

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: P35359

Luminaire Tested: **LDSQ6B15D010 EU6B10208035 6LBCSSQ1MMS**

Test Date: 11/04/16

**Test Information**

Test Method: LM-41-14  
Report Number: P35359  
Test Lab: INNOVATION CENTER-P3  
Test Date: 11/04/16  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDSQ6B15D010 EU6B10208035 6LBCSSQ1MMS  
Description: PORTFOLIO LD6 SERIES 6" RECESSED FIXTURE WITH A SQUARE SHALLOW CAST METALLIC SILVER 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: 1636.9 lumens  
Efficiency: N/A  
Efficacy: 116.9 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

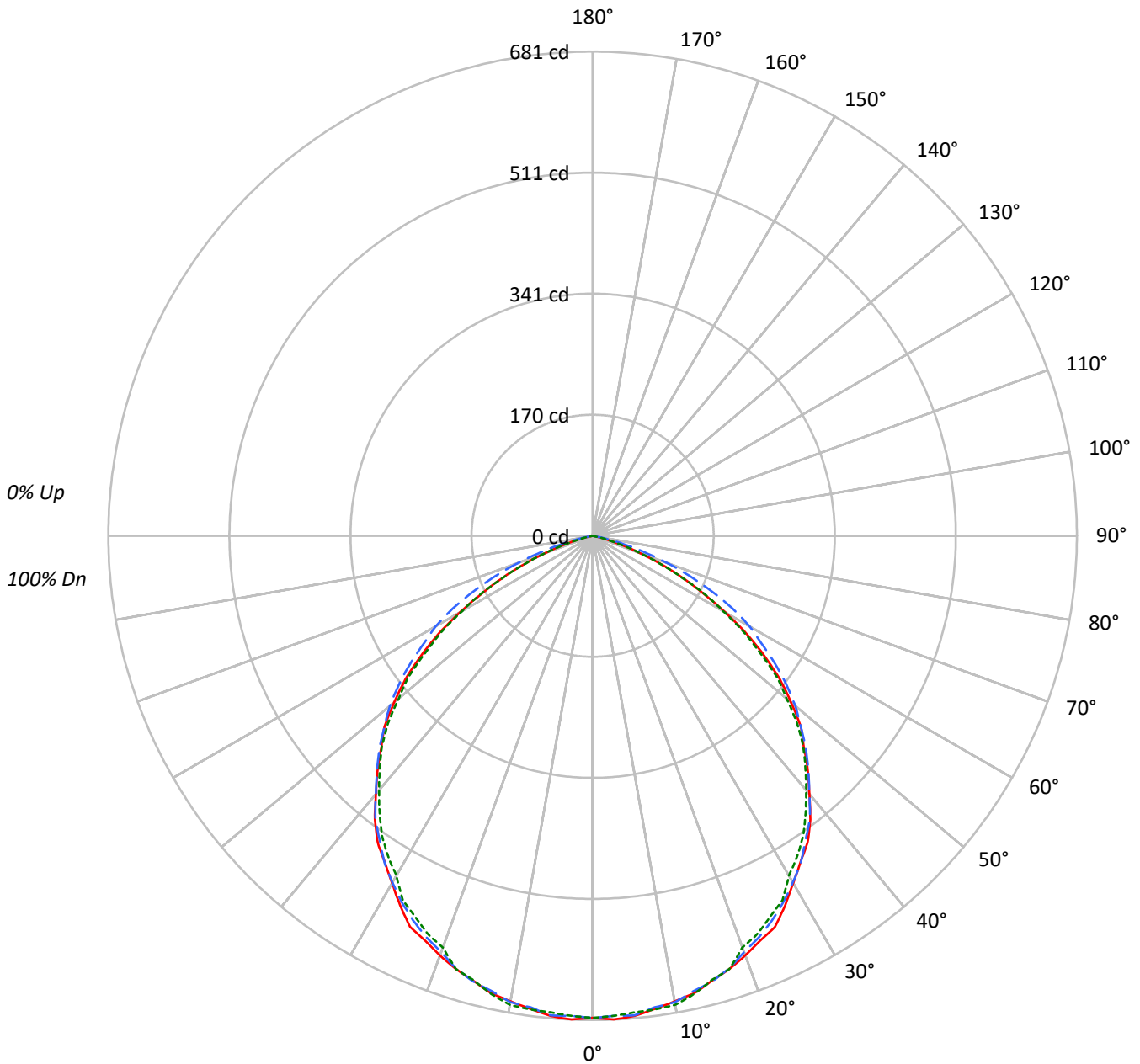
Input Watts (W): 14  
Input Voltage (V): 120.0  
Input Current (A<sub>in</sub>): 0.117  
Voltage Rise (V): NR  
Power Factor: 0.9986  
Total Harmonic Distortion (THDi): 7.78%  
Frequency (hertz): 60  
Stabilization Time: 0.5 HR  
Operation Time: 5 HR  
Ambient Temperature (°C): 24.5  
Test Distance: 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	111	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87																			
2	102	94	88	83	99	93	87	82	89	84	80	86	82	79	83	80	77	75																			
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	64																			
4	86	75	67	60	84	73	66	60	71	64	59	69	63	58	67	62	58	56																			
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49																			
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43																			
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38																			
8	63	50	42	37	62	50	42	36	48	41	36	47	41	36	46	40	36	34																			
9	59	46	38	33	58	46	38	33	45	38	33	43	37	33	42	37	32	31																			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28																			

