

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: P1345474

Luminaire Tested: P3A13R359040DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1345474
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-77)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A13R359040DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R35 optic, 4000K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

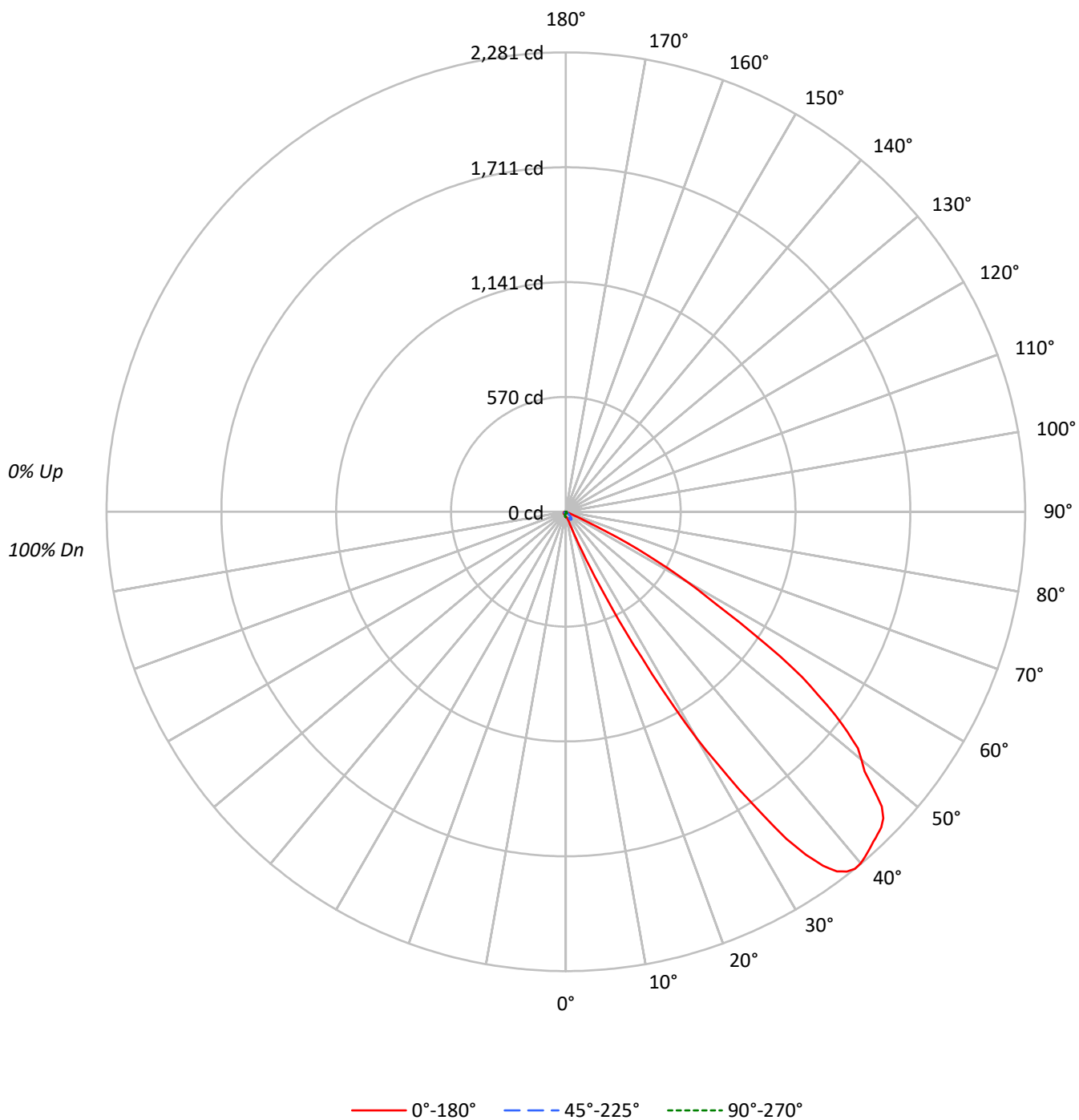
Lumens per Lamp: N/A
Luminaire Lumens: 568.0 lumens
Efficiency: N/A
Efficacy: 38.9 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.6
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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	99	107	104	100	97	100	97	94		96	93	91		92
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		81
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71
4	83	71	62	55	80	69	61	55	67	60	54		64	58	53		62
5	75	62	52	46	73	61	52	45	58	51	45		56	50	44		55
6	68	54	45	38	66	53	44	38	51	43	38		50	43	37		48
7	62	48	38	32	60	47	38	32	45	37	32		44	37	31		42
8	57	42	33	27	55	41	33	27	40	32	27		39	32	26		38
9	52	38	29	23	50	37	29	23	36	28	23		35	28	22		34
10	48	34	25	19	46	33	25	19	32	25	19		31	24	19		30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	5723	5723	5723	5723	5723
5°	6207	6097	5635	5085	4975
10°	6502	5945	5032	4342	4342
15°	9308	5812	4064	3723	3837
20°	23335	6231	3220	3220	3594
25°	108297	7936	2492	2976	3339
30°	329241	10786	1950	2735	3368
35°	556452	12501	1660	2597	3293
40°	652251	12337	1317	2634	3521
45°	686893	8745	1116	2853	3814
50°	653829	5254	1058	2968	4196
55°	547880	2141	1185	3326	4893
60°	306730	439	1360	3815	5394
65°	52924	259	1349	4255	6123
70°	962	321	1667	4616	6924
75°	847	424	2203	5253	7795
80°	631	631	2652	5809	9092
85°	0	1258	5284	6542	10315

