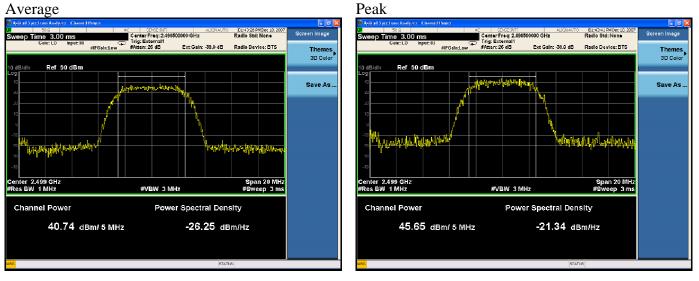
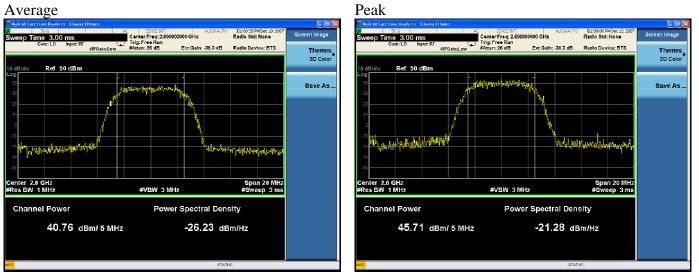
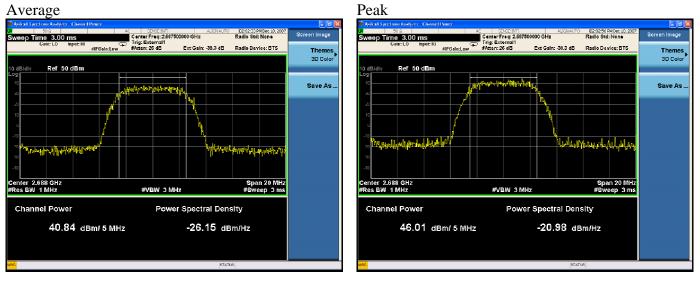
## $Main\ Signal-2498.5 MHz$



