

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: P209495

Luminaire Tested: **LDSQ6B70D010 EU6B60708027 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209495
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 EU6B60708027 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 2700 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7411.1 lumens
Efficiency: N/A
Efficacy: 93.3 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

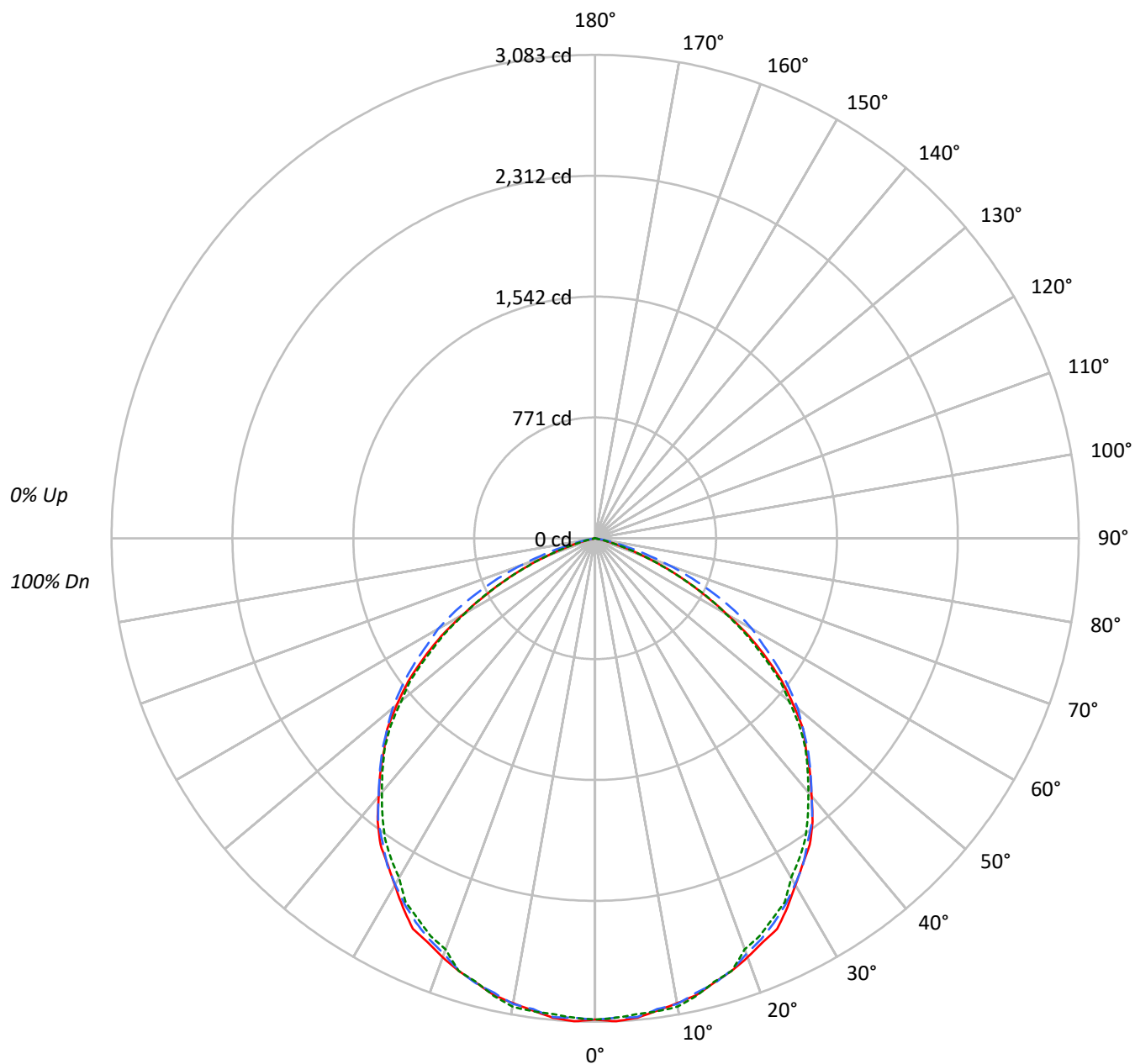
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10		70	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
1	111	107	103	100		108	104	101	98		100	97	95		96	94	92		93	91	89
2	102	94	88	83		99	93	87	82		89	84	80		86	82	79		83	80	77
3	93	84	76	70		91	82	75	70		79	73	69		77	72	67		74	70	66
4	86	75	67	60		84	73	66	60		71	64	59		69	63	58		67	62	58
5	79	67	59	52		77	66	58	52		64	57	52		62	56	51		60	55	51
6	73	61	52	46		71	60	52	46		58	51	45		56	50	45		55	49	45
7	68	55	47	41		66	54	46	41		53	46	40		51	45	40		50	44	40
8	63	50	42	37		62	50	42	36		48	41	36		47	41	36		46	40	36
9	59	46	38	33		58	46	38	33		45	38	33		43	37	33		42	37	32
10	55	43	35	30		54	42	35	30		41	34	30		40	34	30		39	34	30

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°	290.3	3.9
10°-20°	827.9	11.2
20°-30°	1245.7	16.8
30°-40°	1473.7	19.9
40°-50°	1470.6	19.8
50°-60°	1219.5	16.5
60°-70°	712.5	9.6
70°-80°	169.7	2.3
80°-90°	1.2	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°	2363.9	31.9
0°-40°	3837.5	51.8
0°-60°	6527.7	88.1
0°-90°	7411.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7411.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3070	3070	3070	3070	3070	
5°	3070	3054	3065	3056	3047	291
15°	2934	2932	2938	2925	2929	829
25°	2748	2716	2703	2694	2676	1256
35°	2386	2363	2363	2350	2336	1483
45°	1902	1904	1920	1899	1897	1471
55°	1336	1383	1417	1379	1304	1186
65°	629	709	833	706	625	626
75°	90	131	204	129	86	123
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°	3069.6	3069.6	3069.6	3069.6	3069.6	3069.6	3069.6	3069.6	3069.6	3069.6	3069.6
2.5°	3083.2	3065.1	3078.7	3051.5	3069.6	3051.5	3056.0	3047.0	3065.1	3060.6	3056.0
5°	3069.6	3074.1	3065.1	3074.1	3060.6	3047.0	3060.6	3051.5	3024.3	3065.1	3056.0
