

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: P397242

Luminaire Tested: **4VRVT2-LD5-11-DR100-UNV-LG52-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P397242
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-12)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 4VRVT2-LD5-11-DR100-UNV-LG52-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8616.8 lumens
Efficiency: N/A
Efficacy: 43.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4.17' x H: 0.17')
CIE Type: Direct

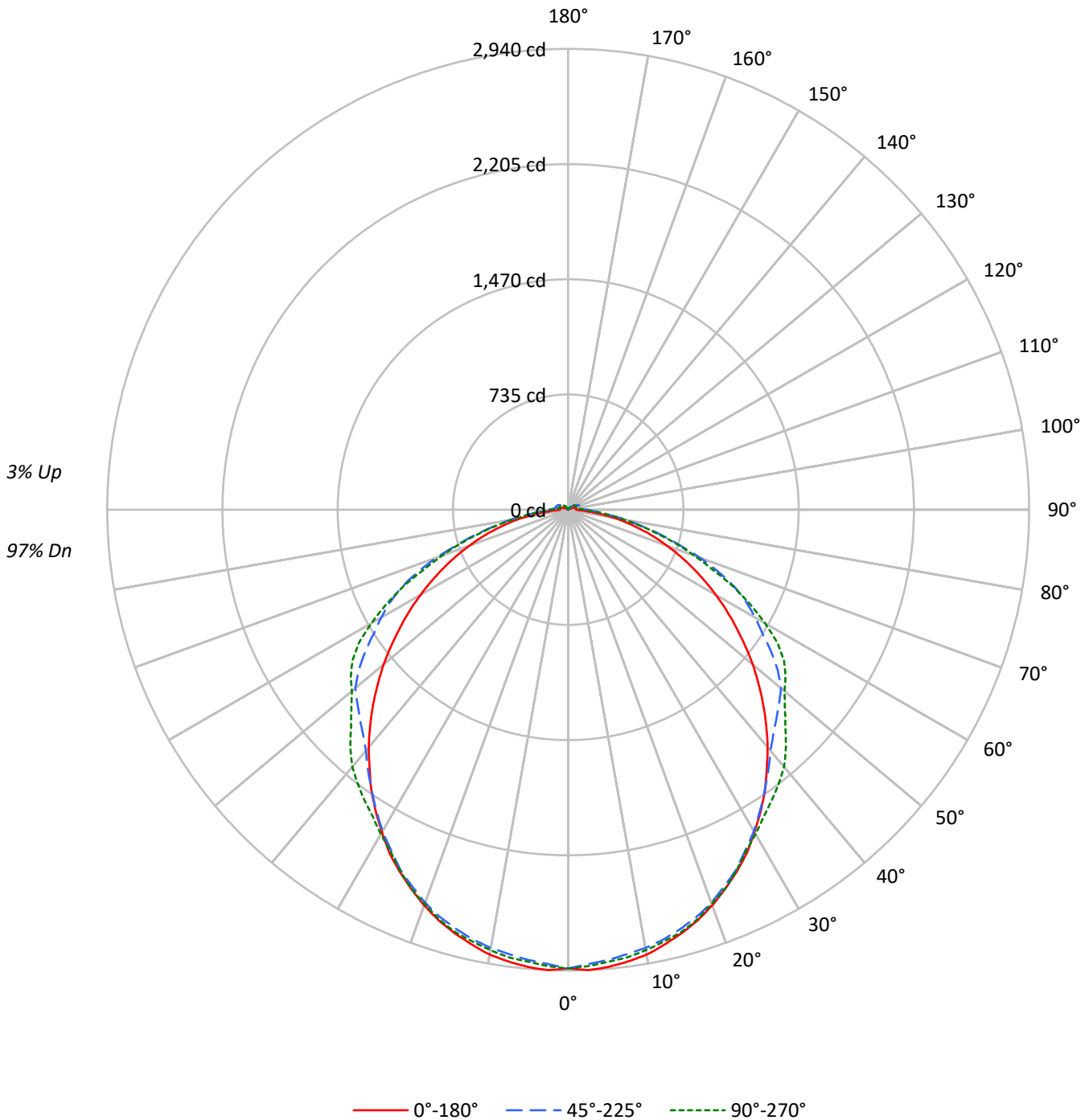
Input Watts (W): 196.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	15121	15121	15121
5°	15136	14619	14590
10°	15017	14231	14139
15°	14802	13826	13693
20°	14557	13385	13125
25°	14248	12859	12531
30°	13847	12260	11958
35°	13421	11633	11576
40°	12909	11079	11291
45°	12363	10861	10732
50°	11792	10836	10358
55°	11146	10342	10254
60°	10508	9764	9494
65°	9818	9166	8266
70°	9095	7809	6744
75°	8264	6077	5209
80°	7101	4448	3681
85°	5020	2947	2371



