

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: P397271

Luminaire Tested: **4VRVT2-LD5-6-DR100-UNV-LA59-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P397271
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-17)
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-DR100-UNV-LA59-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1736.6 lumens
Efficiency: N/A
Efficacy: 22.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.21 / 1.32
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4.17' x H: 0.17')
CIE Type: Direct

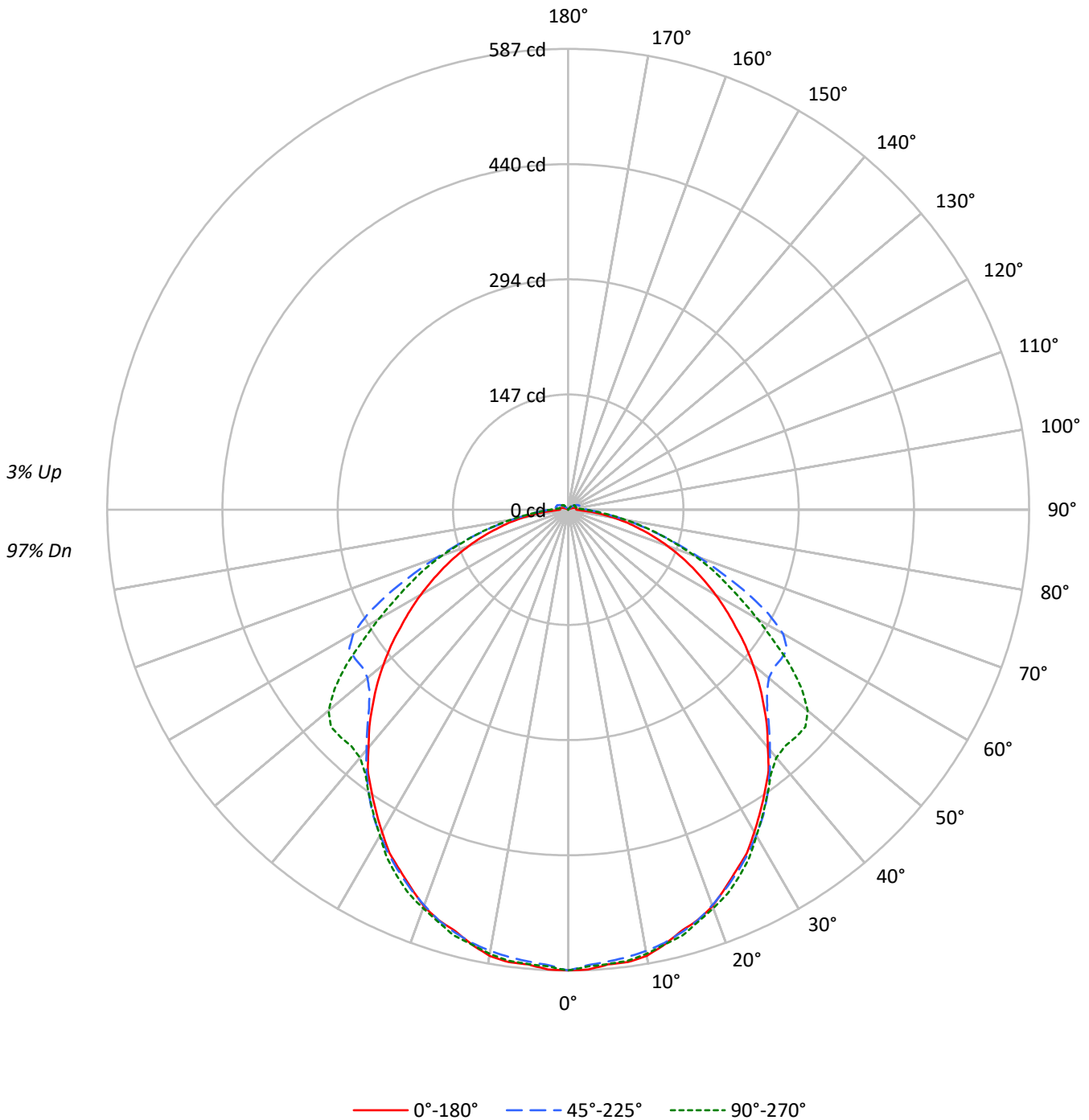
Input Watts (W): 77.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P397271

CATALOG NUMBER: 4VRVT2-LD5-6-DR100-UNV-LA59-CD1-WL-U

Luminous Intensity Polar Plot





TEST NUMBER: P397271

CATALOG NUMBER: 4VRVT2-LD5-6-DR100-UNV-LA59-CD1-WL-U

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	86	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	69	64	59	67	62	58	55
4	81	69	60	53	79	67	59	53	64	57	51	62	55	50	59	54	49	47
5	74	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°	3032	3032	3032
5°	3005	2929	2927
10°	3006	2862	2847
15°	2941	2785	2758
20°	2913	2689	2648
25°	2836	2585	2543
30°	2764	2478	2399
35°	2681	2355	2262
40°	2580	2206	2174
45°	2474	2071	2246
50°	2356	2039	2290
55°	2219	2167	2105
60°	2094	2239	1825
65°	1967	1965	1583
70°	1825	1552	1347
75°	1643	1191	1059
80°	1433	860	758
85°	1058	608	497



