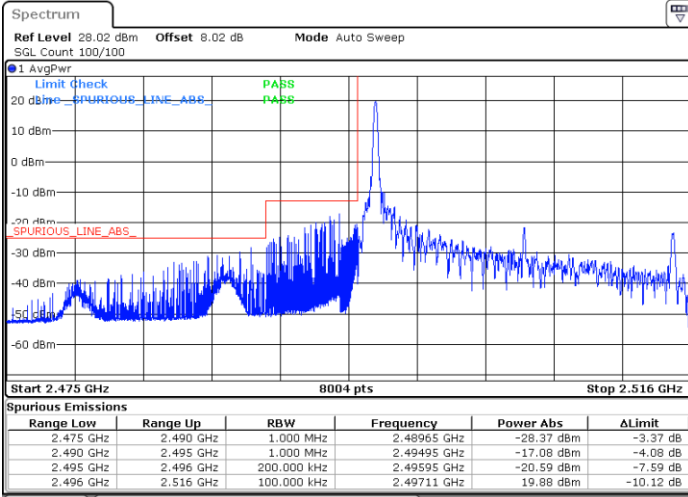




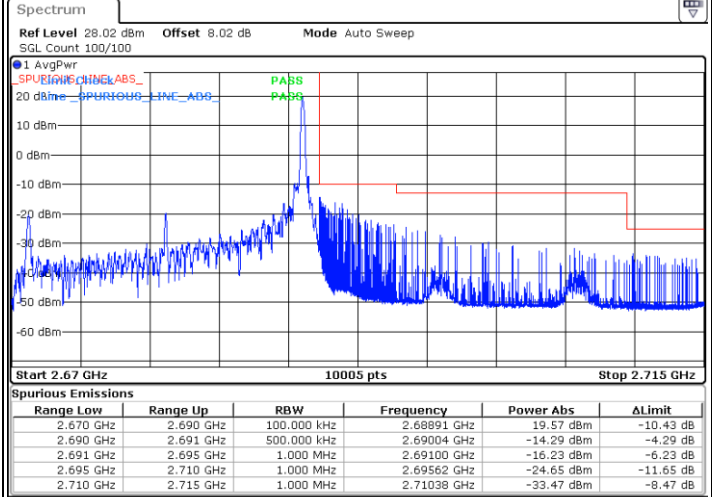
LTE Band 41 / 20MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



