

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: P1336367

Luminaire Tested: P3A05R159040DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336367
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: P3A05R159040DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R15 optic, 4000K CCT AND, 90CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

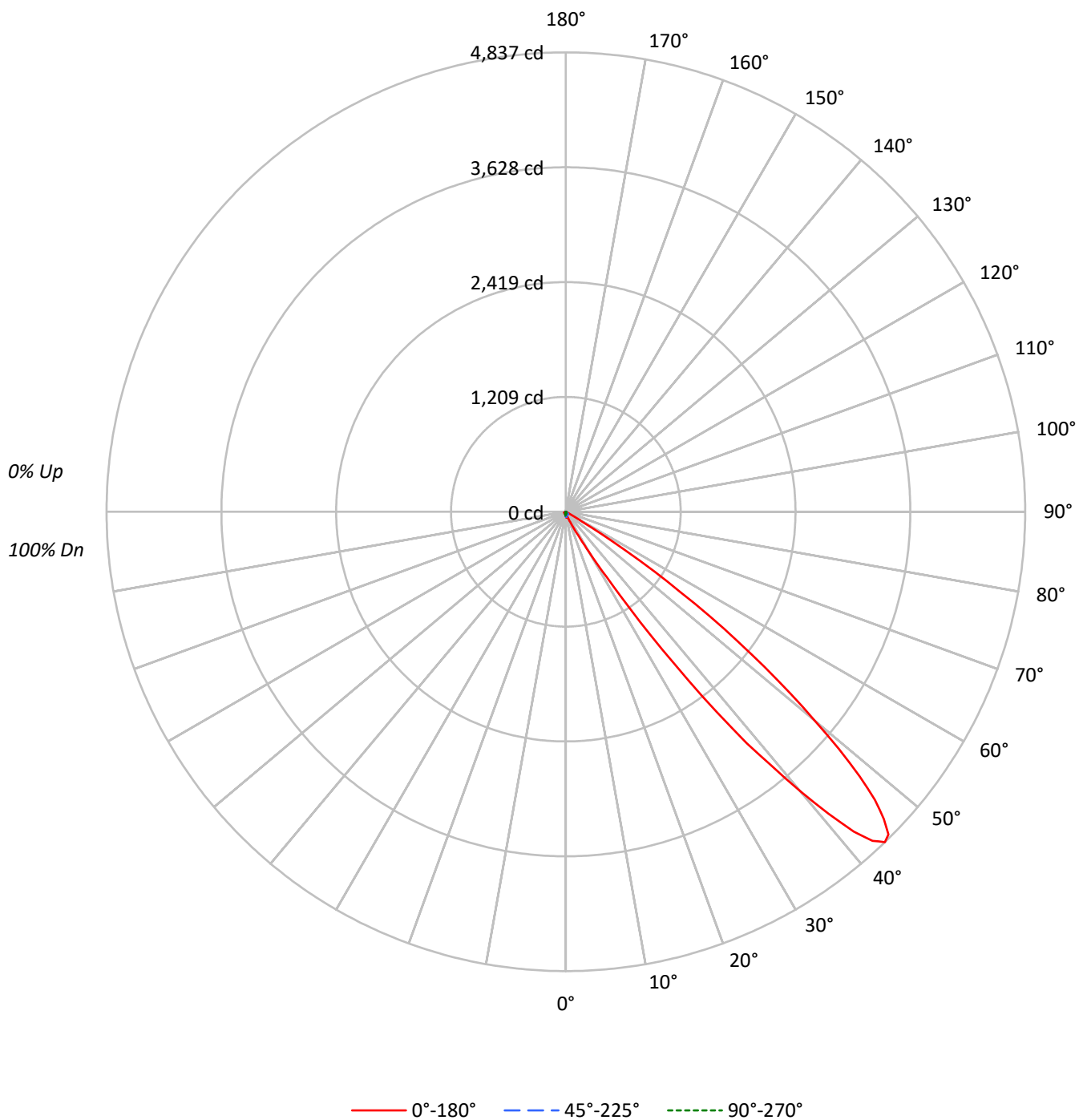
Lumens per Lamp: N/A
Luminaire Lumens: 540.0 lumens
Efficiency: N/A
Efficacy: 75.0 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.48 / 1.09
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	102	102	100
1	110	106	102	99	107	104	100	97	100	97	94	96	93	91	92	90	89	89	89	87
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75	75	75	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	63	63	61
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	53	53	53	50
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44	44	44	42
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	37	37	35
7	62	47	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	31	31	29
8	56	42	33	27	55	41	33	27	40	32	26	39	31	26	37	31	26	26	26	24
9	52	37	28	22	50	37	28	22	35	28	22	34	27	22	33	27	22	22	22	20
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	23	19	19	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	10504	10504	10504	10504	10504
5°	13031	11622	9487	8298	8188
10°	12825	9953	7303	6480	6591
15°	10624	7083	5267	5380	5744
20°	18458	5647	4014	4644	5274
25°	41156	6775	3266	4307	4960
30°	123108	8305	2861	4228	5191
35°	473922	9369	2597	4337	5488
40°	1100004	8158	2462	4466	5868
45°	1489891	6171	2171	4838	6357
50°	1168200	3684	2217	5151	6993
55°	560726	1644	2064	5543	7608
60°	51224	219	1886	5921	8508
65°	5604	0	1660	6123	9236
70°	1410	0	2052	6540	10002
75°	1356	424	2711	7286	11438
80°	1389	1389	3410	7450	12249
85°	1258	1258	5535	6793	13586

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1489891 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.1	0.8
10°-20°	8.5	1.6
20°-30°	20.4	3.8
