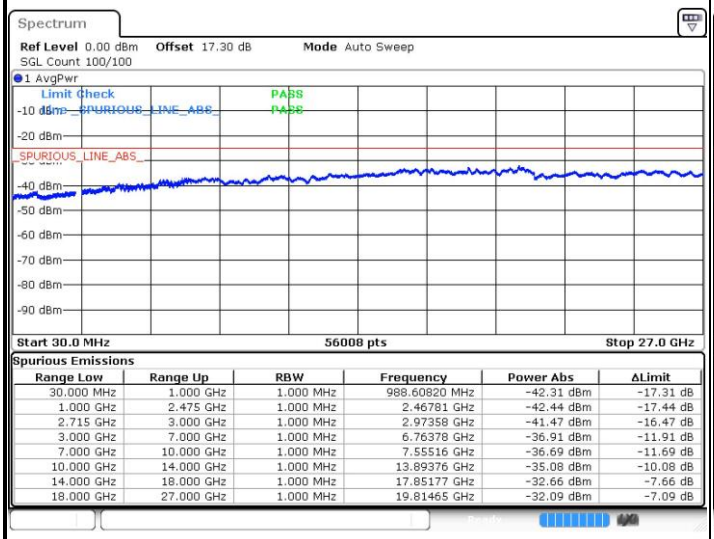
LTE Band 41 / 5MHz

Lowest Channel / 64QAM

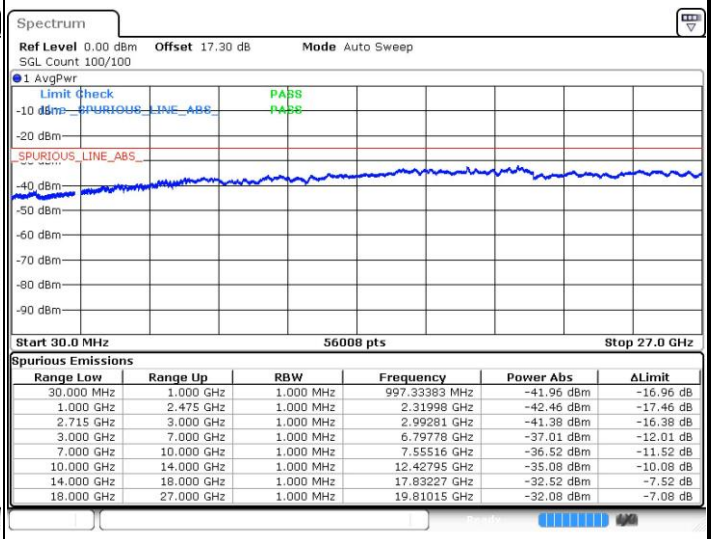


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	988.60820 MHz	-42.31 dBm	-17.31 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.46781 GHz	-42.44 dBm	-17.44 dB
2.715 GHz	3.000 GHz	1.000 MHz	2.97358 GHz	-41.47 dBm	-16.47 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.76378 GHz	-36.91 dBm	-11.91 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.55516 GHz	-36.69 dBm	-11.69 dB
10.000 GHz	14.000 GHz	1.000 MHz	13.89376 GHz	-35.08 dBm	-10.08 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.85177 GHz	-32.66 dBm	-7.66 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.81465 GHz	-32.09 dBm	-7.09 dB

Date: 11.SEP.2018 16:28:39

Middle Channel / 64QAM

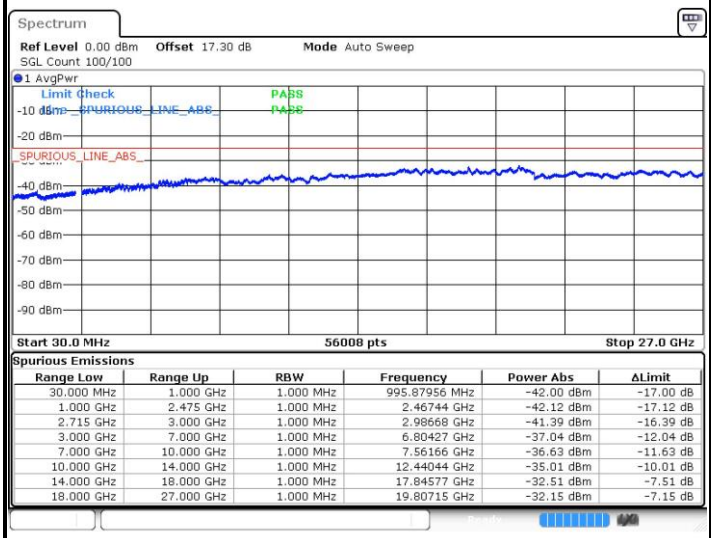


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	997.33383 MHz	-41.96 dBm	-16.96 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.31998 GHz	-42.46 dBm	-17.46 dB
2.715 GHz	3.000 GHz	1.000 MHz	2.99281 GHz	-41.38 dBm	-16.38 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.79778 GHz	-37.01 dBm	-12.01 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.55516 GHz	-36.52 dBm	-11.52 dB
10.000 GHz	14.000 GHz	1.000 MHz	12.42795 GHz	-35.08 dBm	-10.08 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.83227 GHz	-32.52 dBm	-7.52 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.81015 GHz	-32.08 dBm	-7.08 dB

Date: 11.SEP.2018 16:29:30

Highest Channel / 64QAM



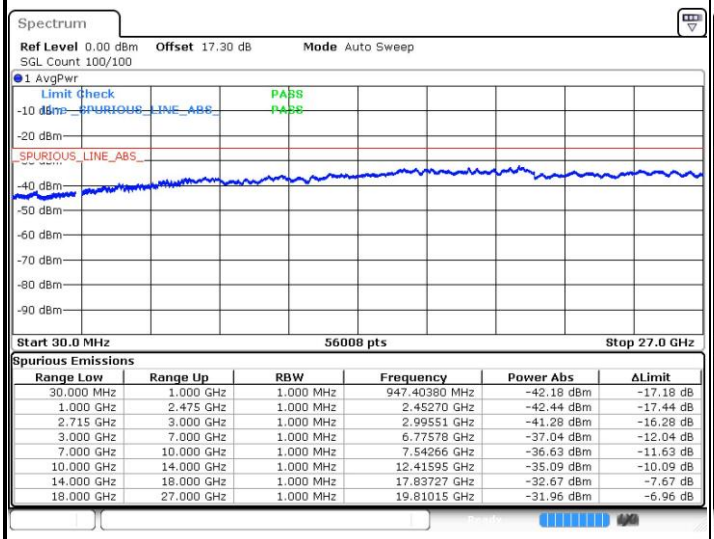
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	995.87956 MHz	-42.00 dBm	-17.00 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.46744 GHz	-42.12 dBm	-17.12 dB
2.715 GHz	3.000 GHz	1.000 MHz	2.98668 GHz	-41.39 dBm	-16.39 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.80427 GHz	-37.04 dBm	-12.04 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.56166 GHz	-36.63 dBm	-11.63 dB
10.000 GHz	14.000 GHz	1.000 MHz	12.44044 GHz	-35.01 dBm	-10.01 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.84577 GHz	-32.51 dBm	-7.51 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.80715 GHz	-32.15 dBm	-7.15 dB

Date: 11.SEP.2018 16:30:20

LTE Band 41 / 10MHz

Lowest Channel / 64QAM

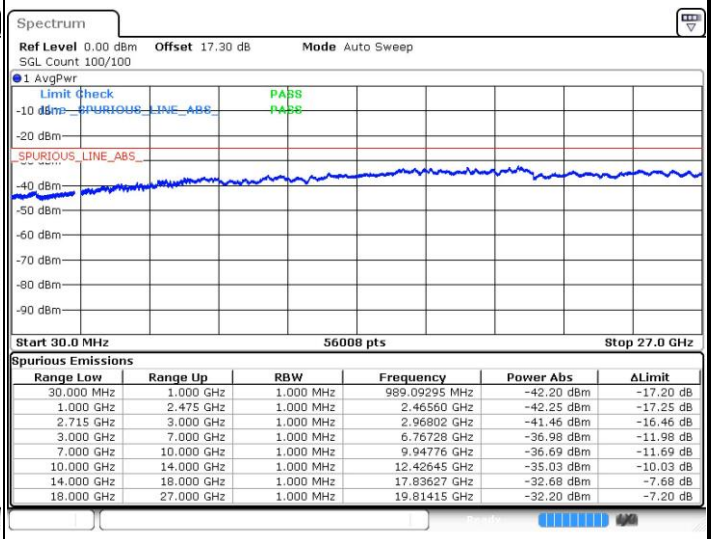


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	947.40380 MHz	-42.18 dBm	-17.18 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.45270 GHz	-42.44 dBm	-17.44 dB
2.715 GHz	3.000 GHz	1.000 MHz	2.99551 GHz	-41.28 dBm	-16.28 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.77578 GHz	-37.04 dBm	-12.04 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.54266 GHz	-36.63 dBm	-11.63 dB
10.000 GHz	14.000 GHz	1.000 MHz	12.41595 GHz	-35.09 dBm	-10.09 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.83727 GHz	-32.67 dBm	-7.67 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.81015 GHz	-31.96 dBm	-6.96 dB

Date: 11.SEP.2018 16:31:11

Middle Channel / 64QAM

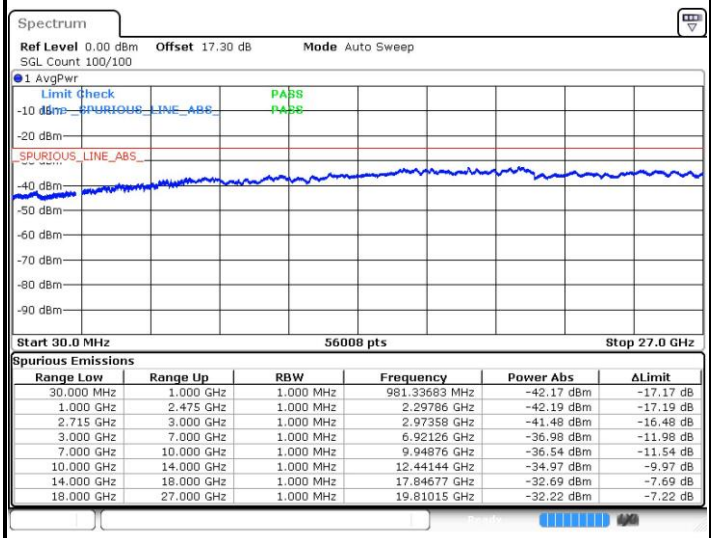


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	989.09295 MHz	-42.20 dBm	-17.20 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.46560 GHz	-42.25 dBm	-17.25 dB
2.715 GHz	3.000 GHz	1.000 MHz	2.96802 GHz	-41.46 dBm	-16.46 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.76728 GHz	-36.98 dBm	-11.98 dB
7.000 GHz	10.000 GHz	1.000 MHz	9.94776 GHz	-36.69 dBm	-11.69 dB
10.000 GHz	14.000 GHz	1.000 MHz	12.42645 GHz	-35.03 dBm	-10.03 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.83627 GHz	-32.68 dBm	-7.68 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.81415 GHz	-32.20 dBm	-7.20 dB

