

Product	CBS 3.65GHz				
Test Item	Spectrum Emission Mask				
	Mode 10: Transmit (10MHz BW_QPSK3/4)				
Test Mode	Mode 11: Transmit (10MHz BW_16QAM1/2)				
	Mode 12: Transmit (10MHz BW_64QAM5/6)				
Date of Test	2011/12/24	Test Site	SR7		

# 10MHz Bandwidth, Antenna Gain: 16dBi

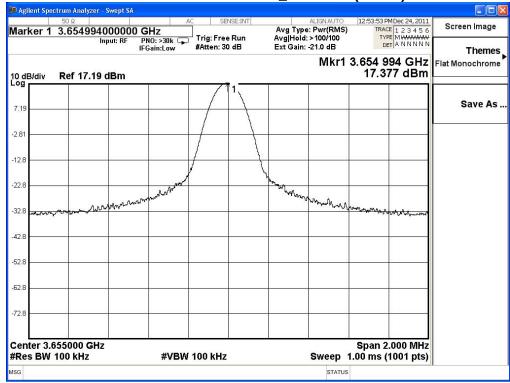
Frequency (MHz)	Modulation	Test Result		
3655.0	QPSK3/4	PASS		
3662.5	QPSK3/4	PASS		
3670.0	QPSK3/4	PASS		
Frequency (MHz)	Modulation	Test Result		
3655.0	16QAM1/2	PASS		
3662.5	16QAM1/2	PASS		
3670.0	16QAM1/2	PASS		
Frequency (MHz)	Modulation	Test Result		
3655.0	64QAM2/3	PASS		
3662.5	64QAM2/3	PASS		
3670.0	64QAM2/3	PASS		

Note: Set the RBW to 100kHz, and the mask limit was be reduced 10log(1MHz/100kHz)=10dB.

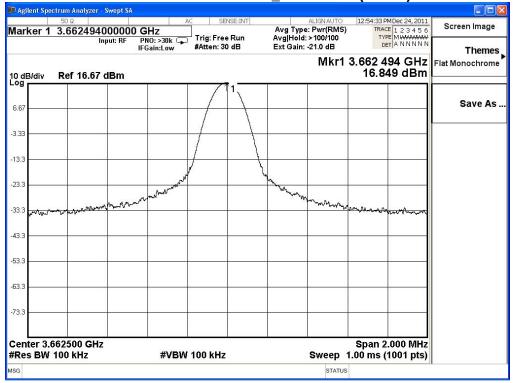
Page: 207 of 521



Reference Level: 10MHz\_3655MHz (ANT 0)

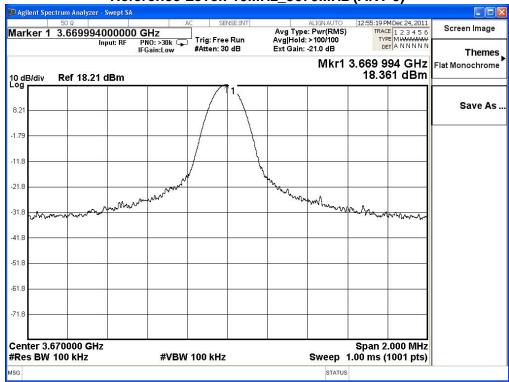


Reference Level: 10MHz\_3662.5MHz (ANT 0)

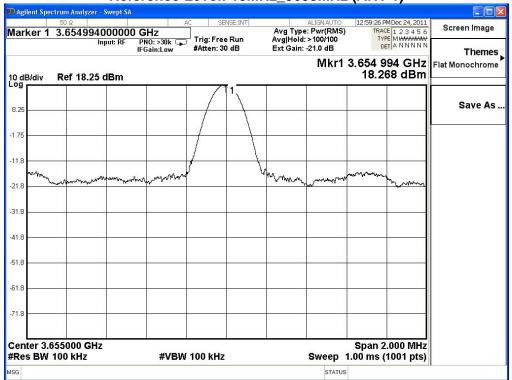




Reference Level: 10MHz\_3670MHz (ANT 0)

