

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: P397248

Luminaire Tested: **4VRVT2-LD5-11-FR50-UNV-LG52-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P397248
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-13)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 4VRVT2-LD5-11-FR50-UNV-LG52-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8496.0 lumens
Efficiency: N/A
Efficacy: 43.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4.17' x H: 0.17')
CIE Type: Direct

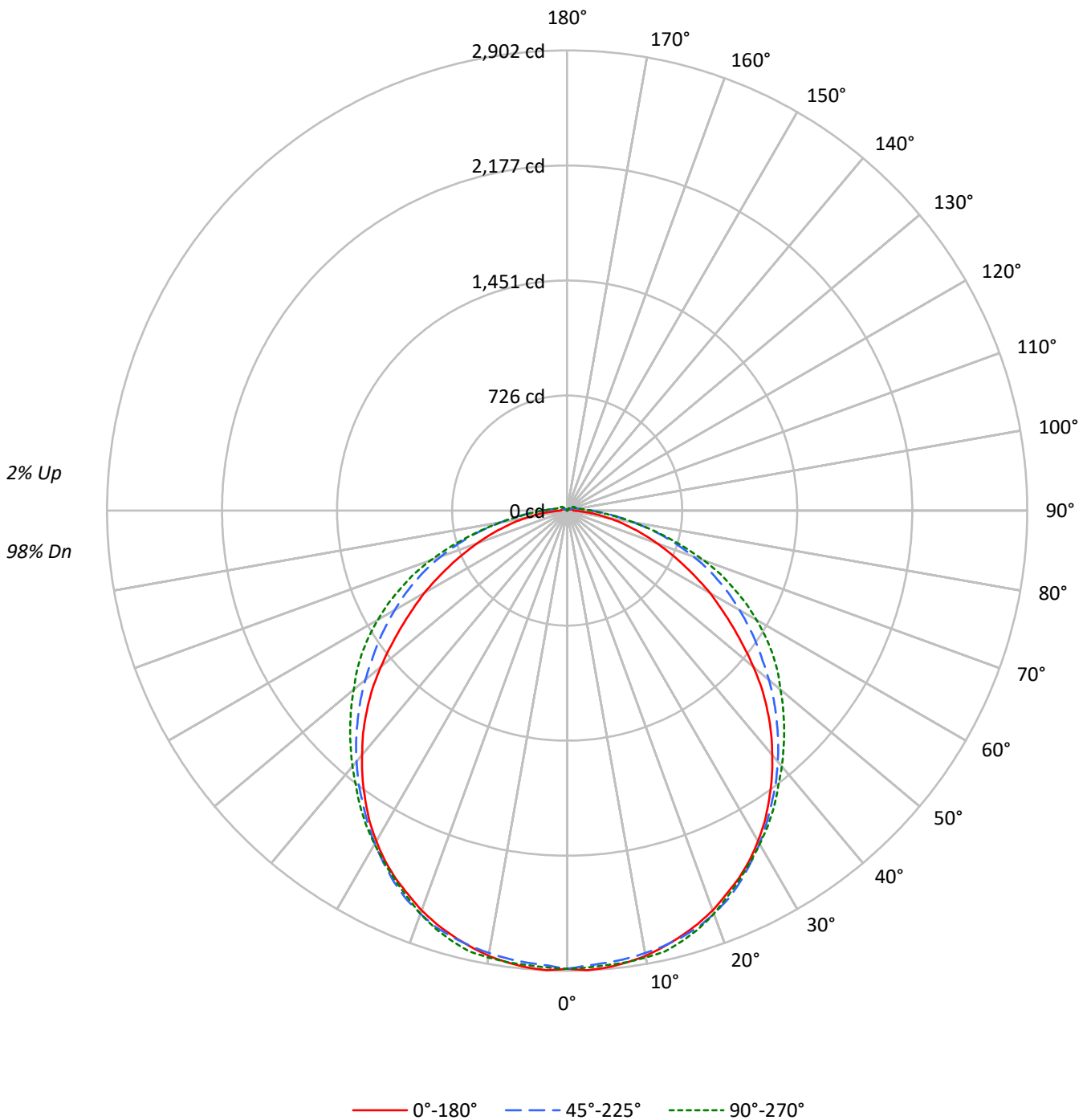
Input Watts (W): 196.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P397248

