

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: P209441

Luminaire Tested: **LDSQ6B20D010 EU6B10209050 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209441
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 EU6B10209050 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 5000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1932.6 lumens
Efficiency: N/A
Efficacy: 92.9 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

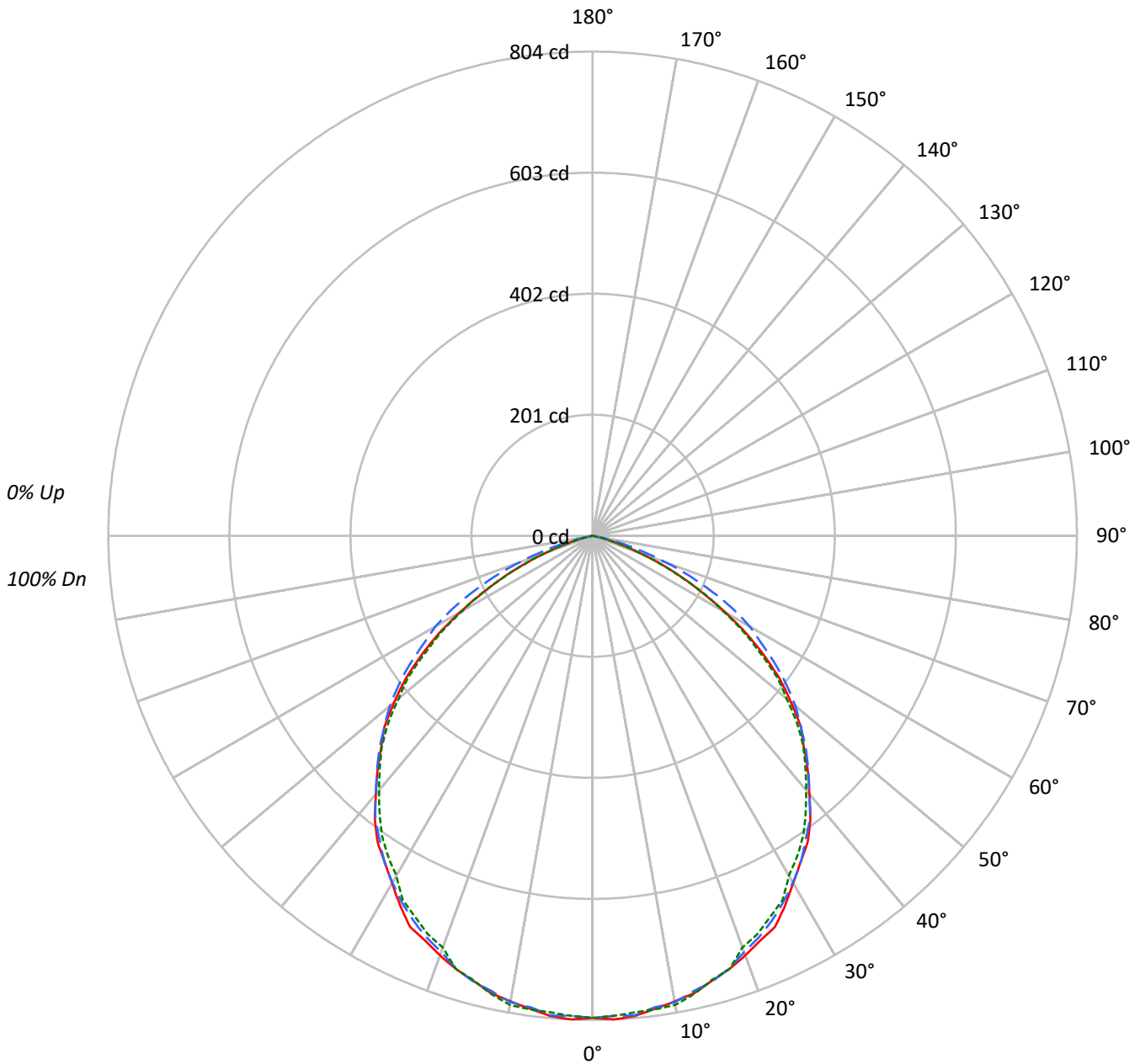
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P209441

