Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0001	PASS
40	Normal Voltage	0.0113	
30	Normal Voltage	0.0107	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0014	
0	Normal Voltage	0.0014	
-10	Normal Voltage	0.0116	
-20	Normal Voltage	0.0000	
-30	Normal Voltage	0.0007	
20	Maximum Voltage	0.0017	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0006	

Note:

1. Normal Voltage = 3.9 V. ；Battery End Point (BEP) = 3.4 V.；Maximum Voltage =4.35 V
2. Note: The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

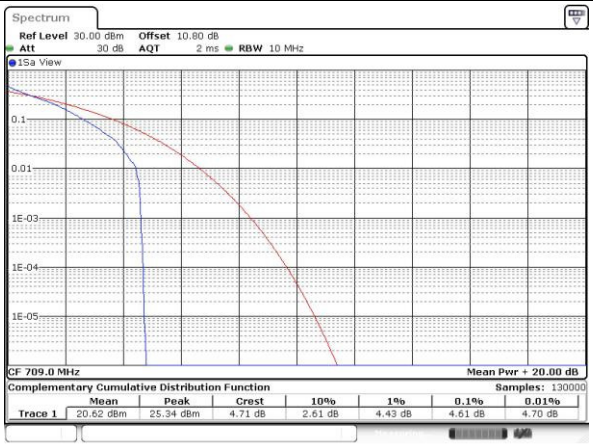
LTE Band 17

Peak-to-Average Ratio

Mode	LTE Band 17 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.61	4.72	5.65	5.77	PASS
Middle CH	4.72	4.67	5.59	5.77	
Highest CH	4.81	4.72	5.51	5.65	

