

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: P209420

Luminaire Tested: **LDSQ6B15D010 EU6B10208030 6LBCSSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P209420  
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: LDSQ6B15D010 EU6B10208030 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-14.39 W DE010-14.29 W D5LT-14.34 W DMX-14.46 W DL2-15.8 W DL3-15.28 W DLE-15.432 W  
Light Source: HIGH LUMEN LED 3000 K  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1596.9 lumens  
Efficiency: N/A  
Efficacy: 111.0 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

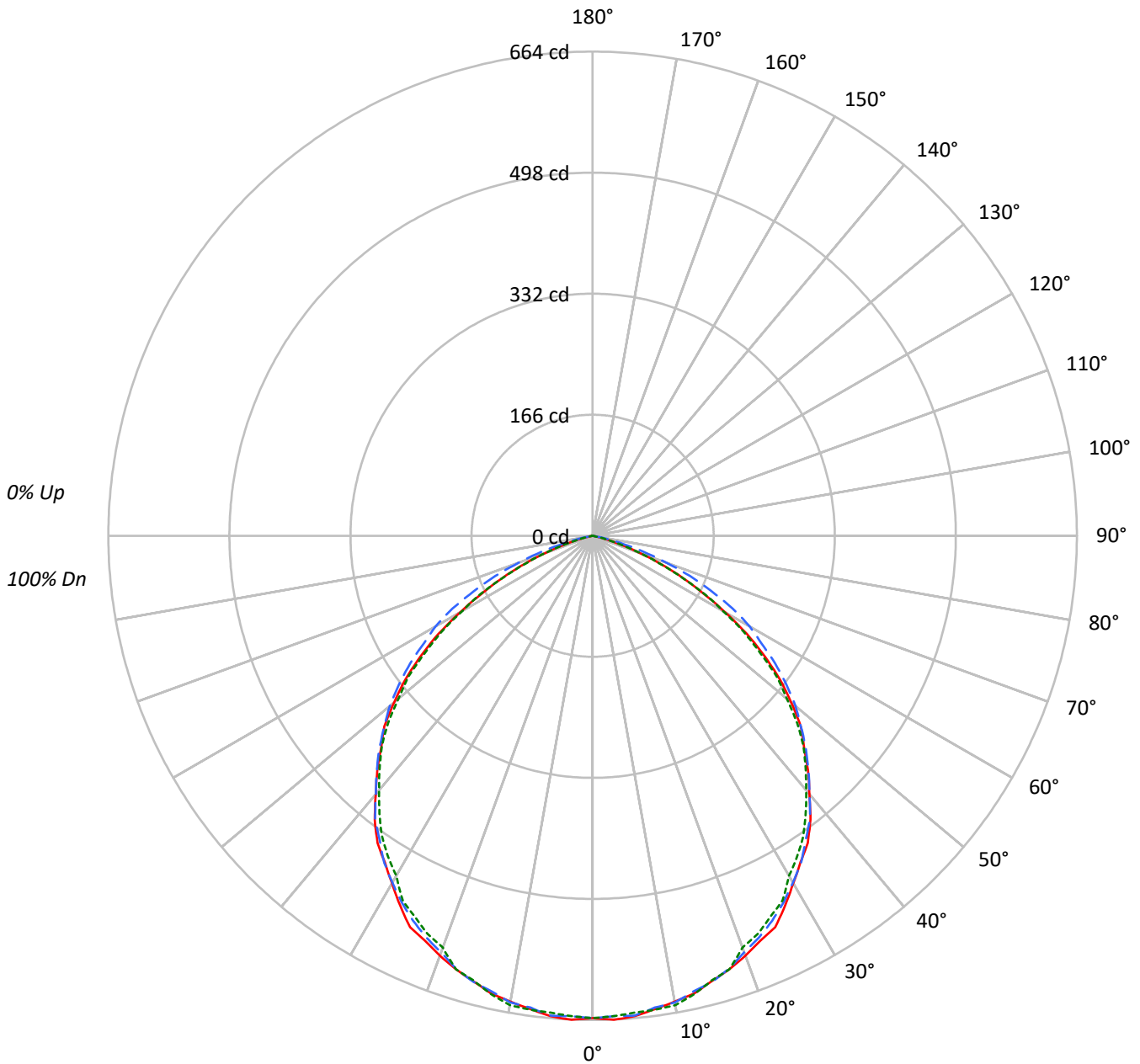
Input Watts (W): 14.39  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P209420

