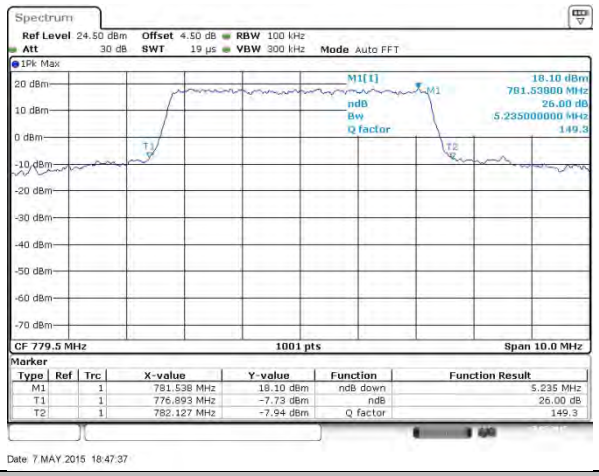
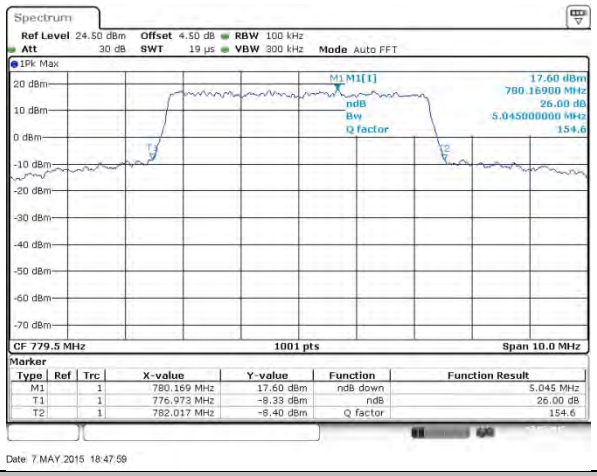
LTE Band 13

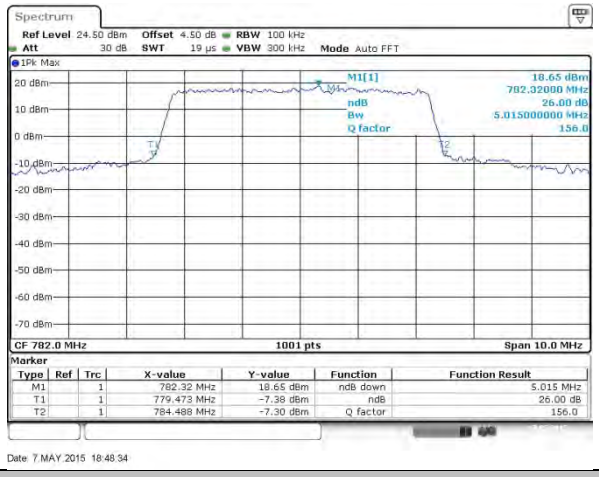
Lowest Channel / 5MHz / QPSK



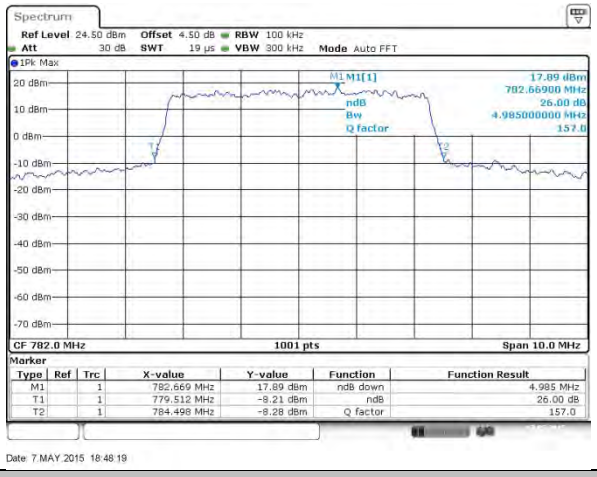
Lowest Channel / 5MHz / 16QAM



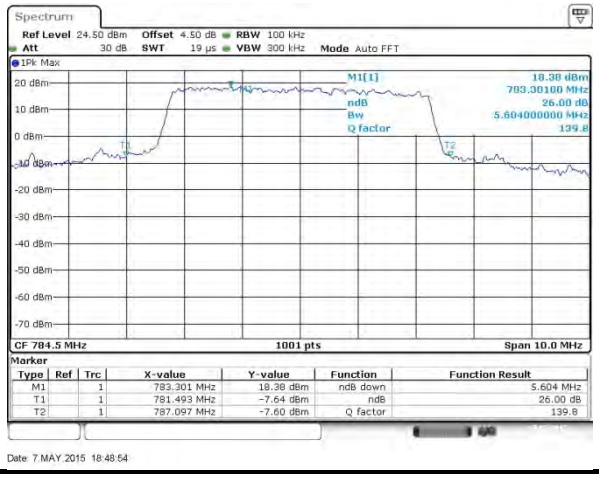
Middle Channel / 5MHz / QPSK



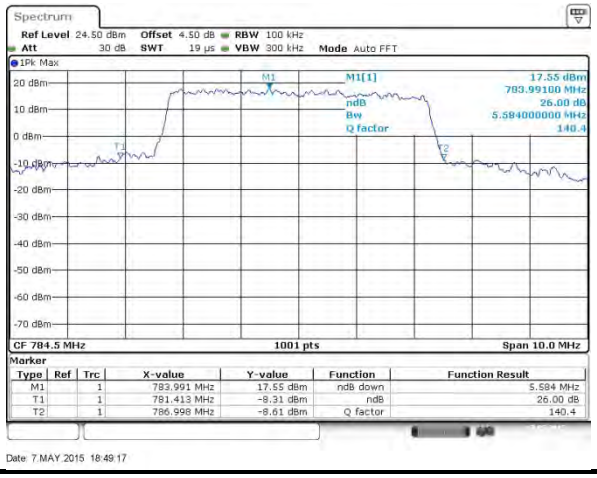
Middle Channel / 5MHz / 16QAM

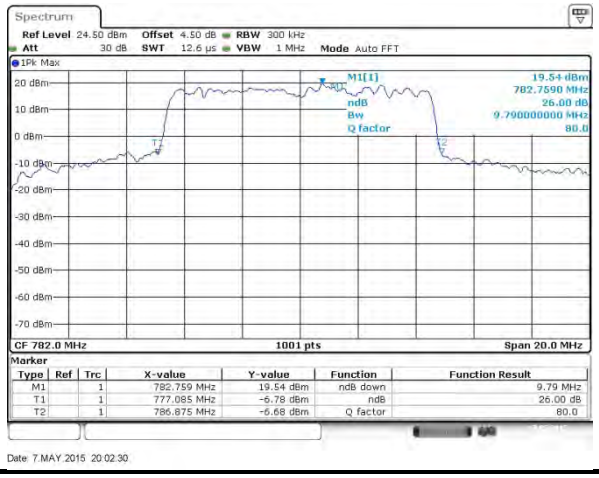
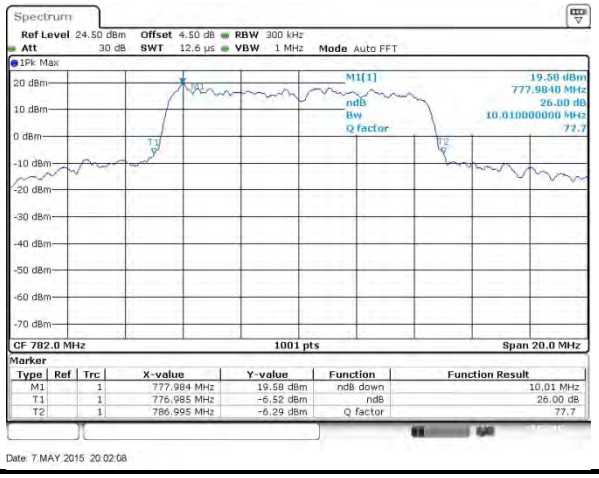


Highest Channel / 5MHz / QPSK



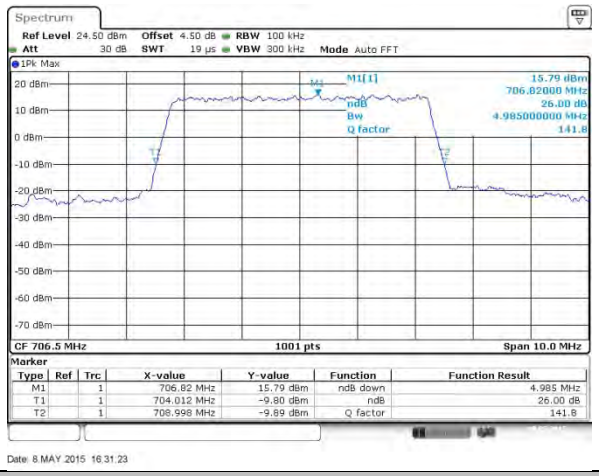
Highest Channel / 5MHz / 16QAM



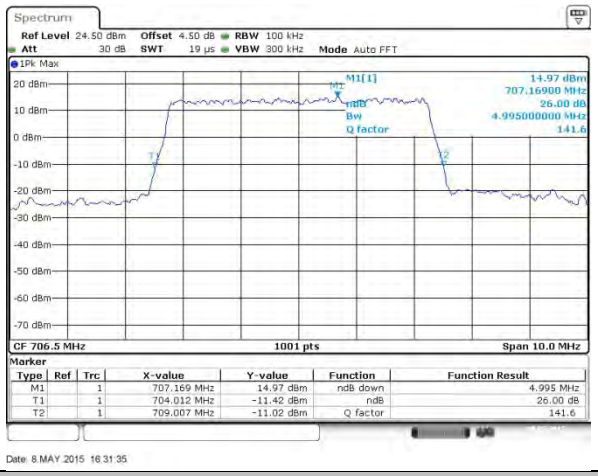
LTE Band 13	
Middle Channel / 10MHz / QPSK	**Middle Channel / 10MHz / 16QAM**
	

LTE Band 17

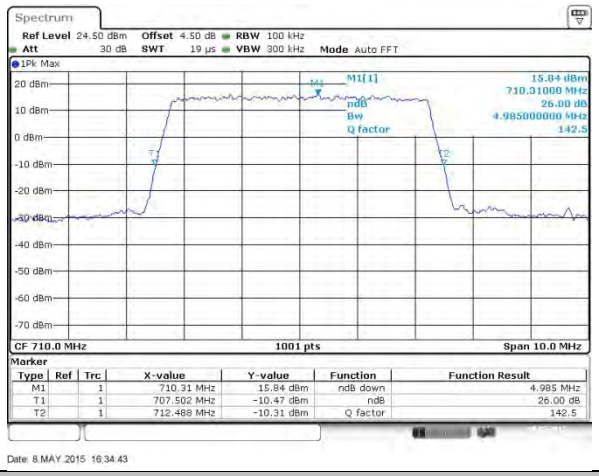
Lowest Channel / 5MHz / QPSK



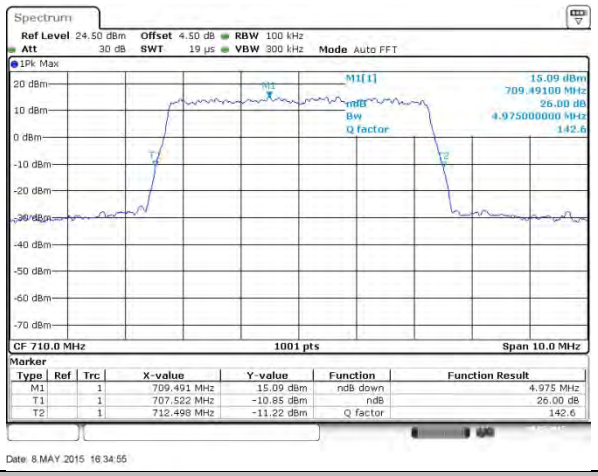
Lowest Channel / 5MHz / 16QAM



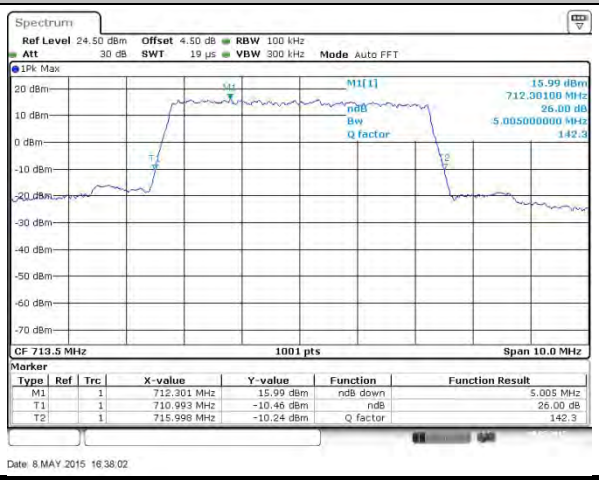
Middle Channel / 5MHz / QPSK



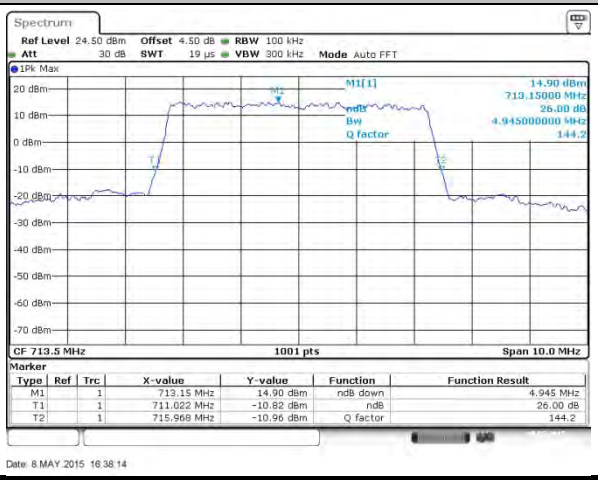
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

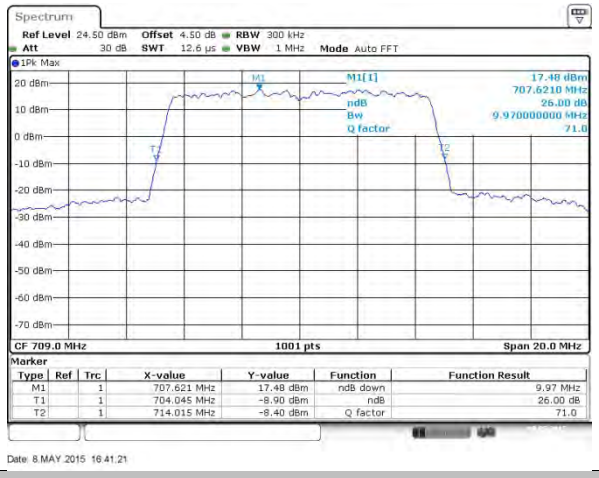


Highest Channel / 5MHz / 16QAM

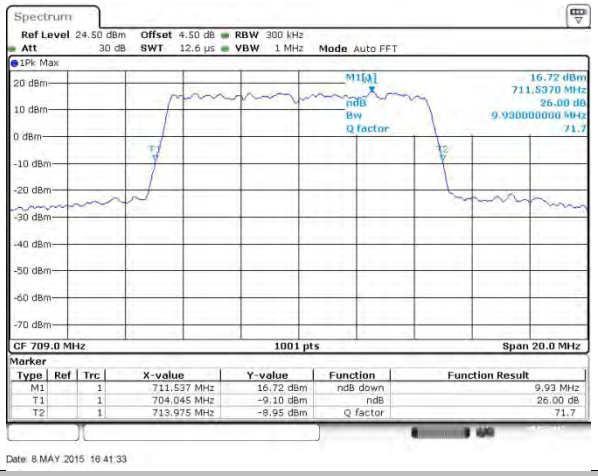


LTE Band 17

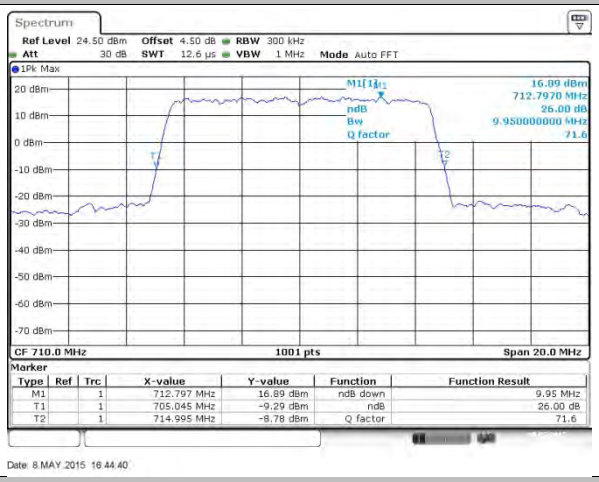
Lowest Channel / 10MHz / QPSK



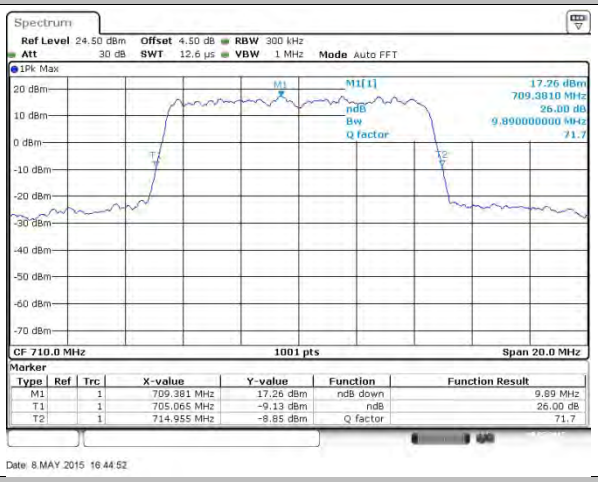
Lowest Channel / 10MHz / 16QAM



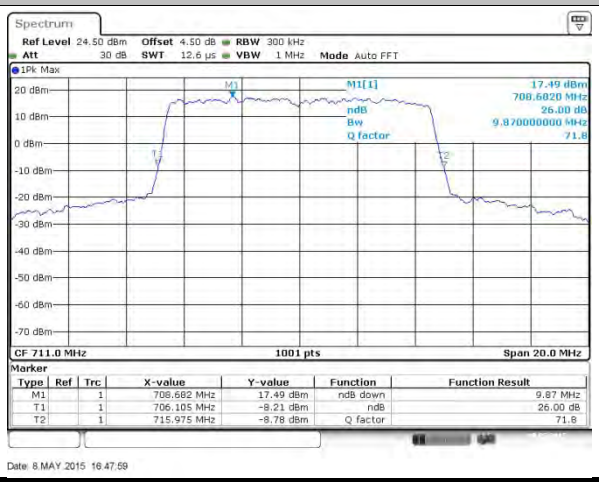
Middle Channel / 10MHz / QPSK



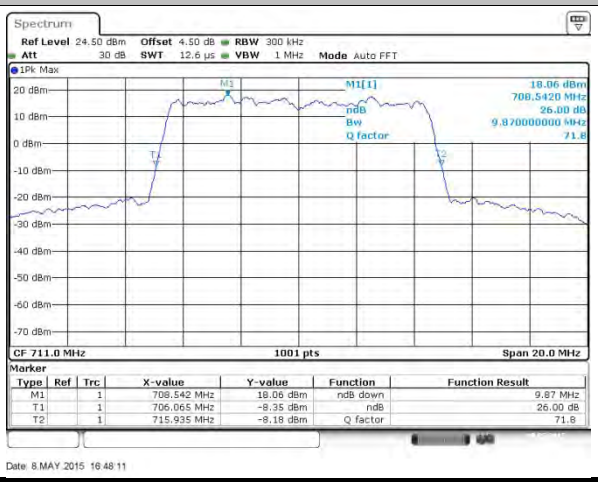
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM



Occupied Bandwidth

Mode	LTE Band 2 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.094	1.102	2.727	2.733	4.505	4.486	9.131	9.051	13.516	13.516	18.701	18.621
Middle CH	1.094	1.097	2.727	2.727	4.496	4.496	9.071	9.011	13.427	13.457	18.462	18.462
Highest CH	1.099	1.099	2.715	2.727	4.486	4.496	9.011	8.971	13.427	13.427	18.581	18.462

Mode	LTE Band 4 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.094	1.091	2.727	2.721	4.486	4.496	9.051	8.991	13.427	13.487	18.462	18.422
Middle CH	1.094	1.094	2.721	2.727	4.486	4.496	9.111	9.031	13.516	13.487	18.462	18.541
Highest CH	1.097	1.099	2.739	2.733	4.505	4.496	9.051	9.031	13.487	13.457	18.422	18.422

Mode	LTE Band 5 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.088	1.091	2.727	2.727	4.486	4.486	9.091	8.991	-	-	-	-
Middle CH	1.091	1.091	2.727	2.727	4.486	4.486	9.051	9.031	-	-	-	-
Highest CH	1.094	1.091	2.727	2.727	4.496	4.496	9.071	9.031	-	-	-	-

Mode	LTE Band 7 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.486	4.486	9.091	9.031	13.487	13.487	18.501	18.541
Middle CH	-	-	-	-	4.486	4.486	9.031	8.971	13.457	13.487	18.462	18.541
Highest CH	-	-	-	-	4.496	4.486	9.031	9.011	13.487	13.457	18.382	18.422

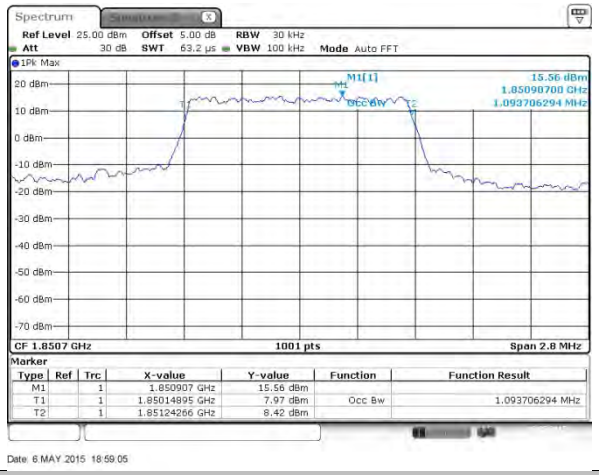
Mode	LTE Band 12 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.091	1.091	2.727	2.733	4.496	4.496	9.071	9.071	-	-	-	-
Middle CH	1.094	1.094	2.727	2.721	4.496	4.486	9.071	9.011	-	-	-	-
Highest CH	1.091	1.094	2.733	2.727	4.486	4.496	9.071	8.991	-	-	-	-

Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.515	4.505	-	-	-	-	-	-
Middle CH	-	-	-	-	4.496	4.496	9.111	9.051	-	-	-	-
Highest CH	-	-	-	-	4.535	4.505	-	-	-	-	-	-

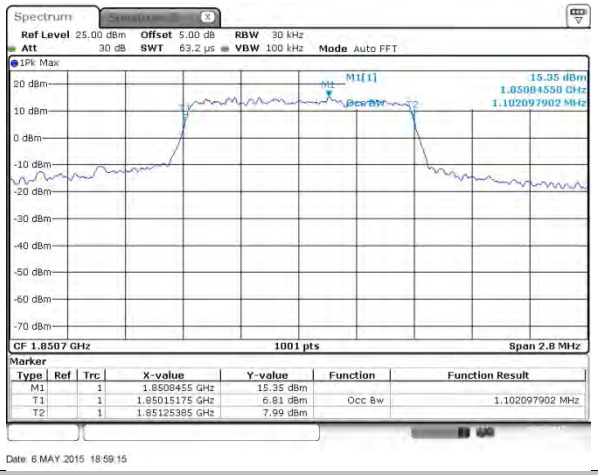
Mode	LTE Band 17 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.496	4.496	9.011	9.011	-	-	-	-
Middle CH	-	-	-	-	4.486	4.476	9.031	8.991	-	-	-	-
Highest CH	-	-	-	-	4.496	4.496	9.031	8.991	-	-	-	-

LTE Band 2

Lowest Channel / 1.4MHz / QPSK

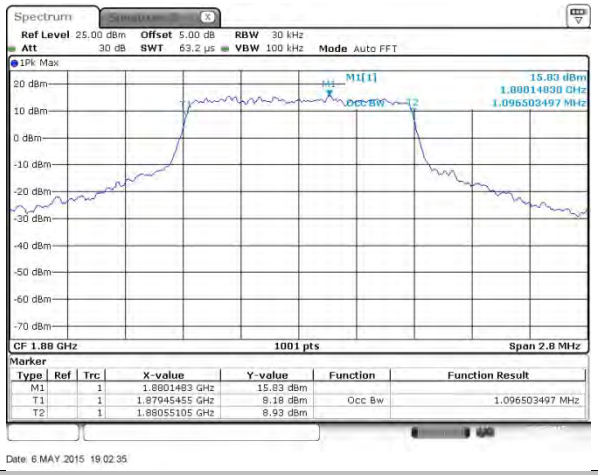


Lowest Channel / 1.4MHz / 16QAM

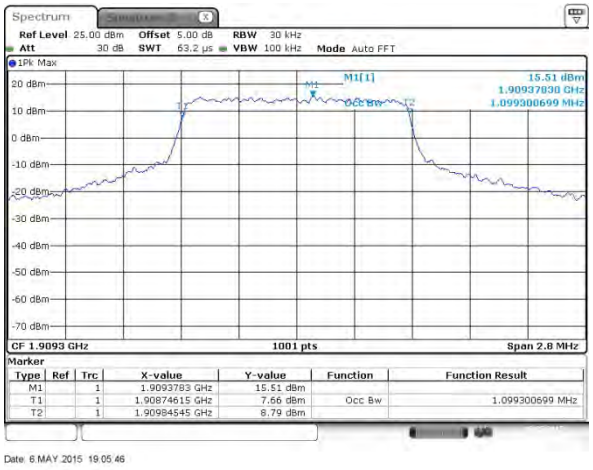


Middle Channel / 1.4MHz / QPSK

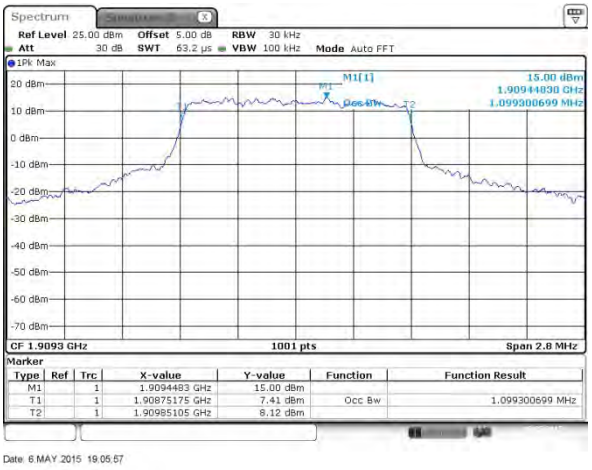
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK

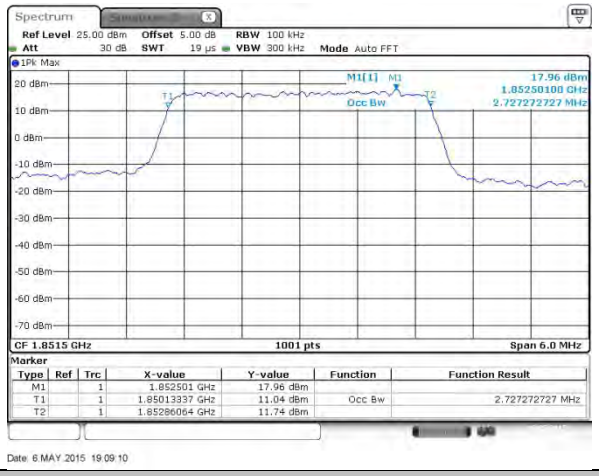


Highest Channel / 1.4MHz / 16QAM

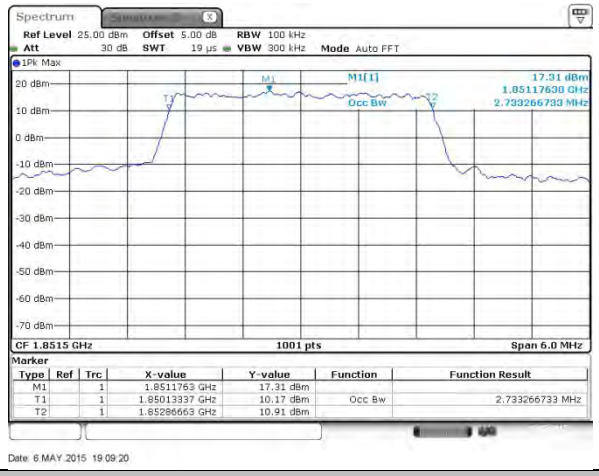


LTE Band 2

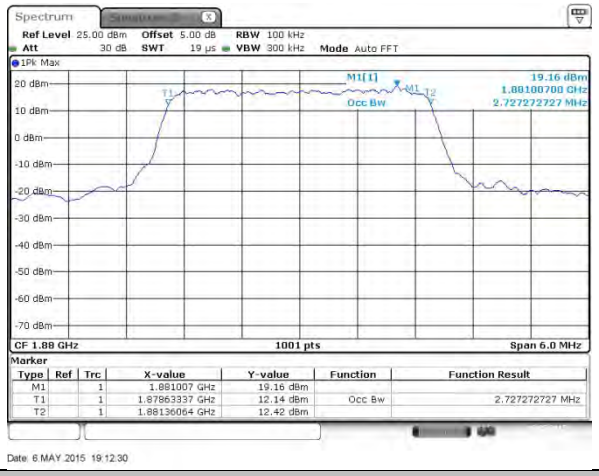
Lowest Channel / 3MHz / QPSK



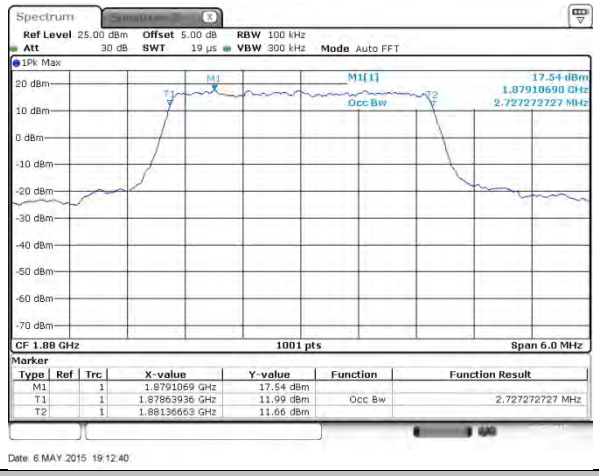
Lowest Channel / 3MHz / 16QAM



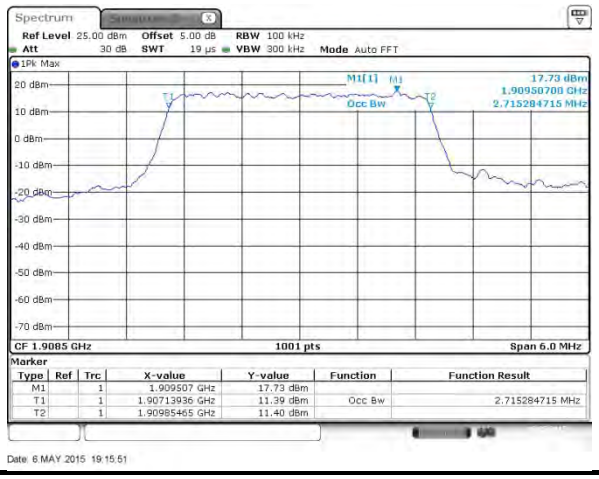
Middle Channel / 3MHz / QPSK



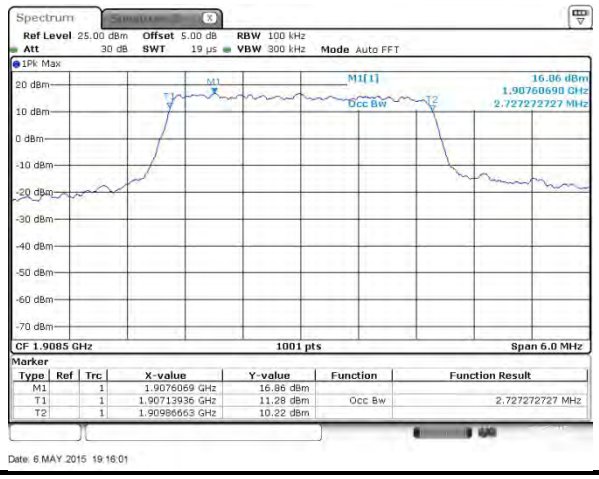
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK

