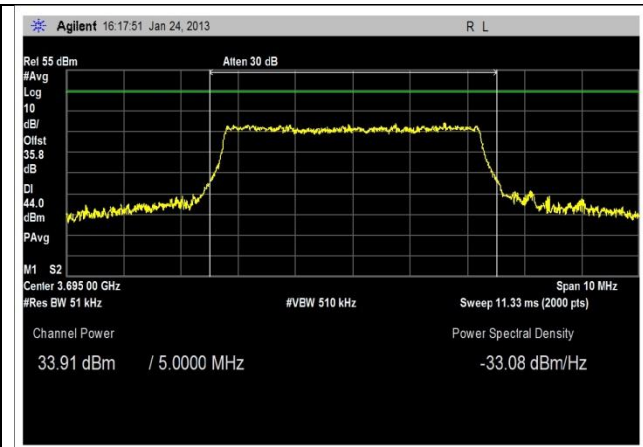
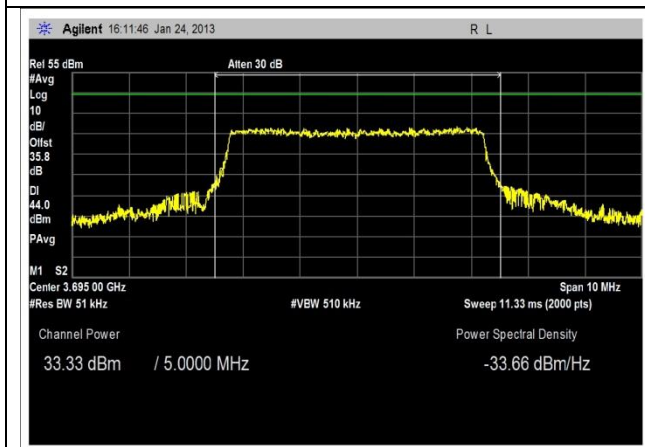


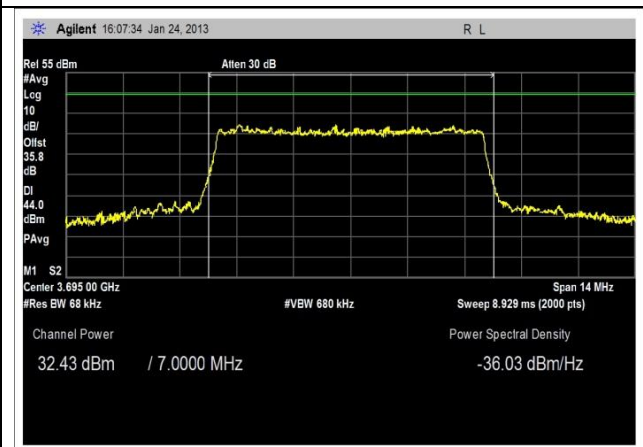
Band power_hi ch_5MHz_16QAM_port 2



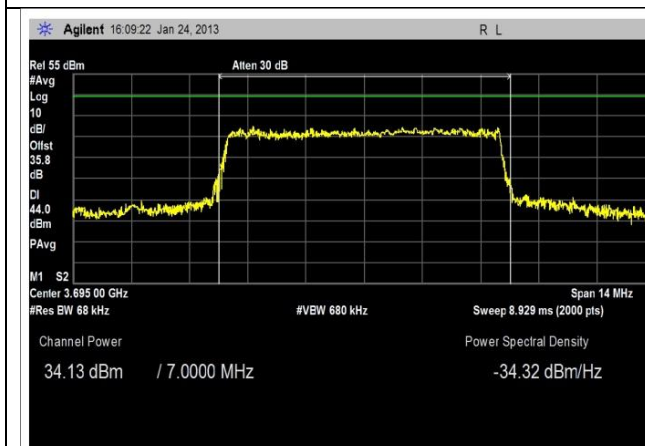
Band power_hi ch_5MHz_64QAM_port 2



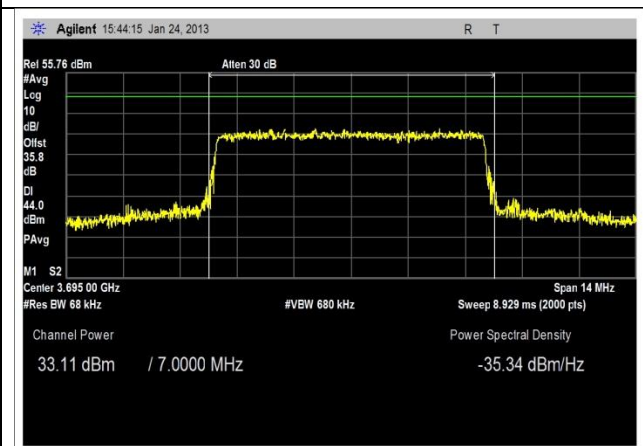
Band power_hi ch_5MHz_QPSK_port 2



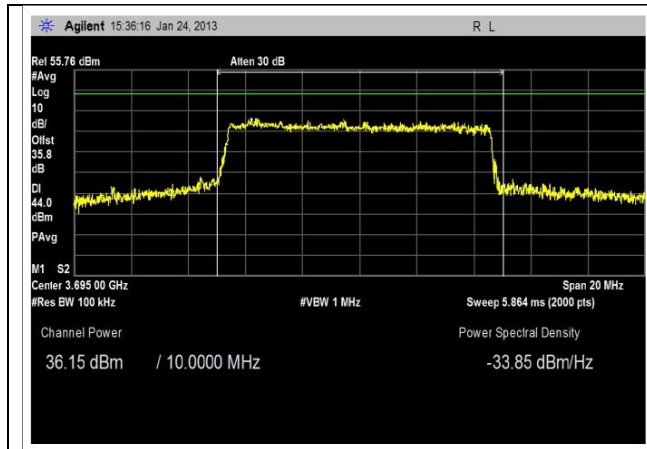
Band power_hi ch_7MHz_16QAM_port 2



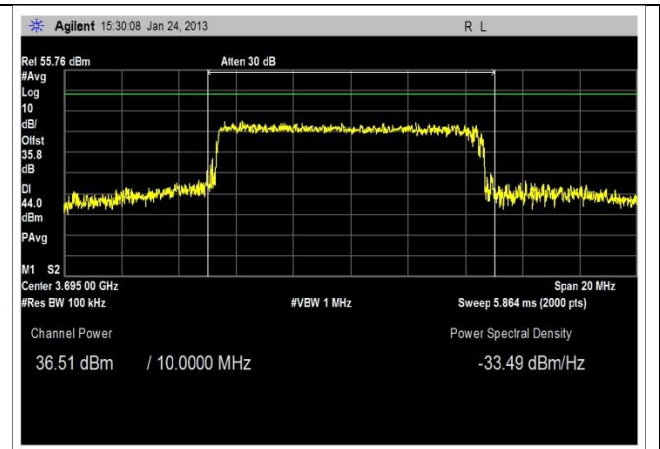
Band power_hi ch_7MHz_64QAM_port 2



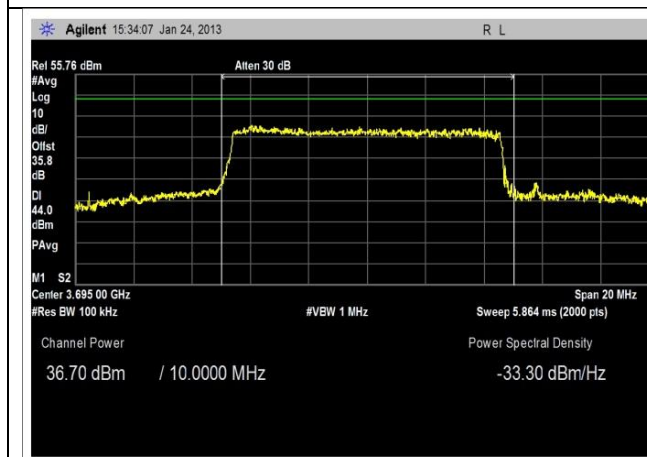
Band power_hi ch_7MHz_QPSK_port 2



Band power_hi ch_10MHz_16QAM_port 2



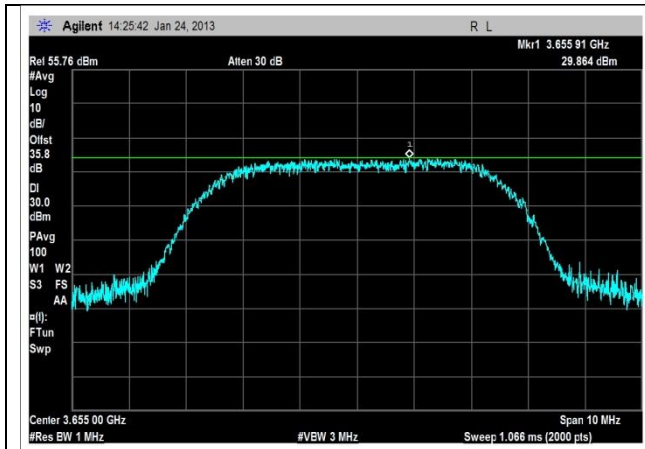
Band power_hi ch_10MHz_64QAM_port 2



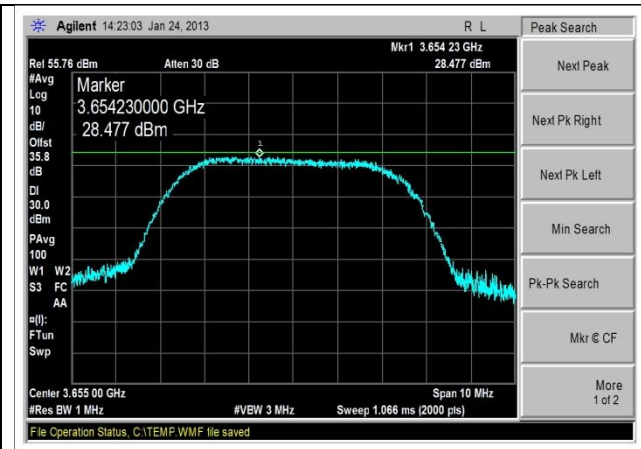
Band power_hi ch_10MHz_QPSK_port 2

Power Spectral Density Port 2					
Frequency (MHz)	Channel Bandwidth (MHz)	Modulation	Power setting (dbm)	Measured PSD (dbm)	EIRP PSD limit (dbm)
3655	5	16QAM	26.0	29.864	30
		64QAM	25.5	28.477	30
		QPSK	26.0	29.047	30
3655	7	16QAM	27.0	28.961	30
		64QAM	27.0	28.334	30
		QPSK	25.0	28.881	30
3655	10	16QAM	26.8	27.587	30
		64QAM	26.8	27.524	30
		QPSK	26.8	27.683	30
3665	5	16QAM	26.0	27.944	30
		64QAM	25.0	27.785	30
		QPSK	24.0	28.445	30
3665	7	16QAM	27.0	28.131	30
		64QAM	27.0	29.232	30
		QPSK	27.0	28.293	30
3665	10	16QAM	27.0	28.315	30
		64QAM	27.0	28.733	30
		QPSK	27.0	28.227	30
3695	5	16QAM	24.0	28.310	30
		64QAM	24.0	27.743	30
		QPSK	24.0	28.422	30
3695	7	16QAM	24.0	28.576	30
		64QAM	25.0	27.964	30
		QPSK	24.0	27.868	30
3695	10	16QAM	25.8	27.885	30
		64QAM	25.8	29.062	30
		QPSK	25.8	29.320	30

