

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P209532

Luminaire Tested: **LDA6A15930D2WD010TED2W LARL15SP 6LAL1H DIF-20**

Test Date: 10/31/16

**Test Information**

Test Method: LM-41-14  
Report Number: P209532  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29032)  
Test Lab: INNOVATION CENTER-P2  
Test Date: 10/31/16  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA6A15930D2WD010TED2W LARL15SP 6LAL1H DIF-20  
Description: 6" ROUND, 1500lm D2W, FLOOD OPTIC WITH DIFFUSED LENS, LENSED ACCENT  
SELF FLANGED, HAZE TRIM  
Light Source: (1) High Lumen 3000K 90 CRI LED  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 735.4 lumens  
Efficiency: N/A  
Efficacy: 33.4 lumens/watt  
Spacing Criteria (0/90/45): 0.52 / 0.52 / 0.57  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

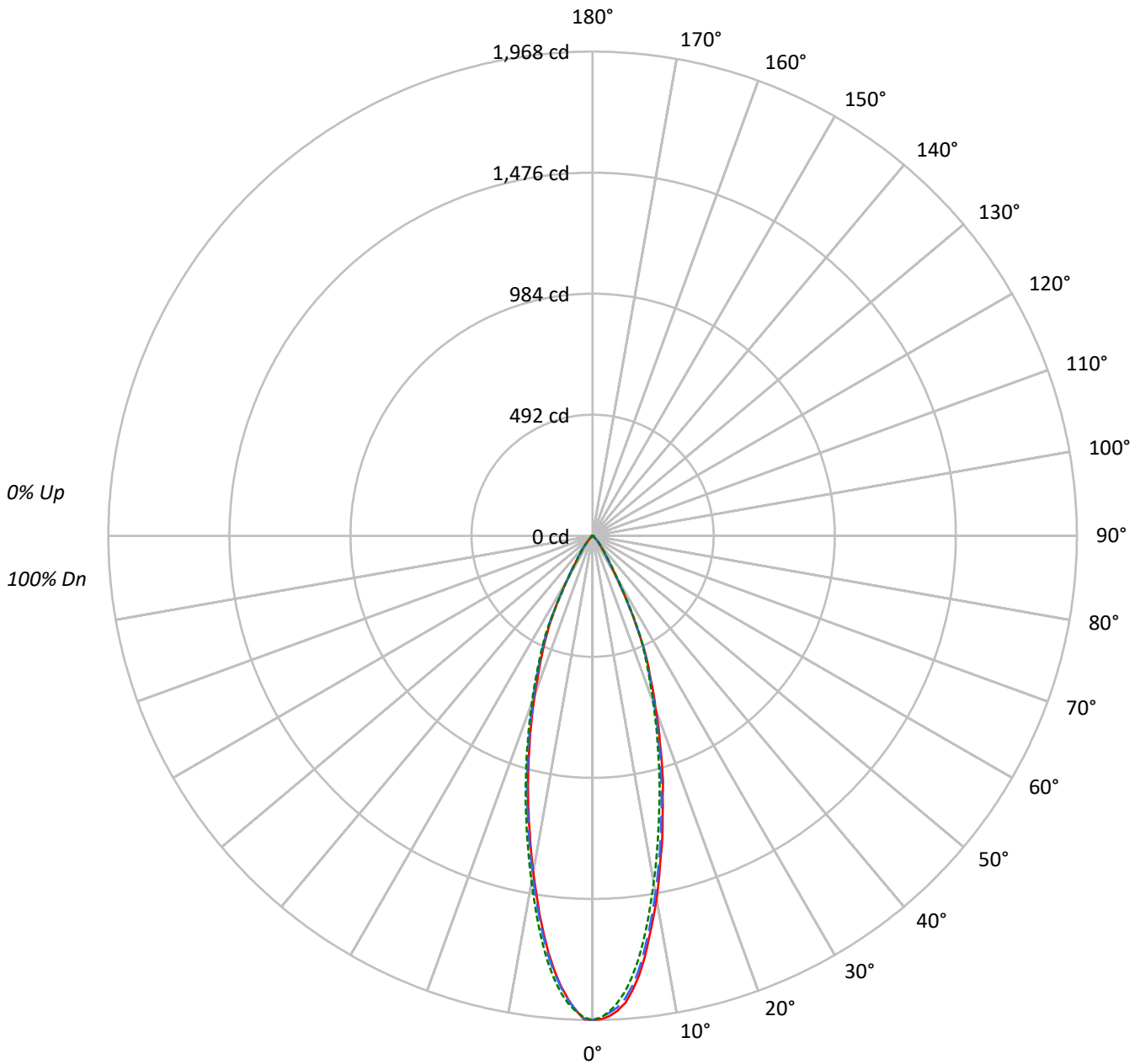
Input Watts (W): 22  
Input Voltage (V): 120.0  
Input Current (A<sub>in</sub>): 0.187  
Voltage Rise (V): NR  
Power Factor: 0.9919  
Total Harmonic Distortion (THDi): 16.3%  
Frequency (hertz): 60  
Stabilization Time: 0.5 HR  
Operation Time: 24 HR  
Ambient Temperature (°C): 24.4  
Test Distance: 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									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95																			
2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	94	92	91																			
3	105	100	96	93	104	99	95	92	96	93	90	94	91	89	92	89	88	86																			
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	86	83	82																			
5	97	91	86	82	96	90	85	82	88	84	81	86	83	80	85	82	80	78																			
6	94	86	81	78	92	86	81	78	84	80	77	83	79	77	82	79	76	75																			
7	90	83	78	74	89	82	77	74	81	77	74	80	76	73	79	75	73	72																			
8	87	79	74	71	86	79	74	71	78	73	70	77	73	70	76	72	70	69																			
9	84	76	71	68	83	76	71	68	75	70	68	74	70	67	73	70	67	66																			
10	81	73	68	65	80	73	68	65	72	68	65	71	67	65	71	67	65	63																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	107886	107886	107886
5°	102135	99383	97677
10°	83332	79602	77209
15°	62429	59592	57492
20°	43695	42004	40020
25°	28369	28308	26433
30°	12027	12597	12850
35°	5287	5822	5822
40°	2934	3077	3006
45°	1318	1240	1395
50°	597	341	597
55°	669	287	478
60°	658	329	329
65°	649	259	259
70°	641	160	160
75°	847	212	0
80°	631	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	160.0	21.8
10°-20°	289.8	39.4
20°-30°	203.3	27.6
30°-40°	59.8	8.1
40°-50°	14.5	2.0
50°-60°	4.1	0.6
60°-70°	2.7	0.4
70°-80°	1.2	0.2
80°-90°	0.1	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
