

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: P209530

Luminaire Tested: **LDA6A10930D2WD010TED2W LARL15SP 6LAL1H DIF-20**

Test Date: 10/31/16

Test Information

Test Method: LM-41-14
Report Number: P209530
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29030)
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: LDA6A10930D2WD010TED2W LARL15SP 6LAL1H DIF-20
Description: 6" ROUND, 1000lm 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: 505.8 lumens
Efficiency: N/A
Efficacy: 37.2 lumens/watt
Spacing Criteria (0/90/45): 0.51 / 0.52 / 0.57
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

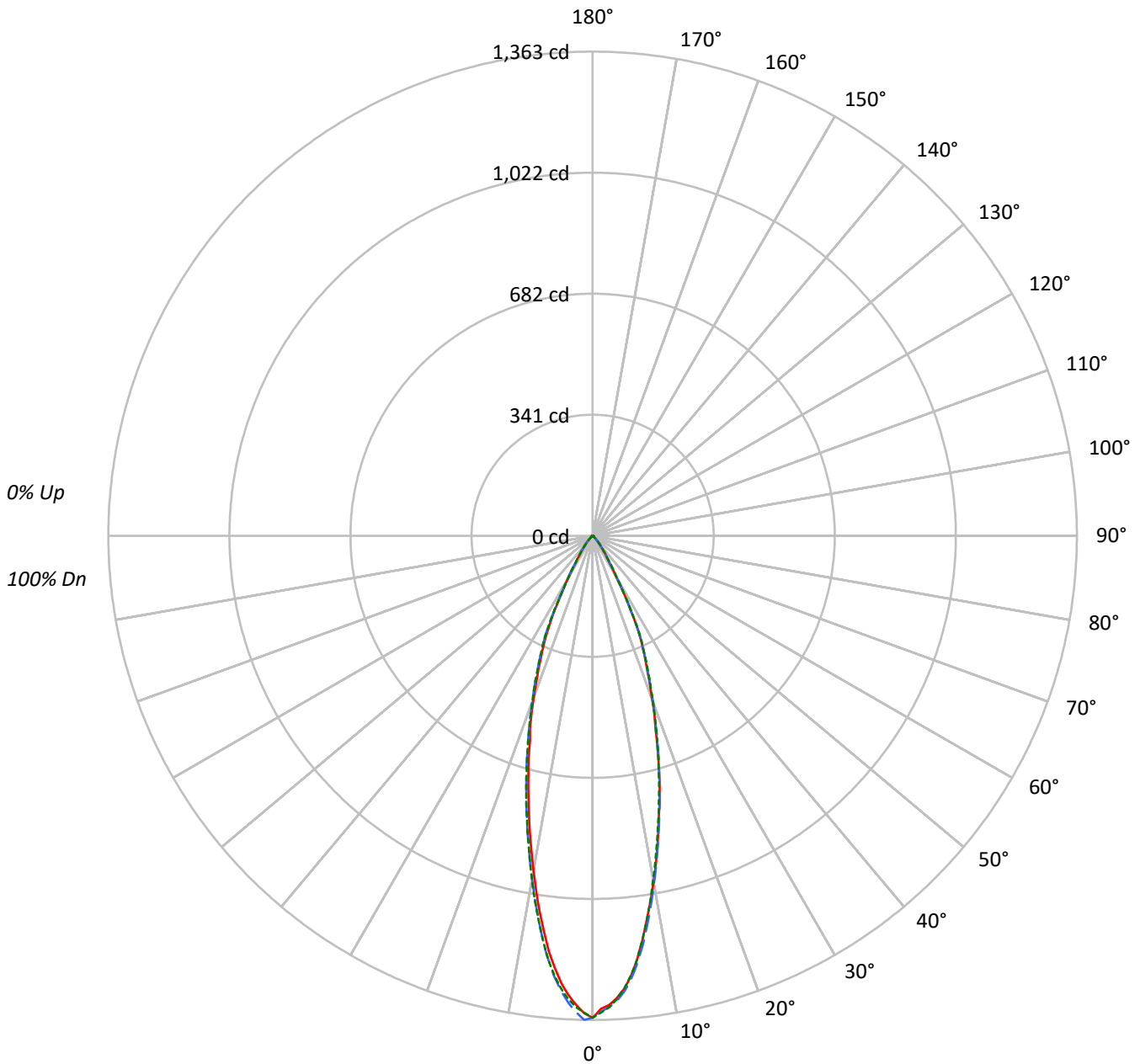
Input Watts (W): 13.6
Input Voltage (V): 120.0
Input Current (A_{in}): 0.115
Voltage Rise (V): NR
Power Factor: 0.9976
Total Harmonic Distortion (THDi): 16.4%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 24 HR
Ambient Temperature (°C): 24.5
Test Distance: 25 FT



