

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: P209480

Luminaire Tested: **LDSQ6B50D010 EU6B30509727 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209480
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: LDSQ6B50D010 EU6B30509727 6LBCSSQ1MMS
Description: PORTFOLIO LD6 SERIES 6" RECESSED FIXTURE WITH A SQUARE SHALLOW CAST METALLIC SILVER TRIM
MEDIUM DISTRIBUTION WITH MATTE METALLIC SILVER TRIM
D010TE
Light Source: HIGH LUMEN LED 2700 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4123.7 lumens
Efficiency: N/A
Efficacy: 70.2 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

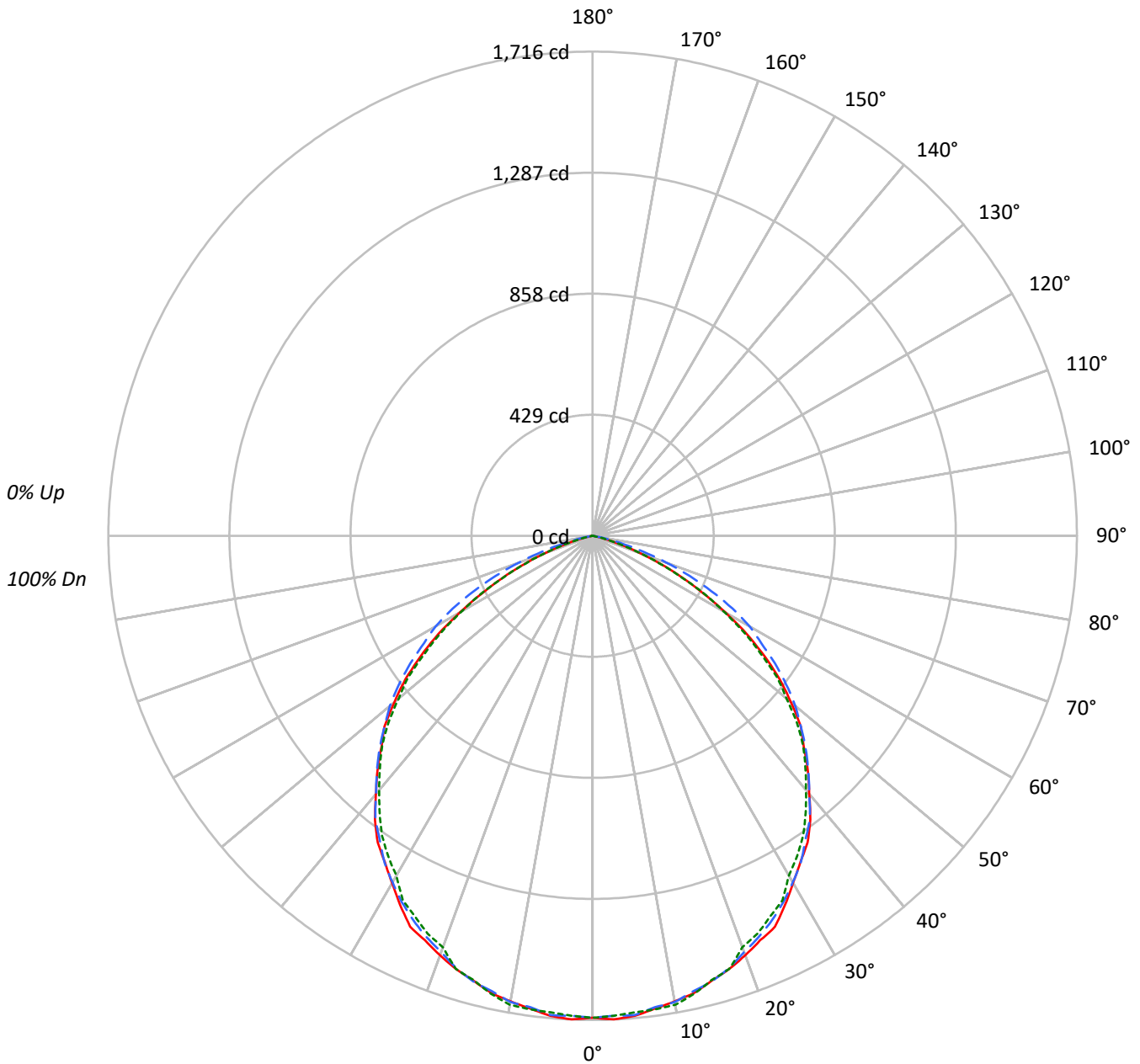
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	161.5	3.9
10°-20°	460.6	11.2
20°-30°	693.2	16.8
30°-40°	820.0	19.9
40°-50°	818.3	19.8
50°-60°	678.6	16.5
60°-70°	396.5	9.6
70°-80°	94.4	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°	1315.3	31.9
0°-40°	2135.3	51.8
0°-60°	3632.2	88.1
0°-90°	4123.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4123.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1708	1708	1708	1708	1708	
5°	1708	1699	1706	1700	1695	162
15°	1632	1631	1635	1627	1630	461
25°	1529	1512	1504	1499	1489	699
35°	1328	1315	1315	1307	1300	825
45°	1058	1059	1068	1057	1056	819
55°	743	770	788	767	726	660
65°	350	394	464	393	348	348
75°	50	73	113	72	48	68
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°	1708.0	1708.0	1708.0	1708.0	1708.0	1708.0	1708.0	1708.0	1708.0	1708.0	1708.0
2.5°	1715.6	1705.5	1713.1	1698.0	1708.0	1698.0	1700.5	1695.4	1705.5	1703.0	1700.5
5°	1708.0	1710.5	1705.5	1710.5	1703.0	1695.4	1703.0	1698.0	1682.8	1705.5	1700.5
7.5°	1690.4	1692.9	1687.9	1695.4	1690.4	1680.3	1700.5	1685.4	1682.8	1685.4	1695.4
10°	1675.3	1680.3	1677.8	1675.3	1677.8	1677.8	1672.8	1665.2	1672.8	1677.8	1675.3
12.5°	1660.2	1667.7	1662.7	1657.6	1652.6	1655.1	1660.2	1647.6	1647.6	1652.6	1667.7
15°	1632.5	1637.5	1640.0	1629.9	1629.9	1632.5	1642.5	1622.4	1632.5	1635.0	1637.5
