

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: P1335511

Luminaire Tested: P3A02R359840DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335511
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: P3A02R359840DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R35 optic, 4000K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

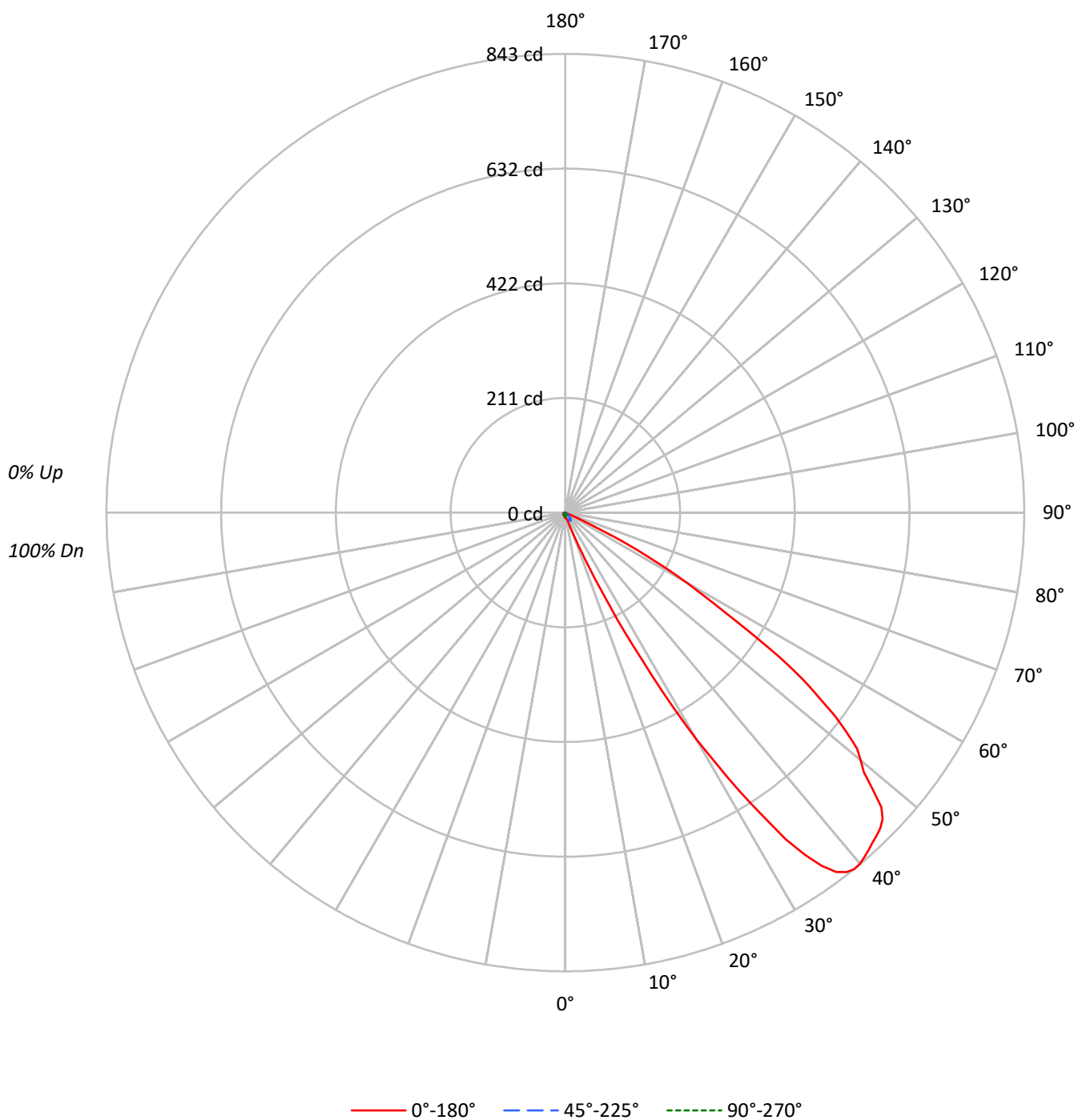
Lumens per Lamp: N/A
Luminaire Lumens: 210.0 lumens
Efficiency: N/A
Efficacy: 58.3 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 3.6
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	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°	2127	2127	2127	2127	2127
5°	2289	2245	2091	1871	1827
10°	2405	2204	1848	1603	1603
15°	3451	2157	1498	1385	1430
20°	8634	2310	1190	1190	1330
25°	40043	2928	919	1089	1234
30°	121715	3975	709	1013	1241
35°	205722	4631	616	964	1205
40°	241138	4551	487	973	1288
45°	253949	3225	403	1054	1395
50°	241732	1944	375	1092	1535
55°	202545	803	421	1223	1797
60°	113412	175	482	1403	1974
65°	19561	104	467	1557	2283
70°	385	128	577	1731	2565
75°	339	169	763	1949	2881
80°	253	253	1010	2147	3410
85°	0	503	2013	2264	3774

