

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: P202483

Luminaire Tested: **LDSQ6B40D010 EU6B30508035 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P202483
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 EU6B30508035 6LBCSSQ1MMS
Description: PORTFOLIO LED SQUARE 6 INCH SHALLOW RECESSED DOWNLIGHT
MEDIUM DISTRIBUTION WITH MATTE METALLIC SILVER TRIM
Light Source: HIGH LUMEN LED 3500 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4636.0 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Circular (Dia: 1.12' x H: 0')
CIE Type: Direct

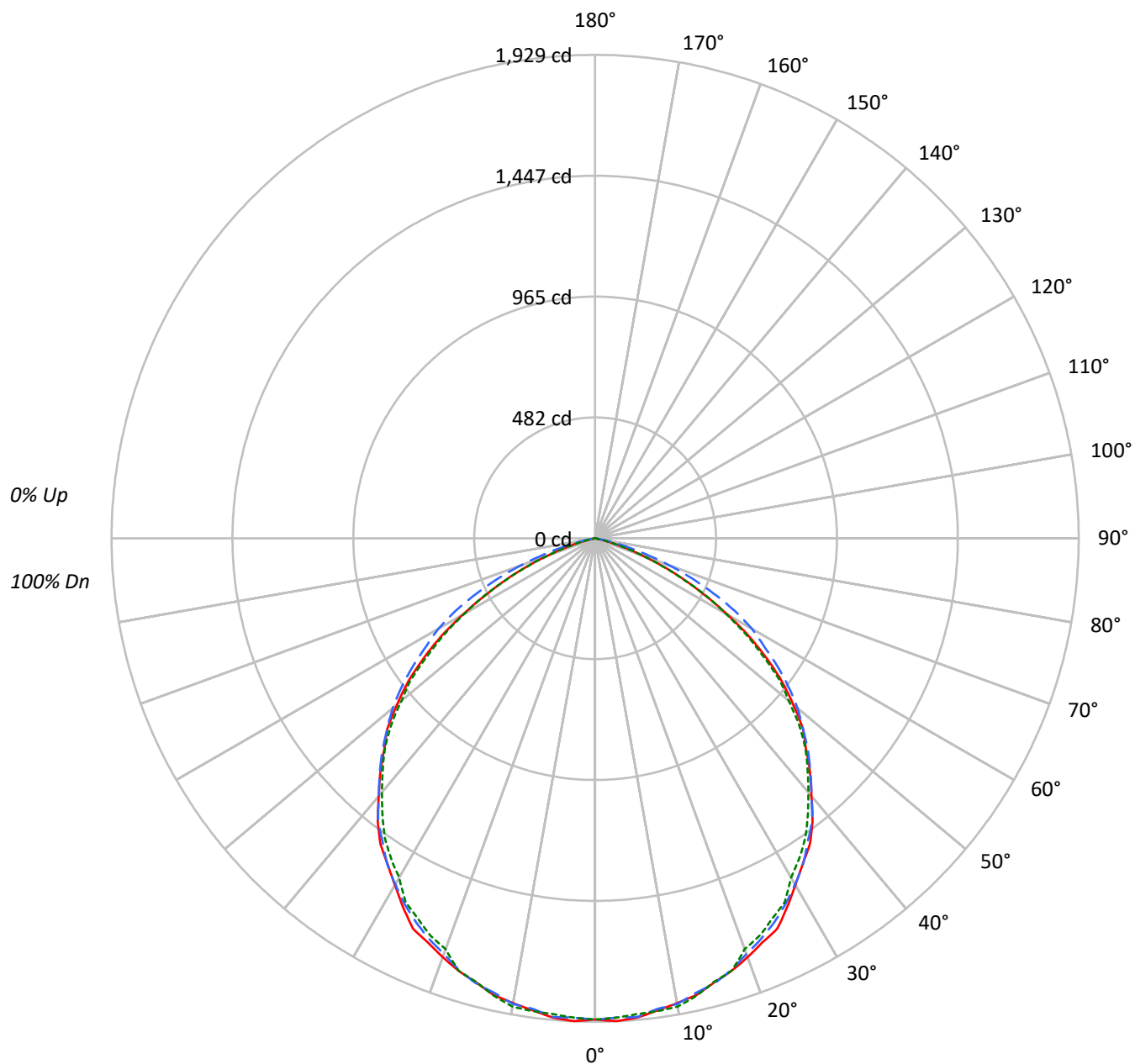
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	20793	20793	20793
5°	20873	20842	20718
10°	20709	20740	20864
15°	20574	20606	20542
20°	20496	20332	20104
25°	20540	20202	19999
30°	19972	19937	19547
35°	19730	19544	19319
40°	18976	18976	18696
45°	18216	18389	18173
50°	17367	17749	16985
55°	15774	16736	15400
60°	13187	15641	13003
65°	10088	13352	10013
70°	6278	9862	6367
75°	2368	5330	2251
80°	175	886	175
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.6	3.9
10°-20°	517.9	11.2
20°-30°	779.3	16.8
30°-40°	921.8	19.9
40°-50°	920.0	19.8
50°-60°	762.9	16.5
60°-70°	445.7	9.6
70°-80°	106.1	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°	1478.7	31.9
0°-40°	2400.6	51.8
0°-60°	4083.4	88.1
0°-90°	4636.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4636.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1920	1920	1920	1920	1920	
5°	1920	1910	1917	1912	1906	182
15°	1835	1834	1838	1830	1832	519
25°	1719	1699	1691	1685	1674	786
35°	1492	1478	1478	1470	1461	928
45°	1190	1191	1201	1188	1187	920
55°	836	865	886	862	816	742
65°	394	443	521	442	391	391
75°	57	82	127	81	54	77
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°	1920.2	1920.2	1920.2	1920.2	1920.2	1920.2	1920.2	1920.2	1920.2	1920.2	1920.2
2.5°	1928.7	1917.4	1925.9	1908.9	1920.2	1908.9	1911.7	1906.0	1917.4	1914.5	1911.7
5°	1920.2	1923.0	1917.4	1923.0	1914.5	1906.0	1914.5	1908.9	1891.9	1917.4	1911.7
7.5°	1900.4	1903.2	1897.5	1906.0	1900.4	1889.0	1911.7	1894.7	1891.9	1894.7	1906.0
