

# FCC ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT CERTIFICATION TO FCC PART 15 REQUIREMENTS

For

## **INTENTIONAL RADIATOR**

of

## WIRELESS RF REMOTE KIT FOR iPod NANO

FCC ID Number : QNP-IJETNANOTrade Name: ABTModel Number: IJETNANORF; IJETNANOFMAgency Series: N/AReport Number: 60516202-RP1Date: June 21, 2006

Issued to

Secure Wireless, Inc. 1185 PARK CENTER DRIVE SUITE, A AND B VISTA, CALIFORNIA, 92083 U.S.A.

Issued by



Compliance Certification Services Inc. Hsintien Lab. No. 165, Chunghsen Road, Hsintien City Taipei Hsien, Taiwan TEL: (02) 2217-0894 FAX: (02) 2217-1029

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## 1. VERIFICATION OF COMPLIANCE

COMPANY NAME	: Secure Wireless, Inc. 1185 PARK CENTER DRIVE SUITE, A AND B VISTA, CALIFORNIA, 92083 U.S.A.
CONTACT PERSON	: Jeff Christsten
TELEPHONE NO.	: 760 727 0601
EUT DESCRIPTION	: WIRELESS RF REMOTE KIT FOR iPod NANO
MODEL NAME/NUMBER	: IJETNANORF; IJETNANOFM
FCC ID	: QNP-IJETNANO
DATE TESTED	: May 24, 2006 ~ June 08, 2006
REPORT NUMBER	: 60516202-RP1

TYPE OF EQUIPMENT	SECURITY EQUIPMENT (INTENTIONAL RADIATOR)
EQUIPMENT TYPE	433.92 MHz WIRELESS RF REMOTE KIT FOR iPod NANO
MEASUREMENT PROCEDURE	ANSI 63.4 / 2003
LIMIT TYPE	CERTIFICATION
FCC RULE	CFR 47, PART 15

The above equipment was tested by Compliance Certification Services Inc. for compliance with the requirements set forth in the FCC CFR 47, PART 15. The results of testing in this report apply to the product/system which was tested only. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties. **Warning**: This document reports conditions under which testing was conducted and results of tests performed. This document may not be altered or revised in any way unless done so by Compliance Certification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Compliance Certification Services Inc. will constitute fraud and shall nullify the document.

Approved by:

David Wang Manager of Hsintien Laboratory Compliance Certification Services Inc.

Reviewed by:

ANG

Vince Chiang Assistant Manager of Hsintien Laboratory Compliance Certification Services Inc.



# 2. PRODUCT DESCRIPTION

Fundamental Frequency	433.92 MHz
Power Source	<b>3V Battery</b>
Transmitting Time	Periodic <u>&lt;</u> 5 seconds
Associated Receiver	Model: IJETNANORF (DoC)
Model Difference	Two models' circuit and layout design are identical except IJETNANOFM has FN function key which is used to control the channel for FM transmitter. Details please refer to user manual.

# **3. TEST FACILITY**

The open area test sites and conducted measurement facilities used to collect the radiated data are located at No. 165, Chung Sheng Road, Hsin Tien City, Taipei, Taiwan R.O.C. The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22.

# 4. MEASUREMENT STANDARDS

The site is constructed and calibrated in conformance with the requirements of ANSI C63.4/2003.

# **5. TEST METHODOLOGY**

For an intentional radiator, the spectrum shall be investigated from the lowest radio frequency signal generated in the device, without going below 9 KHz, up to at least the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower. (CFR 47 Section 15.33)



# 6. MEASUREMENT EQUIPMENT USED

Open Area Test Site # K						
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due		
SITE NSA	CCS	K Site	N/A	10/01/2006		
MEASURE RECEIVER	SCHAFFNER	SCR3501	412	05/18/2007		
SPECTRUM ANALYZER	ADVANTEST	R3132	120900029	No Calibration Required		
ANTENNA	SCHAFFNER	CBL 6112B	2846	05/26/2007		
PRE- AMPLIFIER	SCHAFFNER	CPA9231A	3639	10/08/2006		
CABLE	SUHNER	RG 214	N-TYPE #K2	02/17/2007		
THERMO- HYGRO METER	TFA	N/A	NO.4	02/08/2007		
	Ab	oove 1GHz Used				
EMC ANALYZER (100Hz-22GHz)	HP	8566B	2937A06102	06/30/2006		
ANTENNA (1-18GHz)	EMCO	3115	00022256	01/12/2007		
AMPLIFIER (1-18GHz)	HP	8449B	3008A01266	02/06/2007		
CABLE (1-18GHz) JYEBAO		LL142	SMA#RS1	02/06/2007		
CABLE (1-18GHz)	HUBER +SUHNER	SUCOFLEX 104	SMA#RS3	02/06/2007		
CABLE (1-18GHz) JYEBAO		LL142	SMA#C1	02/06/2007		

Remark: Each piece of equipment is scheduled for calibration once a year.

# 7. POWERLINE RFI LIMIT

CONNECTED TO AC POWER LINE	SECTION 15.207
CARRIER CURRENT SYSTEM IN THE FREQUENCY RANGE OF 450 KHz TO 30 MHz	SECTION 15.205 AND SECTION 15.209, 15.221, 15.223, 15.225 OR 15.227, AS APPROPRIATE.
BATTERY POWER	NO REQUIRED.



