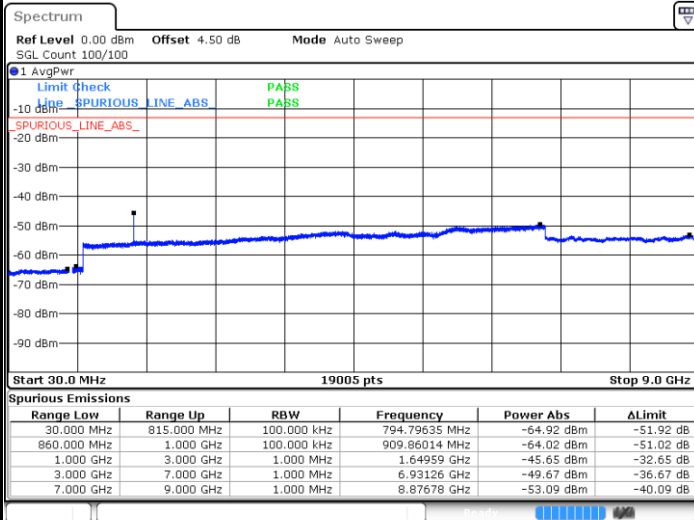




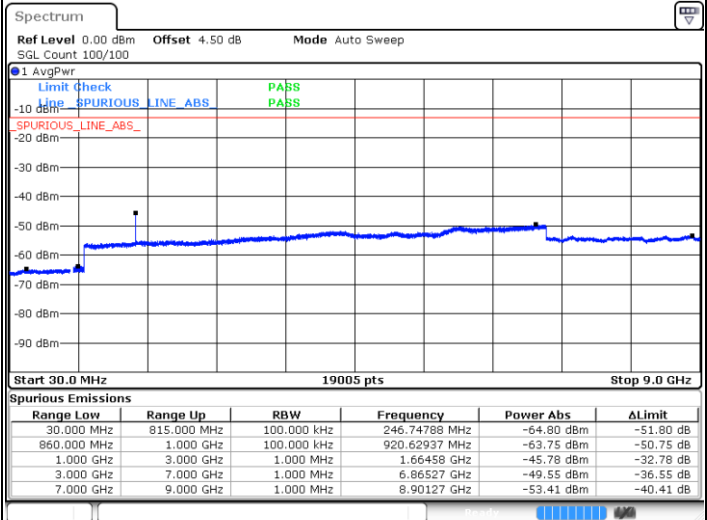
LTE Band 5 / 10MHz

Lowest Channel / 64QAM



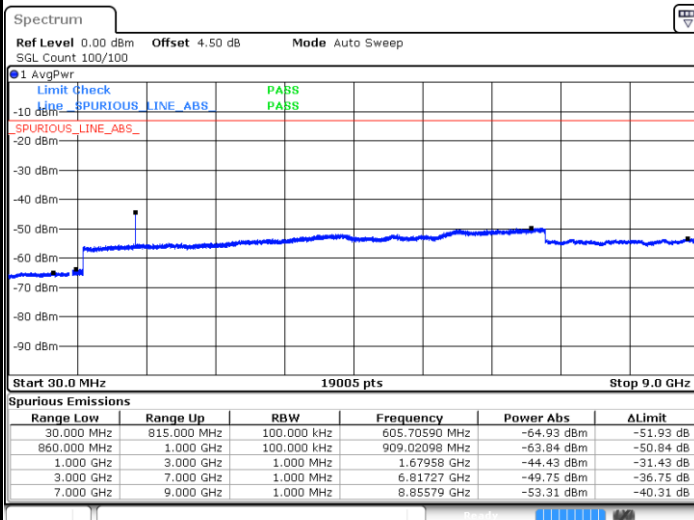
Date: 2 AUG 2018 21:31:37

Middle Channel / 64QAM



Date: 2 AUG 2018 21:32:50

Highest Channel / 64QAM

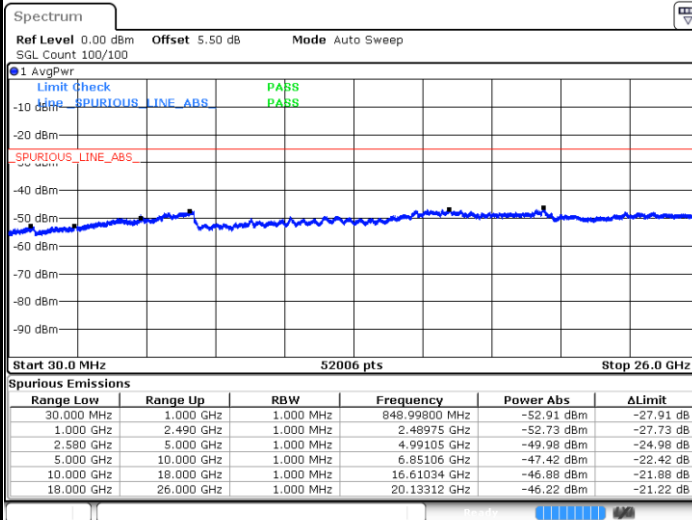


Date: 2 AUG 2018 21:37:21



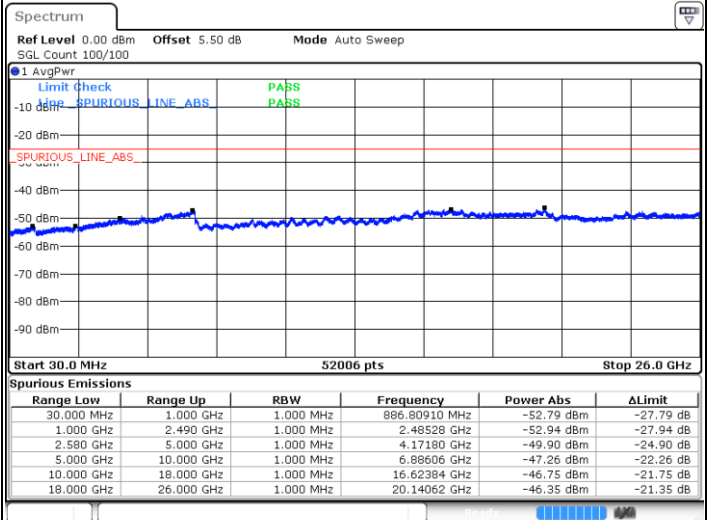
LTE Band 7 / 5MHz

Lowest Channel / QPSK



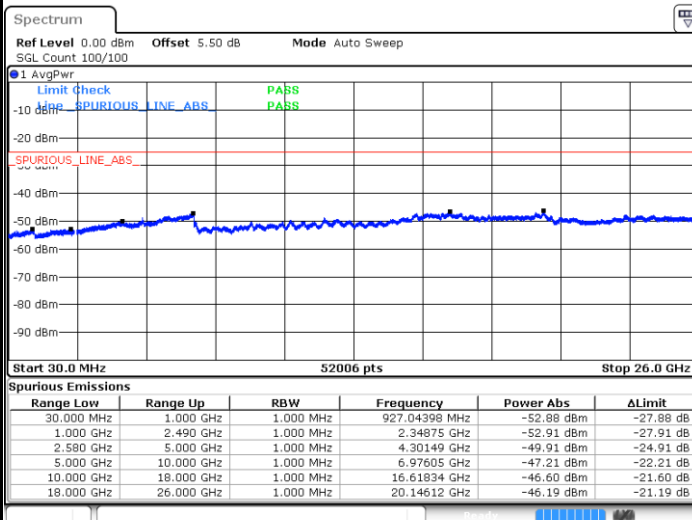
Date: 3 AUG 2018 14:01:31

Lowest Channel / 16QAM



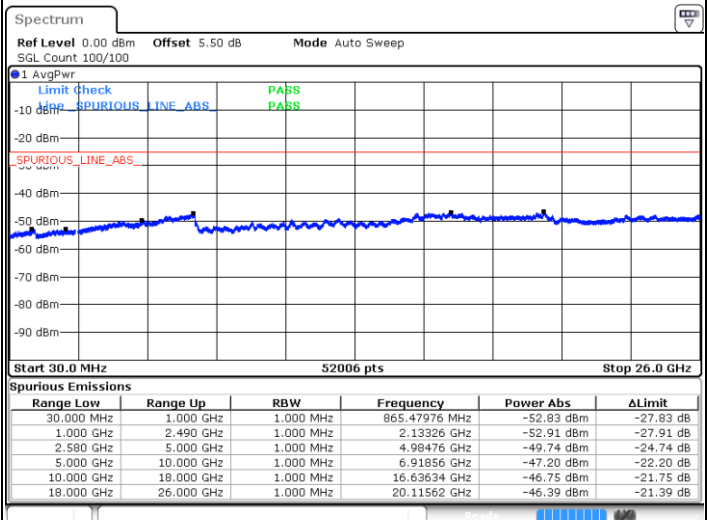
Date: 3 AUG 2018 14:00:37

Middle Channel / QPSK



Date: 3 AUG 2018 14:02:26

Middle Channel / 16QAM

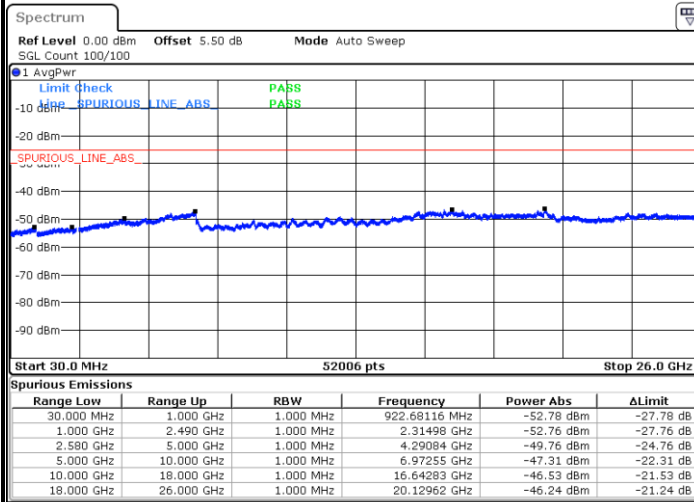


Date: 3 AUG 2018 14:03:20



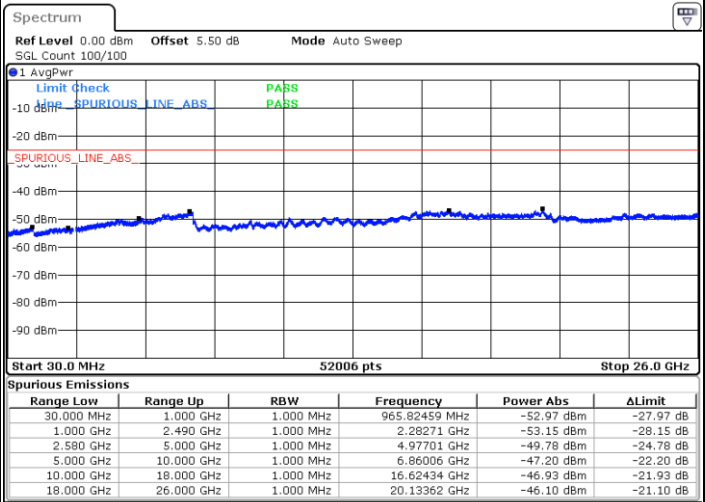
LTE Band 7 / 5MHz

Highest Channel / QPSK



Date: 3.AUG.2018 14:11:09

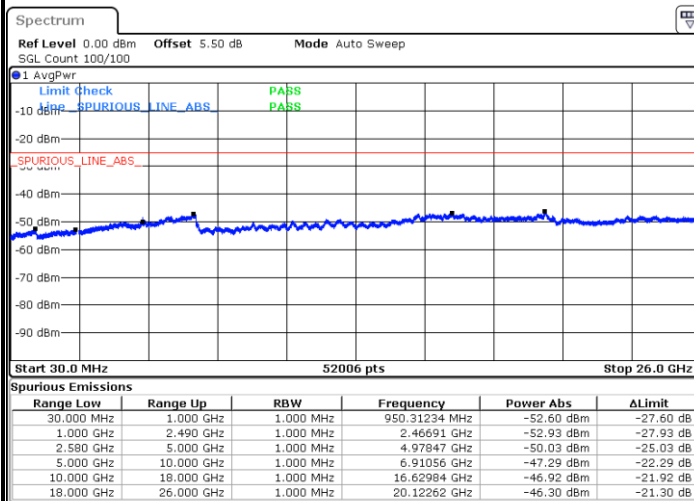
Highest Channel / 16QAM



Date: 3.AUG.2018 14:10:14

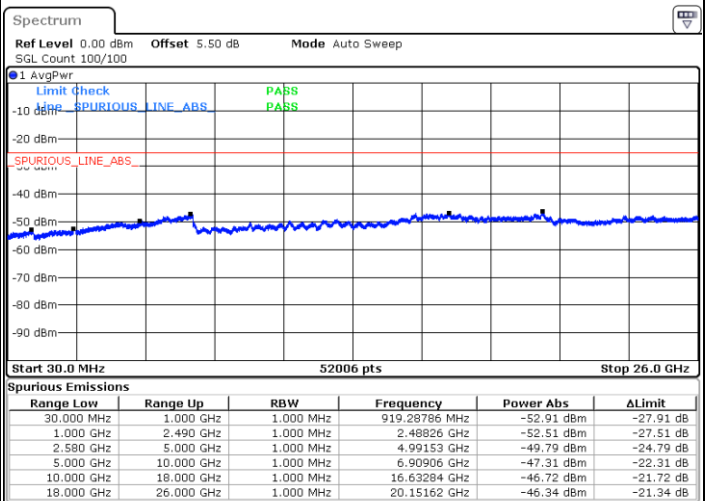
LTE Band 7 / 10MHz

Lowest Channel / QPSK



Date: 3.AUG.2018 14:13:40

