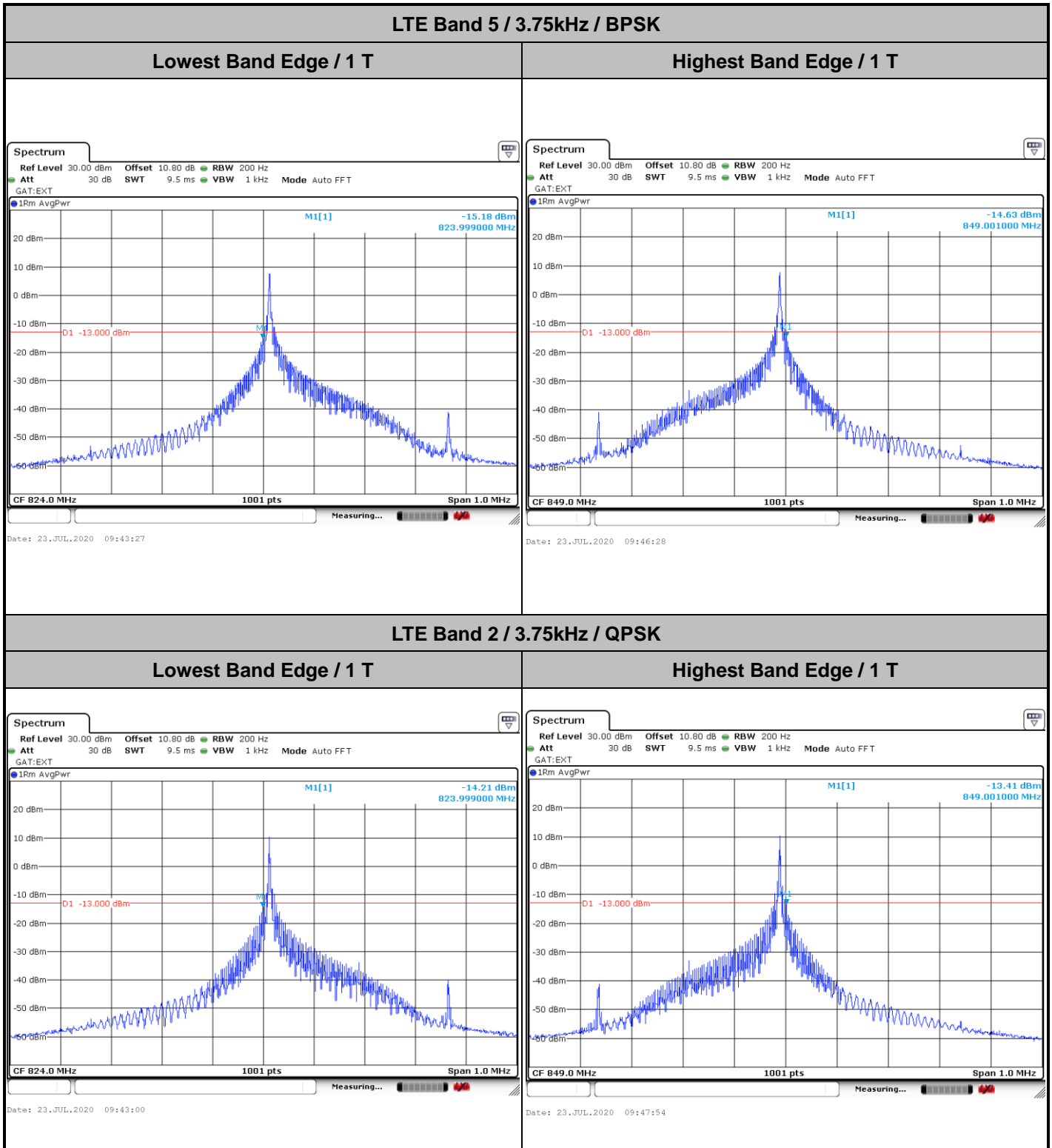




Conducted Band Edge

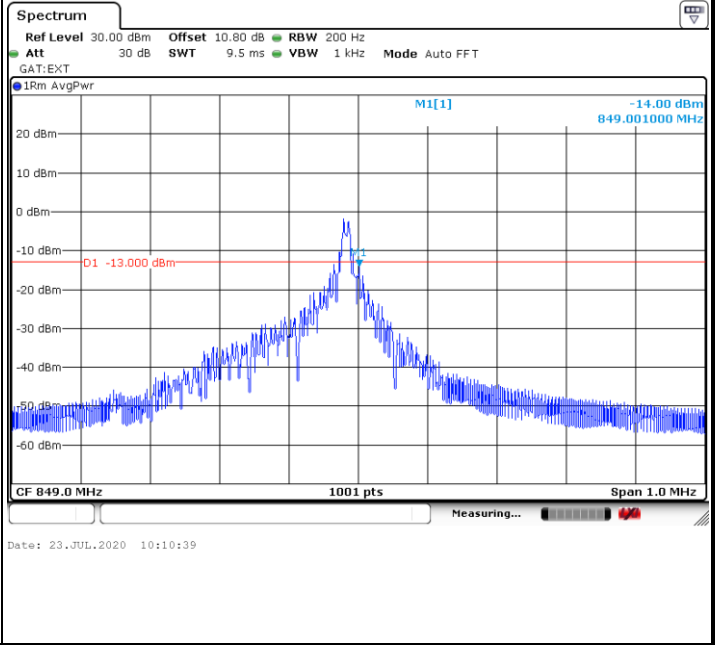
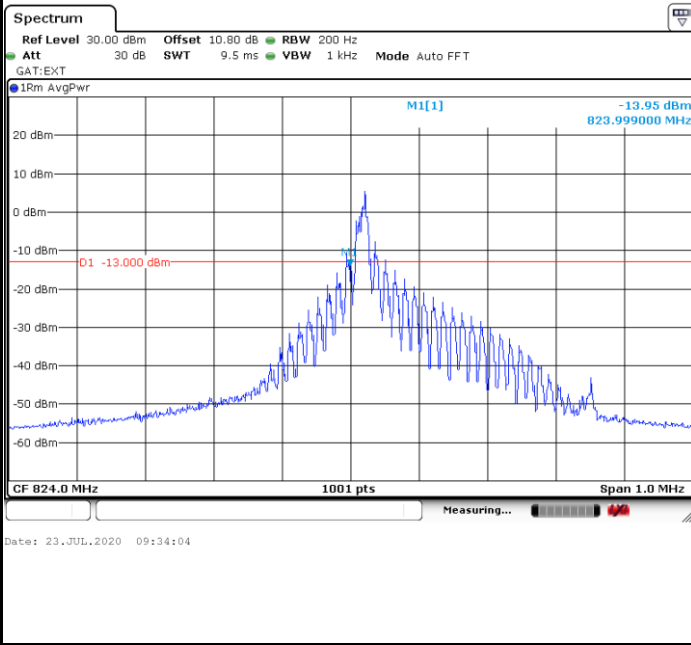




LTE Band 2 / 15kHz / BPSK

Lowest Band Edge / 1 T

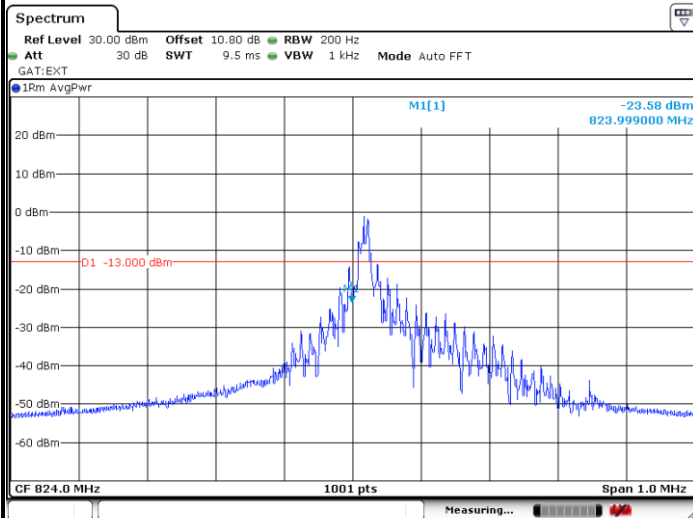
Highest Band Edge / 1 T





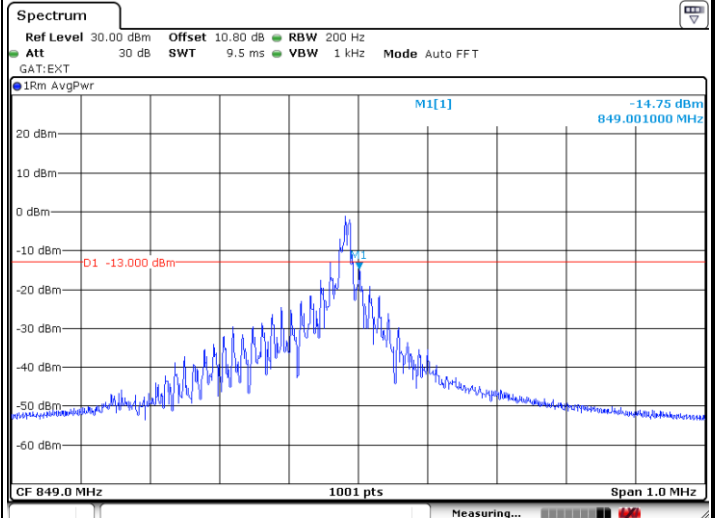
LTE Band 5 / 15kHz / QPSK

Lowest Band Edge / 1 T



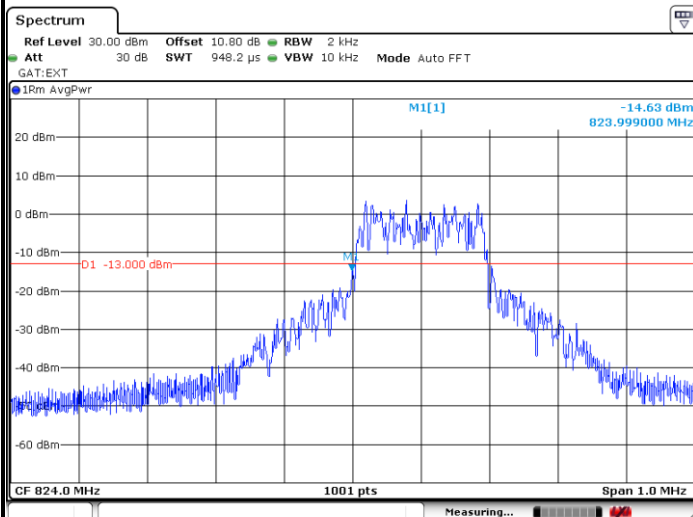
Date: 23.JUL.2020 09:30:55

Highest Band Edge / 1 T



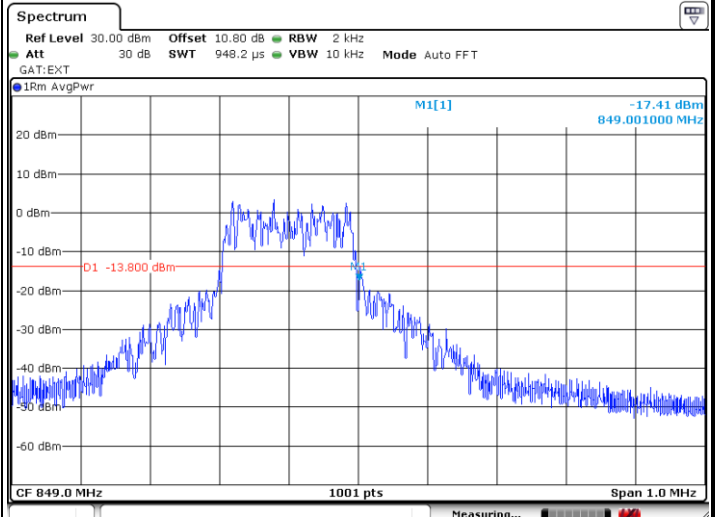
Date: 23.JUL.2020 10:10:18

Lowest Band Edge / Full T



Date: 23.JUL.2020 09:28:01

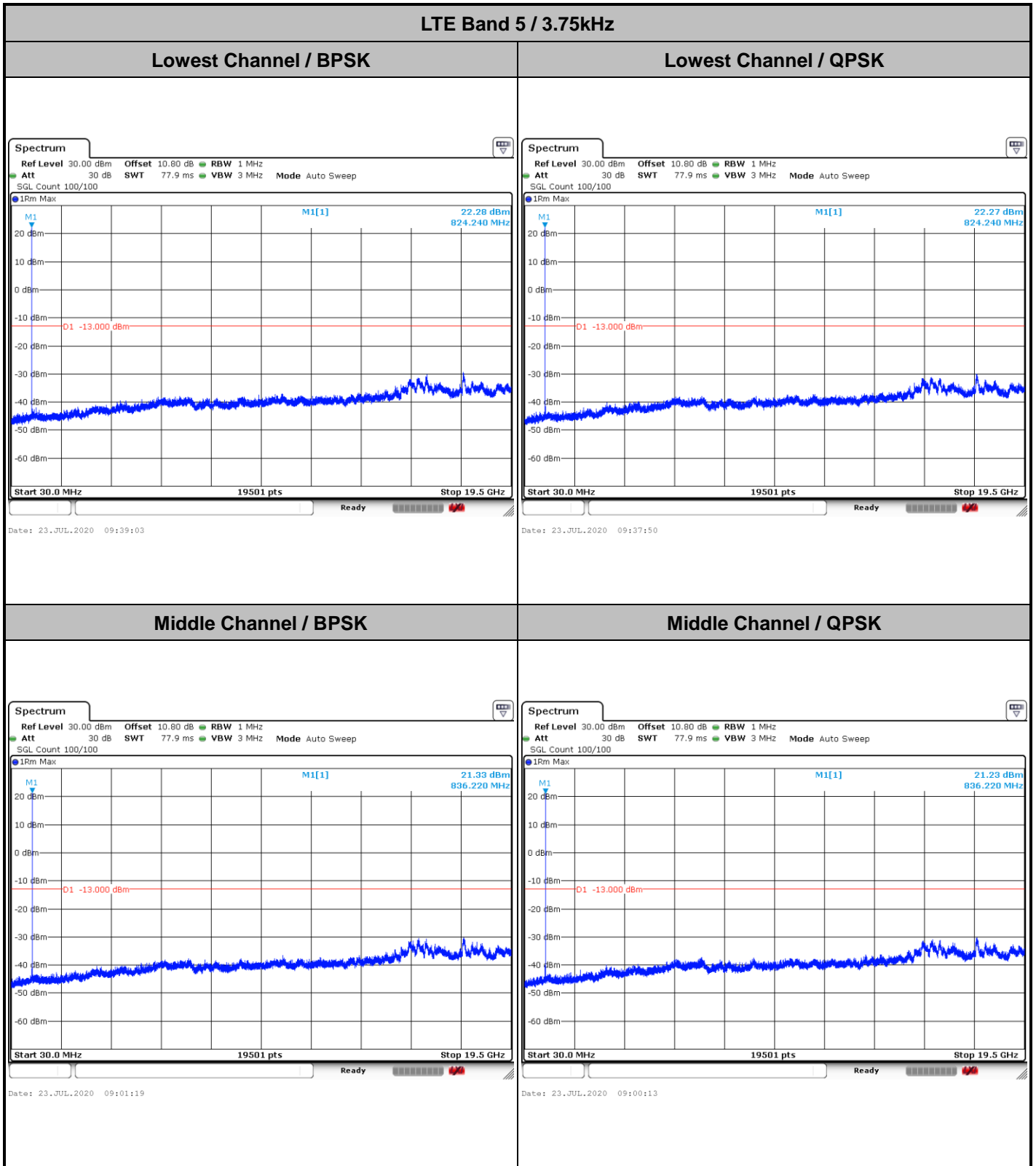
Highest Band Edge / Full T



Date: 23.JUL.2020 10:07:35



Conducted Spurious Emission

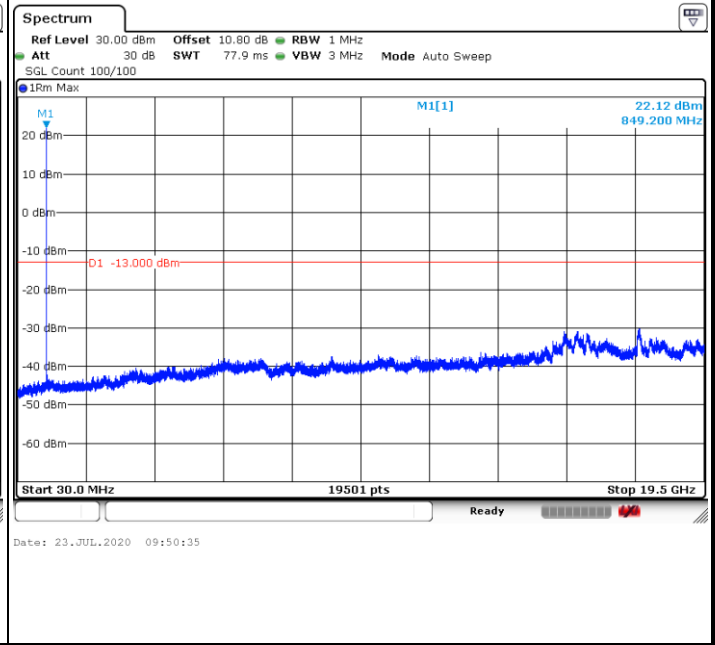
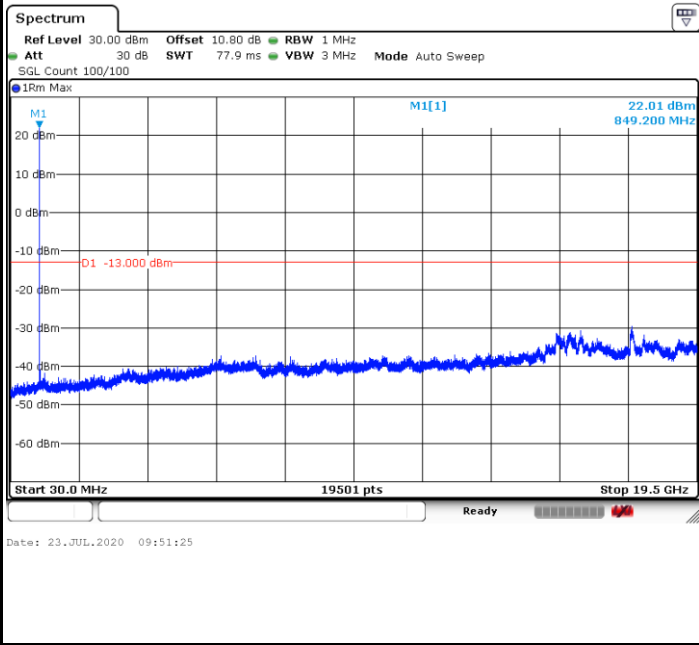




