

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: P1345572

Luminaire Tested: P3A13R359827DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1345572
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: P3A13R359827DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R35 optic, 2700K CCT AND, 98CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

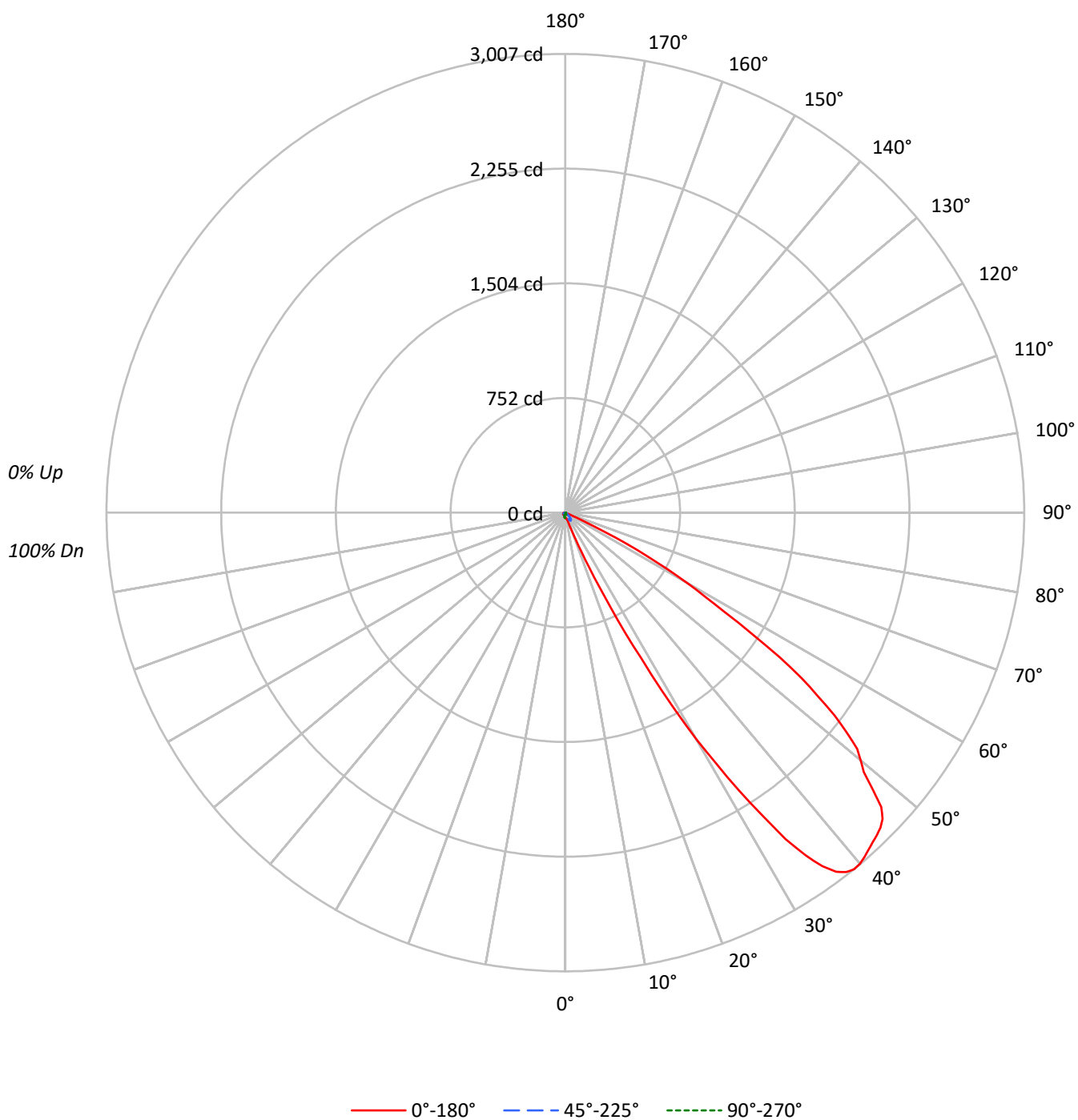
Lumens per Lamp: N/A
Luminaire Lumens: 749.0 lumens
Efficiency: N/A
Efficacy: 51.7 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.5
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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	107	104	100	97	100	97	94	96	93	91	92	90	89
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31
8	57	42	33	27	55	41	33	27	40	32	27	39	32	26	38	31	26
9	52	38	29	23	50	37	29	23	36	28	23	35	28	22	34	27	22
10	48	34	25	19	46	33	25	19	32	25	19	31	24	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	7565	7565	7565	7565	7565
5°	8188	8034	7440	6692	6538
10°	8573	7838	6613	5722	5722
15°	12282	7673	5380	4904	5062
20°	30756	8214	4270	4270	4737
25°	142823	10476	3266	3920	4428
30°	434168	14205	2557	3595	4456
35°	733745	16463	2168	3426	4337
40°	860097	16259	1746	3492	4637
45°	905799	11536	1458	3783	5024
50°	862198	6925	1399	3923	5526
55°	722478	2829	1567	4396	6461
60°	404441	614	1798	5043	7105
65°	69839	363	1764	5604	8094
70°	1282	449	2180	6091	9104
75°	1186	593	2881	6863	10336
80°	884	884	3410	7703	11996
85°	0	1761	6793	8554	13586