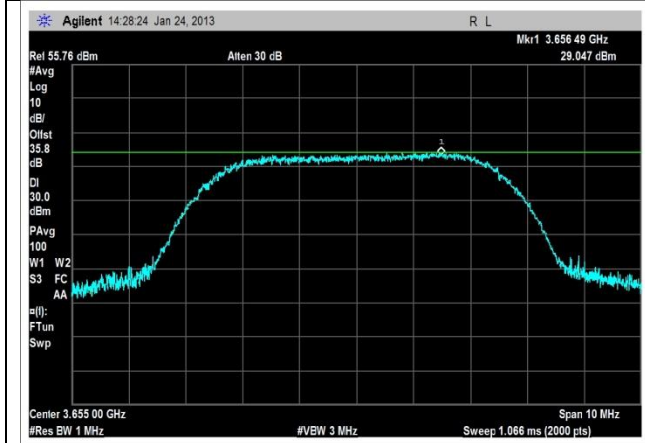
An external 20db attenuator was used. Offset in spectrum analyzer=20db attenuator + 0.9db cable loss (asset: AN02946) +4.86db duty cycle correction factor+10dbi antenna gain = 35.76db.



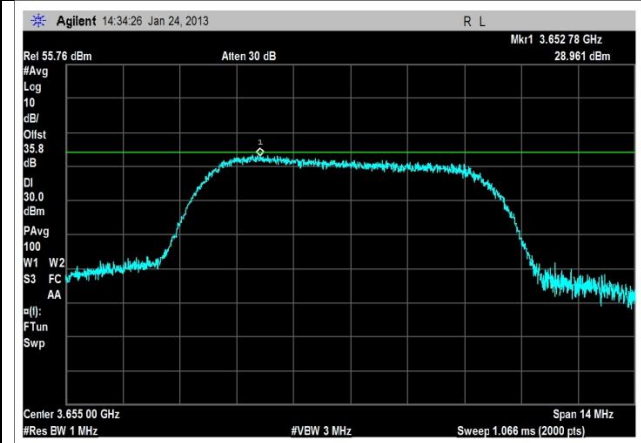
Power density_low ch_5MHz_16QAM_port 2



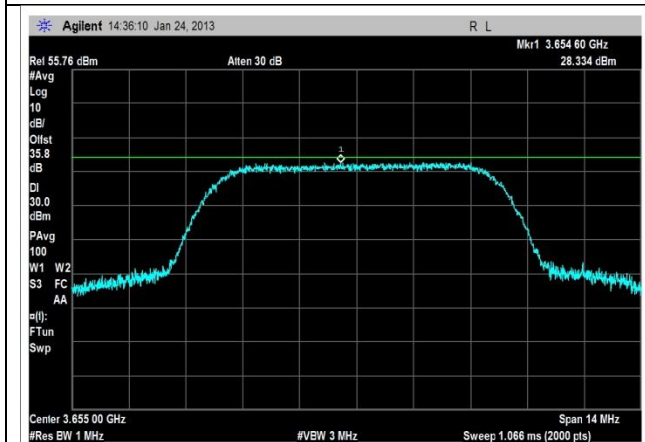
Power density_low ch_5MHz_64QAM_port 2



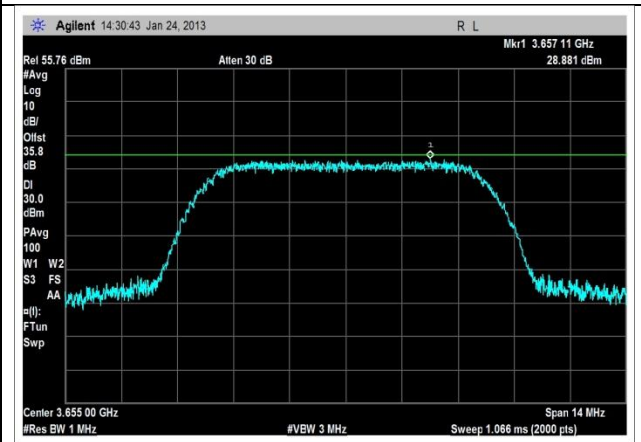
Power density_low ch_5MHz_QPSK_port 2



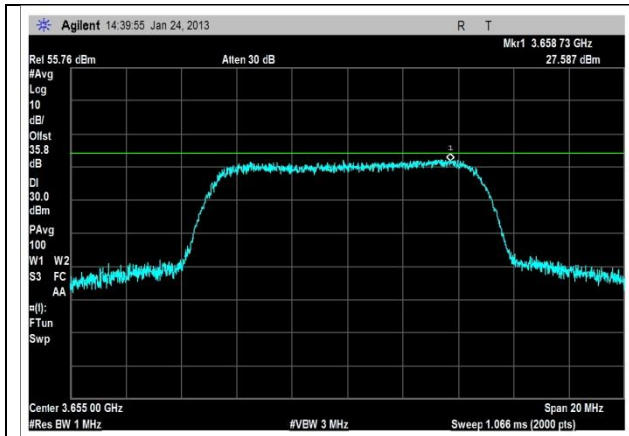
Power density_low ch_7MHz_16QAM_port 2



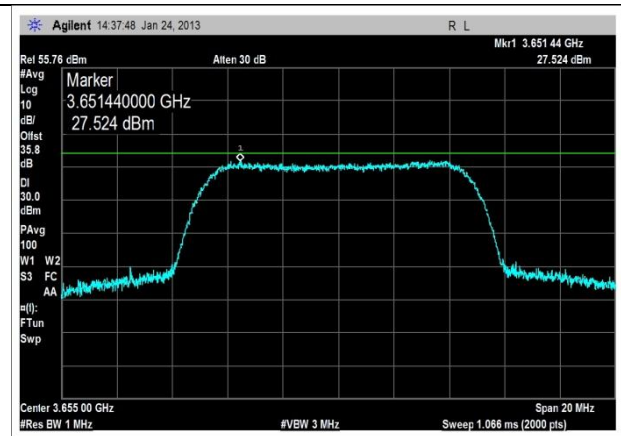
Power density_low ch_7MHz_64QAM_port 2



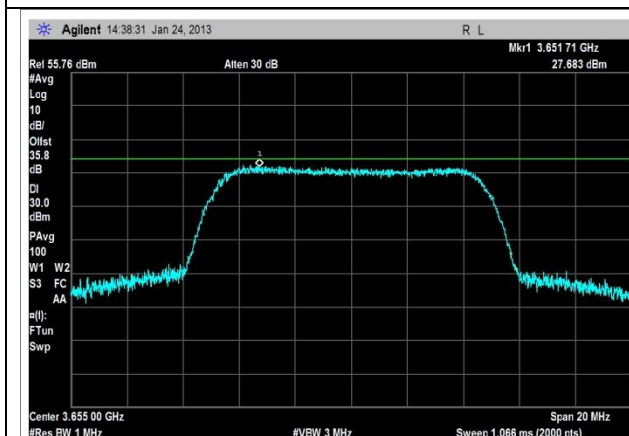
Power density_low ch_7MHz_QPSK_port 2



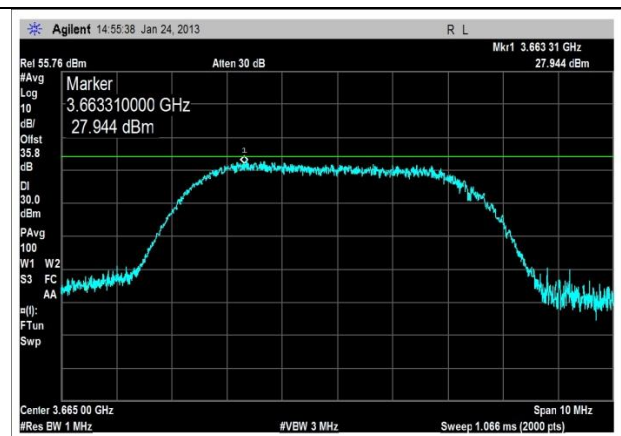
Power density_low ch_10MHz_16QAM_port 2



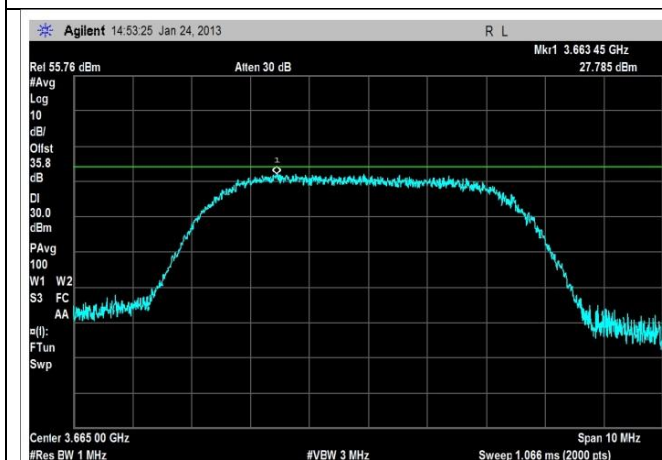
Power density_low ch_10MHz_64QAM_port 2



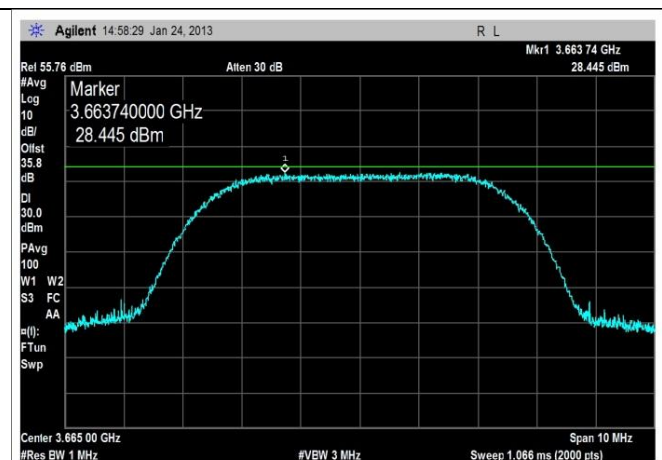
Power density_low ch_10MHz_QPSK_port 2



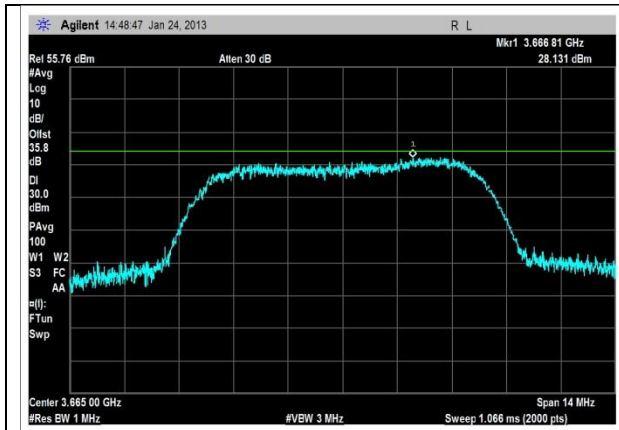
Power density_mid ch_5MHz_16QAM_port 2



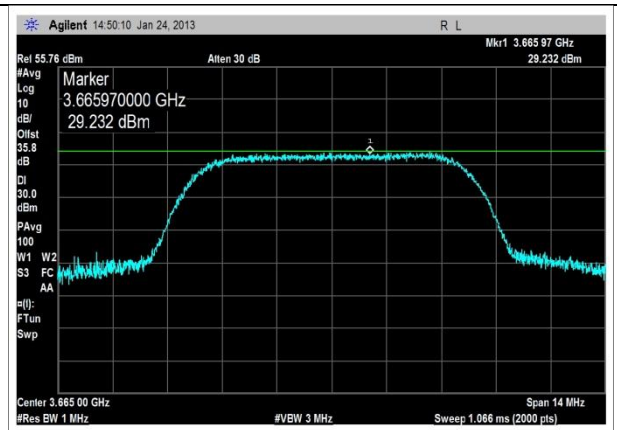
Power density_mid ch_5MHz_64QAM_port 2



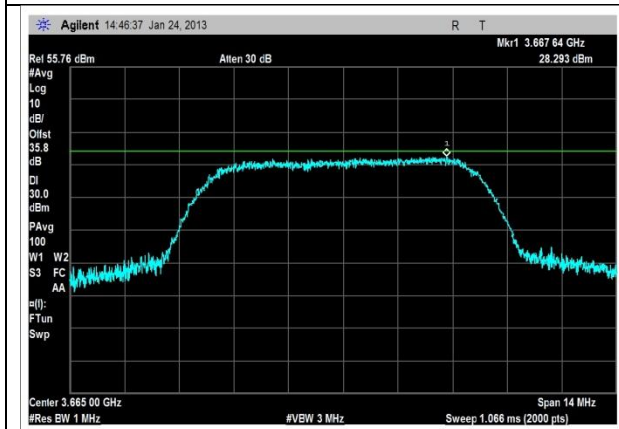
Power density_mid ch_5MHz_QPSK_port 2



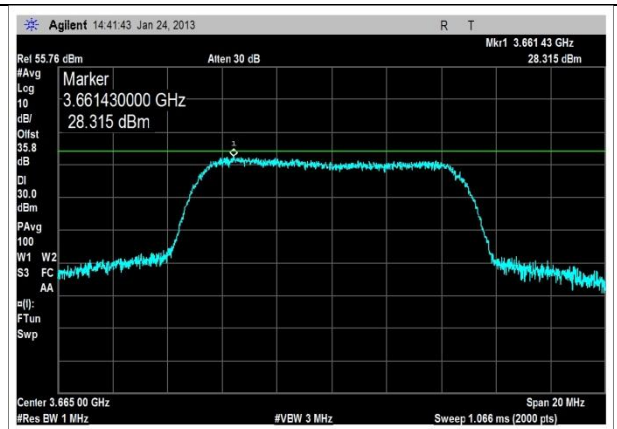
Power density_mid ch_7MHz_16QAM_port 2



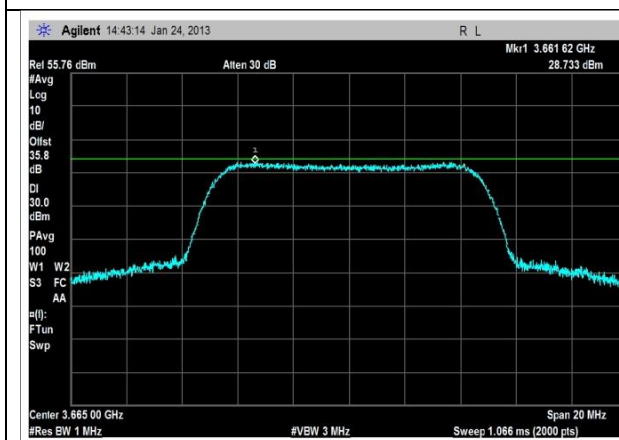
Power density_mid ch_7MHz_64QAM_port 2



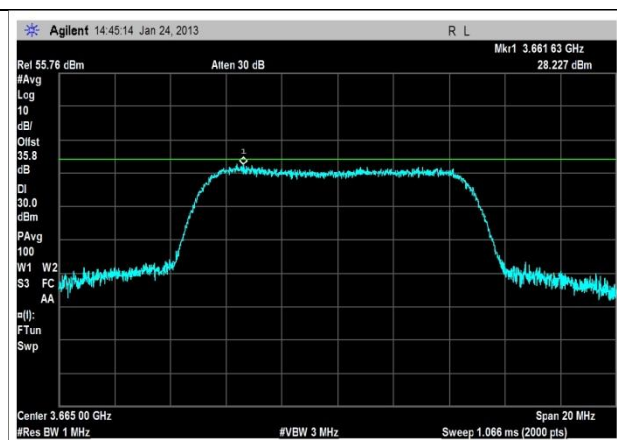
Power density_mid ch_7MHz_QPSK_port 2



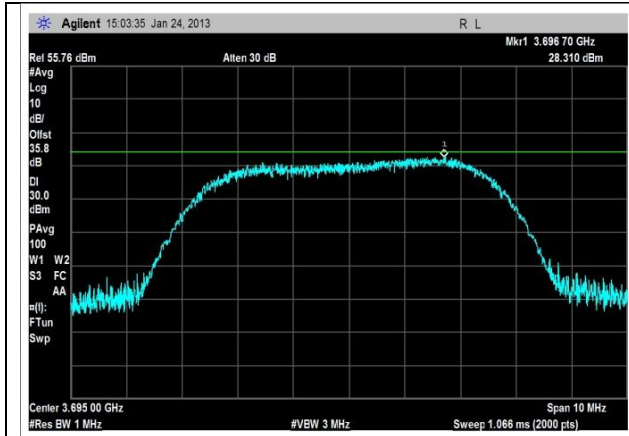
Power density_mid ch_10MHz_16QAM_port 2



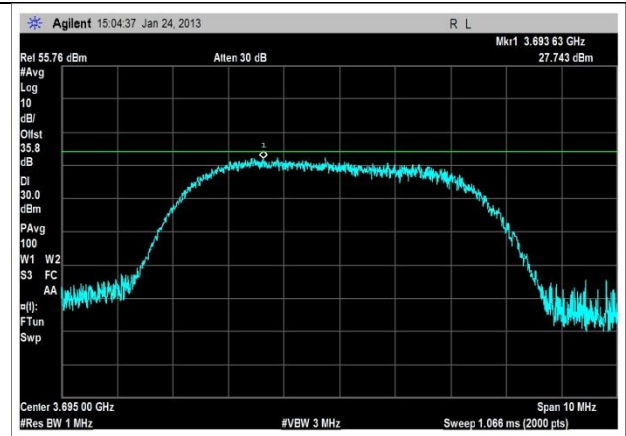
Power density_mid ch_10MHz_64QAM_port 2



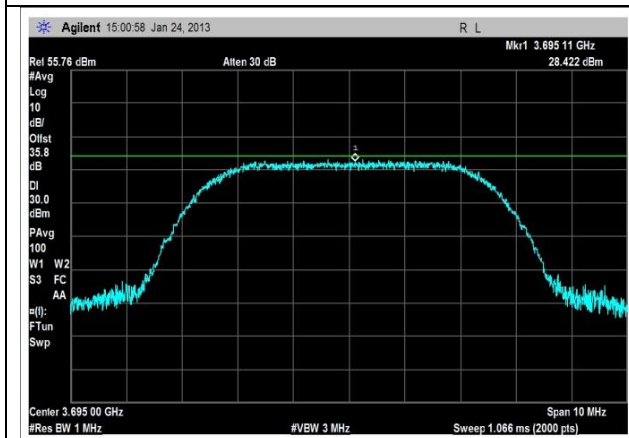
Power density_mid ch_10MHz_QPSK_port 2



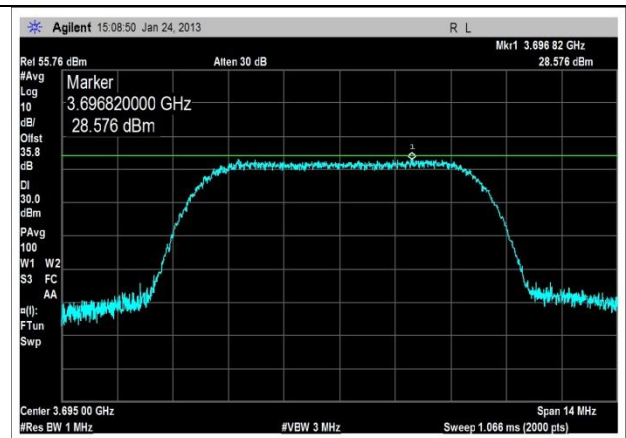
Power density_hi ch_5MHz_16QAM_port 2



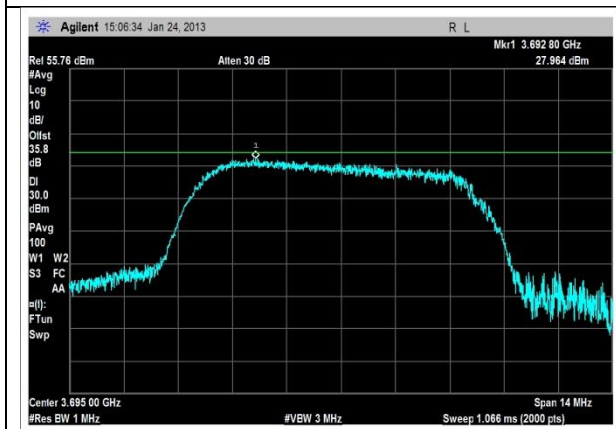
Power density_hi ch_5MHz_64QAM_port 2



