

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: P397390

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397390
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-10)
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-PC-UNV-LR63-CD2-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

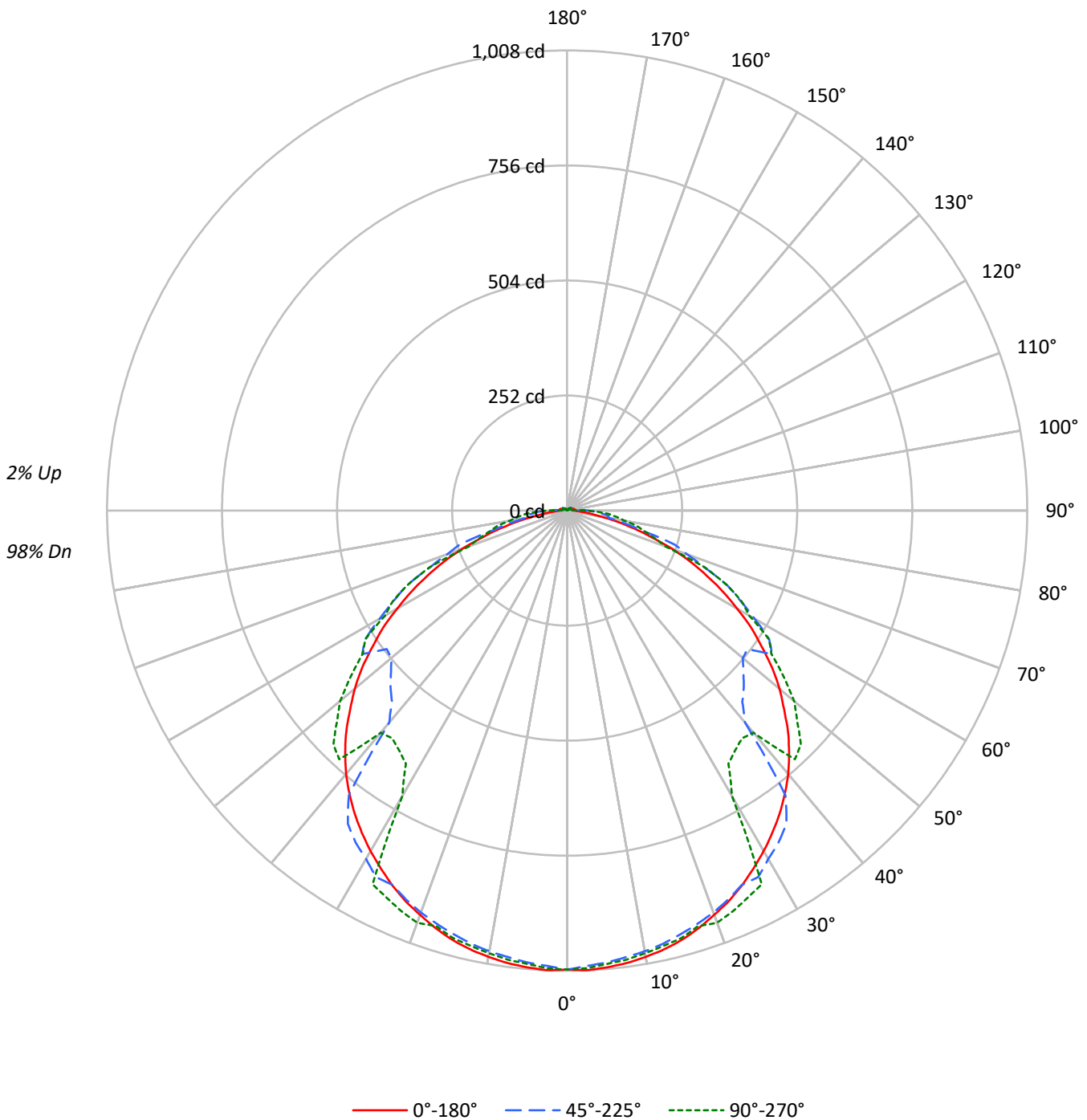
Lumens per Lamp: N/A
Luminaire Lumens: 2877.6 lumens
Efficiency: N/A
Efficacy: 8.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.13 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

Input Watts (W): 345.2
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	98
1	108	103	99	95	105	101	97	93	96	93	90	92	89	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	63	54	47	73	61	53	47	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	36	47	40	35	45	39	35	33
8	60	47	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	35	29	55	42	34	29	41	34	29	40	33	28	38	33	28	26
10	53	39	32	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2519	2519	2519
5°	2512	2453	2455
10°	2498	2404	2403
15°	2484	2357	2361
20°	2458	2318	2356
25°	2435	2275	2326
30°	2407	2270	1835
35°	2380	2230	1679
40°	2345	1683	1728
45°	2286	1600	2068
50°	2207	1562	1966
55°	2091	1836	1777
60°	1952	1736	1632
65°	1772	1574	1511
70°	1533	1291	1004
75°	1192	908	892
80°	807	600	776
85°	535	637	714



