



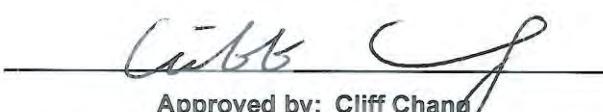
# FCC RADIO TEST REPORT

**FCC ID** : Z8H89FT0044  
**Equipment** : 2 GHz Tyndall 101  
**Brand Name** : Cambium Networks  
**Model Name** : 2 GHz Tyndall 101  
**Applicant** : Cambium Networks Inc.  
3800 Golf Road, Suite 360 Rolling Meadows, IL 60008, USA  
**Manufacturer** : Cambium Networks Inc.  
3800 Golf Road, Suite 360 Rolling Meadows, IL 60008, USA  
**Standard** : 47 CFR Part2, 27

The product was received on Sep. 12, 2018, and testing was started from Sep. 12, 2018 and completed on Sep. 17, 2018. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI/TIA-603-E (2016), ANSI C63.26-2015 and shown compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

  
Approved by: Cliff Chang

**SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory**  
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



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## History of this test report



## Summary of Test Result

Report Clause	Band	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	<input checked="" type="checkbox"/> 41	2.1046	Conducted Output Power	PASS	-
	<input checked="" type="checkbox"/> 41	2.1046 27.50(h)	Equivalent Isotropic Radiated Power	PASS	-
3.2	<input checked="" type="checkbox"/> 41	-	Peak-to-Average Ratio	PASS	-
3.3	<input checked="" type="checkbox"/> 41	2.1049	Occupied Bandwidth	PASS	-
3.4	<input checked="" type="checkbox"/> 41	2.1051 27.53(m)	Conducted Band Edge	PASS	-
3.5	<input checked="" type="checkbox"/> 41	2.1051 27.53(m)	Conducted Emission	PASS	-
3.6	<input checked="" type="checkbox"/> 41	2.1053	Field Strength of Spurious Radiation	PASS	-
3.7	<input checked="" type="checkbox"/> 41	2.1055 27.54	Frequency Stability for Temperature & Voltage	PASS	-

### Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

### Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen

Report Producer: Viola Huang



## 1 General Description

### 1.1 Information

#### 1.1.1 RF General Information

Items	Description
EUT Power Type	From power adapter
EUT Type	<input type="checkbox"/> Base Station <input type="checkbox"/> Mobile Station <input checked="" type="checkbox"/> Fixed Subscriber Station
TX Frequency (MHz)	5 MHz: 2498.5 MHz ~ 2687.5 MHz 10 MHz: 2501 MHz ~ 2685 MHz 15 MHz: 2503.5 MHz ~ 2682.5 MHz 20 MHz: 2506 MHz ~ 2680 MHz
RX Frequency (MHz)	5 MHz: 2498.5 MHz ~ 2687.5 MHz 10 MHz: 2501 MHz ~ 2685 MHz 15 MHz: 2503.5 MHz ~ 2682.5 MHz 20 MHz: 2506 MHz ~ 2680 MHz
Bandwidth (MHz)	5,10,15,20 MHz
Maximum Output Power to Antenna (dBm)	5 MHz: 28.71 dBm 10 MHz: 28.77 dBm 15 MHz: 28.40 dBm 20 MHz: 29.05 dBm
99% Occupied Bandwidth (MHz)	5 MHz: 4.498 MHz 10 MHz: 8.956 MHz 15 MHz: 13.418 MHz 20 MHz: 17.925 MHz
Antenna Information	Please refer to section 1.1.2
Type of Modulation	QPSK / 16QAM / 64QAM

Note: The above information was declared by manufacturer.



### 1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	1	TSKY	cnRanger Tyndall 100	Patch Antenna	I-PEX	14
2	2	TSKY	cnRanger Tyndall 100	Patch Antenna	I-PEX	14

Note: The EUT has two antennas. (1TX/2RX)

#### For 1TX function:

The EUT supports the antenna with TX diversity function.

Both Port 1 and Port 2 support transmit function, but only one of them will be used at one time.

The Port 1 generated the worst case, so it was selected to test and record in the report.

#### For 2RX function:

Both Port 1 and Port 2 could receive simultaneously.

### 1.1.3 Maximum EIRP Power, Frequency Tolerance and Emission Designator

LTE						
FCC Rule	System	Bandwidth	Type of Modulation	Maximum EIRP (dBm)	Frequency Tolerance (ppm)	Emission Designator
Part 27	LTE Band 41	5 MHz	QPSK	42.57	0.004	4M49G7D
			16QAM	42.71		4M50W7D
			64QAM	42.54		4M49D9W
		10 MHz	QPSK	42.49		8M94G7D
			16QAM	42.75		8M96W7D
			64QAM	42.77		8M96D9W
		15 MHz	QPSK	41.92		13M4G7D
			16QAM	42.05		13M4W7D
			64QAM	42.4		13M4D9W
		20 MHz	QPSK	42.92		17M9G7D
			16QAM	43.05		17M9W7D
			64QAM	42.65		17M9D9W



## 1.2 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR Part2, 27
- ANSI/TIA-603-E (2016)
- ANSI C63.26-2015
- FCC KDB 971168 D01 v03r01
- FCC KDB 412172 D01 v01r01
- FCC KDB 662911 D01 v02r01

**Remark:** All test items were verified and recorded according to the standards and without any deviation during the test.

## 1.3 Testing Location

Testing Location				
<input type="checkbox"/>	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL : 886-3-327-3456	FAX : 886-3-327-0973	
<input checked="" type="checkbox"/>	JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C. TEL : 886-3-656-9065	FAX : 886-3-656-9085	

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Roki Liu	25°C / 60%	Sep. 13, 2018~Sep. 17, 2018
Radiated	03CH01-CB	Jay Liu	25°C / 60%	Sep. 12, 2018

Test site Designation No. TW0006 with FCC.

Test site registered number IC 4086B with Industry Canada.

## 1.4 Measurement Uncertainty

Test Items	Uncertainty	Remark
Radiated Emission (30MHz ~ 1,000MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.7 dB	Confidence levels of 95%



## 2 Test Configuration of Equipment Under Test

### 2.1 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	Conducted Output Power and EIRP Peak-to-Average Ratio 99% OBW and 26dB Bandwidth Band Edge Conducted Spurious Emission Frequency Stability
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests	
Tests Item	Field Strength of Spurious Radiation
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
Operating Mode > 1GHz	CTX

The output power of 20 MHz (16QAM) is higher than others modes, so it was selected to perform test and its test result was written in the report.

Note 1: The EUT only be used at Y axis.

Note 2: The EUT was powered by PoE, and the PoE was for measurement only, would not be marketed.

Equipment	Brand Name	Model Name	FCC ID
PoE	Cambium	NET-p15-30IN	N/A

### 2.2 Accessories

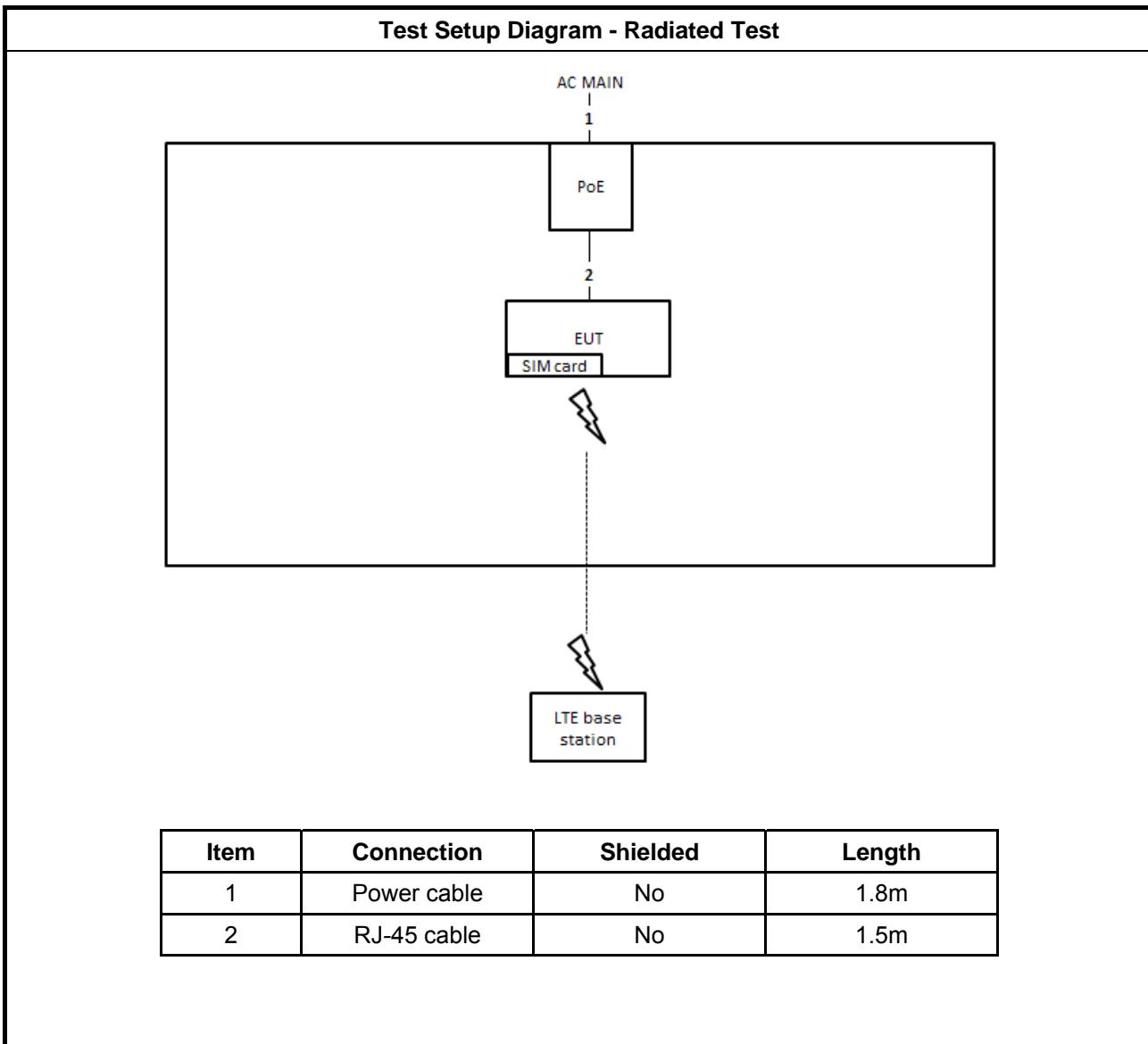
N/A

### 2.3 Support Equipment

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	LTE base station	Anritsu	MT8820C	N/A
2	PoE	Cambium	NET-p15-30IN	N/A
3	SIM card	N/A	N/A	N/A



## 2.4 Test Setup Diagram





## 2.5 Measurement Results Explanation Example

### For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between RF conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level will be exactly the RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

The following shows an offset computation example with RF cable loss 1 dB and a 20dB attenuator.

Example:

Offset (dB) = RF cable loss (dB) + attenuator factor (dB).

$$= 1 + 20 = 21 \text{ (dB)}$$



### 3 Test Result

#### 3.1 Conducted Output Power and EIRP Measurement

##### 3.1.1 Description of the Conducted Output Power and EIRP Measurement

Conducted Output Power Limit	
Base Station: N/A Mobile Station: N/A Fixed Subscriber Station: < 2 Watts	
Equivalent Isotropic Radiated Power (EIRP) Limit	
<input checked="" type="checkbox"/> Band 41	Base Station: $33 \text{ dBW} + 10 \log(X/Y) \text{ dBW} + 10 \log(360/\text{beamwidth}) \text{ dBW}$ , where X=ChBW(MHz), Y=5.5(B and T channel) or 6(M channel) MHz Mobile Station: 2 Watts Fixed Subscriber Station : N/A
<p>Note 1: A system simulator was used to establish communication with the EUT. Its parameters were set to enforce EUT transmitting at the maximum power. The measured power in the radio frequency on the transmitter output terminals shall be reported.</p> <p>Note 2: According to FCC KDB 412172 D01 v01r01 Power Approach, <math>EIRP = P_T + G_T - L_c</math>, <math>ERP = EIRP - 2.15</math>, where <math>P_T</math> = transmitter output power in dBm <math>G_T</math> = gain of the transmitting antenna in dBi <math>L_c</math> = signal attenuation in the connecting cable between the transmitter and antenna in dB</p>	

##### 3.1.2 Measuring Instruments

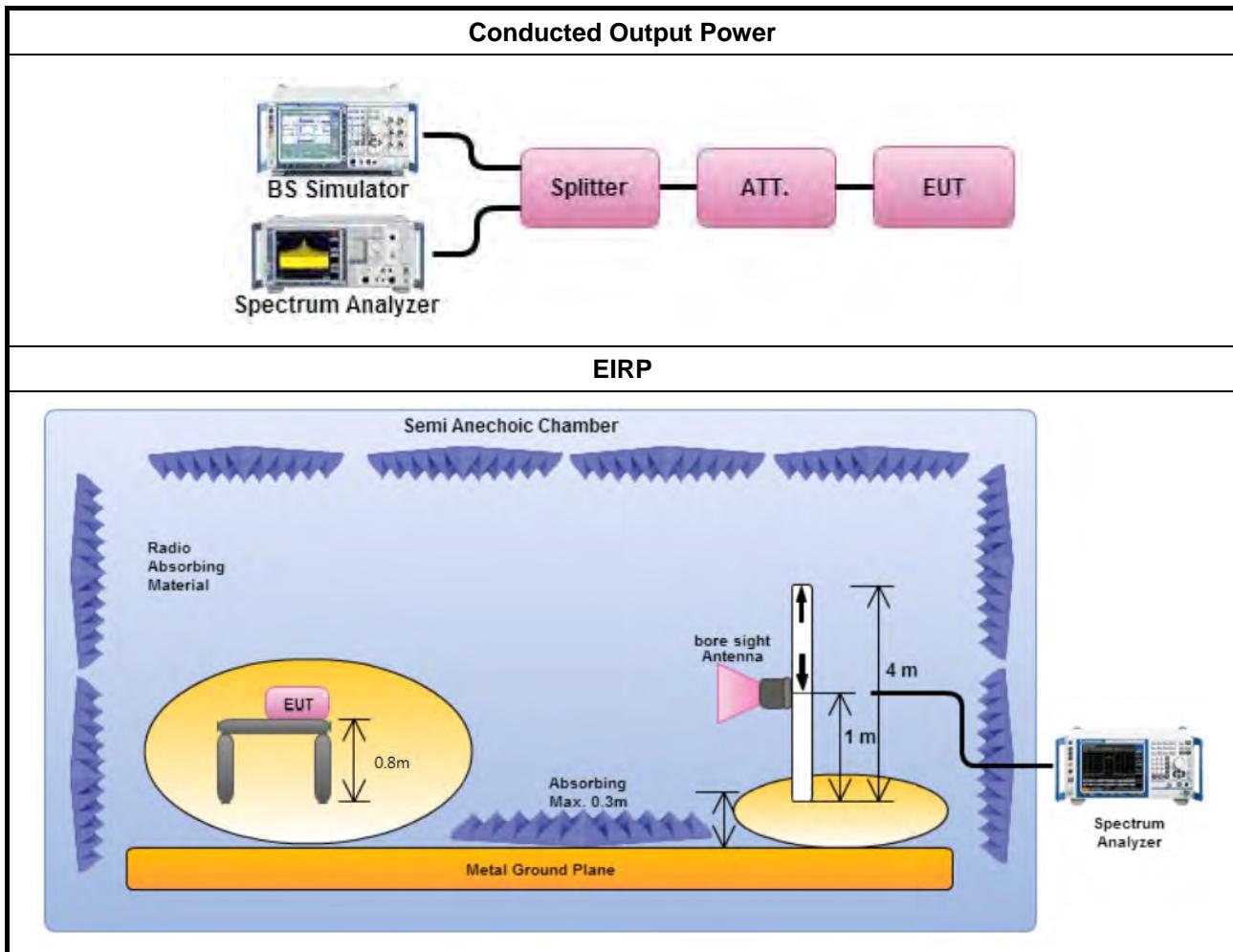
The measuring equipment is listed in the section 4 of this test report.

##### 3.1.3 Test Procedures

1. The transmitter output port was connected to the system simulator.
2. Set EUT at maximum power through system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure and record the power level from the system simulator.



### 3.1.4 Test Setup



### 3.1.5 Test Result of Conducted Output Power

Refer as Appendix A

### 3.1.6 Test Result of EIRP

Refer as Appendix A



## 3.2 Peak-to-Average Ratio Measurement

### 3.2.1 Description of the PAR Measurement

The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

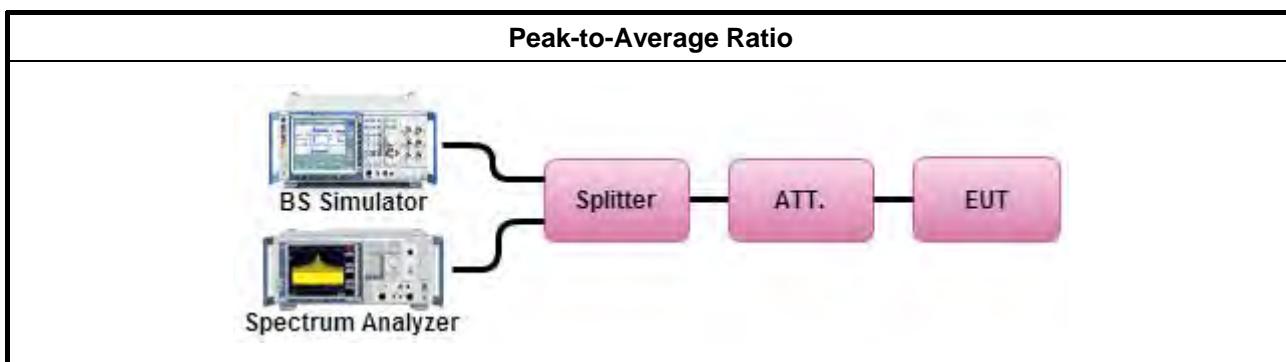
### 3.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

### 3.2.3 Test Procedures

1. The EUT was connected to spectrum and system simulator via a power divider.
2. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
3. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
4. Record the deviation as Peak to Average Ratio.

### 3.2.4 Test Setup



### 3.2.5 Test Result of Peak-to-Average Ratio

Refer as Appendix B



### 3.3 Occupied Bandwidth Measurement

#### 3.3.1 Description of Occupied Bandwidth Measurement

The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

#### 3.3.2 Measuring Instruments

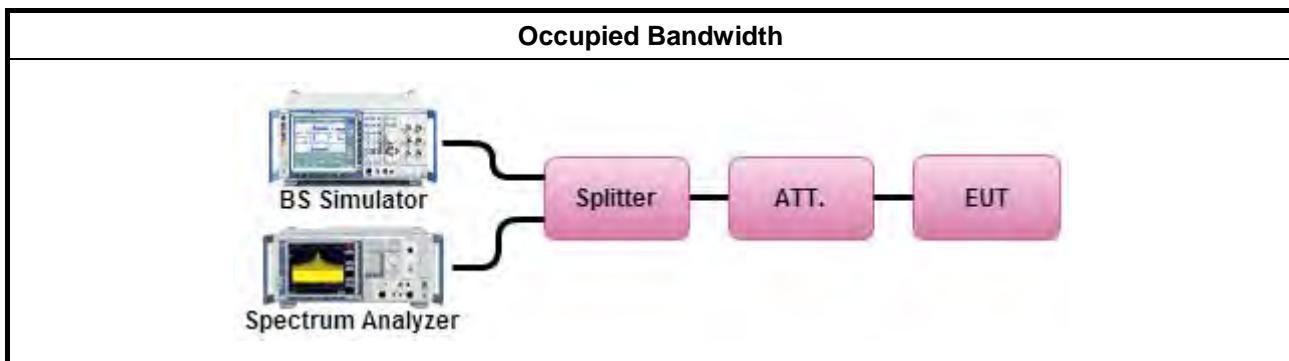
The measuring equipment is listed in the section 4 of this test report.

#### 3.3.3 Test Procedures

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency.  
The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.
3. The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
4. Set the detection mode to peak, and the trace mode to max hold.
5. Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace. (this is the reference value)
6. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
7. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the “-X dB down amplitude” determined in step 6. If a marker is below this “-X dB down amplitude” value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.
8. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.



### 3.3.4 Test Setup



### 3.3.5 Test Result of Occupied Bandwidth

Refer as Appendix C



## 3.4 Conducted Band Edge Measurement

### 3.4.1 Description of Conducted Band Edge Measurement

Conducted Band Edge	
<input checked="" type="checkbox"/> Band 41	For digital base stations: The attenuation shall be not less than $43 + 10 \log (P)$ dB. For mobile digital stations: The attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

### 3.4.2 Measuring Instruments

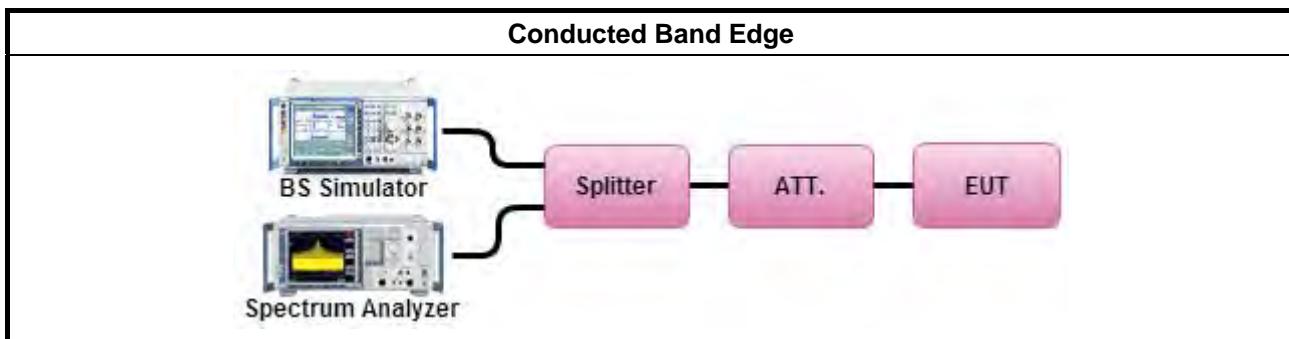
The measuring equipment is listed in the section 4 of this test report.

### 3.4.3 Test Procedures

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The band edges of low and high channels for the highest RF powers were measured.
3. Set RBW  $\geq 1\%$  EBW in the 1MHz band immediately outside and adjacent to the band edge.
4. Beyond the 1 MHz band from the band edge, RBW=1MHz was used.
5. Set spectrum analyzer with RMS detector.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
7. Checked that all the results comply with the emission limit line.



### 3.4.4 Test Setup



### 3.4.5 Test Result of Conducted Band Edge

Refer as Appendix D



## 3.5 Conducted Spurious Emission Measurement

### 3.5.1 Description of Conducted Spurious Emission Measurement

Conducted Band Edge	
<input checked="" type="checkbox"/> Band 41	For digital base stations: The attenuation shall be not less than $43 + 10 \log (P)$ dB. For mobile digital stations: The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $55 + 10 \log (P)$ dB. It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10 <sup>th</sup> harmonic.

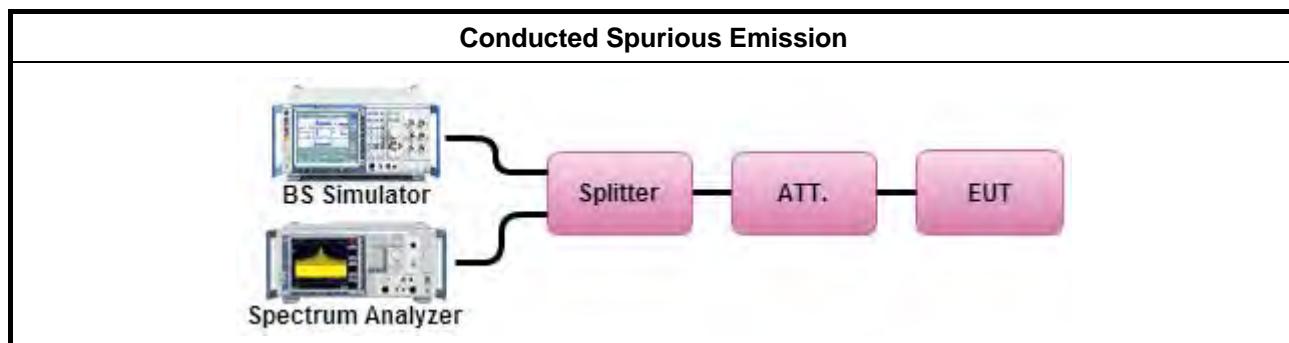
### 3.5.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

### 3.5.3 Test Procedures

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.  
The path loss was compensated to the results for each measurement.
3. The middle channel for the highest RF power within the transmitting frequency was measured.
4. The conducted spurious emission for the whole frequency range was taken.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
6. Set spectrum analyzer with RMS detector.
7. Taking the record of maximum spurious emission.
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

### 3.5.4 Test Setup



### 3.5.5 Test Result of Conducted Spurious Emission

Refer as Appendix D



## 3.6 Field Strength of Spurious Radiation Measurement

### 3.6.1 Description of Field Strength of Spurious Radiated Measurement

Field Strength of Spurious Radiated	
The radiated spurious emission was measured by substitution method according to ANSI / TIA-603-E. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.	
<input checked="" type="checkbox"/> Band 41	The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $55 + 10 \log (P)$ dB.

### 3.6.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

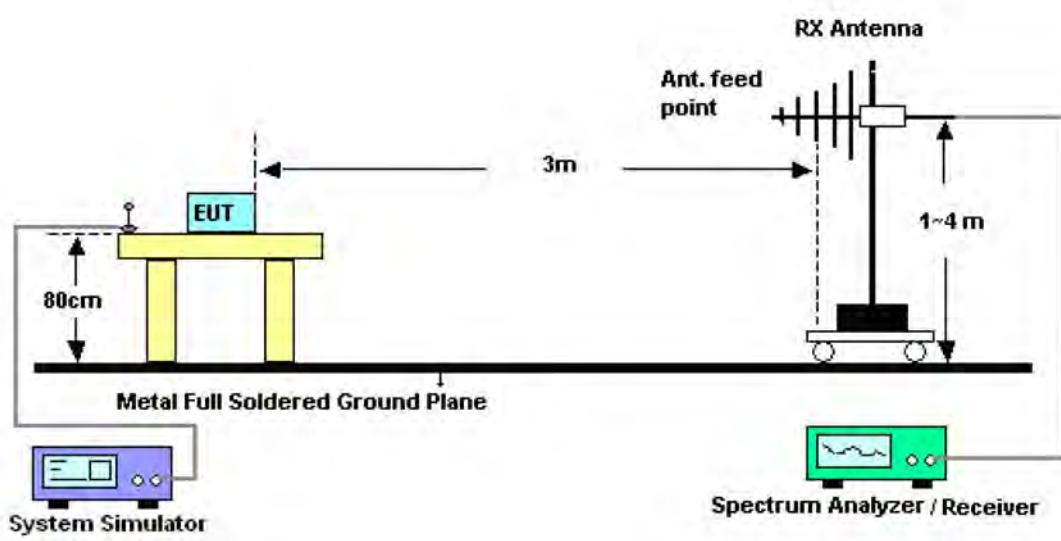
### 3.6.3 Test Procedures

1. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

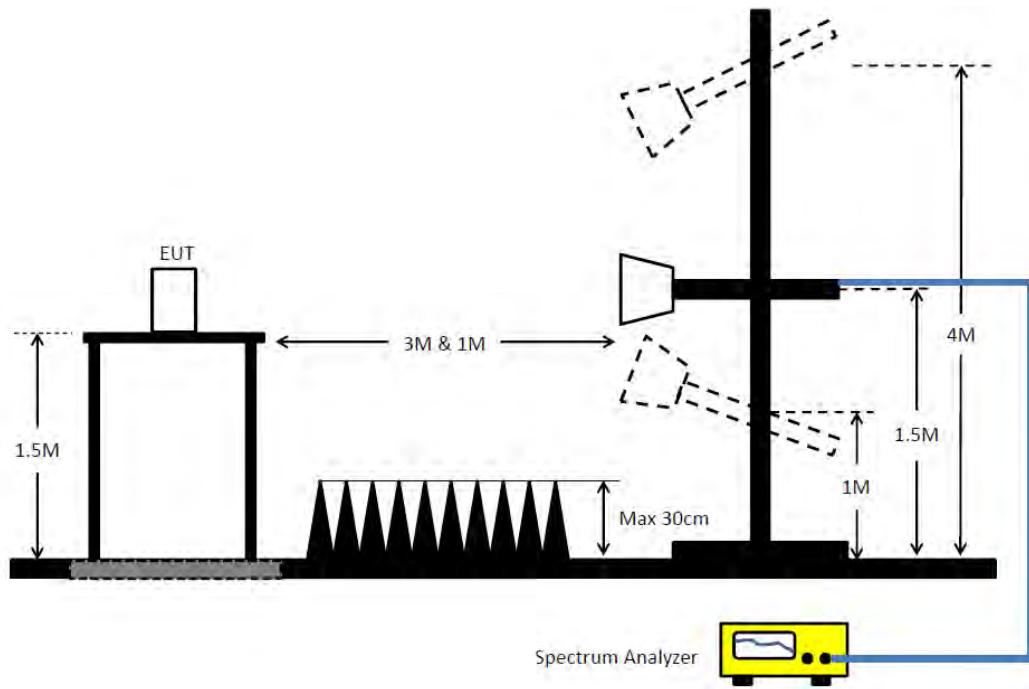


### 3.6.4 Test Setup

For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz





### 3.6.5 Test Result of Radiated Spurious Emission (Below 1GHz)

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

### 3.6.6 Test Result of Field Strength of Spurious Radiated (Above 1GHz)

Refer as Appendix E



## 3.7 Frequency Stability Measurement

### 3.7.1 Description of Frequency Stability Measurement

Frequency Stability	
<input checked="" type="checkbox"/> Band 41	Within Authorized Band
Note: The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block.	

### 3.7.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

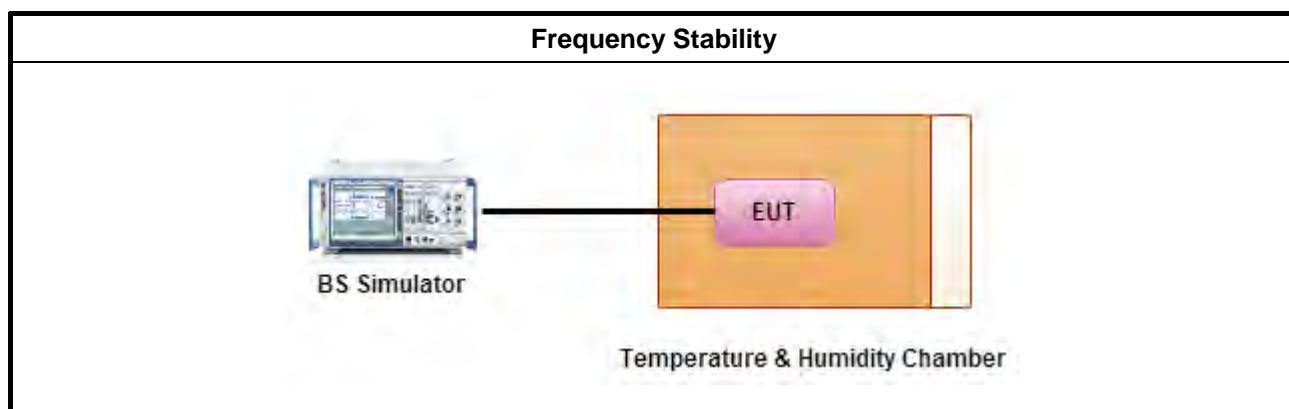
### 3.7.3 Test Procedures for Temperature Variation

1. The EUT was set up in the thermal chamber and connected with the system simulator.
2. With power OFF, the temperature was decreased to -40°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in -40°C steps up to 55°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

### 3.7.4 Test Procedures for Voltage Variation

1. The EUT was placed in a temperature chamber at  $25\pm5^{\circ}\text{C}$  and connected with the system simulator.
2. The power supply voltage to the EUT was varied from 85 to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

### 3.7.5 Test Setup



### 3.7.6 Test Result of Temperature and Voltage Variation

Refer as Appendix F



## 4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 27, 2018	Aug. 26, 2019	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 20, 2017	Nov. 19, 2018	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jun. 28, 2018	Jun. 27, 2019	Radiation (03CH01-CB)
Pre-Amplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	May 02, 2018	May 01, 2019	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 09, 2018	Jan. 08, 2019	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 04, 2018	Jul. 03, 2019	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 23, 2017	Nov. 22, 2018	Radiation (03CH01-CB)
EMI Test	R&S	ESCS	100354	9kHz ~ 2.75GHz	Dec. 08, 2017	Dec. 07, 2018	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-16+17	N/A	30 MHz ~ 1 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16+17	N/A	1 GHz ~ 18 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 21, 2017	Dec. 20, 2018	Conducted (TH01-CB)
Temp. and Humidity Chamber	Ten Billion	TTH-D3SP	TBN-931011	-30~100 degree	Jun. 01, 2018	May 31, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz – 26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz – 26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz – 26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz – 26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 20, 2017	Nov. 19, 2018	Conducted (TH01-CB)
Spectrum analyzer	Keysight	N9020A	MY55400138	10 Hz up to 26.5 GHz	Jan. 02, 2018	Jan. 01, 2019	Conducted (TH01-CB)

**FCC RADIO TEST REPORT****Report No. : FG891915-03**

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
MW Analog Signal Generator	Keysight	N5183A	MY50142965	100kHz~20GHz	Nov. 24, 2017	Nov. 23, 2018	Conducted (TH01-CB)
Vector Signal Generator	Keysight	N5182B	MY53052408	9kHz~6GHz	Jan. 02, 2018	Jan. 01, 2019	Conducted (TH01-CB)

Note: Calibration Interval of instruments listed above is one year.

**Summary**

Mode	Power (dBm)	Power (W)	EIRP (dBm)	EIRP (W)
Band 41	-	-	-	-
Band 41_LTE_5MHz_Nss1,(QPSK)_1TX	28.57	0.719	42.57	18.072
Band 41_LTE_5MHz_Nss1,(16QAM)_1TX	28.71	0.743	42.71	18.664
Band 41_LTE_5MHz_Nss1,(64QAM)_1TX	28.54	0.714	42.54	17.947
Band 41_LTE_10MHz_Nss1,(QPSK)_1TX	28.49	0.706	42.49	17.742
Band 41_LTE_10MHz_Nss1,(16QAM)_1TX	28.75	0.750	42.75	18.836
Band 41_LTE_10MHz_Nss1,(64QAM)_1TX	28.77	0.753	42.77	18.923
Band 41_LTE_15MHz_Nss1,(QPSK)_1TX	27.92	0.619	41.92	17.378
Band 41_LTE_15MHz_Nss1,(16QAM)_1TX	28.05	0.638	42.05	16.032
Band 41_LTE_15MHz_Nss1,(64QAM)_1TX	28.40	0.692	42.4	17.378
Band 41_LTE_20MHz_Nss1,(QPSK)_1TX	28.92	0.780	42.92	19.588
Band 41_LTE_20MHz_Nss1,(16QAM)_1TX	29.05	0.804	43.05	20.184
Band 41_LTE_20MHz_Nss1,(64QAM)_1TX	28.65	0.733	42.65	18.408



## Result

Mode	Result	RB Start	RB	P1 (dBm)	Power (dBm)	Power (W)	Power Lim. (W)	DG (dBi)	EIRP (dBm)	EIRP (W)
LTE_5MHz_Nss1,(QPSK)_1TX	-	-	-	-	-	-	-	-	-	-
2498.5MHz	Pass	0	1	28.29	28.29	0.675	2	14	42.29	16.943
2498.5MHz	Pass	13	1	28.57	28.57	0.719	2	14	42.57	18.072
2498.5MHz	Pass	24	1	28.26	28.26	0.670	2	14	42.26	16.827
2498.5MHz	Pass	0	12	28.37	28.37	0.687	2	14	42.37	17.258
2498.5MHz	Pass	7	12	28.41	28.41	0.693	2	14	42.41	17.418
2498.5MHz	Pass	13	12	28.33	28.33	0.681	2	14	42.33	17.100
2498.5MHz	Pass	0	25	28.38	28.38	0.689	2	14	42.38	17.298
2593MHz	Pass	0	1	27.14	27.14	0.518	2	14	41.14	13.002
2593MHz	Pass	13	1	27.71	27.71	0.590	2	14	41.71	14.825
2593MHz	Pass	24	1	27.36	27.36	0.545	2	14	41.36	13.677
2593MHz	Pass	0	12	27.56	27.56	0.570	2	14	41.56	14.322
2593MHz	Pass	7	12	27.69	27.69	0.587	2	14	41.69	14.757
2593MHz	Pass	13	12	27.56	27.56	0.570	2	14	41.56	14.322
2593MHz	Pass	0	25	27.58	27.58	0.573	2	14	41.58	14.388
2687.5MHz	Pass	0	1	26.53	26.53	0.450	2	14	40.53	11.298
2687.5MHz	Pass	13	1	26.66	26.66	0.463	2	14	40.66	11.641
2687.5MHz	Pass	24	1	26.22	26.22	0.419	2	14	40.22	10.520
2687.5MHz	Pass	0	12	26.51	26.51	0.448	2	14	40.51	11.246
2687.5MHz	Pass	7	12	26.63	26.63	0.460	2	14	40.63	11.561
2687.5MHz	Pass	13	12	26.48	26.48	0.445	2	14	40.48	11.169
2687.5MHz	Pass	0	25	26.52	26.52	0.449	2	14	40.52	11.272
LTE_5MHz_Nss1,(16QAM)_1TX	-	-	-	-	-	-	-	-	-	-
2498.5MHz	Pass	0	1	28.64	28.64	0.731	2	14	42.64	18.365
2498.5MHz	Pass	13	1	28.71	28.71	0.743	2	14	42.71	18.664
2498.5MHz	Pass	24	1	28.50	28.50	0.708	2	14	42.5	17.783
2498.5MHz	Pass	0	12	28.42	28.42	0.695	2	14	42.42	17.458
2498.5MHz	Pass	7	12	28.47	28.47	0.703	2	14	42.47	17.660
2498.5MHz	Pass	13	12	28.37	28.37	0.687	2	14	42.37	17.258
2498.5MHz	Pass	0	25	28.43	28.43	0.697	2	14	42.43	17.498
2593MHz	Pass	0	1	27.92	27.92	0.619	2	14	41.92	15.560
2593MHz	Pass	13	1	27.91	27.91	0.618	2	14	41.91	15.524
2593MHz	Pass	24	1	28.16	28.16	0.655	2	14	42.16	16.444
2593MHz	Pass	0	12	27.68	27.68	0.586	2	14	41.68	14.723
2593MHz	Pass	7	12	27.76	27.76	0.597	2	14	41.76	14.997
2593MHz	Pass	13	12	27.71	27.71	0.590	2	14	41.71	14.825
2593MHz	Pass	0	25	27.74	27.74	0.594	2	14	41.74	14.928
2687.5MHz	Pass	0	1	26.48	26.48	0.445	2	14	40.48	11.169
2687.5MHz	Pass	13	1	27.59	27.59	0.574	2	14	41.59	14.421
2687.5MHz	Pass	24	1	26.76	26.76	0.474	2	14	40.76	11.912
2687.5MHz	Pass	0	12	26.17	26.17	0.414	2	14	40.17	10.399
2687.5MHz	Pass	7	12	27.16	27.16	0.520	2	14	41.16	13.062
2687.5MHz	Pass	13	12	26.75	26.75	0.473	2	14	40.75	11.885
2687.5MHz	Pass	0	25	26.58	26.58	0.455	2	14	40.58	11.429



## AV Power Result

Appendix A

Mode	Result	RB Start	RB	P1 (dBm)	Power (dBm)	Power (W)	Power Lim. (W)	DG (dBi)	EIRP (dBm)	EIRP (W)
LTE_5MHz_Nss1,(64QAM)_1TX	-	-	-	-	-	-	-	-	-	-
2498.5MHz	Pass	0	1	28.54	28.54	0.714	2	14	42.54	17.947
2498.5MHz	Pass	13	1	28.45	28.45	0.700	2	14	42.45	17.579
2498.5MHz	Pass	24	1	27.92	27.92	0.619	2	14	41.92	15.560
2498.5MHz	Pass	0	12	28.32	28.32	0.679	2	14	42.32	17.061
2498.5MHz	Pass	7	12	28.43	28.43	0.697	2	14	42.43	17.498
2498.5MHz	Pass	13	12	28.29	28.29	0.675	2	14	42.29	16.943
2498.5MHz	Pass	0	25	28.39	28.39	0.690	2	14	42.39	17.338
2593MHz	Pass	0	1	27.53	27.53	0.566	2	14	41.53	14.223
2593MHz	Pass	13	1	27.88	27.88	0.614	2	14	41.88	15.417
2593MHz	Pass	24	1	27.57	27.57	0.571	2	14	41.57	14.355
2593MHz	Pass	0	12	27.53	27.53	0.566	2	14	41.53	14.223
2593MHz	Pass	7	12	27.73	27.73	0.593	2	14	41.73	14.894
2593MHz	Pass	13	12	27.55	27.55	0.569	2	14	41.55	14.289
2593MHz	Pass	0	25	27.64	27.64	0.581	2	14	41.64	14.588
2687.5MHz	Pass	0	1	26.58	26.58	0.455	2	14	40.58	11.429
2687.5MHz	Pass	13	1	26.92	26.92	0.492	2	14	40.92	12.359
2687.5MHz	Pass	24	1	26.18	26.18	0.415	2	14	40.18	10.423
2687.5MHz	Pass	0	12	26.61	26.61	0.458	2	14	40.61	11.508
2687.5MHz	Pass	7	12	26.67	26.67	0.465	2	14	40.67	11.668
2687.5MHz	Pass	13	12	26.50	26.50	0.447	2	14	40.5	11.220
2687.5MHz	Pass	0	25	26.59	26.59	0.456	2	14	40.59	11.455
LTE_10MHz_Nss1,(QPSK)_1TX	-	-	-	-	-	-	-	-	-	-
2501MHz	Pass	0	1	27.84	27.84	0.608	2	14	41.84	15.276
2501MHz	Pass	25	1	28.49	28.49	0.706	2	14	42.49	17.742
2501MHz	Pass	49	1	27.26	27.26	0.532	2	14	41.26	13.366
2501MHz	Pass	0	25	28.16	28.16	0.655	2	14	42.16	16.444
2501MHz	Pass	13	25	28.32	28.32	0.679	2	14	42.32	17.061
2501MHz	Pass	25	25	28.00	28.00	0.631	2	14	42	15.849
2501MHz	Pass	0	50	28.08	28.08	0.643	2	14	42.08	16.144
2593MHz	Pass	0	1	26.46	26.46	0.443	2	14	40.46	11.117
2593MHz	Pass	25	1	27.40	27.40	0.550	2	14	41.4	13.804
2593MHz	Pass	49	1	27.08	27.08	0.511	2	14	41.08	12.823
2593MHz	Pass	0	25	27.31	27.31	0.538	2	14	41.31	13.521
2593MHz	Pass	13	25	27.55	27.55	0.569	2	14	41.55	14.289
2593MHz	Pass	25	25	27.34	27.34	0.542	2	14	41.34	13.614
2593MHz	Pass	0	50	27.41	27.41	0.551	2	14	41.41	13.836
2685MHz	Pass	0	1	25.82	25.82	0.382	2	14	39.82	9.594
2685MHz	Pass	25	1	26.84	26.84	0.483	2	14	40.84	12.134
2685MHz	Pass	49	1	26.15	26.15	0.412	2	14	40.15	10.351
2685MHz	Pass	0	25	26.28	26.28	0.425	2	14	40.28	10.666
2685MHz	Pass	13	25	26.55	26.55	0.452	2	14	40.55	11.350
2685MHz	Pass	25	25	26.31	26.31	0.428	2	14	40.31	10.740
2685MHz	Pass	0	50	26.26	26.26	0.423	2	14	40.26	10.617
LTE_10MHz_Nss1,(16QAM)_1TX	-	-	-	-	-	-	-	-	-	-



## AV Power Result

## Appendix A

Mode	Result	RB Start	RB	P1 (dBm)	Power (dBm)	Power (W)	Power Lim. (W)	DG (dBi)	EIRP (dBm)	EIRP (W)
2501MHz	Pass	0	1	28.26	28.26	0.670	2	14	42.26	16.827
2501MHz	Pass	25	1	28.75	28.75	0.750	2	14	42.75	18.836
2501MHz	Pass	49	1	27.94	27.94	0.622	2	14	41.94	15.631
2501MHz	Pass	0	25	28.22	28.22	0.664	2	14	42.22	16.672
2501MHz	Pass	13	25	28.34	28.34	0.682	2	14	42.34	17.140
2501MHz	Pass	25	25	28.05	28.05	0.638	2	14	42.05	16.032
2501MHz	Pass	0	50	28.11	28.11	0.647	2	14	42.11	16.255
2593MHz	Pass	0	1	27.00	27.00	0.501	2	14	41	12.589
2593MHz	Pass	25	1	27.76	27.76	0.597	2	14	41.76	14.997
2593MHz	Pass	49	1	27.15	27.15	0.519	2	14	41.15	13.032
2593MHz	Pass	0	25	27.51	27.51	0.564	2	14	41.51	14.158
2593MHz	Pass	13	25	27.69	27.69	0.587	2	14	41.69	14.757
2593MHz	Pass	25	25	27.47	27.47	0.558	2	14	41.47	14.028
2593MHz	Pass	0	50	27.41	27.41	0.551	2	14	41.41	13.836
2685MHz	Pass	0	1	25.97	25.97	0.395	2	14	39.97	9.931
2685MHz	Pass	25	1	26.86	26.86	0.485	2	14	40.86	12.190
2685MHz	Pass	49	1	25.90	25.90	0.389	2	14	39.9	9.772
2685MHz	Pass	0	25	26.43	26.43	0.440	2	14	40.43	11.041
2685MHz	Pass	13	25	26.63	26.63	0.460	2	14	40.63	11.561
2685MHz	Pass	25	25	26.42	26.42	0.439	2	14	40.42	11.015
2685MHz	Pass	0	50	26.38	26.38	0.435	2	14	40.38	10.914
LTE_10MHz_Nss1,(64QAM)_1TX	-	-	-	-	-	-	-	-	-	-
2501MHz	Pass	0	1	27.70	27.70	0.589	2	14	41.7	14.791
2501MHz	Pass	25	1	28.77	28.77	0.753	2	14	42.77	18.923
2501MHz	Pass	49	1	27.74	27.74	0.594	2	14	41.74	14.928
2501MHz	Pass	0	25	28.27	28.27	0.671	2	14	42.27	16.866
2501MHz	Pass	13	25	28.41	28.41	0.693	2	14	42.41	17.418
2501MHz	Pass	25	25	28.12	28.12	0.649	2	14	42.12	16.293
2501MHz	Pass	0	50	28.23	28.23	0.665	2	14	42.23	16.711
2593MHz	Pass	0	1	26.97	26.97	0.498	2	14	40.97	12.503
2593MHz	Pass	25	1	27.80	27.80	0.603	2	14	41.8	15.136
2593MHz	Pass	49	1	26.74	26.74	0.472	2	14	40.74	11.858
2593MHz	Pass	0	25	27.50	27.50	0.562	2	14	41.5	14.125
2593MHz	Pass	13	25	27.72	27.72	0.592	2	14	41.72	14.859
2593MHz	Pass	25	25	27.44	27.44	0.555	2	14	41.44	13.932
2593MHz	Pass	0	50	27.44	27.44	0.555	2	14	41.44	13.932
2685MHz	Pass	0	1	25.90	25.90	0.389	2	14	39.9	9.772
2685MHz	Pass	25	1	27.10	27.10	0.513	2	14	41.1	12.882
2685MHz	Pass	49	1	25.96	25.96	0.394	2	14	39.96	9.908
2685MHz	Pass	0	25	26.53	26.53	0.450	2	14	40.53	11.298
2685MHz	Pass	13	25	26.59	26.59	0.456	2	14	40.59	11.455
2685MHz	Pass	25	25	26.42	26.42	0.439	2	14	40.42	11.015
2685MHz	Pass	0	50	26.45	26.45	0.442	2	14	40.45	11.092
LTE_15MHz_Nss1,(QPSK)_1TX	-	-	-	-	-	-	-	-	-	-
2503.5MHz	Pass	0	1	26.98	26.98	0.499	2	14	40.98	12.531



