

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: P1338913

Luminaire Tested: P3A05R409050DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1338913
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-78)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R409050DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R40 optic, 5000K CCT AND, 90CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

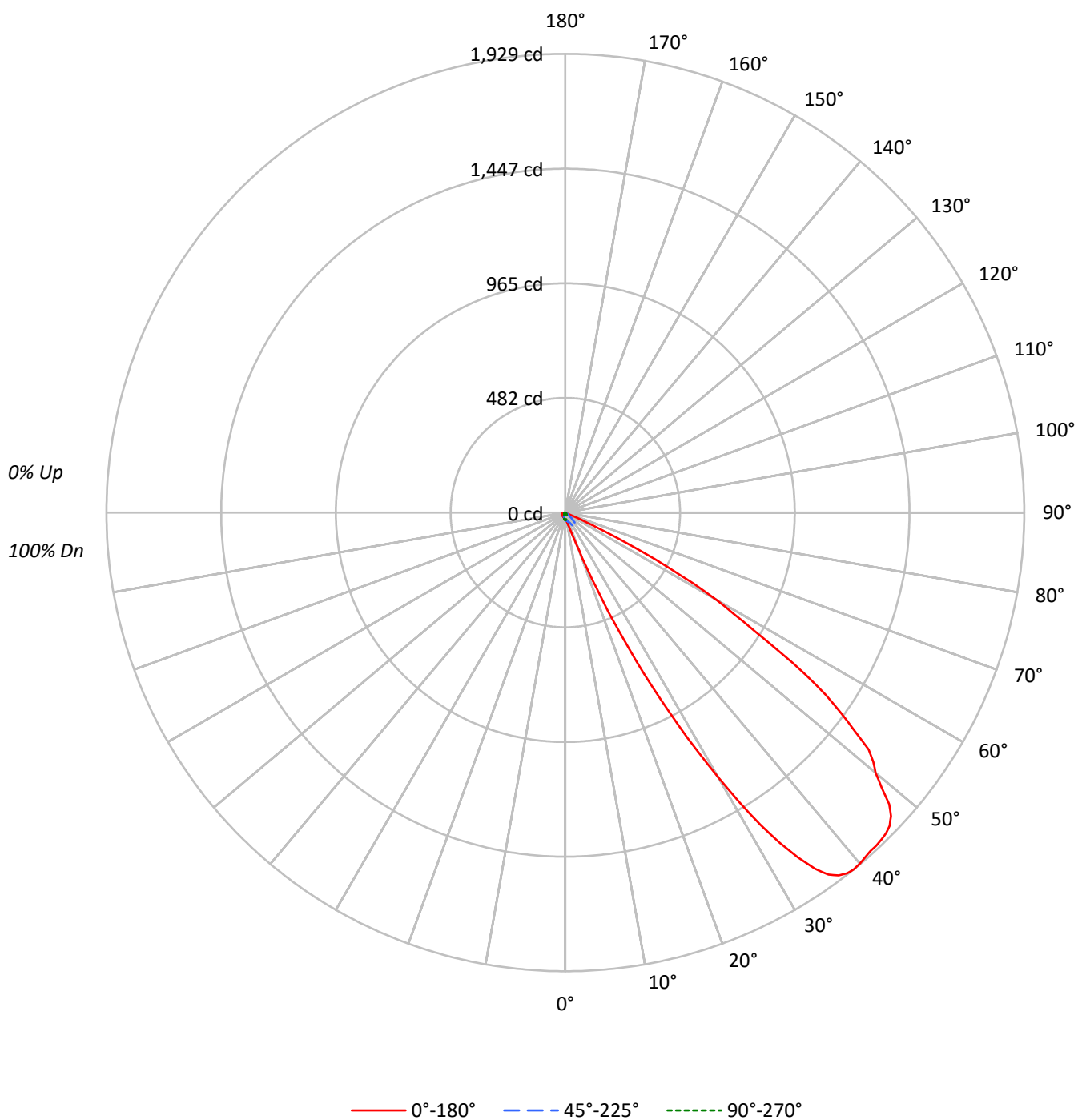
Lumens per Lamp: N/A
Luminaire Lumens: 596.0 lumens
Efficiency: N/A
Efficacy: 82.8 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
RCR																					
0	119	119	119	119		116	116	116	116		111	111	111		106	106	106		102	102	102
1	110	106	102	99		107	104	100	97		99	97	94		96	93	91		92	90	88
2	100	93	86	81		98	91	85	80		87	82	78		84	80	76		81	78	75
3	91	81	73	66		89	79	72	66		76	70	65		73	68	64		71	66	62
4	82	70	62	55		80	69	61	54		67	59	54		64	58	53		62	57	52
5	75	62	52	46		73	60	52	45		58	51	45		56	50	44		54	49	44
6	68	54	45	38		66	53	44	38		51	43	38		50	43	37		48	42	37
7	62	48	39	32		60	47	38	32		45	37	32		44	37	31		42	36	31
8	57	42	33	27		55	42	33	27		40	32	27		39	32	27		38	31	26
9	52	38	29	23		51	37	29	23		36	28	23		35	28	23		34	27	23
10	48	34	25	20		47	33	25	20		32	25	20		31	24	20		30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	6732	6732	6732	6732	6732
5°	7462	7220	6626	6031	5899
10°	9018	7682	6101	5478	5366
15°	14779	8331	5221	4835	4972
20°	39087	9824	4340	4340	4737
25°	150710	12194	3436	3968	4645
30°	325139	16205	2760	3874	4583
35°	489368	19194	2356	3801	4685
40°	551347	19265	2032	3922	5009
45°	591193	14947	1861	4062	5427
50°	581064	9347	1672	4298	5970
55°	511217	4588	1682	4817	6690
60°	323571	965	1930	5263	7456
65°	66155	259	1972	5656	8250
70°	1410	321	2116	6347	9489
75°	1356	932	2288	6947	10675
80°	1389	631	2778	7577	12502
85°	1258	1258	5535	8303	13838

