

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: P1337295

Luminaire Tested: P3A05R259024DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337295
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-75)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R259024DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 2400K CCT AND, 90CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

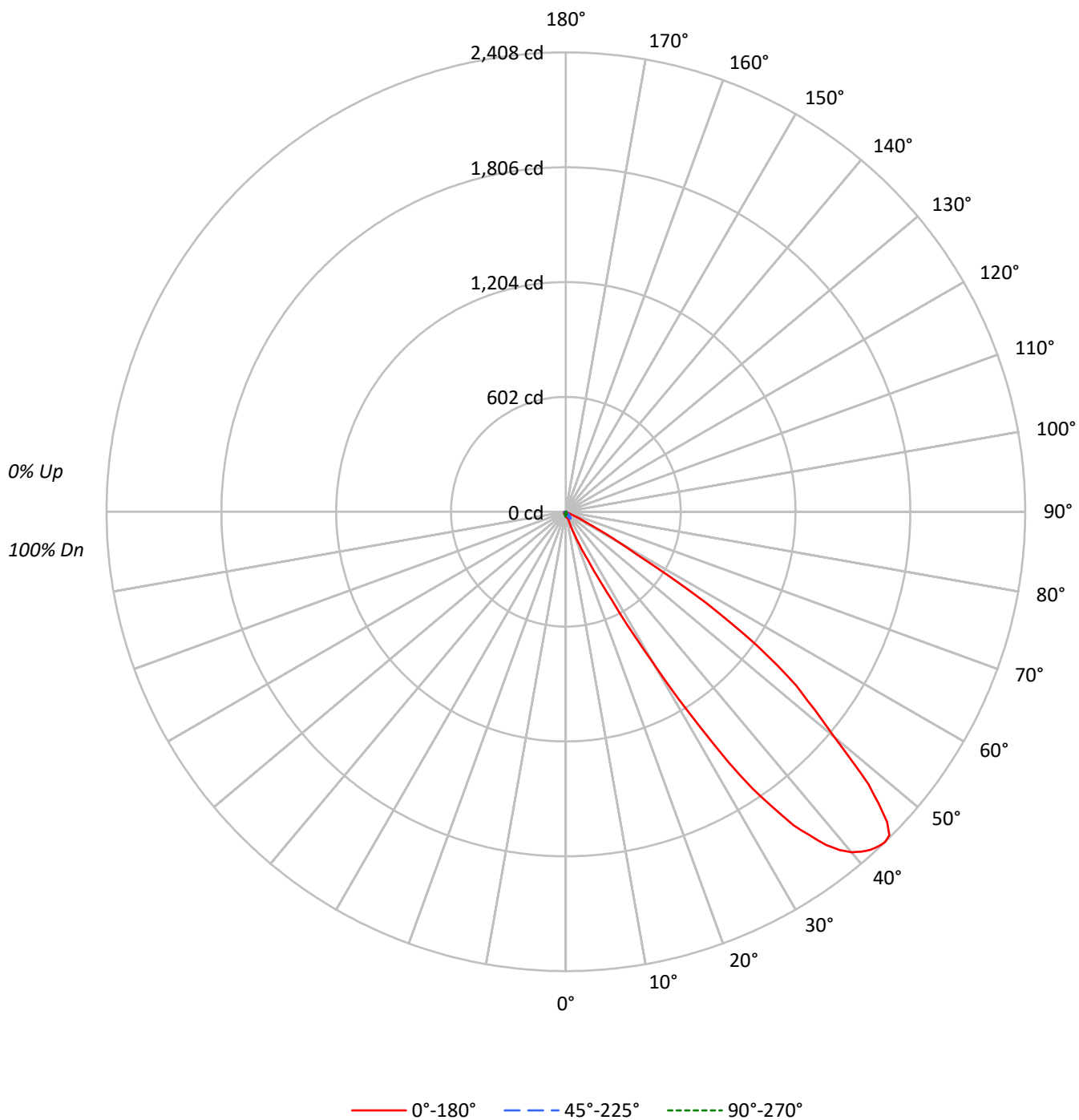
Lumens per Lamp: N/A
Luminaire Lumens: 502.0 lumens
Efficiency: N/A
Efficacy: 69.7 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1337295

