

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: P397294

Luminaire Tested: **4VRVT2-LD5-8-FR50-UNV-LR63-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P397294
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-13)
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-FR50-UNV-LR63-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1300.0 lumens
Efficiency: N/A
Efficacy: 8.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4.17' x H: 0.17')
CIE Type: Direct

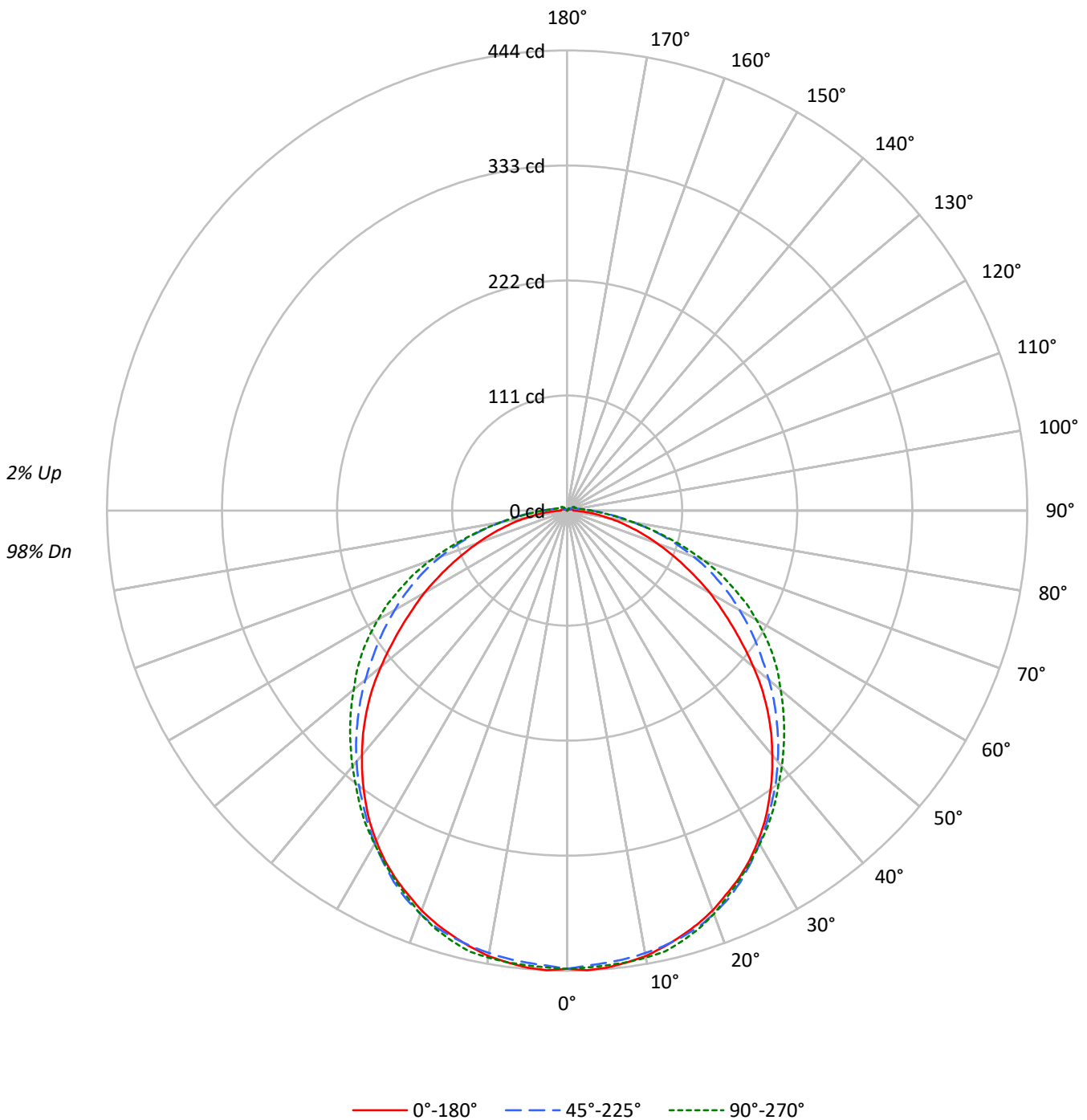
Input Watts (W): 151.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					98			
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	81					81			
2	98	89	82	76	95	87	81	75	83	78	73	80	75	71	76	72	69	67					67			
3	89	78	70	63	86	76	69	63	73	67	61	70	64	60	67	62	58	56					56			
4	81	69	60	54	79	68	60	53	65	58	52	62	56	51	60	55	50	48					48			
5	75	62	53	46	73	61	52	46	58	51	45	56	49	44	54	48	44	41					41			
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	49	43	38	36					36			
7	64	51	42	36	62	50	41	35	48	40	35	46	39	34	45	39	34	32					32			
8	60	46	38	32	58	45	37	32	44	36	31	42	36	31	41	35	30	29					29			
9	56	42	34	29	54	42	34	28	40	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2284	2284	2284
5°	2288	2220	2219
10°	2273	2174	2170
15°	2250	2130	2111
20°	2225	2077	2030
25°	2192	2007	1940
30°	2148	1922	1859
35°	2085	1832	1781
40°	2009	1746	1699
45°	1922	1652	1623
50°	1801	1554	1546
55°	1659	1457	1479
60°	1538	1363	1382
65°	1393	1264	1260
70°	1255	1135	1104
75°	1112	973	888
80°	958	770	665
85°	793	587	473



