



**Test Report:** 6W75071

**Applicant:** VTech Telecommunications Canada Ltd.  
200-7671 Alderbridge Way  
Richmond, BC  
V6X 1Z9

**Apparatus:** AT&T EP5632 Handset

**FCC ID:** EW780-6101-00

**In Accordance With:** FCC Part 15 Subpart B, 15.107 and 15.109  
Unintentional Radiators  
And  
FCC Part 15 Subpart C, 15.247  
FHSS System and Digitally Modulated Radiators  
902-928MHz, 2400 - 2483.5 MHz, 5725-5850MHz

**Tested By:** Nemko Canada Inc.  
303 River Road  
Ottawa, Ontario  
K1V 1H2

**Authorized By:**   
Roman Kuleba, EMC\Wireless Specialist

**Date:** March 2, 2007

**Total Number of Pages:** 35

## Report Summary

These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15, Subpart B and C. Radiated tests were conducted in accordance with ANSI C63.4-2003. Radiated emissions are made on an open area test site. A description of the test facility is on file with the FCC.

The assessment summary is as follows:

<b>Apparatus Assessed:</b>	AT&T EP5632 Handset
<b>Specification:</b>	FCC Part 15 Subpart B, 15.107 and 15.109 FCC Part 15 Subpart C, 15.247
<b>Compliance Status:</b>	Complies
<b>Exclusions:</b>	None
<b>Non-compliances:</b>	None
<b>Report Release History:</b>	Original Release

Author: Jason Nixon, Telecom Specialist

Note that the results contained in this report relate only to the items tested and were obtained in the period between the date of initial receipt of samples and the date of issue of the report.

This test report has been completed in accordance with the requirements of ISO/IEC 17025.

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## **Section 1 : Equipment Under Test**

### **1.1 Product Identification**

The Equipment Under Test was identified as follows:

AT&T EP5632 Handset

### **1.2 Samples Submitted for Assessment**

The following samples of the apparatus have been submitted for type assessment:

<b>Sample No.</b>	<b>Description</b>	<b>Serial No.</b>
3	AT&T charger	None
4	AT&T EP5632 handset	None
5	AT&T EP5632 handset	None
6	AT&T EP5632 handset	None
8	Component Telephone (MN # SY-09060)	None

The first samples were received on: October 23, 2006

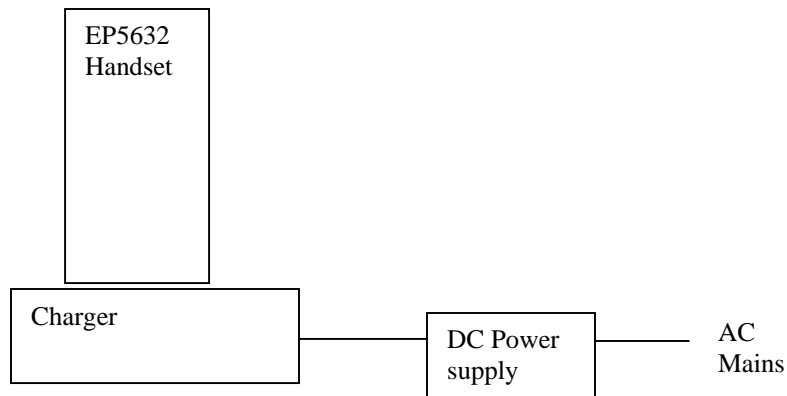
### **1.3 Theory of Operation**

The apparatus is the handset for a 5.8GHz frequency hopping telephone.

### 1.4 Technical Specifications of the EUT

<b>Operating Frequency:</b>	5744.736-5825.952MHz
<b>Peak Output Power:</b>	25.13dBm
<b>Emission Designator</b>	850K6F1E
<b>Rated Power:</b>	25.5dBm
<b>Modulation:</b>	GFSK
<b>Antenna Data:</b>	1dBi
<b>Antenna Connector:</b>	Integral

### 1.5 Block Diagram



## Section 2 : Test Conditions

### 2.1 Specifications

The apparatus was assessed against the following specifications:

FCC Part 15 Subpart B, 15.107 and 15.109

Unintentional Radiators

FCC Part 15 Subpart C, 15.247

FHSS System and Digitally Modulated Radiators

902-928MHz, 2400 - 2483.5 MHz, 5725-5850MHz

### 2.2 Deviations From Laboratory Test Procedures

No deviations were made from laboratory test procedures.

### 2.3 Test Environment

All tests were performed under the following environmental conditions:

Temperature range	:	15 – 30 °C
Humidity range	:	20 - 75 %
Pressure range	:	86 - 106 kPa
Power supply range	:	+/- 5% of rated voltages

### 2.4 Test Equipment

Equipment	Manufacturer	Model No.	Asset/Serial No.	Next Cal.
Spectrum Analyzer	Rohde & Schwarz	FSP40	FA001920	Mar 17/07
Signal Generator	Rohde & Schwarz	SMR40	FA001879	July 27/07
LISN	Rohde & Schwarz	ENV216	FA002023	Aug. 28/07
Transient Limiter	Hewlett-Packard	1194 7A	FA000975	May 18/07
Spectrum Analyzer	Hewlett-Packard	8566B	FA001309	May 16/07
Spectrum Analyzer Display	Hewlett-Packard	85662A	FA001309	May 16/07
Receiver	Rohde & Schwarz	ESHS 10	FA001918	Feb. 17/07
Biconical (1) Antenna	EMCO	3109	FA000805	May 03/07
Log Periodic Antenna #1	EMCO	LPA-25	FA000477	Sept. 12/07
Horn Antenna #1	EMCO	3115	FA000649	Jan. 12/07
18.0 – 40.0GHz Horn Antenna	EMCO	3116	FA001847	May 3/07
1.0 – 2.0 GHz Amplifier	JCA	12-400	FA001498	Aug. 02/07
2.0 – 4.0 GHz Amplifier	JCA	24-600	FA001496	Aug. 02/07
4.0 – 8.0 GHz Amplifier	JCA	48-600	FA001497	Aug. 02/07
5.0 – 18.0 GHz Amplifier	NARDA	DWT-186N23U40	FA001409	COU
18.0 – 26.0 GHz Amplifier	NARDA	BBS-1826N612	FA001550	COU
26 – 40.0 GHz Amplifier	NARDA	DBL-2640N610	FA001556	COU

COU – Calibrate on Use

NCR – No Calibration Required

## **Section 3 : Observations**

### **3.1 Modifications Performed During Assessment**

No modifications were performed during assessment.

### **3.2 Record Of Technical Judgements**

No technical judgements were made during the assessment.

### **3.3 EUT Parameters Affecting Compliance**

The user of the apparatus could not alter parameters that would affect compliance.

### **3.4 Test Deleted**

No Tests were deleted from this assessment.

### **3.5 Additional Observations**

There were no additional observations made during this assessment.

## **Section 4 : Results Summary**

This section contains the following:

FCC Part 15 Subpart B : Test Results

FCC Part 15 Subpart C : Test Results

The column headed 'Required' indicates whether the associated clauses were invoked for the apparatus under test. The following abbreviations are used:

N      No : not applicable / not relevant.

Y      Yes : Mandatory i.e. the apparatus shall conform to these tests.

N/T    Not Tested, mandatory but not assessed. (See section 3.4 Test deleted)

The results contained in this section are representative of the operation of the apparatus as originally submitted.

**4.1 FCC Part 15 Subpart B : Test Results**

Part 15	Test Description	Required	Result
15.107(a)	Conducted Emissions for Class B	Y (1)	PASS
15.109(a)	Radiated Emissions for Class B	Y	PASS

**4.2 FCC Part 15 Subpart C : Test Results**

Part 15	Test Description	Required	Result
15.31(e)	Variation of power supply	Y	PASS
15.207(a)	Powerline Conducted Emissions	Y	PASS
15.209(a)	Radiated Emissions within Restricted Bands	Y	PASS
15.247(a)(1)	Frequency hopping systems	—	—
15.247(a)(1)(i)	Frequency hopping systems operating in the 902-928 MHz band	N	
15.247(a)(1)(ii)	Frequency hopping systems operating in the 5725-5850 MHz band	Y	PASS
15.247(a)(1)(iii)	Frequency hopping systems operating in the 2400-2483.5 MHz band	N	
15.247(a)(2)	Systems using digital modulation techniques	N	
15.247(b)(1)	Maximum peak output power of Frequency hopping systems operating in the 2400-2483.5 MHz band and 5725-5850 MHz band	Y	PASS
15.247(b)(2)	Maximum peak output power of Frequency hopping systems operating in the 902-928 MHz band	N	
15.247(b)(3)	Maximum peak output power of systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands	N	
15.247(b)(4)	Maximum peak output power	Y	PASS
15.247(c)(1)	Fixed point-to-point Operation with directional antenna gains greater than 6 dBi	N	
15.247(c)(2)	Transmitters operating in the 2400-2483.5 MHz band that emit multiple directional beams	N	
15.247(d)	Radiated Emissions Not in Restricted Bands	Y	PASS
15.247(e)	Power Spectral Density for Digitally Modulated Devices	N	
15.247(f)	Time of Occupancy for Hybrid Systems	N	

Notes:

(1) See Test results for 15.207(a).

