

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: P397223

Luminaire Tested: **2VRVT2-LD5-5-FR50-UNV-LA59-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P397223
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-3)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 2VRVT2-LD5-5-FR50-UNV-LA59-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1426.7 lumens
Efficiency: N/A
Efficacy: 23.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 2.08' x H: 0.17')
CIE Type: Direct

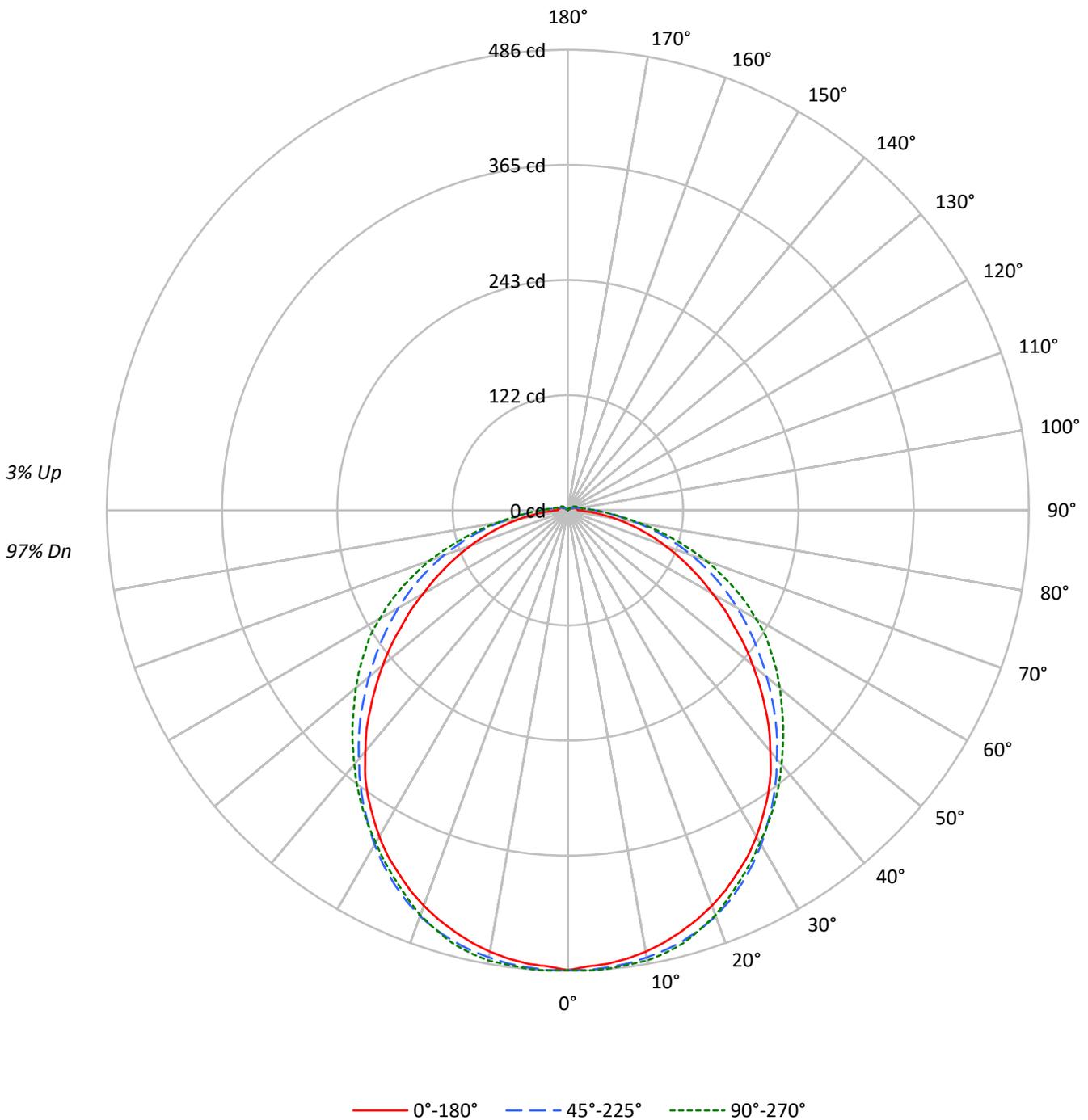
Input Watts (W): 59.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	99	99	99	99	99	99	99	99	99	97		
1	107	102	98	94	104	100	96	92	95	92	89	91	88	85	87	84	82	87	84	82	87	84	82	80		
2	98	89	82	76	95	87	80	75	83	77	73	79	75	71	76	72	69	76	72	69	76	72	69	66		
3	89	78	70	63	86	76	69	62	73	66	61	70	64	59	67	62	58	67	62	58	67	62	58	56		
4	81	69	60	53	79	68	59	53	65	57	52	62	56	51	60	54	50	60	54	50	60	54	50	47		
5	75	62	53	46	72	60	52	46	58	51	45	56	49	44	54	48	43	54	48	43	54	48	43	41		
6	69	56	47	40	67	54	46	40	52	45	39	50	44	39	49	43	38	49	43	38	49	43	38	36		
7	64	50	42	35	62	49	41	35	48	40	35	46	39	34	44	38	34	44	38	34	44	38	34	32		
8	60	46	37	32	58	45	37	31	44	36	31	42	36	31	41	35	30	41	35	30	41	35	30	28		
9	56	42	34	28	54	42	34	28	40	33	28	39	32	28	38	32	27	38	32	27	38	32	27	26		
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	29	25	35	29	25	35	29	25	23		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5014	5014	5014
5°	4950	4898	4895
10°	4894	4781	4781
15°	4822	4665	4641
20°	4744	4529	4459
25°	4643	4356	4247
30°	4534	4159	4053
35°	4391	3943	3879
40°	4195	3712	3691
45°	3977	3494	3519
50°	3737	3264	3355
55°	3465	3045	3193
60°	3200	2831	2998
65°	2955	2600	2753
70°	2695	2333	2440
75°	2423	1997	2019
80°	2092	1617	1563
85°	1654	1254	1144



