

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: P397282

Luminaire Tested: **4VRVT2-LD5-8-DR-UNV-LR63-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P397282
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-11)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 4VRVT2-LD5-8-DR-UNV-LR63-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1316.8 lumens
Efficiency: N/A
Efficacy: 8.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.23 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4.17' x H: 0.17')
CIE Type: Direct

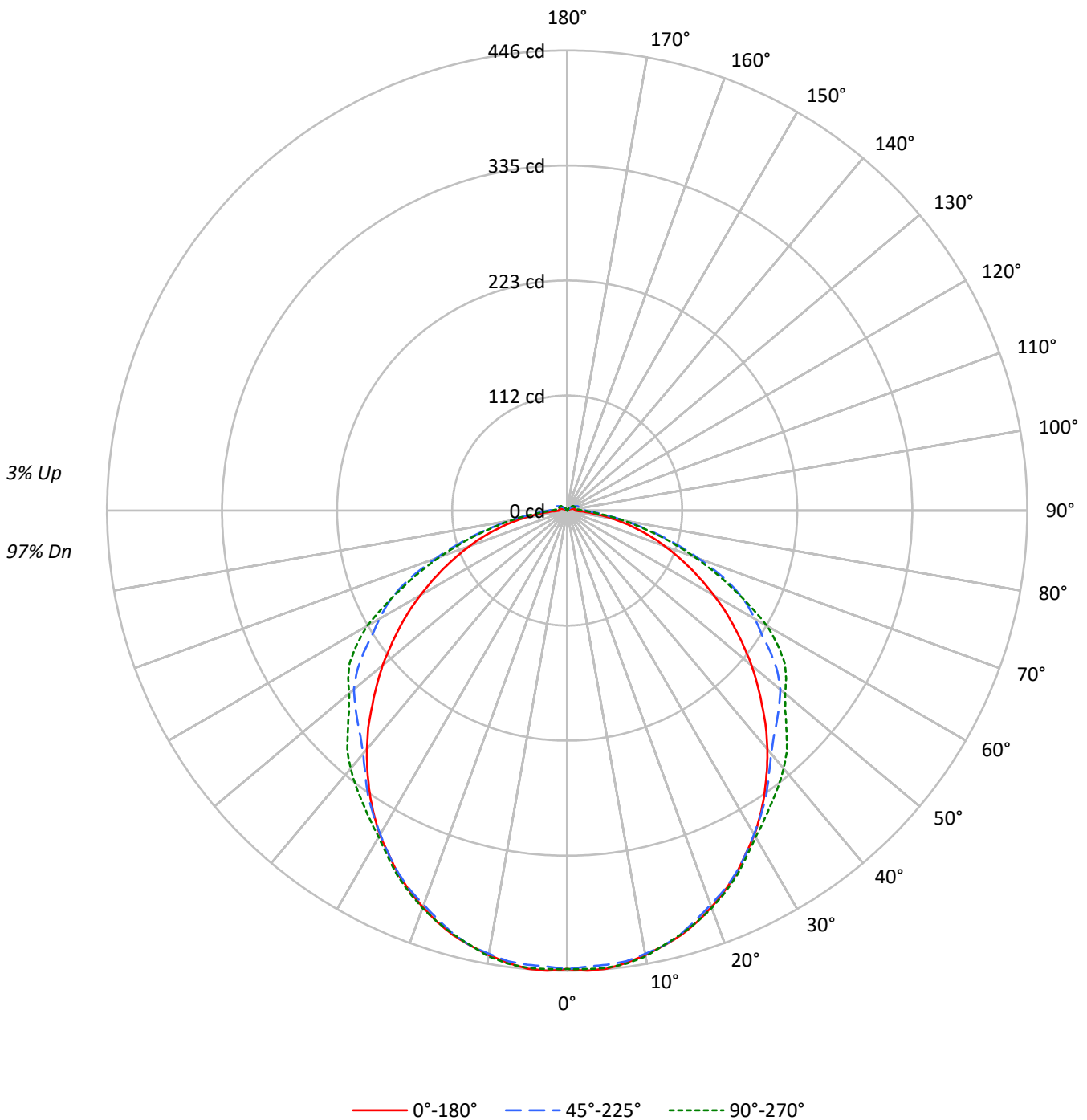
Input Watts (W): 151.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	109	109	104	104	104	99	99	99	97
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	80
2	98	89	82	76	95	87	80	75	83	77	73	79	75	71	76	72	69	66
3	89	78	70	63	86	76	68	62	73	66	61	70	64	59	67	62	58	56
4	81	69	60	53	79	67	59	53	65	57	52	62	56	51	59	54	50	47
5	75	62	52	46	72	60	52	45	58	50	45	55	49	44	53	48	43	41
6	69	55	46	40	67	54	46	39	52	45	39	50	43	38	48	42	38	36
7	64	50	41	35	62	49	41	35	47	40	34	46	39	34	44	38	33	31
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30	40	34	30	28
9	55	42	34	28	54	41	33	28	40	33	28	39	32	27	37	31	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2296	2296	2296
5°	2303	2240	2242
10°	2279	2187	2174
15°	2256	2123	2088
20°	2217	2040	2010
25°	2173	1966	1923
30°	2117	1875	1828
35°	2048	1791	1767
40°	1970	1698	1720
45°	1877	1663	1647
50°	1791	1650	1586
55°	1689	1577	1571
60°	1587	1490	1467
65°	1481	1401	1251
70°	1369	1184	1035
75°	1240	939	802
80°	1067	671	571
85°	805	456	345