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 691784 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.4	0.4
10°-20°	6.7	1.2
20°-30°	34.9	6.1
30°-40°	150.5	26.5
40°-50°	214.7	37.8
50°-60°	133.0	23.4
60°-70°	20.2	3.6
70°-80°	3.8	0.7
80°-90°	1.9	0.3
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°	43.9	7.7
0°-40°	194.4	34.2
0°-60°	542.1	95.4
0°-90°	568.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	568.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	26	26	26	26	26	
5°	28	28	26	23	23	3
15°	41	26	18	16	17	15
25°	448	33	10	12	14	268
35°	2079	47	6	10	12	1248
45°	2215	28	4	9	12	1673
55°	1433	6	3	9	13	1221
65°	102	0	3	8	12	208
75°	1	0	3	6	9	1
85°	0	0	2	3	4	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	26.1	26.1	26.1	26.1	26.1	26.1	26.1	26.1	26.1	26.1	26.1
2.5°	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	26.1	25.6
5°	28.2	28.2	27.7	27.7	27.7	27.7	27.7	27.7	26.7	25.6	24.1
7.5°	28.7	28.7	28.2	28.2	28.2	28.2	27.7	27.2	26.1	24.1	22.6
10°	29.2	29.2	29.2	29.2	28.7	28.2	27.7	26.7	25.1	22.6	21.0
12.5°	32.8	32.8	32.3	31.3	30.3	29.2	28.2	26.1	23.1	20.5	19.0
15°	41.0	40.5	39.5	37.9	35.9	33.3	31.3	25.6	21.0	17.9	16.9
17.5°	57.4	56.4	54.9	49.7	45.1	40.5	36.4	25.6	19.0	15.9	14.9
20°	100.0	100.5	89.7	77.4	67.2	55.9	45.6	26.7	16.9	13.8	13.3
22.5°	208.7	200.5	174.8	145.1	110.8	85.6	64.6	29.2	14.9	11.8	11.8
25°	447.6	416.3	354.3	267.7	188.7	133.8	93.8	32.8	13.3	10.3	10.8
27.5°	817.3	789.1	664.5	500.4	332.3	202.0	127.2	37.4	11.8	8.7	9.7
30°	1300.3	1222.4	1059.8	820.4	555.3	309.2	170.7	42.6	9.7	7.7	9.2
31°	1451.1	1415.2	1217.2	949.1	650.7	367.1	189.2	44.1	9.2	7.7	8.7
32°	1630.0	1566.4	1389.0	1090.1	747.6	418.9	211.2	45.6	8.7	6.7	8.7
33°	1790.0	1728.5	1512.6	1214.2	845.5	477.9	234.8	46.1	7.7	6.7	8.2
34°	1958.2	1874.1	1660.3	1343.9	946.0	541.5	256.4	46.7	7.2	6.2	8.2
35°	2078.7	1994.6	1787.4	1446.4	1032.7	597.9	281.0	46.7	6.7	6.2	7.7
36°	2172.0	2098.1	1897.1	1552.1	1118.8	648.6	300.5	46.7	5.6	5.6	7.7
37°	2236.1	2165.8	1971.0	1642.8	1184.4	693.7	317.9	46.7	5.1	5.6	7.7
38°	2267.3	2208.9	2042.2	1709.0	1248.0	729.1	331.7	45.6	4.6	5.1	7.2
39°	2280.7	2233.0	2085.8	1764.9	1295.7	759.9	342.0	44.6	4.1	5.1	7.2
40°	2278.6	2237.1	2110.4	1803.3	1334.2	780.9	347.6	43.1	3.6	4.6	7.2
41°	2266.8	2230.9	2123.3	1836.1	1357.2	795.3	349.2	41.5	3.1	4.6	6.7
42°	2253.5	2220.7	2127.4	1853.6	1372.1	799.9	345.1	39.5	3.1	4.1	6.7
43°	2239.7	2209.4	2127.4	1859.2	1375.7	796.8	338.4	35.9	2.6	4.1	6.7
44°	2228.4	2199.7	2120.7	1857.7	1368.0	785.0	326.1	31.8	2.1	4.1	6.7
45°	2215.0	2186.8	2112.0	1847.9	1353.1	765.0	310.7	28.2	1.5	3.6	6.7
46°	2191.5	2169.4	2096.6	1827.9	1329.5	737.3	291.2	25.6	1.0	3.6	6.2
47°	2145.8	2126.9	2066.9	1798.2	1298.3	704.5	271.2	23.1	1.0	3.6	6.2
48°	2054.0	2053.5	2007.4	1742.8	1248.5	663.5	250.2	20.5	1.0	3.6	6.2
49°	1965.3	1956.1	1898.7	1645.4	1177.3	614.3	228.2	18.5	0.5	3.6	6.2
50°	1916.6	1896.6	1802.3	1530.5	1086.0	546.1	204.6	15.4	0.5	3.1	6.2
51°	1865.9	1837.2	1725.9	1427.0	977.3	480.4	178.9	12.3	0.5	3.1	5.6
52°	1774.1	1746.9	1622.3	1328.0	871.7	413.3	154.3	10.3	0.5	3.1	6.2
53°	1675.1	1636.2	1500.8	1219.3	778.9	353.8	129.2	8.7	0.5	3.1	5.6
54°	1550.5	1533.1	1377.7	1086.0	670.2	296.4	106.1	7.2	0.5	3.1	5.6
55°	1433.1	1407.5	1246.0	949.6	571.7	243.0	88.7	5.6	0.5	3.1	5.6
56°	1283.4	1244.9	1093.7	824.5	471.7	195.9	74.9	4.6	0.5	3.1	5.6
57°	1105.0	1063.9	944.5	685.5	370.2	149.2	62.6	3.6	0.5	3.1	5.6
58°	934.7	899.3	771.2	529.1	278.9	103.6	51.8	2.6	0.5	2.6	5.6
59°	807.6	768.6	641.4	407.1	193.8	76.4	39.0	2.1	0.5	3.1	5.6
60°	699.4	649.1	516.3	315.3	138.4	54.9	28.7	1.0	1.0	3.1	5.6
62.5°	403.0	355.8	246.6	128.2	56.9	28.2	13.8	0.5	1.0	3.1	5.6
65°	102.0	90.8	59.0	27.7	15.9	9.7	5.1	0.5	1.0	2.6	5.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	3.6	3.6	3.6	3.1	2.6	2.1	1.0	0.5	1.0	2.6	5.1
70°	1.5	1.5	1.5	1.0	1.0	0.5	0.5	0.5	1.0	2.6	4.6
72.5°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.5	2.6	4.1
75°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.5	2.6	4.1
77.5°	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	1.5	2.1	3.6
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.5	2.1	3.1
82.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.5	2.1	2.6
85°	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5	1.5	2.1	2.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.5	2.1	1.5
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):

