

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: P209460

Luminaire Tested: **LDSQ6B40D010 EU6B30508050 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209460
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 EU6B30508050 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 5000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4683.4 lumens
Efficiency: N/A
Efficacy: 108.9 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

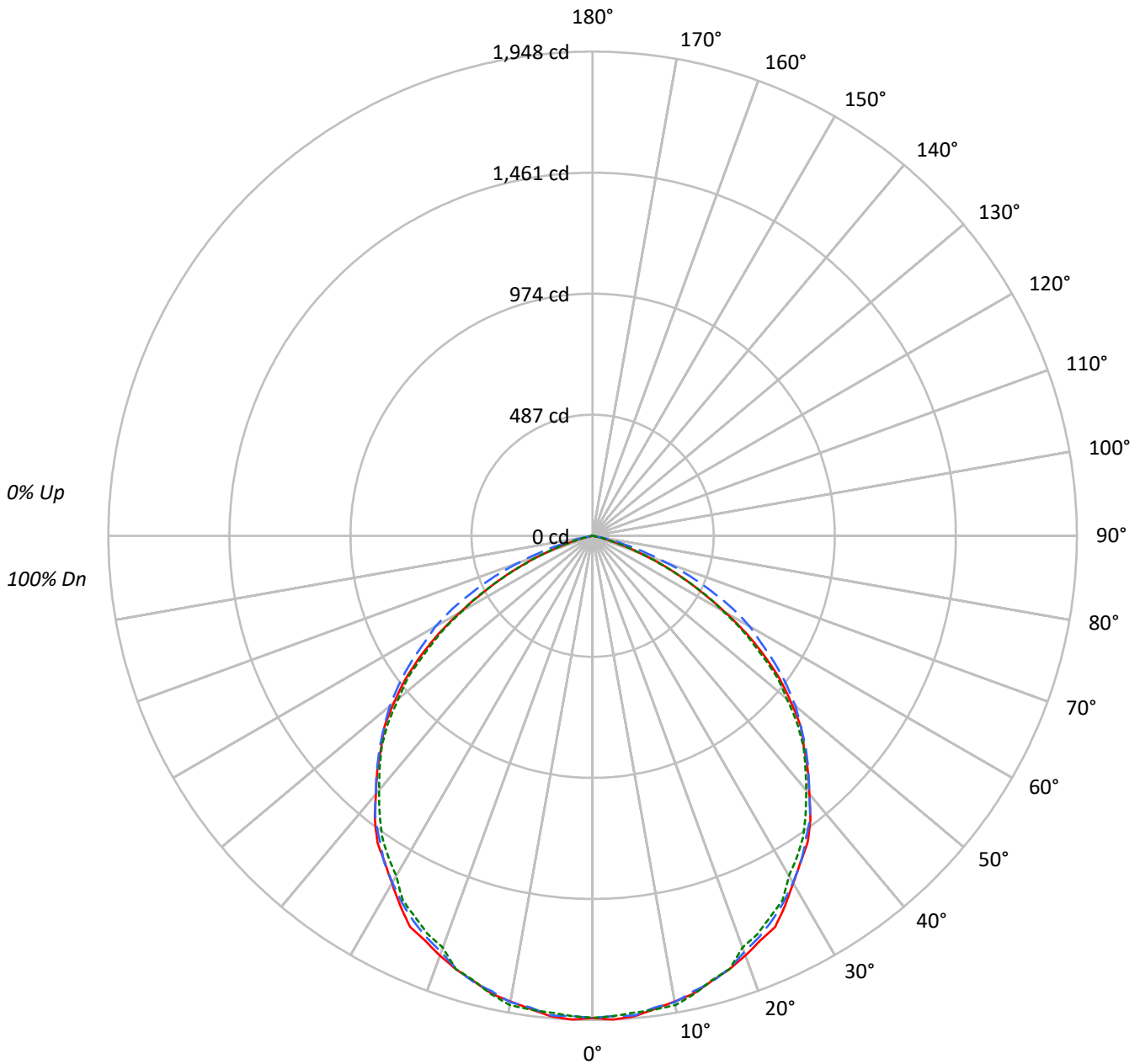
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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				100
1	111	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87				87
2	102	94	88	83	99	93	87	82	89	84	80	86	82	79	83	80	77	75				75
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	64				64
4	86	75	67	60	84	73	66	60	71	64	59	69	63	58	67	62	58	56				56
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49				49
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43				43
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38				38
8	63	50	42	37	62	50	42	36	48	41	36	47	41	36	46	40	36	34				34
9	59	46	38	33	58	46	38	33	45	38	33	43	37	33	42	37	32	31				31
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28				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°	183.5	3.9
10°-20°	523.2	11.2
20°-30°	787.2	16.8
30°-40°	931.3	19.9
40°-50°	929.4	19.8
50°-60°	770.7	16.5
60°-70°	450.3	9.6
70°-80°	107.2	2.3
80°-90°	0.8	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°	1493.9	31.9
0°-40°	2425.1	51.8
0°-60°	4125.2	88.1
0°-90°	4683.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4683.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1940	1940	1940	1940	1940	
5°	1940	1930	1937	1931	1926	184
15°	1854	1853	1857	1848	1851	524
25°	1737	1717	1708	1702	1691	794
35°	1508	1494	1494	1485	1476	937
45°	1202	1203	1213	1200	1199	930
55°	844	874	896	871	824	749
65°	398	448	526	446	395	395
75°	57	83	129	82	54	77
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1939.8	1939.8	1939.8	1939.8	1939.8	1939.8	1939.8	1939.8	1939.8	1939.8	1939.8
2.5°	1948.4	1937.0	1945.6	1928.4	1939.8	1928.4	1931.3	1925.5	1937.0	1934.1	1931.3
5°	1939.8	1942.7	1937.0	1942.7	1934.1	1925.5	1934.1	1928.4	1911.2	1937.0	1931.3
