

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: P397257

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P397257
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-17)
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-DR100-UNV-LG52-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3315.2 lumens
Efficiency: N/A
Efficacy: 46.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.21 / 1.32
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4.17' x H: 0.17')
CIE Type: Direct

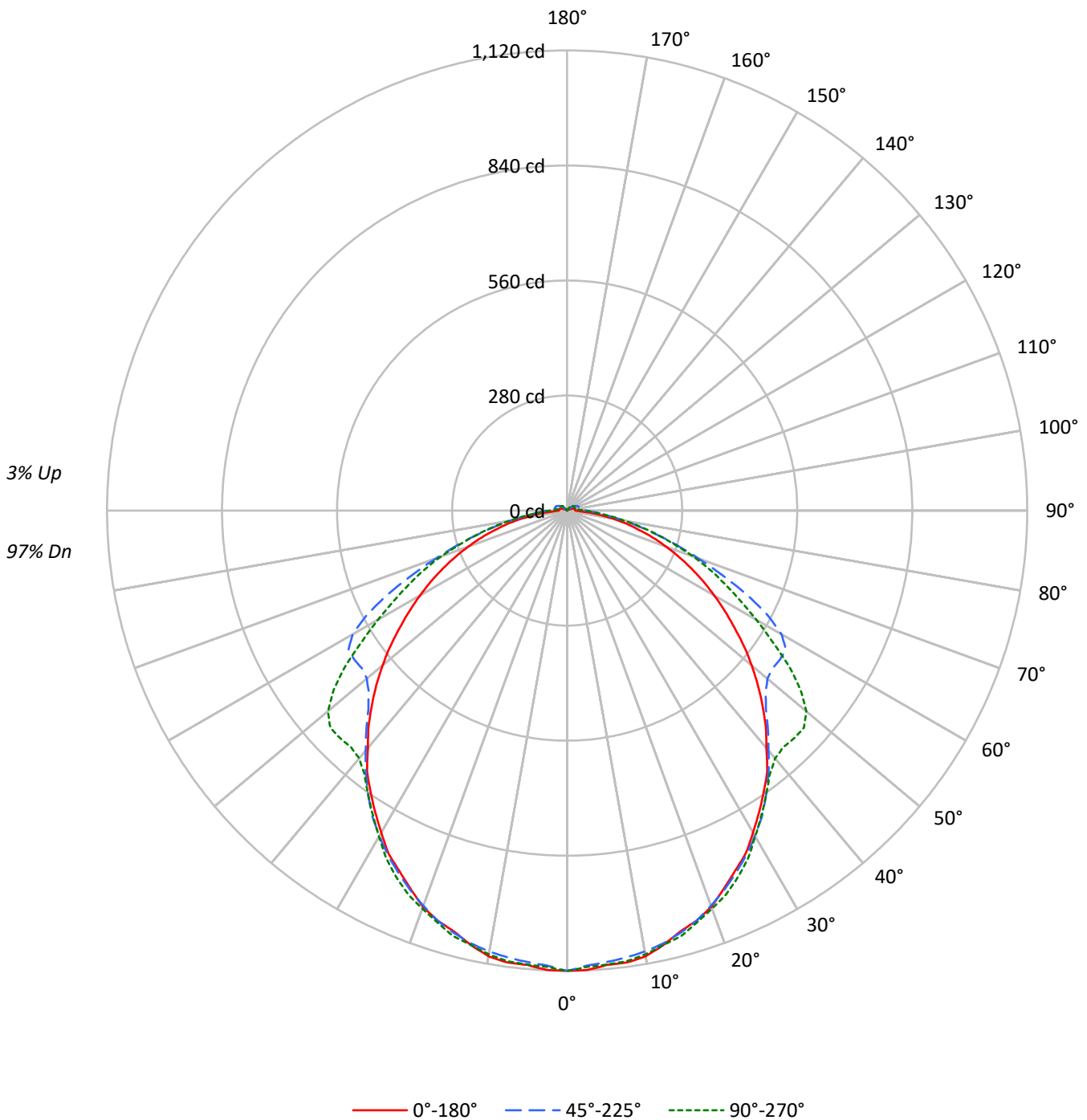
Input Watts (W): 71.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	109	109	104	104	104	99	99	99	97
1	108	103	98	94	104	100	96	92	95	92	89	91	88	86	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	69	64	59	67	62	58	55
4	81	69	60	53	79	67	59	53	64	57	51	62	55	50	59	54	49	47
5	74	61	52	46	72	60	52	45	58	50	44	55	49	44	53	47	43	41
6	69	55	46	40	67	54	46	39	52	44	39	50	43	38	48	42	38	35
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	38	32	27	37	31	27	25
10	52	39	31	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5788	5788	5788
5°	5737	5592	5589
10°	5738	5463	5434
15°	5615	5316	5265
20°	5561	5134	5055
25°	5414	4935	4855
30°	5277	4731	4580
35°	5119	4496	4319
40°	4924	4211	4149
45°	4724	3955	4288
50°	4498	3892	4372
55°	4235	4136	4019
60°	3998	4275	3484
65°	3755	3751	3021
70°	3484	2962	2571
75°	3137	2274	2020
80°	2736	1643	1447
85°	2022	1160	949