## Appendix A : Part 15 Subpart B Test Results

### Clause 15.109(a) Radiated Emissions

Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency of Emission (MHz)	Field Strength (microvoltsmeter)
30 - 88	100
88 - 216	150
216 - 960	200
Above 960	500

### Test Conditions:

<b>Sample Number:</b>	4	<b>Temperature (°C):</b>	10
<b>Date:</b>	October 27, 2006	<b>Humidity (%):</b>	56
<b>Modification State:</b>	0	<b>Tester:</b>	Jason Nixon
		<b>Laboratory:</b>	OATS

### Test Results:

See Attached Table for Results

### Additional Observations:

The Spectrum was searched from 30MHz to the 5th Harmonic.

The EUT was measured on three orthogonal axis.

Measurement equipment setup was 120kHz Quasi-peak detector for measurements below 1GHz and 1MHz RBW/VBW peak detector above 1GHz. For average measurements a 1MHz RBW/10Hz VBW peak detector was used above 1GHz.

Measurements below 8GHz were performed at 3 meters and measurements above 8GHz were performed at 1m.

For emissions above 8GHz the limit has been increased by  $20\log(3/1) = 9.5\text{dB}$  to correct for the measurement distance of 1 meter.

Freq. (MHz)	Ant	Pol. V/H	RCVD Signal (dBμV)	Ant. Factor (dB)	Amp. Gain (dB)	Cable Loss (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
345.6000	LP1	V	9.6	14.8	N/A	2.7	27.1	46.4	19.3	Q-Peak
345.6000	LP1	H	8.7	15.3	N/A	2.7	26.7	46.4	19.7	Q-Peak
207.3602	BC1	V	10.6	14.7	N/A	2.3	27.6	43.5	15.9	Q-Peak
207.3602	BC1	H	9.3	14.5	N/A	2.3	26.1	43.5	17.5	Q-Peak
193.5365	BC1	V	11.0	14.4	N/A	2.1	27.5	43.5	16.1	Q-Peak
193.5365	BC1	H	9.4	13.6	N/A	2.1	25.1	43.5	18.5	Q-Peak
4802.0000	Horn2	V	73.2	33.3	55.6	8.6	59.5	74.0	14.5	Peak
4802.0000	Horn2	H	72.5	33.1	55.6	8.6	58.7	74.0	15.3	Peak
4802.0000	Horn2	V	59.2	33.3	55.6	8.6	45.5	54.0	8.5	Average
4802.0000	Horn2	H	59.3	33.1	55.6	8.6	45.5	54.0	8.5	Average
4883.0000	Horn2	V	72.5	33.3	55.3	8.6	59.1	74.0	14.9	Peak
4883.0000	Horn2	H	69.7	33.2	55.3	8.6	56.2	74.0	17.8	Peak
4883.0000	Horn2	V	58.7	33.3	55.3	8.6	45.3	54.0	8.7	Average
4883.0000	Horn2	H	57.0	33.2	55.3	8.6	43.5	54.0	10.5	Average
4964.5000	Horn2	V	69.2	33.3	55.0	8.4	55.9	74.0	18.1	Peak
4964.5000	Horn2	H	71.0	33.2	55.0	8.4	57.6	74.0	16.4	Peak
4964.5000	Horn2	V	56.5	33.3	55.0	8.4	43.2	54.0	10.8	Average
4964.5000	Horn2	H	57.7	33.2	55.0	8.4	44.3	54.0	9.7	Average
3343.8300	Horn2	V	73.5	31.0	59.3	6.2	51.4	54.0	2.6	Peak
3343.8300	Horn2	H	69.0	31.0	59.3	6.2	46.8	54.0	7.2	Peak
8145.830	Horn2	V	58.7	37.9	36.0	0.0	60.6	64.0	3.4	Peak
8145.830	Horn2	H	57.2	37.7	36.0	0.0	58.9	64.0	5.1	Peak
8226.830	Horn2	V	54.2	38.0	36.0	0.0	56.2	64.0	7.8	Peak
8226.830	Horn2	H	54.1	37.7	36.0	0.0	55.9	64.0	8.1	Peak
8308.330	Horn2	V	59.3	38.1	36.0	0.0	61.4	64.0	2.6	Peak
8308.330	Horn2	H	58.6	37.8	36.0	0.0	60.4	64.0	3.6	Peak

Note 1: Antenna Legend: BC = Biconical, BL = Bilog, LP = Log-Periodic, Horn = Horn, ED = EMCO Dipole

## Appendix B : Part 15 Subpart C Test Results

### Clause 15.207(a) Powerline Conducted Emissions

Frequency of Conducted limit (dBmV)		
Emission (MHz)	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

\* Decreases with the logarithm of the frequency.

### Test Conditions:

<b>Sample Number:</b>	4	<b>Temperature (°C):</b>	22
<b>Date:</b>	October 25, 2006	<b>Humidity (%):</b>	30
<b>Modification State:</b>	0	<b>Tester:</b>	Jason Nixon
		<b>Laboratory:</b>	Shielded Room

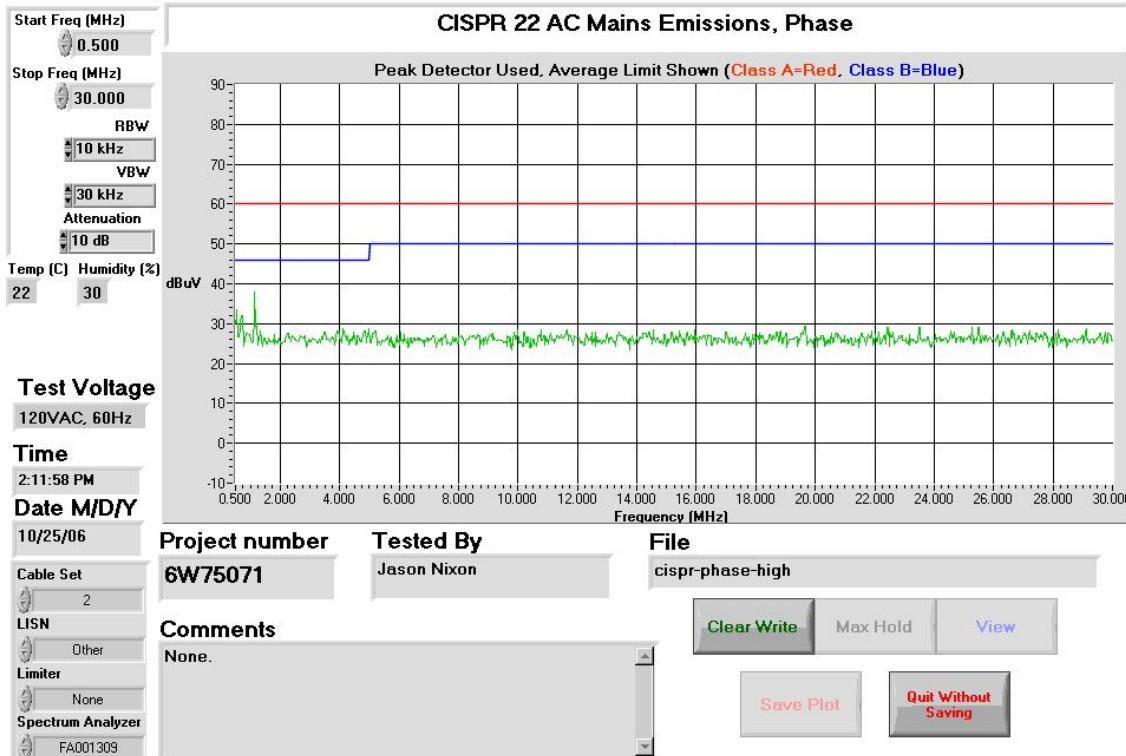
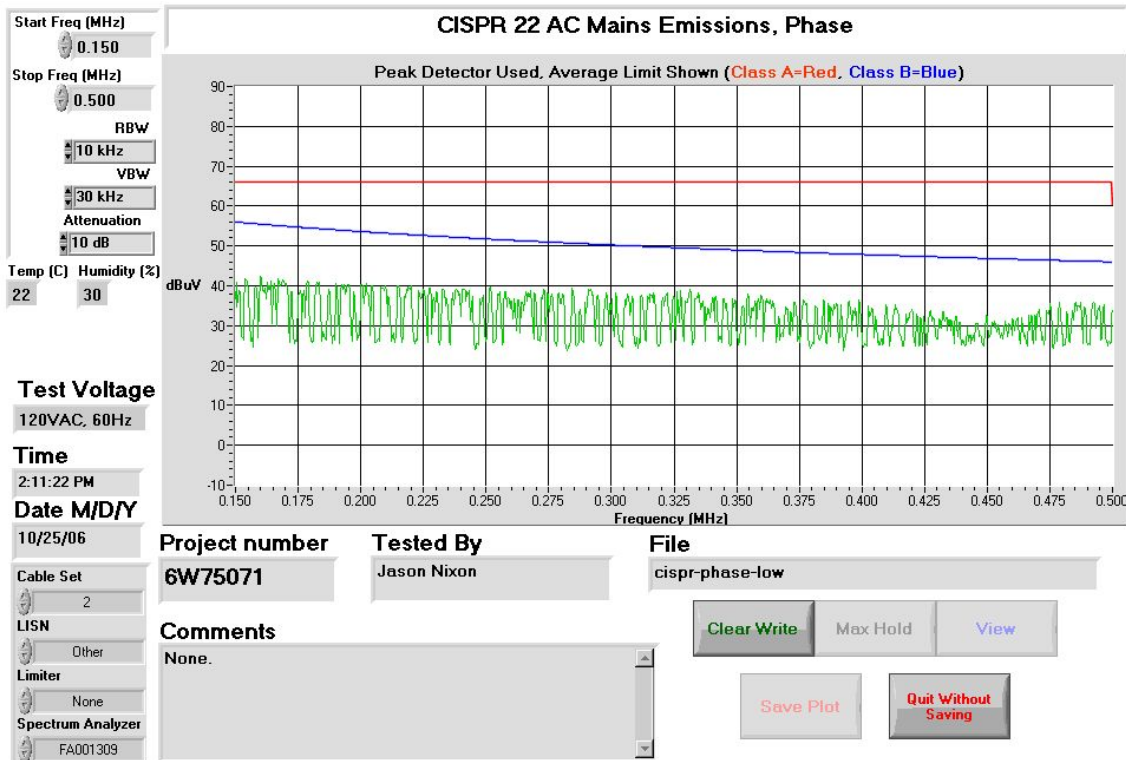
**Test Results:** See Attached Plots.

