

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: P209414

Luminaire Tested: **LDSQ6B10D010 EU6B10209035 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209414
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 EU6B10209035 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 3500 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1000.7 lumens
Efficiency: N/A
Efficacy: 99.6 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

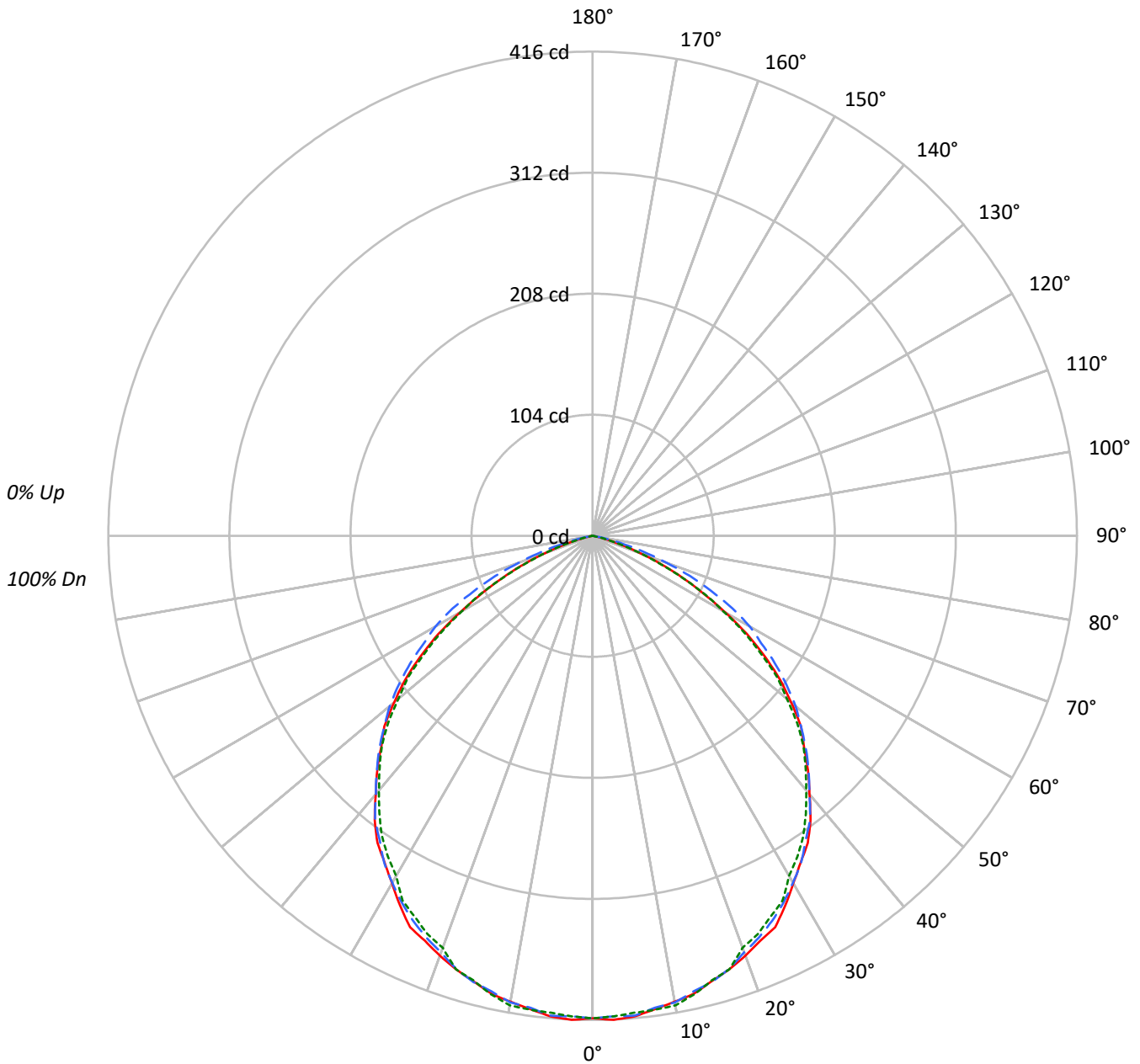
Input Watts (W): 10.05
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P209414

