

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: P397435

Luminaire Tested: **VRVT4S-LD5-15-DRF-LR63-CD2-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397435
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1801-511-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: VRVT4S-LD5-15-DRF-LR63-CD2-U
Description:
Light Source: -
Ballast/Driver: -

Summary

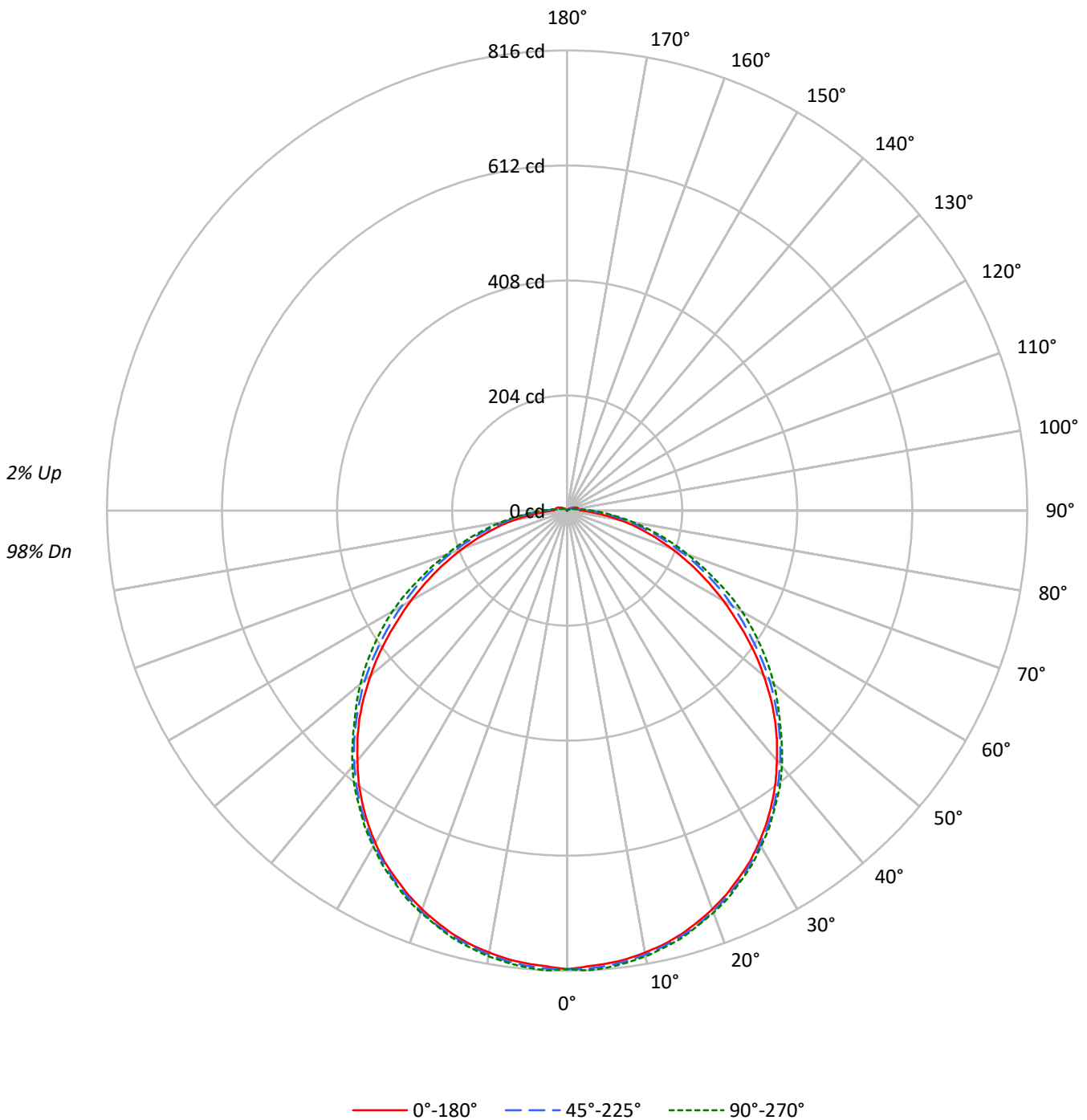
Lumens per Lamp: N/A
Luminaire Lumens: 2371.3 lumens
Efficiency: N/A
Efficacy: 9.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

Input Watts (W): 257.8
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	118	118	118	118	115	115	115	115	110	110	110	105	105	105	100	100	100	98
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	81
2	98	89	82	77	95	87	81	75	83	78	73	80	75	71	76	73	69	67
3	89	78	70	64	86	77	69	63	73	67	61	70	65	60	67	63	59	56
4	82	69	61	54	79	68	60	53	65	58	52	63	56	51	60	55	50	48
5	75	62	53	46	73	61	52	46	58	51	45	56	50	45	54	48	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	49	43	39	36
7	64	51	42	36	62	50	41	36	48	41	35	46	40	35	45	39	34	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	41	35	31	29
9	56	42	34	29	54	42	34	29	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3880	3880	3880
5°	3823	3800	3820
10°	3776	3711	3737
15°	3725	3620	3651
20°	3660	3522	3554
25°	3586	3417	3453
30°	3506	3298	3344
35°	3402	3171	3220
40°	3274	3028	3092
45°	3137	2862	2928
50°	2954	2685	2787
55°	2748	2470	2621
60°	2529	2261	2440
65°	2306	2044	2188
70°	2068	1800	1940
75°	1816	1534	1693
80°	1512	1258	1422
85°	1122	978	1119