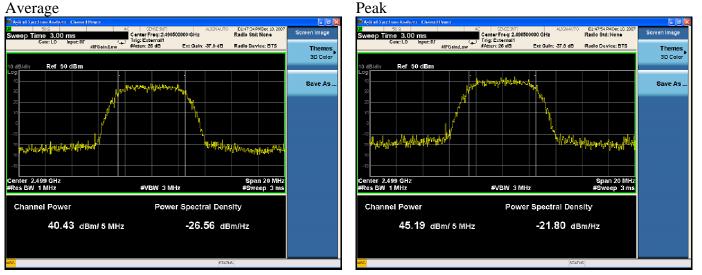
Main Signal – 2600MHz



## Main Signal – 2687.5MHz

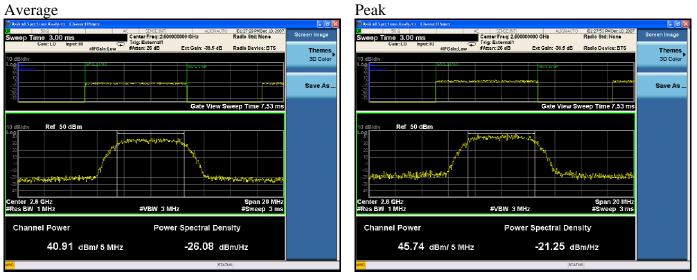


# Diversity Signal – 2498.5MHz

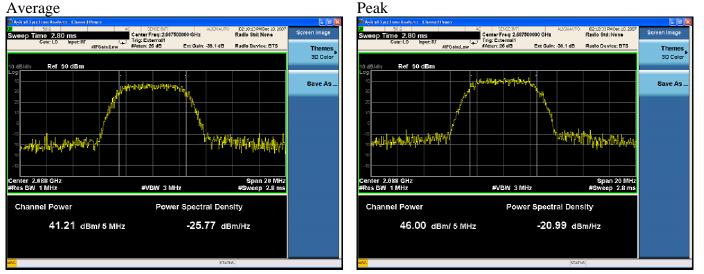


FCC ID: AB6NTQ220AB

# Diversity Signal – 2600MHz



### Diversity Signal – 2687.5MHz

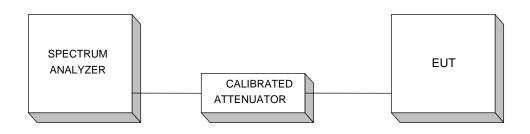


### APPENDIX A : TEST RESULTS Report Number: 98151-1TRFWL Specification: FCC Part 27

# Clause 27.53(1)(6) Occupied Bandwidth

(6) Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 1 MHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. With respect to television operations, measurements must be made of the separate visual and aural operating powers at sufficiently frequent intervals to ensure compliance with the rules.

### **Test Setup**



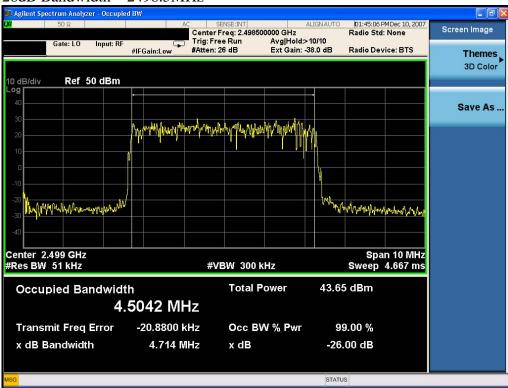
### Setting remarks

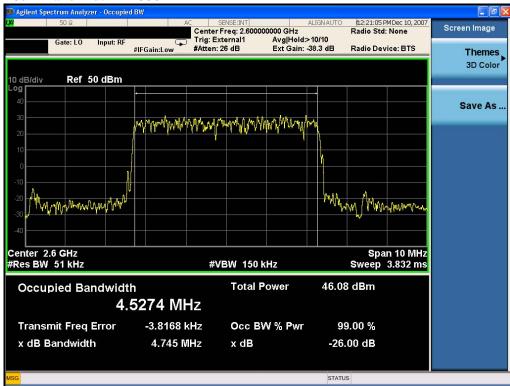
- 1. 26dB occupied bandwidth would be measured using the spectrum analyzer.
- 2. Low, medium and high frequencies would be tested. All modulations (BPSK, QPSK, 16QAM, and 64QAM) modes and different data rates would be evaluated using a combined waveform representative of all 4-modulation schemes.
- Spectrum analyzer settings: RBW/VBW: More than 1% of rated occupied bandwidth VBW: ≥RBW Detector: Peak

Frequency (MHz)	Occupied Bandwidth (MHz)				
2498.5	4.714				
2600	4.745				
2687.5	4.710				

FCC ID: AB6NTQ220AB

#### 26dB Bandwidth - 2498.5MHz

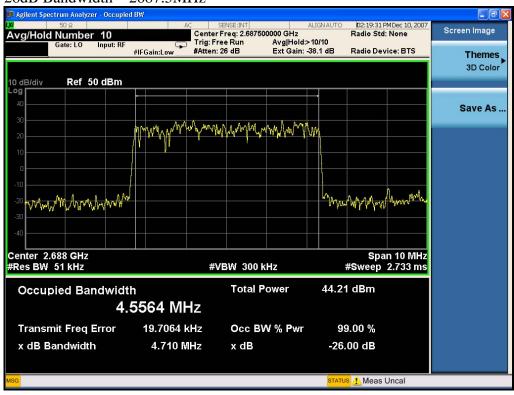




26dB Bandwidth – 2600MHz

FCC ID: AB6NTQ220AB

#### $26 dB \ Bandwidth-2687.5 MHz$



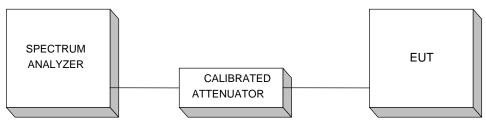
#### Clause 27.53(l) spurious emissions at the antenna terminal

(1) For BRS and EBS stations, the power of any emissions outside the licensee's frequency bands of operation shall be attenuated below the transmitter power (P) measured in watts.

