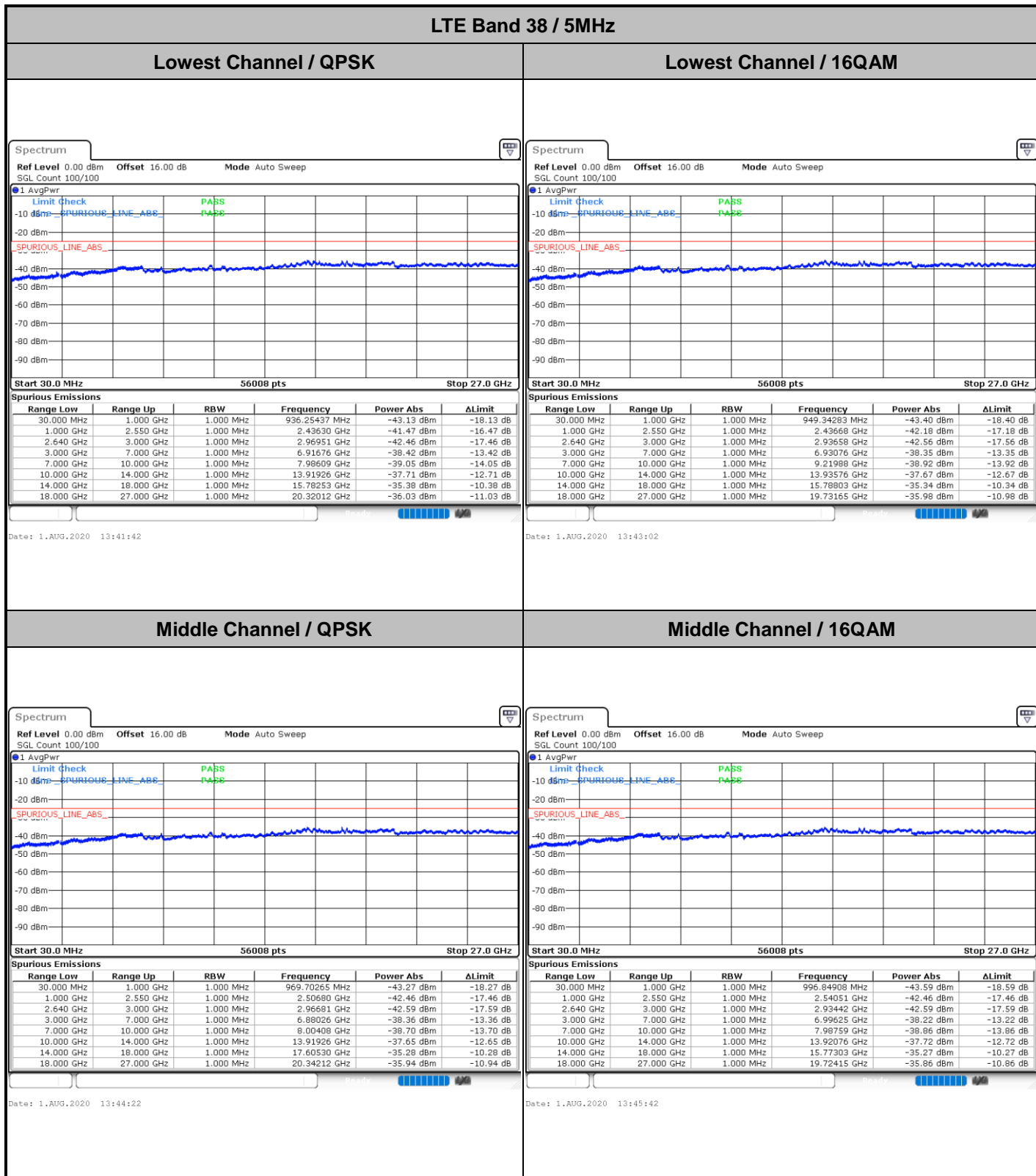




# Conducted Spurious Emission

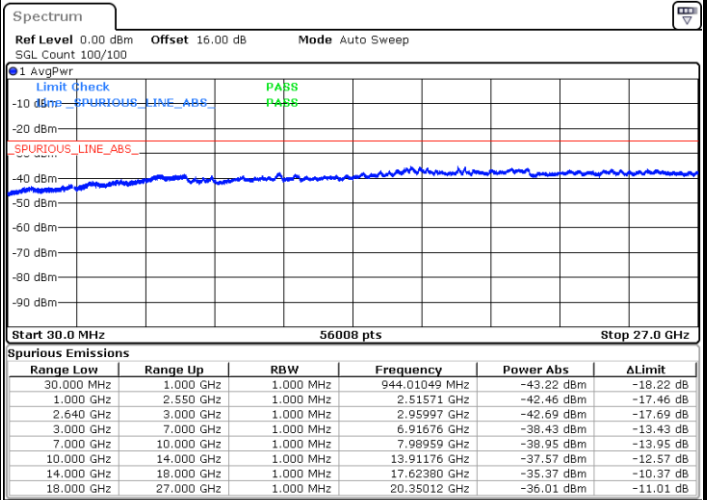
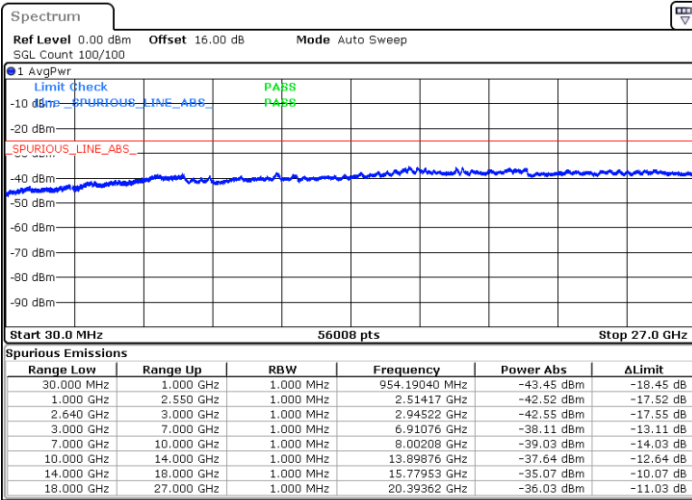




LTE Band 38 / 5MHz

Highest Channel / QPSK

Highest Channel / 16QAM



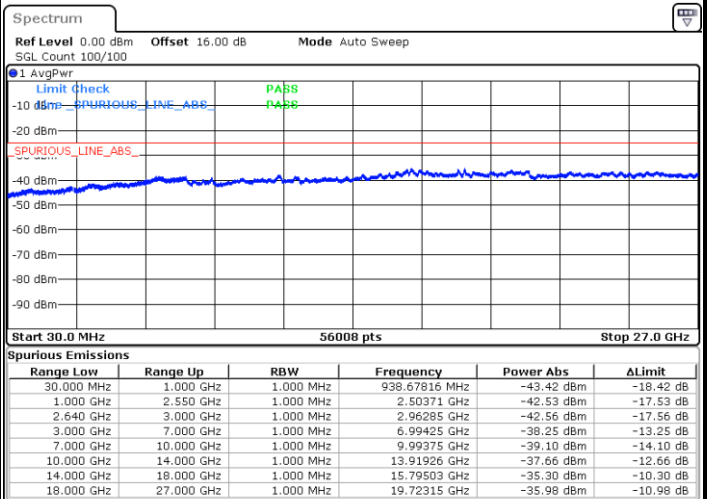
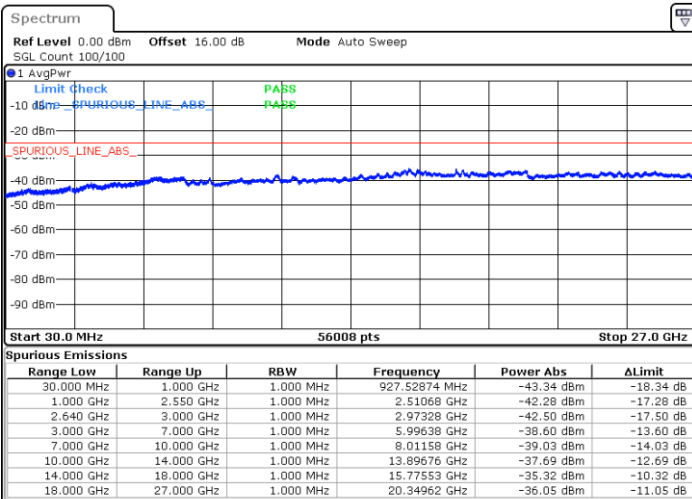
Date: 1.AUG.2020 13:47:01

Date: 1.AUG.2020 13:48:22

LTE Band 38 / 10MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 1.AUG.2020 13:53:42

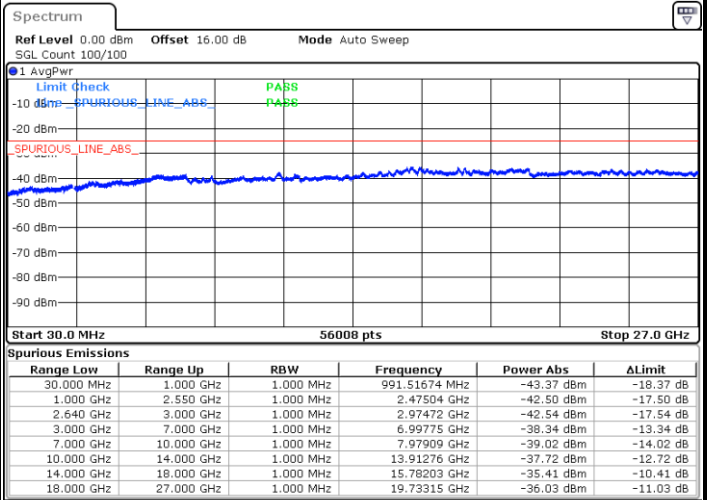
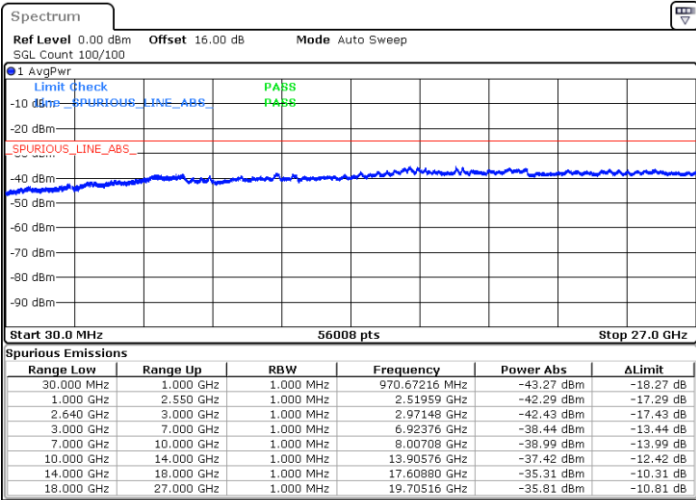
Date: 1.AUG.2020 13:55:03



LTE Band 38 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

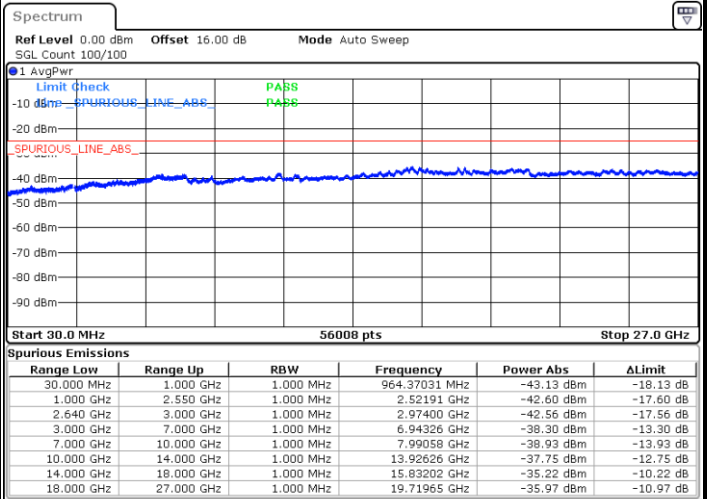
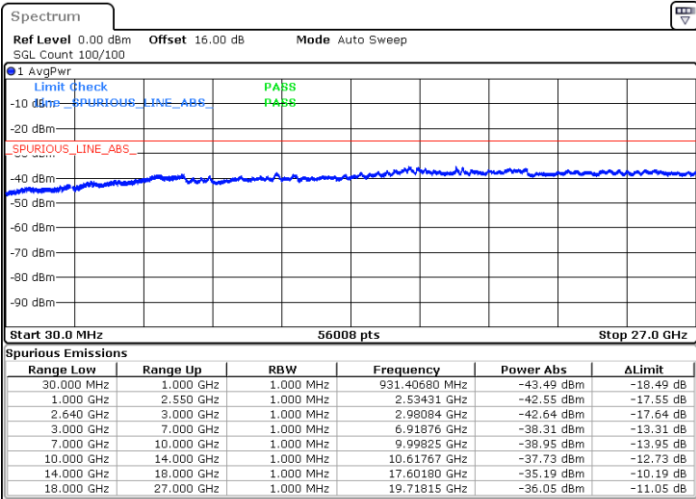


