3.6 Conducted Spurious Emission Measurement

3.6.1 Description of Conducted Spurious Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30MHz up to a frequency including its 10th harmonic.

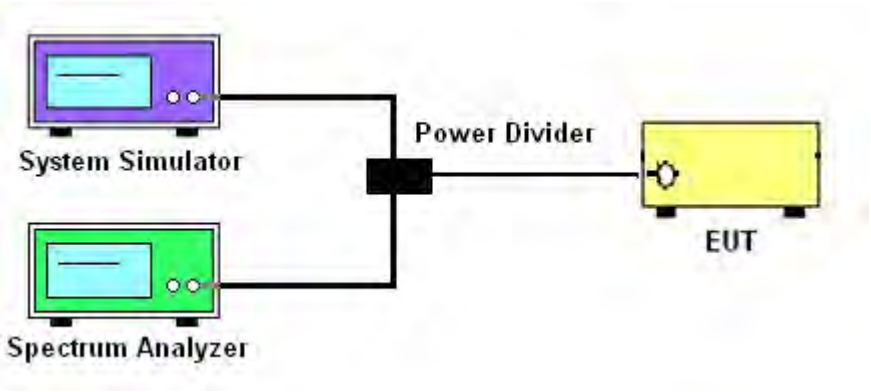
3.6.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.6.3 Test Procedures

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. The middle channel for the highest RF power within the transmitting frequency was measured.
4. The conducted spurious emission for the whole frequency range was taken.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
7. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
   = P(W)- [43 + 10log(P)] (dB)
   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
   = -13dBm.

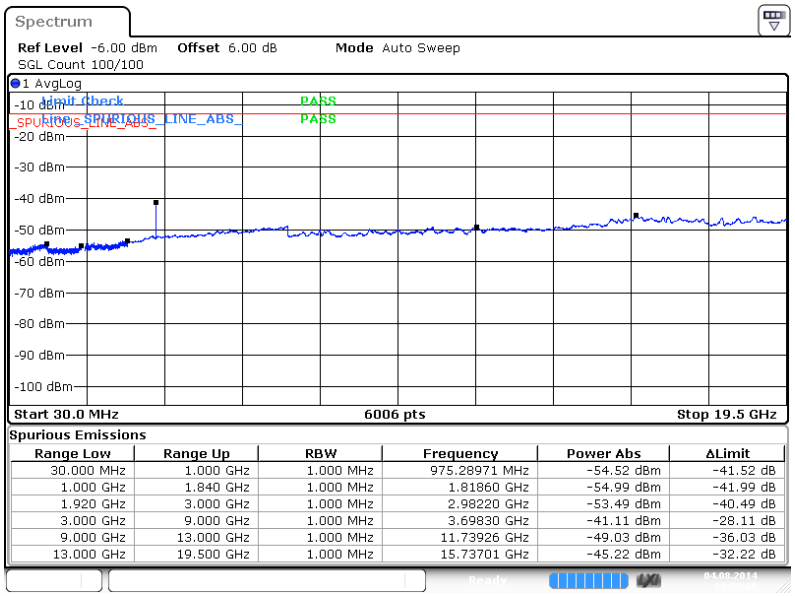
3.6.4 Test Setup



3.6.5 Test Result (Plots) of Conducted Spurious Emission

Band :	LTE Band 2	Channel :	CH18607 (Low)
Band Width :	1.4MHz		

QPSK (RB Size 1, RB Offset 5)

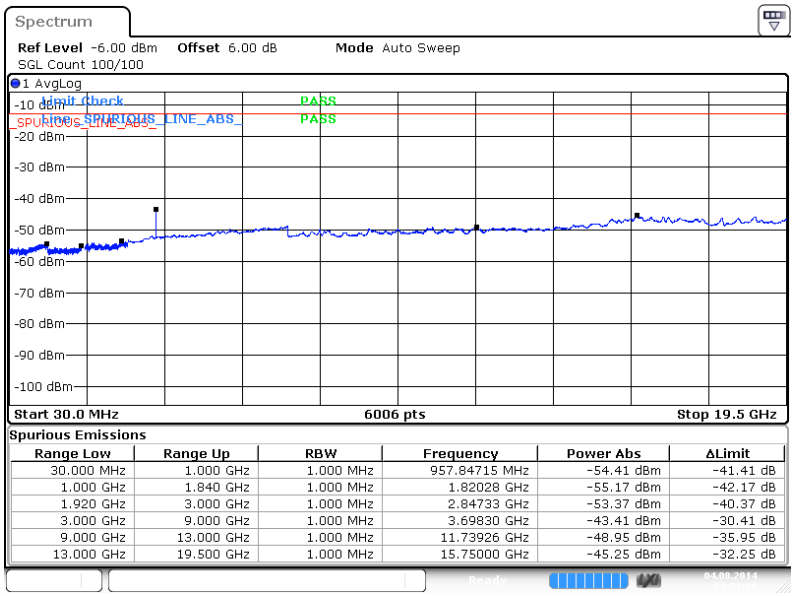


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	975.28971 MHz	-54.52 dBm	-41.52 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.81860 GHz	-54.99 dBm	-41.99 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.98220 GHz	-53.49 dBm	-40.49 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.69830 GHz	-41.11 dBm	-28.11 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.73926 GHz	-49.03 dBm	-36.03 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.73701 GHz	-45.22 dBm	-32.22 dB