## AV Power Result

Appendix A

Mode	Result	RB Start	RB	P1 (dBm)	Power (dBm)	Power (W)	Power Lim. (W)	DG (dBi)	EIRP (dBm)	EIRP (W)
2503.5MHz	Pass	38	1	27.89	27.89	0.615	2	14	41.89	15.453
2503.5MHz	Pass	74	1	26.34	26.34	0.431	2	14	40.34	10.814
2503.5MHz	Pass	0	36	27.71	27.71	0.590	2	14	41.71	14.825
2503.5MHz	Pass	20	36	27.92	27.92	0.619	2	14	41.92	15.560
2503.5MHz	Pass	39	36	27.54	27.54	0.568	2	14	41.54	14.256
2503.5MHz	Pass	0	75	27.58	27.58	0.573	2	14	41.58	14.388
2593MHz	Pass	0	1	26.20	26.20	0.417	2	14	40.2	10.471
2593MHz	Pass	38	1	27.58	27.58	0.573	2	14	41.58	14.388
2593MHz	Pass	74	1	25.88	25.88	0.387	2	14	39.88	9.727
2593MHz	Pass	0	36	26.89	26.89	0.489	2	14	40.89	12.274
2593MHz	Pass	20	36	27.21	27.21	0.526	2	14	41.21	13.213
2593MHz	Pass	39	36	26.88	26.88	0.488	2	14	40.88	12.246
2593MHz	Pass	0	75	26.87	26.87	0.486	2	14	40.87	12.218
2682.5MHz	Pass	0	1	25.06	25.06	0.321	2	14	39.06	8.054
2682.5MHz	Pass	38	1	26.16	26.16	0.413	2	14	40.16	10.375
2682.5MHz	Pass	74	1	25.17	25.17	0.329	2	14	39.17	8.260
2682.5MHz	Pass	0	36	25.87	25.87	0.386	2	14	39.87	9.705
2682.5MHz	Pass	20	36	26.12	26.12	0.409	2	14	40.12	10.280
2682.5MHz	Pass	39	36	25.75	25.75	0.376	2	14	39.75	9.441
2682.5MHz	Pass	0	75	25.80	25.80	0.380	2	14	39.8	9.550
LTE_15MHz_Nss1,(16QAM)_1TX	-	-	-	-	-	-	-	-	-	-
2503.5MHz	Pass	0	1	27.60	27.60	0.575	2	14	41.6	14.454
2503.5MHz	Pass	38	1	27.90	27.90	0.617	2	14	41.9	15.488
2503.5MHz	Pass	74	1	26.92	26.92	0.492	2	14	40.92	12.359
2503.5MHz	Pass	0	36	27.76	27.76	0.597	2	14	41.76	14.997
2503.5MHz	Pass	20	36	28.05	28.05	0.638	2	14	42.05	16.032
2503.5MHz	Pass	39	36	27.61	27.61	0.577	2	14	41.61	14.488
2503.5MHz	Pass	0	75	27.69	27.69	0.587	2	14	41.69	14.757
2593MHz	Pass	0	1	26.89	26.89	0.489	2	14	40.89	12.274
2593MHz	Pass	38	1	27.99	27.99	0.630	2	14	41.99	15.812
2593MHz	Pass	74	1	26.42	26.42	0.439	2	14	40.42	11.015
2593MHz	Pass	0	36	26.98	26.98	0.499	2	14	40.98	12.531
2593MHz	Pass	20	36	27.35	27.35	0.543	2	14	41.35	13.646
2593MHz	Pass	39	36	26.95	26.95	0.495	2	14	40.95	12.445
2593MHz	Pass	0	75	27.00	27.00	0.501	2	14	41	12.589
2682.5MHz	Pass	0	1	25.80	25.80	0.380	2	14	39.8	9.550
2682.5MHz	Pass	38	1	26.74	26.74	0.472	2	14	40.74	11.858
2682.5MHz	Pass	74	1	25.58	25.58	0.361	2	14	39.58	9.078
2682.5MHz	Pass	0	36	26.01	26.01	0.399	2	14	40.01	10.023
2682.5MHz	Pass	20	36	26.28	26.28	0.425	2	14	40.28	10.666
2682.5MHz	Pass	39	36	25.93	25.93	0.392	2	14	39.93	9.840
2682.5MHz	Pass	0	75	26.04	26.04	0.402	2	14	40.04	10.093
LTE_15MHz_Nss1,(64QAM)_1TX	-	-	-	-	-	-	-	-	-	-
2503.5MHz	Pass	0	1	27.57	27.57	0.571	2	14	41.57	14.355
2503.5MHz	Pass	38	1	28.40	28.40	0.692	2	14	42.4	17.378



## AV Power Result

## Appendix A

Mode	Result	RB Start	RB	P1 (dBm)	Power (dBm)	Power (W)	Power Lim. (W)	DG (dBi)	EIRP (dBm)	EIRP (W)
2503.5MHz	Pass	74	1	26.68	26.68	0.466	2	14	40.68	11.695
2503.5MHz	Pass	0	36	27.61	27.61	0.577	2	14	41.61	14.488
2503.5MHz	Pass	20	36	27.93	27.93	0.621	2	14	41.93	15.596
2503.5MHz	Pass	39	36	27.51	27.51	0.564	2	14	41.51	14.158
2503.5MHz	Pass	0	75	27.63	27.63	0.579	2	14	41.63	14.555
2593MHz	Pass	0	1	26.53	26.53	0.450	2	14	40.53	11.298
2593MHz	Pass	38	1	27.74	27.74	0.594	2	14	41.74	14.928
2593MHz	Pass	74	1	26.00	26.00	0.398	2	14	40	10.000
2593MHz	Pass	0	36	26.91	26.91	0.491	2	14	40.91	12.331
2593MHz	Pass	20	36	27.27	27.27	0.533	2	14	41.27	13.397
2593MHz	Pass	39	36	26.85	26.85	0.484	2	14	40.85	12.162
2593MHz	Pass	0	75	26.92	26.92	0.492	2	14	40.92	12.359
2682.5MHz	Pass	0	1	25.33	25.33	0.341	2	14	39.33	8.570
2682.5MHz	Pass	38	1	26.65	26.65	0.462	2	14	40.65	11.614
2682.5MHz	Pass	74	1	25.04	25.04	0.319	2	14	39.04	8.017
2682.5MHz	Pass	0	36	25.94	25.94	0.393	2	14	39.94	9.863
2682.5MHz	Pass	20	36	26.23	26.23	0.420	2	14	40.23	10.544
2682.5MHz	Pass	39	36	25.86	25.86	0.385	2	14	39.86	9.683
2682.5MHz	Pass	0	75	25.90	25.90	0.389	2	14	39.9	9.772
LTE_20MHz_Nss1,(QPSK)_1TX	-	-	-	-	-	-	-	-	-	-
2506MHz	Pass	0	1	28.92	28.92	0.780	2	14	42.92	19.588
2506MHz	Pass	50	1	28.07	28.07	0.641	2	14	42.07	16.106
2506MHz	Pass	99	1	27.86	27.86	0.611	2	14	41.86	15.346
2506MHz	Pass	0	50	28.31	28.31	0.678	2	14	42.31	17.022
2506MHz	Pass	25	50	28.11	28.11	0.647	2	14	42.11	16.255
2506MHz	Pass	50	50	28.15	28.15	0.653	2	14	42.15	16.406
2506MHz	Pass	0	100	28.23	28.23	0.665	2	14	42.23	16.711
2593MHz	Pass	0	1	28.02	28.02	0.634	2	14	42.02	15.922
2593MHz	Pass	50	1	26.95	26.95	0.495	2	14	40.95	12.445
2593MHz	Pass	99	1	27.25	27.25	0.531	2	14	41.25	13.335
2593MHz	Pass	0	50	27.57	27.57	0.571	2	14	41.57	14.355
2593MHz	Pass	25	50	27.51	27.51	0.564	2	14	41.51	14.158
2593MHz	Pass	50	50	27.55	27.55	0.569	2	14	41.55	14.289
2593MHz	Pass	0	100	27.57	27.57	0.571	2	14	41.57	14.355
2680MHz	Pass	0	1	27.05	27.05	0.507	2	14	41.05	12.735
2680MHz	Pass	50	1	26.00	26.00	0.398	2	14	40	10.000
2680MHz	Pass	99	1	26.86	26.86	0.485	2	14	40.86	12.190
2680MHz	Pass	0	50	26.59	26.59	0.456	2	14	40.59	11.455
2680MHz	Pass	25	50	26.43	26.43	0.440	2	14	40.43	11.041
2680MHz	Pass	50	50	26.52	26.52	0.449	2	14	40.52	11.272
2680MHz	Pass	0	100	26.54	26.54	0.451	2	14	40.54	11.324
LTE_20MHz_Nss1,(16QAM)_1TX	-	-	-	-	-	-	-	-	-	-
2506MHz	Pass	0	1	29.05	29.05	0.804	2	14	43.05	20.184
2506MHz	Pass	50	1	28.51	28.51	0.710	2	14	42.51	17.824
2506MHz	Pass	99	1	28.87	28.87	0.771	2	14	42.87	19.364



## AV Power Result

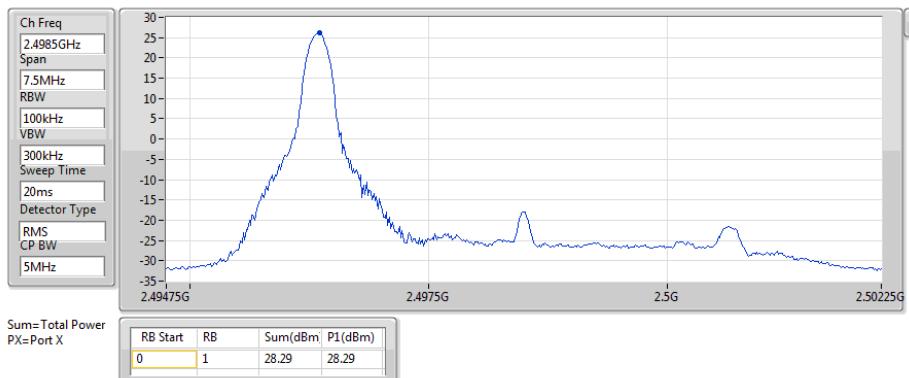
Appendix A

Mode	Result	RB Start	RB	P1 (dBm)	Power (dBm)	Power (W)	Power Lim. (W)	DG (dBi)	EIRP (dBm)	EIRP (W)
2506MHz	Pass	0	50	28.36	28.36	0.685	2	14	42.36	17.219
2506MHz	Pass	25	50	28.15	28.15	0.653	2	14	42.15	16.406
2506MHz	Pass	50	50	28.16	28.16	0.655	2	14	42.16	16.444
2506MHz	Pass	0	100	28.23	28.23	0.665	2	14	42.23	16.711
2593MHz	Pass	0	1	28.30	28.30	0.676	2	14	42.3	16.982
2593MHz	Pass	50	1	28.08	28.08	0.643	2	14	42.08	16.144
2593MHz	Pass	99	1	28.29	28.29	0.675	2	14	42.29	16.943
2593MHz	Pass	0	50	27.65	27.65	0.582	2	14	41.65	14.622
2593MHz	Pass	25	50	27.50	27.50	0.562	2	14	41.5	14.125
2593MHz	Pass	50	50	27.60	27.60	0.575	2	14	41.6	14.454
2593MHz	Pass	0	100	27.71	27.71	0.590	2	14	41.71	14.825
2680MHz	Pass	0	1	27.67	27.67	0.585	2	14	41.67	14.689
2680MHz	Pass	50	1	27.13	27.13	0.516	2	14	41.13	12.972
2680MHz	Pass	99	1	26.87	26.87	0.486	2	14	40.87	12.218
2680MHz	Pass	0	50	26.76	26.76	0.474	2	14	40.76	11.912
2680MHz	Pass	25	50	26.56	26.56	0.453	2	14	40.56	11.376
2680MHz	Pass	50	50	26.69	26.69	0.467	2	14	40.69	11.722
2680MHz	Pass	0	100	26.67	26.67	0.465	2	14	40.67	11.668
LTE_20MHz_Nss1,(64QAM)_1TX	-	-	-	-	-	-	-	-	-	-
2506MHz	Pass	0	1	28.57	28.57	0.719	2	14	42.57	18.072
2506MHz	Pass	50	1	27.97	27.97	0.627	2	14	41.97	15.740
2506MHz	Pass	99	1	28.65	28.65	0.733	2	14	42.65	18.408
2506MHz	Pass	0	50	28.43	28.43	0.697	2	14	42.43	17.498
2506MHz	Pass	25	50	28.22	28.22	0.664	2	14	42.22	16.672
2506MHz	Pass	50	50	28.17	28.17	0.656	2	14	42.17	16.482
2506MHz	Pass	0	100	28.22	28.22	0.664	2	14	42.22	16.672
2593MHz	Pass	0	1	28.16	28.16	0.655	2	14	42.16	16.444
2593MHz	Pass	50	1	28.20	28.20	0.661	2	14	42.2	16.596
2593MHz	Pass	99	1	28.09	28.09	0.644	2	14	42.09	16.181
2593MHz	Pass	0	50	27.62	27.62	0.578	2	14	41.62	14.521
2593MHz	Pass	25	50	27.58	27.58	0.573	2	14	41.58	14.388
2593MHz	Pass	50	50	27.65	27.65	0.582	2	14	41.65	14.622
2593MHz	Pass	0	100	27.62	27.62	0.578	2	14	41.62	14.521
2680MHz	Pass	0	1	27.01	27.01	0.502	2	14	41.01	12.618
2680MHz	Pass	50	1	26.91	26.91	0.491	2	14	40.91	12.331
2680MHz	Pass	99	1	26.84	26.84	0.483	2	14	40.84	12.134
2680MHz	Pass	0	50	26.79	26.79	0.478	2	14	40.79	11.995
2680MHz	Pass	25	50	26.60	26.60	0.457	2	14	40.6	11.482
2680MHz	Pass	50	50	26.62	26.62	0.459	2	14	40.62	11.535
2680MHz	Pass	0	100	26.67	26.67	0.465	2	14	40.67	11.668

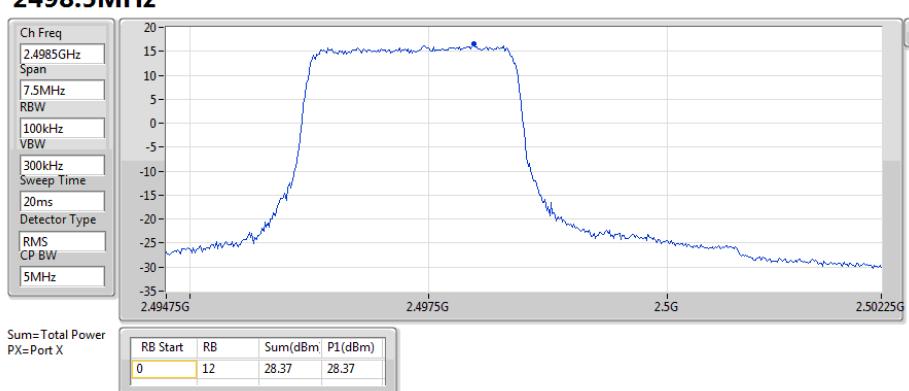
**DG** = Directional Gain; **Port X** = Port X output power

**Band 41\_LTE\_5MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2498.5MHz**

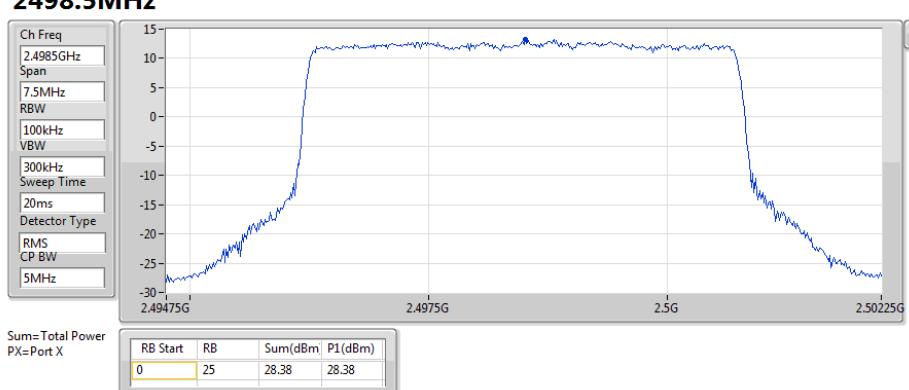
13/09/2018

 Port 1 

**Band 41\_LTE\_5MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2498.5MHz**

13/09/2018

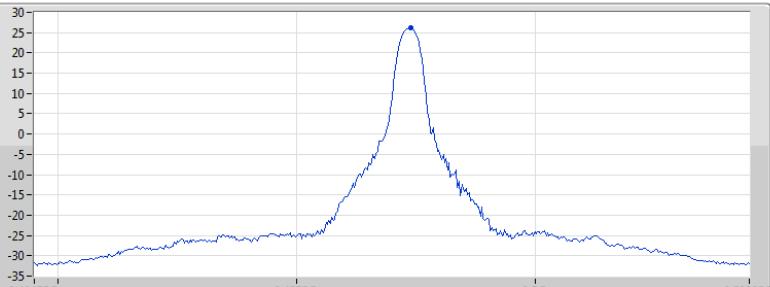
 Port 1 

**Band 41\_LTE\_5MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2498.5MHz**

13/09/2018

 Port 1 


**Band 41\_LTE\_5MHz\_Nss1,(QPSK)\_1TX**
**2498.5MHz**

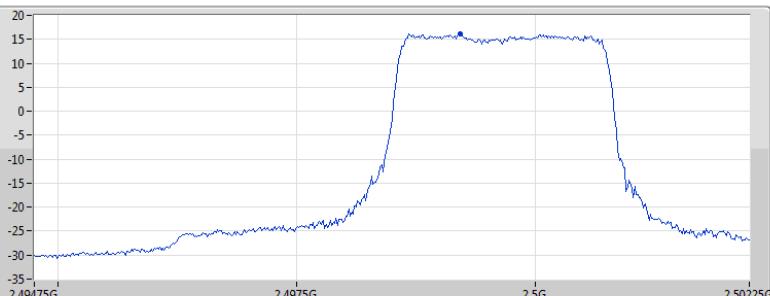
Ch Freq
2.4985GHz
Span
7.5MHz
RBW
100kHz
VBW
300kHz
Sweep Time
20ms
Detector Type
RMS
CP BW
5MHz

Sum=Total Power  
PX=Port X

**AV Power**

13/09/2018

Port 1 
**Band 41\_LTE\_5MHz\_Nss1,(QPSK)\_1TX**
**2498.5MHz**

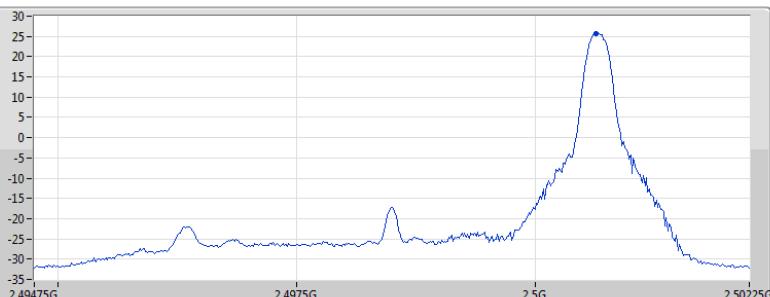
Ch Freq
2.4985GHz
Span
7.5MHz
RBW
100kHz
VBW
300kHz
Sweep Time
20ms
Detector Type
RMS
CP BW
5MHz

Sum=Total Power  
PX=Port X

**AV Power**

13/09/2018

Port 1 
**Band 41\_LTE\_5MHz\_Nss1,(QPSK)\_1TX**
**2498.5MHz**

Ch Freq
2.4985GHz
Span
7.5MHz
RBW
100kHz
VBW
300kHz
Sweep Time
20ms
Detector Type
RMS
CP BW
5MHz

Sum=Total Power  
PX=Port X

**AV Power**

13/09/2018

Port 1 



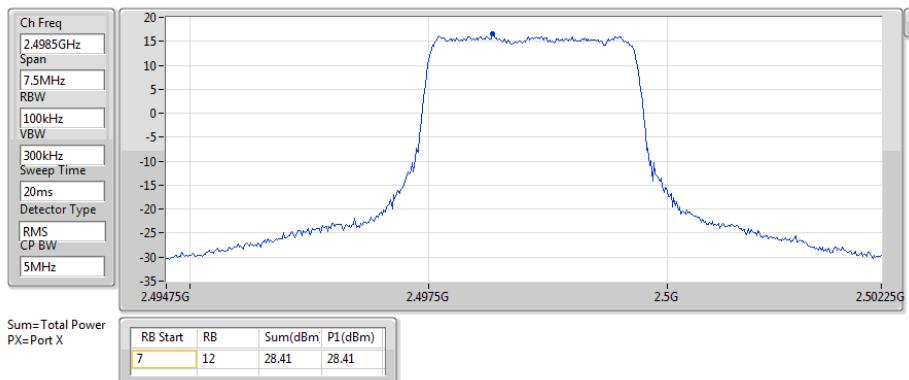
## Band 41\_LTE\_5MHz\_Nss1,(QPSK)\_1TX

AV Power

2498.5MHz

13/09/2018

Port 1



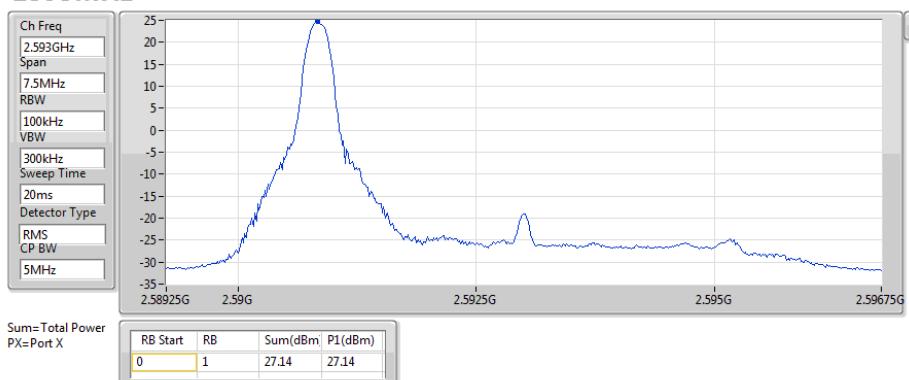
## Band 41\_LTE\_5MHz\_Nss1,(QPSK)\_1TX

AV Power

2593MHz

13/09/2018

Port 1



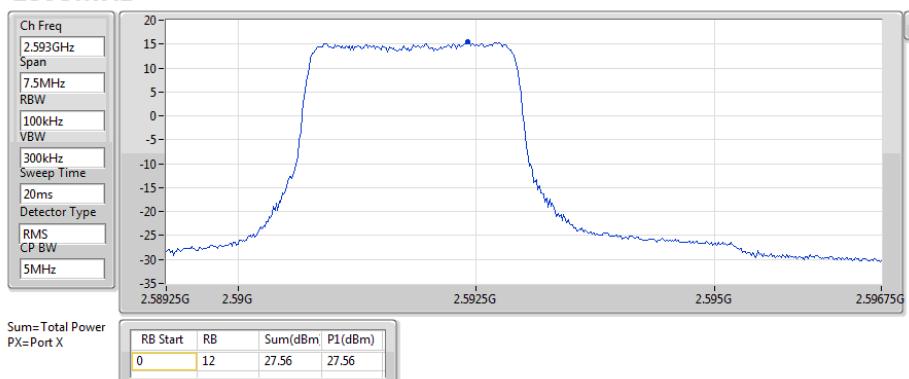
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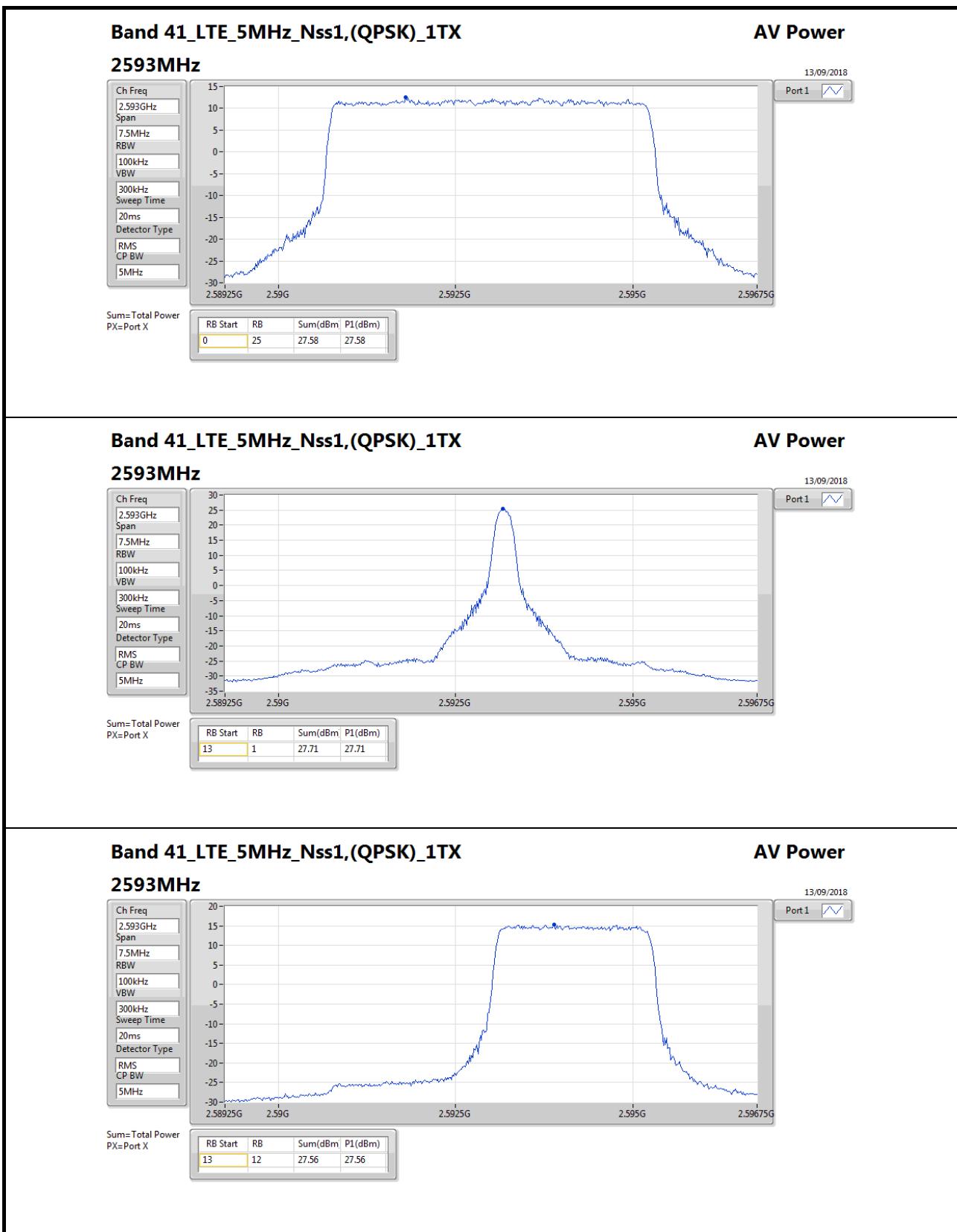
AV Power

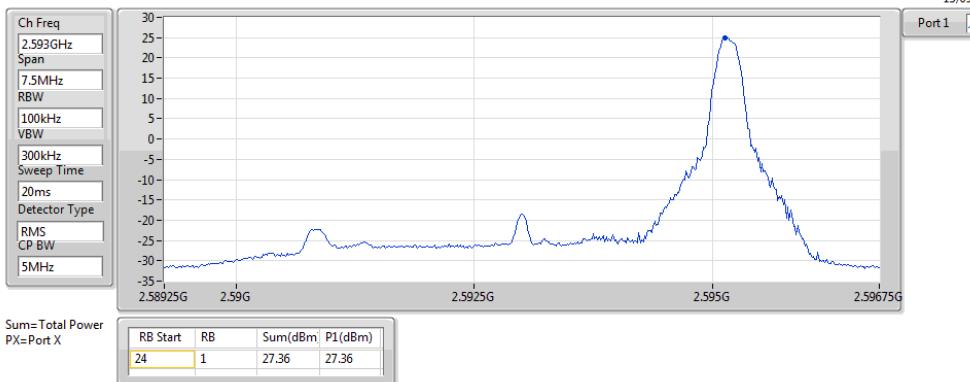
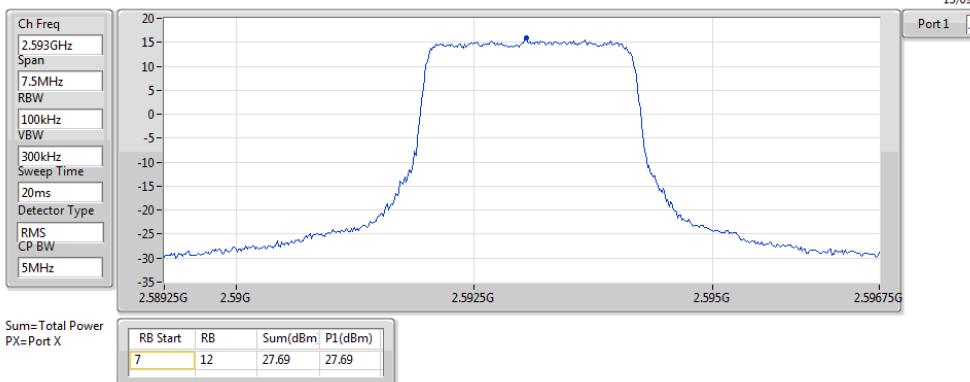
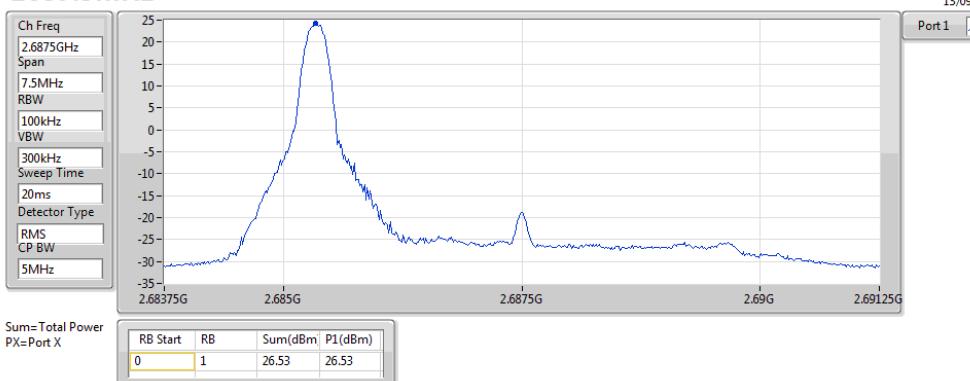
2593MHz

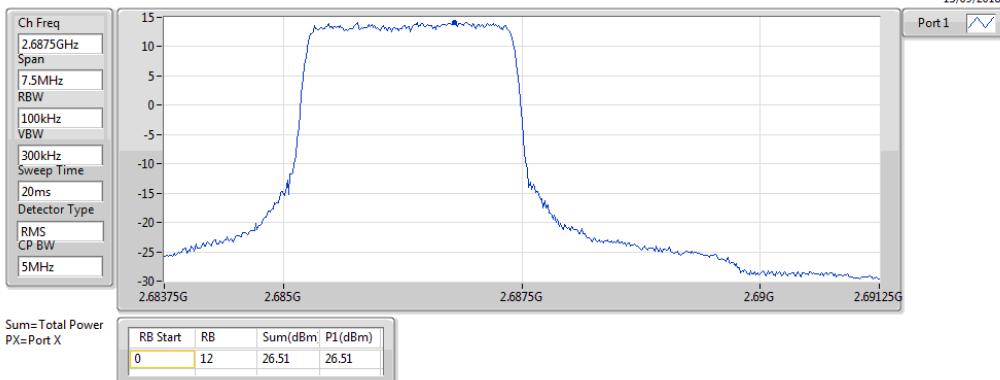
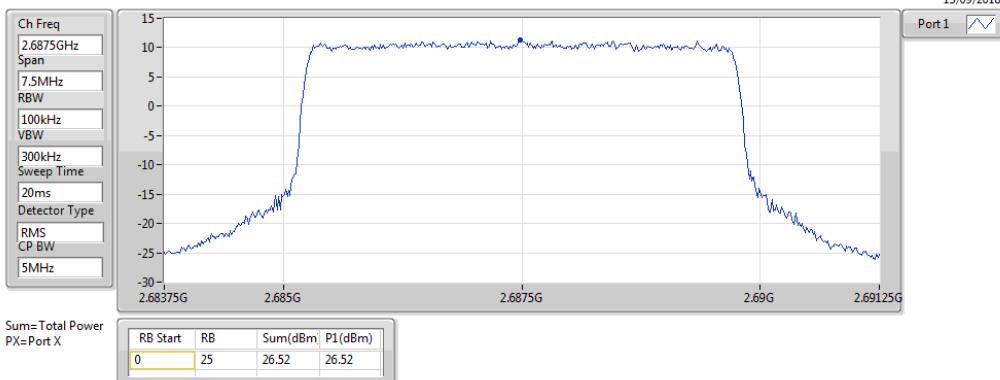
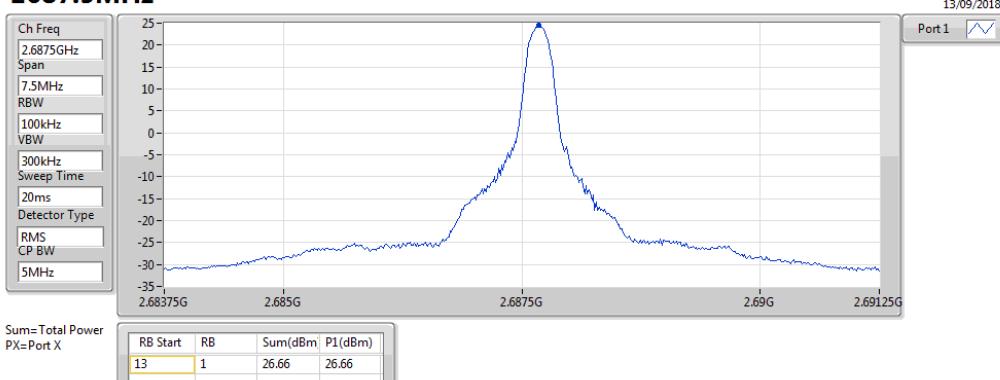
13/09/2018

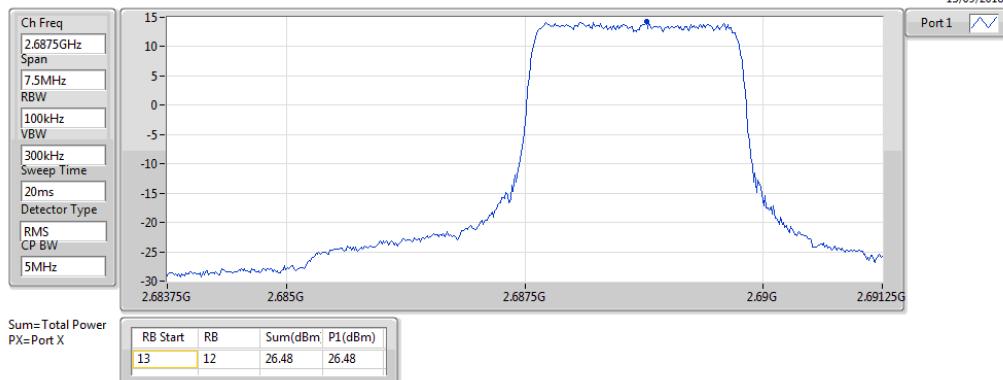
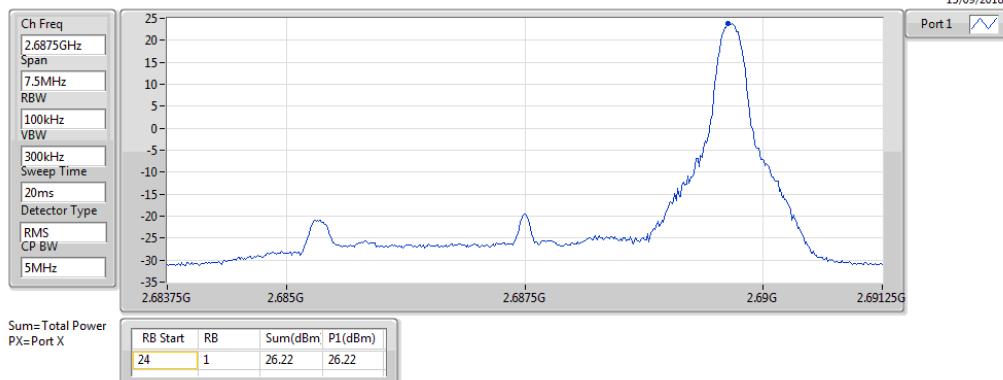
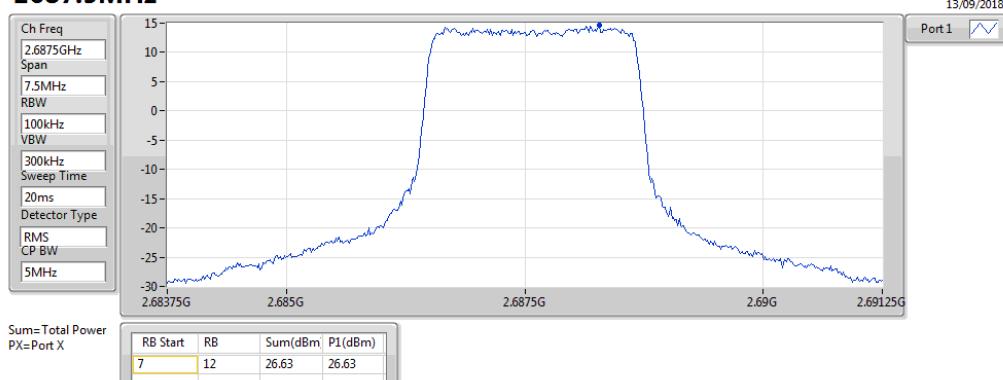
Port 1

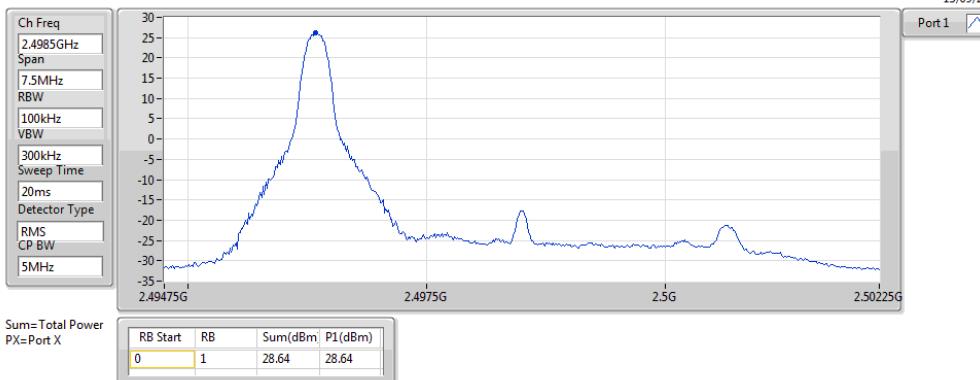
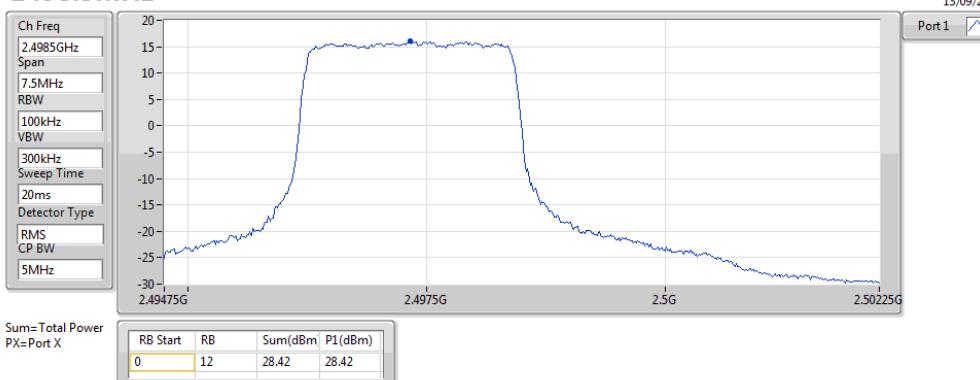
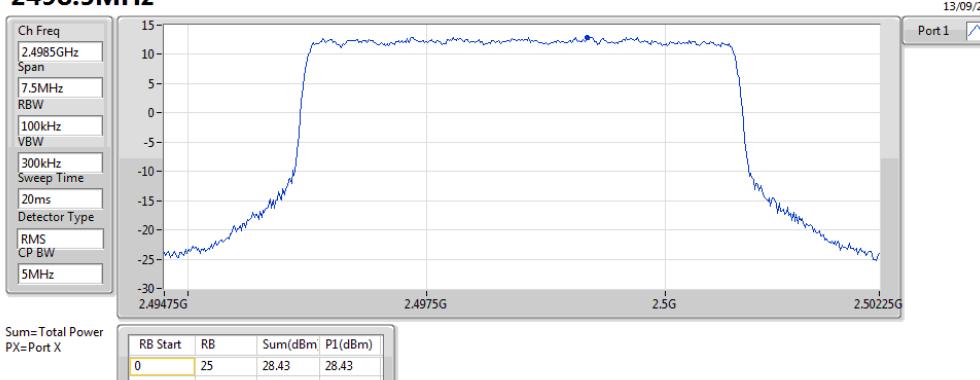


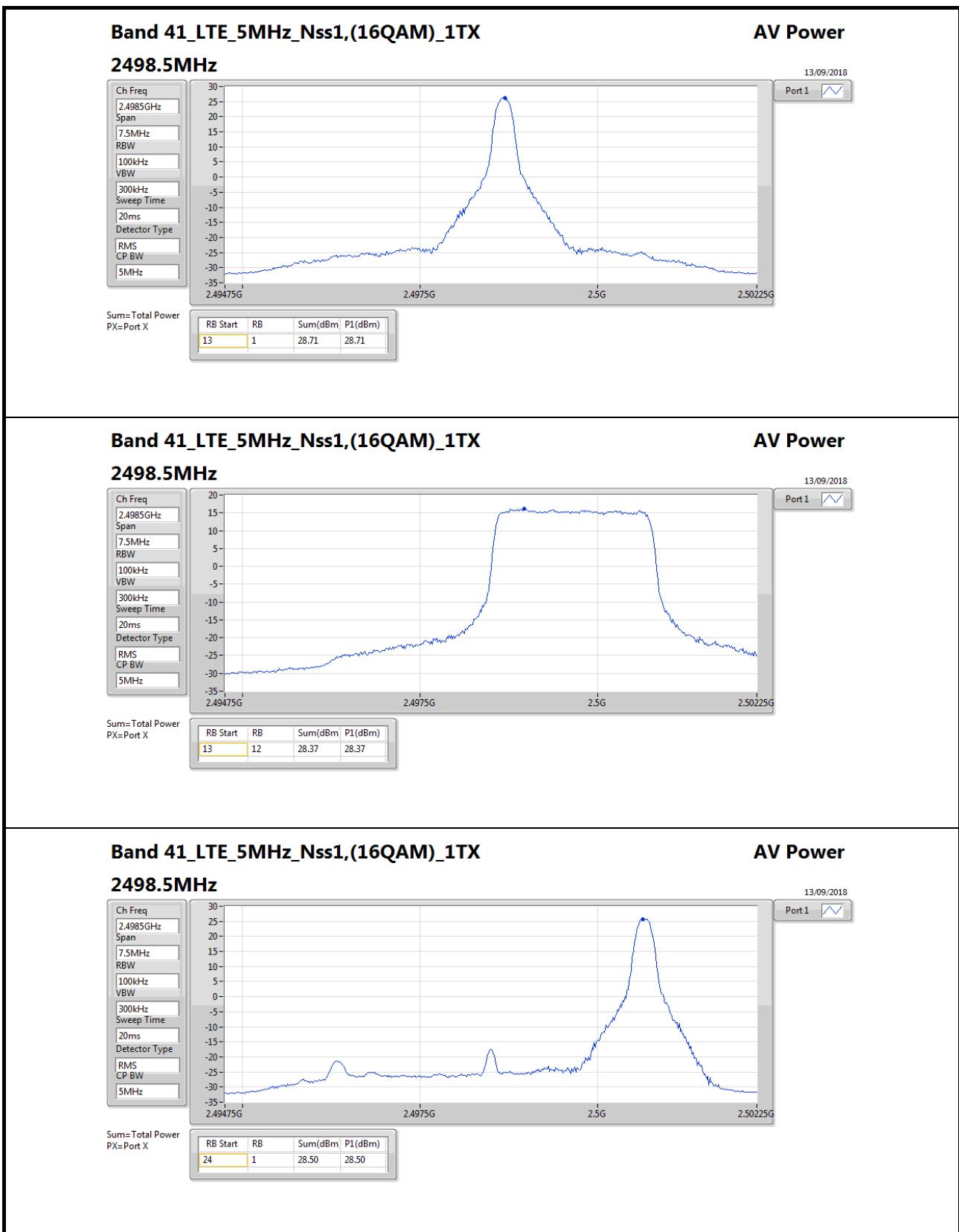


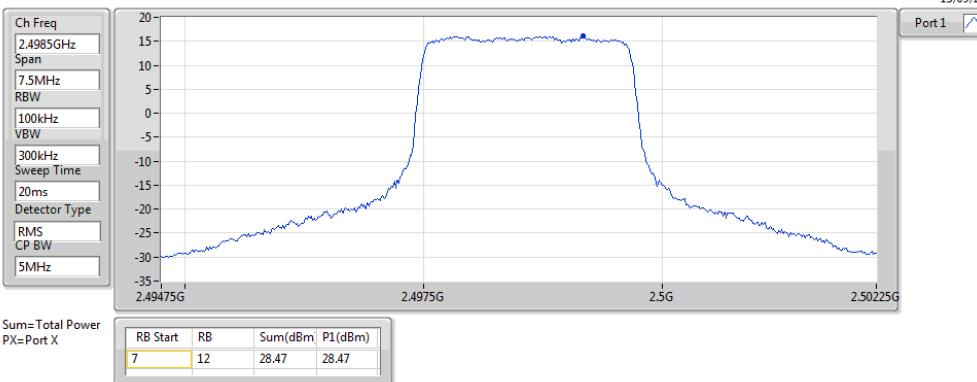
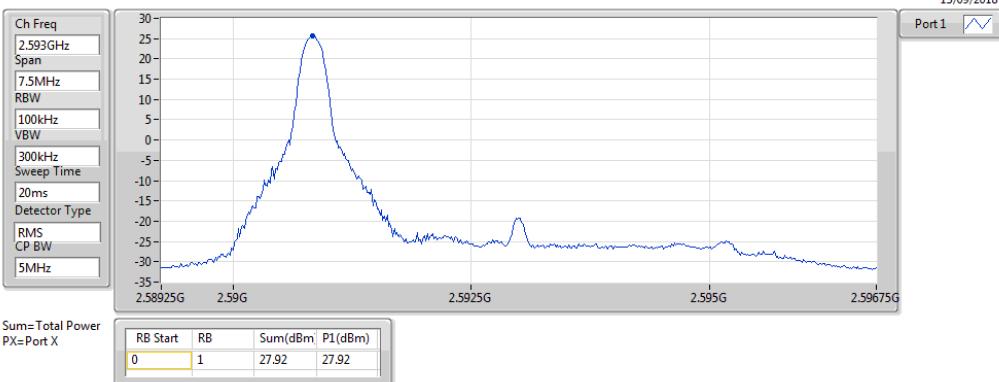
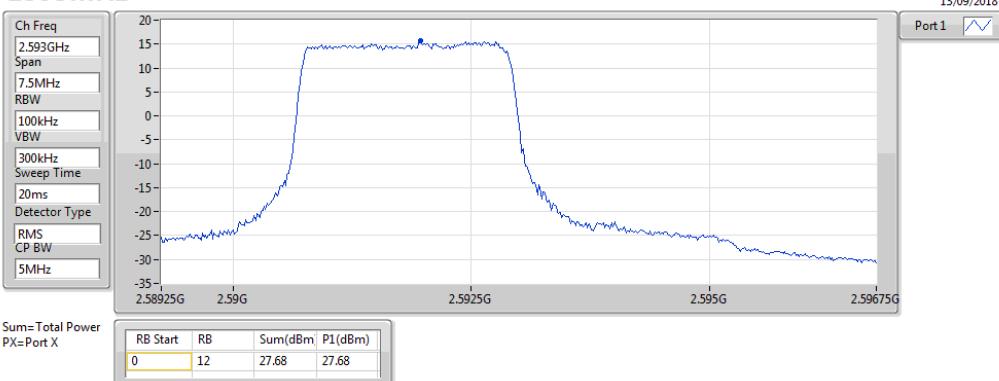
**Band 41\_LTE\_5MHz\_Nss1,(QPSK)\_1TX AV Power**
**2593MHz**