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 912214 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.1	0.4
10°-20°	8.8	1.2
20°-30°	46.0	6.1
30°-40°	198.5	26.5
40°-50°	283.1	37.8
50°-60°	175.4	23.4
60°-70°	26.7	3.6
70°-80°	5.0	0.7
80°-90°	2.5	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°	57.9	7.7
0°-40°	256.4	34.2
0°-60°	714.8	95.4
0°-90°	749.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	749.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	34	34	34	34	34	
5°	37	36	34	30	30	4
15°	54	34	24	22	22	19
25°	590	43	14	16	18	353
35°	2741	62	8	13	16	1646
45°	2921	37	5	12	16	2207
55°	1890	7	4	12	17	1609
65°	135	1	3	11	16	275
75°	1	1	3	8	12	1
85°	0	1	3	3	5	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°	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5
2.5°	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	34.5	33.8
5°	37.2	37.2	36.5	36.5	36.5	36.5	36.5	36.5	35.2	33.8	31.8
7.5°	37.9	37.9	37.2	37.2	37.2	37.2	36.5	35.8	34.5	31.8	29.7
10°	38.5	38.5	38.5	38.5	37.9	37.2	36.5	35.2	33.1	29.7	27.7
12.5°	43.3	43.3	42.6	41.2	39.9	38.5	37.2	34.5	30.4	27.0	25.0
15°	54.1	53.4	52.1	50.0	47.3	43.9	41.2	33.8	27.7	23.7	22.3
17.5°	75.7	74.4	72.3	65.6	59.5	53.4	48.0	33.8	25.0	21.0	19.6
20°	131.8	132.5	118.3	102.1	88.6	73.7	60.2	35.2	22.3	18.3	17.6
22.5°	275.2	264.4	230.6	191.3	146.0	112.9	85.2	38.5	19.6	15.6	15.6
25°	590.3	549.0	467.2	352.9	248.8	176.5	123.7	43.3	17.6	13.5	14.2
27.5°	1077.8	1040.6	876.3	659.9	438.1	266.4	167.7	49.4	15.6	11.5	12.8
30°	1714.7	1611.9	1397.6	1081.8	732.3	407.7	225.2	56.1	12.8	10.1	12.2
31°	1913.5	1866.1	1605.1	1251.5	858.0	484.1	249.5	58.1	12.2	10.1	11.5
32°	2149.4	2065.6	1831.6	1437.5	985.8	552.4	278.6	60.2	11.5	8.8	11.5
33°	2360.4	2279.2	1994.6	1601.1	1114.9	630.2	309.7	60.9	10.1	8.8	10.8
34°	2582.2	2471.3	2189.3	1772.1	1247.5	714.0	338.1	61.5	9.5	8.1	10.8
35°	2741.0	2630.2	2357.0	1907.4	1361.7	788.4	370.5	61.5	8.8	8.1	10.1
36°	2864.1	2766.7	2501.7	2046.7	1475.3	855.3	396.2	61.5	7.4	7.4	10.1
37°	2948.6	2856.0	2599.1	2166.3	1561.9	914.8	419.2	61.5	6.8	7.4	10.1
38°	2989.9	2912.8	2693.0	2253.6	1645.7	961.5	437.5	60.2	6.1	6.8	9.5
39°	3007.4	2944.6	2750.5	2327.2	1708.6	1002.0	451.0	58.8	5.4	6.8	9.5
40°	3004.7	2950.0	2783.0	2378.0	1759.3	1029.8	458.4	56.8	4.7	6.1	9.5
41°	2989.2	2941.9	2799.9	2421.2	1789.7	1048.7	460.4	54.8	4.1	6.1	8.8
42°	2971.6	2928.3	2805.3	2444.2	1809.3	1054.8	455.0	52.1	4.1	5.4	8.8
43°	2953.3	2913.5	2805.3	2451.7	1814.1	1050.7	446.2	47.3	3.4	5.4	8.8
44°	2938.5	2900.6	2796.5	2449.6	1803.9	1035.2	430.0	41.9	2.7	5.4	8.8
45°	2920.9	2883.7	2785.0	2436.8	1784.3	1008.8	409.7	37.2	2.0	4.7	8.8
46°	2889.8	2860.7	2764.7	2410.4	1753.2	972.3	384.0	33.8	1.4	4.7	8.1
47°	2829.6	2804.6	2725.5	2371.2	1712.0	929.0	357.7	30.4	1.4	4.7	8.1