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.0	3.2
10°-20°	132.1	9.3
20°-30°	198.4	13.9
30°-40°	235.0	16.5
40°-50°	238.6	16.7
50°-60°	214.2	15.0
60°-70°	168.2	11.8
70°-80°	106.6	7.5
80°-90°	47.1	3.3
90°-100°	18.1	1.3
100°-110°	10.2	0.7
110°-120°	6.5	0.5
120°-130°	3.7	0.3
130°-140°	1.6	0.1
140°-150°	0.4	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	376.5	26.4
0°-40°	611.4	42.9
0°-60°	1064.2	74.6
0°-90°	1386.1	97.2
90°-120°	34.8	2.4
90°-150°	40.5	2.8
90°-180°	41.0	2.9
0°-180°	1426.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	485	485	485	485	485	
5°	480	482	484	486	486	46
15°	460	464	470	473	473	130
25°	422	430	434	432	430	195
35°	368	376	376	378	379	229
45°	294	303	309	317	321	227
55°	214	224	240	256	262	193
65°	142	150	173	189	193	141
75°	79	88	105	114	114	84
85°	27	36	46	48	46	27
90°	11	20	28	29	29	7
95°	10	12	18	19	18	8
105°	8	7	10	11	11	9
115°	5	4	7	8	9	5
125°	2	1	4	6	7	2
135°	1	1	1	3	4	1
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°	485.2	485.2	485.2	485.2	485.2
2.5°	481.9	483.4	485.7	486.2	486.2
5°	480.5	482.4	484.3	485.7	485.7
7.5°	477.3	479.1	482.4	483.8	483.8
10°	473.0	475.4	479.1	481.9	482.4
12.5°	467.4	470.2	475.4	478.2	478.2
15°	460.4	464.1	470.2	473.0	472.6
17.5°	452.9	457.1	463.7	465.1	463.7
20°	444.0	449.1	455.7	456.6	454.7
22.5°	434.1	440.2	445.8	444.4	442.6
25°	422.4	429.9	434.1	431.8	430.4
27.5°	411.2	418.2	421.5	418.7	418.2
30°	397.5	405.5	407.4	405.5	405.0
32.5°	382.6	391.9	391.9	391.9	392.4
35°	367.6	375.5	376.5	377.9	379.3
37.5°	351.1	359.1	360.1	363.8	365.2
40°	331.9	340.8	342.7	348.3	350.2
42.5°	314.1	322.1	326.3	333.3	335.7
45°	293.9	302.8	309.0	317.4	321.1
47.5°	274.3	283.2	291.1	301.9	305.7
50°	254.6	263.5	273.8	286.4	291.6
52.5°	235.3	242.8	256.5	271.4	277.1
55°	214.3	223.6	239.6	256.0	261.6
57.5°	196.4	203.9	222.7	240.5	247.5
60°	176.3	184.7	206.3	224.1	228.8
62.5°	158.9	167.4	189.4	207.2	211.9
65°	141.6	149.5	173.0	188.9	193.1
67.5°	125.2	134.1	155.7	171.6	173.5
70°	108.8	118.1	139.2	152.8	154.7
72.5°	93.8	102.7	121.9	133.1	133.6
75°	78.8	87.7	104.6	113.5	113.5
77.5°	64.2	73.6	88.1	95.2	94.2
80°	51.1	59.5	72.2	75.9	75.9
82.5°	38.0	46.9	57.7	61.4	59.5
85°	26.7	36.1	45.9	47.8	46.4
87.5°	17.4	27.2	35.6	37.0	36.1
90°	11.3	20.2	28.1	29.1	28.6
92.5°	10.3	15.5	22.0	23.0	22.5
95°	9.9	12.2	17.8	18.8	18.3
97.5°	9.9	10.3	15.0	15.9	15.5
100°	9.4	8.9	12.7	13.6	13.1
102.5°	9.4	8.0	11.3	12.2	11.7
105°	8.4	7.0	9.9	11.3	10.8
107.5°	8.0	6.1	8.9	10.3	10.3
110°	7.0	5.2	8.0	9.9	9.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	6.1	4.7	7.5	9.4	9.4
115°	5.2	4.2	6.6	8.4	8.9
117.5°	4.2	3.3	5.6	8.0	8.4
120°	3.8	2.8	5.2	7.5	8.0
122.5°	3.3	2.4	4.7	6.6	7.5
125°	2.4	1.4	3.8	6.1	6.6
127.5°	2.4	1.4	3.3	5.2	6.1
130°	1.9	1.4	2.8	4.7	5.2
132.5°	1.4	0.9	1.9	3.8	4.7
135°	0.9	0.9	1.4	3.3	3.8
137.5°	0.9	0.5	0.9	2.8	3.3
140°	0.5	0.5	0.5	1.9	2.4
142.5°	0.5	0.5	0.0	1.4	1.9
145°	0.5	0.5	0.0	0.9	1.4
147.5°	0.5	0.5	0.0	0.5	0.9
150°	0.5	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)