

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: P397409

Luminaire Tested: **VRVT4LED-LD5-9-DR-UNV-LA59-CD1-WL-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397409
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: VRVT4LED-LD5-9-DR-UNV-LA59-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

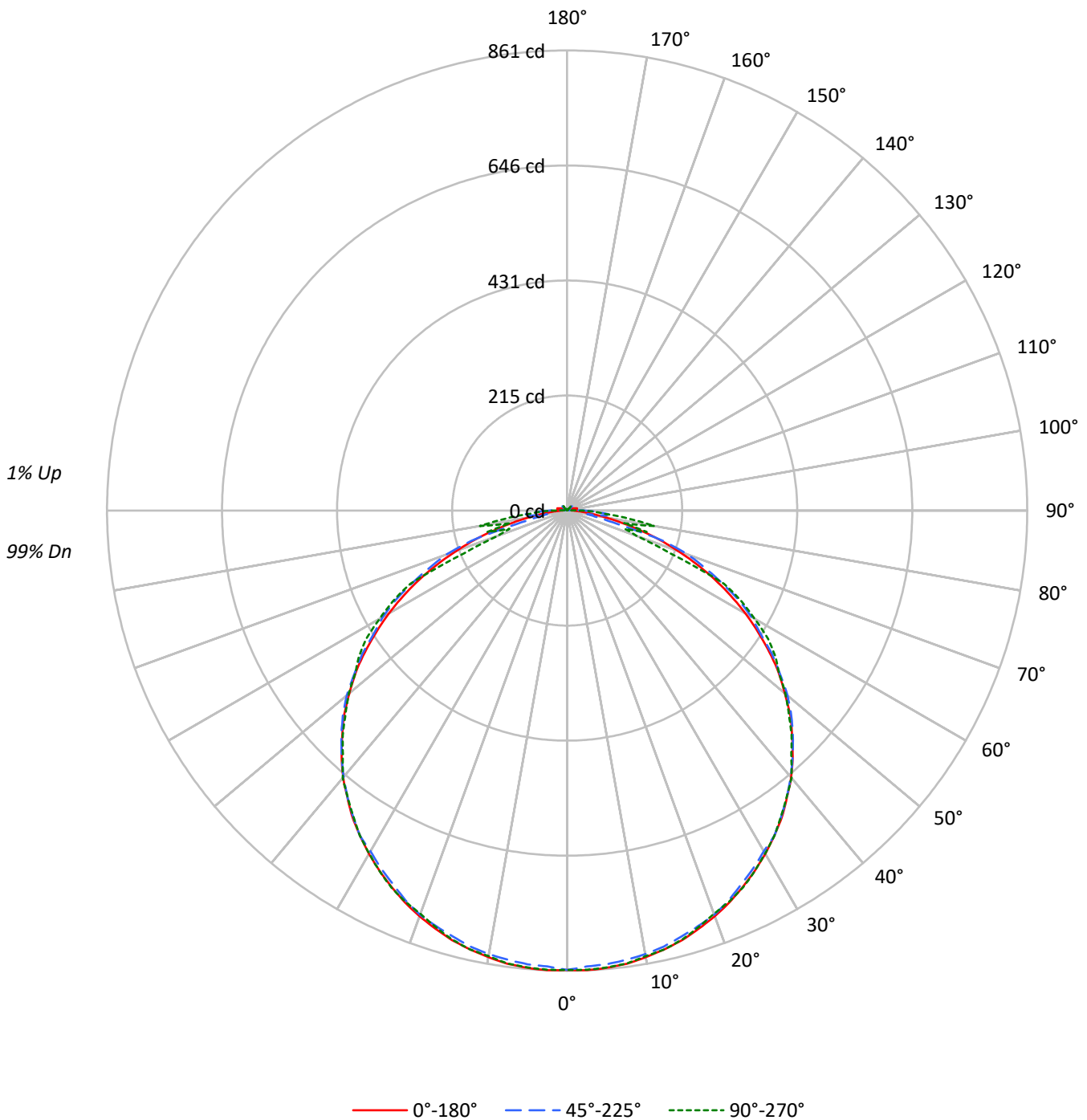
Lumens per Lamp: N/A
Luminaire Lumens: 2520.6 lumens
Efficiency: N/A
Efficacy: 25.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

Input Watts (W): 98.5
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				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	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	110	110	110	106	106	106	101	101	101	99			99
1	108	104	99	96	106	101	97	94	97	94	91	93	90	88	89	87	85	83			83
2	99	90	84	78	96	88	82	77	85	79	75	81	77	73	78	74	71	69			69
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	64	60	58			58
4	82	70	62	55	80	69	61	54	66	59	54	64	58	53	61	56	52	50			50
5	76	63	54	47	73	62	53	47	59	52	46	57	51	46	55	50	45	43			43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	39	37			37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33			33
8	60	47	38	32	59	46	38	32	44	37	32	43	36	32	42	36	31	29			29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26			26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24			24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2153	2153	2153
5°	2148	2103	2113
10°	2136	2066	2066
15°	2124	2025	2025
20°	2107	1991	1968
25°	2089	1939	1934
30°	2072	1896	1882
35°	2055	1860	1827
40°	2029	1807	1778
45°	1988	1746	1697
50°	1933	1673	1616
55°	1858	1568	1546
60°	1748	1458	1434
65°	1598	1294	1268
70°	1380	1107	609
75°	1099	525	788
80°	775	251	1013
85°	486	652	546



