

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: P1212242

Luminaire Tested: 4VT3-LD5-5-G-UNV-L830-CD1-U

Issue Date: 10/16/2019

Test Information

Test Method: LM-79-2019
Report Number: P1212242
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1709-268-1-R3)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 10/16/2019
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: iO LED
Catalog Number: 4VT3-LD5-5-G-UNV-L830-CD1-U
Description: 4FT VT3 GENRAL APPLICATION
Light Source: -
Ballast/Driver: -

Summary

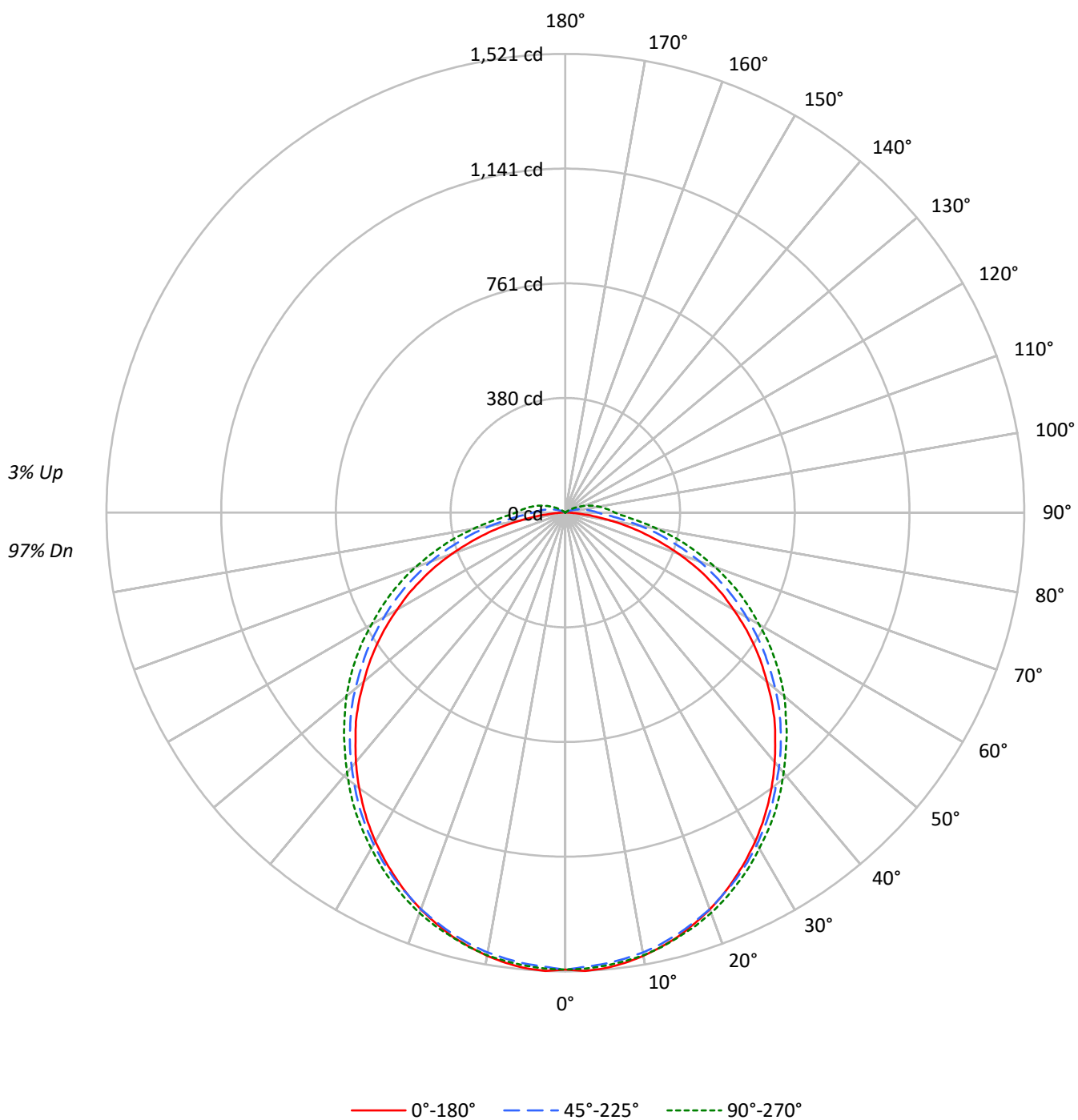
Lumens per Lamp: N/A
Luminaire Lumens: 4692.7 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.26 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 43.6
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
RCR																	
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99
1	107	102	97	93	104	99	95	91	94	91	88	90	87	84	86	83	81
2	97	88	81	75	94	86	79	74	82	76	72	78	73	69	75	71	67
3	88	77	69	62	85	75	67	61	72	65	60	69	63	58	66	61	57
4	81	68	59	52	78	67	58	52	64	56	51	61	55	49	58	53	48
5	74	61	52	45	72	59	51	44	57	49	44	55	48	43	52	47	42
6	68	55	46	39	66	54	45	39	51	44	38	49	43	37	47	42	37
7	63	49	41	34	61	49	40	34	47	39	34	45	38	33	43	37	33
8	59	45	36	31	57	44	36	30	43	35	30	41	34	30	40	34	29
9	55	41	33	27	53	41	33	27	39	32	27	38	31	27	37	31	26
10	52	38	30	25	50	38	30	25	36	29	24	35	29	24	34	28	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9786	9786	9786
5°	9795	9476	9448
10°	9716	9205	9129
15°	9612	8920	8793
20°	9480	8633	8475
25°	9325	8333	8135
30°	9167	8025	7792
35°	8988	7708	7465
40°	8795	7358	7104
45°	8607	7023	6769
50°	8350	6654	6446
55°	8107	6259	6079
60°	7761	5820	5655
65°	7375	5353	5252
70°	6781	4820	4749
75°	5911	4125	4188
80°	4630	3382	3516
85°	2806	2606	2896