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.0	3.2
10°-20°	220.4	9.3
20°-30°	333.3	14.1
30°-40°	399.3	16.8
40°-50°	407.8	17.2
50°-60°	361.1	15.2
60°-70°	273.7	11.5
70°-80°	168.7	7.1
80°-90°	74.6	3.1
90°-100°	26.8	1.1
100°-110°	14.4	0.6
110°-120°	8.6	0.4
120°-130°	4.0	0.2
130°-140°	1.2	0.1
140°-150°	0.2	0.0
150°-160°	0.1	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	630.8	26.6
0°-40°	1030.0	43.4
0°-60°	1798.9	75.9
0°-90°	2315.9	97.7
90°-120°	49.7	2.1
90°-150°	55.2	2.3
90°-180°	55.0	2.3
0°-180°	2371.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	813	813	813	813	813	
5°	806	808	810	813	814	77
15°	778	779	782	783	785	220
25°	719	721	724	726	726	332
35°	633	635	639	644	642	396
45°	521	524	529	536	534	401
55°	387	394	402	415	419	346
65°	257	264	277	288	290	255
75°	143	149	160	169	171	152
85°	49	58	68	74	74	50
90°	26	32	40	43	43	15
95°	21	21	23	25	25	17
105°	19	16	12	11	11	20
115°	12	10	8	7	7	12
125°	7	5	4	3	4	6
135°	3	2	1	1	1	2
145°	1	1	0	0	0	1
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	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°	813.2	813.2	813.2	813.2	813.2
2.5°	809.2	810.2	812.8	815.3	816.1
5°	806.5	808.1	810.5	812.8	813.6
7.5°	802.5	803.8	805.9	808.1	808.8
10°	795.8	797.2	799.5	801.6	802.7
12.5°	788.3	788.9	791.0	793.4	794.0
15°	778.4	779.0	781.6	783.3	784.9
17.5°	766.0	766.7	770.5	771.3	771.5
20°	752.3	753.2	756.3	757.7	758.8
22.5°	737.2	738.5	740.9	742.7	744.3
25°	719.2	721.2	724.1	726.4	726.4
27.5°	701.7	702.0	704.8	707.2	708.8
30°	680.4	680.8	684.4	687.2	687.8
32.5°	657.9	659.2	663.0	665.9	666.7
35°	633.1	635.2	639.0	643.5	642.2
37.5°	607.3	608.5	613.9	617.6	619.0
40°	578.5	581.7	587.3	591.3	592.5
42.5°	550.4	553.3	559.3	563.2	563.7
45°	520.6	523.5	529.4	535.5	534.1
47.5°	488.5	492.9	498.9	505.3	506.4
50°	454.9	461.4	468.6	473.9	478.7
52.5°	421.9	427.2	435.5	444.9	449.4
55°	386.9	394.5	402.1	414.7	419.0
57.5°	352.1	361.4	370.7	384.6	388.5
60°	320.1	327.5	338.7	352.3	357.9
62.5°	287.5	296.0	308.5	320.9	324.8
65°	256.8	263.5	277.4	288.1	289.7
67.5°	225.9	233.9	247.0	258.2	258.9
70°	197.1	204.3	217.0	226.4	227.3
72.5°	169.3	176.6	187.4	197.0	198.9
75°	142.6	149.3	160.2	168.6	170.9
77.5°	118.9	123.8	133.4	143.0	143.8
80°	92.5	98.2	110.2	118.2	119.5
82.5°	70.4	77.3	88.0	95.2	95.5
85°	48.6	58.2	68.5	74.4	74.4
87.5°	33.6	43.7	52.8	56.8	57.3
90°	25.6	32.2	39.7	43.2	43.0
92.5°	22.2	25.3	30.1	33.0	32.5
95°	21.0	21.0	23.0	25.3	25.1
97.5°	20.3	19.0	18.2	19.7	19.5
100°	20.2	17.9	15.0	15.7	15.8
102.5°	19.7	17.0	13.1	13.0	13.1
105°	18.7	16.0	11.8	10.9	11.0
107.5°	17.4	14.7	10.9	9.6	9.8
110°	15.8	13.1	9.9	8.6	8.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	14.2	11.5	9.0	7.7	7.8
115°	12.3	9.9	7.8	6.7	7.0
117.5°	10.7	8.6	6.9	5.8	6.2
120°	9.1	7.5	5.6	4.8	5.4
122.5°	7.7	6.4	4.5	4.0	4.6
125°	6.6	5.3	3.5	3.2	3.8
127.5°	5.4	4.5	2.6	2.6	3.0
130°	4.5	3.7	1.6	1.9	2.4
132.5°	3.7	3.0	1.1	1.3	1.8
135°	2.9	2.4	0.8	0.8	1.3
137.5°	2.4	1.8	0.5	0.3	0.6
140°	1.8	1.3	0.3	0.0	0.2
142.5°	1.4	1.0	0.2	0.0	0.0
145°	1.0	0.6	0.2	0.0	0.0
147.5°	0.6	0.3	0.2	0.2	0.0
150°	0.3	0.3	0.2	0.2	0.0
152.5°	0.3	0.3	0.2	0.2	0.0
155°	0.3	0.3	0.3	0.2	0.0
157.5°	0.3	0.3	0.3	0.2	0.0
160°	0.3	0.3	0.3	0.2	0.2
162.5°	0.5	0.5	0.3	0.2	0.2
165°	0.5	0.5	0.3	0.2	0.2
167.5°	0.5	0.5	0.3	0.3	0.2
170°	0.5	0.5	0.3	0.2	0.2
172.5°	0.5	0.5	0.3	0.3	0.2
175°	0.5	0.5	0.5	0.3	0.2
177.5°	0.5	0.5	0.5	0.3	0.2
180°	0.5	0.5	0.5	0.5	0.5

(END OF REPORT)