

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: P397204

Luminaire Tested: **2VRVT2-LD5-4-DR100-UNV-LR63-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P397204
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-2)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 2VRVT2-LD5-4-DR100-UNV-LR63-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 648.7 lumens
Efficiency: N/A
Efficacy: 8.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 2.08' x H: 0.17')
CIE Type: Direct

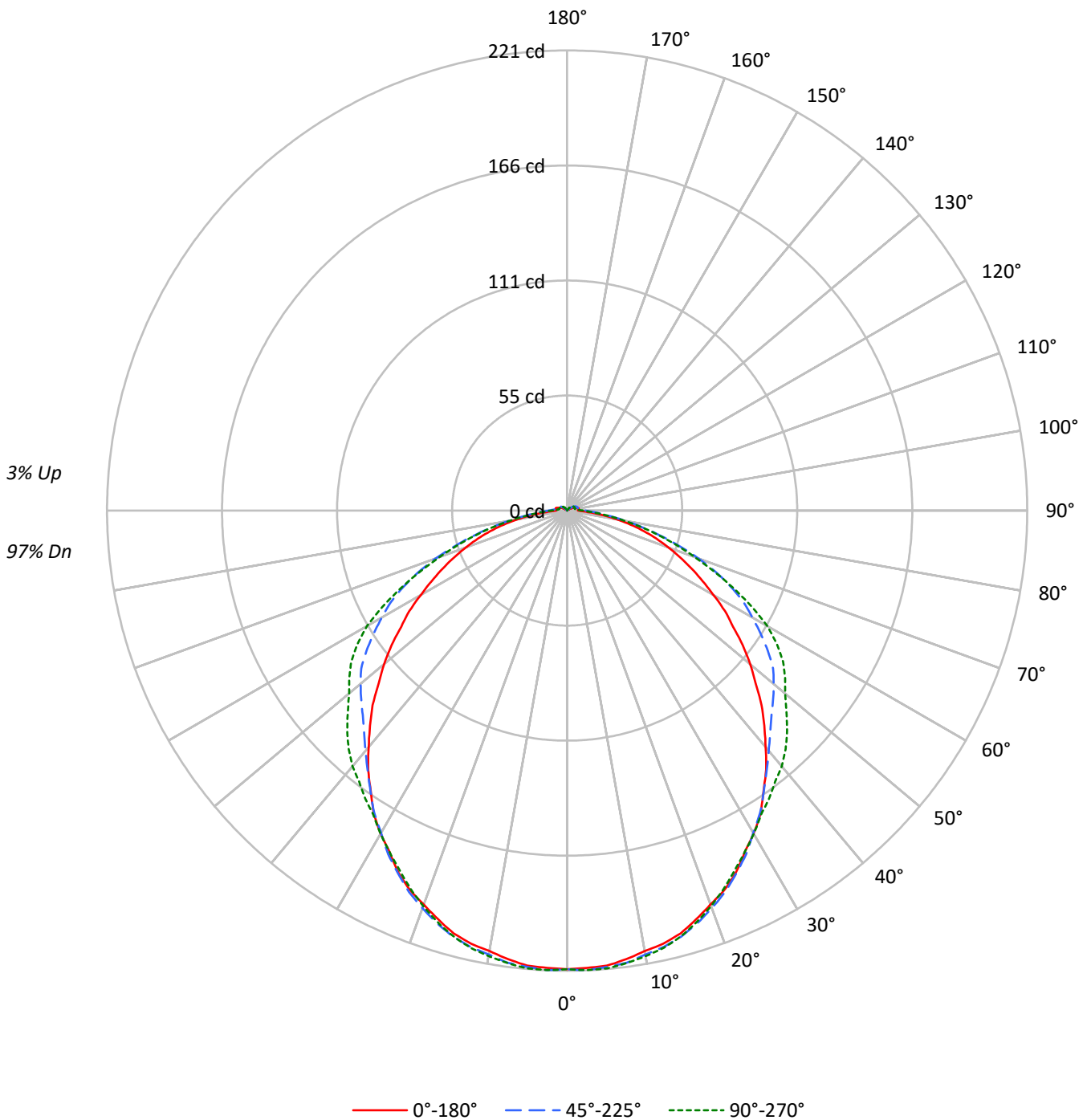
Input Watts (W): 74.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	100	96	92	95	92	89	91	88	85	87	84	82	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	55
4	81	69	60	53	79	67	59	53	64	57	52	62	56	51	59	54	50	47
5	75	62	52	46	72	60	52	45	58	50	44	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°	2276	2276	2276
5°	2260	2225	2224
10°	2222	2160	2154
15°	2203	2101	2078
20°	2151	2020	1982
25°	2108	1929	1880
30°	2043	1824	1794
35°	1964	1724	1728
40°	1875	1631	1690
45°	1787	1570	1637
50°	1685	1544	1573
55°	1573	1496	1545
60°	1474	1411	1454
65°	1377	1306	1255
70°	1281	1124	1025
75°	1174	882	804
80°	995	634	568
85°	731	426	360



