

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: P1343083

Luminaire Tested: P3A09R459835DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1343083
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A09R459835DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R45 optic, 3500K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

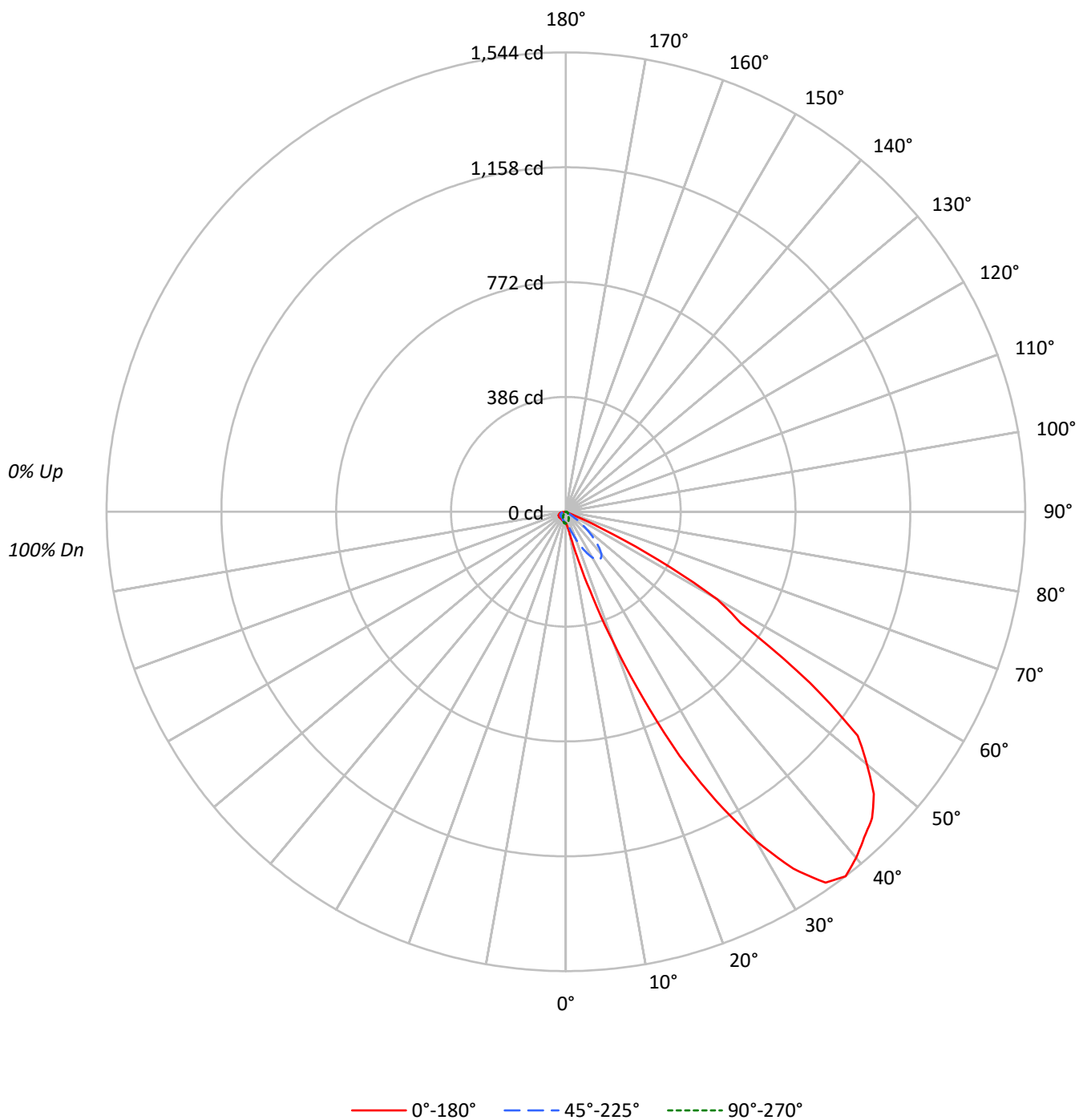
Lumens per Lamp: N/A
Luminaire Lumens: 690.0 lumens
Efficiency: N/A
Efficacy: 62.7 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11
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	83	78	84	80	77	81	78	75
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38
7	63	49	40	34	61	48	40	33	47	39	33	45	38	33	44	37	33
8	58	44	35	29	56	43	35	29	42	34	29	40	33	28	39	33	28
9	53	39	31	25	52	39	30	25	38	30	25	36	29	25	35	29	24
10	49	36	27	22	48	35	27	22	34	27	21	33	26	21	32	26	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	8749	8749	8749	8749	8749
5°	10412	9663	8651	8034	8034
10°	16633	11289	8127	7615	7615
15°	41408	15142	7378	7128	7378
20°	109093	22612	6394	6791	7187
25°	219061	33510	5516	6339	7041
30°	322936	44893	4482	6203	7216
35°	407347	52655	3828	6103	7469
40°	434614	53214	3435	6355	7986
45°	451551	44377	3194	6884	8652
50°	450851	30941	3104	7403	9722
55°	383183	13725	3288	8296	10666
60°	257523	2763	3245	9254	12236
65°	68334	1193	3269	10066	13906
70°	1859	1475	3270	10963	15708
75°	1440	1440	3389	11607	17877
80°	1389	2147	3662	12249	20205
85°	1510	2768	5787	12831	20128

