

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: P397263

Luminaire Tested: **4VRVT2-LD5-4-FR50-UNV-LG52-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P397263
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-LD5-4-FR50-UNV-LG52-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3280.0 lumens
Efficiency: N/A
Efficacy: 46.1 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

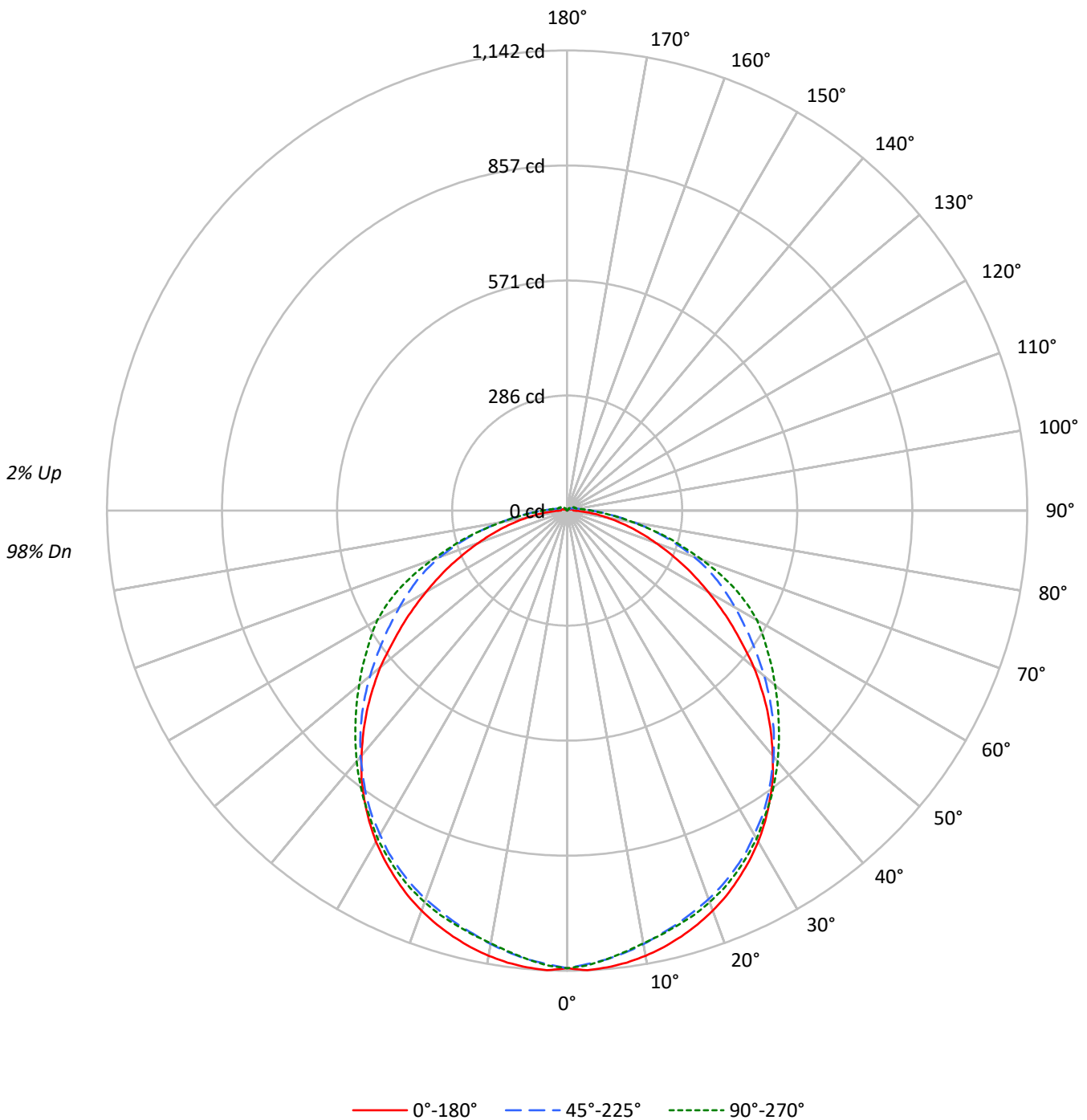
Input Watts (W): 71.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	110	110	105	105	105	100	100	100	98
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	81	75	83	78	73	79	75	71	76	72	69	67
3	89	78	70	63	86	76	69	62	73	66	61	70	64	60	67	62	58	56
4	81	69	60	53	79	68	59	53	65	58	52	62	56	51	60	54	50	48
5	75	62	53	46	73	61	52	46	58	51	45	56	49	44	54	48	43	41
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	49	43	38	36
7	64	50	42	35	62	50	41	35	48	40	35	46	39	34	45	39	34	32
8	60	46	37	32	58	45	37	31	44	36	31	42	36	31	41	35	30	28
9	56	42	34	28	54	42	34	28	40	33	28	39	32	28	38	32	27	26
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5868	5868	5868
5°	5882	5669	5635
10°	5845	5477	5403
15°	5791	5300	5229
20°	5727	5148	5072
25°	5639	4990	4897
30°	5533	4807	4704
35°	5381	4621	4493
40°	5180	4403	4282
45°	4938	4166	4069
50°	4642	3902	3874
55°	4272	3640	3702
60°	3910	3411	3565
65°	3557	3213	3277
70°	3171	2925	2799
75°	2842	2510	2301
80°	2449	1999	1706
85°	2042	1507	1211



