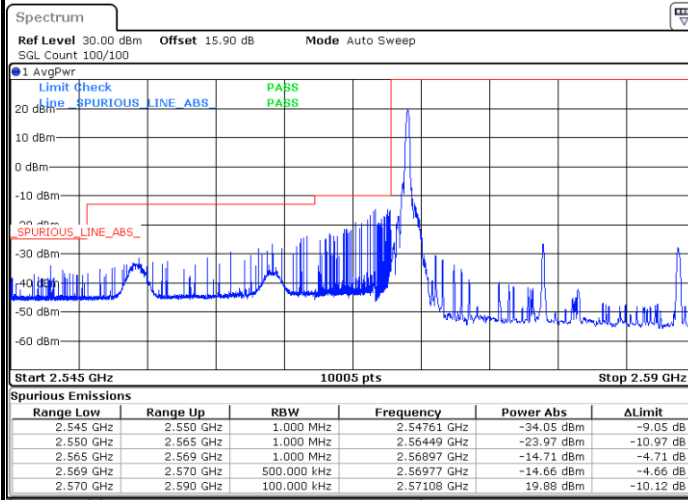




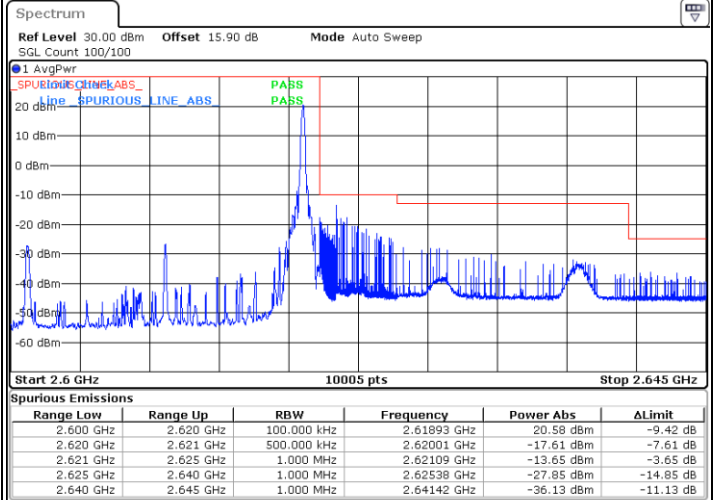
LTE Band 38 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



