

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: P209445

Luminaire Tested: **LDSQ6B30D010 EU6B30508030 6LBCSSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P209445  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35359)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDSQ6B30D010 EU6B30508030 6LBCSSQ1MMS  
Description: PORTFOLIO LD6 SERIES 6" RECESSED FIXTURE WITH A SQUARE SHALLOW CAST METALLIC SILVER TRIM  
MEDIUM DISTRIBUTION WITH MATTE METALLIC SILVER TRIM  
WATTAGE D010TR-27.4 W DE010-27.95 W D5LT-27.65 W DMX-27.73 W DL2-29.56 W  
DL3-29.67 W DLE-29.73 W  
Light Source: HIGH LUMEN LED 3000 K  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3202.1 lumens  
Efficiency: N/A  
Efficacy: 114.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

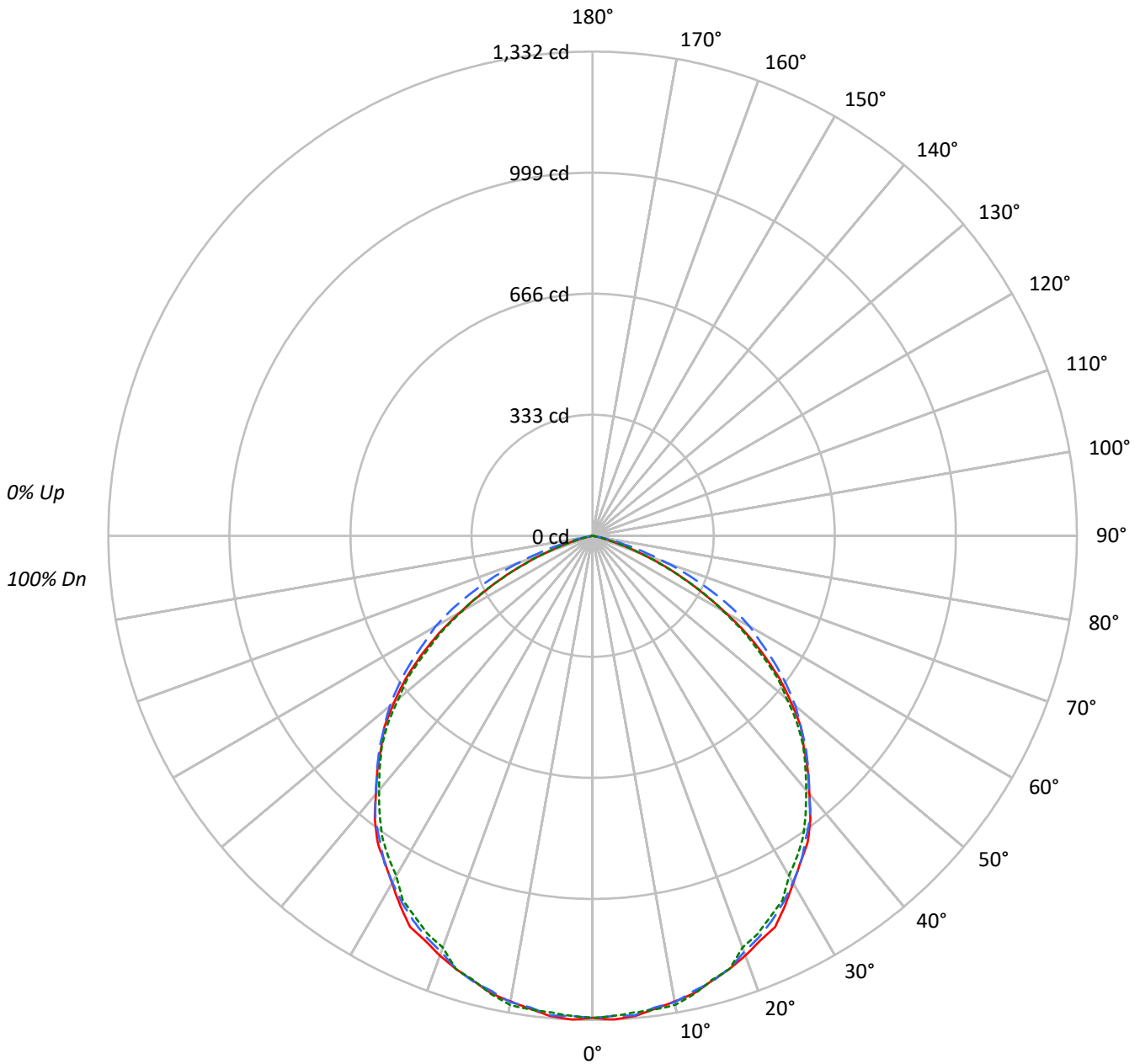
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.4	3.9
10°-20°	357.7	11.2
20°-30°	538.2	16.8
30°-40°	636.7	19.9
40°-50°	635.4	19.8
50°-60°	526.9	16.5
60°-70°	307.8	9.6
70°-80°	73.3	2.3
80°-90°	0.5	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°	1021.3	31.9
0°-40°	1658.1	51.8
0°-60°	2820.4	88.1
0°-90°	3202.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3202.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1326	1326	1326	1326	1326	
5°	1326	1319	1324	1320	1316	126
15°	1268	1267	1270	1264	1266	358
25°	1187	1174	1168	1164	1156	543
35°	1031	1021	1021	1015	1009	641
45°	822	823	829	821	820	636
55°	577	598	612	596	563	512
65°	272	306	360	305	270	270
75°	39	57	88	56	37	53
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°	1326.3	1326.3	1326.3	1326.3	1326.3	1326.3	1326.3	1326.3	1326.3	1326.3	1326.3
2.5°	1332.1	1324.3	1330.2	1318.4	1326.3	1318.4	1320.4	1316.5	1324.3	1322.4	1320.4
5°	1326.3	1328.2	1324.3	1328.2	1322.4	1316.5	1322.4	1318.4	1306.7	1324.3	1320.4
7.5°	1312.6	1314.5	1310.6	1316.5	1312.6	1304.7	1320.4	1308.7	1306.7	1308.7	1316.5
10°	1300.8	1304.7	1302.8	1300.8	1302.8	1302.8	1298.9	1293.0	1298.9	1302.8	1300.8
12.5°	1289.1	1295.0	1291.1	1287.1	1283.2	1285.2	1289.1	1279.3	1279.3	1283.2	1295.0