7.5°	3037.9	3042.5	3033.4	3047.0	3037.9	3019.8	3056.0	3028.9	3024.3	3028.9	3047.0
10°	3010.8	3019.8	3015.3	3010.8	3015.3	3015.3	3006.2	2992.7	3006.2	3015.3	3010.8
12.5°	2983.6	2997.2	2988.1	2979.1	2970.0	2974.5	2983.6	2961.0	2961.0	2970.0	2997.2
15°	2933.8	2942.9	2947.4	2929.3	2929.3	2933.8	2951.9	2915.7	2933.8	2938.3	2942.9
17.5°	2893.0	2897.6	2897.6	2884.0	2893.0	2879.5	2893.0	2874.9	2893.0	2888.5	2897.6
20°	2843.2	2852.3	2843.2	2843.2	2834.2	2838.7	2838.7	2838.7	2825.1	2820.6	2829.7
22.5°	2788.9	2788.9	2779.9	2788.9	2779.9	2775.3	2798.0	2761.8	2798.0	2766.3	2793.4
25°	2748.2	2725.5	2711.9	2707.4	2725.5	2707.4	2716.5	2702.9	2711.9	2702.9	2707.4
27.5°	2653.1	2639.5	2635.0	2639.5	2639.5	2635.0	2653.1	2603.3	2635.0	2630.5	2630.5
30°	2553.5	2553.5	2562.5	2553.5	2562.5	2549.0	2567.1	2526.3	2553.5	2549.0	2553.5
32.5°	2462.9	2467.5	2467.5	2476.5	2462.9	2467.5	2467.5	2453.9	2462.9	2467.5	2458.4
35°	2386.0	2363.3	2363.3	2363.3	2363.3	2363.3	2372.4	2358.8	2372.4	2363.3	2363.3
37.5°	2277.3	2254.7	2254.7	2250.1	2272.8	2259.2	2281.8	2263.7	2263.7	2272.8	2272.8
40°	2146.0	2155.1	2141.5	2159.6	2155.1	2137.0	2177.7	2150.5	2168.7	2146.0	2164.1
42.5°	2028.3	2032.8	2028.3	2023.8	2041.9	2037.4	2055.5	2037.4	2032.8	2032.8	2064.5
45°	1901.5	1901.5	1901.5	1915.1	1901.5	1906.1	1924.2	1915.1	1924.2	1919.6	1951.3
47.5°	1797.4	1774.8	1770.2	1797.4	1792.9	1797.4	1797.4	1801.9	1806.5	1797.4	1811.0
50°	1648.0	1638.9	1638.9	1643.5	1648.0	1657.1	1670.6	1679.7	1670.6	1684.2	1688.7
52.5°	1503.1	1494.1	1498.6	1516.7	1525.8	1521.2	1543.9	1548.4	1543.9	1552.9	1552.9
55°	1335.6	1326.5	1340.1	1362.8	1376.3	1389.9	1412.6	1394.5	1412.6	1417.1	1421.6
57.5°	1163.6	1159.0	1163.6	1186.2	1199.8	1231.5	1267.7	1267.7	1285.8	1272.2	1285.8
60°	973.4	973.4	991.5	1005.1	1041.3	1064.0	1100.2	1118.3	1136.4	1154.5	1145.4
62.5°	792.3	796.8	810.4	842.1	864.7	896.4	937.2	955.3	987.0	1005.1	996.0
65°	629.3	629.3	638.4	665.5	688.2	728.9	765.1	805.9	824.0	833.1	837.6
67.5°	470.9	466.3	484.4	502.5	525.2	565.9	606.7	629.3	661.0	670.1	665.5
70°	316.9	321.4	330.5	348.6	375.8	407.5	452.7	470.9	489.0	498.0	489.0
72.5°	199.2	199.2	203.7	221.8	240.0	262.6	294.3	312.4	335.0	339.6	330.5