Date:4 AUG 2014 23:52:00

16QAM (RB Size 3, RB Offset 0)



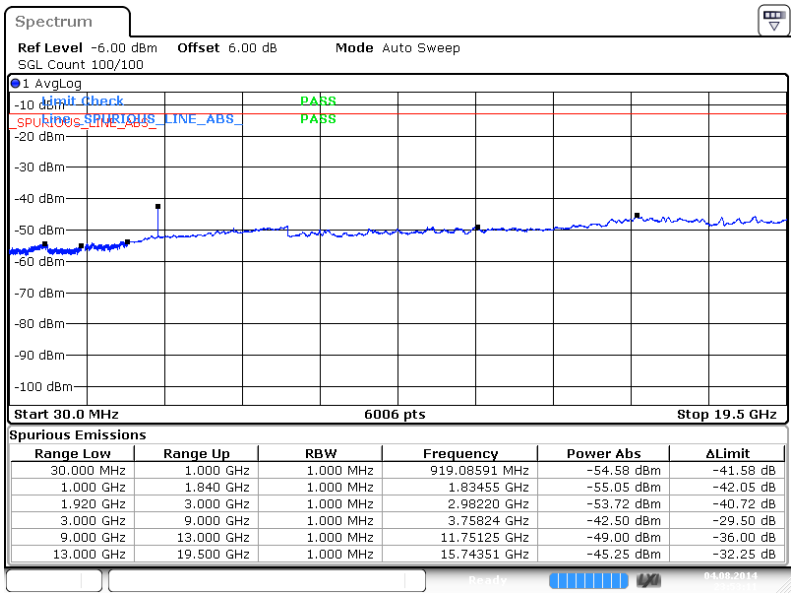
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	957.84715 MHz	-54.41 dBm	-41.41 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.82028 GHz	-55.17 dBm	-42.17 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.84733 GHz	-53.37 dBm	-40.37 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.69830 GHz	-43.41 dBm	-30.41 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.73926 GHz	-48.95 dBm	-35.95 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.75000 GHz	-45.25 dBm	-32.25 dB

Date:4 AUG 2014 23:51:06

Band :	LTE Band 2	Channel :	CH18900 (Middle)
Band Width :	1.4MHz		

QPSK (RB Size 1, RB Offset 5)

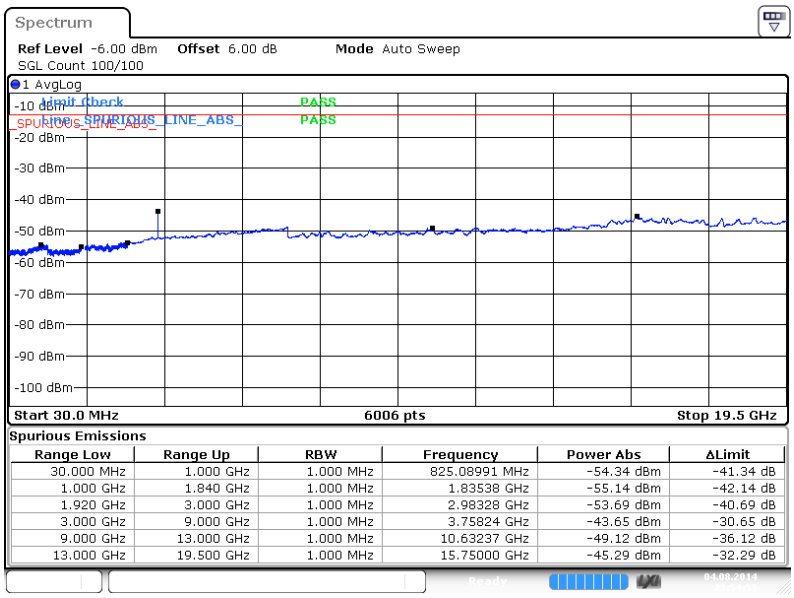


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	919.08591 MHz	-54.58 dBm	-41.58 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83455 GHz	-55.05 dBm	-42.05 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.98220 GHz	-53.72 dBm	-40.72 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.75824 GHz	-42.50 dBm	-29.50 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75125 GHz	-49.00 dBm	-36.00 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.74351 GHz	-45.25 dBm	-32.25 dB

Date:4.AUG.2014 23:53:11

16QAM (RB Size 3, RB Offset 0)



