

4. Occupied Bandwidth

4.1. Test Equipment

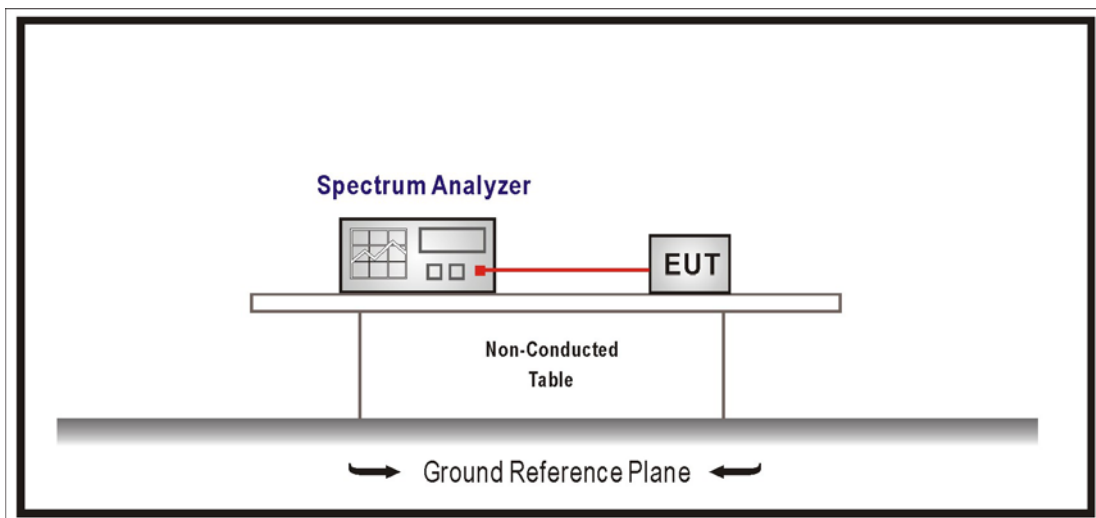
The following test equipments are used during the test:

Occupied Bandwidth / SR7

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

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

4.2. Test Setup



4.3. Limits

NA

4.4. Test Procedure

The occupied bandwidth is measured using Spectrum Analyzer with a resolution bandwidth of 1% EBW, video bandwidth 3% EBW and span of twice the EBW. The EUT was set up for the rated peak power under transmission mode and specific channel frequency. The standards required a measurement bandwidth is the fundamental emission below 26dB bandwidth.

4.5. Test Specification

FCC CFR Title 47 Part 90 Subpart Z

4.6. Uncertainty

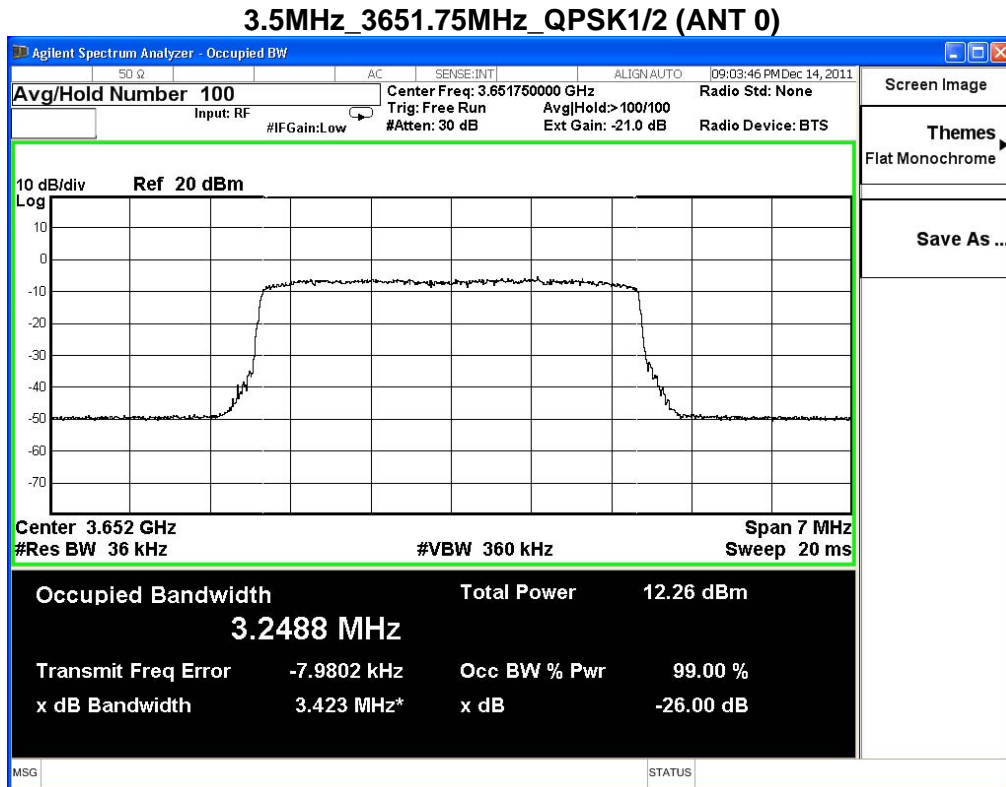
The measurement uncertainty is defined as ± 50 kHz

4.7. Test Result

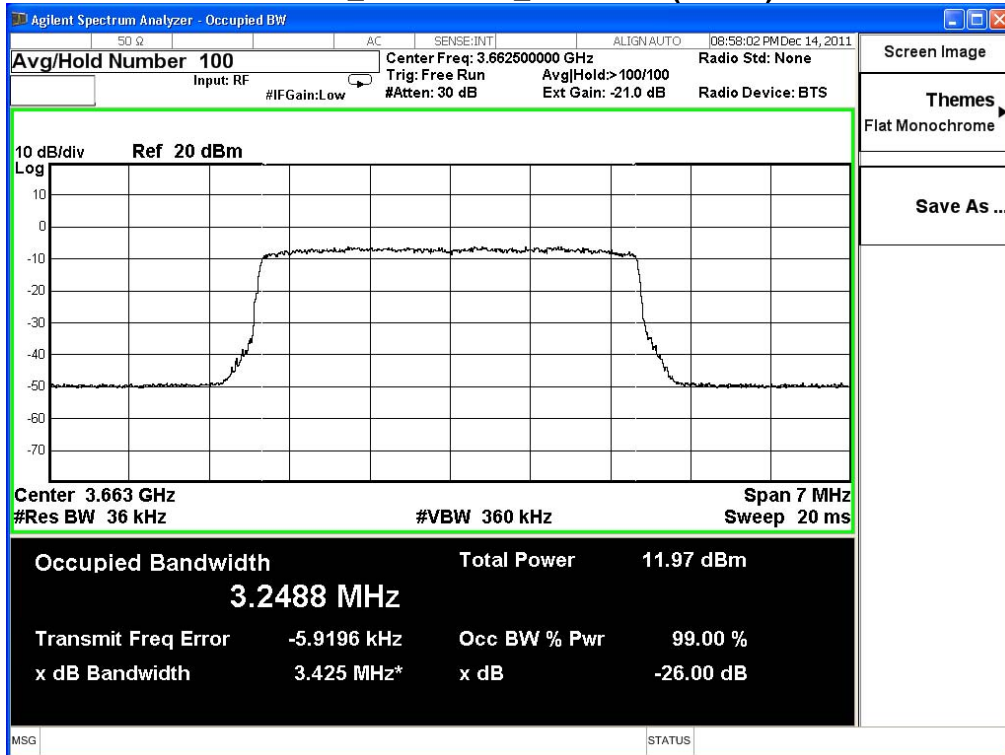
Product	CBS 3.65GHz		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit (3.5MHz BW_QPSK1/2)		
Date of Test	2011/12/14	Test Site	SR7

3.5MHz Bandwidth

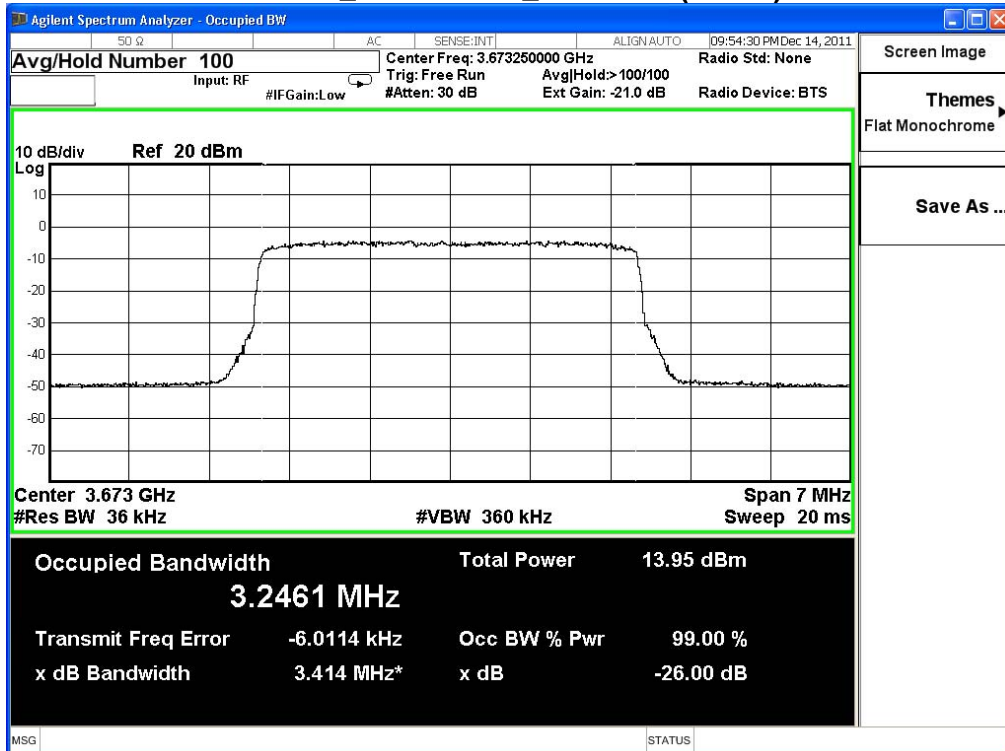
Frequency (MHz)	Measure Value (MHz)_Ant 0	Measure Value (MHz)_Ant 1	Limit (MHz)
3651.75	3.423	3.399	N/A
3662.50	3.425	3.389	N/A
3673.25	3.414	3.387	N/A



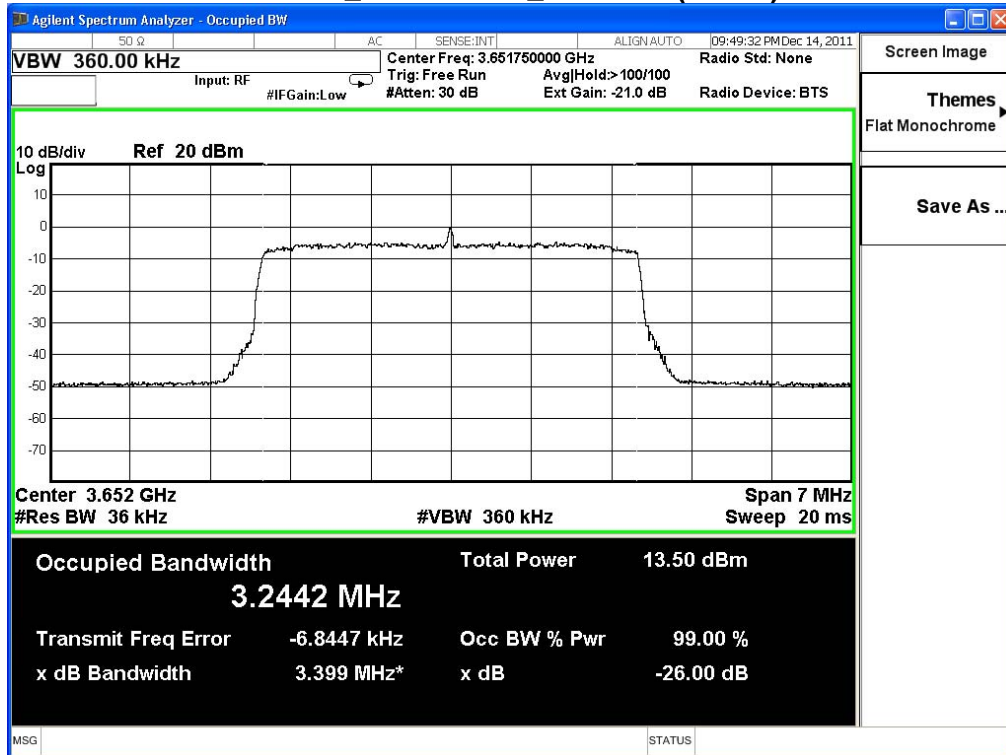
3.5MHz_3662.5MHz_QPSK1/2 (ANT 0)



