

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: P1343051

Luminaire Tested: P3A09R459827DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1343051
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: P3A09R459827DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R45 optic, 2700K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

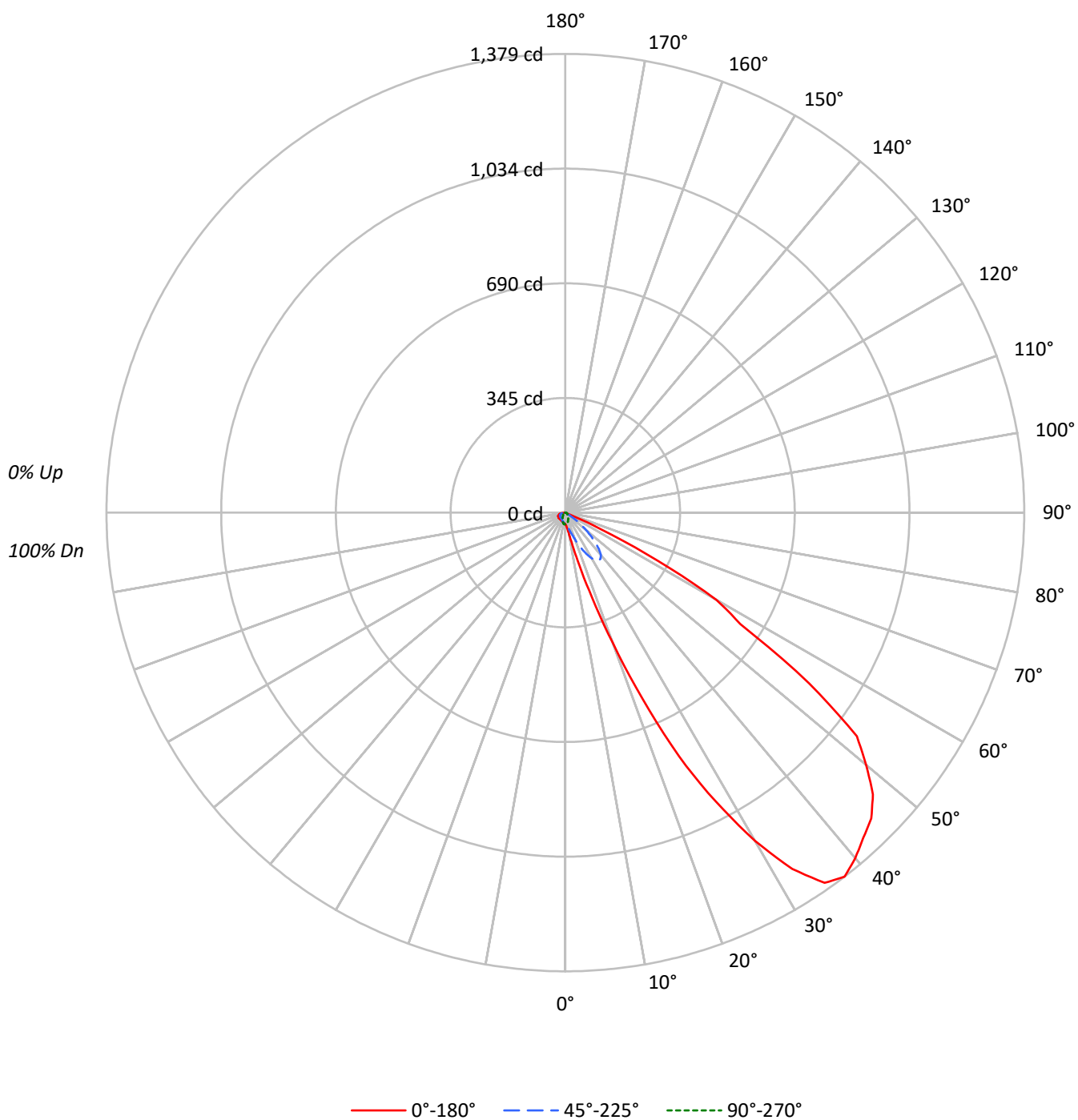
Lumens per Lamp: N/A
Luminaire Lumens: 616.0 lumens
Efficiency: N/A
Efficacy: 56.0 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	7806	7806	7806	7806	7806
5°	9289	8629	7726	7176	7176
10°	14852	10087	7259	6791	6791
15°	36981	13530	6583	6356	6583
20°	97402	20185	5694	6067	6417
25°	195568	29929	4936	5662	6291
30°	288298	40082	4001	5545	6431
35°	363660	47007	3400	5461	6666
40°	387984	47489	3063	5696	7128
45°	403112	39632	2853	6171	7722
50°	402477	27598	2763	6584	8665
55°	342086	12272	2906	7378	9519
60°	229938	2456	2895	8245	10920
65°	61018	1038	2906	8976	12401
70°	1603	1282	2949	9809	14041
75°	1271	1271	3050	10336	15928
80°	1263	1894	3157	10986	18058
85°	1258	2516	5032	11573	17863