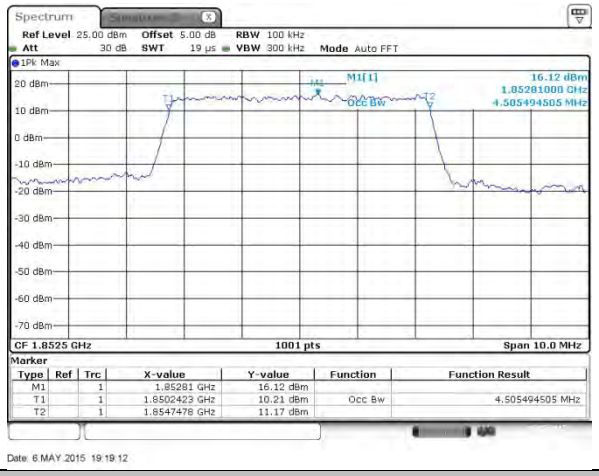


Highest Channel / 3MHz / 16QAM

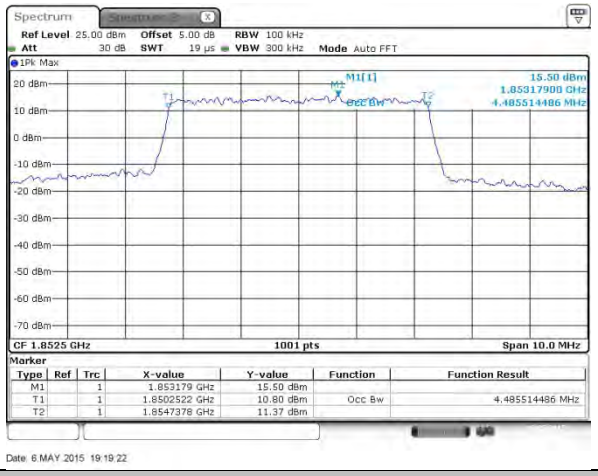


LTE Band 2

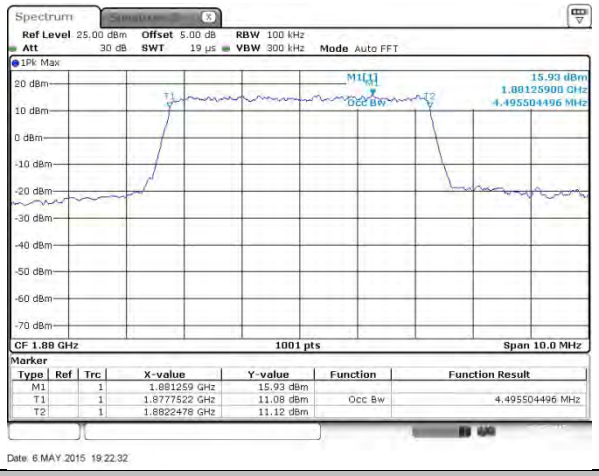
Lowest Channel / 5MHz / QPSK



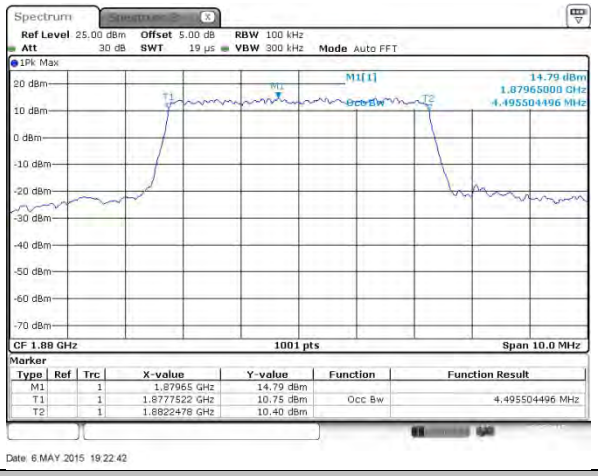
Lowest Channel / 5MHz / 16QAM



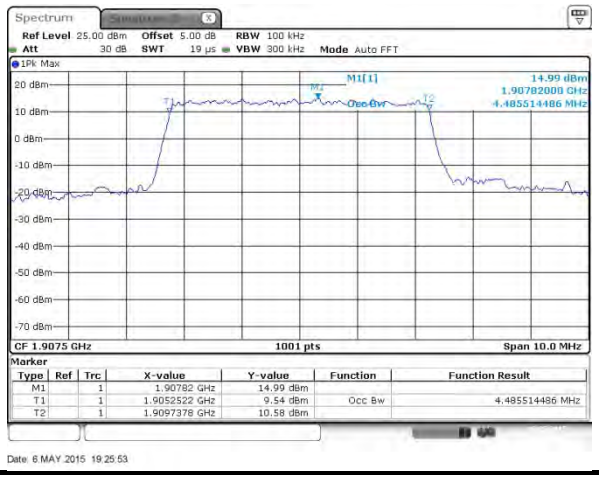
Middle Channel / 5MHz / QPSK



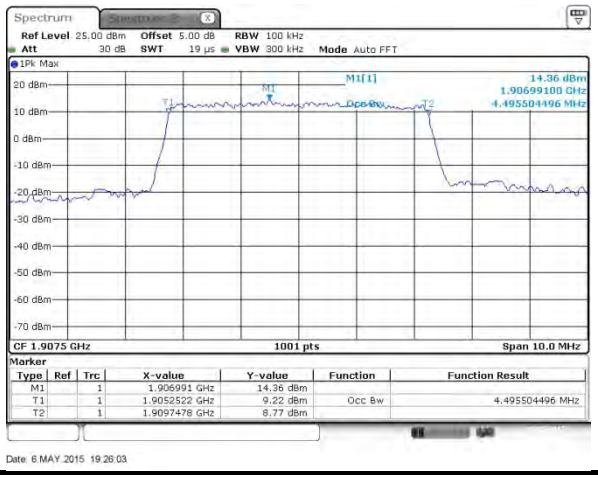
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

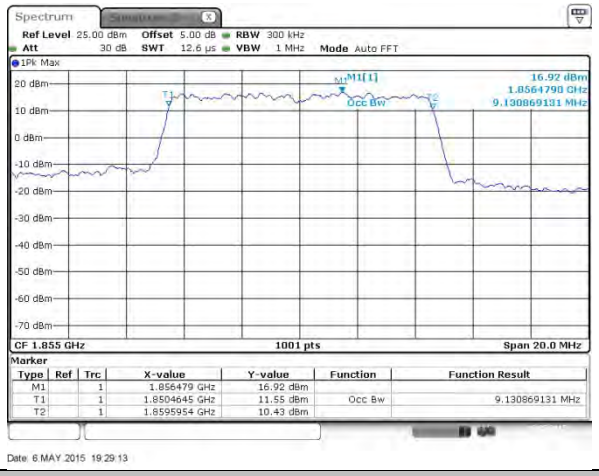


Highest Channel / 5MHz / 16QAM

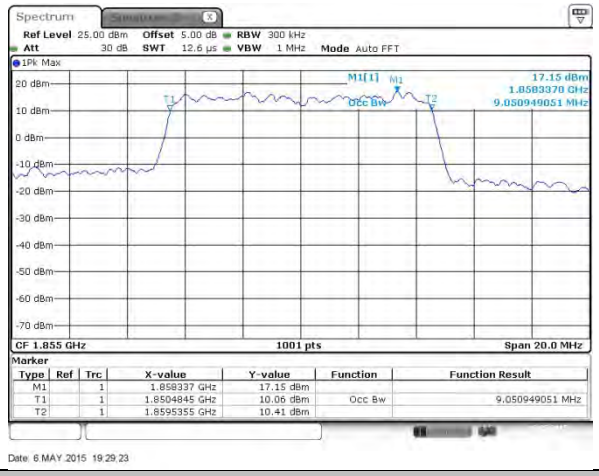


LTE Band 2

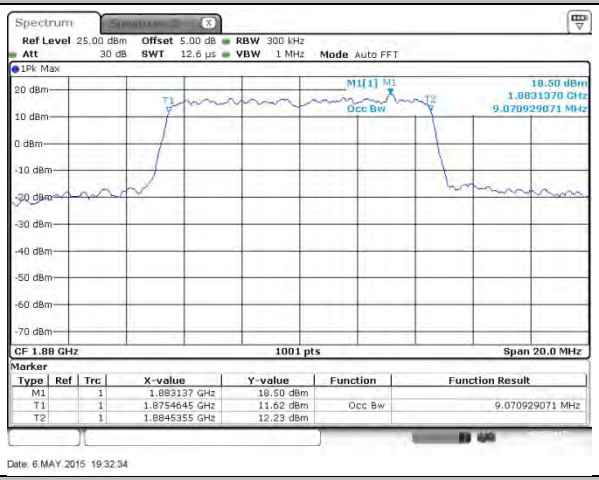
Lowest Channel / 10MHz / QPSK



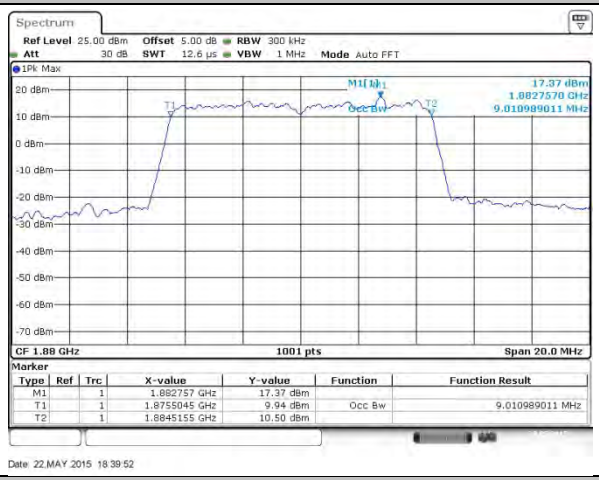
Lowest Channel / 10MHz / 16QAM



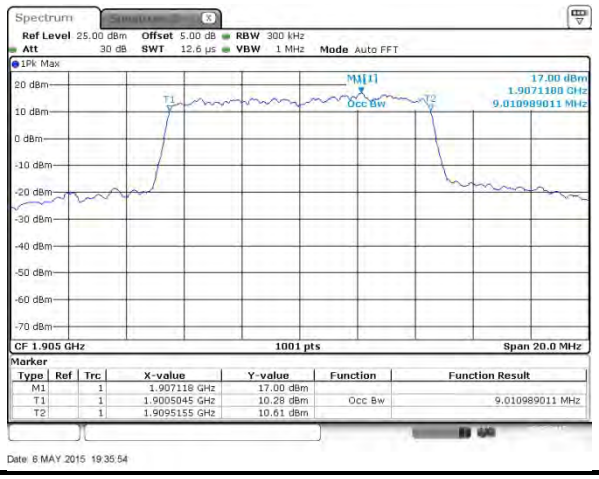
Middle Channel / 10MHz / QPSK



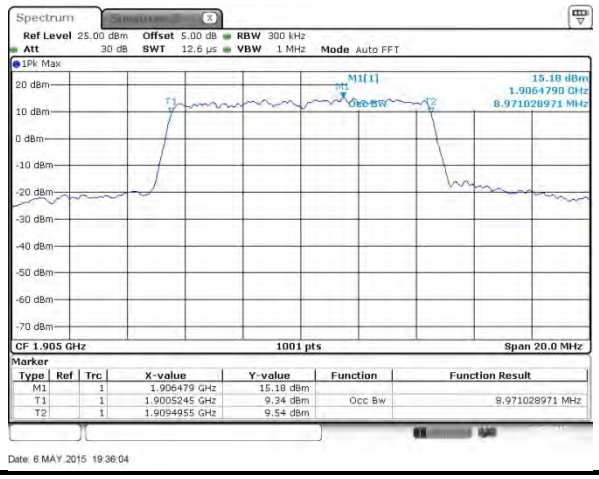
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK

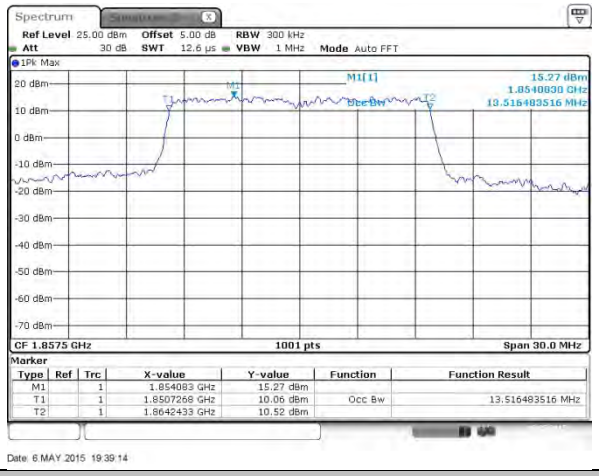


Highest Channel / 10MHz / 16QAM

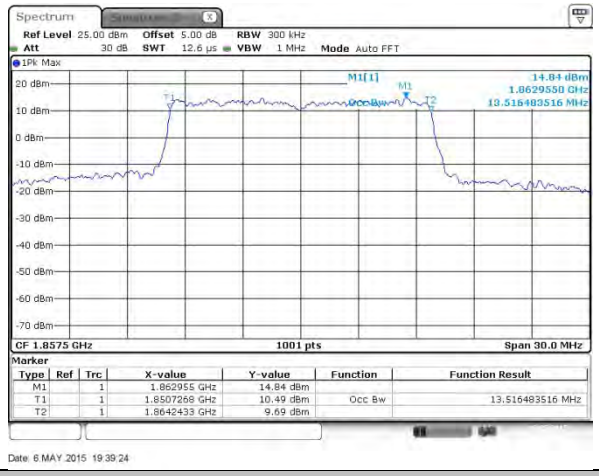


LTE Band 2

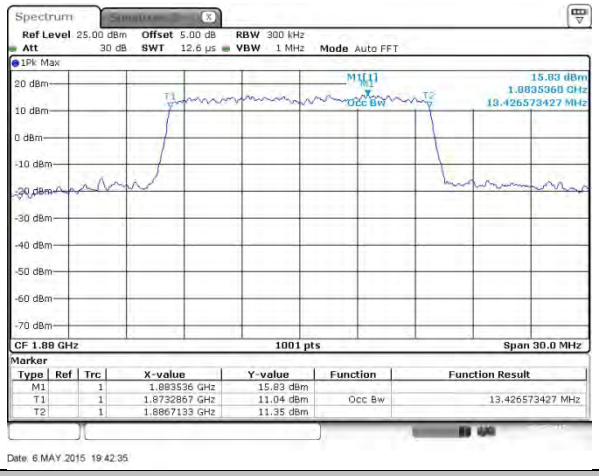
Lowest Channel / 15MHz / QPSK



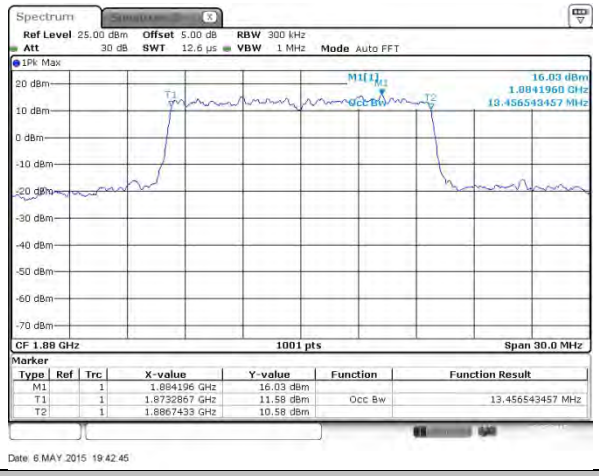
Lowest Channel / 15MHz / 16QAM



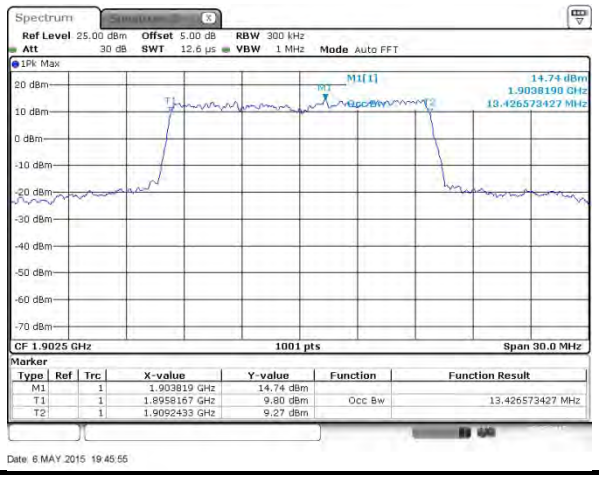
Middle Channel / 15MHz / QPSK



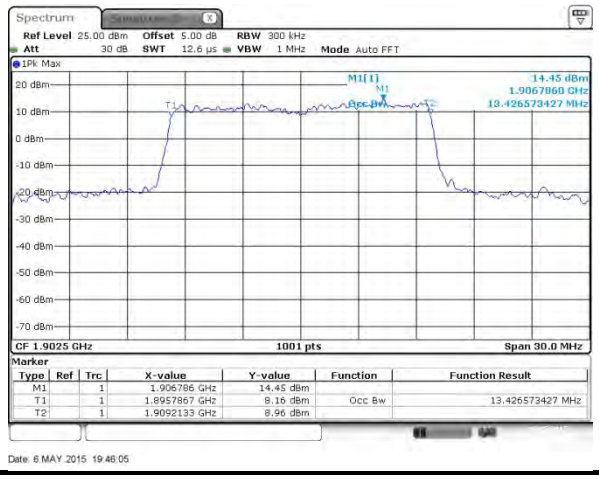
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK

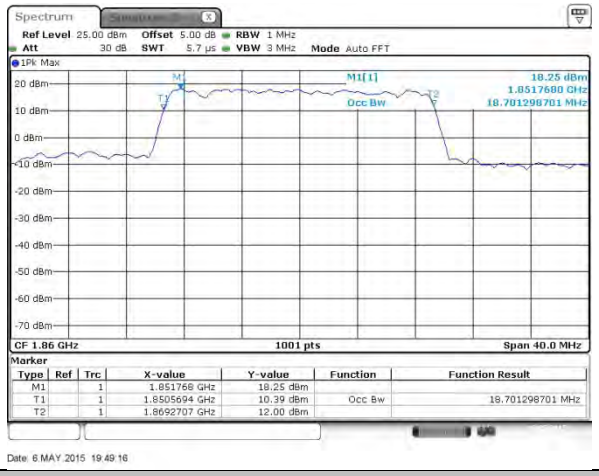


Highest Channel / 15MHz / 16QAM

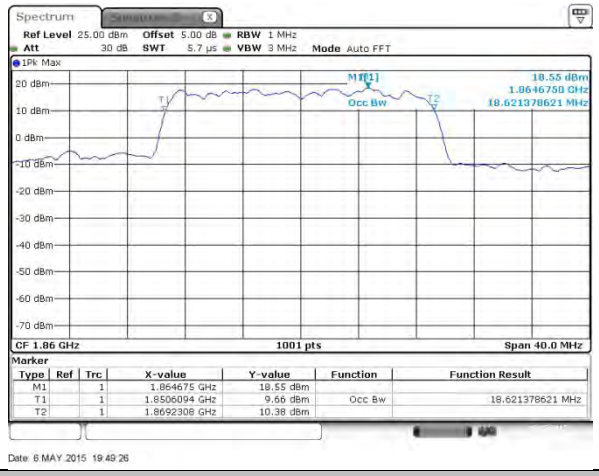


LTE Band 2

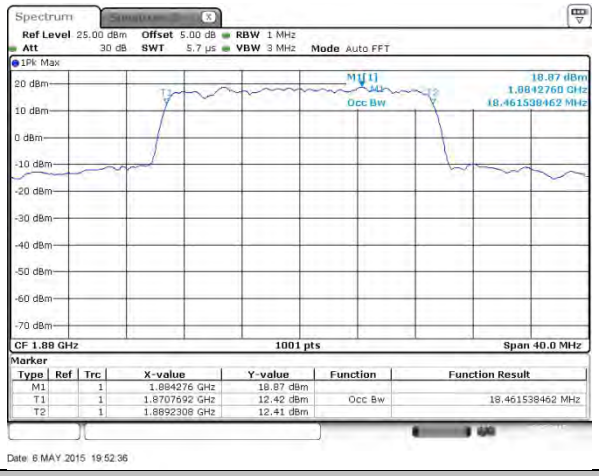
Lowest Channel / 20MHz / QPSK



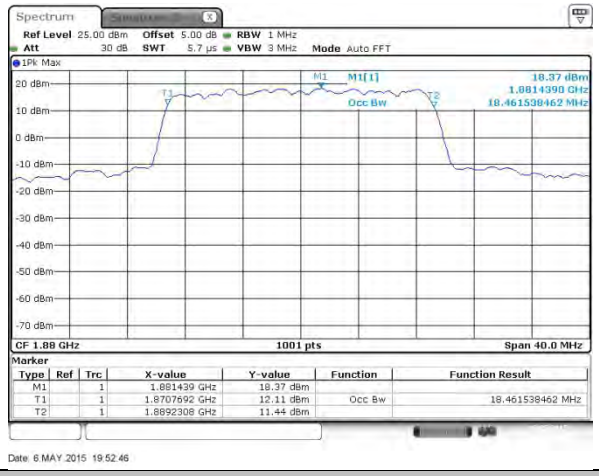
Lowest Channel / 20MHz / 16QAM



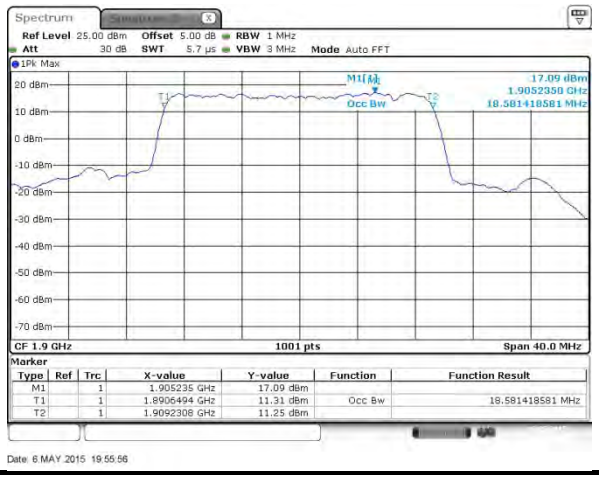
Middle Channel / 20MHz / QPSK



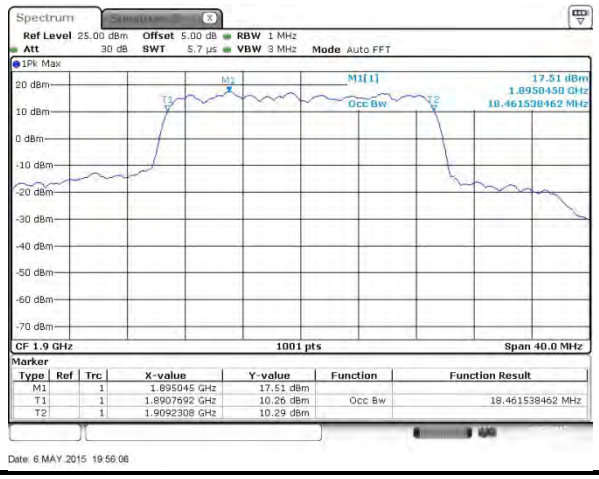
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK

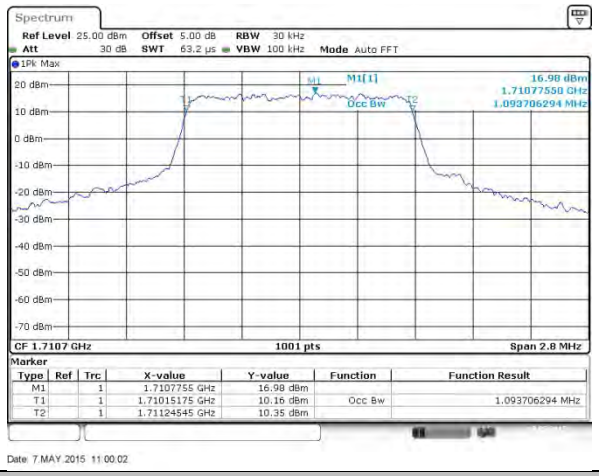


Highest Channel / 20MHz / 16QAM

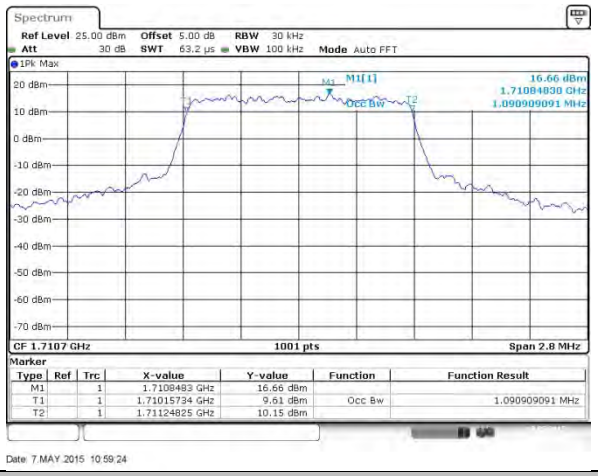


LTE Band 4

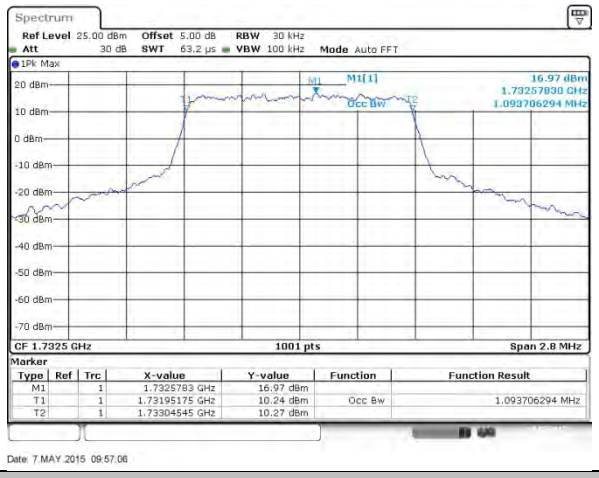
Lowest Channel / 1.4MHz / QPSK



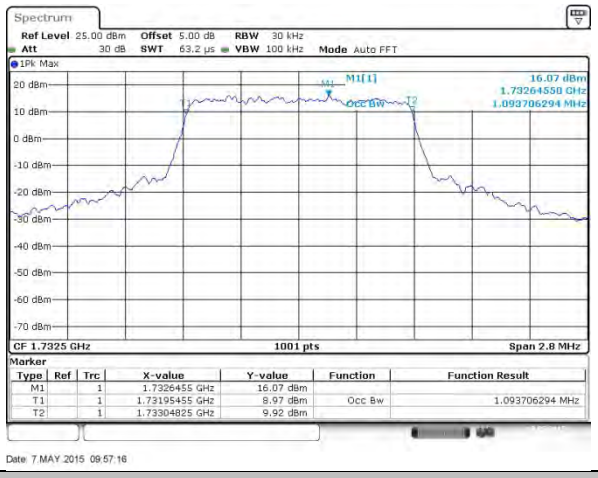
Lowest Channel / 1.4MHz / 16QAM



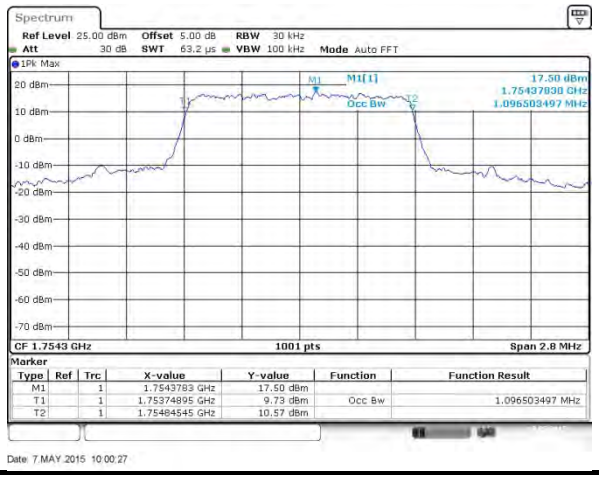
Middle Channel / 1.4MHz / QPSK



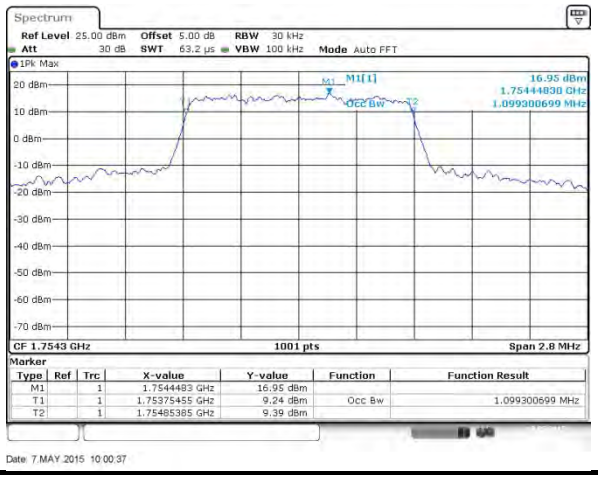
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK

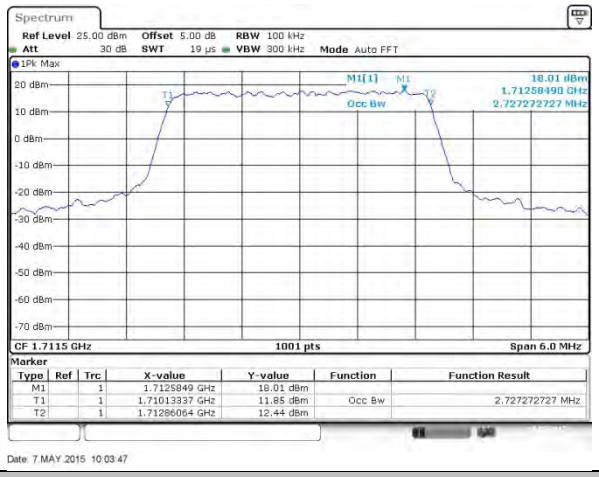


Highest Channel / 1.4MHz / 16QAM

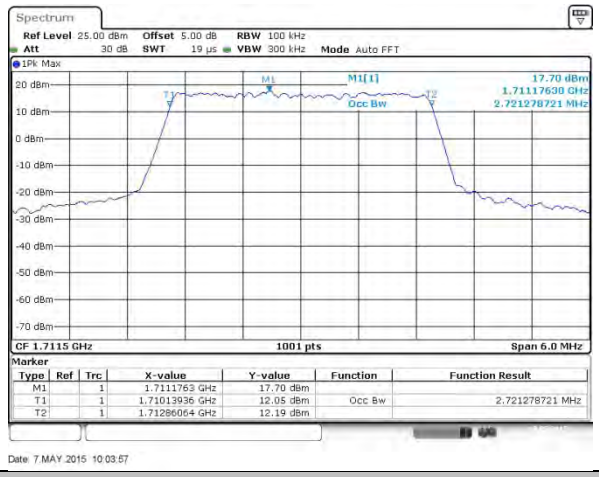


LTE Band 4

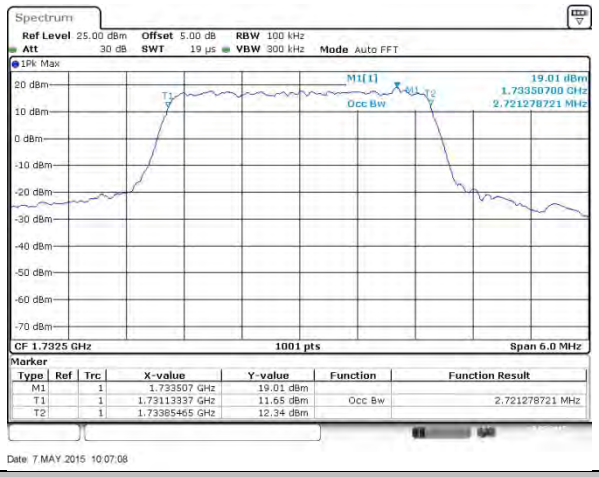
Lowest Channel / 3MHz / QPSK



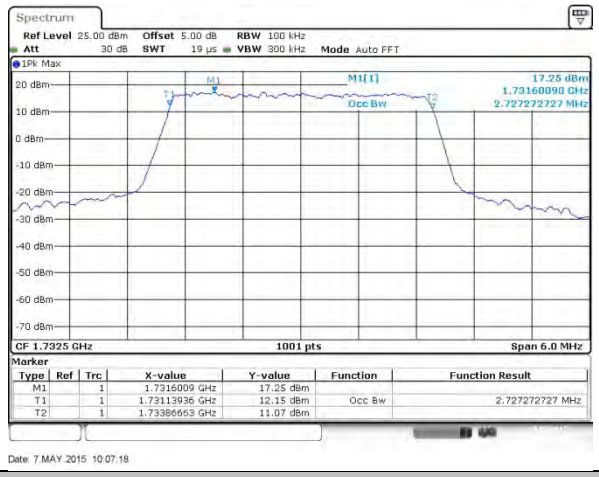
Lowest Channel / 3MHz / 16QAM



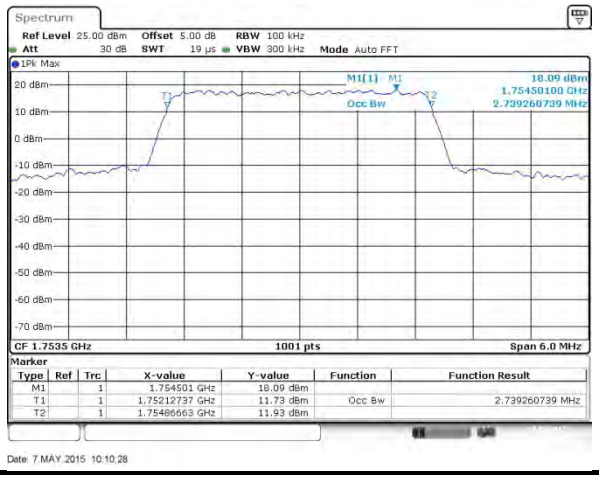
Middle Channel / 3MHz / QPSK



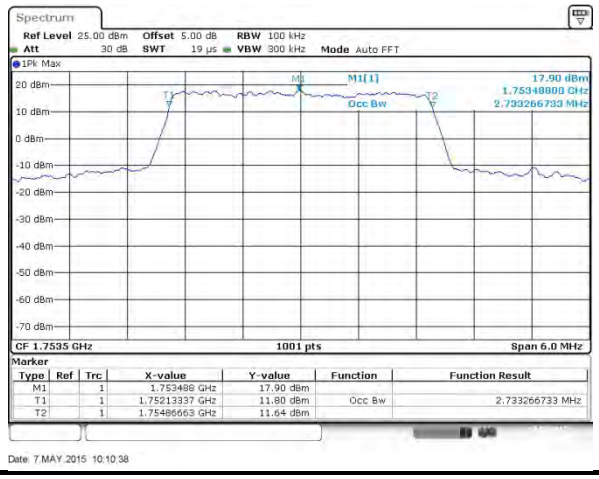
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK

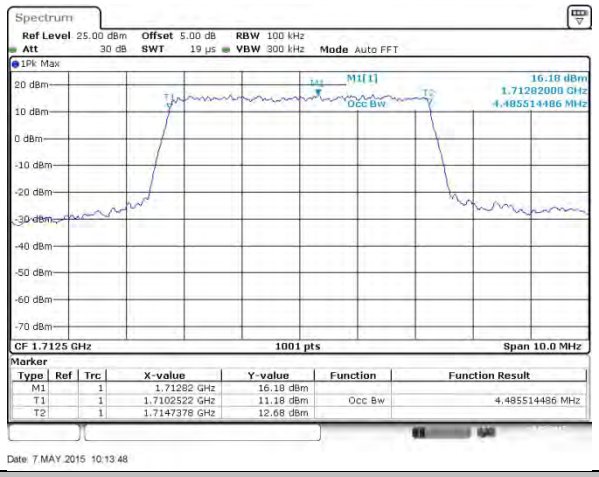


Highest Channel / 3MHz / 16QAM

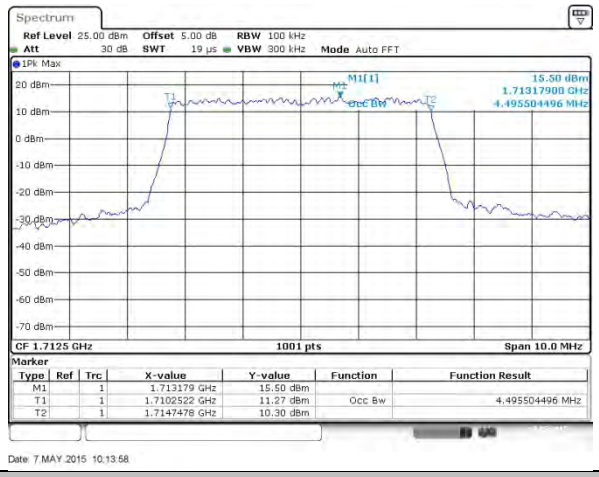


LTE Band 4

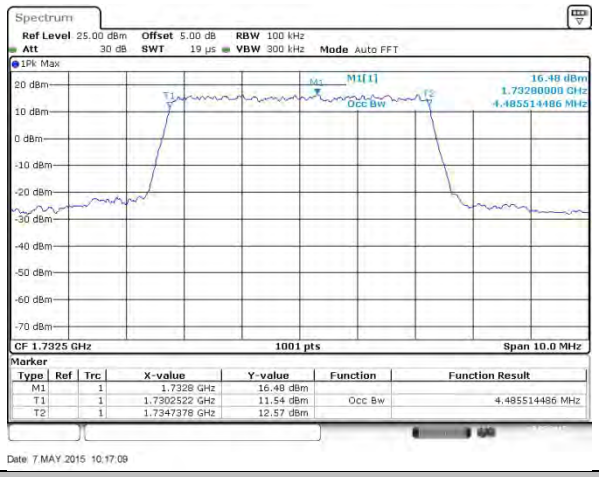
Lowest Channel / 5MHz / QPSK



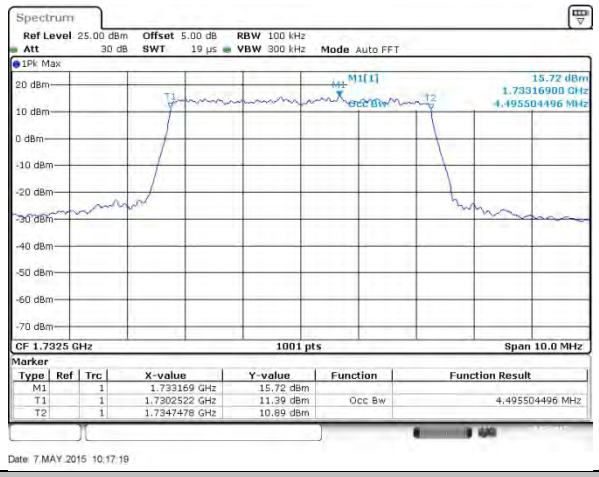
Lowest Channel / 5MHz / 16QAM



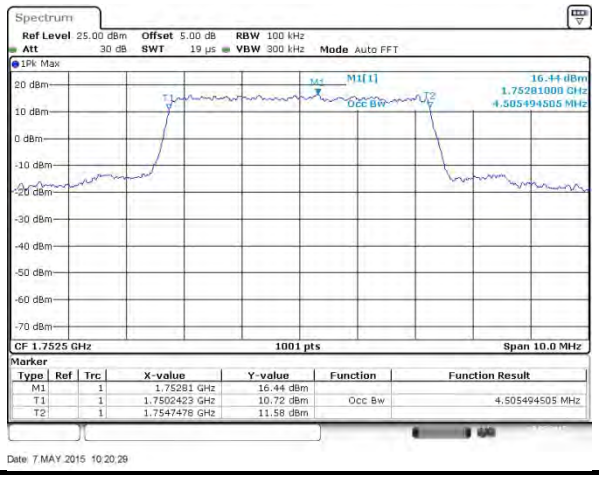
Middle Channel / 5MHz / QPSK



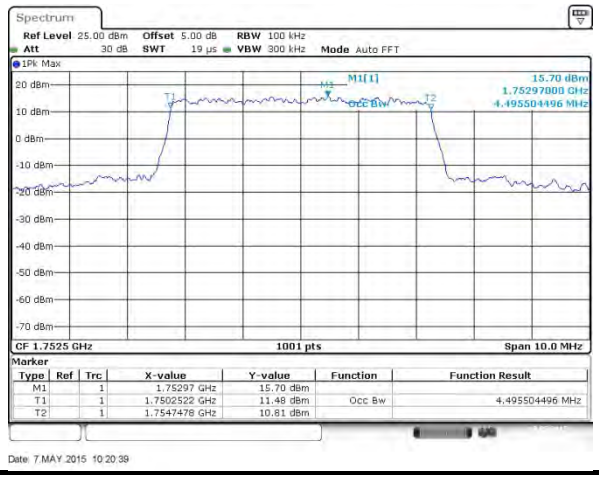
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

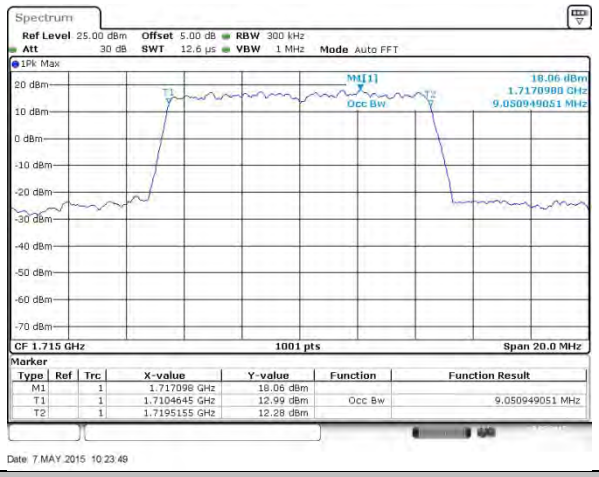


Highest Channel / 5MHz / 16QAM

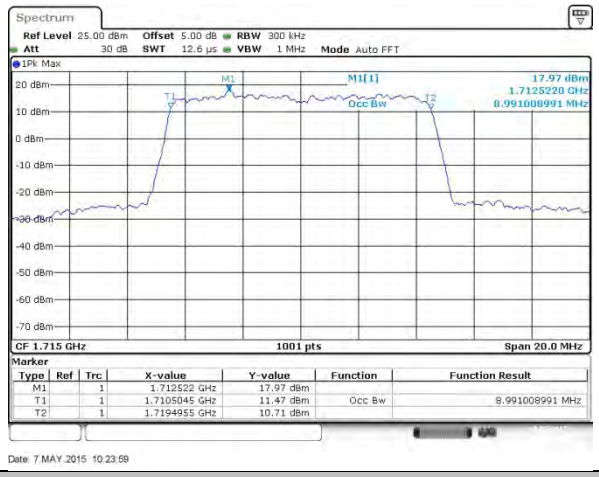


LTE Band 4

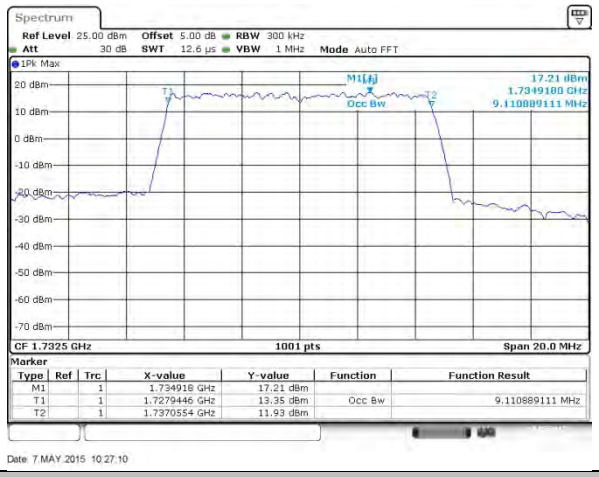
Lowest Channel / 10MHz / QPSK



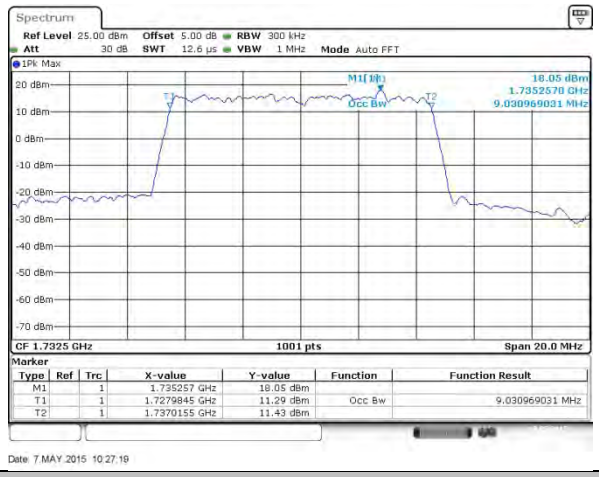
Lowest Channel / 10MHz / 16QAM



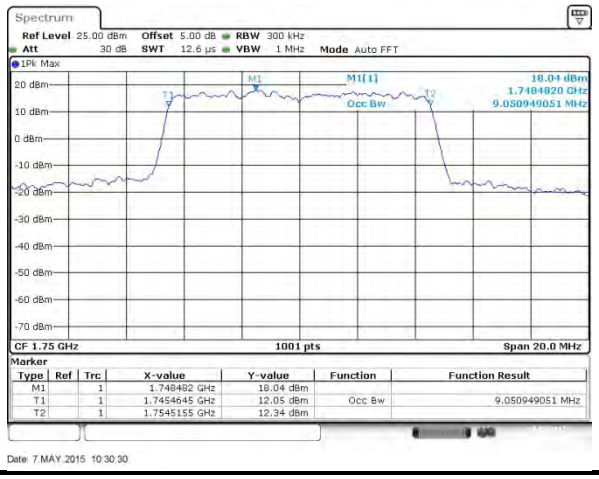
Middle Channel / 10MHz / QPSK



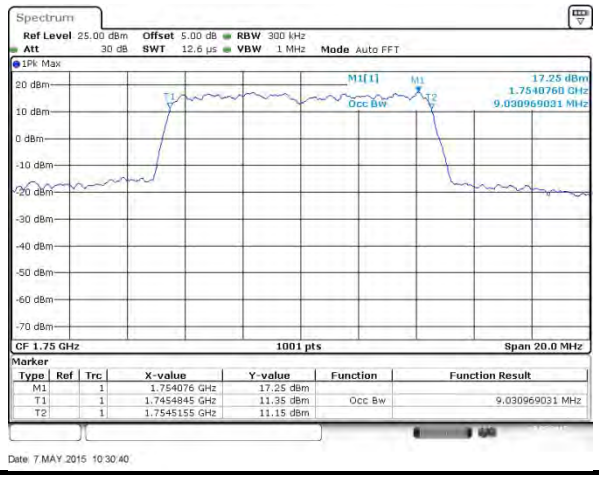
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK

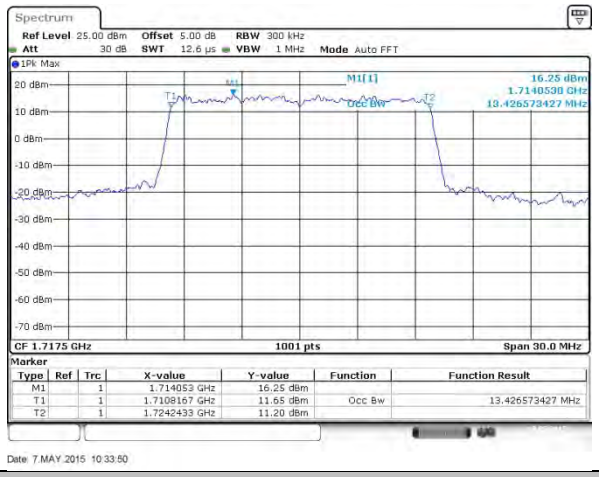


Highest Channel / 10MHz / 16QAM

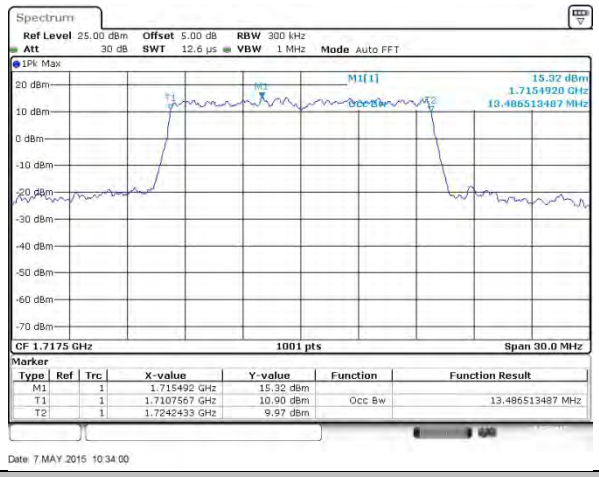


LTE Band 4

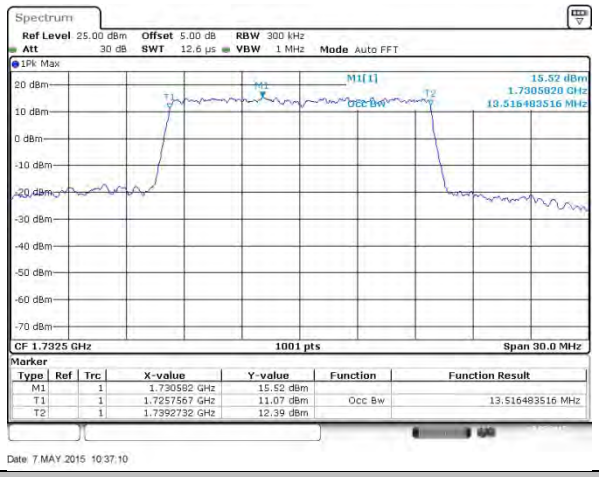
Lowest Channel / 15MHz / QPSK



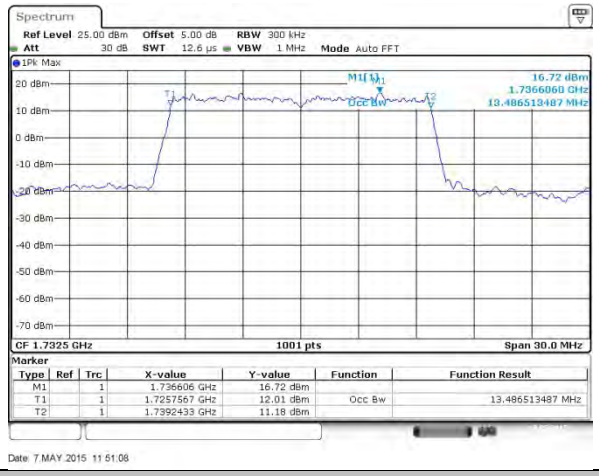
Lowest Channel / 15MHz / 16QAM



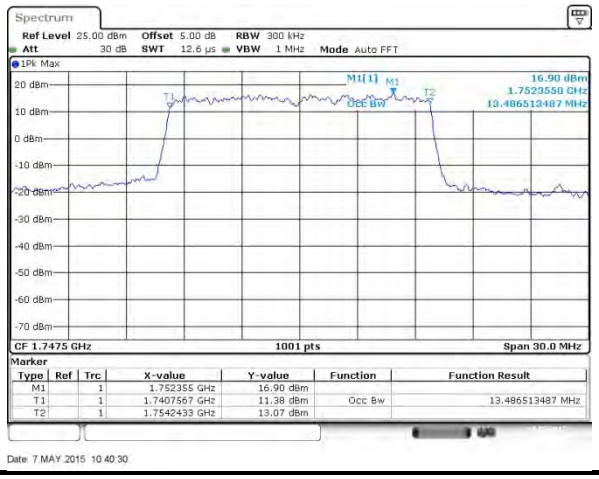
Middle Channel / 15MHz / QPSK



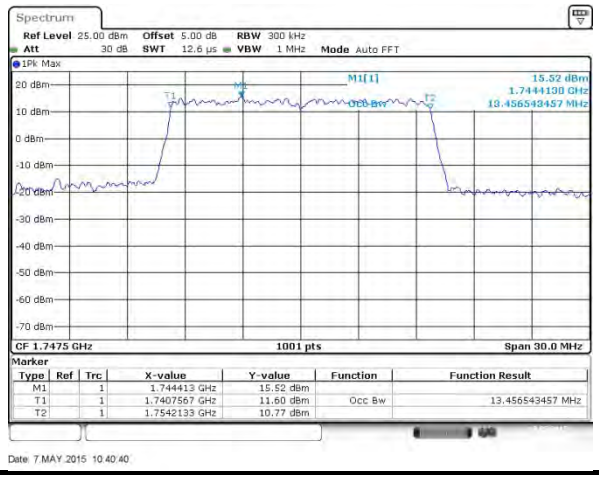
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK

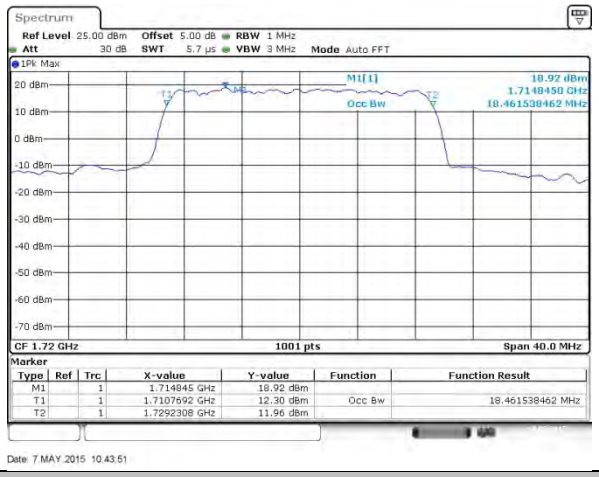


Highest Channel / 15MHz / 16QAM

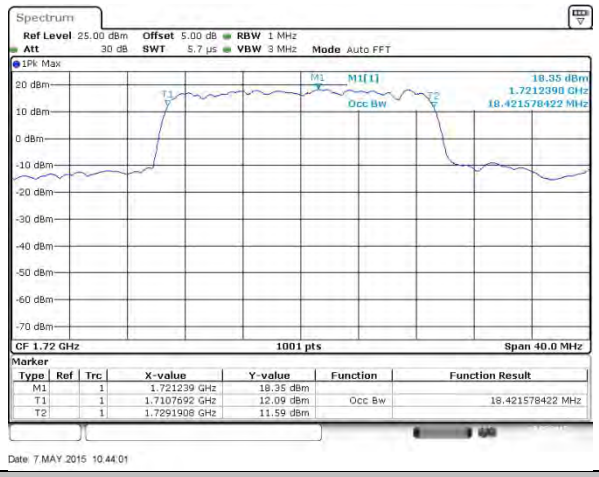


LTE Band 4

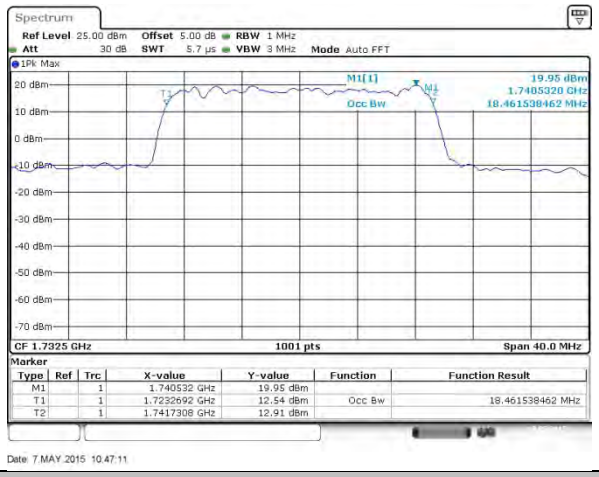
Lowest Channel / 20MHz / QPSK



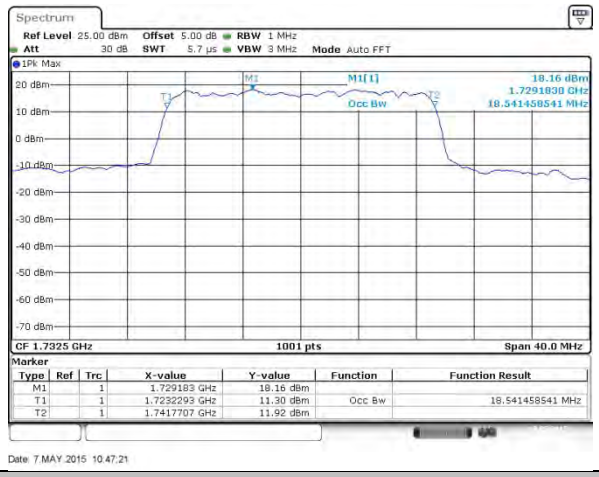
Lowest Channel / 20MHz / 16QAM



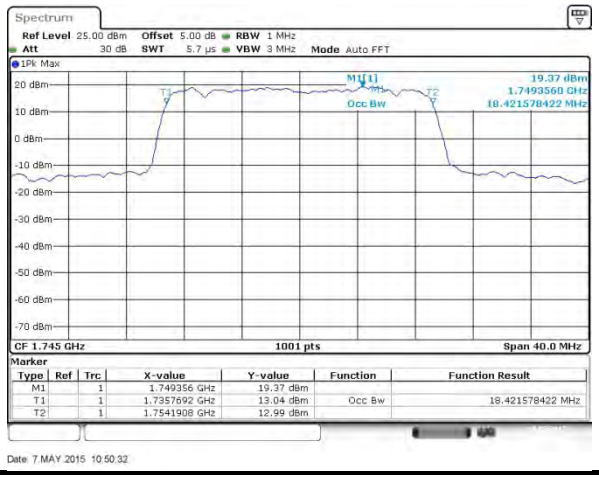
Middle Channel / 20MHz / QPSK



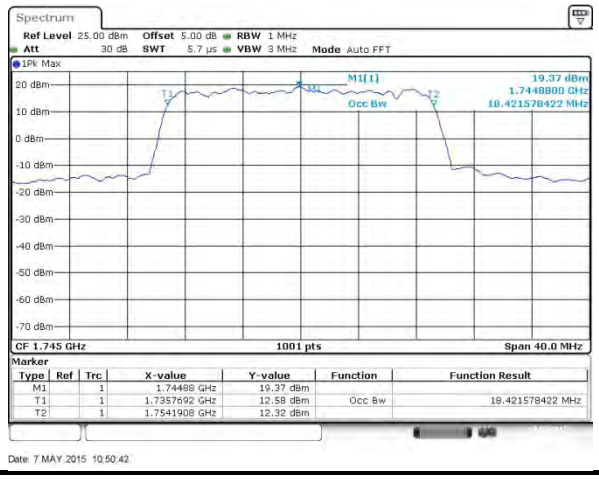
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK

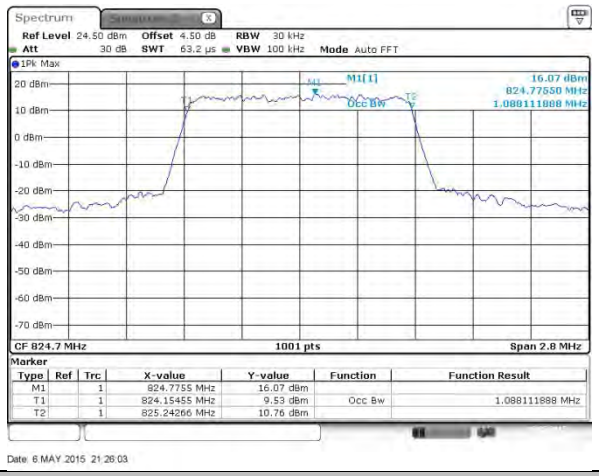


Highest Channel / 20MHz / 16QAM

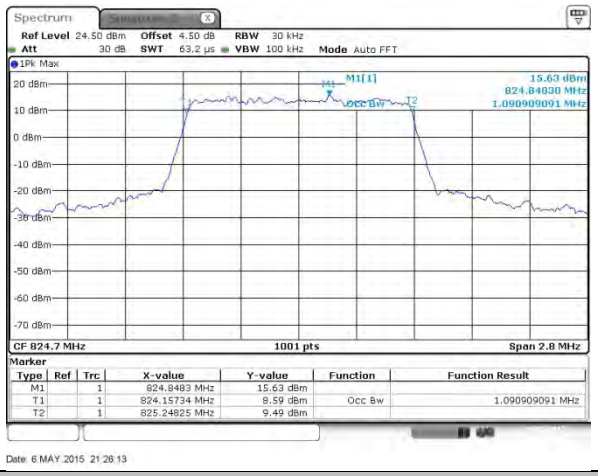


LTE Band 5

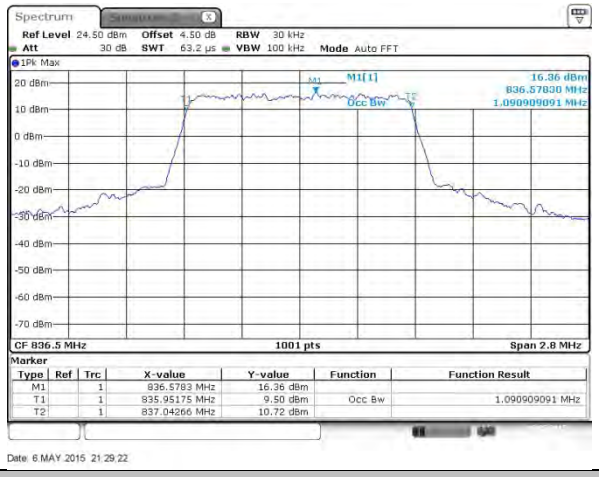
Lowest Channel / 1.4MHz / QPSK



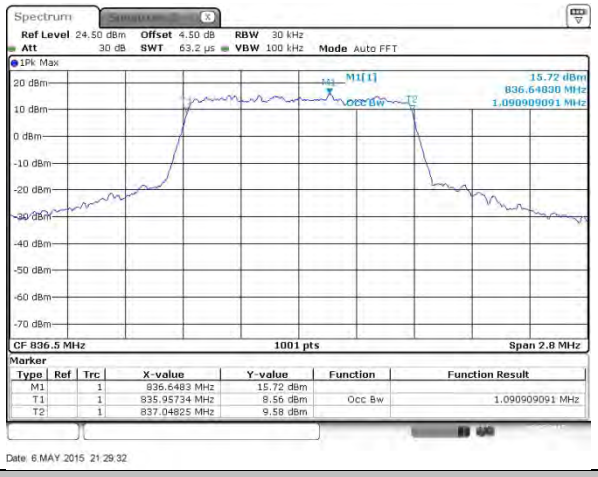
Lowest Channel / 1.4MHz / 16QAM



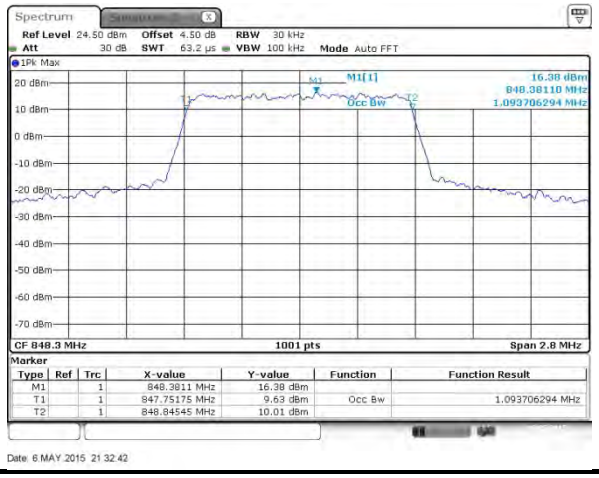
Middle Channel / 1.4MHz / QPSK



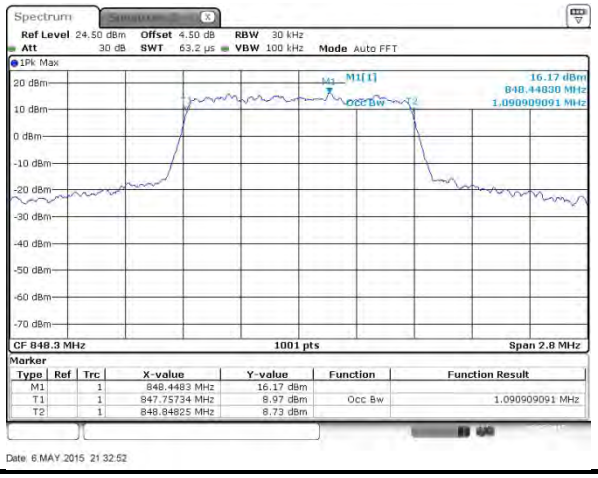
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK

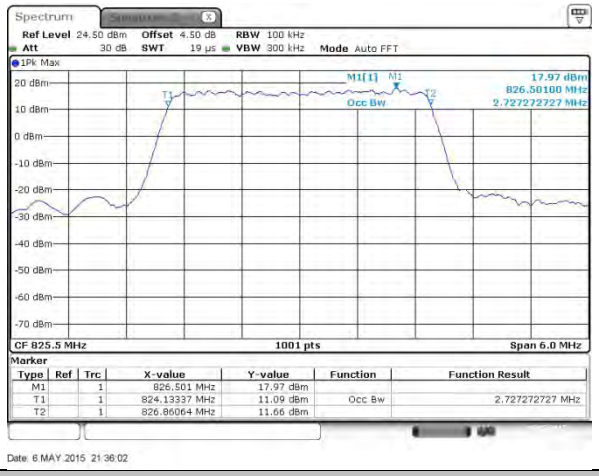


Highest Channel / 1.4MHz / 16QAM

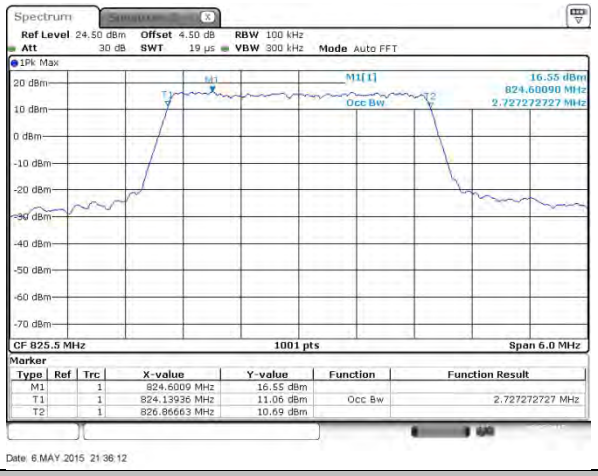


LTE Band 5

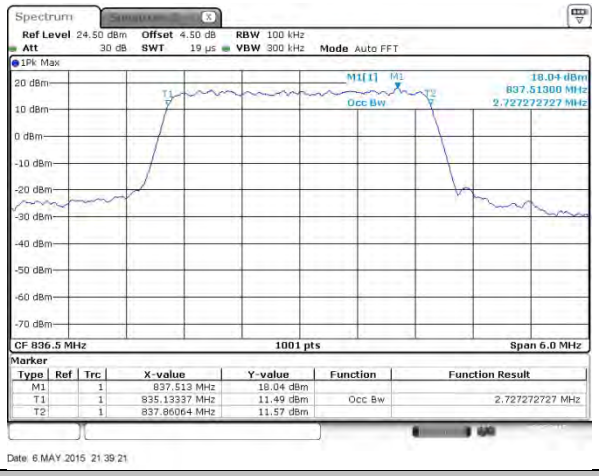
Lowest Channel / 3MHz / QPSK



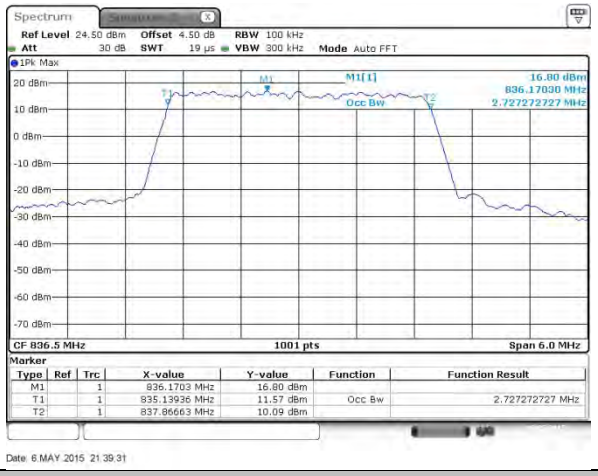
Lowest Channel / 3MHz / 16QAM



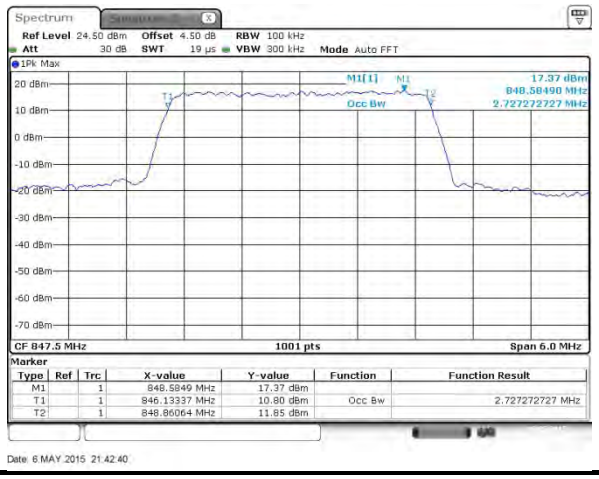
Middle Channel / 3MHz / QPSK



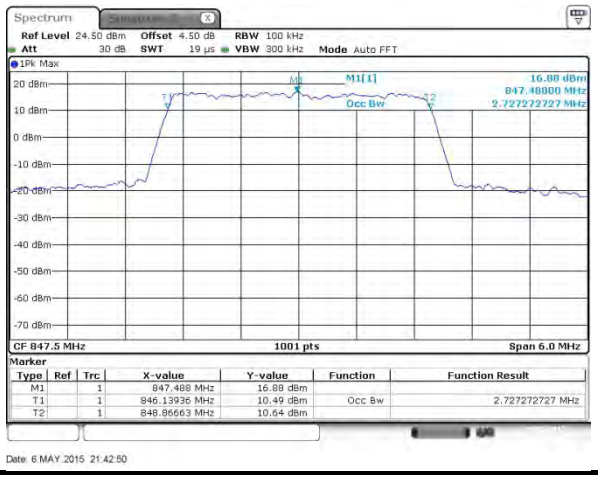
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK

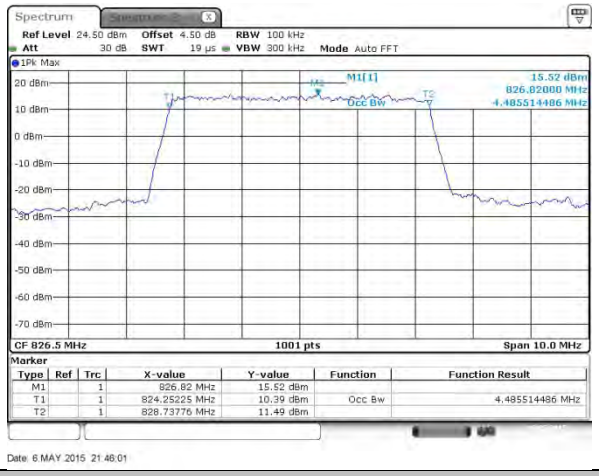


Highest Channel / 3MHz / 16QAM

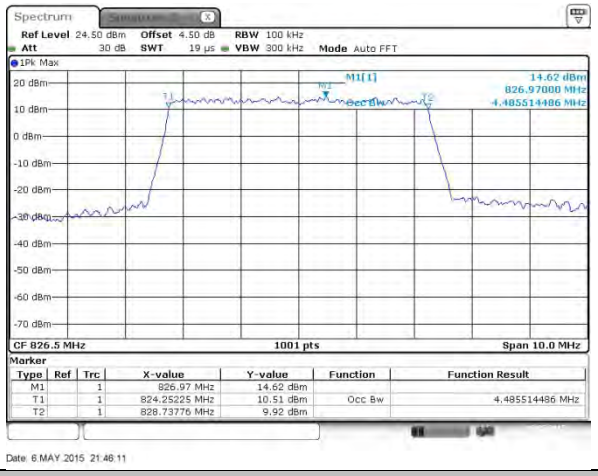


LTE Band 5

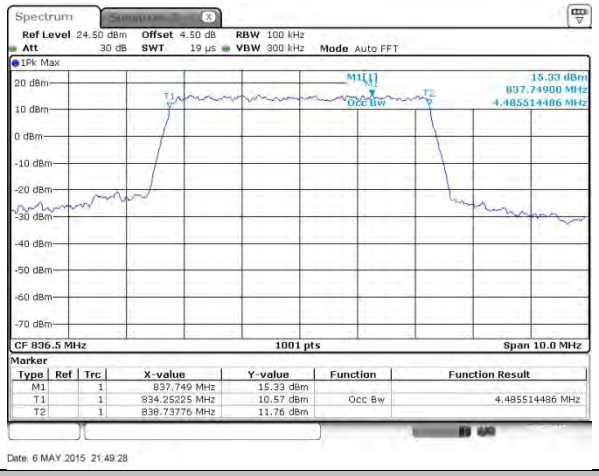
Lowest Channel / 5MHz / QPSK



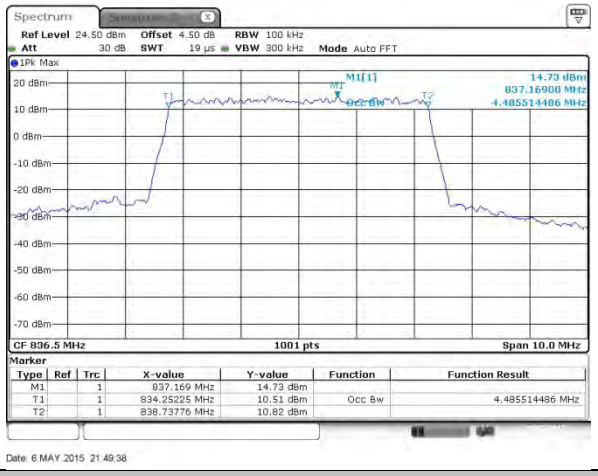
Lowest Channel / 5MHz / 16QAM



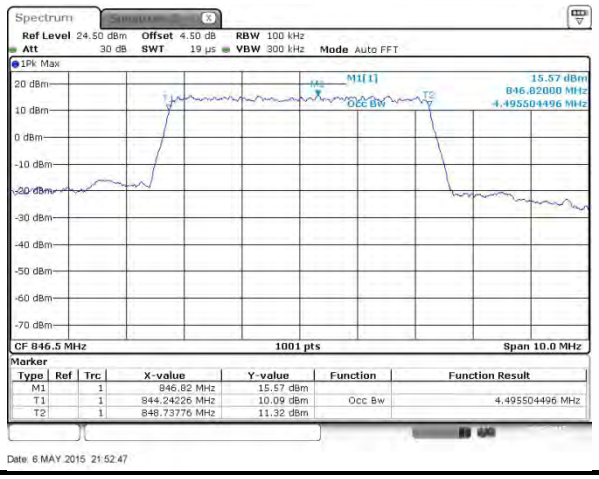
Middle Channel / 5MHz / QPSK



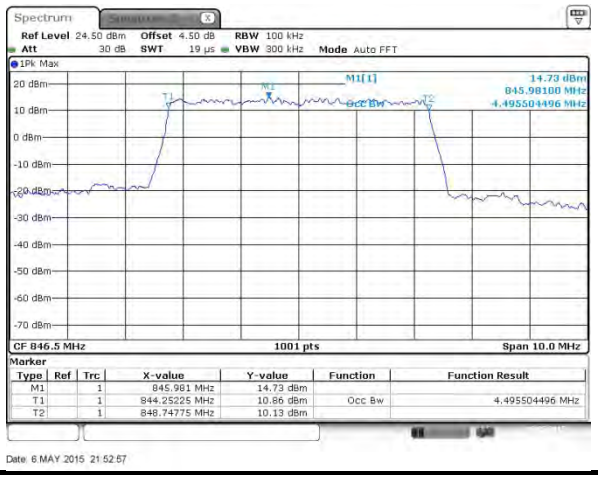
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

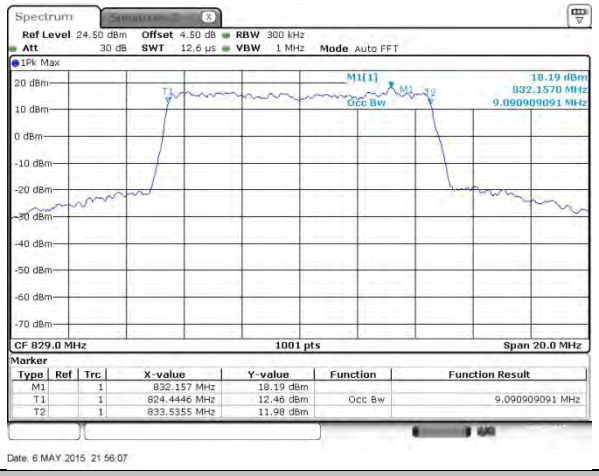


Highest Channel / 5MHz / 16QAM

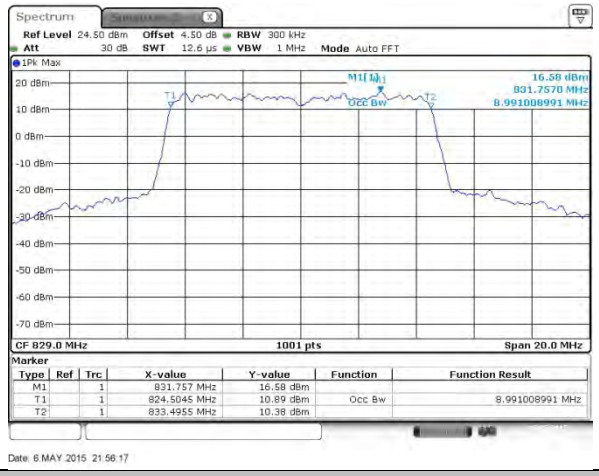


LTE Band 5

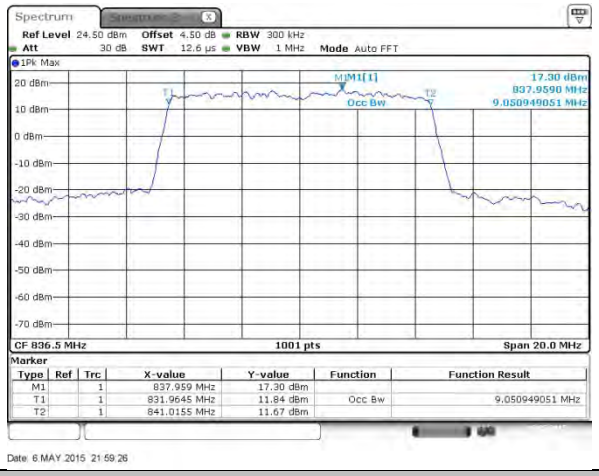
Lowest Channel / 10MHz / QPSK



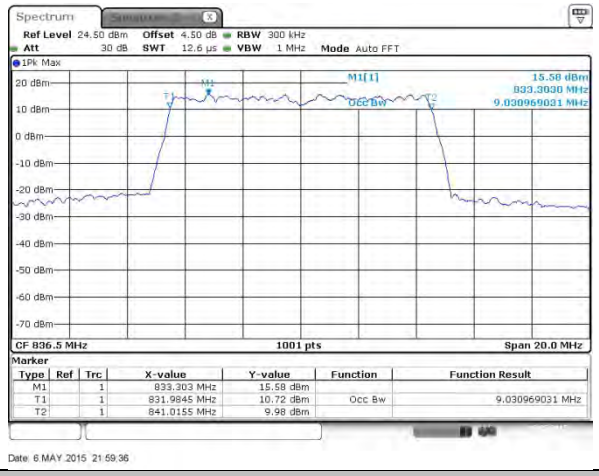
Lowest Channel / 10MHz / 16QAM



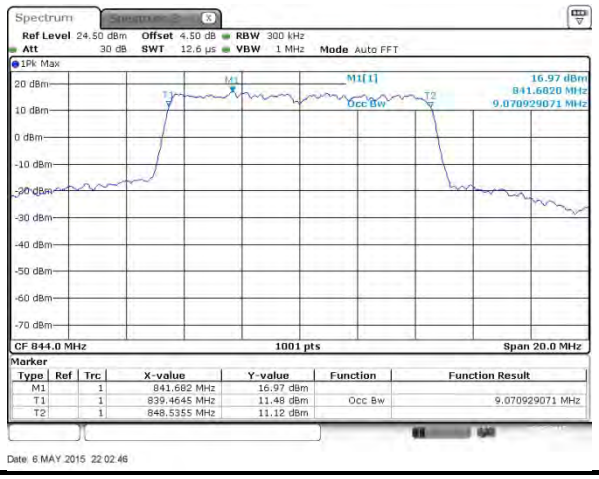
Middle Channel / 10MHz / QPSK



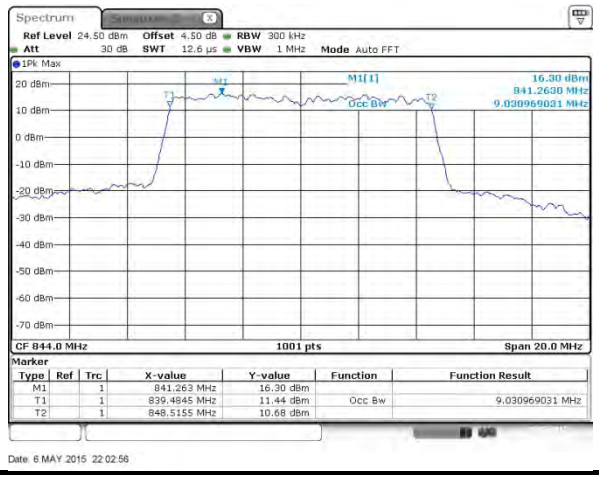
Middle Channel / 10MHz / 16QAM

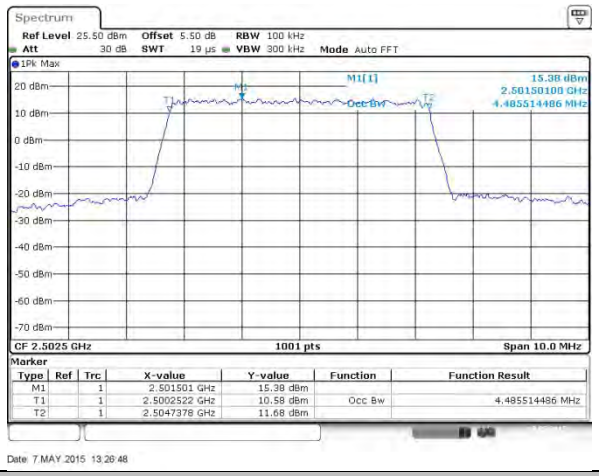
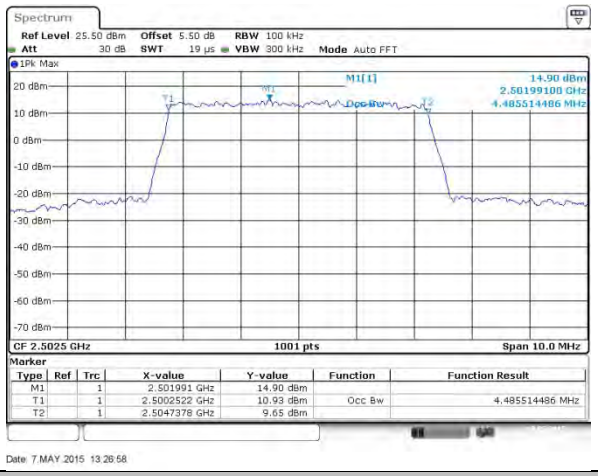
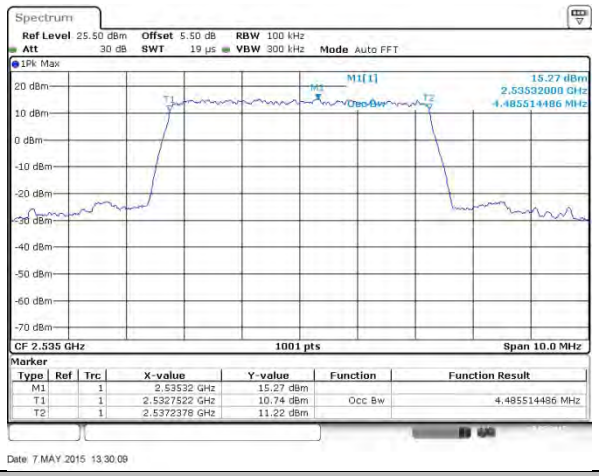
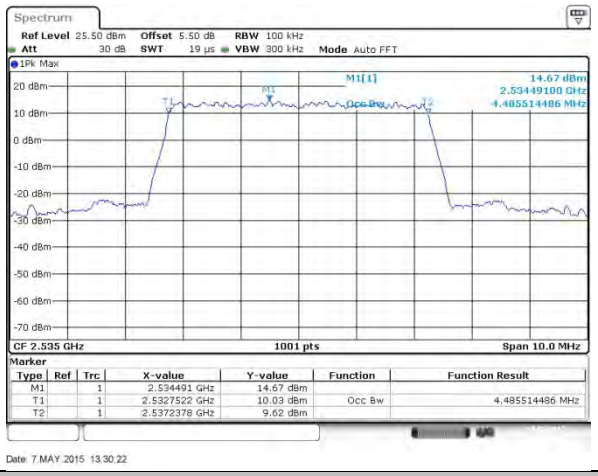
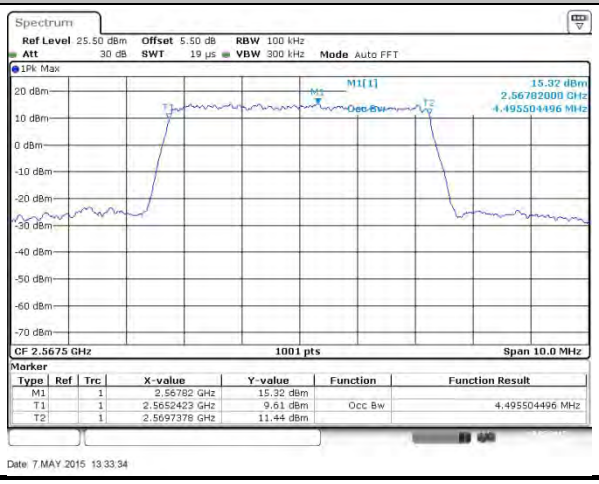
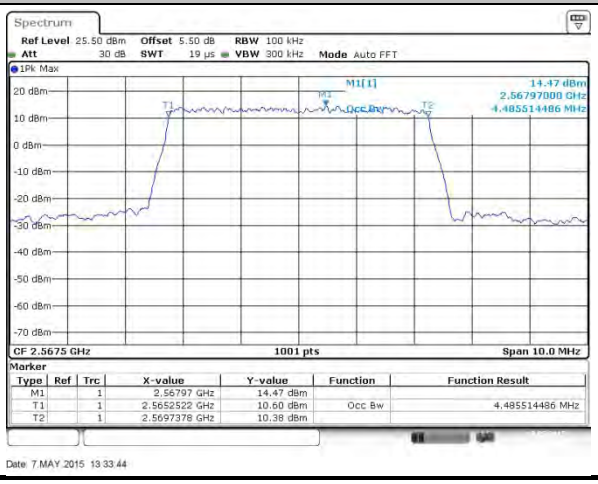


