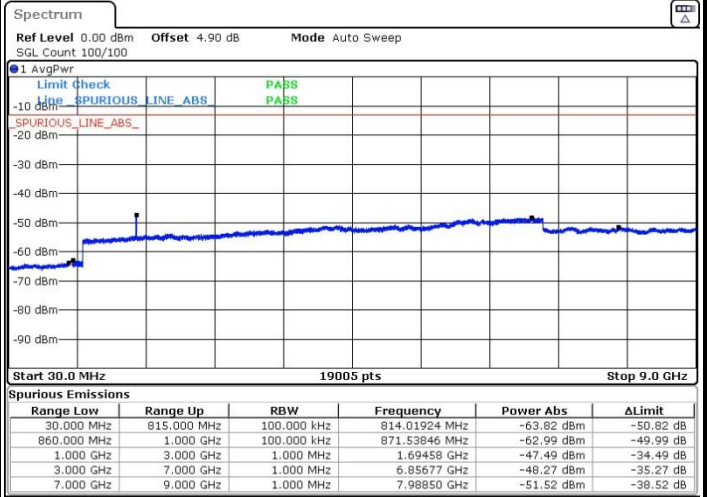
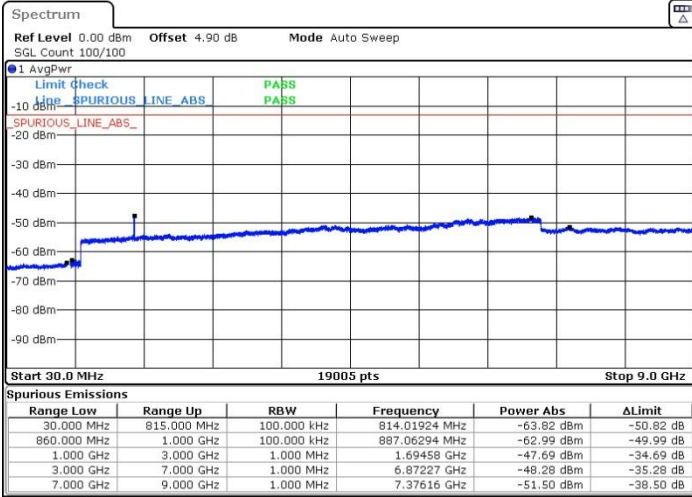




LTE Band 26 / 5MHz

Lowest Channel / QPSK

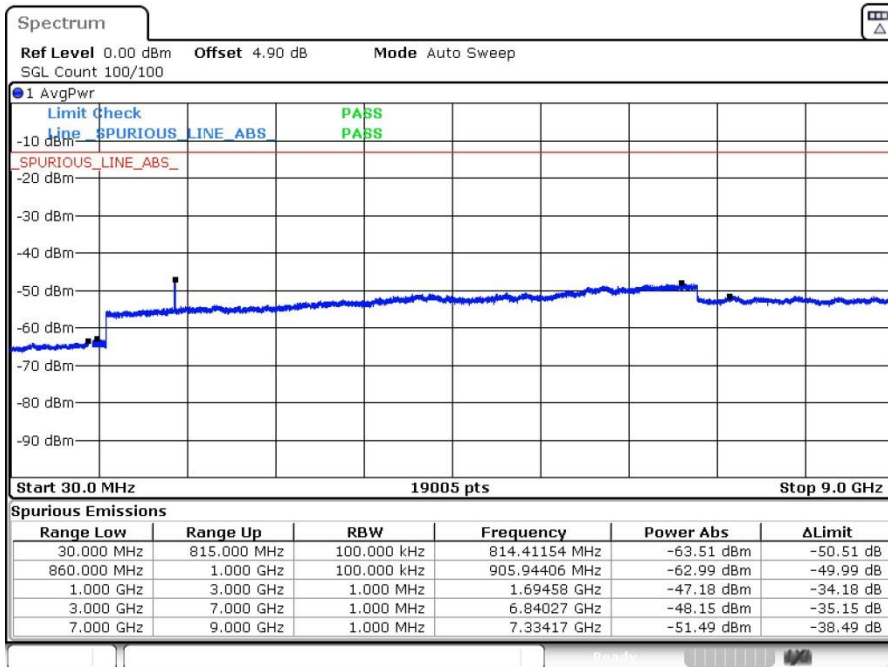
Middle Channel / QPSK



Date: 6.MAR.2021 15:04:19

Date: 6.MAR.2021 15:06:11

Highest Channel / QPSK



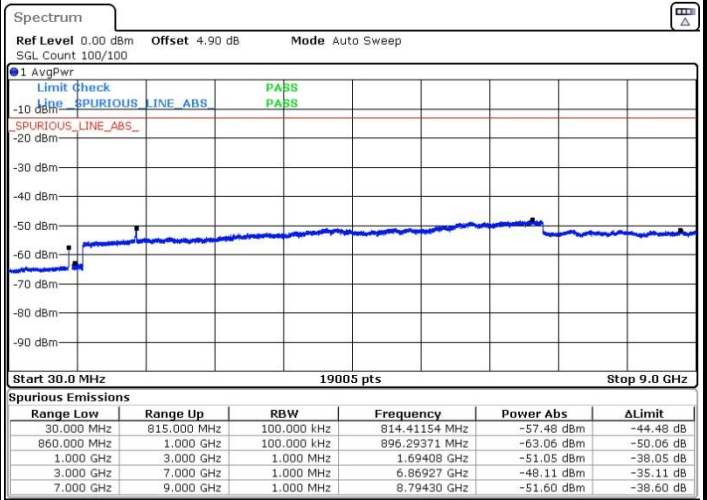
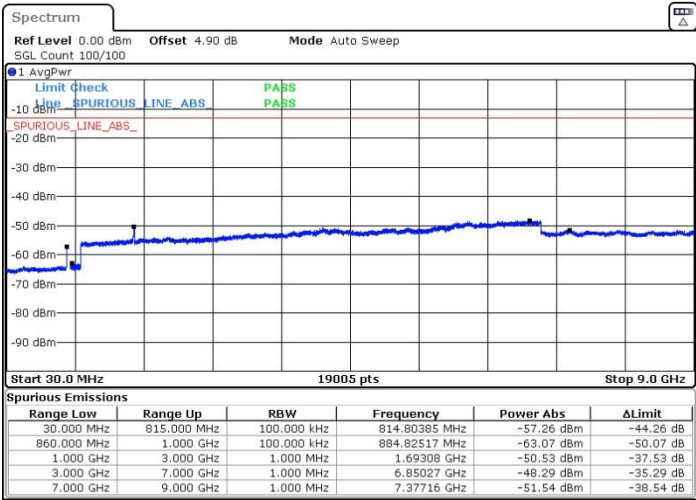
Date: 6.MAR.2021 15:06:55



LTE Band 26 / 10MHz

Lowest Channel / QPSK

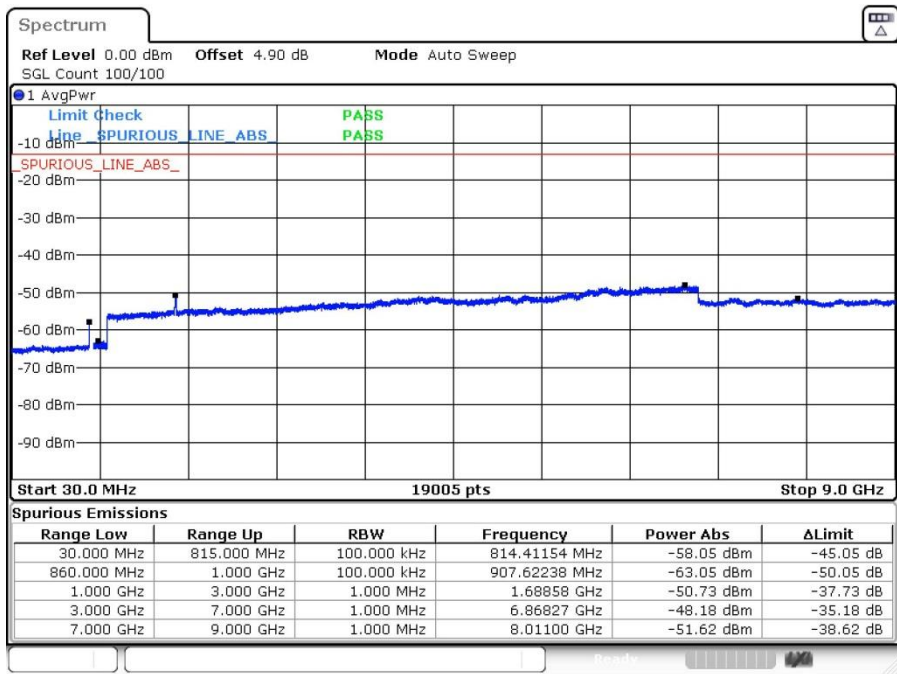
Middle Channel / QPSK



Date: 6.MAR.2021 15:18:50

Date: 6.MAR.2021 15:20:00

Highest Channel / QPSK



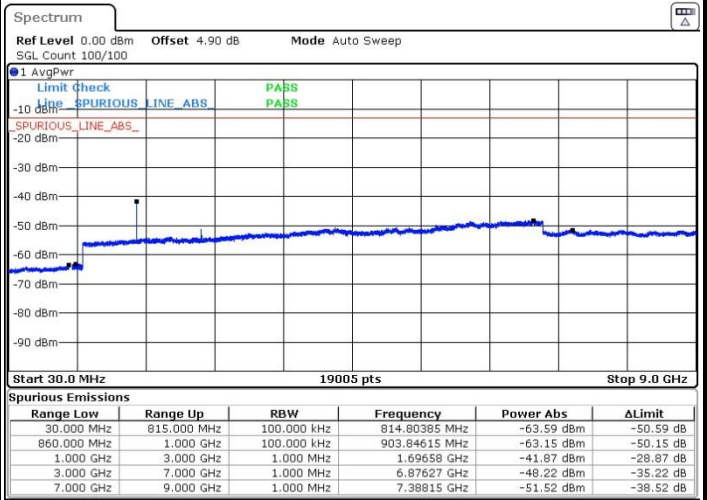
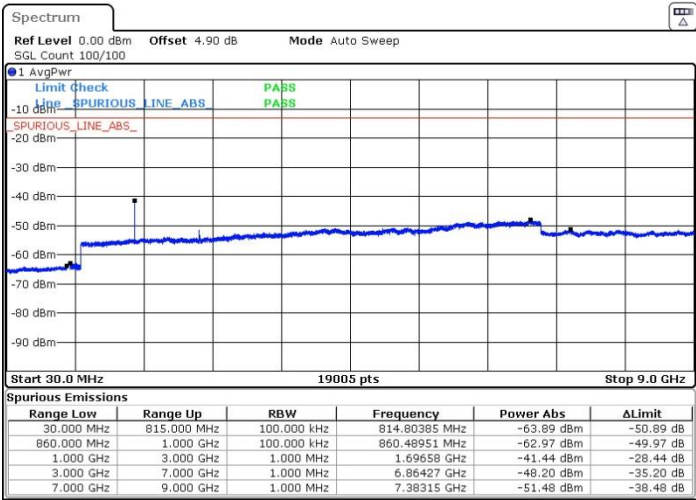
Date: 6.MAR.2021 15:20:50