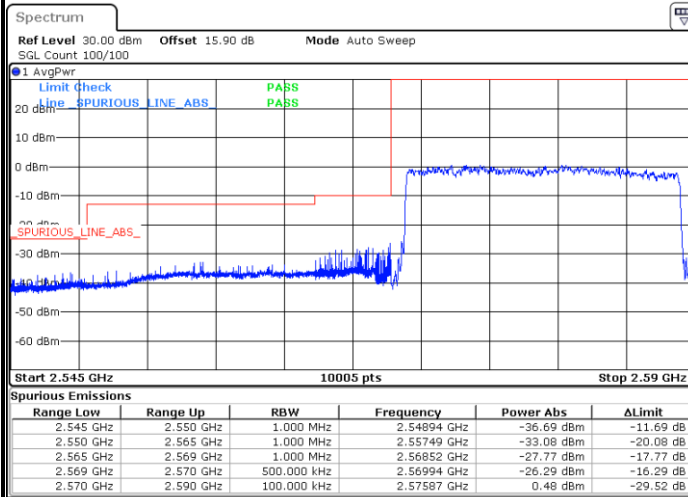
Date: 4 JAN 2020 19:53:00

Highest Band Edge / 1 RB



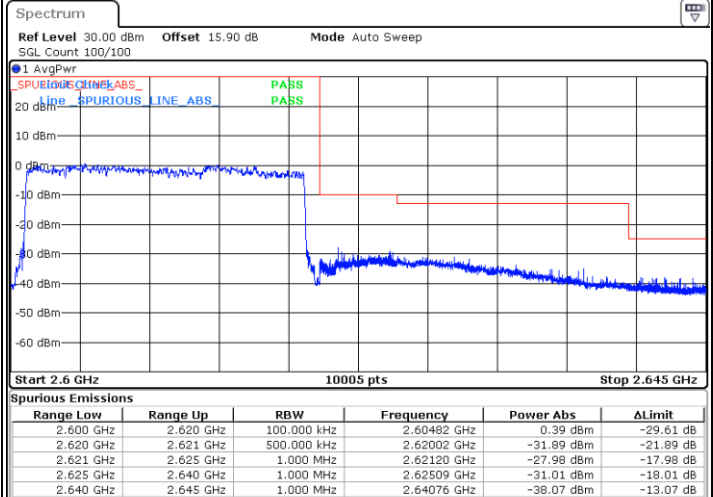
Date: 4 JAN 2020 19:57:09

Lowest Band Edge / Full RB



Date: 4 JAN 2020 19:54:23

Highest Band Edge / Full RB

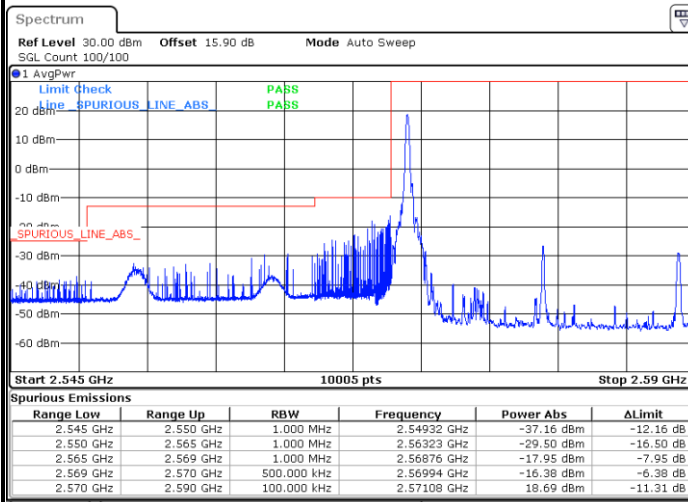


Date: 4 JAN 2020 19:55:46

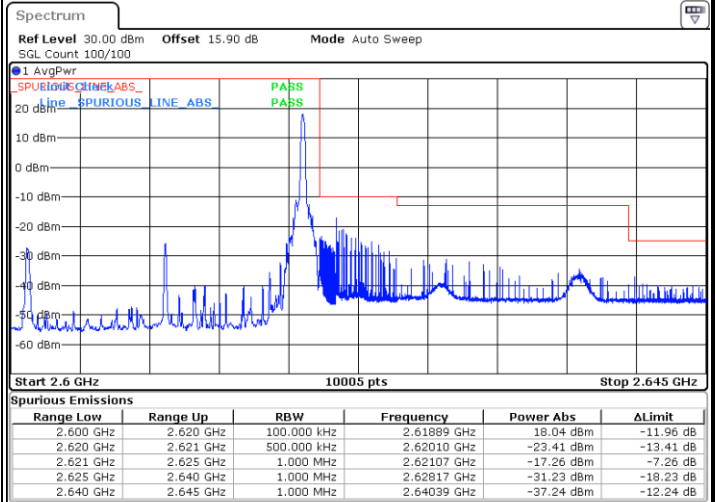


LTE Band 38 / 20MHz / 64QAM

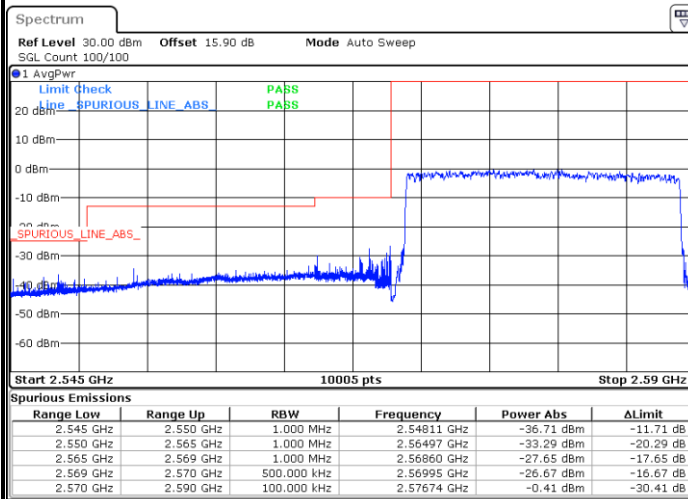
Lowest Band Edge / 1 RB



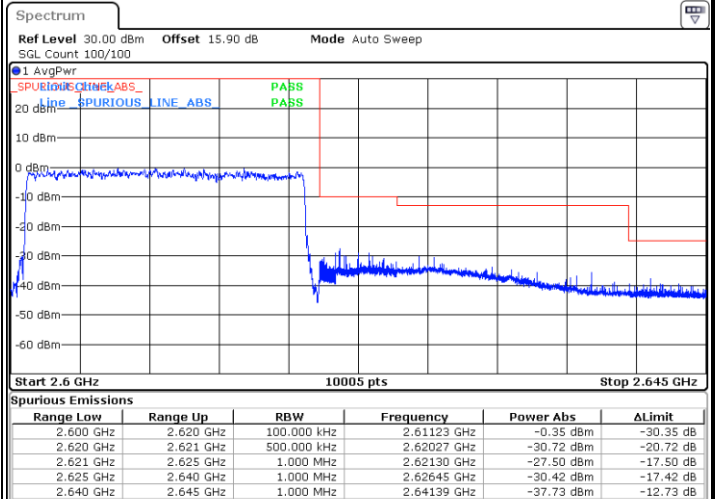
Highest Band Edge / 1 RB

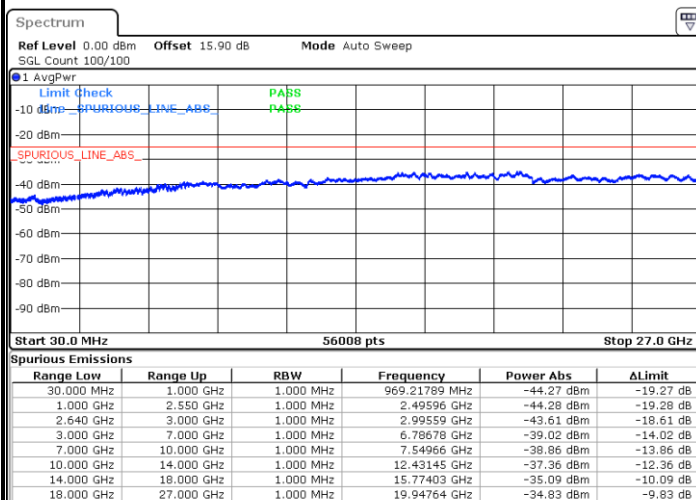


Lowest Band Edge / Full RB

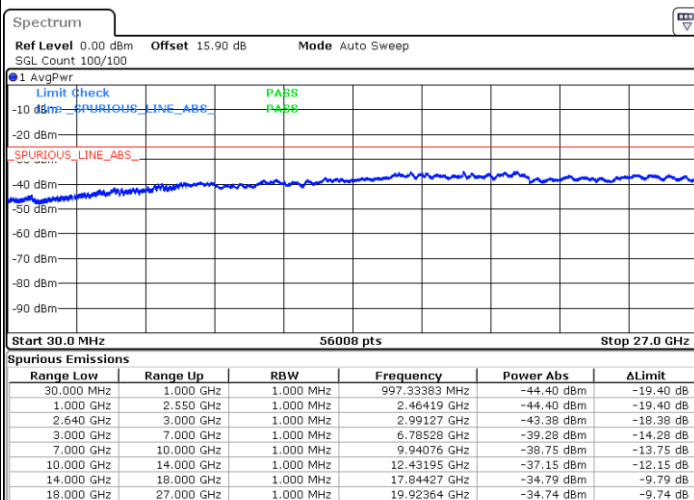


Highest Band Edge / Full RB

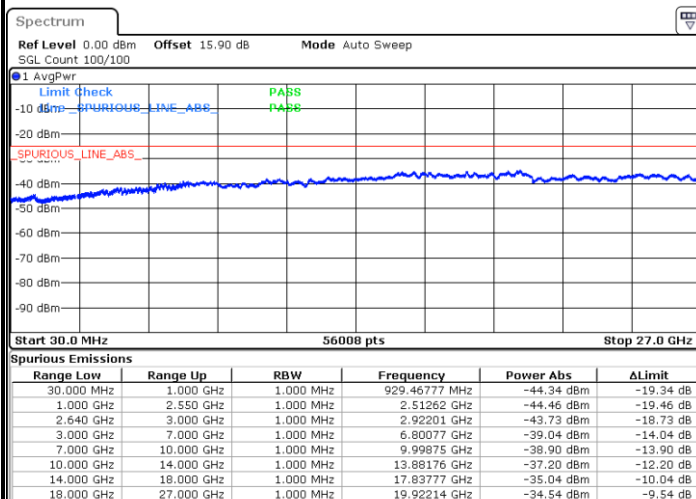


**Conducted Spurious Emission****LTE Band 38 / 5MHz****Lowest Channel / QPSK**

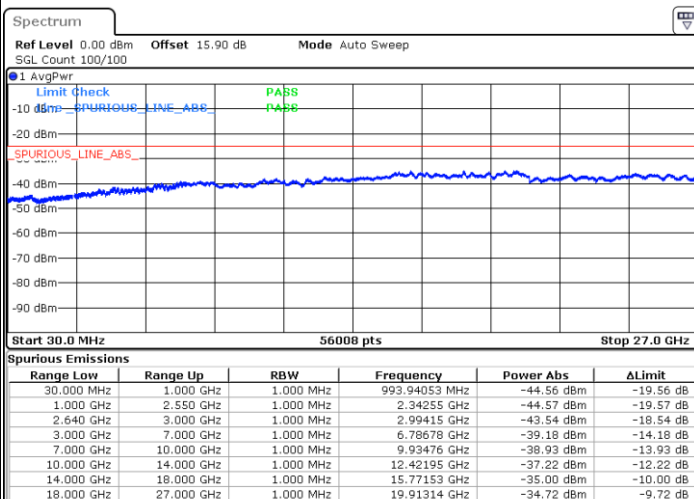
Date: 4 JAN 2020 20:02:56

Lowest Channel / 16QAM

Date: 4 JAN 2020 20:03:41

Middle Channel / QPSK

Date: 4 JAN 2020 20:04:27

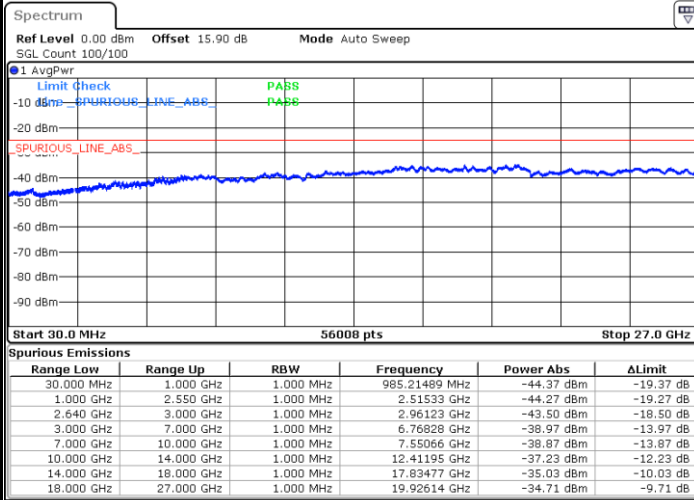
Middle Channel / 16QAM

Date: 4 JAN 2020 20:05:12



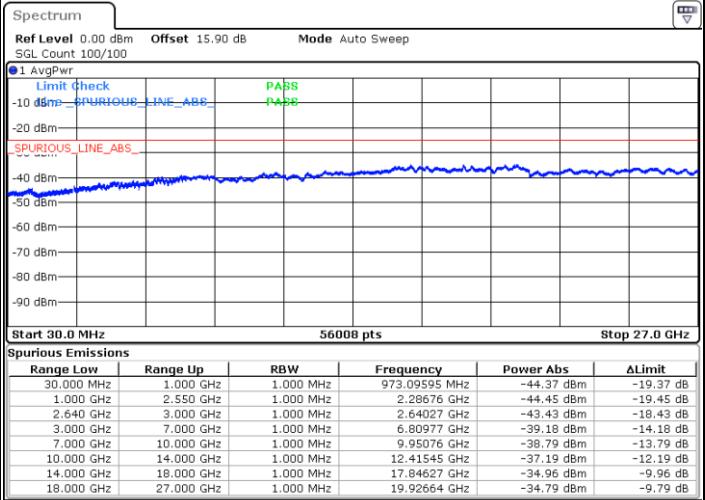
LTE Band 38 / 5MHz

Highest Channel / QPSK



Date: 4 JAN 2020 20:05:57

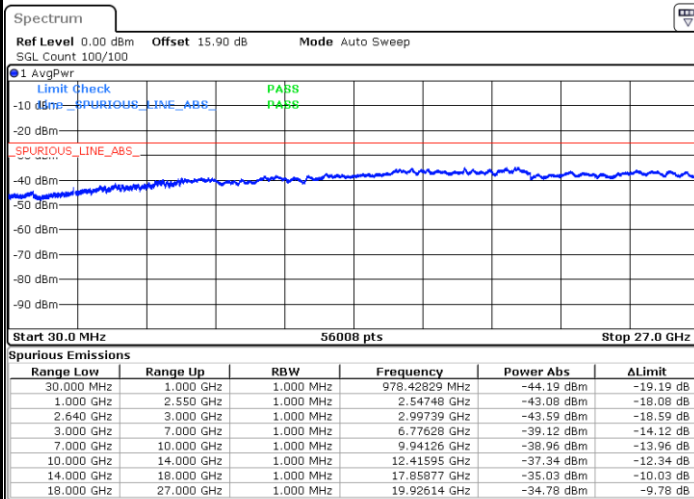
Highest Channel / 16QAM



Date: 4 JAN 2020 20:06:43

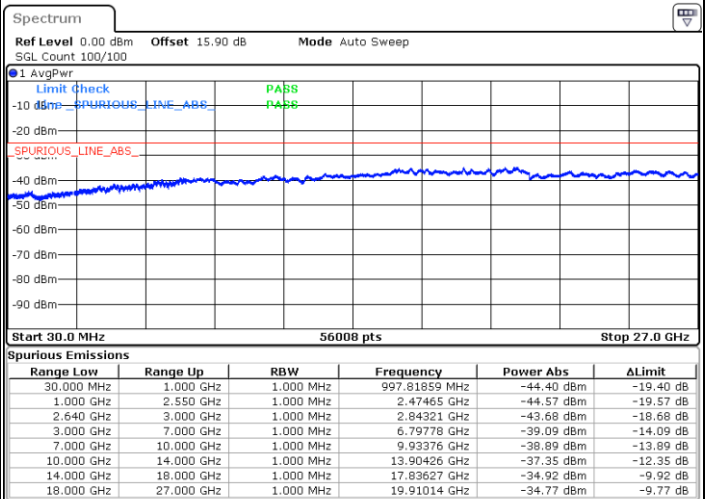
LTE Band 38 / 10MHz

Lowest Channel / QPSK



Date: 4 JAN 2020 20:09:44

Lowest Channel / 16QAM

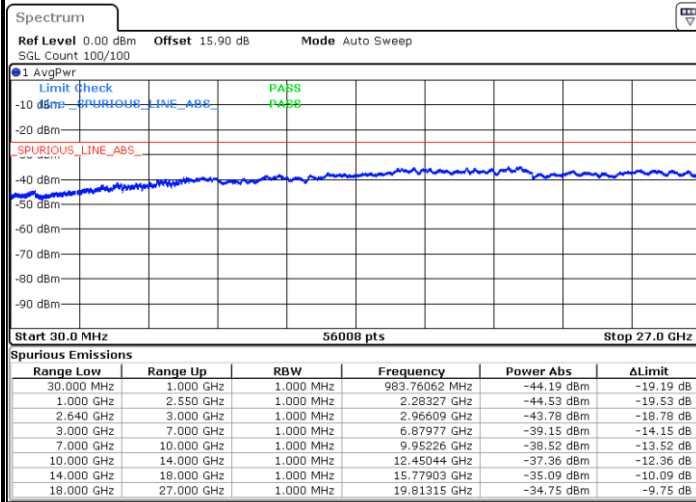


Date: 4 JAN 2020 20:10:30



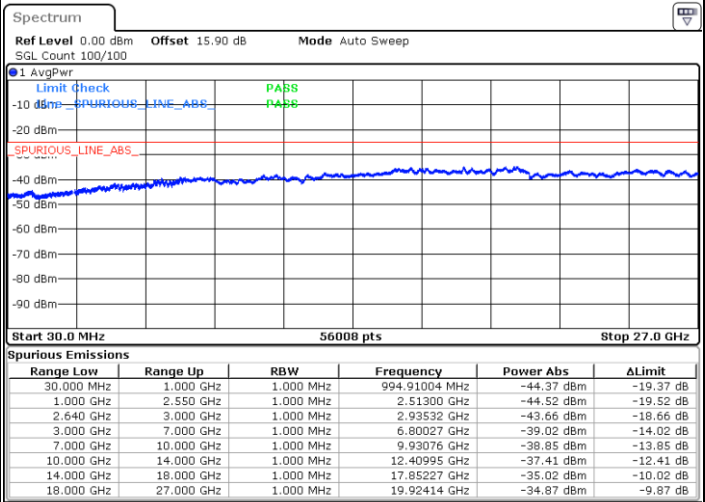
LTE Band 38 / 10MHz

Middle Channel / QPSK



