

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: P397332

Luminaire Tested: **8VRVT2-LD5-16-FR50-UNV-LG52-CD2-WL-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397332  
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-LD5-16-FR50-UNV-LG52-CD2-WL-U  
Description:  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13000.0 lumens  
Efficiency: N/A  
Efficacy: 46.7 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

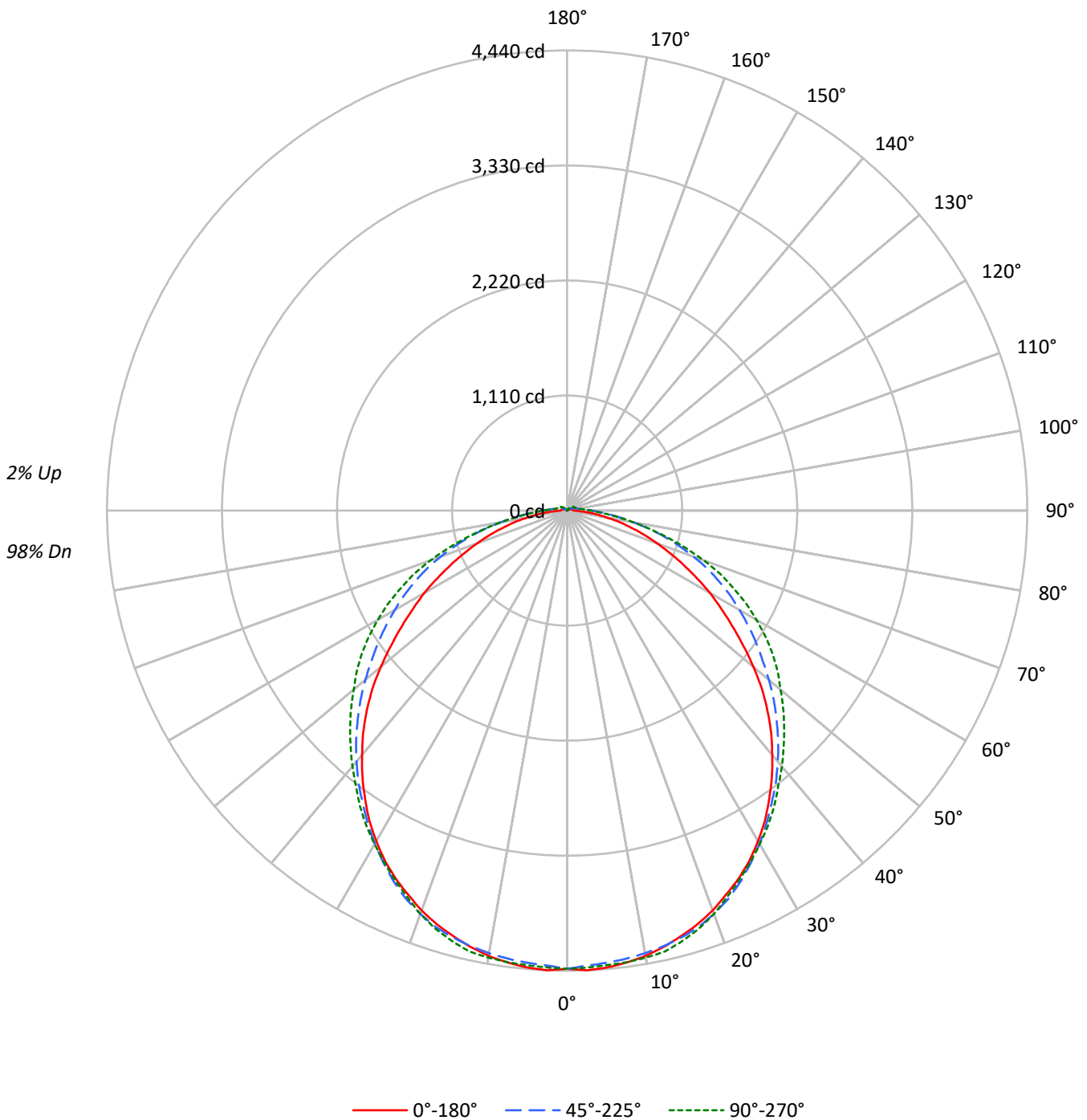
Input Watts (W): 278.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	11421	11421	11421
5°	11457	11114	11095
10°	11406	10895	10850
15°	11310	10689	10556
20°	11206	10435	10152
25°	11062	10094	9699
30°	10862	9677	9294
35°	10570	9238	8907
40°	10211	8815	8492
45°	9795	8354	8115
50°	9214	7869	7732
55°	8527	7394	7392
60°	7950	6930	6908
65°	7250	6445	6303
70°	6599	5805	5520
75°	5944	5000	4441
80°	5280	3979	3327
85°	4709	3063	2366



