

# Test Report of FCC CFR 47 Part 15 Subpart B

On Behalf of

## Shenzhen Deyu Baina Technology Co., Ltd.

**FCC ID:** 2AAD9IP013A  
**Product Description:** Smart Bear Kid's PAD  
**Model No.:** IP013A  
**Supplementary Model:** N/A  
**Brand Name:** SMaRT Bear

**Prepared for:** Shenzhen Deyu Baina Technology Co., Ltd.  
4th FL,Building J,WeiKangDe Industrial Park, ShangXue Area,  
JiHua RD, BanTian, Shenzhen,Guangdong,China.

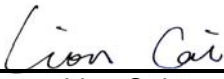
**Prepared by:** Shenzhen Bontek Compliance Testing Laboratory Co., Ltd.  
1/F, Block East H-3, OCT Eastern Ind. Zone, Qiaocheng East  
Road, Nanshan, Shenzhen, China  
Tel: 86-755-86337020  
Fax: 86-755-86337028

**Report No.:** BCT13ER146E-1

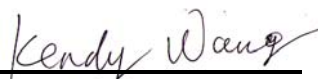
**Issue Date:** May 29, 2013

**Test Date:** May 8~29, 2013

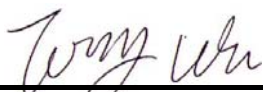
**Tested by:**

  
Lion Cai

**Reviewed by:**

  
Kendy Wang

**Approved by:**

  
Tony Wu

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# 1. GENERAL INFORMATION

## 1.1 Product Description for Equipment Under Test (EUT)

### Client Information

|                          |   |
|--------------------------|---|
| Applicant:               | <b>Shenzhen Deyu Baina Technology Co., Ltd.</b>   |
| Address of Applicant:    | 4th FL,Building J,WeiKangDe Industrial Park, ShangXue Area,JiHua RD, BanTian, Shenzhen,Guangdong,China. |
| Manufacturer:            | <b>Shenzhen Deyu Baina Technology Co., Ltd.</b>   |
| Address of Manufacturer: | 4th FL,Building J,WeiKangDe Industrial Park, ShangXue Area,JiHua RD, BanTian, Shenzhen,Guangdong,China. |

### General Description of E.U.T

| Items                | Description   |
|----------------------|---|
| EUT Description:     | Smart Bear Kid's PAD  |
| Trade Name:          | SMaRT BeaR  |
| Model No.:           | IP013A  |
| Supplementary Model: | N/A   |
| Frequency Band:      | IEEE 802.11b/g,<br>IEEE 802.11n HT20 (ISM Band) : 2412MHz~2462MHz,<br>IEEE 802.11n HT40 (ISM Band) : 2422MHz~2452MHz                          |
| Channel Spacing:     | IEEE 802.11b/g, 802.11n HT20/HT40: 5MHz   |
| Number of Channels:  | IEEE 802.11b/g, 802.11n HT20:11 Channels<br>IEEE 802.11n HT40 :7 Channels   |
| Transmit Data Rate:  | maximum of 150Mbps  |
| Type of Modulation:  | IEEE 802.11b:DSSS (CCK, DQPSK, DBPSK)<br>IEEE 802.11g:OFDM (64QAM, 16QAM, QPSK, BPSK)<br>IEEE 802.11n HT20/40:OFDM (64QAM, 16QAM, QPSK, BPSK) |
| Antenna Type:        | Built-in Antenna  |
| Antenna Gain:        | 3dBi  |
| Power Supply:        | Input: 5VDC 1.5A from adapter ;3.7V 3000mAh for battery   |
| Adapter Information: | TRAVEL CHARGER<br>Model:LFS0501500D-A8S<br>Input: AC 100-240V 50/60Hz 0.5A<br>Output: 5VDC 1.5A   |

\* The test data gathered are from the production sample provided by the manufacturer.

\* The model has the same circuit and appearance, but with different color.

## 1.2 Test Standards

The report of EUT is prepared in accordance with FCC Rules and Regulations Part 15 Subpart B. The objective of the manufacturer is to demonstrate compliance with the described above standards.

## 1.3 Test Facility

All measurement required was performed at laboratory of Shenzhen Bontek Compliance Testing Laboratory Co., Ltd. at 1/F, Block East H-3, OCT Eastern Ind. Zone, Qiaocheng East Road, Nanshan, Shenzhen, China.

The test facility is recognized, certified, or accredited by the following organizations:

### **FCC – Registration No.: 338263**

Shenzhen Bontek Compliance Testing Laboratory Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 338263, March 03, 2011.

### **IC Registration No.: 7631A**

The 3m alternate test site of Shenzhen Bontek Compliance Testing Laboratory Co., Ltd. EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.: 7631A on January 25, 2011.

### **CNAS - Registration No.: L3923**

Shenzhen Bontek Compliance Testing Laboratory Co., Ltd. to ISO/IEC 17025:25 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing. The acceptance letter from the CNAS is maintained in our files: Registration: L3923, March 22, 2012.

### **TUV - Registration No.: UA 50242657-0001**

Shenzhen Bontek Compliance Testing Laboratory Co., Ltd. An assessment of the laboratory was conducted according to the "Procedures and Conditions for EMC Test Laboratories" with reference to EN ISO/IEC 17025 by a TUV Rheinland auditor. Audit Report NO. 17010783-003.

## 2. SYSTEM TEST CONFIGURATION

### 2.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

### 2.2 Support Equipments

The calibrated antennas used to sample the radiated field strength are mounted on a non-conductive, motorized antenna mast 3 or 10 meters from the leading edge of the turntable.

Support equipments or special accessories in test configuration:

| AUX Description: | Manufacturer | Model No. | Certificate | CABLE  |
|------------------|--------------|-----------|-------------|--|
| Host Computer    | Dell         | 78MD82X   | CE, FCC     | 1.5m Unshielded Power Cord                                       |
| Monitor          | Dell         | E178Pc    | CE, FCC     | 1.5m Unshielded Power Cord<br>1.8m shielded data Cable with core |
| Keyboard         | Dell         | L100      | CE, FCC     | 1.8m shielded data Cable with core                               |
| Mouse            | Dell         | OCJ339    | CE, FCC     | 1.8m shielded data Cable with core                               |
| Printer          | EPSON        | P330A     | CE, FCC     | 1.2m Unshielded Power Cord<br>1.5m shielded data Cable           |

### 2.3 General Test Procedures

**Conducted Emissions:** The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 7.1 of ANSI C63.4-2009 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak detector mode.

**Radiated Emissions:** The EUT is placed on a turntable, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 13.1.4.1 of ANSI C63.4-2009.

### 2.4 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

| Parameter                     | Uncertainty |
|-------------------------------|-------------|
| Power Line Conducted Emission | +/- 2.3 dB  |
| Radiated Emission             | +/- 3.4 dB  |

Uncertainty figures are valid to a confidence level of 95%.