Lowest Channel / 16QAM

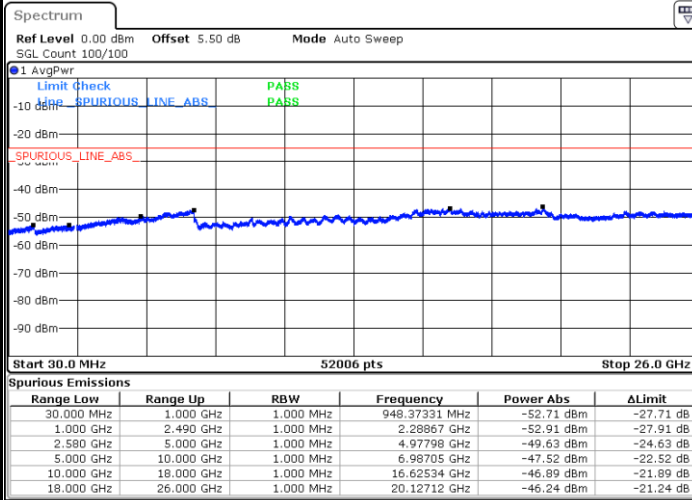


Date: 3.AUG.2018 14:12:46



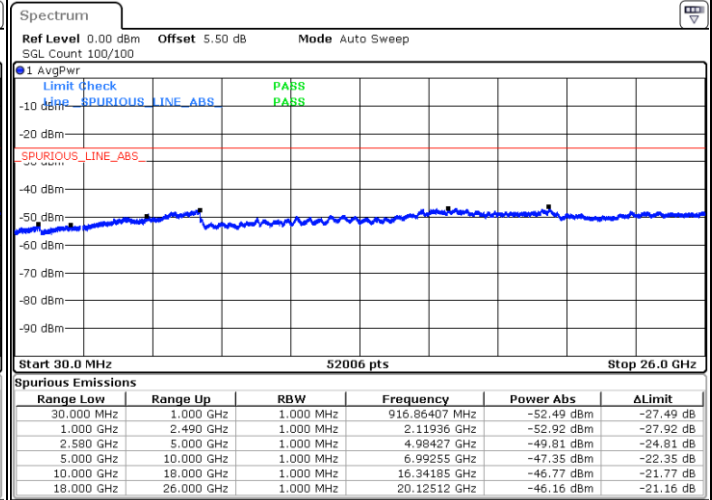
LTE Band 7 / 10MHz

Middle Channel / QPSK



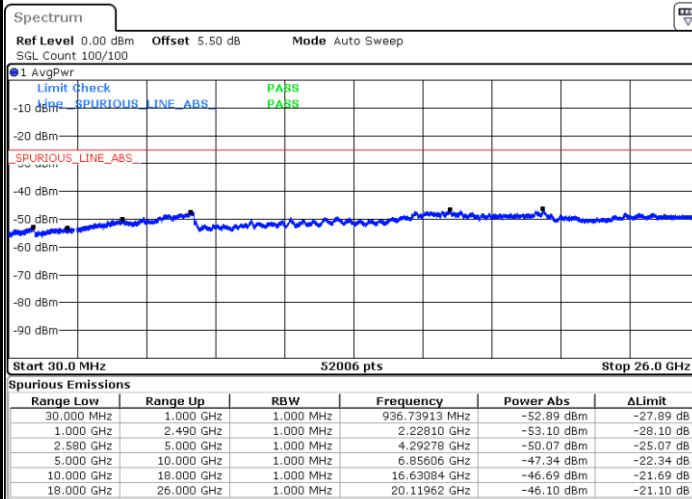
Date: 3.AUG.2018 14:14:35

Middle Channel / 16QAM



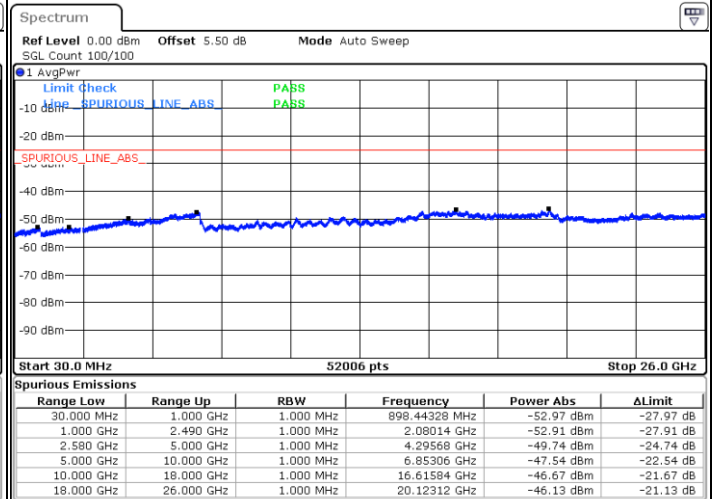
Date: 3.AUG.2018 14:15:30

Highest Channel / QPSK



Date: 3.AUG.2018 14:23:18

Highest Channel / 16QAM

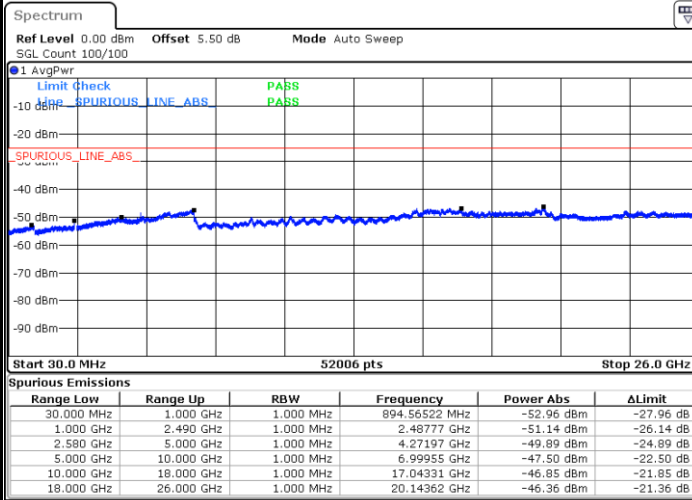


Date: 3.AUG.2018 14:22:23



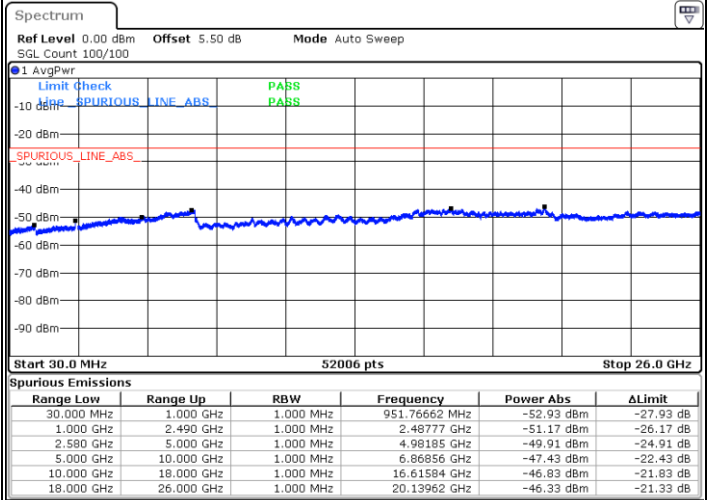
LTE Band 7 / 15MHz

Lowest Channel / QPSK



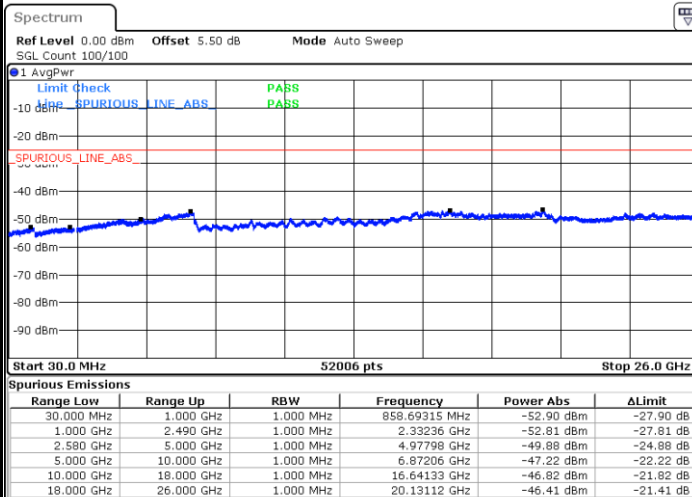
Date: 3.AUG.2018 14:25:49

Lowest Channel / 16QAM



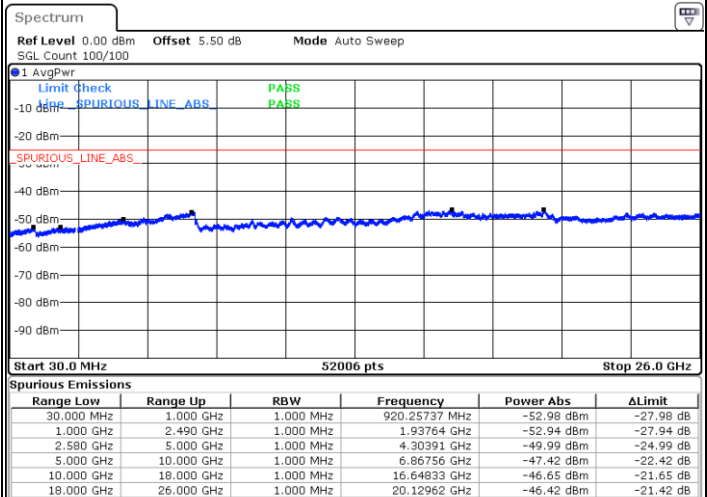
Date: 3.AUG.2018 14:24:55

Middle Channel / QPSK



Date: 3.AUG.2018 14:26:44

Middle Channel / 16QAM

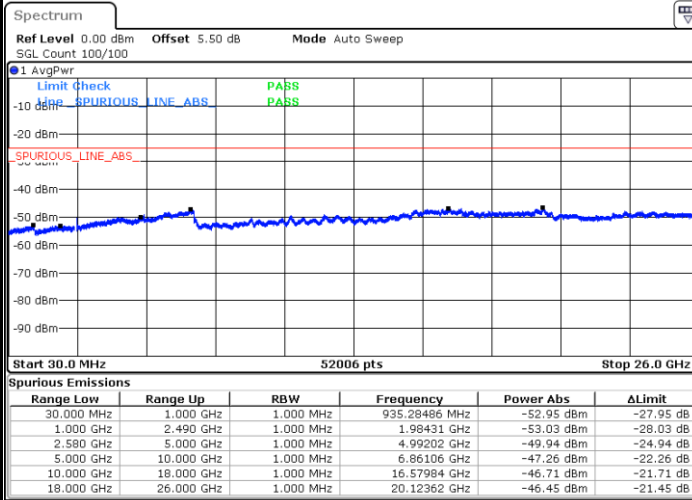


Date: 3.AUG.2018 14:27:39



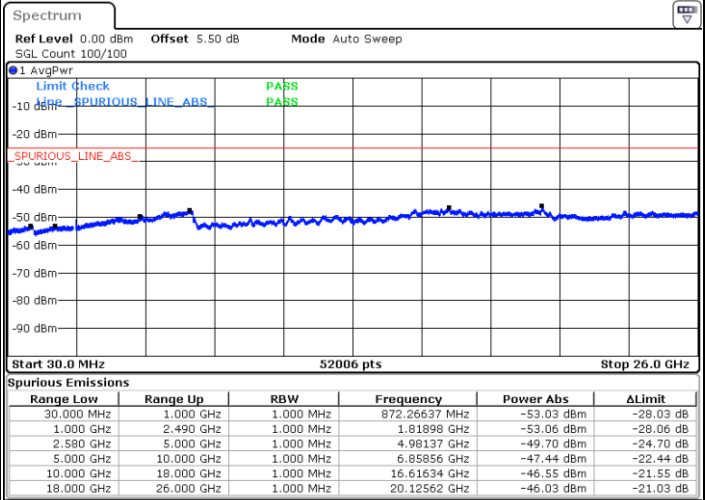
LTE Band7 / 15MHz

Highest Channel / QPSK



Date: 3.AUG.2018 14:35:27

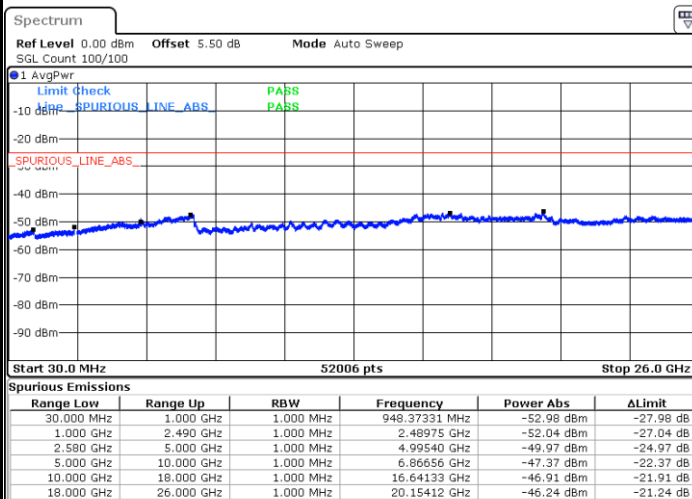
Highest Channel / 16QAM



