

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: P397447

Luminaire Tested: **VRVT4S-LD5-18-DRF-LR63-CD2-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397447
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-LD5-18-DRF-LR63-CD2-U
Description:
Light Source: -
Ballast/Driver: -

Summary

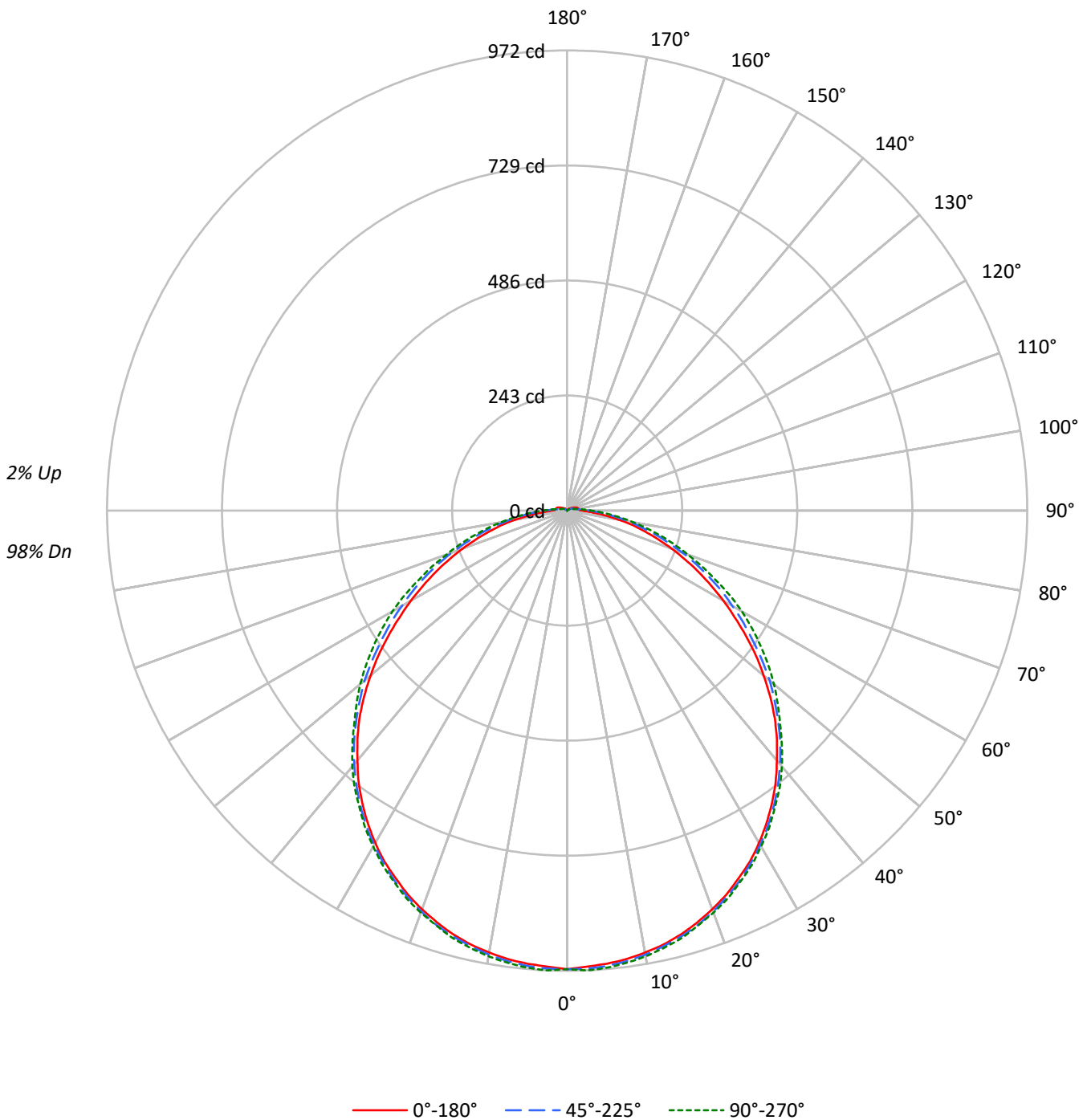
Lumens per Lamp: N/A
Luminaire Lumens: 2825.0 lumens
Efficiency: N/A
Efficacy: 8.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

Input Watts (W): 327.2
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	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°	4623	4623	4623
5°	4554	4527	4550
10°	4498	4421	4452
15°	4438	4313	4350
20°	4360	4196	4234
25°	4271	4071	4113
30°	4177	3930	3984
35°	4053	3778	3837
40°	3900	3607	3683
45°	3737	3410	3488
50°	3519	3199	3320
55°	3273	2942	3123
60°	3013	2693	2907
65°	2747	2436	2607
70°	2463	2144	2312
75°	2162	1826	2016
80°	1802	1499	1694
85°	1336	1165	1333



