

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: P35360

Luminaire Tested: **LDSQ6B15D010 EU6B10208035 6LBSQ1LI**

Test Date: 11/03/16

**Test Information**

Test Method: LM-41-14  
Report Number: P35360  
Test Lab: INNOVATION CENTER-P3  
Test Date: 11/03/16  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDSQ6B15D010 EU6B10208035 6LBSQ1LI  
Description: PORTFOLIO LD6 SERIES 6" RECESSED FIXTURE WITH A SQUARE LOW IRIDESCENT TRIM.  
Light Source: (1) CITIZEN 3500K LED, 80 CRI  
CLU038-1205C4-353M2K1  
Ballast/Driver: (1) EATON ELECTRONIC DRIVER  
XEL-045REU-CX350-ZNT02

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1491.4 lumens  
Efficiency: N/A  
Efficacy: 106.5 lumens/watt  
Spacing Criteria (0/90/45): 0.92 / 0.92 / 0.95  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

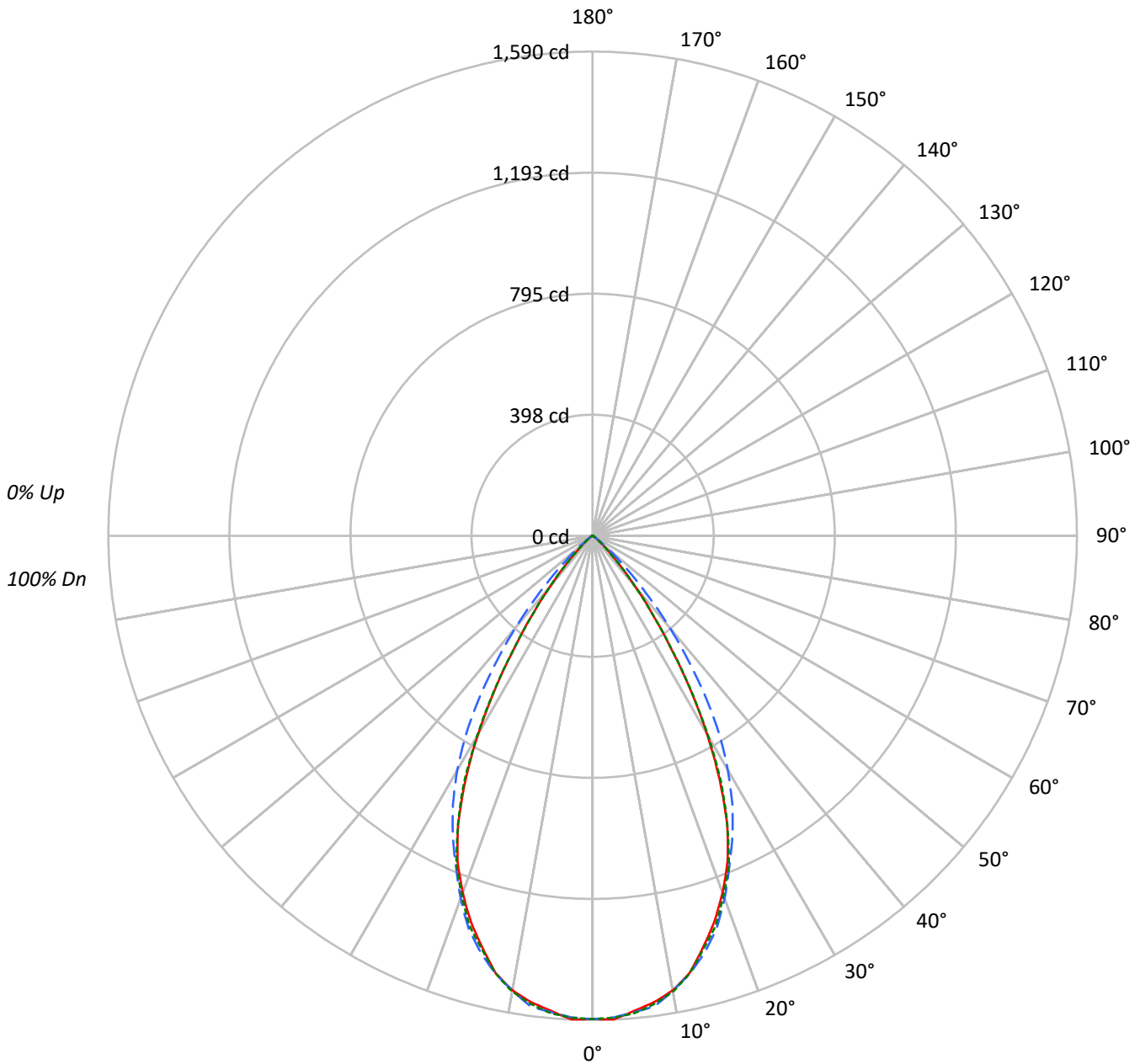
Input Watts (W): 14  
Input Voltage (V): 120.0  
Input Current (A<sub>in</sub>): 0.117  
Voltage Rise (V): NR  
Power Factor: 0.9987  
Total Harmonic Distortion (THDi): 7.77%  
Frequency (hertz): 60  
Stabilization Time: 0.5 HR  
Operation Time: 5 HR  
Ambient Temperature (°C): 24.4  
Test Distance: 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	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93																			
2	108	103	99	95	106	101	97	94	98	95	92	95	92	90	92	90	88	87																			
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	84	82	80																			
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75																			
5	92	83	78	73	90	82	77	73	81	76	72	79	75	72	77	74	71	69																			
6	87	78	72	68	86	77	72	67	76	71	67	74	70	67	73	69	66	65																			
7	83	73	67	63	81	73	67	63	71	66	62	70	66	62	69	65	62	60																			
8	79	69	63	59	77	68	63	59	67	62	58	66	62	58	65	61	58	56																			
9	75	65	59	55	74	64	59	55	64	58	55	63	58	54	62	57	54	53																			
10	71	61	55	52	70	61	55	51	60	55	51	59	55	51	59	54	51	50																			

