

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: P1336429

Luminaire Tested: P3A05R159735DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336429
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-73)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R159735DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R15 optic, 3500K CCT AND, 97CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

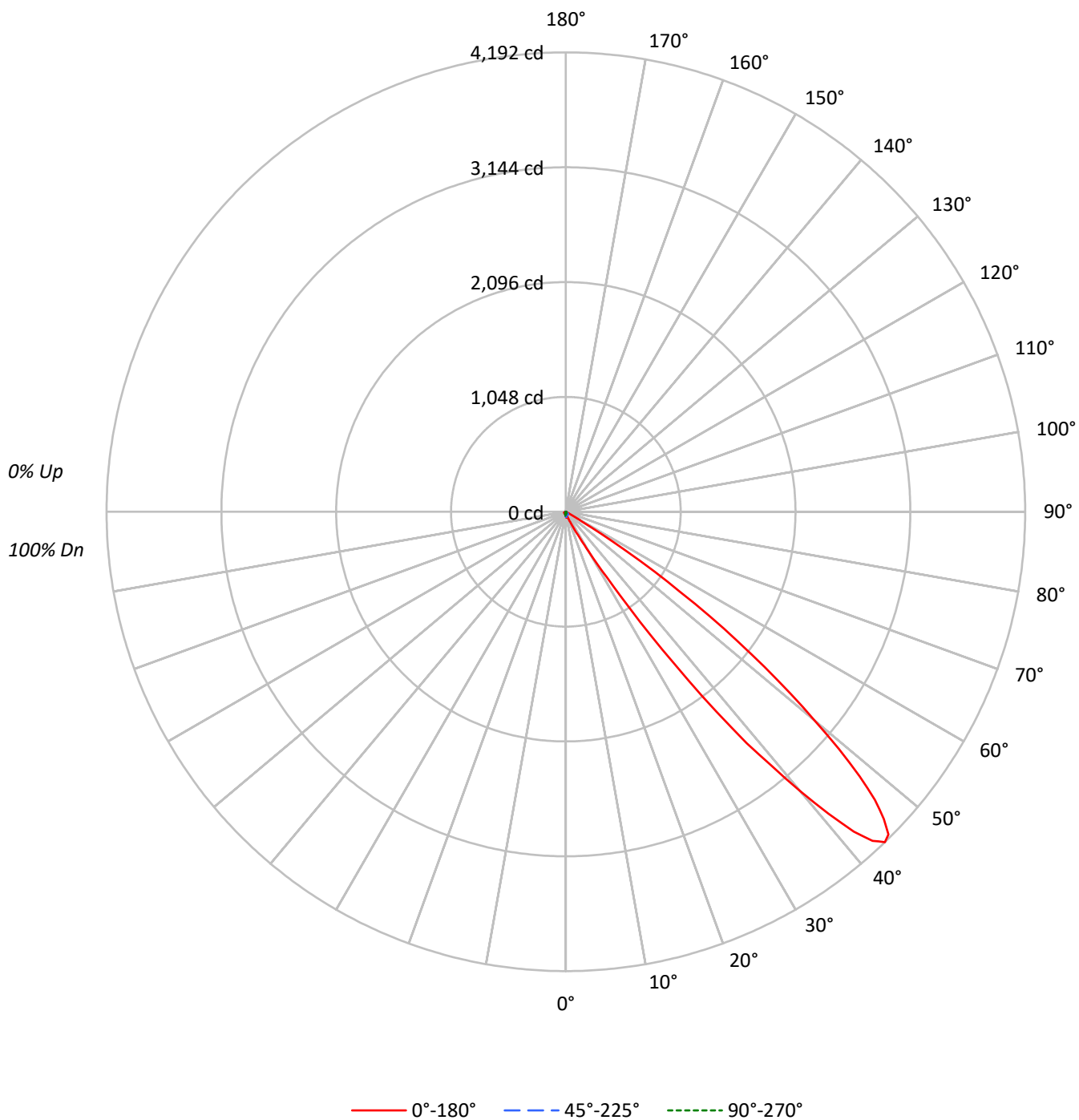
Lumens per Lamp: N/A
Luminaire Lumens: 468.0 lumens
Efficiency: N/A
Efficacy: 65.0 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	101	93	87	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	53	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	37	49	42	37	48	42	37	35		
7	62	47	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29		
8	56	42	33	27	55	41	33	27	40	32	26	39	31	26	37	31	26	24		
9	52	37	28	22	50	37	28	22	35	28	22	34	27	22	33	27	22	20		
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	23	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	9100	9100	9100	9100	9100
5°	11292	10059	8210	7198	7088
10°	11111	8617	6346	5611	5722
15°	9217	6152	4563	4654	4972
20°	16008	4900	3477	4037	4574
25°	35688	5879	2831	3726	4283
30°	106700	7216	2481	3671	4482
35°	410720	8111	2249	3748	4738
40°	953329	7070	2147	3864	5067
45°	1291235	5365	1892	4186	5489
50°	1012436	3173	1910	4469	6038
55°	485947	1415	1797	4817	6614
60°	44426	219	1623	5131	7368
65°	4825	0	1453	5344	7990
70°	1218	0	1795	5706	8655
75°	1186	424	2372	6354	9913
80°	1137	1137	2904	6440	10607
85°	1258	1258	4780	5787	11825

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1291235 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.5	0.8
10°-20°	7.4	1.6
20°-30°	17.7	3.8
30°-40°	96.8	20.7
40°-50°	234.4	50.1
50°-60°	93.5	20.0
60°-70°	8.1	1.7
70°-80°	4.6	1.0
80°-90°	2.0	0.4
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°	28.6	6.1
0°-40°	125.4	26.8
0°-60°	453.3	96.9