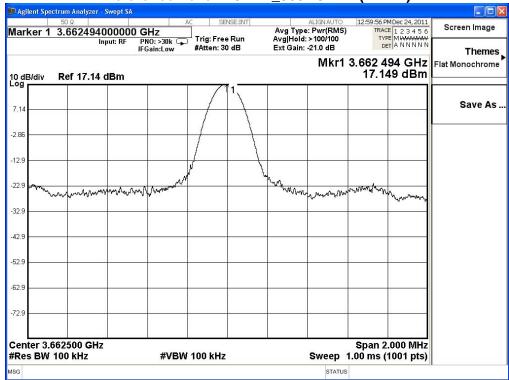


Reference Level: 10MHz\_3655MHz (ANT 1)

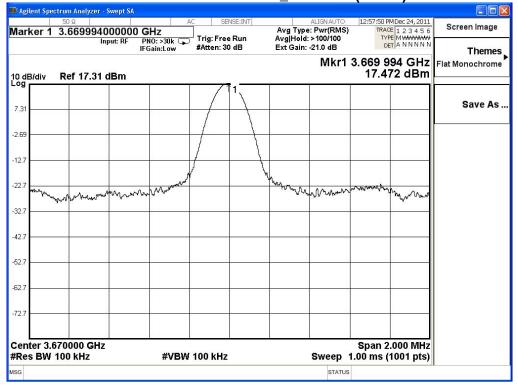




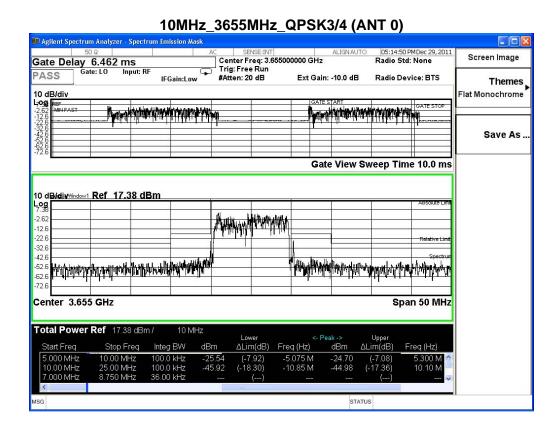
Reference Level: 10MHz\_3662.5MHz (ANT 1)

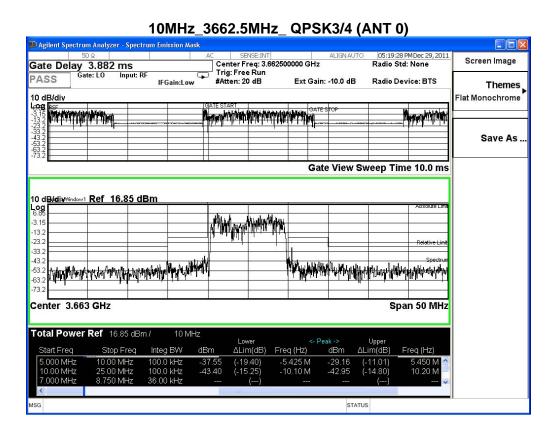


Reference Level: 10MHz\_3670MHz (ANT 1)

