

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: P1344400

Luminaire Tested: P3A13R259027DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344400
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: P3A13R259027DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R25 optic, 2700K CCT AND, 90CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

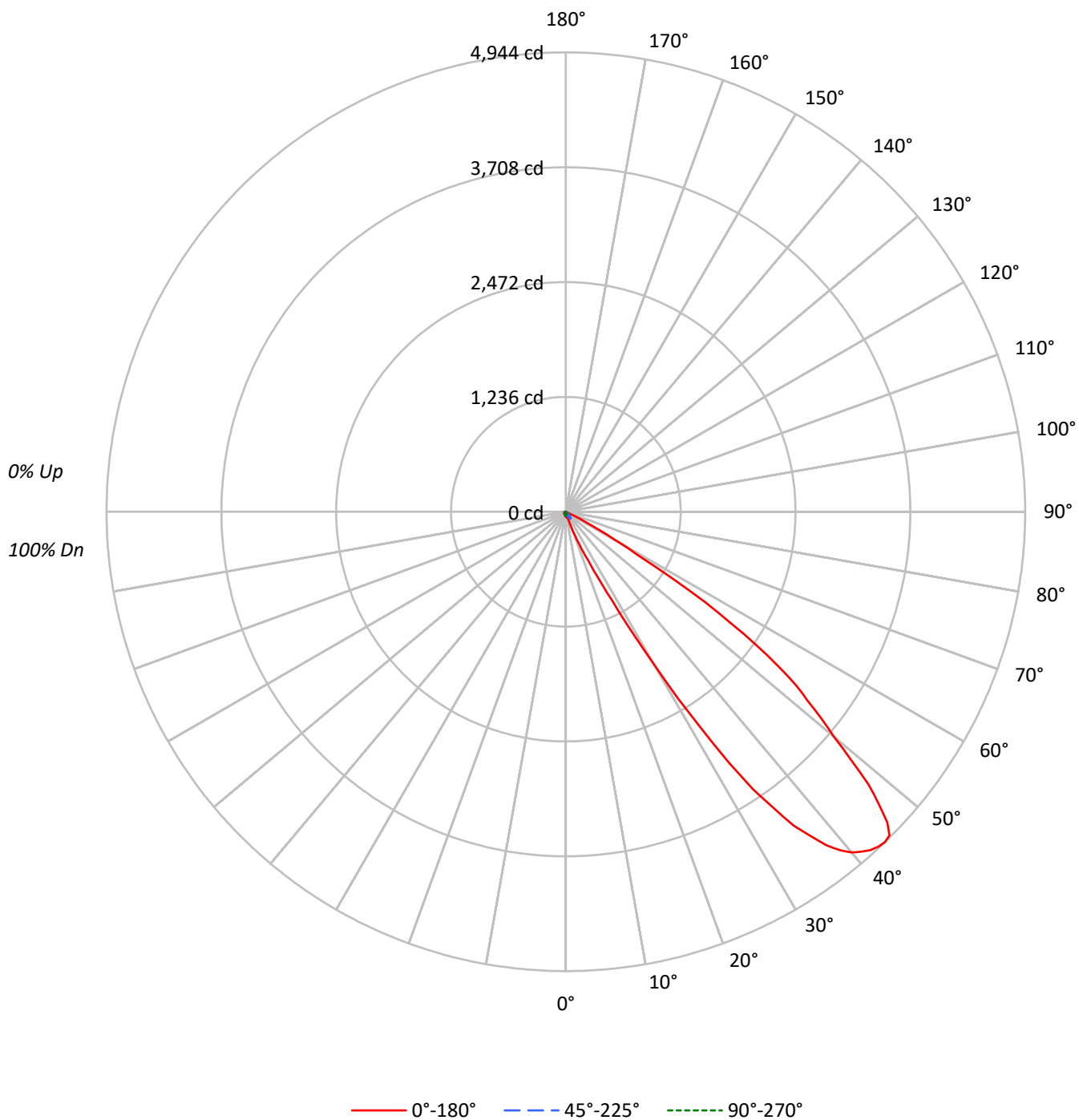
Lumens per Lamp: N/A
Luminaire Lumens: 1031.0 lumens
Efficiency: N/A
Efficacy: 70.6 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	11534	11534	11534	11534	11534
5°	13185	12591	11182	9993	9795
10°	13137	11912	9485	8283	8283
15°	14620	10307	7423	6992	7423
20°	51664	10151	5717	5927	6557
25°	148605	12944	4621	5492	6363
30°	474149	19978	3671	5292	6431
35°	1038485	23557	3159	5113	6558
40°	1369938	21297	2605	5181	7013
45°	1527724	14916	2543	5613	7598
50°	1285962	7744	2490	5868	8358
55°	961457	3135	2447	6576	9366
60°	297608	789	2368	7149	10350
65°	25424	0	2802	7524	11311
70°	1731	577	2885	8719	12823
75°	1525	763	3813	9235	14572
80°	1137	1137	5683	10355	17174
85°	2264	2264	9057	11322	18367

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1527724 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.7	0.5
10°-20°	12.2	1.2
20°-30°	57.0	5.5
30°-40°	274.6	26.6
40°-50°	430.5	41.8
50°-60°	220.7	21.4
60°-70°	20.8	2.0
70°-80°	7.0	0.7
80°-90°	3.5	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°	73.9	7.2
0°-40°	348.5	33.8
0°-60°	999.7	97.0
0°-90°	1031.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1031.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	53	53	53	53	53	
5°	60	57	51	45	44	6
15°	64	45	33	31	33	27
25°	614	54	19	23	26	381
35°	3879	88	12	19	24	2355
45°	4926	48	8	18	24	3605
55°	2515	8	6	17	24	2094
65°	49	0	5	14	22	153
75°	2	1	4	11	17	2
85°	1	1	4	4	7	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°	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6
