

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: P209538

Luminaire Tested: **LDSQA6A15930D2WD010TED2W LARL15SP 6LAL1H DIF-20**

Test Date: 11/02/16

Test Information

Test Method: LM-41-14
Report Number: P209538
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29041)
Test Lab: INNOVATION CENTER-P2
Test Date: 11/02/16
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA6A15930D2WD010TED2W LARL15SP 6LAL1H DIF-20
Description: 6" SQUARE, 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: 686.5 lumens
Efficiency: N/A
Efficacy: 31.2 lumens/watt
Spacing Criteria (0/90/45): 0.54 / 0.54 / 0.58
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

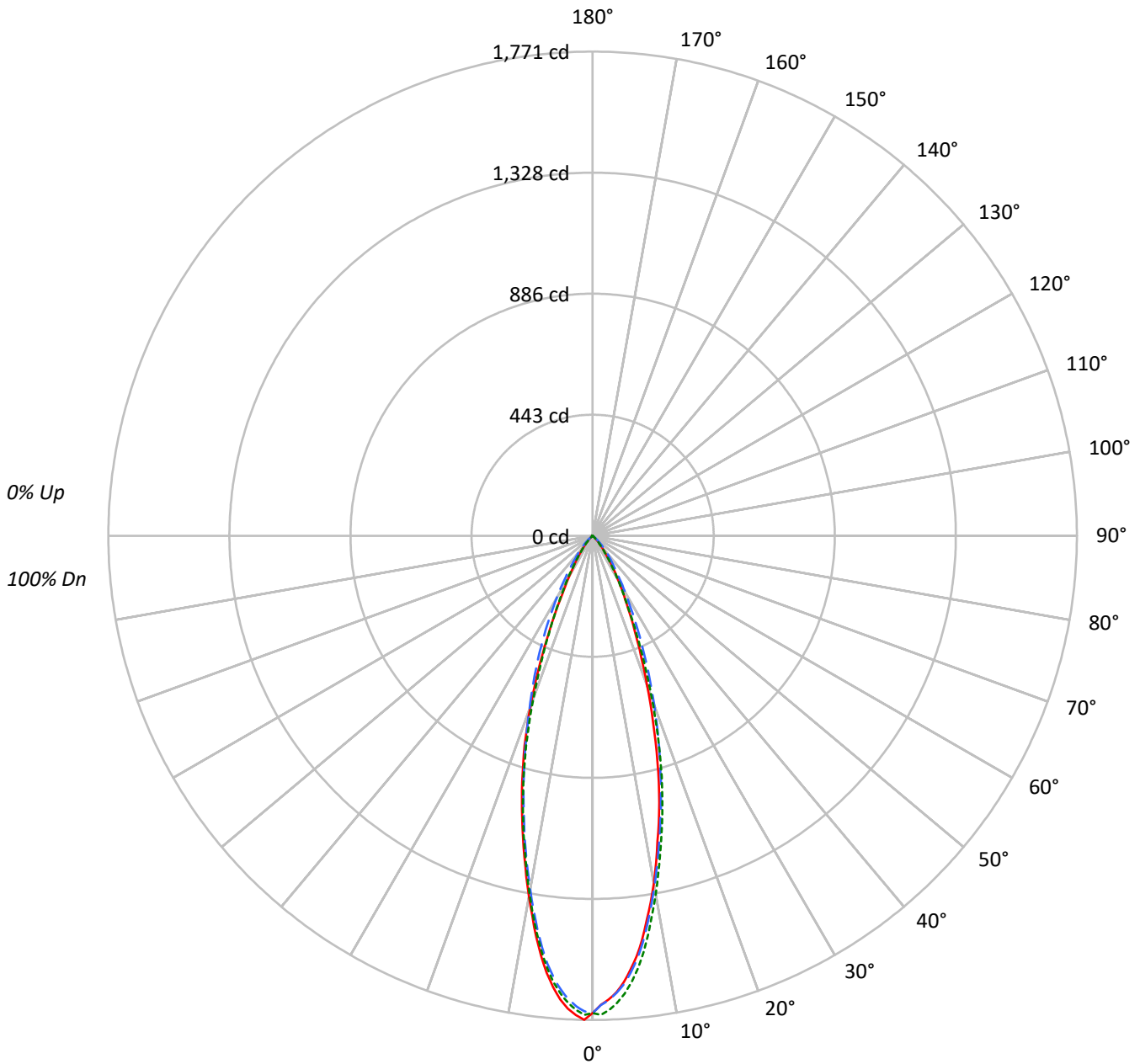
Input Watts (W): 22
Input Voltage (V): 120.0
Input Current (A_{in}): 0.187
Voltage Rise (V): NR
Power Factor: 0.9919
Total Harmonic Distortion (THDi): 16.3%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 24 HR
Ambient Temperature (°C): 24.6
Test Distance: 25 FT