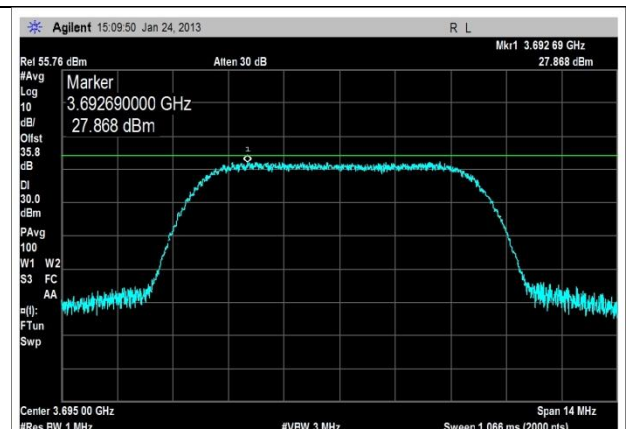
Power density_hi ch_5MHz_QPSK_port 2



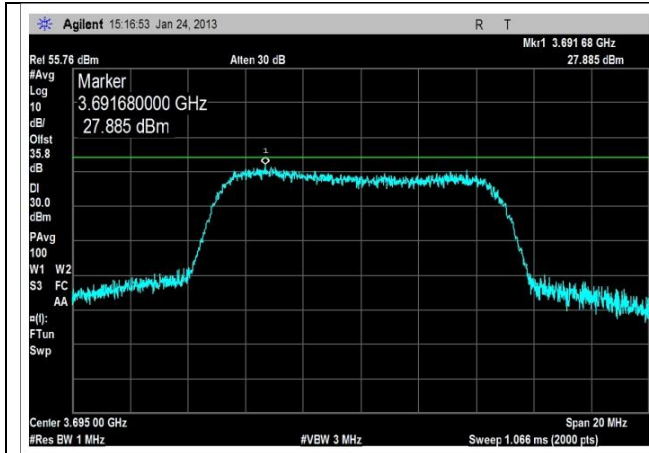
Power density_hi ch_7MHz_16QAM_port 2



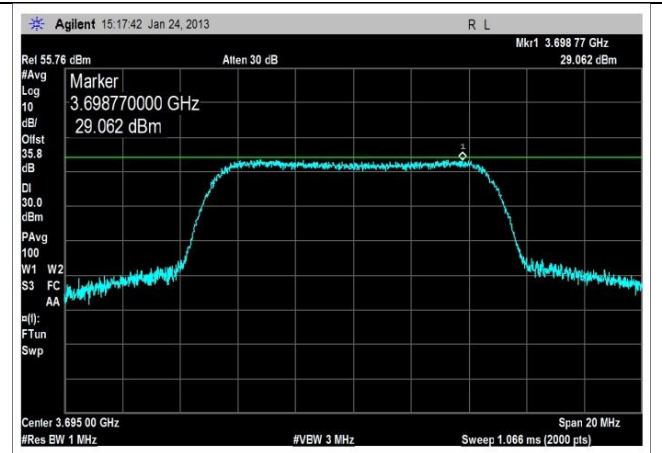
Power density_hi ch_7MHz_64QAM_port 2



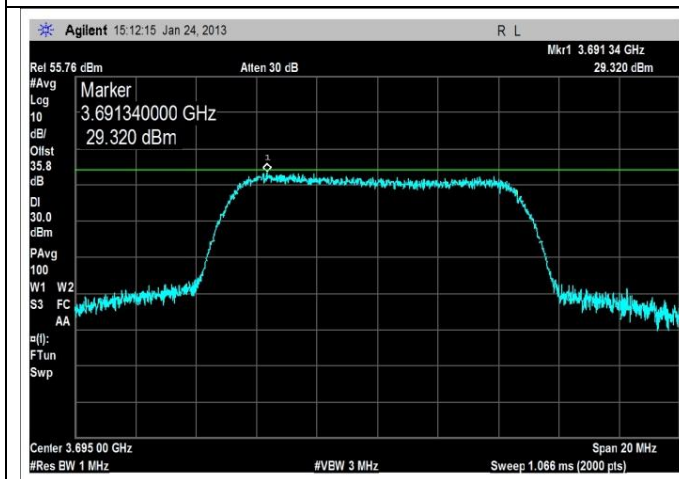
Power density_hi ch_7MHz_QPSK_port 2



Power density_hi ch_10MHz_16QAM_port 2



Power density_hi ch_10MHz_64QAM_port 2



Power density_hi ch_10MHz_QPSK_port 2

Test Setup Photos



90.1323 / 2.1051 Spurious Conducted Emissions

Ambient Temperature: 20°C

Relative Humidity: 35%

Test Engineer: Don Nguyen

Test Equipment					
Asset #	Description	Model	Manufacturer	Cal Date	Cal Due
AN02946	Cable	32022-2-2909K-36TC	Astrolab Inc.	8/8/2011	8/8/2013
AN02672	Spectrum Analyzer	E4446A	HP Agilent	9/4/2012	9/4/2014
AN02746	Low Pass Filter	11SL10-2000/U6000-O/O	K & L	11/22/2011	11/22/2013
AN02755	High Pass Filter	11SH10-6000/T18000-O/O	K & L	4/16/2012	4/16/2014

Spurious Conducted Emissions						
Port 1						
Frequency (MHz)	Channel Bandwidth (MHz)	Modulation	Power setting (dbm)	Measured power at the third harmonic (dbm)	Third harmonic frequency (MHz)	Limit (dbm)
3655	5	16QAM	25.5	-22.6	10965	-13dbm
		64QAM	25.0	-25.1	10965	-13dbm
		QPSK	25.5	-21.4	10965	-13dbm
3655	7	16QAM	25.5	-27.2	10965	-13dbm
		64QAM	25.5	-25.6	10965	-13dbm
		QPSK	25.8	-26.2	10965	-13dbm
3655	10	16QAM	26.8	-25.1	10965	-13dbm
		64QAM	26.8	-24.6	10965	-13dbm
		QPSK	26.8	-24.4	10965	-13dbm
3665	5	16QAM	25.0	-24.9	10995	-13dbm
		64QAM	25.0	-28.4	10995	-13dbm
		QPSK	25.0	-25.1	10995	-13dbm
3665	7	16QAM	27.0	-24.2	10995	-13dbm
		64QAM	25.8	-28.1	10995	-13dbm
		QPSK	25.7	-28.1	10995	-13dbm
3665	10	16QAM	26.0	-30.3	10995	-13dbm
		64QAM	26.0	-29.4	10995	-13dbm
		QPSK	26.0	-29.9	10995	-13dbm
3695	5	16QAM	24.4	-24.2	11085	-13dbm
		64QAM	24.4	-26.0	11085	-13dbm
		QPSK	24.4	-24.9	11085	-13dbm
