**Shenzhen EBO Technology Co., Ltd.**

North 710, Yihua Building, Shennan Road, Futian District,
Shenzhen, P. R. China
Telephone：+86-755-29451282,
Fax: +86-755-22639141



# TEST REPORT

**Applicant:** Archos SA

**Address of Applicant:** 12, Rue Ampere 91430 Igny France

**Equipment Under Test (EUT)**

Product Name: Home Tablet

Model No.: AN7G3

Trade mark: ARNOVA

**FCC ID:** SOVAN7G3

**Applicable standards:** FCC CFR Title 47 Part 15 Subpart B:2010

**Date of sample receipt:** Mar. 07, 2012

**Date of Test:** Mar. 07-19, 2012

**Date of report issued:** Mar. 23, 2012

**Test Result :** PASS *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Kavin Yu
Laboratory Manager

# 2 Version

| Version No. | Date | Description |
|---|---|---|
| *00* | *Mar. 23, 2012* | *Original* |
| | | |
| | | |
| | | |
| | | |

***Prepared by:*** Collin. He ***Date:*** *Mar. 23, 2012*

***Project Engineer***

***Reviewed by:*** Hans. Hu ***Date:*** *Mar. 23, 2012*

***Reviewer***

# 3 Contents

# 4 Test Summary

| Test Item | Section in CFR 47 | Result |
|---|---|---|
| Conducted Emission | Part15.107 | PASS |
| Radiated Emissions | Part15.109 | PASS |

*PASS: The EUT complies with the essential requirements in the standard.*

# 5 General Information

## 5.1 Client Information

| | |
|---|---|
| Applicant: | Archos SA |
| Address of Applicant: | 12, Rue Ampere 91430 Igny France |
| Manufacturer: | Archos SA |
| Address of Manufacturer/ | 12, Rue Ampere 91430 Igny France |

## 5.2 General Description of E.U.T.

| | |
|---|---|
| Product Name: | Home Tablet |
| Model No.: | AN7G3 |
| Power supply: | MODEL: ASSA1a-050150<br>Input: AC 100-240V 50/60Hz 0.45A<br>Output: DC 5.0V 1.5A<br>DC 3.7V Li-ion Battery |

## 5.3 Test mode and voltage

| | |
|---|---|
| Test mode: | |
| PC mode | Keep the EUT in communicate mode by PC |
| Play mode | Keep the EUT in play file. |
| Test voltage: | AC 120V/60Hz |

## 5.4 Test Facility

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

● **FCC —Registration No.: 600491**

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fuly described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files. Registration 600491, July 20, 2010.

● **Industry Canada (IC)**

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A-1.

## 5.5 Test Location

| All tests were performed at: |
|---|
| Global United Technology Services Co., Ltd.<br>Address: 2nd Floor, Block No.2, Laodong Industrial Zone, Xixiang Road Baoan District, Shenzhen, China<br>Tel: 0755-27798480<br>Fax: 0755-27798960 |

## 5.6 Description of Support Units

| Manufacturer | Description | Model | Serial Number | FCC ID/DoC |
|---|---|---|---|---|
| HP | Printer | CB495A | 05257893 | DoC |
| DELL | PC | OPTIPLEX745 | GTS312 | DoC |
| DELL | MONITOR | E178FPC | N/A | DoC |
| DELL | KEYBOARD | SK-8115 | N/A | DoC |
| DELL | MOUSE | MOC5UO | N/A | DoC |

## 5.7 Deviation from Standards

Biconical, log.per. antenna and horn antenna were used instead of dipole antenna.
Semi-anechoic Chamber was used as alternation of open air test sites, and all test suites were performed with radiated method in it.

## 5.8 Abnormalities from Standard Conditions

None.

## 5.9 Other Information Requested by the Customer

None.