2.5°	57.2	57.2	57.2	57.2	57.2	57.2	56.2	56.2	57.2	56.2	56.2
5°	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.0	59.0	59.0	57.2
7.5°	60.8	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.0	59.0	56.2
10°	59.0	59.0	59.0	59.0	58.1	58.1	58.1	57.2	57.2	57.2	53.5
12.5°	59.0	59.0	59.0	59.0	58.1	58.1	57.2	57.2	56.2	55.3	49.0
15°	64.4	64.4	64.4	63.5	62.6	61.7	60.8	59.9	59.0	57.2	45.4
17.5°	94.4	91.6	90.7	87.1	82.6	78.0	74.4	70.8	67.1	64.4	43.5
20°	221.4	220.5	215.9	205.0	193.2	179.6	166.0	150.6	128.8	114.3	43.5
22.5°	383.8	378.3	370.2	362.0	341.1	316.6	291.2	262.2	234.1	204.1	46.3
25°	614.2	626.9	599.7	577.9	541.6	497.2	449.1	409.2	358.4	311.2	53.5
27.5°	1067.8	1076.0	1022.5	951.7	867.3	773.9	683.2	615.1	529.8	451.8	67.1
30°	1872.6	1880.7	1790.9	1640.3	1466.1	1312.8	1105.0	922.7	754.8	625.1	78.9
31°	2337.1	2273.6	2169.2	2023.2	1802.7	1571.4	1321.9	1101.4	889.1	718.5	82.6
32°	2740.8	2735.4	2613.8	2392.4	2171.1	1885.3	1575.9	1288.3	1027.9	812.9	85.3
33°	3217.1	3180.8	3009.4	2800.7	2507.7	2220.1	1820.9	1492.4	1170.4	918.1	87.1
34°	3599.1	3501.1	3430.3	3191.7	2882.4	2515.8	2088.5	1708.4	1348.2	1019.8	88.0
35°	3879.4	3858.6	3720.7	3498.4	3183.6	2808.9	2377.0	1932.5	1497.0	1137.7	88.0
36°	4176.1	4111.7	3977.4	3776.0	3469.3	3081.9	2597.5	2126.6	1670.3	1243.8	87.1
37°	4362.1	4324.0	4190.6	3982.9	3682.6	3312.4	2844.2	2331.6	1808.2	1350.0	85.3
38°	4553.5	4476.4	4344.8	4146.2	3851.3	3503.8	3023.0	2489.5	1935.2	1443.4	82.6
39°	4686.0	4606.1	4471.9	4274.1	3985.6	3640.8	3164.5	2623.8	2045.9	1513.3	78.9
40°	4785.8	4708.7	4572.6	4369.3	4084.5	3748.8	3282.5	2742.6	2138.4	1574.1	74.4
41°	4847.5	4775.8	4640.6	4438.3	4152.5	3810.5	3359.6	2819.8	2201.0	1614.9	69.9
42°	4899.2	4825.7	4687.8	4480.9	4194.2	3863.1	3406.7	2868.7	2243.6	1635.8	66.2
43°	4928.2	4854.7	4720.5	4509.1	4219.6	3887.6	3432.1	2891.4	2258.2	1633.1	59.9
44°	4944.5	4868.3	4733.2	4521.8	4230.5	3893.9	3434.0	2886.9	2248.2	1611.3	54.4