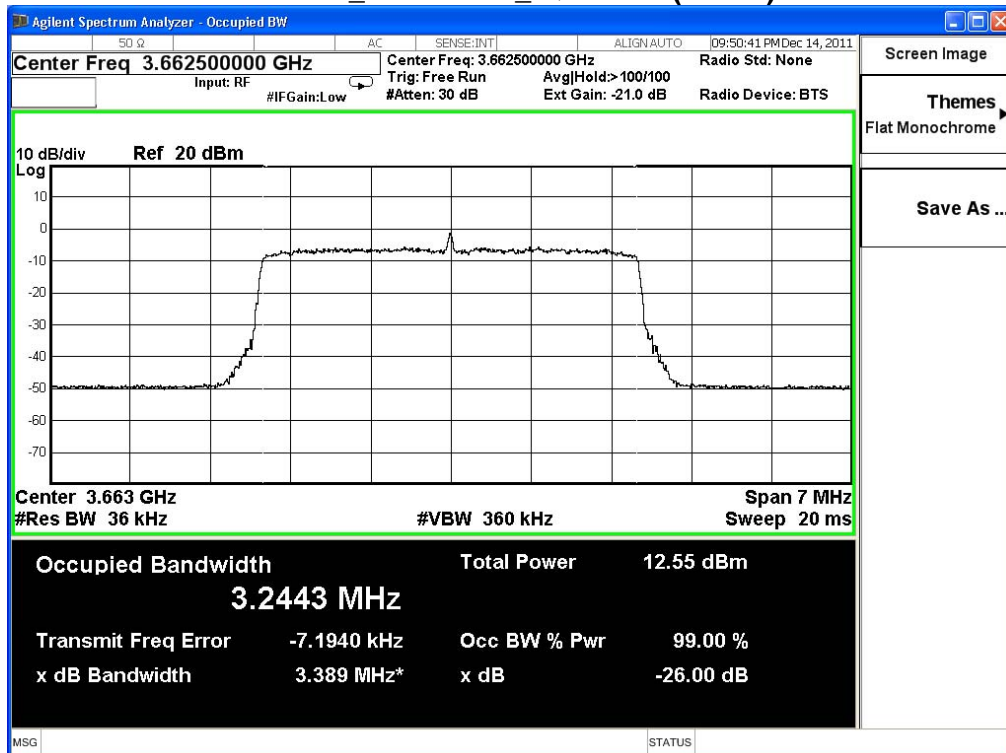
3.5MHz_3673.25MHz_QPSK1/2 (ANT 0)



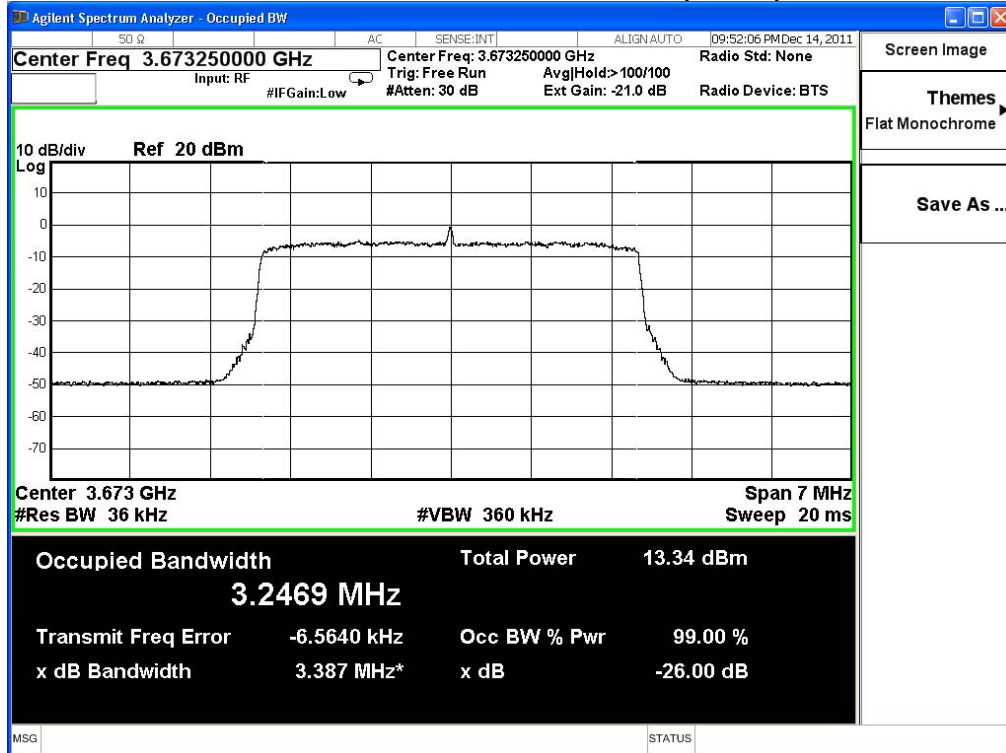
3.5MHz_3651.75MHz_QPSK1/2 (ANT 1)



3.5MHz_3662.5MHz_QPSK1/2 (ANT 1)



3.5MHz_3673.25MHz_QPSK1/2 (ANT 1)

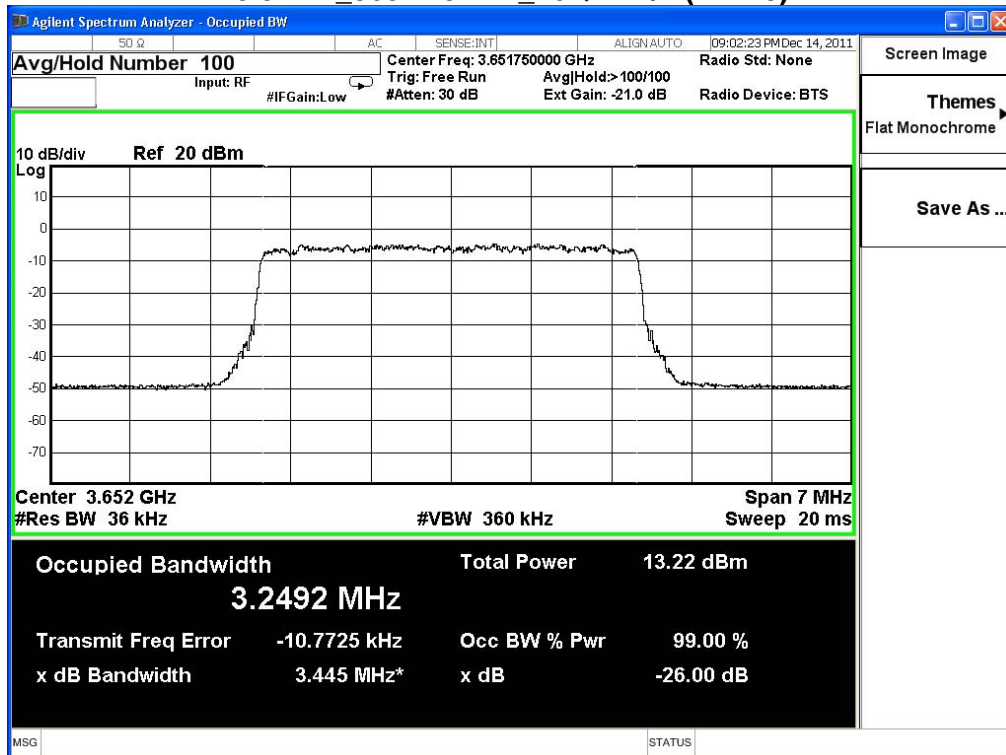


Product	CBS 3.65GHz
Test Item	Occupied Bandwidth
Test Mode	Mode 2: Transmit (3.5MHz BW_16QAM1/2)

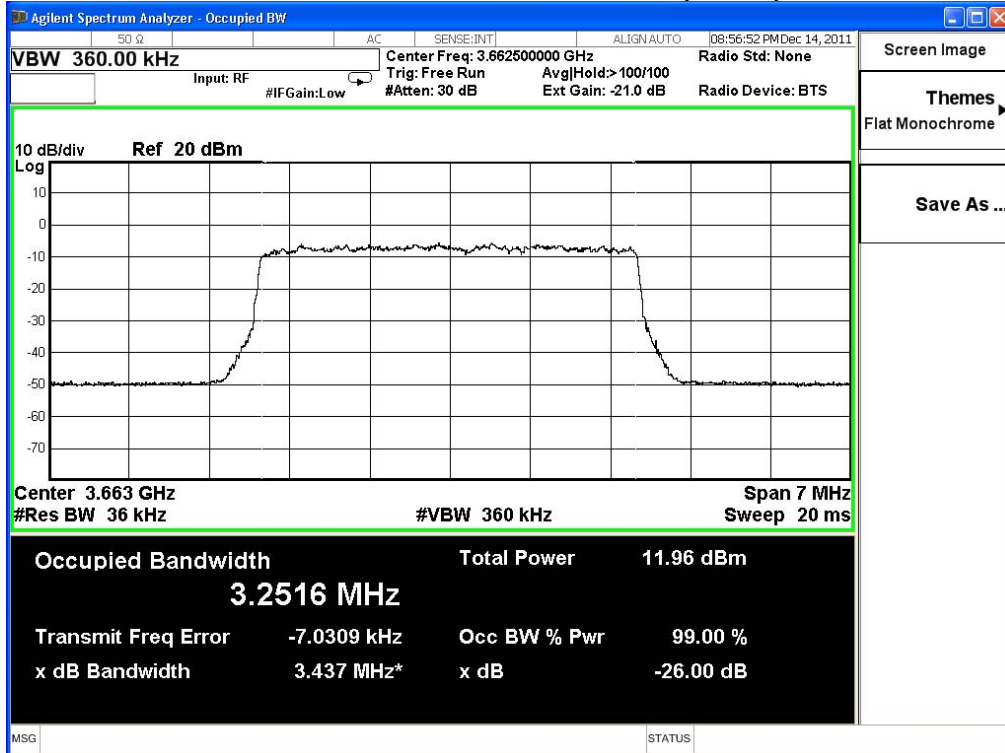
3.5MHz Bandwidth

Frequency (MHz)	Measure Value (MHz)_Ant 0	Measure Value (MHz)_Ant 1	Limit (MHz)
3651.75	3.445	3.384	N/A
3662.50	3.437	3.400	N/A
3673.25	3.432	3.388	N/A

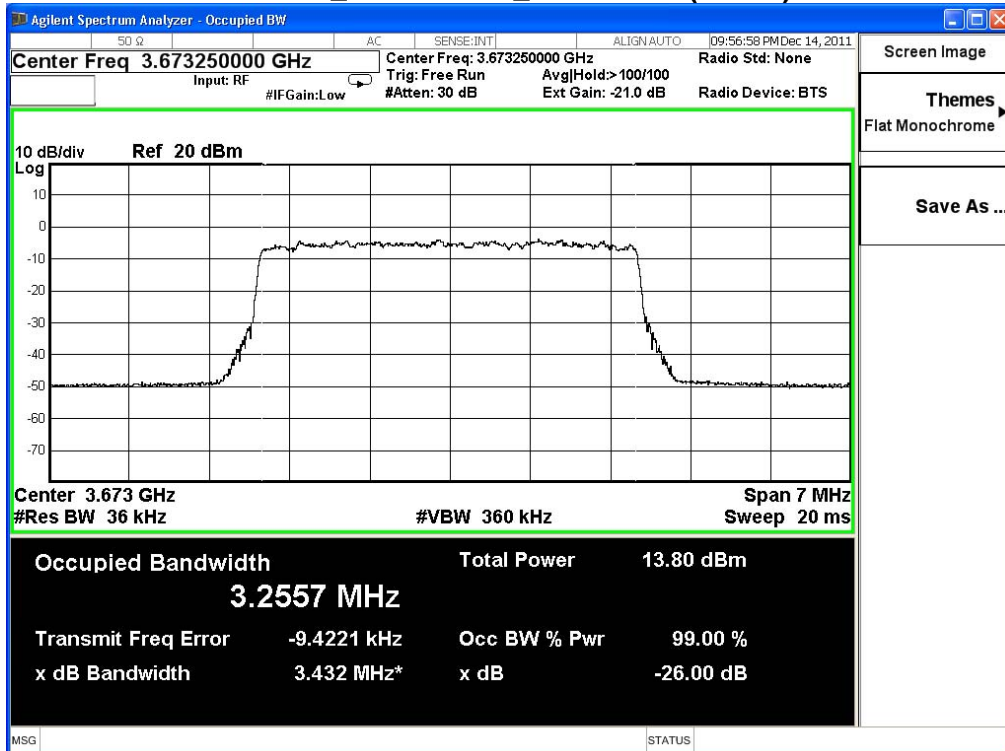
3.5MHz_3651.75MHz_16QAM1/2 (ANT 0)



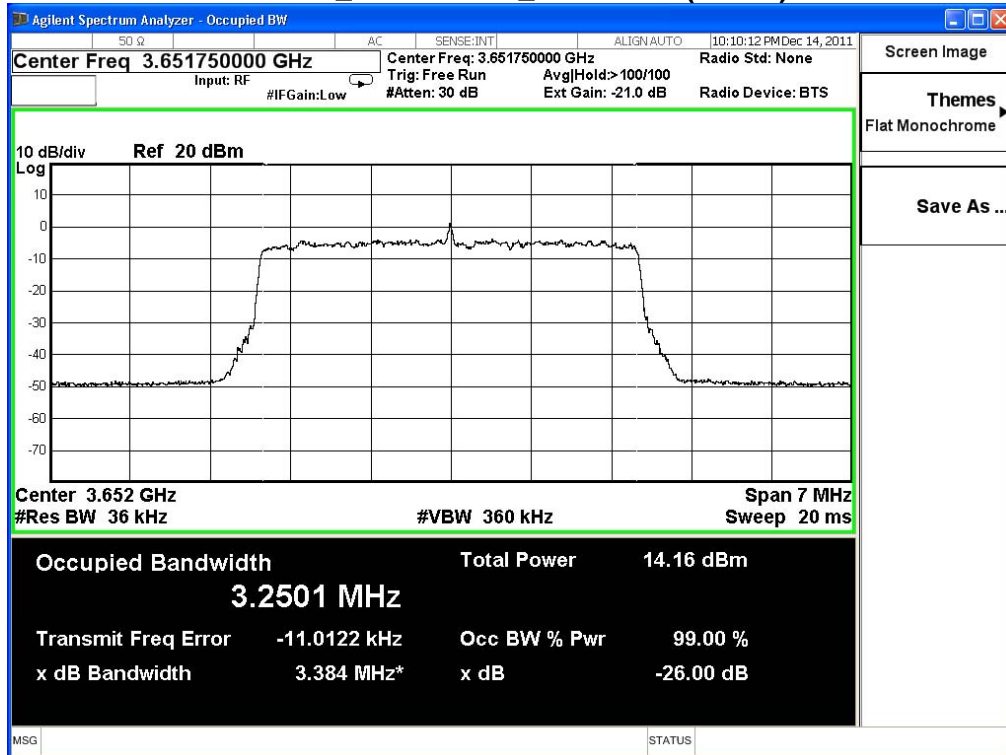
3.5MHz_3662.5MHz_16QAM1/2 (ANT 0)