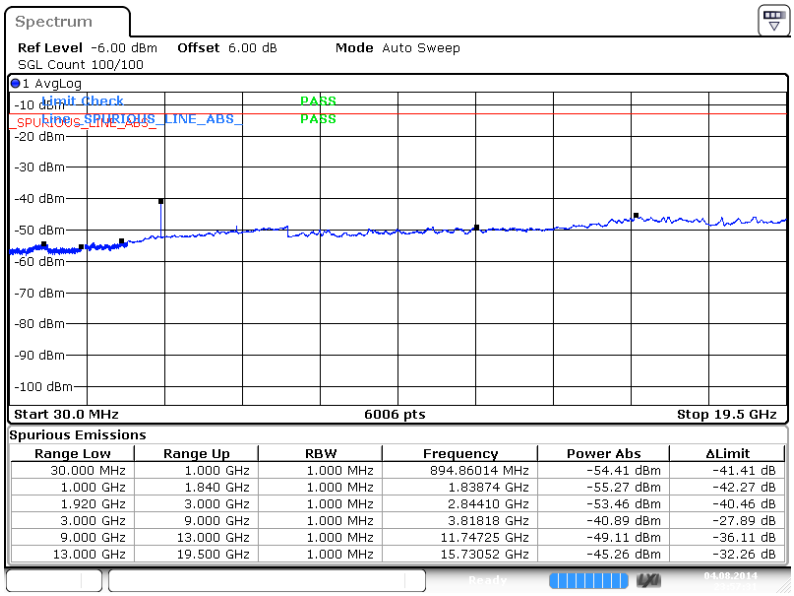
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	825.08991 MHz	-54.34 dBm	-41.34 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83538 GHz	-55.14 dBm	-42.14 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.98328 GHz	-53.69 dBm	-40.69 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.75824 GHz	-43.65 dBm	-30.65 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.63237 GHz	-49.12 dBm	-36.12 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.75000 GHz	-45.29 dBm	-32.29 dB

Date:4.AUG.2014 23:54:53

Band :	LTE Band 2	Channel :	CH19193 (High)
Band Width :	1.4MHz		

QPSK (RB Size 1, RB Offset 5)

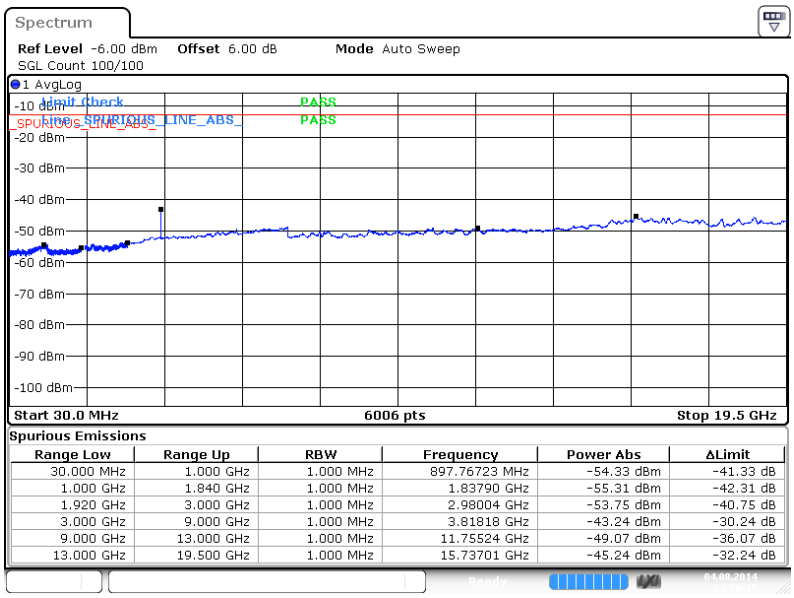


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	894.86014 MHz	-54.41 dBm	-41.41 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83874 GHz	-55.27 dBm	-42.27 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.84410 GHz	-53.46 dBm	-40.46 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.81818 GHz	-40.89 dBm	-27.89 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.74725 GHz	-49.11 dBm	-36.11 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.73052 GHz	-45.26 dBm	-32.26 dB

Date: 4 AUG 2014 23:57:32

16QAM (RB Size 3, RB Offset 0)



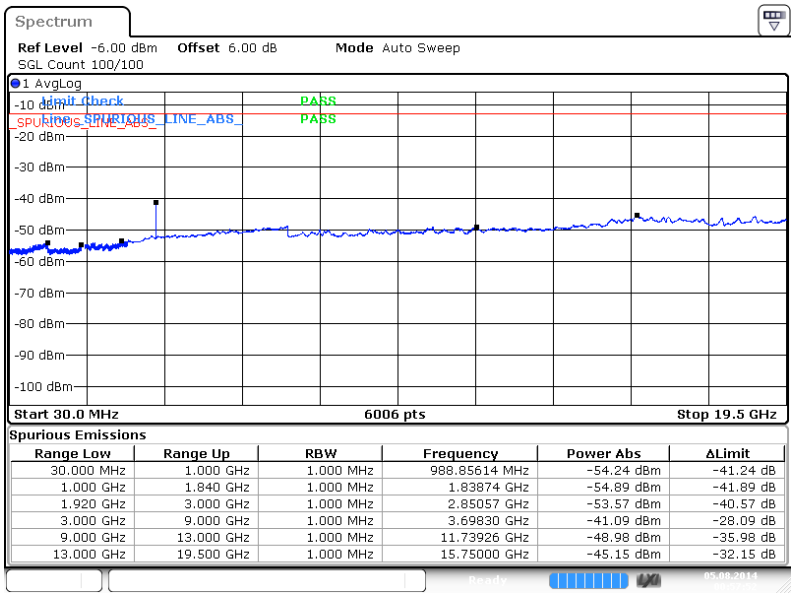
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	897.76723 MHz	-54.33 dBm	-41.33 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83790 GHz	-55.31 dBm	-42.31 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.98004 GHz	-53.75 dBm	-40.75 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.81818 GHz	-43.24 dBm	-30.24 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75524 GHz	-49.07 dBm	-36.07 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.73701 GHz	-45.24 dBm	-32.24 dB