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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	98	95	91	96	93	90	94	91	89	91	89	87	86																			
4	101	95	90	86	99	94	89	86	92	88	85	90	87	84	88	85	83	82																			
5	97	90	85	82	96	89	85	81	87	84	80	86	82	80	84	81	79	78																			
6	93	86	81	77	92	85	80	77	84	80	76	82	79	76	81	78	75	74																			
7	90	82	77	73	89	81	77	73	80	76	73	79	75	72	78	75	72	71																			
8	86	78	73	70	85	78	73	70	77	73	70	76	72	69	75	72	69	68																			
9	83	75	70	67	82	75	70	67	74	70	67	73	69	66	72	69	66	65																			
10	80	72	67	64	79	72	67	64	71	67	64	70	66	64	70	66	64	62																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	75175	75175	75175
5°	68850	70838	71659
10°	56355	58104	58585
15°	41677	43906	44530
20°	26575	29003	30470
25°	15867	16627	16722
30°	9396	9148	8452
35°	4731	4520	4468
40°	2473	2304	2361
45°	913	792	913
50°	134	134	268
55°	75	75	225
60°	86	86	86
65°	102	102	102
70°	126	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.6	21.1
10°-20°	266.2	38.8
20°-30°	178.7	26.0
30°-40°	73.4	10.7
40°-50°	20.6	3.0
50°-60°	2.1	0.3
60°-70°	0.8	0.1
70°-80°	0.1	0.0
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°	589.5	85.9
0°-40°	662.9	96.6
0°-60°	685.7	99.9
0°-90°	686.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	686.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1746	1746	1746	1746	1746	
5°	1593	1604	1639	1624	1658	142
15°	935	966	985	977	999	253
25°	334	406	350	445	352	157
35°	90	134	86	140	85	62
45°	15	38	13	37	15	13
55°	1	1	1	2	3	1
65°	1	1	1	1	1	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P209538

CATALOG NUMBER: LDSQA6A15930D2WD010TED2W LARL15SP 6LAL1H DIF-20

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1746	1746	1746	1746	1746	1746	1746	1746	1746
1°	1716	1711	1717	1725	1753	1741	1740	1751	1771
2°	1697	1693	1699	1706	1735	1723	1722	1733	1754
3°	1672	1669	1675	1683	1711	1699	1697	1709	1732
4°	1637	1637	1644	1651	1679	1668	1665	1677	1700
5°	1593	1595	1604	1611	1639	1627	1624	1636	1658
6°	1546	1546	1557	1563	1590	1578	1576	1587	1608
7°	1488	1489	1501	1507	1533	1521	1518	1528	1548
8°	1420	1424	1437	1442	1467	1456	1452	1461	1482
9°	1357	1357	1369	1374	1399	1388	1384	1393	1410
10°	1289	1288	1301	1305	1329	1318	1314	1322	1340
11°	1218	1221	1231	1236	1258	1249	1245	1253	1270
12°	1142	1151	1164	1168	1189	1181	1177	1183	1200
13°	1076	1090	1097	1101	1121	1112	1109	1124	1132
14°	1007	1020	1031	1035	1053	1046	1042	1057	1065
15°	935	950	966	970	985	980	977	991	999
16°	861	881	901	903	916	915	912	926	933
17°	787	812	838	836	845	851	850	863	869
18°	712	745	777	769	773	787	790	802	804
19°	651	681	716	703	702	723	732	743	735
20°	580	619	658	639	633	661	676	682	665
21°	524	561	601	578	568	602	625	622	595
22°	471	506	548	521	506	545	577	562	529
23°	421	456	498	467	449	491	531	504	465
24°	375	409	450	416	397	440	487	448	406
25°	334	367	406	371	350	393	445	396	352
26°	296	328	365	329	308	349	404	348	304
27°	262	293	328	292	271	310	365	304	262
28°	238	262	294	259	239	274	329	265	224
29°	209	234	263	230	209	242	294	231	195
30°	189	208	235	204	184	212	263	199	170
32.5°	137	160	175	154	128	159	193	144	122
35°	90	114	134	107	86	112	140	106	85
37.5°	64	78	104	73	59	77	103	76	60
40°	44	55	81	52	41	55	77	54	42
42.5°	28	39	57	36	26	38	56	37	27
45°	15	25	38	23	13	24	37	24	15
47.5°	5	13	25	11	4	12	24	12	6
50°	2	3	14	3	2	4	14	5	4
52.5°	2	1	6	1	2	2	6	3	4
55°	1	1	1	1	1	2	2	3	3
57.5°	1	1	1	1	1	1	2	3	3
60°	1	1	1	1	1	1	1	2	1



TEST NUMBER: P209538

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CANDELA DISTRIBUTION (continued):

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



Report Generated By E9808895 / USPTCWHP6082093





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







62.5°	1	1	1	1	1	1	1	1	1	1
65°	1	1	1	1	1	1	1	1	1	1



(END OF REPORT)