

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: P209499

Luminaire Tested: **LDSQ6B70D010 EU6B60708050 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209499
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 EU6B60708050 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 5000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8020.6 lumens
Efficiency: N/A
Efficacy: 101.0 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

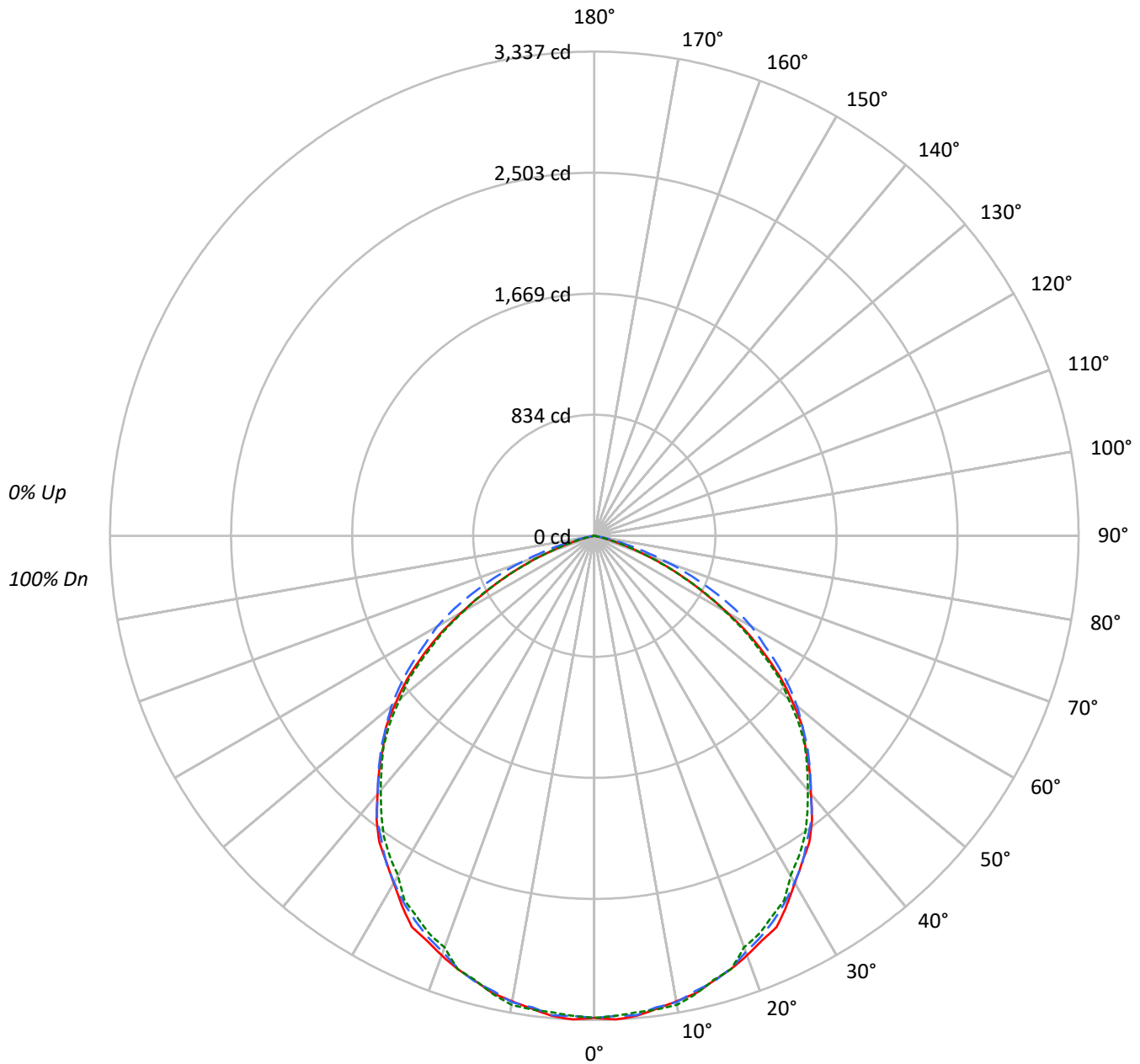
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	314.2	3.9
10°-20°	895.9	11.2
20°-30°	1348.2	16.8
30°-40°	1594.9	19.9
40°-50°	1591.6	19.8
50°-60°	1319.8	16.5
60°-70°	771.1	9.6
70°-80°	183.6	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°	2558.3	31.9
0°-40°	4153.2	51.8
0°-60°	7064.5	88.1
0°-90°	8020.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8020.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3322	3322	3322	3322	3322	
5°	3322	3305	3317	3307	3298	315
15°	3175	3173	3180	3165	3170	898
25°	2974	2940	2925	2915	2896	1359
35°	2582	2558	2558	2543	2528	1605
45°	2058	2060	2078	2055	2053	1592
55°	1445	1497	1534	1492	1411	1283
65°	681	767	902	764	676	677
75°	98	142	220	140	93	133
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°	3322.1	3322.1	3322.1	3322.1	3322.1	3322.1	3322.1	3322.1	3322.1	3322.1	3322.1
2.5°	3336.8	3317.2	3331.9	3302.5	3322.1	3302.5	3307.4	3297.6	3317.2	3312.3	3307.4
5°	3322.1	3327.0	3317.2	3327.0	3312.3	3297.6	3312.3	3302.5	3273.1	3317.2	3307.4
7.5°	3287.8	3292.7	3282.9	3297.6	3287.8	3268.2	3307.4	3278.0	3273.1	3278.0	3297.6
10°	3258.4	3268.2	3263.3	3258.4	3263.3	3263.3	3253.5	3238.8	3253.5	3263.3	3258.4
12.5°	3229.0	3243.7	3233.9	3224.1	3214.3	3219.2	3229.0	3204.5	3204.5	3214.3	3243.7
15°	3175.1	3184.9	3189.8	3170.2	3170.2	3175.1	3194.7	3155.5	3175.1	3180.0	3184.9
17.5°	3131.0	3135.9	3135.9	3121.2	3131.0	3116.3	3131.0	3111.4	3131.0	3126.1	3135.9
20°	3077.1	3086.9	3077.1	3077.1	3067.3	3072.2	3072.2	3072.2	3057.5	3052.6	3062.4
