

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: P1344445

Luminaire Tested: P3A13R259035DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344445
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: P3A13R259035DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 3500K CCT AND, 90CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

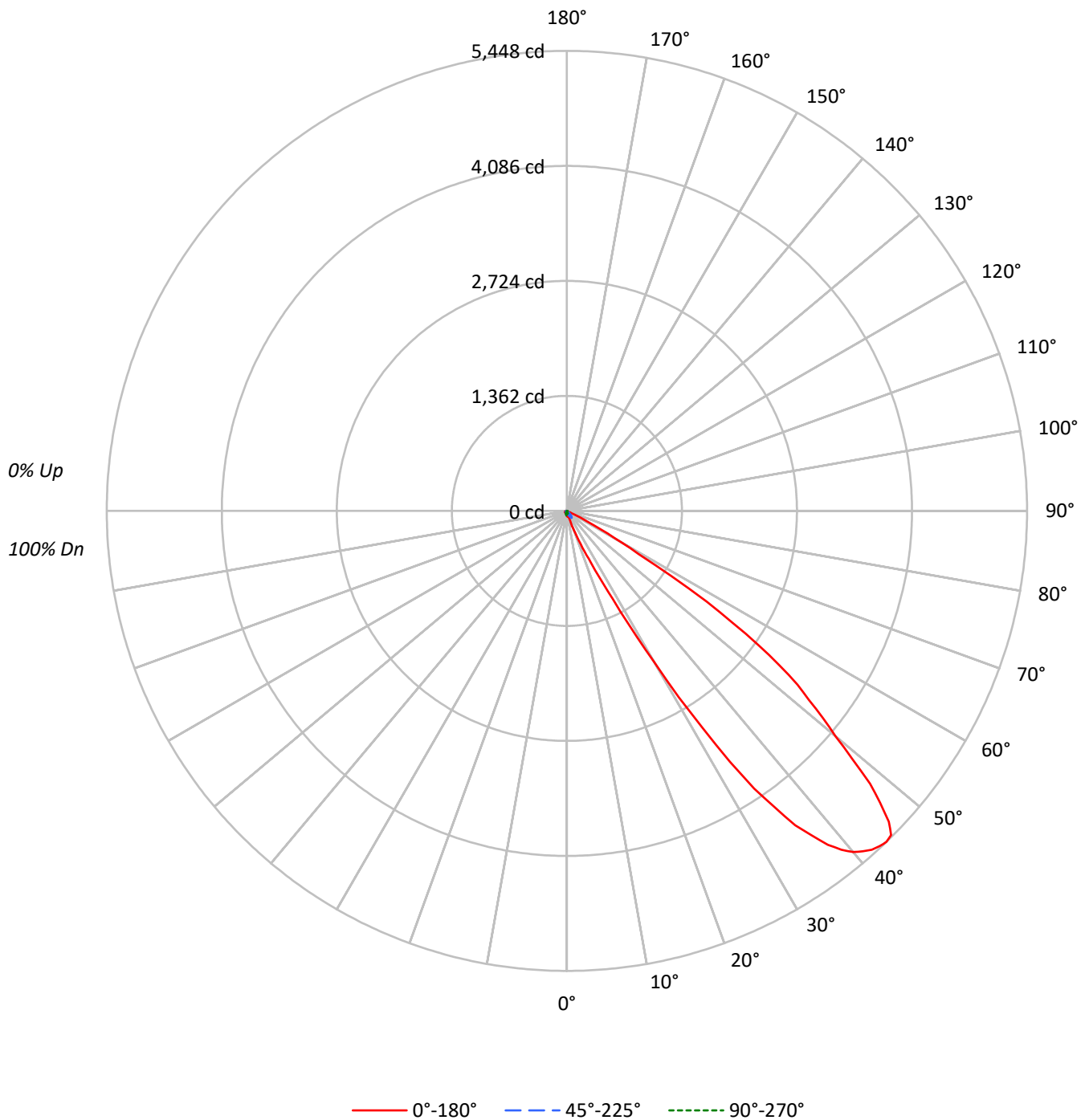
Lumens per Lamp: N/A
Luminaire Lumens: 1136.0 lumens
Efficiency: N/A
Efficacy: 77.8 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.6
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	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°	12718	12718	12718	12718	12718
5°	14528	13867	12327	11006	10786
10°	14473	13137	10465	9129	9129
15°	16118	11351	8173	7719	8173
20°	56915	11201	6301	6534	7234
25°	163751	14275	5081	6049	7017
30°	522435	22029	4051	5824	7090
35°	1144251	25966	3480	5622	7228
40°	1509457	23473	2863	5725	7729
45°	1683307	16436	2791	6202	8373
50°	1416960	8529	2729	6482	9211
55°	1059365	3441	2676	7264	10322
60°	327912	877	2631	7894	11403
65°	28019	0	3113	8302	12453
70°	1923	641	3206	9617	14105
75°	1694	847	4236	10167	16097
80°	1263	1263	6314	11365	18942
85°	2516	2516	10064	12580	20128

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1683307 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.2	0.5
10°-20°	13.4	1.2
20°-30°	62.8	5.5
30°-40°	302.6	26.6
40°-50°	474.3	41.8
50°-60°	243.2	21.4
60°-70°	22.9	2.0
70°-80°	7.7	0.7
80°-90°	3.9	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°	81.4	7.2
0°-40°	384.0	33.8
0°-60°	1101.5	97.0
0°-90°	1136.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1136.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	58	58	58	58	58	
5°	66	63	56	50	49	6
15°	71	50	36	34	36	30
25°	677	59	21	25	29	420
35°	4274	97	13	21	27	2595
45°	5428	53	9	20	27	3972
55°	2771	9	7	19	27	2307
65°	54	0	6	16	24	169
75°	2	1	5	12	19	2