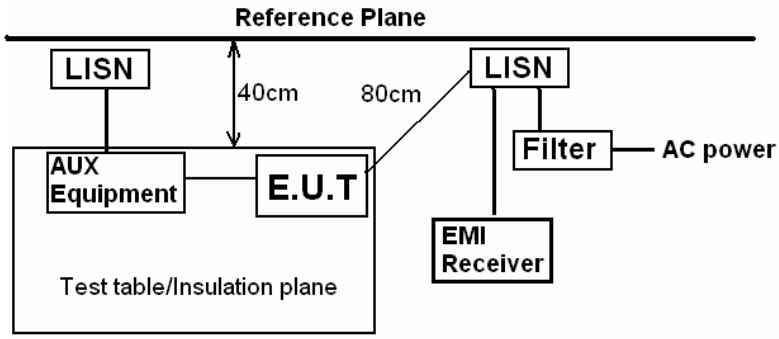
# 6 Test Instruments list

| Radiated Emission | | | | | | |
|---|---|---|---|---|---|---|
| **Item** | **Test Equipment** | **Manufacturer** | **Model No.** | **Inventory No.** | **Cal.Date (mm-dd-yy)** | **Cal.Due date (mm-dd-yy)** |
| 1 | 3m Semi- Anechoic Chamber | ZhongYu Electron | 9.2(L)*6.2(W)* 6.4(H) | GTS250 | Mar. 30 2011 | Mar. 29 2012 |
| 2 | Control Room | ZhongYu Electron | 6.2(L)*2.5(W)* 2.4(H) | GTS251 | N/A | N/A |
| 3 | EMI Test Receiver | Rohde & Schwarz | ESU26 | GTS203 | Jul. 04 2011 | Jul. 03 2012 |
| 4 | BiConiLog Antenna | SCHWARZBECK MESS-ELEKTRONIK | VULB9163 | GTS214 | Feb. 26 2012 | Feb. 25 2013 |
| 5 | EMI Test Software | AUDIX | E3 | N/A | N/A | N/A |
| 6 | Coaxial Cable | GTS | N/A | GTS213 | Apr. 01 2011 | Mar. 31 2012 |
| 7 | Coaxial Cable | GTS | N/A | GTS211 | Apr. 01 2011 | Mar. 31 2012 |
| 8 | Coaxial cable | GTS | N/A | GTS210 | Apr. 01 2011 | Mar. 31 2012 |
| 9 | Coaxial Cable | GTS | N/A | GTS212 | Apr. 01 2011 | Mar. 31 2012 |
| 10 | Amplifier(100kHz-3GHz) | HP | 8347A | GTS204 | Jul. 04 2011 | Jul. 03 2012 |
| 11 | Double -ridged waveguide horn | SCHWARZBECK | 9120D-829 | GTS208 | June 30 2011 | June 29 2012 |

| Conducted Emission | | | | | | |
|---|---|---|---|---|---|---|
| **Item** | **Test Equipment** | **Manufacturer** | **Model No.** | **Inventory No.** | **Cal.Date (mm-dd-yy)** | **Cal.Due date (mm-dd-yy)** |
| 1 | Shielding Room | ZhongYu Electron | 7.0(L)x3.0(W)x3.0(H) | GTS252 | Jul. 04 2011 | Jul. 03 2012 |
| 2 | EMI Test Receiver | Rohde & Schwarz | ESCS30 | GTS223 | Jul. 04 2011 | Jul. 03 2012 |
| 3 | 10dB Pulse Limita | Rohde & Schwarz | N/A | GTS224 | Jul. 04 2011 | Jul. 03 2012 |
| 4 | LISN | SCHWARZBECK MESS-ELEKTRONIK | NSLK 8127 | GTS226 | Jul. 04 2011 | Jul. 03 2012 |
| 5 | Coaxial Cable | GTS | N/A | GTS227 | Apr. 01 2011 | Mar. 31 2012 |
| 6 | EMI Test Software | AUDIX | E3 | N/A | N/A | N/A |