10°	1883.4	1889.0	1886.2	1883.4	1886.2	1886.2	1880.5	1872.0	1880.5	1886.2	1883.4
12.5°	1866.4	1874.9	1869.2	1863.6	1857.9	1860.7	1866.4	1852.2	1852.2	1857.9	1874.9
15°	1835.2	1840.9	1843.7	1832.4	1832.4	1835.2	1846.6	1823.9	1835.2	1838.1	1840.9
17.5°	1809.7	1812.6	1812.6	1804.1	1809.7	1801.2	1809.7	1798.4	1809.7	1806.9	1812.6
20°	1778.6	1784.3	1778.6	1778.6	1772.9	1775.8	1775.8	1775.8	1767.3	1764.4	1770.1
22.5°	1744.6	1744.6	1738.9	1744.6	1738.9	1736.1	1750.3	1727.6	1750.3	1730.4	1747.4
25°	1719.1	1705.0	1696.5	1693.6	1705.0	1693.6	1699.3	1690.8	1696.5	1690.8	1693.6
27.5°	1659.6	1651.1	1648.3	1651.1	1651.1	1648.3	1659.6	1628.5	1648.3	1645.5	1645.5
30°	1597.3	1597.3	1603.0	1597.3	1603.0	1594.5	1605.8	1580.3	1597.3	1594.5	1597.3
32.5°	1540.7	1543.5	1543.5	1549.2	1540.7	1543.5	1543.5	1535.0	1540.7	1543.5	1537.9
35°	1492.5	1478.4	1478.4	1478.4	1478.4	1478.4	1484.0	1475.5	1484.0	1478.4	1478.4
37.5°	1424.6	1410.4	1410.4	1407.6	1421.7	1413.2	1427.4	1416.1	1416.1	1421.7	1421.7
40°	1342.4	1348.1	1339.6	1350.9	1348.1	1336.8	1362.3	1345.3	1356.6	1342.4	1353.8
42.5°	1268.8	1271.6	1268.8	1266.0	1277.3	1274.5	1285.8	1274.5	1271.6	1271.6	1291.5
45°	1189.5	1189.5	1189.5	1198.0	1189.5	1192.3	1203.7	1198.0	1203.7	1200.8	1220.7
47.5°	1124.4	1110.2	1107.4	1124.4	1121.5	1124.4	1124.4	1127.2	1130.0	1124.4	1132.9
50°	1030.9	1025.2	1025.2	1028.1	1030.9	1036.6	1045.1	1050.7	1045.1	1053.6	1056.4
52.5°	940.3	934.6	937.4	948.8	954.4	951.6	965.8	968.6	965.8	971.4	971.4
55°	835.5	829.8	838.3	852.5	861.0	869.5	883.6	872.3	883.6	886.5	889.3
57.5°	727.9	725.0	727.9	742.0	750.5	770.3	793.0	793.0	804.3	795.8	804.3
60°	608.9	608.9	620.2	628.7	651.4	665.6	688.2	699.5	710.9	722.2	716.5
62.5°	495.6	498.5	507.0	526.8	540.9	560.8	586.3	597.6	617.4	628.7	623.1
65°	393.7	393.7	399.3	416.3	430.5	456.0	478.6	504.1	515.5	521.1	523.9
67.5°	294.5	291.7	303.0	314.4	328.5	354.0	379.5	393.7	413.5	419.2	416.3
70°	198.3	201.1	206.7	218.1	235.1	254.9	283.2	294.5	305.9	311.5	305.9
72.5°	124.6	124.6	127.4	138.8	150.1	164.3	184.1	195.4	209.6	212.4	206.7
75°	56.6	56.6	62.3	68.0	76.5	87.8	102.0	110.5	119.0	127.4	127.4
