

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: P397298

Luminaire Tested: **4VRVT3-LD5-6-G-UNV-LA59-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397298
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-LD5-6-G-UNV-LA59-CD1-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

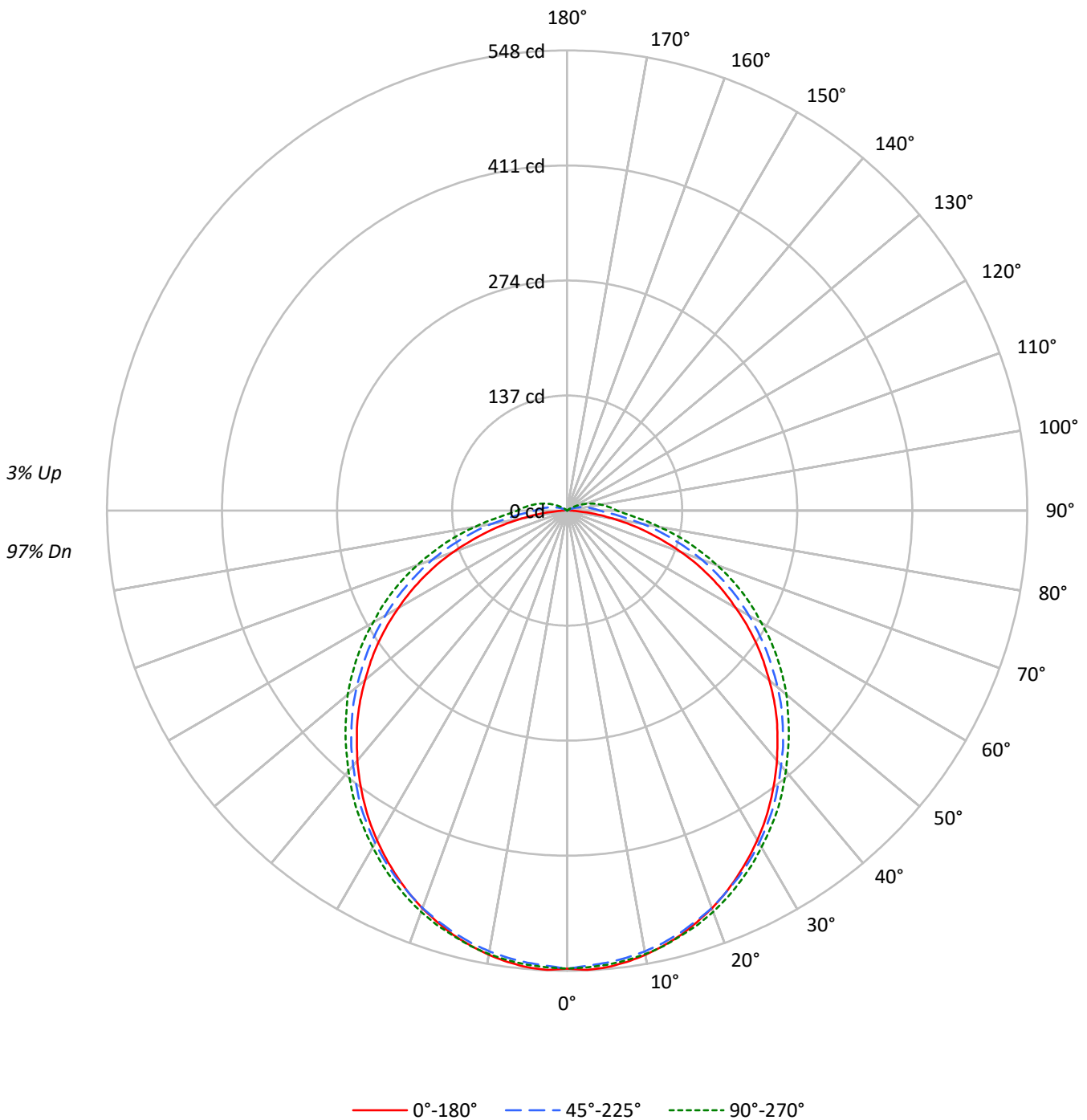
Lumens per Lamp: N/A
Luminaire Lumens: 1689.2 lumens
Efficiency: N/A
Efficacy: 21.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.26 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 1.04')
CIE Type: Direct

Input Watts (W): 78.2
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

TEST NUMBER: P397298

CATALOG NUMBER: 4VRVT3-LD5-6-G-UNV-LA59-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P397298

CATALOG NUMBER: 4VRVT3-LD5-6-G-UNV-LA59-CD1-U

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°	3522	3522	3522
5°	3460	2993	2888
10°	3368	2601	2441
15°	3271	2285	2098
20°	3164	2024	1830
25°	3051	1799	1604
30°	2937	1603	1413
35°	2816	1429	1251
40°	2689	1267	1103
45°	2561	1124	975
50°	2408	988	861
55°	2254	860	752
60°	2064	737	647
65°	1855	620	552
70°	1586	507	456
75°	1246	388	364
80°	832	279	272
85°	375	184	196



