

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: P209406

Luminaire Tested: **LDSQ6B10D010 EU6B10208027 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209406
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: LDSQ6B10D010 EU6B10208027 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-10.05 W DE010-10.58 W D5LT-10.2 W DMX-10.6 W DL2-11.8 W DL3-11.1 W DLE-11.39 W
Light Source: HIGH LUMEN LED 2700 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1104.4 lumens
Efficiency: N/A
Efficacy: 109.9 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

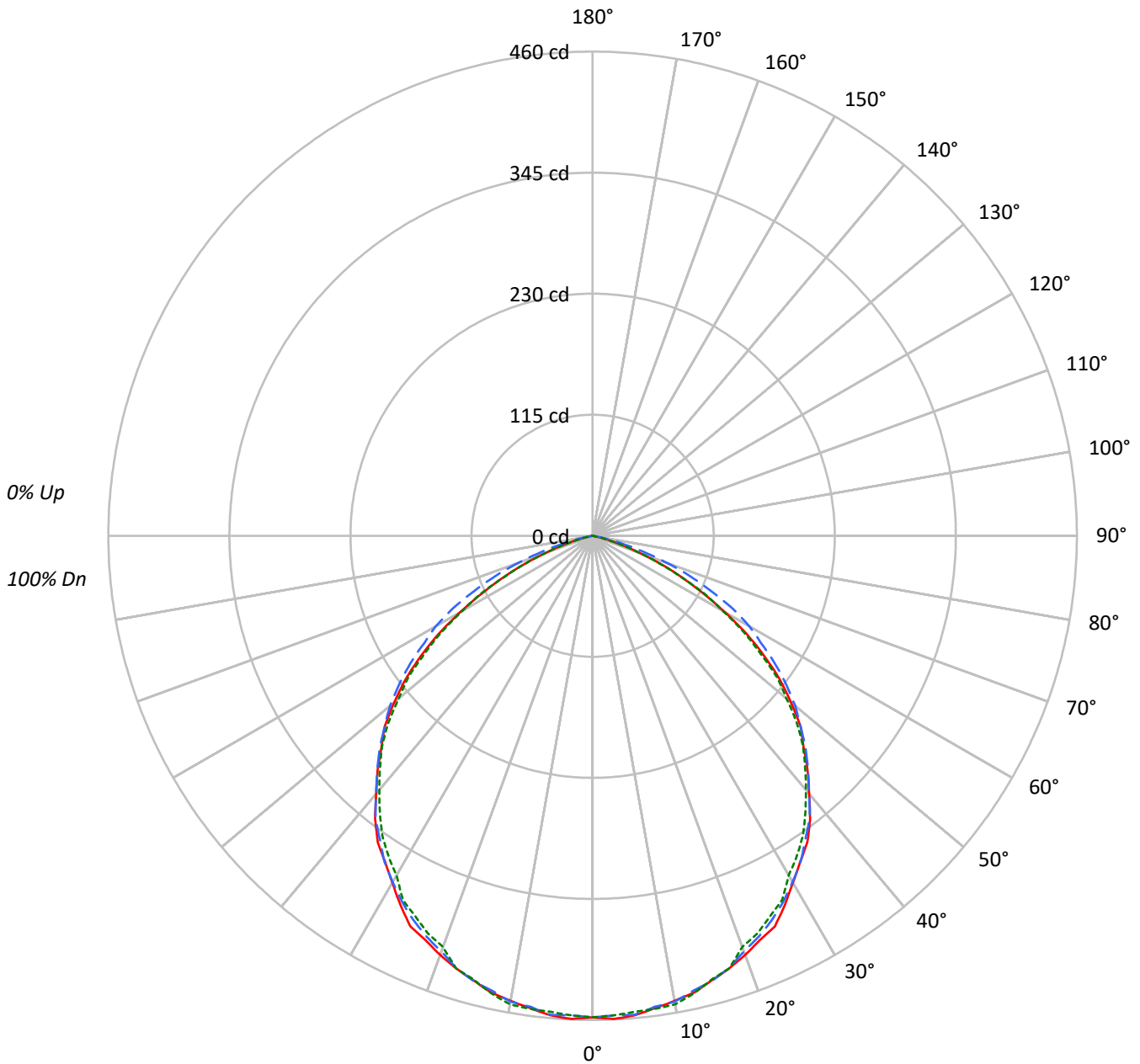
Input Watts (W): 10.05
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P209406