**Band 41\_LTE\_5MHz\_Nss1,(QPSK)\_1TX AV Power**
**2593MHz**

**Band 41\_LTE\_5MHz\_Nss1,(QPSK)\_1TX AV Power**
**2687.5MHz**


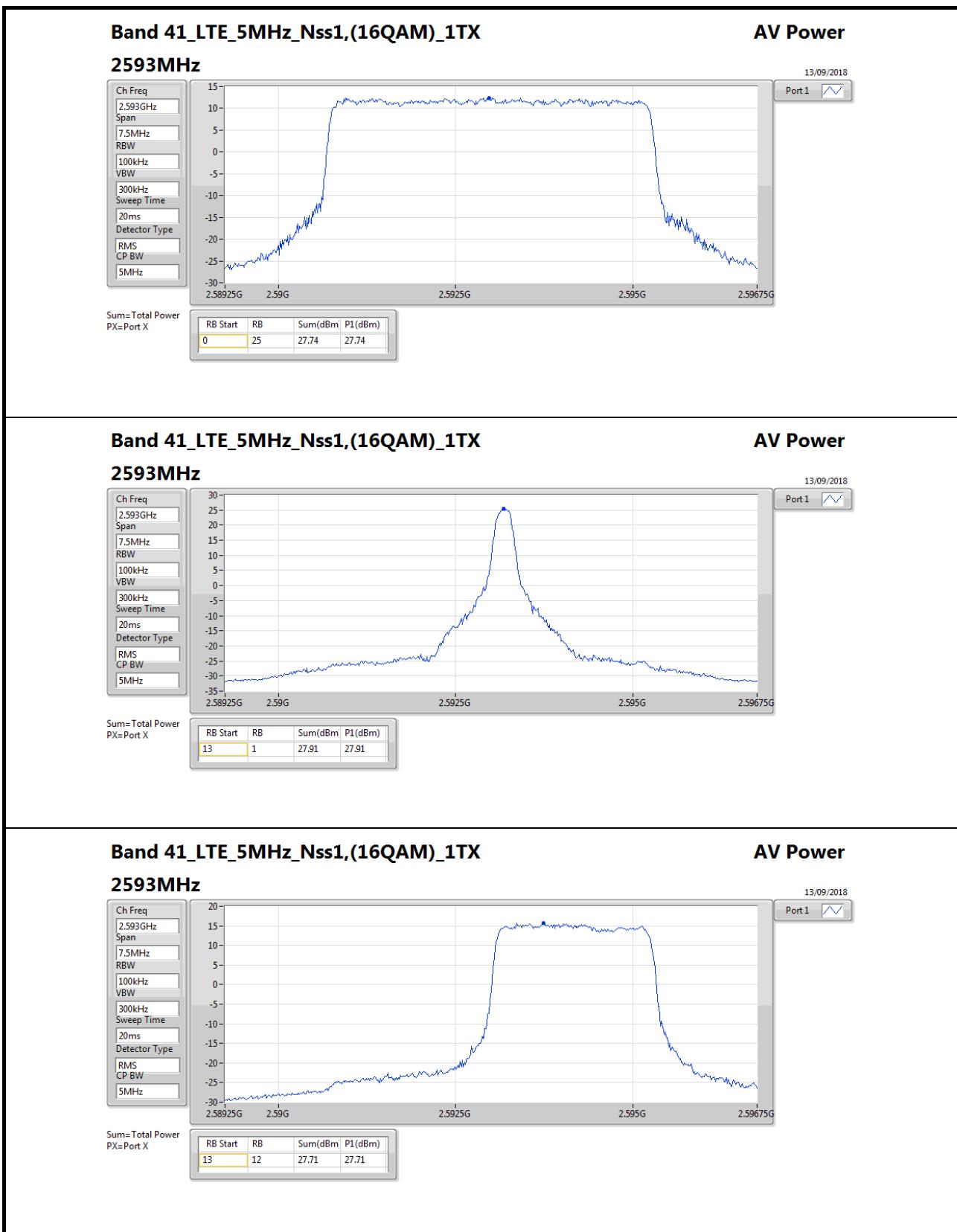
**Band 41\_LTE\_5MHz\_Nss1,(QPSK)\_1TX AV Power**
**2687.5MHz**

**Band 41\_LTE\_5MHz\_Nss1,(QPSK)\_1TX AV Power**
**2687.5MHz**

**Band 41\_LTE\_5MHz\_Nss1,(QPSK)\_1TX AV Power**
**2687.5MHz**


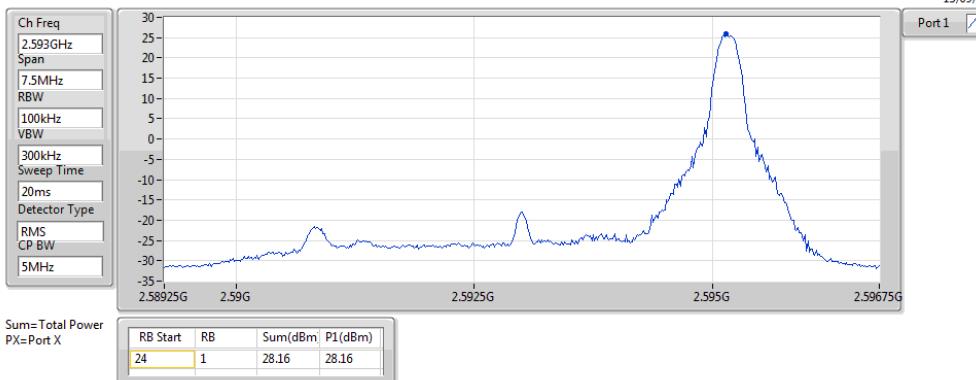
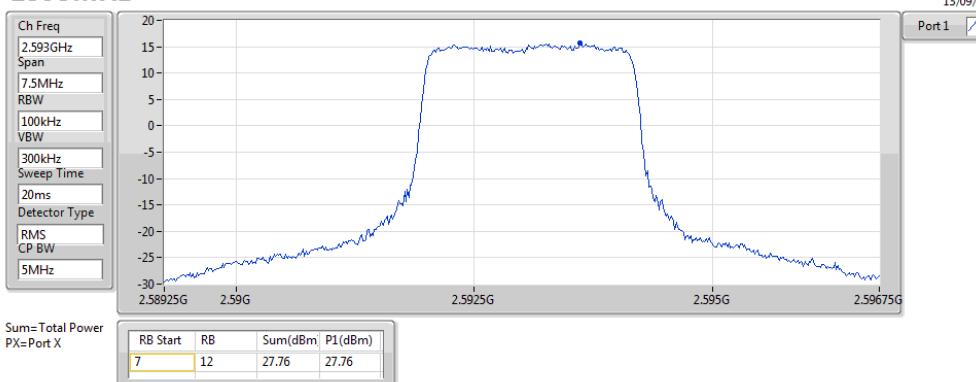
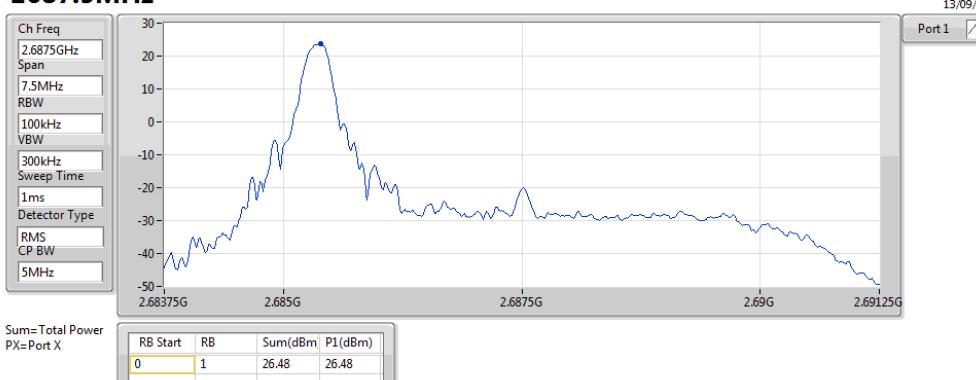
**Band 41\_LTE\_5MHz\_Nss1,(QPSK)\_1TX AV Power**
**2687.5MHz**

**Band 41\_LTE\_5MHz\_Nss1,(QPSK)\_1TX AV Power**
**2687.5MHz**

**Band 41\_LTE\_5MHz\_Nss1,(QPSK)\_1TX AV Power**
**2687.5MHz**


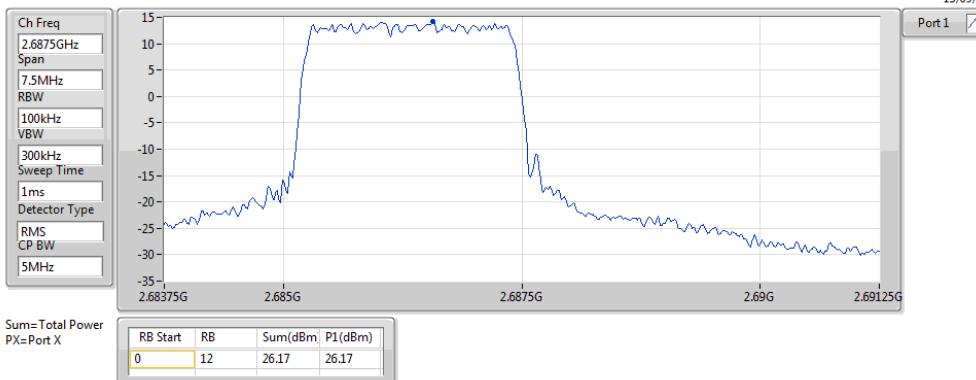
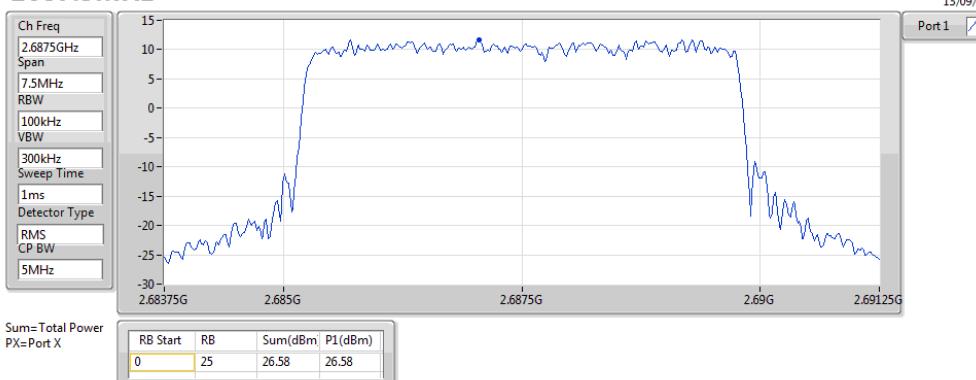
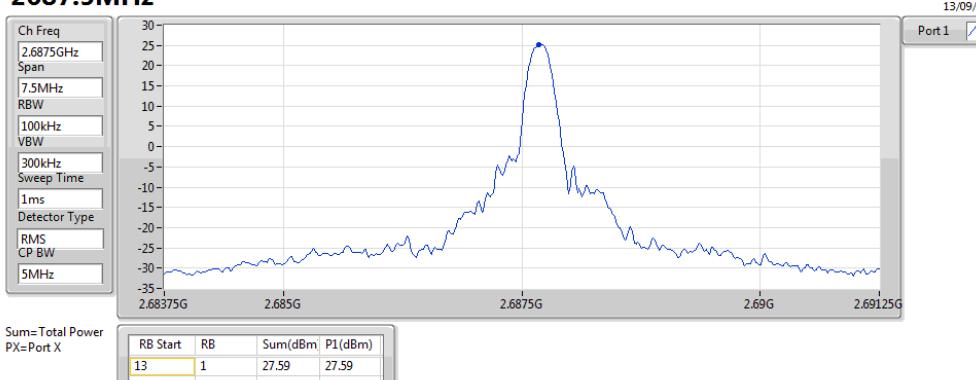
**Band 41\_LTE\_5MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2498.5MHz**

**Band 41\_LTE\_5MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2498.5MHz**

**Band 41\_LTE\_5MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2498.5MHz**




**Band 41\_LTE\_5MHz\_Nss1,(16QAM)\_1TX**
**2498.5MHz**

**Band 41\_LTE\_5MHz\_Nss1,(16QAM)\_1TX**
**2593MHz**

**Band 41\_LTE\_5MHz\_Nss1,(16QAM)\_1TX**
**2593MHz**


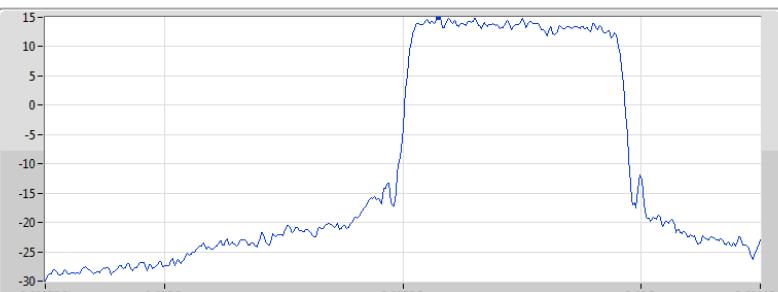


**Band 41\_LTE\_5MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2593MHz**

**Band 41\_LTE\_5MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2593MHz**

**Band 41\_LTE\_5MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2687.5MHz**


**Band 41\_LTE\_5MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2687.5MHz**

**Band 41\_LTE\_5MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2687.5MHz**

**Band 41\_LTE\_5MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2687.5MHz**


**Band 41\_LTE\_5MHz\_Nss1,(16QAM)\_1TX****2687.5MHz**

Ch Freq  
2.6875GHz  
Span  
7.5MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
1ms  
Detector Type  
RMS  
CP BW  
5MHz

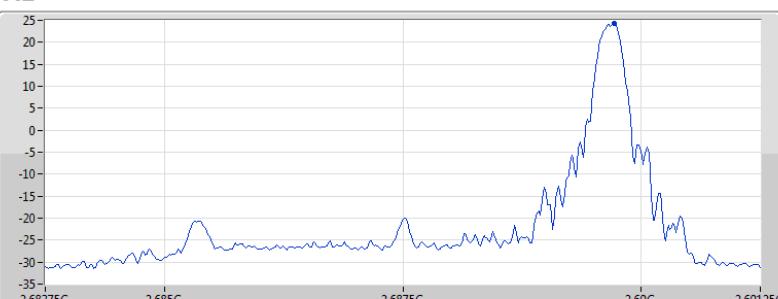
Sum=Total Power  
PX=Port X**AV Power**

13/09/2018

Port 1

**Band 41\_LTE\_5MHz\_Nss1,(16QAM)\_1TX****2687.5MHz**

Ch Freq  
2.6875GHz  
Span  
7.5MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
1ms  
Detector Type  
RMS  
CP BW  
5MHz

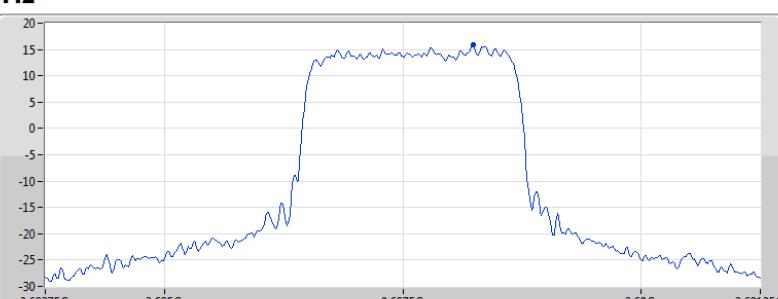
Sum=Total Power  
PX=Port X**AV Power**

13/09/2018

Port 1

**Band 41\_LTE\_5MHz\_Nss1,(16QAM)\_1TX****2687.5MHz**

Ch Freq  
2.6875GHz  
Span  
7.5MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
1ms  
Detector Type  
RMS  
CP BW  
5MHz

Sum=Total Power  
PX=Port X**AV Power**

13/09/2018

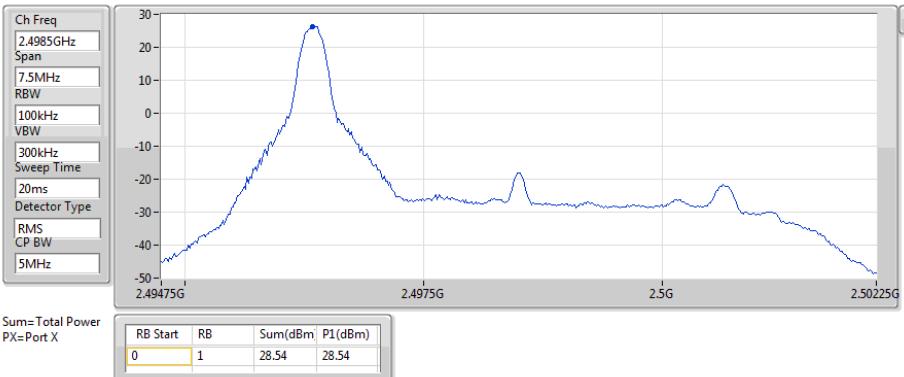
Port 1



## Band 41\_LTE\_5MHz\_Nss1,(64QAM)\_1TX

## AV Power

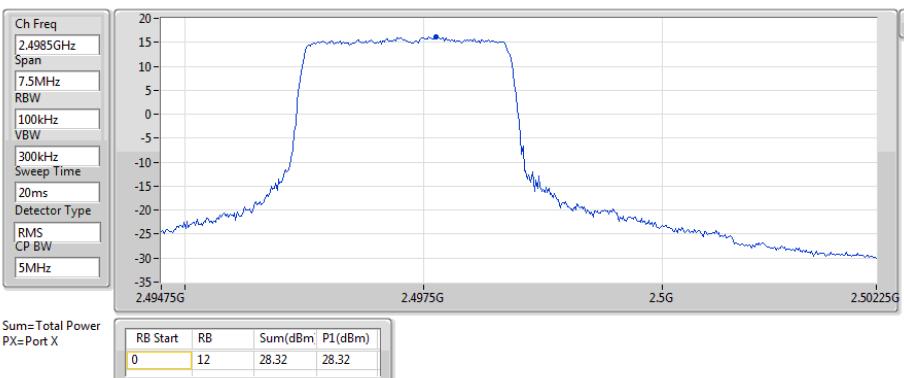
2498.5MHz



## Band 41\_LTE\_5MHz\_Nss1,(64QAM)\_1TX

## AV Power

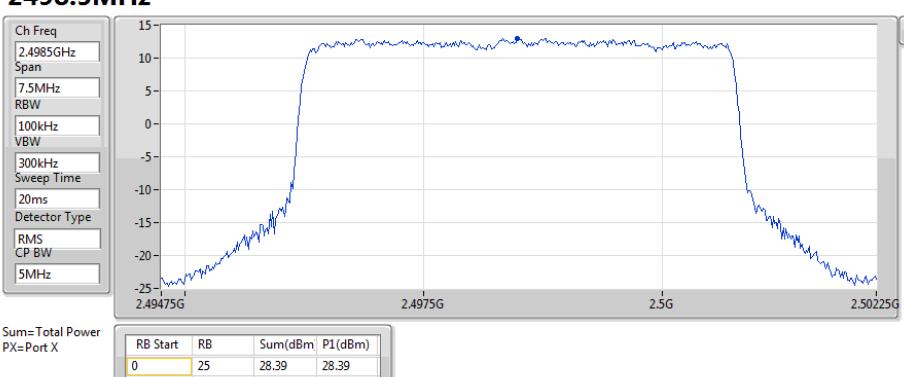
2498.5MHz

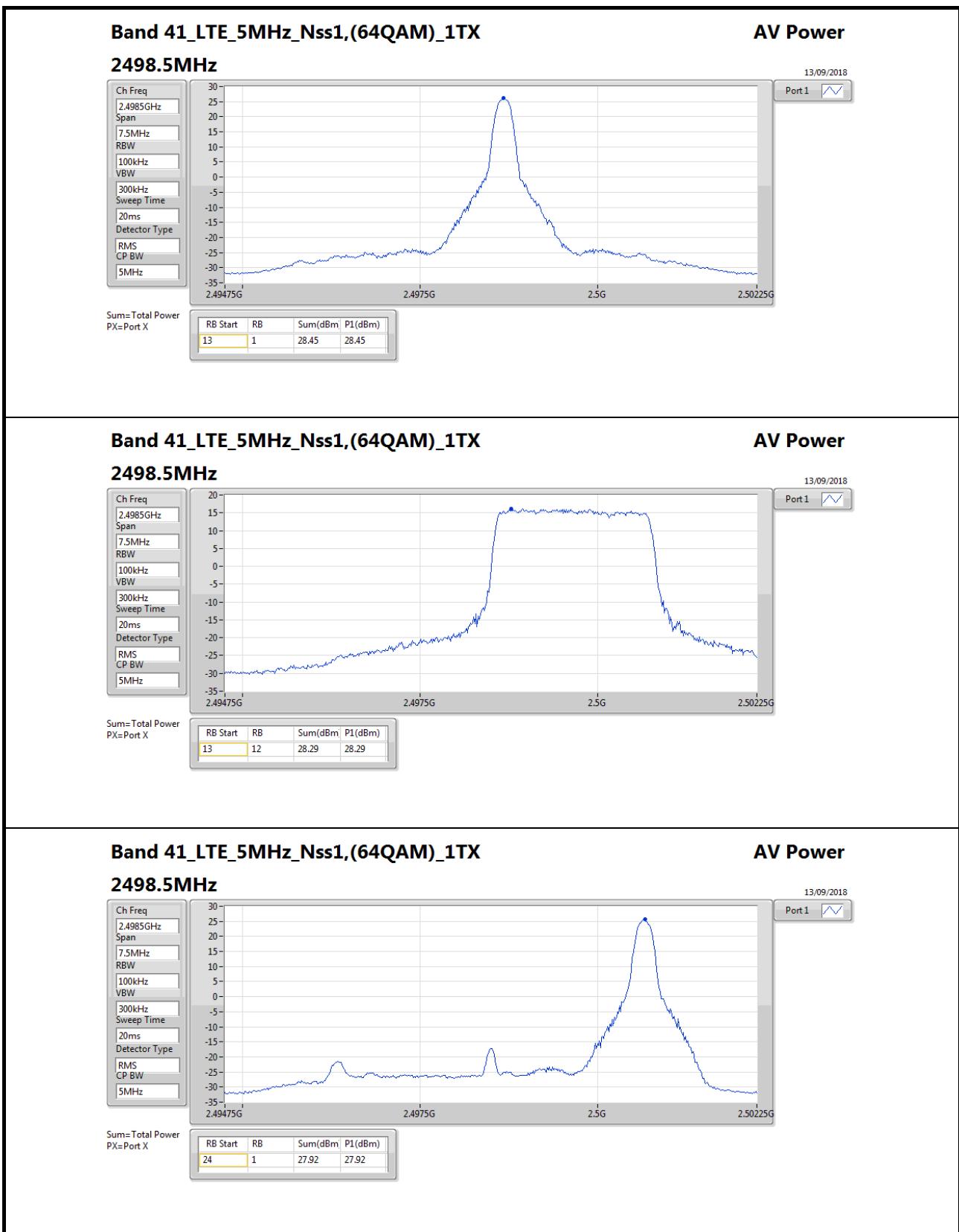


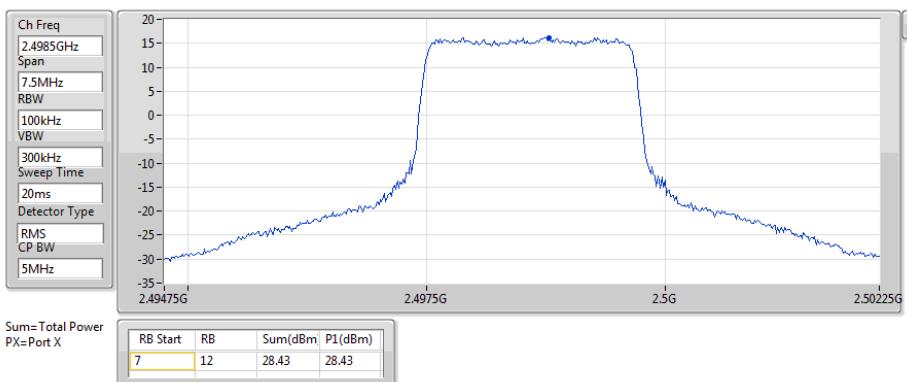
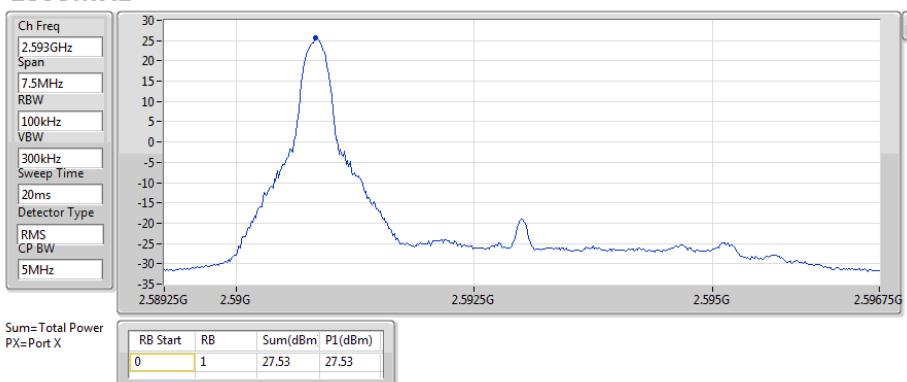
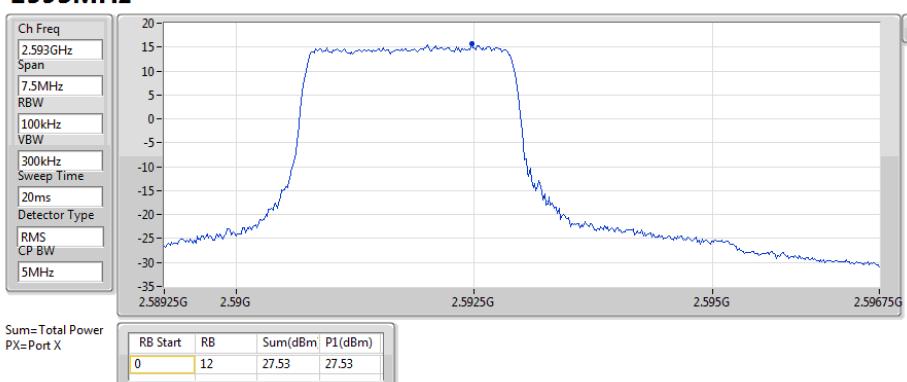
## Band 41\_LTE\_5MHz\_Nss1,(64QAM)\_1TX

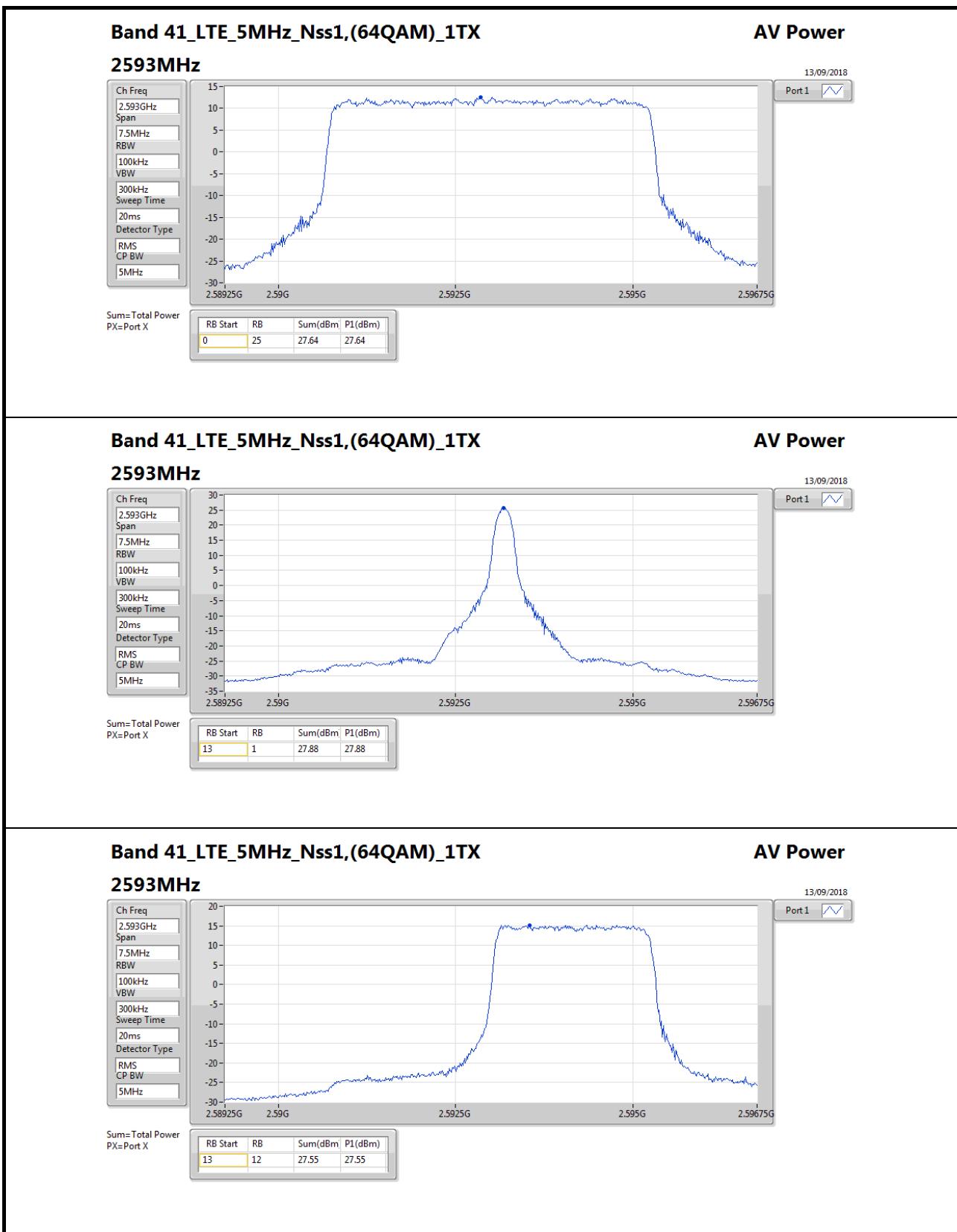
## AV Power

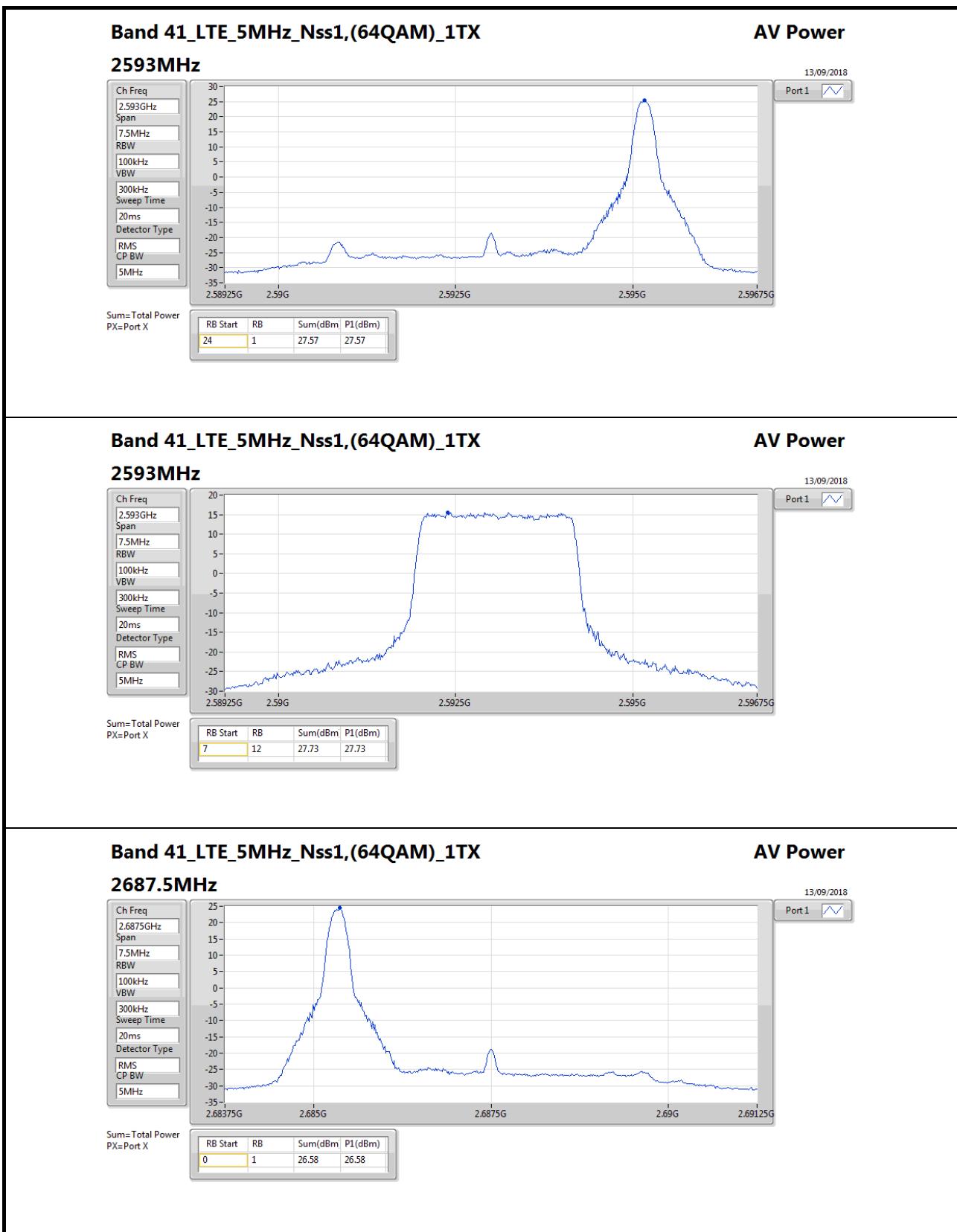
2498.5MHz





**Band 41\_LTE\_5MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2498.5MHz**

**Band 41\_LTE\_5MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2593MHz**

**Band 41\_LTE\_5MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2593MHz**


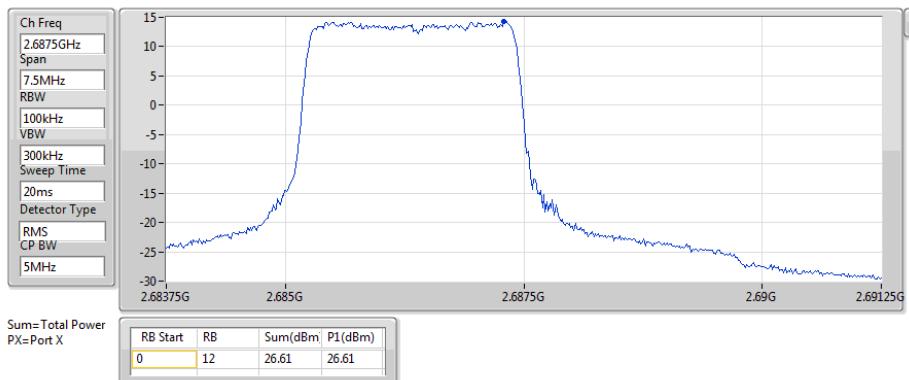




**Band 41\_LTE\_5MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2687.5MHz**

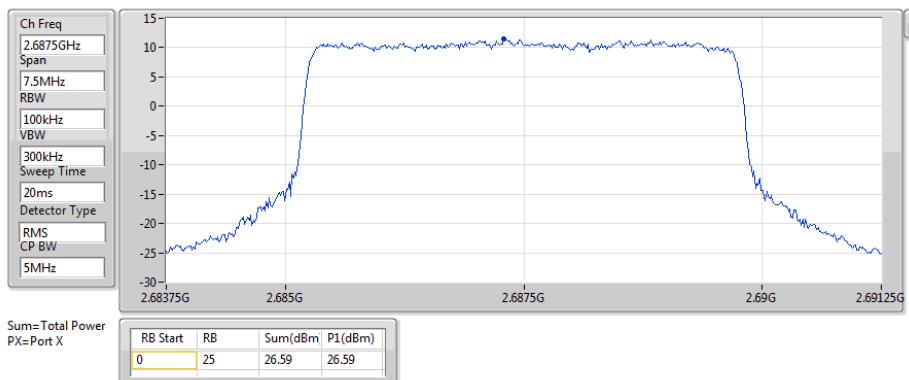
13/09/2018

Port 1


**Band 41\_LTE\_5MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2687.5MHz**

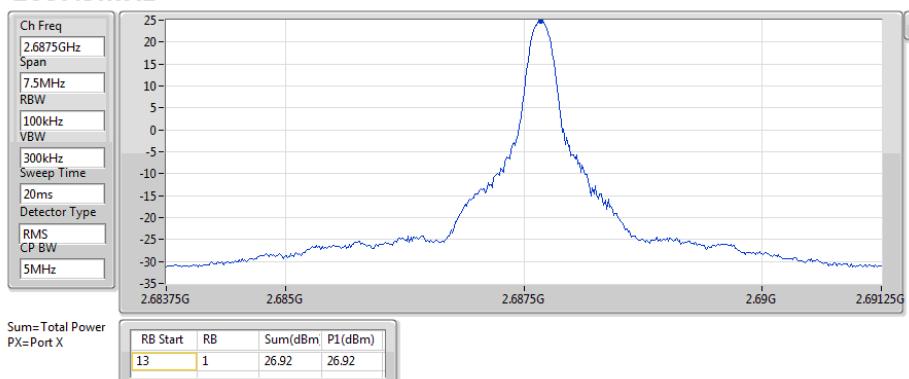
13/09/2018

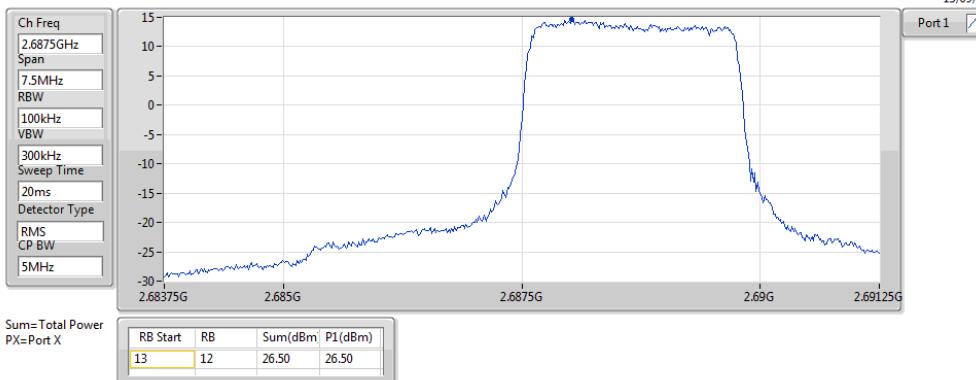
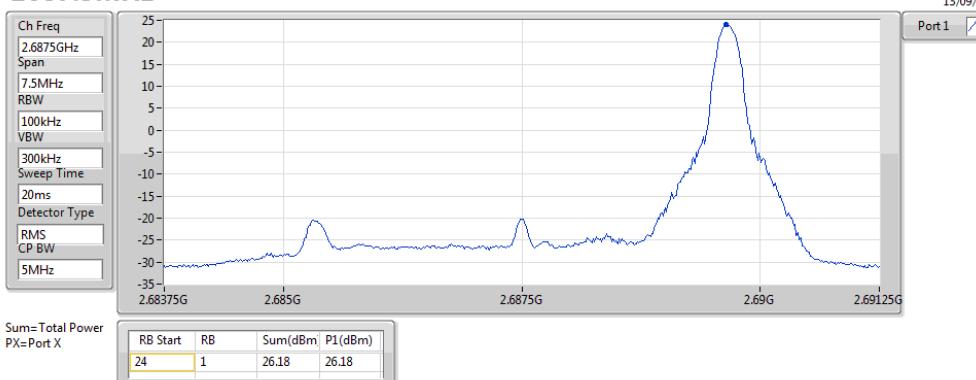
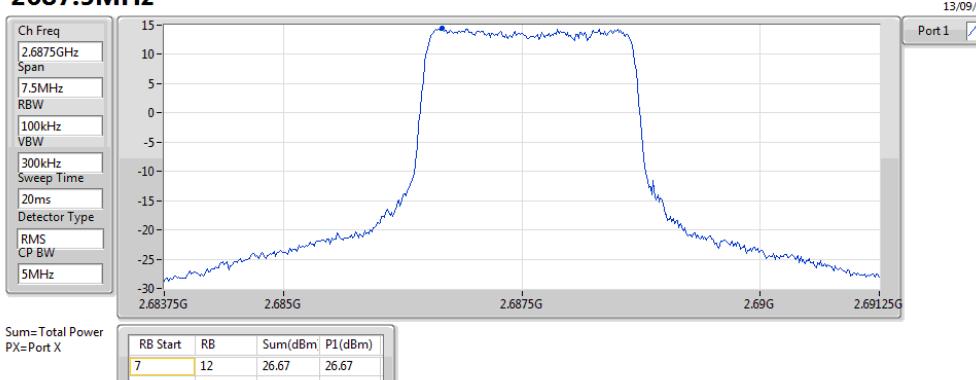
Port 1

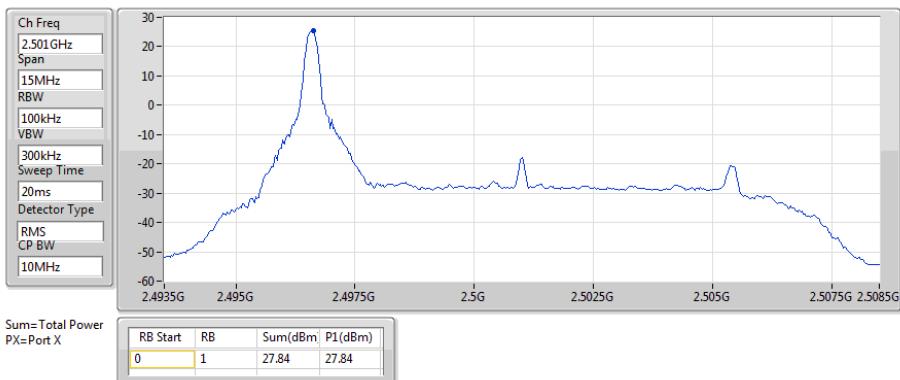
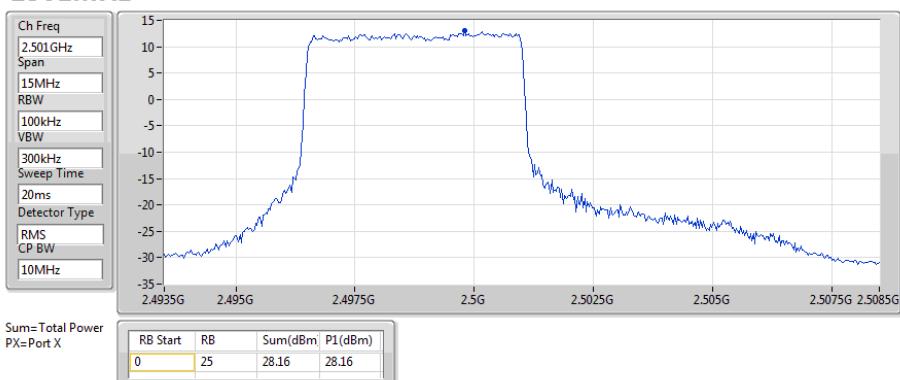
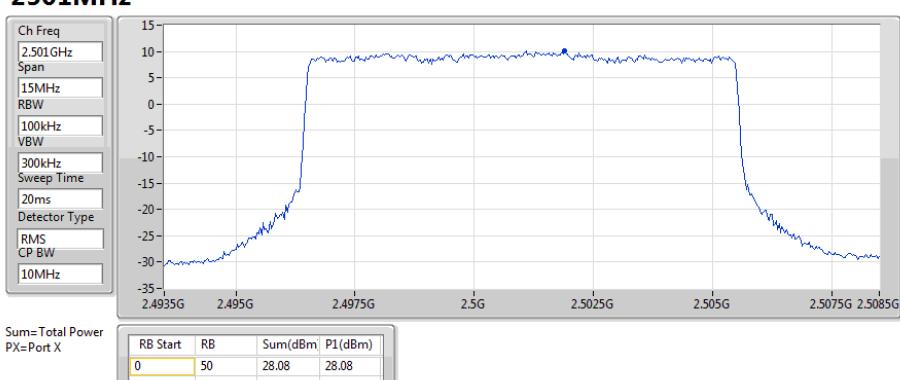

**Band 41\_LTE\_5MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2687.5MHz**

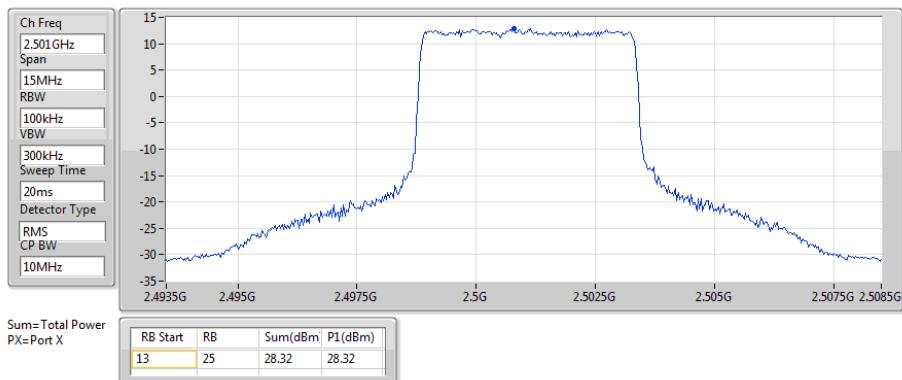
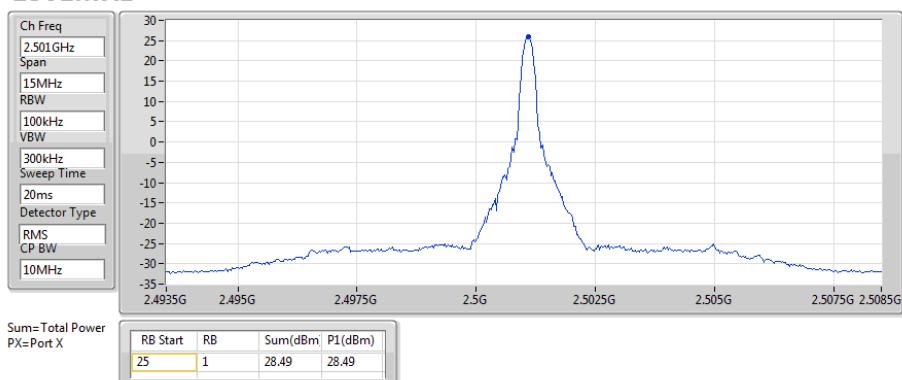
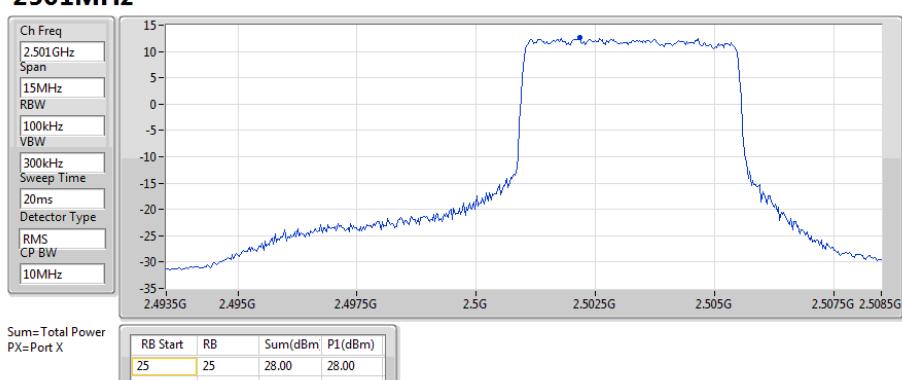
13/09/2018

