

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: P1344529

Luminaire Tested: P3A13R259740DE010 E3A451GPH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344529
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: P3A13R259740DE010 E3A451GPH
Description: 3in Adjustable LED luminaire with, R25 optic, 4000K CCT AND, 97CRI , E3A451GPH TRIM
Light Source: -
Ballast/Driver: -

Summary

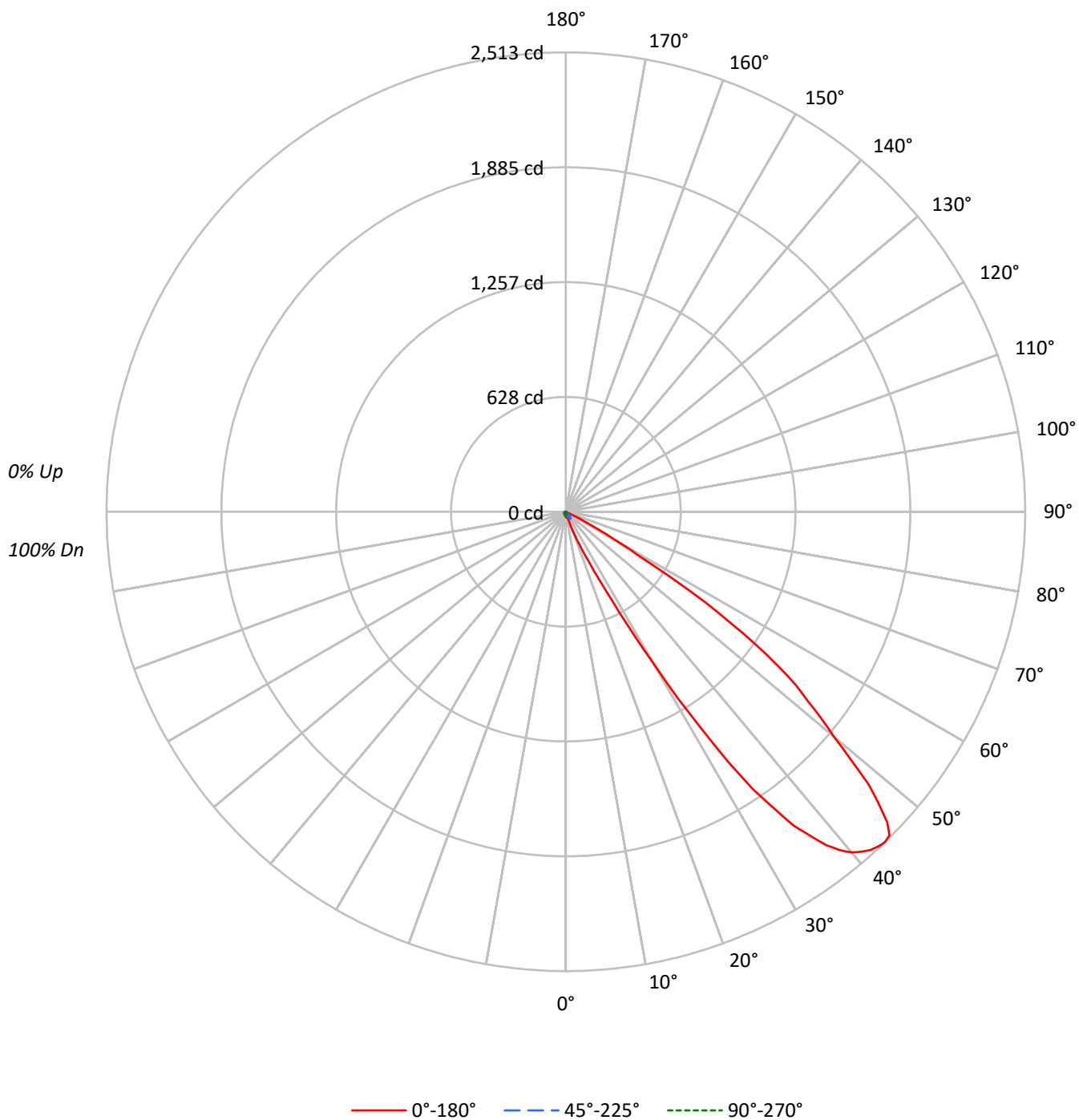
Lumens per Lamp: N/A
Luminaire Lumens: 524.0 lumens
Efficiency: N/A
Efficacy: 35.9 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
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°	5855	5855	5855	5855	5855
5°	6692	6383	5679	5085	4975
10°	6680	6056	4832	4208	4208
15°	7423	5244	3768	3564	3768
20°	26252	5157	2894	3010	3337
25°	75537	6581	2347	2782	3242
30°	240974	10153	1874	2684	3266
35°	527809	11966	1606	2597	3319
40°	696247	10820	1317	2634	3550
45°	776453	7567	1271	2853	3845
50°	653590	3923	1262	3002	4230
55°	488661	1567	1223	3364	4741
60°	151260	395	1228	3640	5263
65°	12920	0	1453	3840	5759
70°	898	321	1475	4424	6475
75°	763	424	1949	4660	7456
80°	631	631	2904	5177	8713
85°	1258	1258	4529	5787	9309

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 776453 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.4	0.5
10°-20°	6.2	1.2
20°-30°	29.0	5.5
30°-40°	139.6	26.6
40°-50°	218.8	41.8
50°-60°	112.2	21.4
60°-70°	10.6	2.0
70°-80°	3.6	0.7
80°-90°	1.8	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°	37.6	7.2
0°-40°	177.1	33.8
0°-60°	508.1	97.0
0°-90°	524.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	524.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	27	27	27	27	27	
5°	30	29	26	23	23	3
15°	33	23	17	16	17	14
25°	312	27	10	12	13	194
35°	1972	45	6	10	12	1197
45°	2504	24	4	9	12	1832
55°	1278	4	3	9	12	1064
65°	25	0	3	7	11	78
75°	1	0	2	6	9	1
