

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: P397302

Luminaire Tested: **4VRVT3-LD5-8-G-UNV-LG52-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P397302  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1709-268-3)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: 4VRVT3-LD5-8-G-UNV-LG52-CD1-U  
Description:  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

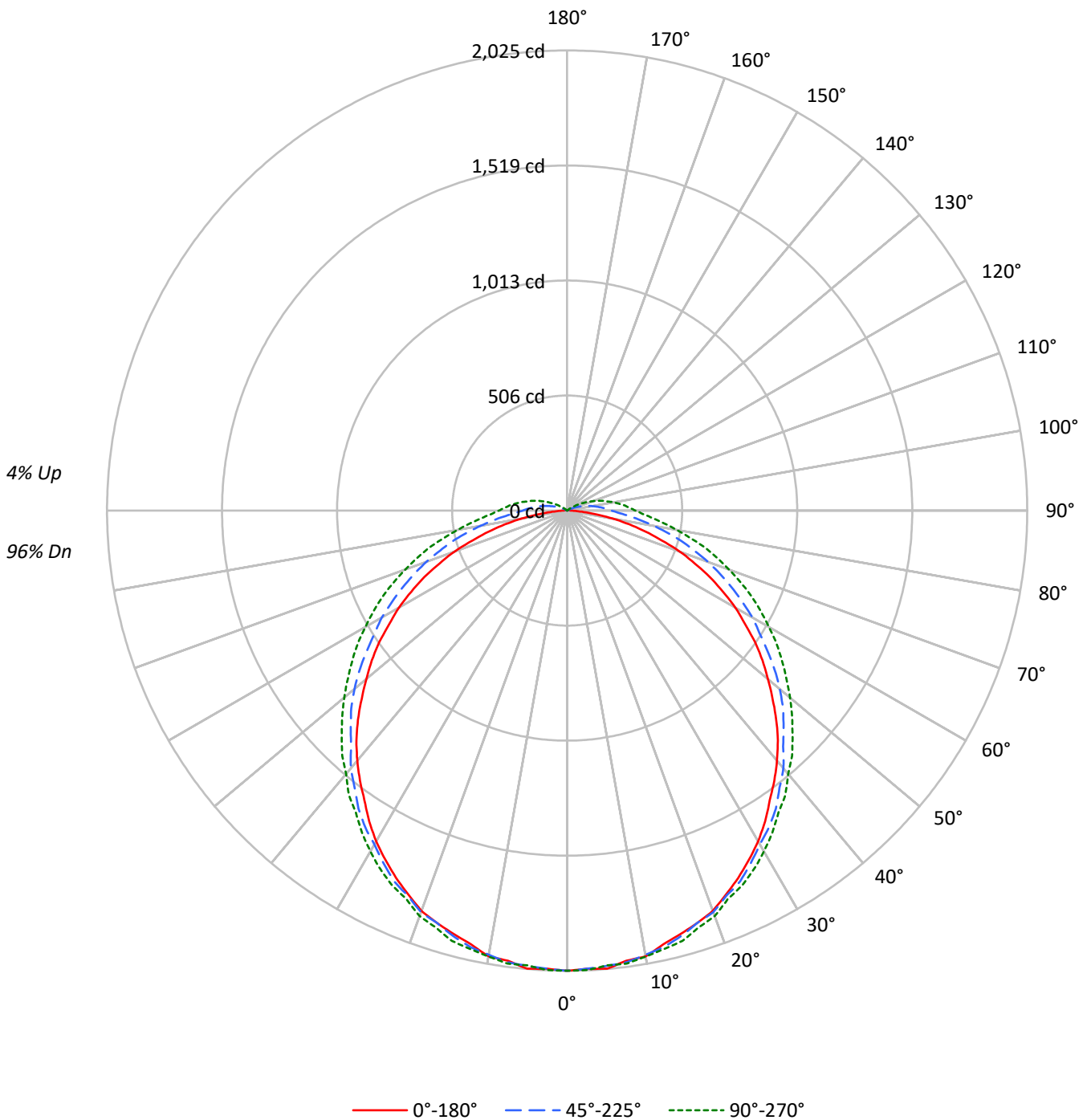
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6464.8 lumens  
Efficiency: N/A  
Efficacy: 40.5 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.27 / 1.37  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 1.04')  
CIE Type: Direct  
  
Input Watts (W): 159.7  
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

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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	0
RCR																		
0	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	96
1	106	101	96	92	103	98	94	90	93	90	86	89	86	83	84	82	80	77
2	96	87	80	74	93	85	78	73	81	75	70	77	72	68	73	69	66	63
3	87	76	68	61	85	74	66	60	71	64	58	67	62	57	64	59	55	53
4	80	67	58	51	77	66	57	51	63	55	50	60	54	48	57	52	47	45
5	73	60	51	44	71	59	50	44	56	48	43	54	47	42	51	46	41	39
6	68	54	45	38	65	53	44	38	51	43	37	48	42	37	46	41	36	34
7	63	49	40	34	61	48	39	33	46	38	33	44	37	32	42	36	32	30
8	58	45	36	30	57	44	35	30	42	35	29	40	34	29	39	33	28	26
9	55	41	33	27	53	40	32	27	39	31	26	37	31	26	36	30	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	28	24	33	28	23	21