0°-90°	468.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	468.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	42	42	42	42	42	
5°	51	46	37	33	32	5
15°	41	27	20	20	22	14
25°	148	24	12	15	18	89
35°	1534	30	8	14	18	1084
45°	4164	17	6	14	18	2937
55°	1271	4	5	13	17	1184
65°	9	0	3	10	15	24
75°	1	0	3	8	12	1
85°	0	0	2	2	5	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5
2.5°	46.7	46.7	47.1	46.7	46.7	46.7	46.7	46.2	46.2	46.2	44.8
5°	51.3	51.3	51.3	51.3	50.9	50.9	50.9	50.4	50.4	49.9	45.7
7.5°	53.2	53.2	52.7	52.7	52.3	52.3	51.8	51.3	50.9	50.4	43.9
10°	49.9	49.9	49.9	49.5	49.5	49.0	48.5	48.1	47.6	46.7	38.7
12.5°	44.3	44.3	44.8	44.3	43.9	43.4	42.5	42.0	41.5	40.6	32.2
15°	40.6	40.6	40.6	40.1	39.7	38.7	38.3	37.3	36.9	35.5	27.1
17.5°	51.8	51.8	51.3	50.4	48.5	47.1	44.8	42.9	40.6	37.8	23.3
20°	68.6	68.6	67.7	66.7	64.4	62.1	58.3	55.1	51.3	48.1	21.0
22.5°	99.4	100.8	98.0	94.7	91.5	85.9	80.7	75.6	69.1	63.5	21.5
25°	147.5	148.9	147.5	140.0	133.9	126.5	116.7	106.4	95.2	84.9	24.3
27.5°	238.9	239.9	237.5	219.3	209.5	189.9	172.7	155.9	137.2	118.5	26.6
30°	421.4	421.8	406.9	370.5	338.3	295.4	259.0	224.0	194.6	164.7	28.5
31°	554.8	541.8	510.0	466.2	414.8	357.0	307.0	261.8	217.9	185.7	28.9
32°	704.6	702.8	650.0	574.0	505.4	433.0	357.9	300.0	249.7	205.8	29.4
33°	902.9	903.9	820.8	731.2	618.8	521.7	423.2	343.9	283.3	229.6	30.3
34°	1212.8	1140.0	1042.5	921.1	768.1	622.0	494.2	394.8	313.6	252.5	30.3
35°	1534.3	1461.0	1353.7	1169.9	959.9	755.5	578.6	449.4	350.0	277.2	30.3
36°	1894.6	1832.5	1670.1	1435.4	1167.5	881.5	668.2	512.4	385.9	299.6	29.9
37°	2283.7	2192.7	2012.6	1756.4	1398.1	1058.8	777.4	574.9	421.8	323.8	28.9
38°	2679.0	2596.9	2369.6	2059.3	1673.4	1245.9	886.6	635.1	455.0	342.0	27.5
39°	2978.6	2933.8	2708.4	2361.7	1893.2	1423.3	999.1	699.5	490.0	360.2	26.1
40°	3330.4	3258.1	3044.4	2615.5	2153.1	1603.8	1109.2	756.4	518.9	374.7	24.7
41°	3651.5	3560.0	3290.3	2875.9	2361.2	1766.2	1213.7	815.2	542.2	383.1	23.8