Date: 11.SEP.2018 16:32:02

Highest Channel / 64QAM



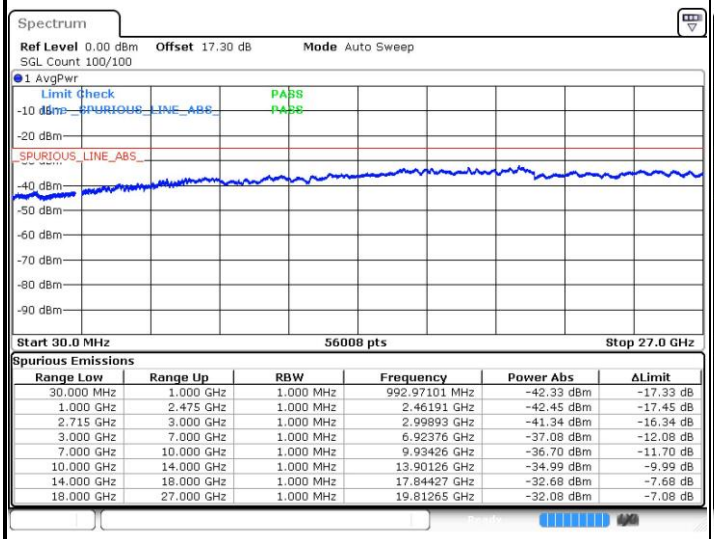
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	981.33683 MHz	-42.17 dBm	-17.17 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.29786 GHz	-42.19 dBm	-17.19 dB
2.715 GHz	3.000 GHz	1.000 MHz	2.97358 GHz	-41.48 dBm	-16.48 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.92126 GHz	-36.98 dBm	-11.98 dB
7.000 GHz	10.000 GHz	1.000 MHz	9.94876 GHz	-36.54 dBm	-11.54 dB
10.000 GHz	14.000 GHz	1.000 MHz	12.44144 GHz	-34.97 dBm	-9.97 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.84677 GHz	-32.69 dBm	-7.69 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.81015 GHz	-32.22 dBm	-7.22 dB

Date: 11.SEP.2018 16:32:52

LTE Band 41 / 15MHz

Lowest Channel / 64QAM

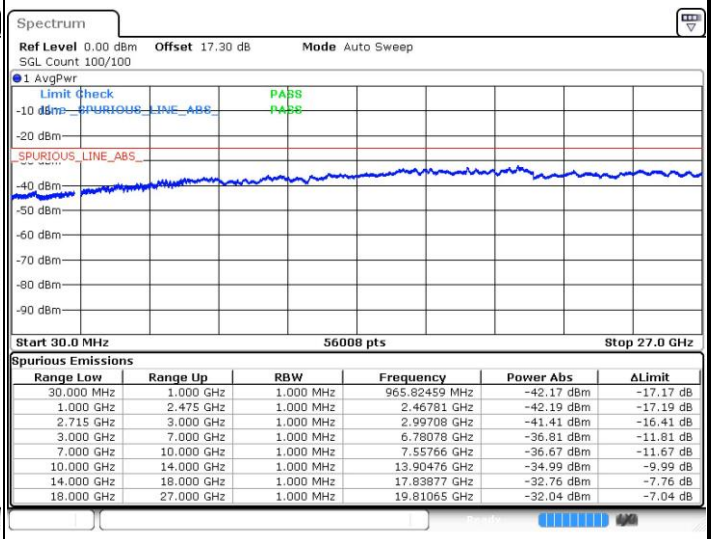


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	992.97101 MHz	-42.33 dBm	-17.33 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.46191 GHz	-42.45 dBm	-17.45 dB
2.715 GHz	3.000 GHz	1.000 MHz	2.99893 GHz	-41.34 dBm	-16.34 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.92376 GHz	-37.08 dBm	-12.08 dB
7.000 GHz	10.000 GHz	1.000 MHz	9.93426 GHz	-36.70 dBm	-11.70 dB
10.000 GHz	14.000 GHz	1.000 MHz	13.90126 GHz	-34.99 dBm	-9.99 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.84427 GHz	-32.68 dBm	-7.68 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.81265 GHz	-32.08 dBm	-7.08 dB

Date: 11.SEP.2018 16:33:43

Middle Channel / 64QAM

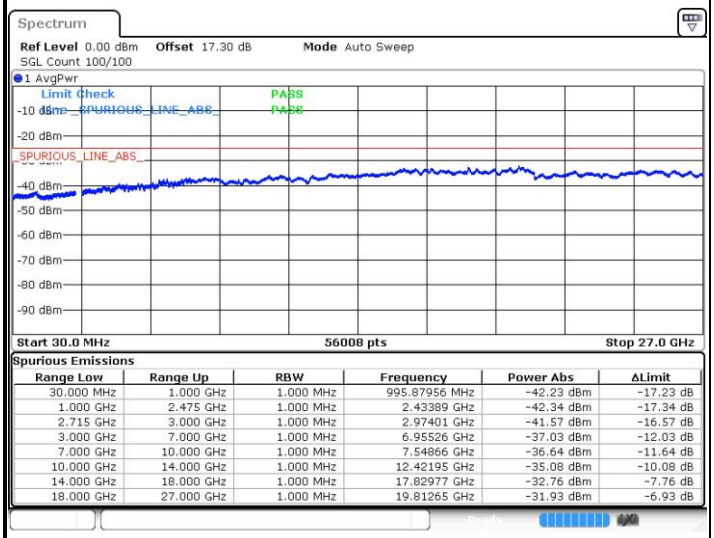


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	965.82459 MHz	-42.17 dBm	-17.17 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.46781 GHz	-42.19 dBm	-17.19 dB
2.715 GHz	3.000 GHz	1.000 MHz	2.99708 GHz	-41.41 dBm	-16.41 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.78078 GHz	-36.81 dBm	-11.81 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.55766 GHz	-36.67 dBm	-11.67 dB
10.000 GHz	14.000 GHz	1.000 MHz	13.90476 GHz	-34.99 dBm	-9.99 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.83877 GHz	-32.76 dBm	-7.76 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.81065 GHz	-32.04 dBm	-7.04 dB

Date: 11.SEP.2018 16:34:34

Highest Channel / 64QAM



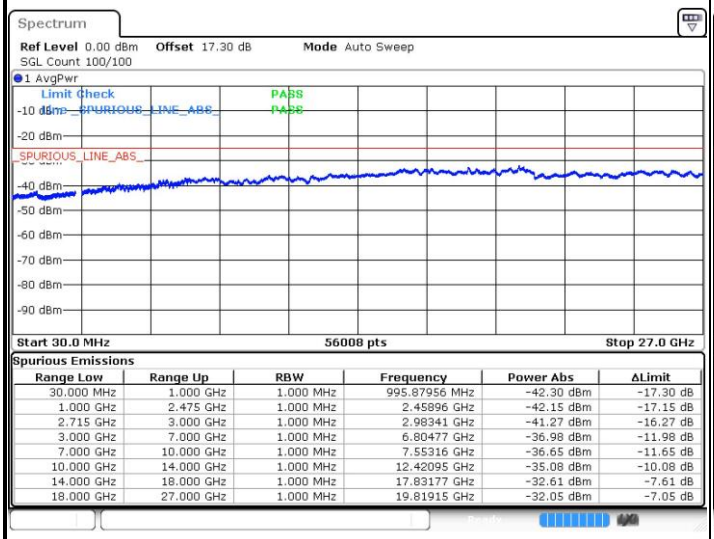
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	995.87956 MHz	-42.23 dBm	-17.23 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.43389 GHz	-42.34 dBm	-17.34 dB
2.715 GHz	3.000 GHz	1.000 MHz	2.97401 GHz	-41.57 dBm	-16.57 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.95526 GHz	-37.03 dBm	-12.03 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.54866 GHz	-36.64 dBm	-11.64 dB
10.000 GHz	14.000 GHz	1.000 MHz	12.42195 GHz	-35.08 dBm	-10.08 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.82977 GHz	-32.76 dBm	-7.76 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.81265 GHz	-31.93 dBm	-6.93 dB

Date: 11.SEP.2018 16:35:24

LTE Band 41 / 20MHz

Lowest Channel / 64QAM

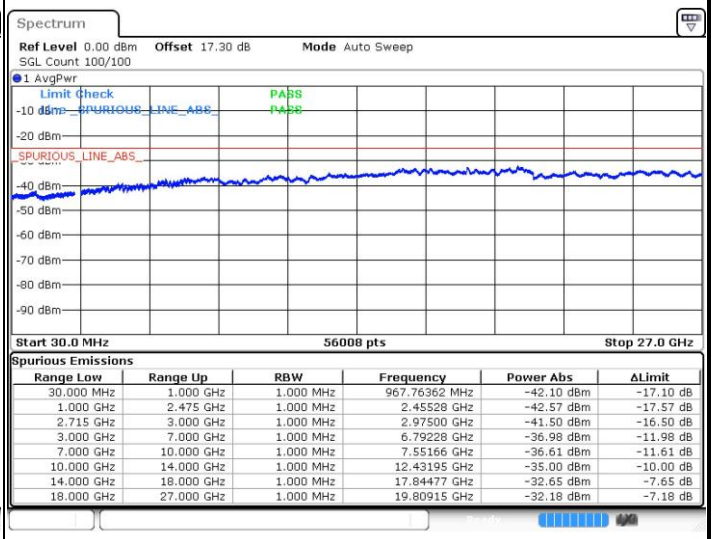


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	995.87956 MHz	-42.30 dBm	-17.30 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.45896 GHz	-42.15 dBm	-17.15 dB
2.715 GHz	3.000 GHz	1.000 MHz	2.98341 GHz	-41.27 dBm	-16.27 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.80477 GHz	-36.98 dBm	-11.98 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.55316 GHz	-36.65 dBm	-11.65 dB
10.000 GHz	14.000 GHz	1.000 MHz	12.42095 GHz	-35.08 dBm	-10.08 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.83177 GHz	-32.61 dBm	-7.61 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.81915 GHz	-32.05 dBm	-7.05 dB

Date: 11.SEP.2018 17:36:39

Middle Channel / 64QAM

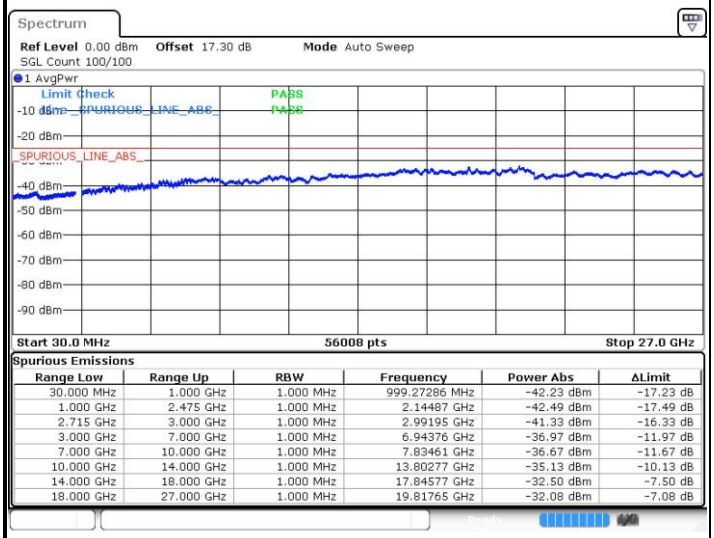


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	967.76362 MHz	-42.10 dBm	-17.10 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.45528 GHz	-42.57 dBm	-17.57 dB
2.715 GHz	3.000 GHz	1.000 MHz	2.97500 GHz	-41.50 dBm	-16.50 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.79228 GHz	-36.98 dBm	-11.98 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.55166 GHz	-36.61 dBm	-11.61 dB
10.000 GHz	14.000 GHz	1.000 MHz	12.43195 GHz	-35.00 dBm	-10.00 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.84477 GHz	-32.65 dBm	-7.65 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.80915 GHz	-32.18 dBm	-7.18 dB

