

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: P397296

Luminaire Tested: **4VRVT3-LD5-4-G-UNV-LG52-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397296
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1709-268-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 4VRVT3-LD5-4-G-UNV-LG52-CD1-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

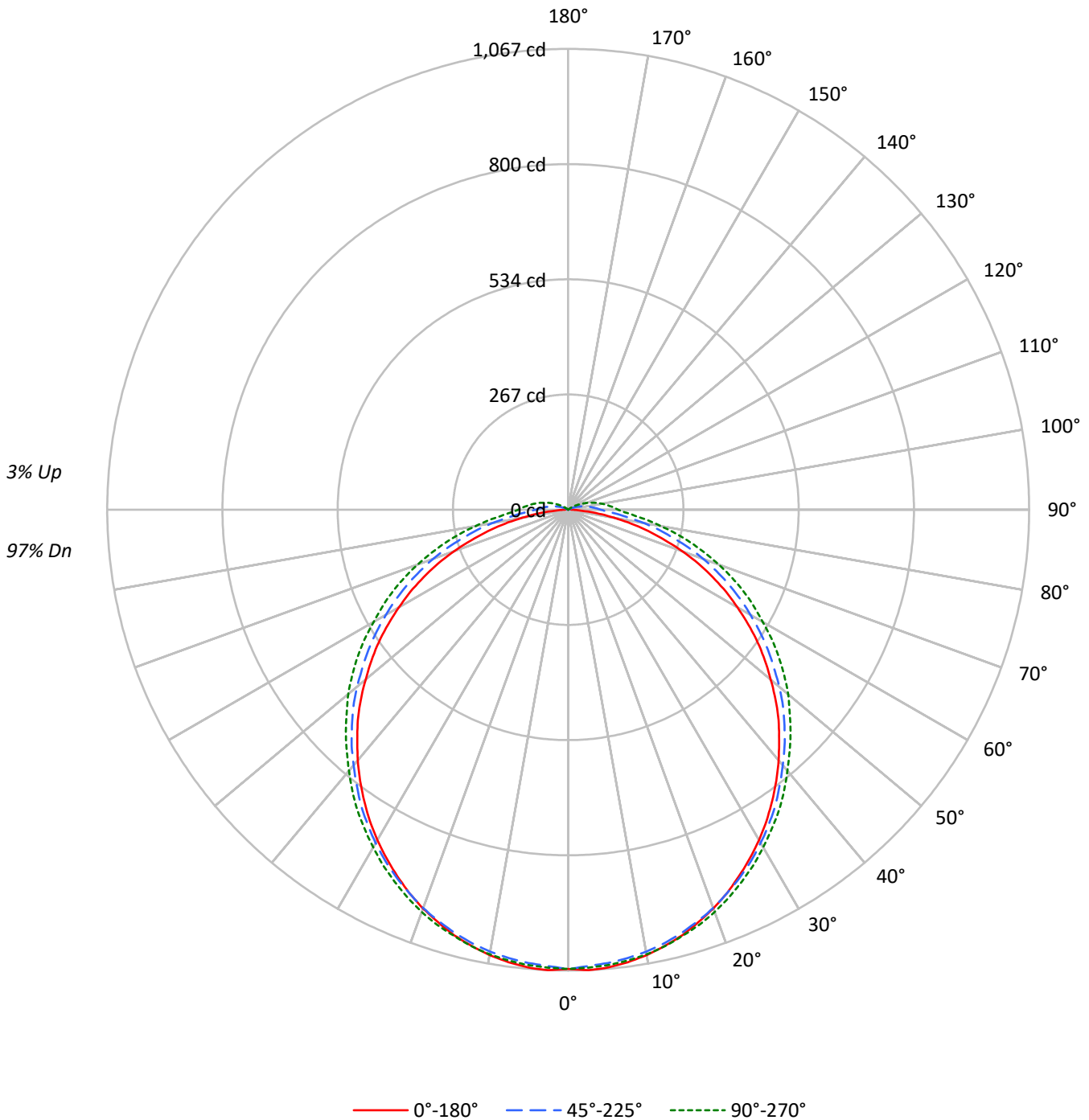
Lumens per Lamp: N/A
Luminaire Lumens: 3292.7 lumens
Efficiency: N/A
Efficacy: 42.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.26 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 1.04')
CIE Type: Direct

Input Watts (W): 76.7
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	0
RCR																		
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	97
1	107	102	97	93	104	99	95	91	94	91	88	90	87	84	86	83	81	79
2	97	88	81	75	94	86	79	74	82	76	72	78	73	69	75	71	67	65
3	88	77	69	62	85	75	67	61	72	65	60	69	63	58	66	61	57	54
4	81	68	59	52	78	67	58	52	64	56	51	61	55	49	58	53	48	46
5	74	61	52	45	72	59	51	44	57	49	44	55	48	43	52	47	42	40
6	68	55	46	39	66	54	45	39	51	44	38	49	43	37	47	42	37	35
7	63	49	41	34	61	49	40	34	47	39	34	45	38	33	43	37	33	31
8	59	45	36	31	57	44	36	30	43	35	30	41	34	30	40	34	29	27
9	55	41	33	27	53	41	33	27	39	32	27	38	31	27	37	31	26	24
10	52	38	30	25	50	38	30	25	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6867	6867	6867
5°	6744	5834	5630
10°	6566	5070	4759
15°	6375	4453	4090
20°	6167	3944	3567
25°	5948	3507	3127
30°	5726	3125	2754
35°	5489	2785	2438
40°	5242	2470	2149
45°	4991	2191	1900
50°	4693	1926	1679
55°	4393	1677	1466
60°	4024	1436	1260
65°	3616	1209	1076
70°	3091	988	889
75°	2430	757	709
80°	1622	545	531
85°	730	359	383



