

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: P209340

Luminaire Tested: **LDSQ6B20D010 EU6B10209727 6LBSQ1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209340
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35360)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQ6B20D010 EU6B10209727 6LBSQ1LI
Description: PORTFOLIO LD6 SERIES 6" RECESSED FIXTURE WITH A SQUARE LOW
IRIDESCENT TRIM.
MEDIUM DISTRIBUTION WITH SPECULAR CLEAR TRIM
WATTAGE D010TR-21.86 W DE010-20.46 W D5LT-21.24 W DMX-20.89 W DL2-22.5 W
DL3-21.8 6 W DLE-22.46 W
Light Source: HIGH LUMEN LED 2700 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1442.7 lumens
Efficiency: N/A
Efficacy: 69.4 lumens/watt
Spacing Criteria (0/90/45): 0.92 / 0.92 / 0.95
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

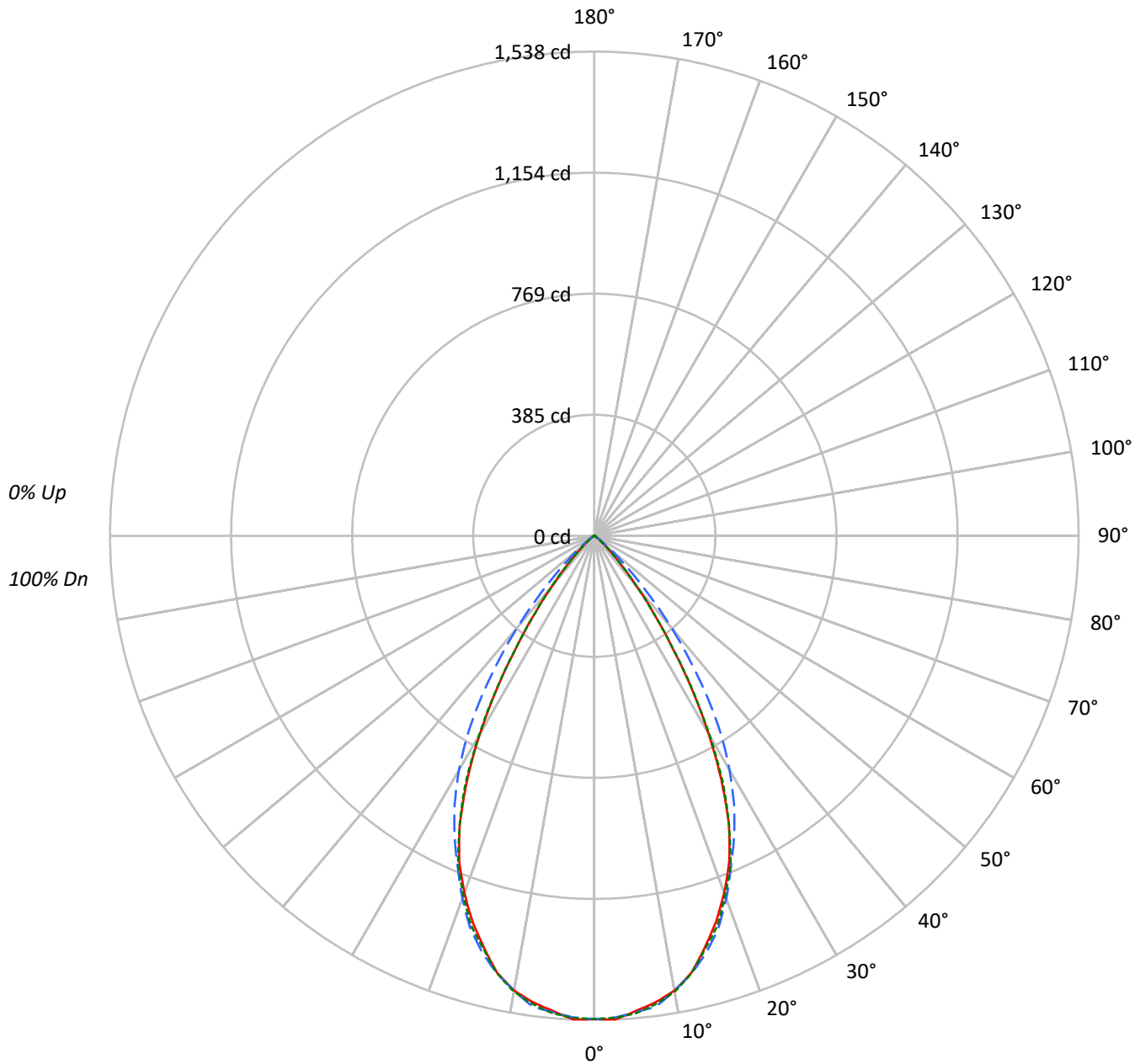
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0			
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93			
2	108	103	99	95	106	101	97	94	98	95	92	95	92	90	92	90	88	87			
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	84	82	80			
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75			
5	92	83	78	73	90	82	77	73	81	76	72	79	75	72	77	74	71	69			
6	87	78	72	68	86	77	72	67	76	71	67	74	70	67	73	69	66	65			
7	83	73	67	63	81	73	67	63	71	66	62	70	66	62	69	65	62	60			
8	79	69	63	59	77	68	63	59	67	62	58	66	62	58	65	61	58	56			
9	75	65	59	55	74	64	59	55	64	58	55	63	58	54	62	57	54	53			
10	71	61	55	52	70	61	55	51	60	55	51	59	55	51	59	54	51	50			

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°	143.7	10.0
10°-20°	382.3	26.5
20°-30°	469.2	32.5
30°-40°	323.9	22.5
40°-50°	101.3	7.0
50°-60°	15.8	1.1
60°-70°	4.6	0.3
70°-80°	1.5	0.1
80°-90°	0.3	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°	995.2	69.0
0°-40°	1319.2	91.4
0°-60°	1436.2	99.6
0°-90°	1442.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1442.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1535	1535	1535	1535	1535	
5°	1515	1521	1519	1519	1523	143
15°	1354	1374	1372	1370	1359	379
25°	1011	1037	1050	1044	1012	453
