



## SGS-CSTC Standards Technical Services Co., Ltd.

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**FEDERAL COMMUNICATIONS COMMISSION**  
Registration number: 282399

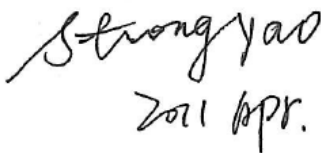
Report No.: GZEM101000254602  
Page: 1 of 21  
FCC ID: ON5USBCU

# TEST REPORT

<b>Application No.:</b>	GZEM1010002546RF
<b>Applicant:</b>	CATEYE Co., Ltd.
<b>Product Name:</b>	USB Dongle Transceiver
<b>Product Description:</b>	Wireless Transmission for Data
<b>Model No:</b>	USBCU
<b>FCC ID:</b>	ON5USBCU
<b>Trade Mark:</b>	CATEYE
<b>Standards:</b>	FCC PART 15 SUBPART B:2009
<b>Date of Receipt:</b>	2010-12-27
<b>Date of Test:</b>	2011-01-07 to 2011-01-09
<b>Date of Issue:</b>	2011-04-08
<b>Test Result :</b>	<b>Pass*</b>

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

Authorized Signature:



2011 Apr.

**Strong Yao**  
Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. All test results in this report can be traceable to National or International Standards.

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## 2 Version

Revision Record				
Version	Chapter	Date	Modifier	Remark
00		2011-04-08		Original

Authorized for issue by:			
Tested By			2011-01-07 to 2011-01-09 Date
	(Little Xiang) /Project Engineer		
Prepared By			2011-02-25 Date
	(Millie Li) /Clerk		
Checked By			2011-04-08 Date
	(Strong Yao) /Reviewer		



### 3 Test Summary

Electromagnetic Interference (EMI)				
Test	Test Requirement	Test Method	Class / Severity	Result
Conducted Emission (150 KHz to 30 MHz)	FCC PART 15 SUBPART B:2009	ANSI C63.4:2009	Class B	PASS
Radiated Emission (30 MHz to 1 GHz)	FCC PART 15 SUBPART B:2009	ANSI C63.4:2009	Class B	PASS
Radiated Emission above 1 GHz	FCC PART 15 SUBPART B:2009	ANSI C63.4:2009	Class B	PASS

**Remark :**  
**EUT:** In this whole report EUT means Equipment Under Test.



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## 5 General Information

### 5.1 Client Information

Applicant: CATEYE Co., Ltd.  
Address of Applicant: 2-8-25 Kuwazu, Higashi-Sumiyoshi-ku, Osaka Japan  
Manufacturer: National Electronics & Watch Co., Ltd.  
Address of Manufacturer: 15/F., SHING DAO IND. BLDG., 232 ABERDEEN MAIN ROAD,  
ABERDEEN, HONG KONG

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

Product Name: USB Dongle Transceiver  
Product Description: Wireless Transmission for Data  
Model No: USBCU  
Trade Mark: CATEYE

### 5.3 Details of E.U.T.

Power Supply: DC 5V (supply by PC USB port)  
USB Cable: N/A

### 5.4 Deviation from Standards

None.

### 5.5 Abnormalities from Standard Conditions

None.

### 5.6 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory,  
198 Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District,  
Guangzhou, China 510663  
Tel: +86 20 82155555 Fax: +86 20 82075059

No tests were sub-contracted.



## 5.7 Description of Support Units

The EUT has been tested with:

Software: e-Train Data™ Ver.4 which is supplied by the client.

And associated equipment as a typical PC system

Description	Manufacturer	Model No.	SN/Certificate NO
<b>Test PC 1</b>			
Personal Computer	DELL	WORKSTATION 690	3R5592X
Monitor	SAMSUNG	225MS	CR22HVMP900646W
Mouse	DELL	MOC5UO	G1B02ZP5
Keyboard	DELL	SK-8115	CN-ODJ331-71616-7B1-109J
<b>Test PC 2</b>			
Personal Computer	DELL	OPTIPLEX 755	D6JF82X
Monitor	DELL	SP2208WFPt(B)	CN-OPK573-71618-831-119U
Mouse	DELL	M-WDEL1	OT0943
Keyboard	DELL	SK-8115	CN-ODJ331-71616-7B1-109J
<b>Test PC 3</b>			
Personal Computer	DELL	OPTIPLEX 330	7JZ382X
Monitor	DELL	E228WFPc	CN-OPN380-64180-7CJ-1DXL
Mouse	DELL	MOC5UO	G1B02ZP5
Keyboard	CHERRY	RS 6000M	G 00005662 Q242 III
<b>Test PC 4</b>			
Personal Computer	DELL	OPTIPLEX 980	GXVZV2X
Monitor	DELL	P2210f	FGL-00000714011207500 -09BO02490-A
Mouse	DELL	M-WDEL1	OT0943
Keyboard	DELL	SK-8135	N/A
<b>Test PC 5</b>			
Personal Computer	HP	DX7208	CNG62707HF
Monitor	HP	D8904	L0204H094
Mouse	DELL	MOC5UO	G1B02ZP5
Keyboard	DELL	SK-8135	N/A



