

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: P209533

Luminaire Tested: **LDA6A20930D2WD010TED2W LARL15SP 6LA1H DIF-20**

Test Date: 10/31/16

**Test Information**

Test Method: LM-41-14  
Report Number: P209533  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29036)  
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 6LA1H DIF-20  
Description: 6" ROUND, 2000lm D2W, FLOOD OPTIC WITH DIFFUSED LENS, ACCENT SELF  
FLANGED, HAZE TRIM  
Light Source: (1) High Lumen 3000K 90 CRI LED  
Ballast/Driver: -

**Summary**

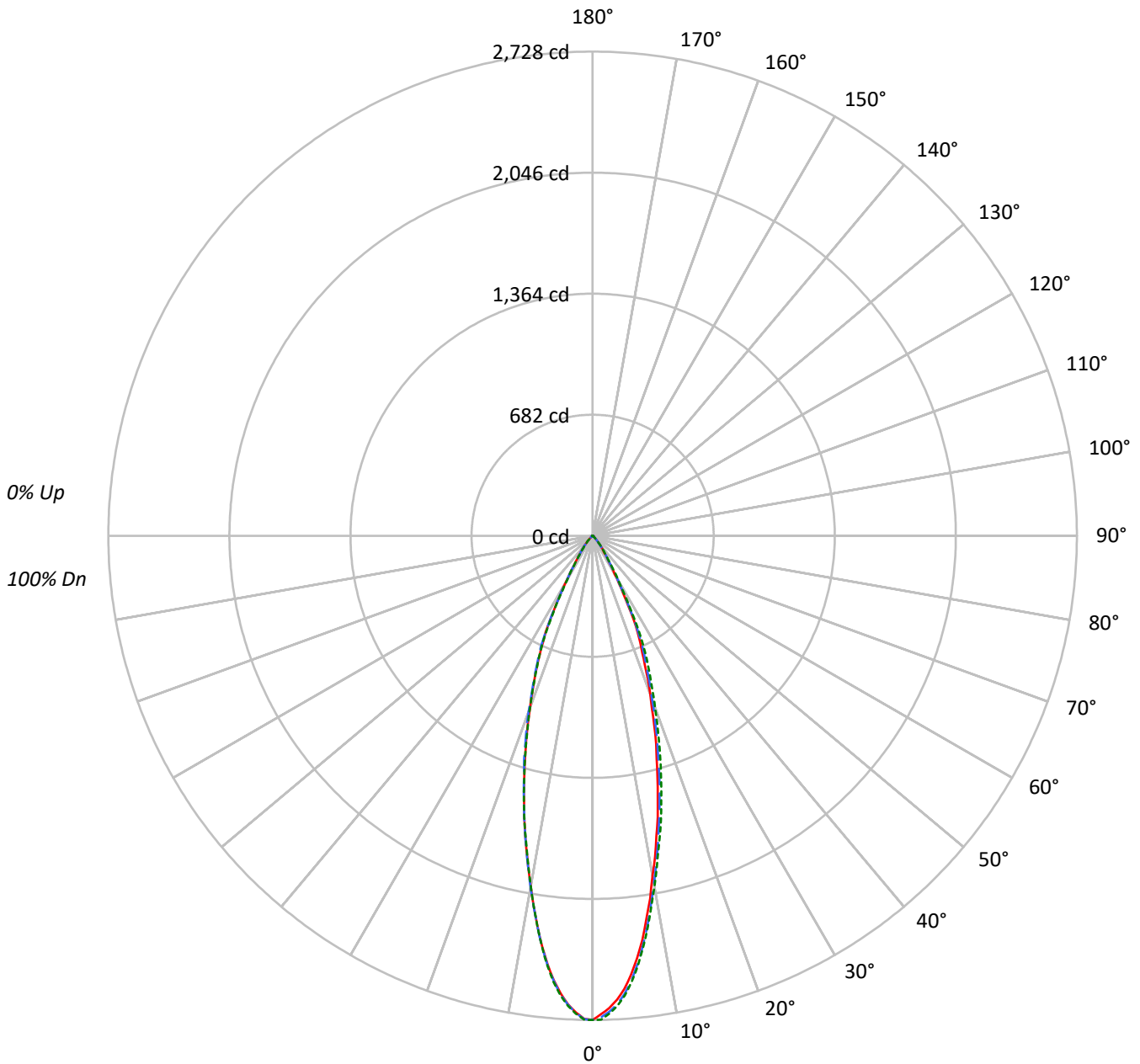
Lumens per Lamp: N/A  
Luminaire Lumens: 1025.6 lumens  
Efficiency: N/A  
Efficacy: 31.2 lumens/watt  
Spacing Criteria (0/90/45): 0.52 / 0.53 / 0.57  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 32.9  
Input Voltage (V): 120.0  
Input Current (A<sub>in</sub>): 0.278  
Voltage Rise (V): NR  
Power Factor: 0.9944  
Total Harmonic Distortion (THDi): 12.3%  
Frequency (hertz): 60  
Stabilization Time: 0.5 HR  
Operation Time: 24 HR  
Ambient Temperature (°C): 24.8  
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	90	88	86																			
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	86	84	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	71	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	64																			