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.4	3.2
10°-20°	234.3	9.3
20°-30°	357.8	14.2
30°-40°	437.7	17.4
40°-50°	459.3	18.2
50°-60°	418.7	16.6
60°-70°	306.2	12.1
70°-80°	134.6	5.3
80°-90°	61.9	2.5
90°-100°	11.1	0.4
100°-110°	5.9	0.2
110°-120°	4.2	0.2
120°-130°	2.6	0.1
130°-140°	3.2	0.1
140°-150°	1.0	0.0
150°-160°	0.3	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	673.5	26.7
0°-40°	1111.2	44.1
0°-60°	1989.2	78.9
0°-90°	2491.9	98.9
90°-120°	21.3	0.8
90°-150°	28.1	1.1
90°-180°	29.0	1.2
0°-180°	2520.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	860	860	860	860	860	
5°	859	858	852	858	858	82
15°	832	831	825	834	831	235
25°	777	776	771	778	778	358
35°	700	701	699	699	698	438
45°	595	596	598	596	594	459
55°	462	468	468	475	475	412
65°	305	308	318	330	324	300
75°	139	145	97	68	154	150
85°	29	20	78	84	71	33
90°	8	22	33	29	25	6
95°	13	7	6	5	4	12
105°	17	5	4	3	3	17
115°	8	6	3	2	2	8
125°	4	3	3	2	2	3
135°	2	1	3	6	3	1
145°	1	1	1	3	2	1
155°	1	1	1	1	0	0
165°	1	1	1	1	1	0
175°	1	1	1	1	1	0
180°	1	1	1	1	1	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	859.5	859.5	859.5	859.5	859.5
2.5°	860.9	859.8	853.7	859.5	859.8
5°	858.7	857.6	852.0	857.9	857.9
7.5°	855.1	853.4	847.8	854.8	854.8
10°	848.6	848.1	842.7	847.5	846.4
12.5°	840.8	839.7	835.5	840.2	840.8
15°	832.1	831.0	825.1	833.5	831.0
17.5°	820.1	820.9	815.3	820.9	817.3
20°	807.7	808.6	804.7	803.0	802.7
22.5°	793.7	793.2	789.8	789.0	791.8
25°	777.2	776.4	771.1	778.3	778.1
27.5°	760.1	759.9	754.5	763.5	760.4
30°	741.4	741.4	736.1	743.6	740.8
32.5°	721.5	722.7	721.3	722.7	721.5
35°	700.5	700.8	698.6	699.1	698.0
37.5°	675.9	677.6	675.3	676.2	674.8
40°	652.1	651.3	651.0	652.4	653.2
42.5°	624.7	619.3	624.4	625.5	620.7
45°	595.3	595.5	597.5	595.8	593.9
47.5°	566.4	565.3	569.2	565.6	562.2
50°	531.7	539.8	538.1	532.0	533.4
52.5°	499.2	505.4	502.0	503.4	499.5
55°	462.3	468.1	467.9	475.4	475.4
57.5°	423.9	430.1	428.7	438.7	445.5
60°	385.5	391.7	398.1	404.6	405.1
62.5°	344.9	351.1	361.2	366.8	367.9
65°	304.6	308.5	317.8	330.4	323.9
67.5°	262.6	265.4	278.3	280.3	208.3
70°	219.8	223.4	239.4	147.8	138.0
72.5°	180.9	182.3	188.2	123.5	113.1
75°	139.2	145.3	97.2	67.8	154.3
77.5°	103.6	108.4	56.0	112.0	109.2
80°	72.2	77.8	38.4	100.0	165.8
82.5°	47.0	36.4	72.5	112.8	117.3
85°	28.6	20.2	77.8	84.3	71.1
87.5°	17.6	15.4	52.4	53.5	49.6
90°	8.4	22.1	32.8	29.1	24.6
92.5°	7.8	15.7	14.6	11.8	10.9
95°	13.4	7.3	5.6	4.8	4.5
97.5°	18.8	4.8	3.9	3.4	3.4
100°	19.0	4.5	3.9	3.4	3.1
102.5°	19.0	4.8	3.9	3.4	3.1
105°	16.8	5.3	3.9	3.4	3.1
107.5°	14.3	5.9	3.6	3.4	3.1
110°	12.0	6.7	3.6	3.1	3.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	9.5	6.4	3.4	2.8	2.8
115°	7.8	5.9	3.1	2.5	2.5
117.5°	6.4	5.3	3.1	2.5	2.2
120°	5.3	4.8	3.1	2.2	2.2
122.5°	4.5	4.2	3.1	2.0	2.0
125°	3.6	3.1	2.8	2.0	2.0
127.5°	3.1	2.2	3.4	2.0	1.7
130°	2.5	2.0	5.9	2.0	2.0
132.5°	2.0	1.4	12.0	2.5	2.0
135°	1.7	1.1	2.8	5.6	2.8
137.5°	1.4	1.1	2.0	17.4	7.8
140°	1.1	0.8	2.0	2.8	10.9
142.5°	0.8	0.8	1.4	2.0	2.0
145°	0.8	0.8	0.6	3.1	2.2
147.5°	0.8	0.6	0.6	3.4	3.6
150°	0.6	0.6	0.6	1.1	2.0
152.5°	0.6	0.6	0.6	0.6	0.6
155°	0.6	0.8	0.8	0.6	0.3
157.5°	0.6	0.8	0.8	0.6	0.3
160°	0.8	0.8	0.8	0.6	0.3
162.5°	0.8	0.8	0.8	0.6	0.6
165°	0.8	0.8	0.8	0.6	0.6
167.5°	0.8	0.8	0.8	0.6	0.6
170°	0.8	0.8	0.8	0.6	0.6
172.5°	0.8	0.8	0.8	0.6	0.6
175°	0.8	0.8	0.8	0.8	0.6
177.5°	0.8	0.8	0.8	0.8	0.6
180°	0.8	0.8	0.8	0.8	0.8

(END OF REPORT)