(2) For fixed and temporary fixed digital stations, the attenuation shall be not less than  $43 + 10 \log (P) dB$ , unless a documented interference complaint is received from an adjacent channel licensee. Provided that the complaint cannot be mutually resolved between the parties, both licensees of existing and new systems shall reduce their outof-band emissions by at least 67 + 10 log (P) dB measured at 3 MHz from their channel's edges for distances between stations exceeding 1.5 km.

(6) Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 1 MHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. With respect to television operations, measurements must be made of the separate visual and aural operating powers at sufficiently frequent intervals to ensure compliance with the rules.

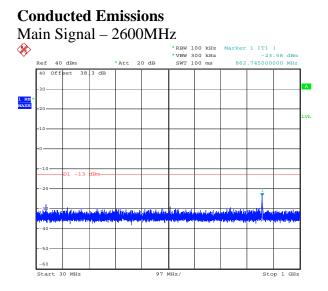
#### **Test Setup:**

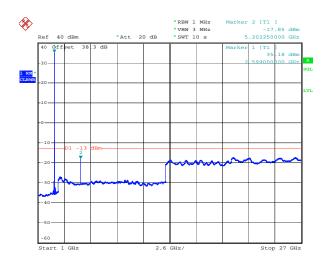


#### Setting Remarks:

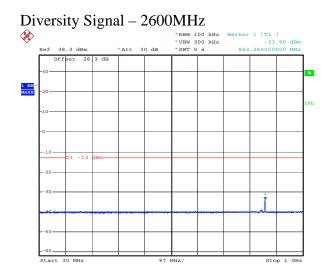
- 1. Conducted spurious emission measurement would be performed.
- 2. Frequency scan would start from 30MHz to 10<sup>th</sup> Harmonics. The measurements would be performed using RMS detector with 1MHz/3MHz RBW/VBW settings.
- 3. Band edge check would be conducted with the EUT operated the nearest channel to the band edge.
- 4. To measure the emission level at the 1 MHz bands immediately outside the frequency band, RBW/VBW in the spectrum analyzer would be set up to more than 1% of the emission bandwidth. RM detector would be applied.
- 5. To measure the emission level more than the 1 MHz bands outside the frequency band, RBW/VBW in the spectrum analyzer would be set up to more than 1% of the emission bandwidth, with the measured power being integrated to 1MHz. The RMS detector would be applied.
- 6. The test would be repeated both for individual chain and combined transmitters configuration.
- 7. All modulations (BPSK, QPSK, 16QAM, and 64QAM) modes and different data rates would be evaluated using a combined waveform representative of all 4-modulation schemes.

### APPENDIX A : TEST RESULTS Report Number: 98151-1TRFWL Specification: FCC Part 27



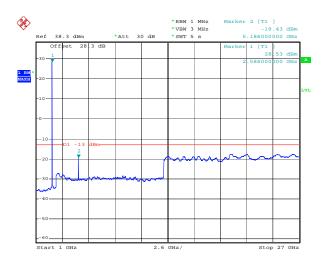


Date: 11.DEC.2007 12:01:39



Date: 11.DEC.2007 12:21:52

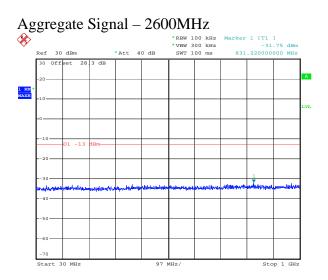
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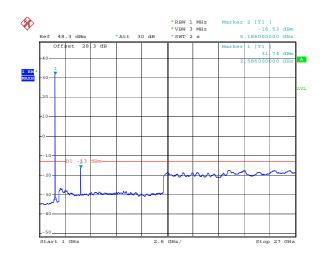


