

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: io LED

Report Number: P397281

Luminaire Tested: **4VRVT2-LD5-8-DR-UNV-LG52-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P397281
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-11)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 4VRVT2-LD5-8-DR-UNV-LG52-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6583.9 lumens
Efficiency: N/A
Efficacy: 47.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.23 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4.17' x H: 0.17')
CIE Type: Direct

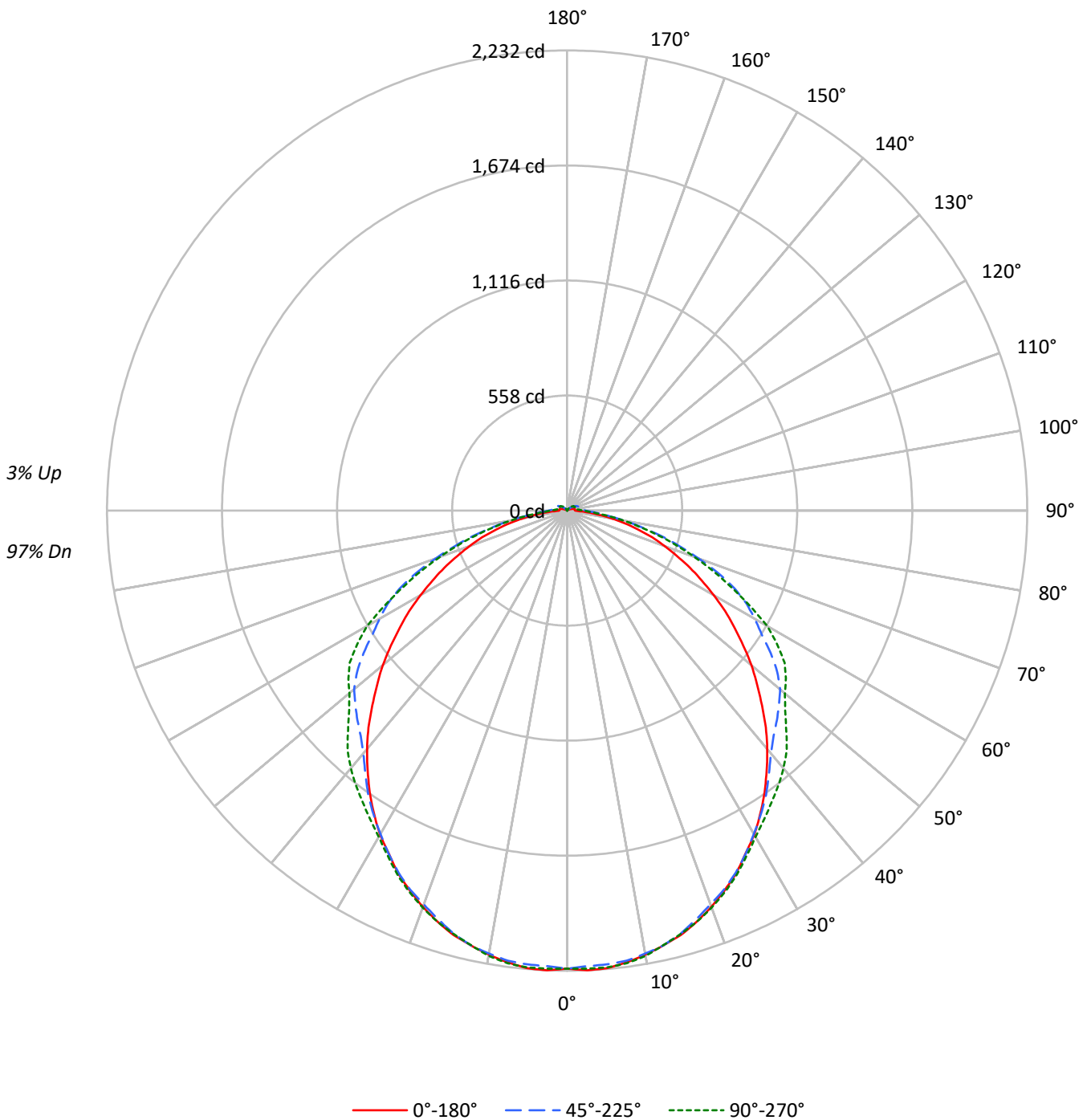
Input Watts (W): 139.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P397281