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 601866 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.9	0.5
10°-20°	9.4	1.6
20°-30°	46.3	7.8
30°-40°	150.6	25.3
40°-50°	207.6	34.8
50°-60°	144.6	24.3
60°-70°	27.4	4.6
70°-80°	4.9	0.8
80°-90°	2.3	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°	58.6	9.8
0°-40°	209.2	35.1
0°-60°	561.3	94.2
0°-90°	596.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	596.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	31	31	31	31	31	
5°	34	33	30	27	27	3
15°	65	37	23	21	22	24
25°	623	50	14	16	19	321
35°	1828	72	9	14	18	1105
45°	1906	48	6	13	18	1450
55°	1337	12	4	13	18	1143
65°	128	0	4	11	16	226
75°	2	1	3	8	13	2
85°	0	0	2	3	6	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7
2.5°	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.2	30.7
5°	33.9	33.9	33.9	33.9	33.4	33.4	33.4	32.8	32.8	31.7	30.1
7.5°	36.1	36.1	36.1	36.1	35.6	35.0	34.5	34.5	33.9	31.2	29.0
10°	40.5	40.5	40.0	39.4	38.9	37.8	37.2	36.1	34.5	30.7	27.4
12.5°	49.3	48.2	47.6	46.5	44.9	42.7	40.5	38.9	35.0	29.6	25.7
15°	65.1	64.0	61.8	58.6	55.3	50.9	47.1	43.2	36.7	27.9	23.0
17.5°	93.0	89.8	86.5	81.0	72.8	65.1	56.9	49.8	38.9	26.3	20.8
20°	167.5	165.3	145.6	130.3	105.6	88.1	71.7	59.7	42.1	24.6	18.6
22.5°	345.4	322.4	290.1	237.5	185.0	136.3	99.1	75.0	45.4	22.4	16.4
25°	622.9	586.8	517.2	416.0	307.1	217.3	143.4	98.0	50.4	20.3	14.2
27.5°	943.1	906.4	798.6	659.0	481.1	327.9	204.7	129.7	56.9	18.1	12.6
30°	1284.1	1252.9	1116.0	922.8	678.2	459.2	274.2	162.0	64.0	15.9	10.9
31°	1421.5	1381.5	1233.7	1027.9	770.7	513.4	302.1	175.7	66.8	15.3	10.4
32°	1547.9	1502.5	1349.2	1128.6	845.6	572.0	332.8	187.7	69.0	14.2	9.9
33°	1656.8	1603.7	1455.9	1223.9	928.3	626.7	364.5	199.2	70.6	13.1	9.3
34°	1749.3	1703.3	1544.6	1319.6	1001.6	679.3	395.7	210.7	71.7	12.6	8.8
35°	1828.1	1786.5	1629.4	1392.4	1073.3	730.2	424.2	221.7	71.7	11.5	8.8
36°	1881.2	1845.1	1702.8	1466.9	1133.5	773.4	448.3	231.5	71.7	10.4	8.2
