

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: P1336295

Luminaire Tested: P3A05R159024DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336295
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-73)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R159024DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R15 optic, 2400K CCT AND, 90CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

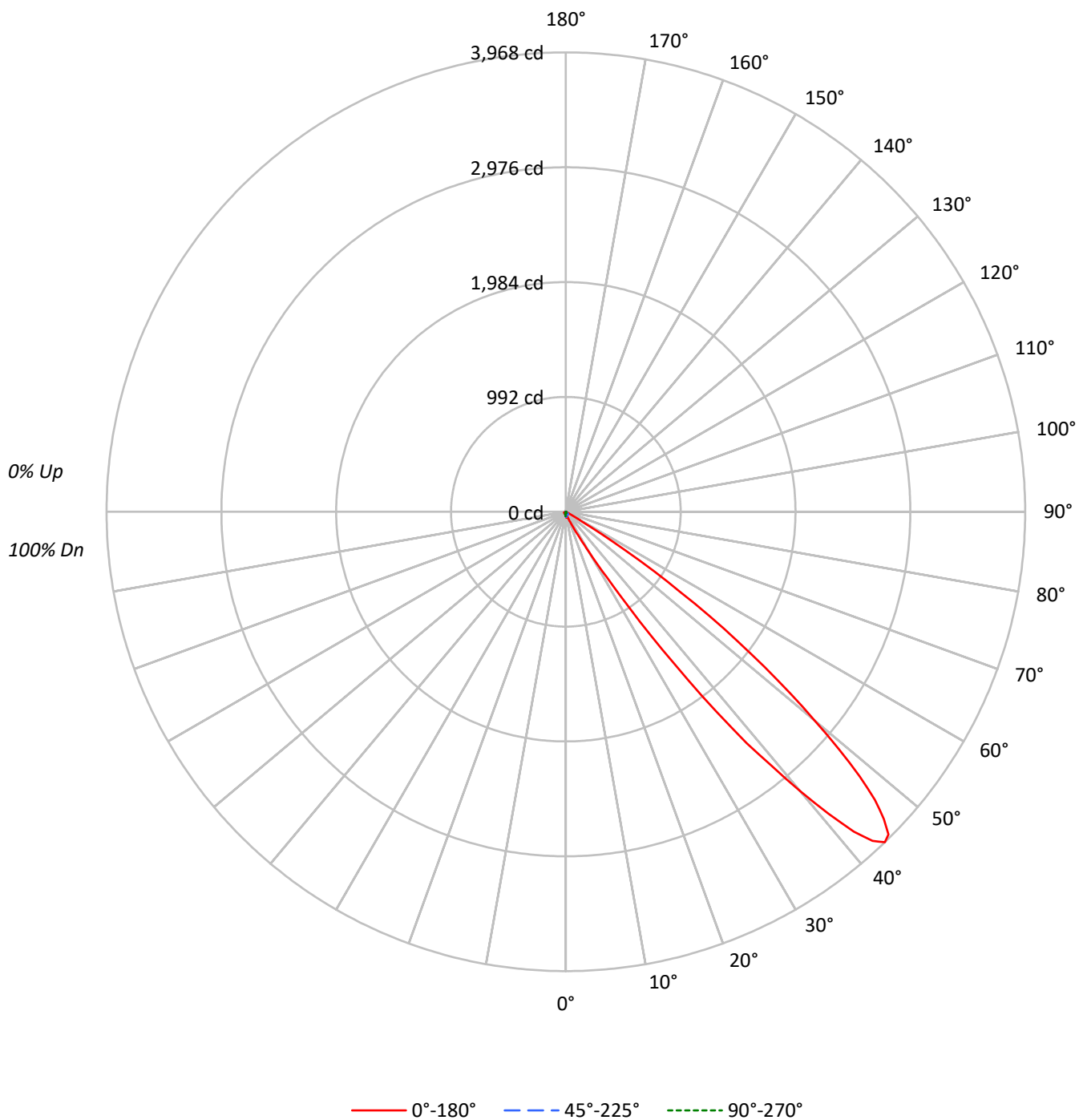
Lumens per Lamp: N/A
Luminaire Lumens: 443.0 lumens
Efficiency: N/A
Efficacy: 61.5 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.09
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 7.2
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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	110	106	102	99	107	104	100	97	100	97	94	96	93	91	92	90	89	89	89	87
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75	75	75	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	63	63	61
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	53	53	53	50
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44	44	44	42
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	37	37	35
7	62	47	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	31	31	29
8	56	42	33	27	55	41	33	27	40	32	26	39	31	26	37	31	26	26	26	24
9	52	37	28	22	50	37	28	22	35	28	22	34	27	22	33	27	22	22	22	20
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	23	19	19	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	8618	8618	8618	8618	8618
5°	10698	9531	7770	6802	6714
10°	10532	8172	5990	5322	5411
15°	8717	5812	4313	4404	4722
20°	15145	4644	3290	3804	4340
25°	33776	5565	2661	3532	4065
30°	101003	6811	2355	3469	4254
35°	388796	7683	2142	3560	4497
40°	902405	6698	2032	3664	4809
45°	1222266	5055	1768	3969	5210
50°	958365	3002	1808	4230	5731
55°	459988	1338	1682	4549	6232
60°	42058	175	1535	4824	6973
65°	4566	0	1401	5033	7575
70°	1154	0	1731	5386	8207
75°	1101	339	2288	6015	9320
80°	1137	1137	2778	6188	10102
85°	1006	1006	4529	5535	11070