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 463171 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.0	0.6
10°-20°	19.5	2.8
20°-30°	80.3	11.6
30°-40°	169.2	24.5
40°-50°	208.7	30.2
50°-60°	156.4	22.7
60°-70°	40.3	5.8
70°-80°	8.4	1.2
80°-90°	3.4	0.5
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°	103.7	15.0
0°-40°	272.9	39.5
0°-60°	638.0	92.5
0°-90°	690.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	690.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	40	40	40	40	40	
5°	47	44	39	36	36	5
15°	182	67	32	31	32	67
25°	905	138	23	26	29	422
35°	1522	197	14	23	28	927
45°	1456	143	10	22	28	1114
55°	1002	36	9	22	28	865
65°	132	2	6	19	27	190
75°	2	2	4	14	21	2
85°	1	1	2	5	8	1
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°	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9
2.5°	42.2	42.2	42.2	42.2	42.2	42.2	42.2	41.6	41.0	39.9	38.8
5°	47.3	46.8	46.8	46.8	46.2	45.6	45.6	43.9	41.6	39.3	37.6
7.5°	55.9	55.9	55.3	54.2	53.6	52.5	51.3	46.8	41.6	38.2	35.9
10°	74.7	73.5	71.8	70.7	67.8	63.9	61.0	50.7	41.0	36.5	34.8
12.5°	111.7	114.0	108.3	102.6	94.6	87.2	78.1	57.6	41.0	34.8	33.1
15°	182.4	186.4	175.6	164.2	144.8	126.6	109.5	66.7	39.9	32.5	30.8
17.5°	298.2	303.3	285.1	258.3	228.1	191.6	160.2	79.2	38.8	30.2	29.1
20°	467.5	466.9	431.6	398.0	339.8	286.2	227.5	96.9	37.1	27.4	27.4
22.5°	675.6	677.9	634.6	574.1	491.5	405.4	311.9	117.4	34.8	25.1	25.7
25°	905.4	886.0	834.7	761.1	655.6	536.5	413.3	138.5	32.5	22.8	23.9
27.5°	1096.9	1078.1	1019.4	932.2	818.7	677.3	516.5	159.6	29.6	20.5	22.2
30°	1275.4	1251.4	1180.7	1082.1	947.0	794.2	613.5	177.3	26.2	17.7	20.5
32.5°	1422.5	1400.8	1320.4	1205.8	1058.7	894.5	695.6	191.0	22.8	16.0	19.4
35°	1521.7	1499.4	1425.3	1299.3	1139.1	967.5	762.3	196.7	20.0	14.3	18.8
37.5°	1544.5	1532.5	1479.5	1361.5	1194.4	1014.3	805.0	195.0	16.5	13.1	17.7
40°	1518.3	1521.1	1496.0	1398.0	1224.1	1034.2	822.7	185.9	13.7	12.0	17.1
42.5°	1484.6	1492.0	1490.3	1412.8	1236.6	1035.4	815.3	167.6	10.8	10.8	16.5