85°	0	0	2	2	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°	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7
2.5°	29.0	29.0	29.0	29.0	29.0	29.0	28.6	28.6	29.0	28.6	28.6
5°	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.0	30.0	30.0	29.0
7.5°	30.9	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.0	30.0	28.6
10°	30.0	30.0	30.0	30.0	29.5	29.5	29.5	29.0	29.0	29.0	27.2
12.5°	30.0	30.0	30.0	30.0	29.5	29.5	29.0	29.0	28.6	28.1	24.9
15°	32.7	32.7	32.7	32.3	31.8	31.4	30.9	30.4	30.0	29.0	23.1
17.5°	48.0	46.6	46.1	44.3	42.0	39.7	37.8	36.0	34.1	32.7	22.1
20°	112.5	112.0	109.7	104.2	98.2	91.3	84.4	76.5	65.5	58.1	22.1
22.5°	195.0	192.3	188.1	184.0	173.4	160.9	148.0	133.3	119.0	103.7	23.5
25°	312.2	318.6	304.8	293.7	275.3	252.7	228.2	208.0	182.1	158.2	27.2
27.5°	542.7	546.9	519.7	483.7	440.8	393.3	347.2	312.6	269.3	229.6	34.1
30°	951.7	955.9	910.2	833.7	745.1	667.2	561.6	468.9	383.6	317.7	40.1
31°	1187.8	1155.5	1102.5	1028.3	916.2	798.6	671.8	559.8	451.9	365.2	42.0
32°	1393.0	1390.2	1328.5	1215.9	1103.4	958.2	800.9	654.8	522.4	413.2	43.3
33°	1635.1	1616.6	1529.5	1423.4	1274.5	1128.3	925.4	758.5	594.8	466.6	44.3
34°	1829.2	1779.4	1743.4	1622.2	1464.9	1278.7	1061.5	868.3	685.2	518.3	44.7
35°	1971.7	1961.1	1891.0	1778.0	1618.0	1427.6	1208.1	982.2	760.8	578.2	44.7
36°	2122.5	2089.7	2021.5	1919.1	1763.3	1566.4	1320.2	1080.8	848.9	632.2	44.3
37°	2217.0	2197.6	2129.9	2024.3	1871.6	1683.5	1445.6	1185.0	919.0	686.1	43.3
38°	2314.3	2275.1	2208.2	2107.3	1957.4	1780.8	1536.4	1265.3	983.5	733.6	42.0
39°	2381.6	2341.0	2272.8	2172.3	2025.6	1850.4	1608.3	1333.5	1039.8	769.1	40.1
40°	2432.3	2393.1	2324.0	2220.7	2075.9	1905.3	1668.3	1393.9	1086.8	800.0	37.8
41°	2463.7	2427.3	2358.6	2255.7	2110.5	1936.7	1707.5	1433.1	1118.6	820.8	35.5
42°	2490.0	2452.6	2382.5	2277.4	2131.7	1963.4	1731.5	1458.0	1140.3	831.4	33.7
