

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: P209443

Luminaire Tested: **LDSQ6B20D010 EU6B10209730 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209443
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: LDSQ6B20D010 EU6B10209730 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-21.86 W DE010-20.46 W D5LT-21.24 W DMX-20.89 W DL2-22.5 W DL3-21.8 6 W DLE-22.46 W
Light Source: HIGH LUMEN LED 3000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1655.4 lumens
Efficiency: N/A
Efficacy: 79.6 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

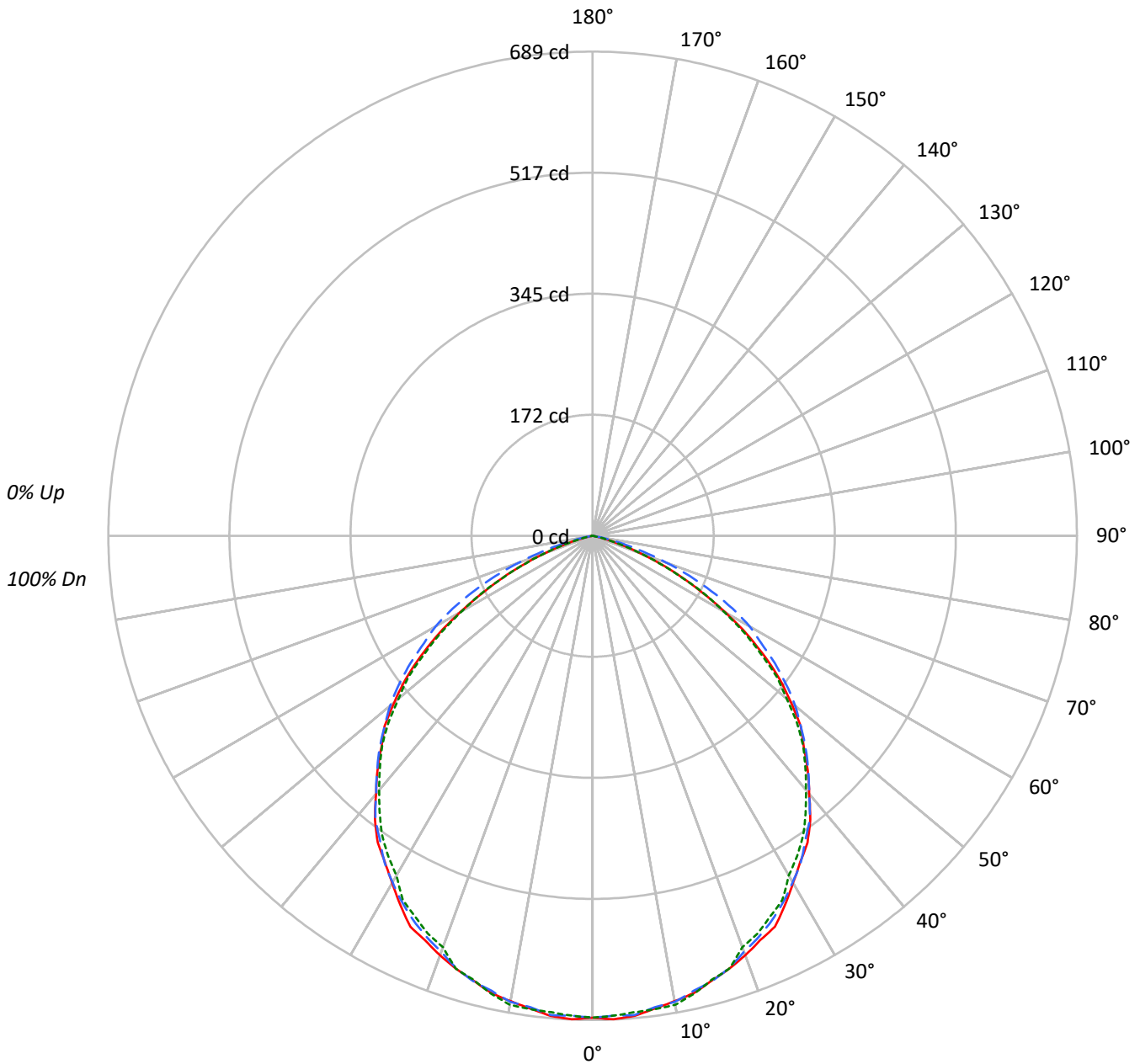
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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°	64.8	3.9
10°-20°	184.9	11.2
20°-30°	278.3	16.8
30°-40°	329.2	19.9
40°-50°	328.5	19.8
50°-60°	272.4	16.5
60°-70°	159.2	9.6
70°-80°	37.9	2.3
80°-90°	0.3	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°	528.0	31.9
0°-40°	857.2	51.8
0°-60°	1458.1	88.1
0°-90°	1655.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1655.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	686	686	686	686	686	
5°	686	682	685	683	681	65
15°	655	655	656	653	654	185
25°	614	607	604	602	598	281
35°	533	528	528	525	522	331
45°	425	425	429	424	424	329
55°	298	309	316	308	291	265
65°	141	158	186	158	140	140
75°	20	29	46	29	19	27
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°	685.7	685.7	685.7	685.7	685.7	685.7	685.7	685.7	685.7	685.7	685.7
2.5°	688.7	684.6	687.7	681.6	685.7	681.6	682.6	680.6	684.6	683.6	682.6
5°	685.7	686.7	684.6	686.7	683.6	680.6	683.6	681.6	675.5	684.6	682.6
7.5°	678.6	679.6	677.6	680.6	678.6	674.5	682.6	676.6	675.5	676.6	680.6
10°	672.5	674.5	673.5	672.5	673.5	673.5	671.5	668.5	671.5	673.5	672.5
12.5°	666.4	669.5	667.4	665.4	663.4	664.4	666.4	661.4	661.4	663.4	669.5
15°	655.3	657.3	658.3	654.3	654.3	655.3	659.4	651.3	655.3	656.3	657.3
