

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: P397278

Luminaire Tested: **4VRVT2-LD5-6-FR50-UNV-LG52-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P397278
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-LG52-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4908.8 lumens
Efficiency: N/A
Efficacy: 40.8 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

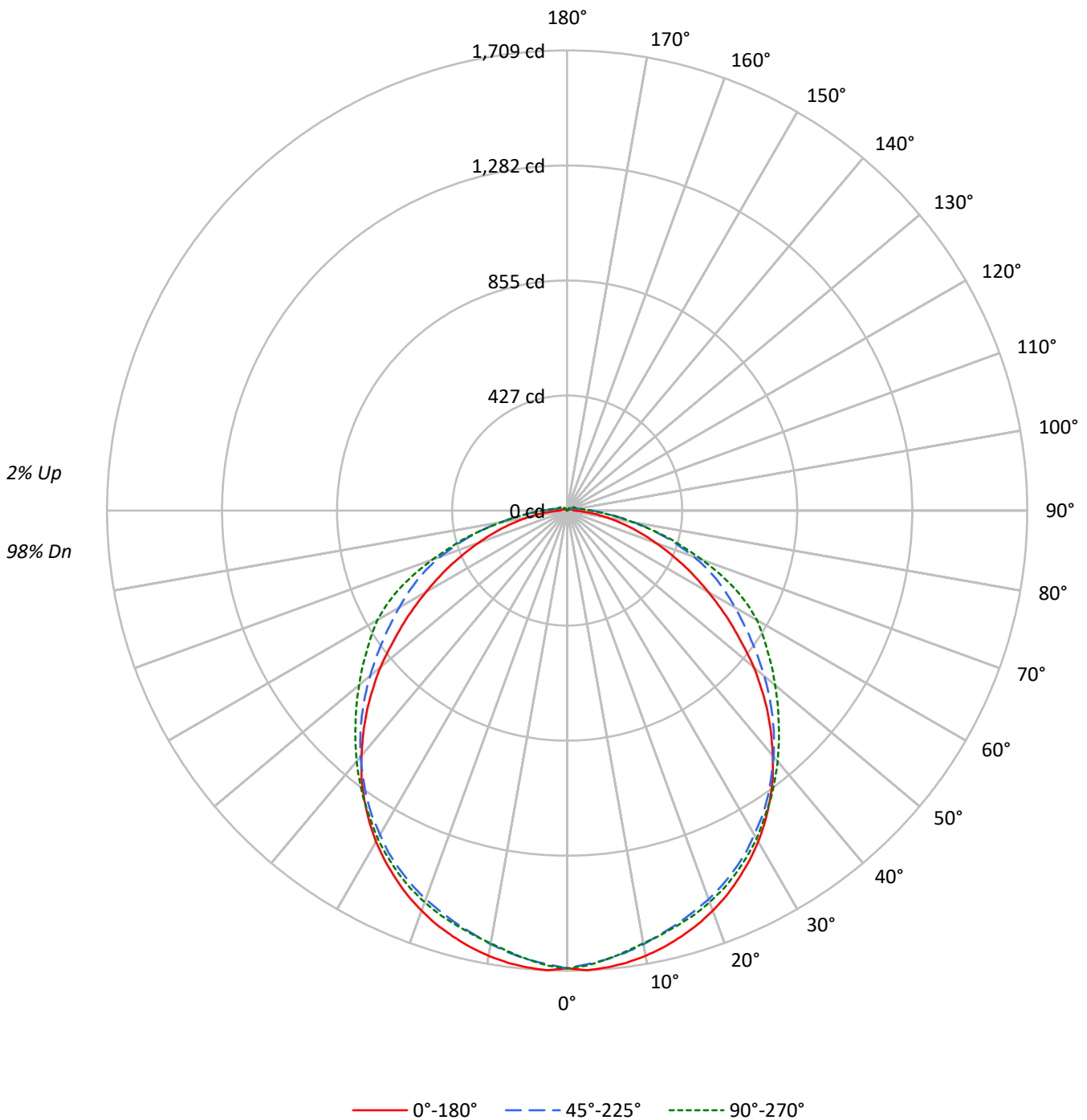
Input Watts (W): 120.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	8783	8783	8783
5°	8802	8484	8434
10°	8748	8197	8086
15°	8666	7932	7825
20°	8571	7705	7590
25°	8439	7467	7329
30°	8280	7193	7040
35°	8054	6916	6725
40°	7752	6590	6408
45°	7390	6233	6089
50°	6947	5840	5798
55°	6394	5447	5541
60°	5852	5106	5335
65°	5324	4809	4905
70°	4747	4378	4189
75°	4252	3757	3444
80°	3667	2993	2553
85°	3059	2255	1814