### Additional Observations:

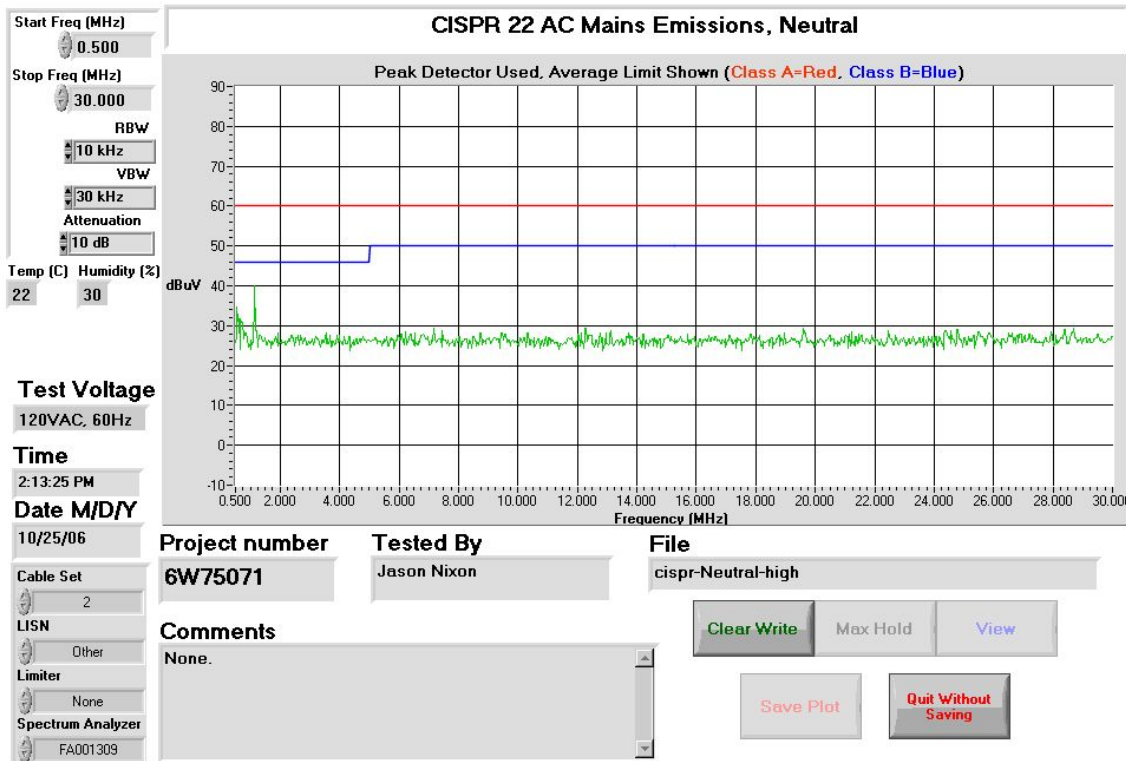
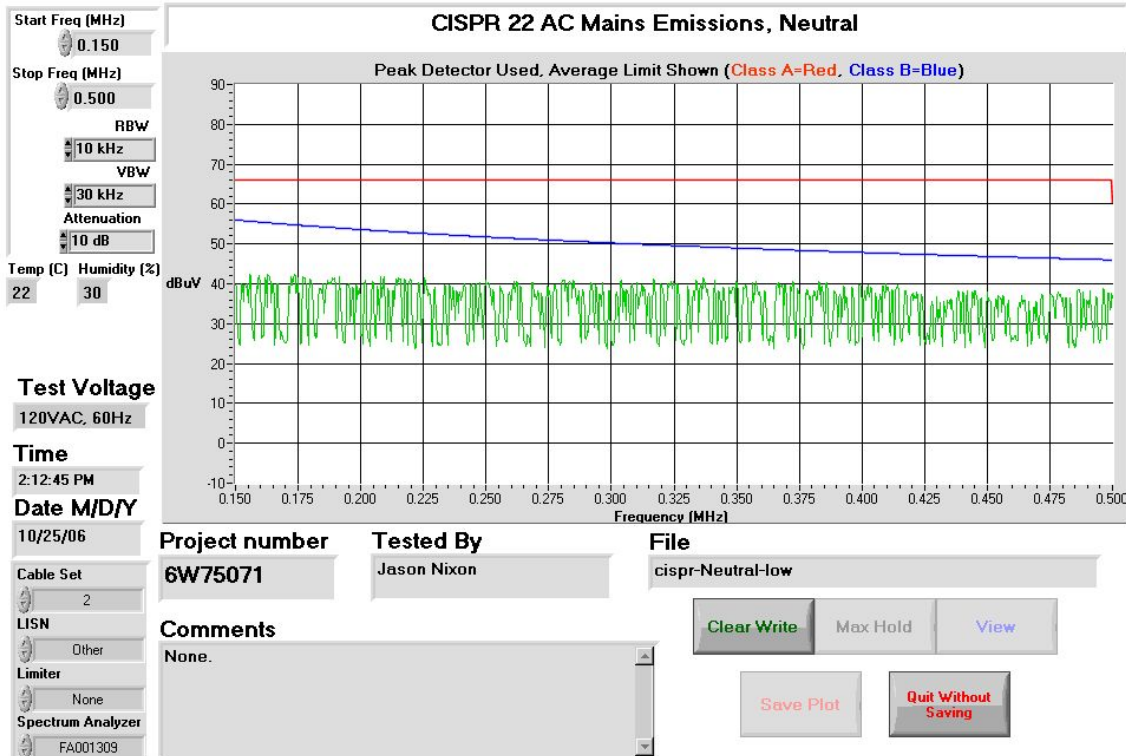
All plots were taken with a Peak detector and compared to the Average limit.

All Plots are corrected with the LISN and Cable losses to show compliance.

Phase Conductor:



Neutral Conductor:



**Clause 15.209(a) Radiated Emissions within Restricted Bands**

Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

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

**Test Conditions:**

<b>Sample Number:</b>	4	<b>Temperature (°C):</b>	24
<b>Date:</b>	October 24, 2006	<b>Humidity (%):</b>	29
<b>Modification State:</b>	0	<b>Tester:</b>	Jason Nixon
		<b>Laboratory:</b>	OATS

**Test Results:**

See Attached Table for Results

**Additional Observations:**

The Spectrum was searched from 30MHz to the 10<sup>th</sup> Harmonic.

These results apply to emissions found in the Restricted bands defined in FCC Part 15 Subpart C, 15.205.

The EUT was measured on three orthogonal axis.

