

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: P209464

Luminaire Tested: **LDSQ6B40D010 EU6B30509035 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209464
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 EU6B30509035 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 3500 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3918.9 lumens
Efficiency: N/A
Efficacy: 91.1 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

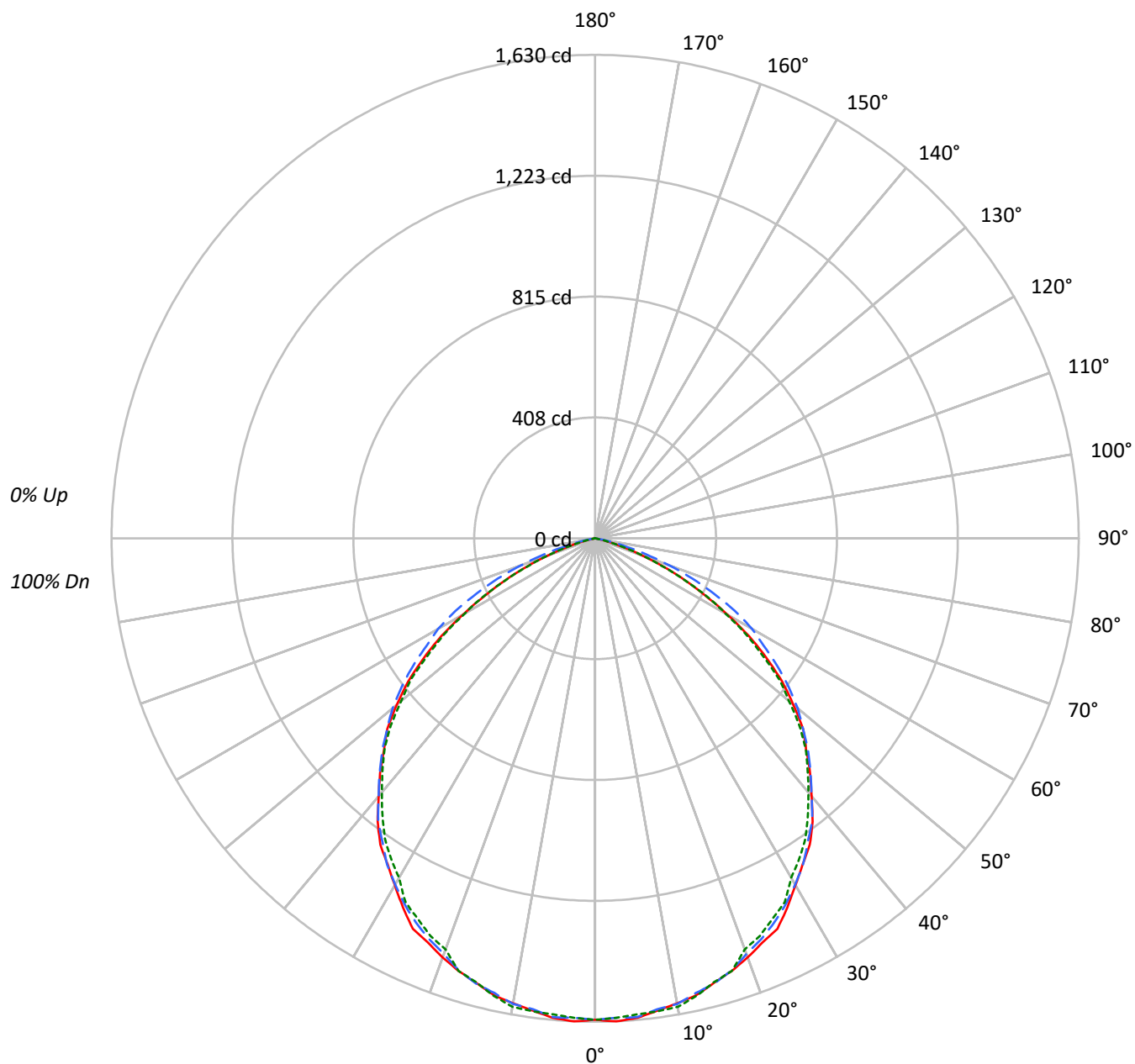
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20							
RC	80				70				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°	153.5	3.9
10°-20°	437.8	11.2
20°-30°	658.7	16.8
30°-40°	779.3	19.9
40°-50°	777.6	19.8
50°-60°	644.9	16.5
60°-70°	376.8	9.6
70°-80°	89.7	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°	1250.0	31.9
0°-40°	2029.3	51.8
0°-60°	3451.8	88.1
0°-90°	3918.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3918.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1623	1623	1623	1623	1623	
5°	1623	1615	1621	1616	1611	154
15°	1551	1550	1554	1547	1549	439
25°	1453	1436	1429	1424	1415	664
35°	1262	1250	1250	1242	1235	784
45°	1006	1007	1015	1004	1003	778
55°	706	731	749	729	690	627
65°	333	375	440	374	330	331
75°	48	69	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°	1623.2	1623.2	1623.2	1623.2	1623.2	1623.2	1623.2	1623.2	1623.2	1623.2	1623.2
2.5°	1630.4	1620.8	1628.0	1613.6	1623.2	1613.6	1616.0	1611.2	1620.8	1618.4	1616.0
5°	1623.2	1625.6	1620.8	1625.6	1618.4	1611.2	1618.4	1613.6	1599.2	1620.8	1616.0
7.5°	1606.4	1608.8	1604.0	1611.2	1606.4	1596.8	1616.0	1601.6	1599.2	1601.6	1611.2
10°	1592.1	1596.8	1594.4	1592.1	1594.4	1594.4	1589.7	1582.5	1589.7	1594.4	1592.1
12.5°	1577.7	1584.9	1580.1	1575.3	1570.5	1572.9	1577.7	1565.7	1565.7	1570.5	1584.9
15°	1551.4	1556.1	1558.5	1549.0	1549.0	1551.4	1560.9	1541.8	1551.4	1553.7	1556.1
17.5°	1529.8	1532.2	1532.2	1525.0	1529.8	1522.6	1529.8	1520.2	1529.8	1527.4	1532.2