LTE Band 5 / 3.75kHz

Highest Channel / BPSK

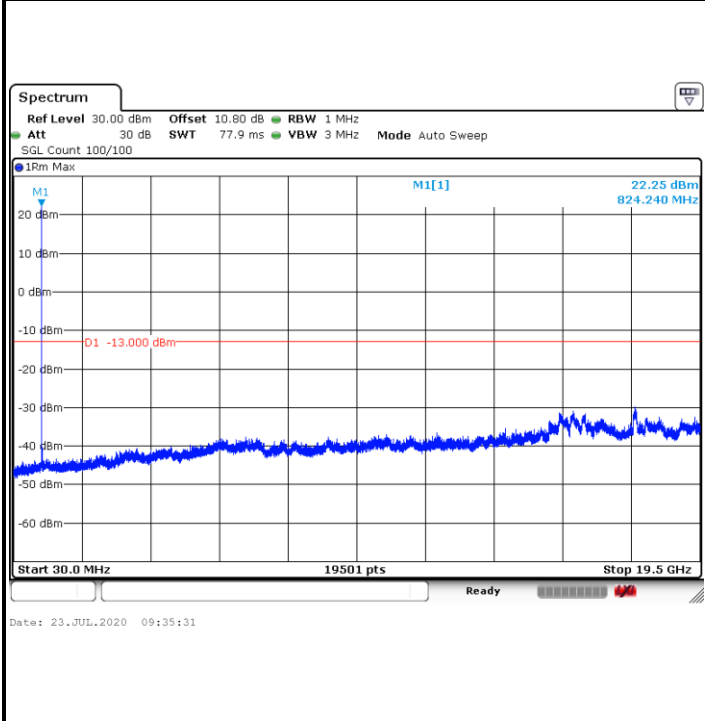
Highest Channel / QPSK



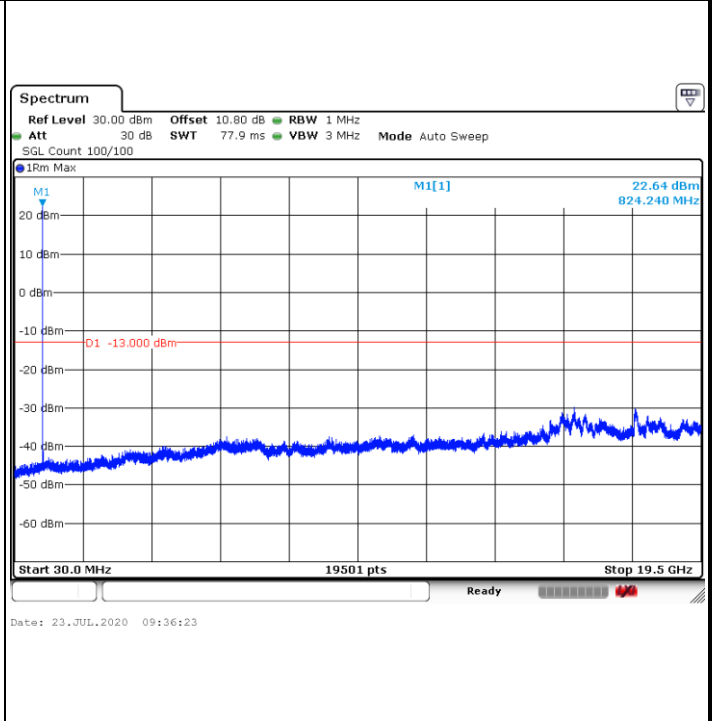


LTE Band 5 / 15kHz

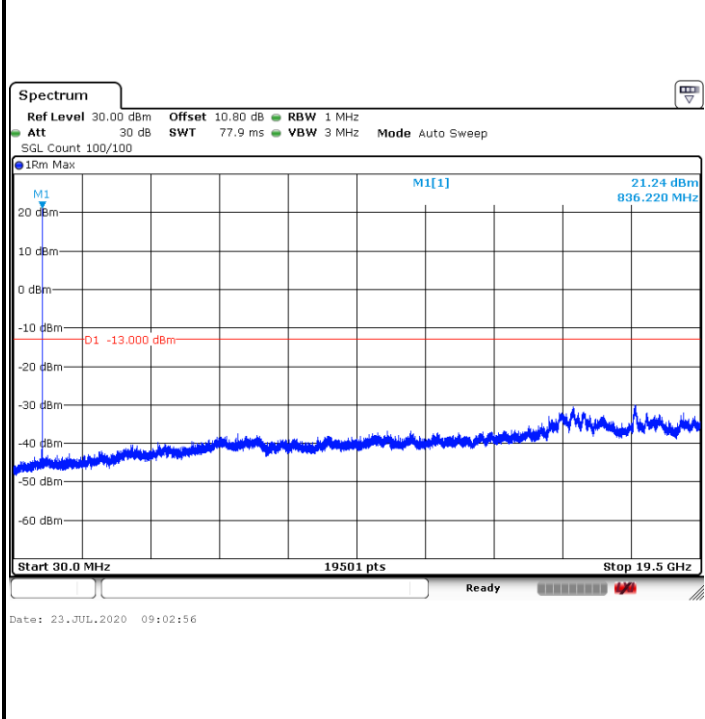
Lowest Channel / BPSK



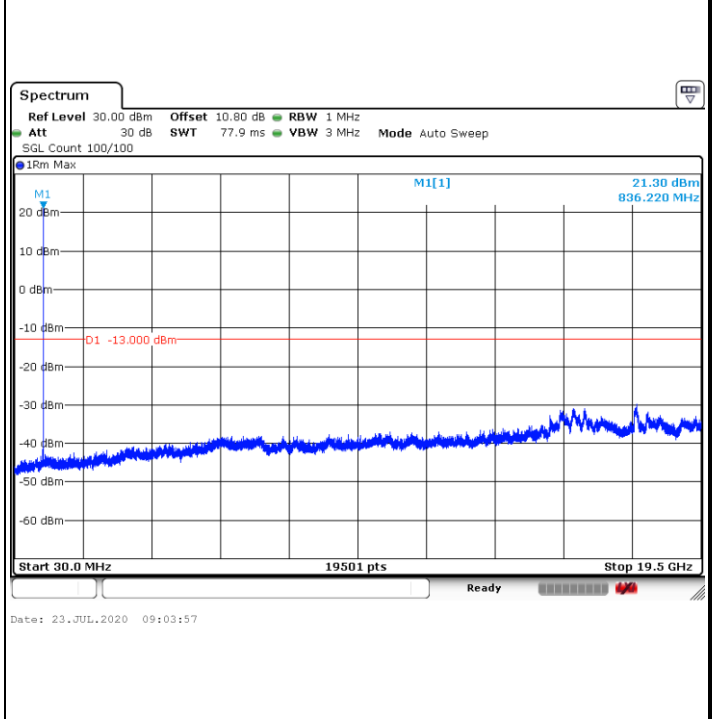
Lowest Channel / QPSK

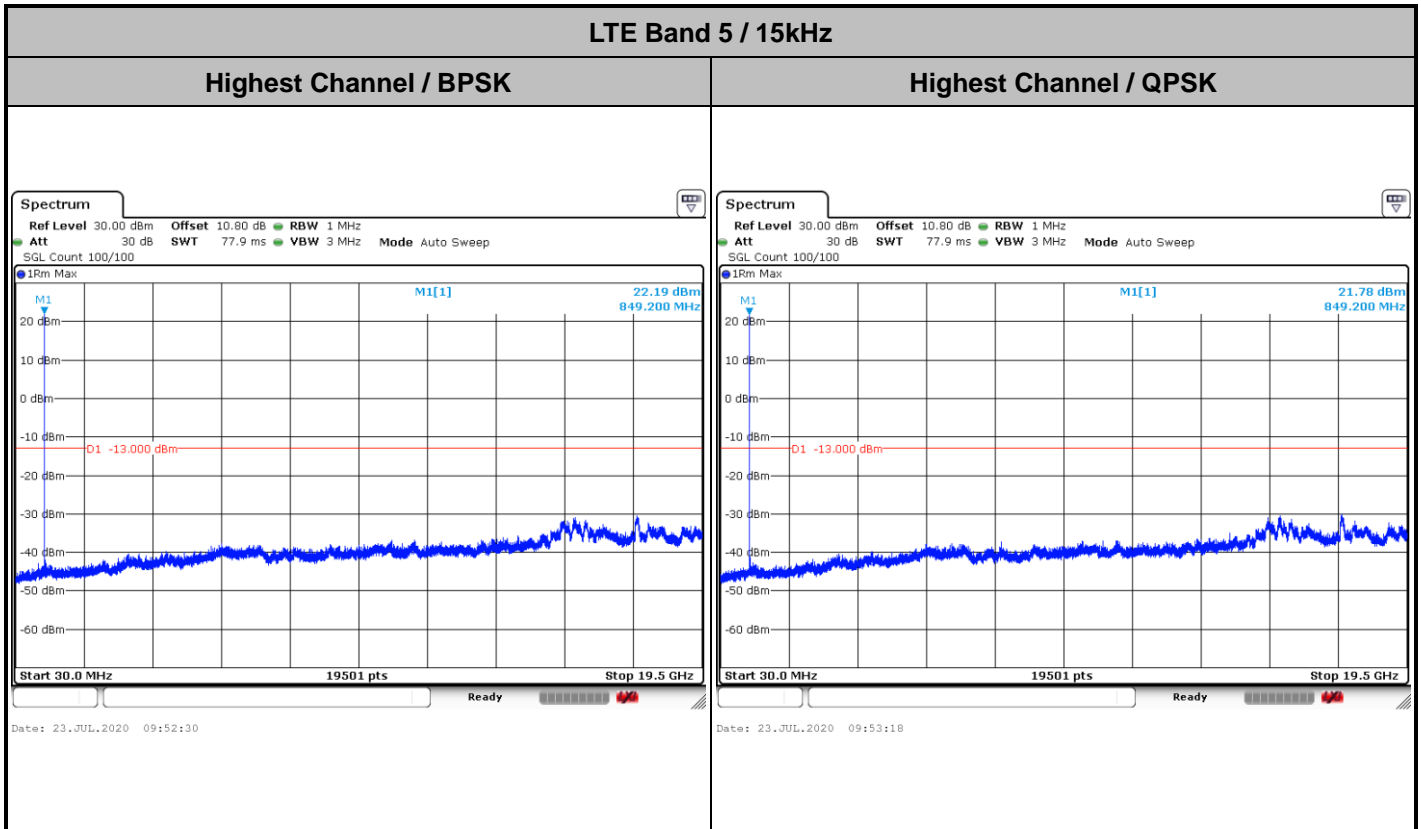


Middle Channel / BPSK



Middle Channel / QPSK







Frequency Stability

Test Conditions		LTE Band 5 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 15kHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0091	PASS
40	Normal Voltage	0.0085	
30	Normal Voltage	0.0053	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0013	
0	Normal Voltage	0.0042	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0151	
-30	Normal Voltage	0.0004	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0158	

Note:

- 1. Normal Voltage =3.6 V. ; Battery End Point (BEP) =3.3 V. ; Maximum Voltage =3.7 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 12

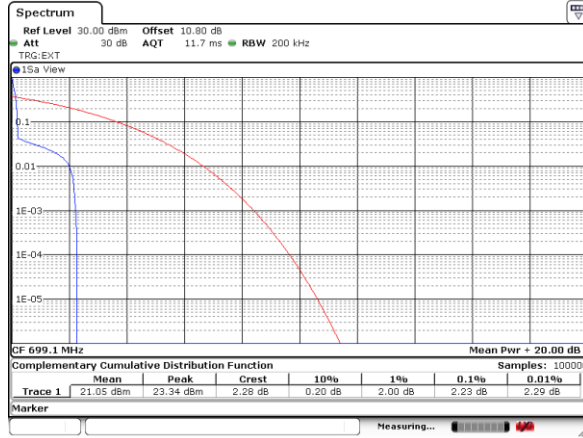
Peak-to-Average Ratio

Mode	LTE Band 12 / 15kHz			
Mod.	BPSK	QPSK		Limit: 13dB
T Size	1T	1T	Full T	Result
Lowest CH	2.23	1.77	3.97	PASS
Middle CH	2.20	1.74	3.97	
Highest CH	2.20	1.77	4.00	



