

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: P209467

Luminaire Tested: **LDSQ6B40D010 EU6B30509727 6LBCSSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P209467  
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 EU6B30509727 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 2700 K  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3230.8 lumens  
Efficiency: N/A  
Efficacy: 75.1 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

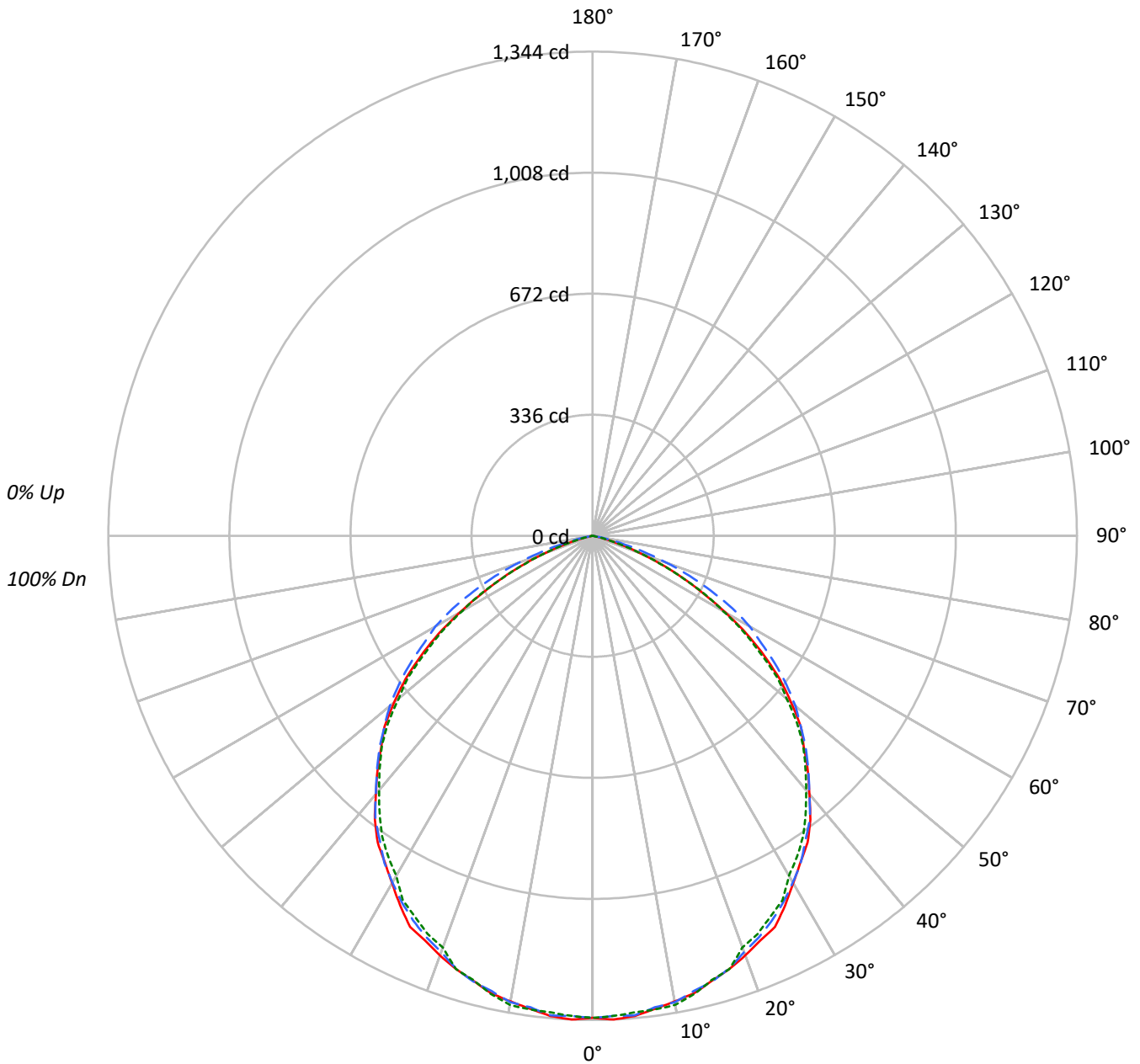
Input Watts (W): 43.02  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	126.6	3.9
10°-20°	360.9	11.2
20°-30°	543.1	16.8
30°-40°	642.4	19.9
40°-50°	641.1	19.8
50°-60°	531.6	16.5
60°-70°	310.6	9.6
70°-80°	74.0	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°	1030.5	31.9
0°-40°	1673.0	51.8
0°-60°	2845.7	88.1
0°-90°	3230.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3230.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1338	1338	1338	1338	1338	
5°	1338	1331	1336	1332	1328	127
15°	1279	1278	1281	1275	1277	362
25°	1198	1184	1178	1174	1166	548
35°	1040	1030	1030	1024	1018	647
45°	829	830	837	828	827	641
55°	582	603	618	601	568	517
65°	274	309	363	308	272	273
75°	40	57	89	56	38	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°	1338.2	1338.2	1338.2	1338.2	1338.2	1338.2	1338.2	1338.2	1338.2	1338.2	1338.2
2.5°	1344.1	1336.2	1342.1	1330.3	1338.2	1330.3	1332.3	1328.3	1336.2	1334.2	1332.3
5°	1338.2	1340.2	1336.2	1340.2	1334.2	1328.3	1334.2	1330.3	1318.4	1336.2	1332.3
7.5°	1324.4	1326.3	1322.4	1328.3	1324.4	1316.5	1332.3	1320.4	1318.4	1320.4	1328.3
10°	1312.5	1316.5	1314.5	1312.5	1314.5	1314.5	1310.5	1304.6	1310.5	1314.5	1312.5
12.5°	1300.7	1306.6	1302.7	1298.7	1294.8	1296.7	1300.7	1290.8	1290.8	1294.8	1306.6
15°	1279.0	1282.9	1284.9	1277.0	1277.0	1279.0	1286.9	1271.1	1279.0	1280.9	1282.9
17.5°	1261.2	1263.2	1263.2	1257.3	1261.2	1255.3	1261.2	1253.3	1261.2	1259.2	1263.2
