

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: P1344489

Luminaire Tested: P3A13R259727DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344489
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: P3A13R259727DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 2700K CCT AND, 97CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

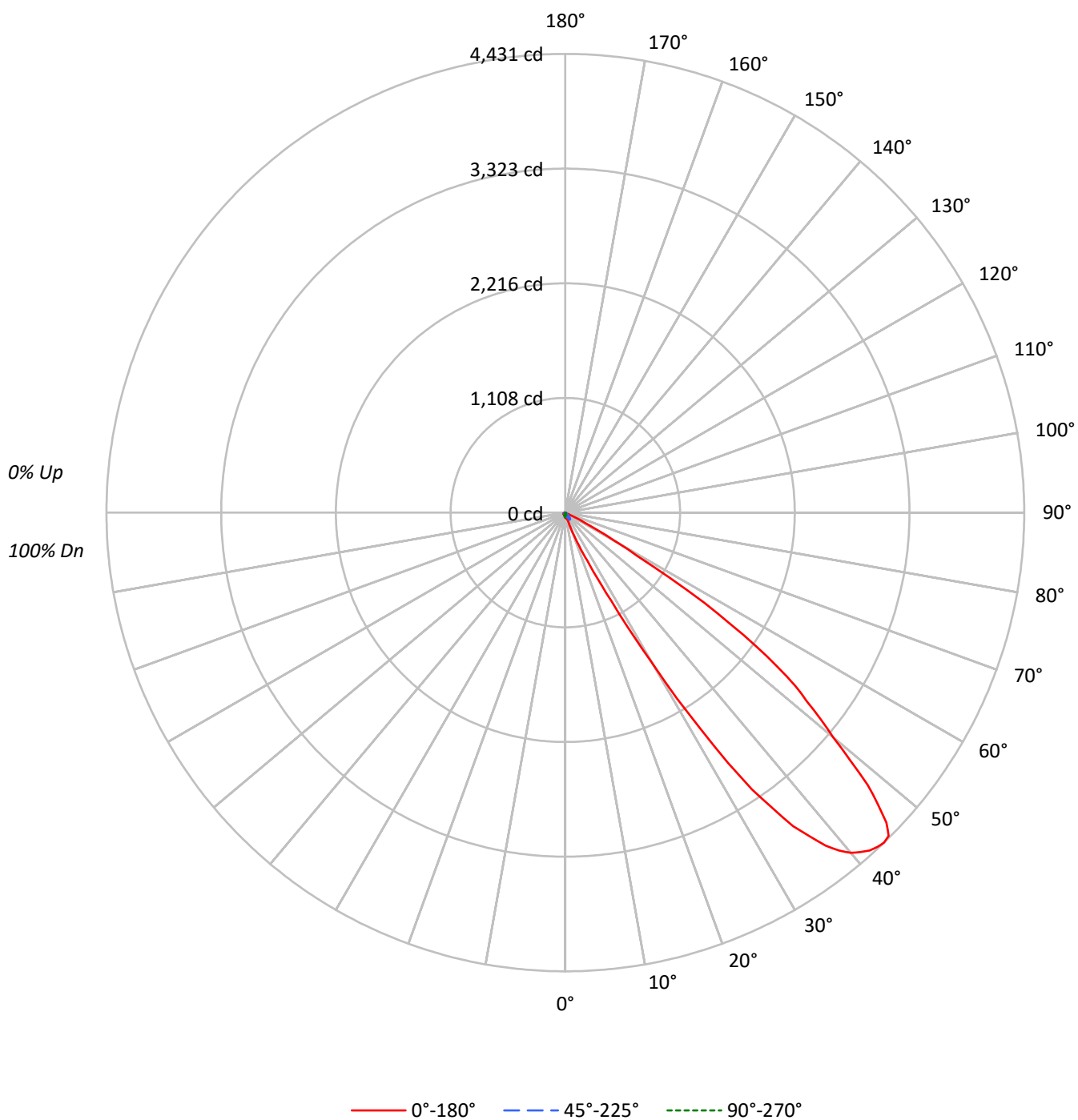
Lumens per Lamp: N/A
Luminaire Lumens: 924.0 lumens
Efficiency: N/A
Efficacy: 63.3 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	0
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°	10350	10350	10350	10350	10350
5°	11820	11270	10015	8959	8761
10°	11779	10688	8506	7415	7415
15°	13099	9240	6652	6266	6652
20°	46297	9101	5134	5320	5881
25°	133193	11614	4137	4912	5710
30°	424926	17901	3292	4735	5773
35°	930713	21121	2838	4578	5889
40°	1227757	19093	2319	4666	6298
45°	1369165	13366	2264	5055	6822
50°	1152508	6925	2217	5254	7505
55°	861675	2791	2179	5887	8411
60°	266733	702	2149	6403	9254
65°	22778	0	2542	6745	10118
70°	1539	513	2629	7822	11476
75°	1356	678	3474	8303	13047
80°	1010	1010	5177	9218	15406
85°	2013	2013	8303	10315	16354

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1369165 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.2	0.5
10°-20°	10.9	1.2
20°-30°	51.1	5.5
30°-40°	246.1	26.6
40°-50°	385.8	41.8
50°-60°	197.8	21.4
60°-70°	18.6	2.0
70°-80°	6.3	0.7
80°-90°	3.2	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°	66.2	7.2
0°-40°	312.4	33.8
0°-60°	895.9	97.0
0°-90°	924.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	924.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	47	47	47	47	47	
5°	54	51	46	41	40	5
15°	58	41	29	28	29	24
25°	550	48	17	20	24	341
35°	3477	79	11	17	22	2111
45°	4415	43	7	16	22	3231
55°	2254	7	6	15	22	1876
65°	44	0	5	13	20	138
75°	2	1	4	10	15	2
85°	1	1	3	4	6	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°	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