85°	1	1	4	5	8	1
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°	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0
2.5°	63.0	63.0	63.0	63.0	63.0	63.0	62.0	62.0	63.0	62.0	62.0
5°	66.0	66.0	66.0	66.0	66.0	66.0	66.0	65.0	65.0	65.0	63.0
7.5°	67.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	65.0	65.0	62.0
10°	65.0	65.0	65.0	65.0	64.0	64.0	64.0	63.0	63.0	63.0	59.0
12.5°	65.0	65.0	65.0	65.0	64.0	64.0	63.0	63.0	62.0	61.0	54.0
15°	71.0	71.0	71.0	70.0	69.0	68.0	67.0	66.0	65.0	63.0	50.0
17.5°	104.0	101.0	100.0	96.0	91.0	86.0	82.0	78.0	74.0	71.0	48.0
20°	243.9	242.9	237.9	225.9	212.9	197.9	182.9	165.9	142.0	126.0	48.0
22.5°	422.9	416.9	407.9	398.9	375.9	348.9	320.9	288.9	257.9	224.9	51.0
25°	676.8	690.8	660.8	636.8	596.8	547.8	494.8	450.8	394.9	342.9	59.0
27.5°	1176.6	1185.6	1126.6	1048.6	955.7	852.7	752.7	677.8	583.8	497.8	74.0
30°	2063.3	2072.3	1973.3	1807.4	1615.4	1446.5	1217.6	1016.6	831.7	688.8	87.0
31°	2575.1	2505.1	2390.2	2229.2	1986.3	1731.4	1456.5	1213.6	979.7	791.7	91.0
32°	3020.0	3014.0	2880.0	2636.1	2392.2	2077.3	1736.4	1419.5	1132.6	895.7	94.0
33°	3544.8	3504.8	3315.8	3085.9	2763.0	2446.2	2006.3	1644.4	1289.6	1011.6	96.0
34°	3965.6	3857.7	3779.7	3516.8	3175.9	2772.0	2301.2	1882.3	1485.5	1123.6	97.0
35°	4274.5	4251.5	4099.6	3854.7	3507.8	3094.9	2619.1	2129.3	1649.4	1253.6	97.0
36°	4601.4	4530.4	4382.5	4160.6	3822.7	3395.8	2862.0	2343.2	1840.4	1370.5	96.0
37°	4806.3	4764.3	4617.4	4388.5	4057.6	3649.7	3133.9	2569.1	1992.3	1487.5	94.0
38°	5017.3	4932.3	4787.3	4568.4	4243.5	3860.7	3330.8	2743.0	2132.3	1590.4	91.0
39°	5163.2	5075.2	4927.3	4709.4	4391.5	4011.6	3486.8	2891.0	2254.2	1667.4	87.0
40°	5273.2	5188.2	5038.3	4814.3	4500.4	4130.6	3616.7	3022.0	2356.2	1734.4	82.0
41°	5341.1	5262.2	5113.2	4890.3	4575.4	4198.5	3701.7	3106.9	2425.2	1779.4	77.0
42°	5398.1	5317.2	5165.2	4937.3	4621.4	4256.5	3753.7	3160.9	2472.1	1802.4	73.0