15°	1267.6	1271.5	1273.4	1265.6	1265.6	1267.6	1275.4	1259.8	1267.6	1269.5	1271.5
17.5°	1250.0	1251.9	1251.9	1246.1	1250.0	1244.1	1250.0	1242.1	1250.0	1248.0	1251.9
20°	1228.5	1232.4	1228.5	1228.5	1224.5	1226.5	1226.5	1226.5	1220.6	1218.7	1222.6
22.5°	1205.0	1205.0	1201.1	1205.0	1201.1	1199.1	1208.9	1193.2	1208.9	1195.2	1206.9
25°	1187.4	1177.6	1171.7	1169.8	1177.6	1169.8	1173.7	1167.8	1171.7	1167.8	1169.8
27.5°	1146.3	1140.4	1138.5	1140.4	1140.4	1138.5	1146.3	1124.8	1138.5	1136.5	1136.5
30°	1103.3	1103.3	1107.2	1103.3	1107.2	1101.3	1109.1	1091.5	1103.3	1101.3	1103.3
32.5°	1064.1	1066.1	1066.1	1070.0	1064.1	1066.1	1066.1	1060.2	1064.1	1066.1	1062.2
35°	1030.9	1021.1	1021.1	1021.1	1021.1	1021.1	1025.0	1019.1	1025.0	1021.1	1021.1
37.5°	983.9	974.2	974.2	972.2	982.0	976.1	985.9	978.1	978.1	982.0	982.0
40°	927.2	931.1	925.3	933.1	931.1	923.3	940.9	929.2	937.0	927.2	935.0
42.5°	876.4	878.3	876.4	874.4	882.2	880.3	888.1	880.3	878.3	878.3	892.0
45°	821.6	821.6	821.6	827.4	821.6	823.5	831.4	827.4	831.4	829.4	843.1
47.5°	776.6	766.8	764.9	776.6	774.6	776.6	776.6	778.5	780.5	776.6	782.5
50°	712.0	708.1	708.1	710.1	712.0	715.9	721.8	725.7	721.8	727.7	729.6
52.5°	649.4	645.5	647.5	655.3	659.2	657.3	667.0	669.0	667.0	671.0	671.0
55°	577.1	573.1	579.0	588.8	594.7	600.5	610.3	602.5	610.3	612.3	614.2
57.5°	502.7	500.8	502.7	512.5	518.4	532.1	547.7	547.7	555.5	549.7	555.5
60°	420.6	420.6	428.4	434.3	449.9	459.7	475.3	483.2	491.0	498.8	494.9
62.5°	342.3	344.3	350.1	363.8	373.6	387.3	404.9	412.7	426.4	434.3	430.4
65°	271.9	271.9	275.8	287.6	297.3	314.9	330.6	348.2	356.0	359.9	361.9
67.5°	203.4	201.5	209.3	217.1	226.9	244.5	262.1	271.9	285.6	289.5	287.6
70°	136.9	138.9	142.8	150.6	162.4	176.1	195.6	203.4	211.3	215.2	211.3
72.5°	86.1	86.1	88.0	95.9	103.7	113.5	127.1	135.0	144.8	146.7	142.8
75°	39.1	39.1	43.0	46.9	52.8	60.6	70.4	76.3	82.2	88.0	88.0
77.5°	7.8	9.8	11.7	11.7	15.6	21.5	27.4	33.3	39.1	39.1	39.1
80°	2.0	2.0	2.0	2.0	2.0	2.0	3.9	5.9	9.8	9.8	9.8