Date: 11.DEC.2007 12:21:26

Page 24 of 33

FCC ID: AB6NTQ220AB

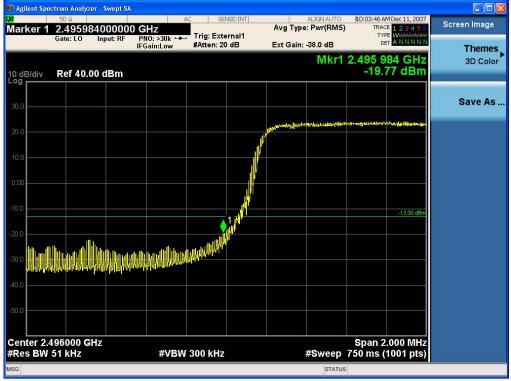




Date: 11.DEC.2007 12:23:30

Date: 11.DEC.2007 12:30:15

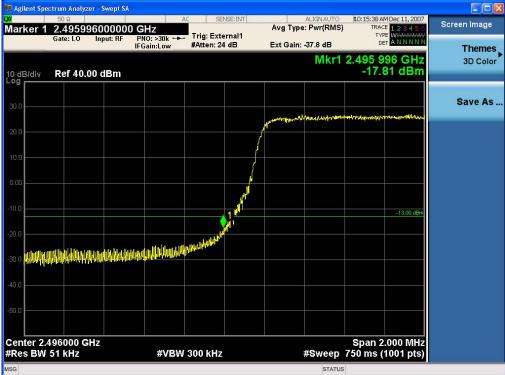
#### Lower Bandedge – Main Signal Agilent Spectrum Analyzer - Swept SA



### Lower Bandedge – Diversity Signal

🔋 Agilent Spectrum Analyzer - S					
	00000 GHz put: RF PNO: >30k ++ IEGain:Low	Trig: External1 #Atten: 20 dB	ALIGNAUTO Avg Type: Pwr(RMS) Ext Gain: -37.8 dB	10:12:44 AM Dec 11, 2007 TRACE 1 2 3 4 5 6 TYPE WWWWWW DET A N N N N N	Screen Image
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SG			STATUS		

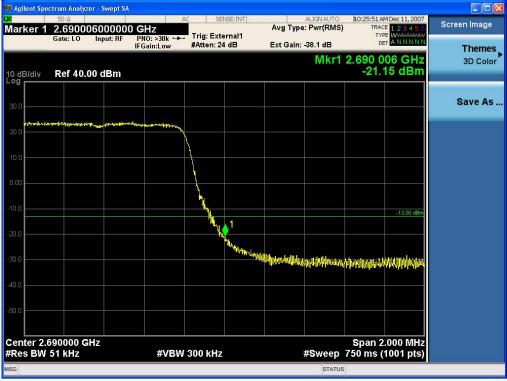
#### Lower Bandedge – Aggregate Signal Agilent Spectrum Analyzer - Swept SA



### Upper Bandedge – Main Signal

Agilent Spectrum Analyzer - Swept SA				
50 Ω larker 1 2.69000400000		Avg Type: Pwr(RMS)	10:21:01 AM Dec 11, 2007 TRACE 1 2 3 4 5 6	Screen Image
Gate: LO Input: RF	PNO: >30k +++ IFGain:Low #Atten: 24 dB	Ext Gain: -38.3 dB	TYPE WWWWWW DET A N N N N N	Themes
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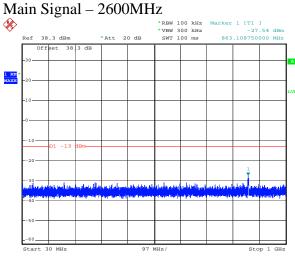
#### Upper Bandedge – Diversity Signal Agilent Spectrum Analyzer - Swept SA

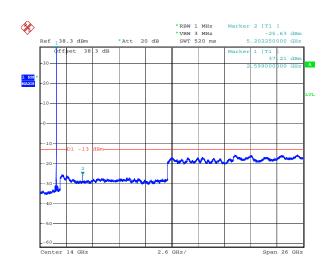


## Upper Bandedge – Aggregate Signal

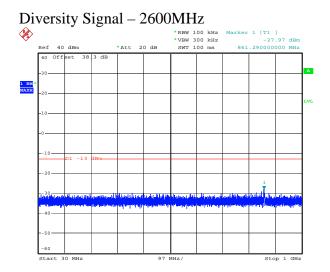
50 Ω		A	C SEN	SE:INT			10:27:19 AM	Dec 11, 2007	Screen Imag
rker 1 2.690002 Gate: L0	Input: RF	PNO: >30k +++	Trig: Exte			Pwr(RMS)	TYP	123456 WWWWWWW ANNNNN	
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es BW 51 kHz	2	#VBW	300 kHz		#	Sweep 7	'50 ms (1	000 Min2	
						STATUS			

