

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: P397295

Luminaire Tested: **4VRVT3-LD5-4-G-UNV-LA59-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397295
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-LA59-CD1-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

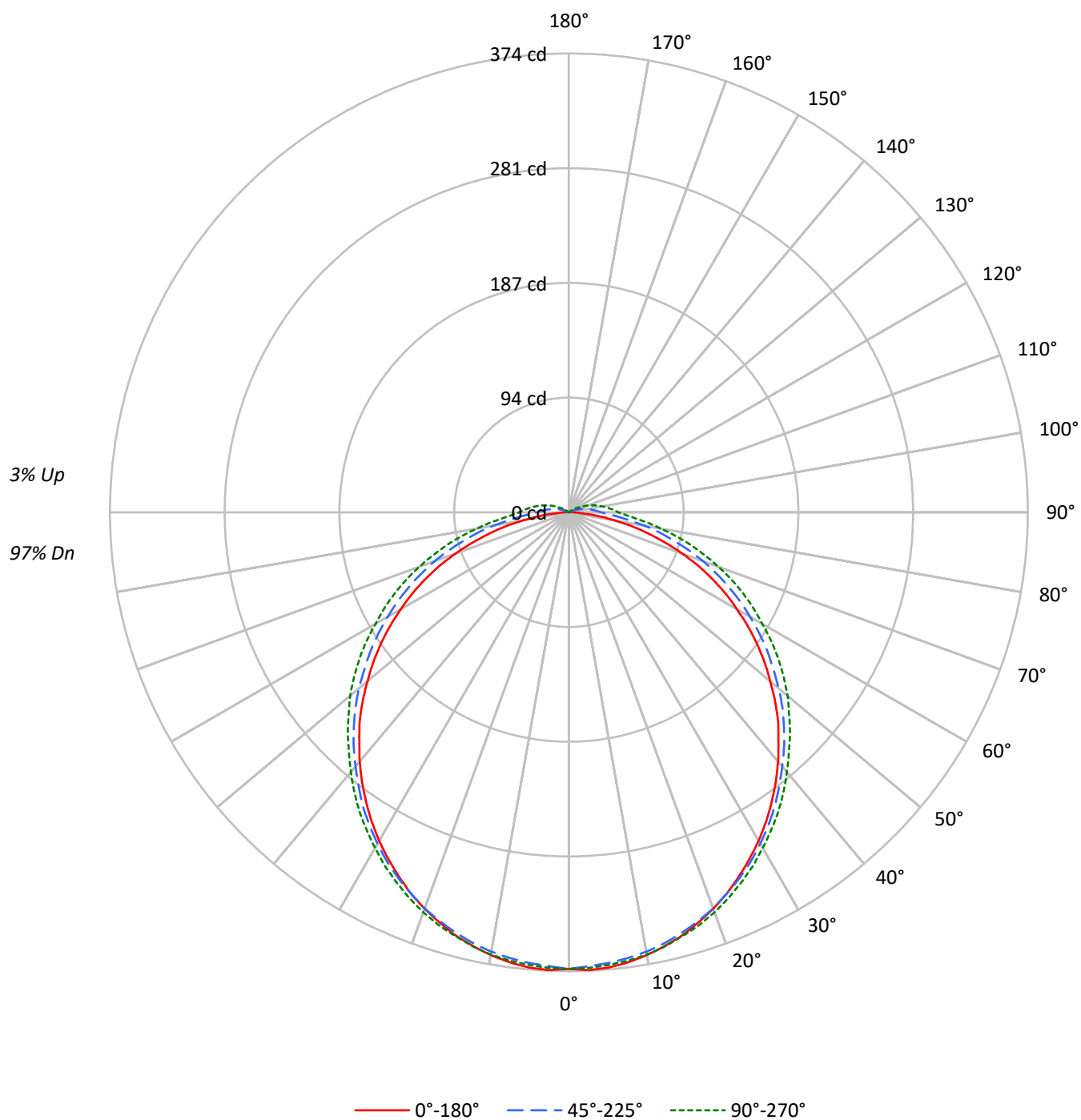
Lumens per Lamp: N/A
Luminaire Lumens: 1152.5 lumens
Efficiency: N/A
Efficacy: 23.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.26 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 1.04')
CIE Type: Direct

Input Watts (W): 49.3
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
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	118	118	118	118	115	115	115	115		109	109	109		104	104	104		99	99	99
1	107	102	97	93	104	99	95	91		94	91	88		90	87	84		86	83	81
2	97	88	81	75	94	86	79	74		82	76	72		78	73	69		75	71	67
3	88	77	69	62	85	75	67	61		72	65	60		69	63	58		66	61	57
4	81	68	59	52	78	67	58	52		64	56	51		61	55	49		58	53	48
5	74	61	52	45	72	59	51	44		57	49	44		55	48	43		52	47	42
6	68	55	46	39	66	54	45	39		51	44	38		49	43	37		47	42	37
7	63	49	41	34	61	49	40	34		47	39	34		45	38	33		43	37	33
8	59	45	36	31	57	44	36	30		43	35	30		41	34	30		40	34	29
9	55	41	33	27	53	41	33	27		39	32	27		38	31	27		37	31	26
10	52	38	30	25	50	38	30	25		36	29	24		35	29	24		34	28	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2403	2403	2403
5°	2360	2042	1970
10°	2298	1774	1666
15°	2231	1558	1432
20°	2158	1381	1248
25°	2082	1227	1094
30°	2004	1094	964
35°	1921	975	853
40°	1835	865	752
45°	1747	767	665
50°	1642	674	588
55°	1537	587	513
60°	1408	503	441
65°	1266	423	377
70°	1082	346	311
75°	850	265	248
80°	568	191	186
85°	255	126	134



