

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: P1339038

Luminaire Tested: P3A05R409840DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1339038
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: P3A05R409840DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R40 optic, 4000K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

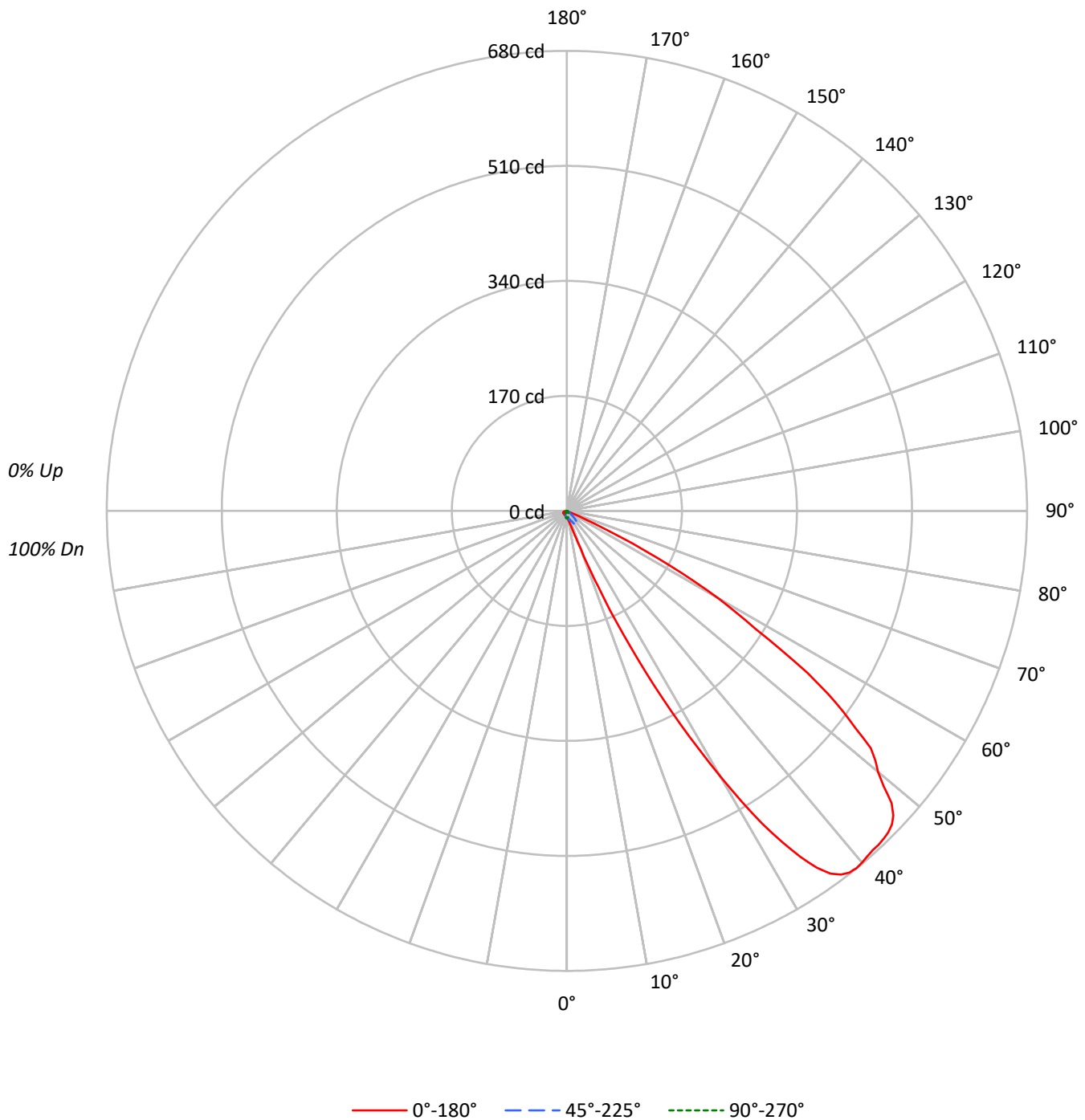
Lumens per Lamp: N/A
Luminaire Lumens: 210.0 lumens
Efficiency: N/A
Efficacy: 29.2 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.74 / 1.54
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	2368	2368	2368	2368	2368
5°	2641	2553	2333	2113	2069
10°	3184	2694	2138	1937	1893
15°	5199	2929	1839	1703	1748
20°	13768	3454	1540	1540	1657
25°	53108	4283	1210	1403	1621
30°	114549	5722	987	1367	1621
35°	172421	6773	830	1338	1660
40°	194278	6784	716	1374	1775
45°	208301	5272	651	1427	1923
50°	204752	3275	580	1501	2115
55°	180104	1606	573	1682	2370
60°	114026	351	658	1842	2631
65°	23297	104	675	2024	2906
70°	513	128	769	2244	3334
75°	508	339	847	2457	3728
80°	505	253	1010	2652	4420
85°	503	503	2013	3019	4780