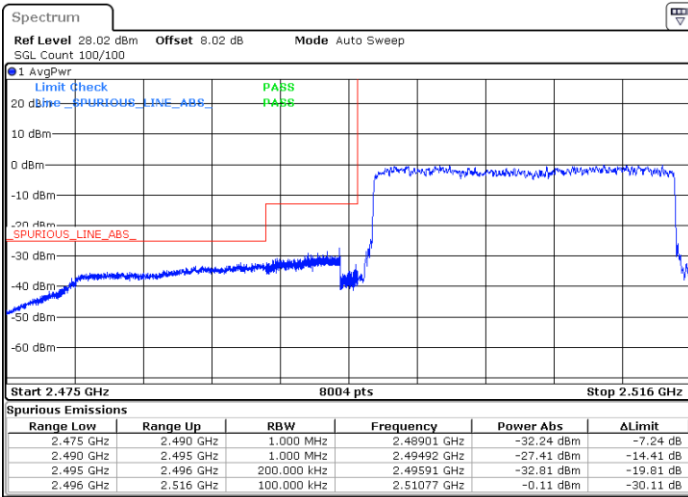
Date: 22.DEC.2021 09:45:07



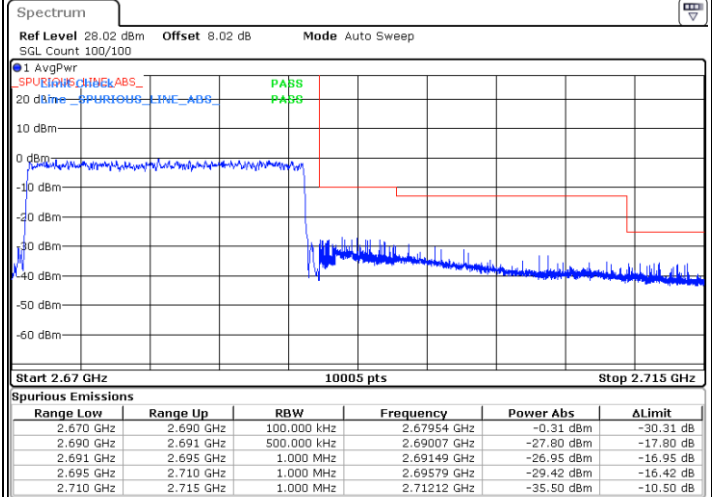
Date: 22 DEC 2021 09:53:22

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 22.DEC.2021 09:49:15



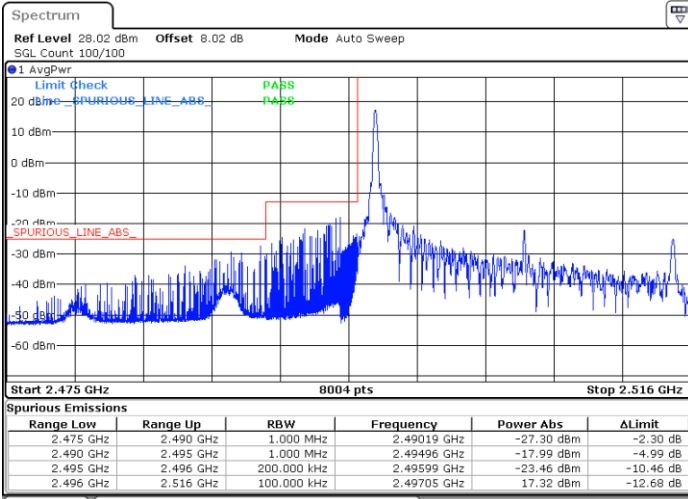
Date: 22.DEC.2021 09:57:29



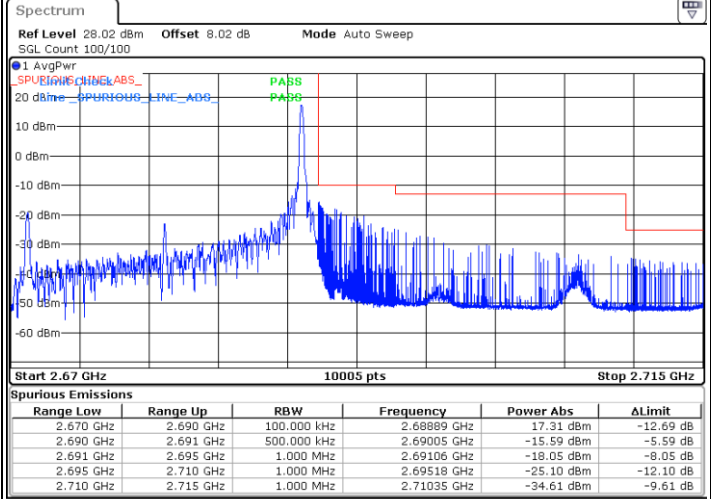
LTE Band 41 / 20MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



