

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: P209437

Luminaire Tested: **LDSQ6B20D010 EU6B10209027 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209437
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 EU6B10209027 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 2700 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1821.0 lumens
Efficiency: N/A
Efficacy: 87.5 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

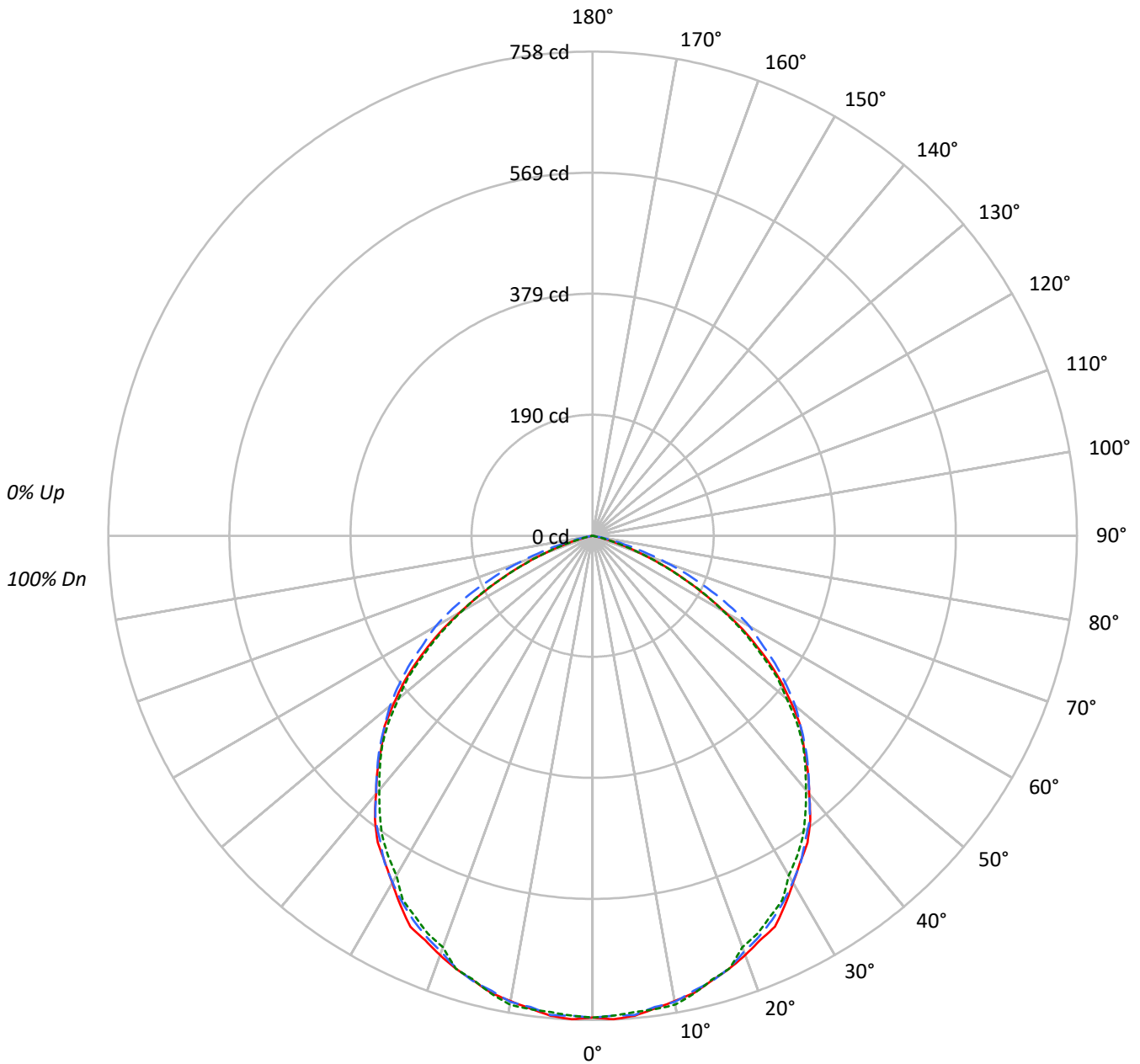
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	71.3	3.9
10°-20°	203.4	11.2
20°-30°	306.1	16.8
30°-40°	362.1	19.9
40°-50°	361.4	19.8
50°-60°	299.7	16.5
60°-70°	175.1	9.6
70°-80°	41.7	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°	580.8	31.9
0°-40°	942.9	51.8
0°-60°	1604.0	88.1
0°-90°	1821.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1821.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	754	754	754	754	754	
5°	754	750	753	751	749	71
15°	721	720	722	719	720	204
25°	675	668	664	662	658	309
35°	586	581	581	577	574	365
45°	467	468	472	467	466	361
55°	328	340	348	339	320	291
65°	155	174	205	174	154	154
75°	22	32	50	32	21	30
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°	754.3	754.3	754.3	754.3	754.3	754.3	754.3	754.3	754.3	754.3	754.3
2.5°	757.6	753.1	756.5	749.8	754.3	749.8	750.9	748.7	753.1	752.0	750.9
5°	754.3	755.4	753.1	755.4	752.0	748.7	752.0	749.8	743.1	753.1	750.9
7.5°	746.5	747.6	745.4	748.7	746.5	742.0	750.9	744.2	743.1	744.2	748.7
10°	739.8	742.0	740.9	739.8	740.9	740.9	738.7	735.3	738.7	740.9	739.8
12.5°	733.1	736.5	734.2	732.0	729.8	730.9	733.1	727.6	727.6	729.8	736.5
15°	720.9	723.1	724.2	719.8	719.8	720.9	725.3	716.4	720.9	722.0	723.1
17.5°	710.9	712.0	712.0	708.6	710.9	707.5	710.9	706.4	710.9	709.8	712.0