Description	Manufacturer	Model No.	SN/Certificate NO
<b>Notebook</b>			
NoteBook	IBM	T40	99-FBAF9 03/09
NoteBook	Lenovo	R400	L3-ABB9E
<b>Printer</b>			
Printer	DELL	4470-AD1 (926B)	CN-OGH204-48734-69Q-7K78
Printer	HP	C5884A	SG78D1H18F
<b>Other Peripheral</b>			
DV	SONY	DCR-HC28	375383
Portable Hard disk	MSI	2.5" USB2.0 MOBILE HDD(250GB)	HKC08-J/L8022438329
Portable Hard disk	SAMSUNG	HM320JI(320GB)	S16LJD0Q543275
ROM Programmer	DASI Electronics	EMP-100A	N/A
Faxmodem	3Com U.S. Robotics	56K Faxmodem	715630-01
HP Colorado T1000e External Parallel Tape Backup System	Hewlett Packard	T1000e	US035980
GROUP PHONE SYSTEM	HB	WS824(1)	241342207120130
Fast Ethernet Switch	TP-Link	TL-SF1005D	7126101589
Fast Ethernet Switch	TP-Link	TL-SF1008D	7126001251
MIC	VoiceAO	N/A	N/A
MIC	VoiceAO	N/A	N/A
Flash Disk	Kingston	DTI/2GB	CH 092908
Flash Disk	Kingston	DTI/1GB	CH 042007
SD Memory Card	SanDisk	128MB	AK0531802339D
MiniSD Memory Card	SanDisk	1024MB	BB063010TE
MMCmobile	Richlight	1GB	MM8GH01GRMCA-9A
Headphone	COBY	CV-230	N/A
Headphone	Philips	N/A	N/A
Ipod classic	Apple	MB147CH	JQ74121YMV
Ipod nano	Apple	A1137	JQ63803RV9M
Ipod nano	Apple	A1137	5Z50163JXUY
Ipod nano	Apple	A1137	YM601DN0SZB
Ipod nano	Apple	MC688CH/A	DCYDWE22DDVX
Ipod touch	Apple	A1288	1B9070RW203
Iphone	Apple	A1203	87810HJBWH8
Iphone 3GS	Apple	A1303	579C-A1303A
Projector	Sony	VPL-CX61	5004355
Wii console	Nintendo	RVL-001(JPN)	N/A
Xbox 360 Console	Microsoft	Xbox 360 Console	328731122665682000
Xbox Video Game System	Microsoft	F23-00064	111100623241005

## 5.8 Test Facility

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

- **NVLAP (Lab Code: 200611-0)**

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory is recognized under the National Voluntary Laboratory Accreditation Program (NVLAP/NIST). NVLAP Code: 200611-0.

- **ACMA**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our NVLAP accreditation.

- **SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO**

Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

- **CNAS (Lab Code: L0167)**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been assessed and in compliance with CNAS-CL01:2006 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:2005 General Requirements) for the Competence of Testing Laboratories.

- **FCC (Registration No.: 282399)**

SGS-CSTC Standards Technical Services 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 282399, May 31, 2002.

- **Industry Canada (Registration No.: 4620B-1)**

The 3m/10m Alternate Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. has been registered by Certification and Engineering of Industry Canada for radio equipment testing with Registration No. 4620B-1.

- **VCCI (Registration No.: R-2460 and C-2584)**

The 10m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-2460 and C-2584 respectively.

- **CBTL (Lab Code: TL129)**

SGS-CSTC Standards Technical Services Co., Ltd., E&E Laboratory has been assessed and fully comply with the requirements of ISO/IEC 17025:2005, the Basic Rules, IEC 61010-1:2006-10 and Rules of procedure IEC 61010-2:2006-10, and the relevant IEC 61010-2:2006-10 Operational documents.





## 6 Equipment Used during Test

Conducted Emission					
No.	Test Equipment	Manufacturer	Model No.	Serial No.	Cal.Due date (YYYY-MM-DD)
EMC0306	Shielding Room	Zhong Yu	8 x 3 x 3.8 m <sup>3</sup>	N/A	N/A
EMC0118	Two-line v-netwok	R&S	ENV216	100359	2011-09-25
EMC0506	EMI Test Receiver	Rohde & Schwarz	ESCS30	100085	2011-11-24
EMC0107	Coaxial Cable	SGS	2m	N/A	2011-07-18
EMC0106	Voltage Probe	SGS	N/A	N/A	N/A
EMC0120	8 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T8-02	20550	2012-01-17
EMC0121	4 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T4-02	20549	2012-01-17
EMC0122	2 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T2-02	20548	2012-01-17

RE in Chamber					
No.	Test Equipment	Manufacturer	Model No.	Serial No.	Cal.Due date (YYYY-MM-DD)
EMC0525	Compact Semi-Anechoic Chamber	ChangZhou ZhongYu	N/A	N/A	2011-09-06
EMC0522	EMI Test Receiver	Rohde & Schwarz	ESIB26	100283	2012-01-17
EMC0056	EMI Test Receiver	Rohde & Schwarz	ESCI	10036	2011-06-02
N/A	EMI Test Software	Audix	E3	N/A	N/A
EMC0514	Coaxial cable	SGS	N/A	N/A	2011-12-08
EMC2025	Trilog Broadband Antenna 30-3000MHz	SCHWARZBECK MESS-ELEKTRONIK	VULB 9163	9163-450	2011-10-28
EMC0524	Bi-log Type Antenna	Schaffner -Chase	CBL6112B	2966	2011-12-20
EMC0519	Bilog Type Antenna	Schaffner -Chase	CBL6143	5070	2011-12-20
EMC0518	Horn Antenna	Rohde & Schwarz	HF906	100096	2011-09-11
EMC0521	1-26.5 GHz Pre-Amplifier	Agilent	8449B	3008A01649	2012-01-17
EMC0049	Amplifier	Agilent	8447D	2944A10862	2011-04-21
EMC0075	310N Amplifier	Sonoma	310N	272683	2011-10-25
EMC0523	Active Loop Antenna	EMCO	6502	42963	2011-11-17
EMC0530	10m Semi- Anechoic Chamber	ETS	N/A	N/A	2011-05-17

General used equipment					
No.	Test Equipment	Manufacturer	Model No.	Serial No.	Cal.Due date (YYYY-MM-DD)
EMC0006	DMM	Fluke	73	70681569	2011-12-16
EMC0007	DMM	Fluke	73	70671122	2011-12-16



## 7 Emission Test Results

### 7.1 Conducted Emissions Mains Terminals, 150 KHz to 30MHz

**Test Requirement:** FCC Part15 B  
**Test Method:** ANSI C63.4  
**Test Voltage:** 120V AC, 60Hz  
**Test Date:** 2011-01-07  
**Frequency Range:** 150KHz to 30MHz  
**Detector:** Peak for pre-scan  
 Quasi-Peak and Average at frequency with maximum peak  
 (9 kHz resolution bandwidth)  
**Class / Limit:** Class B

Frequency range MHz	Class B Limits dB (μV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

