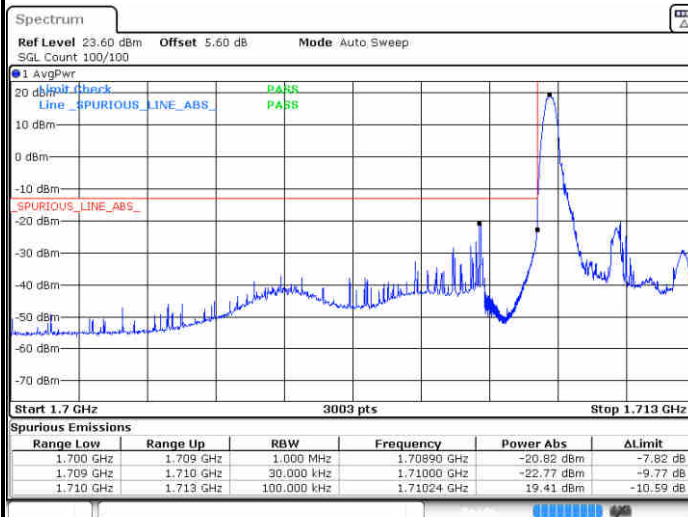


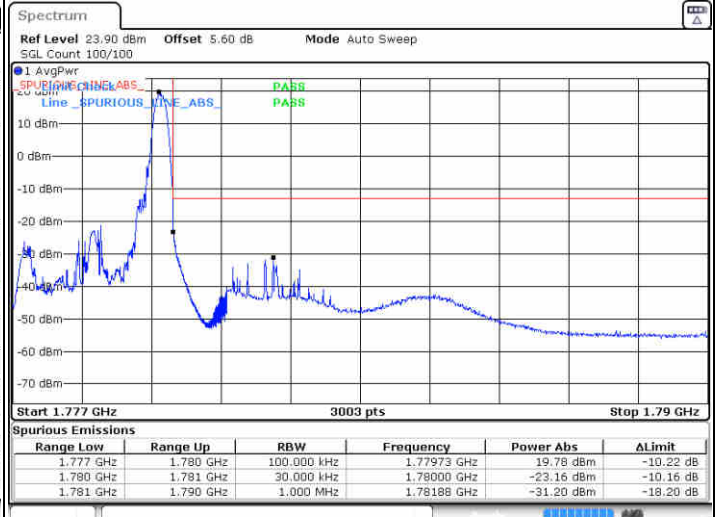


LTE Band 66 / 3MHz / 64QAM

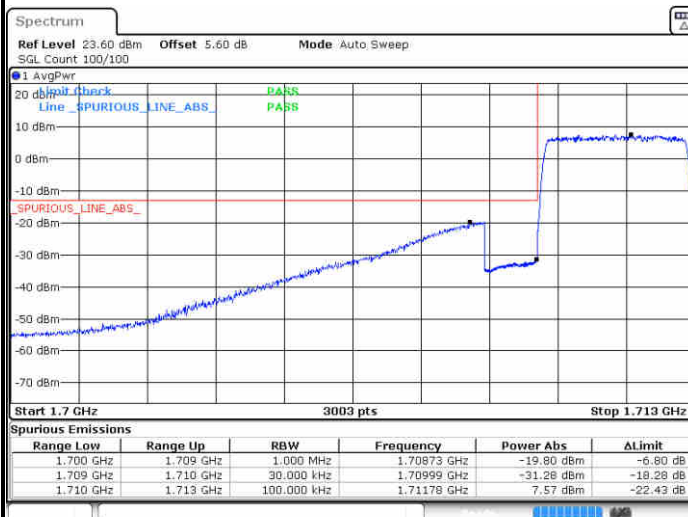
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



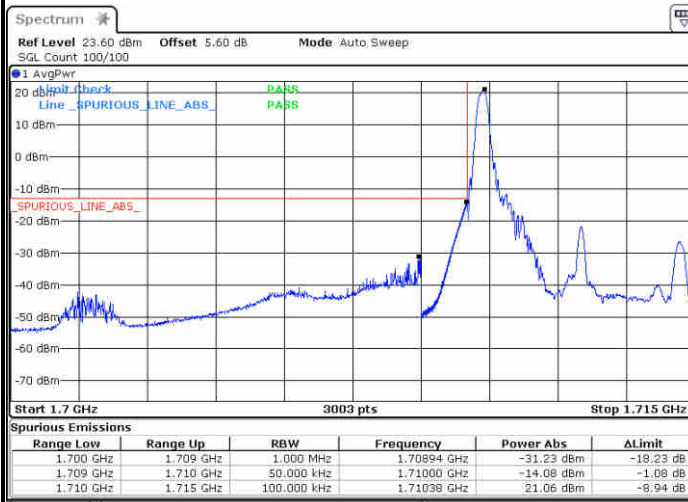
Highest Band Edge / Full RB



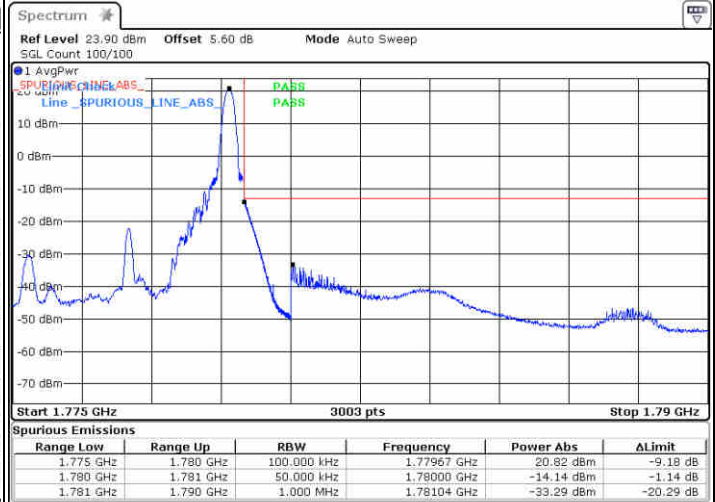


LTE Band 66 / 5MHz / QPSK

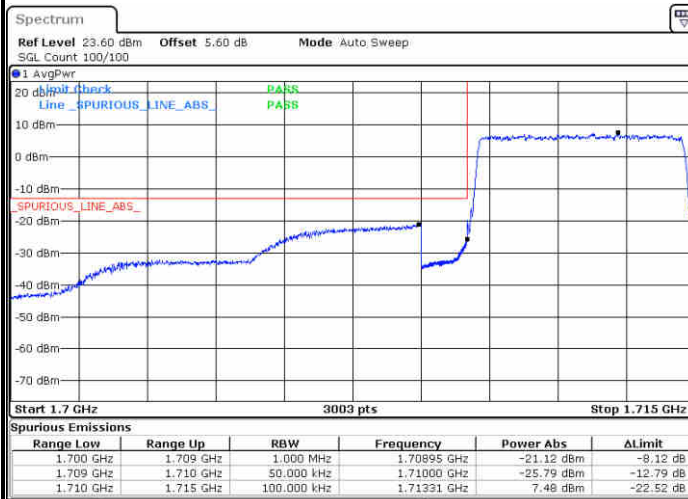
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



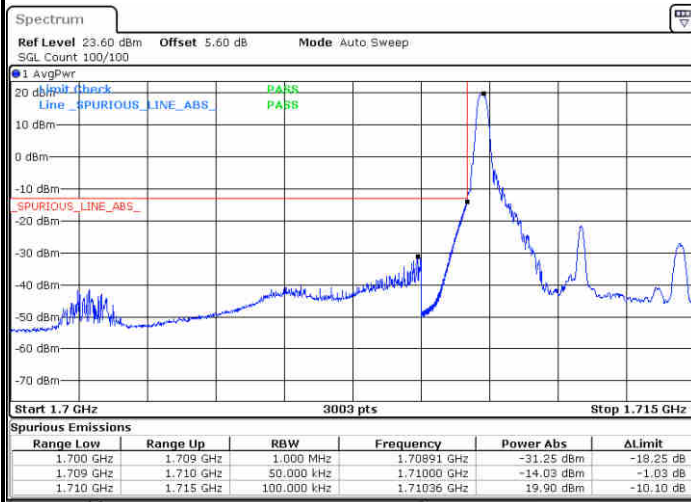
Highest Band Edge / Full RB



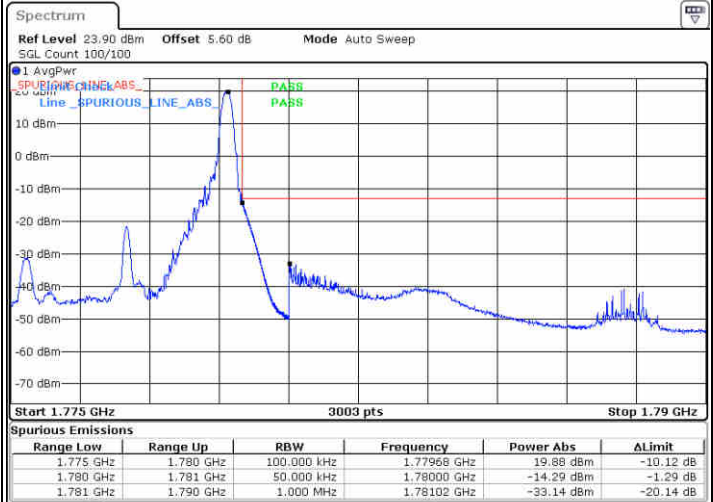


LTE Band 66 / 5MHz / 16QAM

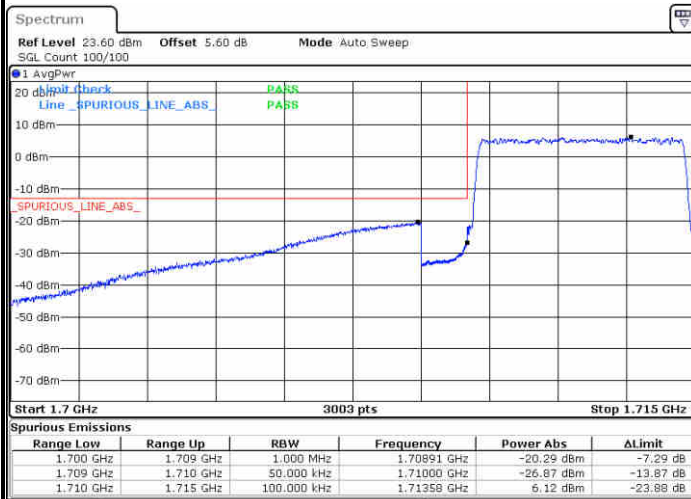
Lowest Band Edge / 1RB



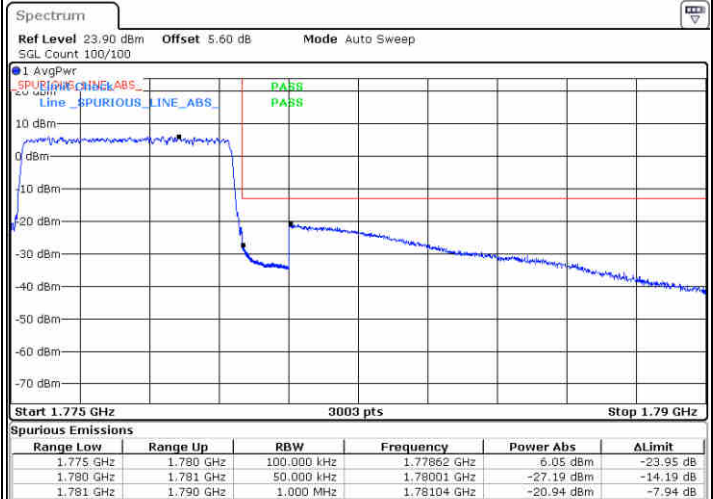
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



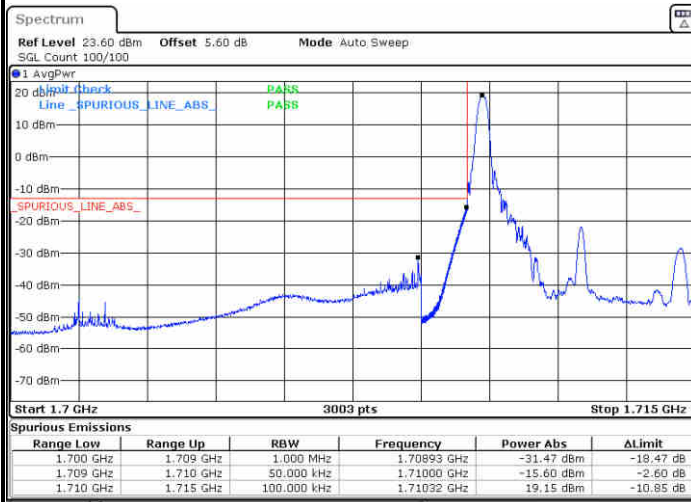
Highest Band Edge / Full RB



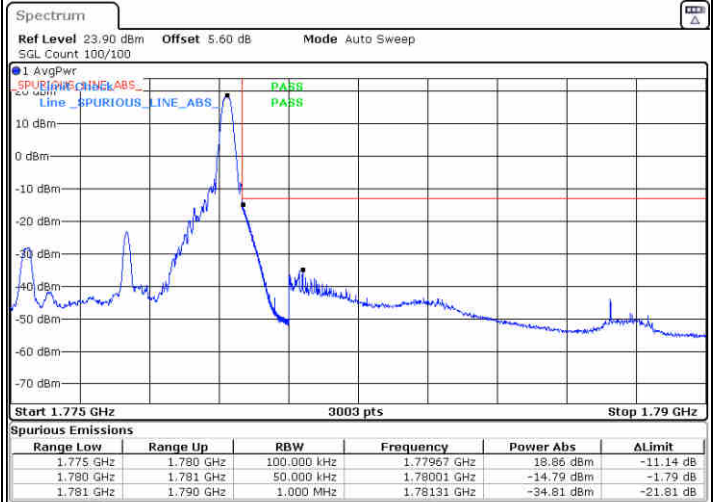


LTE Band 66 / 5MHz / 64QAM

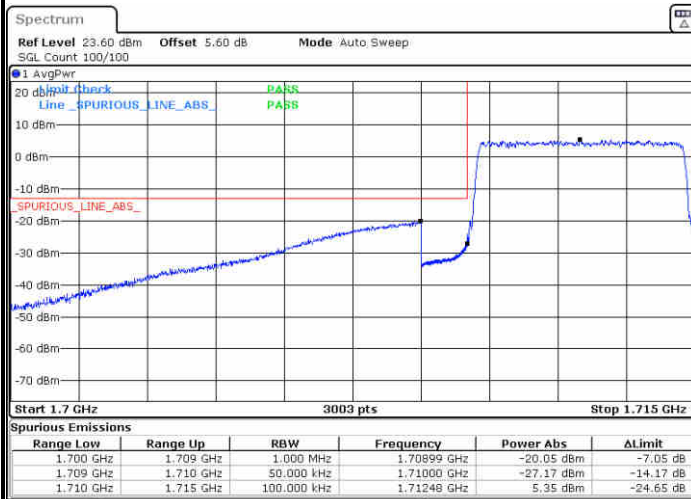
Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