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.2	3.2
10°-20°	120.1	9.1
20°-30°	179.1	13.6
30°-40°	211.8	16.1
40°-50°	220.6	16.7
50°-60°	207.5	15.8
60°-70°	166.3	12.6
70°-80°	96.6	7.3
80°-90°	34.1	2.6
90°-100°	13.2	1.0
100°-110°	10.0	0.8
110°-120°	7.6	0.6
120°-130°	4.6	0.4
130°-140°	2.3	0.2
140°-150°	0.7	0.1
150°-160°	0.1	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	341.4	25.9
0°-40°	553.2	42.0
0°-60°	981.3	74.5
0°-90°	1278.2	97.1
90°-120°	30.8	2.3
90°-150°	38.4	2.9
90°-180°	39.0	3.0
0°-180°	1316.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	444	444	444	444	444	
5°	446	444	442	446	445	42
15°	426	428	425	426	425	120
25°	388	389	387	390	390	179
35°	334	335	336	342	346	209
45°	267	270	288	302	300	206
55°	198	210	241	252	257	178
65°	132	164	180	178	176	130
75°	71	99	93	91	90	76
85°	20	30	31	30	28	21
90°	8	16	18	17	16	5
95°	8	12	13	12	11	6
105°	6	9	12	10	8	6
115°	3	6	10	9	8	3
125°	1	2	7	8	7	1
135°	0	0	3	5	5	0
145°	0	0	1	2	3	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°	444.3	444.3	444.3	444.3	444.3
2.5°	446.4	444.8	442.4	445.6	444.8
5°	445.6	443.7	441.9	445.8	444.8
7.5°	442.1	441.8	440.5	443.7	442.9
10°	437.4	438.4	436.3	438.9	438.7
12.5°	432.0	434.4	432.0	432.6	431.7
15°	426.2	427.7	425.0	425.8	425.3
17.5°	418.2	420.3	415.8	419.8	418.2
20°	409.1	411.2	406.6	411.0	409.9
22.5°	398.9	400.8	397.9	401.1	400.3
25°	388.2	389.4	387.4	390.2	389.8
27.5°	374.9	377.9	375.2	378.7	377.3
30°	363.0	364.2	362.2	366.6	365.4
32.5°	348.8	349.6	349.6	353.4	355.4
35°	333.8	334.6	336.5	342.2	345.6
37.5°	317.9	319.7	321.4	332.8	336.5
40°	301.9	303.2	307.5	324.0	326.4
42.5°	285.3	286.6	296.5	314.6	315.4
45°	267.2	269.9	287.7	301.8	300.5
47.5°	250.1	253.4	278.7	285.4	286.7
50°	233.4	237.3	269.8	272.3	275.7
52.5°	215.5	222.9	257.0	260.5	267.5
55°	198.2	209.9	241.1	251.5	257.4
57.5°	181.8	197.0	223.8	240.0	241.6
60°	164.2	185.9	210.1	223.8	224.0
62.5°	147.4	175.4	196.5	201.8	199.5
65°	131.5	164.5	179.5	177.9	175.5
67.5°	115.4	150.6	158.6	155.0	153.4
70°	100.6	135.5	135.2	132.2	131.2
72.5°	86.6	116.8	113.6	110.9	110.1
75°	71.4	98.9	93.4	91.4	90.1
77.5°	57.6	80.3	73.0	72.2	71.2
80°	44.0	61.3	56.3	56.5	55.5
82.5°	30.4	44.0	41.3	41.0	39.8
85°	19.8	30.2	30.9	29.8	28.0
87.5°	10.7	21.1	22.6	21.8	20.5
90°	7.5	16.3	17.8	16.8	15.7
92.5°	7.5	13.8	15.0	13.6	12.6
95°	7.7	12.0	13.4	11.7	10.7
97.5°	7.7	10.9	12.5	10.6	9.4
100°	7.4	10.2	12.2	10.1	9.0
102.5°	6.9	9.6	12.0	9.8	8.6
105°	6.2	9.0	11.8	9.8	8.3
107.5°	5.4	8.3	11.7	9.6	8.3
110°	4.6	7.5	11.4	9.6	8.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	4.0	6.7	10.9	9.4	8.2
115°	3.2	5.8	10.2	9.1	8.0
117.5°	2.6	4.8	9.4	8.8	7.8
120°	2.1	3.8	8.6	8.5	7.7
122.5°	1.6	2.9	7.7	8.0	7.4
125°	1.3	2.1	6.7	7.5	7.2
127.5°	1.0	1.4	5.8	7.0	6.7
130°	0.8	0.8	4.8	6.4	6.2
132.5°	0.6	0.6	4.0	5.8	5.9
135°	0.5	0.5	3.2	5.0	5.3
137.5°	0.5	0.3	2.4	4.3	4.6
140°	0.3	0.3	1.8	3.5	3.8
142.5°	0.3	0.3	1.1	2.9	3.2
145°	0.3	0.2	0.6	2.1	2.6
147.5°	0.3	0.2	0.3	1.4	1.9
150°	0.2	0.2	0.2	1.0	1.3
152.5°	0.2	0.2	0.2	0.5	0.6
155°	0.2	0.2	0.2	0.2	0.3
157.5°	0.2	0.2	0.2	0.2	0.0
160°	0.2	0.2	0.2	0.2	0.0
162.5°	0.2	0.2	0.2	0.2	0.0
165°	0.2	0.2	0.2	0.2	0.0
167.5°	0.3	0.2	0.2	0.2	0.0
170°	0.3	0.2	0.2	0.2	0.0
172.5°	0.3	0.3	0.2	0.2	0.0
175°	0.3	0.3	0.2	0.2	0.2
177.5°	0.3	0.3	0.2	0.2	0.2
180°	0.2	0.2	0.2	0.2	0.2

(END OF REPORT)