

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: P1337509

Luminaire Tested: P3A05R259840DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337509
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: P3A05R259840DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 4000K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

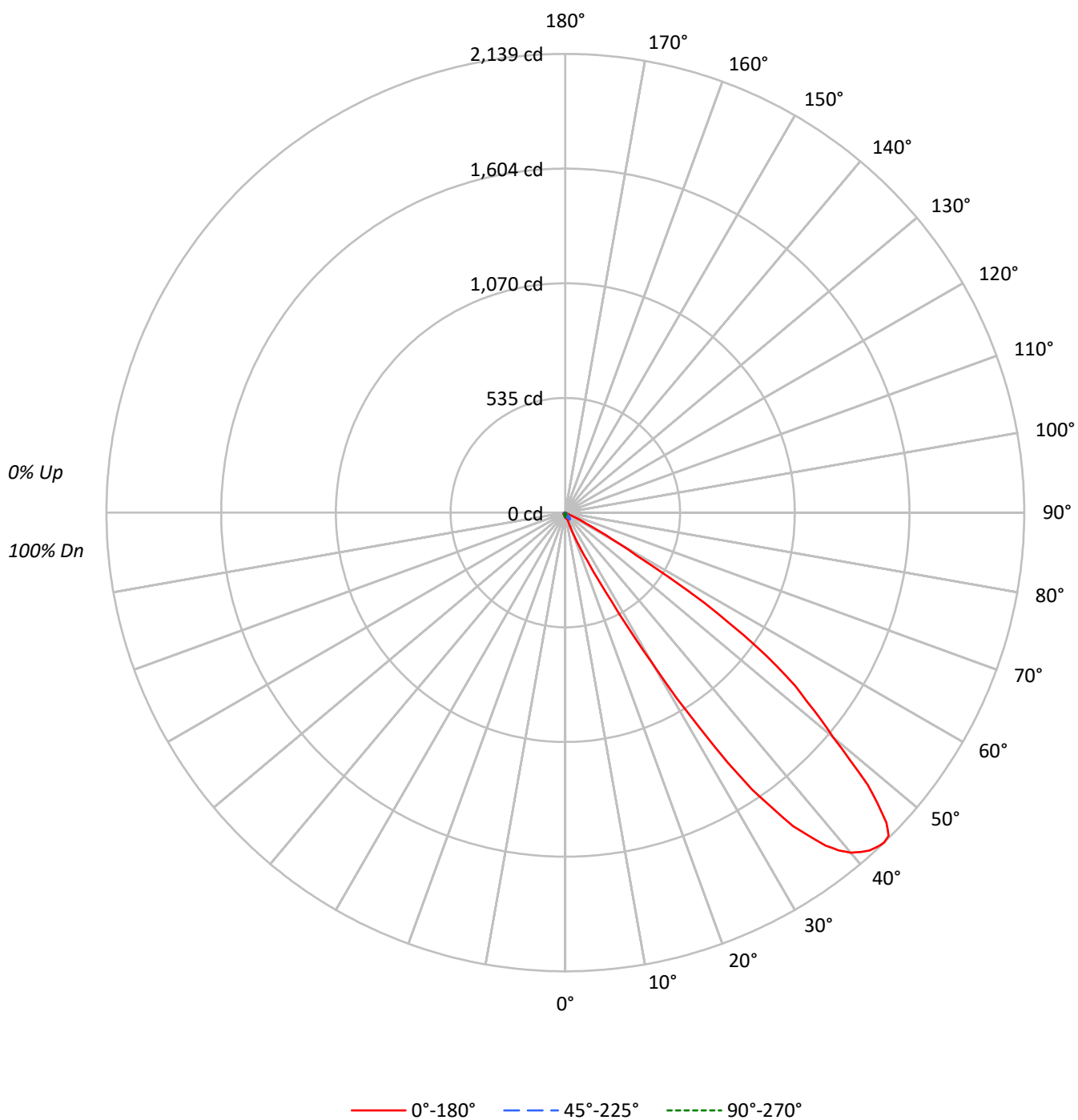
Lumens per Lamp: N/A
Luminaire Lumens: 446.0 lumens
Efficiency: N/A
Efficacy: 61.9 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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			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°	5000	5000	5000	5000	5000
5°	5701	5437	4843	4314	4226
10°	5678	5166	4097	3585	3585
15°	6334	4450	3201	3019	3201
20°	22355	4387	2474	2567	2847
25°	64286	5613	1984	2371	2758
30°	205120	8634	1595	2279	2785
35°	449241	10199	1365	2195	2838
40°	592625	9217	1116	2233	3034
45°	660875	6450	1085	2419	3287
50°	556297	3343	1058	2559	3616
55°	415909	1338	1032	2867	4052
60°	128762	351	1053	3114	4473
65°	11000	0	1245	3269	4877
70°	769	256	1282	3783	5514
75°	678	339	1694	3982	6354
80°	505	505	2526	4420	7450
85°	1006	1006	4026	5032	7799

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 660875 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.0	0.5
10°-20°	5.3	1.2
20°-30°	24.7	5.5
30°-40°	118.8	26.6
40°-50°	186.2	41.7
50°-60°	95.5	21.4
60°-70°	9.0	2.0
70°-80°	3.0	0.7
80°-90°	1.5	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°	32.0	7.2
0°-40°	150.8	33.8
0°-60°	432.4	97.0
0°-90°	446.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	446.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	23	23	23	23	23	
5°	26	25	22	20	19	2
15°	28	20	14	13	14	12
25°	266	23	8	10	11	165
35°	1678	38	5	8	11	1019
45°	2131	21	4	8	11	1559
55°	1088	4	3	8	11	906
65°	21	0	2	6	9	66
75°	1	0	2	5	8	1
