

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: P397347

Luminaire Tested: **8VRVT2-LD5-22-FR50-UNV-LG52-CD2-WL-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397347  
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: 8VRVT2-LD5-22-FR50-UNV-LG52-CD2-WL-U  
Description:  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16992.0 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: 8.33' x H: 0.17')  
CIE Type: Direct

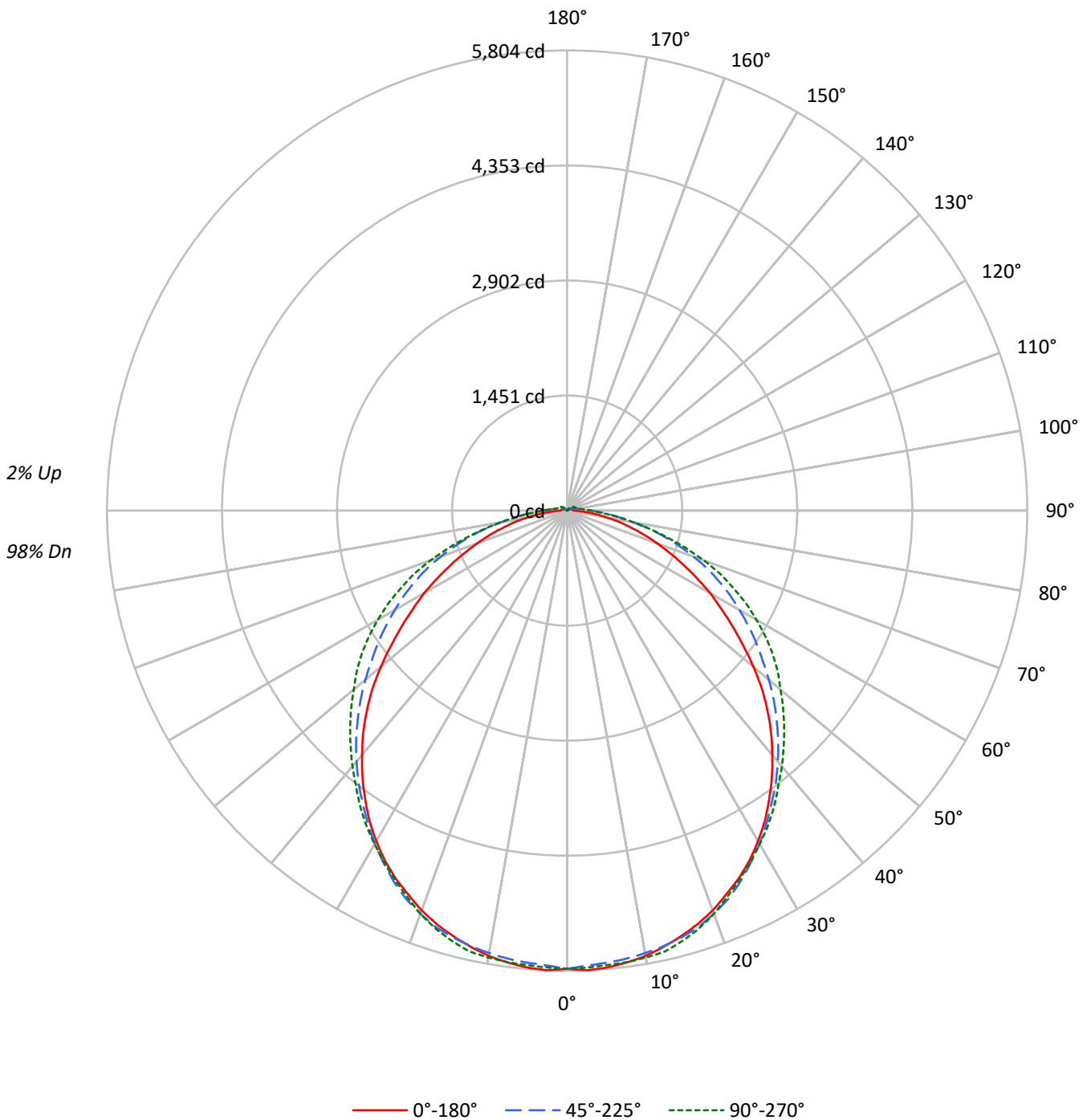
Input Watts (W): 392.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	14928	14928	14928
5°	14976	14527	14503
10°	14909	14240	14182
15°	14783	13971	13797
20°	14647	13640	13270
25°	14459	13193	12677
30°	14198	12649	12148
35°	13816	12075	11642
40°	13346	11521	11100
45°	12802	10919	10608
50°	12044	10285	10106
55°	11145	9664	9662
60°	10392	9058	9029
65°	9476	8424	8238
70°	8625	7587	7215
75°	7770	6536	5805
80°	6902	5201	4349
85°	6154	4004	3093