37°	1910.2	1875.2	1751.0	1528.2	1192.7	816.1	470.2	239.2	71.2	9.9	7.7
38°	1925.0	1894.4	1786.5	1578.0	1233.7	846.7	489.3	245.2	70.6	8.8	7.7
39°	1928.8	1903.1	1809.0	1614.1	1273.7	877.4	503.0	248.5	69.0	8.2	7.1
40°	1926.1	1903.7	1821.0	1646.4	1304.3	901.5	512.9	249.6	67.3	7.1	7.1
41°	1920.6	1903.1	1829.8	1668.8	1328.9	916.8	516.7	247.4	65.1	6.0	6.6
42°	1915.7	1896.5	1833.6	1684.2	1345.9	924.5	516.1	243.0	61.8	5.5	6.6
43°	1915.7	1893.8	1834.1	1694.0	1354.1	925.0	509.6	234.8	57.5	4.9	6.0
44°	1912.4	1892.2	1836.9	1700.6	1356.3	920.1	499.2	226.1	52.5	4.4	6.0
45°	1906.4	1885.0	1836.3	1701.1	1352.5	908.0	482.2	214.6	48.2	3.3	6.0
46°	1894.9	1875.7	1831.4	1697.3	1341.0	890.5	462.0	203.1	43.2	2.7	5.5
47°	1871.9	1857.1	1818.3	1684.2	1323.5	864.8	437.9	189.9	39.4	2.2	5.5
48°	1832.5	1822.1	1795.8	1655.2	1290.1	833.1	412.1	175.7	35.6	2.2	5.5
49°	1760.3	1752.0	1736.7	1608.6	1247.4	794.2	384.2	159.8	31.7	1.6	5.5
50°	1703.3	1694.6	1663.4	1530.4	1186.1	744.9	353.6	144.0	27.4	1.1	4.9
51°	1665.6	1651.3	1602.1	1439.5	1096.9	679.3	320.2	128.1	23.0	1.1	4.9
52°	1617.9	1596.6	1535.3	1358.0	1015.3	613.6	284.1	112.2	20.3	1.1	4.9
53°	1518.3	1510.7	1449.9	1270.4	933.8	550.6	246.9	99.1	17.5	1.1	4.9
54°	1431.3	1419.8	1337.2	1148.9	845.1	480.6	208.5	87.6	14.8	1.1	4.9
55°	1337.2	1314.7	1241.4	1046.5	741.1	416.0	171.9	75.5	12.0	1.1	4.4
56°	1218.4	1198.7	1119.9	937.1	645.3	350.3	144.0	61.8	9.3	1.1	4.4
57°	1073.9	1055.8	995.1	802.4	545.7	286.3	117.1	49.8	7.1	1.1	4.4
58°	934.3	914.1	844.6	673.2	440.6	227.1	98.0	40.5	5.5	1.1	4.4
59°	827.0	799.7	709.9	565.4	344.8	172.4	77.7	32.3	3.8	1.1	4.4
60°	737.8	715.4	622.3	470.7	270.4	127.0	57.5	24.6	2.2	1.1	4.4
62.5°	427.5	421.5	337.7	242.5	127.5	59.1	28.5	11.5	1.1	1.6	4.4
65°	127.5	111.1	86.5	51.5	32.8	19.7	10.4	3.8	0.5	1.6	3.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	3.8	3.8	3.8	3.8	3.8	3.8	2.2	1.1	0.5	1.6	3.8