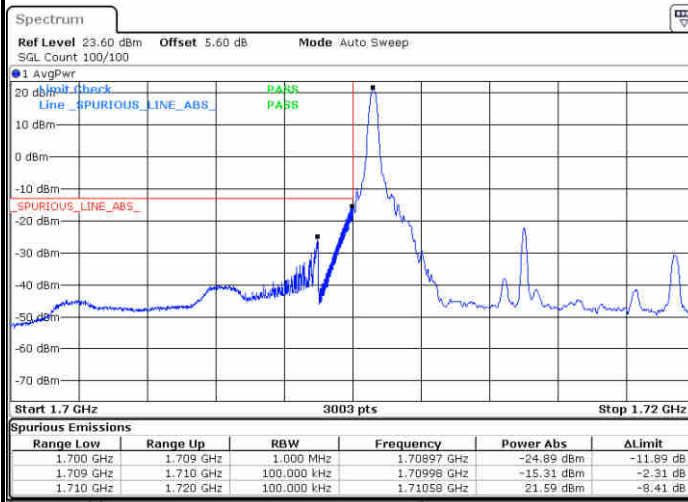
Highest Band Edge / Full RB



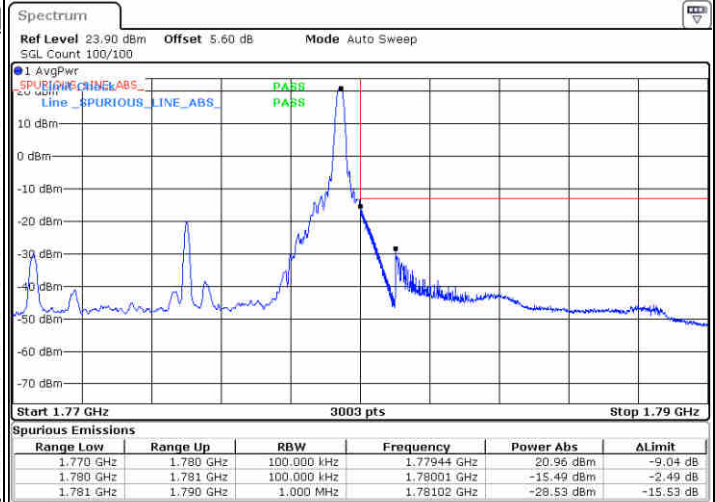


LTE Band 66 / 10MHz / QPSK

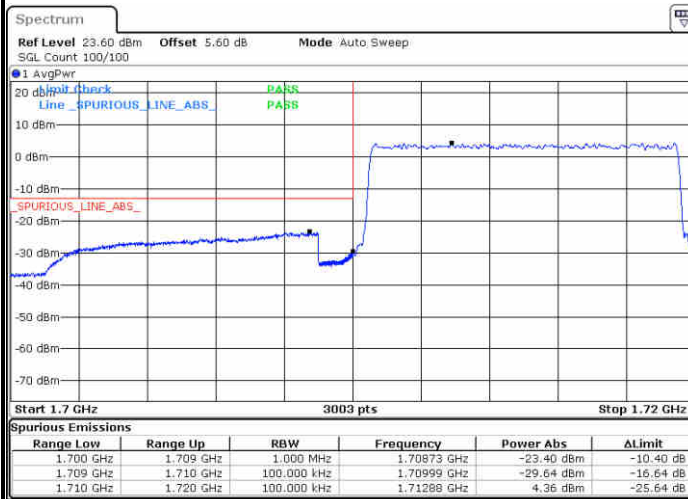
Lowest Band Edge / 1 RB



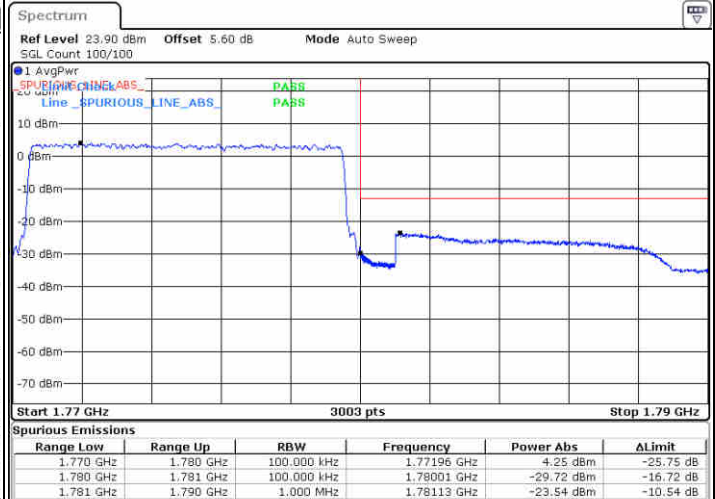
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



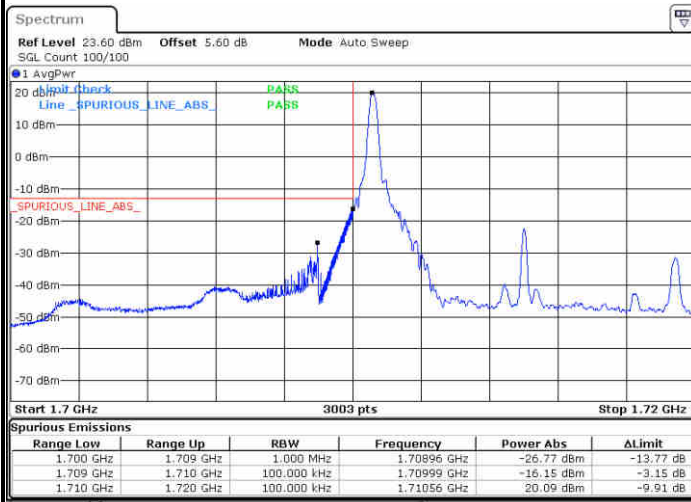
Highest Band Edge / Full RB



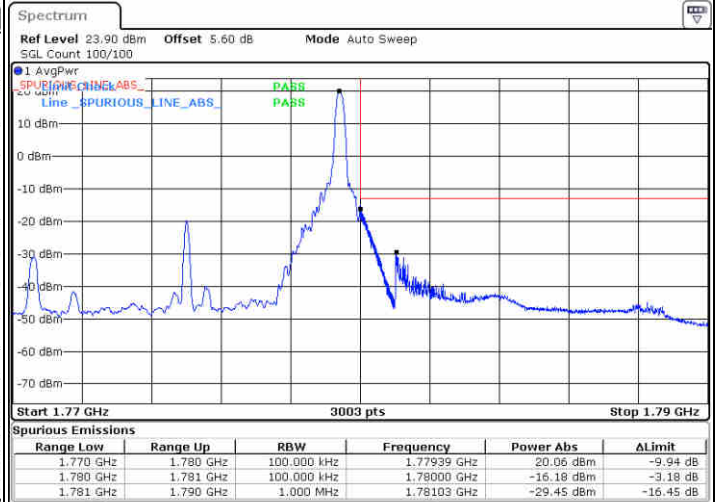


LTE Band 66 / 10MHz / 16QAM

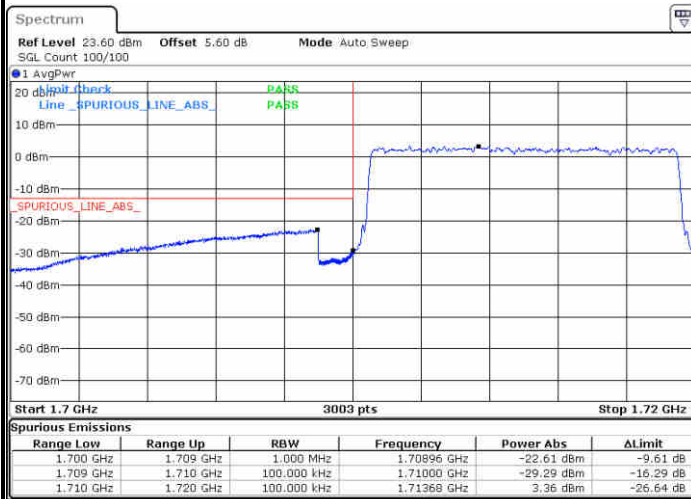
Lowest Band Edge / 1 RB



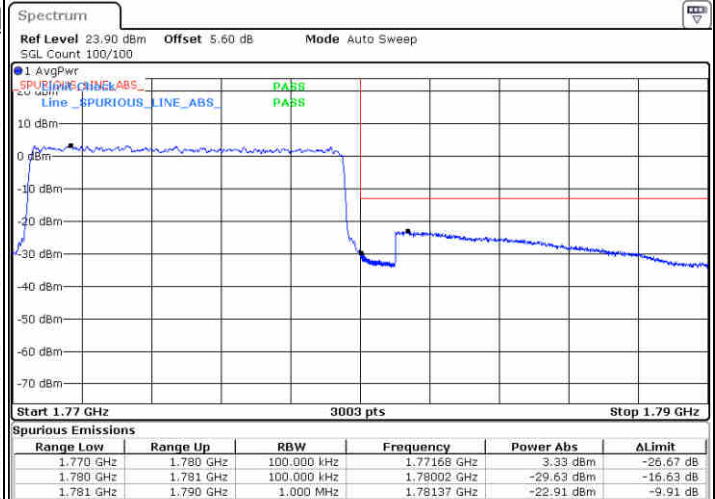
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



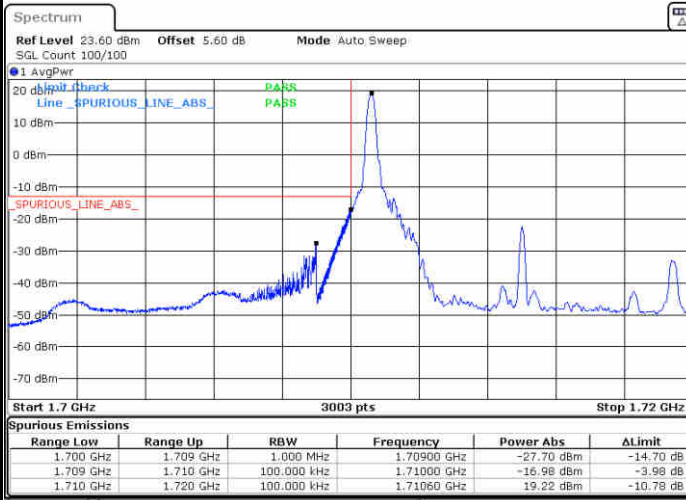
Highest Band Edge / Full RB



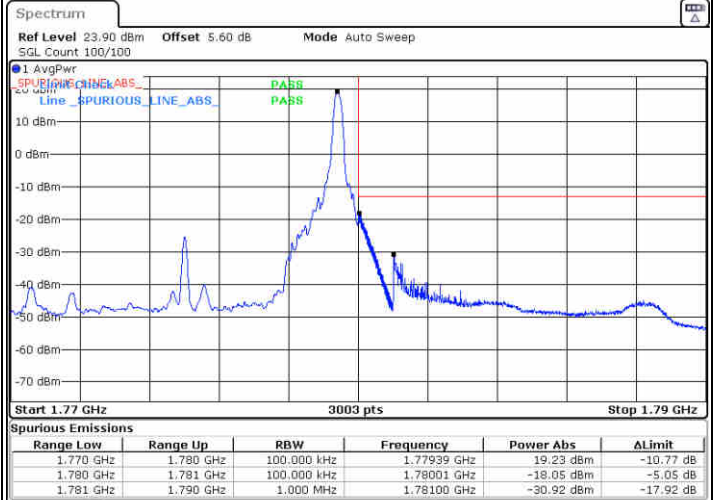


LTE Band 66 / 10MHz / 64QAM

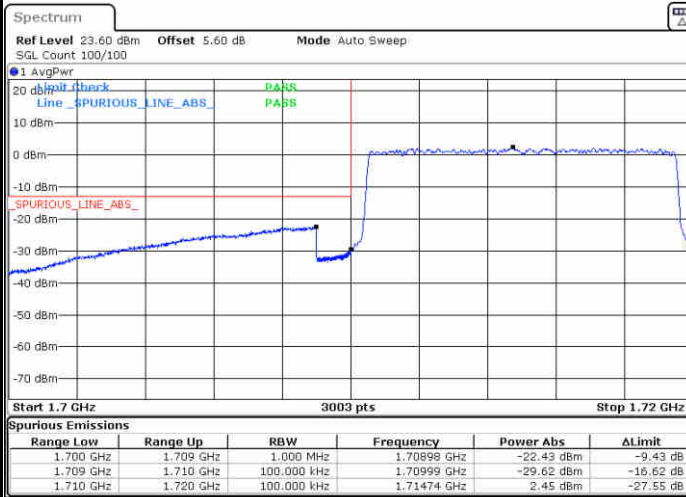
Lowest Band Edge / 1 RB



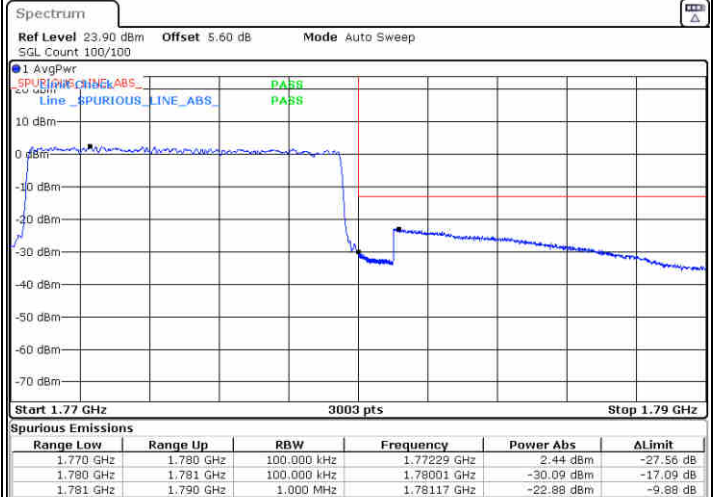
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



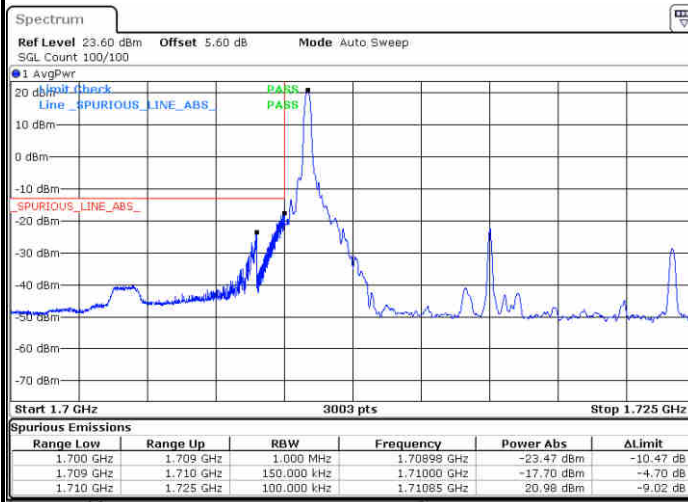
Highest Band Edge / Full RB



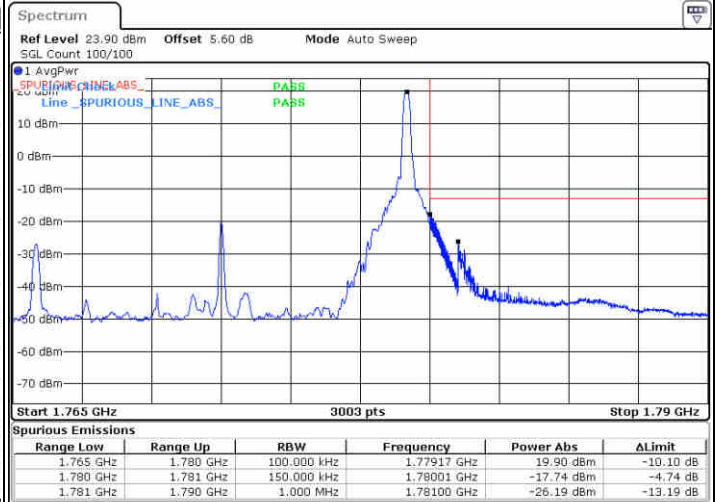


LTE Band 66 / 15MHz / QPSK

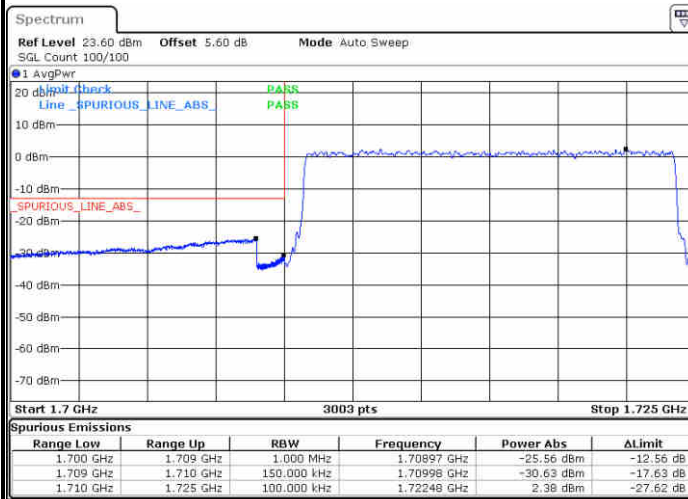
Lowest Band Edge / 1 RB



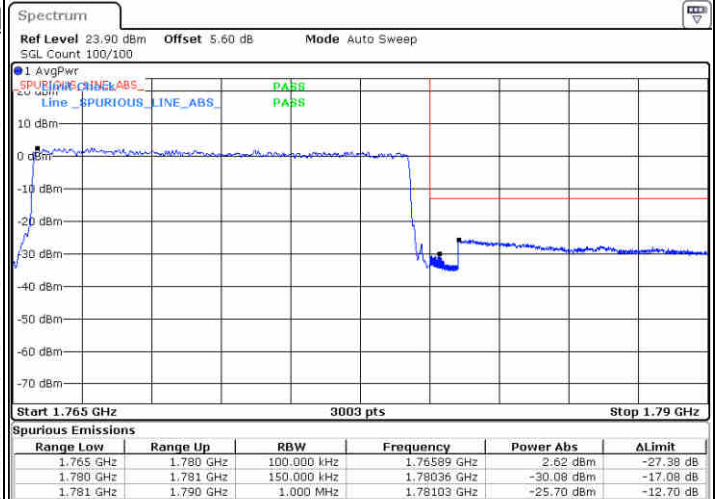
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