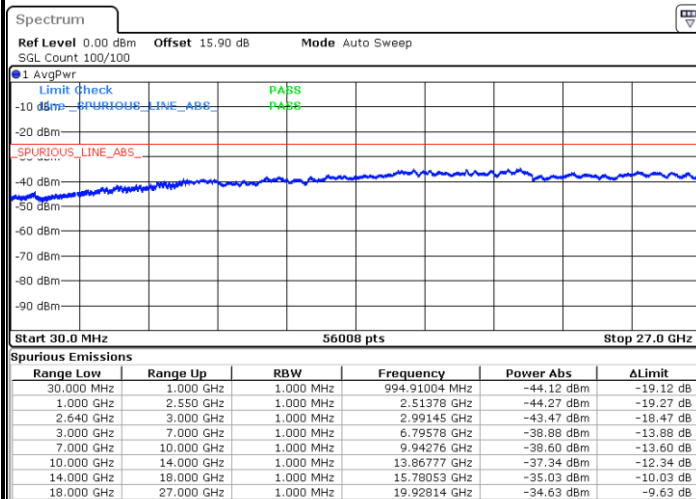
Date: 4 JAN 2020 20:11:15

Middle Channel / 16QAM



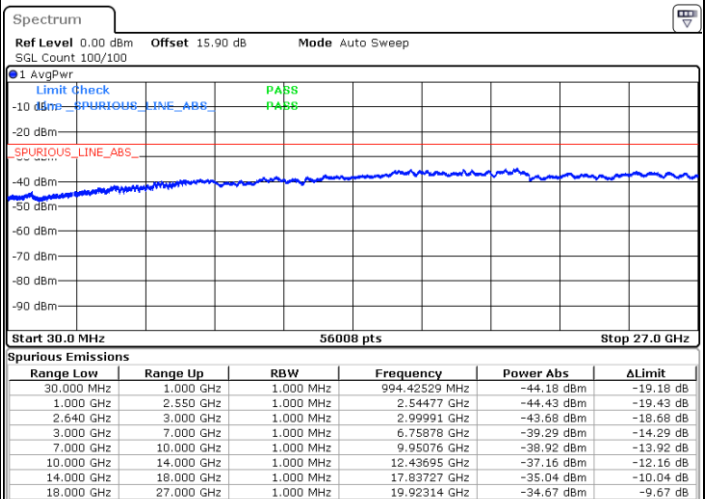
Date: 4 JAN 2020 20:12:00

Highest Channel / QPSK



Date: 4 JAN 2020 20:12:46

Highest Channel / 16QAM

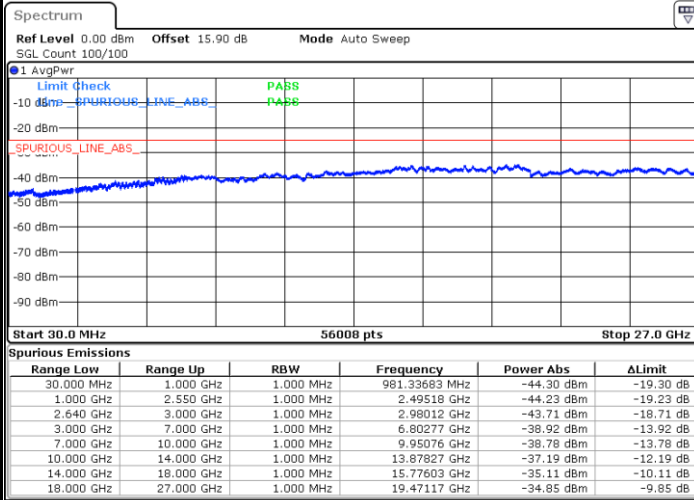


Date: 4 JAN 2020 20:13:31



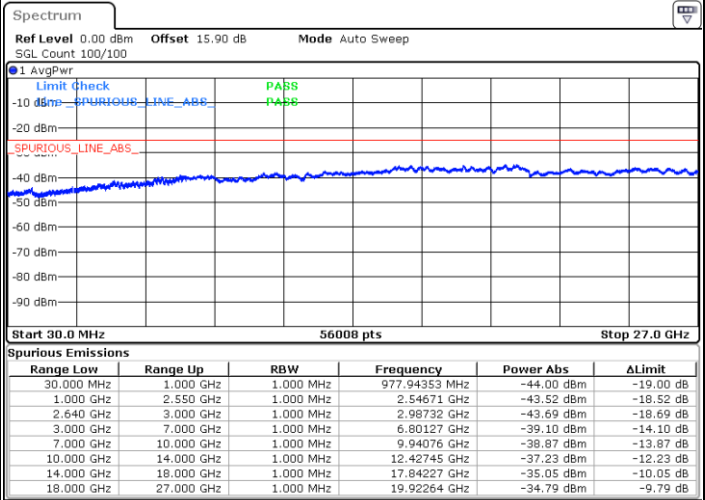
LTE Band 38 / 15MHz

Lowest Channel / QPSK



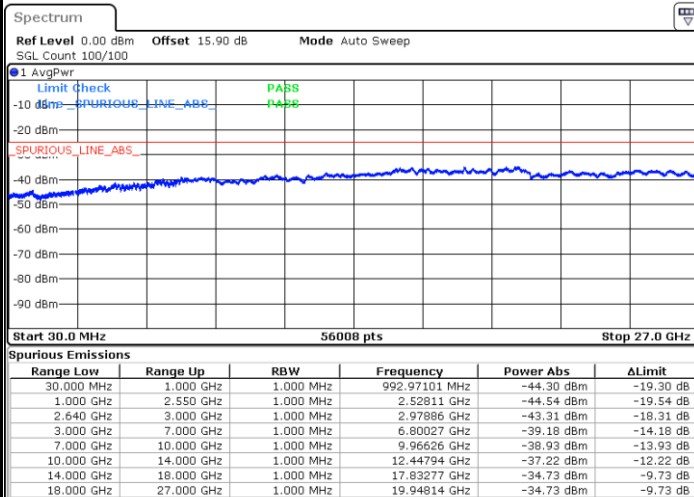
Date: 4 JAN 2020 20:14:17

Lowest Channel / 16QAM



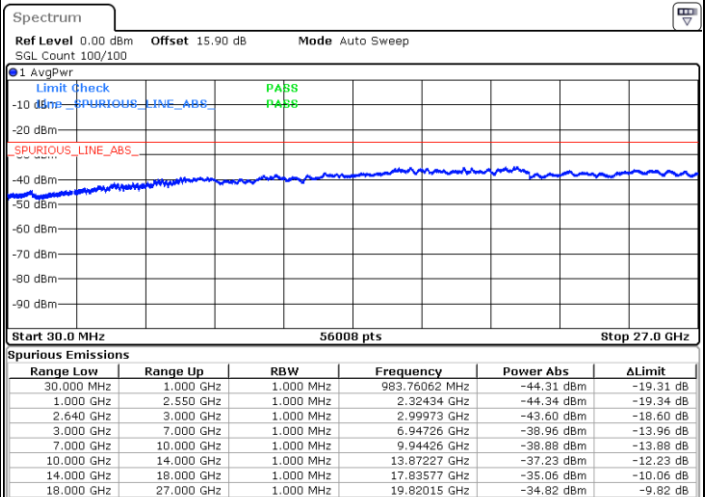
Date: 4 JAN 2020 20:15:03

Middle Channel / QPSK



Date: 4 JAN 2020 20:15:48

Middle Channel / 16QAM

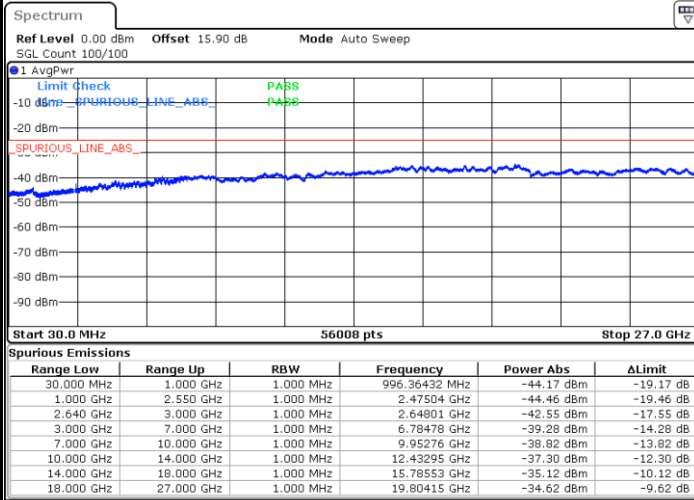


Date: 4 JAN 2020 20:16:33



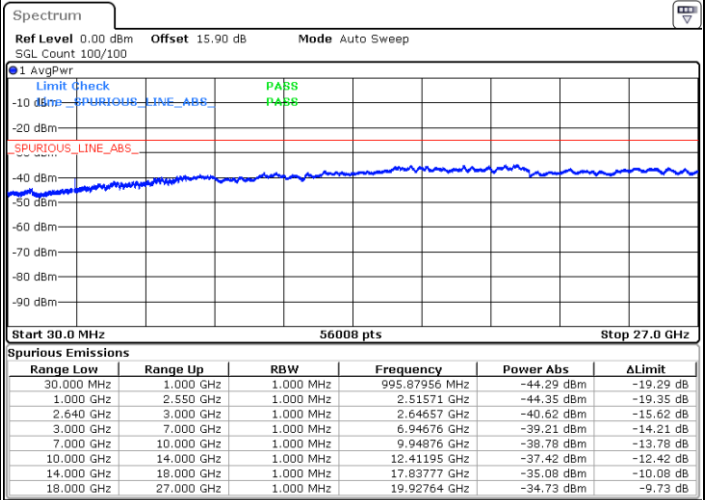
LTE Band 38 / 15MHz

Highest Channel / QPSK



Date: 4 JAN 2020 20:17:18

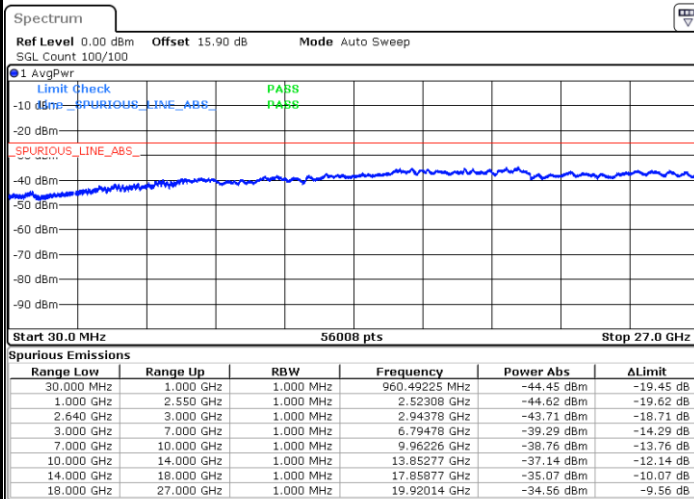
Highest Channel / 16QAM



Date: 4 JAN 2020 20:18:03

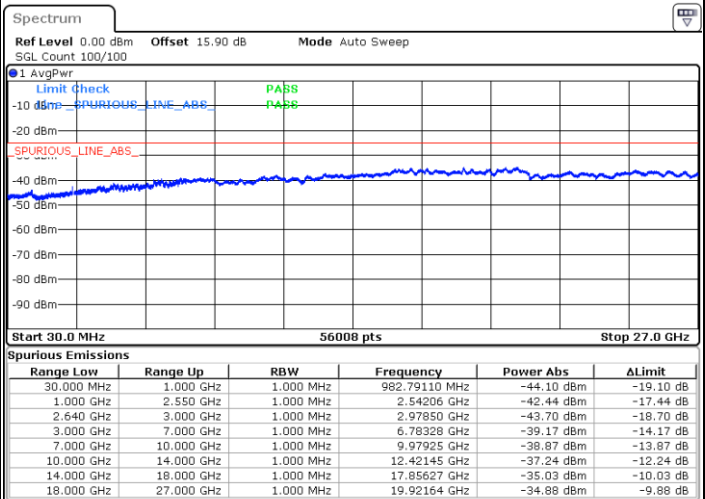
LTE Band 38 / 20MHz

Lowest Channel / QPSK



Date: 4 JAN 2020 20:36:38

Lowest Channel / 16QAM

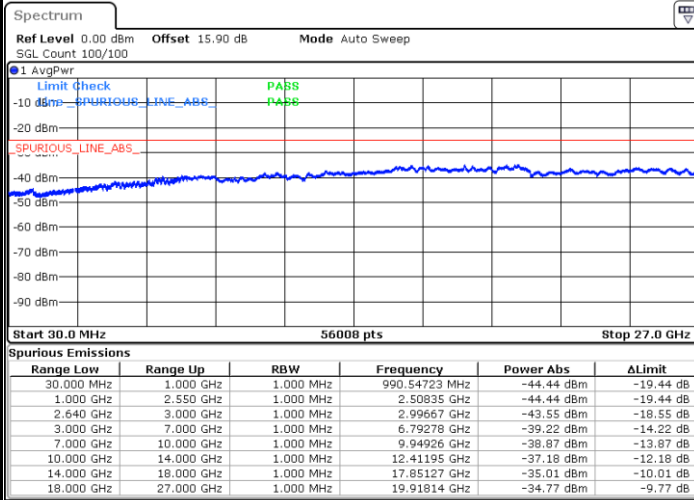


Date: 4 JAN 2020 20:37:24



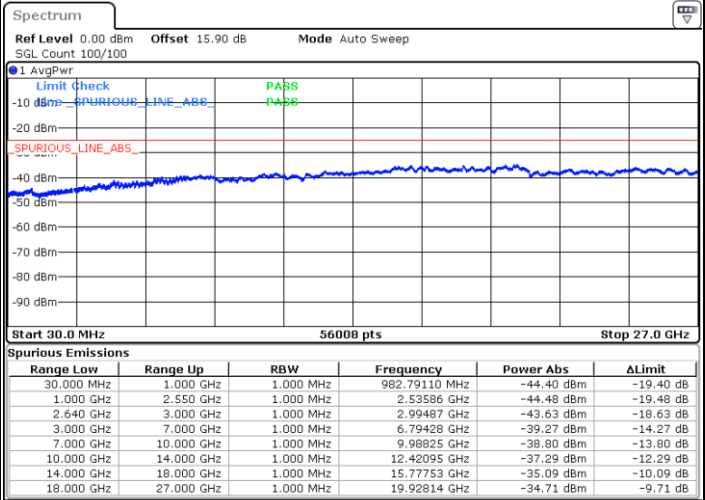
LTE Band 38 / 20MHz

Middle Channel / QPSK



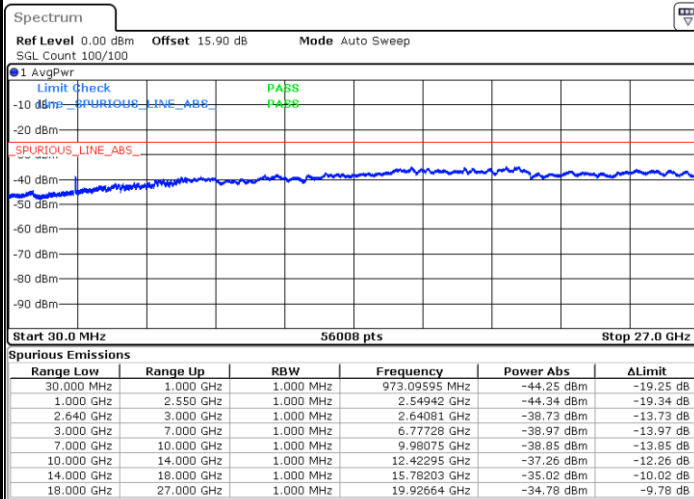
Date: 4 JAN 2020 20:38:09

Middle Channel / 16QAM



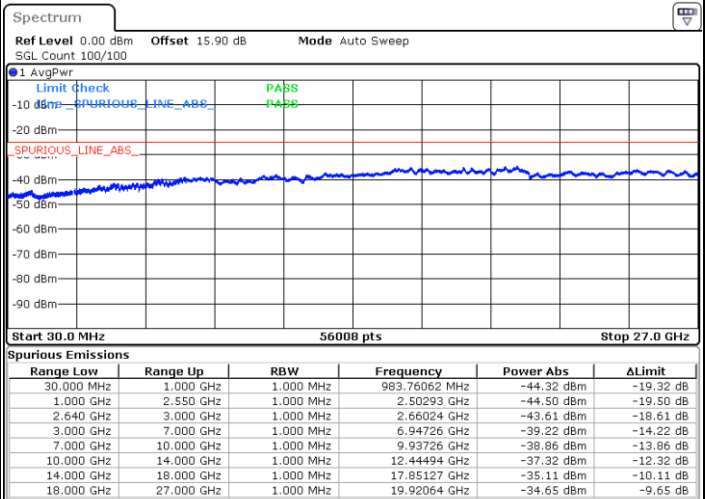
Date: 4 JAN 2020 20:38:54

Highest Channel / QPSK



Date: 4 JAN 2020 20:39:39

Highest Channel / 16QAM

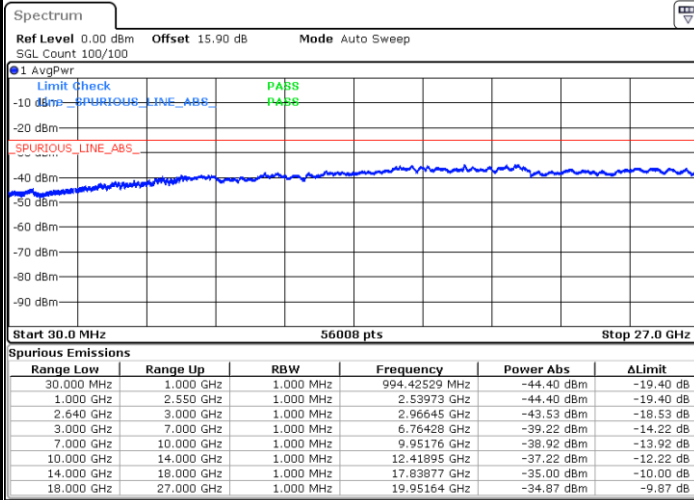


Date: 4 JAN 2020 20:40:25



