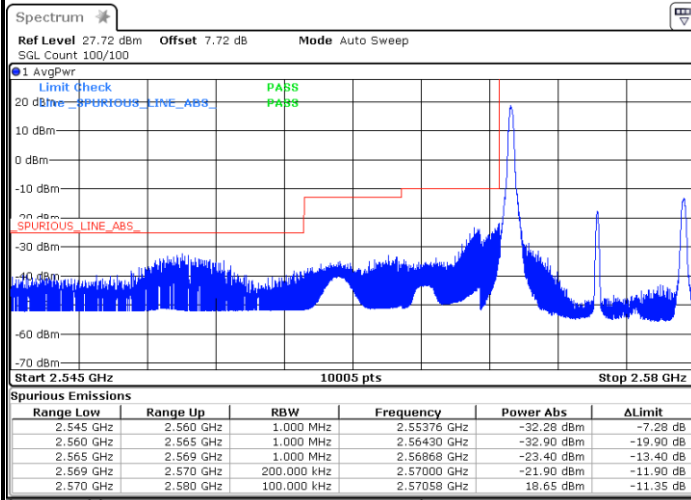


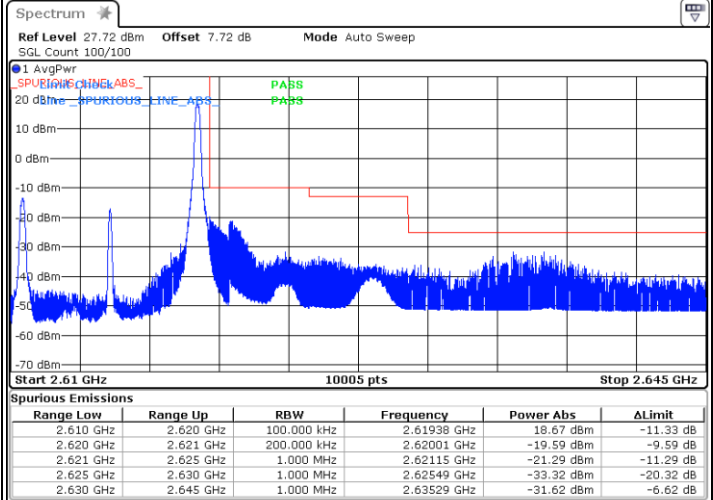


LTE Band 38 / 10MHz / 16QAM

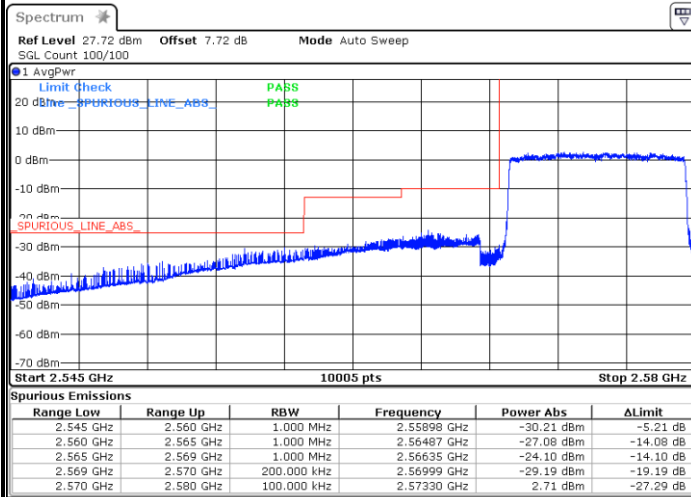
Lowest Band Edge / 1 RB



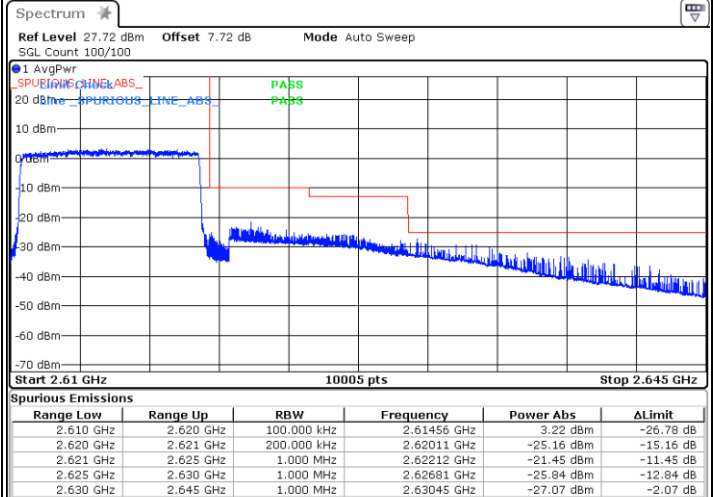
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



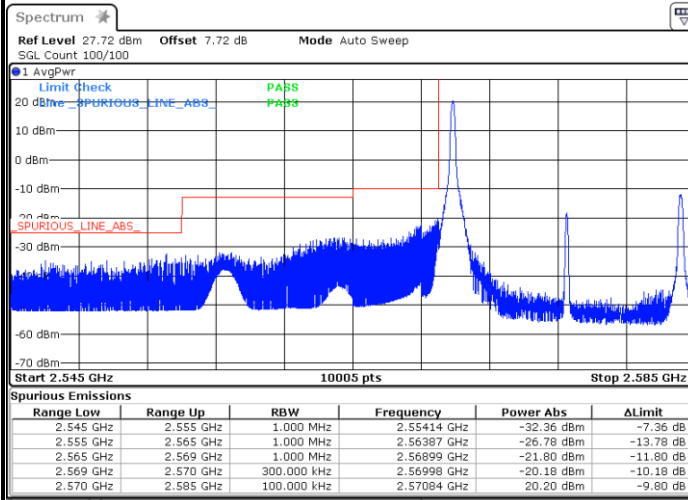
Highest Band Edge / Full RB



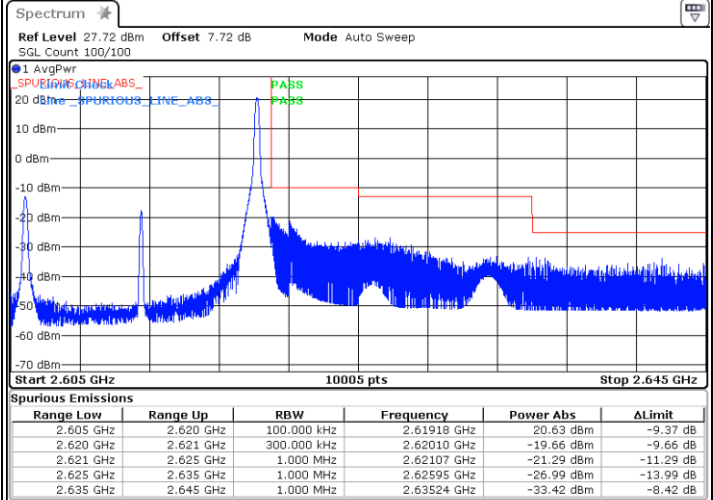


LTE Band 38 / 15MHz / QPSK

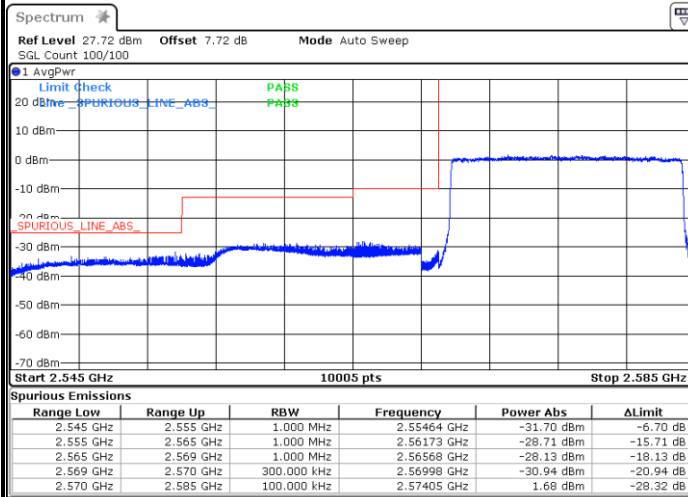
Lowest Band Edge / 1 RB



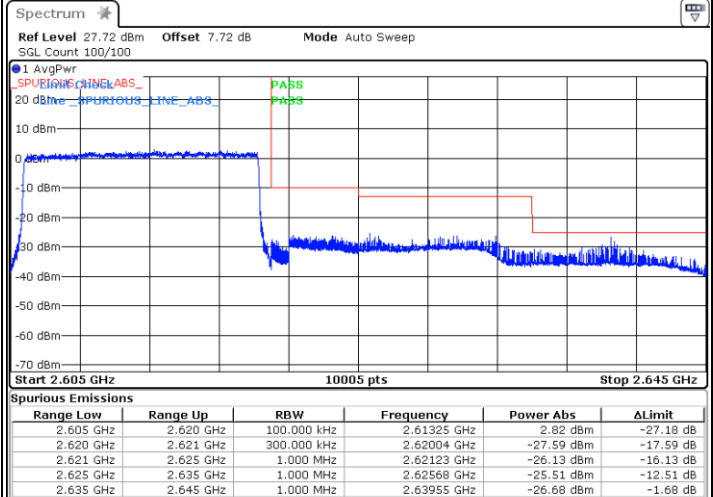
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



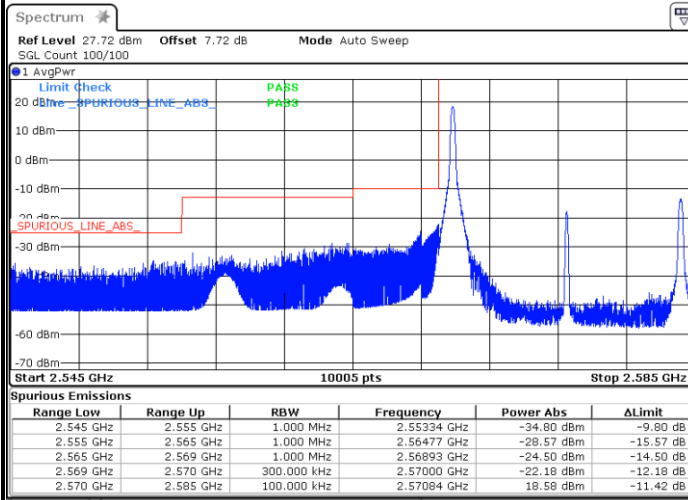
Highest Band Edge / Full RB



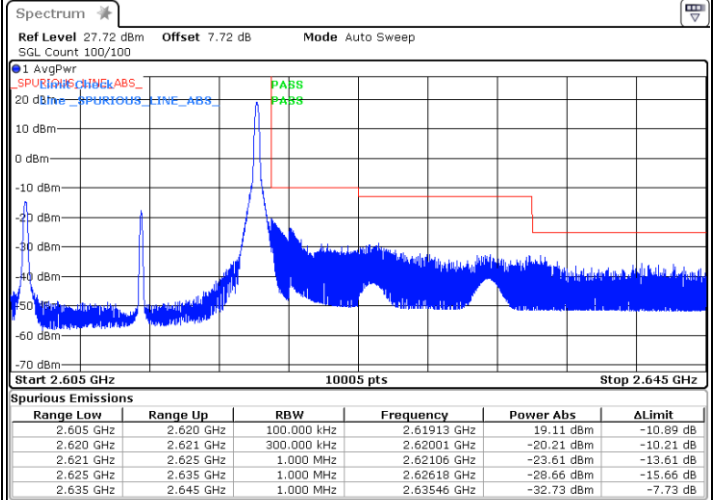


LTE Band 38 / 15MHz / 16QAM

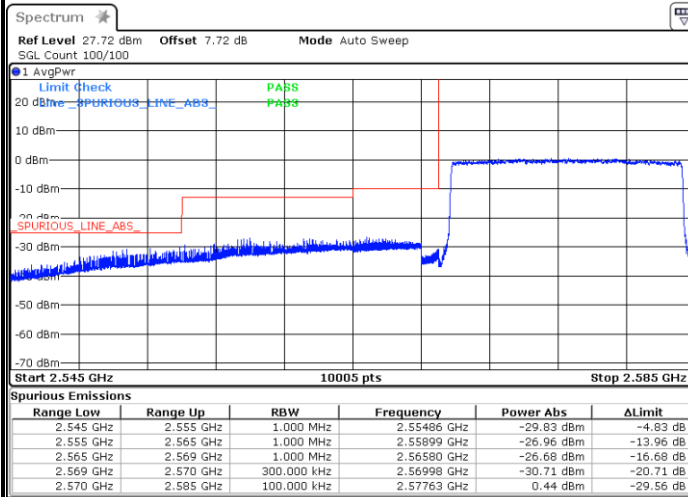
Lowest Band Edge / 1 RB



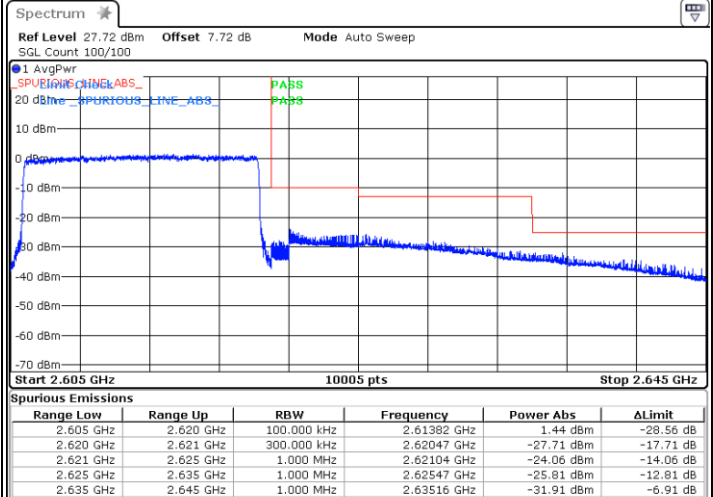
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



