

FCC CERTIFICATION
On Behalf of
Guangdong Zhaoqing L&V Co., Ltd.

Helios Charging Disc
Model No.: LVWLC104111

FCC ID: RYV-520

Prepared for : Guangdong Zhaoqing L&V Co., Ltd.
Address : 21 Yingbing Road, Zhaoqing Hi-Tech, Guangdong, China

Prepared by : ACCURATE TECHNOLOGY CO. LTD
Address : F1, Bldg. A, Changyuan New Material Port, Keyuan Rd.
Science & Industry Park, Nanshan, Shenzhen, Guangdong
P.R. China

Tel: (0755) 26503290
Fax: (0755) 26503396

Report Number : ATE20130121
Date of Test : January 22-31, 2013
Date of Report : February 2, 2013

TABLE OF CONTENTS

| Description | Page |
|---|-----------|
| Test Report Certification | |
| 1. GENERAL INFORMATION | 4 |
| 1.1. Description of Device (EUT)..... | 4 |
| 1.2. Special Accessory and Auxiliary Equipment | 4 |
| 1.3. Description of Test Facility | 5 |
| 1.4. Measurement Uncertainty..... | 5 |
| 2. MEASURING DEVICE AND TEST EQUIPMENT | 6 |
| 3. SUMMARY OF TEST RESULTS..... | 7 |
| 4. RADIATED EMISSION FOR FCC PART 15 SECTION 15.209 | 8 |
| 4.1. Block Diagram of Test Setup..... | 8 |
| 4.2. The Field Strength of Radiation Emission Measurement Limits..... | 9 |
| 4.3. Configuration of EUT on Measurement | 9 |
| 4.4. Operating Condition of EUT | 9 |
| 4.5. Test Procedure | 10 |
| 4.6. The Field Strength of Radiation Emission Measurement Results | 11 |
| 5. AC POWER LINE CONDUCTED EMISSION FOR FCC PART 15 SECTION 15.207(A) .. | 30 |
| 5.1. Block Diagram of Test Setup..... | 30 |
| 5.2. The Emission Limit | 30 |
| 5.3. Configuration of EUT on Measurement | 31 |
| 5.4. Operating Condition of EUT | 31 |
| 5.5. Test Procedure | 31 |
| 5.6. Power Line Conducted Emission Measurement Results | 32 |
| 6. ANTENNA REQUIREMENT..... | 35 |
| 6.1. The Requirement | 35 |
| 6.2. Antenna Construction | 35 |

Test Report Certification

Applicant : Guangdong Zhaoqing L&V Co., Ltd.
 Manufacturer : Guangdong Zhaoqing L&V Co., Ltd.
 EUT Description : Helios Charging Disc
 (A) MODEL NO.: LVWLC104111
 (B) SERIAL NO.: N/A
 (C) POWER SUPPLY: DC 19V/0.52A (Power by adapter)

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.209 ANSI C63.4: 2009

The device described above is tested by ACCURATE TECHNOLOGY CO. LTD to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section 15.209 limits. The measurement results are contained in this test report and ACCURATE TECHNOLOGY CO. LTD is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of ACCURATE TECHNOLOGY CO. LTD.

Date of Test : January 22-31, 2013

Prepared by : Apple Lv
 (Engineer)

Approved & Authorized Signer : 
 (Manager)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

| | | |
|-------------------------|---|---|
| EUT | : | Helios Charging Disc |
| Model Number | : | LVWLC104111 |
| Power Supply | : | DC 19V/0.52A (Power by adapter) |
| Adapter | : | M/N: PS12K1900520UE Input: AC 100-240V; 50/60Hz 0.35A Output: DC 19V/520mA Output line: Non-shielded, Non-detachable, 1.8m with a ferrite core |
| Operation Frequency | : | 137.2-158.0KHz |
| Applicant | : | Guangdong Zhaoqing L&V Co., Ltd. |
| Address | : | 21 Yingbing Road, Zhaoqing Hi-Tech, Guangdong, China |
| Manufacturer | : | Guangdong Zhaoqing L&V Co., Ltd. |
| Address | : | 21 Yingbing Road, Zhaoqing Hi-Tech, Guangdong, China |
| Date of sample received | : | January 22, 2013 |
| Date of Test | : | January 22-31, 2013 |

1.2. Special Accessory and Auxiliary Equipment

n.a.

1.3. Description of Test Facility

| | | |
|---------------|---|---|
| EMC Lab | : | Accredited by TUV Rheinland Shenzhen |
| | | Listed by FCC |
| | | The Registration Number is 752051 |
| | | Listed by Industry Canada |
| | | The Registration Number is 5077A-2 |
| | | Accredited by China National Accreditation Committee for Laboratories |
| | | The Certificate Registration Number is L3193 |
| Name of Firm | : | ACCURATE TECHNOLOGY CO. LTD |
| Site Location | : | F1, Bldg. A, Changyuan New Material Port, Keyuan Rd. Science & Industry Park, Nanshan, Shenzhen, Guangdong P.R. China |

1.4. Measurement Uncertainty

| | | |
|---|---|-------------|
| Conducted Emission Expanded Uncertainty | = | 2.23dB, k=2 |
| Radiated emission expanded uncertainty (9kHz-30MHz) | = | 3.08dB, k=2 |
| Radiated emission expanded uncertainty (30MHz-1000MHz) | = | 4.42dB, k=2 |
| Radiated emission expanded uncertainty (Above 1GHz) | = | 4.06dB, k=2 |

2. MEASURING DEVICE AND TEST EQUIPMENT

Table 1: List of Test and Measurement Equipment

| Kind of equipment | Manufacturer | Type | S/N | Calibrated date | Calibrated until |
|-------------------|---------------|--------------------|------------|-----------------|------------------|
| EMI Test Receiver | Rohde&Schwarz | ESCS30 | 100307 | Jan. 12, 2013 | Jan. 11, 2014 |
| EMI Test Receiver | Rohde&Schwarz | ESPI3 | 101526/003 | Jan. 12, 2013 | Jan. 11, 2014 |
| Spectrum Analyzer | Agilent | E7405A | MY45115511 | Jan. 12, 2013 | Jan. 11, 2014 |
| Pre-Amplifier | Rohde&Schwarz | CBLU118354 0-01 | 3791 | Jan. 12, 2013 | Jan. 11, 2014 |
| Loop Antenna | Schwarzbeck | FMZB1516 | 1516131 | Jan. 12, 2013 | Jan. 11, 2014 |
| Bilog Antenna | Schwarzbeck | VULB9163 | 9163-323 | Jan. 12, 2013 | Jan. 11, 2014 |
| Horn Antenna | Schwarzbeck | BBHA9120D | 9120D-655 | Jan. 12, 2013 | Jan. 11, 2014 |
| Horn Antenna | Schwarzbeck | BBHA9170 | 9170-359 | Jan. 12, 2013 | Jan. 11, 2014 |
| LISN | Rohde&Schwarz | ESH3-Z5 | 100305 | Jan. 12, 2013 | Jan. 11, 2014 |
| LISN | Schwarzbeck | NSLK8126 | 8126431 | Jan. 12, 2013 | Jan. 11, 2014 |

3. SUMMARY OF TEST RESULTS

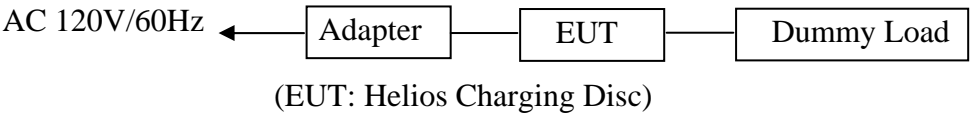
| FCC Rules | Description of Test | Result |
|----------------|---------------------|-----------|
| Section 15.207 | Conducted Emission | Compliant |
| Section 15.209 | Radiated Emission | Compliant |
| Section 15.203 | Antenna Requirement | Compliant |

Remark: “N/A” means “Not applicable”.