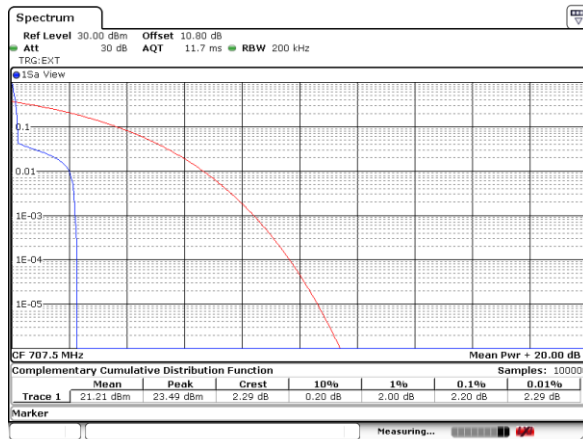
LTE Band 12 / 15kHz / BPSK

Lowest Channel / 1T



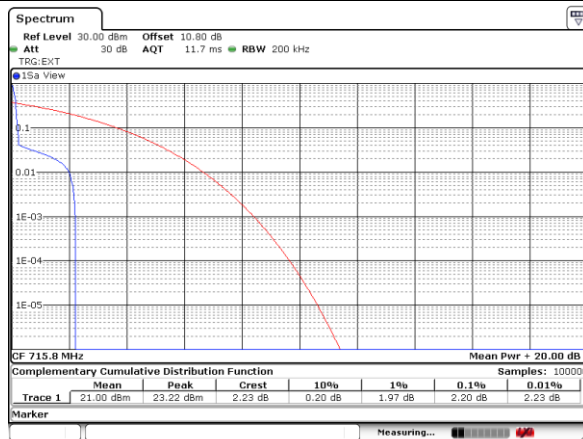
Date: 23.JUL.2020 10:43:52

Middle Channel/ 1T



Date: 23.JUL.2020 10:28:28

Highest Channel/ 1T

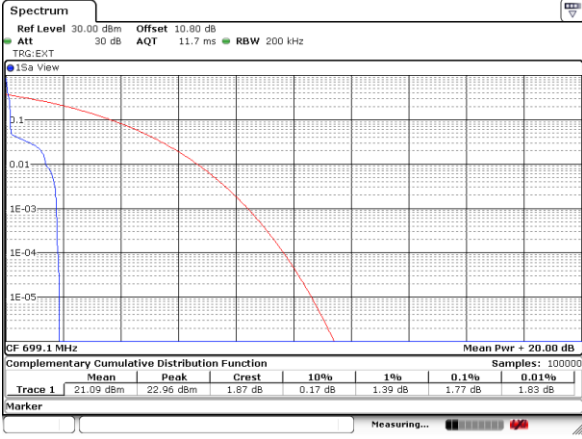


Date: 30.JUL.2020 14:05:31

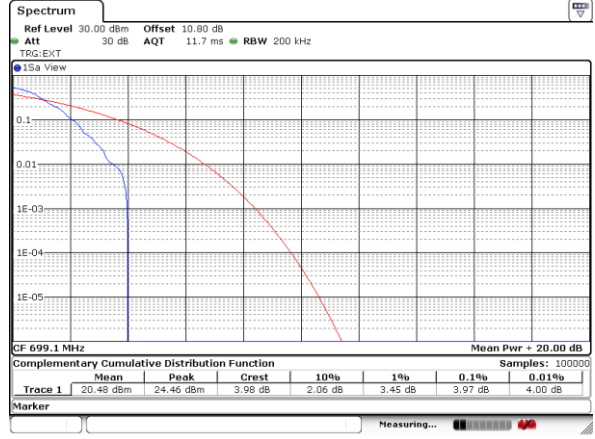


LTE Band 12 / 15kHz / QPSK

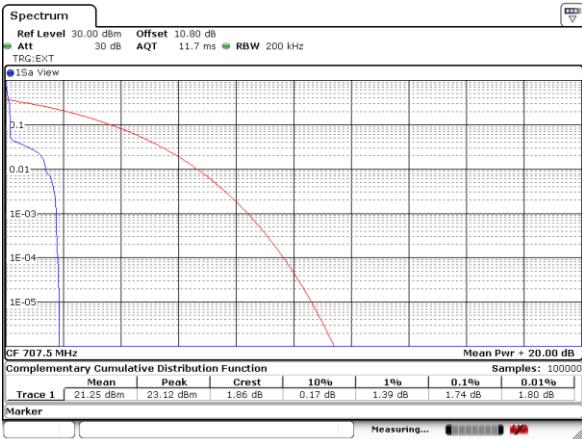
Lowest Channel / 1T



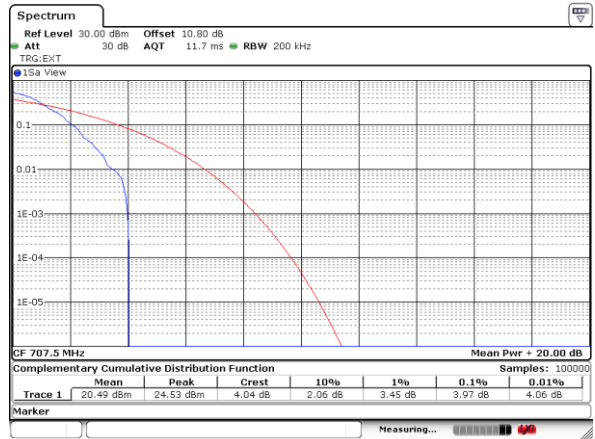
Lowest Channel / Full T



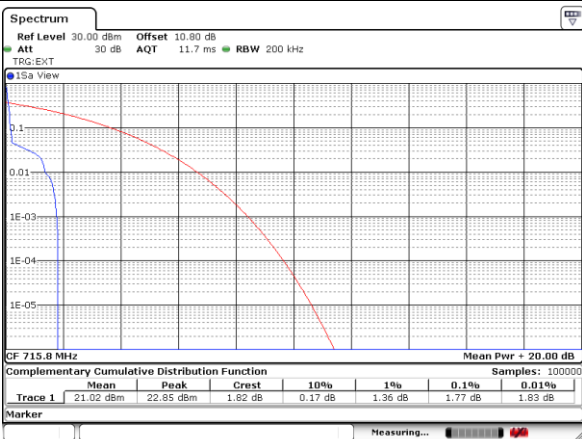
Middle Channel / 1T



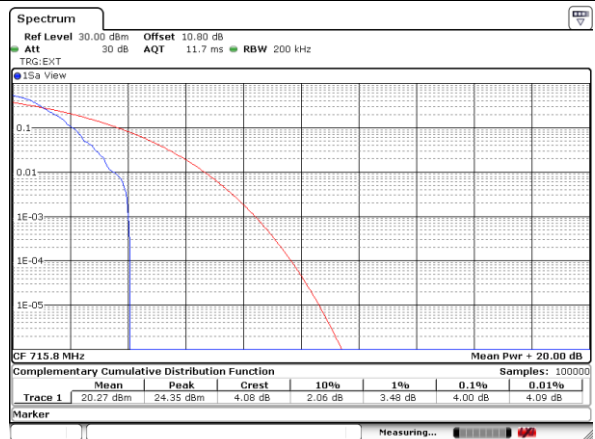
Middle Channel / Full T



Highest Channel / 1T



Highest Channel / Full T





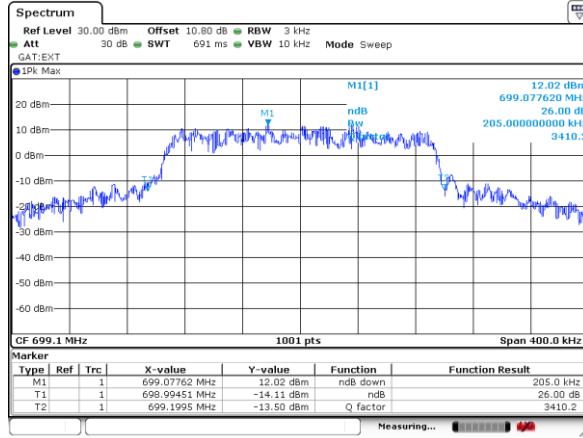
26dB Bandwidth

Mode	LTE Band 12 : 26dB(kHz)
Subcarrier Spacing	15k
Mod.	QPSK
Lowest CH	205.00
Middle CH	205.00
Highest CH	205.00



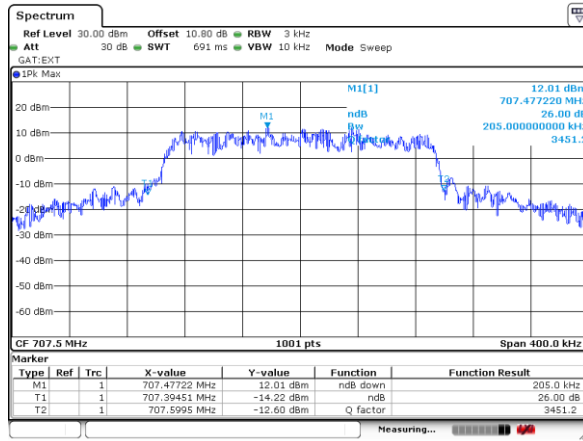
LTE Band 12

Lowest Channel / 15kHz / QPSK



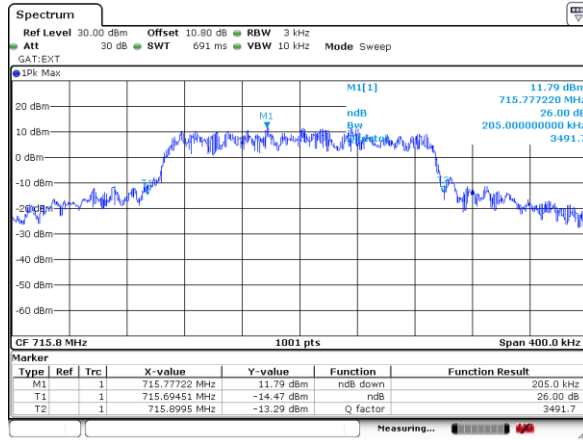
Date: 23.JUL.2020 10:47:10

Middle Channel / 15kHz / QPSK



Date: 23.JUL.2020 10:24:06

Highest Channel / 15kHz / QPSK



Date: 30.JUL.2020 14:04:06



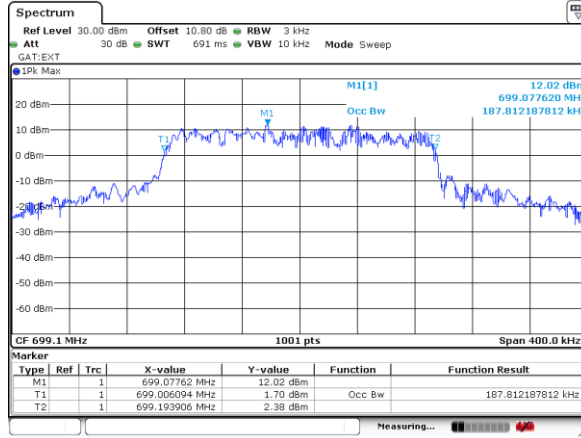
Occupied Bandwidth

Mode	LTE Band 12 : OB(kHz)
Subcarrier Spacing	15k
Mod.	QPSK
Lowest CH	187.81
Middle CH	186.61
Highest CH	187.41



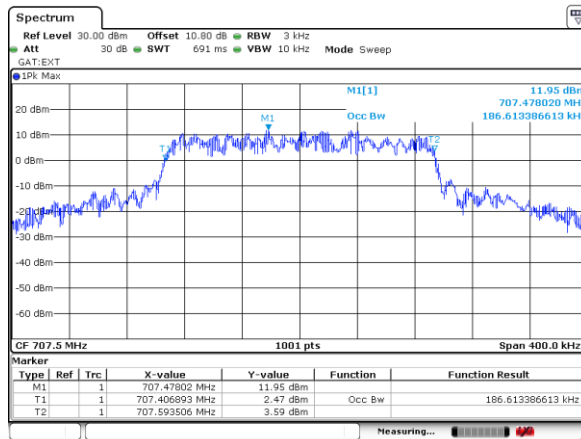
LTE Band 12

Lowest Channel / 15kHz / QPSK



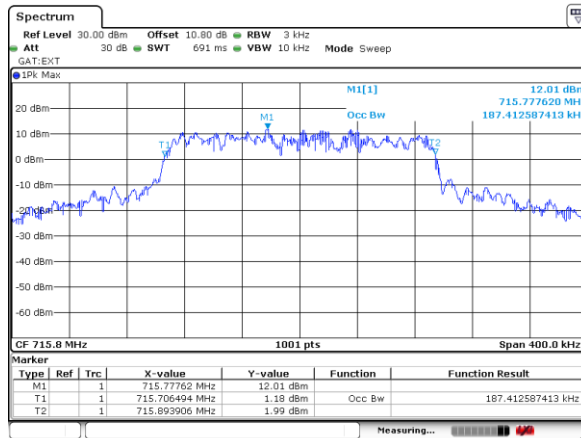
Date: 23.JUL.2020 10:49:44

Middle Channel / 15kHz / QPSK



Date: 23.JUL.2020 10:26:25

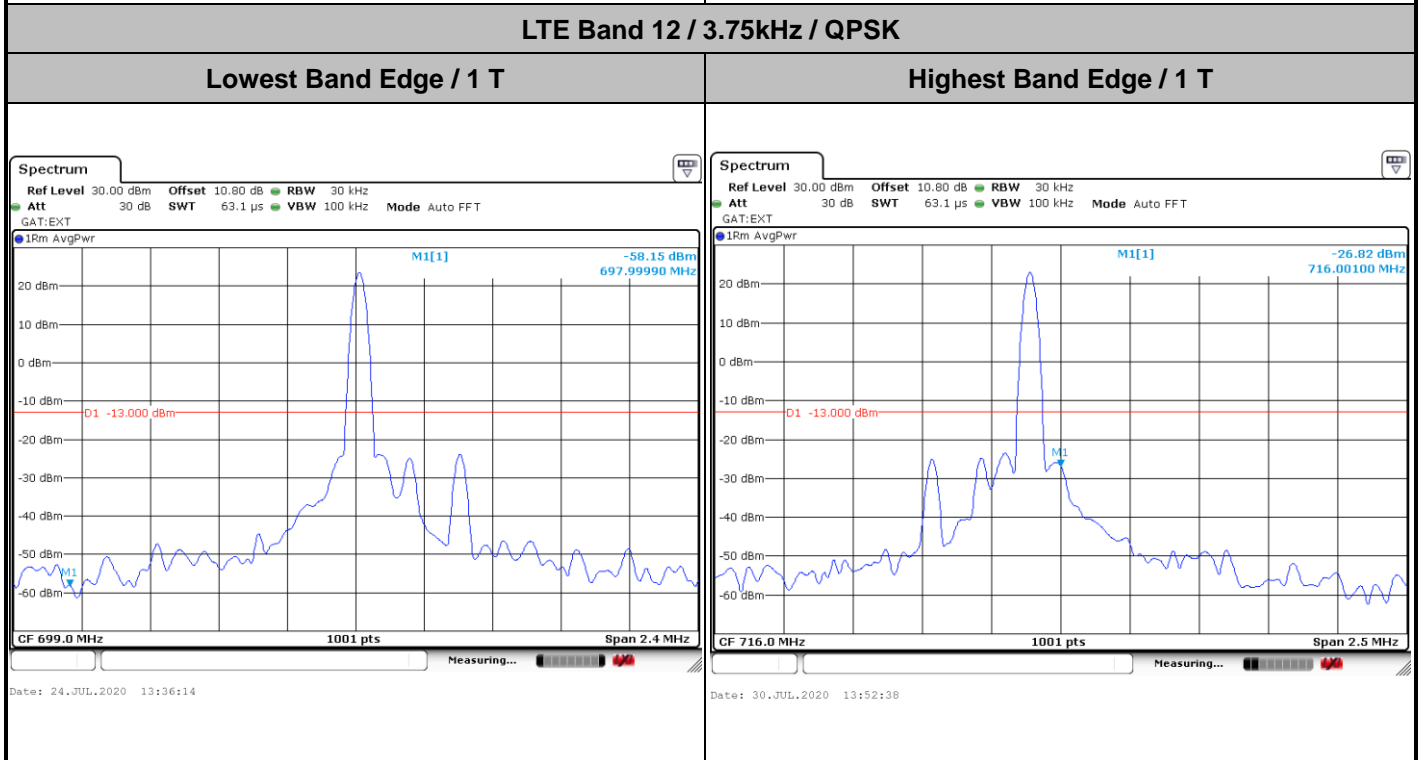
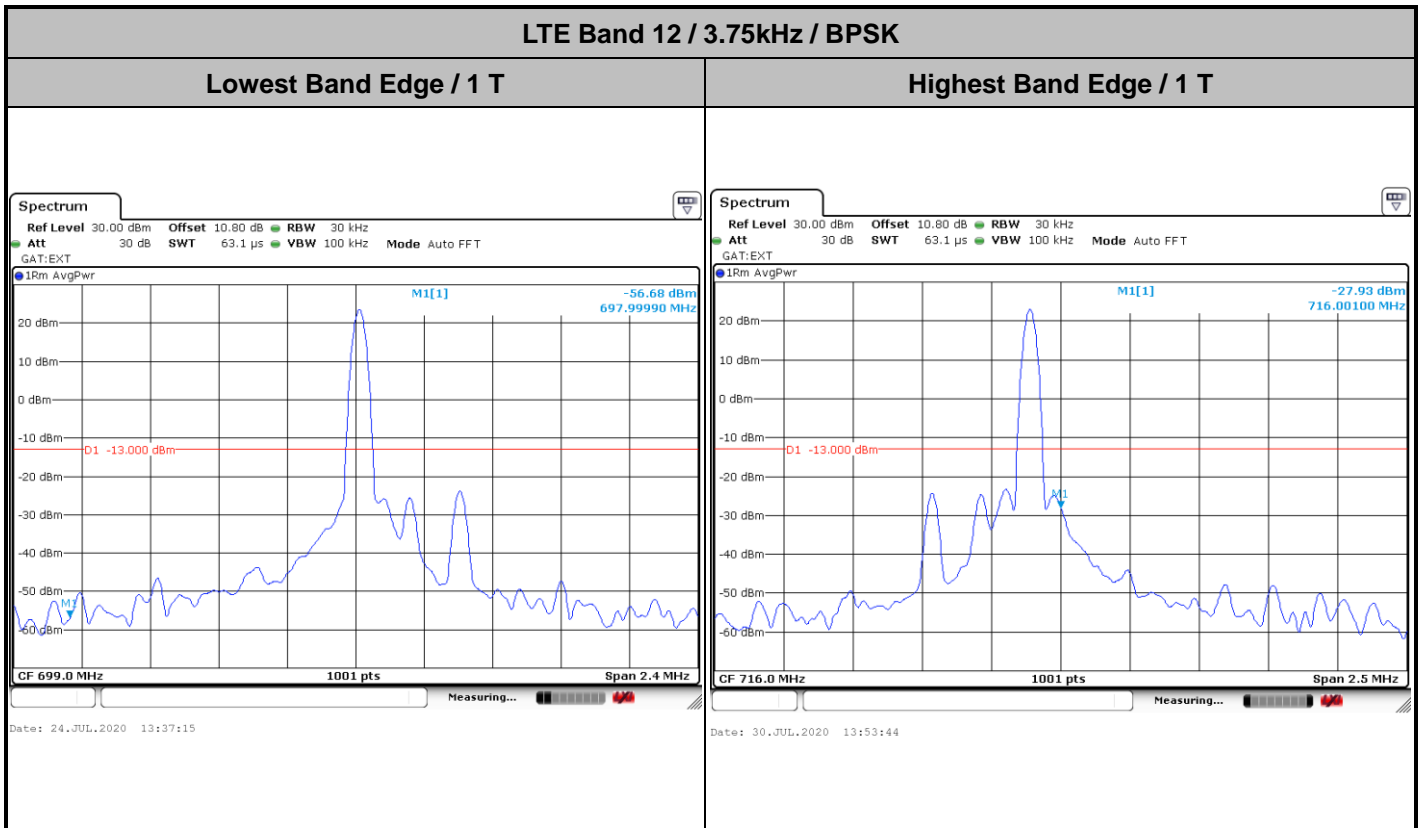
Highest Channel / 15kHz / QPSK