43°	5430.1	5349.1	5201.2	4968.3	4649.4	4283.5	3781.7	3185.9	2488.1	1799.4	66.0
44°	5448.1	5364.1	5215.2	4982.3	4661.4	4290.5	3783.7	3180.9	2477.1	1775.4	60.0
45°	5428.1	5345.1	5201.2	4968.3	4640.4	4268.5	3763.7	3153.9	2435.2	1728.4	53.0
46°	5298.2	5234.2	5102.2	4888.3	4574.4	4212.5	3712.7	3101.9	2370.2	1670.4	45.0
47°	5069.2	5018.3	4890.3	4731.4	4447.5	4109.6	3618.7	3003.0	2279.2	1583.5	36.0
48°	4830.3	4755.4	4636.4	4473.4	4233.5	3924.6	3463.8	2858.0	2141.3	1469.5	32.0
49°	4477.4	4433.5	4328.5	4146.6	3947.6	3675.7	3244.9	2672.1	1972.3	1345.5	28.0
50°	4153.6	4123.6	3976.6	3842.7	3631.7	3377.8	2948.0	2427.2	1762.4	1191.6	25.0
51°	3900.6	3864.7	3758.7	3591.8	3366.8	3071.9	2667.1	2109.3	1521.5	1008.7	20.0
52°	3636.7	3616.7	3522.8	3350.8	3129.9	2836.0	2394.2	1839.4	1287.6	852.7	16.0
53°	3420.8	3391.8	3276.9	3123.9	2885.0	2581.1	2098.3	1588.4	1090.6	716.8	14.0
54°	3105.9	3093.9	3020.0	2860.0	2601.1	2270.2	1830.4	1337.5	909.7	607.8	12.0
55°	2771.0	2731.1	2656.1	2529.1	2291.2	1982.3	1520.5	1108.6	735.7	511.8	9.0
56°	2363.2	2361.2	2227.2	2121.3	1910.3	1582.5	1214.6	865.7	597.8	426.9	8.0
57°	1973.3	1910.3	1781.4	1676.4	1449.5	1200.6	901.7	648.8	467.8	345.9	6.0
58°	1459.5	1426.5	1392.5	1238.6	1028.6	850.7	643.8	455.8	345.9	263.9	4.0
59°	990.7	989.7	949.7	832.7	711.8	529.8	401.9	309.9	237.9	193.9	3.0
60°	747.7	729.7	649.8	572.8	447.8	334.9	237.9	182.9	147.9	125.0	2.0
62.5°	261.9	271.9	238.9	197.9	150.9	124.0	95.0	77.0	63.0	51.0	0.0
65°	54.0	59.0	51.0	48.0	38.0	33.0	29.0	25.0	21.0	18.0	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°	7.0	6.0	6.0	6.0	5.0	5.0	5.0	5.0	4.0	4.0	1.0
70°	3.0	3.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0	1.0
72.5°	3.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0
75°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0
77.5°	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