LTE Band 17 / 10MHz / QPSK

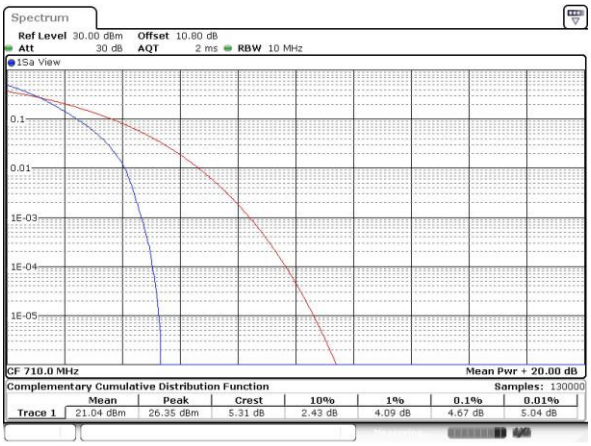
Lowest Channel / 1RB



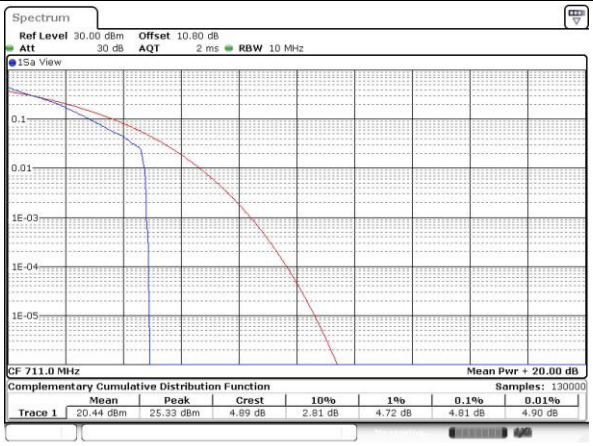
Lowest Channel / Full RB

Middle Channel/ 1RB

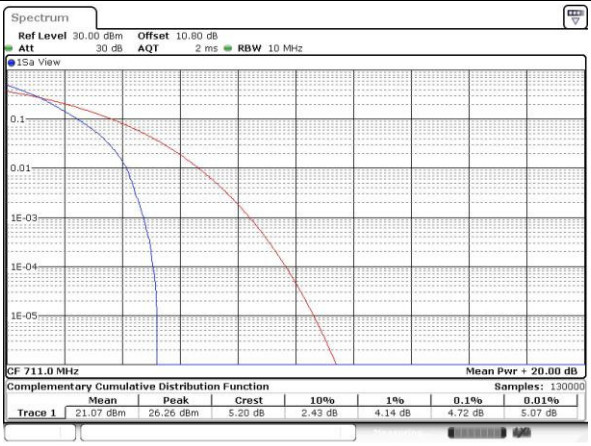
Middle Channel / Full RB



Highest Channel/ 1RB

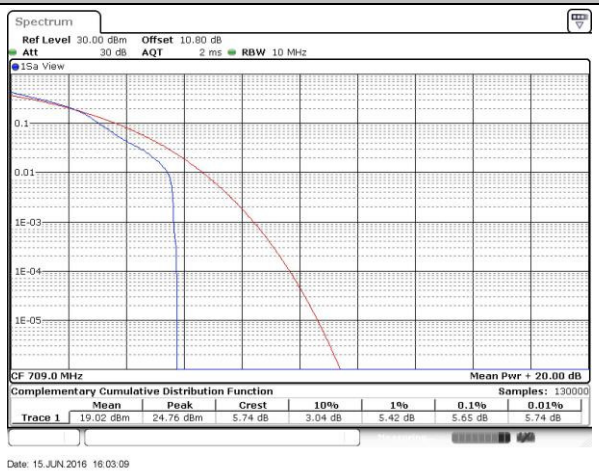


Highest Channel / Full RB

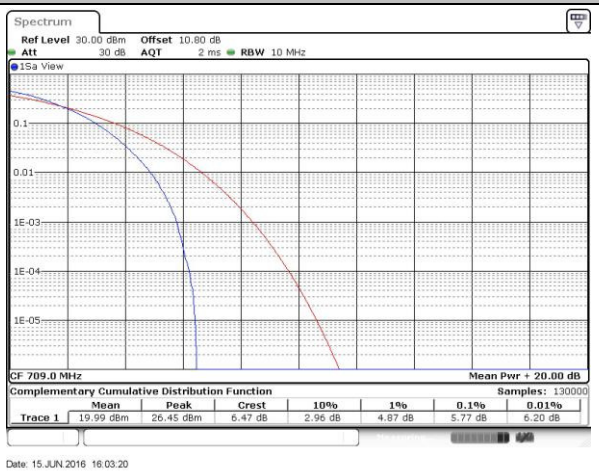


LTE Band 17 / 10MHz / 16QAM

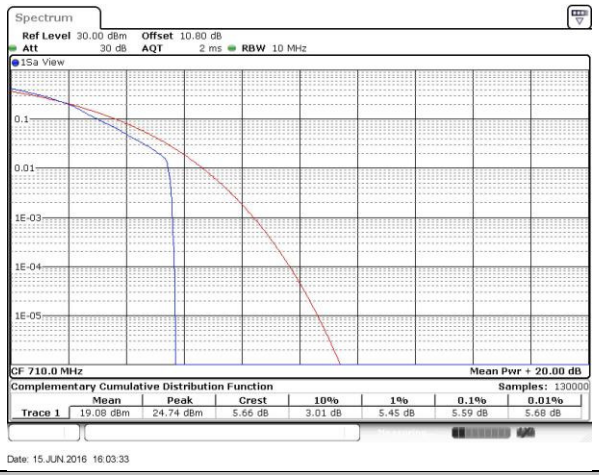
Lowest Channel / 1RB



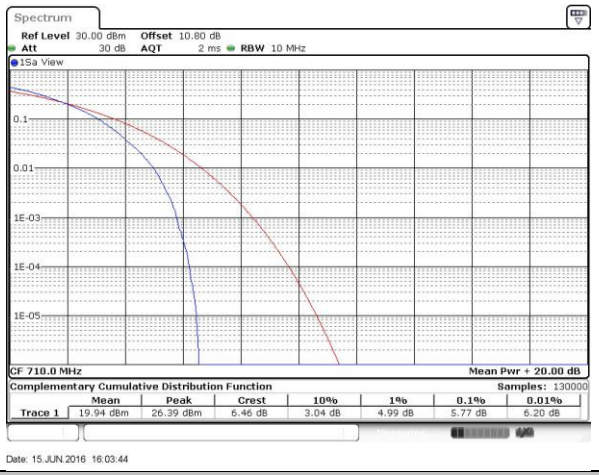
Lowest Channel / Full RB



Middle Channel/ 1RB

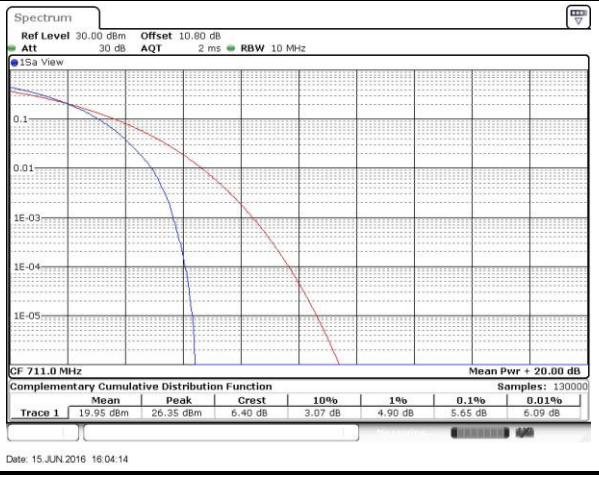


Middle Channel / Full RB



Highest Channel/ 1RB

Highest Channel / Full RB

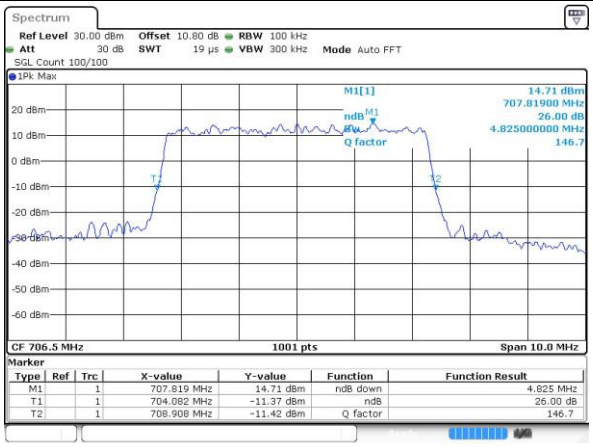


26dB Bandwidth

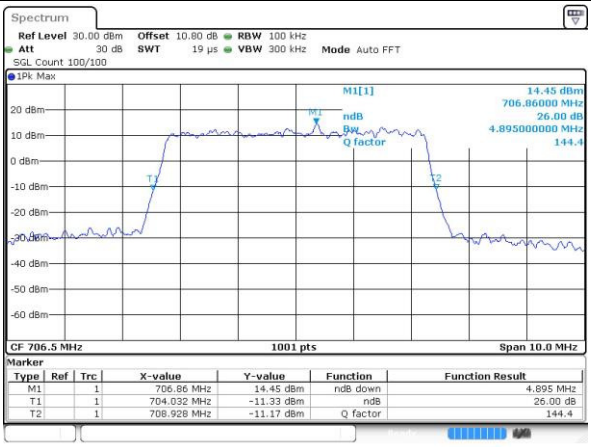
Mode	LTE Band 17 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.83	4.90	9.79	9.87	-	-	-	-
Middle CH	-	-	-	-	4.88	4.86	9.63	9.79	-	-	-	-
Highest CH	-	-	-	-	4.89	4.95	9.63	9.77	-	-	-	-