# 8. RADIATED EMISSION LIMITS

GENERAL REQUIREMENTS	SECTION 15.209
RESTRICTED BANDS OF OPERATION	SECTION 15.205
PERIODIC OPERATION IN THE BAND 40.66 -40.70 MHz AND ABOVE 70 MHz.	SECTION 15.231

# 9. SYSTEM TEST CONFIGURATION

Use a block of foam and combined it with EUT wrapping rubber band around it. This way it can test X, Y and Z axis. To activate continuous transmitting & receiving, place a small plastic block between rubber band and EUT push button.







## **Model: IJETNANOFM**





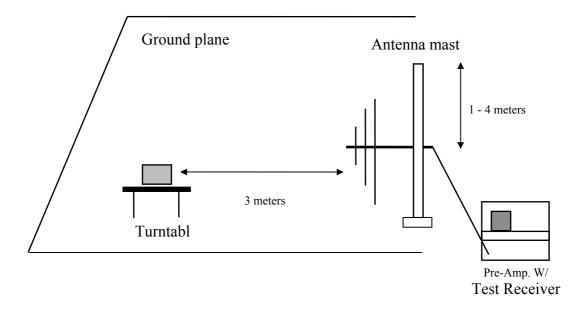
# Radiated Open Site Test Set-up



#### **10. TEST PROCEDURE**

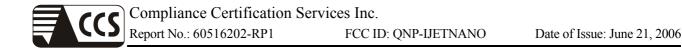
#### Radiated Emissions, 15.231(4)(b)

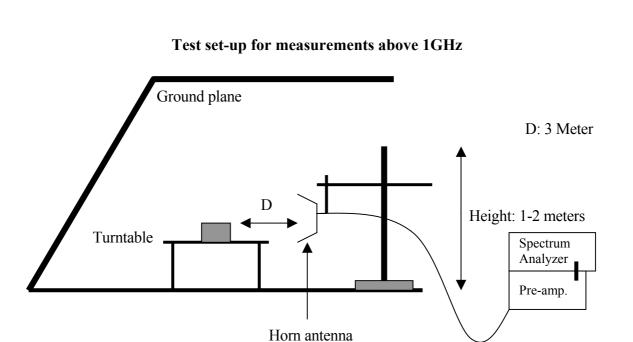
#### Test Set-up for frequency range 30 – 1000 MHz





- 1. The EUT was placed on a wooden table on the outdoor ground plane. The search antenna was placed 3-meters from the EUT.
- 2. The turntable was slowly rotated to locate the direction of maximum emission at each emission falling in the restricted bands of 15.205. The EUT was moved throughout the XY, XZ, and YZ planes to maximize emissions received by the search antenna.
- 3. Once maximum direction was determined, the search antenna was raised and lowered in both vertical and horizontal polarizations. The maximum readings so obtained are recorded in the data listed below.







- 1. The EUT was placed on a wooden table on the outdoor ground plane. The search antenna was placed 1-meters from the EUT. The EUT antenna was mounted vertically as per normal installation.
- 2. The turntable was slowly rotated to locate the direction of maximum emission at each emission falling in the restricted bands of 15.205. The EUT was moved throughout the XY, XZ, and YZ planes to maximize emissions received by the search antenna.
- 3. Once maximum direction was determined, the search antenna was raised and lowered in both vertical and horizontal polarizations. The maximum readings so obtained are recorded in the data

listed below.

# **11. Equipment Modifications**

To achieve compliance to FCC Section 15.231 technical limits, the following change(s) were made during compliance testing:

## NONE



# **12. TEST RESULT**

Powerline RFI Class B Eut		Radiated Emission Limits	Eut
SECTION 15.207		SECTION 15.209	Х
SECTION 15.205, 15.209, 15.221, 15.223, x 15.225 OR		SECTION 15.205	
15.227			
BATTERY POWER	Х	SECTION 15.231 (b)	Х
		SECTION 15.231 (e)	

# 12.1 Maximum Modulation Percentage (M%)

## CALCULATION:

Average Reading = Peak Reading (dBuV/m)+ 20log (Duty Cycle)

In order to determine possible Maximum Modulation percentage, alternations are made to the EUT. We measured:

Model Tp (ms)		Ton (ms)	M% = (Ton/Tp)*100%	C.F. = 20*log(M%)
IJETNANORF	28.24	(6*0.36)+(36*0.13)=6.84	24.22	-12.317 dB
IJETNANOFM	30.08	(7*0.21)+(34*0.04) = 2.83	9.41	-20.528 dB

## 12.2 The Emissions Bandwidth

The bandwidth of the emissions were investigated per 15.231(c)

Frequency	IJETNANORF	IJETNANOFM	Limit	Result
(MHz)	BW (kHz)	BW (kHz)	(MHz)	
433.92	452.00	550.00	1.0848	PASS



