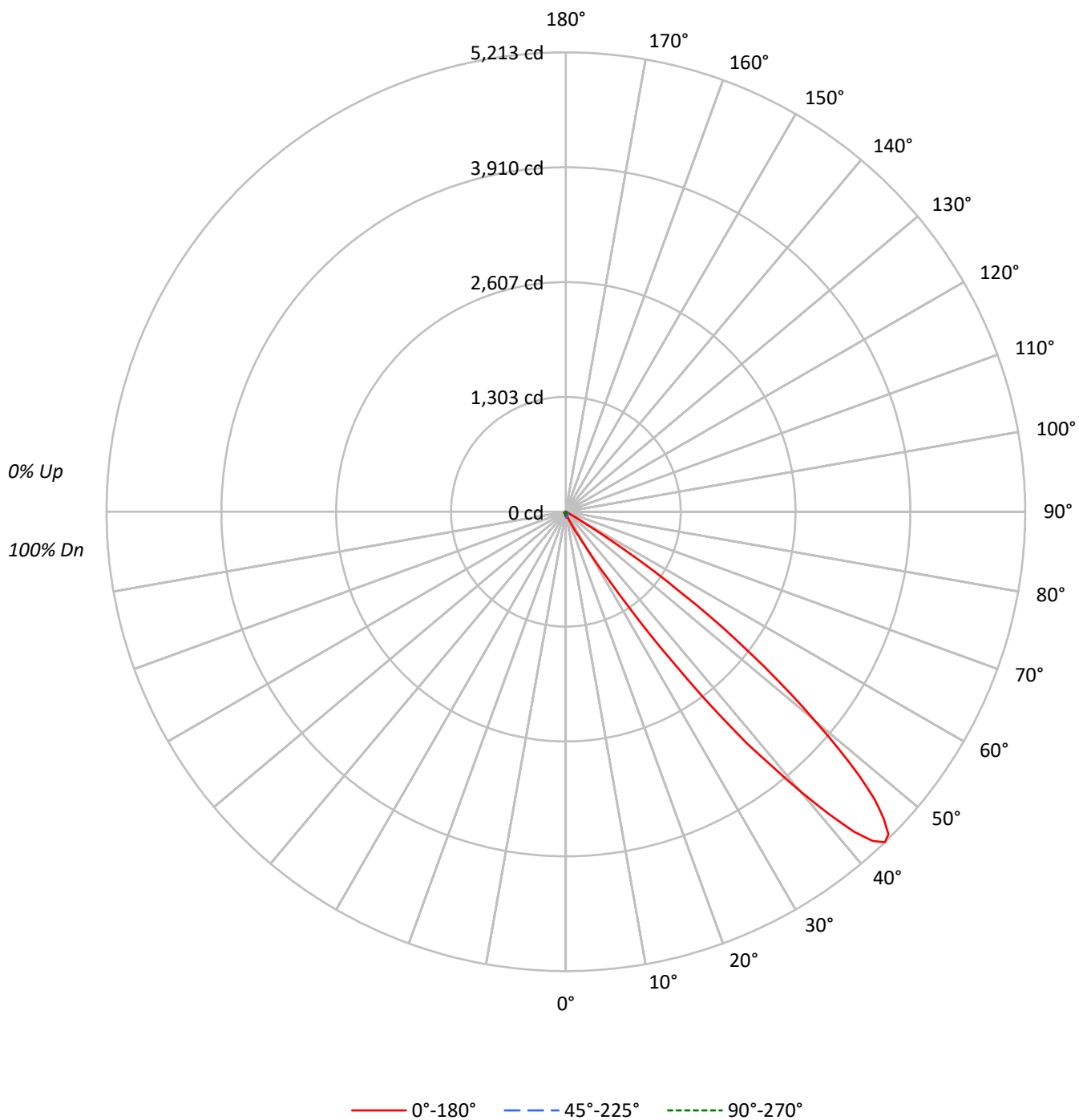
Lumens per Lamp: N/A
Luminaire Lumens: 582.0 lumens
Efficiency: N/A
Efficacy: 52.9 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.48 / 1.08
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11
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°	11315	11315	11315	11315	11315
5°	14044	12525	10213	8937	8805
10°	13827	10732	7882	6969	7103
15°	11464	7650	5675	5789	6198
20°	19905	6091	4340	5017	5694
25°	44374	7307	3508	4645	5347
30°	132679	8963	3089	4558	5596
35°	510784	10092	2784	4658	5916
40°	1185564	8817	2662	4809	6326
45°	1605779	6667	2326	5210	6853
50°	1259080	3957	2388	5526	7539
55°	604346	1759	2217	6002	8220
60°	55215	263	2017	6359	9166
65°	6019	0	1816	6641	9962
70°	1475	0	2244	7052	10771
75°	1440	508	2965	7879	12285
80°	1515	1515	3662	8082	13133
85°	1510	1510	5787	7296	14593

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1605779 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.4	0.8
10°-20°	9.2	1.6
20°-30°	22.0	3.8
30°-40°	120.4	20.7
40°-50°	291.5	50.1
50°-60°	116.3	20.0
60°-70°	10.1	1.7
70°-80°	5.7	1.0
80°-90°	2.5	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°	35.6	6.1
0°-40°	156.0	26.8
0°-60°	563.8	96.9
0°-90°	582.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	582.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	52	52	52	52	52	
5°	64	57	46	41	40	6
15°	50	34	25	26	27	18
25°	183	30	14	19	22	111
35°	1908	38	10	17	22	1348
45°	5178	22	8	17	22	3653
55°	1581	5	6	16	22	1473
65°	12	0	4	13	19	30
75°	2	1	4	9	14	2
85°	1	1	2	3	6	0
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°	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
2.5°	58.0	58.0	58.6	58.0	58.0	58.0	58.0	57.5	57.5	57.5	55.7
5°	63.8	63.8	63.8	63.8	63.3	63.3	63.3	62.7	62.7	62.1	56.9
7.5°	66.2	66.2	65.6	65.6	65.0	65.0	64.4	63.8	63.3	62.7	54.5
10°	62.1	62.1	62.1	61.5	61.5	60.9	60.4	59.8	59.2	58.0	48.2
12.5°	55.1	55.1	55.7	55.1	54.5	54.0	52.8	52.2	51.6	50.5	40.0
15°	50.5	50.5	50.5	49.9	49.3	48.2	47.6	46.4	45.8	44.1	33.7
17.5°	64.4	64.4	63.8	62.7	60.4	58.6	55.7	53.4	50.5	47.0	29.0
20°	85.3	85.3	84.1	83.0	80.1	77.2	72.5	68.5	63.8	59.8	26.1
22.5°	123.6	125.3	121.9	117.8	113.7	106.8	100.4	94.0	85.9	78.9	26.7
25°	183.4	185.1	183.4	174.1	166.5	157.3	145.1	132.3	118.4	105.6	30.2
27.5°	297.1	298.3	295.4	272.7	260.6	236.2	214.7	193.8	170.6	147.4	33.1
30°	524.0	524.6	506.0	460.8	420.7	367.3	322.1	278.5	242.0	204.8	35.4
