

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: P397297

Luminaire Tested: **4VRVT3-LD5-4-G-UNV-LR63-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397297
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-LR63-CD1-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

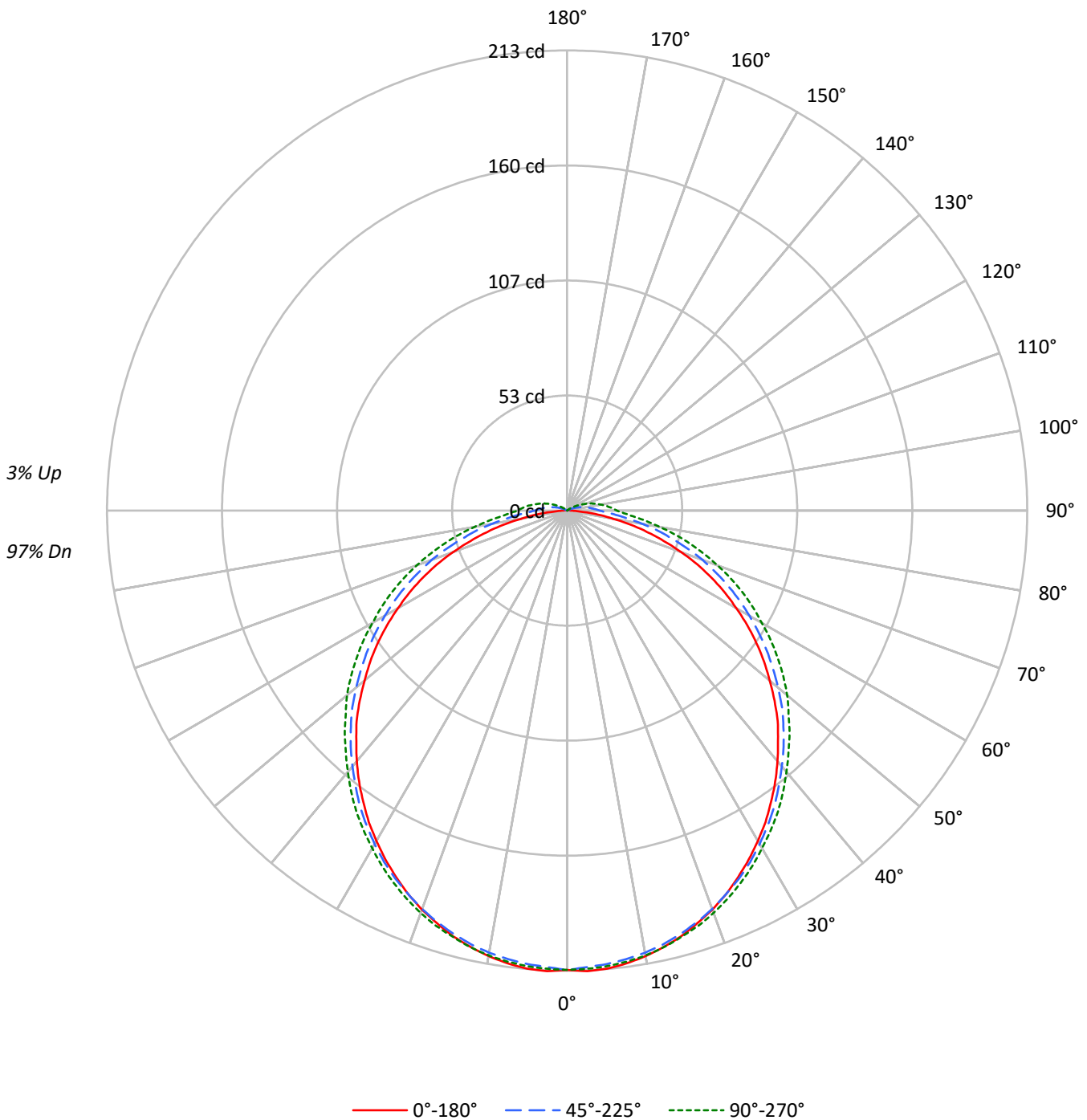
Lumens per Lamp: N/A
Luminaire Lumens: 658.6 lumens
Efficiency: N/A
Efficacy: 7.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.26 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 1.04')
CIE Type: Direct

Input Watts (W): 83.5
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°	1373	1373	1373
5°	1349	1167	1126
10°	1313	1014	952
15°	1275	891	818
20°	1234	789	713
25°	1190	701	625
30°	1145	625	551
35°	1098	557	488
40°	1048	494	430
45°	999	438	380
50°	939	385	336
55°	878	335	293
60°	805	287	252
65°	724	242	215
70°	619	198	178
75°	486	151	142
80°	324	109	106
85°	145	72	77