75°	90.5	90.5	99.6	108.7	122.2	140.4	163.0	176.6	190.2	203.7	203.7
77.5°	18.1	22.6	27.2	27.2	36.2	49.8	63.4	77.0	90.5	90.5	90.5
80°	4.5	4.5	4.5	4.5	4.5	4.5	9.1	13.6	22.6	22.6	22.6
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°	3069.6	3069.6	3069.6	3069.6	3069.6	3069.6	3069.6	3069.6
2.5°	3069.6	3096.8	3069.6	3056.0	3074.1	3069.6	3056.0	3060.6
5°	3056.0	3065.1	3074.1	3037.9	3060.6	3065.1	3056.0	3047.0
7.5°	3042.5	3047.0	3042.5	3033.4	3033.4	3033.4	3042.5	3042.5
10°	3037.9	3024.3	3001.7	2988.1	3001.7	3001.7	2997.2	3033.4
12.5°	2979.1	2997.2	2983.6	2956.4	2983.6	2979.1	2979.1	2988.1
15°	2933.8	2933.8	2942.9	2906.6	2924.7	2920.2	2920.2	2929.3
17.5°	2888.5	2888.5	2884.0	2874.9	2870.4	2884.0	2870.4	2893.0
20°	2825.1	2834.2	2861.4	2816.1	2829.7	2816.1	2816.1	2788.9
22.5°	2748.2	2793.4	2770.8	2766.3	2761.8	2766.3	2775.3	2743.6
25°	2698.4	2698.4	2707.4	2680.3	2680.3	2689.3	2684.8	2675.7
27.5°	2630.5	2625.9	2621.4	2612.3	2635.0	2616.9	2616.9	2616.9
30°	2535.4	2549.0	2544.4	2521.8	2549.0	2539.9	2526.3	2499.2
32.5°	2453.9	2472.0	2444.8	2440.3	2435.8	2440.3	2444.8	2422.2
35°	2354.3	2358.8	2358.8	2340.7	2345.2	2340.7	2331.6	2336.2
37.5°	2263.7	2259.2	2236.6	2227.5	2232.0	2232.0	2236.6	2227.5
40°	2137.0	2150.5	2150.5	2118.9	2127.9	2118.9	2118.9	2114.3
42.5°	2032.8	2037.4	2023.8	2010.2	2010.2	2005.7	1996.6	2005.7
45°	1924.2	1919.6	1906.1	1892.5	1892.5	1888.0	1878.9	1897.0
47.5°	1801.9	1792.9	1788.3	1770.2	1770.2	1743.1	1747.6	1765.7
50°	1679.7	1670.6	1652.5	1643.5	1629.9	1616.3	1611.8	1611.8
52.5°	1534.8	1534.8	1516.7	1498.6	1494.1	1485.0	1476.0	1480.5
55°	1408.0	1408.0	1394.5	1362.8	1344.7	1322.0	1308.4	1303.9
57.5°	1263.2	1254.1	1226.9	1190.7	1172.6	1154.5	1140.9	1140.9
60°	1118.3	1095.6	1068.5	1036.8	1005.1	973.4	964.3	959.8
62.5°	959.8	937.2	887.4	851.2	828.5	810.4	792.3	805.9
65°	801.4	769.7	724.4	688.2	665.5	638.4	624.8	624.8
67.5°	633.8	602.2	556.9	520.7	498.0	479.9	461.8	461.8
70°	466.3	443.7	402.9	371.3	353.1	326.0	321.4	321.4
72.5°	316.9	289.8	258.1	235.4	217.3	199.2	190.2	185.6
75°	176.6	158.5	135.8	122.2	104.1	95.1	86.0	86.0
77.5°	72.4	58.9	45.3	36.2	27.2	22.6	18.1	22.6
80°	13.6	9.1	4.5	4.5	4.5	4.5	4.5	4.5
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)