4. RADIATED EMISSION FOR FCC PART 15 SECTION 15.209

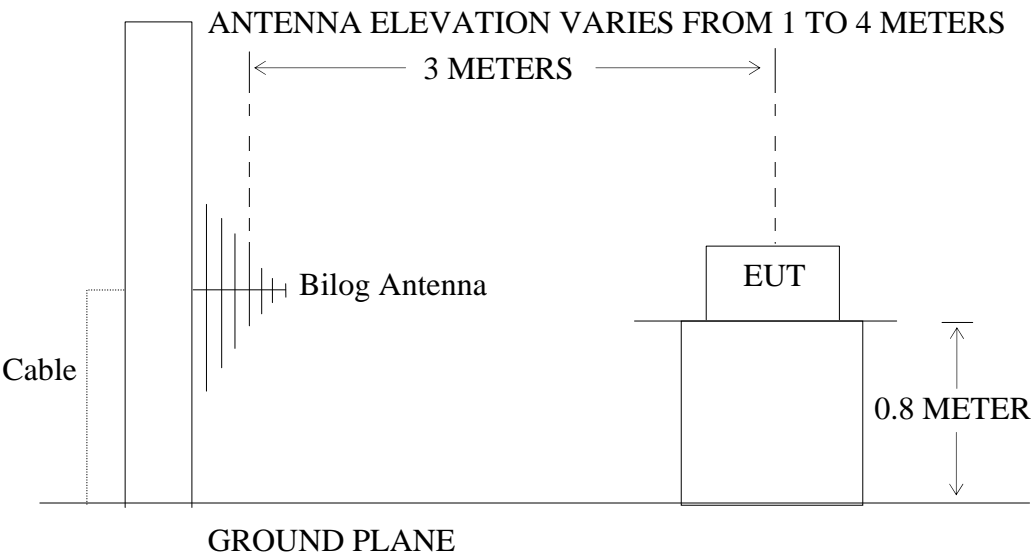
4.1. Block Diagram of Test Setup

4.1.1. Block diagram of connection between the EUT and simulators

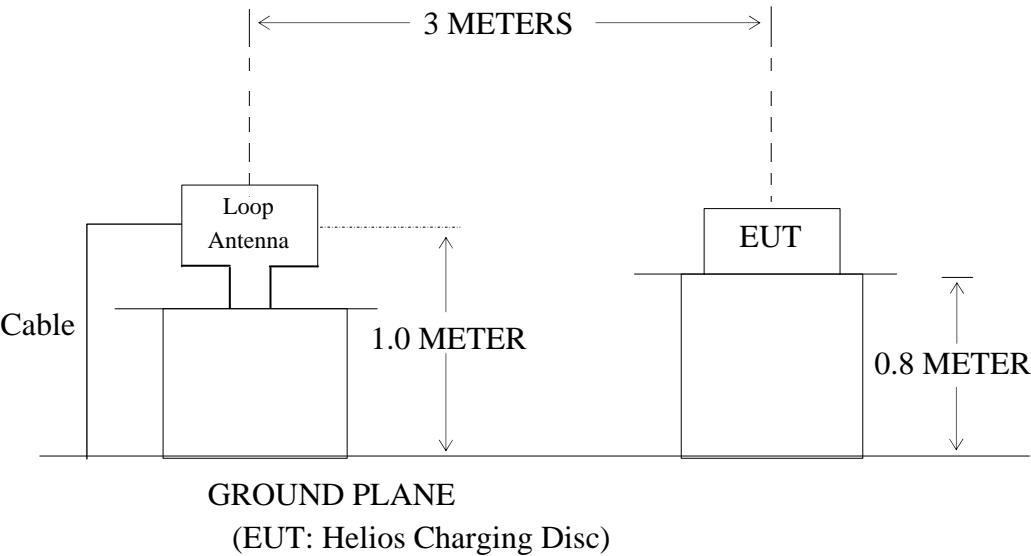


4.1.2. Semi-Anechoic Chamber Test Setup Diagram

4.1.2.1. Above 30MHz



4.1.2.2. Below 30MHz



4.2.The Field Strength of Radiation Emission Measurement Limits

| Frequency (MHz) | Field Strength (microvolts/meter) | Measurement Distance (meters) |
|--------------------|--------------------------------------|----------------------------------|
| 0.009 - 0.490 | 2400/F(kHz) | 300 |
| 0.490 - 1.705 | 24000/F(kHz) | 30 |
| 1.705 - 30.0 | 30 | 30 |
| 30 - 88 | 100 ** | 3 |
| 88 - 216 | 150 ** | 3 |
| 216 - 960 | 200 ** | 3 |
| Above 960 | 500 | 3 |

4.3.Configuration of EUT on Measurement

The following equipment are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

4.3.1. Helios Charging Disc (EUT)

Model Number : LVWLC104111
 Serial Number : N/A
 Manufacturer : Guangdong Zhaoqing L&V Co., Ltd.

4.4.Operating Condition of EUT

4.4.1.Setup the EUT and simulator as shown as Section 4.1.

4.4.2.Turn on the power of all equipment.

4.4.3.Let the EUT work in TX modes and measure it. The transmit frequency are 137.2 KHz-158.0 KHz. We select 137.2KHz, 140.6KHz, 158.0KHz TX frequency to transmit.

4.5. Test Procedure

4.5.1. Above 30MHz: The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C 63.4: 2009 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

The bandwidth of test receiver is set at 120kHz in 30-1000MHz.

The frequency range from 30MHz to 1000MHz is checked.

4.5.2. Below 30MHz: The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. calibrated Loop antenna is used as receiving antenna. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C 63.4: 2009 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

The bandwidth of test receiver is set at 9kHz in 9kHz-30MHz.

The frequency range from 9kHz to 30MHz is checked.

The final measurement in band 9-90kHz, 110-490kHz and above 1000MHz is performed with Average detector. Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.

4.6. The Field Strength of Radiation Emission Measurement Results

PASS.

| | | | |
|---------------|----------------------|----------------|------|
| Date of Test: | January 28, 2013 | Temperature: | 25°C |
| EUT: | Helios Charging Disc | Humidity: | 50% |
| Model No.: | LVWLC104111 | Test Engineer: | Pei |
| Test Mode: | TX | | |

Fundamental Radiated Emissions

| | |
|---|-------------|
| Fundamental Frequency | 137.2KHz |
| Final Result | 66.52dBuV/m |
| Limit | 104.8dBuV/m |
| Note: Measurement was performed with modulated signal with peak detector. | |

| | |
|---|-------------|
| Fundamental Frequency | 140.6KHz |
| Final Result | 64.86dBuV/m |
| Limit | 104.6dBuV/m |
| Note: Measurement was performed with modulated signal with peak detector. | |

| | |
|---|-------------|
| Fundamental Frequency | 158.0KHz |
| Final Result | 58.92dBuV/m |
| Limit | 103.6dBuV/m |
| Note: Measurement was performed with modulated signal with peak detector. | |

Note: $3m \text{ limit} = 300m \text{ limit}(20\log 2400/F(\text{KHz})) (\text{dBuV/m}) + 40\log(300/3) (\text{dBuV/m})$

Example: Fundamental Frequency is 137.2KHz

$$3m \text{ limit}(137.2 \text{ kHz}) = 20\log 2400/137.2(\text{KHz}) ((\text{dBuV/m})) + 40\log(300/3) (\text{dBuV/m}) \\ = 104.8(\text{dBuV/m})$$

Radiated Emissions

| | | | |
|---------------|----------------------|----------------|------|
| Date of Test: | January 28, 2013 | Temperature: | 25°C |
| EUT: | Helios Charging Disc | Humidity: | 50% |
| Model No.: | LVWLC104111 | Test Engineer: | Pei |
| Test Mode: | TX (Low 137.2KHz) | | |

Below 30MHz:

| Polarization | Frequency (MHz) | Reading(dBμV/m) PK/AV | Factor Corr.(dB) | Result(dBμV/m) PK/AV | Limits(dBμV/m) PK/AV | Margin(dBμV/m) PK/AV |
|--------------|-----------------|--------------------------|----------------------|-------------------------|-------------------------|-------------------------|
| Horizontal | - | - | - | - | - | - |
| Vertical | - | - | - | - | - | - |

For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

| Frequency (MHz) | Reading (dBμV/m) | Factor Corr. (dB) | Result (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
|-----------------|------------------|-------------------|-----------------|----------------|-------------|--------------|
| | QP | | QP | QP | QP | |
| 33.2112 | 42.23 | -9.12 | 33.11 | 40.00 | -6.89 | Vertical |
| 37.1550 | 42.22 | -8.45 | 33.77 | 40.00 | -6.23 | Vertical |
| 71.3300 | 48.71 | -13.82 | 34.89 | 40.00 | -5.11 | Vertical |
| 39.0245 | 32.08 | -11.61 | 20.47 | 40.00 | -19.53 | Horizontal |
| 71.0803 | 36.95 | -12.91 | 24.04 | 40.00 | -15.96 | Horizontal |
| 284.9767 | 35.14 | -9.74 | 25.40 | 46.00 | -20.60 | Horizontal |

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain
3. The spectral diagrams in appendix I display the measurement of peak values.

Radiated Emissions

| | | | |
|---------------|----------------------|----------------|------|
| Date of Test: | January 28, 2013 | Temperature: | 25°C |
| EUT: | Helios Charging Disc | Humidity: | 50% |
| Model No.: | LVWLC104111 | Test Engineer: | Pei |
| Test Mode: | TX (Middle 140.6KHz) | | |

Below 30MHz:

| Polarization | Frequency (MHz) | Reading(dBμV/m) PK/AV | Factor Corr.(dB) | Result(dBμV/m) PK/AV | Limits(dBμV/m) PK/AV | Margin(dBμV/m) PK/AV |
|--------------|-----------------|--------------------------|----------------------|-------------------------|-------------------------|-------------------------|
| Horizontal | - | - | - | - | - | - |
| Vertical | - | - | - | - | - | - |

For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

| Frequency (MHz) | Reading (dBμV/m) | Factor Corr. (dB) | Result (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
|-----------------|------------------|-------------------|-----------------|----------------|-------------|--------------|
| | QP | | QP | QP | QP | |
| 33.6802 | 42.32 | -9.06 | 33.26 | 40.00 | -6.74 | Vertical |
| 36.7662 | 42.42 | -8.53 | 33.89 | 40.00 | -6.11 | Vertical |
| 71.5806 | 48.85 | -13.83 | 35.02 | 40.00 | -4.98 | Vertical |
| 32.2991 | 32.32 | -11.64 | 20.68 | 40.00 | -19.32 | Horizontal |
| 69.3568 | 35.61 | -12.83 | 22.78 | 40.00 | -17.22 | Horizontal |
| 277.0935 | 35.93 | -10.00 | 25.93 | 46.00 | -20.07 | Horizontal |

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$

3. The spectral diagrams in appendix I display the measurement of peak values.

Radiated Emissions

| | | | |
|---------------|----------------------|----------------|------|
| Date of Test: | January 28, 2013 | Temperature: | 25°C |
| EUT: | Helios Charging Disc | Humidity: | 50% |
| Model No.: | LVWLC104111 | Test Engineer: | Pei |
| Test Mode: | TX(High 158.0KHz) | | |