CATALOG NUMBER: LDSQ6B20D010 EU6B10209050 6LBCSSQ1MMS

Luminous Intensity Polar Plot





TEST NUMBER: P209441

CATALOG NUMBER: LDSQ6B20D010 EU6B10209050 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: P209441

CATALOG NUMBER: LDSQ6B20D010 EU6B10209050 6LBCSSQ1MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.7	3.9
10°-20°	215.9	11.2
20°-30°	324.8	16.8
30°-40°	384.3	19.9
40°-50°	383.5	19.8
50°-60°	318.0	16.5
60°-70°	185.8	9.6
70°-80°	44.2	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°	616.4	31.9
0°-40°	1000.7	51.8
0°-60°	1702.2	88.1
0°-90°	1932.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1932.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	800	800	800	800	800	
5°	800	796	799	797	795	76
15°	765	764	766	763	764	216
25°	717	708	705	702	698	328
35°	622	616	616	613	609	387
45°	496	496	501	495	495	384
55°	348	361	370	360	340	309
65°	164	185	217	184	163	163
75°	24	34	53	34	22	32
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P209441

CATALOG NUMBER: LDSQ6B20D010 EU6B10209050 6LBCSSQ1MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	800.5	800.5	800.5	800.5	800.5	800.5	800.5	800.5	800.5	800.5	800.5
2.5°	804.0	799.3	802.8	795.7	800.5	795.7	796.9	794.6	799.3	798.1	796.9
5°	800.5	801.6	799.3	801.6	798.1	794.6	798.1	795.7	788.7	799.3	796.9
7.5°	792.2	793.4	791.0	794.6	792.2	787.5	796.9	789.8	788.7	789.8	794.6
10°	785.1	787.5	786.3	785.1	786.3	786.3	783.9	780.4	783.9	786.3	785.1
12.5°	778.0	781.6	779.2	776.9	774.5	775.7	778.0	772.1	772.1	774.5	781.6
15°	765.0	767.4	768.6	763.9	763.9	765.0	769.8	760.3	765.0	766.2	767.4
17.5°	754.4	755.6	755.6	752.1	754.4	750.9	754.4	749.7	754.4	753.2	755.6
20°	741.4	743.8	741.4	741.4	739.1	740.3	740.3	740.3	736.7	735.5	737.9
22.5°	727.3	727.3	724.9	727.3	724.9	723.7	729.6	720.2	729.6	721.4	728.5
25°	716.6	710.7	707.2	706.0	710.7	706.0	708.4	704.8	707.2	704.8	706.0
27.5°	691.9	688.3	687.1	688.3	688.3	687.1	691.9	678.9	687.1	685.9	685.9
30°	665.9	665.9	668.2	665.9	668.2	664.7	669.4	658.8	665.9	664.7	665.9
32.5°	642.3	643.4	643.4	645.8	642.3	643.4	643.4	639.9	642.3	643.4	641.1
35°	622.2	616.3	616.3	616.3	616.3	616.3	618.7	615.1	618.7	616.3	616.3
37.5°	593.9	588.0	588.0	586.8	592.7	589.1	595.0	590.3	590.3	592.7	592.7
40°	559.6	562.0	558.4	563.2	562.0	557.3	567.9	560.8	565.5	559.6	564.3
42.5°	528.9	530.1	528.9	527.7	532.5	531.3	536.0	531.3	530.1	530.1	538.4
45°	495.9	495.9	495.9	499.4	495.9	497.0	501.8	499.4	501.8	500.6	508.9
47.5°	468.7	462.8	461.6	468.7	467.5	468.7	468.7	469.9	471.1	468.7	472.3
50°	429.8	427.4	427.4	428.6	429.8	432.1	435.7	438.0	435.7	439.2	440.4
52.5°	392.0	389.6	390.8	395.5	397.9	396.7	402.6	403.8	402.6	405.0	405.0
55°	348.3	345.9	349.5	355.4	358.9	362.5	368.4	363.6	368.4	369.5	370.7
57.5°	303.4	302.2	303.4	309.3	312.9	321.1	330.6	330.6	335.3	331.8	335.3
60°	253.8	253.8	258.6	262.1	271.5	277.4	286.9	291.6	296.3	301.1	298.7
62.5°	206.6	207.8	211.3	219.6	225.5	233.8	244.4	249.1	257.4	262.1	259.7
65°	164.1	164.1	166.5	173.6	179.5	190.1	199.5	210.2	214.9	217.2	218.4
67.5°	122.8	121.6	126.3	131.1	137.0	147.6	158.2	164.1	172.4	174.7	173.6
70°	82.6	83.8	86.2	90.9	98.0	106.3	118.1	122.8	127.5	129.9	127.5
72.5°	51.9	51.9	53.1	57.9	62.6	68.5	76.7	81.5	87.4	88.5	86.2
75°	23.6	23.6	26.0	28.3	31.9	36.6	42.5	46.0	49.6	53.1	53.1
77.5°	4.7	5.9	7.1	7.1	9.4	13.0	16.5	20.1	23.6	23.6	23.6
80°	1.2	1.2	1.2	1.2	1.2	1.2	2.4	3.5	5.9	5.9	5.9
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: P209441