# 7 Test results and Measurement Data

## 7.1 Conducted Emissions

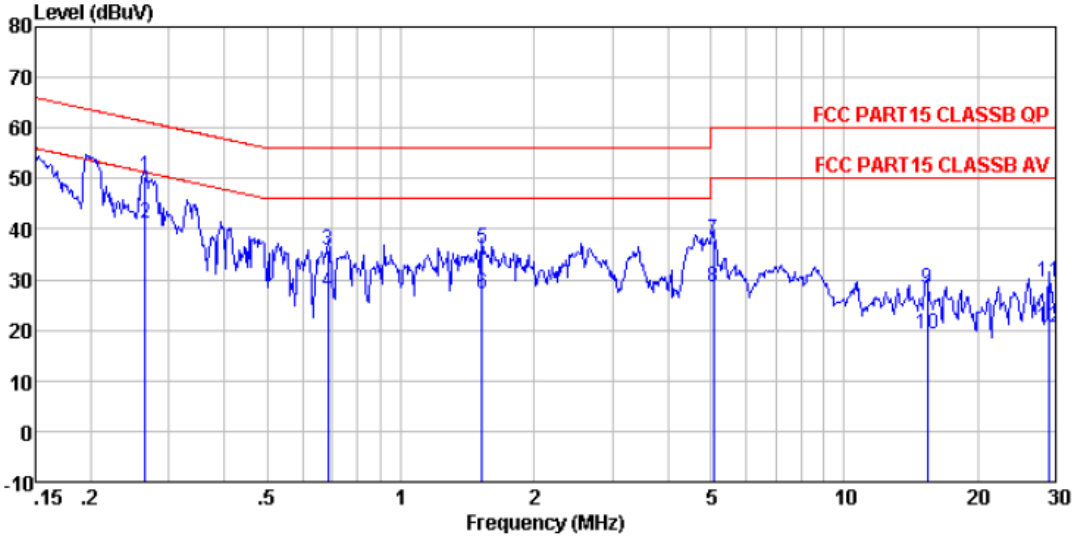
| | |
|---|---|
| Test Requirement: | FCC Part15 B Section 15.107 |
| Test Method: | ANSI C63.4:2003 |
| Test Frequency Range: | 150kHz to 30MHz |
| Class / Severity: | Class B |
| Receiver setup: | RBW=9kHz, VBW=30kHz |
| Limit: | Frequency range (MHz) / Limit (dBμV): Quasi-peak / Average<br>0.15-0.5: 66 to 56* / 56 to 46*<br>0.5-5: 56 / 46<br>0.5-30: 60 / 50 |
| Test procedure | The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). The provide a 50ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs). Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement. |
| Test setup: |  <br>*Remark:*<br>*E.U.T: Equipment Under Test*<br>*LISN: Line Impedence Stabilization Network*<br>*Test table height=0.8m* |
| Test environment: | Temp.: 25 °C ⋮ Humid.: 52% ⋮ Press.: 1 012mbar |
| Measurement Record: | Uncertainty: ± 3.45dB |
| Test Instruments: | Refer to section 6 for details |

| | |
|---|---|
| Test mode: | Refer to section 5.3 for details |
| Test results: | Pass |

**Measurement Data**

worst case

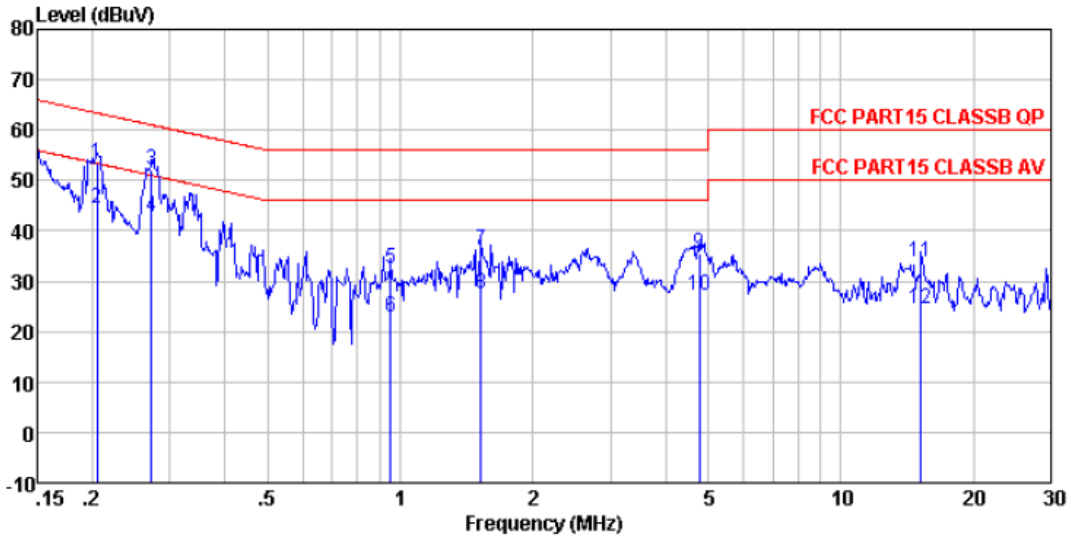
Line:




Condition : FCC PART15 CLASSB QP LISN(2011) LINE
Job No. : 166RF
Test Mode : PC mode
Test Engineer: Collin

| | Freq | Read Level | LISN Factor | Cable Loss | Level | Limit Line | Over Limit | Remark |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB | dB | dBuV | dBuV | dB | |
| 1 | 0.266 | 49.81 | 0.62 | 0.10 | 50.53 | 61.25 | -10.72 | QP |
| 2 | 0.266 | 40.36 | 0.62 | 0.10 | 41.08 | 51.25 | -10.17 | Average |
| 3 | 0.686 | 35.12 | 0.52 | 0.10 | 35.74 | 56.00 | -20.26 | QP |
| 4 | 0.686 | 26.78 | 0.52 | 0.10 | 27.40 | 46.00 | -18.60 | Average |
| 5 | 1.527 | 35.63 | 0.43 | 0.10 | 36.16 | 56.00 | -19.84 | QP |
| 6 | 1.527 | 26.71 | 0.43 | 0.10 | 27.24 | 46.00 | -18.76 | Average |
| 7 | 5.085 | 37.31 | 0.30 | 0.10 | 37.71 | 60.00 | -22.29 | QP |
| 8 | 5.085 | 28.23 | 0.30 | 0.10 | 28.63 | 50.00 | -21.37 | Average |
| 9 | 15.388 | 27.95 | 0.17 | 0.20 | 28.32 | 60.00 | -31.68 | QP |
| 10 | 15.388 | 18.79 | 0.17 | 0.20 | 19.16 | 50.00 | -30.84 | Average |
| 11 | 29.061 | 29.04 | 0.10 | 0.23 | 29.37 | 60.00 | -30.63 | QP |
| 12 | 29.061 | 20.07 | 0.10 | 0.23 | 20.40 | 50.00 | -29.60 | Average |

Neutral:




Condition : FCC PART15 CLASSB QP LISN(2011) NEUTRAL
Job No. : 166RF
Test Mode : PC mode
Test Engineer: Collin

| | Freq | Read Level | LISN Factor | Cable Loss | Level | Limit Line | Over Limit | Remark |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB | dB | dBuV | dBuV | dB | |
| 1 | 0.205 | 52.83 | 0.65 | 0.10 | 53.58 | 63.40 | -9.82 | QP |
| 2 | 0.205 | 43.68 | 0.65 | 0.10 | 44.43 | 53.40 | -8.97 | Average |
| 3 | 0.273 | 51.47 | 0.62 | 0.10 | 52.19 | 61.03 | -8.84 | QP |
| 4 | 0.273 | 42.17 | 0.62 | 0.10 | 42.89 | 51.03 | -8.14 | Average |
| 5 | 0.953 | 31.79 | 0.48 | 0.10 | 32.37 | 56.00 | -23.63 | QP |
| 6 | 0.953 | 22.23 | 0.48 | 0.10 | 22.81 | 46.00 | -23.19 | Average |
| 7 | 1.527 | 35.57 | 0.43 | 0.10 | 36.10 | 56.00 | -19.90 | QP |
| 8 | 1.527 | 26.98 | 0.43 | 0.10 | 27.51 | 46.00 | -18.49 | Average |
| 9 | 4.772 | 35.13 | 0.30 | 0.10 | 35.53 | 56.00 | -20.47 | QP |
| 10 | 4.772 | 26.73 | 0.30 | 0.10 | 27.13 | 46.00 | -18.87 | Average |
| 11 | 15.226 | 33.34 | 0.18 | 0.20 | 33.72 | 60.00 | -26.28 | QP |
| 12 | 15.226 | 24.07 | 0.18 | 0.20 | 24.45 | 50.00 | -25.55 | Average |

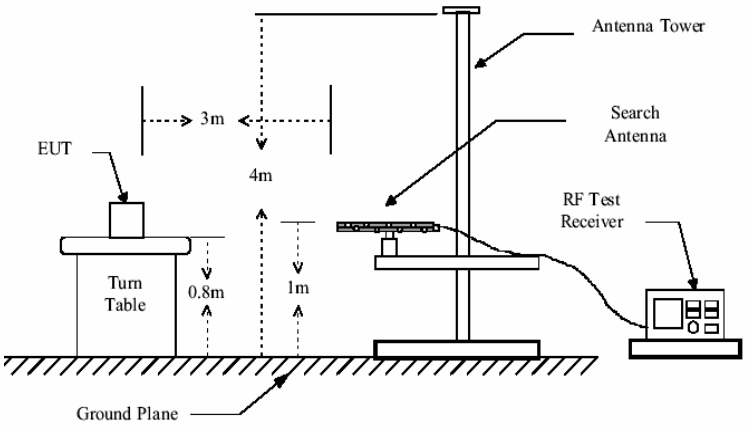
*Notes:*

*1. The following Quasi-Peak and Average measurements were performed on the EUT:*