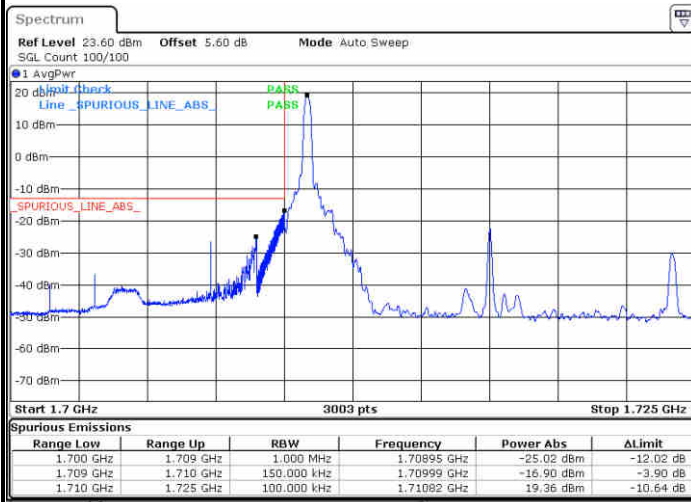
Highest Band Edge / Full RB



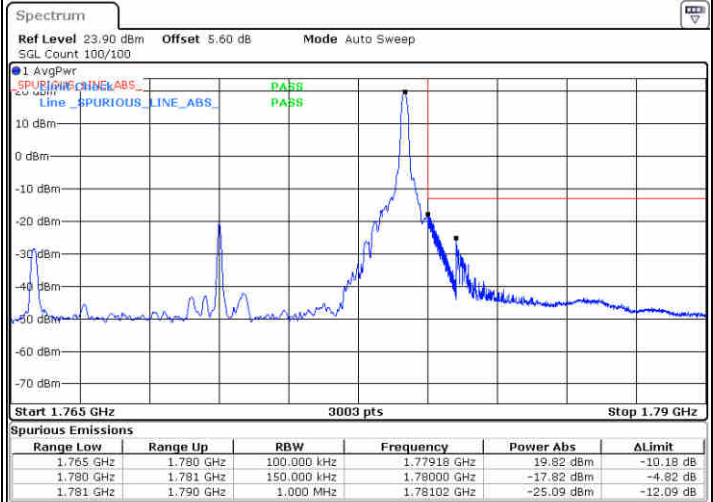


LTE Band 66 / 15MHz / 16QAM

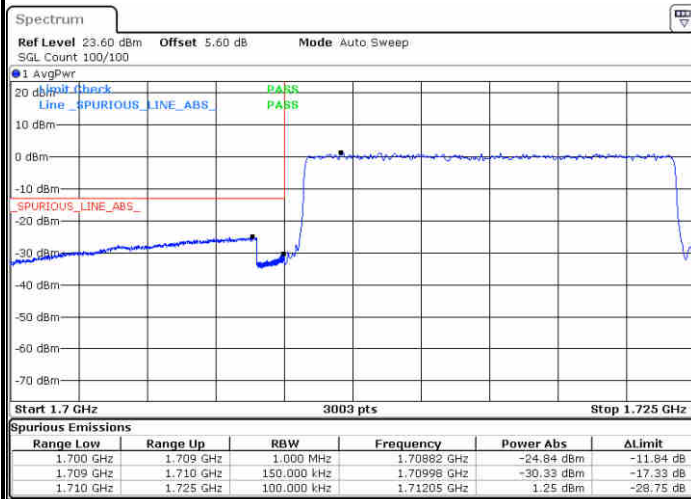
Lowest Band Edge / 1 RB



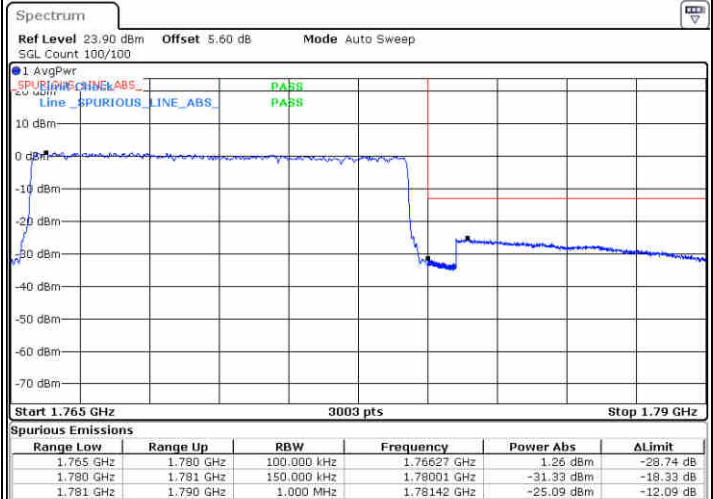
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



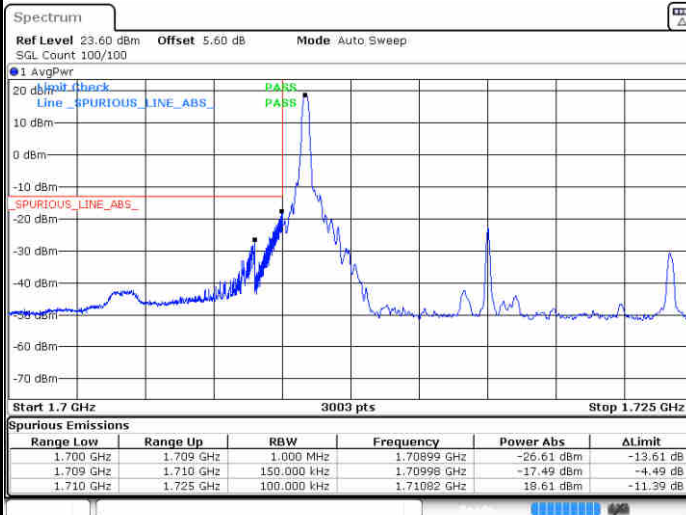
Highest Band Edge / Full RB



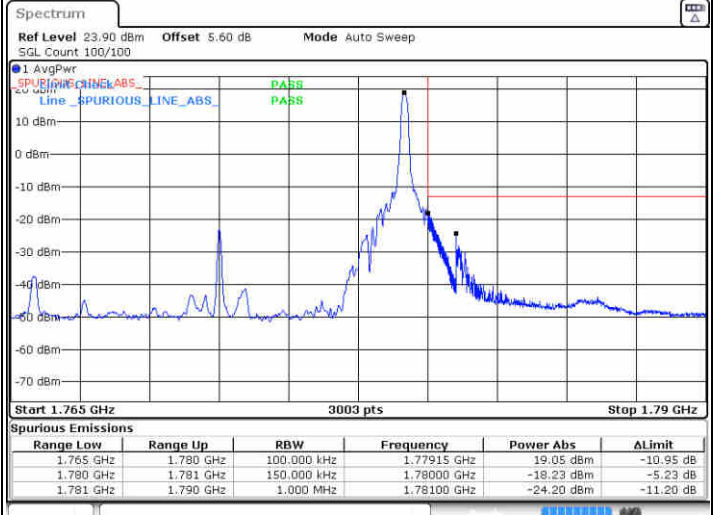


LTE Band 66 / 15MHz / 64QAM

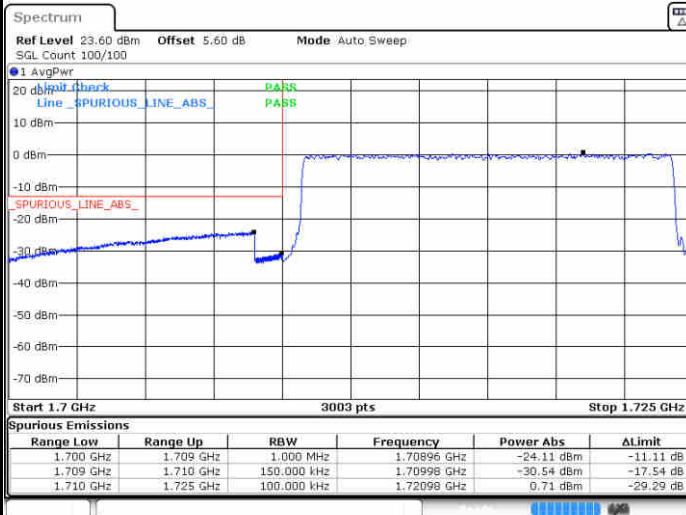
Lowest Band Edge / 1 RB



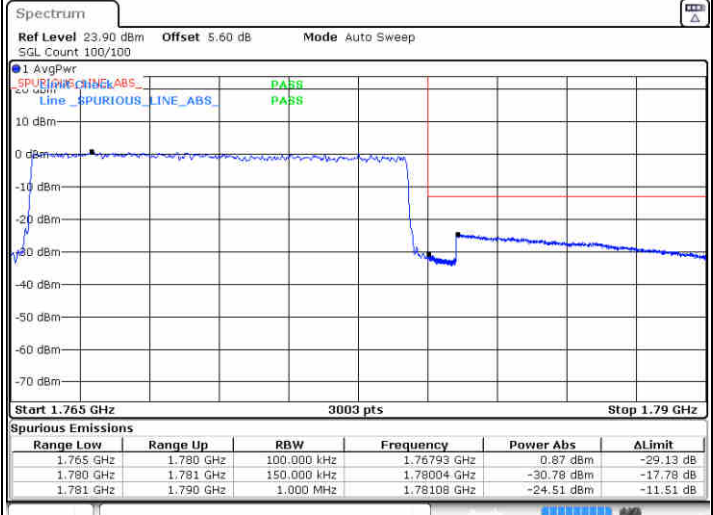
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



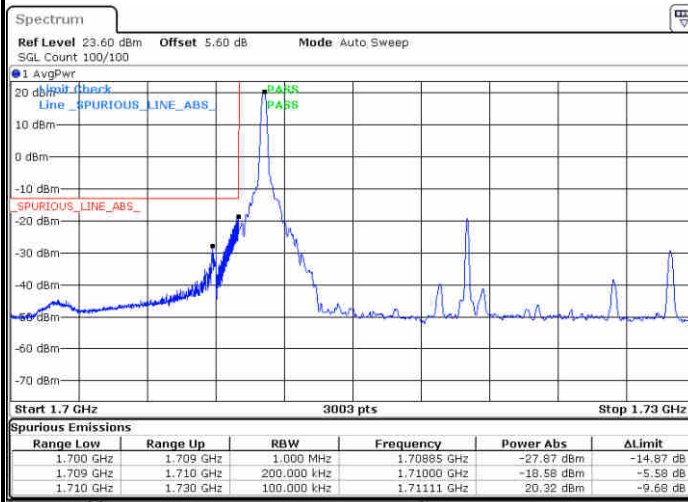
Highest Band Edge / Full RB



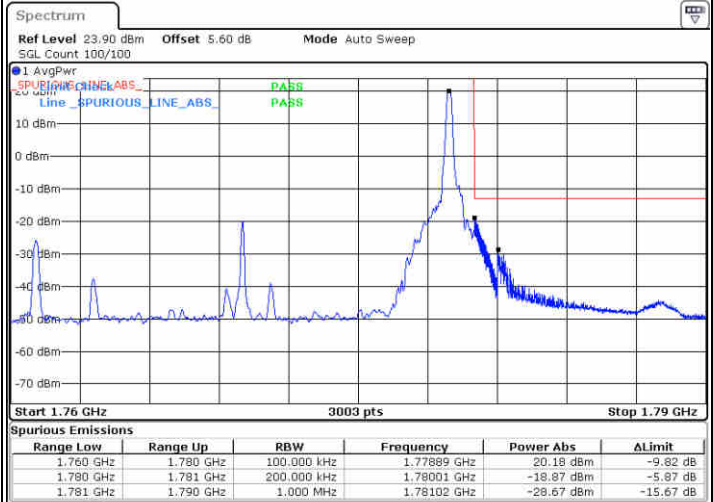


LTE Band 66 / 20MHz / QPSK

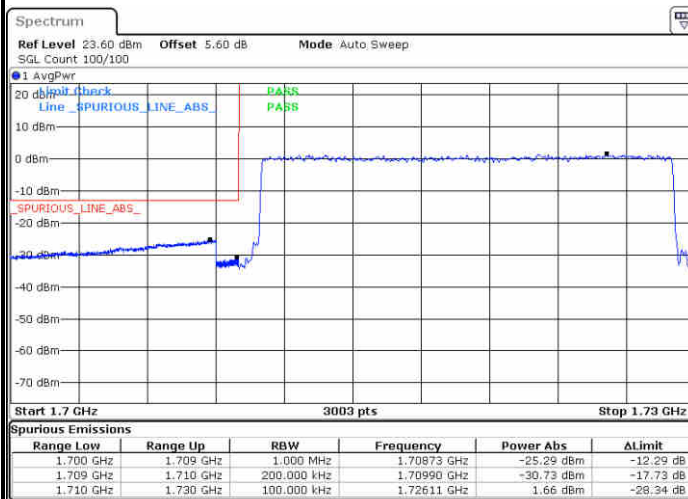
Lowest Band Edge / 1 RB



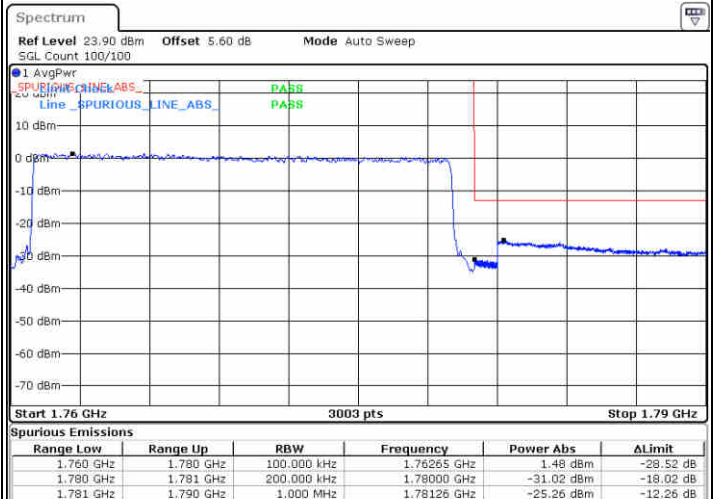
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