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8607 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.4	3.1
10°-20°	409.8	8.7
20°-30°	619.1	13.2
30°-40°	745.9	15.9
40°-50°	779.3	16.6
50°-60°	719.9	15.3
60°-70°	577.2	12.3
70°-80°	373.9	8.0
80°-90°	172.7	3.7
90°-100°	85.2	1.8
100°-110°	45.5	1.0
110°-120°	17.6	0.4
120°-130°	3.3	0.1
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°	1172.3	25.0
0°-40°	1918.2	40.9
0°-60°	3417.4	72.8
0°-90°	4541.2	96.8
90°-120°	148.3	3.2
90°-150°	151.6	3.2
90°-180°	152.0	3.2
0°-180°	4692.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1515	1515	1515	1515	1515	
5°	1516	1512	1502	1511	1508	144
15°	1454	1453	1446	1457	1456	410
25°	1334	1337	1340	1352	1354	615
35°	1173	1181	1192	1205	1212	734
45°	982	993	1009	1028	1038	756
55°	763	780	804	834	848	681
65°	526	542	585	622	638	520
75°	274	308	358	401	418	290
85°	56	103	161	203	218	68
90°	12	51	107	149	164	8
95°	8	32	82	123	138	6
105°	4	7	41	75	89	4
115°	1	1	11	33	43	2
125°	1	0	0	6	10	1
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1515.2	1515.2	1515.2	1515.2	1515.2
2.5°	1521.0	1516.4	1507.3	1515.2	1513.0
5°	1516.4	1511.9	1501.6	1510.7	1508.4
7.5°	1506.2	1501.6	1492.4	1502.7	1500.5
10°	1492.4	1489.1	1481.0	1490.2	1490.2
12.5°	1474.2	1473.1	1465.1	1475.3	1475.3
15°	1453.7	1452.6	1445.7	1457.1	1456.0
17.5°	1427.5	1428.6	1422.9	1434.3	1436.6
20°	1400.2	1400.2	1398.9	1410.3	1412.7
22.5°	1369.3	1370.5	1369.3	1383.0	1385.3
25°	1334.0	1337.4	1339.7	1352.2	1354.5
27.5°	1297.5	1302.1	1306.7	1319.2	1322.5
30°	1258.8	1262.1	1270.1	1283.8	1286.1
32.5°	1217.7	1224.6	1231.4	1245.0	1249.6
35°	1173.2	1181.2	1191.5	1205.1	1212.0
37.5°	1127.6	1136.8	1145.8	1164.1	1169.8
40°	1079.7	1090.0	1101.4	1118.5	1125.4
42.5°	1029.5	1043.3	1056.9	1075.1	1080.9
45°	981.6	993.1	1009.0	1028.4	1037.6
47.5°	928.1	942.9	961.2	981.6	990.8
50°	872.3	888.1	908.7	932.7	947.4
52.5°	818.7	834.6	855.1	884.8	898.4
55°	762.8	779.9	803.8	833.5	848.3
57.5°	704.6	722.8	749.1	782.1	797.0
60°	644.2	663.6	694.3	730.9	741.1
62.5°	587.2	605.4	640.7	676.1	691.0
65°	525.7	541.5	584.9	622.5	638.5
67.5°	465.2	483.4	529.0	570.1	583.8
70°	400.2	423.0	474.3	511.9	527.9
72.5°	335.2	362.6	416.2	457.2	472.0
75°	273.7	307.8	358.0	401.3	418.4
77.5°	214.4	249.7	306.7	346.6	363.7
80°	153.9	196.1	252.0	293.0	309.0
82.5°	102.6	146.0	201.8	245.2	262.3
85°	55.9	102.6	160.7	203.0	217.8
87.5°	26.2	71.8	126.6	168.8	185.9
90°	12.5	51.3	107.1	149.3	164.2
92.5°	10.3	39.9	94.6	135.7	151.7
95°	7.9	31.9	82.1	123.1	138.0
97.5°	6.8	22.8	71.8	110.6	126.6
100°	5.7	16.0	60.4	99.2	112.9
102.5°	4.6	10.3	50.2	87.8	101.4
105°	3.5	6.8	41.0	75.3	88.9
107.5°	3.5	3.5	33.1	63.9	77.5
110°	2.2	2.2	23.9	53.6	65.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.2	2.2	17.1	43.3	53.6
115°	1.1	1.1	11.4	33.1	43.3
117.5°	1.1	1.1	6.8	25.1	33.1
120°	1.1	1.1	3.5	17.1	25.1
122.5°	1.1	1.1	1.1	11.4	17.1
125°	1.1	0.0	0.0	5.7	10.3
127.5°	0.0	0.0	0.0	2.2	5.7
130°	0.0	0.0	0.0	0.0	1.1
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)