

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: P209334

Luminaire Tested: **LDSQ6B20D010 EU6B10209024 6LBSQ1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209334
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 EU6B10209024 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 2400 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1459.3 lumens
Efficiency: N/A
Efficacy: 70.2 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

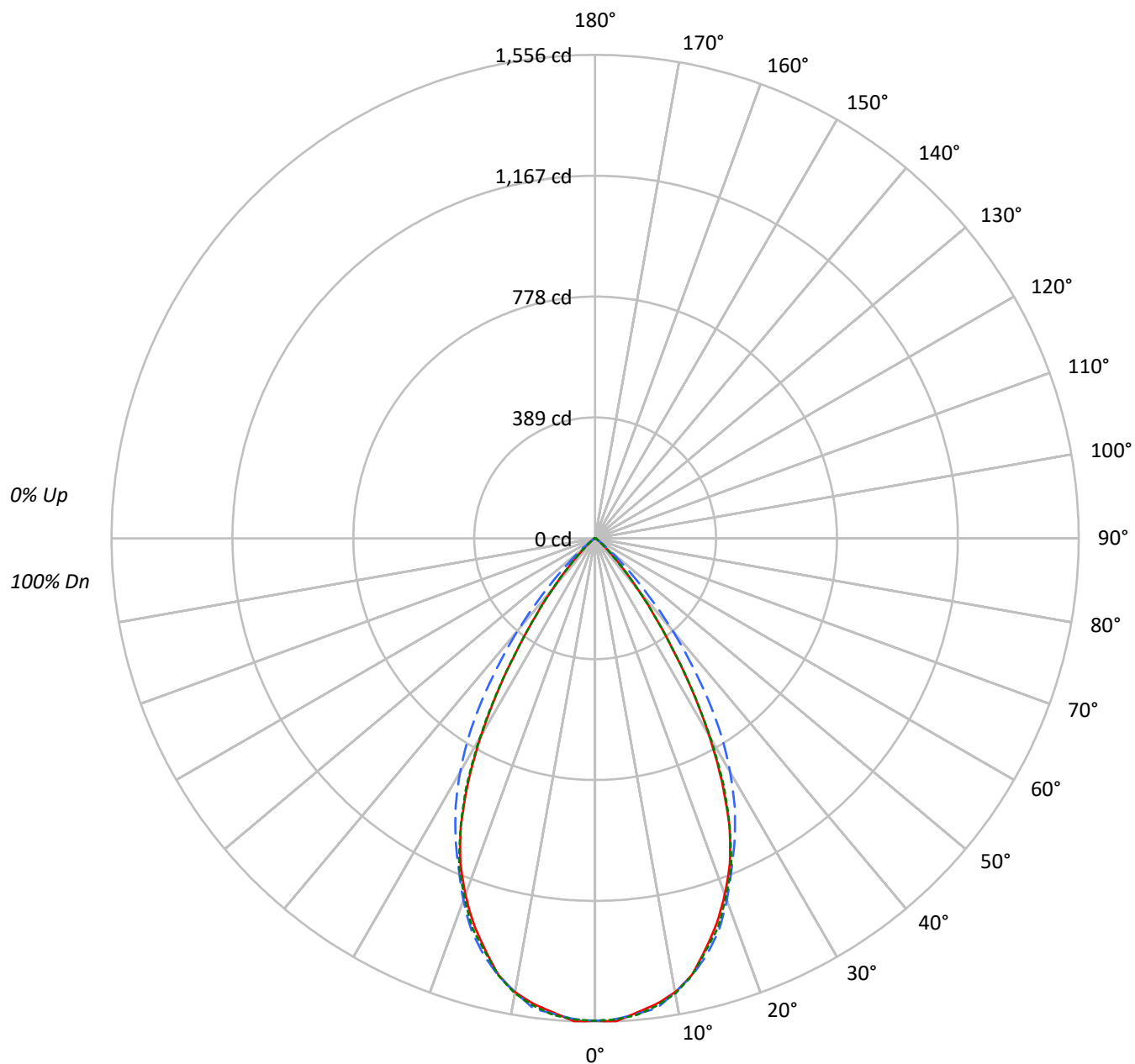
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	113	111	108	106	111	108	106	104	104	103	101		101	99	98		97
2	108	103	99	95	106	101	97	94	98	95	92		95	92	90		92
3	102	96	91	87	100	94	90	86	92	88	85		89	86	83		87
4	97	89	84	79	95	88	83	79	86	81	78		84	80	77		82
5	92	83	78	73	90	82	77	73	81	76	72		79	75	72		77
6	87	78	72	68	86	77	72	67	76	71	67		74	70	67		73
7	83	73	67	63	81	73	67	63	71	66	62		70	66	62		69
8	79	69	63	59	77	68	63	59	67	62	58		66	62	58		65
9	75	65	59	55	74	64	59	55	64	58	55		63	58	54		62
10	71	61	55	52	70	61	55	51	60	55	51		59	55	51		59