Date: 3.AUG.2018 14:34:32

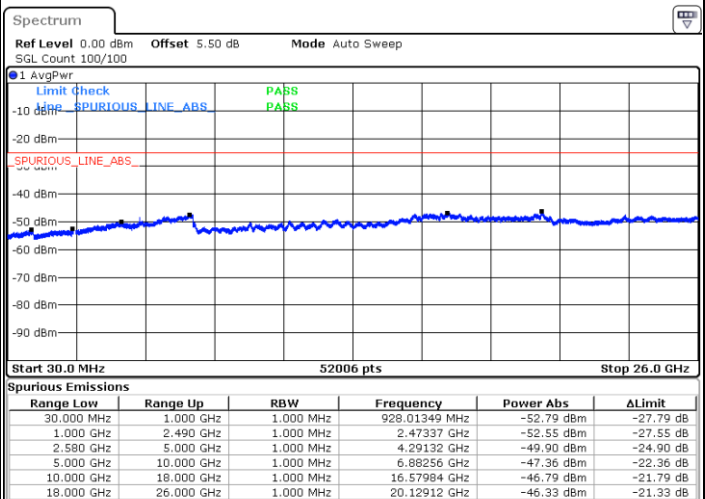
LTE Band 7 / 20MHz

Lowest Channel / QPSK



Date: 3.AUG.2018 14:37:58

Lowest Channel / 16QAM

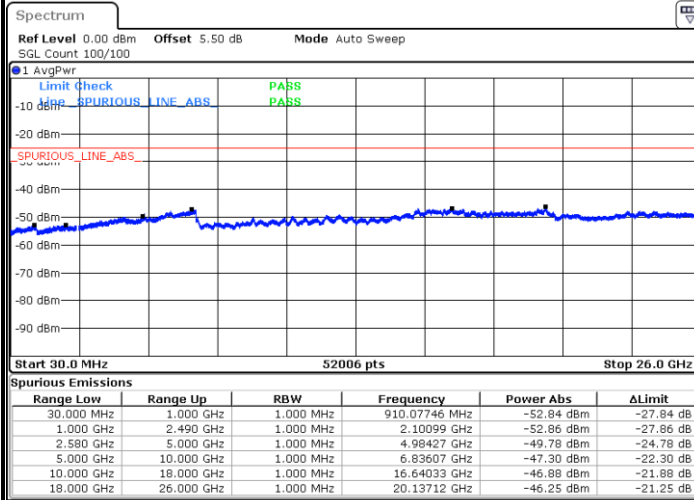


Date: 3.AUG.2018 14:37:04



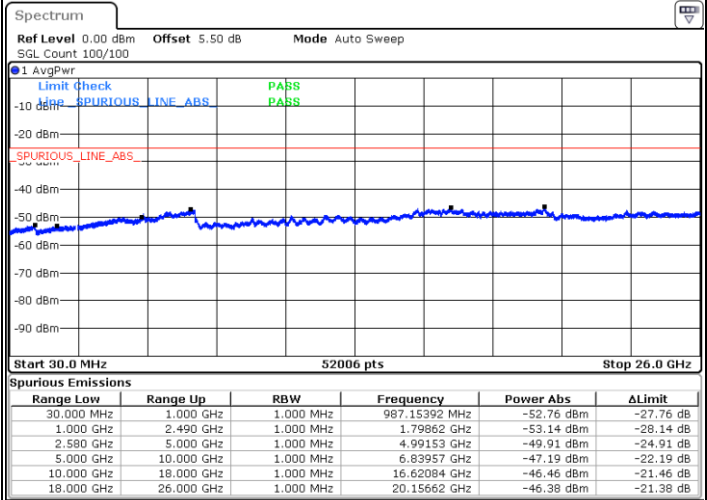
LTE Band 7 / 20MHz

Middle Channel / QPSK



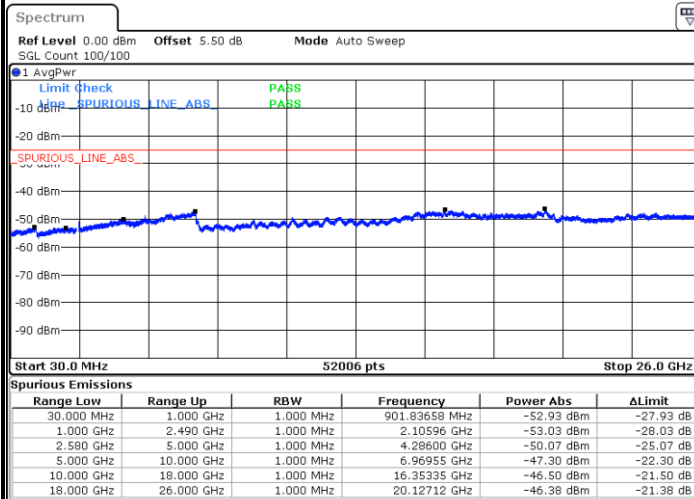
Date: 3.AUG.2018 14:38:53

Middle Channel / 16QAM



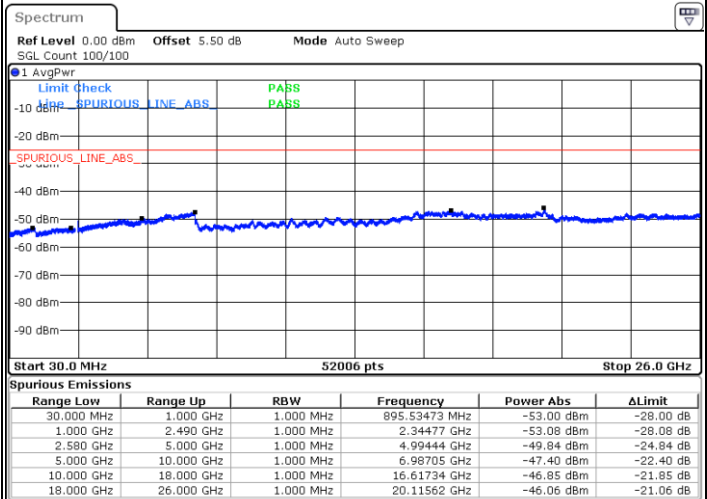
Date: 3.AUG.2018 14:39:47

Highest Channel / QPSK



Date: 3.AUG.2018 14:47:36

Highest Channel / 16QAM

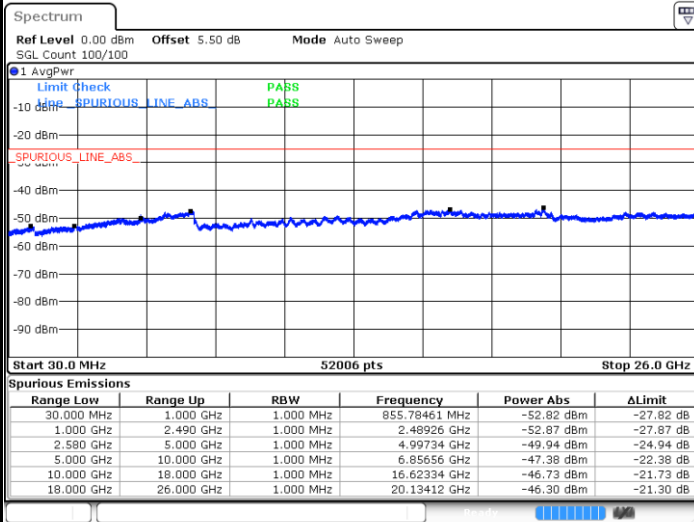


Date: 3.AUG.2018 14:46:41



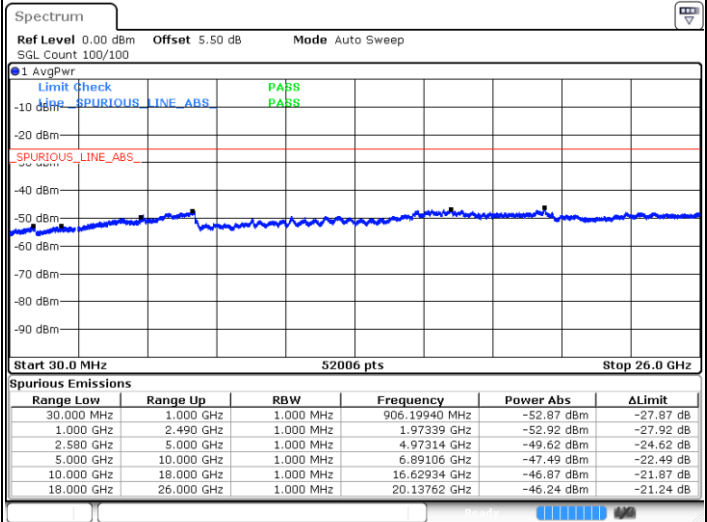
LTE Band 7 / 5MHz

Lowest Channel / 64QAM



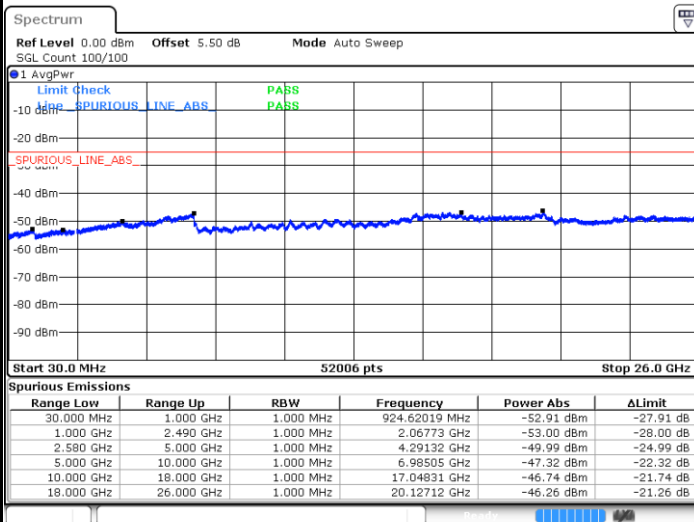
Date: 3 AUG 2018 15:34:51

Middle Channel / 64QAM



Date: 3 AUG 2018 15:35:46

Highest Channel / 64QAM



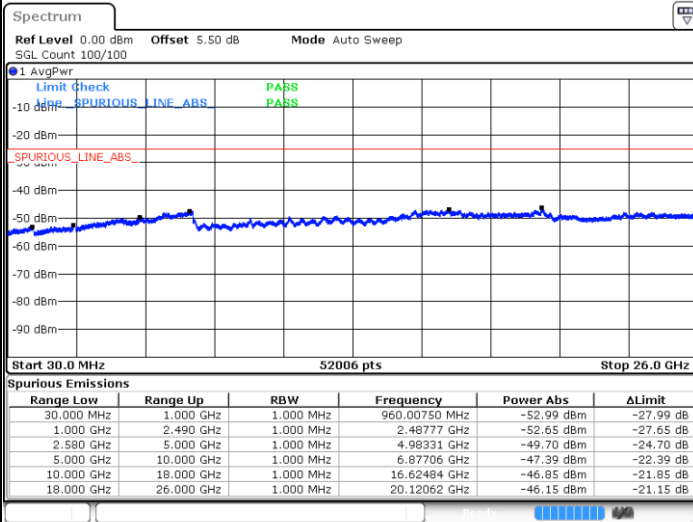
Date: 3 AUG 2018 15:36:40



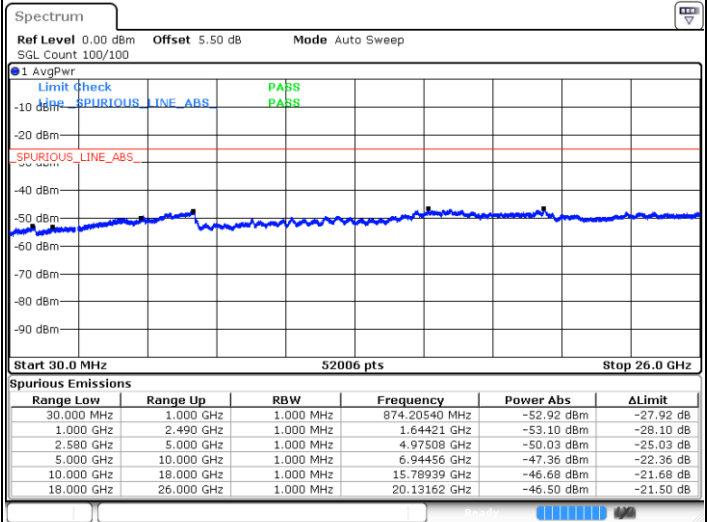
LTE Band 7 / 10MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

