

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: P209531

Luminaire Tested: **LDA6A15930D2WD010TED2W LARL15SP 6LA1H DIF-20**

Test Date: 10/31/16

Test Information

Test Method: LM-41-14
Report Number: P209531
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29031)
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 6LA1H DIF-20
Description: 6" ROUND, 1500lm D2W, FLOOD OPTIC WITH DIFFUSED LENS, ACCENT SELF
FLANGED, HAZE TRIM
Light Source: (1) High Lumen 3000K 90 CRI LED
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 818.1 lumens
Efficiency: N/A
Efficacy: 37.2 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

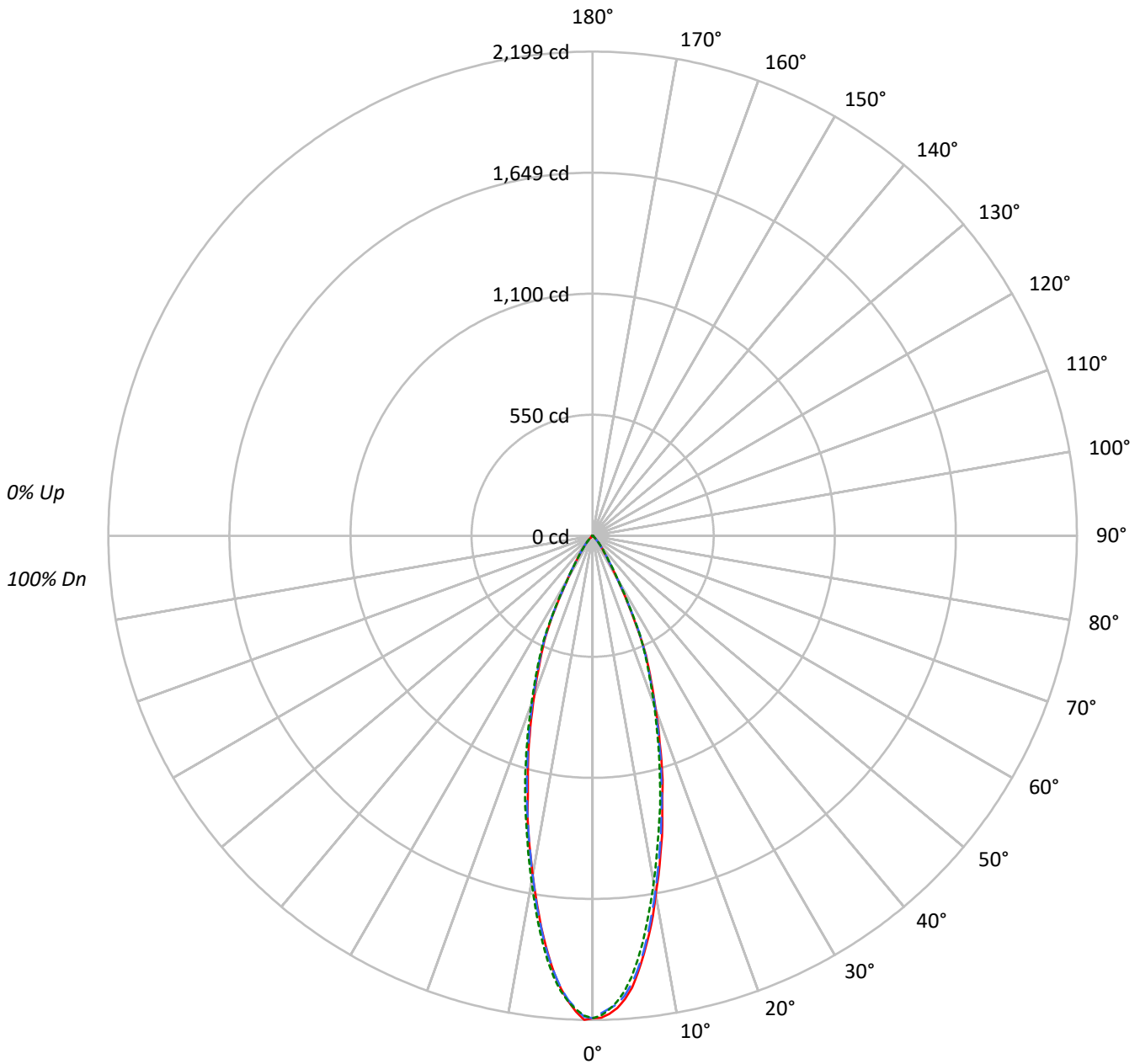
Input Watts (W): 22
Input Voltage (V): 120.0
Input Current (A_{in}): 0.187
Voltage Rise (V): NR
Power Factor: 0.9918
Total Harmonic Distortion (THDi): 16.3%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 24 HR
Ambient Temperature (°C): 24.1
Test Distance: 25 FT