Date: 4 AUG 2014 23:56:15

Band :	LTE Band 2	Channel :	CH18615 (Low)
Band Width :	3MHz		

QPSK (RB Size 1, RB Offset 14)

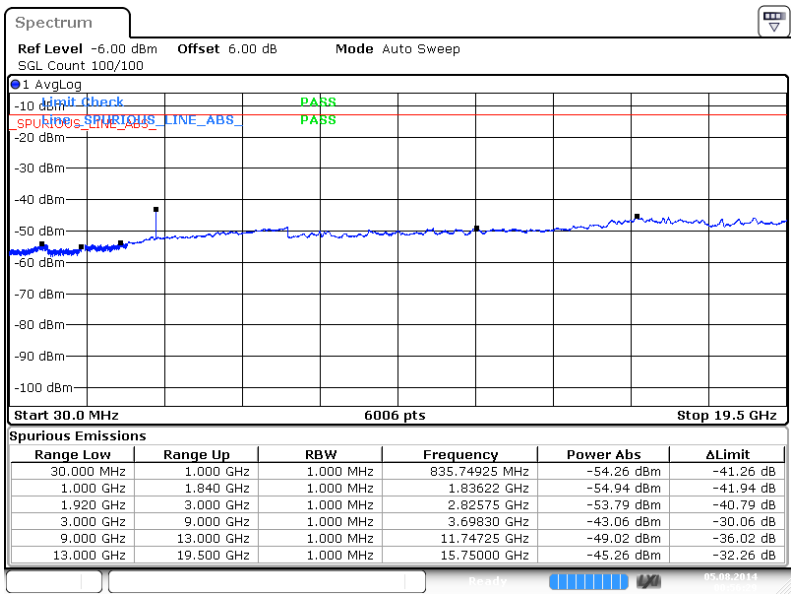


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	988.85614 MHz	-54.24 dBm	-41.24 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83874 GHz	-54.89 dBm	-41.89 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.85057 GHz	-53.57 dBm	-40.57 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.69830 GHz	-41.09 dBm	-28.09 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.73926 GHz	-48.98 dBm	-35.98 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.75000 GHz	-45.15 dBm	-32.15 dB

Date:5.AUG.2014 00:57:52

16QAM (RB Size 1, RB Offset 14)



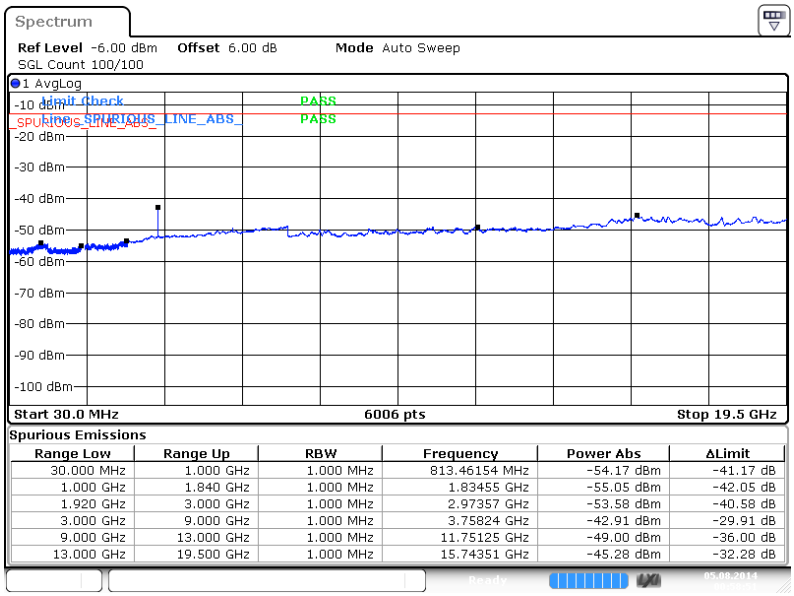
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	835.74925 MHz	-54.26 dBm	-41.26 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83622 GHz	-54.94 dBm	-41.94 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.82575 GHz	-53.79 dBm	-40.79 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.69830 GHz	-43.06 dBm	-30.06 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.74725 GHz	-49.02 dBm	-36.02 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.75000 GHz	-45.26 dBm	-32.26 dB

Date:5.AUG.2014 00:56:29

Band :	LTE Band 2	Channel :	CH18900 (Middle)
Band Width :	3MHz		

QPSK (RB Size 1, RB Offset 14)