Date: 1.AUG.2020 13:56:23

Date: 1.AUG.2020 13:57:42

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 1.AUG.2020 13:59:02

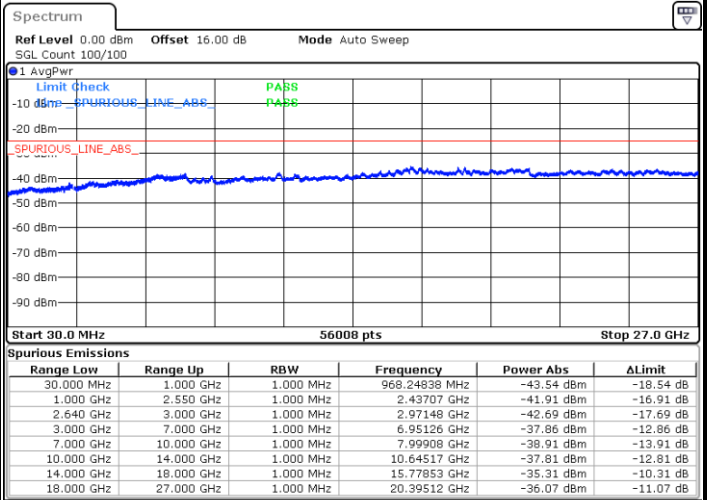
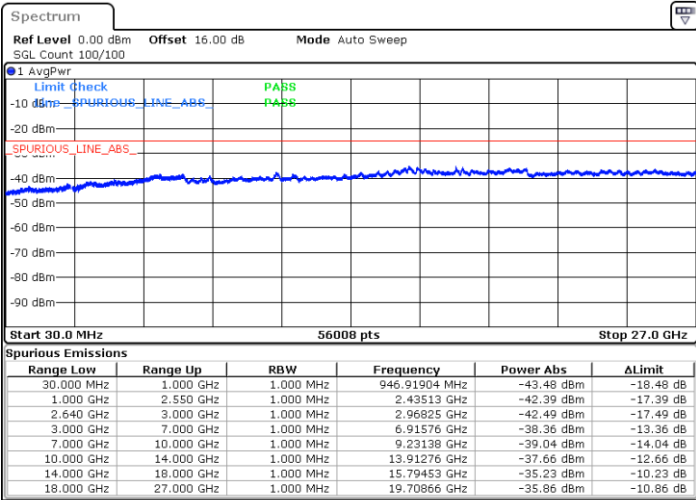
Date: 1.AUG.2020 14:00:22



LTE Band 38 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

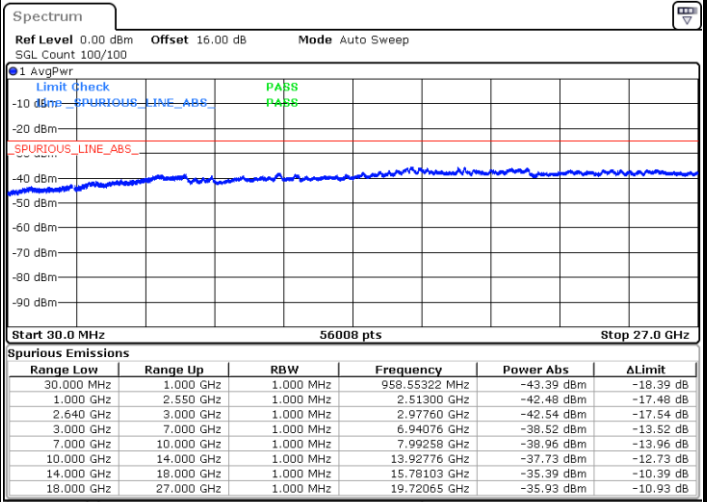
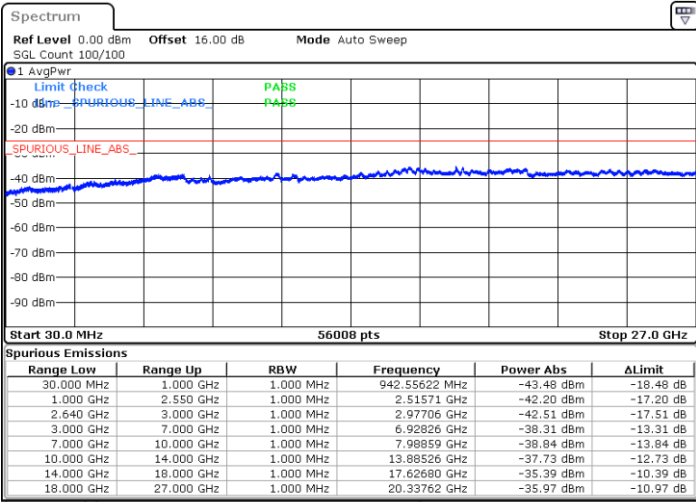


Date: 1.AUG.2020 14:01:43

Date: 1.AUG.2020 14:03:03

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 1.AUG.2020 14:04:23

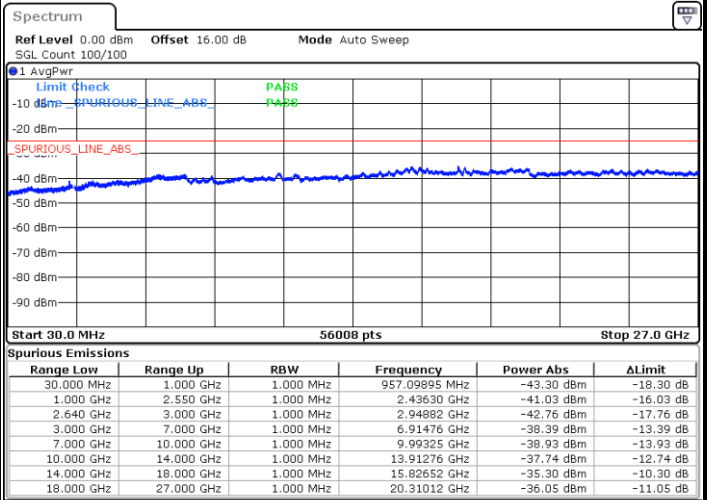
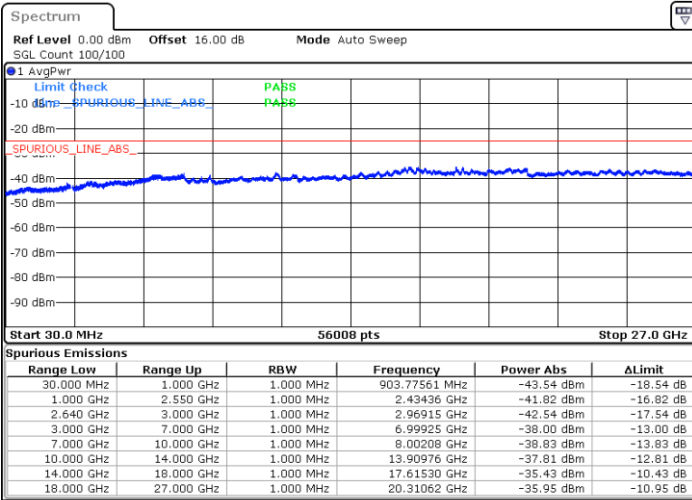
Date: 1.AUG.2020 14:05:43



LTE Band 38 / 15MHz

Highest Channel / QPSK

Highest Channel / 16QAM



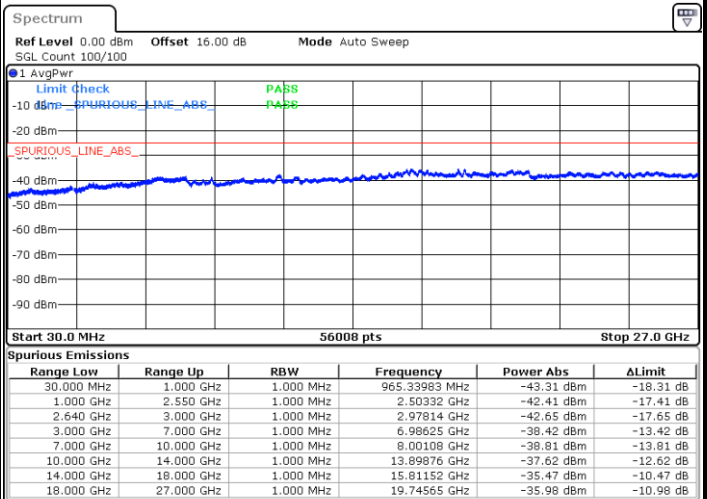
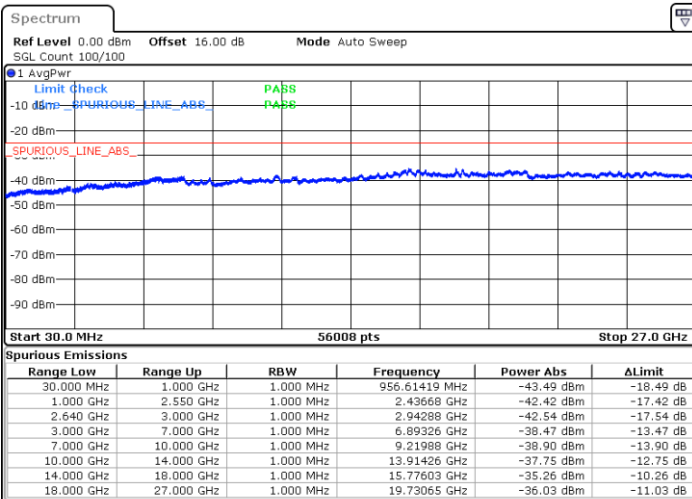
Date: 1.AUG.2020 14:07:03

Date: 1.AUG.2020 14:08:23

LTE Band 38 / 20MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 1.AUG.2020 14:13:44

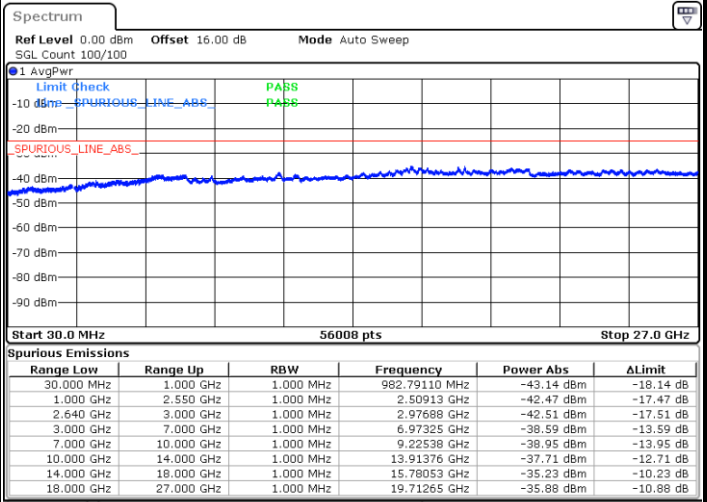
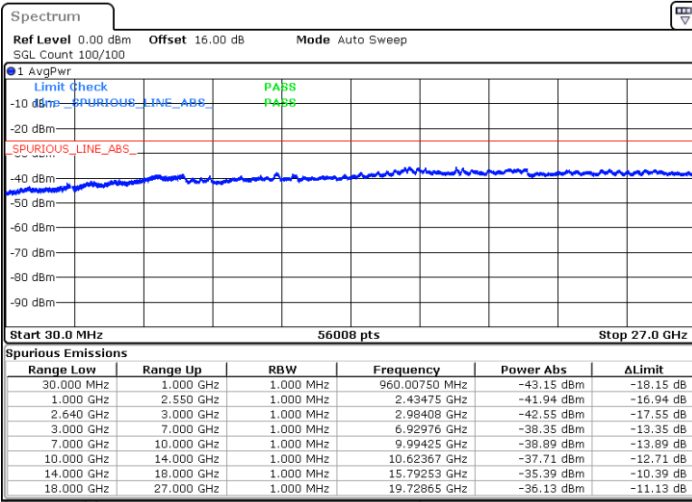
Date: 1.AUG.2020 14:15:05



