

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: P397202

Luminaire Tested: **2VRVT2-LD5-4-DR100-UNV-LA59-CD1-WL-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397202  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-2)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: 2VRVT2-LD5-4-DR100-UNV-LA59-CD1-WL-U  
Description:  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1135.1 lumens  
Efficiency: N/A  
Efficacy: 25.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 2.08' x H: 0.17')  
CIE Type: Direct

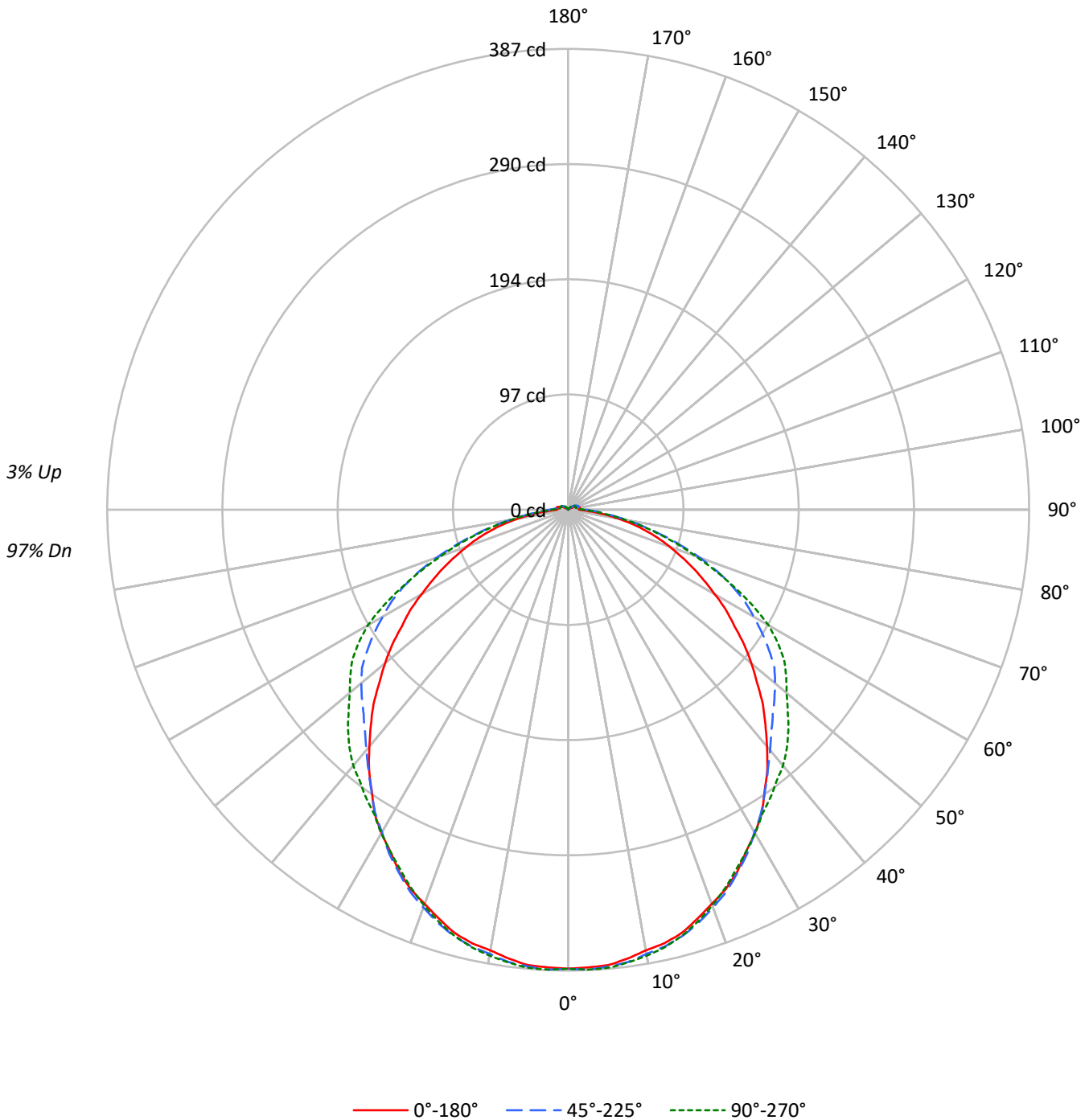
Input Watts (W): 44.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	104	104	99	99	99	97
1	108	103	98	94	104	100	96	92	95	92	89	91	88	85	87	84	82	80
2	98	89	82	76	95	87	80	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	55
4	81	69	60	53	79	67	59	53	64	57	52	62	56	51	59	54	50	47
5	75	62	52	46	72	60	52	45	58	50	44	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°	3982	3982	3982
5°	3955	3895	3892
10°	3888	3780	3769
15°	3855	3678	3637
20°	3763	3533	3469
25°	3689	3374	3290
30°	3576	3192	3140
35°	3436	3016	3024
40°	3282	2855	2958
45°	3127	2747	2865
50°	2947	2703	2752
55°	2752	2618	2703
60°	2581	2467	2544
65°	2413	2286	2194
70°	2242	1967	1793
75°	2054	1545	1406
80°	1736	1108	996
85°	1282	746	629