## 2.5 List of Measuring Equipments Used

Test equipments list of Shenzhen Bontek Compliance Testing Laboratory Co., Ltd.

| No. | Instrument no. | Equipment                                | Manufacturer    | Model No.   | S/N        | Last Calculator | Due Calculator |
|-----|----------------|--|-----------------|-------------|------------|-----------------|----------------|
| 1   | BCT-EMC001     | EMI Test Receiver                        | R&S             | ESCI        | 100687     | 2013-4-16       | 2014-4-17      |
| 2   | BCT-EMC002     | EMI Test Receiver                        | R&S             | ESPI        | 100097     | 2012-11-1       | 2013-10-31     |
| 3   | BCT-EMC003     | Amplifier                                | HP              | 8447D       | 1937A02492 | 2013-4-19       | 2014-4-18      |
| 4   | BCT-EMC004     | Single Power Conductor Module            | R&S             | NNBM 8124   | 242        | 2013-4-19       | 2014-4-18      |
| 5   | BCT-EMC005     | Single Power Conductor Module            | R&S             | NNBM 8124   | 243        | 2013-4-19       | 2014-4-18      |
| 6   | BCT-EMC006     | Power Clamp                              | SCHWARZBECK     | MDS-21      | 3812       | 2012-11-5       | 2013-11-4      |
| 7   | BCT-EMC007     | Positioning Controller                   | C&C             | CC-C-1F     | MF7802113  | N/A             | N/A            |
| 8   | BCT-EMC008     | Electrostatic Discharge Simulator        | TESEQ           | NSG437      | 125        | 2012-11-2       | 2013-11-1      |
| 9   | BCT-EMC009     | Fast Transient Burst Generator           | SCHAFFNER       | MODULA6150  | 34572      | 2013-4-16       | 2014-4-17      |
| 10  | BCT-EMC010     | Fast Transient Noise Simulator           | Noiseken        | FNS-105AX   | 10501      | 2012-6-26       | 2013-6-25      |
| 11  | BCT-EMC011     | Color TV Pattern Generator               | PHILIPS         | PM5418      | TM209947   | N/A             | N/A            |
| 12  | BCT-EMC012     | Power Frequency Magnetic Field Generator | EVERFINE        | EMS61000-8K | 608002     | 2013-4-16       | 2014-4-17      |
| 14  | BCT-EMC014     | Capacitive Coupling Clamp                | TESEQ           | CDN8014     | 25096      | 2013-4-16       | 2014-4-17      |
| 15  | BCT-EMC015     | High Field Biconical Antenna             | ELECTRO-METRICS | EM-6913     | 166        | 2012-11-28      | 2013-11-27     |
| 16  | BCT-EMC016     | Log Periodic Antenna                     | ELECTRO-METRICS | EM-6950     | 811        | 2012-11-28      | 2013-11-27     |
| 17  | BCT-EMC017     | Remote Active Vertical Antenna           | ELECTRO-METRICS | EM-6892     | 304        | 2012-11-28      | 2013-11-27     |
| 18  | BCT-EMC018     | TRILOG Broadband Test-Antenna            | SCHWARZBECK     | VULB9163    | 9163-324   | 2012-5-19       | 2014-5-18      |
| 19  | BCT-EMC019     | Horn Antenna                             | SCHWARZBECK     | BBHA9120A   | 0499       | 2012-11-28      | 2013-11-27     |
| 20  | BCT-EMC020     | Teo Line Single Phase Module             | SCHWARZBECK     | NSLK8128    | 8128247    | 2012-11-1       | 2013-10-31     |
| 21  | BCT-EMC021     | Triple-Loop Antenna                      | EVERFINE        | LLA-2       | 711002     | 2012-11-15      | 2013-11-14     |
| 22  | BCT-EMC022     | Electric bridge                          | Jhai            | JK2812C     | 803024     | N/A             | N/A            |
| 23  | BCT-EMC026     | RF POWER AMPLIFIER                       | FRANKONIA       | FLL-75      | 1020A1109  | 2013-4-16       | 2014-4-15      |
| 24  | BCT-EMC027     | CDN                                      | FRANKONIA       | CDN M2+M3   | A3027019   | 2013-4-16       | 2014-4-15      |

|    |            |                                   |                 |                      |               |            |            |
|----|------------|-----------------------------------|-----------------|----------------------|---------------|------------|------------|
| 25 | BCT-EMC029 | 6DB Attenuator                    | FRANKONIA       | N/A                  | 1001698       | 2013-4-16  | 2014-4-15  |
| 26 | BCT-EMC030 | EM Injection clamp                | FCC             | F-203I-23mm          | 091536        | 2013-4-16  | 2014-4-17  |
| 27 | BCT-EMC031 | 9kHz-2.4GHz signal generator 2024 | MARCONI         | 10S/6625-99-457-8730 | 112260/042    | 2013-4-16  | 2014-4-17  |
| 28 | BCT-EMC032 | 10dB attenuator                   | ELECTRO-METRICS | EM-7600              | 836           | 2013-4-16  | 2014-4-17  |
| 29 | BCT-EMC033 | ISN                               | TESEQ           | ISN-T800             | 30301         | 2012-11-15 | 2013-11-14 |
| 30 | BCT-EMC034 | 10KV surge generator              | SANKI           | SKS-0510M            | 048110003E321 | 2012-11-01 | 2013-10-31 |
| 31 | BCT-EMC035 | HRMONICS&FLICKRE ANALYSER         | VOLTECH         | PM6000               | 200006700433  | 2012-11-20 | 2013-11-19 |
| 32 | BCT-EMC036 | Spectrum Analyzer                 | R&S             | FSP                  | 100397        | 2012-11-1  | 2013-10-31 |
| 33 | BCT-EMC037 | Broadband preamplifier            | SCHWARZBECK     | BBV9718              | 9718-182      | 2013-4-19  | 2014-4-18  |

### 3. SUMMARY OF TEST RESULTS

| Standard              | Test Items                            | Result |
|-----------------------|---------------------------------------|--------|
| FCC Part 15 Subpart B | Conduction Emission, 0.15MHz to 30MHz | Pass   |
| FCC Part 15 Subpart B | Radiation Emission, 30MHz to 1000MHz  | Pass   |

## 4. TEST OF AC POWER LINE CONDUCTED EMISSION

### 4.1 Limit of AC Power Line Conducted Emission

| Frequency Range (MHz) | Limits ( dBuV) |         |
|-----------------------|----------------|---------|
|                       | Quasi-Peak     | Average |
| 0.150~0.500           | 66~56          | 56~46   |
| 0.500~5.000           | 56             | 46      |
| 5.000~30.00           | 60             | 50      |

### 4.2 EUT Setup

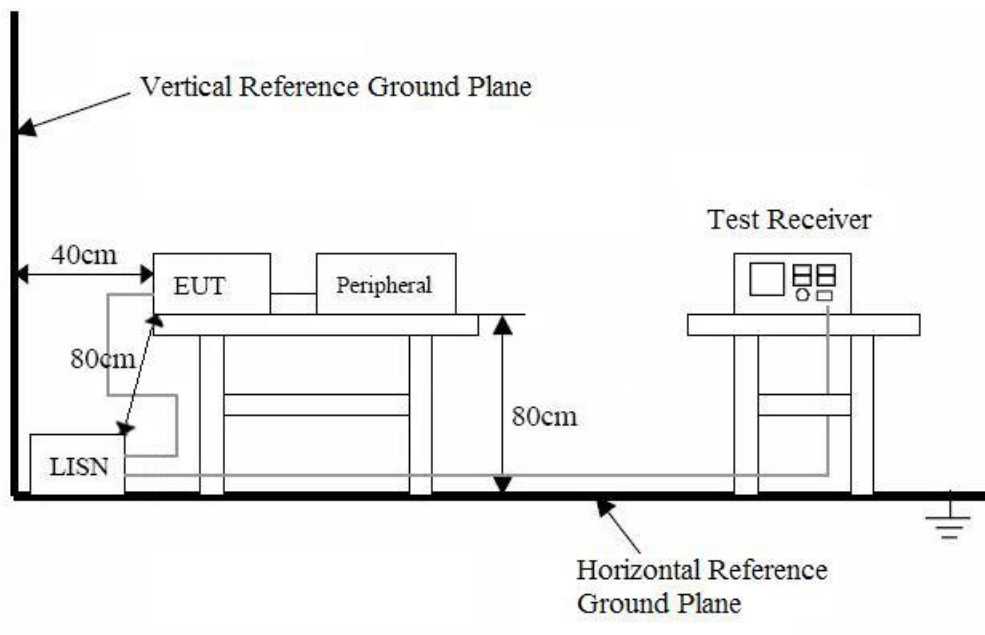
The setup of EUT is according with ANSI C63.4-2009 measurement procedure. The specification used was the FCC Rules and Regulations Part 15 Subpart B limits.