LTE Band 38 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

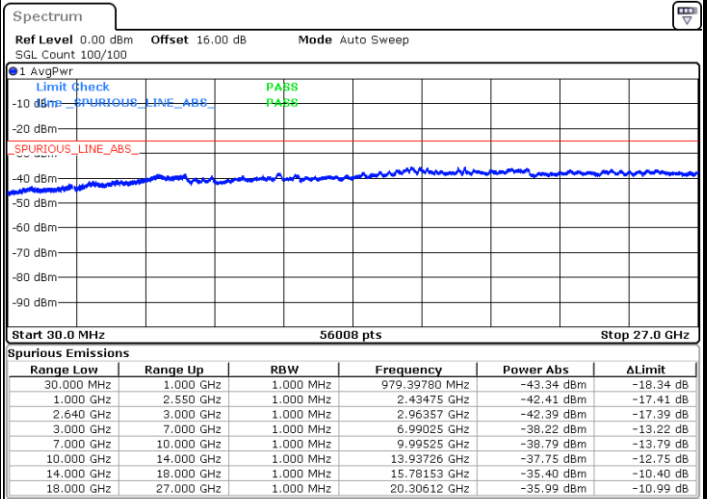
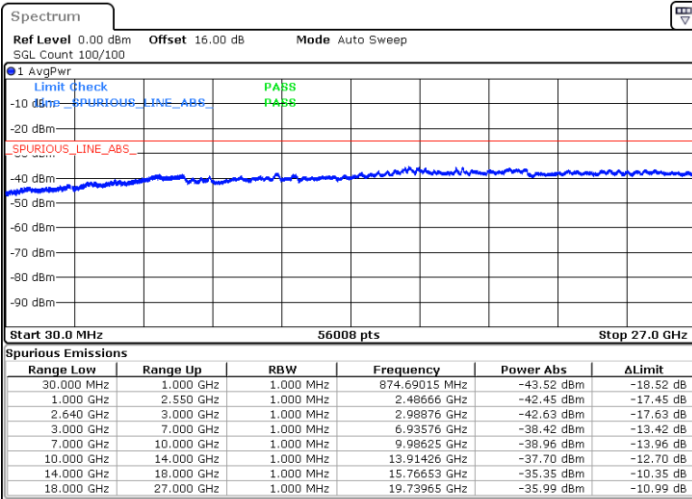


Date: 1.AUG.2020 14:16:25

Date: 1.AUG.2020 14:17:44

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 1.AUG.2020 14:19:04

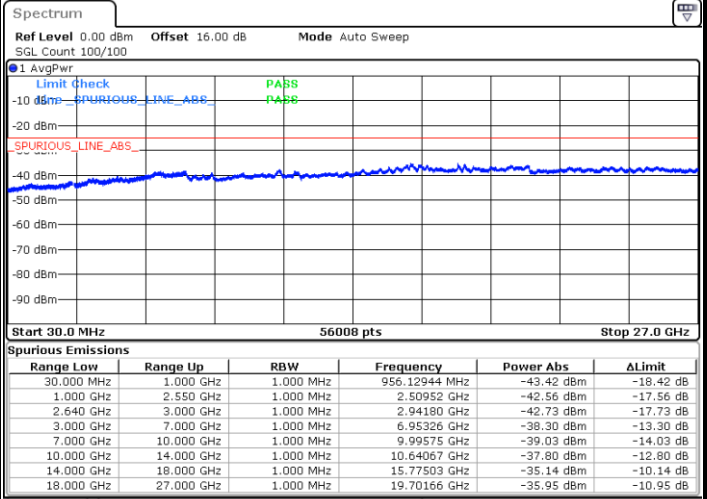
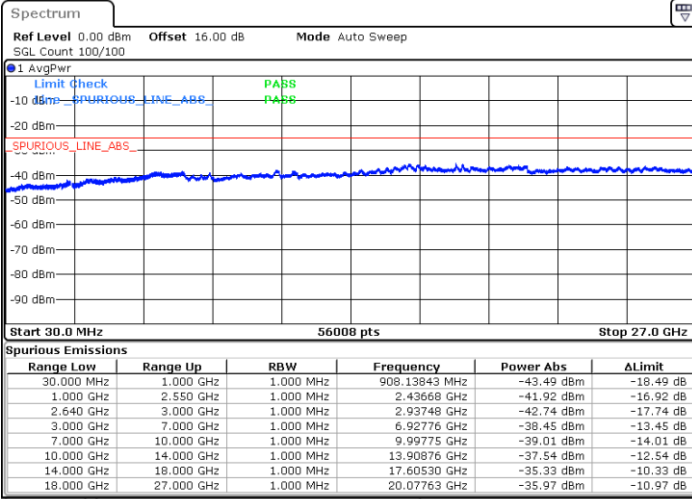
Date: 1.AUG.2020 14:20:24



LTE Band 38 / 5MHz

Lowest Channel / 64QAM

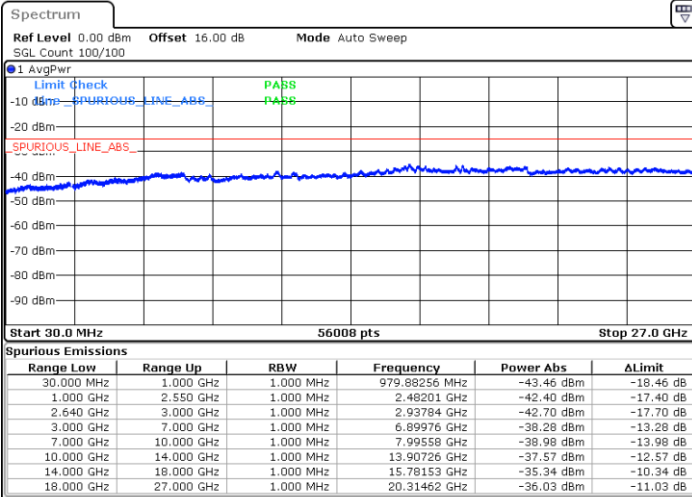
Middle Channel / 64QAM



Date: 1.AUG.2020 13:37:42

Date: 1.AUG.2020 13:39:02

Highest Channel / 64QAM



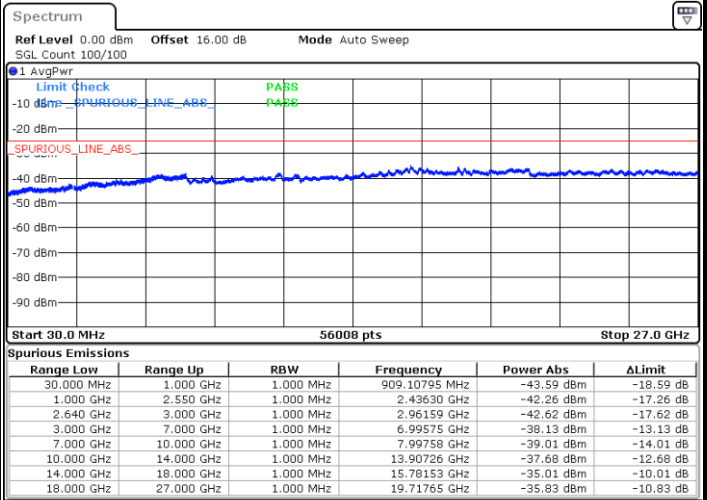
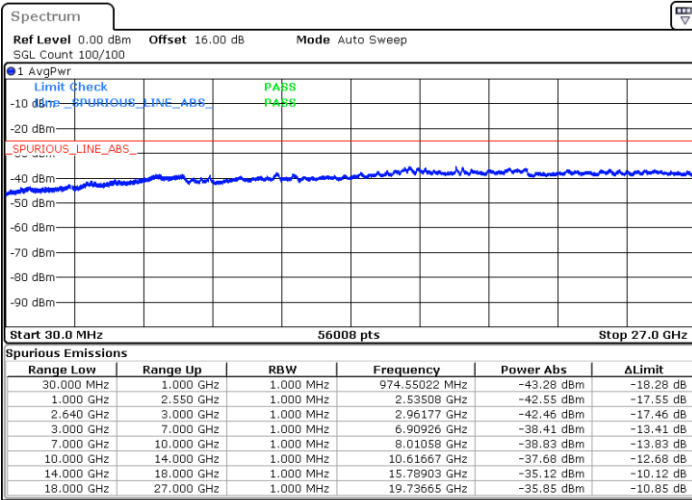
Date: 1.AUG.2020 13:40:21



LTE Band 38 / 10MHz

Lowest Channel / 64QAM

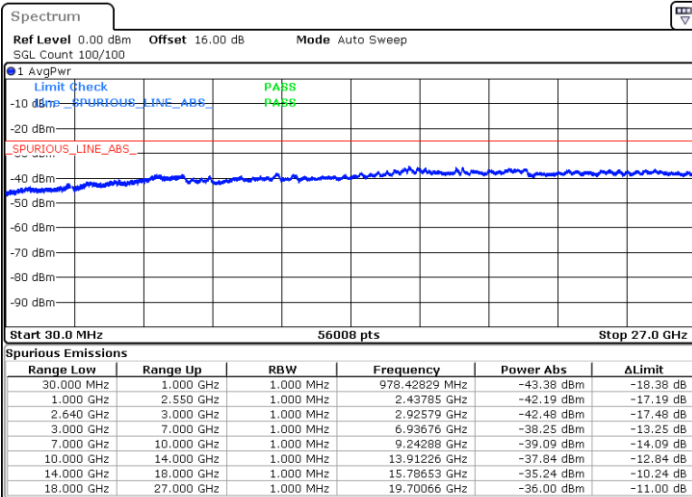
Middle Channel / 64QAM



Date: 1.AUG.2020 13:49:42

Date: 1.AUG.2020 13:51:02

Highest Channel / 64QAM



Date: 1.AUG.2020 13:52:22

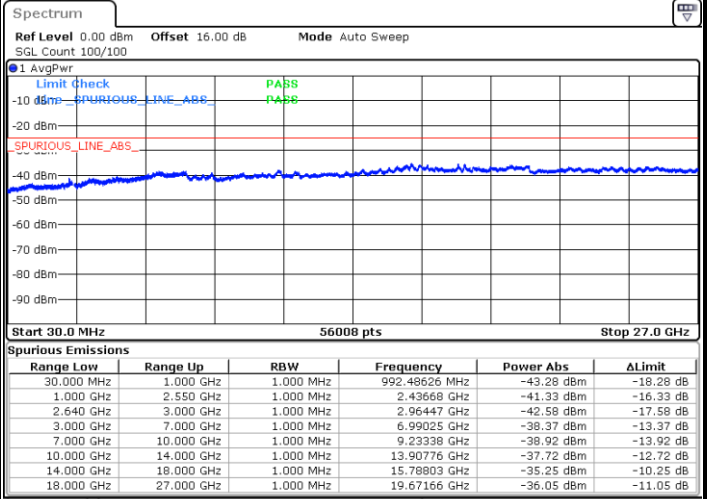
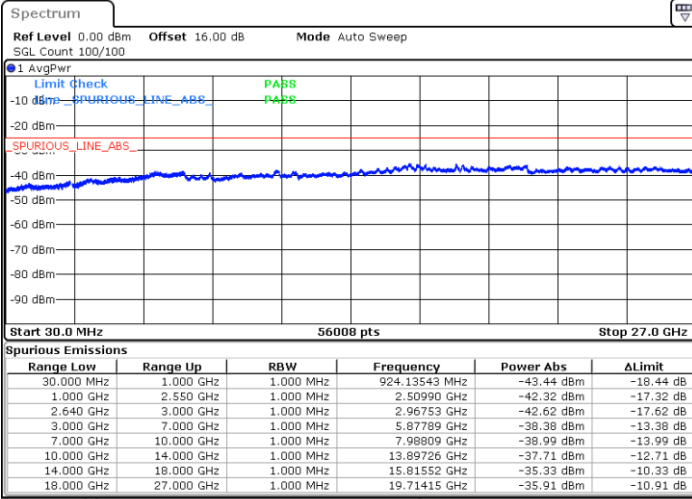




