

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: P209442

Luminaire Tested: **LDSQ6B20D010 EU6B10209727 6LBCSSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P209442  
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 EU6B10209727 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: 1583.9 lumens  
Efficiency: N/A  
Efficacy: 76.1 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

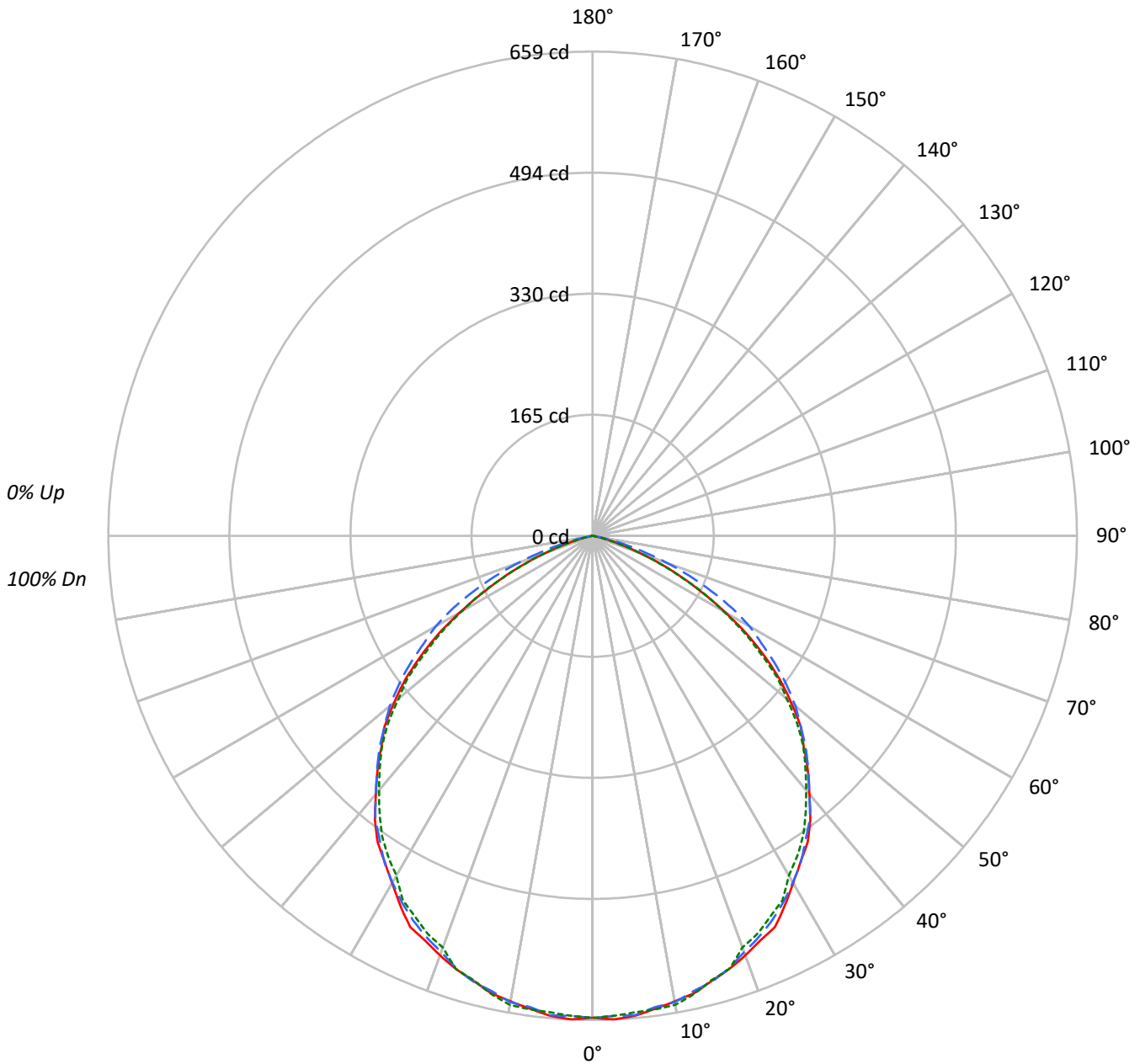
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	62.0	3.9
10°-20°	176.9	11.2
20°-30°	266.2	16.8
30°-40°	315.0	19.9
40°-50°	314.3	19.8
50°-60°	260.6	16.5
60°-70°	152.3	9.6
70°-80°	36.3	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°	505.2	31.9
0°-40°	820.2	51.8
0°-60°	1395.1	88.1
0°-90°	1583.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1583.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	656	656	656	656	656	
5°	656	653	655	653	651	62
15°	627	626	628	625	626	177
25°	587	581	578	576	572	268
35°	510	505	505	502	499	317
45°	406	407	410	406	405	314
55°	285	296	303	295	279	253
65°	134	151	178	151	134	134
75°	19	28	44	28	18	26
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°	656.0	656.0	656.0	656.0	656.0	656.0	656.0	656.0	656.0	656.0	656.0
2.5°	658.9	655.1	658.0	652.2	656.0	652.2	653.1	651.2	655.1	654.1	653.1
5°	656.0	657.0	655.1	657.0	654.1	651.2	654.1	652.2	646.4	655.1	653.1
7.5°	649.3	650.2	648.3	651.2	649.3	645.4	653.1	647.3	646.4	647.3	651.2
10°	643.5	645.4	644.4	643.5	644.4	644.4	642.5	639.6	642.5	644.4	643.5
12.5°	637.7	640.6	638.6	636.7	634.8	635.7	637.7	632.8	632.8	634.8	640.6
15°	627.0	629.0	629.9	626.0	626.0	627.0	630.9	623.1	627.0	628.0	629.0
17.5°	618.3	619.3	619.3	616.4	618.3	615.4	618.3	614.4	618.3	617.3	619.3