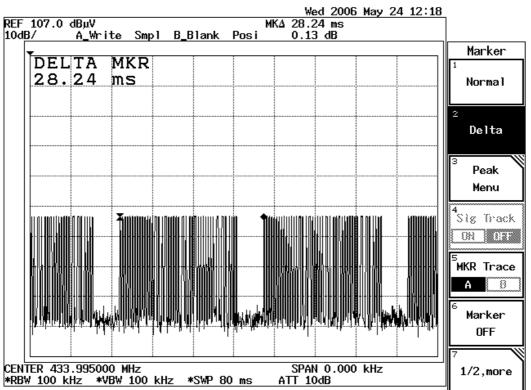
# **APPENDIX I**

# **TEST DATA**

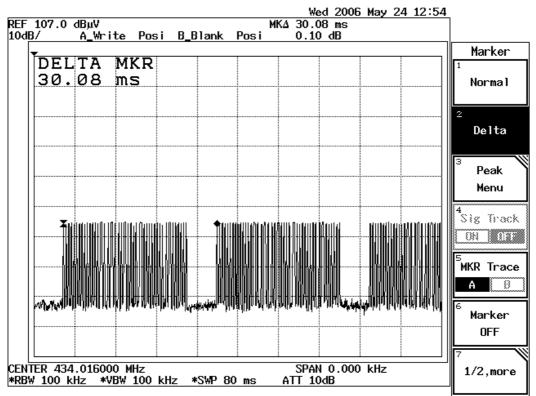


# Test Plot: Maximum Modulation Percentage (M%)

Tp



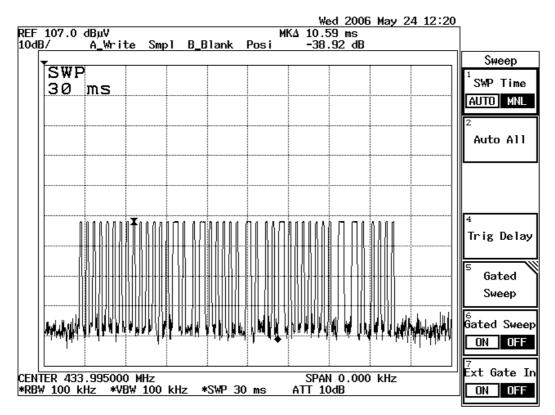
#### **Model: IJETNANORF**

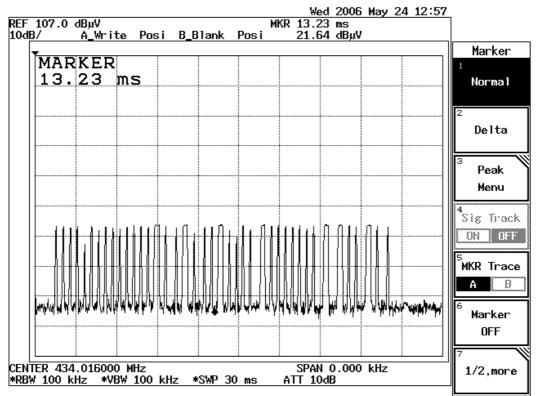




# Channel Number

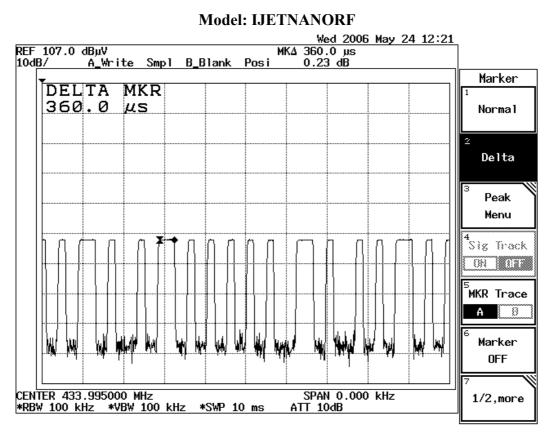
**Model: IJETNANORF** 

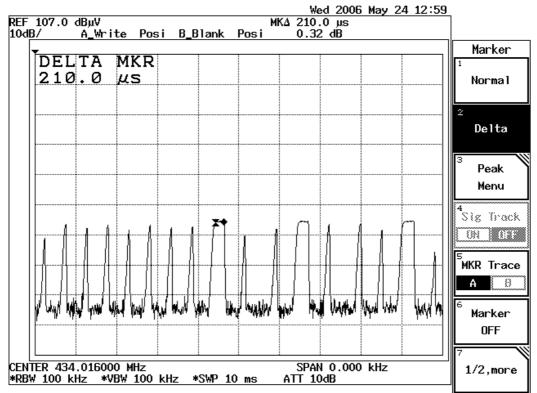






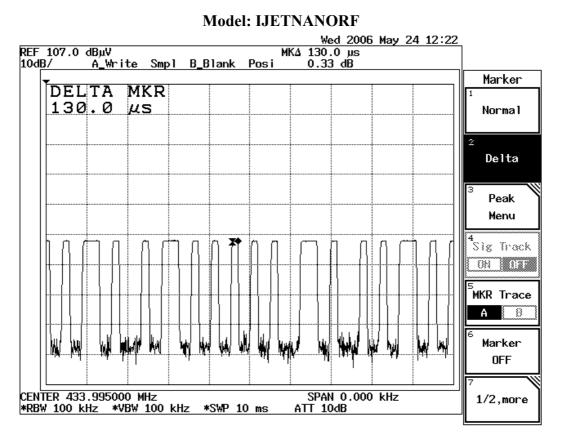
<u>Ton</u>

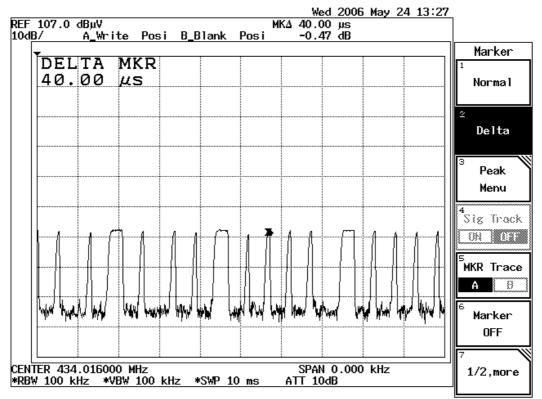






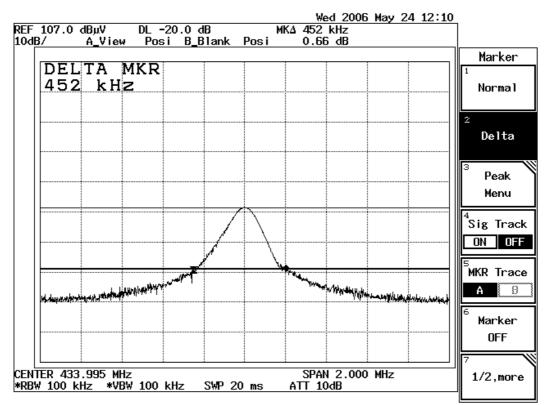
<u>Ton</u>



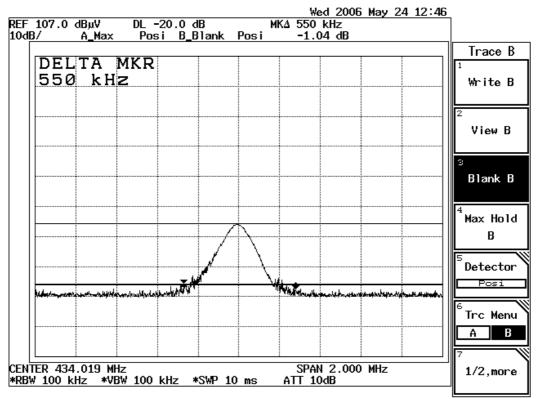




## **Test Plot:** The Emissions Bandwidth



## **Model: IJETNANORF**





# **TEST RESULTS**

## Below 1 GHz

<b>Operation Mode:</b>	TX Mode / Button#1	Test Date:	May 29, 2006
Temperature:	35°C	Humidity:	50% RH
Tested by:	Kevin Chang	Model:	IJETNANORF

Freq. (MHz)	Pk Rdg (dBuV)	Av Rdg (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol (H/V)	
434.00	48.70	36.38	-6.02	30.36	80.83	-50.46	3mV_X	
868.00	33.64	21.32	1.38	22.70	60.83	-38.13	3mV_X	
434.00	64.62	52.30	-6.02	46.28	80.83	-34.54	3mV_Y	
868.00	41.11	28.79	1.38	30.17	60.83	-30.66	3mV_Y	
434.00	64.17	51.85	-6.02	45.83	80.83	-34.99	3mV_Z	
868.00	49.16	36.84	1.38	38.22	60.83	-22.61	3mV_Z	
				_				
434.00	63.53	51.21	-6.02	45.19	80.83	-35.63	3mH_X	
868.00	44.02	31.70	1.38	33.08	60.83	-27.75	3mH_X	
434.00	62.48	50.16	-6.02	44.14	80.83	-36.68	3mH_Y	
868.00	44.67	32.35	1.38	33.73	60.83	-27.10	3mH_Y	