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.5	3.2
10°-20°	104.1	9.2
20°-30°	154.5	13.6
30°-40°	182.0	16.0
40°-50°	188.9	16.6
50°-60°	177.3	15.6
60°-70°	142.5	12.6
70°-80°	84.6	7.5
80°-90°	31.0	2.7
90°-100°	11.6	1.0
100°-110°	8.8	0.8
110°-120°	6.8	0.6
120°-130°	4.1	0.4
130°-140°	1.9	0.2
140°-150°	0.3	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	295.2	26.0
0°-40°	477.1	42.0
0°-60°	843.4	74.3
0°-90°	1101.5	97.0
90°-120°	27.2	2.4
90°-150°	33.6	3.0
90°-180°	34.0	3.0
0°-180°	1135.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	385	385	385	385	385	
5°	384	384	385	386	386	36
15°	368	368	371	371	370	103
25°	336	336	336	335	333	154
35°	288	290	288	292	296	180
45°	231	231	243	259	261	178
55°	170	176	206	216	222	153
65°	116	136	152	156	154	115
75°	67	85	81	80	79	70
85°	21	28	27	27	26	21
90°	9	16	16	14	13	5
95°	10	11	11	10	8	8
105°	9	9	9	8	7	9
115°	5	6	8	7	7	5
125°	2	3	5	6	6	2
135°	1	1	3	4	4	1
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°	385.4	385.4	385.4	385.4	385.4
2.5°	384.7	385.4	386.6	386.6	386.6
5°	384.0	384.0	385.1	386.2	386.2
7.5°	380.3	381.0	383.2	383.2	383.6
10°	375.8	378.1	378.8	380.3	380.3
12.5°	372.9	373.6	375.5	376.2	376.2
15°	368.1	368.5	370.7	370.7	370.3
17.5°	360.3	361.5	363.7	363.7	362.5
20°	352.2	354.8	355.5	354.4	353.7
22.5°	345.2	345.9	347.1	345.2	344.1
25°	335.6	335.6	336.3	335.2	333.4
27.5°	323.4	326.0	325.6	324.9	323.4
30°	313.5	314.9	312.7	313.1	313.8
32.5°	302.4	303.1	301.6	302.4	303.1
35°	287.6	289.8	288.0	292.0	295.7
37.5°	274.7	276.2	275.4	283.6	287.3
40°	259.6	261.0	263.6	275.4	280.6
42.5°	245.1	245.5	252.5	267.7	271.7
45°	231.1	230.7	242.9	259.2	261.4
47.5°	214.9	216.0	234.8	248.8	250.0
50°	200.8	202.7	226.7	235.9	239.2
52.5°	186.1	189.0	218.2	225.2	230.7
55°	170.2	176.1	206.0	215.6	221.5
57.5°	157.3	164.7	193.1	204.5	209.0
60°	142.2	154.7	179.8	190.9	194.2
62.5°	128.5	145.1	167.2	174.6	175.0
65°	115.6	135.9	152.1	156.5	153.9
67.5°	102.6	125.5	135.5	135.9	133.3
70°	90.5	113.3	117.4	115.9	113.7
72.5°	78.7	99.3	99.0	97.1	96.4
75°	66.8	84.9	80.9	80.5	79.0
77.5°	54.7	69.8	64.6	64.2	63.1
80°	42.4	53.5	49.5	49.8	48.4
82.5°	30.6	40.6	36.9	37.3	35.8
85°	20.7	28.4	27.3	26.6	25.5
87.5°	12.2	19.9	19.9	19.6	18.1
90°	9.2	15.5	15.5	14.4	13.3
92.5°	8.8	12.5	12.5	11.5	10.3
95°	9.6	11.1	10.7	9.6	8.5
97.5°	10.0	10.3	10.0	8.5	7.8
100°	10.0	9.6	9.6	7.8	7.0
102.5°	9.6	9.2	9.2	7.8	6.6
105°	8.8	8.8	9.2	7.8	6.6
107.5°	8.1	8.5	8.8	7.8	6.6
110°	7.0	7.8	8.8	7.8	6.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	6.3	7.0	8.5	7.4	6.6
115°	5.2	5.9	8.1	7.4	6.6
117.5°	4.4	5.2	7.4	7.0	6.6
120°	3.7	4.1	7.0	7.0	6.3
122.5°	2.9	3.3	6.3	6.6	6.3
125°	2.2	2.6	5.2	5.9	5.9
127.5°	1.8	1.8	4.4	5.5	5.5
130°	1.5	1.5	3.7	5.2	5.2
132.5°	1.1	1.1	2.9	4.4	4.8
135°	1.1	0.7	2.6	3.7	4.1
137.5°	0.7	0.7	1.8	3.3	3.7
140°	0.7	0.7	1.5	2.6	2.9
142.5°	0.7	0.4	0.7	2.2	2.6
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)