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.2	3.1
10°-20°	100.6	8.7
20°-30°	152.1	13.2
30°-40°	183.2	15.9
40°-50°	191.4	16.6
50°-60°	176.8	15.3
60°-70°	141.7	12.3
70°-80°	91.8	8.0
80°-90°	42.4	3.7
90°-100°	20.9	1.8
100°-110°	11.2	1.0
110°-120°	4.4	0.4
120°-130°	0.8	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°	287.9	25.0
0°-40°	471.1	40.9
0°-60°	839.3	72.8
0°-90°	1115.2	96.8
90°-120°	36.4	3.2
90°-150°	37.2	3.2
90°-180°	37.0	3.2
0°-180°	1152.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	372	372	372	372	372	
5°	372	371	369	371	370	35
15°	357	357	355	358	358	101
25°	328	328	329	332	333	151
35°	288	290	293	296	298	180
45°	241	244	248	253	255	186
55°	187	192	197	205	208	167
65°	129	133	144	153	157	128
75°	67	76	88	99	103	71
85°	14	25	40	50	54	17
90°	3	13	26	37	40	2
95°	2	8	20	30	34	2
105°	1	2	10	18	22	1
115°	0	0	3	8	11	0
125°	0	0	0	1	2	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°	372.1	372.1	372.1	372.1	372.1
2.5°	373.5	372.4	370.2	372.1	371.6
5°	372.4	371.3	368.8	371.0	370.4
7.5°	369.9	368.8	366.5	369.0	368.5
10°	366.5	365.7	363.7	366.0	366.0
12.5°	362.0	361.8	359.8	362.3	362.3
15°	357.0	356.7	355.0	357.8	357.6
17.5°	350.6	350.8	349.4	352.2	352.8
20°	343.8	343.8	343.6	346.4	346.9
22.5°	336.3	336.6	336.3	339.6	340.2
25°	327.6	328.4	329.0	332.1	332.6
27.5°	318.6	319.8	320.9	324.0	324.8
30°	309.1	310.0	311.9	315.3	315.8
32.5°	299.0	300.7	302.4	305.8	306.9
35°	288.1	290.1	292.6	296.0	297.6
37.5°	276.9	279.2	281.4	285.9	287.3
40°	265.2	267.7	270.5	274.7	276.4
42.5°	252.8	256.2	259.6	264.0	265.4
45°	241.1	243.9	247.8	252.6	254.8
47.5°	227.9	231.6	236.0	241.1	243.3
50°	214.2	218.1	223.2	229.0	232.7
52.5°	201.0	205.0	210.0	217.3	220.6
55°	187.3	191.5	197.4	204.7	208.3
57.5°	173.0	177.5	184.0	192.1	195.7
60°	158.2	163.0	170.5	179.5	182.0
62.5°	144.2	148.7	157.4	166.0	169.7
65°	129.1	133.0	143.6	152.9	156.8
67.5°	114.2	118.7	129.9	140.0	143.4
70°	98.3	103.9	116.5	125.7	129.6
72.5°	82.3	89.0	102.2	112.3	115.9
75°	67.2	75.6	87.9	98.6	102.8
77.5°	52.6	61.3	75.3	85.1	89.3
80°	37.8	48.2	61.9	72.0	75.9
82.5°	25.2	35.8	49.6	60.2	64.4
85°	13.7	25.2	39.5	49.8	53.5
87.5°	6.4	17.6	31.1	41.4	45.6
90°	3.1	12.6	26.3	36.7	40.3
92.5°	2.5	9.8	23.2	33.3	37.2
95°	2.0	7.8	20.2	30.2	33.9
97.5°	1.7	5.6	17.6	27.2	31.1
100°	1.4	3.9	14.8	24.4	27.7
102.5°	1.1	2.5	12.3	21.6	24.9
105°	0.8	1.7	10.1	18.5	21.8
107.5°	0.8	0.8	8.1	15.7	19.0
110°	0.6	0.6	5.9	13.2	16.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.6	0.6	4.2	10.6	13.2
115°	0.3	0.3	2.8	8.1	10.6
117.5°	0.3	0.3	1.7	6.2	8.1
120°	0.3	0.3	0.8	4.2	6.2
122.5°	0.3	0.3	0.3	2.8	4.2
125°	0.3	0.0	0.0	1.4	2.5
127.5°	0.0	0.0	0.0	0.6	1.4
130°	0.0	0.0	0.0	0.0	0.3
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)