

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: P209440

Luminaire Tested: **LDSQ6B20D010 EU6B10209040 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209440
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 EU6B10209040 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 4000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1923.9 lumens
Efficiency: N/A
Efficacy: 92.5 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

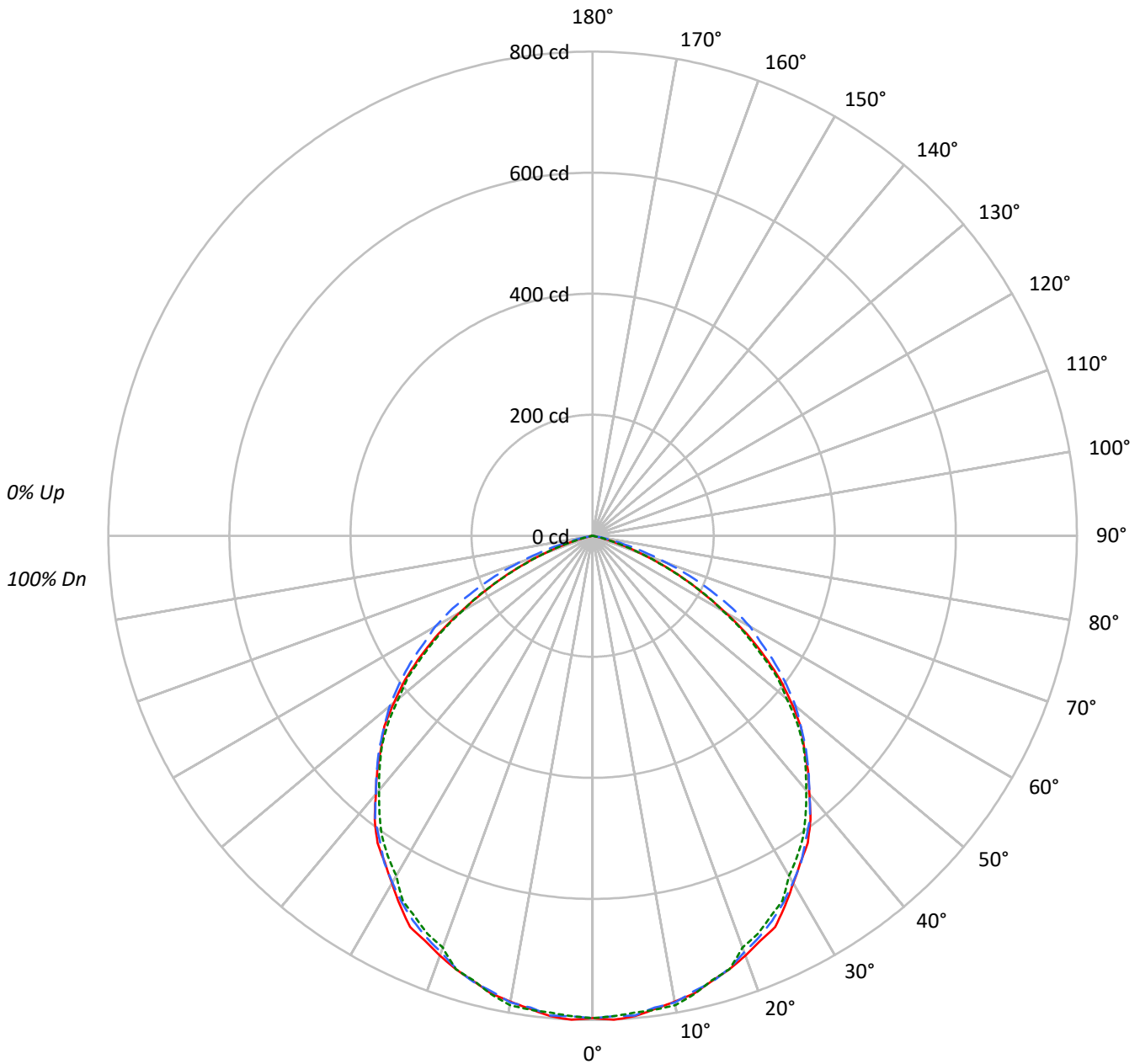
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	75.4	3.9
10°-20°	214.9	11.2
20°-30°	323.4	16.8
30°-40°	382.6	19.9
40°-50°	381.8	19.8
50°-60°	316.6	16.5
60°-70°	185.0	9.6
70°-80°	44.1	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°	613.6	31.9
0°-40°	996.2	51.8
0°-60°	1694.6	88.1
0°-90°	1923.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1923.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	797	797	797	797	797	
5°	797	793	796	793	791	75
15°	762	761	763	759	760	215
25°	713	705	702	699	695	326
35°	619	614	614	610	606	385
45°	494	494	498	493	492	382
55°	347	359	368	358	338	308
65°	163	184	216	183	162	162
75°	24	34	53	34	22	32
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°	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9
2.5°	800.4	795.7	799.2	792.2	796.9	792.2	793.3	791.0	795.7	794.5	793.3
5°	796.9	798.0	795.7	798.0	794.5	791.0	794.5	792.2	785.1	795.7	793.3
7.5°	788.6	789.8	787.5	791.0	788.6	783.9	793.3	786.3	785.1	786.3	791.0
10°	781.6	783.9	782.8	781.6	782.8	782.8	780.4	776.9	780.4	782.8	781.6
12.5°	774.5	778.1	775.7	773.4	771.0	772.2	774.5	768.7	768.7	771.0	778.1
15°	761.6	763.9	765.1	760.4	760.4	761.6	766.3	756.9	761.6	762.8	763.9
17.5°	751.0	752.2	752.2	748.7	751.0	747.5	751.0	746.3	751.0	749.8	752.2
20°	738.1	740.4	738.1	738.1	735.7	736.9	736.9	736.9	733.4	732.2	734.6
22.5°	724.0	724.0	721.6	724.0	721.6	720.5	726.3	716.9	726.3	718.1	725.2
25°	713.4	707.5	704.0	702.8	707.5	702.8	705.2	701.7	704.0	701.7	702.8
27.5°	688.7	685.2	684.0	685.2	685.2	684.0	688.7	675.8	684.0	682.9	682.9
30°	662.9	662.9	665.2	662.9	665.2	661.7	666.4	655.8	662.9	661.7	662.9
32.5°	639.4	640.5	640.5	642.9	639.4	640.5	640.5	637.0	639.4	640.5	638.2
35°	619.4	613.5	613.5	613.5	613.5	613.5	615.9	612.3	615.9	613.5	613.5
37.5°	591.2	585.3	585.3	584.1	590.0	586.5	592.4	587.7	587.7	590.0	590.0
40°	557.1	559.4	555.9	560.6	559.4	554.7	565.3	558.3	563.0	557.1	561.8
42.5°	526.5	527.7	526.5	525.4	530.1	528.9	533.6	528.9	527.7	527.7	535.9
45°	493.6	493.6	493.6	497.2	493.6	494.8	499.5	497.2	499.5	498.3	506.6
47.5°	466.6	460.7	459.5	466.6	465.4	466.6	466.6	467.8	468.9	466.6	470.1
