

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: P1343067

Luminaire Tested: P3A09R459830DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1343067
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: P3A09R459830DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R45 optic, 3000K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

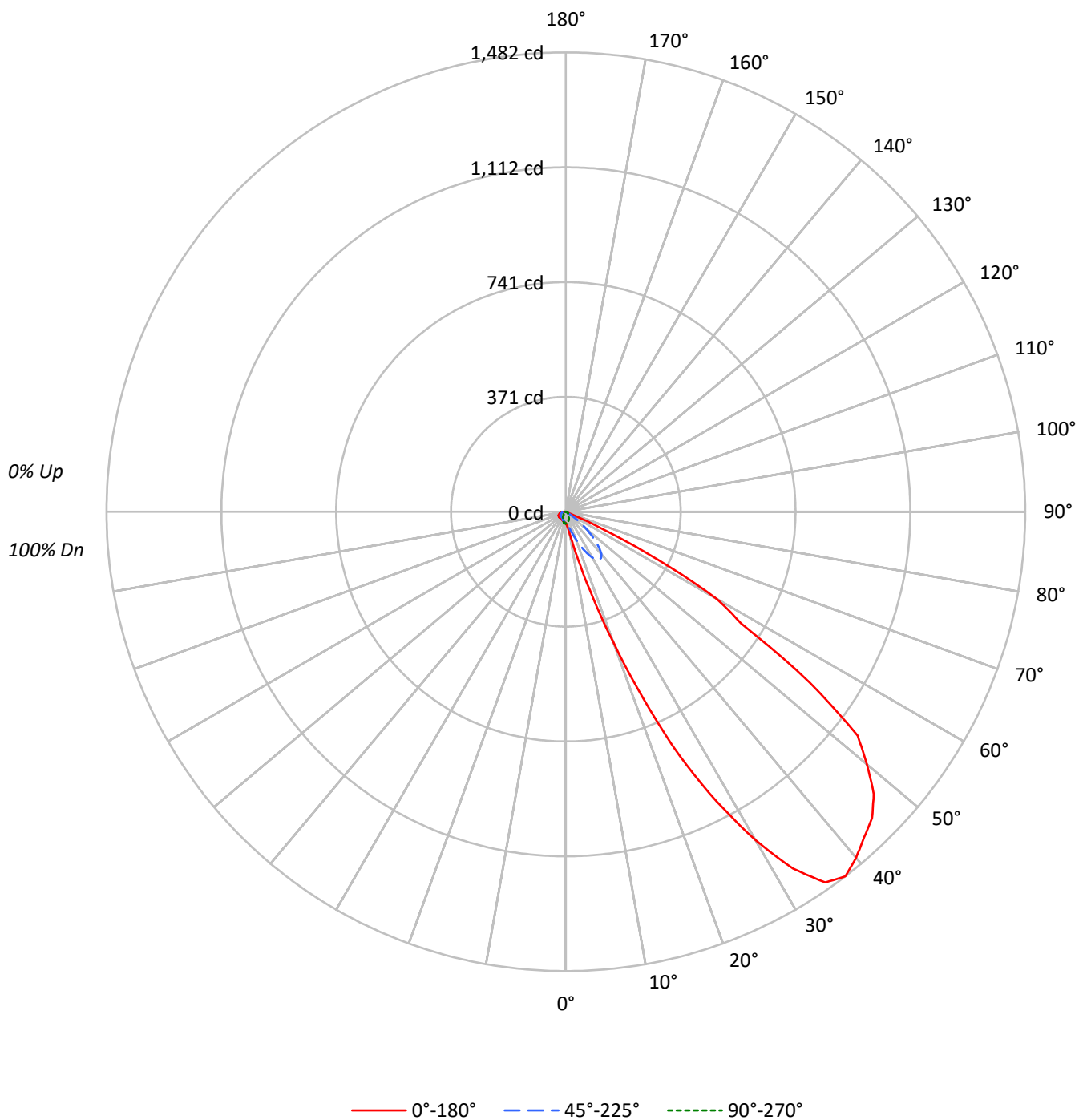
Lumens per Lamp: N/A
Luminaire Lumens: 662.0 lumens
Efficiency: N/A
Efficacy: 60.2 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	99	107	104	100	97	99	97	94		96	93	91		92
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		81
3	91	81	73	67	89	80	72	66	77	70	65		74	69	64		71
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		63
5	76	63	53	47	73	61	53	46	59	52	46		57	51	45		55
6	69	55	46	39	67	54	46	39	52	45	39		51	44	39		49
7	63	49	40	34	61	48	40	33	47	39	33		45	38	33		44
8	58	44	35	29	56	43	35	29	42	34	29		40	33	28		39
9	53	39	31	25	52	39	30	25	38	30	25		36	29	25		35
10	49	36	27	22	48	35	27	22	34	27	21		33	26	21		32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	8398	8398	8398	8398	8398
5°	9993	9267	8298	7704	7704
10°	15965	10844	7793	7303	7303
15°	39728	14529	7083	6833	7083
20°	104659	21702	6137	6511	6884
25°	210157	32155	5299	6097	6750
30°	309820	43070	4304	5950	6912
35°	390804	50514	3667	5862	7174
40°	416953	51038	3292	6097	7672
45°	433223	42578	3039	6605	8311
50°	432532	29679	3002	7096	9313
55°	367624	13189	3135	7952	10246
60°	247085	2631	3114	8859	11753
65°	65584	1141	3113	9651	13335
70°	1731	1410	3142	10515	15067
75°	1356	1356	3219	11099	17114
80°	1389	2020	3410	11744	19321
85°	1258	2768	5535	12328	19373

