

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: P1338926

Luminaire Tested: P3A05R409727DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1338926
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: P3A05R409727DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R40 optic, 2700K CCT AND, 97CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

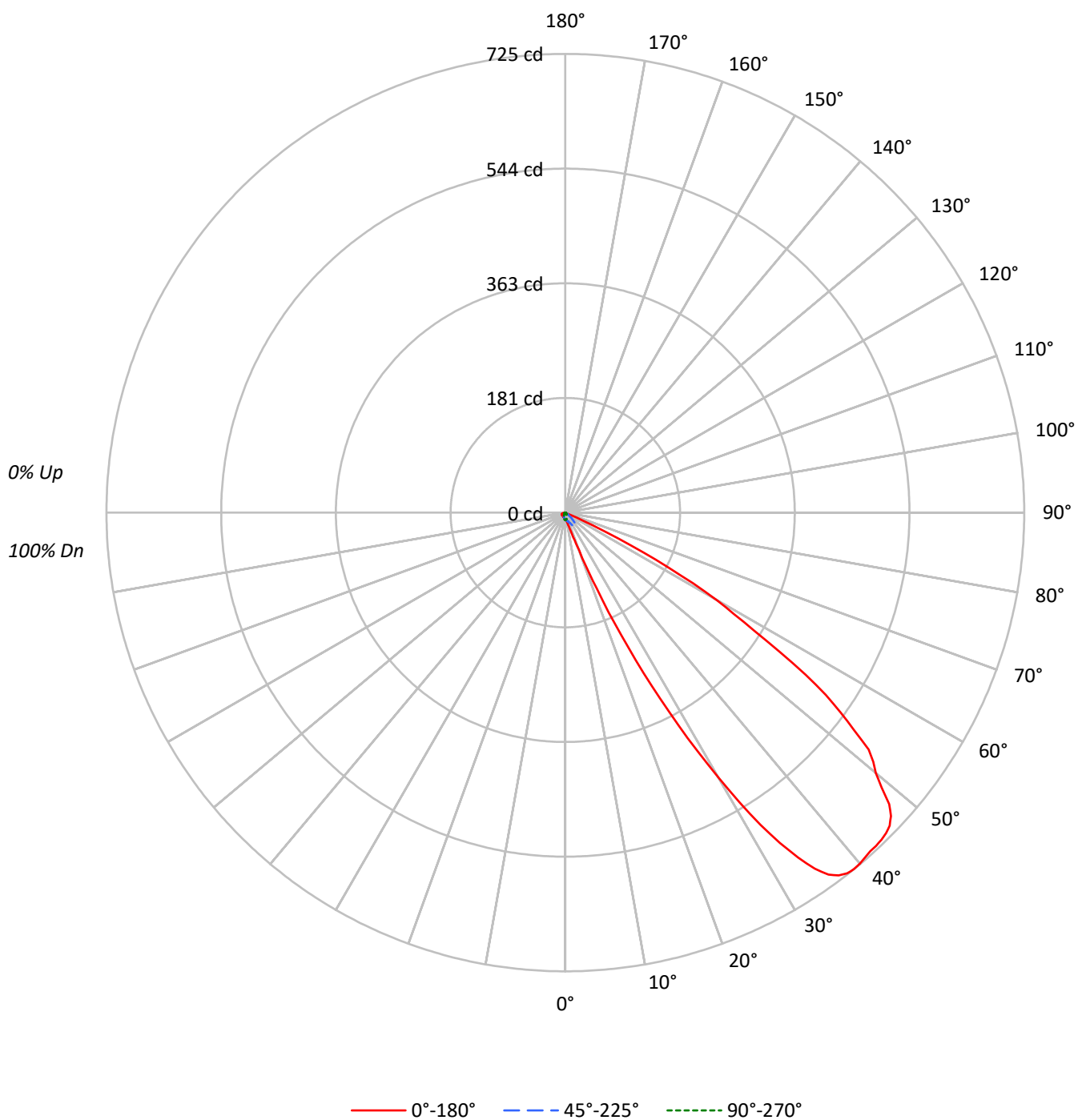
Lumens per Lamp: N/A
Luminaire Lumens: 224.0 lumens
Efficiency: N/A
Efficacy: 31.1 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1338926

CATALOG NUMBER: P3A05R409727DE010 E3A451WMH

Luminous Intensity Polar Plot



TEST NUMBER: P1338926

CATALOG NUMBER: P3A05R409727DE010 E3A451WMH

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°	2522	2522	2522	2522	2522
5°	2818	2707	2487	2267	2223
10°	3384	2895	2293	2071	2026
15°	5562	3133	1952	1816	1862
20°	14678	3687	1633	1633	1773
25°	56640	4573	1282	1500	1742
30°	122196	6102	1038	1469	1722
35°	183931	7201	883	1419	1767
40°	207217	7242	773	1460	1889
45°	222194	5613	713	1520	2047
50°	218398	3514	648	1603	2252
55°	192146	1720	612	1797	2523
60°	121613	351	702	1974	2807
65°	24854	104	726	2127	3113
70°	513	128	769	2372	3590
75°	508	339	847	2626	3982
80°	505	253	1010	2904	4672
85°	503	503	2013	3019	5284