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	419.0	3.2
10°-20°	1206.0	9.3
20°-30°	1816.7	14.0
30°-40°	2163.5	16.6
40°-50°	2208.7	17.0
50°-60°	1979.4	15.2
60°-70°	1544.7	11.9
70°-80°	951.0	7.3
80°-90°	396.5	3.0
90°-100°	142.8	1.1
100°-110°	76.9	0.6
110°-120°	50.3	0.4
120°-130°	28.6	0.2
130°-140°	12.7	0.1
140°-150°	3.1	0.0
150°-160°	0.3	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	3441.7	26.5
0°-40°	5605.1	43.1
0°-60°	9793.2	75.3
0°-90°	12685.3	97.6
90°-120°	270.0	2.1
90°-150°	314.4	2.4
90°-180°	315.0	2.4
0°-180°	13000.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4421	4421	4421	4421	4421	
5°	4426	4410	4379	4410	4403	420
15°	4251	4253	4264	4312	4299	1200
25°	3917	3949	3954	3947	3931	1803
35°	3399	3471	3442	3480	3483	2125
45°	2735	2805	2858	2939	2962	2105
55°	1947	2061	2227	2376	2423	1748
65°	1237	1366	1619	1752	1768	1231
75°	640	781	968	1016	998	686
85°	195	304	398	398	384	201
90°	64	162	235	238	232	41
95°	58	91	147	154	149	46
105°	45	45	82	91	90	47
115°	24	22	56	74	77	24
125°	11	6	32	53	58	10
135°	5	3	13	29	34	4
145°	2	2	2	8	11	1
155°	2	2	2	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°	4421.0	4421.0	4421.0	4421.0	4421.0
2.5°	4440.2	4424.2	4393.8	4422.6	4413.0
5°	4425.8	4409.8	4379.4	4409.8	4403.4
7.5°	4398.6	4387.4	4361.8	4398.6	4395.4
10°	4363.4	4352.2	4336.2	4381.0	4379.4
12.5°	4310.6	4305.8	4304.2	4360.2	4357.0
15°	4251.4	4253.0	4264.2	4312.2	4299.4
17.5°	4184.2	4193.8	4213.0	4241.8	4229.0
20°	4105.8	4121.8	4141.0	4152.2	4141.0
22.5°	4009.8	4038.6	4057.8	4049.8	4035.4
25°	3917.0	3949.0	3953.8	3947.4	3931.4
27.5°	3808.2	3848.2	3833.8	3841.8	3824.2
30°	3683.4	3739.4	3712.2	3726.6	3715.4
32.5°	3550.6	3616.2	3579.4	3603.4	3606.6
35°	3398.6	3470.6	3441.8	3480.2	3483.4
37.5°	3245.0	3320.2	3307.4	3355.4	3347.4
40°	3078.6	3161.8	3161.8	3214.6	3222.6
42.5°	2913.8	2984.2	3014.6	3077.0	3093.0
45°	2734.6	2805.0	2857.8	2939.4	2961.8
47.5°	2550.6	2629.0	2704.2	2793.8	2827.4
50°	2347.4	2441.8	2541.0	2657.8	2688.2
52.5°	2142.5	2248.2	2377.8	2518.6	2561.8
55°	1947.3	2060.9	2227.4	2376.2	2422.6
57.5°	1761.7	1878.5	2073.7	2230.6	2270.6
60°	1592.1	1692.9	1921.7	2084.9	2108.9
62.5°	1409.7	1529.7	1772.9	1923.3	1950.5
65°	1236.9	1366.5	1619.3	1752.1	1768.1
67.5°	1073.7	1206.5	1464.1	1580.9	1600.1
70°	921.7	1062.5	1296.1	1393.7	1400.1
72.5°	782.5	920.1	1129.7	1208.1	1196.9
75°	640.0	780.9	968.1	1016.1	998.5
77.5°	520.0	648.0	804.9	840.1	812.9
80°	395.2	518.4	646.4	659.2	646.4
82.5°	289.6	404.8	515.2	518.4	499.2
85°	195.2	304.0	398.4	398.4	384.0
87.5°	110.4	222.4	304.0	307.2	291.2
90°	64.0	161.6	235.2	238.4	232.0
92.5°	59.2	116.8	184.0	188.8	182.4
95°	57.6	91.2	147.2	153.6	148.8
97.5°	56.0	73.6	123.2	128.0	124.8
100°	54.4	60.8	104.0	112.0	110.4
102.5°	49.6	52.8	91.2	99.2	97.6
105°	44.8	44.8	81.6	91.2	89.6
107.5°	40.0	38.4	73.6	86.4	84.8
110°	33.6	33.6	67.2	81.6	81.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	28.8	28.8	60.8	78.4	78.4
115°	24.0	22.4	56.0	73.6	76.8
117.5°	19.2	19.2	49.6	68.8	72.0
120°	16.0	14.4	43.2	64.0	68.8
122.5°	12.8	9.6	38.4	57.6	64.0
125°	11.2	6.4	32.0	52.8	57.6
127.5°	8.0	4.8	27.2	46.4	52.8
130°	6.4	4.8	22.4	40.0	46.4
132.5°	6.4	3.2	17.6	33.6	40.0
135°	4.8	3.2	12.8	28.8	33.6
137.5°	3.2	3.2	8.0	24.0	28.8
140°	3.2	3.2	4.8	17.6	22.4
142.5°	3.2	1.6	1.6	12.8	17.6
145°	1.6	1.6	1.6	8.0	11.2
147.5°	1.6	1.6	1.6	3.2	6.4
150°	1.6	1.6	1.6	0.0	1.6
152.5°	1.6	1.6	1.6	0.0	0.0
155°	1.6	1.6	1.6	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)