Below 30MHz:

| Polarization | Frequency (MHz) | Reading(dBμV/m) PK/AV | Factor Corr.(dB) | Result(dBμV/m) PK/AV | Limits(dBμV/m) PK/AV | Margin(dBμV/m) PK/AV |
|--------------|-----------------|--------------------------|----------------------|-------------------------|-------------------------|-------------------------|
| Horizontal | - | - | - | - | - | - |
| Vertical | - | - | - | - | - | - |

For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

| Frequency (MHz) | Reading (dBμV/m) | Factor Corr. (dB) | Result (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
|-----------------|------------------|-------------------|-----------------|----------------|-------------|--------------|
| | QP | | QP | QP | QP | |
| 33.2112 | 43.24 | -9.12 | 34.12 | 40.00 | -5.88 | Vertical |
| 37.0248 | 42.32 | -8.48 | 33.84 | 40.00 | -6.16 | Vertical |
| 71.5806 | 48.52 | -13.83 | 34.69 | 40.00 | -5.31 | Vertical |
| 72.8466 | 40.05 | -13.00 | 27.05 | 40.00 | -12.95 | Horizontal |
| 139.3613 | 40.16 | -15.93 | 24.23 | 43.50 | -19.27 | Horizontal |
| 252.9482 | 41.06 | -11.07 | 29.99 | 46.00 | -16.01 | Horizontal |

Note:

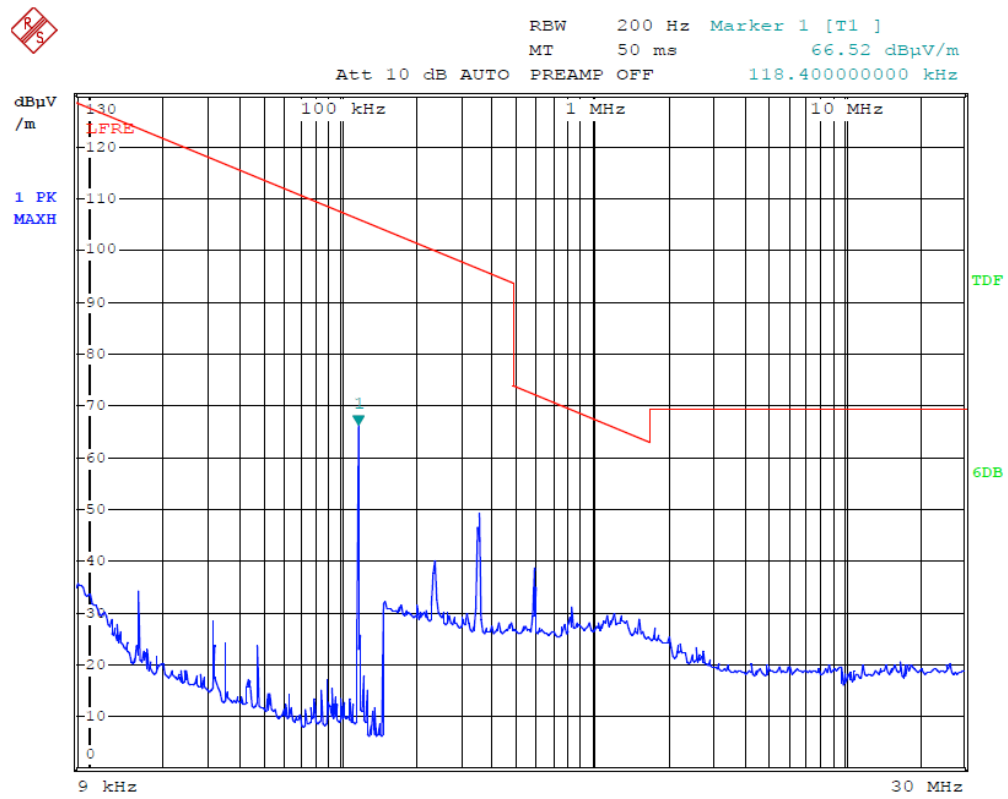
1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

$$\text{Where Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$

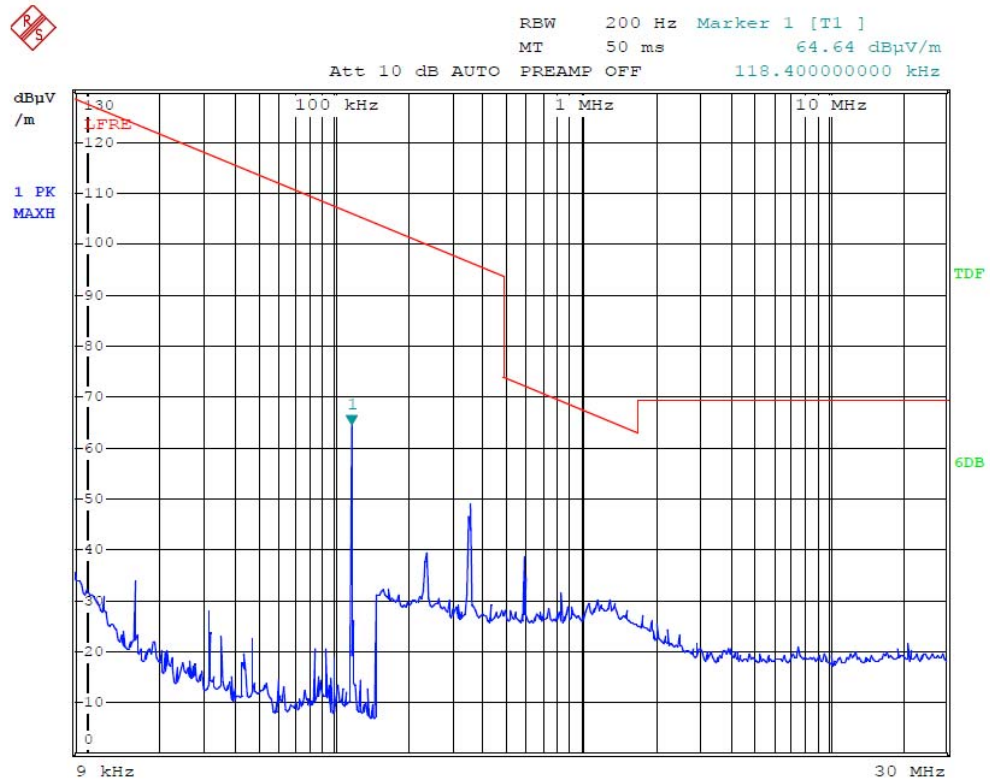
3. The spectral diagrams in appendix I display the measurement of peak values.

X Axis



Manuf:L&V M/N:LVWLC104111 Mode:TX Low Power:120V/60Hz
X
Date: 30.JAN.2013 11:58:44