85°	0	0	2	2	3	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°	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8
2.5°	24.7	24.7	24.7	24.7	24.7	24.7	24.3	24.3	24.7	24.3	24.3
5°	25.9	25.9	25.9	25.9	25.9	25.9	25.9	25.5	25.5	25.5	24.7
7.5°	26.3	25.9	25.9	25.9	25.9	25.9	25.9	25.9	25.5	25.5	24.3
10°	25.5	25.5	25.5	25.5	25.1	25.1	25.1	24.7	24.7	24.7	23.2
12.5°	25.5	25.5	25.5	25.5	25.1	25.1	24.7	24.7	24.3	23.9	21.2
15°	27.9	27.9	27.9	27.5	27.1	26.7	26.3	25.9	25.5	24.7	19.6
17.5°	40.8	39.6	39.2	37.7	35.7	33.8	32.2	30.6	29.0	27.9	18.8
20°	95.8	95.4	93.4	88.7	83.6	77.7	71.8	65.1	55.7	49.5	18.8
22.5°	166.0	163.7	160.1	156.6	147.6	137.0	126.0	113.4	101.3	88.3	20.0
25°	265.7	271.2	259.4	250.0	234.3	215.1	194.3	177.0	155.0	134.6	23.2
27.5°	461.9	465.5	442.3	411.7	375.2	334.8	295.5	266.1	229.2	195.4	29.0
30°	810.1	813.6	774.7	709.6	634.2	567.9	478.0	399.1	326.5	270.4	34.1
31°	1011.0	983.5	938.4	875.2	779.8	679.8	571.8	476.5	384.6	310.8	35.7
32°	1185.7	1183.3	1130.7	1034.9	939.2	815.6	681.7	557.3	444.7	351.7	36.9
33°	1391.7	1376.0	1301.8	1211.6	1084.8	960.4	787.7	645.6	506.3	397.2	37.7
34°	1556.9	1514.5	1483.9	1380.7	1246.9	1088.3	903.5	739.0	583.2	441.1	38.1
35°	1678.2	1669.2	1609.5	1513.4	1377.2	1215.1	1028.3	836.0	647.6	492.2	38.1
36°	1806.5	1778.7	1720.6	1633.5	1500.8	1333.2	1123.6	919.9	722.5	538.1	37.7
37°	1887.0	1870.5	1812.8	1722.9	1593.0	1432.9	1230.4	1008.6	782.2	584.0	36.9
38°	1969.8	1936.4	1879.5	1793.6	1666.0	1515.7	1307.7	1076.9	837.1	624.4	35.7
39°	2027.1	1992.6	1934.5	1848.9	1724.1	1575.0	1368.9	1135.0	885.0	654.6	34.1
40°	2070.3	2036.9	1978.0	1890.1	1766.9	1621.7	1420.0	1186.4	925.1	680.9	32.2
41°	2097.0	2066.0	2007.5	1920.0	1796.3	1648.4	1453.3	1219.8	952.1	698.6	30.2
42°	2119.3	2087.5	2027.9	1938.4	1814.4	1671.1	1473.7	1241.0	970.6	707.6	28.7
43°	2131.9	2100.1	2042.0	1950.6	1825.4	1681.7	1484.7	1250.8	976.9	706.4	25.9