85°	1.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	58.0	58.0	58.0	58.0	58.0	58.0
2.5°	61.0	59.0	56.0	55.0	54.0	54.0
5°	60.0	56.0	53.0	50.0	49.0	49.0
7.5°	57.0	52.0	48.0	46.0	45.0	44.0
10°	54.0	47.0	43.0	41.0	41.0	41.0
12.5°	48.0	42.0	38.0	37.0	38.0	38.0
15°	43.0	36.0	34.0	34.0	35.0	36.0
17.5°	37.0	32.0	30.0	31.0	32.0	33.0
20°	33.0	27.0	27.0	28.0	31.0	31.0
22.5°	29.0	24.0	24.0	27.0	29.0	30.0
25°	26.0	21.0	22.0	25.0	28.0	29.0
27.5°	22.0	18.0	20.0	24.0	27.0	28.0
30°	19.0	16.0	19.0	23.0	26.0	28.0
31°	18.0	15.0	19.0	22.0	26.0	28.0
32°	16.0	15.0	18.0	22.0	26.0	27.0
33°	15.0	14.0	18.0	22.0	26.0	27.0
34°	14.0	13.0	17.0	22.0	26.0	27.0
35°	12.0	13.0	17.0	21.0	25.0	27.0
36°	11.0	12.0	17.0	21.0	25.0	27.0
37°	10.0	12.0	16.0	21.0	25.0	27.0
38°	9.0	11.0	16.0	21.0	25.0	27.0
39°	8.0	11.0	15.0	21.0	25.0	27.0
40°	7.0	10.0	15.0	20.0	25.0	27.0
41°	7.0	10.0	15.0	20.0	25.0	27.0
42°	6.0	10.0	15.0	20.0	25.0	27.0
43°	5.0	9.0	15.0	20.0	25.0	27.0
44°	4.0	9.0	14.0	20.0	25.0	27.0
45°	4.0	9.0	14.0	20.0	25.0	27.0
46°	3.0	8.0	14.0	20.0	25.0	27.0
47°	2.0	8.0	14.0	19.0	25.0	27.0
48°	2.0	8.0	14.0	19.0	25.0	27.0
49°	2.0	8.0	13.0	19.0	25.0	27.0
50°	2.0	8.0	13.0	19.0	25.0	27.0
51°	1.0	7.0	13.0	19.0	25.0	27.0
52°	1.0	7.0	13.0	19.0	25.0	28.0
53°	1.0	7.0	13.0	19.0	25.0	27.0
54°	1.0	7.0	12.0	19.0	25.0	27.0
55°	1.0	7.0	12.0	19.0	25.0	27.0
56°	1.0	6.0	12.0	18.0	25.0	27.0
57°	2.0	6.0	12.0	18.0	25.0	26.0
58°	2.0	6.0	12.0	18.0	24.0	26.0
59°	2.0	6.0	12.0	18.0	24.0	26.0
60°	2.0	6.0	11.0	18.0	24.0	26.0
62.5°	2.0	6.0	11.0	17.0	23.0	25.0
65°	2.0	6.0	10.0	16.0	23.0	24.0



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.0	5.0	10.0	15.0	22.0	23.0
70°	3.0	5.0	9.0	15.0	21.0	22.0
72.5°	3.0	5.0	9.0	13.0	19.0	21.0
75°	3.0	5.0	8.0	12.0	18.0	19.0
77.5°	3.0	5.0	7.0	11.0	16.0	17.0
80°	4.0	5.0	6.0	9.0	14.0	15.0
82.5°	4.0	5.0	5.0	7.0	11.0	12.0
85°	3.0	4.0	4.0	5.0	7.0	8.0
87.5°	3.0	4.0	3.0	2.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)