20°	1239.5	1243.4	1239.5	1239.5	1235.5	1237.5	1237.5	1237.5	1231.6	1229.6	1233.6
22.5°	1215.8	1215.8	1211.9	1215.8	1211.9	1209.9	1219.8	1204.0	1219.8	1205.9	1217.8
25°	1198.0	1188.2	1182.3	1180.3	1188.2	1180.3	1184.2	1178.3	1182.3	1178.3	1180.3
27.5°	1156.6	1150.7	1148.7	1150.7	1150.7	1148.7	1156.6	1134.9	1148.7	1146.7	1146.7
30°	1113.2	1113.2	1117.1	1113.2	1117.1	1111.2	1119.1	1101.3	1113.2	1111.2	1113.2
32.5°	1073.7	1075.7	1075.7	1079.6	1073.7	1075.7	1075.7	1069.8	1073.7	1075.7	1071.7
35°	1040.1	1030.3	1030.3	1030.3	1030.3	1030.3	1034.2	1028.3	1034.2	1030.3	1030.3
37.5°	992.8	982.9	982.9	980.9	990.8	984.9	994.8	986.9	986.9	990.8	990.8
40°	935.5	939.5	933.6	941.5	939.5	931.6	949.4	937.5	945.4	935.5	943.4
42.5°	884.2	886.2	884.2	882.3	890.1	888.2	896.1	888.2	886.2	886.2	900.0
45°	829.0	829.0	829.0	834.9	829.0	830.9	838.8	834.9	838.8	836.9	850.7
47.5°	783.6	773.7	771.7	783.6	781.6	783.6	783.6	785.5	787.5	783.6	789.5
50°	718.4	714.5	714.5	716.5	718.4	722.4	728.3	732.2	728.3	734.2	736.2
52.5°	655.3	651.3	653.3	661.2	665.1	663.2	673.0	675.0	673.0	677.0	677.0
55°	582.2	578.3	584.2	594.1	600.0	605.9	615.8	607.9	615.8	617.8	619.7
57.5°	507.2	505.3	507.2	517.1	523.0	536.9	552.6	552.6	560.5	554.6	560.5
60°	424.3	424.3	432.2	438.2	454.0	463.8	479.6	487.5	495.4	503.3	499.3
62.5°	345.4	347.4	353.3	367.1	377.0	390.8	408.6	416.5	430.3	438.2	434.2
65°	274.3	274.3	278.3	290.1	300.0	317.8	333.6	351.3	359.2	363.2	365.1
67.5°	205.3	203.3	211.2	219.1	229.0	246.7	264.5	274.3	288.2	292.1	290.1
70°	138.2	140.1	144.1	152.0	163.8	177.6	197.4	205.3	213.2	217.1	213.2
72.5°	86.8	86.8	88.8	96.7	104.6	114.5	128.3	136.2	146.1	148.0	144.1
75°	39.5	39.5	43.4	47.4	53.3	61.2	71.1	77.0	82.9	88.8	88.8
77.5°	7.9	9.9	11.8	11.8	15.8	21.7	27.6	33.6	39.5	39.5	39.5
80°	2.0	2.0	2.0	2.0	2.0	2.0	3.9	5.9	9.9	9.9	9.9
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°	1338.2	1338.2	1338.2	1338.2	1338.2	1338.2	1338.2	1338.2