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1222266 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.4	0.8
10°-20°	7.0	1.6
20°-30°	16.7	3.8
30°-40°	91.6	20.7
40°-50°	221.9	50.1
50°-60°	88.5	20.0
60°-70°	7.7	1.7
70°-80°	4.3	1.0
80°-90°	1.9	0.4
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°	27.1	6.1
0°-40°	118.7	26.8
0°-60°	429.1	96.9
0°-90°	443.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	443.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	39	39	39	39	39	
5°	49	43	35	31	30	5
15°	38	26	19	19	21	13
25°	140	23	11	15	17	84
35°	1452	29	8	13	17	1026
45°	3941	16	6	13	17	2780
55°	1203	4	4	12	16	1121
65°	9	0	3	10	15	23
75°	1	0	3	7	11	1
85°	0	0	2	2	4	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°	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3
2.5°	44.2	44.2	44.6	44.2	44.2	44.2	44.2	43.7	43.7	43.7	42.4
5°	48.6	48.6	48.6	48.6	48.1	48.1	48.1	47.7	47.7	47.3	43.3
7.5°	50.4	50.4	49.9	49.9	49.5	49.5	49.0	48.6	48.1	47.7	41.5
10°	47.3	47.3	47.3	46.8	46.8	46.4	45.9	45.5	45.1	44.2	36.7
12.5°	42.0	42.0	42.4	42.0	41.5	41.1	40.2	39.8	39.3	38.4	30.5
15°	38.4	38.4	38.4	38.0	37.5	36.7	36.2	35.3	34.9	33.6	25.6
17.5°	49.0	49.0	48.6	47.7	45.9	44.6	42.4	40.6	38.4	35.8	22.1
20°	64.9	64.9	64.0	63.2	61.0	58.7	55.2	52.1	48.6	45.5	19.9
22.5°	94.1	95.4	92.8	89.7	86.6	81.3	76.4	71.6	65.4	60.1	20.3
25°	139.6	140.9	139.6	132.5	126.8	119.7	110.4	100.7	90.1	80.4	23.0
27.5°	226.2	227.0	224.8	207.6	198.3	179.8	163.4	147.5	129.9	112.2	25.2
30°	398.9	399.3	385.2	350.7	320.2	279.6	245.2	212.0	184.2	155.9	26.9
31°	525.2	512.8	482.8	441.3	392.7	337.9	290.6	247.8	206.3	175.8	27.4
32°	667.0	665.2	615.3	543.3	478.4	409.9	338.8	284.0	236.3	194.8	27.8
33°	854.7	855.6	777.0	692.2	585.7	493.8	400.6	325.5	268.1	217.3	28.7
34°	1148.0	1079.1	986.8	871.9	727.1	588.8	467.8	373.7	296.8	239.0	28.7
35°	1452.4	1383.0	1281.4	1107.4	908.6	715.1	547.7	425.4	331.3	262.4	28.7
36°	1793.4	1734.6	1580.9	1358.7	1105.2	834.4	632.5	485.0	365.3	283.6	28.3
37°	2161.7	2075.6	1905.1	1662.6	1323.4	1002.2	735.9	544.2	399.3	306.5	27.4
38°	2535.9	2458.1	2243.0	1949.3	1584.0	1179.4	839.3	601.2	430.7	323.8	26.1