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

	0°	45°	90°
0°	68329	68329	68329
5°	67683	67856	68028
10°	66279	66279	66454
15°	62404	63207	62627
20°	57136	58053	57549
25°	49644	51592	49692
30°	37337	44148	37685
35°	23180	34007	23285
40°	12197	22145	12140
45°	5054	11082	5176
50°	1942	4153	1942
55°	1051	1276	976
60°	689	603	689
65°	408	408	408
70°	252	378	252
75°	166	166	166
80°	248	248	248
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	148.6	10.0
10°-20°	395.2	26.5
20°-30°	485.0	32.5
30°-40°	334.8	22.5
40°-50°	104.7	7.0
50°-60°	16.4	1.1
60°-70°	4.7	0.3
70°-80°	1.6	0.1
80°-90°	0.3	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°	1028.8	69.0
0°-40°	1363.7	91.4
0°-60°	1484.7	99.6
0°-90°	1491.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1491.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1587	1587	1587	1587	1587	
5°	1566	1572	1570	1570	1574	148
15°	1400	1420	1418	1416	1405	392
25°	1045	1072	1086	1079	1046	468
35°	441	522	647	526	443	282
45°	83	114	182	112	85	74
55°	14	15	17	15	13	14
65°	4	5	4	5	4	4
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P35360