434.00	59.12	46.80	-6.02	40.78	80.83	-40.04	3mH_Z	
868.00	45.69	33.37	1.38	34.75	60.83	-26.08	3mH_Z	
	Factor = Antenna Factor + Cable Loss - Pre Amplifier Av Rdg = Pk Rdg-12.317dB							

- 1. Measuring frequencies from 30 MHz to the 1GHz.
- 2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. The IF bandwidth of SPA between 30MHz to 1GHz was 100kHz.



<b>Operation Mode:</b>	TX Mode / Button#2			
Temperature:	35°C			
Tested by:	Kevin Chang			

Test Date:	May 29, 2006				
Humidity:	50% RH				
Model:	IJETNANORF				

Freq. (MHz)	Pk Rdg (dBuV)	Av Rdg (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol (H/V)
434.00	47.92	35.60	-6.02	29.58	80.83	-51.24	3mV_X
868.00	37.58	25.26	1.38	26.64	60.83	-34.19	3mV_X
434.00	64.31	51.99	-6.02	45.97	80.83	-34.85	3mV_Y
868.00	41.40	29.08	1.38	30.46	60.83	-30.37	3mV_Y
434.00	64.15	51.83	-6.02	45.81	80.83	-35.01	3mV_Z
868.00	49.12	36.80	1.38	38.18	60.83	-22.65	3mV_Z
434.00	63.27	50.95	-6.02	44.93	80.83	-35.89	3mH_X
868.00	44.59	32.27	1.38	33.65	60.83	-27.18	3mH_X
434.00	63.03	50.71	-6.02	44.69	80.83	-36.13	3mH_Y
868.00	41.87	29.55	1.38	30.93	60.83	-29.90	3mH_Y
434.00	59.27	46.95	-6.02	40.93	80.83	-39.89	3mH_Z
868.00	45.55	33.23	1.38	34.61	60.83	-26.22	3mH_Z
	Factor = Antenna Factor + Cable Loss - Pre Amplifier Av Rdg = Pk Rdg-12.317dB						

- 1. Measuring frequencies from 30 MHz to the 1GHz.
- 2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. The IF bandwidth of SPA between 30MHz to 1GHz was 100kHz.