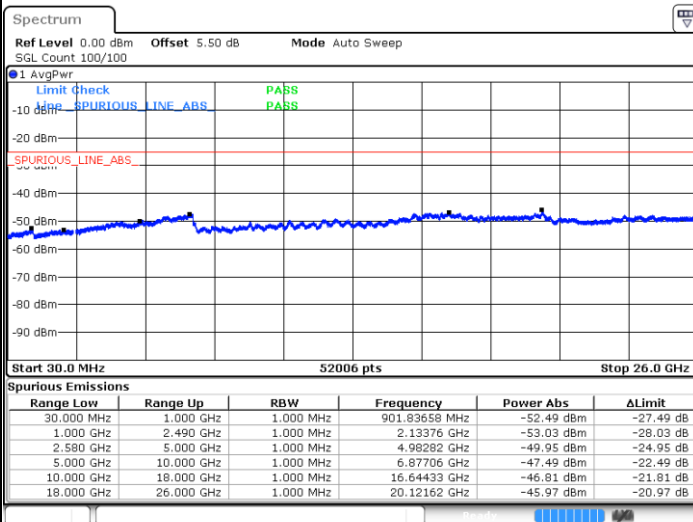


Date: 3 AUG 2018 15:27:32



Date: 3 AUG 2018 15:28:27

Highest Channel / 64QAM

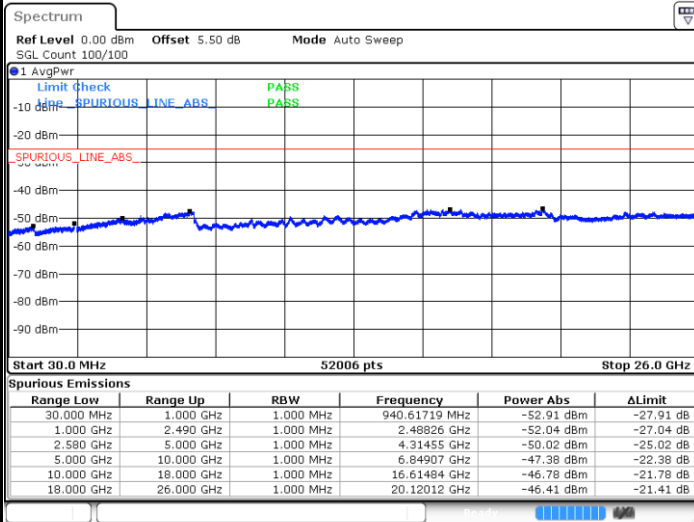


Date: 3 AUG 2018 15:29:22



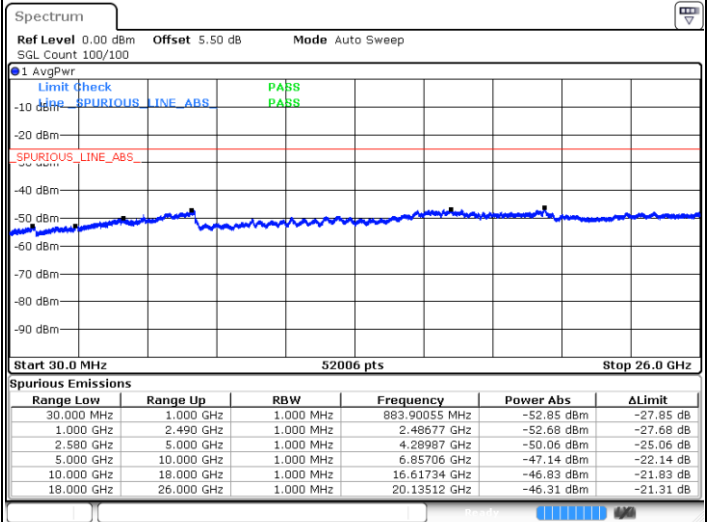
LTE Band 7 / 15MHz

Lowest Channel / 64QAM



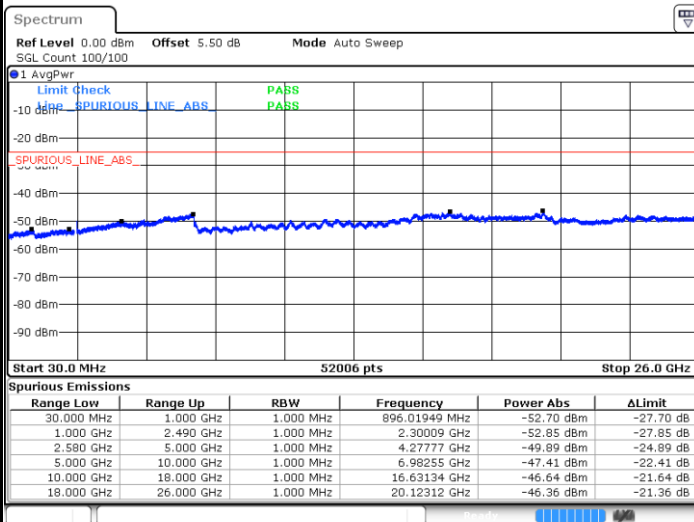
Date: 3 AUG 2018 15:24:49

Middle Channel / 64QAM



Date: 3 AUG 2018 15:25:43

Highest Channel / 64QAM

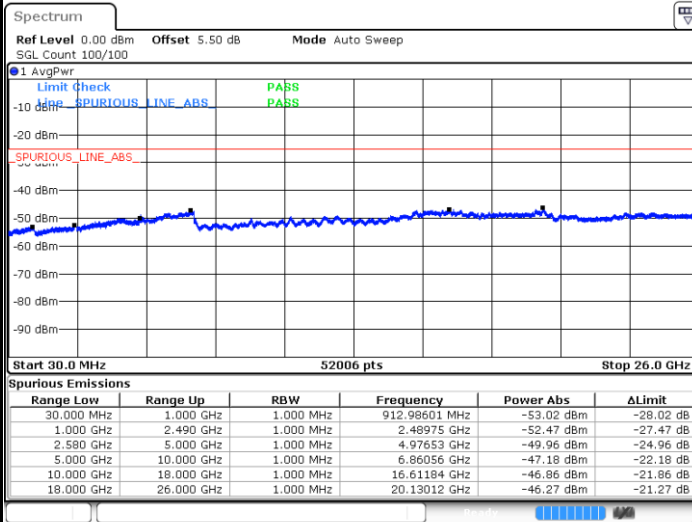


Date: 3 AUG 2018 15:26:38



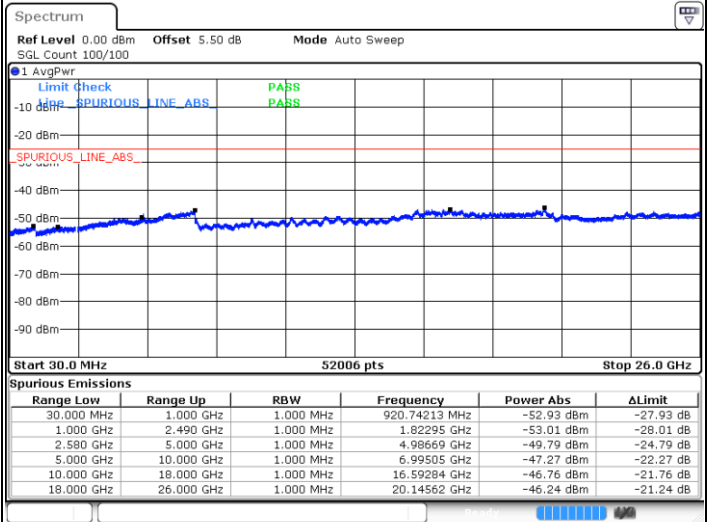
LTE Band 7 / 20MHz

Lowest Channel / 64QAM



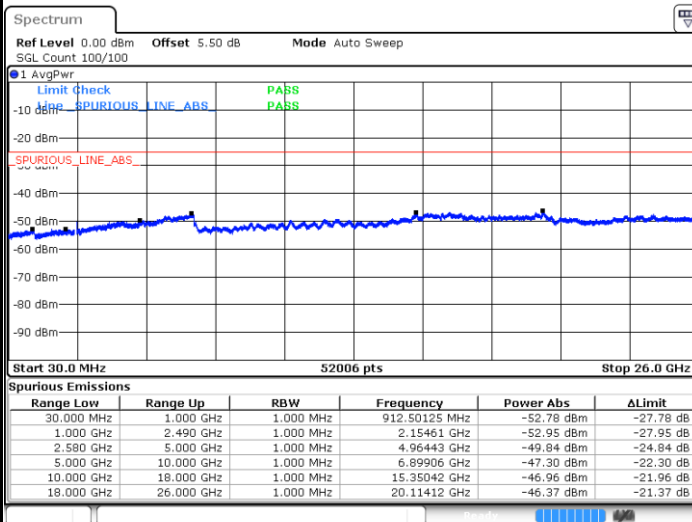
Date: 3 AUG 2018 15:19:47

Middle Channel / 64QAM



Date: 3 AUG 2018 15:20:42

Highest Channel / 64QAM

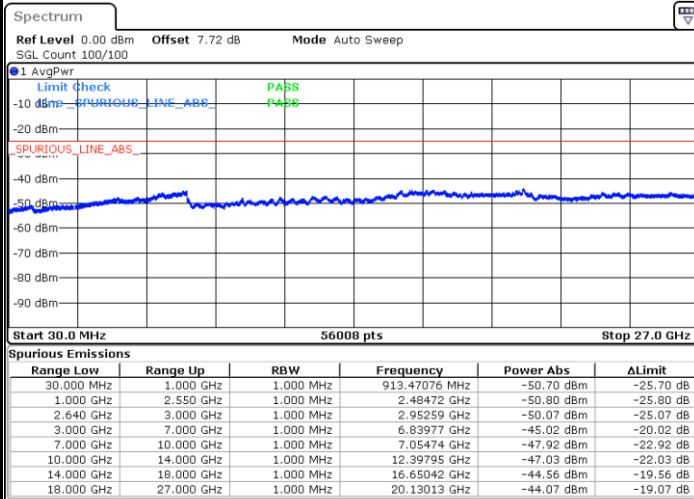


Date: 3 AUG 2018 15:21:37



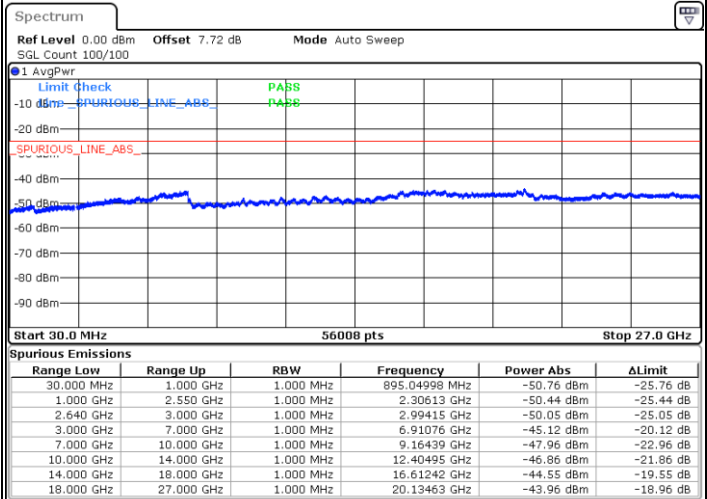
LTE Band 38 / 5MHz

Lowest Channel / QPSK



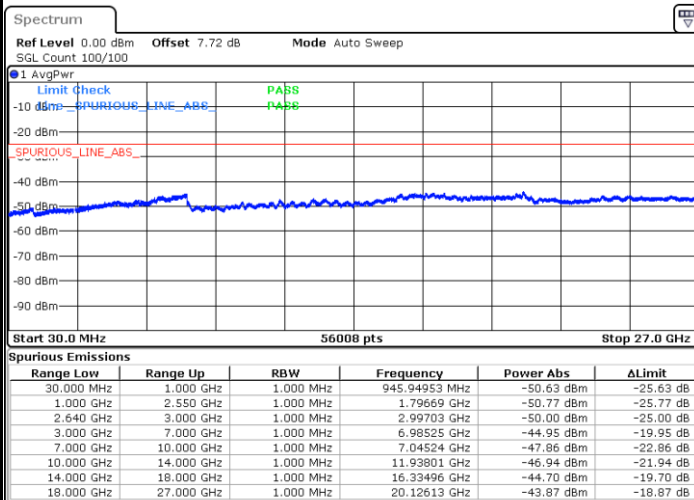
Date: 3.AUG.2018 19:49:19

Lowest Channel / 16QAM



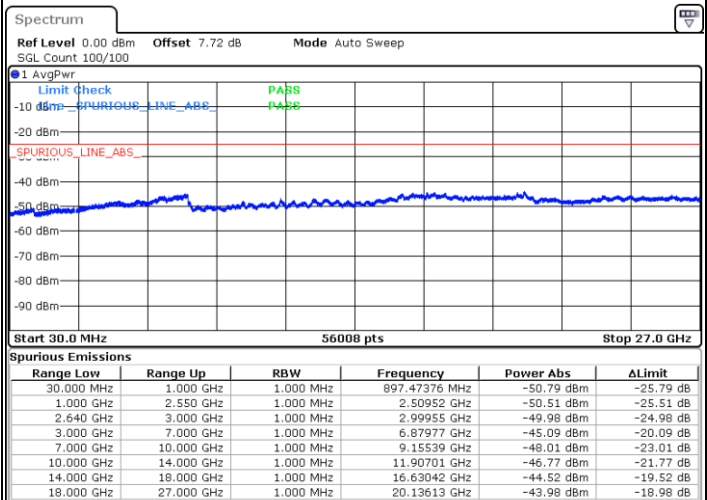
Date: 3.AUG.2018 19:50:15

Middle Channel / QPSK



Date: 3.AUG.2018 19:51:10

Middle Channel / 16QAM

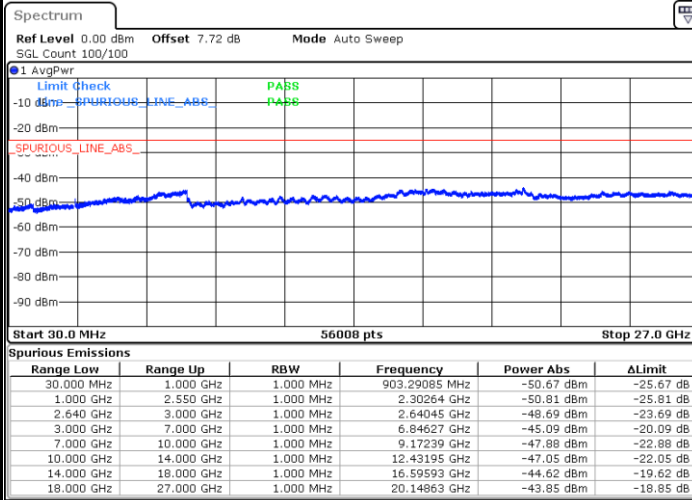


Date: 3.AUG.2018 19:52:06



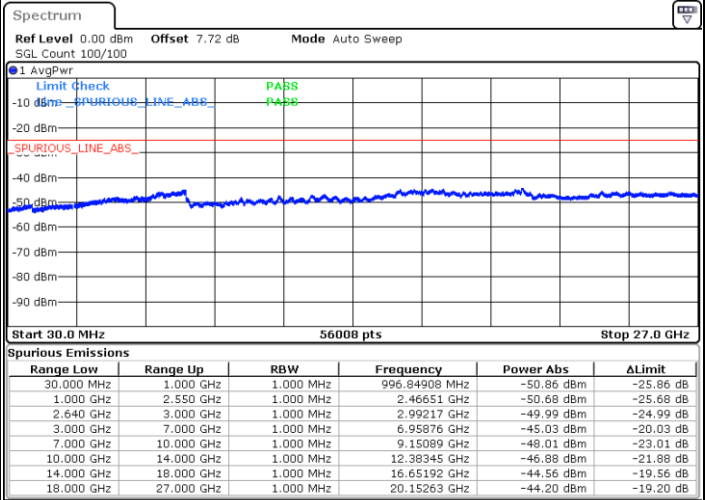
LTE Band 38 / 5MHz

Highest Channel / QPSK



Date: 3.AUG.2018 19:53:02

