

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: P1344409

Luminaire Tested: P3A13R259030D2WDE010 E3A451GPH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344409
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: P3A13R259030D2WDE010 E3A451GPH
Description: 3in Adjustable Dim to Warm LED luminaire with, R25 optic, 3000K CCT AND, 90CRI ,
E3A451GPH TRIM
Light Source: -
Ballast/Driver: -

Summary

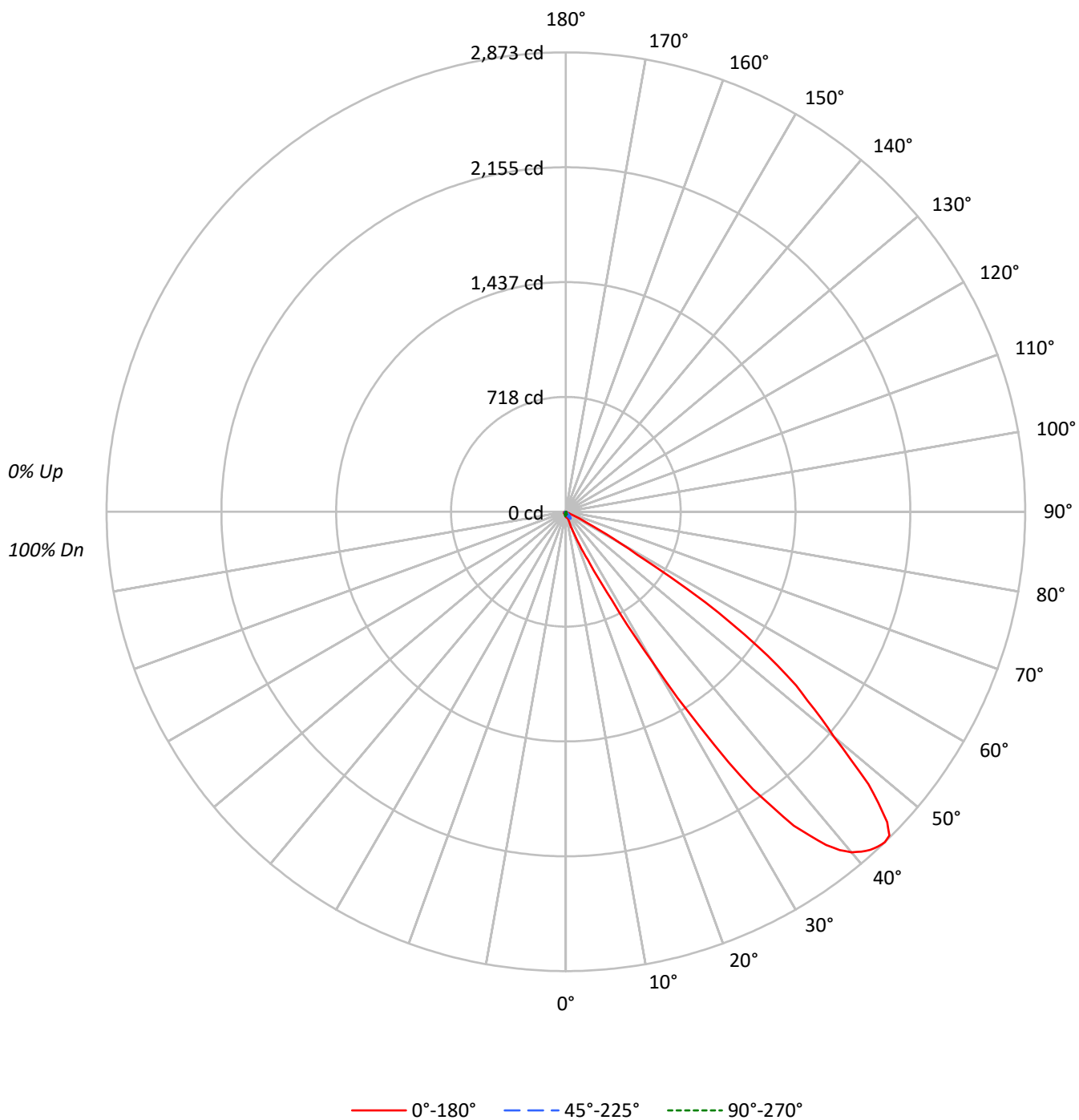
Lumens per Lamp: N/A
Luminaire Lumens: 599.0 lumens
Efficiency: N/A
Efficacy: 29.8 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 20.1
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	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	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°	6710	6710	6710	6710	6710
5°	7660	7308	6493	5811	5679
10°	7637	6925	5522	4810	4810
15°	8490	5993	4313	4064	4313
20°	30009	5904	3314	3454	3804
25°	86352	7525	2686	3194	3702
30°	275460	11622	2127	3064	3747
35°	603352	13679	1847	2971	3801
40°	795920	12366	1517	3006	4065
45°	887596	8652	1458	3256	4404
50°	747131	4503	1433	3411	4844
55°	558585	1797	1415	3823	5429
60°	172925	482	1403	4166	6008
65°	14788	0	1660	4358	6590
70°	1026	321	1667	5065	7437
75°	932	424	2203	5338	8472
80°	631	631	3283	5935	9976
85°	1258	1258	5284	6542	10567

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 887596 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.7	0.5
10°-20°	7.1	1.2
20°-30°	33.1	5.5
30°-40°	159.6	26.6
40°-50°	250.1	41.8
50°-60°	128.2	21.4
60°-70°	12.1	2.0
70°-80°	4.1	0.7
80°-90°	2.0	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°	42.9	7.2
0°-40°	202.5	33.8
0°-60°	580.8	97.0
0°-90°	599.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	599.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	31	31	31	31	31	
5°	35	33	30	26	26	3
15°	37	26	19	18	19	16
25°	357	31	11	13	15	221
35°	2254	51	7	11	14	1368
45°	2862	28	5	10	14	2094