TEST NUMBER: P397298

CATALOG NUMBER: 4VRVT3-LD5-6-G-UNV-LA59-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.6	3.1
10°-20°	147.5	8.7
20°-30°	222.9	13.2
30°-40°	268.5	15.9
40°-50°	280.5	16.6
50°-60°	259.1	15.3
60°-70°	207.8	12.3
70°-80°	134.6	8.0
80°-90°	62.2	3.7
90°-100°	30.7	1.8
100°-110°	16.4	1.0
110°-120°	6.4	0.4
120°-130°	1.2	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°	422.0	25.0
0°-40°	690.5	40.9
0°-60°	1230.1	72.8
0°-90°	1634.7	96.8
90°-120°	53.4	3.2
90°-150°	54.6	3.2
90°-180°	55.0	3.3
0°-180°	1689.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	545	545	545	545	545	
5°	546	544	540	544	543	52
15°	523	523	520	524	524	148
25°	480	481	482	487	488	221
35°	422	425	429	434	436	264
45°	353	358	363	370	374	272
55°	275	281	289	300	305	245
65°	189	195	210	224	230	187
75°	98	111	129	144	151	104
85°	20	37	58	73	78	24
90°	4	18	39	54	59	3
95°	3	12	30	44	50	2
105°	1	2	15	27	32	1
115°	0	0	4	12	16	1
125°	0	0	0	2	4	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



TEST NUMBER: P397298

CATALOG NUMBER: 4VRVT3-LD5-6-G-UNV-LA59-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	545.4	545.4	545.4	545.4	545.4
2.5°	547.5	545.9	542.6	545.4	544.6
5°	545.9	544.2	540.5	543.8	543.0
7.5°	542.2	540.5	537.2	540.9	540.1
10°	537.2	536.0	533.1	536.4	536.4
12.5°	530.7	530.3	527.4	531.1	531.1
15°	523.3	522.9	520.4	524.5	524.1
17.5°	513.9	514.2	512.2	516.3	517.1
20°	504.0	504.0	503.6	507.7	508.5
22.5°	492.9	493.3	492.9	497.8	498.7
25°	480.2	481.4	482.2	486.8	487.6
27.5°	467.1	468.7	470.3	474.9	476.1
30°	453.1	454.3	457.2	462.1	463.0
32.5°	438.3	440.8	443.2	448.2	449.8
35°	422.3	425.2	428.9	433.8	436.3
37.5°	405.9	409.2	412.5	419.0	421.1
40°	388.7	392.4	396.5	402.6	405.1
42.5°	370.6	375.5	380.5	387.0	389.1
45°	353.4	357.5	363.2	370.2	373.5
47.5°	334.1	339.4	346.0	353.4	356.7
50°	314.0	319.7	327.1	335.7	341.1
52.5°	294.7	300.4	307.8	318.5	323.4
55°	274.6	280.7	289.4	300.0	305.3
57.5°	253.7	260.2	269.6	281.5	286.9
60°	231.9	238.9	250.0	263.1	266.8
62.5°	211.4	217.9	230.7	243.4	248.7
65°	189.2	194.9	210.5	224.1	229.8
67.5°	167.4	174.0	190.4	205.2	210.1
70°	144.1	152.3	170.7	184.3	190.0
72.5°	120.7	130.5	149.8	164.6	169.9
75°	98.5	110.8	128.9	144.5	150.6
77.5°	77.2	89.9	110.4	124.8	130.9
80°	55.4	70.6	90.7	105.5	111.2
82.5°	36.9	52.5	72.6	88.2	94.4
85°	20.1	36.9	57.9	73.1	78.4
87.5°	9.4	25.8	45.6	60.7	66.9
90°	4.5	18.5	38.6	53.8	59.1
92.5°	3.7	14.4	34.1	48.8	54.6
95°	2.9	11.5	29.5	44.3	49.7
97.5°	2.5	8.2	25.8	39.8	45.6
100°	2.0	5.7	21.8	35.7	40.6
102.5°	1.7	3.7	18.1	31.6	36.5
105°	1.2	2.5	14.8	27.1	32.0
107.5°	1.2	1.2	11.9	23.0	27.9
110°	0.8	0.8	8.6	19.3	23.4



TEST NUMBER: P397298

CATALOG NUMBER: 4VRVT3-LD5-6-G-UNV-LA59-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.8	0.8	6.2	15.6	19.3
115°	0.4	0.4	4.1	11.9	15.6
117.5°	0.4	0.4	2.5	9.0	11.9
120°	0.4	0.4	1.2	6.2	9.0
122.5°	0.4	0.4	0.4	4.1	6.2
125°	0.4	0.0	0.0	2.0	3.7
127.5°	0.0	0.0	0.0	0.8	2.0
130°	0.0	0.0	0.0	0.0	0.4
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)