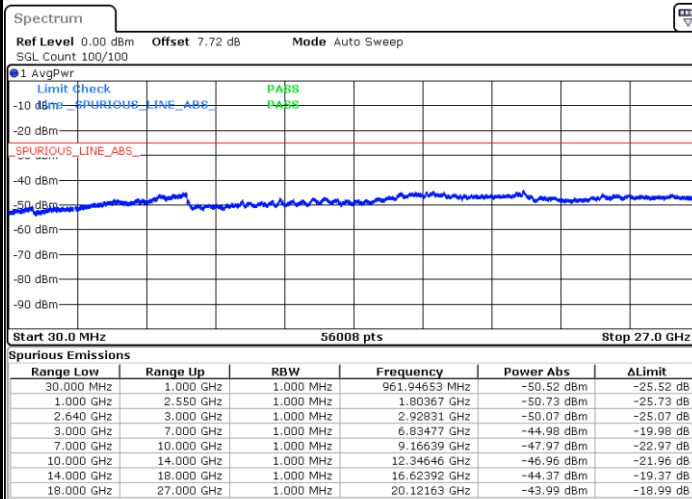
Highest Channel / 16QAM



Date: 3.AUG.2018 19:53:57

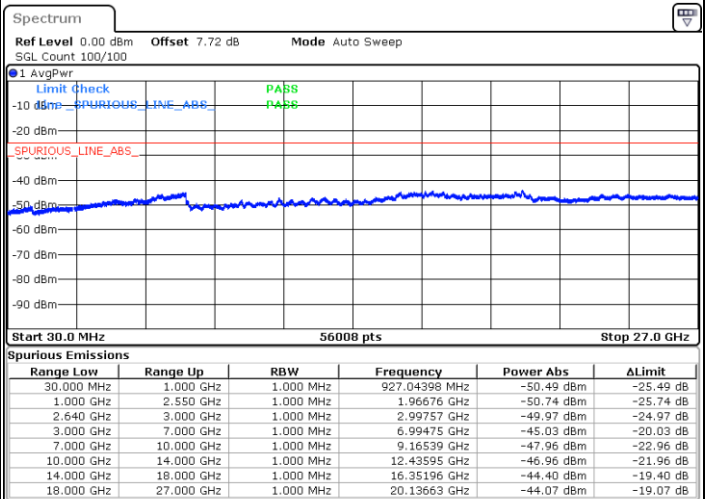
LTE Band 38 / 10MHz

Lowest Channel / QPSK



Date: 3.AUG.2018 19:54:53

Lowest Channel / 16QAM

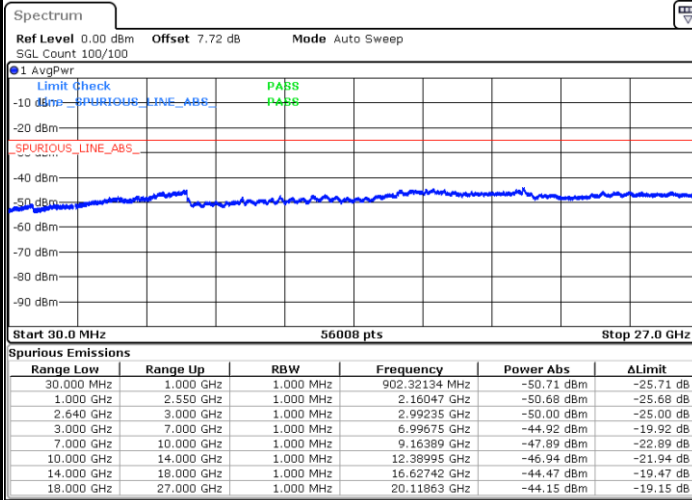


Date: 3.AUG.2018 19:55:48



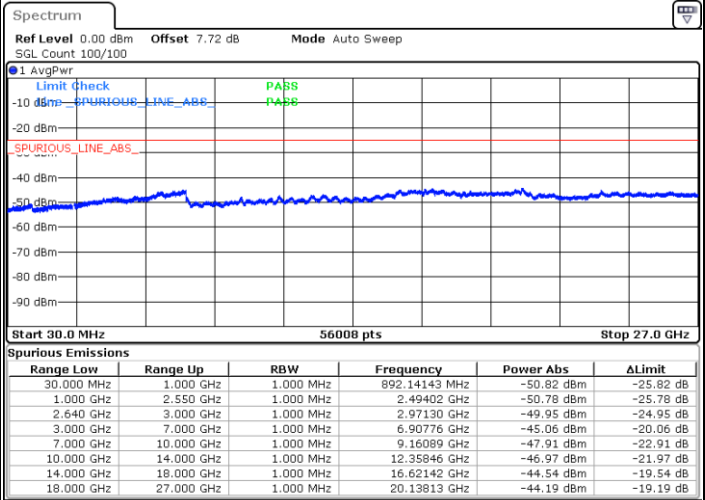
LTE Band 38 / 10MHz

Middle Channel / QPSK



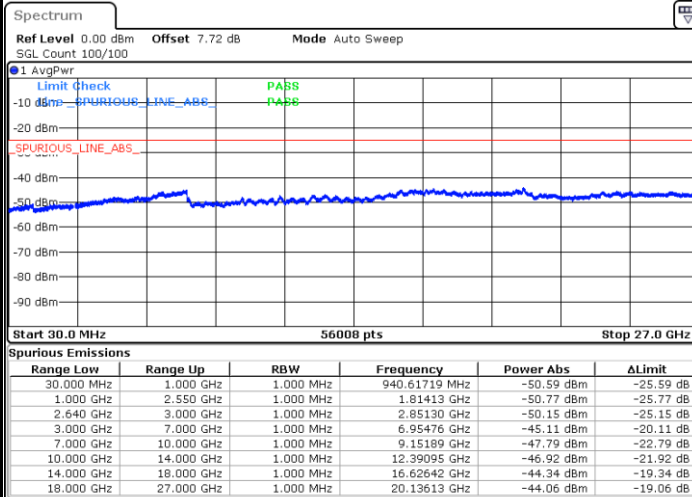
Date: 3 AUG 2018 19:56:44

Middle Channel / 16QAM



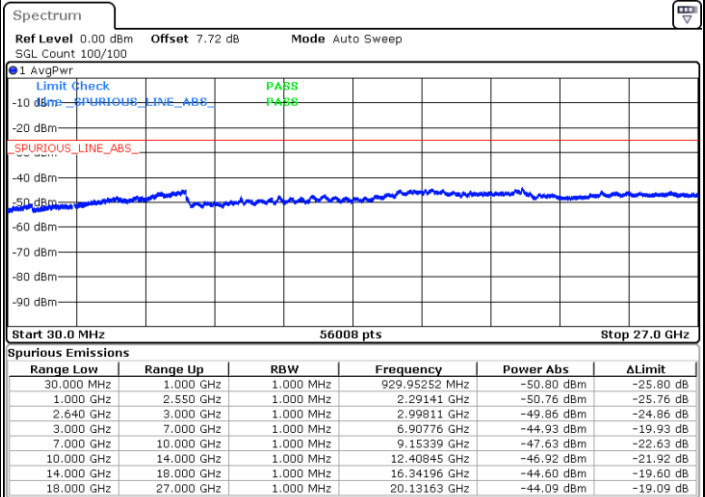
Date: 3 AUG 2018 19:57:39

Highest Channel / QPSK



Date: 3 AUG 2018 19:58:34

Highest Channel / 16QAM

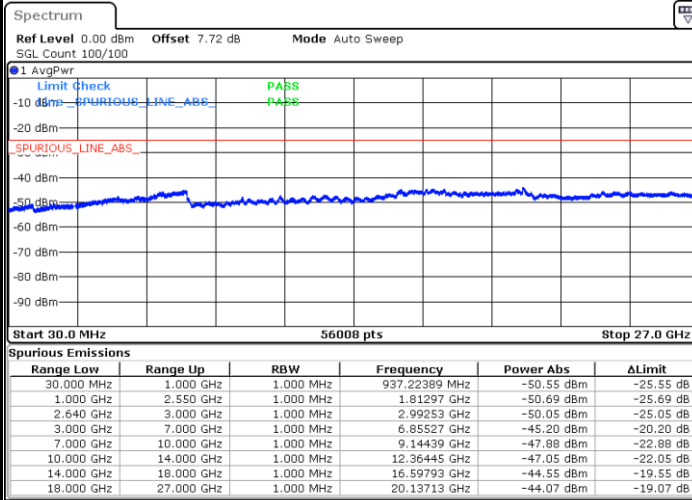


Date: 3 AUG 2018 19:59:30



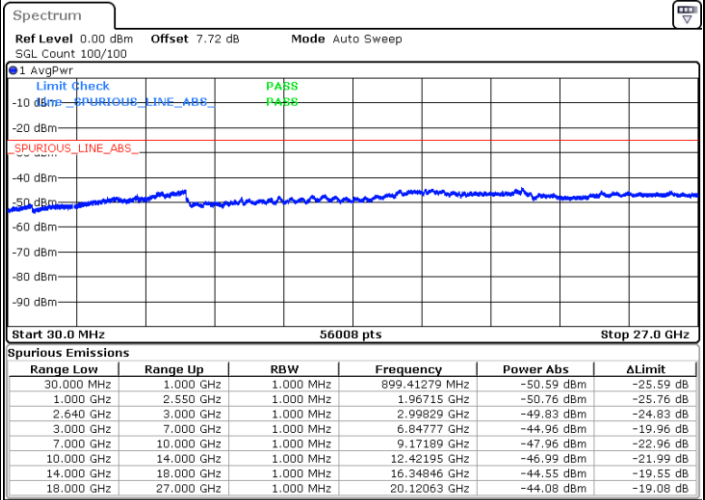
LTE Band 38 / 15MHz

Lowest Channel / QPSK



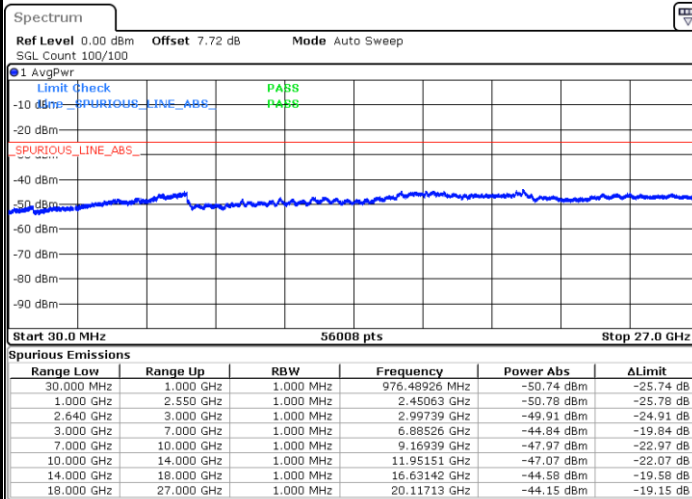
Date: 3 AUG 2018 20:00:25

Lowest Channel / 16QAM



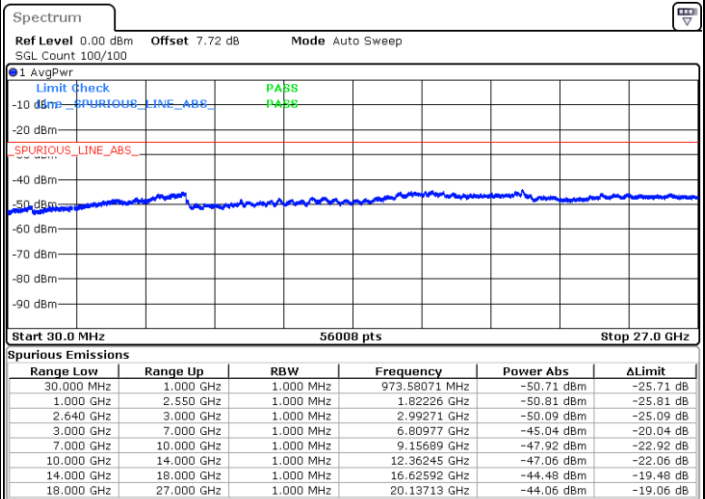
Date: 3 AUG 2018 20:01:21

Middle Channel / QPSK



Date: 3 AUG 2018 20:02:16

Middle Channel / 16QAM

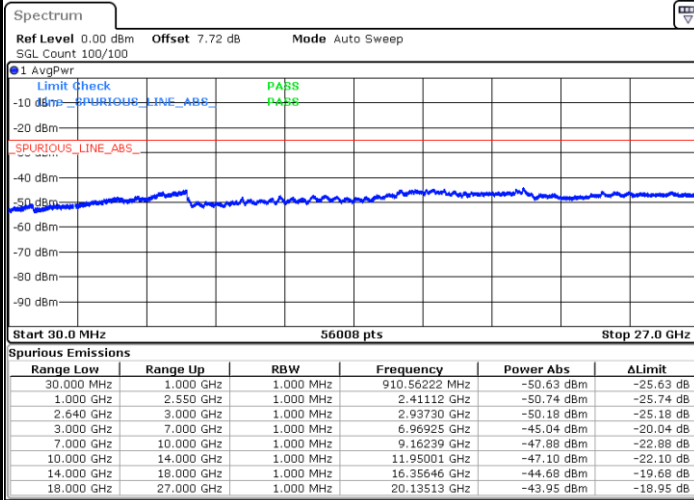


Date: 3 AUG 2018 20:03:12



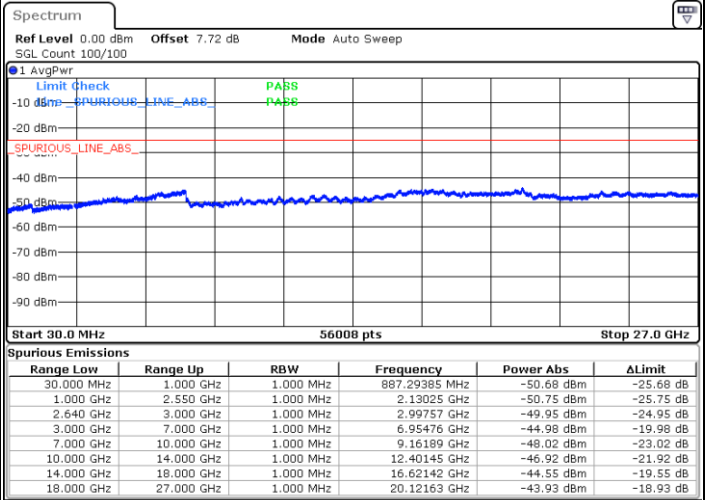
LTE Band 38 / 15MHz

Highest Channel / QPSK



Date: 3.AUG.2018 20:04:07

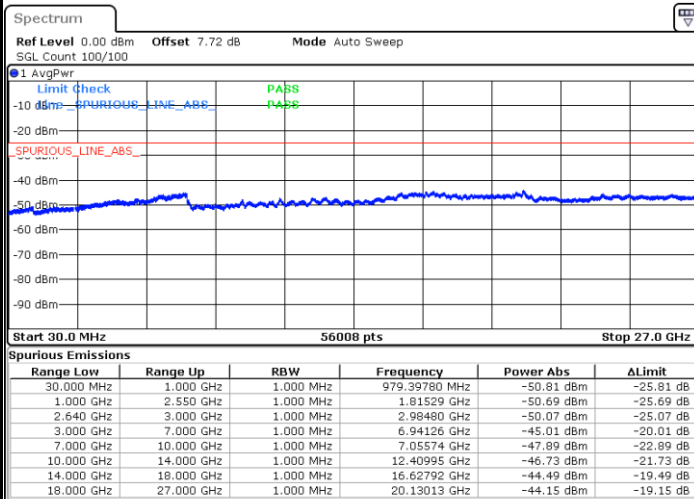
Highest Channel / 16QAM



Date: 3.AUG.2018 20:05:03