LTE Band 38 / 15MHz

Lowest Channel / 64QAM

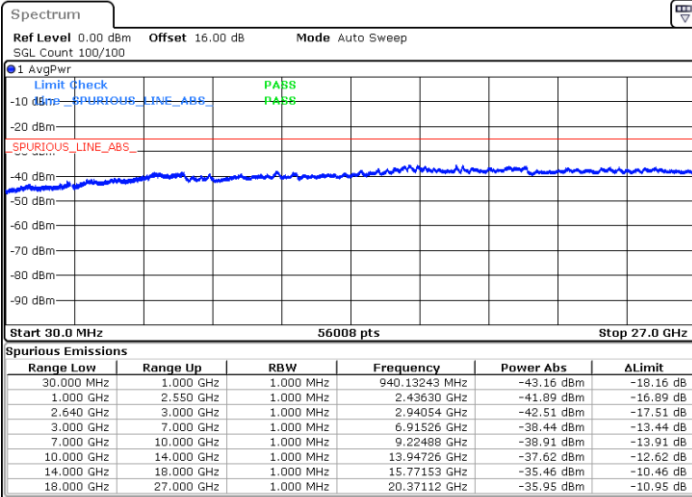
Middle Channel / 64QAM



Date: 1.AUG.2020 14:09:43

Date: 1.AUG.2020 14:11:03

Highest Channel / 64QAM



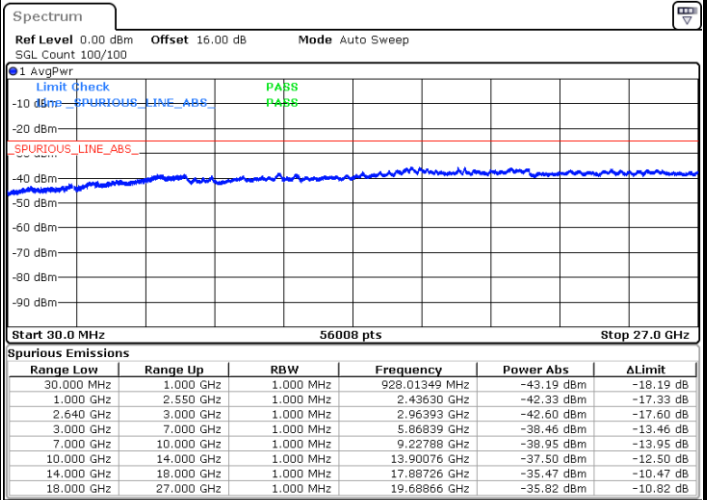
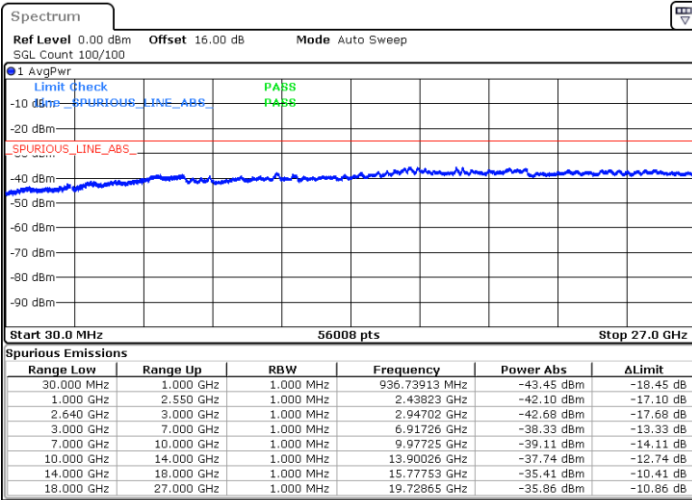
Date: 1.AUG.2020 14:12:23



LTE Band 38 / 20MHz

Lowest Channel / 64QAM

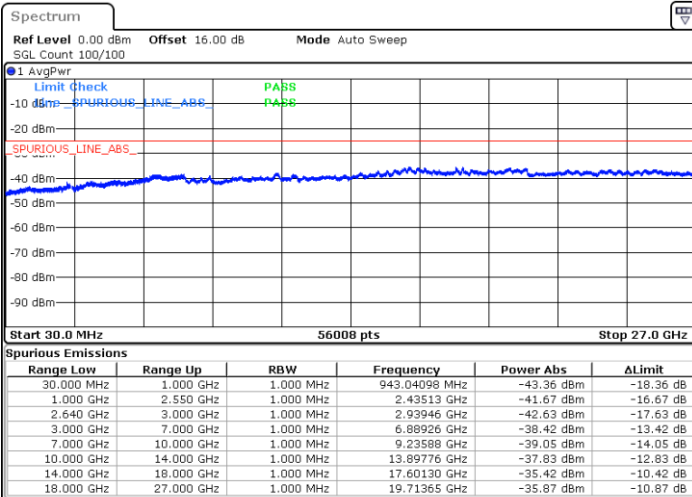
Middle Channel / 64QAM



Date: 1.AUG.2020 14:21:44

Date: 1.AUG.2020 14:23:04

Highest Channel / 64QAM



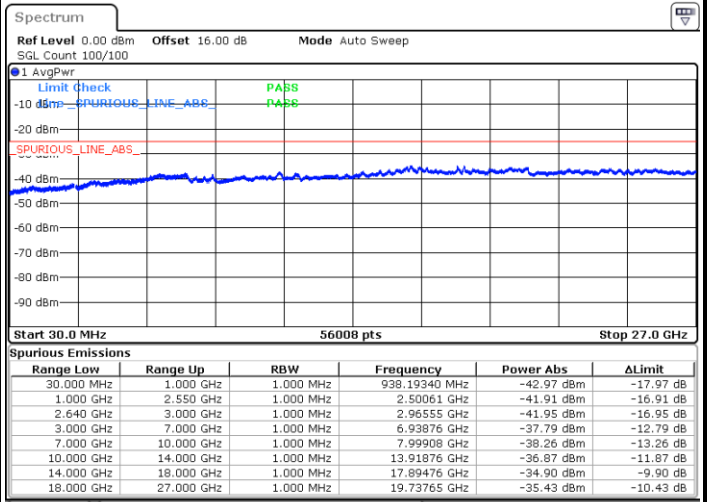
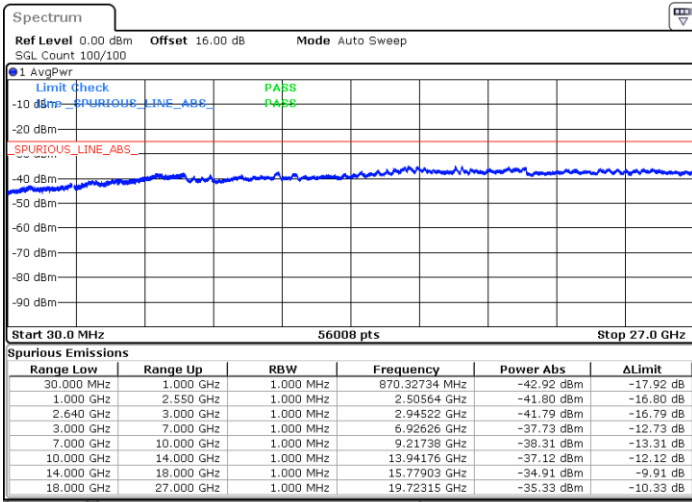
Date: 1.AUG.2020 14:24:24



LTE Band 38 / 5MHz

Lowest Channel / 256QAM

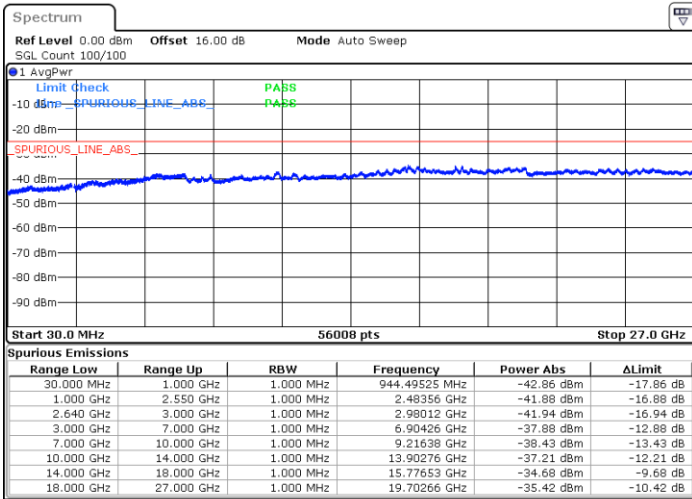
Middle Channel / 256QAM



Date: 9.AUG.2020 12:59:12

Date: 9.AUG.2020 12:56:28

Highest Channel / 256QAM



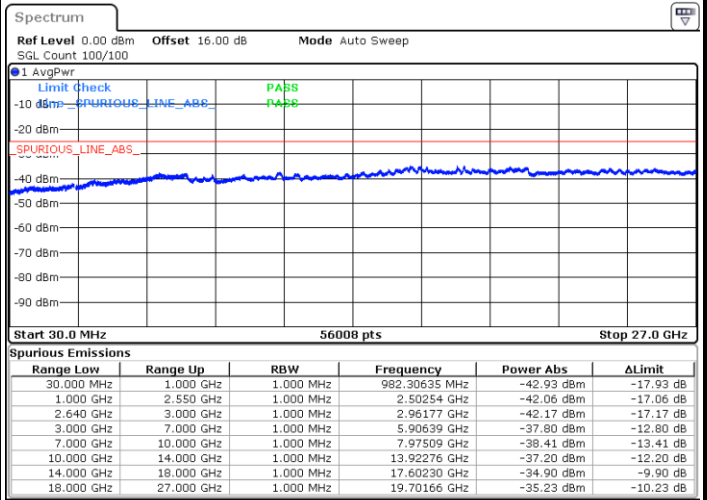
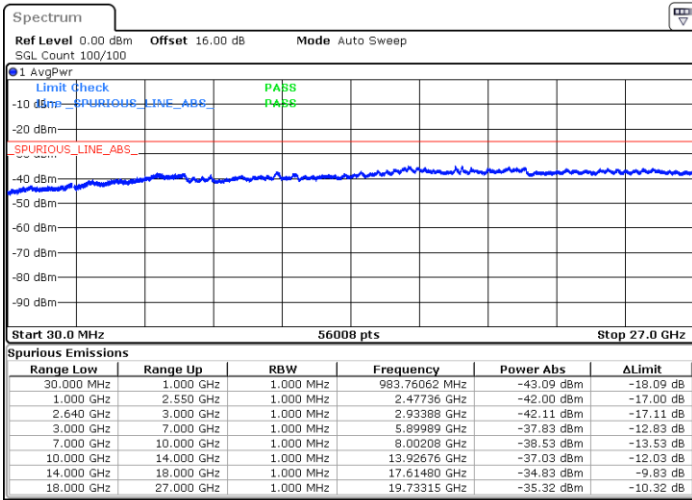
Date: 9.AUG.2020 13:01:08



LTE Band 38 / 10MHz

Lowest Channel / 256QAM

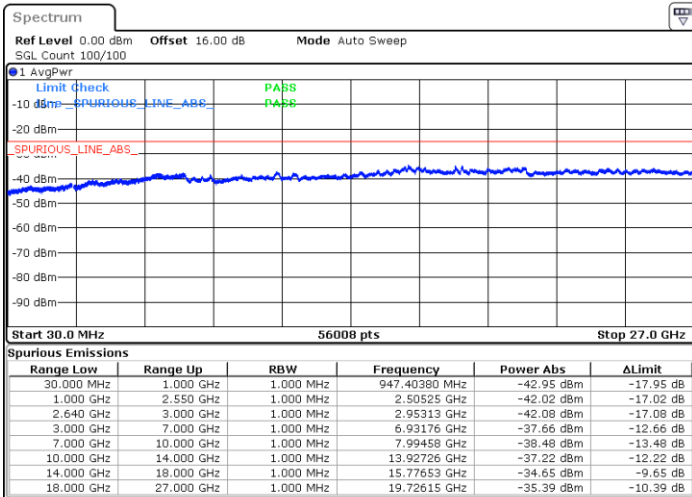
Middle Channel / 256QAM



Date: 9.AUG.2020 13:05:38

Date: 9.AUG.2020 13:03:34

Highest Channel / 256QAM



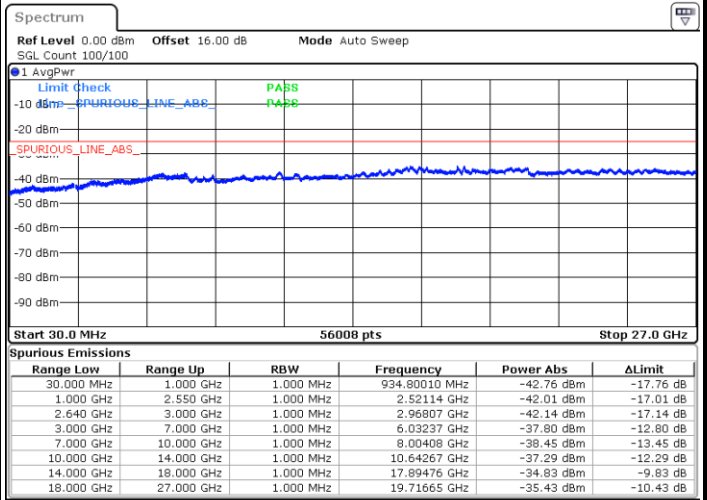
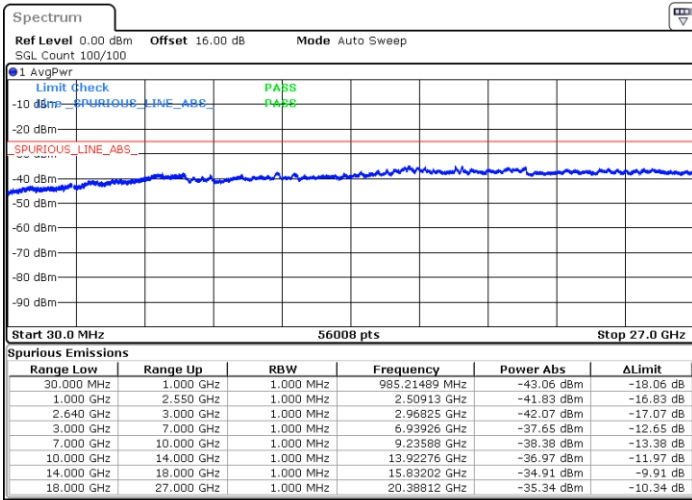
Date: 9.AUG.2020 13:07:40