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

	0°	90°	180°
0°	336487	336487	336487
5°	307313	312514	311152
10°	243232	251123	251499
15°	180308	191034	191034
20°	124174	135200	135593
25°	81386	90913	90368
30°	35464	41019	42586
35°	16262	18220	19575
40°	8856	9339	10305
45°	3838	3663	4361
50°	1727	959	1535
55°	1935	860	1290
60°	1974	740	987
65°	2043	584	584
70°	1803	721	361
75°	1906	477	477
80°	710	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	222.5	21.7
10°-20°	404.9	39.5
20°-30°	284.8	27.8
30°-40°	83.6	8.2
40°-50°	19.6	1.9
50°-60°	5.2	0.5
60°-70°	3.4	0.3
70°-80°	1.5	0.1
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°	912.2	88.9
0°-40°	995.8	97.1
0°-60°	1020.6	99.5
0°-90°	1025.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1025.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2728	2728	2728	2728	2728	
5°	2482	2514	2524	2518	2513	219
15°	1412	1455	1496	1498	1496	389
25°	598	628	668	691	664	262
35°	108	112	121	126	130	76
45°	22	20	21	25	25	19
55°	9	6	4	6	6	8
65°	7	5	2	2	2	7
75°	4	3	1	1	1	3
85°	0	0	0	0	0	0
90°	0	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°	2728	2728	2728	2728	2728	2728	2728	2728	2728
1°	2696	2684	2713	2700	2727	2719	2724	2717	2722
2°	2663	2655	2684	2671	2695	2687	2691	2685	2688
3°	2618	2614	2642	2631	2653	2645	2647	2639	2644
4°	2560	2558	2587	2578	2596	2588	2590	2583	2586
5°	2482	2483	2514	2508	2524	2518	2518	2512	2513
6°	2395	2396	2426	2424	2437	2432	2433	2428	2427
7°	2294	2296	2326	2326	2336	2335	2336	2331	2331
8°	2178	2186	2216	2219	2228	2227	2228	2226	2225
9°	2069	2074	2103	2108	2116	2118	2120	2116	2116
10°	1942	1961	1990	1996	2005	2008	2011	2008	2008
11°	1843	1848	1878	1886	1896	1899	1902	1900	1901
12°	1729	1739	1769	1779	1790	1795	1799	1797	1797
13°	1630	1632	1662	1674	1698	1692	1696	1696	1695
14°	1513	1528	1557	1569	1596	1592	1596	1584	1594
15°	1412	1426	1455	1468	1496	1493	1498	1485	1496
16°	1309	1325	1354	1368	1396	1396	1401	1389	1397
17°	1224	1227	1255	1269	1299	1301	1318	1294	1301
18°	1124	1134	1160	1175	1206	1209	1226	1203	1208
19°	1025	1044	1069	1085	1116	1120	1138	1115	1119
20°	946	957	981	998	1030	1036	1054	1030	1033
21°	870	875	899	919	949	956	963	949	952
22°	784	800	825	844	874	882	888	874	877
23°	719	733	756	775	803	811	817	804	806
24°	658	671	692	710	736	745	750	738	734
25°	598	611	628	643	668	675	691	674	664
26°	533	535	548	561	583	588	604	599	604
27°	445	451	462	475	497	501	515	509	517
28°	364	374	385	397	417	420	432	425	434
29°	307	308	318	329	347	350	360	353	360
30°	249	254	263	272	288	291	298	292	299
32.5°	159	161	166	171	181	184	190	186	191
35°	108	110	112	115	121	124	126	126	130
37.5°	78	79	78	80	84	87	89	91	91
40°	55	56	54	55	58	60	63	63	64
42.5°	37	37	35	36	38	40	41	42	42
45°	22	22	20	19	21	23	25	25	25
47.5°	12	11	9	8	9	11	12	12	13
50°	9	8	6	5	5	6	7	8	8
52.5°	9	9	6	5	5	5	6	7	7
55°	9	8	6	4	4	5	6	6	6
57.5°	9	8	6	4	4	4	5	5	5
60°	8	8	6	4	3	3	4	4	4



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**CANDELA DISTRIBUTION (continued):**

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



Report Generated By E9808895 / USPTCWHP6082093







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







62.5°	8	7	5	4	3	3	3	3	3
65°	7	6	5	3	2	2	2	2	2



(END OF REPORT)