43°	2504.7	2467.4	2399.1	2291.7	2144.6	1975.8	1744.4	1469.6	1147.7	830.0	30.4
44°	2513.0	2474.3	2405.6	2298.2	2150.1	1979.1	1745.3	1467.2	1142.6	818.9	27.7
45°	2503.8	2465.5	2399.1	2291.7	2140.5	1968.9	1736.1	1454.8	1123.3	797.3	24.4
46°	2443.9	2414.4	2353.5	2254.8	2110.0	1943.1	1712.6	1430.8	1093.3	770.5	20.7
47°	2338.3	2314.8	2255.7	2182.4	2051.5	1895.6	1669.2	1385.2	1051.3	730.4	16.6
48°	2228.1	2193.5	2138.6	2063.5	1952.8	1810.3	1597.7	1318.3	987.7	677.8	14.8
49°	2065.3	2045.0	1996.6	1912.7	1820.9	1695.5	1496.8	1232.5	909.8	620.7	12.9
50°	1915.9	1902.1	1834.3	1772.5	1675.2	1558.1	1359.8	1119.6	812.9	549.6	11.5
51°	1799.2	1782.6	1733.8	1656.8	1553.0	1417.0	1230.2	972.9	701.8	465.3	9.2
52°	1677.5	1668.3	1624.9	1545.6	1443.7	1308.2	1104.4	848.4	593.9	393.3	7.4
53°	1577.9	1564.5	1511.5	1441.0	1330.8	1190.6	967.9	732.7	503.1	330.6	6.5
54°	1432.7	1427.1	1393.0	1319.2	1199.8	1047.2	844.3	617.0	419.6	280.4	5.5
55°	1278.2	1259.7	1225.2	1166.6	1056.9	914.4	701.3	511.4	339.4	236.1	4.1
56°	1090.1	1089.1	1027.3	978.5	881.2	729.9	560.2	399.3	275.7	196.9	3.7
57°	910.2	881.2	821.7	773.3	668.6	553.8	415.9	299.3	215.8	159.5	2.8
58°	673.2	658.0	642.3	571.3	474.5	392.4	297.0	210.3	159.5	121.7	1.8
59°	457.0	456.5	438.1	384.1	328.3	244.4	185.4	142.9	109.7	89.5	1.4
60°	344.9	336.6	299.7	264.2	206.6	154.5	109.7	84.4	68.2	57.6	0.9
62.5°	120.8	125.4	110.2	91.3	69.6	57.2	43.8	35.5	29.0	23.5	0.0
65°	24.9	27.2	23.5	22.1	17.5	15.2	13.4	11.5	9.7	8.3	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°	3.2	2.8	2.8	2.8	2.3	2.3	2.3	2.3	1.8	1.8	0.5
70°	1.4	1.4	1.4	1.4	1.4	1.4	0.9	0.9	0.9	0.9	0.5
72.5°	1.4	1.4	1.4	0.9	0.9	0.9	0.9	0.9	0.9	0.5	0.5
75°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.5	0.5	0.5	0.5
77.5°	0.9	0.9	0.9	0.9	0.9	0.9	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	0.9
