

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: iO LED

Report Number: P958938

Luminaire Tested: MFO-06W-930-60-X-4F-UNV-STD

Issue Date: 2/11/2025

Test Information

Test Method: LM-79-2019
Report Number: P958938
SCALED TEST REPORT
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/11/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: iO LED
Catalog Number: MFO-06W-930-60-X-4F-UNV-STD
Description: iO LED MiniO-FLEX LINEAR LIGHTING WITH 60 DEGREE OPTICS
6 WATTS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

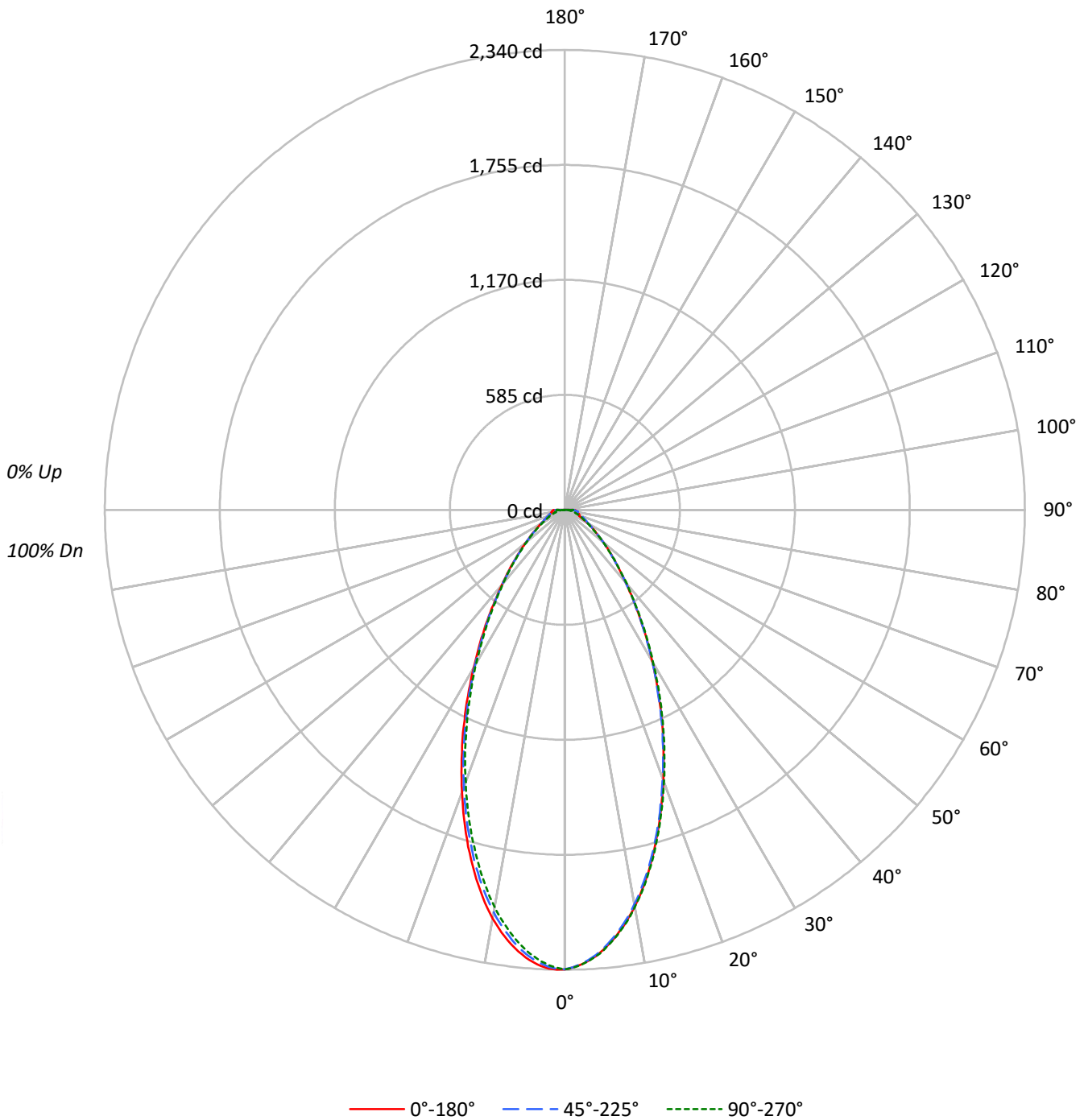
Lumens per Lamp: N/A
Luminaire Lumens: 2348.9 lumens
Efficiency: N/A
Efficacy: 103.0 lumens/watt
Spacing Criteria (0/90/45): 0.77 / 0.76 / 0.82
Luminous Opening: Rectangular w/ Sides (W: 0.08' x L: 4' x H: 0.03')
CIE Type: Direct