LTE Band 26 / 15MHz

Lowest Channel / QPSK

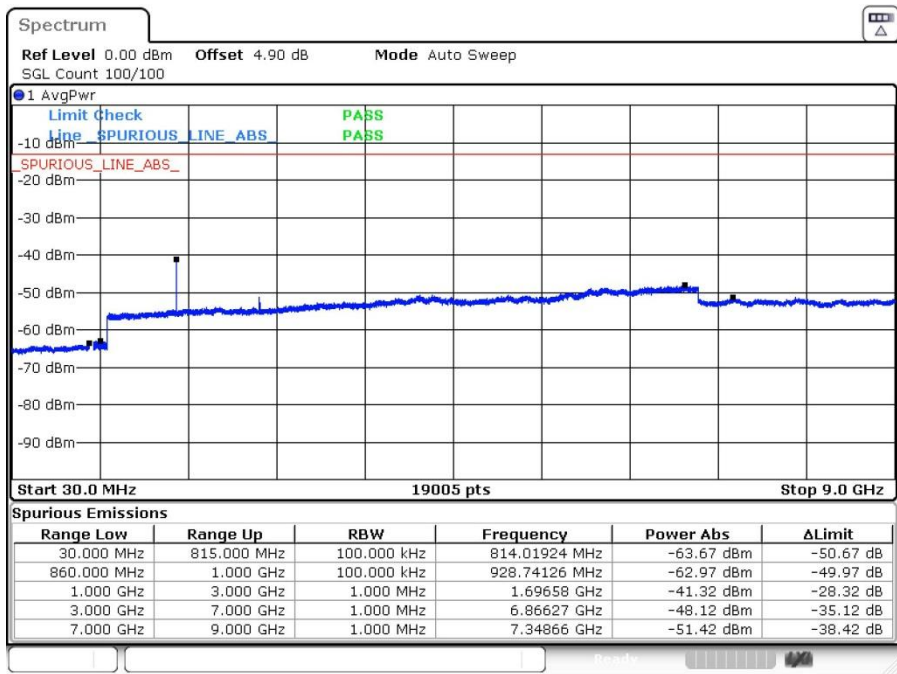
Middle Channel / QPSK



Date: 6.MAR.2021 15:44:11

Date: 6.MAR.2021 15:46:20

Highest Channel / QPSK



Date: 6.MAR.2021 15:46:51



Frequency Stability

Test Conditions		LTE Band 26 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 15MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0063	PASS
40	Normal Voltage	0.0051	
30	Normal Voltage	0.0005	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0068	
0	Normal Voltage	0.0068	
-10	Normal Voltage	0.0016	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0023	
20	Maximum Voltage	0.0013	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0073	

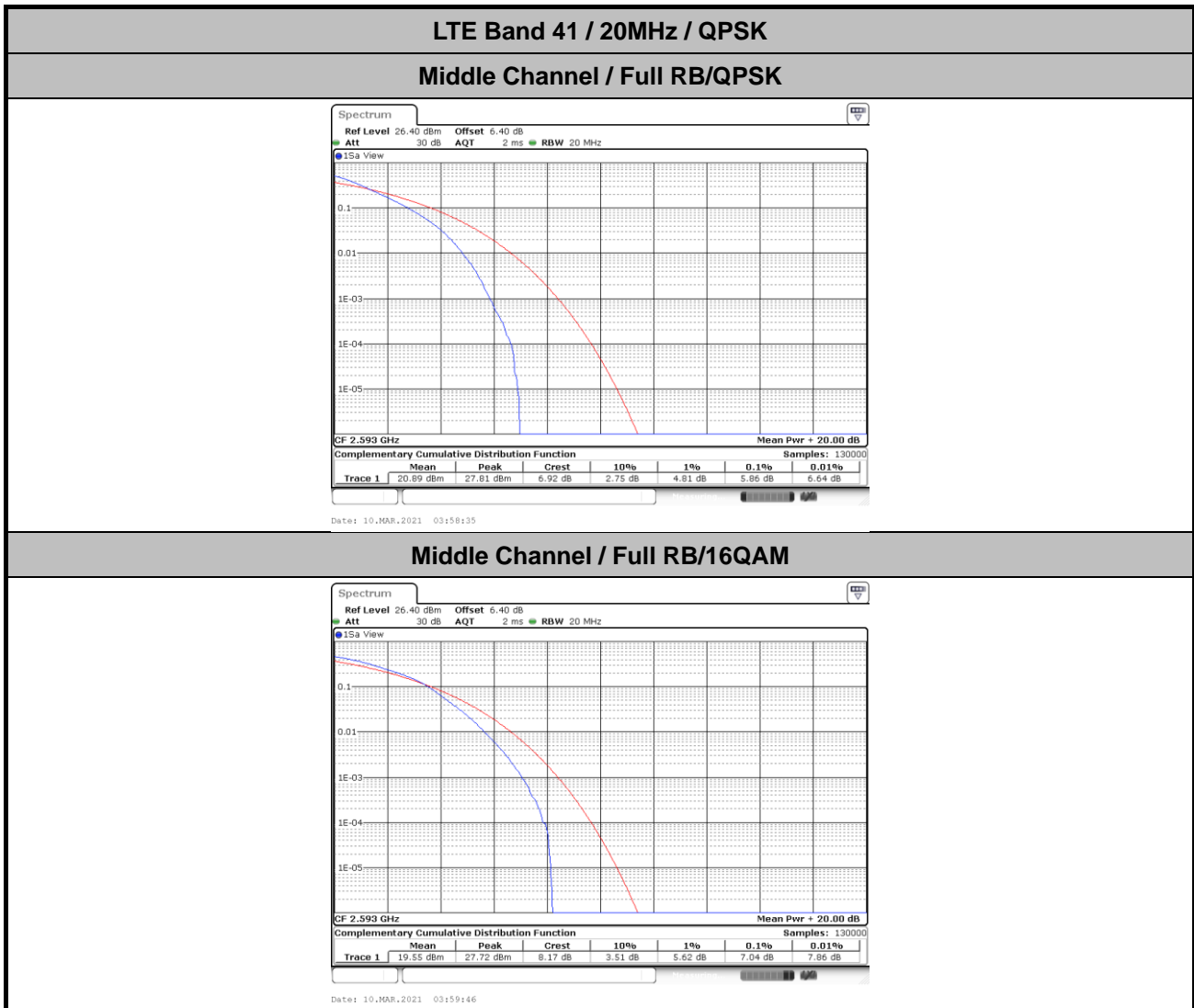
Note: Normal Voltage =3.86 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.43 V.



LTE Band 41

Peak-to-Average Ratio

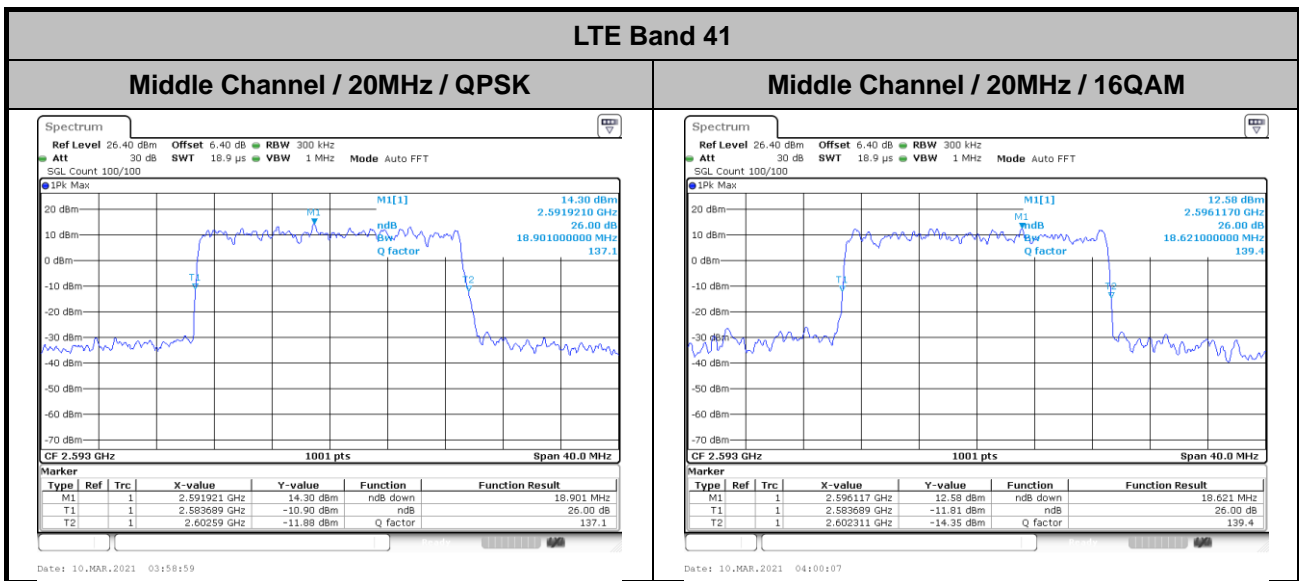
Mode	LTE Band 41 / 20MHz			
Mod.	QPSK	16QAM	-	Limit: 13dB
RB Size	Full RB	Full RB	-	Result
Low CH	5.86	7.04	-	PASS





26dB Bandwidth

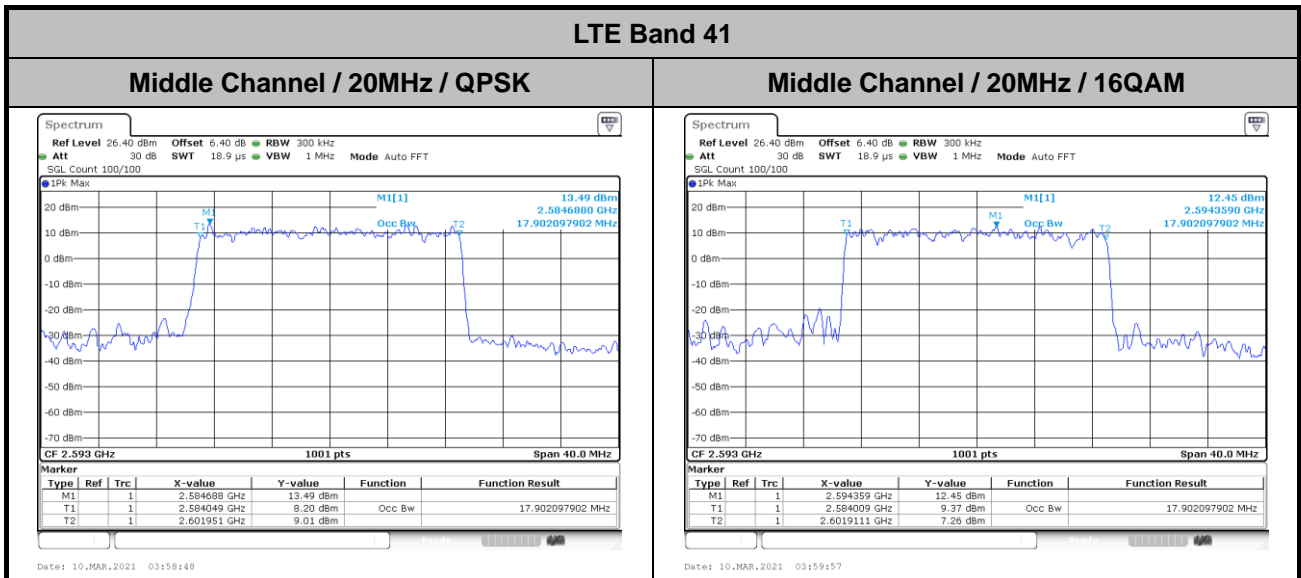
Mode	LTE Band 41 : 26dB BW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Low CH	18.90	18.62