3695	7	16QAM	26.0	-29.2	11085	-13dbm
		64QAM	26.0	-24.2	11085	-13dbm
		QPSK	26.0	-22.1	11085	-13dbm
3695	10	16QAM	26.7	-25.3	11085	-13dbm
		64QAM	26.7	-25.9	11085	-13dbm
		QPSK	26.7	-26.6	11085	-13dbm

Spurious Conducted Emission Port 2						
Frequency (MHz)	Channel Bandwidth (MHz)	Modulation	Power setting (dbm)	Measured power at the third harmonic (dbm)	Third harmonic frequency (MHz)	Limit (dbm)
3655	5	16QAM	26.0	-27.3	10965	-13dbm
		64QAM	25.5	-30.7	10965	-13dbm
		QPSK	26.0	-27.3	10965	-13dbm
3655	7	16QAM	27.0	-31.5	10965	-13dbm
		64QAM	27.0	-30.4	10965	-13dbm
		QPSK	25.0	-34.4	10965	-13dbm
3655	10	16QAM	26.8	-31.7	10965	-13dbm
		64QAM	26.8	-33.3	10965	-13dbm
		QPSK	26.8	-30.3	10965	-13dbm
3665	5	16QAM	26.0	-25.0	10995	-13dbm
		64QAM	25.0	-28.5	10995	-13dbm
		QPSK	24.0	-28.9	10995	-13dbm
3665	7	16QAM	27.0	-23.5	10995	-13dbm
		64QAM	27.0	-24.0	10995	-13dbm
		QPSK	27.0	-22.5	10995	-13dbm
3665	10	16QAM	27.0	-27.9	10995	-13dbm
		64QAM	27.0	-29.2	10995	-13dbm
		QPSK	27.0	-26.2	10995	-13dbm
3695	5	16QAM	24.0	-30.1	11085	-13dbm
		64QAM	24.0	-31.6	11085	-13dbm
		QPSK	24.0	-27.7	11085	-13dbm
3695	7	16QAM	24.0	-34.8	11085	-13dbm
		64QAM	25.0	-31.6	11085	-13dbm
		QPSK	24.0	-32.2	11085	-13dbm
3695	10	16QAM	25.8	-29.5	11085	-13dbm
		64QAM	25.8	-31.5	11085	-13dbm
		QPSK	25.8	-28.4	11085	-13dbm

Frequency range of measurement = 9kHz- 40GHz. 9kHz -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

Note: Only the third harmonic is presented as it is the worst case and within 20db margin. Other frequencies emissions have margin greater than 20db. Offset in spectrum analyzer=4.86db duty cycle correction factor. EMI test software automatically calculated correction factors from other test equipment and added to final readings.

Test Setup Photos



Note: 20db attenuator was removed between spectrum analyzer and test cable during spurious conducted emissions.