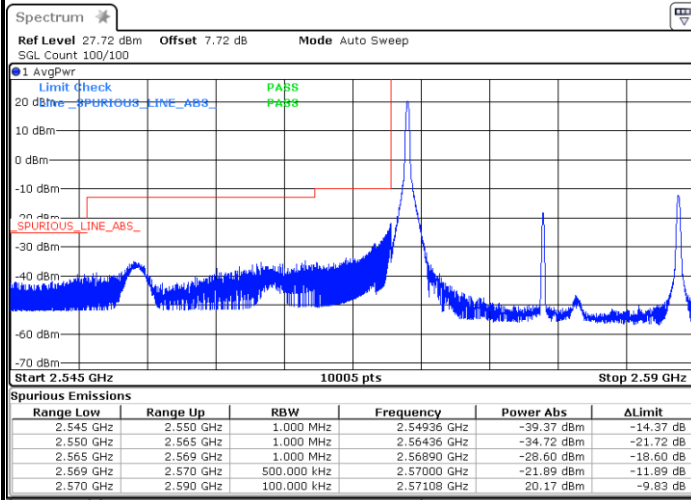
Highest Band Edge / Full RB



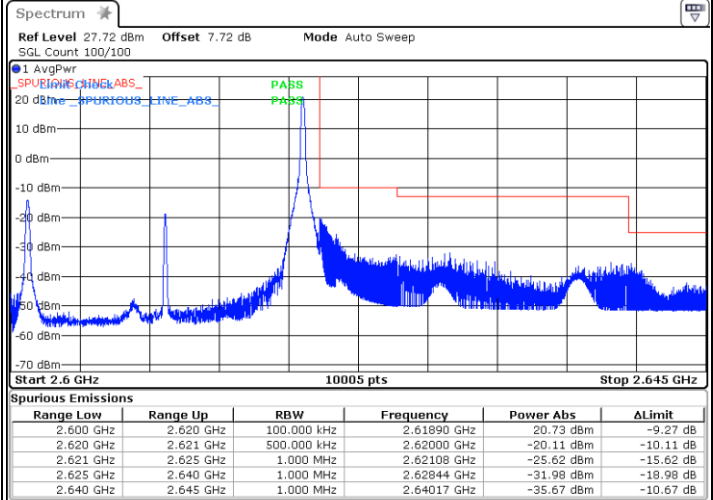


LTE Band 38 / 20MHz / QPSK

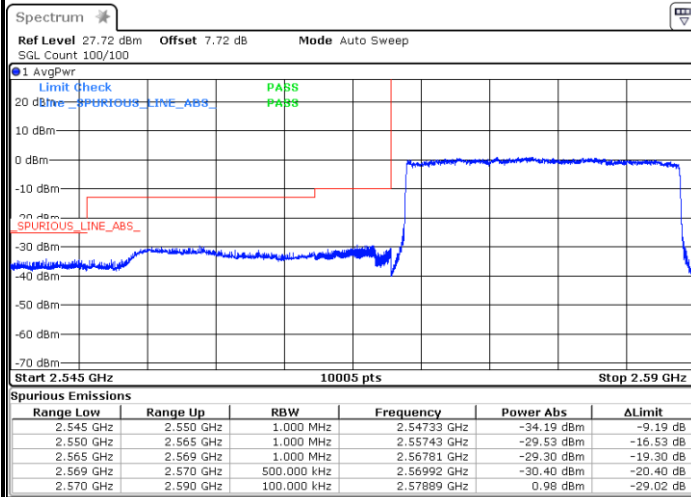
Lowest Band Edge / 1 RB



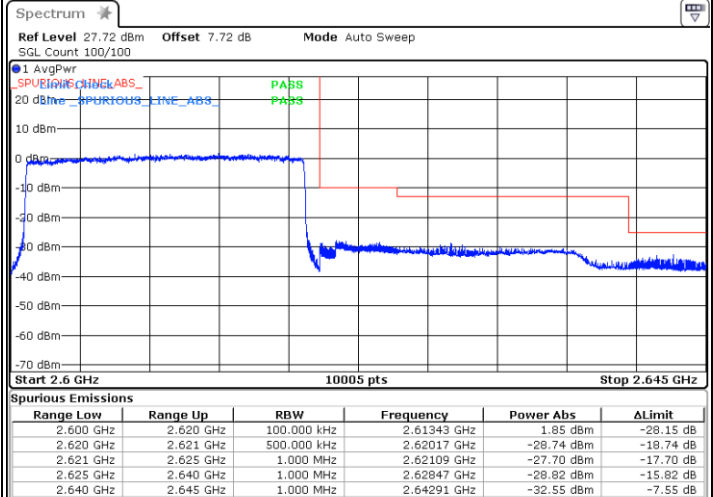
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



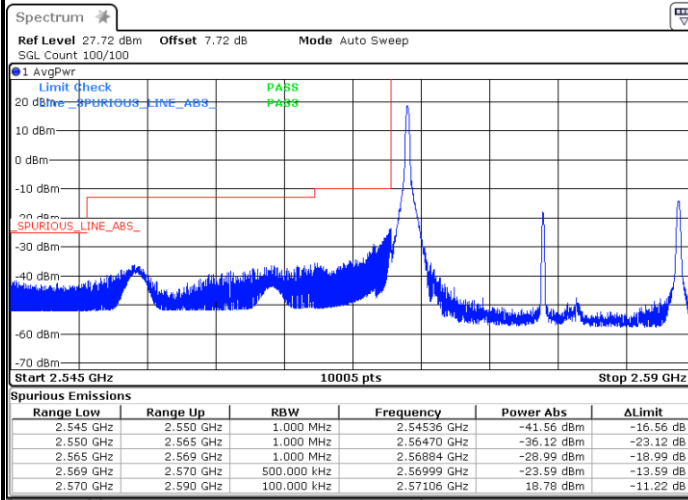
Highest Band Edge / Full RB



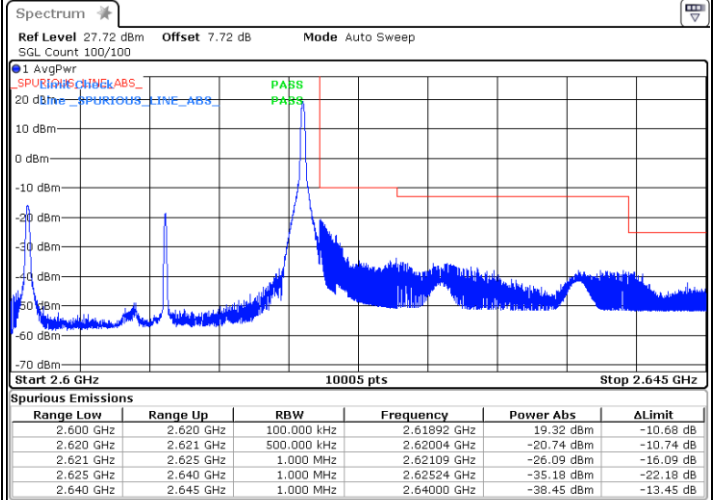


LTE Band 38 / 20MHz / 16QAM

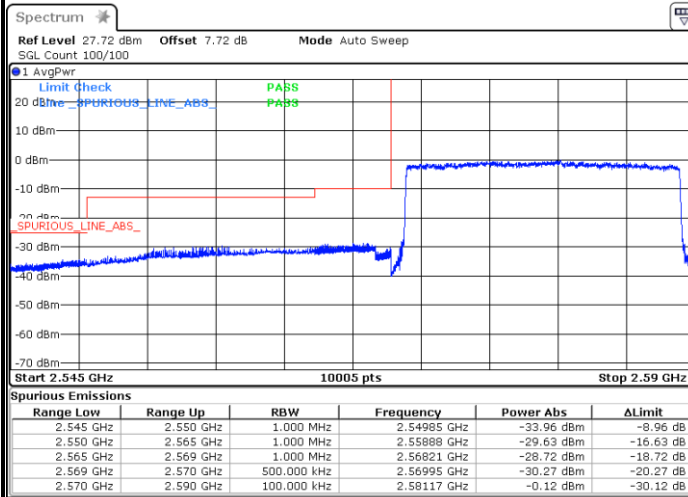
Lowest Band Edge / 1 RB



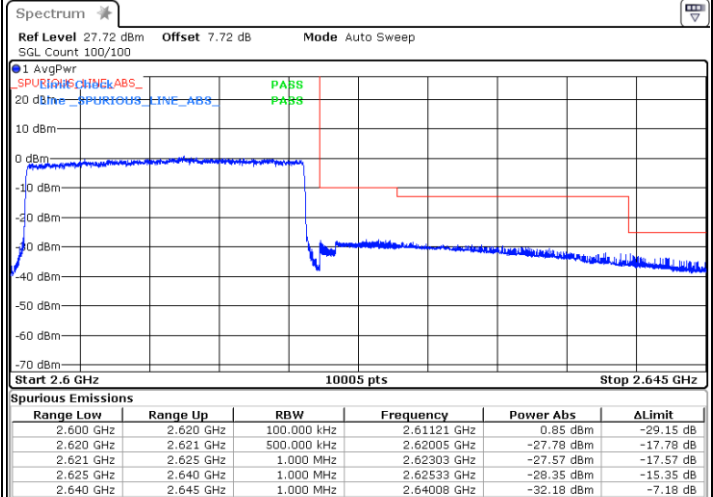
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