Date: 3.AUG.2020 09:06:08



Conducted Band Edge

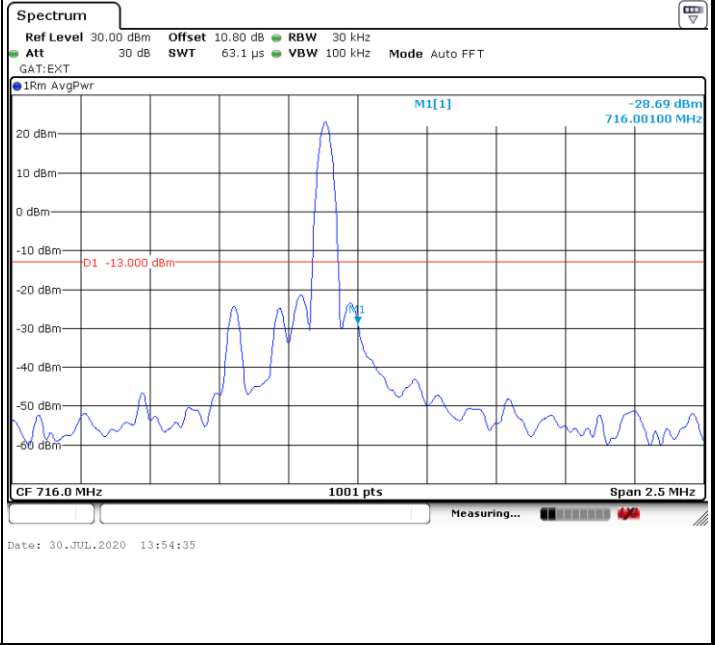
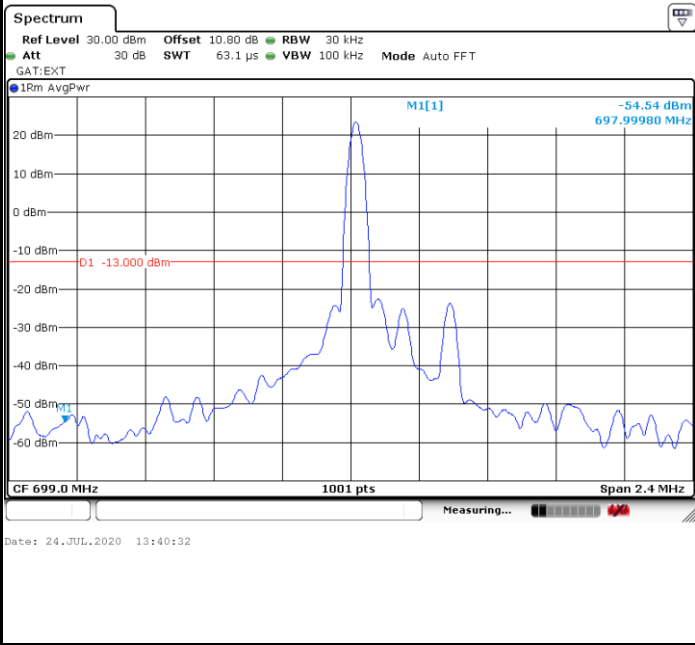




LTE Band 2 / 15kHz / BPSK

Lowest Band Edge / 1 T

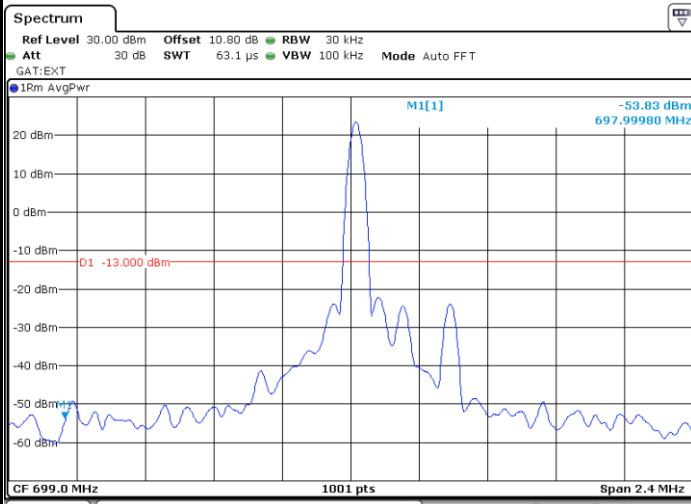
Highest Band Edge / 1 T





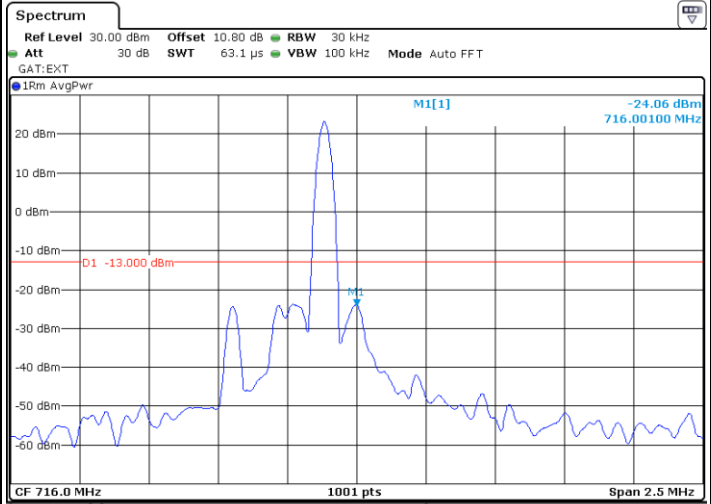
LTE Band 2 / 15kHz / QPSK

Lowest Band Edge / 1 T



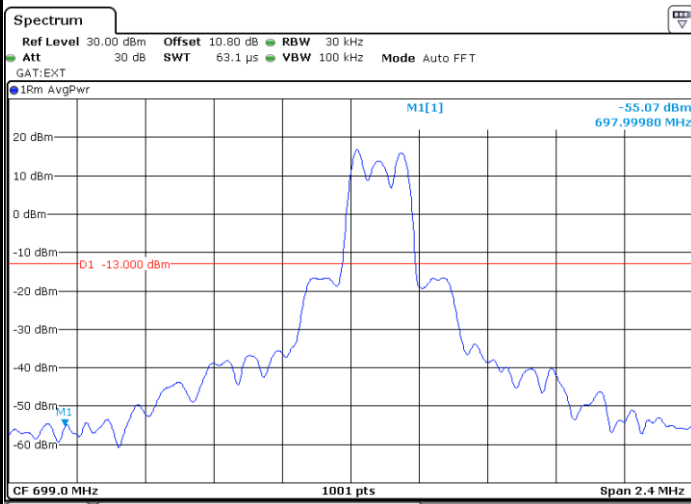
Date: 24.JUL.2020 13:41:05

Highest Band Edge / 1 T



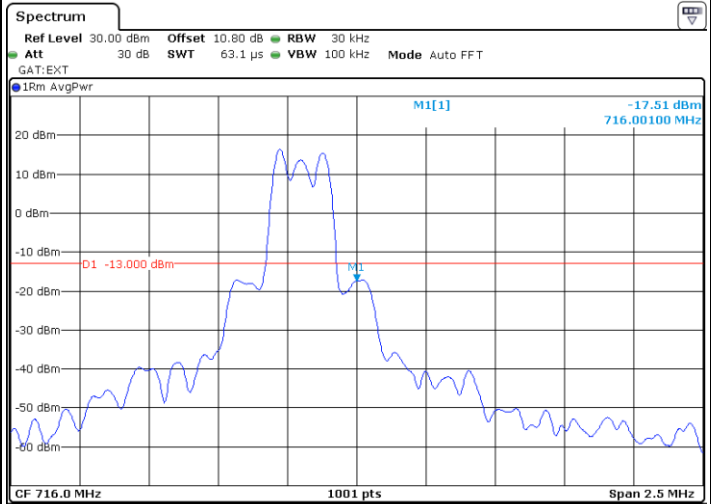
Date: 30.JUL.2020 13:55:00

Lowest Band Edge / Full T



Date: 24.JUL.2020 13:41:32

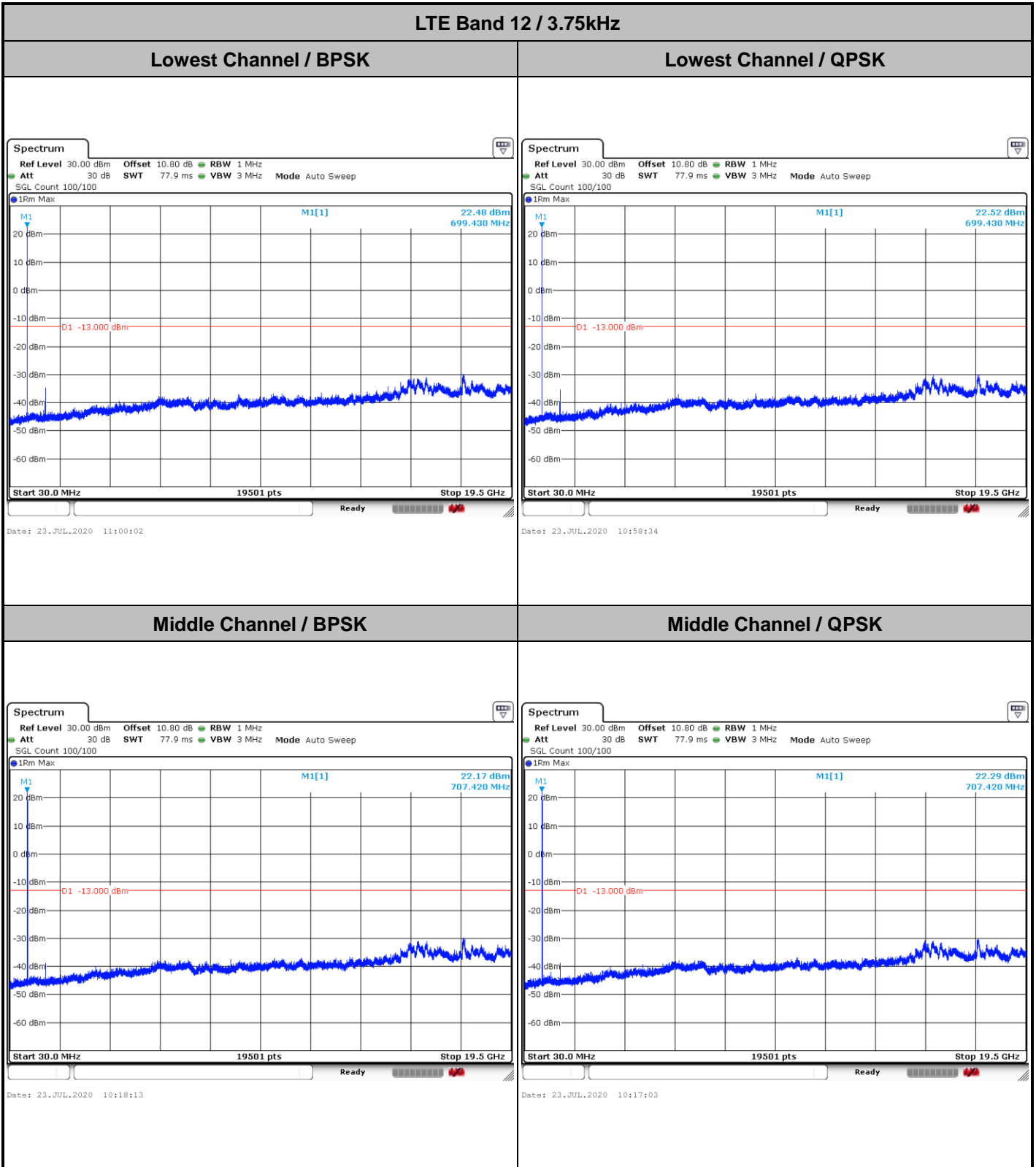
Highest Band Edge / Full T



Date: 30.JUL.2020 13:55:17



Conducted Spurious Emission

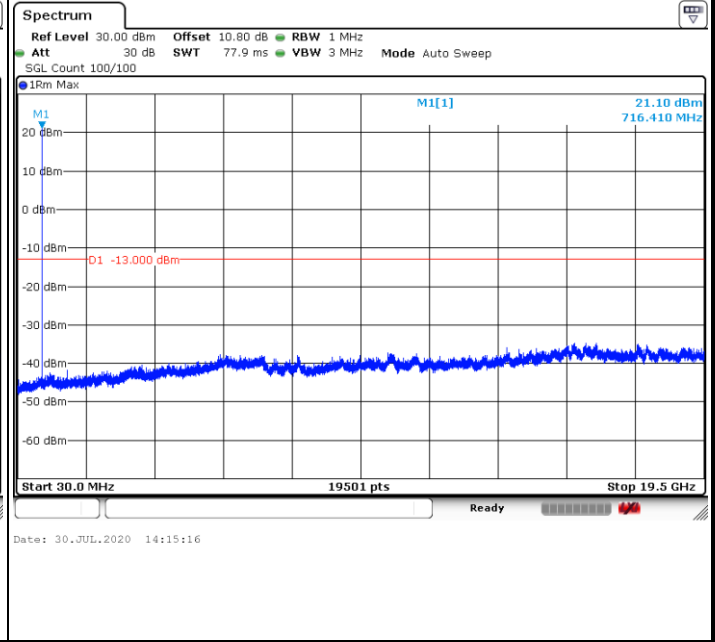
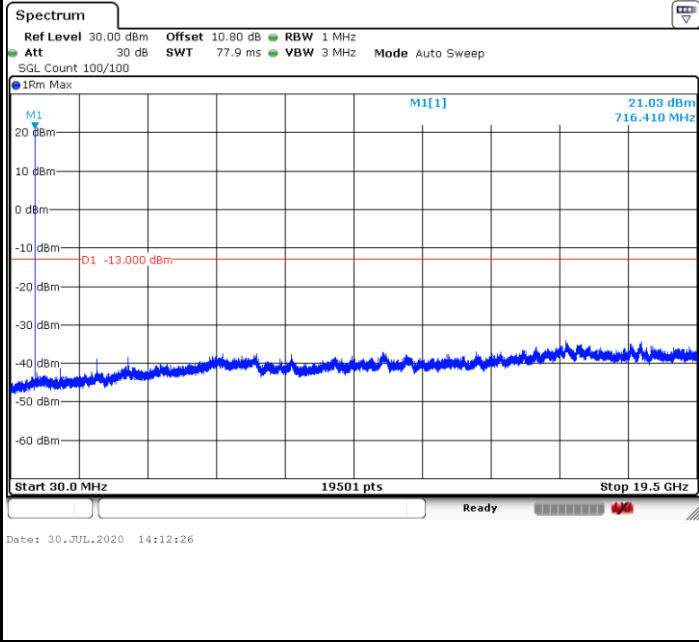