7.5°	1919.8	1922.7	1917.0	1925.5	1919.8	1908.4	1931.3	1914.1	1911.2	1914.1	1925.5
10°	1902.6	1908.4	1905.5	1902.6	1905.5	1905.5	1899.8	1891.2	1899.8	1905.5	1902.6
12.5°	1885.5	1894.1	1888.3	1882.6	1876.9	1879.8	1885.5	1871.2	1871.2	1876.9	1894.1
15°	1854.0	1859.7	1862.6	1851.1	1851.1	1854.0	1865.5	1842.6	1854.0	1856.9	1859.7
17.5°	1828.3	1831.1	1831.1	1822.5	1828.3	1819.7	1828.3	1816.8	1828.3	1825.4	1831.1
20°	1796.8	1802.5	1796.8	1796.8	1791.1	1793.9	1793.9	1793.9	1785.3	1782.5	1788.2
22.5°	1762.5	1762.5	1756.7	1762.5	1756.7	1753.9	1768.2	1745.3	1768.2	1748.1	1765.3
25°	1736.7	1722.4	1713.8	1711.0	1722.4	1711.0	1716.7	1708.1	1713.8	1708.1	1711.0
27.5°	1676.6	1668.0	1665.2	1668.0	1668.0	1665.2	1676.6	1645.1	1665.2	1662.3	1662.3
30°	1613.7	1613.7	1619.4	1613.7	1619.4	1610.8	1622.3	1596.5	1613.7	1610.8	1613.7
32.5°	1556.5	1559.3	1559.3	1565.0	1556.5	1559.3	1559.3	1550.7	1556.5	1559.3	1553.6
35°	1507.8	1493.5	1493.5	1493.5	1493.5	1493.5	1499.2	1490.6	1499.2	1493.5	1493.5
37.5°	1439.1	1424.8	1424.8	1422.0	1436.3	1427.7	1442.0	1430.6	1430.6	1436.3	1436.3
40°	1356.2	1361.9	1353.3	1364.8	1361.9	1350.4	1376.2	1359.0	1370.5	1356.2	1367.6
42.5°	1281.8	1284.6	1281.8	1278.9	1290.4	1287.5	1298.9	1287.5	1284.6	1284.6	1304.7
45°	1201.7	1201.7	1201.7	1210.3	1201.7	1204.5	1216.0	1210.3	1216.0	1213.1	1233.1
47.5°	1135.9	1121.6	1118.7	1135.9	1133.0	1135.9	1135.9	1138.7	1141.6	1135.9	1144.4
50°	1041.4	1035.7	1035.7	1038.6	1041.4	1047.2	1055.8	1061.5	1055.8	1064.3	1067.2
52.5°	949.9	944.2	947.0	958.5	964.2	961.3	975.6	978.5	975.6	981.4	981.4
55°	844.0	838.3	846.9	861.2	869.8	878.4	892.7	881.2	892.7	895.5	898.4
57.5°	735.3	732.4	735.3	749.6	758.2	778.2	801.1	801.1	812.6	804.0	812.6
60°	615.1	615.1	626.6	635.2	658.1	672.4	695.3	706.7	718.1	729.6	723.9
62.5°	500.7	503.6	512.1	532.2	546.5	566.5	592.3	603.7	623.7	635.2	629.4
65°	397.7	397.7	403.4	420.6	434.9	460.6	483.5	509.3	520.7	526.4	529.3
67.5°	297.6	294.7	306.1	317.6	331.9	357.6	383.4	397.7	417.7	423.4	420.6
70°	200.3	203.1	208.9	220.3	237.5	257.5	286.1	297.6	309.0	314.7	309.0
72.5°	125.9	125.9	128.8	140.2	151.6	165.9	186.0	197.4	211.7	214.6	208.9
75°	57.2	57.2	62.9	68.7	77.3	88.7	103.0	111.6	120.2	128.8	128.8
