

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: P209456

Luminaire Tested: **LDSQ6B30D010 EU6B30509730 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209456
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 EU6B30509730 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: 3377.1 lumens
Efficiency: N/A
Efficacy: 120.6 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

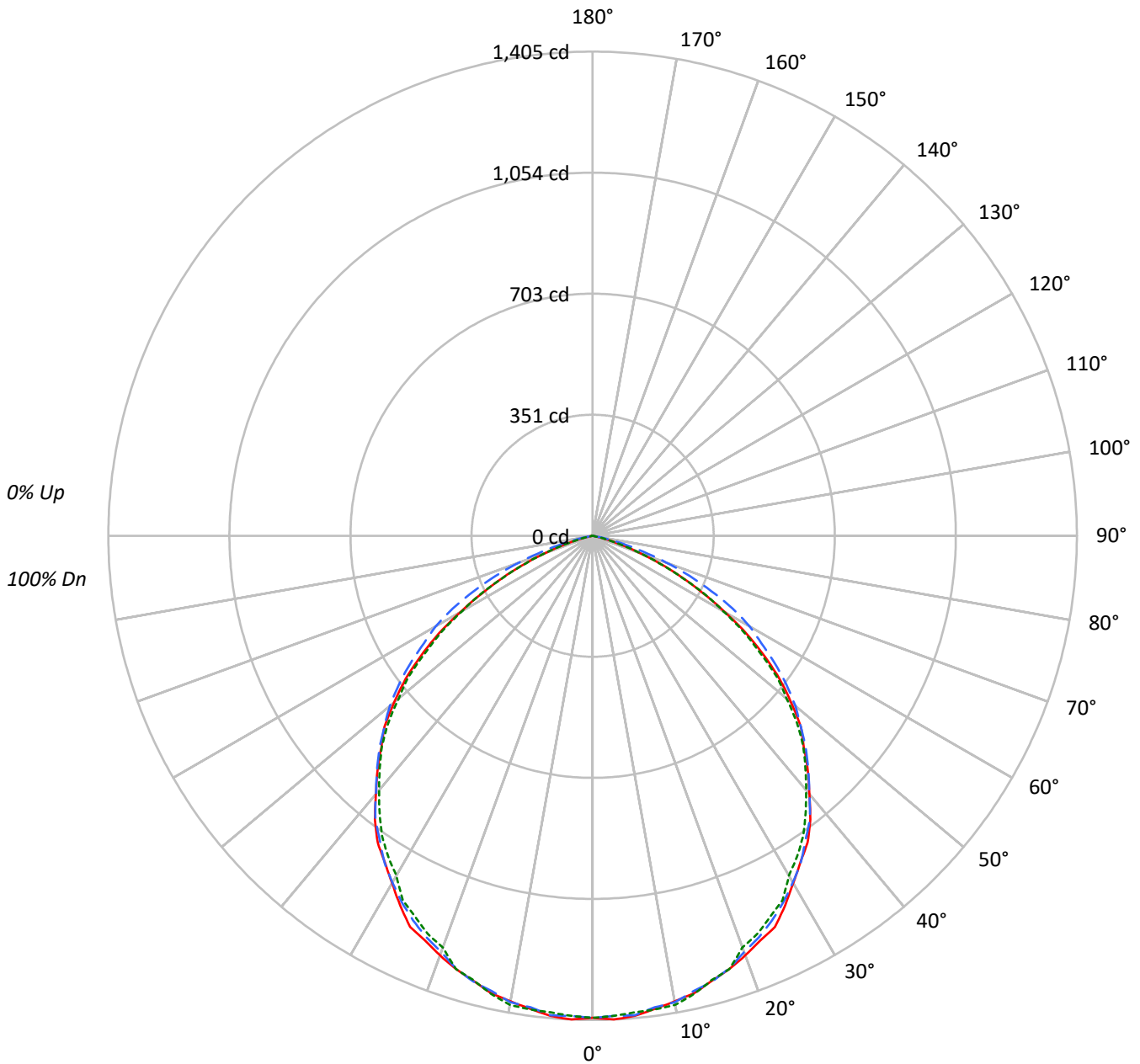
Input Watts (W): 28
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	132.3	3.9
10°-20°	377.2	11.2
20°-30°	567.7	16.8
30°-40°	671.5	19.9
40°-50°	670.2	19.8
50°-60°	555.7	16.5
60°-70°	324.7	9.6
70°-80°	77.3	2.3
80°-90°	0.6	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°	1077.2	31.9
0°-40°	1748.7	51.8
0°-60°	2974.6	88.1
0°-90°	3377.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3377.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1399	1399	1399	1399	1399	
5°	1399	1392	1397	1393	1388	133
15°	1337	1336	1339	1333	1335	378
25°	1252	1238	1232	1228	1219	572
35°	1087	1077	1077	1071	1065	676
45°	866	868	875	866	864	670
55°	609	630	646	628	594	540
65°	287	323	380	322	285	285
75°	41	60	93	59	39	56
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°	1398.8	1398.8	1398.8	1398.8	1398.8	1398.8	1398.8	1398.8	1398.8	1398.8	1398.8
2.5°	1405.0	1396.7	1402.9	1390.5	1398.8	1390.5	1392.6	1388.5	1396.7	1394.7	1392.6
5°	1398.8	1400.8	1396.7	1400.8	1394.7	1388.5	1394.7	1390.5	1378.2	1396.7	1392.6
7.5°	1384.3	1386.4	1382.3	1388.5	1384.3	1376.1	1392.6	1380.2	1378.2	1380.2	1388.5
10°	1372.0	1376.1	1374.0	1372.0	1374.0	1374.0	1369.9	1363.7	1369.9	1374.0	1372.0
12.5°	1359.6	1365.8	1361.6	1357.5	1353.4	1355.5	1359.6	1349.3	1349.3	1353.4	1365.8
15°	1336.9	1341.0	1343.1	1334.8	1334.8	1336.9	1345.1	1328.6	1336.9	1339.0	1341.0
17.5°	1318.3	1320.4	1320.4	1314.2	1318.3	1312.1	1318.3	1310.1	1318.3	1316.3	1320.4