30°-40°	111.7	20.7
40°-50°	270.5	50.1
50°-60°	107.9	20.0
60°-70°	9.3	1.7
70°-80°	5.3	1.0
80°-90°	2.3	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°	33.0	6.1
0°-40°	144.7	26.8
0°-60°	523.1	96.9
0°-90°	540.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	540.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	48	48	48	48	48	
5°	59	53	43	38	37	6
15°	47	31	23	24	25	16
25°	170	28	14	18	20	103
35°	1770	35	10	16	20	1251
45°	4804	20	7	16	20	3389
55°	1467	4	5	14	20	1366
65°	11	0	3	12	18	28
75°	2	0	3	9	14	2
85°	0	0	2	3	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°	47.9	47.9	47.9	47.9	47.9	47.9	47.9	47.9	47.9	47.9	47.9
2.5°	53.8	53.8	54.4	53.8	53.8	53.8	53.8	53.3	53.3	53.3	51.7
5°	59.2	59.2	59.2	59.2	58.7	58.7	58.7	58.2	58.2	57.6	52.8
7.5°	61.4	61.4	60.8	60.8	60.3	60.3	59.8	59.2	58.7	58.2	50.6
10°	57.6	57.6	57.6	57.1	57.1	56.5	56.0	55.5	54.9	53.8	44.7
12.5°	51.2	51.2	51.7	51.2	50.6	50.1	49.0	48.5	47.9	46.8	37.2
15°	46.8	46.8	46.8	46.3	45.8	44.7	44.2	43.1	42.5	40.9	31.2
17.5°	59.8	59.8	59.2	58.2	56.0	54.4	51.7	49.5	46.8	43.6	26.9
20°	79.1	79.1	78.1	77.0	74.3	71.6	67.3	63.5	59.2	55.5	24.2
22.5°	114.7	116.3	113.1	109.3	105.5	99.1	93.1	87.2	79.7	73.2	24.8
25°	170.1	171.8	170.1	161.5	154.5	145.9	134.6	122.8	109.8	98.0	28.0
27.5°	275.7	276.8	274.1	253.1	241.8	219.1	199.2	179.8	158.3	136.8	30.7
30°	486.2	486.7	469.5	427.5	390.4	340.8	298.8	258.4	224.5	190.1	32.8
31°	640.2	625.1	588.5	537.9	478.7	411.9	354.3	302.1	251.4	214.3	33.4
32°	813.0	810.9	750.0	662.3	583.1	499.7	413.0	346.2	288.1	237.4	33.9
33°	1041.9	1042.9	947.1	843.7	714.0	602.0	488.4	396.8	326.8	264.9	35.0
34°	1399.4	1315.4	1202.9	1062.9	886.3	717.7	570.2	455.5	361.8	291.3	35.0
35°	1770.4	1685.8	1562.0	1349.8	1107.6	871.7	667.7	518.5	403.8	319.8	35.0
36°	2186.0	2114.4	1927.0	1656.2	1347.2	1017.1	771.0	591.2	445.3	345.7	34.5
37°	2635.1	2530.1	2322.3	2026.7	1613.1	1221.7	897.0	663.3	486.7	373.7	33.4
38°	3091.1	2996.4	2734.2	2376.1	1930.8	1437.6	1023.0	732.8	525.0	394.7	31.8
39°	3436.8	3385.1	3125.1	2725.0	2184.4	1642.2	1152.8	807.1	565.4	415.7	30.2
