

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: P397442

Luminaire Tested: **VRVT4S-LD5-18-DR-LA59-CD2-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397442
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-LD5-18-DR-LA59-CD2-U
Description:
Light Source: -
Ballast/Driver: -

Summary

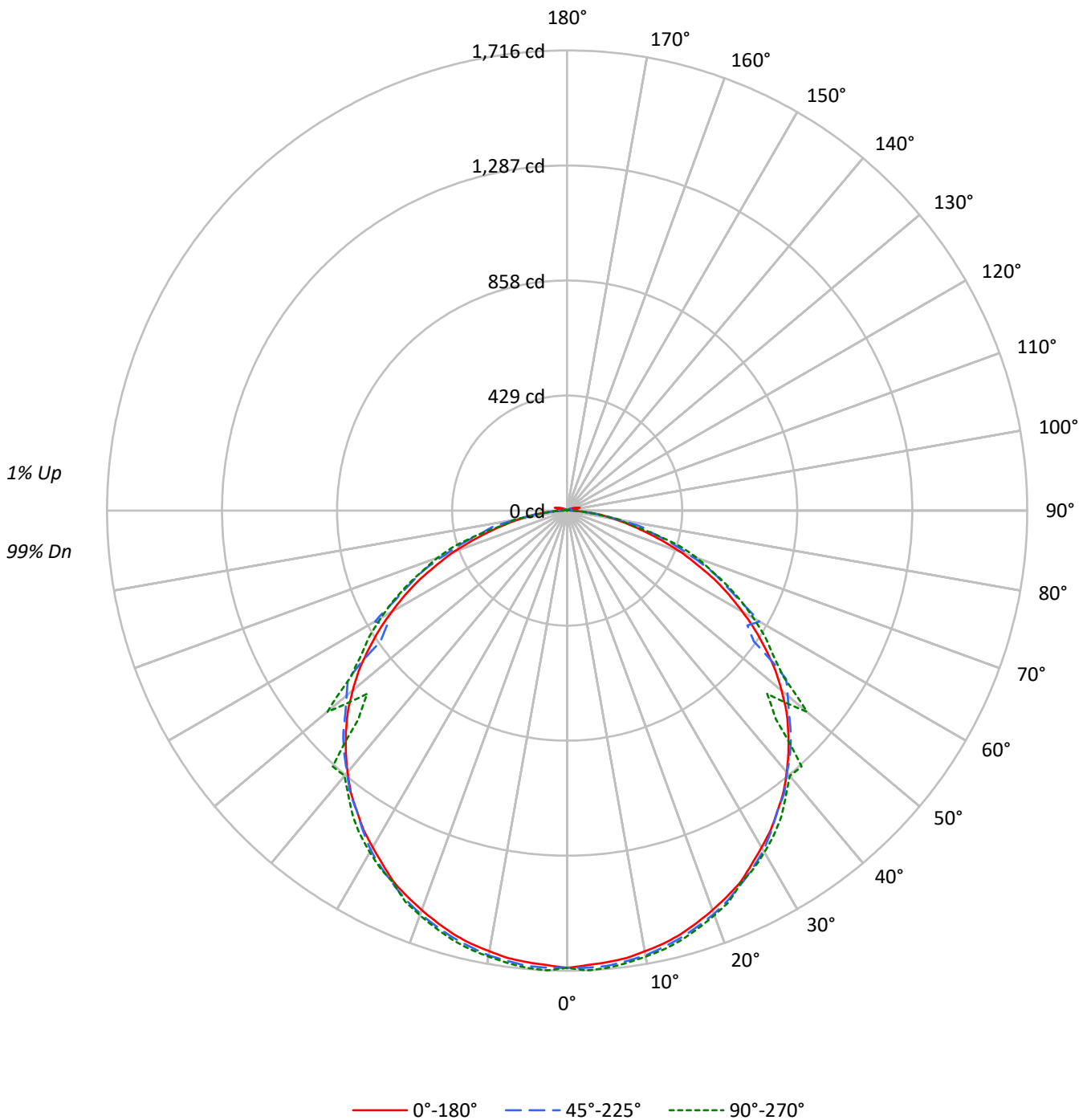
Lumens per Lamp: N/A
Luminaire Lumens: 5036.1 lumens
Efficiency: N/A
Efficacy: 23.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

Input Watts (W): 210.4
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	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°	8134	8134	8134
5°	8015	7990	8037
10°	7918	7817	7862
15°	7828	7633	7707
20°	7712	7453	7521
25°	7623	7250	7283
30°	7472	7054	7154
35°	7349	6787	6984
40°	7208	6578	6739
45°	7029	6382	6034
50°	6779	6152	6791
55°	6423	5219	5856
60°	5963	5521	5471
65°	5421	4757	4951
70°	4714	4038	4384
75°	3747	3192	3276
80°	2884	2185	2380
85°	1819	1040	1056