70°	2.2	1.6	1.6	1.6	1.6	1.1	1.1	0.5	0.5	1.6	3.3
72.5°	1.6	1.6	1.6	1.6	1.1	1.1	1.1	0.5	1.1	1.6	2.7
75°	1.6	1.1	1.1	1.1	1.1	0.5	0.5	0.5	1.1	1.6	2.7
77.5°	1.1	1.1	1.1	1.1	0.5	0.5	0.5	0.5	1.1	1.6	2.7
80°	1.1	1.1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.6	2.2
82.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.6	2.2
85°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.6	2.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	1.6	1.6
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):

	112.5°	135°	157.5°	180°
0°	30.7	30.7	30.7	30.7
2.5°	29.6	29.0	28.5	28.5
5°	28.5	27.4	27.4	26.8
7.5°	26.8	25.7	25.7	25.7
10°	25.2	24.6	24.6	24.1
12.5°	23.0	23.0	23.0	23.0
15°	21.3	21.3	21.9	21.9
17.5°	19.2	19.7	20.8	21.3
20°	17.5	18.6	19.7	20.3
22.5°	16.4	17.5	19.2	19.7
25°	14.8	16.4	18.6	19.2
27.5°	13.7	15.9	17.5	18.6
30°	12.6	15.3	17.0	18.1
31°	12.6	14.8	17.0	18.1
32°	12.0	14.2	17.0	17.5
33°	12.0	14.2	17.0	17.5
34°	11.5	14.2	16.4	17.5
35°	11.5	14.2	16.4	17.5
36°	10.9	13.7	16.4	17.5
37°	10.9	13.7	16.4	17.5
38°	10.4	13.7	16.4	17.5
39°	10.4	13.7	16.4	17.5
40°	10.4	13.7	16.4	17.5
41°	9.9	13.7	16.4	17.5
42°	9.9	13.7	16.4	17.5
43°	9.9	13.1	16.4	17.5
44°	9.9	13.1	16.4	17.5
45°	9.3	13.1	16.4	17.5
46°	9.3	13.1	16.4	17.5
47°	9.3	13.1	16.4	17.5
48°	9.3	13.1	16.4	17.5
49°	9.3	13.1	16.4	17.5
50°	8.8	12.6	16.4	17.5
51°	8.8	12.6	16.4	17.5
52°	8.8	12.6	16.4	17.5
53°	8.8	12.6	16.4	17.5
54°	8.2	12.6	16.4	17.5
55°	8.2	12.6	16.4	17.5
56°	8.2	12.6	16.4	17.0
57°	8.2	12.6	15.9	17.0
58°	8.2	12.0	15.9	17.0
59°	8.2	12.0	15.9	17.0
60°	8.2	12.0	15.9	17.0
62.5°	7.7	12.0	15.3	16.4
65°	7.1	10.9	15.3	15.9



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	7.1	10.4	14.2	15.3
70°	6.6	9.9	13.7	14.8
72.5°	5.5	9.3	12.6	13.7
75°	4.9	8.2	11.5	12.6
77.5°	4.4	7.1	10.4	10.9
80°	3.8	6.0	8.8	9.9
82.5°	2.7	4.4	7.1	7.7
85°	2.2	3.3	4.9	5.5
87.5°	1.6	1.6	2.7	2.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)