

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: P397266

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P397266
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-16)
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-DR-UNV-LG52-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4957.6 lumens
Efficiency: N/A
Efficacy: 41.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4.17' x H: 0.17')
CIE Type: Direct

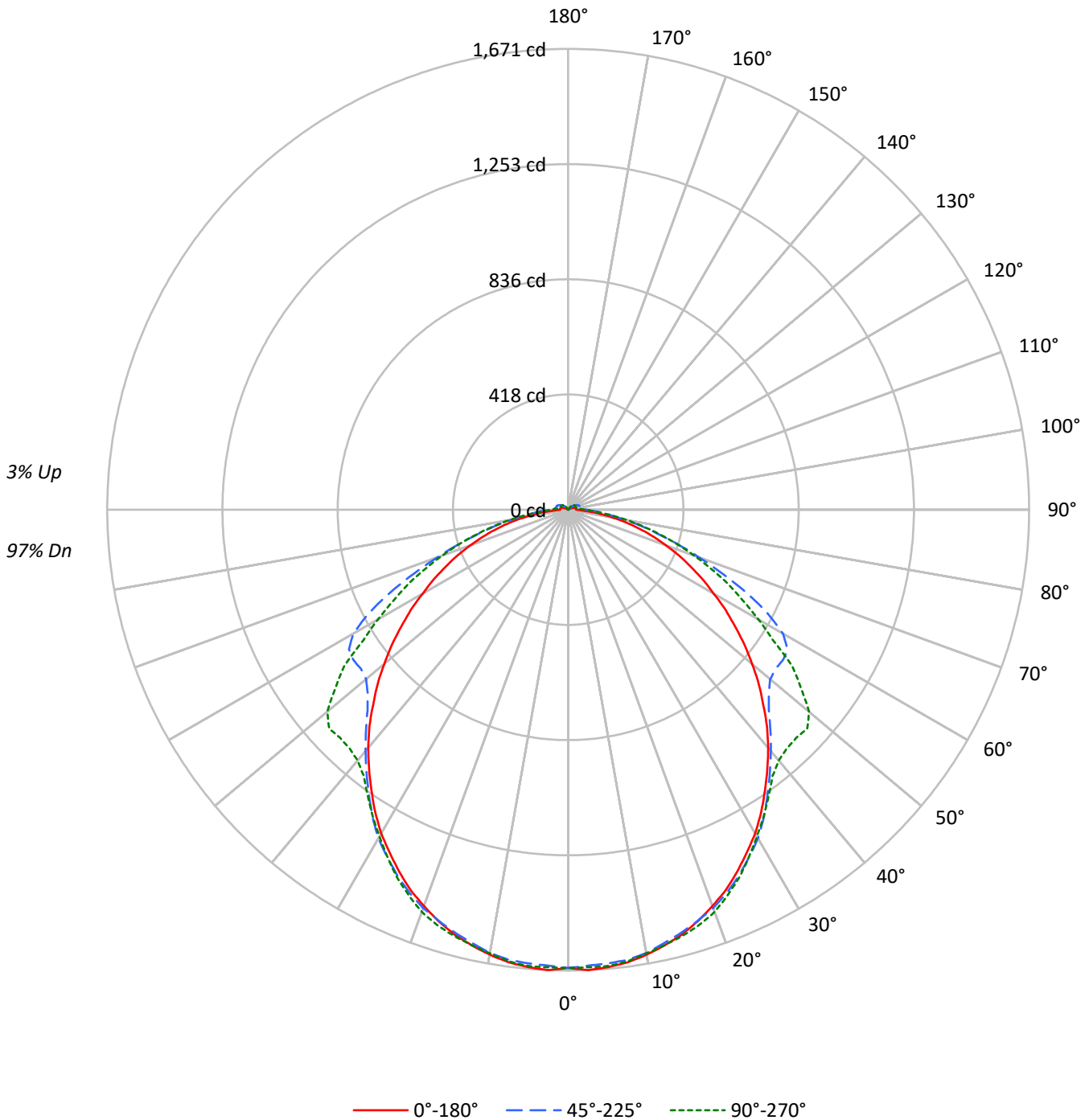
Input Watts (W): 120.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	109	109	104	104	104	99	99	99	97
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	80	75	83	77	73	79	75	71	76	72	69	66
3	89	78	70	63	86	76	68	62	73	66	61	70	64	59	67	62	58	55
4	81	69	60	53	79	67	59	53	64	57	51	62	56	50	59	54	49	47
5	75	61	52	46	72	60	52	45	58	50	44	55	49	44	53	47	43	41
6	69	55	46	40	67	54	46	39	52	44	39	50	43	38	48	42	38	35
7	64	50	41	35	62	49	41	35	47	40	34	46	39	34	44	38	33	31
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30	40	34	30	28
9	55	42	34	28	54	41	33	28	40	33	28	38	32	27	37	31	27	25
10	52	39	31	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8585	8585	8585
5°	8604	8370	8370
10°	8535	8181	8095
15°	8438	7929	7857
20°	8285	7709	7610
25°	8108	7431	7251
30°	7903	7123	6844
35°	7628	6707	6476
40°	7361	6308	6257
45°	7026	5947	6410
50°	6678	5845	6558
55°	6292	6217	6059
60°	5891	6376	5220
65°	5522	5564	4574
70°	5128	4413	3823
75°	4641	3371	3039
80°	3997	2450	2215
85°	3059	1747	1410