31°	690.0	673.7	634.3	579.7	515.9	443.9	381.8	325.6	271.0	231.0	36.0
32°	876.3	873.9	808.4	713.8	628.5	538.5	445.1	373.1	310.5	255.9	36.6
33°	1122.9	1124.1	1020.8	909.3	769.5	648.8	526.3	427.7	352.2	285.5	37.7
34°	1508.2	1417.7	1296.4	1145.5	955.2	773.6	614.5	490.9	390.0	313.9	37.7
35°	1908.1	1816.9	1683.5	1454.8	1193.7	939.5	719.6	558.8	435.2	344.7	37.7
36°	2356.1	2278.9	2076.9	1785.0	1451.9	1096.2	831.0	637.2	479.9	372.6	37.1
37°	2840.0	2726.9	2502.9	2184.3	1738.6	1316.7	966.8	714.9	524.6	402.7	36.0
38°	3331.6	3229.4	2946.8	2560.9	2081.0	1549.4	1102.6	789.8	565.8	425.4	34.2
39°	3704.1	3648.4	3368.1	2936.9	2354.3	1769.9	1242.4	869.9	609.3	448.0	32.5
40°	4141.7	4051.7	3785.9	3252.6	2677.5	1994.5	1379.4	940.7	645.3	466.0	30.8
41°	4540.9	4427.2	4091.8	3576.4	2936.4	2196.5	1509.4	1013.8	674.3	476.4	29.6
42°	4883.3	4751.0	4400.5	3853.8	3152.8	2357.8	1613.3	1066.0	701.6	485.1	27.9
43°	5105.0	4990.7	4646.0	4062.2	3337.9	2505.8	1710.2	1120.6	718.4	490.9	25.5
44°	5212.9	5097.4	4763.8	4192.7	3451.7	2594.6	1772.8	1158.3	737.0	498.5	23.8
45°	5178.1	5060.9	4738.2	4195.1	3487.1	2626.5	1799.5	1175.1	746.9	505.4	21.5
46°	5018.5	4936.1	4611.1	4086.0	3419.8	2592.2	1784.4	1162.4	743.4	505.4	19.2
47°	4794.5	4700.5	4391.2	3898.5	3256.7	2504.0	1723.5	1123.5	721.9	493.8	16.8
48°	4489.3	4409.2	4084.2	3600.8	3006.6	2312.0	1586.0	1060.2	688.2	471.2	14.5
49°	4106.3	3994.8	3692.5	3220.1	2680.4	2039.2	1405.5	953.4	634.3	439.3	12.8
50°	3690.8	3553.2	3319.9	2838.9	2343.3	1748.5	1168.2	806.0	558.3	397.5	11.6
51°	3284.0	3144.1	2921.9	2512.7	1983.5	1450.8	942.4	643.6	459.6	340.1	9.9
52°	2862.1	2744.9	2495.9	2174.4	1698.0	1175.7	785.2	544.3	381.8	285.5	8.1
53°	2441.9	2361.9	2125.1	1799.5	1364.3	960.4	641.2	466.0	333.1	244.3	6.4
54°	2021.2	1933.6	1753.7	1463.5	1099.7	757.9	543.7	390.0	289.0	213.0	5.8
55°	1580.8	1535.5	1369.5	1115.9	833.3	604.7	441.0	335.4	242.0	178.2	4.6
56°	1217.5	1166.4	1015.0	809.5	619.2	473.5	356.9	273.9	204.8	149.1	3.5
57°	797.3	745.1	644.7	565.2	450.9	345.3	272.7	215.9	166.5	123.6	2.9
58°	471.2	423.6	408.0	348.2	300.6	234.4	201.4	160.7	123.0	97.5	1.7
59°	216.5	219.9	195.6	183.4	166.5	149.1	122.4	107.4	84.1	70.2	1.2
60°	125.9	119.0	116.1	103.9	92.3	81.8	73.7	65.0	52.8	45.3	0.6
62.5°	42.9	41.2	42.4	38.3	36.0	34.8	31.9	27.3	22.6	18.6	0.0
65°	11.6	11.6	11.0	10.4	9.9	9.3	8.7	7.5	7.0	5.8	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°	4.1	4.1	3.5	3.5	2.9	2.9	2.3	2.3	1.7	1.7	0.0