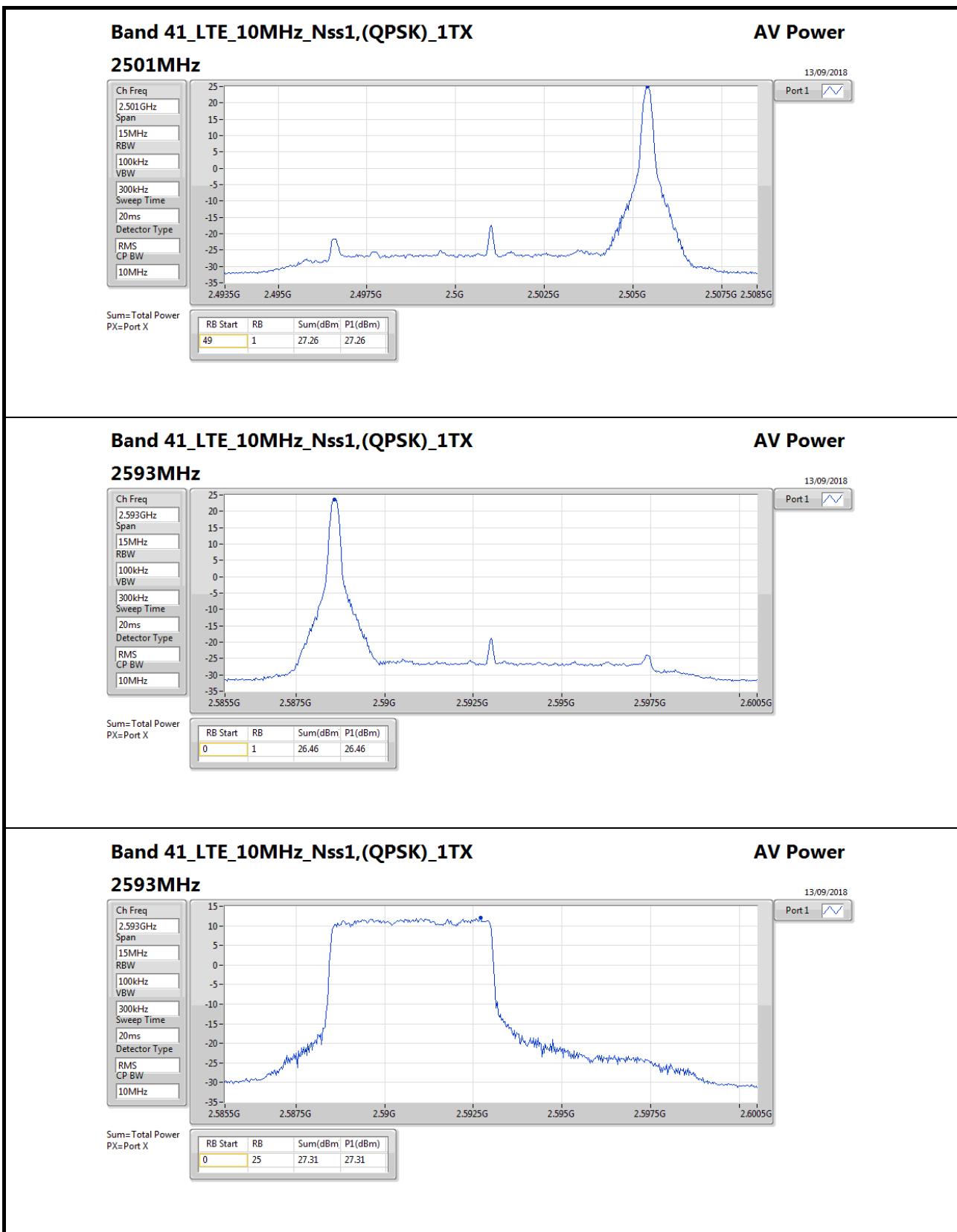
Port 1

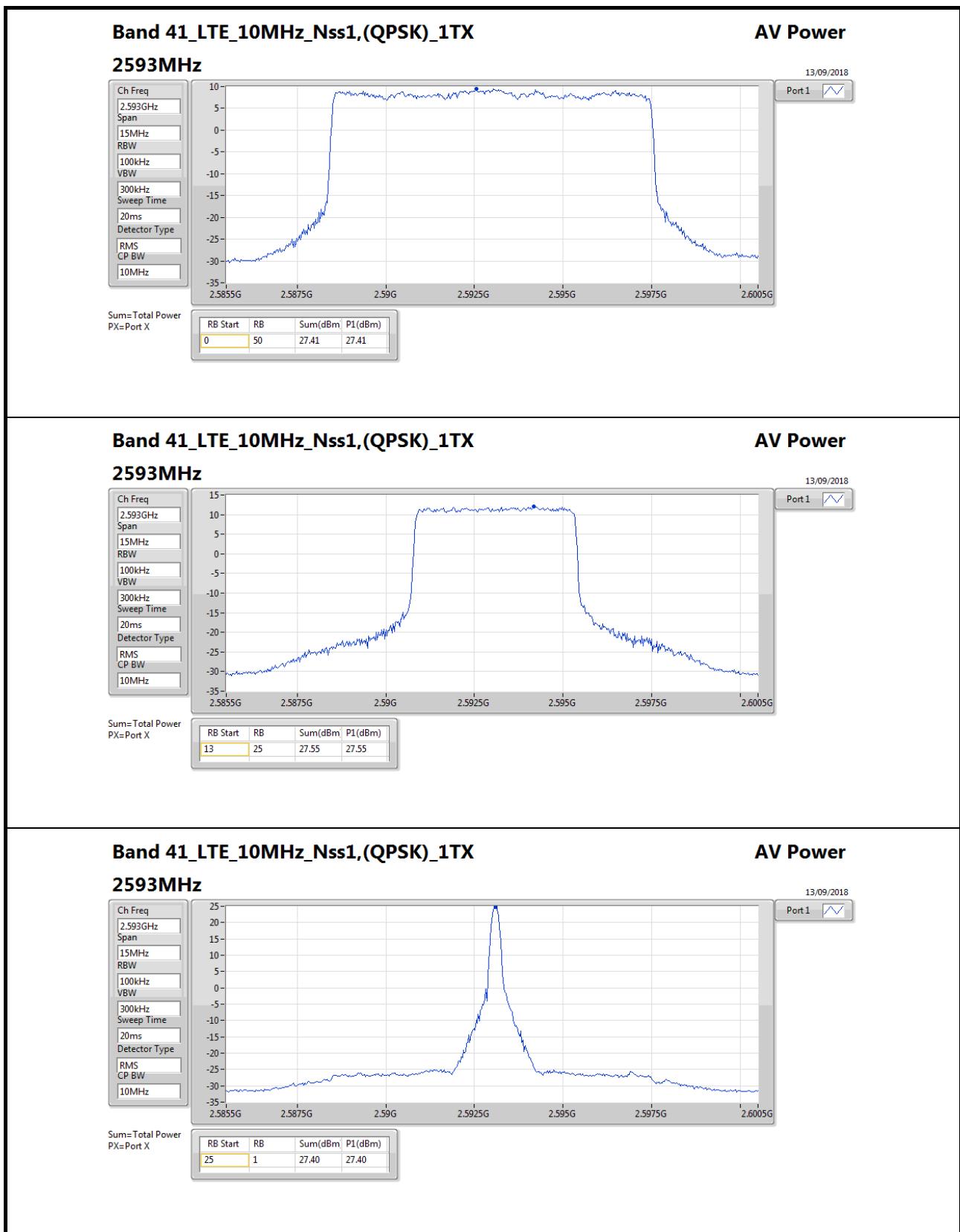


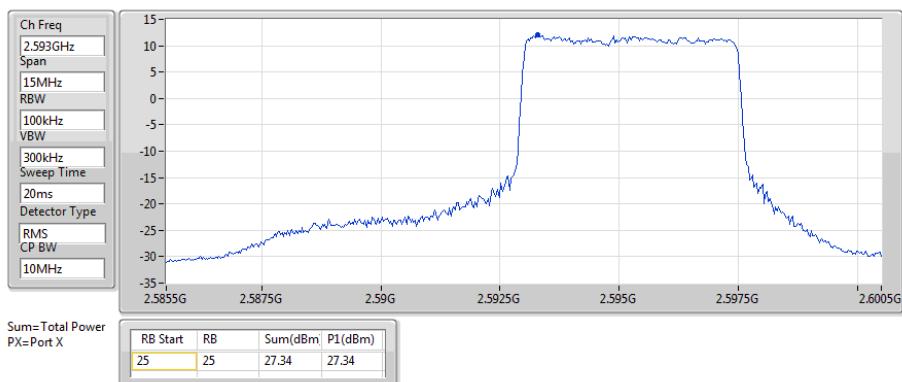
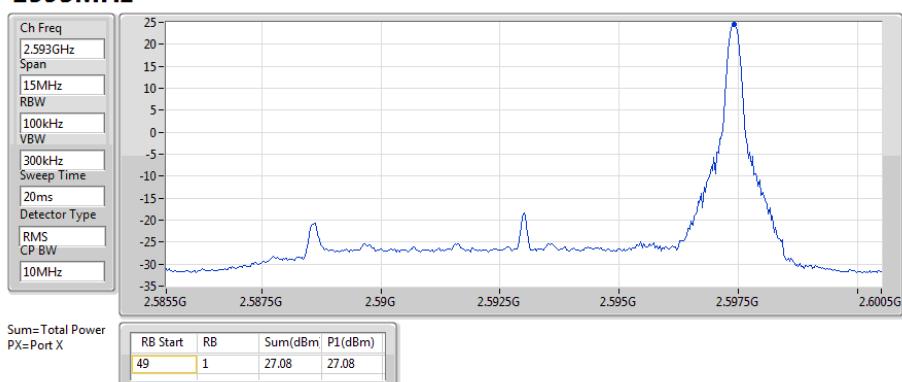
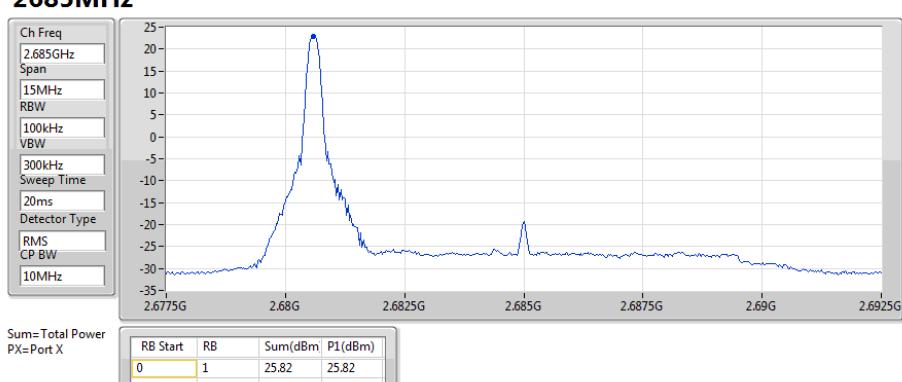
**Band 41\_LTE\_5MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2687.5MHz**

**Band 41\_LTE\_5MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2687.5MHz**

**Band 41\_LTE\_5MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2687.5MHz**


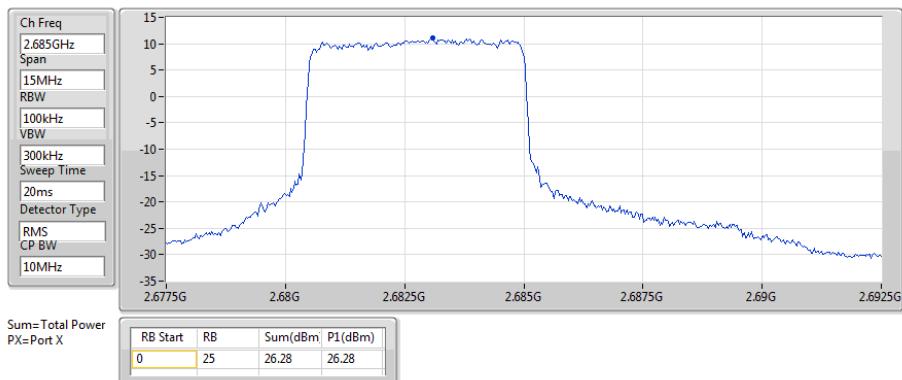
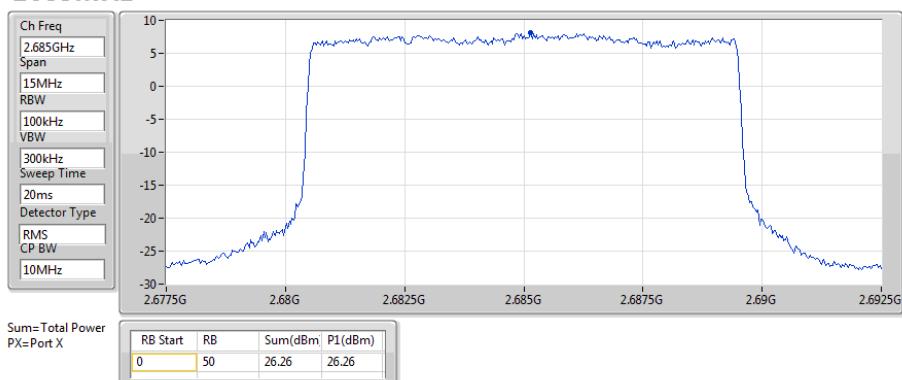
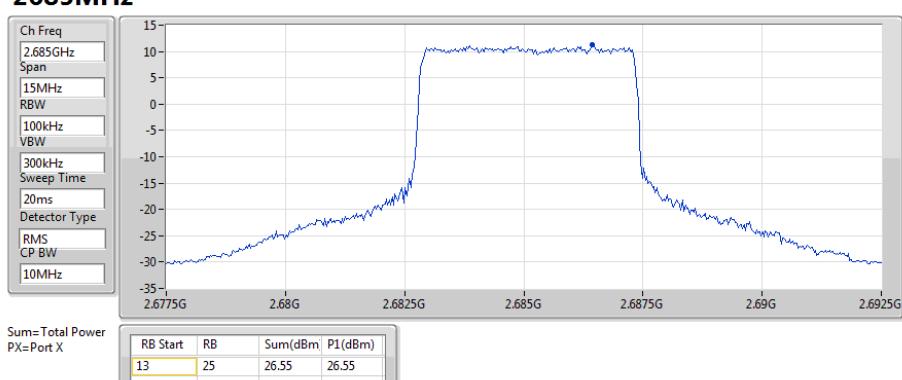
**Band 41\_LTE\_10MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2501MHz**

**Band 41\_LTE\_10MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2501MHz**

**Band 41\_LTE\_10MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2501MHz**


**Band 41\_LTE\_10MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2501MHz**

**Band 41\_LTE\_10MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2501MHz**

**Band 41\_LTE\_10MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2501MHz**






**Band 41\_LTE\_10MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2593MHz**

**Band 41\_LTE\_10MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2593MHz**

**Band 41\_LTE\_10MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2685MHz**


**Band 41\_LTE\_10MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2685MHz**

**Band 41\_LTE\_10MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2685MHz**

**Band 41\_LTE\_10MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2685MHz**


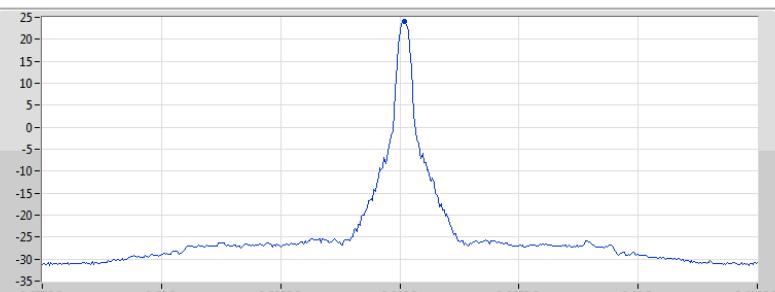


## Band 41\_LTE\_10MHz\_Nss1,(QPSK)\_1TX

## AV Power

2685MHz

Ch Freq  
2.685GHz  
Span  
15MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
20ms  
Detector Type  
RMS  
CP BW  
10MHz



13/09/2018

Port 1 Sum=Total Power  
PX=Port X

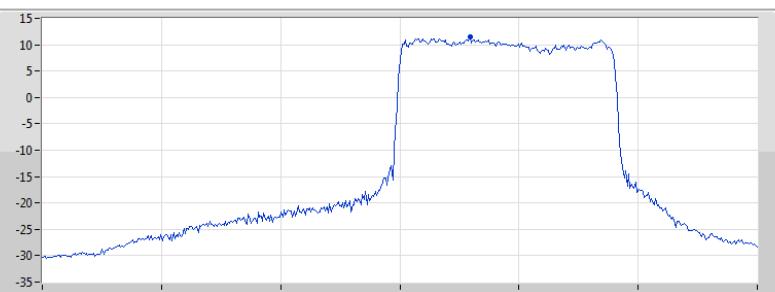
RB Start	RB	Sum(dBm)	P1(dBm)
25	1	26.84	26.84

## Band 41\_LTE\_10MHz\_Nss1,(QPSK)\_1TX

## AV Power

2685MHz

Ch Freq  
2.685GHz  
Span  
15MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
20ms  
Detector Type  
RMS  
CP BW  
10MHz



13/09/2018

Port 1 Sum=Total Power  
PX=Port X

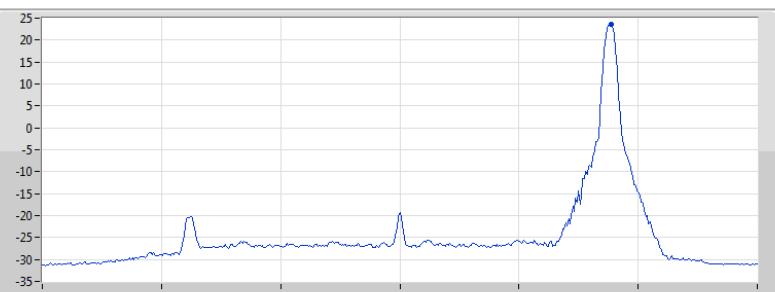
RB Start	RB	Sum(dBm)	P1(dBm)
25	25	26.31	26.31

## Band 41\_LTE\_10MHz\_Nss1,(QPSK)\_1TX

## AV Power

2685MHz

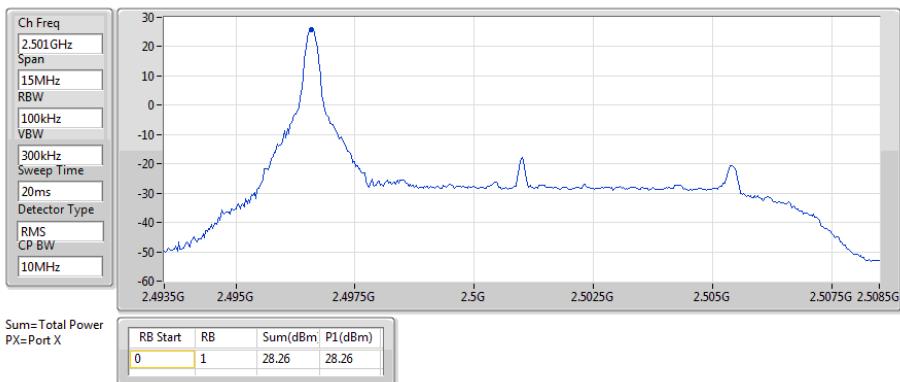
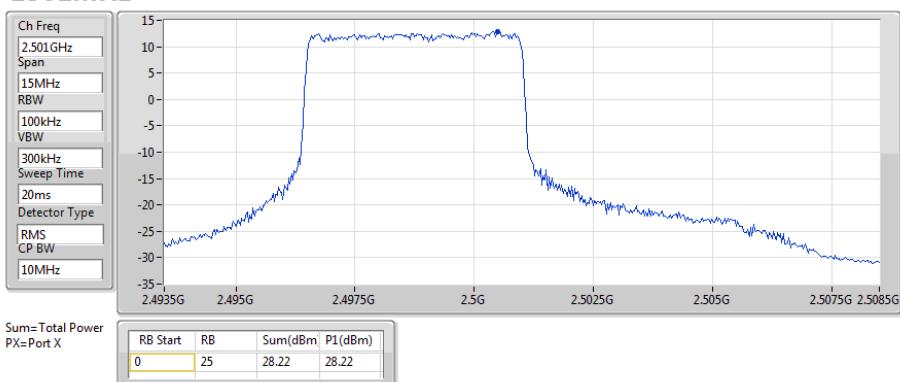
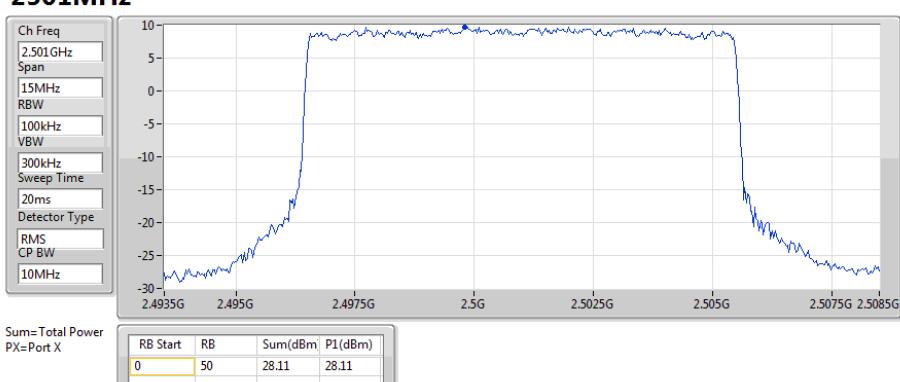
Ch Freq  
2.685GHz  
Span  
15MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
20ms  
Detector Type  
RMS  
CP BW  
10MHz

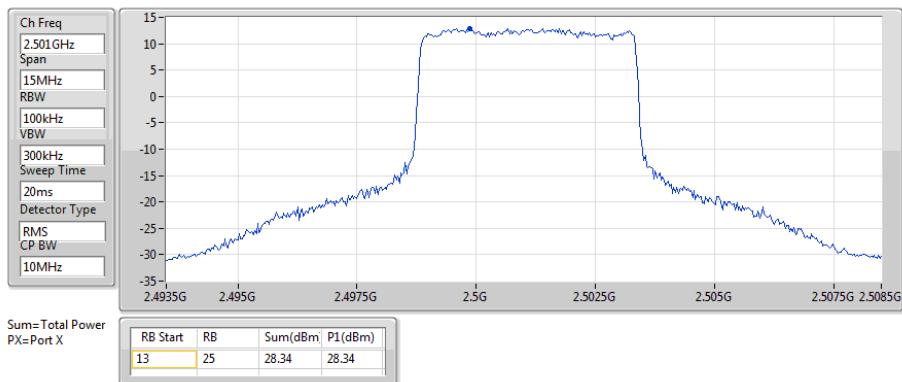
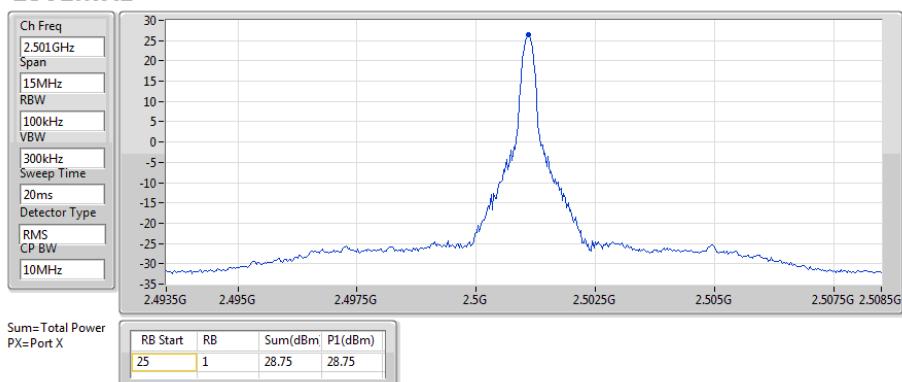
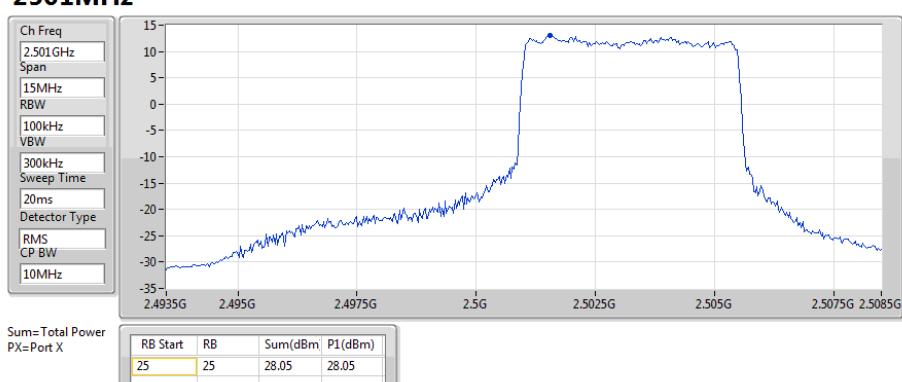


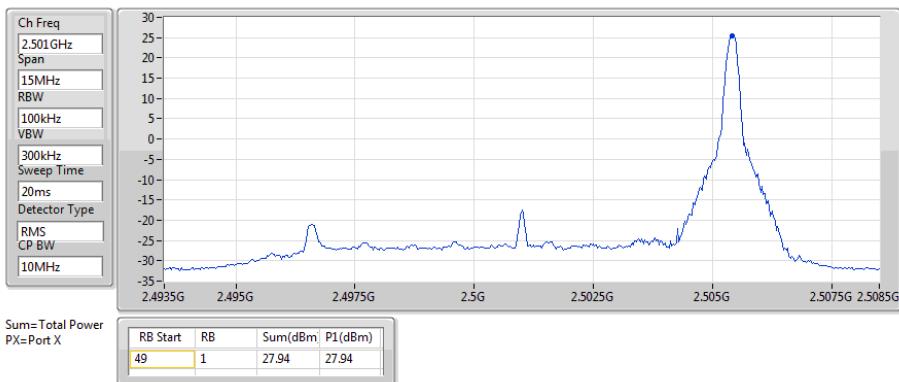
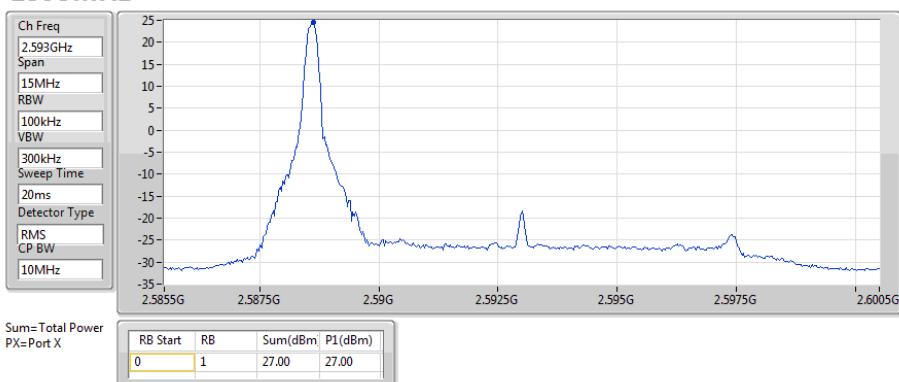
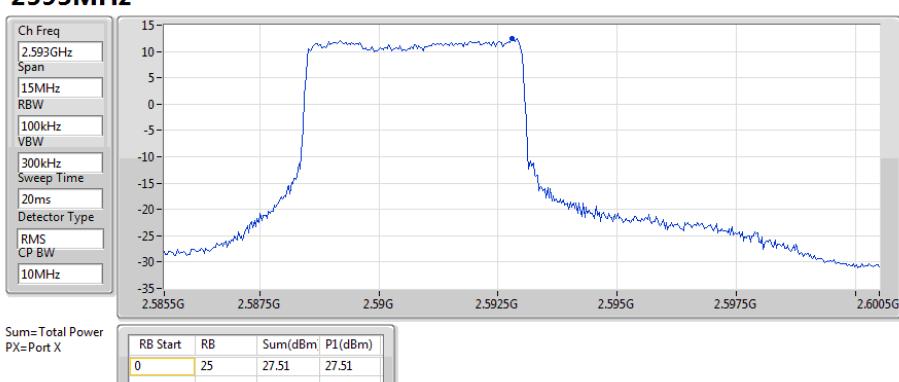
13/09/2018

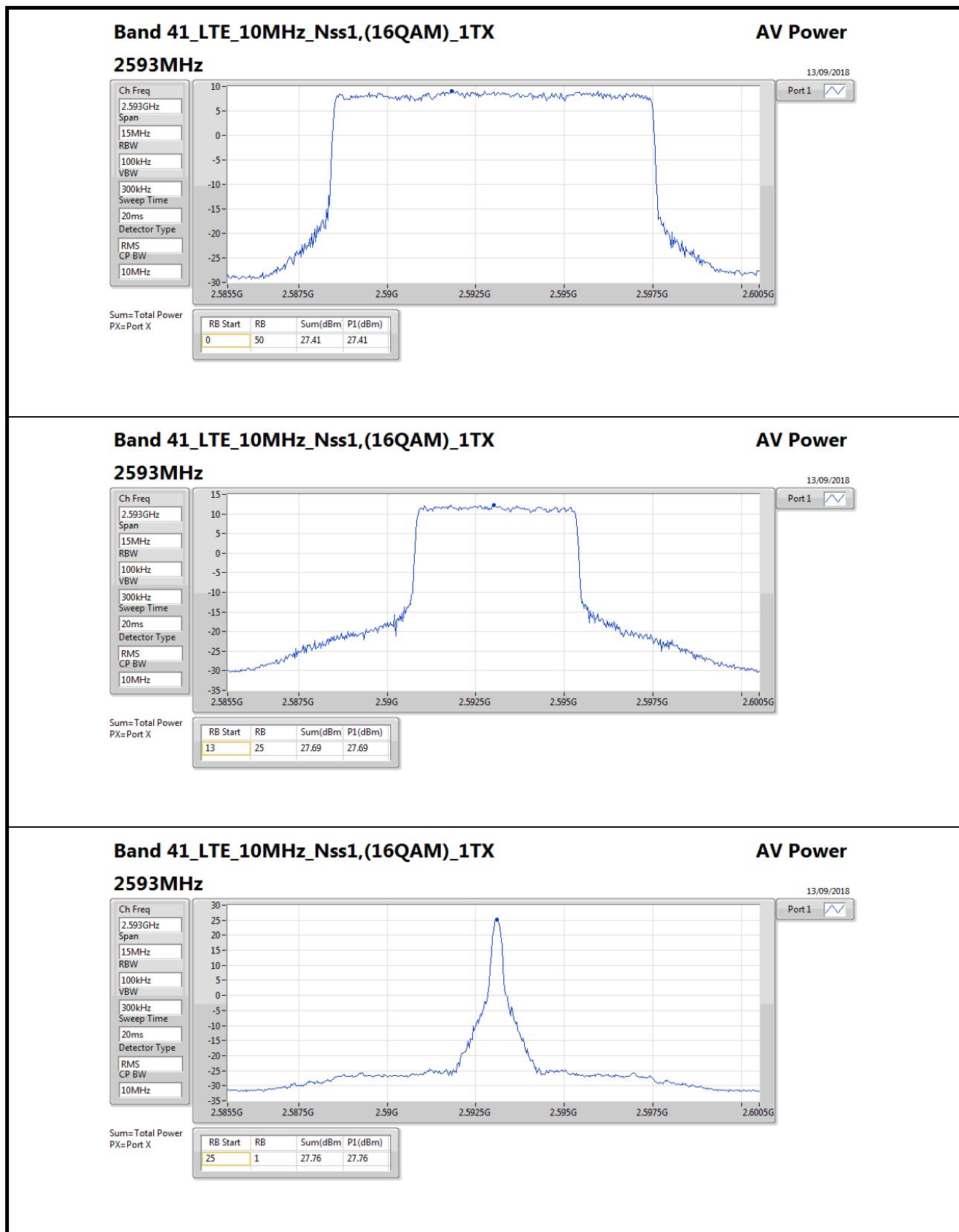
Port 1 Sum=Total Power  
PX=Port X

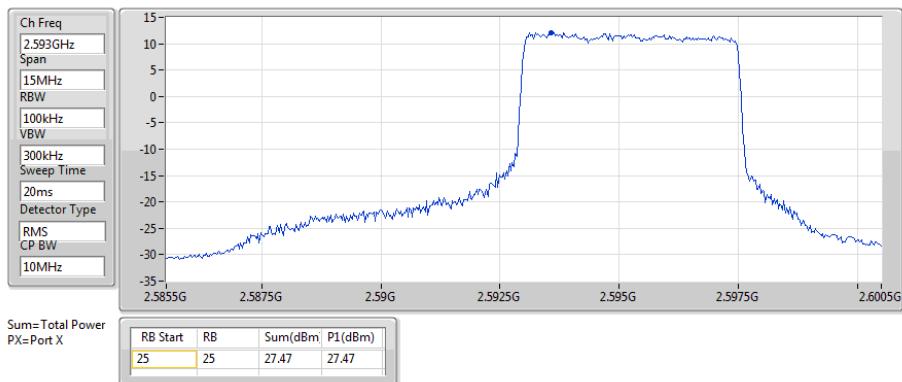
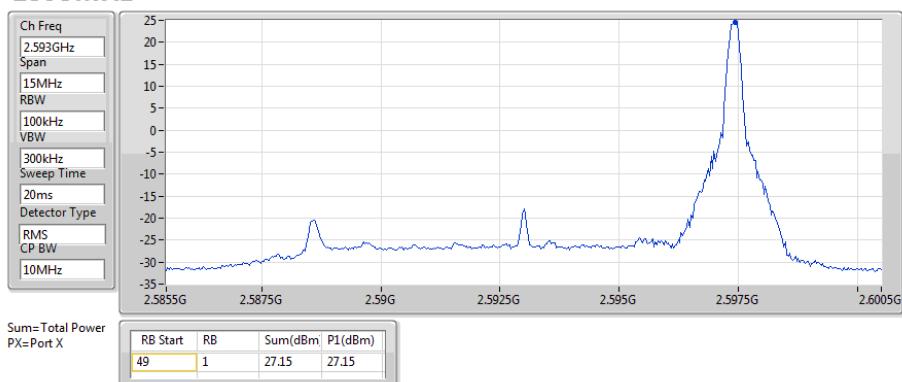
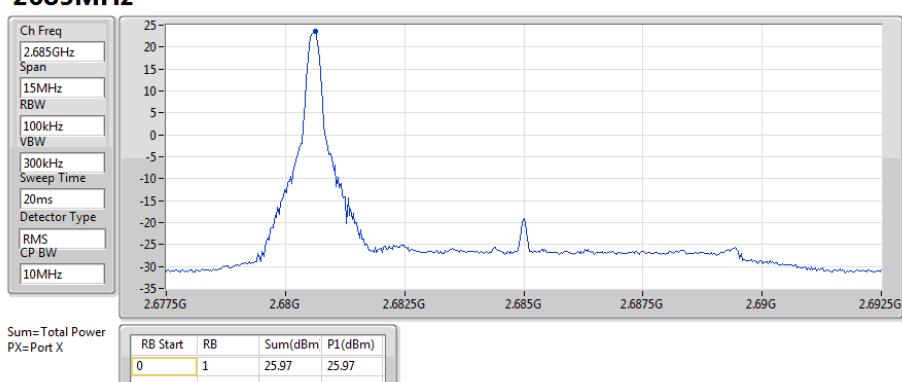
RB Start	RB	Sum(dBm)	P1(dBm)
49	1	26.15	26.15

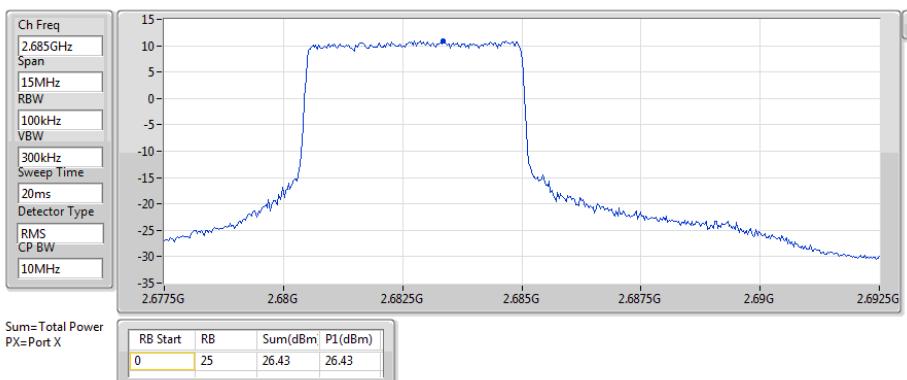
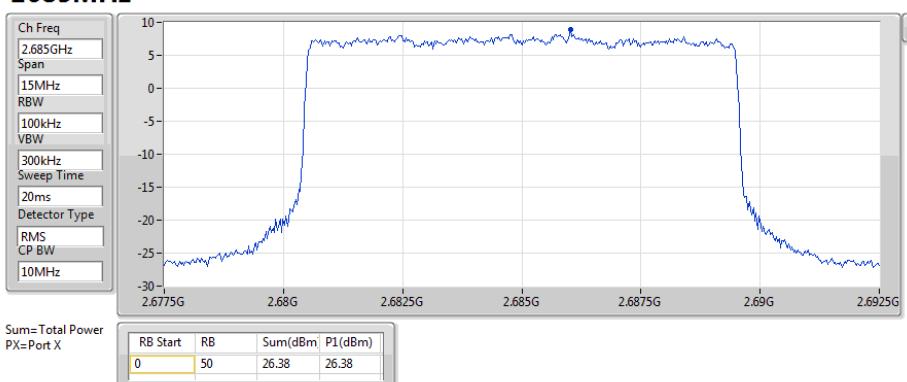
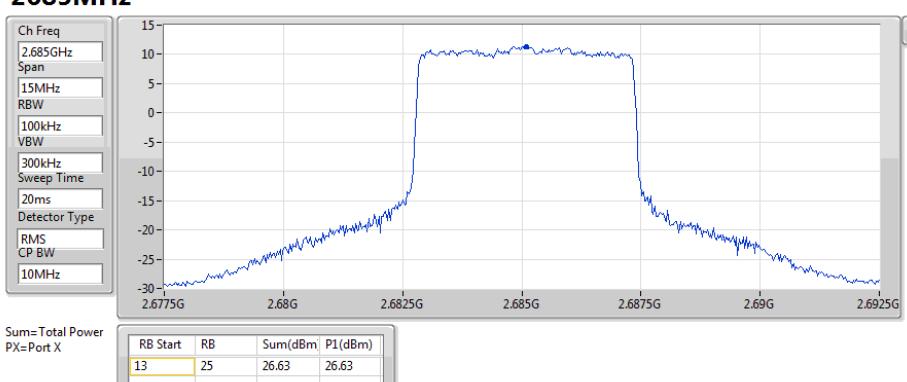
**Band 41\_LTE\_10MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2501MHz**

**Band 41\_LTE\_10MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2501MHz**

**Band 41\_LTE\_10MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2501MHz**


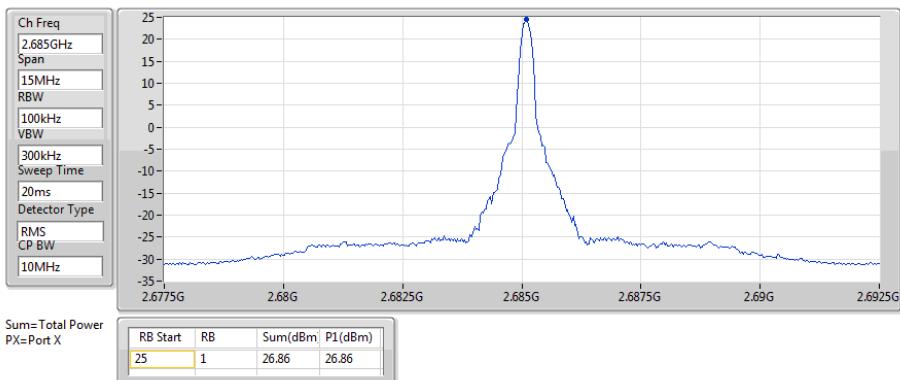
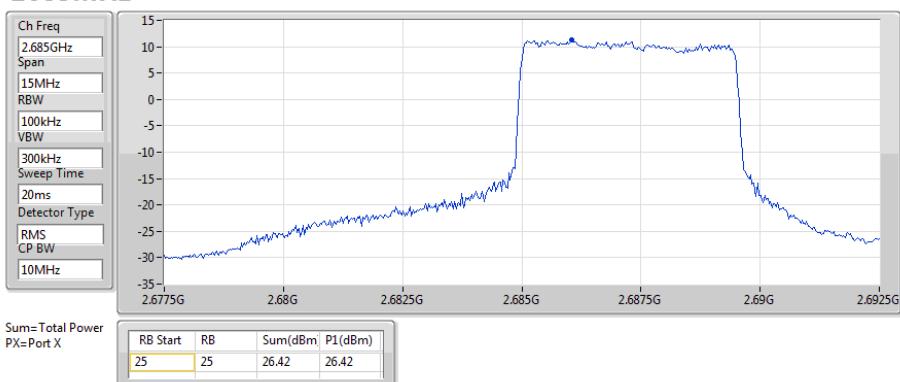
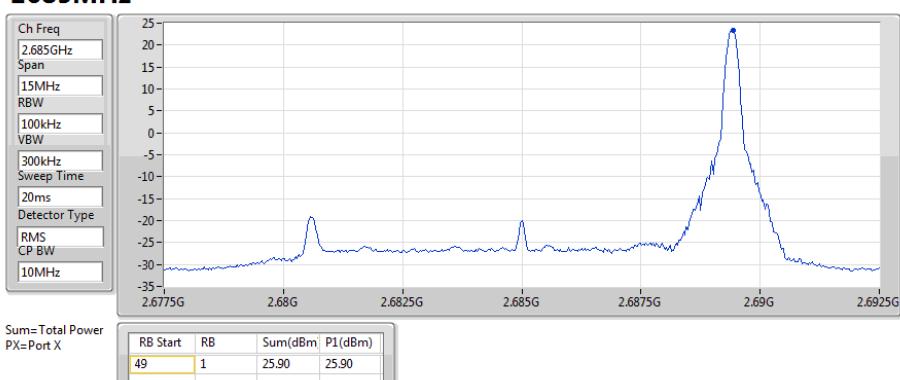
**Band 41\_LTE\_10MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2501MHz**

**Band 41\_LTE\_10MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2501MHz**

**Band 41\_LTE\_10MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2501MHz**


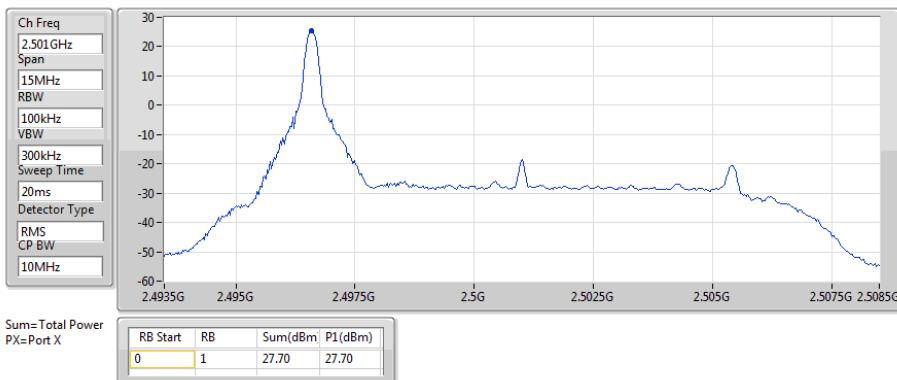
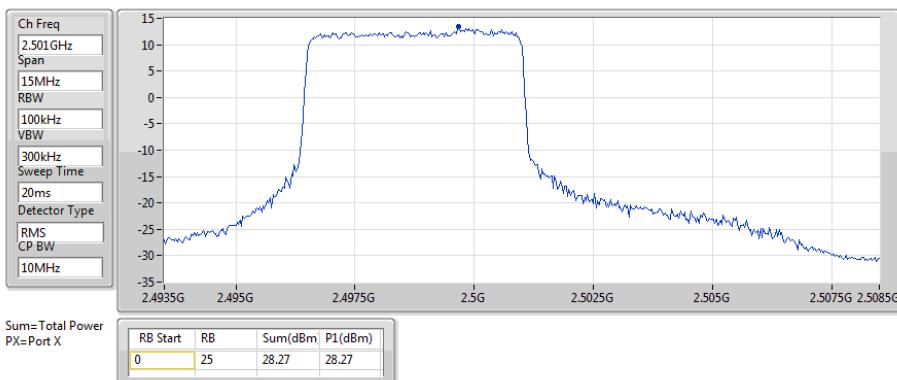
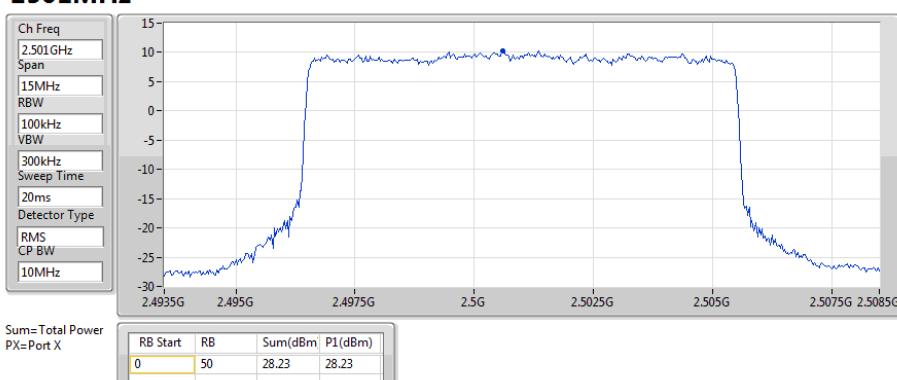
**Band 41\_LTE\_10MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2501MHz**

**Band 41\_LTE\_10MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2593MHz**

**Band 41\_LTE\_10MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2593MHz**


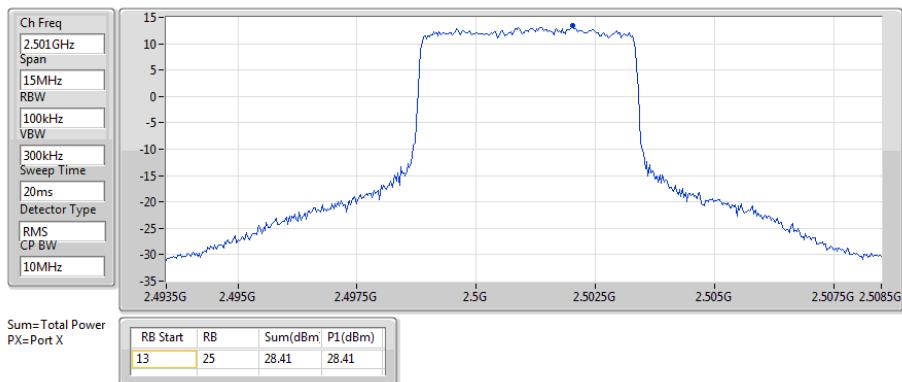
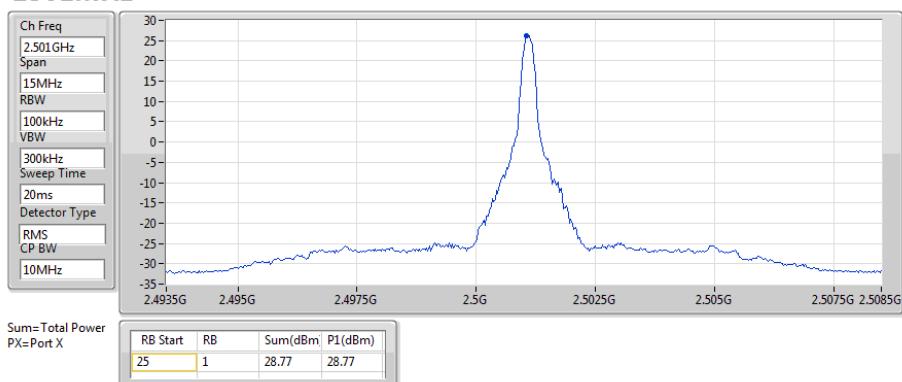
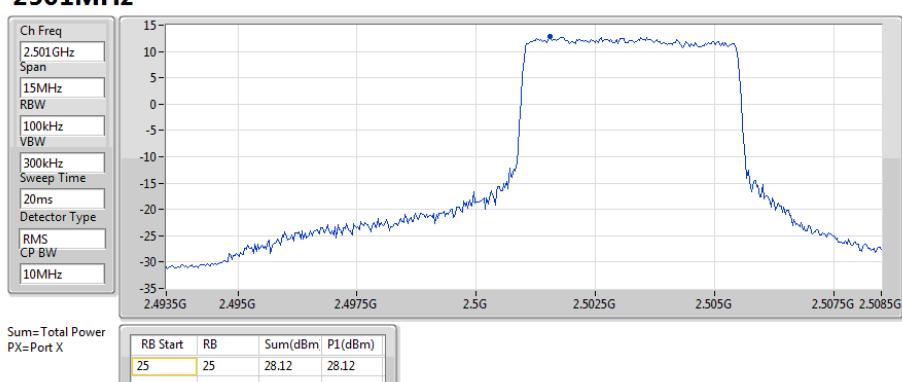