<b>Operation Mode:</b>	TX Mode / Button#3				
Temperature:	35°C				
Tested by:	Kevin Chang				

Test Date:	May 29, 2006			
Humidity:	50% RH			
Model:	IJETNANORF			

Freq. (MHz)	Pk Rdg (dBuV)	Av Rdg (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol (H/V)
434.00	64.79	52.47	-6.02	46.45	80.83	-34.37	3mV_X
868.00	41.45	29.13	1.38	30.51	60.83	-30.32	3mV_X
434.00	45.55	33.23	-6.02	27.21	80.83	-53.61	3mV_Y
868.00	36.05	23.73	1.38	25.11	60.83	-35.72	3mV_Y
434.00	62.83	50.51	-6.02	44.49	80.83	-36.33	3mV_Z
868.00	50.87	38.55	1.38	39.93	60.83	-20.90	3mV_Z
434.00	60.44	48.12	-6.02	42.10	80.83	-38.72	3mH_X
868.00	45.63	33.31	1.38	34.69	60.83	-26.14	3mH_X
434.00	62.22	49.90	-6.02	43.88	80.83	-36.94	3mH_Y
868.00	43.92	31.60	1.38	32.98	60.83	-27.85	3mH_Y
434.00	59.37	47.05	-6.02	41.03	80.83	-39.79	3mH_Z
868.00	38.32	26.00	1.38	27.38	60.83	-33.45	3mH_Z
	Factor = Antenna Factor + Cable Loss - Pre Amplifier Av Rdg = Pk Rdg-12.317dB						

- 1. Measuring frequencies from 30 MHz to the 1GHz.
- 2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. The IF bandwidth of SPA between 30MHz to 1GHz was 100kHz.



<b>Operation Mode:</b>	TX Mode / Button#4				
Temperature:	35°C				
Tested by:	Kevin Chang				

Test Date:	May 29, 2006			
Humidity:	50% RH			
Model:	IJETNANORF			

Freq. (MHz)	Pk Rdg (dBuV)	Av Rdg (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol (H/V)
434.00	64.14	51.82	-6.02	45.80	80.83	-35.02	3mV_X
868.00	41.38	29.06	1.38	30.44	60.83	-30.39	3mV_X
434.00	42.02	29.70	-6.02	23.68	80.83	-57.14	3mV_Y
868.00	36.99	24.67	1.38	26.05	60.83	-34.78	3mV_Y
434.00	64.37	52.05	-6.02	46.03	80.83	-34.79	$3 mV_Z$
868.00	51.08	38.76	1.38	40.14	60.83	-20.69	3mV_Z
434.00	61.35	49.03	-6.02	43.01	80.83	-37.81	3mH_X
868.00	46.95	34.63	1.38	36.01	60.83	-24.82	3mH_X
434.00	63.20	50.88	-6.02	44.86	80.83	-35.96	3mH_Y
868.00	44.30	31.98	1.38	33.36	60.83	-27.47	3mH_Y
434.00	57.10	44.78	-6.02	38.76	80.83	-42.06	3mH_Z
868.00	45.31	32.99	1.38	34.37	60.83	-26.46	3mH_Z
	Factor = Antenna Factor + Cable Loss - Pre Amplifier Av Rdg = Pk Rdg-12.317dB						

- 1. Measuring frequencies from 30 MHz to the 1GHz.
- 2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. The IF bandwidth of SPA between 30MHz to 1GHz was 100kHz.



<b>Operation Mode:</b>	TX Mode / Button#5				
Temperature:	35°C				
Tested by:	Kevin Chang				

Test Date:	May 29, 2006			
Humidity:	50% RH			
Model:	IJETNANORF			

Freq. (MHz)	Pk Rdg (dBuV)	Av Rdg (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol (H/V)
434.00	64.31	51.99	-6.02	45.97	80.83	-34.85	3mV_X
868.00	41.31	28.99	1.38	30.37	60.83	-30.46	3mV_X
434.00	45.41	33.09	-6.02	27.07	80.83	-53.75	3mV_Y
868.00	35.01	22.69	1.38	24.07	60.83	-36.76	3mV_Y
434.00	64.88	52.56	-6.02	46.54	80.83	-34.28	3mV_Z
868.00	50.98	38.66	1.38	40.04	60.83	-20.79	3mV_Z
434.00	61.13	48.81	-6.02	42.79	80.83	-38.03	3mH_X
868.00	47.66	35.34	1.38	36.72	60.83	-24.11	3mH_X
434.00	62.30	49.98	-6.02	43.96	80.83	-36.86	3mH_Y
868.00	45.89	33.57	1.38	34.95	60.83	-25.88	3mH_Y
434.00	55.41	43.09	-6.02	37.07	80.83	-43.75	3mH_Z
868.00	45.85	33.53	1.38	34.91	60.83	-25.92	3mH_Z
	$Factor = Antenna \ Factor + Cable \ Loss - Pre \ Amplifier$ $Av \ Rdg = Pk \ Rdg - 12.317 dB$						

- 1. Measuring frequencies from 30 MHz to the 1GHz.
- 2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. The IF bandwidth of SPA between 30MHz to 1GHz was 100kHz.



<b>Operation Mode:</b>	TX Mode / Button#6			
Temperature:	35°C			
Tested by:	Kevin Chang			

Test Date:	May 29, 2006			
Humidity:	50% RH			
Model:	IJETNANORF			

Freq. (MHz)	Pk Rdg (dBuV)	Av Rdg (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol (H/V)
434.00	63.97	51.65	-6.02	45.63	80.83	-35.19	3mV_X
868.00	40.80	28.48	1.38	29.86	60.83	-30.97	3mV_X
434.00	46.66	34.34	-6.02	28.32	80.83	-52.50	3mV_Y
868.00	37.02	24.70	1.38	26.08	60.83	-34.75	3mV_Y
434.00	63.10	50.78	-6.02	44.76	80.83	-36.06	3mV_Z
868.00	52.71	40.39	1.38	41.77	60.83	-19.06	3mV_Z
434.00	60.68	48.36	-6.02	42.34	80.83	-38.48	3mH_X
868.00	45.99	33.67	1.38	35.05	60.83	-25.78	3mH_X
434.00	63.45	51.13	-6.02	45.11	80.83	-35.71	3mH_Y
868.00	47.27	34.95	1.38	36.33	60.83	-24.50	3mH_Y
434.00	58.13	45.81	-6.02	39.79	80.83	-41.03	3mH_Z
868.00	46.67	34.35	1.38	35.73	60.83	-25.10	3mH_Z
	Factor = Antenna Factor + Cable Loss - Pre Amplifier Av Rdg = Pk Rdg-12.317dB						

- 1. Measuring frequencies from 30 MHz to the 1GHz.
- 2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. The IF bandwidth of SPA between 30MHz to 1GHz was 100kHz.