LTE Band 12 / 3.75kHz

Highest Channel / BPSK

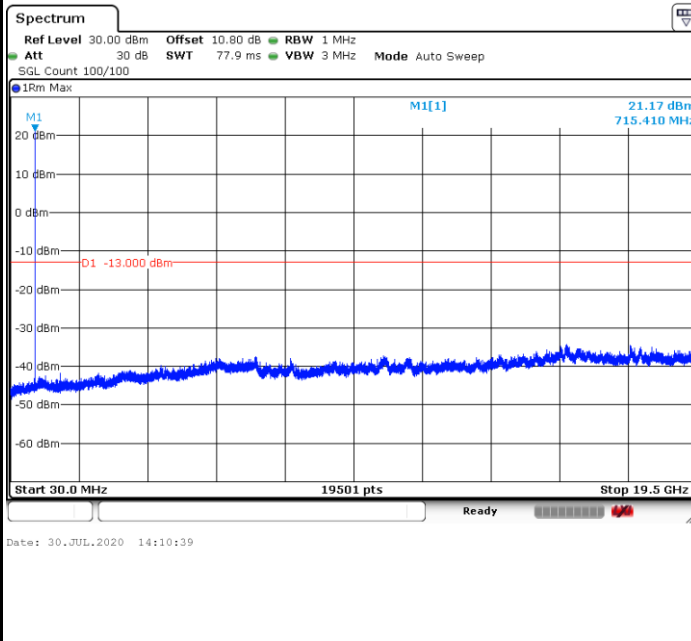
Highest Channel / QPSK



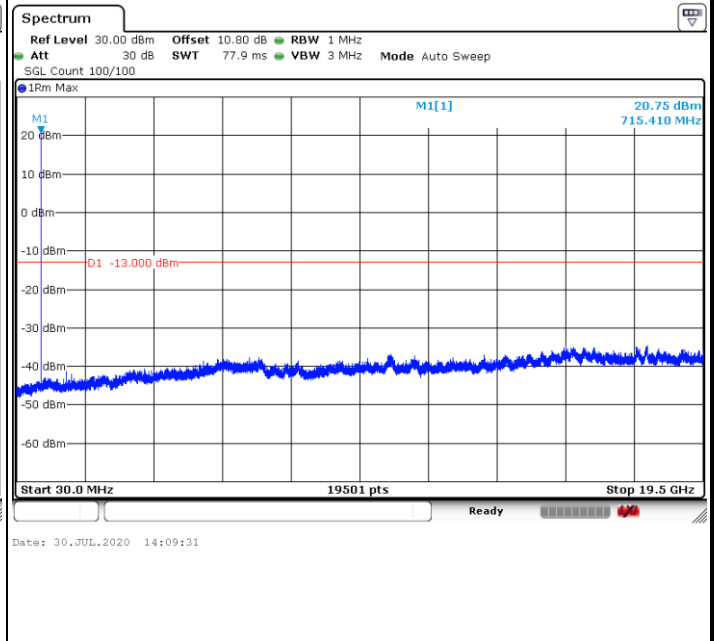


LTE Band 12 / 15kHz

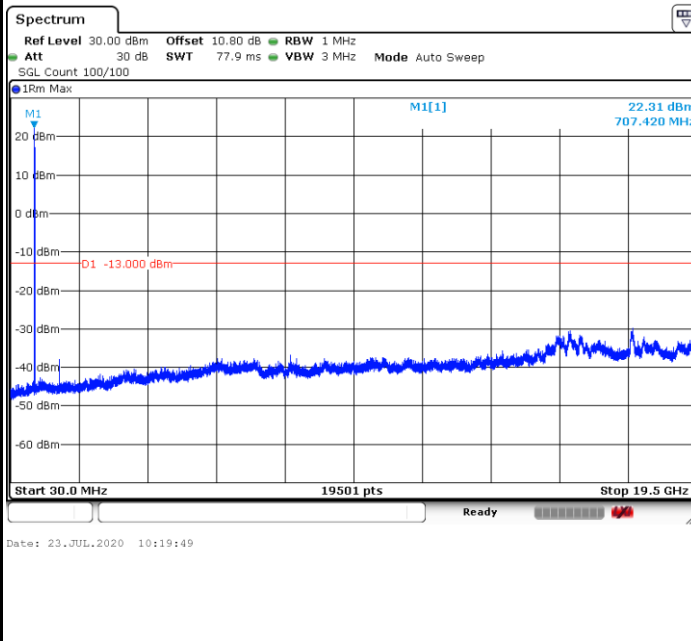
Lowest Channel / BPSK



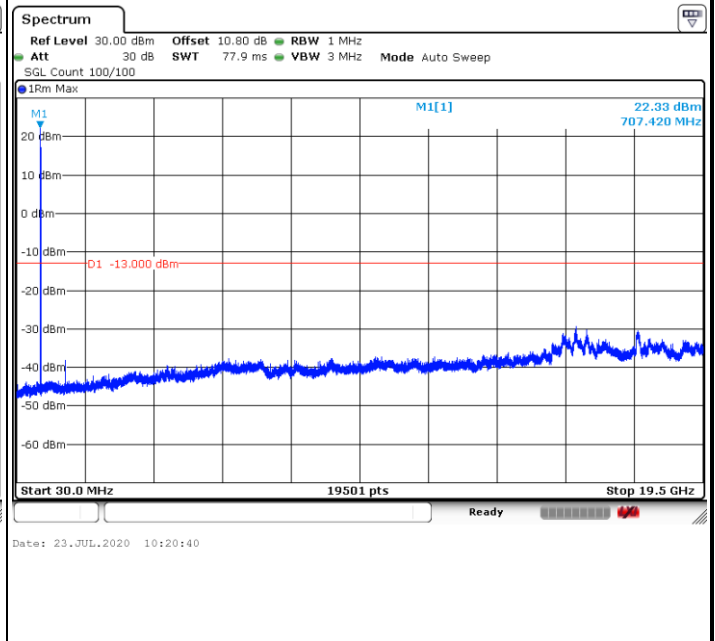
Lowest Channel / QPSK



Middle Channel / BPSK



Middle Channel / QPSK

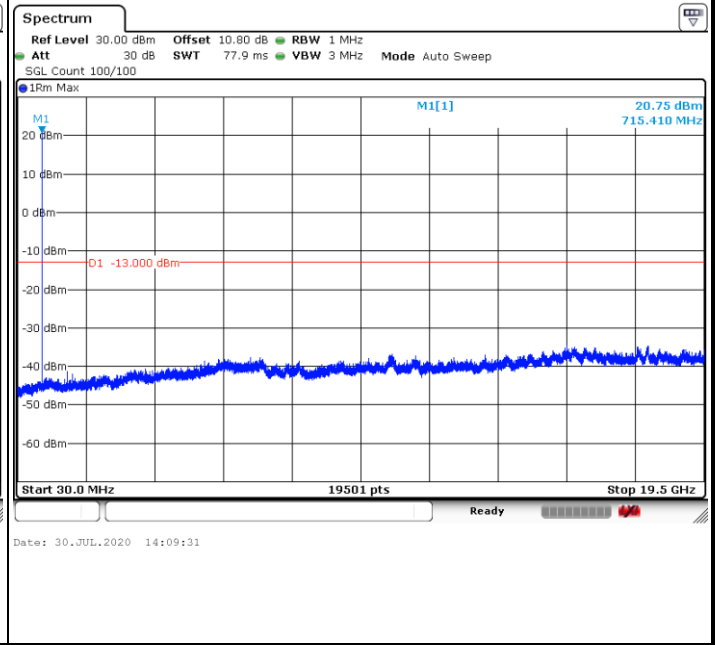
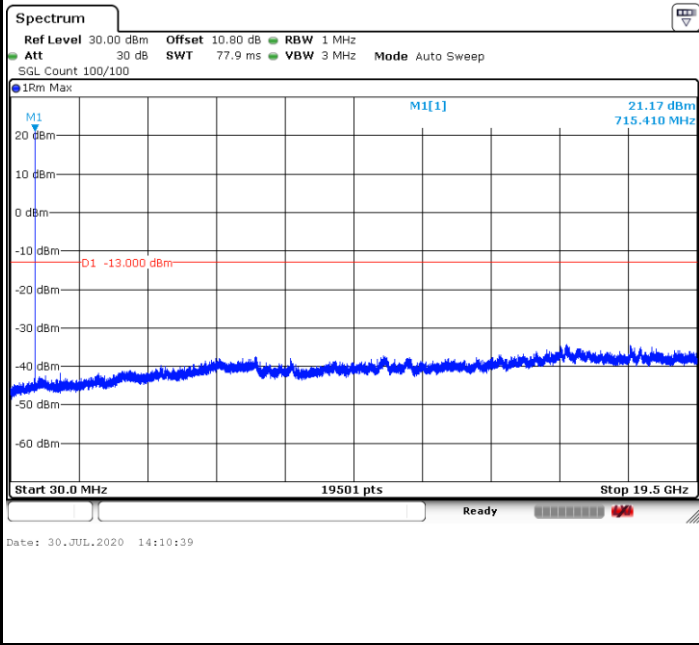




LTE Band 12 / 15kHz

Highest Channel / BPSK

Highest Channel / QPSK





Frequency Stability

Test Conditions		LTE Band 12 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 15kHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0095	PASS
40	Normal Voltage	0.0139	
30	Normal Voltage	0.0093	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0041	
0	Normal Voltage	0.0100	
-10	Normal Voltage	0.0151	
-20	Normal Voltage	0.0147	
-30	Normal Voltage	0.0068	
20	Maximum Voltage	0.0041	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0028	

Note:

- 1. Normal Voltage =3.6 V. ; Battery End Point (BEP) =3.3 V. ; Maximum Voltage =3.7 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

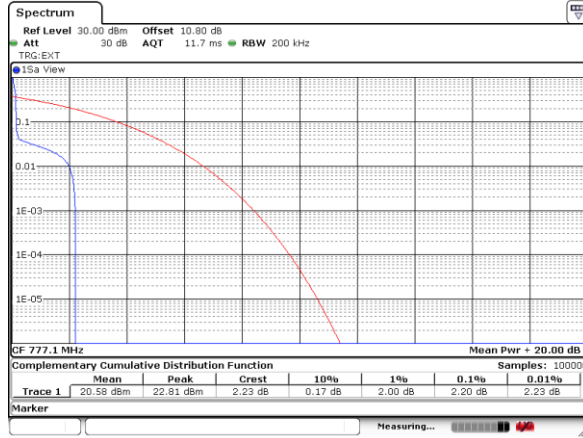
Peak-to-Average Ratio

Mode	LTE Band 13 / 15kHz			
Mod.	BPSK	QPSK		Limit: 13dB
T Size	1T	1T	Full T	Result
Lowest CH	2.20	1.77	4.06	PASS
Middle CH	2.20	1.74	4.09	
Highest CH	2.20	1.77	4.09	



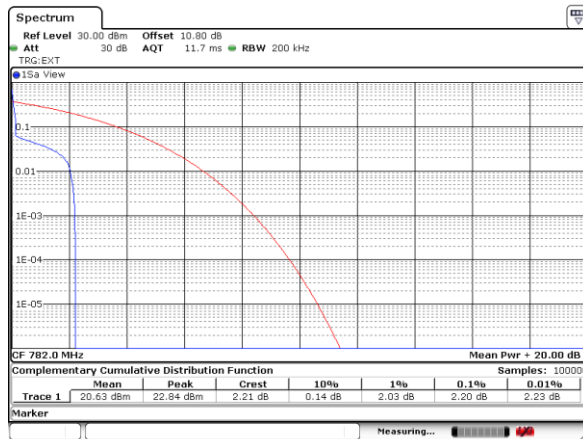
LTE Band 13 / 15kHz / BPSK

Lowest Channel / 1T



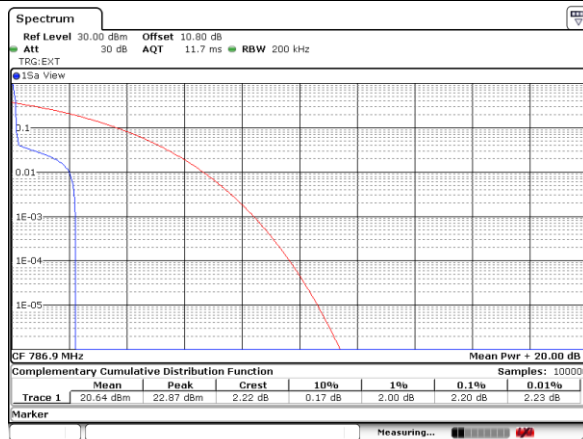
Date: 30.JUL.2020 11:12:27

Middle Channel/ 1T



Date: 30.JUL.2020 11:48:40

Highest Channel/ 1T

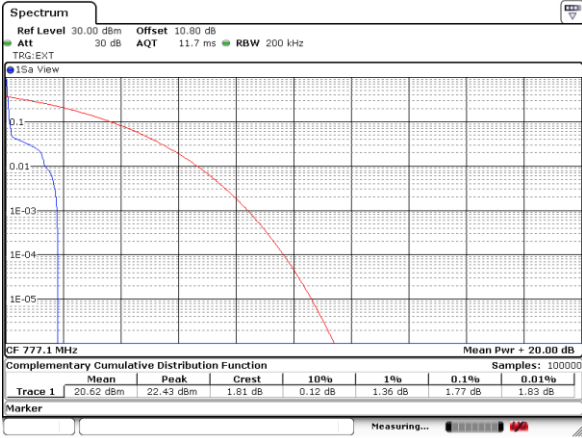


Date: 30.JUL.2020 11:47:01

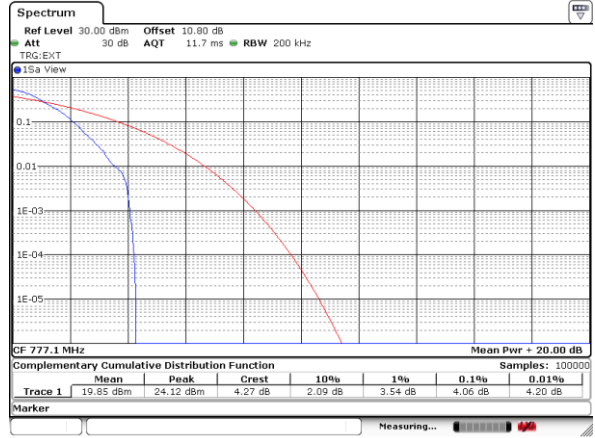


LTE Band 13 / 10MHz / QPSK

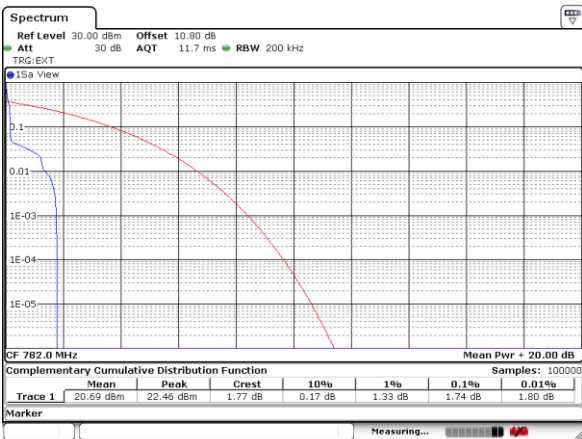
Lowest Channel / 1T



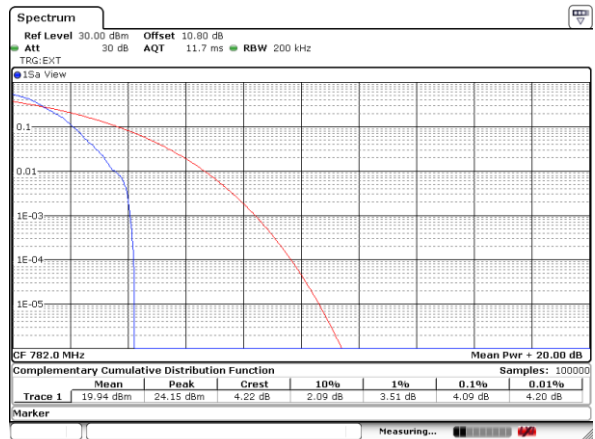
Lowest Channel / Full T



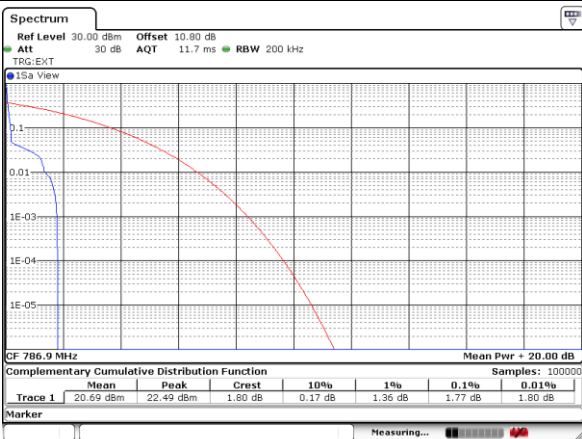
Middle Channel / 1T



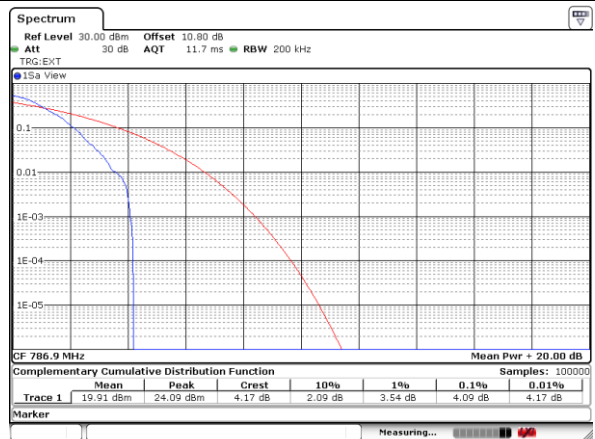
Middle Channel / Full T



Highest Channel / 1T



Highest Channel / Full T





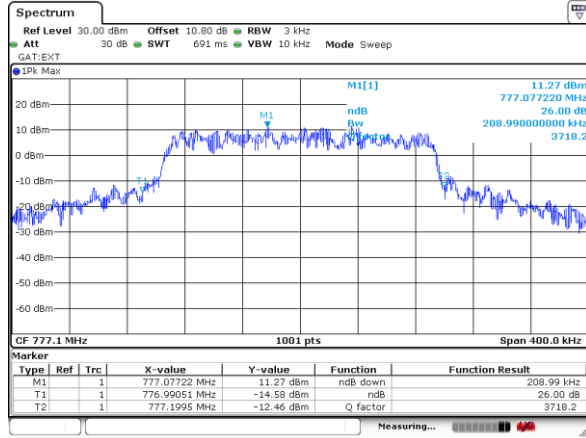
26dB Bandwidth

Mode	LTE Band 13 : 26dB(kHz)
Subcarrier Spacing	15k
Mod.	QPSK
Lowest CH	208.99
Middle CH	218.58
Highest CH	206.59

