

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: P1337795

Luminaire Tested: P3A05R309024DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337795
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R309024DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R30 optic, 2400K CCT AND, 90CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

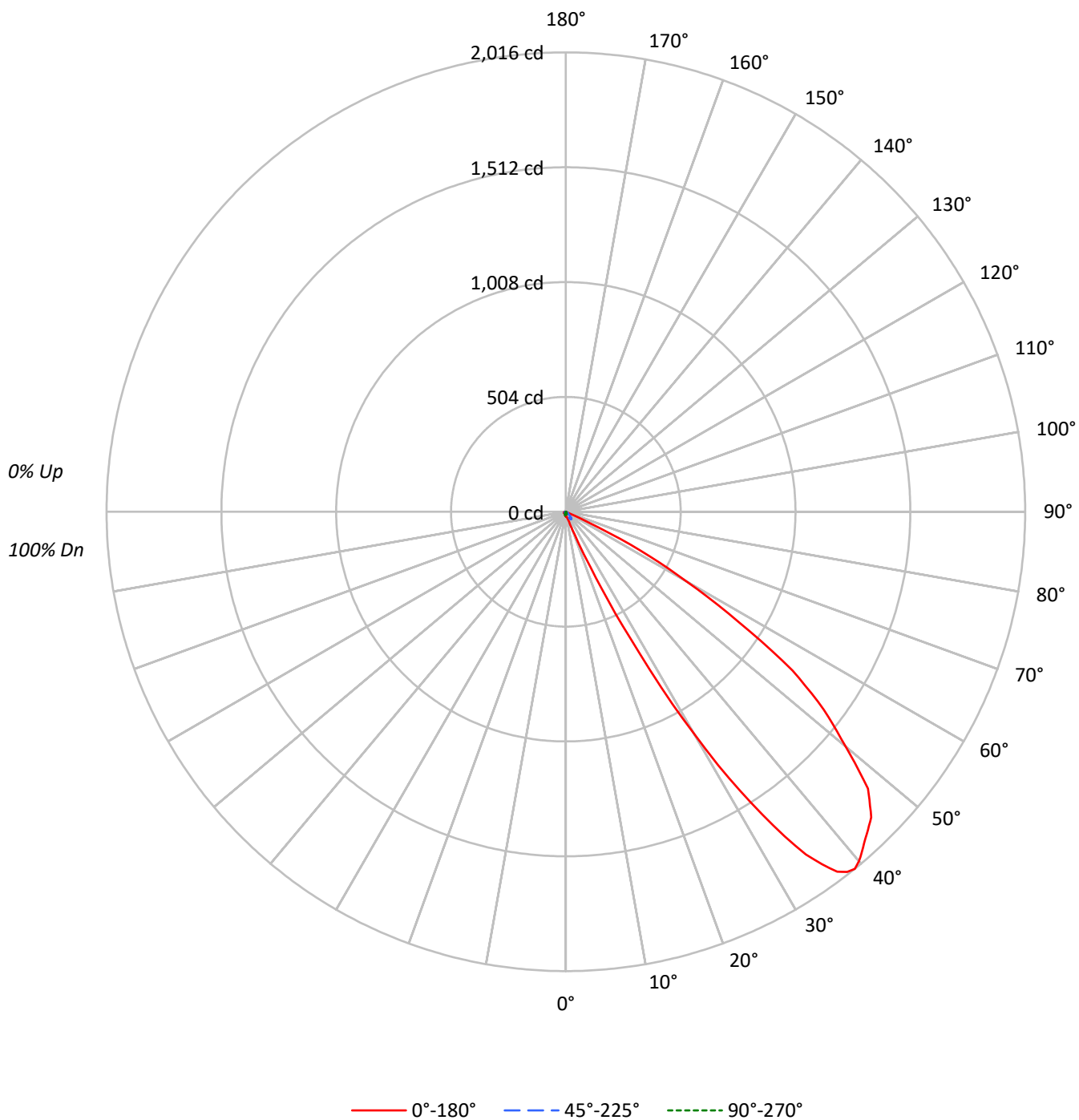
Lumens per Lamp: N/A
Luminaire Lumens: 524.0 lumens
Efficiency: N/A
Efficacy: 72.8 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	99	108	104	100	97	100	97	94		96	93	91		92
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		81
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71
4	83	71	62	55	80	69	61	55	67	60	54		64	58	53		62
5	75	62	52	46	73	60	52	45	58	51	45		56	50	44		54
6	68	54	45	38	66	53	44	38	51	43	37		49	42	37		48
7	62	48	38	32	60	47	38	32	45	37	31		44	36	31		42
8	56	42	33	27	55	41	33	27	40	32	26		39	32	26		37
9	52	37	29	23	50	37	28	23	36	28	22		34	27	22		33
10	48	33	25	19	46	33	25	19	32	24	19		31	24	19		30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	4451	4451	4451	4451	4451
5°	4755	4667	4380	3984	3896
10°	5210	4609	3830	3429	3340
15°	7605	4608	3201	2906	2997
20°	19158	5040	2474	2474	2777
25°	88965	6291	1911	2250	2565
30°	283208	8710	1443	2127	2583
35°	491429	10627	1178	2008	2597
40°	573131	10620	887	2032	2662
45°	587782	7536	961	2202	2884
50°	546609	4230	751	2252	3309
55°	464576	2179	841	2523	3708
60°	268312	570	965	2719	4079
65°	54740	0	1141	3217	4566
70°	833	256	1410	3654	5386
75°	763	339	1525	3728	6354
80°	505	505	2273	4420	7198
85°	0	1006	4529	4529	8806

