

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: P397301

Luminaire Tested: **4VRVT3-LD5-8-G-UNV-LA59-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397301
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1709-268-3)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 4VRVT3-LD5-8-G-UNV-LA59-CD1-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

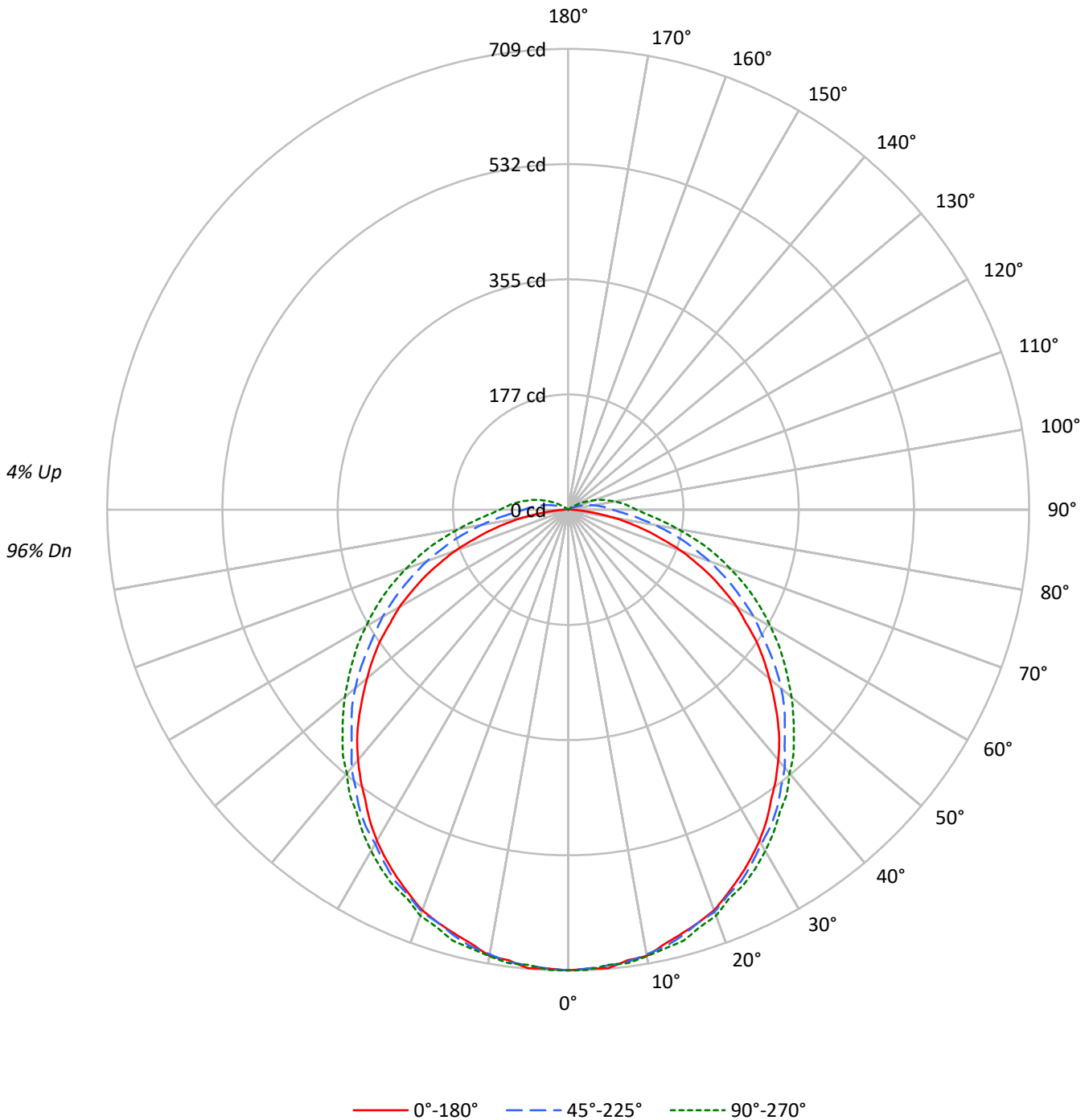
Lumens per Lamp: N/A
Luminaire Lumens: 2262.7 lumens
Efficiency: N/A
Efficacy: 22.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.27 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 1.04')
CIE Type: Direct

Input Watts (W): 102.7
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	103	103	103	98	98	98	96
1	106	101	96	92	103	98	94	90	93	90	86	89	86	83	84	82	80	77
2	96	87	80	74	93	85	78	73	81	75	70	77	72	68	73	69	66	63
3	87	76	68	61	85	74	66	60	71	64	58	67	62	57	64	59	55	53
4	80	67	58	51	77	66	57	51	63	55	50	60	54	48	57	52	47	45
5	73	60	51	44	71	59	50	44	56	48	43	54	47	42	51	46	41	39
6	68	54	45	38	65	53	44	38	51	43	37	48	42	37	46	41	36	34
7	63	49	40	34	61	48	39	33	46	38	33	44	37	32	42	36	32	30
8	58	45	36	30	57	44	35	30	42	35	29	40	34	29	39	33	28	26
9	55	41	33	27	53	40	32	27	39	31	26	37	31	26	36	30	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	28	24	33	28	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4577	4577	4577
5°	4488	3898	3740
10°	4371	3389	3175
15°	4219	2978	2748
20°	4118	2645	2392
25°	3964	2351	2097
30°	3814	2081	1850
35°	3630	1866	1627
40°	3480	1657	1441
45°	3301	1458	1281
50°	3096	1292	1132
55°	2900	1120	996
60°	2667	972	870
65°	2381	823	753
70°	2034	685	636
75°	1584	550	529
80°	1072	417	420
85°	475	302	331