2.5°	51.2	51.2	51.2	51.2	51.2	51.2	50.4	50.4	51.2	50.4	50.4
5°	53.7	53.7	53.7	53.7	53.7	53.7	53.7	52.9	52.9	52.9	51.2
7.5°	54.5	53.7	53.7	53.7	53.7	53.7	53.7	53.7	52.9	52.9	50.4
10°	52.9	52.9	52.9	52.9	52.0	52.0	52.0	51.2	51.2	51.2	48.0
12.5°	52.9	52.9	52.9	52.9	52.0	52.0	51.2	51.2	50.4	49.6	43.9
15°	57.7	57.7	57.7	56.9	56.1	55.3	54.5	53.7	52.9	51.2	40.7
17.5°	84.6	82.1	81.3	78.1	74.0	69.9	66.7	63.4	60.2	57.7	39.0
20°	198.4	197.6	193.5	183.8	173.2	161.0	148.8	135.0	115.5	102.5	39.0
22.5°	343.9	339.1	331.7	324.4	305.7	283.8	261.0	235.0	209.8	182.9	41.5
25°	550.5	561.9	537.5	517.9	485.4	445.6	402.5	366.7	321.2	278.9	48.0
27.5°	957.0	964.3	916.4	852.9	777.3	693.6	612.3	551.3	474.8	404.9	60.2
30°	1678.2	1685.6	1605.1	1470.1	1314.0	1176.6	990.4	826.9	676.5	560.2	70.7
31°	2094.5	2037.6	1944.1	1813.2	1615.6	1408.3	1184.7	987.1	796.8	644.0	74.0
32°	2456.4	2451.5	2342.5	2144.1	1945.7	1689.6	1412.4	1154.6	921.2	728.5	76.4
33°	2883.2	2850.7	2697.0	2510.0	2247.4	1989.7	1631.9	1337.5	1048.9	822.9	78.1
34°	3225.6	3137.7	3074.3	2860.5	2583.2	2254.7	1871.8	1531.1	1208.3	913.9	78.9
35°	3476.8	3458.1	3334.5	3135.3	2853.2	2517.4	2130.3	1731.9	1341.6	1019.6	78.9
36°	3742.7	3685.0	3564.6	3384.1	3109.3	2762.1	2327.9	1905.9	1496.9	1114.8	78.1
37°	3909.4	3875.2	3755.7	3569.5	3300.4	2968.6	2549.1	2089.7	1620.5	1209.9	76.4
38°	4080.9	4011.8	3893.9	3715.9	3451.6	3140.2	2709.2	2231.1	1734.3	1293.6	74.0
39°	4199.7	4128.1	4007.8	3830.5	3571.9	3263.0	2836.1	2351.5	1833.5	1356.2	70.7
40°	4289.1	4220.0	4098.0	3915.9	3660.6	3359.7	2941.8	2458.0	1916.5	1410.7	66.7
41°	4344.4	4280.1	4159.0	3977.7	3721.6	3415.0	3010.9	2527.1	1972.6	1447.3	62.6
42°	4390.7	4324.9	4201.3	4015.9	3759.0	3462.2	3053.2	2571.0	2010.8	1466.0	59.4
43°	4416.7	4350.9	4230.6	4041.1	3781.7	3484.1	3076.0	2591.3	2023.8	1463.6	53.7
44°	4431.4	4363.1	4241.9	4052.5	3791.5	3489.8	3077.6	2587.3	2014.9	1444.1	48.8