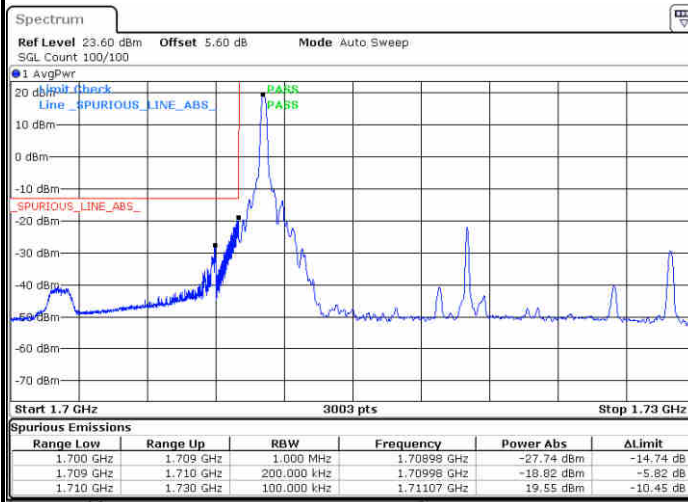
Highest Band Edge / Full RB



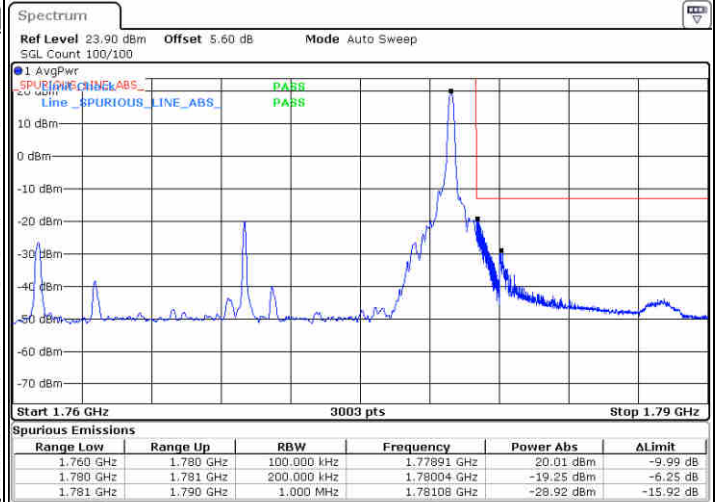


LTE Band 66 / 20MHz / 16QAM

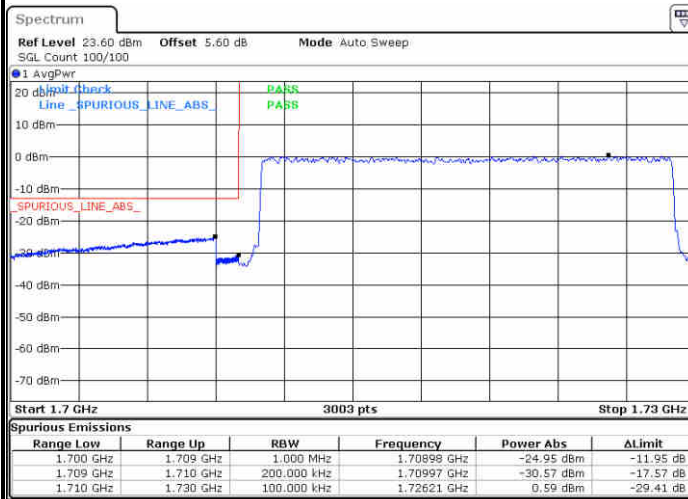
Lowest Band Edge / 1 RB



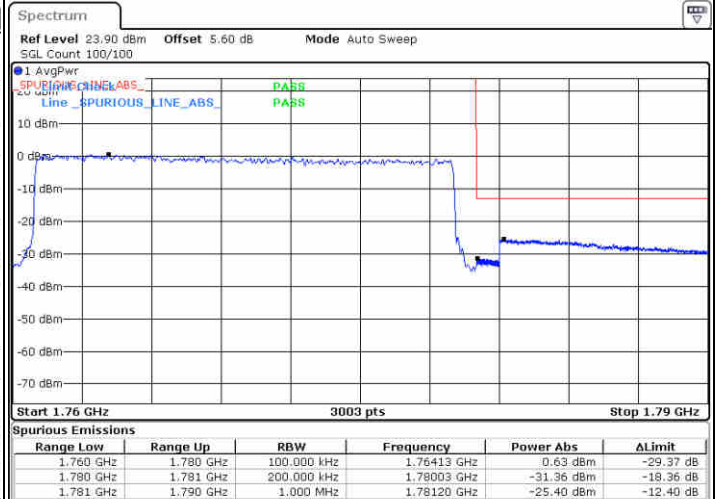
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



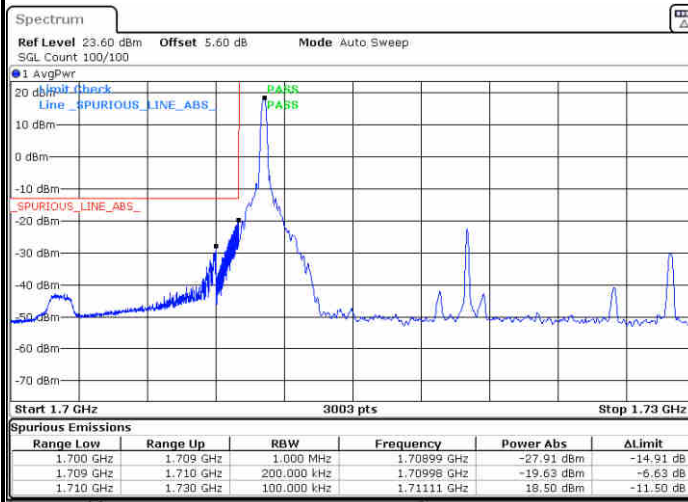
Highest Band Edge / Full RB



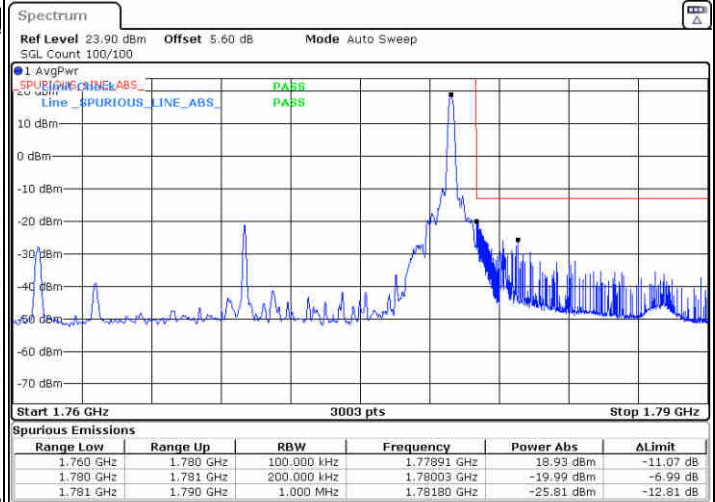


LTE Band 66 / 20MHz / 64QAM

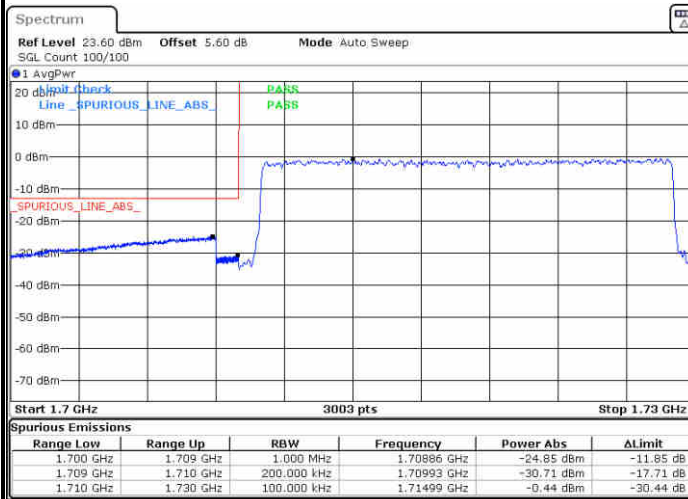
Lowest Band Edge / 1 RB



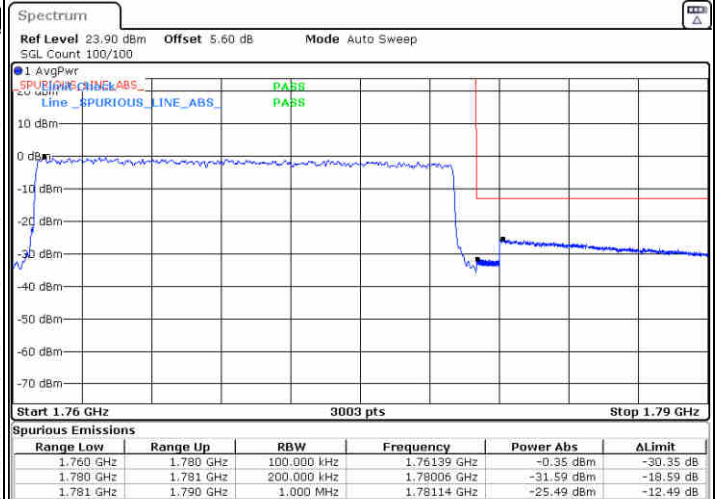
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