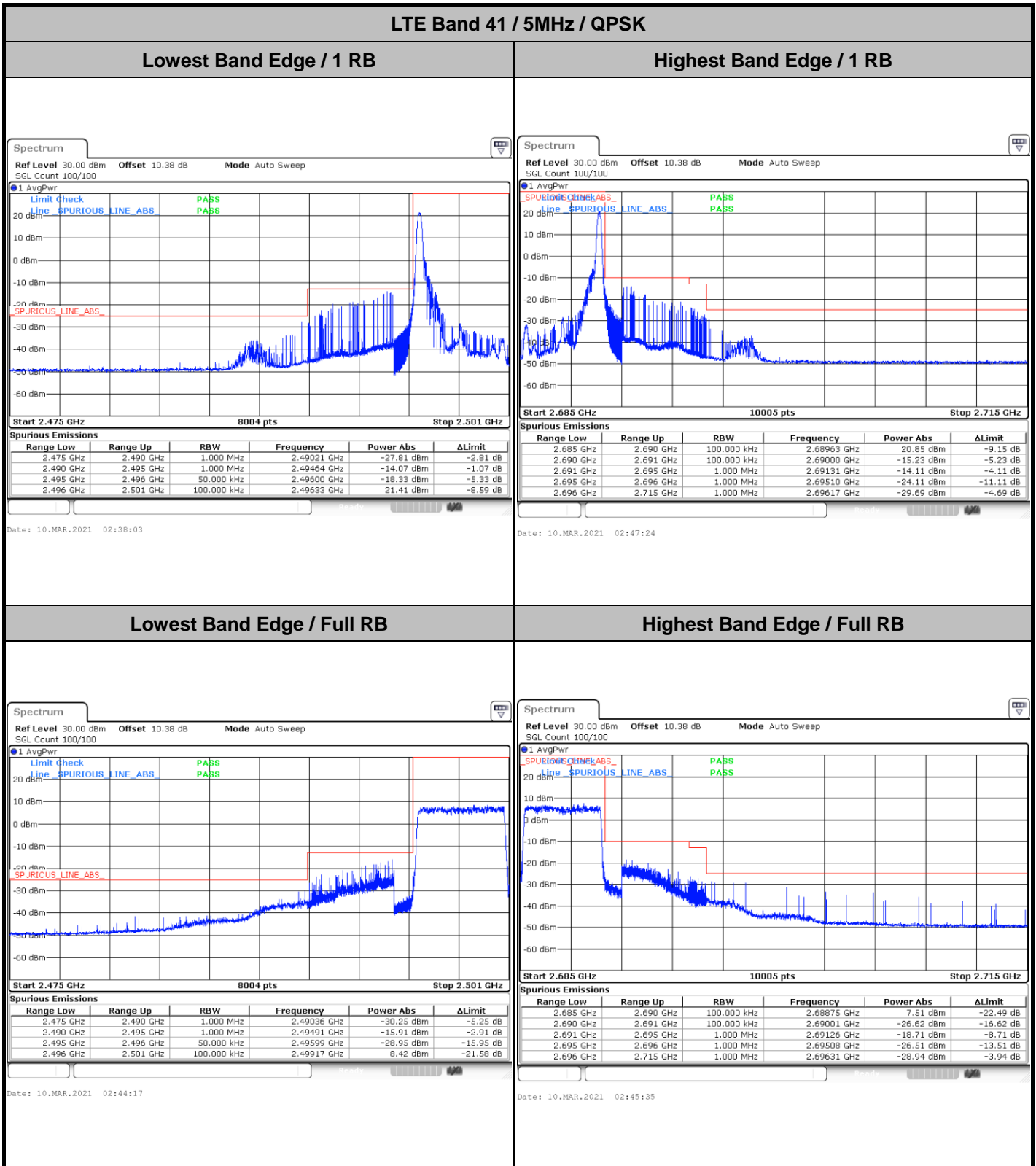
Occupied Bandwidth

Mode	LTE Band 41 : 99%OBW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Low CH	17.90	17.90