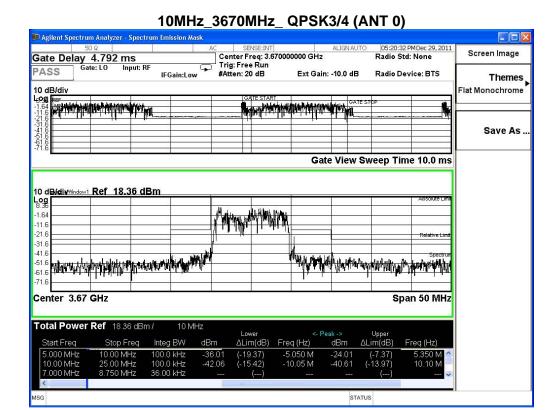


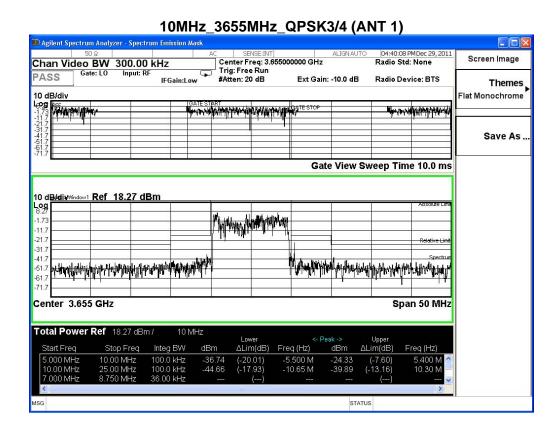




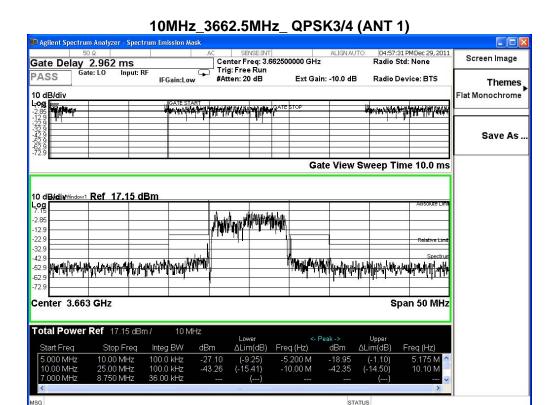


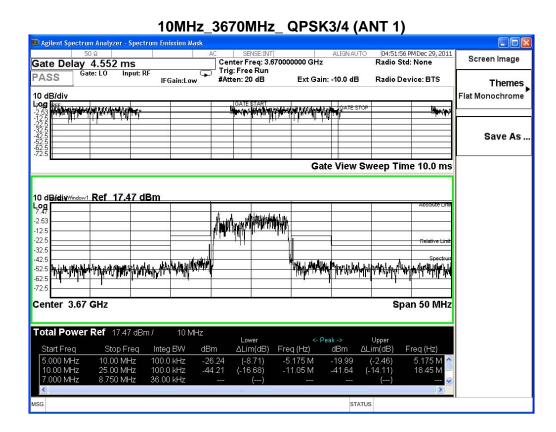




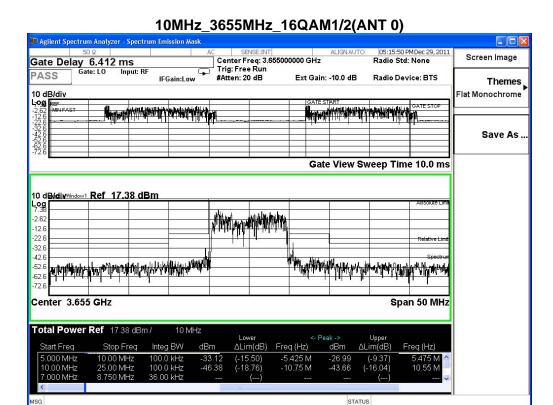






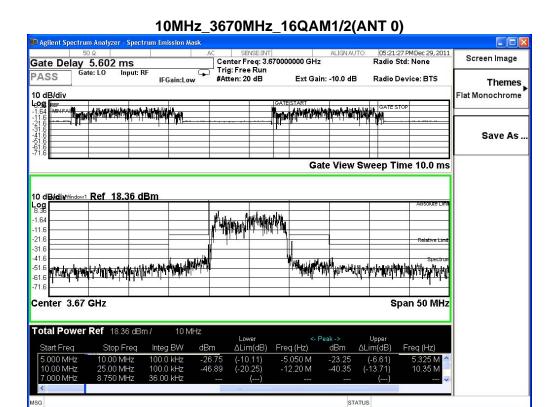


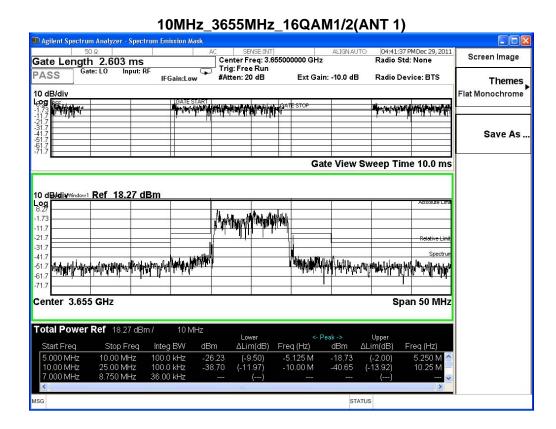




#### 10MHz\_3662.5MHz\_16QAM1/2(ANT 0) 05:18:43 PM Dec 29, 2011 Radio Std: None Screen Image Gate Delay 5.922 ms Center Freq: 3.662500000 GHz Trig: Free Run PASS IFGain:Low #Atten: 20 dB Ext Gain: -10.0 dB Radio Device: BTS Themes lat Monochrome Save As . Gate View Sweep Time 10.0 ms 10 dB/diy/Window1 Ref 16.85 dBm 23.2 -43.2 ±qualitation to to the state of -63.2 Center 3.663 GHz Span 50 MHz Total Power Ref 16.85 dBm / Lower ΔLim(dB) Upper ΔLim(dB) Start Fred Stop Frea Integ BW dBm Freq (Hz) Freq (Hz) dBm 5 000 MHz 10.00 MHz 25.00 MHz 5.300 M 10.05 M 7.000 MHz

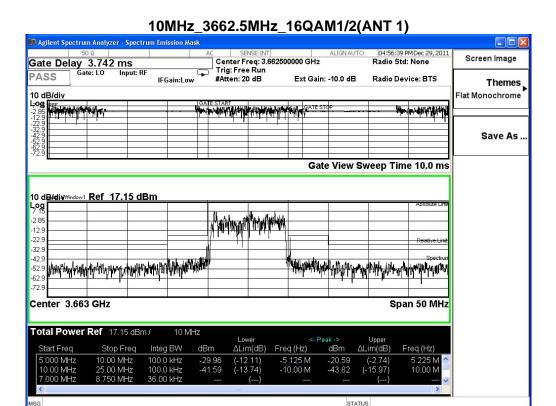


