

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: P1344502

Luminaire Tested: P3A13R259730DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344502
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-75)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A13R259730DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R25 optic, 3000K CCT AND, 97CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

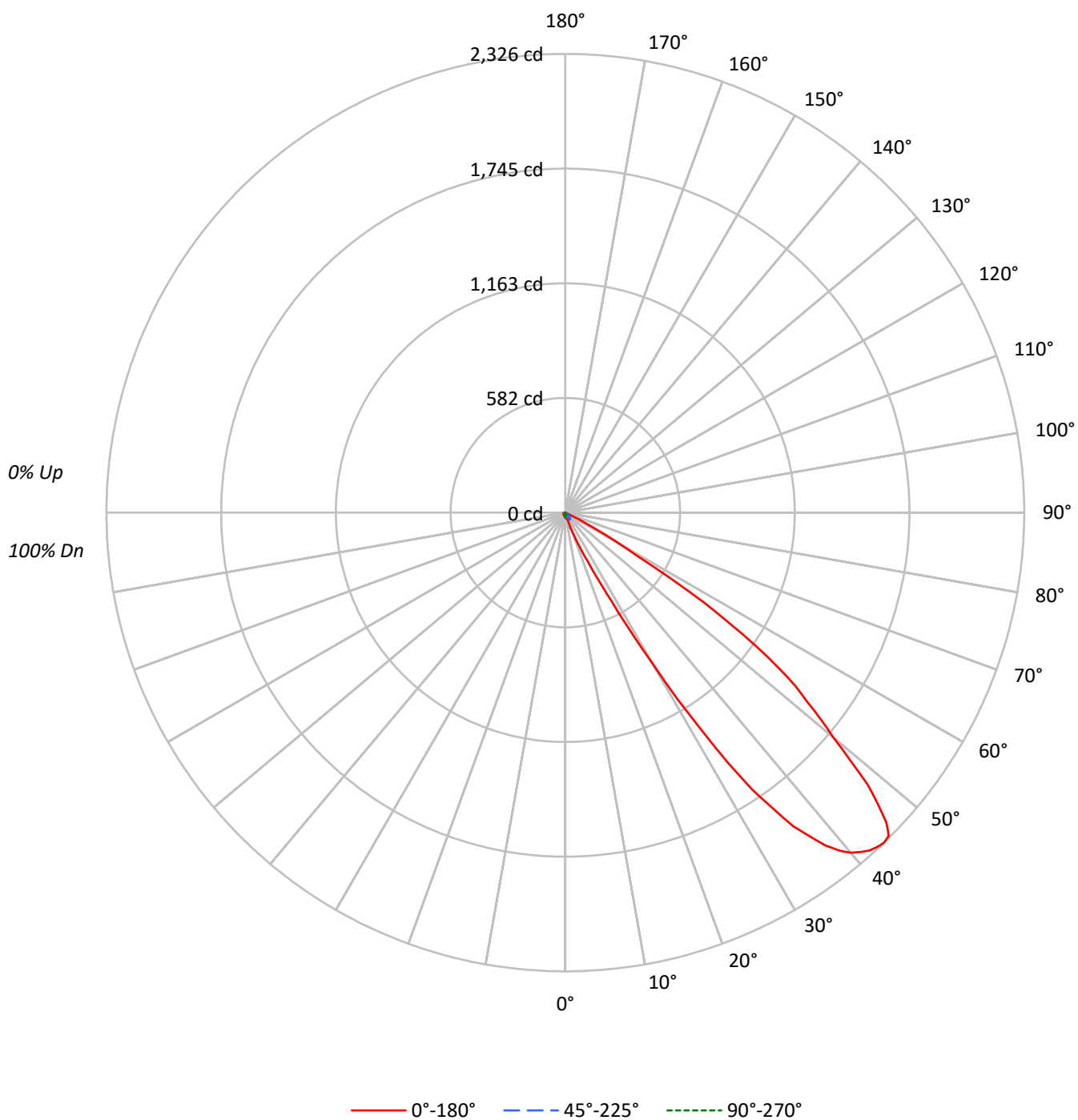
Lumens per Lamp: N/A
Luminaire Lumens: 485.0 lumens
Efficiency: N/A
Efficacy: 33.2 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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			0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
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	64		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	39	52	44	38		50	43	38		48	42	37	35
7	62	48	39	32	60	47	39	32	46	38	32		44	37	32		43	36	32	29
8	57	43	34	27	55	42	33	27	40	33	27		39	32	27		38	32	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	20		31	24	19		30	24	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	5438	5438	5438	5438	5438
5°	6207	5921	5261	4689	4600
10°	6168	5611	4476	3897	3897
15°	6879	4835	3496	3292	3496
20°	24292	4784	2684	2800	3080
25°	69899	6097	2178	2589	3000
30°	223047	9394	1722	2481	3038
35°	488512	11082	1472	2409	3078
40°	644436	10019	1231	2433	3292
45°	718679	7008	1178	2636	3566
50°	604944	3650	1160	2763	3923
55°	452304	1453	1147	3097	4396
60°	139989	395	1140	3377	4868
65°	11934	0	1349	3528	5292
70°	833	256	1346	4103	6027
75°	763	339	1779	4321	6863
80°	505	505	2652	4799	8082
85°	1006	1006	4277	5284	8554

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 718679 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.2	0.5
10°-20°	5.7	1.2
20°-30°	26.8	5.5
30°-40°	129.2	26.6
40°-50°	202.5	41.8
50°-60°	103.8	21.4
60°-70°	9.8	2.0
70°-80°	3.3	0.7
80°-90°	1.6	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°	34.8	7.2
0°-40°	164.0	33.8
0°-60°	470.3	97.0
