

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: P397384

Luminaire Tested: **VRVT4LED-LD5-18-DR-UNV-LR63-CD2-WL-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397384
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-8)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: VRVT4LED-LD5-18-DR-UNV-LR63-CD2-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

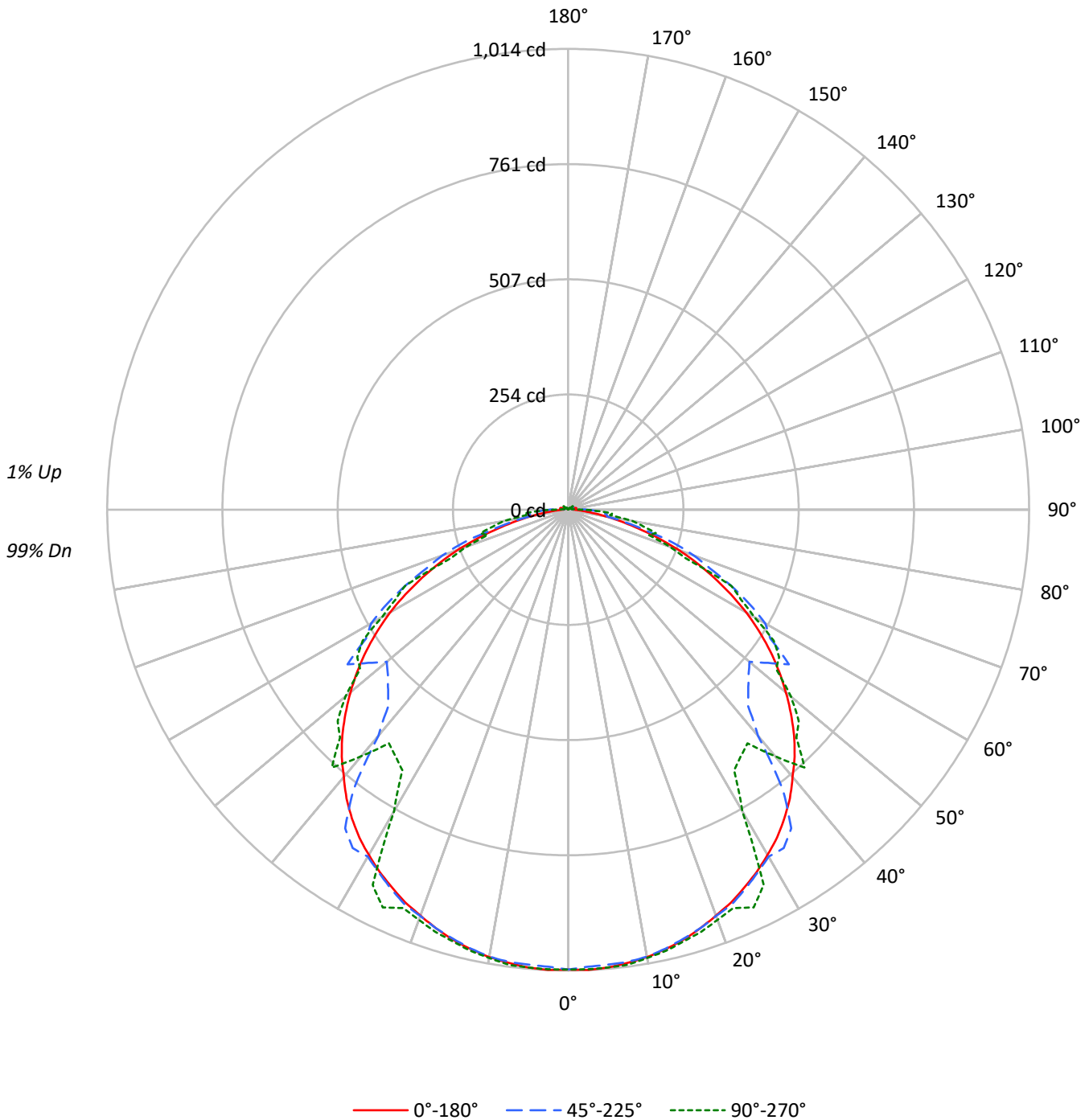
Lumens per Lamp: N/A
Luminaire Lumens: 2937.3 lumens
Efficiency: N/A
Efficacy: 8.5 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.15 / 1.26
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

Input Watts (W): 345.8
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	103	99	95	105	101	97	93	96	93	90	92	90	87	88	86	84	82
2	98	90	83	77	96	88	82	76	84	79	74	81	76	72	77	74	71	68
3	90	79	71	64	87	77	70	64	74	68	62	71	66	61	68	64	60	57
4	82	70	61	54	80	69	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	47	73	61	53	46	59	52	46	57	50	45	55	49	45	42
6	70	56	47	41	68	55	47	41	53	46	40	51	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	38	32	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2535	2535	2535
5°	2529	2481	2490
10°	2516	2449	2444
15°	2500	2398	2395
20°	2479	2354	2354
25°	2465	2316	2400
30°	2451	2271	1946
35°	2432	2277	1734
40°	2390	1803	1928
45°	2347	1636	2027
50°	2272	1619	1938
55°	2180	1986	1841
60°	2052	1832	1673
65°	1858	1606	1550
70°	1616	1357	1050
75°	1259	954	1020
80°	899	565	879
85°	552	650	745