40°	3842.8	3759.3	3512.7	3017.9	2484.3	1850.6	1279.9	872.8	598.7	432.4	28.5
41°	4213.2	4107.7	3796.5	3318.3	2724.5	2038.0	1400.5	940.6	625.7	442.1	27.5
42°	4530.9	4408.1	4082.9	3575.7	2925.3	2187.6	1496.8	989.1	651.0	450.1	25.8
43°	4736.6	4630.5	4310.7	3769.0	3097.1	2324.9	1586.8	1039.7	666.6	455.5	23.7
44°	4836.7	4729.6	4420.0	3890.2	3202.6	2407.3	1644.9	1074.7	683.8	462.5	22.1
45°	4804.4	4695.7	4396.3	3892.3	3235.4	2436.9	1669.7	1090.3	693.0	469.0	19.9
46°	4656.3	4579.9	4278.4	3791.1	3173.0	2405.2	1655.7	1078.5	689.7	469.0	17.8
47°	4448.5	4361.3	4074.3	3617.2	3021.7	2323.3	1599.1	1042.4	669.8	458.2	15.6
48°	4165.3	4091.0	3789.5	3341.0	2789.6	2145.1	1471.5	983.7	638.6	437.2	13.5
49°	3809.9	3706.6	3426.0	2987.8	2487.0	1892.0	1304.1	884.6	588.5	407.6	11.8
50°	3424.4	3296.8	3080.4	2634.0	2174.2	1622.3	1083.9	747.9	518.0	368.8	10.8
51°	3047.0	2917.2	2711.0	2331.4	1840.4	1346.1	874.4	597.1	426.4	315.5	9.2
52°	2655.5	2546.8	2315.8	2017.5	1575.4	1090.9	728.5	505.0	354.3	264.9	7.5
53°	2265.7	2191.4	1971.7	1669.7	1265.9	891.1	595.0	432.4	309.1	226.7	5.9
54°	1875.4	1794.1	1627.1	1357.9	1020.3	703.2	504.5	361.8	268.1	197.6	5.4
55°	1466.7	1424.7	1270.7	1035.4	773.2	561.0	409.2	311.2	224.5	165.3	4.3
56°	1129.6	1082.2	941.7	751.1	574.5	439.4	331.1	254.1	190.1	138.4	3.2
57°	739.8	691.3	598.2	524.4	418.4	320.4	253.1	200.3	154.5	114.7	2.7
58°	437.2	393.1	378.5	323.1	278.9	217.5	186.8	149.1	114.1	90.5	1.6
59°	200.8	204.1	181.5	170.1	154.5	138.4	113.6	99.6	78.1	65.2	1.1
60°	116.8	110.4	107.7	96.4	85.6	75.9	68.4	60.3	49.0	42.0	0.5
62.5°	39.8	38.2	39.3	35.5	33.4	32.3	29.6	25.3	21.0	17.2	0.0
65°	10.8	10.8	10.2	9.7	9.2	8.6	8.1	7.0	6.5	5.4	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°	3.8	3.8	3.2	3.2	2.7	2.7	2.2	2.2	1.6	1.6	0.0
70°	2.2	2.2	2.2	1.6	1.6	1.6	1.1	1.1	1.1	0.5	0.0
72.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.1	1.1	1.1	0.5	0.5
75°	1.6	1.6	1.6	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.5
77.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