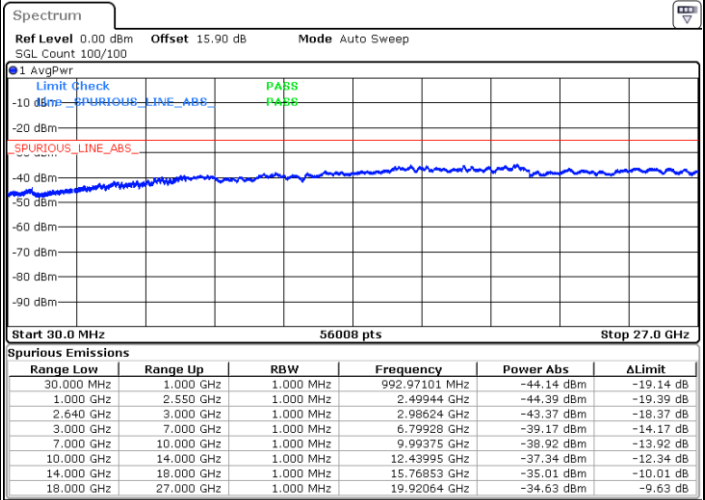
LTE Band 38 / 5MHz

Lowest Channel / 64QAM



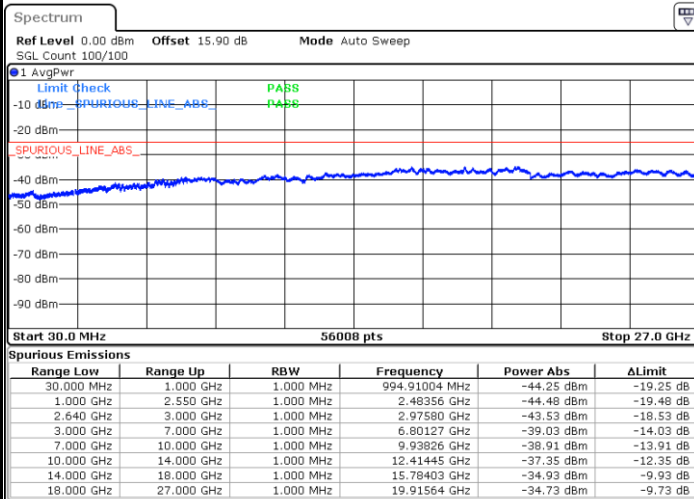
Date: 4 JAN 2020 20:00:41

Middle Channel / 64QAM



Date: 4 JAN 2020 20:01:26

Highest Channel / 64QAM

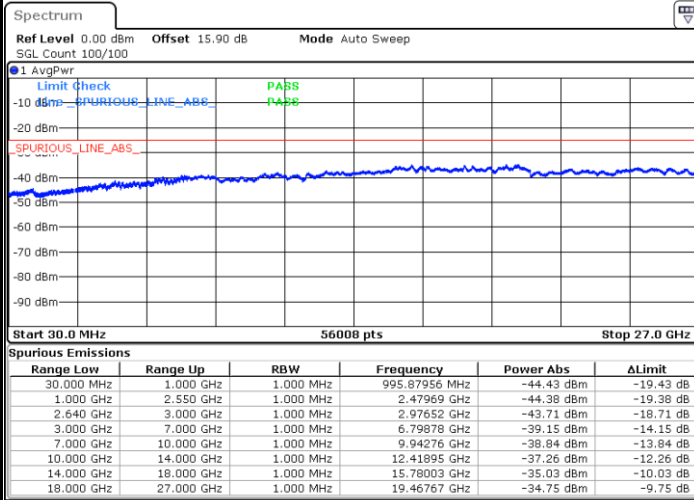


Date: 4 JAN 2020 20:02:11



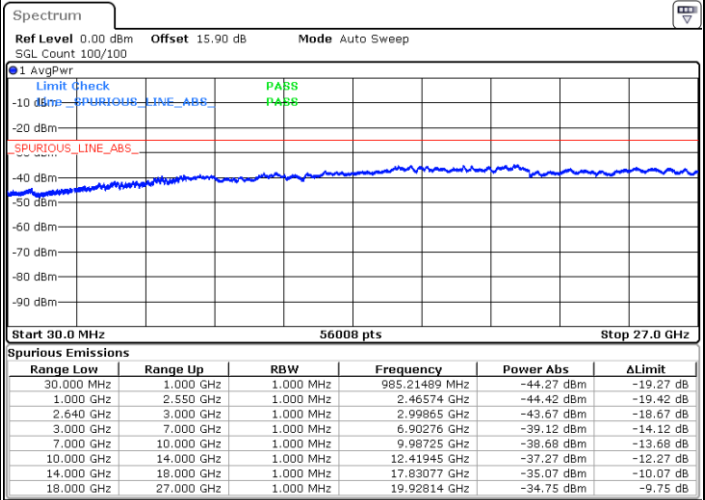
LTE Band 38 / 10MHz

Lowest Channel / 64QAM



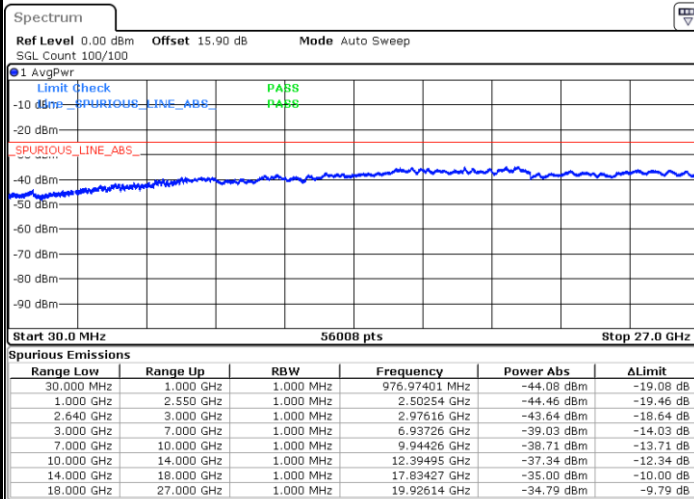
Date: 4 JAN 2020 20:07:29

Middle Channel / 64QAM



Date: 4 JAN 2020 20:08:14

Highest Channel / 64QAM

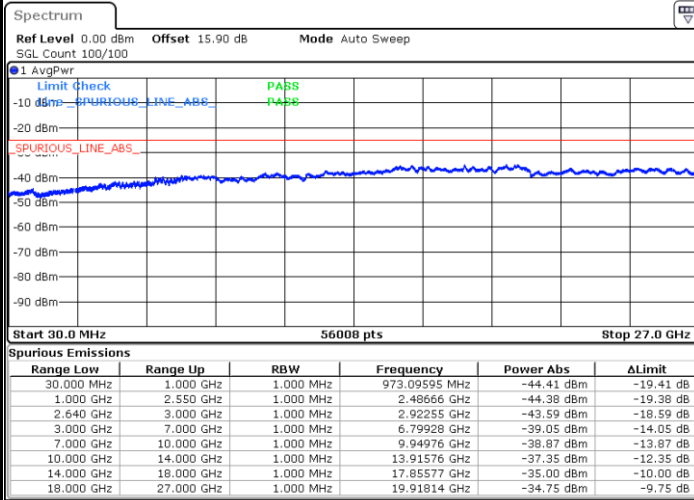


Date: 4 JAN 2020 20:08:59



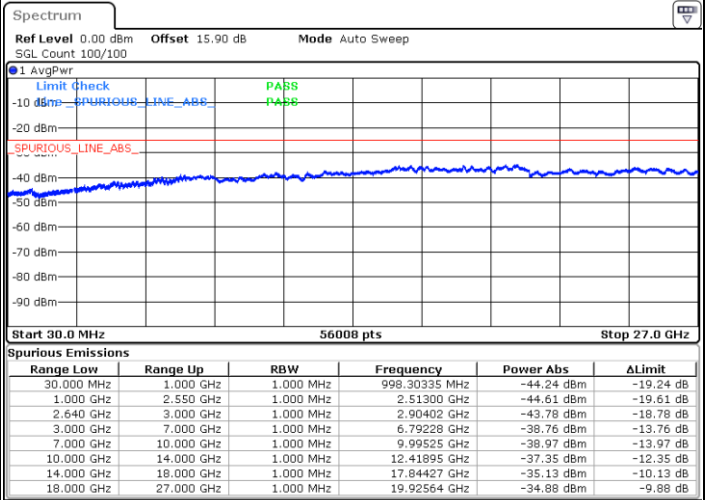
LTE Band 38 / 15MHz

Lowest Channel / 64QAM



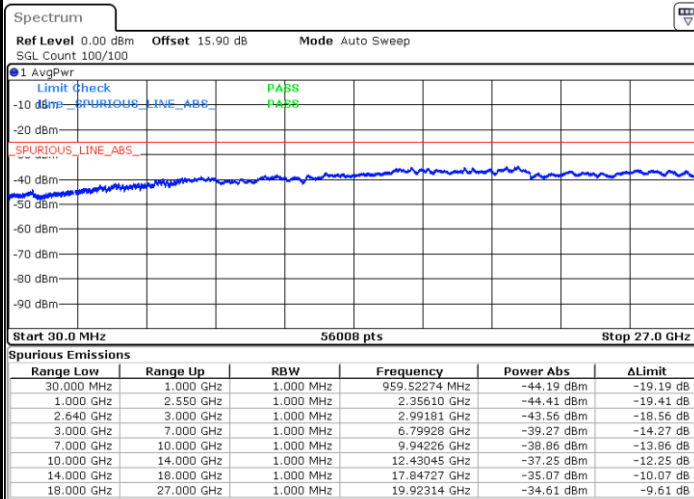
Date: 4 JAN 2020 20:18:49

Middle Channel / 64QAM



Date: 4 JAN 2020 20:19:34

Highest Channel / 64QAM

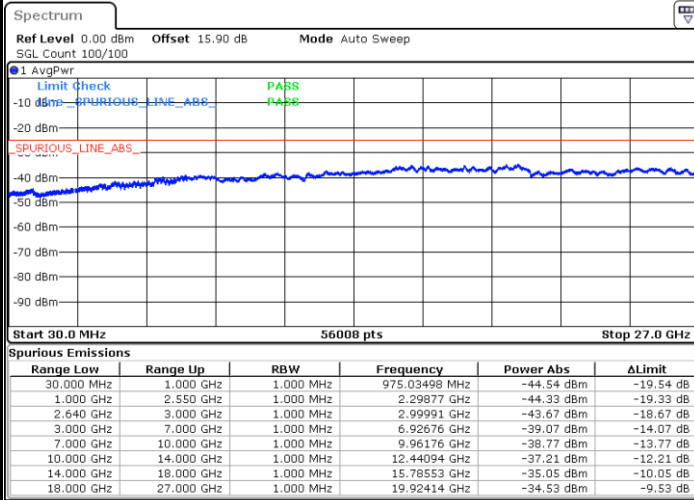


Date: 4 JAN 2020 20:20:19



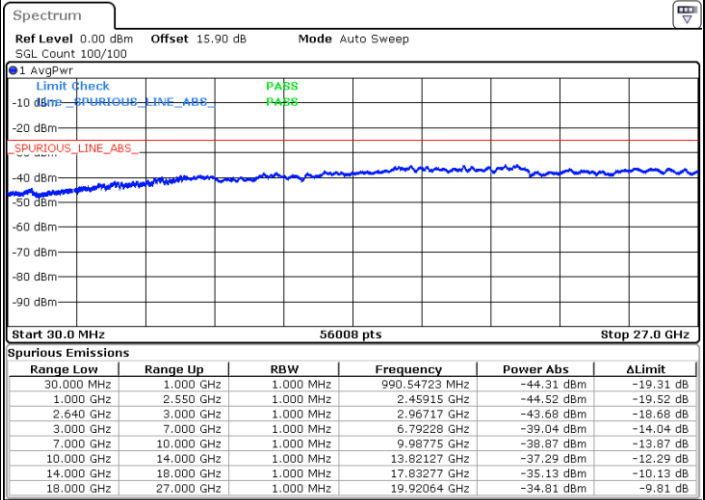
LTE Band 38 / 20MHz

Lowest Channel / 64QAM



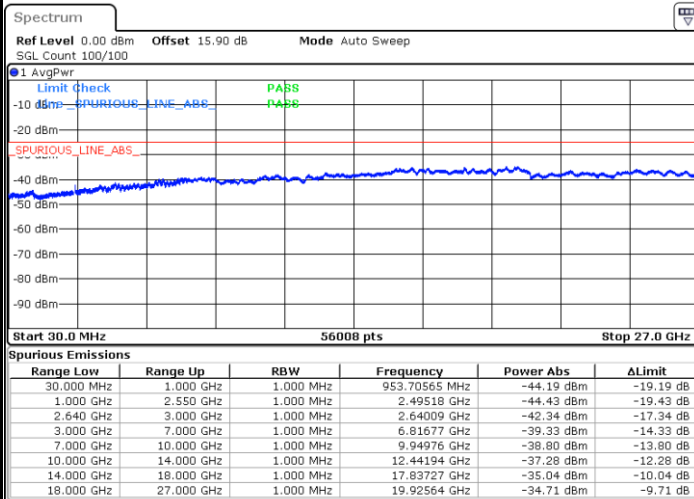
Date: 4 JAN 2020 20:41:11

Middle Channel / 64QAM



Date: 4 JAN 2020 20:41:56

Highest Channel / 64QAM



Date: 4 JAN 2020 20:42:41

Frequency Stability

Test Conditions		LTE Band 38 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0076	PASS
40	Normal Voltage	0.0001	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0029	
0	Normal Voltage	0.0064	
-10	Normal Voltage	0.0009	
-20	Normal Voltage	0.0034	
-30	Normal Voltage	0.0002	
20	Maximum Voltage	0.0060	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0020	