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 587782 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.8	0.4
10°-20°	5.3	1.0
20°-30°	30.2	5.8
30°-40°	141.1	26.9
40°-50°	199.6	38.1
50°-60°	122.8	23.4
60°-70°	18.7	3.6
70°-80°	2.9	0.6
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°	37.3	7.1
0°-40°	178.5	34.1
0°-60°	500.8	95.6
0°-90°	524.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	524.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	20	20	20	20	20	
5°	22	21	20	18	18	2
15°	34	20	14	13	13	12
25°	368	26	8	9	11	226
35°	1836	40	4	8	10	1102
45°	1895	24	3	7	9	1437
55°	1215	6	2	7	10	1034
65°	106	0	2	6	9	191
75°	1	0	2	4	8	1
85°	0	0	2	2	4	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3
2.5°	20.7	20.7	21.2	21.2	20.7	21.2	21.2	21.2	20.3	19.9	19.0
5°	21.6	21.6	21.6	22.1	21.6	21.6	21.2	20.7	19.9	18.5	18.1
7.5°	22.5	22.5	22.1	22.5	22.1	22.1	21.2	20.3	19.0	17.7	16.8
10°	23.4	23.4	23.0	23.0	22.5	22.5	20.7	19.4	17.2	15.9	15.4
12.5°	26.0	26.0	25.6	25.2	24.3	23.8	20.3	18.1	15.4	14.1	13.7
15°	33.5	33.1	32.2	30.9	28.7	28.2	20.3	16.8	14.1	12.8	12.8
17.5°	45.9	45.5	44.1	40.6	36.6	35.3	20.3	15.0	12.4	11.5	11.5
20°	82.1	78.6	71.9	63.1	53.9	49.0	21.6	13.2	10.6	10.2	10.6
21°	107.3	103.7	95.3	80.8	64.4	59.1	22.5	12.8	10.2	9.7	10.6
22°	146.1	142.1	124.9	105.1	81.7	72.4	23.0	11.9	9.3	9.3	10.2
23°	203.9	197.3	168.2	136.4	102.0	88.7	23.8	11.5	8.8	9.3	9.7
24°	267.0	261.3	228.2	180.5	130.2	111.2	24.7	11.0	8.4	8.4	9.3
25°	367.7	361.1	302.4	227.8	165.1	133.7	26.0	10.2	7.9	7.9	9.3
26°	497.9	467.4	389.3	293.5	203.5	167.7	27.4	9.7	7.5	7.9	8.8
27°	621.5	596.3	508.5	376.5	251.6	206.1	29.1	9.3	7.1	7.5	8.8
28°	783.9	748.6	637.8	476.3	316.9	249.4	30.9	8.8	6.6	7.5	8.4
29°	965.8	916.3	782.6	588.4	390.6	297.9	32.7	8.4	6.2	7.1	8.4
30°	1118.5	1072.1	938.4	721.2	475.4	361.9	34.4	7.9	5.7	7.1	8.4
31°	1297.7	1227.5	1065.5	833.8	548.2	425.9	36.2	7.1	5.3	6.6	7.9
32°	1442.9	1393.9	1221.8	960.9	644.0	496.6	37.5	6.6	5.3	6.6	7.9
33°	1583.3	1517.5	1351.1	1082.7	730.5	569.0	38.8	6.2	4.9	6.2	7.9
34°	1717.5	1657.0	1473.4	1181.2	812.2	637.8	39.7	5.3	4.9	6.2	7.5
35°	1835.8	1765.6	1581.1	1277.4	896.0	700.5	39.7	4.9	4.4	5.7	7.5
36°	1912.6	1862.2	1674.7	1372.3	972.0	760.1	39.7	4.4	4.0	5.7	7.1
37°	1978.3	1919.6	1749.7	1445.1	1028.0	807.8	39.7	4.0	4.0	5.7	7.1
38°	2005.3	1954.9	1801.3	1509.6	1080.5	856.3	39.3	3.5	3.5	5.3	7.1
39°	2015.9	1970.8	1840.2	1555.9	1119.4	889.0	38.4	3.1	3.5	5.3	7.1
40°	2002.2	1968.2	1860.0	1585.9	1150.3	912.8	37.1	2.6	3.1	5.3	7.1
42.5°	1945.7	1923.2	1855.6	1615.9	1176.8	930.5	32.2	1.8	3.1	4.9	7.1
45°	1895.4	1870.6	1811.0	1584.6	1142.3	895.6	24.3	0.9	3.1	4.9	7.1
47.5°	1797.8	1782.4	1735.6	1504.7	1066.9	817.0	17.2	0.4	2.6	4.4	6.6
50°	1602.3	1587.7	1525.9	1306.5	917.7	690.8	12.4	0.4	2.2	4.4	6.6
52.5°	1427.0	1411.6	1322.9	1086.3	704.9	506.3	7.9	0.4	2.2	4.4	6.6
55°	1215.2	1188.2	1071.7	824.5	499.7	339.4	5.7	0.4	2.2	4.0	6.6
57.5°	899.6	860.3	756.1	562.3	287.8	184.1	3.1	0.4	2.2	4.0	6.6
60°	611.8	588.4	473.2	296.6	122.7	77.7	1.3	0.4	2.2	4.0	6.2
62.5°	370.8	341.2	237.9	126.2	53.0	35.3	0.0	0.9	2.2	4.0	6.2
65°	105.5	93.6	62.2	28.7	15.0	11.5	0.0	0.9	2.2	4.0	6.2
67.5°	3.5	3.5	3.5	3.1	2.2	2.2	0.4	0.9	2.2	4.0	5.7
70°	1.3	1.3	1.3	0.9	0.9	0.4	0.4	0.9	2.2	3.5	5.7
72.5°	0.9	0.9	0.9	0.9	0.4	0.4	0.4	0.9	1.8	3.1	5.3
75°	0.9	0.9	0.9	0.4	0.4	0.4	0.4	1.3	1.8	3.1	4.4
77.5°	0.9	0.9	0.9	0.4	0.4	0.4	0.4	1.3	1.8	2.6	4.4
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.3	1.8	2.6	3.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.4	0.4	0.4	0.0	0.0	0.0	0.4	1.3	1.8	1.8	2.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.3	1.8	1.3	1.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.3	1.3	1.3	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):