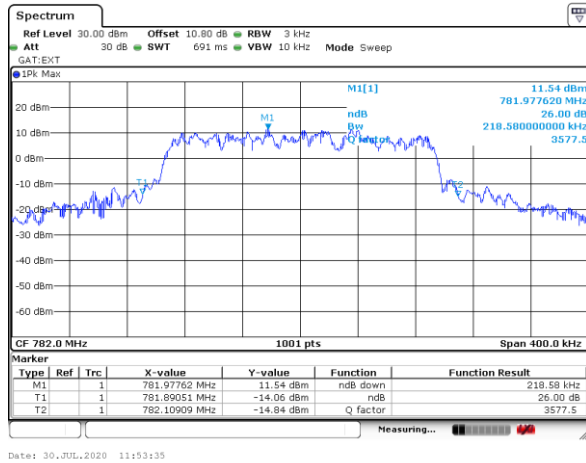


LTE Band 13

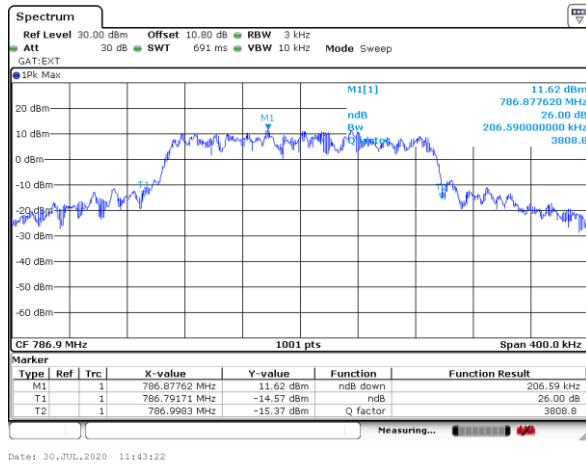
Lowest Channel / 15kHz / QPSK



Middle Channel / 15kHz / QPSK



Highest Channel / 15kHz / QPSK





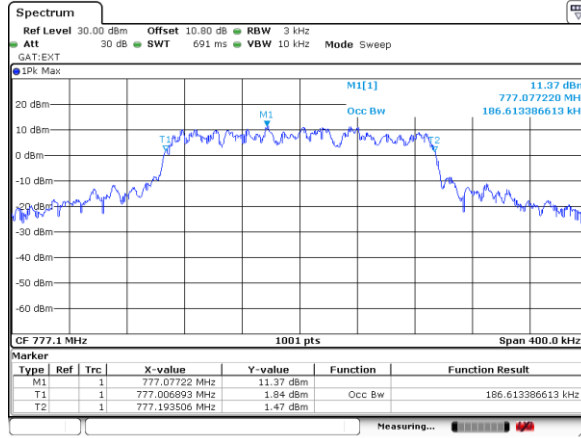
Occupied Bandwidth

Mode	LTE Band 13 : OB(kHz)
Subcarrier Spacing	15k
Mod.	QPSK
Lowest CH	186.61
Middle CH	187.01
Highest CH	187.01



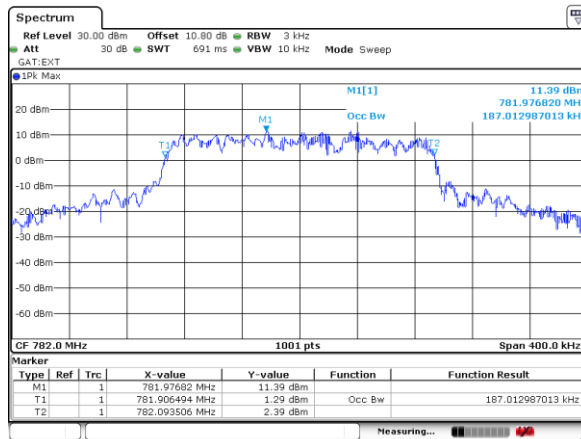
LTE Band 13

Lowest Channel / 15kHz / QPSK



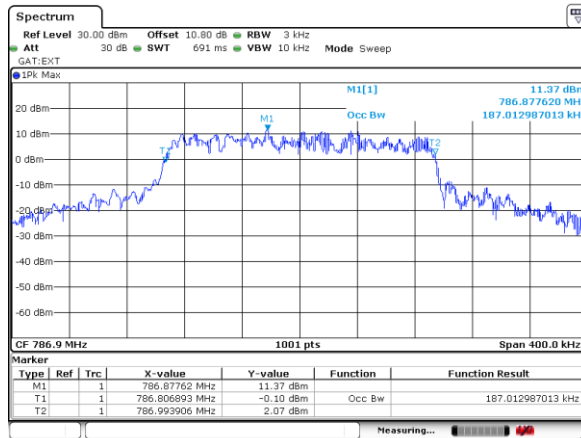
Date: 30.JUL.2020 11:10:51

Middle Channel / 15kHz / QPSK



Date: 30.JUL.2020 11:57:51

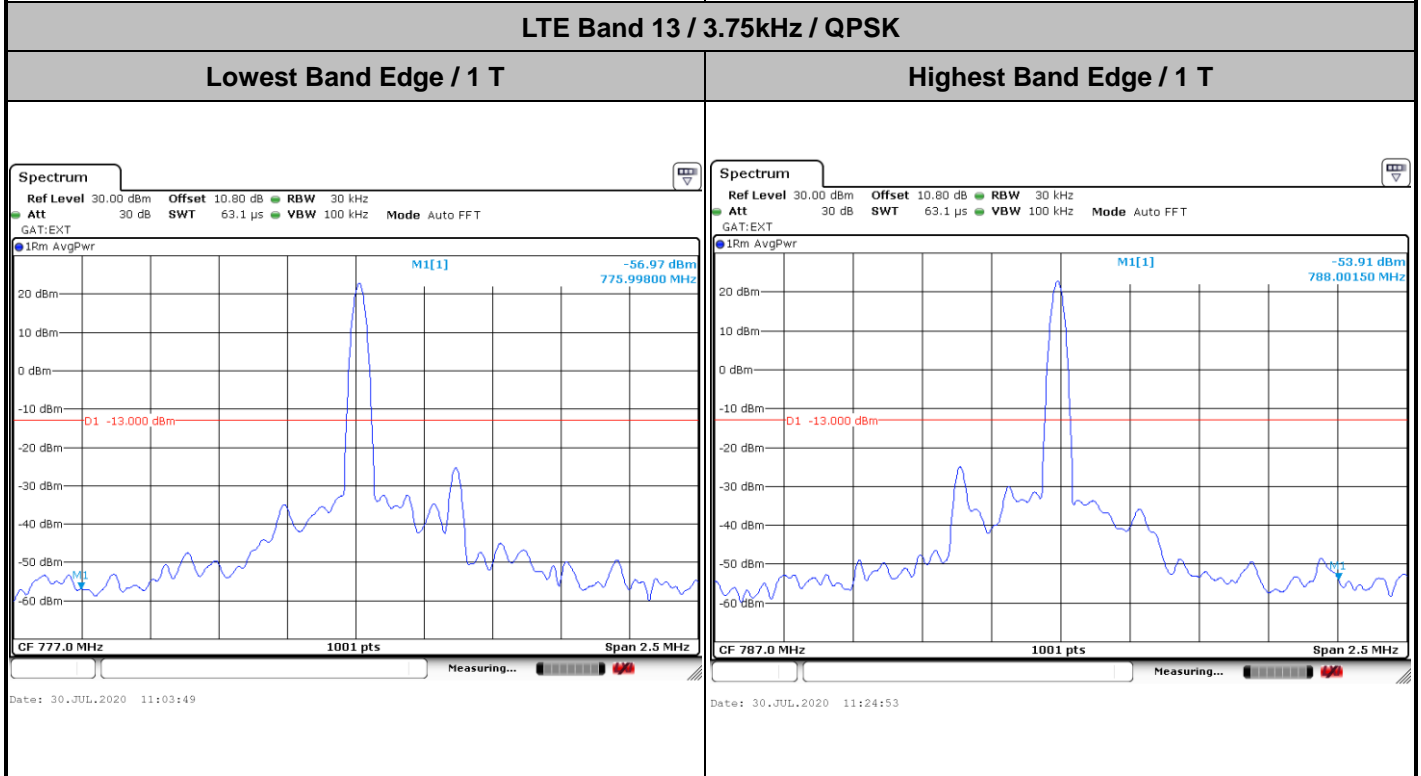
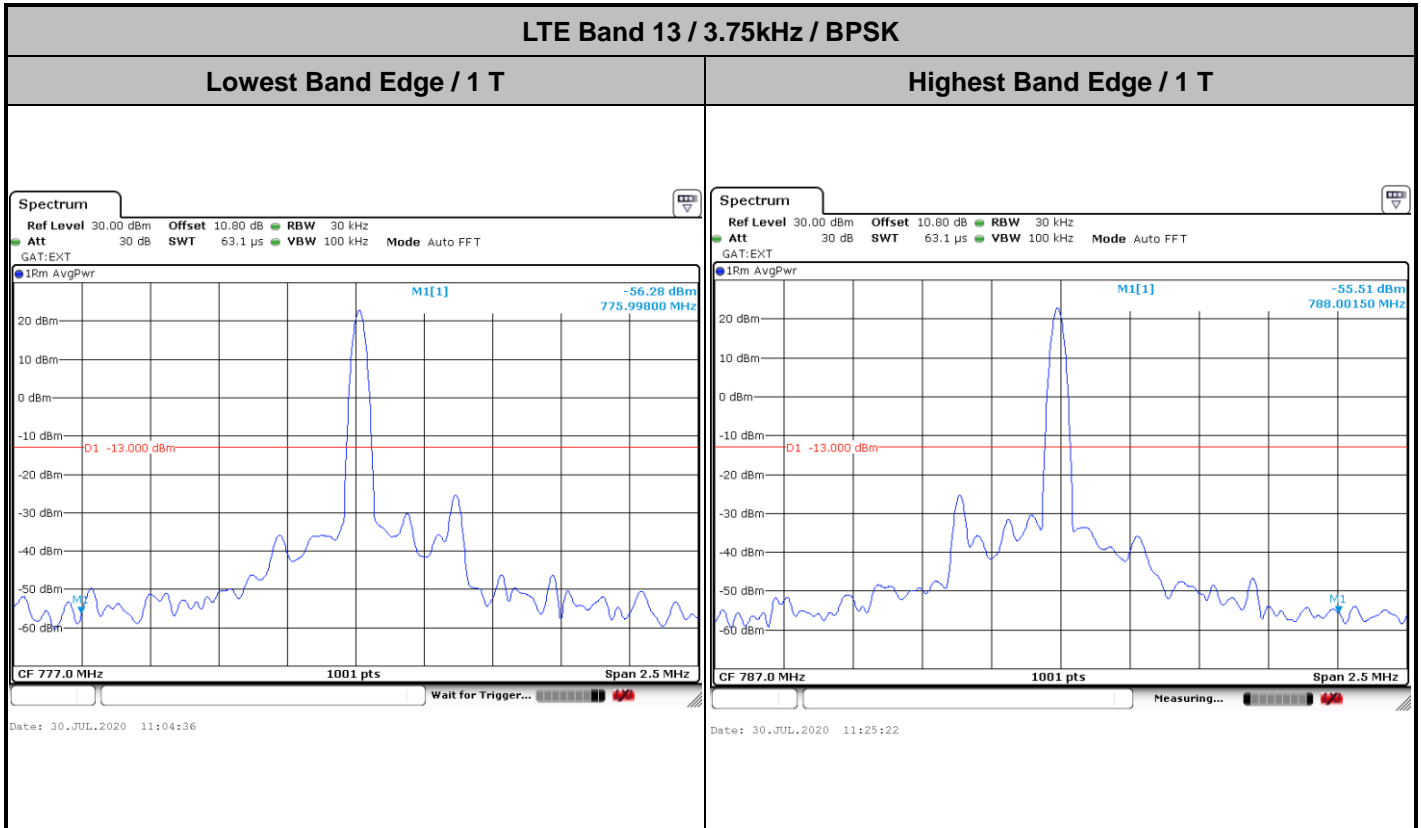
Highest Channel / 15kHz / QPSK



Date: 30.JUL.2020 11:45:02



Conducted Band Edge

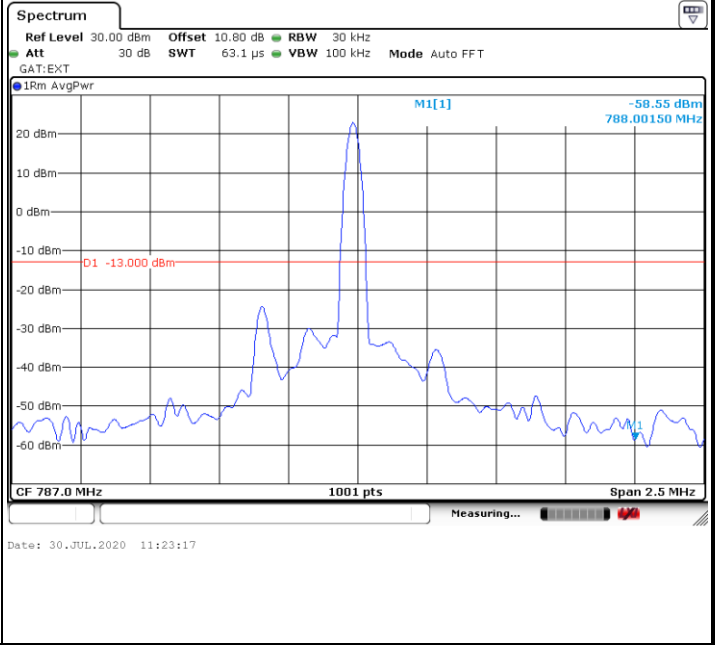
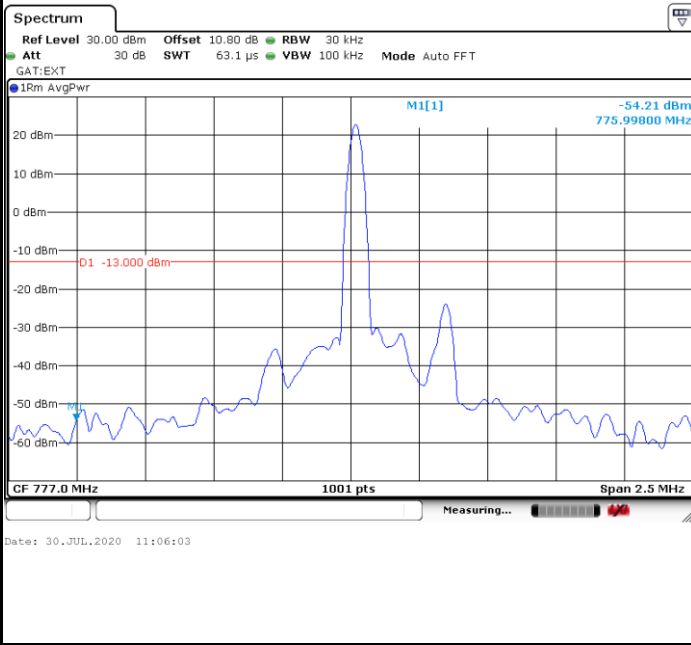




