

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: P397279

Luminaire Tested: **4VRVT2-LD5-6-FR50-UNV-LR63-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P397279
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 4VRVT2-LD5-6-FR50-UNV-LR63-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 981.8 lumens
Efficiency: N/A
Efficacy: 7.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4.17' x H: 0.17')
CIE Type: Direct

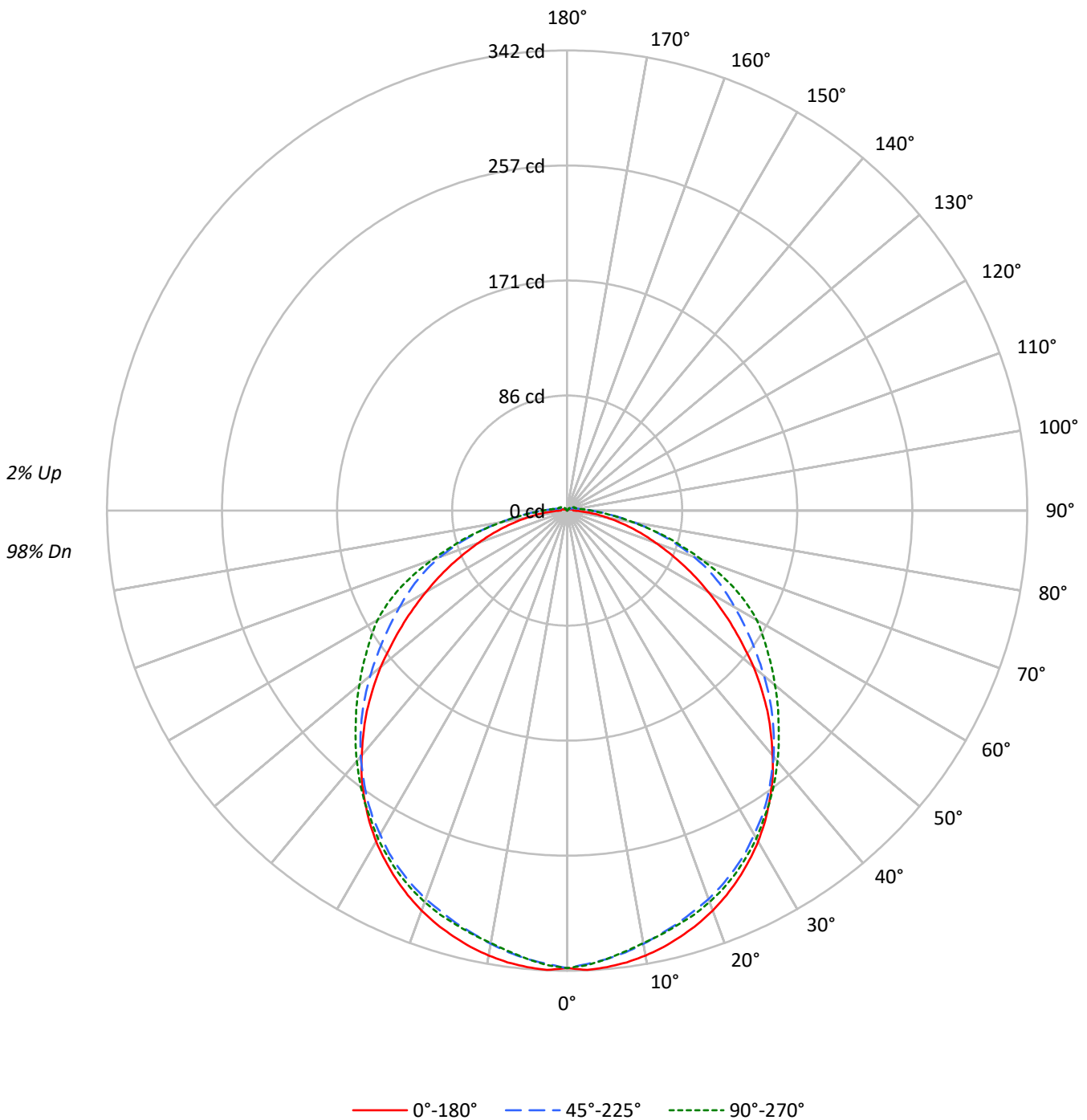
Input Watts (W): 131.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	80					80			
2	98	89	82	76	95	87	81	75	83	78	73	79	75	71	76	72	69	67					67			
3	89	78	70	63	86	76	69	62	73	66	61	70	64	60	67	62	58	56					56			
4	81	69	60	53	79	68	59	53	65	58	52	62	56	51	60	54	50	48					48			
5	75	62	53	46	73	61	52	46	58	51	45	56	49	44	54	48	43	41					41			
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	49	43	38	36					36			
7	64	50	42	35	62	50	41	35	48	40	35	46	39	34	45	39	34	32					32			
8	60	46	37	32	58	45	37	31	44	36	31	42	36	31	41	35	30	28					28			
9	56	42	34	28	54	42	34	28	40	33	28	39	32	28	38	32	27	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°	1757	1757	1757
5°	1760	1697	1687
10°	1749	1639	1617
15°	1733	1587	1565
20°	1714	1541	1518
25°	1688	1493	1466
30°	1656	1439	1408
35°	1611	1383	1345
40°	1550	1318	1282
45°	1478	1247	1218
50°	1389	1168	1160
55°	1279	1089	1108
60°	1170	1021	1067
65°	1065	962	981
70°	950	876	837
75°	851	751	689
80°	732	598	511
85°	610	452	362