The EUT was placed center and the back edge of the test table.

The AV cables were draped along the test table and bundled to 30-40cm in the middle.

The spacing between the peripherals was 10 cm.

Maximum emission emitted from EUT was determined by manipulating the EUT, support equipment, interconnecting cables and varying the mode of operation and the levels in the final result of the test were recorded with the EUT running in the operating mode that maximum emission was emitted.



Remark: The EUT was connected to a 120VAC/ 60Hz power source.



### 4.3 Instrument Setup

The test receiver was set with the following configurations:

Test Receiver Setting:

Frequency Range.....150 KHz to 30 MHz  
Detector.....Peak & Quasi-Peak & Average  
Sweep Speed.....Auto  
IF Band Width.....9 KHz

### 4.4 Test Procedure

During the conducted emission test, the EUT power cord was connected to the auxiliary outlet of the first Artificial Mains.

Maximizing procedure was performed on the six (6) highest emissions to ensure EUT compliance using all installation combination.

All data was recorded in the peak detection mode. Quasi-peak and Average readings were only performed when an emission was found to be marginal (within -10 dB $\mu$ V of specification limits). Quasi-peak readings are distinguished with a "QP". Average readings are distinguished with a "AV".

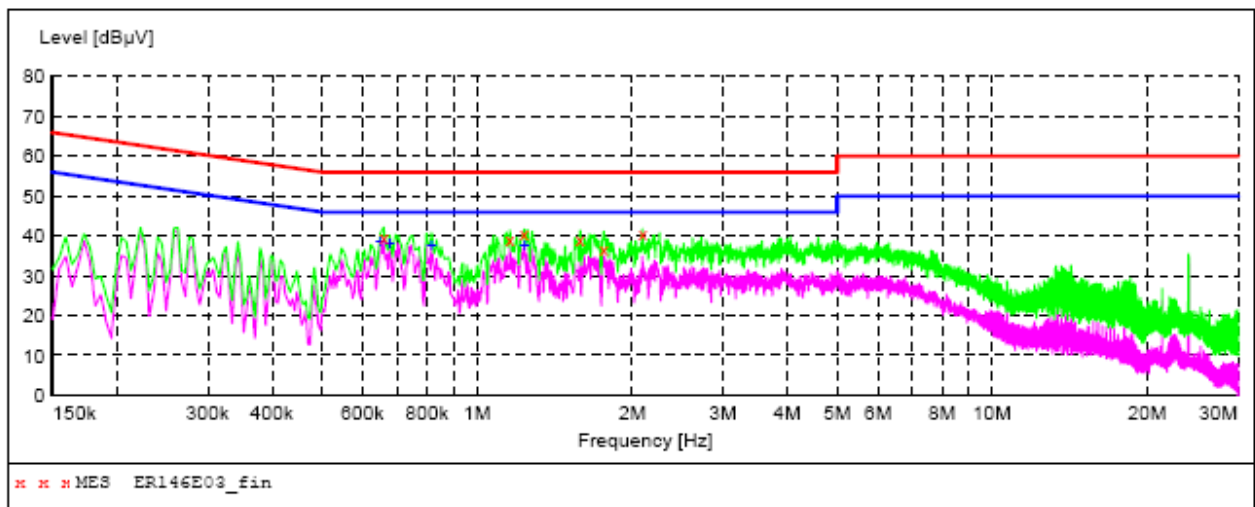
### 4.5 Test Result

|   |  |
|---|--|
| Temperature ( °C ) : 22~23              | EUT: Smart Bear Kid's PAD                                  |
| Humidity (%RH ) : 50~54                 | M/N: IP013A  |
| Barometric Pressure ( mbar ) : 950~1000 | Operation Condition: Connect to PC & SD /Charging & Camera |

## Conducted Emission:

EUT: Smart Bear Kid's PAD  
M/N: IP013A  
Operating Condition: Connect to PC & SD  
Test Site: Shielded Room  
Operator: Yang  
Test Specification: AC 120V/60Hz for PC  
Comment: L Line

**SCAN TABLE: "Voltage (150K-30M) FIN"**  
Short Description: 150K-30M Voltage



### MEASUREMENT RESULT: "ER146E03\_fin"

5/9/2013 8:05PM

| Frequency<br>MHz | Level<br>dBμV | Transd<br>dB | Limit<br>dBμV | Margin<br>dB | Detector | Line | PE  |
|------------------|---------------|--------------|---------------|--------------|----------|------|-----|
| 0.658500         | 39.80         | 10.4         | 56            | 16.2         | QP       | L1   | GND |
| 1.158000         | 39.00         | 10.4         | 56            | 17.0         | QP       | L1   | GND |
| 1.234500         | 40.80         | 10.4         | 56            | 15.2         | QP       | L1   | GND |
| 1.585500         | 39.00         | 10.4         | 56            | 17.0         | QP       | L1   | GND |
| 1.761000         | 36.80         | 10.4         | 56            | 19.2         | QP       | L1   | GND |
| 2.098500         | 40.70         | 10.4         | 56            | 15.3         | QP       | L1   | GND |