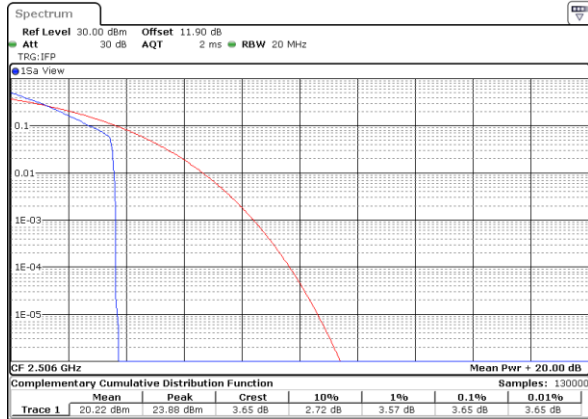
Note:

1. Normal Voltage =7.7 V. ; Battery End Point (BEP) =6.9 V. ; Maximum Voltage =8.5 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

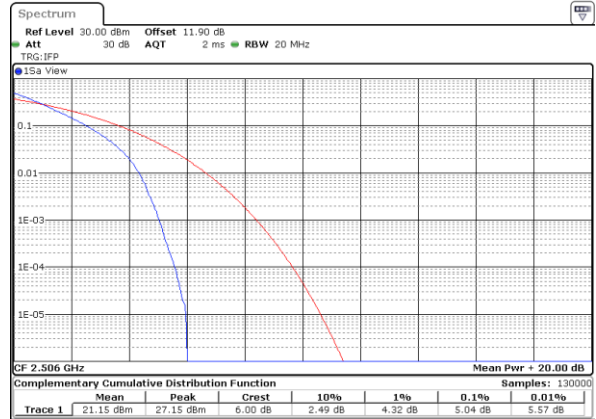
LTE Band 41

Peak-to-Average Ratio

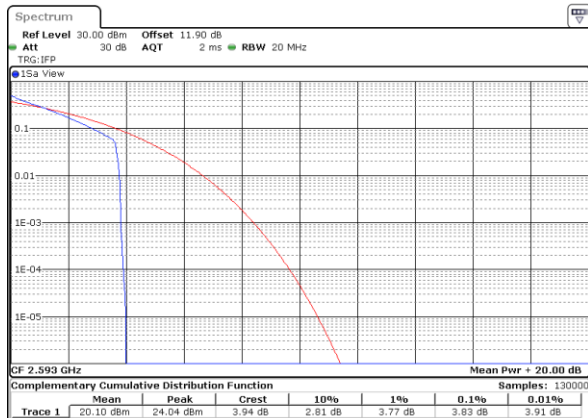
Mode	LTE Band 41 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.65	5.04	5.51	5.94	PASS
Middle CH	3.83	5.13	5.65	6.00	
Highest CH	4.06	5.25	6.26	6.20	
Mode	LTE Band 41 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	6.58	6.38	-	-	PASS
Middle CH	7.04	6.55	-	-	
Highest CH	7.16	6.64	-	-	