48°	2708.6	2707.9	2647.1	2298.2	1646.4	874.9	330.0	27.0	1.4	4.7	8.1
49°	2591.6	2579.4	2503.7	2169.7	1552.4	810.0	300.9	24.3	0.7	4.7	8.1
50°	2527.4	2501.0	2376.6	2018.3	1432.0	720.1	269.8	20.3	0.7	4.1	8.1
51°	2460.4	2422.6	2275.9	1881.7	1288.7	633.5	236.0	16.2	0.7	4.1	7.4
52°	2339.4	2303.6	2139.3	1751.2	1149.4	545.0	203.5	13.5	0.7	4.1	8.1
53°	2208.9	2157.5	1979.0	1607.8	1027.0	466.5	170.4	11.5	0.7	4.1	7.4
54°	2044.6	2021.6	1816.8	1432.0	883.7	390.8	140.0	9.5	0.7	4.1	7.4
55°	1889.8	1856.0	1643.0	1252.2	753.9	320.5	117.0	7.4	0.7	4.1	7.4
56°	1692.4	1641.7	1442.2	1087.2	622.0	258.3	98.7	6.1	0.7	4.1	7.4
57°	1457.1	1403.0	1245.4	904.0	488.2	196.8	82.5	4.7	0.7	4.1	7.4
58°	1232.6	1185.9	1016.9	697.8	367.8	136.6	68.3	3.4	0.7	3.4	7.4
59°	1064.9	1013.5	845.8	536.8	255.6	100.7	51.4	2.7	0.7	4.1	7.4
60°	922.2	856.0	680.9	415.8	182.6	72.3	37.9	1.4	1.4	4.1	7.4
62.5°	531.4	469.2	325.2	169.0	75.1	37.2	18.3	0.7	1.4	4.1	7.4
65°	134.6	119.7	77.8	36.5	21.0	12.8	6.8	0.7	1.4	3.4	6.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	4.7	4.7	4.7	4.1	3.4	2.7	1.4	0.7	1.4	3.4	6.8
70°	2.0	2.0	2.0	1.4	1.4	0.7	0.7	0.7	1.4	3.4	6.1
72.5°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	2.0	3.4	5.4
75°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	2.0	3.4	5.4
77.5°	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	2.0	2.7	4.7
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.0	2.7	4.1
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.0	2.7	3.4
85°	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.7	2.0	2.7	2.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	2.0	2.7	2.0
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°	34.5	34.5	34.5
2.5°	32.5	32.5	32.5
5°	30.4	30.4	29.7
7.5°	28.4	27.7	27.7
10°	25.7	25.7	25.7
12.5°	23.7	23.7	23.7
15°	21.6	22.3	22.3
17.5°	19.6	21.0	21.0
20°	18.3	19.6	20.3
22.5°	16.9	18.3	18.9
25°	16.2	17.6	18.3
27.5°	14.9	16.9	18.3
30°	14.2	16.2	17.6
31°	14.2	16.2	16.9
32°	13.5	16.2	16.9
33°	13.5	16.2	16.9
34°	13.5	15.6	16.9
35°	12.8	15.6	16.2
36°	12.8	15.6	16.2
37°	12.8	15.6	16.9
38°	12.8	15.6	16.2
39°	12.2	15.6	16.2
40°	12.2	15.6	16.2
41°	12.2	15.6	16.2
42°	12.2	15.6	16.2
43°	12.2	15.6	16.2
44°	12.2	14.9	16.2
45°	12.2	14.9	16.2
46°	12.2	15.6	16.2
47°	12.2	15.6	16.9
48°	12.2	14.9	16.2
49°	11.5	14.9	16.2
50°	11.5	14.9	16.2
51°	11.5	15.6	16.9
52°	11.5	15.6	16.9
53°	11.5	15.6	16.9
54°	11.5	15.6	16.2
55°	11.5	15.6	16.9
56°	11.5	15.6	16.2
57°	11.5	15.6	16.2
58°	11.5	14.9	16.2
59°	11.5	14.9	16.2
60°	11.5	14.9	16.2
62.5°	10.8	14.9	16.2
65°	10.8	14.2	15.6



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	10.1	14.2	14.9
70°	9.5	13.5	14.2
72.5°	8.8	12.8	13.5
75°	8.1	11.5	12.2
77.5°	6.8	10.1	11.5
80°	6.1	8.8	9.5
82.5°	4.7	7.4	8.1
85°	3.4	5.4	5.4
87.5°	1.4	2.7	2.7
90°	0.0	0.0	0.0

(END OF REPORT)