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 212079 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.0	0.5
10°-20°	3.3	1.6
20°-30°	16.3	7.8
30°-40°	53.1	25.3
40°-50°	73.1	34.8
50°-60°	50.9	24.3
60°-70°	9.7	4.6
70°-80°	1.8	0.8
80°-90°	0.8	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°	20.6	9.8
0°-40°	73.7	35.1
0°-60°	197.8	94.2
0°-90°	210.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	210.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	11	11	11	11	11	
5°	12	12	11	10	9	1
15°	23	13	8	8	8	8
25°	220	18	5	6	7	113
35°	644	25	3	5	6	389
45°	672	17	2	5	6	511
55°	471	4	2	4	6	403
65°	45	0	1	4	6	79
75°	1	0	1	3	4	1
85°	0	0	1	1	2	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°	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
2.5°	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.0	10.8
5°	12.0	12.0	12.0	12.0	11.8	11.8	11.8	11.6	11.6	11.2	10.6
7.5°	12.7	12.7	12.7	12.7	12.5	12.3	12.1	12.1	12.0	11.0	10.2
10°	14.3	14.3	14.1	13.9	13.7	13.3	13.1	12.7	12.1	10.8	9.6
12.5°	17.4	17.0	16.8	16.4	15.8	15.0	14.3	13.7	12.3	10.4	9.1
15°	22.9	22.6	21.8	20.6	19.5	17.9	16.6	15.2	12.9	9.8	8.1
17.5°	32.8	31.6	30.5	28.5	25.6	22.9	20.1	17.5	13.7	9.3	7.3
20°	59.0	58.2	51.3	45.9	37.2	31.0	25.3	21.0	14.8	8.7	6.6
22.5°	121.7	113.6	102.2	83.7	65.2	48.0	34.9	26.4	16.0	7.9	5.8
25°	219.5	206.7	182.2	146.6	108.2	76.6	50.5	34.5	17.7	7.1	5.0
27.5°	332.3	319.4	281.4	232.2	169.5	115.5	72.1	45.7	20.1	6.4	4.4
30°	452.4	441.4	393.2	325.2	238.9	161.8	96.6	57.1	22.6	5.6	3.9
31°	500.8	486.8	434.7	362.2	271.5	180.9	106.5	61.9	23.5	5.4	3.7
32°	545.4	529.4	475.4	397.7	298.0	201.5	117.3	66.1	24.3	5.0	3.5
33°	583.8	565.1	513.0	431.2	327.1	220.8	128.4	70.2	24.9	4.6	3.3
34°	616.4	600.2	544.2	465.0	352.9	239.3	139.4	74.2	25.3	4.4	3.1
35°	644.1	629.5	574.1	490.6	378.2	257.3	149.5	78.1	25.3	4.0	3.1
36°	662.8	650.1	600.0	516.9	399.4	272.5	157.9	81.6	25.3	3.7	2.9
37°	673.1	660.7	616.9	538.5	420.2	287.5	165.7	84.3	25.1	3.5	2.7
38°	678.3	667.5	629.5	556.0	434.7	298.3	172.4	86.4	24.9	3.1	2.7
39°	679.6	670.6	637.4	568.7	448.8	309.1	177.2	87.6	24.3	2.9	2.5
40°	678.7	670.8	641.6	580.1	459.6	317.6	180.7	87.9	23.7	2.5	2.5
41°	676.7	670.6	644.7	588.0	468.3	323.0	182.1	87.2	22.9	2.1	2.3
42°	675.0	668.2	646.1	593.4	474.2	325.7	181.9	85.6	21.8	1.9	2.3
43°	675.0	667.3	646.3	596.9	477.1	325.9	179.5	82.7	20.2	1.7	2.1
44°	673.8	666.7	647.2	599.2	477.9	324.2	175.9	79.6	18.5	1.5	2.1
45°	671.7	664.2	647.0	599.4	476.5	319.9	169.9	75.6	17.0	1.2	2.1
46°	667.7	660.9	645.3	598.0	472.5	313.8	162.8	71.5	15.2	1.0	1.9
47°	659.6	654.4	640.7	593.4	466.3	304.7	154.3	66.9	13.9	0.8	1.9
48°	645.7	642.0	632.8	583.2	454.6	293.5	145.2	61.9	12.5	0.8	1.9
