

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: P1344553

Luminaire Tested: P3A13R259827DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344553
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: P3A13R259827DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 2700K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

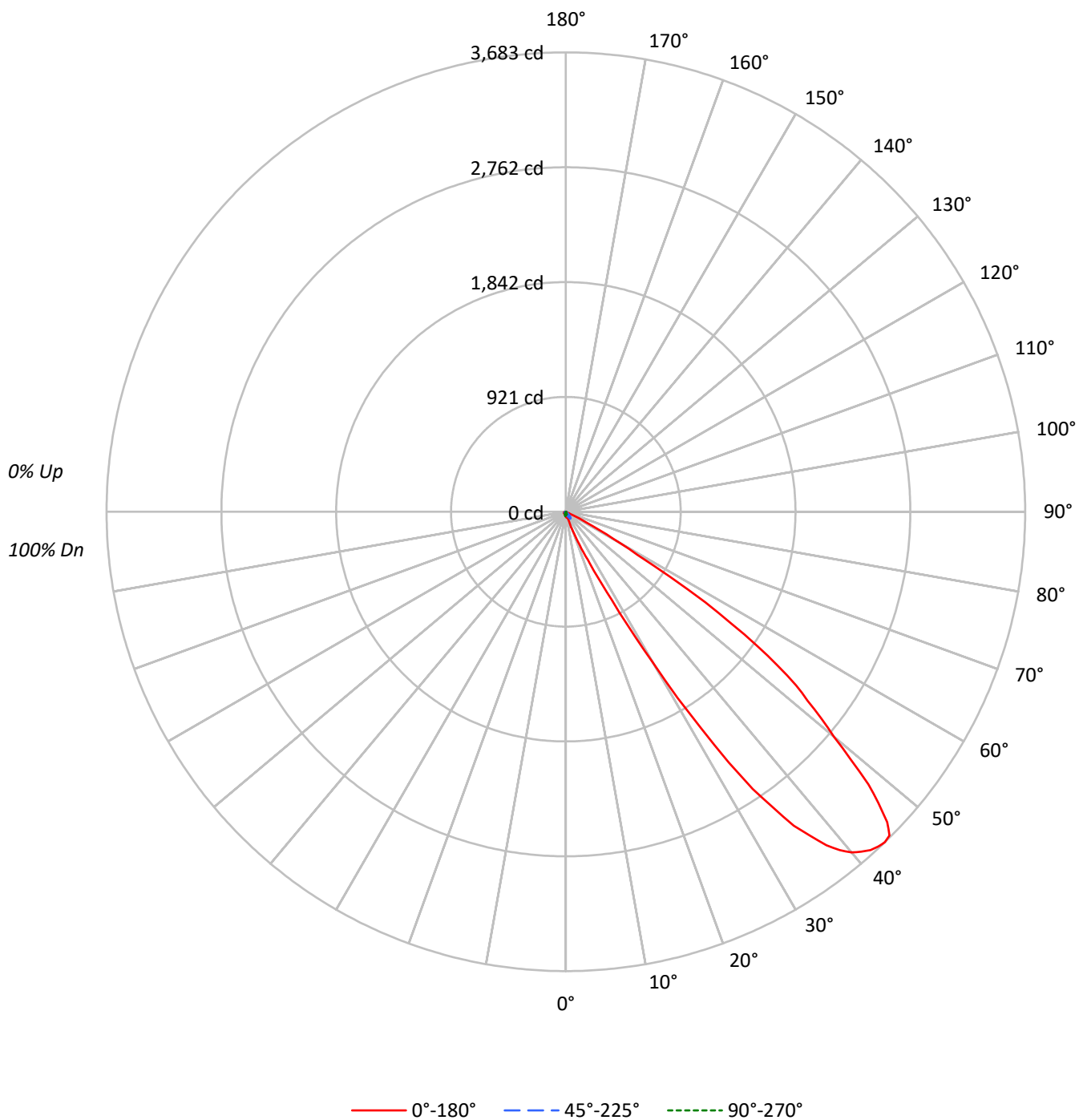
Lumens per Lamp: N/A
Luminaire Lumens: 768.0 lumens
Efficiency: N/A
Efficacy: 53.0 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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			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°	8596	8596	8596	8596	8596
5°	9817	9377	8320	7440	7286
10°	9775	8884	7081	6168	6168
15°	10897	7673	5516	5221	5516
20°	38480	7561	4247	4410	4900
25°	110692	9654	3436	4089	4742
30°	353194	14888	2735	3925	4786
35°	773577	17561	2356	3801	4872
40°	1020483	15858	1947	3864	5210
45°	1138010	11102	1892	4186	5644
50°	957922	5765	1842	4367	6209
55°	716209	2332	1797	4893	6958
60°	221693	614	1798	5350	7719
65°	18938	0	2127	5604	8406
70°	1282	449	2180	6475	9553
75°	1186	593	2881	6863	10845
80°	884	884	4293	7703	12754
85°	1761	1761	6793	8554	13586

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1138010 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.5	0.5
10°-20°	9.1	1.2
20°-30°	42.5	5.5
30°-40°	204.6	26.6
40°-50°	320.7	41.8
50°-60°	164.4	21.4
60°-70°	15.5	2.0
70°-80°	5.2	0.7
80°-90°	2.6	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°	55.1	7.2
0°-40°	259.6	33.8
0°-60°	744.7	97.0
0°-90°	768.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	768.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	39	39	39	39	39	
5°	45	43	38	34	33	4
15°	48	34	24	23	24	20
25°	458	40	14	17	20	284
35°	2890	66	9	14	18	1754
45°	3670	36	6	14	18	2685
55°	1873	6	5	13	18	1560
65°	36	0	4	11	16	114
75°	1	1	3	8	13	2