42°	3926.8	3820.4	3538.5	3099.0	2535.3	1896.0	1297.3	857.2	564.2	390.1	22.4
43°	4105.0	4013.1	3735.9	3266.5	2684.1	2015.0	1375.2	901.1	577.7	394.8	20.5
44°	4191.8	4099.0	3830.6	3371.5	2775.6	2086.3	1425.6	931.4	592.6	400.8	19.1
45°	4163.8	4069.6	3810.1	3373.3	2804.0	2112.0	1447.1	944.9	600.6	406.4	17.3
46°	4035.5	3969.2	3707.9	3285.6	2749.9	2084.5	1434.9	934.7	597.8	406.4	15.4
47°	3855.4	3779.8	3531.1	3134.9	2618.8	2013.6	1385.9	903.4	580.5	397.1	13.5
48°	3609.9	3545.5	3284.2	2895.5	2417.7	1859.1	1275.3	852.6	553.4	378.9	11.7
49°	3301.9	3212.3	2969.2	2589.4	2155.4	1639.8	1130.2	766.7	510.0	353.2	10.3
50°	2967.8	2857.2	2669.6	2282.8	1884.3	1406.0	939.3	648.2	448.9	319.6	9.3
51°	2640.7	2528.3	2349.5	2020.6	1595.0	1166.6	757.8	517.5	369.6	273.5	7.9
52°	2301.5	2207.2	2007.0	1748.5	1365.4	945.4	631.4	437.7	307.0	229.6	6.5
53°	1963.6	1899.2	1708.8	1447.1	1097.1	772.3	515.6	374.7	267.9	196.5	5.1
54°	1625.3	1554.8	1410.2	1176.9	884.3	609.4	437.2	313.6	232.4	171.3	4.7
55°	1271.1	1234.7	1101.3	897.3	670.1	486.2	354.6	269.7	194.6	143.3	3.7
56°	979.0	937.9	816.2	651.0	497.9	380.8	287.0	220.3	164.7	119.9	2.8
57°	641.2	599.2	518.4	454.5	362.6	277.7	219.3	173.6	133.9	99.4	2.3
58°	378.9	340.6	328.0	280.0	241.7	188.5	161.9	129.3	98.9	78.4	1.4
59°	174.1	176.9	157.3	147.5	133.9	119.9	98.5	86.3	67.7	56.5	0.9
60°	101.3	95.7	93.3	83.5	74.2	65.8	59.3	52.3	42.5	36.4	0.5
62.5°	34.5	33.1	34.1	30.8	28.9	28.0	25.7	21.9	18.2	14.9	0.0
65°	9.3	9.3	8.9	8.4	7.9	7.5	7.0	6.1	5.6	4.7	0.0



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	3.3	3.3	2.8	2.8	2.3	2.3	1.9	1.9	1.4	1.4	0.0
70°	1.9	1.9	1.9	1.4	1.4	1.4	0.9	0.9	0.9	0.5	0.0
72.5°	1.4	1.4	1.4	1.4	1.4	1.4	0.9	0.9	0.9	0.5	0.5
75°	1.4	1.4	1.4	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.5
77.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
80°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.5	0.9