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

	0°	45°	90°
0°	29192	29192	29192
5°	29303	29260	29087
10°	29074	29117	29292
15°	28884	28929	28840
20°	28774	28545	28224
25°	28837	28361	28076
30°	28040	27990	27443
35°	27700	27437	27122
40°	26641	26641	26248
45°	25574	25817	25513
50°	24382	24918	23846
55°	22144	23495	21619
60°	18514	21958	18256
65°	14161	18746	14059
70°	8812	13847	8938
75°	3327	7486	3161
80°	248	1240	248
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.1	3.9
10°-20°	182.9	11.2
20°-30°	275.1	16.8
30°-40°	325.5	19.9
40°-50°	324.8	19.8
50°-60°	269.4	16.5
60°-70°	157.4	9.6
70°-80°	37.5	2.3
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°	522.1	31.9
0°-40°	847.6	51.8
0°-60°	1441.8	88.1
0°-90°	1636.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1636.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	678	678	678	678	678	
5°	678	674	677	675	673	64
15°	648	648	649	646	647	183
25°	607	600	597	595	591	277
35°	527	522	522	519	516	328
45°	420	420	424	420	419	325
55°	295	306	313	304	288	262
65°	139	156	184	156	138	138
75°	20	29	45	28	19	27
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	678	678	678	678	678	678	678	678	678	678	678
2.5°	681	677	680	674	678	674	675	673	677	676	675
5°	678	679	677	679	676	673	676	674	668	677	675
7.5°	671	672	670	673	671	667	675	669	668	669	673
10°	665	667	666	665	666	666	664	661	664	666	665
12.5°	659	662	660	658	656	657	659	654	654	656	662
15°	648	650	651	647	647	648	652	644	648	649	650
17.5°	639	640	640	637	639	636	639	635	639	638	640
20°	628	630	628	628	626	627	627	627	624	623	625
22.5°	616	616	614	616	614	613	618	610	618	611	617
25°	607	602	599	598	602	598	600	597	599	597	598
27.5°	586	583	582	583	583	582	586	575	582	581	581
30°	564	564	566	564	566	563	567	558	564	563	564
32.5°	544	545	545	547	544	545	545	542	544	545	543
35°	527	522	522	522	522	522	524	521	524	522	522
37.5°	503	498	498	497	502	499	504	500	500	502	502
40°	474	476	473	477	476	472	481	475	479	474	478
42.5°	448	449	448	447	451	450	454	450	449	449	456
45°	420	420	420	423	420	421	425	423	425	424	431
47.5°	397	392	391	397	396	397	397	398	399	397	400
50°	364	362	362	363	364	366	369	371	369	372	373
52.5°	332	330	331	335	337	336	341	342	341	343	343
55°	295	293	296	301	304	307	312	308	312	313	314
57.5°	257	256	257	262	265	272	280	280	284	281	284
60°	215	215	219	222	230	235	243	247	251	255	253
62.5°	175	176	179	186	191	198	207	211	218	222	220
65°	139	139	141	147	152	161	169	178	182	184	185
67.5°	104	103	107	111	116	125	134	139	146	148	147
70°	70	71	73	77	83	90	100	104	108	110	108
72.5°	44	44	45	49	53	58	65	69	74	75	73
75°	20	20	22	24	27	31	36	39	42	45	45
77.5°	4	5	6	6	8	11	14	17	20	20	20
80°	1	1	1	1	1	1	2	3	5	5	5
82.5°	0	0	0	0	0	0	0	0	0	0	0
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



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	678	678	678	678	678	678	678	678
2.5°	678	684	678	675	679	678	675	676
5°	675	677	679	671	676	677	675	673
7.5°	672	673	672	670	670	670	672	672
10°	671	668	663	660	663	663	662	670
12.5°	658	662	659	653	659	658	658	660
15°	648	648	650	642	646	645	645	647
17.5°	638	638	637	635	634	637	634	639
20°	624	626	632	622	625	622	622	616
22.5°	607	617	612	611	610	611	613	606
25°	596	596	598	592	592	594	593	591
27.5°	581	580	579	577	582	578	578	578
30°	560	563	562	557	563	561	558	552
32.5°	542	546	540	539	538	539	540	535
35°	520	521	521	517	518	517	515	516
37.5°	500	499	494	492	493	493	494	492
40°	472	475	475	468	470	468	468	467
42.5°	449	450	447	444	444	443	441	443
45°	425	424	421	418	418	417	415	419
47.5°	398	396	395	391	391	385	386	390
50°	371	369	365	363	360	357	356	356
52.5°	339	339	335	331	330	328	326	327
55°	311	311	308	301	297	292	289	288
57.5°	279	277	271	263	259	255	252	252
60°	247	242	236	229	222	215	213	212
62.5°	212	207	196	188	183	179	175	178
65°	177	170	160	152	147	141	138	138
67.5°	140	133	123	115	110	106	102	102
70°	103	98	89	82	78	72	71	71
72.5°	70	64	57	52	48	44	42	41
75°	39	35	30	27	23	21	19	19
77.5°	16	13	10	8	6	5	4	5
80°	3	2	1	1	1	1	1	1
82.5°	0	0	0	0	0	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)