45°	1456.1	1463.5	1473.8	1406.5	1228.1	1020.5	791.9	143.1	8.0	10.3	16.5
47.5°	1404.2	1412.2	1427.0	1356.3	1184.7	982.3	749.7	116.3	5.7	9.7	16.0
50°	1321.6	1325.6	1321.6	1242.3	1101.5	920.8	681.3	90.7	4.0	9.1	16.0
52.5°	1236.6	1228.6	1195.6	1095.2	969.2	823.3	595.2	64.4	2.9	8.6	15.4
55°	1002.3	989.7	965.2	903.7	831.8	703.5	481.2	35.9	2.9	8.6	14.8
57.5°	698.4	705.3	713.8	701.3	668.2	554.2	365.5	16.0	2.9	8.0	14.8
60°	587.2	581.5	582.1	574.1	519.4	404.2	251.4	6.3	2.9	7.4	14.3
62.5°	350.6	354.6	362.0	363.7	309.6	225.8	131.7	2.9	2.9	6.8	13.7
65°	131.7	138.0	120.9	104.9	83.2	61.0	30.8	2.3	3.4	6.3	12.5
67.5°	4.0	4.6	5.7	5.1	5.1	4.6	3.4	2.3	3.4	5.7	12.0
70°	2.9	2.9	2.9	2.9	2.9	2.3	2.3	2.3	2.9	5.1	10.8
72.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.9	4.6	9.7
75°	1.7	2.3	1.7	1.7	1.7	1.7	1.7	1.7	2.9	4.0	8.0
77.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.3	3.4	6.8
80°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.7	2.3	2.9	5.7
82.5°	1.1	1.1	1.1	0.6	1.1	1.1	1.1	1.1	2.3	2.3	4.6
85°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.1	1.7	2.3	2.9
87.5°	0.0	0.0	0.0	0.0	0.6	0.6	0.6	1.1	1.7	1.7	1.7
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°	39.9	39.9	39.9
2.5°	37.6	37.6	37.6
5°	36.5	36.5	36.5
7.5°	35.3	35.3	35.3
10°	34.2	34.2	34.2
12.5°	33.1	33.1	33.6
15°	31.4	32.5	32.5
17.5°	30.2	31.4	31.9
20°	29.1	30.2	30.8
22.5°	27.4	29.1	30.2
25°	26.2	28.5	29.1
27.5°	25.1	27.9	29.1
30°	24.5	27.4	28.5
32.5°	23.4	26.8	27.9
35°	22.8	26.8	27.9
37.5°	22.8	26.2	27.9
40°	22.2	26.2	27.9
42.5°	22.2	26.2	27.9
45°	22.2	26.2	27.9
47.5°	21.7	26.2	28.5
50°	21.7	26.8	28.5
52.5°	21.7	26.8	28.5
55°	21.7	26.8	27.9
57.5°	21.1	26.2	27.9
60°	21.1	26.2	27.9
62.5°	20.0	25.7	27.4
65°	19.4	25.1	26.8
67.5°	18.2	24.5	25.7
70°	17.1	22.8	24.5
72.5°	15.4	21.7	23.4
75°	13.7	20.0	21.1
77.5°	12.0	17.7	18.8
80°	9.7	14.8	16.0
82.5°	7.4	11.4	12.0
85°	5.1	7.4	8.0
87.5°	2.3	3.4	4.0
90°	0.0	0.0	0.0

(END OF REPORT)