

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: P209431

Luminaire Tested: **LDSQ6B20D010 EU6B10208027 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209431
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 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-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: 2121.8 lumens
Efficiency: N/A
Efficacy: 102.0 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

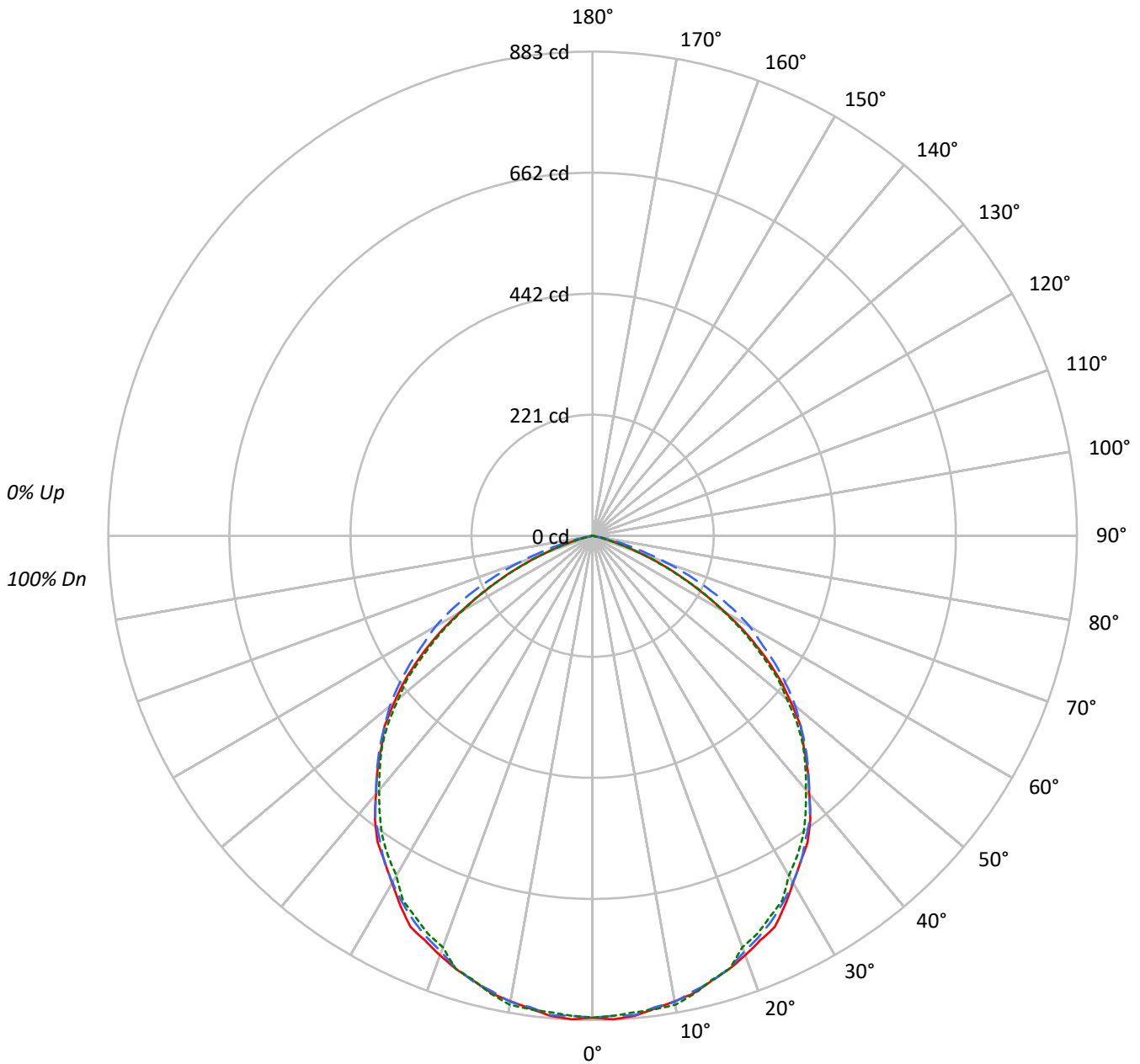
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	83.1	3.9
10°-20°	237.0	11.2
20°-30°	356.6	16.8
30°-40°	421.9	19.9
40°-50°	421.0	19.8
50°-60°	349.1	16.5
60°-70°	204.0	9.6
70°-80°	48.6	2.3
80°-90°	0.4	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°	676.8	31.9
0°-40°	1098.7	51.8
0°-60°	1868.8	88.1
0°-90°	2121.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2121.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	879	879	879	879	879	
5°	879	874	878	875	872	83
15°	840	839	841	837	839	237
25°	787	778	774	771	766	360
35°	683	677	677	673	669	425
45°	544	545	550	544	543	421
55°	382	396	406	395	373	339
65°	180	203	238	202	179	179
75°	26	38	58	37	25	35
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°	878.8	878.8	878.8	878.8	878.8	878.8	878.8	878.8	878.8	878.8	878.8
2.5°	882.7	877.5	881.4	873.6	878.8	873.6	874.9	872.3	877.5	876.2	874.9
5°	878.8	880.1	877.5	880.1	876.2	872.3	876.2	873.6	865.9	877.5	874.9
7.5°	869.7	871.0	868.4	872.3	869.7	864.6	874.9	867.2	865.9	867.2	872.3
10°	862.0	864.6	863.3	862.0	863.3	863.3	860.7	856.8	860.7	863.3	862.0
12.5°	854.2	858.1	855.5	852.9	850.3	851.6	854.2	847.7	847.7	850.3	858.1
15°	839.9	842.5	843.8	838.6	838.6	839.9	845.1	834.7	839.9	841.2	842.5
17.5°	828.3	829.6	829.6	825.7	828.3	824.4	828.3	823.1	828.3	827.0	829.6