39°	2819.5	2777.0	2563.7	2235.5	1792.0	1347.2	945.7	662.1	463.8	341.0	24.7
40°	3152.5	3084.0	2881.7	2475.8	2038.1	1518.2	1050.0	716.0	491.2	354.7	23.4
41°	3456.4	3369.8	3114.5	2722.3	2235.1	1671.9	1148.9	771.7	513.3	362.6	22.5
42°	3717.0	3616.3	3349.5	2933.4	2399.8	1794.7	1228.0	811.4	534.0	369.3	21.2
43°	3885.7	3798.7	3536.4	3092.0	2540.7	1907.3	1301.7	852.9	546.8	373.7	19.4
44°	3967.9	3880.0	3626.0	3191.4	2627.3	1974.9	1349.4	881.7	561.0	379.4	18.1
45°	3941.4	3852.2	3606.6	3193.1	2654.3	1999.2	1369.8	894.5	568.5	384.7	16.3
46°	3819.9	3757.2	3509.8	3110.1	2603.0	1973.1	1358.3	884.8	565.8	384.7	14.6
47°	3649.4	3577.9	3342.4	2967.4	2478.9	1906.0	1311.9	855.2	549.5	375.9	12.8
48°	3417.1	3356.1	3108.8	2740.8	2288.5	1759.8	1207.2	807.0	523.9	358.7	11.0
49°	3125.6	3040.8	2810.6	2451.1	2040.3	1552.2	1069.8	725.7	482.8	334.4	9.7
50°	2809.3	2704.6	2527.0	2160.9	1783.6	1330.9	889.2	613.5	424.9	302.6	8.8
51°	2499.7	2393.2	2224.0	1912.6	1509.8	1104.3	717.3	489.9	349.8	258.8	7.5
52°	2178.5	2089.3	1899.8	1655.1	1292.5	894.9	597.6	414.3	290.6	217.3	6.2
53°	1858.7	1797.8	1617.6	1369.8	1038.5	731.0	488.1	354.7	253.5	186.0	4.9
54°	1538.5	1471.8	1334.9	1114.0	837.0	576.9	413.9	296.8	220.0	162.1	4.4
55°	1203.2	1168.8	1042.4	849.4	634.3	460.3	335.7	255.3	184.2	135.6	3.5
56°	926.7	887.8	772.6	616.2	471.3	360.4	271.7	208.5	155.9	113.5	2.7
57°	606.9	567.2	490.7	430.2	343.2	262.8	207.6	164.3	126.8	94.1	2.2
58°	358.7	322.5	310.5	265.0	228.8	178.5	153.3	122.4	93.6	74.2	1.3
59°	164.8	167.4	148.9	139.6	126.8	113.5	93.2	81.7	64.0	53.4	0.9
60°	95.9	90.6	88.3	79.1	70.2	62.3	56.1	49.5	40.2	34.5	0.4
62.5°	32.7	31.4	32.2	29.2	27.4	26.5	24.3	20.8	17.2	14.1	0.0
65°	8.8	8.8	8.4	8.0	7.5	7.1	6.6	5.7	5.3	4.4	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°	3.1	3.1	2.7	2.7	2.2	2.2	1.8	1.8	1.3	1.3	0.0
70°	1.8	1.8	1.8	1.3	1.3	1.3	0.9	0.9	0.9	0.4	0.0
72.5°	1.3	1.3	1.3	1.3	1.3	1.3	0.9	0.9	0.9	0.4	0.4
75°	1.3	1.3	1.3	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.4