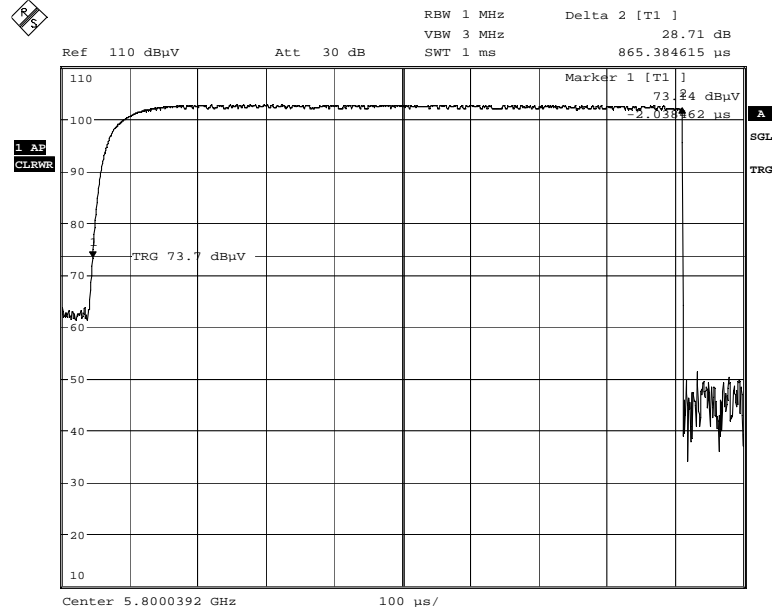
Emissions above 8GHz were measured at 1 meter and corrected with  $20\log(3/1) = 9.5\text{dB}$ .

All measurements were performed using a Peak detector with 1MHz RBW/VBW above 1GHz and 100kHz RBW/VBW below 1GHz.

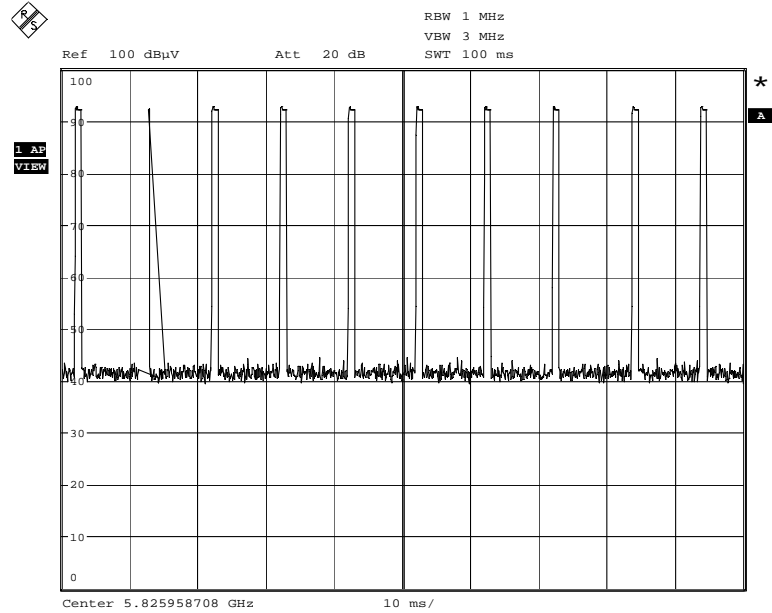
Frequency (MHz)	Antenna	Polarity	RCVD Signal (dBuV)	Ant. Factor (dB)	Amp. Gain / Cable Loss (dB)	Duty Cycle Corr.	Distance Correction	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	
1	11488.000	Horn2	V	52.5	39.5	35.5	21.3	9.5	47.0	74	27.0	Peak
									25.7	54	28.3	Average
2	11488.000	Horn2	H	53.2	39.3	35.5	21.3	9.5	47.5	74	26.5	Peak
									26.2	54	27.8	Average
3	11570.000	Horn2	V	52.3	39.5	35.5	21.3	9.5	46.8	74	27.2	Peak
									25.5	54	28.5	Average
4	11570.000	Horn2	H	53.7	39.3	35.5	21.3	9.5	48.0	74	26.0	Peak
									26.7	54	27.3	Average
5	11652.000	Horn2	V	54.3	39.5	35.5	21.3	9.5	48.8	74	25.2	Peak
									27.5	54	26.5	Average
6	11652.000	Horn2	H	55.0	39.3	35.5	21.3	9.5	49.3	74	24.7	Peak
									28.0	54	26.0	Average

Note 1: Antenna Legend: BC = Biconical, BL = Bilog, LP = Log-Periodic, Horn = Horn, ED = EMCO Dipole

**Duty Cycle:**



Dwell time  
 Date: 24.OCT.2006 11:38:02



On-time in 100msec  
 Date: 24.OCT.2006 13:01:48

Duty cycle correction =  $20\log((10 \times 0.865.3)/100) = -21.3\text{dB}$

**Clause 15.247(a)(1) Frequency hopping systems**

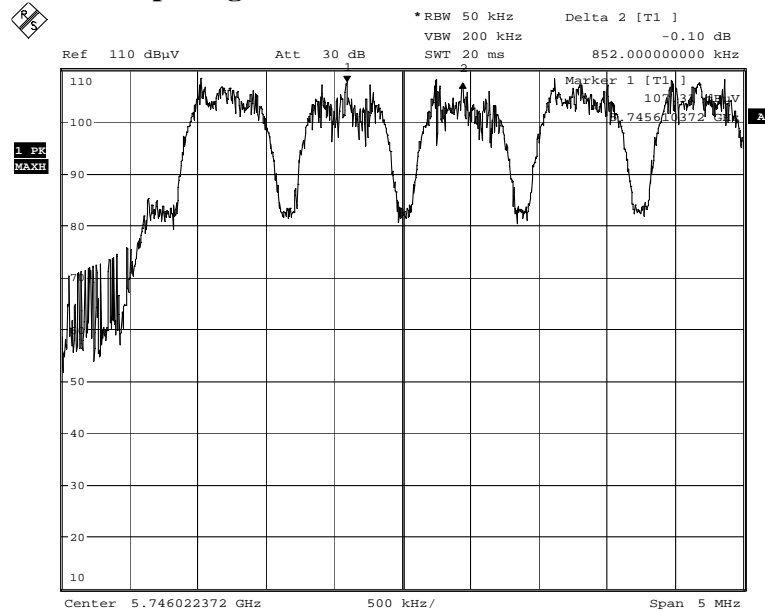
Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW. The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

**Test Conditions:**

<b>Sample Number:</b>	5	<b>Temperature (°C):</b>	24
<b>Date:</b>	October 24, 2006	<b>Humidity (%):</b>	29
<b>Modification State:</b>	0	<b>Tester:</b>	Jason Nixon
		<b>Laboratory:</b>	Wireless