CATALOG NUMBER: 4VRVT2-LD5-11-FR50-UNV-LG52-CD1-WL-U

Luminous Intensity Polar Plot





TEST NUMBER: P397248

CATALOG NUMBER: 4VRVT2-LD5-11-FR50-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	50	30	10	0	
RCR																						
0	118	118	118	118	115	115	115	115	110	110	110	105	105	105	100	100	100	98				
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	81				
2	98	89	82	76	95	87	81	75	83	78	73	80	75	71	76	72	69	67				
3	89	78	70	63	86	76	69	63	73	67	61	70	64	60	67	62	58	56				
4	81	69	60	54	79	68	60	53	65	58	52	62	56	51	60	55	50	48				
5	75	62	53	46	73	61	52	46	58	51	45	56	49	44	54	48	44	41				
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	49	43	38	36				
7	64	51	42	36	62	50	41	35	48	40	35	46	39	34	45	39	34	32				
8	60	46	38	32	58	45	37	32	44	36	31	42	36	31	41	35	30	29				
9	56	42	34	29	54	42	34	28	40	33	28	39	33	28	38	32	28	26				
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	29	25	23				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14929	14929	14929
5°	14949	14509	14503
10°	14856	14206	14183
15°	14704	13922	13797
20°	14542	13576	13270
25°	14326	13116	12677
30°	14038	12560	12149
35°	13628	11974	11642
40°	13129	11409	11100
45°	12556	10797	10607
50°	11770	10153	10106
55°	10844	9523	9662
60°	10055	8906	9029
65°	9101	8260	8238
70°	8198	7416	7215
75°	7266	6361	5805
80°	6264	5034	4349
85°	5191	3842	3093



TEST NUMBER: P397248

CATALOG NUMBER: 4VRVT2-LD5-11-FR50-UNV-LG52-CD1-WL-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	273.9	3.2
10°-20°	788.2	9.3
20°-30°	1187.3	14.0
30°-40°	1413.9	16.6
40°-50°	1443.4	17.0
50°-60°	1293.6	15.2
60°-70°	1009.5	11.9
70°-80°	621.5	7.3
80°-90°	259.1	3.0
90°-100°	93.3	1.1
100°-110°	50.3	0.6
110°-120°	32.9	0.4
120°-130°	18.7	0.2
130°-140°	8.3	0.1
140°-150°	2.0	0.0
150°-160°	0.2	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2249.3	26.5
0°-40°	3663.2	43.1
0°-60°	6400.2	75.3
0°-90°	8290.3	97.6
90°-120°	176.5	2.1
90°-150°	205.5	2.4
90°-180°	206.0	2.4
0°-180°	8496.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2889	2889	2889	2889	2889	
5°	2892	2882	2862	2882	2878	275
15°	2778	2780	2787	2818	2810	784
25°	2560	2581	2584	2580	2569	1178
35°	2221	2268	2249	2274	2277	1388
45°	1787	1833	1868	1921	1936	1376
55°	1273	1347	1456	1553	1583	1142
65°	808	893	1058	1145	1156	804
75°	418	510	633	664	653	448
85°	128	199	260	260	251	131
90°	42	106	154	156	152	27
95°	38	60	96	100	97	30
105°	29	29	53	60	59	31
115°	16	15	37	48	50	16
125°	7	4	21	34	38	6
135°	3	2	8	19	22	2
145°	1	1	1	5	7	1
155°	1	1	1	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P397248

