

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: P1338478

Luminaire Tested: P3A05R359827DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1338478
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-77)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R359827DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R35 optic, 2700K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

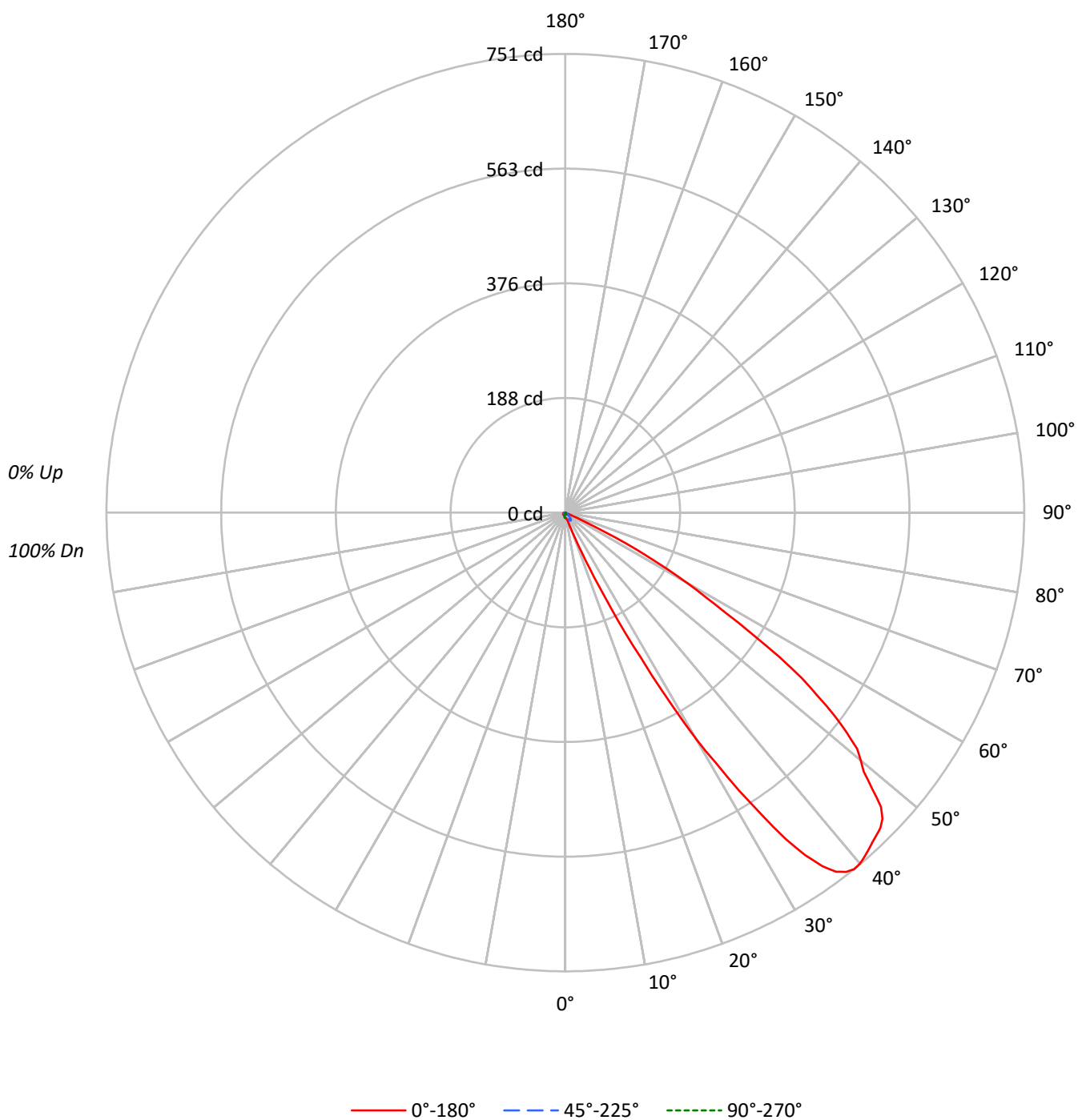
Lumens per Lamp: N/A
Luminaire Lumens: 187.0 lumens
Efficiency: N/A
Efficacy: 26.0 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	50	30	10
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	107	104	100	97	100	97	94	96	93	91	92	90	89	87		
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73		
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61		
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	50		
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35		
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31	29		
8	57	42	33	27	55	41	33	27	40	32	27	39	32	26	38	31	26	24		
9	52	38	29	23	50	37	29	23	36	28	23	35	28	22	34	27	22	20		
10	48	34	25	19	46	33	25	19	32	25	19	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1886	1886	1886	1886	1886
5°	2047	2003	1849	1673	1629
10°	2138	1959	1648	1425	1425
15°	3065	1907	1339	1226	1271
20°	7677	2054	1073	1073	1190
25°	35663	2613	823	992	1113
30°	108396	3545	633	886	1114
35°	183182	4122	535	857	1098
40°	214745	4065	429	859	1174
45°	226132	2884	372	930	1271
50°	215259	1740	341	989	1399
55°	180371	726	382	1109	1606
60°	101001	132	439	1272	1798
65°	17434	104	415	1401	2024
70°	321	128	513	1539	2244
75°	254	169	678	1694	2542
80°	253	253	884	1894	3031
85°	0	503	1761	2013	3522