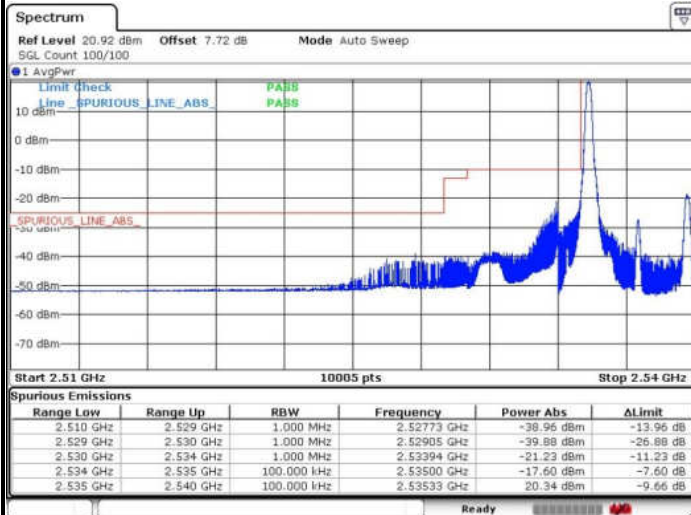
Highest Band Edge / Full RB





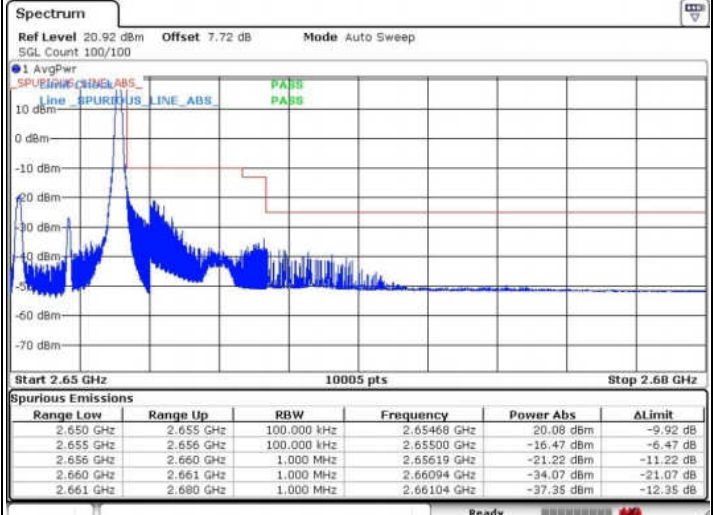
LTE Band 41 / 5MHz / QPSK

Lowest Band Edge / 1 RB



Date: 15 MAY 2018 10:34:33

Highest Band Edge / 1 RB



Date: 15 MAY 2018 10:43:36

Lowest Band Edge / Full RB



Date: 15 MAY 2018 10:35:20

Highest Band Edge / Full RB

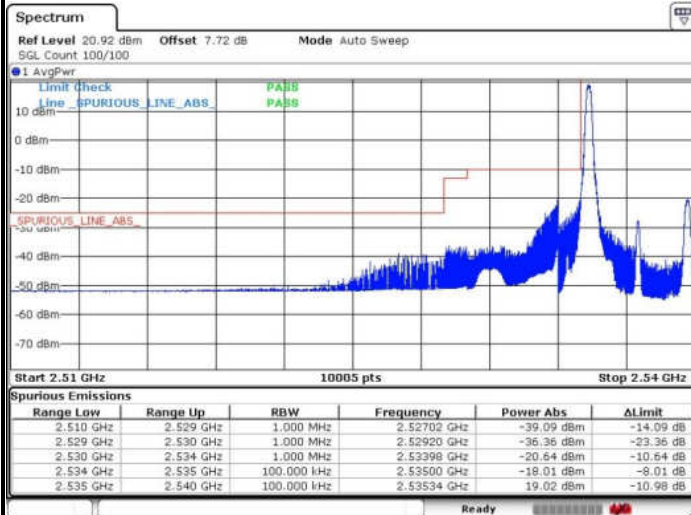


Date: 15 MAY 2018 10:42:08



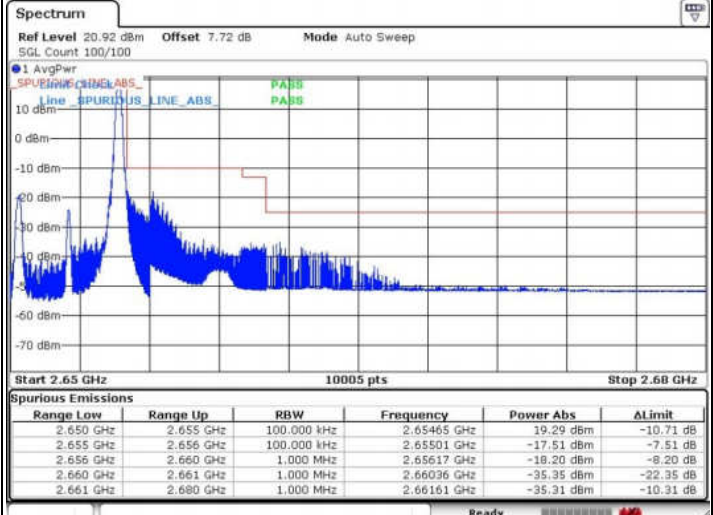
LTE Band 41 / 5MHz / 16QAM

Lowest Band Edge / 1RB



Date: 15 MAY 2018 10:32:01

Highest Band Edge / 1 RB



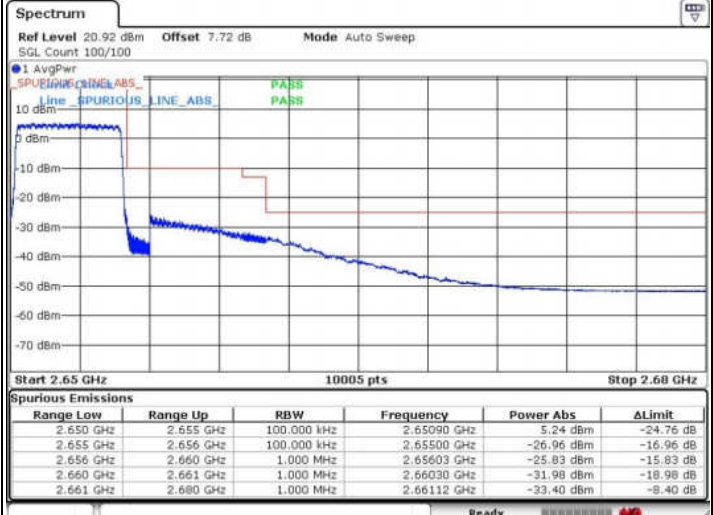
Date: 15 MAY 2018 10:44:47

Lowest Band Edge / Full RB



Date: 15 MAY 2018 10:37:06

Highest Band Edge / Full RB

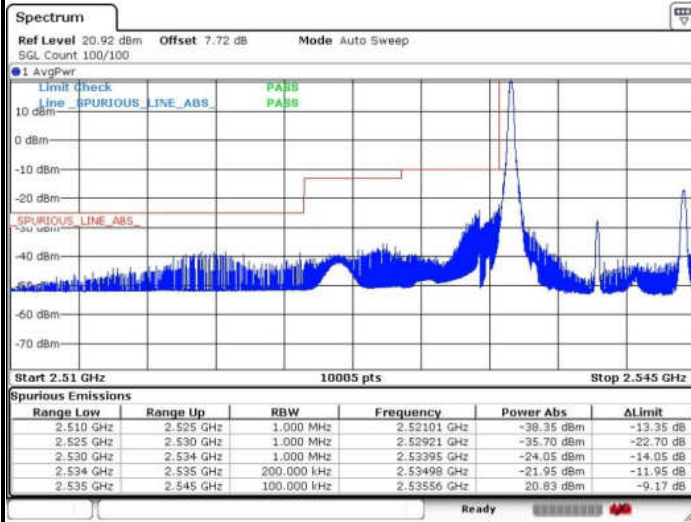


Date: 15 MAY 2018 10:40:38



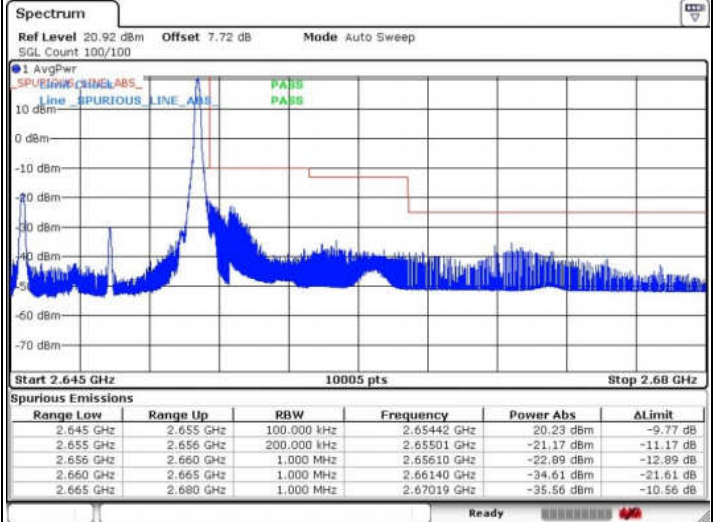
LTE Band 41 / 10MHz / QPSK

Lowest Band Edge / 1 RB



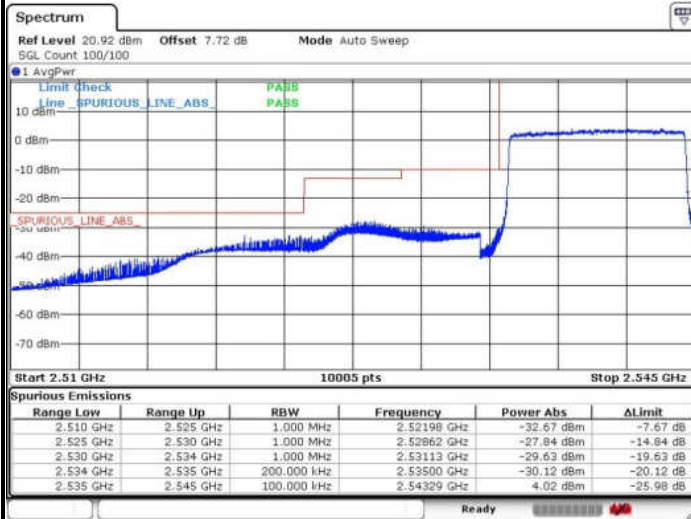
Date: 15 MAY 2018 10:53:44

Highest Band Edge / 1 RB



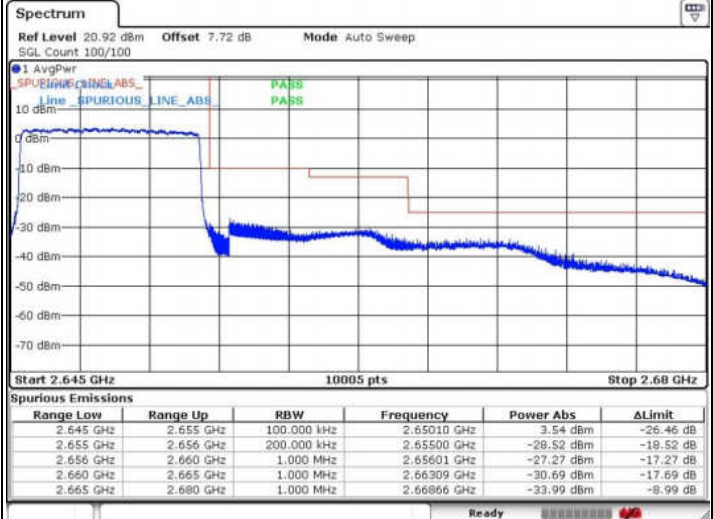
Date: 15 MAY 2018 11:00:49

Lowest Band Edge / Full RB



Date: 15 MAY 2018 10:52:59

Highest Band Edge / Full RB

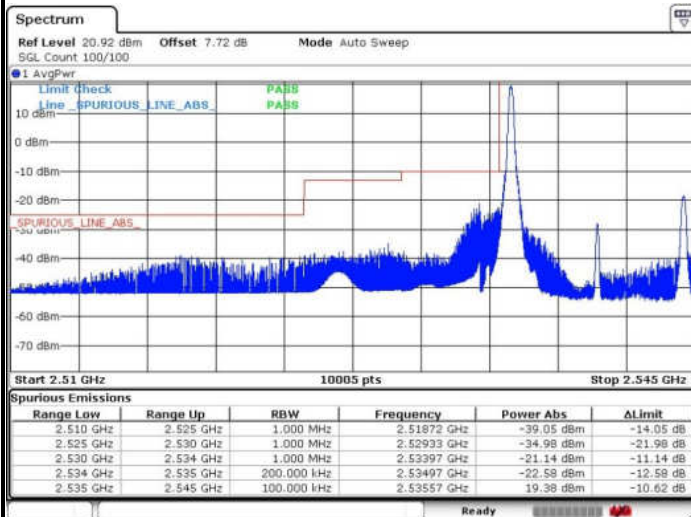


Date: 15 MAY 2018 11:07:48



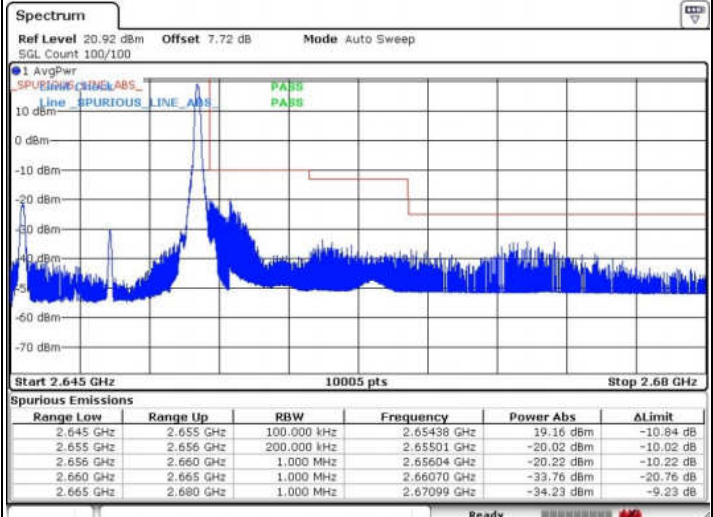
LTE Band 41 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