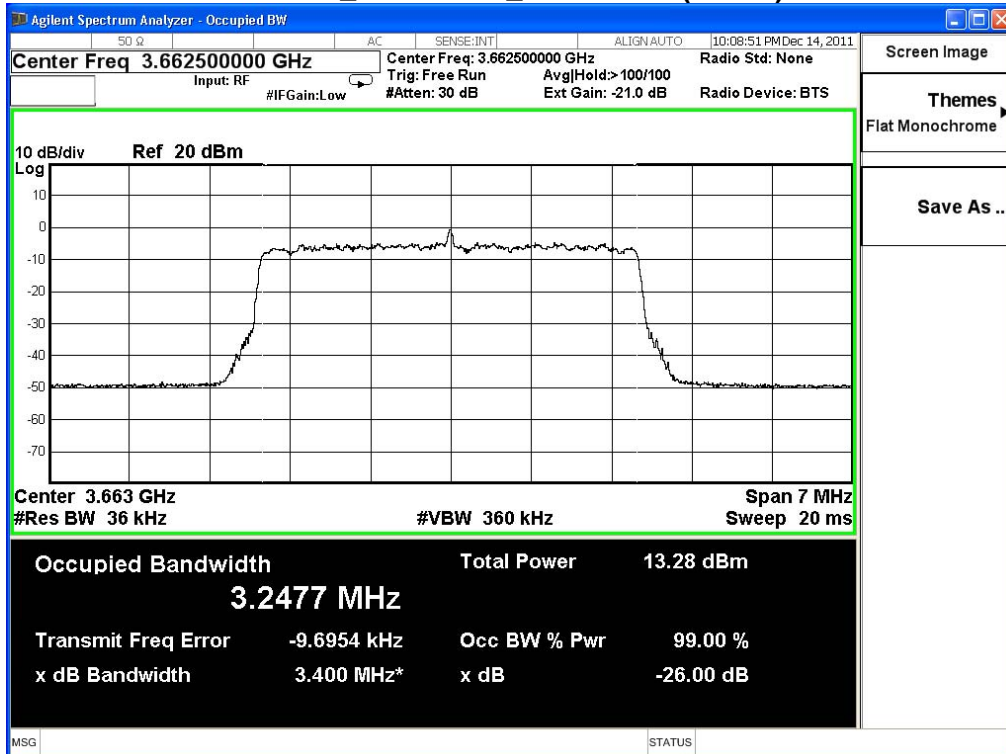
3.5MHz_3673.25MHz_16QAM1/2 (ANT 0)



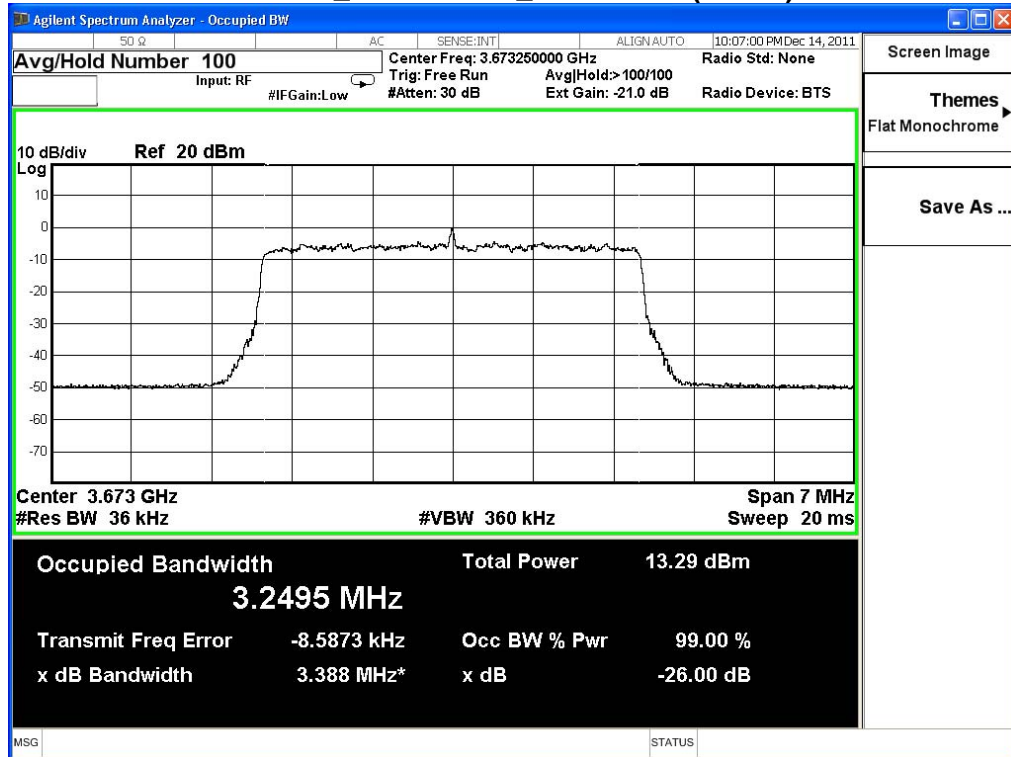
3.5MHz_3651.75MHz_16QAM1/2 (ANT 1)



3.5MHz_3662.5MHz_16QAM1/2 (ANT 1)



3.5MHz_3673.25MHz_16QAM1/2 (ANT 1)

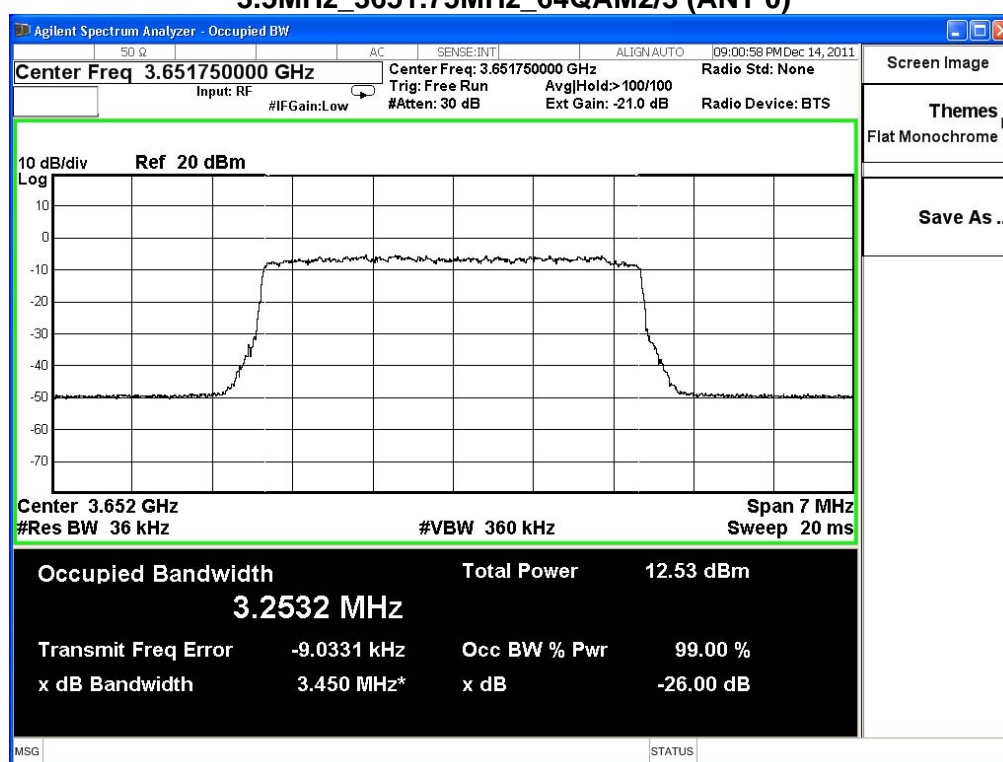


Product	CBS 3.65GHz
Test Item	Occupied Bandwidth
Test Mode	Mode 3: Transmit (3.5MHz BW_64QAM2/3)

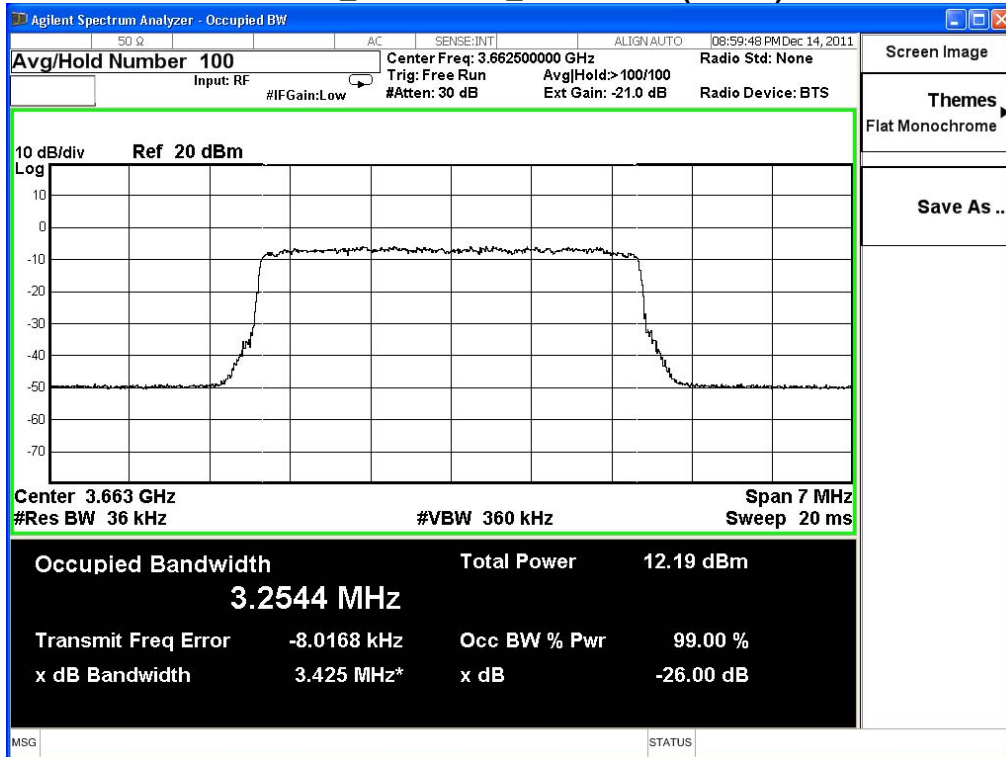
3.5MHz Bandwidth

Frequency (MHz)	Measure Value (MHz)_Ant 0	Measure Value (MHz)_Ant 1	Limit (MHz)
3651.75	3.450	3.395	N/A
3662.50	3.425	3.394	N/A
3673.25	3.433	3.400	N/A

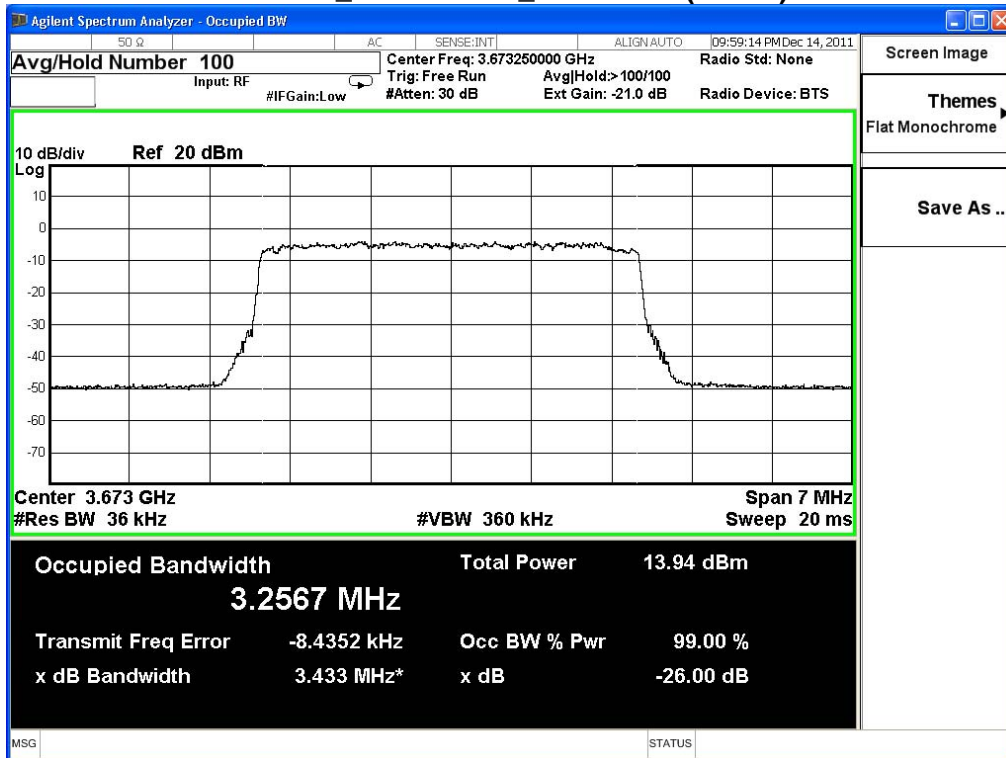
3.5MHz_3651.75MHz_64QAM2/3 (ANT 0)