77.5°	0.9	0.9	0.9	0.9	0.9	0.9	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	0.4	0.9
82.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9
85°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
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°	39.3	39.3	39.3	39.3	39.3	39.3
2.5°	40.6	38.9	36.7	35.3	34.9	34.5
5°	38.9	35.3	32.7	30.9	30.5	30.5
7.5°	34.9	30.9	28.3	27.4	26.9	26.9
10°	30.5	26.9	24.7	23.9	24.3	24.3
12.5°	25.6	22.5	21.6	21.6	22.1	22.5
15°	20.8	19.0	19.0	19.4	20.3	20.8
17.5°	17.2	16.3	16.8	17.7	18.6	19.4
20°	14.1	14.1	15.0	16.3	17.7	18.6
22.5°	11.9	12.4	13.7	15.0	16.8	17.7
25°	10.2	11.0	12.4	14.6	16.3	16.8
27.5°	8.8	10.2	11.9	14.1	15.9	16.8
30°	7.5	9.3	11.5	13.7	15.9	16.8
31°	7.1	8.8	11.0	13.7	15.9	16.8
32°	6.6	8.8	11.0	13.7	15.9	16.8
33°	6.2	8.4	11.0	13.3	15.9	16.8
34°	5.7	8.4	11.0	13.7	15.9	16.8
35°	5.3	8.0	10.6	13.3	15.5	16.8
36°	4.9	8.0	10.6	13.3	15.9	16.8
37°	4.4	8.0	10.6	13.3	15.5	16.8
38°	4.4	7.5	10.2	13.3	15.5	16.8
39°	4.0	7.1	10.2	13.3	15.5	16.8
40°	3.5	7.1	9.7	12.8	15.5	16.8
41°	3.1	6.6	9.7	12.8	15.5	16.8
42°	2.7	6.6	9.7	12.8	15.5	16.8
43°	2.2	6.2	9.3	12.8	15.5	16.8
44°	2.2	6.2	9.3	12.8	15.5	16.8
45°	1.8	5.7	8.8	12.8	15.5	16.8
46°	1.8	5.7	8.8	12.4	15.5	16.8
47°	1.3	5.7	8.8	12.4	15.5	16.8
48°	1.3	5.3	8.8	12.4	15.5	16.8
49°	0.9	5.3	8.8	12.4	15.5	16.8
50°	0.9	5.3	8.4	12.4	15.5	16.8
51°	0.9	5.3	8.4	12.4	15.5	16.8
52°	0.9	4.9	8.4	12.4	15.5	16.8
53°	0.9	4.9	8.4	12.4	15.5	16.8
54°	0.9	4.9	8.0	12.4	15.5	16.8
55°	0.9	4.4	8.0	11.9	15.5	16.3
56°	0.9	4.4	8.0	11.9	15.5	16.3
57°	0.9	4.4	7.5	11.9	15.5	16.3
58°	0.9	4.0	7.5	11.5	15.0	16.3
59°	0.9	4.0	7.1	11.5	15.0	15.9
60°	0.9	3.5	7.1	11.0	14.6	15.9
62.5°	0.9	3.1	6.2	10.6	14.1	15.0
65°	0.9	2.7	5.7	9.7	13.7	14.6



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.9	2.7	5.3	9.3	12.8	14.1
70°	0.9	2.7	4.9	8.4	12.4	12.8
72.5°	1.3	2.7	4.4	8.0	11.5	11.9
75°	1.8	2.7	4.0	7.1	10.6	11.0
77.5°	1.8	2.7	3.5	6.2	9.3	9.7
80°	1.8	2.2	3.1	4.9	7.5	8.0
82.5°	1.8	2.2	2.2	4.0	5.7	6.2
85°	1.3	1.8	1.8	2.2	4.0	4.4
87.5°	1.3	1.8	0.9	1.3	1.8	1.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)