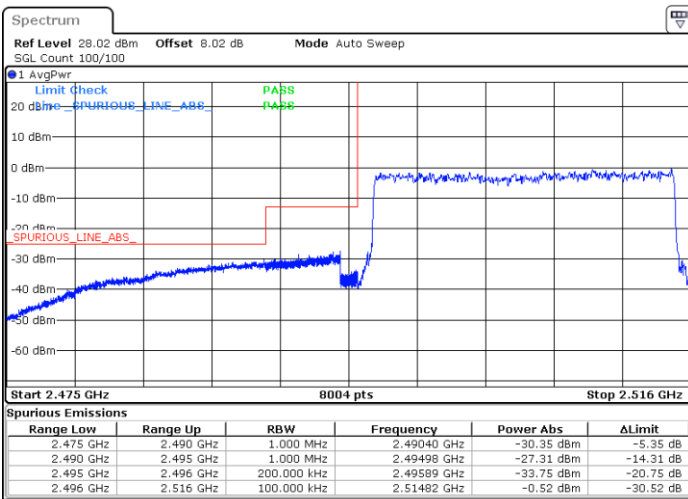
Date: 22 DEC 2021 09:46:29



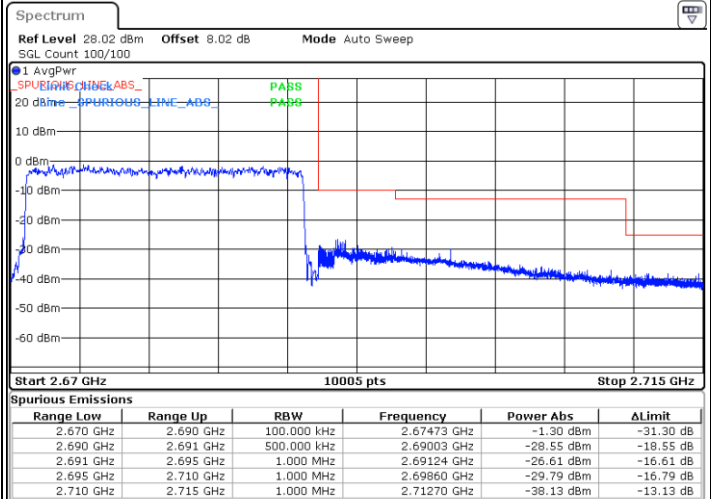
Date: 22 DEC 2021 09:54:44

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 22 DEC 2021 09:47:52

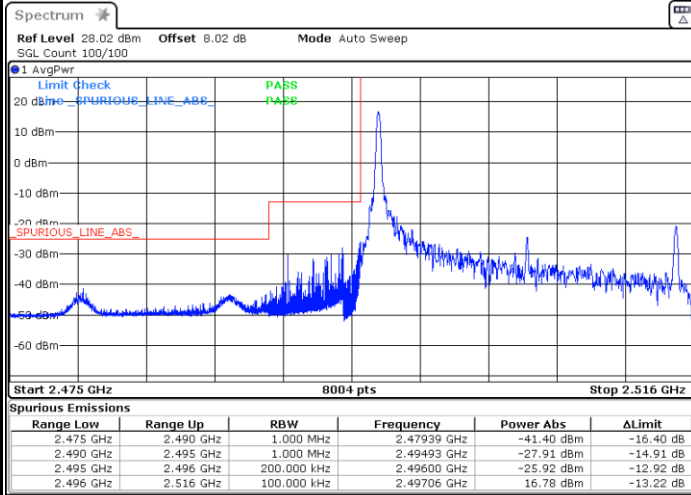


Date: 22 DEC 2021 09:56:07



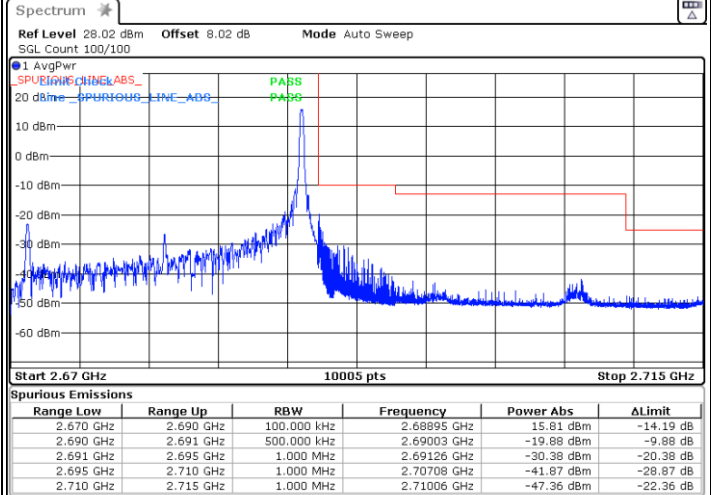
LTE Band 41 / 20MHz / 64QAM

Lowest Band Edge / 1RB