LTE Band 41 / 20MHz / QPSK
Lowest Channel / 1RB


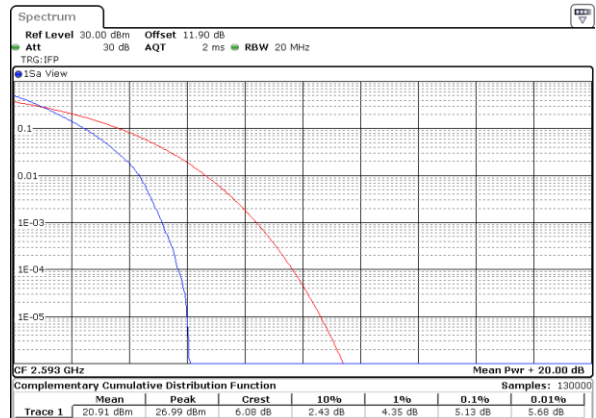
Date: 3 JAN 2020 08:18:49

Lowest Channel / Full RB


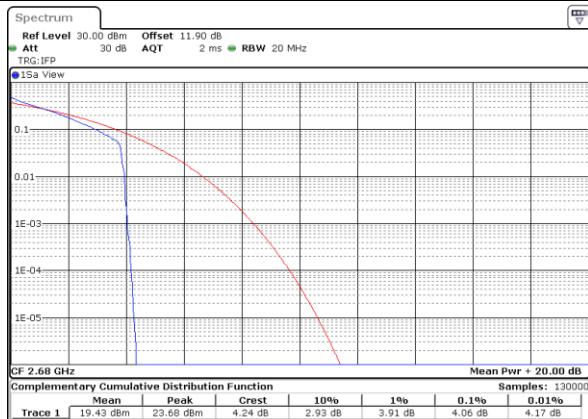
Date: 3 JAN 2020 08:19:03

Middle Channel / 1RB


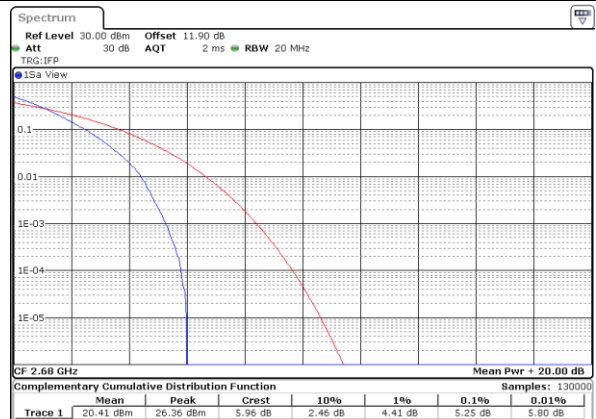
Date: 3 JAN 2020 08:19:19

Middle Channel / Full RB


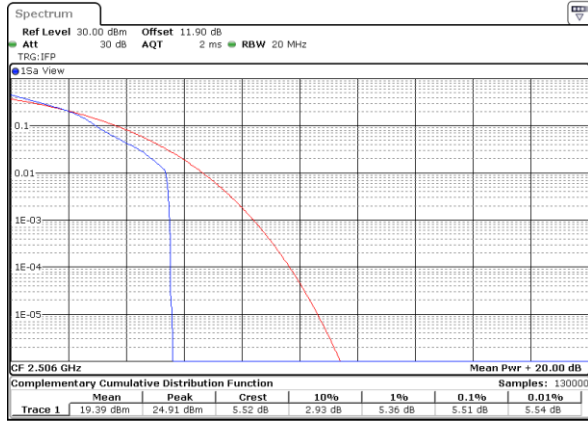
Date: 3 JAN 2020 08:19:33

Highest Channel / 1RB


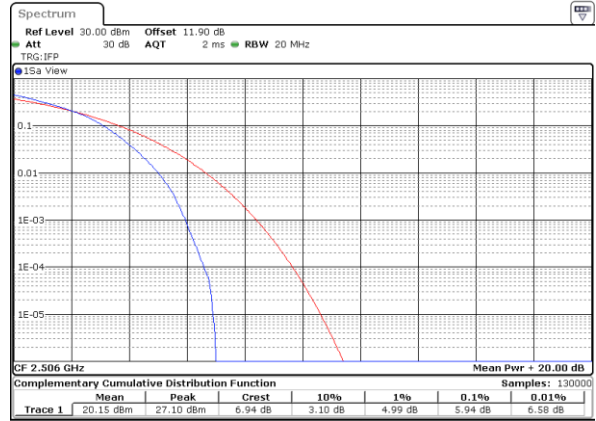
Date: 3 JAN 2020 08:19:48

Highest Channel / Full RB


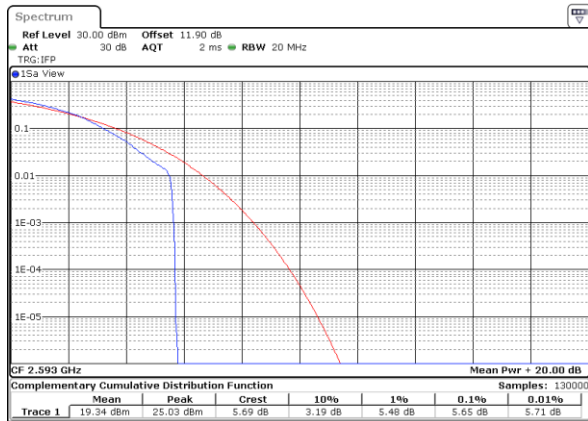
Date: 3 JAN 2020 08:20:02

LTE Band 41 / 20MHz / 16QAM
Lowest Channel / 1RB


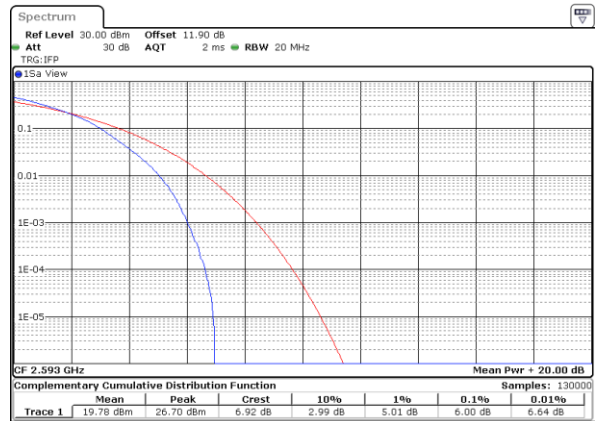
Date: 3 JAN 2020 08:16:48

Lowest Channel / Full RB


Date: 3 JAN 2020 08:17:11

Middle Channel / 1RB


Date: 3 JAN 2020 08:17:34

Middle Channel / Full RB


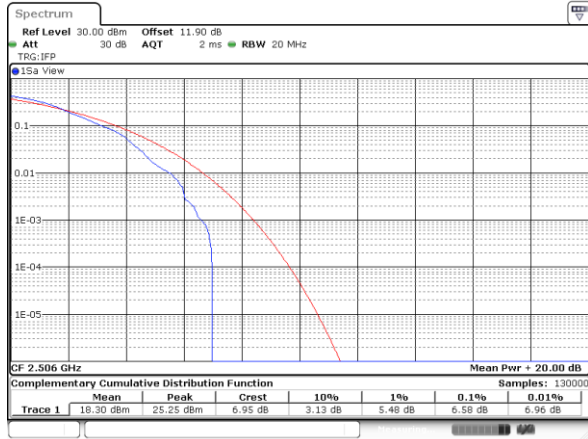
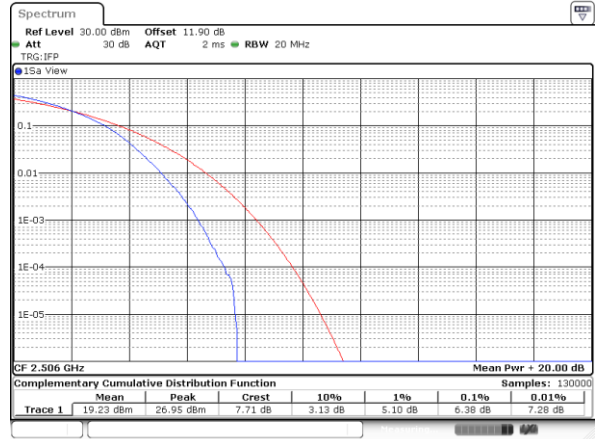
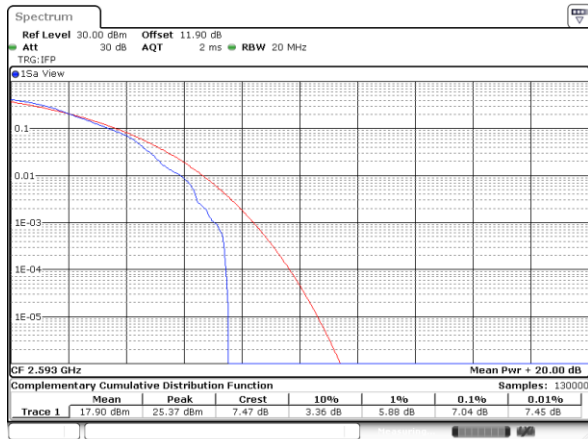
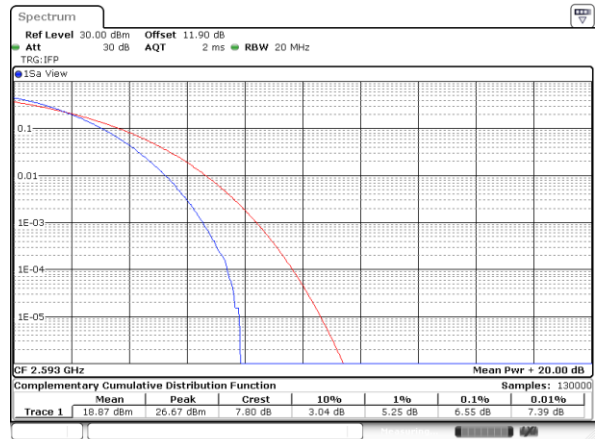
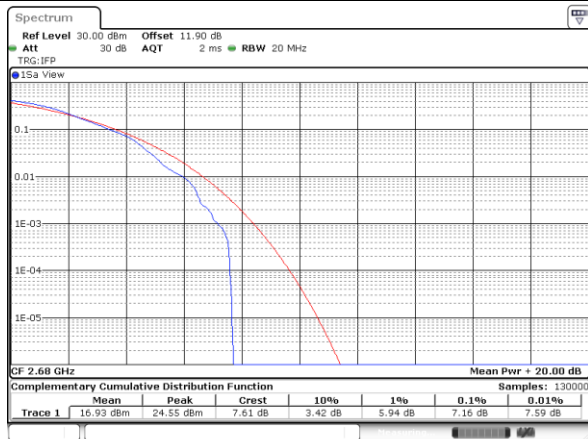
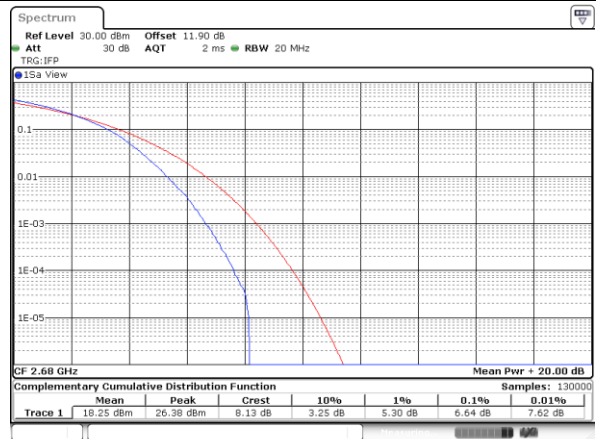
Date: 3 JAN 2020 08:18:02

Highest Channel / 1RB


Date: 3 JAN 2020 08:18:18

Highest Channel / Full RB


Date: 3 JAN 2020 08:18:34

LTE Band 41 / 20MHz / 64QAM
Lowest Channel / 1RB

Lowest Channel / Full RB

Middle Channel / 1RB

Middle Channel / Full RB

Highest Channel / 1RB

Highest Channel / Full RB


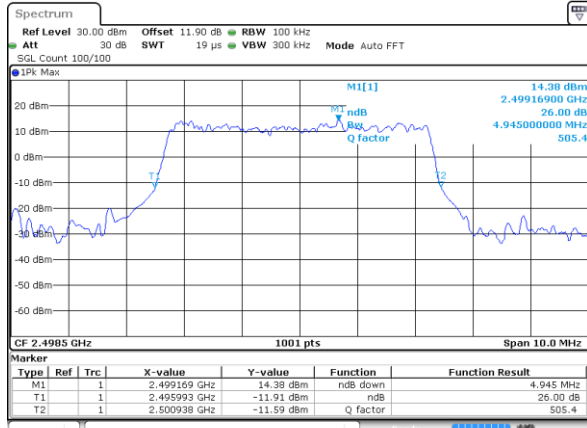
**26dB Bandwidth**

Mode	LTE Band 41 : 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	-	-	-	-	4.95	4.94	9.77	9.75	14.36	14.33	18.86	18.70
Middle CH	-	-	-	-	4.77	4.89	9.63	9.77	14.42	14.15	18.62	18.82
Highest CH	-	-	-	-	4.96	4.86	9.81	9.69	14.27	14.12	18.66	18.94
Mode	LTE Band 41 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.86	-	9.83	-	14.21	-	18.82	-
Middle CH	-	-	-	-	4.84	-	9.65	-	14.09	-	18.66	-
Highest CH	-	-	-	-	4.92	-	9.63	-	14.36	-	18.70	-