LTE Band 17

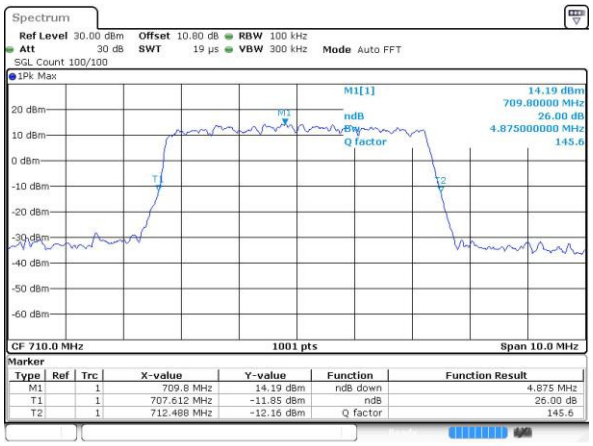
Lowest Channel / 5MHz / QPSK



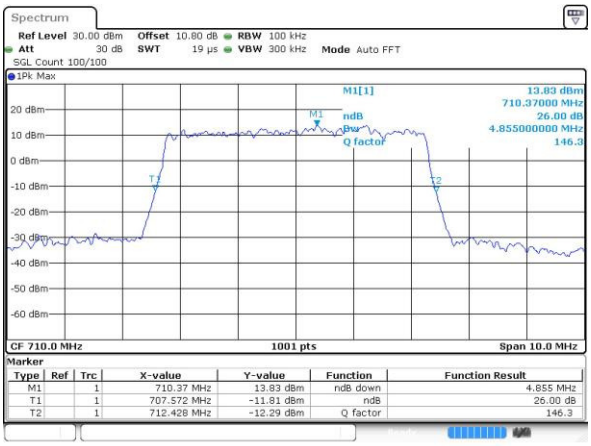
Lowest Channel / 5MHz / 16QAM



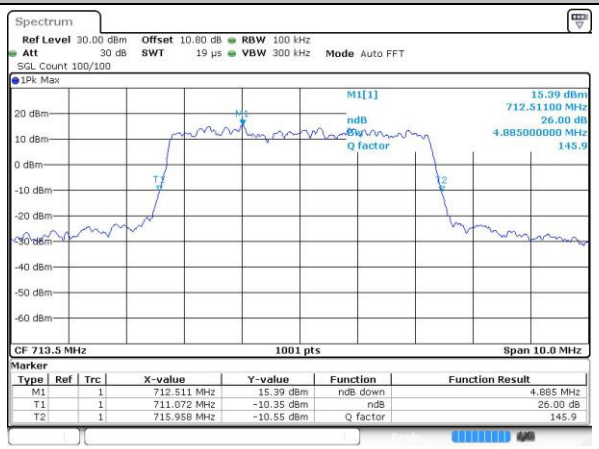
Middle Channel / 5MHz / QPSK



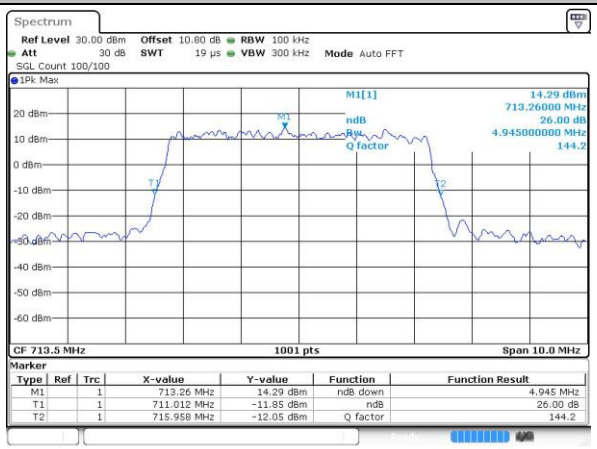
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

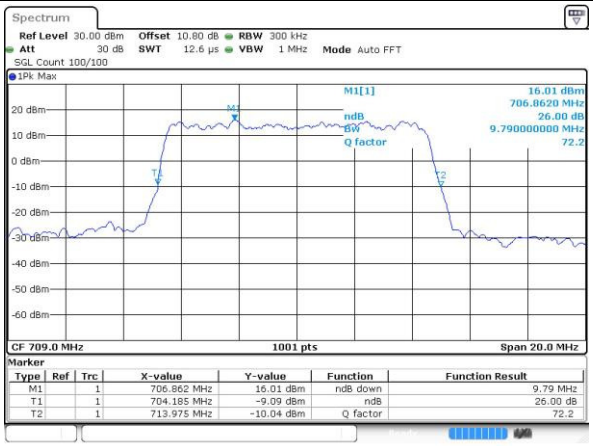


Highest Channel / 5MHz / 16QAM



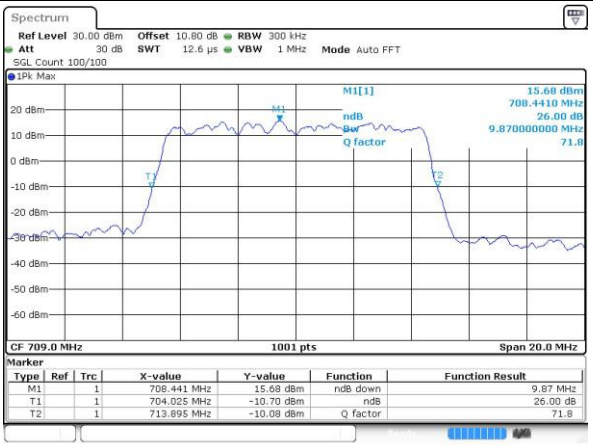
LTE Band 17

Lowest Channel / 10MHz / QPSK



Date: 15.JUN.2016 13:46:25

Lowest Channel / 10MHz / 16QAM



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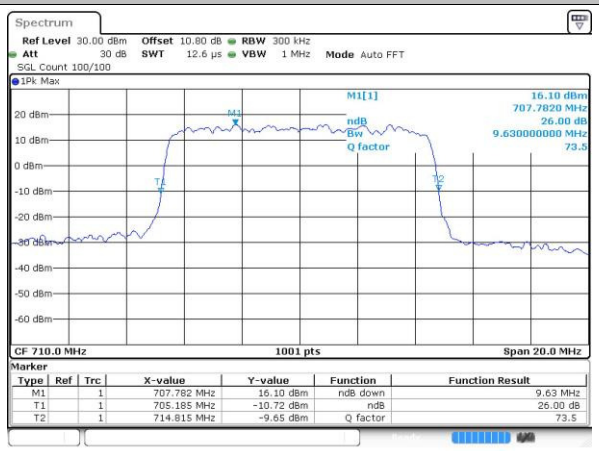
Middle Channel / 10MHz / QPSK



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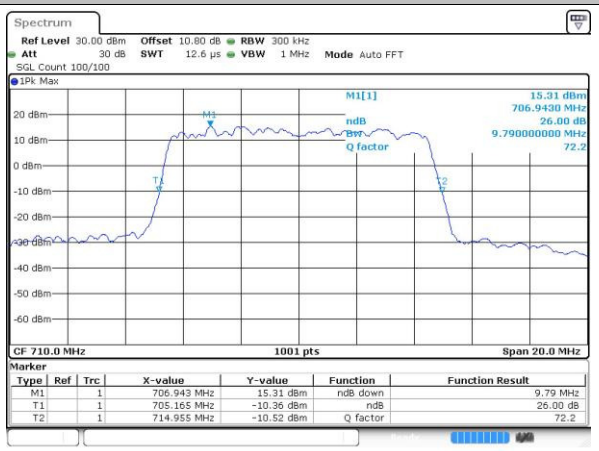
Middle Channel / 10MHz / 16QAM



