

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: P397265

Luminaire Tested: **4VRVT2-LD5-6-DR-UNV-LA59-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P397265
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-16)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 4VRVT2-LD5-6-DR-UNV-LA59-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1735.2 lumens
Efficiency: N/A
Efficacy: 22.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4.17' x H: 0.17')
CIE Type: Direct

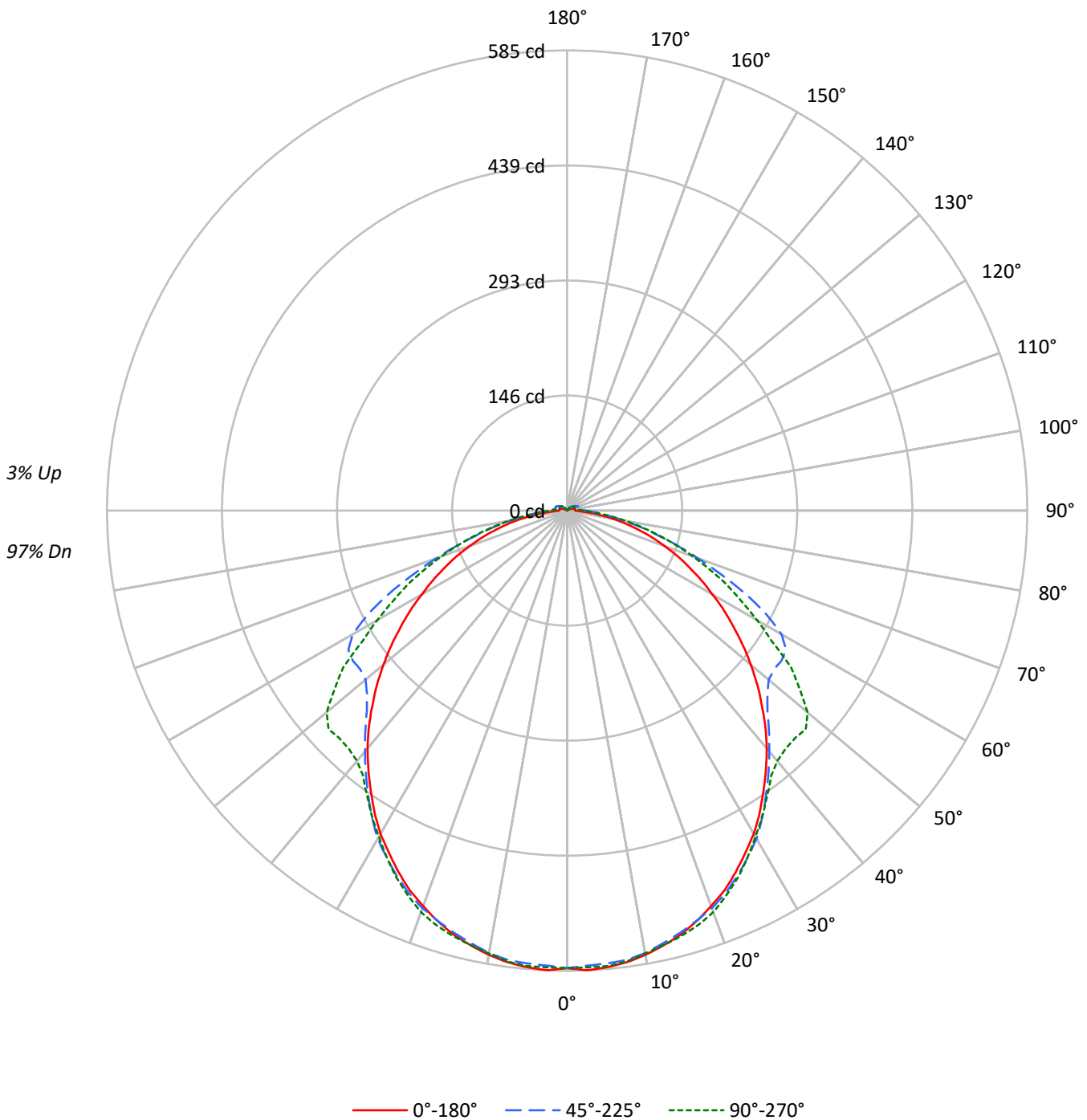
Input Watts (W): 77.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	100	96	92	95	92	89	91	88	86	87	85	83	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	51	62	56	50	59	54	49	47
5	75	61	52	46	72	60	52	45	58	50	44	55	49	44	53	47	43	41
6	69	55	46	40	67	54	46	39	52	44	39	50	43	38	48	42	38	35
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	38	32	27	37	31	27	25
10	52	39	31	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3005	3005	3005
5°	3012	2930	2929
10°	2987	2863	2833
15°	2953	2775	2750
20°	2900	2698	2664
25°	2838	2601	2538
30°	2766	2493	2395
35°	2670	2348	2266
40°	2576	2208	2190
45°	2459	2082	2244
50°	2337	2046	2295
55°	2202	2176	2121
60°	2062	2232	1827
65°	1932	1948	1601
70°	1795	1545	1338
75°	1624	1180	1064
80°	1399	858	775
85°	1070	611	493