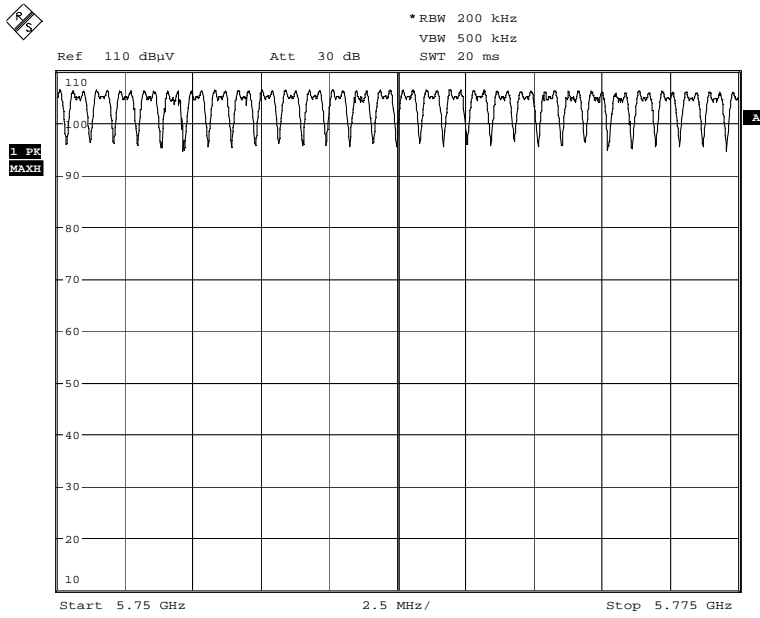
**Test Results:**

**Channel Spacing:**

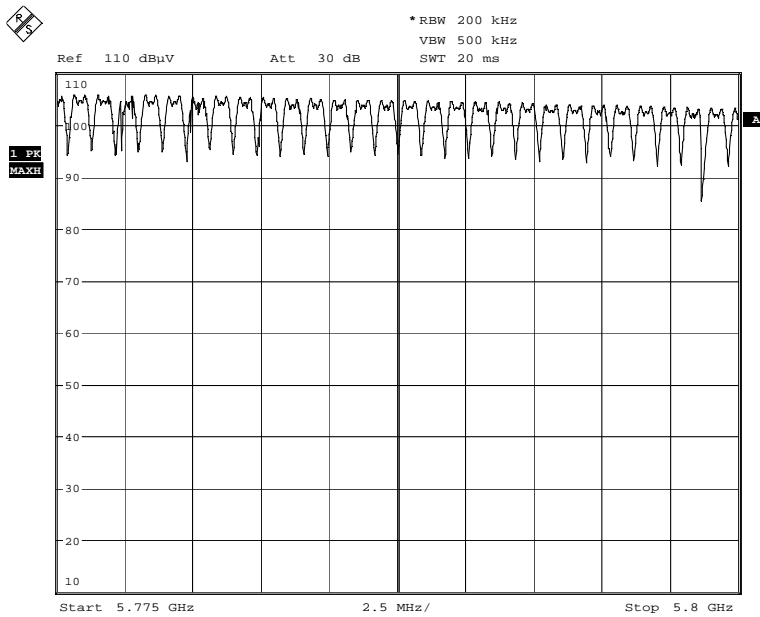


Channel Spacing  
 Date: 24.OCT.2006 11:06:52

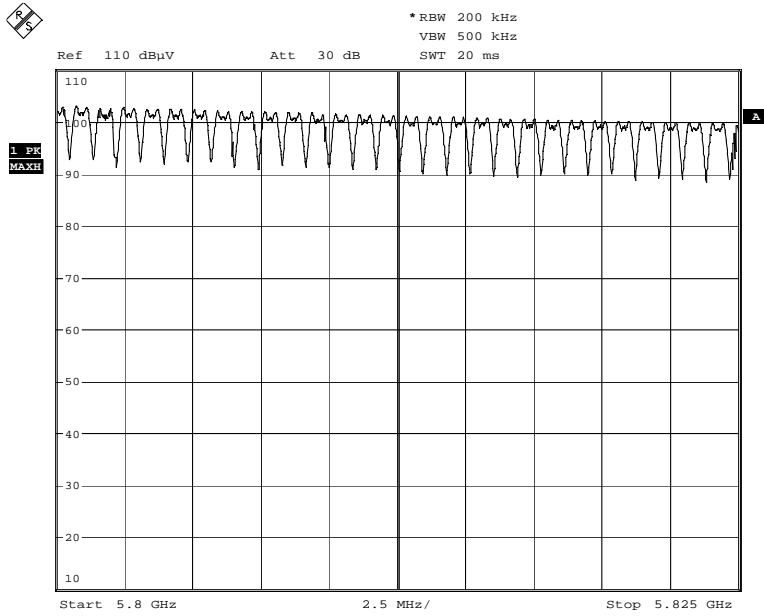




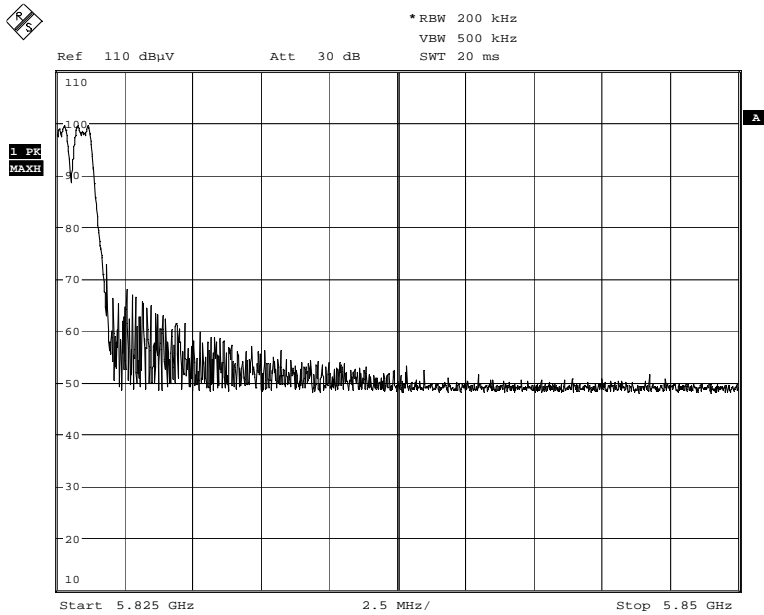
Number of Hopping Channels  
Date: 24.OCT.2006 11:18:24