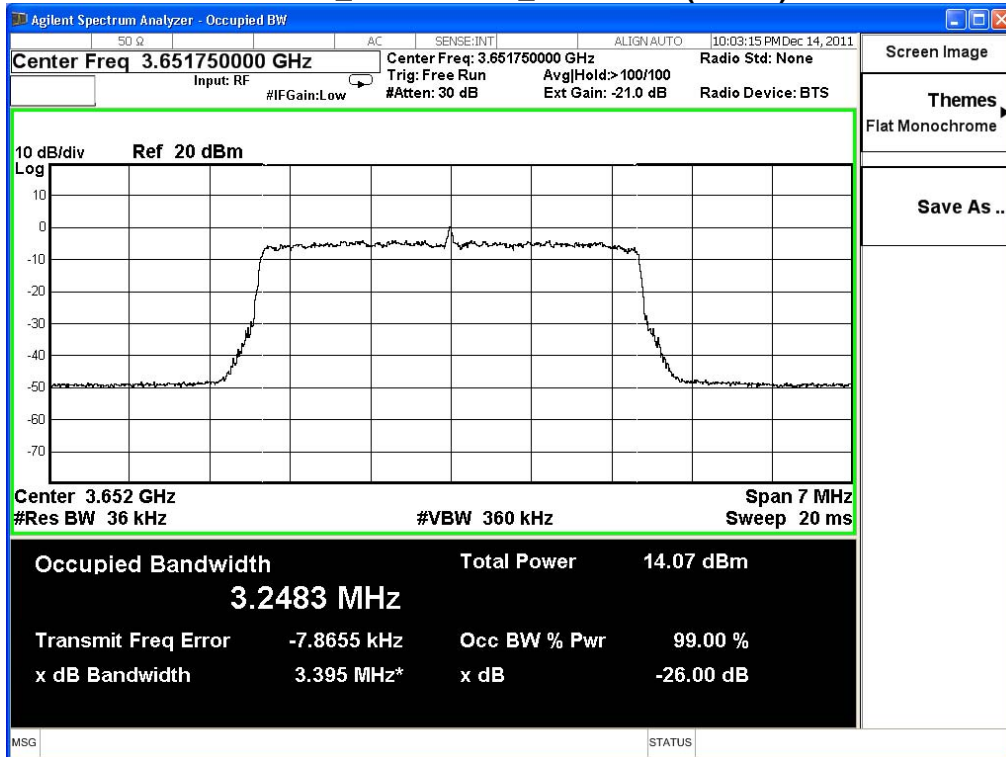
3.5MHz_3662.5MHz_64QAM2/3 (ANT 0)



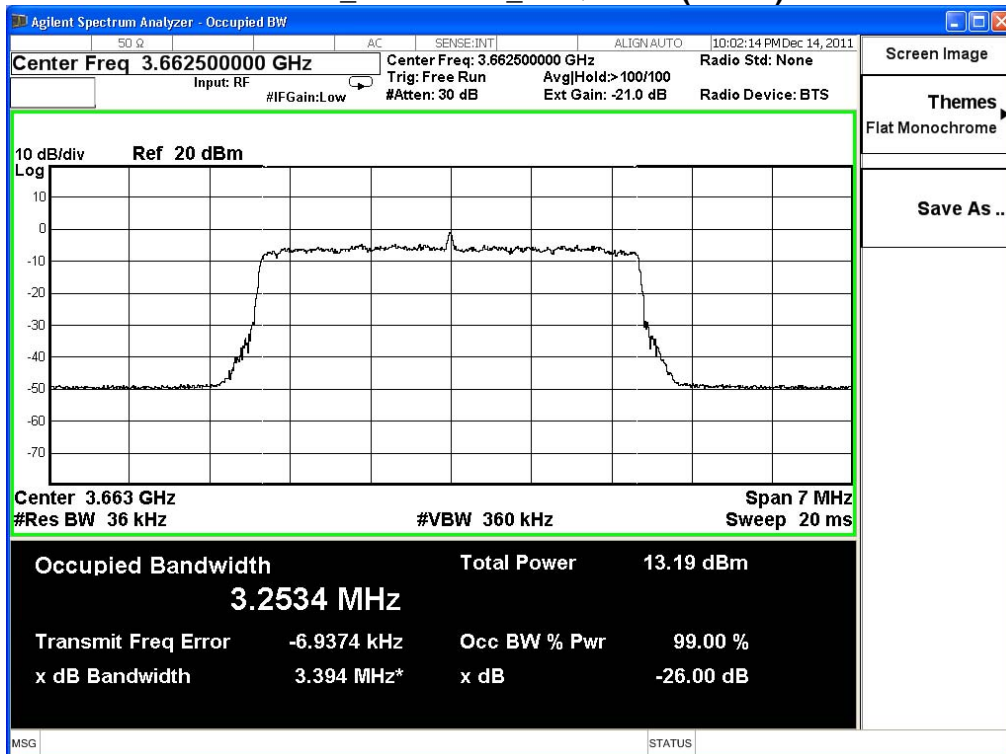
3.5MHz_3673.25MHz_64QAM2/3 (ANT 0)



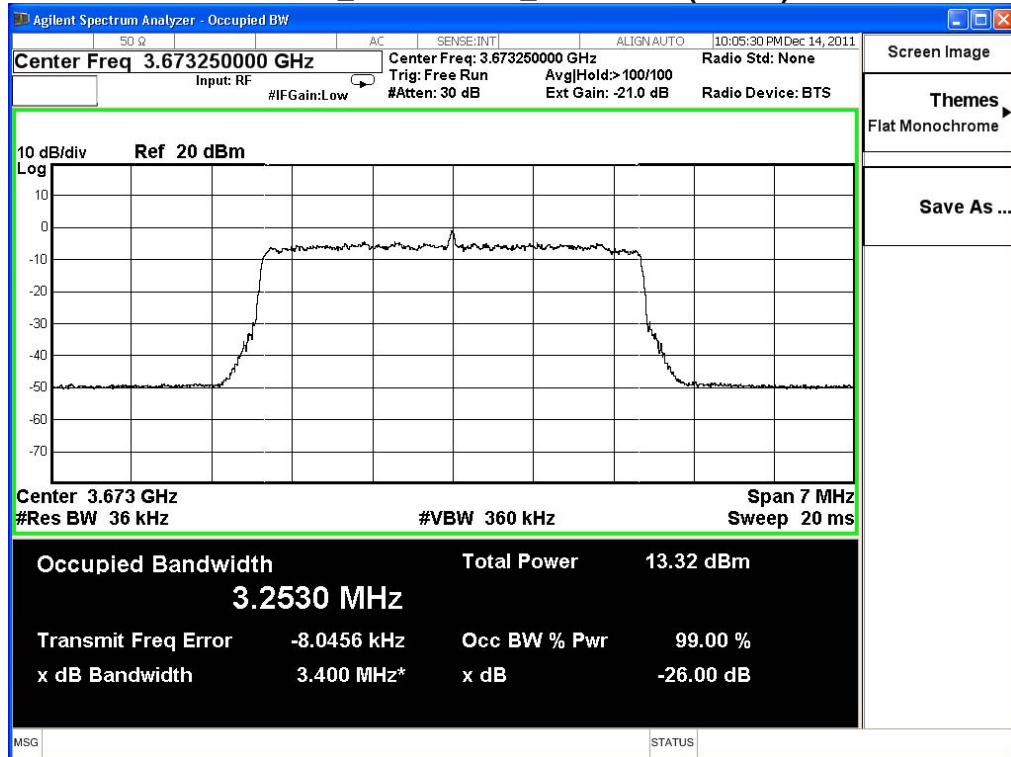
3.5MHz_3651.75MHz_64QAM2/3 (ANT 1)



3.5MHz_3662.5MHz_64QAM2/3 (ANT 1)



3.5MHz_3673.25MHz_64QAM2/3 (ANT 1)

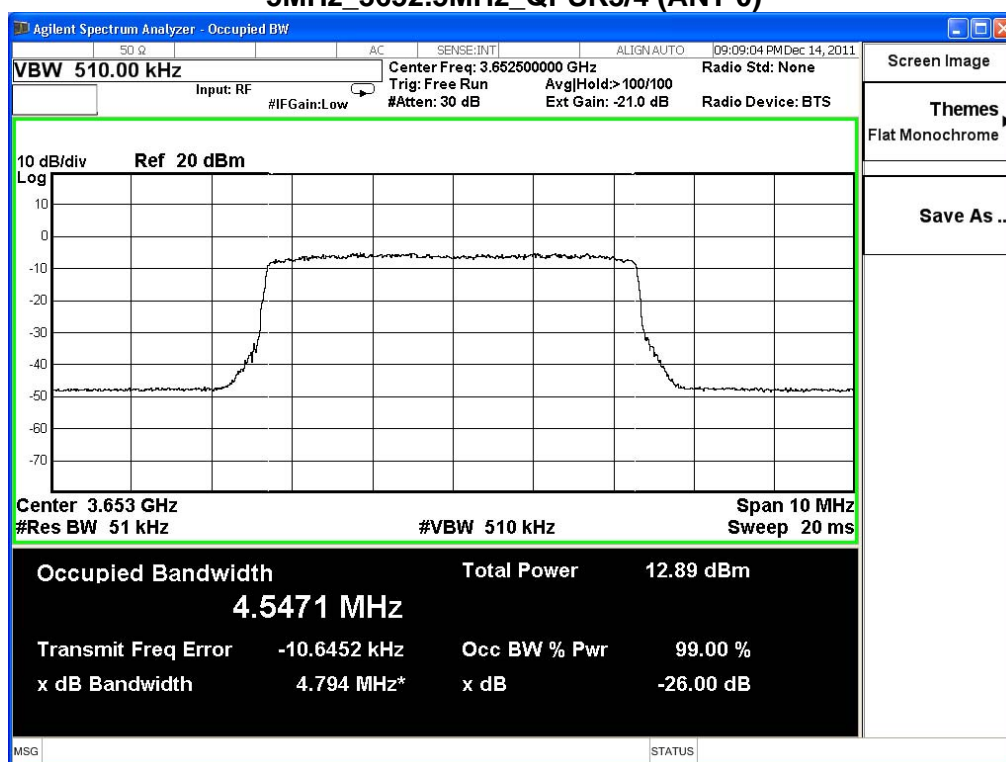


Product	CBS 3.65GHz
Test Item	Occupied Bandwidth
Test Mode	Mode 4: Transmit (5MHz BW_QPSK3/4)

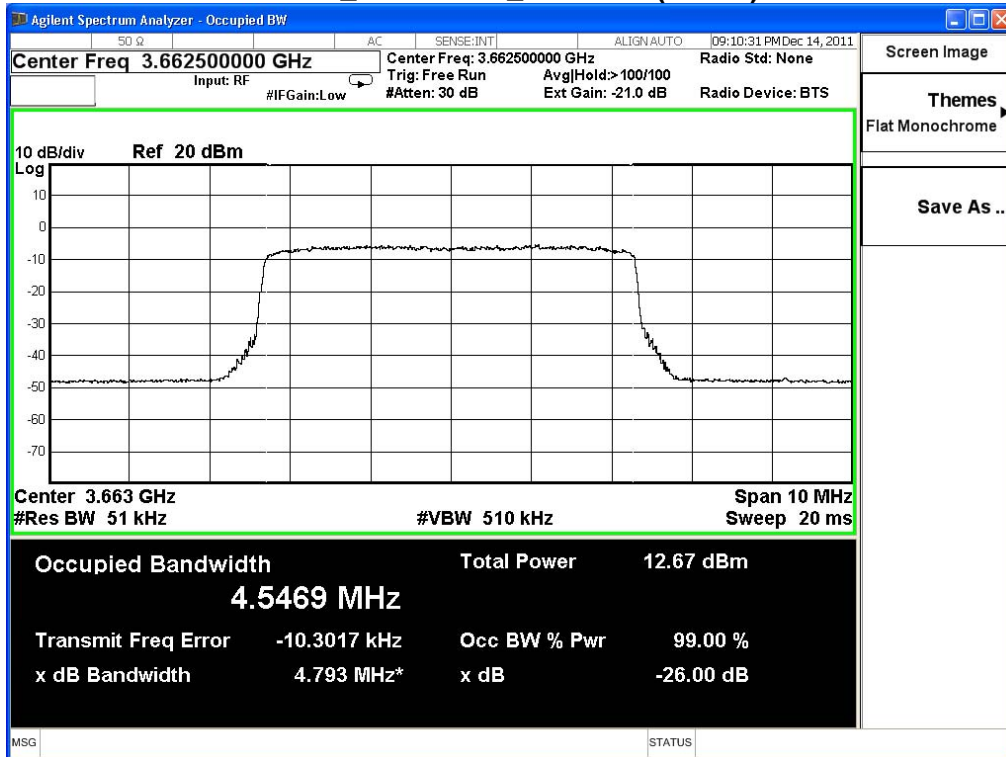
5MHz Bandwidth

Frequency (MHz)	Measure Value (MHz)_Ant 0	Measure Value (MHz)_Ant 1	Limit (MHz)
3652.5	4.794	4.736	N/A
3662.5	4.793	4.753	N/A
3672.5	4.809	4.761	N/A