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 255753 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.9	0.4
10°-20°	2.5	1.2
20°-30°	12.9	6.1
30°-40°	55.6	26.5
40°-50°	79.4	37.8
50°-60°	49.2	23.4
60°-70°	7.5	3.6
70°-80°	1.4	0.7
80°-90°	0.7	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°	16.2	7.7
0°-40°	71.9	34.2
0°-60°	200.4	95.4
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°	10	10	10	10	10	
5°	10	10	10	8	8	1
15°	15	10	7	6	6	5
25°	166	12	4	4	5	99
35°	768	17	2	4	4	461
45°	819	10	1	3	4	619
55°	530	2	1	3	5	451
65°	38	0	1	3	4	77
75°	0	0	1	2	3	0
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°	45°	67.5°	90°	112.5°
0°	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
2.5°	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.7	9.5
5°	10.4	10.4	10.2	10.2	10.2	10.2	10.2	10.2	9.9	9.5	8.9
7.5°	10.6	10.6	10.4	10.4	10.4	10.4	10.2	10.0	9.7	8.9	8.3
10°	10.8	10.8	10.8	10.8	10.6	10.4	10.2	9.9	9.3	8.3	7.8
12.5°	12.1	12.1	11.9	11.6	11.2	10.8	10.4	9.7	8.5	7.6	7.0
15°	15.2	15.0	14.6	14.0	13.3	12.3	11.6	9.5	7.8	6.6	6.3
17.5°	21.2	20.9	20.3	18.4	16.7	15.0	13.5	9.5	7.0	5.9	5.5
20°	37.0	37.2	33.2	28.6	24.8	20.7	16.9	9.9	6.3	5.1	4.9
22.5°	77.2	74.1	64.6	53.6	40.9	31.7	23.9	10.8	5.5	4.4	4.4
25°	165.5	153.9	131.0	99.0	69.8	49.5	34.7	12.1	4.9	3.8	4.0
27.5°	302.2	291.7	245.7	185.0	122.8	74.7	47.0	13.8	4.4	3.2	3.6
30°	480.7	451.9	391.8	303.3	205.3	114.3	63.1	15.7	3.6	2.8	3.4
31°	536.5	523.2	450.0	350.9	240.6	135.7	70.0	16.3	3.4	2.8	3.2
32°	602.6	579.1	513.5	403.0	276.4	154.9	78.1	16.9	3.2	2.5	3.2
33°	661.8	639.0	559.2	448.9	312.6	176.7	86.8	17.1	2.8	2.5	3.0
34°	724.0	692.9	613.8	496.9	349.8	200.2	94.8	17.3	2.7	2.3	3.0
35°	768.5	737.4	660.8	534.8	381.8	221.0	103.9	17.3	2.5	2.3	2.8
36°	803.0	775.7	701.4	573.8	413.6	239.8	111.1	17.3	2.1	2.1	2.8
37°	826.7	800.7	728.7	607.4	437.9	256.5	117.5	17.3	1.9	2.1	2.8
38°	838.3	816.7	755.1	631.8	461.4	269.6	122.7	16.9	1.7	1.9	2.7
39°	843.2	825.6	771.2	652.5	479.0	280.9	126.4	16.5	1.5	1.9	2.7
40°	842.4	827.1	780.3	666.7	493.3	288.7	128.5	15.9	1.3	1.7	2.7
41°	838.1	824.8	785.0	678.9	501.8	294.0	129.1	15.4	1.1	1.7	2.5
42°	833.2	821.0	786.5	685.3	507.3	295.7	127.6	14.6	1.1	1.5	2.5
43°	828.0	816.9	786.5	687.4	508.6	294.6	125.1	13.3	0.9	1.5	2.5
44°	823.9	813.3	784.1	686.8	505.8	290.2	120.6	11.8	0.8	1.5	2.5
45°	818.9	808.5	780.8	683.2	500.3	282.8	114.9	10.4	0.6	1.3	2.5
46°	810.2	802.1	775.2	675.8	491.6	272.6	107.7	9.5	0.4	1.3	2.3
47°	793.4	786.3	764.2	664.8	480.0	260.5	100.3	8.5	0.4	1.3	2.3
48°	759.4	759.2	742.2	644.3	461.6	245.3	92.5	7.6	0.4	1.3	2.3
49°	726.6	723.2	702.0	608.3	435.3	227.1	84.4	6.8	0.2	1.3	2.3
50°	708.6	701.2	666.3	565.9	401.5	201.9	75.6	5.7	0.2	1.1	2.3
51°	689.8	679.2	638.1	527.6	361.3	177.6	66.2	4.5	0.2	1.1	2.1
52°	655.9	645.9	599.8	491.0	322.3	152.8	57.1	3.8	0.2	1.1	2.3
53°	619.3	604.9	554.9	450.8	288.0	130.8	47.8	3.2	0.2	1.1	2.1
54°	573.3	566.8	509.4	401.5	247.8	109.6	39.2	2.7	0.2	1.1	2.1
55°	529.8	520.4	460.7	351.1	211.4	89.9	32.8	2.1	0.2	1.1	2.1
56°	474.5	460.3	404.4	304.8	174.4	72.4	27.7	1.7	0.2	1.1	2.1
57°	408.5	393.4	349.2	253.5	136.9	55.2	23.1	1.3	0.2	1.1	2.1
58°	345.6	332.5	285.1	195.6	103.1	38.3	19.1	0.9	0.2	0.9	2.1
59°	298.6	284.2	237.2	150.5	71.7	28.2	14.4	0.8	0.2	1.1	2.1
60°	258.6	240.0	190.9	116.6	51.2	20.3	10.6	0.4	0.4	1.1	2.1
62.5°	149.0	131.6	91.2	47.4	21.0	10.4	5.1	0.2	0.4	1.1	2.1
65°	37.7	33.6	21.8	10.2	5.9	3.6	1.9	0.2	0.4	0.9	1.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	1.3	1.3	1.3	1.1	0.9	0.8	0.4	0.2	0.4	0.9	1.9
70°	0.6	0.6	0.6	0.4	0.4	0.2	0.2	0.2	0.4	0.9	1.7
72.5°	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.6	0.9	1.5
75°	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.6	0.9	1.5
77.5°	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.8	1.3
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.8	1.1
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.8	0.9
85°	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.6	0.8	0.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.8	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):