CATALOG NUMBER: P3A05R259024DE010 E3CA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1337295

CATALOG NUMBER: P3A05R259024DE010 E3CA451MMS

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	108	104	101	97	100	97	94	96	94	92	92	91	89	87		
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73		
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42		
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	39	32	46	38	32	44	37	32	43	36	32	29		
8	57	43	34	27	55	42	33	27	40	33	27	39	32	27	38	32	27	25		
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21		
10	48	34	25	20	47	33	25	20	32	25	20	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	5614	5614	5614	5614	5614
5°	6427	6119	5437	4865	4755
10°	6390	5812	4631	4030	4030
15°	7128	5017	3610	3405	3610
20°	25156	4947	2777	2894	3197
25°	72367	6315	2250	2661	3097
30°	230871	9723	1798	2583	3140
35°	505644	11457	1526	2490	3186
40°	667021	10362	1260	2519	3406
45°	743860	7257	1240	2729	3690
50°	626163	3753	1194	2866	4060
55°	468131	1529	1185	3211	4549
60°	144901	395	1184	3508	5043
65°	12401	0	1401	3684	5500
70°	833	256	1410	4231	6219
75°	763	339	1864	4490	7117
80°	505	505	2778	5051	8334
85°	1006	1006	4529	5535	8806

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 743860 cd/sqm

TEST NUMBER: P1337295

CATALOG NUMBER: P3A05R259024DE010 E3CA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.3	0.5
10°-20°	5.9	1.2
20°-30°	27.8	5.5
30°-40°	133.7	26.6
40°-50°	209.6	41.8
50°-60°	107.4	21.4
60°-70°	10.1	2.0
70°-80°	3.4	0.7
80°-90°	1.7	0.3
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°	36.0	7.2
0°-40°	169.7	33.8
0°-60°	486.7	97.0
0°-90°	502.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	502.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	26	26	26	26	26	
5°	29	28	25	22	22	3
15°	31	22	16	15	16	13
25°	299	26	9	11	13	186
35°	1889	43	6	9	12	1147
45°	2399	23	4	9	12	1755
55°	1224	4	3	8	12	1019
65°	24	0	3	7	11	75
75°	1	0	2	5	8	1
85°	0	0	2	2	4	0
90°	0	0	0	0	0	