80°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.5	1.1
82.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.1
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°	47.9	47.9	47.9	47.9	47.9	47.9
2.5°	49.5	47.4	44.7	43.1	42.5	42.0
5°	47.4	43.1	39.8	37.7	37.2	37.2
7.5°	42.5	37.7	34.5	33.4	32.8	32.8
10°	37.2	32.8	30.2	29.1	29.6	29.6
12.5°	31.2	27.5	26.4	26.4	26.9	27.5
15°	25.3	23.2	23.2	23.7	24.8	25.3
17.5°	21.0	19.9	20.5	21.5	22.6	23.7
20°	17.2	17.2	18.3	19.9	21.5	22.6
22.5°	14.5	15.1	16.7	18.3	20.5	21.5
25°	12.4	13.5	15.1	17.8	19.9	20.5
27.5°	10.8	12.4	14.5	17.2	19.4	20.5
30°	9.2	11.3	14.0	16.7	19.4	20.5
31°	8.6	10.8	13.5	16.7	19.4	20.5
32°	8.1	10.8	13.5	16.7	19.4	20.5
33°	7.5	10.2	13.5	16.2	19.4	20.5
34°	7.0	10.2	13.5	16.7	19.4	20.5
35°	6.5	9.7	12.9	16.2	18.8	20.5
36°	5.9	9.7	12.9	16.2	19.4	20.5
37°	5.4	9.7	12.9	16.2	18.8	20.5
38°	5.4	9.2	12.4	16.2	18.8	20.5
39°	4.8	8.6	12.4	16.2	18.8	20.5
40°	4.3	8.6	11.8	15.6	18.8	20.5
41°	3.8	8.1	11.8	15.6	18.8	20.5
42°	3.2	8.1	11.8	15.6	18.8	20.5
43°	2.7	7.5	11.3	15.6	18.8	20.5
44°	2.7	7.5	11.3	15.6	18.8	20.5
45°	2.2	7.0	10.8	15.6	18.8	20.5
46°	2.2	7.0	10.8	15.1	18.8	20.5
47°	1.6	7.0	10.8	15.1	18.8	20.5
48°	1.6	6.5	10.8	15.1	18.8	20.5
49°	1.1	6.5	10.8	15.1	18.8	20.5
50°	1.1	6.5	10.2	15.1	18.8	20.5
51°	1.1	6.5	10.2	15.1	18.8	20.5
52°	1.1	5.9	10.2	15.1	18.8	20.5
53°	1.1	5.9	10.2	15.1	18.8	20.5
54°	1.1	5.9	9.7	15.1	18.8	20.5
55°	1.1	5.4	9.7	14.5	18.8	19.9
56°	1.1	5.4	9.7	14.5	18.8	19.9
57°	1.1	5.4	9.2	14.5	18.8	19.9
58°	1.1	4.8	9.2	14.0	18.3	19.9
59°	1.1	4.8	8.6	14.0	18.3	19.4
60°	1.1	4.3	8.6	13.5	17.8	19.4
62.5°	1.1	3.8	7.5	12.9	17.2	18.3
65°	1.1	3.2	7.0	11.8	16.7	17.8



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.1	3.2	6.5	11.3	15.6	17.2
70°	1.1	3.2	5.9	10.2	15.1	15.6
72.5°	1.6	3.2	5.4	9.7	14.0	14.5
75°	2.2	3.2	4.8	8.6	12.9	13.5
77.5°	2.2	3.2	4.3	7.5	11.3	11.8
80°	2.2	2.7	3.8	5.9	9.2	9.7
82.5°	2.2	2.7	2.7	4.8	7.0	7.5
85°	1.6	2.2	2.2	2.7	4.8	5.4
87.5°	1.6	2.2	1.1	1.6	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)