### MEASUREMENT RESULT: "ER146E03\_fin2"

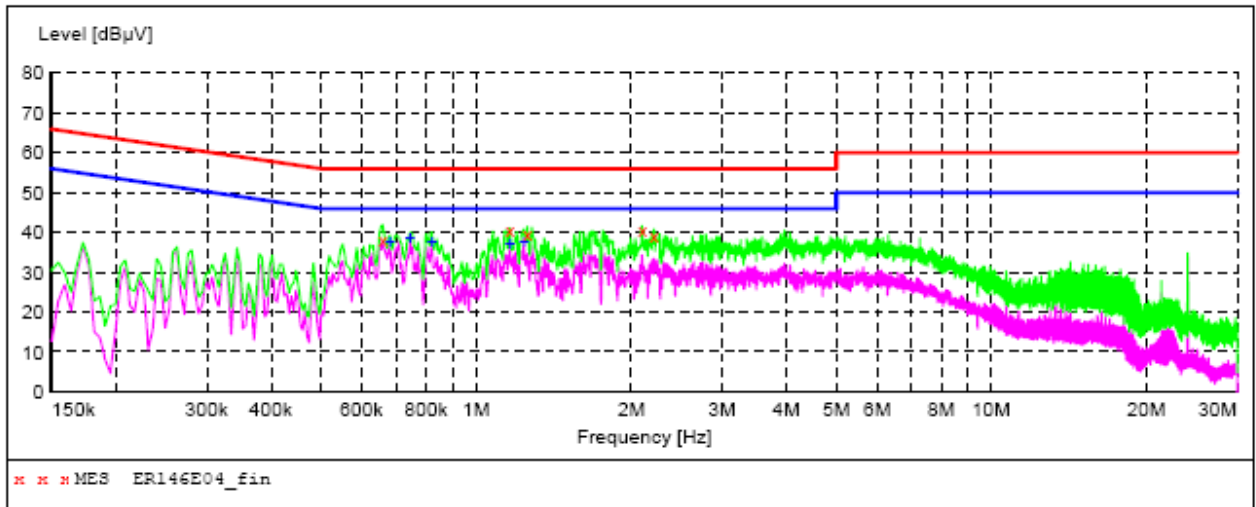
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| Frequency<br>MHz | Level<br>dBμV | Transd<br>dB | Limit<br>dBμV | Margin<br>dB | Detector | Line | PE  |
|------------------|---------------|--------------|---------------|--------------|----------|------|-----|
| 0.649500         | 38.50         | 10.4         | 46            | 7.5          | AV       | L1   | GND |
| 0.676500         | 38.00         | 10.4         | 46            | 8.0          | AV       | L1   | GND |
| 0.816000         | 37.80         | 10.4         | 46            | 8.2          | AV       | L1   | GND |
| 1.234500         | 37.90         | 10.4         | 46            | 8.1          | AV       | L1   | GND |

## Conducted Emission:

EUT: Smart Bear Kid's PAD  
M/N: IP013A  
Operating Condition: Connect to PC & SD  
Test Site: Shielded Room  
Operator: Yang  
Test Specification: AC 120V/60Hz for PC  
Comment: N Line

**SCAN TABLE: "Voltage (150K-30M) FIN"**  
Short Description: 150K-30M Voltage



### MEASUREMENT RESULT: "ER146E04\_fin"

5/9/2013 8:08PM

| Frequency<br>MHz | Level<br>dBμV | Transd<br>dB | Limit<br>dBμV | Margin<br>dB | Detector | Line | PE  |
|------------------|---------------|--------------|---------------|--------------|----------|------|-----|
| 0.658500         | 38.10         | 10.4         | 56            | 17.9         | QP       | N    | GND |
| 1.162500         | 40.40         | 10.4         | 56            | 15.6         | QP       | N    | GND |
| 1.257000         | 39.80         | 10.4         | 56            | 16.2         | QP       | N    | GND |
| 2.103000         | 40.40         | 10.4         | 56            | 15.6         | QP       | N    | GND |
| 2.215500         | 39.10         | 10.4         | 56            | 16.9         | QP       | N    | GND |

### MEASUREMENT RESULT: "ER146E04\_fin2"

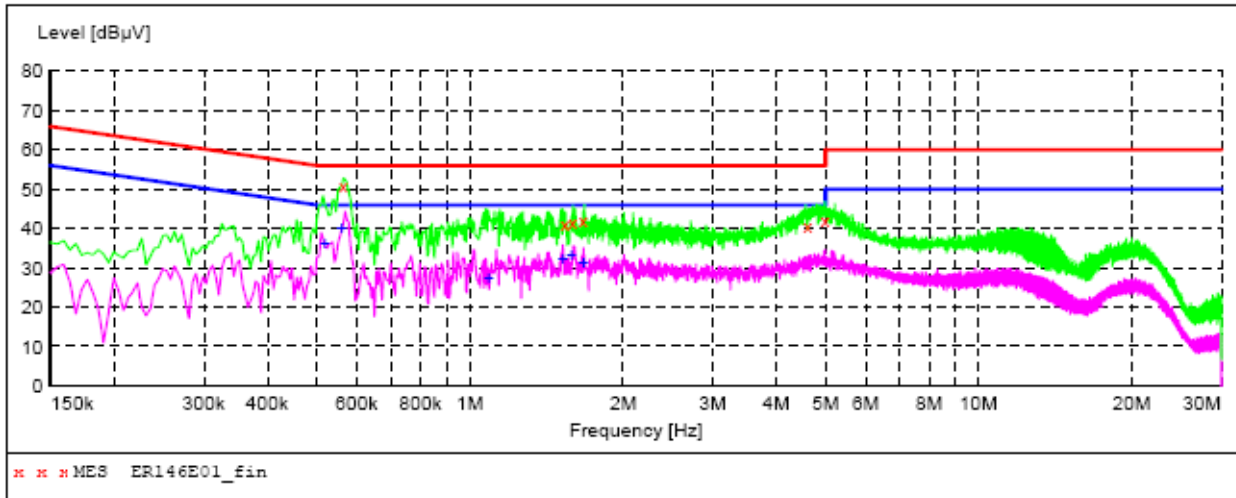
5/9/2013 8:08PM

| Frequency<br>MHz | Level<br>dBμV | Transd<br>dB | Limit<br>dBμV | Margin<br>dB | Detector | Line | PE  |
|------------------|---------------|--------------|---------------|--------------|----------|------|-----|
| 0.681000         | 37.90         | 10.4         | 46            | 8.1          | AV       | N    | GND |
| 0.744000         | 38.80         | 10.4         | 46            | 7.2          | AV       | N    | GND |
| 0.820500         | 37.80         | 10.4         | 46            | 8.2          | AV       | N    | GND |
| 1.162500         | 37.10         | 10.4         | 46            | 8.9          | AV       | N    | GND |
| 1.239000         | 37.60         | 10.4         | 46            | 8.4          | AV       | N    | GND |

## Conducted Emission:

EUT: Smart Bear Kid's PAD  
M/N: IP013A  
Operating Condition: Charging & Camera  
Test Site: Shielded Room  
Operator: Yang  
Test Specification: AC 120V/60Hz for Adapter  
Comment: L Line

**SCAN TABLE: "Voltage (150K-30M) FIN"**  
Short Description: 150K-30M Voltage



### MEASUREMENT RESULT: "ER146E01\_fin"

5/9/2013 1:54PM

| Frequency<br>MHz | Level<br>dBuV | Transd<br>dB | Limit<br>dBuV | Margin<br>dB | Detector | Line | PE  |
|------------------|---------------|--------------|---------------|--------------|----------|------|-----|
| 0.564000         | 51.00         | 10.5         | 56            | 5.0          | QP       | L1   | GND |
| 1.536000         | 41.10         | 10.4         | 56            | 14.9         | QP       | L1   | GND |
| 1.590000         | 41.60         | 10.4         | 56            | 14.4         | QP       | L1   | GND |
| 1.671000         | 41.90         | 10.4         | 56            | 14.1         | QP       | L1   | GND |
| 4.605000         | 40.70         | 10.4         | 56            | 15.3         | QP       | L1   | GND |
| 4.987500         | 41.90         | 10.4         | 56            | 14.1         | QP       | L1   | GND |