CATALOG NUMBER: LDSQ6B15D010 EU6B10208035 6LBSQ1LI

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1587	1587	1587	1587	1587	1587	1587	1587	1587	1587	1587
2.5°	1590	1568	1582	1579	1587	1592	1587	1596	1590	1583	1585
5°	1566	1569	1568	1570	1572	1572	1582	1583	1585	1570	1574
7.5°	1545	1545	1550	1548	1555	1553	1554	1562	1563	1559	1556
10°	1516	1512	1507	1507	1516	1517	1525	1526	1532	1516	1518
12.5°	1471	1469	1461	1465	1472	1468	1481	1482	1480	1473	1477
15°	1400	1408	1406	1405	1421	1419	1418	1421	1422	1418	1415
17.5°	1329	1336	1337	1339	1342	1345	1349	1360	1356	1353	1363
20°	1247	1244	1252	1260	1263	1263	1269	1277	1271	1267	1268
22.5°	1158	1163	1159	1167	1171	1176	1182	1189	1184	1173	1186
25°	1045	1048	1061	1060	1066	1078	1087	1087	1087	1086	1086
27.5°	903	901	917	928	943	962	974	993	996	993	986
30°	751	749	769	783	810	819	852	870	889	888	883
32.5°	593	597	613	633	655	683	714	754	771	775	766
35°	441	447	462	479	506	537	580	618	647	647	640
37.5°	318	320	334	345	373	401	438	490	508	515	508
40°	217	217	225	237	260	284	318	357	383	394	382
42.5°	138	140	146	154	171	192	218	247	266	274	263
45°	83	85	90	96	107	120	138	159	175	182	177
47.5°	50	52	54	58	66	75	84	96	106	107	105
50°	29	29	31	34	38	43	48	55	58	62	58
52.5°	19	19	19	20	22	24	26	30	32	32	31
55°	14	14	14	14	15	15	15	16	17	17	17
57.5°	10	10	10	11	11	11	10	10	10	10	10
60°	8	8	8	8	8	8	8	8	7	7	7
62.5°	6	6	6	6	6	6	6	6	6	6	6
65°	4	4	4	5	5	5	5	4	4	4	4
67.5°	3	3	3	4	4	4	4	4	3	3	3
70°	2	2	3	3	3	3	3	3	3	3	3
72.5°	2	2	2	2	2	2	2	2	2	2	2
75°	1	1	1	1	1	1	1	1	1	1	1
77.5°	1	1	1	1	1	1	1	1	1	1	1
80°	1	1	1	1	1	1	1	1	1	1	1
82.5°	0	0	1	1	1	1	1	1	1	1	1
85°	0	0	0	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0	0	0	0	0



TEST NUMBER: P35360

CATALOG NUMBER: LDSQ6B15D010 EU6B10208035 6LBSQ1LI

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1587	1587	1587	1587	1587	1587	1587	1587
2.5°	1591	1586	1586	1586	1584	1586	1589	1584
5°	1574	1576	1567	1574	1577	1572	1584	1574
7.5°	1559	1556	1542	1552	1558	1560	1559	1551
10°	1529	1522	1516	1516	1514	1513	1524	1520
12.5°	1475	1480	1471	1476	1472	1473	1474	1472
15°	1429	1424	1412	1420	1415	1410	1420	1405
17.5°	1357	1356	1349	1344	1346	1345	1350	1343
20°	1272	1274	1270	1268	1265	1258	1264	1256
22.5°	1180	1182	1186	1178	1179	1169	1178	1169
25°	1087	1086	1081	1077	1066	1055	1053	1046
27.5°	985	978	966	953	936	921	920	915
30°	873	858	836	815	789	766	766	758
32.5°	755	721	691	665	631	618	605	598
35°	614	584	548	505	489	457	459	443
37.5°	481	444	410	375	347	332	324	316
40°	357	321	284	261	236	223	218	216
42.5°	244	214	190	171	158	144	140	138
45°	159	142	120	105	96	88	88	85
47.5°	95	84	73	63	57	52	50	49
50°	53	47	41	37	33	30	29	29
52.5°	29	26	24	21	19	19	19	18
55°	15	15	15	15	14	14	14	13
57.5°	10	10	11	11	11	10	10	10
60°	8	8	8	8	8	8	8	8
62.5°	6	6	6	6	6	6	6	6
65°	4	5	5	5	5	4	4	4
67.5°	3	4	4	4	3	3	3	3
70°	3	3	3	3	3	2	2	2
72.5°	2	2	2	2	2	2	2	2
75°	1	1	1	1	1	1	1	1
77.5°	1	1	1	1	1	1	1	1
80°	1	1	1	1	1	1	1	1
82.5°	1	1	1	1	1	0	0	0
85°	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0	0



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









(END OF REPORT)