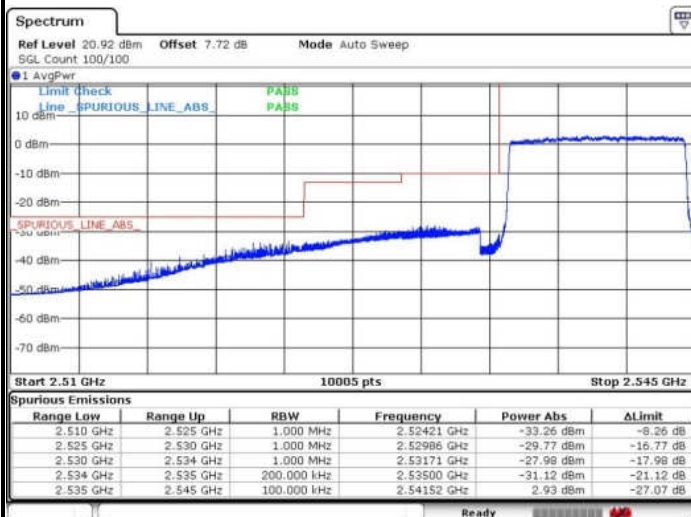
Date: 15 MAY 2018 10:54:43

Highest Band Edge / 1 RB



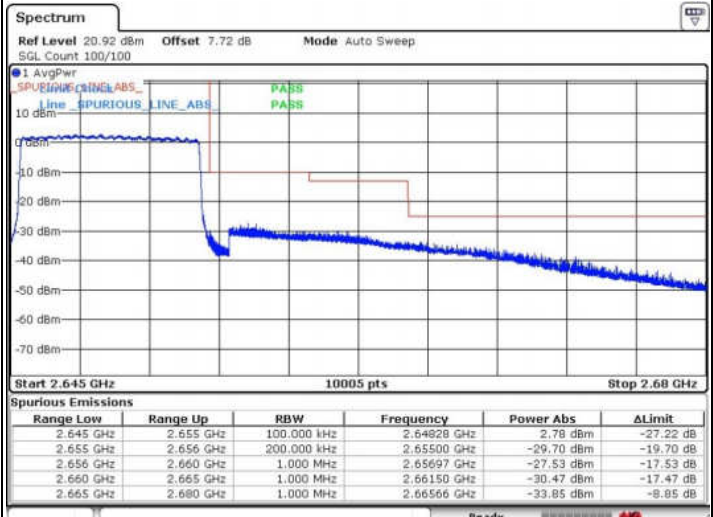
Date: 15 MAY 2018 10:58:53

Lowest Band Edge / Full RB



Date: 15 MAY 2018 10:50:42

Highest Band Edge / Full RB

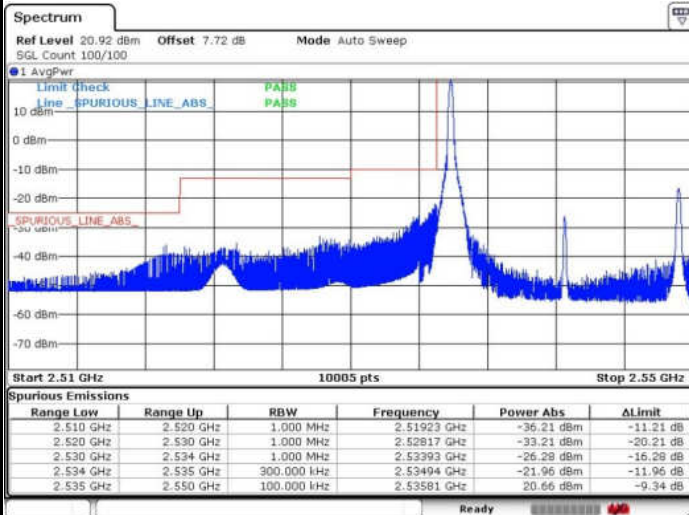


Date: 15 MAY 2018 11:09:03



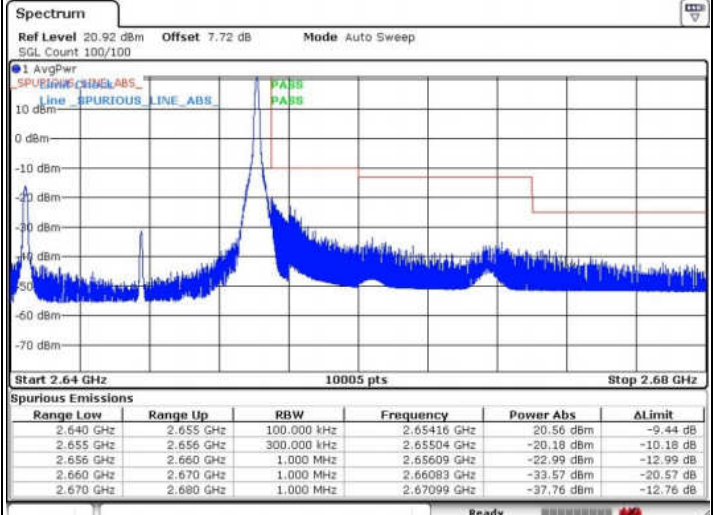
LTE Band 41 / 15MHz / QPSK

Lowest Band Edge / 1 RB



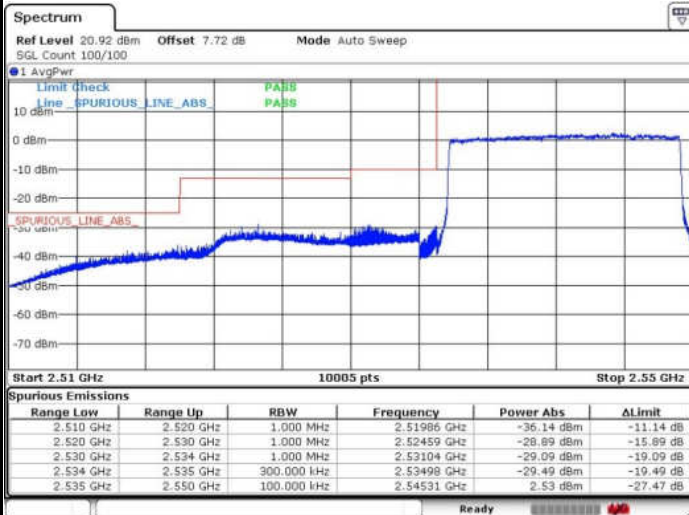
Date: 15 MAY 2018 11:14:43

Highest Band Edge / 1 RB



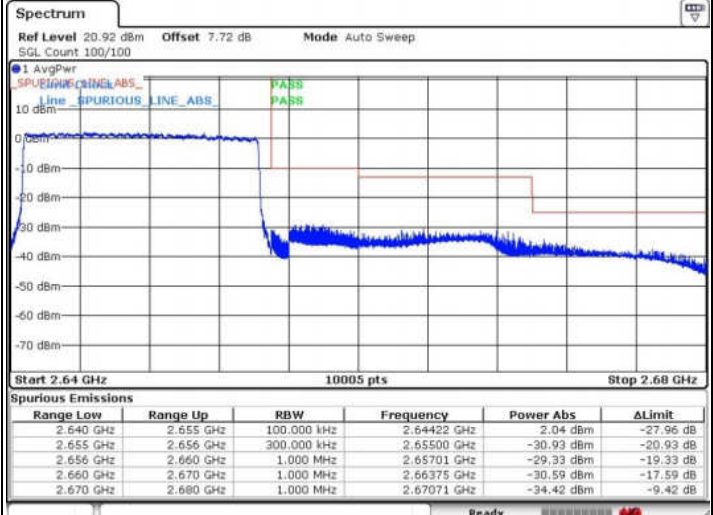
Date: 15 MAY 2018 11:20:11

Lowest Band Edge / Full RB



Date: 15 MAY 2018 11:12:48

Highest Band Edge / Full RB

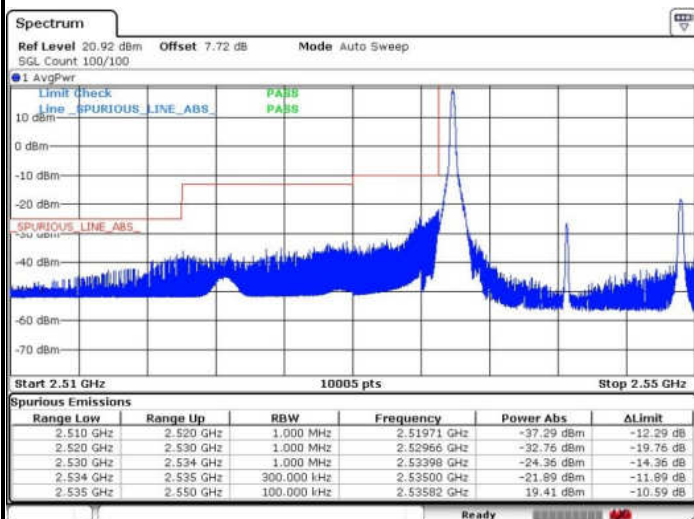


Date: 15 MAY 2018 11:21:06



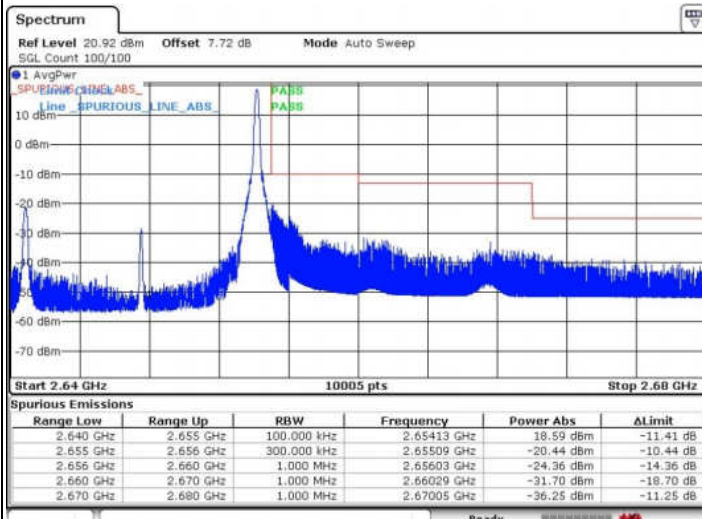
LTE Band 41 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



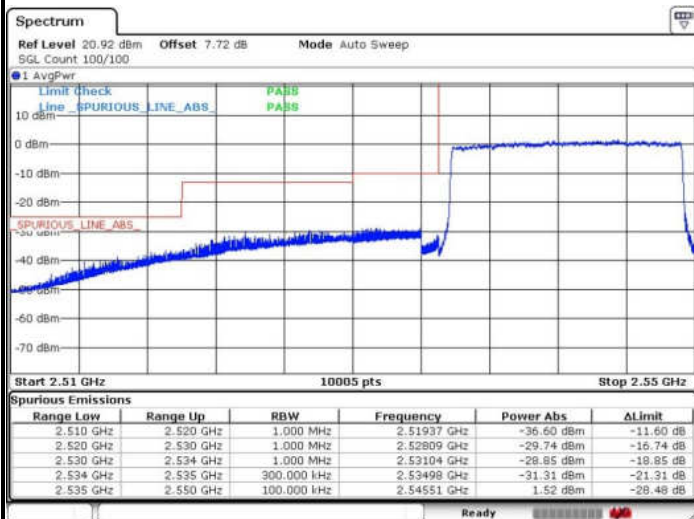
Date: 15 MAY 2018 11:15:33

Highest Band Edge / 1 RB



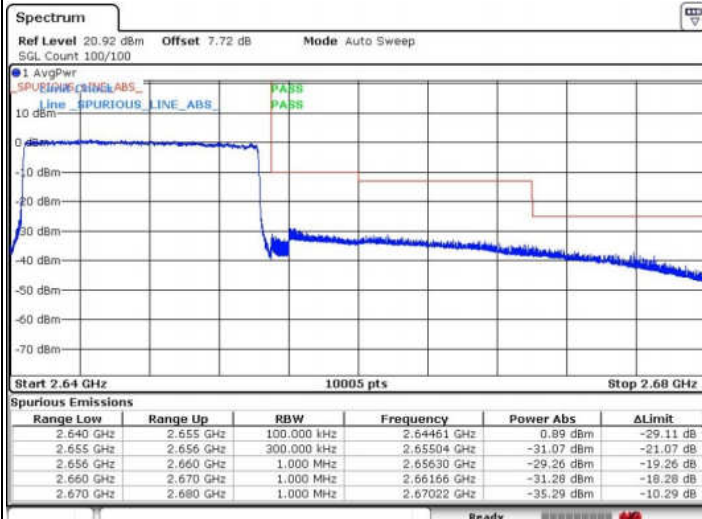
Date: 15 MAY 2018 11:18:58

Lowest Band Edge / Full RB



Date: 15 MAY 2018 11:11:49

Highest Band Edge / Full RB

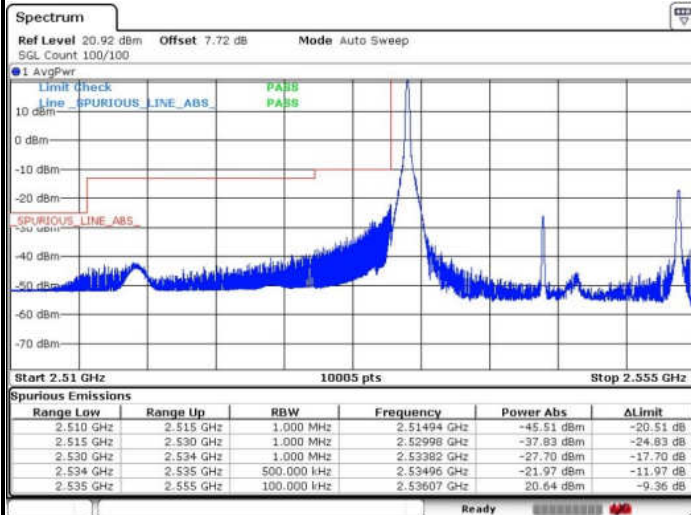


Date: 15 MAY 2018 11:22:02

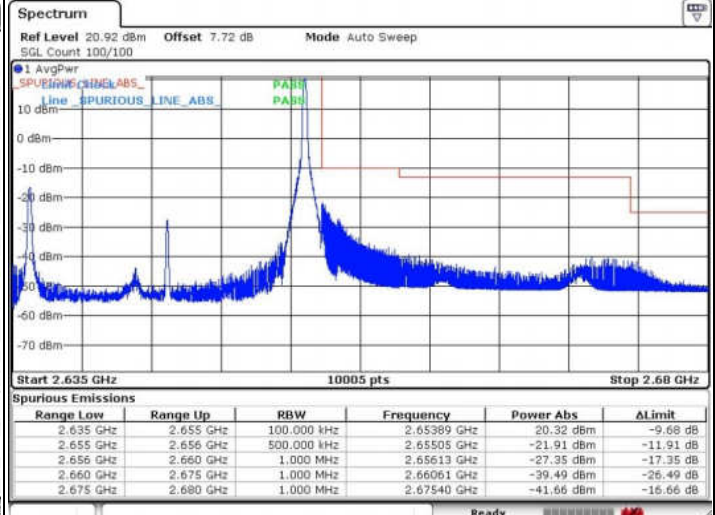


LTE Band 41 / 20MHz / QPSK

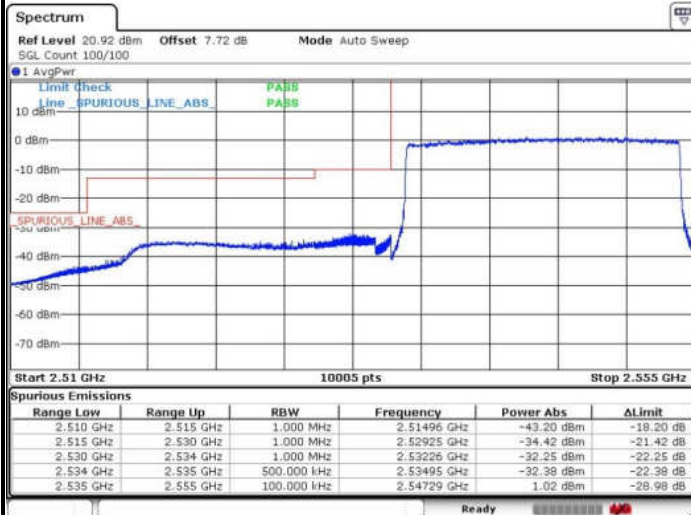
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



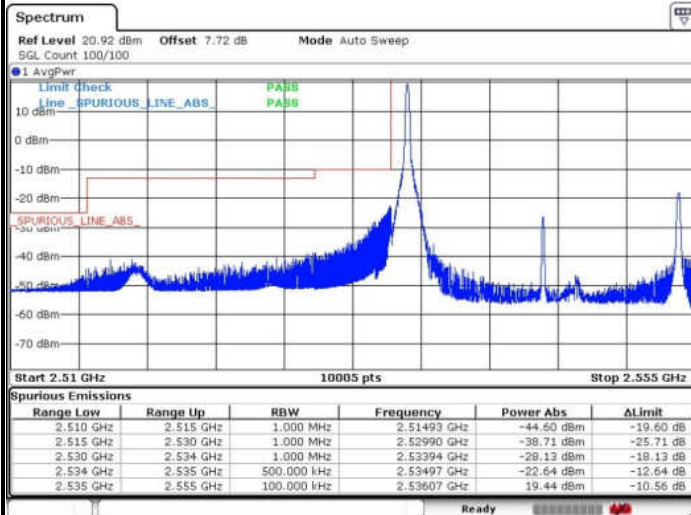
Highest Band Edge / Full RB





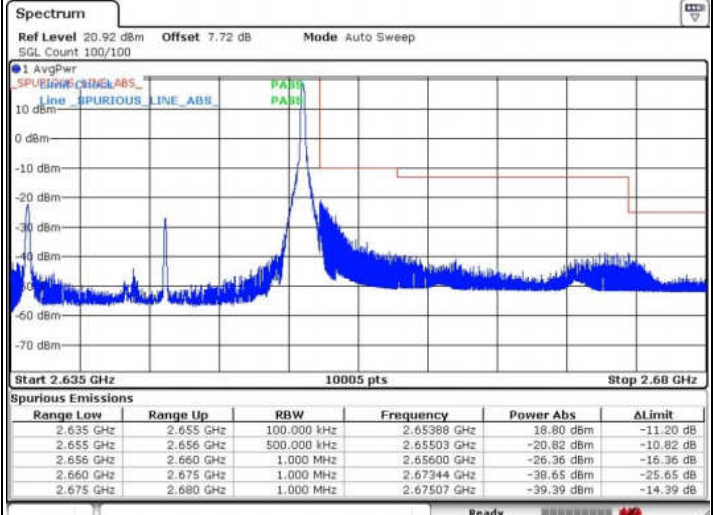
LTE Band 41 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