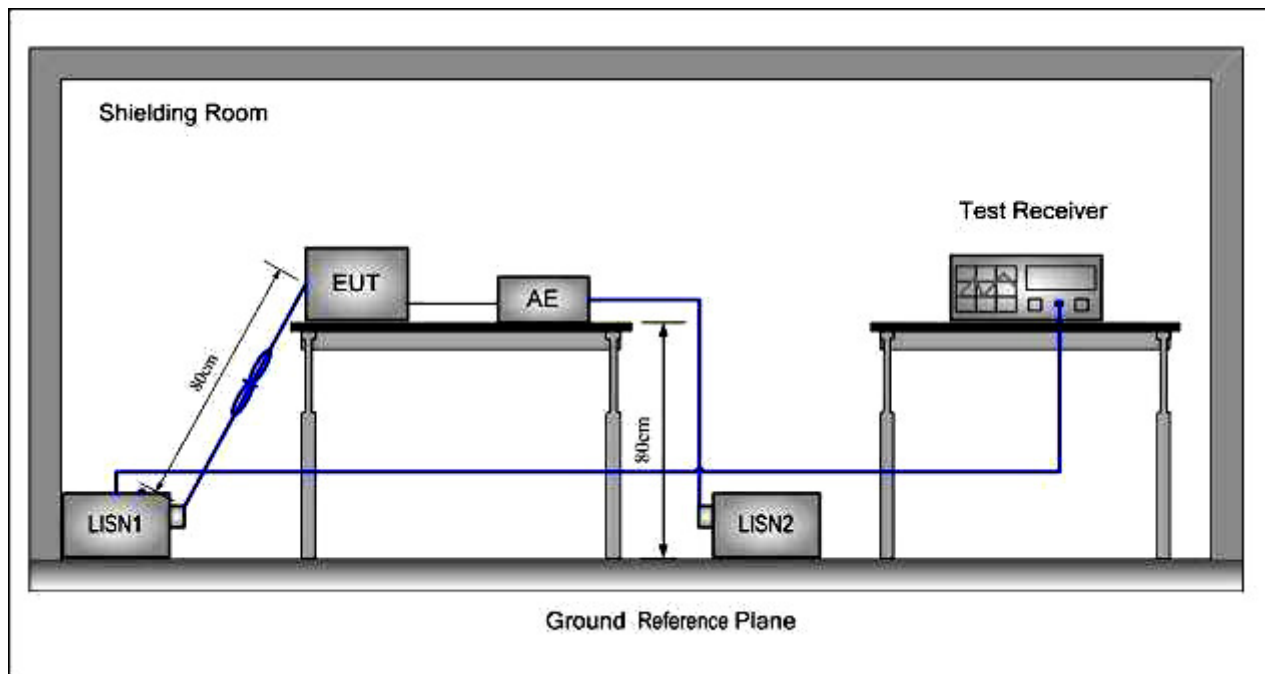
NOTE 1 :The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

NOTE 2: The lower limit is applicable at the transition frequency.

#### 7.1.1 E.U.T. Operation

**Operating Environment:**  
 Temperature: 25.0 °C      Humidity: 52 %RH      Atmospheric Pressure: 1003 mbar  
**EUT Operation:** Test the EUT in PC connection mode.

### 7.1.2 Test Setup and Procedure



1. The mains terminal disturbance voltage test was conducted in a shielded room.
2. The EUT was connected to nominal power supply through a LISN 1 (Line Impedance Stabilization Network) which provides a  $50\Omega/50\mu\text{H} + 5\Omega$  linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
3. The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, but separated from metallic contact with the ground reference plane by 0.1m of insulation.
4. The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.

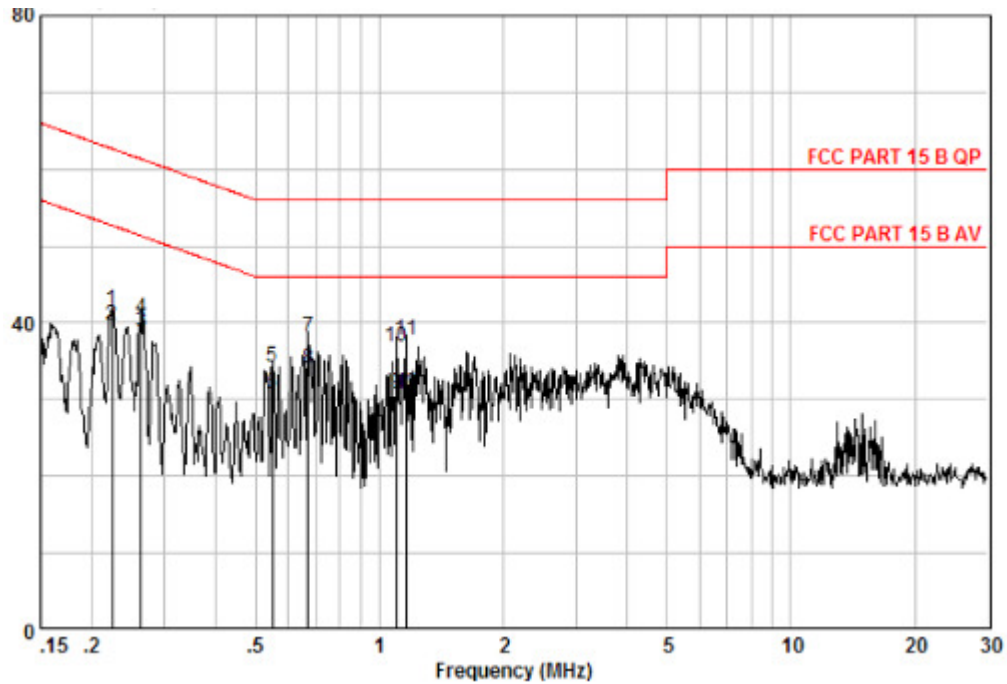
### 7.1.3 Measurement Data

Pre-scan was performed with peak detected on both live and neutral cable. Quasi-peak & average measurements were performed at the frequencies which maximum peak emission level was detected. Please see the attached Quasi-peak and Average test results.

