

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: P397369

Luminaire Tested: **VRVT4LED-LD5-12-DRF-UNV-LR63-CD1-WL-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397369
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-2)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: VRVT4LED-LD5-12-DRF-UNV-LR63-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

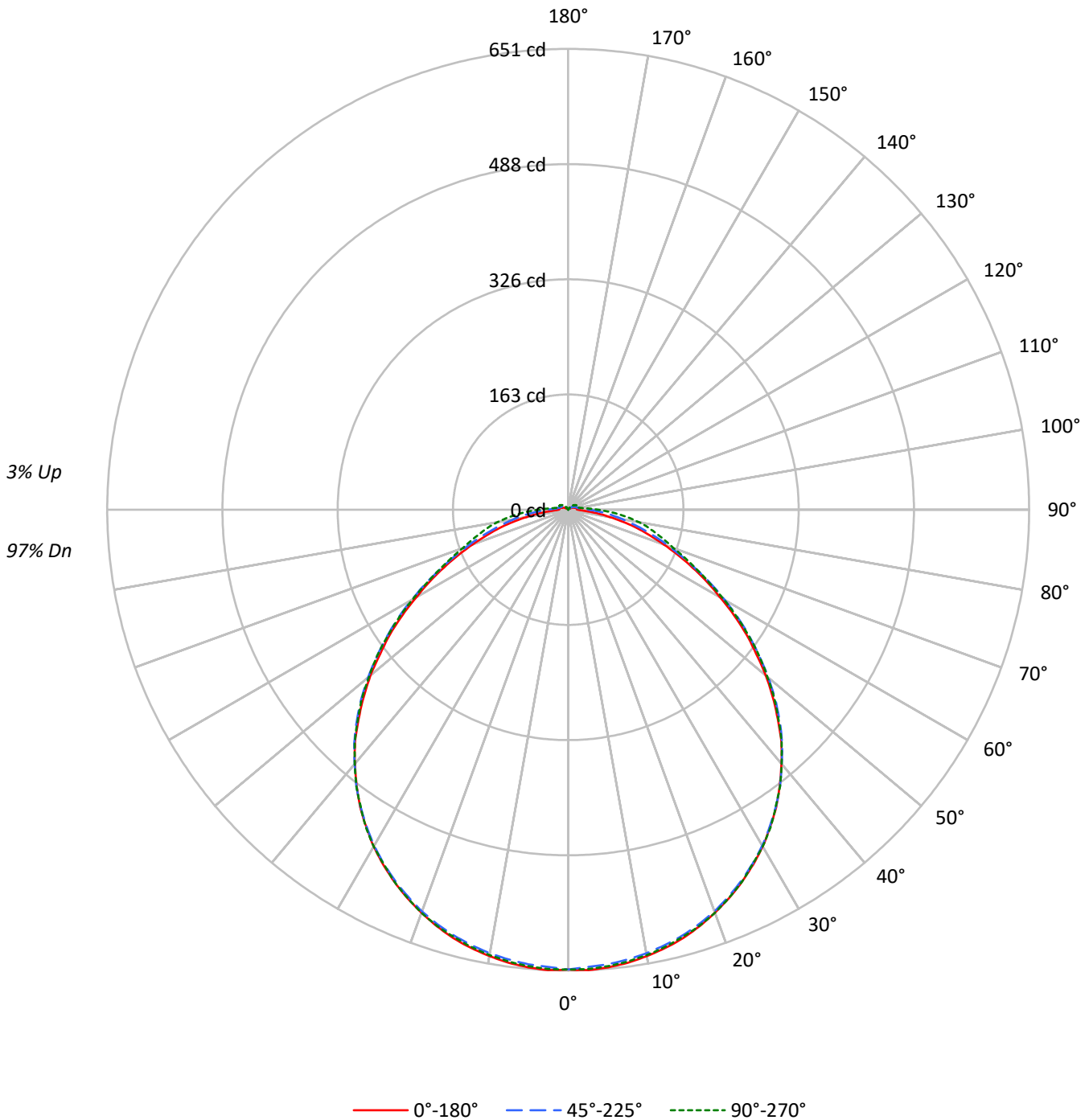
Lumens per Lamp: N/A
Luminaire Lumens: 1855.8 lumens
Efficiency: N/A
Efficacy: 7.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