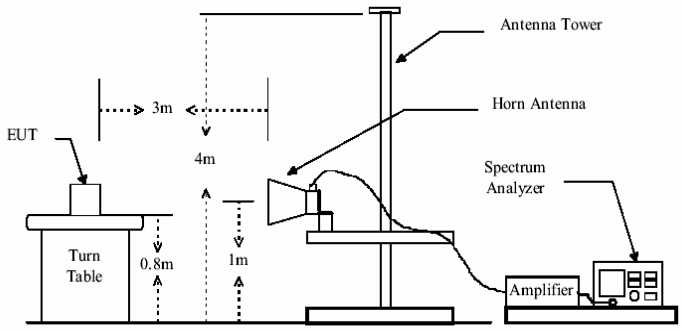
*2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.*

## 7.2 Radiated Emission

| | |
|---|---|
| Test Requirement: | FCC Part15 B Section 15.109 |
| Test Method: | ANSI C63.4:2003 |
| Test Frequency Range: | 30MHz to 1GHz |
| Test site: | Measurement Distance: 3m (Semi-Anechoic Chamber) |
| Receiver setup: | Frequency / Detector / RBW / VBW / Remark<br>30MHz-1GHz / Quasi-peak / 120kHz / 300KHz / Quasi-peak Value<br>Above 1GHz / Peak / 1MHz / 3MHz / Peak Value<br>Above 1GHz Peak 1MHz 10Hz AV value |
| Limit: | Frequency / Limit (dBuV/m @3m) / Remark<br>30MHz-88MHz / 40.0 / Quasi-peak Value<br>88MHz-216MHz / 43.5 / Quasi-peak Value<br>216MHz-960MHz / 46.0 / Quasi-peak Value<br>960MHz-1GHz / 54.0 / Quasi-peak Value<br>Above 1GHz / 54.0 / Average Value<br>Above 1GHz / 74.0 / Peak Value |
| Test Procedure: | 1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.<br>2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.<br>3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.<br>4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.<br>5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.<br>6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. |
| Test setup: | Below 1GHz |




Above 1GHz




| | | | | | | |
|---|---|---|---|---|---|---|
| Test environment: | Temp.: | 25 °C | Humid.: | 52% | Press.: | 1 012mbar |
| Measurement Record: | | | | | | Uncertainty: ± 4.5dB |
| Test Instruments: | Refer to section 6 for details | | | | | |
| Test mode: | Refer to section 5.3 for details | | | | | |
| Test results: | Passed | | | | | |

*Note:*
*The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:*

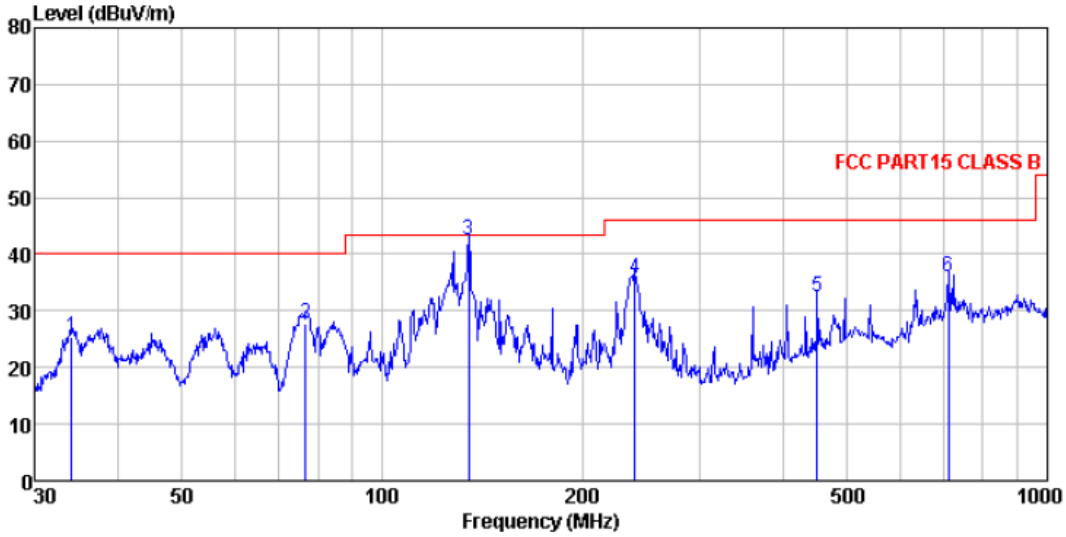
*Final Test Level =Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor*