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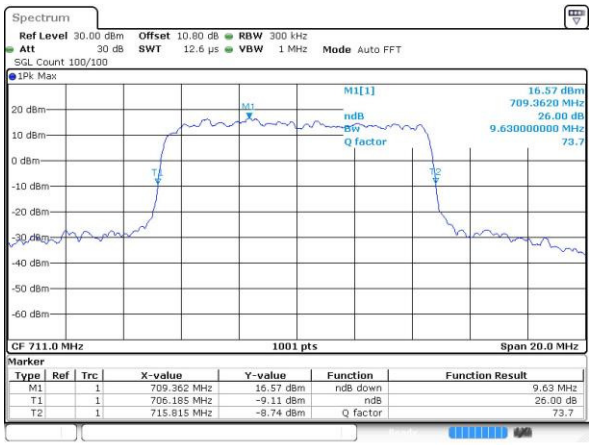
Highest Channel / 10MHz / QPSK



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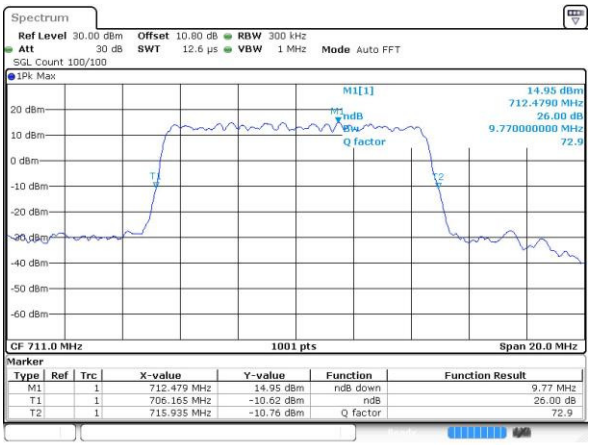
Highest Channel / 10MHz / 16QAM



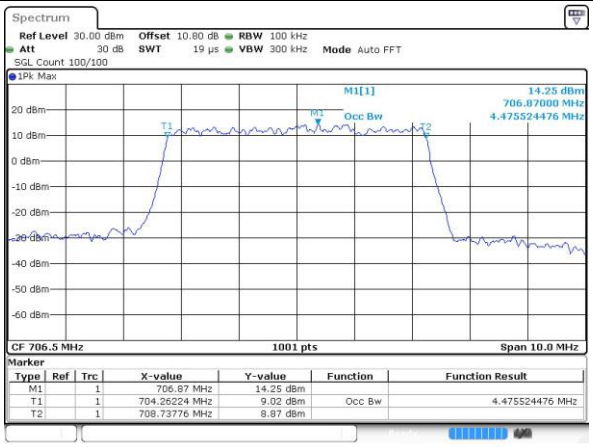
Date: 15.JUN.2016 14:38:53

Occupied Bandwidth

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	-	-	-	-	4.48	4.49	8.95	8.99	-	-	-	-
Middle CH	-	-	-	-	4.47	4.47	8.99	8.99	-	-	-	-
Highest CH	-	-	-	-	4.48	4.5	9.01	9.01	-	-	-	-

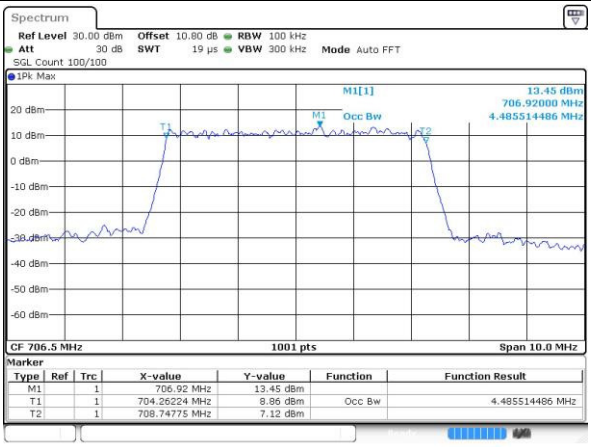
LTE Band 17

Lowest Channel / 5MHz / QPSK



Date: 15.JUN.2016 13:27:53

Lowest Channel / 5MHz / 16QAM



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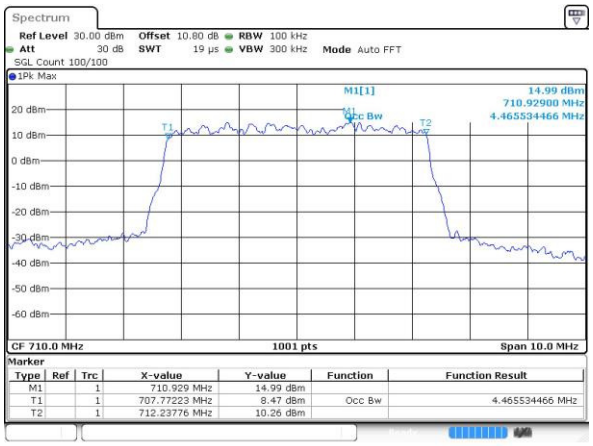
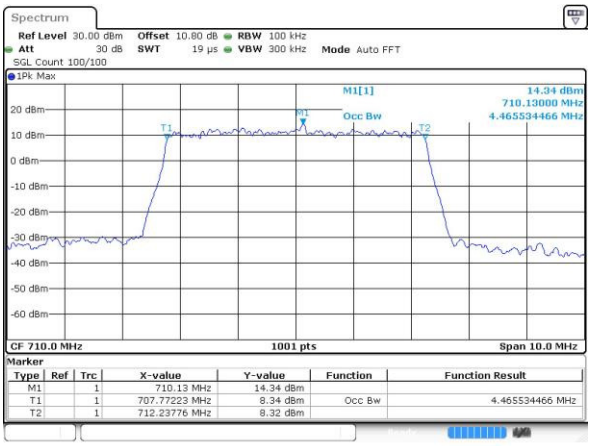
Middle Channel / 5MHz / QPSK



