

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: P209465

Luminaire Tested: **LDSQ6B40D010 EU6B30509040 6LBCSSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P209465  
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: LDSQ6B40D010 EU6B30509040 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-43.02 W DE010-42.54 W D5LT-42.539 W DMX-41.87 W DL2-41.57 W DL3-44.71 W DLE-39.33 W  
Light Source: HIGH LUMEN LED 4000 K  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3925.5 lumens  
Efficiency: N/A  
Efficacy: 91.2 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

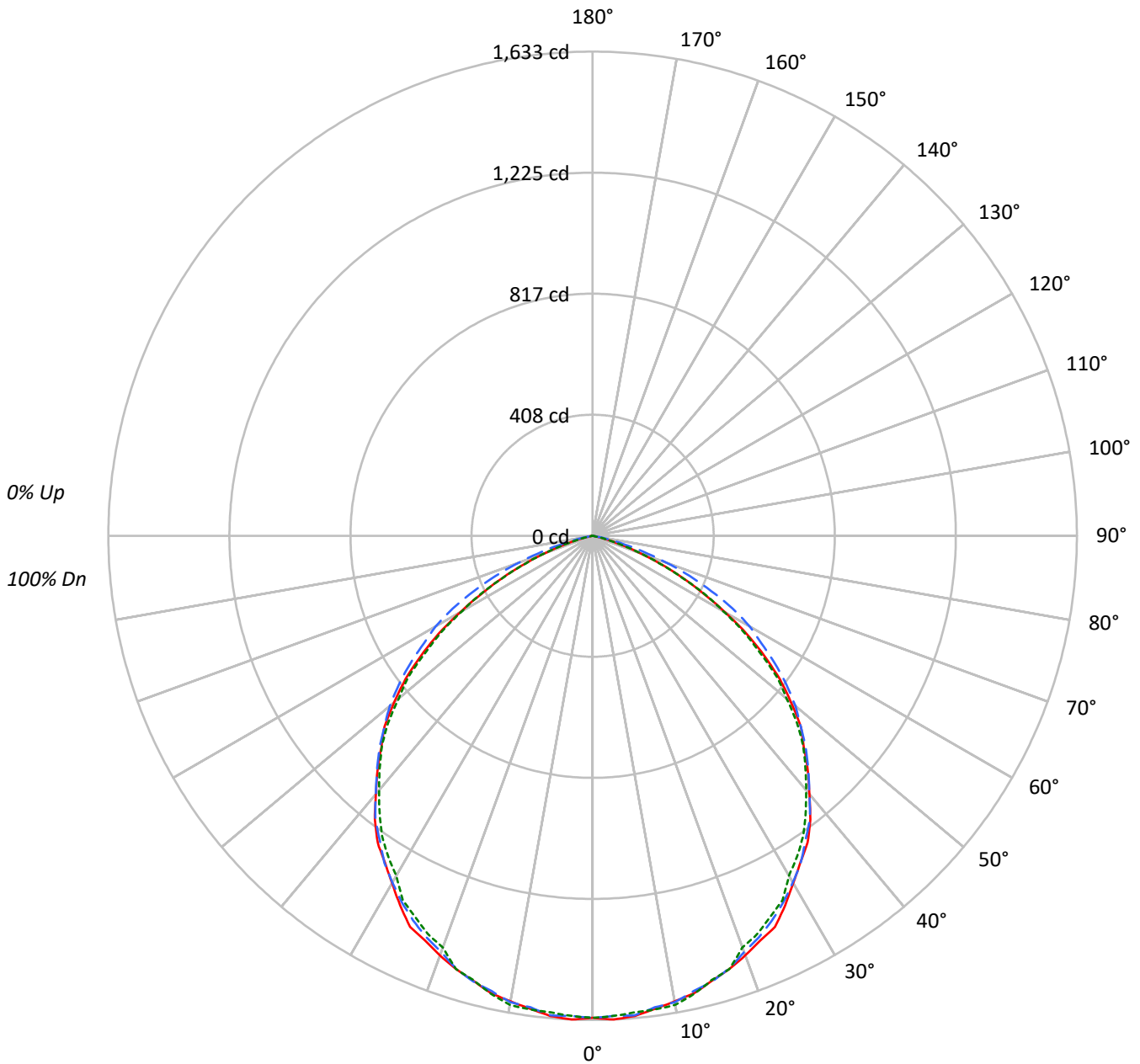
Input Watts (W): 43.02  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	153.8	3.9
10°-20°	438.5	11.2
20°-30°	659.8	16.8
30°-40°	780.6	19.9
40°-50°	779.0	19.8
50°-60°	645.9	16.5
60°-70°	377.4	9.6
70°-80°	89.9	2.3
80°-90°	0.7	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°	1252.1	31.9
0°-40°	2032.7	51.8
0°-60°	3457.6	88.1
0°-90°	3925.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3925.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1626	1626	1626	1626	1626	
5°	1626	1618	1624	1619	1614	154
15°	1554	1553	1556	1549	1552	439
25°	1456	1439	1432	1427	1417	665
35°	1264	1252	1252	1245	1237	786
45°	1007	1008	1017	1006	1005	779
55°	707	733	751	730	691	628
65°	333	375	441	374	331	331
75°	48	70	108	68	46	65
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°	1625.9	1625.9	1625.9	1625.9	1625.9	1625.9	1625.9	1625.9	1625.9	1625.9	1625.9
2.5°	1633.1	1623.5	1630.7	1616.3	1625.9	1616.3	1618.7	1613.9	1623.5	1621.1	1618.7
5°	1625.9	1628.3	1623.5	1628.3	1621.1	1613.9	1621.1	1616.3	1601.9	1623.5	1618.7
7.5°	1609.1	1611.5	1606.7	1613.9	1609.1	1599.5	1618.7	1604.3	1601.9	1604.3	1613.9
10°	1594.7	1599.5	1597.1	1594.7	1597.1	1597.1	1592.3	1585.1	1592.3	1597.1	1594.7
12.5°	1580.3	1587.5	1582.7	1577.9	1573.1	1575.5	1580.3	1568.4	1568.4	1573.1	1587.5
15°	1554.0	1558.8	1561.2	1551.6	1551.6	1554.0	1563.6	1544.4	1554.0	1556.4	1558.8