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 413510 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.5	0.6
10°-20°	17.4	2.8
20°-30°	71.7	11.6
30°-40°	151.0	24.5
40°-50°	186.3	30.3
50°-60°	139.6	22.7
60°-70°	35.9	5.8
70°-80°	7.4	1.2
80°-90°	3.0	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°	92.6	15.0
0°-40°	243.6	39.5
0°-60°	569.6	92.5
0°-90°	616.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	616.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	36	36	36	36	36	
5°	42	39	35	33	33	5
15°	163	60	29	28	29	60
25°	808	124	20	23	26	377
35°	1358	176	13	20	25	828
45°	1300	128	9	20	25	995
55°	895	32	8	19	25	773
65°	118	2	6	17	24	170
75°	2	2	4	12	19	2
85°	0	1	2	5	7	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°	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6
2.5°	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.2	36.6	35.6	34.6
5°	42.2	41.7	41.7	41.7	41.2	40.7	40.7	39.2	37.2	35.1	33.6
7.5°	49.9	49.9	49.4	48.4	47.8	46.8	45.8	41.7	37.2	34.1	32.1
10°	66.7	65.7	64.1	63.1	60.6	57.0	54.5	45.3	36.6	32.6	31.0
12.5°	99.8	101.8	96.7	91.6	84.5	77.9	69.7	51.4	36.6	31.0	29.5
15°	162.9	166.4	156.8	146.6	129.3	113.0	97.7	59.6	35.6	29.0	27.5
17.5°	266.2	270.8	254.5	230.6	203.6	171.0	143.0	70.7	34.6	27.0	26.0
20°	417.4	416.9	385.3	355.3	303.4	255.5	203.1	86.5	33.1	24.4	24.4
22.5°	603.1	605.2	566.5	512.5	438.7	361.9	278.4	104.9	31.0	22.4	22.9
25°	808.3	791.0	745.2	679.5	585.3	479.0	369.0	123.7	29.0	20.4	21.4
27.5°	979.3	962.5	910.1	832.2	730.9	604.7	461.1	142.5	26.5	18.3	19.9
30°	1138.6	1117.2	1054.1	966.1	845.4	709.0	547.7	158.3	23.4	15.8	18.3
32.5°	1269.9	1250.6	1178.8	1076.5	945.2	798.6	621.0	170.5	20.4	14.3	17.3
35°	1358.5	1338.6	1272.5	1160.0	1017.0	863.7	680.5	175.6	17.8	12.7	16.8
37.5°	1378.8	1368.2	1320.8	1215.5	1066.3	905.5	718.7	174.1	14.8	11.7	15.8
40°	1355.4	1358.0	1335.6	1248.0	1092.8	923.3	734.5	165.9	12.2	10.7	15.3
42.5°	1325.4	1332.0	1330.5	1261.3	1104.0	924.3	727.8	149.6	9.7	9.7	14.8
45°	1299.9	1306.6	1315.7	1255.7	1096.4	911.1	707.0	127.8	7.1	9.2	14.8
47.5°	1253.6	1260.8	1274.0	1210.9	1057.7	877.0	669.3	103.8	5.1	8.7	14.3
50°	1179.8	1183.4	1179.8	1109.1	983.4	822.0	608.2	80.9	3.6	8.1	14.3
52.5°	1104.0	1096.9	1067.3	977.8	865.3	735.0	531.4	57.5	2.5	7.6	13.7
55°	894.8	883.6	861.7	806.7	742.6	628.1	429.6	32.1	2.5	7.6	13.2
57.5°	623.5	629.6	637.3	626.1	596.5	494.7	326.3	14.3	2.5	7.1	13.2
60°	524.3	519.2	519.7	512.5	463.7	360.9	224.5	5.6	2.5	6.6	12.7
62.5°	313.0	316.6	323.2	324.7	276.4	201.6	117.6	2.5	2.5	6.1	12.2
65°	117.6	123.2	107.9	93.7	74.3	54.5	27.5	2.0	3.1	5.6	11.2
67.5°	3.6	4.1	5.1	4.6	4.6	4.1	3.1	2.0	3.1	5.1	10.7
70°	2.5	2.5	2.5	2.5	2.5	2.0	2.0	2.0	2.5	4.6	9.7
72.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5	4.1	8.7
75°	1.5	2.0	1.5	1.5	1.5	1.5	1.5	1.5	2.5	3.6	7.1
77.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	3.1	6.1
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	2.0	2.5	5.1
82.5°	1.0	1.0	1.0	0.5	1.0	1.0	1.0	1.0	2.0	2.0	4.1
85°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.5	2.0	2.5
87.5°	0.0	0.0	0.0	0.0	0.5	0.5	0.5	1.0	1.5	1.5	1.5
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°	35.6	35.6	35.6
2.5°	33.6	33.6	33.6
5°	32.6	32.6	32.6
7.5°	31.6	31.6	31.6
10°	30.5	30.5	30.5
12.5°	29.5	29.5	30.0
15°	28.0	29.0	29.0
17.5°	27.0	28.0	28.5
20°	26.0	27.0	27.5
22.5°	24.4	26.0	27.0
25°	23.4	25.4	26.0
27.5°	22.4	24.9	26.0
30°	21.9	24.4	25.4
32.5°	20.9	23.9	24.9
35°	20.4	23.9	24.9
37.5°	20.4	23.4	24.9
40°	19.9	23.4	24.9
42.5°	19.9	23.4	24.9
45°	19.9	23.4	24.9
47.5°	19.3	23.4	25.4
50°	19.3	23.9	25.4
52.5°	19.3	23.9	25.4
55°	19.3	23.9	24.9
57.5°	18.8	23.4	24.9
60°	18.8	23.4	24.9
62.5°	17.8	22.9	24.4
65°	17.3	22.4	23.9
67.5°	16.3	21.9	22.9
70°	15.3	20.4	21.9
72.5°	13.7	19.3	20.9
75°	12.2	17.8	18.8
77.5°	10.7	15.8	16.8
80°	8.7	13.2	14.3
82.5°	6.6	10.2	10.7
85°	4.6	6.6	7.1
87.5°	2.0	3.1	3.6
90°	0.0	0.0	0.0

(END OF REPORT)