20°	1503.5	1508.3	1503.5	1503.5	1498.7	1501.1	1501.1	1501.1	1493.9	1491.5	1496.3
22.5°	1474.7	1474.7	1470.0	1474.7	1470.0	1467.6	1479.5	1460.4	1479.5	1462.8	1477.1
25°	1453.2	1441.2	1434.0	1431.7	1441.2	1431.7	1436.4	1429.3	1434.0	1429.3	1431.7
27.5°	1402.9	1395.7	1393.3	1395.7	1395.7	1393.3	1402.9	1376.6	1393.3	1391.0	1391.0
30°	1350.3	1350.3	1355.0	1350.3	1355.0	1347.9	1357.4	1335.9	1350.3	1347.9	1350.3
32.5°	1302.4	1304.8	1304.8	1309.6	1302.4	1304.8	1304.8	1297.6	1302.4	1304.8	1300.0
35°	1261.7	1249.7	1249.7	1249.7	1249.7	1249.7	1254.5	1247.3	1254.5	1249.7	1249.7
37.5°	1204.2	1192.2	1192.2	1189.9	1201.8	1194.6	1206.6	1197.0	1197.0	1201.8	1201.8
40°	1134.8	1139.6	1132.4	1142.0	1139.6	1130.0	1151.5	1137.2	1146.8	1134.8	1144.4
42.5°	1072.5	1074.9	1072.5	1070.1	1079.7	1077.3	1086.9	1077.3	1074.9	1074.9	1091.7
45°	1005.5	1005.5	1005.5	1012.7	1005.5	1007.9	1017.5	1012.7	1017.5	1015.1	1031.8
47.5°	950.4	938.5	936.1	950.4	948.0	950.4	950.4	952.8	955.2	950.4	957.6
50°	871.4	866.7	866.7	869.0	871.4	876.2	883.4	888.2	883.4	890.6	893.0
52.5°	794.8	790.0	792.4	802.0	806.8	804.4	816.4	818.8	816.4	821.2	821.2
55°	706.2	701.5	708.6	720.6	727.8	735.0	746.9	737.4	746.9	749.3	751.7
57.5°	615.3	612.9	615.3	627.2	634.4	651.2	670.3	670.3	679.9	672.7	679.9
60°	514.7	514.7	524.3	531.5	550.6	562.6	581.8	591.3	600.9	610.5	605.7
62.5°	419.0	421.4	428.5	445.3	457.3	474.0	495.6	505.1	521.9	531.5	526.7
65°	332.8	332.8	337.6	351.9	363.9	385.4	404.6	426.1	435.7	440.5	442.9
67.5°	249.0	246.6	256.2	265.7	277.7	299.3	320.8	332.8	349.5	354.3	351.9
70°	167.6	170.0	174.8	184.3	198.7	215.5	239.4	249.0	258.6	263.3	258.6
72.5°	105.3	105.3	107.7	117.3	126.9	138.9	155.6	165.2	177.2	179.6	174.8
75°	47.9	47.9	52.7	57.5	64.6	74.2	86.2	93.4	100.6	107.7	107.7
77.5°	9.6	12.0	14.4	14.4	19.2	26.3	33.5	40.7	47.9	47.9	47.9
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°	1623.2	1623.2	1623.2	1623.2	1623.2	1623.2	1623.2	1623.2