85°	1	1	3	3	5	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°	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2
2.5°	42.6	42.6	42.6	42.6	42.6	42.6	41.9	41.9	42.6	41.9	41.9
5°	44.6	44.6	44.6	44.6	44.6	44.6	44.6	43.9	43.9	43.9	42.6
7.5°	45.3	44.6	44.6	44.6	44.6	44.6	44.6	44.6	43.9	43.9	41.9
10°	43.9	43.9	43.9	43.9	43.3	43.3	43.3	42.6	42.6	42.6	39.9
12.5°	43.9	43.9	43.9	43.9	43.3	43.3	42.6	42.6	41.9	41.2	36.5
15°	48.0	48.0	48.0	47.3	46.6	46.0	45.3	44.6	43.9	42.6	33.8
17.5°	70.3	68.3	67.6	64.9	61.5	58.1	55.4	52.7	50.0	48.0	32.4
20°	164.9	164.2	160.8	152.7	144.0	133.8	123.7	112.2	96.0	85.2	32.4
22.5°	285.9	281.8	275.7	269.7	254.1	235.9	216.9	195.3	174.4	152.1	34.5
25°	457.5	467.0	446.7	430.5	403.5	370.4	334.5	304.8	266.9	231.8	39.9
27.5°	795.4	801.5	761.7	708.9	646.1	576.5	508.9	458.2	394.7	336.6	50.0
30°	1394.9	1401.0	1334.1	1221.9	1092.1	977.9	823.2	687.3	562.3	465.6	58.8
31°	1740.9	1693.6	1615.9	1507.1	1342.9	1170.5	984.7	820.4	662.3	535.3	61.5
32°	2041.7	2037.6	1947.0	1782.1	1617.2	1404.4	1173.9	959.7	765.7	605.5	63.5
33°	2396.5	2369.4	2241.7	2086.3	1868.0	1653.7	1356.4	1111.7	871.8	683.9	64.9
34°	2681.0	2608.0	2555.3	2377.5	2147.1	1874.1	1555.7	1272.6	1004.3	759.6	65.6
35°	2889.8	2874.3	2771.5	2606.0	2371.5	2092.3	1770.7	1439.5	1115.1	847.5	65.6
36°	3110.8	3062.8	2962.8	2812.8	2584.3	2295.8	1934.9	1584.1	1244.2	926.6	64.9
37°	3249.4	3221.0	3121.6	2966.9	2743.2	2467.4	2118.7	1736.9	1346.9	1005.6	63.5
38°	3392.0	3334.5	3236.5	3088.5	2868.9	2610.0	2251.8	1854.5	1441.5	1075.2	61.5
39°	3490.6	3431.1	3331.1	3183.8	2968.9	2712.1	2357.3	1954.5	1524.0	1127.3	58.8
40°	3565.0	3507.5	3406.1	3254.8	3042.6	2792.5	2445.1	2043.0	1592.9	1172.6	55.4
41°	3610.9	3557.5	3456.8	3306.1	3093.2	2838.5	2502.6	2100.5	1639.5	1203.0	52.0
42°	3649.4	3594.7	3492.0	3337.9	3124.3	2877.6	2537.7	2136.9	1671.3	1218.5	49.3
43°	3671.1	3616.3	3516.3	3358.8	3143.2	2895.9	2556.6	2153.8	1682.1	1216.5	44.6
