

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: P209341

Luminaire Tested: **LDSQ6B20D010 EU6B10209730 6LBSQ1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209341
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 EU6B10209730 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 3000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1507.7 lumens
Efficiency: N/A
Efficacy: 72.5 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

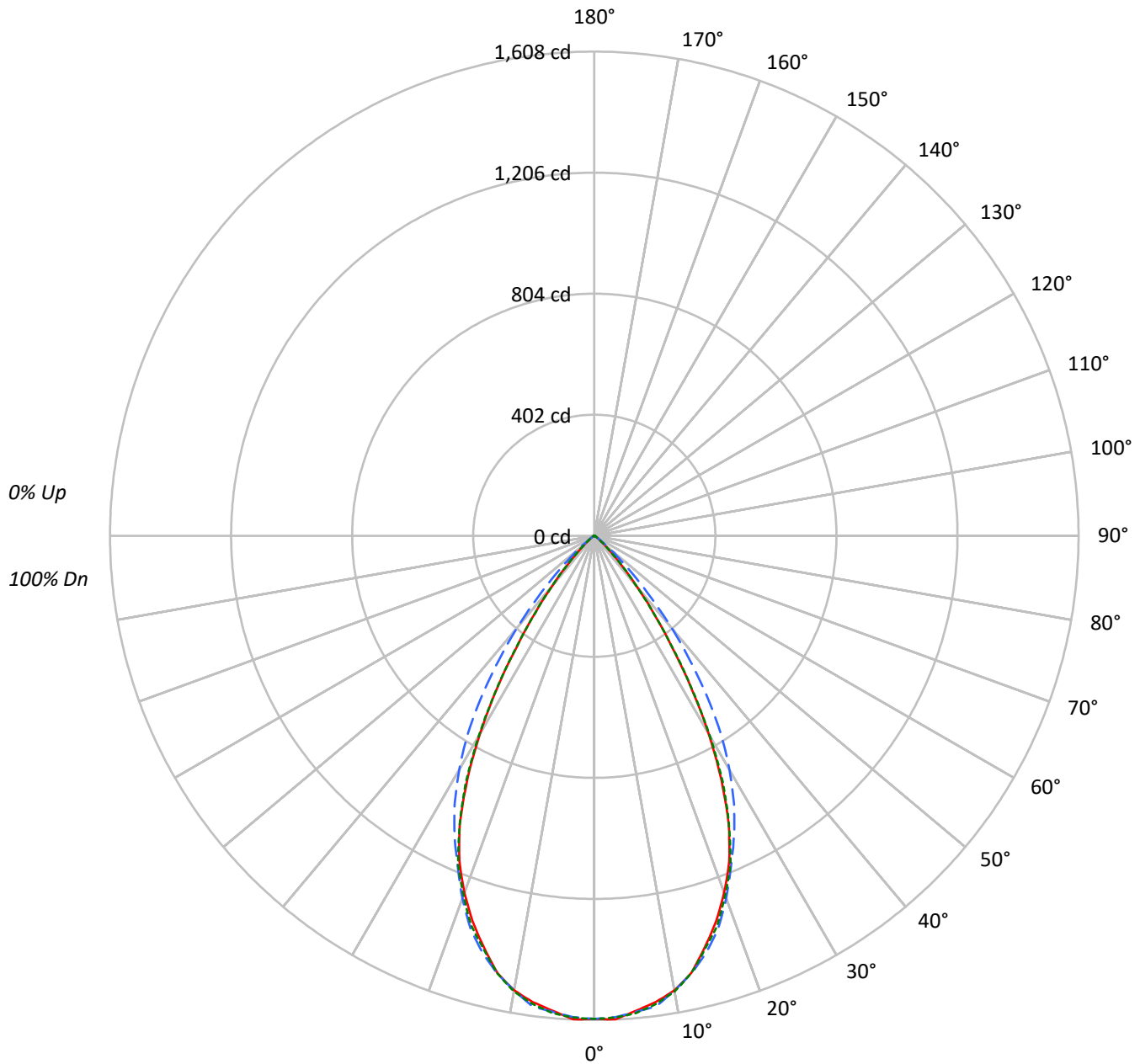
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	150.2	10.0
10°-20°	399.6	26.5
20°-30°	490.4	32.5
30°-40°	338.5	22.5
40°-50°	105.8	7.0
50°-60°	16.5	1.1
60°-70°	4.8	0.3
70°-80°	1.6	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°	1040.2	69.0
0°-40°	1378.7	91.4
0°-60°	1501.1	99.6
0°-90°	1507.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1507.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1604	1604	1604	1604	1604	
5°	1583	1589	1587	1588	1591	150
15°	1415	1436	1434	1432	1420	396
25°	1056	1084	1098	1091	1058	473
35°	446	527	654	532	448	285
45°	84	115	184	114	86	75
55°	14	15	17	15	13	14
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°	1604.5	1604.5	1604.5	1604.5	1604.5	1604.5	1604.5	1604.5	1604.5	1604.5	1604.5
2.5°	1607.5	1585.2	1599.4	1596.4	1604.5	1609.5	1604.5	1613.6	1607.5	1600.4	1602.4
5°	1583.2	1586.3	1585.2	1587.3	1589.3	1589.3	1599.4	1600.4	1602.4	1587.3	1591.3
7.5°	1562.0	1562.0	1567.0	1565.0	1572.1	1570.1	1571.1	1579.2	1580.2	1576.1	1573.1
10°	1532.7	1528.6	1523.6	1523.6	1532.7	1533.7	1541.8	1542.8	1548.9	1532.7	1534.7
12.5°	1487.2	1485.2	1477.1	1481.1	1488.2	1484.1	1497.3	1498.3	1496.3	1489.2	1493.2
15°	1415.4	1423.5	1421.5	1420.5	1436.6	1434.6	1433.6	1436.6	1437.6	1433.6	1430.6
17.5°	1343.6	1350.7	1351.7	1353.7	1356.8	1359.8	1363.8	1375.0	1370.9	1367.9	1378.0
20°	1260.7	1257.7	1265.8	1273.9	1276.9	1276.9	1283.0	1291.0	1285.0	1280.9	1281.9
22.5°	1170.7	1175.8	1171.7	1179.8	1183.9	1188.9	1195.0	1202.1	1197.0	1185.9	1199.0
25°	1056.5	1059.5	1072.7	1071.7	1077.7	1089.9	1099.0	1099.0	1099.0	1097.9	1097.9
27.5°	912.9	910.9	927.1	938.2	953.4	972.6	984.7	1003.9	1007.0	1003.9	996.8
30°	759.3	757.2	777.5	791.6	818.9	828.0	861.4	879.6	898.8	897.8	892.7
32.5°	599.5	603.6	619.7	640.0	662.2	690.5	721.9	762.3	779.5	783.5	774.4
35°	445.9	451.9	467.1	484.3	511.6	542.9	586.4	624.8	654.1	654.1	647.0
37.5°	321.5	323.5	337.7	348.8	377.1	405.4	442.8	495.4	513.6	520.7	513.6