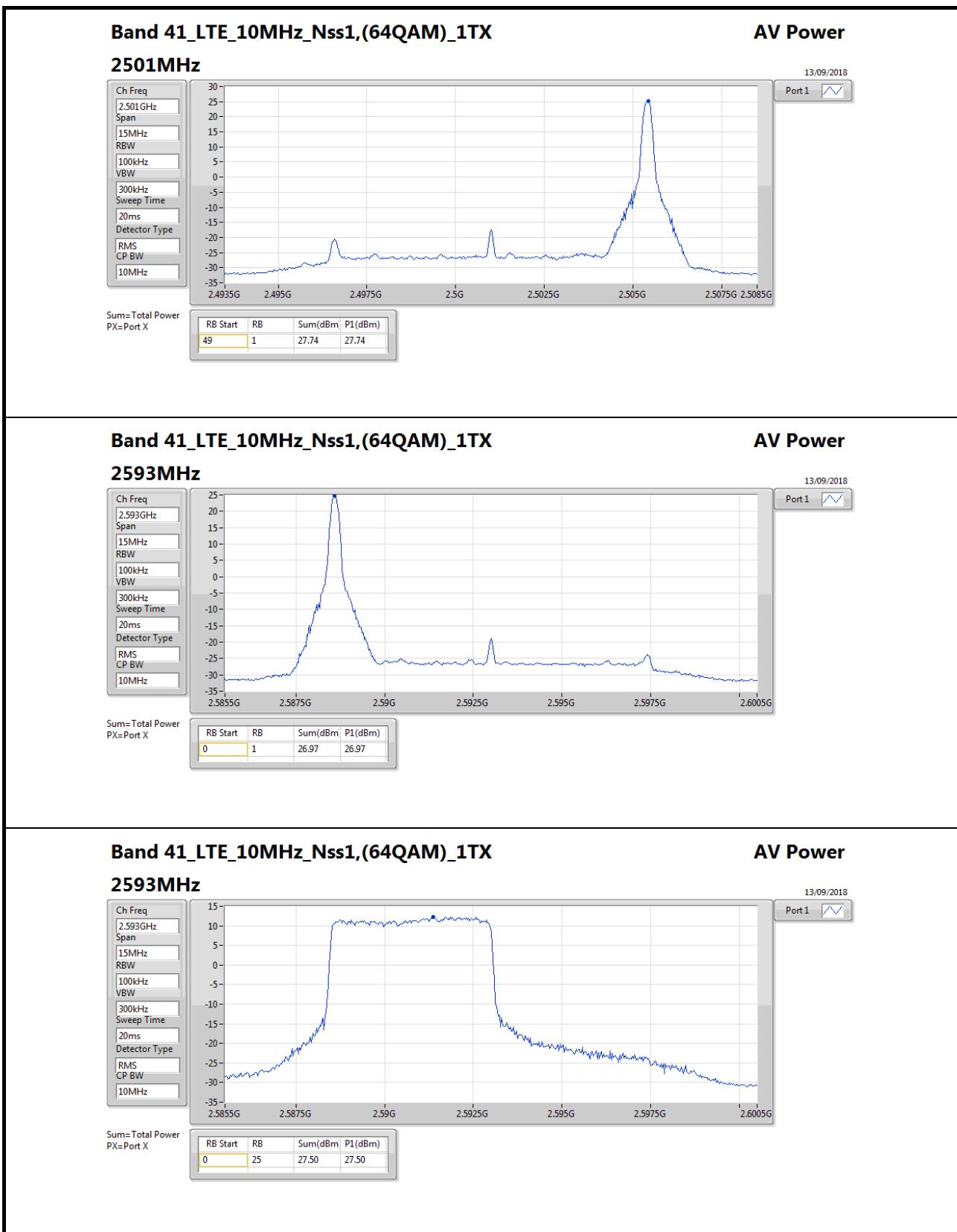
**Band 41\_LTE\_10MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2593MHz**

**Band 41\_LTE\_10MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2593MHz**

**Band 41\_LTE\_10MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2685MHz**


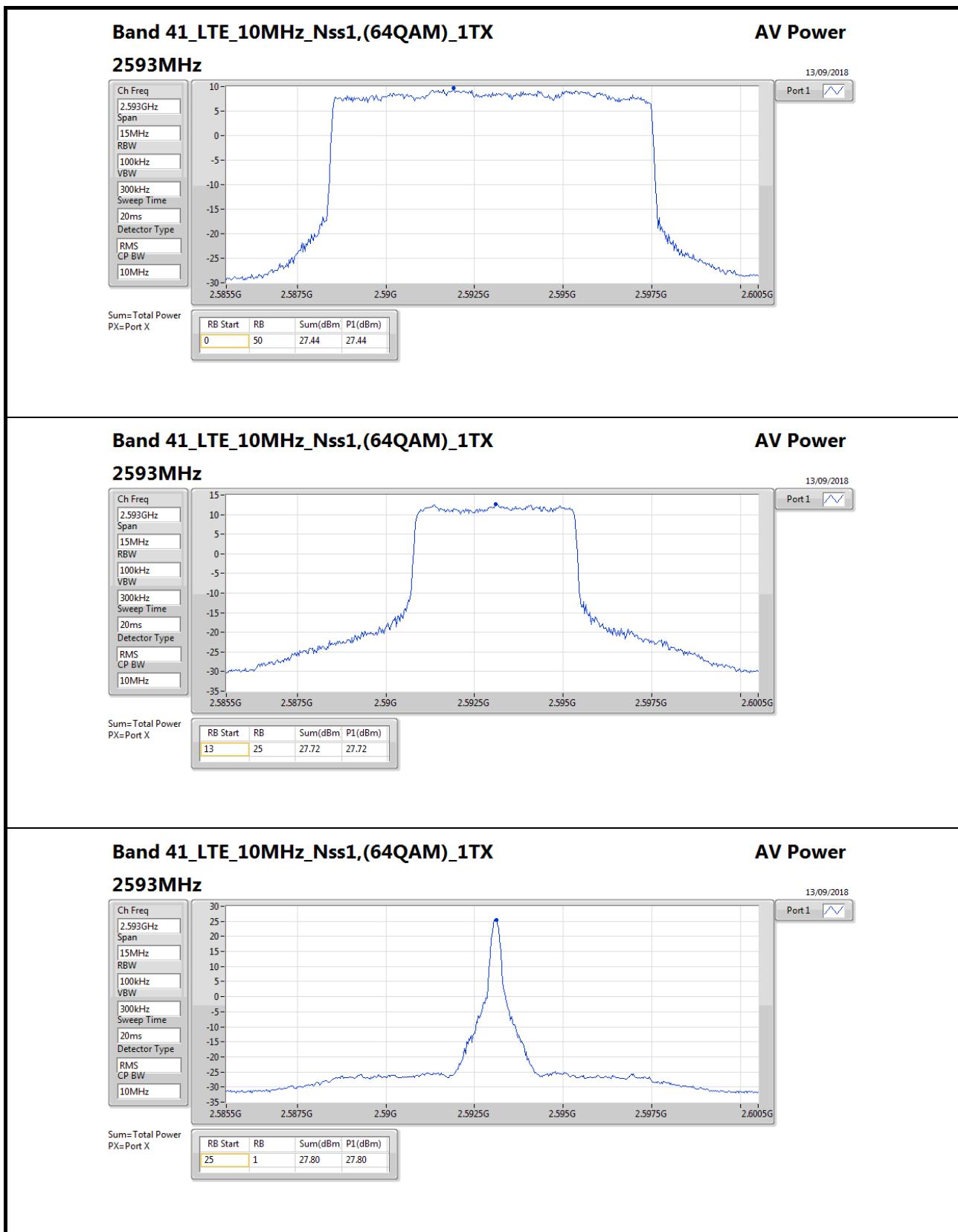
**Band 41\_LTE\_10MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2685MHz**

**Band 41\_LTE\_10MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2685MHz**

**Band 41\_LTE\_10MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2685MHz**


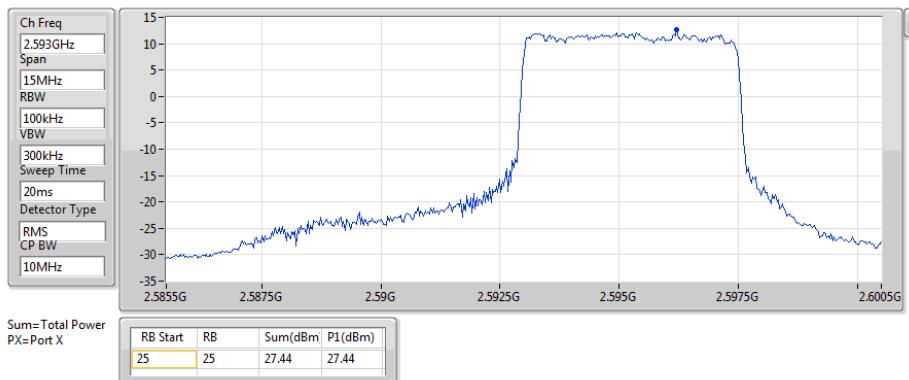
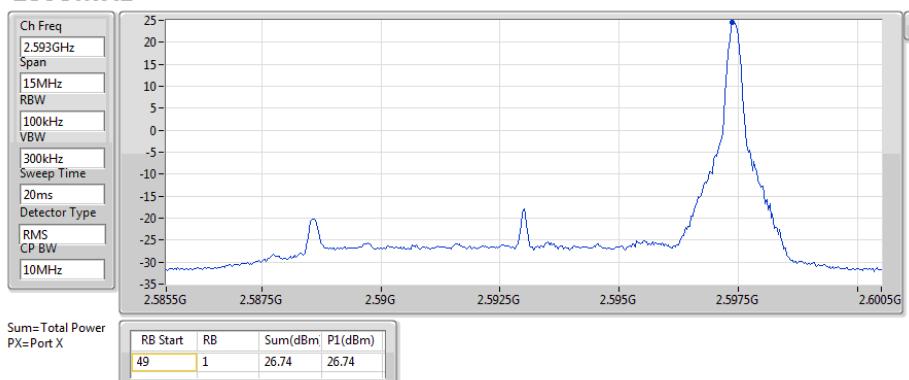
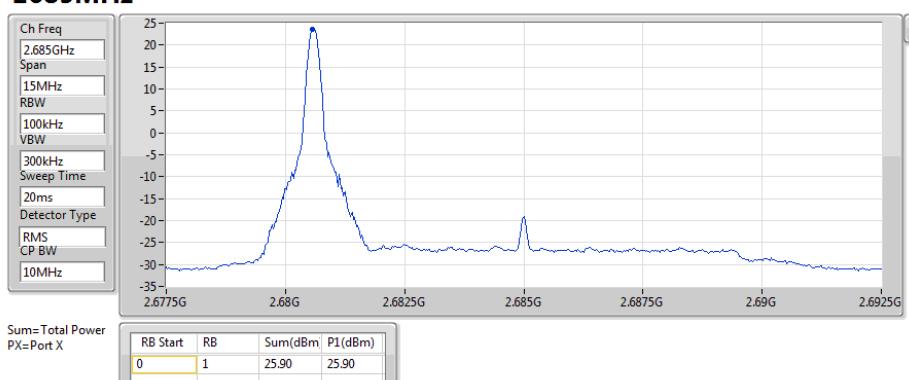
**Band 41\_LTE\_10MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2685MHz**

**Band 41\_LTE\_10MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2685MHz**

**Band 41\_LTE\_10MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2685MHz**


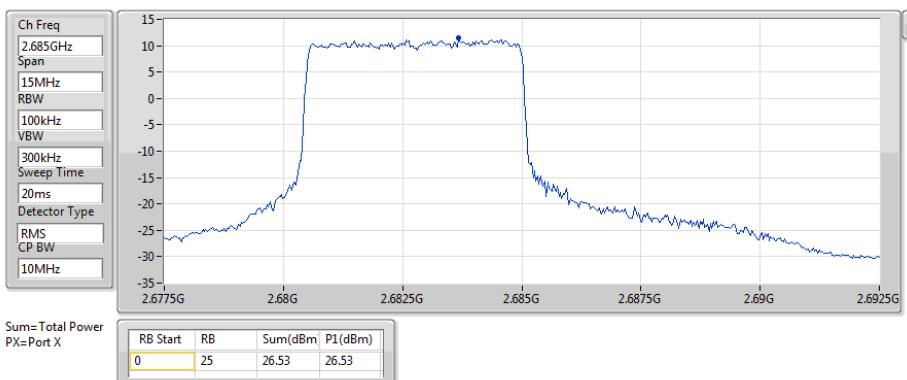
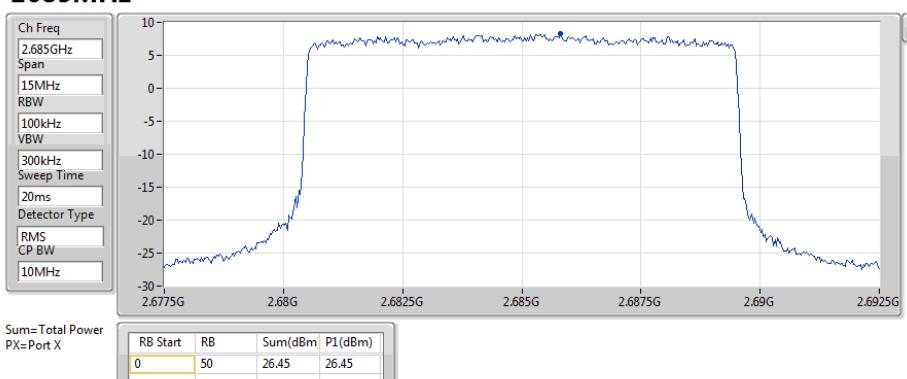
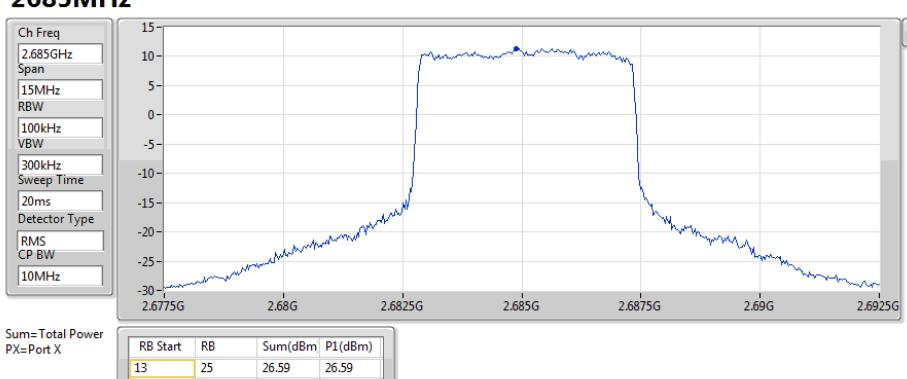
**Band 41\_LTE\_10MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2501MHz**

**Band 41\_LTE\_10MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2501MHz**

**Band 41\_LTE\_10MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2501MHz**


**Band 41\_LTE\_10MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2501MHz**

**Band 41\_LTE\_10MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2501MHz**

**Band 41\_LTE\_10MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2501MHz**






**Band 41\_LTE\_10MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2593MHz**

**Band 41\_LTE\_10MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2593MHz**

**Band 41\_LTE\_10MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2685MHz**


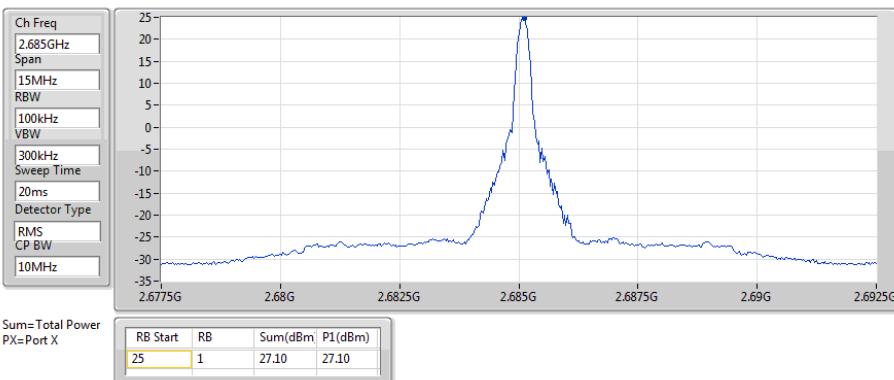
**Band 41\_LTE\_10MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2685MHz**

**Band 41\_LTE\_10MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2685MHz**

**Band 41\_LTE\_10MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2685MHz**




## Band 41\_LTE\_10MHz\_Nss1,(64QAM)\_1TX

## AV Power

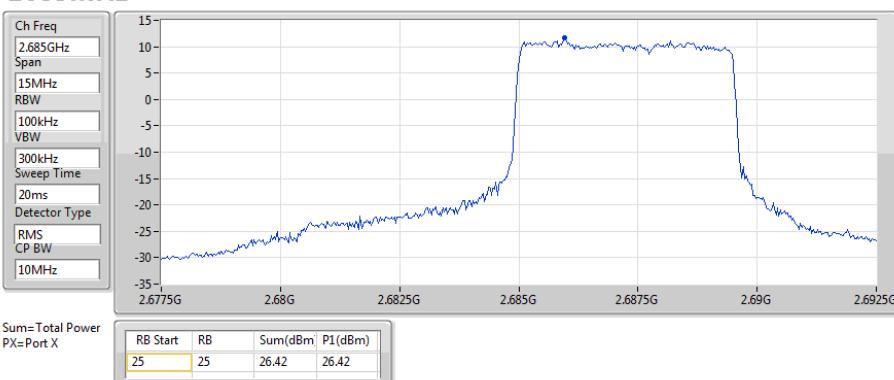
2685MHz



## Band 41\_LTE\_10MHz\_Nss1,(64QAM)\_1TX

## AV Power

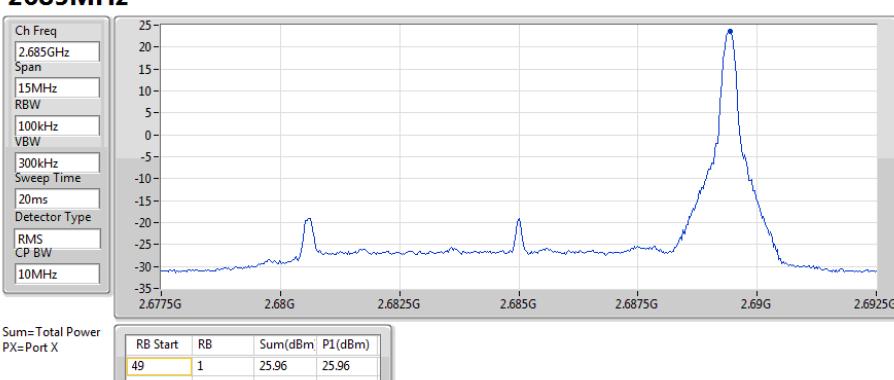
2685MHz

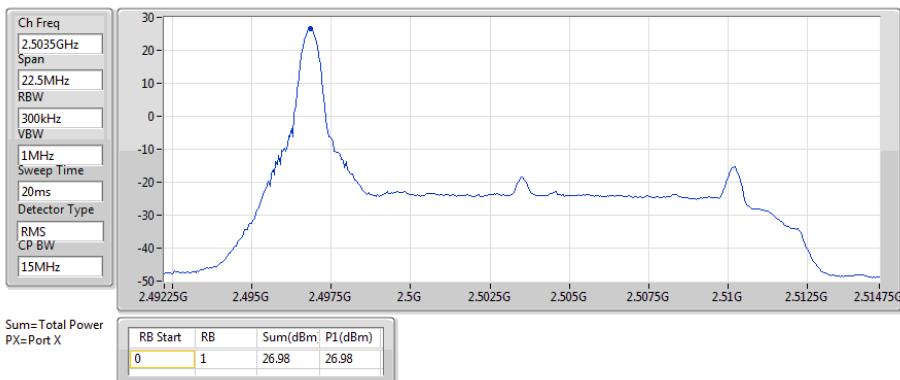
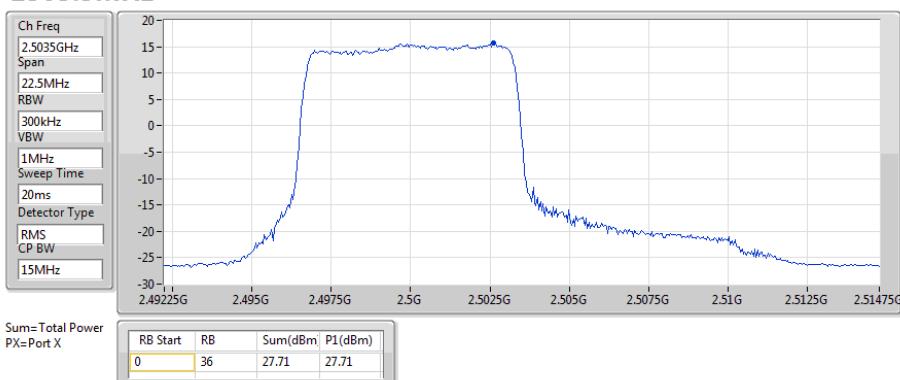
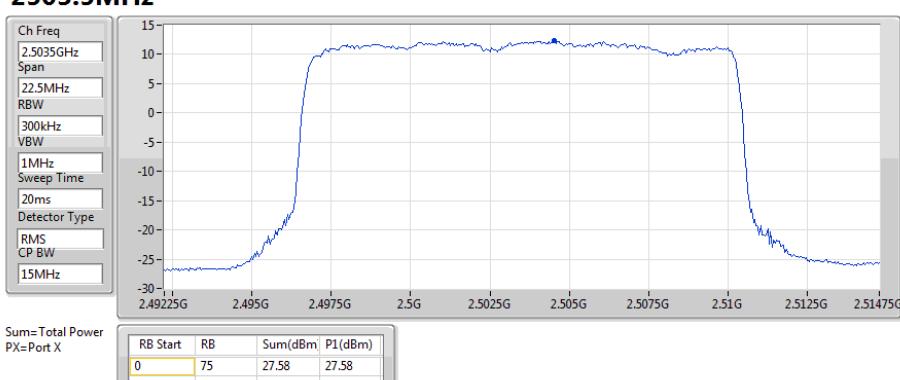


## Band 41\_LTE\_10MHz\_Nss1,(64QAM)\_1TX

## AV Power

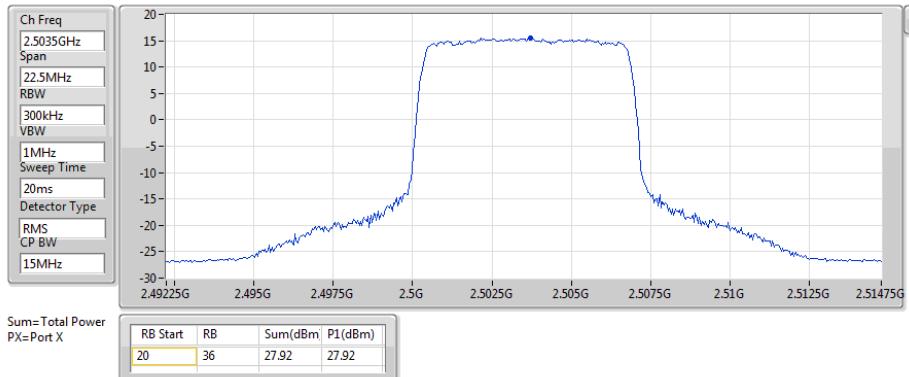
2685MHz



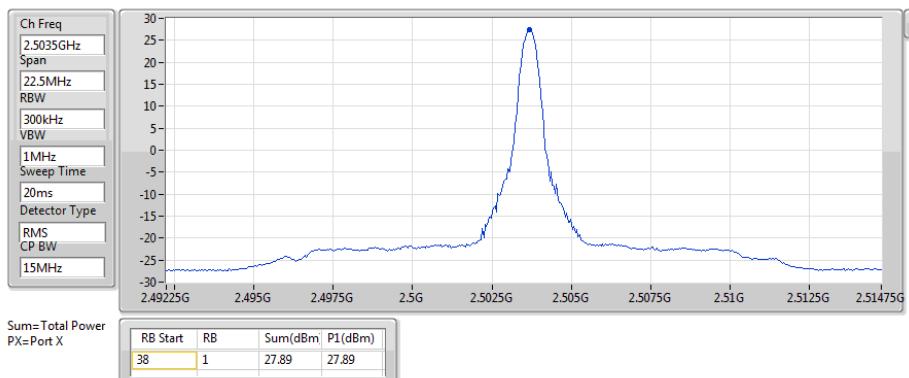
**Band 41\_LTE\_15MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2503.5MHz**

**Band 41\_LTE\_15MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2503.5MHz**

**Band 41\_LTE\_15MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2503.5MHz**


**Band 41\_LTE\_15MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2503.5MHz**

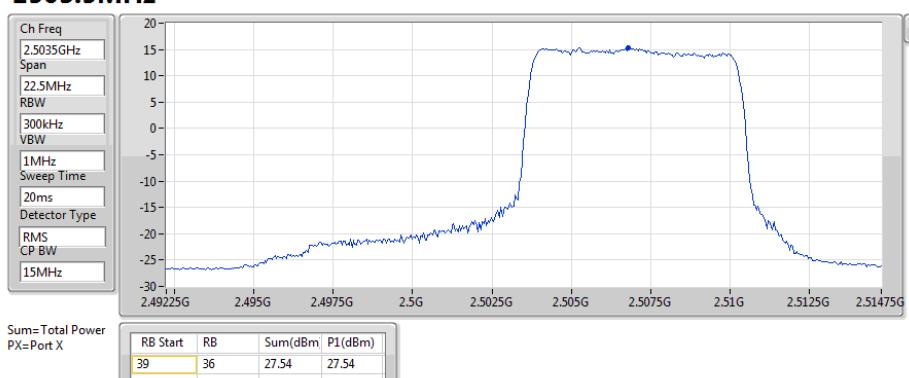
13/09/2018

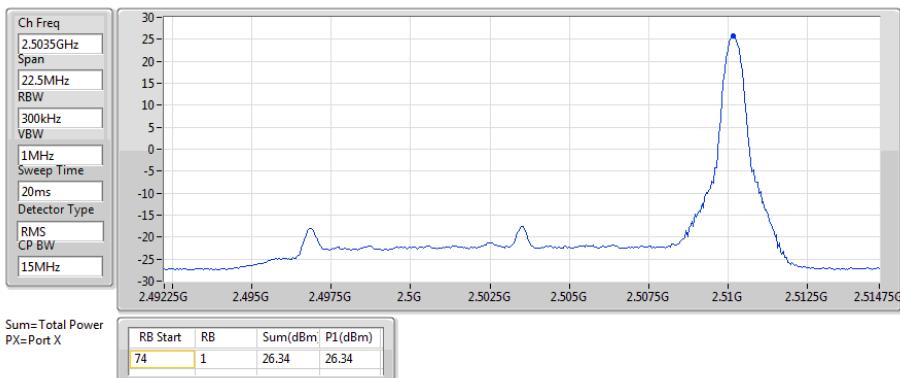
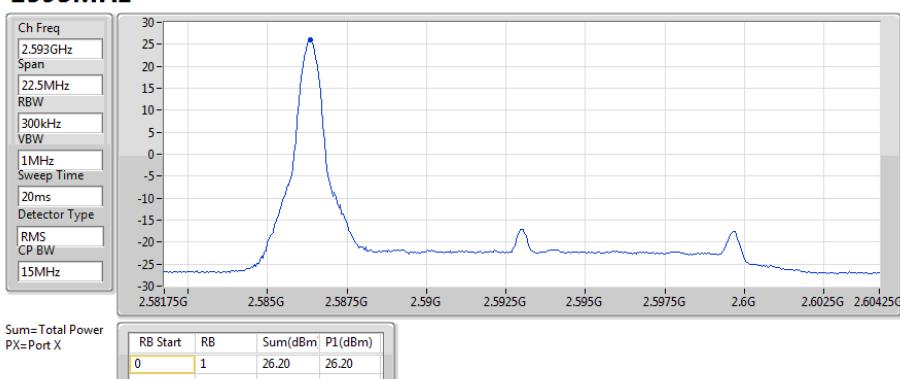
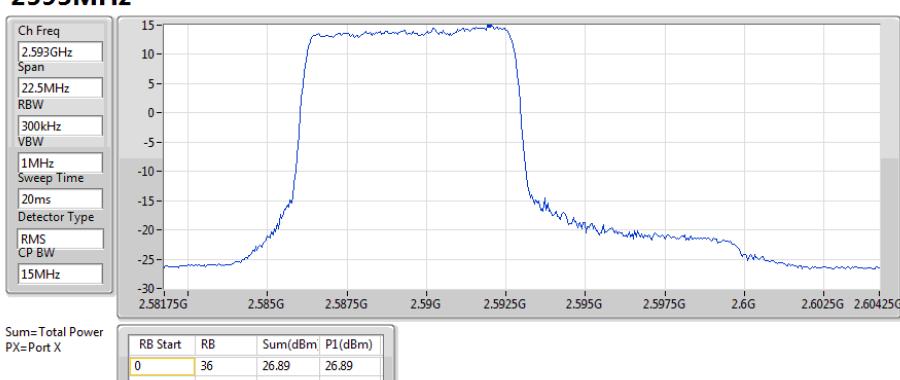
 Port 1 

**Band 41\_LTE\_15MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2503.5MHz**

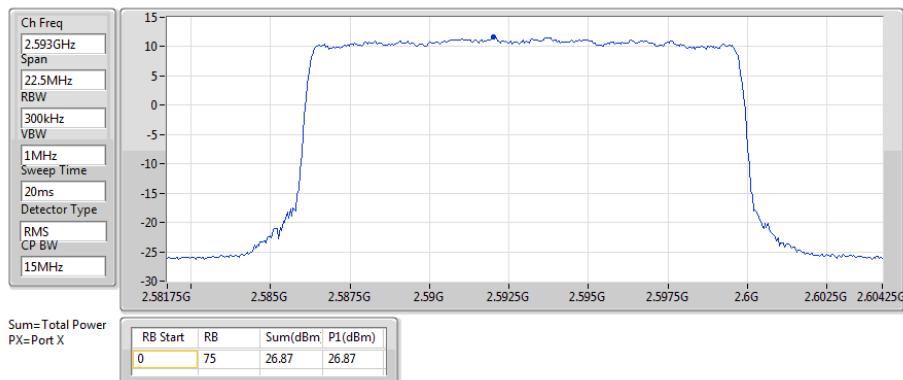
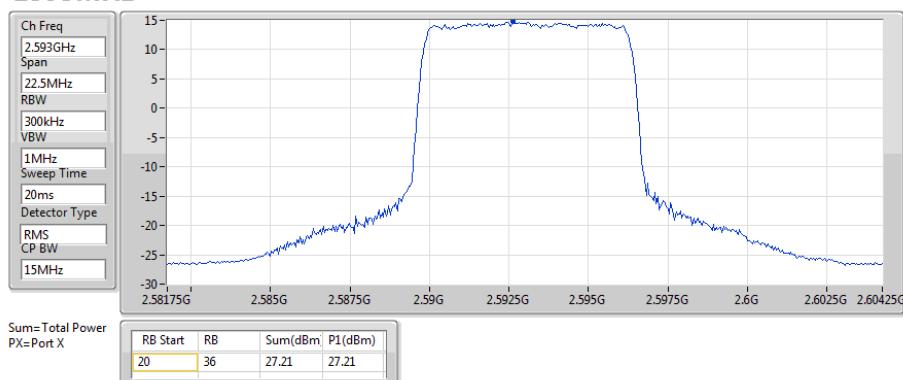
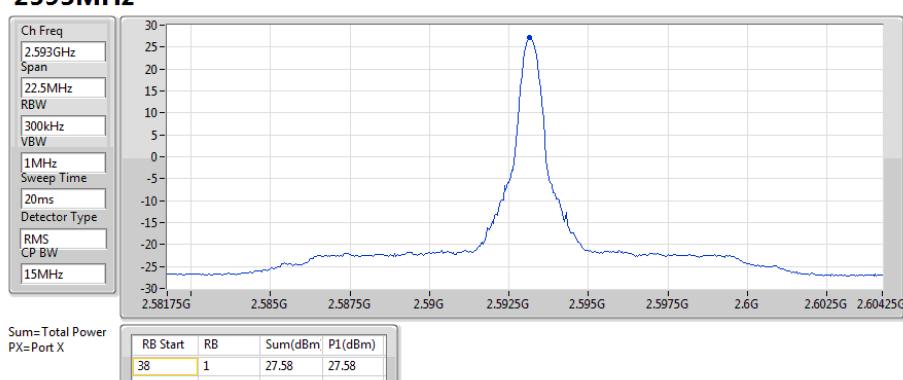
13/09/2018

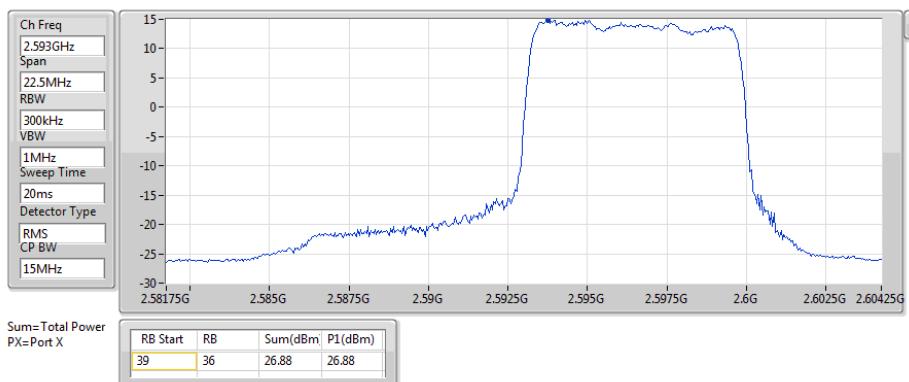
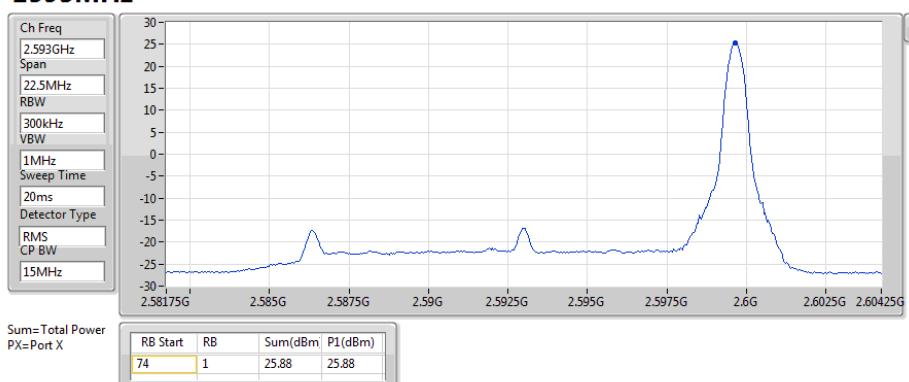
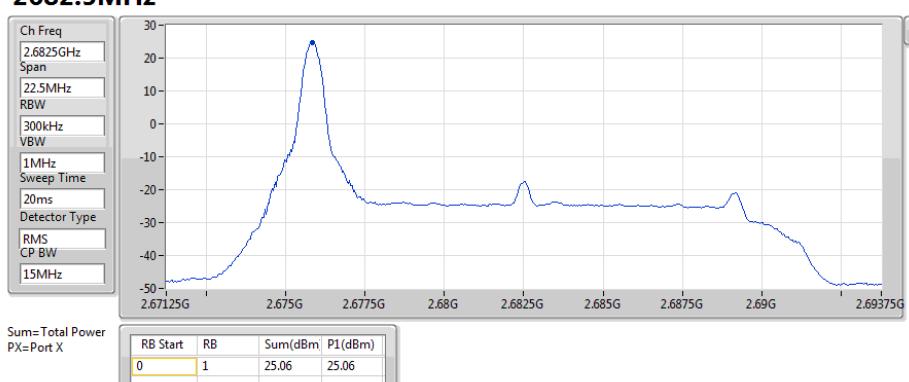
 Port 1 

**Band 41\_LTE\_15MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2503.5MHz**

13/09/2018

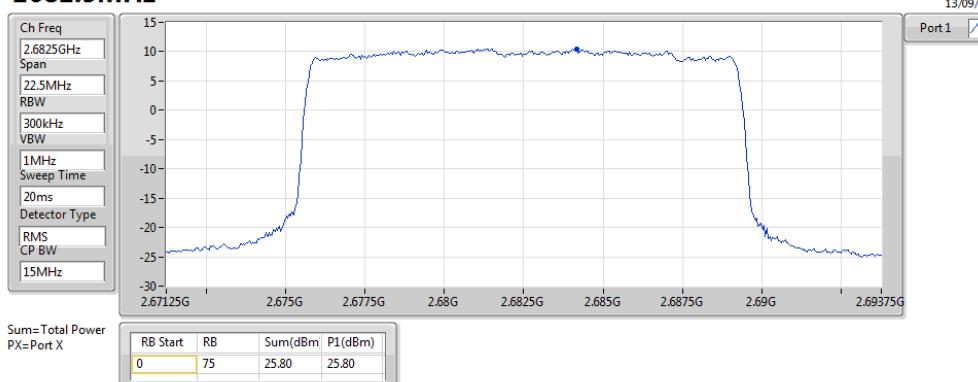
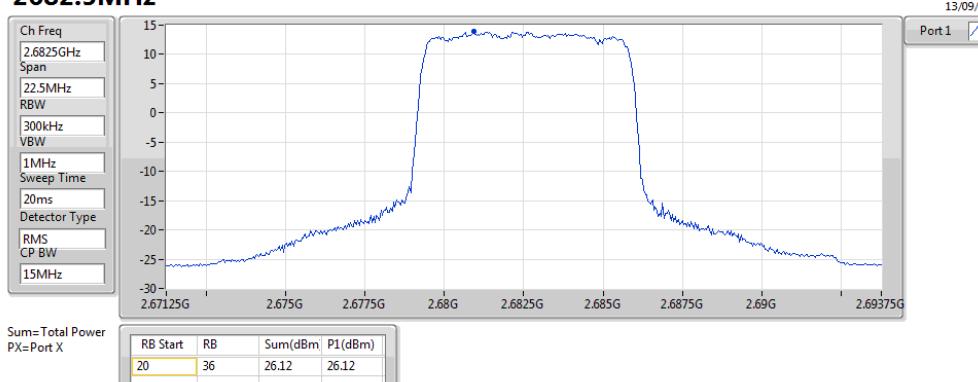
 Port 1 


**Band 41\_LTE\_15MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2503.5MHz**

**Band 41\_LTE\_15MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2593MHz**

**Band 41\_LTE\_15MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2593MHz**


**Band 41\_LTE\_15MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2593MHz**

**Band 41\_LTE\_15MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2593MHz**

**Band 41\_LTE\_15MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2593MHz**


**Band 41\_LTE\_15MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2593MHz**

**Band 41\_LTE\_15MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2593MHz**

**Band 41\_LTE\_15MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2682.5MHz**


**Band 41\_LTE\_15MHz\_Nss1,(QPSK)\_1TX**
**2682.5MHz**

**Band 41\_LTE\_15MHz\_Nss1,(QPSK)\_1TX**
**2682.5MHz**

**Band 41\_LTE\_15MHz\_Nss1,(QPSK)\_1TX**
**2682.5MHz**


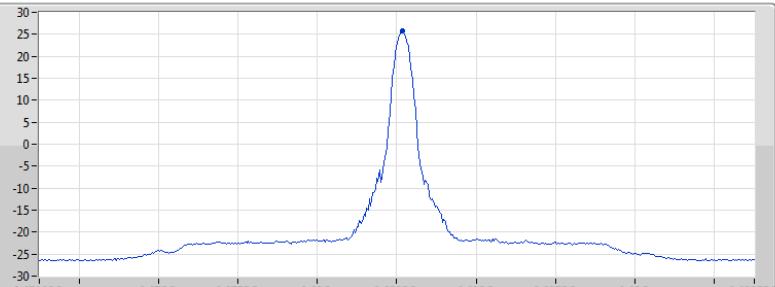


## Band 41\_LTE\_15MHz\_Nss1,(QPSK)\_1TX

2682.5MHz

Ch Freq  
2.6825GHz  
Span  
22.5MHz  
RBW  
300kHz  
VBW  
1MHz  
Sweep Time  
20ms  
Detector Type  
RMS  
CP BW  
15MHz

Sum=Total Power  
PX=Port X



## AV Power

13/09/2018

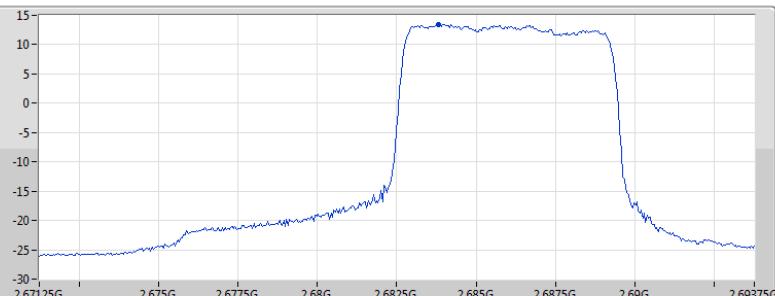
Port 1 

## Band 41\_LTE\_15MHz\_Nss1,(QPSK)\_1TX

2682.5MHz

Ch Freq  
2.6825GHz  
Span  
22.5MHz  
RBW  
300kHz  
VBW  
1MHz  
Sweep Time  
20ms  
Detector Type  
RMS  
CP BW  
15MHz

Sum=Total Power  
PX=Port X



## AV Power

13/09/2018

Port 1 

## Band 41\_LTE\_15MHz\_Nss1,(QPSK)\_1TX

2682.5MHz

Ch Freq  
2.6825GHz  
Span  
22.5MHz  
RBW  
300kHz  
VBW  
1MHz  
Sweep Time  
20ms  
Detector Type  
RMS  
CP BW  
15MHz

Sum=Total Power  
PX=Port X



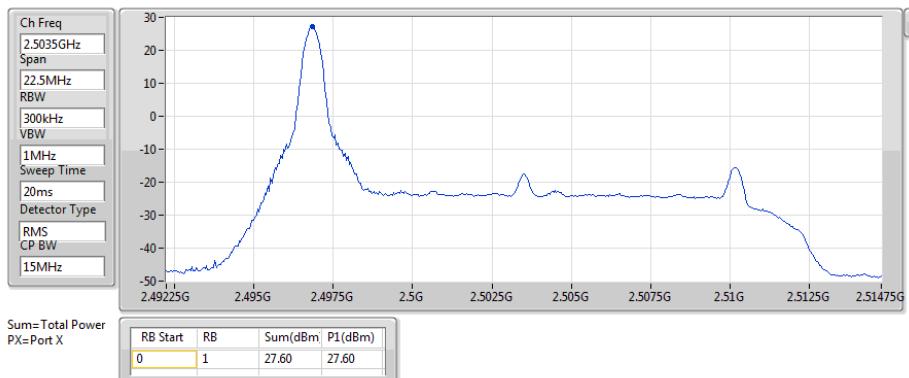
## AV Power

13/09/2018

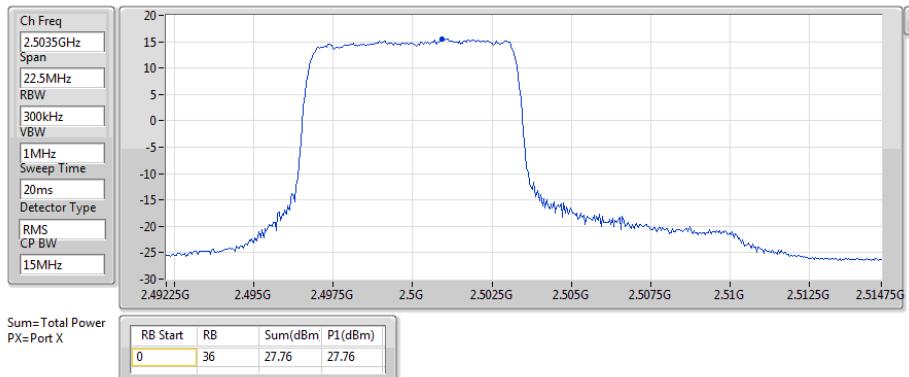
Port 1

**Band 41\_LTE\_15MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2503.5MHz**

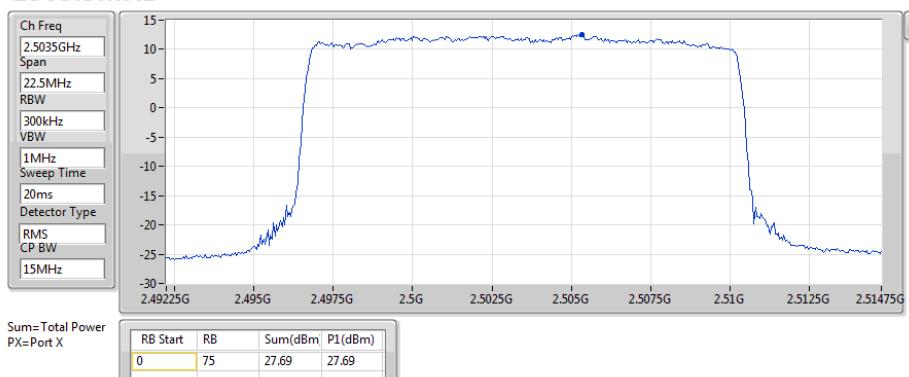
13/09/2018

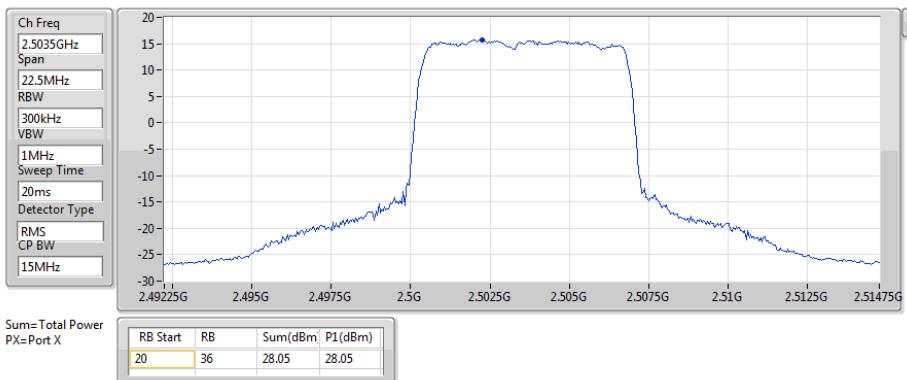
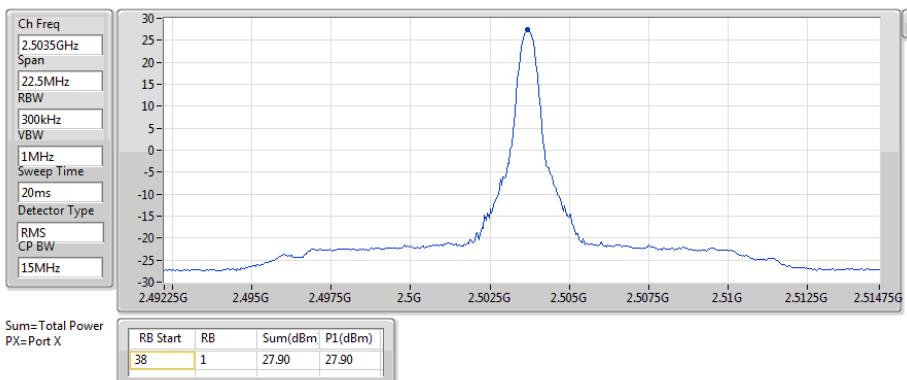
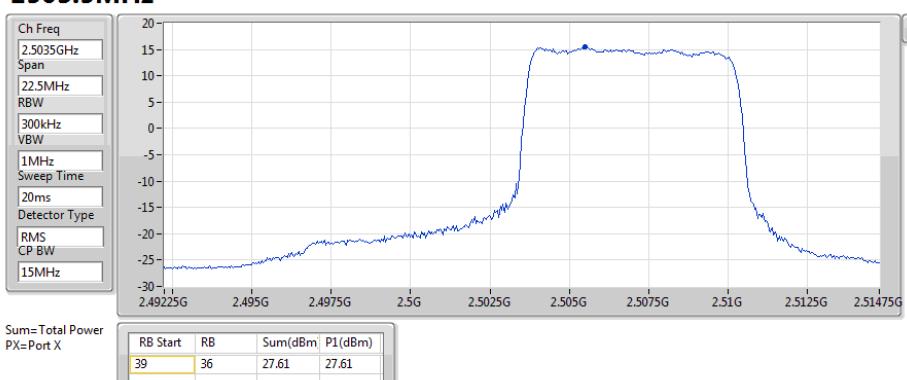
Port 1 

**Band 41\_LTE\_15MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2503.5MHz**

13/09/2018

Port 1 

**Band 41\_LTE\_15MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2503.5MHz**

13/09/2018

Port 1 


**Band 41\_LTE\_15MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2503.5MHz**

**Band 41\_LTE\_15MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2503.5MHz**

**Band 41\_LTE\_15MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2503.5MHz**


**Band 41\_LTE\_15MHz\_Nss1,(16QAM)\_1TX****AV Power****2503.5MHz**

Ch Freq  
2.5035GHz  
Span  
22.5MHz  
RBW  
300kHz  
VBW  
1MHz  
Sweep Time  
20ms  
Detector Type  
RMS  
CP BW  
15MHz

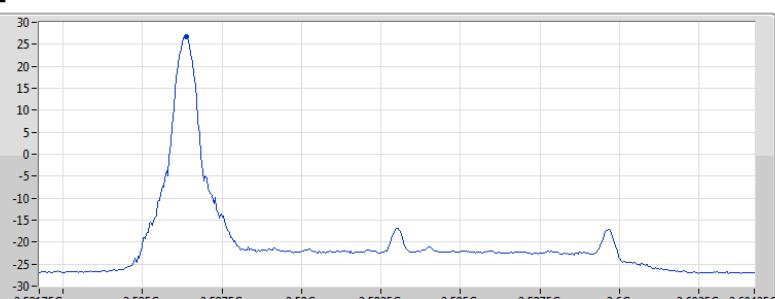
Sum=Total Power  
PX=Port X

13/09/2018

Port 1

**Band 41\_LTE\_15MHz\_Nss1,(16QAM)\_1TX****AV Power****2593MHz**

Ch Freq  
2.593GHz  
Span  
22.5MHz  
RBW  
300kHz  
VBW  
1MHz  
Sweep Time  
20ms  
Detector Type  
RMS  
CP BW  
15MHz