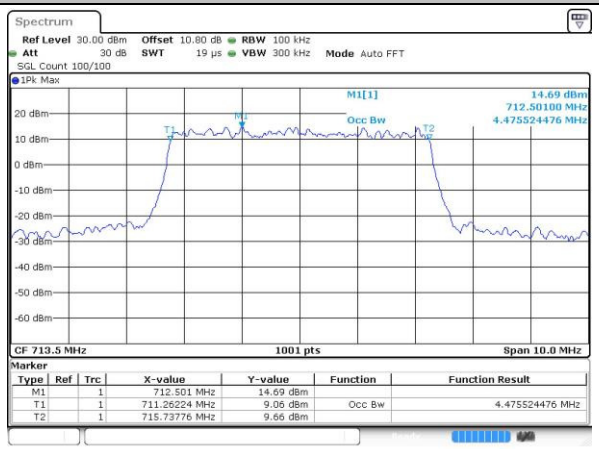
Date: 16.JUN.2016 18:33:39

Middle Channel / 5MHz / 16QAM



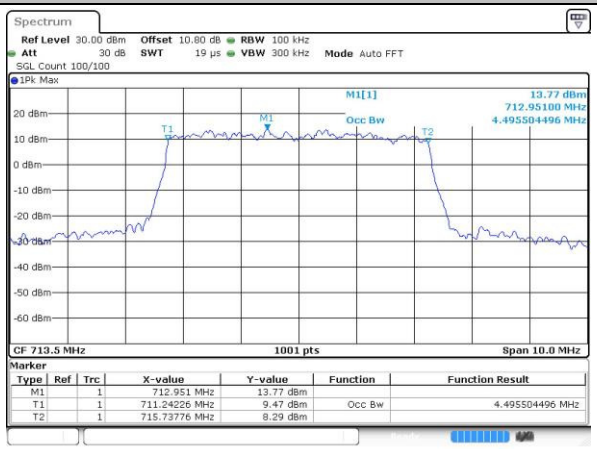
Date: 15.JUN.2016 13:35:45

Highest Channel / 5MHz / QPSK



Date: 15.JUN.2016 13:38:24

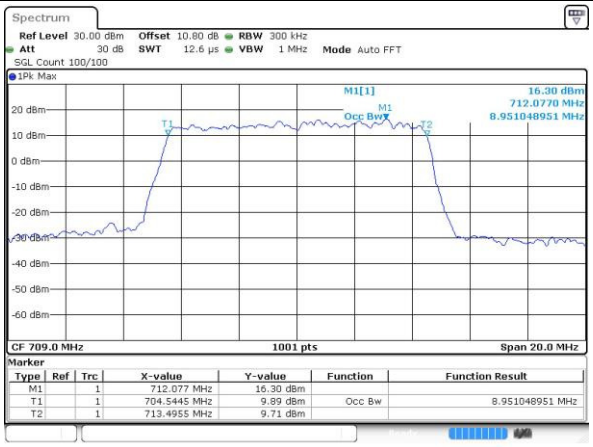
Highest Channel / 5MHz / 16QAM



Date: 15.JUN.2016 13:38:35

LTE Band 17

Lowest Channel / 10MHz / QPSK



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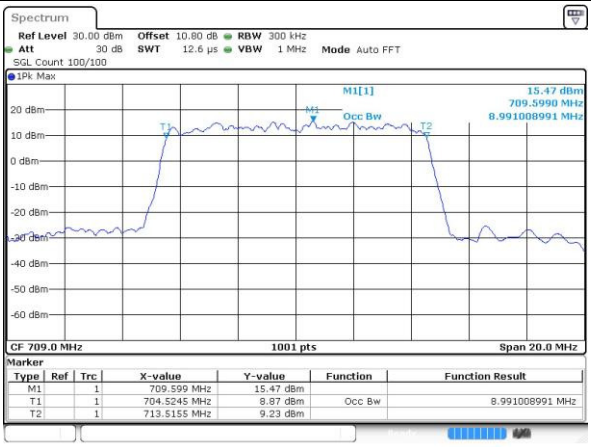
Lowest Channel / 10MHz / 16QAM



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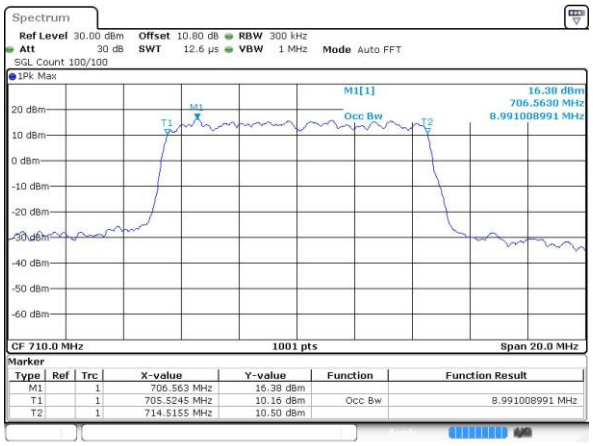
Middle Channel / 10MHz / QPSK



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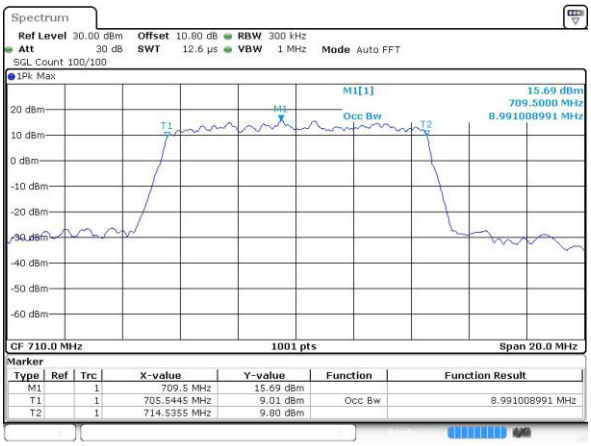
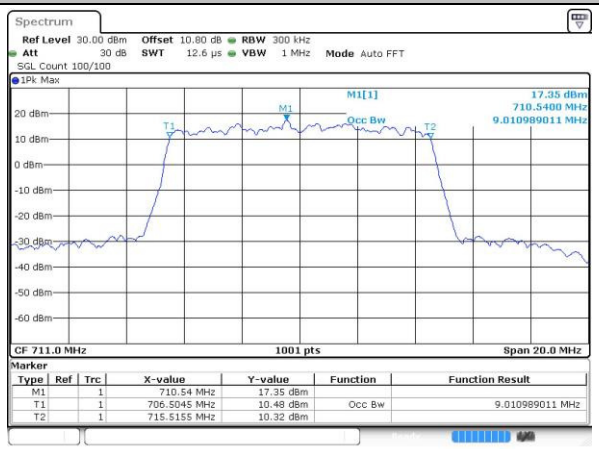
Middle Channel / 10MHz / 16QAM