LTE Band 38 / 15MHz

Lowest Channel / 256QAM

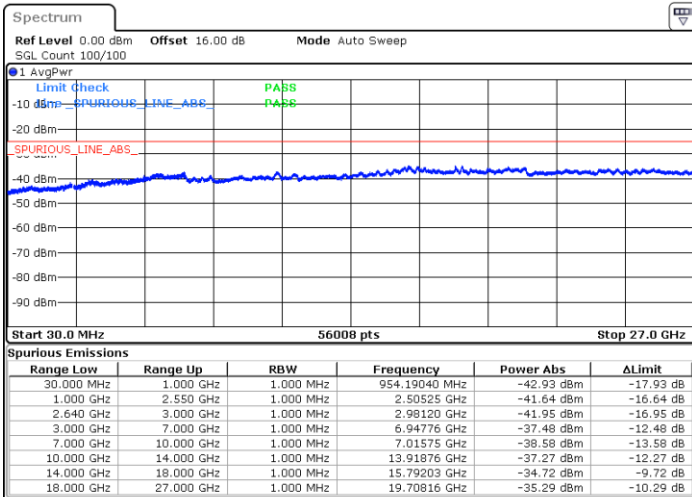
Middle Channel / 256QAM



Date: 9.AUG.2020 13:12:59

Date: 9.AUG.2020 13:10:07

Highest Channel / 256QAM



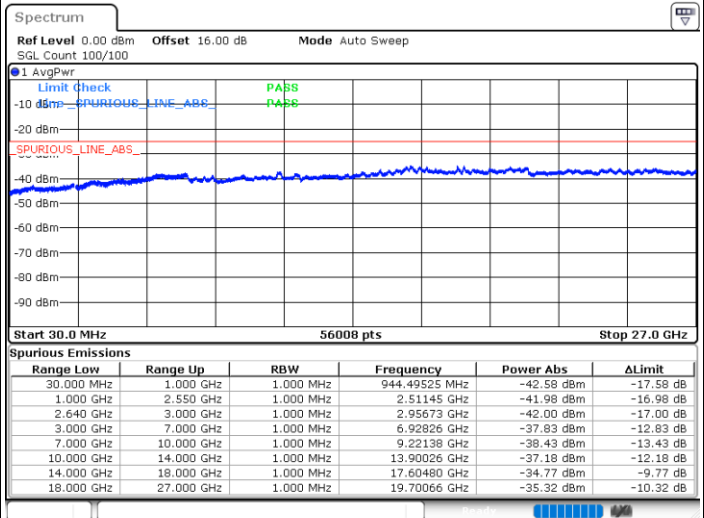
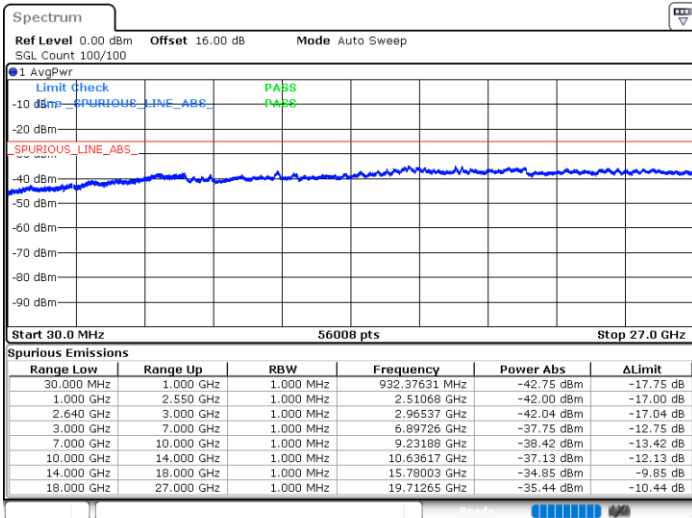
Date: 9.AUG.2020 13:14:49



LTE Band 38 / 20MHz

Lowest Channel / 256QAM

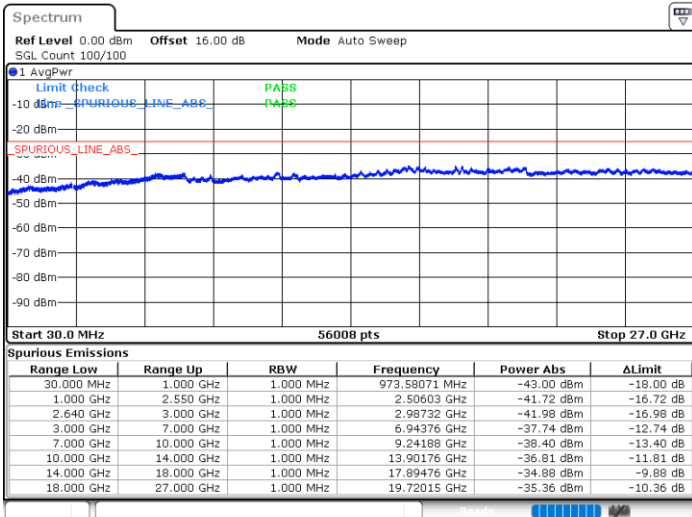
Middle Channel / 256QAM



Date: 9.AUG.2020 13:21:51

Date: 9.AUG.2020 13:17:30

Highest Channel / 256QAM



Date: 9.AUG.2020 13:23:58



**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	0.0069	PASS
40	Normal Voltage	0.0057	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0019	
0	Normal Voltage	0.0019	
-10	Normal Voltage	0.0079	
-20	Normal Voltage	0.0007	
-30	Normal Voltage	0.0079	
20	Maximum Voltage	0.0015	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0053	

**Note:**

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.3 V. ; Maximum Voltage =4.25 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 41\_HPUE

## Peak-to-Average Ratio

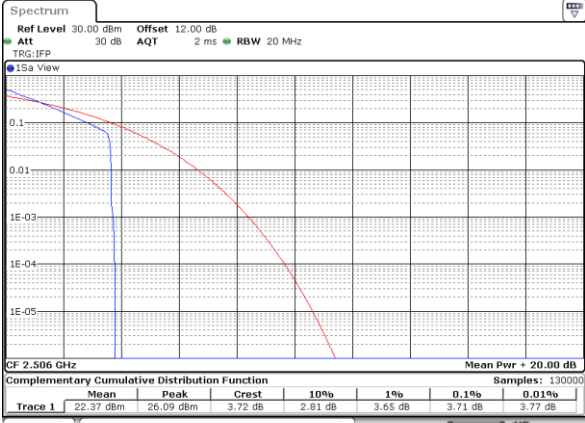
Mode	LTE Band 41 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.71	5.07	5.54	5.94	<b>PASS</b>
Middle CH	3.83	5.19	5.94	6.12	
Highest CH	3.94	5.25	6.06	6.14	
Mode	LTE Band 41 / 20MHz				
Mod.	64QAM		256QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	6.70	6.49	8.00	6.58	<b>PASS</b>
Middle CH	6.90	6.55	8.06	6.67	
Highest CH	7.04	6.61	7.83	6.72	