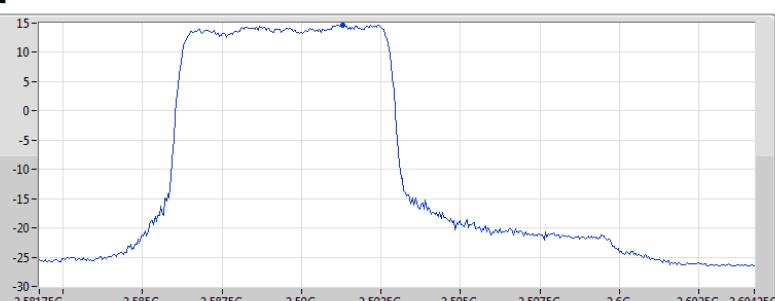
Sum=Total Power  
PX=Port X

13/09/2018

Port 1

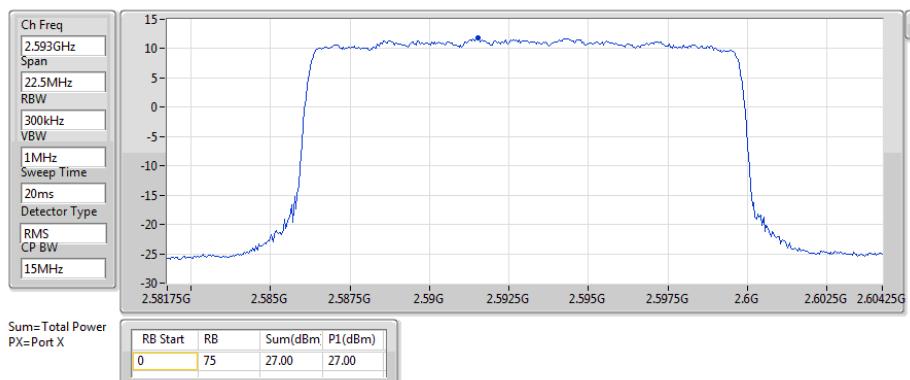
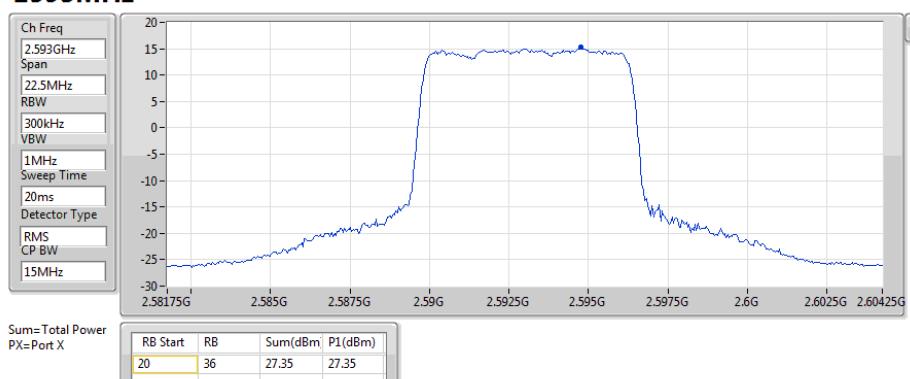
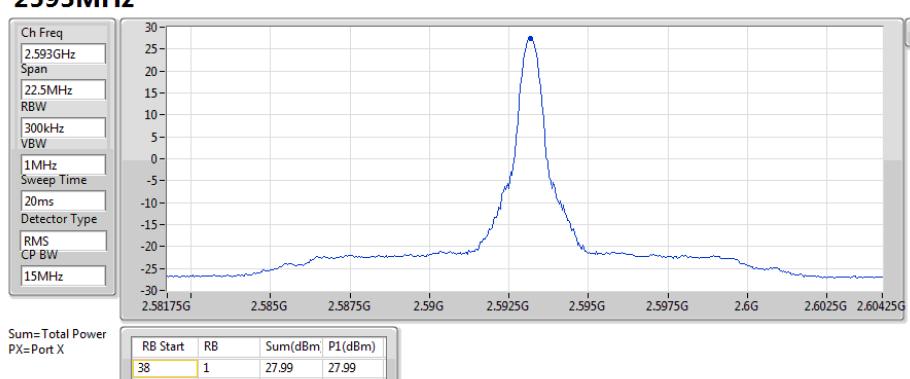
**Band 41\_LTE\_15MHz\_Nss1,(16QAM)\_1TX****AV Power****2593MHz**

Ch Freq  
2.593GHz  
Span  
22.5MHz  
RBW  
300kHz  
VBW  
1MHz  
Sweep Time  
20ms  
Detector Type  
RMS  
CP BW  
15MHz

Sum=Total Power  
PX=Port X

13/09/2018

Port 1

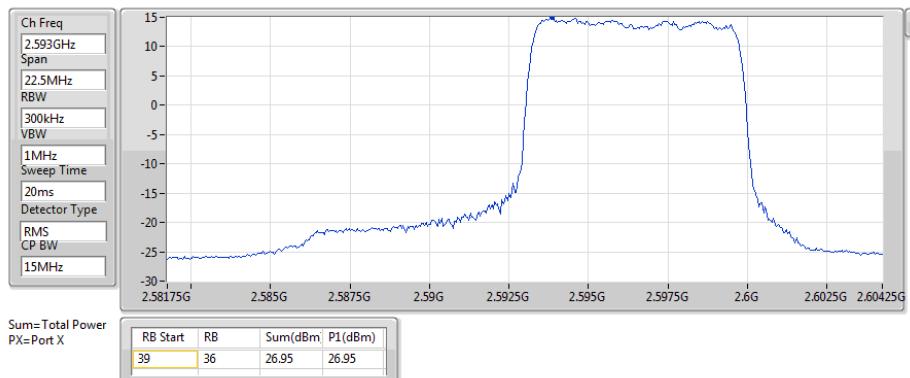
**Band 41\_LTE\_15MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2593MHz**

**Band 41\_LTE\_15MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2593MHz**

**Band 41\_LTE\_15MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2593MHz**




## Band 41\_LTE\_15MHz\_Nss1,(16QAM)\_1TX

## AV Power

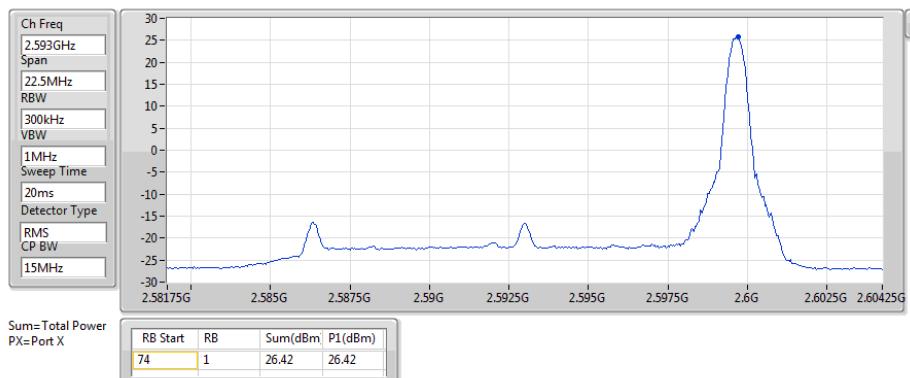
2593MHz



## Band 41\_LTE\_15MHz\_Nss1,(16QAM)\_1TX

## AV Power

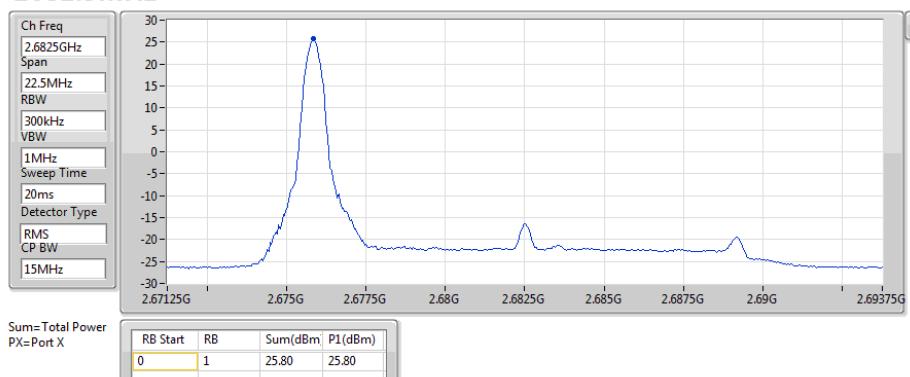
2593MHz



## Band 41\_LTE\_15MHz\_Nss1,(16QAM)\_1TX

## AV Power

2682.5MHz





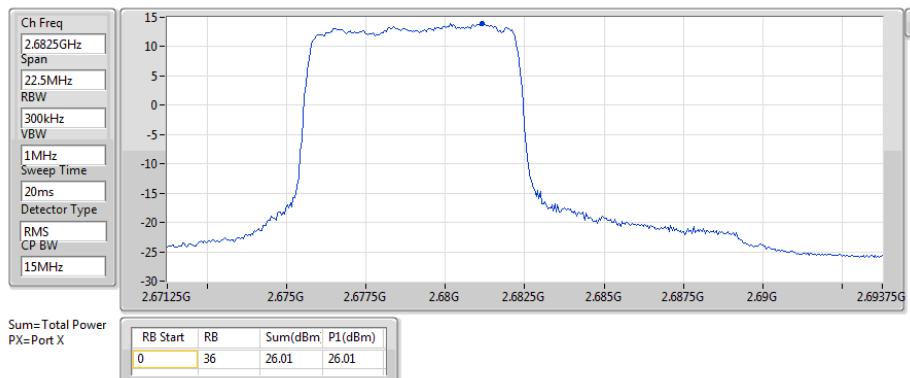
## Band 41\_LTE\_15MHz\_Nss1,(16QAM)\_1TX

AV Power

2682.5MHz

13/09/2018

Port 1



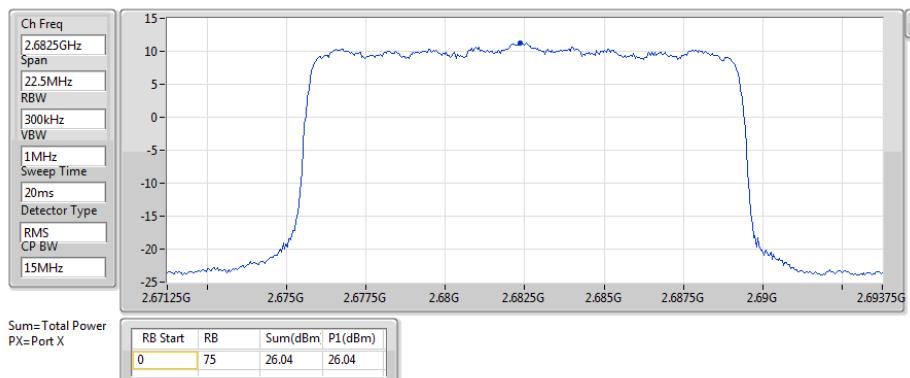
## Band 41\_LTE\_15MHz\_Nss1,(16QAM)\_1TX

AV Power

2682.5MHz

13/09/2018

Port 1



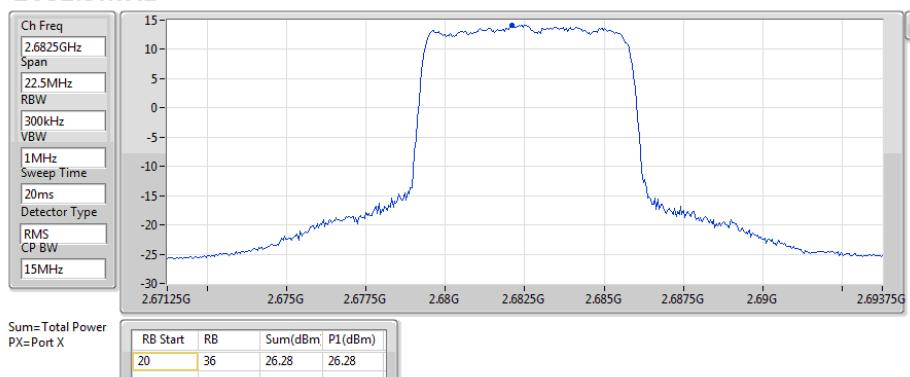
## Band 41\_LTE\_15MHz\_Nss1,(16QAM)\_1TX

AV Power

2682.5MHz

13/09/2018

Port 1



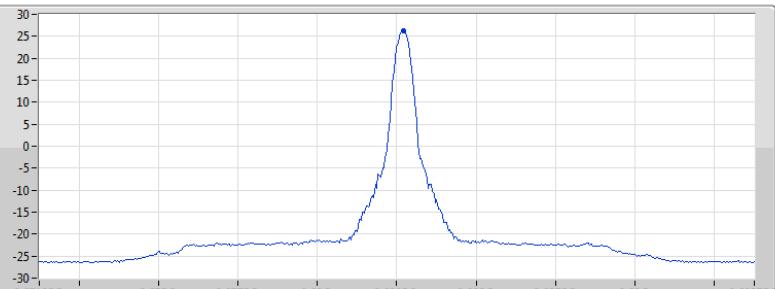


## Band 41\_LTE\_15MHz\_Nss1,(16QAM)\_1TX

## AV Power

2682.5MHz

Ch Freq  
2.6825GHz  
Span  
22.5MHz  
RBW  
300kHz  
VBW  
1MHz  
Sweep Time  
20ms  
Detector Type  
RMS  
CP BW  
15MHz



13/09/2018

Port 1 Sum=Total Power  
PX=Port X

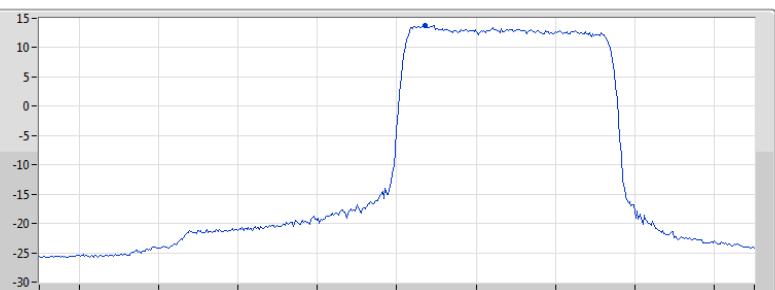
RB Start	RB	Sum(dBm)	P1(dBm)
38	1	26.74	26.74

## Band 41\_LTE\_15MHz\_Nss1,(16QAM)\_1TX

## AV Power

2682.5MHz

Ch Freq  
2.6825GHz  
Span  
22.5MHz  
RBW  
300kHz  
VBW  
1MHz  
Sweep Time  
20ms  
Detector Type  
RMS  
CP BW  
15MHz



13/09/2018

Port 1 Sum=Total Power  
PX=Port X

RB Start	RB	Sum(dBm)	P1(dBm)
39	36	25.93	25.93

## Band 41\_LTE\_15MHz\_Nss1,(16QAM)\_1TX

## AV Power

2682.5MHz

Ch Freq  
2.6825GHz  
Span  
22.5MHz  
RBW  
300kHz  
VBW  
1MHz  
Sweep Time  
20ms  
Detector Type  
RMS  
CP BW  
15MHz



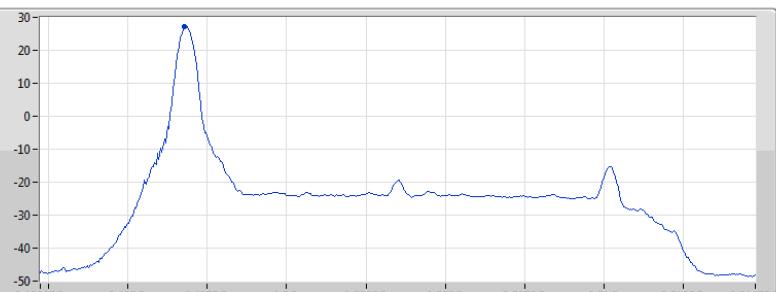
13/09/2018

Port 1 Sum=Total Power  
PX=Port X

RB Start	RB	Sum(dBm)	P1(dBm)
74	1	25.58	25.58

**Band 41\_LTE\_15MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2503.5MHz**

 Ch Freq  
 2.5035GHz  
 Span  
 22.5MHz  
 RBW  
 300kHz  
 VBW  
 1MHz  
 Sweep Time  
 20ms  
 Detector Type  
 RMS  
 CP BW  
 15MHz

 Sum=Total Power  
 PX=Port X


13/09/2018

 Port 1 
**Band 41\_LTE\_15MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2503.5MHz**

 Ch Freq  
 2.5035GHz  
 Span  
 22.5MHz  
 RBW  
 300kHz  
 VBW  
 1MHz  
 Sweep Time  
 20ms  
 Detector Type  
 RMS  
 CP BW  
 15MHz

 Sum=Total Power  
 PX=Port X


13/09/2018

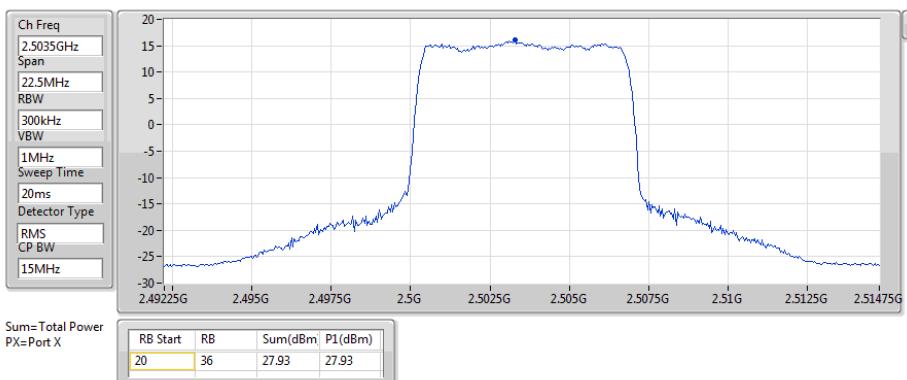
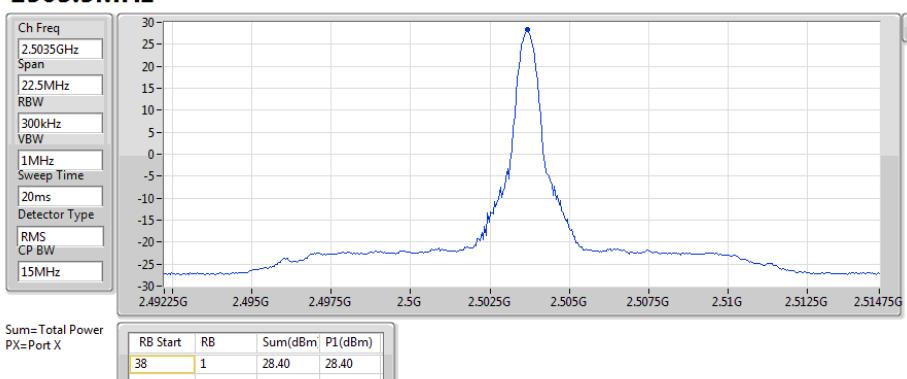
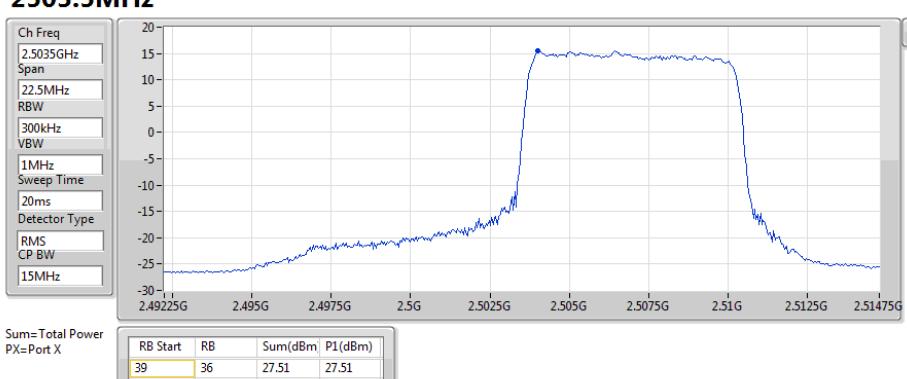
 Port 1 
**Band 41\_LTE\_15MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2503.5MHz**

 Ch Freq  
 2.5035GHz  
 Span  
 22.5MHz  
 RBW  
 300kHz  
 VBW  
 1MHz  
 Sweep Time  
 20ms  
 Detector Type  
 RMS  
 CP BW  
 15MHz

 Sum=Total Power  
 PX=Port X

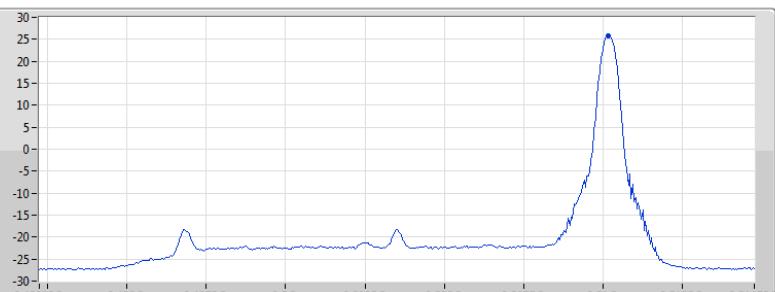

13/09/2018

 Port 1

**Band 41\_LTE\_15MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2503.5MHz**

**Band 41\_LTE\_15MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2503.5MHz**

**Band 41\_LTE\_15MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2503.5MHz**


**Band 41\_LTE\_15MHz\_Nss1,(64QAM)\_1TX****AV Power****2503.5MHz**

Ch Freq  
2.5035GHz  
Span  
22.5MHz  
RBW  
300kHz  
VBW  
1MHz  
Sweep Time  
20ms  
Detector Type  
RMS  
CP BW  
15MHz

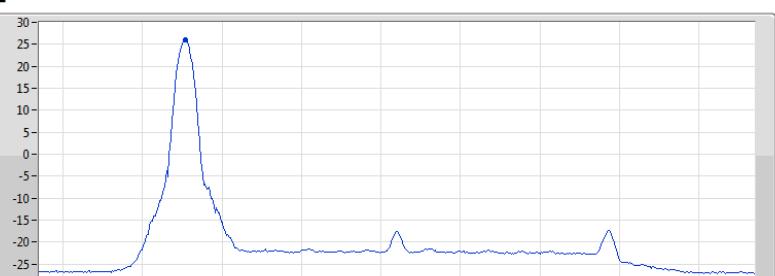
Sum=Total Power  
PX=Port X

13/09/2018

Port 1

**Band 41\_LTE\_15MHz\_Nss1,(64QAM)\_1TX****AV Power****2593MHz**

Ch Freq  
2.593GHz  
Span  
22.5MHz  
RBW  
300kHz  
VBW  
1MHz  
Sweep Time  
20ms  
Detector Type  
RMS  
CP BW  
15MHz

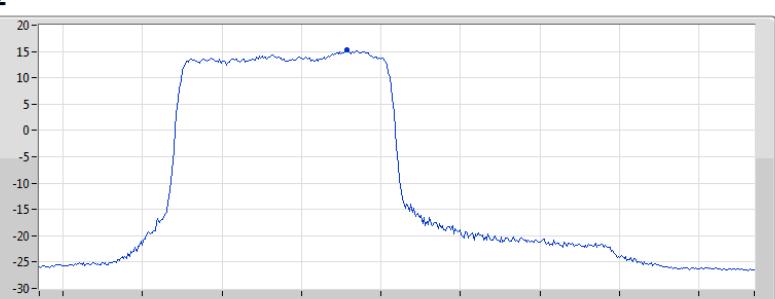
Sum=Total Power  
PX=Port X

13/09/2018

Port 1

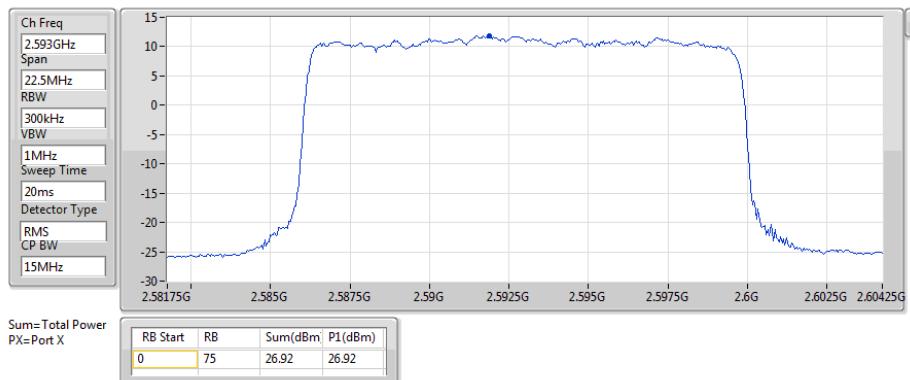
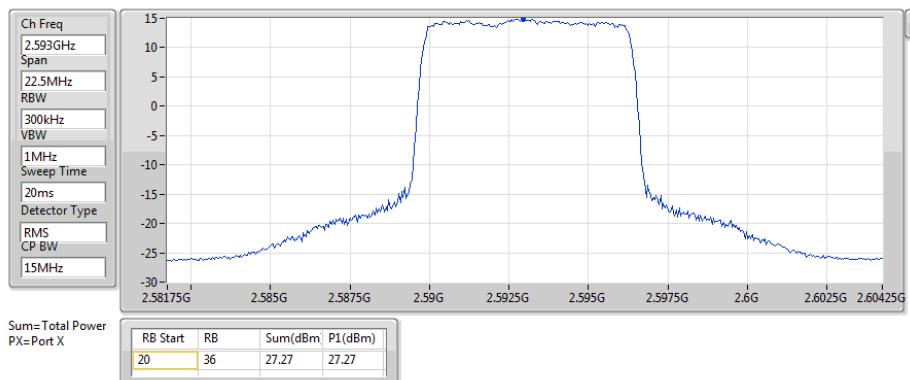
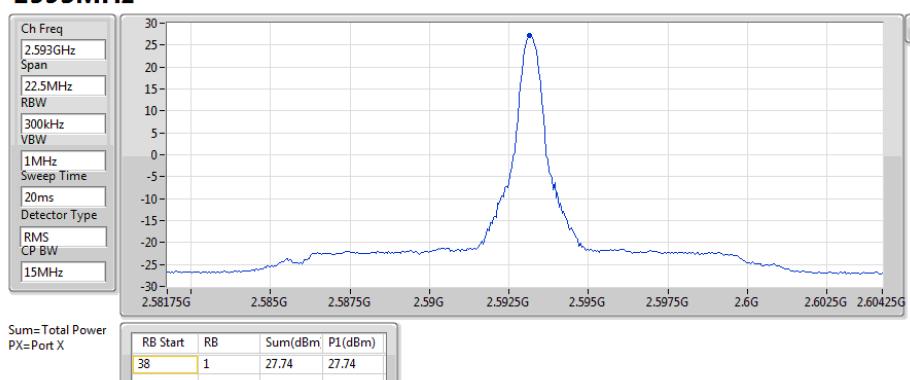
**Band 41\_LTE\_15MHz\_Nss1,(64QAM)\_1TX****AV Power****2593MHz**

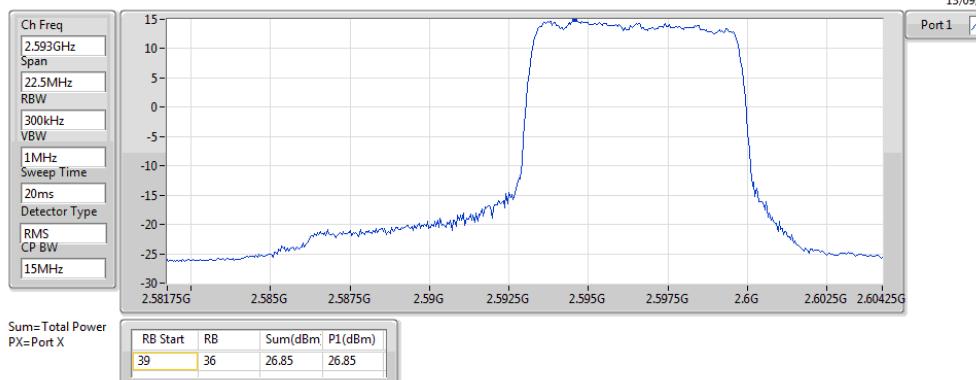
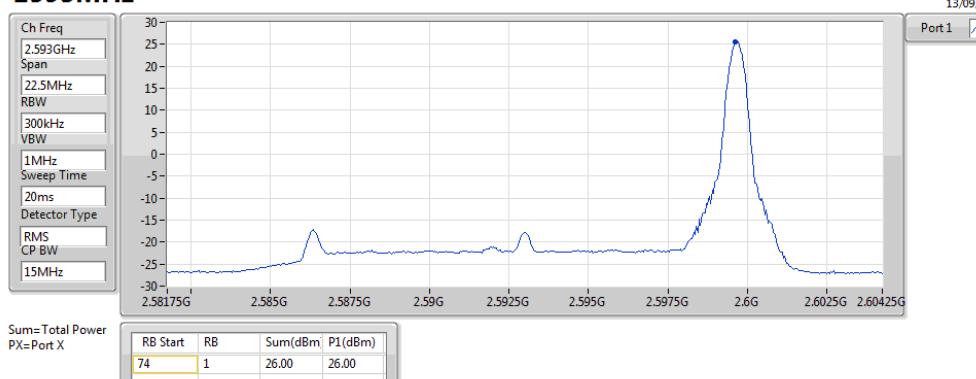
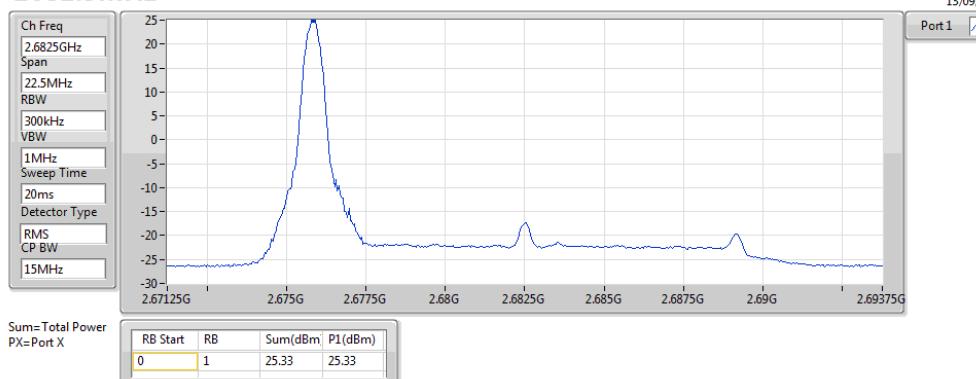
Ch Freq  
2.593GHz  
Span  
22.5MHz  
RBW  
300kHz  
VBW  
1MHz  
Sweep Time  
20ms  
Detector Type  
RMS  
CP BW  
15MHz

Sum=Total Power  
PX=Port X

13/09/2018

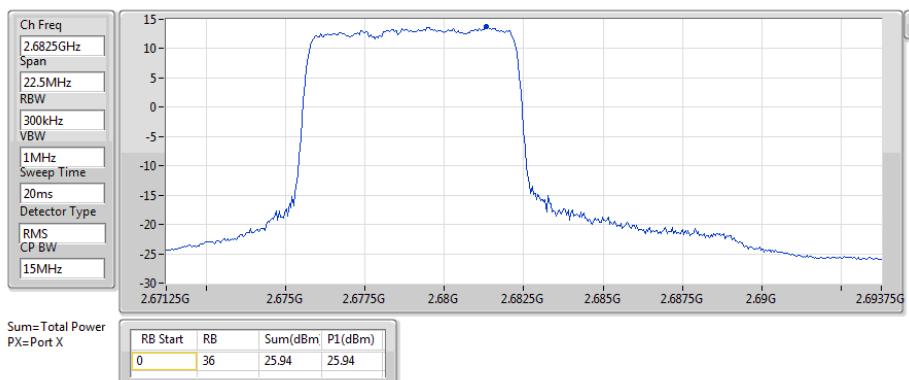
Port 1

**Band 41\_LTE\_15MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2593MHz**

**Band 41\_LTE\_15MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2593MHz**

**Band 41\_LTE\_15MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2593MHz**


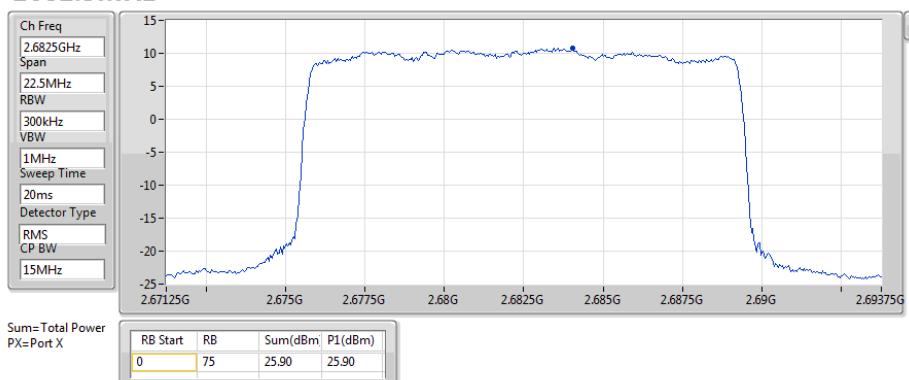
**Band 41\_LTE\_15MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2593MHz**

**Band 41\_LTE\_15MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2593MHz**

**Band 41\_LTE\_15MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2682.5MHz**


**Band 41\_LTE\_15MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2682.5MHz**

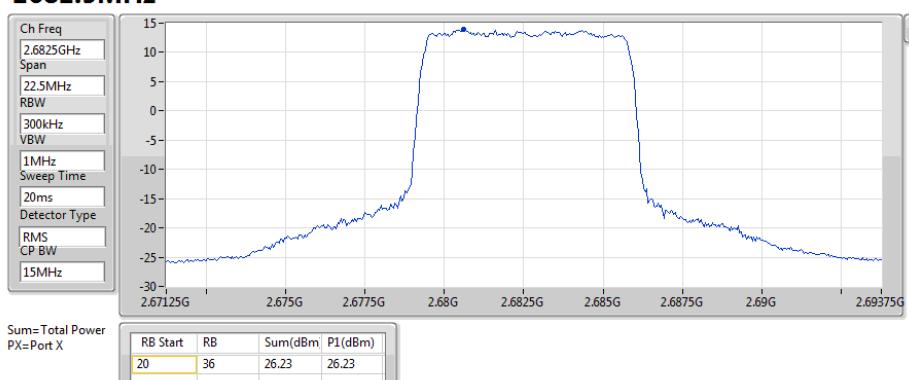
13/09/2018

 Port 1 

**Band 41\_LTE\_15MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2682.5MHz**

13/09/2018

 Port 1 

**Band 41\_LTE\_15MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2682.5MHz**

13/09/2018

 Port 1 


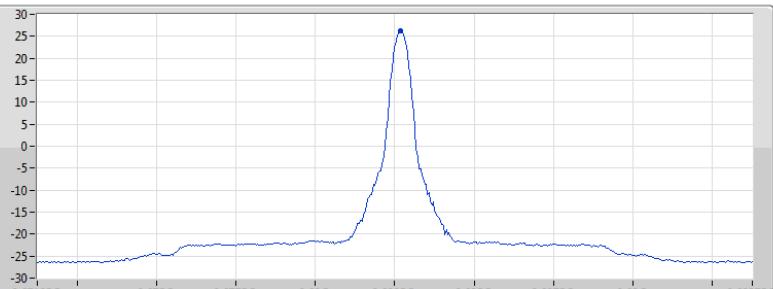


## Band 41\_LTE\_15MHz\_Nss1,(64QAM)\_1TX

## AV Power

2682.5MHz

Ch Freq  
2.6825GHz  
Span  
22.5MHz  
RBW  
300kHz  
VBW  
1MHz  
Sweep Time  
20ms  
Detector Type  
RMS  
CP BW  
15MHz

Sum=Total Power  
PX=Port X

13/09/2018

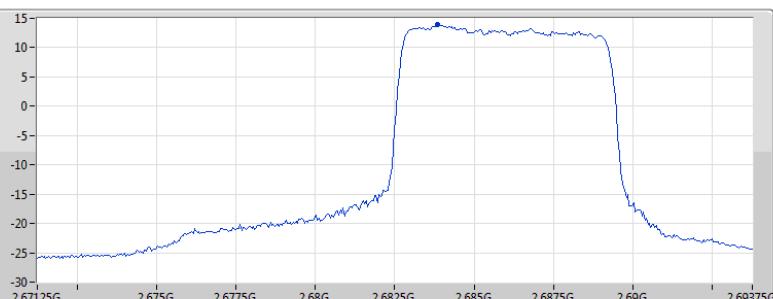
Port 1 

## Band 41\_LTE\_15MHz\_Nss1,(64QAM)\_1TX

## AV Power

2682.5MHz

Ch Freq  
2.6825GHz  
Span  
22.5MHz  
RBW  
300kHz  
VBW  
1MHz  
Sweep Time  
20ms  
Detector Type  
RMS  
CP BW  
15MHz

Sum=Total Power  
PX=Port X

13/09/2018

Port 1 

## Band 41\_LTE\_15MHz\_Nss1,(64QAM)\_1TX

## AV Power

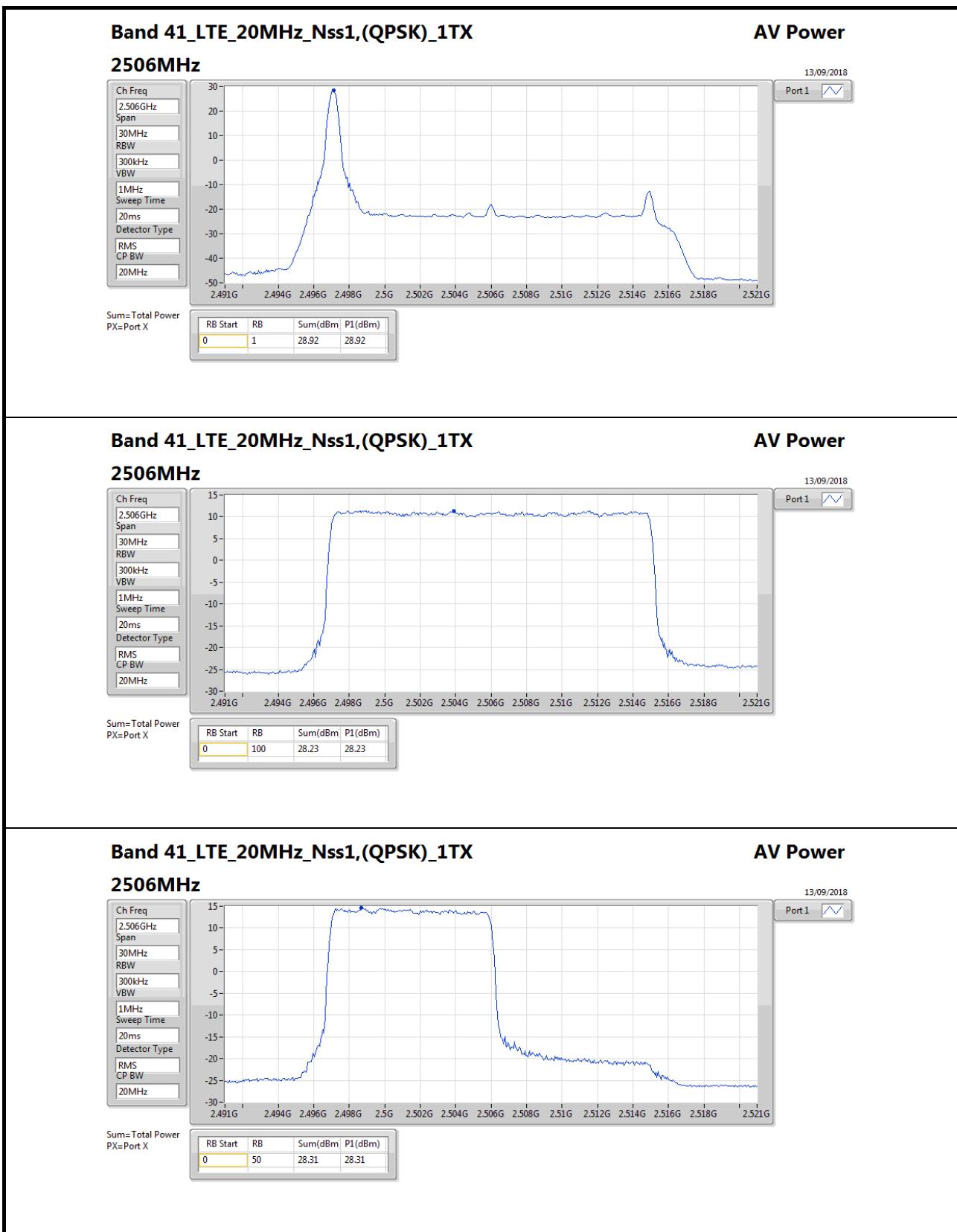
2682.5MHz

Ch Freq  
2.6825GHz  
Span  
22.5MHz  
RBW  
300kHz  
VBW  
1MHz  
Sweep Time  
20ms  
Detector Type  
RMS  
CP BW  
15MHz

Sum=Total Power  
PX=Port X

13/09/2018

Port 1





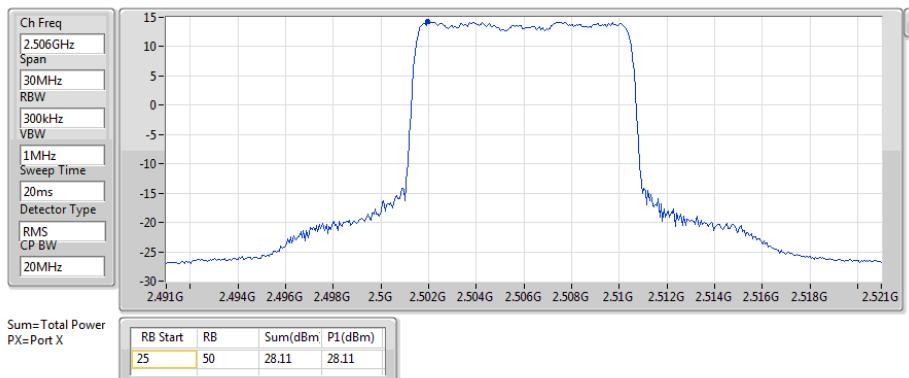
## Band 41\_LTE\_20MHz\_Nss1,(QPSK)\_1TX

## AV Power

2506MHz

13/09/2018

Port 1



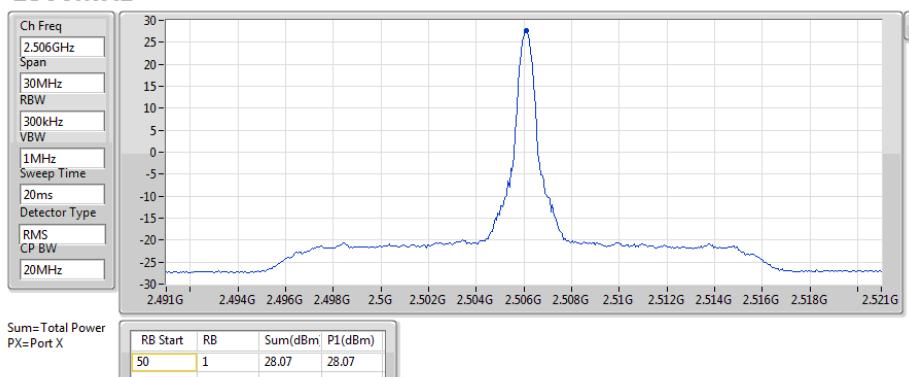
## Band 41\_LTE\_20MHz\_Nss1,(QPSK)\_1TX

## AV Power

2506MHz

13/09/2018

Port 1



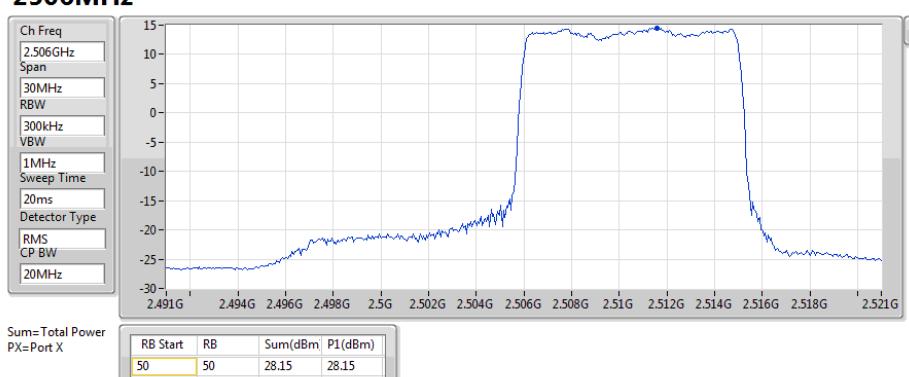
## Band 41\_LTE\_20MHz\_Nss1,(QPSK)\_1TX

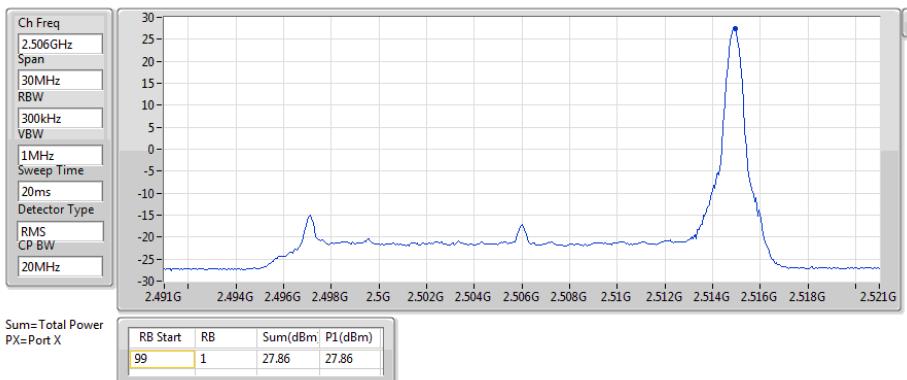
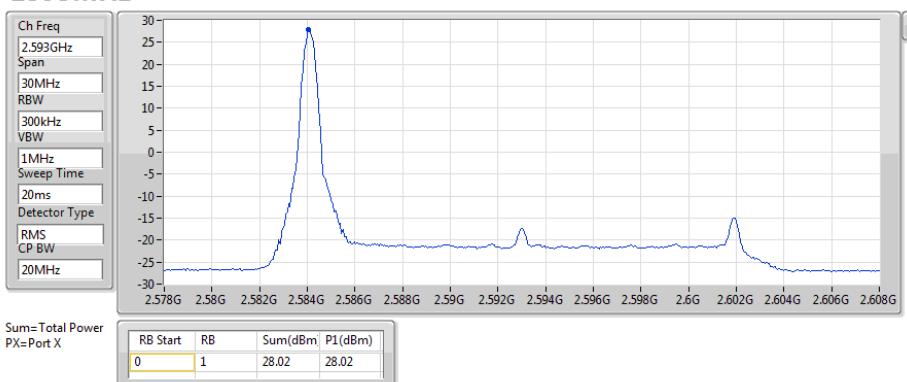
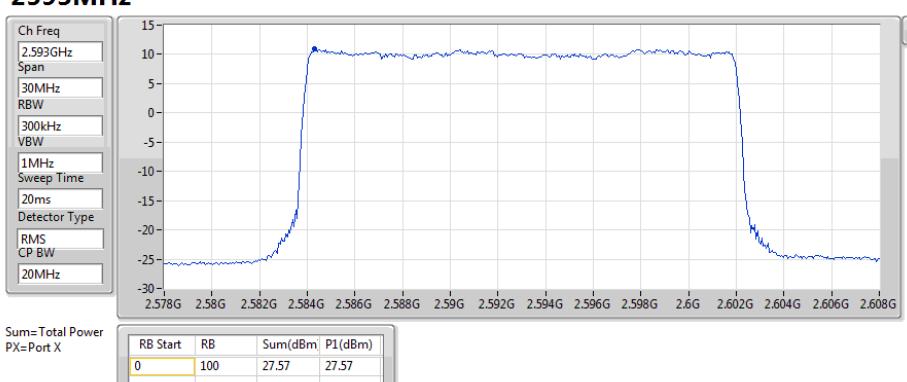
## AV Power