44°	3683.2	3626.5	3525.8	3368.3	3151.4	2900.6	2558.0	2150.5	1674.7	1200.3	40.5
45°	3669.7	3613.6	3516.3	3358.8	3137.2	2885.8	2544.5	2132.2	1646.3	1168.5	35.8
46°	3581.9	3538.6	3449.4	3304.8	3092.6	2847.9	2510.0	2097.1	1602.4	1129.3	30.4
47°	3427.1	3392.6	3306.1	3198.7	3006.7	2778.3	2446.5	2030.2	1540.9	1070.5	24.3
48°	3265.6	3214.9	3134.5	3024.3	2862.1	2653.3	2341.7	1932.2	1447.6	993.5	21.6
49°	3027.0	2997.3	2926.3	2803.3	2668.8	2485.0	2193.7	1806.5	1333.4	909.7	18.9
50°	2808.0	2787.8	2688.4	2597.9	2455.3	2283.6	1993.0	1640.9	1191.5	805.6	16.9
51°	2637.1	2612.7	2541.1	2428.2	2276.2	2076.8	1803.1	1426.0	1028.6	681.9	13.5
52°	2458.6	2445.1	2381.6	2265.4	2116.0	1917.3	1618.6	1243.5	870.5	576.5	10.8
53°	2312.7	2293.1	2215.3	2111.9	1950.4	1745.0	1418.6	1073.9	737.3	484.6	9.5
54°	2099.8	2091.7	2041.7	1933.5	1758.5	1534.8	1237.4	904.2	615.0	410.9	8.1
55°	1873.4	1846.3	1795.7	1709.8	1549.0	1340.2	1027.9	749.5	497.4	346.0	6.1
56°	1597.6	1596.3	1505.7	1434.1	1291.5	1069.8	821.1	585.3	404.1	288.6	5.4
57°	1334.1	1291.5	1204.3	1133.4	979.9	811.7	609.6	438.6	316.3	233.8	4.1
58°	986.7	964.4	941.4	837.3	695.4	575.1	435.2	308.2	233.8	178.4	2.7
59°	669.7	669.1	642.0	563.0	481.2	358.2	271.7	209.5	160.8	131.1	2.0
60°	505.5	493.4	439.3	387.2	302.8	226.4	160.8	123.7	100.0	84.5	1.4
62.5°	177.1	183.8	161.5	133.8	102.0	83.8	64.2	52.0	42.6	34.5	0.0
65°	36.5	39.9	34.5	32.4	25.7	22.3	19.6	16.9	14.2	12.2	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°	4.7	4.1	4.1	4.1	3.4	3.4	3.4	3.4	2.7	2.7	0.7
70°	2.0	2.0	2.0	2.0	2.0	2.0	1.4	1.4	1.4	1.4	0.7
72.5°	2.0	2.0	2.0	1.4	1.4	1.4	1.4	1.4	1.4	0.7	0.7
75°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7
77.5°	1.4	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.4
85°	0.7	0.7	0.7	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