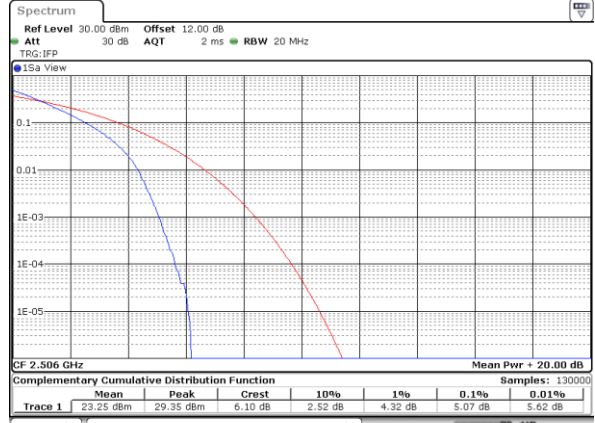
LTE Band 41 / 20MHz / QPSK

Lowest Channel / 1RB



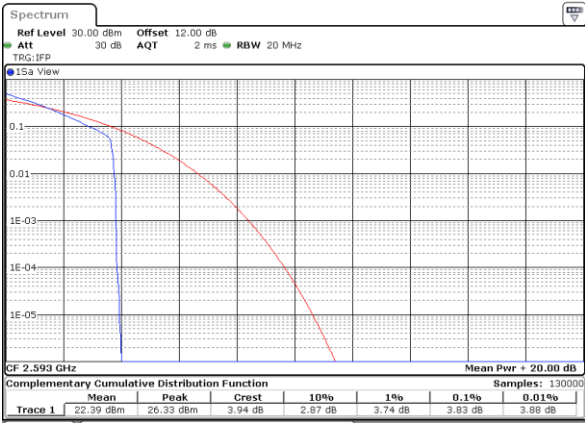
Date: 9\_AUG.2020 10:27:57

Lowest Channel / Full RB



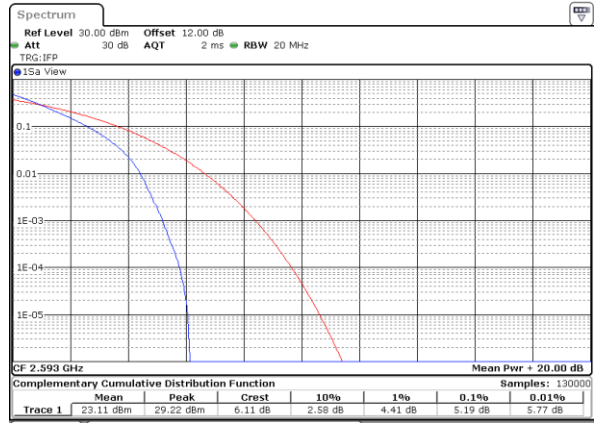
Date: 9\_AUG.2020 10:28:12

Middle Channel / 1RB



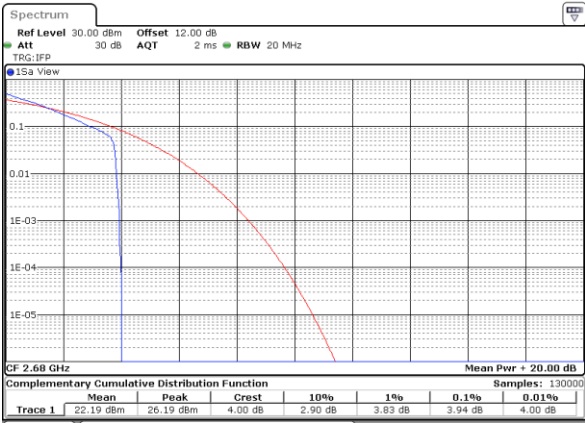
Date: 9\_AUG.2020 10:28:26

Middle Channel / Full RB



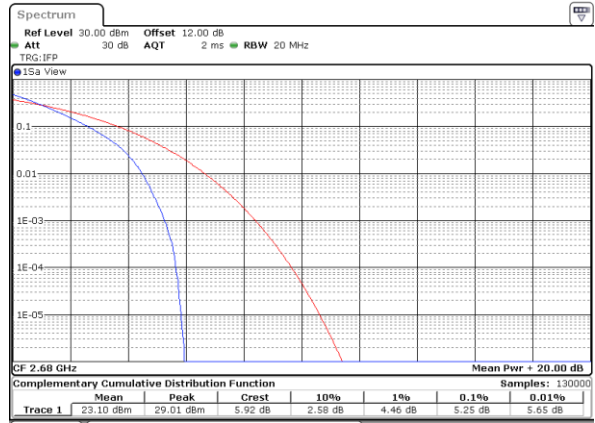
Date: 9\_AUG.2020 10:28:40

Highest Channel / 1RB



Date: 9\_AUG.2020 10:28:55

Highest Channel / Full RB

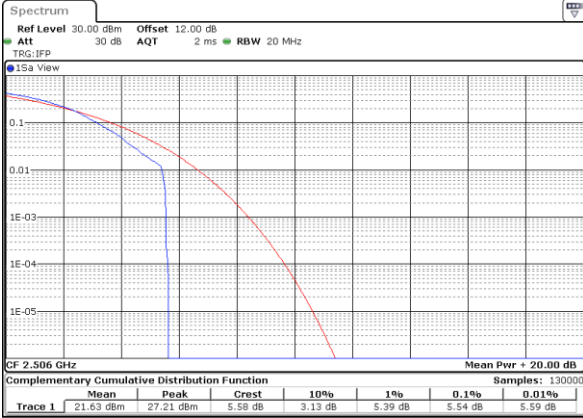


Date: 9\_AUG.2020 10:29:10



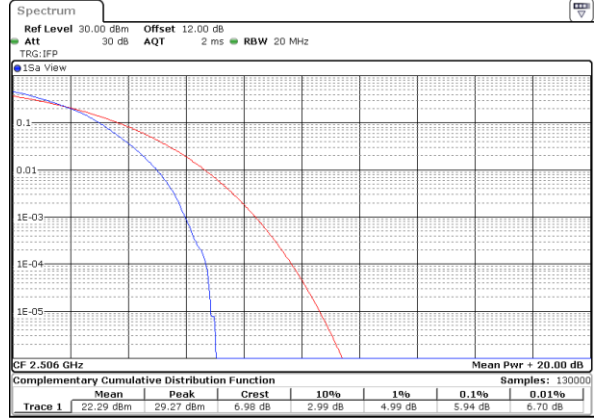
LTE Band 41 / 20MHz / 16QAM

Lowest Channel / 1RB



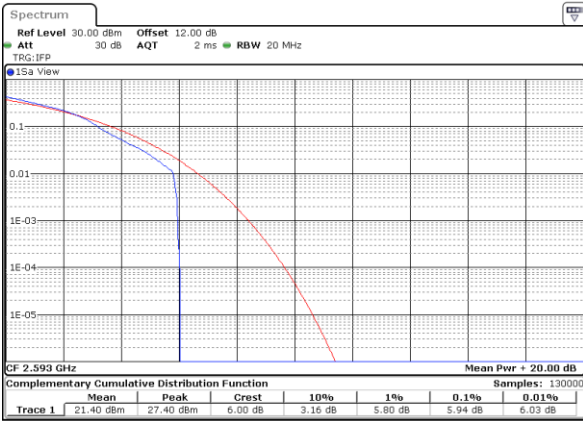
Date: 9,AUG,2020 10:26:29

Lowest Channel / Full RB



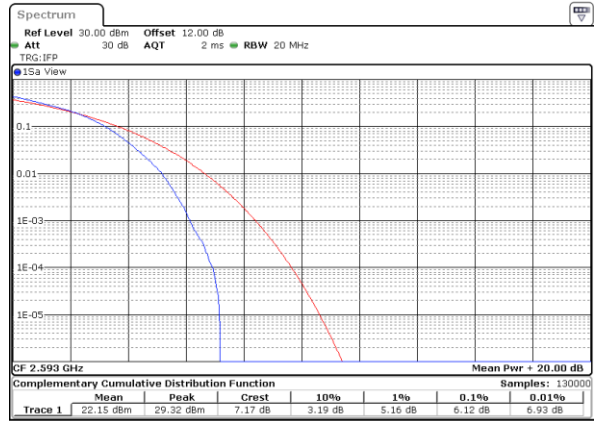
Date: 9,AUG,2020 10:26:44

Middle Channel / 1RB



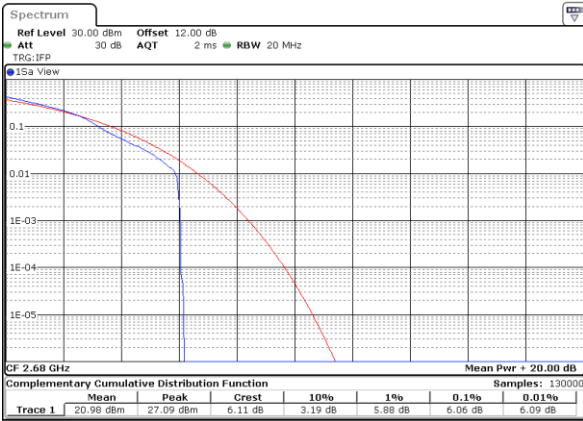
Date: 9,AUG,2020 10:26:59

Middle Channel / Full RB



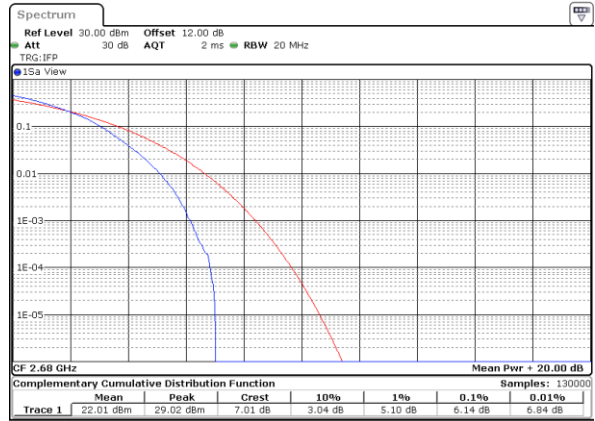
Date: 9,AUG,2020 10:27:13

Highest Channel / 1RB



Date: 9,AUG,2020 10:27:27

Highest Channel / Full RB

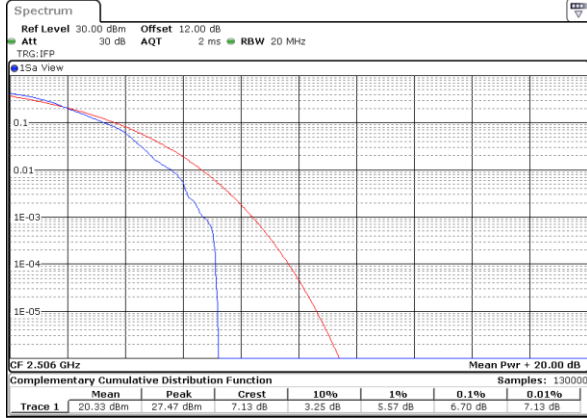


Date: 9,AUG,2020 10:27:42



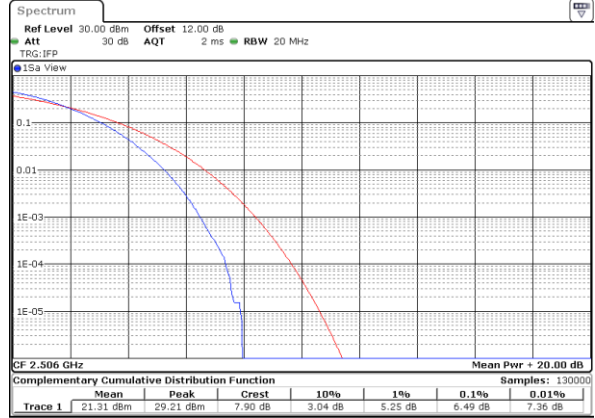
LTE Band 41 / 20MHz / 64QAM

Lowest Channel / 1RB



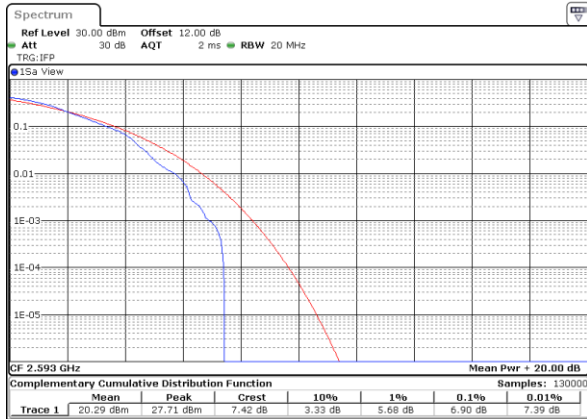
Date: 9,AUG,2020 10:24:55

Lowest Channel / Full RB



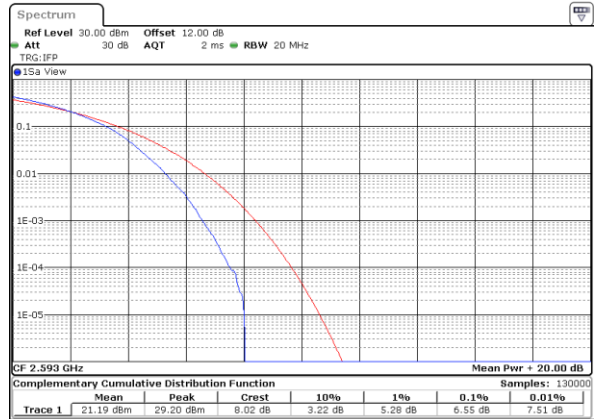
Date: 9,AUG,2020 10:25:11

Middle Channel / 1RB



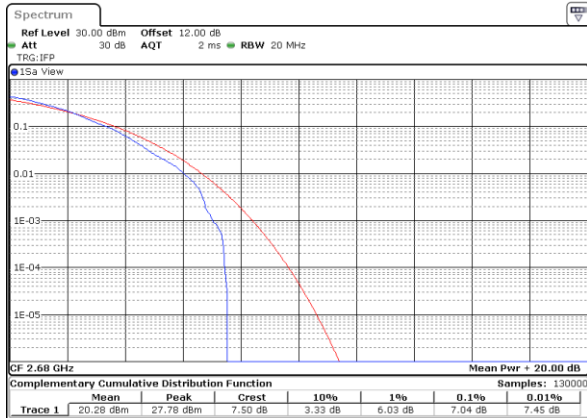
Date: 9,AUG,2020 10:25:27

Middle Channel / Full RB



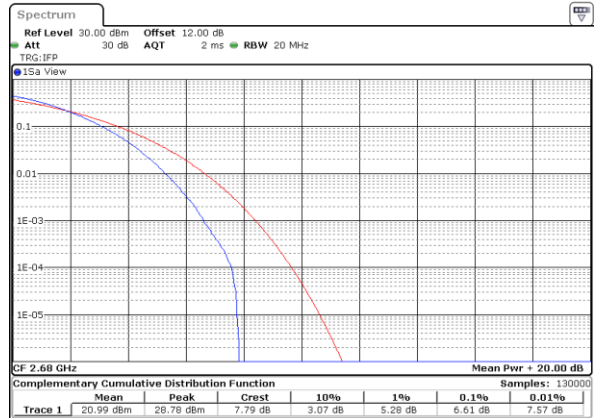
Date: 9,AUG,2020 10:25:42

Highest Channel / 1RB



Date: 9,AUG,2020 10:25:57

Highest Channel / Full RB

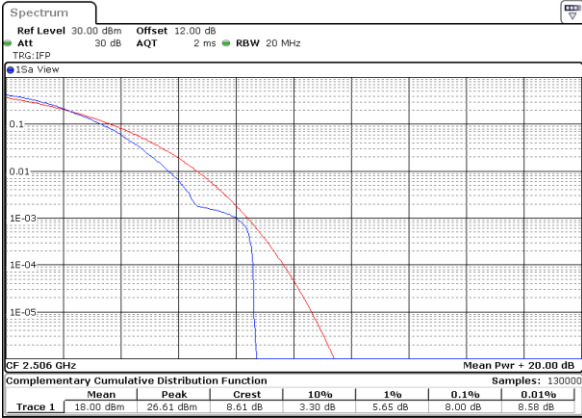


Date: 9,AUG,2020 10:26:13



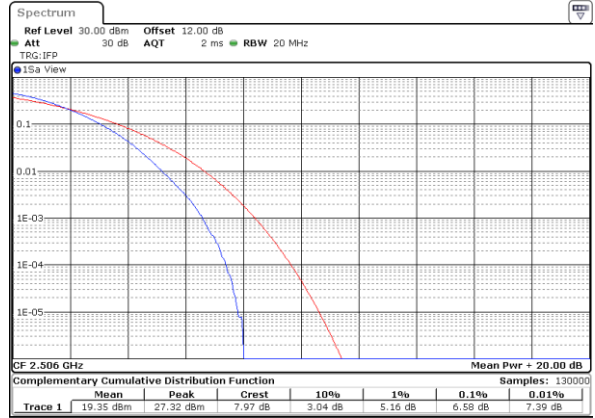
LTE Band 41 / 20MHz / 256QAM

Lowest Channel / 1RB