**Measurement Data**

worst case

Below 1GHz

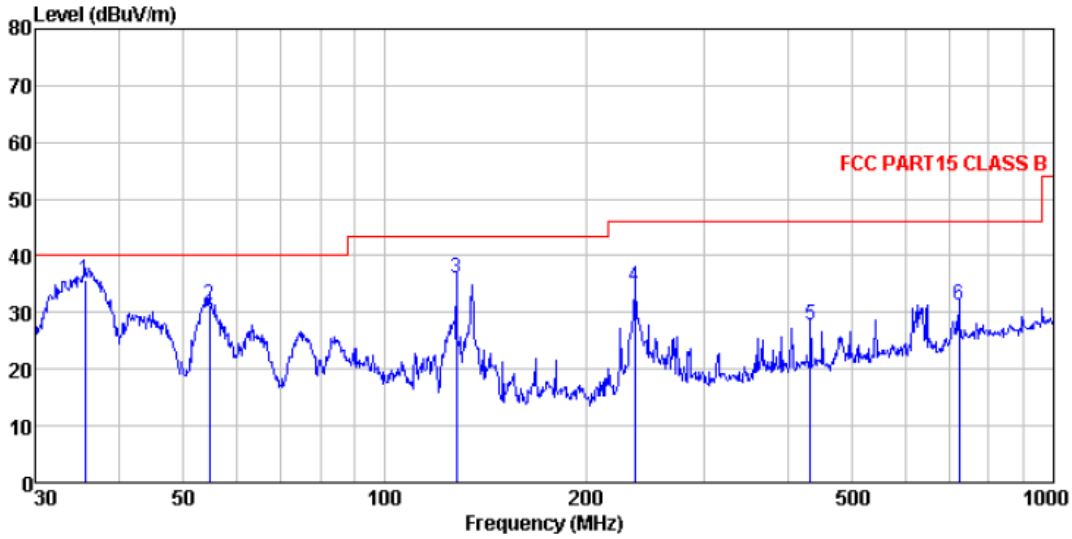
Horizontal:




Site : 3m chamber
Condition : FCC PART15 CLASS B 3m VULB9163-NEW HORIZONTAL
Job No. : 166RF
Test Mode : PC mode
Test Engineer: Collin

| | Freq | Read Level | Antenna Factor | Cable Loss | Preamp Factor | Level | Limit Line | Over Limit | Remark |
|---|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB/m | dB | dB | dBuV/m | dBuV/m | dB | |
| 1 | 34.1561 | 47.64 | 9.93 | 0.13 | 32.23 | 25.47 | 40.00 | -14.53 | QP |
| 2 | 76.7808 | 52.02 | 7.39 | 0.23 | 31.83 | 27.81 | 40.00 | -12.19 | QP |
| 3 | 135.0000 | 66.39 | 7.74 | 0.33 | 31.89 | 42.57 | 43.50 | -0.93 | QP |
| 4 | 239.9874 | 57.20 | 10.14 | 0.53 | 32.28 | 35.59 | 46.00 | -10.41 | QP |
| 5 | 451.1350 | 47.00 | 16.38 | 0.92 | 31.96 | 32.34 | 46.00 | -13.66 | QP |
| 6 | 709.1823 | 44.44 | 21.88 | 1.38 | 31.68 | 36.02 | 46.00 | -9.98 | QP |

Vertical:

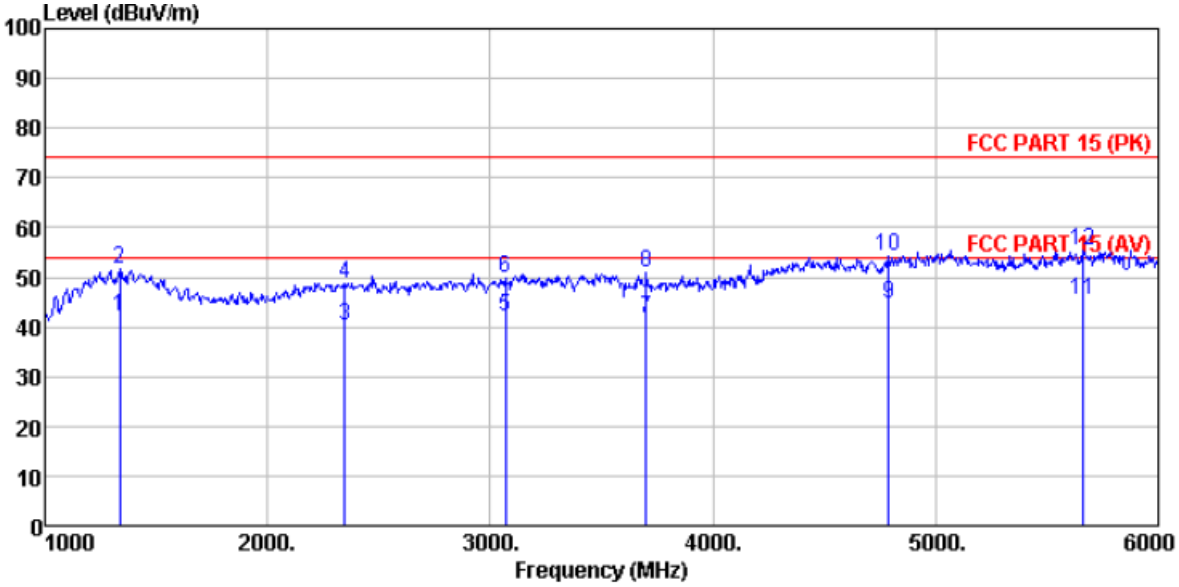



Site : 3m chamber
Condition : FCC PART15 CLASS B 3m VULB9163-NEW VERTICAL
Job No. : 166RF
Test Mode : PC mode
Test Engineer: Collin

| | Freq | ReadAntenna Level | Factor | Cable Loss | Preamp Factor | Level | Limit Line | Over Limit | Remark |
|---|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB/m | dB | dB | dBuV/m | dBuV/m | dB | |
| 1 | 35.6240 | 54.64 | 13.26 | 0.13 | 32.20 | 35.83 | 40.00 | -4.17 | QP |
| 2 | 54.6429 | 49.37 | 13.73 | 0.17 | 31.99 | 31.28 | 40.00 | -8.72 | QP |
| 3 | 128.1130 | 61.23 | 6.29 | 0.33 | 31.86 | 35.99 | 43.50 | -7.51 | QP |
| 4 | 236.6447 | 56.60 | 9.58 | 0.53 | 32.28 | 34.43 | 46.00 | -11.57 | QP |
| 5 | 432.5457 | 45.46 | 13.53 | 0.85 | 32.09 | 27.75 | 46.00 | -18.25 | QP |
| 6 | 721.7259 | 43.66 | 17.98 | 1.41 | 31.65 | 31.40 | 46.00 | -14.60 | QP |

Above 1GHz

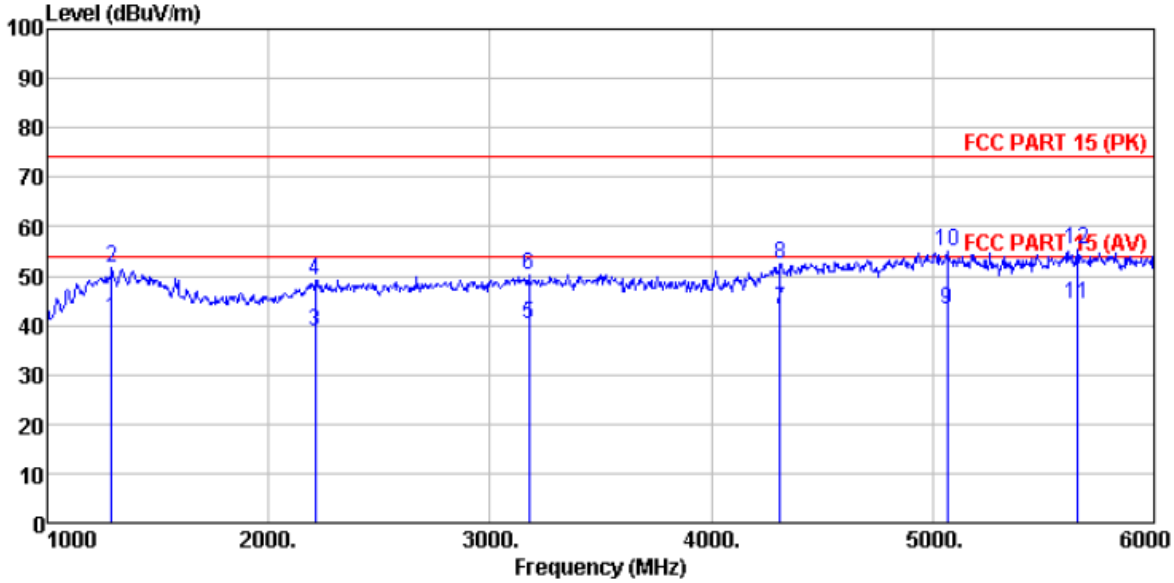
Horizontal:




Site : 3m chamber
Condition : FCC PART 15 (PK) 3m BBHA9120D ANT(>1GHZ) HORIZONTAL
Job No. : 166RF
Test Mode : PC mode
Test Engineer: Collin

| | Freq | ReadAntenna Level | Antenna Factor | Cable Loss | Preamp Factor | Level | Limit Line | Over Limit | Remark |
|---|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB/m | dB | dB | dBuV/m | dBuV/m | dB | |
| 1 | 1335.0000 | 34.66 | 25.69 | 2.41 | 20.52 | 42.24 | 54.00 | -11.76 | Average |
| 2 | 1335.0000 | 44.11 | 25.69 | 2.41 | 20.52 | 51.69 | 74.00 | -22.31 | Peak |
| 3 | 2345.0000 | 39.29 | 27.74 | 3.25 | 30.22 | 40.06 | 54.00 | -13.94 | Average |
| 4 | 2345.0000 | 48.06 | 27.74 | 3.25 | 30.22 | 48.83 | 74.00 | -25.17 | Peak |
| 5 | 3070.0000 | 38.97 | 28.67 | 3.96 | 29.69 | 41.91 | 54.00 | -12.09 | Average |
| 6 | 3070.0000 | 47.00 | 28.67 | 3.96 | 29.69 | 49.94 | 74.00 | -24.06 | Peak |
| 7 | 3700.0000 | 35.66 | 29.24 | 4.20 | 27.47 | 41.63 | 54.00 | -12.37 | Average |
| 8 | 3700.0000 | 44.78 | 29.24 | 4.20 | 27.47 | 50.75 | 74.00 | -23.25 | Peak |
| 9 | 4790.0000 | 31.63 | 31.76 | 5.30 | 24.11 | 44.58 | 54.00 | -9.42 | Average |
| 10 | 4790.0000 | 41.36 | 31.76 | 5.30 | 24.11 | 54.31 | 74.00 | -19.69 | Peak |
| 11 | 5660.0000 | 30.88 | 32.40 | 5.85 | 23.82 | 45.31 | 54.00 | -8.69 | Average |
| 12 | 5660.0000 | 40.98 | 32.40 | 5.85 | 23.82 | 55.41 | 74.00 | -18.59 | Peak |

Vertical:




Site : 3m chamber
Condition : FCC PART 15 (PK) 3m BBHA9120D ANT(>1GHZ) VERTICAL
Job No. : 166RF
Test Mode : PC mode
Test Engineer: Collin

| | Freq | ReadAntenna Level | Antenna Factor | Cable Loss | Preamp Factor | Level | Limit Line | Over Limit | Remark |
|---|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB/m | dB | dB | dBuV/m | dBuV/m | dB | |
| 1 | 1290.0000 | 33.19 | 25.61 | 2.39 | 19.81 | 41.38 | 54.00 | -12.62 | Average |
| 2 | 1290.0000 | 43.35 | 25.61 | 2.39 | 19.81 | 51.54 | 74.00 | -22.46 | Peak |
| 3 | 2210.0000 | 38.60 | 27.97 | 3.01 | 30.67 | 38.91 | 54.00 | -15.09 | Average |
| 4 | 2210.0000 | 48.71 | 27.97 | 3.01 | 30.67 | 49.02 | 74.00 | -24.98 | Peak |
| 5 | 3175.0000 | 36.85 | 28.79 | 4.01 | 29.28 | 40.37 | 54.00 | -13.63 | Average |
| 6 | 3175.0000 | 46.63 | 28.79 | 4.01 | 29.28 | 50.15 | 74.00 | -23.85 | Peak |
| 7 | 4310.0000 | 32.86 | 30.77 | 4.57 | 25.20 | 43.00 | 54.00 | -11.00 | Average |
| 8 | 4310.0000 | 42.42 | 30.77 | 4.57 | 25.20 | 52.56 | 74.00 | -21.44 | Peak |
| 9 | 5065.0000 | 29.53 | 32.01 | 5.56 | 23.89 | 43.21 | 54.00 | -10.79 | Average |
| 10 | 5065.0000 | 41.32 | 32.01 | 5.56 | 23.89 | 55.00 | 74.00 | -19.00 | Peak |
| 11 | 5650.0000 | 29.71 | 32.36 | 5.85 | 23.82 | 44.10 | 54.00 | -9.90 | Average |
| 12 | 5650.0000 | 40.81 | 32.36 | 5.85 | 23.82 | 55.20 | 74.00 | -18.80 | Peak |