TEST NUMBER: P1337295

CATALOG NUMBER: P3A05R259024DE010 E3CA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	25.6	25.6	25.6	25.6	25.6	25.6	25.6	25.6	25.6	25.6	25.6
2.5°	27.8	27.8	27.8	27.8	27.8	27.8	27.4	27.4	27.8	27.4	27.4
5°	29.2	29.2	29.2	29.2	29.2	29.2	29.2	28.7	28.7	28.7	27.8
7.5°	29.6	29.2	29.2	29.2	29.2	29.2	29.2	29.2	28.7	28.7	27.4
10°	28.7	28.7	28.7	28.7	28.3	28.3	28.3	27.8	27.8	27.8	26.1
12.5°	28.7	28.7	28.7	28.7	28.3	28.3	27.8	27.8	27.4	26.9	23.9
15°	31.4	31.4	31.4	30.9	30.5	30.0	29.6	29.2	28.7	27.8	22.1
17.5°	45.9	44.6	44.2	42.4	40.2	38.0	36.2	34.5	32.7	31.4	21.2
20°	107.8	107.3	105.1	99.8	94.1	87.5	80.8	73.3	62.7	55.7	21.2
22.5°	186.9	184.2	180.2	176.3	166.1	154.2	141.8	127.7	114.0	99.4	22.5
25°	299.1	305.2	292.0	281.4	263.7	242.1	218.7	199.2	174.5	151.5	26.1
27.5°	519.9	523.9	497.9	463.4	422.3	376.8	332.6	299.5	258.0	220.0	32.7
30°	911.8	915.7	872.0	798.7	713.9	639.2	538.0	449.3	367.5	304.4	38.4
31°	1137.9	1107.0	1056.2	985.1	877.8	765.1	643.6	536.3	432.9	349.9	40.2
32°	1334.5	1331.9	1272.7	1164.9	1057.1	918.0	767.3	627.3	500.5	395.8	41.5
33°	1566.4	1548.8	1465.3	1363.7	1221.0	1081.0	886.6	726.7	569.9	447.0	42.4
34°	1752.4	1704.7	1670.2	1554.1	1403.4	1225.0	1016.9	831.8	656.4	496.5	42.8
35°	1888.9	1878.8	1811.6	1703.4	1550.1	1367.7	1157.4	940.9	728.9	554.0	42.8
36°	2033.4	2002.0	1936.6	1838.6	1689.2	1500.6	1264.7	1035.5	813.3	605.6	42.4
37°	2123.9	2105.4	2040.4	1939.3	1793.1	1612.8	1384.9	1135.3	880.4	657.3	41.5
38°	2217.1	2179.6	2115.5	2018.8	1875.2	1706.0	1471.9	1212.2	942.2	702.8	40.2
39°	2281.6	2242.8	2177.4	2081.1	1940.6	1772.7	1540.8	1277.5	996.1	736.8	38.4
40°	2330.2	2292.7	2226.4	2127.5	1988.8	1825.3	1598.2	1335.4	1041.2	766.4	36.2
41°	2360.3	2325.4	2259.5	2161.0	2021.9	1855.3	1635.8	1373.0	1071.7	786.3	34.0
42°	2385.4	2349.7	2282.5	2181.8	2042.2	1881.0	1658.8	1396.8	1092.4	796.5	32.2
43°	2399.6	2363.8	2298.4	2195.5	2054.6	1892.9	1671.1	1407.9	1099.5	795.1	29.2
44°	2407.5	2370.4	2304.6	2201.7	2059.9	1896.0	1672.0	1405.6	1094.7	784.5	26.5
45°	2398.7	2362.0	2298.4	2195.5	2050.6	1886.3	1663.2	1393.7	1076.1	763.8	23.4
46°	2341.3	2313.0	2254.7	2160.1	2021.4	1861.5	1640.7	1370.7	1047.4	738.2	19.9
47°	2240.1	2217.6	2161.0	2090.8	1965.3	1816.0	1599.1	1327.0	1007.2	699.7	15.9
48°	2134.5	2101.4	2048.8	1976.8	1870.8	1734.3	1530.7	1263.0	946.2	649.4	14.1
49°	1978.6	1959.2	1912.8	1832.4	1744.5	1624.3	1433.9	1180.8	871.6	594.6	12.4
50°	1835.5	1822.2	1757.3	1698.1	1604.9	1492.7	1302.7	1072.6	778.8	526.6	11.0
51°	1723.7	1707.8	1661.0	1587.2	1487.8	1357.5	1178.6	932.1	672.3	445.7	8.8
52°	1607.1	1598.2	1556.7	1480.7	1383.1	1253.2	1058.0	812.8	569.0	376.8	7.1
53°	1511.7	1498.9	1448.1	1380.5	1274.9	1140.6	927.2	701.9	481.9	316.7	6.2
54°	1372.5	1367.2	1334.5	1263.8	1149.4	1003.2	808.8	591.1	402.0	268.6	5.3
55°	1224.5	1206.9	1173.7	1117.6	1012.5	876.0	671.9	489.9	325.1	226.2	4.0
56°	1044.3	1043.4	984.2	937.4	844.2	699.3	536.7	382.6	264.2	188.6	3.5
57°	872.0	844.2	787.2	740.8	640.5	530.5	398.5	286.7	206.7	152.8	2.7
58°	645.0	630.4	615.4	547.3	454.6	375.9	284.5	201.4	152.8	116.6	1.8
59°	437.8	437.3	419.7	368.0	314.5	234.1	177.6	136.9	105.1	85.7	1.3
60°	330.4	322.5	287.1	253.1	197.9	148.0	105.1	80.8	65.4	55.2	0.9
62.5°	115.7	120.2	105.6	87.5	66.7	54.8	42.0	34.0	27.8	22.5	0.0
65°	23.9	26.1	22.5	21.2	16.8	14.6	12.8	11.0	9.3	8.0	0.0