0°-90°	485.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	485.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	25	25	25	25	25	
5°	28	27	24	21	21	3
15°	30	21	15	14	15	13
25°	289	25	9	11	12	179
35°	1825	41	6	9	12	1108
45°	2318	23	4	8	12	1696
55°	1183	4	3	8	12	985
65°	23	0	3	7	10	72
75°	1	0	2	5	8	1
85°	0	0	2	2	3	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°	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8
2.5°	26.9	26.9	26.9	26.9	26.9	26.9	26.5	26.5	26.9	26.5	26.5
5°	28.2	28.2	28.2	28.2	28.2	28.2	28.2	27.7	27.7	27.7	26.9
7.5°	28.6	28.2	28.2	28.2	28.2	28.2	28.2	28.2	27.7	27.7	26.5
10°	27.7	27.7	27.7	27.7	27.3	27.3	27.3	26.9	26.9	26.9	25.2
12.5°	27.7	27.7	27.7	27.7	27.3	27.3	26.9	26.9	26.5	26.0	23.0
15°	30.3	30.3	30.3	29.9	29.4	29.0	28.6	28.2	27.7	26.9	21.3
17.5°	44.4	43.1	42.7	41.0	38.8	36.7	35.0	33.3	31.6	30.3	20.5
20°	104.1	103.7	101.6	96.5	90.9	84.5	78.1	70.8	60.6	53.8	20.5
22.5°	180.5	178.0	174.1	170.3	160.5	148.9	137.0	123.3	110.1	96.0	21.8
25°	288.9	294.9	282.1	271.9	254.8	233.9	211.3	192.5	168.6	146.4	25.2
27.5°	502.3	506.2	481.0	447.7	408.0	364.1	321.4	289.4	249.2	212.5	31.6
30°	880.9	884.7	842.5	771.6	689.7	617.6	519.8	434.0	355.1	294.1	37.1
31°	1099.4	1069.5	1020.5	951.7	848.0	739.2	621.8	518.1	418.3	338.0	38.8
32°	1289.3	1286.8	1229.6	1125.4	1021.3	886.9	741.3	606.0	483.6	382.4	40.1
33°	1513.4	1496.3	1415.7	1317.5	1179.6	1044.4	856.6	702.1	550.6	431.9	41.0
34°	1693.1	1647.0	1613.7	1501.4	1355.9	1183.5	982.5	803.6	634.2	479.7	41.4
35°	1824.9	1815.1	1750.3	1645.7	1497.6	1321.3	1118.2	909.1	704.2	535.2	41.4
36°	1964.5	1934.2	1871.0	1776.3	1632.0	1449.8	1221.9	1000.4	785.7	585.1	41.0
37°	2052.0	2034.1	1971.3	1873.6	1732.3	1558.2	1338.0	1096.8	850.6	635.1	40.1
38°	2142.1	2105.8	2043.9	1950.4	1811.7	1648.3	1422.1	1171.1	910.3	679.0	38.8
39°	2204.4	2166.8	2103.6	2010.6	1874.9	1712.7	1488.6	1234.3	962.4	711.9	37.1
40°	2251.3	2215.0	2151.0	2055.4	1921.4	1763.5	1544.1	1290.2	1005.9	740.5	35.0