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.2	3.2
10°-20°	157.7	9.1
20°-30°	235.7	13.6
30°-40°	276.1	15.9
40°-50°	289.0	16.7
50°-60°	279.5	16.1
60°-70°	217.3	12.5
70°-80°	128.2	7.4
80°-90°	46.2	2.7
90°-100°	17.2	1.0
100°-110°	12.9	0.7
110°-120°	10.0	0.6
120°-130°	6.4	0.4
130°-140°	3.3	0.2
140°-150°	0.7	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	448.6	25.9
0°-40°	724.7	41.8
0°-60°	1293.1	74.5
0°-90°	1684.8	97.1
90°-120°	40.1	2.3
90°-150°	50.4	2.9
90°-180°	50.0	2.9
0°-180°	1735.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	582	582	582	582	582	
5°	583	580	578	583	581	55
15°	558	560	556	562	560	157
25°	507	509	512	516	514	233
35°	435	441	441	444	443	272
45°	350	356	360	394	409	270
55°	258	267	333	355	348	232
65°	172	206	250	223	225	171
75°	94	140	117	119	120	99
85°	26	41	41	41	40	28
90°	10	22	24	23	21	6
95°	10	16	17	15	13	8
105°	8	12	15	12	10	9
115°	4	8	13	12	10	4
125°	2	3	9	10	10	2
135°	1	1	5	7	8	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



TEST NUMBER: P397265

CATALOG NUMBER: 4VRVT2-LD5-6-DR-UNV-LA59-CD1-WL-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	581.6	581.6	581.6	581.6	581.6
2.5°	584.9	582.1	579.0	582.7	581.3
5°	582.7	579.9	577.9	583.0	581.3
7.5°	579.3	577.4	576.2	580.4	578.2
10°	573.4	572.6	571.2	575.4	571.8
12.5°	566.2	567.0	563.4	568.1	565.9
15°	558.0	559.7	555.5	562.2	560.0
17.5°	547.4	549.4	546.8	555.2	552.7
20°	535.1	536.2	537.9	543.8	543.2
22.5°	522.5	523.3	526.1	530.6	529.2
25°	507.1	509.3	512.4	516.3	514.4
27.5°	490.6	493.9	497.0	500.1	496.7
30°	474.3	476.0	481.6	481.3	478.8
32.5°	455.6	459.8	462.0	461.2	461.4
35°	435.1	440.7	441.0	443.5	443.2
37.5°	415.0	421.1	420.3	425.0	425.9
40°	394.8	399.0	399.8	408.2	415.5
42.5°	373.2	377.4	379.7	397.3	410.8
45°	350.0	356.2	360.1	394.5	409.4
47.5°	328.2	333.8	345.0	394.5	411.3
50°	304.6	311.4	334.6	393.7	399.0
52.5°	282.0	288.7	331.5	381.6	372.4
55°	258.4	267.4	332.6	354.8	347.5
57.5°	236.6	249.2	329.8	322.6	308.0
60°	213.4	231.8	314.7	286.7	278.9
62.5°	192.9	217.8	285.6	252.6	249.8
65°	171.6	206.4	249.5	222.9	224.6
67.5°	152.3	196.0	211.7	195.7	196.8
70°	131.9	183.7	176.4	170.0	169.7
72.5°	112.8	166.0	145.6	143.6	144.5
75°	93.5	139.7	117.3	118.7	119.6
77.5°	75.9	112.8	94.1	95.8	95.8
80°	57.7	84.3	72.0	75.0	75.3
82.5°	41.4	60.2	54.9	56.6	55.2
85°	26.3	41.4	41.4	41.2	40.0
87.5°	14.8	28.6	30.2	30.0	28.6
90°	10.1	21.6	23.8	22.7	21.3
92.5°	10.1	18.2	19.9	17.9	16.5
95°	10.4	15.7	17.4	15.1	13.4
97.5°	10.1	14.6	16.2	13.4	11.8
100°	9.8	13.4	15.7	12.6	10.9
102.5°	9.2	12.9	15.4	12.0	10.4
105°	8.4	12.3	15.1	12.0	10.4
107.5°	7.3	11.5	15.1	12.0	10.4
110°	6.4	10.4	14.8	11.8	10.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	5.3	9.2	14.3	11.8	10.1
115°	4.2	8.1	13.4	11.5	10.1
117.5°	3.6	6.7	12.6	11.5	10.1
120°	2.8	5.6	11.8	10.9	9.8
122.5°	2.2	4.2	10.6	10.6	9.5
125°	1.7	3.1	9.2	10.1	9.5
127.5°	1.4	2.2	8.1	9.5	9.2
130°	1.1	1.4	7.0	9.0	8.7
132.5°	0.8	0.8	5.9	8.1	8.1
135°	0.8	0.6	4.8	7.3	7.6
137.5°	0.6	0.6	3.6	6.2	6.7
140°	0.6	0.6	2.8	5.3	5.9
142.5°	0.6	0.6	2.0	4.2	4.8
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)