90.1323 / 2.1051 Spurious Radiated Emissions

Ambient Temperature: 20°C

Relative Humidity: 35%

Test Engineer: Don Nguyen

Test Equipment					
Asset #	Description	Model	Manufacturer	Cal Date	Cal Due
AN02946	Cable	32022-2-2909K-36TC	Astrolab Inc.	8/8/11	8/8/13
AN02672	Spectrum Analyzer	E4446A	HP Agilent	9/4/12	9/4/14
AN02746	Low Pass Filter	11SL10-2000/U6000-O/O	K & L	11/22/11	11/22/13
AN02755	High Pass Filter	11SH10-6000/T18000-O/O	K & L	4/16/12	4/16/14
AN00010	Preamp	8447D	HP	3/29/12	3/29/14
AN00851	Biconilog Antenna	CBL6111C	Chase	5/16/12	5/16/14
ANP05555	Cable	RG223/U	Pasternack	6/19/12	6/19/14
ANP05569	Cable	RG-214/U	Pasternack	6/19/12	6/19/14
AN00314	Loop Antenna	6502	EMCO	6/29/12	6/29/14
ANP04382	Cable	LDF-50	Andrew	8/30/12	8/30/14
AN00787	Preamp	83017A	HP	4/8/11	4/8/13
AN00849	Horn Antenna	3115	ETS	4/13/12	4/13/14
ANP06360	Cable	L1-PNMNM-48	Andrew	8/29/12	8/29/14
ANP06153	Cable	16301	Astrolab	10/27/11	10/27/13
AN01413	Horn Antenna	84125-80008	HP	11/9/12	11/9/14
AN 03158	Active Horn Antenna	AMFW-5F-26004000-33-8P	Miteq	12/18/12	12/18/14

Summary of Conditions
<p>The EUT is placed on the wooden table lined with Styrofoam of 10 cm thickness.. Software is used to control EUT is MTK RFCAL-TOOL v1.6.6, build 649 LAN1 is connected remotely to a support laptop. LAN2 is connected remotely to Ethernet hub. RJ11 port is connected to telephone. Per the manufacturer, the product transmits from one antenna at a time. Radiated emission is performed with both antenna ports terminated with 50ohm loads.</p> <p>TX frequency=3650-3700MHz Low channel=3655MHz, Middle channel=3665MHz, High Channel=3695MHz Channel Bandwidth=5,7,10MHz Modulations: QPSK, 16QAM, 64QAM</p> <p>Per the manufacturer, coaxial cable with 4dB insertion loss will be used between the EUT and the antenna during normal operation.</p> <p>Antenna: Dual Polarized Panel, 10dBi gain. (14db-4db coaxial cable loss)</p> <p>Duty cycle=1.617/4.951=32.66% Correction factor for duty cycle=10*log(32.66%)=4.86 db Frequency range of measurement = 9 kHz- 40 GHz. 9kH -150 kHz; RBW=200 Hz, VBW=200 Hz;150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz;30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.</p>

LIMIT LINE FOR SPURIOUS RADIATED EMISSION

REQUIRED ATTENUATION = 43+10 LOG P (DB)

For radiated spurious emission measured at 3 meter test distance,

Required attenuation = 43+10 Log P_{t at 3 meter} dB
 Limit line (dBuV) = E_{dBuV} - Attenuation

E_{dBuV} = Measured field strength at 3 meter in dBuV/m

Power Density (Isotropic)

$$P_D = \frac{P_t}{4\pi r^2}$$

P_D = Power Density in Watts /m²
 P_t = Average Transmit Power
 r = Test distance

Field Intensity E (V/m)

$$E = \sqrt{P_D \times 377}$$

$$E = \frac{\sqrt{P_t \times 377}}{4\pi r^2}$$

$$E = \sqrt{\frac{P_t \times 30}{r^2}}$$

$$P_t = \left(\frac{E^2 \times r^2}{30} \right)$$

$$10 \text{ Log } P_t = 10 \text{ Log } E^2 \text{ (V/m)} + 10 \text{ Log } r^2 - 10 \text{ Log } 30$$

$$10 \text{ Log } P_t = 20 \text{ Log } E \text{ (V/m)} + 20 \text{ Log } r - 10 \text{ Log } 30$$

At 3 meter, $r = 3 \text{ m}$

$$10 \text{ Log } P_t = 20 \text{ Log } E \text{ (V/m)} + 20 \text{ Log } 3 - 10 \text{ Log } 30$$

$$10 \text{ Log } P_t = 20 \text{ Log } E \text{ (V/m)} + 9.54 - 14.77$$

$$10 \text{ Log } P_t = 20 \text{ Log } E \text{ (V/m)} - 5.23$$

Since $20 \text{ Log } E \text{ (V/m)} = 20 \text{ Log } E \text{ (uV/m)} - 120$

$$10 \text{ Log } P_t = 20 \text{ Log } E \text{ (uV/m)} - 120 - 5.23$$

$$10 \text{ Log } P_t = 20 \text{ Log } E \text{ (uV/m)} - 125.23$$

$$\begin{aligned}
 \text{Limit line (dBuV) at 3 meter} &= E_{\text{dBuV}} - \text{Attenuation} \\
 &= E_{\text{dBuV}} - (43 + 10 \text{ Log } P_{t \text{ at 3 meter}}) \\
 &= E_{\text{dBuV}} - 43 - 10 \text{ Log } P_{t \text{ at 3 meter}} \\
 &= E_{\text{dBuV}} - 43 - (20 \text{ Log } E \text{ (uV/m)} - 125.23) \\
 &= E_{\text{dBuV}} - 43 - 20 \text{ Log } E \text{ (uV/m)} + 125.23 \\
 &= E_{\text{dBuV}} - 20 \text{ Log } E \text{ (uV/m)} + 82.23 \\
 &\text{Since } 20 \text{ Log } E \text{ (uV/m)} = E \text{ in dBuV/m} \\
 &= E_{\text{dBuV}} - E_{\text{dBuV}} + 82.23
 \end{aligned}$$

Radiated Emission limit 3 meter = 82.23 dBuV at any power level measured in dBuV

Spurious Radiated Emission Port 1									
Frequency (MHz)	Channel Band width (MHz)	Modulation	Power Setting (dbm)	Second Harmonic Frequency (MHz)	Vertical Polarity 2 nd Harmonic Emission Ref Level (dbm)	Horizontal Polarity 2 nd Harmonic Emission Ref Level (dbm)	Vertical Polarity 2 nd Harmonic Emission Attenuation (dbc)	Horizontal Polarity 2 nd Harmonic Emission Attenuation (dbc)	Attenuation Limit (dbc)
3655	5	QPSK	25.5	7310	-17.3	-30.2	44.10	57.00	39.80
3655	7	64QAM	25.5	7310	-17.7	-29.2	44.50	56.00	39.80
3655	10	QPSK	26.8	7310	-17.1	-28.9	43.90	55.70	39.80
3665	5	16QAM	25.0	7330	-22.8	-30.0	49.60	56.80	39.80
3665	7	16QAM	27.0	7330	-22.2	-29.8	49.00	56.60	39.80
3665	10	64QAM	26.0	7330	-21.7	-30.9	48.50	57.70	39.80
3695	5	16QAM	24.4	7390	-20.6	-30.2	47.40	57.00	39.80
3695	7	QPSK	26.0	7390	-17.5	-30.6	44.30	57.40	39.80
3695	10	16QAM	26.7	7390	-19.7	-29.3	46.50	56.10	39.80

Spurious Radiated Emission Port 2									
Frequency (MHz)	Channel Band width (MHz)	Modulation	Power Setting (dbm)	Second Harmonic Frequency (MHz)	Vertical Polarity 2 nd Harmonic Emission Ref Level (dbm)	Horizontal Polarity 2 nd Harmonic Emission Ref Level (dbm)	Vertical Polarity 2 nd Harmonic Emission Attenuation (dbc)	Horizontal Polarity 2 nd Harmonic Emission Attenuation (dbc)	Attenuation Limit (dbc)
3655	5	QPSK	26	7310	-17.4	-21.5	44.20	48.30	39.80
3655	7	64QAM	27	7310	-20.4	-23.3	47.20	50.10	39.80
3655	10	QPSK	26.8	7310	-19.3	-26.3	46.10	53.10	39.80
3665	5	16QAM	26.0	7330	-17.1	-24.6	43.90	51.40	39.80
3665	7	16QAM	27.0	7330	-20.5	-23.6	47.30	50.40	39.80
3665	10	64QAM	27.0	7330	-18.5	-26.3	45.30	53.10	39.80
3695	5	16QAM	24.0	7390	-18.3	-30.6	45.10	57.40	39.80
3695	7	QPSK	25.0	7390	-19.5	-26.7	46.30	53.50	39.80
3695	10	16QAM	25.8	7390	-19.7	-28.9	46.50	55.70	39.80

Frequency range of measurement = 9kHz- 40GHz. 9kHz -150kHz; RBW=200Hz, VBW=200 Hz;150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,1000 MHz-40,000 MHz; RBW=1 MHz, VBW=1 MHz.

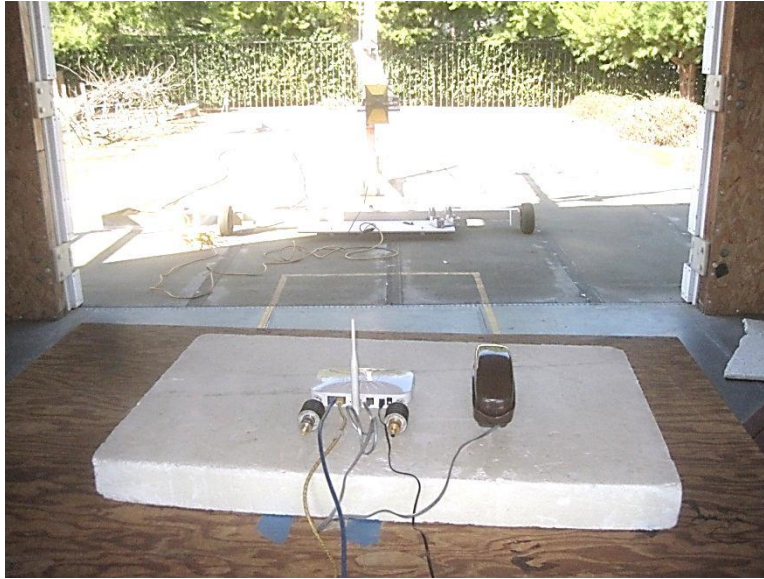
Highest Measured Output Power: 26.80 (dBm) = 0.47863 (W)

Distance: 3 meters

Limit: 43+10Log(P)=**39.80 (dBc)**

Note: Only the modulations which have the highest conducted emission were tested from each configuration. The radiated emissions at second harmonic are presented as worst case. Offset in spectrum analyzer=4.86db duty cycle correction factor. EMI test software automatically calculated correction factors from other test equipment and added to final readings.