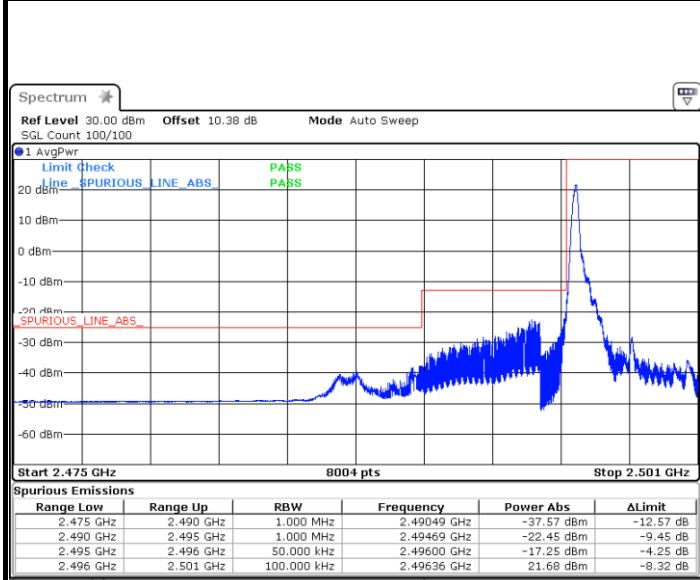
Conducted Band Edge





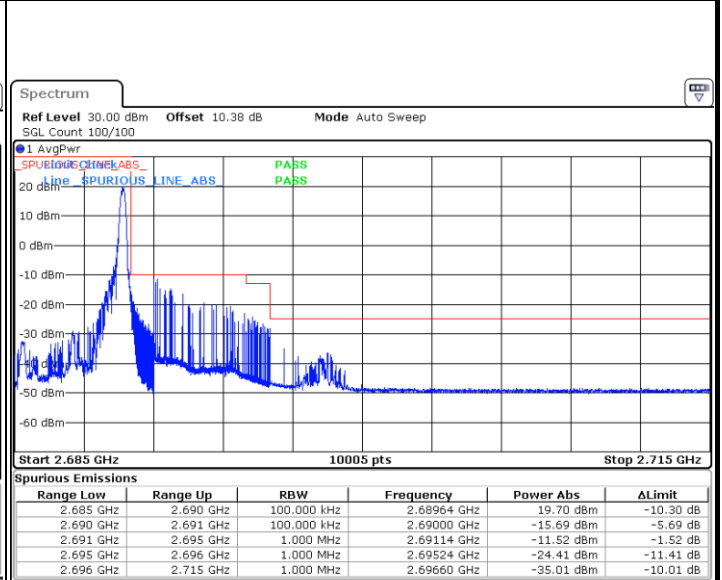
LTE Band 41 / 5MHz / 16QAM

Lowest Band Edge / 1RB



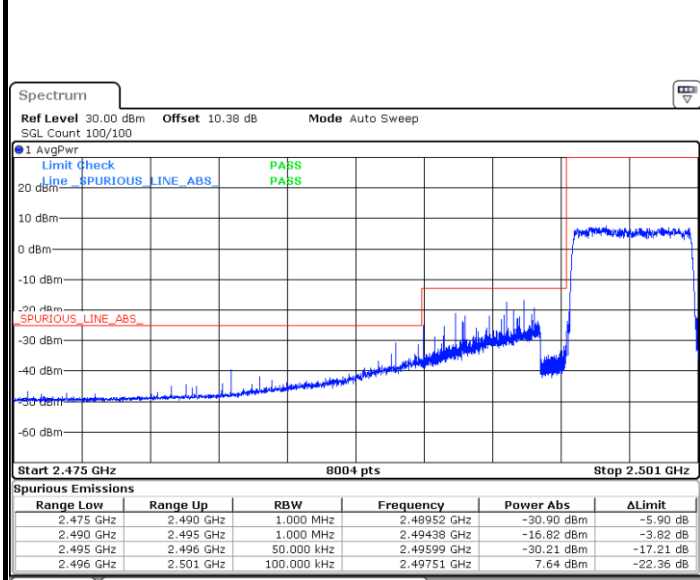
Date: 10.MAR.2021 02:40:45

Highest Band Edge / 1 RB



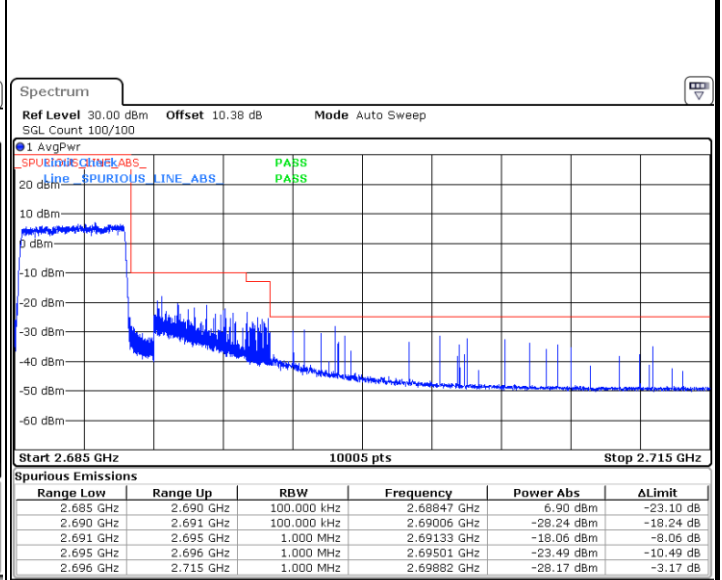
Date: 10.MAR.2021 02:46:56

Lowest Band Edge / Full RB



Date: 10.MAR.2021 02:43:47

Highest Band Edge / Full RB

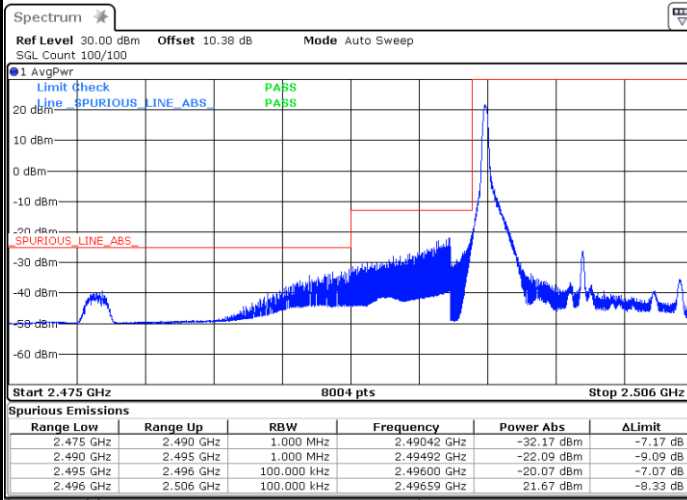


Date: 10.MAR.2021 02:45:56



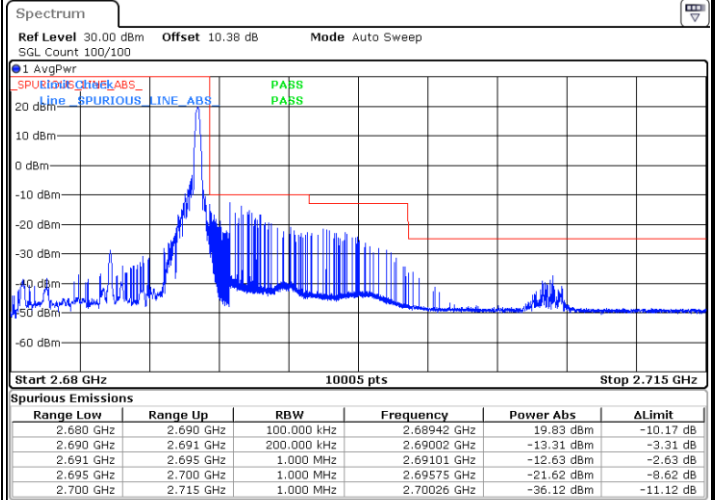
LTE Band 41 / 10MHz / QPSK

Lowest Band Edge / 1 RB



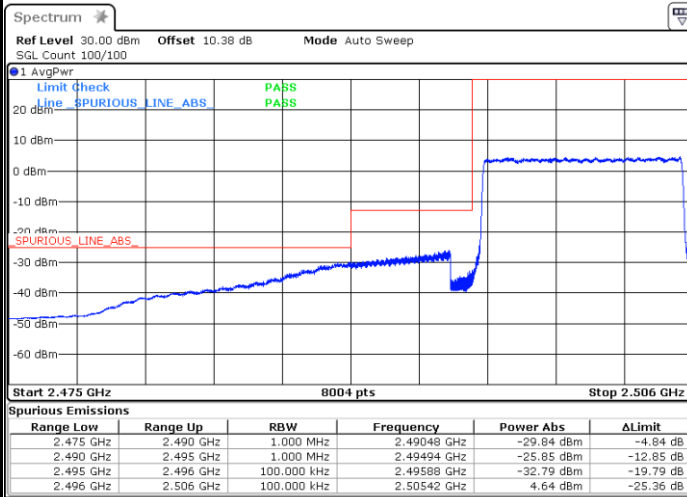
Date: 10.MAR.2021 03:21:17

Highest Band Edge / 1 RB



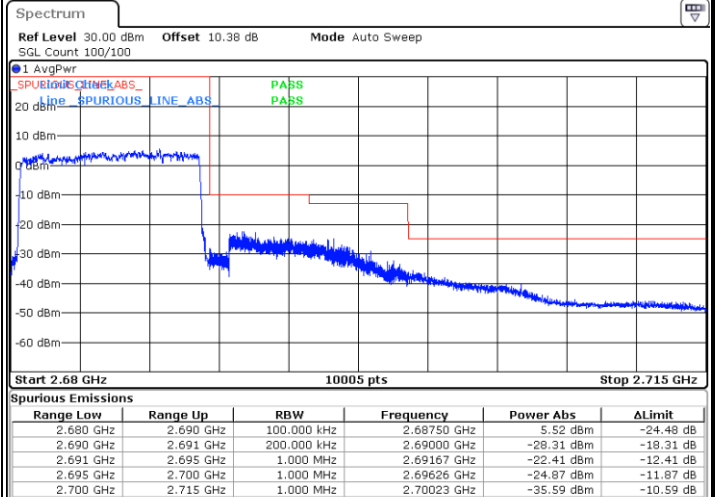
Date: 10.MAR.2021 03:31:20

Lowest Band Edge / Full RB



Date: 10.MAR.2021 03:29:01

Highest Band Edge / Full RB

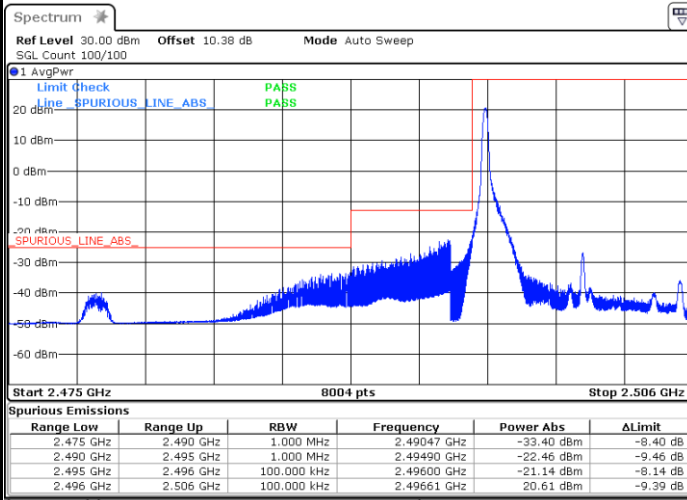


Date: 10.MAR.2021 03:29:34



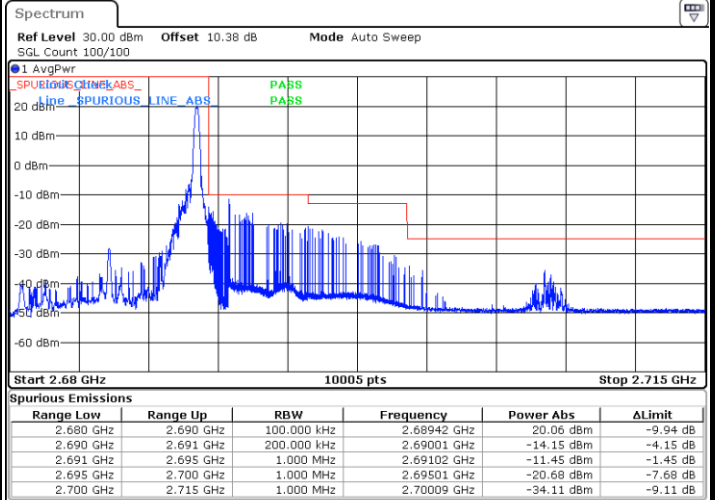
LTE Band 41 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