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.7	3.2
10°-20°	450.5	9.1
20°-30°	673.4	13.6
30°-40°	788.9	15.9
40°-50°	825.6	16.7
50°-60°	798.5	16.1
60°-70°	620.8	12.5
70°-80°	366.2	7.4
80°-90°	132.0	2.7
90°-100°	49.2	1.0
100°-110°	36.9	0.7
110°-120°	28.5	0.6
120°-130°	18.2	0.4
130°-140°	9.4	0.2
140°-150°	1.8	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1281.6	25.9
0°-40°	2070.5	41.8
0°-60°	3694.7	74.5
0°-90°	4813.6	97.1
90°-120°	114.6	2.3
90°-150°	144.0	2.9
90°-180°	144.0	2.9
0°-180°	4957.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1662	1662	1662	1662	1662	
5°	1665	1657	1651	1666	1661	158
15°	1594	1599	1587	1606	1600	449
25°	1449	1455	1464	1475	1470	667
35°	1243	1259	1260	1267	1266	778
45°	1000	1018	1029	1127	1170	772
55°	738	764	950	1014	993	662
65°	490	590	713	637	642	487
75°	267	399	335	339	342	284
85°	75	118	118	118	114	81
90°	29	62	68	65	61	18
95°	30	45	50	43	38	24
105°	24	35	43	34	30	25
115°	12	23	38	33	29	13
125°	5	9	26	29	27	5
135°	2	2	14	21	22	2
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°	1661.6	1661.6	1661.6	1661.6	1661.6
2.5°	1671.2	1663.2	1654.4	1664.8	1660.8
5°	1664.8	1656.8	1651.2	1665.6	1660.8
7.5°	1655.2	1649.6	1646.4	1658.4	1652.0
10°	1638.4	1636.0	1632.0	1644.0	1633.6
12.5°	1617.6	1620.0	1609.6	1623.2	1616.8
15°	1594.4	1599.2	1587.2	1606.4	1600.0
17.5°	1564.0	1569.6	1562.4	1586.4	1579.2
20°	1528.8	1532.0	1536.8	1553.6	1552.0
22.5°	1492.8	1495.2	1503.2	1516.0	1512.0
25°	1448.8	1455.2	1464.0	1475.2	1469.6
27.5°	1401.6	1411.2	1420.0	1428.8	1419.2
30°	1355.2	1360.0	1376.0	1375.2	1368.0
32.5°	1301.6	1313.6	1320.0	1317.6	1318.4
35°	1243.2	1259.2	1260.0	1267.2	1266.4
37.5°	1185.6	1203.2	1200.8	1214.4	1216.8
40°	1128.0	1140.0	1142.4	1166.4	1187.2
42.5°	1066.4	1078.4	1084.8	1135.2	1173.6
45°	1000.0	1017.6	1028.8	1127.2	1169.6
47.5°	937.6	953.6	985.6	1127.2	1175.2
50°	870.4	889.6	956.0	1124.8	1140.0
52.5°	805.6	824.8	947.2	1090.4	1064.0
55°	738.4	764.0	950.4	1013.6	992.8
57.5°	676.0	712.0	942.4	921.6	880.0
60°	609.6	662.4	899.2	819.2	796.8
62.5°	551.2	622.4	816.0	721.6	713.6
65°	490.4	589.6	712.8	636.8	641.6
67.5°	435.2	560.0	604.8	559.2	562.4
70°	376.8	524.8	504.0	485.6	484.8
72.5°	322.4	474.4	416.0	410.4	412.8
75°	267.2	399.2	335.2	339.2	341.6
77.5°	216.8	322.4	268.8	273.6	273.6
80°	164.8	240.8	205.6	214.4	215.2
82.5°	118.4	172.0	156.8	161.6	157.6
85°	75.2	118.4	118.4	117.6	114.4
87.5°	42.4	81.6	86.4	85.6	81.6
90°	28.8	61.6	68.0	64.8	60.8
92.5°	28.8	52.0	56.8	51.2	47.2
95°	29.6	44.8	49.6	43.2	38.4
97.5°	28.8	41.6	46.4	38.4	33.6
100°	28.0	38.4	44.8	36.0	31.2
102.5°	26.4	36.8	44.0	34.4	29.6
105°	24.0	35.2	43.2	34.4	29.6
107.5°	20.8	32.8	43.2	34.4	29.6
110°	18.4	29.6	42.4	33.6	28.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	15.2	26.4	40.8	33.6	28.8
115°	12.0	23.2	38.4	32.8	28.8
117.5°	10.4	19.2	36.0	32.8	28.8
120°	8.0	16.0	33.6	31.2	28.0
122.5°	6.4	12.0	30.4	30.4	27.2
125°	4.8	8.8	26.4	28.8	27.2
127.5°	4.0	6.4	23.2	27.2	26.4
130°	3.2	4.0	20.0	25.6	24.8
132.5°	2.4	2.4	16.8	23.2	23.2
135°	2.4	1.6	13.6	20.8	21.6
137.5°	1.6	1.6	10.4	17.6	19.2
140°	1.6	1.6	8.0	15.2	16.8
142.5°	1.6	1.6	5.6	12.0	13.6
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)