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.6	3.2
10°-20°	302.4	9.2
20°-30°	456.3	13.9
30°-40°	544.5	16.6
40°-50°	555.2	16.9
50°-60°	497.0	15.2
60°-70°	392.9	12.0
70°-80°	243.1	7.4
80°-90°	102.3	3.1
90°-100°	36.4	1.1
100°-110°	19.3	0.6
110°-120°	12.7	0.4
120°-130°	7.4	0.2
130°-140°	3.3	0.1
140°-150°	0.5	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	865.3	26.4
0°-40°	1409.8	43.0
0°-60°	2462.1	75.1
0°-90°	3200.4	97.6
90°-120°	68.5	2.1
90°-150°	79.6	2.4
90°-180°	80.0	2.4
0°-180°	3280.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1136	1136	1136	1136	1136	
5°	1138	1129	1118	1122	1118	108
15°	1094	1077	1061	1067	1065	309
25°	1008	986	983	994	993	464
35°	877	861	868	879	879	548
45°	703	698	721	739	742	541
55°	501	513	556	596	607	449
65°	316	338	412	454	460	314
75°	164	198	250	259	259	174
85°	50	79	102	103	98	52
90°	17	41	61	61	59	11
95°	15	23	38	39	38	12
105°	12	11	20	23	22	13
115°	6	6	14	19	19	6
125°	3	2	9	13	15	3
135°	1	1	3	8	9	1
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°	1135.8	1135.8	1135.8	1135.8	1135.8
2.5°	1141.8	1135.4	1126.8	1132.6	1130.0
5°	1138.0	1129.4	1118.2	1122.0	1118.2
7.5°	1131.6	1120.9	1106.5	1108.1	1104.3
10°	1122.0	1109.1	1092.6	1094.2	1090.4
12.5°	1109.7	1094.2	1076.0	1081.8	1078.2
15°	1094.2	1076.6	1061.0	1067.4	1064.8
17.5°	1077.0	1057.8	1043.4	1053.5	1051.4
20°	1056.7	1035.4	1026.3	1035.9	1034.3
22.5°	1033.8	1010.8	1006.0	1016.6	1015.0
25°	1007.6	986.2	983.0	993.7	992.6
27.5°	979.3	956.8	958.4	967.5	967.0
30°	948.8	929.0	928.5	940.8	940.2
32.5°	914.6	894.8	900.2	909.8	908.2
35°	877.1	861.1	868.1	878.7	878.7
37.5°	838.2	823.2	832.2	843.4	846.2
40°	793.8	782.6	797.5	810.9	812.5
42.5°	748.9	741.4	759.5	774.6	777.8
45°	702.9	697.5	720.6	738.7	742.5
47.5°	653.8	653.8	679.9	701.8	708.8
50°	605.1	605.1	638.2	665.5	673.5
52.5°	551.1	558.6	596.6	629.1	640.9
55°	501.4	512.6	556.4	596.0	606.7
57.5°	452.2	466.1	517.4	563.4	575.7
60°	404.6	423.4	481.0	530.2	544.2
62.5°	359.8	379.5	446.3	494.4	504.1
65°	315.9	337.8	411.6	453.8	459.7
67.5°	273.7	302.0	375.2	407.3	409.4
70°	233.0	266.2	334.1	358.2	355.0
72.5°	197.8	230.9	291.8	308.4	303.0
75°	163.6	197.8	249.6	259.3	258.7
77.5°	131.5	165.2	208.5	213.8	208.5
80°	101.0	134.7	167.8	170.5	165.7
82.5°	75.4	104.2	132.0	133.6	131.0
85°	50.2	78.6	102.1	102.6	98.3
87.5°	30.5	57.2	78.1	79.1	75.9
90°	16.6	41.1	61.0	61.4	59.4
92.5°	15.5	29.9	47.0	48.1	47.0
95°	15.0	23.0	37.9	39.0	37.9
97.5°	15.0	18.7	31.0	32.6	31.5
100°	13.9	15.5	26.2	27.8	27.3
102.5°	13.4	12.8	23.0	25.1	24.1
105°	11.8	11.2	20.3	23.0	22.5
107.5°	10.7	9.6	18.7	21.4	20.9
110°	9.1	8.6	17.1	20.3	20.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	7.5	7.0	15.5	19.3	19.3
115°	6.4	5.8	13.9	18.7	18.7
117.5°	5.4	4.8	12.8	17.6	18.2
120°	4.2	3.8	11.2	16.0	17.1
122.5°	3.8	2.6	9.6	15.0	16.0
125°	2.6	1.6	8.6	13.4	15.0
127.5°	2.2	1.6	7.0	11.8	13.4
130°	1.6	1.0	5.8	10.7	11.8
132.5°	1.6	1.0	4.2	9.1	10.2
135°	1.0	1.0	3.2	7.5	9.1
137.5°	1.0	0.6	2.2	5.8	7.5
140°	1.0	0.6	1.0	4.8	5.8
142.5°	0.6	0.6	0.6	3.2	4.2
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)