2.5°	1623.2	1637.5	1623.2	1616.0	1625.6	1623.2	1616.0	1618.4
5°	1616.0	1620.8	1625.6	1606.4	1618.4	1620.8	1616.0	1611.2
7.5°	1608.8	1611.2	1608.8	1604.0	1604.0	1604.0	1608.8	1608.8
10°	1606.4	1599.2	1587.3	1580.1	1587.3	1587.3	1584.9	1604.0
12.5°	1575.3	1584.9	1577.7	1563.3	1577.7	1575.3	1575.3	1580.1
15°	1551.4	1551.4	1556.1	1537.0	1546.6	1544.2	1544.2	1549.0
17.5°	1527.4	1527.4	1525.0	1520.2	1517.8	1525.0	1517.8	1529.8
20°	1493.9	1498.7	1513.0	1489.1	1496.3	1489.1	1489.1	1474.7
22.5°	1453.2	1477.1	1465.2	1462.8	1460.4	1462.8	1467.6	1450.8
25°	1426.9	1426.9	1431.7	1417.3	1417.3	1422.1	1419.7	1414.9
27.5°	1391.0	1388.6	1386.2	1381.4	1393.3	1383.8	1383.8	1383.8
30°	1340.7	1347.9	1345.5	1333.5	1347.9	1343.1	1335.9	1321.5
32.5°	1297.6	1307.2	1292.8	1290.4	1288.0	1290.4	1292.8	1280.8
35°	1244.9	1247.3	1247.3	1237.7	1240.1	1237.7	1232.9	1235.3
37.5°	1197.0	1194.6	1182.7	1177.9	1180.3	1180.3	1182.7	1177.9
40°	1130.0	1137.2	1137.2	1120.4	1125.2	1120.4	1120.4	1118.0
42.5°	1074.9	1077.3	1070.1	1063.0	1063.0	1060.6	1055.8	1060.6
45°	1017.5	1015.1	1007.9	1000.7	1000.7	998.3	993.5	1003.1
47.5°	952.8	948.0	945.7	936.1	936.1	921.7	924.1	933.7
50°	888.2	883.4	873.8	869.0	861.9	854.7	852.3	852.3
52.5°	811.6	811.6	802.0	792.4	790.0	785.3	780.5	782.9
55°	744.6	744.6	737.4	720.6	711.0	699.1	691.9	689.5
57.5°	667.9	663.2	648.8	629.6	620.1	610.5	603.3	603.3
60°	591.3	579.4	565.0	548.2	531.5	514.7	509.9	507.5
62.5°	507.5	495.6	469.2	450.1	438.1	428.5	419.0	426.1
65°	423.7	407.0	383.1	363.9	351.9	337.6	330.4	330.4
67.5°	335.2	318.4	294.5	275.3	263.3	253.8	244.2	244.2
70°	246.6	234.6	213.1	196.3	186.7	172.4	170.0	170.0
72.5°	167.6	153.2	136.5	124.5	114.9	105.3	100.6	98.2
75°	93.4	83.8	71.8	64.6	55.1	50.3	45.5	45.5
77.5°	38.3	31.1	23.9	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



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— 0°-180° - - 45°-225° - - - 90°-270°









(END OF REPORT)