Date: 11.SEP.2018 17:37:30

Highest Channel / 64QAM



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	999.27286 MHz	-42.23 dBm	-17.23 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.14487 GHz	-42.49 dBm	-17.49 dB
2.715 GHz	3.000 GHz	1.000 MHz	2.99195 GHz	-41.33 dBm	-16.33 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.94376 GHz	-36.97 dBm	-11.97 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.83461 GHz	-36.67 dBm	-11.67 dB
10.000 GHz	14.000 GHz	1.000 MHz	13.80277 GHz	-35.13 dBm	-10.13 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.84577 GHz	-32.50 dBm	-7.50 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.81765 GHz	-32.08 dBm	-7.08 dB

Date: 11.SEP.2018 17:38:21

Frequency Stability

Test Conditions		LTE Band 41 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0044	PASS
40	Normal Voltage	0.0048	
30	Normal Voltage	0.0047	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0058	
0	Normal Voltage	0.0005	
-10	Normal Voltage	0.0049	
-20	Normal Voltage	0.0056	
-30	Normal Voltage	0.0048	
20	Maximum Voltage	0.0005	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0003	

Note:

1. Normal Voltage =3.8 V.；Battery End Point (BEP) =3.5 V.；Maximum Voltage =4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

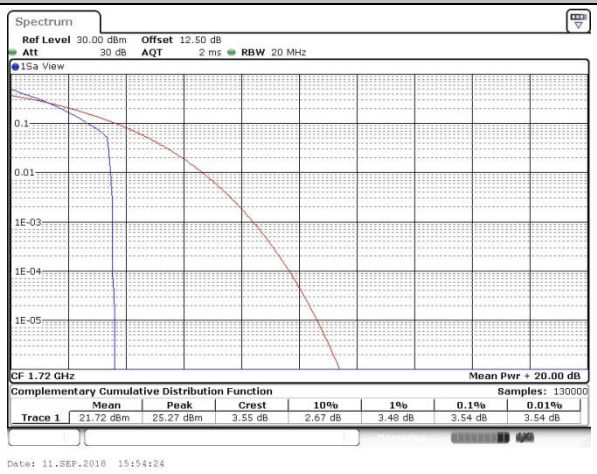
LTE Band 66

Peak-to-Average Ratio

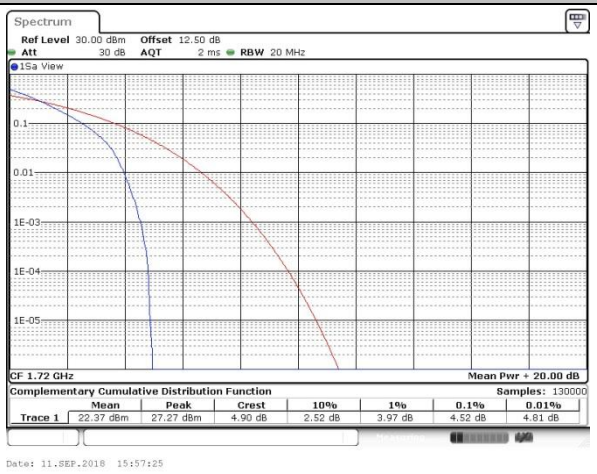
Mode	LTE Band 66 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.54	4.52	4.99	5.94	PASS
Middle CH	3.45	4.52	4.9	5.91	
Highest CH	3.48	4.41	5.25	5.71	
Mode	LTE Band 66 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	6.38	6.46	-	-	PASS
Middle CH	6.17	6.49	-	-	
Highest CH	6.06	6.41	-	-	