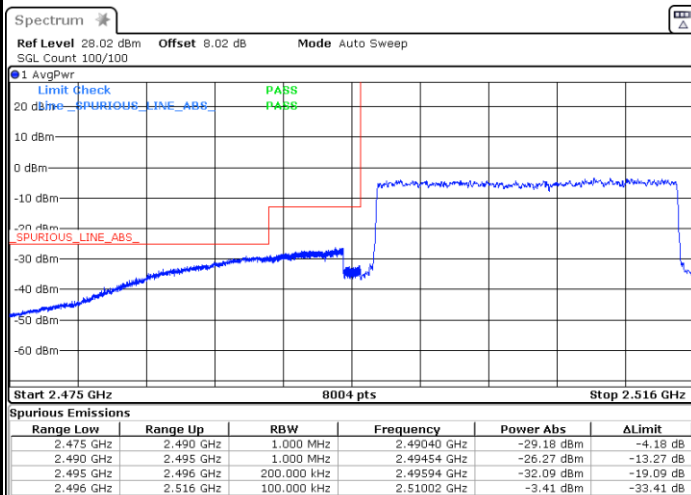
Date: 25.JAN.2022 04:22:44

Highest Band Edge / 1 RB



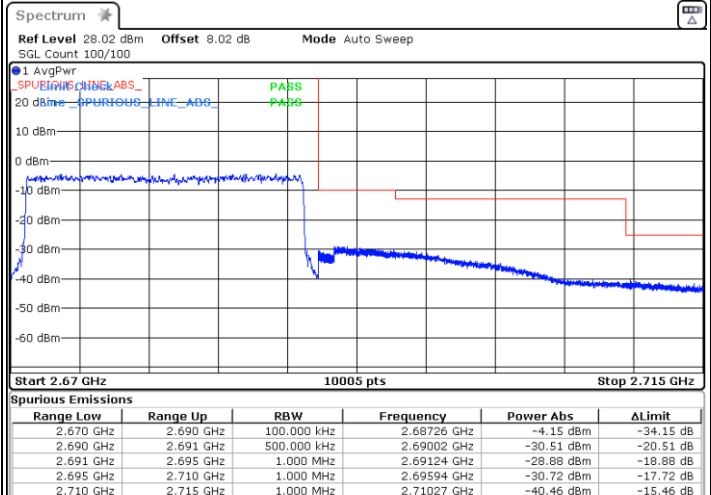
Date: 25.JAN.2022 04:16:23

Lowest Band Edge / Full RB



Date: 25.JAN.2022 04:21:35

Highest Band Edge / Full RB



Date: 25.JAN.2022 04:17:50

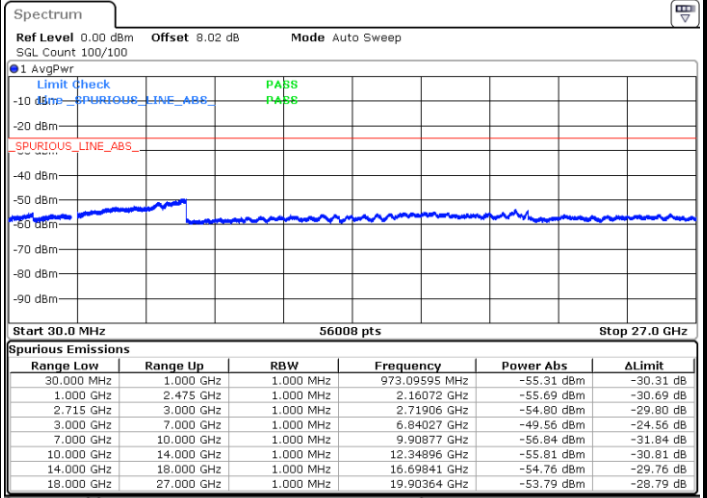
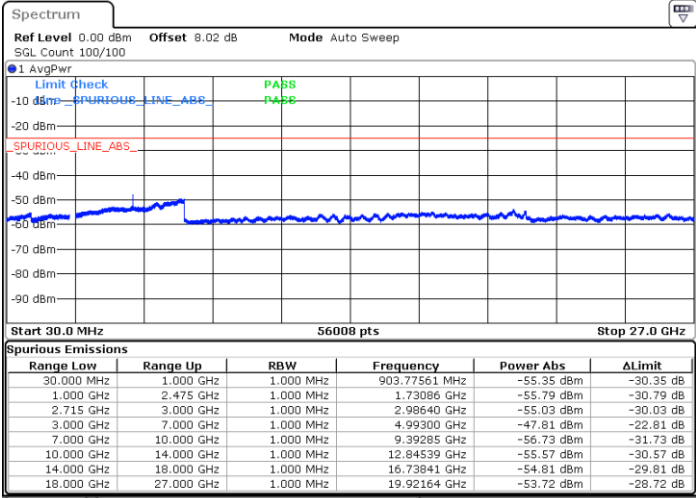