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	275.6	3.2
10°-20°	784.6	9.1
20°-30°	1168.5	13.6
30°-40°	1382.7	16.0
40°-50°	1444.0	16.8
50°-60°	1358.5	15.8
60°-70°	1089.5	12.6
70°-80°	632.3	7.3
80°-90°	225.2	2.6
90°-100°	87.9	1.0
100°-110°	66.1	0.8
110°-120°	50.3	0.6
120°-130°	30.8	0.4
130°-140°	15.1	0.2
140°-150°	4.9	0.1
150°-160°	0.6	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2228.8	25.9
0°-40°	3611.5	41.9
0°-60°	6414.0	74.4
0°-90°	8361.1	97.0
90°-120°	204.3	2.4
90°-150°	255.1	3.0
90°-180°	256.0	3.0
0°-180°	8616.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2927	2927	2927	2927	2927	
5°	2929	2913	2884	2898	2895	278
15°	2797	2776	2768	2796	2789	789
25°	2546	2531	2533	2551	2540	1172
35°	2187	2184	2185	2233	2264	1366
45°	1760	1769	1879	1972	1958	1357
55°	1308	1373	1581	1638	1680	1171
65°	872	1085	1174	1166	1160	866
75°	476	652	604	593	586	505
85°	123	202	200	196	192	138
90°	50	108	120	113	107	30
95°	51	79	89	78	71	41
105°	42	60	78	64	55	44
115°	22	38	68	61	52	22
125°	8	15	45	49	47	8
135°	4	3	21	33	34	3
145°	2	2	4	15	17	1
155°	1	1	1	1	2	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°	2926.6	2926.6	2926.6	2926.6	2926.6
2.5°	2940.2	2924.5	2901.5	2922.4	2915.1
5°	2928.7	2913.0	2883.8	2898.4	2895.2
7.5°	2907.8	2886.9	2860.7	2883.8	2881.6
10°	2882.6	2858.6	2838.8	2860.7	2853.4
12.5°	2840.9	2822.0	2807.4	2833.5	2822.0
15°	2797.0	2776.0	2767.7	2795.9	2788.6
17.5°	2746.7	2730.0	2723.8	2739.4	2740.5
20°	2686.1	2673.5	2668.3	2689.3	2676.7
22.5°	2617.1	2599.4	2600.4	2622.3	2616.1
25°	2546.0	2531.4	2533.4	2551.2	2539.8
27.5°	2468.6	2451.9	2447.7	2466.6	2455.0
30°	2374.6	2371.4	2368.2	2383.9	2390.2
32.5°	2283.5	2282.5	2276.2	2298.2	2320.2
35°	2187.4	2184.2	2185.3	2233.4	2263.7
37.5°	2080.7	2083.8	2096.4	2173.8	2204.1
40°	1978.2	1979.3	2006.5	2122.6	2142.4
42.5°	1869.5	1871.6	1937.4	2059.8	2055.6
45°	1759.7	1769.1	1878.9	1972.0	1958.4
47.5°	1645.8	1663.5	1824.6	1873.7	1874.7
50°	1537.0	1560.0	1772.2	1783.8	1800.5
52.5°	1421.0	1465.9	1684.4	1700.2	1747.2
55°	1308.0	1372.9	1581.0	1638.4	1680.2
57.5°	1197.2	1292.3	1469.0	1560.0	1583.0
60°	1087.4	1220.2	1377.0	1451.3	1449.2
62.5°	979.7	1151.2	1280.9	1315.4	1310.1
65°	872.0	1085.3	1174.2	1165.8	1159.5
67.5°	772.7	995.4	1038.2	1003.8	993.3
70°	668.2	886.6	891.9	857.4	855.3
72.5°	574.0	769.5	738.2	721.4	722.5
75°	475.8	652.5	604.3	592.9	585.5
77.5°	383.8	523.8	476.8	474.7	470.5
80°	292.8	403.6	373.3	363.8	357.6
82.5°	203.9	291.7	272.9	272.9	268.7
85°	123.4	201.8	199.7	195.5	192.4
87.5°	69.0	139.0	149.5	145.4	137.0
90°	50.2	107.7	120.2	113.0	106.6
92.5°	50.2	91.0	100.4	92.0	84.7
95°	51.2	79.4	88.9	78.4	71.1
97.5°	51.2	73.2	83.7	71.1	63.8
100°	49.1	68.0	80.5	66.9	58.6
102.5°	46.0	63.8	78.4	64.8	56.5
105°	41.8	59.6	78.4	63.8	55.4
107.5°	36.6	55.4	76.3	63.8	54.4
110°	31.4	50.2	75.3	62.7	54.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	27.2	43.9	72.2	61.7	53.4
115°	21.9	37.7	68.0	60.6	52.2
117.5°	17.8	31.4	62.7	58.6	51.2
120°	14.6	25.1	56.5	55.4	50.2
122.5°	10.5	18.8	51.2	53.4	49.1
125°	8.4	14.6	45.0	49.1	47.0
127.5°	7.3	9.4	38.7	46.0	45.0
130°	5.2	6.2	32.4	41.8	41.8
132.5°	4.2	4.2	26.2	37.7	38.7
135°	4.2	3.1	20.9	33.4	34.5
137.5°	3.1	3.1	16.7	28.2	30.3
140°	2.1	2.1	11.5	23.0	26.2
142.5°	2.1	2.1	7.3	18.8	20.9
145°	2.1	2.1	4.2	14.6	16.7
147.5°	2.1	1.0	2.1	10.5	12.6
150°	2.1	1.0	1.0	6.2	8.4
152.5°	1.0	1.0	1.0	3.1	5.2
155°	1.0	1.0	1.0	1.0	2.1
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)