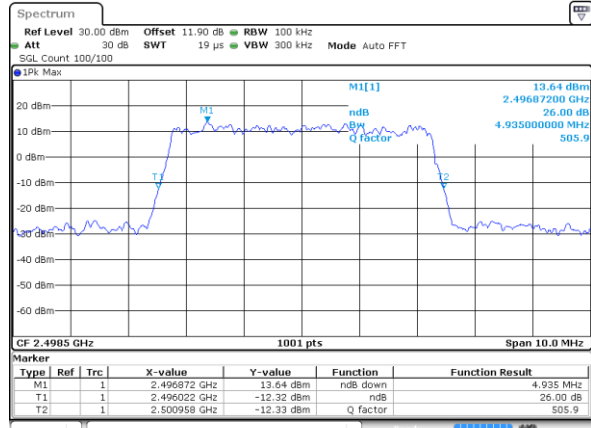
LTE Band 41

Lowest Channel / 5MHz / QPSK



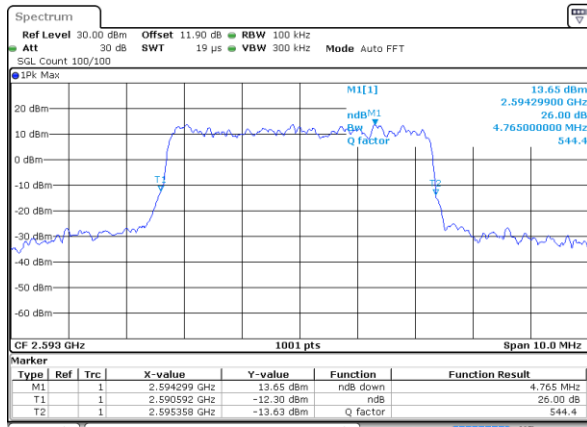
Date: 3 JAN 2020 07:59:17

Lowest Channel / 5MHz / 16QAM



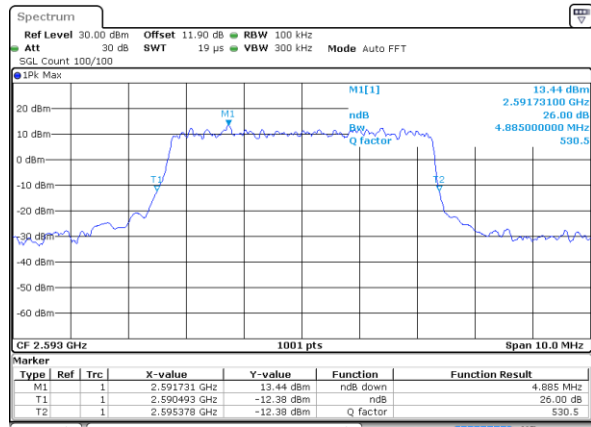
Date: 3 JAN 2020 07:59:29

Middle Channel / 5MHz / QPSK



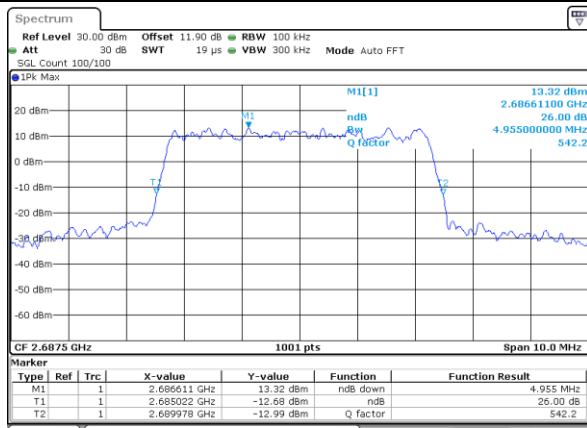
Date: 3 JAN 2020 08:00:03

Middle Channel / 5MHz / 16QAM



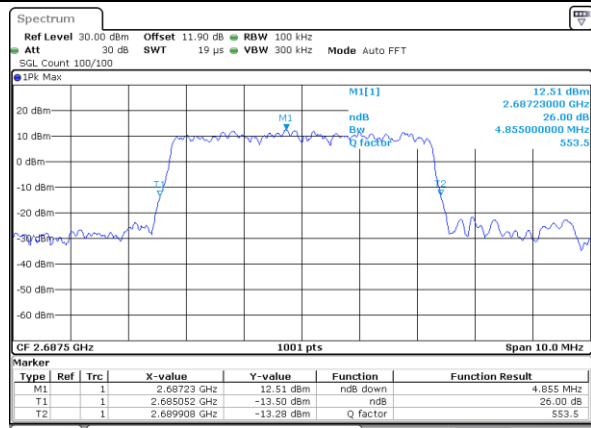
Date: 3 JAN 2020 08:00:15

Highest Channel / 5MHz / QPSK



Date: 3 JAN 2020 08:00:50

Highest Channel / 5MHz / 16QAM

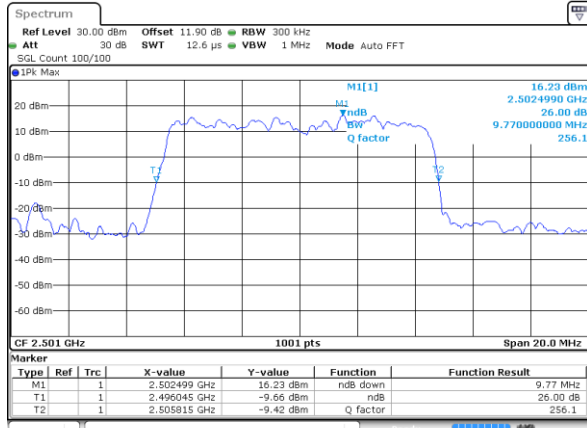


Date: 3 JAN 2020 08:01:02

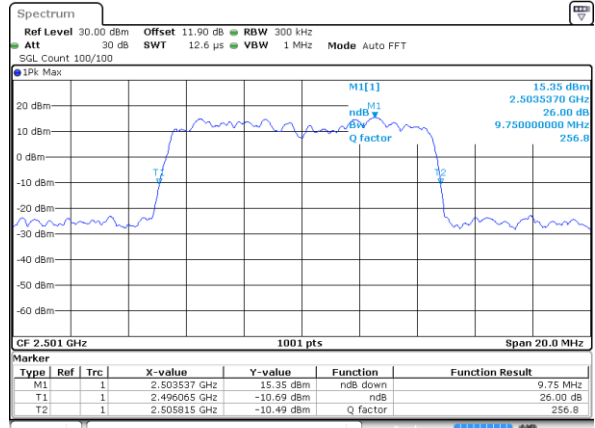


LTE Band 41

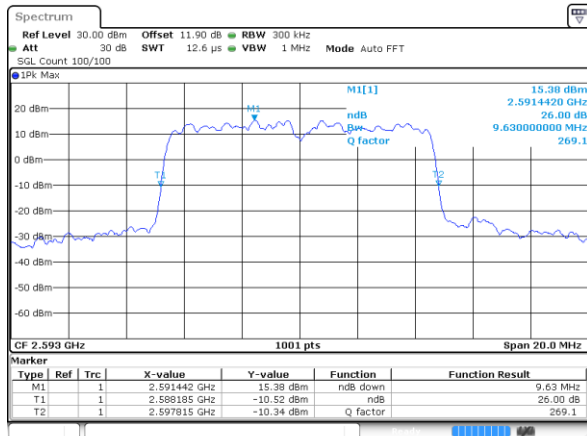
Lowest Channel / 10MHz / QPSK



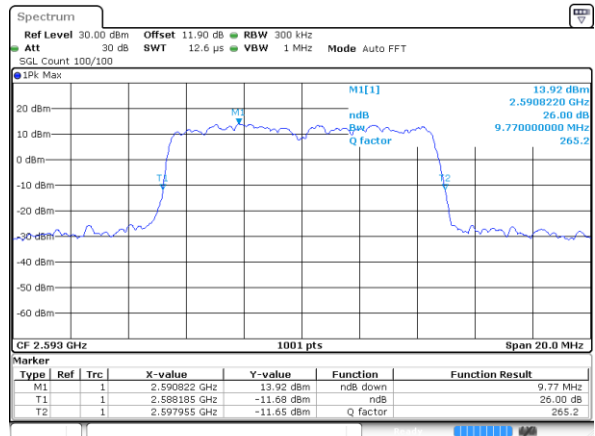
Lowest Channel / 10MHz / 16QAM



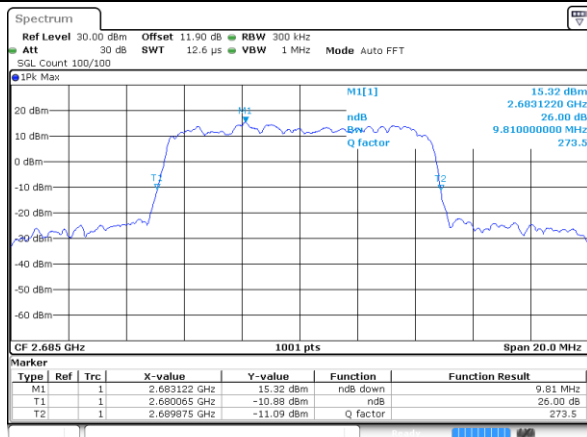
Middle Channel / 10MHz / QPSK



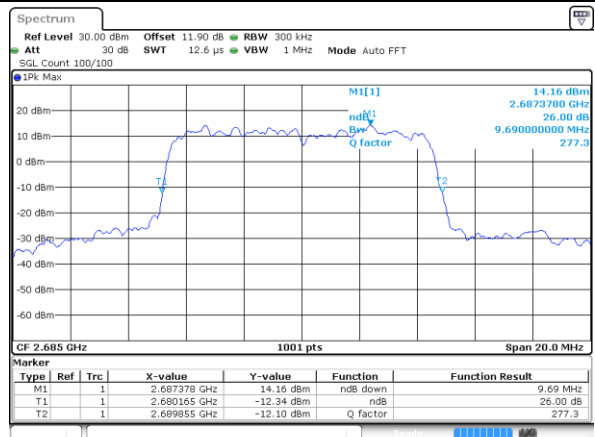
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