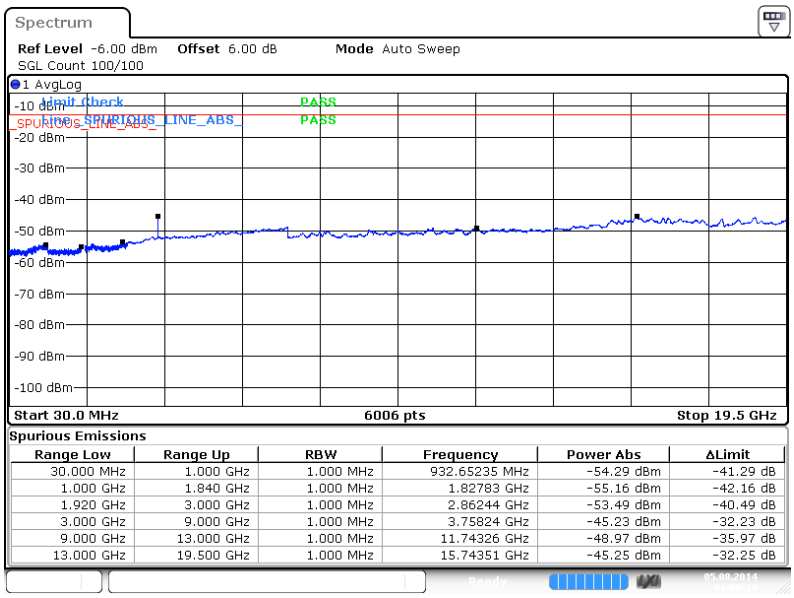


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	813.46154 MHz	-54.17 dBm	-41.17 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83455 GHz	-55.05 dBm	-42.05 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.97357 GHz	-53.58 dBm	-40.58 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.75824 GHz	-42.91 dBm	-29.91 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75125 GHz	-49.00 dBm	-36.00 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.74351 GHz	-45.28 dBm	-32.28 dB

Date:5.AUG.2014 00:58:51

16QAM (RB Size 1, RB Offset 14)



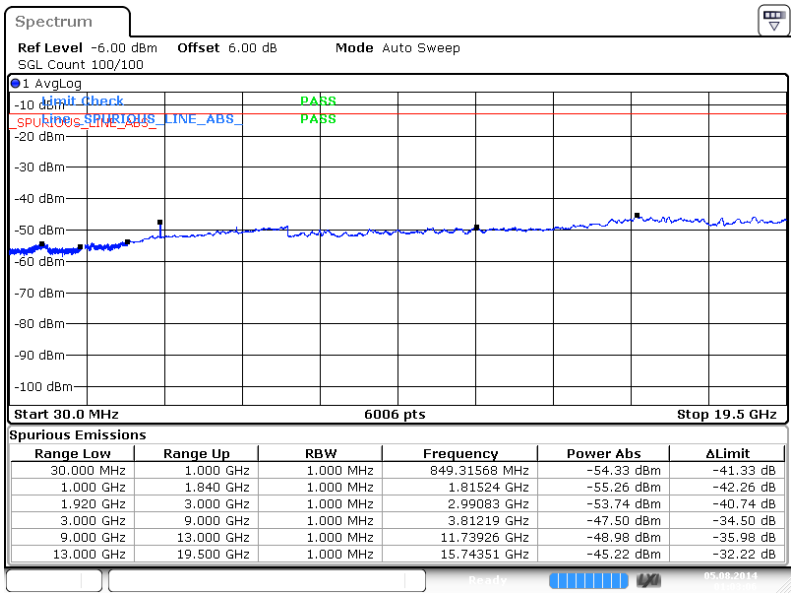
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	932.65235 MHz	-54.29 dBm	-41.29 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.82783 GHz	-55.16 dBm	-42.16 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.86244 GHz	-53.49 dBm	-40.49 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.75824 GHz	-45.23 dBm	-32.23 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.74326 GHz	-48.97 dBm	-35.97 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.74351 GHz	-45.25 dBm	-32.25 dB

Date:5.AUG.2014 01:00:15

Band :	LTE Band 2	Channel :	CH19185 (High)
Band Width :	3MHz		

QPSK (RB Size 1, RB Offset 14)