CATALOG NUMBER: LDSQ6B10D010 EU6B10208027 6LBCSSQ1MMS

Luminous Intensity Polar Plot





TEST NUMBER: P209406

CATALOG NUMBER: LDSQ6B10D010 EU6B10208027 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: P209406

CATALOG NUMBER: LDSQ6B10D010 EU6B10208027 6LBCSSQ1MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.3	3.9
10°-20°	123.4	11.2
20°-30°	185.6	16.8
30°-40°	219.6	19.9
40°-50°	219.2	19.8
50°-60°	181.7	16.5
60°-70°	106.2	9.6
70°-80°	25.3	2.3
80°-90°	0.2	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°	352.3	31.9
0°-40°	571.9	51.8
0°-60°	972.8	88.1
0°-90°	1104.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1104.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	457	457	457	457	457	
5°	457	455	457	455	454	43
15°	437	437	438	436	436	124
25°	410	405	403	401	399	187
35°	356	352	352	350	348	221
45°	283	284	286	283	283	219
55°	199	206	211	205	194	177
65°	94	106	124	105	93	93
75°	14	20	30	19	13	18
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P209406

CATALOG NUMBER: LDSQ6B10D010 EU6B10208027 6LBCSSQ1MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	457.4	457.4	457.4	457.4	457.4	457.4	457.4	457.4	457.4	457.4	457.4
2.5°	459.5	456.8	458.8	454.7	457.4	454.7	455.4	454.1	456.8	456.1	455.4
5°	457.4	458.1	456.8	458.1	456.1	454.1	456.1	454.7	450.7	456.8	455.4
7.5°	452.7	453.4	452.0	454.1	452.7	450.0	455.4	451.4	450.7	451.4	454.1
10°	448.7	450.0	449.3	448.7	449.3	449.3	448.0	446.0	448.0	449.3	448.7
12.5°	444.6	446.6	445.3	443.9	442.6	443.3	444.6	441.2	441.2	442.6	446.6
15°	437.2	438.5	439.2	436.5	436.5	437.2	439.9	434.5	437.2	437.9	438.5
17.5°	431.1	431.8	431.8	429.8	431.1	429.1	431.1	428.4	431.1	430.4	431.8
20°	423.7	425.1	423.7	423.7	422.4	423.0	423.0	423.0	421.0	420.3	421.7
22.5°	415.6	415.6	414.3	415.6	414.3	413.6	417.0	411.6	417.0	412.2	416.3
25°	409.5	406.2	404.1	403.5	406.2	403.5	404.8	402.8	404.1	402.8	403.5
27.5°	395.4	393.3	392.7	393.3	393.3	392.7	395.4	387.9	392.7	392.0	392.0
30°	380.5	380.5	381.9	380.5	381.9	379.8	382.5	376.5	380.5	379.8	380.5
32.5°	367.0	367.7	367.7	369.1	367.0	367.7	367.7	365.7	367.0	367.7	366.4
35°	355.6	352.2	352.2	352.2	352.2	352.2	353.5	351.5	353.5	352.2	352.2
37.5°	339.4	336.0	336.0	335.3	338.7	336.7	340.0	337.3	337.3	338.7	338.7
40°	319.8	321.1	319.1	321.8	321.1	318.5	324.5	320.5	323.2	319.8	322.5
42.5°	302.3	302.9	302.3	301.6	304.3	303.6	306.3	303.6	302.9	302.9	307.7
45°	283.4	283.4	283.4	285.4	283.4	284.0	286.7	285.4	286.7	286.1	290.8
47.5°	267.8	264.5	263.8	267.8	267.2	267.8	267.8	268.5	269.2	267.8	269.9
50°	245.6	244.2	244.2	244.9	245.6	246.9	249.0	250.3	249.0	251.0	251.7
52.5°	224.0	222.6	223.3	226.0	227.4	226.7	230.1	230.7	230.1	231.4	231.4
55°	199.0	197.7	199.7	203.1	205.1	207.1	210.5	207.8	210.5	211.2	211.9
57.5°	173.4	172.7	173.4	176.8	178.8	183.5	188.9	188.9	191.6	189.6	191.6
60°	145.1	145.1	147.8	149.8	155.2	158.6	163.9	166.6	169.3	172.0	170.7
62.5°	118.1	118.7	120.8	125.5	128.9	133.6	139.7	142.4	147.1	149.8	148.4
65°	93.8	93.8	95.1	99.2	102.6	108.6	114.0	120.1	122.8	124.1	124.8
67.5°	70.2	69.5	72.2	74.9	78.3	84.3	90.4	93.8	98.5	99.9	99.2
70°	47.2	47.9	49.3	52.0	56.0	60.7	67.5	70.2	72.9	74.2	72.9
72.5°	29.7	29.7	30.4	33.1	35.8	39.1	43.9	46.6	49.9	50.6	49.3
75°	13.5	13.5	14.8	16.2	18.2	20.9	24.3	26.3	28.3	30.4	30.4
77.5°	2.7	3.4	4.0	4.0	5.4	7.4	9.4	11.5	13.5	13.5	13.5
80°	0.7	0.7	0.7	0.7	0.7	0.7	1.3	2.0	3.4	3.4	3.4
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: P209406