20°	814.0	816.6	814.0	814.0	811.4	812.7	812.7	812.7	808.8	807.5	810.1
22.5°	798.5	798.5	795.9	798.5	795.9	794.6	801.0	790.7	801.0	792.0	799.8
25°	786.8	780.3	776.4	775.1	780.3	775.1	777.7	773.8	776.4	773.8	775.1
27.5°	759.6	755.7	754.4	755.7	755.7	754.4	759.6	745.3	754.4	753.1	753.1
30°	731.1	731.1	733.6	731.1	733.6	729.8	734.9	723.3	731.1	729.8	731.1
32.5°	705.1	706.4	706.4	709.0	705.1	706.4	706.4	702.5	705.1	706.4	703.8
35°	683.1	676.6	676.6	676.6	676.6	676.6	679.2	675.3	679.2	676.6	676.6
37.5°	652.0	645.5	645.5	644.2	650.7	646.8	653.3	648.1	648.1	650.7	650.7
40°	614.4	617.0	613.1	618.3	617.0	611.8	623.5	615.7	620.9	614.4	619.6
42.5°	580.7	582.0	580.7	579.4	584.6	583.3	588.5	583.3	582.0	582.0	591.1
45°	544.4	544.4	544.4	548.3	544.4	545.7	550.9	548.3	550.9	549.6	558.7
47.5°	514.6	508.1	506.8	514.6	513.3	514.6	514.6	515.9	517.2	514.6	518.5
50°	471.8	469.2	469.2	470.5	471.8	474.4	478.3	480.9	478.3	482.2	483.5
52.5°	430.3	427.7	429.0	434.2	436.8	435.5	442.0	443.3	442.0	444.6	444.6
55°	382.4	379.8	383.7	390.2	394.0	397.9	404.4	399.2	404.4	405.7	407.0
57.5°	333.1	331.8	333.1	339.6	343.5	352.6	362.9	362.9	368.1	364.2	368.1
60°	278.7	278.7	283.9	287.8	298.1	304.6	315.0	320.2	325.3	330.5	327.9
62.5°	226.8	228.1	232.0	241.1	247.6	256.6	268.3	273.5	282.6	287.8	285.2
65°	180.2	180.2	182.8	190.5	197.0	208.7	219.1	230.7	235.9	238.5	239.8
67.5°	134.8	133.5	138.7	143.9	150.4	162.0	173.7	180.2	189.2	191.8	190.5
70°	90.7	92.0	94.6	99.8	107.6	116.7	129.6	134.8	140.0	142.6	140.0
72.5°	57.0	57.0	58.3	63.5	68.7	75.2	84.3	89.4	95.9	97.2	94.6
75°	25.9	25.9	28.5	31.1	35.0	40.2	46.7	50.6	54.4	58.3	58.3
77.5°	5.2	6.5	7.8	7.8	10.4	14.3	18.1	22.0	25.9	25.9	25.9
80°	1.3	1.3	1.3	1.3	1.3	1.3	2.6	3.9	6.5	6.5	6.5
