

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: P209496

Luminaire Tested: **LDSQ6B70D010 EU6B60708030 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209496
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: LDSQ6B70D010 EU6B60708030 6LBCSSQ1MMS
Description: PORTFOLIO LD6 SERIES 6" RECESSED FIXTURE WITH A SQUARE SHALLOW CAST METALLIC SILVER TRIM
MEDIUM DISTRIBUTION WITH MATTE METALLIC SILVER TRIM
D010TE
Light Source: HIGH LUMEN LED 3000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7747.4 lumens
Efficiency: N/A
Efficacy: 97.5 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

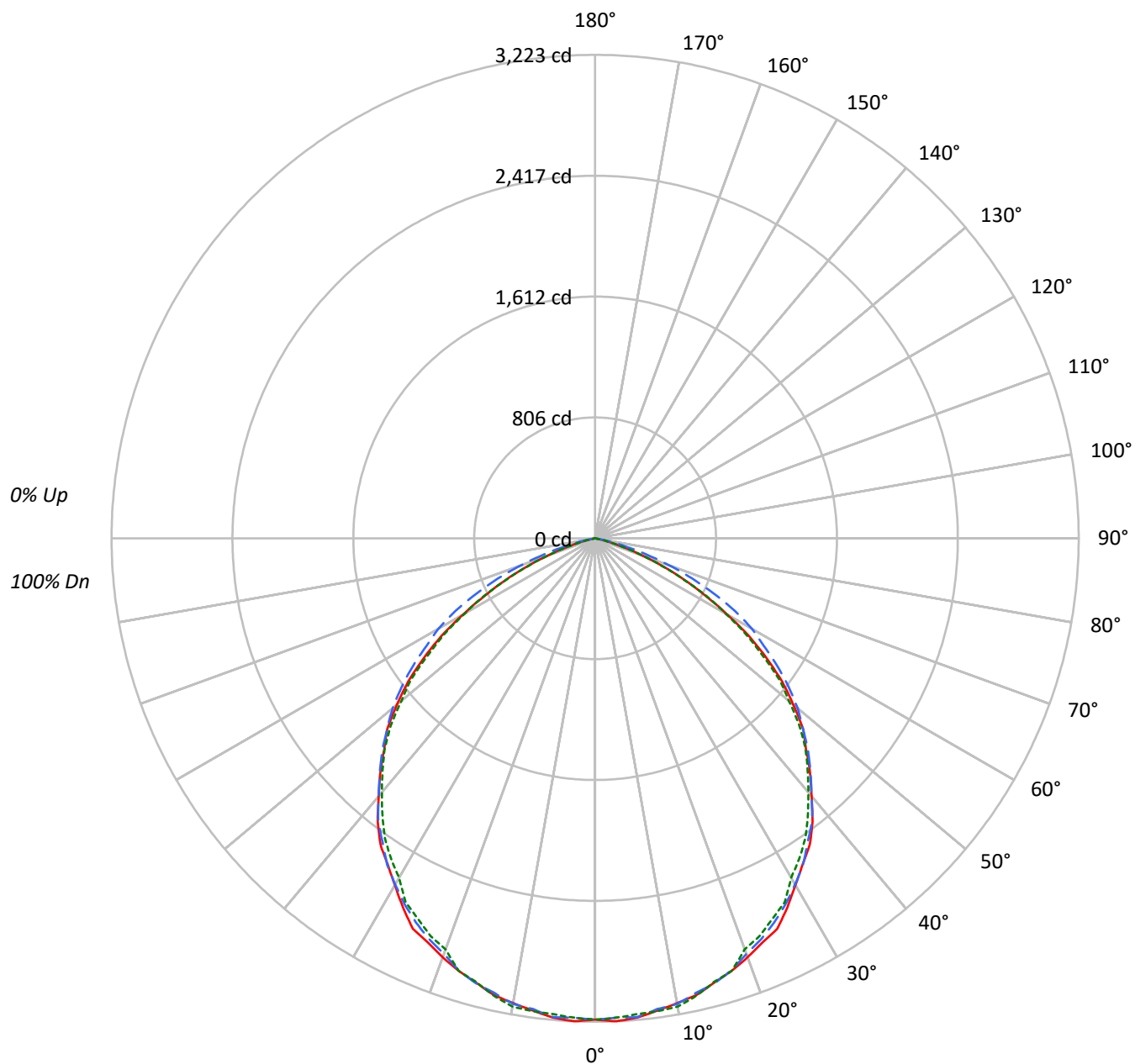
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
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	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°	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°	303.5	3.9
10°-20°	865.4	11.2
20°-30°	1302.3	16.8
30°-40°	1540.6	19.9
40°-50°	1537.4	19.8
50°-60°	1274.9	16.5
60°-70°	744.8	9.6
70°-80°	177.4	2.3
80°-90°	1.3	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°	2471.2	31.9
0°-40°	4011.7	51.8
0°-60°	6824.0	88.1
0°-90°	7747.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7747.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3209	3209	3209	3209	3209	
5°	3209	3192	3204	3195	3185	304
15°	3067	3065	3072	3057	3062	867
25°	2873	2840	2826	2816	2797	1313
35°	2494	2471	2471	2456	2442	1551
45°	1988	1990	2007	1986	1983	1538
55°	1396	1446	1481	1441	1363	1240
65°	658	741	871	738	653	654
75°	95	137	213	135	90	128
85°	0	0	0	0	0	1
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°	3208.9	3208.9	3208.9	3208.9	3208.9	3208.9	3208.9	3208.9	3208.9	3208.9	3208.9
2.5°	3223.1	3204.2	3218.4	3190.0	3208.9	3190.0	3194.7	3185.3	3204.2	3199.5	3194.7
5°	3208.9	3213.7	3204.2	3213.7	3199.5	3185.3	3199.5	3190.0	3161.6	3204.2	3194.7
7.5°	3175.8	3180.5	3171.1	3185.3	3175.8	3156.9	3194.7	3166.3	3161.6	3166.3	3185.3
10°	3147.4	3156.9	3152.1	3147.4	3152.1	3152.1	3142.7	3128.5	3142.7	3152.1	3147.4
12.5°	3119.0	3133.2	3123.7	3114.3	3104.8	3109.5	3119.0	3095.3	3095.3	3104.8	3133.2
