

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: P397292

Luminaire Tested: **4VRVT2-LD5-8-FR50-UNV-LA59-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P397292
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-LD5-8-FR50-UNV-LA59-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2275.0 lumens
Efficiency: N/A
Efficacy: 25.4 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

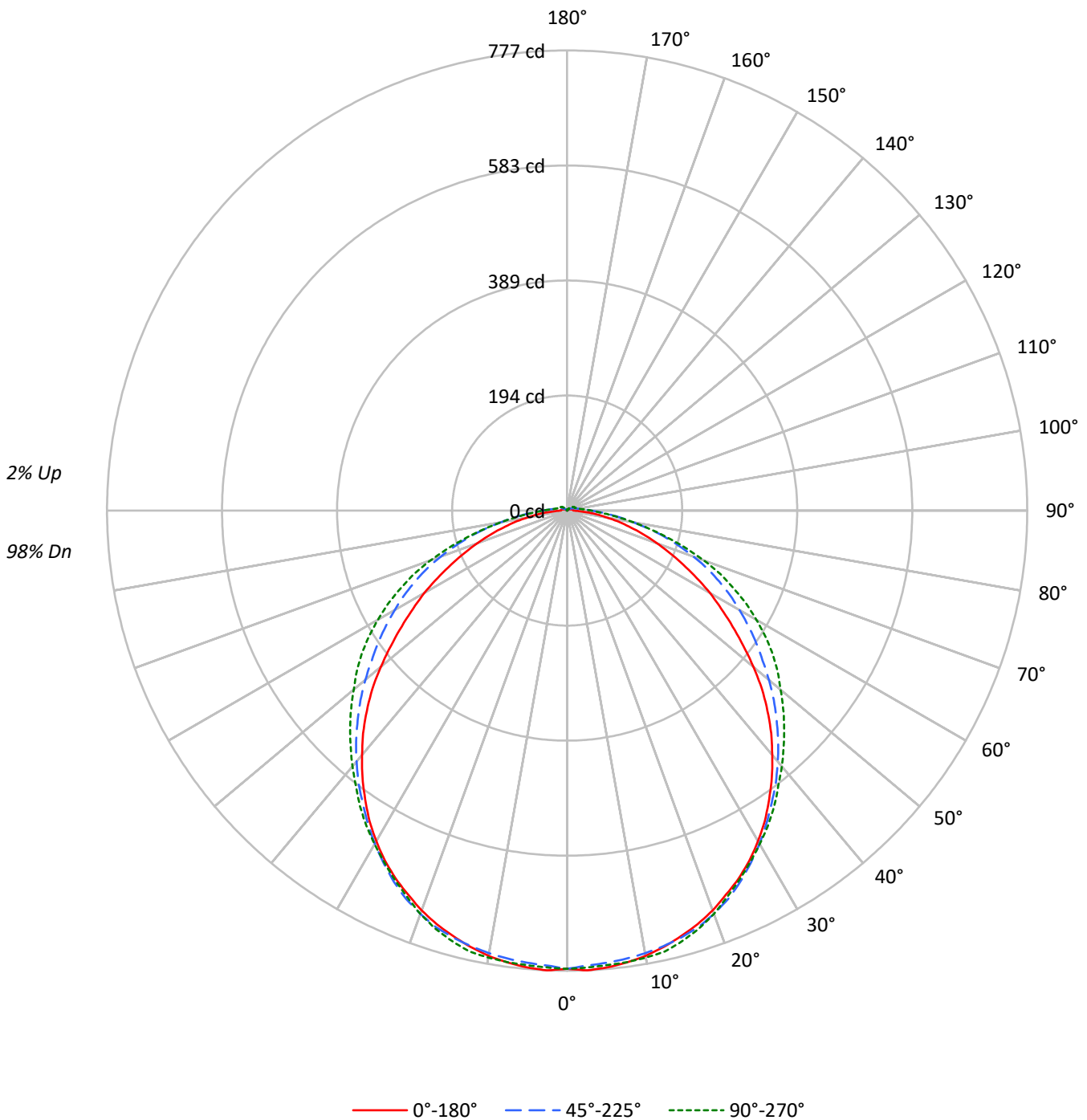
Input Watts (W): 89.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3997	3997	3997
5°	4003	3885	3883
10°	3978	3804	3798
15°	3937	3728	3695
20°	3894	3635	3553
25°	3836	3512	3395
30°	3759	3363	3253
35°	3649	3206	3117
40°	3515	3055	2972
45°	3362	2891	2840
50°	3152	2719	2706
55°	2904	2550	2587
60°	2692	2385	2418
65°	2437	2212	2206
70°	2195	1986	1932
75°	1945	1703	1554
80°	1678	1348	1164
85°	1391	1029	828