44°	2139.0	2106.0	2047.5	1956.1	1830.1	1684.5	1485.5	1248.8	972.5	697.0	23.5
45°	2131.1	2098.5	2042.0	1950.6	1821.8	1675.8	1477.6	1238.2	956.1	678.6	20.8
46°	2080.1	2055.0	2003.2	1919.2	1795.9	1653.9	1457.6	1217.8	930.5	655.8	17.7
47°	1990.2	1970.2	1920.0	1857.6	1746.1	1613.4	1420.7	1179.0	894.8	621.7	14.1
48°	1896.4	1867.0	1820.3	1756.3	1662.1	1540.8	1359.9	1122.1	840.7	576.9	12.6
49°	1757.9	1740.6	1699.4	1628.0	1549.9	1443.1	1274.0	1049.1	774.3	528.3	11.0
50°	1630.7	1618.9	1561.2	1508.7	1425.8	1326.2	1157.4	952.9	691.9	467.8	9.8
51°	1531.4	1517.3	1475.7	1410.1	1321.8	1206.1	1047.1	828.1	597.3	396.0	7.8
52°	1427.8	1420.0	1383.1	1315.6	1228.8	1113.4	940.0	722.1	505.5	334.8	6.3
53°	1343.0	1331.6	1286.5	1226.5	1132.7	1013.4	823.8	623.6	428.2	281.4	5.5
54°	1219.4	1214.7	1185.7	1122.9	1021.2	891.3	718.6	525.1	357.1	238.6	4.7
55°	1087.9	1072.2	1042.8	992.9	899.5	778.3	596.9	435.2	288.9	200.9	3.5
56°	927.8	927.0	874.4	832.8	750.0	621.3	476.9	339.9	234.7	167.6	3.1
57°	774.7	750.0	699.4	658.2	569.1	471.4	354.0	254.7	183.7	135.8	2.4
58°	573.0	560.1	546.7	486.3	403.9	334.0	252.8	179.0	135.8	103.6	1.6
59°	388.9	388.5	372.8	326.9	279.4	208.0	157.8	121.7	93.4	76.1	1.2
60°	293.6	286.5	255.1	224.9	175.8	131.5	93.4	71.8	58.1	49.1	0.8
62.5°	102.8	106.8	93.8	77.7	59.3	48.7	37.3	30.2	24.7	20.0	0.0
65°	21.2	23.2	20.0	18.8	14.9	13.0	11.4	9.8	8.2	7.1	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°	2.7	2.4	2.4	2.4	2.0	2.0	2.0	2.0	1.6	1.6	0.4
70°	1.2	1.2	1.2	1.2	1.2	1.2	0.8	0.8	0.8	0.8	0.4
72.5°	1.2	1.2	1.2	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.4
75°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4
77.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.4
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
82.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8