Conducted Spurious Emission

LTE Band 41 / 5MHz

Lowest Channel / QPSK

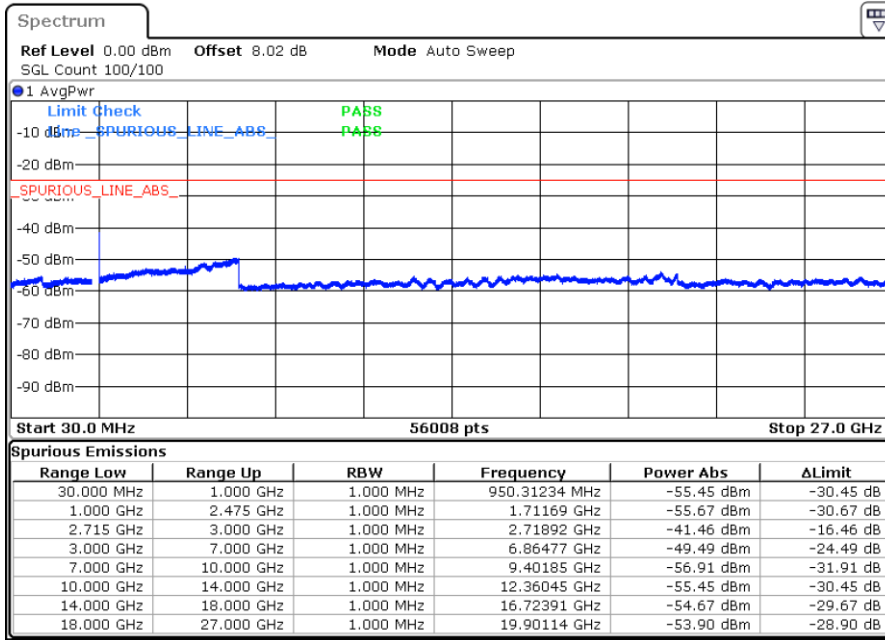
Middle Channel / QPSK



Date: 22.DEC.2021 08:58:53

Date: 22.DEC.2021 09:05:37

Highest Channel / QPSK



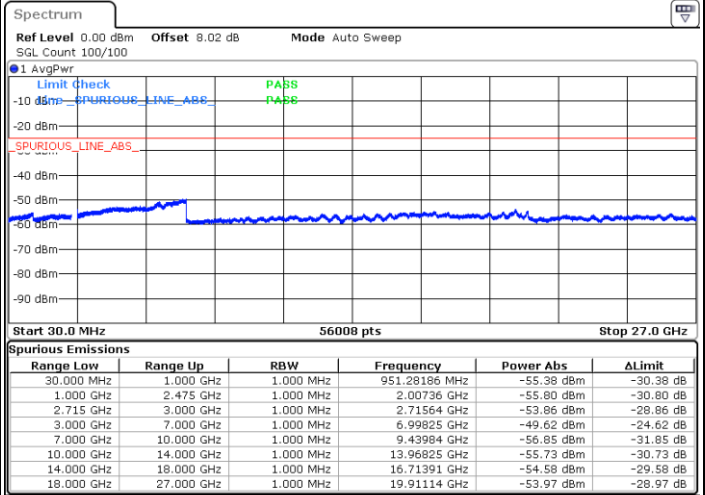
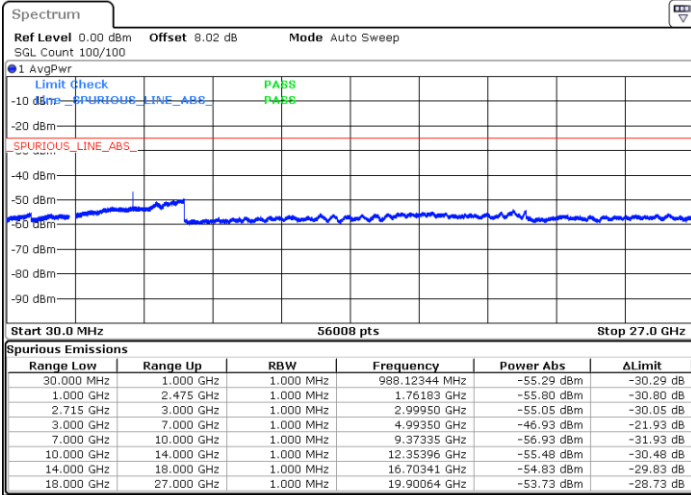
Date: 22.DEC.2021 09:06:59