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°	878.8	878.8	878.8	878.8	878.8	878.8	878.8	878.8
2.5°	878.8	886.6	878.8	874.9	880.1	878.8	874.9	876.2
5°	874.9	877.5	880.1	869.7	876.2	877.5	874.9	872.3
7.5°	871.0	872.3	871.0	868.4	868.4	868.4	871.0	871.0
10°	869.7	865.9	859.4	855.5	859.4	859.4	858.1	868.4
12.5°	852.9	858.1	854.2	846.4	854.2	852.9	852.9	855.5
15°	839.9	839.9	842.5	832.2	837.3	836.0	836.0	838.6
17.5°	827.0	827.0	825.7	823.1	821.8	825.7	821.8	828.3
20°	808.8	811.4	819.2	806.2	810.1	806.2	806.2	798.5
22.5°	786.8	799.8	793.3	792.0	790.7	792.0	794.6	785.5
25°	772.5	772.5	775.1	767.3	767.3	769.9	768.6	766.0
27.5°	753.1	751.8	750.5	747.9	754.4	749.2	749.2	749.2
30°	725.9	729.8	728.5	722.0	729.8	727.2	723.3	715.5
32.5°	702.5	707.7	699.9	698.6	697.4	698.6	699.9	693.5
35°	674.0	675.3	675.3	670.1	671.4	670.1	667.5	668.8
37.5°	648.1	646.8	640.3	637.7	639.0	639.0	640.3	637.7
40°	611.8	615.7	615.7	606.6	609.2	606.6	606.6	605.3
42.5°	582.0	583.3	579.4	575.5	575.5	574.2	571.6	574.2
45°	550.9	549.6	545.7	541.8	541.8	540.5	537.9	543.1
47.5°	515.9	513.3	512.0	506.8	506.8	499.0	500.3	505.5
50°	480.9	478.3	473.1	470.5	466.6	462.7	461.4	461.4
52.5°	439.4	439.4	434.2	429.0	427.7	425.2	422.6	423.9
55°	403.1	403.1	399.2	390.2	385.0	378.5	374.6	373.3
57.5°	361.6	359.0	351.3	340.9	335.7	330.5	326.6	326.6
60°	320.2	313.7	305.9	296.8	287.8	278.7	276.1	274.8
62.5°	274.8	268.3	254.1	243.7	237.2	232.0	226.8	230.7
65°	229.4	220.4	207.4	197.0	190.5	182.8	178.9	178.9
67.5°	181.5	172.4	159.4	149.1	142.6	137.4	132.2	132.2
70°	133.5	127.0	115.4	106.3	101.1	93.3	92.0	92.0
72.5°	90.7	83.0	73.9	67.4	62.2	57.0	54.4	53.1
75°	50.6	45.4	38.9	35.0	29.8	27.2	24.6	24.6
77.5°	20.7	16.9	13.0	10.4	7.8	6.5	5.2	6.5
80°	3.9	2.6	1.3	1.3	1.3	1.3	1.3	1.3
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)