	135°	157.5°	180°
0°	9.7	9.7	9.7
2.5°	9.1	9.1	9.1
5°	8.5	8.5	8.3
7.5°	8.0	7.8	7.8
10°	7.2	7.2	7.2
12.5°	6.6	6.6	6.6
15°	6.1	6.3	6.3
17.5°	5.5	5.9	5.9
20°	5.1	5.5	5.7
22.5°	4.7	5.1	5.3
25°	4.5	4.9	5.1
27.5°	4.2	4.7	5.1
30°	4.0	4.5	4.9
31°	4.0	4.5	4.7
32°	3.8	4.5	4.7
33°	3.8	4.5	4.7
34°	3.8	4.4	4.7
35°	3.6	4.4	4.5
36°	3.6	4.4	4.5
37°	3.6	4.4	4.7
38°	3.6	4.4	4.5
39°	3.4	4.4	4.5
40°	3.4	4.4	4.5
41°	3.4	4.4	4.5
42°	3.4	4.4	4.5
43°	3.4	4.4	4.5
44°	3.4	4.2	4.5
45°	3.4	4.2	4.5
46°	3.4	4.4	4.5
47°	3.4	4.4	4.7
48°	3.4	4.2	4.5
49°	3.2	4.2	4.5
50°	3.2	4.2	4.5
51°	3.2	4.4	4.7
52°	3.2	4.4	4.7
53°	3.2	4.4	4.7
54°	3.2	4.4	4.5
55°	3.2	4.4	4.7
56°	3.2	4.4	4.5
57°	3.2	4.4	4.5
58°	3.2	4.2	4.5
59°	3.2	4.2	4.5
60°	3.2	4.2	4.5
62.5°	3.0	4.2	4.5
65°	3.0	4.0	4.4



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	2.8	4.0	4.2
70°	2.7	3.8	4.0
72.5°	2.5	3.6	3.8
75°	2.3	3.2	3.4
77.5°	1.9	2.8	3.2
80°	1.7	2.5	2.7
82.5°	1.3	2.1	2.3
85°	0.9	1.5	1.5
87.5°	0.4	0.8	0.8
90°	0.0	0.0	0.0

(END OF REPORT)