Input Watts (W): 239.7
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	104	104	104	99	99	99	97
1	108	103	99	95	105	100	96	93	96	92	89	91	89	86	87	85	83	81
2	98	90	83	77	95	88	81	76	84	78	74	80	76	72	77	73	70	67
3	90	79	71	64	87	77	70	64	74	67	62	71	65	61	68	63	59	57
4	82	70	61	55	80	69	60	54	66	59	53	63	57	52	61	55	51	49
5	76	63	54	47	73	61	53	47	59	52	46	57	50	45	55	49	45	42
6	70	57	48	41	68	55	47	41	53	46	40	51	45	40	50	44	39	37
7	65	51	43	36	63	50	42	36	49	41	36	47	40	35	45	39	35	33
8	60	47	38	33	59	46	38	32	44	37	32	43	36	32	42	36	31	29
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	38	33	28	26
10	53	40	32	27	51	39	32	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1627	1627	1627
5°	1623	1591	1594
10°	1612	1560	1559
15°	1599	1528	1522
20°	1580	1494	1485
25°	1560	1455	1442
30°	1536	1412	1396
35°	1503	1362	1339
40°	1458	1302	1276
45°	1398	1234	1201
50°	1324	1147	1113
55°	1234	1047	1014
60°	1124	936	898
65°	1018	815	786
70°	905	701	698
75°	792	600	657
80°	645	511	620
85°	482	422	540