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.5	3.2
10°-20°	452.6	9.2
20°-30°	682.9	13.9
30°-40°	814.9	16.6
40°-50°	830.9	16.9
50°-60°	743.8	15.2
60°-70°	588.1	12.0
70°-80°	363.8	7.4
80°-90°	153.1	3.1
90°-100°	54.6	1.1
100°-110°	28.9	0.6
110°-120°	19.0	0.4
120°-130°	11.0	0.2
130°-140°	4.9	0.1
140°-150°	0.7	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1294.9	26.4
0°-40°	2109.8	43.0
0°-60°	3684.6	75.1
0°-90°	4789.6	97.6
90°-120°	102.5	2.1
90°-150°	119.2	2.4
90°-180°	119.0	2.4
0°-180°	4908.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1700	1700	1700	1700	1700	
5°	1703	1690	1674	1679	1674	162
15°	1638	1611	1588	1598	1594	462
25°	1508	1476	1471	1487	1486	695
35°	1313	1289	1299	1315	1315	820
45°	1052	1044	1078	1106	1111	810
55°	750	767	833	892	908	672
65°	473	506	616	679	688	469
75°	245	296	374	388	387	260
85°	75	118	153	154	147	78
90°	25	62	91	92	89	16
95°	22	34	57	58	57	18
105°	18	17	30	34	34	19
115°	10	9	21	28	28	10
125°	4	2	13	20	22	4
135°	2	2	5	11	14	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°	1699.9	1699.9	1699.9	1699.9	1699.9
2.5°	1708.7	1699.1	1686.3	1695.1	1691.1
5°	1703.1	1690.3	1673.5	1679.1	1673.5
7.5°	1693.5	1677.5	1655.9	1658.3	1652.7
10°	1679.1	1659.9	1635.1	1637.5	1631.9
12.5°	1660.7	1637.5	1610.3	1619.1	1613.5
15°	1637.5	1611.1	1587.9	1597.5	1593.5
17.5°	1611.9	1583.1	1561.5	1576.7	1573.5
20°	1581.5	1549.5	1535.9	1550.3	1547.9
22.5°	1547.1	1512.7	1505.5	1521.5	1519.1
25°	1507.9	1475.9	1471.1	1487.1	1485.5
27.5°	1465.5	1431.9	1434.3	1447.9	1447.1
30°	1419.9	1390.3	1389.5	1407.9	1407.1
32.5°	1368.7	1339.1	1347.1	1361.5	1359.1
35°	1312.7	1288.7	1299.1	1315.1	1315.1
37.5°	1254.3	1231.9	1245.5	1262.3	1266.3
40°	1187.9	1171.1	1193.5	1213.5	1215.9
42.5°	1120.7	1109.5	1136.7	1159.1	1163.9
45°	1051.9	1043.9	1078.3	1105.5	1111.1
47.5°	978.3	978.3	1017.5	1050.3	1060.7
50°	905.5	905.5	955.1	995.9	1007.9
52.5°	824.7	835.9	892.7	941.5	959.1
55°	750.4	767.2	832.7	891.9	907.9
57.5°	676.8	697.6	774.4	843.1	861.5
60°	605.6	633.6	720.0	793.5	814.3
62.5°	538.4	568.0	668.0	740.0	754.4
65°	472.8	505.6	616.0	679.2	688.0
67.5°	409.6	452.0	561.6	609.6	612.8
70°	348.8	398.4	500.0	536.0	531.2
72.5°	296.0	345.6	436.8	461.6	453.6
75°	244.8	296.0	373.6	388.0	387.2
77.5°	196.8	247.2	312.0	320.0	312.0
80°	151.2	201.6	251.2	255.2	248.0
82.5°	112.8	156.0	197.6	200.0	196.0
85°	75.2	117.6	152.8	153.6	147.2
87.5°	45.6	85.6	116.8	118.4	113.6
90°	24.8	61.6	91.2	92.0	88.8
92.5°	23.2	44.8	70.4	72.0	70.4
95°	22.4	34.4	56.8	58.4	56.8
97.5°	22.4	28.0	46.4	48.8	47.2
100°	20.8	23.2	39.2	41.6	40.8
102.5°	20.0	19.2	34.4	37.6	36.0
105°	17.6	16.8	30.4	34.4	33.6
107.5°	16.0	14.4	28.0	32.0	31.2
110°	13.6	12.8	25.6	30.4	30.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	11.2	10.4	23.2	28.8	28.8
115°	9.6	8.8	20.8	28.0	28.0
117.5°	8.0	7.2	19.2	26.4	27.2
120°	6.4	5.6	16.8	24.0	25.6
122.5°	5.6	4.0	14.4	22.4	24.0
125°	4.0	2.4	12.8	20.0	22.4
127.5°	3.2	2.4	10.4	17.6	20.0
130°	2.4	1.6	8.8	16.0	17.6
132.5°	2.4	1.6	6.4	13.6	15.2
135°	1.6	1.6	4.8	11.2	13.6
137.5°	1.6	0.8	3.2	8.8	11.2
140°	1.6	0.8	1.6	7.2	8.8
142.5°	0.8	0.8	0.8	4.8	6.4
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)