TEST NUMBER: P1337295

CATALOG NUMBER: P3A05R259024DE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	3.1	2.7	2.7	2.7	2.2	2.2	2.2	2.2	1.8	1.8	0.4
70°	1.3	1.3	1.3	1.3	1.3	1.3	0.9	0.9	0.9	0.9	0.4
72.5°	1.3	1.3	1.3	0.9	0.9	0.9	0.9	0.9	0.9	0.4	0.4
75°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.4	0.4	0.4	0.4
77.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.4	0.4	0.4	0.4	0.4
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
82.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9
85°	0.4	0.4	0.4	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1337295

CATALOG NUMBER: P3A05R259024DE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	25.6	25.6	25.6	25.6	25.6	25.6
2.5°	26.9	26.1	24.7	24.3	23.9	23.9
5°	26.5	24.7	23.4	22.1	21.6	21.6
7.5°	25.2	23.0	21.2	20.3	19.9	19.4
10°	23.9	20.8	19.0	18.1	18.1	18.1
12.5°	21.2	18.6	16.8	16.3	16.8	16.8
15°	19.0	15.9	15.0	15.0	15.5	15.9
17.5°	16.3	14.1	13.3	13.7	14.1	14.6
20°	14.6	11.9	11.9	12.4	13.7	13.7
22.5°	12.8	10.6	10.6	11.9	12.8	13.3
25°	11.5	9.3	9.7	11.0	12.4	12.8
27.5°	9.7	8.0	8.8	10.6	11.9	12.4
30°	8.4	7.1	8.4	10.2	11.5	12.4
31°	8.0	6.6	8.4	9.7	11.5	12.4
32°	7.1	6.6	8.0	9.7	11.5	11.9
33°	6.6	6.2	8.0	9.7	11.5	11.9
34°	6.2	5.7	7.5	9.7	11.5	11.9
35°	5.3	5.7	7.5	9.3	11.0	11.9
36°	4.9	5.3	7.5	9.3	11.0	11.9
37°	4.4	5.3	7.1	9.3	11.0	11.9
38°	4.0	4.9	7.1	9.3	11.0	11.9
39°	3.5	4.9	6.6	9.3	11.0	11.9
40°	3.1	4.4	6.6	8.8	11.0	11.9
41°	3.1	4.4	6.6	8.8	11.0	11.9
42°	2.7	4.4	6.6	8.8	11.0	11.9
43°	2.2	4.0	6.6	8.8	11.0	11.9
44°	1.8	4.0	6.2	8.8	11.0	11.9
45°	1.8	4.0	6.2	8.8	11.0	11.9
46°	1.3	3.5	6.2	8.8	11.0	11.9
47°	0.9	3.5	6.2	8.4	11.0	11.9
48°	0.9	3.5	6.2	8.4	11.0	11.9
49°	0.9	3.5	5.7	8.4	11.0	11.9
50°	0.9	3.5	5.7	8.4	11.0	11.9
51°	0.4	3.1	5.7	8.4	11.0	11.9
52°	0.4	3.1	5.7	8.4	11.0	12.4
53°	0.4	3.1	5.7	8.4	11.0	11.9
54°	0.4	3.1	5.3	8.4	11.0	11.9
55°	0.4	3.1	5.3	8.4	11.0	11.9
56°	0.4	2.7	5.3	8.0	11.0	11.9
57°	0.9	2.7	5.3	8.0	11.0	11.5
58°	0.9	2.7	5.3	8.0	10.6	11.5
59°	0.9	2.7	5.3	8.0	10.6	11.5
60°	0.9	2.7	4.9	8.0	10.6	11.5
62.5°	0.9	2.7	4.9	7.5	10.2	11.0
65°	0.9	2.7	4.4	7.1	10.2	10.6



TEST NUMBER: P1337295

CATALOG NUMBER: P3A05R259024DE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.9	2.2	4.4	6.6	9.7	10.2
70°	1.3	2.2	4.0	6.6	9.3	9.7
72.5°	1.3	2.2	4.0	5.7	8.4	9.3
75°	1.3	2.2	3.5	5.3	8.0	8.4
77.5°	1.3	2.2	3.1	4.9	7.1	7.5
80°	1.8	2.2	2.7	4.0	6.2	6.6
82.5°	1.8	2.2	2.2	3.1	4.9	5.3
85°	1.3	1.8	1.8	2.2	3.1	3.5
87.5°	1.3	1.8	1.3	0.9	1.8	1.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)