17.5°	646.2	647.2	647.2	644.2	646.2	643.2	646.2	642.2	646.2	645.2	647.2
20°	635.1	637.1	635.1	635.1	633.1	634.1	634.1	634.1	631.0	630.0	632.1
22.5°	623.0	623.0	620.9	623.0	620.9	619.9	625.0	616.9	625.0	617.9	624.0
25°	613.9	608.8	605.8	604.7	608.8	604.7	606.8	603.7	605.8	603.7	604.7
27.5°	592.6	589.6	588.6	589.6	589.6	588.6	592.6	581.5	588.6	587.6	587.6
30°	570.4	570.4	572.4	570.4	572.4	569.4	573.4	564.3	570.4	569.4	570.4
32.5°	550.1	551.2	551.2	553.2	550.1	551.2	551.2	548.1	550.1	551.2	549.1
35°	532.9	527.9	527.9	527.9	527.9	527.9	529.9	526.9	529.9	527.9	527.9
37.5°	508.7	503.6	503.6	502.6	507.7	504.6	509.7	505.6	505.6	507.7	507.7
40°	479.3	481.4	478.3	482.4	481.4	477.3	486.4	480.4	484.4	479.3	483.4
42.5°	453.1	454.1	453.1	452.0	456.1	455.1	459.1	455.1	454.1	454.1	461.1
45°	424.7	424.7	424.7	427.8	424.7	425.8	429.8	427.8	429.8	428.8	435.9
47.5°	401.5	396.4	395.4	401.5	400.5	401.5	401.5	402.5	403.5	401.5	404.5
50°	368.1	366.1	366.1	367.1	368.1	370.1	373.2	375.2	373.2	376.2	377.2
52.5°	335.7	333.7	334.7	338.8	340.8	339.8	344.8	345.9	344.8	346.9	346.9
55°	298.3	296.3	299.3	304.4	307.4	310.5	315.5	311.5	315.5	316.5	317.5
57.5°	259.9	258.9	259.9	265.0	268.0	275.1	283.2	283.2	287.2	284.2	287.2
60°	217.4	217.4	221.5	224.5	232.6	237.7	245.7	249.8	253.8	257.9	255.9
62.5°	177.0	178.0	181.0	188.1	193.2	200.2	209.3	213.4	220.5	224.5	222.5
65°	140.6	140.6	142.6	148.7	153.7	162.8	170.9	180.0	184.1	186.1	187.1
67.5°	105.2	104.2	108.2	112.3	117.3	126.4	135.5	140.6	147.6	149.7	148.7
70°	70.8	71.8	73.8	77.9	83.9	91.0	101.1	105.2	109.2	111.2	109.2
72.5°	44.5	44.5	45.5	49.6	53.6	58.7	65.7	69.8	74.8	75.8	73.8
75°	20.2	20.2	22.2	24.3	27.3	31.3	36.4	39.4	42.5	45.5	45.5
77.5°	4.0	5.1	6.1	6.1	8.1	11.1	14.2	17.2	20.2	20.2	20.2
80°	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	5.1	5.1	5.1