Highest Channel / 10MHz / QPSK



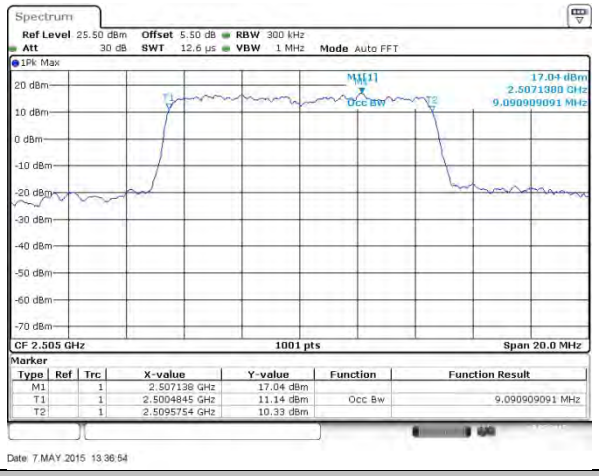
Highest Channel / 10MHz / 16QAM



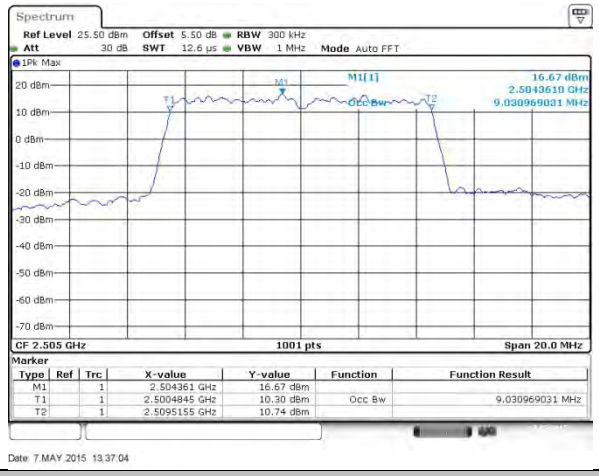
LTE Band 7	
Lowest Channel / 5MHz / QPSK	**Lowest Channel / 5MHz / 16QAM**
	
Middle Channel / 5MHz / QPSK	**Middle Channel / 5MHz / 16QAM**
	
Highest Channel / 5MHz / QPSK	**Highest Channel / 5MHz / 16QAM**
	

LTE Band 7

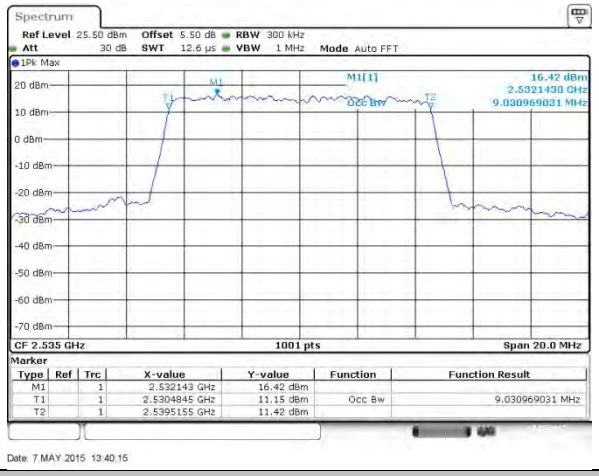
Lowest Channel / 10MHz / QPSK



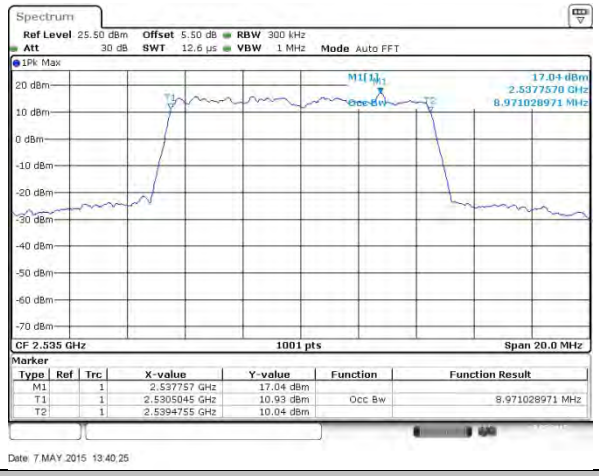
Lowest Channel / 10MHz / 16QAM



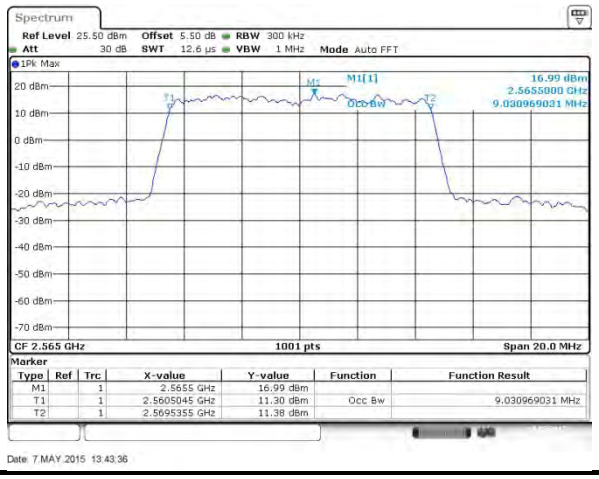
Middle Channel / 10MHz / QPSK



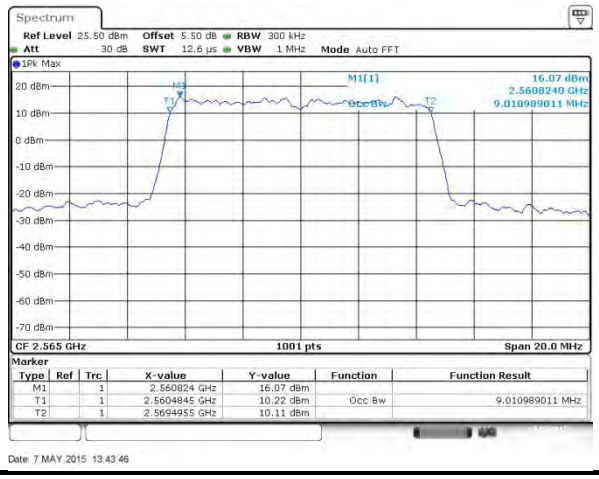
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK

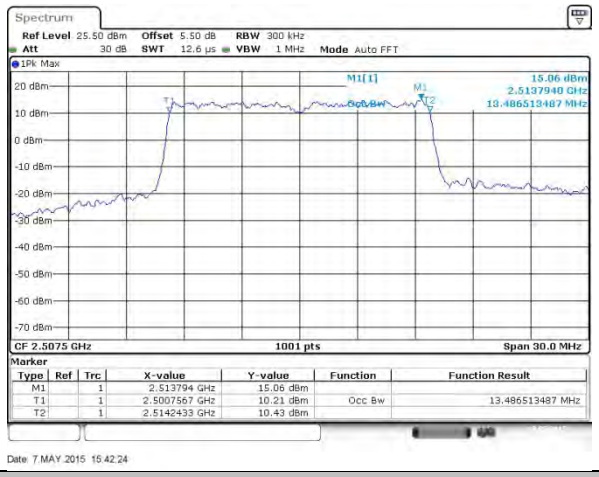


Highest Channel / 10MHz / 16QAM

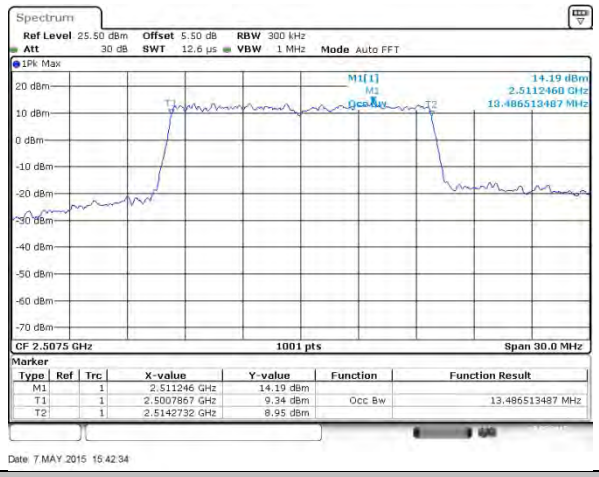


LTE Band 7

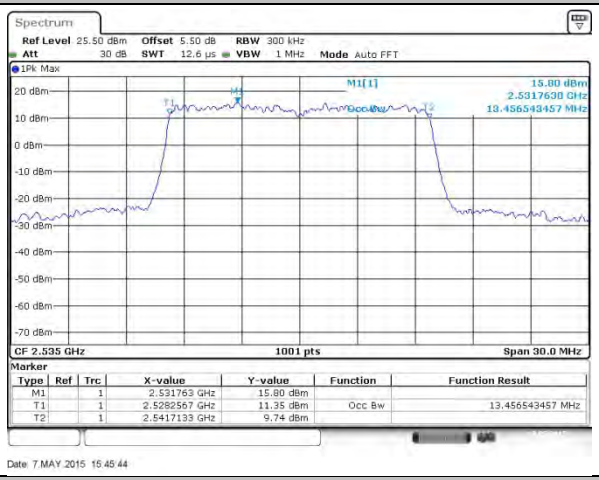
Lowest Channel / 15MHz / QPSK



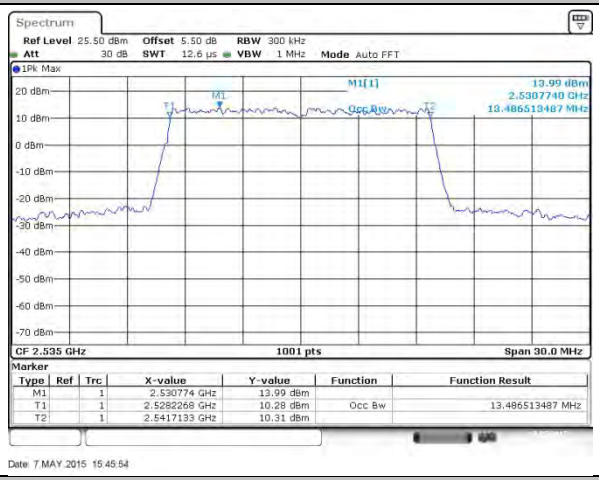
Lowest Channel / 15MHz / 16QAM



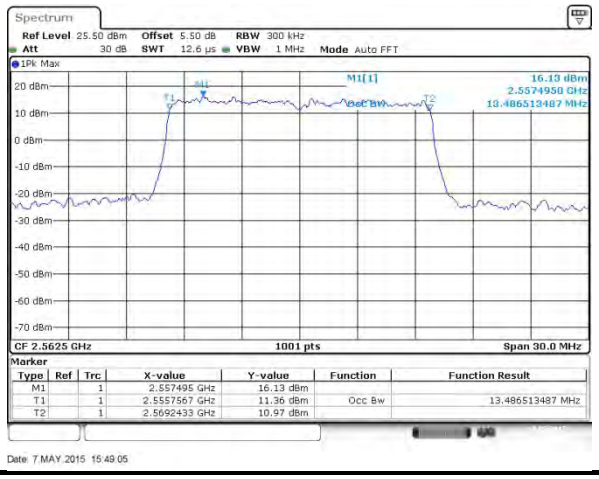
Middle Channel / 15MHz / QPSK



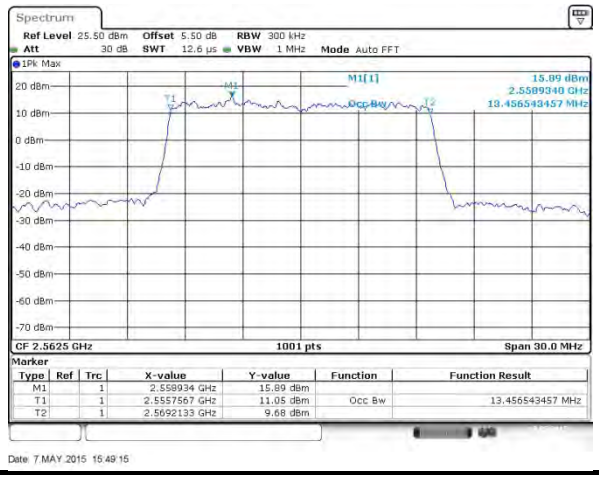
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK

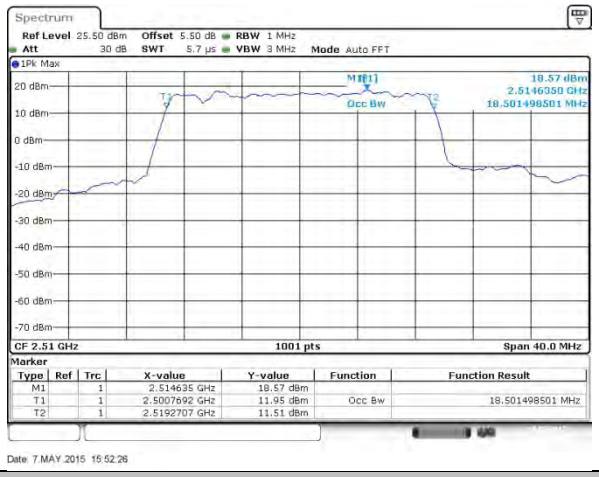


Highest Channel / 15MHz / 16QAM

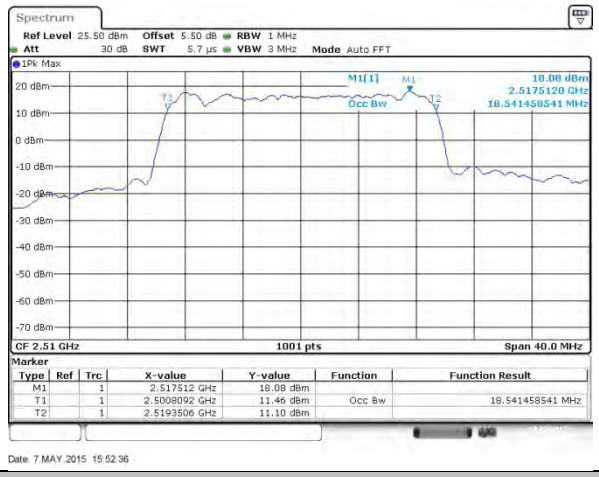


LTE Band 7

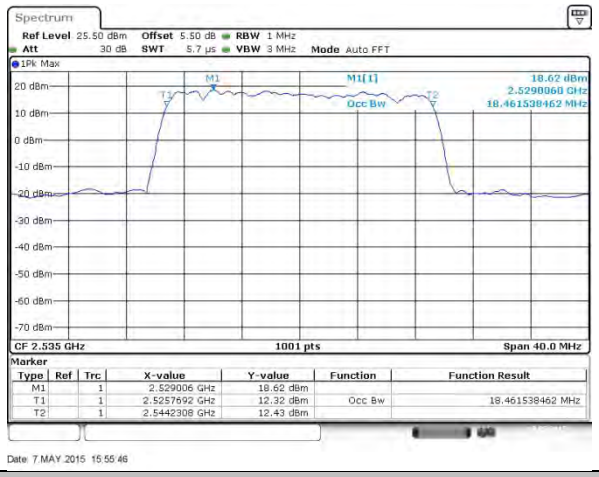
Lowest Channel / 20MHz / QPSK



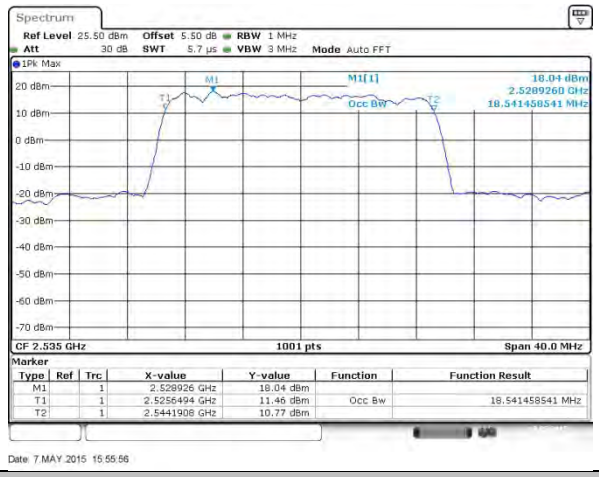
Lowest Channel / 20MHz / 16QAM



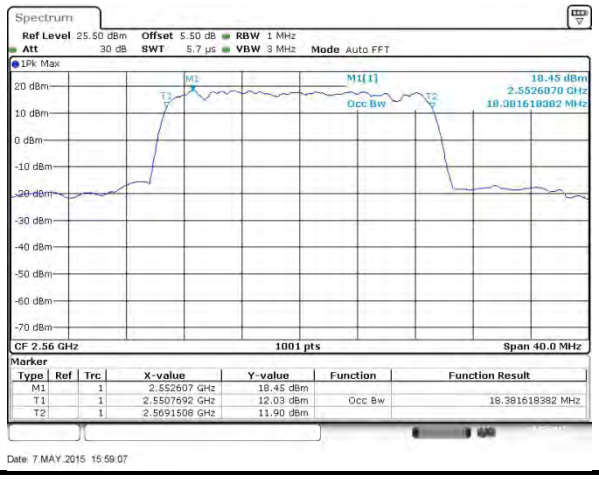
Middle Channel / 20MHz / QPSK



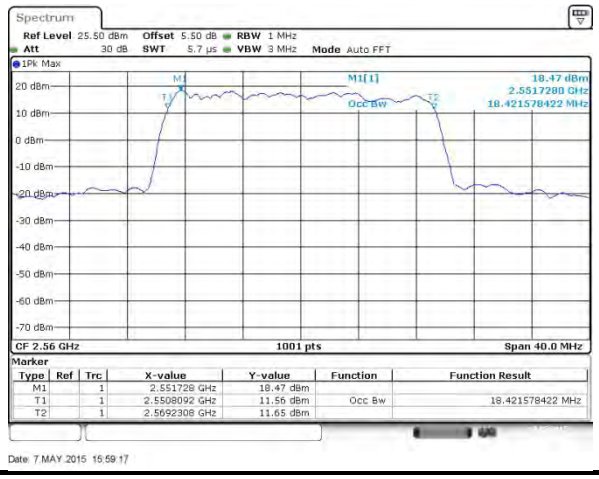
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK

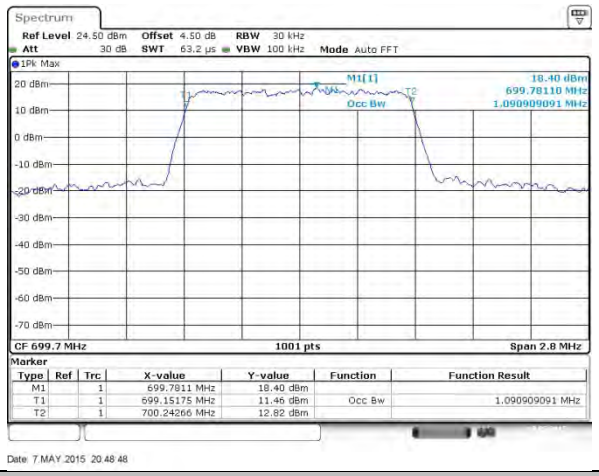


Highest Channel / 20MHz / 16QAM

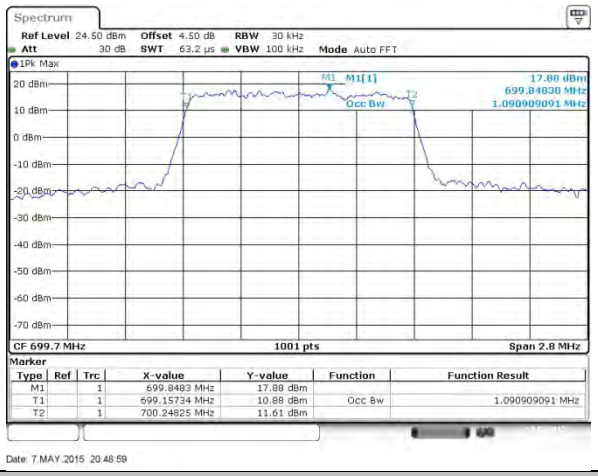


LTE Band 12

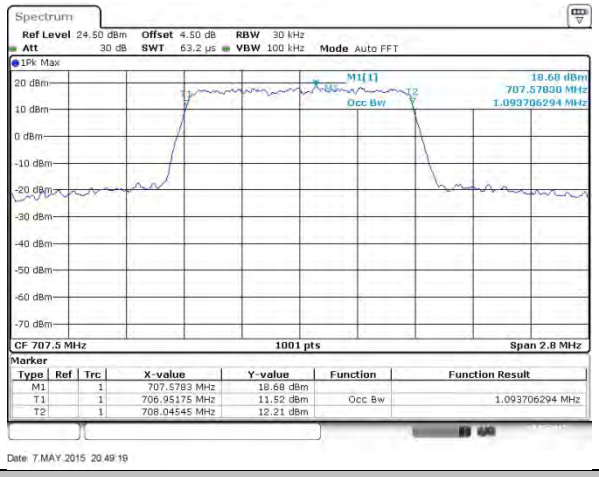
Lowest Channel / 1.4MHz / QPSK



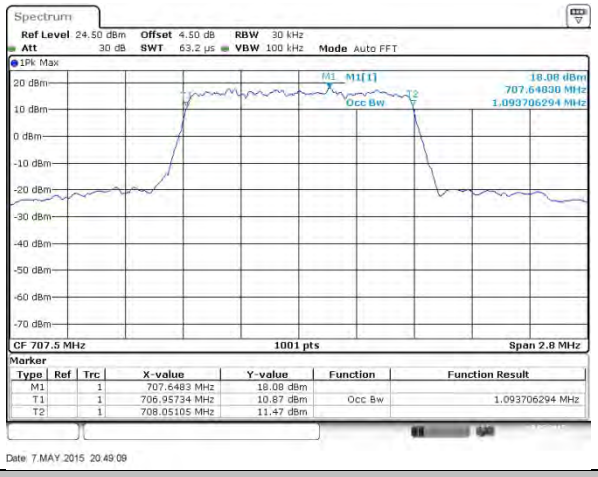
Lowest Channel / 1.4MHz / 16QAM



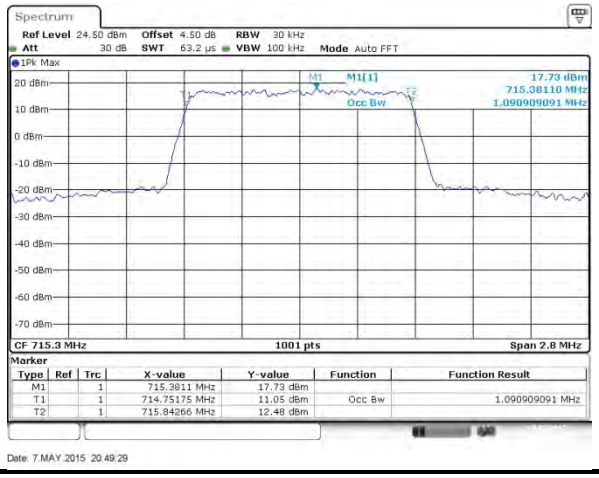
Middle Channel / 1.4MHz / QPSK



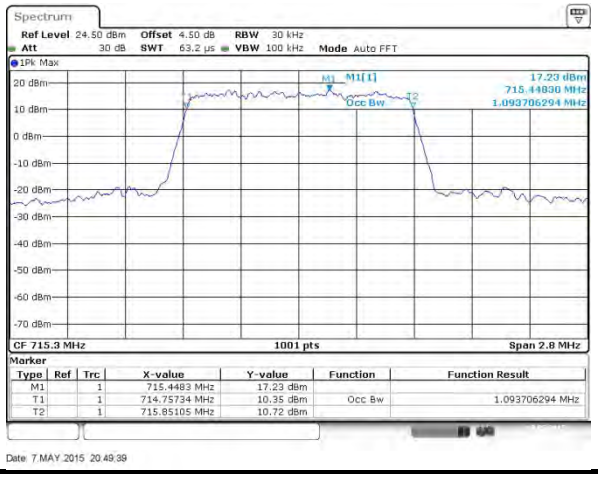
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK

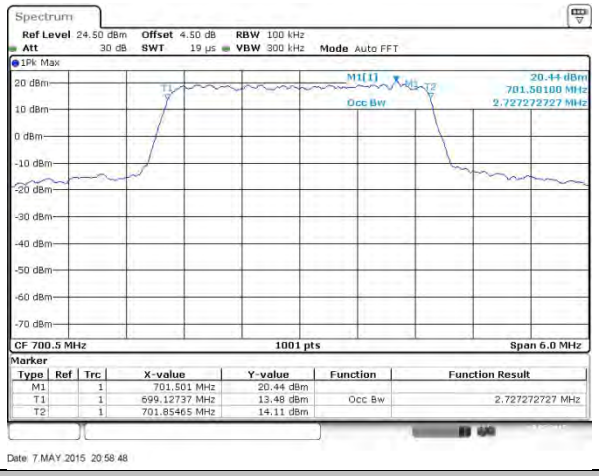


Highest Channel / 1.4MHz / 16QAM

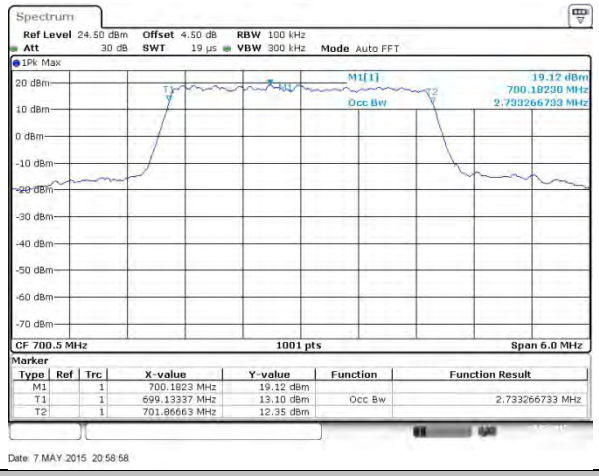


LTE Band 12

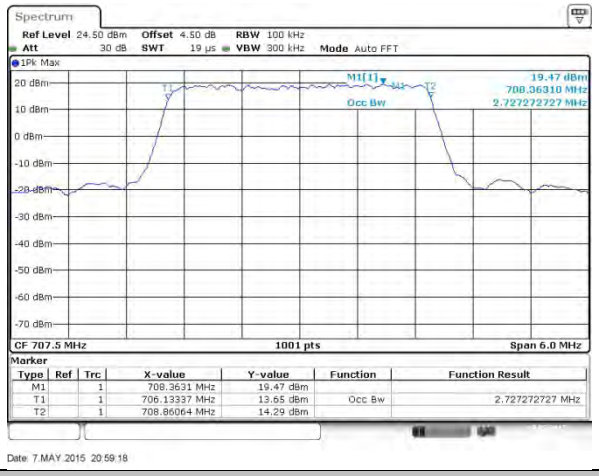
Lowest Channel / 3MHz / QPSK



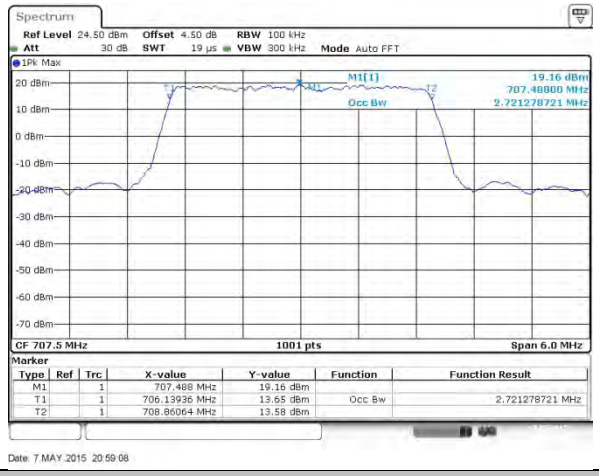
Lowest Channel / 3MHz / 16QAM



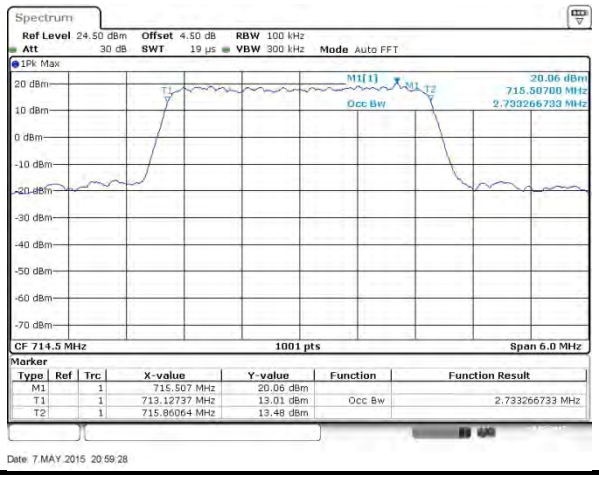
Middle Channel / 3MHz / QPSK



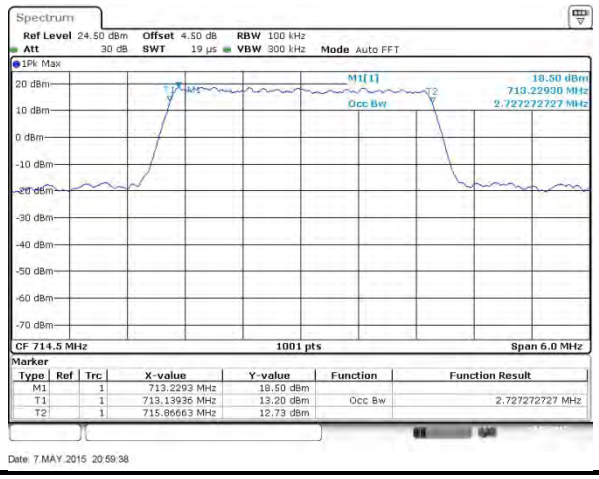
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK

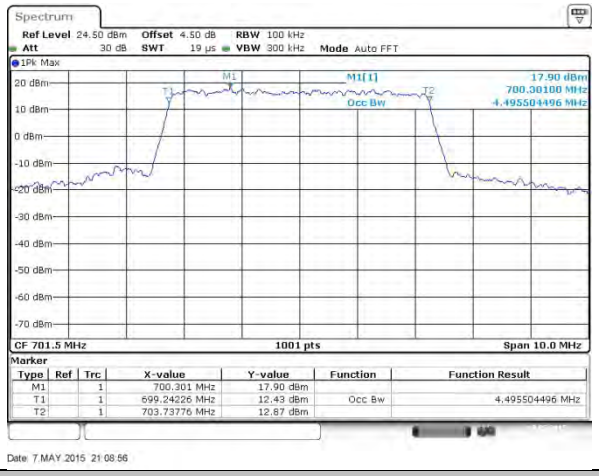


Highest Channel / 3MHz / 16QAM

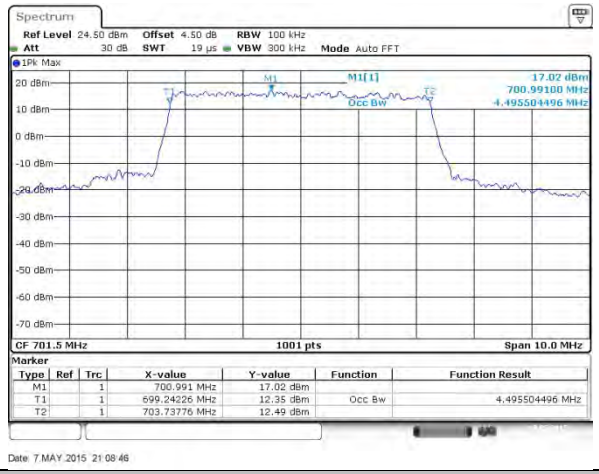


LTE Band 12

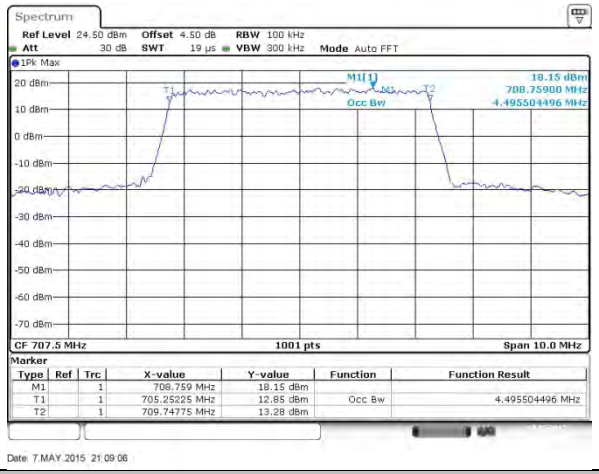
Lowest Channel / 5MHz / QPSK



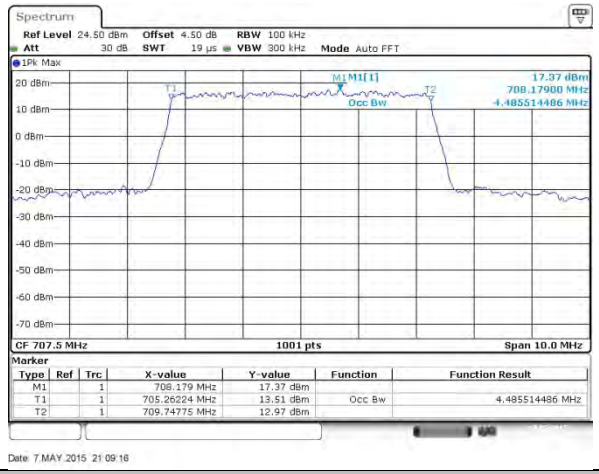
Lowest Channel / 5MHz / 16QAM



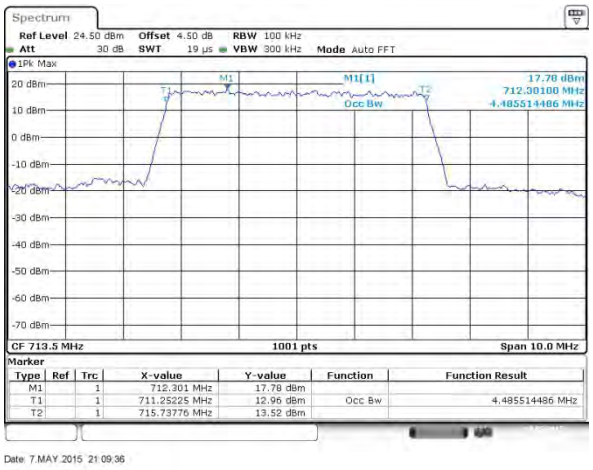
Middle Channel / 5MHz / QPSK



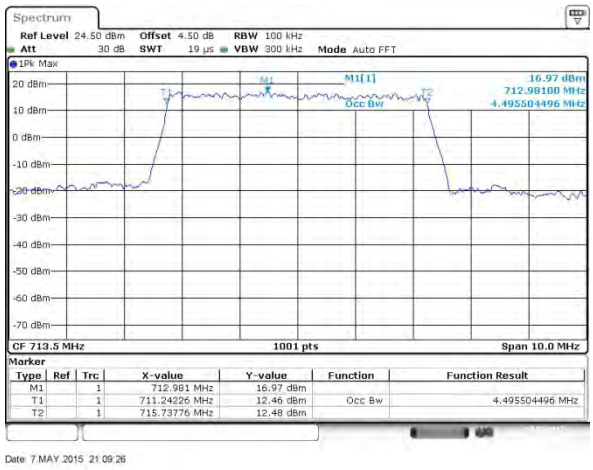
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

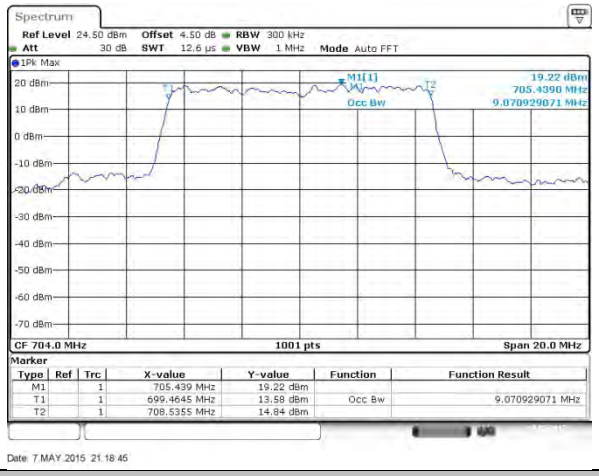


Highest Channel / 5MHz / 16QAM

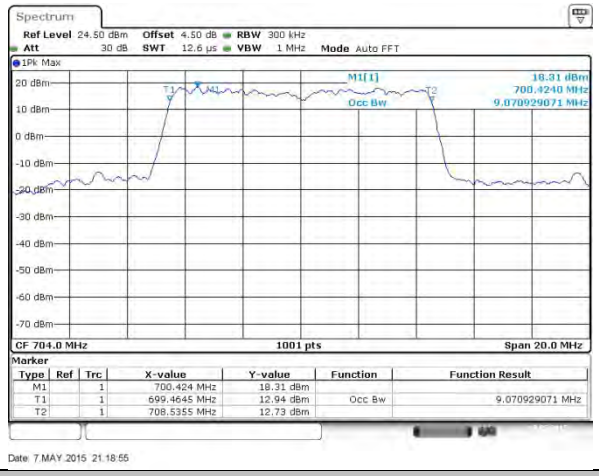


LTE Band 12

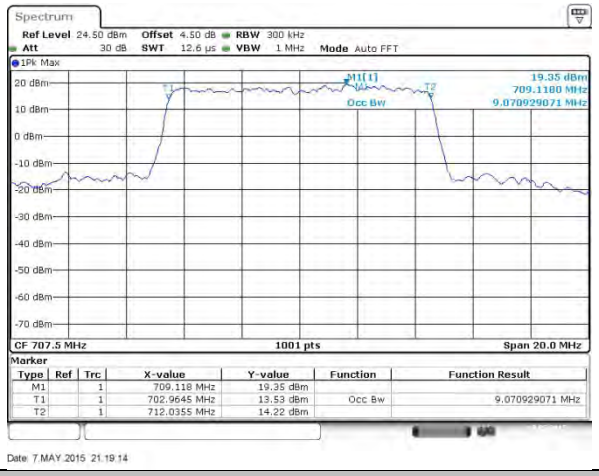
Lowest Channel / 10MHz / QPSK



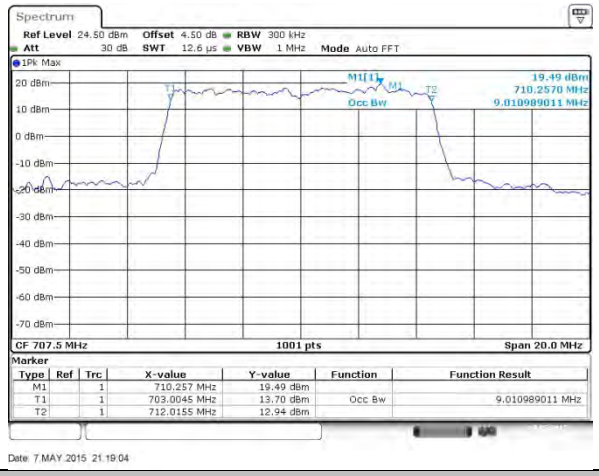
Lowest Channel / 10MHz / 16QAM



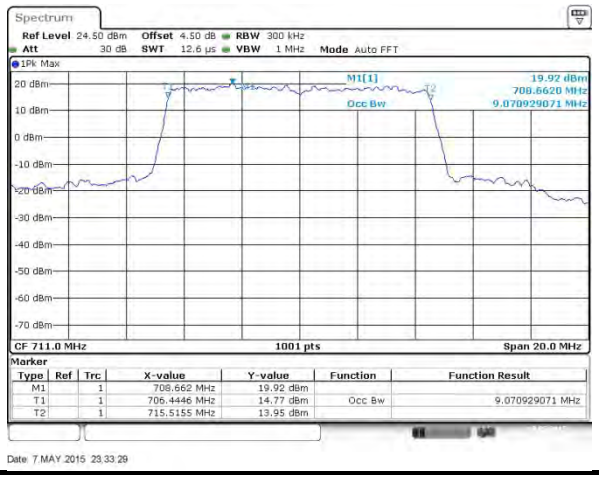
Middle Channel / 10MHz / QPSK



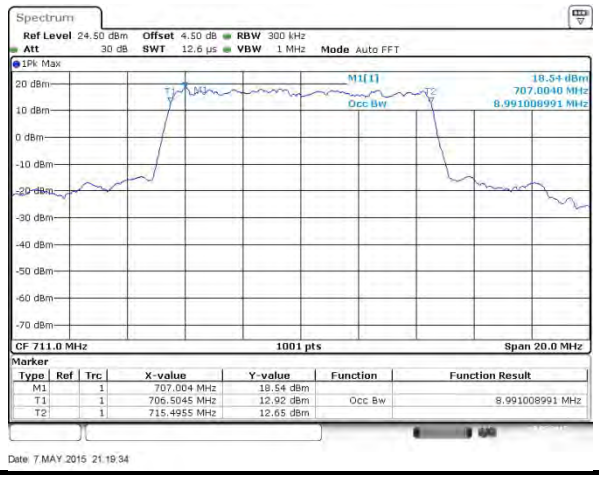
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK

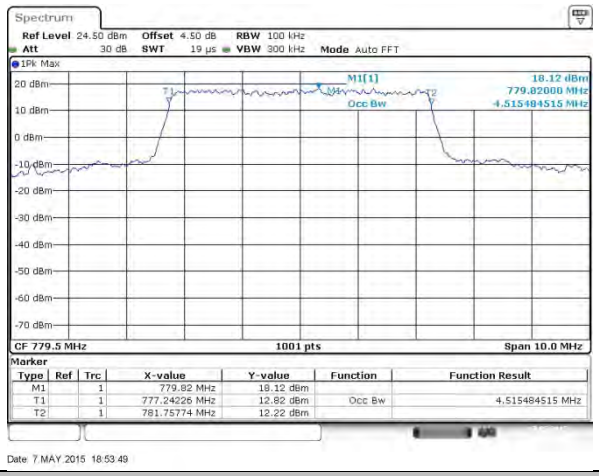


Highest Channel / 10MHz / 16QAM

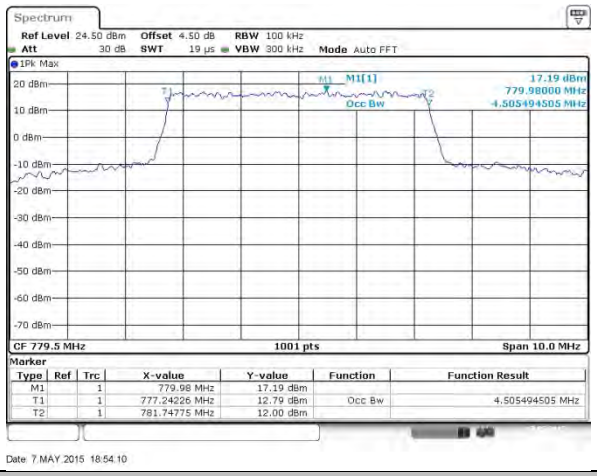


LTE Band 13

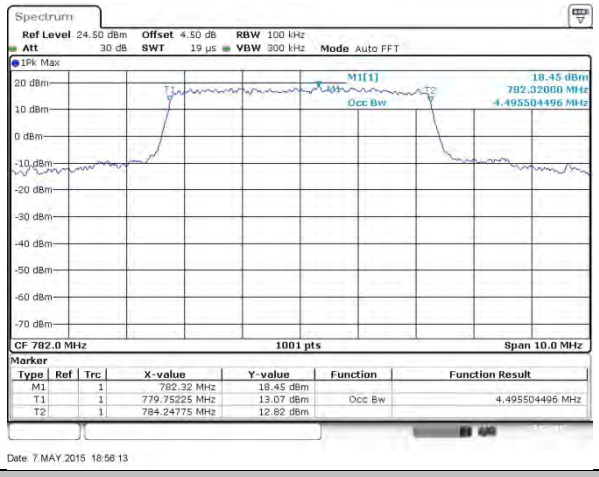
Lowest Channel / 5MHz / QPSK



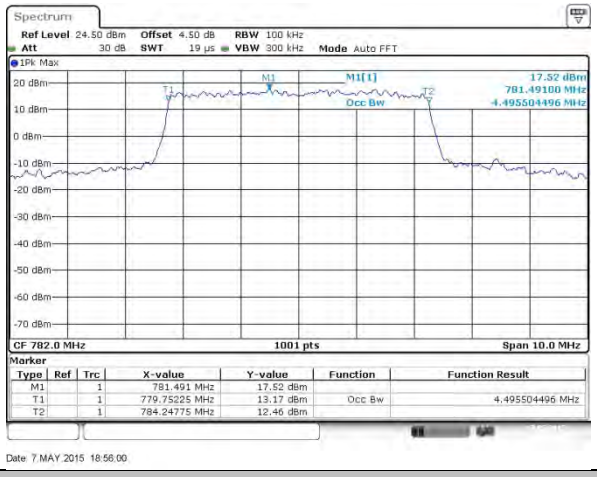
Lowest Channel / 5MHz / 16QAM



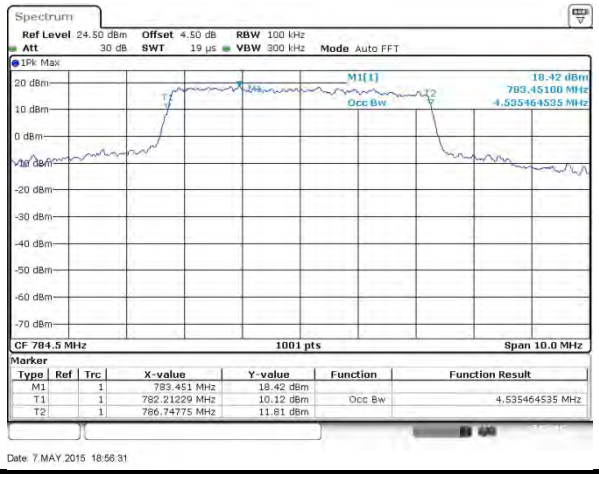
Middle Channel / 5MHz / QPSK



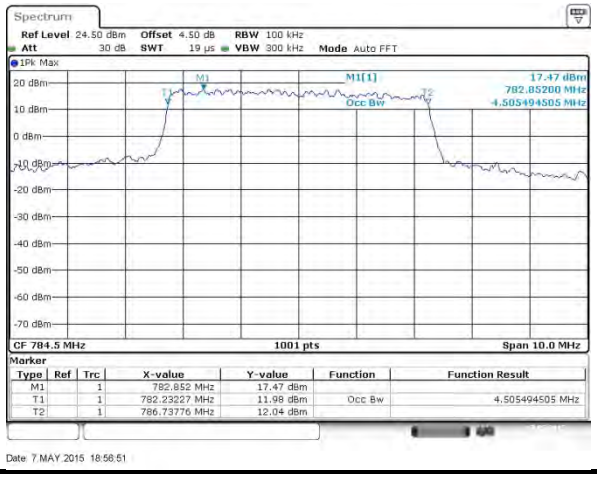
Middle Channel / 5MHz / 16QAM

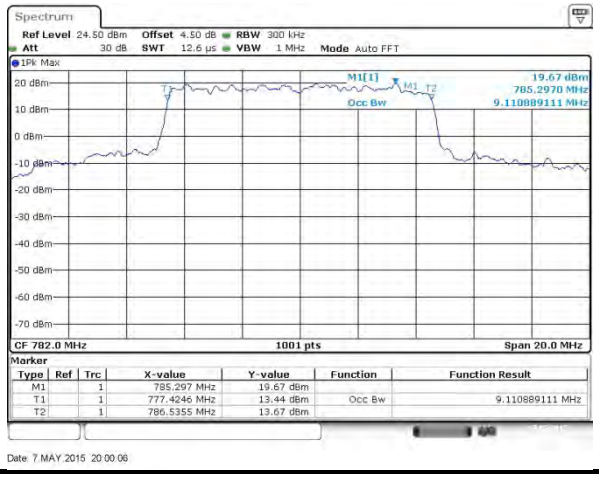
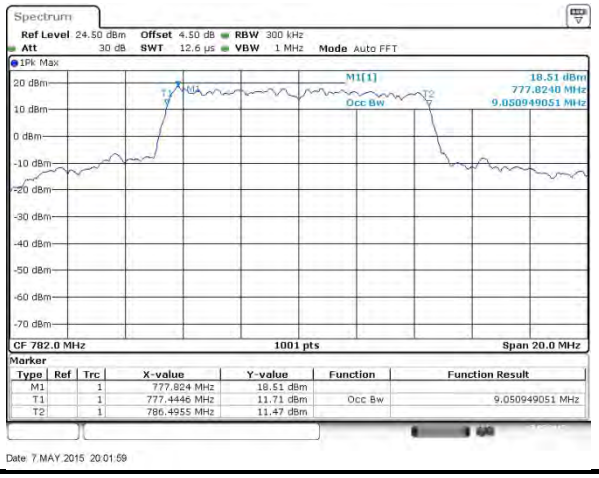


Highest Channel / 5MHz / QPSK



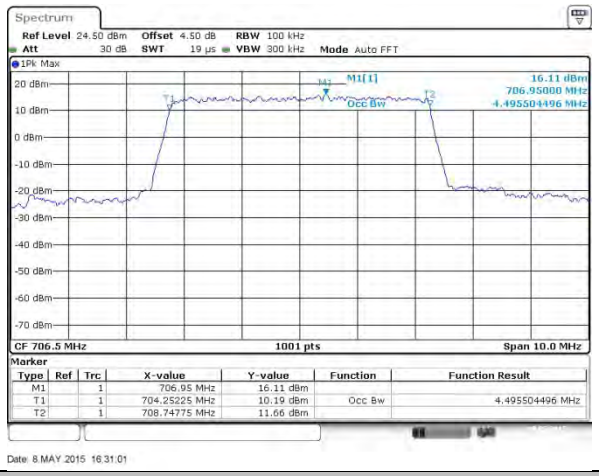
Highest Channel / 5MHz / 16QAM



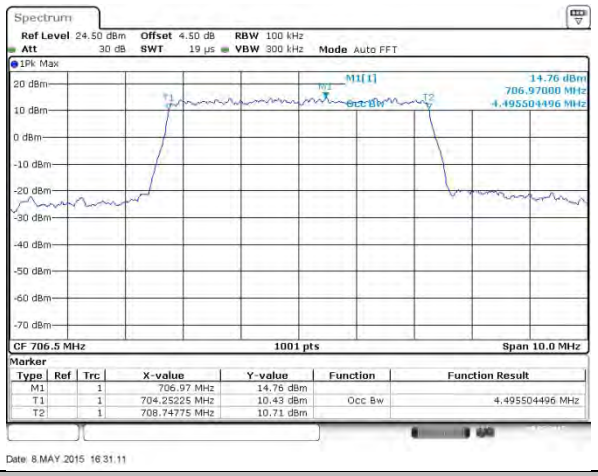
LTE Band 13	
Middle Channel / 10MHz / QPSK	**Middle Channel / 10MHz / 16QAM**
	

LTE Band 17

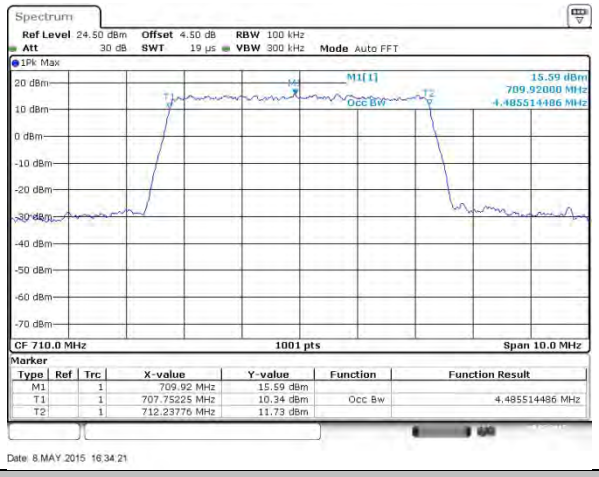
Lowest Channel / 5MHz / QPSK



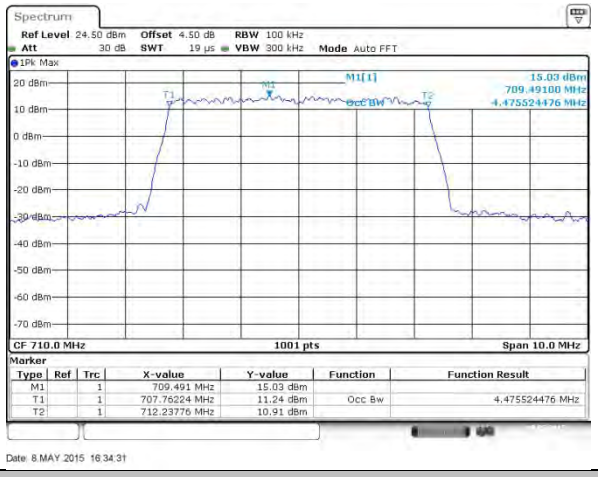
Lowest Channel / 5MHz / 16QAM



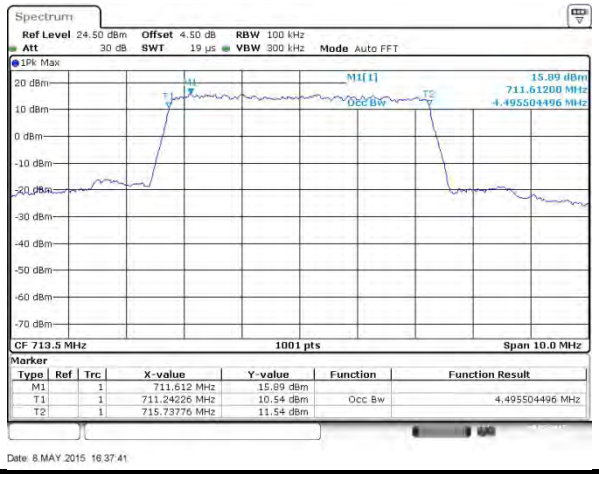
Middle Channel / 5MHz / QPSK



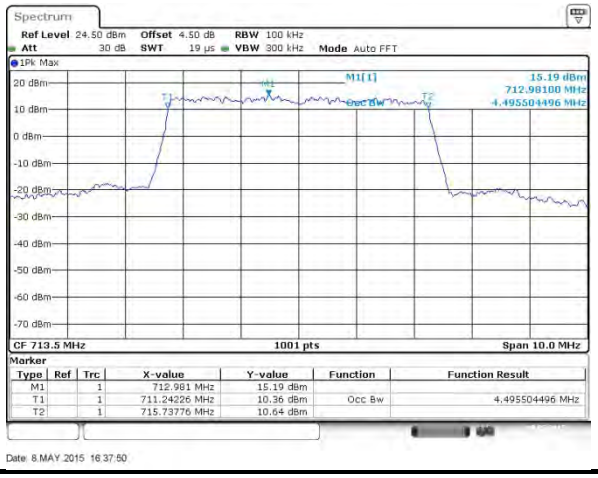
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

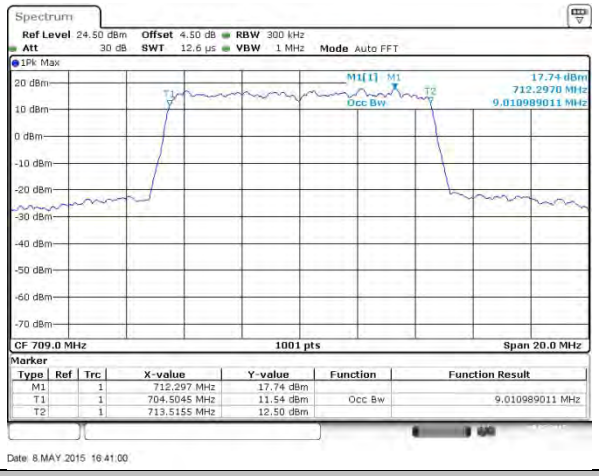


Highest Channel / 5MHz / 16QAM

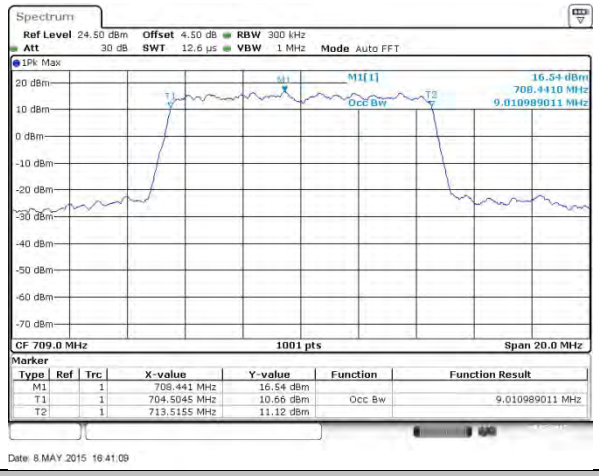


LTE Band 17

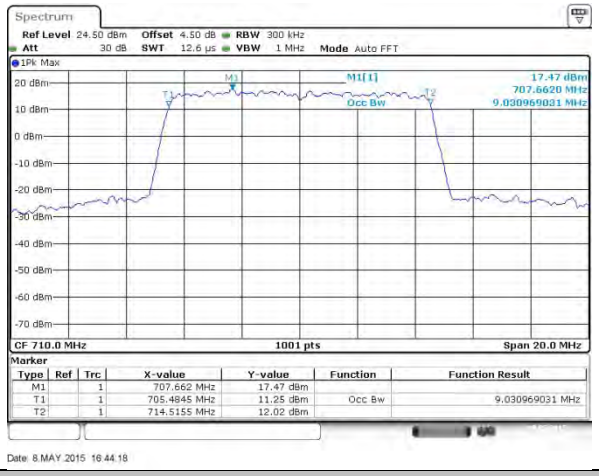
Lowest Channel / 10MHz / QPSK



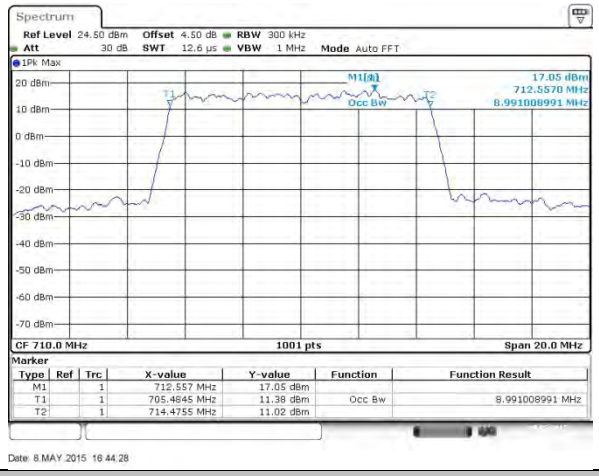
Lowest Channel / 10MHz / 16QAM



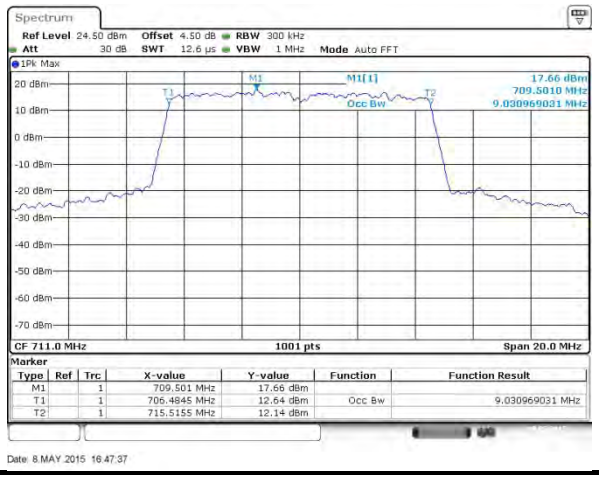
Middle Channel / 10MHz / QPSK



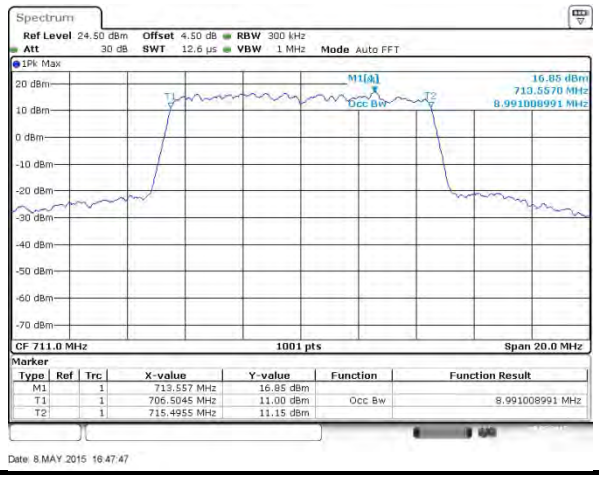
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