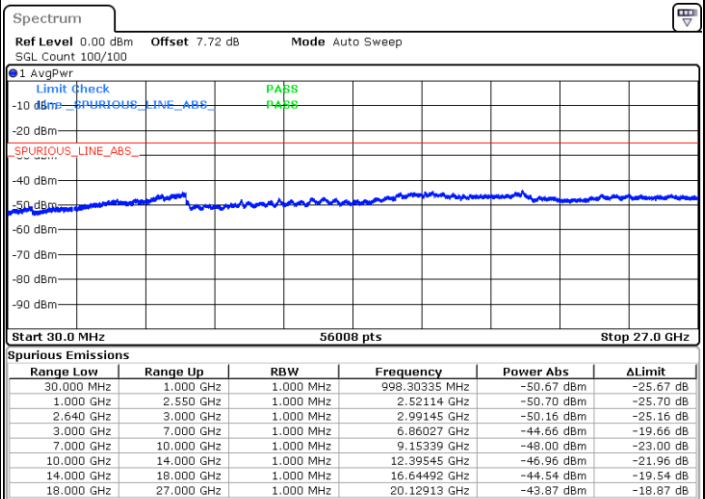
LTE Band 38 / 20MHz

Lowest Channel / QPSK



Date: 3.AUG.2018 20:05:58

Lowest Channel / 16QAM

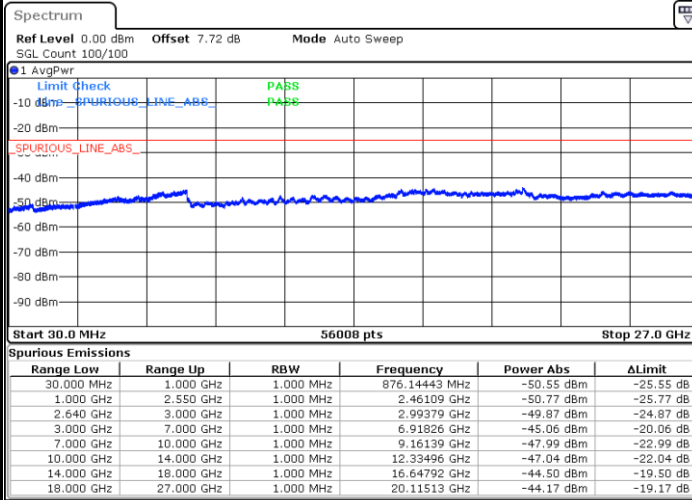


Date: 3.AUG.2018 20:06:54



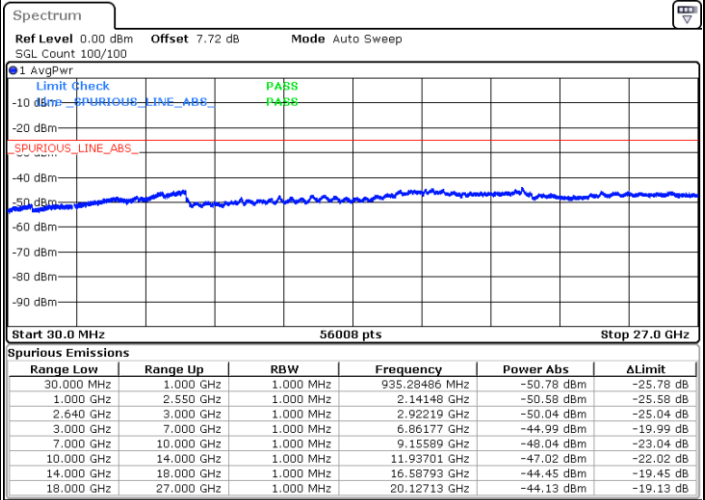
LTE Band 38 / 20MHz

Middle Channel / QPSK



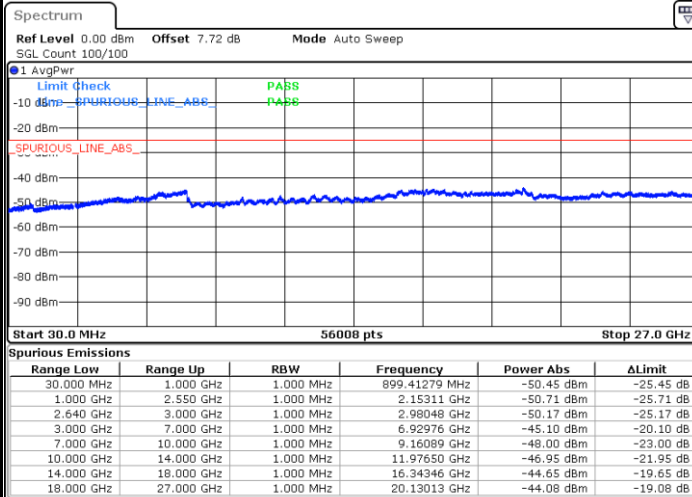
Date: 3.AUG.2018 20:07:50

Middle Channel / 16QAM



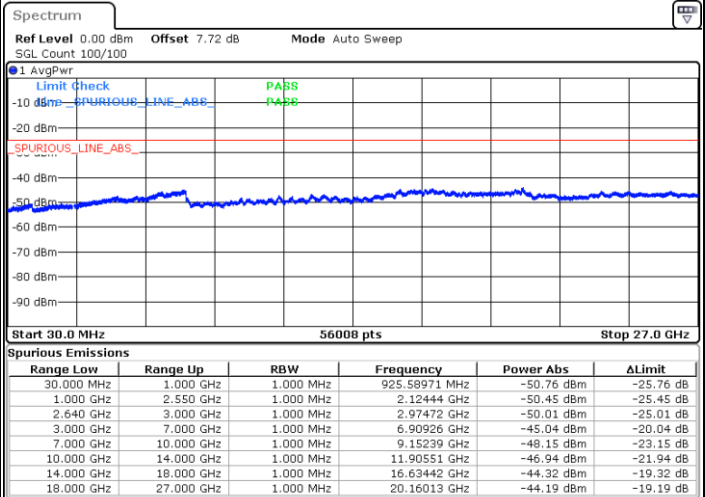
Date: 3.AUG.2018 20:08:45

Highest Channel / QPSK



Date: 3.AUG.2018 20:09:41

Highest Channel / 16QAM

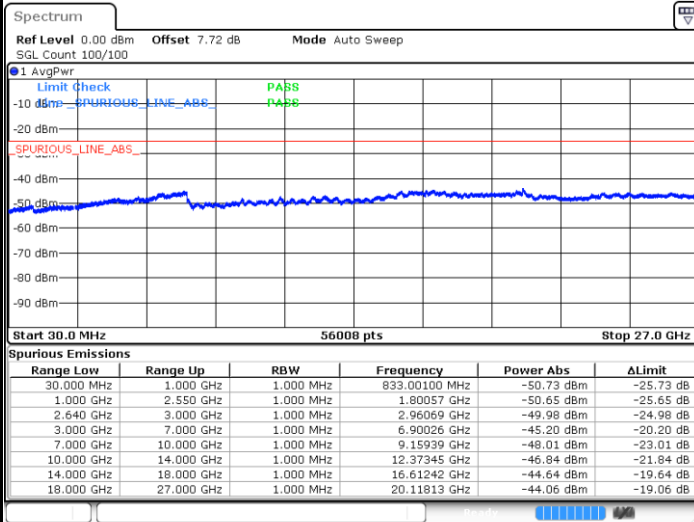


Date: 3.AUG.2018 20:10:36



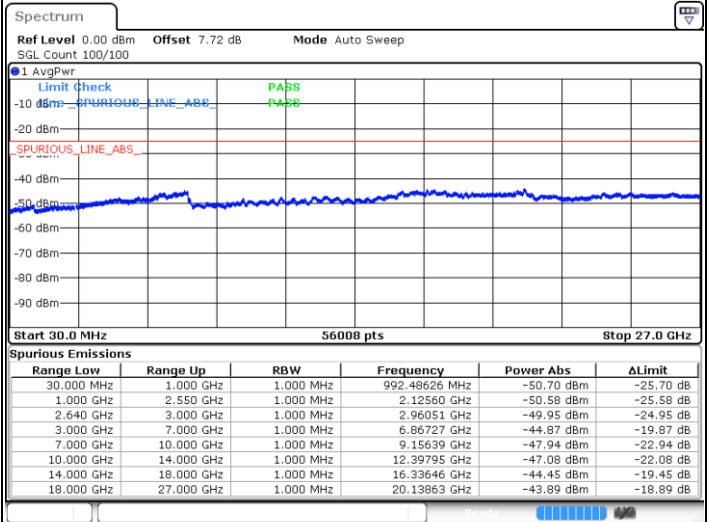
LTE Band 38 / 5MHz

Lowest Channel / 64QAM



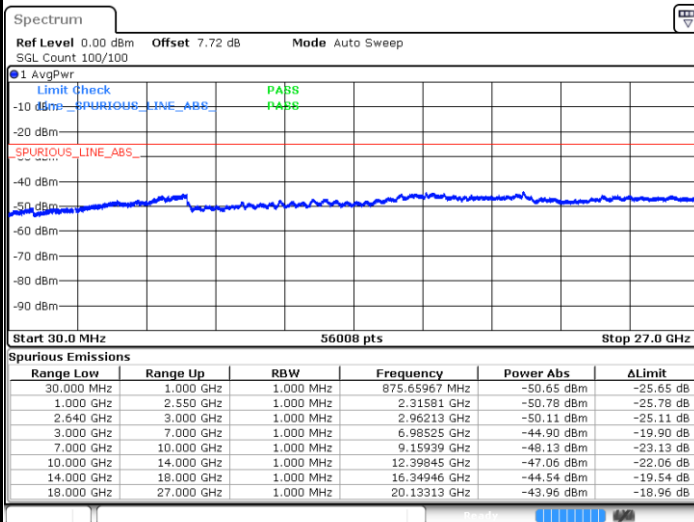
Date: 3.AUG.2018 20:11:32

Middle Channel / 64QAM



Date: 3.AUG.2018 20:12:29

Highest Channel / 64QAM

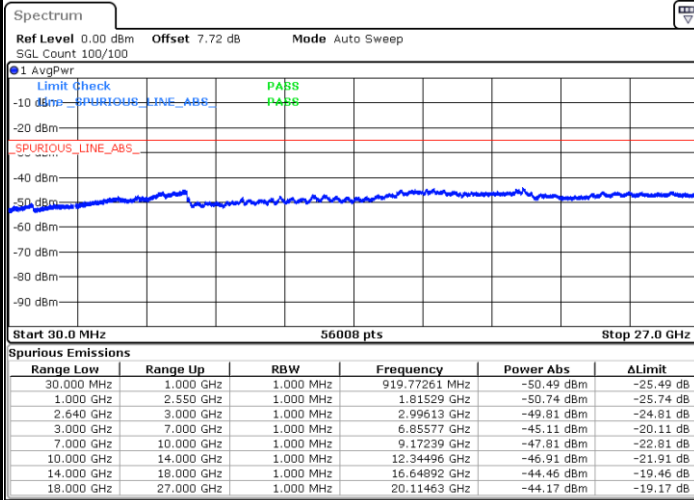


Date: 3.AUG.2018 20:13:24



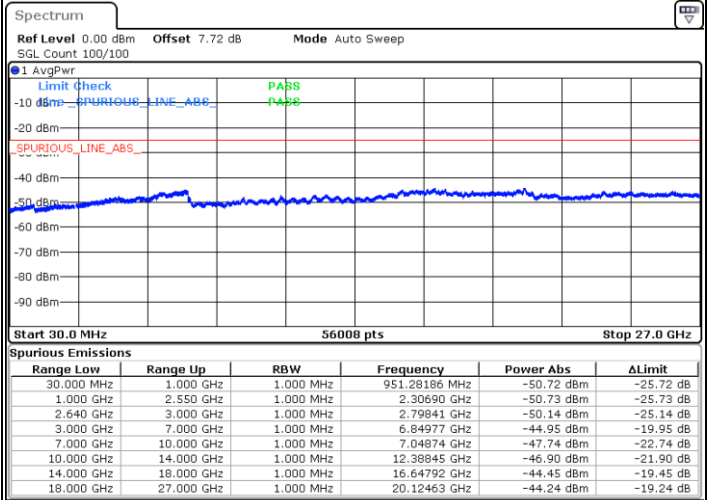
LTE Band 38 / 10MHz

Lowest Channel / 64QAM



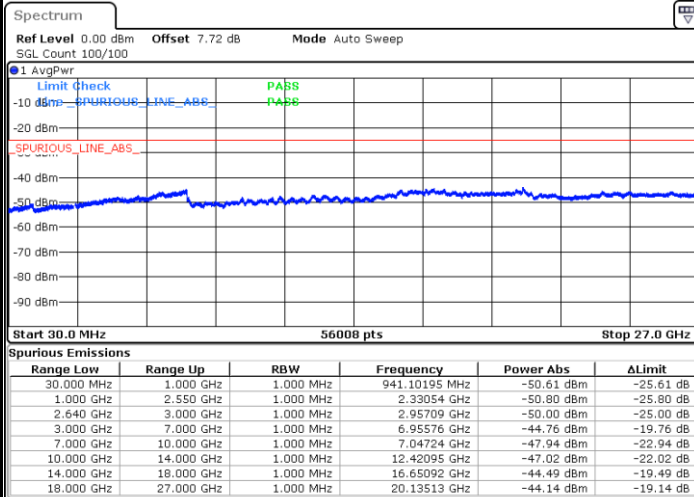
Date: 3.AUG.2018 20:14:20

Middle Channel / 64QAM



Date: 3.AUG.2018 20:15:16

Highest Channel / 64QAM



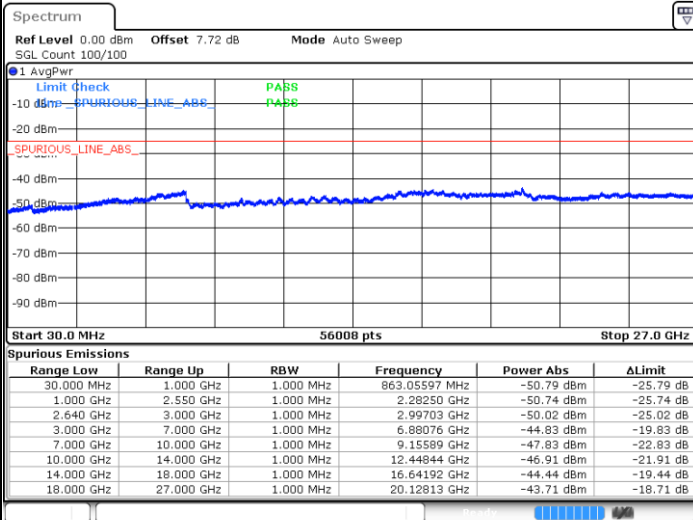
Date: 3.AUG.2018 20:16:11



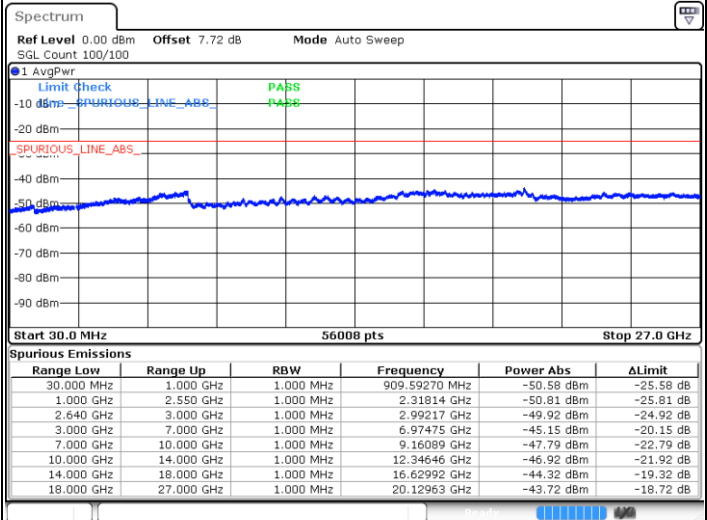
LTE Band 38 / 15MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