Y Axis

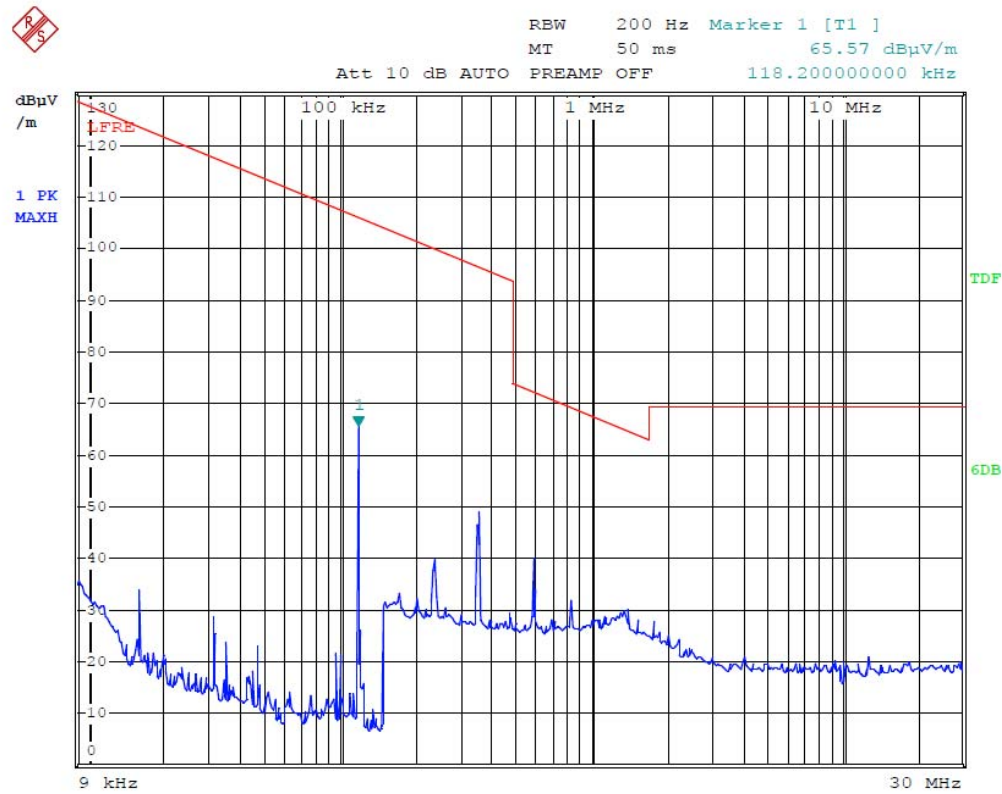


Manuf:L&V M/N:LVWLC104111 Mode:TX Low Power:120V/60Hz

Y

Date: 30.JAN.2013 12:01:10

Z Axis



Manuf:L&V M/N:LVWLC104111 Mode:TX Low Power:120V/60Hz

Z

Date: 30.JAN.2013 12:03:04



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: Bob #186

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 26 C / 60 %

EUT: Helios Charging Disc

Mode: TX Low

Model: LVWLC104111

Manufacturer: L&V

Polarization: Horizontal

Power Source: AC 120V/60Hz

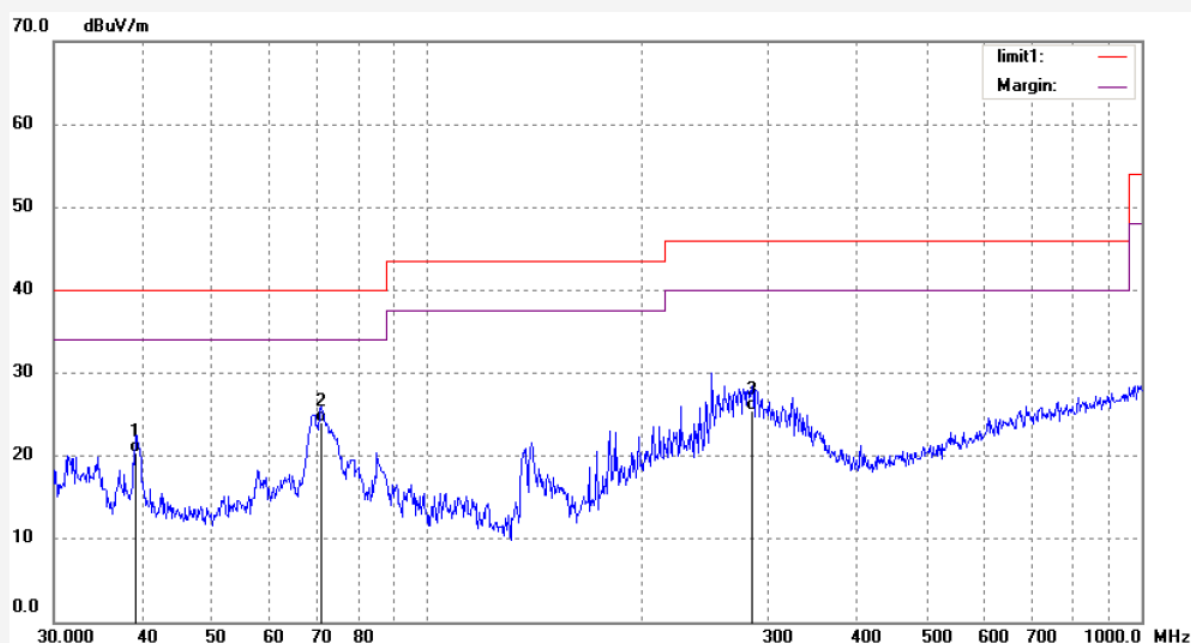
Date: 2013/01/26

Time: 16:33:30

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20130121



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1 | 39.0245 | 32.08 | -11.61 | 20.47 | 40.00 | -19.53 | QP | | | |
| 2 | 71.0803 | 36.95 | -12.91 | 24.04 | 40.00 | -15.96 | QP | | | |
| 3 | 284.9767 | 35.14 | -9.74 | 25.40 | 46.00 | -20.60 | QP | | | |


ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: Bob #187

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 26 C / 60 %

EUT: Helios Charging Disc

Mode: TX Low

Model: LVWLC104111

Manufacturer: L&V

Polarization: Vertical

Power Source: AC 120V/60Hz

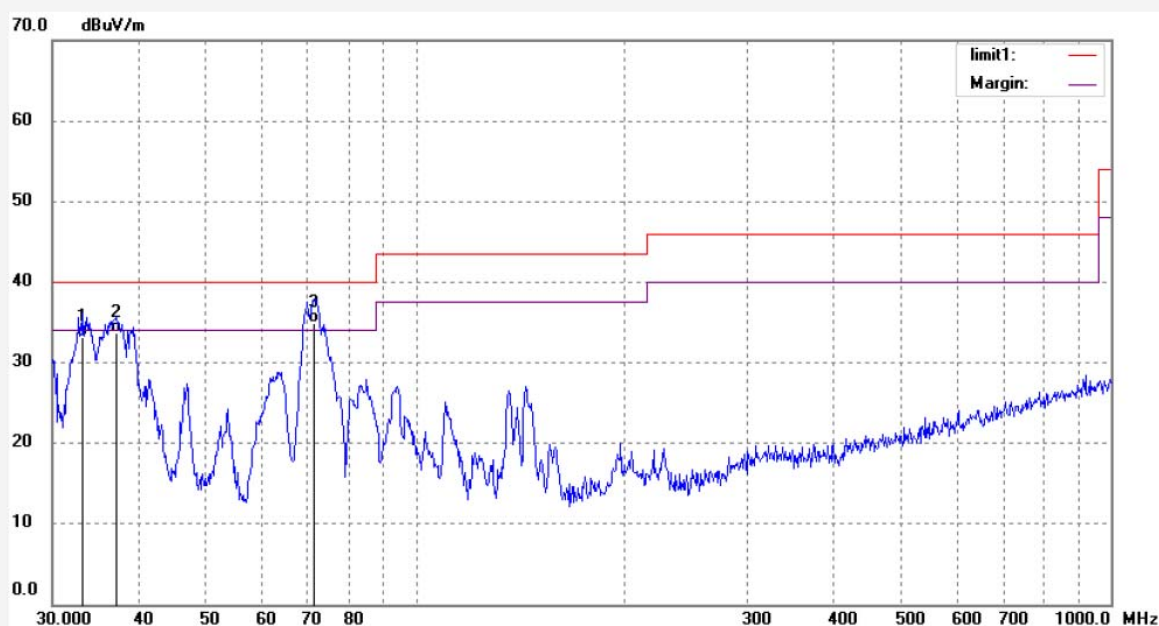
Date: 2013/01/26

Time: 16:36:12

Engineer Signature:

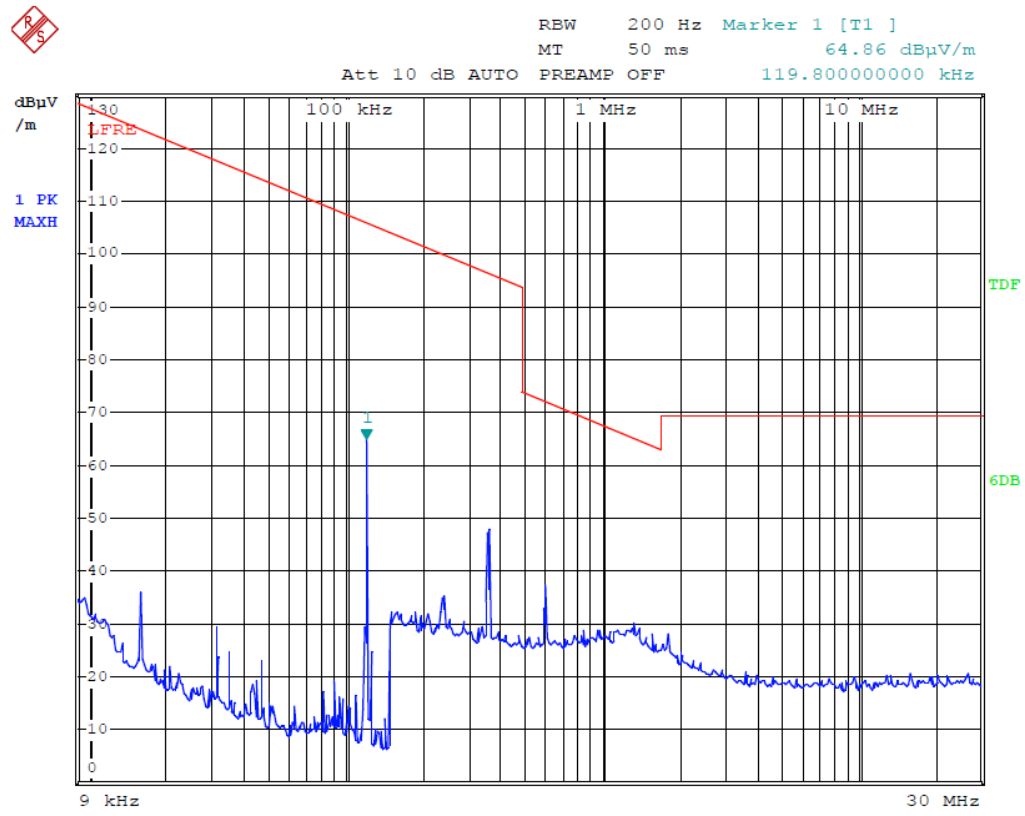
Distance: 3m

Note: Report NO.: ATE20130121



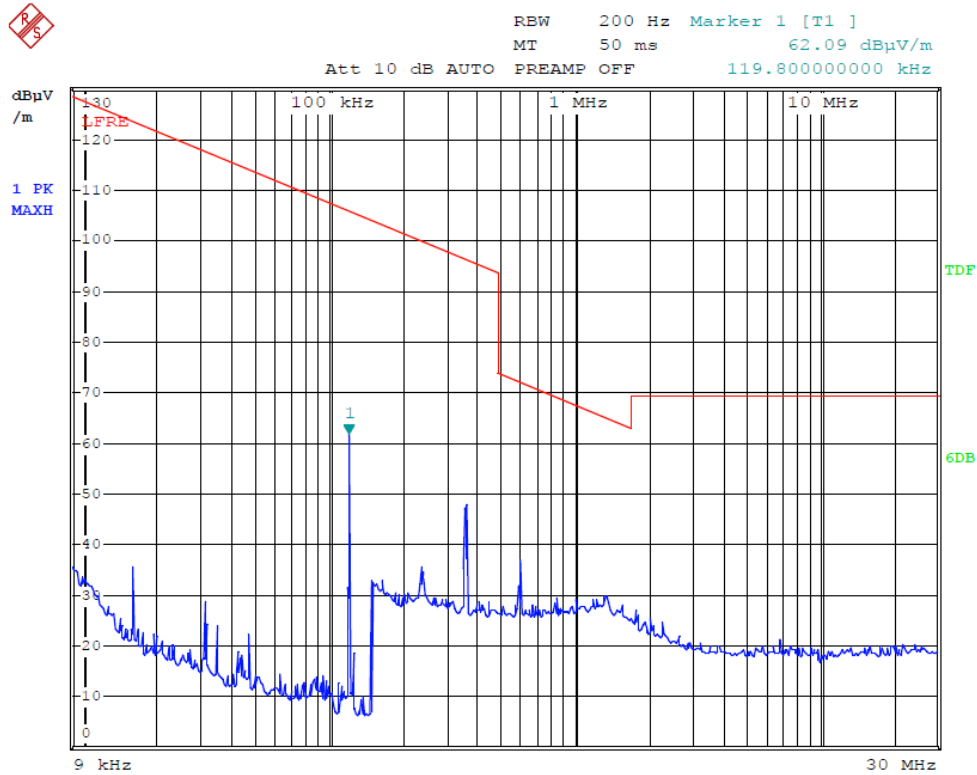
| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1 | 33.2112 | 42.23 | -9.12 | 33.11 | 40.00 | -6.89 | QP | | | |
| 2 | 37.1550 | 42.22 | -8.45 | 33.77 | 40.00 | -6.23 | QP | | | |
| 3 | 71.3300 | 48.71 | -13.82 | 34.89 | 40.00 | -5.11 | QP | | | |

X Axis



Manuf:L&V M/N:LVWLC104111 Mode:TX Mid Power:120V/60Hz
X
Date: 30.JAN.2013 12:06:12

Y Axis

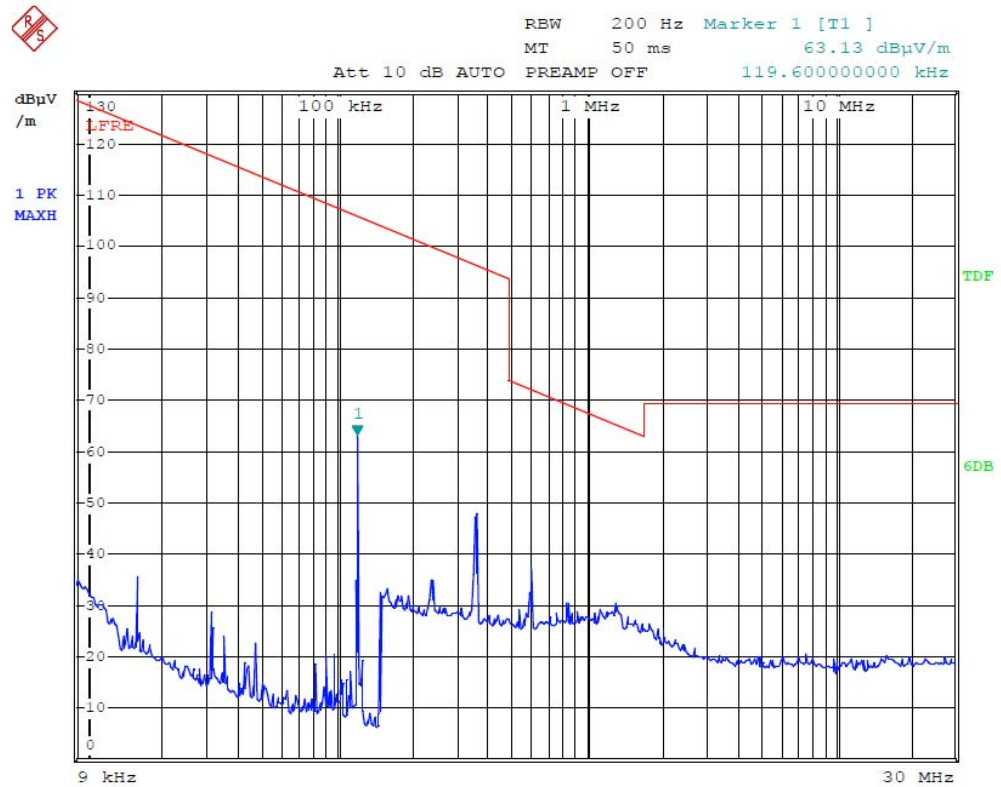


Manuf:L&V M/N:LVWLC104111 Mode:TX Mid Power:120V/60Hz

Y

Date: 30.JAN.2013 12:08:49

Z Axis



Manuf:L&V M/N:LVWLC104111 Mode:TX Mid Power:120V/60Hz

Z

Date: 30.JAN.2013 12:11:35



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: Bob #185

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 26 C / 60 %

EUT: Helios Charging Disc

Mode: TX Mid

Model: LVWLC104111

Manufacturer: L&V

Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2013/01/26

Time: 16:30:37

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20130121



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1 | 39.2991 | 32.32 | -11.64 | 20.68 | 40.00 | -19.32 | QP | | | |
| 2 | 69.3568 | 35.61 | -12.83 | 22.78 | 40.00 | -17.22 | QP | | | |
| 3 | 277.0935 | 35.93 | -10.00 | 25.93 | 46.00 | -20.07 | QP | | | |


ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: Bob #184

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 26 C / 60 %

EUT: Helios Charging Disc

Mode: TX Mid

Model: LVWLC104111

Manufacturer: L&V

Polarization: Vertical

Power Source: AC 120V/60Hz

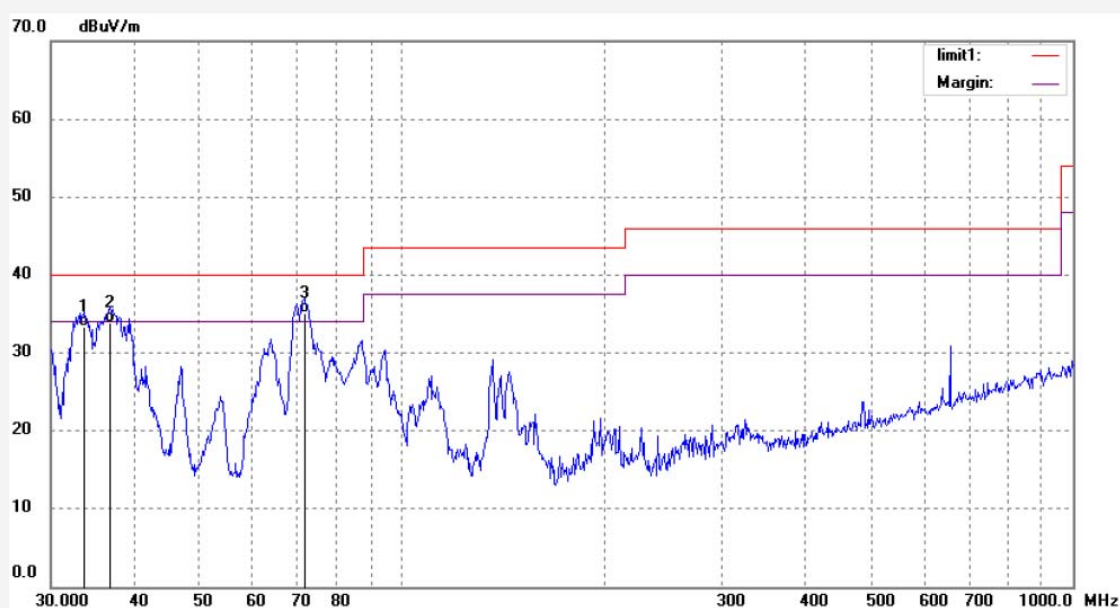
Date: 2013/01/26

Time: 16:28:42

Engineer Signature:

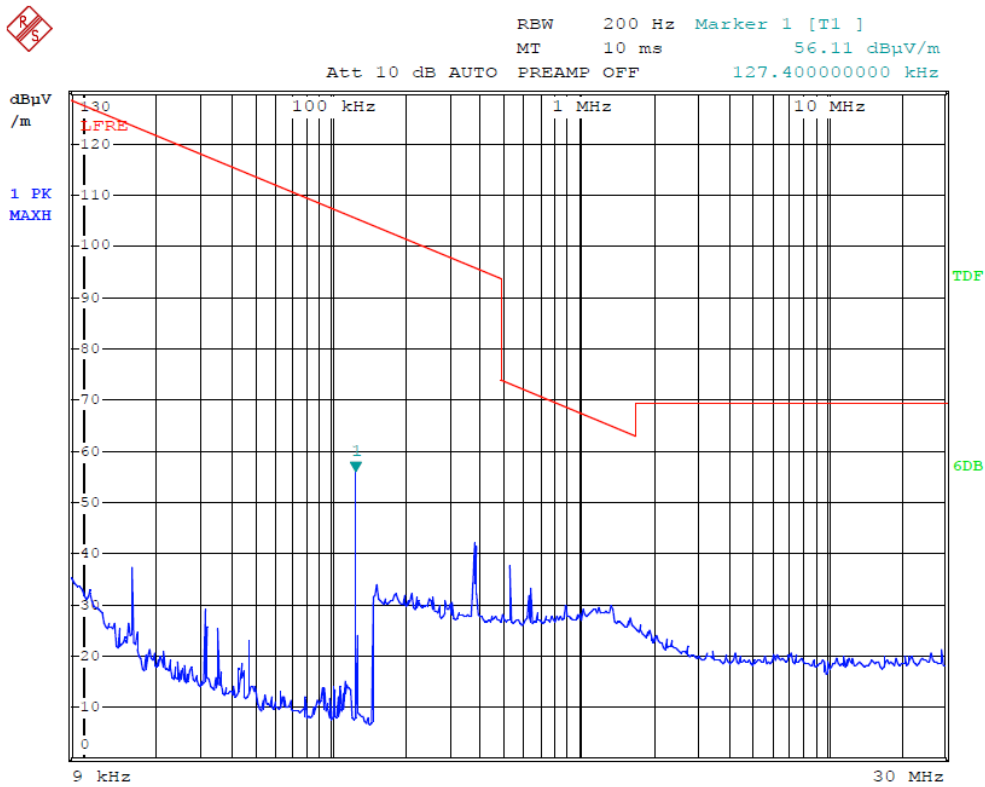
Distance: 3m

Note: Report NO.:ATE20130121



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1 | 33.6802 | 42.32 | -9.06 | 33.26 | 40.00 | -6.74 | QP | | | |
| 2 | 36.7662 | 42.42 | -8.53 | 33.89 | 40.00 | -6.11 | QP | | | |
| 3 | 71.5806 | 48.85 | -13.83 | 35.02 | 40.00 | -4.98 | QP | | | |