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 227754 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.8	0.4
10°-20°	2.2	1.2
20°-30°	11.5	6.1
30°-40°	49.6	26.5
40°-50°	70.7	37.8
50°-60°	43.8	23.4
60°-70°	6.7	3.6
70°-80°	1.3	0.7
80°-90°	0.6	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°	14.5	7.7
0°-40°	64.0	34.2
0°-60°	178.5	95.4
0°-90°	187.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	187.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9	9	9	9	9	
5°	9	9	8	8	7	1
15°	14	8	6	5	6	5
25°	147	11	3	4	5	88
35°	684	15	2	3	4	411
45°	729	9	1	3	4	551
55°	472	2	1	3	4	402
65°	34	0	1	3	4	69
75°	0	0	1	2	3	0
85°	0	0	1	1	1	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
2.5°	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.6	8.4
5°	9.3	9.3	9.1	9.1	9.1	9.1	9.1	9.1	8.8	8.4	7.9
7.5°	9.5	9.5	9.3	9.3	9.3	9.3	9.1	8.9	8.6	7.9	7.4
10°	9.6	9.6	9.6	9.6	9.5	9.3	9.1	8.8	8.3	7.4	6.9
12.5°	10.8	10.8	10.6	10.3	10.0	9.6	9.3	8.6	7.6	6.8	6.2
15°	13.5	13.3	13.0	12.5	11.8	11.0	10.3	8.4	6.9	5.9	5.6
17.5°	18.9	18.6	18.1	16.4	14.9	13.3	12.0	8.4	6.2	5.2	4.9
20°	32.9	33.1	29.5	25.5	22.1	18.4	15.0	8.8	5.6	4.6	4.4
22.5°	68.7	66.0	57.6	47.8	36.5	28.2	21.3	9.6	4.9	3.9	3.9
25°	147.4	137.1	116.6	88.1	62.1	44.1	30.9	10.8	4.4	3.4	3.5
27.5°	269.1	259.8	218.8	164.8	109.4	66.5	41.9	12.3	3.9	2.9	3.2
30°	428.1	402.4	348.9	270.1	182.8	101.8	56.2	14.0	3.2	2.5	3.0
31°	477.7	465.9	400.7	312.5	214.2	120.9	62.3	14.5	3.0	2.5	2.9
32°	536.6	515.7	457.3	358.9	246.1	137.9	69.5	15.0	2.9	2.2	2.9
33°	589.3	569.1	498.0	399.7	278.4	157.3	77.3	15.2	2.5	2.2	2.7
34°	644.7	617.0	546.6	442.4	311.4	178.3	84.4	15.4	2.4	2.0	2.7
35°	684.3	656.7	588.5	476.2	340.0	196.8	92.5	15.4	2.2	2.0	2.5
36°	715.1	690.8	624.6	511.0	368.3	213.5	98.9	15.4	1.9	1.9	2.5
37°	736.2	713.0	648.9	540.9	389.9	228.4	104.7	15.4	1.7	1.9	2.5
38°	746.5	727.2	672.4	562.6	410.9	240.0	109.2	15.0	1.5	1.7	2.4
39°	750.9	735.2	686.7	581.0	426.6	250.2	112.6	14.7	1.4	1.7	2.4
40°	750.2	736.5	694.8	593.7	439.2	257.1	114.5	14.2	1.2	1.5	2.4
41°	746.3	734.5	699.0	604.5	446.8	261.8	115.0	13.7	1.0	1.5	2.2
42°	741.9	731.1	700.4	610.2	451.7	263.3	113.6	13.0	1.0	1.4	2.2
43°	737.4	727.4	700.4	612.1	452.9	262.3	111.4	11.8	0.8	1.4	2.2
44°	733.6	724.2	698.2	611.6	450.4	258.4	107.4	10.5	0.7	1.4	2.2
45°	729.2	720.0	695.3	608.4	445.5	251.9	102.3	9.3	0.5	1.2	2.2
46°	721.5	714.2	690.3	601.8	437.7	242.7	95.9	8.4	0.3	1.2	2.0
47°	706.5	700.2	680.5	592.0	427.4	231.9	89.3	7.6	0.3	1.2	2.0
48°	676.2	676.1	660.9	573.8	411.0	218.4	82.4	6.8	0.3	1.2	2.0
49°	647.0	644.0	625.1	541.7	387.6	202.2	75.1	6.1	0.2	1.2	2.0
50°	631.0	624.4	593.4	503.9	357.5	179.8	67.4	5.1	0.2	1.0	2.0
51°	614.3	604.8	568.2	469.8	321.7	158.2	58.9	4.1	0.2	1.0	1.9
52°	584.1	575.1	534.1	437.2	287.0	136.1	50.8	3.4	0.2	1.0	2.0
53°	551.5	538.7	494.1	401.4	256.4	116.5	42.5	2.9	0.2	1.0	1.9
54°	510.5	504.7	453.6	357.5	220.6	97.6	34.9	2.4	0.2	1.0	1.9
55°	471.8	463.4	410.2	312.6	188.2	80.0	29.2	1.9	0.2	1.0	1.9
56°	422.5	409.9	360.1	271.4	155.3	64.5	24.6	1.5	0.2	1.0	1.9
57°	363.8	350.3	310.9	225.7	121.9	49.1	20.6	1.2	0.2	1.0	1.9
58°	307.7	296.1	253.9	174.2	91.8	34.1	17.0	0.8	0.2	0.8	1.9
59°	265.9	253.0	211.2	134.0	63.8	25.2	12.8	0.7	0.2	1.0	1.9
60°	230.3	213.7	170.0	103.8	45.6	18.1	9.5	0.3	0.3	1.0	1.9
62.5°	132.7	117.2	81.2	42.2	18.7	9.3	4.6	0.2	0.3	1.0	1.9
65°	33.6	29.9	19.4	9.1	5.2	3.2	1.7	0.2	0.3	0.8	1.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	1.2	1.2	1.2	1.0	0.8	0.7	0.3	0.2	0.3	0.8	1.7
70°	0.5	0.5	0.5	0.3	0.3	0.2	0.2	0.2	0.3	0.8	1.5
72.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.5	0.8	1.4
75°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.5	0.8	1.4
77.5°	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7	1.2
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7	1.0
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7	0.8
85°	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.5	0.7	0.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.7	0.5
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):