45°	4415.1	4347.6	4230.6	4041.1	3774.4	3471.9	3061.3	2565.3	1980.7	1405.8	43.1
46°	4309.4	4257.4	4150.1	3976.1	3720.7	3426.4	3019.8	2523.0	1927.9	1358.7	36.6
47°	4123.2	4081.8	3977.7	3848.4	3617.5	3342.6	2943.4	2442.5	1853.9	1287.9	29.3
48°	3928.9	3867.9	3771.1	3638.6	3443.5	3192.2	2817.4	2324.6	1741.7	1195.3	26.0
49°	3641.9	3606.1	3520.7	3372.7	3210.9	2989.8	2639.3	2173.4	1604.2	1094.4	22.8
50°	3378.4	3354.0	3234.5	3125.5	2954.0	2747.5	2397.8	1974.2	1433.5	969.2	20.3
51°	3172.7	3143.4	3057.2	2921.5	2738.5	2498.7	2169.3	1715.6	1237.5	820.4	16.3
52°	2958.1	2941.8	2865.4	2725.5	2545.8	2306.8	1947.4	1496.1	1047.3	693.6	13.0
53°	2782.4	2758.8	2665.3	2540.9	2346.6	2099.4	1706.7	1292.0	887.1	583.0	11.4
54°	2526.3	2516.5	2456.4	2326.3	2115.7	1846.5	1488.8	1087.9	739.9	494.4	9.8
55°	2253.9	2221.4	2160.4	2057.1	1863.6	1612.4	1236.7	901.7	598.4	416.3	7.3
56°	1922.2	1920.5	1811.6	1725.4	1553.8	1287.1	987.9	704.1	486.2	347.2	6.5
57°	1605.1	1553.8	1448.9	1363.6	1179.0	976.5	733.4	527.7	380.5	281.3	4.9
58°	1187.1	1160.3	1132.6	1007.4	836.7	691.9	523.6	370.8	281.3	214.7	3.3
59°	805.8	805.0	772.4	677.3	578.9	430.9	326.9	252.1	193.5	157.7	2.4
60°	608.2	593.6	528.5	465.9	364.3	272.4	193.5	148.8	120.3	101.6	1.6
62.5°	213.0	221.2	194.3	161.0	122.8	100.8	77.2	62.6	51.2	41.5	0.0
65°	43.9	48.0	41.5	39.0	30.9	26.8	23.6	20.3	17.1	14.6	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°	5.7	4.9	4.9	4.9	4.1	4.1	4.1	4.1	3.3	3.3	0.8
70°	2.4	2.4	2.4	2.4	2.4	2.4	1.6	1.6	1.6	1.6	0.8
72.5°	2.4	2.4	2.4	1.6	1.6	1.6	1.6	1.6	1.6	0.8	0.8
75°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8
77.5°	1.6	1.6	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.8
80°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
82.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6
85°	0.8	0.8	0.8	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