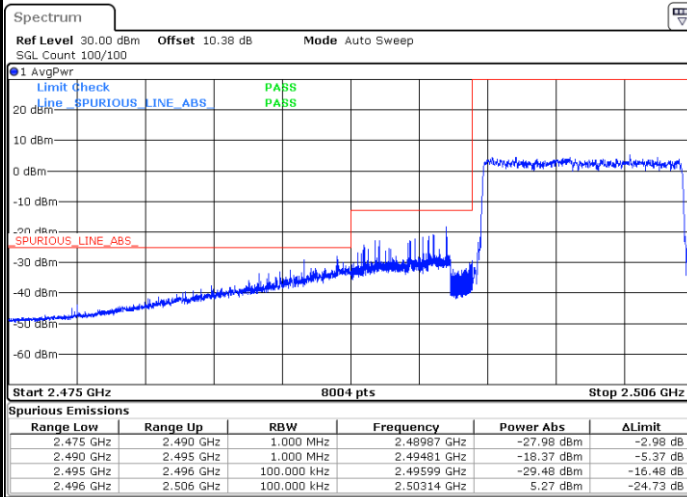
Date: 10.MAR.2021 03:23:15

Highest Band Edge / 1 RB



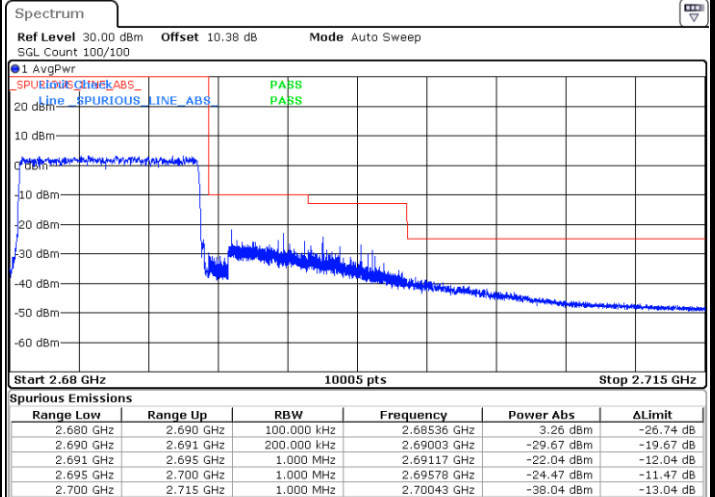
Date: 10.MAR.2021 03:31:03

Lowest Band Edge / Full RB



Date: 10.MAR.2021 03:25:43

Highest Band Edge / Full RB

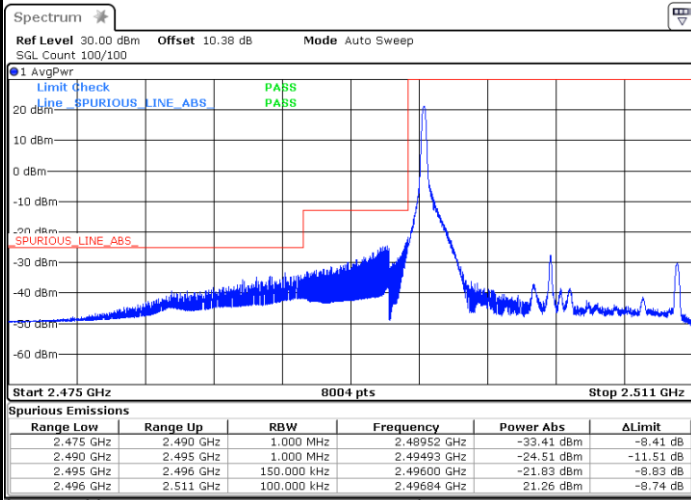


Date: 10.MAR.2021 03:30:00



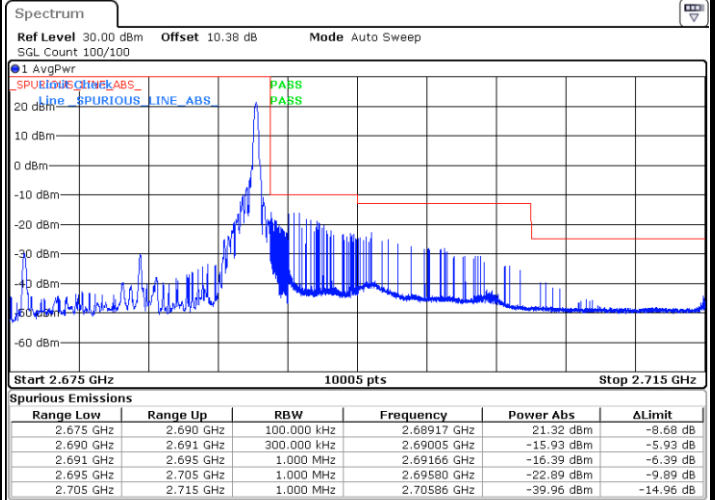
LTE Band 41 / 15MHz / QPSK

Lowest Band Edge / 1 RB



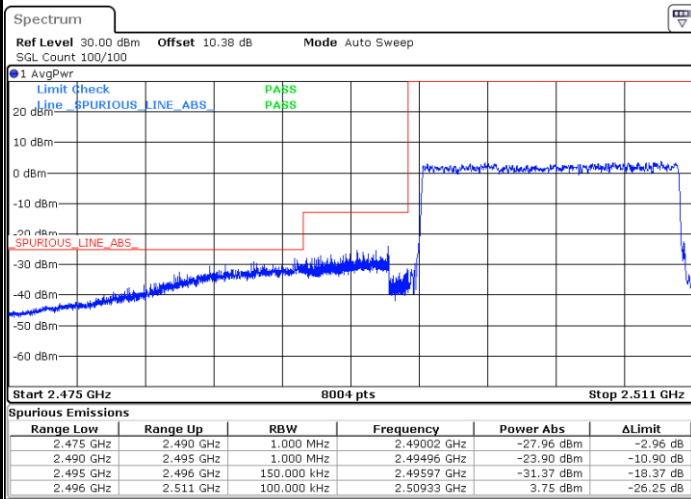
Date: 10.MAR.2021 03:36:06

Highest Band Edge / 1 RB



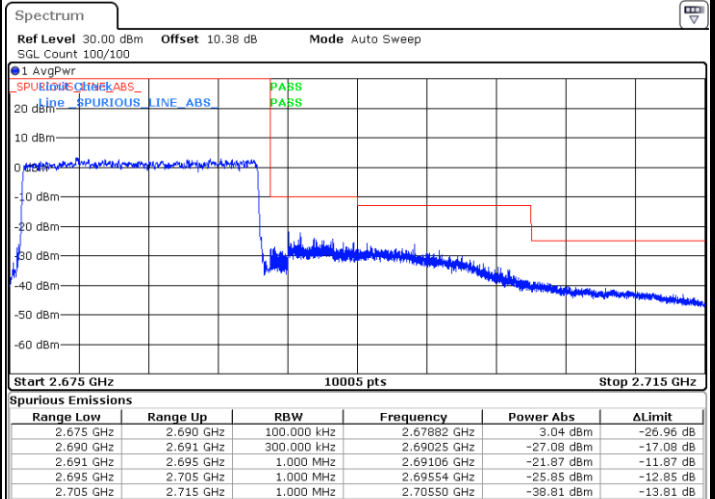
Date: 10.MAR.2021 03:43:22

Lowest Band Edge / Full RB



Date: 10.MAR.2021 03:41:24

Highest Band Edge / Full RB

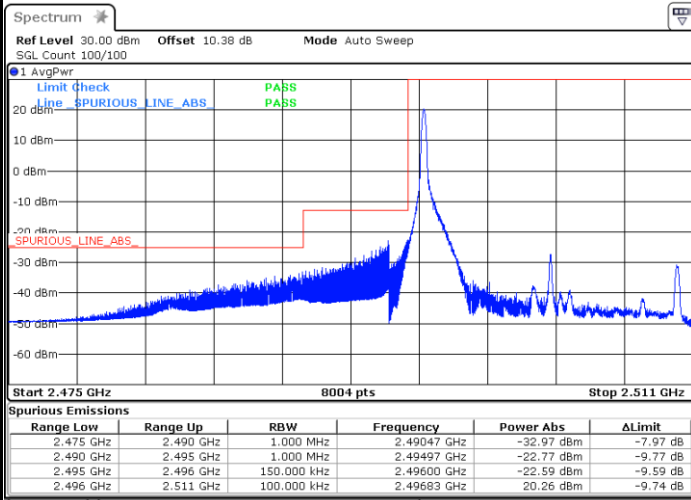


Date: 10.MAR.2021 03:41:04



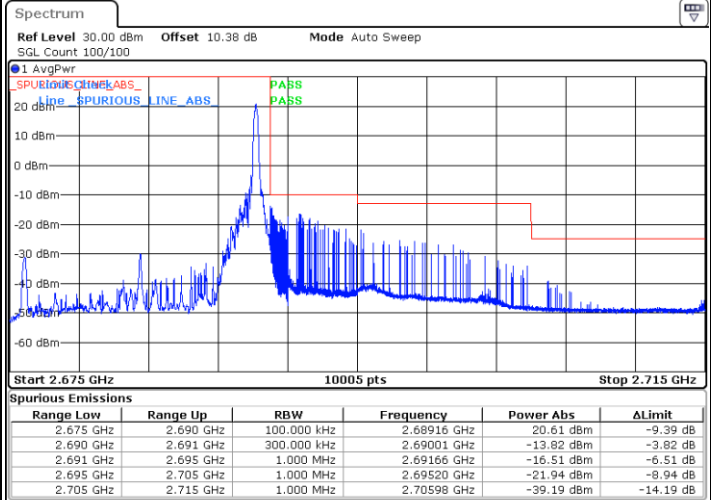
LTE Band 41 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