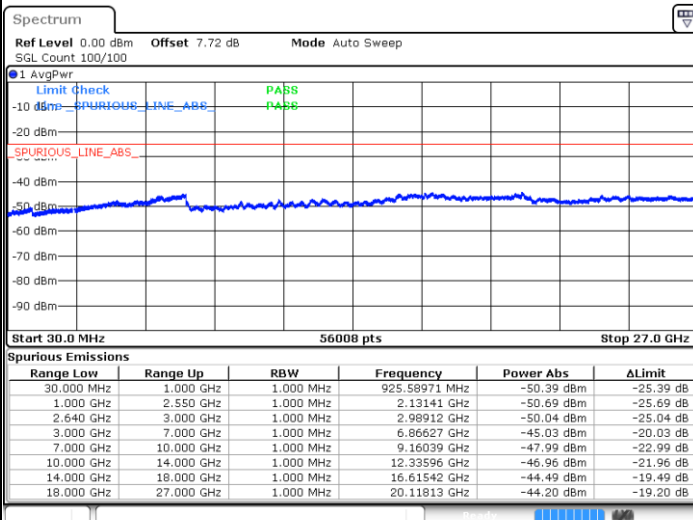


Date: 3 AUG 2018 20:17:07



Date: 3 AUG 2018 20:18:02

Highest Channel / 64QAM

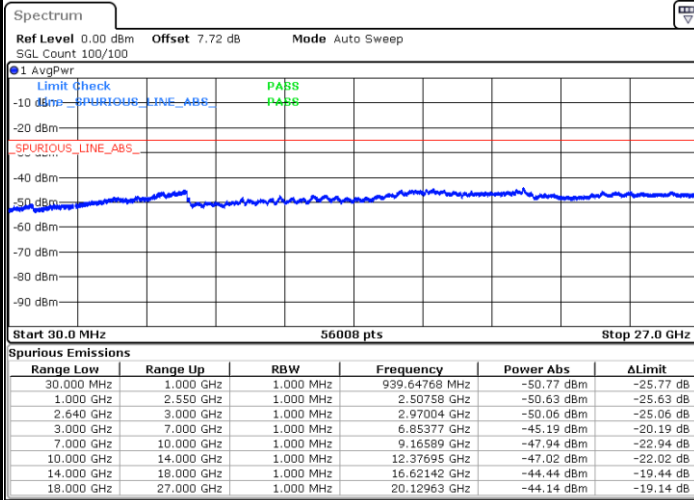


Date: 3 AUG 2018 20:18:58



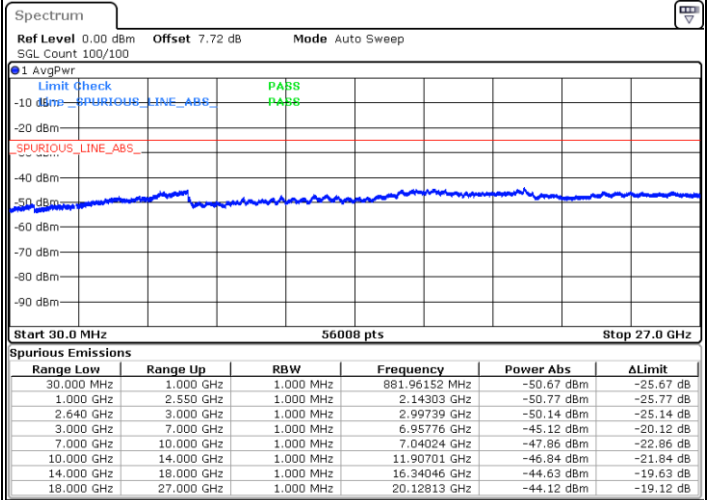
LTE Band 38 / 20MHz

Lowest Channel / 64QAM



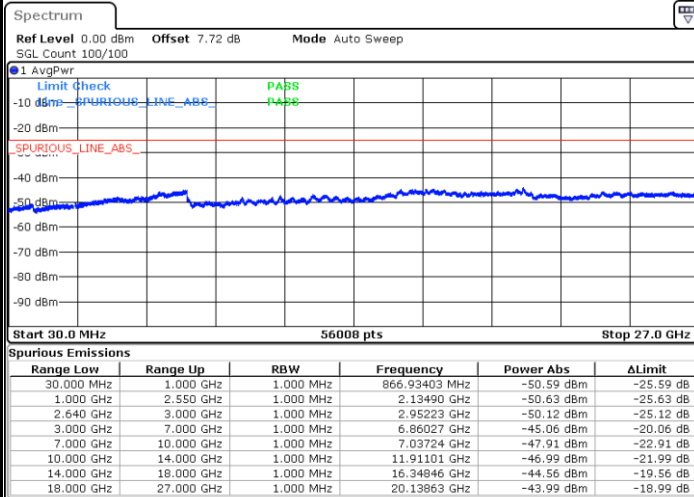
Date: 3.AUG.2018 20:19:53

Middle Channel / 64QAM



Date: 3.AUG.2018 20:20:49

Highest Channel / 64QAM



Date: 3.AUG.2018 20:21:45



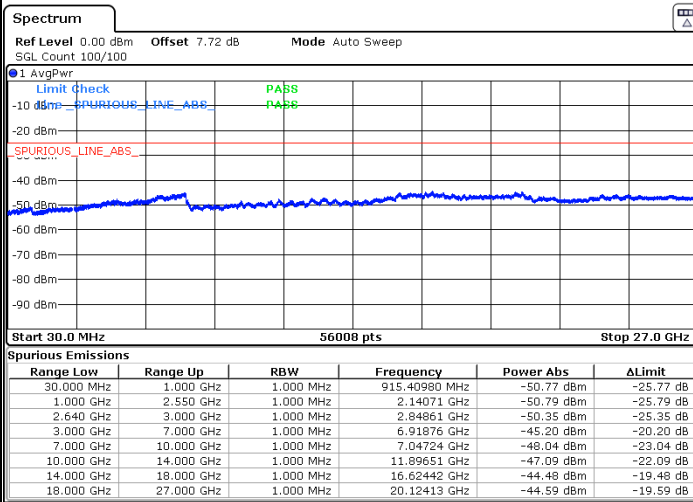
For CA

LTE Band 38 / 15MHz+15MHz

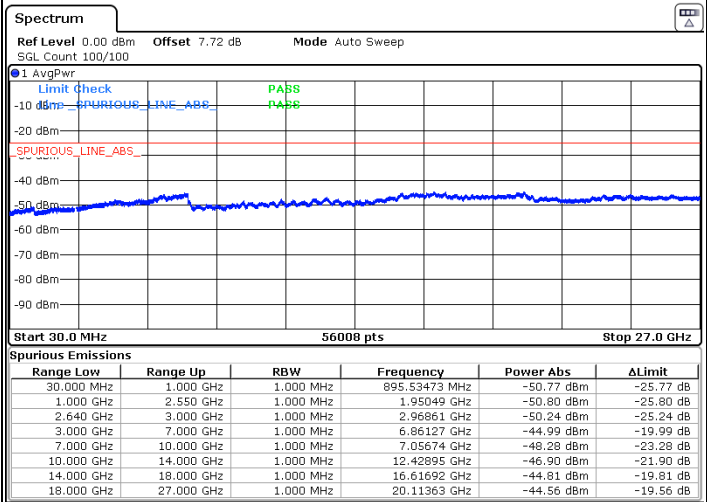
QPSK

Lowest Channel

Middle Channel



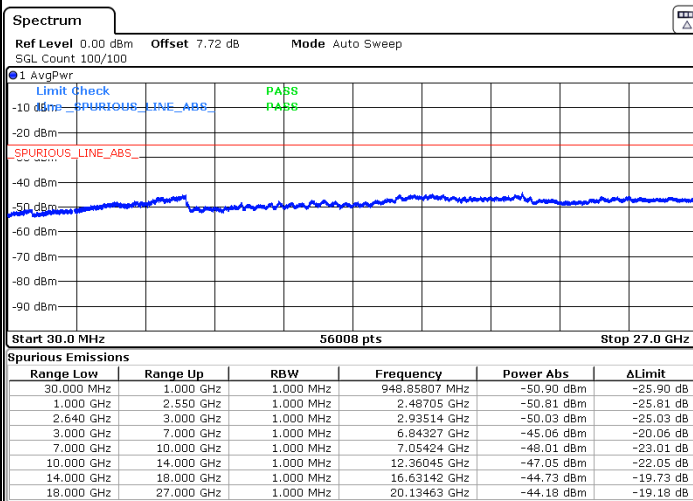
Date: 24 AUG 2018 15:11:49



Date: 24 AUG 2018 15:11:38

Highest Channel

N/A



Date: 24 AUG 2018 15:05:17

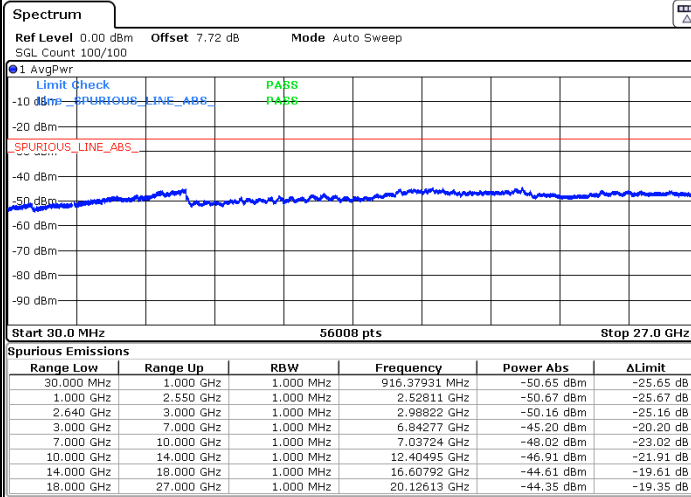


LTE Band 38 / 15MHz+15MHz

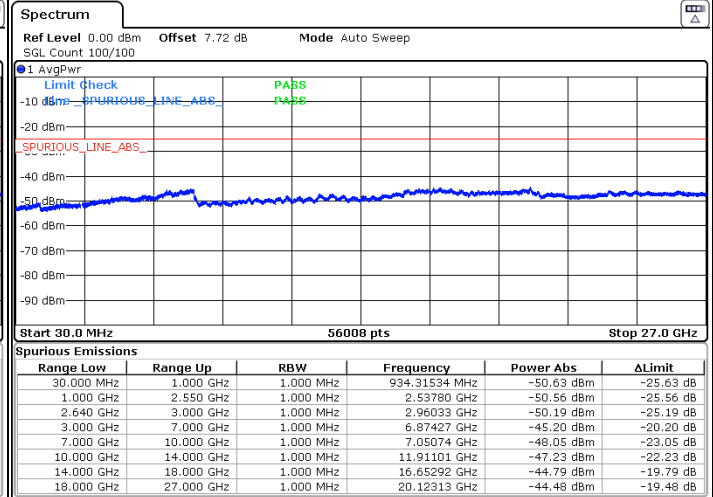
16QAM

Lowest Channel

Middle Channel



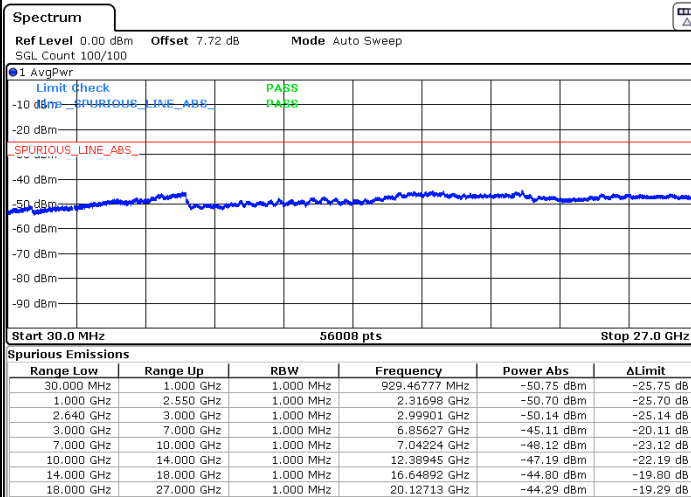
Date: 24 AUG 2018 15:10:51



Date: 24 AUG 2018 15:14:43

Highest Channel

N/A



Date: 24 AUG 2018 15:06:48

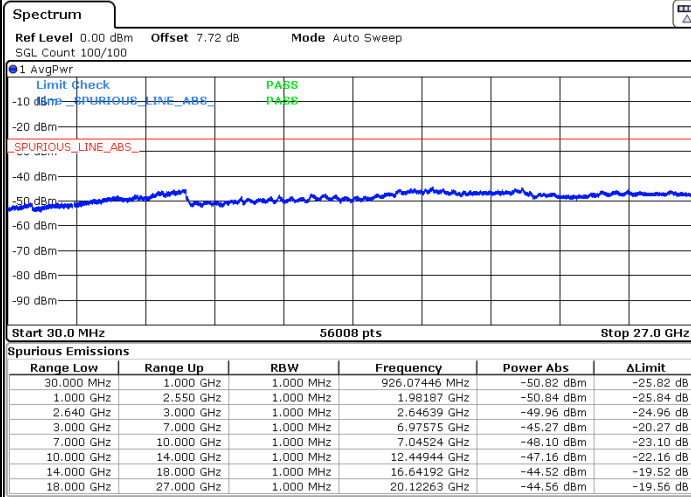


LTE Band 38 / 15MHz+15MHz

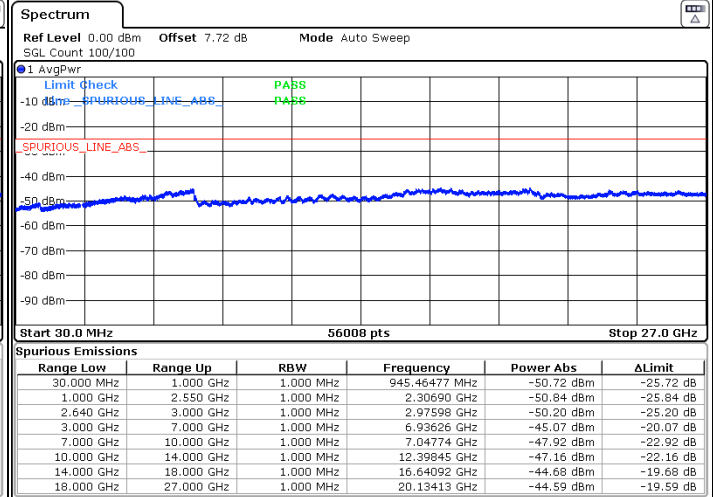
64QAM

Lowest Channel

Middle Channel



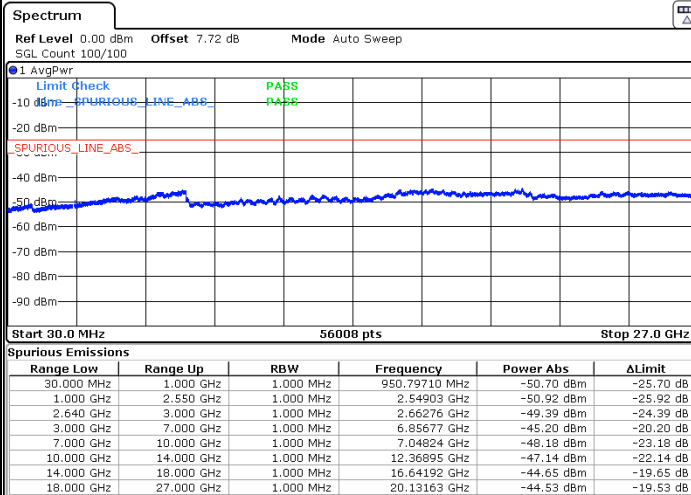
Date: 24 AUG 2018 15:09:49



Date: 24 AUG 2018 15:15:52

Highest Channel

N/A



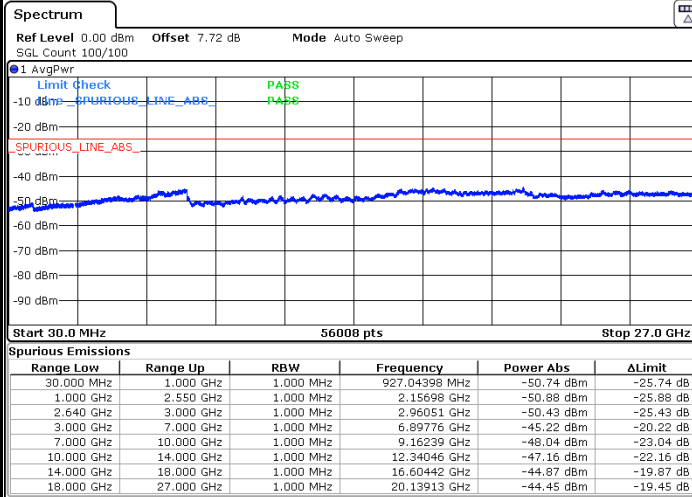
Date: 24 AUG 2018 15:07:45



LTE Band 38 / 20MHz+20MHz

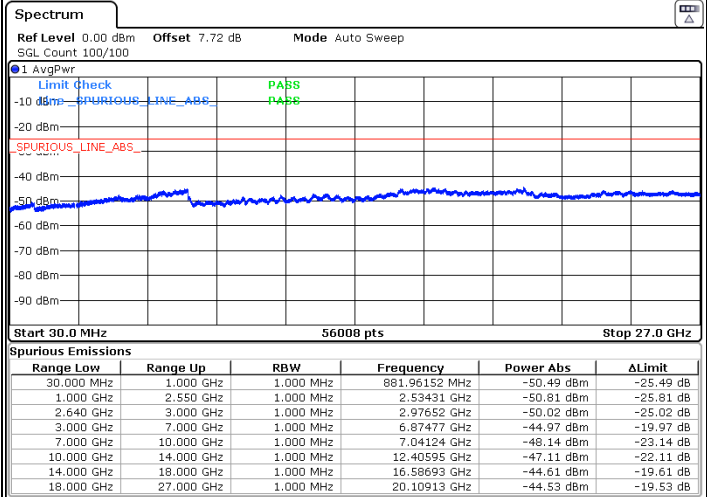
QPSK

Lowest Channel



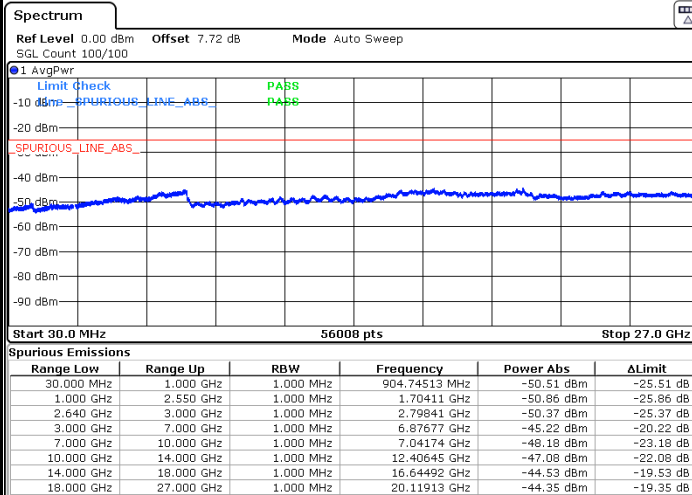
Date: 24 AUG 2018 15:24:24

Middle Channel



Date: 24 AUG 2018 15:34:56

Highest Channel



Date: 24 AUG 2018 15:26:38

N/A

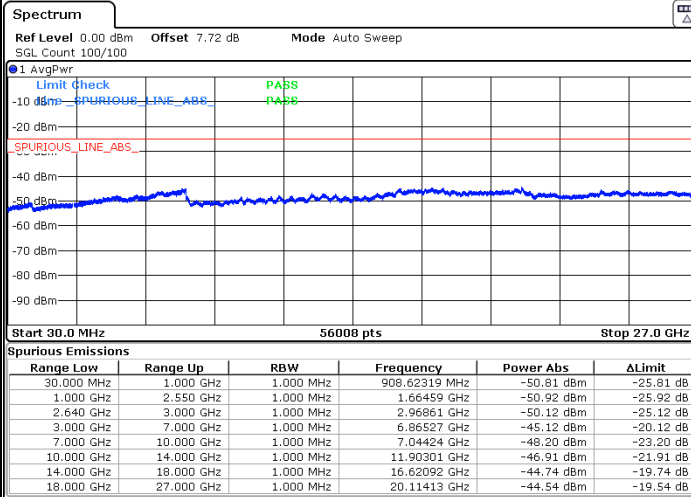


LTE Band 38 / 20MHz+20MHz

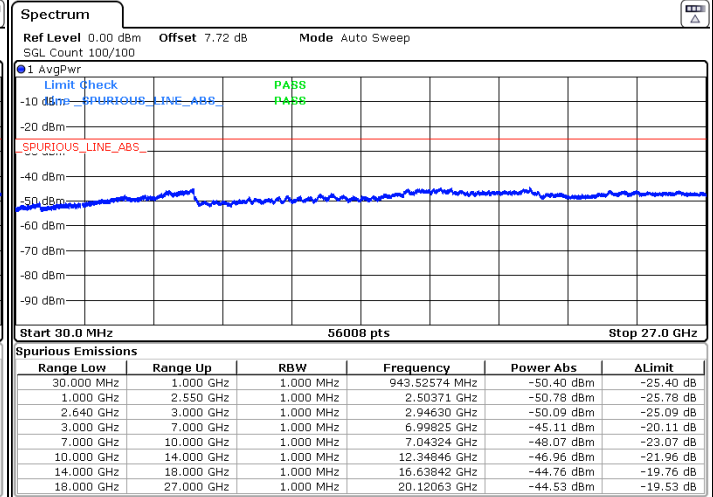
16QAM

Lowest Channel

Middle Channel



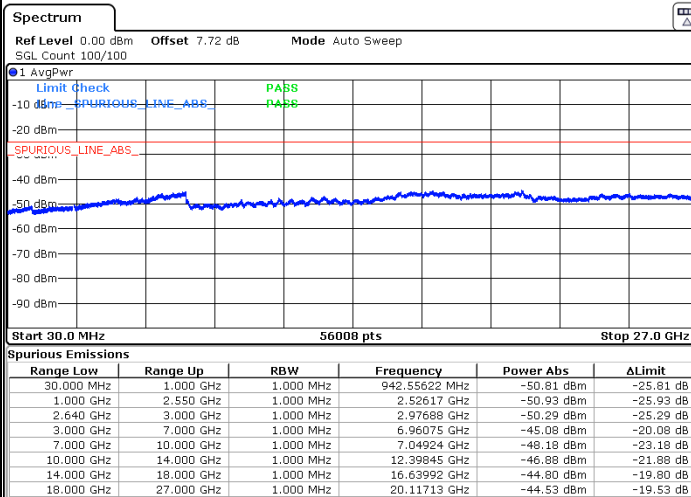
Date: 24 AUG 2018 15:23:17



Date: 24 AUG 2018 15:33:58

Highest Channel

N/A



Date: 24 AUG 2018 15:27:41

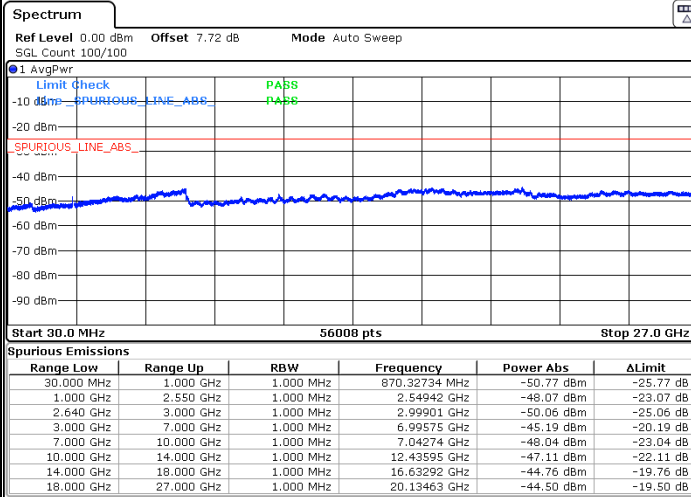


LTE Band 38 / 20MHz+20MHz

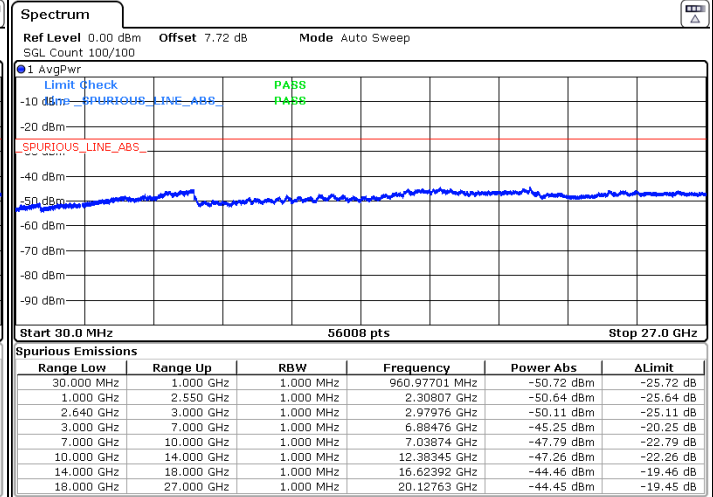
64QAM

Lowest Channel

Middle Channel



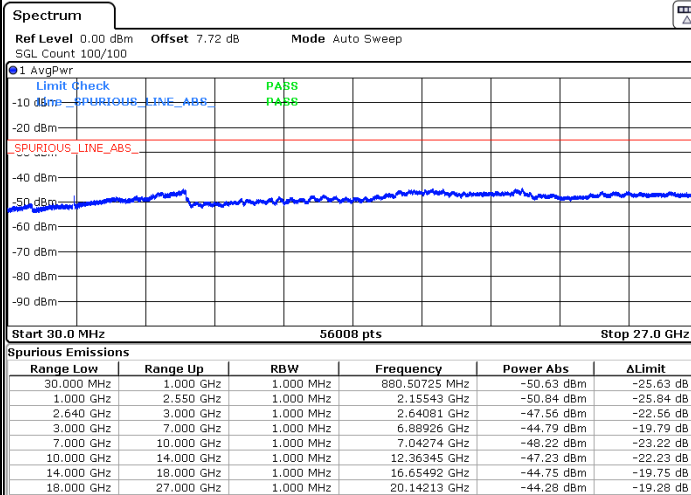
Date: 24 AUG 2018 15:21:15



Date: 24 AUG 2018 15:30:24

Highest Channel

N/A



Date: 24 AUG 2018 15:28:42

Frequency Stability

Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0012	PASS
40	Normal Voltage	0.0006	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0013	
0	Normal Voltage	0.0015	
-10	Normal Voltage	0.0003	
-20	Normal Voltage	0.0016	
-30	Normal Voltage	0.0022	
20	Maximum Voltage	0.0005	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0014	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.7 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0002	PASS
40	Normal Voltage	0.0012	
30	Normal Voltage	0.0025	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0008	
0	Normal Voltage	0.0019	
-10	Normal Voltage	0.0027	
-20	Normal Voltage	0.0004	
-30	Normal Voltage	0.0016	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0026	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.7 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0001	PASS
40	Normal Voltage	0.0018	
30	Normal Voltage	0.0050	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0056	