CATALOG NUMBER: LDSQ6B15D010 EU6B10208030 6LBCSSQ1MMS

### Luminous Intensity Polar Plot





TEST NUMBER: P209420

CATALOG NUMBER: LDSQ6B15D010 EU6B10208030 6LBCSSQ1MMS

**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°			



TEST NUMBER: P209420

CATALOG NUMBER: LDSQ6B15D010 EU6B10208030 6LBCSSQ1MMS

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.6	3.9
10°-20°	178.4	11.2
20°-30°	268.4	16.8
30°-40°	317.5	19.9
40°-50°	316.9	19.8
50°-60°	262.8	16.5
60°-70°	153.5	9.6
70°-80°	36.6	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°	509.4	31.9
0°-40°	826.9	51.8
0°-60°	1406.6	88.1
0°-90°	1596.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1596.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	661	661	661	661	661	
5°	661	658	660	658	657	63
15°	632	632	633	630	631	179
25°	592	585	582	580	577	271
35°	514	509	509	506	503	320
45°	410	410	414	409	409	317
55°	288	298	305	297	281	256
65°	136	153	180	152	135	135
75°	20	28	44	28	18	26
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P209420

CATALOG NUMBER: LDSQ6B15D010 EU6B10208030 6LBCSSQ1MMS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	661.4	661.4	661.4	661.4	661.4	661.4	661.4	661.4	661.4	661.4	661.4
2.5°	664.4	660.5	663.4	657.5	661.4	657.5	658.5	656.6	660.5	659.5	658.5
5°	661.4	662.4	660.5	662.4	659.5	656.6	659.5	657.5	651.7	660.5	658.5
7.5°	654.6	655.6	653.6	656.6	654.6	650.7	658.5	652.7	651.7	652.7	656.6
10°	648.8	650.7	649.7	648.8	649.7	649.7	647.8	644.8	647.8	649.7	648.8
12.5°	642.9	645.8	643.9	641.9	640.0	640.9	642.9	638.0	638.0	640.0	645.8
15°	632.2	634.1	635.1	631.2	631.2	632.2	636.1	628.3	632.2	633.1	634.1
17.5°	623.4	624.4	624.4	621.4	623.4	620.5	623.4	619.5	623.4	622.4	624.4
20°	612.7	614.6	612.7	612.7	610.7	611.7	611.7	611.7	608.8	607.8	609.7
22.5°	600.9	600.9	599.0	600.9	599.0	598.0	602.9	595.1	602.9	596.1	601.9
25°	592.2	587.3	584.4	583.4	587.3	583.4	585.3	582.4	584.4	582.4	583.4
27.5°	571.7	568.8	567.8	568.8	568.8	567.8	571.7	561.0	567.8	566.8	566.8
30°	550.2	550.2	552.2	550.2	552.2	549.2	553.1	544.4	550.2	549.2	550.2
32.5°	530.7	531.7	531.7	533.6	530.7	531.7	531.7	528.8	530.7	531.7	529.7
35°	514.1	509.2	509.2	509.2	509.2	509.2	511.2	508.3	511.2	509.2	509.2
37.5°	490.7	485.8	485.8	484.9	489.7	486.8	491.7	487.8	487.8	489.7	489.7
40°	462.4	464.4	461.4	465.3	464.4	460.5	469.2	463.4	467.3	462.4	466.3
42.5°	437.1	438.0	437.1	436.1	440.0	439.0	442.9	439.0	438.0	438.0	444.9
45°	409.7	409.7	409.7	412.7	409.7	410.7	414.6	412.7	414.6	413.6	420.5
47.5°	387.3	382.4	381.4	387.3	386.3	387.3	387.3	388.3	389.3	387.3	390.2
50°	355.1	353.2	353.2	354.1	355.1	357.1	360.0	361.9	360.0	362.9	363.9
52.5°	323.9	321.9	322.9	326.8	328.8	327.8	332.7	333.6	332.7	334.6	334.6
55°	287.8	285.8	288.8	293.6	296.6	299.5	304.4	300.5	304.4	305.4	306.3
57.5°	250.7	249.7	250.7	255.6	258.5	265.4	273.2	273.2	277.1	274.1	277.1
60°	209.7	209.7	213.6	216.6	224.4	229.3	237.1	241.0	244.9	248.8	246.8
62.5°	170.7	171.7	174.6	181.5	186.3	193.2	201.9	205.8	212.7	216.6	214.6
65°	135.6	135.6	137.6	143.4	148.3	157.1	164.9	173.7	177.6	179.5	180.5
67.5°	101.5	100.5	104.4	108.3	113.2	121.9	130.7	135.6	142.4	144.4	143.4
70°	68.3	69.3	71.2	75.1	81.0	87.8	97.6	101.5	105.4	107.3	105.4
72.5°	42.9	42.9	43.9	47.8	51.7	56.6	63.4	67.3	72.2	73.2	71.2
75°	19.5	19.5	21.5	23.4	26.3	30.2	35.1	38.0	41.0	43.9	43.9
77.5°	3.9	4.9	5.9	5.9	7.8	10.7	13.7	16.6	19.5	19.5	19.5
80°	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.9	4.9	4.9	4.9
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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



