



# Test Report

Report No.:

UNI2017122603RR-01

Date: 2017/12/26

Page 1/8

**Applicant** :

**Address** :

The following sample(s) was /were submitted and identified on behalf of the clients as :

**Sample Name** : Wireless charger

**Sample Model** : LWC-S02, LWC-S01, LWC-S07, LWC-S09

**Sample Received Date** : Dec., 16, 2017

**Testing Period** : Dec., 16, 2017 - Dec., 26, 2017

**Test Requested** : Selected test (s) in the selected parts as requested by client with the EU Directive 2011/65/EU on the restriction of hazardous substances and Commission Decision 2005/618/EC-(RoHS Directive)

**Test Method** : Please refer to next page(s).

**Test Result** : Please refer to next page(s).

Prepared by :

Amanda

Reviewer :

Jazmin

Approved & Authorized Signer





# Test Report

Report No.:

UNI2017122603RR-01

Date: 2017/12/26

Page 2/ 8

## Test Method and Test Equipment:

| Test Item(s) | Test Method       | Test Equipment |
|--------------|-------------------|----------------|
| Lead(Pb)     | IEC62321-3-1:2013 | XRF            |
| Cadmium(Cd)  | IEC62321-3-1:2013 | XRF            |
| Mercury(Hg)  | IEC62321-3-1:2013 | XRF            |
| Chromium(Cr) | IEC62321-3-1:2013 | XRF            |
| Bromine(Br)  | IEC62321-3-1:2013 | XRF            |

| No. | Sample Description          | Test item    | Result | Limit | Judgment |
|-----|-----------------------------|--------------|--------|-------|----------|
| 1   | Black plastic case          | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                             | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                             | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                             | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                             | Bromine(Br)  | N.D.   | 350   | Pass     |
| 2   | Silver screws               | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                             | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                             | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                             | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                             | Bromine(Br)  | N.D.   | 350   | --       |
| 3   | White plastic ring membrane | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                             | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                             | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                             | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                             | Bromine(Br)  | N.D.   | 350   | Pass     |



# Test Report

Report No.:

UNI2017122603RR-01

Date: 2017/12/26

Page 3 / 8

| No. | Sample Description  | Test item    | Result | Limit | Judgment |
|-----|---------------------|--------------|--------|-------|----------|
| 4   | Black rubber ring   | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                     | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                     | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                     | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                     | Bromine(Br)  | N.D.   | 350   | Pass     |
| 5   | transparent plastic | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                     | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                     | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                     | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                     | Bromine(Br)  | N.D.   | 350   | Pass     |
| 6   | Silver spring       | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                     | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                     | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                     | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                     | Bromine(Br)  | N.D.   | 350   | --       |
| 7   | White plastic       | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                     | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                     | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                     | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                     | Bromine(Br)  | N.D.   | 350   | Pass     |
| 8   | Black rubber pad    | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                     | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                     | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                     | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                     | Bromine(Br)  | N.D.   | 350   | Pass     |
| 9   | Pink wire skin      | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                     | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                     | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                     | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                     | Bromine(Br)  | N.D.   | 350   | Pass     |



# Test Report

Report No.:

UNI2017122603RR-01

Date: 2017/12/26

Page 4/ 8

| No. | Sample Description      | Test item    | Result | Limit | Judgment |
|-----|-------------------------|--------------|--------|-------|----------|
| 10  | Copper core             | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                         | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                         | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                         | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                         | Bromine(Br)  | N.D.   | 350   | --       |
| 11  | Black metal             | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                         | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                         | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                         | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                         | Bromine(Br)  | N.D.   | 350   | --       |
| 12  | Silver metal (mic-usb)  | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                         | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                         | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                         | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                         | Bromine(Br)  | N.D.   | 350   | --       |
| 13  | Black plastic (mic-usb) | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                         | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                         | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                         | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                         | Bromine(Br)  | N.D.   | 350   | Pass     |
| 14  | Black body              | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                         | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                         | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                         | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                         | Bromine(Br)  | N.D.   | 350   | Pass     |
| 15  | Silver lead             | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                         | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                         | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                         | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                         | Bromine(Br)  | N.D.   | 350   | --       |



# Test Report

Report No.:

UNI2017122603RR-01

Date: 2017/12/26

Page 5/ 8

| No. | Sample Description       | Test item    | Result | Limit | Judgment |
|-----|--------------------------|--------------|--------|-------|----------|
| 16  | Silver solder joints     | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                          | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                          | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                          | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                          | Bromine(Br)  | N.D.   | 350   | --       |
| 17  | Green coating            | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                          | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                          | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                          | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                          | Bromine(Br)  | N.D.   | 350   | Pass     |
| 18  | White resin              | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                          | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                          | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                          | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                          | Bromine(Br)  | N.D.   | 350   | Pass     |
| 19  | Black plastic            | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                          | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                          | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                          | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                          | Bromine(Br)  | N.D.   | 350   | Pass     |
| 20  | Red film                 | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                          | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                          | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                          | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                          | Bromine(Br)  | N.D.   | 350   | Pass     |
| 21  | Transparent soft plastic | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                          | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                          | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                          | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                          | Bromine(Br)  | N.D.   | 350   | Pass     |





# Test Report

Report No.:

UNI2017122603RR-01

Date: 2017/12/26

Page 6/ 8

| No. | Sample Description | Test item    | Result | Limit | Judgment |
|-----|--------------------|--------------|--------|-------|----------|
| 22  | Black rubber       | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                    | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                    | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                    | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                    | Bromine(Br)  | N.D.   | 350   | Pass     |
| 23  | Silver gray metal  | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                    | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                    | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                    | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                    | Bromine(Br)  | N.D.   | 350   | --       |
| 24  | Silver gray metal  | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                    | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                    | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                    | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                    | Bromine(Br)  | N.D.   | 350   | --       |
| 25  | White plastic      | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                    | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                    | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                    | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                    | Bromine(Br)  | N.D.   | 350   | Pass     |
| 26  | Silver lead        | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                    | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                    | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                    | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                    | Bromine(Br)  | N.D.   | 350   | --       |
| 27  | Black plastic      | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                    | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                    | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                    | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                    | Bromine(Br)  | N.D.   | 350   | Pass     |



# Test Report

Report No.:

UNI2017122603RR-01

Date: 2017/12/26

Page 7/ 8

| No. | Sample Description      | Test item    | Result | Limit | Judgment |
|-----|-------------------------|--------------|--------|-------|----------|
| 28  | Black wire skin         | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                         | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                         | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                         | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                         | Bromine(Br)  | N.D.   | 350   | Pass     |
| 29  | Red wire skin           | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                         | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                         | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                         | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                         | Bromine(Br)  | N.D.   | 350   | Pass     |
| 30  | White wire skin         | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                         | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                         | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                         | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                         | Bromine(Br)  | N.D.   | 350   | Pass     |
| 31  | Copper core             | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                         | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                         | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                         | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                         | Bromine(Br)  | N.D.   | 350   | --       |
| 32  | Silver metal (mic-usb)  | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                         | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                         | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                         | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                         | Bromine(Br)  | N.D.   | 350   | --       |
| 33  | Black plastic (mic-usb) | Lead(Pb)     | N.D.   | 1000  | Pass     |
|     |                         | Cadmium(Cd)  | N.D.   | 100   | Pass     |
|     |                         | Mercury(Hg)  | N.D.   | 1000  | Pass     |
|     |                         | Chromium(Cr) | N.D.   | 1000  | Pass     |
|     |                         | Bromine(Br)  | N.D.   | 350   | Pass     |

# Test Report

Report No.:

UNI2017122603RR-01

Date: 2017/12/26

Page 8/ 8

## Estimated detection limits in mg/kg for regulated elements in various material

| Element      | Polymer Material | Metallic Material | Composite Material |
|--------------|------------------|-------------------|--------------------|
| Lead(Pb)     | 300              | 300               | 300                |
| Cadmium(Cd)  | 30               | 30                | 30                 |
| Mercury(Hg)  | 300              | 300               | 300                |
| Chromium(Cr) | 300              | 300               | 300                |
| Bromine(Br)  | 300              | Not applicable    | 300                |

### Note:

1. P = Pass
2. F = Fail
3. "--" = Not applicable

### Sample photo:



\*\*\* End of Report \*\*\*