70°	2.3	2.3	2.3	1.7	1.7	1.7	1.2	1.2	1.2	0.6	0.0
72.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.2	1.2	1.2	0.6	0.6
75°	1.7	1.7	1.7	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.6
77.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	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	0.6	1.2
82.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2
85°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
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°	51.6	51.6	51.6	51.6	51.6	51.6
2.5°	53.4	51.1	48.2	46.4	45.8	45.3
5°	51.1	46.4	42.9	40.6	40.0	40.0
7.5°	45.8	40.6	37.1	36.0	35.4	35.4
10°	40.0	35.4	32.5	31.3	31.9	31.9
12.5°	33.7	29.6	28.4	28.4	29.0	29.6
15°	27.3	25.0	25.0	25.5	26.7	27.3
17.5°	22.6	21.5	22.1	23.2	24.4	25.5
20°	18.6	18.6	19.7	21.5	23.2	24.4
22.5°	15.7	16.2	18.0	19.7	22.1	23.2
25°	13.3	14.5	16.2	19.2	21.5	22.1
27.5°	11.6	13.3	15.7	18.6	20.9	22.1
30°	9.9	12.2	15.1	18.0	20.9	22.1
31°	9.3	11.6	14.5	18.0	20.9	22.1
32°	8.7	11.6	14.5	18.0	20.9	22.1
33°	8.1	11.0	14.5	17.4	20.9	22.1
34°	7.5	11.0	14.5	18.0	20.9	22.1
35°	7.0	10.4	13.9	17.4	20.3	22.1
36°	6.4	10.4	13.9	17.4	20.9	22.1
37°	5.8	10.4	13.9	17.4	20.3	22.1
38°	5.8	9.9	13.3	17.4	20.3	22.1
39°	5.2	9.3	13.3	17.4	20.3	22.1
40°	4.6	9.3	12.8	16.8	20.3	22.1
41°	4.1	8.7	12.8	16.8	20.3	22.1
42°	3.5	8.7	12.8	16.8	20.3	22.1
43°	2.9	8.1	12.2	16.8	20.3	22.1
44°	2.9	8.1	12.2	16.8	20.3	22.1
45°	2.3	7.5	11.6	16.8	20.3	22.1
46°	2.3	7.5	11.6	16.2	20.3	22.1
47°	1.7	7.5	11.6	16.2	20.3	22.1
48°	1.7	7.0	11.6	16.2	20.3	22.1
49°	1.2	7.0	11.6	16.2	20.3	22.1
50°	1.2	7.0	11.0	16.2	20.3	22.1
51°	1.2	7.0	11.0	16.2	20.3	22.1
52°	1.2	6.4	11.0	16.2	20.3	22.1
53°	1.2	6.4	11.0	16.2	20.3	22.1
54°	1.2	6.4	10.4	16.2	20.3	22.1
55°	1.2	5.8	10.4	15.7	20.3	21.5
56°	1.2	5.8	10.4	15.7	20.3	21.5
57°	1.2	5.8	9.9	15.7	20.3	21.5
58°	1.2	5.2	9.9	15.1	19.7	21.5
59°	1.2	5.2	9.3	15.1	19.7	20.9
60°	1.2	4.6	9.3	14.5	19.2	20.9
62.5°	1.2	4.1	8.1	13.9	18.6	19.7
65°	1.2	3.5	7.5	12.8	18.0	19.2



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.2	3.5	7.0	12.2	16.8	18.6
70°	1.2	3.5	6.4	11.0	16.2	16.8
72.5°	1.7	3.5	5.8	10.4	15.1	15.7
75°	2.3	3.5	5.2	9.3	13.9	14.5
77.5°	2.3	3.5	4.6	8.1	12.2	12.8
80°	2.3	2.9	4.1	6.4	9.9	10.4
82.5°	2.3	2.9	2.9	5.2	7.5	8.1
85°	1.7	2.3	2.3	2.9	5.2	5.8
87.5°	1.7	2.3	1.2	1.7	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)