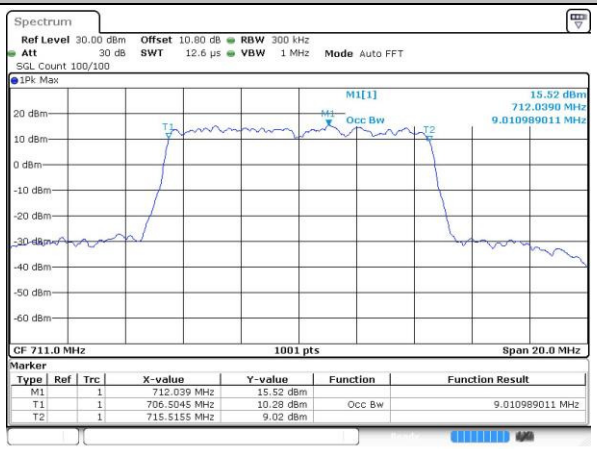
Date: 15.JUN.2016 14:35:43

Highest Channel / 10MHz / QPSK



Date: 15.JUN.2016 14:38:21

Highest Channel / 10MHz / 16QAM

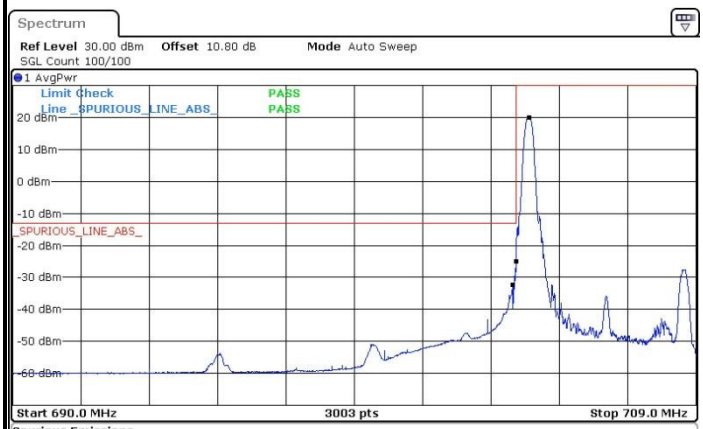


Date: 15.JUN.2016 14:38:31

Conducted Band Edge

LTE Band 17 / 5MHz / QPSK

Lowest Band Edge / 1 RB

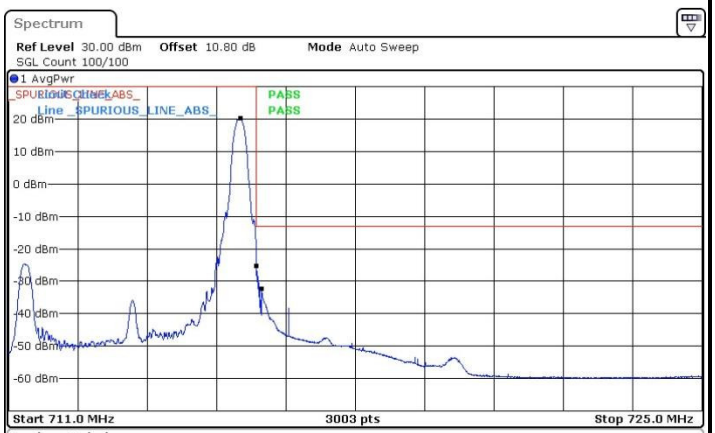


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	703.900 MHz	100.000 kHz	703.89306 MHz	-32.30 dBm	-19.30 dB
703.900 MHz	704.000 MHz	30.000 kHz	703.99905 MHz	-24.99 dBm	-11.99 dB
704.000 MHz	709.000 MHz	100.000 kHz	704.36713 MHz	19.85 dBm	-10.15 dB

Date: 15.JUN.2016 13:29:40

Highest Band Edge / 1 RB

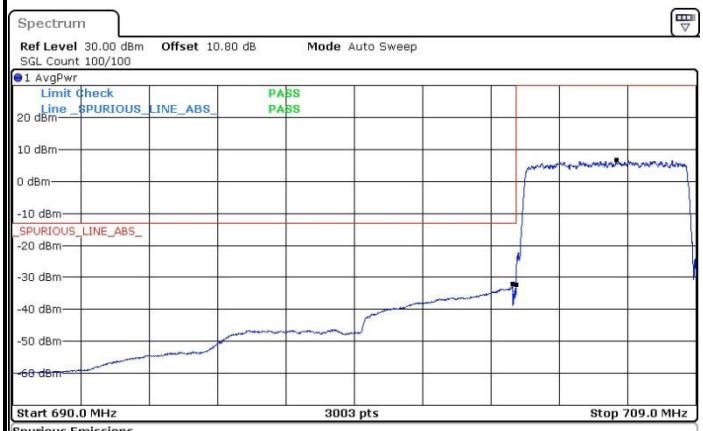


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
711.000 MHz	716.000 MHz	100.000 kHz	715.68282 MHz	20.33 dBm	-9.67 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00225 MHz	-25.19 dBm	-12.19 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.10445 MHz	-32.42 dBm	-19.42 dB

Date: 15.JUN.2016 13:40:08

Lowest Band Edge / Full RB

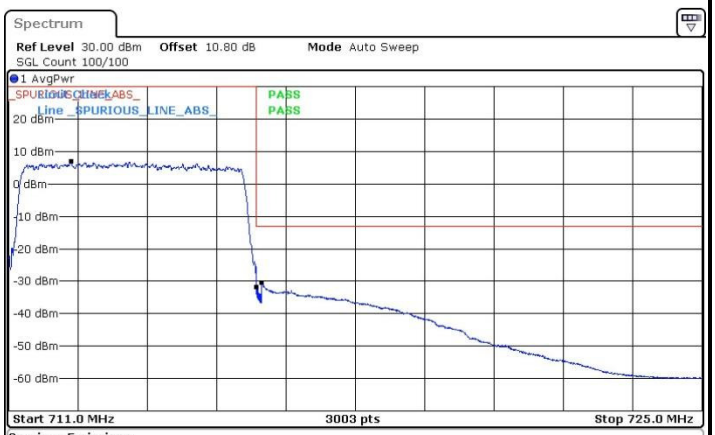


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	703.900 MHz	100.000 kHz	703.89306 MHz	-32.19 dBm	-19.19 dB
703.900 MHz	704.000 MHz	30.000 kHz	703.99825 MHz	-32.42 dBm	-19.42 dB
704.000 MHz	709.000 MHz	100.000 kHz	706.77473 MHz	6.64 dBm	-23.36 dB