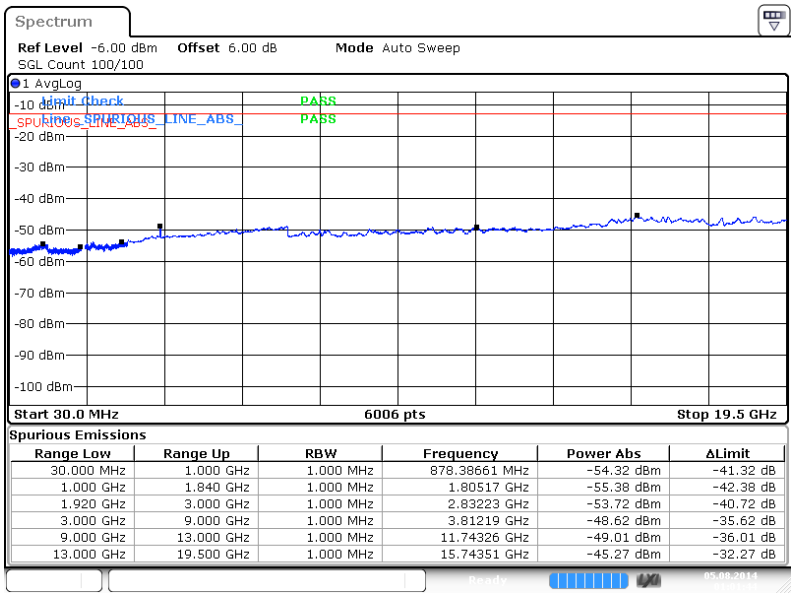


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	849.31568 MHz	-54.33 dBm	-41.33 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.81524 GHz	-55.26 dBm	-42.26 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.99083 GHz	-53.74 dBm	-40.74 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.81219 GHz	-47.50 dBm	-34.50 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.73926 GHz	-48.98 dBm	-35.98 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.74351 GHz	-45.22 dBm	-32.22 dB

Date:5.AUG.2014 01:03:06

16QAM (RB Size 1, RB Offset 14)



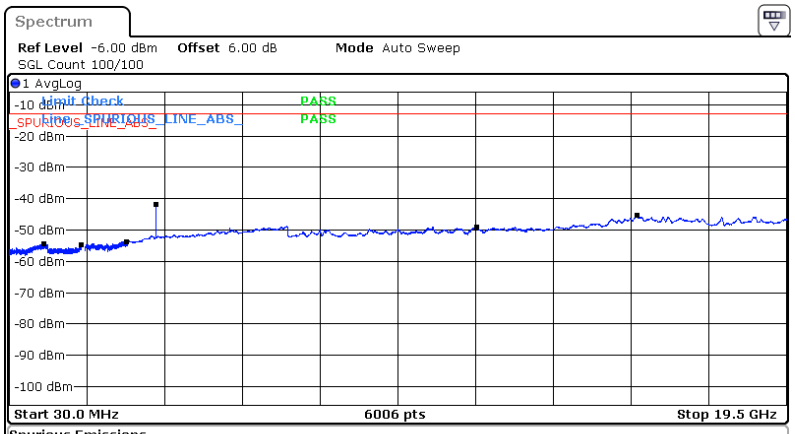
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	878.38661 MHz	-54.32 dBm	-41.32 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.80517 GHz	-55.38 dBm	-42.38 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.83223 GHz	-53.72 dBm	-40.72 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.81219 GHz	-48.62 dBm	-35.62 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.74326 GHz	-49.01 dBm	-36.01 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.74351 GHz	-45.27 dBm	-32.27 dB

Date:5.AUG.2014 01:01:44

Band :	LTE Band 2	Channel :	CH18625 (Low)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 24)

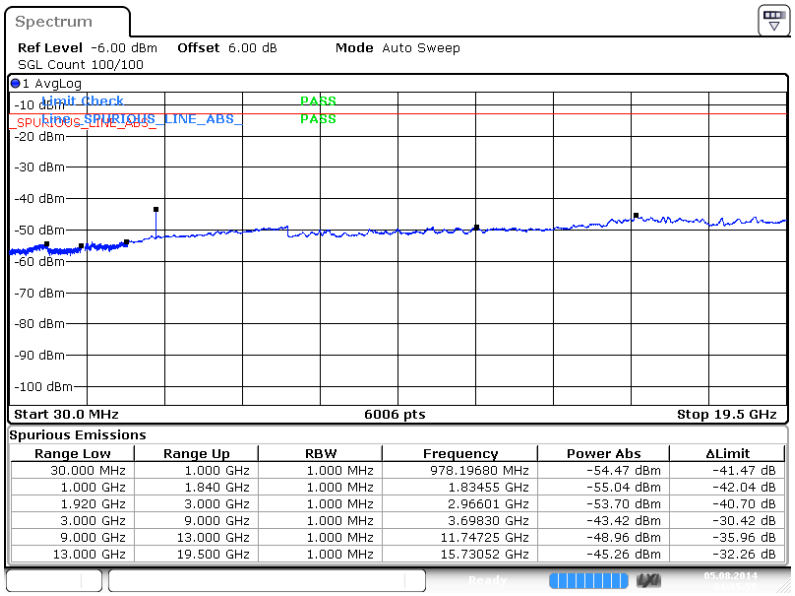


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	894.86014 MHz	-54.33 dBm	-41.33 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83958 GHz	-54.74 dBm	-41.74 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.95954 GHz	-53.64 dBm	-40.64 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.69830 GHz	-41.83 dBm	-28.83 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.74725 GHz	-48.98 dBm	-35.98 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.74351 GHz	-45.19 dBm	-32.19 dB

Date:5.AUG.2014 01:17:06

16QAM (RB Size 1, RB Offset 24)