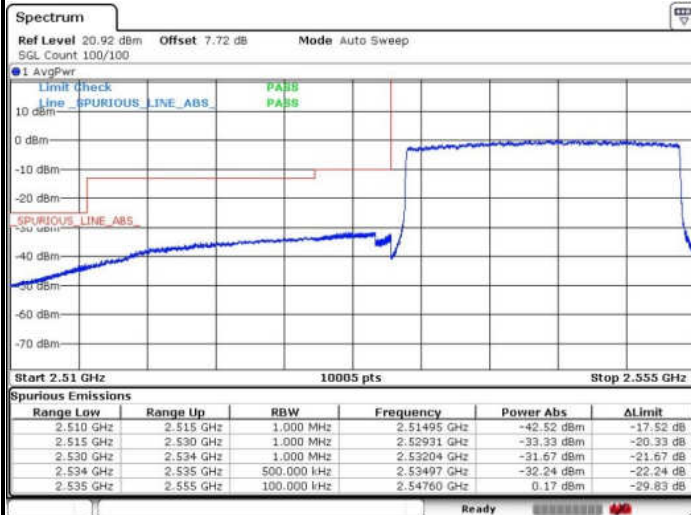
Date: 15 MAY 2018 11:28:18

Highest Band Edge / 1 RB



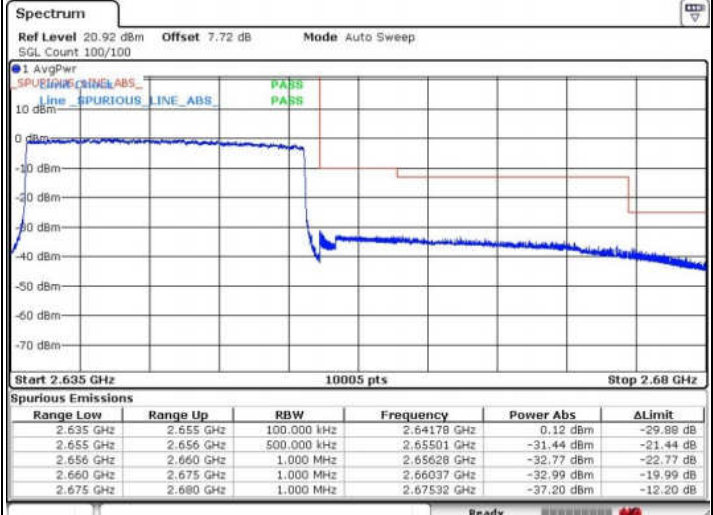
Date: 15 MAY 2018 11:30:51

Lowest Band Edge / Full RB



Date: 15 MAY 2018 11:25:44

Highest Band Edge / Full RB



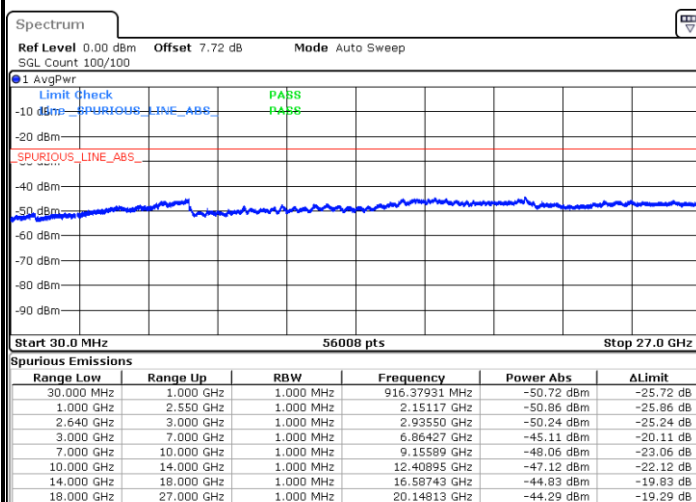
Date: 15 MAY 2018 11:33:52



Conducted Spurious Emission

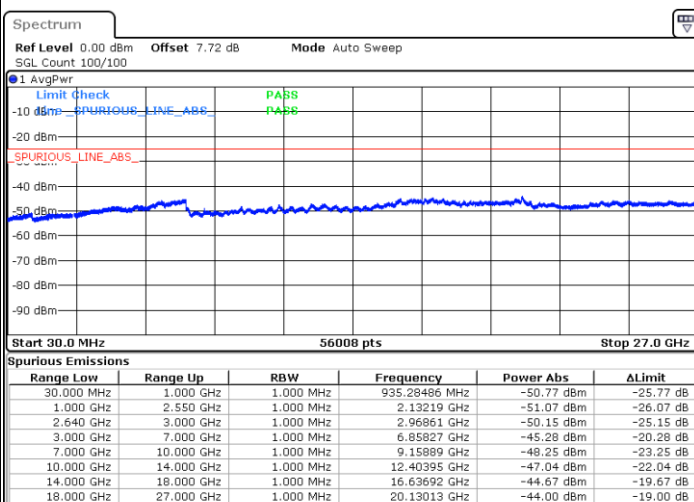
LTE Band 38 / 5MHz

Lowest Channel / QPSK



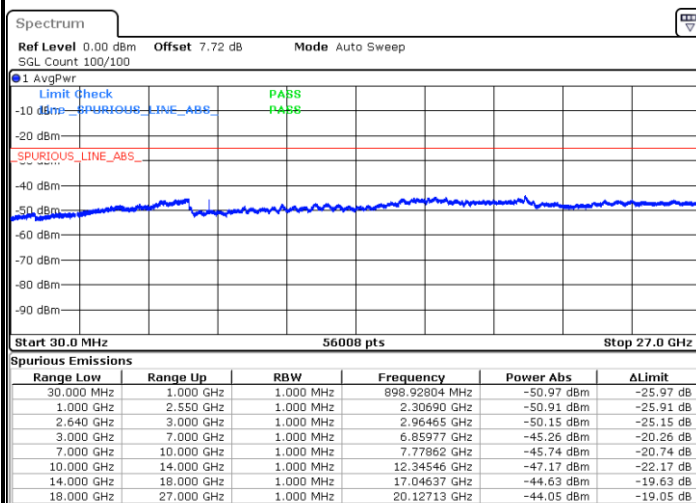
Date: 14 MAY 2018 16:17:01

Lowest Channel / 16QAM



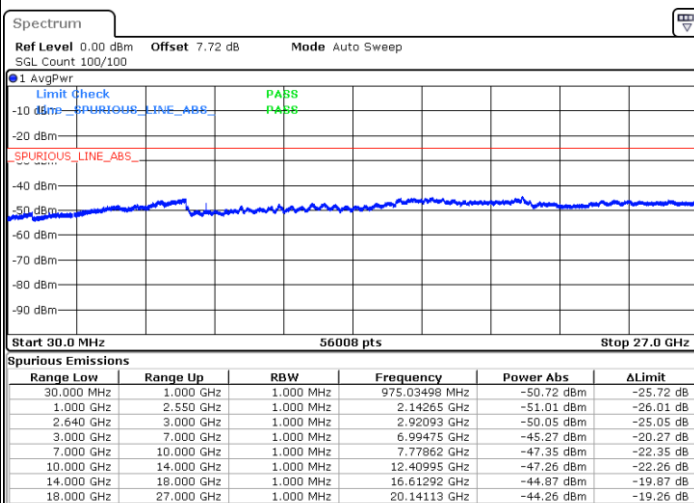
Date: 14 MAY 2018 16:17:57

Middle Channel / QPSK



Date: 14 MAY 2018 16:18:52

Middle Channel / 16QAM

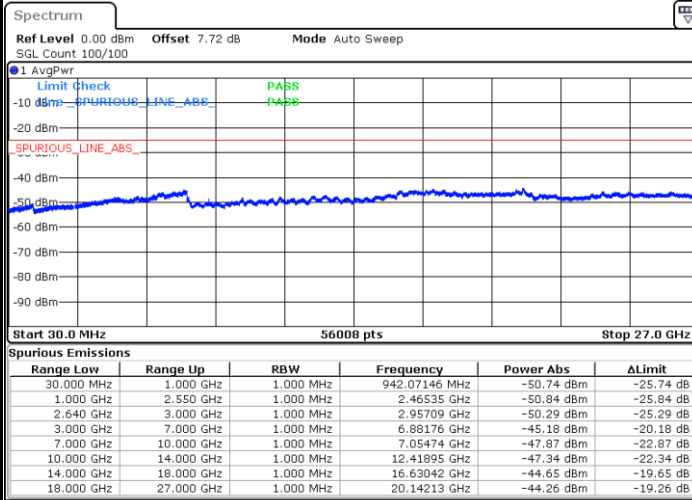


Date: 14 MAY 2018 16:19:48



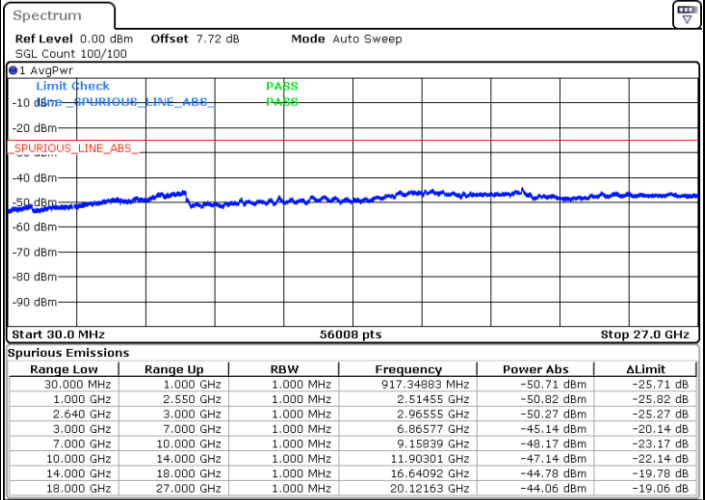
LTE Band 38 / 5MHz

Highest Channel / QPSK



Date: 14 MAY 2018 16:20:43

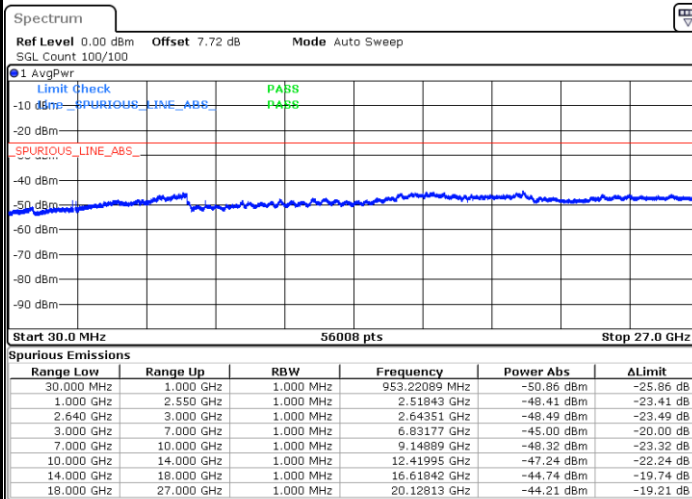
Highest Channel / 16QAM



Date: 14 MAY 2018 16:21:39

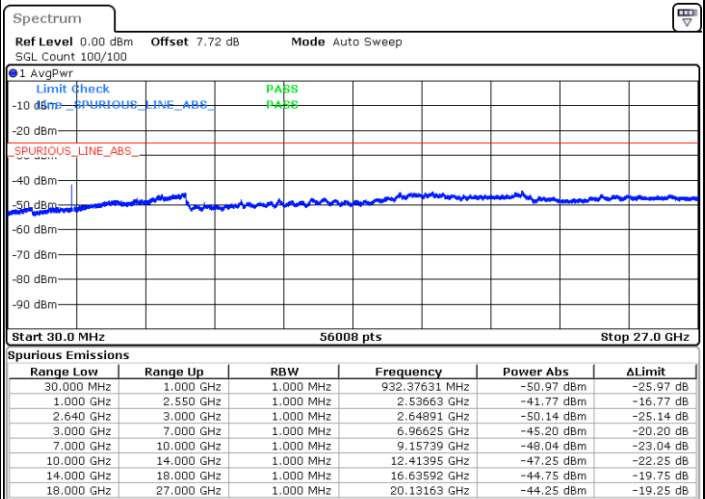
LTE Band 38 / 10MHz

Lowest Channel / QPSK



Date: 14 MAY 2018 16:22:34

Lowest Channel / 16QAM

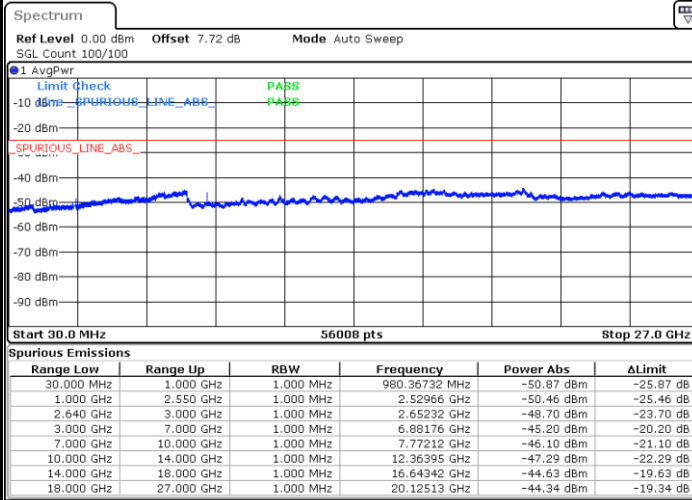


Date: 14 MAY 2018 16:23:30



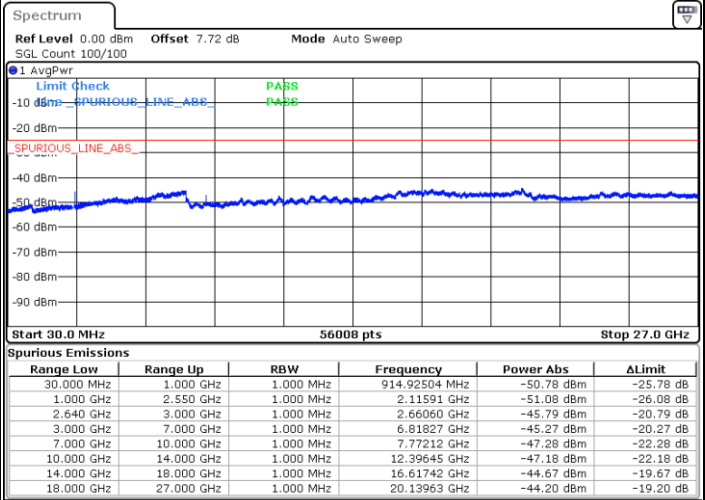
LTE Band 38 / 10MHz

Middle Channel / QPSK



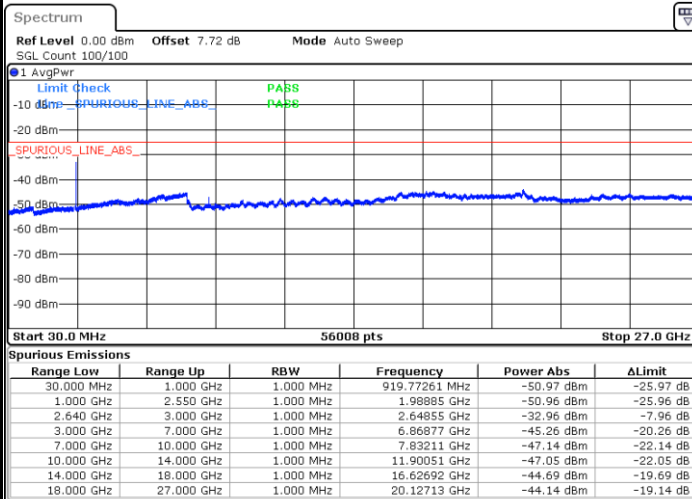
Date: 14 MAY 2018 16:24:26

Middle Channel / 16QAM



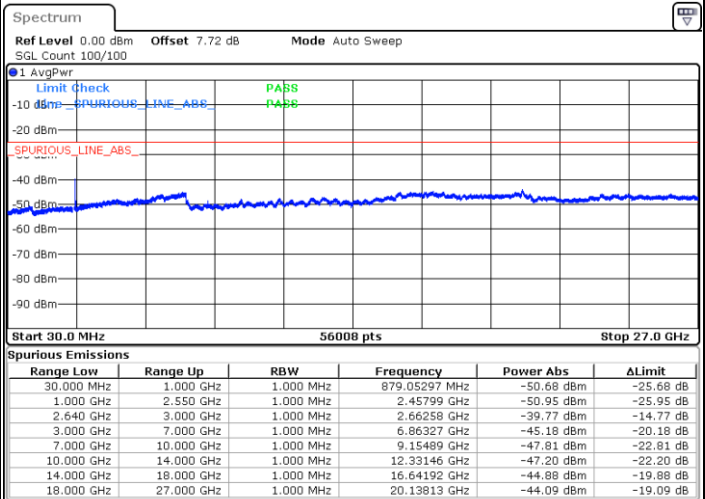
Date: 14 MAY 2018 16:25:21

Highest Channel / QPSK



Date: 14 MAY 2018 16:26:17

Highest Channel / 16QAM

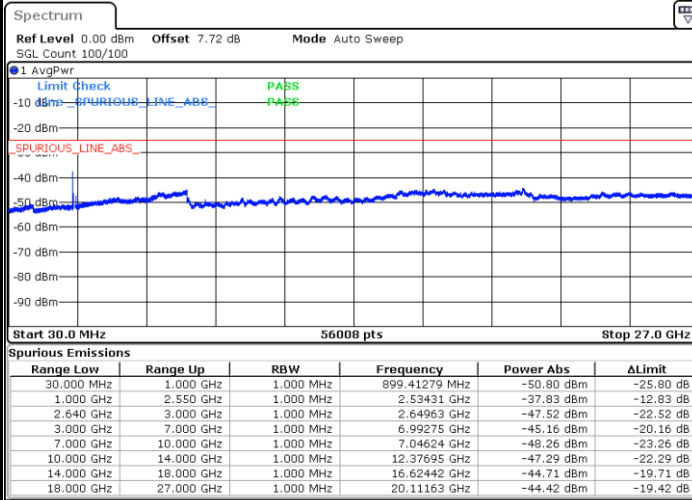


Date: 14 MAY 2018 16:27:12



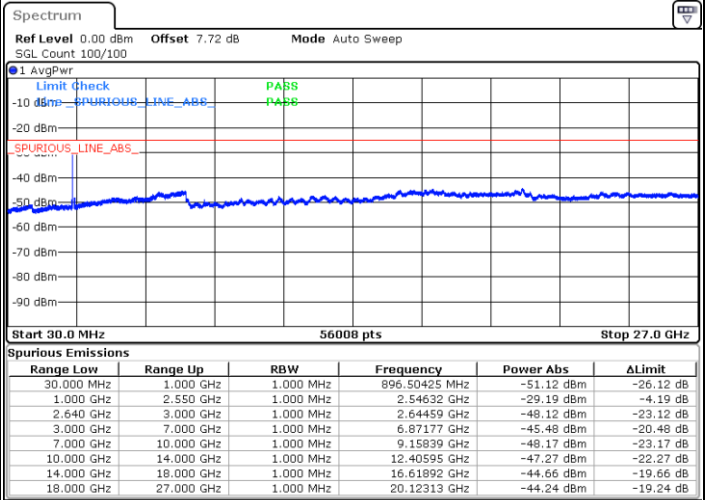
LTE Band 38 / 15MHz

Lowest Channel / QPSK



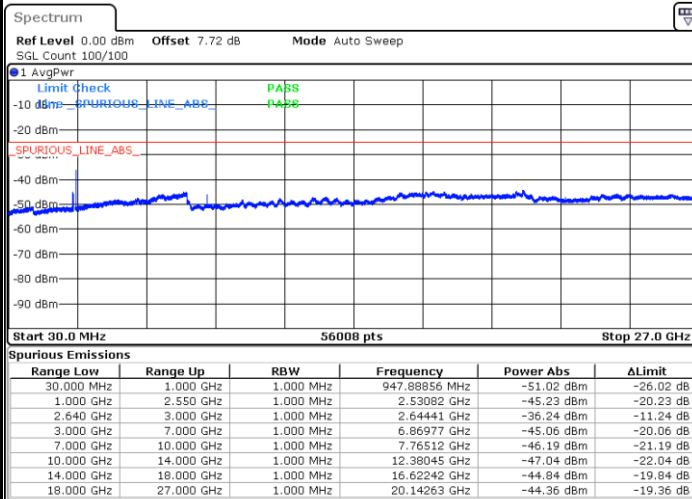
Date: 14 MAY 2018 16:28:08

Lowest Channel / 16QAM



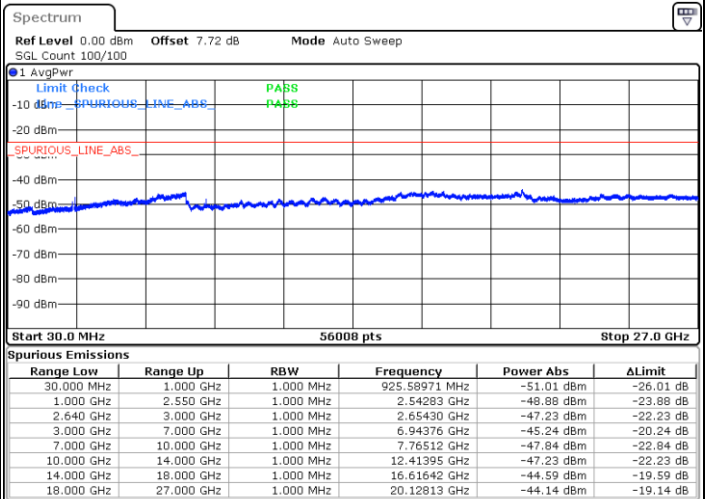
Date: 14 MAY 2018 16:29:03

Middle Channel / QPSK



Date: 14 MAY 2018 16:29:59

Middle Channel / 16QAM

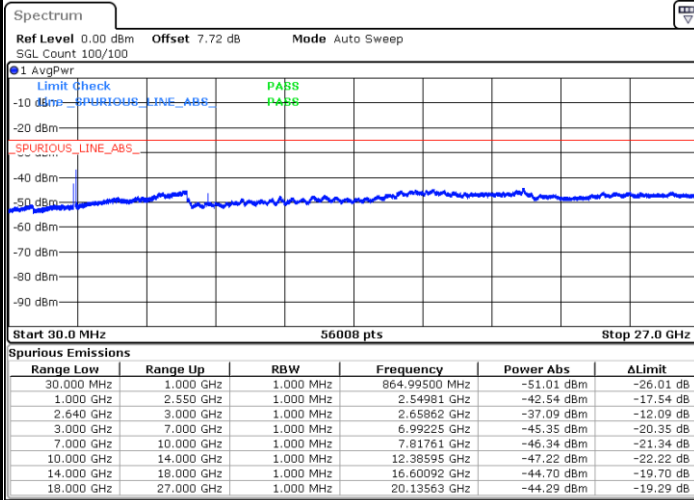