41°	2280.3	2246.6	2183.0	2087.8	1953.4	1792.5	1580.4	1326.5	1035.4	759.7	32.9
42°	2304.7	2270.1	2205.2	2107.9	1973.0	1817.3	1602.6	1349.5	1055.4	769.5	31.2
43°	2318.3	2283.7	2220.6	2121.1	1985.0	1828.8	1614.5	1360.2	1062.3	768.2	28.2
44°	2326.0	2290.1	2226.6	2127.1	1990.1	1831.8	1615.4	1358.0	1057.6	758.0	25.6
45°	2317.5	2282.0	2220.6	2121.1	1981.2	1822.4	1606.9	1346.5	1039.7	737.9	22.6
46°	2262.0	2234.7	2178.3	2087.0	1953.0	1798.5	1585.1	1324.3	1011.9	713.2	19.2
47°	2164.2	2142.5	2087.8	2020.0	1898.8	1754.5	1545.0	1282.1	973.1	676.0	15.4
48°	2062.2	2030.2	1979.4	1909.9	1807.4	1675.6	1478.8	1220.2	914.2	627.4	13.7
49°	1911.6	1892.8	1848.0	1770.3	1685.4	1569.3	1385.4	1140.8	842.1	574.5	12.0
50°	1773.3	1760.5	1697.8	1640.6	1550.5	1442.1	1258.6	1036.2	752.4	508.7	10.7
51°	1665.3	1650.0	1604.7	1533.5	1437.4	1311.5	1138.7	900.5	649.6	430.6	8.5
52°	1552.7	1544.1	1504.0	1430.6	1336.3	1210.8	1022.2	785.3	549.7	364.1	6.8
53°	1460.5	1448.1	1399.0	1333.7	1231.7	1102.0	895.8	678.2	465.6	306.0	6.0
54°	1326.0	1320.9	1289.3	1221.0	1110.5	969.2	781.4	571.0	388.4	259.5	5.1
55°	1183.1	1166.0	1134.0	1079.8	978.2	846.3	649.1	473.3	314.1	218.5	3.8
56°	1008.9	1008.1	950.9	905.6	815.6	675.6	518.5	369.6	255.2	182.2	3.4
57°	842.5	815.6	760.5	715.7	618.8	512.6	385.0	277.0	199.7	147.7	2.6
58°	623.1	609.0	594.5	528.8	439.2	363.2	274.9	194.6	147.7	112.7	1.7
59°	422.9	422.5	405.4	355.5	303.9	226.2	171.6	132.3	101.6	82.8	1.3
60°	319.2	311.6	277.4	244.5	191.2	143.0	101.6	78.1	63.2	53.3	0.9
62.5°	111.8	116.1	102.0	84.5	64.4	52.9	40.5	32.9	26.9	21.8	0.0
65°	23.0	25.2	21.8	20.5	16.2	14.1	12.4	10.7	9.0	7.7	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°	3.0	2.6	2.6	2.6	2.1	2.1	2.1	2.1	1.7	1.7	0.4
70°	1.3	1.3	1.3	1.3	1.3	1.3	0.9	0.9	0.9	0.9	0.4
72.5°	1.3	1.3	1.3	0.9	0.9	0.9	0.9	0.9	0.9	0.4	0.4
75°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.4	0.4	0.4	0.4
77.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.4	0.4	0.4	0.4	0.4
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