20°	607.7	609.6	607.7	607.7	605.7	606.7	606.7	606.7	603.8	602.8	604.8
22.5°	596.1	596.1	594.1	596.1	594.1	593.1	598.0	590.2	598.0	591.2	597.0
25°	587.3	582.5	579.6	578.6	582.5	578.6	580.6	577.7	579.6	577.7	578.6
27.5°	567.0	564.1	563.2	564.1	564.1	563.2	567.0	556.4	563.2	562.2	562.2
30°	545.7	545.7	547.7	545.7	547.7	544.8	548.6	539.9	545.7	544.8	545.7
32.5°	526.4	527.4	527.4	529.3	526.4	527.4	527.4	524.4	526.4	527.4	525.4
35°	509.9	505.1	505.1	505.1	505.1	505.1	507.0	504.1	507.0	505.1	505.1
37.5°	486.7	481.9	481.9	480.9	485.7	482.8	487.7	483.8	483.8	485.7	485.7
40°	458.7	460.6	457.7	461.6	460.6	456.7	465.4	459.6	463.5	458.7	462.5
42.5°	433.5	434.5	433.5	432.5	436.4	435.4	439.3	435.4	434.5	434.5	441.2
45°	406.4	406.4	406.4	409.3	406.4	407.4	411.2	409.3	411.2	410.3	417.0
47.5°	384.1	379.3	378.3	384.1	383.2	384.1	384.1	385.1	386.1	384.1	387.0
50°	352.2	350.3	350.3	351.2	352.2	354.1	357.1	359.0	357.1	360.0	360.9
52.5°	321.2	319.3	320.3	324.2	326.1	325.1	330.0	330.9	330.0	331.9	331.9
55°	285.4	283.5	286.4	291.3	294.2	297.1	301.9	298.0	301.9	302.9	303.8
57.5°	248.7	247.7	248.7	253.5	256.4	263.2	270.9	270.9	274.8	271.9	274.8
60°	208.0	208.0	211.9	214.8	222.6	227.4	235.1	239.0	242.9	246.7	244.8
62.5°	169.3	170.3	173.2	180.0	184.8	191.6	200.3	204.2	210.9	214.8	212.9
65°	134.5	134.5	136.4	142.2	147.1	155.8	163.5	172.2	176.1	178.0	179.0
67.5°	100.6	99.7	103.5	107.4	112.2	121.0	129.7	134.5	141.3	143.2	142.2
70°	67.7	68.7	70.6	74.5	80.3	87.1	96.8	100.6	104.5	106.4	104.5
72.5°	42.6	42.6	43.5	47.4	51.3	56.1	62.9	66.8	71.6	72.6	70.6
75°	19.4	19.4	21.3	23.2	26.1	30.0	34.8	37.7	40.6	43.5	43.5
77.5°	3.9	4.8	5.8	5.8	7.7	10.6	13.5	16.4	19.4	19.4	19.4
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.9	2.9	4.8	4.8	4.8