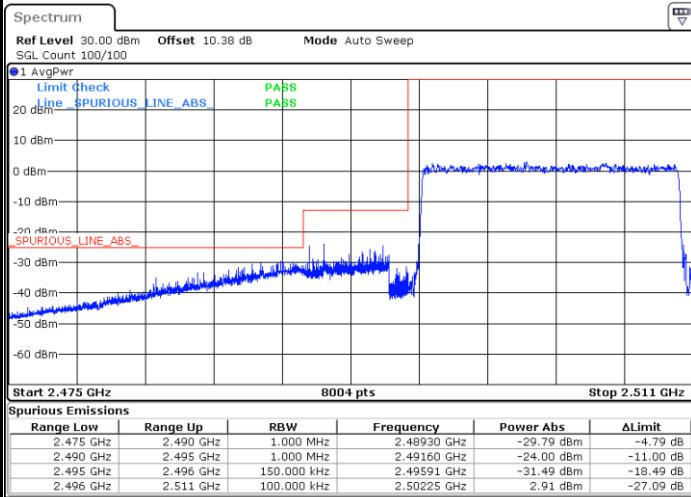
Date: 10.MAR.2021 03:37:32

Highest Band Edge / 1 RB



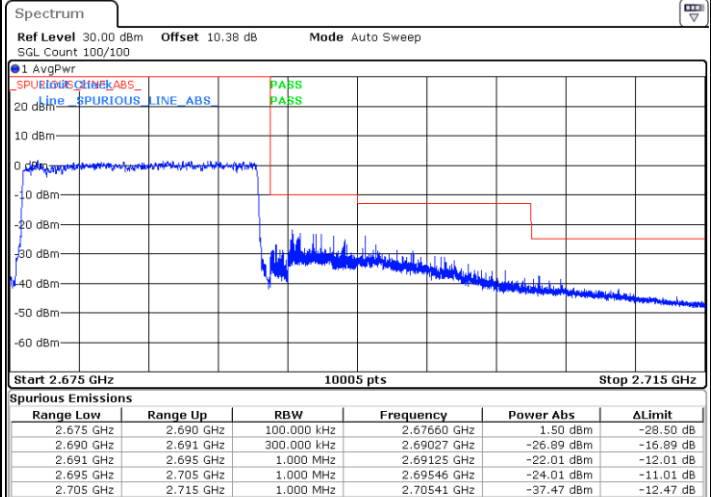
Date: 10.MAR.2021 03:43:05

Lowest Band Edge / Full RB



Date: 10.MAR.2021 03:40:17

Highest Band Edge / Full RB

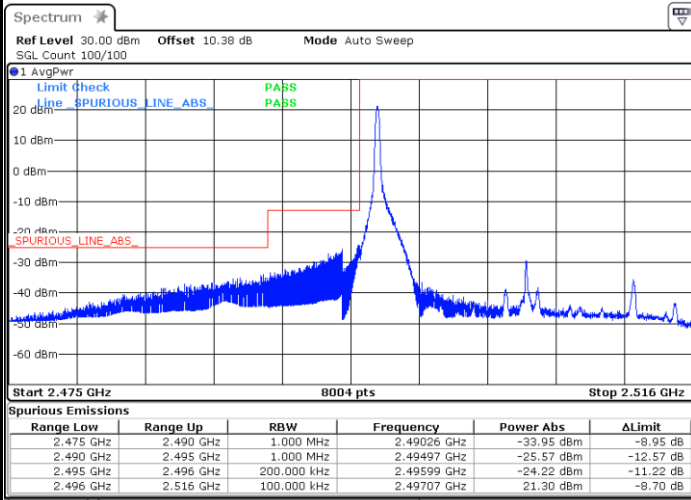


Date: 10.MAR.2021 03:41:53



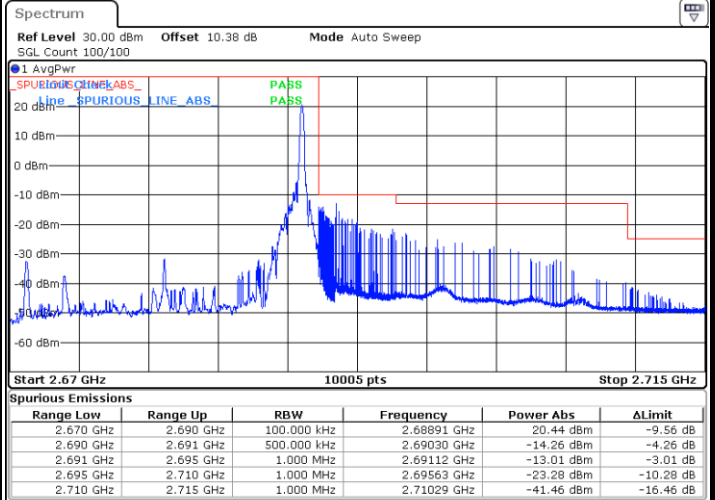
LTE Band 41 / 20MHz / QPSK

Lowest Band Edge / 1 RB



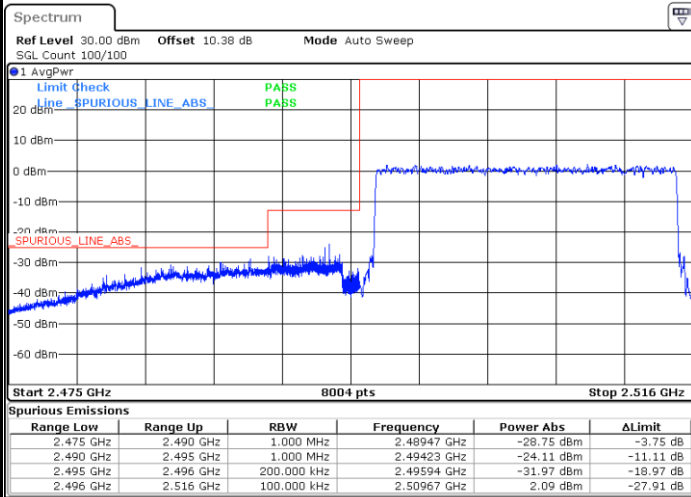
Date: 10.MAR.2021 03:50:07

Highest Band Edge / 1 RB



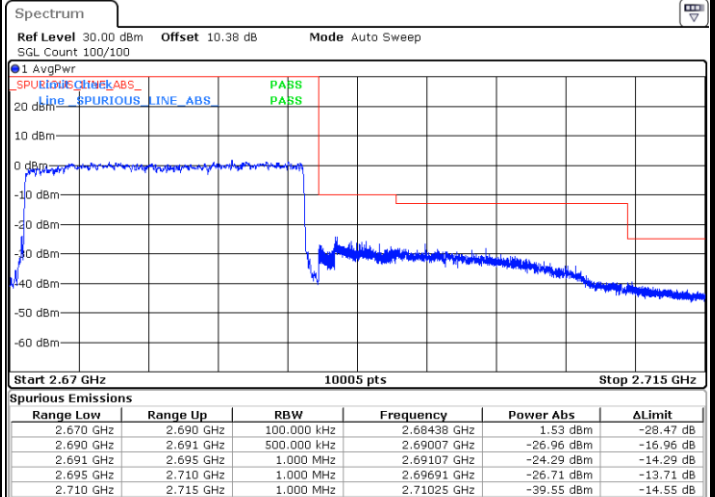
Date: 10.MAR.2021 03:55:55

Lowest Band Edge / Full RB



Date: 10.MAR.2021 03:53:52

Highest Band Edge / Full RB

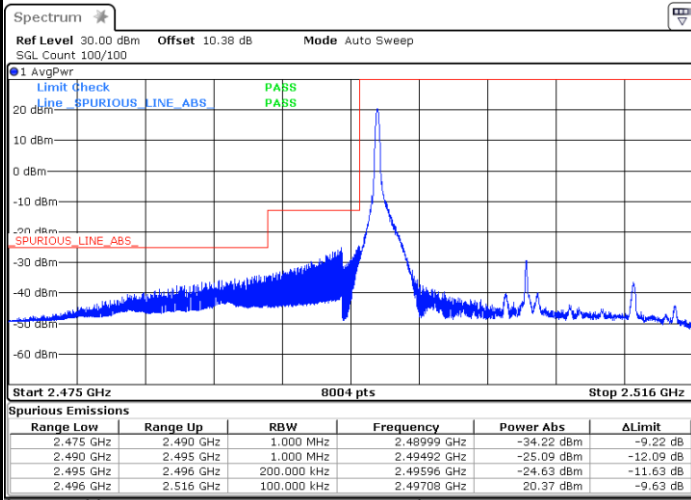


Date: 10.MAR.2021 03:54:12



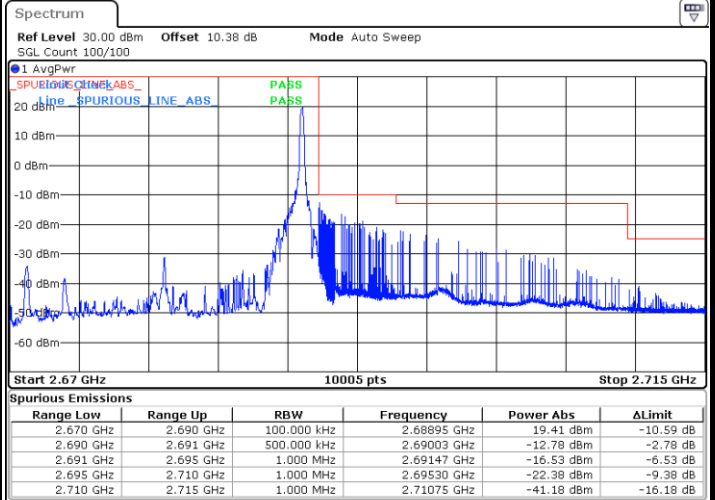
LTE Band 41 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



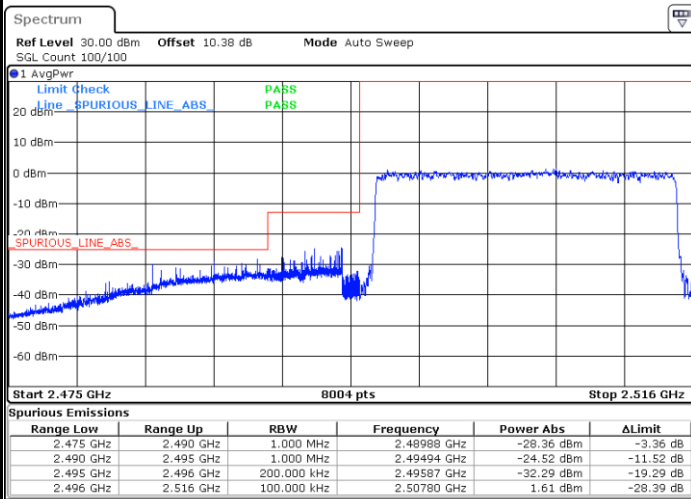
Date: 10.MAR.2021 03:51:56

Highest Band Edge / 1 RB



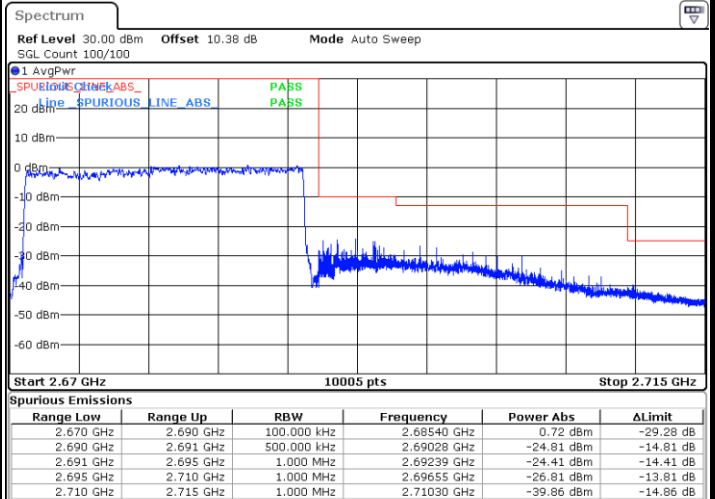
Date: 10.MAR.2021 03:55:36

Lowest Band Edge / Full RB



Date: 10.MAR.2021 03:53:27

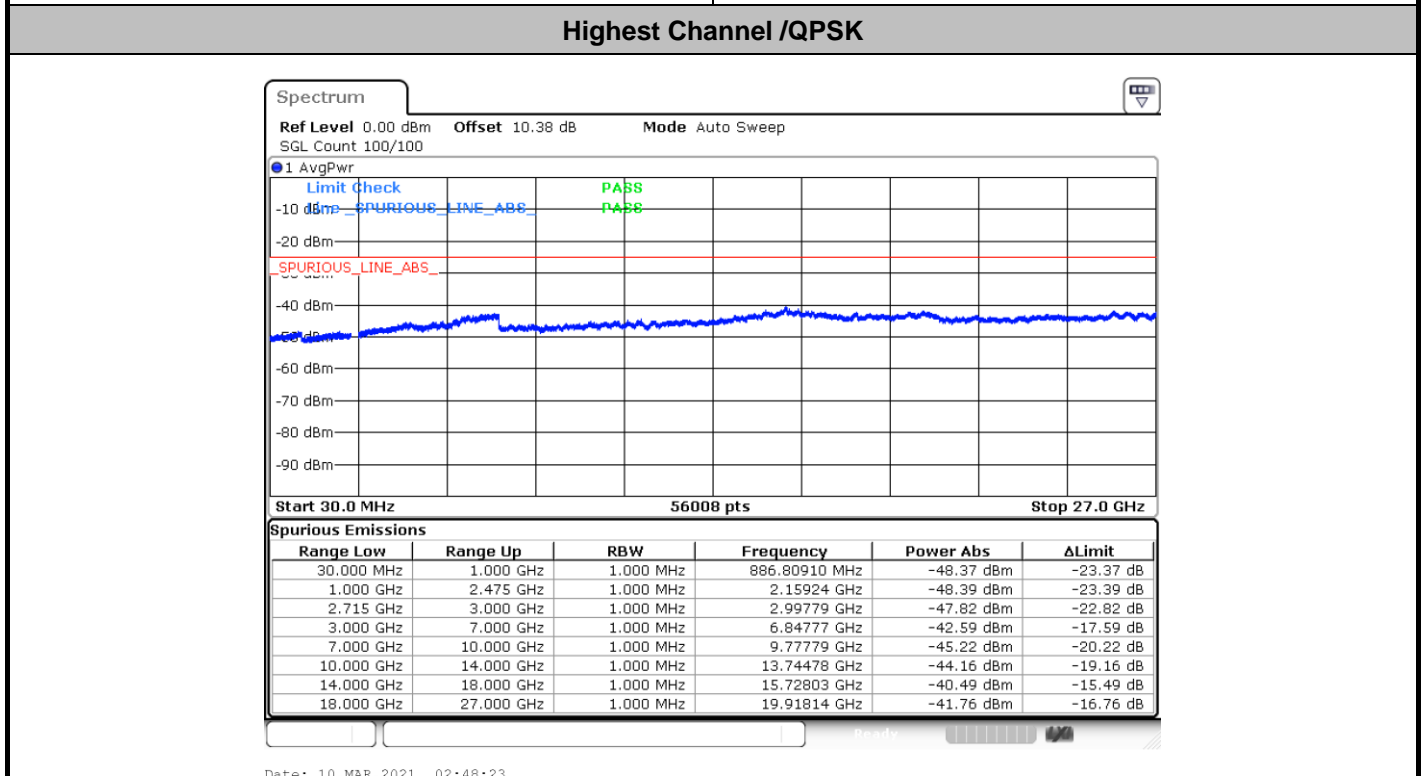
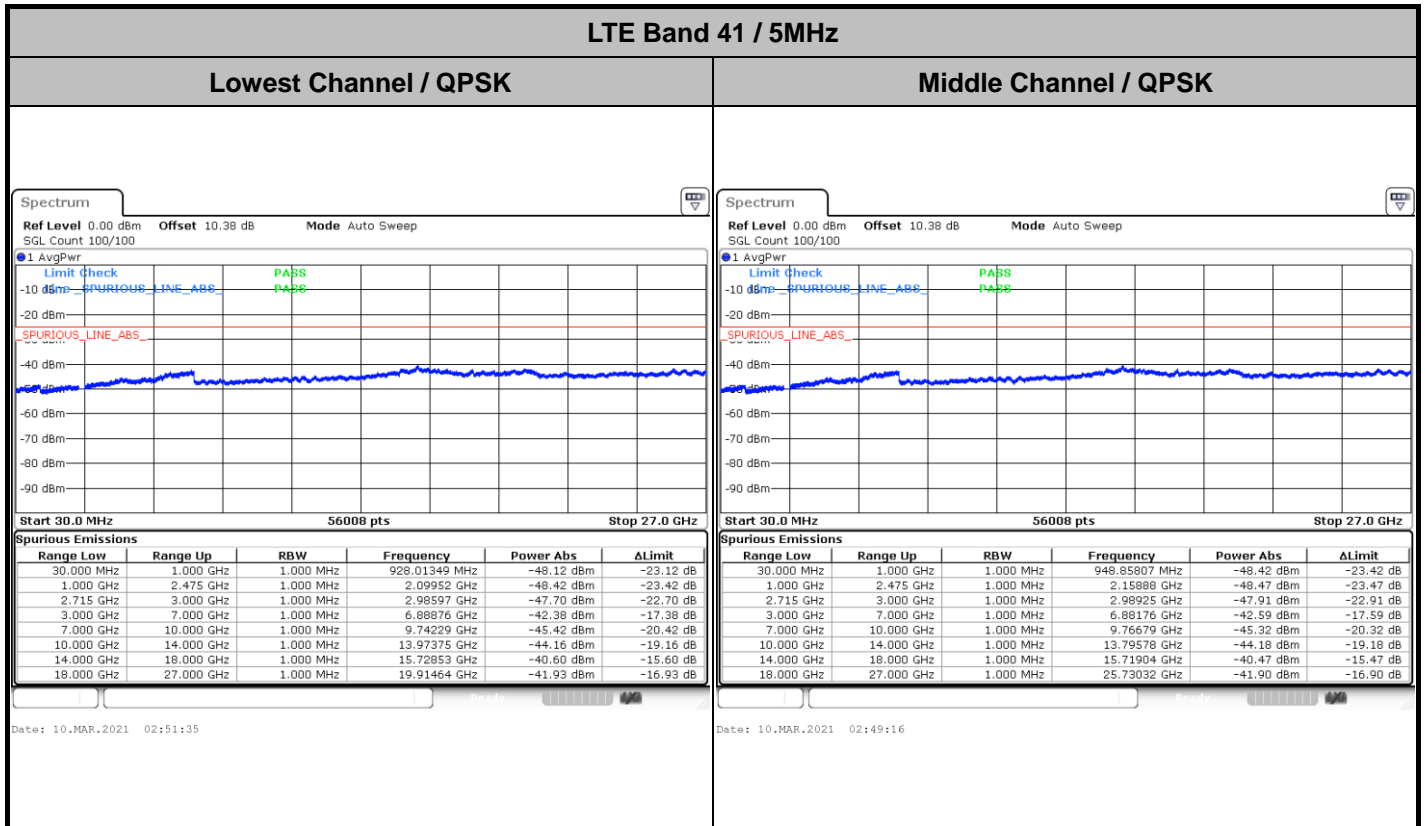
Highest Band Edge / Full RB