40°	219.4	219.4	227.5	239.6	262.9	287.1	321.5	360.9	387.2	398.3	386.2
42.5°	139.5	141.5	147.6	155.7	172.9	194.1	220.4	249.7	268.9	277.0	265.9
45°	83.9	85.9	91.0	97.1	108.2	121.3	139.5	160.7	176.9	184.0	178.9
47.5°	50.5	52.6	54.6	58.6	66.7	75.8	84.9	97.1	107.2	108.2	106.2
50°	29.3	29.3	31.3	34.4	38.4	43.5	48.5	55.6	58.6	62.7	58.6
52.5°	19.2	19.2	19.2	20.2	22.2	24.3	26.3	30.3	32.4	32.4	31.3
55°	14.2	14.2	14.2	14.2	15.2	15.2	15.2	16.2	17.2	17.2	17.2
57.5°	10.1	10.1	10.1	11.1	11.1	11.1	10.1	10.1	10.1	10.1	10.1
60°	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	7.1	7.1	7.1
62.5°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
65°	4.0	4.0	4.0	5.1	5.1	5.1	5.1	4.0	4.0	4.0	4.0
67.5°	3.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0
70°	2.0	2.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
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°	1604.5	1604.5	1604.5	1604.5	1604.5	1604.5	1604.5	1604.5
2.5°	1608.5	1603.4	1603.4	1603.4	1601.4	1603.4	1606.5	1601.4
5°	1591.3	1593.3	1584.2	1591.3	1594.3	1589.3	1601.4	1591.3
7.5°	1576.1	1573.1	1559.0	1569.1	1575.1	1577.2	1576.1	1568.1
10°	1545.8	1538.7	1532.7	1532.7	1530.7	1529.6	1540.8	1536.7
12.5°	1491.2	1496.3	1487.2	1492.2	1488.2	1489.2	1490.2	1488.2
15°	1444.7	1439.7	1427.5	1435.6	1430.6	1425.5	1435.6	1420.5
17.5°	1371.9	1370.9	1363.8	1358.8	1360.8	1359.8	1364.8	1357.8
20°	1286.0	1288.0	1284.0	1281.9	1278.9	1271.8	1277.9	1269.8
22.5°	1193.0	1195.0	1199.0	1191.0	1192.0	1181.9	1191.0	1181.9
25°	1099.0	1097.9	1092.9	1088.8	1077.7	1066.6	1064.6	1057.5
27.5°	995.8	988.8	976.6	963.5	946.3	931.1	930.1	925.1
30°	882.6	867.4	845.2	824.0	797.7	774.4	774.4	766.3
32.5°	763.3	728.9	698.6	672.3	637.9	624.8	611.7	604.6
35°	620.8	590.4	554.0	510.6	494.4	462.0	464.0	447.9
37.5°	486.3	448.9	414.5	379.1	350.8	335.7	327.6	319.5
40°	360.9	324.5	287.1	263.9	238.6	225.5	220.4	218.4
42.5°	246.7	216.4	192.1	172.9	159.7	145.6	141.5	139.5
45°	160.7	143.6	121.3	106.2	97.1	89.0	89.0	85.9
47.5°	96.0	84.9	73.8	63.7	57.6	52.6	50.5	49.5
50°	53.6	47.5	41.5	37.4	33.4	30.3	29.3	29.3
52.5°	29.3	26.3	24.3	21.2	19.2	19.2	19.2	18.2
55°	15.2	15.2	15.2	15.2	14.2	14.2	14.2	13.1
57.5°	10.1	10.1	11.1	11.1	11.1	10.1	10.1	10.1
60°	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
62.5°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
65°	4.0	5.1	5.1	5.1	5.1	4.0	4.0	4.0
67.5°	3.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0
70°	3.0	3.0	3.0	3.0	3.0	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)