2506MHz

13/09/2018

Port 1

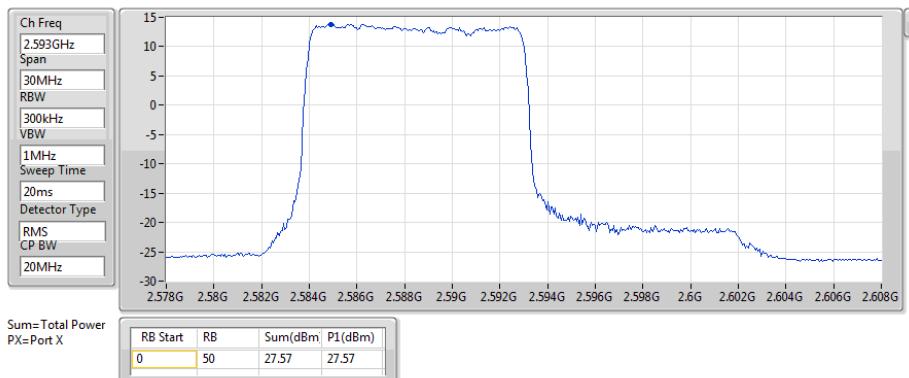


**Band 41\_LTE\_20MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2506MHz**

**Band 41\_LTE\_20MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2593MHz**

**Band 41\_LTE\_20MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2593MHz**


**Band 41\_LTE\_20MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2593MHz**

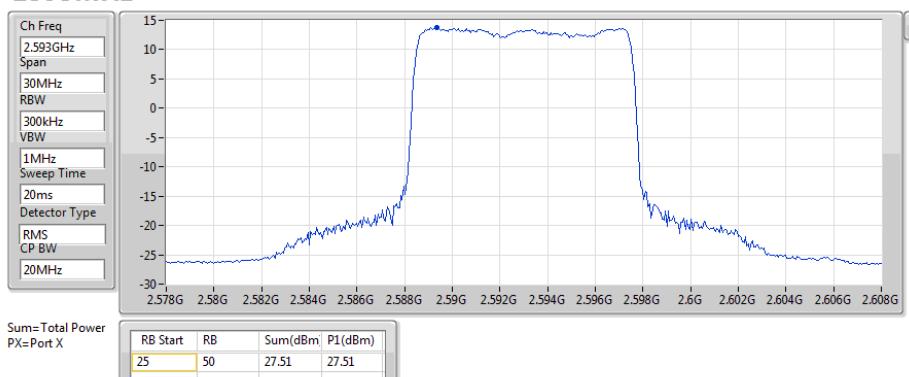
13/09/2018

Port 1


**Band 41\_LTE\_20MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2593MHz**

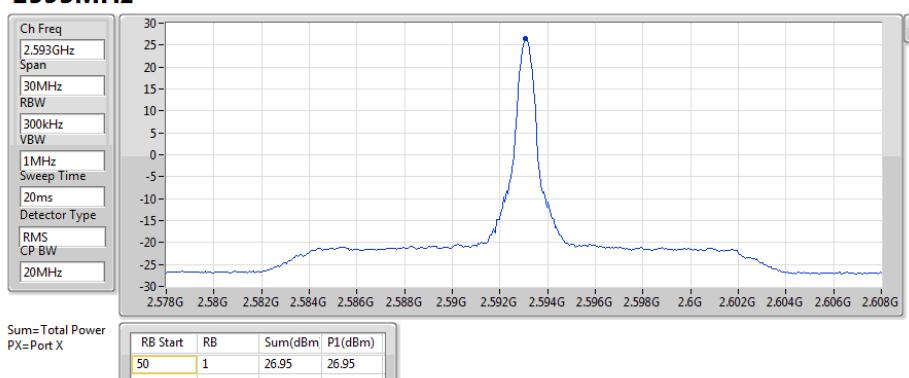
13/09/2018

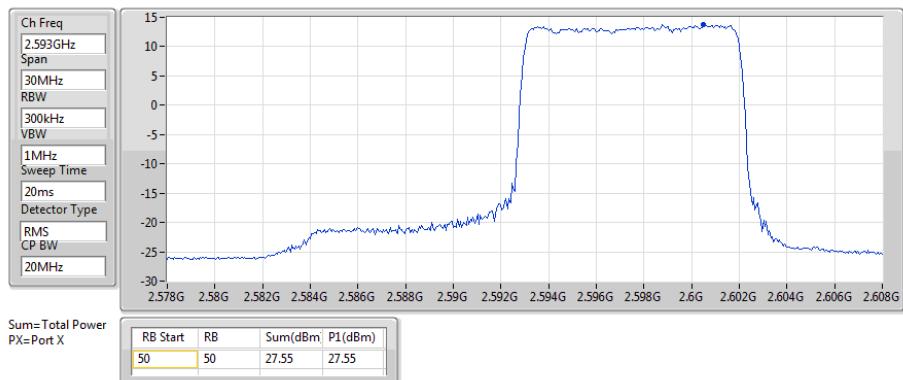
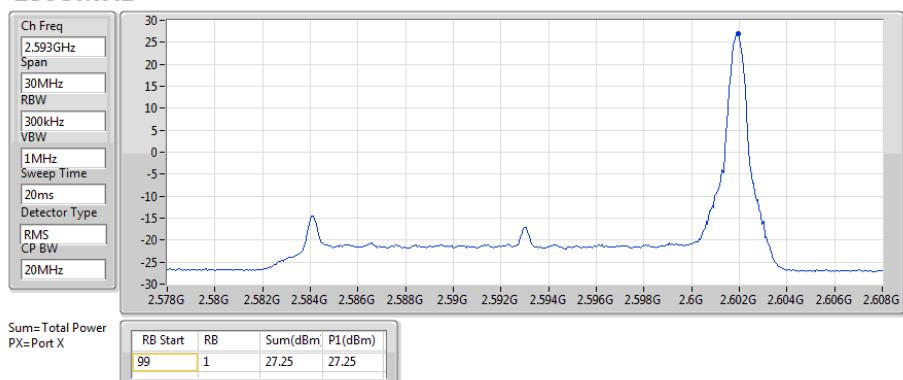
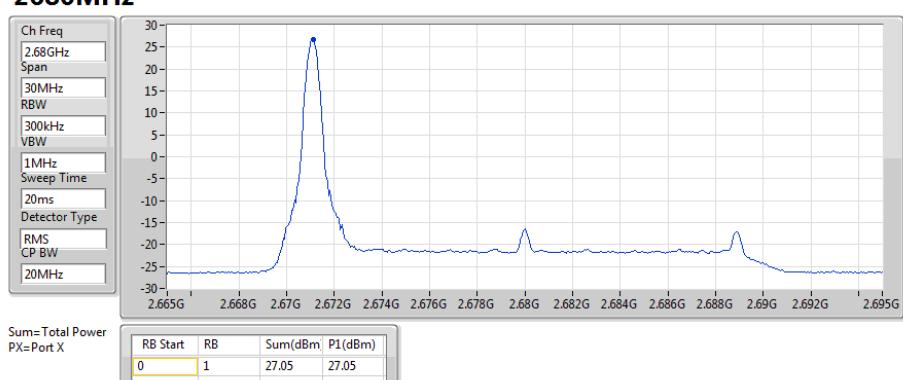
Port 1

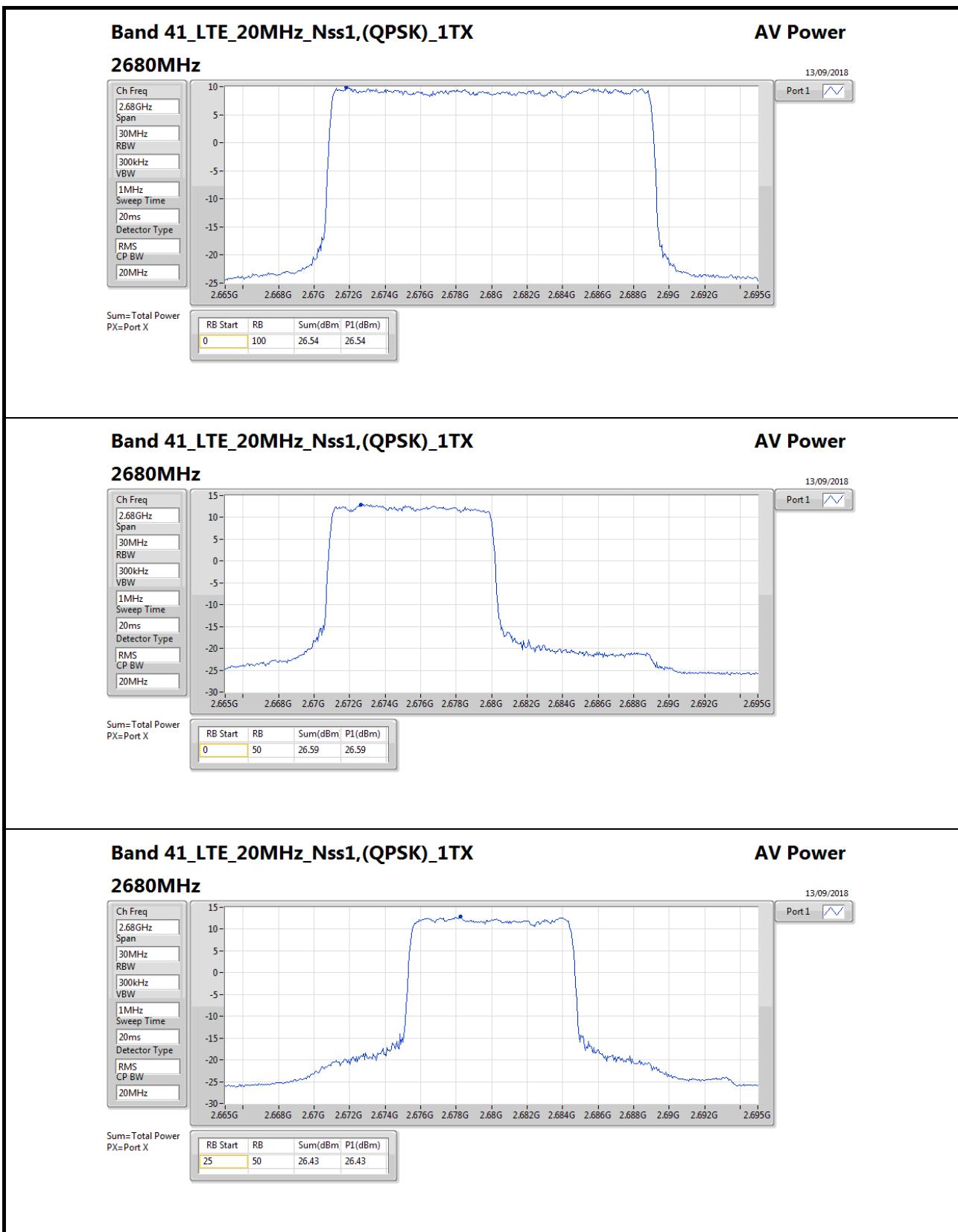

**Band 41\_LTE\_20MHz\_Nss1,(QPSK)\_1TX**
**AV Power**
**2593MHz**

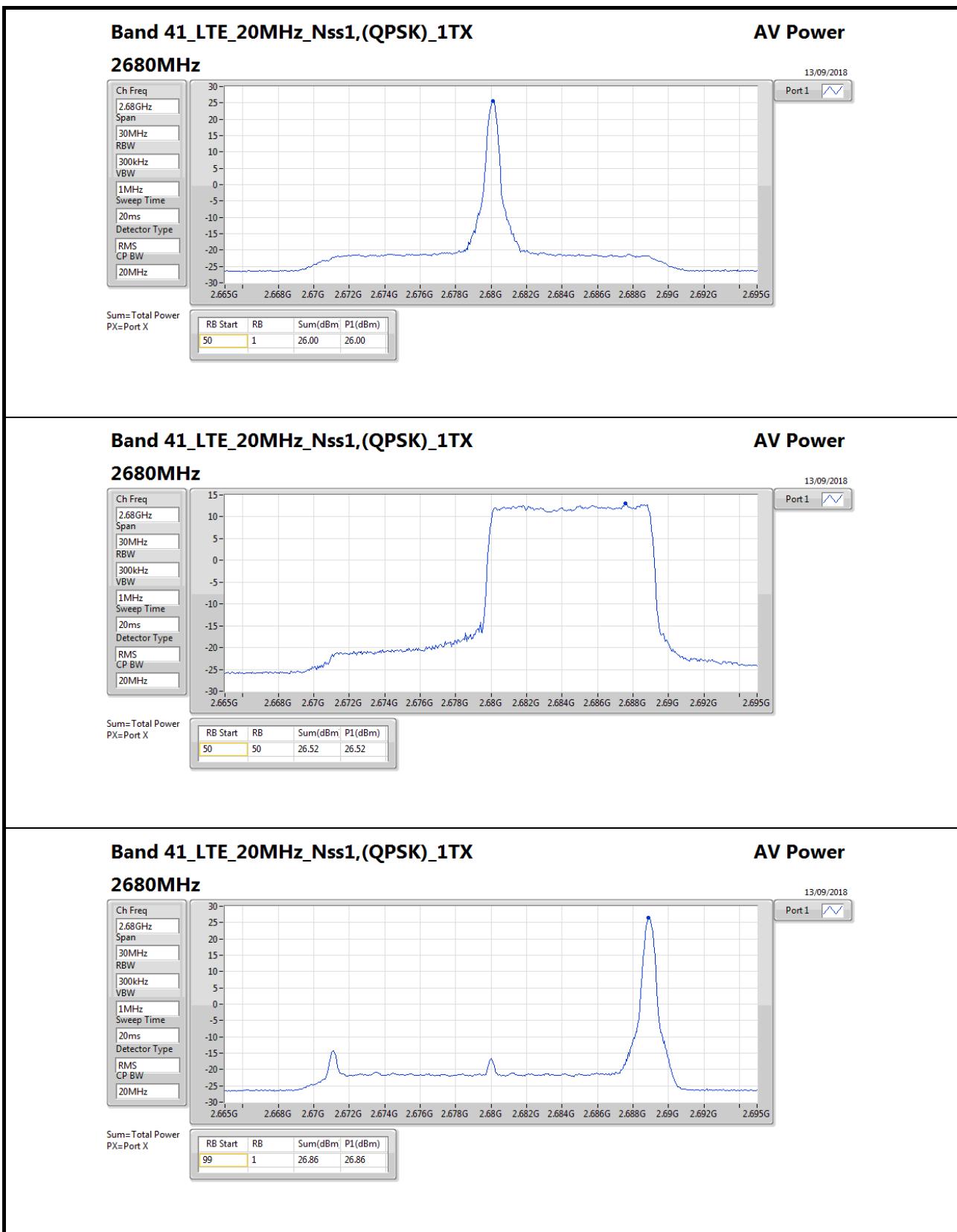
13/09/2018

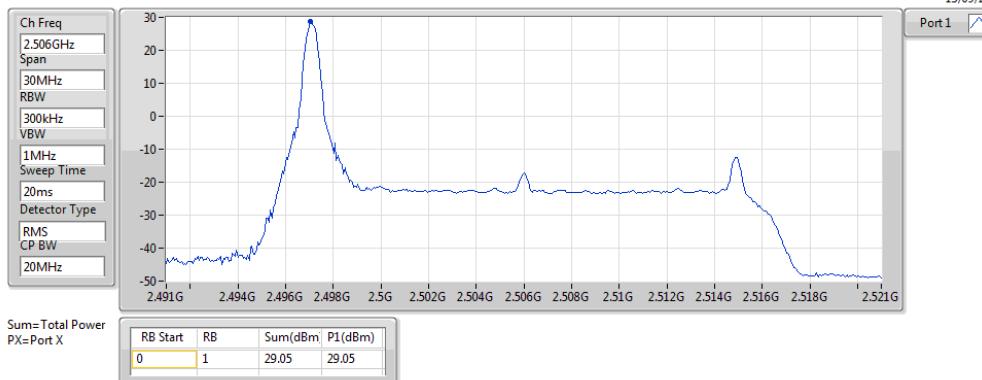
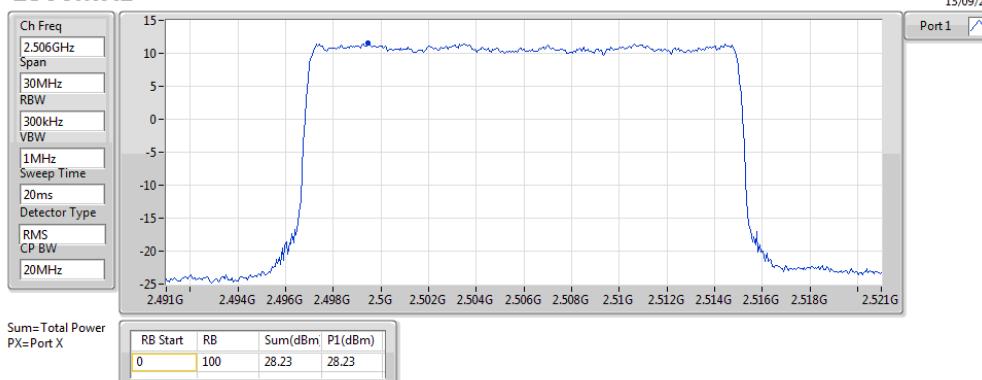
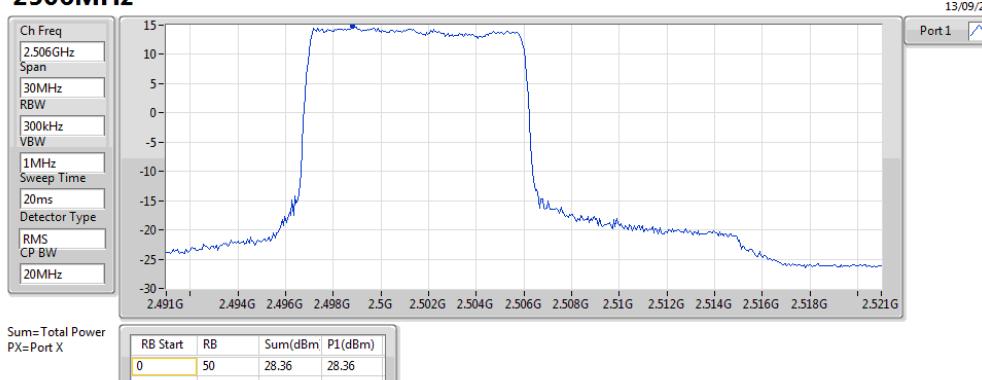
Port 1

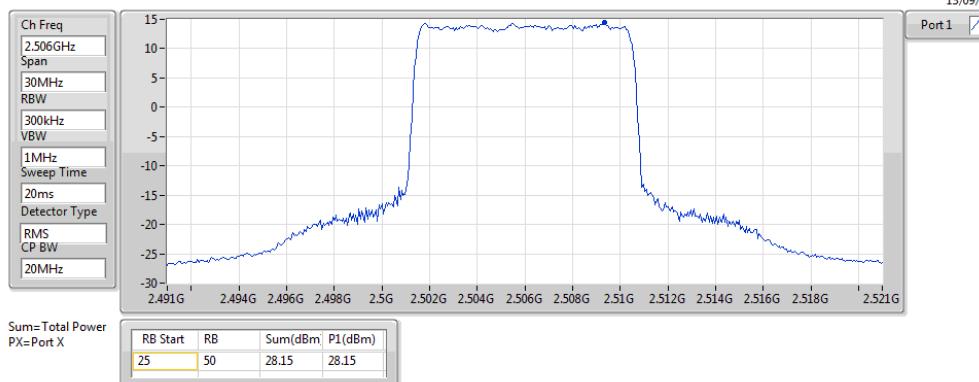
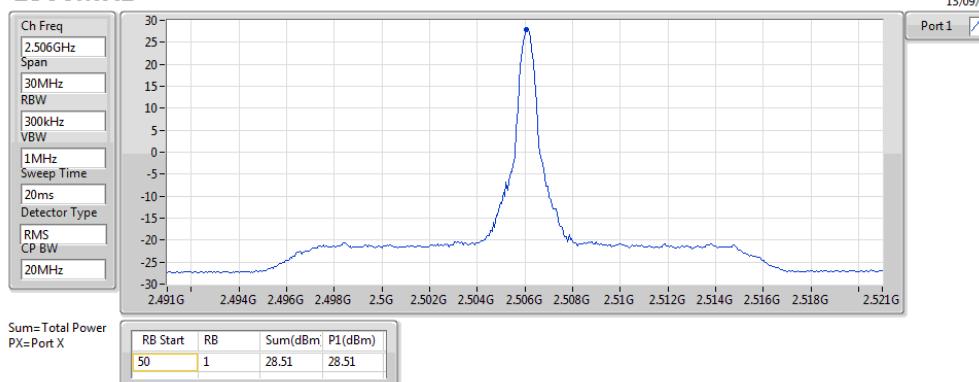
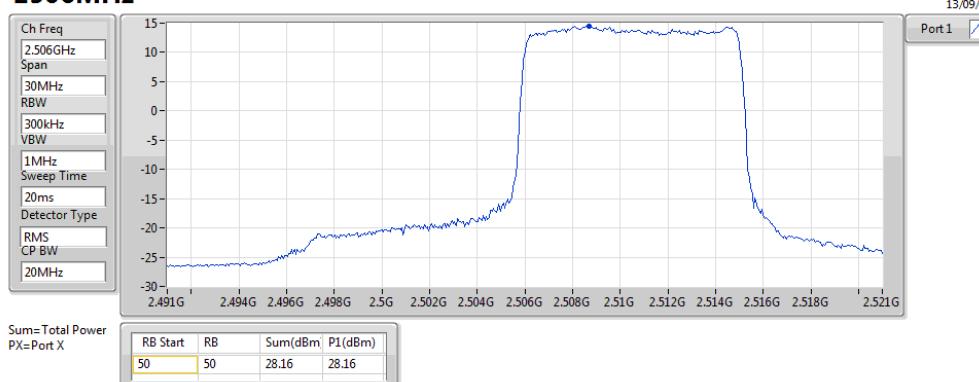


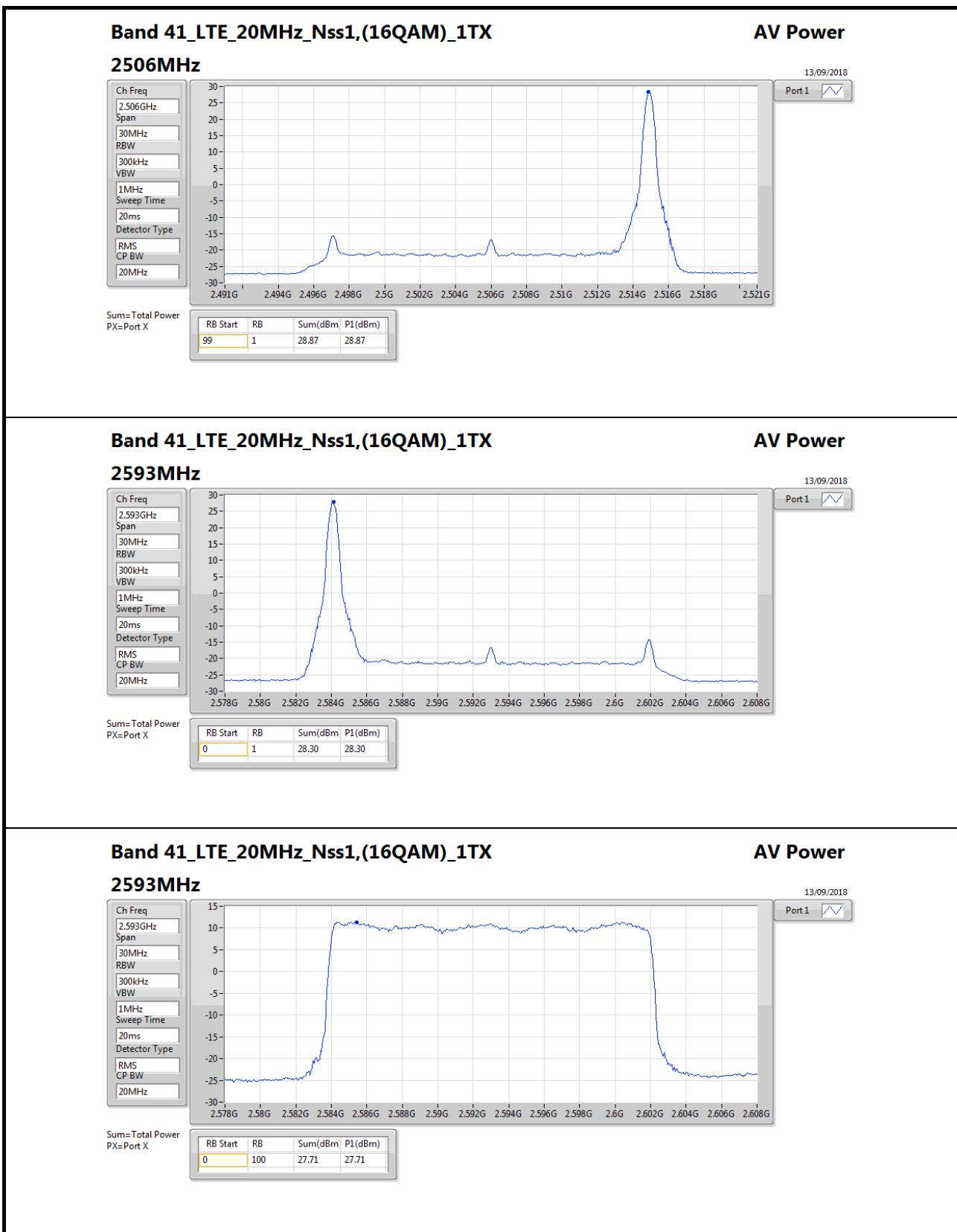
**Band 41\_LTE\_20MHz\_Nss1,(QPSK)\_1TX****AV Power****2593MHz****Band 41\_LTE\_20MHz\_Nss1,(QPSK)\_1TX****AV Power****2593MHz****Band 41\_LTE\_20MHz\_Nss1,(QPSK)\_1TX****AV Power****2680MHz**





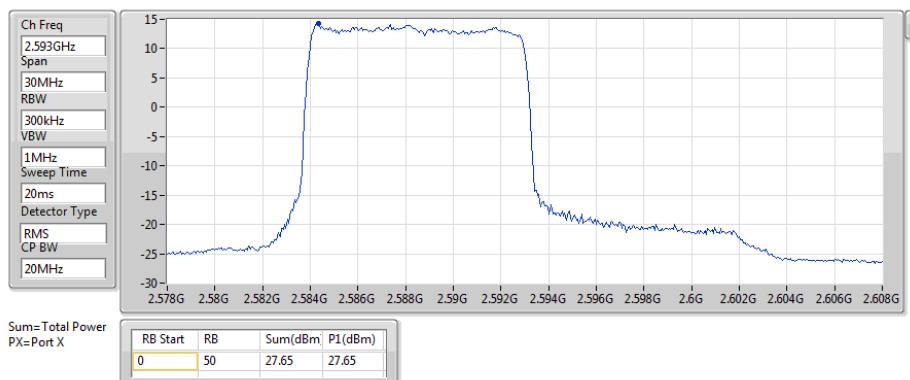
**Band 41\_LTE\_20MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2506MHz**

**Band 41\_LTE\_20MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2506MHz**

**Band 41\_LTE\_20MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2506MHz**


**Band 41\_LTE\_20MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2506MHz**

**Band 41\_LTE\_20MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2506MHz**

**Band 41\_LTE\_20MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2506MHz**


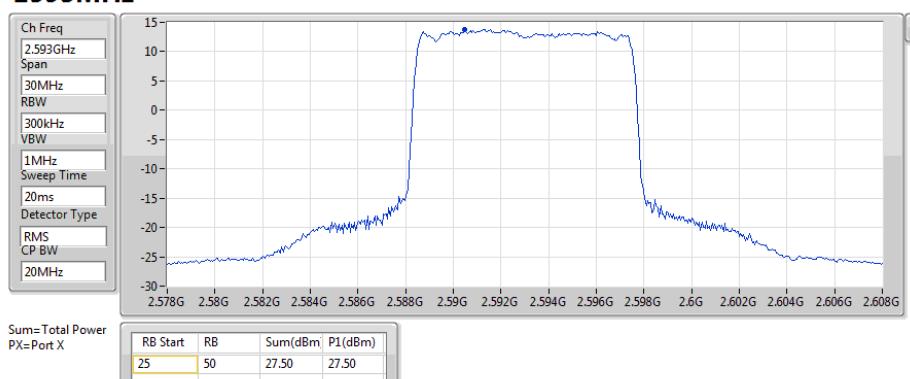


**Band 41\_LTE\_20MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2593MHz**

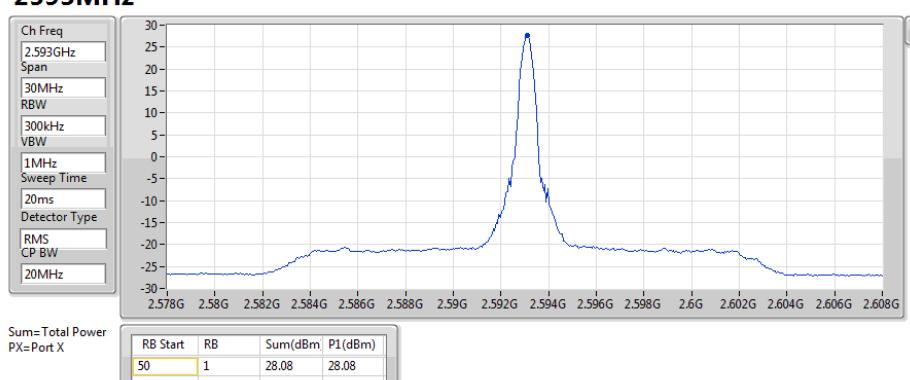
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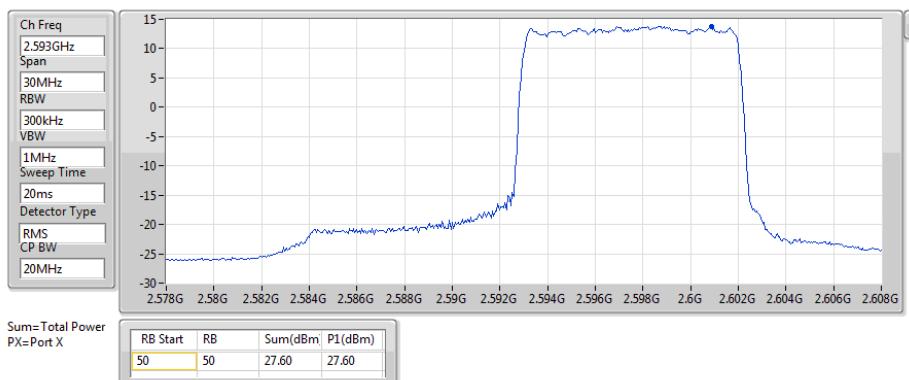
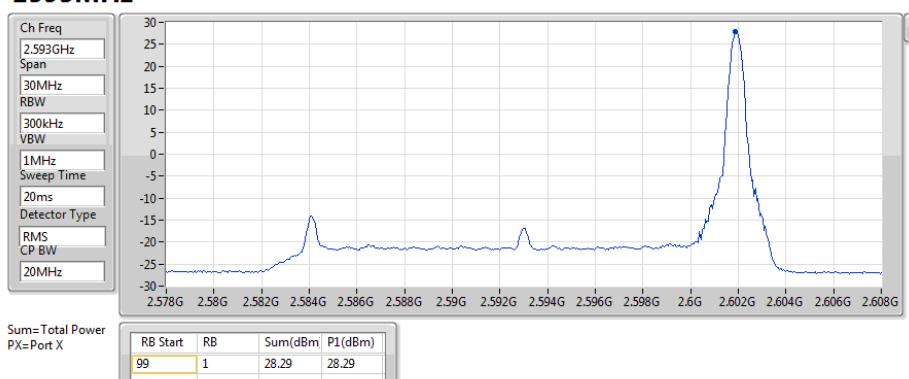
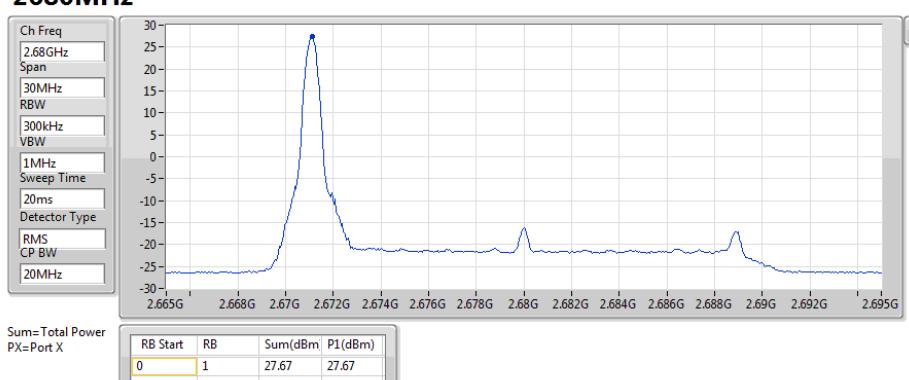
 Port 1 

**Band 41\_LTE\_20MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2593MHz**

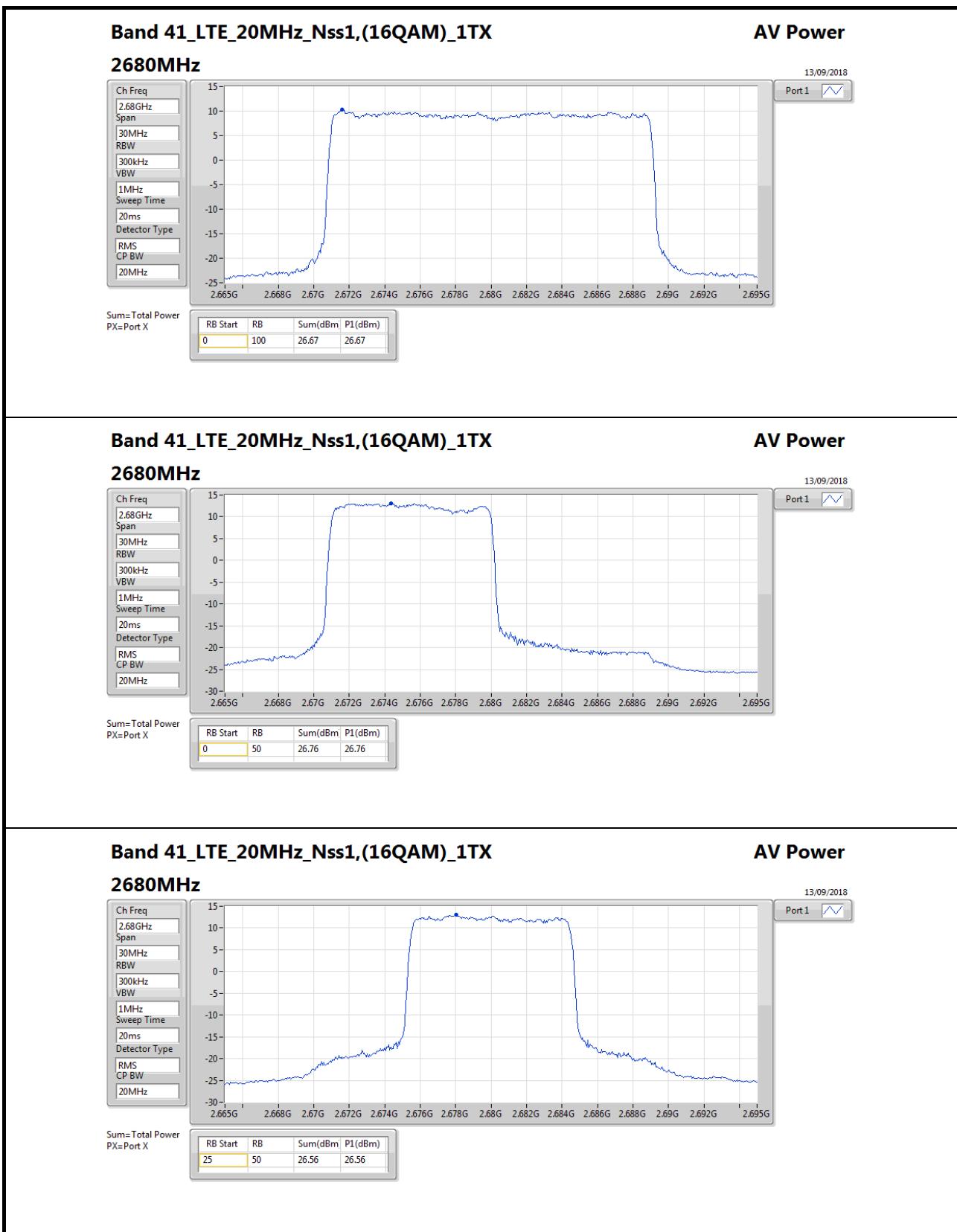
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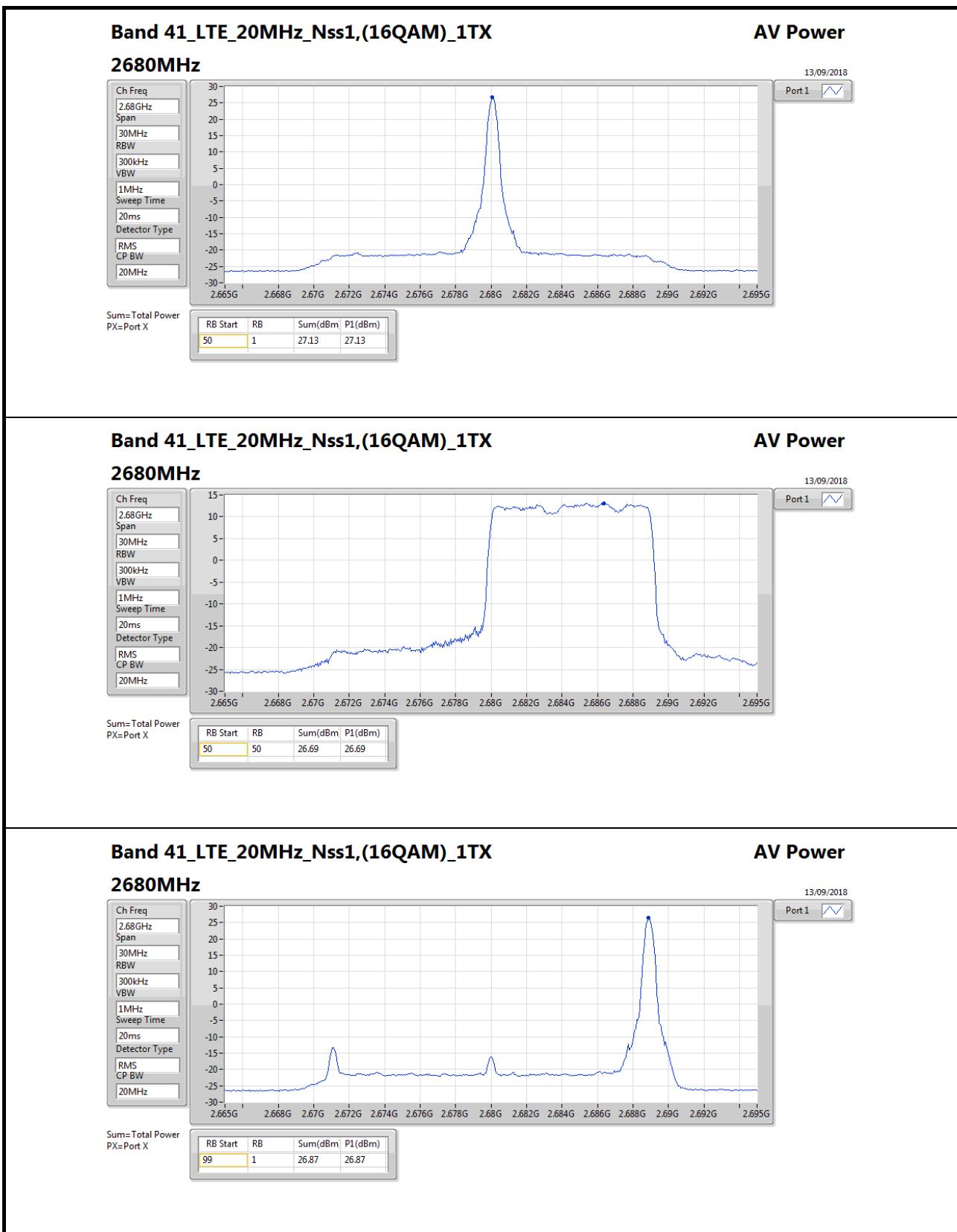
 Port 1 

**Band 41\_LTE\_20MHz\_Nss1,(16QAM)\_1TX**
**AV Power**
**2593MHz**

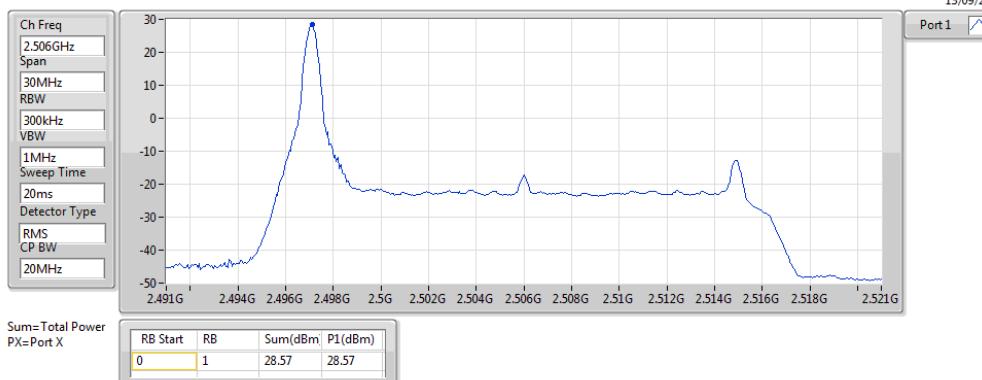
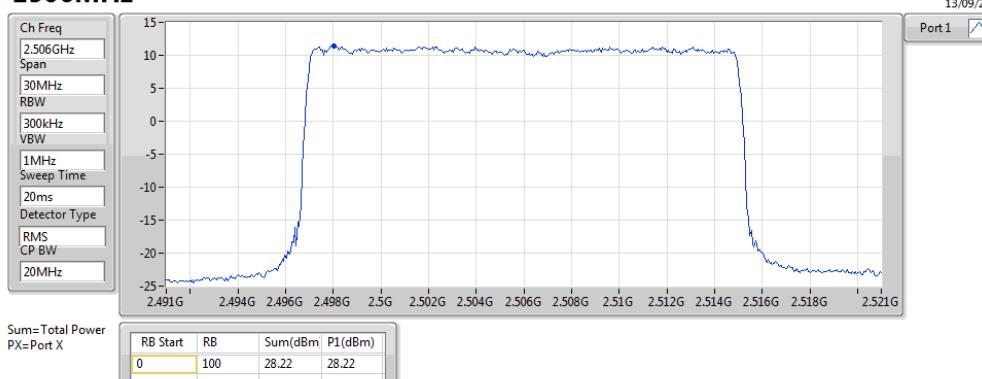
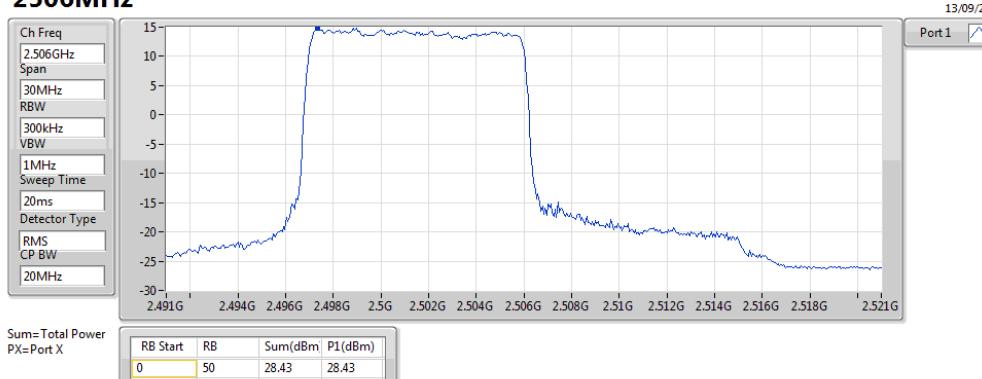
13/09/2018

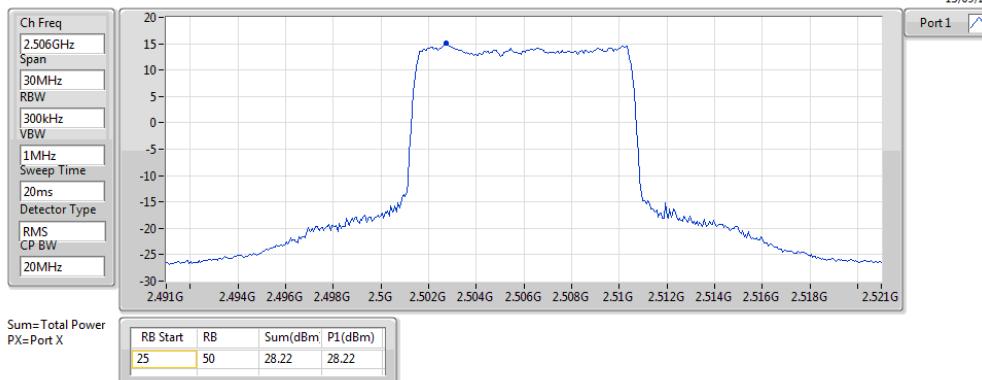
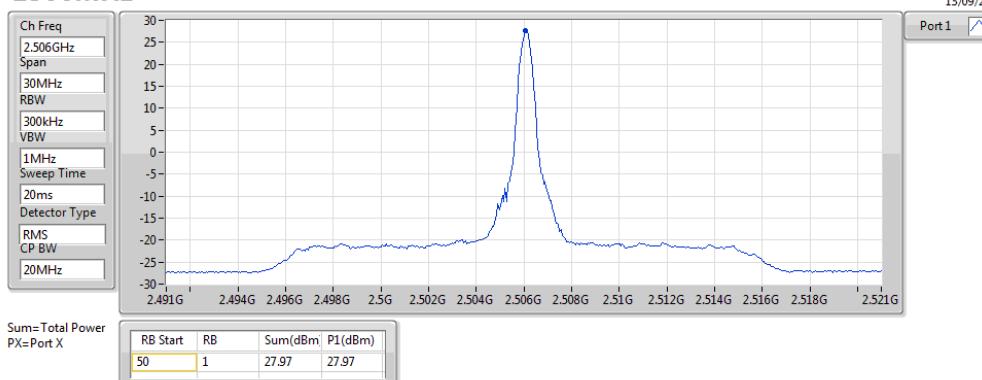
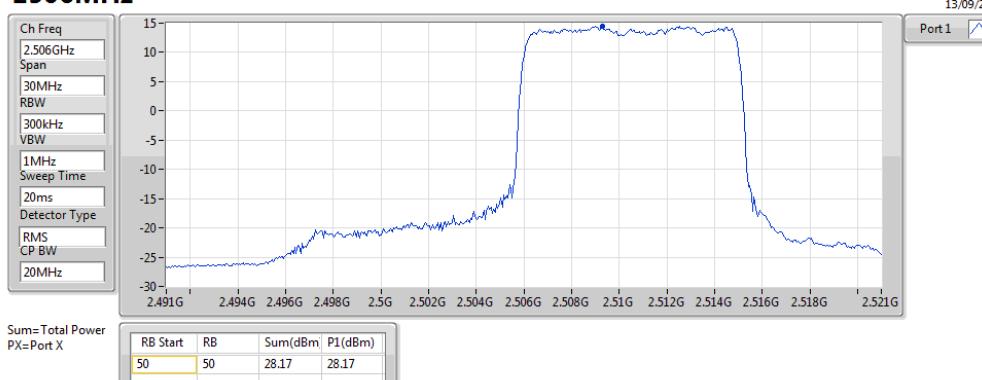
 Port 1 


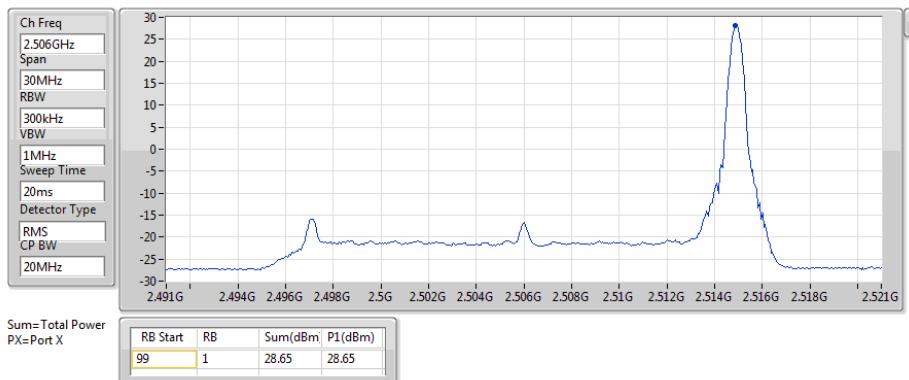
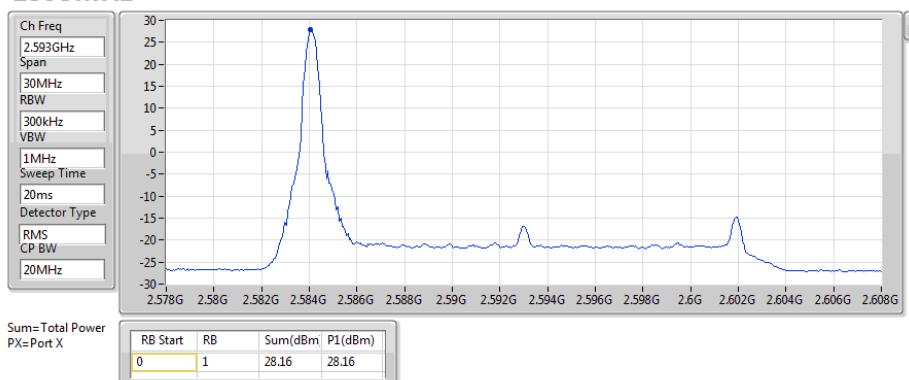
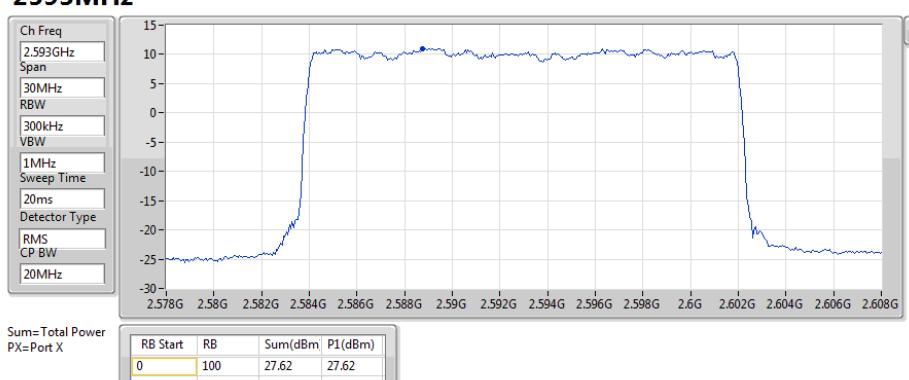
**Band 41\_LTE\_20MHz\_Nss1,(16QAM)\_1TX****AV Power****2593MHz****Band 41\_LTE\_20MHz\_Nss1,(16QAM)\_1TX****AV Power****2593MHz****Band 41\_LTE\_20MHz\_Nss1,(16QAM)\_1TX****AV Power****2680MHz**