17.5°	1609.8	1612.3	1612.3	1604.7	1609.8	1602.2	1609.8	1599.7	1609.8	1607.3	1612.3
20°	1582.1	1587.1	1582.1	1582.1	1577.0	1579.5	1579.5	1579.5	1572.0	1569.5	1574.5
22.5°	1551.8	1551.8	1546.8	1551.8	1546.8	1544.3	1556.9	1536.7	1556.9	1539.2	1554.4
25°	1529.2	1516.6	1509.0	1506.5	1516.6	1506.5	1511.5	1504.0	1509.0	1504.0	1506.5
27.5°	1476.3	1468.7	1466.2	1468.7	1468.7	1466.2	1476.3	1448.5	1466.2	1463.7	1463.7
30°	1420.8	1420.8	1425.9	1420.8	1425.9	1418.3	1428.4	1405.7	1420.8	1418.3	1420.8
32.5°	1370.5	1373.0	1373.0	1378.0	1370.5	1373.0	1373.0	1365.4	1370.5	1373.0	1367.9
35°	1327.6	1315.0	1315.0	1315.0	1315.0	1315.0	1320.1	1312.5	1320.1	1315.0	1315.0
37.5°	1267.2	1254.6	1254.6	1252.0	1264.6	1257.1	1269.7	1259.6	1259.6	1264.6	1264.6
40°	1194.1	1199.1	1191.6	1201.7	1199.1	1189.1	1211.7	1196.6	1206.7	1194.1	1204.2
42.5°	1128.6	1131.1	1128.6	1126.1	1136.2	1133.6	1143.7	1133.6	1131.1	1131.1	1148.8
45°	1058.1	1058.1	1058.1	1065.6	1058.1	1060.6	1070.7	1065.6	1070.7	1068.1	1085.8
47.5°	1000.1	987.5	985.0	1000.1	997.6	1000.1	1000.1	1002.6	1005.2	1000.1	1007.7
50°	917.0	912.0	912.0	914.5	917.0	922.0	929.6	934.6	929.6	937.1	939.7
52.5°	836.4	831.3	833.9	843.9	849.0	846.5	859.1	861.6	859.1	864.1	864.1
55°	743.2	738.1	745.7	758.3	765.8	773.4	786.0	775.9	786.0	788.5	791.0
57.5°	647.4	644.9	647.4	660.0	667.6	685.2	705.4	705.4	715.5	707.9	715.5
60°	541.6	541.6	551.7	559.3	579.4	592.0	612.2	622.2	632.3	642.4	637.4
62.5°	440.9	443.4	450.9	468.6	481.2	498.8	521.5	531.6	549.2	559.3	554.2
65°	350.2	350.2	355.2	370.3	382.9	405.6	425.7	448.4	458.5	463.5	466.1
67.5°	262.0	259.5	269.6	279.6	292.2	314.9	337.6	350.2	367.8	372.8	370.3
70°	176.3	178.9	183.9	194.0	209.1	226.7	251.9	262.0	272.1	277.1	272.1
72.5°	110.8	110.8	113.4	123.4	133.5	146.1	163.7	173.8	186.4	188.9	183.9
75°	50.4	50.4	55.4	60.5	68.0	78.1	90.7	98.2	105.8	113.4	113.4
77.5°	10.1	12.6	15.1	15.1	20.2	27.7	35.3	42.8	50.4	50.4	50.4
80°	2.5	2.5	2.5	2.5	2.5	2.5	5.0	7.6	12.6	12.6	12.6