**Live Line:**

Peak Scan:

Level (dBμV)



Quasi-peak and Average measurement

Freq MHz	Read Level dBuV	Cable Loss dB	LISN Factor dB	Level dBuV	Limit Line dBuV	Over Limit dB	Remark
0.223	31.96	0.12	9.62	41.70	62.70	-21.00	QP
0.223	29.92	0.12	9.62	39.66	52.70	-13.04	AVERAGE
0.263	29.17	0.10	9.62	38.88	51.34	-12.45	AVERAGE
0.263	30.78	0.10	9.62	40.49	61.34	-20.84	QP
0.549	24.54	0.05	9.61	34.20	56.00	-21.80	QP
0.549	20.98	0.05	9.61	30.64	46.00	-15.36	AVERAGE
0.672	28.40	0.04	9.62	38.06	56.00	-17.94	QP
0.672	24.38	0.04	9.62	34.04	46.00	-11.96	AVERAGE
1.100	21.03	0.02	9.62	30.67	46.00	-15.33	AVERAGE
1.100	27.18	0.02	9.62	36.82	56.00	-19.18	QP
1.160	28.16	0.02	9.62	37.80	56.00	-18.20	QP
1.160	21.18	0.02	9.62	30.82	46.00	-15.18	AVERAGE

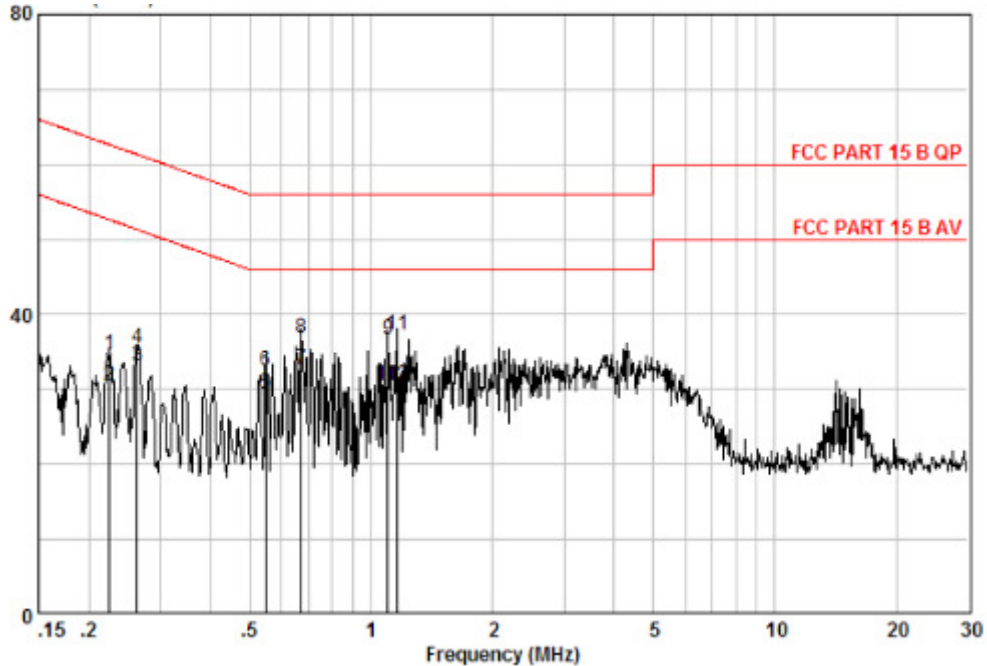
**Level = Read Level + LISN Factor + Cable Loss.**



**Neutral Line:**

Peak Scan:

Level (dBμV)



Quasi-peak and Average measurement:

Freq MHz	Read Level dBuV	Cable Loss dB	LISN Factor dB	Level dBuV	Limit Line dBuV	Over Limit dB	Remark
0.224	24.88	0.12	9.62	34.62	62.66	-28.04	QP
0.224	20.78	0.12	9.62	30.52	52.66	-22.14	AVERAGE
0.263	23.38	0.10	9.62	33.10	51.34	-18.24	AVERAGE
0.263	25.82	0.10	9.62	35.54	61.34	-25.80	QP
0.549	19.68	0.05	9.62	29.35	46.00	-16.65	AVERAGE
0.549	22.90	0.05	9.62	32.57	56.00	-23.43	QP
0.672	23.15	0.04	9.61	32.81	46.00	-13.19	AVERAGE
0.672	27.24	0.04	9.61	36.90	56.00	-19.10	QP
1.100	26.92	0.02	9.64	36.58	56.00	-19.42	QP
1.100	20.83	0.02	9.64	30.49	46.00	-15.51	AVERAGE
1.160	27.52	0.02	9.64	37.18	56.00	-18.82	QP
1.160	20.78	0.02	9.64	30.44	46.00	-15.56	AVERAGE