**Band 41\_LTE\_20MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2506MHz**

**Band 41\_LTE\_20MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2506MHz**

**Band 41\_LTE\_20MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2506MHz**


**Band 41\_LTE\_20MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2506MHz**

**Band 41\_LTE\_20MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2506MHz**

**Band 41\_LTE\_20MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2506MHz**


**Band 41\_LTE\_20MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2506MHz**

**Band 41\_LTE\_20MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2593MHz**

**Band 41\_LTE\_20MHz\_Nss1,(64QAM)\_1TX**
**AV Power**
**2593MHz**




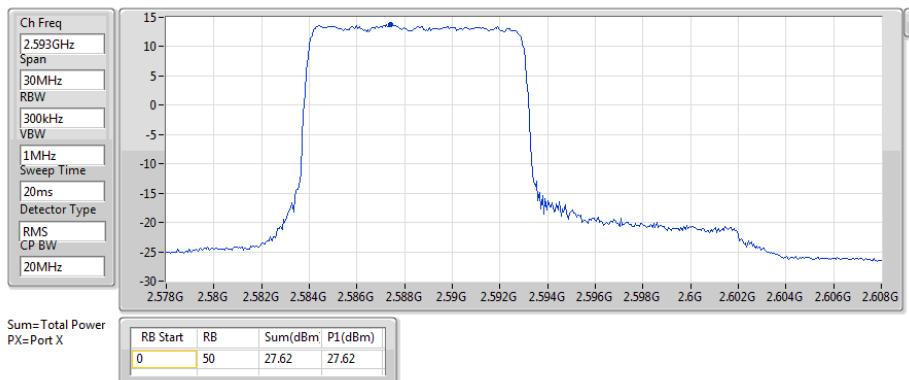
## Band 41\_LTE\_20MHz\_Nss1,(64QAM)\_1TX

## AV Power

2593MHz

13/09/2018

Port 1



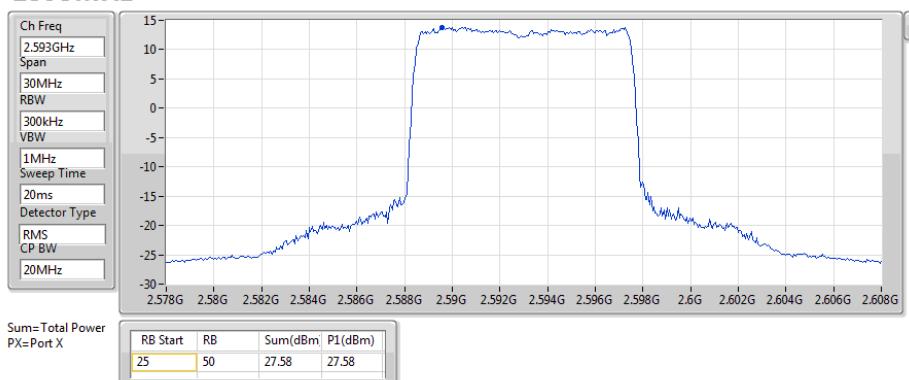
## Band 41\_LTE\_20MHz\_Nss1,(64QAM)\_1TX

## AV Power

2593MHz

13/09/2018

Port 1



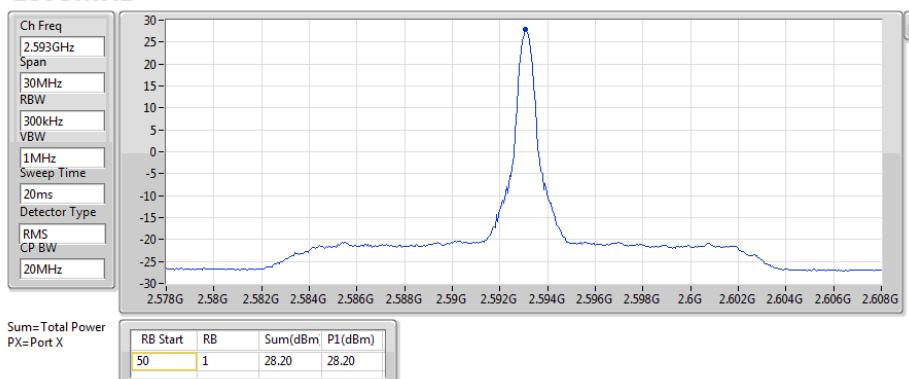
## Band 41\_LTE\_20MHz\_Nss1,(64QAM)\_1TX

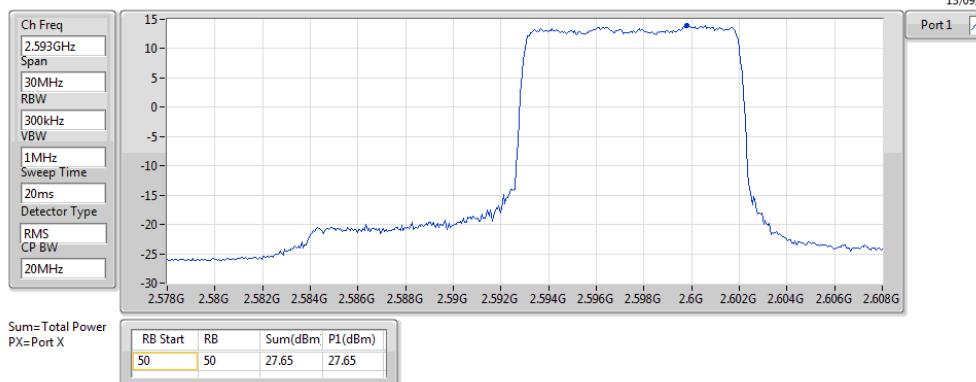
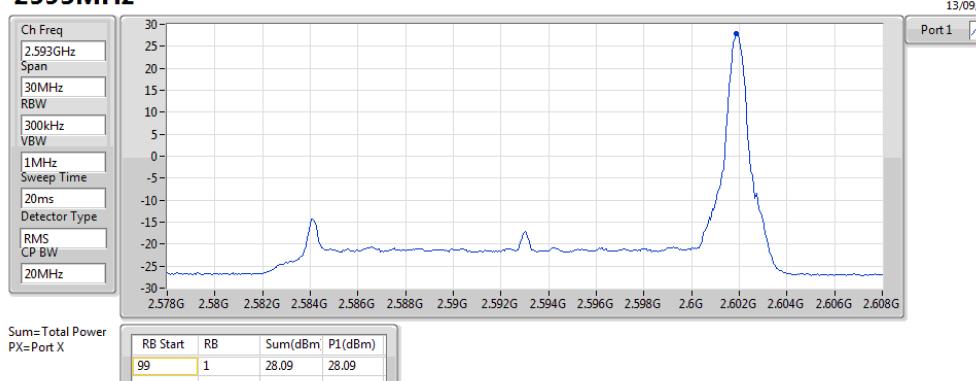
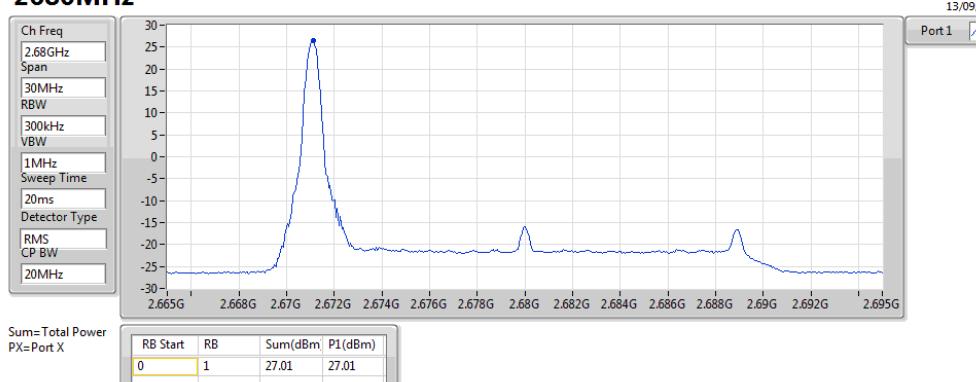
## AV Power

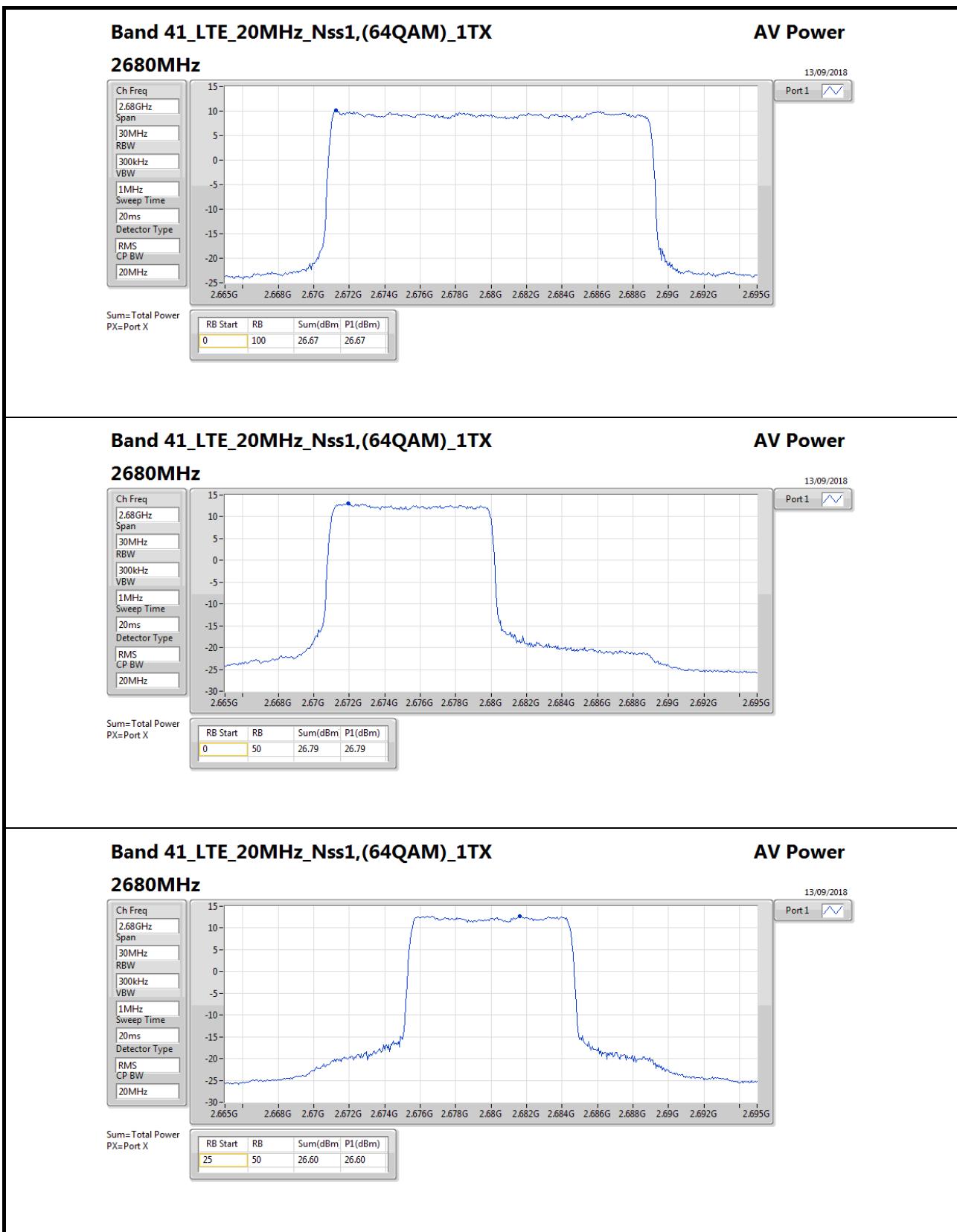
2593MHz

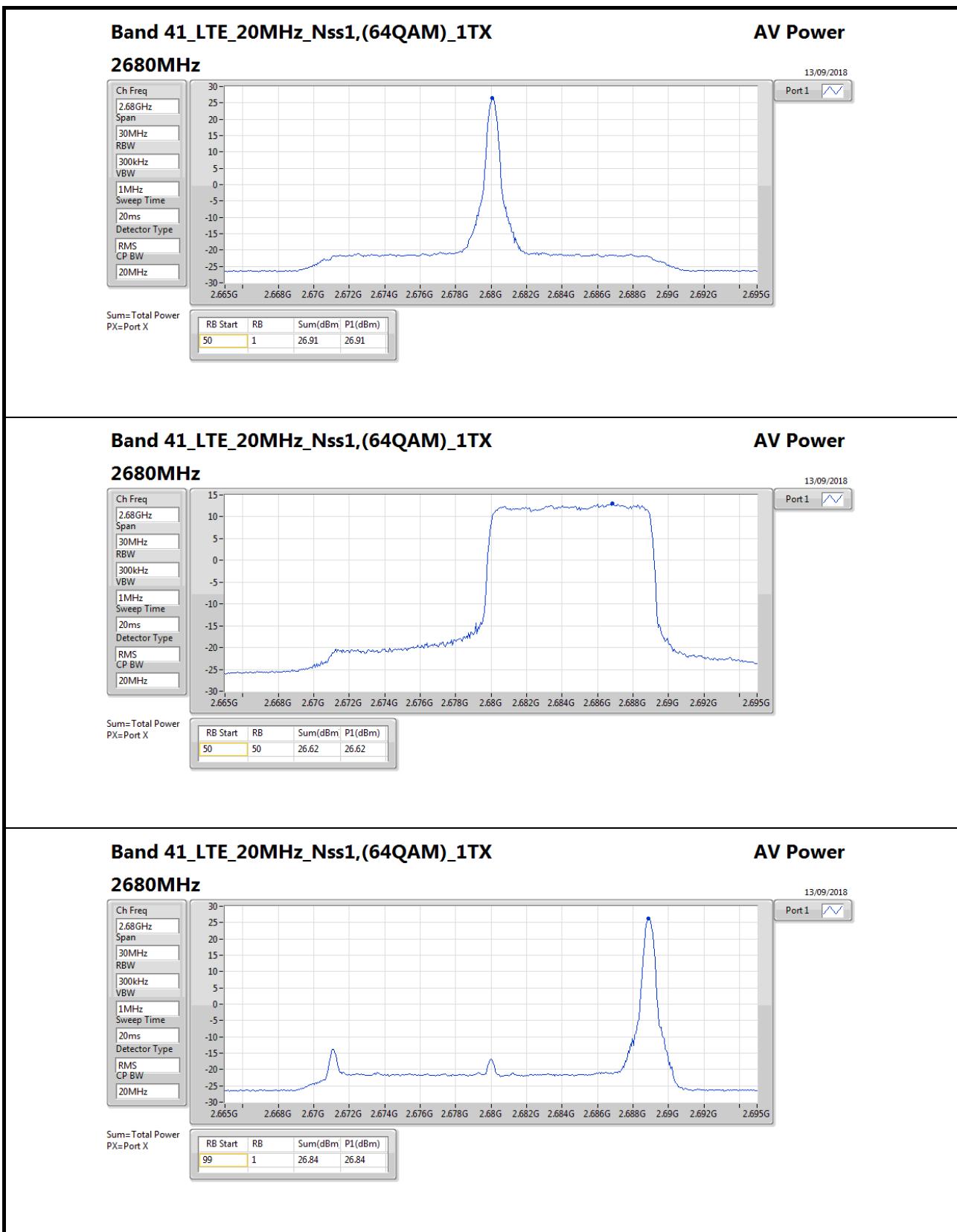
13/09/2018

Port 1



**Band 41\_LTE\_20MHz\_Nss1,(64QAM)\_1TX****AV Power****2593MHz****Band 41\_LTE\_20MHz\_Nss1,(64QAM)\_1TX****AV Power****2593MHz****Band 41\_LTE\_20MHz\_Nss1,(64QAM)\_1TX****AV Power****2680MHz**







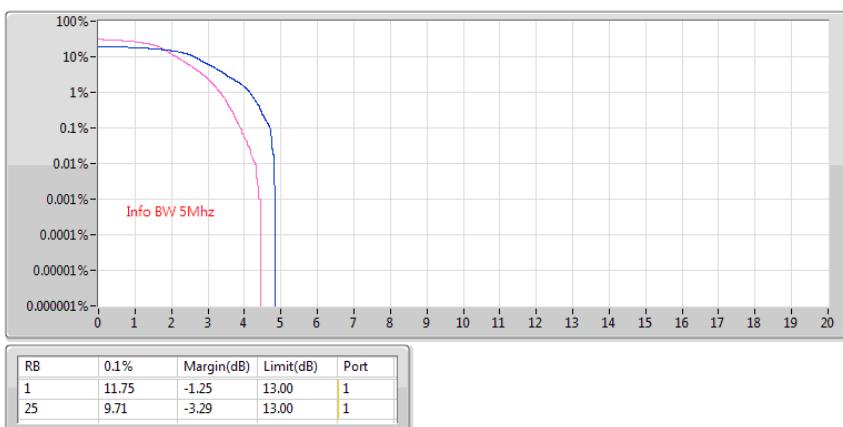
## Summary

Mode	Result	RB	0.1%	Margin (dB)	Limit (dB)	Port
Band 41	-	-	-	-	-	-
Band 41_LTE_5MHz_Nss1,(QPSK)_1TX	Pass	1	11.75	-1.25	13.00	1
Band 41_LTE_5MHz_Nss1,(16QAM)_1TX	Pass	25	12.24	-0.76	13.00	1
Band 41_LTE_5MHz_Nss1,(64QAM)_1TX	Pass	25	11.10	-1.90	13.00	1
Band 41_LTE_10MHz_Nss1,(QPSK)_1TX	Pass	1	12.61	-0.39	13.00	1
Band 41_LTE_10MHz_Nss1,(16QAM)_1TX	Pass	1	10.50	-2.50	13.00	1
Band 41_LTE_10MHz_Nss1,(64QAM)_1TX	Pass	50	9.22	-3.78	13.00	1
Band 41_LTE_15MHz_Nss1,(QPSK)_1TX	Pass	75	10.68	-2.32	13.00	1
Band 41_LTE_15MHz_Nss1,(16QAM)_1TX	Pass	1	11.40	-1.60	13.00	1
Band 41_LTE_15MHz_Nss1,(64QAM)_1TX	Pass	1	10.20	-2.80	13.00	1
Band 41_LTE_20MHz_Nss1,(QPSK)_1TX	Pass	100	10.28	-2.72	13.00	1
Band 41_LTE_20MHz_Nss1,(16QAM)_1TX	Pass	100	10.02	-2.98	13.00	1
Band 41_LTE_20MHz_Nss1,(64QAM)_1TX	Pass	1	8.64	-4.36	13.00	1



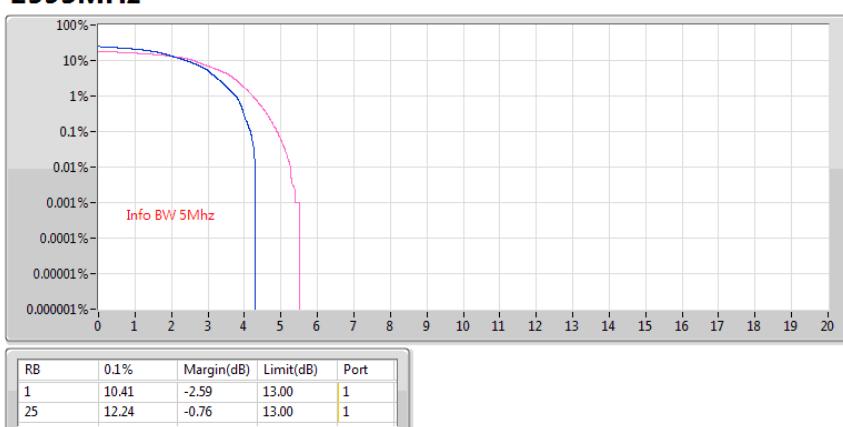
## Result

Mode	Result	RB	0.1%	Margin (dB)	Limit (dB)	Port
LTE_5MHz_Nss1,(QPSK)_1TX	-	-	-	-	-	-
2593MHz	Pass	1	11.75	-1.25	13.00	1
2593MHz	Pass	25	9.71	-3.29	13.00	1
LTE_5MHz_Nss1,(16QAM)_1TX	-	-	-	-	-	-
2593MHz	Pass	1	10.41	-2.59	13.00	1
2593MHz	Pass	25	12.24	-0.76	13.00	1
LTE_5MHz_Nss1,(64QAM)_1TX	-	-	-	-	-	-
2593MHz	Pass	1	7.97	-5.03	13.00	1
2593MHz	Pass	25	11.10	-1.90	13.00	1
LTE_10MHz_Nss1,(QPSK)_1TX	-	-	-	-	-	-
2593MHz	Pass	1	12.61	-0.39	13.00	1
2593MHz	Pass	50	11.58	-1.42	13.00	1
LTE_10MHz_Nss1,(16QAM)_1TX	-	-	-	-	-	-
2593MHz	Pass	1	10.50	-2.50	13.00	1
2593MHz	Pass	50	10.30	-2.70	13.00	1
LTE_10MHz_Nss1,(64QAM)_1TX	-	-	-	-	-	-
2593MHz	Pass	1	7.85	-5.15	13.00	1
2593MHz	Pass	50	9.22	-3.78	13.00	1
LTE_15MHz_Nss1,(QPSK)_1TX	-	-	-	-	-	-
2593MHz	Pass	1	5.69	-7.31	13.00	1
2593MHz	Pass	75	10.68	-2.32	13.00	1
LTE_15MHz_Nss1,(16QAM)_1TX	-	-	-	-	-	-
2593MHz	Pass	1	11.40	-1.60	13.00	1
2593MHz	Pass	75	9.49	-3.51	13.00	1
LTE_15MHz_Nss1,(64QAM)_1TX	-	-	-	-	-	-
2593MHz	Pass	1	10.20	-2.80	13.00	1
2593MHz	Pass	75	9.56	-3.44	13.00	1
LTE_20MHz_Nss1,(QPSK)_1TX	-	-	-	-	-	-
2593MHz	Pass	1	10.05	-2.95	13.00	1
2593MHz	Pass	100	10.28	-2.72	13.00	1
LTE_20MHz_Nss1,(16QAM)_1TX	-	-	-	-	-	-
2593MHz	Pass	1	9.81	-3.19	13.00	1
2593MHz	Pass	100	10.02	-2.98	13.00	1
LTE_20MHz_Nss1,(64QAM)_1TX	-	-	-	-	-	-
2593MHz	Pass	1	8.64	-4.36	13.00	1
2593MHz	Pass	100	7.72	-5.28	13.00	1

**Band 41\_LTE\_5MHz\_Nss1,(QPSK)\_1TX**
**PAR**
**2593MHz**


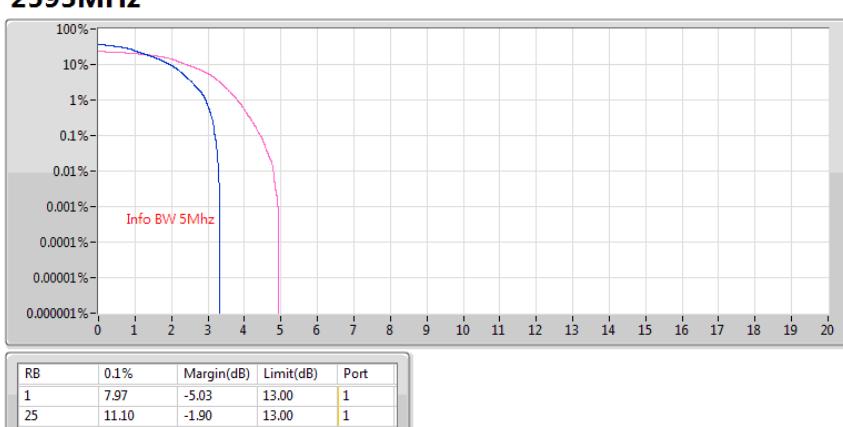
13/09/2018

1 RB 

Full RB 
**Band 41\_LTE\_5MHz\_Nss1,(16QAM)\_1TX**
**PAR**
**2593MHz**


13/09/2018

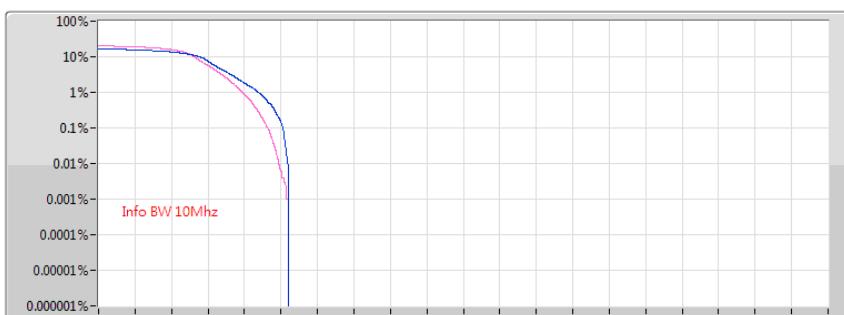
1 RB 

Full RB 
**Band 41\_LTE\_5MHz\_Nss1,(64QAM)\_1TX**
**PAR**
**2593MHz**


13/09/2018

1 RB 

Full RB

**Band 41\_LTE\_10MHz\_Nss1,(QPSK)\_1TX**
**PAR**
**2593MHz**


13/09/2018

 1 RB 

 Full RB 

RB	0.1%	Margin(dB)	Limit(dB)	Port
1	12.61	-0.39	13.00	1
50	11.58	-1.42	13.00	1

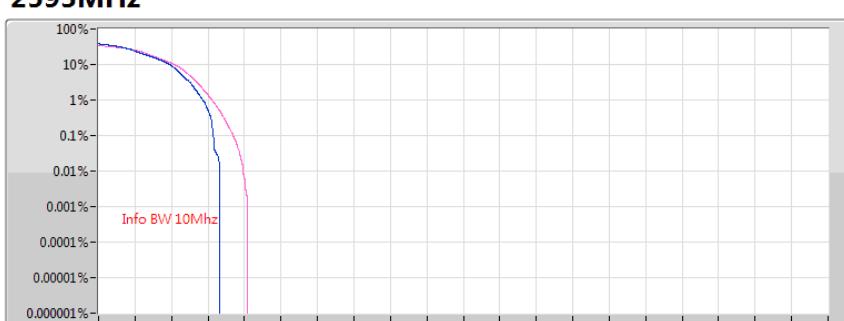
**Band 41\_LTE\_10MHz\_Nss1,(16QAM)\_1TX**
**PAR**
**2593MHz**


13/09/2018

 1 RB 

 Full RB 

RB	0.1%	Margin(dB)	Limit(dB)	Port
1	10.50	-2.50	13.00	1
50	10.30	-2.70	13.00	1

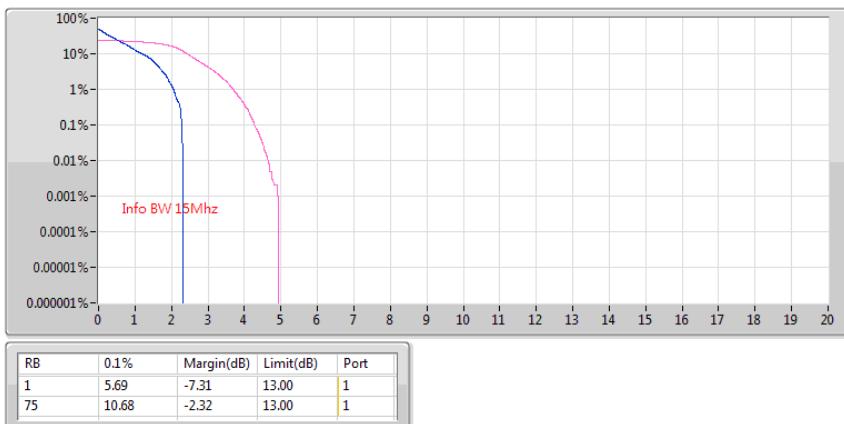
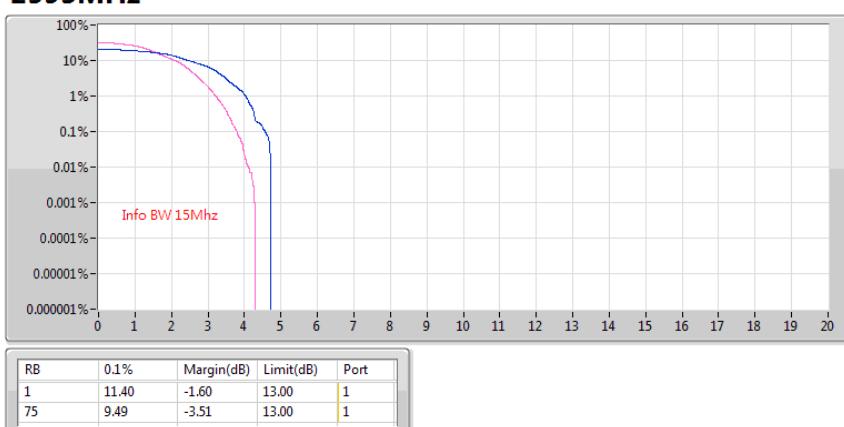
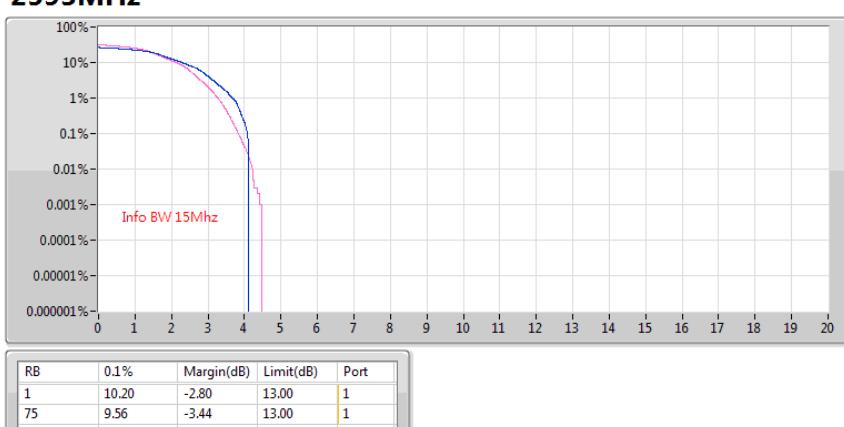
**Band 41\_LTE\_10MHz\_Nss1,(64QAM)\_1TX**
**PAR**
**2593MHz**


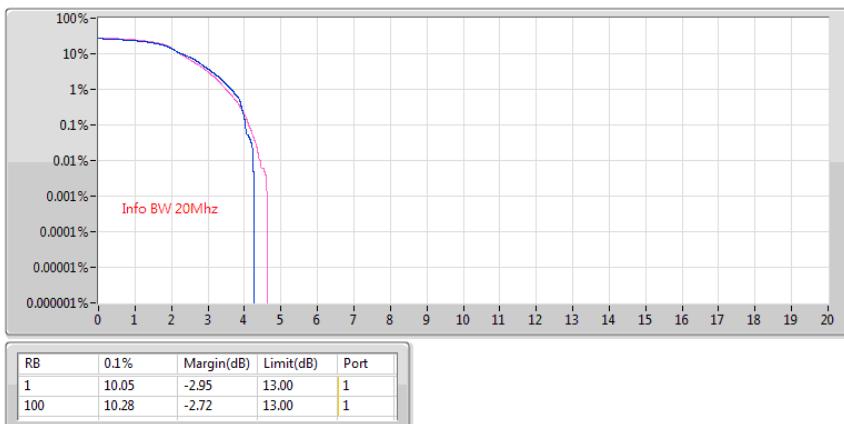
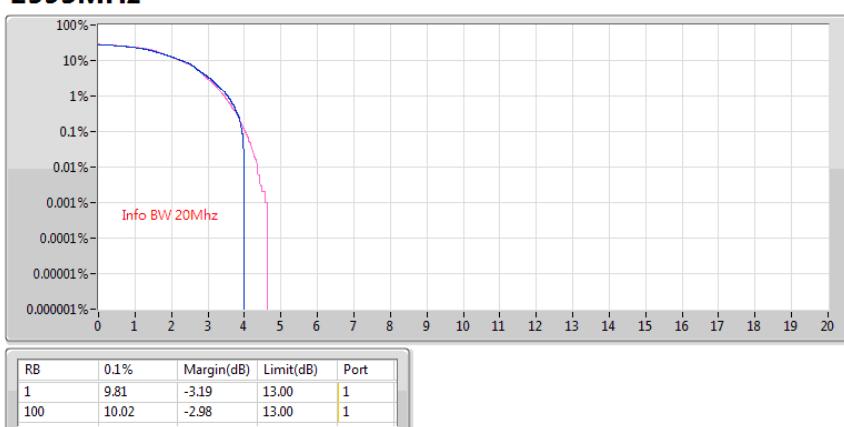
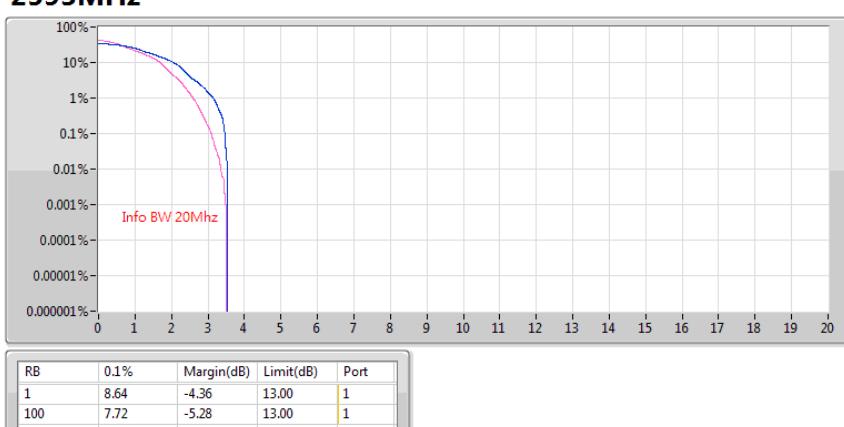
13/09/2018

 1 RB 

 Full RB 

RB	0.1%	Margin(dB)	Limit(dB)	Port
1	7.85	-5.15	13.00	1
50	9.22	-3.78	13.00	1

**Band 41\_LTE\_15MHz\_Nss1,(QPSK)\_1TX**
**PAR**
**2593MHz**

**Band 41\_LTE\_15MHz\_Nss1,(16QAM)\_1TX**
**PAR**
**2593MHz**

**Band 41\_LTE\_15MHz\_Nss1,(64QAM)\_1TX**
**PAR**
**2593MHz**


**Band 41\_LTE\_20MHz\_Nss1,(QPSK)\_1TX**
**PAR**
**2593MHz**

**Band 41\_LTE\_20MHz\_Nss1,(16QAM)\_1TX**
**PAR**
**2593MHz**

**Band 41\_LTE\_20MHz\_Nss1,(64QAM)\_1TX**
**PAR**
**2593MHz**


**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
Band 41	-	-	-	-	-
Band 41_LTE_5MHz_Nss1,(QPSK)_1TX	5.7M	4.485M	4M49G7D	5.544M	4.484M
Band 41_LTE_5MHz_Nss1,(16QAM)_1TX	5.588M	4.498M	4M50W7D	5.481M	4.488M
Band 41_LTE_5MHz_Nss1,(64QAM)_1TX	5.519M	4.486M	4M49D9W	5.381M	4.474M
Band 41_LTE_10MHz_Nss1,(QPSK)_1TX	10.825M	8.935M	8M94G7D	10.613M	8.913M
Band 41_LTE_10MHz_Nss1,(16QAM)_1TX	10.363M	8.956M	8M96W7D	10.225M	8.948M
Band 41_LTE_10MHz_Nss1,(64QAM)_1TX	10.713M	8.956M	8M96D9W	10.663M	8.934M
Band 41_LTE_15MHz_Nss1,(QPSK)_1TX	15.9M	13.411M	13M4G7D	15.694M	13.381M
Band 41_LTE_15MHz_Nss1,(16QAM)_1TX	15.75M	13.412M	13M4W7D	15.375M	13.39M
Band 41_LTE_15MHz_Nss1,(64QAM)_1TX	15.881M	13.418M	13M4D9W	15.656M	13.404M
Band 41_LTE_20MHz_Nss1,(QPSK)_1TX	20.2M	17.898M	17M9G7D	19.925M	17.852M
Band 41_LTE_20MHz_Nss1,(16QAM)_1TX	20.175M	17.925M	17M9W7D	20.1M	17.91M
Band 41_LTE_20MHz_Nss1,(64QAM)_1TX	20M	17.899M	17M9D9W	19.875M	17.883M

**Max-N dB** = Maximum26dB downbandwidth; **Max-OBW** = Maximum99% occupied bandwidth;

**Min-N dB** = Minimum26dB downbandwidth; **Min-OBW** = Minimum99% occupied bandwidth;



## Result

Mode	Result	RB	RB Start	P1-N dB (Hz)	P1-OBW (Hz)
LTE_5MHz_Nss1,(QPSK)_1TX	-	-	-	-	-
2498.5MHz	Pass	25	0	5.575M	4.485M
2593MHz	Pass	25	0	5.544M	4.484M
2687.5MHz	Pass	25	0	5.7M	4.485M
LTE_5MHz_Nss1,(16QAM)_1TX	-	-	-	-	-
2498.5MHz	Pass	25	0	5.481M	4.488M
2593MHz	Pass	25	0	5.588M	4.498M
2687.5MHz	Pass	25	0	5.519M	4.49M
LTE_5MHz_Nss1,(64QAM)_1TX	-	-	-	-	-
2498.5MHz	Pass	25	0	5.381M	4.48M
2593MHz	Pass	25	0	5.394M	4.474M
2687.5MHz	Pass	25	0	5.519M	4.486M
LTE_10MHz_Nss1,(QPSK)_1TX	-	-	-	-	-
2501MHz	Pass	50	0	10.613M	8.93M
2593MHz	Pass	50	0	10.8M	8.913M
2685MHz	Pass	50	0	10.825M	8.935M
LTE_10MHz_Nss1,(16QAM)_1TX	-	-	-	-	-
2501MHz	Pass	50	0	10.263M	8.956M
2593MHz	Pass	50	0	10.225M	8.949M
2685MHz	Pass	50	0	10.363M	8.948M
LTE_10MHz_Nss1,(64QAM)_1TX	-	-	-	-	-
2501MHz	Pass	50	0	10.663M	8.955M
2593MHz	Pass	50	0	10.713M	8.956M
2685MHz	Pass	50	0	10.713M	8.934M
LTE_15MHz_Nss1,(QPSK)_1TX	-	-	-	-	-
2503.5MHz	Pass	75	0	15.694M	13.411M
2593MHz	Pass	75	0	15.788M	13.381M
2682.5MHz	Pass	75	0	15.9M	13.393M
LTE_15MHz_Nss1,(16QAM)_1TX	-	-	-	-	-
2503.5MHz	Pass	75	0	15.413M	13.398M
2593MHz	Pass	75	0	15.375M	13.39M
2682.5MHz	Pass	75	0	15.75M	13.412M
LTE_15MHz_Nss1,(64QAM)_1TX	-	-	-	-	-
2503.5MHz	Pass	75	0	15.656M	13.418M
2593MHz	Pass	75	0	15.731M	13.413M
2682.5MHz	Pass	75	0	15.881M	13.404M
LTE_20MHz_Nss1,(QPSK)_1TX	-	-	-	-	-
2506MHz	Pass	100	0	20.2M	17.898M
2593MHz	Pass	100	0	20.05M	17.852M
2680MHz	Pass	100	0	19.925M	17.885M
LTE_20MHz_Nss1,(16QAM)_1TX	-	-	-	-	-
2506MHz	Pass	100	0	20.175M	17.925M
2593MHz	Pass	100	0	20.15M	17.922M
2680MHz	Pass	100	0	20.1M	17.91M
LTE_20MHz_Nss1,(64QAM)_1TX	-	-	-	-	-



## EBW Result

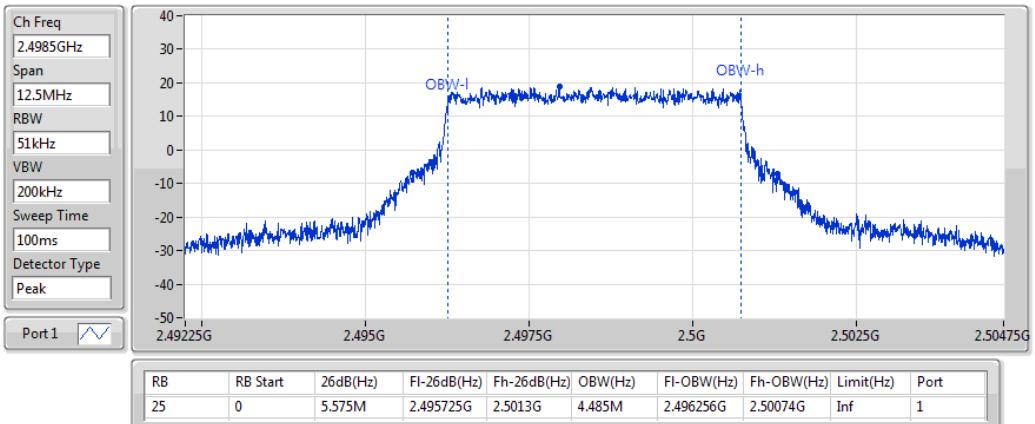
## Appendix C

Mode	Result	RB	RB Start	P1-N dB (Hz)	P1-OBW (Hz)
2506MHz	Pass	100	0	20M	17.886M
2593MHz	Pass	100	0	19.875M	17.883M
2680MHz	Pass	100	0	19.9M	17.899M

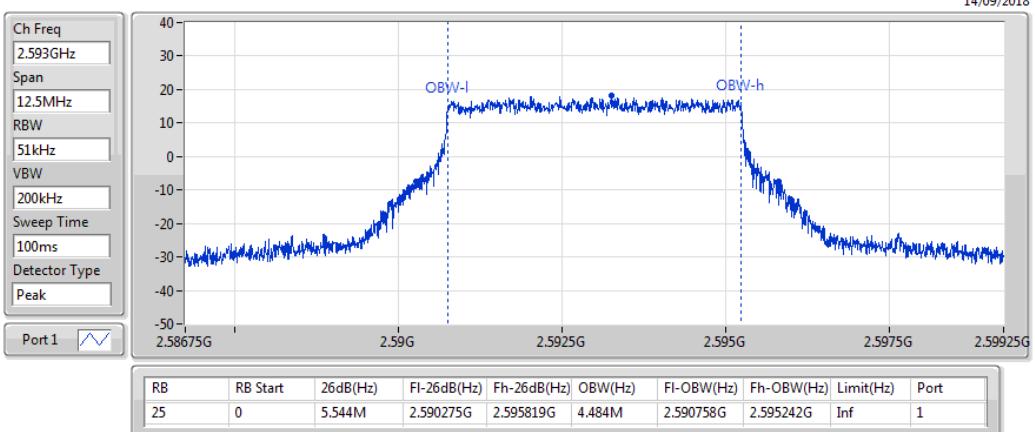
**Port X-N dB** = Port X26dB downbandwidth; **Port X-OBW** = Port X99% occupied bandwidth;

**Band 41\_LTE\_5MHz\_Nss1,(QPSK)\_1TX**
**EBW**
**2498.5MHz**

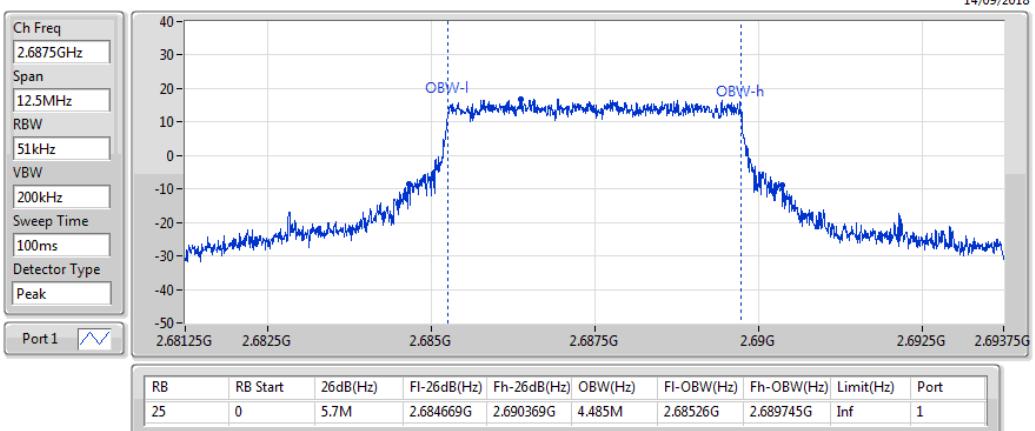
14/09/2018


**Band 41\_LTE\_5MHz\_Nss1,(QPSK)\_1TX**
**EBW**
**2593MHz**

14/09/2018

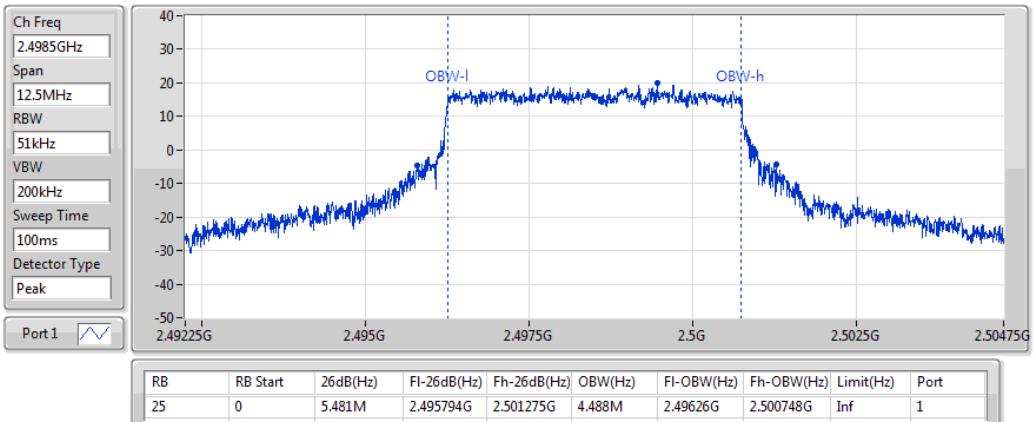

**Band 41\_LTE\_5MHz\_Nss1,(QPSK)\_1TX**
**EBW**
**2687.5MHz**

14/09/2018

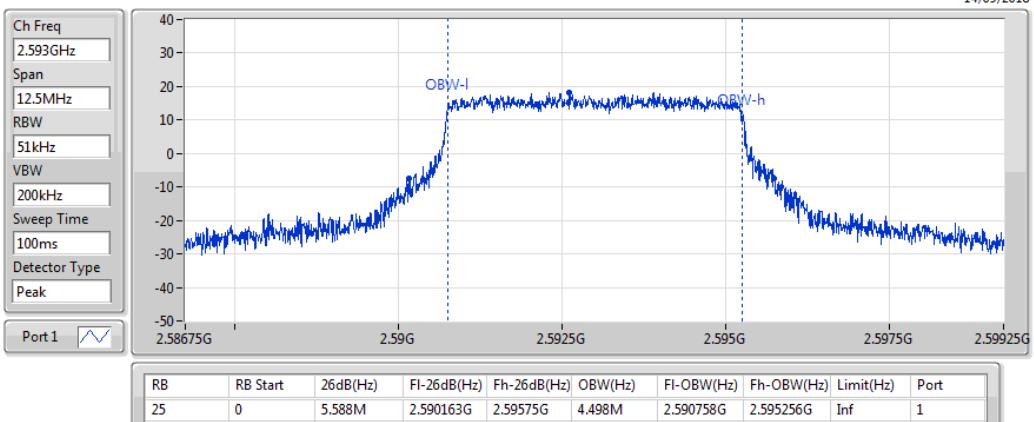


**Band 41\_LTE\_5MHz\_Nss1,(16QAM)\_1TX**
**EBW**
**2498.5MHz**

14/09/2018


**Band 41\_LTE\_5MHz\_Nss1,(16QAM)\_1TX**
**EBW**
**2593MHz**

14/09/2018


**Band 41\_LTE\_5MHz\_Nss1,(16QAM)\_1TX**
**EBW**
**2687.5MHz**

14/09/2018