Input Watts (W): 22.8
Input Voltage (V): 120
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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71				
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64				
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59				
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50				
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46				
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43				
10	64	53	47	42	63	53	47	42	52	46	42	51	46	42	50	45	42	40				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	83001	83001	83001	83001	83001
5°	80031	77800	77359	78748	81445
10°	73775	69771	68925	71205	76011
15°	64967	59894	58792	61561	67582
20°	55161	49543	48340	51119	57632
25°	45377	39755	38558	41019	47496
30°	36338	31011	29751	31933	37901
35°	28497	23638	22450	24289	29596
40°	22185	17837	16717	18229	22922
45°	17474	13515	12436	13746	17917
50°	13935	10330	9266	10452	14182
55°	11353	8027	6929	8057	11500
60°	9217	6462	5287	6471	9764
65°	7219	5577	4220	5577	9020
70°	7853	5162	3468	5168	9133
75°	9366	4997	2753	5010	10232
80°	12619	5177	2268	5253	13461
85°	21737	4766	1402	5591	23082

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 90°
 Luminance: 192624 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.1	8.9
10°-20°	496.4	21.1
20°-30°	539.2	23.0
30°-40°	421.3	17.9
40°-50°	275.8	11.7
50°-60°	168.0	7.2
60°-70°	106.1	4.5
70°-80°	76.1	3.2
80°-90°	56.9	2.4
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°	1244.6	53.0
0°-40°	1665.9	70.9
0°-60°	2109.7	89.8
0°-90°	2348.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2348.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2338	2338	2338	2338	2338	
5°	2247	2241	2250	2268	2287	208
15°	1771	1761	1779	1810	1843	492
25°	1163	1158	1176	1194	1217	532
35°	661	660	670	679	687	416
45°	351	350	351	356	360	274
55°	186	186	179	186	188	168
65°	87	109	95	109	109	93
75°	70	77	51	78	77	75
85°	58	52	20	61	62	62
90°	43	43	43	43	43	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2338.0	2338.0	2338.0	2338.0	2338.0	2338.0	2338.0	2338.0	2338.0
1°	2329.0	2327.9	2327.9	2328.9	2330.9	2333.4	2336.0	2338.7	2340.1
2°	2316.2	2313.9	2313.3	2314.6	2317.9	2322.2	2326.8	2331.5	2334.9
3°	2298.7	2294.5	2293.7	2295.4	2300.0	2305.9	2312.3	2319.2	2324.5
4°	2275.7	2270.7	2269.7	2272.0	2277.4	2284.4	2292.8	2301.5	2308.1
5°	2247.3	2241.3	2240.7	2243.9	2250.2	2258.4	2268.0	2278.3	2287.0
6°	2214.9	2207.5	2207.1	2211.2	2217.5	2227.2	2238.6	2249.6	2260.1