15°	3066.9	3076.4	3081.1	3062.2	3062.2	3066.9	3085.9	3048.0	3066.9	3071.7	3076.4
17.5°	3024.3	3029.1	3029.1	3014.9	3024.3	3010.2	3024.3	3005.4	3024.3	3019.6	3029.1
20°	2972.3	2981.8	2972.3	2972.3	2962.8	2967.6	2967.6	2967.6	2953.4	2948.6	2958.1
22.5°	2915.5	2915.5	2906.0	2915.5	2906.0	2901.3	2925.0	2887.1	2925.0	2891.8	2920.2
25°	2872.9	2849.2	2835.0	2830.3	2849.2	2830.3	2839.8	2825.6	2835.0	2825.6	2830.3
27.5°	2773.5	2759.3	2754.6	2759.3	2759.3	2754.6	2773.5	2721.4	2754.6	2749.8	2749.8
30°	2669.4	2669.4	2678.8	2669.4	2678.8	2664.6	2683.6	2641.0	2669.4	2664.6	2669.4
32.5°	2574.7	2579.5	2579.5	2588.9	2574.7	2579.5	2579.5	2565.3	2574.7	2579.5	2570.0
35°	2494.3	2470.6	2470.6	2470.6	2470.6	2470.6	2480.1	2465.9	2480.1	2470.6	2470.6
37.5°	2380.7	2357.0	2357.0	2352.3	2375.9	2361.7	2385.4	2366.5	2366.5	2375.9	2375.9
40°	2243.4	2252.9	2238.7	2257.6	2252.9	2233.9	2276.5	2248.1	2267.1	2243.4	2262.3
42.5°	2120.4	2125.1	2120.4	2115.6	2134.6	2129.8	2148.8	2129.8	2125.1	2125.1	2158.2
45°	1987.8	1987.8	1987.8	2002.0	1987.8	1992.6	2011.5	2002.0	2011.5	2006.8	2039.9
47.5°	1879.0	1855.3	1850.6	1879.0	1874.2	1879.0	1879.0	1883.7	1888.4	1879.0	1893.2
50°	1722.8	1713.3	1713.3	1718.1	1722.8	1732.3	1746.5	1755.9	1746.5	1760.7	1765.4
52.5°	1571.3	1561.9	1566.6	1585.5	1595.0	1590.3	1613.9	1618.7	1613.9	1623.4	1623.4
55°	1396.2	1386.8	1401.0	1424.6	1438.8	1453.0	1476.7	1457.7	1476.7	1481.4	1486.1
57.5°	1216.4	1211.6	1216.4	1240.0	1254.2	1287.4	1325.2	1325.2	1344.2	1330.0	1344.2
60°	1017.6	1017.6	1036.5	1050.7	1088.6	1112.2	1150.1	1169.0	1188.0	1206.9	1197.4
62.5°	828.3	833.0	847.2	880.3	904.0	937.1	979.7	998.7	1031.8	1050.7	1041.2
65°	657.9	657.9	667.3	695.7	719.4	762.0	799.9	842.5	861.4	870.9	875.6
67.5°	492.2	487.5	506.4	525.4	549.0	591.6	634.2	657.9	691.0	700.5	695.7
70°	331.3	336.0	345.5	364.4	392.8	426.0	473.3	492.2	511.2	520.6	511.2
72.5°	208.2	208.2	213.0	231.9	250.8	274.5	307.6	326.6	350.2	355.0	345.5
75°	94.7	94.7	104.1	113.6	127.8	146.7	170.4	184.6	198.8	213.0	213.0
77.5°	18.9	23.7	28.4	28.4	37.9	52.1	66.3	80.5	94.7	94.7	94.7