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°	656.0	656.0	656.0	656.0	656.0	656.0	656.0	656.0
2.5°	656.0	661.9	656.0	653.1	657.0	656.0	653.1	654.1
5°	653.1	655.1	657.0	649.3	654.1	655.1	653.1	651.2
7.5°	650.2	651.2	650.2	648.3	648.3	648.3	650.2	650.2
10°	649.3	646.4	641.5	638.6	641.5	641.5	640.6	648.3
12.5°	636.7	640.6	637.7	631.9	637.7	636.7	636.7	638.6
15°	627.0	627.0	629.0	621.2	625.1	624.1	624.1	626.0
17.5°	617.3	617.3	616.4	614.4	613.5	616.4	613.5	618.3
20°	603.8	605.7	611.5	601.9	604.8	601.9	601.9	596.1
22.5°	587.3	597.0	592.2	591.2	590.2	591.2	593.1	586.4
25°	576.7	576.7	578.6	572.8	572.8	574.8	573.8	571.9
27.5°	562.2	561.2	560.3	558.3	563.2	559.3	559.3	559.3
30°	541.9	544.8	543.8	539.0	544.8	542.8	539.9	534.1
32.5°	524.4	528.3	522.5	521.5	520.6	521.5	522.5	517.7
35°	503.2	504.1	504.1	500.3	501.2	500.3	498.3	499.3
37.5°	483.8	482.8	478.0	476.1	477.0	477.0	478.0	476.1
40°	456.7	459.6	459.6	452.8	454.8	452.8	452.8	451.9
42.5°	434.5	435.4	432.5	429.6	429.6	428.7	426.7	428.7
45°	411.2	410.3	407.4	404.5	404.5	403.5	401.6	405.4
47.5°	385.1	383.2	382.2	378.3	378.3	372.5	373.5	377.4
50°	359.0	357.1	353.2	351.2	348.3	345.4	344.5	344.5
52.5°	328.0	328.0	324.2	320.3	319.3	317.4	315.4	316.4
55°	300.9	300.9	298.0	291.3	287.4	282.5	279.6	278.7
57.5°	270.0	268.0	262.2	254.5	250.6	246.7	243.8	243.8
60°	239.0	234.2	228.4	221.6	214.8	208.0	206.1	205.1
62.5°	205.1	200.3	189.7	181.9	177.1	173.2	169.3	172.2
65°	171.3	164.5	154.8	147.1	142.2	136.4	133.5	133.5
67.5°	135.5	128.7	119.0	111.3	106.4	102.6	98.7	98.7
70°	99.7	94.8	86.1	79.3	75.5	69.7	68.7	68.7
72.5°	67.7	61.9	55.2	50.3	46.4	42.6	40.6	39.7
75°	37.7	33.9	29.0	26.1	22.3	20.3	18.4	18.4
77.5°	15.5	12.6	9.7	7.7	5.8	4.8	3.9	4.8
80°	2.9	1.9	1.0	1.0	1.0	1.0	1.0	1.0
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)