<b>Operation Mode:</b>	TX Mode / Button#7			
Temperature:	35°C			
Tested by:	Kevin Chang			

Test Date:	May 29, 2006			
Humidity:	50% RH			
Model:	IJETNANORF			

Freq. (MHz)	Pk Rdg (dBuV)	Av Rdg (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol (H/V)
434.00	63.66	51.34	-6.02	45.32	80.83	-35.50	3mV_X
868.00	42.41	30.09	1.38	31.47	60.83	-29.36	3mV_X
434.00	46.69	34.37	-6.02	28.35	80.83	-52.47	3mV_Y
868.00	35.93	23.61	1.38	24.99	60.83	-35.84	3mV_Y
434.00	63.50	51.18	-6.02	45.16	80.83	-35.66	3mV_Z
868.00	49.90	37.58	1.38	38.96	60.83	-21.87	3mV_Z
434.00	60.82	48.50	-6.02	42.48	80.83	-38.34	3mH_X
868.00	46.38	34.06	1.38	35.44	60.83	-25.39	3mH_X
434.00	60.85	48.53	-6.02	42.51	80.83	-38.31	3mH_Y
868.00	47.07	34.75	1.38	36.13	60.83	-24.70	3mH_Y
434.00	55.65	43.33	-6.02	37.31	80.83	-43.51	3mH_Z
868.00	46.38	34.06	1.38	35.44	60.83	-25.39	3mH_Z
	tenna Factor k Rdg-12.317		ss - Pre Amp	olifier			-

- 1. Measuring frequencies from 30 MHz to the 1GHz.
- 2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. The IF bandwidth of SPA between 30MHz to 1GHz was 100kHz.



<b>Operation Mode:</b>	TX Mode / Button#1				
Temperature:	35°C				
Tested by:	Kevin Chang				

Test Date:	May 29, 2006			
Humidity:	50% RH			
Model:	IJETNANOFM			

Freq. (MHz)	Pk Rdg (dBuV)	Av Rdg (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol (H/V)
434.02	58.88	38.35	-6.02	32.33	80.83	-48.50	3mV_X
868.02	34.15	13.62	1.38	15.00	60.83	-45.83	3mV_X
434.02	43.57	23.04	-6.02	17.02	80.83	-63.81	3mV_Y
868.02	32.37	11.84	1.38	13.22	60.83	-47.61	3mV_Y
434.02	59.54	39.01	-6.02	32.99	80.83	-47.84	3mV_Z
868.02	43.66	23.13	1.38	24.51	60.83	-36.32	3mV_Z
	-						
434.02	53.93	33.40	-6.02	27.38	80.83	-53.45	3mH_X
868.02	42.66	22.13	1.38	23.51	60.83	-37.32	3mH_X
434.02	57.66	37.13	-6.02	31.11	80.83	-49.72	3mH_Y
868.02	41.30	20.77	1.38	22.15	60.83	-38.68	3mH_Y
434.02	49.78	29.25	-6.02	23.23	80.83	-57.60	3mH_Z
868.02	37.50	16.97	1.38	18.35	60.83	-42.48	3mH_Z
	$Factor = Antenna \ Factor + Cable \ Loss - Pre \ Amplifier$ $Av \ Rdg = Pk \ Rdg-20.528 dB$						

- 1. Measuring frequencies from 30 MHz to the 1GHz.
- 2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. The IF bandwidth of SPA between 30MHz to 1GHz was 100kHz.



<b>Operation Mode:</b>	TX Mode / Button#2			
Temperature:	35°C			
Tested by:	Kevin Chang			

Test Date:	May 29, 2006			
Humidity:	50% RH			
Model:	IJETNANOFM			

Freq. (MHz)	Pk Rdg (dBuV)	Av Rdg (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol (H/V)
434.02	59.44	38.91	-6.02	32.89	80.83	-47.94	3mV_X
868.02	35.11	14.58	1.38	15.96	60.83	-44.87	3mV_X
434.02	44.11	23.58	-6.02	17.56	80.83	-63.27	3mV_Y
868.02	35.44	14.91	1.38	16.29	60.83	-44.54	3mV_Y
434.02	58.98	38.45	-6.02	32.43	80.83	-48.40	3mV_Z
868.02	45.48	24.95	1.38	26.33	60.83	-34.50	3mV_Z
434.02	56.80	36.27	-6.02	30.25	80.83	-50.58	3mH_X
868.02	40.00	19.47	1.38	20.85	60.83	-39.98	3mH_X
434.02	57.45	36.92	-6.02	30.90	80.83	-49.93	3mH_Y
868.02	40.53	20.00	1.38	21.38	60.83	-39.45	3mH_Y
434.02	52.78	32.25	-6.02	26.23	80.83	-54.60	3mH_Z
868.02	40.20	19.67	1.38	21.05	60.83	-39.78	3mH_Z
	tenna Factor k Rdg-20.528		ss - Pre Amp	olifier			

- 1. Measuring frequencies from 30 MHz to the 1GHz.
- 2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. The IF bandwidth of SPA between 30MHz to 1GHz was 100kHz.