7°	2178.5	2170.4	2170.4	2174.2	2181.7	2192.4	2204.5	2217.0	2228.6
8°	2138.8	2129.6	2130.3	2134.5	2142.1	2153.6	2166.4	2180.5	2193.9
9°	2095.8	2085.9	2086.3	2090.8	2099.6	2111.8	2124.8	2140.0	2154.4
10°	2049.4	2037.9	2038.3	2044.1	2053.0	2066.3	2080.2	2095.1	2111.5
11°	1999.4	1987.3	1987.8	1994.0	2003.6	2017.1	2031.8	2046.7	2063.9
12°	1946.4	1933.7	1934.8	1941.3	1951.0	1964.8	1980.5	1995.3	2012.9
13°	1890.5	1877.8	1879.3	1886.2	1895.7	1910.6	1926.2	1940.9	1958.7
14°	1831.5	1819.7	1820.9	1828.7	1838.1	1853.5	1869.1	1884.1	1901.7
15°	1771.4	1760.1	1761.2	1770.3	1778.9	1794.9	1810.2	1825.2	1842.7
16°	1711.1	1698.9	1700.9	1710.4	1719.3	1734.9	1750.2	1764.6	1782.3
17°	1650.0	1636.8	1639.3	1649.2	1658.5	1673.7	1688.7	1702.3	1720.6
18°	1588.4	1574.4	1577.8	1587.5	1597.3	1612.0	1626.5	1639.6	1657.1
19°	1526.4	1512.7	1516.1	1526.4	1535.7	1550.0	1564.1	1576.7	1593.5
20°	1464.3	1451.3	1455.2	1464.9	1474.3	1487.7	1501.5	1513.9	1529.9
21°	1403.2	1390.5	1394.0	1404.0	1414.0	1425.8	1438.9	1450.8	1466.7
22°	1342.2	1330.3	1334.0	1343.3	1353.5	1364.4	1376.8	1388.2	1403.3
23°	1281.7	1270.3	1274.6	1283.4	1293.9	1303.6	1315.4	1326.3	1340.5
24°	1221.7	1210.9	1215.8	1224.2	1234.4	1243.4	1254.6	1264.7	1278.5
25°	1162.7	1153.0	1157.5	1165.7	1176.3	1184.0	1194.3	1204.5	1217.0
26°	1104.9	1096.2	1100.6	1108.6	1118.6	1125.8	1135.3	1145.1	1156.0
27°	1048.7	1041.1	1045.3	1052.8	1062.1	1069.3	1077.7	1086.6	1096.7
28°	994.5	987.5	991.3	998.2	1007.0	1013.7	1021.4	1029.4	1038.9
29°	941.6	935.5	938.7	945.2	953.0	960.2	967.3	973.9	983.0
30°	890.5	885.2	888.1	894.2	901.0	908.4	914.5	920.4	928.8
31°	841.3	836.5	839.3	844.9	851.2	858.5	863.8	869.1	876.6
32°	793.8	789.3	791.7	796.9	803.0	810.1	814.8	819.5	826.3
33°	748.0	744.2	746.4	751.6	756.8	763.8	767.9	772.3	777.9
34°	703.4	700.5	702.5	707.7	712.4	718.6	722.6	726.3	731.4
35°	661.2	658.9	660.5	665.6	669.7	675.3	678.7	682.6	686.7
36°	621.1	619.3	620.9	625.1	629.4	634.1	637.2	640.7	644.5
37°	583.2	581.9	583.1	586.7	590.8	595.0	597.8	601.1	604.4
38°	547.3	546.3	547.4	550.7	554.3	557.9	560.8	563.8	566.6
39°	513.6	512.8	513.9	516.7	520.0	523.1	525.7	528.6	531.2
40°	481.9	481.2	482.2	484.6	487.3	490.3	492.8	495.5	497.9
41°	452.3	451.6	452.5	454.5	456.6	459.8	462.0	464.4	466.6
42°	424.5	423.7	424.3	426.1	427.7	430.8	433.1	435.1	437.3
43°	398.3	397.6	398.1	399.6	400.5	403.3	405.8	407.7	409.9
44°	373.9	373.1	373.5	374.7	375.1	377.9	380.2	382.1	384.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
45°	350.8	350.2	350.3	351.2	351.3	354.0	356.3	358.3	359.7