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.3	3.2
10°-20°	211.0	9.3
20°-30°	317.9	14.0
30°-40°	378.6	16.6
40°-50°	386.5	17.0
50°-60°	346.4	15.2
60°-70°	270.3	11.9
70°-80°	166.4	7.3
80°-90°	69.4	3.0
90°-100°	25.0	1.1
100°-110°	13.5	0.6
110°-120°	8.8	0.4
120°-130°	5.0	0.2
130°-140°	2.2	0.1
140°-150°	0.5	0.0
150°-160°	0.1	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	602.3	26.5
0°-40°	980.9	43.1
0°-60°	1713.8	75.3
0°-90°	2219.9	97.6
90°-120°	47.3	2.1
90°-150°	55.0	2.4
90°-180°	55.0	2.4
0°-180°	2275.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	774	774	774	774	774	
5°	774	772	766	772	771	74
15°	744	744	746	755	752	210
25°	686	691	692	691	688	316
35°	595	607	602	609	610	372
45°	478	491	500	514	518	368
55°	341	361	390	416	424	306
65°	216	239	283	307	309	215
75°	112	137	169	178	175	120
85°	34	53	70	70	67	35
90°	11	28	41	42	41	7
95°	10	16	26	27	26	8
105°	8	8	14	16	16	8
115°	4	4	10	13	13	4
125°	2	1	6	9	10	2
135°	1	1	2	5	6	1
145°	0	0	0	1	2	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°	773.7	773.7	773.7	773.7	773.7
2.5°	777.1	774.3	768.9	774.0	772.3
5°	774.5	771.7	766.4	771.7	770.6
7.5°	769.8	767.8	763.3	769.8	769.2
10°	763.6	761.7	758.9	766.7	766.4
12.5°	754.4	753.5	753.2	763.1	762.5
15°	744.0	744.3	746.2	754.7	752.4
17.5°	732.2	733.9	737.3	742.3	740.1
20°	718.5	721.3	724.7	726.6	724.7
22.5°	701.7	706.7	710.1	708.7	706.2
25°	685.5	691.1	691.9	690.8	688.0
27.5°	666.4	673.4	670.9	672.3	669.2
30°	644.6	654.4	649.6	652.1	650.2
32.5°	621.3	632.8	626.4	630.6	631.1
35°	594.7	607.3	602.3	609.0	609.6
37.5°	567.9	581.0	578.8	587.2	585.8
40°	538.7	553.3	553.3	562.5	563.9
42.5°	509.9	522.2	527.5	538.5	541.3
45°	478.5	490.9	500.1	514.4	518.3
47.5°	446.3	460.1	473.2	488.9	494.8
50°	410.8	427.3	444.7	465.1	470.4
52.5°	374.9	393.4	416.1	440.7	448.3
55°	340.8	360.7	389.8	415.8	423.9
57.5°	308.3	328.7	362.9	390.3	397.3
60°	278.6	296.3	336.3	364.9	369.1
62.5°	246.7	267.7	310.3	336.6	341.3
65°	216.4	239.1	283.4	306.6	309.4
67.5°	187.9	211.1	256.2	276.7	280.0
70°	161.3	185.9	226.8	243.9	245.0
72.5°	136.9	161.0	197.7	211.4	209.4
75°	112.0	136.6	169.4	177.8	174.7
77.5°	91.0	113.4	140.8	147.0	142.2
80°	69.2	90.7	113.1	115.4	113.1
82.5°	50.7	70.8	90.2	90.7	87.4
85°	34.2	53.2	69.7	69.7	67.2
87.5°	19.3	38.9	53.2	53.8	51.0
90°	11.2	28.3	41.2	41.7	40.6
92.5°	10.4	20.4	32.2	33.0	31.9
95°	10.1	16.0	25.8	26.9	26.0
97.5°	9.8	12.9	21.6	22.4	21.8
100°	9.5	10.6	18.2	19.6	19.3
102.5°	8.7	9.2	16.0	17.4	17.1
105°	7.8	7.8	14.3	16.0	15.7
107.5°	7.0	6.7	12.9	15.1	14.8
110°	5.9	5.9	11.8	14.3	14.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	5.0	5.0	10.6	13.7	13.7
115°	4.2	3.9	9.8	12.9	13.4
117.5°	3.4	3.4	8.7	12.0	12.6
120°	2.8	2.5	7.6	11.2	12.0
122.5°	2.2	1.7	6.7	10.1	11.2
125°	2.0	1.1	5.6	9.2	10.1
127.5°	1.4	0.8	4.8	8.1	9.2
130°	1.1	0.8	3.9	7.0	8.1
132.5°	1.1	0.6	3.1	5.9	7.0
135°	0.8	0.6	2.2	5.0	5.9
137.5°	0.6	0.6	1.4	4.2	5.0
140°	0.6	0.6	0.8	3.1	3.9
142.5°	0.6	0.3	0.3	2.2	3.1
145°	0.3	0.3	0.3	1.4	2.0
147.5°	0.3	0.3	0.3	0.6	1.1
150°	0.3	0.3	0.3	0.0	0.3
152.5°	0.3	0.3	0.3	0.0	0.0
155°	0.3	0.3	0.3	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)