50°	427.8	425.5	425.5	426.6	427.8	430.2	433.7	436.0	433.7	437.2	438.4
52.5°	390.2	387.9	389.0	393.7	396.1	394.9	400.8	402.0	400.8	403.1	403.1
55°	346.7	344.4	347.9	353.8	357.3	360.8	366.7	362.0	366.7	367.9	369.0
57.5°	302.1	300.9	302.1	307.9	311.5	319.7	329.1	329.1	333.8	330.3	333.8
60°	252.7	252.7	257.4	260.9	270.3	276.2	285.6	290.3	295.0	299.7	297.4
62.5°	205.7	206.9	210.4	218.6	224.5	232.7	243.3	248.0	256.2	260.9	258.6
65°	163.4	163.4	165.7	172.8	178.6	189.2	198.6	209.2	213.9	216.3	217.4
67.5°	122.2	121.1	125.8	130.5	136.3	146.9	157.5	163.4	171.6	173.9	172.8
70°	82.3	83.4	85.8	90.5	97.6	105.8	117.5	122.2	126.9	129.3	126.9
72.5°	51.7	51.7	52.9	57.6	62.3	68.2	76.4	81.1	87.0	88.1	85.8
75°	23.5	23.5	25.9	28.2	31.7	36.4	42.3	45.8	49.4	52.9	52.9
77.5°	4.7	5.9	7.1	7.1	9.4	12.9	16.5	20.0	23.5	23.5	23.5
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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9
2.5°	796.9	803.9	796.9	793.3	798.0	796.9	793.3	794.5
5°	793.3	795.7	798.0	788.6	794.5	795.7	793.3	791.0
7.5°	789.8	791.0	789.8	787.5	787.5	787.5	789.8	789.8
10°	788.6	785.1	779.2	775.7	779.2	779.2	778.1	787.5
12.5°	773.4	778.1	774.5	767.5	774.5	773.4	773.4	775.7
15°	761.6	761.6	763.9	754.5	759.2	758.1	758.1	760.4
17.5°	749.8	749.8	748.7	746.3	745.1	748.7	745.1	751.0
20°	733.4	735.7	742.8	731.0	734.6	731.0	731.0	724.0
22.5°	713.4	725.2	719.3	718.1	716.9	718.1	720.5	712.2
25°	700.5	700.5	702.8	695.8	695.8	698.1	697.0	694.6
27.5°	682.9	681.7	680.5	678.2	684.0	679.3	679.3	679.3
30°	658.2	661.7	660.5	654.6	661.7	659.3	655.8	648.8
32.5°	637.0	641.7	634.7	633.5	632.3	633.5	634.7	628.8
35°	611.2	612.3	612.3	607.6	608.8	607.6	605.3	606.5
37.5°	587.7	586.5	580.6	578.3	579.4	579.4	580.6	578.3
40°	554.7	558.3	558.3	550.0	552.4	550.0	550.0	548.9
42.5°	527.7	528.9	525.4	521.8	521.8	520.7	518.3	520.7
45°	499.5	498.3	494.8	491.3	491.3	490.1	487.8	492.5
47.5°	467.8	465.4	464.2	459.5	459.5	452.5	453.7	458.4
50°	436.0	433.7	429.0	426.6	423.1	419.6	418.4	418.4
52.5°	398.4	398.4	393.7	389.0	387.9	385.5	383.2	384.3
55°	365.5	365.5	362.0	353.8	349.1	343.2	339.7	338.5
57.5°	327.9	325.6	318.5	309.1	304.4	299.7	296.2	296.2
60°	290.3	284.4	277.4	269.1	260.9	252.7	250.3	249.2
62.5°	249.2	243.3	230.4	221.0	215.1	210.4	205.7	209.2
65°	208.0	199.8	188.0	178.6	172.8	165.7	162.2	162.2
67.5°	164.5	156.3	144.6	135.2	129.3	124.6	119.9	119.9
70°	121.1	115.2	104.6	96.4	91.7	84.6	83.4	83.4
72.5°	82.3	75.2	67.0	61.1	56.4	51.7	49.4	48.2
75°	45.8	41.1	35.3	31.7	27.0	24.7	22.3	22.3
77.5°	18.8	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



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









(END OF REPORT)