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.0	3.3
10°-20°	277.0	9.4
20°-30°	426.0	14.5
30°-40°	483.4	16.5
40°-50°	513.6	17.5
50°-60°	485.9	16.5
60°-70°	353.3	12.0
70°-80°	184.8	6.3
80°-90°	74.4	2.5
90°-100°	16.6	0.6
100°-110°	9.9	0.3
110°-120°	6.6	0.2
120°-130°	5.2	0.2
130°-140°	2.7	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°	799.0	27.2
0°-40°	1282.5	43.7
0°-60°	2282.0	77.7
0°-90°	2894.5	98.5
90°-120°	33.2	1.1
90°-150°	42.1	1.4
90°-180°	43.0	1.5
0°-180°	2937.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1012	1012	1012	1012	1012	
5°	1011	1008	1005	1010	1011	96
15°	980	982	978	982	983	276
25°	917	917	921	933	966	423
35°	829	825	855	658	662	518
45°	703	701	560	742	710	541
55°	542	518	593	550	566	484
65°	354	294	394	383	396	351
75°	160	177	177	141	200	173
85°	32	50	78	85	97	38
90°	10	28	41	38	31	7
95°	15	14	11	10	10	13
105°	15	11	8	8	7	16
115°	7	8	6	5	5	7
125°	3	3	4	13	12	3
135°	2	1	3	6	4	1
145°	1	1	1	3	3	1
155°	1	1	1	1	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°	1011.9	1011.9	1011.9	1011.9	1011.9
2.5°	1013.6	1011.4	1006.4	1010.4	1012.0
5°	1010.9	1008.5	1005.0	1009.9	1011.2
7.5°	1005.9	1004.0	1003.4	1009.6	1009.9
10°	999.5	997.6	998.7	1001.5	1001.6
12.5°	990.4	991.1	989.1	992.7	994.1
15°	979.7	981.5	977.5	981.6	982.9
17.5°	965.9	967.5	965.9	972.5	973.6
20°	950.4	952.5	951.5	958.3	960.2
22.5°	935.7	935.7	940.0	946.7	948.5
25°	917.1	916.7	921.0	933.3	965.5
27.5°	898.4	895.7	901.0	937.6	930.9
30°	877.0	875.2	881.5	876.7	766.1
32.5°	855.4	850.3	882.6	725.1	679.1
35°	829.1	824.7	855.4	657.9	662.3
37.5°	800.8	798.9	775.5	638.7	647.7
40°	768.0	766.3	649.8	623.7	708.2
42.5°	737.3	735.4	585.1	663.7	769.3
45°	702.6	700.8	560.0	741.5	709.6
47.5°	664.5	682.6	538.1	674.3	687.9
50°	625.1	646.9	520.7	645.5	639.4
52.5°	584.8	602.7	553.8	600.5	576.7
55°	542.3	518.3	592.8	549.5	566.1
57.5°	497.9	432.0	527.5	526.7	536.0
60°	452.6	367.0	500.3	494.1	472.8
62.5°	403.7	331.0	449.9	430.1	428.6
65°	354.2	293.9	394.4	382.6	396.0
67.5°	305.9	254.9	337.6	352.3	278.9
70°	257.4	219.4	293.4	226.6	237.8
72.5°	207.7	189.0	242.7	212.0	185.4
75°	159.5	177.3	176.8	140.8	199.7
77.5°	118.4	157.3	132.2	150.4	169.1
80°	83.7	113.8	86.4	108.2	143.8
82.5°	54.6	70.2	86.2	109.3	92.8
85°	32.5	49.9	77.6	85.4	97.0
87.5°	20.5	36.5	58.9	63.2	62.4
90°	10.2	28.3	41.0	37.9	31.4
92.5°	9.4	21.0	20.3	18.1	16.2
95°	14.9	13.8	10.7	10.2	10.4
97.5°	18.2	10.6	8.3	8.3	8.3
100°	17.8	10.9	8.0	7.7	7.2
102.5°	17.0	13.1	8.0	7.5	7.4
105°	14.9	11.2	8.2	7.7	7.2
107.5°	12.5	9.8	7.8	8.0	7.8
110°	10.4	8.8	7.5	7.2	7.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	8.5	8.5	7.0	6.1	6.7
115°	6.9	7.8	6.1	5.3	5.4
117.5°	5.8	5.8	7.4	4.8	4.6
120°	4.6	4.8	11.8	4.5	4.3
122.5°	3.8	4.2	7.2	8.8	4.6
125°	3.2	2.9	4.3	13.3	12.5
127.5°	2.7	2.1	4.0	6.7	11.8
130°	2.2	1.8	6.1	3.5	5.0
132.5°	1.9	1.4	6.9	3.4	3.0
135°	1.6	1.3	2.6	6.1	3.5
137.5°	1.3	1.1	2.2	10.2	7.0
140°	1.1	1.0	2.4	2.4	5.3
142.5°	1.1	0.8	1.1	2.4	2.1
145°	1.0	0.8	0.8	3.0	2.9
147.5°	0.8	0.8	0.8	2.1	3.0
150°	0.8	0.8	0.8	0.8	1.3
152.5°	0.8	0.8	0.8	0.6	0.5
155°	0.8	0.8	0.8	0.6	0.5
157.5°	0.8	0.8	0.8	0.6	0.5
160°	1.0	0.8	1.0	0.6	0.5
162.5°	1.0	1.0	1.0	0.8	0.5
165°	1.0	1.0	1.0	0.8	0.5
167.5°	1.0	1.0	1.0	0.8	0.6
170°	1.0	1.0	1.0	0.8	0.6
172.5°	1.0	1.0	1.1	1.0	0.6
175°	1.1	1.0	1.1	1.0	0.8
177.5°	1.1	1.0	1.1	1.0	0.8
180°	1.0	1.0	1.0	1.0	1.0

(END OF REPORT)