20°	698.6	700.9	698.6	698.6	696.4	697.5	697.5	697.5	694.2	693.1	695.3
22.5°	685.3	685.3	683.1	685.3	683.1	681.9	687.5	678.6	687.5	679.7	686.4
25°	675.3	669.7	666.4	665.3	669.7	665.3	667.5	664.1	666.4	664.1	665.3
27.5°	651.9	648.6	647.5	648.6	648.6	647.5	651.9	639.7	647.5	646.3	646.3
30°	627.4	627.4	629.7	627.4	629.7	626.3	630.8	620.8	627.4	626.3	627.4
32.5°	605.2	606.3	606.3	608.5	605.2	606.3	606.3	603.0	605.2	606.3	604.1
35°	586.3	580.7	580.7	580.7	580.7	580.7	582.9	579.6	582.9	580.7	580.7
37.5°	559.6	554.0	554.0	552.9	558.5	555.1	560.7	556.2	556.2	558.5	558.5
40°	527.3	529.5	526.2	530.6	529.5	525.1	535.1	528.4	532.9	527.3	531.8
42.5°	498.4	499.5	498.4	497.3	501.7	500.6	505.1	500.6	499.5	499.5	507.3
45°	467.2	467.2	467.2	470.6	467.2	468.3	472.8	470.6	472.8	471.7	479.5
47.5°	441.6	436.1	435.0	441.6	440.5	441.6	441.6	442.8	443.9	441.6	445.0
50°	404.9	402.7	402.7	403.8	404.9	407.2	410.5	412.7	410.5	413.8	415.0
52.5°	369.3	367.1	368.2	372.7	374.9	373.8	379.4	380.5	379.4	381.6	381.6
55°	328.2	326.0	329.3	334.9	338.2	341.5	347.1	342.6	347.1	348.2	349.3
57.5°	285.9	284.8	285.9	291.5	294.8	302.6	311.5	311.5	315.9	312.6	315.9
60°	239.2	239.2	243.6	247.0	255.9	261.4	270.3	274.8	279.2	283.7	281.5
62.5°	194.7	195.8	199.1	206.9	212.5	220.3	230.3	234.7	242.5	247.0	244.7
65°	154.6	154.6	156.9	163.5	169.1	179.1	188.0	198.0	202.5	204.7	205.8
67.5°	115.7	114.6	119.0	123.5	129.0	139.1	149.1	154.6	162.4	164.6	163.5
70°	77.9	79.0	81.2	85.7	92.3	100.1	111.2	115.7	120.1	122.4	120.1
72.5°	48.9	48.9	50.1	54.5	59.0	64.5	72.3	76.8	82.3	83.4	81.2
75°	22.2	22.2	24.5	26.7	30.0	34.5	40.0	43.4	46.7	50.1	50.1
77.5°	4.4	5.6	6.7	6.7	8.9	12.2	15.6	18.9	22.2	22.2	22.2
80°	1.1	1.1	1.1	1.1	1.1	1.1	2.2	3.3	5.6	5.6	5.6