LTE Band 66 / 20MHz / QPSK

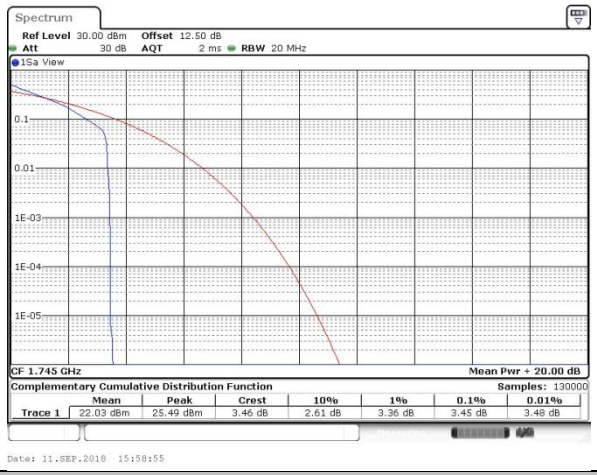
Lowest Channel / 1RB



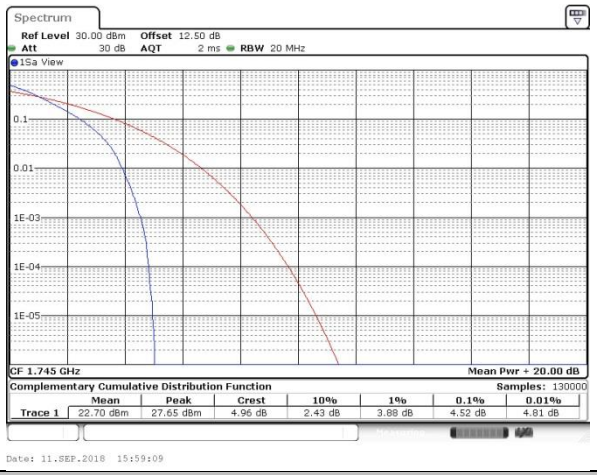
Lowest Channel / Full RB



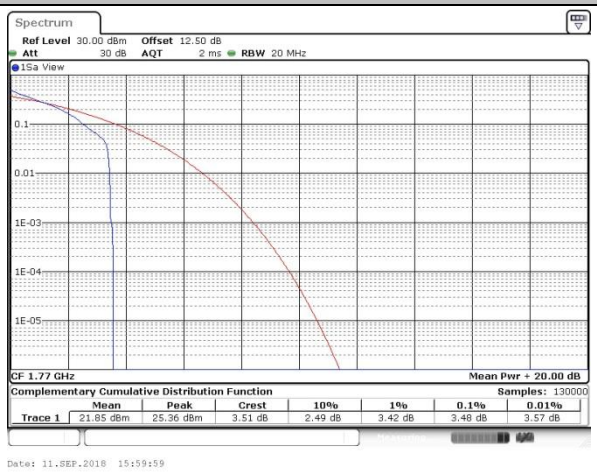
Middle Channel / 1RB



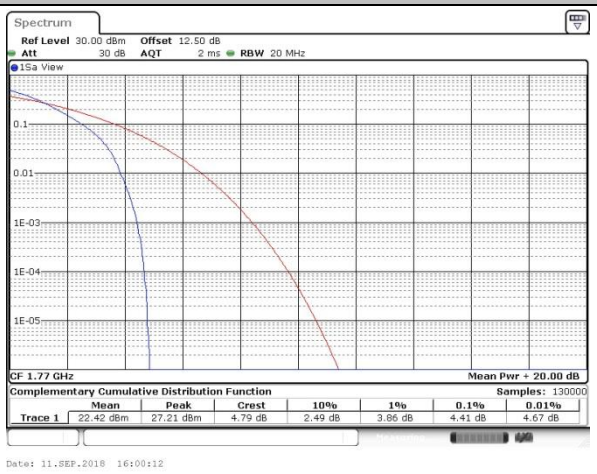
Middle Channel / Full RB



Highest Channel / 1RB

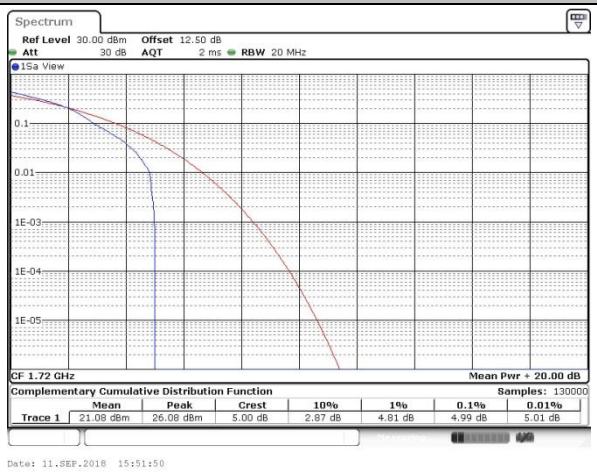


Highest Channel / Full RB

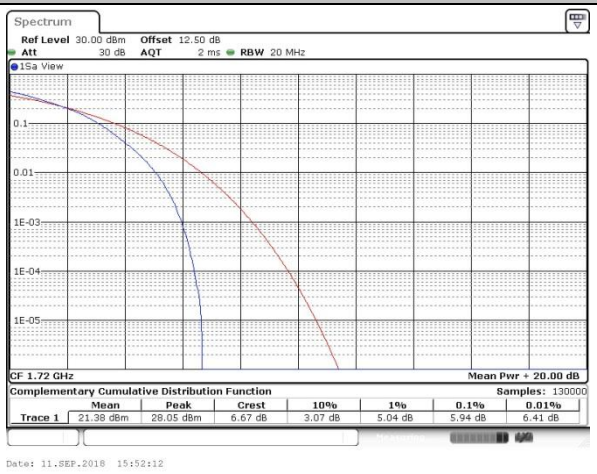


LTE Band 66 / 20MHz / 16QAM

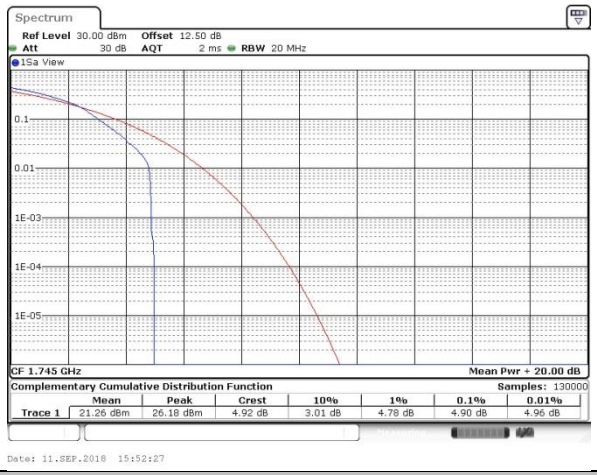
Lowest Channel / 1RB



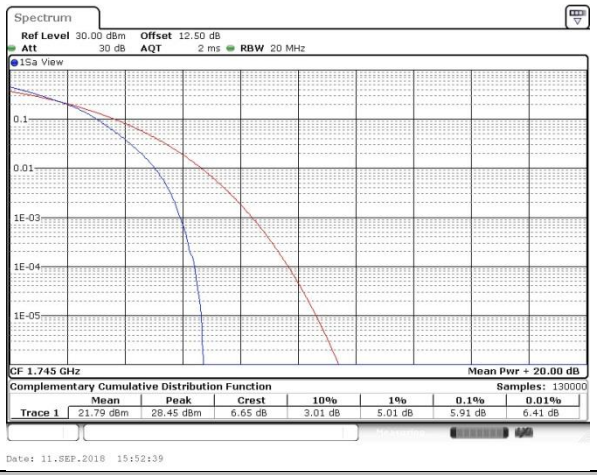
Lowest Channel / Full RB



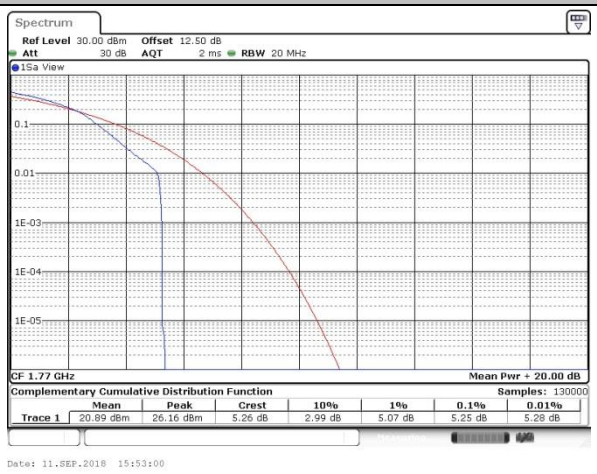
Middle Channel / 1RB



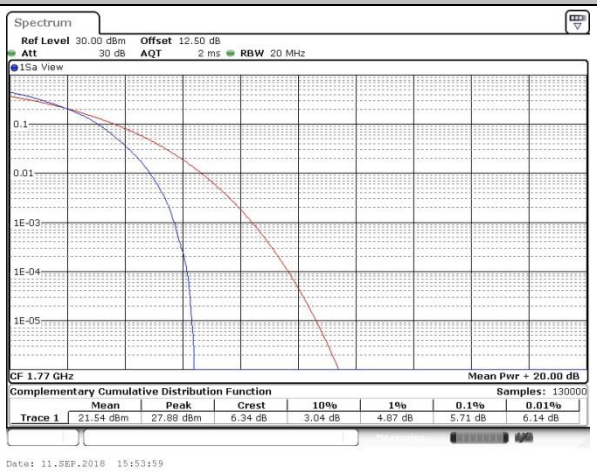
Middle Channel / Full RB



Highest Channel / 1RB

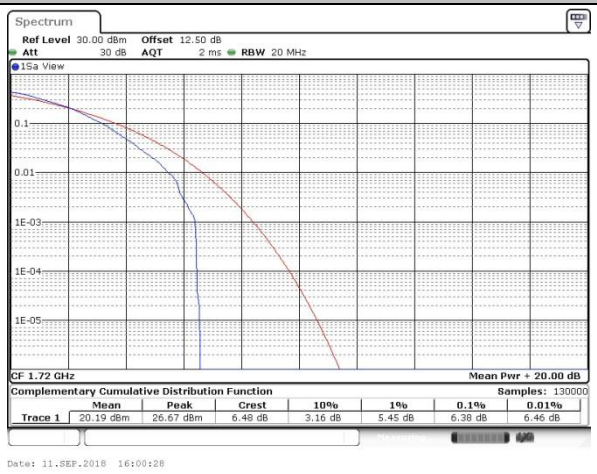


Highest Channel / Full RB

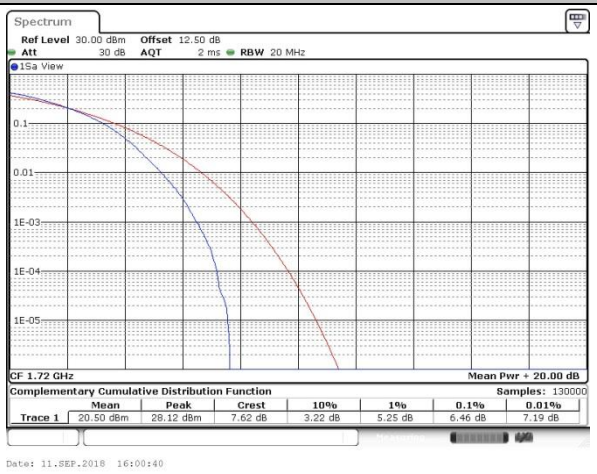


LTE Band 66 / 20MHz / 64QAM

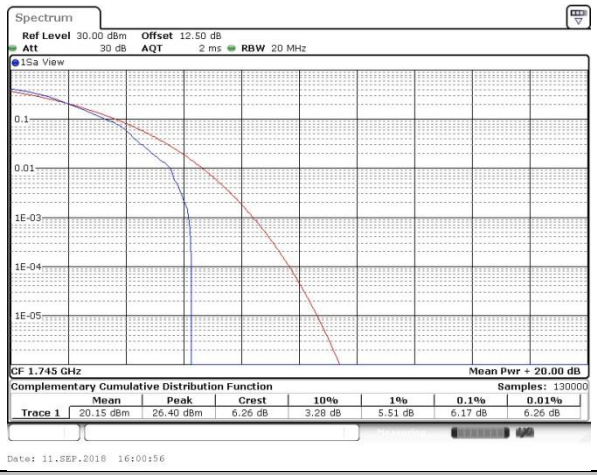
Lowest Channel / 1RB



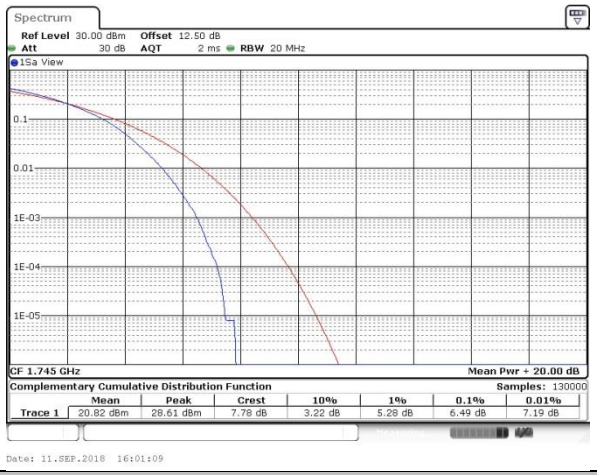
Lowest Channel / Full RB



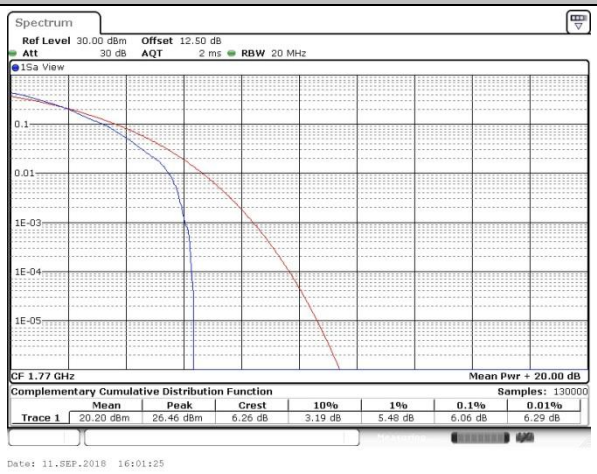
Middle Channel / 1RB



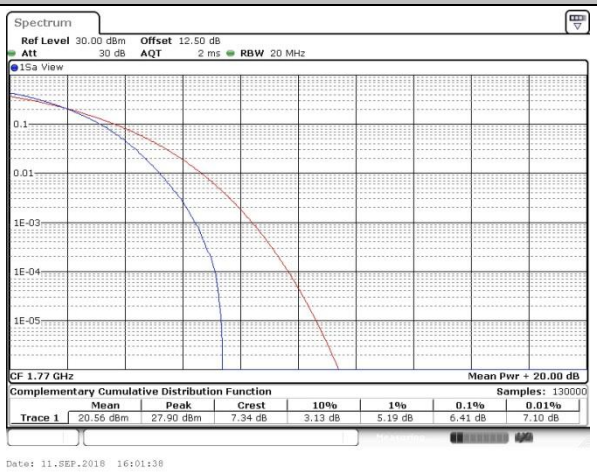
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB

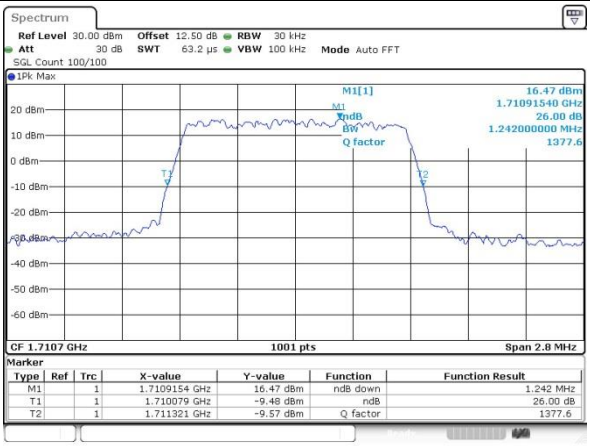


26dB Bandwidth

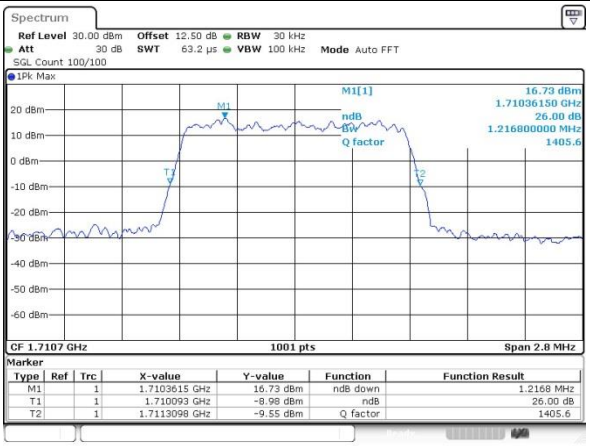
Mode	LTE Band 66 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.24	1.22	3.02	3.02	4.90	4.89	9.81	9.75	14.42	14.24	20.34	20.10
Middle CH	1.24	1.22	3.05	3.02	4.91	4.94	9.83	9.71	14.24	14.51	20.22	20.10
Highest CH	1.24	1.22	3.06	2.99	4.89	4.84	9.71	9.81	14.48	14.39	20.02	20.22
Mode	LTE Band 66 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.24	-	3.02	-	4.93	-	9.87	-	14.51	-	20.22	-
Middle CH	1.21	-	3.02	-	4.87	-	9.91	-	14.27	-	20.14	-
Highest CH	1.23	-	3.03	-	4.85	-	9.71	-	14.51	-	20.30	-