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 226194 cd/sqm

TEST NUMBER: P1338926

CATALOG NUMBER: P3A05R409727DE010 E3A451WMH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.1	0.5
10°-20°	3.5	1.6
20°-30°	17.4	7.8
30°-40°	56.6	25.3
40°-50°	78.0	34.8
50°-60°	54.3	24.3
60°-70°	10.3	4.6
70°-80°	1.9	0.8
80°-90°	0.9	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°	22.0	9.8
0°-40°	78.6	35.1
0°-60°	211.0	94.2
0°-90°	224.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	224.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	12	12	12	12	12	
5°	13	12	11	10	10	1
15°	24	14	9	8	8	9
25°	234	19	5	6	7	121
35°	687	27	3	5	7	415
45°	716	18	2	5	7	545
55°	503	4	2	5	7	430
65°	48	0	1	4	6	85
75°	1	0	1	3	5	1
85°	0	0	1	1	2	0
90°	0	0	0	0	0	

TEST NUMBER: P1338926

CATALOG NUMBER: P3A05R409727DE010 E3A451WMH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
2.5°	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.7	11.5
5°	12.8	12.8	12.8	12.8	12.5	12.5	12.5	12.3	12.3	11.9	11.3
7.5°	13.6	13.6	13.6	13.6	13.4	13.2	13.0	13.0	12.8	11.7	10.9
10°	15.2	15.2	15.0	14.8	14.6	14.2	14.0	13.6	13.0	11.5	10.3
12.5°	18.5	18.1	17.9	17.5	16.9	16.0	15.2	14.6	13.2	11.1	9.7
15°	24.5	24.1	23.2	22.0	20.8	19.1	17.7	16.3	13.8	10.5	8.6
17.5°	35.0	33.7	32.5	30.4	27.4	24.5	21.4	18.7	14.6	9.9	7.8
20°	62.9	62.1	54.7	49.0	39.7	33.1	26.9	22.4	15.8	9.3	7.0
22.5°	129.8	121.2	109.0	89.3	69.5	51.2	37.2	28.2	17.1	8.4	6.2
25°	234.1	220.5	194.4	156.3	115.4	81.7	53.9	36.8	18.9	7.6	5.3
27.5°	354.4	340.7	300.1	247.7	180.8	123.2	76.9	48.8	21.4	6.8	4.7
30°	482.6	470.9	419.4	346.8	254.9	172.6	103.1	60.9	24.1	6.0	4.1
31°	534.2	519.2	463.7	386.3	289.6	193.0	113.6	66.0	25.1	5.8	3.9
32°	581.8	564.7	507.1	424.2	317.8	215.0	125.1	70.6	25.9	5.3	3.7
33°	622.7	602.7	547.2	460.0	348.9	235.5	137.0	74.9	26.5	4.9	3.5
34°	657.5	640.2	580.5	496.0	376.5	255.3	148.7	79.2	26.9	4.7	3.3
35°	687.1	671.4	612.4	523.3	403.4	274.4	159.4	83.3	26.9	4.3	3.3
36°	707.0	693.5	640.0	551.3	426.0	290.7	168.5	87.0	26.9	3.9	3.1
37°	717.9	704.8	658.1	574.4	448.2	306.7	176.7	89.9	26.7	3.7	2.9
38°	723.5	712.0	671.4	593.1	463.7	318.2	183.9	92.2	26.5	3.3	2.9
39°	724.9	715.3	679.9	606.6	478.7	329.8	189.1	93.4	25.9	3.1	2.7
40°	723.9	715.5	684.4	618.8	490.2	338.8	192.8	93.8	25.3	2.7	2.7
41°	721.8	715.3	687.7	627.2	499.5	344.6	194.2	93.0	24.5	2.3	2.5
42°	720.0	712.8	689.1	633.0	505.8	347.4	194.0	91.3	23.2	2.1	2.5
43°	720.0	711.8	689.3	636.7	508.9	347.7	191.5	88.3	21.6	1.9	2.3
44°	718.8	711.1	690.4	639.1	509.8	345.8	187.6	85.0	19.7	1.6	2.3
45°	716.5	708.5	690.2	639.4	508.3	341.3	181.2	80.6	18.1	1.2	2.3
46°	712.2	705.0	688.3	637.9	504.0	334.7	173.6	76.3	16.3	1.0	2.1
47°	703.5	698.0	683.4	633.0	497.4	325.0	164.6	71.4	14.8	0.8	2.1
48°	688.7	684.8	674.9	622.1	484.9	313.1	154.9	66.0	13.4	0.8	2.1
49°	661.6	658.5	652.7	604.6	468.8	298.5	144.4	60.1	11.9	0.6	2.1
50°	640.2	636.9	625.2	575.2	445.8	280.0	132.9	54.1	10.3	0.4	1.9
51°	626.0	620.6	602.1	541.0	412.2	255.3	120.3	48.1	8.6	0.4	1.9
52°	608.1	600.1	577.0	510.4	381.6	230.6	106.8	42.2	7.6	0.4	1.9
53°	570.6	567.8	544.9	477.5	350.9	206.9	92.8	37.2	6.6	0.4	1.9
54°	537.9	533.6	502.6	431.8	317.6	180.6	78.4	32.9	5.6	0.4	1.9
55°	502.6	494.1	466.6	393.3	278.5	156.3	64.6	28.4	4.5	0.4	1.6
56°	457.9	450.5	420.9	352.2	242.5	131.7	54.1	23.2	3.5	0.4	1.6
57°	403.6	396.8	374.0	301.6	205.1	107.6	44.0	18.7	2.7	0.4	1.6
58°	351.2	343.5	317.4	253.0	165.6	85.4	36.8	15.2	2.1	0.4	1.6
59°	310.8	300.5	266.8	212.5	129.6	64.8	29.2	12.1	1.4	0.4	1.6
60°	277.3	268.9	233.9	176.9	101.6	47.7	21.6	9.3	0.8	0.4	1.6
62.5°	160.7	158.4	126.9	91.1	47.9	22.2	10.7	4.3	0.4	0.6	1.6
65°	47.9	41.8	32.5	19.3	12.3	7.4	3.9	1.4	0.2	0.6	1.4