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 444378 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.8	0.6
10°-20°	18.7	2.8
20°-30°	77.0	11.6
30°-40°	162.3	24.5
40°-50°	200.2	30.2
50°-60°	150.1	22.7
60°-70°	38.6	5.8
70°-80°	8.0	1.2
80°-90°	3.2	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°	99.5	15.0
0°-40°	261.8	39.5
0°-60°	612.1	92.5
0°-90°	662.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	662.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	38	38	38	38	38	
5°	45	42	38	35	35	5
15°	175	64	31	30	31	64
25°	869	133	22	25	28	405
35°	1460	189	14	22	27	890
45°	1397	137	10	21	27	1069
55°	962	34	8	21	27	830
65°	126	2	6	19	26	182
75°	2	2	4	13	20	2
85°	0	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°	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3
2.5°	40.5	40.5	40.5	40.5	40.5	40.5	40.5	39.9	39.4	38.3	37.2
5°	45.4	44.9	44.9	44.9	44.3	43.8	43.8	42.1	39.9	37.7	36.1
7.5°	53.6	53.6	53.1	52.0	51.4	50.3	49.2	44.9	39.9	36.6	34.5
10°	71.7	70.6	68.9	67.8	65.1	61.3	58.5	48.7	39.4	35.0	33.4
12.5°	107.2	109.4	103.9	98.5	90.8	83.7	74.9	55.2	39.4	33.4	31.7
15°	175.0	178.9	168.5	157.5	138.9	121.4	105.0	64.0	38.3	31.2	29.5
17.5°	286.1	291.0	273.5	247.8	218.8	183.8	153.7	76.0	37.2	29.0	27.9
20°	448.5	448.0	414.1	381.8	326.0	274.6	218.3	93.0	35.6	26.3	26.3
22.5°	648.2	650.4	608.8	550.8	471.5	388.9	299.2	112.7	33.4	24.1	24.6
25°	868.6	850.0	800.8	730.2	629.0	514.7	396.6	132.9	31.2	21.9	23.0
27.5°	1052.4	1034.4	978.0	894.3	785.5	649.8	495.6	153.2	28.4	19.7	21.3
30°	1223.6	1200.7	1132.8	1038.2	908.6	762.0	588.6	170.1	25.2	17.0	19.7
32.5°	1364.8	1344.0	1266.8	1156.9	1015.8	858.2	667.3	183.2	21.9	15.3	18.6
35°	1459.9	1438.6	1367.5	1246.6	1092.9	928.2	731.3	188.7	19.1	13.7	18.1
37.5°	1481.8	1470.3	1419.5	1306.2	1146.0	973.1	772.4	187.1	15.9	12.6	17.0
40°	1456.6	1459.4	1435.3	1341.2	1174.4	992.2	789.3	178.3	13.1	11.5	16.4
42.5°	1424.4	1431.5	1429.8	1355.5	1186.4	993.3	782.2	160.8	10.4	10.4	15.9