Test Setup Photos



90.209 / 2.1049 -26dBc Occupied Bandwidth

Ambient Temperature: 20°C

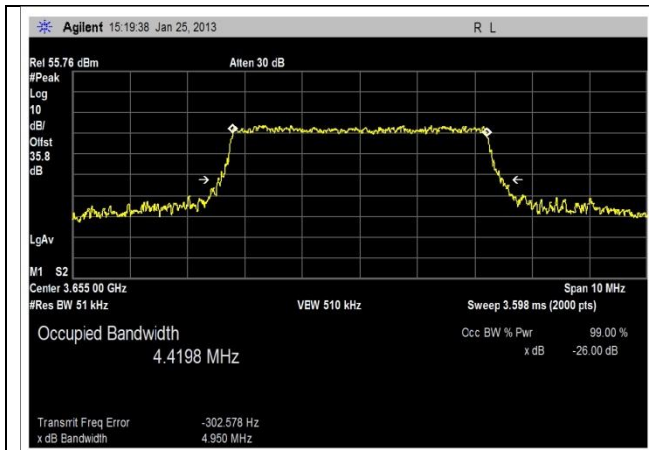
Relative Humidity: 35%

Test Engineer: Don Nguyen

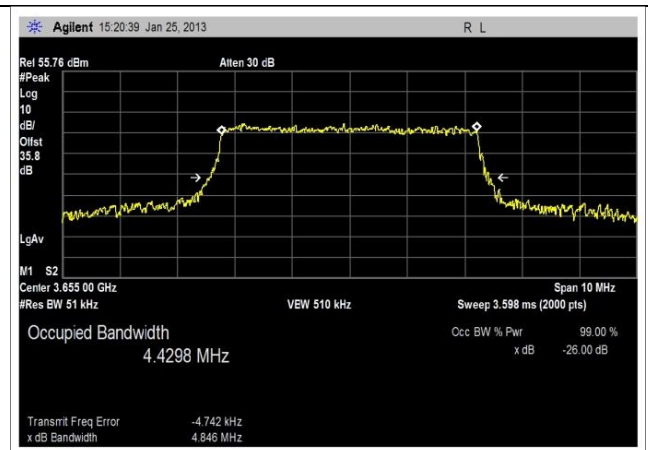
Test Equipment					
Asset #	Description	Model	Manufacturer	Cal Date	Cal Due
AN02946	Cable	32022-2-2909K-36TC	Astrolab Inc.	8/8/2011	8/8/2013
AN02672	Spectrum Analyzer	E4446A	HP Agilent	9/4/2012	9/4/2014

Occupied Bandwidth Port 1				
Frequency (MHz)	Channel Bandwidth (MHz)	Modulation	Power setting (dbm)	Measured Bandwidth (MHz)
3655	5	16QAM	25.5	4.950
		64QAM	25.0	4.846
		QPSK	25.5	4.844
3655	7	16QAM	25.5	6.924
		64QAM	25.5	6.952
		QPSK	25.8	6.926
3655	10	16QAM	26.8	9.699
		64QAM	26.8	9.888
		QPSK	26.8	9.747
3665	5	16QAM	25.0	4.913
		64QAM	25.0	4.862
		QPSK	25.0	4.945
3665	7	16QAM	27.0	6.969
		64QAM	25.8	6.947
		QPSK	25.7	6.902
3665	10	16QAM	26.0	9.738
		64QAM	26.0	9.667
		QPSK	26.0	9.637
3695	5	16QAM	24.4	4.854
		64QAM	24.4	4.764
		QPSK	24.4	4.929
3695	7	16QAM	26.0	6.918
		64QAM	26.0	6.879
		QPSK	26.0	6.921
3695	10	16QAM	26.7	9.648
		64QAM	26.7	9.799
		QPSK	26.7	9.734

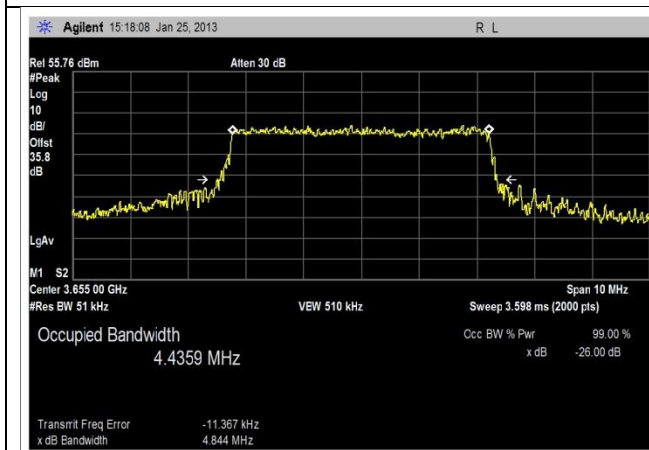
An external 20db attenuator was used. Offset in spectrum analyzer=20db attenuator + 0.9db cable loss (asset: AN02946) +4.86db duty cycle correction factor+10dbi antenna gain = 35.76db.