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°	26.7	26.7	26.7	26.7	26.7	26.7
2.5°	28.1	27.2	25.8	25.4	24.9	24.9
5°	27.7	25.8	24.4	23.1	22.6	22.6
7.5°	26.3	24.0	22.1	21.2	20.7	20.3
10°	24.9	21.7	19.8	18.9	18.9	18.9
12.5°	22.1	19.4	17.5	17.1	17.5	17.5
15°	19.8	16.6	15.7	15.7	16.1	16.6
17.5°	17.1	14.8	13.8	14.3	14.8	15.2
20°	15.2	12.4	12.4	12.9	14.3	14.3
22.5°	13.4	11.1	11.1	12.4	13.4	13.8
25°	12.0	9.7	10.1	11.5	12.9	13.4
27.5°	10.1	8.3	9.2	11.1	12.4	12.9
30°	8.8	7.4	8.8	10.6	12.0	12.9
31°	8.3	6.9	8.8	10.1	12.0	12.9
32°	7.4	6.9	8.3	10.1	12.0	12.4
33°	6.9	6.5	8.3	10.1	12.0	12.4
34°	6.5	6.0	7.8	10.1	12.0	12.4
35°	5.5	6.0	7.8	9.7	11.5	12.4
36°	5.1	5.5	7.8	9.7	11.5	12.4
37°	4.6	5.5	7.4	9.7	11.5	12.4
38°	4.1	5.1	7.4	9.7	11.5	12.4
39°	3.7	5.1	6.9	9.7	11.5	12.4
40°	3.2	4.6	6.9	9.2	11.5	12.4
41°	3.2	4.6	6.9	9.2	11.5	12.4
42°	2.8	4.6	6.9	9.2	11.5	12.4
43°	2.3	4.1	6.9	9.2	11.5	12.4
44°	1.8	4.1	6.5	9.2	11.5	12.4
45°	1.8	4.1	6.5	9.2	11.5	12.4
46°	1.4	3.7	6.5	9.2	11.5	12.4
47°	0.9	3.7	6.5	8.8	11.5	12.4
48°	0.9	3.7	6.5	8.8	11.5	12.4
49°	0.9	3.7	6.0	8.8	11.5	12.4
50°	0.9	3.7	6.0	8.8	11.5	12.4
51°	0.5	3.2	6.0	8.8	11.5	12.4
52°	0.5	3.2	6.0	8.8	11.5	12.9
53°	0.5	3.2	6.0	8.8	11.5	12.4
54°	0.5	3.2	5.5	8.8	11.5	12.4
55°	0.5	3.2	5.5	8.8	11.5	12.4
56°	0.5	2.8	5.5	8.3	11.5	12.4
57°	0.9	2.8	5.5	8.3	11.5	12.0
58°	0.9	2.8	5.5	8.3	11.1	12.0
59°	0.9	2.8	5.5	8.3	11.1	12.0
60°	0.9	2.8	5.1	8.3	11.1	12.0
62.5°	0.9	2.8	5.1	7.8	10.6	11.5
65°	0.9	2.8	4.6	7.4	10.6	11.1



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.9	2.3	4.6	6.9	10.1	10.6
70°	1.4	2.3	4.1	6.9	9.7	10.1
72.5°	1.4	2.3	4.1	6.0	8.8	9.7
75°	1.4	2.3	3.7	5.5	8.3	8.8
77.5°	1.4	2.3	3.2	5.1	7.4	7.8
80°	1.8	2.3	2.8	4.1	6.5	6.9
82.5°	1.8	2.3	2.3	3.2	5.1	5.5
85°	1.4	1.8	1.8	2.3	3.2	3.7
87.5°	1.4	1.8	1.4	0.9	1.8	1.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)