Frequency Stability

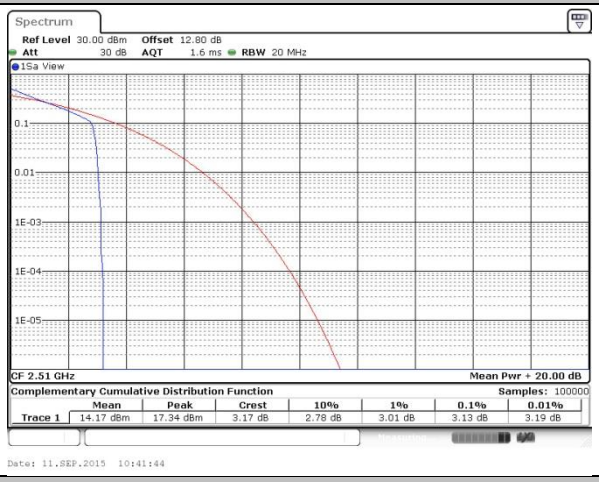
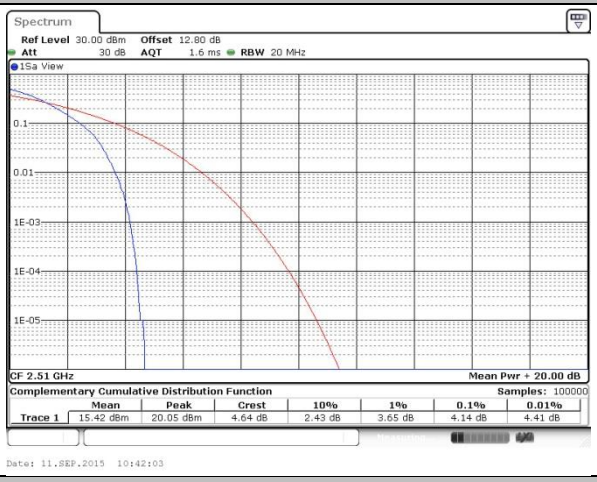
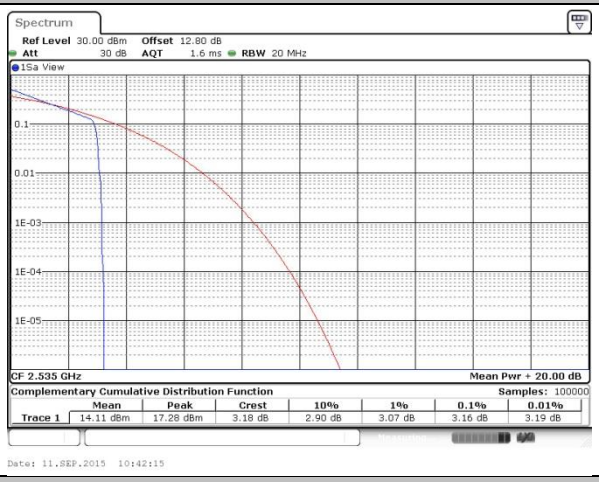
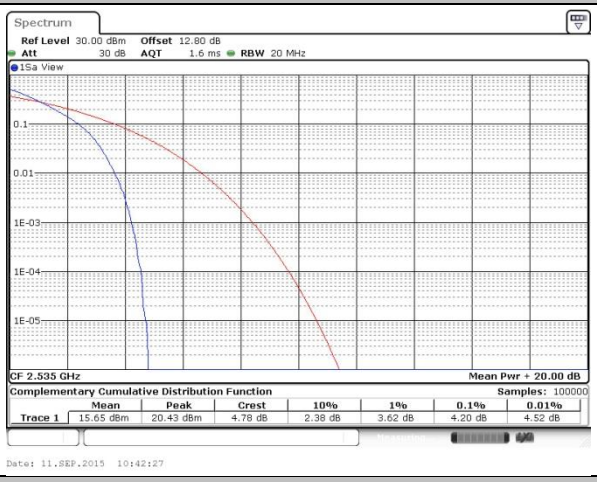
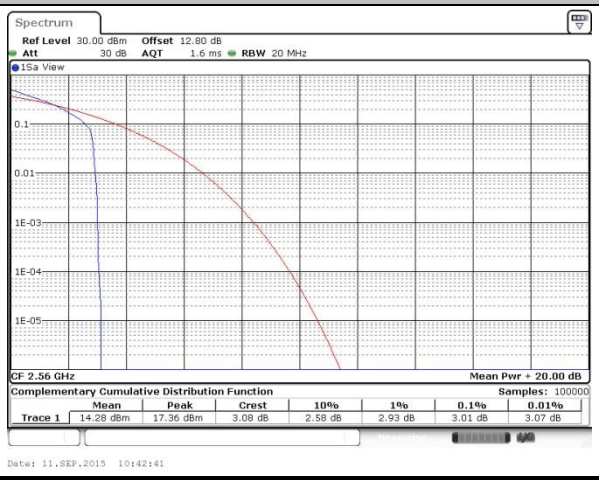
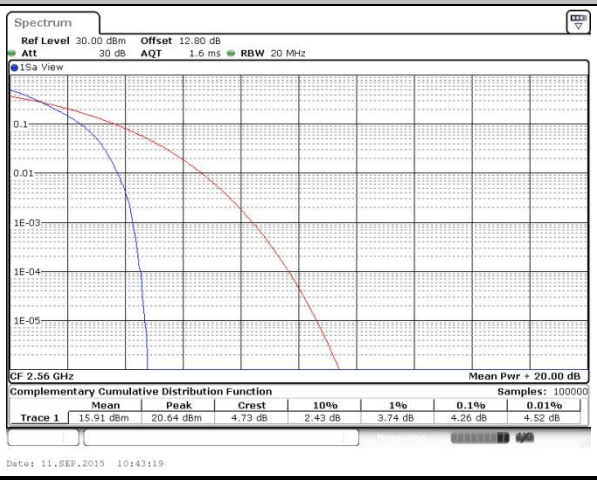
Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0004	PASS
40	Normal Voltage	0.0053	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0069	
0	Normal Voltage	0.0004	
-10	Normal Voltage	0.0005	
-20	Normal Voltage	0.0056	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0050	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0006	

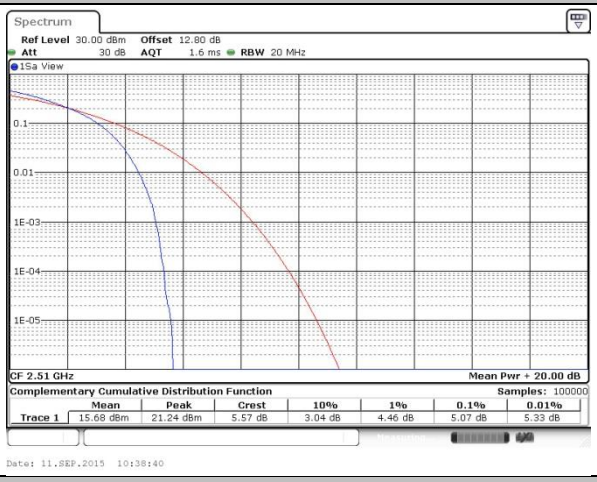
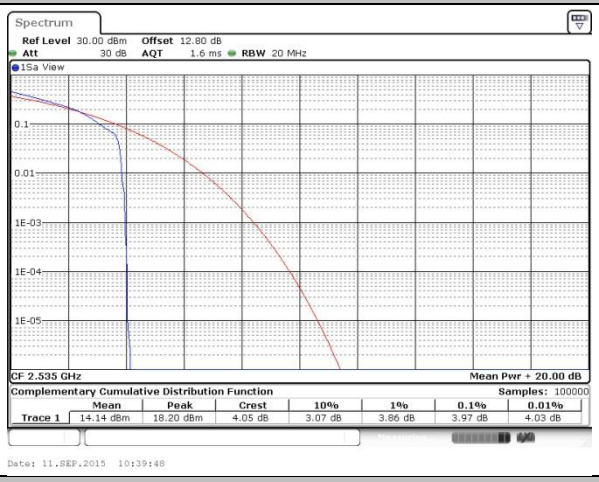
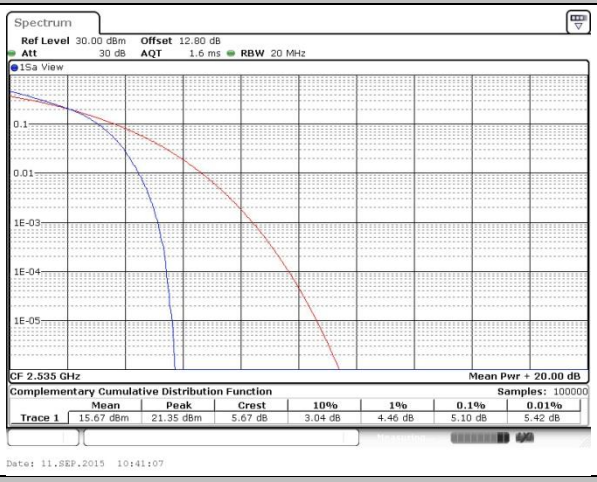
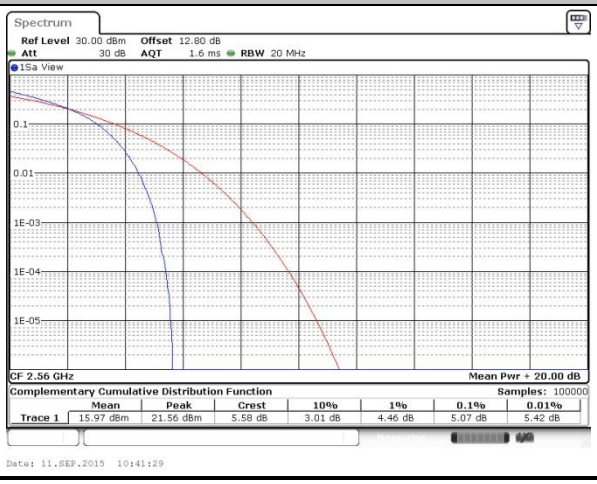
Note: Normal Voltage = 3.8V. ；Battery End Point (BEP) = 3.6 V.；Maximum Voltage =4.2 V