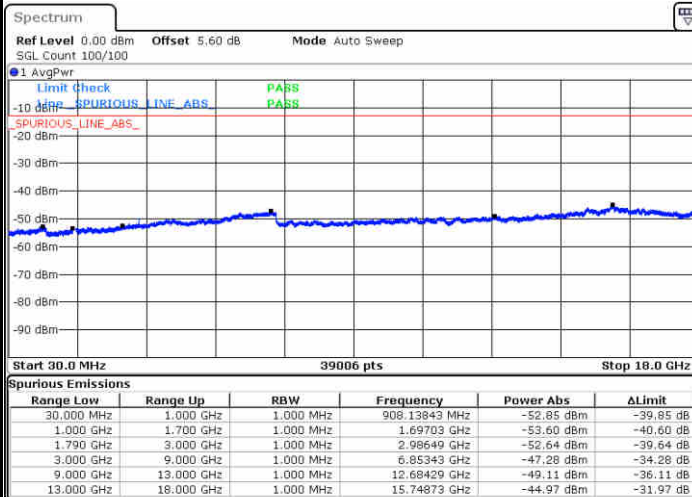




Conducted Spurious Emission

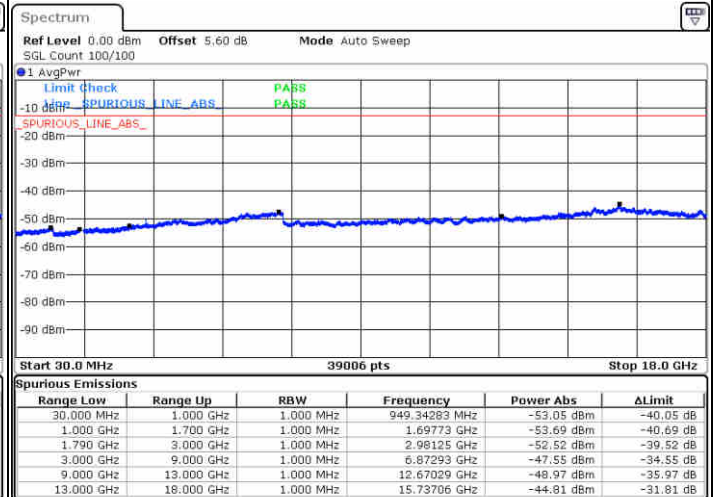
LTE Band 66 / 1.4MHz

Lowest Channel / QPSK



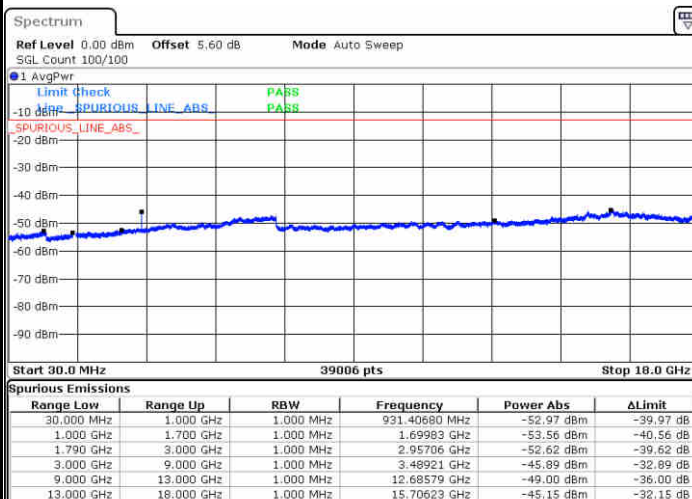
Date: 5.FEB.2020 03:46:47

Lowest Channel / 16QAM



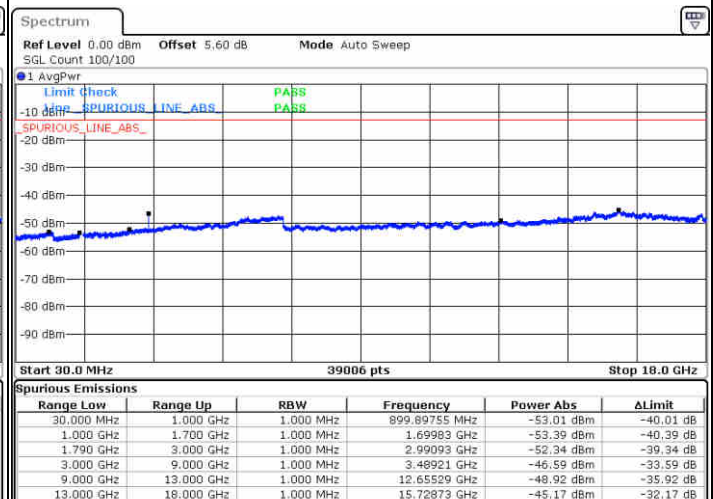
Date: 5.FEB.2020 03:44:57

Middle Channel / QPSK



Date: 5.FEB.2020 03:58:40

Middle Channel / 16QAM

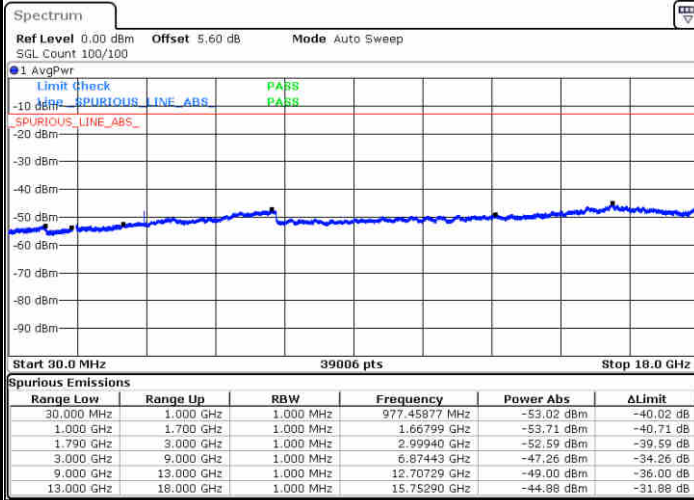


Date: 5.FEB.2020 03:58:18



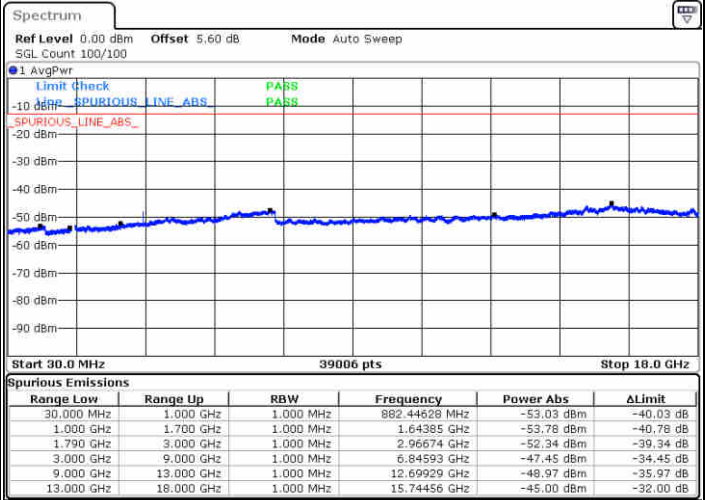
LTE Band 66 / 1.4MHz

Highest Channel / QPSK



Date: 5 FEB 2020 04:04:09

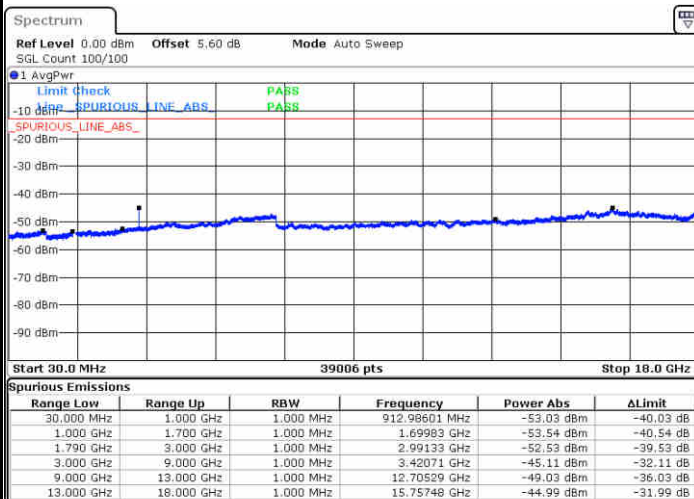
Highest Channel / 16QAM



Date: 5 FEB 2020 04:03:31

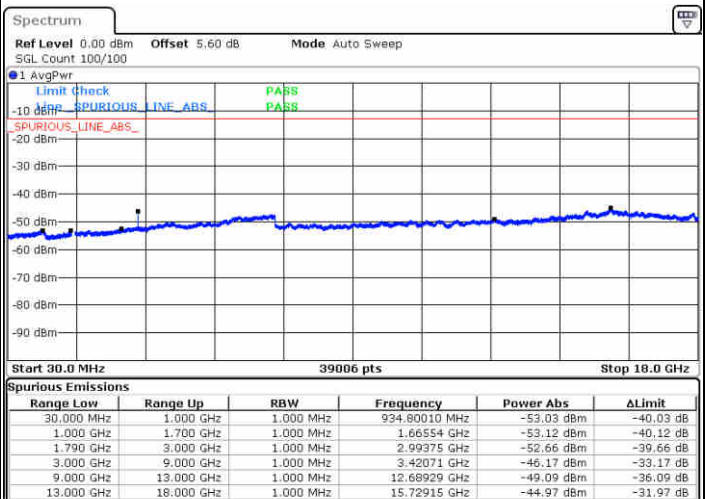
LTE Band 66 / 3MHz

Lowest Channel / QPSK



Date: 5 FEB 2020 04:52:47

Lowest Channel / 16QAM

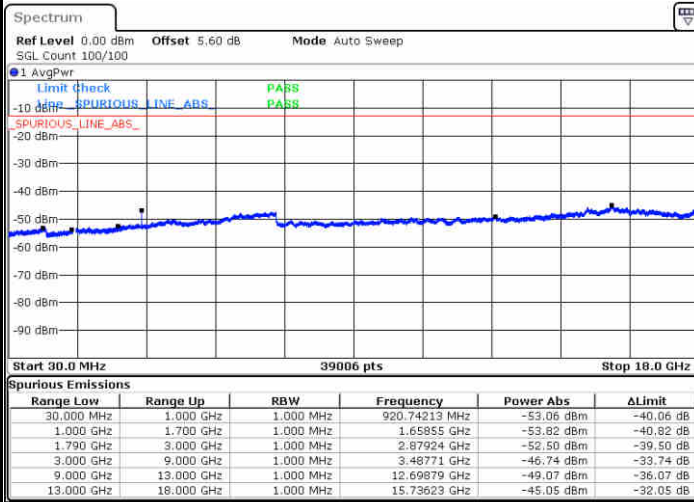


Date: 5 FEB 2020 04:55:49



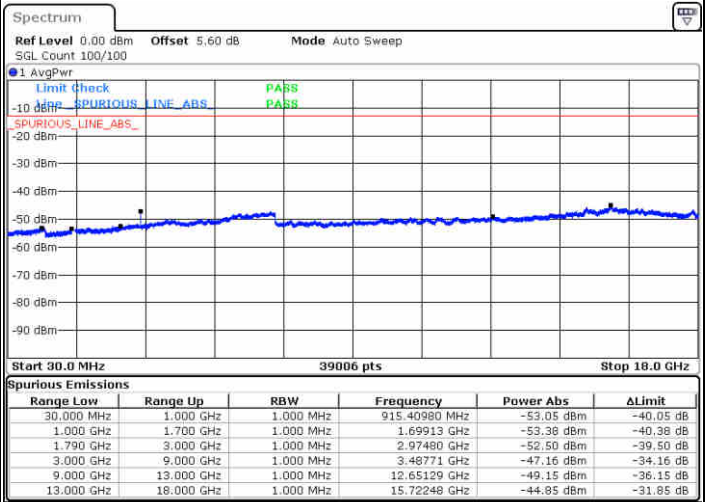
LTE Band 66 / 3MHz

Middle Channel / QPSK



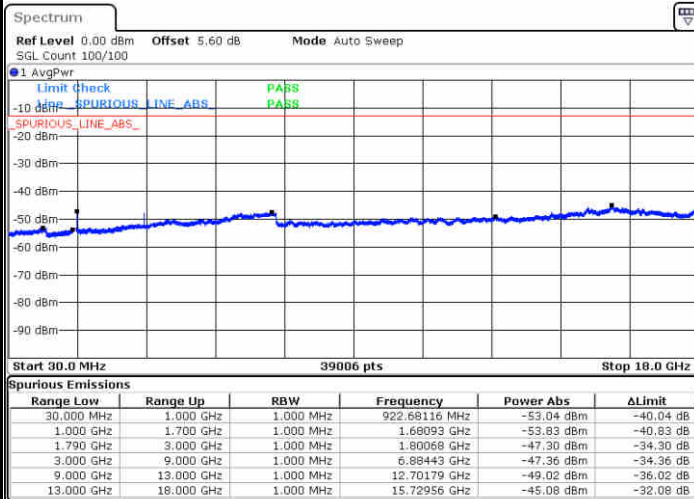
Date: 5.FEB.2020 04:57:38

Middle Channel / 16QAM



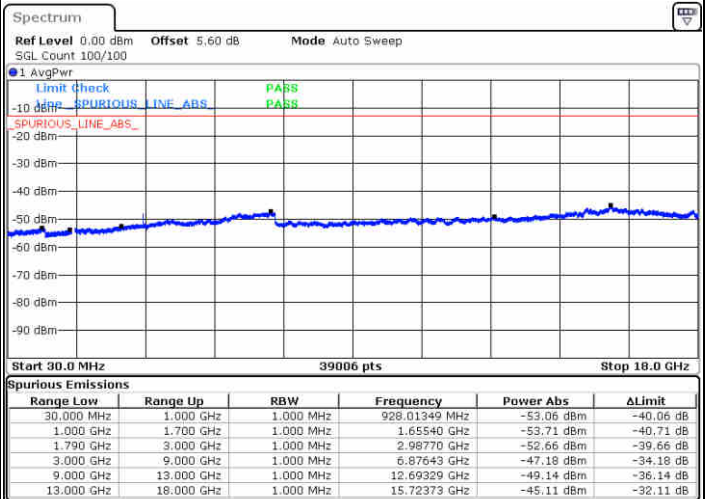
Date: 5.FEB.2020 04:56:59

Highest Channel / QPSK



Date: 5.FEB.2020 05:02:39

Highest Channel / 16QAM

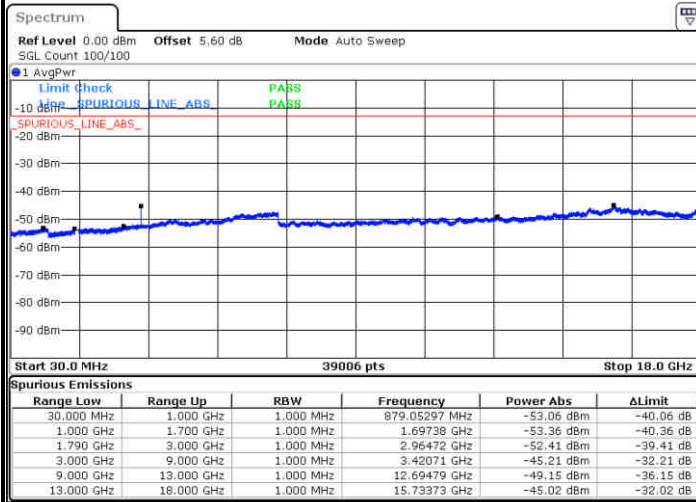


Date: 5.FEB.2020 05:03:22



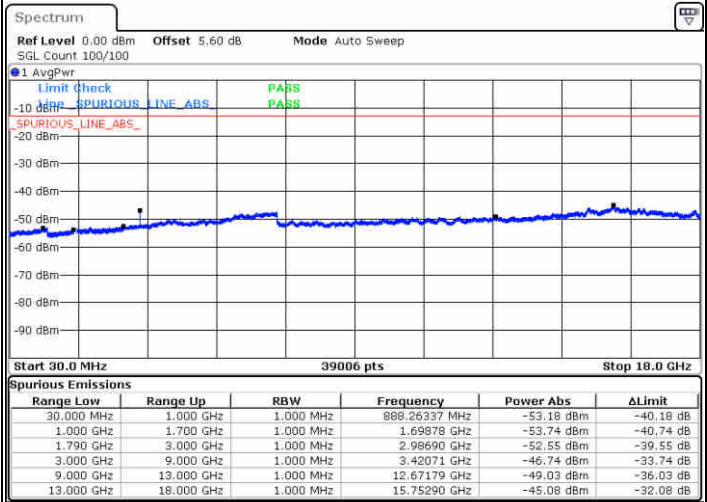
LTE Band 66 / 5MHz

Lowest Channel / QPSK



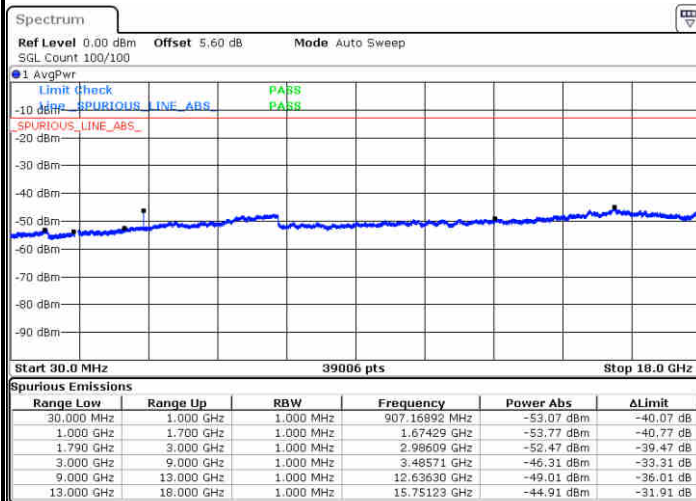
Date: 5.FEB.2020 05:10:06

Lowest Channel / 16QAM



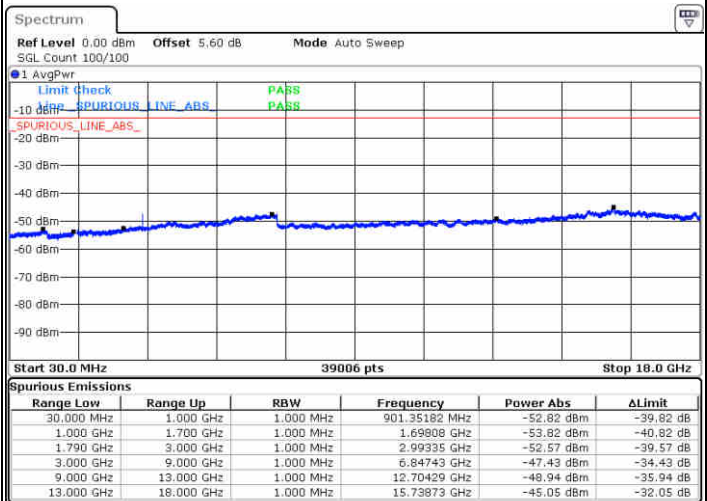
Date: 5.FEB.2020 05:08:21

Middle Channel / QPSK



Date: 5.FEB.2020 05:19:27

Middle Channel / 16QAM

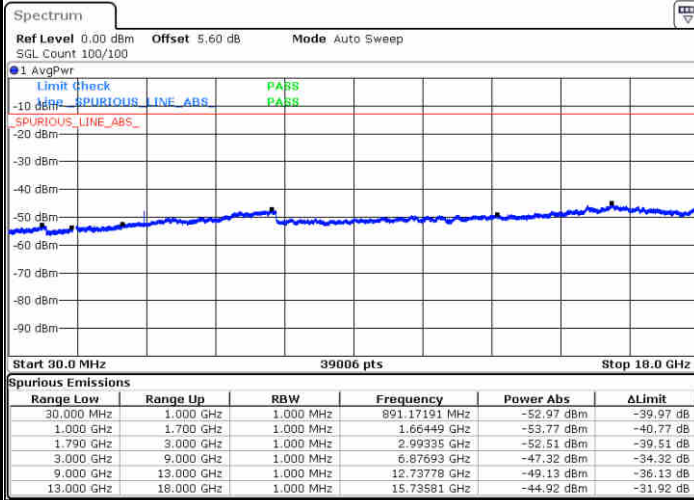


Date: 5.FEB.2020 05:24:57



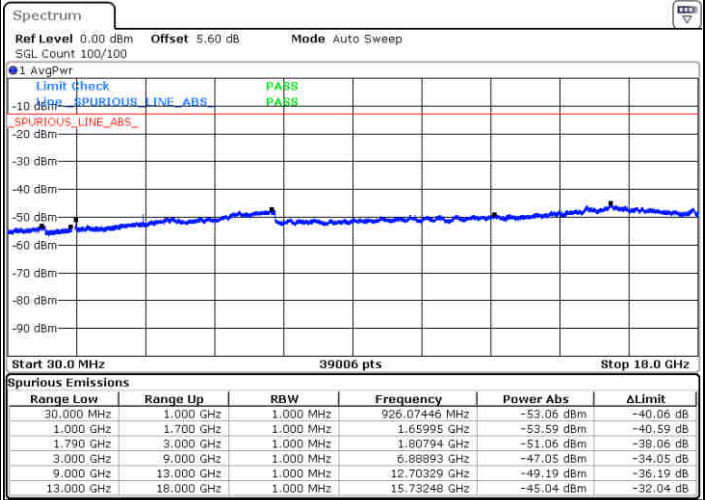
LTE Band 66 / 5MHz

Highest Channel / QPSK



Date: 5 FEB 2020 05:29:14

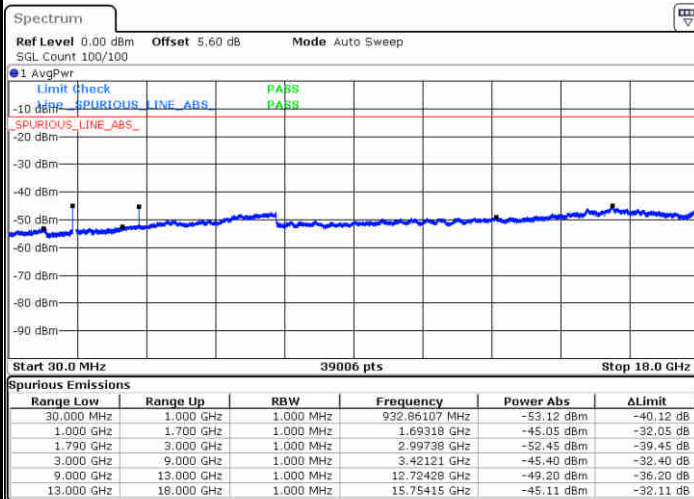
Highest Channel / 16QAM



Date: 5 FEB 2020 05:28:36

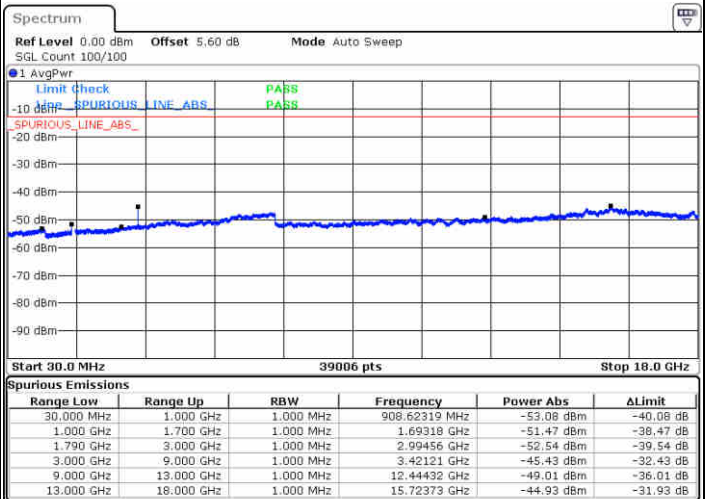
LTE Band 66 / 10MHz

Lowest Channel / QPSK



Date: 5 FEB 2020 05:33:55

Lowest Channel / 16QAM

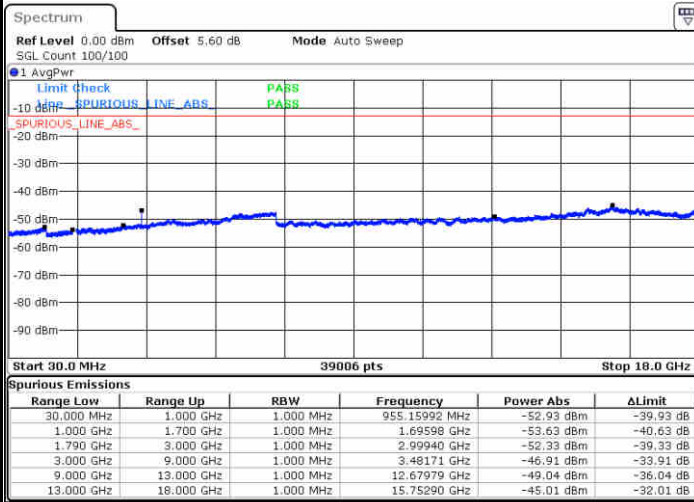


Date: 5 FEB 2020 05:35:08



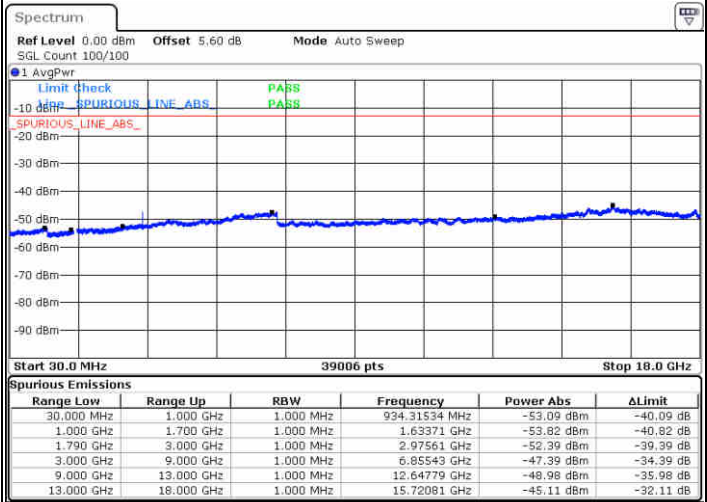
LTE Band 66 / 10MHz

Middle Channel / QPSK



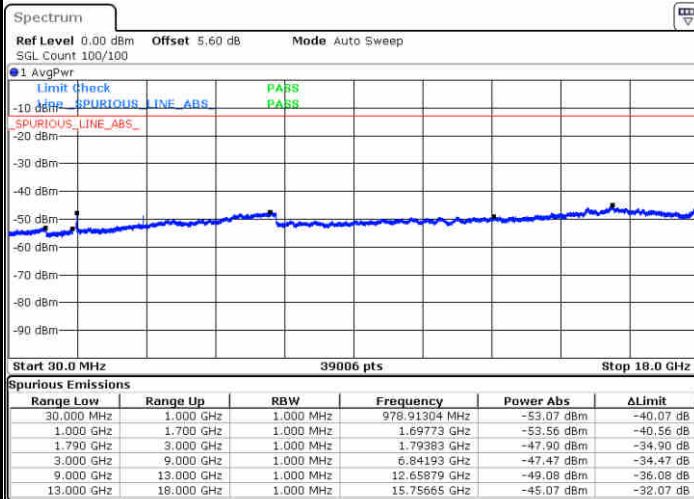
Date: 5.FEB.2020 05:37:05

Middle Channel / 16QAM



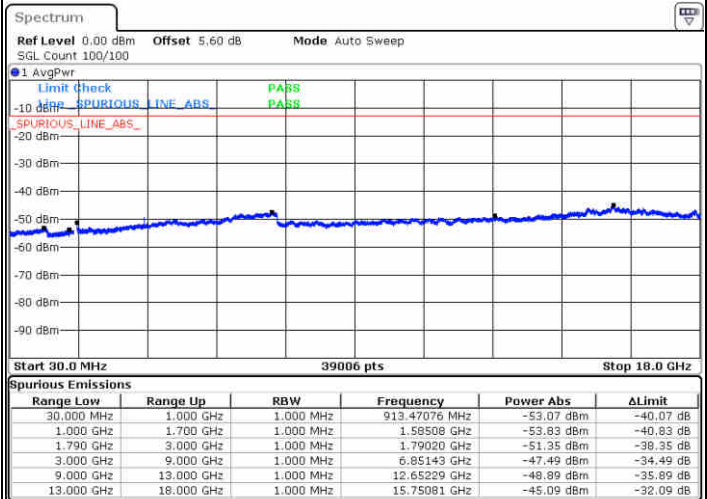
Date: 5.FEB.2020 05:36:22

Highest Channel / QPSK



Date: 5.FEB.2020 05:40:43

Highest Channel / 16QAM

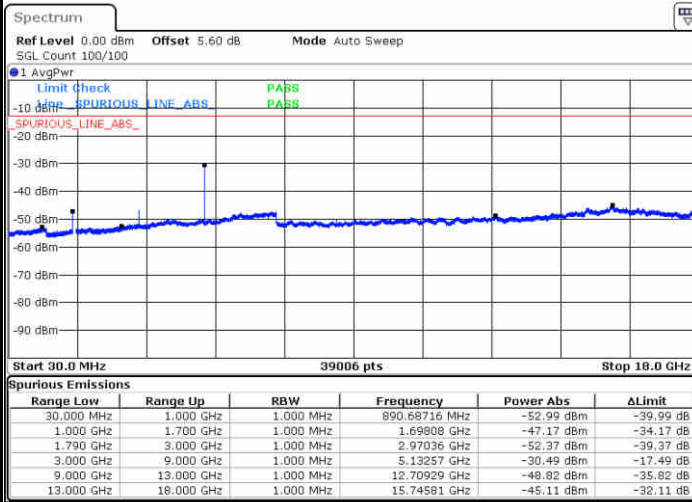


Date: 5.FEB.2020 05:41:27



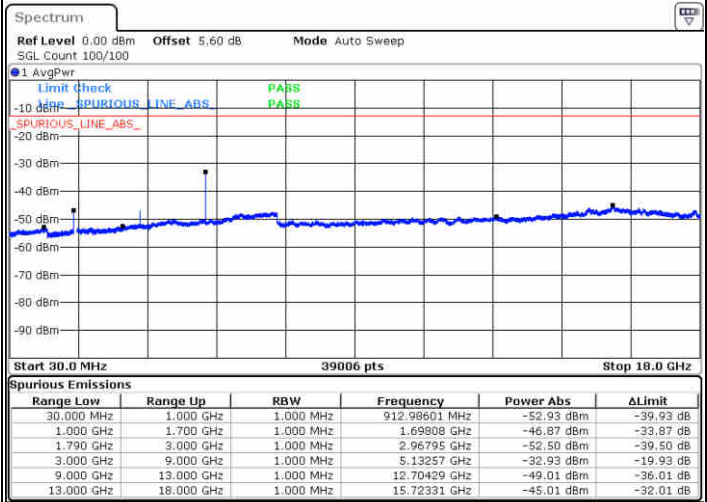
LTE Band 66 / 15MHz

Lowest Channel / QPSK



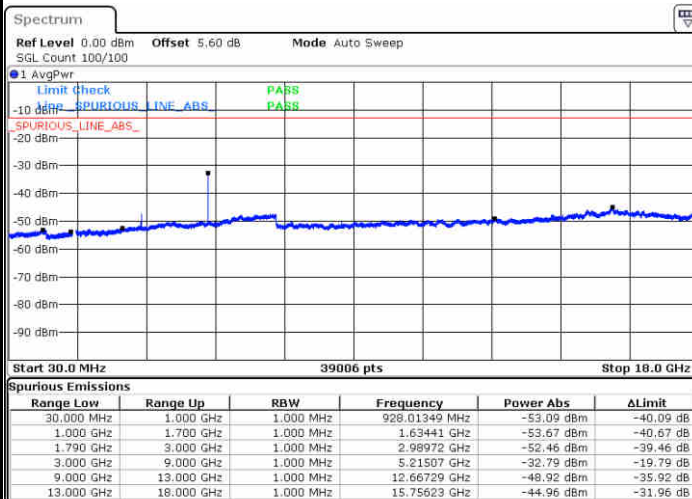
Date: 5.FEB.2020 05:46:12

Lowest Channel / 16QAM



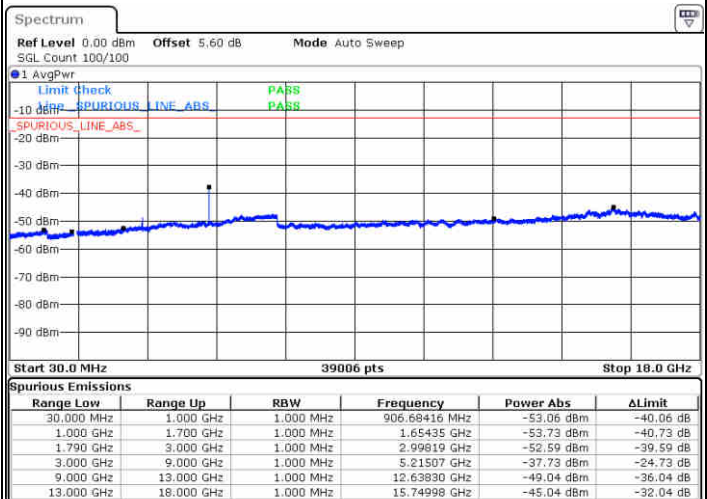
Date: 5.FEB.2020 05:45:11

Middle Channel / QPSK



Date: 5.FEB.2020 05:47:10

Middle Channel / 16QAM

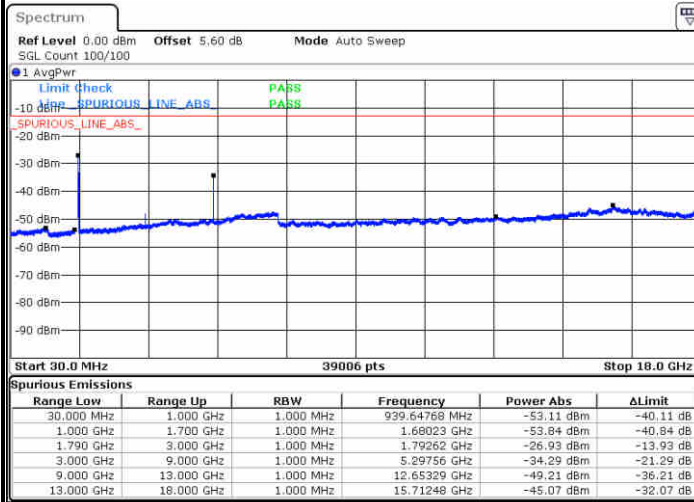


Date: 5.FEB.2020 05:48:07



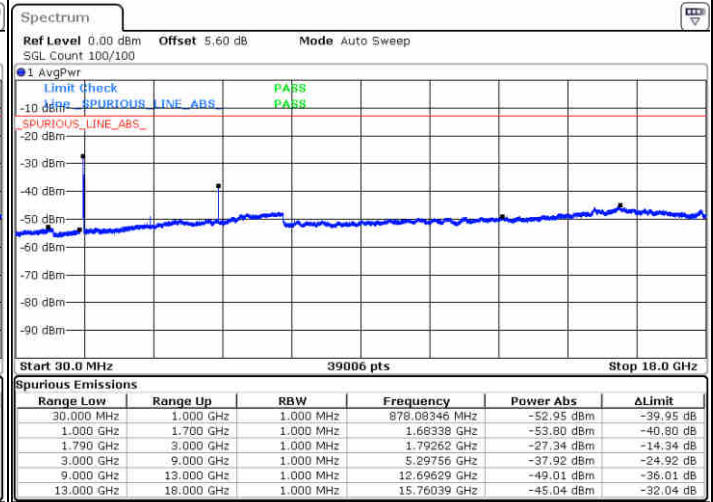
LTE Band 66 / 15MHz

Highest Channel / QPSK