0	Normal Voltage	0.0060	
-10	Normal Voltage	0.0051	
-20	Normal Voltage	0.0023	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0051	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0012	

Note: Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.7 V. ; Maximum Voltage =4.4 V.



Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0003	PASS
40	Normal Voltage	0.0002	
30	Normal Voltage	0.0015	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0021	
0	Normal Voltage	0.0017	
-10	Normal Voltage	0.0019	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0013	
20	Maximum Voltage	0.0007	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0014	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.7 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 38 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0024	PASS
40	Normal Voltage	0.0008	
30	Normal Voltage	0.0026	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0004	
0	Normal Voltage	0.0020	
-10	Normal Voltage	0.0018	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0010	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0022	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.7 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)
Middle	3741	-61.29	-13	-48.29	-66.16	3.55	8.42	H
	5613	-49.76	-13	-36.76	-56.10	4.34	10.68	H
	7485	-55.42	-13	-42.42	-62.22	5.14	11.94	H
	3741	-63.02	-13	-50.02	-67.89	3.55	8.42	V
	5613	-59.64	-13	-46.64	-65.98	4.34	10.68	V
	7485	-54.95	-13	-41.95	-61.75	5.14	11.94	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	3447	-57.94	-13	-44.94	-62.66	3.41	8.13	H
	5172	-56.72	-13	-43.72	-62.73	4.195	10.20	H
	6894	-57.26	-13	-44.26	-63.71	4.91	11.36	H
	3447	-55.63	-13	-42.63	-60.35	3.413	8.13	V
	5172	-51.81	-13	-38.81	-57.82	4.195	10.20	V
	6894	-57.99	-13	-44.99	-64.44	4.911	11.36	V

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



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	-68.66	-13	-55.66	-69.87	2.32	5.68	H
	2496	-65.89	-13	-52.89	-66.52	3.02	5.80	H
	3327	-64.77	-13	-51.77	-67.23	3.27	7.88	H
	1664	-69.02	-13	-56.02	-70.23	2.32	5.68	V
	2496	-66.13	-13	-53.13	-66.76	3.02	5.80	V
	3327	-64.62	-13	-51.62	-67.08	3.27	7.88	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	5051	-64.90	-25	-39.90	-70.91	4.20	10.21	H
	7577	-53.41	-25	-28.41	-60.27	5.12	11.98	H
	10104	-55.16	-25	-30.16	-62.20	5.86	12.90	H
	5051	-62.34	-25	-37.34	-68.35	4.20	10.21	V
	7577	-56.02	-25	-31.02	-62.88	5.12	11.98	V
	10104	-58.83	-25	-33.83	-65.87	5.86	12.90	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	5177	-65.62	-25	-40.62	-71.63	4.20	10.21	H
	7766	-52.44	-25	-27.44	-59.30	5.12	11.98	H
	10352	-53.37	-25	-28.37	-60.41	5.86	12.90	H
	5177	-65.25	-25	-40.25	-71.26	4.20	10.21	V
	7766	-55.49	-25	-30.49	-62.35	5.12	11.98	V
	10352	-54.24	-25	-29.24	-61.28	5.86	12.90	V

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

**For CA**

LTE Band 38 CA / 20M+20M / 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	5152	-63.59	-25	-38.59	-69.60	4.20	10.21	H
	7728	-53.43	-25	-28.43	-60.29	5.12	11.98	H
	10305	-54.81	-25	-29.81	-61.85	5.86	12.90	H
	5152	-64.05	-25	-39.05	-70.06	4.20	10.21	V
	7728	-53.67	-25	-28.67	-60.53	5.12	11.98	V
	10305	-56.07	-25	-31.07	-63.11	5.86	12.90	V

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