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	13077	13077	13077
5°	12824	11137	10686
10°	12490	9683	9070
15°	12055	8510	7851
20°	11767	7557	6834
25°	11326	6718	5991
30°	10896	5947	5286
35°	10370	5333	4648
40°	9941	4733	4117
45°	9432	4166	3660
50°	8845	3690	3234
55°	8286	3199	2846
60°	7620	2776	2485
65°	6801	2350	2152
70°	5812	1956	1818
75°	4525	1571	1513
80°	3063	1191	1200
85°	1357	862	946



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	191.3	3.0
10°-20°	547.1	8.5
20°-30°	828.5	12.8
30°-40°	998.4	15.4
40°-50°	1042.7	16.1
50°-60°	968.3	15.0
60°-70°	789.8	12.2
70°-80°	536.5	8.3
80°-90°	284.8	4.4
90°-100°	155.7	2.4
100°-110°	83.5	1.3
110°-120°	32.7	0.5
120°-130°	5.6	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°	1566.9	24.2
0°-40°	2565.2	39.7
0°-60°	4576.2	70.8
0°-90°	6187.3	95.7
90°-120°	271.8	4.2
90°-150°	277.4	4.3
90°-180°	277.0	4.3
0°-180°	6464.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2025	2025	2025	2025	2025	
5°	2023	1999	2011	2018	2009	192
15°	1929	1936	1938	1941	1961	546
25°	1782	1787	1801	1806	1821	821
35°	1555	1571	1601	1622	1622	976
45°	1302	1319	1346	1385	1402	1003
55°	1010	1038	1076	1133	1155	900
65°	694	727	798	871	896	685
75°	358	418	522	596	626	379
85°	73	163	271	350	378	88
90°	18	93	195	274	300	12
95°	11	55	152	226	255	9
105°	6	10	76	139	165	6
115°	2	2	21	63	81	2
125°	1	0	0	11	19	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°	2024.8	2024.8	2024.8	2024.8	2024.8
2.5°	2018.4	2033.6	2018.4	2016.8	2024.0
5°	2023.2	1999.2	2011.2	2018.4	2008.8
7.5°	1997.6	2008.8	2004.8	1996.8	2010.4
10°	1992.0	1976.0	1984.8	1981.6	1992.8
12.5°	1955.2	1952.8	1967.2	1960.0	1975.2
15°	1928.8	1936.0	1938.4	1940.8	1960.8
17.5°	1903.2	1907.2	1903.2	1910.4	1923.2
20°	1874.4	1862.4	1880.8	1885.6	1899.2
22.5°	1828.0	1829.6	1833.6	1852.0	1849.6
25°	1782.4	1787.2	1800.8	1806.4	1820.8
27.5°	1732.8	1731.2	1749.6	1765.6	1780.0
30°	1680.8	1687.2	1696.0	1728.8	1732.0
32.5°	1621.6	1626.4	1653.6	1672.0	1680.8
35°	1555.2	1571.2	1600.8	1622.4	1621.6
37.5°	1497.6	1512.8	1536.0	1562.4	1577.6
40°	1436.8	1449.6	1480.8	1505.6	1512.8
42.5°	1372.8	1384.0	1407.2	1444.0	1464.8
45°	1301.6	1319.2	1346.4	1384.8	1402.4
47.5°	1226.4	1253.6	1288.8	1320.8	1342.4
50°	1153.6	1180.8	1221.6	1259.2	1280.8
52.5°	1083.2	1109.6	1151.2	1199.2	1216.8
55°	1009.6	1037.6	1076.0	1132.8	1155.2
57.5°	926.4	958.4	1004.0	1076.0	1093.6
60°	856.0	879.2	941.6	1006.4	1025.6
62.5°	773.6	810.4	868.8	942.4	961.6
65°	693.6	727.2	797.6	871.2	896.0
67.5°	608.0	648.8	727.2	800.8	827.2
70°	528.0	570.4	659.2	732.0	757.6
72.5°	436.0	493.6	586.4	667.2	692.0
75°	357.6	417.6	521.6	596.0	626.4
77.5°	279.2	349.6	453.6	528.8	553.6
80°	204.0	280.0	386.4	468.8	489.6
82.5°	130.4	219.2	326.4	404.8	428.8
85°	72.8	163.2	271.2	350.4	377.6
87.5°	35.2	122.4	226.4	307.2	332.0
90°	17.6	92.8	195.2	273.6	300.0
92.5°	13.6	73.6	173.6	249.6	274.4
95°	11.2	55.2	152.0	225.6	255.2
97.5°	9.6	41.6	132.0	205.6	230.4
100°	7.2	28.0	112.0	182.4	208.8
102.5°	6.4	18.4	94.4	160.8	183.2
105°	5.6	10.4	76.0	139.2	164.8
107.5°	4.0	5.6	60.0	120.0	143.2
110°	3.2	4.0	45.6	99.2	121.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	3.2	3.2	32.0	80.8	100.0
115°	2.4	1.6	20.8	63.2	80.8
117.5°	1.6	1.6	11.2	47.2	63.2
120°	0.8	0.8	4.0	32.0	46.4
122.5°	0.8	0.8	0.8	20.8	31.2
125°	0.8	0.0	0.0	11.2	19.2
127.5°	0.8	0.0	0.0	2.4	8.8
130°	0.8	0.0	0.0	0.0	1.6
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)