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.8	3.3
10°-20°	272.8	9.5
20°-30°	420.9	14.6
30°-40°	472.7	16.4
40°-50°	500.4	17.4
50°-60°	472.8	16.4
60°-70°	343.1	11.9
70°-80°	176.5	6.1
80°-90°	77.3	2.7
90°-100°	19.1	0.7
100°-110°	9.4	0.3
110°-120°	6.9	0.2
120°-130°	6.0	0.2
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°	788.6	27.4
0°-40°	1261.3	43.8
0°-60°	2234.5	77.7
0°-90°	2831.5	98.4
90°-120°	35.3	1.2
90°-150°	45.5	1.6
90°-180°	46.0	1.6
0°-180°	2877.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1005	1005	1005	1005	1005	
5°	1004	1000	994	996	997	96
15°	973	964	961	966	969	275
25°	906	901	905	932	936	417
35°	811	813	838	637	641	507
45°	684	696	548	696	724	527
55°	520	530	548	556	546	466
65°	338	277	387	384	386	334
75°	151	147	168	139	175	162
85°	32	50	76	87	93	35
90°	14	29	47	44	42	8
95°	13	16	14	12	11	12
105°	14	11	8	7	7	15
115°	7	8	7	5	5	8
125°	4	3	5	12	14	3
135°	2	1	4	6	3	1
145°	1	1	1	2	2	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°	1005.4	1005.4	1005.4	1005.4	1005.4
2.5°	1007.7	1004.6	998.2	1001.4	1003.2
5°	1004.3	999.8	993.6	996.1	996.9
7.5°	999.8	994.9	986.7	991.2	992.3
10°	992.6	986.5	980.3	984.1	984.5
12.5°	984.3	977.1	971.7	976.1	976.8
15°	973.3	964.5	960.6	966.5	969.1
17.5°	959.0	951.5	949.1	958.1	954.2
20°	942.4	936.1	936.9	941.9	960.9
22.5°	925.7	919.3	922.1	953.4	949.6
25°	905.9	900.9	904.8	931.7	935.7
27.5°	883.8	880.8	905.6	915.7	922.9
30°	861.1	859.3	881.1	884.3	722.1
32.5°	836.9	836.3	862.1	679.2	657.6
35°	811.3	812.9	837.6	637.4	641.4
37.5°	782.9	790.7	785.7	620.9	628.9
40°	753.7	769.1	606.4	605.4	634.7
42.5°	719.8	732.6	568.0	605.1	738.9
45°	684.3	695.8	547.5	696.0	724.0
47.5°	644.3	661.4	523.2	685.3	683.8
50°	607.3	626.9	502.4	644.5	648.9
52.5°	566.7	586.5	498.1	606.4	597.6
55°	520.3	530.1	548.0	556.5	546.2
57.5°	478.2	403.2	524.8	513.3	523.7
60°	430.6	347.5	474.2	478.7	461.1
62.5°	385.1	314.1	428.3	422.6	430.6
65°	337.8	277.4	386.7	384.0	386.2
67.5°	292.2	239.5	326.2	345.3	327.2
70°	244.2	203.5	279.2	228.6	227.5
72.5°	193.8	169.3	245.4	205.0	200.8
75°	151.0	146.7	168.3	138.9	174.7
77.5°	110.4	139.5	128.2	157.9	156.8
80°	75.2	110.1	91.7	119.2	127.0
82.5°	49.4	73.8	91.5	110.9	109.9
85°	31.5	49.6	76.0	87.4	93.0
87.5°	21.6	36.8	65.0	71.2	69.0
90°	13.8	29.1	46.7	44.2	42.1
92.5°	11.2	23.4	27.4	24.2	21.3
95°	13.4	16.0	14.1	11.7	10.7
97.5°	16.0	11.0	9.6	9.1	9.3
100°	16.5	11.0	8.0	6.9	6.4
102.5°	15.7	11.5	7.8	7.0	6.4
105°	14.1	10.9	7.8	6.7	6.6
107.5°	12.3	9.9	8.0	6.4	5.8
110°	10.6	9.3	7.4	7.2	6.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	8.8	8.8	6.6	5.8	6.6
115°	7.4	7.7	6.7	4.6	4.6
117.5°	6.2	6.2	10.9	4.3	4.0
120°	5.3	5.0	10.9	6.9	4.2
122.5°	4.3	4.2	7.7	14.7	11.4
125°	3.7	3.2	5.0	12.0	14.1
127.5°	3.0	2.4	3.8	7.4	9.8
130°	2.6	1.9	5.6	4.3	6.2
132.5°	2.1	1.6	8.6	3.2	3.4
135°	1.8	1.4	3.8	6.4	3.4
137.5°	1.4	1.1	1.9	12.6	9.1
140°	1.3	1.0	1.8	4.3	10.9
142.5°	1.0	0.8	1.4	2.1	2.9
145°	1.0	0.8	0.6	2.4	2.1
147.5°	0.8	0.6	0.6	2.9	3.0
150°	0.8	0.6	0.6	1.0	2.7
152.5°	0.8	0.6	0.6	0.5	0.5
155°	0.8	0.8	0.8	0.5	0.3
157.5°	0.8	0.8	0.8	0.5	0.3
160°	0.8	0.8	0.8	0.5	0.3
162.5°	0.8	0.8	0.8	0.6	0.3
165°	0.8	0.8	0.8	0.6	0.5
167.5°	0.8	0.8	1.0	0.6	0.5
170°	0.8	0.8	1.0	0.6	0.5
172.5°	1.0	0.8	1.0	0.6	0.5
175°	1.0	1.0	1.0	0.8	0.6
177.5°	1.0	1.0	1.0	0.8	0.6
180°	0.8	0.8	0.8	0.8	0.8

(END OF REPORT)