LTE Band 7

Peak-to-Average Ratio

Mode	LTE Band 7 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.13	4.14	3.88	5.07	PASS
Middle CH	3.16	4.2	3.97	5.1	
Highest CH	3.01	4.26	3.42	5.07	

LTE Band 7 / 20MHz / QPSK	
Lowest Channel / 1RB	**Lowest Channel / Full RB**
	
Middle Channel / 1RB	**Middle Channel / Full RB**
	
Highest Channel / 1RB	**Highest Channel / Full RB**
	

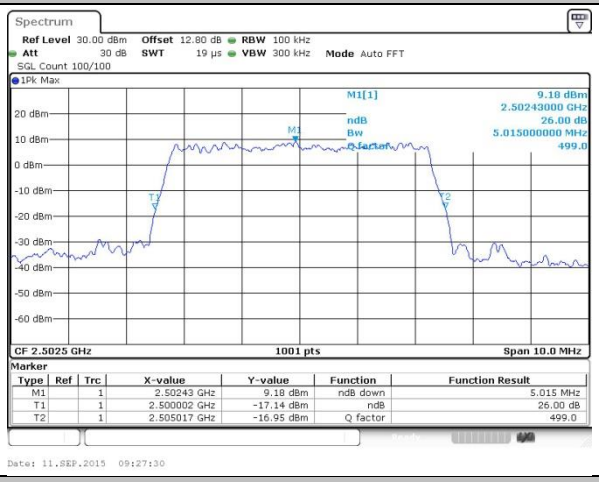
LTE Band 7 / 20MHz / 16QAM	
Lowest Channel / 1RB	**Lowest Channel / Full RB**
	
Middle Channel / 1RB	**Middle Channel / Full RB**
	
Highest Channel / 1RB	**Highest Channel / Full RB**
	

26dB Bandwidth

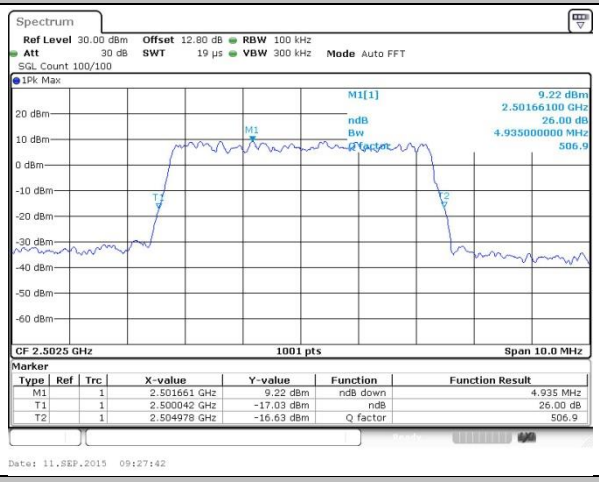
Mode	LTE Band 7 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	5.02	4.94	9.79	9.69	14.36	14.42	20.18	20.18
Middle CH	-	-	-	-	4.93	4.96	9.75	9.73	14.51	14.18	20.18	20.34
Highest CH	-	-	-	-	4.98	4.87	9.87	9.65	14.39	14.39	20.14	20.26

LTE Band 7

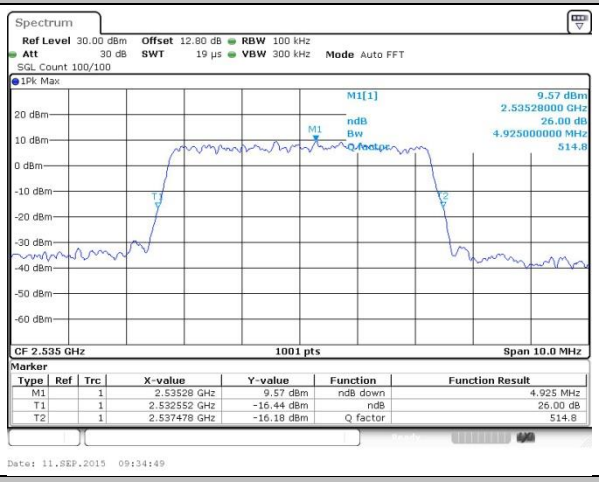
Lowest Channel / 5MHz / QPSK



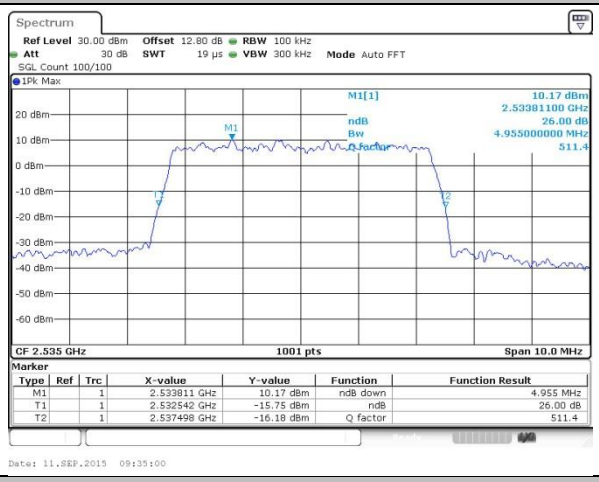
Lowest Channel / 5MHz / 16QAM



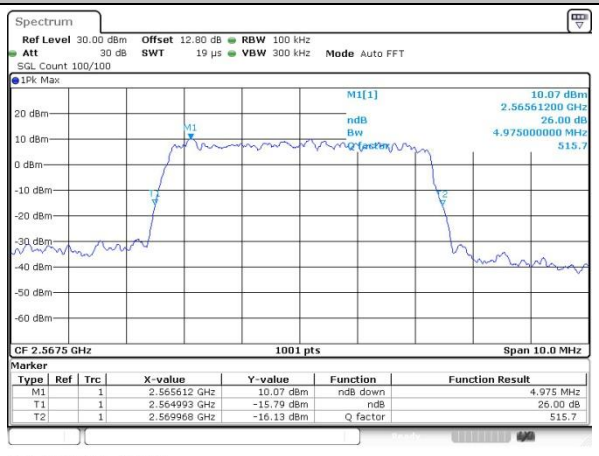
Middle Channel / 5MHz / QPSK



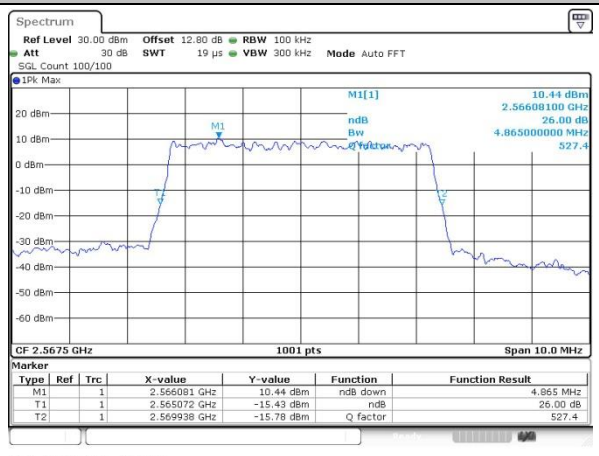
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