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.4	3.2
10°-20°	300.9	9.1
20°-30°	449.8	13.6
30°-40°	526.8	15.9
40°-50°	550.4	16.6
50°-60°	534.7	16.1
60°-70°	416.0	12.5
70°-80°	244.8	7.4
80°-90°	88.4	2.7
90°-100°	33.6	1.0
100°-110°	25.0	0.8
110°-120°	19.5	0.6
120°-130°	12.4	0.4
130°-140°	6.3	0.2
140°-150°	1.2	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	856.2	25.8
0°-40°	1383.0	41.7
0°-60°	2468.1	74.4
0°-90°	3217.3	97.0
90°-120°	78.0	2.4
90°-150°	97.9	3.0
90°-180°	98.0	3.0
0°-180°	3315.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1120	1120	1120	1120	1120	
5°	1110	1107	1103	1111	1109	106
15°	1061	1064	1064	1074	1072	300
25°	967	975	972	984	984	446
35°	834	840	844	845	844	522
45°	672	679	684	748	782	519
55°	497	513	632	681	658	446
65°	334	395	480	424	424	330
75°	181	268	226	224	227	193
85°	50	80	79	78	77	54
90°	20	42	46	44	43	12
95°	20	30	34	29	27	16
105°	17	24	29	23	20	18
115°	9	16	26	22	19	9
125°	4	6	18	20	18	3
135°	2	1	9	14	14	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°	1120.2	1120.2	1120.2	1120.2	1120.2
2.5°	1119.2	1114.4	1108.5	1114.9	1111.7
5°	1110.1	1106.9	1103.1	1110.6	1109.0
7.5°	1109.6	1102.6	1097.3	1106.9	1106.3
10°	1101.5	1092.5	1089.8	1099.9	1096.7
12.5°	1082.9	1078.6	1079.1	1090.3	1082.9
15°	1061.0	1064.2	1064.2	1073.8	1072.2
17.5°	1046.5	1046.5	1047.0	1053.4	1050.8
20°	1026.2	1025.1	1023.5	1034.2	1031.0
22.5°	996.2	1000.6	999.0	1013.4	1011.2
25°	967.4	975.4	972.2	984.5	984.0
27.5°	941.2	945.5	945.0	955.1	954.0
30°	904.9	911.8	913.9	920.4	915.5
32.5°	869.6	876.6	882.4	882.4	879.8
35°	834.3	840.2	844.5	845.0	844.5
37.5°	800.1	800.6	804.9	804.9	809.8
40°	754.6	761.1	762.7	775.0	787.3
42.5°	715.7	719.4	723.1	754.6	779.8
45°	672.4	678.8	684.2	747.8	782.5
47.5°	630.2	635.5	654.7	750.4	781.9
50°	586.3	593.8	636.6	753.0	760.0
52.5°	543.0	553.2	630.2	729.5	715.7
55°	497.0	512.6	632.3	681.4	658.5
57.5°	454.8	477.3	631.2	618.4	590.6
60°	413.7	445.8	602.9	546.8	531.8
62.5°	373.0	419.0	548.9	482.6	474.6
65°	333.5	395.0	480.5	423.8	423.8
67.5°	293.9	375.8	405.7	371.4	376.8
70°	256.0	352.7	338.3	319.0	326.0
72.5°	218.1	317.4	279.5	272.6	274.2
75°	180.6	268.3	226.1	224.5	227.1
77.5°	148.1	213.8	177.4	182.8	183.8
80°	112.8	160.9	137.9	142.7	140.6
82.5°	79.1	115.4	104.2	107.4	106.3
85°	49.7	80.2	78.6	78.0	77.0
87.5°	28.3	54.5	58.2	58.2	56.1
90°	19.8	41.7	46.5	43.8	42.7
92.5°	19.8	35.3	38.5	34.7	32.6
95°	20.3	30.5	33.7	29.4	26.7
97.5°	20.3	28.3	31.5	26.2	23.5
100°	19.8	26.2	30.5	24.1	21.4
102.5°	18.2	25.1	29.9	23.5	20.3
105°	16.6	23.5	29.4	23.0	19.8
107.5°	15.0	21.9	29.4	23.0	19.3
110°	12.8	20.3	28.9	23.0	19.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	10.7	18.2	27.8	22.5	19.3
115°	8.6	16.0	26.2	22.5	19.3
117.5°	7.0	13.4	24.6	21.9	19.3
120°	5.8	10.7	23.0	21.4	18.7
122.5°	4.2	8.6	20.3	20.3	18.7
125°	3.8	6.4	18.2	19.8	18.2
127.5°	2.6	4.2	16.0	18.2	17.6
130°	2.2	2.6	13.4	17.1	17.1
132.5°	1.6	1.6	11.2	15.5	16.0
135°	1.6	1.0	9.1	13.9	14.4
137.5°	1.0	1.0	7.0	11.8	13.4
140°	1.0	1.0	5.4	10.2	11.2
142.5°	1.0	1.0	3.8	8.0	9.6
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)