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.9	3.2
10°-20°	465.0	9.2
20°-30°	707.8	14.1
30°-40°	862.3	17.1
40°-50°	900.6	17.9
50°-60°	823.9	16.4
60°-70°	629.2	12.5
70°-80°	343.1	6.8
80°-90°	92.7	1.8
90°-100°	14.2	0.3
100°-110°	17.2	0.3
110°-120°	10.4	0.2
120°-130°	4.9	0.1
130°-140°	1.7	0.0
140°-150°	0.5	0.0
150°-160°	0.2	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	1334.8	26.5
0°-40°	2197.1	43.6
0°-60°	3921.6	77.9
0°-90°	4986.6	99.0
90°-120°	41.8	0.8
90°-150°	48.9	1.0
90°-180°	50.0	1.0
0°-180°	5036.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1705	1705	1705	1705	1705	
5°	1691	1698	1704	1710	1712	161
15°	1636	1642	1648	1654	1657	461
25°	1529	1534	1536	1541	1532	703
35°	1368	1375	1368	1385	1393	856
45°	1167	1172	1180	1241	1101	899
55°	904	910	850	942	936	808
65°	604	622	646	648	656	596
75°	294	317	334	333	331	318
85°	79	79	73	71	70	86
90°	13	22	21	21	20	10
95°	13	12	12	10	10	15
105°	41	55	7	8	8	41
115°	20	10	13	5	5	21
125°	9	8	4	2	3	9
135°	4	3	2	1	1	3
145°	2	1	0	0	0	1
155°	0	0	0	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°	1704.8	1704.8	1704.8	1704.8	1704.8
2.5°	1696.8	1701.1	1706.4	1713.9	1716.1
5°	1690.9	1697.8	1704.3	1710.2	1711.8
7.5°	1683.4	1691.9	1694.6	1702.1	1702.1
10°	1668.9	1678.5	1683.9	1688.7	1688.7
12.5°	1654.9	1661.9	1666.7	1672.6	1675.3
15°	1635.6	1642.1	1648.0	1653.9	1656.6
17.5°	1611.0	1621.2	1624.9	1629.7	1631.9
20°	1585.2	1594.9	1600.3	1604.5	1605.6
22.5°	1557.9	1565.4	1570.8	1572.4	1578.3
25°	1529.0	1533.8	1536.5	1540.8	1532.2
27.5°	1488.2	1497.3	1501.1	1497.3	1505.9
30°	1450.1	1459.3	1463.6	1464.6	1471.6
32.5°	1412.6	1419.1	1416.9	1424.9	1435.1
35°	1367.6	1375.1	1367.6	1385.3	1392.8
37.5°	1325.2	1329.0	1329.5	1347.2	1339.7
40°	1273.8	1278.6	1275.9	1287.2	1291.5
42.5°	1221.8	1226.1	1230.9	1239.5	1294.2
45°	1166.6	1171.9	1180.5	1241.1	1100.6
47.5°	1109.2	1110.3	1121.5	1028.8	1011.1
50°	1043.8	1043.3	1073.8	976.8	1166.6
52.5°	978.4	977.8	1028.8	1074.9	1014.8
55°	904.4	909.8	849.7	942.5	936.0
57.5°	832.6	837.4	796.7	861.0	874.9
60°	754.8	773.6	827.2	802.0	802.5
62.5°	680.8	697.5	721.1	729.1	732.3
65°	603.7	621.9	645.5	647.6	655.6
67.5°	521.6	547.9	576.3	572.5	580.0
70°	449.3	417.1	486.8	490.0	513.6
72.5°	367.8	406.4	411.7	343.1	441.8
75°	294.3	316.8	333.5	332.9	330.8
77.5°	233.2	248.2	288.4	259.5	234.8
80°	176.4	180.7	191.4	190.3	200.0
82.5°	132.9	126.5	130.3	128.7	113.7
85°	78.8	79.4	72.9	70.8	70.2
87.5°	32.7	36.5	35.4	33.8	36.5
90°	13.4	22.5	21.4	20.9	20.4
92.5°	15.0	16.1	15.0	12.9	11.3
95°	12.9	11.8	12.3	10.2	10.2
97.5°	17.7	9.7	9.7	8.6	8.0
100°	35.4	8.6	9.1	7.5	7.5
102.5°	47.2	9.1	8.0	7.5	8.0
105°	41.3	54.7	7.0	7.5	7.5
107.5°	34.9	32.2	6.4	7.0	7.5
110°	29.5	19.8	5.3	6.4	7.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	24.1	13.9	4.8	5.3	6.4
115°	20.4	10.2	13.4	4.8	5.3
117.5°	17.2	10.7	14.5	4.3	4.8
120°	13.9	22.0	7.5	3.8	3.8
122.5°	11.3	10.2	5.3	2.7	3.2
125°	9.1	7.5	3.8	2.2	2.7
127.5°	7.5	5.9	2.7	1.6	2.2
130°	6.4	5.3	1.6	1.6	1.6
132.5°	5.3	4.3	1.6	1.1	1.6
135°	4.3	3.2	1.6	1.1	1.1
137.5°	3.2	2.7	1.1	1.1	1.1
140°	2.7	1.6	0.5	0.5	0.5
142.5°	2.2	1.6	0.5	0.5	0.5
145°	1.6	1.1	0.5	0.5	0.5
147.5°	1.1	0.5	0.5	0.5	0.5
150°	0.5	0.5	0.5	0.5	0.5
152.5°	0.5	0.5	0.5	0.5	0.5
155°	0.5	0.5	0.5	0.5	0.5
157.5°	0.5	0.5	0.5	0.5	0.5
160°	0.5	0.5	0.5	0.5	0.5
162.5°	1.1	1.1	1.1	1.1	0.5
165°	1.1	1.1	1.1	1.1	0.5
167.5°	1.1	1.1	1.1	1.1	0.5
170°	1.1	1.1	1.1	1.1	0.5
172.5°	1.1	1.1	1.1	1.1	1.1
175°	1.1	1.1	1.1	1.1	1.1
177.5°	1.1	1.1	1.1	1.1	1.1
180°	1.1	1.1	1.1	1.1	1.1

(END OF REPORT)