### MEASUREMENT RESULT: "ER146E01\_fin2"

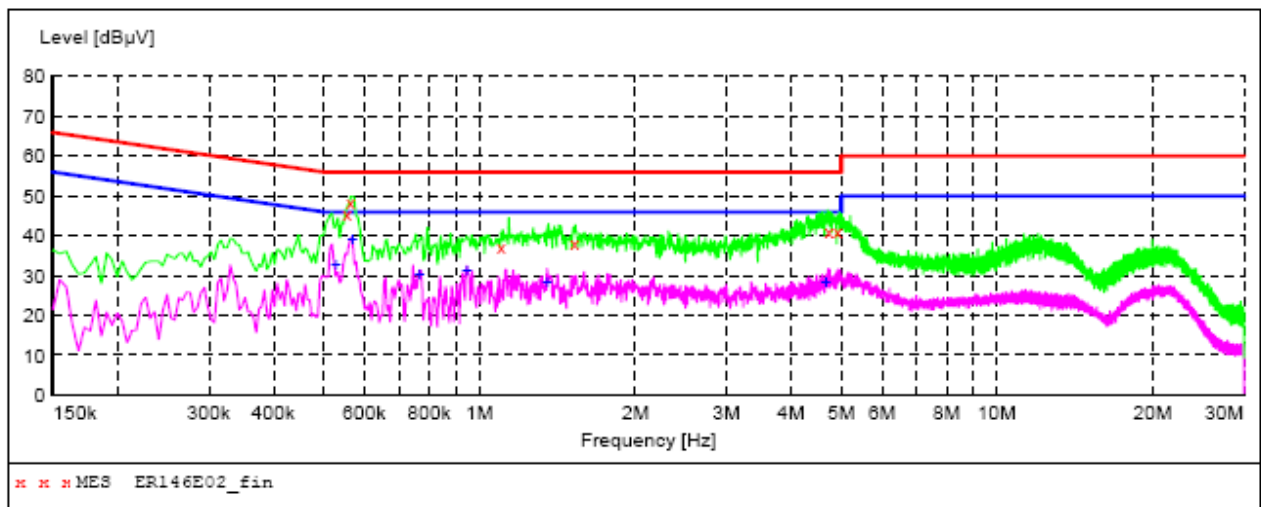
5/9/2013 1:54PM

| Frequency<br>MHz | Level<br>dBuV | Transd<br>dB | Limit<br>dBuV | Margin<br>dB | Detector | Line | PE  |
|------------------|---------------|--------------|---------------|--------------|----------|------|-----|
| 0.519000         | 36.30         | 10.5         | 46            | 9.7          | AV       | L1   | GND |
| 0.559500         | 40.10         | 10.5         | 46            | 5.9          | AV       | L1   | GND |
| 1.090500         | 27.40         | 10.5         | 46            | 18.6         | AV       | L1   | GND |
| 1.522500         | 32.10         | 10.4         | 46            | 13.9         | AV       | L1   | GND |
| 1.585500         | 33.10         | 10.4         | 46            | 12.9         | AV       | L1   | GND |
| 1.675500         | 31.50         | 10.4         | 46            | 14.5         | AV       | L1   | GND |

## Conducted Emission:

EUT: Smart Bear Kid's PAD  
M/N: IP013A  
Operating Condition: Charging & Camera  
Test Site: Shielded Room  
Operator: Yang  
Test Specification: AC 120V/60Hz for Adapter  
Comment: N Line

**SCAN TABLE: "Voltage (150K-30M) FIN"**  
Short Description: 150K-30M Voltage



## MEASUREMENT RESULT: "ER146E02\_fin"

5/9/2013 1:51PM

| Frequency<br>MHz | Level<br>dBuV | Transd<br>dB | Limit<br>dBuV | Margin<br>dB | Detector | Line | PE  |
|------------------|---------------|--------------|---------------|--------------|----------|------|-----|
| 0.555000         | 45.60         | 10.5         | 56            | 10.4         | QP       | N    | GND |
| 0.564000         | 48.40         | 10.5         | 56            | 7.6          | QP       | N    | GND |
| 1.104000         | 37.40         | 10.5         | 56            | 18.6         | QP       | N    | GND |
| 1.527000         | 38.20         | 10.4         | 56            | 17.8         | QP       | N    | GND |
| 4.740000         | 41.40         | 10.4         | 56            | 14.6         | QP       | N    | GND |
| 4.924500         | 40.90         | 10.4         | 56            | 15.1         | QP       | N    | GND |

## MEASUREMENT RESULT: "ER146E02\_fin2"

5/9/2013 1:51PM

| Frequency<br>MHz | Level<br>dBuV | Transd<br>dB | Limit<br>dBuV | Margin<br>dB | Detector | Line | PE  |
|------------------|---------------|--------------|---------------|--------------|----------|------|-----|
| 0.528000         | 32.90         | 10.5         | 46            | 13.1         | AV       | N    | GND |
| 0.568500         | 39.10         | 10.4         | 46            | 6.9          | AV       | N    | GND |
| 0.766500         | 30.40         | 10.4         | 46            | 15.6         | AV       | N    | GND |
| 0.946500         | 31.40         | 10.4         | 46            | 14.6         | AV       | N    | GND |
| 1.351500         | 28.60         | 10.4         | 46            | 17.4         | AV       | N    | GND |
| 4.677000         | 28.20         | 10.4         | 46            | 17.8         | AV       | N    | GND |

## 5 - RADIATED DISTURBANCES

### 5.1 Limit of Radiated Disturbances

| Frequency (MHz) | Distance (Meters) | Field Strengths Limits (dB $\mu$ V/m) |
|-----------------|-------------------|---------------------------------------|
| 30 ~ 88         | 3                 | 40                                    |
| 88~216          | 3                 | 43.5                                  |
| 216 ~ 960       | 3                 | 46                                    |
| 960 ~ 1000      | 3                 | 54                                    |

Note:

- (1) The tighter limit shall apply at the edge between two frequency bands.
- (2) Distance refers to the distance in meters between the test instrument antenna and the closest point of any part of the E.U.T.

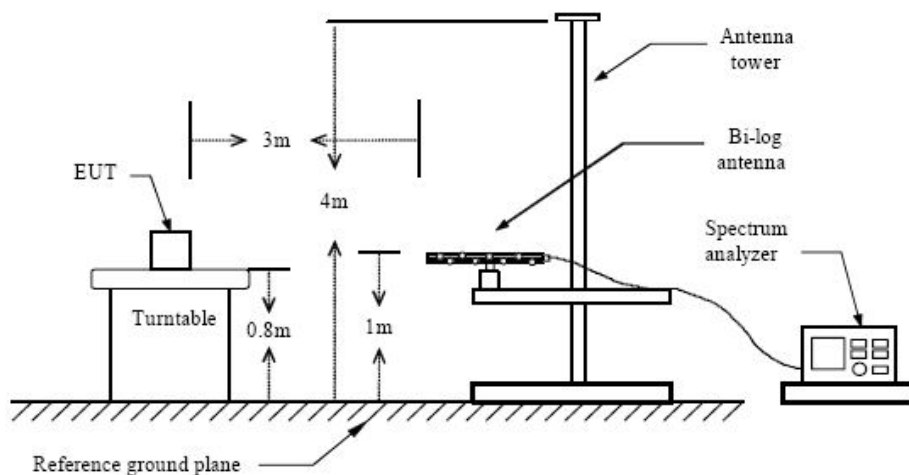
### 5.2 EUT Setup

The radiated emission tests were performed in the in the 3-meter anechoic chamber, using the setup accordance with the ANSI C63.4-2009. The specification used was the FCC Part 15 Subpart B limits.

The EUT was placed on the center of the test table.

Maximum emission emitted from EUT was determined by manipulating the EUT, support equipment, interconnecting cables and varying the mode of operation and the levels in the final result of the test were recorded with the EUT running in the operating mode that maximum emission was emitted.