17.5°	1532.4	1534.8	1534.8	1527.6	1532.4	1525.2	1532.4	1522.8	1532.4	1530.0	1534.8
20°	1506.0	1510.8	1506.0	1506.0	1501.2	1503.6	1503.6	1503.6	1496.4	1494.0	1498.8
22.5°	1477.2	1477.2	1472.4	1477.2	1472.4	1470.0	1482.0	1462.8	1482.0	1465.2	1479.6
25°	1455.6	1443.7	1436.5	1434.1	1443.7	1434.1	1438.9	1431.7	1436.5	1431.7	1434.1
27.5°	1405.3	1398.1	1395.7	1398.1	1398.1	1395.7	1405.3	1378.9	1395.7	1393.3	1393.3
30°	1352.5	1352.5	1357.3	1352.5	1357.3	1350.1	1359.7	1338.1	1352.5	1350.1	1352.5
32.5°	1304.6	1307.0	1307.0	1311.8	1304.6	1307.0	1307.0	1299.8	1304.6	1307.0	1302.2
35°	1263.8	1251.8	1251.8	1251.8	1251.8	1251.8	1256.6	1249.4	1256.6	1251.8	1251.8
37.5°	1206.2	1194.2	1194.2	1191.9	1203.8	1196.6	1208.6	1199.0	1199.0	1203.8	1203.8
40°	1136.7	1141.5	1134.3	1143.9	1141.5	1131.9	1153.5	1139.1	1148.7	1136.7	1146.3
42.5°	1074.3	1076.7	1074.3	1071.9	1081.5	1079.1	1088.7	1079.1	1076.7	1076.7	1093.5
45°	1007.2	1007.2	1007.2	1014.4	1007.2	1009.6	1019.2	1014.4	1019.2	1016.8	1033.6
47.5°	952.0	940.1	937.7	952.0	949.6	952.0	952.0	954.4	956.8	952.0	959.2
50°	872.9	868.1	868.1	870.5	872.9	877.7	884.9	889.7	884.9	892.1	894.5
52.5°	796.2	791.4	793.8	803.4	808.2	805.8	817.7	820.1	817.7	822.5	822.5
55°	707.4	702.6	709.8	721.8	729.0	736.2	748.2	738.6	748.2	750.6	753.0
57.5°	616.3	613.9	616.3	628.3	635.5	652.3	671.5	671.5	681.1	673.9	681.1
60°	515.6	515.6	525.2	532.4	551.6	563.6	582.7	592.3	601.9	611.5	606.7
62.5°	419.7	422.1	429.3	446.0	458.0	474.8	496.4	506.0	522.8	532.4	527.6
65°	333.3	333.3	338.1	352.5	364.5	386.1	405.3	426.9	436.5	441.2	443.6
67.5°	249.4	247.0	256.6	266.2	278.2	299.8	321.3	333.3	350.1	354.9	352.5
70°	167.9	170.3	175.1	184.7	199.0	215.8	239.8	249.4	259.0	263.8	259.0
72.5°	105.5	105.5	107.9	117.5	127.1	139.1	155.9	165.5	177.5	179.9	175.1
75°	48.0	48.0	52.8	57.6	64.7	74.3	86.3	93.5	100.7	107.9	107.9
77.5°	9.6	12.0	14.4	14.4	19.2	26.4	33.6	40.8	48.0	48.0	48.0
80°	2.4	2.4	2.4	2.4	2.4	2.4	4.8	7.2	12.0	12.0	12.0
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°	1625.9	1625.9	1625.9	1625.9	1625.9	1625.9	1625.9	1625.9