22.5°	3018.3	3018.3	3008.5	3018.3	3008.5	3003.6	3028.1	2988.9	3028.1	2993.8	3023.2
25°	2974.2	2949.7	2935.0	2930.1	2949.7	2930.1	2939.9	2925.2	2935.0	2925.2	2930.1
27.5°	2871.3	2856.6	2851.7	2856.6	2856.6	2851.7	2871.3	2817.4	2851.7	2846.8	2846.8
30°	2763.5	2763.5	2773.3	2763.5	2773.3	2758.6	2778.2	2734.1	2763.5	2758.6	2763.5
32.5°	2665.5	2670.4	2670.4	2680.2	2665.5	2670.4	2670.4	2655.7	2665.5	2670.4	2660.6
35°	2582.2	2557.7	2557.7	2557.7	2557.7	2557.7	2567.5	2552.8	2567.5	2557.7	2557.7
37.5°	2464.6	2440.1	2440.1	2435.2	2459.7	2445.0	2469.5	2449.9	2449.9	2459.7	2459.7
40°	2322.5	2332.3	2317.6	2337.2	2332.3	2312.7	2356.8	2327.4	2347.0	2322.5	2342.1
42.5°	2195.1	2200.0	2195.1	2190.2	2209.8	2204.9	2224.5	2204.9	2200.0	2200.0	2234.3
45°	2057.9	2057.9	2057.9	2072.6	2057.9	2062.8	2082.4	2072.6	2082.4	2077.5	2111.8
47.5°	1945.2	1920.7	1915.8	1945.2	1940.3	1945.2	1945.2	1950.1	1955.0	1945.2	1959.9
50°	1783.5	1773.7	1773.7	1778.6	1783.5	1793.3	1808.0	1817.8	1808.0	1822.7	1827.6
52.5°	1626.7	1616.9	1621.8	1641.4	1651.2	1646.3	1670.8	1675.7	1670.8	1680.6	1680.6
55°	1445.4	1435.6	1450.3	1474.8	1489.5	1504.2	1528.7	1509.1	1528.7	1533.6	1538.5
57.5°	1259.3	1254.4	1259.3	1283.7	1298.4	1332.7	1371.9	1371.9	1391.5	1376.8	1391.5
60°	1053.5	1053.5	1073.1	1087.8	1127.0	1151.5	1190.7	1210.3	1229.9	1249.5	1239.7
62.5°	857.5	862.4	877.1	911.4	935.9	970.2	1014.3	1033.9	1068.2	1087.8	1078.0
65°	681.1	681.1	690.9	720.3	744.8	788.9	828.1	872.2	891.8	901.6	906.5
67.5°	509.6	504.7	524.3	543.9	568.4	612.5	656.6	681.1	715.4	725.2	720.3
70°	343.0	347.9	357.7	377.3	406.7	441.0	490.0	509.6	529.2	539.0	529.2
72.5°	215.6	215.6	220.5	240.1	259.7	284.2	318.5	338.1	362.6	367.5	357.7
75°	98.0	98.0	107.8	117.6	132.3	151.9	176.4	191.1	205.8	220.5	220.5
77.5°	19.6	24.5	29.4	29.4	39.2	53.9	68.6	83.3	98.0	98.0	98.0
80°	4.9	4.9	4.9	4.9	4.9	4.9	9.8	14.7	24.5	24.5	24.5
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°	3322.1	3322.1	3322.1	3322.1	3322.1	3322.1	3322.1	3322.1