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.9	3.2
10°-20°	120.6	9.3
20°-30°	181.7	14.0
30°-40°	216.3	16.6
40°-50°	220.9	17.0
50°-60°	197.9	15.2
60°-70°	154.5	11.9
70°-80°	95.1	7.3
80°-90°	39.6	3.0
90°-100°	14.3	1.1
100°-110°	7.7	0.6
110°-120°	5.0	0.4
120°-130°	2.9	0.2
130°-140°	1.3	0.1
140°-150°	0.3	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	344.2	26.5
0°-40°	560.5	43.1
0°-60°	979.3	75.3
0°-90°	1268.5	97.6
90°-120°	27.0	2.1
90°-150°	31.5	2.4
90°-180°	32.0	2.5
0°-180°	1300.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	442	442	442	442	442	
5°	443	441	438	441	440	42
15°	425	425	426	431	430	120
25°	392	395	395	395	393	180
35°	340	347	344	348	348	212
45°	274	280	286	294	296	211
55°	195	206	223	238	242	175
65°	124	137	162	175	177	123
75°	64	78	97	102	100	69
85°	20	30	40	40	38	20
90°	6	16	24	24	23	4
95°	6	9	15	15	15	5
105°	4	4	8	9	9	5
115°	2	2	6	7	8	2
125°	1	1	3	5	6	1
135°	0	0	1	3	3	0
145°	0	0	0	1	1	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°	442.1	442.1	442.1	442.1	442.1
2.5°	444.0	442.4	439.4	442.3	441.3
5°	442.6	441.0	438.0	441.0	440.4
7.5°	439.9	438.8	436.2	439.9	439.6
10°	436.4	435.2	433.6	438.1	438.0
12.5°	431.1	430.6	430.4	436.0	435.7
15°	425.1	425.3	426.4	431.2	429.9
17.5°	418.4	419.4	421.3	424.2	422.9
20°	410.6	412.2	414.1	415.2	414.1
22.5°	401.0	403.9	405.8	405.0	403.5
25°	391.7	394.9	395.4	394.7	393.1
27.5°	380.8	384.8	383.4	384.2	382.4
30°	368.3	373.9	371.2	372.7	371.5
32.5°	355.1	361.6	357.9	360.3	360.7
35°	339.9	347.1	344.2	348.0	348.3
37.5°	324.5	332.0	330.7	335.5	334.7
40°	307.9	316.2	316.2	321.5	322.3
42.5°	291.4	298.4	301.5	307.7	309.3
45°	273.5	280.5	285.8	293.9	296.2
47.5°	255.1	262.9	270.4	279.4	282.7
50°	234.7	244.2	254.1	265.8	268.8
52.5°	214.3	224.8	237.8	251.9	256.2
55°	194.7	206.1	222.7	237.6	242.3
57.5°	176.2	187.9	207.4	223.1	227.1
60°	159.2	169.3	192.2	208.5	210.9
62.5°	141.0	153.0	177.3	192.3	195.1
65°	123.7	136.6	161.9	175.2	176.8
67.5°	107.4	120.6	146.4	158.1	160.0
70°	92.2	106.2	129.6	139.4	140.0
72.5°	78.2	92.0	113.0	120.8	119.7
75°	64.0	78.1	96.8	101.6	99.8
77.5°	52.0	64.8	80.5	84.0	81.3
80°	39.5	51.8	64.6	65.9	64.6
82.5°	29.0	40.5	51.5	51.8	49.9
85°	19.5	30.4	39.8	39.8	38.4
87.5°	11.0	22.2	30.4	30.7	29.1
90°	6.4	16.2	23.5	23.8	23.2
92.5°	5.9	11.7	18.4	18.9	18.2
95°	5.8	9.1	14.7	15.4	14.9
97.5°	5.6	7.4	12.3	12.8	12.5
100°	5.4	6.1	10.4	11.2	11.0
102.5°	5.0	5.3	9.1	9.9	9.8
105°	4.5	4.5	8.2	9.1	9.0
107.5°	4.0	3.8	7.4	8.6	8.5
110°	3.4	3.4	6.7	8.2	8.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.9	2.9	6.1	7.8	7.8
115°	2.4	2.2	5.6	7.4	7.7
117.5°	1.9	1.9	5.0	6.9	7.2
120°	1.6	1.4	4.3	6.4	6.9
122.5°	1.3	1.0	3.8	5.8	6.4
125°	1.1	0.6	3.2	5.3	5.8
127.5°	0.8	0.5	2.7	4.6	5.3
130°	0.6	0.5	2.2	4.0	4.6
132.5°	0.6	0.3	1.8	3.4	4.0
135°	0.5	0.3	1.3	2.9	3.4
137.5°	0.3	0.3	0.8	2.4	2.9
140°	0.3	0.3	0.5	1.8	2.2
142.5°	0.3	0.2	0.2	1.3	1.8
145°	0.2	0.2	0.2	0.8	1.1
147.5°	0.2	0.2	0.2	0.3	0.6
150°	0.2	0.2	0.2	0.0	0.2
152.5°	0.2	0.2	0.2	0.0	0.0
155°	0.2	0.2	0.2	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)