LTE Band 66

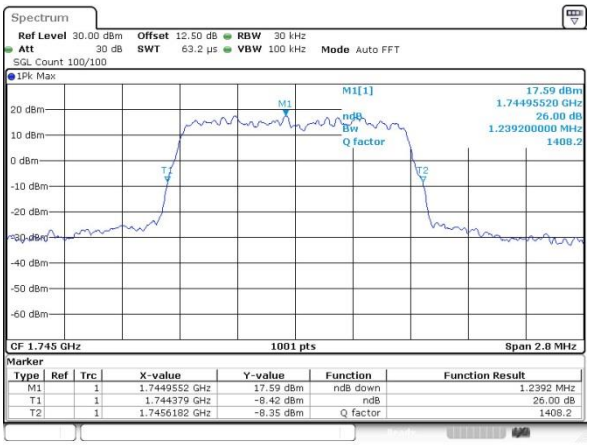
Lowest Channel / 1.4MHz / QPSK



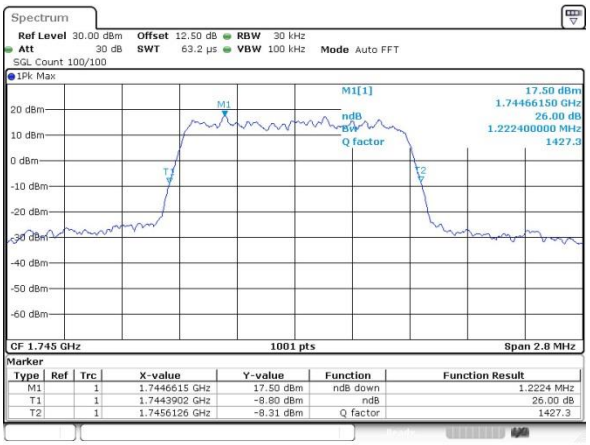
Lowest Channel / 1.4MHz / 16QAM



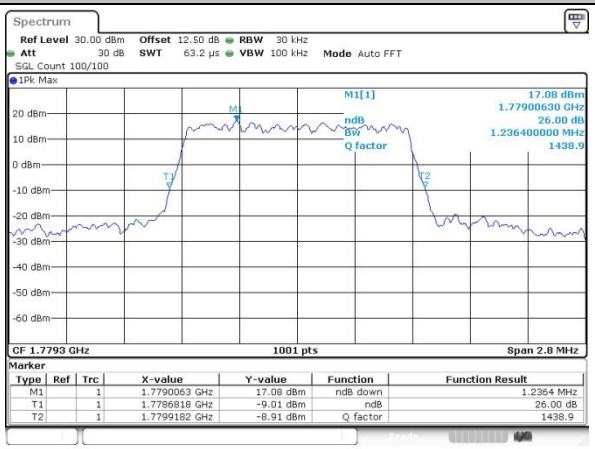
Middle Channel / 1.4MHz / QPSK



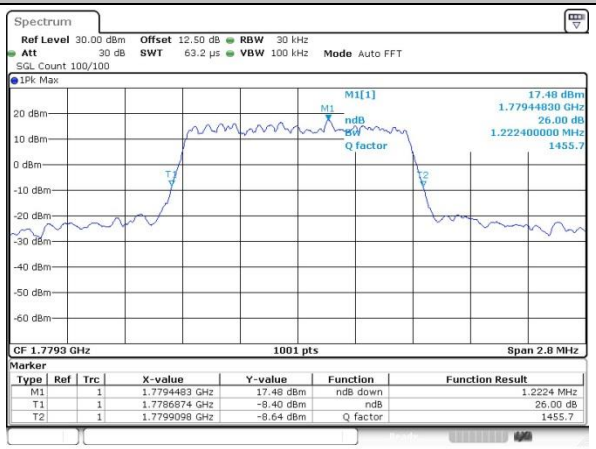
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK

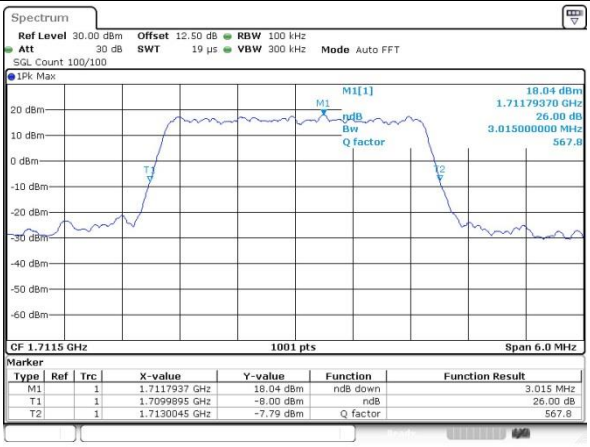


Highest Channel / 1.4MHz / 16QAM

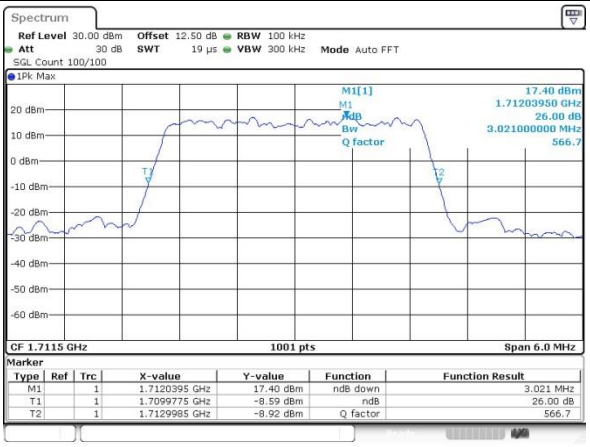


LTE Band 66

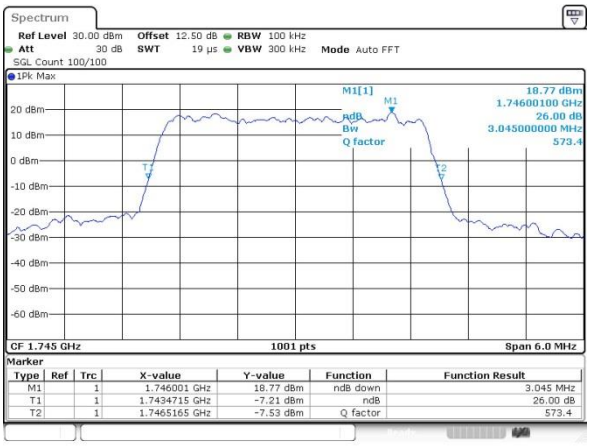
Lowest Channel / 3MHz / QPSK



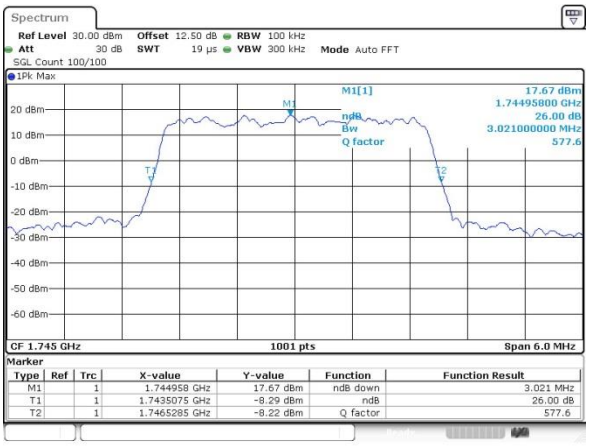
Lowest Channel / 3MHz / 16QAM



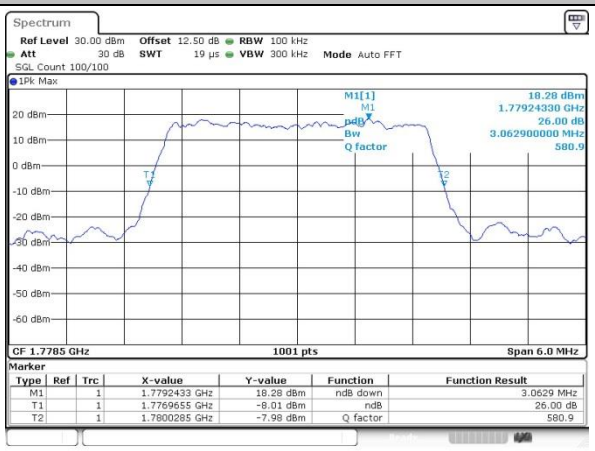
Middle Channel / 3MHz / QPSK



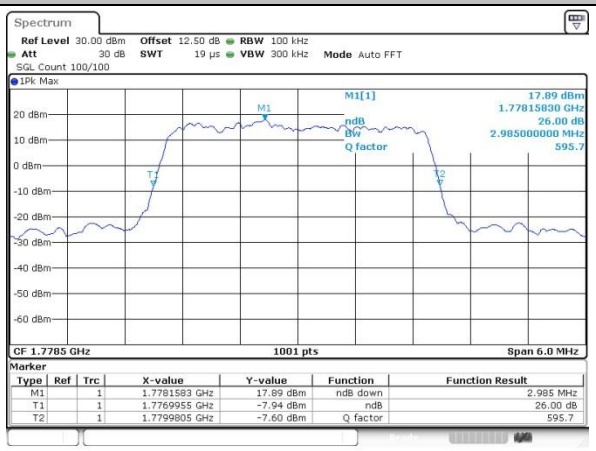
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK

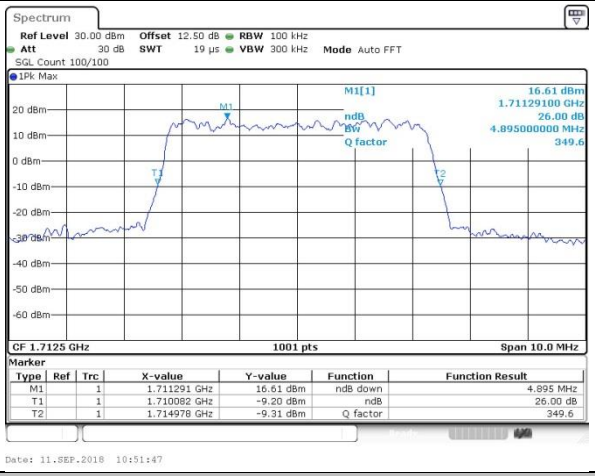


Highest Channel / 3MHz / 16QAM

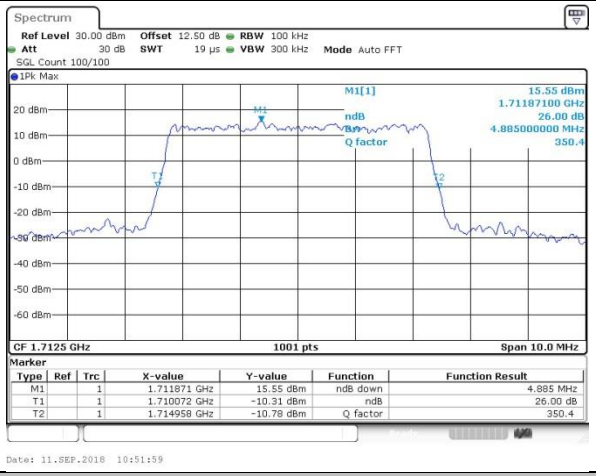


LTE Band 66

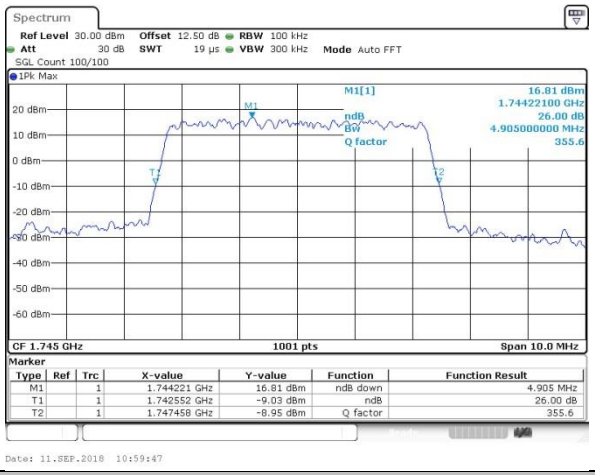
Lowest Channel / 5MHz / QPSK



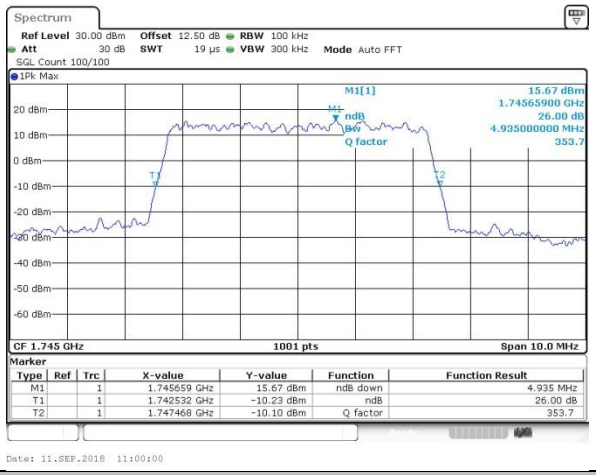
Lowest Channel / 5MHz / 16QAM



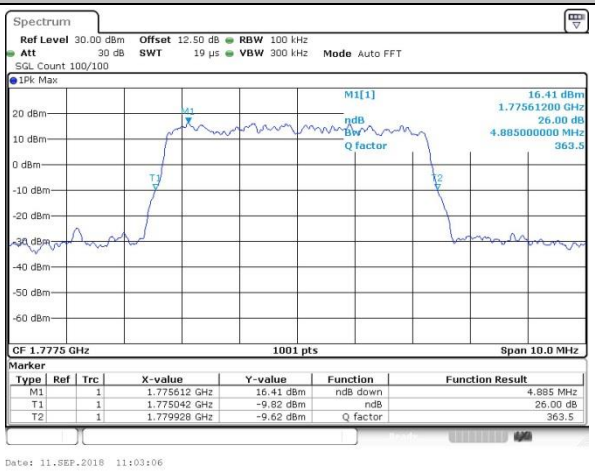
Middle Channel / 5MHz / QPSK



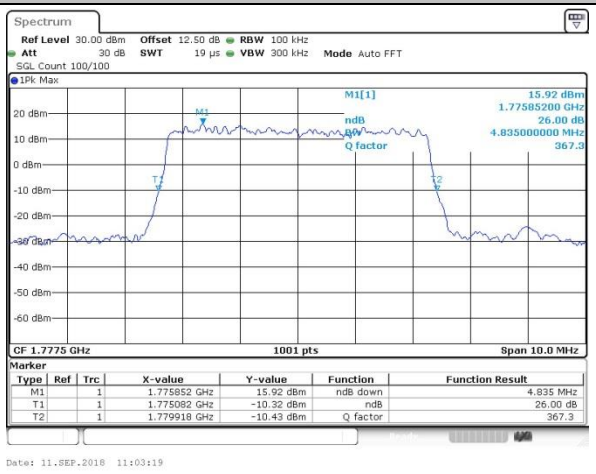
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

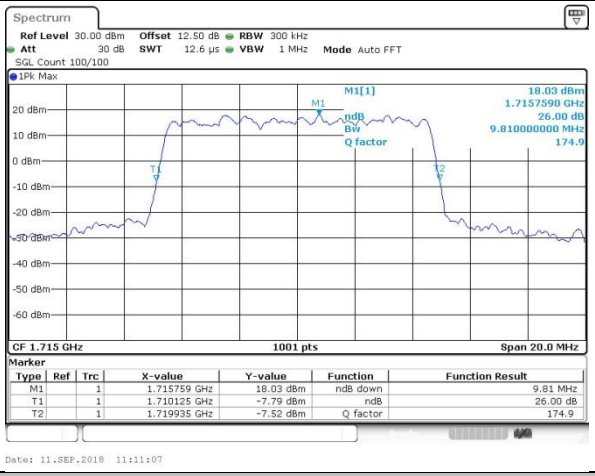


Highest Channel / 5MHz / 16QAM

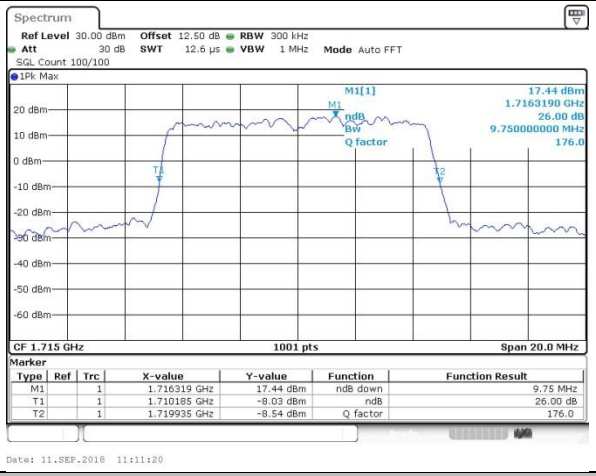


LTE Band 66

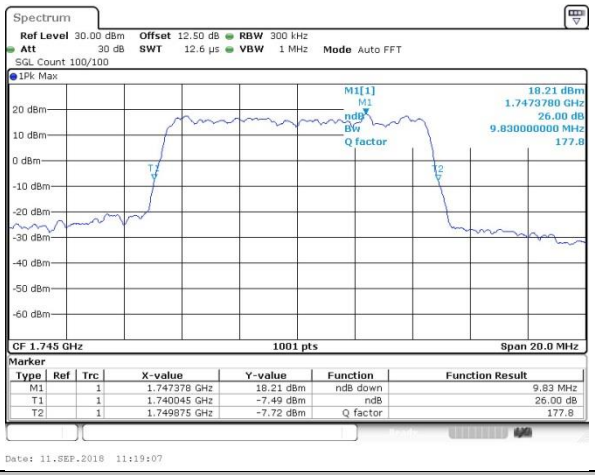
Lowest Channel / 10MHz / QPSK



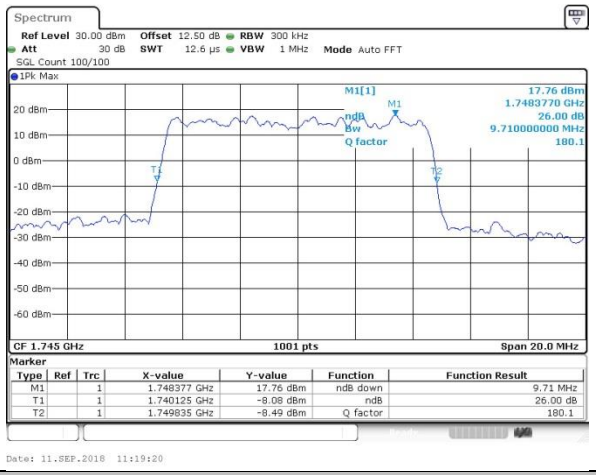
Lowest Channel / 10MHz / 16QAM



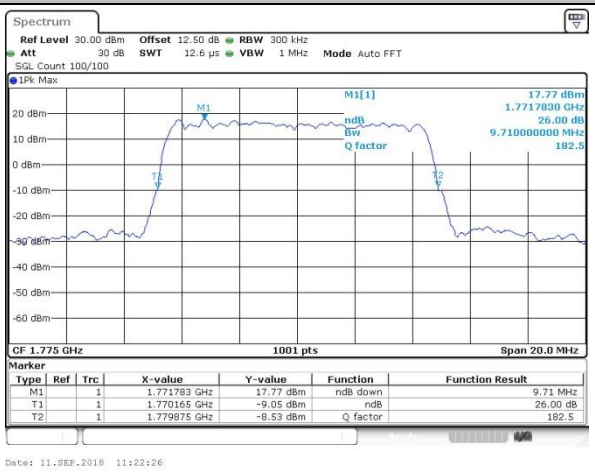
Middle Channel / 10MHz / QPSK



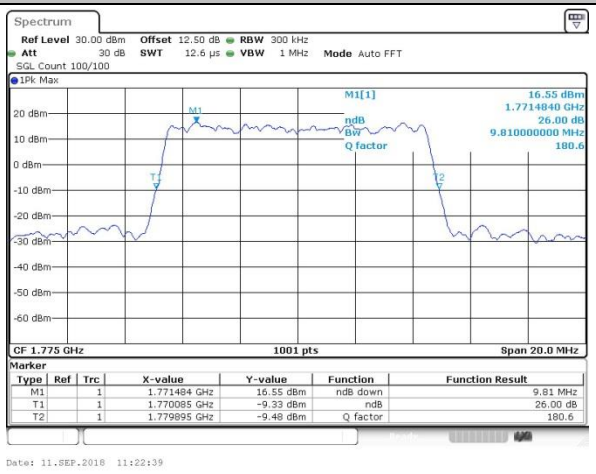
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK

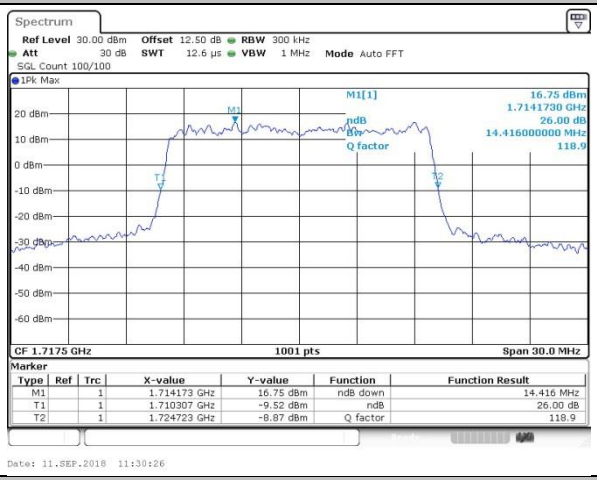


Highest Channel / 10MHz / 16QAM

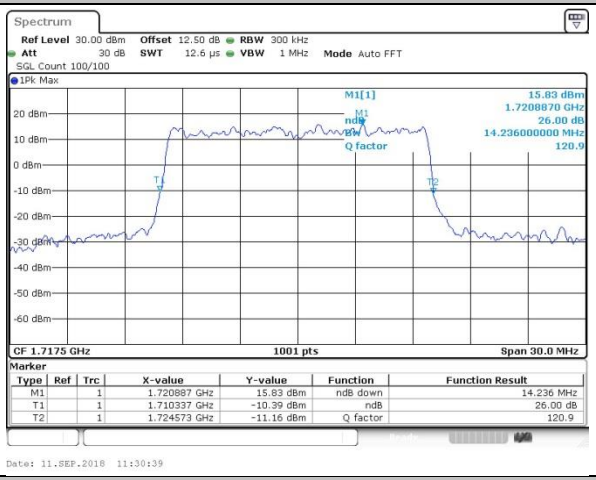


LTE Band 66

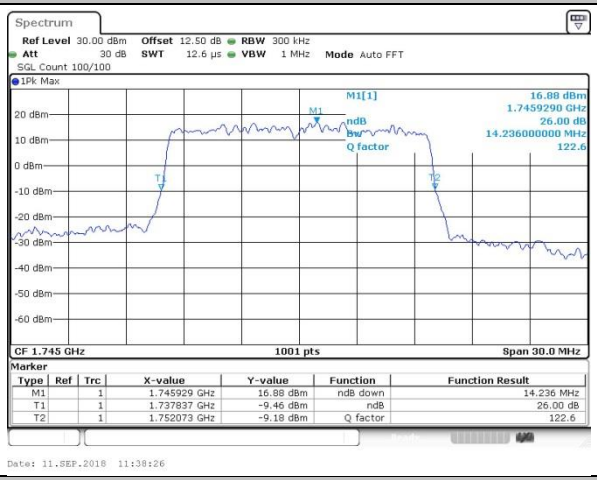
Lowest Channel / 15MHz / QPSK



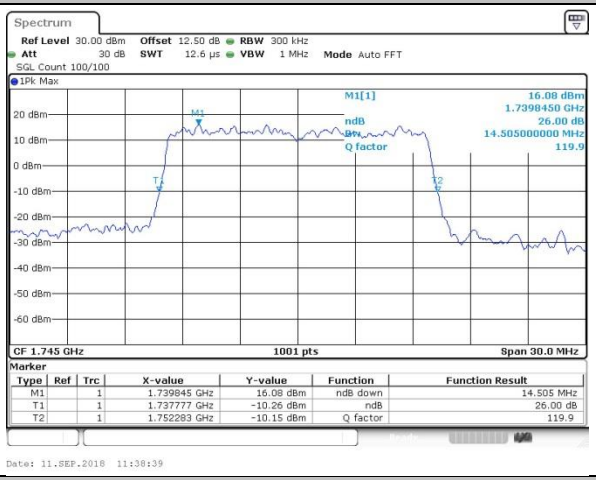
Lowest Channel / 15MHz / 16QAM



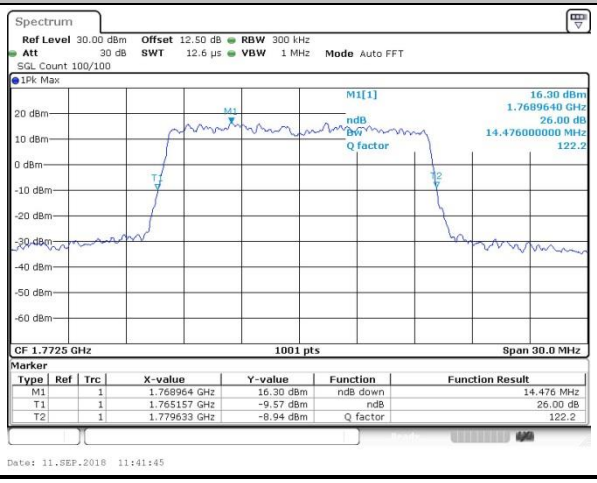
Middle Channel / 15MHz / QPSK



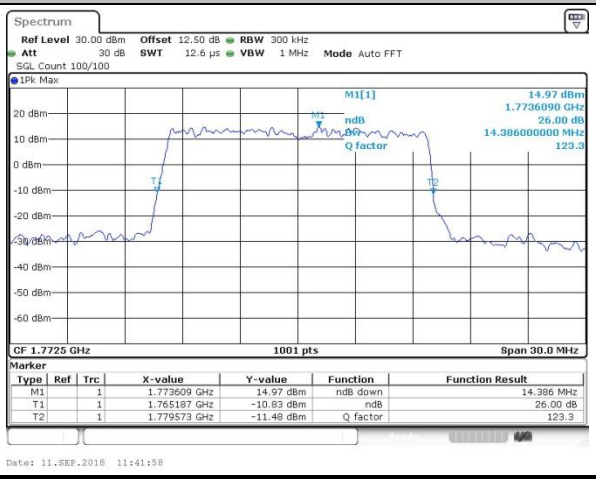
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK

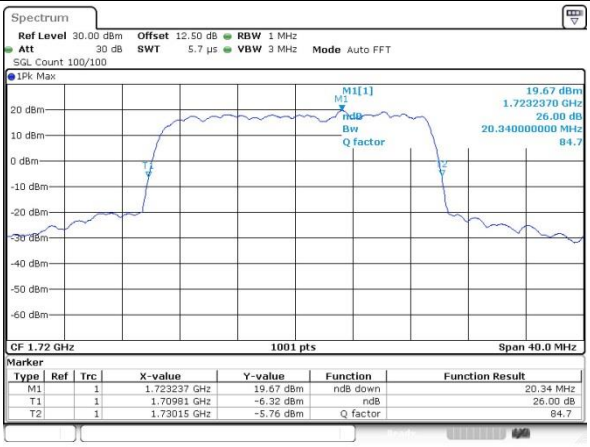


Highest Channel / 15MHz / 16QAM

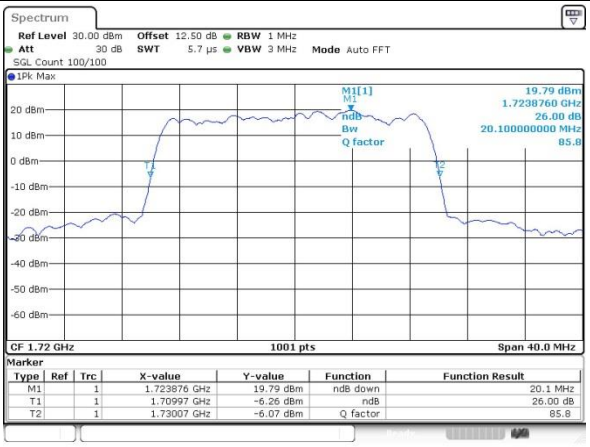


LTE Band 66

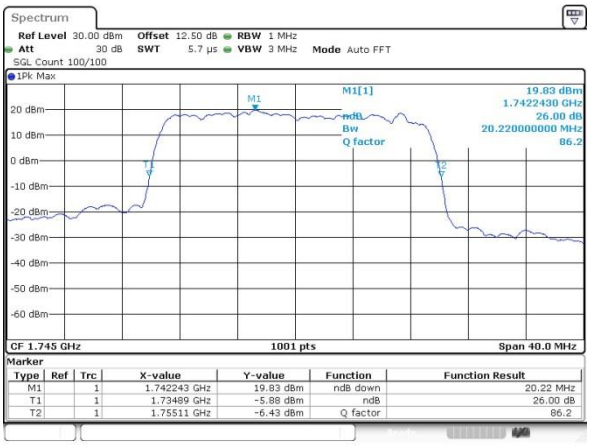
Lowest Channel / 20MHz / QPSK



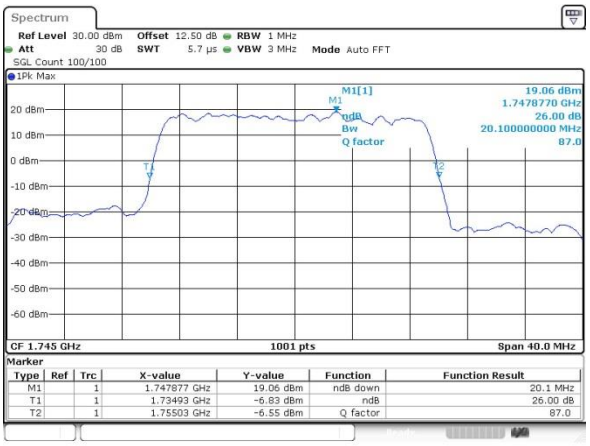
Lowest Channel / 20MHz / 16QAM



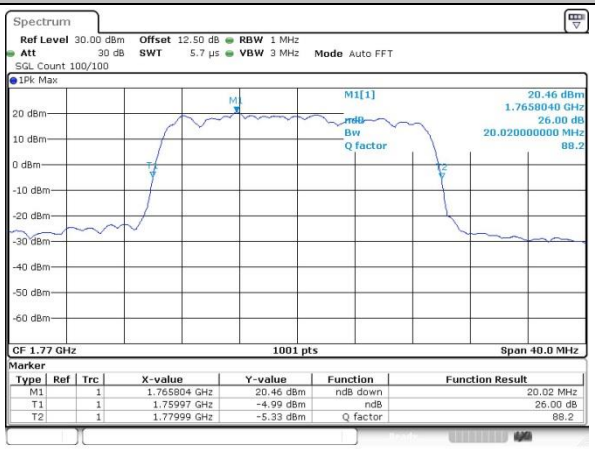
Middle Channel / 20MHz / QPSK



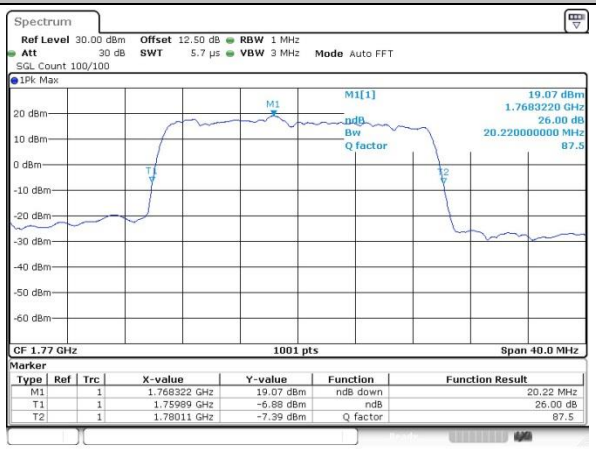
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK

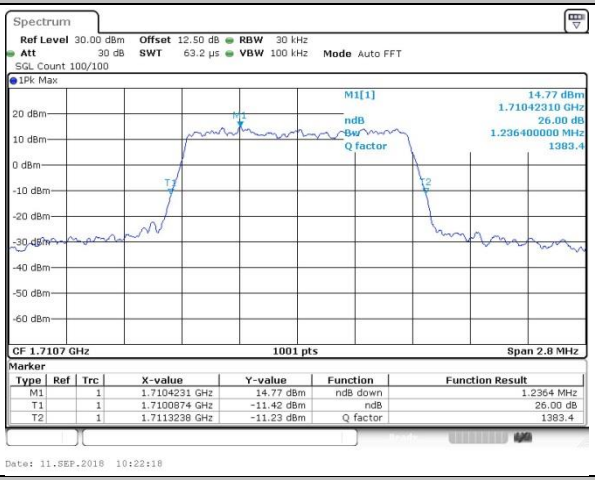


Highest Channel / 20MHz / 16QAM

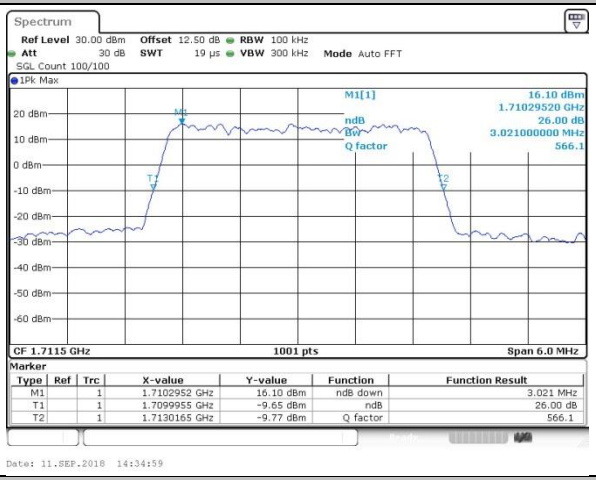


LTE Band 66

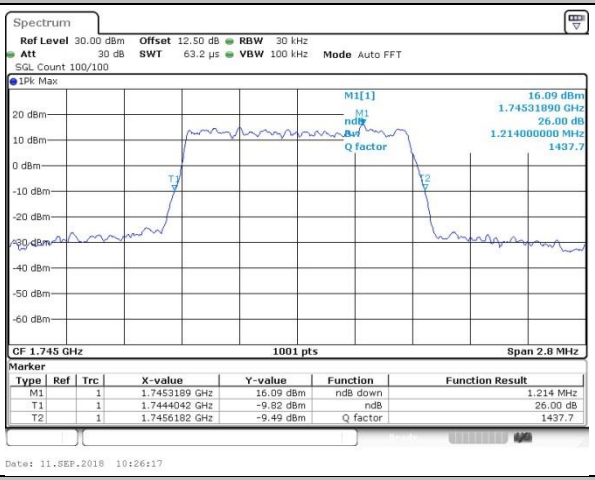
Lowest Channel / 1.4MHz / 64QAM



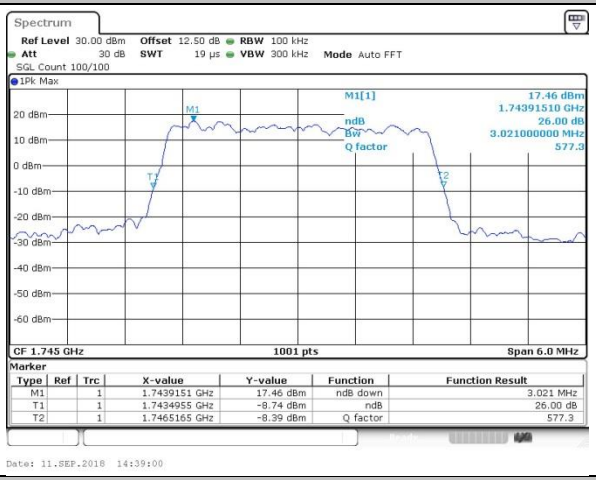
Lowest Channel / 3MHz / 64QAM



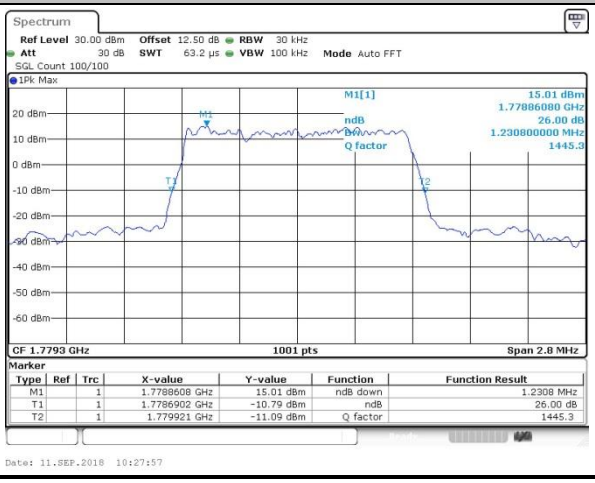
Middle Channel / 20MHz / 64QAM



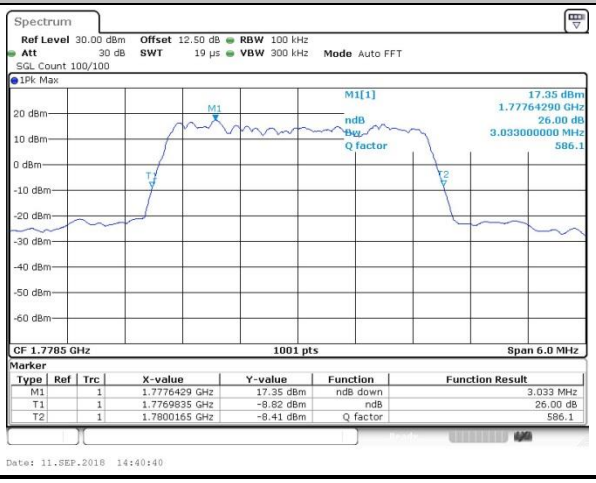
Middle Channel / 3MHz / 64QAM



Highest Channel / 20MHz / 64QAM

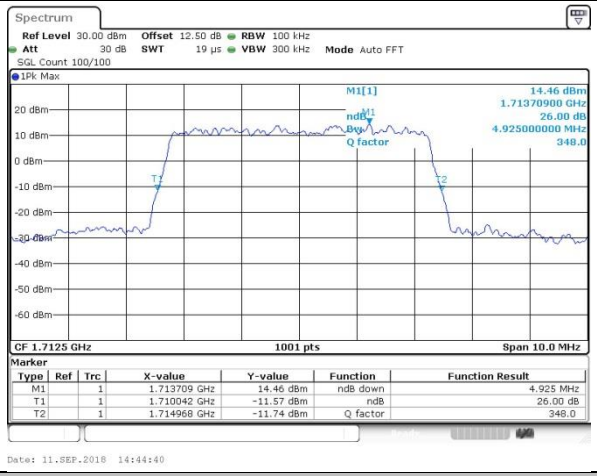


Highest Channel / 3MHz / 64QAM

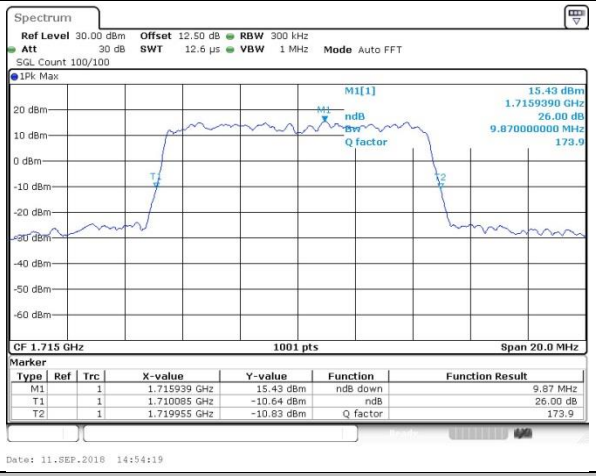


LTE Band 66

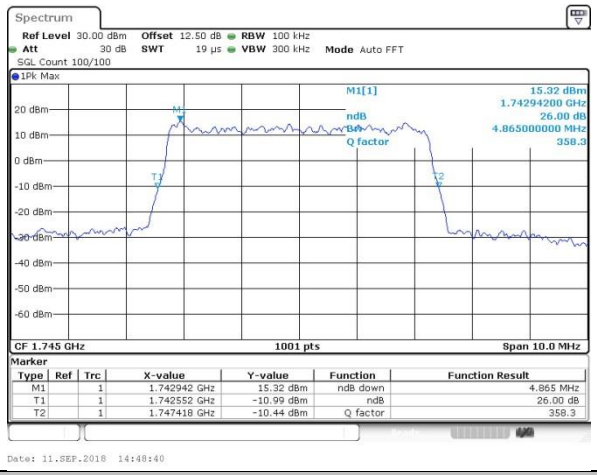
Lowest Channel / 5MHz / 64QAM



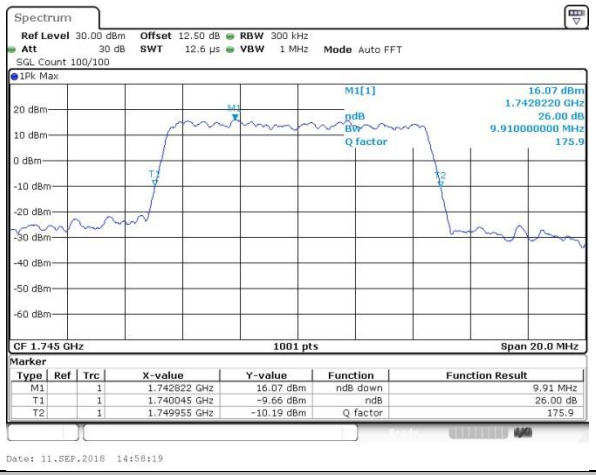
Lowest Channel / 10MHz / 64QAM



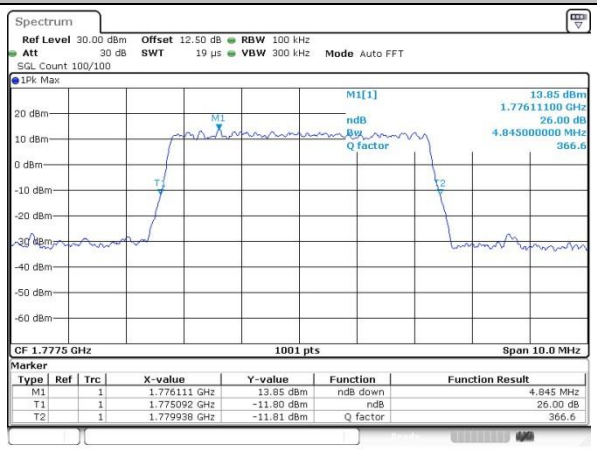
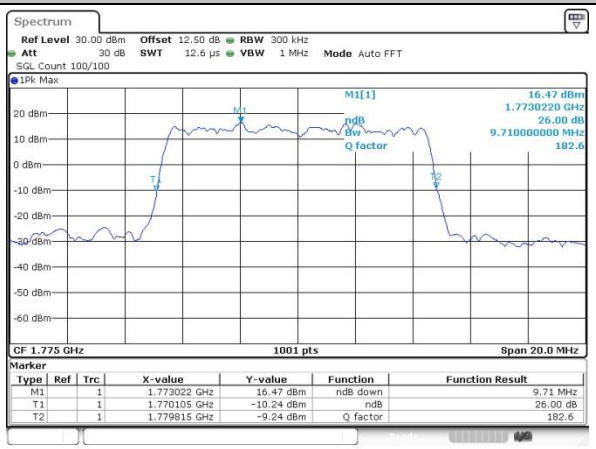
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



Highest Channel / 10MHz / 64QAM