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°	39.2	39.2	39.2	39.2	39.2	39.2
2.5°	41.2	39.9	37.8	37.2	36.5	36.5
5°	40.5	37.8	35.8	33.8	33.1	33.1
7.5°	38.5	35.1	32.4	31.1	30.4	29.7
10°	36.5	31.8	29.1	27.7	27.7	27.7
12.5°	32.4	28.4	25.7	25.0	25.7	25.7
15°	29.1	24.3	23.0	23.0	23.7	24.3
17.5°	25.0	21.6	20.3	21.0	21.6	22.3
20°	22.3	18.2	18.2	18.9	21.0	21.0
22.5°	19.6	16.2	16.2	18.2	19.6	20.3
25°	17.6	14.2	14.9	16.9	18.9	19.6
27.5°	14.9	12.2	13.5	16.2	18.2	18.9
30°	12.8	10.8	12.8	15.5	17.6	18.9
31°	12.2	10.1	12.8	14.9	17.6	18.9
32°	10.8	10.1	12.2	14.9	17.6	18.2
33°	10.1	9.5	12.2	14.9	17.6	18.2
34°	9.5	8.8	11.5	14.9	17.6	18.2
35°	8.1	8.8	11.5	14.2	16.9	18.2
36°	7.4	8.1	11.5	14.2	16.9	18.2
37°	6.8	8.1	10.8	14.2	16.9	18.2
38°	6.1	7.4	10.8	14.2	16.9	18.2
39°	5.4	7.4	10.1	14.2	16.9	18.2
40°	4.7	6.8	10.1	13.5	16.9	18.2
41°	4.7	6.8	10.1	13.5	16.9	18.2
42°	4.1	6.8	10.1	13.5	16.9	18.2
43°	3.4	6.1	10.1	13.5	16.9	18.2
44°	2.7	6.1	9.5	13.5	16.9	18.2
45°	2.7	6.1	9.5	13.5	16.9	18.2
46°	2.0	5.4	9.5	13.5	16.9	18.2
47°	1.4	5.4	9.5	12.8	16.9	18.2
48°	1.4	5.4	9.5	12.8	16.9	18.2
49°	1.4	5.4	8.8	12.8	16.9	18.2
50°	1.4	5.4	8.8	12.8	16.9	18.2
51°	0.7	4.7	8.8	12.8	16.9	18.2
52°	0.7	4.7	8.8	12.8	16.9	18.9
53°	0.7	4.7	8.8	12.8	16.9	18.2
54°	0.7	4.7	8.1	12.8	16.9	18.2
55°	0.7	4.7	8.1	12.8	16.9	18.2
56°	0.7	4.1	8.1	12.2	16.9	18.2
57°	1.4	4.1	8.1	12.2	16.9	17.6
58°	1.4	4.1	8.1	12.2	16.2	17.6
59°	1.4	4.1	8.1	12.2	16.2	17.6
60°	1.4	4.1	7.4	12.2	16.2	17.6
62.5°	1.4	4.1	7.4	11.5	15.5	16.9
65°	1.4	4.1	6.8	10.8	15.5	16.2



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.4	3.4	6.8	10.1	14.9	15.5
70°	2.0	3.4	6.1	10.1	14.2	14.9
72.5°	2.0	3.4	6.1	8.8	12.8	14.2
75°	2.0	3.4	5.4	8.1	12.2	12.8
77.5°	2.0	3.4	4.7	7.4	10.8	11.5
80°	2.7	3.4	4.1	6.1	9.5	10.1
82.5°	2.7	3.4	3.4	4.7	7.4	8.1
85°	2.0	2.7	2.7	3.4	4.7	5.4
87.5°	2.0	2.7	2.0	1.4	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)