<b>Operation Mode:</b>	TX Mode / Button#3
Temperature:	35°C
Tested by:	Kevin Chang

Test Date:	May 29, 2006			
Humidity:	50% RH			
Model:	IJETNANOFM			

Freq. (MHz)	Pk Rdg (dBuV)	Av Rdg (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol (H/V)
434.02	58.46	37.93	-6.02	31.91	80.83	-48.92	3mV_X
868.02	35.70	15.17	1.38	16.55	60.83	-44.28	3mV_X
434.02	44.18	23.65	-6.02	17.63	80.83	-63.20	3mV_Y
868.02	33.92	13.39	1.38	14.77	60.83	-46.06	3mV_Y
434.02	56.68	36.15	-6.02	30.13	80.83	-50.70	3mV_Z
868.02	44.00	23.47	1.38	24.85	60.83	-35.98	3mV_Z
	-						
434.02	55.40	34.87	-6.02	28.85	80.83	-51.98	3mH_X
868.02	40.64	20.11	1.38	21.49	60.83	-39.34	3mH_X
434.02	57.59	37.06	-6.02	31.04	80.83	-49.79	3mH_Y
868.02	38.20	17.67	1.38	19.05	60.83	-41.78	3mH_Y
434.02	52.37	31.84	-6.02	25.82	80.83	-55.01	3mH_Z
868.02	39.91	19.38	1.38	20.76	60.83	-40.07	3mH_Z
	$Factor = Antenna \ Factor + Cable \ Loss - Pre \ Amplifier$ $Av \ Rdg = Pk \ Rdg-20.528 dB$						

- 1. Measuring frequencies from 30 MHz to the 1GHz.
- 2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. The IF bandwidth of SPA between 30MHz to 1GHz was 100kHz.



<b>Operation Mode:</b>	TX Mode / Button#4
Temperature:	35°C
Tested by:	Kevin Chang

Test Date:	May 29, 2006			
Humidity:	50% RH			
Model:	IJETNANOFM			

Freq. (MHz)	Pk Rdg (dBuV)	Av Rdg (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol (H/V)
434.02	56.93	36.40	-6.02	30.38	80.83	-50.45	3mV_X
868.02	34.30	13.77	1.38	15.15	60.83	-45.68	3mV_X
434.02	37.32	16.79	-6.02	10.77	80.83	-70.06	3mV_Y
868.02	31.09	10.56	1.38	11.94	60.83	-48.89	3mV_Y
434.02	60.21	39.68	-6.02	33.66	80.83	-47.17	3mV_Z
868.02	42.96	22.43	1.38	23.81	60.83	-37.02	3mV_Z
434.02	55.38	34.85	-6.02	28.83	80.83	-52.00	3mH_X
868.02	40.20	19.67	1.38	21.05	60.83	-39.78	3mH_X
434.02	58.20	37.67	-6.02	31.65	80.83	-49.18	3mH_Y
868.02	36.34	15.81	1.38	17.19	60.83	-43.64	3mH_Y
434.02	50.25	29.72	-6.02	23.70	80.83	-57.13	3mH_Z
868.02	40.20	19.67	1.38	21.05	60.83	-39.78	3mH_Z
	Factor = Antenna Factor + Cable Loss - Pre Amplifier Av Rdg = Pk Rdg-20.528dB						

- 1. Measuring frequencies from 30 MHz to the 1GHz.
- 2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. The IF bandwidth of SPA between 30MHz to 1GHz was 100kHz.



<b>Operation Mode:</b>	TX Mode / Button#5
Temperature:	35°C
Tested by:	Kevin Chang

Test Date:	May 29, 2006			
Humidity:	50% RH			
Model:	IJETNANOFM			

Freq. (MHz)	Pk Rdg (dBuV)	Av Rdg (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol (H/V)
434.02	58.53	38.00	-6.02	31.98	80.83	-48.85	3mV_X
868.02	35.43	14.90	1.38	16.28	60.83	-44.55	3mV_X
434.02	37.41	16.88	-6.02	10.86	80.83	-69.97	3mV_Y
868.02	35.88	15.35	1.38	16.73	60.83	-44.10	3mV_Y
434.02	58.44	37.91	-6.02	31.89	80.83	-48.94	3mV_Z
868.02	43.43	22.90	1.38	24.28	60.83	-36.55	3mV_Z
434.02	53.80	33.27	-6.02	27.25	80.83	-53.58	3mH_X
868.02	39.80	19.27	1.38	20.65	60.83	-40.18	3mH_X
434.02	56.97	36.44	-6.02	30.42	80.83	-50.41	3mH_Y
868.02	37.03	16.50	1.38	17.88	60.83	-42.95	3mH_Y
434.02	51.59	31.06	-6.02	25.04	80.83	-55.79	3mH_Z
868.02	37.43	16.90	1.38	18.28	60.83	-42.55	3mH_Z
	Factor = Antenna Factor + Cable Loss - Pre Amplifier Av Rdg = Pk Rdg-20.528dB						

- 1. Measuring frequencies from 30 MHz to the 1GHz.
- 2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. The IF bandwidth of SPA between 30MHz to 1GHz was 100kHz.