TEST NUMBER: P397271

CATALOG NUMBER: 4VRVT2-LD5-6-DR100-UNV-LA59-CD1-WL-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.2	3.2
10°-20°	157.6	9.1
20°-30°	235.6	13.6
30°-40°	275.9	15.9
40°-50°	288.3	16.6
50°-60°	280.1	16.1
60°-70°	217.9	12.5
70°-80°	128.2	7.4
80°-90°	46.3	2.7
90°-100°	17.6	1.0
100°-110°	13.1	0.8
110°-120°	10.2	0.6
120°-130°	6.5	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°	448.5	25.8
0°-40°	724.4	41.7
0°-60°	1292.8	74.4
0°-90°	1685.3	97.0
90°-120°	40.9	2.4
90°-150°	51.3	3.0
90°-180°	51.0	2.9
0°-180°	1736.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	587	587	587	587	587	
5°	582	580	578	582	581	55
15°	556	557	557	562	562	157
25°	507	511	509	516	515	234
35°	437	440	442	443	442	273
45°	352	356	358	392	410	272
55°	260	268	331	357	345	234
65°	175	207	252	222	222	173
75°	95	140	118	118	119	101
85°	26	42	41	41	40	28
90°	10	22	24	23	22	6
95°	11	16	18	15	14	9
105°	9	12	15	12	10	9
115°	4	8	14	12	10	5
125°	2	3	10	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: P397271

CATALOG NUMBER: 4VRVT2-LD5-6-DR100-UNV-LA59-CD1-WL-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	586.8	586.8	586.8	586.8	586.8
2.5°	586.2	583.7	580.6	584.0	582.3
5°	581.5	579.8	577.8	581.8	580.9
7.5°	581.2	577.6	574.8	579.8	579.5
10°	577.0	572.3	570.9	576.2	574.5
12.5°	567.2	565.0	565.3	571.1	567.2
15°	555.7	557.4	557.4	562.5	561.6
17.5°	548.2	548.2	548.5	551.8	550.4
20°	537.5	537.0	536.1	541.7	540.1
22.5°	521.9	524.1	523.3	530.8	529.7
25°	506.7	510.9	509.3	515.7	515.4
27.5°	493.0	495.3	495.0	500.3	499.7
30°	474.0	477.6	478.7	482.1	479.6
32.5°	455.5	459.1	462.2	462.2	460.8
35°	437.0	440.1	442.3	442.6	442.3
37.5°	419.1	419.4	421.6	421.6	424.1
40°	395.3	398.7	399.5	405.9	412.4
42.5°	374.9	376.8	378.8	395.3	408.5
45°	352.2	355.5	358.3	391.7	409.9
47.5°	330.1	332.9	343.0	393.1	409.6
50°	307.1	311.1	333.5	394.5	398.1
52.5°	284.5	289.8	330.1	382.1	374.9
55°	260.4	268.5	331.2	356.9	344.9
57.5°	238.3	250.0	330.7	323.9	309.4
60°	216.7	233.5	315.8	286.4	278.6
62.5°	195.4	219.5	287.5	252.8	248.6
65°	174.7	206.9	251.7	222.0	222.0
67.5°	154.0	196.8	212.5	194.6	197.4
70°	134.1	184.8	177.2	167.1	170.8
72.5°	114.2	166.3	146.4	142.8	143.6
75°	94.6	140.5	118.4	117.6	119.0
77.5°	77.6	112.0	93.0	95.8	96.3
80°	59.1	84.3	72.2	74.8	73.6
82.5°	41.4	60.5	54.6	56.3	55.7
85°	26.0	42.0	41.2	40.9	40.3
87.5°	14.8	28.6	30.5	30.5	29.4
90°	10.4	21.8	24.4	23.0	22.4
92.5°	10.4	18.5	20.2	18.2	17.1
95°	10.6	16.0	17.6	15.4	14.0
97.5°	10.6	14.8	16.5	13.7	12.3
100°	10.4	13.7	16.0	12.6	11.2
102.5°	9.5	13.2	15.7	12.3	10.6
105°	8.7	12.3	15.4	12.0	10.4
107.5°	7.8	11.5	15.4	12.0	10.1
110°	6.7	10.6	15.1	12.0	10.1



TEST NUMBER: P397271

CATALOG NUMBER: 4VRVT2-LD5-6-DR100-UNV-LA59-CD1-WL-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	5.6	9.5	14.6	11.8	10.1
115°	4.5	8.4	13.7	11.8	10.1
117.5°	3.6	7.0	12.9	11.5	10.1
120°	3.1	5.6	12.0	11.2	9.8
122.5°	2.2	4.5	10.6	10.6	9.8
125°	2.0	3.4	9.5	10.4	9.5
127.5°	1.4	2.2	8.4	9.5	9.2
130°	1.1	1.4	7.0	9.0	9.0
132.5°	0.8	0.8	5.9	8.1	8.4
135°	0.8	0.6	4.8	7.3	7.6
137.5°	0.6	0.6	3.6	6.2	7.0
140°	0.6	0.6	2.8	5.3	5.9
142.5°	0.6	0.6	2.0	4.2	5.0
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)