CATALOG NUMBER: LDSQ6B10D010 EU6B10209035 6LBCSSQ1MMS

Luminous Intensity Polar Plot





TEST NUMBER: P209414

CATALOG NUMBER: LDSQ6B10D010 EU6B10209035 6LBCSSQ1MMS

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			100
1	111	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87			87
2	102	94	88	83	99	93	87	82	89	84	80	86	82	79	83	80	77	75			75
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	64			64
4	86	75	67	60	84	73	66	60	71	64	59	69	63	58	67	62	58	56			56
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49			49
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43			43
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38			38
8	63	50	42	37	62	50	42	36	48	41	36	47	41	36	46	40	36	34			34
9	59	46	38	33	58	46	38	33	45	38	33	43	37	33	42	37	32	31			31
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28			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: P209414

CATALOG NUMBER: LDSQ6B10D010 EU6B10209035 6LBCSSQ1MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	3.9
10°-20°	111.8	11.2
20°-30°	168.2	16.8
30°-40°	199.0	19.9
40°-50°	198.6	19.8
50°-60°	164.7	16.5
60°-70°	96.2	9.6
70°-80°	22.9	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°	319.2	31.9
0°-40°	518.2	51.8
0°-60°	881.4	88.1
0°-90°	1000.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1000.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	414	414	414	414	414	
5°	414	412	414	413	411	39
15°	396	396	397	395	396	112
25°	371	367	365	364	361	170
35°	322	319	319	317	315	200
45°	257	257	259	256	256	199
55°	180	187	191	186	176	160
65°	85	96	112	95	84	84
75°	12	18	28	17	12	17
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P209414

CATALOG NUMBER: LDSQ6B10D010 EU6B10209035 6LBCSSQ1MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	414.5	414.5	414.5	414.5	414.5	414.5	414.5	414.5	414.5	414.5	414.5
2.5°	416.3	413.9	415.7	412.0	414.5	412.0	412.6	411.4	413.9	413.3	412.6
5°	414.5	415.1	413.9	415.1	413.3	411.4	413.3	412.0	408.4	413.9	412.6
7.5°	410.2	410.8	409.6	411.4	410.2	407.8	412.6	409.0	408.4	409.0	411.4
10°	406.5	407.8	407.1	406.5	407.1	407.1	405.9	404.1	405.9	407.1	406.5
12.5°	402.9	404.7	403.5	402.3	401.0	401.6	402.9	399.8	399.8	401.0	404.7
15°	396.1	397.4	398.0	395.5	395.5	396.1	398.6	393.7	396.1	396.8	397.4
17.5°	390.6	391.3	391.3	389.4	390.6	388.8	390.6	388.2	390.6	390.0	391.3
20°	383.9	385.1	383.9	383.9	382.7	383.3	383.3	383.3	381.5	380.9	382.1
22.5°	376.6	376.6	375.4	376.6	375.4	374.7	377.8	372.9	377.8	373.5	377.2
25°	371.1	368.0	366.2	365.6	368.0	365.6	366.8	365.0	366.2	365.0	365.6
27.5°	358.2	356.4	355.8	356.4	356.4	355.8	358.2	351.5	355.8	355.2	355.2
30°	344.8	344.8	346.0	344.8	346.0	344.2	346.6	341.1	344.8	344.2	344.8
32.5°	332.6	333.2	333.2	334.4	332.6	333.2	333.2	331.3	332.6	333.2	332.0
35°	322.2	319.1	319.1	319.1	319.1	319.1	320.3	318.5	320.3	319.1	319.1
37.5°	307.5	304.4	304.4	303.8	306.9	305.1	308.1	305.7	305.7	306.9	306.9
40°	289.8	291.0	289.2	291.6	291.0	288.5	294.1	290.4	292.8	289.8	292.2
42.5°	273.9	274.5	273.9	273.3	275.7	275.1	277.5	275.1	274.5	274.5	278.8
45°	256.8	256.8	256.8	258.6	256.8	257.4	259.8	258.6	259.8	259.2	263.5
47.5°	242.7	239.6	239.0	242.7	242.1	242.7	242.7	243.3	243.9	242.7	244.5
50°	222.5	221.3	221.3	221.9	222.5	223.7	225.6	226.8	225.6	227.4	228.0
52.5°	203.0	201.7	202.4	204.8	206.0	205.4	208.5	209.1	208.5	209.7	209.7
55°	180.3	179.1	181.0	184.0	185.8	187.7	190.7	188.3	190.7	191.3	192.0
57.5°	157.1	156.5	157.1	160.2	162.0	166.3	171.2	171.2	173.6	171.8	173.6
60°	131.4	131.4	133.9	135.7	140.6	143.7	148.6	151.0	153.4	155.9	154.7
62.5°	107.0	107.6	109.4	113.7	116.8	121.0	126.5	129.0	133.3	135.7	134.5
65°	85.0	85.0	86.2	89.9	92.9	98.4	103.3	108.8	111.3	112.5	113.1
67.5°	63.6	63.0	65.4	67.9	70.9	76.4	81.9	85.0	89.3	90.5	89.9
70°	42.8	43.4	44.6	47.1	50.7	55.0	61.1	63.6	66.0	67.2	66.0
72.5°	26.9	26.9	27.5	30.0	32.4	35.5	39.7	42.2	45.2	45.8	44.6
75°	12.2	12.2	13.4	14.7	16.5	19.0	22.0	23.8	25.7	27.5	27.5
77.5°	2.4	3.1	3.7	3.7	4.9	6.7	8.6	10.4	12.2	12.2	12.2
80°	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.8	3.1	3.1	3.1
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