<b>Operation Mode:</b>	TX Mode / Button#6			
Temperature:	35°C			
Tested by:	Kevin Chang			

Test Date:	May 29, 2006			
Humidity:	50% RH			
Model:	IJETNANOFM			

Freq. (MHz)	Pk Rdg (dBuV)	Av Rdg (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol (H/V)
434.02	58.34	37.81	-6.02	31.79	80.83	-49.04	3mV_X
868.02	35.97	15.44	1.38	16.82	60.83	-44.01	3mV_X
434.02	52.31	31.78	-6.02	25.76	80.83	-55.07	3mV_Y
868.02	31.44	10.91	1.38	12.29	60.83	-48.54	3mV_Y
434.02	58.30	37.77	-6.02	31.75	80.83	-49.08	3mV_Z
868.02	42.10	21.57	1.38	22.95	60.83	-37.88	3mV_Z
	-						
434.02	54.13	33.60	-6.02	27.58	80.83	-53.25	3mH_X
868.02	39.04	18.51	1.38	19.89	60.83	-40.94	3mH_X
434.02	57.36	36.83	-6.02	30.81	80.83	-50.02	3mH_Y
868.02	35.22	14.69	1.38	16.07	60.83	-44.76	3mH_Y
434.02	52.35	31.82	-6.02	25.80	80.83	-55.03	3mH_Z
868.02	39.26	18.73	1.38	20.11	60.83	-40.72	3mH_Z
	Factor = Antenna Factor + Cable Loss - Pre Amplifier Av Rdg = Pk Rdg-20.528dB						

- 1. Measuring frequencies from 30 MHz to the 1GHz.
- 2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. The IF bandwidth of SPA between 30MHz to 1GHz was 100kHz.

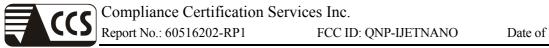


<b>Operation Mode:</b>	TX Mode / Button#7
Temperature:	35°C
Tested by:	Kevin Chang

Test Date:	May 29, 2006			
Humidity:	50% RH			
Model:	IJETNANOFM			

Freq. (MHz)	Pk Rdg (dBuV)	Av Rdg (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol (H/V)
434.02	58.11	37.58	-6.02	31.56	80.83	-49.27	3mV_X
868.02	36.84	16.31	1.38	17.69	60.83	-43.14	3mV_X
434.02	36.87	16.34	-6.02	10.32	80.83	-70.51	3mV_Y
868.02	32.48	11.95	1.38	13.33	60.83	-47.50	3mV_Y
434.02	58.30	37.77	-6.02	31.75	80.83	-49.08	3mV_Z
868.02	43.32	22.79	1.38	24.17	60.83	-36.66	3mV_Z
434.02	54.12	33.59	-6.02	27.57	80.83	-53.26	3mH_X
868.02	39.66	19.13	1.38	20.51	60.83	-40.32	3mH_X
434.02	57.22	36.69	-6.02	30.67	80.83	-50.16	3mH_Y
868.02	38.22	17.69	1.38	19.07	60.83	-41.76	3mH_Y
434.02	49.80	29.27	-6.02	23.25	80.83	-57.58	3mH_Z
868.02	38.25	17.72	1.38	19.10	60.83	-41.73	3mH_Z
	$Factor = Antenna \ Factor + Cable \ Loss - Pre \ Amplifier$ $Av \ Rdg = Pk \ Rdg-20.528 dB$						

- 1. Measuring frequencies from 30 MHz to the 1GHz.
- 2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. The IF bandwidth of SPA between 30MHz to 1GHz was 100kHz.



## Above 1 GHz

<b>Operation Mode:</b>	TX Mode	Test Date:	June 08, 2006
Temperature:	35°C	Humidity:	50% RH
Tested by:	Kevin Chang	Model:	IJETNANORF

Freq.	Pk Rdg	Av Rdg	Factor	Level	Limit	Margin	Pol
(MHz)	(dBuV)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(H/V)
1738	47.00	34.68	-8.21	26.47	60.83	-34.36	3mV
1894	46.40	34.08	-7.30	26.78	60.83	-34.05	3mV
2083	46.40	34.08	-6.38	27.70	60.83	-33.13	3mV
1549	46.40		0.22	27.07	74.00	26.02	2 11
1548	46.40		-9.33	37.07	74.00	-36.93	3mH
1548					54.00		3mH
1764	46.80	34.48	-8.07	26.41	60.83	-34.42	3mH
2005	46.50	34.18	-6.67	27.51	60.83	-33.32	3mH
Factor = Antenna Factor + Cable Loss - Pre Amplifier							

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode (RBW=VBW=1MHz) of the emission shown in Rdg column.
- 4. Average detector mode (RBW=1MHz, VBW=10Hz) for restricted frequency bands.
- 5. Average measured mode (Pk Rdg 12.317dB) for not restricted frequency bands.
- 6. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.



**Operation Mode:** TX Mode **Temperature:** 35°C

Temperature. 55 (

Tested by:

Kevin Chang

Test Date:June 08, 2006Humidity:50% RHModel:IJETNANOFM

Freq.	Pk Rdg	Av Rdg	Factor	Level	Limit	Margin	Pol
(MHz)	(dBuV)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(H/V)
1621.00	47.10		-8.90	38.20	74.00	-35.80	3 m V
1621.00					54.00		3 m V
1753.00	48.31	27.78	-8.13	19.65	60.83	-41.18	3mV
2026.00	46.30	25.77	-6.59	19.18	60.83	-41.65	3mV
1711.00	47.30	26.77	-8.38	18.39	60.83	-42.44	3mH
2246.50	46.80		-5.78	41.02	74.00	-32.98	3mH
2246.50					54.00		3mH
2294.50	47.40		-8.07	39.33	74.00	-34.67	3mH
2294.50					54.00		3mH

## Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode (RBW=VBW=1MHz) of the emission shown in Rdg column.
- 4. Average detector mode (RBW=1MHz, VBW=10Hz) for restricted frequency bands.
- 5. Average measured mode (Pk Rdg 20.528dB) for not restricted frequency bands.

6. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.