35°	427	504	626	509	428	273
45°	80	110	176	109	82	72
55°	14	14	16	14	13	13
65°	4	5	4	5	4	4
75°	1	1	1	1	1	1
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°	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2
2.5°	1538.1	1516.8	1530.3	1527.4	1535.2	1540.0	1535.2	1543.9	1538.1	1531.3	1533.2
5°	1514.9	1517.8	1516.8	1518.7	1520.7	1520.7	1530.3	1531.3	1533.2	1518.7	1522.6
7.5°	1494.5	1494.5	1499.4	1497.4	1504.2	1502.3	1503.3	1511.0	1512.0	1508.1	1505.2
10°	1466.5	1462.6	1457.8	1457.8	1466.5	1467.5	1475.2	1476.2	1482.0	1466.5	1468.4
12.5°	1423.0	1421.0	1413.3	1417.2	1423.9	1420.1	1432.6	1433.6	1431.7	1424.9	1428.8
15°	1354.3	1362.0	1360.1	1359.1	1374.6	1372.7	1371.7	1374.6	1375.6	1371.7	1368.8
17.5°	1285.6	1292.4	1293.3	1295.3	1298.2	1301.1	1304.9	1315.6	1311.7	1308.8	1318.5
20°	1206.3	1203.4	1211.1	1218.9	1221.8	1221.8	1227.6	1235.3	1229.5	1225.6	1226.6
22.5°	1120.2	1125.0	1121.2	1128.9	1132.8	1137.6	1143.4	1150.2	1145.3	1134.7	1147.3
25°	1010.9	1013.8	1026.4	1025.4	1031.2	1042.8	1051.5	1051.5	1051.5	1050.5	1050.5
27.5°	873.5	871.6	887.1	897.7	912.2	930.6	942.2	960.6	963.5	960.6	953.8
30°	726.5	724.5	743.9	757.4	783.5	792.3	824.2	841.6	860.0	859.0	854.2
32.5°	573.6	577.5	593.0	612.3	633.6	660.7	690.7	729.4	745.8	749.7	741.0
35°	426.6	432.4	446.9	463.4	489.5	519.5	561.1	597.8	625.9	625.9	619.1
37.5°	307.6	309.5	323.1	333.7	360.8	387.9	423.7	474.0	491.4	498.2	491.4
40°	209.9	209.9	217.7	229.3	251.5	274.7	307.6	345.3	370.5	381.1	369.5
42.5°	133.5	135.4	141.2	149.0	165.4	185.7	210.9	238.9	257.3	265.1	254.4
45°	80.3	82.2	87.1	92.9	103.5	116.1	133.5	153.8	169.3	176.1	171.2
47.5°	48.4	50.3	52.2	56.1	63.8	72.6	81.3	92.9	102.5	103.5	101.6
50°	28.1	28.1	30.0	32.9	36.8	41.6	46.4	53.2	56.1	60.0	56.1
52.5°	18.4	18.4	18.4	19.3	21.3	23.2	25.2	29.0	31.0	31.0	30.0
55°	13.5	13.5	13.5	13.5	14.5	14.5	14.5	15.5	16.4	16.4	16.4
57.5°	9.7	9.7	9.7	10.6	10.6	10.6	9.7	9.7	9.7	9.7	9.7
60°	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	6.8	6.8	6.8
62.5°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
65°	3.9	3.9	3.9	4.8	4.8	4.8	4.8	3.9	3.9	3.9	3.9