LTE Band 41 / 10MHz

Lowest Channel / QPSK

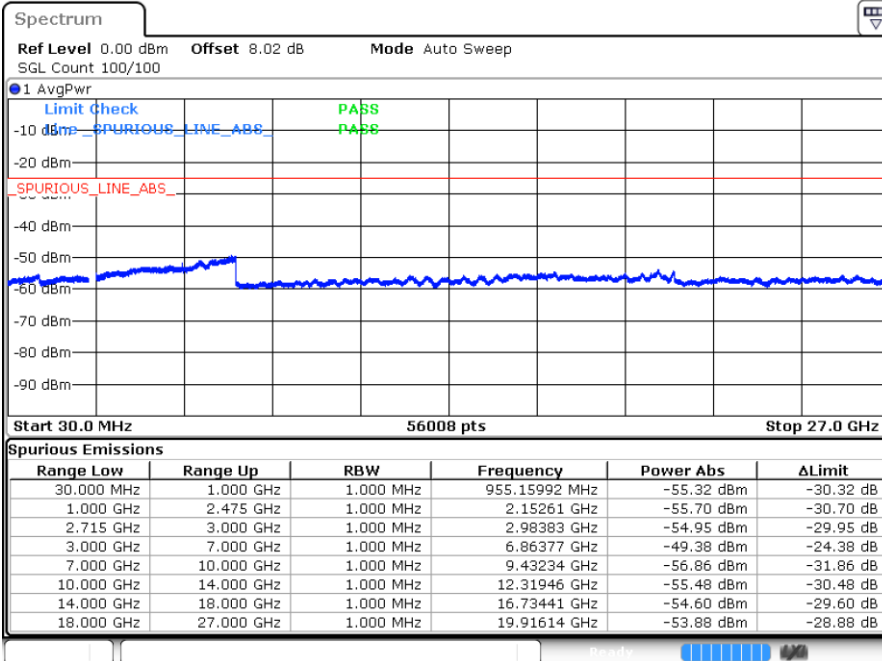
Middle Channel / QPSK



Date: 22.DEC.2021 09:13:52

Date: 22.DEC.2021 09:20:36

Highest Channel / QPSK



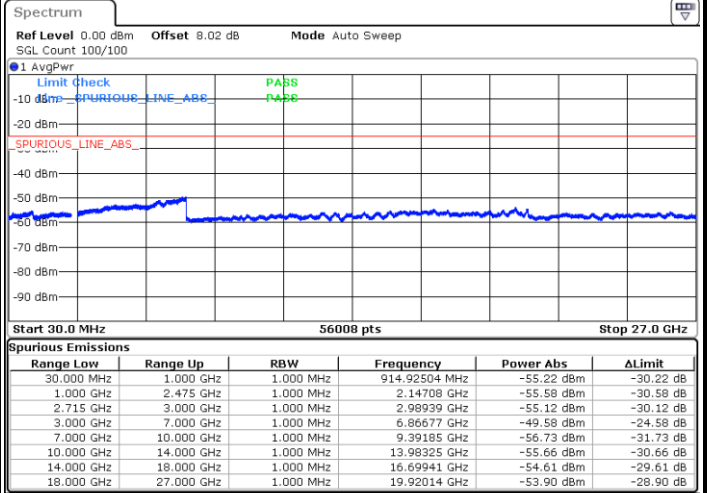
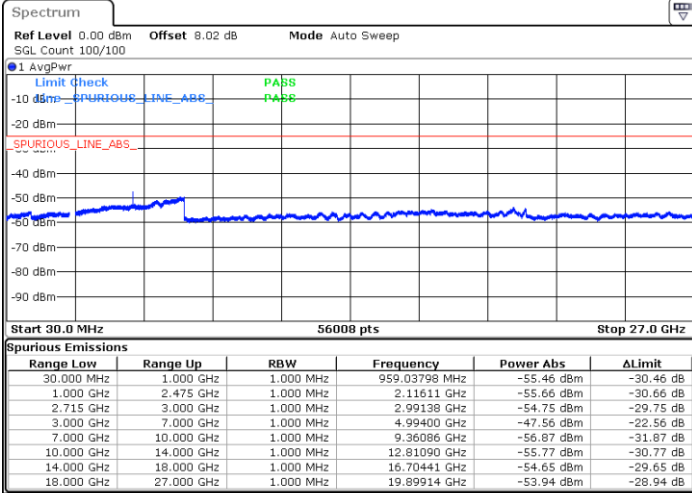
Date: 22.DEC.2021 09:21:58