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.5	3.3
10°-20°	176.4	9.5
20°-30°	267.2	14.4
30°-40°	320.2	17.3
40°-50°	324.7	17.5
50°-60°	278.1	15.0
60°-70°	198.3	10.7
70°-80°	120.4	6.5
80°-90°	56.0	3.0
90°-100°	20.5	1.1
100°-110°	12.8	0.7
110°-120°	9.7	0.5
120°-130°	6.1	0.3
130°-140°	2.9	0.2
140°-150°	0.8	0.0
150°-160°	0.1	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	505.0	27.2
0°-40°	825.3	44.5
0°-60°	1428.1	77.0
0°-90°	1802.8	97.1
90°-120°	43.0	2.3
90°-150°	52.8	2.8
90°-180°	53.0	2.9
0°-180°	1855.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	650	650	650	650	650	
5°	649	648	645	648	647	62
15°	627	625	623	626	625	177
25°	580	580	578	581	580	267
35°	512	513	512	513	511	320
45°	418	422	422	422	420	323
55°	307	311	312	314	312	274
65°	194	198	200	201	201	193
75°	100	103	111	124	129	106
85°	28	33	50	67	70	30
90°	13	16	29	40	42	8
95°	12	12	18	22	24	10
105°	11	9	12	14	14	11
115°	7	6	10	13	13	7
125°	3	3	7	10	12	3
135°	2	1	3	6	7	1
145°	1	1	0	2	3	0
155°	0	0	0	0	0	0
165°	1	0	0	0	0	0
175°	1	1	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°	649.6	649.6	649.6	649.6	649.6
2.5°	651.1	649.6	646.5	649.6	649.4
5°	649.0	647.5	644.6	647.7	647.3
7.5°	645.6	644.1	640.9	644.3	643.9
10°	640.3	639.7	636.3	639.5	638.8
12.5°	634.2	633.1	630.1	633.3	632.7
15°	626.7	625.2	622.9	626.1	624.8
17.5°	617.0	616.3	614.0	617.2	616.3
20°	605.9	605.1	603.8	606.4	605.9
22.5°	593.8	593.2	591.5	594.9	593.4
25°	580.5	579.8	578.5	581.3	580.2
27.5°	565.4	565.4	563.7	566.2	564.3
30°	549.5	549.1	548.0	549.9	549.5
32.5°	531.0	532.7	530.2	531.9	531.9
35°	512.5	513.0	511.5	513.2	511.3
37.5°	490.9	492.2	491.5	492.6	491.5
40°	468.6	470.3	469.2	469.7	468.8
42.5°	445.7	447.4	447.2	447.0	446.1
45°	418.5	421.7	422.4	421.9	420.4
47.5°	391.8	396.0	396.4	397.1	395.0
50°	364.4	367.2	368.9	369.1	367.2
52.5°	334.7	339.2	340.8	341.7	340.4
55°	307.1	310.7	312.4	313.5	311.6
57.5°	277.8	280.4	284.6	284.8	282.7
60°	247.9	252.6	255.5	255.3	253.8
62.5°	221.2	223.9	227.5	227.3	225.8
65°	194.0	197.8	200.1	201.0	200.8
67.5°	168.1	171.7	174.9	177.6	178.7
70°	144.1	146.9	151.7	156.6	158.1
72.5°	121.0	124.4	130.9	139.0	142.6
75°	100.4	103.2	111.2	123.5	128.6
77.5°	80.2	82.6	93.8	109.9	115.5
80°	60.1	64.3	78.1	96.1	101.4
82.5°	43.3	47.1	63.9	81.3	86.4
85°	28.4	33.1	50.3	66.6	70.3
87.5°	18.0	22.1	38.6	52.6	55.4
90°	13.4	15.5	29.1	39.9	42.0
92.5°	12.5	12.9	21.9	30.1	31.4
95°	12.3	11.9	17.8	22.5	23.6
97.5°	12.1	11.0	15.5	18.3	18.7
100°	11.9	10.4	14.2	15.9	15.9
102.5°	11.5	9.8	13.2	14.6	14.6
105°	10.6	9.3	12.5	13.8	13.8
107.5°	9.8	8.7	11.9	13.6	13.6
110°	8.7	8.1	11.5	13.4	13.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	7.6	7.2	10.8	13.2	13.6
115°	6.6	6.2	10.2	12.7	13.4
117.5°	5.7	5.3	9.6	12.3	13.2
120°	4.9	4.2	8.7	11.9	12.9
122.5°	4.0	3.4	7.9	11.0	12.3
125°	3.4	2.8	6.8	10.4	11.5
127.5°	3.0	2.1	5.7	9.3	10.6
130°	2.3	1.9	4.7	8.3	9.6
132.5°	1.9	1.5	3.8	7.2	8.5
135°	1.7	1.3	2.8	5.9	7.2
137.5°	1.3	1.1	1.9	4.9	6.2
140°	1.1	0.8	1.1	3.8	4.9
142.5°	0.8	0.6	0.6	2.8	3.8
145°	0.6	0.6	0.2	1.9	2.8
147.5°	0.6	0.4	0.2	1.1	1.7
150°	0.4	0.4	0.2	0.4	0.8
152.5°	0.4	0.4	0.2	0.0	0.2
155°	0.4	0.4	0.2	0.0	0.0
157.5°	0.4	0.4	0.2	0.0	0.0
160°	0.4	0.4	0.2	0.0	0.0
162.5°	0.6	0.4	0.2	0.2	0.0
165°	0.6	0.4	0.4	0.2	0.2
167.5°	0.6	0.6	0.4	0.2	0.2
170°	0.6	0.4	0.4	0.2	0.2
172.5°	0.6	0.4	0.4	0.2	0.2
175°	0.6	0.6	0.4	0.2	0.2
177.5°	0.6	0.6	0.4	0.2	0.2
180°	0.4	0.4	0.4	0.4	0.4

(END OF REPORT)