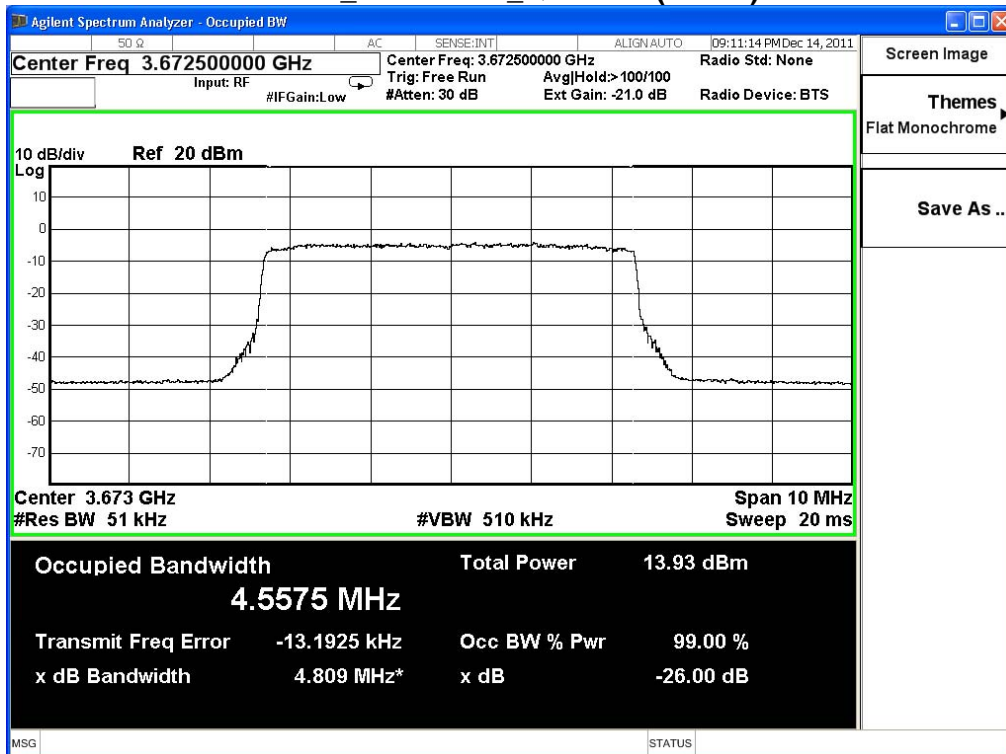
5MHz_3652.5MHz_QPSK3/4 (ANT 0)



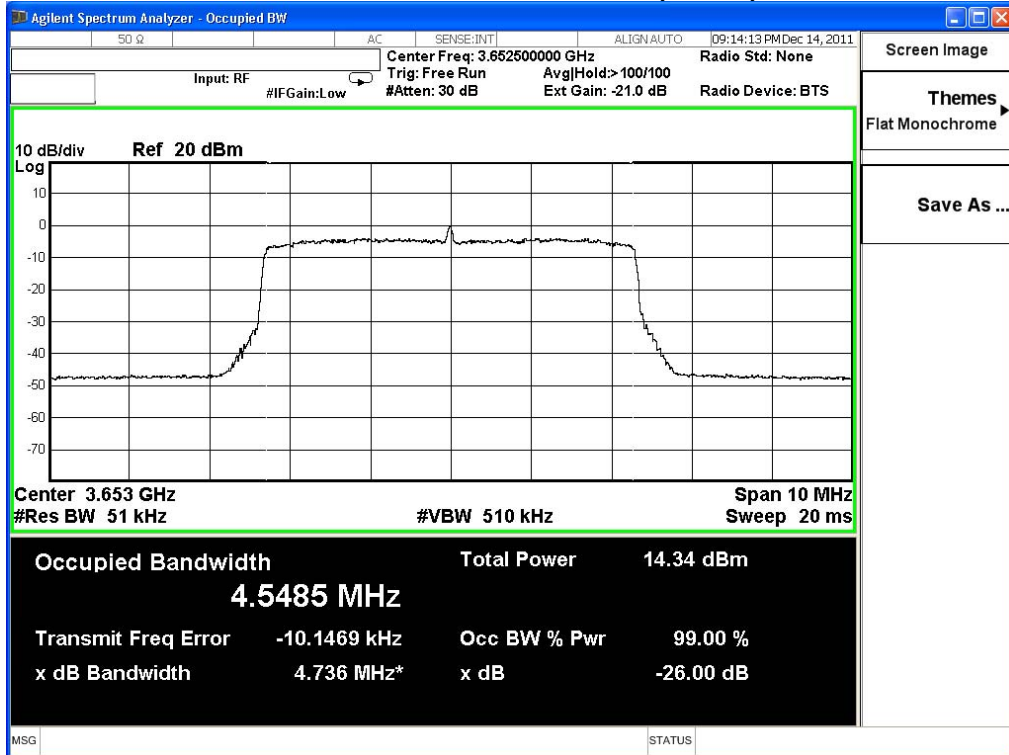
5MHz_3662.5MHz_QPSK3/4 (ANT 0)



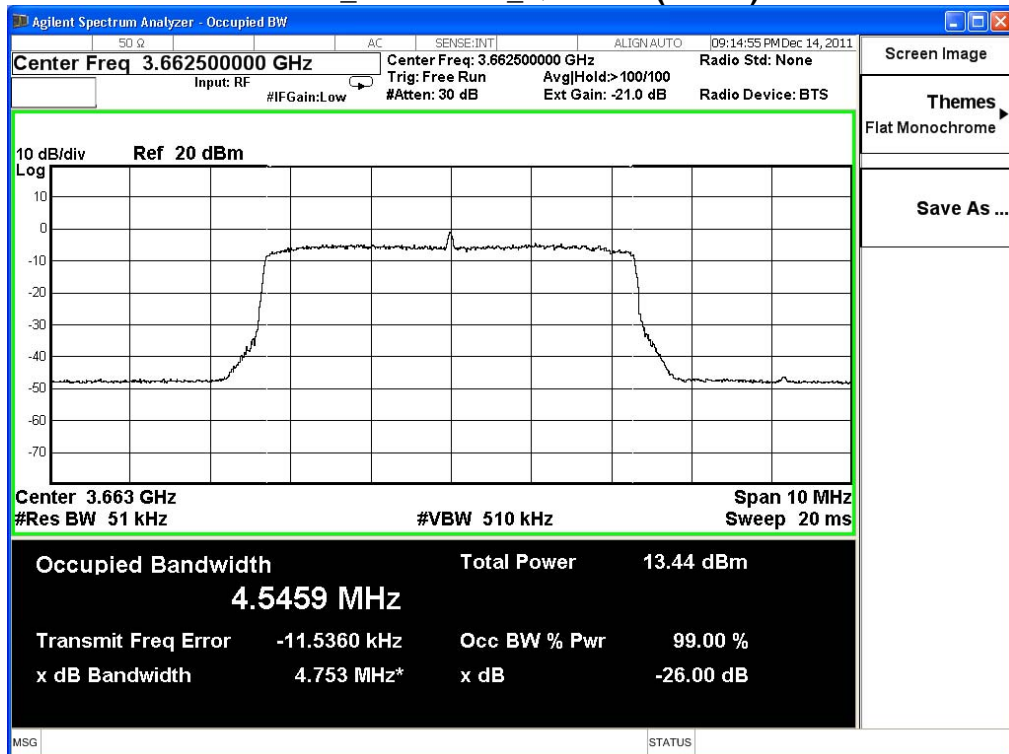
5MHz_3672.5MHz_QPSK3/4 (ANT 0)



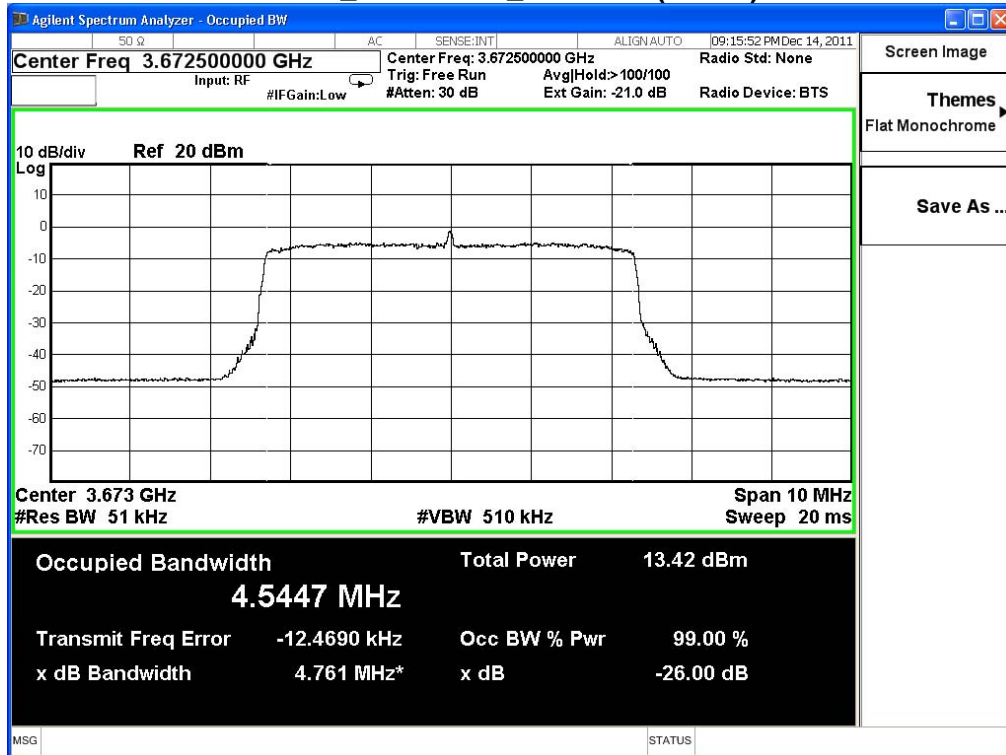
5MHz_3652.5MHz_QPSK3/4 (ANT 1)



5MHz_3662.5MHz_QPSK3/4 (ANT 1)



5MHz_3672.5MHz_QPSK3/4 (ANT 1)

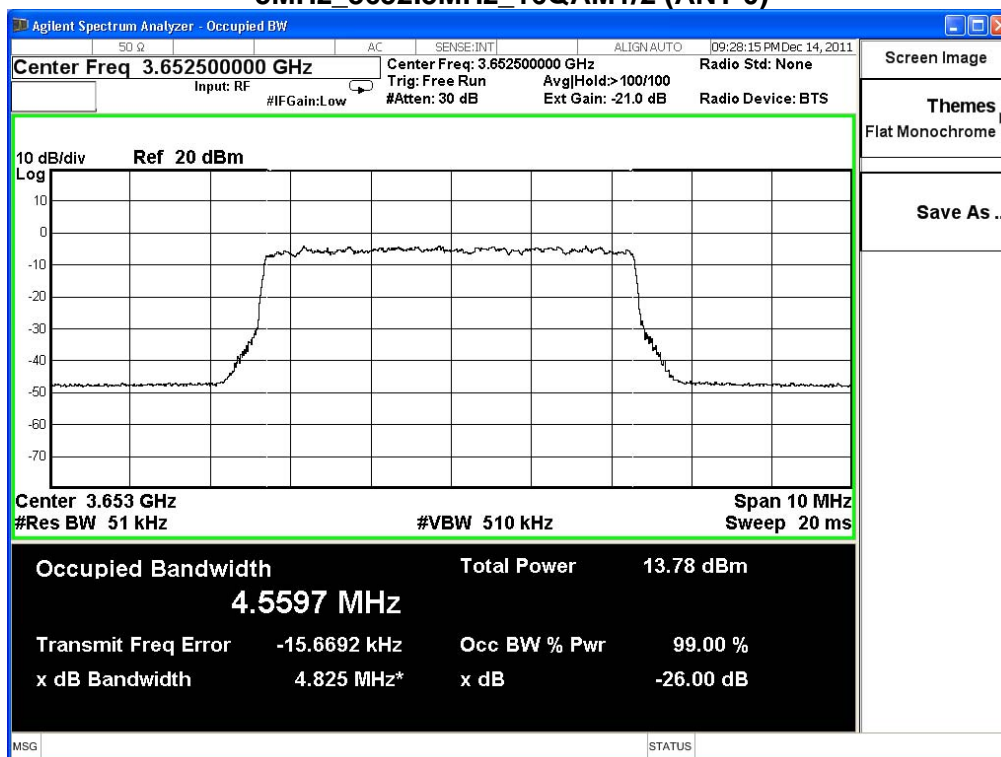


Product	CBS 3.65GHz
Test Item	Occupied Bandwidth
Test Mode	Mode 5: Transmit (5MHz BW_16QAM1/2)