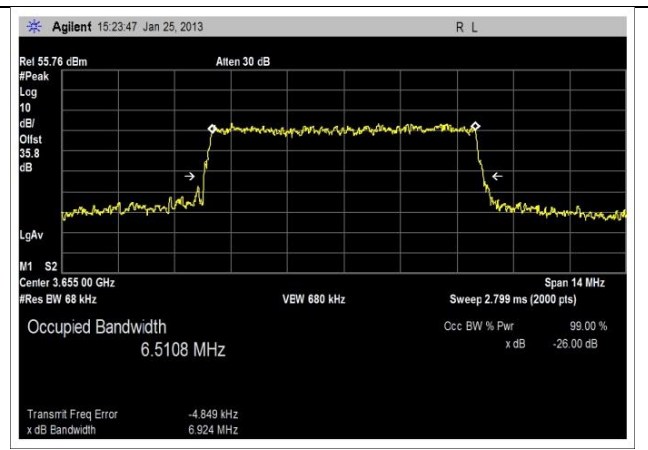
OBW_port 1_low ch_5MHz_16QAM



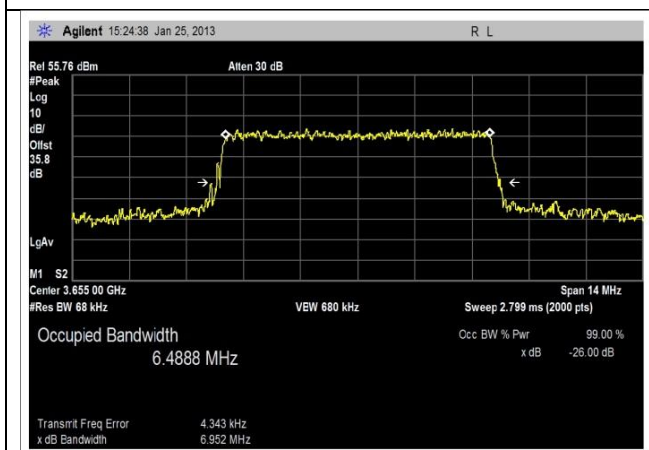
OBW_port 1_low ch_5MHz_64QAM



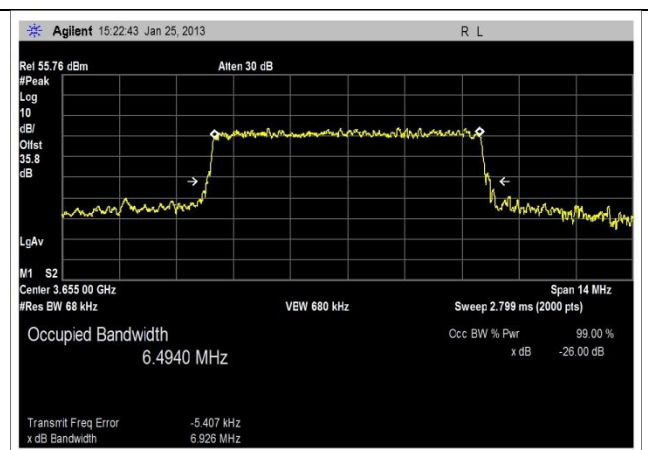
OBW_port 1_low ch_5MHz_QPSK



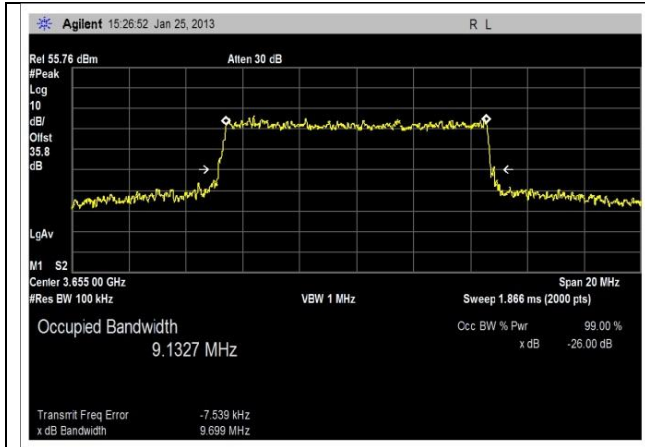
OBW_port 1_low ch_7MHz_16QAM



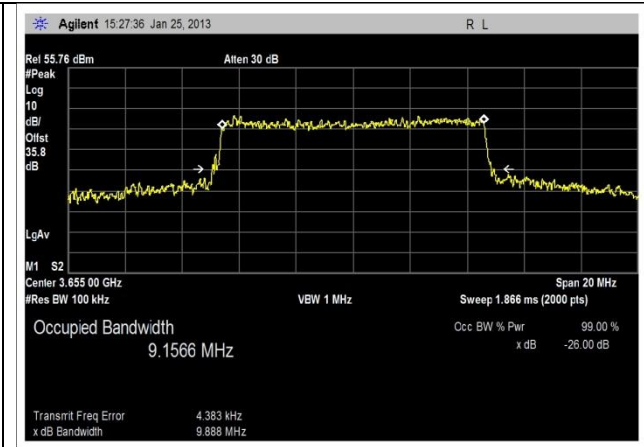
OBW_port 1_low ch_7MHz_64QAM



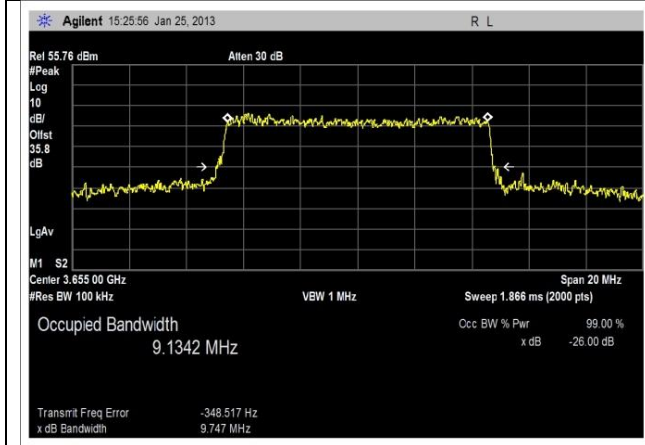
OBW_port 1_low ch_7MHz_QPSK



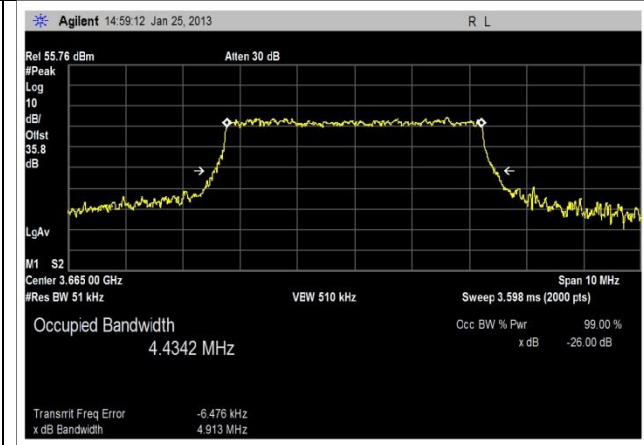
OBW_port 1_low ch_10MHz_16QAM



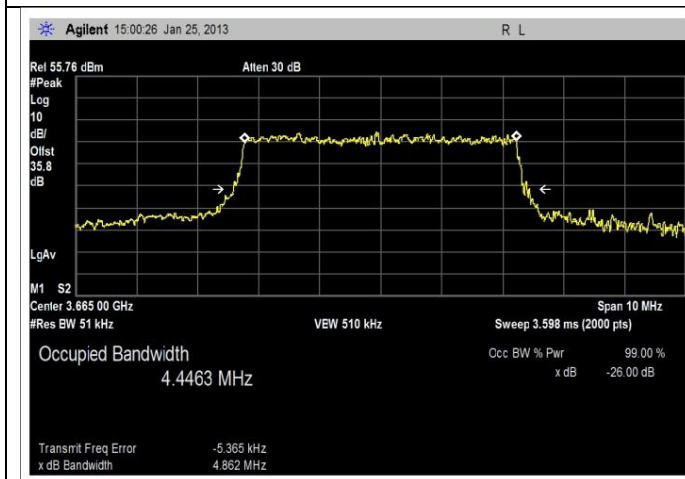
OBW_port 1_low ch_10MHz_64QAM



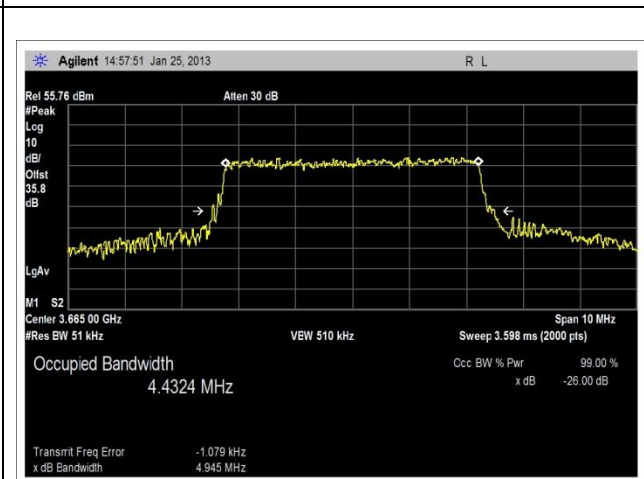
OBW_port 1_low ch_10MHz_QPSK



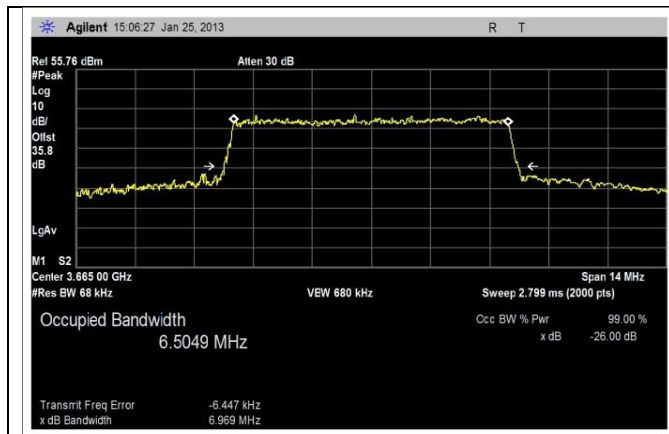
OBW_port 1_mid ch_5MHz_16QAM



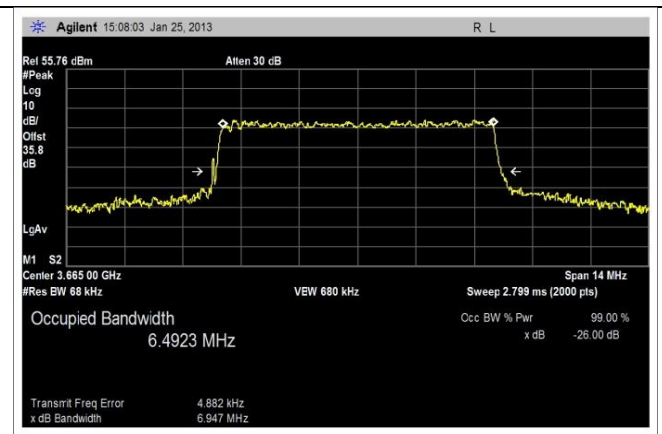
OBW_port 1_mid ch_5MHz_64QAM



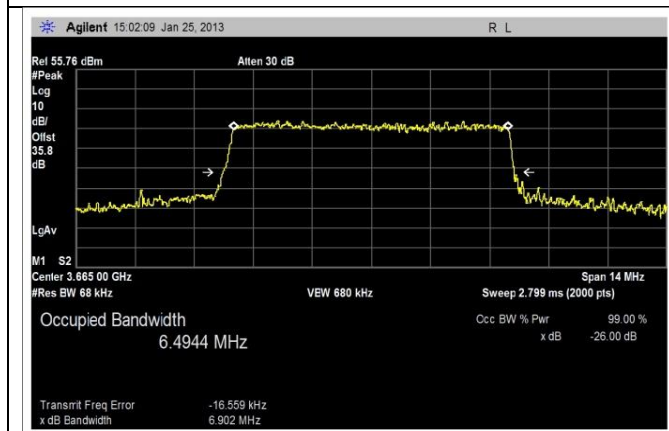
OBW_port 1_mid ch_5MHz_QPSK



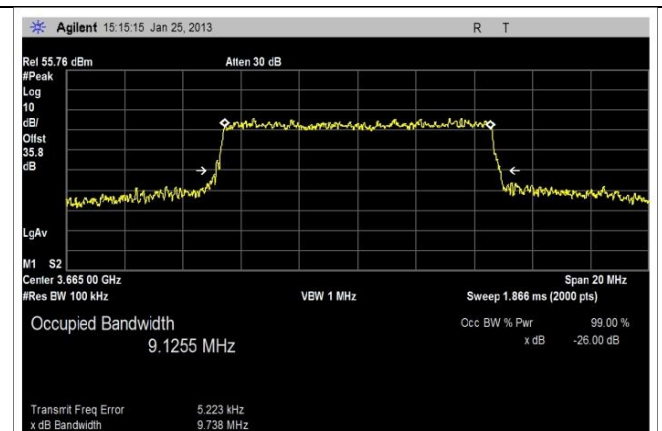
OBW_port 1_mid ch_7MHz_16QAM



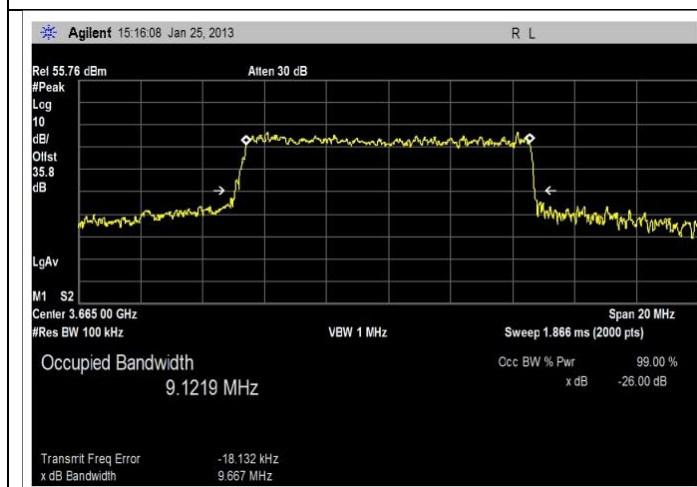
OBW_port 1_mid ch_7MHz_64QAM



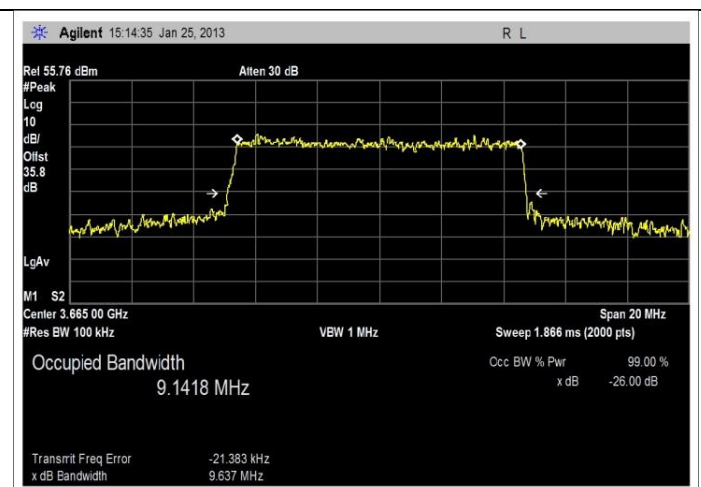
OBW_port 1_mid ch_7MHz_QPSK



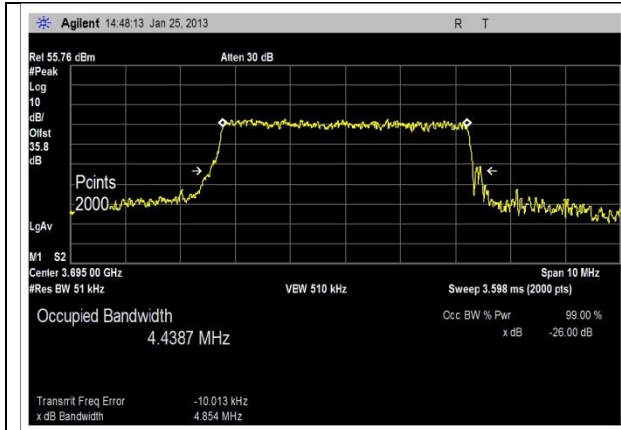
OBW_port 1_mid ch_10MHz_16QAM



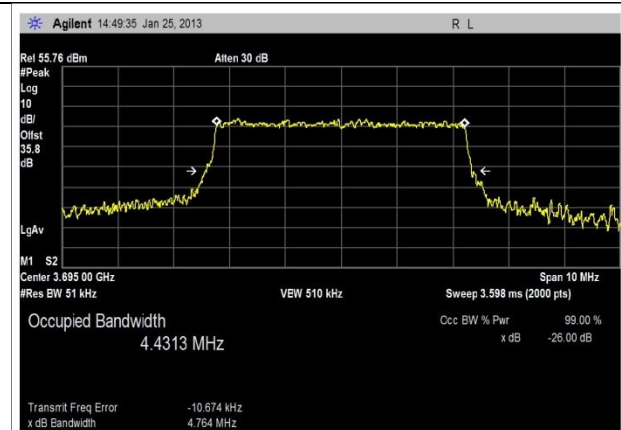
OBW_port 1_mid ch_10MHz_64QAM



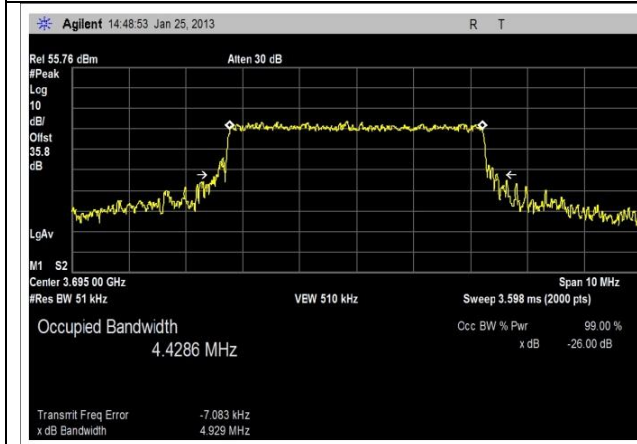
OBW_port 1_mid ch_10MHz_QPSK



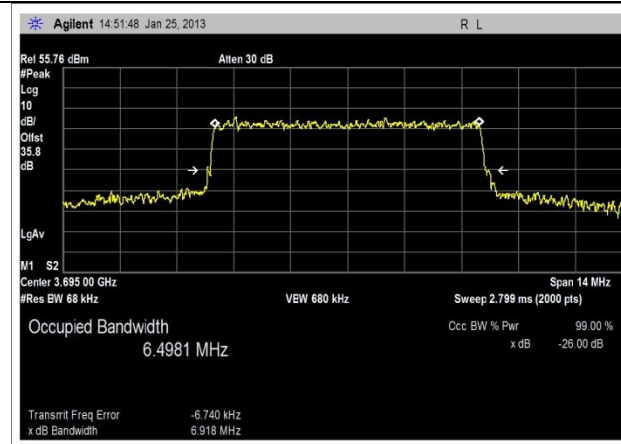