LTE Band 13 / 15kHz / BPSK

Lowest Band Edge / 1 T

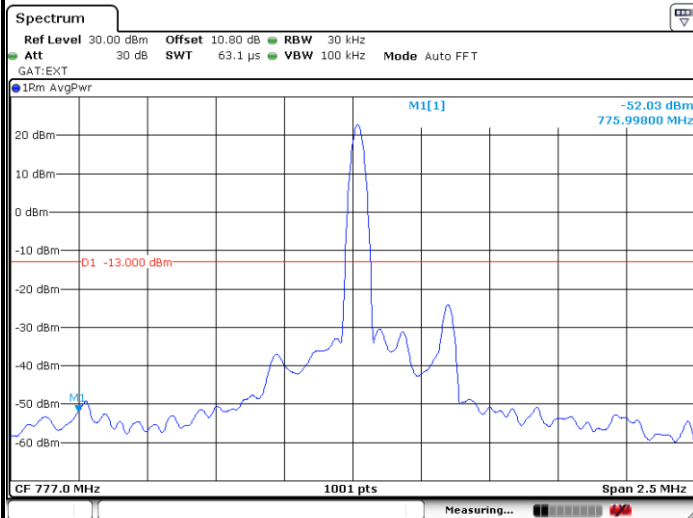
Highest Band Edge / 1 T



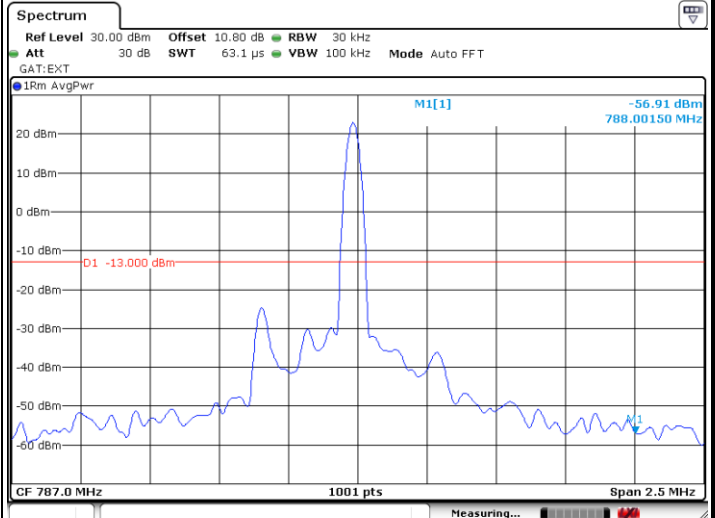


LTE Band 13 / 15kHz / QPSK

Lowest Band Edge / 1 T



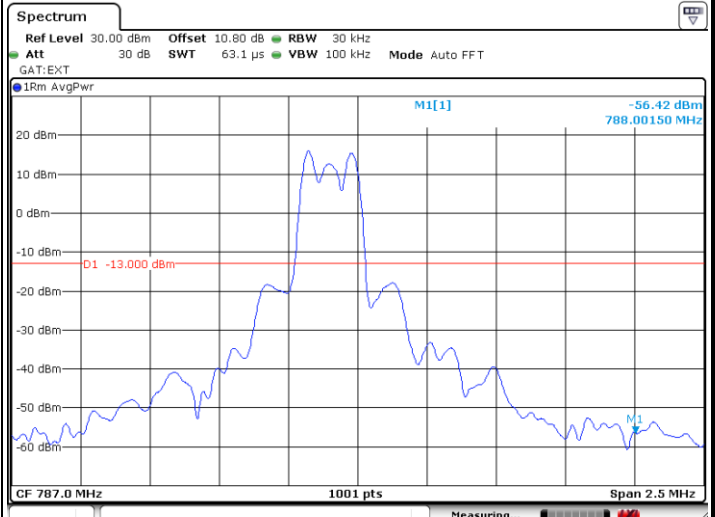
Highest Band Edge / 1 T



Lowest Band Edge / Full T

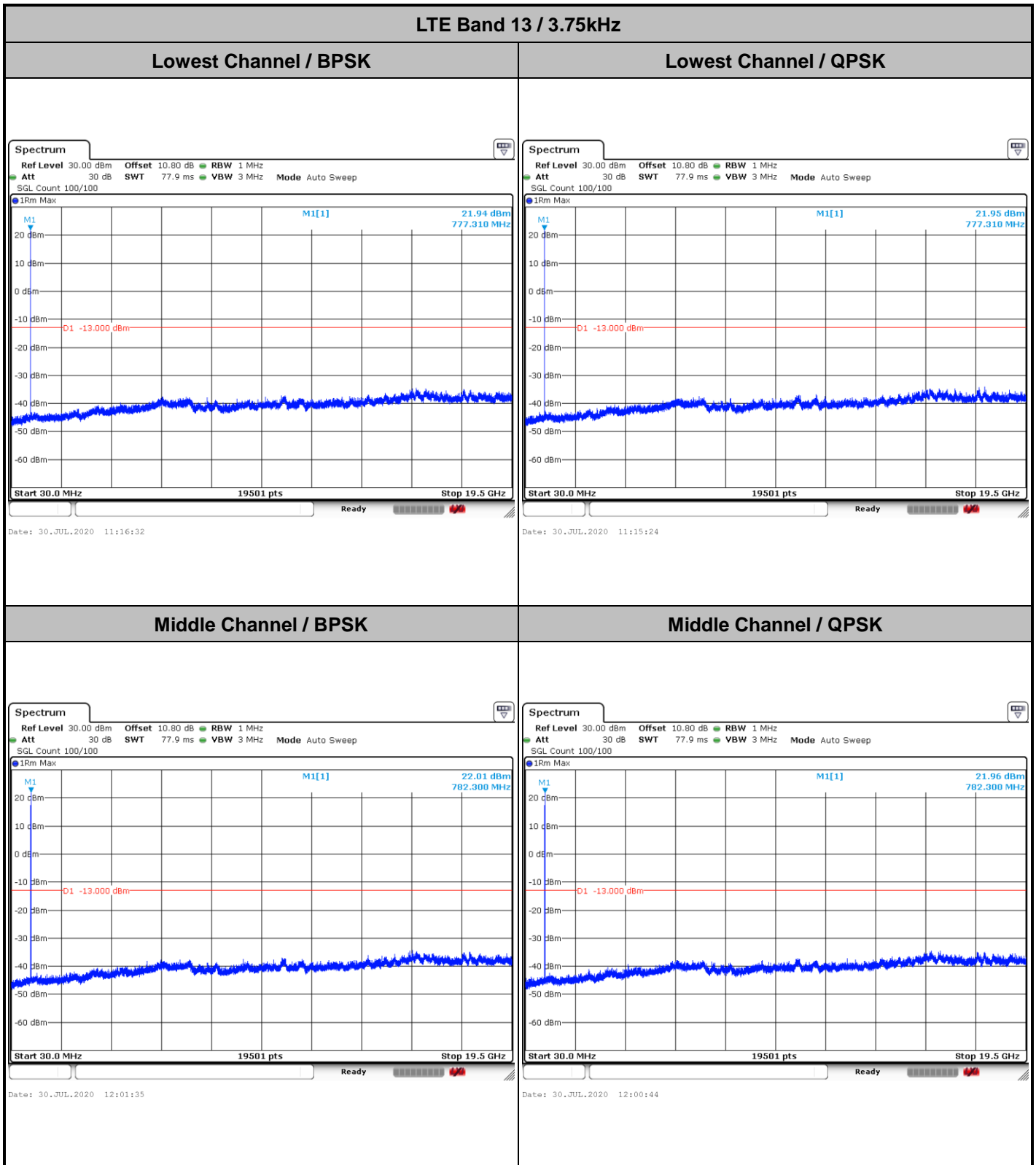


Highest Band Edge / Full T





Conducted Spurious Emission

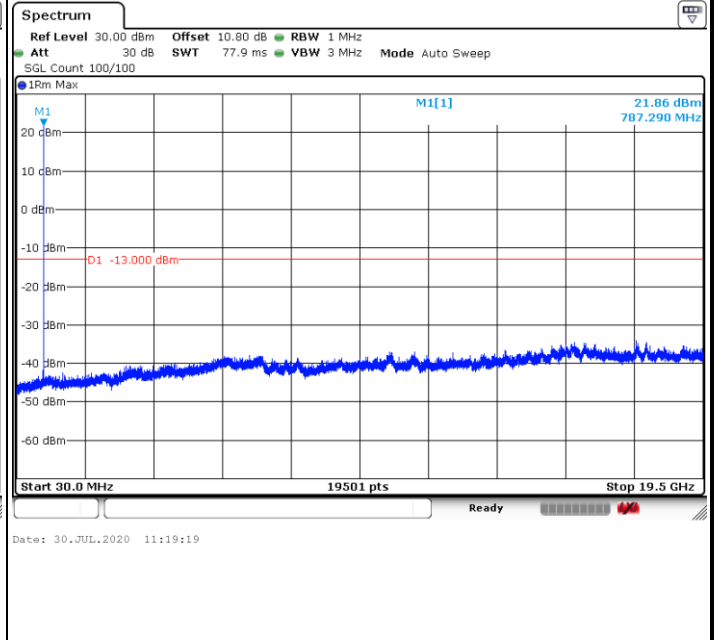
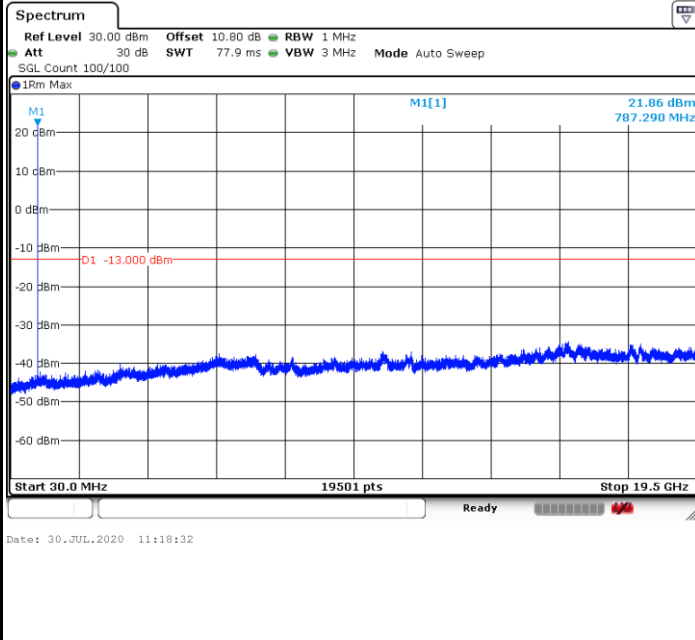




LTE Band 13 / 3.75kHz

Highest Channel / BPSK

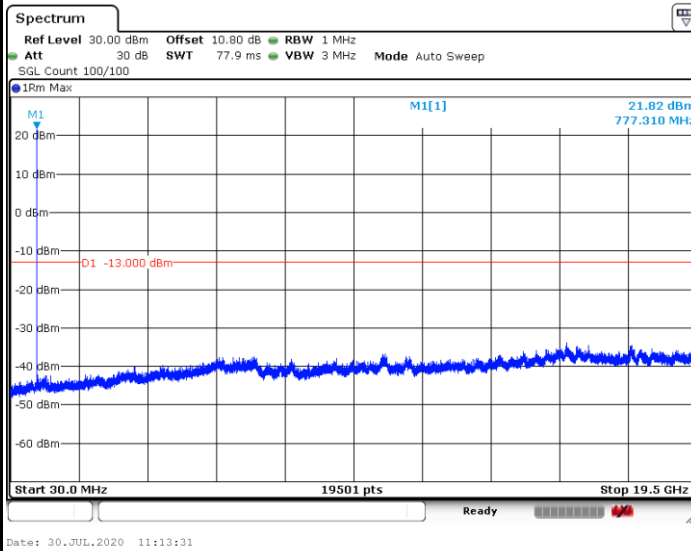
Highest Channel / QPSK



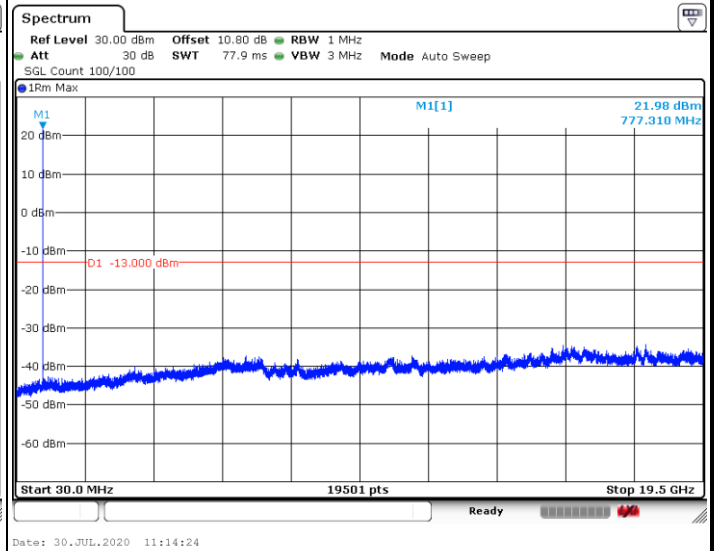


LTE Band 13 / 15kHz

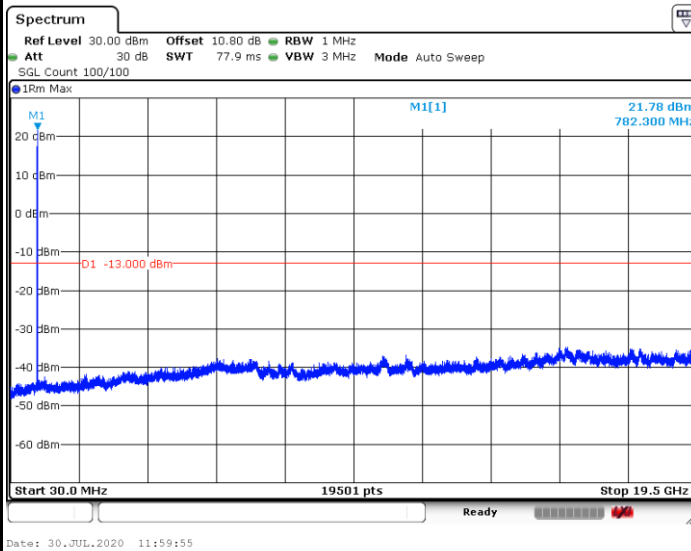
Lowest Channel / BPSK



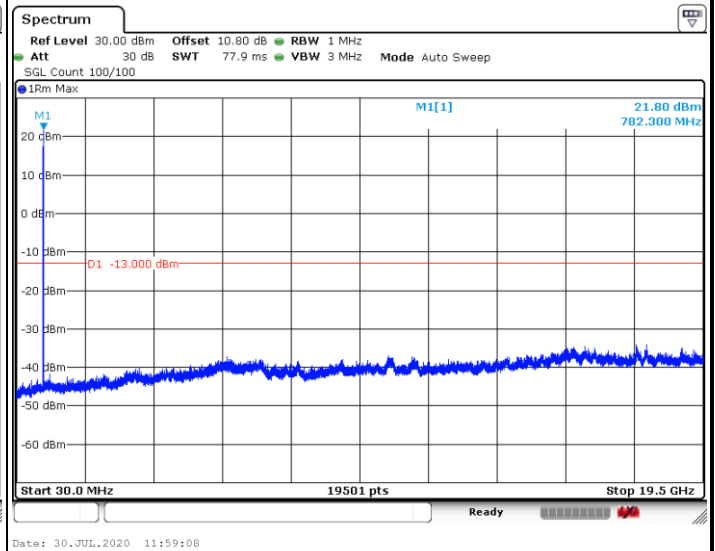
Lowest Channel / QPSK



Middle Channel / BPSK



Middle Channel / QPSK

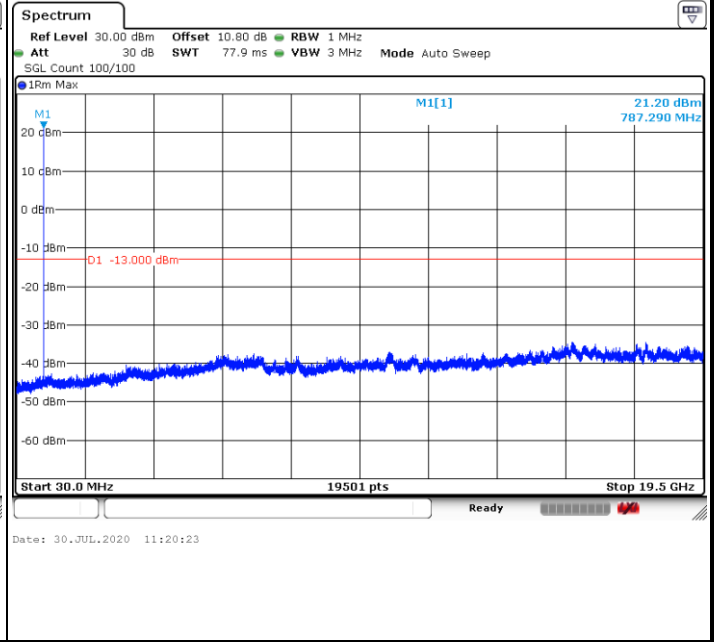
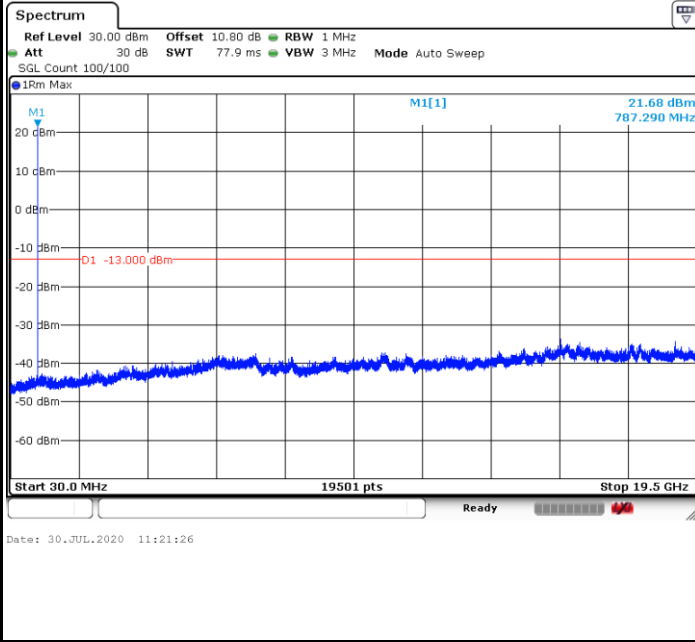