2.5°	1338.2	1350.0	1338.2	1332.3	1340.2	1338.2	1332.3	1334.2
5°	1332.3	1336.2	1340.2	1324.4	1334.2	1336.2	1332.3	1328.3
7.5°	1326.3	1328.3	1326.3	1322.4	1322.4	1322.4	1326.3	1326.3
10°	1324.4	1318.4	1308.6	1302.7	1308.6	1308.6	1306.6	1322.4
12.5°	1298.7	1306.6	1300.7	1288.8	1300.7	1298.7	1298.7	1302.7
15°	1279.0	1279.0	1282.9	1267.1	1275.0	1273.0	1273.0	1277.0
17.5°	1259.2	1259.2	1257.3	1253.3	1251.3	1257.3	1251.3	1261.2
20°	1231.6	1235.5	1247.4	1227.7	1233.6	1227.7	1227.7	1215.8
22.5°	1198.0	1217.8	1207.9	1205.9	1204.0	1205.9	1209.9	1196.1
25°	1176.3	1176.3	1180.3	1168.4	1168.4	1172.4	1170.4	1166.5
27.5°	1146.7	1144.8	1142.8	1138.8	1148.7	1140.8	1140.8	1140.8
30°	1105.3	1111.2	1109.2	1099.4	1111.2	1107.3	1101.3	1089.5
32.5°	1069.8	1077.6	1065.8	1063.8	1061.9	1063.8	1065.8	1055.9
35°	1026.3	1028.3	1028.3	1020.4	1022.4	1020.4	1016.5	1018.4
37.5°	986.9	984.9	975.0	971.1	973.0	973.0	975.0	971.1
40°	931.6	937.5	937.5	923.7	927.6	923.7	923.7	921.7
42.5°	886.2	888.2	882.3	876.3	876.3	874.4	870.4	874.4
45°	838.8	836.9	830.9	825.0	825.0	823.0	819.1	827.0
47.5°	785.5	781.6	779.6	771.7	771.7	759.9	761.9	769.7
50°	732.2	728.3	720.4	716.5	710.5	704.6	702.6	702.6
52.5°	669.1	669.1	661.2	653.3	651.3	647.4	643.4	645.4
55°	613.8	613.8	607.9	594.1	586.2	576.3	570.4	568.4
57.5°	550.7	546.7	534.9	519.1	511.2	503.3	497.4	497.4
60°	487.5	477.6	465.8	452.0	438.2	424.3	420.4	418.4
62.5°	418.4	408.6	386.8	371.1	361.2	353.3	345.4	351.3
65°	349.3	335.5	315.8	300.0	290.1	278.3	272.4	272.4
67.5°	276.3	262.5	242.8	227.0	217.1	209.2	201.3	201.3
70°	203.3	193.4	175.7	161.8	153.9	142.1	140.1	140.1
72.5°	138.2	126.3	112.5	102.6	94.7	86.8	82.9	80.9
75°	77.0	69.1	59.2	53.3	45.4	41.4	37.5	37.5
77.5°	31.6	25.7	19.7	15.8	11.8	9.9	7.9	9.9
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



Report Generated By E9808895 / USPTCWHP6082093







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









(END OF REPORT)