LTE Band 41 / 15MHz

Lowest Channel / QPSK

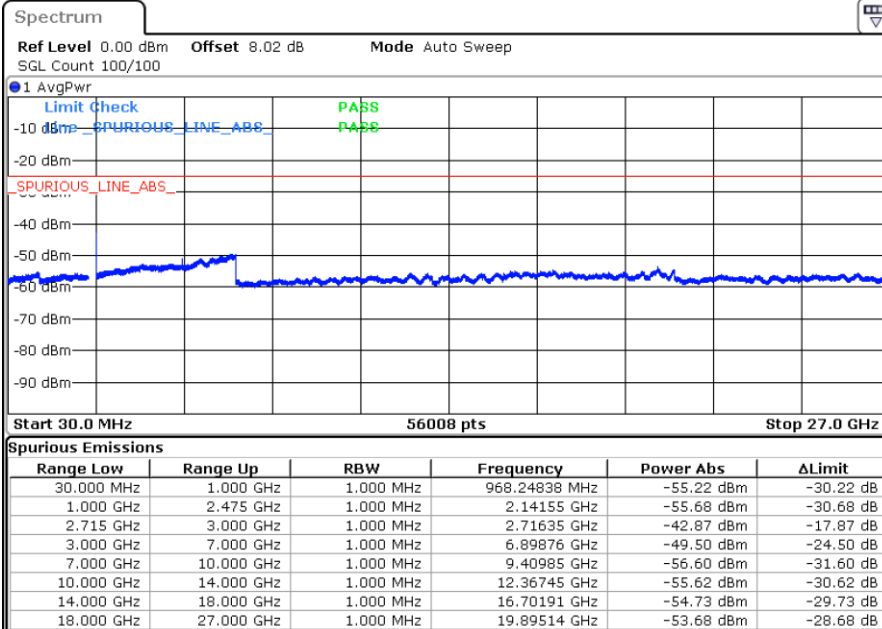
Middle Channel / QPSK



Date: 22.DEC.2021 09:28:53

Date: 22.DEC.2021 09:35:38

Highest Channel / QPSK



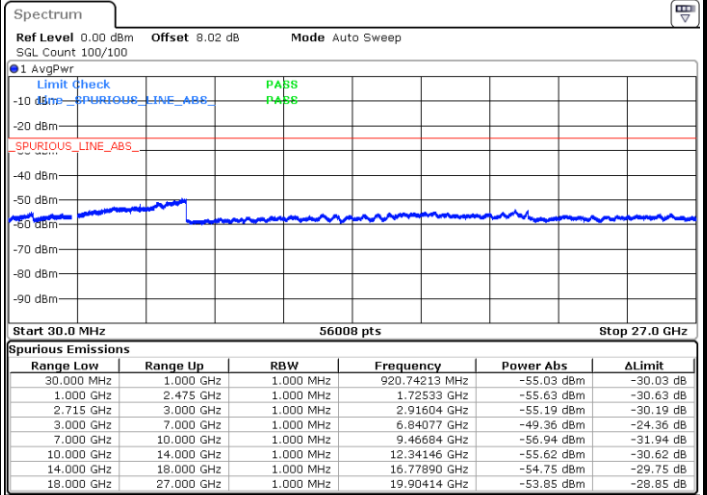
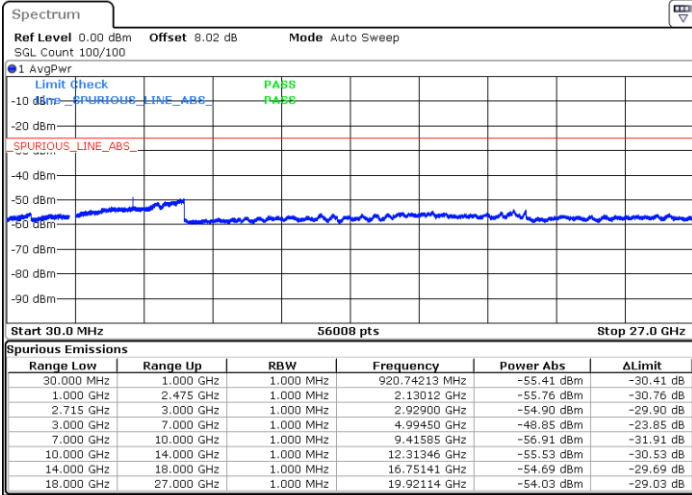
Date: 22.DEC.2021 09:37:00