Date: 14 MAY 2018 16:30:55



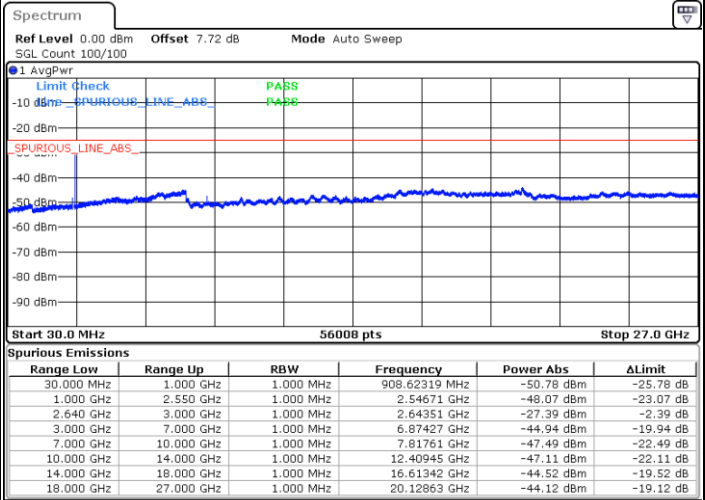
LTE Band 38 / 15MHz

Highest Channel / QPSK



Date: 14 MAY 2018 16:31:50

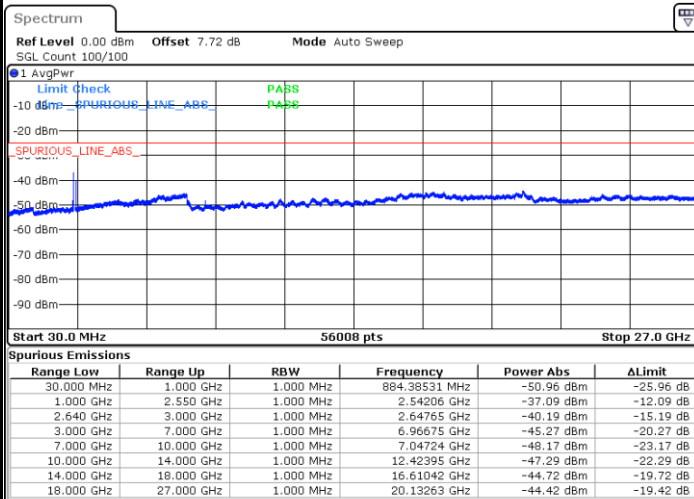
Highest Channel / 16QAM



Date: 15 MAY 2018 09:03:48

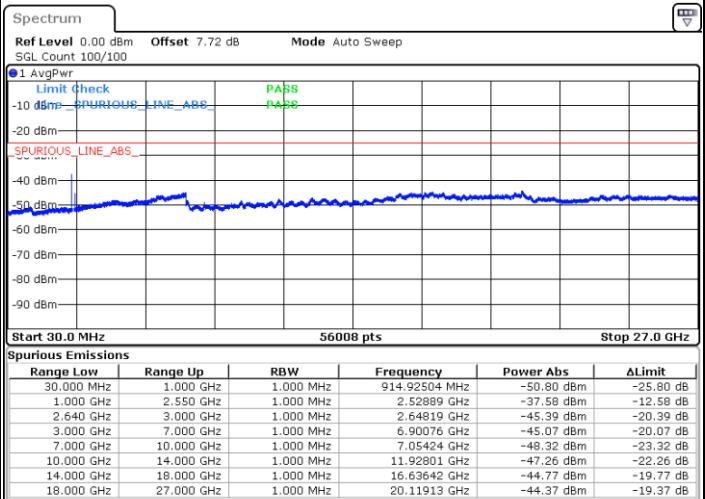
LTE Band 38 / 20MHz

Lowest Channel / QPSK



Date: 14 MAY 2018 16:40:53

Lowest Channel / 16QAM

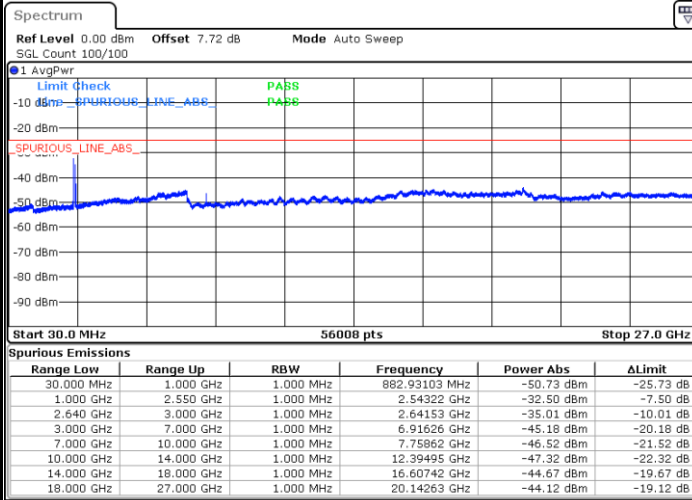


Date: 14 MAY 2018 16:41:48



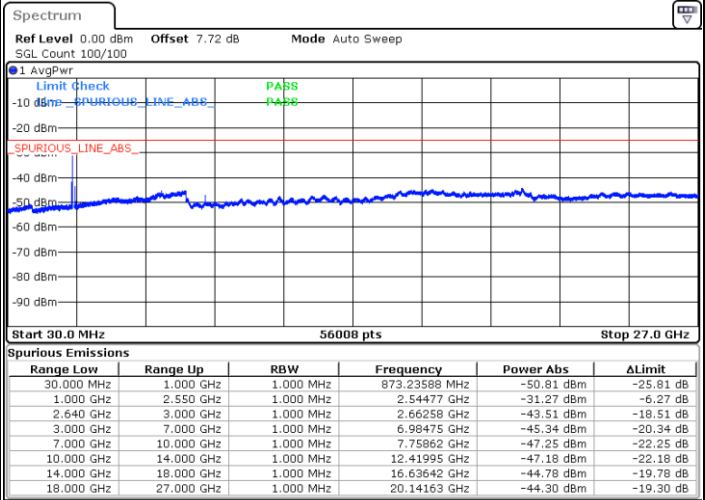
LTE Band 38 / 20MHz

Middle Channel / QPSK



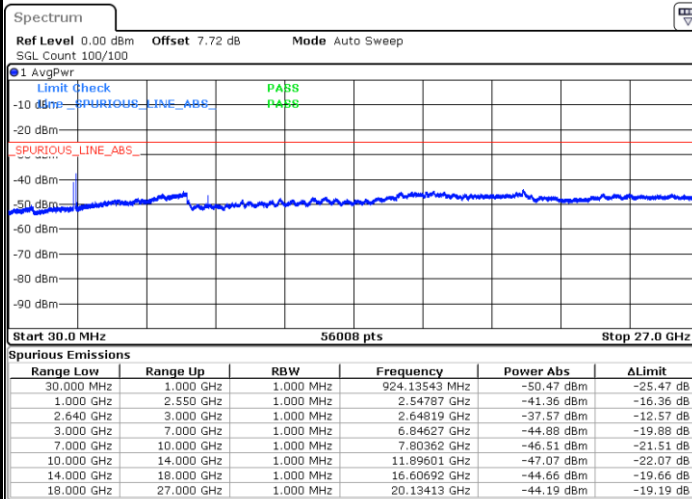
Date: 14 MAY 2018 16:42:44

Middle Channel / 16QAM



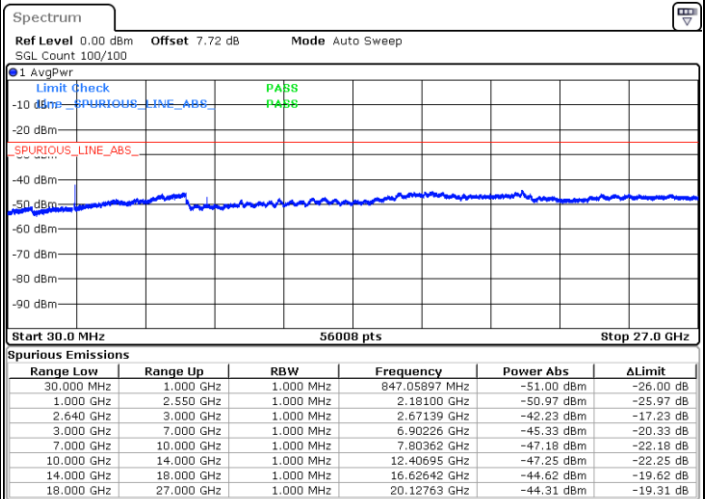
Date: 14 MAY 2018 16:43:39

Highest Channel / QPSK



Date: 15 MAY 2018 09:11:14

Highest Channel / 16QAM

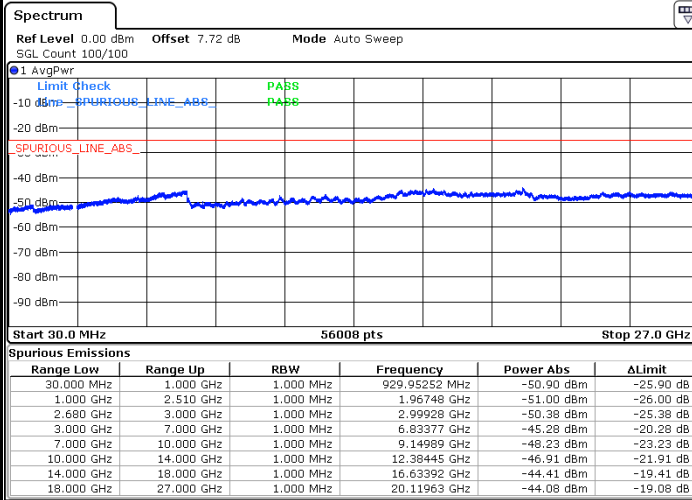


Date: 14 MAY 2018 16:47:01



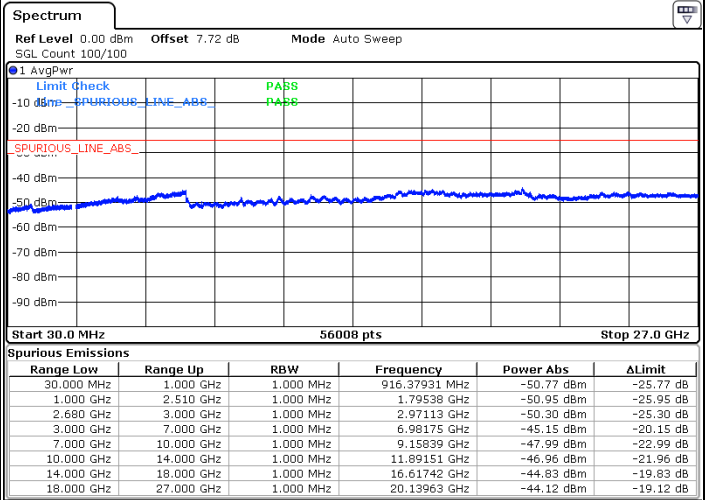
LTE Band 41 / 5MHz

Lowest Channel / QPSK



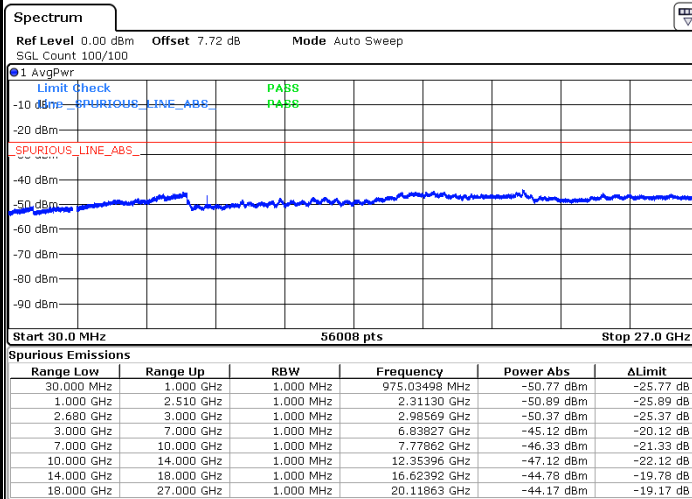
Date:15 MAY 2018 11:40:09

Lowest Channel / 16QAM



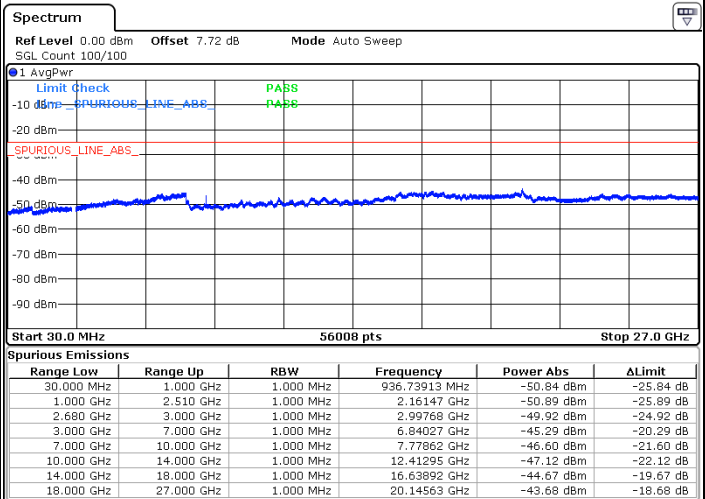
Date:15 MAY 2018 11:38:59

Middle Channel / QPSK



Date:15 MAY 2018 11:41:01

Middle Channel / 16QAM

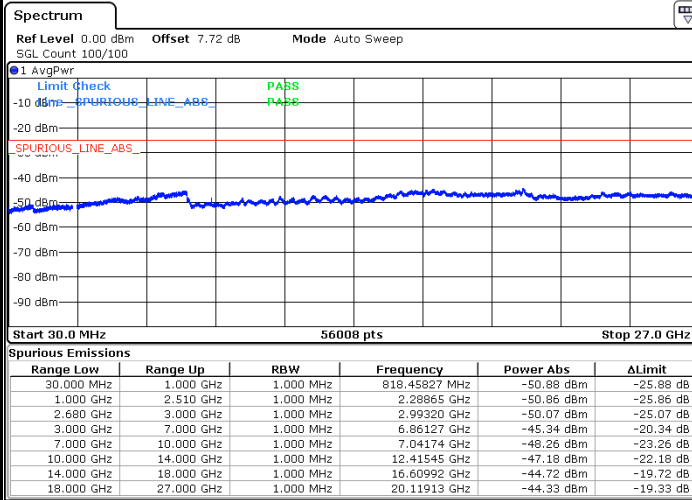


Date:15 MAY 2018 11:42:01



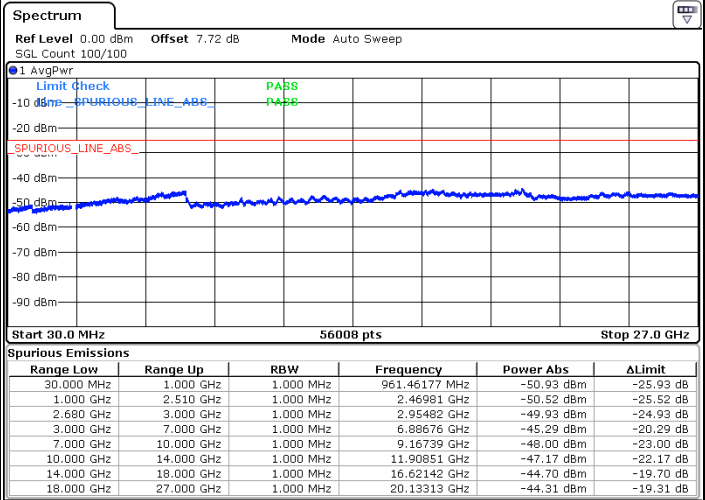
LTE Band 41 / 5MHz

Highest Channel / QPSK



Date:15 MAY 2018 11:46:37

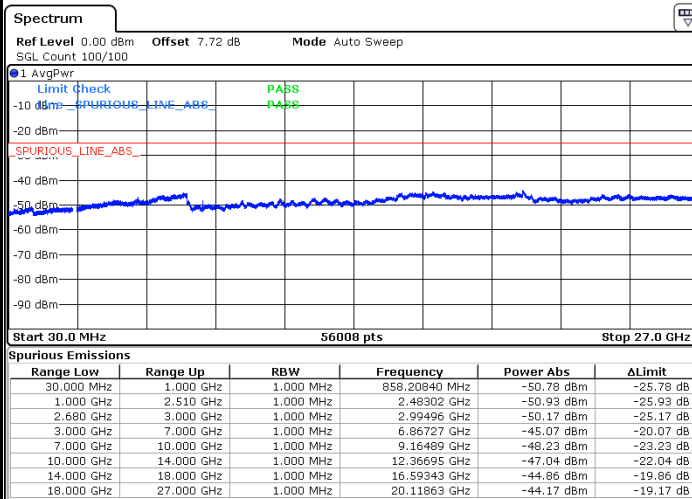
Highest Channel / 16QAM



Date:15 MAY 2018 11:44:57

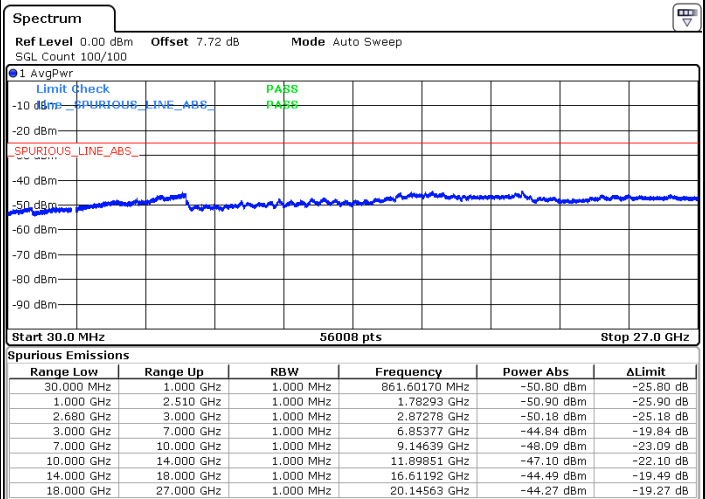
LTE Band 41 / 10MHz

Lowest Channel / QPSK



Date:15 MAY 2018 11:47:59

Lowest Channel / 16QAM

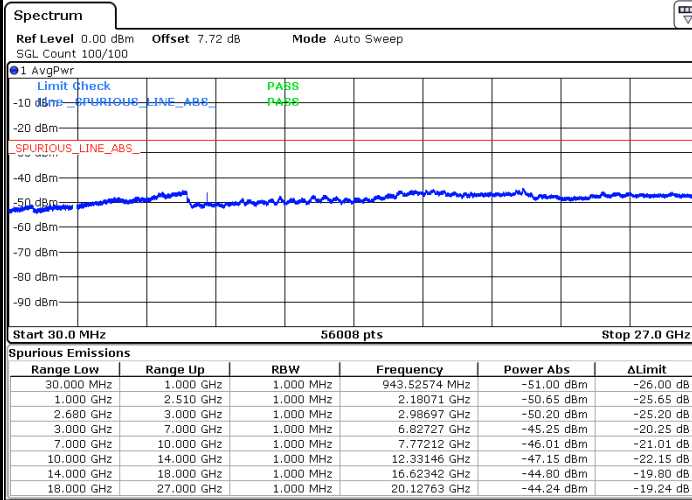


Date:15 MAY 2018 11:49:00



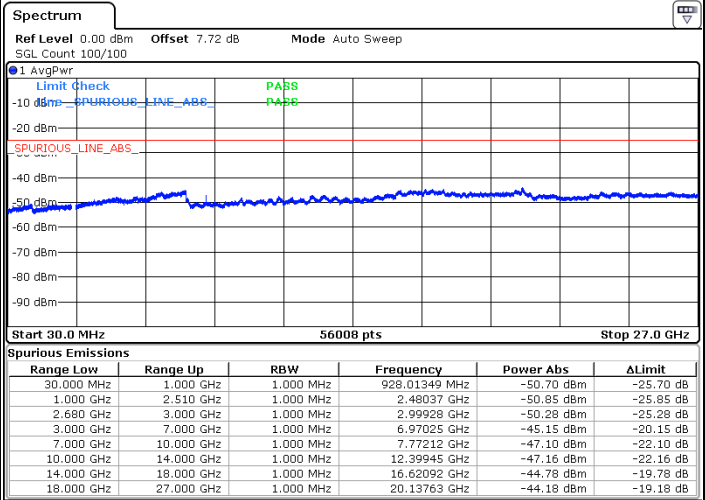
LTE Band 41 / 10MHz

Middle Channel / QPSK



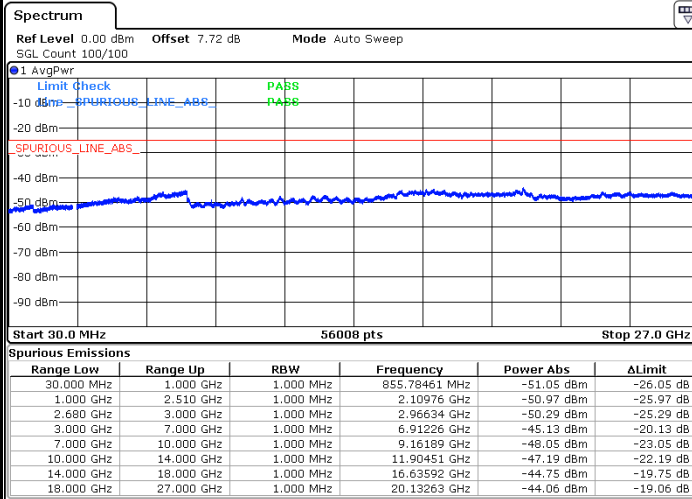
Date:15 MAY 2018 11:52:59

Middle Channel / 16QAM



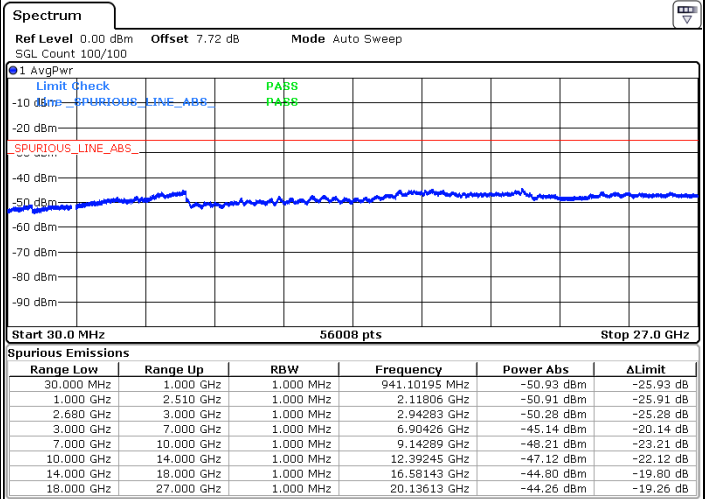
Date:15 MAY 2018 11:50:40

Highest Channel / QPSK