45°	1397.0	1404.1	1414.0	1349.4	1178.2	979.1	759.8	137.3	7.7	9.8	15.9
47.5°	1347.2	1354.9	1369.1	1301.3	1136.7	942.5	719.3	111.6	5.5	9.3	15.3
50°	1267.9	1271.8	1267.9	1191.9	1056.8	883.4	653.7	87.0	3.8	8.8	15.3
52.5°	1186.4	1178.8	1147.0	1050.8	929.9	789.9	571.1	61.8	2.7	8.2	14.8
55°	961.6	949.6	926.1	867.0	798.1	675.0	461.7	34.5	2.7	8.2	14.2
57.5°	670.1	676.6	684.8	672.8	641.1	531.7	350.6	15.3	2.7	7.7	14.2
60°	563.4	557.9	558.5	550.8	498.3	387.8	241.2	6.0	2.7	7.1	13.7
62.5°	336.4	340.2	347.3	349.0	297.0	216.6	126.4	2.7	2.7	6.6	13.1
65°	126.4	132.4	116.0	100.6	79.9	58.5	29.5	2.2	3.3	6.0	12.0
67.5°	3.8	4.4	5.5	4.9	4.9	4.4	3.3	2.2	3.3	5.5	11.5
70°	2.7	2.7	2.7	2.7	2.7	2.2	2.2	2.2	2.7	4.9	10.4
72.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.7	4.4	9.3
75°	1.6	2.2	1.6	1.6	1.6	1.6	1.6	1.6	2.7	3.8	7.7
77.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.2	3.3	6.6
80°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.6	2.2	2.7	5.5
82.5°	1.1	1.1	1.1	0.5	1.1	1.1	1.1	1.1	2.2	2.2	4.4
85°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.1	1.6	2.2	2.7
87.5°	0.0	0.0	0.0	0.0	0.5	0.5	0.5	1.1	1.6	1.6	1.6
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°	38.3	38.3	38.3
2.5°	36.1	36.1	36.1
5°	35.0	35.0	35.0
7.5°	33.9	33.9	33.9
10°	32.8	32.8	32.8
12.5°	31.7	31.7	32.3
15°	30.1	31.2	31.2
17.5°	29.0	30.1	30.6
20°	27.9	29.0	29.5
22.5°	26.3	27.9	29.0
25°	25.2	27.3	27.9
27.5°	24.1	26.8	27.9
30°	23.5	26.3	27.3
32.5°	22.4	25.7	26.8
35°	21.9	25.7	26.8
37.5°	21.9	25.2	26.8
40°	21.3	25.2	26.8
42.5°	21.3	25.2	26.8
45°	21.3	25.2	26.8
47.5°	20.8	25.2	27.3
50°	20.8	25.7	27.3
52.5°	20.8	25.7	27.3
55°	20.8	25.7	26.8
57.5°	20.2	25.2	26.8
60°	20.2	25.2	26.8
62.5°	19.1	24.6	26.3
65°	18.6	24.1	25.7
67.5°	17.5	23.5	24.6
70°	16.4	21.9	23.5
72.5°	14.8	20.8	22.4
75°	13.1	19.1	20.2
77.5°	11.5	17.0	18.1
80°	9.3	14.2	15.3
82.5°	7.1	10.9	11.5
85°	4.9	7.1	7.7
87.5°	2.2	3.3	3.8
90°	0.0	0.0	0.0

(END OF REPORT)