Number of Hopping Channels  
Date: 24.OCT.2006 11:22:03

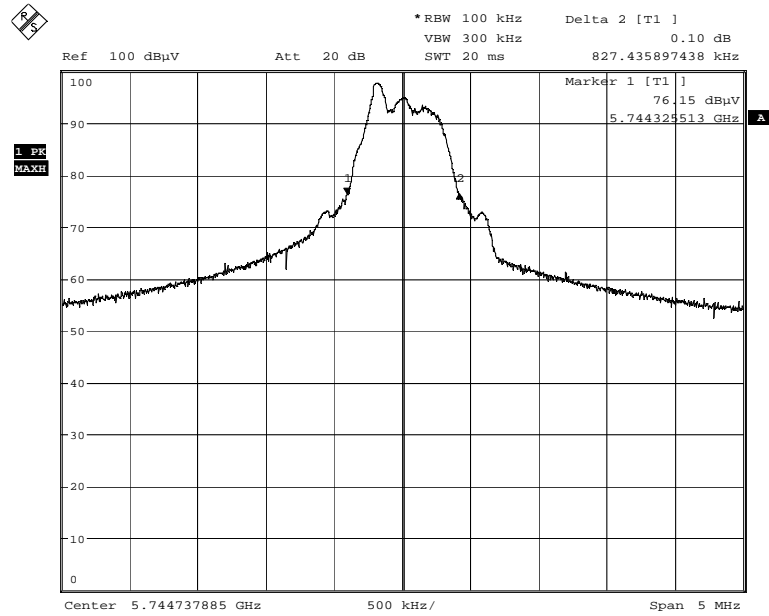


Number of Hopping Channels  
Date: 24.OCT.2006 11:26:30



Number of Hopping Channels  
Date: 24.OCT.2006 11:29:55

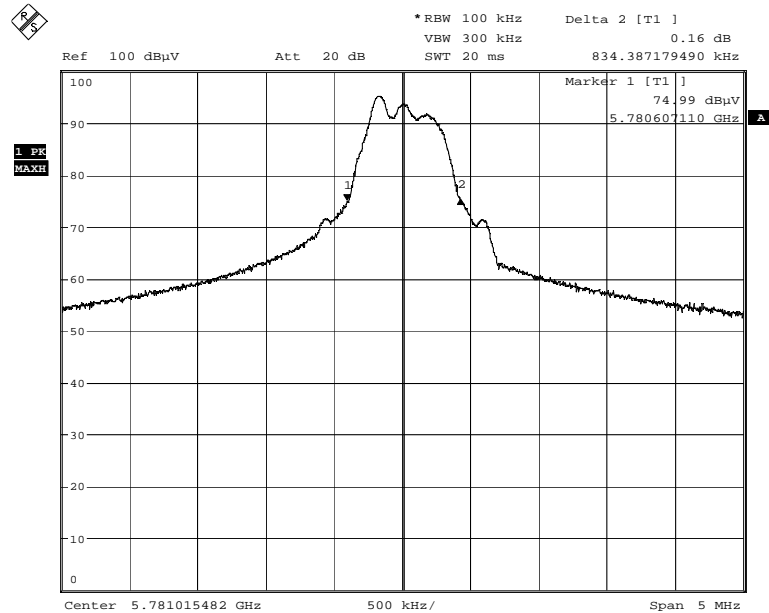
### 20dB Bandwidth – Low Channel



20dB Bandwidth - Low channel

Date: 24.OCT.2006 12:06:17

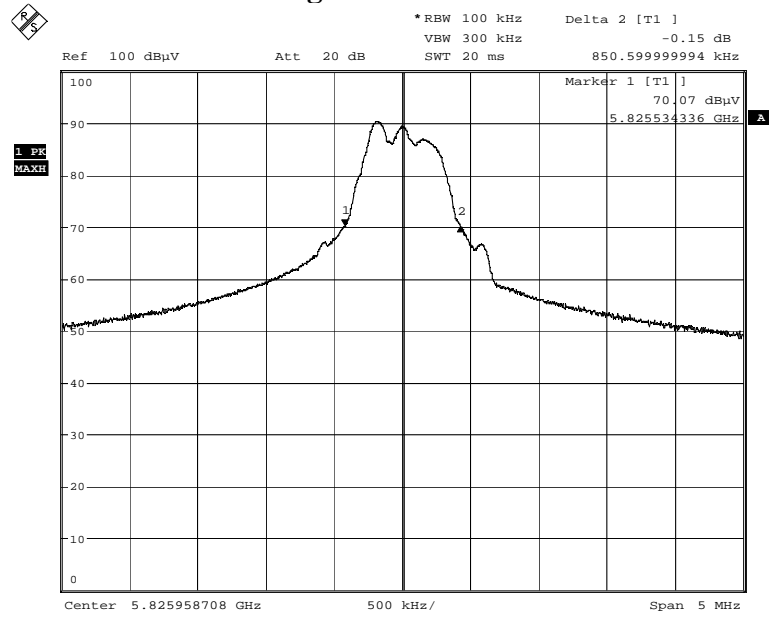
### 20dB Bandwidth – Mid Channel



20dB Bandwidth - Middle channel

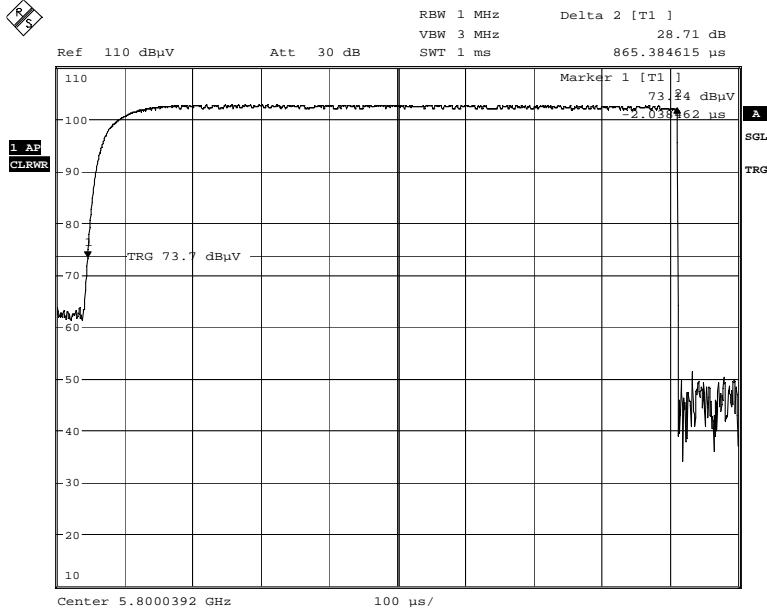
Date: 24.OCT.2006 12:04:17

20dB Bandwidth – High Channel

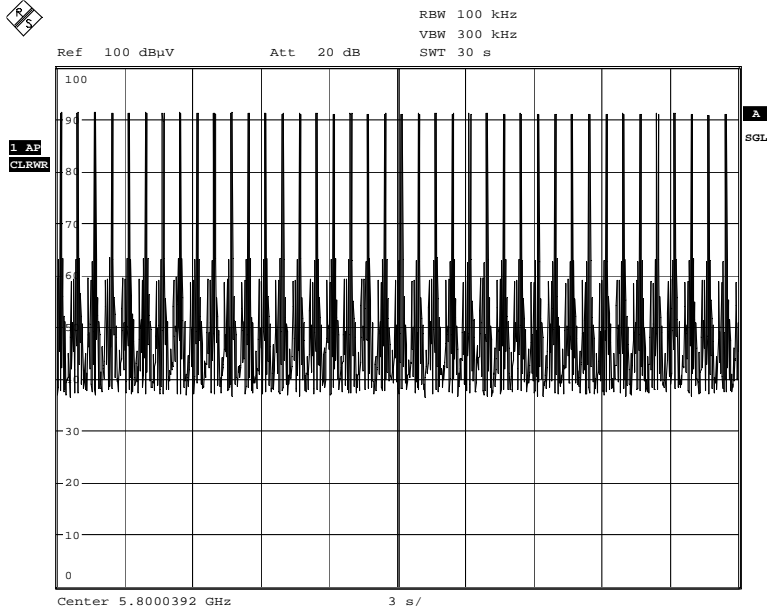


20dB Bandwidth - High channel  
Date: 24.OCT.2006 12:08:44

**Time of Occupancy:**



Dwell time  
 Date: 24.OCT.2006 11:38:02



40 Hits in 30seconds  
 Date: 24.OCT.2006 11:48:52

Time of occupancy = 0.8654msec x 40 hits = 34.62msec in 30 seconds

**Clause 15.247(b)(1) Maximum peak output power of Frequency hopping systems operating in the 2400-2483.5 MHz band and 5725-5850 MHz band**

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

**Test Conditions:**

<b>Sample Number:</b>	5	<b>Temperature (°C):</b>	24
<b>Date:</b>	October 24, 2006	<b>Humidity (%):</b>	29
<b>Modification State:</b>	0	<b>Tester:</b>	Jason Nixon
		<b>Laboratory:</b>	Wireless

**Test Results:**

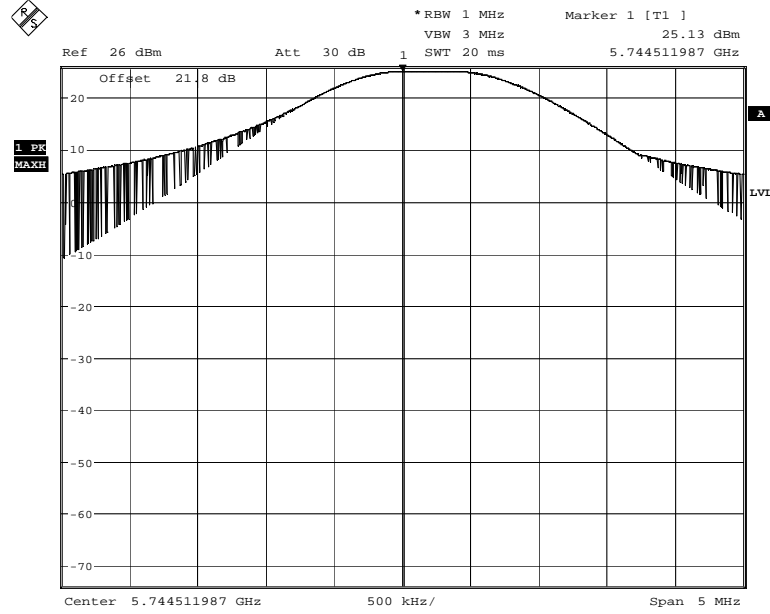
**Conducted Output Power:**

The output power was measured at +/-15% of the supply voltage and found that there was no change.

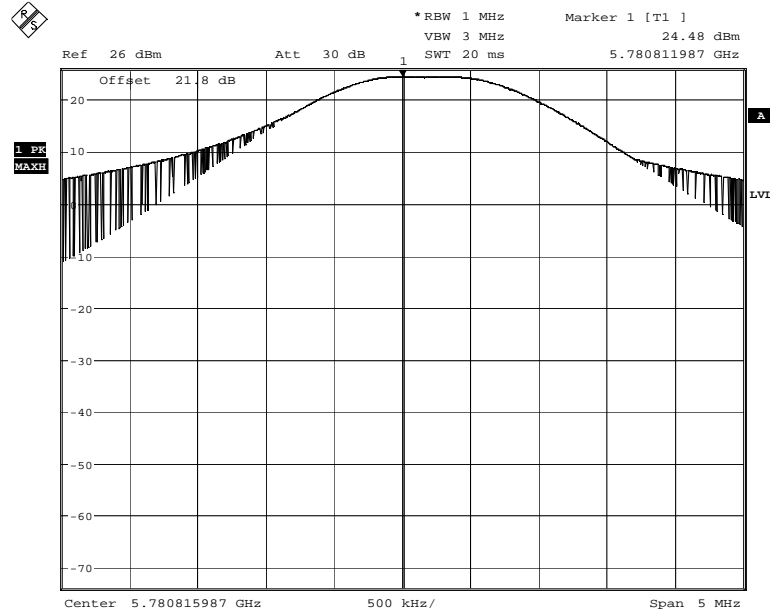
Note: The EUT was modified by the manufacturer to perform conducted measurements. The EUT uses an integral antenna.

Channel Range	Measured Output Power (W)
Low	0.326
Mid	0.277
High	0.229

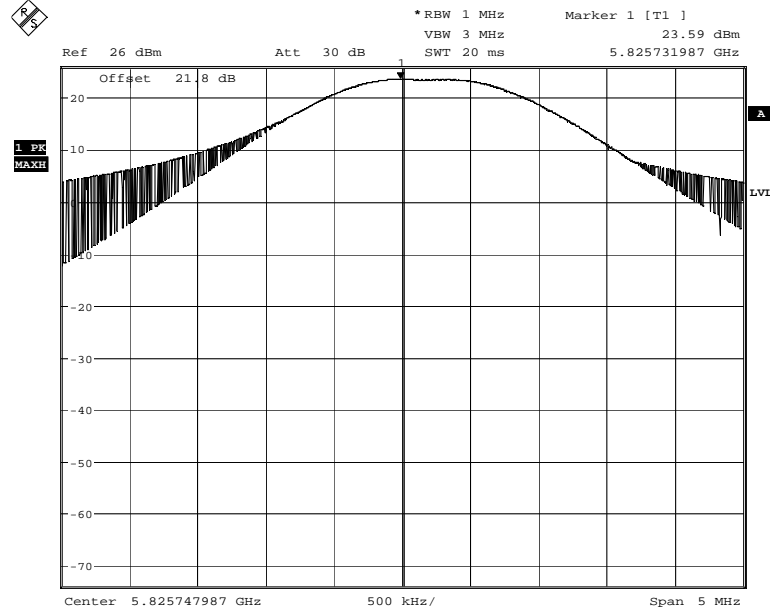
**Low Channel:**



**Mid Channel:**



High Channel:



Peak Power - High channel  
Date: 24.OCT.2006 10:16:22

**Clause 15.247(b)(4) Maximum peak output power**

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

**Test Conditions:**

<b>Sample Number:</b>	4	<b>Temperature (°C):</b>	10
<b>Date:</b>	October 25, 2006	<b>Humidity (%):</b>	66
<b>Modification State:</b>	0	<b>Tester:</b>	Jason Nixon
		<b>Laboratory:</b>	OATS

**Test Results:**

**Radiated Output Power:**

Ch.	Freq.	Pol V/H	ANT.	Rx dBuV	Cable loss dB	Ant Factor dB/m	F.S. dBuV/m
low	5744.0000	Horn1	V	71.8	9.8	34.6	116.2
	5744.0000	Horn1	H	72.5	9.8	34.7	117.0
mid	5785.0000	Horn1	V	72.2	9.8	34.6	116.6
	5785.0000	Horn1	H	71.3	9.8	34.7	115.9
high	5826.0000	Horn1	V	66.8	9.7	34.6	111.1
	5826.0000	Horn1	H	65.3	9.7	34.7	109.8

**Worst Case:**

Measured value (V/m) =  $10^{(FS/20)} = 0.707945784V/m$

Output Power (W) =  $\frac{E^2 R^2}{30G} = 0.150W (21.8dBm)$

E = Measured Value (V/m)

R = Measurement distance

G = Antenna Gain (numeric) (assumed to be 1 to get EIRP)

**Additional Observations:**

All Measurements were performed at 3m using a 1MHz RBW/VBW.