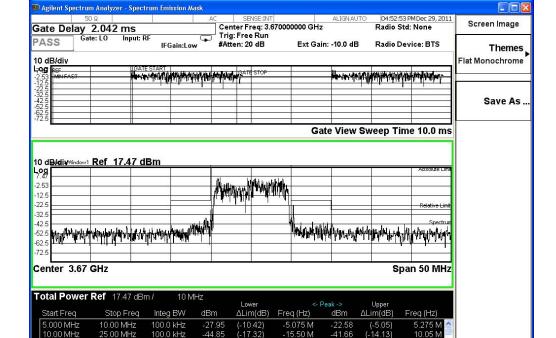






7.000 MHz





10MHz\_3670MHz\_16QAM1/2(ANT 1)

STATUS



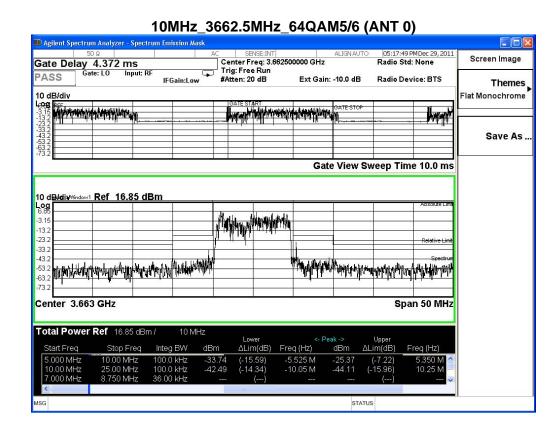
10MHz\_3655MHz\_64QAM5/6 (ANT 0) 🗎 Agilent Spectrum Analyzer - Spectrum Emission Mas SENSE:INT

Center Freq: 3.655000000 GHz

Trig: Free Run

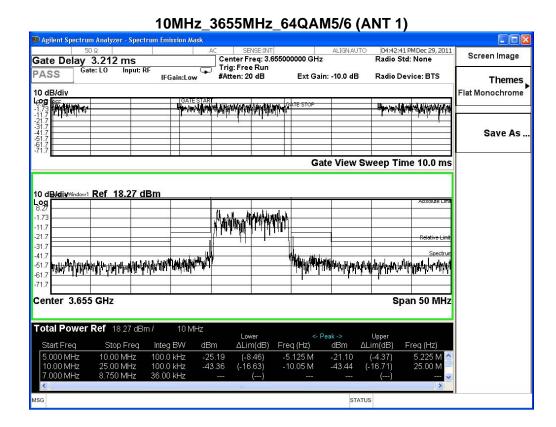
#Atten: 20 dB Ext Gain 05:16:49 PMDec 29, 2011 Radio Std: None Screen Image Gate Delay 4.202 ms PASS IFGain:Low Radio Device: BTS **Themes** 10 dB/div Flat Monochrome Save As . Gate View Sweep Time 10.0 ms 10 dB/diw/window1 Ref 17.38 dBm 12.8 MANANATOTIPE AND THE BOOK OF T Center 3.655 GHz Span 50 MHz Total Power Ref 17.38 dBm / ΔLim(dB) Freq (Hz) Freq (Hz) -5.525 M -10.05 M -26.67 -40.19 (-9.05) (-12.57) -32.90 -44.82 5.350 M 10.15 M