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°	685.7	685.7	685.7	685.7	685.7	685.7	685.7	685.7
2.5°	685.7	691.7	685.7	682.6	686.7	685.7	682.6	683.6
5°	682.6	684.6	686.7	678.6	683.6	684.6	682.6	680.6
7.5°	679.6	680.6	679.6	677.6	677.6	677.6	679.6	679.6
10°	678.6	675.5	670.5	667.4	670.5	670.5	669.5	677.6
12.5°	665.4	669.5	666.4	660.4	666.4	665.4	665.4	667.4
15°	655.3	655.3	657.3	649.2	653.3	652.3	652.3	654.3
17.5°	645.2	645.2	644.2	642.2	641.2	644.2	641.2	646.2
20°	631.0	633.1	639.1	629.0	632.1	629.0	629.0	623.0
22.5°	613.9	624.0	618.9	617.9	616.9	617.9	619.9	612.8
25°	602.7	602.7	604.7	598.7	598.7	600.7	599.7	597.7
27.5°	587.6	586.5	585.5	583.5	588.6	584.5	584.5	584.5
30°	566.3	569.4	568.3	563.3	569.4	567.3	564.3	558.2
32.5°	548.1	552.2	546.1	545.1	544.1	545.1	546.1	541.0
35°	525.9	526.9	526.9	522.8	523.8	522.8	520.8	521.8
37.5°	505.6	504.6	499.6	497.6	498.6	498.6	499.6	497.6
40°	477.3	480.4	480.4	473.3	475.3	473.3	473.3	472.3
42.5°	454.1	455.1	452.0	449.0	449.0	448.0	446.0	448.0
45°	429.8	428.8	425.8	422.7	422.7	421.7	419.7	423.7
47.5°	402.5	400.5	399.5	395.4	395.4	389.3	390.4	394.4
50°	375.2	373.2	369.1	367.1	364.1	361.0	360.0	360.0
52.5°	342.8	342.8	338.8	334.7	333.7	331.7	329.7	330.7
55°	314.5	314.5	311.5	304.4	300.4	295.3	292.3	291.3
57.5°	282.1	280.1	274.1	266.0	261.9	257.9	254.8	254.8
60°	249.8	244.7	238.7	231.6	224.5	217.4	215.4	214.4
62.5°	214.4	209.3	198.2	190.1	185.1	181.0	177.0	180.0
65°	179.0	171.9	161.8	153.7	148.7	142.6	139.6	139.6
67.5°	141.6	134.5	124.4	116.3	111.2	107.2	103.2	103.2
70°	104.2	99.1	90.0	82.9	78.9	72.8	71.8	71.8
72.5°	70.8	64.7	57.6	52.6	48.5	44.5	42.5	41.5
75°	39.4	35.4	30.3	27.3	23.3	21.2	19.2	19.2
77.5°	16.2	13.1	10.1	8.1	6.1	5.1	4.0	5.1
80°	3.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0
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



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









(END OF REPORT)