X Axis

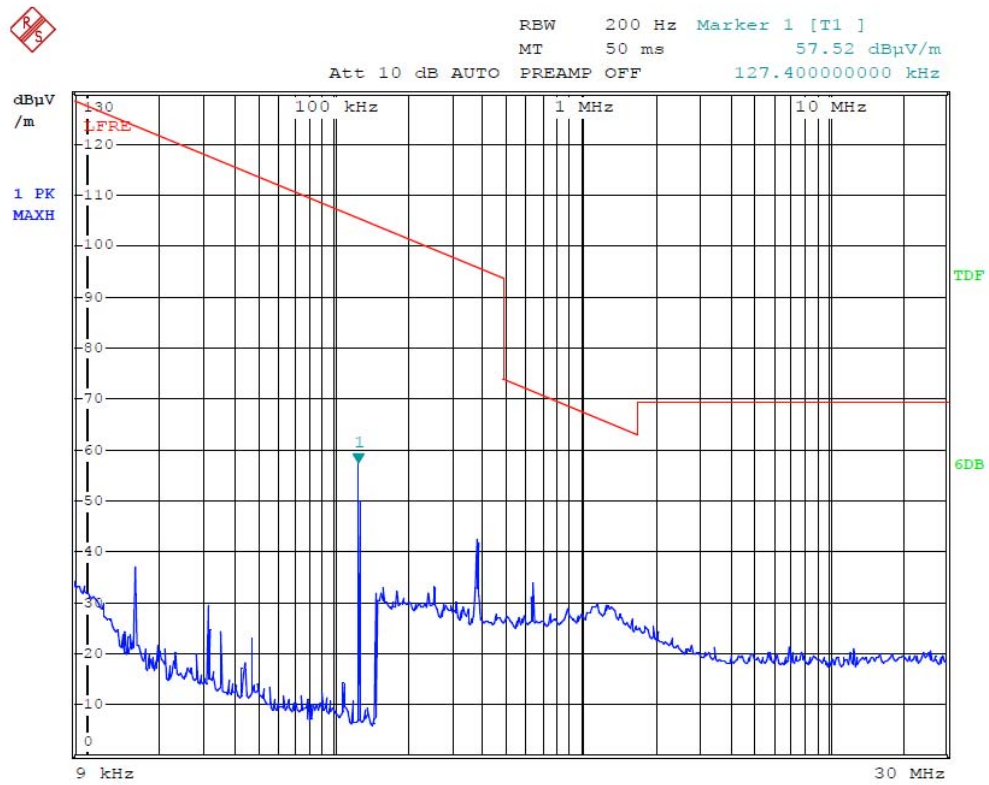


Manuf:L&V M/N:LVWLC104111 Mode:TX High Power:120V/60Hz

X

Date: 30.JAN.2013 12:15:27

Y Axis

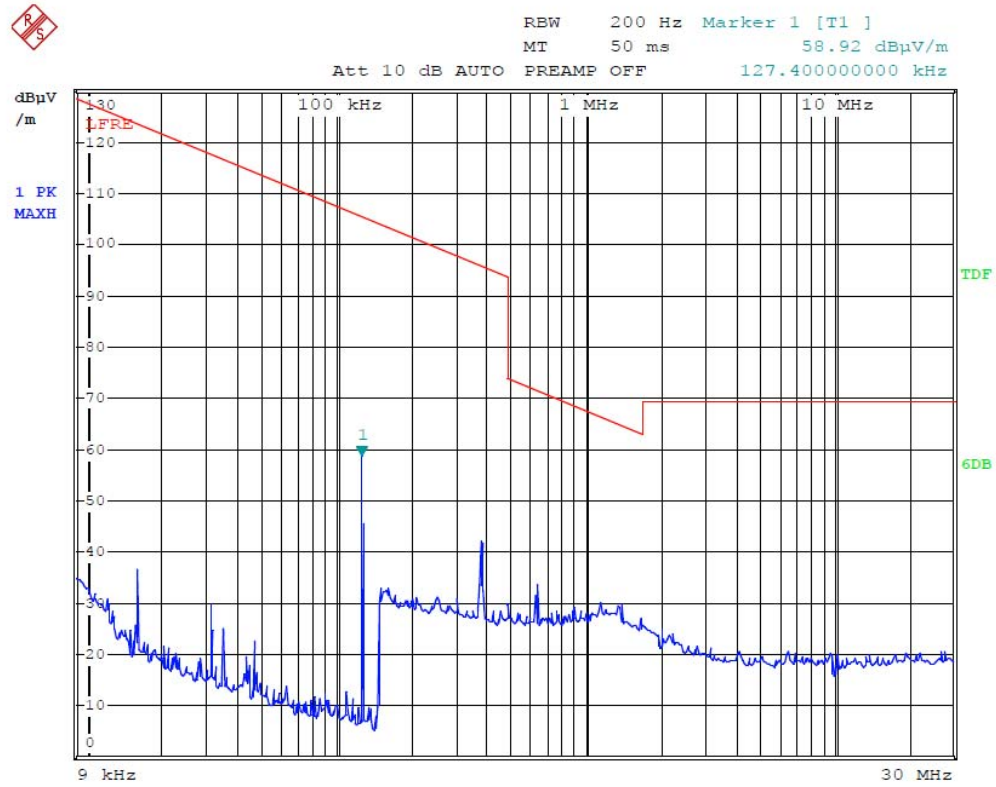


Manuf:L&V M/N:LVWLC104111 Mode:TX High Power:120V/60Hz

Y

Date: 30.JAN.2013 12:17:24

Z Axis



Manuf:L&V M/N:LVWLC104111 Mode:TX High Power:120V/60Hz

Z

Date: 30.JAN.2013 12:19:38


ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Bob #182

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 26 C / 60 %

EUT: Helios Charging Disc

Mode: TX Hight

Model: LVWLC104111

Manufacturer: L&V

Polarization: Horizontal

Power Source: AC 120V/60Hz

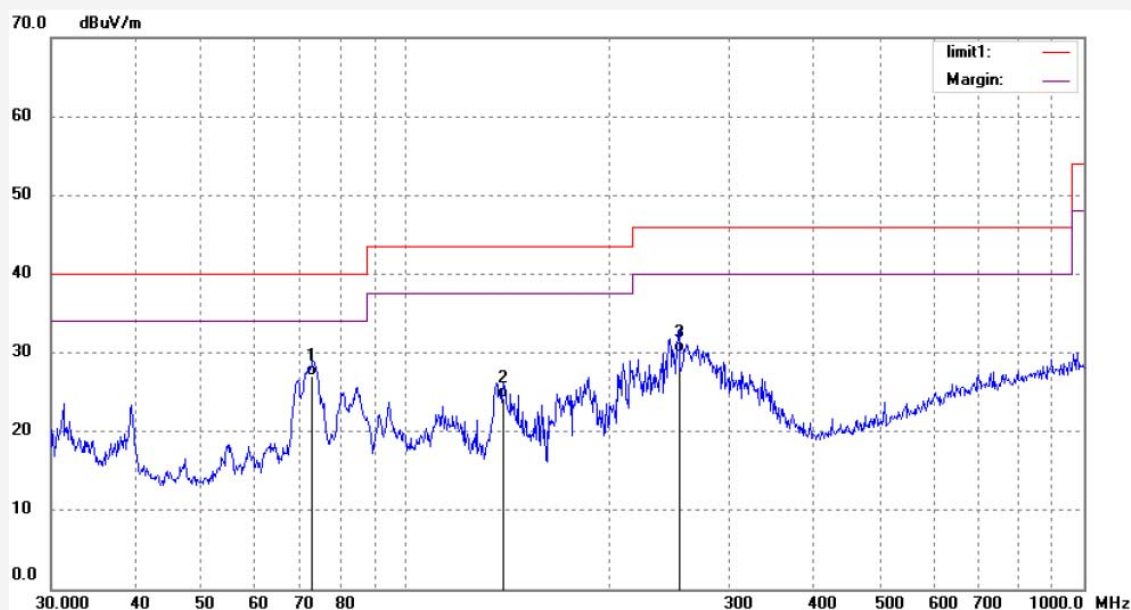
Date: 2013/01/26

Time: 16:22:27

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20130121



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1 | 72.8466 | 40.05 | -13.00 | 27.05 | 40.00 | -12.95 | QP | | | |
| 2 | 139.3613 | 40.16 | -15.93 | 24.23 | 43.50 | -19.27 | QP | | | |
| 3 | 252.9482 | 41.06 | -11.07 | 29.99 | 46.00 | -16.01 | QP | | | |


ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: Bob #183

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 26 C / 60 %

EUT: Helios Charging Disc

Mode: TX Hight

Model: LVWLC104111

Manufacturer: L&V

Polarization: Vertical

Power Source: AC 120V/60Hz

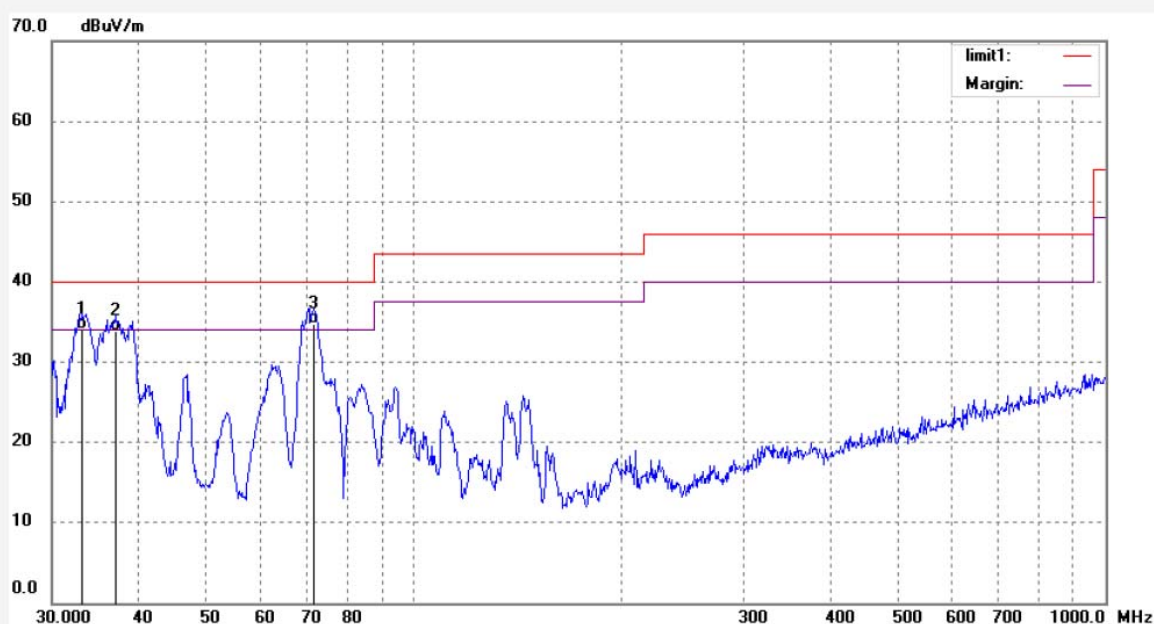
Date: 2013/01/26

Time: 16:25:16

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20130121

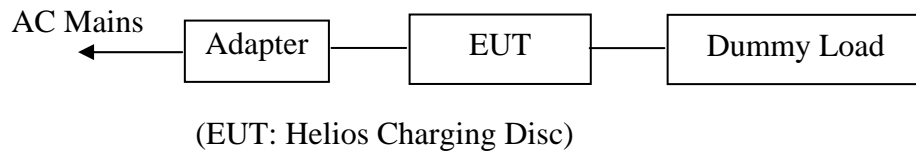


| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1 | 33.2112 | 43.24 | -9.12 | 34.12 | 40.00 | -5.88 | QP | | | |
| 2 | 37.0248 | 42.32 | -8.48 | 33.84 | 40.00 | -6.16 | QP | | | |
| 3 | 71.5806 | 48.52 | -13.83 | 34.69 | 40.00 | -5.31 | QP | | | |

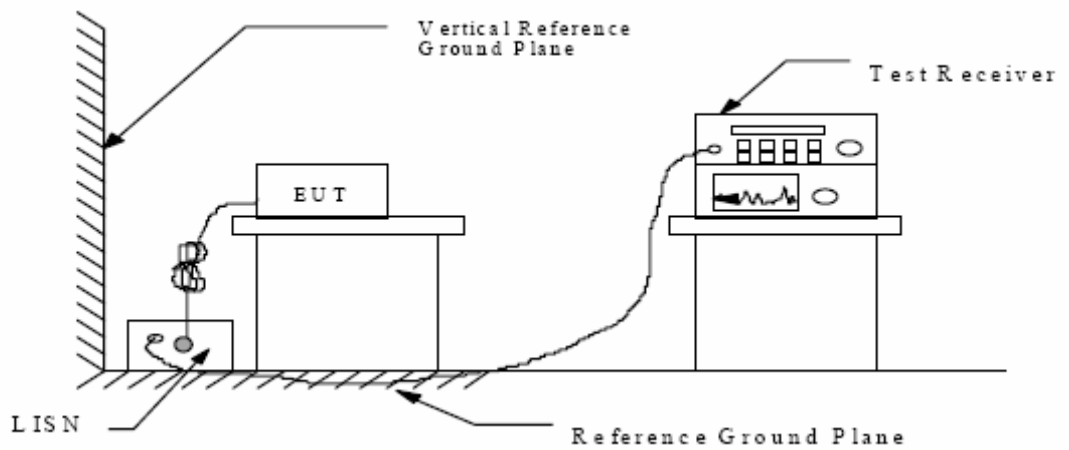
5. AC POWER LINE CONDUCTED EMISSION FOR FCC PART 15 SECTION 15.207(A)

5.1. Block Diagram of Test Setup

5.1.1. Block diagram of connection between the EUT and simulators



5.1.2. Shielding Room Test Setup Diagram



(EUT: Helios Charging Disc)

5.2. The Emission Limit

5.2.1. Conducted Emission Measurement Limits According to Section 15.207(a)

| Frequency (MHz) | Limit dB(μV) | |
|--------------------|------------------|---------------|
| | Quasi-peak Level | Average Level |
| 0.15 - 0.50 | 66.0 – 56.0 * | 56.0 – 46.0 * |
| 0.50 - 5.00 | 56.0 | 46.0 |
| 5.00 - 30.00 | 60.0 | 50.0 |

* Decreases with the logarithm of the frequency.

5.3.Configuration of EUT on Measurement

The following equipment are installed on the Conducted Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

5.3.1.Helios Charging Disc (EUT)

Model Number : LVWLC104111
Serial Number : N/A
Manufacturer : Guangdong Zhaoqing L&V Co., Ltd.

5.4.Operating Condition of EUT

5.4.1.Setup the EUT and simulator as shown as Section 5.1.

5.4.2. Let the EUT work in Tx mode measure it.

5.5.Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4: 2009 on Conducted Emission Measurement.

The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

5.6. Power Line Conducted Emission Measurement Results

PASS.

The frequency range from 150kHz to 30MHz is checked.

| | | | |
|---------------|----------------------|----------------|-------------|
| Date of Test: | January 25, 2013 | Temperature: | 25°C |
| EUT: | Helios Charging Disc | Humidity: | 50% |
| Model No.: | LVWLC104111 | Power Supply: | AC 120/60Hz |
| Test Mode: | Tx | Test Engineer: | Pei |

| Frequency (MHz) | Result (dBμV) | Limit (dBμV) | Margin (dB) | Detector | Line |
|--------------------|------------------|-----------------|----------------|----------|---------|
| 0.421816 | 47.80 | 57 | -9.6 | QP | Live |
| 0.703134 | 47.60 | 56 | -8.4 | QP | |
| 0.987197 | 47.50 | 56 | -8.5 | QP | |
| 1.264427 | 44.00 | 56 | -12.0 | QP | |
| 0.421816 | 43.90 | 47 | -3.5 | AV | |
| 0.703134 | 43.70 | 46 | -2.3 | AV | |
| 0.983264 | 41.60 | 46 | -4.4 | AV | |
| 1.264427 | 40.00 | 46 | -6.0 | AV | |
| 0.402085 | 47.10 | 58 | -10.7 | QP | Neutral |
| 0.670245 | 47.30 | 56 | -8.7 | QP | |
| 0.937272 | 47.00 | 56 | -9.0 | QP | |
| 1.205284 | 46.80 | 56 | -9.2 | QP | |
| 0.402085 | 42.60 | 48 | -5.2 | AV | |
| 0.670245 | 42.90 | 46 | -3.1 | AV | |
| 0.937272 | 42.60 | 46 | -3.4 | AV | |
| 1.205284 | 42.40 | 46 | -3.6 | AV | |

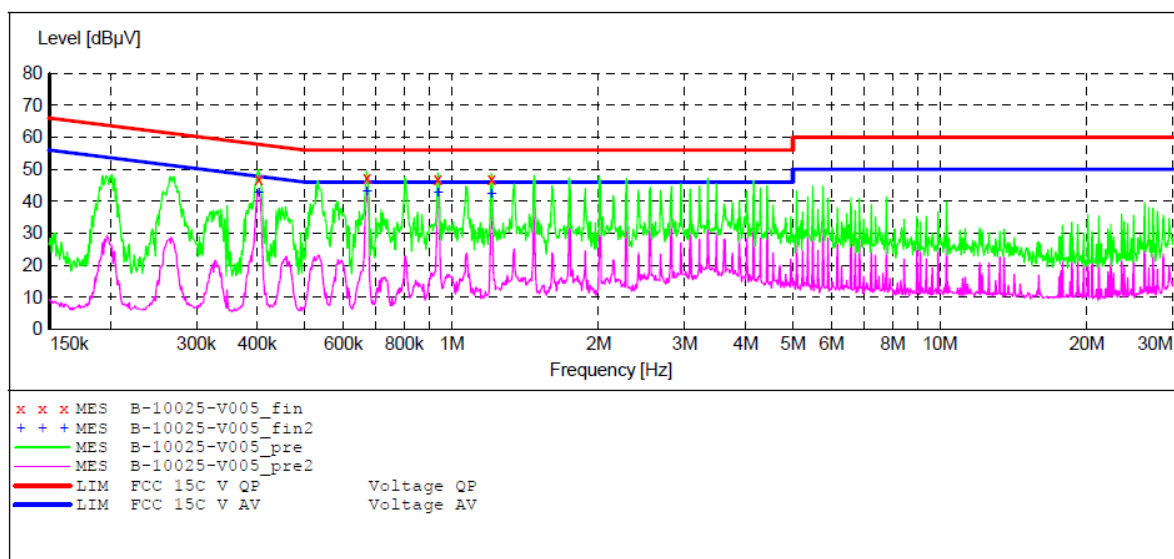
Emissions attenuated more than 20 dB below the permissible value are not reported.
The spectral diagrams are attached as below.