TEST NUMBER: P209530

CATALOG NUMBER: LDA6A10930D2WD010TED2W LARL15SP 6LAL1H DIF-20

Luminous Intensity Polar Plot





TEST NUMBER: P209530

CATALOG NUMBER: LDA6A10930D2WD010TED2W LARL15SP 6LAL1H DIF-20

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	90	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°	74391	74391	74391
5°	68402	68292	67191
10°	55054	54720	53272
15°	41374	40976	39671
20°	28527	28936	28236
25°	19295	19598	18570
30°	8356	8736	8609
35°	3815	4015	3948
40°	2004	2075	2004
45°	853	853	930
50°	341	256	426
55°	478	191	382
60°	439	219	219
65°	519	130	130
70°	481	160	160
75°	424	0	0
80°	316	0	0
85°	0	0	0



TEST NUMBER: P209530

CATALOG NUMBER: LDA6A10930D2WD010TED2W LARL15SP 6LAL1H DIF-20

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.3	21.8
10°-20°	199.0	39.3
20°-30°	139.7	27.6
30°-40°	41.2	8.1
40°-50°	9.9	2.0
50°-60°	2.8	0.6
60°-70°	1.9	0.4
70°-80°	0.9	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°	449.0	88.8
0°-40°	490.2	96.9
0°-60°	503.0	99.4
0°-90°	505.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	505.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1357	1357	1357	1357	1357	
5°	1243	1251	1241	1244	1221	110
15°	729	728	722	722	699	199
25°	319	321	324	322	307	138
35°	57	58	60	60	59	39
45°	11	11	11	12	12	10
55°	5	3	2	3	4	4
65°	4	3	1	1	1	4
75°	2	2	0	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P209530

CATALOG NUMBER: LDA6A10930D2WD010TED2W LARL15SP 6LAL1H DIF-20

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1357	1357	1357	1357	1357	1357	1357	1357	1357
1°	1332	1344	1340	1356	1343	1358	1363	1358	1344
2°	1322	1333	1328	1341	1328	1339	1342	1336	1322
3°	1303	1316	1311	1323	1306	1315	1316	1309	1295
4°	1278	1290	1285	1296	1277	1284	1283	1276	1262
5°	1243	1256	1251	1261	1241	1245	1244	1236	1221
6°	1198	1214	1208	1218	1198	1199	1198	1192	1177
7°	1148	1165	1160	1168	1147	1148	1148	1141	1123
8°	1093	1112	1106	1113	1094	1094	1093	1086	1070
9°	1042	1057	1051	1056	1039	1038	1037	1029	1013
10°	989	1001	995	1000	983	982	982	973	957
11°	935	946	939	944	928	927	927	918	902
12°	881	892	885	890	874	875	874	865	850
13°	825	839	832	836	822	822	822	813	797
14°	778	787	779	784	771	772	771	762	748
15°	729	736	728	733	722	723	722	713	699
16°	677	679	679	683	673	675	674	664	652
17°	624	630	630	635	626	629	627	617	604
18°	574	582	582	587	581	583	582	571	570
19°	534	537	537	542	537	540	538	527	527
20°	489	494	495	500	496	499	497	486	484
21°	449	452	454	460	457	459	457	446	444
22°	413	415	417	423	421	423	420	410	407
23°	379	381	383	388	387	388	386	375	372
24°	348	349	350	355	354	356	353	343	340
25°	319	320	321	325	324	325	322	313	307
26°	281	282	283	285	286	286	284	277	273
27°	237	239	240	242	243	244	243	237	234
28°	201	197	199	200	201	203	202	196	195
29°	164	163	168	166	167	169	168	164	163
30°	132	134	138	137	138	140	140	136	136
32.5°	83	84	87	87	88	90	90	87	87
35°	57	57	58	58	60	61	60	59	59
37.5°	39	41	40	41	42	42	42	41	41
40°	28	29	28	28	29	30	30	29	28
42.5°	19	19	18	19	19	20	20	19	19
45°	11	12	11	10	11	12	12	12	12
47.5°	6	6	5	5	5	6	7	7	7
50°	4	4	3	2	3	3	4	5	5
52.5°	5	4	3	2	3	3	4	4	4
55°	5	4	3	2	2	3	3	4	4
57.5°	5	4	3	2	2	2	3	3	3
60°	4	4	3	2	2	2	2	2	2



TEST NUMBER: P209530

CATALOG NUMBER: LDA6A10930D2WD010TED2W LARL15SP 6LAL1H DIF-20

CANDELA DISTRIBUTION (continued):

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



Report Generated By E9808895 / USPTCWHP6082093





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







62.5°	4	4	3	2	2	2	2	2	2
65°	4	3	3	2	1	1	1	1	1



(END OF REPORT)