2.5°	1625.9	1640.3	1625.9	1618.7	1628.3	1625.9	1618.7	1621.1
5°	1618.7	1623.5	1628.3	1609.1	1621.1	1623.5	1618.7	1613.9
7.5°	1611.5	1613.9	1611.5	1606.7	1606.7	1606.7	1611.5	1611.5
10°	1609.1	1601.9	1589.9	1582.7	1589.9	1589.9	1587.5	1606.7
12.5°	1577.9	1587.5	1580.3	1566.0	1580.3	1577.9	1577.9	1582.7
15°	1554.0	1554.0	1558.8	1539.6	1549.2	1546.8	1546.8	1551.6
17.5°	1530.0	1530.0	1527.6	1522.8	1520.4	1527.6	1520.4	1532.4
20°	1496.4	1501.2	1515.6	1491.6	1498.8	1491.6	1491.6	1477.2
22.5°	1455.6	1479.6	1467.6	1465.2	1462.8	1465.2	1470.0	1453.2
25°	1429.3	1429.3	1434.1	1419.7	1419.7	1424.5	1422.1	1417.3
27.5°	1393.3	1390.9	1388.5	1383.7	1395.7	1386.1	1386.1	1386.1
30°	1342.9	1350.1	1347.7	1335.7	1350.1	1345.3	1338.1	1323.7
32.5°	1299.8	1309.4	1295.0	1292.6	1290.2	1292.6	1295.0	1283.0
35°	1247.0	1249.4	1249.4	1239.8	1242.2	1239.8	1235.0	1237.4
37.5°	1199.0	1196.6	1184.7	1179.9	1182.3	1182.3	1184.7	1179.9
40°	1131.9	1139.1	1139.1	1122.3	1127.1	1122.3	1122.3	1119.9
42.5°	1076.7	1079.1	1071.9	1064.8	1064.8	1062.4	1057.6	1062.4
45°	1019.2	1016.8	1009.6	1002.4	1002.4	1000.0	995.2	1004.8
47.5°	954.4	949.6	947.2	937.7	937.7	923.3	925.7	935.3
50°	889.7	884.9	875.3	870.5	863.3	856.1	853.7	853.7
52.5°	813.0	813.0	803.4	793.8	791.4	786.6	781.8	784.2
55°	745.8	745.8	738.6	721.8	712.2	700.2	693.0	690.7
57.5°	669.1	664.3	649.9	630.7	621.1	611.5	604.3	604.3
60°	592.3	580.3	565.9	549.2	532.4	515.6	510.8	508.4
62.5°	508.4	496.4	470.0	450.8	438.9	429.3	419.7	426.9
65°	424.5	407.7	383.7	364.5	352.5	338.1	330.9	330.9
67.5°	335.7	318.9	295.0	275.8	263.8	254.2	244.6	244.6
70°	247.0	235.0	213.4	196.6	187.1	172.7	170.3	170.3
72.5°	167.9	153.5	136.7	124.7	115.1	105.5	100.7	98.3
75°	93.5	83.9	71.9	64.7	55.2	50.4	45.6	45.6
77.5°	38.4	31.2	24.0	19.2	14.4	12.0	9.6	12.0
80°	7.2	4.8	2.4	2.4	2.4	2.4	2.4	2.4
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



Report Generated By E9808895 / USPTCWHP6082093







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









(END OF REPORT)