2.5°	3322.1	3351.5	3322.1	3307.4	3327.0	3322.1	3307.4	3312.3
5°	3307.4	3317.2	3327.0	3287.8	3312.3	3317.2	3307.4	3297.6
7.5°	3292.7	3297.6	3292.7	3282.9	3282.9	3282.9	3292.7	3292.7
10°	3287.8	3273.1	3248.6	3233.9	3248.6	3248.6	3243.7	3282.9
12.5°	3224.1	3243.7	3229.0	3199.6	3229.0	3224.1	3224.1	3233.9
15°	3175.1	3175.1	3184.9	3145.7	3165.3	3160.4	3160.4	3170.2
17.5°	3126.1	3126.1	3121.2	3111.4	3106.5	3121.2	3106.5	3131.0
20°	3057.5	3067.3	3096.7	3047.7	3062.4	3047.7	3047.7	3018.3
22.5°	2974.2	3023.2	2998.7	2993.8	2988.9	2993.8	3003.6	2969.3
25°	2920.3	2920.3	2930.1	2900.7	2900.7	2910.5	2905.6	2895.8
27.5°	2846.8	2841.9	2837.0	2827.2	2851.7	2832.1	2832.1	2832.1
30°	2743.9	2758.6	2753.7	2729.2	2758.6	2748.8	2734.1	2704.7
32.5°	2655.7	2675.3	2645.9	2641.0	2636.1	2641.0	2645.9	2621.4
35°	2547.9	2552.8	2552.8	2533.2	2538.1	2533.2	2523.4	2528.3
37.5°	2449.9	2445.0	2420.5	2410.7	2415.6	2415.6	2420.5	2410.7
40°	2312.7	2327.4	2327.4	2293.1	2302.9	2293.1	2293.1	2288.2
42.5°	2200.0	2204.9	2190.2	2175.5	2175.5	2170.6	2160.8	2170.6
45°	2082.4	2077.5	2062.8	2048.1	2048.1	2043.2	2033.4	2053.0
47.5°	1950.1	1940.3	1935.4	1915.8	1915.8	1886.4	1891.3	1910.9
50°	1817.8	1808.0	1788.4	1778.6	1763.9	1749.2	1744.3	1744.3
52.5°	1661.0	1661.0	1641.4	1621.8	1616.9	1607.1	1597.3	1602.2
55°	1523.8	1523.8	1509.1	1474.8	1455.2	1430.7	1416.0	1411.1
57.5°	1367.0	1357.2	1327.8	1288.6	1269.1	1249.5	1234.8	1234.8
60°	1210.3	1185.8	1156.4	1122.1	1087.8	1053.5	1043.7	1038.8
62.5°	1038.8	1014.3	960.4	921.2	896.7	877.1	857.5	872.2
65°	867.3	833.0	784.0	744.8	720.3	690.9	676.2	676.2
67.5°	686.0	651.7	602.7	563.5	539.0	519.4	499.8	499.8
70°	504.7	480.2	436.1	401.8	382.2	352.8	347.9	347.9
72.5°	343.0	313.6	279.3	254.8	235.2	215.6	205.8	200.9
75°	191.1	171.5	147.0	132.3	112.7	102.9	93.1	93.1
77.5°	78.4	63.7	49.0	39.2	29.4	24.5	19.6	24.5
80°	14.7	9.8	4.9	4.9	4.9	4.9	4.9	4.9
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)