**Level = Read Level + LISN Factor + Cable Loss.**



## 7.2 Radiated Emissions, 30MHz to 1GHz

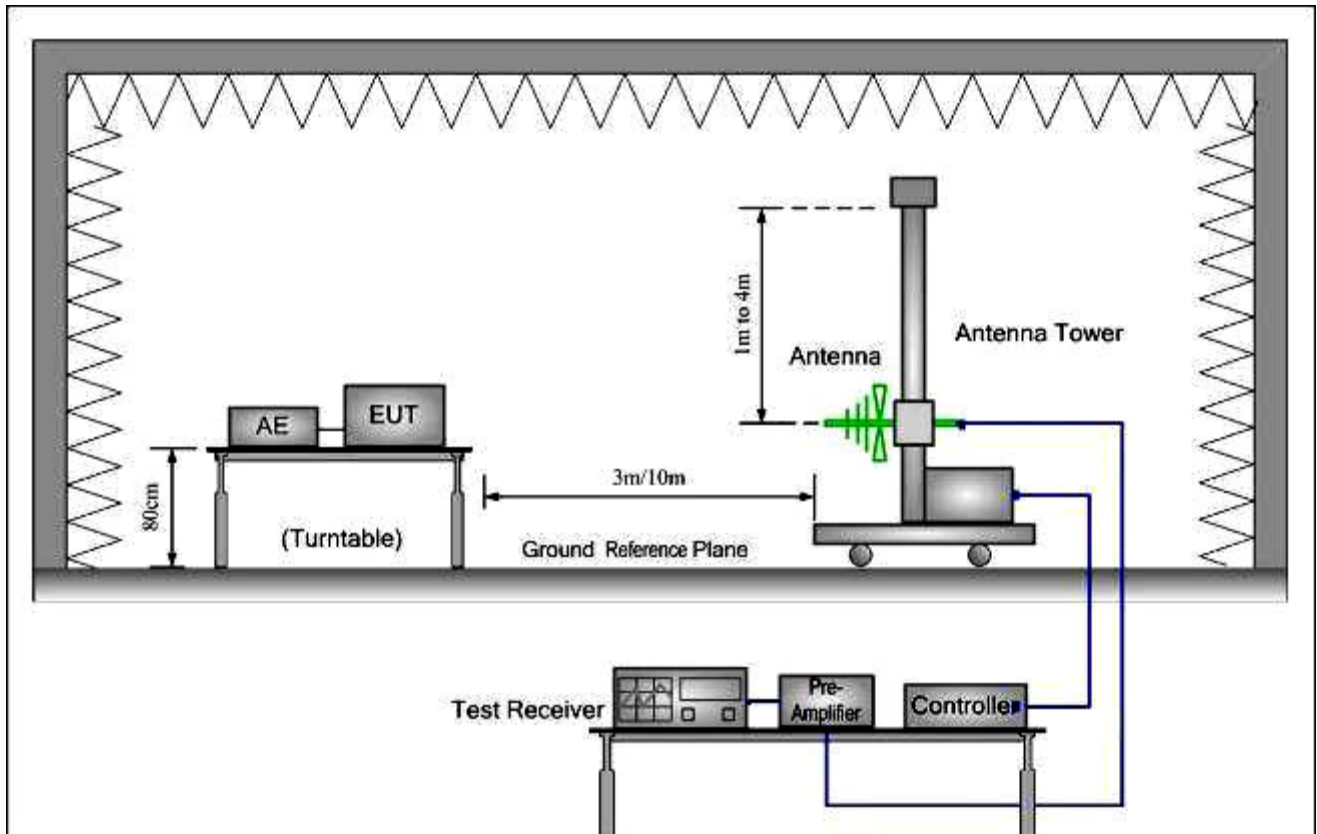
Test Requirement: FCC Part15 B  
 Test Method: ANSI C63.4  
 Test Voltage: 120V AC, 60Hz  
 Test Date: 2011-01-09  
 Frequency Range: 30MHz to 1GHz  
 Measurement Distance: 3 m  
 Detector: Peak for pre-scan  
                   Quasi-Peak if maximised peak within 6dB of limit  
                   (120 kHz resolution bandwidth)  
 Class / Limit: Class B

Frequency range MHz	Quasi-peak limits dB (µV/m)
30 to 88	40
88 to 216	43.5
216 to 960	46
Above 960	54
At transitional frequencies the lower limit applies.	

### 7.2.1 E.U.T. Operation

Operating Environment:  
 Temperature: 25.0 °C                      Humidity: 50 %RH                      Atmospheric Pressure: 1010 mbar  
 EUT Operation: Test the EUT in PC connection mode.

## 7.2.2 Test Setup and Procedure



1. The radiated emissions test was conducted in a semi-anechoic chamber.
2. Biconical and log periodic antenna was used for the frequency range from 30MHz to 1GHz
3. The EUT was connected to nominal power supply through a mains power outlet which was bonded to the ground reference plane; The mains cables were draped to the ground reference plane. The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, but separated from metallic contact with the ground reference plane by 0.1m of insulation.
4. Before final measurements of radiated emissions, a pre-scan was performed in the spectrum mode with the peak detector to find out the maximum emissions spectrum plots of the EUT.
5. The frequencies of maximum emission were determined in the final radiated emissions measurement. At each frequency, the EUT was rotated 360°, and the antenna was raised and lowered from 1 to 4 meters in order to determine the maximum disturbance. Measurements were performed for both horizontal and vertical antenna polarization.

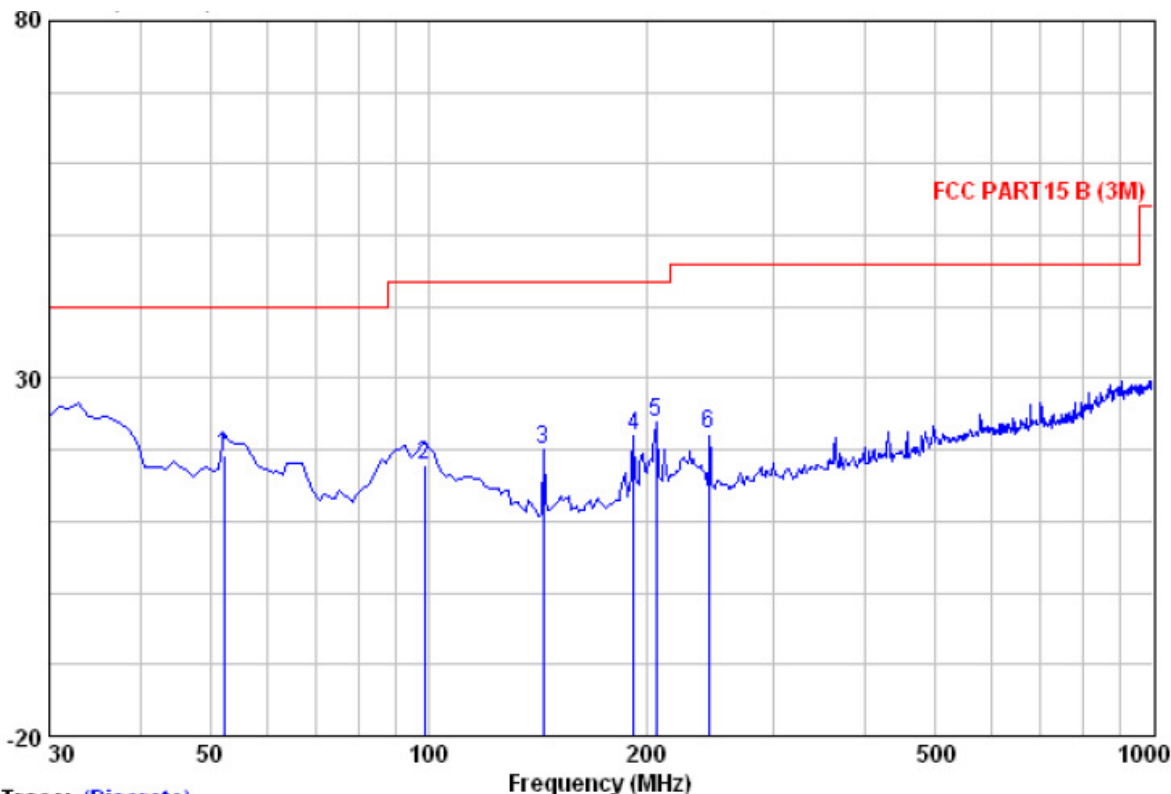


### 7.2.3 Measurement Data

Vertical:

Peak scan

Level (dB $\mu$ V/m)



Trace: (Discrete)

Quasi-peak measurement

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Limit Line	Level	Over Limit	Remark
MHz	dB $\mu$ V	dB/m	dB	dB	dB $\mu$ V/m	dB $\mu$ V/m	dB	
52.310	34.78	13.15	0.70	29.51	40.00	19.12	-20.88	QP
98.870	33.69	13.10	0.90	29.70	43.50	17.99	-25.51	QP
144.020	40.59	8.22	1.00	29.70	43.50	20.11	-23.39	QP
192.050	39.63	10.56	1.20	29.53	43.50	21.87	-21.63	QP
206.540	41.43	10.77	1.20	29.51	43.50	23.89	-19.61	QP
244.040	38.42	12.08	1.40	29.55	46.00	22.35	-23.65	QP

Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor.

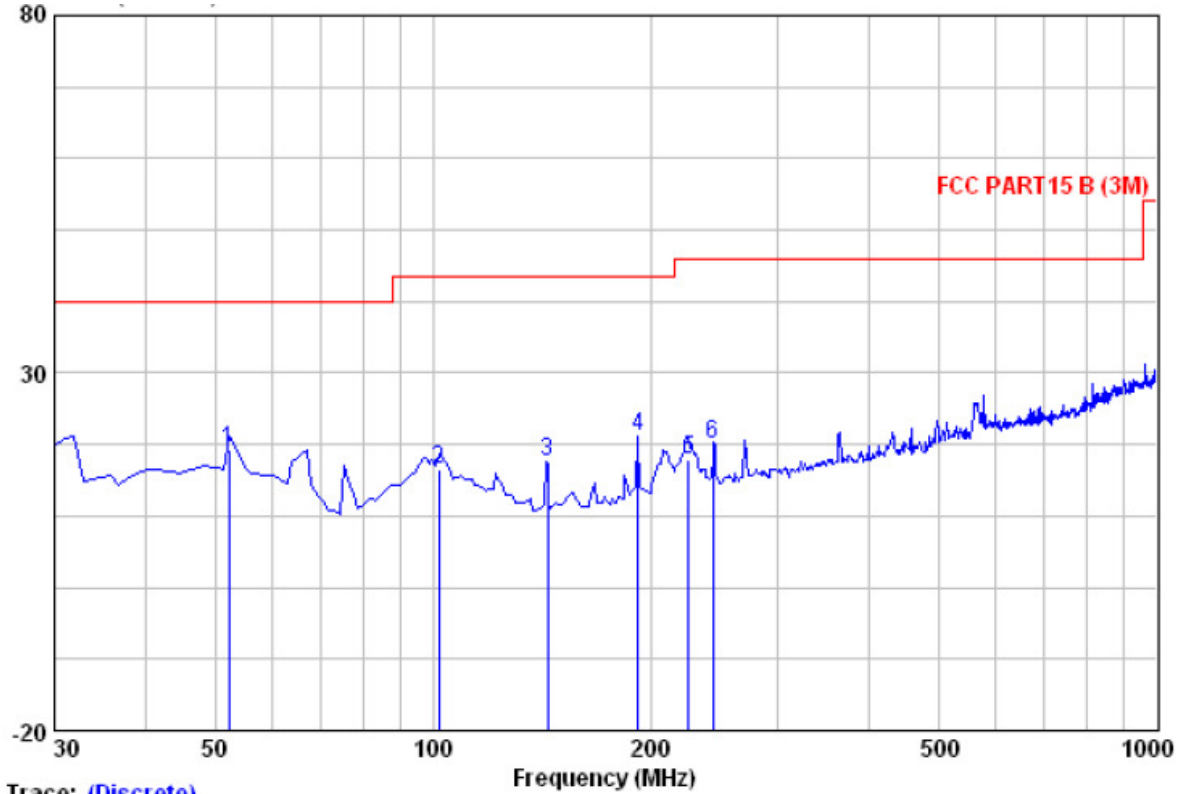




**Horizontal:**

Peak scan

Level (dBμV/m)



Trace: (Discrete)

Quasi-peak measurement

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Limit Line	Level	Over Limit	Remark
MHz	dBμV	dB/m	dB	dB	dBμV/m	dBμV/m	dB	
52.310	34.88	13.15	0.70	29.51	40.00	19.22	-20.78	QP
101.780	32.34	12.97	0.90	29.70	43.50	16.51	-26.99	QP
144.020	38.17	8.22	1.00	29.70	43.50	17.69	-25.81	QP
192.010	38.83	10.56	1.20	29.53	43.50	21.07	-22.43	QP
225.940	34.51	11.46	1.30	29.53	46.00	17.75	-28.25	QP
244.050	36.14	12.08	1.40	29.55	46.00	20.08	-25.92	QP

**Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor.**



### 7.3 Radiated Emissions above 1 GHz

Test Requirement: FCC Part15 B  
 Test Method: ANSI C63.4  
 Test Voltage: 120V AC, 60Hz  
 Test Date: 2011-01-09  
 Frequency Range: 1 GHz to 18 GHz  
 Measurement Distance: 3 m  
 Detector: Peak for pre-scan  
 Peak and Average if maximised peak within 6 dB of limit  
 (1 MHz resolution bandwidth)  
 Class / Limit: Class B