Date: 9.AUG.2020 11:36:16

Lowest Channel / Full RB



Date: 9.AUG.2020 11:35:54

Middle Channel / 1RB



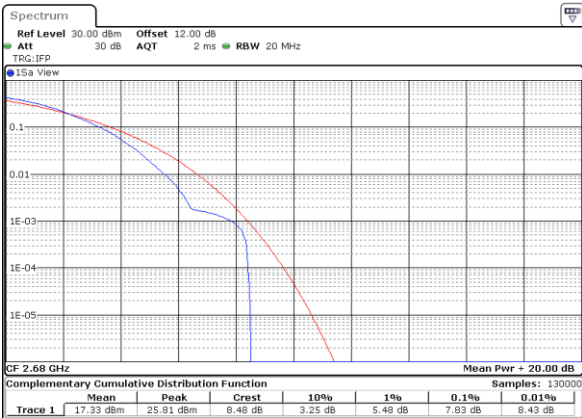
Date: 9.AUG.2020 11:33:20

Middle Channel / Full RB



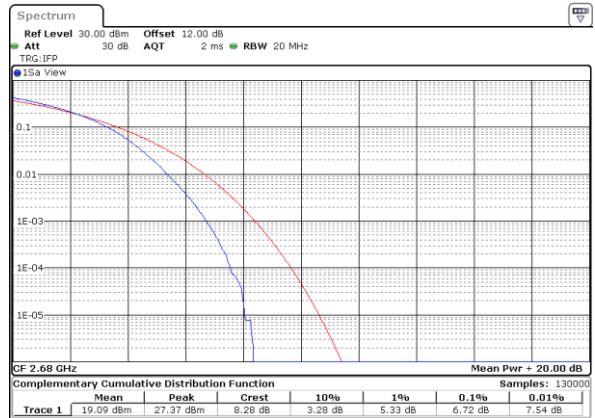
Date: 9.AUG.2020 11:32:47

Highest Channel / 1RB



Date: 9.AUG.2020 11:38:56

Highest Channel / Full RB



Date: 9.AUG.2020 11:38:37



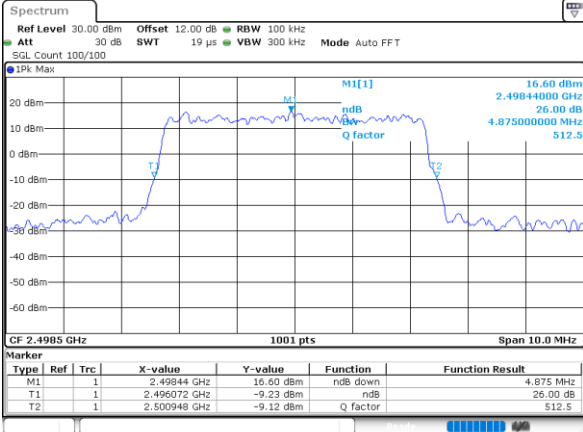
**26dB Bandwidth**

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	-	-	-	-	4.88	4.80	9.81	9.83	14.33	14.51	18.66	19.06
Middle CH	-	-	-	-	4.85	4.84	9.75	9.77	14.18	14.15	18.66	18.66
Highest CH	-	-	-	-	4.82	4.75	9.69	9.73	14.12	14.15	18.62	18.62
Mode	LTE Band 41 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Lowest CH	-	-	-	-	4.88	4.75	9.71	9.63	14.18	14.30	18.82	18.86
Middle CH	-	-	-	-	4.85	4.87	9.97	9.69	14.30	14.30	18.98	18.78
Highest CH	-	-	-	-	4.77	4.83	9.65	9.71	14.36	14.33	18.86	18.66



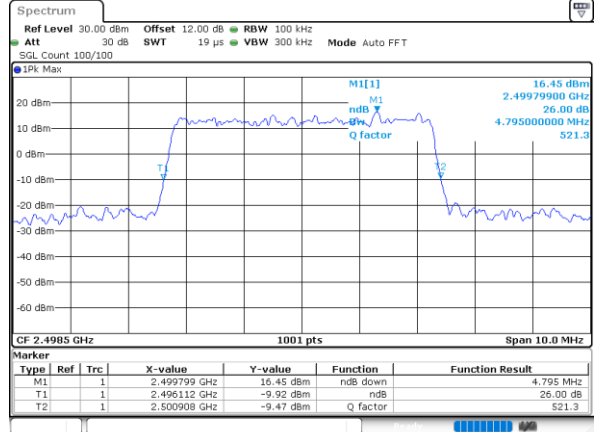
LTE Band 41

Lowest Channel / 5MHz / QPSK



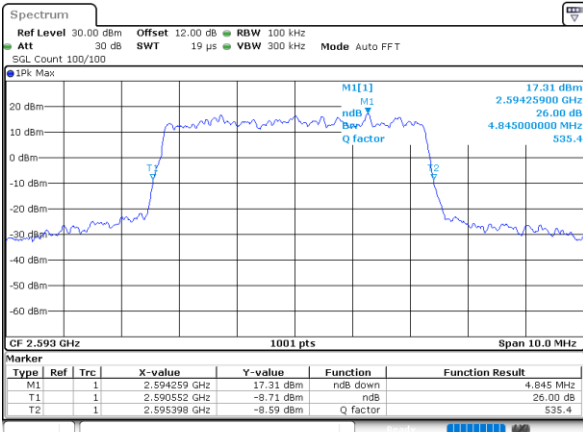
Date: 9,AUG,2020 10:11:12

Lowest Channel / 5MHz / 16QAM



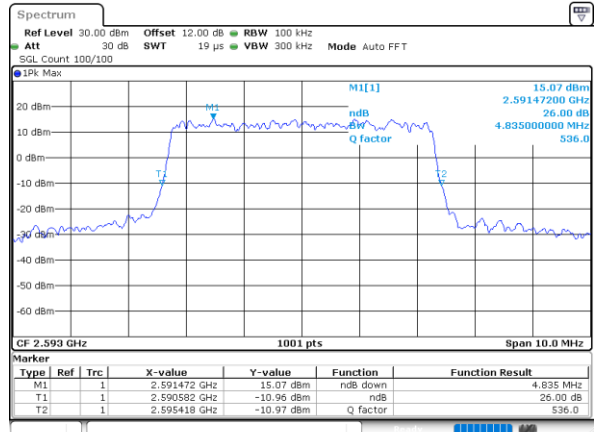
Date: 9,AUG,2020 10:11:24

Middle Channel / 5MHz / QPSK



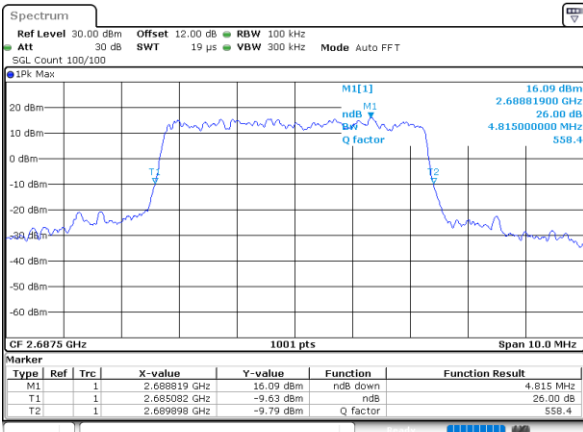
Date: 9,AUG,2020 10:11:58

Middle Channel / 5MHz / 16QAM



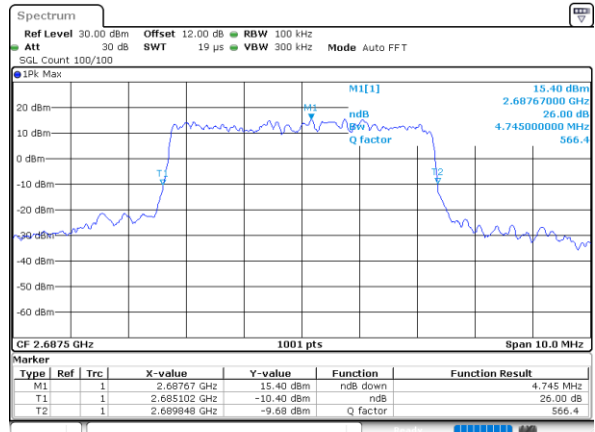
Date: 9,AUG,2020 10:12:09

Highest Channel / 5MHz / QPSK



Date: 9,AUG,2020 10:12:44

Highest Channel / 5MHz / 16QAM

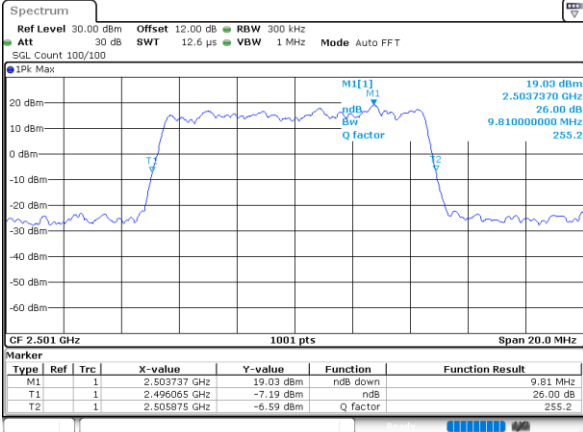


Date: 9,AUG,2020 10:12:56



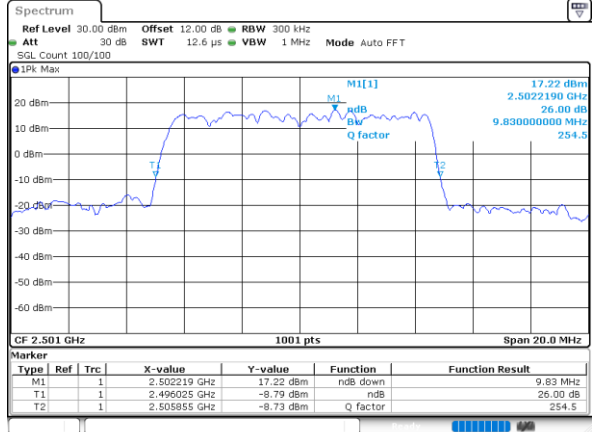
LTE Band 41

Lowest Channel / 10MHz / QPSK



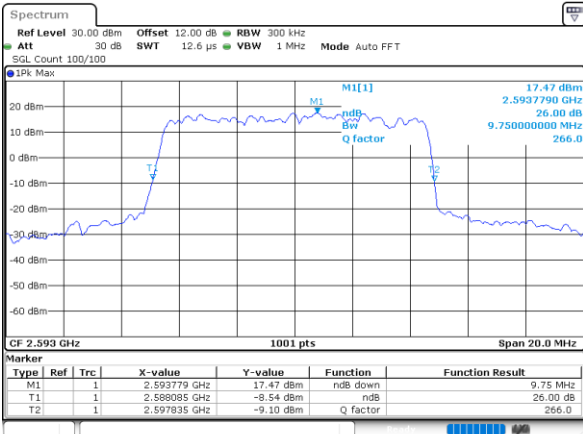
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Lowest Channel / 10MHz / 16QAM



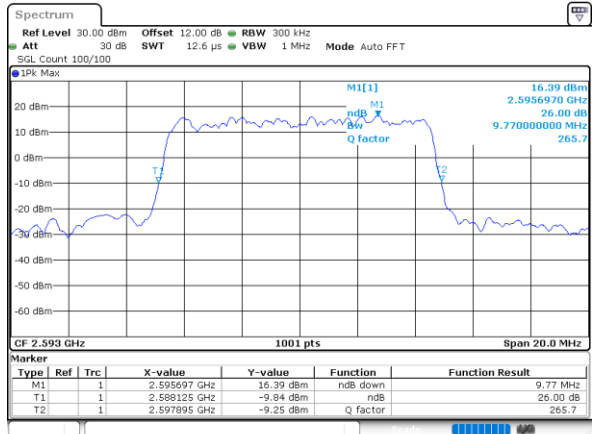
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Middle Channel / 10MHz / QPSK



