

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: P397277

Luminaire Tested: **4VRVT2-LD5-6-FR50-UNV-LA59-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P397277
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 4VRVT2-LD5-6-FR50-UNV-LA59-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1718.1 lumens
Efficiency: N/A
Efficacy: 22.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4.17' x H: 0.17')
CIE Type: Direct

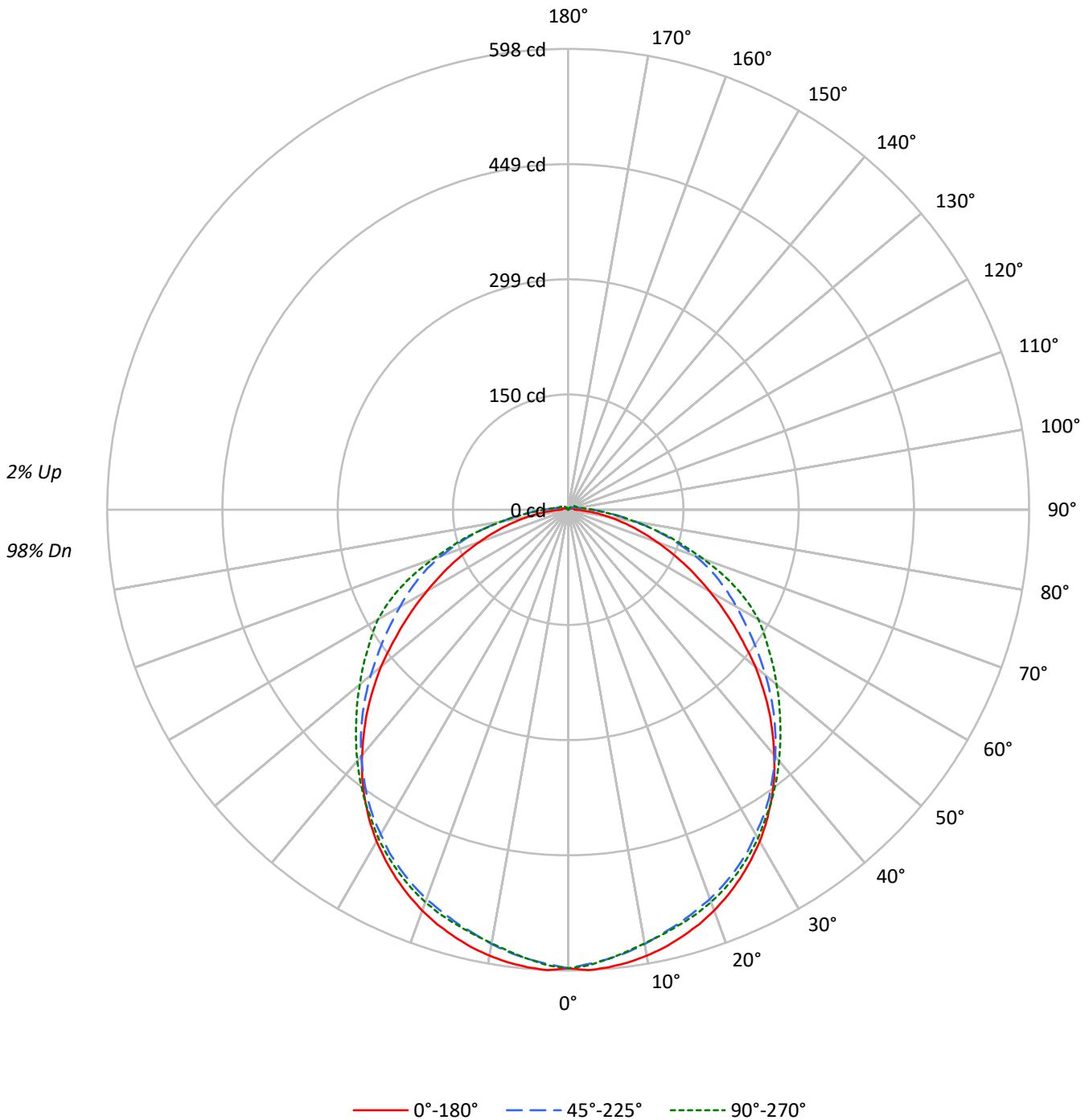
Input Watts (W): 77.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	110	110	105	105	105	100	100	100	98
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	80
2	98	89	82	76	95	87	81	75	83	78	73	79	75	71	76	72	69	67
3	89	78	70	63	86	76	69	62	73	66	61	70	64	60	67	62	58	56
4	81	69	60	53	79	68	59	53	65	58	52	62	56	51	60	54	50	48
5	75	62	53	46	73	61	52	46	58	51	45	56	49	44	54	48	43	41
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	49	43	38	36
7	64	50	42	35	62	50	41	35	48	40	35	46	39	34	45	39	34	32
8	60	46	37	32	58	45	37	31	44	36	31	42	36	31	41	35	30	28
9	56	42	34	28	54	42	34	28	40	33	28	39	32	28	38	32	27	26
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3074	3074	3074
5°	3081	2969	2952
10°	3062	2869	2830
15°	3033	2777	2739
20°	3000	2697	2657
25°	2954	2614	2565
30°	2898	2518	2464
35°	2819	2421	2354
40°	2713	2306	2243
45°	2587	2182	2131
50°	2431	2044	2030
55°	2238	1907	1939
60°	2049	1787	1867
65°	1863	1683	1717
70°	1662	1532	1466
75°	1489	1315	1205
80°	1283	1047	894
85°	1070	789	635