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°	47.2	47.2	47.2	47.2	47.2	47.2
2.5°	49.6	48.0	45.5	44.7	43.9	43.9
5°	48.8	45.5	43.1	40.7	39.8	39.8
7.5°	46.3	42.3	39.0	37.4	36.6	35.8
10°	43.9	38.2	35.0	33.3	33.3	33.3
12.5°	39.0	34.2	30.9	30.1	30.9	30.9
15°	35.0	29.3	27.6	27.6	28.5	29.3
17.5°	30.1	26.0	24.4	25.2	26.0	26.8
20°	26.8	22.0	22.0	22.8	25.2	25.2
22.5°	23.6	19.5	19.5	22.0	23.6	24.4
25°	21.1	17.1	17.9	20.3	22.8	23.6
27.5°	17.9	14.6	16.3	19.5	22.0	22.8
30°	15.4	13.0	15.4	18.7	21.1	22.8
31°	14.6	12.2	15.4	17.9	21.1	22.8
32°	13.0	12.2	14.6	17.9	21.1	22.0
33°	12.2	11.4	14.6	17.9	21.1	22.0
34°	11.4	10.6	13.8	17.9	21.1	22.0
35°	9.8	10.6	13.8	17.1	20.3	22.0
36°	8.9	9.8	13.8	17.1	20.3	22.0
37°	8.1	9.8	13.0	17.1	20.3	22.0
38°	7.3	8.9	13.0	17.1	20.3	22.0
39°	6.5	8.9	12.2	17.1	20.3	22.0
40°	5.7	8.1	12.2	16.3	20.3	22.0
41°	5.7	8.1	12.2	16.3	20.3	22.0
42°	4.9	8.1	12.2	16.3	20.3	22.0
43°	4.1	7.3	12.2	16.3	20.3	22.0
44°	3.3	7.3	11.4	16.3	20.3	22.0
45°	3.3	7.3	11.4	16.3	20.3	22.0
46°	2.4	6.5	11.4	16.3	20.3	22.0
47°	1.6	6.5	11.4	15.4	20.3	22.0
48°	1.6	6.5	11.4	15.4	20.3	22.0
49°	1.6	6.5	10.6	15.4	20.3	22.0
50°	1.6	6.5	10.6	15.4	20.3	22.0
51°	0.8	5.7	10.6	15.4	20.3	22.0
52°	0.8	5.7	10.6	15.4	20.3	22.8
53°	0.8	5.7	10.6	15.4	20.3	22.0
54°	0.8	5.7	9.8	15.4	20.3	22.0
55°	0.8	5.7	9.8	15.4	20.3	22.0
56°	0.8	4.9	9.8	14.6	20.3	22.0
57°	1.6	4.9	9.8	14.6	20.3	21.1
58°	1.6	4.9	9.8	14.6	19.5	21.1
59°	1.6	4.9	9.8	14.6	19.5	21.1
60°	1.6	4.9	8.9	14.6	19.5	21.1
62.5°	1.6	4.9	8.9	13.8	18.7	20.3
65°	1.6	4.9	8.1	13.0	18.7	19.5



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.6	4.1	8.1	12.2	17.9	18.7
70°	2.4	4.1	7.3	12.2	17.1	17.9
72.5°	2.4	4.1	7.3	10.6	15.4	17.1
75°	2.4	4.1	6.5	9.8	14.6	15.4
77.5°	2.4	4.1	5.7	8.9	13.0	13.8
80°	3.3	4.1	4.9	7.3	11.4	12.2
82.5°	3.3	4.1	4.1	5.7	8.9	9.8
85°	2.4	3.3	3.3	4.1	5.7	6.5
87.5°	2.4	3.3	2.4	1.6	3.3	3.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)