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.0	3.0
10°-20°	191.5	8.5
20°-30°	290.0	12.8
30°-40°	349.4	15.4
40°-50°	365.0	16.1
50°-60°	338.9	15.0
60°-70°	276.4	12.2
70°-80°	187.8	8.3
80°-90°	99.7	4.4
90°-100°	54.5	2.4
100°-110°	29.2	1.3
110°-120°	11.4	0.5
120°-130°	2.0	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°	548.4	24.2
0°-40°	897.8	39.7
0°-60°	1601.7	70.8
0°-90°	2165.6	95.7
90°-120°	95.1	4.2
90°-150°	97.1	4.3
90°-180°	97.0	4.3
0°-180°	2262.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	709	709	709	709	709	
5°	708	700	704	706	703	67
15°	675	678	678	679	686	191
25°	624	626	630	632	637	287
35°	544	550	560	568	568	342
45°	456	462	471	485	491	351
55°	353	363	377	396	404	315
65°	243	254	279	305	314	240
75°	125	146	183	209	219	133
85°	26	57	95	123	132	31
90°	6	32	68	96	105	4
95°	4	19	53	79	89	3
105°	2	4	27	49	58	2
115°	1	1	7	22	28	1
125°	0	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°	708.7	708.7	708.7	708.7	708.7
2.5°	706.4	711.8	706.4	705.9	708.4
5°	708.1	699.7	703.9	706.4	703.1
7.5°	699.2	703.1	701.7	698.9	703.6
10°	697.2	691.6	694.7	693.6	697.5
12.5°	684.3	683.5	688.5	686.0	691.3
15°	675.1	677.6	678.4	679.3	686.3
17.5°	666.1	667.5	666.1	668.6	673.1
20°	656.0	651.8	658.3	660.0	664.7
22.5°	639.8	640.4	641.8	648.2	647.4
25°	623.8	625.5	630.3	632.2	637.3
27.5°	606.5	605.9	612.4	618.0	623.0
30°	588.3	590.5	593.6	605.1	606.2
32.5°	567.6	569.2	578.8	585.2	588.3
35°	544.3	549.9	560.3	567.8	567.6
37.5°	524.2	529.5	537.6	546.8	552.2
40°	502.9	507.4	518.3	527.0	529.5
42.5°	480.5	484.4	492.5	505.4	512.7
45°	455.6	461.7	471.2	484.7	490.8
47.5°	429.2	438.8	451.1	462.3	469.8
50°	403.8	413.3	427.6	440.7	448.3
52.5°	379.1	388.4	402.9	419.7	425.9
55°	353.4	363.2	376.6	396.5	404.3
57.5°	324.2	335.4	351.4	376.6	382.8
60°	299.6	307.7	329.6	352.2	359.0
62.5°	270.8	283.6	304.1	329.8	336.6
65°	242.8	254.5	279.2	304.9	313.6
67.5°	212.8	227.1	254.5	280.3	289.5
70°	184.8	199.6	230.7	256.2	265.2
72.5°	152.6	172.8	205.2	233.5	242.2
75°	125.2	146.2	182.6	208.6	219.2
77.5°	97.7	122.4	158.8	185.1	193.8
80°	71.4	98.0	135.2	164.1	171.4
82.5°	45.6	76.7	114.2	141.7	150.1
85°	25.5	57.1	94.9	122.6	132.2
87.5°	12.3	42.8	79.2	107.5	116.2
90°	6.2	32.5	68.3	95.8	105.0
92.5°	4.8	25.8	60.8	87.4	96.0
95°	3.9	19.3	53.2	79.0	89.3
97.5°	3.4	14.6	46.2	72.0	80.6
100°	2.5	9.8	39.2	63.8	73.1
102.5°	2.2	6.4	33.0	56.3	64.1
105°	2.0	3.6	26.6	48.7	57.7
107.5°	1.4	2.0	21.0	42.0	50.1
110°	1.1	1.4	16.0	34.7	42.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.1	1.1	11.2	28.3	35.0
115°	0.8	0.6	7.3	22.1	28.3
117.5°	0.6	0.6	3.9	16.5	22.1
120°	0.3	0.3	1.4	11.2	16.2
122.5°	0.3	0.3	0.3	7.3	10.9
125°	0.3	0.0	0.0	3.9	6.7
127.5°	0.3	0.0	0.0	0.8	3.1
130°	0.3	0.0	0.0	0.0	0.6
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)