**Below 1 GHz**



### 5.3 Test Receiver Setup

According to FCC Part 15 rule, the frequency was investigated from 30 to 1000 MHz. During the radiated emission test, the test receiver was set with the following configurations:

Test Receiver Setting:

Detector.....Peak & Quasi-Peak  
IF Band Width.....120KHz  
Frequency Range.....30MHz to 1000MHz  
Turntable Rotated.....0 to 360 degrees

Antenna Position:

Height.....1m to 4m  
Polarity.....Horizontal and Vertical

### 5.4 Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

All data was recorded in the peak detection mode. Quasi-peak readings performed only when an emission was found to be marginal (within -10 dB $\mu$ V of specification limits), and are distinguished with a "QP" in the data table.

### 5.5 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

Corr. Ampl. = Indicated Reading + Antenna Factor + Cable Factor - Amplifier Gain

The "Margin" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB $\mu$ V means the emission is 7dB $\mu$ V below the maximum limit for Subpart B. The equation for margin calculation is as follows:

Margin = Limit – Corr. Ampl.

### 5.6 Radiated Emissions Test Result

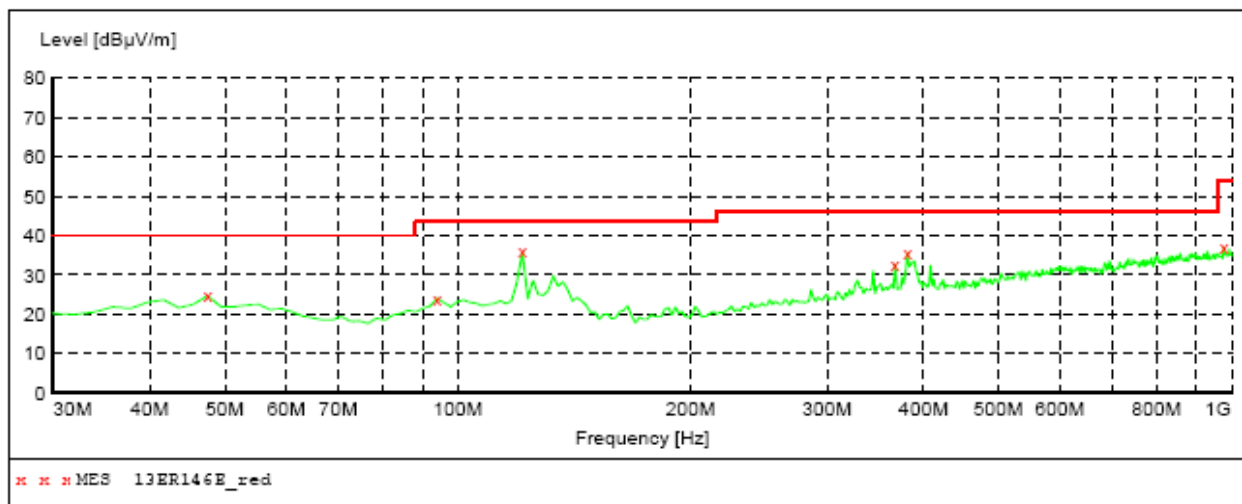
|   |  |
|---|--|
| Temperature ( °C ) : 22~23              | EUT: Smart Bear Kid's PAD                                  |
| Humidity (%RH) : 50~54                  | M/N: IP013A  |
| Barometric Pressure ( mbar ) : 950~1000 | Operation Condition: Connect to PC & SD /Charging & Camera |

## Radiated Emission Test Data:

EUT: Smart Bear Kid's PAD  
M/N: IP013A  
Operating Condition: Connect to PC & SD  
Test Site: 3m CHAMBER  
Operator: Chen  
Test Specification: AC 120V/60Hz for PC  
Comment: Polarization: Horizontal

### ***SWEEP TABLE: "test (30M-1G)"***

| Short Description:                                    | Field Strength |
|---|----------------|
| Start Stop Detector Meas. IF Transducer               |                |
| Frequency Frequency Time Bandw.                       |                |
| 30.0 MHz 1.0 GHz MaxPeak Coupled 100 kHz VULB9163 NEW |                |



### ***MEASUREMENT RESULT: "13ER146E\_red"***

5/21/2013 14:16

| Frequency<br>MHz | Level<br>dBμV/m | Transd<br>dB | Limit<br>dBμV/m | Margin<br>dB | Det. | Height<br>cm | Azimuth<br>deg | Polarization |
|------------------|-----------------|--------------|-----------------|--------------|------|--------------|----------------|--------------|
| 47.460000        | 24.70           | 15.8         | 40.0            | 15.3         | QP   | 100.0        | 0.00           | HORIZONTAL   |
| 94.020000        | 24.10           | 16.9         | 43.5            | 19.4         | QP   | 100.0        | 0.00           | HORIZONTAL   |
| 121.180000       | 36.00           | 14.5         | 43.5            | 7.5          | QP   | 100.0        | 0.00           | HORIZONTAL   |
| 367.560000       | 32.70           | 20.7         | 46.0            | 13.3         | QP   | 100.0        | 0.00           | HORIZONTAL   |
| 381.140000       | 35.70           | 20.9         | 46.0            | 10.3         | QP   | 100.0        | 0.00           | HORIZONTAL   |
| 978.660000       | 37.10           | 29.8         | 54.0            | 16.9         | QP   | 100.0        | 0.00           | HORIZONTAL   |

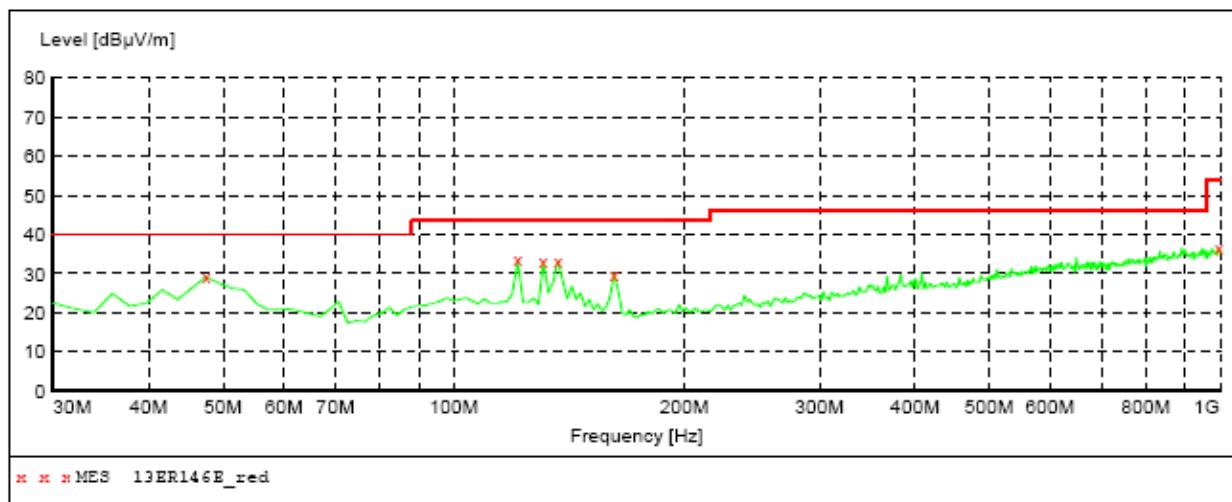


## Radiated Emission Test Data:

EUT: Smart Bear Kid's PAD  
M/N: IP013A  
Operating Condition: Connect to PC & SD  
Test Site: 3m CHAMBER  
Operator: Chen  
Test Specification: AC 120V/60Hz for PC  
Comment: Polarization: Vertical