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°	653.1	88.8
0°-40°	712.9	96.9
0°-60°	731.4	99.5
0°-90°	735.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	735.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1968	1968	1968	1968	1968	
5°	1856	1838	1806	1783	1775	165
15°	1100	1082	1050	1029	1013	304
25°	469	472	468	455	437	206
35°	79	81	87	89	87	56
45°	17	15	16	18	18	15
55°	7	4	3	5	5	6
65°	5	4	2	2	2	5
75°	4	2	1	0	0	3
85°	0	0	0	0	0	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1968	1968	1968	1968	1968	1968	1968	1968	1968
1°	1965	1953	1956	1940	1958	1942	1963	1959	1966
2°	1954	1942	1941	1923	1935	1912	1930	1925	1931
3°	1933	1923	1920	1896	1903	1879	1890	1883	1887
4°	1903	1892	1886	1859	1861	1835	1841	1833	1836
5°	1856	1846	1838	1810	1806	1779	1783	1773	1775
6°	1799	1788	1779	1749	1742	1715	1717	1706	1707
7°	1729	1719	1708	1680	1670	1643	1643	1632	1631
8°	1649	1643	1631	1603	1591	1566	1563	1552	1551
9°	1574	1565	1552	1522	1510	1476	1482	1471	1468
10°	1497	1485	1472	1443	1430	1397	1401	1389	1387
11°	1415	1407	1391	1364	1350	1319	1323	1310	1308
12°	1332	1328	1312	1286	1272	1243	1246	1234	1230
13°	1260	1251	1234	1210	1196	1170	1172	1160	1157
14°	1176	1174	1157	1136	1122	1098	1100	1088	1085
15°	1100	1099	1082	1063	1050	1027	1029	1017	1013
16°	1037	1025	1009	991	979	958	959	956	943
17°	960	952	937	921	910	891	891	888	875
18°	885	882	868	853	844	827	825	822	810
19°	823	813	801	788	780	765	763	759	747
20°	749	747	736	727	720	706	703	699	686
21°	691	685	675	669	663	656	647	642	629
22°	631	628	620	616	610	603	594	588	577
23°	581	578	570	566	560	554	545	539	528
24°	533	530	522	518	513	507	498	492	482
25°	469	473	472	473	468	464	455	449	437
26°	399	407	406	411	412	417	411	408	392
27°	344	341	342	347	350	358	355	358	343
28°	281	283	283	290	293	302	300	304	292
29°	226	232	233	238	243	251	250	249	244
30°	190	189	190	196	199	207	206	206	203
32.5°	119	119	120	124	128	132	132	132	130
35°	79	80	81	84	87	90	89	88	87
37.5°	57	56	57	59	61	63	63	62	60
40°	41	40	40	41	43	44	44	43	42
42.5°	27	27	26	27	28	30	30	29	28
45°	17	16	15	15	16	17	18	18	18
47.5°	9	8	7	7	7	9	10	10	10
50°	7	6	4	4	4	5	6	7	7
52.5°	7	6	5	3	4	4	6	6	7
55°	7	6	4	3	3	4	5	5	5
57.5°	7	6	4	3	3	4	4	4	4
60°	6	6	4	3	3	3	3	3	3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	5	4	3	2	1	1	1	1	1
70°	4	4	3	2	1	1	1	1	1
72.5°	4	3	3	2	1	1	1	1	1
75°	4	3	2	1	1	0	0	0	0
77.5°	2	2	1	1	0	0	0	0	0
80°	2	1	1	0	0	0	0	0	0
82.5°	1	1	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0	0	0



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— 0°-180°    - - 45°-225°    - - - - 90°-270°







62.5°	6	5	4	3	2	2	3	2	2
65°	5	5	4	2	2	2	2	2	2



(END OF REPORT)