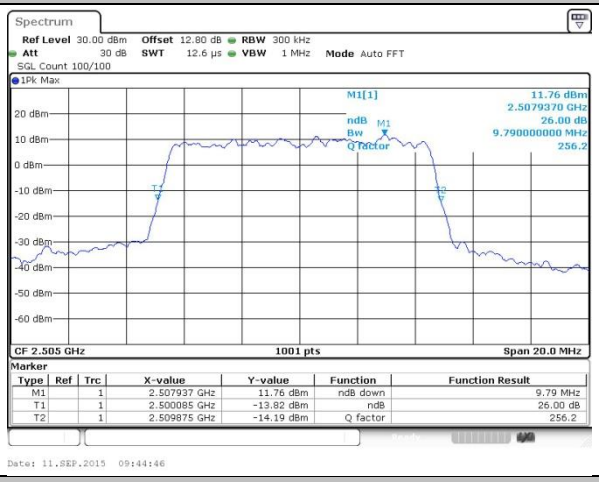


Highest Channel / 5MHz / 16QAM

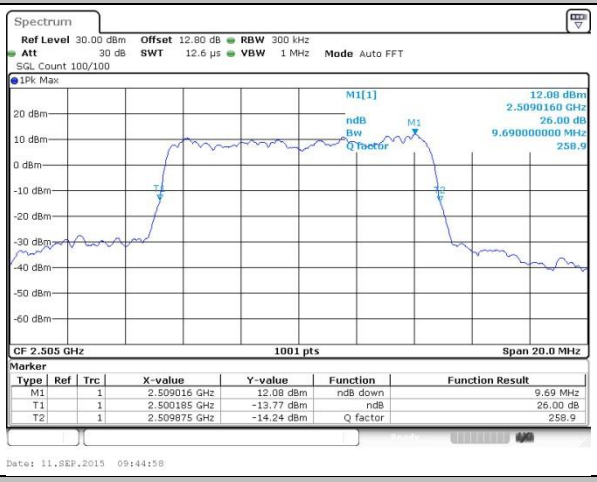


LTE Band 7

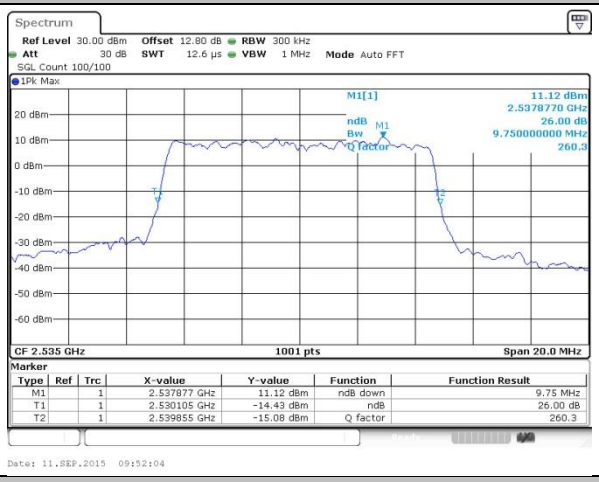
Lowest Channel / 10MHz / QPSK



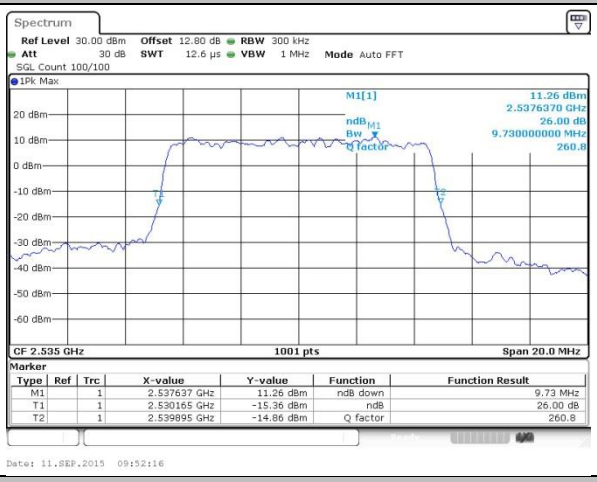
Lowest Channel / 10MHz / 16QAM



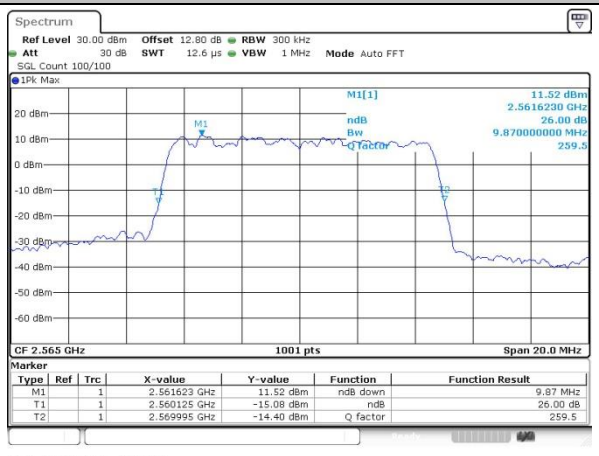
Middle Channel / 10MHz / QPSK



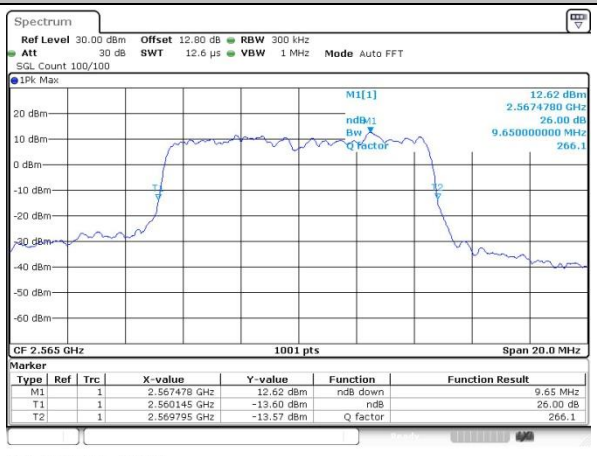
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK

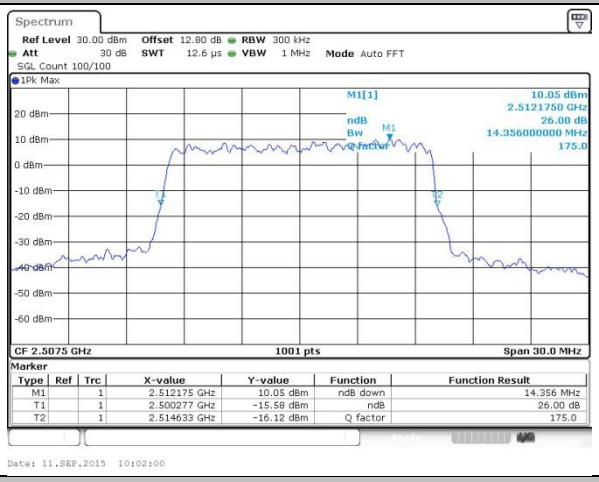


Highest Channel / 10MHz / 16QAM

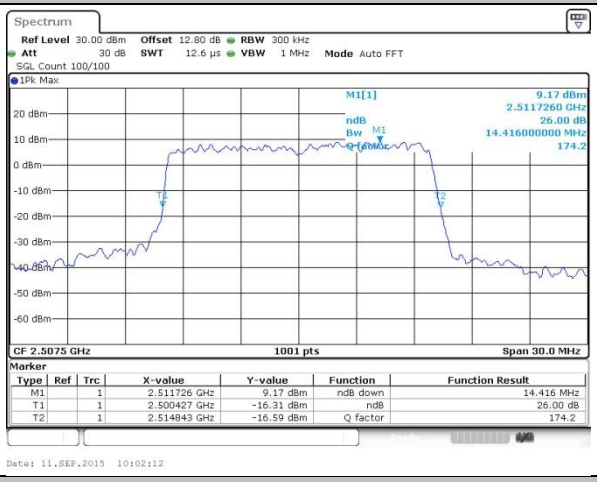


LTE Band 7

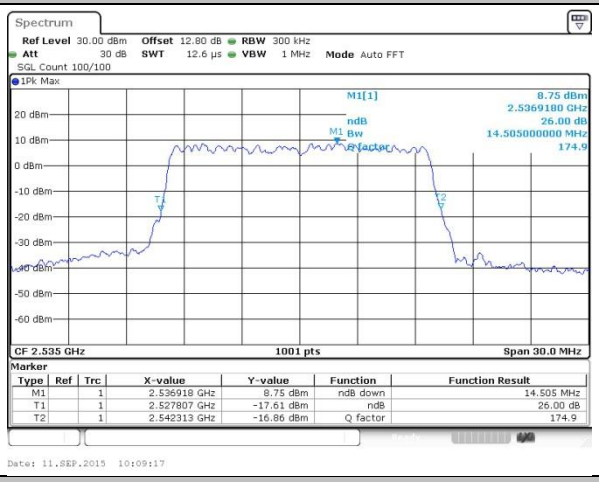
Lowest Channel / 15MHz / QPSK



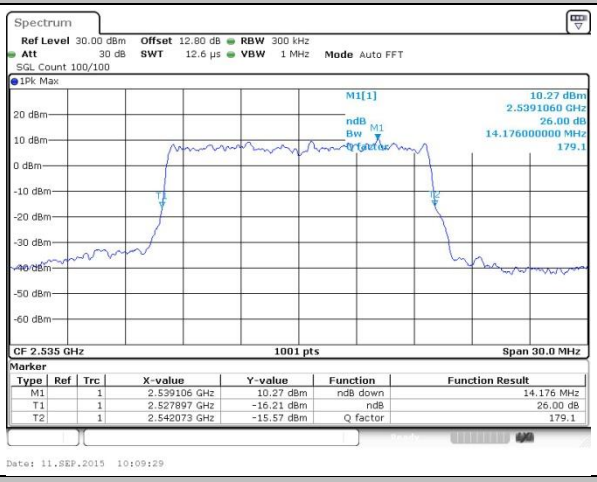
Lowest Channel / 15MHz / 16QAM



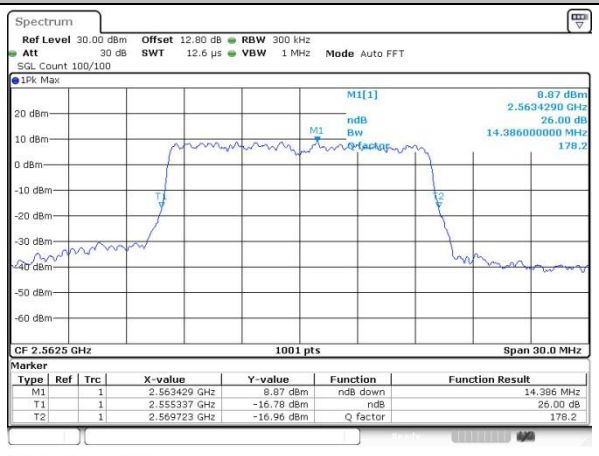
Middle Channel / 15MHz / QPSK



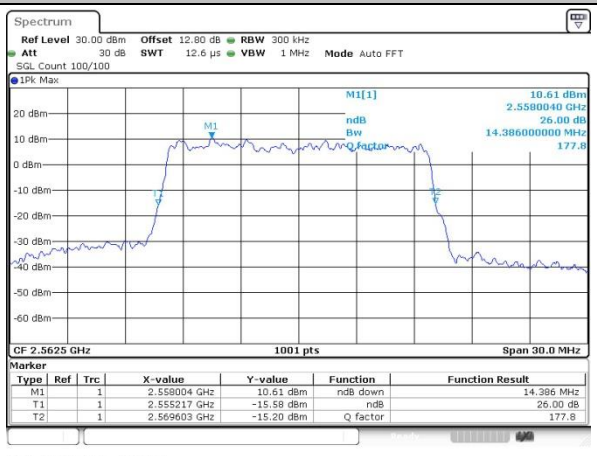
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK

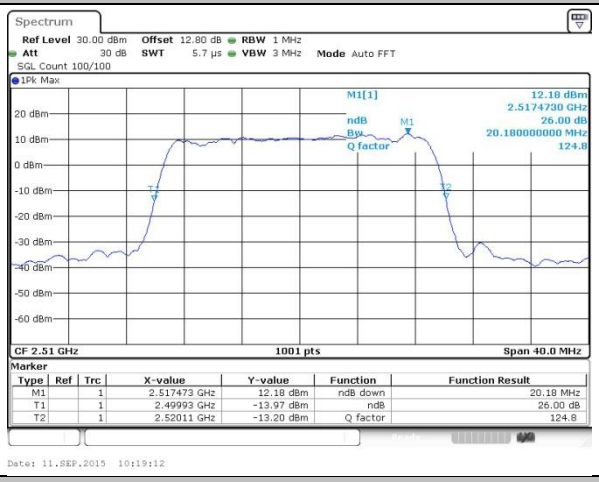


Highest Channel / 15MHz / 16QAM

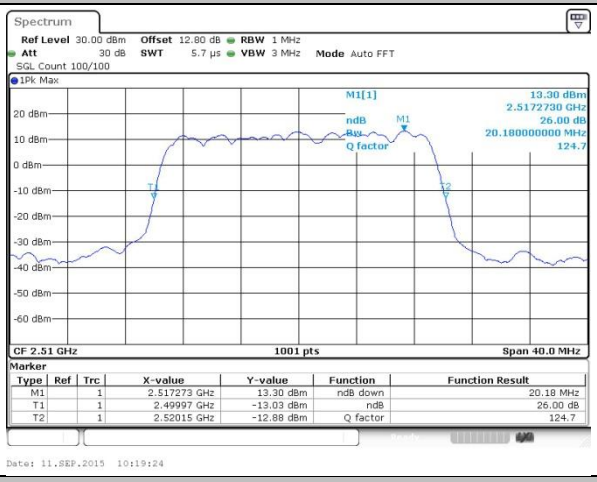


LTE Band 7

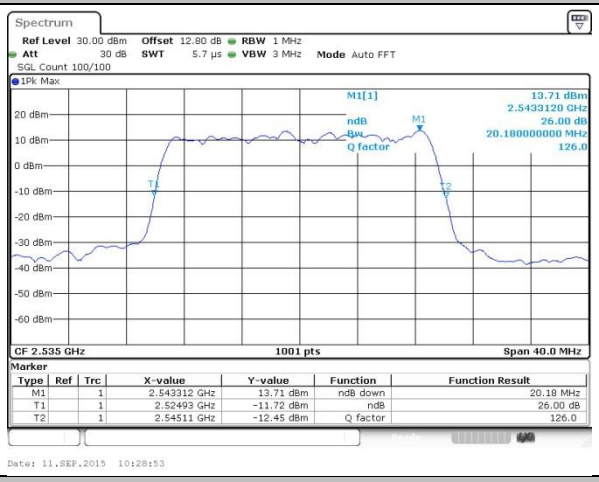
Lowest Channel / 20MHz / QPSK



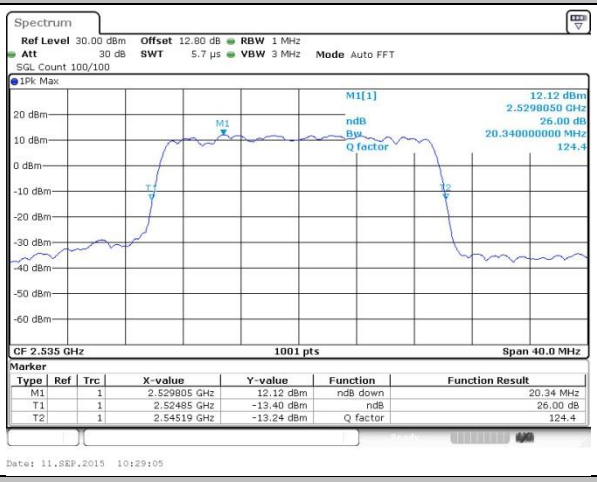
Lowest Channel / 20MHz / 16QAM



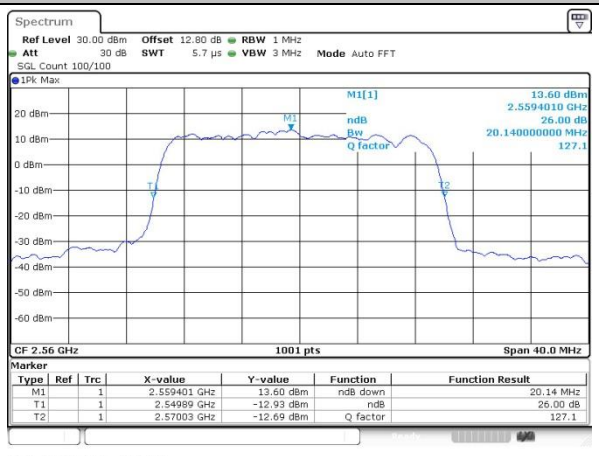
Middle Channel / 20MHz / QPSK



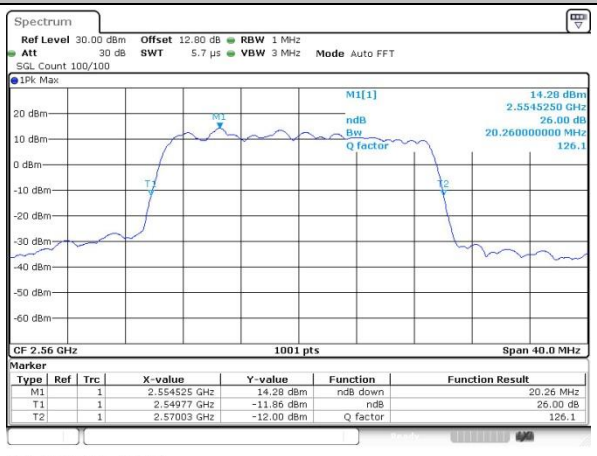
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



Highest Channel / 20MHz / 16QAM

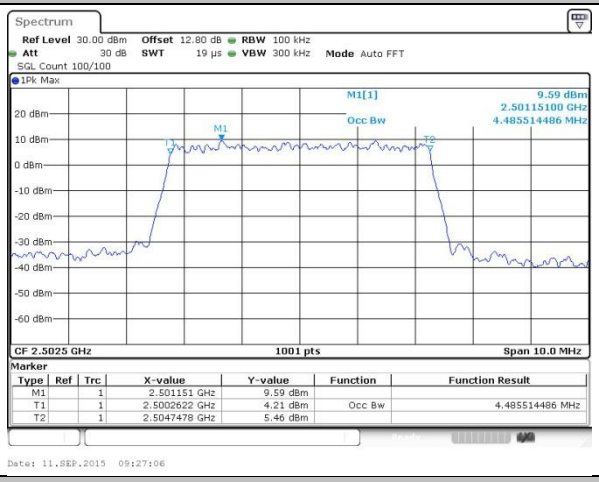


Occupied Bandwidth

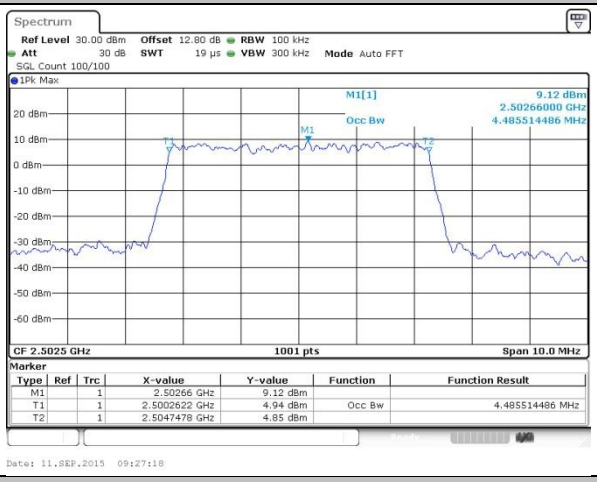
Mode	LTE Band 7 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.49	4.49	9.03	8.99	13.49	13.4	18.26	18.46
Middle CH	-	-	-	-	4.51	4.48	9.05	9.05	13.43	13.43	18.22	18.38
Highest CH	-	-	-	-	4.5	4.48	8.99	8.99	13.4	13.43	18.26	18.38

LTE Band 7

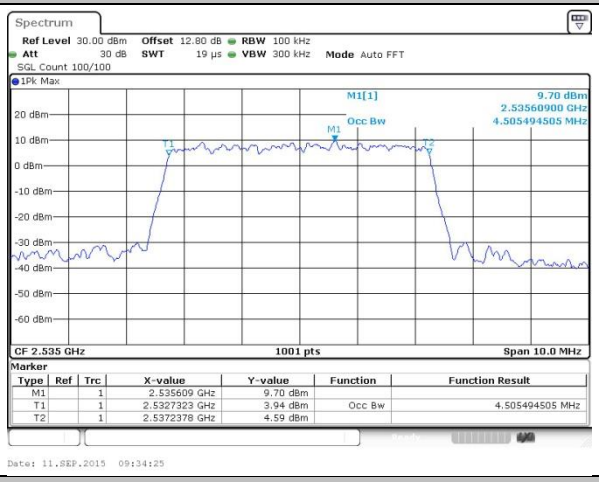
Lowest Channel / 5MHz / QPSK



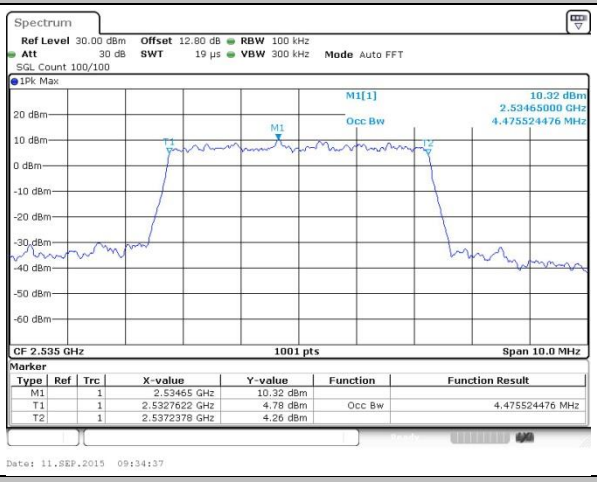
Lowest Channel / 5MHz / 16QAM



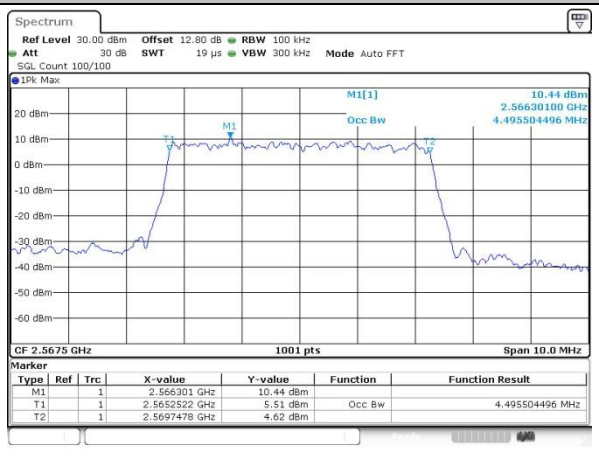
Middle Channel / 5MHz / QPSK



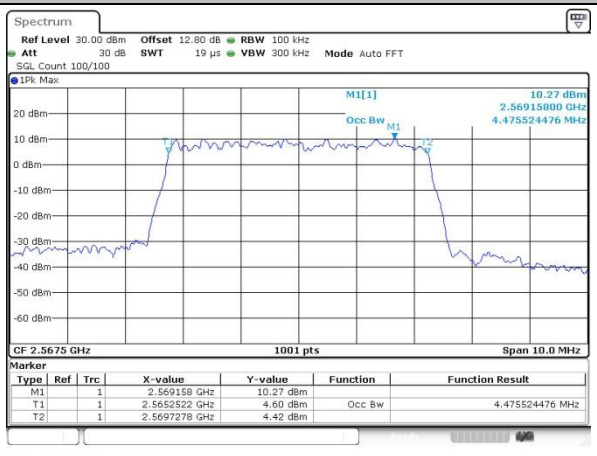
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