Date: 5 FEB 2020 05:52:06

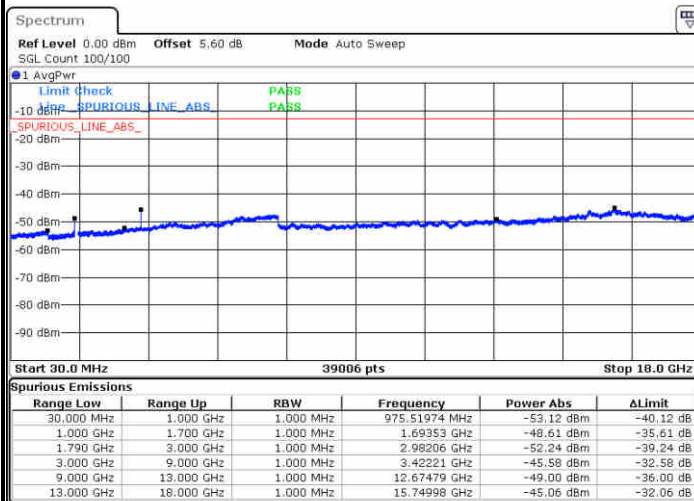
Highest Channel / 16QAM



Date: 5 FEB 2020 05:51:25

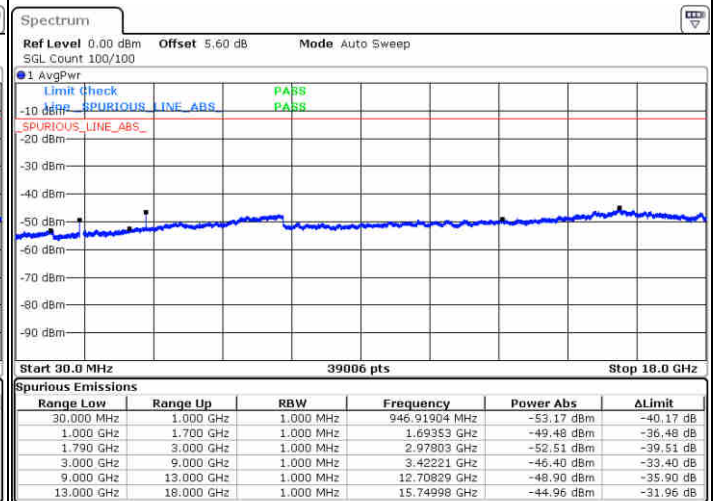
LTE Band 66 / 20MHz

Lowest Channel / QPSK



Date: 5 FEB 2020 05:56:39

Lowest Channel / 16QAM

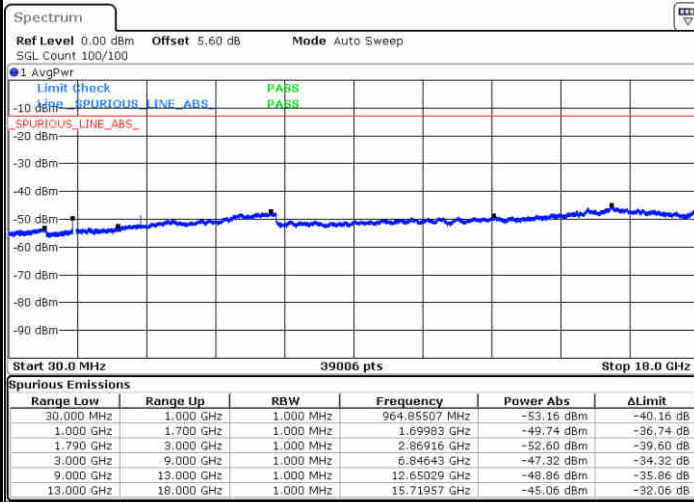


Date: 5 FEB 2020 05:57:37



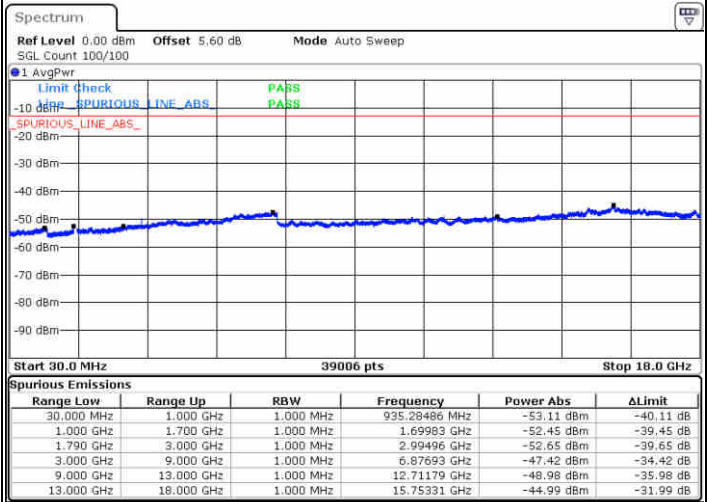
LTE Band 66 / 20MHz

Middle Channel / QPSK



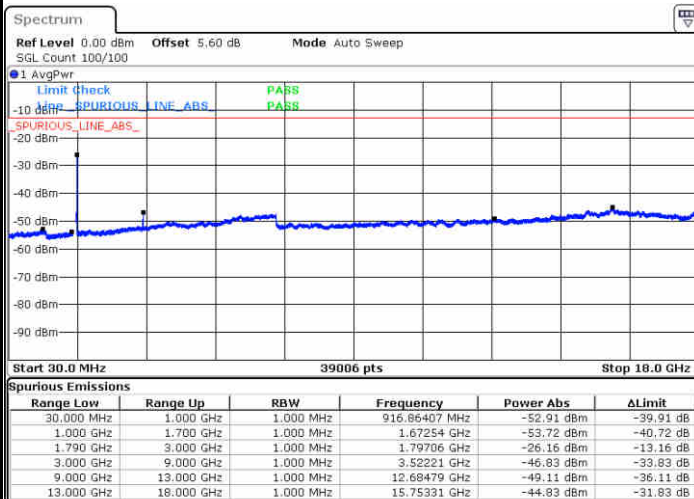
Date: 5.FEB.2020 06:00:36

Middle Channel / 16QAM



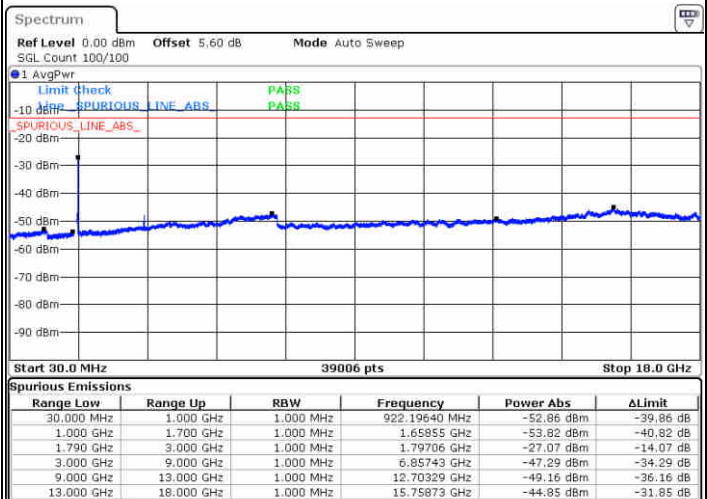
Date: 5.FEB.2020 05:58:45

Highest Channel / QPSK



Date: 5.FEB.2020 06:05:31

Highest Channel / 16QAM

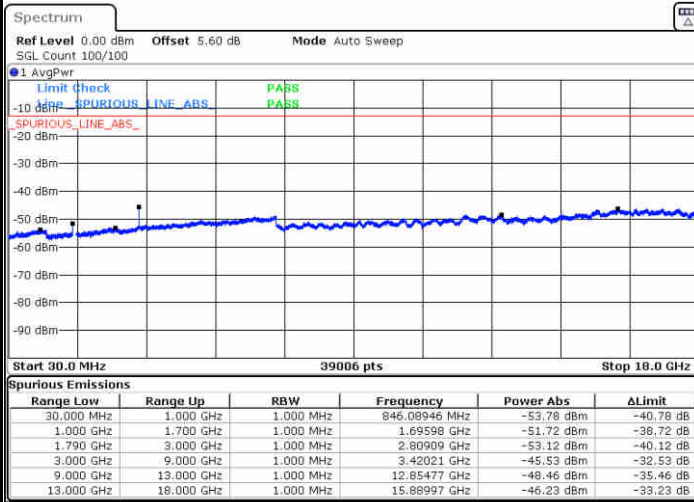


Date: 5.FEB.2020 06:06:29



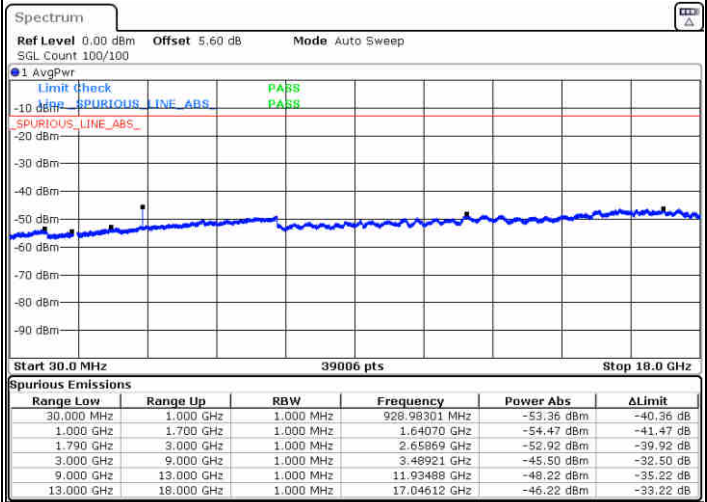
LTE Band 66 / 1.4MHz

Lowest Channel / 64QAM



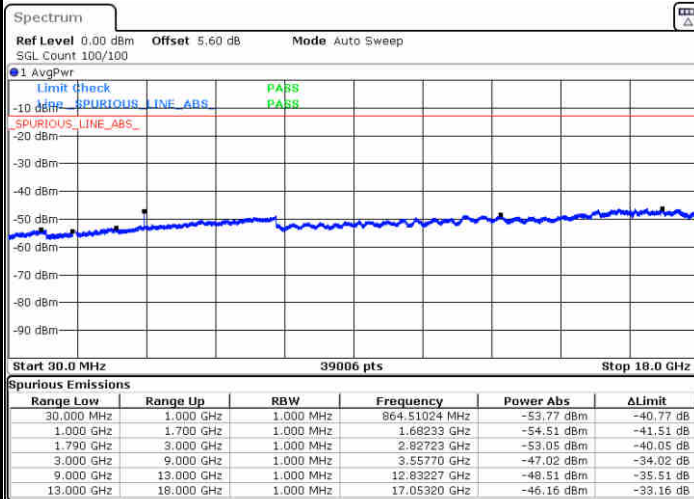
Date: 11 MAR 2020 01:31:58

Middle Channel / 64QAM



Date: 11 MAR 2020 01:33:04

Highest Channel / 64QAM

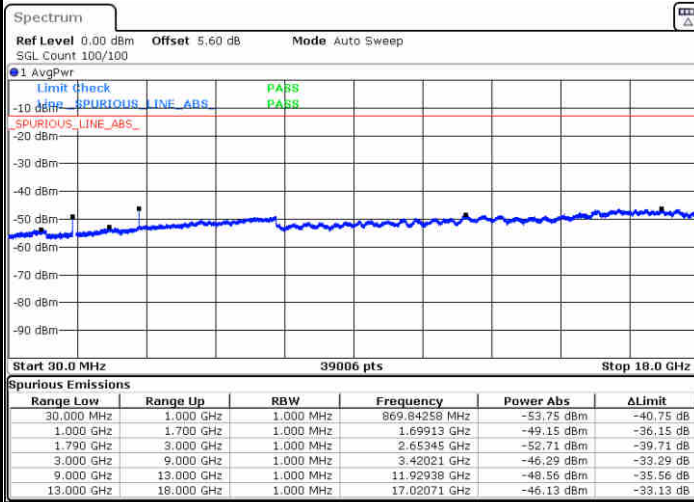


Date: 11 MAR 2020 01:37:22



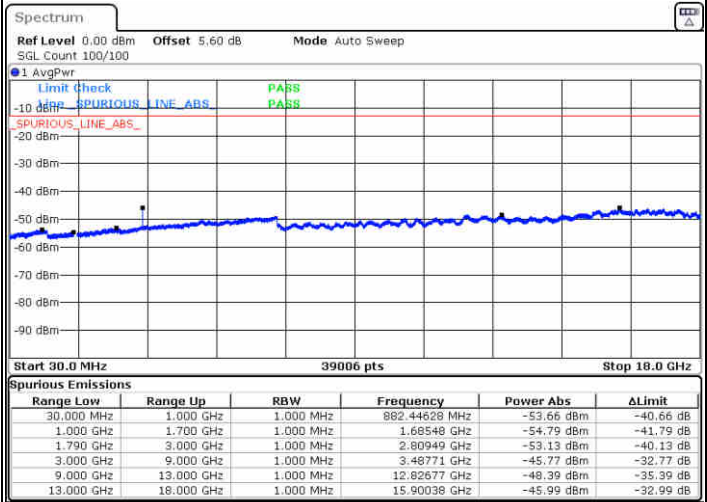
LTE Band 66 / 3MHz

Lowest Channel / 64QAM



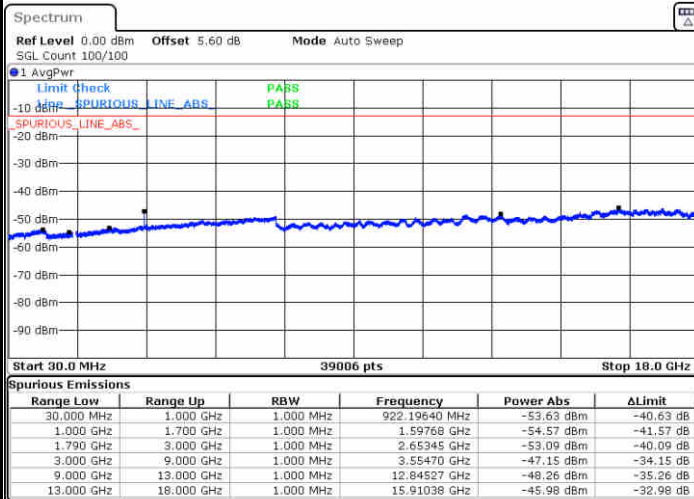
Date: 11 MAR 2020 01:40:26

Middle Channel / 64QAM



Date: 11 MAR 2020 01:41:18

Highest Channel / 64QAM

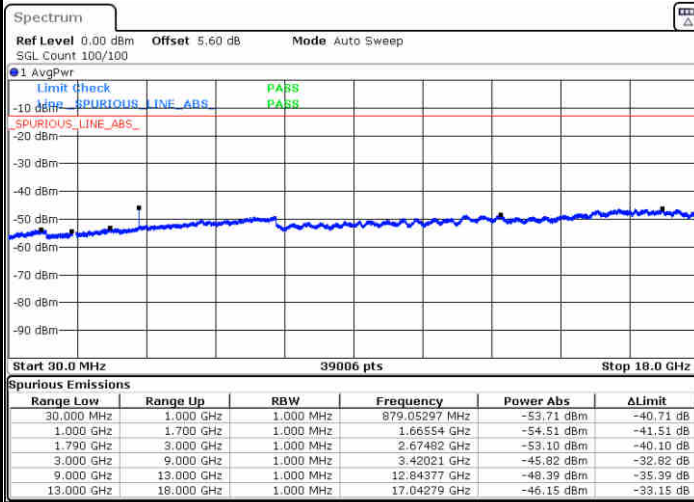


Date: 11 MAR 2020 01:43:40



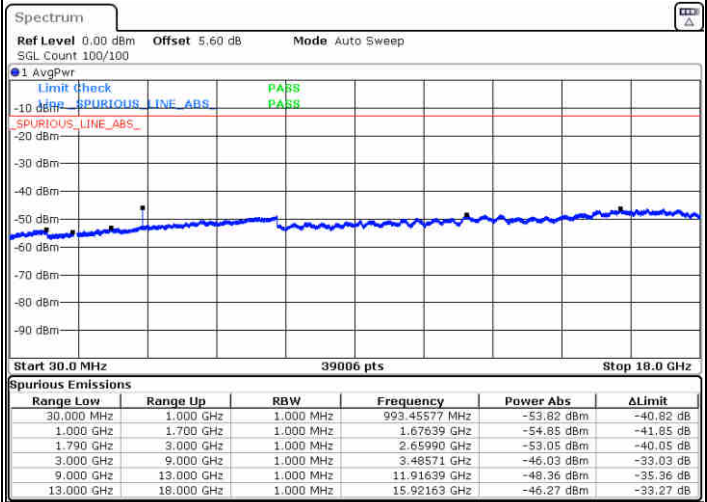
LTE Band 66 / 5MHz

Lowest Channel / 64QAM



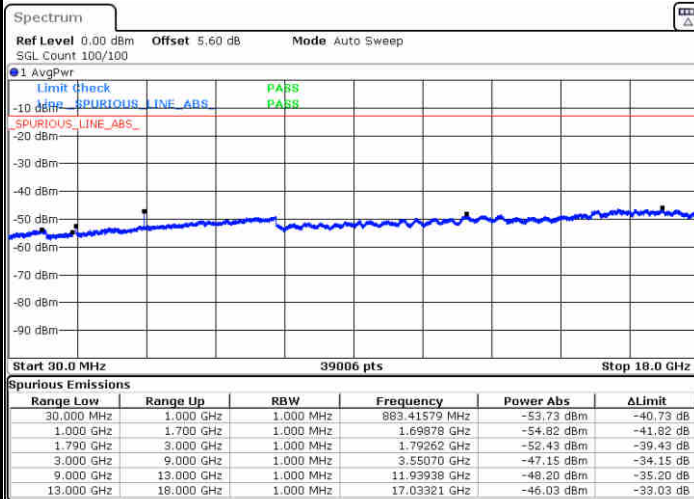
Date: 11 MAR 2020 01:46:27

Middle Channel / 64QAM



Date: 11 MAR 2020 01:48:25

Highest Channel / 64QAM

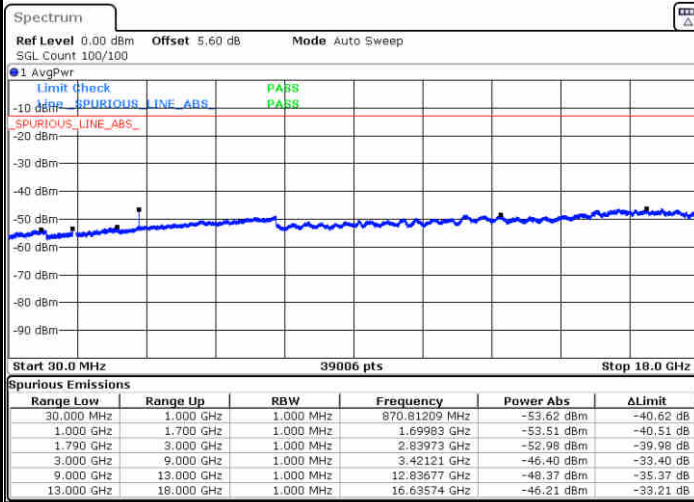


Date: 11 MAR 2020 01:50:29



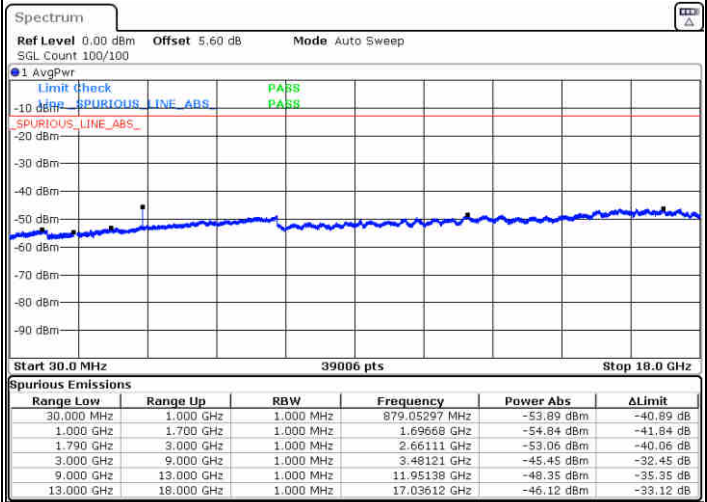
LTE Band 66 / 10MHz

Lowest Channel / 64QAM



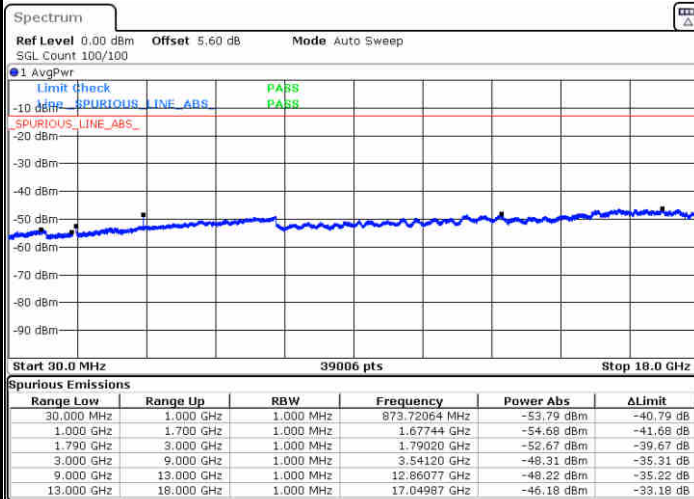
Date: 11 MAR 2020 01:53:06

Middle Channel / 64QAM



Date: 11 MAR 2020 01:53:59

Highest Channel / 64QAM

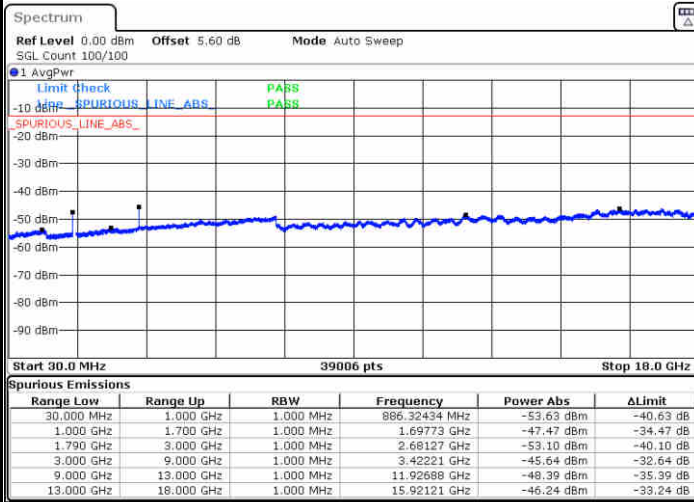


Date: 11 MAR 2020 01:55:55



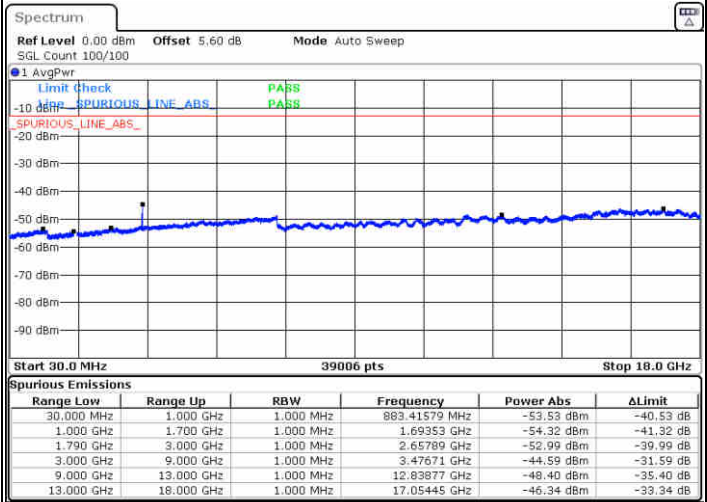
LTE Band 66 / 15MHz

Lowest Channel / 64QAM



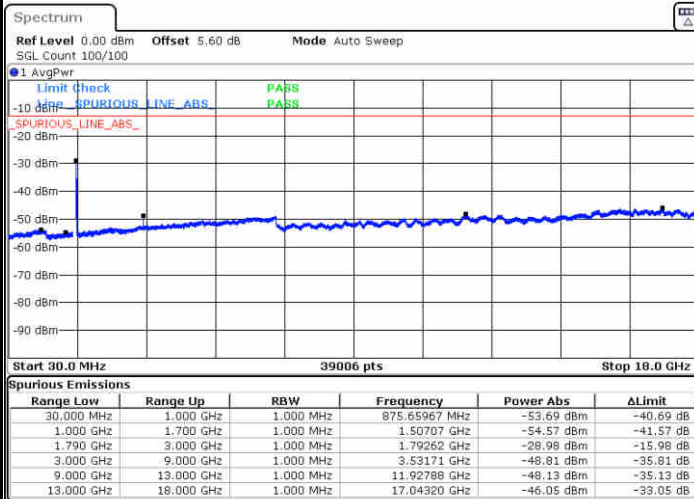
Date: 11 MAR 2020 01:58:02

Middle Channel / 64QAM



Date: 11 MAR 2020 01:58:52

Highest Channel / 64QAM

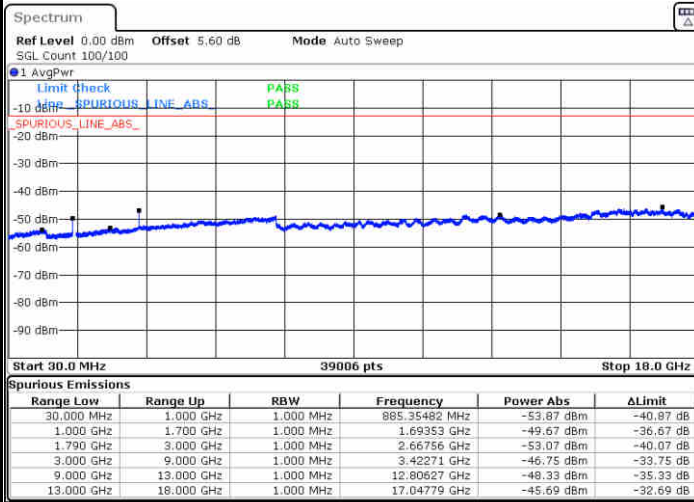


Date: 11 MAR 2020 02:01:21



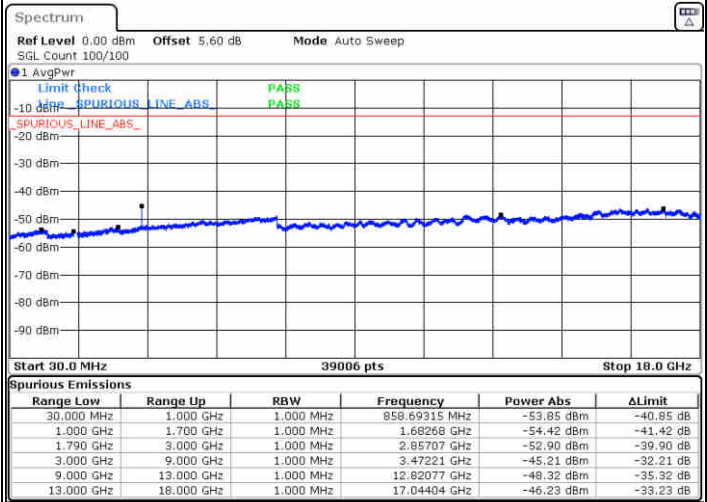
LTE Band 66 / 20MHz

Lowest Channel / 64QAM



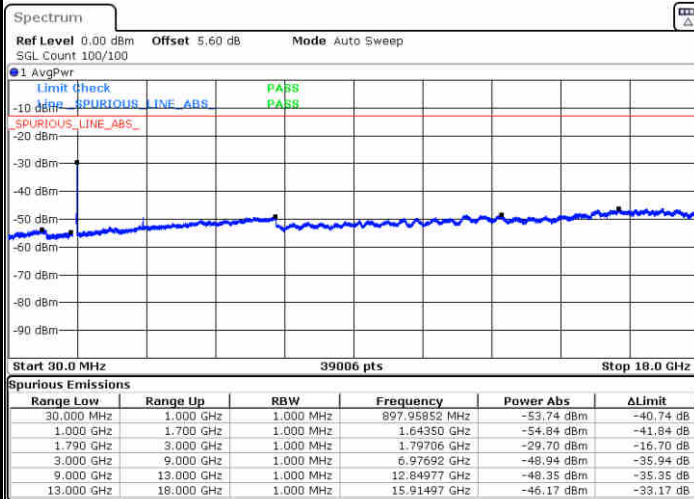
Date: 11 MAR 2020 02:03:43

Middle Channel / 64QAM



Date: 11 MAR 2020 02:04:41

Highest Channel / 64QAM



Date: 11 MAR 2020 02:06:57

Frequency Stability

Test Conditions		LTE Band 66 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0001	PASS
40	Normal Voltage	0.0028	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0032	
0	Normal Voltage	0.0005	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0020	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0029	
20	Normal Voltage	0.0006	
20	Battery End Point	0.0007	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 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)