LTE Band 13 / 15kHz

Highest Channel / BPSK

Highest Channel / QPSK





Frequency Stability

Test Conditions		LTE Band 13 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 15kHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0013	PASS
40	Normal Voltage	0.0090	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0132	
0	Normal Voltage	0.0032	
-10	Normal Voltage	0.0107	
-20	Normal Voltage	0.0133	
-30	Normal Voltage	0.0118	
20	Maximum Voltage	0.0138	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0124	

Note:

- 1. Normal Voltage =3.6 V. ; Battery End Point (BEP) =3.3 V. ; Maximum Voltage =3.7 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 17

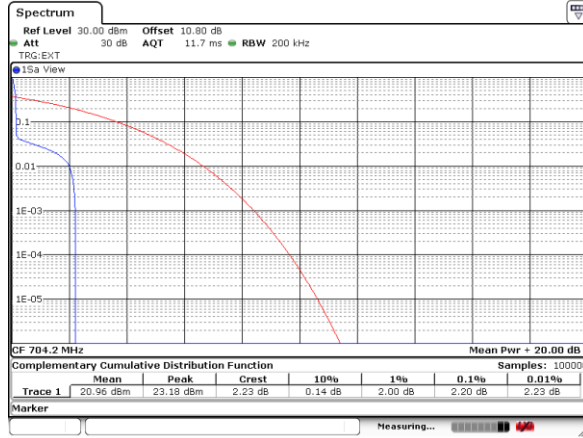
Peak-to-Average Ratio

Mode	LTE Band 17 / 15kHz			
Mod.	BPSK	QPSK		Limit: 13dB
T Size	1T	1T	Full T	Result
Lowest CH	2.20	1.80	4.06	PASS
Middle CH	2.20	1.80	4.12	
Highest CH	2.23	1.77	4.06	



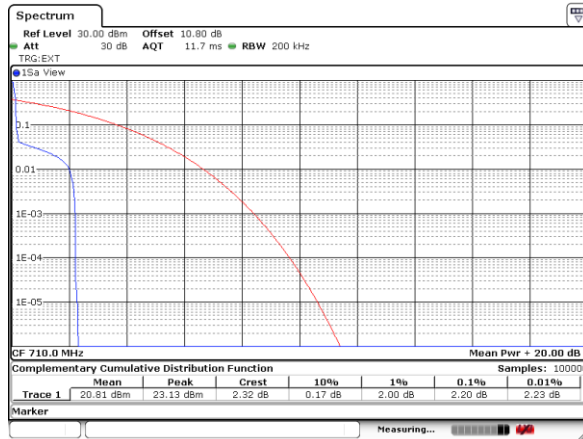
LTE Band 17 / 15kHz / BPSK

Lowest Channel / 1T



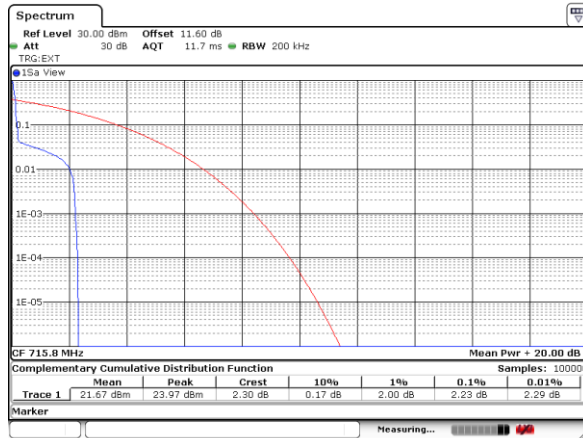
Date: 31.JUL.2020 10:20:37

Middle Channel/ 1T



Date: 31.JUL.2020 10:32:01

Highest Channel/ 1T

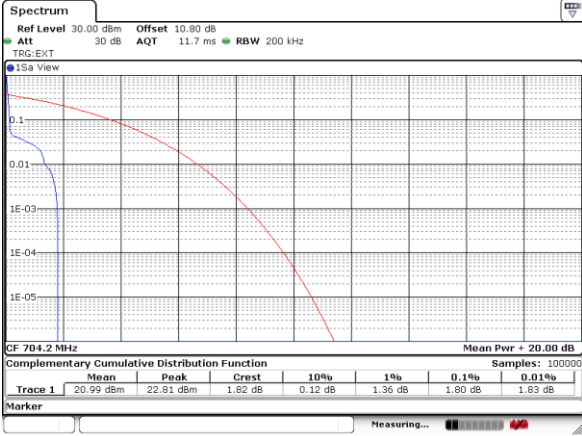


Date: 31.JUL.2020 11:40:47



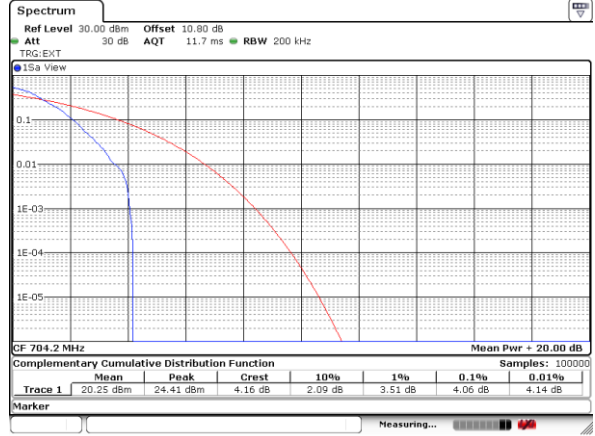
LTE Band 17 / 15kHz / QPSK

Lowest Channel / 1T



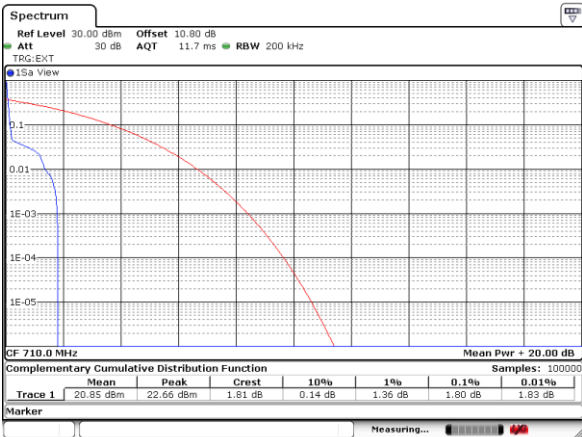
Date: 31.JUL.2020 10:20:05

Lowest Channel / Full T



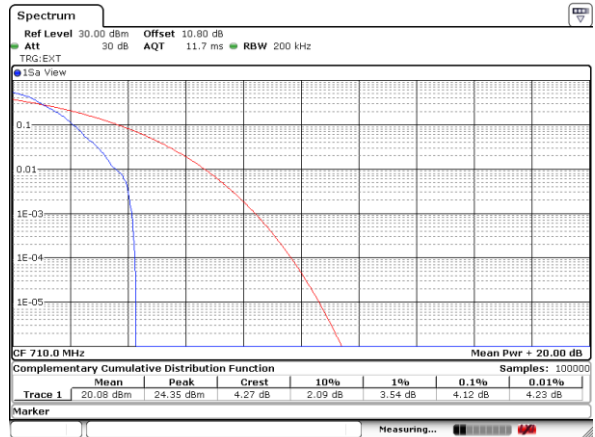
Date: 31.JUL.2020 10:19:30

Middle Channel / 1T



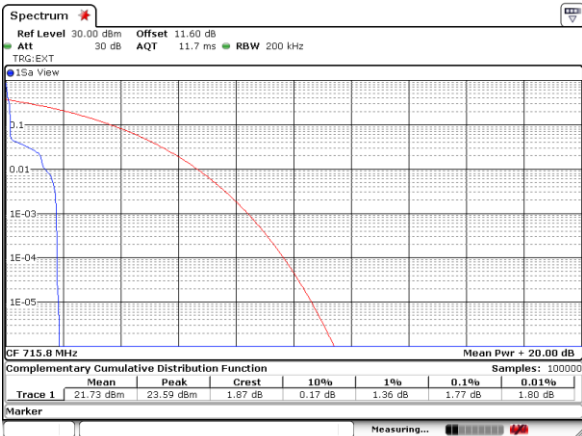
Date: 31.JUL.2020 10:32:47

Middle Channel / Full T



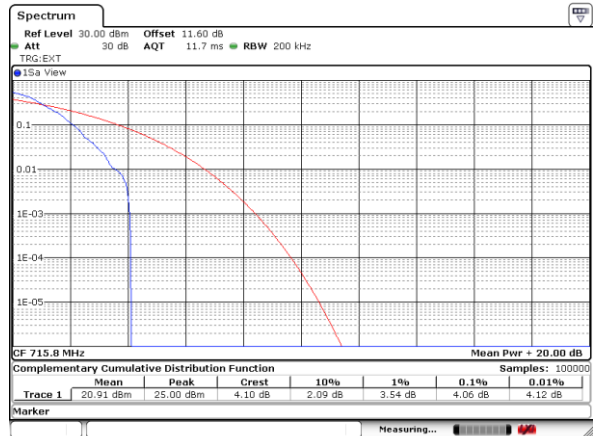
Date: 31.JUL.2020 10:33:05

Highest Channel / 1T



Date: 31.JUL.2020 11:40:22

Highest Channel / Full T



Date: 31.JUL.2020 11:39:54



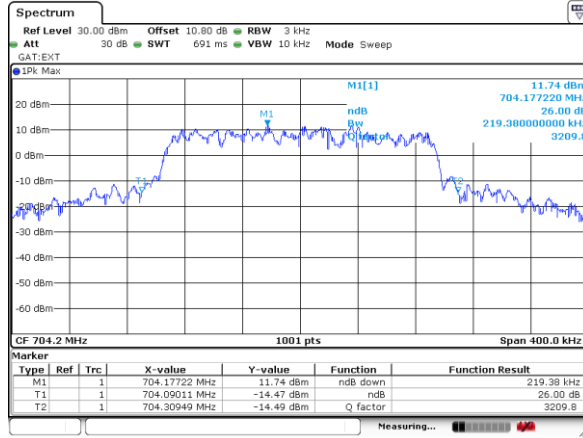
26dB Bandwidth

Mode	LTE Band 17 : 26dB(kHz)
Subcarrier Spacing	15k
Mod.	QPSK
Lowest CH	219.38
Middle CH	206.59
Highest CH	198.20

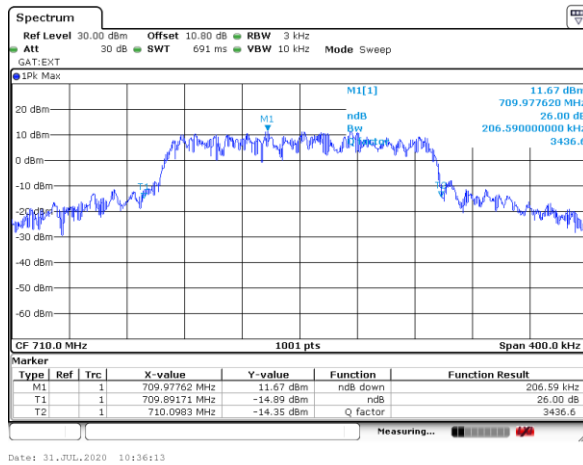


LTE Band 17

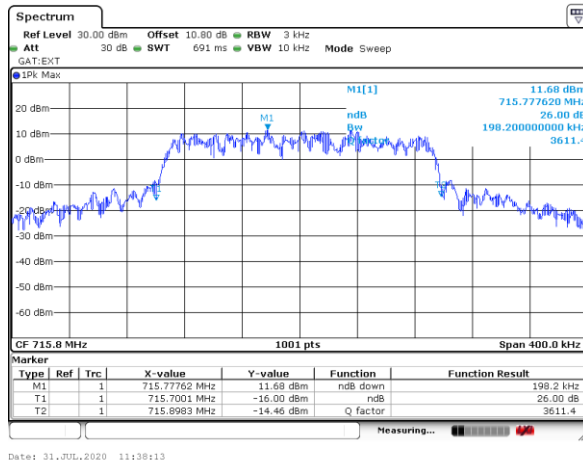
Lowest Channel / 15kHz / QPSK



Middle Channel / 15kHz / QPSK



Highest Channel / 15kHz / QPSK





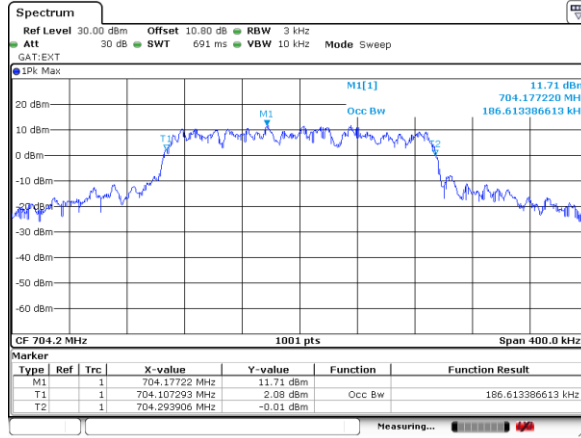
Occupied Bandwidth

Mode	LTE Band 17 : OB(kHz)
Subcarrier Spacing	15k
Mod.	QPSK
Lowest CH	186.61
Middle CH	187.01
Highest CH	187.41

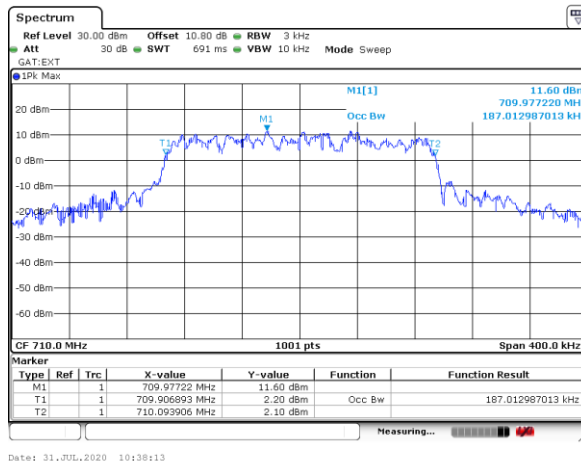


LTE Band 17

Lowest Channel / 15kHz / QPSK



Middle Channel / 15kHz / QPSK



Highest Channel / 15kHz / QPSK