20°	1295.6	1299.8	1295.6	1295.6	1291.5	1293.6	1293.6	1293.6	1287.4	1285.3	1289.4
22.5°	1270.9	1270.9	1266.7	1270.9	1266.7	1264.7	1275.0	1258.5	1275.0	1260.6	1272.9
25°	1252.3	1242.0	1235.8	1233.7	1242.0	1233.7	1237.9	1231.7	1235.8	1231.7	1233.7
27.5°	1209.0	1202.8	1200.7	1202.8	1202.8	1200.7	1209.0	1186.3	1200.7	1198.7	1198.7
30°	1163.6	1163.6	1167.7	1163.6	1167.7	1161.5	1169.8	1151.2	1163.6	1161.5	1163.6
32.5°	1122.3	1124.4	1124.4	1128.5	1122.3	1124.4	1124.4	1118.2	1122.3	1124.4	1120.3
35°	1087.3	1076.9	1076.9	1076.9	1076.9	1076.9	1081.1	1074.9	1081.1	1076.9	1076.9
37.5°	1037.7	1027.4	1027.4	1025.4	1035.7	1029.5	1039.8	1031.5	1031.5	1035.7	1035.7
40°	977.9	982.0	975.8	984.1	982.0	973.8	992.4	980.0	988.2	977.9	986.2
42.5°	924.3	926.3	924.3	922.2	930.5	928.4	936.6	928.4	926.3	926.3	940.8
45°	866.5	866.5	866.5	872.7	866.5	868.6	876.8	872.7	876.8	874.8	889.2
47.5°	819.1	808.7	806.7	819.1	817.0	819.1	819.1	821.1	823.2	819.1	825.2
50°	751.0	746.8	746.8	748.9	751.0	755.1	761.3	765.4	761.3	767.5	769.5
52.5°	684.9	680.8	682.9	691.1	695.3	693.2	703.5	705.6	703.5	707.6	707.6
55°	608.6	604.5	610.7	621.0	627.2	633.4	643.7	635.4	643.7	645.8	647.8
57.5°	530.2	528.2	530.2	540.5	546.7	561.2	577.7	577.7	585.9	579.7	585.9
60°	443.6	443.6	451.8	458.0	474.5	484.8	501.3	509.6	517.8	526.1	522.0
62.5°	361.0	363.1	369.3	383.7	394.1	408.5	427.1	435.3	449.8	458.0	453.9
65°	286.8	286.8	290.9	303.3	313.6	332.2	348.7	367.2	375.5	379.6	381.7
67.5°	214.6	212.5	220.8	229.0	239.3	257.9	276.5	286.8	301.2	305.3	303.3
70°	144.4	146.5	150.6	158.9	171.2	185.7	206.3	214.6	222.8	226.9	222.8
72.5°	90.8	90.8	92.8	101.1	109.3	119.7	134.1	142.4	152.7	154.7	150.6
75°	41.3	41.3	45.4	49.5	55.7	64.0	74.3	80.5	86.7	92.8	92.8
77.5°	8.3	10.3	12.4	12.4	16.5	22.7	28.9	35.1	41.3	41.3	41.3
80°	2.1	2.1	2.1	2.1	2.1	2.1	4.1	6.2	10.3	10.3	10.3
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°	1398.8	1398.8	1398.8	1398.8	1398.8	1398.8	1398.8	1398.8