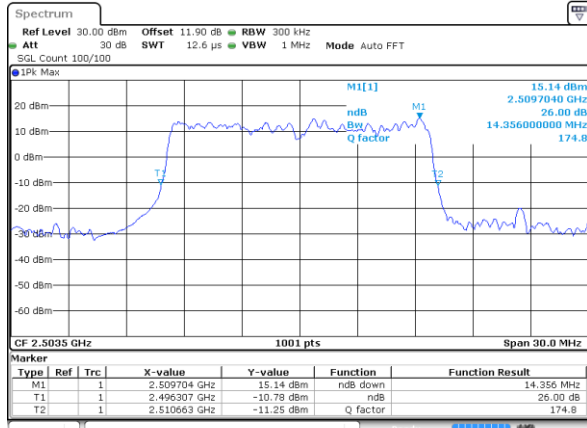
Highest Channel / 10MHz / 16QAM





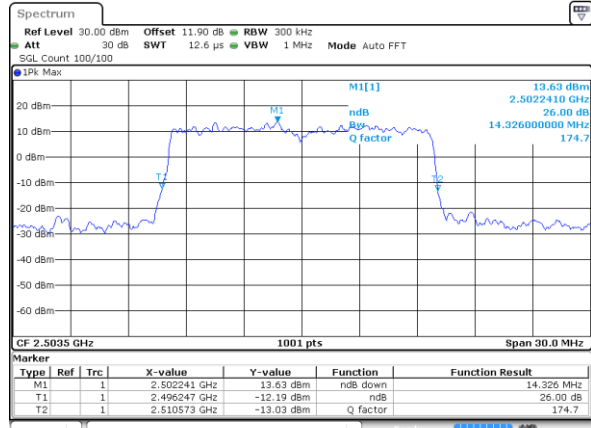
LTE Band 41

Lowest Channel / 15MHz / QPSK



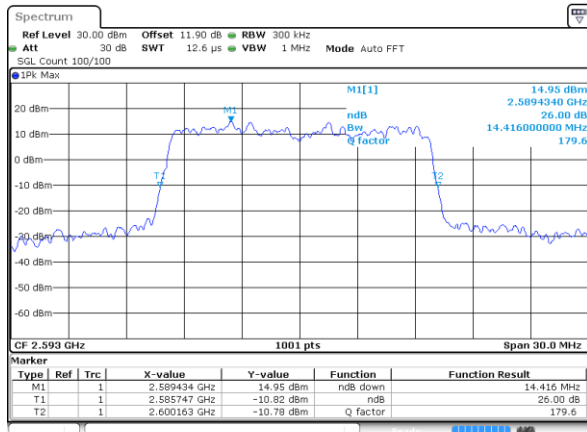
Date: 3 JAN 2020 08:04:04

Lowest Channel / 15MHz / 16QAM



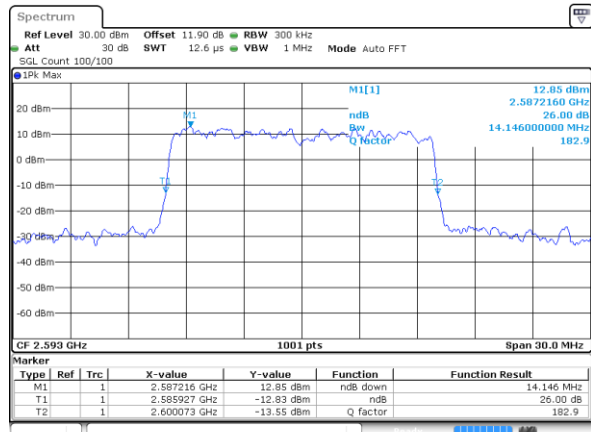
Date: 3 JAN 2020 08:04:16

Middle Channel / 15MHz / QPSK



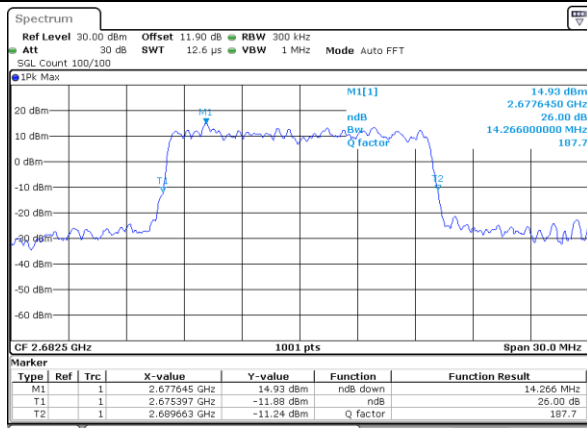
Date: 3 JAN 2020 08:04:51

Middle Channel / 15MHz / 16QAM



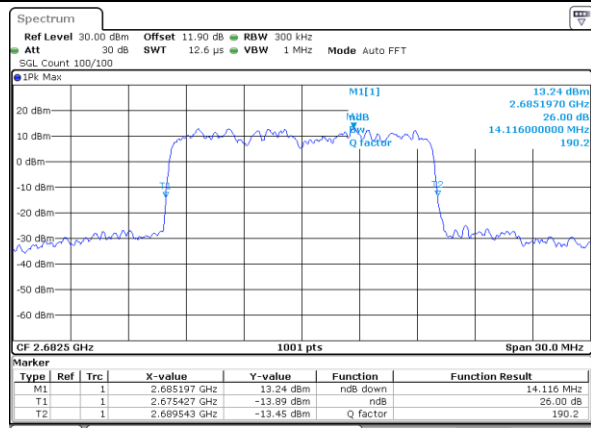
Date: 3 JAN 2020 08:05:02

Highest Channel / 15MHz / QPSK



Date: 3 JAN 2020 08:05:38

Highest Channel / 15MHz / 16QAM

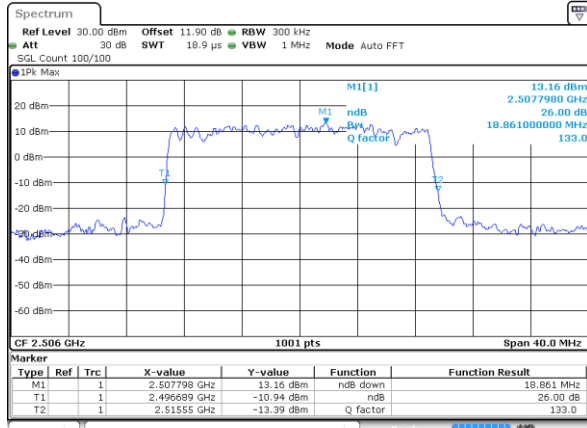


Date: 3 JAN 2020 08:21:30



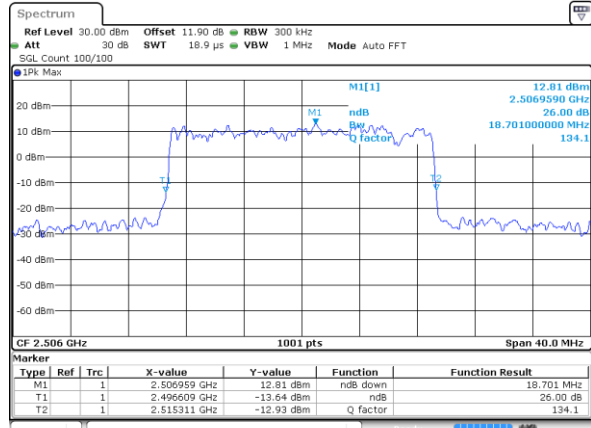
LTE Band 41

Lowest Channel / 20MHz / QPSK



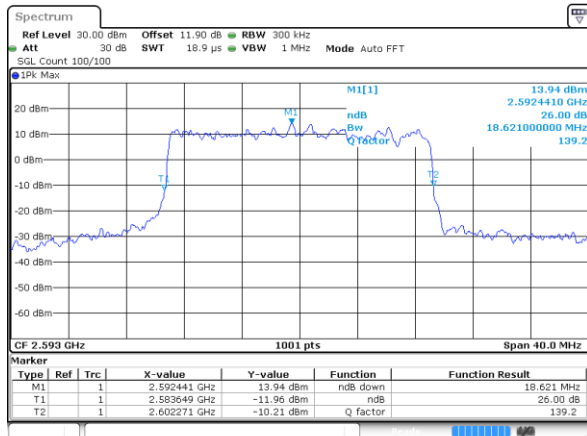
Date: 3 JAN 2020 08:06:28

Lowest Channel / 20MHz / 16QAM



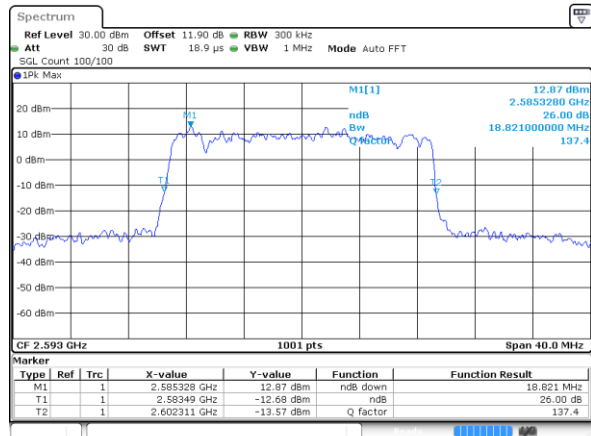
Date: 3 JAN 2020 08:06:41

Middle Channel / 20MHz / QPSK



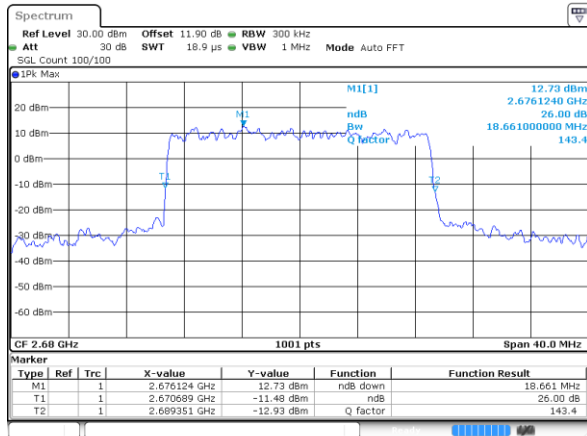
Date: 3 JAN 2020 08:07:15

Middle Channel / 20MHz / 16QAM



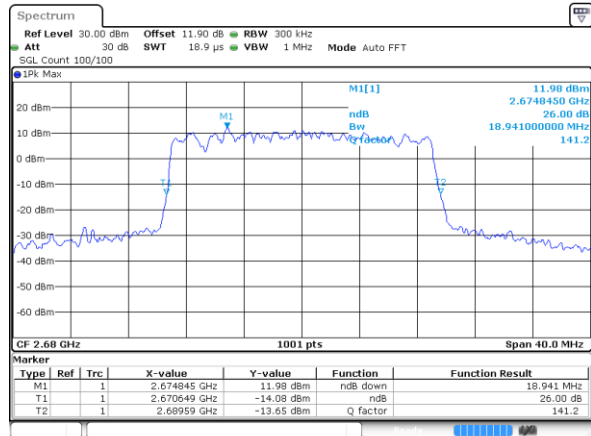
Date: 3 JAN 2020 08:07:27

Highest Channel / 20MHz / QPSK



Date: 3 JAN 2020 08:22:45

Highest Channel / 20MHz / 16QAM

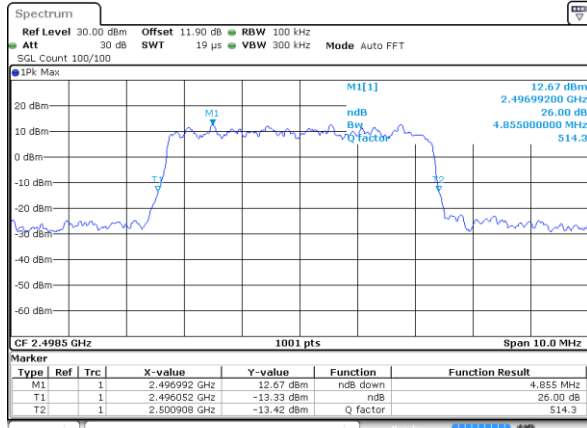


Date: 3 JAN 2020 08:08:15



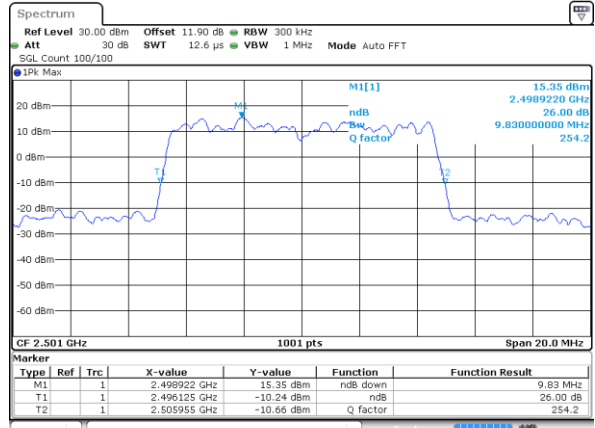
LTE Band 41

Lowest Channel / 5MHz / 64QAM



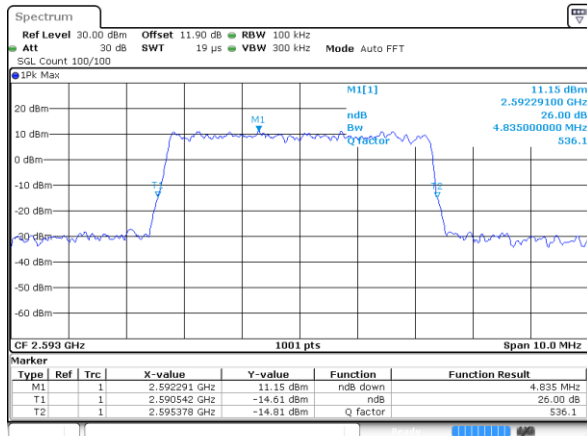
Date: 3 JAN 2020 08:08:41

Lowest Channel / 10MHz / 64QAM



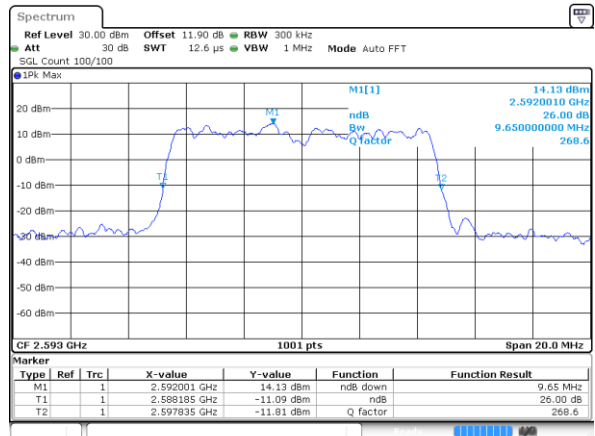
Date: 3 JAN 2020 08:09:53

Middle Channel / 5MHz / 64QAM



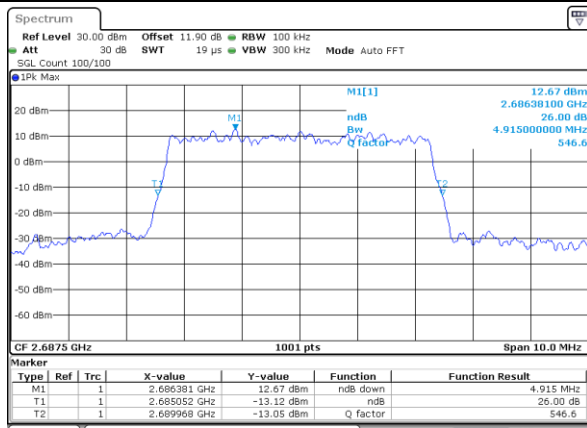
Date: 3 JAN 2020 08:09:04

Middle Channel / 10MHz / 64QAM



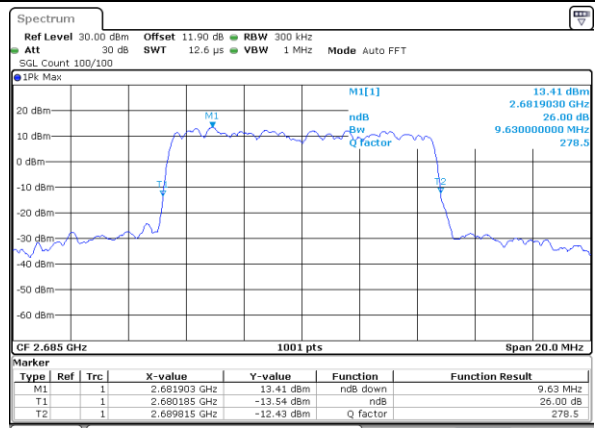
Date: 3 JAN 2020 08:10:16

Highest Channel / 5MHz / 64QAM



Date: 3 JAN 2020 08:09:27

Highest Channel / 10MHz / 64QAM

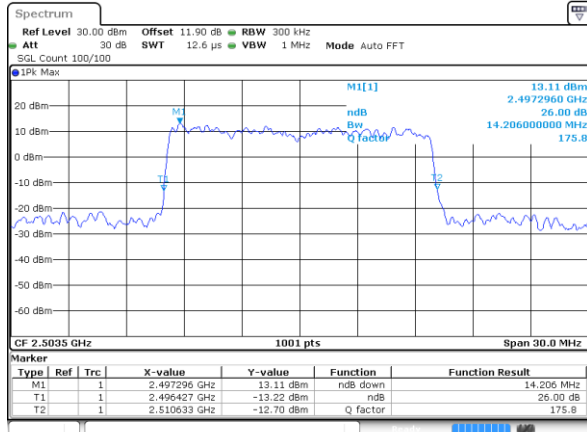


Date: 3 JAN 2020 08:10:40



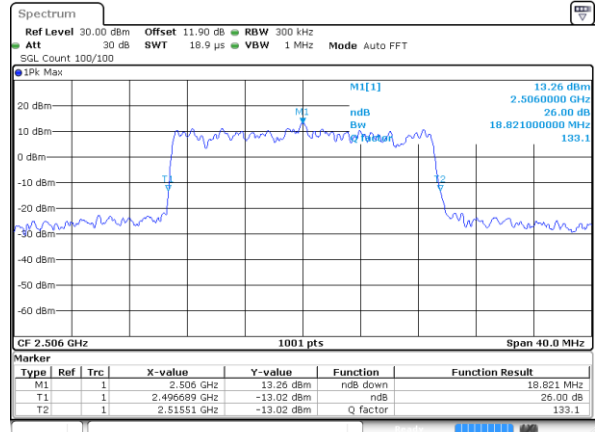
LTE Band 41

Lowest Channel / 15MHz / 64QAM



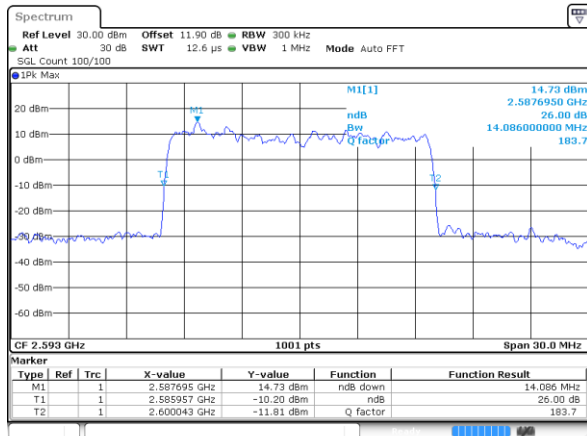
Date: 3 JAN 2020 08:11:05

Lowest Channel / 20MHz / 64QAM



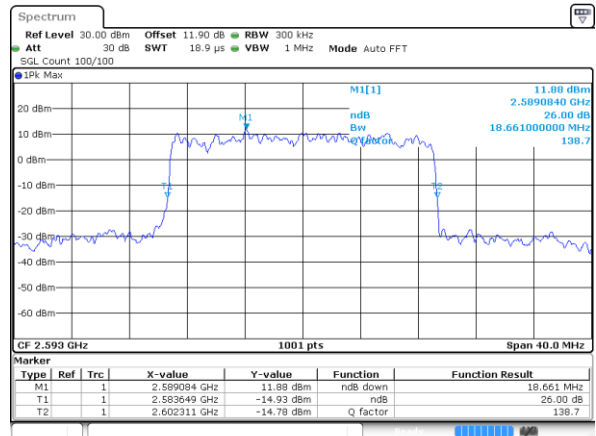
Date: 3 JAN 2020 08:12:18

Middle Channel / 15MHz / 64QAM



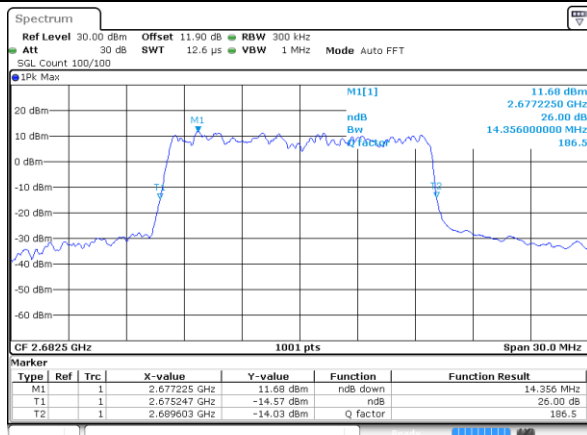
Date: 3 JAN 2020 08:11:29

Middle Channel / 20MHz / 64QAM



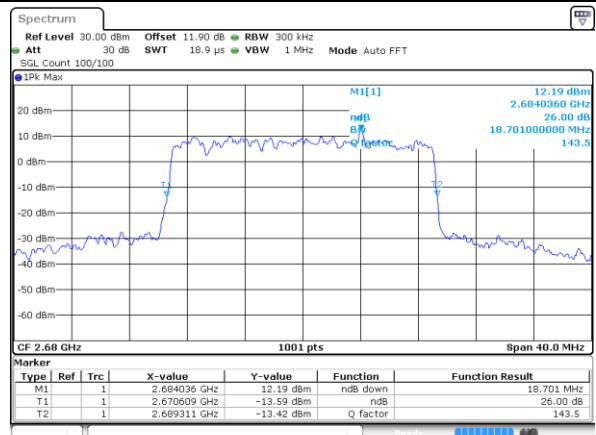
Date: 3 JAN 2020 08:12:41

Highest Channel / 15MHz / 64QAM



Date: 3 JAN 2020 08:11:52

Highest Channel / 20MHz / 64QAM



Date: 3 JAN 2020 08:13:04

**Occupied Bandwidth**

Mode	LTE Band 41 : 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	-	-	-	-	4.52	4.48	9.01	8.99	13.49	13.49	17.82	17.86
Middle CH	-	-	-	-	4.50	4.50	9.01	9.05	13.46	13.46	17.86	17.86
Highest CH	-	-	-	-	4.50	4.49	9.09	8.97	13.43	13.49	17.90	17.78
Mode	LTE Band 41 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.50	-	9.05	-	13.43	-	17.90	-
Middle CH	-	-	-	-	4.48	-	9.01	-	13.46	-	17.78	-
Highest CH	-	-	-	-	4.48	-	9.01	-	13.40	-	17.78	-