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.9	3.2
10°-20°	90.5	9.2
20°-30°	136.6	13.9
30°-40°	163.0	16.6
40°-50°	166.2	16.9
50°-60°	148.8	15.2
60°-70°	117.6	12.0
70°-80°	72.8	7.4
80°-90°	30.6	3.1
90°-100°	10.9	1.1
100°-110°	5.8	0.6
110°-120°	3.8	0.4
120°-130°	2.2	0.2
130°-140°	1.0	0.1
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°	259.0	26.4
0°-40°	422.0	43.0
0°-60°	736.9	75.1
0°-90°	957.9	97.6
90°-120°	20.5	2.1
90°-150°	23.9	2.4
90°-180°	24.0	2.4
0°-180°	981.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	340	340	340	340	340	
5°	341	338	335	336	335	32
15°	328	322	318	320	319	92
25°	302	295	294	297	297	139
35°	262	258	260	263	263	164
45°	210	209	216	221	222	162
55°	150	153	166	178	182	134
65°	95	101	123	136	138	94
75°	49	59	75	78	77	52
85°	15	24	31	31	29	16
90°	5	12	18	18	18	3
95°	4	7	11	12	11	4
105°	4	3	6	7	7	4
115°	2	2	4	6	6	2
125°	1	0	3	4	4	1
135°	0	0	1	2	3	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°	340.0	340.0	340.0	340.0	340.0
2.5°	341.7	339.8	337.3	339.0	338.2
5°	340.6	338.1	334.7	335.8	334.7
7.5°	338.7	335.5	331.2	331.7	330.5
10°	335.8	332.0	327.0	327.5	326.4
12.5°	332.1	327.5	322.1	323.8	322.7
15°	327.5	322.2	317.6	319.5	318.7
17.5°	322.4	316.6	312.3	315.3	314.7
20°	316.3	309.9	307.2	310.1	309.6
22.5°	309.4	302.5	301.1	304.3	303.8
25°	301.6	295.2	294.2	297.4	297.1
27.5°	293.1	286.4	286.9	289.6	289.4
30°	284.0	278.1	277.9	281.6	281.4
32.5°	273.7	267.8	269.4	272.3	271.8
35°	262.5	257.7	259.8	263.0	263.0
37.5°	250.9	246.4	249.1	252.5	253.3
40°	237.6	234.2	238.7	242.7	243.2
42.5°	224.1	221.9	227.3	231.8	232.8
45°	210.4	208.8	215.7	221.1	222.2
47.5°	195.7	195.7	203.5	210.1	212.1
50°	181.1	181.1	191.0	199.2	201.6
52.5°	164.9	167.2	178.5	188.3	191.8
55°	150.1	153.4	166.5	178.4	181.6
57.5°	135.4	139.5	154.9	168.6	172.3
60°	121.1	126.7	144.0	158.7	162.9
62.5°	107.7	113.6	133.6	148.0	150.9
65°	94.6	101.1	123.2	135.8	137.6
67.5°	81.9	90.4	112.3	121.9	122.6
70°	69.8	79.7	100.0	107.2	106.2
72.5°	59.2	69.1	87.4	92.3	90.7
75°	49.0	59.2	74.7	77.6	77.4
77.5°	39.4	49.4	62.4	64.0	62.4
80°	30.2	40.3	50.2	51.0	49.6
82.5°	22.6	31.2	39.5	40.0	39.2
85°	15.0	23.5	30.6	30.7	29.4
87.5°	9.1	17.1	23.4	23.7	22.7
90°	5.0	12.3	18.2	18.4	17.8
92.5°	4.6	9.0	14.1	14.4	14.1
95°	4.5	6.9	11.4	11.7	11.4
97.5°	4.5	5.6	9.3	9.8	9.4
100°	4.2	4.6	7.8	8.3	8.2
102.5°	4.0	3.8	6.9	7.5	7.2
105°	3.5	3.4	6.1	6.9	6.7
107.5°	3.2	2.9	5.6	6.4	6.2
110°	2.7	2.6	5.1	6.1	6.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.2	2.1	4.6	5.8	5.8
115°	1.9	1.8	4.2	5.6	5.6
117.5°	1.6	1.4	3.8	5.3	5.4
120°	1.3	1.1	3.4	4.8	5.1
122.5°	1.1	0.8	2.9	4.5	4.8
125°	0.8	0.5	2.6	4.0	4.5
127.5°	0.6	0.5	2.1	3.5	4.0
130°	0.5	0.3	1.8	3.2	3.5
132.5°	0.5	0.3	1.3	2.7	3.0
135°	0.3	0.3	1.0	2.2	2.7
137.5°	0.3	0.2	0.6	1.8	2.2
140°	0.3	0.2	0.3	1.4	1.8
142.5°	0.2	0.2	0.2	1.0	1.3
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)