77.5°	11.3	14.2	17.0	17.0	22.7	31.2	39.7	48.1	56.6	56.6	56.6
80°	2.8	2.8	2.8	2.8	2.8	2.8	5.7	8.5	14.2	14.2	14.2
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°	1920.2	1920.2	1920.2	1920.2	1920.2	1920.2	1920.2	1920.2
2.5°	1920.2	1937.2	1920.2	1911.7	1923.0	1920.2	1911.7	1914.5
5°	1911.7	1917.4	1923.0	1900.4	1914.5	1917.4	1911.7	1906.0
7.5°	1903.2	1906.0	1903.2	1897.5	1897.5	1897.5	1903.2	1903.2
10°	1900.4	1891.9	1877.7	1869.2	1877.7	1877.7	1874.9	1897.5
12.5°	1863.6	1874.9	1866.4	1849.4	1866.4	1863.6	1863.6	1869.2
15°	1835.2	1835.2	1840.9	1818.2	1829.6	1826.7	1826.7	1832.4
17.5°	1806.9	1806.9	1804.1	1798.4	1795.6	1804.1	1795.6	1809.7
20°	1767.3	1772.9	1789.9	1761.6	1770.1	1761.6	1761.6	1744.6
22.5°	1719.1	1747.4	1733.3	1730.4	1727.6	1730.4	1736.1	1716.3
25°	1688.0	1688.0	1693.6	1676.6	1676.6	1682.3	1679.5	1673.8
27.5°	1645.5	1642.6	1639.8	1634.1	1648.3	1637.0	1637.0	1637.0
30°	1586.0	1594.5	1591.7	1577.5	1594.5	1588.8	1580.3	1563.3
32.5°	1535.0	1546.4	1529.4	1526.5	1523.7	1526.5	1529.4	1515.2
35°	1472.7	1475.5	1475.5	1464.2	1467.1	1464.2	1458.6	1461.4
37.5°	1416.1	1413.2	1399.1	1393.4	1396.2	1396.2	1399.1	1393.4
40°	1336.8	1345.3	1345.3	1325.4	1331.1	1325.4	1325.4	1322.6
42.5°	1271.6	1274.5	1266.0	1257.5	1257.5	1254.6	1249.0	1254.6
45°	1203.7	1200.8	1192.3	1183.8	1183.8	1181.0	1175.3	1186.7
47.5°	1127.2	1121.5	1118.7	1107.4	1107.4	1090.4	1093.2	1104.5
50°	1050.7	1045.1	1033.7	1028.1	1019.6	1011.1	1008.2	1008.2
52.5°	960.1	960.1	948.8	937.4	934.6	928.9	923.3	926.1
55°	880.8	880.8	872.3	852.5	841.1	827.0	818.5	815.7
57.5°	790.2	784.5	767.5	744.9	733.5	722.2	713.7	713.7
60°	699.5	685.4	668.4	648.6	628.7	608.9	603.2	600.4
62.5°	600.4	586.3	555.1	532.4	518.3	507.0	495.6	504.1
65°	501.3	481.5	453.1	430.5	416.3	399.3	390.8	390.8
67.5°	396.5	376.7	348.4	325.7	311.5	300.2	288.9	288.9
70°	291.7	277.6	252.1	232.2	220.9	203.9	201.1	201.1
72.5°	198.3	181.3	161.4	147.3	135.9	124.6	119.0	116.1
75°	110.5	99.1	85.0	76.5	65.1	59.5	53.8	53.8
77.5°	45.3	36.8	28.3	22.7	17.0	14.2	11.3	14.2
80°	8.5	5.7	2.8	2.8	2.8	2.8	2.8	2.8
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)