Lowest	3702	-54.06	-13	-41.06	-66.32	2.641	14.90	H
	5556	-45.90	-13	-32.90	-57.76	2.94	14.80	H
	7400	-50.72	-13	-37.72	-60.49	3.39	13.16	H
	3702	-53.44	-13	-40.44	-65.70	2.64	14.90	V
	5556	-47.10	-13	-34.10	-58.96	2.94	14.80	V
	7400	-50.04	-13	-37.04	-59.81	3.39	13.16	V
Middle	3744	-54.85	-13	-41.85	-67.11	2.641	14.90	H
	5616	-47.06	-13	-34.06	-58.92	2.94	14.80	H
	7480	-50.24	-13	-37.24	-60.01	3.39	13.16	H
	3744	-54.17	-13	-41.17	-66.43	2.64	14.90	V
	5616	-51.21	-13	-38.21	-63.07	2.94	14.80	V
	7480	-49.92	-13	-36.92	-59.69	3.39	13.16	V
Highest	3780	-56.12	-13	-43.12	-68.38	2.641	14.90	H
	5670	-49.08	-13	-36.08	-60.94	2.94	14.80	H
	7560	-50.47	-13	-37.47	-60.24	3.39	13.16	H
	3780	-55.22	-13	-42.22	-67.48	2.64	14.90	V
	5670	-51.05	-13	-38.05	-62.91	2.94	14.80	V
	7560	-49.73	-13	-36.73	-59.50	3.39	13.16	V

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



LTE Band 5 / 10MHz / 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)
Lowest	1650	-60.60	-13	-47.60	-67.57	1.58	10.70	H
	2474	-39.73	-13	-26.73	-47.98	2.102	12.50	H
	3294	-61.97	-13	-48.97	-70.86	2.856	13.90	H
	1650	-56.66	-13	-43.66	-63.63	1.58	10.70	V
	2474	-40.46	-13	-27.46	-48.71	2.10	12.50	V
	3294	-62.04	-13	-49.04	-70.93	2.86	13.90	V
Middle	1664	-62.65	-13	-49.65	-69.62	1.58	10.70	H
	2496	-42.01	-13	-29.01	-50.26	2.102	12.50	H
	3324	-61.69	-13	-48.69	-70.58	2.856	13.90	H
	1664	-54.49	-13	-41.49	-61.46	1.58	10.70	V
	2496	-36.65	-13	-23.65	-44.90	2.10	12.50	V
	3324	-61.41	-13	-48.41	-70.30	2.86	13.90	V
Highest	1680	-59.51	-13	-46.51	-66.48	1.58	10.70	H
	2518	-32.63	-13	-19.63	-40.88	2.102	12.50	H
	3354	-61.67	-13	-48.67	-70.56	2.856	13.90	H
	1680	-58.25	-13	-45.25	-65.22	1.58	10.70	V
	2518	-35.29	-13	-22.29	-43.54	2.10	12.50	V
	3354	-61.30	-13	-48.30	-70.19	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)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	4998	-56.16	-25	-31.16	-66.37	3.03	13.24	H
	7500	-50.02	-25	-25.02	-59.47	3.56	13.01	H
	9999	-47.08	-25	-22.08	-56.60	3.92	13.44	H
	5000	-55.91	-25	-30.91	-66.12	3.03	13.24	V
	7500	-49.87	-25	-24.87	-59.32	3.56	13.01	V
	9999	-48.13	-25	-23.13	-57.65	3.92	13.44	V
Middle	5050	-56.29	-25	-31.29	-66.50	3.03	13.24	H
	7578	-48.85	-25	-23.85	-58.30	3.56	13.01	H
	10098	-46.67	-25	-21.67	-56.19	3.92	13.44	H
	5052	-56.16	-25	-31.16	-66.37	3.03	13.24	V
	7575	-49.99	-25	-24.99	-59.44	3.56	13.01	V
	10098	-47.34	-25	-22.34	-56.86	3.92	13.44	V
Highest	5100	-56.51	-25	-31.51	-66.72	3.03	13.24	H
	7650	-50.87	-25	-25.87	-60.32	3.56	13.01	H
	10197	-46.08	-25	-21.08	-55.60	3.92	13.44	H
	5100	-56.03	-25	-31.03	-66.24	3.03	13.24	V
	7650	-49.96	-25	-24.96	-59.41	3.56	13.01	V
	10197	-47.12	-25	-22.12	-56.64	3.92	13.44	V

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



LTE Band 12 / 10MHz / 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)
Lowest	1398	-64.26	-13	-51.26	-71.23	1.58	10.70	H
	2098	-51.01	-13	-38.01	-59.26	2.102	12.50	H
	2796	-60.66	-13	-47.66	-69.55	2.856	13.90	H