CATALOG NUMBER: 4VRVT2-LD5-11-FR50-UNV-LG52-CD1-WL-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2889.4	2889.4	2889.4	2889.4	2889.4
2.5°	2901.8	2891.4	2871.5	2890.4	2884.1
5°	2892.5	2882.0	2862.2	2882.0	2877.8
7.5°	2874.7	2867.4	2850.6	2874.7	2872.6
10°	2851.7	2844.3	2833.9	2863.2	2862.2
12.5°	2817.2	2814.0	2813.0	2849.6	2847.5
15°	2778.5	2779.5	2786.9	2818.2	2809.8
17.5°	2734.6	2740.8	2753.4	2772.2	2763.8
20°	2683.3	2693.8	2706.3	2713.7	2706.3
22.5°	2620.6	2639.4	2651.9	2646.7	2637.3
25°	2559.9	2580.8	2584.0	2579.8	2569.4
27.5°	2488.8	2515.0	2505.5	2510.8	2499.3
30°	2407.3	2443.8	2426.1	2435.5	2428.2
32.5°	2320.5	2363.4	2339.3	2355.0	2357.0
35°	2221.1	2268.2	2249.4	2274.5	2276.6
37.5°	2120.7	2169.8	2161.5	2192.9	2187.7
40°	2012.0	2066.3	2066.3	2100.9	2106.1
42.5°	1904.2	1950.2	1970.2	2010.9	2021.4
45°	1787.1	1833.1	1867.7	1921.0	1935.6
47.5°	1666.9	1718.1	1767.3	1825.8	1847.8
50°	1534.1	1595.8	1660.6	1737.0	1756.8
52.5°	1400.2	1469.2	1553.9	1646.0	1674.2
55°	1272.6	1346.9	1455.7	1552.9	1583.2
57.5°	1151.4	1227.7	1355.3	1457.8	1483.8
60°	1040.5	1106.4	1255.9	1362.6	1378.2
62.5°	921.3	999.7	1158.6	1257.0	1274.7
65°	808.3	893.0	1058.2	1145.0	1155.5
67.5°	701.7	788.5	956.8	1033.2	1045.7
70°	602.3	694.3	847.0	910.8	915.0
72.5°	511.4	601.3	738.2	789.5	782.2
75°	418.3	510.3	632.6	664.0	652.6
77.5°	339.8	423.5	526.0	549.0	531.2
80°	258.3	338.8	422.5	430.8	422.5
82.5°	189.3	264.6	336.7	338.8	326.2
85°	127.6	198.7	260.4	260.4	251.0
87.5°	72.2	145.4	198.7	200.8	190.3
90°	41.8	105.6	153.8	155.8	151.6
92.5°	38.7	76.3	120.2	123.4	119.2
95°	37.7	59.6	96.2	100.4	97.3
97.5°	36.6	48.1	80.6	83.7	81.6
100°	35.5	39.8	68.0	73.2	72.2
102.5°	32.4	34.5	59.6	64.8	63.8
105°	29.3	29.3	53.4	59.6	58.6
107.5°	26.2	25.1	48.1	56.5	55.4
110°	22.0	22.0	43.9	53.4	53.4



TEST NUMBER: P397248

CATALOG NUMBER: 4VRVT2-LD5-11-FR50-UNV-LG52-CD1-WL-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	18.8	18.8	39.8	51.3	51.3
115°	15.7	14.6	36.6	48.1	50.2
117.5°	12.6	12.6	32.4	45.0	47.0
120°	10.5	9.4	28.2	41.8	45.0
122.5°	8.4	6.2	25.1	37.7	41.8
125°	7.4	4.2	20.9	34.5	37.7
127.5°	5.2	3.1	17.8	30.3	34.5
130°	4.2	3.1	14.6	26.2	30.3
132.5°	4.2	2.1	11.5	22.0	26.2
135°	3.1	2.1	8.4	18.8	22.0
137.5°	2.1	2.1	5.2	15.7	18.8
140°	2.1	2.1	3.1	11.5	14.6
142.5°	2.1	1.0	1.0	8.4	11.5
145°	1.0	1.0	1.0	5.2	7.4
147.5°	1.0	1.0	1.0	2.1	4.2
150°	1.0	1.0	1.0	0.0	1.0
152.5°	1.0	1.0	1.0	0.0	0.0
155°	1.0	1.0	1.0	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)