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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	106	100	96	93	104	99	95	92	96	93	91	94	91	89	92	90	88	86																			
4	101	95	91	87	100	94	90	87	92	88	86	90	87	85	88	86	84	82																			
5	98	91	86	82	96	90	85	82	88	84	81	87	83	81	85	82	80	79																			
6	94	87	82	78	93	86	81	78	84	80	77	83	80	77	82	79	76	75																			
7	90	83	78	74	89	82	78	74	81	77	74	80	76	74	79	76	73	72																			
8	87	79	74	71	86	79	74	71	78	74	71	77	73	70	76	73	70	69																			
9	84	76	71	68	83	76	71	68	75	71	68	74	70	68	73	70	67	66																			
10	81	73	69	65	80	73	68	65	72	68	65	71	68	65	71	67	65	64																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	120111	120111	120111
5°	113361	110830	109784
10°	91849	88898	87173
15°	69467	67254	64586
20°	48713	47487	45446
25°	31998	31877	30728
30°	13610	14306	13926
35°	5889	6425	6826
40°	3149	3363	3650
45°	1318	1318	1551
50°	426	341	597
55°	478	287	478
60°	548	219	329
65°	519	259	259
70°	481	160	160
75°	424	0	0
80°	316	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.4	21.8
10°-20°	324.3	39.6
20°-30°	227.1	27.8
30°-40°	66.4	8.1
40°-50°	15.4	1.9
50°-60°	3.5	0.4
60°-70°	2.2	0.3
70°-80°	0.8	0.1
80°-90°	0.0	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°	729.8	89.2
0°-40°	796.2	97.3
0°-60°	815.1	99.6
0°-90°	818.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	818.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2191	2191	2191	2191	2191	
5°	2060	2042	2014	1994	1995	183
15°	1224	1212	1185	1154	1138	338
25°	529	530	527	515	508	231
35°	88	90	96	101	102	63
45°	17	16	17	19	20	15
55°	5	3	3	5	5	4
65°	4	3	2	2	2	4
75°	2	1	0	0	0	2
85°	0	0	0	0	0	0
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°	2191	2191	2191	2191	2191	2191	2191	2191	2191
1°	2189	2161	2170	2173	2180	2183	2185	2166	2199
2°	2173	2146	2149	2152	2153	2157	2150	2131	2163
3°	2148	2122	2130	2120	2119	2119	2111	2086	2117
4°	2109	2086	2092	2078	2073	2070	2059	2033	2062
5°	2060	2035	2042	2022	2014	2008	1994	1967	1995
6°	1989	1971	1977	1953	1943	1936	1921	1893	1918
7°	1912	1895	1901	1875	1863	1854	1838	1811	1835
8°	1832	1810	1816	1788	1775	1766	1750	1722	1744
9°	1748	1723	1729	1700	1686	1676	1659	1633	1655
10°	1650	1635	1641	1611	1597	1586	1569	1545	1566
11°	1571	1547	1552	1523	1509	1497	1480	1458	1478
12°	1480	1461	1465	1438	1423	1411	1396	1375	1395
13°	1400	1375	1379	1354	1339	1327	1313	1294	1314
14°	1306	1292	1295	1261	1266	1247	1233	1215	1215
15°	1224	1209	1212	1180	1185	1166	1154	1137	1138
16°	1153	1128	1130	1100	1105	1088	1077	1060	1062
17°	1070	1048	1051	1022	1029	1012	1002	987	988
18°	986	971	975	947	954	939	930	916	915
19°	917	896	900	883	882	869	861	847	845
20°	835	824	828	813	814	803	795	781	779
21°	771	756	760	746	750	740	732	719	717
22°	709	692	695	685	689	680	673	661	658
23°	650	634	638	629	633	625	619	608	605
24°	596	581	584	570	580	573	567	557	555
25°	529	519	530	525	527	521	515	510	508
26°	452	445	461	457	463	457	452	449	444
27°	375	374	389	387	395	389	394	383	378
28°	319	310	324	323	331	326	325	322	318
29°	259	255	268	267	275	272	272	270	266
30°	215	207	219	219	226	225	225	224	220
32.5°	134	130	134	139	144	144	148	145	149
35°	88	87	90	93	96	98	101	97	102
37.5°	63	61	63	65	67	69	71	69	72
40°	44	42	44	45	47	48	50	49	51
42.5°	29	28	28	29	30	31	33	33	34
45°	17	16	16	16	17	17	19	19	20
47.5°	8	7	7	7	7	8	9	10	11
50°	5	5	4	4	4	5	6	7	7
52.5°	5	4	3	3	4	4	5	6	6
55°	5	4	3	3	3	4	5	5	5
57.5°	5	4	3	2	3	3	4	4	4
60°	5	4	3	2	2	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°	3	3	2	2	1	1	1	1	1
70°	3	3	2	1	1	1	1	1	1
72.5°	3	2	2	1	1	1	1	1	1
75°	2	2	1	1	0	0	0	0	0
77.5°	1	1	1	0	0	0	0	0	0
80°	1	0	0	0	0	0	0	0	0
82.5°	0	0	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°	5	4	3	2	2	2	2	2	2
65°	4	4	3	2	2	2	2	2	2



(END OF REPORT)