67.5°	2.9	2.9	2.9	3.9	3.9	3.9	3.9	3.9	2.9	2.9	2.9
70°	1.9	1.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
72.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
75°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
82.5°	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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°	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2
2.5°	1539.0	1534.2	1534.2	1534.2	1532.3	1534.2	1537.1	1532.3
5°	1522.6	1524.5	1515.8	1522.6	1525.5	1520.7	1532.3	1522.6
7.5°	1508.1	1505.2	1491.6	1501.3	1507.1	1509.1	1508.1	1500.3
10°	1479.1	1472.3	1466.5	1466.5	1464.6	1463.6	1474.2	1470.4
12.5°	1426.8	1431.7	1423.0	1427.8	1423.9	1424.9	1425.9	1423.9
15°	1382.3	1377.5	1365.9	1373.6	1368.8	1364.0	1373.6	1359.1
17.5°	1312.7	1311.7	1304.9	1300.1	1302.0	1301.1	1305.9	1299.1
20°	1230.5	1232.4	1228.5	1226.6	1223.7	1216.9	1222.7	1215.0
22.5°	1141.5	1143.4	1147.3	1139.5	1140.5	1130.8	1139.5	1130.8
25°	1051.5	1050.5	1045.7	1041.8	1031.2	1020.5	1018.6	1011.8
27.5°	952.8	946.1	934.5	921.9	905.4	890.9	890.0	885.1
30°	844.5	830.0	808.7	788.4	763.2	741.0	741.0	733.2
32.5°	730.3	697.5	668.4	643.3	610.4	597.8	585.2	578.5
35°	593.9	564.9	530.1	488.5	473.0	442.1	444.0	428.5
37.5°	465.3	429.5	396.6	362.8	335.7	321.2	313.4	305.7
40°	345.3	310.5	274.7	252.5	228.3	215.7	210.9	208.9
42.5°	236.0	207.0	183.8	165.4	152.8	139.3	135.4	133.5
45°	153.8	137.4	116.1	101.6	92.9	85.1	85.1	82.2
47.5°	91.9	81.3	70.6	60.9	55.1	50.3	48.4	47.4
50°	51.3	45.5	39.7	35.8	31.9	29.0	28.1	28.1
52.5°	28.1	25.2	23.2	20.3	18.4	18.4	18.4	17.4
55°	14.5	14.5	14.5	14.5	13.5	13.5	13.5	12.6
57.5°	9.7	9.7	10.6	10.6	10.6	9.7	9.7	9.7
60°	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
62.5°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
65°	3.9	4.8	4.8	4.8	4.8	3.9	3.9	3.9
67.5°	2.9	3.9	3.9	3.9	2.9	2.9	2.9	2.9
70°	2.9	2.9	2.9	2.9	2.9	1.9	1.9	1.9
72.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
75°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
82.5°	1.0	1.0	1.0	1.0	1.0	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)