CATALOG NUMBER: 4VRVT2-LD5-8-DR-UNV-LG52-CD1-WL-U

Luminous Intensity Polar Plot





TEST NUMBER: P397281

CATALOG NUMBER: 4VRVT2-LD5-8-DR-UNV-LG52-CD1-WL-U

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	0
RCR																		
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	97
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	80
2	98	89	82	76	95	87	81	75	83	77	73	79	75	71	76	72	69	66
3	89	78	70	63	86	76	68	62	73	66	61	70	64	59	67	62	58	56
4	81	69	60	53	79	67	59	53	65	57	52	62	56	51	59	54	50	47
5	75	62	52	46	72	60	52	45	58	50	45	55	49	44	53	48	43	41
6	69	55	46	40	67	54	46	39	52	45	39	50	43	38	48	42	38	36
7	64	50	41	35	62	49	41	35	47	40	34	46	39	34	44	38	33	31
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30	40	34	30	28
9	55	42	34	28	54	41	33	28	40	33	28	39	32	27	37	31	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11478	11478	11478
5°	11515	11201	11208
10°	11395	10936	10870
15°	11279	10615	10441
20°	11086	10197	10050
25°	10862	9831	9615
30°	10585	9376	9142
35°	10239	8956	8837
40°	9851	8490	8601
45°	9386	8315	8233
50°	8955	8247	7929
55°	8446	7887	7855
60°	7932	7448	7337
65°	7404	7007	6257
70°	6849	5919	5173
75°	6197	4698	4007
80°	5335	3355	2858
85°	4036	2278	1725



TEST NUMBER: P397281

CATALOG NUMBER: 4VRVT2-LD5-8-DR-UNV-LG52-CD1-WL-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.0	3.2
10°-20°	600.7	9.1
20°-30°	895.3	13.6
30°-40°	1059.2	16.1
40°-50°	1102.8	16.7
50°-60°	1037.4	15.8
60°-70°	831.3	12.6
70°-80°	482.9	7.3
80°-90°	170.3	2.6
90°-100°	65.8	1.0
100°-110°	50.0	0.8
110°-120°	38.1	0.6
120°-130°	23.2	0.4
130°-140°	11.3	0.2
140°-150°	3.7	0.1
150°-160°	0.6	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	1707.0	25.9
0°-40°	2766.3	42.0
0°-60°	4906.4	74.5
0°-90°	6391.0	97.1
90°-120°	153.8	2.3
90°-150°	192.1	2.9
90°-180°	193.0	2.9
0°-180°	6583.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2222	2222	2222	2222	2222	
5°	2228	2218	2210	2229	2224	211
15°	2131	2138	2125	2129	2126	600
25°	1941	1947	1937	1951	1949	892
35°	1669	1673	1682	1711	1728	1043
45°	1336	1350	1438	1509	1502	1032
55°	991	1050	1206	1258	1287	888
65°	658	822	898	890	878	651
75°	357	494	467	457	450	380
85°	99	151	154	149	140	106
90°	38	82	89	84	78	23
95°	38	60	67	58	54	31
105°	31	45	59	49	42	33
115°	16	29	51	46	40	16
125°	6	10	34	38	36	6
135°	2	2	16	25	26	2
145°	2	1	3	10	13	1
155°	1	1	1	1	2	0
165°	1	1	1	1	0	0
175°	2	2	1	1	1	0
180°	1	1	1	1	1	