46°	329.1	328.6	328.6	329.1	328.8	331.4	333.9	335.7	336.8
47°	308.8	308.4	308.4	308.3	307.6	310.2	312.9	314.6	315.6
48°	289.4	289.4	289.2	288.7	287.6	290.4	293.2	294.8	295.5
49°	271.5	271.5	271.1	270.6	268.9	271.7	274.7	276.1	276.7
50°	254.7	254.7	254.2	253.5	251.4	254.3	257.2	258.8	259.2
51°	238.8	239.0	238.6	237.4	234.9	238.0	240.8	242.5	242.7
52°	224.1	224.2	223.8	222.4	219.3	222.8	225.7	227.3	227.5
53°	210.4	210.6	210.1	208.5	205.0	208.6	211.5	213.1	213.4
54°	197.7	197.8	197.3	195.6	191.4	195.5	198.5	200.0	200.1
55°	185.5	186.0	185.5	183.5	178.8	183.3	186.2	187.8	187.9
56°	173.8	174.9	174.4	172.3	167.1	172.1	174.9	176.4	176.4
57°	162.6	164.5	164.1	162.1	156.2	161.7	164.5	166.0	166.0
58°	152.3	155.1	154.9	152.7	146.1	152.2	155.0	156.3	156.3
59°	142.3	146.5	146.3	144.2	137.0	143.5	146.5	147.6	147.4
60°	131.6	138.5	138.5	136.2	128.4	135.7	138.7	139.5	139.4
61°	120.8	131.4	131.4	129.0	120.6	128.4	131.5	132.2	132.2
62°	113.8	124.8	125.0	122.5	113.6	121.9	125.0	125.6	125.6
63°	103.6	118.9	119.3	116.3	107.0	115.8	119.3	119.7	119.5
64°	93.2	113.4	114.1	110.5	100.9	110.3	114.1	114.2	114.2
65°	87.4	108.6	109.3	105.5	95.3	105.3	109.3	109.3	109.2
66°	83.6	104.1	105.0	100.8	89.9	100.5	104.9	104.9	104.7
67°	80.4	99.9	101.1	96.4	85.1	96.1	101.0	100.9	100.7
68°	78.7	96.1	97.6	92.4	80.4	92.2	97.4	97.1	96.8
69°	76.9	92.7	94.2	89.0	76.0	88.6	94.1	93.6	93.3
70°	77.3	89.4	90.9	85.5	71.8	84.9	91.0	90.3	89.9
71°	77.1	86.4	87.9	82.1	67.5	81.8	88.0	87.2	86.9
72°	76.3	83.5	84.9	79.0	63.2	78.6	85.2	84.3	84.0
73°	74.3	80.1	82.3	75.9	59.1	75.7	82.5	81.5	81.2
74°	72.4	75.4	79.7	73.1	55.1	73.0	79.9	79.0	79.0
75°	70.3	69.6	77.4	70.7	51.4	70.7	77.6	76.8	76.8
76°	68.6	63.2	75.2	68.6	48.1	68.8	75.6	74.8	74.2
77°	67.0	59.2	73.1	67.0	45.2	67.3	73.7	72.7	72.4
78°	65.8	57.3	71.4	65.8	42.5	66.3	72.3	71.2	71.0
79°	65.1	57.5	69.8	64.8	40.0	65.6	71.5	69.9	69.8
80°	64.5	59.0	68.6	64.0	37.4	64.8	69.6	68.7	68.8
81°	63.4	59.1	67.3	62.9	34.5	63.9	68.1	67.5	67.6
82°	62.4	59.1	65.7	61.4	31.2	62.3	66.5	66.2	66.4
83°	61.0	58.5	63.2	59.5	27.5	60.1	64.8	64.6	64.9
84°	59.6	57.5	59.6	56.3	23.6	57.4	62.9	63.0	63.4
85°	58.2	56.3	52.0	52.4	19.9	53.3	61.0	61.3	61.8
86°	56.1	54.7	48.1	49.1	15.8	49.2	59.1	59.7	60.2
87°	54.1	53.0	47.8	44.8	12.7	46.1	57.4	58.2	58.7
88°	52.3	51.3	47.4	39.8	10.5	43.3	55.8	56.8	57.4
89°	51.1	49.8	46.4	32.9	7.8	40.7	54.3	55.7	56.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
90°	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0

(END OF REPORT)