80°	4.7	4.7	4.7	4.7	4.7	4.7	9.5	14.2	23.7	23.7	23.7
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°	3208.9	3208.9	3208.9	3208.9	3208.9	3208.9	3208.9	3208.9
2.5°	3208.9	3237.3	3208.9	3194.7	3213.7	3208.9	3194.7	3199.5
5°	3194.7	3204.2	3213.7	3175.8	3199.5	3204.2	3194.7	3185.3
7.5°	3180.5	3185.3	3180.5	3171.1	3171.1	3171.1	3180.5	3180.5
10°	3175.8	3161.6	3137.9	3123.7	3137.9	3137.9	3133.2	3171.1
12.5°	3114.3	3133.2	3119.0	3090.6	3119.0	3114.3	3114.3	3123.7
15°	3066.9	3066.9	3076.4	3038.5	3057.5	3052.7	3052.7	3062.2
17.5°	3019.6	3019.6	3014.9	3005.4	3000.7	3014.9	3000.7	3024.3
20°	2953.4	2962.8	2991.2	2943.9	2958.1	2943.9	2943.9	2915.5
22.5°	2872.9	2920.2	2896.6	2891.8	2887.1	2891.8	2901.3	2868.2
25°	2820.8	2820.8	2830.3	2801.9	2801.9	2811.4	2806.6	2797.2
27.5°	2749.8	2745.1	2740.4	2730.9	2754.6	2735.6	2735.6	2735.6
30°	2650.4	2664.6	2659.9	2636.2	2664.6	2655.2	2641.0	2612.6
32.5°	2565.3	2584.2	2555.8	2551.1	2546.3	2551.1	2555.8	2532.1
35°	2461.1	2465.9	2465.9	2446.9	2451.7	2446.9	2437.5	2442.2
37.5°	2366.5	2361.7	2338.1	2328.6	2333.3	2333.3	2338.1	2328.6
40°	2233.9	2248.1	2248.1	2215.0	2224.5	2215.0	2215.0	2210.3
42.5°	2125.1	2129.8	2115.6	2101.4	2101.4	2096.7	2087.2	2096.7
45°	2011.5	2006.8	1992.6	1978.4	1978.4	1973.6	1964.2	1983.1
47.5°	1883.7	1874.2	1869.5	1850.6	1850.6	1822.2	1826.9	1845.8
50°	1755.9	1746.5	1727.5	1718.1	1703.9	1689.7	1684.9	1684.9
52.5°	1604.5	1604.5	1585.5	1566.6	1561.9	1552.4	1542.9	1547.7
55°	1471.9	1471.9	1457.7	1424.6	1405.7	1382.0	1367.8	1363.1
57.5°	1320.5	1311.0	1282.6	1244.8	1225.8	1206.9	1192.7	1192.7
60°	1169.0	1145.4	1117.0	1083.8	1050.7	1017.6	1008.1	1003.4
62.5°	1003.4	979.7	927.7	889.8	866.1	847.2	828.3	842.5
65°	837.7	804.6	757.3	719.4	695.7	667.3	653.1	653.1
67.5°	662.6	629.5	582.2	544.3	520.6	501.7	482.8	482.8
70°	487.5	463.8	421.2	388.1	369.2	340.8	336.0	336.0
72.5°	331.3	302.9	269.8	246.1	227.2	208.2	198.8	194.1
75°	184.6	165.7	142.0	127.8	108.9	99.4	89.9	89.9
77.5°	75.7	61.5	47.3	37.9	28.4	23.7	18.9	23.7
80°	14.2	9.5	4.7	4.7	4.7	4.7	4.7	4.7
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)