45°	4926.4	4851.1	4720.5	4509.1	4211.5	3874.0	3415.8	2862.4	2210.1	1568.6	48.1
46°	4808.5	4750.4	4630.6	4436.5	4151.6	3823.2	3369.5	2815.2	2151.1	1516.0	40.8
47°	4600.7	4554.4	4438.3	4294.0	4036.4	3729.7	3284.3	2725.4	2068.5	1437.1	32.7
48°	4383.9	4315.8	4207.9	4060.0	3842.2	3561.9	3143.6	2593.8	1943.3	1333.7	29.0
49°	4063.6	4023.7	3928.4	3763.3	3582.8	3336.0	2945.0	2425.1	1790.0	1221.2	25.4
50°	3769.6	3742.4	3609.1	3487.5	3296.1	3065.6	2675.5	2202.8	1599.5	1081.4	22.7
51°	3540.1	3507.5	3411.3	3259.8	3055.6	2788.0	2420.6	1914.3	1380.8	915.4	18.1
52°	3300.6	3282.5	3197.2	3041.1	2840.6	2573.9	2172.9	1669.4	1168.5	773.9	14.5
53°	3104.6	3078.3	2974.0	2835.2	2618.3	2342.5	1904.3	1441.6	989.8	650.5	12.7
54°	2818.8	2808.0	2740.8	2595.7	2360.7	2060.4	1661.2	1213.9	825.6	551.6	10.9
55°	2514.9	2478.6	2410.6	2295.4	2079.4	1799.1	1379.9	1006.1	667.7	464.5	8.2
56°	2144.8	2142.9	2021.4	1925.2	1733.8	1436.2	1102.3	785.7	542.5	387.4	7.3
57°	1790.9	1733.8	1616.7	1521.5	1315.5	1089.6	818.3	588.8	424.6	313.9	5.4
58°	1324.6	1294.7	1263.8	1124.1	933.6	772.1	584.3	413.7	313.9	239.5	3.6
59°	899.1	898.2	861.9	755.7	646.0	480.8	364.7	281.2	215.9	176.0	2.7
60°	678.6	662.3	589.7	519.9	406.5	303.9	215.9	166.0	134.3	113.4	1.8
62.5°	237.7	246.8	216.8	179.6	137.0	112.5	86.2	69.9	57.2	46.3	0.0
65°	49.0	53.5	46.3	43.5	34.5	29.9	26.3	22.7	19.1	16.3	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°	6.4	5.4	5.4	5.4	4.5	4.5	4.5	4.5	3.6	3.6	0.9
70°	2.7	2.7	2.7	2.7	2.7	2.7	1.8	1.8	1.8	1.8	0.9
72.5°	2.7	2.7	2.7	1.8	1.8	1.8	1.8	1.8	1.8	0.9	0.9
75°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9
77.5°	1.8	1.8	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.9
80°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
82.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.8
85°	0.9	0.9	0.9	0.0	0.0	0.9	0.9	0.9	0.9	0.9	0.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