STATUS

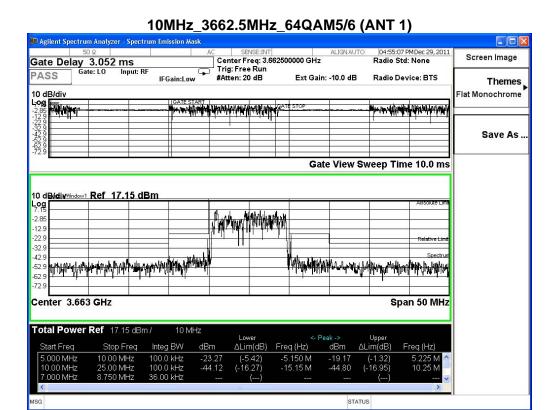


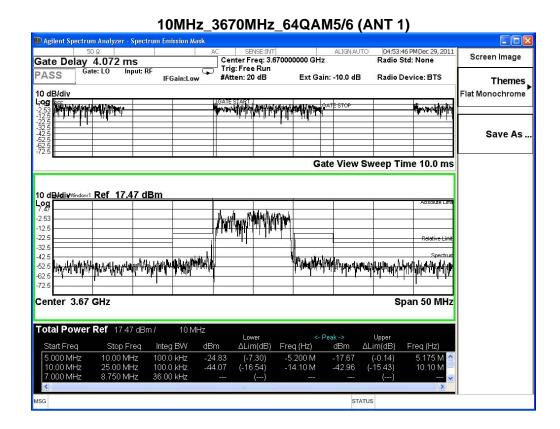


10MHz\_3670MHz\_64QAM5/6 (ANT 0) 🗎 Agilent Spectrum Analyzer - Spectrum Emission Mask Screen Image Gate Delay 6.112 ms PASS IFGain:Low **Themes** 10 dB/div Flat Monochrome Save As .. Gate View Sweep Time 10.0 ms 10 dB/diw/wndow1 Ref 18.36 dBm MARINE WATER AND THE PROPERTY. White the state of -51.6 -61.6 Center 3.67 GHz Span 50 MHz Total Power Ref 18.36 dBm / ΔLim(dB) Freq (Hz) -5.000 M -11.10 M -25.81 -43.18 (-9,17) (-16.54) -25.00 -42.16 (-8.36) (-15.52) 5.000 M 10.35 M











## 6. Conducted Spurious Emission

### 6.1. Test Equipment

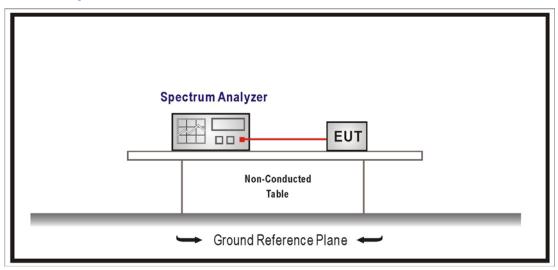
The following test equipments are used during the test:

### **Conducted Spurious Emission / SR7**

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A	US47140172	2012/07/13

Note: All equipment upon which need to calibrated are with calibration period of 1 year.

### 6.2. Test Setup



#### 6.3. Limits

The power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or less, but at least one percent of the emission bandwidth of the fundamental emission of the transmitter, provided the measured energy is integrated over a 1 MHz bandwidth.

#### 6.4. Test Procedure

The EUT was set up for the rated peak power. The power was measured with Spectrum Analyzer. All measurements were done at 3 channels: low, middle and high operational frequency range. The spectrum set RBW = 1MHz, VBW = 3MHz. and using peak detection mode.



# 6.5. Test Specification

FCC CFR Title 47 Part 90 Subpart Z,

# 6.6. Uncertainty

The measurement uncertainty is defined as  $\pm 1.27 \text{ dB}$ 

Page: 221 of 521