

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: P397415

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397415
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-3)
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-PC-UNV-LA59-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

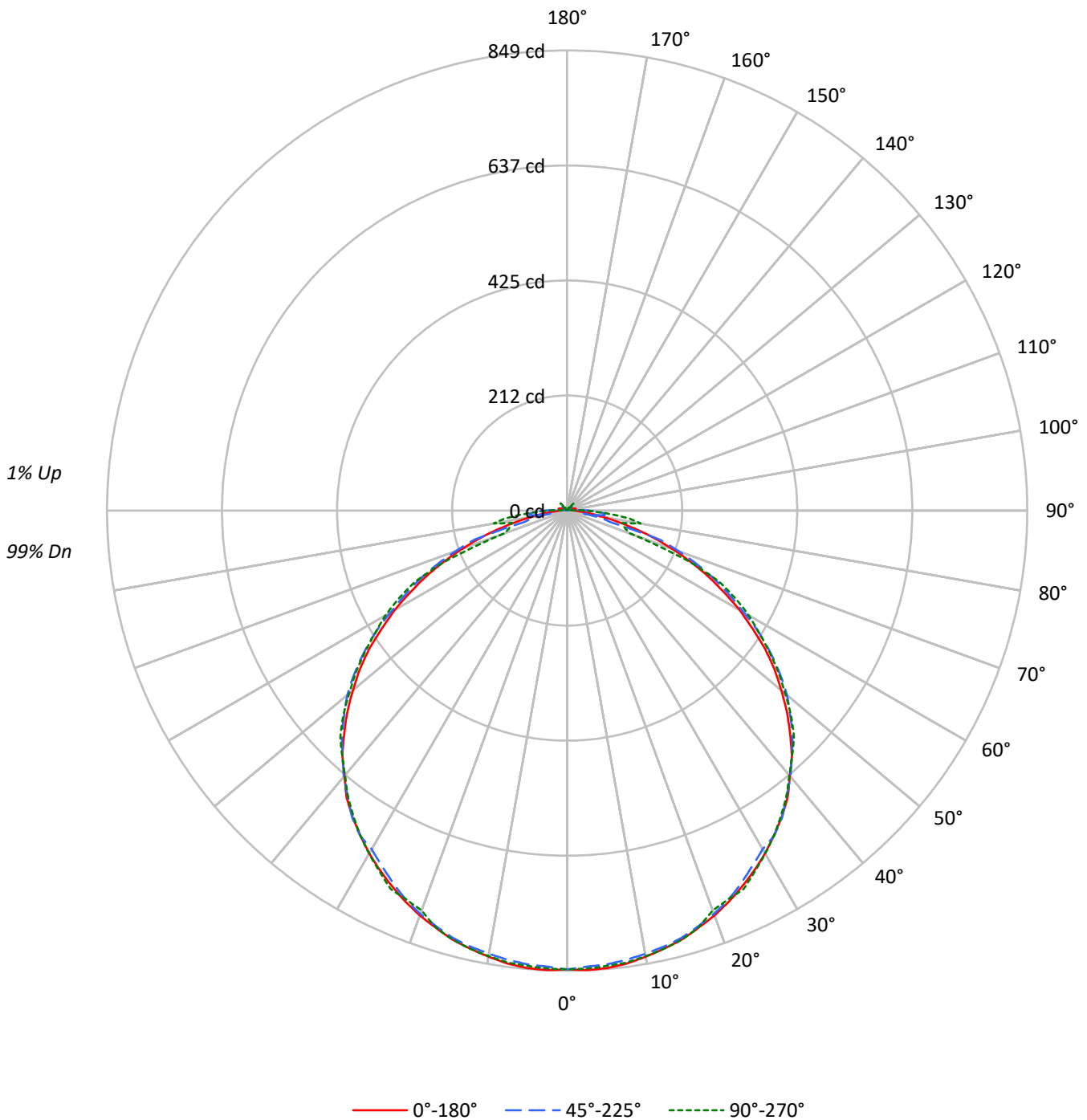
Lumens per Lamp: N/A
Luminaire Lumens: 2458.7 lumens
Efficiency: N/A
Efficacy: 25.0 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

Input Watts (W): 98.2
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	119	119	119	119	116	116	116	116	110	110	110	105	105	105	101	101	101	99
1	108	104	99	96	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	91	84	78	96	89	82	77	85	80	75	81	77	73	78	75	71	69
3	90	80	72	65	88	78	70	64	75	68	63	72	66	62	69	65	61	58
4	83	71	62	55	80	69	61	55	66	59	54	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	60	52	46	57	51	46	55	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	50	44	40	38
7	65	51	43	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2120	2120	2120
5°	2119	2074	2077
10°	2104	2035	2037
15°	2090	2003	1996
20°	2073	1959	1925
25°	2056	1909	1915
30°	2041	1858	1857
35°	2025	1840	1800
40°	1988	1779	1735
45°	1942	1717	1691
50°	1874	1646	1591
55°	1794	1535	1482
60°	1666	1378	1370
65°	1502	1221	1206
70°	1287	1008	546
75°	1019	447	550
80°	713	207	838
85°	475	584	640