**Clause 15.247(d) Radiated Emissions Not in Restricted Bands**

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

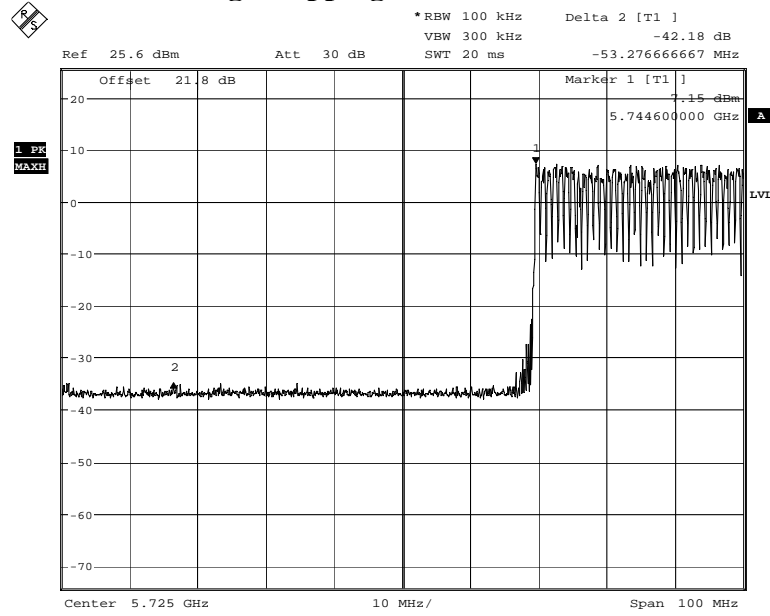
**Test Conditions:**

<b>Sample Number:</b>	4/5	<b>Temperature (°C):</b>	24
<b>Date:</b>	October 24, 2006	<b>Humidity (%):</b>	29
<b>Modification State:</b>	0	<b>Tester:</b>	Jason Nixon
		<b>Laboratory:</b>	Wireless

**Test Results:**

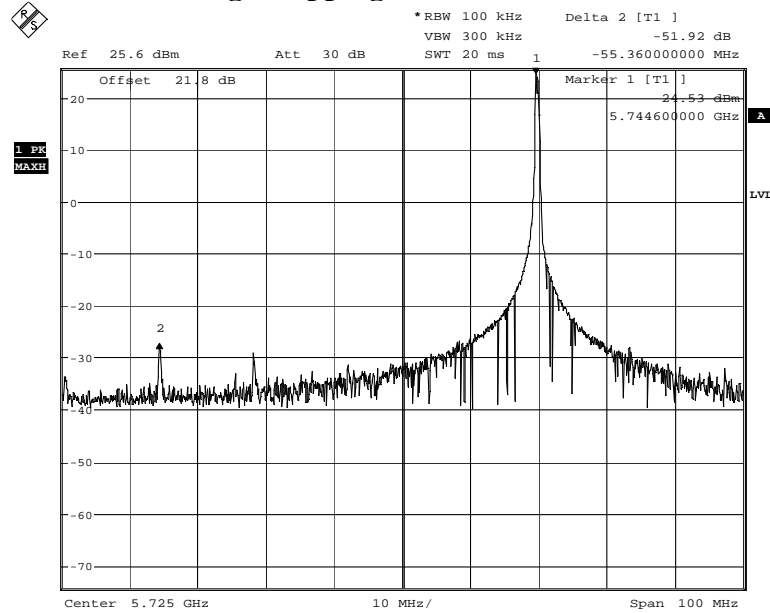
See Attached Table and Plots.

Lower Band Edge Hopping On:



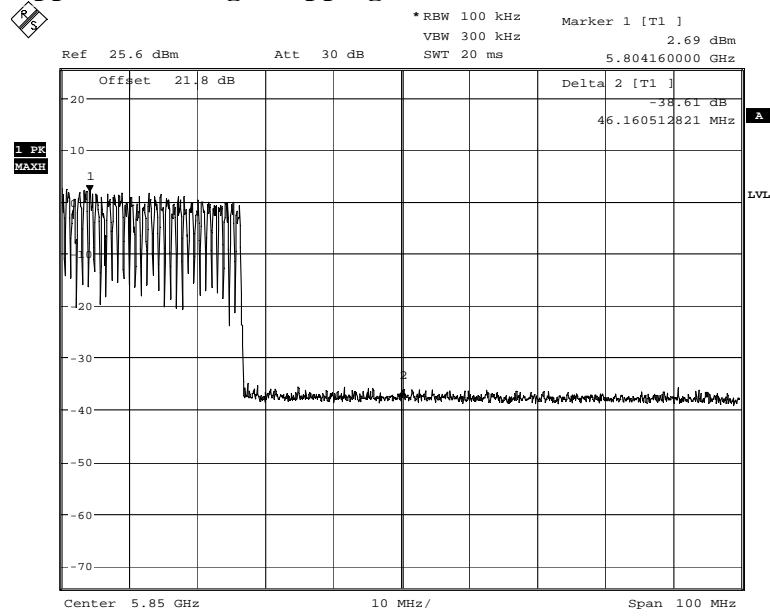
Lower Bandedge - Hopping on  
Date: 24.OCT.2006 14:31:36

Lower Band Edge Hopping Off:



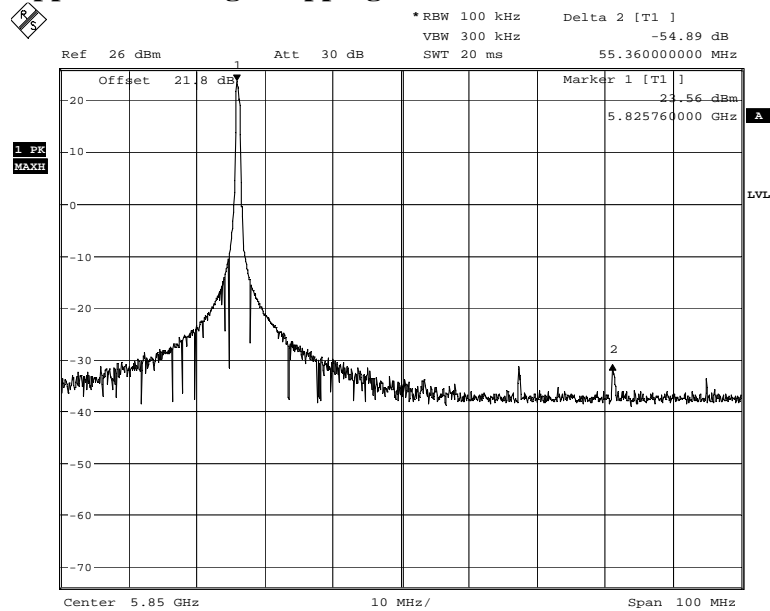
Lower Bandedge - Hopping off  
Date: 24.OCT.2006 14:19:55