49°	620.2	617.3	611.9	566.8	439.5	279.8	135.4	56.3	11.2	0.6	1.9
50°	600.2	597.1	586.1	539.2	417.9	262.5	124.6	50.7	9.6	0.4	1.7
51°	586.9	581.8	564.5	507.2	386.5	239.3	112.8	45.1	8.1	0.4	1.7
52°	570.1	562.6	541.0	478.5	357.7	216.2	100.1	39.5	7.1	0.4	1.7
53°	535.0	532.3	510.9	447.6	329.0	194.0	87.0	34.9	6.2	0.4	1.7
54°	504.3	500.3	471.1	404.8	297.8	169.3	73.5	30.9	5.2	0.4	1.7
55°	471.1	463.2	437.4	368.7	261.1	146.6	60.6	26.6	4.2	0.4	1.5
56°	429.3	422.4	394.6	330.2	227.4	123.4	50.7	21.8	3.3	0.4	1.5
57°	378.4	372.0	350.6	282.7	192.3	100.9	41.3	17.5	2.5	0.4	1.5
58°	329.2	322.1	297.6	237.2	155.2	80.0	34.5	14.3	1.9	0.4	1.5
59°	291.4	281.8	250.1	199.2	121.5	60.7	27.4	11.4	1.3	0.4	1.5
60°	260.0	252.1	219.3	165.9	95.3	44.7	20.2	8.7	0.8	0.4	1.5
62.5°	150.6	148.5	119.0	85.4	44.9	20.8	10.0	4.0	0.4	0.6	1.5
65°	44.9	39.1	30.5	18.1	11.6	6.9	3.7	1.3	0.2	0.6	1.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	1.3	1.3	1.3	1.3	1.3	1.3	0.8	0.4	0.2	0.6	1.3
70°	0.8	0.6	0.6	0.6	0.6	0.4	0.4	0.2	0.2	0.6	1.2
72.5°	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.2	0.4	0.6	1.0
75°	0.6	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.4	0.6	1.0
77.5°	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.4	0.6	1.0
80°	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.8
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.8
85°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.6	0.6
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°	10.8	10.8	10.8	10.8
2.5°	10.4	10.2	10.0	10.0
5°	10.0	9.6	9.6	9.4
7.5°	9.4	9.1	9.1	9.1
10°	8.9	8.7	8.7	8.5
12.5°	8.1	8.1	8.1	8.1
15°	7.5	7.5	7.7	7.7
17.5°	6.7	6.9	7.3	7.5
20°	6.2	6.6	6.9	7.1
22.5°	5.8	6.2	6.7	6.9
25°	5.2	5.8	6.6	6.7
27.5°	4.8	5.6	6.2	6.6
30°	4.4	5.4	6.0	6.4
31°	4.4	5.2	6.0	6.4
32°	4.2	5.0	6.0	6.2
33°	4.2	5.0	6.0	6.2
34°	4.0	5.0	5.8	6.2
35°	4.0	5.0	5.8	6.2
36°	3.9	4.8	5.8	6.2
37°	3.9	4.8	5.8	6.2
38°	3.7	4.8	5.8	6.2
39°	3.7	4.8	5.8	6.2
40°	3.7	4.8	5.8	6.2
41°	3.5	4.8	5.8	6.2
42°	3.5	4.8	5.8	6.2
43°	3.5	4.6	5.8	6.2
44°	3.5	4.6	5.8	6.2
45°	3.3	4.6	5.8	6.2
46°	3.3	4.6	5.8	6.2
47°	3.3	4.6	5.8	6.2
48°	3.3	4.6	5.8	6.2
49°	3.3	4.6	5.8	6.2
50°	3.1	4.4	5.8	6.2
51°	3.1	4.4	5.8	6.2
52°	3.1	4.4	5.8	6.2
53°	3.1	4.4	5.8	6.2
54°	2.9	4.4	5.8	6.2
55°	2.9	4.4	5.8	6.2
56°	2.9	4.4	5.8	6.0
57°	2.9	4.4	5.6	6.0
58°	2.9	4.2	5.6	6.0
59°	2.9	4.2	5.6	6.0
60°	2.9	4.2	5.6	6.0
62.5°	2.7	4.2	5.4	5.8
65°	2.5	3.9	5.4	5.6



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	2.5	3.7	5.0	5.4
70°	2.3	3.5	4.8	5.2
72.5°	1.9	3.3	4.4	4.8
75°	1.7	2.9	4.0	4.4
77.5°	1.5	2.5	3.7	3.9
80°	1.3	2.1	3.1	3.5
82.5°	1.0	1.5	2.5	2.7
85°	0.8	1.2	1.7	1.9
87.5°	0.6	0.6	1.0	1.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)