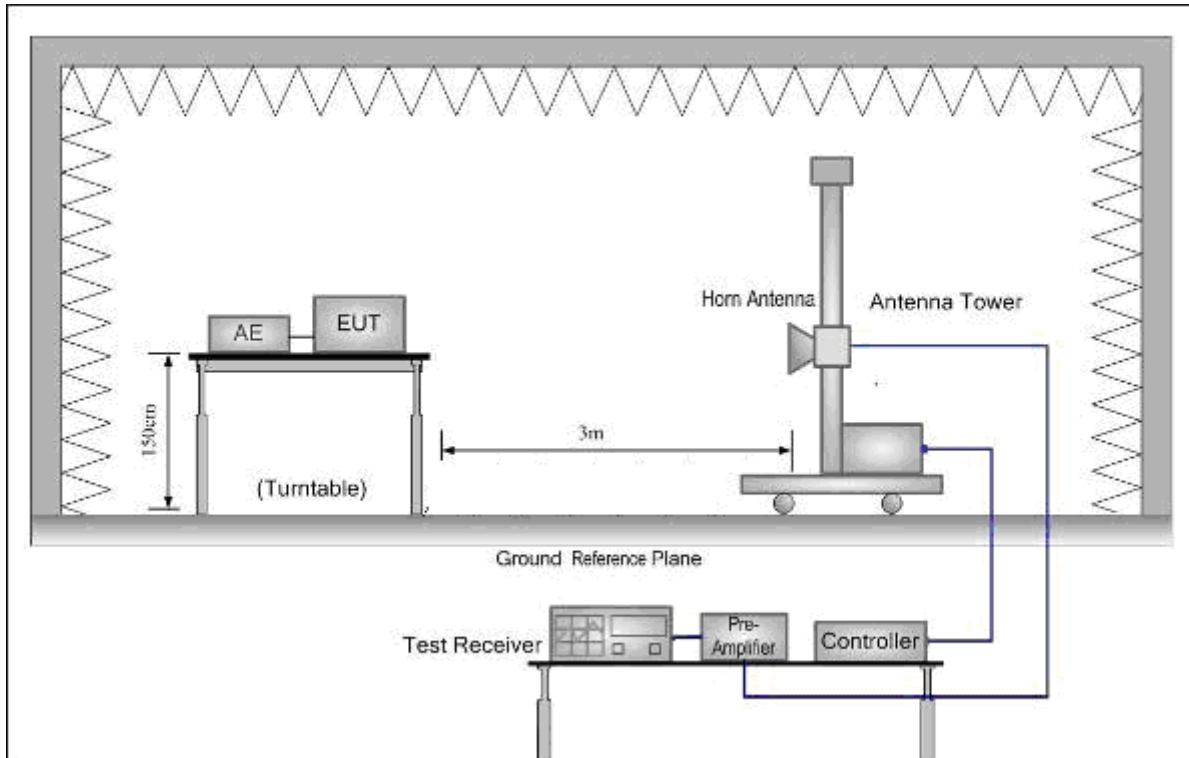
For Class B

Frequency range MHz	Class B Limits dB (µV)	
	Quasi-peak	Average
Above 1000	74	54

#### 7.3.1 E.U.T. Operation

Operating Environment:  
 Temperature: 25.0 °C      Humidity: 45 %RH      Atmospheric Pressure: 1008 mbar  
 EUT Operation: Test the EUT in PC connection mode.

### 7.3.2 Test Setup and Procedure



1. The radiated emissions test was conducted in a fully-anechoic chamber.
2. Horn antenna was used for the frequency above 1GHz
3. The EUT was connected to nominal power supply through a mains power outlet which was bonded to the ground reference plane; the mains cables were draped to the ground reference plane. The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, but separated from metallic contact with the ground reference plane by 0.1m of insulation.
4. Before final measurements of radiated emissions, a pre-scan was performed in the spectrum mode with the peak detector to find out the maximum emission spectrum plots of the EUT.
5. The frequencies of maximum emission were determined in the final radiated emissions measurement. At each frequency, the EUT was rotated 360°, and the antenna was raised and lowered from 1 to 4 meters in order to determine the maximum disturbance. Measurements were performed for both horizontal and vertical antenna polarization.

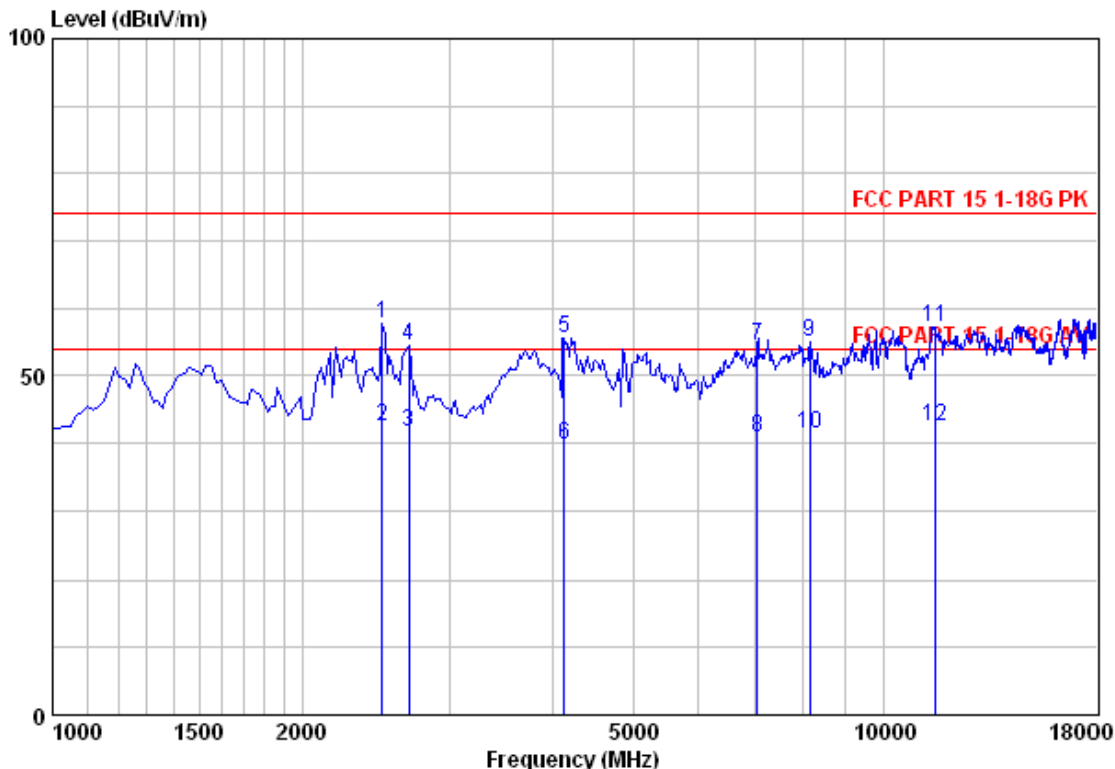


### 7.3.3 Measurement Data

Vertical:

Peak scan

Level (dBμV/m)



Peak and Average measurement:

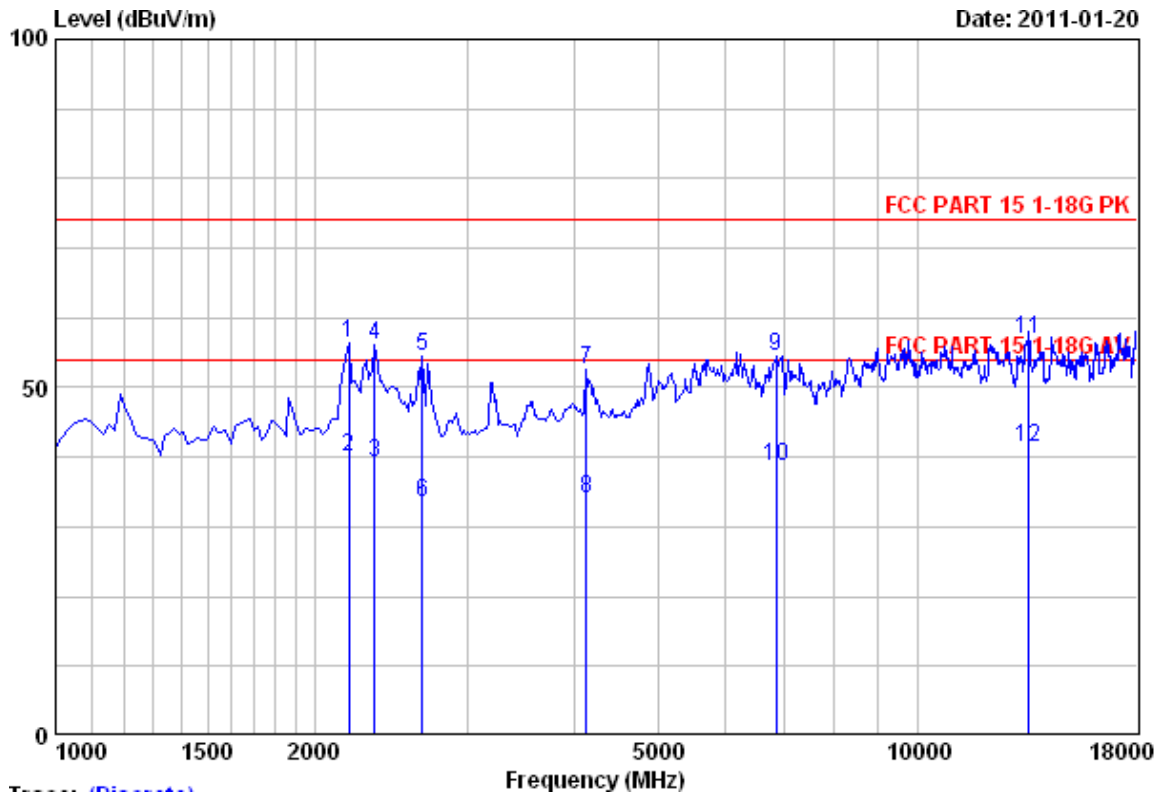
Freq	Read Level	Antenna Factor	Cable Loss	Preamp	Level	Limit	Over	Remark
MHz	dBμV	dB/m	dB	dB	dBμV/m	dBμV/m	dB	
2496.000	58.89	29.58	5.00	35.60	57.87	74.00	-16.13	Peak
2496.000	43.58	29.58	5.00	35.60	42.56	54.00	-11.44	Average
2683.000	42.00	30.17	5.18	35.68	41.67	54.00	-12.33	Average
2683.000	54.89	30.17	5.18	35.68	54.57	74.00	-19.43	Peak
4128.000	50.09	32.95	7.08	34.46	55.65	74.00	-18.35	Peak
4128.000	34.20	32.95	7.08	34.46	39.76	54.00	-14.24	Average
7052.000	42.19	36.38	8.87	32.91	54.52	74.00	-19.48	Peak
7052.000	28.55	36.38	8.87	32.91	40.88	54.00	-13.12	Average
8157.000	39.25	36.80	12.80	33.74	55.12	74.00	-18.88	Peak
8157.000	25.56	36.80	12.80	33.74	41.42	54.00	-12.58	Average
11557.000	37.75	41.43	11.50	33.58	57.10	74.00	-16.90	Peak
11557.000	23.28	41.43	11.50	33.58	42.63	54.00	-11.37	Average

**Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor.**



**Horizontal:**

Peak scan  
 Level (dBµV/m)



Peak and Average measurement:

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
MHz	dBµV	dB/m	dB	dB	dBµV/m	dBµV/m	dB	
2190.000	58.67	28.82	4.60	35.60	56.49	74.00	-17.51	Peak
2190.000	42.20	28.82	4.60	35.60	40.02	54.00	-13.98	Average
2343.000	40.85	29.23	4.83	35.60	39.31	54.00	-14.69	Average
2343.000	57.63	29.23	4.83	35.60	56.08	74.00	-17.92	Peak
2666.000	54.83	30.12	5.16	35.67	54.44	74.00	-19.56	Peak
2666.000	34.01	30.12	5.16	35.67	33.62	54.00	-20.38	Average
4128.000	46.97	32.95	7.08	34.46	52.53	74.00	-21.47	Peak
4128.000	28.59	32.95	7.08	34.46	34.15	54.00	-19.85	Average
6865.000	42.96	35.61	8.85	32.89	54.53	74.00	-19.47	Peak
6865.000	27.01	35.61	8.85	32.89	38.58	54.00	-15.42	Average
13427.000	31.54	42.95	13.30	30.90	56.89	74.00	-17.11	Peak
13427.000	16.10	42.95	13.30	30.90	41.45	54.00	-12.55	Average

Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor.

--End of Report--