

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: P209534

Luminaire Tested: **LDA6A20930D2WD010TED2W LARL15SP 6LAL1H DIF-20**

Test Date: 10/31/16

Test Information

Test Method: LM-41-14
Report Number: P209534
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29037)
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: LDA6A20930D2WD010TED2W LARL15SP 6LAL1H DIF-20
Description: 6" ROUND, 2000lm 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: 939.8 lumens
Efficiency: N/A
Efficacy: 28.6 lumens/watt
Spacing Criteria (0/90/45): 0.52 / 0.53 / 0.57
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

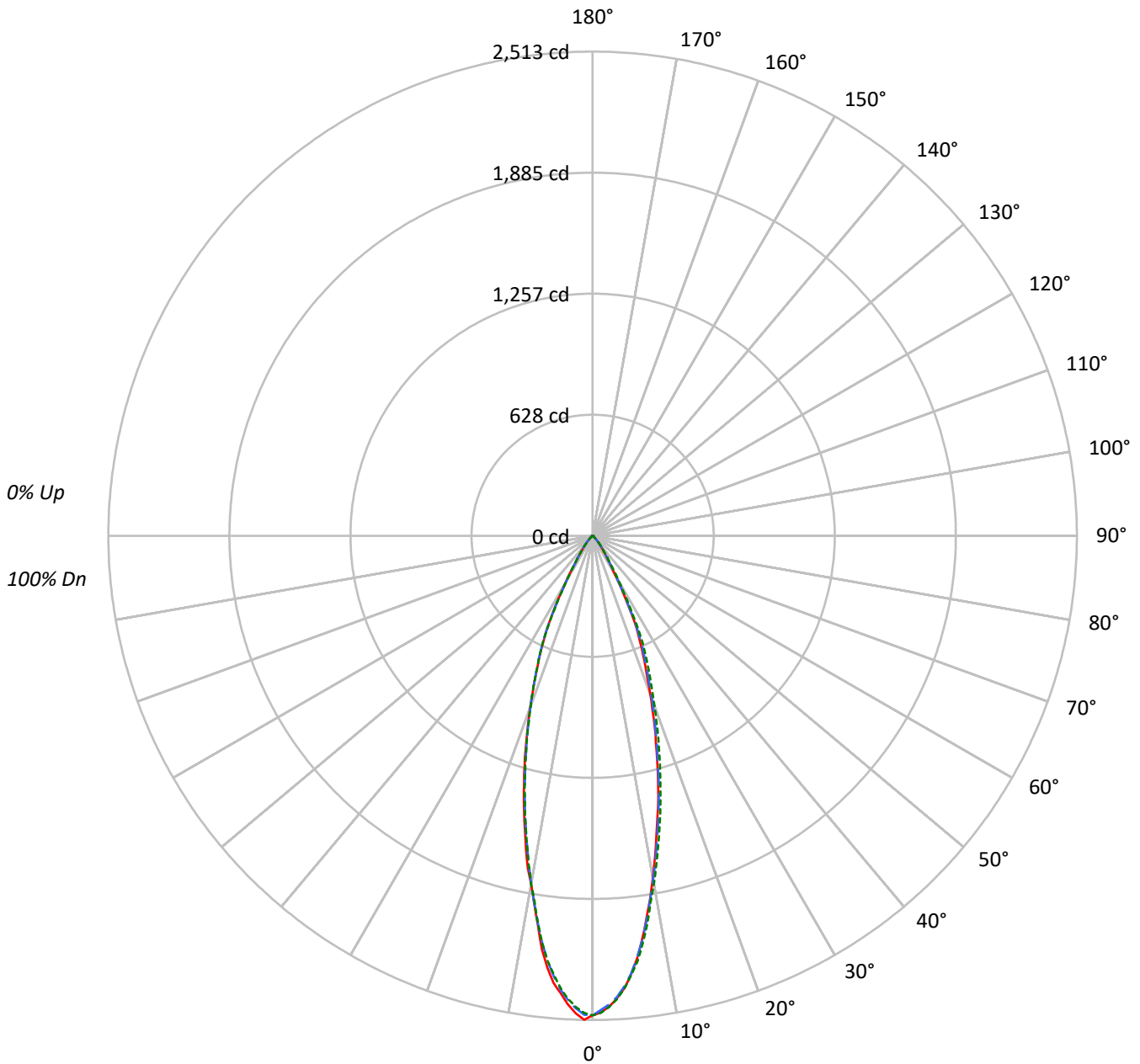
Input Watts (W): 32.9
Input Voltage (V): 120.0
Input Current (A_{in}): 0.278
Voltage Rise (V): NR
Power Factor: 0.9943
Total Harmonic Distortion (THDi): 12.3%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 24 HR
Ambient Temperature (°C): 25.0
Test Distance: 25 FT