55°	1461	5	4	10	14	1216
65°	28	0	3	8	13	89
75°	1	0	3	6	10	1
85°	0	0	2	3	4	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°	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6
2.5°	33.2	33.2	33.2	33.2	33.2	33.2	32.7	32.7	33.2	32.7	32.7
5°	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.3	34.3	34.3	33.2
7.5°	35.3	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.3	34.3	32.7
10°	34.3	34.3	34.3	34.3	33.7	33.7	33.7	33.2	33.2	33.2	31.1
12.5°	34.3	34.3	34.3	34.3	33.7	33.7	33.2	33.2	32.7	32.2	28.5
15°	37.4	37.4	37.4	36.9	36.4	35.8	35.3	34.8	34.3	33.2	26.4
17.5°	54.8	53.2	52.7	50.6	48.0	45.3	43.2	41.1	39.0	37.4	25.3
20°	128.6	128.1	125.5	119.1	112.3	104.4	96.5	87.5	74.8	66.4	25.3
22.5°	223.0	219.8	215.1	210.3	198.2	184.0	169.2	152.3	136.0	118.6	26.9
25°	356.9	364.2	348.4	335.8	314.7	288.9	260.9	237.7	208.2	180.8	31.1
27.5°	620.4	625.1	594.0	552.9	503.9	449.6	396.9	357.4	307.8	262.5	39.0
30°	1087.9	1092.7	1040.5	953.0	851.8	762.7	642.0	536.1	438.6	363.2	45.9
31°	1357.8	1320.9	1260.3	1175.4	1047.4	912.9	768.0	639.9	516.6	417.5	48.0
32°	1592.4	1589.2	1518.6	1390.0	1261.4	1095.3	915.6	748.5	597.2	472.3	49.5
33°	1869.1	1848.0	1748.4	1627.2	1456.9	1289.8	1057.9	867.1	680.0	533.4	50.6
34°	2091.0	2034.1	1993.0	1854.4	1674.6	1461.7	1213.4	992.5	783.3	592.5	51.1
35°	2253.9	2241.8	2161.7	2032.5	1849.6	1631.9	1381.0	1122.7	869.7	661.0	51.1
36°	2426.3	2388.8	2310.8	2193.8	2015.7	1790.6	1509.1	1235.5	970.4	722.7	50.6
37°	2534.3	2512.2	2434.7	2314.0	2139.5	1924.5	1652.5	1354.7	1050.5	784.3	49.5
38°	2645.5	2600.7	2524.3	2408.9	2237.6	2035.7	1756.3	1446.4	1124.3	838.6	48.0
39°	2722.5	2676.1	2598.1	2483.2	2315.6	2115.3	1838.5	1524.4	1188.6	879.2	45.9
40°	2780.5	2735.7	2656.6	2538.5	2373.0	2178.0	1907.1	1593.4	1242.4	914.5	43.2
41°	2816.3	2774.7	2696.1	2578.6	2412.6	2213.8	1951.9	1638.2	1278.8	938.2	40.6
42°	2846.4	2803.7	2723.6	2603.4	2436.8	2244.4	1979.3	1666.7	1303.5	950.4	38.5