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.2	3.3
10°-20°	230.7	9.4
20°-30°	352.0	14.3
30°-40°	431.0	17.5
40°-50°	451.5	18.4
50°-60°	405.9	16.5
60°-70°	290.1	11.8
70°-80°	123.0	5.0
80°-90°	62.6	2.5
90°-100°	13.1	0.5
100°-110°	5.7	0.2
110°-120°	4.0	0.2
120°-130°	2.8	0.1
130°-140°	4.2	0.2
140°-150°	1.4	0.1
150°-160°	0.3	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	662.9	27.0
0°-40°	1093.9	44.5
0°-60°	1951.3	79.4
0°-90°	2427.0	98.7
90°-120°	22.8	0.9
90°-150°	31.2	1.3
90°-180°	32.0	1.3
0°-180°	2458.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	846	846	846	846	846	
5°	847	844	840	844	843	80
15°	819	817	816	820	819	231
25°	765	766	759	766	770	353
35°	690	691	691	690	688	431
45°	581	583	588	587	592	448
55°	446	451	458	458	456	397
65°	286	292	300	310	308	283
75°	129	132	83	54	108	139
85°	28	20	70	89	83	31
90°	12	17	40	34	35	7
95°	11	11	8	6	5	10
105°	15	6	4	3	3	15
115°	8	6	3	2	2	8
125°	4	3	3	1	1	4
135°	2	1	5	16	7	1
145°	1	1	1	5	4	1
155°	1	1	1	0	0	0
165°	1	1	1	1	0	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°	846.4	846.4	846.4	846.4	846.4
2.5°	848.7	846.1	842.2	845.9	845.6
5°	847.3	843.6	840.3	844.2	843.3
7.5°	842.8	838.9	836.1	840.3	840.8
10°	835.8	833.5	830.2	835.2	834.7
12.5°	827.7	826.8	824.0	827.9	827.9
15°	819.0	817.0	816.2	819.8	819.3
17.5°	806.9	806.9	804.1	809.2	806.1
20°	794.9	793.8	791.8	789.0	785.1
22.5°	780.6	780.9	777.3	771.4	776.4
25°	764.7	766.3	759.1	766.1	770.5
27.5°	748.1	749.3	739.5	752.9	750.1
30°	730.2	729.9	721.3	731.1	730.8
32.5°	710.6	712.3	710.9	710.9	710.3
35°	690.2	690.7	691.3	689.9	687.7
37.5°	668.1	666.1	664.7	666.1	664.7
40°	638.9	641.5	640.9	641.7	637.5
42.5°	614.0	608.1	613.5	614.3	614.3
45°	581.3	582.9	587.7	587.4	591.9
47.5°	550.2	549.9	558.0	561.9	560.5
50°	515.7	525.0	529.5	528.3	525.0
52.5°	482.4	490.3	495.3	494.5	491.7
55°	446.3	451.3	458.1	457.5	455.5
57.5°	405.4	415.8	420.3	421.9	419.7
60°	367.4	372.7	376.3	383.0	387.0
62.5°	325.9	332.9	337.7	348.3	349.2
65°	286.4	291.5	299.9	309.7	308.3
67.5°	245.6	250.9	260.1	270.8	239.1
70°	205.0	209.2	218.1	129.1	123.8
72.5°	168.0	167.2	180.3	109.5	113.1
75°	129.1	131.6	82.9	53.8	107.8
77.5°	94.6	99.4	64.4	106.7	104.7
80°	66.4	72.0	31.6	99.1	137.2
82.5°	44.0	36.1	69.2	117.9	117.6
85°	28.0	20.2	69.7	89.0	83.4
87.5°	18.8	15.4	60.2	58.8	53.5
90°	11.5	17.4	40.3	33.9	35.3
92.5°	9.0	18.2	21.3	16.5	14.8
95°	11.2	10.9	8.4	5.6	4.8
97.5°	14.8	5.9	4.5	3.6	3.1
100°	16.0	5.3	3.9	3.1	2.8
102.5°	16.0	5.9	3.9	3.1	2.8
105°	14.6	6.4	3.6	3.1	2.8
107.5°	12.9	6.7	3.6	2.8	2.5
110°	11.2	7.0	3.4	2.5	2.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	9.5	6.7	3.1	2.2	2.0
115°	8.1	6.2	3.1	2.0	1.7
117.5°	6.7	5.6	2.8	1.7	1.7
120°	5.6	5.0	2.8	1.7	1.4
122.5°	4.8	4.5	2.8	1.4	1.4
125°	3.9	3.4	3.1	1.4	1.4
127.5°	3.4	2.5	5.0	1.7	1.4
130°	2.8	2.0	11.2	2.2	1.7
132.5°	2.2	1.7	9.8	4.5	2.5
135°	2.0	1.4	4.8	16.5	6.7
137.5°	1.4	1.1	2.8	11.8	17.9
140°	1.1	0.8	3.1	6.7	10.6
142.5°	1.1	0.8	1.7	3.1	4.5
145°	0.8	0.8	0.6	5.0	3.6
147.5°	0.8	0.6	0.6	3.6	6.2
150°	0.6	0.6	0.6	1.1	2.8
152.5°	0.6	0.6	0.6	0.3	0.6
155°	0.6	0.6	0.6	0.3	0.3
157.5°	0.6	0.6	0.8	0.3	0.3
160°	0.6	0.8	0.8	0.3	0.3
162.5°	0.6	0.8	0.8	0.3	0.3
165°	0.8	0.8	0.8	0.6	0.3
167.5°	0.8	0.8	0.8	0.6	0.3
170°	0.8	0.8	0.8	0.6	0.3
172.5°	0.8	0.8	0.8	0.6	0.6
175°	0.8	0.8	0.8	0.6	0.6
177.5°	0.8	0.8	0.8	0.6	0.6
180°	0.6	0.6	0.6	0.6	0.6

(END OF REPORT)