

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: P397420

Luminaire Tested: **VRVT4S-LD5-12-DR-LR63-CD2-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397420
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1801-511-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: VRVT4S-LD5-12-DR-LR63-CD2-U
Description:
Light Source: -
Ballast/Driver: -

Summary

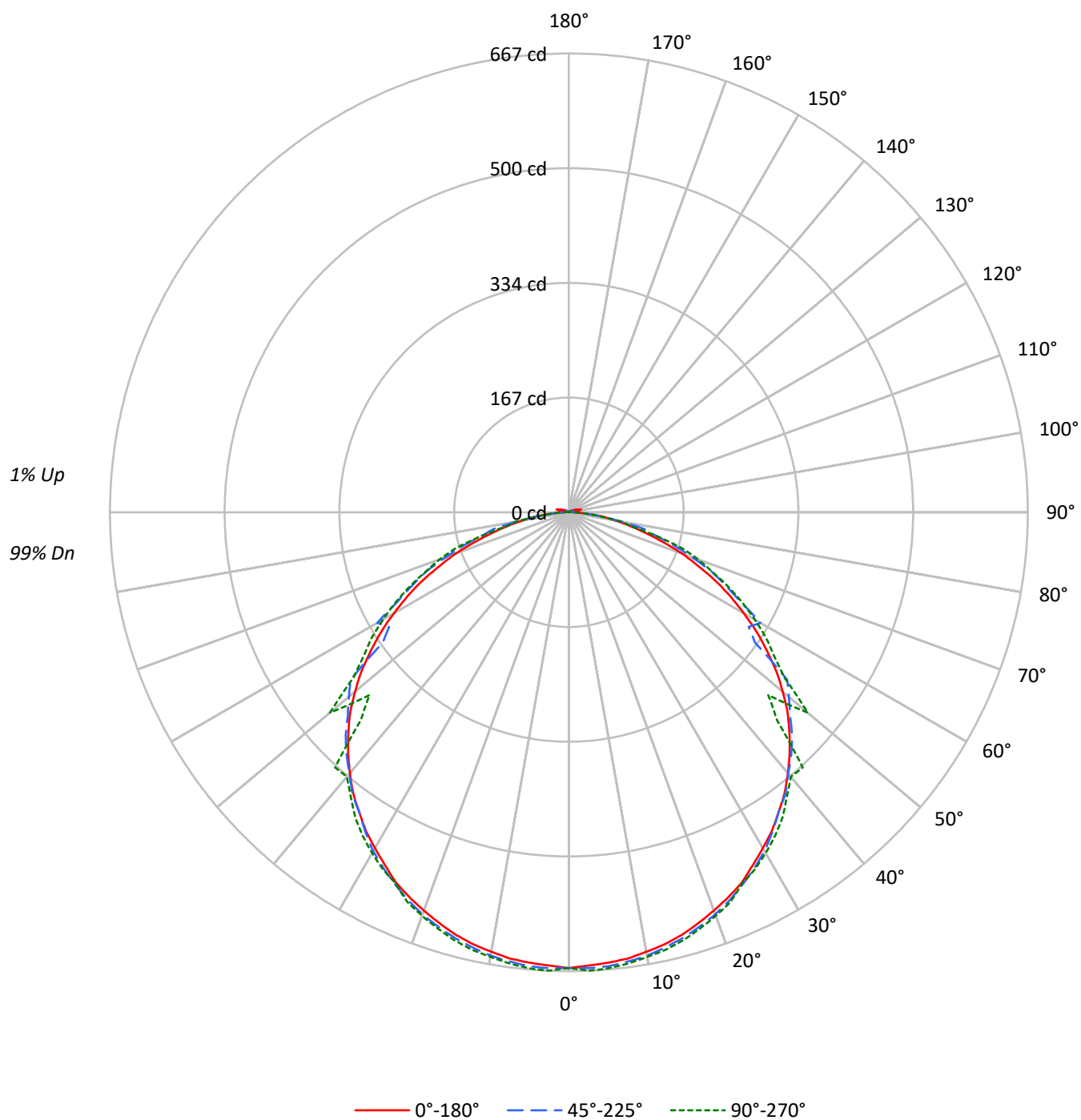
Lumens per Lamp: N/A
Luminaire Lumens: 1957.1 lumens
Efficiency: N/A
Efficacy: 9.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

Input Watts (W): 199.7
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101			99
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85			83
2	99	90	83	78	96	88	82	77	84	79	75	81	77	73	78	74	71			69
3	90	79	71	64	87	77	70	64	74	68	62	71	66	61	69	64	60			58
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	51	46	57	50	45	55	49	45			42
6	70	56	47	41	68	55	47	40	53	46	40	51	45	39	50	44	39			37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	45	39	35			33
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	35	31			29
9	56	42	34	29	54	42	34	29	41	33	28	39	33	28	38	32	28			26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25			24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3161	3161	3161
5°	3115	3105	3123
10°	3077	3038	3055
15°	3042	2966	2995
20°	2997	2896	2923
25°	2963	2818	2830
30°	2904	2741	2780
35°	2856	2638	2714
40°	2801	2557	2619
45°	2731	2481	2345
50°	2634	2391	2639
55°	2496	2028	2276
60°	2317	2146	2126
65°	2107	1848	1924
70°	1832	1570	1704
75°	1457	1241	1273
80°	1120	849	925
85°	706	404	411