TEST NUMBER: P209420

CATALOG NUMBER: LDSQ6B15D010 EU6B10208030 6LBCSSQ1MMS

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	661.4	661.4	661.4	661.4	661.4	661.4	661.4	661.4
2.5°	661.4	667.3	661.4	658.5	662.4	661.4	658.5	659.5
5°	658.5	660.5	662.4	654.6	659.5	660.5	658.5	656.6
7.5°	655.6	656.6	655.6	653.6	653.6	653.6	655.6	655.6
10°	654.6	651.7	646.8	643.9	646.8	646.8	645.8	653.6
12.5°	641.9	645.8	642.9	637.0	642.9	641.9	641.9	643.9
15°	632.2	632.2	634.1	626.3	630.2	629.2	629.2	631.2
17.5°	622.4	622.4	621.4	619.5	618.5	621.4	618.5	623.4
20°	608.8	610.7	616.6	606.8	609.7	606.8	606.8	600.9
22.5°	592.2	601.9	597.0	596.1	595.1	596.1	598.0	591.2
25°	581.4	581.4	583.4	577.5	577.5	579.5	578.5	576.6
27.5°	566.8	565.8	564.9	562.9	567.8	563.9	563.9	563.9
30°	546.3	549.2	548.3	543.4	549.2	547.3	544.4	538.5
32.5°	528.8	532.7	526.8	525.8	524.9	525.8	526.8	521.9
35°	507.3	508.3	508.3	504.4	505.3	504.4	502.4	503.4
37.5°	487.8	486.8	481.9	480.0	481.0	481.0	481.9	480.0
40°	460.5	463.4	463.4	456.6	458.5	456.6	456.6	455.6
42.5°	438.0	439.0	436.1	433.2	433.2	432.2	430.2	432.2
45°	414.6	413.6	410.7	407.8	407.8	406.8	404.9	408.8
47.5°	388.3	386.3	385.3	381.4	381.4	375.6	376.6	380.5
50°	361.9	360.0	356.1	354.1	351.2	348.3	347.3	347.3
52.5°	330.7	330.7	326.8	322.9	321.9	320.0	318.0	319.0
55°	303.4	303.4	300.5	293.6	289.7	284.9	281.9	281.0
57.5°	272.2	270.2	264.4	256.6	252.7	248.8	245.8	245.8
60°	241.0	236.1	230.2	223.4	216.6	209.7	207.8	206.8
62.5°	206.8	201.9	191.2	183.4	178.5	174.6	170.7	173.7
65°	172.7	165.8	156.1	148.3	143.4	137.6	134.6	134.6
67.5°	136.6	129.8	120.0	112.2	107.3	103.4	99.5	99.5
70°	100.5	95.6	86.8	80.0	76.1	70.2	69.3	69.3
72.5°	68.3	62.4	55.6	50.7	46.8	42.9	41.0	40.0
75°	38.0	34.1	29.3	26.3	22.4	20.5	18.5	18.5
77.5°	15.6	12.7	9.8	7.8	5.9	4.9	3.9	4.9
80°	2.9	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



Report Generated By E9808895 / USPTCWHP6082093







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









(END OF REPORT)