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.9	3.2
10°-20°	59.5	9.2
20°-30°	88.3	13.6
30°-40°	104.0	16.0
40°-50°	108.0	16.6
50°-60°	101.3	15.6
60°-70°	81.5	12.6
70°-80°	48.3	7.5
80°-90°	17.7	2.7
90°-100°	6.6	1.0
100°-110°	5.1	0.8
110°-120°	3.9	0.6
120°-130°	2.3	0.4
130°-140°	1.1	0.2
140°-150°	0.2	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	168.7	26.0
0°-40°	272.7	42.0
0°-60°	481.9	74.3
0°-90°	629.5	97.0
90°-120°	15.6	2.4
90°-150°	19.2	3.0
90°-180°	19.0	2.9
0°-180°	648.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	220	220	220	220	220	
5°	219	219	220	221	221	21
15°	210	210	212	212	212	59
25°	192	192	192	192	190	88
35°	164	166	165	167	169	103
45°	132	132	139	148	149	102
55°	97	101	118	123	127	88
65°	66	78	87	90	88	65
75°	38	48	46	46	45	40
85°	12	16	16	15	15	12
90°	5	9	9	8	8	3
95°	6	6	6	6	5	5
105°	5	5	5	4	4	5
115°	3	3	5	4	4	3
125°	1	2	3	3	3	1
135°	1	0	2	2	2	0
145°	0	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°	220.3	220.3	220.3	220.3	220.3
2.5°	219.8	220.3	220.9	220.9	220.9
5°	219.4	219.4	220.0	220.7	220.7
7.5°	217.3	217.7	219.0	219.0	219.2
10°	214.8	216.0	216.5	217.3	217.3
12.5°	213.1	213.5	214.6	215.0	215.0
15°	210.3	210.5	211.8	211.8	211.6
17.5°	205.9	206.5	207.8	207.8	207.2
20°	201.3	202.8	203.2	202.5	202.1
22.5°	197.3	197.7	198.3	197.3	196.6
25°	191.8	191.8	192.2	191.6	190.5
27.5°	184.8	186.3	186.1	185.7	184.8
30°	179.1	180.0	178.7	178.9	179.3
32.5°	172.8	173.2	172.4	172.8	173.2
35°	164.4	165.6	164.6	166.9	169.0
37.5°	157.0	157.8	157.4	162.0	164.1
40°	148.3	149.2	150.6	157.4	160.3
42.5°	140.1	140.3	144.3	153.0	155.3
45°	132.1	131.9	138.8	148.1	149.4
47.5°	122.8	123.4	134.2	142.2	142.8
50°	114.8	115.8	129.5	134.8	136.7
52.5°	106.3	108.0	124.7	128.7	131.9
55°	97.3	100.6	117.7	123.2	126.6
57.5°	89.9	94.1	110.3	116.9	119.4
60°	81.2	88.4	102.8	109.1	111.0
62.5°	73.4	82.9	95.6	99.8	100.0
65°	66.0	77.6	86.9	89.5	88.0
67.5°	58.7	71.7	77.4	77.6	76.2
70°	51.7	64.8	67.1	66.2	65.0
72.5°	44.9	56.8	56.5	55.5	55.1
75°	38.2	48.5	46.2	46.0	45.2
77.5°	31.2	39.9	36.9	36.7	36.1
80°	24.3	30.6	28.3	28.5	27.6
82.5°	17.5	23.2	21.1	21.3	20.5
85°	11.8	16.2	15.6	15.2	14.6
87.5°	7.0	11.4	11.4	11.2	10.3
90°	5.3	8.9	8.9	8.2	7.6
92.5°	5.1	7.2	7.2	6.5	5.9
95°	5.5	6.3	6.1	5.5	4.8
97.5°	5.7	5.9	5.7	4.8	4.4
100°	5.7	5.5	5.5	4.4	4.0
102.5°	5.5	5.3	5.3	4.4	3.8
105°	5.1	5.1	5.3	4.4	3.8
107.5°	4.6	4.8	5.1	4.4	3.8
110°	4.0	4.4	5.1	4.4	3.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	3.6	4.0	4.8	4.2	3.8
115°	3.0	3.4	4.6	4.2	3.8
117.5°	2.5	3.0	4.2	4.0	3.8
120°	2.1	2.3	4.0	4.0	3.6
122.5°	1.7	1.9	3.6	3.8	3.6
125°	1.3	1.5	3.0	3.4	3.4
127.5°	1.1	1.1	2.5	3.2	3.2
130°	0.8	0.8	2.1	3.0	3.0
132.5°	0.6	0.6	1.7	2.5	2.7
135°	0.6	0.4	1.5	2.1	2.3
137.5°	0.4	0.4	1.1	1.9	2.1
140°	0.4	0.4	0.8	1.5	1.7
142.5°	0.4	0.2	0.4	1.3	1.5
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	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)