ACCURATE TECHNOLOGY CO., LTD**CONDUCTED EMISSION STANDARD FCC PART 15C**

EUT: Helios Charging Disc M/N:LVWLC104111
 Manufacturer: L&V
 Operating Condition: Charging
 Test Site: 1#Shielding Room
 Operator: Bob
 Test Specification: N 120V/60Hz
 Comment: Report NO.:ATE20130121
 Start of Test: 1/25/2013 / 5:42:39PM

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average

**MEASUREMENT RESULT: "B-10025-V005_fin"**

1/25/2013 5:45PM

| Frequency MHz | Level dBμV | Transd dB | Limit dBμV | Margin dB | Detector | Line | PE |
|------------------|---------------|--------------|---------------|--------------|----------|------|-----|
| 0.402085 | 47.10 | 11.2 | 58 | 10.7 | QP | N | GND |
| 0.670245 | 47.30 | 11.3 | 56 | 8.7 | QP | N | GND |
| 0.937272 | 47.00 | 11.3 | 56 | 9.0 | QP | N | GND |
| 1.205284 | 46.80 | 11.3 | 56 | 9.2 | QP | N | GND |

MEASUREMENT RESULT: "B-10025-V005_fin2"

1/25/2013 5:45PM

| Frequency MHz | Level dBμV | Transd dB | Limit dBμV | Margin dB | Detector | Line | PE |
|------------------|---------------|--------------|---------------|--------------|----------|------|-----|
| 0.402085 | 42.60 | 11.2 | 48 | 5.2 | AV | N | GND |
| 0.670245 | 42.90 | 11.3 | 46 | 3.1 | AV | N | GND |
| 0.937272 | 42.60 | 11.3 | 46 | 3.4 | AV | N | GND |
| 1.205284 | 42.40 | 11.3 | 46 | 3.6 | AV | N | GND |

ACCURATE TECHNOLOGY CO., LTD

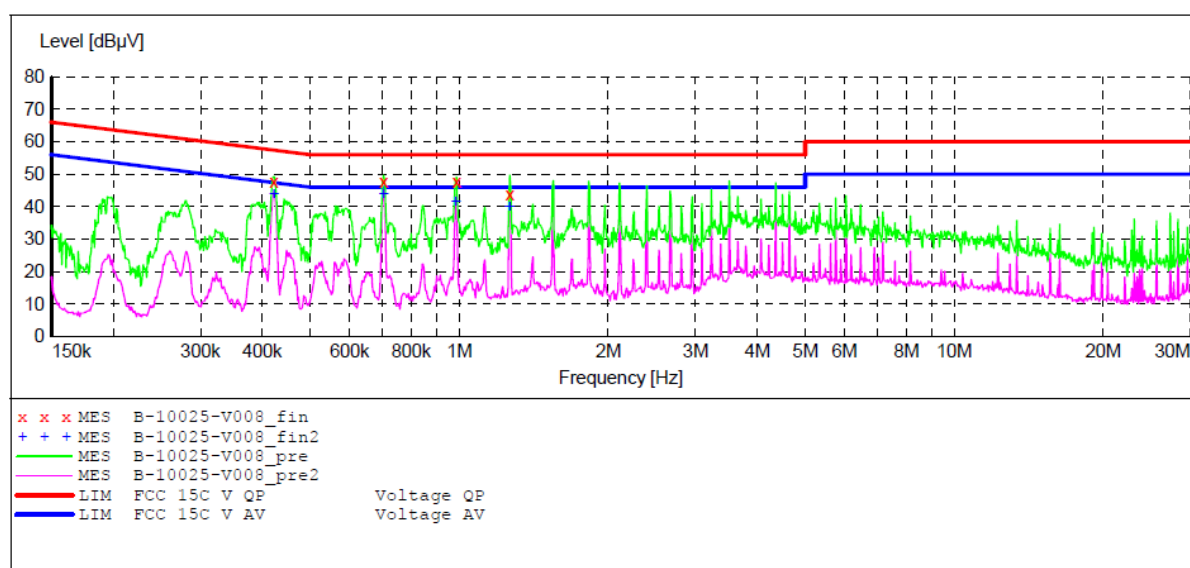
CONDUCTED EMISSION STANDARD FCC PART 15C

EUT: Helios Charging Disc M/N:LVWLC104111
 Manufacturer: L&V
 Operating Condition: Charging
 Test Site: 1#Shielding Room
 Operator: Bob
 Test Specification: L 120V/60Hz
 Comment: Report NO.:ATE20130121
 Start of Test: 1/25/2013 / 5:55:19PM

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70

| Start | Stop | Step | Detector | Meas. Time | IF Bandw. | Transducer |
|-----------|-----------|-------|-----------|------------|-----------|---------------|
| Frequency | Frequency | Width | | | | |
| 150.0 kHz | 30.0 MHz | 0.8 % | QuasiPeak | 1.0 s | 9 kHz | NSLK8126 2008 |
| Average | | | | | | |



MEASUREMENT RESULT: "B-10025-V008_fin"

1/25/2013 5:58PM

| Frequency MHz | Level dBμV | Transd dB | Limit dBμV | Margin dB | Detector | Line | PE |
|---------------|------------|-----------|------------|-----------|----------|------|-----|
| 0.421816 | 47.80 | 11.2 | 57 | 9.6 | QP | L1 | GND |
| 0.703134 | 47.60 | 11.3 | 56 | 8.4 | QP | L1 | GND |
| 0.987197 | 47.50 | 11.3 | 56 | 8.5 | QP | L1 | GND |
| 1.264427 | 44.00 | 11.3 | 56 | 12.0 | QP | L1 | GND |

MEASUREMENT RESULT: "B-10025-V008_fin2"

1/25/2013 5:58PM

| Frequency MHz | Level dBμV | Transd dB | Limit dBμV | Margin dB | Detector | Line | PE |
|---------------|------------|-----------|------------|-----------|----------|------|-----|
| 0.421816 | 43.90 | 11.2 | 47 | 3.5 | AV | L1 | GND |
| 0.703134 | 43.70 | 11.3 | 46 | 2.3 | AV | L1 | GND |
| 0.983264 | 41.60 | 11.3 | 46 | 4.4 | AV | L1 | GND |
| 1.264427 | 40.00 | 11.3 | 46 | 6.0 | AV | L1 | GND |

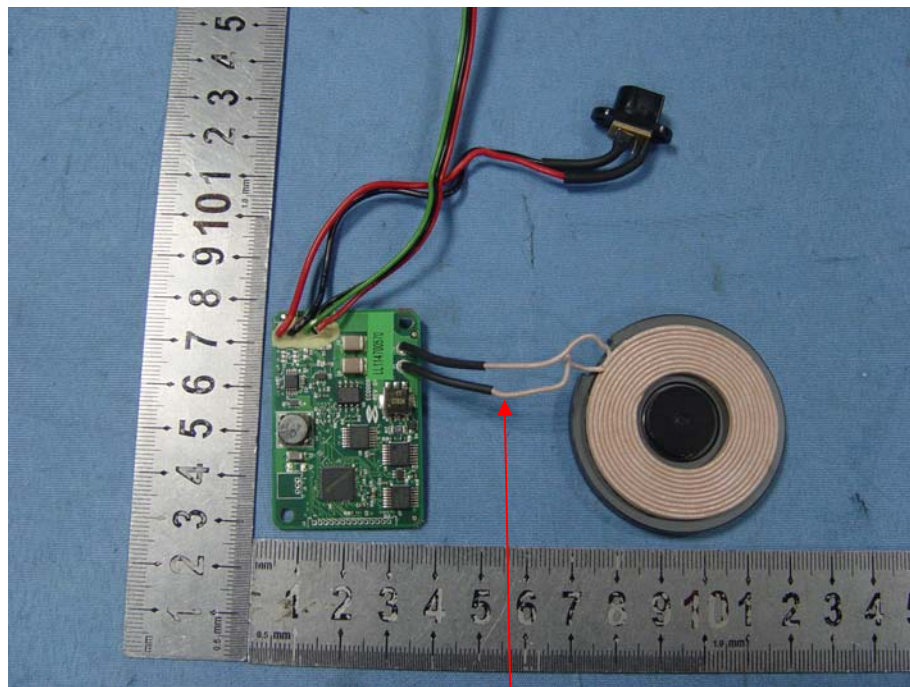
6. ANTENNA REQUIREMENT

6.1.The Requirement

According to Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

6.2.Antenna Construction

Device is equipped with unique antenna, which isn't displaced by other antenna. Therefore, the equipment complies with the antenna requirement of Section 15.203.



Antenna