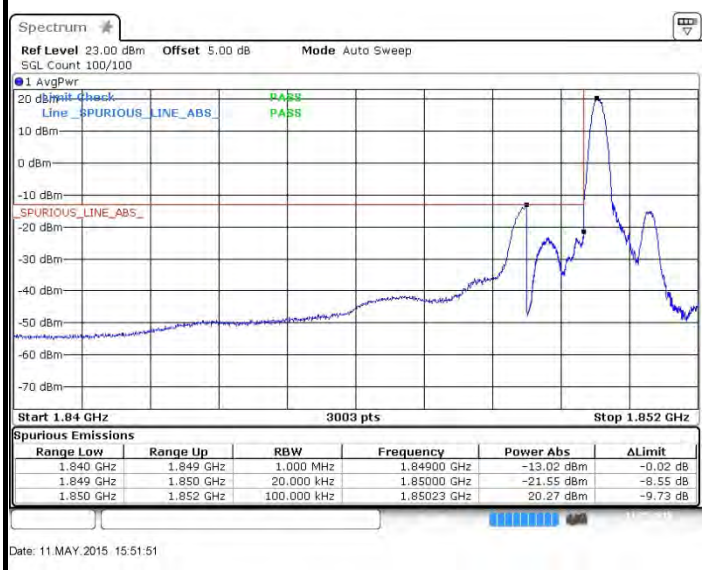
Highest Channel / 10MHz / 16QAM



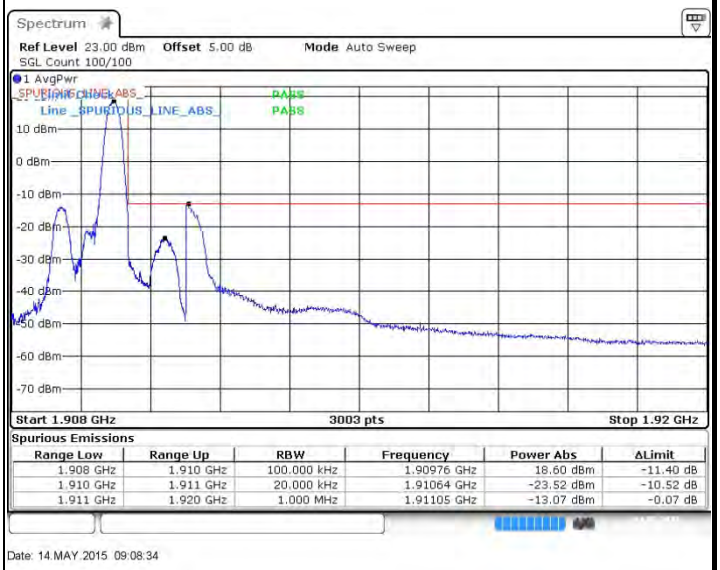
Conducted Band Edge

LTE Band 2 / 1.4MHz / QPSK

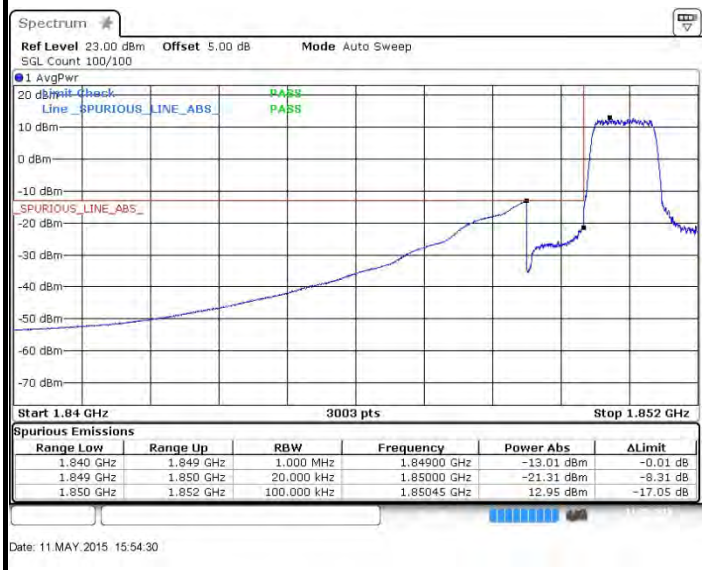
Lowest Band Edge / 1RB



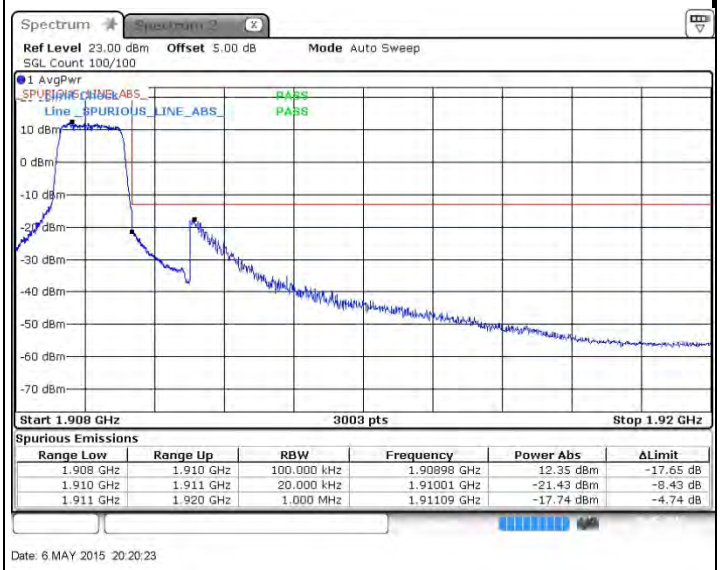
Highest Band Edge / 1RB



Lowest Band Edge / Full RB

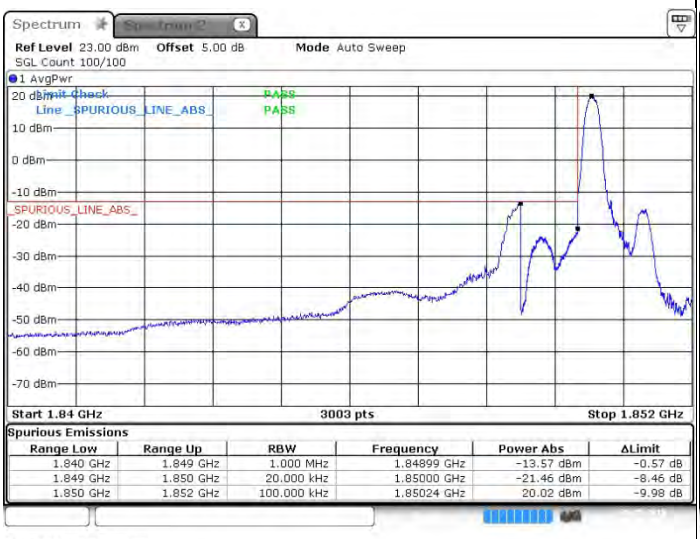


Highest Band Edge / Full RB



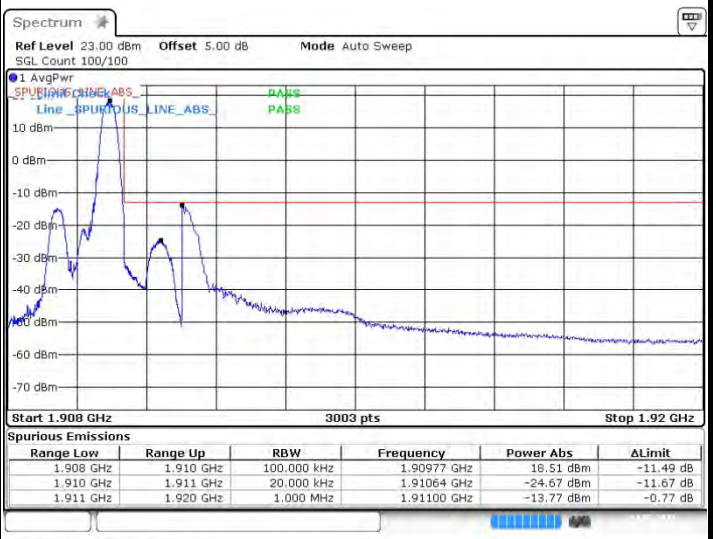
LTE Band 2 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



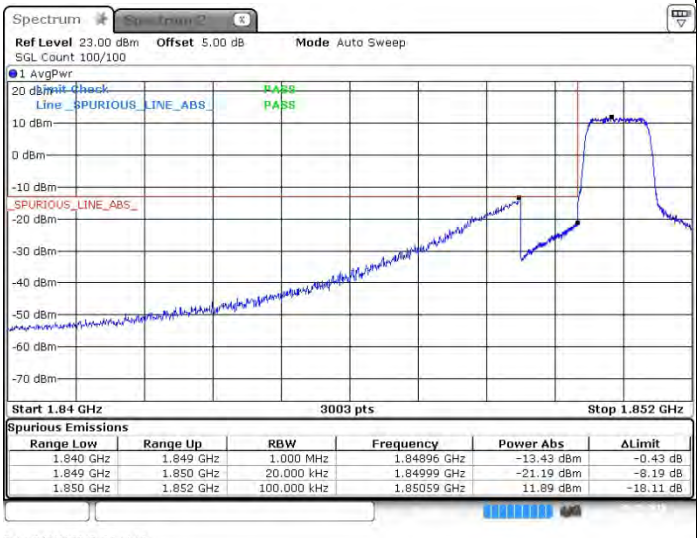
Date: 6.MAY.2015 20:13:07

Highest Band Edge / 1 RB



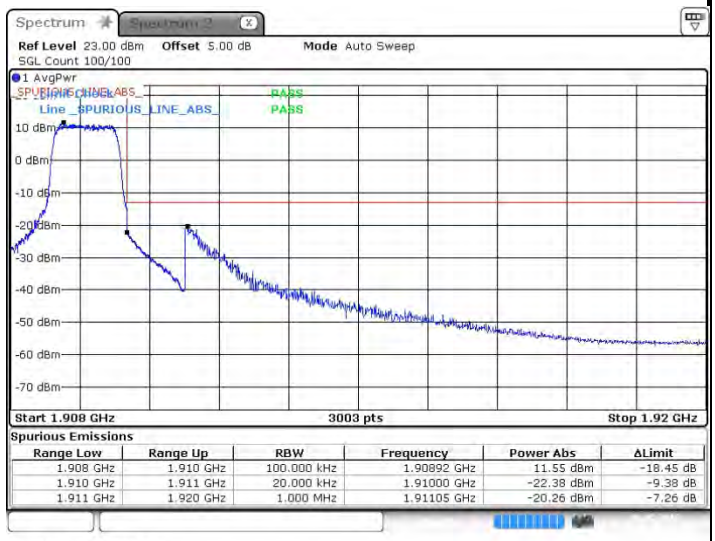
Date: 14.MAY.2015 09:09:50

Lowest Band Edge / Full RB



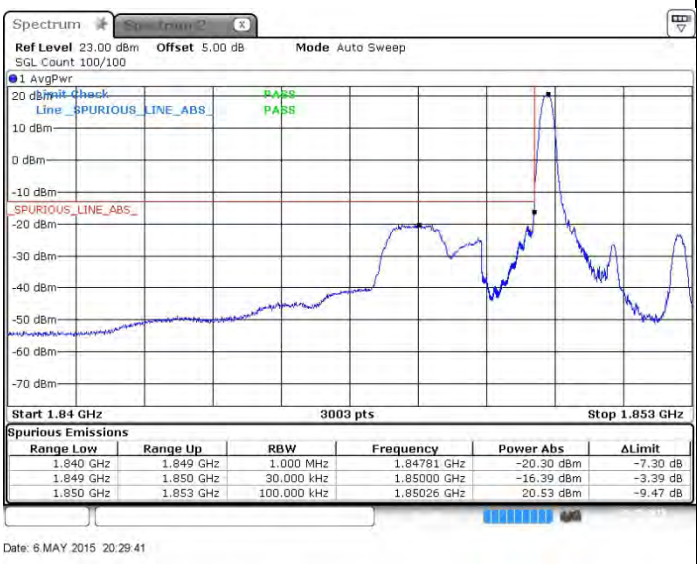
Date: 6.MAY.2015 20:14:15

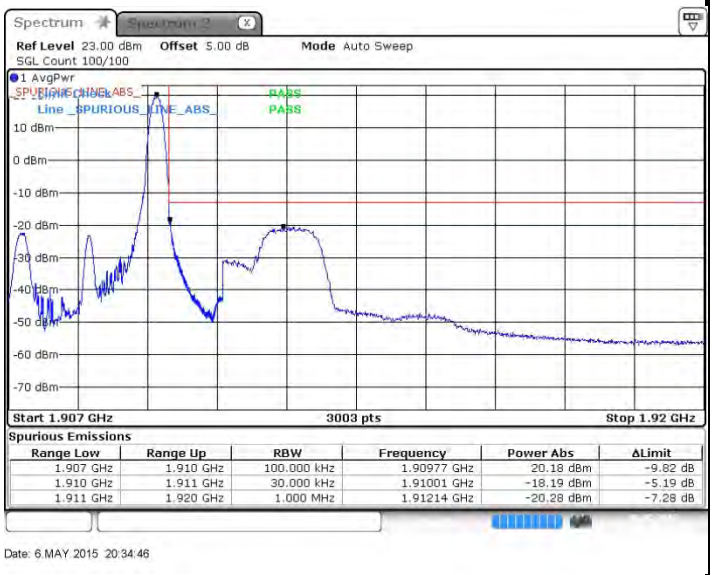
Highest Band Edge / Full RB

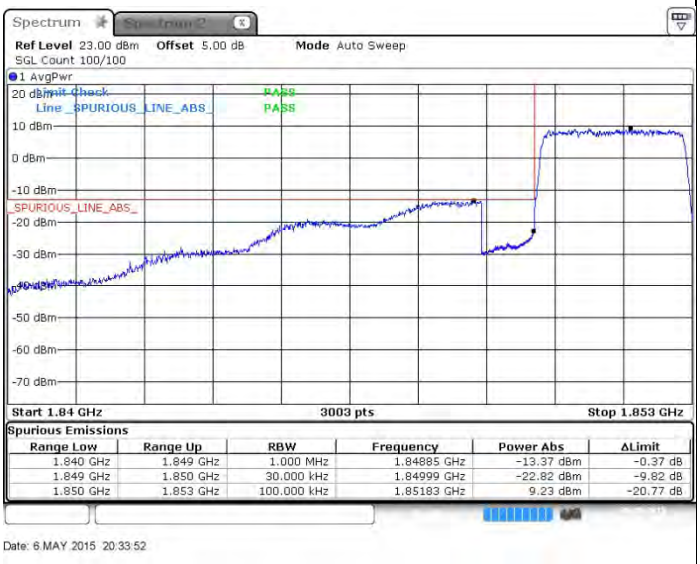


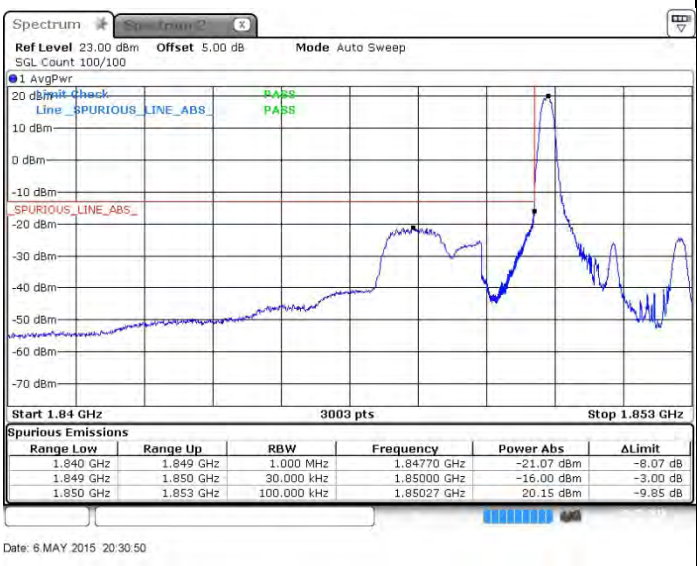
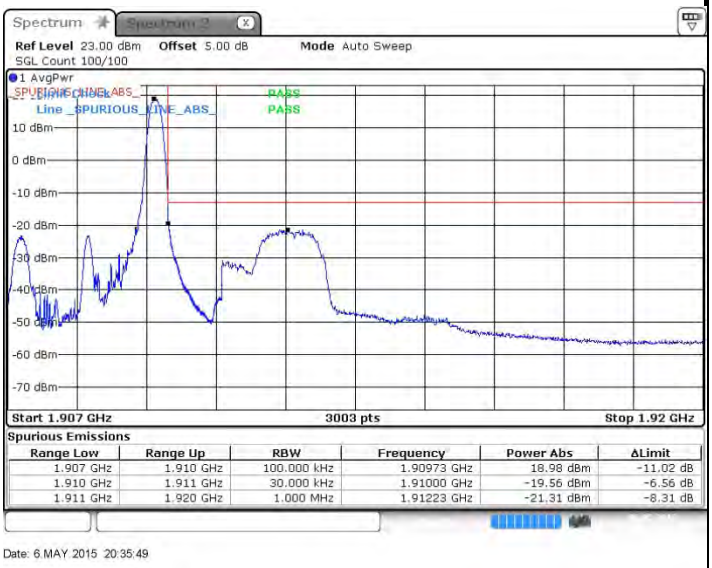
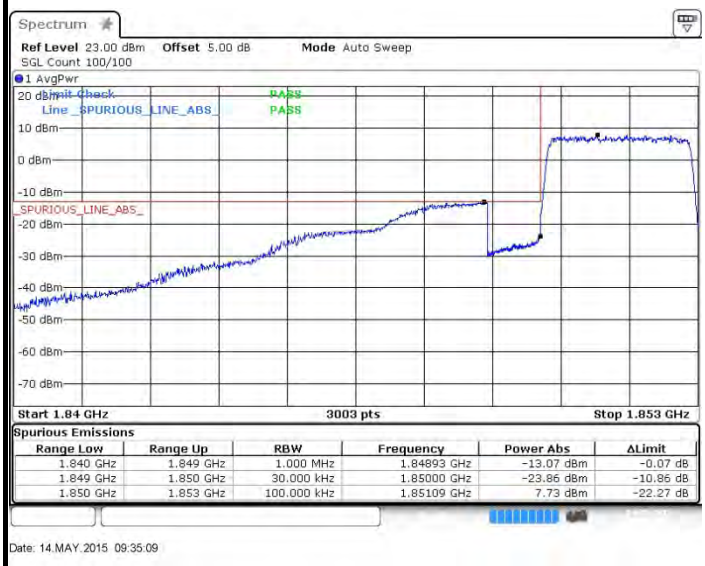
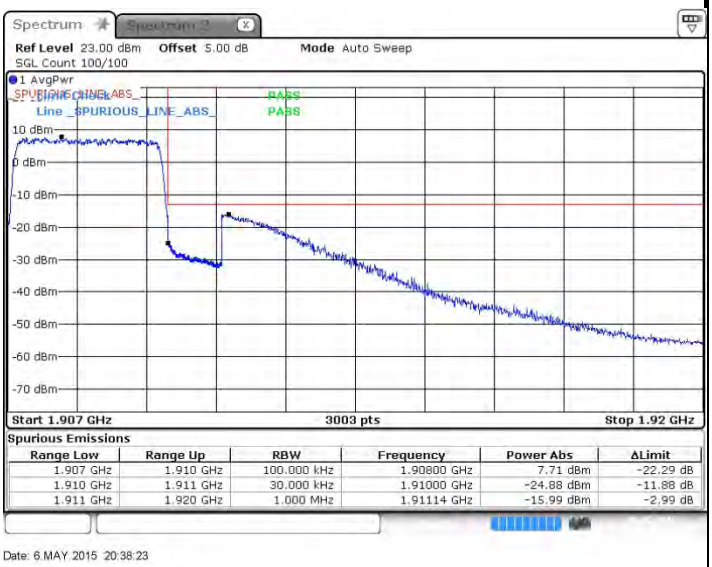
Date: 6.MAY.2015 20:21:50

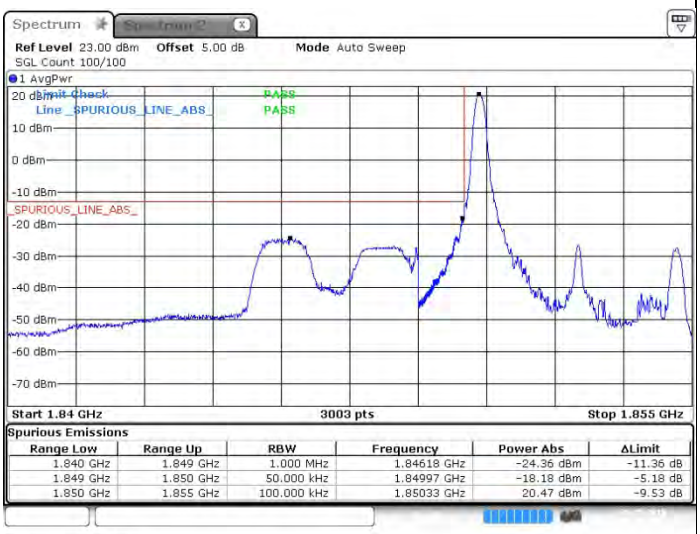
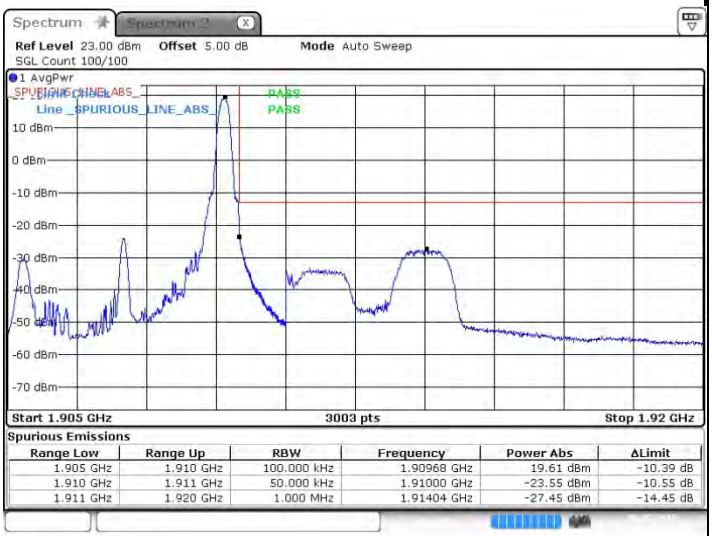
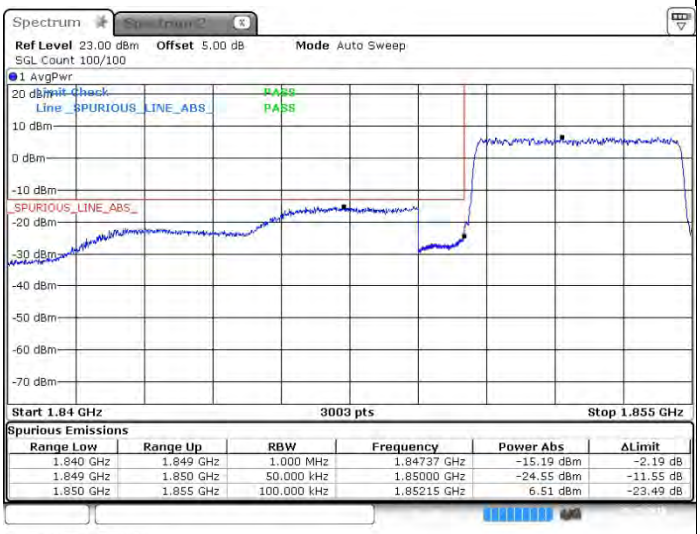
LTE Band 2 / 3MHz / QPSK	
Lowest Band Edge / 1RB	**Highest Band Edge / 1 RB**
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**





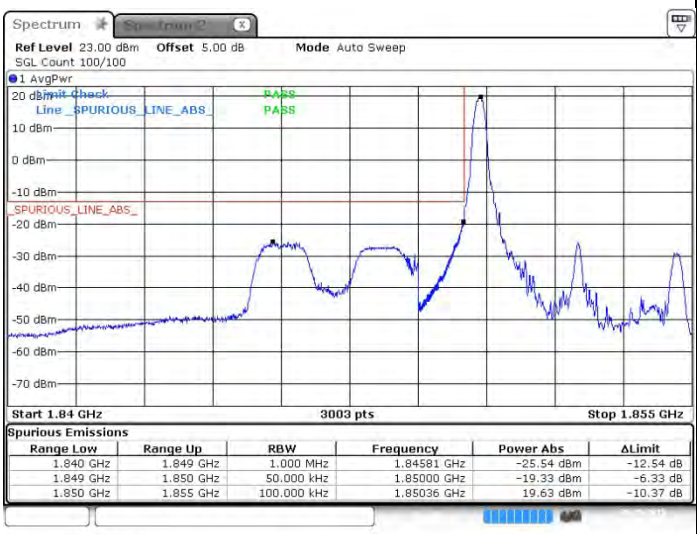


LTE Band 2 / 3MHz / 16QAM	
Lowest Band Edge / 1 RB	**Highest Band Edge /1 RB**
	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

LTE Band 2 / 5MHz / QPSK	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

LTE Band 2 / 5MHz / 16QAM

Lowest Band Edge / 1RB

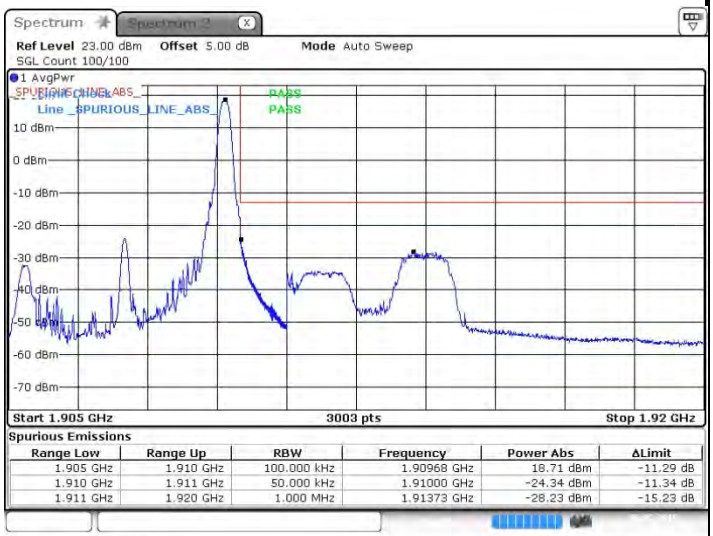


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.840 GHz	1.849 GHz	1.000 MHz	1.84581 GHz	-25.54 dBm	-12.54 dB
1.849 GHz	1.850 GHz	50.000 kHz	1.85000 GHz	-19.33 dBm	-6.33 dB
1.850 GHz	1.855 GHz	100.000 kHz	1.85036 GHz	19.63 dBm	-10.37 dB

Date: 6.MAY.2015 20:39:23

Highest Band Edge / 1 RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.905 GHz	1.910 GHz	100.000 kHz	1.90968 GHz	18.71 dBm	-11.29 dB
1.910 GHz	1.911 GHz	50.000 kHz	1.91000 GHz	-24.34 dBm	-11.34 dB
1.911 GHz	1.920 GHz	1.000 MHz	1.91373 GHz	-28.23 dBm	-15.23 dB

Date: 6.MAY.2015 20:41:07

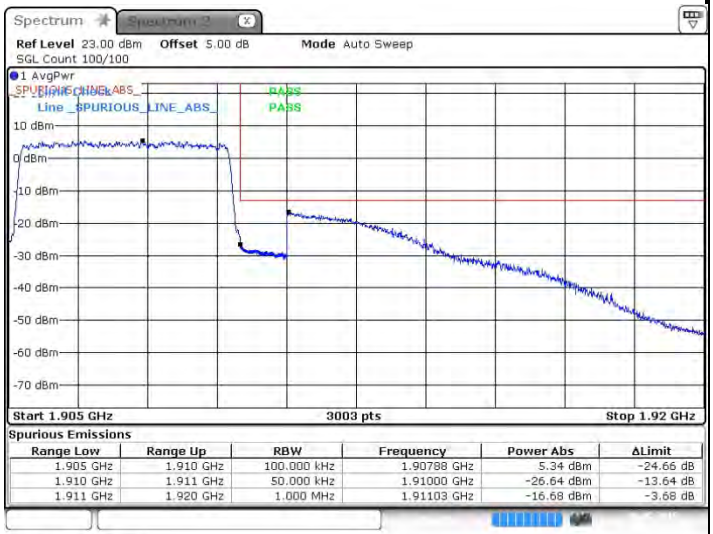
Lowest Band Edge / Full RB

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.840 GHz	1.849 GHz	1.000 MHz	1.84887 GHz	-13.33 dBm	-0.33 dB
1.849 GHz	1.850 GHz	50.000 kHz	1.85000 GHz	-24.02 dBm	-11.02 dB
1.850 GHz	1.855 GHz	100.000 kHz	1.85336 GHz	5.73 dBm	-24.27 dB