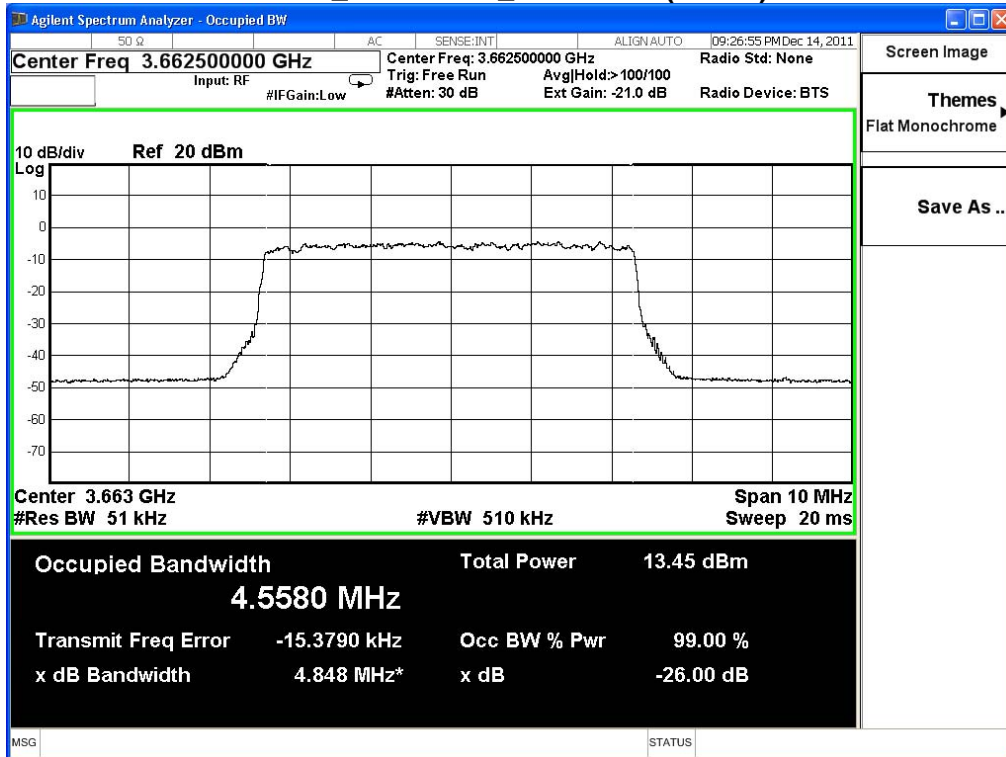
5MHz Bandwidth

Frequency (MHz)	Measure Value (MHz)_ Ant 0	Measure Value (MHz)_ Ant 1	Limit (MHz)
3652.5	4.825	4.759	N/A
3662.5	4.848	4.760	N/A
3672.5	4.811	4.765	N/A

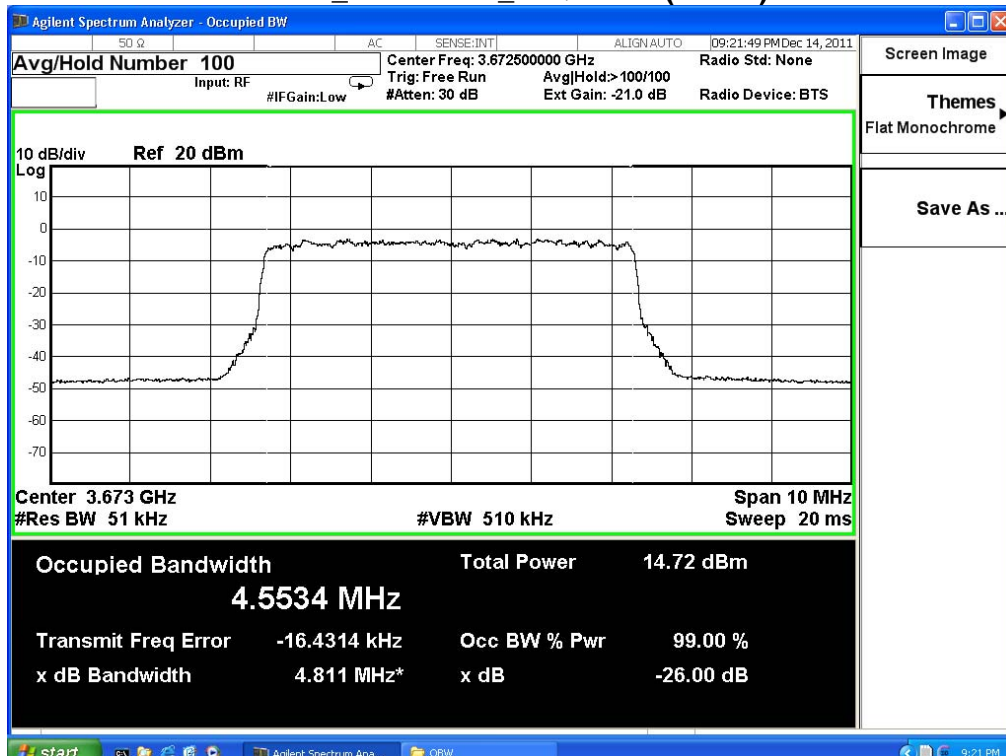
5MHz_3652.5MHz_16QAM1/2 (ANT 0)



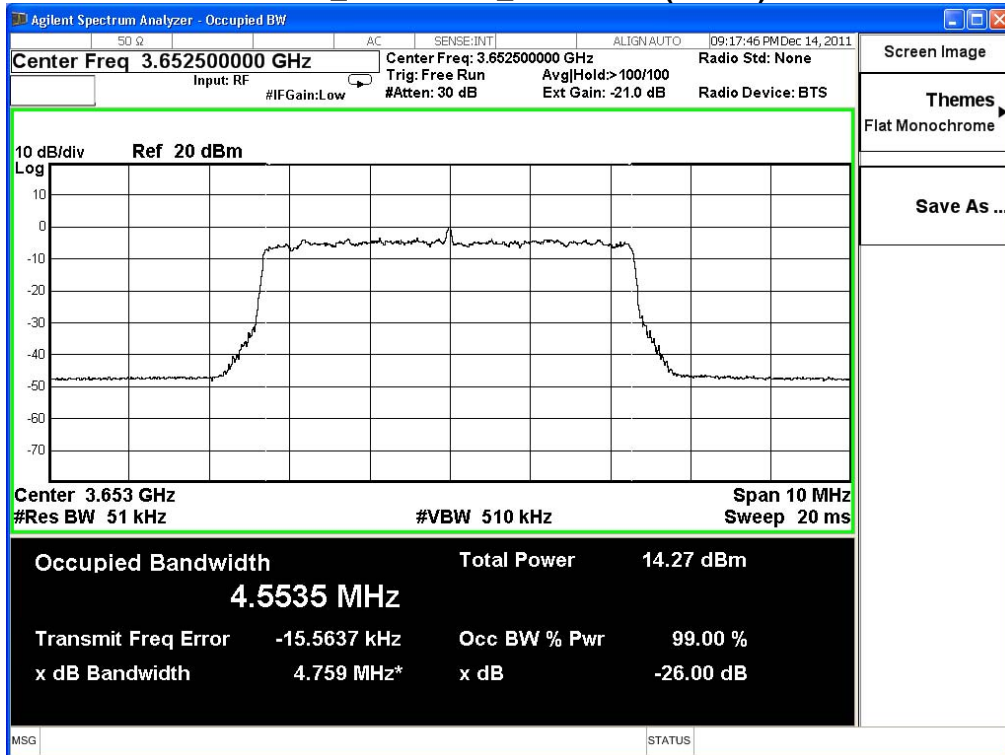
5MHz_3662.5MHz_16QAM1/2 (ANT 0)



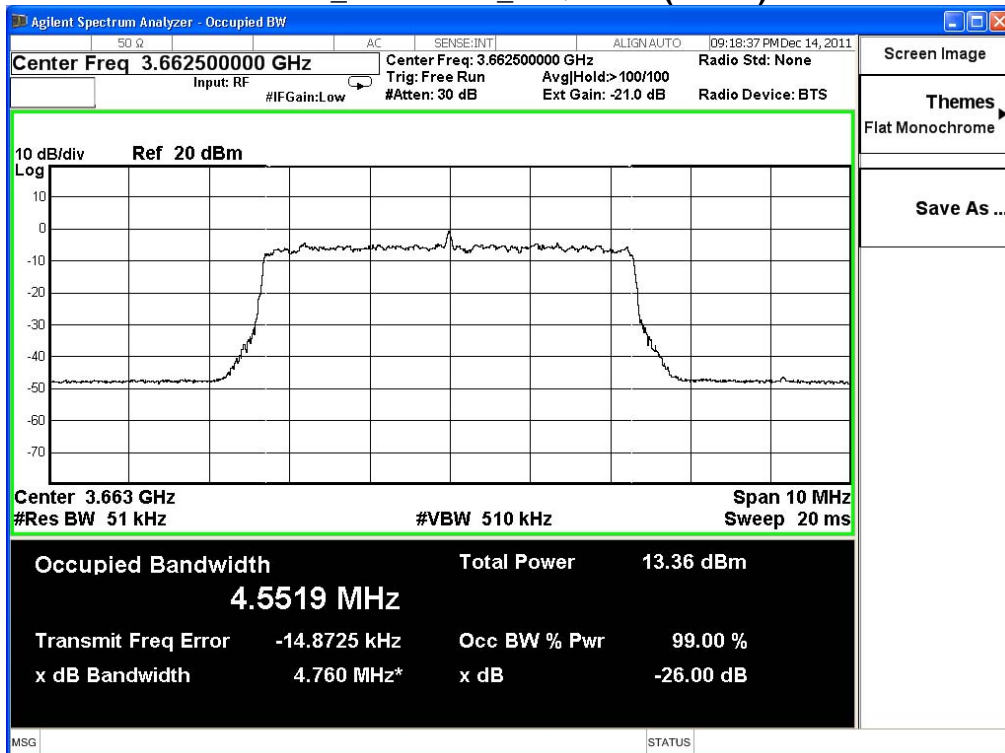
5MHz_3672.5MHz_16QAM1/2 (ANT 0)



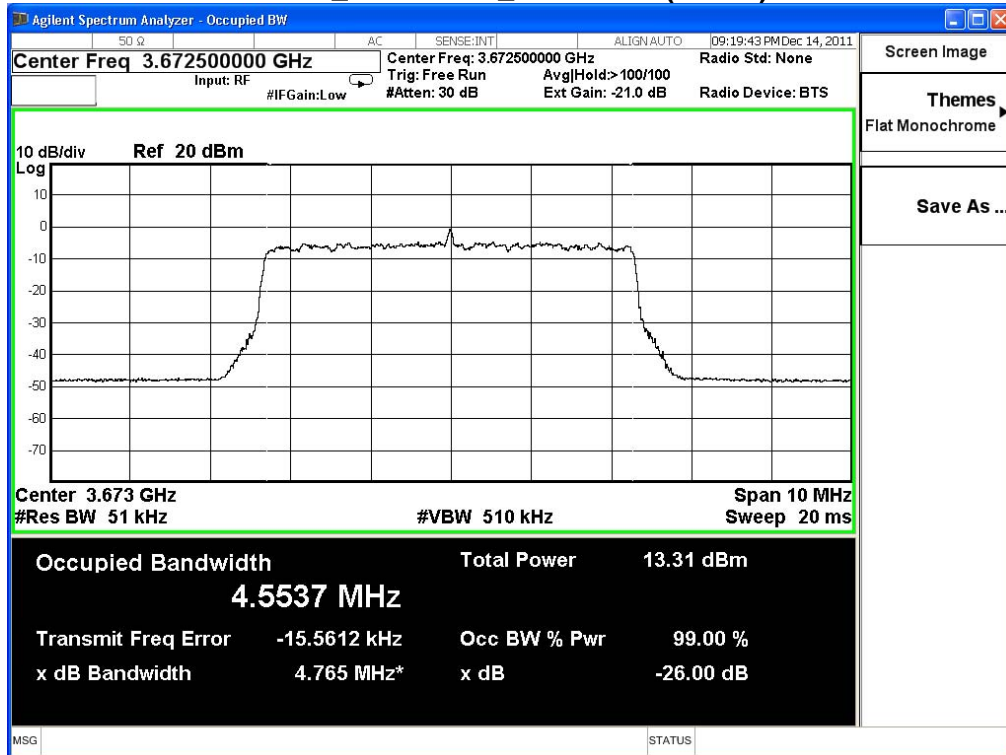
5MHz_3652.5MHz_16QAM1/2 (ANT 1)



5MHz_3662.5MHz_16QAM1/2 (ANT 1)



5MHz_3672.5MHz_16QAM1/2 (ANT 1)