Date: 15.JUN.2016 13:32:06

Highest Band Edge / Full RB



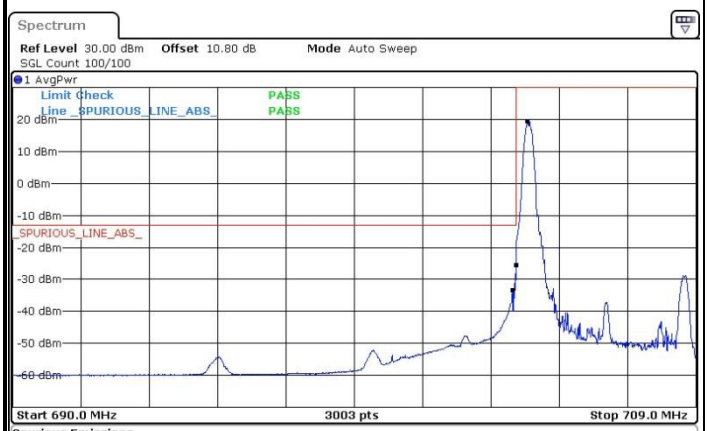
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
711.000 MHz	716.000 MHz	100.000 kHz	712.25624 MHz	6.99 dBm	-23.01 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00215 MHz	-31.72 dBm	-18.72 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.10445 MHz	-30.50 dBm	-17.50 dB

Date: 15.JUN.2016 13:42:33

LTE Band 17 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

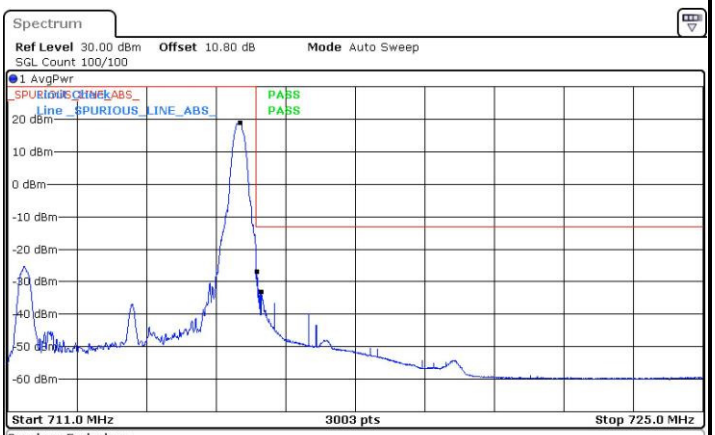


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	703.900 MHz	100.000 kHz	703.89306 MHz	-33.48 dBm	-20.48 dB
703.900 MHz	704.000 MHz	30.000 kHz	703.99965 MHz	-25.52 dBm	-12.52 dB
704.000 MHz	709.000 MHz	100.000 kHz	704.31219 MHz	19.32 dBm	-10.68 dB

Date: 15.JUN.2016 13:30:54

Highest Band Edge / 1 RB

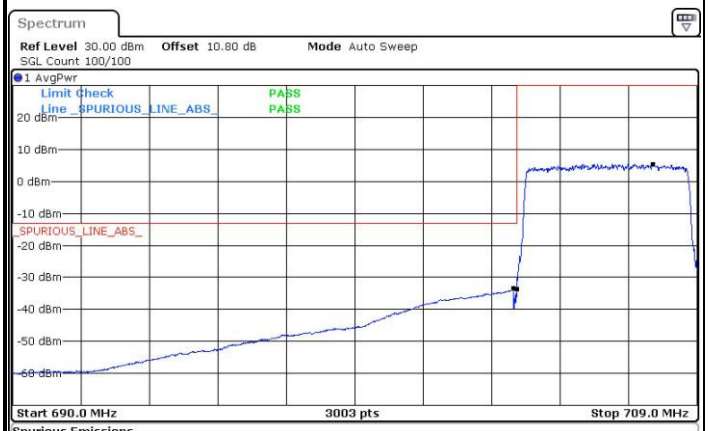


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
711.000 MHz	716.000 MHz	100.000 kHz	715.67283 MHz	18.89 dBm	-11.11 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00914 MHz	-26.78 dBm	-13.78 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.10445 MHz	-33.19 dBm	-20.19 dB

Date: 15.JUN.2016 13:41:20

Lowest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	703.900 MHz	100.000 kHz	703.89306 MHz	-33.40 dBm	-20.40 dB
703.900 MHz	704.000 MHz	30.000 kHz	703.99915 MHz	-33.71 dBm	-20.71 dB
704.000 MHz	709.000 MHz	100.000 kHz	707.76374 MHz	5.32 dBm	-24.68 dB

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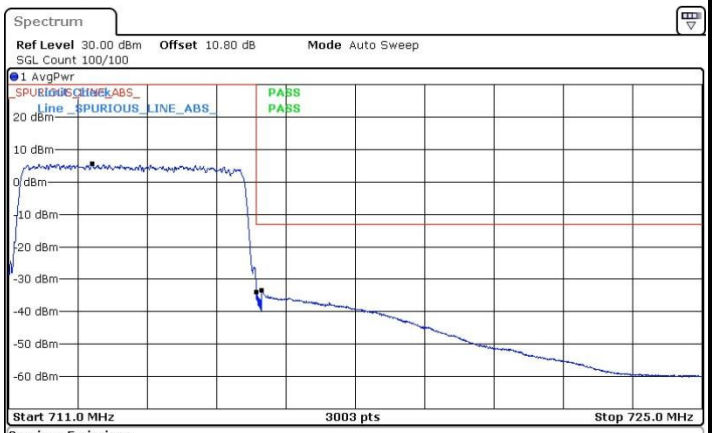
Highest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
711.000 MHz	716.000 MHz	100.000 kHz	712.68581 MHz	5.65 dBm	-24.35 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00195 MHz	-33.87 dBm	-20.87 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.10445 MHz	-33.54 dBm	-20.54 dB