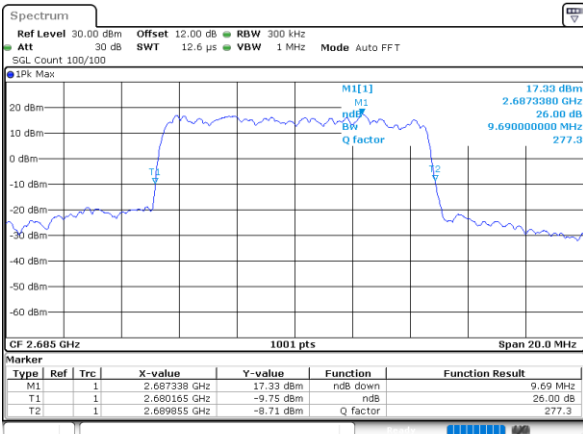
Date: 9\_AUG.2020 10:14:18

Middle Channel / 10MHz / 16QAM



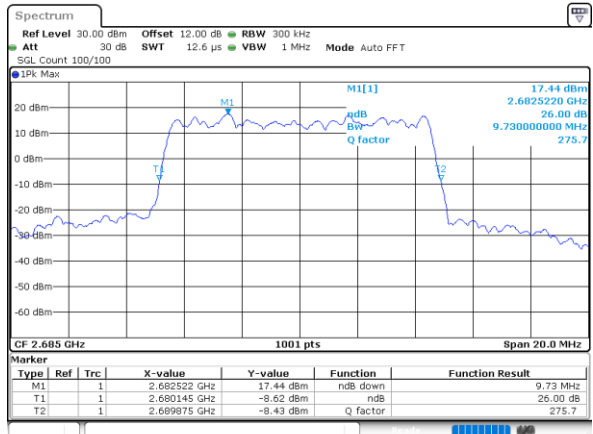
Date: 9\_AUG.2020 10:14:29

Highest Channel / 10MHz / QPSK



Date: 9\_AUG.2020 10:15:04

Highest Channel / 10MHz / 16QAM

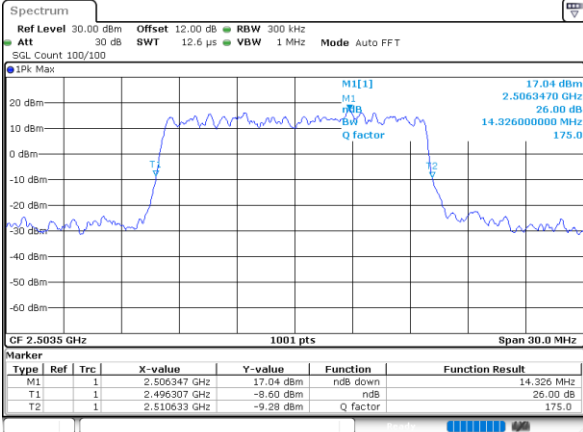


Date: 9\_AUG.2020 10:15:16



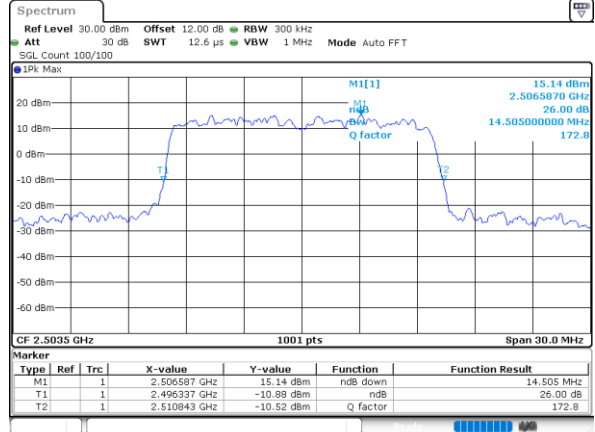
LTE Band 41

Lowest Channel / 15MHz / QPSK



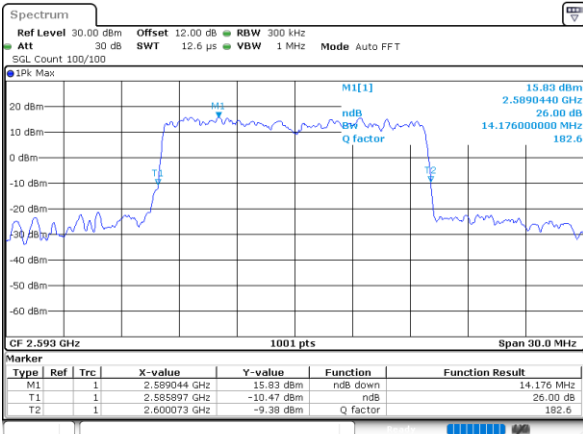
Date: 9\_AUG.2020 10:15:52

Lowest Channel / 15MHz / 16QAM



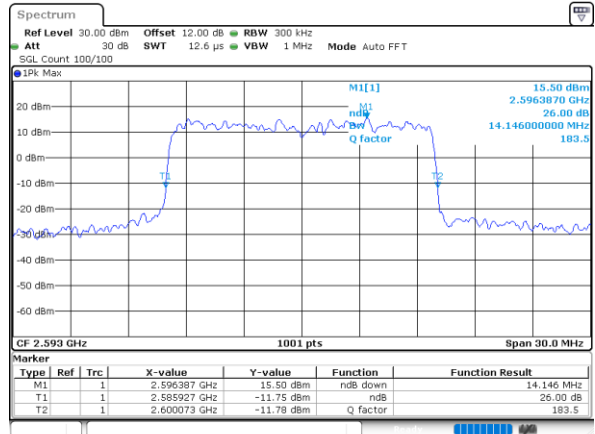
Date: 9\_AUG.2020 10:16:04

Middle Channel / 15MHz / QPSK



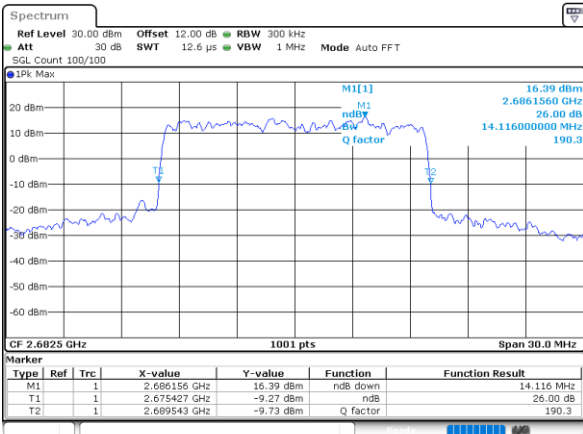
Date: 9\_AUG.2020 10:16:38

Middle Channel / 15MHz / 16QAM



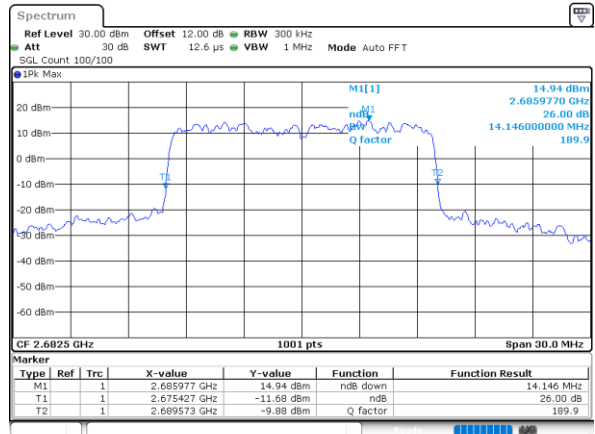
Date: 9\_AUG.2020 10:16:49

Highest Channel / 15MHz / QPSK



Date: 9\_AUG.2020 10:17:24

Highest Channel / 15MHz / 16QAM



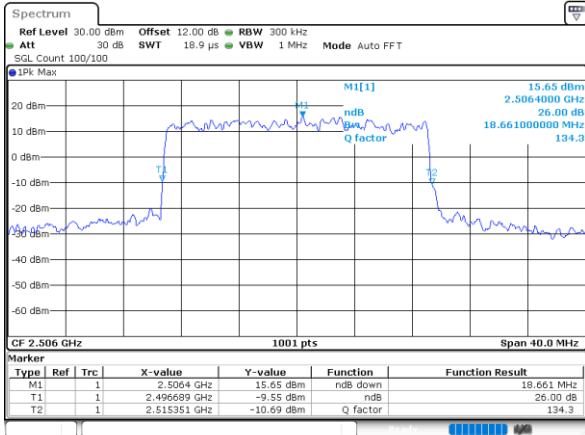
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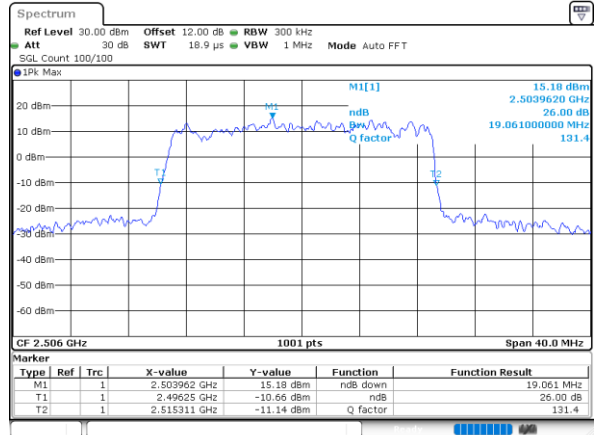
LTE Band 41

Lowest Channel / 20MHz / QPSK



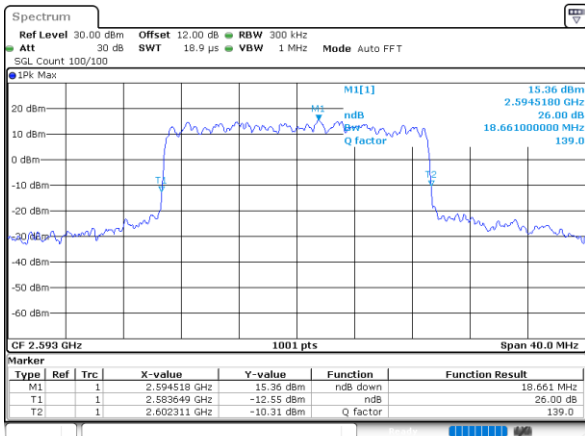
Date: 9,AUG,2020 10:18:12

Lowest Channel / 20MHz / 16QAM



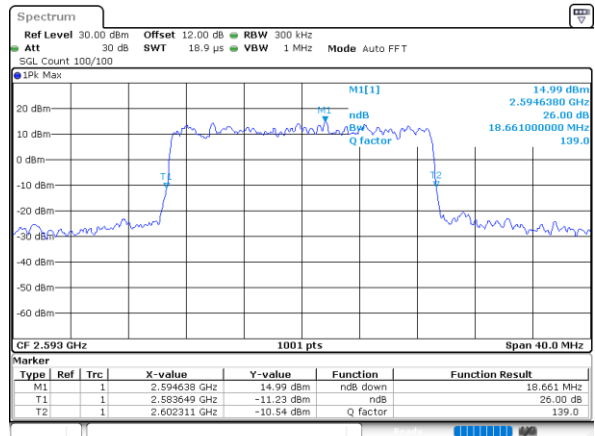
Date: 9,AUG,2020 10:18:24

Middle Channel / 20MHz / QPSK



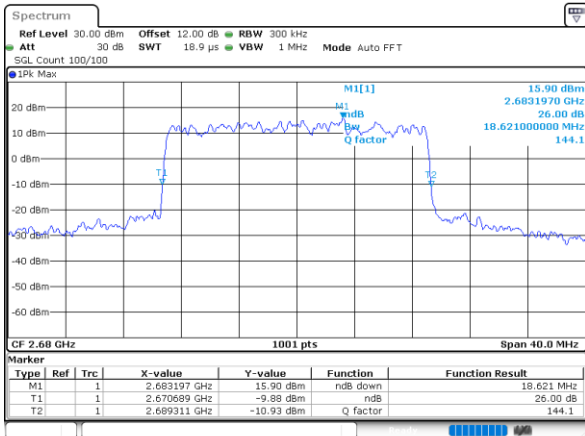
Date: 9,AUG,2020 10:18:58

Middle Channel / 20MHz / 16QAM



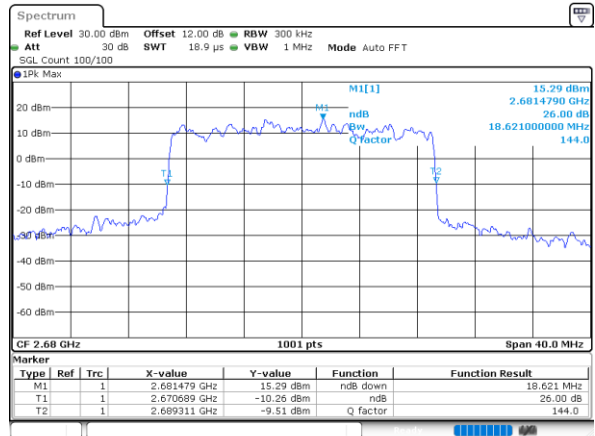
Date: 9,AUG,2020 10:19:09

Highest Channel / 20MHz / QPSK



Date: 9,AUG,2020 10:19:44

Highest Channel / 20MHz / 16QAM



Date: 9,AUG,2020 10:19:56