LTE Band 41 / 20MHz

Lowest Channel / QPSK

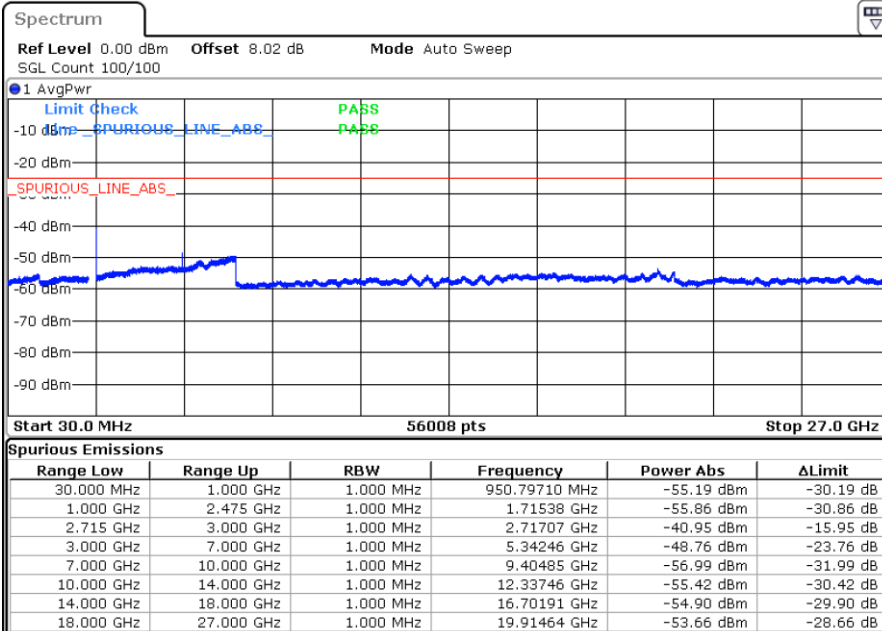
Middle Channel / QPSK



Date: 22.DEC.2021 09:43:53

Date: 22.DEC.2021 09:50:37

Highest Channel / QPSK



Date: 22.DEC.2021 09:51:59



Frequency Stability

Test Conditions		LTE Band 41 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0007	PASS
40	Normal Voltage	0.0022	
30	Normal Voltage	0.0009	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0028	
0	Normal Voltage	0.0005	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0004	
-30	Normal Voltage	0.0020	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0014	
20	Battery End Point	0.0033	

Note:

1. Normal Voltage =3.86 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.25 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Chris Chen	Temperature :	22~23°C
		Relative Humidity :	41~42%

LTE Band 2 / 20MHz / 16QAM								
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	3741	-55.62	-13	-42.62	-67.88	2.64	14.90	H
	5613	-53.91	-13	-40.91	-65.77	2.94	14.80	H
	7488	-51.94	-13	-38.94	-61.71	3.39	13.16	H
	3741	-55.29	-13	-42.29	-67.55	2.64	14.90	V
	5613	-54.53	-13	-41.53	-66.39	2.94	14.80	V
	7488	-52.25	-13	-39.25	-62.02	3.39	13.16	V

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

LTE Band 4 / 20MHz / 16QAM								
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	3450	-56.55	-13	-43.55	-67.29	2.604	13.34	H
	5175	-52.91	-13	-39.91	-63.42	3.011	13.52	H
	6900	-54.11	-13	-41.11	-64.31	3.271	13.47	H
	3450	-54.83	-13	-41.83	-65.57	2.604	13.34	V
	5175	-52.85	-13	-39.85	-63.36	3.011	13.52	V
	6900	-53.93	-13	-40.93	-64.13	3.271	13.47	V

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



LTE Band 5 / 10MHz / 16QAM								
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	1656	-59.34	-13	-46.34	-66.31	1.58	10.70	H
	2482	-33.66	-13	-20.66	-41.91	2.102	12.50	H
	3312	-59.84	-13	-46.84	-68.73	2.856	13.90	H
	1656	-61.61	-13	-48.61	-68.58	1.58	10.70	V
	2482	-33.28	-13	-20.28	-41.53	2.10	12.50	V
	3312	-59.48	-13	-46.48	-68.37	2.86	13.90	V

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

LTE Band 7 / 20MHz / 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	5050	-42.58	-25	-17.58	-52.79	3.03	13.24	H
	7584	-61.69	-25	-36.69	-71.14	3.56	13.01	H
	10104	-61.22	-25	-36.22	-70.74	3.92	13.44	H
	5050	-34.84	-25	-9.84	-45.05	3.03	13.24	V
	7584	-62.83	-25	-37.83	-72.28	3.56	13.01	V
	10104	-61.76	-25	-36.76	-71.28	3.92	13.44	V

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

LTE Band 41 / 20MHz / 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	5168	-33.20	-25	-8.20	-43.41	3.03	13.24	H
	7752	-54.73	-25	-29.73	-64.18	3.56	13.01	H
	10340	-57.04	-25	-32.04	-66.56	3.92	13.44	H
	5168	-28.55	-25	-3.55	-38.76	3.03	13.24	V
	7752	-59.66	-25	-34.66	-69.11	3.56	13.01	V
	10340	-59.21	-25	-34.21	-68.73	3.92	13.44	V

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



Co-location Mode

LTE B41 BW=20MHz Link + BLE CH39 Tx

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
WWAN + BLE		4960	44.37	-29.63	74	59.14	34.81	10.43	60.01	300	0	P	H
		7440	44.47	-29.53	74	55.54	36.59	12.88	60.54	300	0	P	H
		4960	42.98	-31.02	74	57.75	34.81	10.43	60.01	100	0	P	V
		7440	44.84	-29.16	74	55.91	36.59	12.88	60.54	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

LTE B41 BW=20MHz Link + WLAN 2.4GHz 11b CH01 Tx

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
WWAN + WLAN		4830	48.61	-25.39	74	69.54	33.58	10.24	64.75	300	0	P	H
		7230	53.78	-31.68	85.46	69.69	35.39	12.67	63.97	300	0	P	H
		4830	43.75	-30.25	74	64.68	33.58	10.24	64.75	100	0	P	V
		7230	55.92	-25.52	81.44	71.83	35.39	12.67	63.97	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												