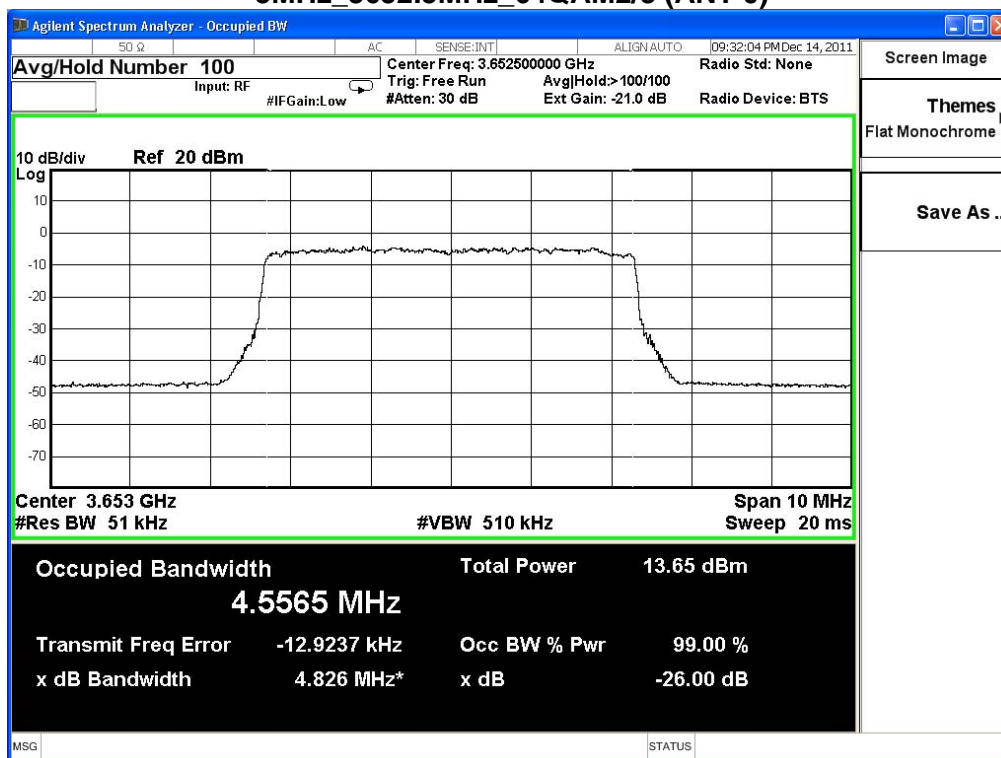


Product	CBS 3.65GHz
Test Item	Occupied Bandwidth
Test Mode	Mode 6: Transmit (5MHz BW_64QAM2/3)

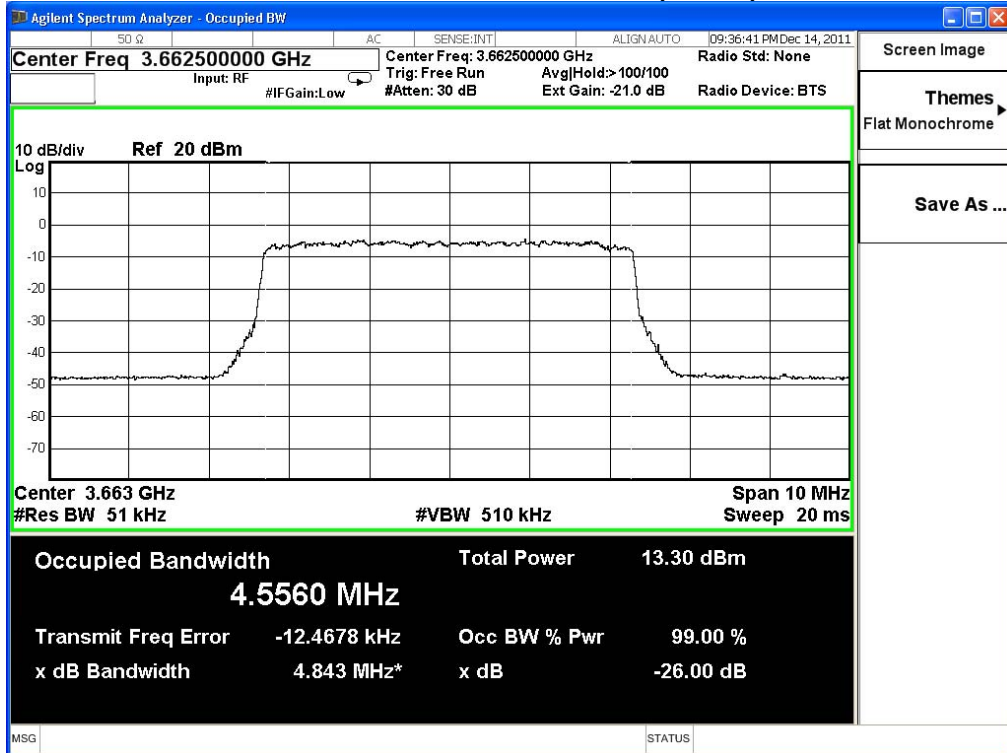
5MHz Bandwidth

Frequency (MHz)	Measure Value (MHz)_Ant 0	Measure Value (MHz)_Ant 1	Limit (MHz)
3652.5	4.826	4.769	N/A
3662.5	4.843	4.771	N/A
3672.5	4.886	4.770	N/A

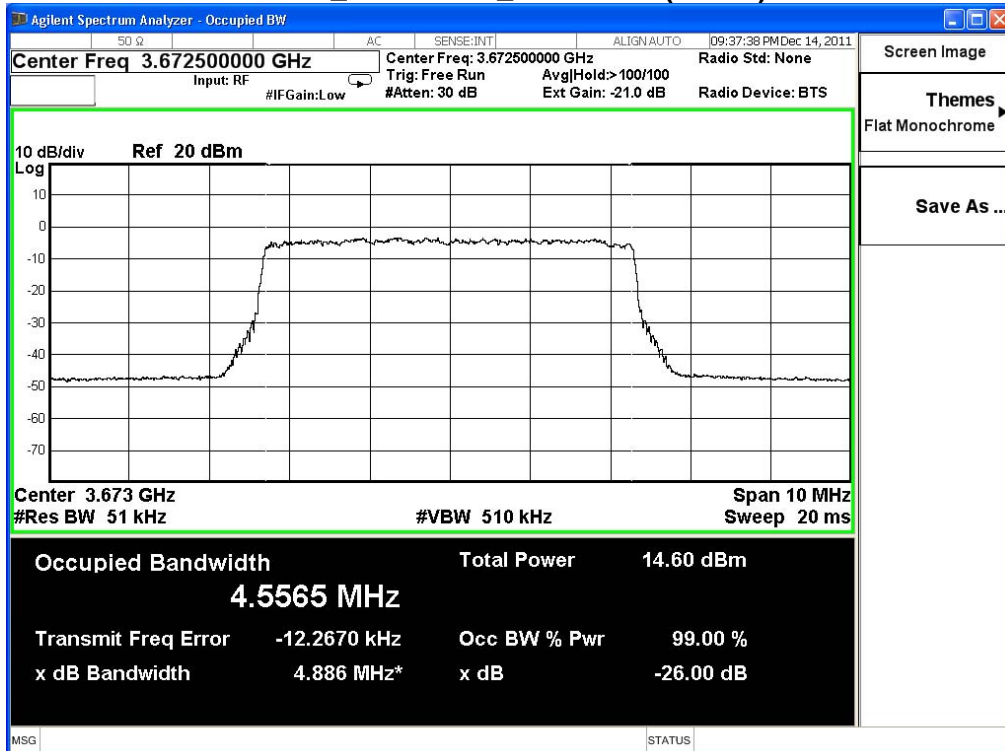
5MHz 3652.5MHz 64QAM2/3 (ANT 0)



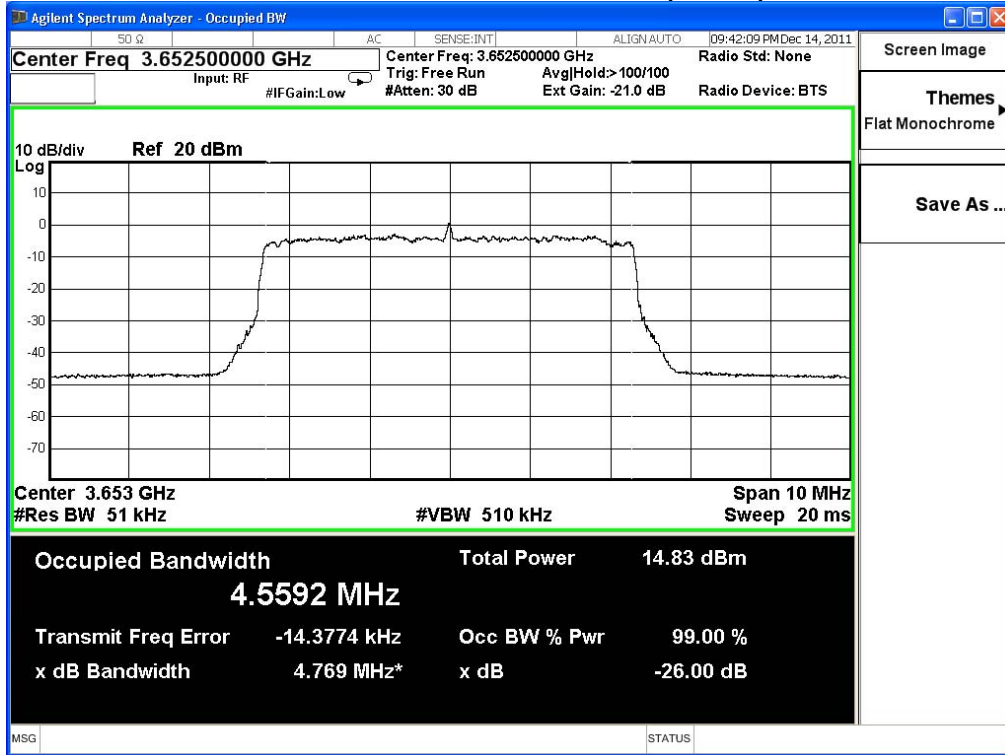
5MHz_3662.5MHz_64QAM2/3 (ANT 0)



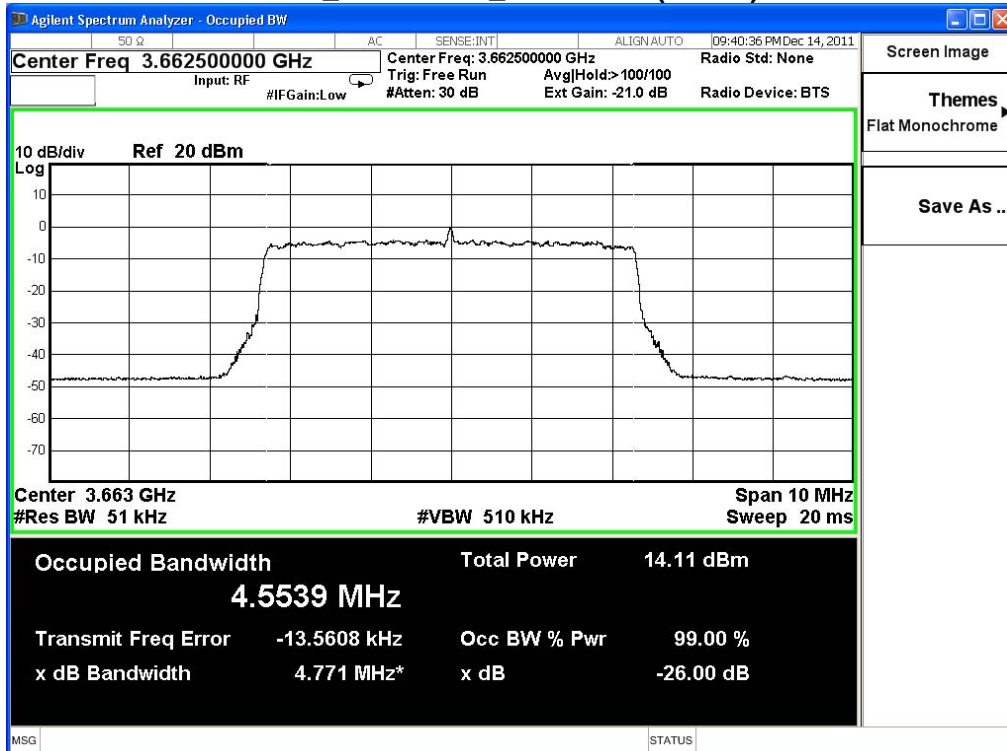
5MHz_3672.5MHz_64QAM2/3 (ANT 0)



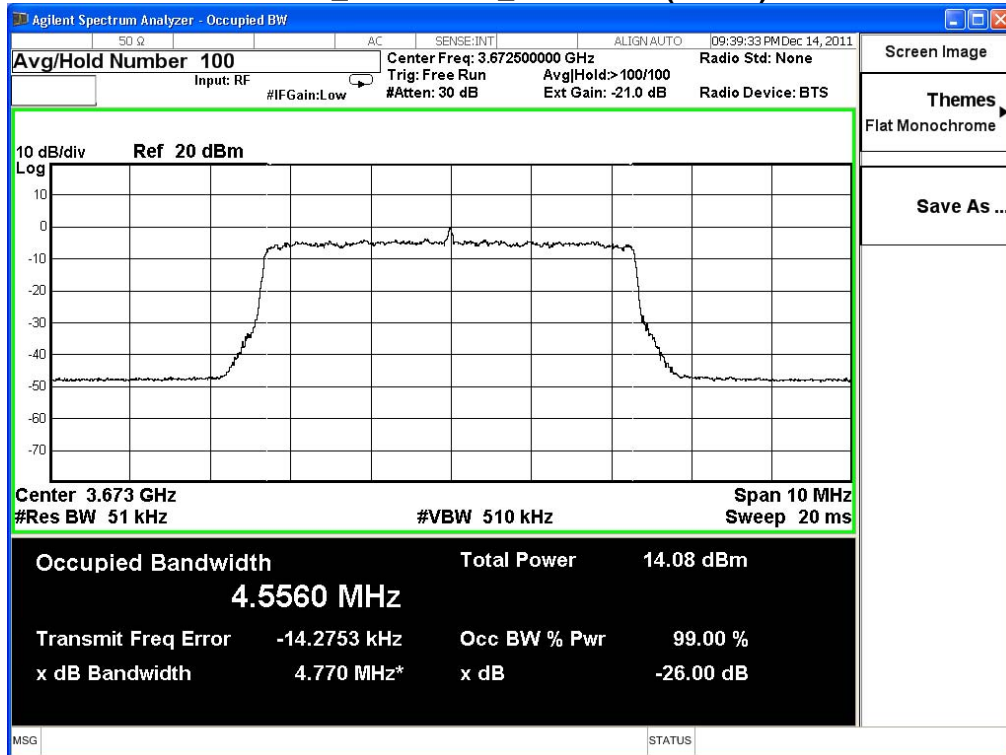
5MHz_3652.5MHz_64QAM2/3 (ANT 1)