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.7	3.2
10°-20°	262.6	9.3
20°-30°	397.1	14.1
30°-40°	475.7	16.8
40°-50°	485.8	17.2
50°-60°	430.1	15.2
60°-70°	326.0	11.5
70°-80°	201.0	7.1
80°-90°	88.9	3.1
90°-100°	31.9	1.1
100°-110°	17.1	0.6
110°-120°	10.2	0.4
120°-130°	4.7	0.2
130°-140°	1.5	0.1
140°-150°	0.3	0.0
150°-160°	0.1	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	751.4	26.6
0°-40°	1227.1	43.4
0°-60°	2143.0	75.9
0°-90°	2758.9	97.7
90°-120°	59.3	2.1
90°-150°	65.7	2.3
90°-180°	66.0	2.3
0°-180°	2825.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	969	969	969	969	969	
5°	961	963	966	968	969	91
15°	927	928	931	933	935	262
25°	857	859	863	865	865	395
35°	754	757	761	767	765	471
45°	620	624	631	638	636	477
55°	461	470	479	494	499	412
65°	306	314	330	343	345	303
75°	170	178	191	201	204	181
85°	58	69	82	89	89	59
90°	30	38	47	52	51	17
95°	25	25	27	30	30	20
105°	22	19	14	13	13	23
115°	15	12	9	8	8	15
125°	8	6	4	4	5	7
135°	3	3	1	1	2	3
145°	1	1	0	0	0	1
155°	0	0	0	0	0	0
165°	1	1	0	0	0	0
175°	1	1	1	0	0	0
180°	1	1	1	1	1	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	968.8	968.8	968.8	968.8	968.8
2.5°	964.0	965.2	968.2	971.3	972.2
5°	960.8	962.7	965.6	968.2	969.2
7.5°	956.0	957.6	960.0	962.7	963.5
10°	948.0	949.7	952.4	954.9	956.2
12.5°	939.1	939.8	942.3	945.2	945.9
15°	927.3	928.0	931.1	933.2	935.1
17.5°	912.6	913.3	917.9	918.9	919.1
20°	896.2	897.3	901.0	902.7	904.0
22.5°	878.3	879.8	882.7	884.8	886.7
25°	856.7	859.2	862.7	865.3	865.3
27.5°	836.0	836.4	839.6	842.4	844.4
30°	810.6	811.0	815.4	818.6	819.4
32.5°	783.7	785.3	789.8	793.3	794.2
35°	754.2	756.7	761.2	766.6	765.1
37.5°	723.5	724.8	731.3	735.7	737.4
40°	689.2	693.0	699.7	704.4	705.8
42.5°	655.7	659.1	666.3	670.9	671.5
45°	620.2	623.6	630.7	637.9	636.2
47.5°	581.9	587.2	594.3	601.9	603.2
50°	541.9	549.7	558.3	564.6	570.3
52.5°	502.6	508.9	518.8	530.0	535.4
55°	460.9	470.0	479.0	494.0	499.2
57.5°	419.5	430.6	441.6	458.2	462.8
60°	381.4	390.2	403.5	419.7	426.4
62.5°	342.5	352.6	367.5	382.3	386.9
65°	305.9	313.9	330.5	343.3	345.2
67.5°	269.1	278.7	294.3	307.6	308.4
70°	234.8	243.4	258.4	269.7	270.8
72.5°	201.6	210.4	223.2	234.6	236.9
75°	169.8	177.8	190.8	200.9	203.6
77.5°	141.6	147.5	159.0	170.4	171.3
80°	110.2	117.0	131.3	140.8	142.4
82.5°	83.9	92.1	104.8	113.4	113.8
85°	57.9	69.4	81.6	88.6	88.6
87.5°	40.0	52.0	62.9	67.7	68.2
90°	30.5	38.3	47.3	51.5	51.3
92.5°	26.5	30.1	35.8	39.3	38.7
95°	25.0	25.0	27.4	30.1	29.9
97.5°	24.2	22.7	21.7	23.4	23.2
100°	24.0	21.3	17.9	18.7	18.9
102.5°	23.4	20.2	15.6	15.4	15.6
105°	22.3	19.1	14.1	13.0	13.2
107.5°	20.8	17.5	13.0	11.4	11.6
110°	18.9	15.6	11.8	10.3	10.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	17.0	13.7	10.7	9.2	9.3
115°	14.7	11.8	9.3	8.0	8.4
117.5°	12.8	10.3	8.2	6.9	7.4
120°	10.9	9.0	6.7	5.7	6.5
122.5°	9.2	7.6	5.3	4.8	5.5
125°	7.8	6.3	4.2	3.8	4.6
127.5°	6.5	5.3	3.1	3.1	3.6
130°	5.3	4.4	1.9	2.3	2.9
132.5°	4.4	3.6	1.3	1.5	2.1
135°	3.4	2.9	1.0	1.0	1.5
137.5°	2.9	2.1	0.6	0.4	0.8
140°	2.1	1.5	0.4	0.0	0.2
142.5°	1.7	1.1	0.2	0.0	0.0
145°	1.1	0.8	0.2	0.0	0.0
147.5°	0.8	0.4	0.2	0.2	0.0
150°	0.4	0.4	0.2	0.2	0.0
152.5°	0.4	0.4	0.2	0.2	0.0
155°	0.4	0.4	0.4	0.2	0.0
157.5°	0.4	0.4	0.4	0.2	0.0
160°	0.4	0.4	0.4	0.2	0.2
162.5°	0.6	0.6	0.4	0.2	0.2
165°	0.6	0.6	0.4	0.2	0.2
167.5°	0.6	0.6	0.4	0.4	0.2
170°	0.6	0.6	0.4	0.2	0.2
172.5°	0.6	0.6	0.4	0.4	0.2
175°	0.6	0.6	0.6	0.4	0.2
177.5°	0.6	0.6	0.6	0.4	0.2
180°	0.6	0.6	0.6	0.6	0.6

(END OF REPORT)