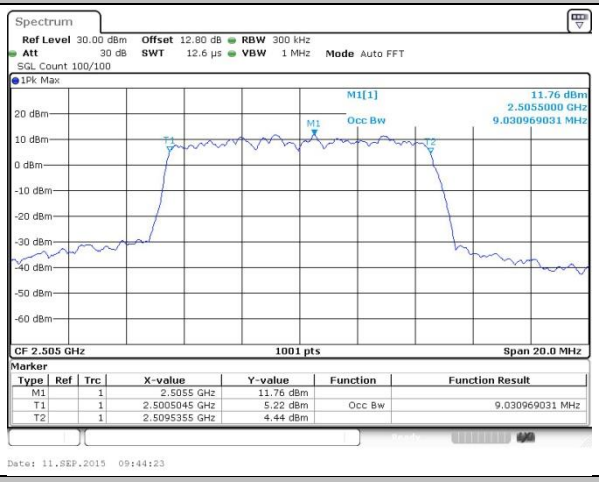


Highest Channel / 5MHz / 16QAM

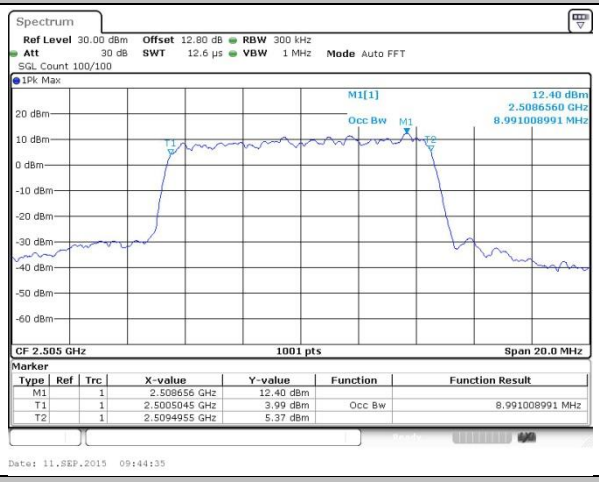


LTE Band 7

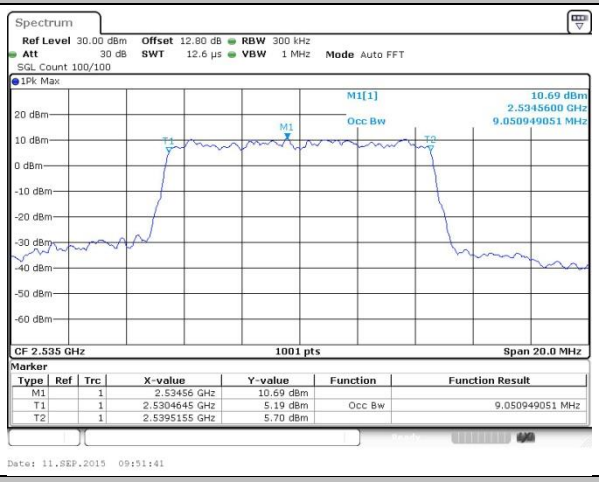
Lowest Channel / 10MHz / QPSK



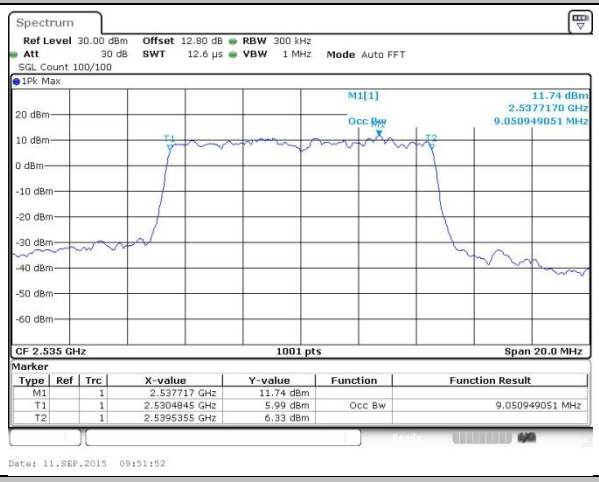
Lowest Channel / 10MHz / 16QAM



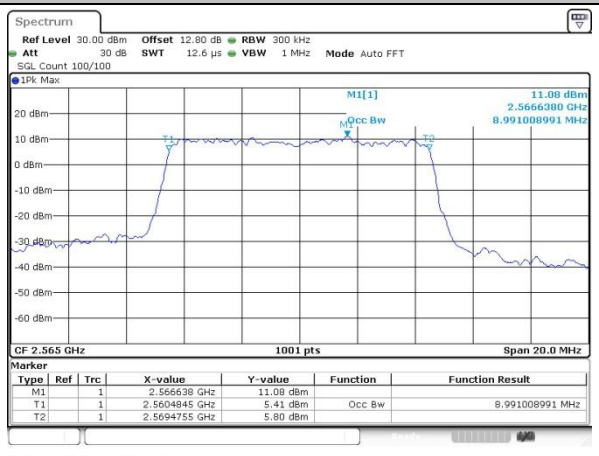
Middle Channel / 10MHz / QPSK



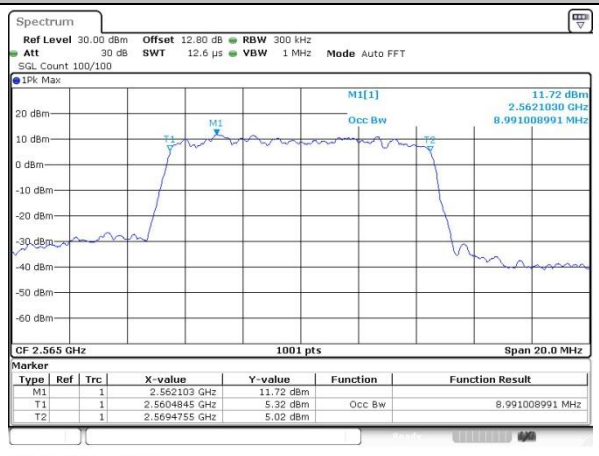
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK