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.9	3.2
10°-20°	180.7	9.2
20°-30°	275.1	14.1
30°-40°	335.1	17.1
40°-50°	350.0	17.9
50°-60°	320.2	16.4
60°-70°	244.5	12.5
70°-80°	133.3	6.8
80°-90°	36.0	1.8
90°-100°	5.5	0.3
100°-110°	6.7	0.3
110°-120°	4.0	0.2
120°-130°	1.9	0.1
130°-140°	0.6	0.0
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°	518.7	26.5
0°-40°	853.8	43.6
0°-60°	1524.0	77.9
0°-90°	1937.9	99.0
90°-120°	16.2	0.8
90°-150°	19.0	1.0
90°-180°	19.0	1.0
0°-180°	1957.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	662	662	662	662	662	
5°	657	660	662	665	665	62
15°	636	638	640	643	644	179
25°	594	596	597	599	595	273
35°	532	534	532	538	541	333
45°	453	455	459	482	428	349
55°	352	354	330	366	364	314
65°	235	242	251	252	255	231
75°	114	123	130	129	128	124
85°	31	31	28	28	27	33
90°	5	9	8	8	8	4
95°	5	5	5	4	4	6
105°	16	21	3	3	3	16
115°	8	4	5	2	2	8
125°	4	3	2	1	1	3
135°	2	1	1	0	0	1
145°	1	0	0	0	0	0
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°	662.5	662.5	662.5	662.5	662.5
2.5°	659.4	661.1	663.2	666.1	666.9
5°	657.1	659.8	662.3	664.6	665.2
7.5°	654.2	657.5	658.6	661.5	661.5
10°	648.6	652.3	654.4	656.3	656.3
12.5°	643.2	645.9	647.7	650.0	651.1
15°	635.6	638.1	640.4	642.7	643.8
17.5°	626.1	630.0	631.5	633.4	634.2
20°	616.1	619.8	621.9	623.6	624.0
22.5°	605.4	608.4	610.4	611.1	613.3
25°	594.2	596.1	597.1	598.8	595.4
27.5°	578.4	581.9	583.3	581.9	585.2
30°	563.6	567.1	568.8	569.2	571.9
32.5°	549.0	551.5	550.6	553.8	557.7
35°	531.5	534.4	531.5	538.4	541.3
37.5°	515.0	516.5	516.7	523.6	520.6
40°	495.0	496.9	495.9	500.2	501.9
42.5°	474.8	476.5	478.4	481.7	502.9
45°	453.3	455.4	458.8	482.3	427.7
47.5°	431.1	431.5	435.8	399.8	392.9
50°	405.6	405.4	417.3	379.6	453.3
52.5°	380.2	380.0	399.8	417.7	394.4
55°	351.5	353.6	330.2	366.3	363.8
57.5°	323.6	325.4	309.6	334.6	340.0
60°	293.3	300.6	321.5	311.7	311.9
62.5°	264.6	271.1	280.2	283.3	284.6
65°	234.6	241.7	250.8	251.7	254.8
67.5°	202.7	212.9	224.0	222.5	225.4
70°	174.6	162.1	189.2	190.4	199.6
72.5°	142.9	157.9	160.0	133.3	171.7
75°	114.4	123.1	129.6	129.4	128.5
77.5°	90.6	96.5	112.1	100.8	91.2
80°	68.5	70.2	74.4	74.0	77.7
82.5°	51.7	49.2	50.6	50.0	44.2
85°	30.6	30.8	28.3	27.5	27.3
87.5°	12.7	14.2	13.7	13.1	14.2
90°	5.2	8.8	8.3	8.1	7.9
92.5°	5.8	6.3	5.8	5.0	4.4
95°	5.0	4.6	4.8	4.0	4.0
97.5°	6.9	3.7	3.7	3.3	3.1
100°	13.7	3.3	3.5	2.9	2.9
102.5°	18.3	3.5	3.1	2.9	3.1
105°	16.0	21.2	2.7	2.9	2.9
107.5°	13.5	12.5	2.5	2.7	2.9
110°	11.5	7.7	2.1	2.5	2.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	9.4	5.4	1.9	2.1	2.5
115°	7.9	4.0	5.2	1.9	2.1
117.5°	6.7	4.2	5.6	1.7	1.9
120°	5.4	8.5	2.9	1.5	1.5
122.5°	4.4	4.0	2.1	1.0	1.2
125°	3.5	2.9	1.5	0.8	1.0
127.5°	2.9	2.3	1.0	0.6	0.8
130°	2.5	2.1	0.6	0.6	0.6
132.5°	2.1	1.7	0.6	0.4	0.6
135°	1.7	1.2	0.6	0.4	0.4
137.5°	1.2	1.0	0.4	0.4	0.4
140°	1.0	0.6	0.2	0.2	0.2
142.5°	0.8	0.6	0.2	0.2	0.2
145°	0.6	0.4	0.2	0.2	0.2
147.5°	0.4	0.2	0.2	0.2	0.2
150°	0.2	0.2	0.2	0.2	0.2
152.5°	0.2	0.2	0.2	0.2	0.2
155°	0.2	0.2	0.2	0.2	0.2
157.5°	0.2	0.2	0.2	0.2	0.2
160°	0.2	0.2	0.2	0.2	0.2
162.5°	0.4	0.4	0.4	0.4	0.2
165°	0.4	0.4	0.4	0.4	0.2
167.5°	0.4	0.4	0.4	0.4	0.2
170°	0.4	0.4	0.4	0.4	0.2
172.5°	0.4	0.4	0.4	0.4	0.4
175°	0.4	0.4	0.4	0.4	0.4
177.5°	0.4	0.4	0.4	0.4	0.4
180°	0.4	0.4	0.4	0.4	0.4

(END OF REPORT)