TEST NUMBER: P1338926

CATALOG NUMBER: P3A05R409727DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	1.4	1.4	1.4	1.4	1.4	1.4	0.8	0.4	0.2	0.6	1.4
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

TEST NUMBER: P1338926

CATALOG NUMBER: P3A05R409727DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	11.5	11.5	11.5	11.5
2.5°	11.1	10.9	10.7	10.7
5°	10.7	10.3	10.3	10.1
7.5°	10.1	9.7	9.7	9.7
10°	9.5	9.3	9.3	9.1
12.5°	8.6	8.6	8.6	8.6
15°	8.0	8.0	8.2	8.2
17.5°	7.2	7.4	7.8	8.0
20°	6.6	7.0	7.4	7.6
22.5°	6.2	6.6	7.2	7.4
25°	5.6	6.2	7.0	7.2
27.5°	5.1	6.0	6.6	7.0
30°	4.7	5.8	6.4	6.8
31°	4.7	5.6	6.4	6.8
32°	4.5	5.3	6.4	6.6
33°	4.5	5.3	6.4	6.6
34°	4.3	5.3	6.2	6.6
35°	4.3	5.3	6.2	6.6
36°	4.1	5.1	6.2	6.6
37°	4.1	5.1	6.2	6.6
38°	3.9	5.1	6.2	6.6
39°	3.9	5.1	6.2	6.6
40°	3.9	5.1	6.2	6.6
41°	3.7	5.1	6.2	6.6
42°	3.7	5.1	6.2	6.6
43°	3.7	4.9	6.2	6.6
44°	3.7	4.9	6.2	6.6
45°	3.5	4.9	6.2	6.6
46°	3.5	4.9	6.2	6.6
47°	3.5	4.9	6.2	6.6
48°	3.5	4.9	6.2	6.6
49°	3.5	4.9	6.2	6.6
50°	3.3	4.7	6.2	6.6
51°	3.3	4.7	6.2	6.6
52°	3.3	4.7	6.2	6.6
53°	3.3	4.7	6.2	6.6
54°	3.1	4.7	6.2	6.6
55°	3.1	4.7	6.2	6.6
56°	3.1	4.7	6.2	6.4
57°	3.1	4.7	6.0	6.4
58°	3.1	4.5	6.0	6.4
59°	3.1	4.5	6.0	6.4
60°	3.1	4.5	6.0	6.4
62.5°	2.9	4.5	5.8	6.2
65°	2.7	4.1	5.8	6.0



TEST NUMBER: P1338926

CATALOG NUMBER: P3A05R409727DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	2.7	3.9	5.3	5.8
70°	2.5	3.7	5.1	5.6
72.5°	2.1	3.5	4.7	5.1
75°	1.9	3.1	4.3	4.7
77.5°	1.6	2.7	3.9	4.1
80°	1.4	2.3	3.3	3.7
82.5°	1.0	1.6	2.7	2.9
85°	0.8	1.2	1.9	2.1
87.5°	0.6	0.6	1.0	1.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)