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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	93	92	90																			
3	105	100	96	92	103	99	95	92	96	93	90	94	91	89	92	89	87	86																			
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	85	83	82																			
5	97	90	85	82	96	89	85	82	88	84	81	86	83	80	85	82	79	78																			
6	94	86	81	78	92	85	81	77	84	80	77	83	79	76	82	78	76	75																			
7	90	82	77	74	89	82	77	74	81	76	73	80	76	73	79	75	73	72																			
8	87	79	74	71	86	78	74	71	77	73	70	77	73	70	76	72	70	69																			
9	84	76	71	68	83	75	71	68	75	70	67	74	70	67	73	69	67	66																			
10	81	73	68	65	80	72	68	65	72	68	65	71	67	64	70	67	64	63																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	136447	136447	136447
5°	125743	126073	128164
10°	100310	102147	102147
15°	74461	77242	78264
20°	51279	54780	55130
25°	33570	37079	36534
30°	14623	17155	17788
35°	6692	7696	7562
40°	3721	3936	3793
45°	1628	1628	1706
50°	768	426	768
55°	860	478	669
60°	987	439	439
65°	908	389	389
70°	962	321	160
75°	1059	212	212
80°	631	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.6	21.6
10°-20°	368.7	39.2
20°-30°	260.4	27.7
30°-40°	77.8	8.3
40°-50°	18.7	2.0
50°-60°	5.6	0.6
60°-70°	3.9	0.4
70°-80°	1.9	0.2
80°-90°	0.2	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°	831.7	88.5
0°-40°	909.5	96.8
0°-60°	933.8	99.4
0°-90°	939.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	939.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2489	2489	2489	2489	2489	
5°	2285	2282	2291	2298	2329	202
15°	1312	1325	1361	1360	1379	360
25°	555	576	613	612	604	243
35°	100	105	115	116	113	71
45°	21	20	21	24	22	18
55°	9	6	5	7	7	8
65°	7	5	3	3	3	7
75°	5	3	1	1	1	5
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°	2489	2489	2489	2489	2489	2489	2489	2489	2489
1°	2474	2453	2461	2452	2477	2472	2486	2477	2513
2°	2446	2426	2434	2425	2448	2441	2456	2446	2481
3°	2406	2390	2398	2388	2409	2402	2415	2403	2437
4°	2355	2339	2347	2338	2357	2349	2363	2347	2380
5°	2285	2270	2282	2272	2291	2284	2298	2279	2329
6°	2207	2190	2203	2194	2222	2205	2221	2201	2252
7°	2111	2096	2113	2105	2133	2116	2133	2111	2162
8°	2005	1996	2014	2006	2036	2019	2035	2015	2039
9°	1905	1894	1912	1907	1923	1920	1935	1914	1936
10°	1802	1790	1810	1806	1835	1820	1835	1814	1835
11°	1696	1689	1709	1707	1737	1722	1736	1716	1760
12°	1590	1588	1610	1610	1640	1626	1640	1620	1661
13°	1497	1501	1512	1515	1545	1531	1544	1527	1565
14°	1406	1406	1418	1422	1453	1440	1452	1435	1472
15°	1312	1311	1325	1330	1361	1349	1360	1345	1379
16°	1217	1218	1223	1239	1272	1260	1271	1255	1288
17°	1123	1129	1144	1152	1184	1184	1183	1168	1200
18°	1045	1043	1058	1067	1100	1100	1099	1083	1112
19°	953	959	975	985	1017	1018	1018	1011	1027
20°	879	881	896	907	939	941	940	933	945
21°	795	805	822	835	866	868	866	849	869
22°	729	735	755	768	797	799	797	780	797
23°	669	674	692	705	732	734	732	715	729
24°	612	617	633	646	672	673	670	653	667
25°	555	563	576	587	613	616	612	596	604
26°	494	490	505	513	540	555	547	547	543
27°	412	413	418	436	462	477	471	474	472
28°	337	342	356	365	390	404	397	401	402
29°	285	282	295	304	326	338	331	326	337
30°	231	233	244	252	271	281	275	270	281
32.5°	148	151	155	161	172	177	174	173	170
35°	100	103	105	108	115	118	116	114	113
37.5°	73	73	74	76	80	82	81	78	77
40°	52	52	52	54	55	58	57	53	53
42.5°	34	34	34	35	36	39	38	35	35
45°	21	21	20	20	21	23	24	22	22
47.5°	11	11	9	9	10	12	13	13	14
50°	9	8	6	5	5	7	8	9	9
52.5°	9	8	6	5	5	6	7	8	8
55°	9	8	6	5	5	6	7	7	7
57.5°	9	8	6	4	4	5	6	6	6
60°	9	8	6	4	4	4	5	4	4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	7	6	5	3	2	2	2	2	2
70°	6	6	4	3	2	1	1	1	1
72.5°	6	5	4	2	1	1	1	1	1
75°	5	5	3	2	1	1	1	1	1
77.5°	4	3	2	1	0	0	0	0	0
80°	2	2	1	1	0	0	0	0	0
82.5°	1	1	1	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°	8	8	6	4	3	3	4	3	3
65°	7	7	5	4	3	3	3	3	3



(END OF REPORT)