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	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°	1326.3	1326.3	1326.3	1326.3	1326.3	1326.3	1326.3	1326.3
2.5°	1326.3	1338.0	1326.3	1320.4	1328.2	1326.3	1320.4	1322.4
5°	1320.4	1324.3	1328.2	1312.6	1322.4	1324.3	1320.4	1316.5
7.5°	1314.5	1316.5	1314.5	1310.6	1310.6	1310.6	1314.5	1314.5
10°	1312.6	1306.7	1296.9	1291.1	1296.9	1296.9	1295.0	1310.6
12.5°	1287.1	1295.0	1289.1	1277.4	1289.1	1287.1	1287.1	1291.1
15°	1267.6	1267.6	1271.5	1255.8	1263.7	1261.7	1261.7	1265.6
17.5°	1248.0	1248.0	1246.1	1242.1	1240.2	1246.1	1240.2	1250.0
20°	1220.6	1224.5	1236.3	1216.7	1222.6	1216.7	1216.7	1205.0
22.5°	1187.4	1206.9	1197.2	1195.2	1193.2	1195.2	1199.1	1185.4
25°	1165.9	1165.9	1169.8	1158.0	1158.0	1161.9	1160.0	1156.1
27.5°	1136.5	1134.6	1132.6	1128.7	1138.5	1130.6	1130.6	1130.6
30°	1095.4	1101.3	1099.4	1089.6	1101.3	1097.4	1091.5	1079.8
32.5°	1060.2	1068.1	1056.3	1054.4	1052.4	1054.4	1056.3	1046.5
35°	1017.2	1019.1	1019.1	1011.3	1013.3	1011.3	1007.4	1009.4
37.5°	978.1	976.1	966.3	962.4	964.4	964.4	966.3	962.4
40°	923.3	929.2	929.2	915.5	919.4	915.5	915.5	913.5
42.5°	878.3	880.3	874.4	868.5	868.5	866.6	862.7	866.6
45°	831.4	829.4	823.5	817.7	817.7	815.7	811.8	819.6
47.5°	778.5	774.6	772.7	764.9	764.9	753.1	755.1	762.9
50°	725.7	721.8	714.0	710.1	704.2	698.3	696.4	696.4
52.5°	663.1	663.1	655.3	647.5	645.5	641.6	637.7	639.7
55°	608.4	608.4	602.5	588.8	581.0	571.2	565.3	563.4
57.5°	545.8	541.9	530.1	514.5	506.6	498.8	492.9	492.9
60°	483.2	473.4	461.6	448.0	434.3	420.6	416.7	414.7
62.5°	414.7	404.9	383.4	367.8	358.0	350.1	342.3	348.2
65°	346.2	332.5	313.0	297.3	287.6	275.8	269.9	269.9
67.5°	273.9	260.2	240.6	225.0	215.2	207.4	199.5	199.5
70°	201.5	191.7	174.1	160.4	152.6	140.8	138.9	138.9
72.5°	136.9	125.2	111.5	101.7	93.9	86.1	82.2	80.2
75°	76.3	68.5	58.7	52.8	45.0	41.1	37.2	37.2
77.5°	31.3	25.4	19.6	15.6	11.7	9.8	7.8	9.8
80°	5.9	3.9	2.0	2.0	2.0	2.0	2.0	2.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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









(END OF REPORT)