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°	1708.0	1708.0	1708.0	1708.0	1708.0	1708.0	1708.0	1708.0
2.5°	1708.0	1723.1	1708.0	1700.5	1710.5	1708.0	1700.5	1703.0
5°	1700.5	1705.5	1710.5	1690.4	1703.0	1705.5	1700.5	1695.4
7.5°	1692.9	1695.4	1692.9	1687.9	1687.9	1687.9	1692.9	1692.9
10°	1690.4	1682.8	1670.2	1662.7	1670.2	1670.2	1667.7	1687.9
12.5°	1657.6	1667.7	1660.2	1645.0	1660.2	1657.6	1657.6	1662.7
15°	1632.5	1632.5	1637.5	1617.3	1627.4	1624.9	1624.9	1629.9
17.5°	1607.3	1607.3	1604.7	1599.7	1597.2	1604.7	1597.2	1609.8
20°	1572.0	1577.0	1592.1	1567.0	1574.5	1567.0	1567.0	1551.8
22.5°	1529.2	1554.4	1541.8	1539.2	1536.7	1539.2	1544.3	1526.6
25°	1501.5	1501.5	1506.5	1491.4	1491.4	1496.4	1493.9	1488.9
27.5°	1463.7	1461.1	1458.6	1453.6	1466.2	1456.1	1456.1	1456.1
30°	1410.8	1418.3	1415.8	1403.2	1418.3	1413.3	1405.7	1390.6
32.5°	1365.4	1375.5	1360.4	1357.9	1355.3	1357.9	1360.4	1347.8
35°	1310.0	1312.5	1312.5	1302.4	1305.0	1302.4	1297.4	1299.9
37.5°	1259.6	1257.1	1244.5	1239.5	1242.0	1242.0	1244.5	1239.5
40°	1189.1	1196.6	1196.6	1179.0	1184.0	1179.0	1179.0	1176.5
42.5°	1131.1	1133.6	1126.1	1118.5	1118.5	1116.0	1111.0	1116.0
45°	1070.7	1068.1	1060.6	1053.0	1053.0	1050.5	1045.5	1055.6
47.5°	1002.6	997.6	995.1	985.0	985.0	969.9	972.4	982.5
50°	934.6	929.6	919.5	914.5	906.9	899.4	896.8	896.8
52.5°	854.0	854.0	843.9	833.9	831.3	826.3	821.3	823.8
55°	783.5	783.5	775.9	758.3	748.2	735.6	728.1	725.5
57.5°	702.9	697.8	682.7	662.6	652.5	642.4	634.8	634.8
60°	622.2	609.6	594.5	576.9	559.3	541.6	536.6	534.1
62.5°	534.1	521.5	493.8	473.6	461.0	450.9	440.9	448.4
65°	445.9	428.3	403.1	382.9	370.3	355.2	347.7	347.7
67.5°	352.7	335.1	309.9	289.7	277.1	267.0	257.0	257.0
70°	259.5	246.9	224.2	206.6	196.5	181.4	178.9	178.9
72.5°	176.3	161.2	143.6	131.0	120.9	110.8	105.8	103.3
75°	98.2	88.2	75.6	68.0	57.9	52.9	47.9	47.9
77.5°	40.3	32.7	25.2	20.2	15.1	12.6	10.1	12.6
80°	7.6	5.0	2.5	2.5	2.5	2.5	2.5	2.5
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)