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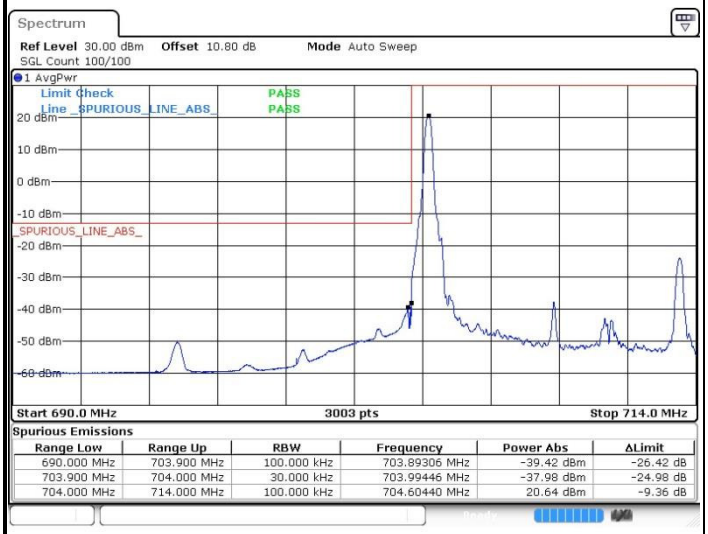
LTE Band 17 / 10MHz / QPSK

Lowest Band Edge / 1 RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	703.900 MHz	100.000 kHz	703.89306 MHz	-39.42 dBm	-26.42 dB
703.900 MHz	704.000 MHz	30.000 kHz	703.99446 MHz	-37.98 dBm	-24.98 dB
704.000 MHz	714.000 MHz	100.000 kHz	704.60440 MHz	20.64 dBm	-9.36 dB

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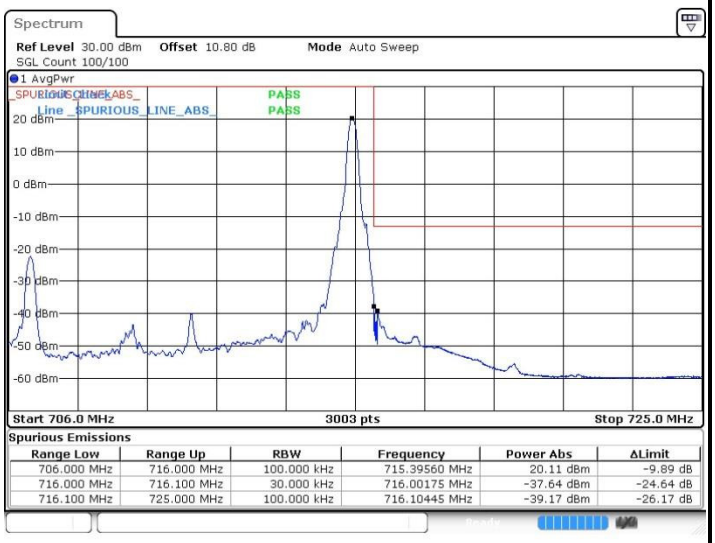
Highest Band Edge / 1 RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
706.000 MHz	716.000 MHz	100.000 kHz	715.39560 MHz	20.11 dBm	-9.89 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00175 MHz	-37.64 dBm	-24.64 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.10445 MHz	-39.17 dBm	-26.17 dB

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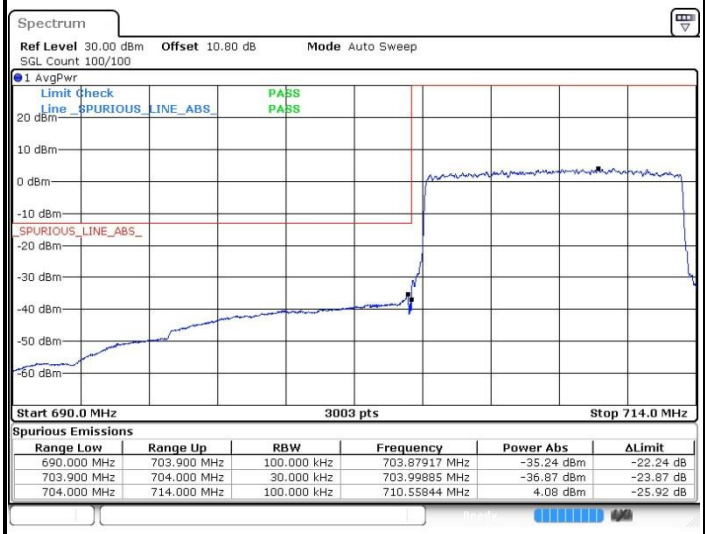
Lowest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	703.900 MHz	100.000 kHz	703.87917 MHz	-35.24 dBm	-22.24 dB
703.900 MHz	704.000 MHz	30.000 kHz	703.99885 MHz	-36.87 dBm	-23.87 dB
704.000 MHz	714.000 MHz	100.000 kHz	710.55844 MHz	4.08 dBm	-25.92 dB

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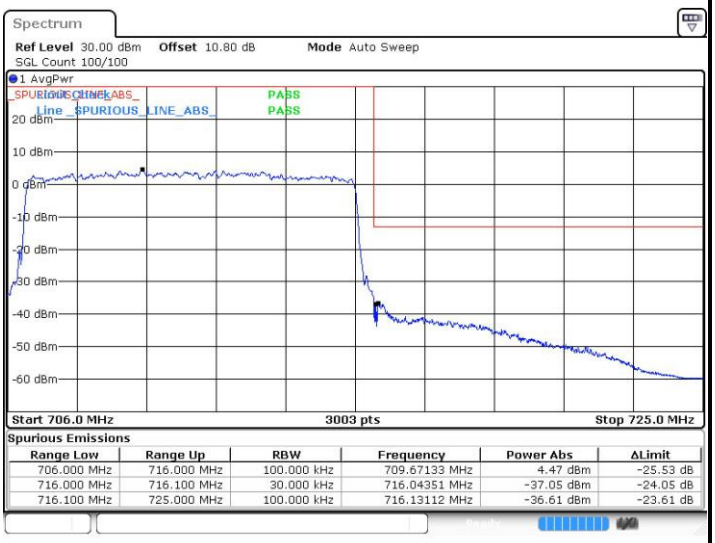
Highest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
706.000 MHz	716.000 MHz	100.000 kHz	709.67133 MHz	4.47 dBm	-25.53 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.04351 MHz	-37.05 dBm	-24.05 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.13112 MHz	-36.61 dBm	-23.61 dB

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