5MHz_3662.5MHz_64QAM2/3 (ANT 1)



5MHz_3672.5MHz_64QAM2/3 (ANT 1)

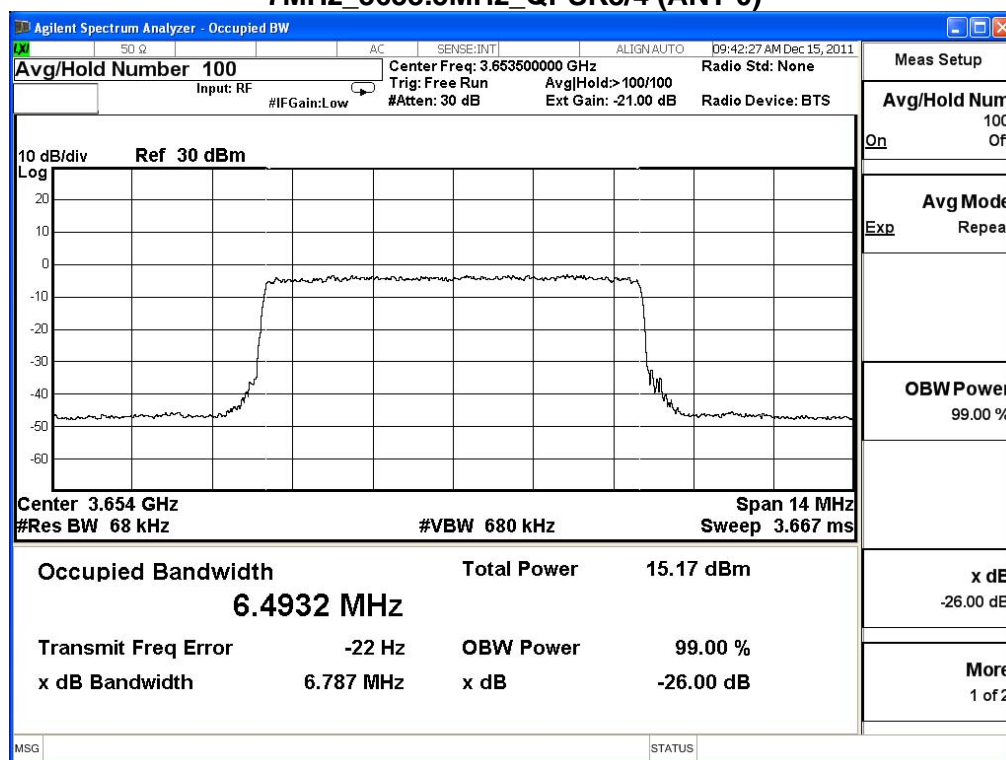


Product	CBS 3.65GHz
Test Item	Occupied Bandwidth
Test Mode	Mode 7: Transmit (7MHz BW_QPSK3/4)

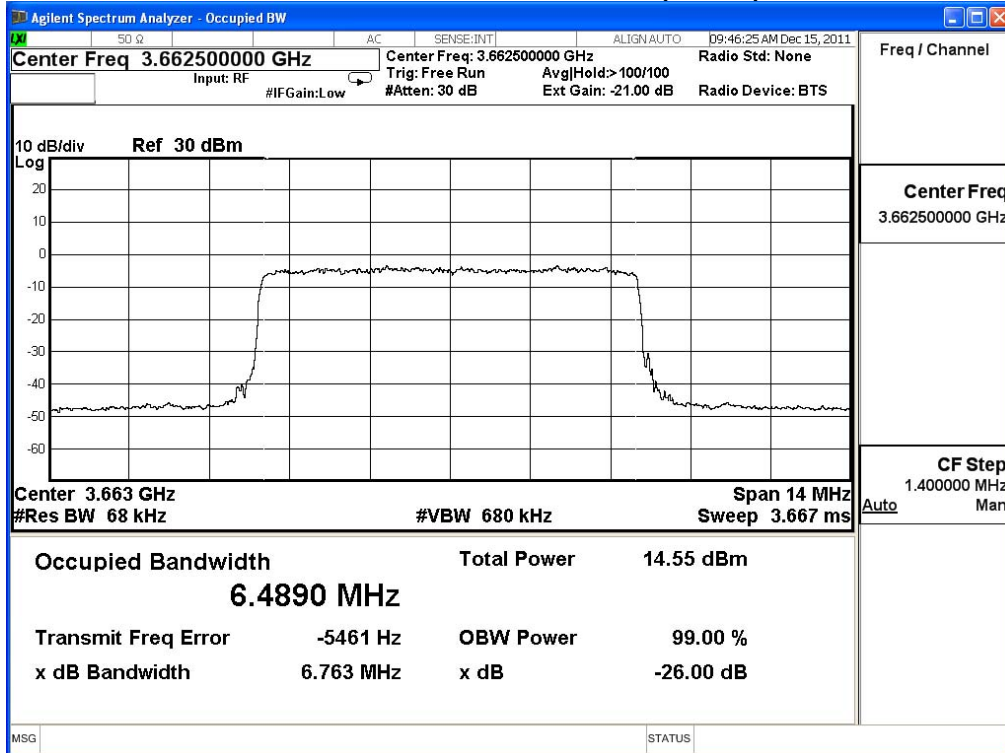
7MHz Bandwidth

Frequency (MHz)	Measure Value (MHz)_Ant 0	Measure Value (MHz)_Ant 1	Limit (MHz)
3653.5	6.787	6.764	N/A
3662.5	6.763	6.739	N/A
3671.5	6.836	6.749	N/A

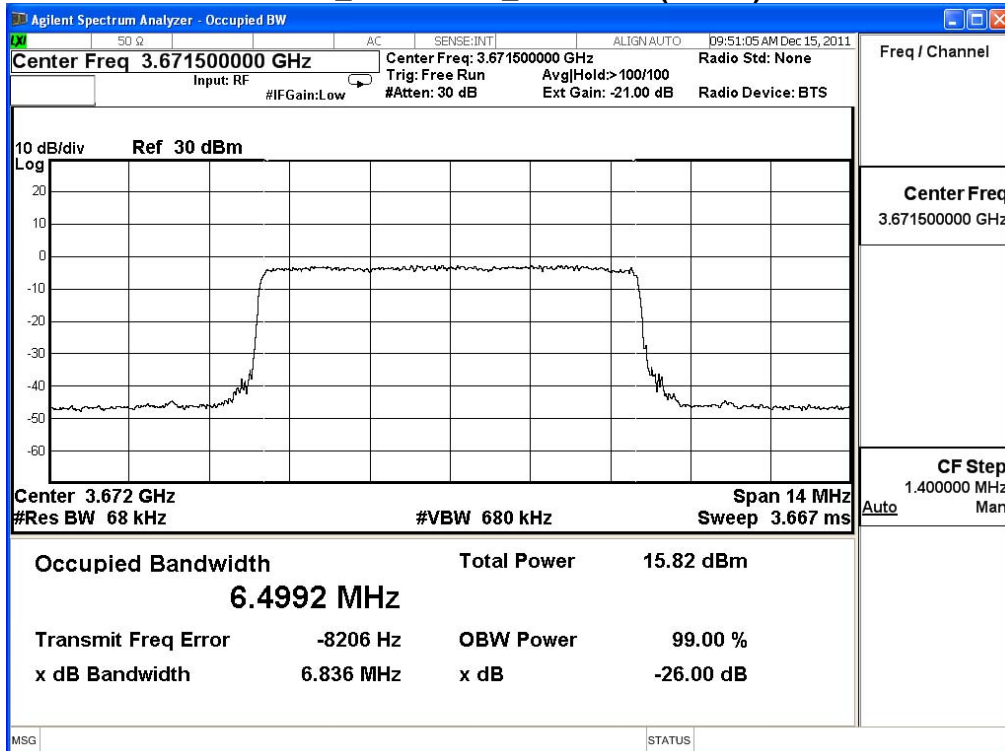
7MHz_3653.5MHz_QPSK3/4 (ANT 0)



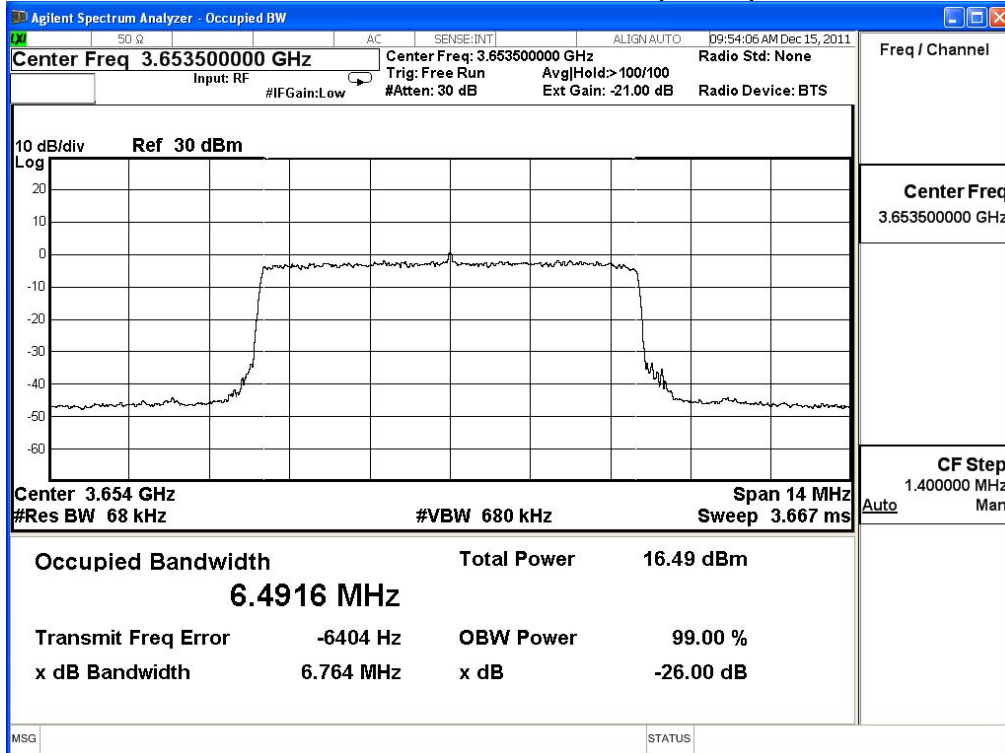
7MHz_3662.5MHz_QPSK3/4 (ANT 0)



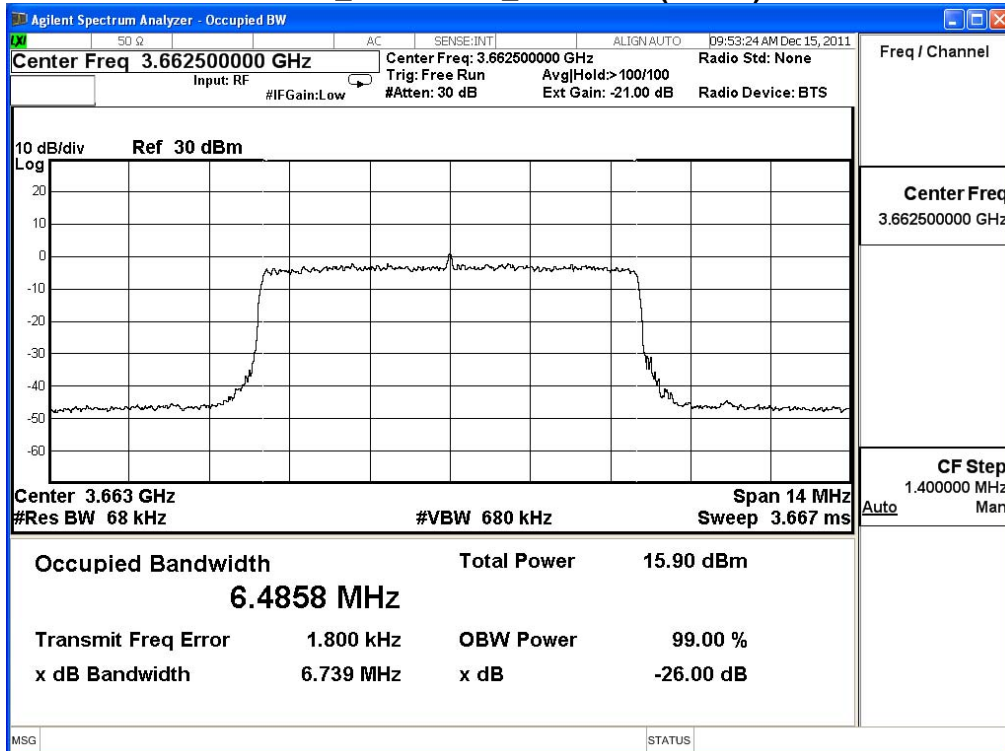
7MHz_3671.5MHz_QPSK3/4 (ANT 0)



7MHz_3653.5MHz_QPSK3/4 (ANT 1)



7MHz_3662.5MHz_QPSK3/4 (ANT 1)



7MHz_3671.5MHz_QPSK3/4 (ANT 1)