2.5°	1398.8	1411.2	1398.8	1392.6	1400.8	1398.8	1392.6	1394.7
5°	1392.6	1396.7	1400.8	1384.3	1394.7	1396.7	1392.6	1388.5
7.5°	1386.4	1388.5	1386.4	1382.3	1382.3	1382.3	1386.4	1386.4
10°	1384.3	1378.2	1367.8	1361.6	1367.8	1367.8	1365.8	1382.3
12.5°	1357.5	1365.8	1359.6	1347.2	1359.6	1357.5	1357.5	1361.6
15°	1336.9	1336.9	1341.0	1324.5	1332.8	1330.7	1330.7	1334.8
17.5°	1316.3	1316.3	1314.2	1310.1	1308.0	1314.2	1308.0	1318.3
20°	1287.4	1291.5	1303.9	1283.2	1289.4	1283.2	1283.2	1270.9
22.5°	1252.3	1272.9	1262.6	1260.6	1258.5	1260.6	1264.7	1250.2
25°	1229.6	1229.6	1233.7	1221.4	1221.4	1225.5	1223.4	1219.3
27.5°	1198.7	1196.6	1194.5	1190.4	1200.7	1192.5	1192.5	1192.5
30°	1155.3	1161.5	1159.5	1149.1	1161.5	1157.4	1151.2	1138.8
32.5°	1118.2	1126.5	1114.1	1112.0	1109.9	1112.0	1114.1	1103.8
35°	1072.8	1074.9	1074.9	1066.6	1068.7	1066.6	1062.5	1064.6
37.5°	1031.5	1029.5	1019.2	1015.0	1017.1	1017.1	1019.2	1015.0
40°	973.8	980.0	980.0	965.5	969.7	965.5	965.5	963.5
42.5°	926.3	928.4	922.2	916.0	916.0	914.0	909.8	914.0
45°	876.8	874.8	868.6	862.4	862.4	860.3	856.2	864.4
47.5°	821.1	817.0	814.9	806.7	806.7	794.3	796.4	804.6
50°	765.4	761.3	753.0	748.9	742.7	736.5	734.5	734.5
52.5°	699.4	699.4	691.1	682.9	680.8	676.7	672.6	674.6
55°	641.6	641.6	635.4	621.0	612.7	602.4	596.2	594.2
57.5°	575.6	571.5	559.1	542.6	534.3	526.1	519.9	519.9
60°	509.6	499.3	486.9	472.4	458.0	443.6	439.4	437.4
62.5°	437.4	427.1	404.4	387.9	377.5	369.3	361.0	367.2
65°	365.2	350.7	330.1	313.6	303.3	290.9	284.7	284.7
67.5°	288.8	274.4	253.8	237.3	226.9	218.7	210.4	210.4
70°	212.5	202.2	183.6	169.2	160.9	148.5	146.5	146.5
72.5°	144.4	132.0	117.6	107.3	99.0	90.8	86.7	84.6
75°	80.5	72.2	61.9	55.7	47.5	43.3	39.2	39.2
77.5°	33.0	26.8	20.6	16.5	12.4	10.3	8.3	10.3
80°	6.2	4.1	2.1	2.1	2.1	2.1	2.1	2.1
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)