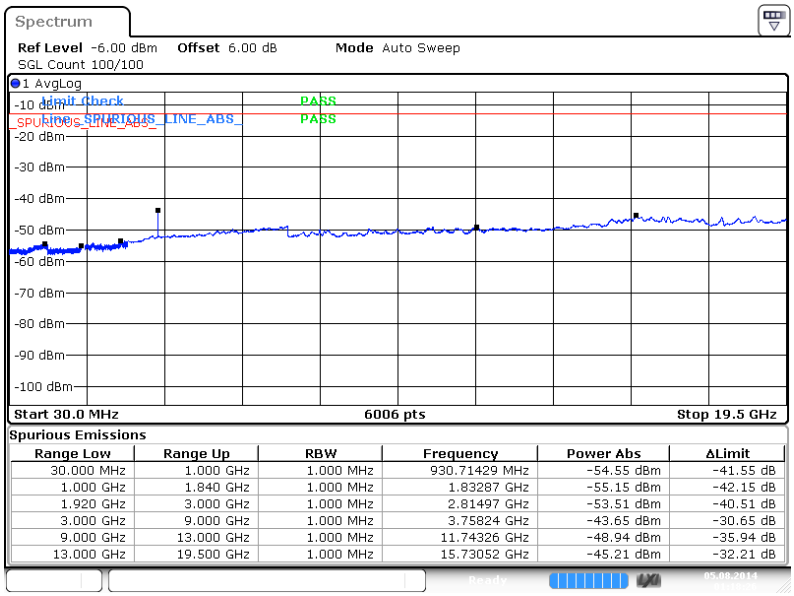
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	978.19680 MHz	-54.47 dBm	-41.47 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83455 GHz	-55.04 dBm	-42.04 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.96601 GHz	-53.70 dBm	-40.70 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.69830 GHz	-43.42 dBm	-30.42 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.74725 GHz	-48.96 dBm	-35.96 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.73052 GHz	-45.26 dBm	-32.26 dB

Date:5.AUG.2014 01:15:58

Band :	LTE Band 2	Channel :	CH18900 (Middle)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 24)

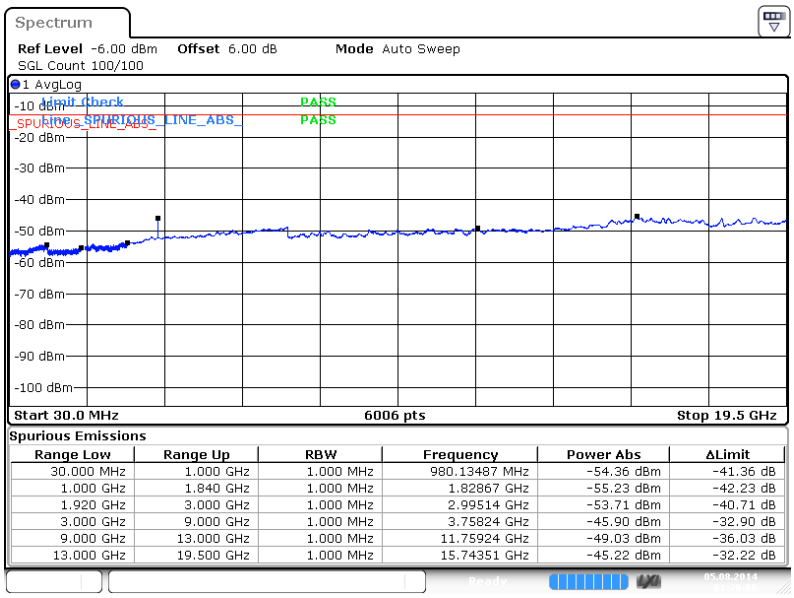


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	930.71429 MHz	-54.55 dBm	-41.55 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83287 GHz	-55.15 dBm	-42.15 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.81497 GHz	-53.51 dBm	-40.51 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.75824 GHz	-43.65 dBm	-30.65 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.74326 GHz	-48.94 dBm	-35.94 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.73052 GHz	-45.21 dBm	-32.21 dB

Date:5.AUG.2014 01:18:26

16QAM (RB Size 1, RB Offset 24)



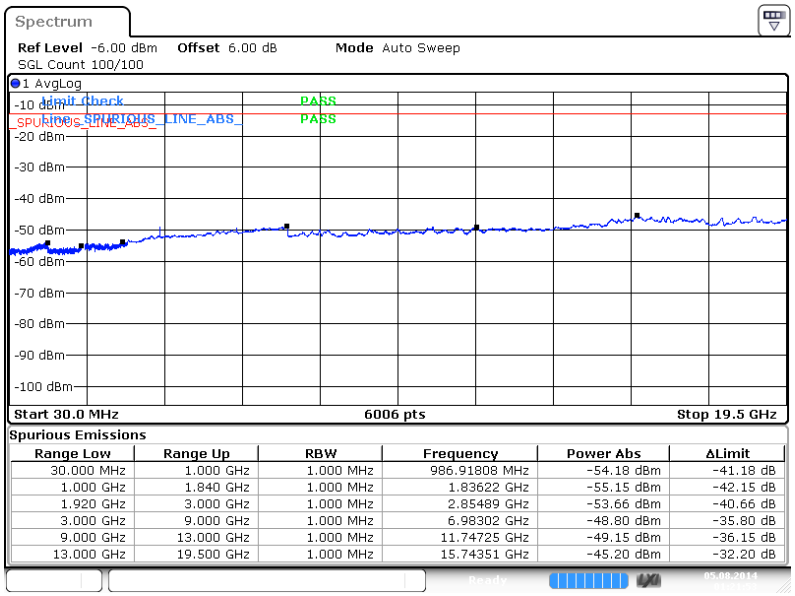
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	980.13487 MHz	-54.36 dBm	-41.36 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.82867 GHz	-55.23 dBm	-42.23 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.99514 GHz	-53.71 dBm	-40.71 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.75824 GHz	-45.90 dBm	-32.90 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75924 GHz	-49.03 dBm	-36.03 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.74351 GHz	-45.22 dBm	-32.22 dB