OBW_port 1_hi ch_5MHz_16QAM



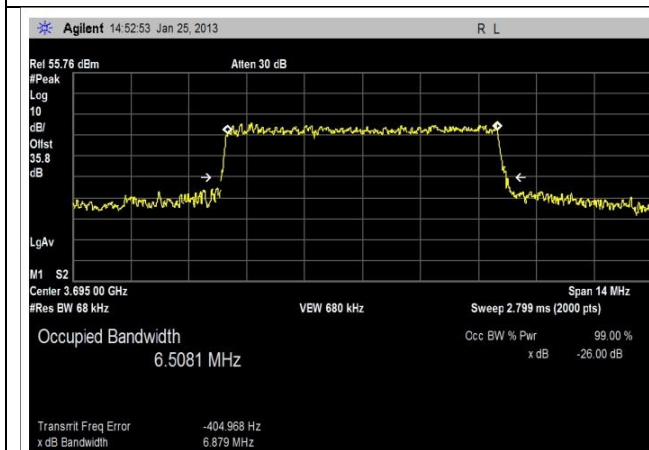
OBW_port 1_hi ch_5MHz_64QAM



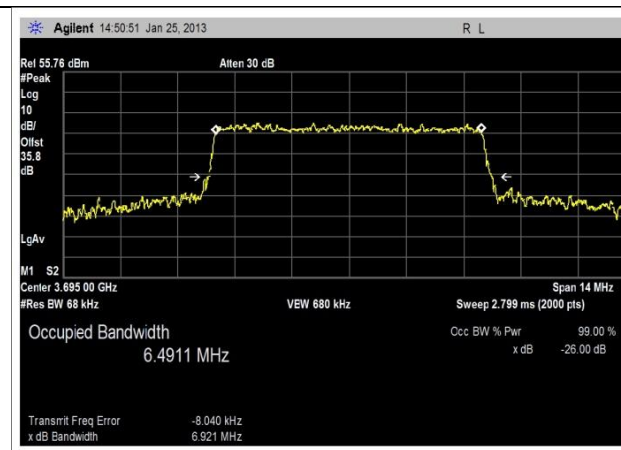
OBW_port 1_hi ch_5MHz_QPSK



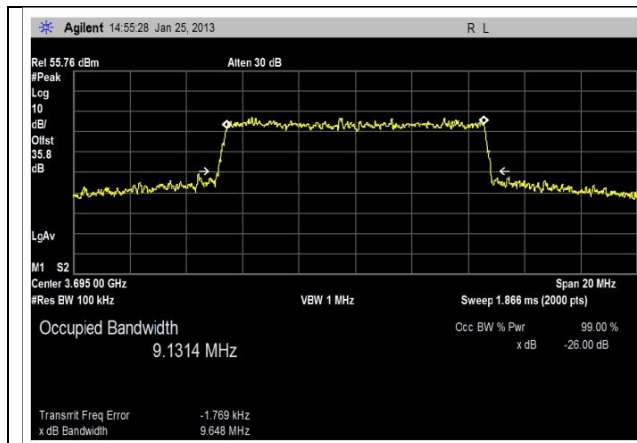
OBW_port 1_hi ch_7MHz_16QAM



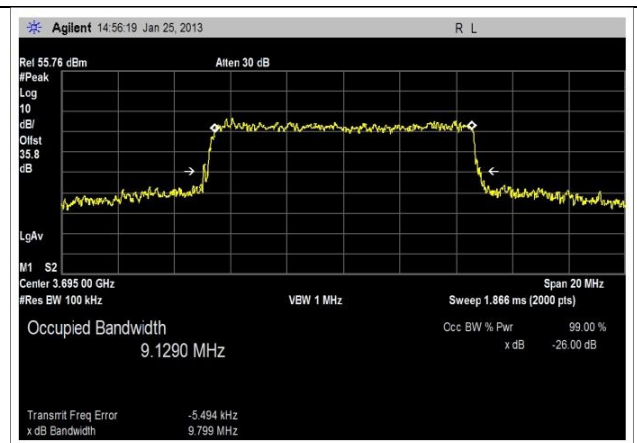
OBW_port 1_hi ch_7MHz_64QAM



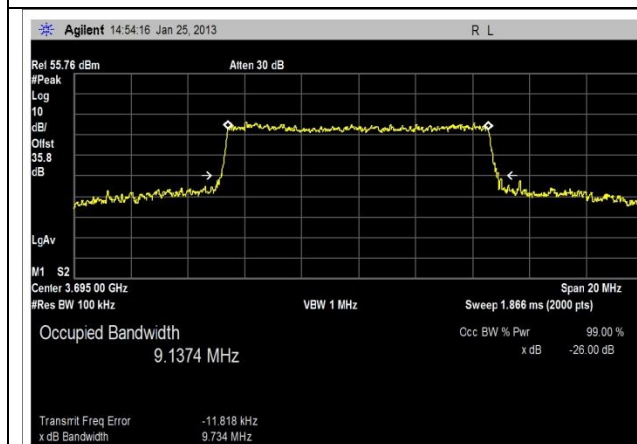
OBW_port 1_hi ch_7MHz_QPSK



OBW_port 1_hi ch_10MHz_16QAM



OBW_port 1_hi ch_10MHz_64QAM



OBW_port 1_hi ch_10MHz_QPSK

Occupied Bandwidth Port 2				
Frequency (MHz)	Channel Bandwidth (MHz)	Modulation	Power Setting (dbm)	Measured Bandwidth (MHz)
3655	5	16QAM	26.0	4.828
		64QAM	25.5	4.622
		QPSK	26.0	4.848
3655	7	16QAM	27.0	6.974
		64QAM	27.0	7.571
		QPSK	25.0	6.967
3655	10	16QAM	26.8	9.464
		64QAM	26.8	9.723
		QPSK	26.8	9.603
3665	5	16QAM	26.0	4.876
		64QAM	25.0	4.891
		QPSK	24.0	4.874
3665	7	16QAM	27.0	6.922
		64QAM	27.0	6.955
		QPSK	27.0	6.863
3665	10	16QAM	27.0	9.606
		64QAM	27.0	9.810
		QPSK	27.0	9.892
3695	5	16QAM	24.0	4.945
		64QAM	24.0	4.793
		QPSK	24.0	4.965
3695	7	16QAM	24.0	6.883
		64QAM	25.0	6.852
		QPSK	24.0	6.886
3695	10	16QAM	25.8	9.656
		64QAM	25.8	9.943
		QPSK	25.8	9.663

An external 20db attenuator was used. Offset in spectrum analyzer=20db attenuator + 0.9db cable loss (asset: AN02946) +4.86db duty cycle correction factor+10dbi antenna gain = 35.76db.