77.5°	11.4	14.3	17.2	17.2	22.9	31.5	40.1	48.6	57.2	57.2	57.2
80°	2.9	2.9	2.9	2.9	2.9	2.9	5.7	8.6	14.3	14.3	14.3
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°	1939.8	1939.8	1939.8	1939.8	1939.8	1939.8	1939.8	1939.8
2.5°	1939.8	1957.0	1939.8	1931.3	1942.7	1939.8	1931.3	1934.1
5°	1931.3	1937.0	1942.7	1919.8	1934.1	1937.0	1931.3	1925.5
7.5°	1922.7	1925.5	1922.7	1917.0	1917.0	1917.0	1922.7	1922.7
10°	1919.8	1911.2	1896.9	1888.3	1896.9	1896.9	1894.1	1917.0
12.5°	1882.6	1894.1	1885.5	1868.3	1885.5	1882.6	1882.6	1888.3
15°	1854.0	1854.0	1859.7	1836.8	1848.3	1845.4	1845.4	1851.1
17.5°	1825.4	1825.4	1822.5	1816.8	1814.0	1822.5	1814.0	1828.3
20°	1785.3	1791.1	1808.2	1779.6	1788.2	1779.6	1779.6	1762.5
22.5°	1736.7	1765.3	1751.0	1748.1	1745.3	1748.1	1753.9	1733.8
25°	1705.2	1705.2	1711.0	1693.8	1693.8	1699.5	1696.6	1690.9
27.5°	1662.3	1659.5	1656.6	1650.9	1665.2	1653.7	1653.7	1653.7
30°	1602.2	1610.8	1608.0	1593.6	1610.8	1605.1	1596.5	1579.3
32.5°	1550.7	1562.2	1545.0	1542.1	1539.3	1542.1	1545.0	1530.7
35°	1487.8	1490.6	1490.6	1479.2	1482.1	1479.2	1473.5	1476.3
37.5°	1430.6	1427.7	1413.4	1407.7	1410.5	1410.5	1413.4	1407.7
40°	1350.4	1359.0	1359.0	1339.0	1344.7	1339.0	1339.0	1336.1
42.5°	1284.6	1287.5	1278.9	1270.3	1270.3	1267.5	1261.8	1267.5
45°	1216.0	1213.1	1204.5	1195.9	1195.9	1193.1	1187.4	1198.8
47.5°	1138.7	1133.0	1130.1	1118.7	1118.7	1101.5	1104.4	1115.8
50°	1061.5	1055.8	1044.3	1038.6	1030.0	1021.4	1018.6	1018.6
52.5°	969.9	969.9	958.5	947.0	944.2	938.4	932.7	935.6
55°	889.8	889.8	881.2	861.2	849.8	835.4	826.9	824.0
57.5°	798.3	792.5	775.4	752.5	741.0	729.6	721.0	721.0
60°	706.7	692.4	675.2	655.2	635.2	615.1	609.4	606.6
62.5°	606.6	592.3	560.8	537.9	523.6	512.1	500.7	509.3
65°	506.4	486.4	457.8	434.9	420.6	403.4	394.8	394.8
67.5°	400.6	380.5	351.9	329.0	314.7	303.3	291.8	291.8
70°	294.7	280.4	254.6	234.6	223.2	206.0	203.1	203.1
72.5°	200.3	183.1	163.1	148.8	137.3	125.9	120.2	117.3
75°	111.6	100.1	85.8	77.3	65.8	60.1	54.4	54.4
77.5°	45.8	37.2	28.6	22.9	17.2	14.3	11.4	14.3
80°	8.6	5.7	2.9	2.9	2.9	2.9	2.9	2.9
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



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - - 90°-270°









(END OF REPORT)