Date:15 MAY 2018 11:54:41

Highest Channel / 16QAM

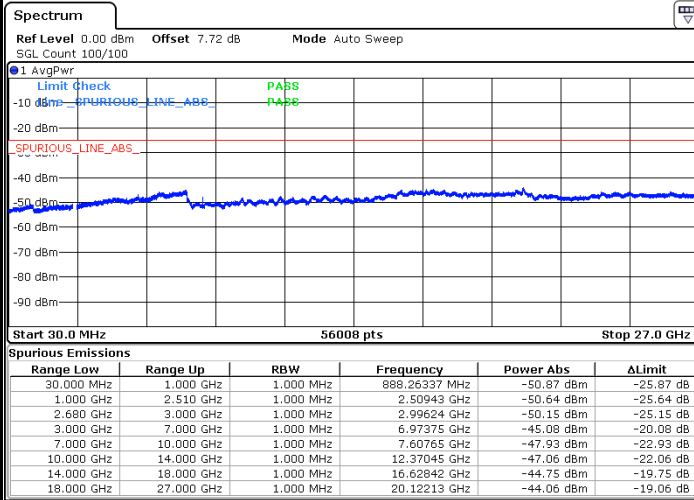


Date:15 MAY 2018 11:56:14



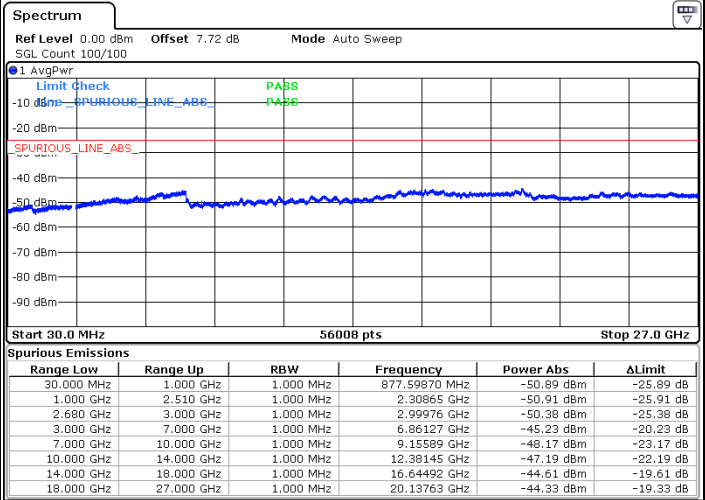
LTE Band 41 / 15MHz

Lowest Channel / QPSK



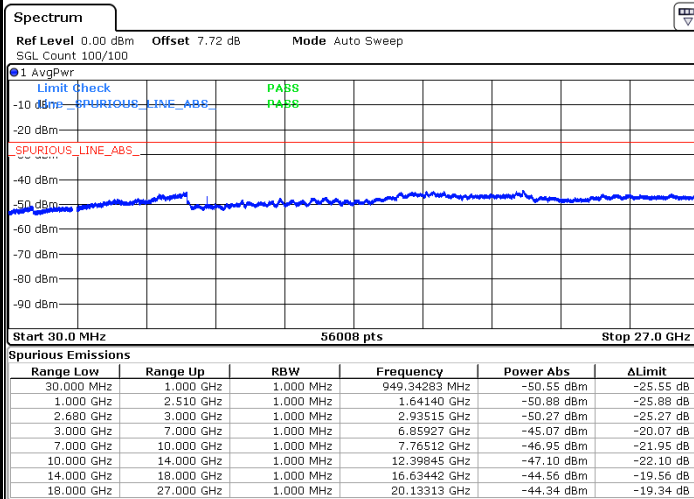
Date:15 MAY 2018 11:58:47

Lowest Channel / 16QAM



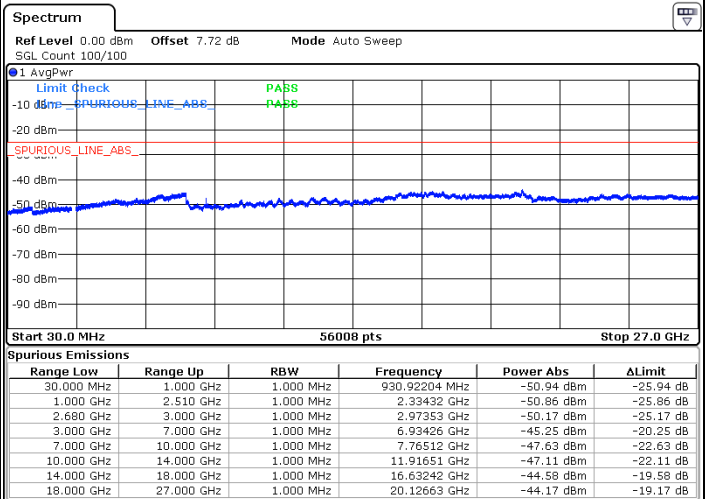
Date:15 MAY 2018 11:57:35

Middle Channel / QPSK



Date:15 MAY 2018 11:59:42

Middle Channel / 16QAM

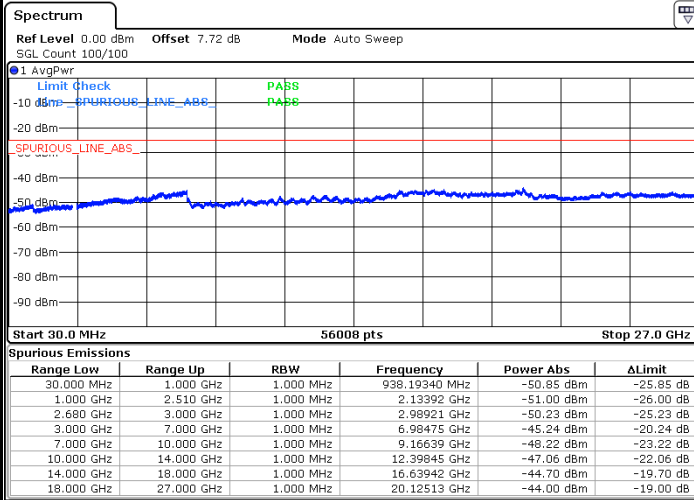


Date:15 MAY 2018 12:00:36



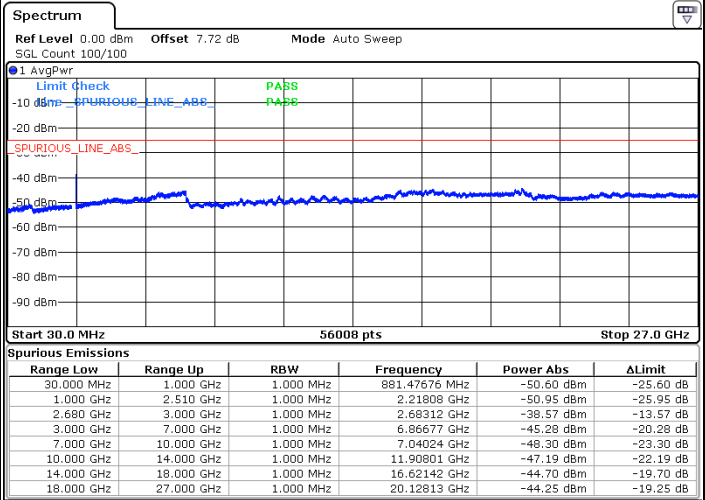
LTE Band 41 / 15MHz

Highest Channel / QPSK



Date: 15 MAY 2018 12:02:49

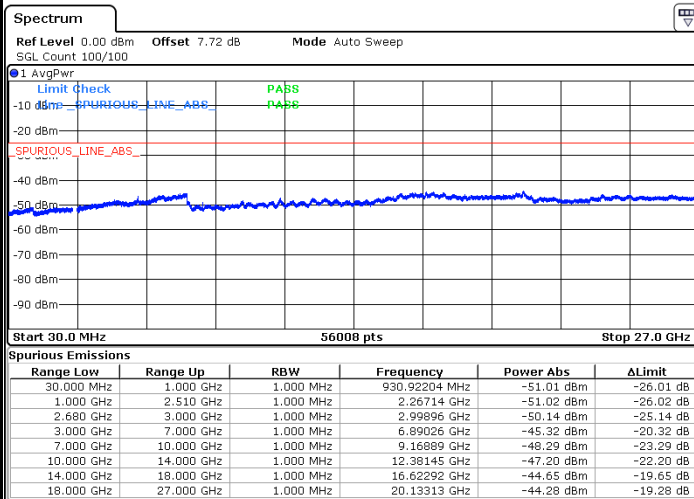
Highest Channel / 16QAM



Date: 15 MAY 2018 12:01:34

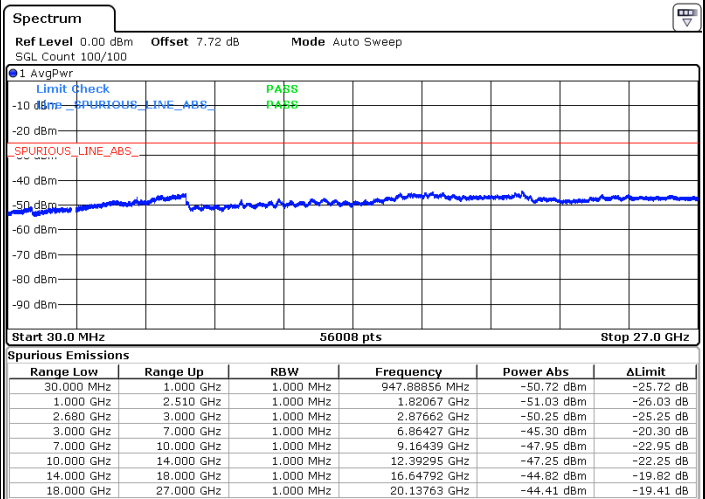
LTE Band 41 / 20MHz

Lowest Channel / QPSK



Date: 15 MAY 2018 13:50:56

Lowest Channel / 16QAM

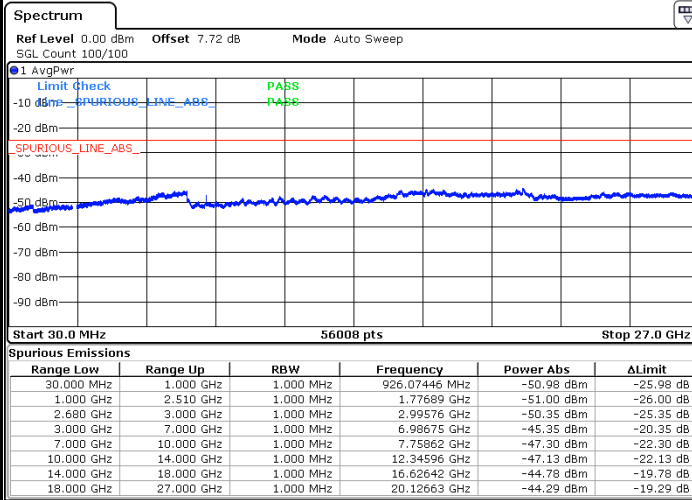


Date: 15 MAY 2018 13:52:13



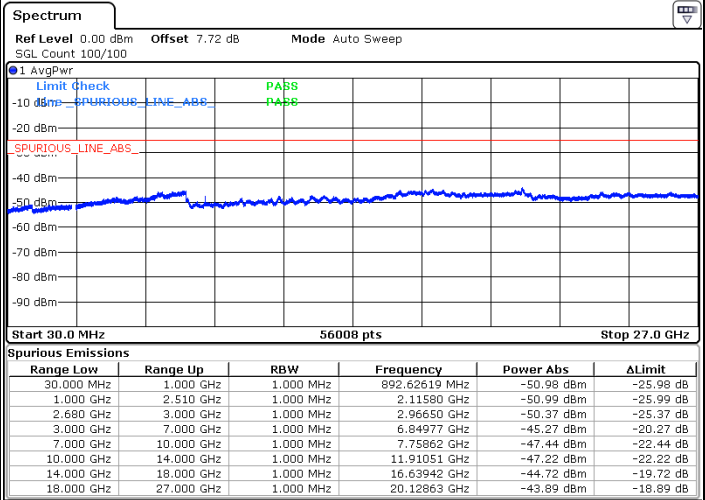
LTE Band 41 / 20MHz

Middle Channel / QPSK



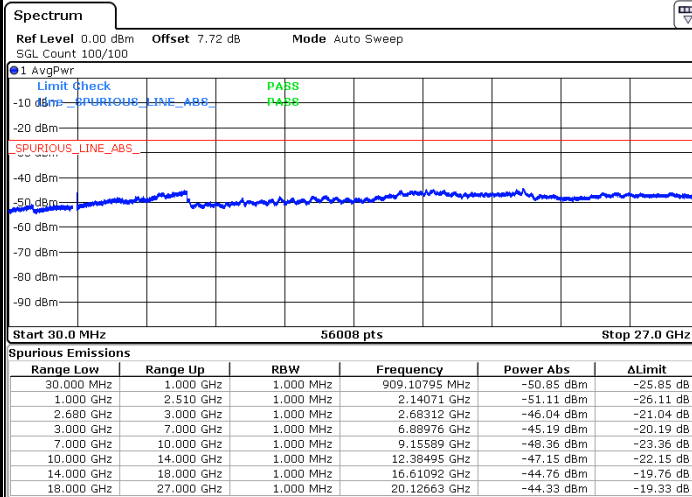
Date:15 MAY 2018 13:55:11

Middle Channel / 16QAM



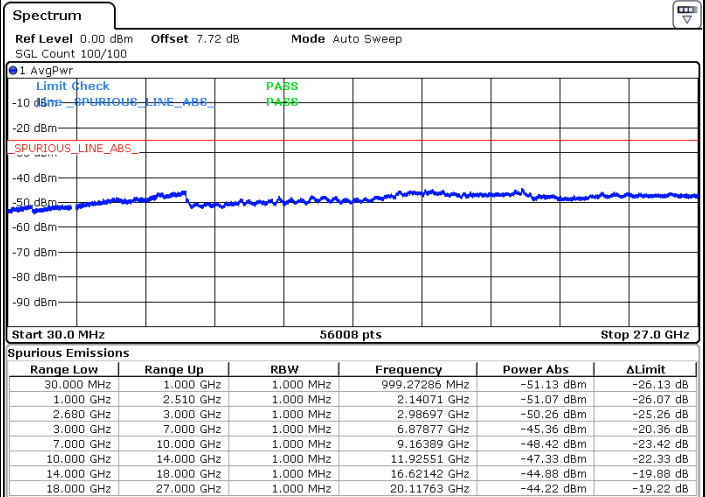
Date:15 MAY 2018 13:53:57

Highest Channel / QPSK



Date:15 MAY 2018 13:56:08

Highest Channel / 16QAM



Date:15 MAY 2018 13:57:16

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	0.0007	PASS
40	Normal Voltage	0.0001	
30	Normal Voltage	0.0014	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0016	
0	Normal Voltage	0.0017	
-10	Normal Voltage	0.0014	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0018	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0017	
20	Battery End Point	0.0001	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.1 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 41 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0002	PASS
40	Normal Voltage	0.0009	
30	Normal Voltage	0.0022	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0006	