	157.5°	180°
0°	20.3	20.3
2.5°	19.0	19.0
5°	17.7	17.7
7.5°	16.3	16.3
10°	15.0	15.0
12.5°	14.1	14.1
15°	12.8	13.2
17.5°	11.9	12.4
20°	11.5	11.9
21°	11.5	11.9
22°	11.0	11.5
23°	11.0	11.5
24°	10.6	11.0
25°	10.2	10.6
26°	10.2	10.6
27°	10.2	10.6
28°	9.7	10.6
29°	9.7	10.2
30°	9.7	10.2
31°	9.3	10.2
32°	9.3	10.2
33°	9.3	9.7
34°	8.8	9.7
35°	8.8	9.7
36°	8.8	9.7
37°	8.8	9.3
38°	8.8	9.7
39°	8.8	9.3
40°	8.8	9.3
42.5°	8.8	9.3
45°	8.8	9.3
47.5°	8.8	9.7
50°	8.8	9.7
52.5°	8.8	9.7
55°	8.8	9.7
57.5°	8.8	9.3
60°	8.8	9.3
62.5°	8.4	9.3
65°	8.4	8.8
67.5°	8.4	8.8
70°	7.9	8.4
72.5°	7.5	7.9
75°	6.6	7.5
77.5°	6.2	6.6
80°	5.3	5.7



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	4.4	4.4
85°	3.1	3.5
87.5°	1.8	1.8
90°	0.0	0.0

(END OF REPORT)