Date: 10.MAR.2021 03:54:30



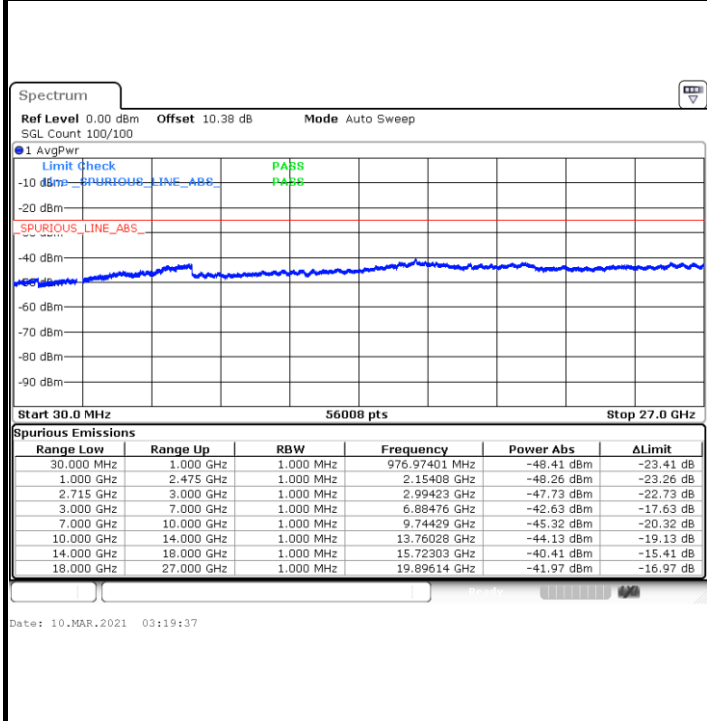
Conducted Spurious Emission



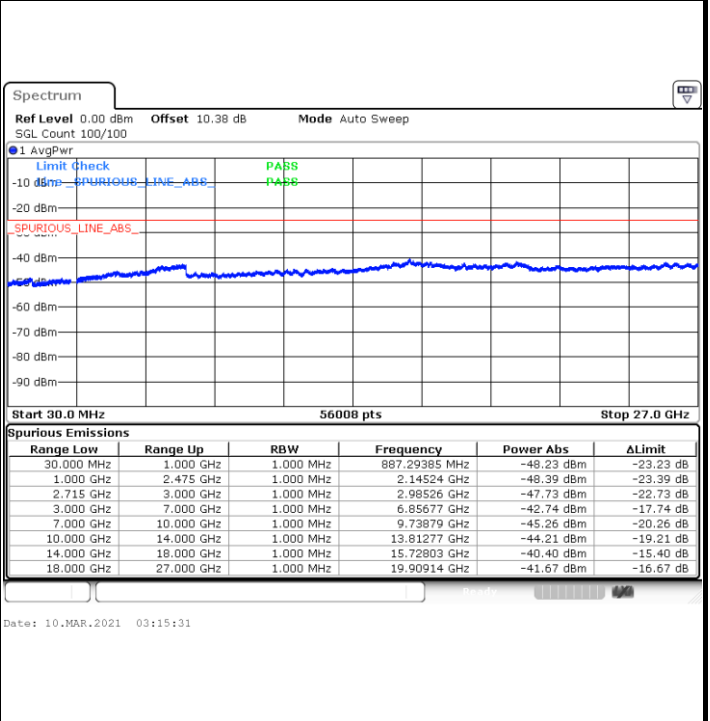


LTE Band 41 / 10MHz

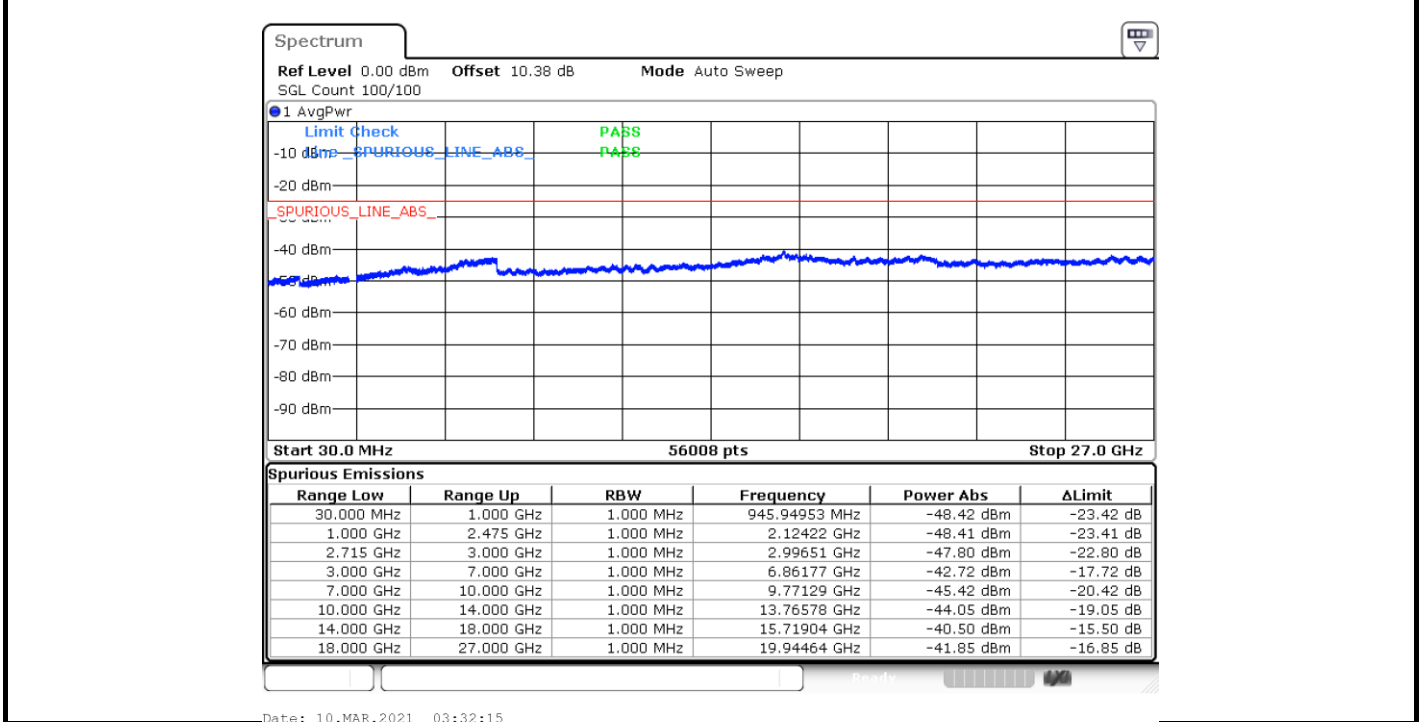
Lowest Channel / QPSK



Middle Channel / QPSK



Highest Channel / QPSK

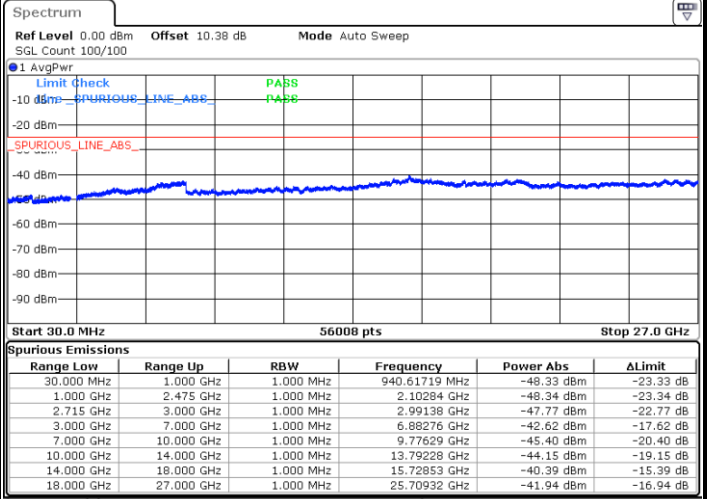
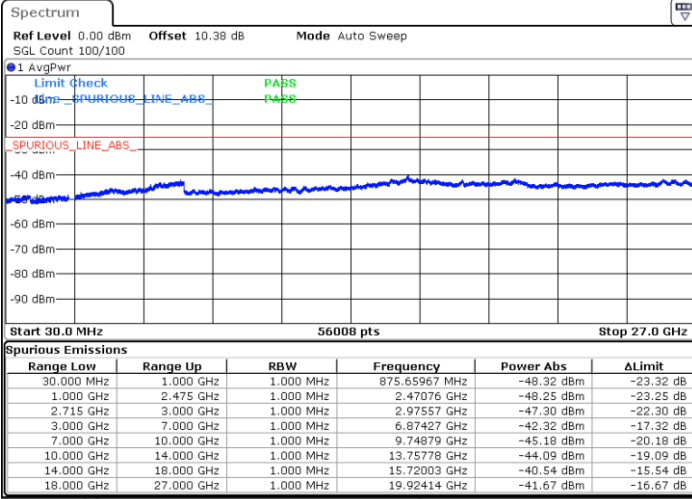