TEST NUMBER: P397281

CATALOG NUMBER: 4VRVT2-LD5-8-DR-UNV-LG52-CD1-WL-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2221.6	2221.6	2221.6	2221.6	2221.6
2.5°	2232.0	2224.0	2212.0	2228.0	2224.0
5°	2228.0	2218.4	2209.6	2228.8	2224.0
7.5°	2210.4	2208.8	2202.4	2218.4	2214.4
10°	2187.2	2192.0	2181.6	2194.4	2193.6
12.5°	2160.0	2172.0	2160.0	2163.2	2158.4
15°	2131.2	2138.4	2124.8	2128.8	2126.4
17.5°	2091.2	2101.6	2079.2	2099.2	2091.2
20°	2045.6	2056.0	2032.8	2055.2	2049.6
22.5°	1994.4	2004.0	1989.6	2005.6	2001.6
25°	1940.8	1947.2	1936.8	1951.2	1948.8
27.5°	1874.4	1889.6	1876.0	1893.6	1886.4
30°	1815.2	1820.8	1811.2	1832.8	1827.2
32.5°	1744.0	1748.0	1748.0	1767.2	1776.8
35°	1668.8	1672.8	1682.4	1711.2	1728.0
37.5°	1589.6	1598.4	1607.2	1664.0	1682.4
40°	1509.6	1516.0	1537.6	1620.0	1632.0
42.5°	1426.4	1432.8	1482.4	1572.8	1576.8
45°	1336.0	1349.6	1438.4	1508.8	1502.4
47.5°	1250.4	1267.2	1393.6	1427.2	1433.6
50°	1167.2	1186.4	1348.8	1361.6	1378.4
52.5°	1077.6	1114.4	1284.8	1302.4	1337.6
55°	991.2	1049.6	1205.6	1257.6	1287.2
57.5°	908.8	984.8	1119.2	1200.0	1208.0
60°	820.8	929.6	1050.4	1119.2	1120.0
62.5°	736.8	876.8	982.4	1008.8	997.6
65°	657.6	822.4	897.6	889.6	877.6
67.5°	576.8	752.8	792.8	775.2	767.2
70°	503.2	677.6	676.0	660.8	656.0
72.5°	432.8	584.0	568.0	554.4	550.4
75°	356.8	494.4	467.2	456.8	450.4
77.5°	288.0	401.6	364.8	360.8	356.0
80°	220.0	306.4	281.6	282.4	277.6
82.5°	152.0	220.0	206.4	204.8	199.2
85°	99.2	151.2	154.4	148.8	140.0
87.5°	53.6	105.6	112.8	108.8	102.4
90°	37.6	81.6	88.8	84.0	78.4
92.5°	37.6	68.8	75.2	68.0	63.2
95°	38.4	60.0	67.2	58.4	53.6
97.5°	38.4	54.4	62.4	52.8	47.2
100°	36.8	51.2	60.8	50.4	44.8
102.5°	34.4	48.0	60.0	48.8	43.2
105°	31.2	44.8	59.2	48.8	41.6
107.5°	27.2	41.6	58.4	48.0	41.6
110°	23.2	37.6	56.8	48.0	40.8



TEST NUMBER: P397281

CATALOG NUMBER: 4VRVT2-LD5-8-DR-UNV-LG52-CD1-WL-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	20.0	33.6	54.4	47.2	40.8
115°	16.0	28.8	51.2	45.6	40.0
117.5°	12.8	24.0	47.2	44.0	39.2
120°	10.4	19.2	43.2	42.4	38.4
122.5°	8.0	14.4	38.4	40.0	36.8
125°	6.4	10.4	33.6	37.6	36.0
127.5°	4.8	7.2	28.8	35.2	33.6
130°	4.0	4.0	24.0	32.0	31.2
132.5°	3.2	3.2	20.0	28.8	29.6
135°	2.4	2.4	16.0	24.8	26.4
137.5°	2.4	1.6	12.0	21.6	23.2
140°	1.6	1.6	8.8	17.6	19.2
142.5°	1.6	1.6	5.6	14.4	16.0
145°	1.6	0.8	3.2	10.4	12.8
147.5°	1.6	0.8	1.6	7.2	9.6
150°	0.8	0.8	0.8	4.8	6.4
152.5°	0.8	0.8	0.8	2.4	3.2
155°	0.8	0.8	0.8	0.8	1.6
157.5°	0.8	0.8	0.8	0.8	0.0
160°	0.8	0.8	0.8	0.8	0.0
162.5°	0.8	0.8	0.8	0.8	0.0
165°	0.8	0.8	0.8	0.8	0.0
167.5°	1.6	0.8	0.8	0.8	0.0
170°	1.6	0.8	0.8	0.8	0.0
172.5°	1.6	1.6	0.8	0.8	0.0
175°	1.6	1.6	0.8	0.8	0.8
177.5°	1.6	1.6	0.8	0.8	0.8
180°	0.8	0.8	0.8	0.8	0.8

(END OF REPORT)