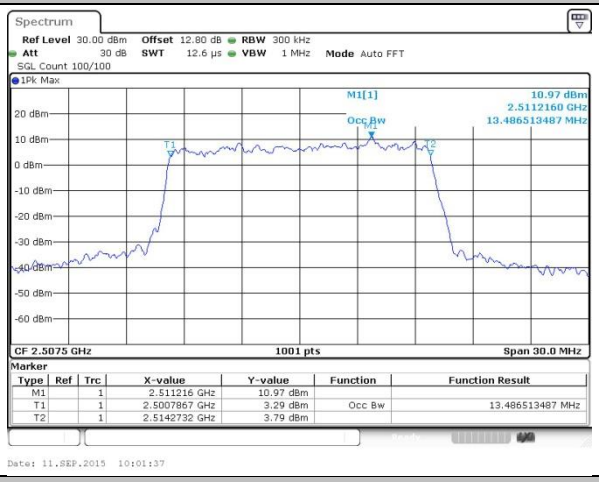


Highest Channel / 10MHz / 16QAM

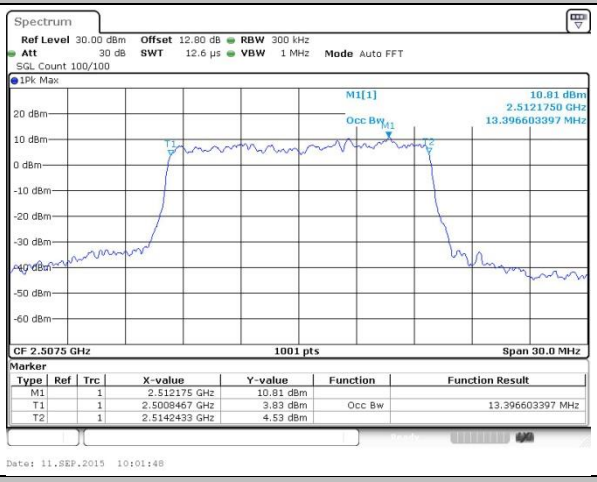


LTE Band 7

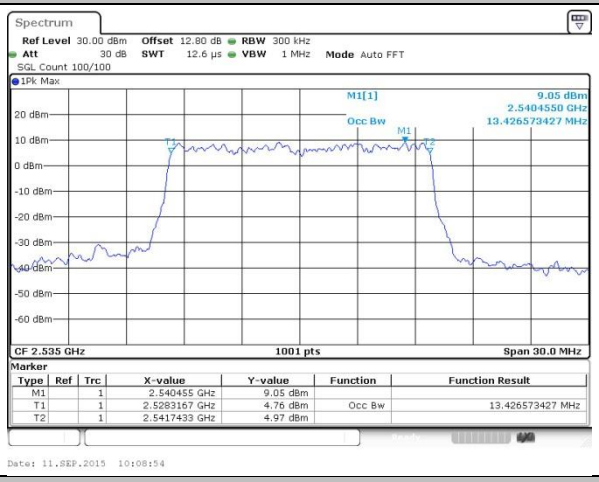
Lowest Channel / 15MHz / QPSK



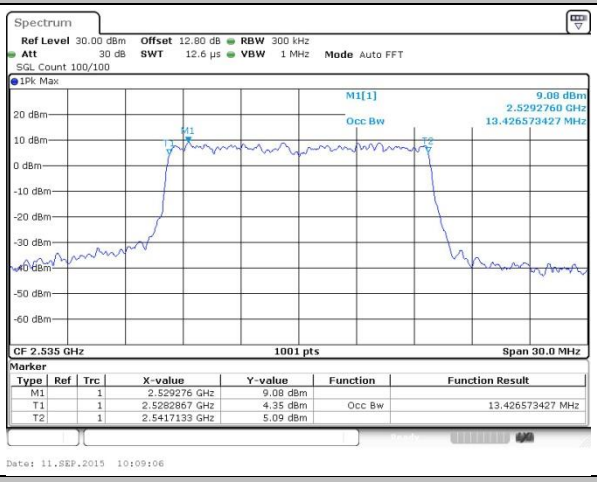
Lowest Channel / 15MHz / 16QAM



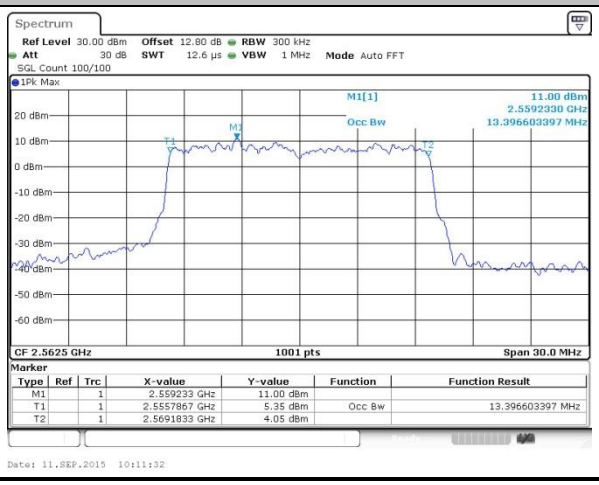
Middle Channel / 15MHz / QPSK



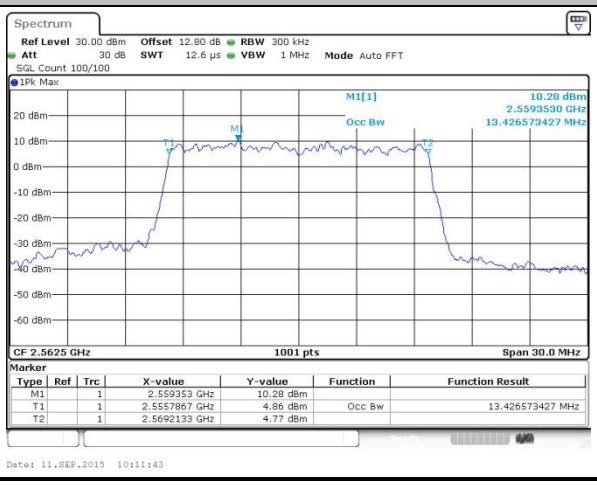
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK

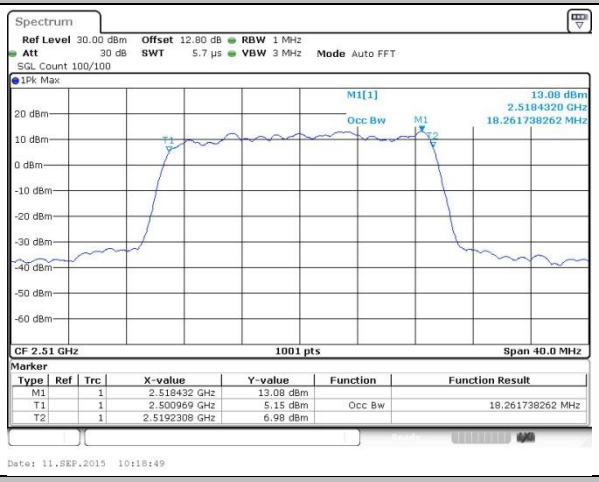


Highest Channel / 15MHz / 16QAM

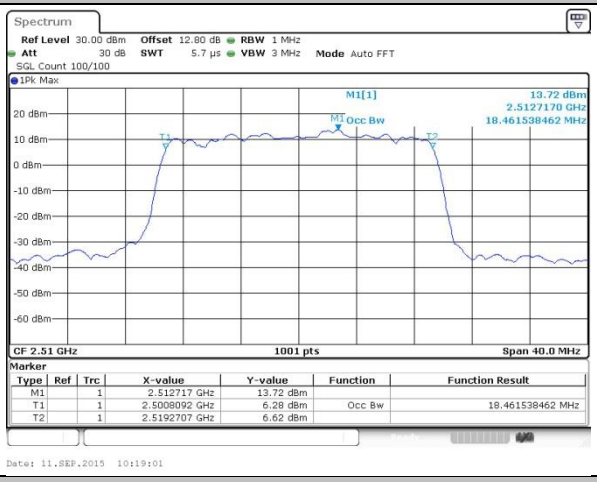


LTE Band 7

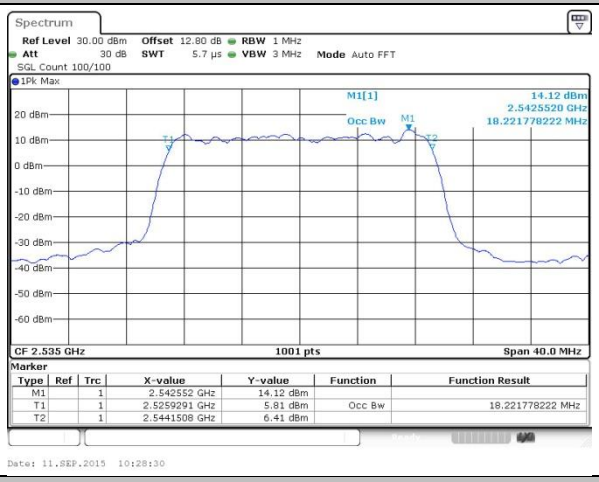
Lowest Channel / 20MHz / QPSK



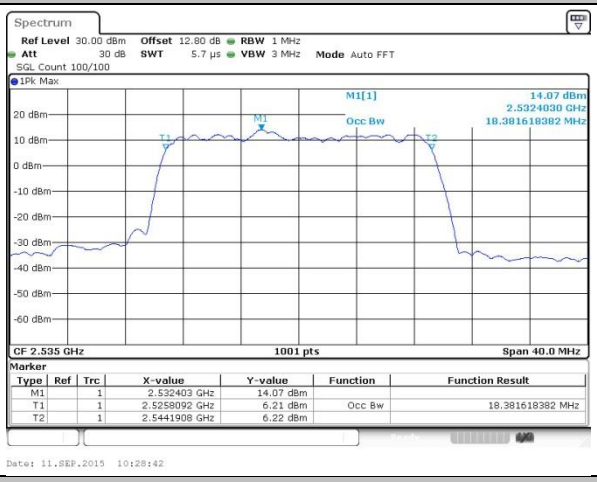
Lowest Channel / 20MHz / 16QAM



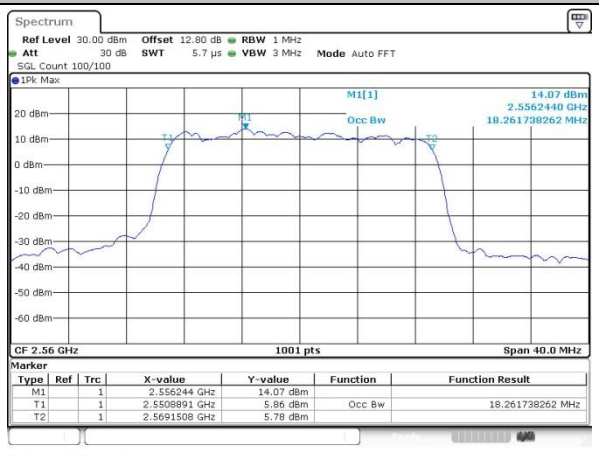
Middle Channel / 20MHz / QPSK



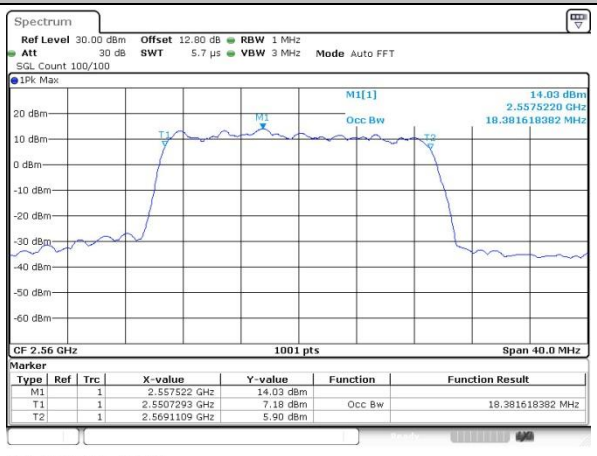
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



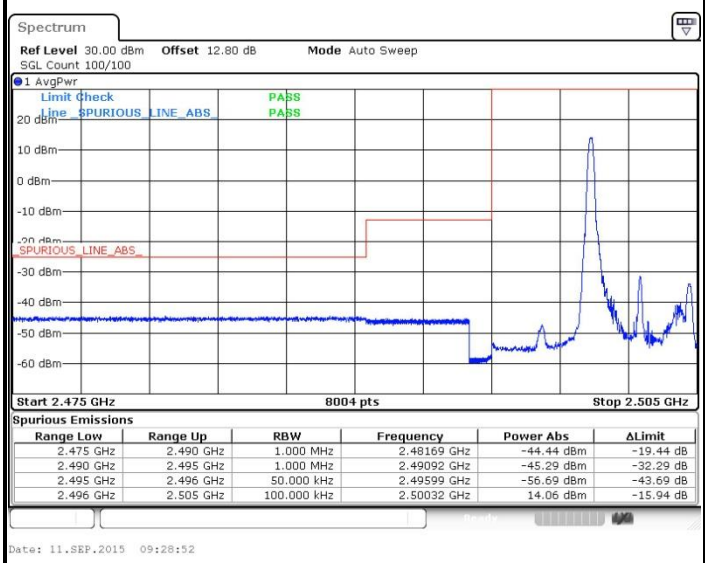
Highest Channel / 20MHz / 16QAM



Conducted Band Edge

LTE Band 7 / 5MHz / QPSK

Lowest Band Edge / 1 RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48169 GHz	-44.44 dBm	-19.44 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49092 GHz	-45.29 dBm	-32.29 dB
2.495 GHz	2.496 GHz	50.000 kHz	2.49599 GHz	-56.69 dBm	-43.69 dB
2.496 GHz	2.505 GHz	100.000 kHz	2.50032 GHz	14.06 dBm	-15.94 dB

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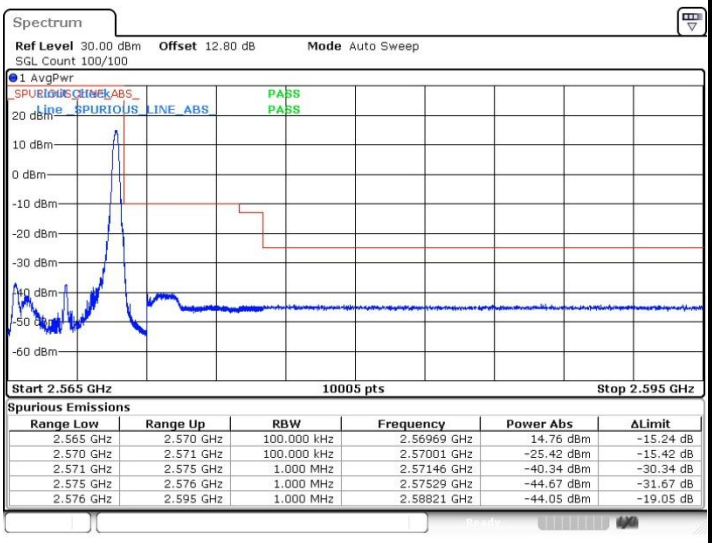
Highest Band Edge / 1 RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56969 GHz	14.76 dBm	-15.24 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57001 GHz	-25.42 dBm	-15.42 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57146 GHz	-40.34 dBm	-30.34 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57529 GHz	-44.67 dBm	-31.67 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.58821 GHz	-44.05 dBm	-19.05 dB

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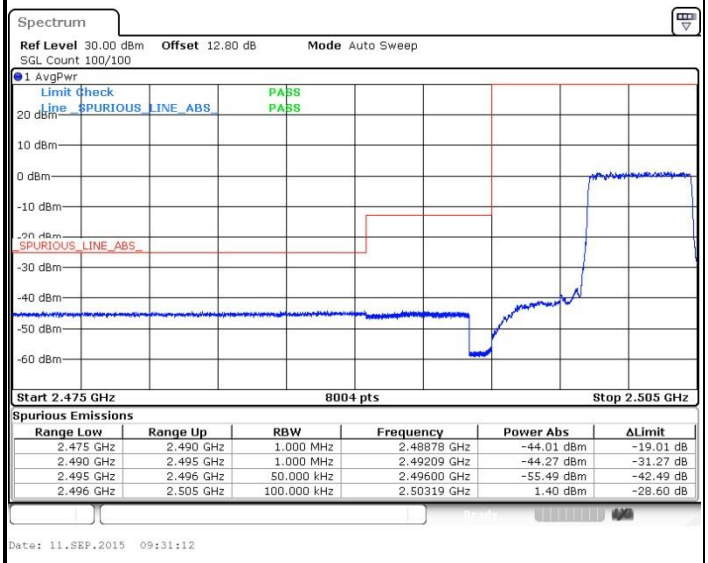
Lowest Band Edge / Full RB

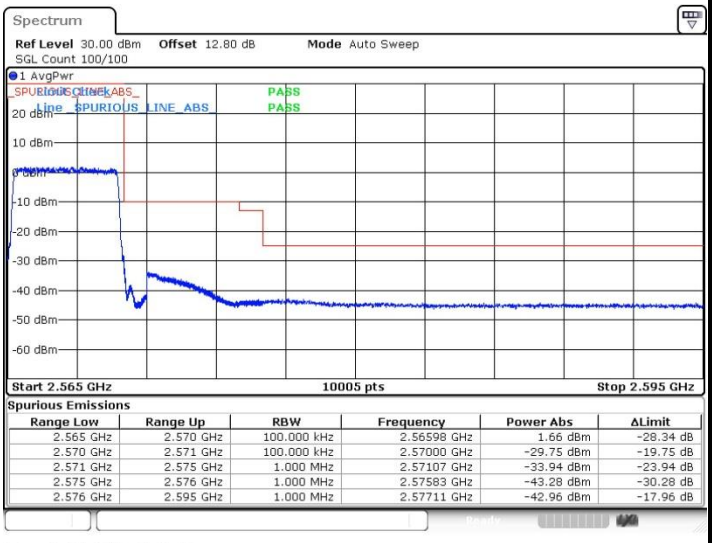


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48878 GHz	-44.01 dBm	-19.01 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49209 GHz	-44.27 dBm	-31.27 dB
2.495 GHz	2.496 GHz	50.000 kHz	2.49600 GHz	-55.49 dBm	-42.49 dB
2.496 GHz	2.505 GHz	100.000 kHz	2.50319 GHz	1.40 dBm	-28.60 dB

Date: 11.SEP.2015 09:31:12

Highest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56598 GHz	1.66 dBm	-28.34 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57000 GHz	-29.75 dBm	-19.75 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57107 GHz	-33.94 dBm	-23.94 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57583 GHz	-43.28 dBm	-30.28 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57711 GHz	-42.96 dBm	-17.96 dB

Date: 11.SEP.2015 09:41:10