### ***SWEEP TABLE: "test (30M-1G)"***

| Short Description: |         | Field Strength |            |           |              |
|--------------------|---------|----------------|------------|-----------|--------------|
| Start              | Stop    | Detector       | Meas. Time | IF Bandw. | Transducer   |
| 30.0 MHz           | 1.0 GHz | MaxPeak        | Coupled    | 100 kHz   | VULB9163 NEW |



### ***MEASUREMENT RESULT: "13ER146E\_red"***

5/21/2013 14:12

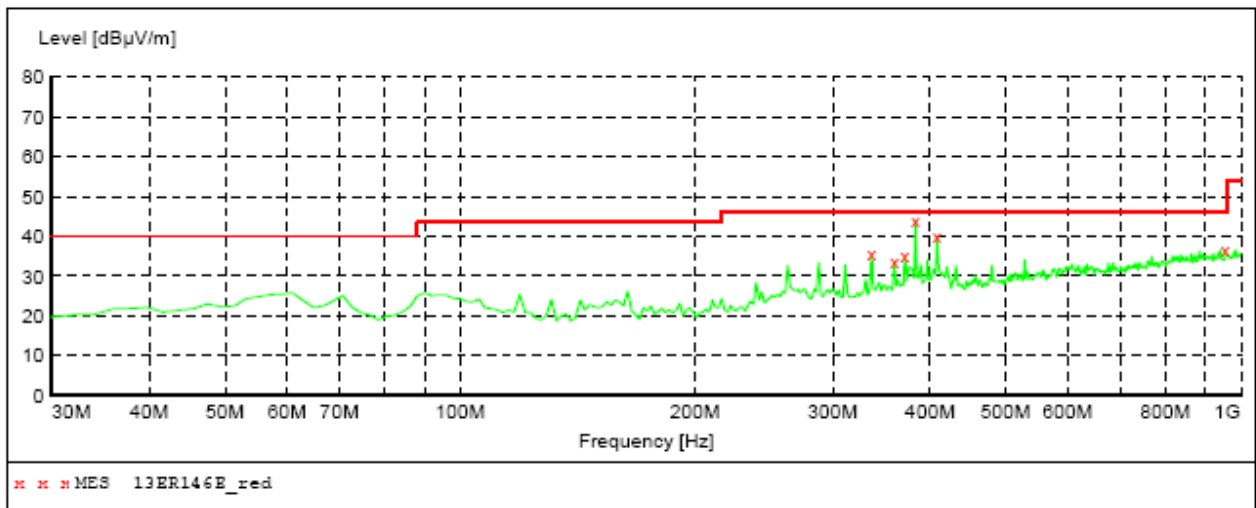
| Frequency<br>MHz | Level<br>dBμV/m | Transd<br>dB | Limit<br>dBμV/m | Margin<br>dB | Det. | Height<br>cm | Azimuth<br>deg | Polarization |
|------------------|-----------------|--------------|-----------------|--------------|------|--------------|----------------|--------------|
| 47.460000        | 29.20           | 15.8         | 40.0            | 10.8         | QP   | 100.0        | 0.00           | VERTICAL     |
| 121.180000       | 33.50           | 14.5         | 43.5            | 10.0         | QP   | 100.0        | 0.00           | VERTICAL     |
| 130.880000       | 33.20           | 13.0         | 43.5            | 10.3         | QP   | 100.0        | 0.00           | VERTICAL     |
| 136.700000       | 33.30           | 12.5         | 43.5            | 10.2         | QP   | 100.0        | 0.00           | VERTICAL     |
| 161.920000       | 29.90           | 12.8         | 43.5            | 13.6         | QP   | 100.0        | 0.00           | VERTICAL     |
| 996.120000       | 36.60           | 29.9         | 54.0            | 17.4         | QP   | 100.0        | 0.00           | VERTICAL     |

## Radiated Emission Test Data:

EUT: Smart Bear Kid's PAD  
M/N: IP013A  
Operating Condition: Charging & Camera  
Test Site: 3m CHAMBER  
Operator: Chen  
Test Specification: AC 120V/60Hz for Adapter  
Comment: Polarization: Horizontal

### ***SWEEP TABLE: "test (30M-1G)"***

| Short Description: |           | Field Strength |            |           |              |
|--------------------|-----------|----------------|------------|-----------|--------------|
| Start              | Stop      | Detector       | Meas. Time | IF Bandw. | Transducer   |
| Frequency          | Frequency |                |            |           |              |
| 30.0 MHz           | 1.0 GHz   | MaxPeak        | Coupled    | 100 kHz   | VULB9163 NEW |



### ***MEASUREMENT RESULT: "13ER146E\_red"***

5/21/2013 14:10

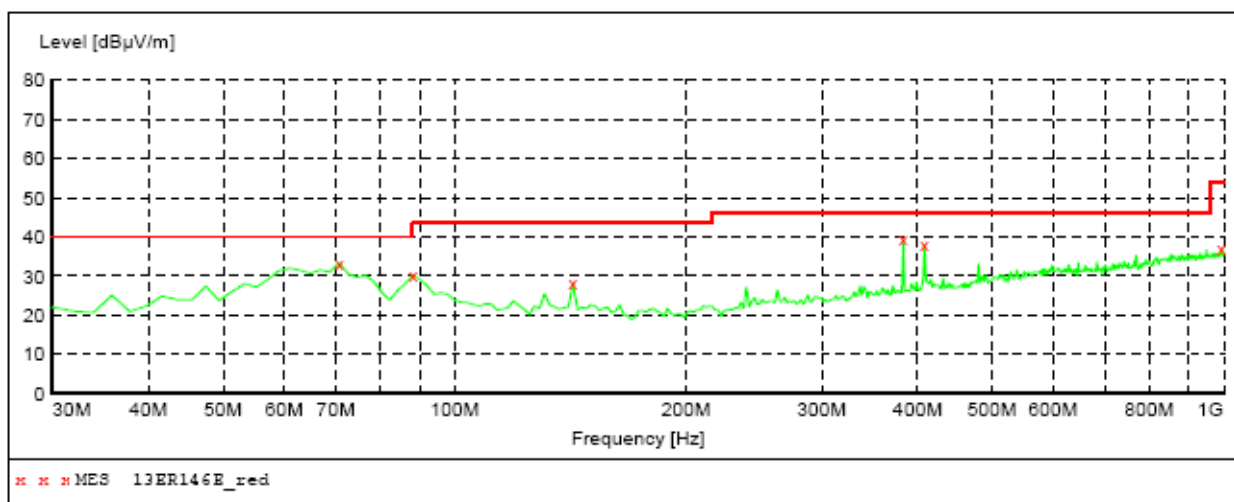
| Frequency<br>MHz | Level<br>dBµV/m | Transd<br>dB | Limit<br>dBµV/m | Margin<br>dB | Det. | Height<br>cm | Azimuth<br>deg | Polarization |
|------------------|-----------------|--------------|-----------------|--------------|------|--------------|----------------|--------------|
| 336.520000       | 35.80           | 20.0         | 46.0            | 10.2         | QP   | 100.0        | 0.00           | HORIZONTAL   |
| 359.800000       | 33.60           | 20.6         | 46.0            | 12.4         | QP   | 100.0        | 0.00           | HORIZONTAL   |
| 371.440000       | 35.20           | 20.8         | 46.0            | 10.8         | QP   | 100.0        | 0.00           | HORIZONTAL   |
| 383.080000       | 43.00           | 21.0         | 46.0            | 3.0          | QP   | 100.0        | 0.00           | HORIZONTAL   |
| 408.300000       | 40.00           | 21.7         | 46.0            | 6.0          | QP   | 100.0        | 0.00           | HORIZONTAL   |
| 955.380000       | 36.60           | 29.6         | 46.0            | 9.4          | QP   | 100.0        | 0.00           | HORIZONTAL   |