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.8	3.2
10°-20°	158.4	9.2
20°-30°	239.0	13.9
30°-40°	285.2	16.6
40°-50°	290.8	16.9
50°-60°	260.4	15.2
60°-70°	205.8	12.0
70°-80°	127.4	7.4
80°-90°	53.6	3.1
90°-100°	19.1	1.1
100°-110°	10.1	0.6
110°-120°	6.7	0.4
120°-130°	3.8	0.2
130°-140°	1.7	0.1
140°-150°	0.3	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	453.2	26.4
0°-40°	738.5	43.0
0°-60°	1289.6	75.1
0°-90°	1676.4	97.6
90°-120°	35.9	2.1
90°-150°	41.7	2.4
90°-180°	42.0	2.4
0°-180°	1718.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	595	595	595	595	595	
5°	596	592	586	588	586	57
15°	573	564	556	559	558	162
25°	528	517	515	520	520	243
35°	460	451	455	460	460	287
45°	368	365	377	387	389	283
55°	263	268	292	312	318	235
65°	166	177	216	238	241	164
75°	86	104	131	136	136	91
85°	26	41	54	54	52	27
90°	9	22	32	32	31	6
95°	8	12	20	20	20	6
105°	6	6	11	12	12	7
115°	3	3	7	10	10	3
125°	1	1	4	7	8	1
135°	1	1	2	4	5	1
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°	595.0	595.0	595.0	595.0	595.0
2.5°	598.1	594.7	590.2	593.3	591.9
5°	596.1	591.6	585.7	587.7	585.7
7.5°	592.7	587.1	579.6	580.4	578.5
10°	587.7	581.0	572.3	573.1	571.2
12.5°	581.3	573.1	563.6	566.7	564.7
15°	573.1	563.9	555.8	559.1	557.7
17.5°	564.2	554.1	546.5	551.9	550.7
20°	553.5	542.3	537.6	542.6	541.8
22.5°	541.5	529.5	526.9	532.5	531.7
25°	527.8	516.6	514.9	520.5	519.9
27.5°	512.9	501.2	502.0	506.8	506.5
30°	497.0	486.6	486.3	492.8	492.5
32.5°	479.1	468.7	471.5	476.5	475.7
35°	459.5	451.1	454.7	460.3	460.3
37.5°	439.0	431.2	435.9	441.8	443.2
40°	415.8	409.9	417.7	424.7	425.6
42.5°	392.3	388.3	397.9	405.7	407.4
45°	368.2	365.4	377.4	386.9	388.9
47.5°	342.4	342.4	356.1	367.6	371.3
50°	316.9	316.9	334.3	348.6	352.8
52.5°	288.7	292.6	312.5	329.5	335.7
55°	262.6	268.5	291.5	312.2	317.8
57.5°	236.9	244.2	271.0	295.1	301.5
60°	212.0	221.8	252.0	277.7	285.0
62.5°	188.4	198.8	233.8	259.0	264.0
65°	165.5	177.0	215.6	237.7	240.8
67.5°	143.4	158.2	196.6	213.4	214.5
70°	122.1	139.4	175.0	187.6	185.9
72.5°	103.6	121.0	152.9	161.6	158.8
75°	85.7	103.6	130.8	135.8	135.5
77.5°	68.9	86.5	109.2	112.0	109.2
80°	52.9	70.6	87.9	89.3	86.8
82.5°	39.5	54.6	69.2	70.0	68.6
85°	26.3	41.2	53.5	53.8	51.5
87.5°	16.0	30.0	40.9	41.4	39.8
90°	8.7	21.6	31.9	32.2	31.1
92.5°	8.1	15.7	24.6	25.2	24.6
95°	7.8	12.0	19.9	20.4	19.9
97.5°	7.8	9.8	16.2	17.1	16.5
100°	7.3	8.1	13.7	14.6	14.3
102.5°	7.0	6.7	12.0	13.2	12.6
105°	6.2	5.9	10.6	12.0	11.8
107.5°	5.6	5.0	9.8	11.2	10.9
110°	4.8	4.5	9.0	10.6	10.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	3.9	3.6	8.1	10.1	10.1
115°	3.4	3.1	7.3	9.8	9.8
117.5°	2.8	2.5	6.7	9.2	9.5
120°	2.2	2.0	5.9	8.4	9.0
122.5°	2.0	1.4	5.0	7.8	8.4
125°	1.4	0.8	4.5	7.0	7.8
127.5°	1.1	0.8	3.6	6.2	7.0
130°	0.8	0.6	3.1	5.6	6.2
132.5°	0.8	0.6	2.2	4.8	5.3
135°	0.6	0.6	1.7	3.9	4.8
137.5°	0.6	0.3	1.1	3.1	3.9
140°	0.6	0.3	0.6	2.5	3.1
142.5°	0.3	0.3	0.3	1.7	2.2
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)