Date: 6.MAY.2015 20:39:47

Highest Band Edge / Full RB

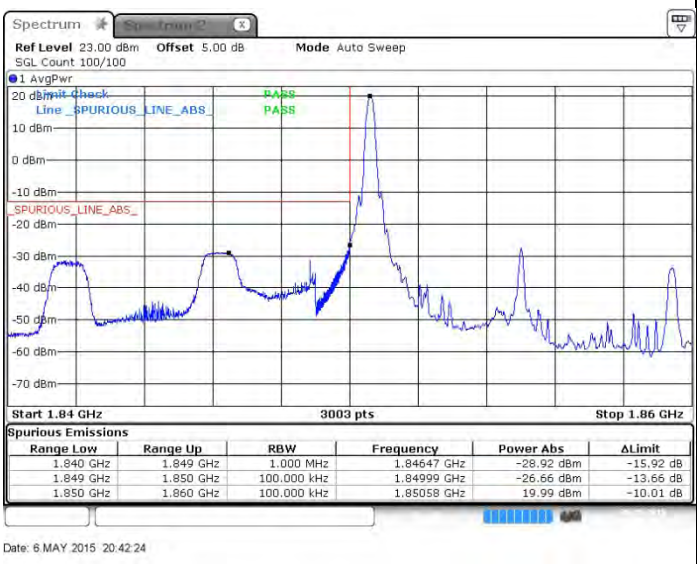


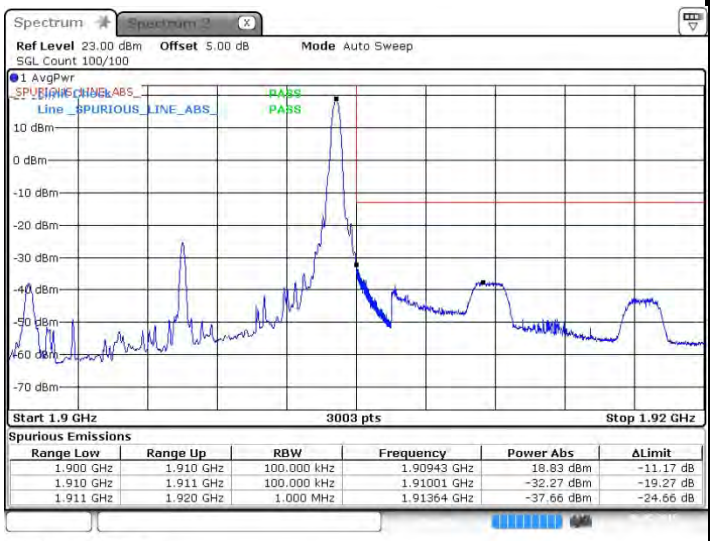
Spurious Emissions

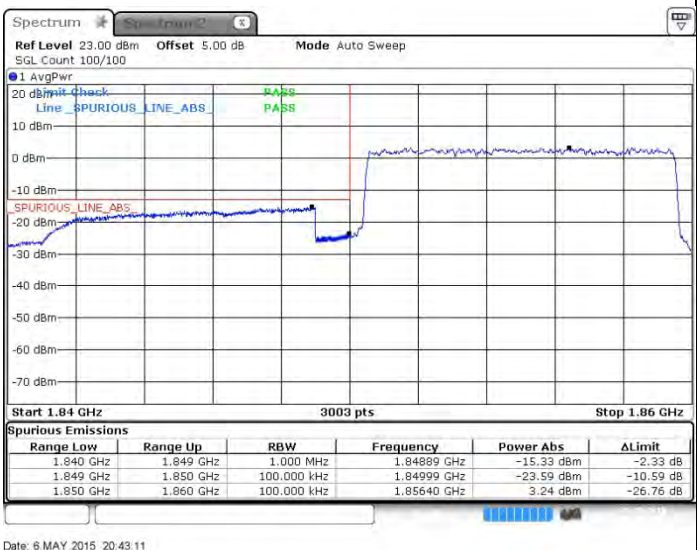
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.905 GHz	1.910 GHz	100.000 kHz	1.90788 GHz	5.34 dBm	-24.66 dB
1.910 GHz	1.911 GHz	50.000 kHz	1.91000 GHz	-26.64 dBm	-13.64 dB
1.911 GHz	1.920 GHz	1.000 MHz	1.91103 GHz	-16.68 dBm	-3.68 dB

Date: 6.MAY.2015 20:41:34

LTE Band 2 / 10MHz / QPSK	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**

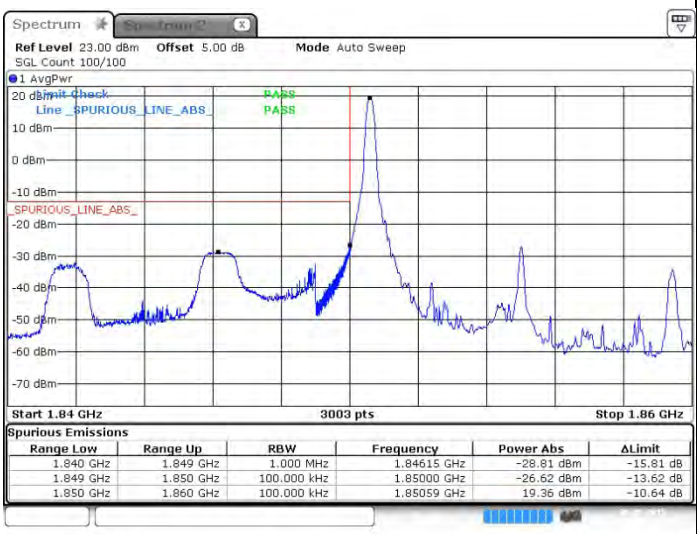






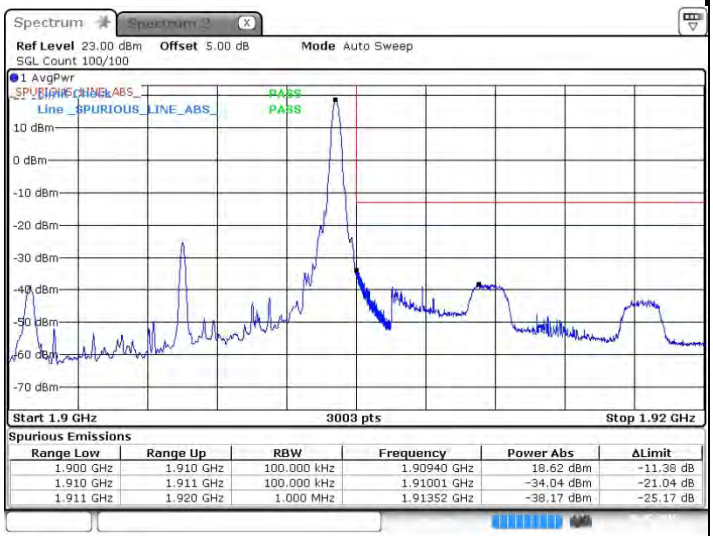
LTE Band 2 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



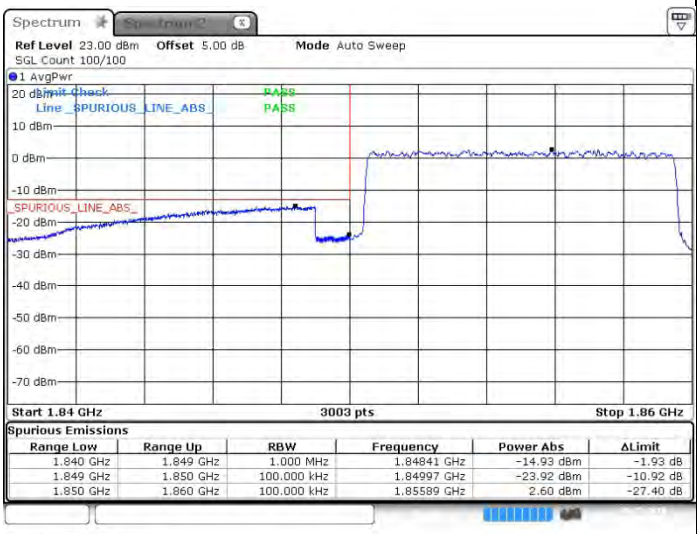
Date: 6.MAY.2015 20:42:41

Highest Band Edge / 1 RB



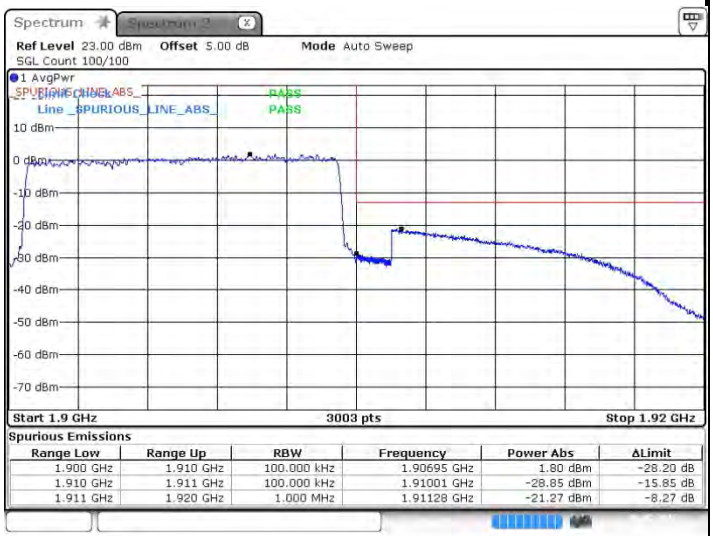
Date: 6.MAY.2015 20:44:00

Lowest Band Edge / Full RB



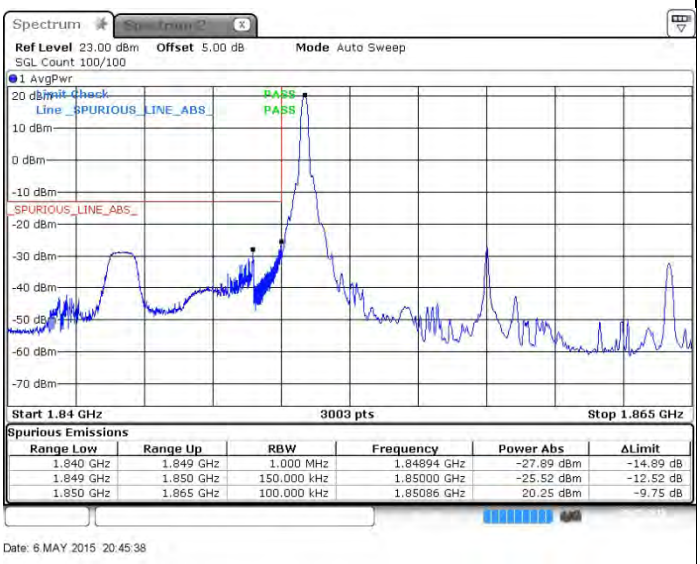
Date: 6.MAY.2015 20:42:56

Highest Band Edge / Full RB

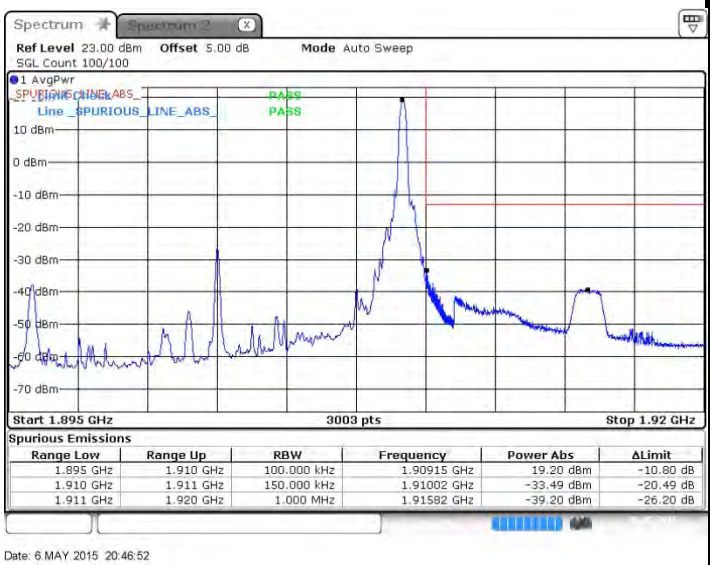


Date: 6.MAY.2015 20:44:26

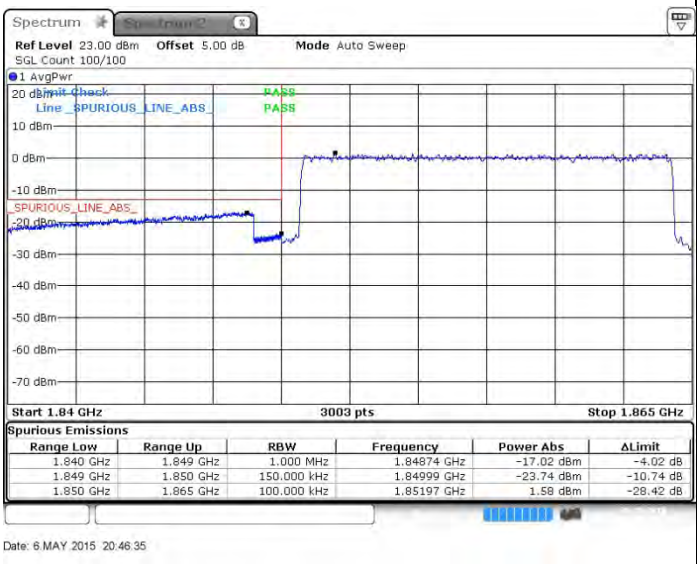
LTE Band 2 / 15MHz / QPSK	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**



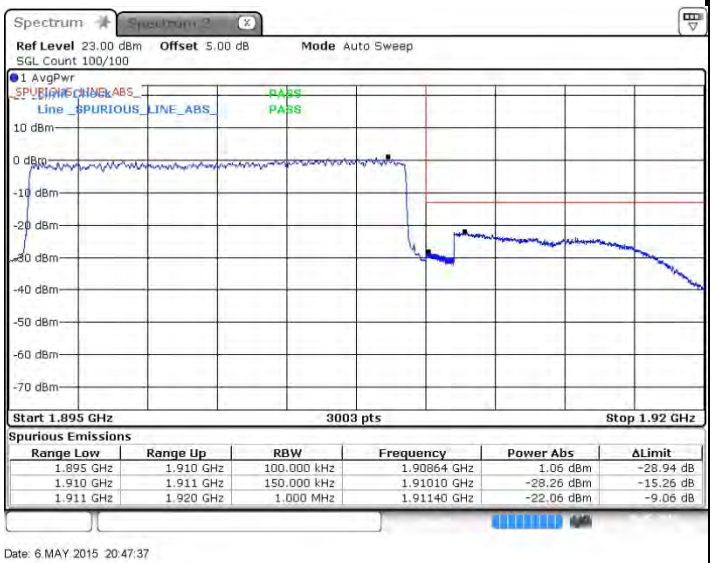
Date: 6.MAY.2015 20:45:38



Date: 6.MAY.2015 20:46:52



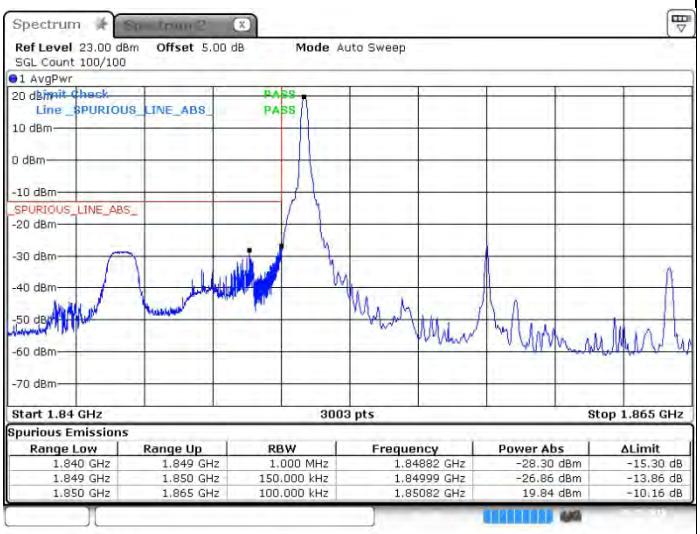
Date: 6.MAY.2015 20:46:35



Date: 6.MAY.2015 20:47:37

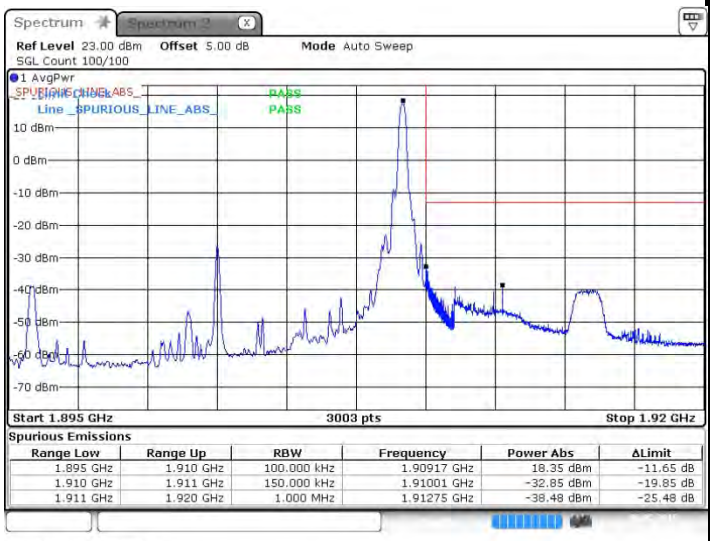
LTE Band 2 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



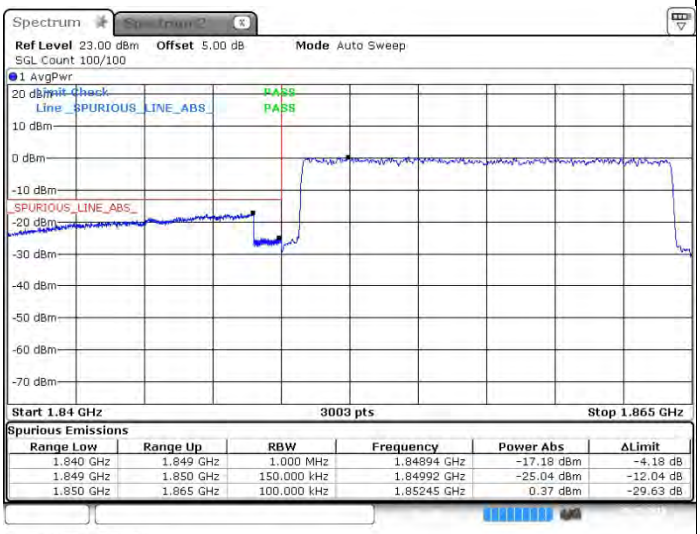
Date: 6.MAY.2015 20:46:04

Highest Band Edge / 1 RB



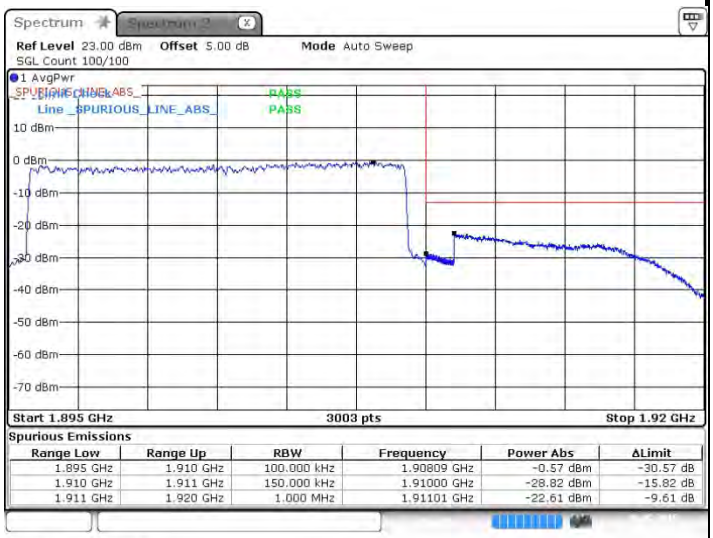
Date: 6.MAY.2015 20:47:05

Lowest Band Edge / Full RB



Date: 6.MAY.2015 20:46:21

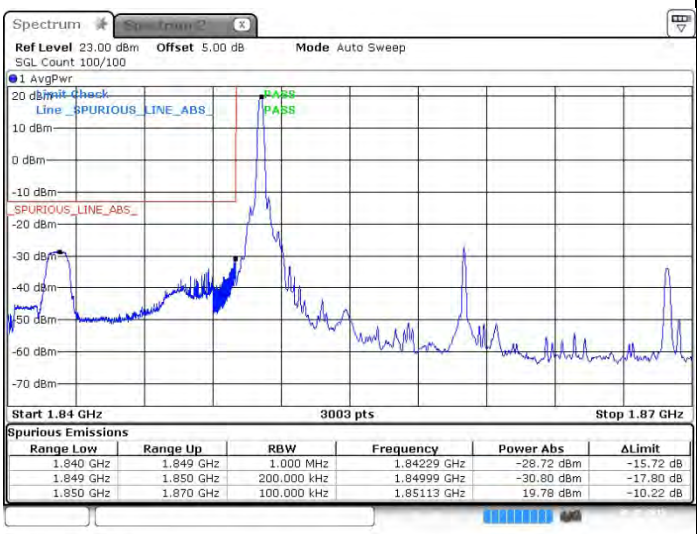
Highest Band Edge / Full RB



Date: 6.MAY.2015 20:47:22

LTE Band 2 / 20MHz / QPSK

Lowest Band Edge / 1 RB

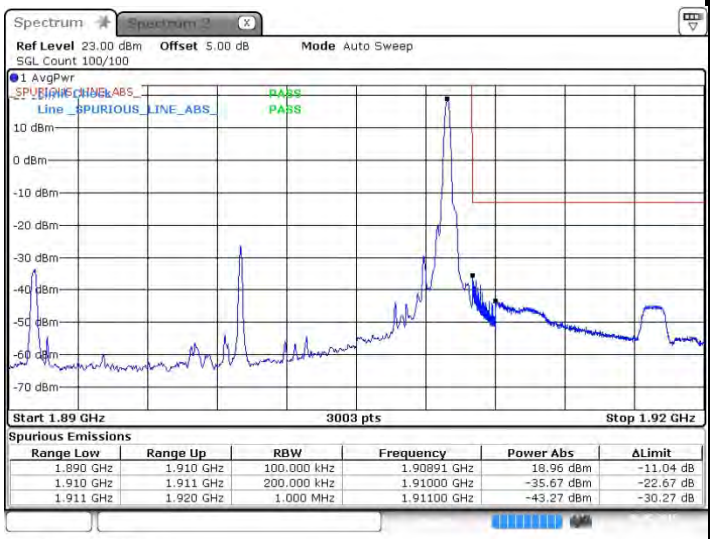


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.840 GHz	1.849 GHz	1.000 MHz	1.84229 GHz	-28.72 dBm	-15.72 dB
1.849 GHz	1.850 GHz	200.000 kHz	1.84999 GHz	-30.80 dBm	-17.80 dB
1.850 GHz	1.870 GHz	100.000 kHz	1.85113 GHz	19.78 dBm	-10.22 dB

Date: 6.MAY.2015 20:47:58

Highest Band Edge / 1 RB

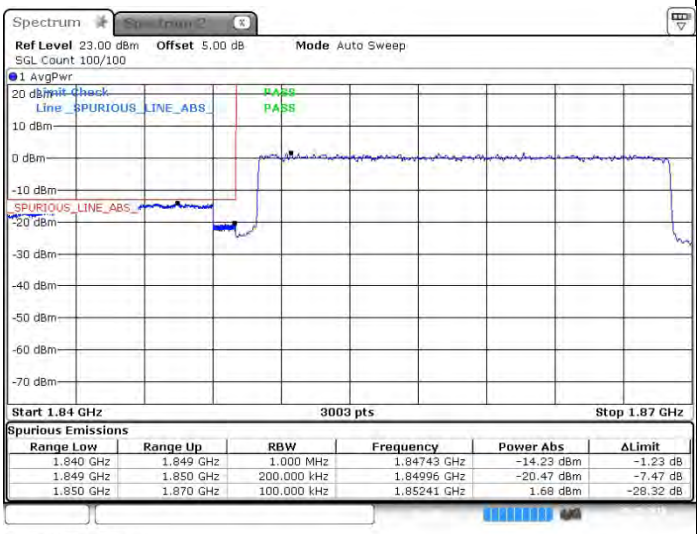


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.890 GHz	1.910 GHz	100.000 kHz	1.90891 GHz	18.96 dBm	-11.04 dB
1.910 GHz	1.911 GHz	200.000 kHz	1.91000 GHz	-35.67 dBm	-22.67 dB
1.911 GHz	1.920 GHz	1.000 MHz	1.91100 GHz	-43.27 dBm	-30.27 dB

Date: 6.MAY.2015 20:50:29

Lowest Band Edge / Full RB

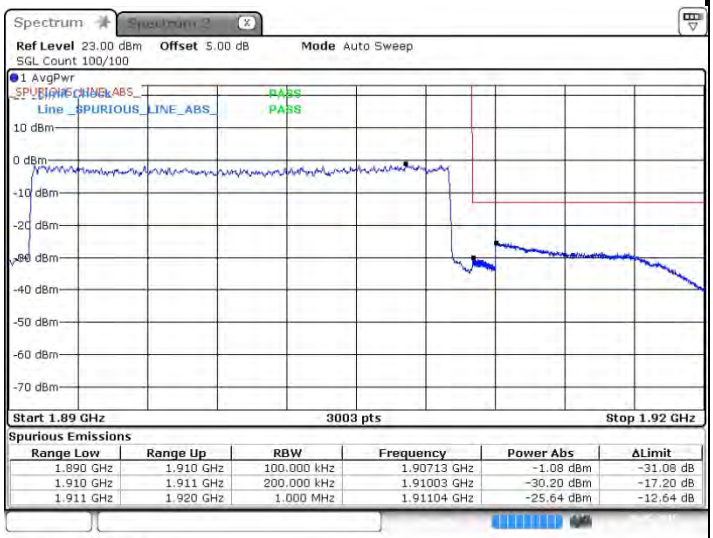


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.840 GHz	1.849 GHz	1.000 MHz	1.84743 GHz	-14.23 dBm	-1.23 dB
1.849 GHz	1.850 GHz	200.000 kHz	1.84996 GHz	-20.47 dBm	-7.47 dB
1.850 GHz	1.870 GHz	100.000 kHz	1.85241 GHz	1.68 dBm	-28.32 dB

Date: 6.MAY.2015 20:50:04

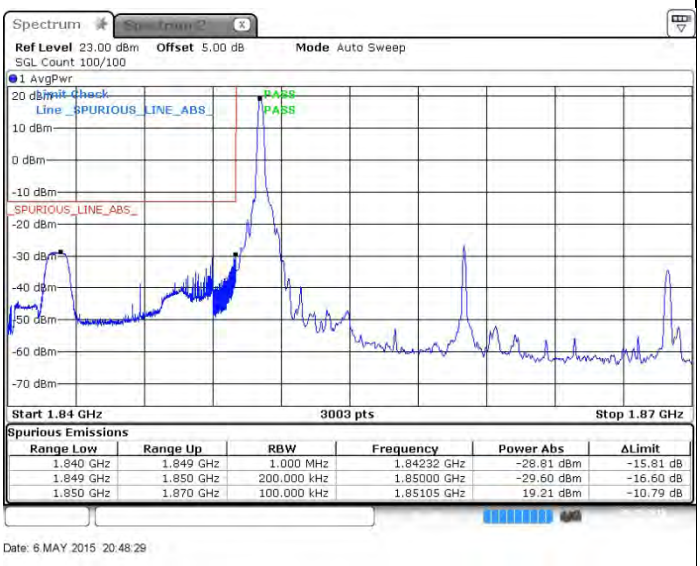
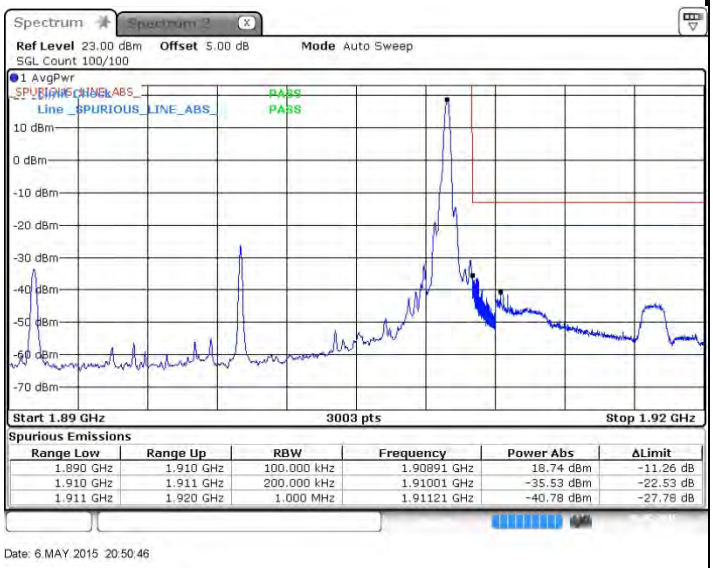
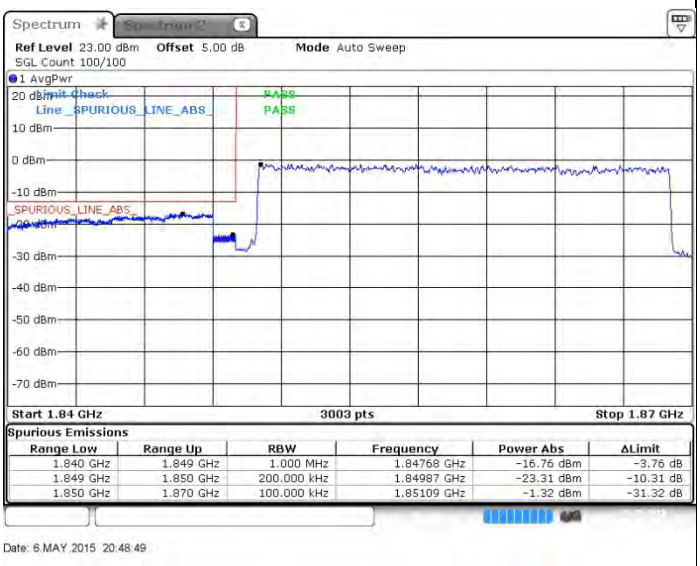
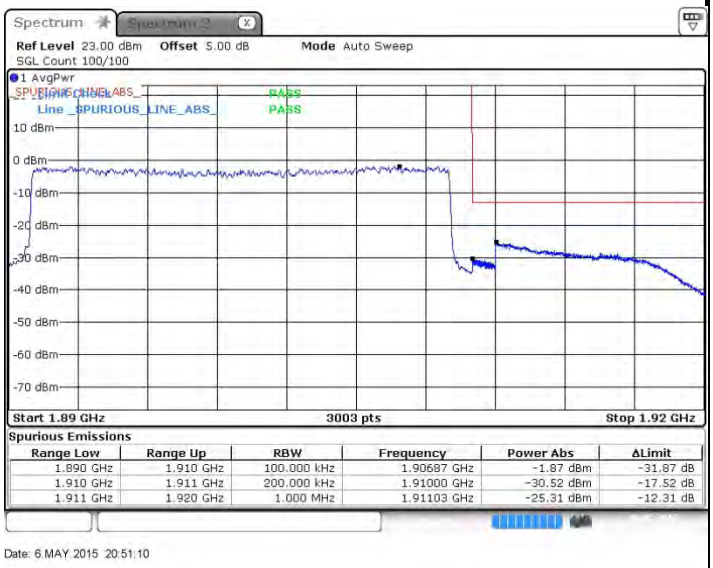
Highest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.890 GHz	1.910 GHz	100.000 kHz	1.90713 GHz	-1.08 dBm	-31.08 dB
1.910 GHz	1.911 GHz	200.000 kHz	1.91003 GHz	-30.20 dBm	-17.20 dB
1.911 GHz	1.920 GHz	1.000 MHz	1.91104 GHz	-25.64 dBm	-12.64 dB

Date: 6.MAY.2015 20:51:40

LTE Band 2 / 20MHz / 16QAM	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**