	135°	157.5°	180°
0°	26.1	26.1	26.1
2.5°	24.6	24.6	24.6
5°	23.1	23.1	22.6
7.5°	21.5	21.0	21.0
10°	19.5	19.5	19.5
12.5°	17.9	17.9	17.9
15°	16.4	16.9	16.9
17.5°	14.9	15.9	15.9
20°	13.8	14.9	15.4
22.5°	12.8	13.8	14.4
25°	12.3	13.3	13.8
27.5°	11.3	12.8	13.8
30°	10.8	12.3	13.3
31°	10.8	12.3	12.8
32°	10.3	12.3	12.8
33°	10.3	12.3	12.8
34°	10.3	11.8	12.8
35°	9.7	11.8	12.3
36°	9.7	11.8	12.3
37°	9.7	11.8	12.8
38°	9.7	11.8	12.3
39°	9.2	11.8	12.3
40°	9.2	11.8	12.3
41°	9.2	11.8	12.3
42°	9.2	11.8	12.3
43°	9.2	11.8	12.3
44°	9.2	11.3	12.3
45°	9.2	11.3	12.3
46°	9.2	11.8	12.3
47°	9.2	11.8	12.8
48°	9.2	11.3	12.3
49°	8.7	11.3	12.3
50°	8.7	11.3	12.3
51°	8.7	11.8	12.8
52°	8.7	11.8	12.8
53°	8.7	11.8	12.8
54°	8.7	11.8	12.3
55°	8.7	11.8	12.8
56°	8.7	11.8	12.3
57°	8.7	11.8	12.3
58°	8.7	11.3	12.3
59°	8.7	11.3	12.3
60°	8.7	11.3	12.3
62.5°	8.2	11.3	12.3
65°	8.2	10.8	11.8



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	7.7	10.8	11.3
70°	7.2	10.3	10.8
72.5°	6.7	9.7	10.3
75°	6.2	8.7	9.2
77.5°	5.1	7.7	8.7
80°	4.6	6.7	7.2
82.5°	3.6	5.6	6.2
85°	2.6	4.1	4.1
87.5°	1.0	2.1	2.1
90°	0.0	0.0	0.0

(END OF REPORT)