85°	0.4	0.4	0.4	0.0	0.0	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°	22.8	22.8	22.8	22.8	22.8	22.8
2.5°	23.9	23.2	22.0	21.6	21.2	21.2
5°	23.5	22.0	20.8	19.6	19.2	19.2
7.5°	22.4	20.4	18.8	18.1	17.7	17.3
10°	21.2	18.4	16.9	16.1	16.1	16.1
12.5°	18.8	16.5	14.9	14.5	14.9	14.9
15°	16.9	14.1	13.3	13.3	13.7	14.1
17.5°	14.5	12.6	11.8	12.2	12.6	13.0
20°	13.0	10.6	10.6	11.0	12.2	12.2
22.5°	11.4	9.4	9.4	10.6	11.4	11.8
25°	10.2	8.2	8.6	9.8	11.0	11.4
27.5°	8.6	7.1	7.8	9.4	10.6	11.0
30°	7.5	6.3	7.5	9.0	10.2	11.0
31°	7.1	5.9	7.5	8.6	10.2	11.0
32°	6.3	5.9	7.1	8.6	10.2	10.6
33°	5.9	5.5	7.1	8.6	10.2	10.6
34°	5.5	5.1	6.7	8.6	10.2	10.6
35°	4.7	5.1	6.7	8.2	9.8	10.6
36°	4.3	4.7	6.7	8.2	9.8	10.6
37°	3.9	4.7	6.3	8.2	9.8	10.6
38°	3.5	4.3	6.3	8.2	9.8	10.6
39°	3.1	4.3	5.9	8.2	9.8	10.6
40°	2.7	3.9	5.9	7.8	9.8	10.6
41°	2.7	3.9	5.9	7.8	9.8	10.6
42°	2.4	3.9	5.9	7.8	9.8	10.6
43°	2.0	3.5	5.9	7.8	9.8	10.6
44°	1.6	3.5	5.5	7.8	9.8	10.6
45°	1.6	3.5	5.5	7.8	9.8	10.6
46°	1.2	3.1	5.5	7.8	9.8	10.6
47°	0.8	3.1	5.5	7.5	9.8	10.6
48°	0.8	3.1	5.5	7.5	9.8	10.6
49°	0.8	3.1	5.1	7.5	9.8	10.6
50°	0.8	3.1	5.1	7.5	9.8	10.6
51°	0.4	2.7	5.1	7.5	9.8	10.6
52°	0.4	2.7	5.1	7.5	9.8	11.0
53°	0.4	2.7	5.1	7.5	9.8	10.6
54°	0.4	2.7	4.7	7.5	9.8	10.6
55°	0.4	2.7	4.7	7.5	9.8	10.6
56°	0.4	2.4	4.7	7.1	9.8	10.6
57°	0.8	2.4	4.7	7.1	9.8	10.2
58°	0.8	2.4	4.7	7.1	9.4	10.2
59°	0.8	2.4	4.7	7.1	9.4	10.2
60°	0.8	2.4	4.3	7.1	9.4	10.2
62.5°	0.8	2.4	4.3	6.7	9.0	9.8
65°	0.8	2.4	3.9	6.3	9.0	9.4



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.8	2.0	3.9	5.9	8.6	9.0
70°	1.2	2.0	3.5	5.9	8.2	8.6
72.5°	1.2	2.0	3.5	5.1	7.5	8.2
75°	1.2	2.0	3.1	4.7	7.1	7.5
77.5°	1.2	2.0	2.7	4.3	6.3	6.7
80°	1.6	2.0	2.4	3.5	5.5	5.9
82.5°	1.6	2.0	2.0	2.7	4.3	4.7
85°	1.2	1.6	1.6	2.0	2.7	3.1
87.5°	1.2	1.6	1.2	0.8	1.6	1.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)