43°	2863.2	2820.5	2742.5	2619.7	2451.6	2258.6	1994.0	1679.9	1312.0	948.8	34.8
44°	2872.7	2828.5	2749.9	2627.1	2457.9	2262.3	1995.1	1677.3	1306.2	936.1	31.6
45°	2862.2	2818.4	2742.5	2619.7	2446.8	2250.7	1984.6	1663.0	1284.0	911.4	27.9
46°	2793.7	2759.9	2690.3	2577.5	2412.0	2221.2	1957.7	1635.6	1249.8	880.8	23.7
47°	2673.0	2646.1	2578.6	2494.8	2345.1	2166.9	1908.1	1583.4	1201.8	834.9	19.0
48°	2547.0	2507.4	2444.7	2358.8	2232.3	2069.4	1826.4	1507.0	1129.1	774.8	16.9
49°	2360.9	2337.7	2282.4	2186.4	2081.5	1938.2	1711.0	1409.0	1040.0	709.5	14.8
50°	2190.1	2174.3	2096.8	2026.2	1915.0	1781.1	1554.4	1279.8	929.3	628.3	13.2
51°	2056.8	2037.8	1981.9	1893.9	1775.3	1619.8	1406.3	1112.2	802.3	531.8	10.5
52°	1917.6	1907.1	1857.5	1766.9	1650.4	1495.4	1262.4	969.9	678.9	449.6	8.4
53°	1803.8	1788.5	1727.9	1647.2	1521.2	1361.0	1106.4	837.6	575.1	377.9	7.4
54°	1637.7	1631.4	1592.4	1508.1	1371.5	1197.1	965.1	705.3	479.7	320.5	6.3
55°	1461.1	1440.1	1400.5	1333.6	1208.1	1045.3	801.7	584.6	387.9	269.9	4.7
56°	1246.1	1245.0	1174.4	1118.5	1007.3	834.4	640.4	456.5	315.2	225.1	4.2
57°	1040.5	1007.3	939.3	884.0	764.3	633.1	475.4	342.1	246.7	182.4	3.2
58°	769.6	752.2	734.3	653.1	542.4	448.6	339.5	240.4	182.4	139.2	2.1
59°	522.4	521.8	500.8	439.1	375.3	279.4	211.9	163.4	125.5	102.3	1.6
60°	394.3	384.8	342.6	302.0	236.1	176.6	125.5	96.5	78.0	65.9	1.1
62.5°	138.1	143.4	126.0	104.4	79.6	65.4	50.1	40.6	33.2	26.9	0.0
65°	28.5	31.1	26.9	25.3	20.0	17.4	15.3	13.2	11.1	9.5	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°	3.7	3.2	3.2	3.2	2.6	2.6	2.6	2.6	2.1	2.1	0.5
70°	1.6	1.6	1.6	1.6	1.6	1.6	1.1	1.1	1.1	1.1	0.5
72.5°	1.6	1.6	1.6	1.1	1.1	1.1	1.1	1.1	1.1	0.5	0.5
75°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.5	0.5	0.5	0.5
77.5°	1.1	1.1	1.1	1.1	1.1	1.1	0.5	0.5	0.5	0.5	0.5
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
82.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.1