### Upper Band Edge Hopping On:



Upper Bandedge - Hopping on  
Date: 24.OCT.2006 14:35:00

### Upper Band Edge Hopping Off:

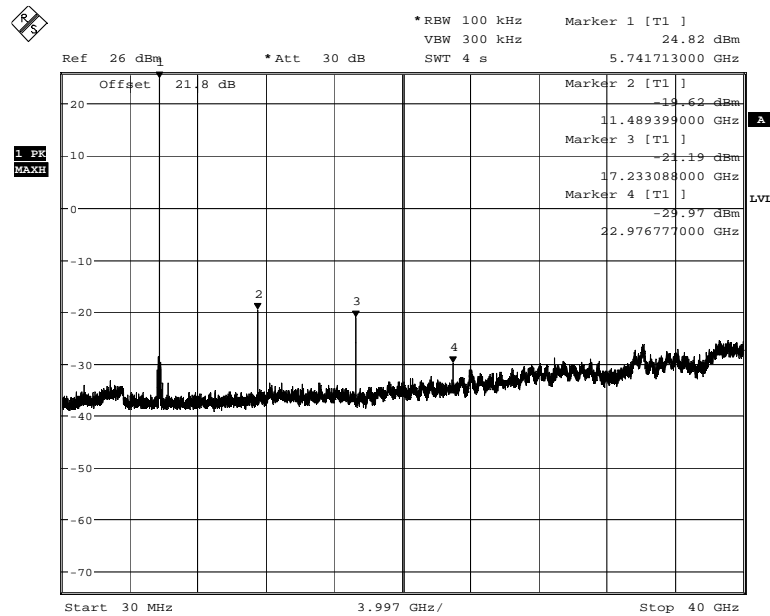


Upper Bandedge - Hopping Off  
Date: 24.OCT.2006 10:19:32

**Conducted Emissions**

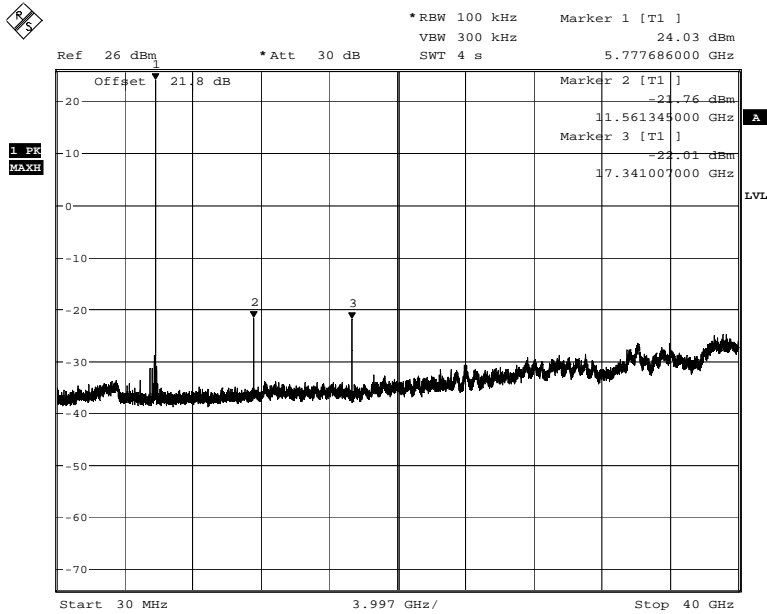
Harmonic	Level (dBm)		
	Low Channel	Mid Channel	High Channel
Fundamental	24.56	23.84	23.15
2 <sup>nd</sup>	-19.07	-21.60	-25.12
3 <sup>rd</sup>	-20.49	-21.60	-22.51
4 <sup>th</sup>	-28.55	-23.55	-52.47
5 <sup>th</sup>	—	—	—
6 <sup>th</sup>	—	—	—

All measurements in table are from zoom plots on the harmonics to show compliance with the 20dBc requirements.

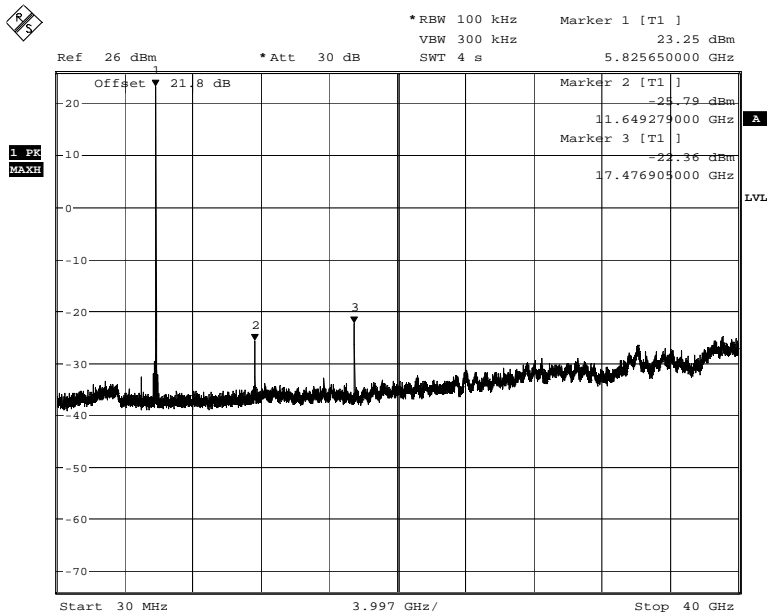


Conducted Emissions - Low Channel

Date: 24.OCT.2006 13:14:38



Conducted Emissions - Middle Channel  
 Date: 24.OCT.2006 13:25:12



Conducted Emissions - High Channel  
 Date: 24.OCT.2006 13:30:52

**Radiated Emissions**

Frequency (MHz)	Antenna	Polarity	RCVD Signal (dBuV)	Ant. Factor (dB)	Amp. Gain/cable loss (dB)	Distance Corr. (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
5744.0000	Horn1	V	71.8	34.6	9.8	0.0	116.2		
5744.0000	Horn1	H	72.5	34.7	9.8	0.0	117.0		
17232.000	Horn2	V	52.5	43.4	34.0	9.5	52.4	96.2	43.8
17232.000	Horn2	H	53.8	43.3	34.0	9.5	53.6	97.0	43.4
5785.0000	Horn1	V	72.2	34.6	9.8	0.0	116.6		
5785.0000	Horn1	H	71.3	34.7	9.8	0.0	115.9		
17355.000	Horn2	V	52.5	44.0	34.0	9.5	53.0	96.6	43.6
17355.000	Horn2	H	54.2	43.9	34.0	9.5	54.6	95.9	41.3
5826.0000	Horn1	V	66.8	34.6	9.7	0.0	111.1		
5826.0000	Horn1	H	65.3	34.7	9.7	0.0	109.8		
17478.000	Horn2	V	51.0	44.7	34.0	9.5	52.2	91.1	38.9
17478.000	Horn2	H	53.8	44.6	34.0	9.5	54.9	89.8	34.9

Note 1: Antenna Legend: BC = Biconical, BL = Bilog, LP = Log-Periodic, Horn = Horn, ED = EMCO Dipole

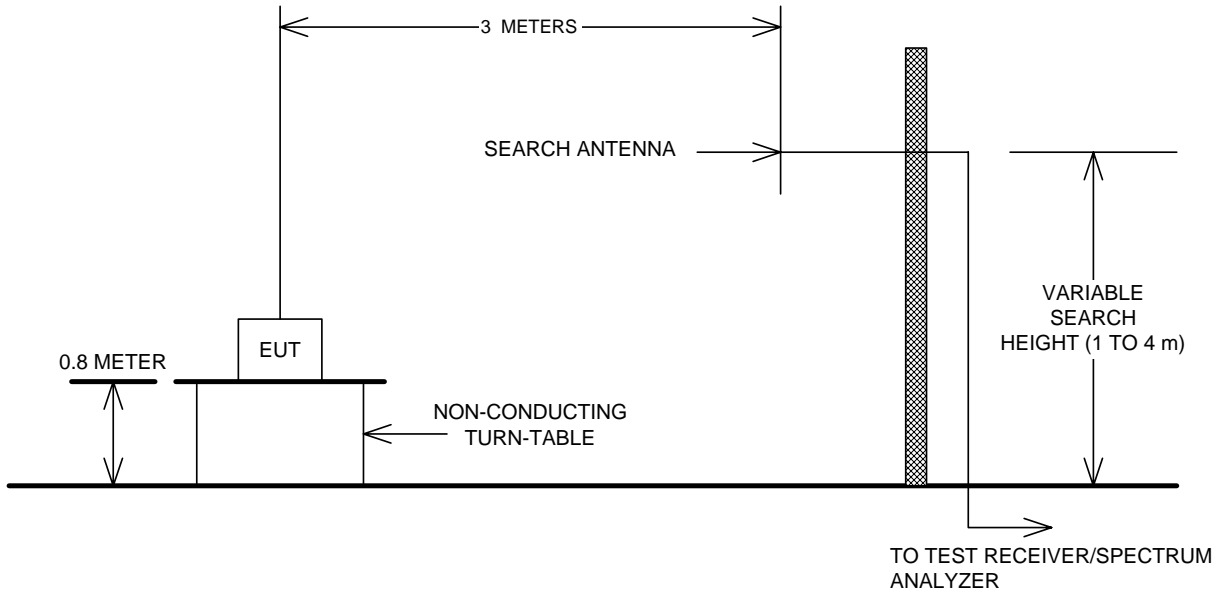
**Additional Observations:**

All measurements were performed using a Peak detector with 100kHz RBW/VBW.

Measurements below 8GHz were performed at 3m and measurements above 8GHz were performed at 1 meter.

### Appendix C : Block Diagram of Test Setups

#### Test Site For Radiated Emissions



#### Conducted Emissions