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°	754.3	754.3	754.3	754.3	754.3	754.3	754.3	754.3
2.5°	754.3	760.9	754.3	750.9	755.4	754.3	750.9	752.0
5°	750.9	753.1	755.4	746.5	752.0	753.1	750.9	748.7
7.5°	747.6	748.7	747.6	745.4	745.4	745.4	747.6	747.6
10°	746.5	743.1	737.6	734.2	737.6	737.6	736.5	745.4
12.5°	732.0	736.5	733.1	726.4	733.1	732.0	732.0	734.2
15°	720.9	720.9	723.1	714.2	718.7	717.5	717.5	719.8
17.5°	709.8	709.8	708.6	706.4	705.3	708.6	705.3	710.9
20°	694.2	696.4	703.1	692.0	695.3	692.0	692.0	685.3
22.5°	675.3	686.4	680.8	679.7	678.6	679.7	681.9	674.2
25°	663.0	663.0	665.3	658.6	658.6	660.8	659.7	657.5
27.5°	646.3	645.2	644.1	641.9	647.5	643.0	643.0	643.0
30°	623.0	626.3	625.2	619.6	626.3	624.1	620.8	614.1
32.5°	603.0	607.4	600.7	599.6	598.5	599.6	600.7	595.2
35°	578.5	579.6	579.6	575.1	576.3	575.1	572.9	574.0
37.5°	556.2	555.1	549.6	547.3	548.4	548.4	549.6	547.3
40°	525.1	528.4	528.4	520.6	522.9	520.6	520.6	519.5
42.5°	499.5	500.6	497.3	493.9	493.9	492.8	490.6	492.8
45°	472.8	471.7	468.3	465.0	465.0	463.9	461.7	466.1
47.5°	442.8	440.5	439.4	435.0	435.0	428.3	429.4	433.9
50°	412.7	410.5	406.1	403.8	400.5	397.2	396.0	396.0
52.5°	377.1	377.1	372.7	368.2	367.1	364.9	362.7	363.8
55°	346.0	346.0	342.6	334.9	330.4	324.8	321.5	320.4
57.5°	310.4	308.2	301.5	292.6	288.1	283.7	280.3	280.3
60°	274.8	269.2	262.5	254.8	247.0	239.2	237.0	235.8
62.5°	235.8	230.3	218.0	209.1	203.6	199.1	194.7	198.0
65°	196.9	189.1	178.0	169.1	163.5	156.9	153.5	153.5
67.5°	155.7	148.0	136.8	127.9	122.4	117.9	113.5	113.5
70°	114.6	109.0	99.0	91.2	86.8	80.1	79.0	79.0
72.5°	77.9	71.2	63.4	57.8	53.4	48.9	46.7	45.6
75°	43.4	38.9	33.4	30.0	25.6	23.4	21.1	21.1
77.5°	17.8	14.5	11.1	8.9	6.7	5.6	4.4	5.6
80°	3.3	2.2	1.1	1.1	1.1	1.1	1.1	1.1
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)