85°	0.5	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	30.6	30.6	30.6	30.6	30.6	30.6
2.5°	32.2	31.1	29.5	29.0	28.5	28.5
5°	31.6	29.5	27.9	26.4	25.8	25.8
7.5°	30.0	27.4	25.3	24.2	23.7	23.2
10°	28.5	24.8	22.7	21.6	21.6	21.6
12.5°	25.3	22.1	20.0	19.5	20.0	20.0
15°	22.7	19.0	17.9	17.9	18.4	19.0
17.5°	19.5	16.9	15.8	16.3	16.9	17.4
20°	17.4	14.2	14.2	14.8	16.3	16.3
22.5°	15.3	12.7	12.7	14.2	15.3	15.8
25°	13.7	11.1	11.6	13.2	14.8	15.3
27.5°	11.6	9.5	10.5	12.7	14.2	14.8
30°	10.0	8.4	10.0	12.1	13.7	14.8
31°	9.5	7.9	10.0	11.6	13.7	14.8
32°	8.4	7.9	9.5	11.6	13.7	14.2
33°	7.9	7.4	9.5	11.6	13.7	14.2
34°	7.4	6.9	9.0	11.6	13.7	14.2
35°	6.3	6.9	9.0	11.1	13.2	14.2
36°	5.8	6.3	9.0	11.1	13.2	14.2
37°	5.3	6.3	8.4	11.1	13.2	14.2
38°	4.7	5.8	8.4	11.1	13.2	14.2
39°	4.2	5.8	7.9	11.1	13.2	14.2
40°	3.7	5.3	7.9	10.5	13.2	14.2
41°	3.7	5.3	7.9	10.5	13.2	14.2
42°	3.2	5.3	7.9	10.5	13.2	14.2
43°	2.6	4.7	7.9	10.5	13.2	14.2
44°	2.1	4.7	7.4	10.5	13.2	14.2
45°	2.1	4.7	7.4	10.5	13.2	14.2
46°	1.6	4.2	7.4	10.5	13.2	14.2
47°	1.1	4.2	7.4	10.0	13.2	14.2
48°	1.1	4.2	7.4	10.0	13.2	14.2
49°	1.1	4.2	6.9	10.0	13.2	14.2
50°	1.1	4.2	6.9	10.0	13.2	14.2
51°	0.5	3.7	6.9	10.0	13.2	14.2
52°	0.5	3.7	6.9	10.0	13.2	14.8
53°	0.5	3.7	6.9	10.0	13.2	14.2
54°	0.5	3.7	6.3	10.0	13.2	14.2
55°	0.5	3.7	6.3	10.0	13.2	14.2
56°	0.5	3.2	6.3	9.5	13.2	14.2
57°	1.1	3.2	6.3	9.5	13.2	13.7
58°	1.1	3.2	6.3	9.5	12.7	13.7
59°	1.1	3.2	6.3	9.5	12.7	13.7
60°	1.1	3.2	5.8	9.5	12.7	13.7
62.5°	1.1	3.2	5.8	9.0	12.1	13.2
65°	1.1	3.2	5.3	8.4	12.1	12.7



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.1	2.6	5.3	7.9	11.6	12.1
70°	1.6	2.6	4.7	7.9	11.1	11.6
72.5°	1.6	2.6	4.7	6.9	10.0	11.1
75°	1.6	2.6	4.2	6.3	9.5	10.0
77.5°	1.6	2.6	3.7	5.8	8.4	9.0
80°	2.1	2.6	3.2	4.7	7.4	7.9
82.5°	2.1	2.6	2.6	3.7	5.8	6.3
85°	1.6	2.1	2.1	2.6	3.7	4.2
87.5°	1.6	2.1	1.6	1.1	2.1	2.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)