	135°	157.5°	180°
0°	8.6	8.6	8.6
2.5°	8.1	8.1	8.1
5°	7.6	7.6	7.4
7.5°	7.1	6.9	6.9
10°	6.4	6.4	6.4
12.5°	5.9	5.9	5.9
15°	5.4	5.6	5.6
17.5°	4.9	5.2	5.2
20°	4.6	4.9	5.1
22.5°	4.2	4.6	4.7
25°	4.1	4.4	4.6
27.5°	3.7	4.2	4.6
30°	3.5	4.1	4.4
31°	3.5	4.1	4.2
32°	3.4	4.1	4.2
33°	3.4	4.1	4.2
34°	3.4	3.9	4.2
35°	3.2	3.9	4.1
36°	3.2	3.9	4.1
37°	3.2	3.9	4.2
38°	3.2	3.9	4.1
39°	3.0	3.9	4.1
40°	3.0	3.9	4.1
41°	3.0	3.9	4.1
42°	3.0	3.9	4.1
43°	3.0	3.9	4.1
44°	3.0	3.7	4.1
45°	3.0	3.7	4.1
46°	3.0	3.9	4.1
47°	3.0	3.9	4.2
48°	3.0	3.7	4.1
49°	2.9	3.7	4.1
50°	2.9	3.7	4.1
51°	2.9	3.9	4.2
52°	2.9	3.9	4.2
53°	2.9	3.9	4.2
54°	2.9	3.9	4.1
55°	2.9	3.9	4.2
56°	2.9	3.9	4.1
57°	2.9	3.9	4.1
58°	2.9	3.7	4.1
59°	2.9	3.7	4.1
60°	2.9	3.7	4.1
62.5°	2.7	3.7	4.1
65°	2.7	3.5	3.9



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	2.5	3.5	3.7
70°	2.4	3.4	3.5
72.5°	2.2	3.2	3.4
75°	2.0	2.9	3.0
77.5°	1.7	2.5	2.9
80°	1.5	2.2	2.4
82.5°	1.2	1.9	2.0
85°	0.8	1.4	1.4
87.5°	0.3	0.7	0.7
90°	0.0	0.0	0.0

(END OF REPORT)