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.6	3.1
10°-20°	287.5	8.7
20°-30°	434.4	13.2
30°-40°	523.4	15.9
40°-50°	546.8	16.6
50°-60°	505.1	15.3
60°-70°	405.0	12.3
70°-80°	262.3	8.0
80°-90°	121.2	3.7
90°-100°	59.8	1.8
100°-110°	31.9	1.0
110°-120°	12.4	0.4
120°-130°	2.3	0.1
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	822.6	25.0
0°-40°	1345.9	40.9
0°-60°	2397.8	72.8
0°-90°	3186.3	96.8
90°-120°	104.1	3.2
90°-150°	106.4	3.2
90°-180°	106.0	3.2
0°-180°	3292.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1063	1063	1063	1063	1063	
5°	1064	1061	1054	1060	1058	101
15°	1020	1019	1014	1022	1022	288
25°	936	938	940	949	950	431
35°	823	829	836	846	850	515
45°	689	697	708	722	728	530
55°	535	547	564	585	595	478
65°	369	380	410	437	448	365
75°	192	216	251	282	294	204
85°	39	72	113	142	153	47
90°	9	36	75	105	115	6
95°	6	22	58	86	97	4
105°	2	5	29	53	62	3
115°	1	1	8	23	30	1
125°	1	0	0	4	7	0
135°	0	0	0	0	0	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°	1063.2	1063.2	1063.2	1063.2	1063.2
2.5°	1067.2	1064.0	1057.6	1063.2	1061.6
5°	1064.0	1060.8	1053.6	1060.0	1058.4
7.5°	1056.8	1053.6	1047.2	1054.4	1052.8
10°	1047.2	1044.8	1039.2	1045.6	1045.6
12.5°	1034.4	1033.6	1028.0	1035.2	1035.2
15°	1020.0	1019.2	1014.4	1022.4	1021.6
17.5°	1001.6	1002.4	998.4	1006.4	1008.0
20°	982.4	982.4	981.6	989.6	991.2
22.5°	960.8	961.6	960.8	970.4	972.0
25°	936.0	938.4	940.0	948.8	950.4
27.5°	910.4	913.6	916.8	925.6	928.0
30°	883.2	885.6	891.2	900.8	902.4
32.5°	854.4	859.2	864.0	873.6	876.8
35°	823.2	828.8	836.0	845.6	850.4
37.5°	791.2	797.6	804.0	816.8	820.8
40°	757.6	764.8	772.8	784.8	789.6
42.5°	722.4	732.0	741.6	754.4	758.4
45°	688.8	696.8	708.0	721.6	728.0
47.5°	651.2	661.6	674.4	688.8	695.2
50°	612.0	623.2	637.6	654.4	664.8
52.5°	574.4	585.6	600.0	620.8	630.4
55°	535.2	547.2	564.0	584.8	595.2
57.5°	494.4	507.2	525.6	548.8	559.2
60°	452.0	465.6	487.2	512.8	520.0
62.5°	412.0	424.8	449.6	474.4	484.8
65°	368.8	380.0	410.4	436.8	448.0
67.5°	326.4	339.2	371.2	400.0	409.6
70°	280.8	296.8	332.8	359.2	370.4
72.5°	235.2	254.4	292.0	320.8	331.2
75°	192.0	216.0	251.2	281.6	293.6
77.5°	150.4	175.2	215.2	243.2	255.2
80°	108.0	137.6	176.8	205.6	216.8
82.5°	72.0	102.4	141.6	172.0	184.0
85°	39.2	72.0	112.8	142.4	152.8
87.5°	18.4	50.4	88.8	118.4	130.4
90°	8.8	36.0	75.2	104.8	115.2
92.5°	7.2	28.0	66.4	95.2	106.4
95°	5.6	22.4	57.6	86.4	96.8
97.5°	4.8	16.0	50.4	77.6	88.8
100°	4.0	11.2	42.4	69.6	79.2
102.5°	3.2	7.2	35.2	61.6	71.2
105°	2.4	4.8	28.8	52.8	62.4
107.5°	2.4	2.4	23.2	44.8	54.4
110°	1.6	1.6	16.8	37.6	45.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.6	1.6	12.0	30.4	37.6
115°	0.8	0.8	8.0	23.2	30.4
117.5°	0.8	0.8	4.8	17.6	23.2
120°	0.8	0.8	2.4	12.0	17.6
122.5°	0.8	0.8	0.8	8.0	12.0
125°	0.8	0.0	0.0	4.0	7.2
127.5°	0.0	0.0	0.0	1.6	4.0
130°	0.0	0.0	0.0	0.0	0.8
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
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)