## Radiated Emission Test Data:

EUT: Smart Bear Kid's PAD  
M/N: IP013A  
Operating Condition: Charging & Camera  
Test Site: 3m CHAMBER  
Operator: Chen  
Test Specification: AC 120V/60Hz for Adapter  
Comment: Polarization: Vertical

### ***SWEEP TABLE: "test (30M-1G)"***

| Short Description: |           | Field Strength |         |         |              |
|--------------------|-----------|----------------|---------|---------|--------------|
| Start              | Stop      | Detector       | Meas.   | IF      | Transducer   |
| Frequency          | Frequency |                | Time    | Bandw.  |              |
| 30.0 MHz           | 1.0 GHz   | MaxPeak        | Coupled | 100 kHz | VULB9163 NEW |



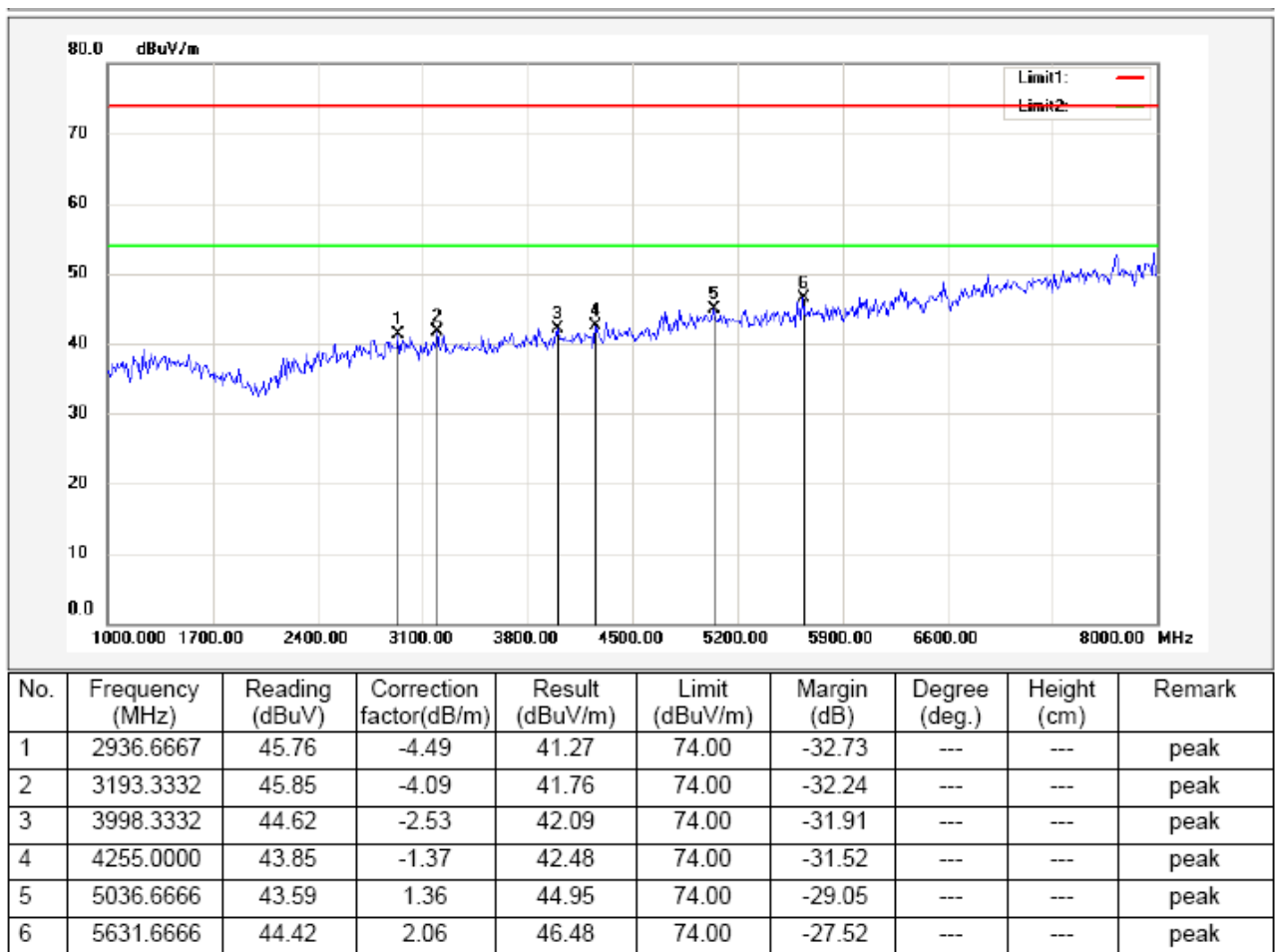
### ***MEASUREMENT RESULT: "13ER146E\_red"***

5/21/2013 14:06

| Frequency<br>MHz | Level<br>dBµV/m | Transd<br>dB | Limit<br>dBµV/m | Margin<br>dB | Det. | Height<br>cm | Azimuth<br>deg | Polarization |
|------------------|-----------------|--------------|-----------------|--------------|------|--------------|----------------|--------------|
| 70.740000        | 33.40           | 12.4         | 40.0            | 6.6          | QP   | 100.0        | 0.00           | VERTICAL     |
| 88.200000        | 30.10           | 15.5         | 43.5            | 13.4         | QP   | 100.0        | 0.00           | VERTICAL     |
| 142.520000       | 28.20           | 12.3         | 43.5            | 15.3         | QP   | 100.0        | 0.00           | VERTICAL     |
| 383.080000       | 39.40           | 21.0         | 46.0            | 6.6          | QP   | 100.0        | 0.00           | VERTICAL     |
| 408.300000       | 38.00           | 21.7         | 46.0            | 8.0          | QP   | 100.0        | 0.00           | VERTICAL     |
| 992.240000       | 36.90           | 29.9         | 54.0            | 17.1         | QP   | 100.0        | 0.00           | VERTICAL     |

**Worst case above 1GHz**  
**Radiated Emission Test Data:**

EUT: Smart Bear Kid's PAD  
M/N: IP013A  
Operating Condition: Connect to PC  
Test Site: 3m CHAMBER  
Operator: Chen  
Test Specification: AC 120V/60Hz for Adapter  
Comment: Polarization: Horizontal



# Radiated Emission Test Data:

EUT: Smart Bear Kid's PAD  
M/N: IP013A  
Operating Condition: Connect to PC  
Test Site: 3m CHAMBER  
Operator: Chen  
Test Specification: AC 120V/60Hz for Adapter  
Comment: Polarization: Vertical