### Conducted Emissions with TTLNA



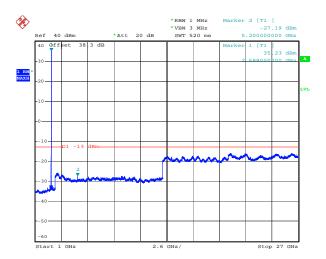


Date: 11.DEC.2007 10:51:36



Date: 11.DEC.2007 10:53:31

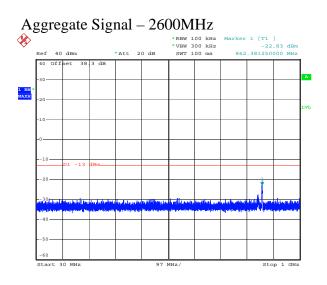
Date: 11.DEC.2007 10:50:50



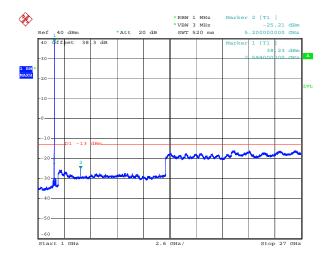
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FCC ID: AB6NTQ220AB

### APPENDIX A : TEST RESULTS Report Number: 98151-1TRFWL Specification: FCC Part 27

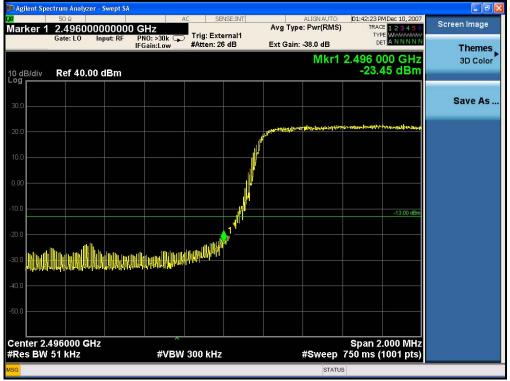


Date: 11.DEC.2007 10:56:25



Date: 11.DEC.2007 10:57:22

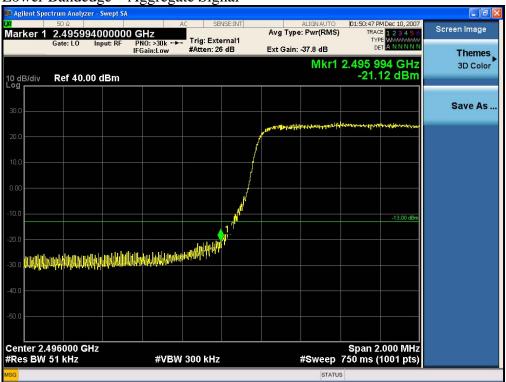
#### Lower Bandedge – Main Signal Agilent Spectrum Analyzer - Swept SA



### Lower Bandedge – Diversity Signal

🎾 Agilent Spo	ectrum Analyzer -	Swept SA								- 7 🛛
Marker 1	<sup>50 Ω</sup> 2.4959940	000000 G	SHz A		NSE:INT	Avg Type	ALIGNAUTO Pwr(RMS)	TRAC	MDec 10, 2007 E 1 2 3 4 5 6	Screen Image
		put: RF P	NO: >30k +++ Gain:Low	Trig: Exte #Atten: 26		Ext Gain:	-37.8 dB	TYF		Themes
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MSG							STATUS			





### Upper Bandedge – Main Signal



#### Upper Bandedge – Diversity Signal Agilent Spectrum Analyzer - Swept SA



#### Upper Bandedge – Aggregate Signal