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°	145.4	10.0
10°-20°	386.7	26.5
20°-30°	474.6	32.5
30°-40°	327.6	22.5
40°-50°	102.4	7.0
50°-60°	16.0	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°	1006.7	69.0
0°-40°	1334.4	91.4
0°-60°	1452.8	99.6
0°-90°	1459.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1459.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1553	1553	1553	1553	1553	
5°	1532	1538	1536	1537	1540	145
15°	1370	1390	1388	1386	1375	383
25°	1023	1049	1063	1056	1024	458
35°	432	510	633	515	434	276
45°	81	111	178	110	83	73
55°	14	15	17	15	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°	1552.9	1552.9	1552.9	1552.9	1552.9	1552.9	1552.9	1552.9	1552.9	1552.9	1552.9
2.5°	1555.9	1534.3	1548.0	1545.1	1552.9	1557.8	1552.9	1561.7	1555.9	1549.0	1551.0
5°	1532.4	1535.3	1534.3	1536.3	1538.2	1538.2	1548.0	1549.0	1551.0	1536.3	1540.2
7.5°	1511.8	1511.8	1516.7	1514.8	1521.6	1519.6	1520.6	1528.5	1529.4	1525.5	1522.6
10°	1483.4	1479.5	1474.6	1474.6	1483.4	1484.4	1492.2	1493.2	1499.1	1483.4	1485.4
12.5°	1439.4	1437.5	1429.6	1433.5	1440.4	1436.5	1449.2	1450.2	1448.2	1441.4	1445.3
15°	1369.9	1377.8	1375.8	1374.8	1390.5	1388.5	1387.5	1390.5	1391.5	1387.5	1384.6
17.5°	1300.5	1307.3	1308.3	1310.2	1313.2	1316.1	1320.0	1330.8	1326.9	1323.9	1333.7
20°	1220.2	1217.3	1225.1	1232.9	1235.9	1235.9	1241.7	1249.6	1243.7	1239.8	1240.8
22.5°	1133.1	1138.0	1134.1	1141.9	1145.9	1150.7	1156.6	1163.5	1158.6	1147.8	1160.5
25°	1022.6	1025.5	1038.2	1037.2	1043.1	1054.8	1063.7	1063.7	1063.7	1062.7	1062.7
27.5°	883.6	881.6	897.3	908.1	922.7	941.3	953.1	971.7	974.6	971.7	964.8
30°	734.9	732.9	752.5	766.2	792.6	801.4	833.7	851.3	869.9	868.9	864.0
32.5°	580.3	584.2	599.8	619.4	640.9	668.3	698.7	737.8	754.4	758.4	749.5
35°	431.5	437.4	452.1	468.7	495.1	525.5	567.5	604.7	633.1	633.1	626.3
37.5°	311.2	313.1	326.8	337.6	365.0	392.4	428.6	479.5	497.1	503.9	497.1
40°	212.3	212.3	220.2	231.9	254.4	277.9	311.2	349.3	374.8	385.5	373.8
42.5°	135.0	137.0	142.9	150.7	167.3	187.9	213.3	241.7	260.3	268.1	257.4
45°	81.2	83.2	88.1	93.9	104.7	117.4	135.0	155.6	171.2	178.1	173.2
47.5°	48.9	50.9	52.8	56.8	64.6	73.4	82.2	93.9	103.7	104.7	102.7
50°	28.4	28.4	30.3	33.3	37.2	42.1	47.0	53.8	56.8	60.7	56.8
52.5°	18.6	18.6	18.6	19.6	21.5	23.5	25.4	29.4	31.3	31.3	30.3
55°	13.7	13.7	13.7	13.7	14.7	14.7	14.7	15.7	16.6	16.6	16.6
57.5°	9.8	9.8	9.8	10.8	10.8	10.8	9.8	9.8	9.8	9.8	9.8
60°	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	6.8	6.8	6.8
62.5°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
65°	3.9	3.9	3.9	4.9	4.9	4.9	4.9	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°	2.0	2.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
72.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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°	1552.9	1552.9	1552.9	1552.9	1552.9	1552.9	1552.9	1552.9
2.5°	1556.8	1551.9	1551.9	1551.9	1550.0	1551.9	1554.9	1550.0
5°	1540.2	1542.2	1533.3	1540.2	1543.1	1538.2	1550.0	1540.2
7.5°	1525.5	1522.6	1508.9	1518.7	1524.5	1526.5	1525.5	1517.7
10°	1496.2	1489.3	1483.4	1483.4	1481.5	1480.5	1491.3	1487.4
12.5°	1443.3	1448.2	1439.4	1444.3	1440.4	1441.4	1442.3	1440.4
15°	1398.3	1393.4	1381.7	1389.5	1384.6	1379.7	1389.5	1374.8
17.5°	1327.9	1326.9	1320.0	1315.1	1317.1	1316.1	1321.0	1314.2
20°	1244.7	1246.6	1242.7	1240.8	1237.8	1231.0	1236.9	1229.0
22.5°	1154.7	1156.6	1160.5	1152.7	1153.7	1143.9	1152.7	1143.9
25°	1063.7	1062.7	1057.8	1053.9	1043.1	1032.3	1030.4	1023.5
27.5°	963.8	957.0	945.3	932.5	915.9	901.2	900.2	895.3
30°	854.3	839.6	818.0	797.5	772.1	749.5	749.5	741.7
32.5°	738.8	705.5	676.2	650.7	617.4	604.7	592.0	585.2
35°	600.8	571.5	536.2	494.2	478.5	447.2	449.1	433.5
37.5°	470.7	434.5	401.2	366.9	339.5	324.9	317.0	309.2
40°	349.3	314.1	277.9	255.4	230.9	218.2	213.3	211.4
42.5°	238.8	209.4	185.9	167.3	154.6	140.9	137.0	135.0
45°	155.6	139.0	117.4	102.7	93.9	86.1	86.1	83.2
47.5°	93.0	82.2	71.4	61.6	55.8	50.9	48.9	47.9
50°	51.9	46.0	40.1	36.2	32.3	29.4	28.4	28.4
52.5°	28.4	25.4	23.5	20.5	18.6	18.6	18.6	17.6
55°	14.7	14.7	14.7	14.7	13.7	13.7	13.7	12.7
57.5°	9.8	9.8	10.8	10.8	10.8	9.8	9.8	9.8
60°	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
62.5°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
65°	3.9	4.9	4.9	4.9	4.9	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	2.0	2.0	2.0
72.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)