82.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9
85°	0.4	0.4	0.4	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
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°	24.8	24.8	24.8	24.8	24.8	24.8
2.5°	26.0	25.2	23.9	23.5	23.0	23.0
5°	25.6	23.9	22.6	21.3	20.9	20.9
7.5°	24.3	22.2	20.5	19.6	19.2	18.8
10°	23.0	20.1	18.4	17.5	17.5	17.5
12.5°	20.5	17.9	16.2	15.8	16.2	16.2
15°	18.4	15.4	14.5	14.5	14.9	15.4
17.5°	15.8	13.7	12.8	13.2	13.7	14.1
20°	14.1	11.5	11.5	12.0	13.2	13.2
22.5°	12.4	10.2	10.2	11.5	12.4	12.8
25°	11.1	9.0	9.4	10.7	12.0	12.4
27.5°	9.4	7.7	8.5	10.2	11.5	12.0
30°	8.1	6.8	8.1	9.8	11.1	12.0
31°	7.7	6.4	8.1	9.4	11.1	12.0
32°	6.8	6.4	7.7	9.4	11.1	11.5
33°	6.4	6.0	7.7	9.4	11.1	11.5
34°	6.0	5.5	7.3	9.4	11.1	11.5
35°	5.1	5.5	7.3	9.0	10.7	11.5
36°	4.7	5.1	7.3	9.0	10.7	11.5
37°	4.3	5.1	6.8	9.0	10.7	11.5
38°	3.8	4.7	6.8	9.0	10.7	11.5
39°	3.4	4.7	6.4	9.0	10.7	11.5
40°	3.0	4.3	6.4	8.5	10.7	11.5
41°	3.0	4.3	6.4	8.5	10.7	11.5
42°	2.6	4.3	6.4	8.5	10.7	11.5
43°	2.1	3.8	6.4	8.5	10.7	11.5
44°	1.7	3.8	6.0	8.5	10.7	11.5
45°	1.7	3.8	6.0	8.5	10.7	11.5
46°	1.3	3.4	6.0	8.5	10.7	11.5
47°	0.9	3.4	6.0	8.1	10.7	11.5
48°	0.9	3.4	6.0	8.1	10.7	11.5
49°	0.9	3.4	5.5	8.1	10.7	11.5
50°	0.9	3.4	5.5	8.1	10.7	11.5
51°	0.4	3.0	5.5	8.1	10.7	11.5
52°	0.4	3.0	5.5	8.1	10.7	12.0
53°	0.4	3.0	5.5	8.1	10.7	11.5
54°	0.4	3.0	5.1	8.1	10.7	11.5
55°	0.4	3.0	5.1	8.1	10.7	11.5
56°	0.4	2.6	5.1	7.7	10.7	11.5
57°	0.9	2.6	5.1	7.7	10.7	11.1
58°	0.9	2.6	5.1	7.7	10.2	11.1
59°	0.9	2.6	5.1	7.7	10.2	11.1
60°	0.9	2.6	4.7	7.7	10.2	11.1
62.5°	0.9	2.6	4.7	7.3	9.8	10.7
65°	0.9	2.6	4.3	6.8	9.8	10.2



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.9	2.1	4.3	6.4	9.4	9.8
70°	1.3	2.1	3.8	6.4	9.0	9.4
72.5°	1.3	2.1	3.8	5.5	8.1	9.0
75°	1.3	2.1	3.4	5.1	7.7	8.1
77.5°	1.3	2.1	3.0	4.7	6.8	7.3
80°	1.7	2.1	2.6	3.8	6.0	6.4
82.5°	1.7	2.1	2.1	3.0	4.7	5.1
85°	1.3	1.7	1.7	2.1	3.0	3.4
87.5°	1.3	1.7	1.3	0.9	1.7	1.7
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)