LTE Band 41 / 15MHz

Lowest Channel / QPSK

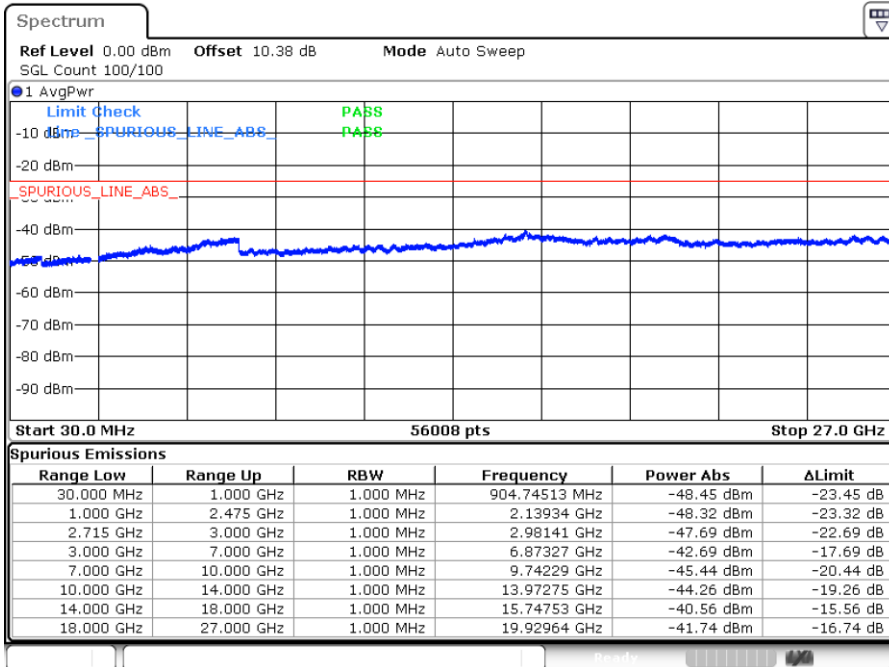
Middle Channel / QPSK



Date: 10.MAR.2021 03:34:35

Date: 10.MAR.2021 03:33:25

Highest Channel / QPSK



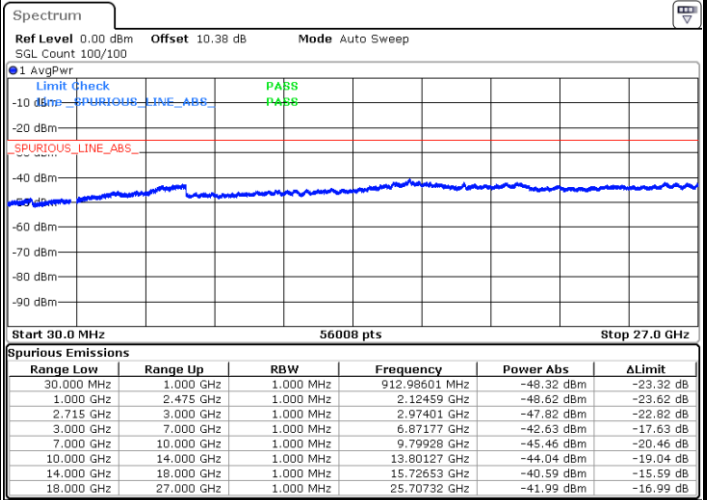
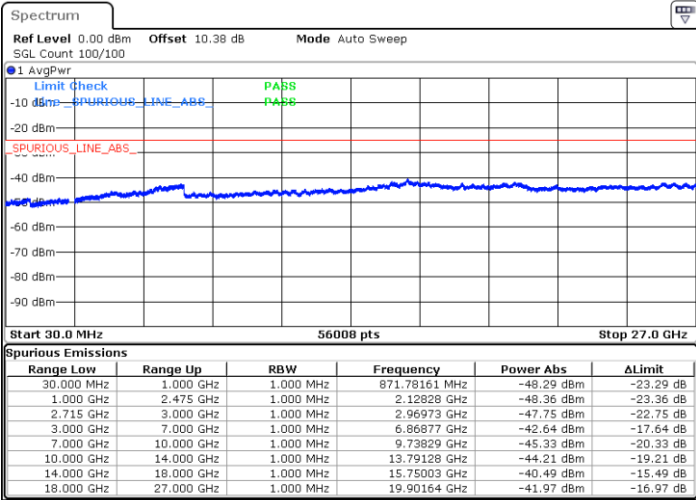
Date: 10.MAR.2021 03:44:37



LTE Band 41 / 20MHz

Lowest Channel / QPSK

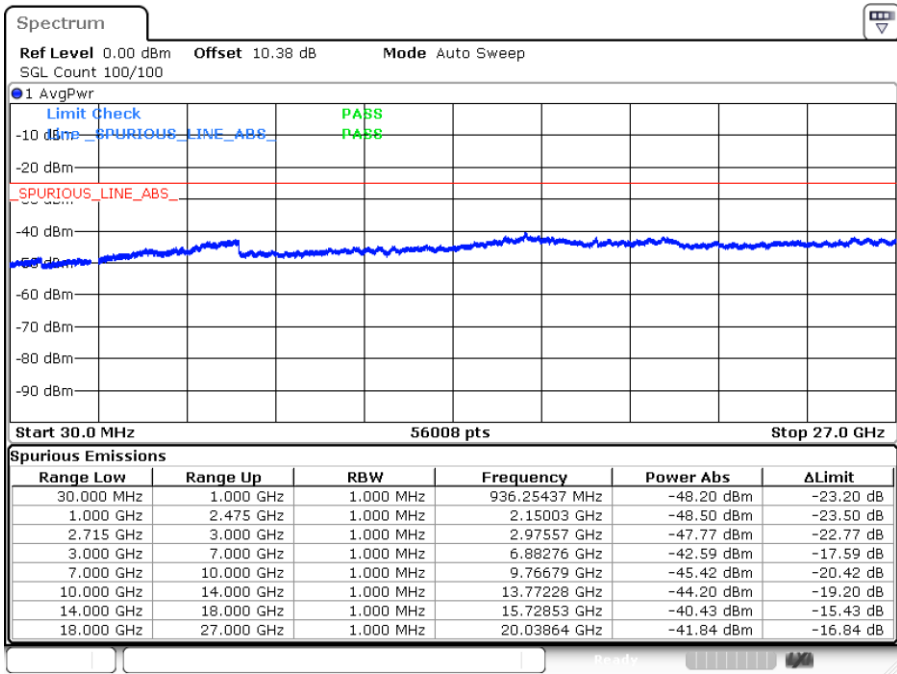
Middle Channel / QPSK



Date: 10.MAR.2021 03:46:46

Date: 10.MAR.2021 03:45:52

Highest Channel / QPSK



Date: 10.MAR.2021 03:57:38



Frequency Stability

Test Conditions		LTE Band 41 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0011	PASS
40	Normal Voltage	0.0008	
30	Normal Voltage	0.0012	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0004	
0	Normal Voltage	0.0011	
-10	Normal Voltage	0.0001	
-20	Normal Voltage	0.0005	
-30	Normal Voltage	0.0002	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0001	

Note:

1. Normal Voltage =3.86 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.43 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

LTE Band 2 / 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	3741	-54.54	-13	-41.54	-66.80	2.64	14.90	H
	5613	-54.19	-13	-41.19	-66.05	2.94	14.80	H
	7488	-52.04	-13	-39.04	-61.81	3.39	13.16	H
	3741	-55.76	-13	-42.76	-68.02	2.64	14.90	V
	5613	-55.04	-13	-42.04	-66.90	2.94	14.80	V
	7488	-52.45	-13	-39.45	-62.22	3.39	13.16	V

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

LTE Band 4 / 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	3741	-56.79	-13	-43.79	-67.53	2.60	13.34	H
	5613	-54.91	-13	-41.91	-65.42	3.01	13.52	H
	7488	-52.44	-13	-39.44	-62.64	3.27	13.47	H
	3741	-57.25	-13	-44.25	-67.99	2.60	13.34	V
	5613	-55.39	-13	-42.39	-65.90	3.01	13.52	V
	7488	-52.61	-13	-39.61	-62.81	3.27	13.47	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	-58.86	-25	-33.86	-69.07	3.03	13.24	H
	7580	-62.07	-25	-37.07	-71.52	3.56	13.01	H
	10100	-60.78	-25	-35.78	-70.30	3.92	13.44	H
	12630	-55.38	-25	-30.38	-64.42	4.39	13.43	H
	15160	-55.49	-25	-30.49	-64.18	4.83	13.53	H
	5052	-59.90	-25	-34.90	-70.11	3.03	13.24	V
	7580	-61.93	-25	-36.93	-71.38	3.56	13.01	V
	10100	-61.20	-25	-36.20	-70.72	3.92	13.44	V
	12630	-55.43	-25	-30.43	-64.47	4.39	13.43	V
15160	-53.83	-25	-28.83	-62.52	4.83	13.53	V	

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

LTE Band 26 / 15MHz / 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	1660	-59.51	-13	-46.51	-66.48	1.58	10.70	H
	2490	-47.18	-13	-34.18	-55.43	2.10	12.50	H
	3318	-60.50	-13	-47.50	-69.39	2.86	13.90	H
	1660	-58.25	-13	-45.25	-65.22	1.58	10.70	V
	2490	-52.04	-13	-39.04	-60.29	2.10	12.50	V
	3318	-60.74	-13	-47.74	-69.63	2.86	13.90	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	5168	-57.74	-25	-32.74	-67.95	3.03	13.24	H
	7752	-61.25	-25	-36.25	-70.70	3.56	13.01	H
	10340	-58.85	-25	-33.85	-68.37	3.92	13.44	H
	12920	-54.48	-25	-29.48	-63.52	4.39	13.43	H
	15500	-56.56	-25	-31.56	-65.25	4.83	13.53	H
	5168	-59.05	-25	-34.05	-69.26	3.03	13.24	V
	7752	-59.57	-25	-34.57	-69.02	3.56	13.01	V
	10340	-59.01	-25	-34.01	-68.53	3.92	13.44	V
	12920	-51.72	-25	-26.72	-60.76	4.39	13.43	V
	15500	-54.09	-25	-29.09	-62.78	4.83	13.53	V

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