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	547.7	3.2
10°-20°	1576.3	9.3
20°-30°	2374.5	14.0
30°-40°	2827.8	16.6
40°-50°	2886.9	17.0
50°-60°	2587.1	15.2
60°-70°	2019.1	11.9
70°-80°	1243.0	7.3
80°-90°	518.2	3.0
90°-100°	186.6	1.1
100°-110°	100.6	0.6
110°-120°	65.8	0.4
120°-130°	37.4	0.2
130°-140°	16.6	0.1
140°-150°	4.0	0.0
150°-160°	0.4	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	4498.5	26.5
0°-40°	7326.4	43.1
0°-60°	12800.4	75.3
0°-90°	16580.6	97.6
90°-120°	353.0	2.1
90°-150°	410.9	2.4
90°-180°	411.0	2.4
0°-180°	16992.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5779	5779	5779	5779	5779	
5°	5785	5764	5724	5764	5756	549
15°	5557	5559	5574	5636	5620	1568
25°	5120	5162	5168	5160	5139	2357
35°	4442	4536	4499	4549	4553	2777
45°	3574	3666	3735	3842	3871	2751
55°	2545	2694	2911	3106	3166	2284
65°	1617	1786	2117	2290	2311	1609
75°	837	1021	1265	1328	1305	896
85°	255	397	521	521	502	262
90°	84	211	307	312	303	53
95°	75	119	192	201	194	61
105°	59	59	107	119	117	62
115°	31	29	73	96	100	32
125°	15	8	42	69	75	13
135°	6	4	17	38	44	5
145°	2	2	2	10	15	2
155°	2	2	2	0	0	1
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°	5778.6	5778.6	5778.6	5778.6	5778.6
2.5°	5803.8	5782.8	5743.1	5780.7	5768.2
5°	5785.0	5764.0	5724.2	5764.0	5755.7
7.5°	5749.4	5734.7	5701.3	5749.4	5745.2
10°	5703.4	5688.7	5667.8	5726.4	5724.2
12.5°	5634.3	5628.1	5626.0	5699.2	5695.0
15°	5557.0	5559.0	5573.7	5636.4	5619.7
17.5°	5469.1	5481.7	5506.8	5544.4	5527.7
20°	5366.6	5387.5	5412.6	5427.3	5412.6
22.5°	5241.1	5278.8	5303.9	5293.4	5274.6
25°	5119.8	5161.7	5167.9	5159.6	5138.6
27.5°	4977.6	5029.9	5011.1	5021.5	4998.6
30°	4814.5	4887.7	4852.2	4871.0	4856.3
32.5°	4640.9	4726.6	4678.6	4709.9	4714.1
35°	4442.2	4536.3	4498.7	4548.9	4553.0
37.5°	4241.4	4339.8	4323.0	4385.8	4375.3
40°	4023.9	4132.7	4132.7	4201.7	4212.2
42.5°	3808.5	3900.6	3940.2	4021.8	4042.7
45°	3574.2	3666.3	3735.3	3842.0	3871.3
47.5°	3333.8	3436.2	3534.6	3651.7	3695.6
50°	3068.2	3191.5	3321.2	3473.9	3513.6
52.5°	2800.4	2938.5	3107.8	3291.9	3348.4
55°	2545.3	2693.8	2911.3	3105.8	3166.4
57.5°	2302.6	2455.4	2710.5	2915.4	2967.8
60°	2081.0	2212.7	2511.8	2725.1	2756.5
62.5°	1842.6	1999.4	2317.3	2513.9	2549.4
65°	1616.7	1786.1	2116.6	2290.2	2311.0
67.5°	1403.4	1577.0	1913.7	2066.3	2091.4
70°	1204.6	1388.7	1694.1	1821.7	1830.0
72.5°	1022.7	1202.6	1476.6	1579.0	1564.4
75°	836.6	1020.6	1265.4	1328.1	1305.0
77.5°	679.7	847.0	1052.0	1098.0	1062.5
80°	516.6	677.6	845.0	861.7	845.0
82.5°	378.6	529.1	673.4	677.6	652.6
85°	255.1	397.4	520.8	520.8	501.9
87.5°	144.3	290.7	397.4	401.5	380.6
90°	83.7	211.2	307.4	311.6	303.3
92.5°	77.4	152.6	240.5	246.8	238.4
95°	75.3	119.2	192.4	200.8	194.5
97.5°	73.2	96.2	161.0	167.3	163.1
100°	71.1	79.4	135.9	146.4	144.3
102.5°	64.8	69.0	119.2	129.7	127.6
105°	58.6	58.6	106.6	119.2	117.1
107.5°	52.3	50.2	96.2	113.0	110.9
110°	43.9	43.9	87.8	106.6	106.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	37.7	37.7	79.4	102.5	102.5
115°	31.4	29.3	73.2	96.2	100.4
117.5°	25.1	25.1	64.8	89.9	94.1
120°	20.9	18.8	56.5	83.7	89.9
122.5°	16.7	12.6	50.2	75.3	83.7
125°	14.6	8.4	41.8	69.0	75.3
127.5°	10.5	6.2	35.5	60.6	69.0
130°	8.4	6.2	29.3	52.3	60.6
132.5°	8.4	4.2	23.0	43.9	52.3
135°	6.2	4.2	16.7	37.7	43.9
137.5°	4.2	4.2	10.5	31.4	37.7
140°	4.2	4.2	6.2	23.0	29.3
142.5°	4.2	2.1	2.1	16.7	23.0
145°	2.1	2.1	2.1	10.5	14.6
147.5°	2.1	2.1	2.1	4.2	8.4
150°	2.1	2.1	2.1	0.0	2.1
152.5°	2.1	2.1	2.1	0.0	0.0
155°	2.1	2.1	2.1	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)