CATALOG NUMBER: LDSQ6B10D010 EU6B10208027 6LBCSSQ1MMS

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	457.4	457.4	457.4	457.4	457.4	457.4	457.4	457.4
2.5°	457.4	461.5	457.4	455.4	458.1	457.4	455.4	456.1
5°	455.4	456.8	458.1	452.7	456.1	456.8	455.4	454.1
7.5°	453.4	454.1	453.4	452.0	452.0	452.0	453.4	453.4
10°	452.7	450.7	447.3	445.3	447.3	447.3	446.6	452.0
12.5°	443.9	446.6	444.6	440.6	444.6	443.9	443.9	445.3
15°	437.2	437.2	438.5	433.1	435.8	435.2	435.2	436.5
17.5°	430.4	430.4	429.8	428.4	427.7	429.8	427.7	431.1
20°	421.0	422.4	426.4	419.7	421.7	419.7	419.7	415.6
22.5°	409.5	416.3	412.9	412.2	411.6	412.2	413.6	408.9
25°	402.1	402.1	403.5	399.4	399.4	400.8	400.1	398.7
27.5°	392.0	391.3	390.6	389.3	392.7	390.0	390.0	390.0
30°	377.8	379.8	379.2	375.8	379.8	378.5	376.5	372.4
32.5°	365.7	368.4	364.3	363.7	363.0	363.7	364.3	361.0
35°	350.8	351.5	351.5	348.8	349.5	348.8	347.5	348.1
37.5°	337.3	336.7	333.3	331.9	332.6	332.6	333.3	331.9
40°	318.5	320.5	320.5	315.8	317.1	315.8	315.8	315.1
42.5°	302.9	303.6	301.6	299.6	299.6	298.9	297.5	298.9
45°	286.7	286.1	284.0	282.0	282.0	281.3	280.0	282.7
47.5°	268.5	267.2	266.5	263.8	263.8	259.8	260.4	263.1
50°	250.3	249.0	246.3	244.9	242.9	240.9	240.2	240.2
52.5°	228.7	228.7	226.0	223.3	222.6	221.3	219.9	220.6
55°	209.8	209.8	207.8	203.1	200.4	197.0	195.0	194.3
57.5°	188.2	186.9	182.8	177.4	174.7	172.0	170.0	170.0
60°	166.6	163.3	159.2	154.5	149.8	145.1	143.7	143.0
62.5°	143.0	139.7	132.2	126.8	123.5	120.8	118.1	120.1
65°	119.4	114.7	107.9	102.6	99.2	95.1	93.1	93.1
67.5°	94.5	89.7	83.0	77.6	74.2	71.5	68.8	68.8
70°	69.5	66.1	60.0	55.3	52.6	48.6	47.9	47.9
72.5°	47.2	43.2	38.5	35.1	32.4	29.7	28.3	27.7
75°	26.3	23.6	20.2	18.2	15.5	14.2	12.8	12.8
77.5°	10.8	8.8	6.7	5.4	4.0	3.4	2.7	3.4
80°	2.0	1.3	0.7	0.7	0.7	0.7	0.7	0.7
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)