CATALOG NUMBER: LDSQ6B20D010 EU6B10209050 6LBCSSQ1MMS

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	800.5	800.5	800.5	800.5	800.5	800.5	800.5	800.5
2.5°	800.5	807.6	800.5	796.9	801.6	800.5	796.9	798.1
5°	796.9	799.3	801.6	792.2	798.1	799.3	796.9	794.6
7.5°	793.4	794.6	793.4	791.0	791.0	791.0	793.4	793.4
10°	792.2	788.7	782.8	779.2	782.8	782.8	781.6	791.0
12.5°	776.9	781.6	778.0	771.0	778.0	776.9	776.9	779.2
15°	765.0	765.0	767.4	758.0	762.7	761.5	761.5	763.9
17.5°	753.2	753.2	752.1	749.7	748.5	752.1	748.5	754.4
20°	736.7	739.1	746.2	734.4	737.9	734.4	734.4	727.3
22.5°	716.6	728.5	722.5	721.4	720.2	721.4	723.7	715.5
25°	703.7	703.7	706.0	698.9	698.9	701.3	700.1	697.8
27.5°	685.9	684.8	683.6	681.2	687.1	682.4	682.4	682.4
30°	661.2	664.7	663.5	657.6	664.7	662.3	658.8	651.7
32.5°	639.9	644.6	637.5	636.4	635.2	636.4	637.5	631.6
35°	613.9	615.1	615.1	610.4	611.6	610.4	608.0	609.2
37.5°	590.3	589.1	583.2	580.9	582.1	582.1	583.2	580.9
40°	557.3	560.8	560.8	552.5	554.9	552.5	552.5	551.4
42.5°	530.1	531.3	527.7	524.2	524.2	523.0	520.7	523.0
45°	501.8	500.6	497.0	493.5	493.5	492.3	490.0	494.7
47.5°	469.9	467.5	466.3	461.6	461.6	454.5	455.7	460.4
50°	438.0	435.7	430.9	428.6	425.0	421.5	420.3	420.3
52.5°	400.2	400.2	395.5	390.8	389.6	387.2	384.9	386.1
55°	367.2	367.2	363.6	355.4	350.6	344.7	341.2	340.0
57.5°	329.4	327.0	320.0	310.5	305.8	301.1	297.5	297.5
60°	291.6	285.7	278.6	270.4	262.1	253.8	251.5	250.3
62.5°	250.3	244.4	231.4	222.0	216.1	211.3	206.6	210.2
65°	209.0	200.7	188.9	179.5	173.6	166.5	162.9	162.9
67.5°	165.3	157.0	145.2	135.8	129.9	125.1	120.4	120.4
70°	121.6	115.7	105.1	96.8	92.1	85.0	83.8	83.8
72.5°	82.6	75.6	67.3	61.4	56.7	51.9	49.6	48.4
75°	46.0	41.3	35.4	31.9	27.2	24.8	22.4	22.4
77.5°	18.9	15.3	11.8	9.4	7.1	5.9	4.7	5.9
80°	3.5	2.4	1.2	1.2	1.2	1.2	1.2	1.2
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)