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°	52.6	52.6	52.6	52.6	52.6	52.6
2.5°	55.3	53.5	50.8	49.9	49.0	49.0
5°	54.4	50.8	48.1	45.4	44.5	44.5
7.5°	51.7	47.2	43.5	41.7	40.8	39.9
10°	49.0	42.6	39.0	37.2	37.2	37.2
12.5°	43.5	38.1	34.5	33.6	34.5	34.5
15°	39.0	32.7	30.8	30.8	31.8	32.7
17.5°	33.6	29.0	27.2	28.1	29.0	29.9
20°	29.9	24.5	24.5	25.4	28.1	28.1
22.5°	26.3	21.8	21.8	24.5	26.3	27.2
25°	23.6	19.1	20.0	22.7	25.4	26.3
27.5°	20.0	16.3	18.1	21.8	24.5	25.4
30°	17.2	14.5	17.2	20.9	23.6	25.4
31°	16.3	13.6	17.2	20.0	23.6	25.4
32°	14.5	13.6	16.3	20.0	23.6	24.5
33°	13.6	12.7	16.3	20.0	23.6	24.5
34°	12.7	11.8	15.4	20.0	23.6	24.5
35°	10.9	11.8	15.4	19.1	22.7	24.5
36°	10.0	10.9	15.4	19.1	22.7	24.5
37°	9.1	10.9	14.5	19.1	22.7	24.5
38°	8.2	10.0	14.5	19.1	22.7	24.5
39°	7.3	10.0	13.6	19.1	22.7	24.5
40°	6.4	9.1	13.6	18.1	22.7	24.5
41°	6.4	9.1	13.6	18.1	22.7	24.5
42°	5.4	9.1	13.6	18.1	22.7	24.5
43°	4.5	8.2	13.6	18.1	22.7	24.5
44°	3.6	8.2	12.7	18.1	22.7	24.5
45°	3.6	8.2	12.7	18.1	22.7	24.5
46°	2.7	7.3	12.7	18.1	22.7	24.5
47°	1.8	7.3	12.7	17.2	22.7	24.5
48°	1.8	7.3	12.7	17.2	22.7	24.5
49°	1.8	7.3	11.8	17.2	22.7	24.5
50°	1.8	7.3	11.8	17.2	22.7	24.5
51°	0.9	6.4	11.8	17.2	22.7	24.5
52°	0.9	6.4	11.8	17.2	22.7	25.4
53°	0.9	6.4	11.8	17.2	22.7	24.5
54°	0.9	6.4	10.9	17.2	22.7	24.5
55°	0.9	6.4	10.9	17.2	22.7	24.5
56°	0.9	5.4	10.9	16.3	22.7	24.5
57°	1.8	5.4	10.9	16.3	22.7	23.6
58°	1.8	5.4	10.9	16.3	21.8	23.6
59°	1.8	5.4	10.9	16.3	21.8	23.6
60°	1.8	5.4	10.0	16.3	21.8	23.6
62.5°	1.8	5.4	10.0	15.4	20.9	22.7
65°	1.8	5.4	9.1	14.5	20.9	21.8



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.8	4.5	9.1	13.6	20.0	20.9
70°	2.7	4.5	8.2	13.6	19.1	20.0
72.5°	2.7	4.5	8.2	11.8	17.2	19.1
75°	2.7	4.5	7.3	10.9	16.3	17.2
77.5°	2.7	4.5	6.4	10.0	14.5	15.4
80°	3.6	4.5	5.4	8.2	12.7	13.6
82.5°	3.6	4.5	4.5	6.4	10.0	10.9
85°	2.7	3.6	3.6	4.5	6.4	7.3
87.5°	2.7	3.6	2.7	1.8	3.6	3.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)