TEST NUMBER: P209414

CATALOG NUMBER: LDSQ6B10D010 EU6B10209035 6LBCSSQ1MMS

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	414.5	414.5	414.5	414.5	414.5	414.5	414.5	414.5
2.5°	414.5	418.2	414.5	412.6	415.1	414.5	412.6	413.3
5°	412.6	413.9	415.1	410.2	413.3	413.9	412.6	411.4
7.5°	410.8	411.4	410.8	409.6	409.6	409.6	410.8	410.8
10°	410.2	408.4	405.3	403.5	405.3	405.3	404.7	409.6
12.5°	402.3	404.7	402.9	399.2	402.9	402.3	402.3	403.5
15°	396.1	396.1	397.4	392.5	394.9	394.3	394.3	395.5
17.5°	390.0	390.0	389.4	388.2	387.6	389.4	387.6	390.6
20°	381.5	382.7	386.4	380.2	382.1	380.2	380.2	376.6
22.5°	371.1	377.2	374.1	373.5	372.9	373.5	374.7	370.5
25°	364.4	364.4	365.6	361.9	361.9	363.1	362.5	361.3
27.5°	355.2	354.6	354.0	352.7	355.8	353.4	353.4	353.4
30°	342.3	344.2	343.6	340.5	344.2	343.0	341.1	337.5
32.5°	331.3	333.8	330.1	329.5	328.9	329.5	330.1	327.1
35°	317.9	318.5	318.5	316.1	316.7	316.1	314.8	315.4
37.5°	305.7	305.1	302.0	300.8	301.4	301.4	302.0	300.8
40°	288.5	290.4	290.4	286.1	287.3	286.1	286.1	285.5
42.5°	274.5	275.1	273.3	271.4	271.4	270.8	269.6	270.8
45°	259.8	259.2	257.4	255.5	255.5	254.9	253.7	256.1
47.5°	243.3	242.1	241.5	239.0	239.0	235.4	236.0	238.4
50°	226.8	225.6	223.1	221.9	220.1	218.2	217.6	217.6
52.5°	207.2	207.2	204.8	202.4	201.7	200.5	199.3	199.9
55°	190.1	190.1	188.3	184.0	181.6	178.5	176.7	176.1
57.5°	170.6	169.3	165.7	160.8	158.3	155.9	154.1	154.1
60°	151.0	147.9	144.3	140.0	135.7	131.4	130.2	129.6
62.5°	129.6	126.5	119.8	114.9	111.9	109.4	107.0	108.8
65°	108.2	103.9	97.8	92.9	89.9	86.2	84.4	84.4
67.5°	85.6	81.3	75.2	70.3	67.2	64.8	62.4	62.4
70°	63.0	59.9	54.4	50.1	47.7	44.0	43.4	43.4
72.5°	42.8	39.1	34.8	31.8	29.3	26.9	25.7	25.1
75°	23.8	21.4	18.3	16.5	14.1	12.8	11.6	11.6
77.5°	9.8	7.9	6.1	4.9	3.7	3.1	2.4	3.1
80°	1.8	1.2	0.6	0.6	0.6	0.6	0.6	0.6
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)