	1400	-63.12	-13	-50.12	-70.09	1.58	10.70	V
	2098	-51.91	-13	-38.91	-60.16	2.10	12.50	V
	2796	-60.76	-13	-47.76	-69.65	2.86	13.90	V
Middle	1405	-64.36	-13	-51.36	-71.33	1.58	10.70	H
	2108	-48.90	-13	-35.90	-57.15	2.102	12.50	H
	2810	-60.19	-13	-47.19	-69.08	2.856	13.90	H
	1404	-65.21	-13	-52.21	-72.18	1.58	10.70	V
	2108	-59.25	-13	-46.25	-67.50	2.10	12.50	V
	2810	-60.74	-13	-47.74	-69.63	2.86	13.90	V
Highest	1412	-64.34	-13	-51.34	-71.31	1.58	10.70	H
	2120	-56.10	-13	-43.10	-64.35	2.102	12.50	H
	2824	-60.26	-13	-47.26	-69.15	2.856	13.90	H
	1412	-64.68	-13	-51.68	-71.65	1.58	10.70	V
	2120	-58.18	-13	-45.18	-66.43	2.10	12.50	V
	2824	-60.45	-13	-47.45	-69.34	2.86	13.90	V

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



LTE Band 13 / 5MHz / 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)
Lowest	1554	-60.42	-13	-47.42	-63.05	1.09	5.87	H
	2332	-47.25	-13	-34.25	-49.65	1.37	5.92	H
	3108	-60.69	-13	-47.69	-64.58	1.64	7.68	H
	1554	-59.90	-13	-46.90	-62.53	1.09	5.87	V
	2332	-46.35	-13	-33.35	-48.75	1.37	5.92	V
	3108	-60.54	-13	-47.54	-64.43	1.64	7.68	V
Middle	1560	-60.17	-42.15	-18.02	-62.80	1.09	5.87	H
	2340	-47.43	-13	-34.43	-49.83	1.37	5.92	H
	3120	-61.14	-13	-48.14	-65.03	1.64	7.68	H
	1560	-55.89	-42.15	-13.74	-58.52	1.09	5.87	V
	2340	-47.59	-13	-34.59	-49.99	1.37	5.92	V
	3120	-60.64	-13	-47.64	-64.53	1.64	7.68	V
Highest	1564	-62.52	-42.15	-20.37	-65.15	1.09	5.87	H
	2346	-47.10	-13	-34.10	-49.50	1.37	5.92	H
	3126	-60.80	-13	-47.80	-64.69	1.64	7.68	H
	1564	-56.08	-42.15	-13.93	-58.71	1.09	5.87	V
	2346	-49.53	-13	-36.53	-51.93	1.37	5.92	V
	3126	-60.59	-13	-47.59	-64.48	1.64	7.68	V

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

LTE Band 13 / 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	1556	-62.05	-13	-49.05	-64.68	1.09	5.87	H
	2332	-44.77	-13	-31.77	-47.17	1.37	5.92	H
	3108	-60.14	-13	-47.14	-64.03	1.64	7.68	H
	1554	-56.64	-13	-43.64	-59.27	1.09	5.87	V
	2332	-42.10	-13	-29.10	-44.50	1.37	5.92	V
	3108	-60.40	-13	-47.40	-64.29	1.64	7.68	V

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



LTE Band 66 / 10MHz / 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)
Lowest	3420	-53.53	-13	-40.53	-64.27	2.604	13.34	H
	5136	-53.33	-13	-40.33	-63.84	3.011	13.52	H
	6840	-53.62	-13	-40.62	-63.82	3.271	13.47	H
	3420	-50.87	-13	-37.87	-61.61	2.604	13.34	V
	5130	-55.78	-13	-42.78	-66.29	3.011	13.52	V
	6840	-53.18	-13	-40.18	-63.38	3.271	13.47	V
Middle	3474	-53.85	-13	-40.85	-64.59	2.604	13.34	H
	5208	-48.27	-13	-35.27	-58.78	3.011	13.52	H
	6940	-52.72	-13	-39.72	-62.92	3.271	13.47	H
	3474	-52.22	-13	-39.22	-62.96	2.604	13.34	V
	5208	-54.64	-13	-41.64	-65.15	3.011	13.52	V
	6940	-52.15	-13	-39.15	-62.35	3.271	13.47	V
Highest	3522	-57.34	-13	-44.34	-68.08	2.604	13.34	H
	5280	-53.47	-13	-40.47	-63.98	3.011	13.52	H
	7040	-51.61	-13	-38.61	-61.81	3.271	13.47	H
	3522	-54.62	-13	-41.62	-65.36	2.604	13.34	V
	5286	-55.26	-13	-42.26	-65.77	3.011	13.52	V
	7040	-51.13	-13	-38.13	-61.33	3.271	13.47	V

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