82.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9
85°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	41.5	41.5	41.5	41.5	41.5	41.5
2.5°	42.9	41.1	38.7	37.3	36.9	36.4
5°	41.1	37.3	34.5	32.7	32.2	32.2
7.5°	36.9	32.7	29.9	28.9	28.5	28.5
10°	32.2	28.5	26.1	25.2	25.7	25.7
12.5°	27.1	23.8	22.9	22.9	23.3	23.8
15°	21.9	20.1	20.1	20.5	21.5	21.9
17.5°	18.2	17.3	17.7	18.7	19.6	20.5
20°	14.9	14.9	15.9	17.3	18.7	19.6
22.5°	12.6	13.1	14.5	15.9	17.7	18.7
25°	10.7	11.7	13.1	15.4	17.3	17.7
27.5°	9.3	10.7	12.6	14.9	16.8	17.7
30°	7.9	9.8	12.1	14.5	16.8	17.7
31°	7.5	9.3	11.7	14.5	16.8	17.7
32°	7.0	9.3	11.7	14.5	16.8	17.7
33°	6.5	8.9	11.7	14.0	16.8	17.7
34°	6.1	8.9	11.7	14.5	16.8	17.7
35°	5.6	8.4	11.2	14.0	16.3	17.7
36°	5.1	8.4	11.2	14.0	16.8	17.7
37°	4.7	8.4	11.2	14.0	16.3	17.7
38°	4.7	7.9	10.7	14.0	16.3	17.7
39°	4.2	7.5	10.7	14.0	16.3	17.7
40°	3.7	7.5	10.3	13.5	16.3	17.7
41°	3.3	7.0	10.3	13.5	16.3	17.7
42°	2.8	7.0	10.3	13.5	16.3	17.7
43°	2.3	6.5	9.8	13.5	16.3	17.7
44°	2.3	6.5	9.8	13.5	16.3	17.7
45°	1.9	6.1	9.3	13.5	16.3	17.7
46°	1.9	6.1	9.3	13.1	16.3	17.7
47°	1.4	6.1	9.3	13.1	16.3	17.7
48°	1.4	5.6	9.3	13.1	16.3	17.7
49°	0.9	5.6	9.3	13.1	16.3	17.7
50°	0.9	5.6	8.9	13.1	16.3	17.7
51°	0.9	5.6	8.9	13.1	16.3	17.7
52°	0.9	5.1	8.9	13.1	16.3	17.7
53°	0.9	5.1	8.9	13.1	16.3	17.7
54°	0.9	5.1	8.4	13.1	16.3	17.7
55°	0.9	4.7	8.4	12.6	16.3	17.3
56°	0.9	4.7	8.4	12.6	16.3	17.3
57°	0.9	4.7	7.9	12.6	16.3	17.3
58°	0.9	4.2	7.9	12.1	15.9	17.3
59°	0.9	4.2	7.5	12.1	15.9	16.8
60°	0.9	3.7	7.5	11.7	15.4	16.8
62.5°	0.9	3.3	6.5	11.2	14.9	15.9
65°	0.9	2.8	6.1	10.3	14.5	15.4



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.9	2.8	5.6	9.8	13.5	14.9
70°	0.9	2.8	5.1	8.9	13.1	13.5
72.5°	1.4	2.8	4.7	8.4	12.1	12.6
75°	1.9	2.8	4.2	7.5	11.2	11.7
77.5°	1.9	2.8	3.7	6.5	9.8	10.3
80°	1.9	2.3	3.3	5.1	7.9	8.4
82.5°	1.9	2.3	2.3	4.2	6.1	6.5
85°	1.4	1.9	1.9	2.3	4.2	4.7
87.5°	1.4	1.9	0.9	1.4	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)