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.1	3.1
10°-20°	57.5	8.7
20°-30°	86.9	13.2
30°-40°	104.7	15.9
40°-50°	109.4	16.6
50°-60°	101.0	15.3
60°-70°	81.0	12.3
70°-80°	52.5	8.0
80°-90°	24.3	3.7
90°-100°	12.0	1.8
100°-110°	6.4	1.0
110°-120°	2.5	0.4
120°-130°	0.5	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°	164.5	25.0
0°-40°	269.2	40.9
0°-60°	479.6	72.8
0°-90°	637.3	96.8
90°-120°	20.8	3.2
90°-150°	21.3	3.2
90°-180°	21.0	3.2
0°-180°	658.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	213	213	213	213	213	
5°	213	212	211	212	212	20
15°	204	204	203	204	204	58
25°	187	188	188	190	190	86
35°	165	166	167	169	170	103
45°	138	139	142	144	146	106
55°	107	109	113	117	119	96
65°	74	76	82	87	90	73
75°	38	43	50	56	59	41
85°	8	14	23	28	31	9
90°	2	7	15	21	23	1
95°	1	4	12	17	19	1
105°	0	1	6	11	12	1
115°	0	0	2	5	6	0
125°	0	0	0	1	1	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°	212.6	212.6	212.6	212.6	212.6
2.5°	213.4	212.8	211.5	212.6	212.3
5°	212.8	212.2	210.7	212.0	211.7
7.5°	211.4	210.7	209.4	210.9	210.6
10°	209.4	209.0	207.8	209.1	209.1
12.5°	206.9	206.7	205.6	207.0	207.0
15°	204.0	203.8	202.9	204.5	204.3
17.5°	200.3	200.5	199.7	201.3	201.6
20°	196.5	196.5	196.3	197.9	198.2
22.5°	192.2	192.3	192.2	194.1	194.4
25°	187.2	187.7	188.0	189.8	190.1
27.5°	182.1	182.7	183.4	185.1	185.6
30°	176.6	177.1	178.2	180.2	180.5
32.5°	170.9	171.8	172.8	174.7	175.4
35°	164.6	165.8	167.2	169.1	170.1
37.5°	158.2	159.5	160.8	163.4	164.2
40°	151.5	153.0	154.6	157.0	157.9
42.5°	144.5	146.4	148.3	150.9	151.7
45°	137.8	139.4	141.6	144.3	145.6
47.5°	130.2	132.3	134.9	137.8	139.0
50°	122.4	124.6	127.5	130.9	133.0
52.5°	114.9	117.1	120.0	124.2	126.1
55°	107.0	109.4	112.8	117.0	119.0
57.5°	98.9	101.4	105.1	109.8	111.8
60°	90.4	93.1	97.4	102.6	104.0
62.5°	82.4	85.0	89.9	94.9	97.0
65°	73.8	76.0	82.1	87.4	89.6
67.5°	65.3	67.8	74.2	80.0	81.9
70°	56.2	59.4	66.6	71.8	74.1
72.5°	47.0	50.9	58.4	64.2	66.2
75°	38.4	43.2	50.2	56.3	58.7
77.5°	30.1	35.0	43.0	48.6	51.0
80°	21.6	27.5	35.4	41.1	43.4
82.5°	14.4	20.5	28.3	34.4	36.8
85°	7.8	14.4	22.6	28.5	30.6
87.5°	3.7	10.1	17.8	23.7	26.1
90°	1.8	7.2	15.0	21.0	23.0
92.5°	1.4	5.6	13.3	19.0	21.3
95°	1.1	4.5	11.5	17.3	19.4
97.5°	1.0	3.2	10.1	15.5	17.8
100°	0.8	2.2	8.5	13.9	15.8
102.5°	0.6	1.4	7.0	12.3	14.2
105°	0.5	1.0	5.8	10.6	12.5
107.5°	0.5	0.5	4.6	9.0	10.9
110°	0.3	0.3	3.4	7.5	9.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.3	0.3	2.4	6.1	7.5
115°	0.2	0.2	1.6	4.6	6.1
117.5°	0.2	0.2	1.0	3.5	4.6
120°	0.2	0.2	0.5	2.4	3.5
122.5°	0.2	0.2	0.2	1.6	2.4
125°	0.2	0.0	0.0	0.8	1.4
127.5°	0.0	0.0	0.0	0.3	0.8
130°	0.0	0.0	0.0	0.0	0.2
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)