0	Normal Voltage	0.0020	
-10	Normal Voltage	0.0015	
-20	Normal Voltage	0.0007	
-30	Normal Voltage	0.0020	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0023	
20	Battery End Point	0.0021	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.1V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

LTE Band 5 / 10MHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1664	-59.31	-13	-46.31	-61.43	1.333	5.60	H
	2496	-53.71	-13	-40.71	-56.62	1.64	6.70	H
	3330	-56.97	-13	-43.97	-60.33	1.89	7.40	H
	1664	-59.11	-13	-46.11	-61.23	1.33	5.60	V
	2496	-49.93	-13	-36.93	-52.84	1.64	6.70	V
	3330	-55.85	-13	-42.85	-59.21	1.89	7.40	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 7 / 20MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5052	-63.71	-25	-38.71	-70.15	2.34	8.78	H
	7580	-54.29	-25	-29.29	-63.50	2.66	11.87	H
	10107	-61.51	-25	-36.51	-70.53	2.99	12.01	H
	5052	-63.84	-25	-38.84	-70.28	2.34	8.78	V
	7580	-50.02	-25	-25.02	-59.23	2.66	11.87	V
	10107	-60.74	-25	-35.74	-69.76	2.99	12.01	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 38 / 20MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5172	-62.37	-25	-37.37	-69.08	2.37	9.08	H
	7760	-56.75	-25	-31.75	-66.34	2.69	12.28	H
	10341	-61.76	-25	-36.76	-70.93	3.04	12.21	H
	5172	-61.47	-25	-36.47	-68.18	2.37	9.08	V
	7760	-53.80	-25	-28.80	-63.39	2.69	12.28	V
	10341	-61.26	-25	-36.26	-70.43	3.04	12.21	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 41 / 20MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5172	-63.31	-25	-38.31	-70.02	2.37	9.08	H
	7756	-61.15	-25	-36.15	-70.74	2.69	12.28	H
	10341	-60.77	-25	-35.77	-69.94	3.04	12.21	H
	5172	-63.40	-25	-38.40	-70.11	2.37	9.08	V
	7756	-58.84	-25	-33.84	-68.43	2.69	12.28	V
	10341	-60.39	-25	-35.39	-69.56	3.04	12.21	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



Appendix D. Reference Report

Please refer to Sporton report number FG841203B which is issued separately.