Date:5.AUG.2014 01:20:08

Band :	LTE Band 2	Channel :	CH19175 (High)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 24)

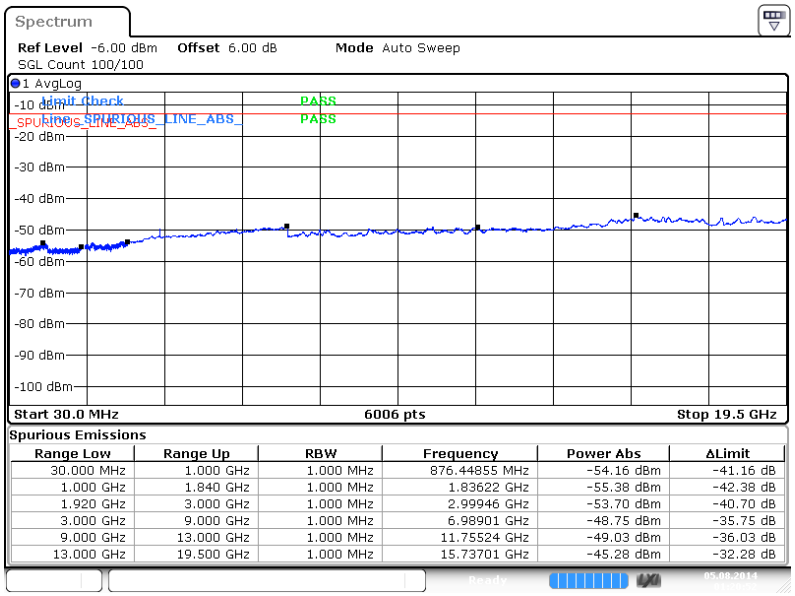


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	986.91808 MHz	-54.18 dBm	-41.18 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83622 GHz	-55.15 dBm	-42.15 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.85489 GHz	-53.66 dBm	-40.66 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98302 GHz	-48.80 dBm	-35.80 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.74725 GHz	-49.15 dBm	-36.15 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.74351 GHz	-45.20 dBm	-32.20 dB

Date:5.AUG.2014 01:21:53

16QAM (RB Size 1, RB Offset 24)



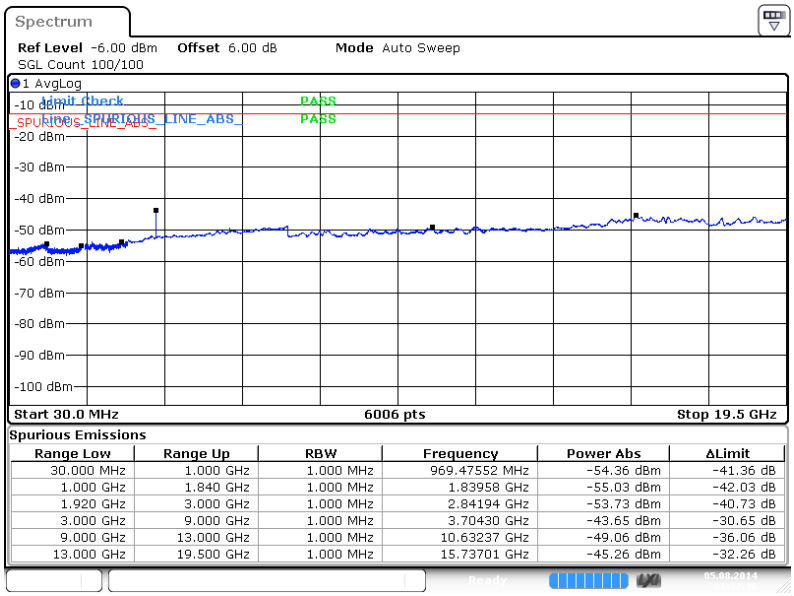
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	876.44855 MHz	-54.16 dBm	-41.16 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83622 GHz	-55.38 dBm	-42.38 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.99946 GHz	-53.70 dBm	-40.70 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98901 GHz	-48.75 dBm	-35.75 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75524 GHz	-49.03 dBm	-36.03 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.73701 GHz	-45.28 dBm	-32.28 dB

Date:5.AUG.2014 01:20:53

Band :	LTE Band 2	Channel :	CH18650 (Low)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 49)

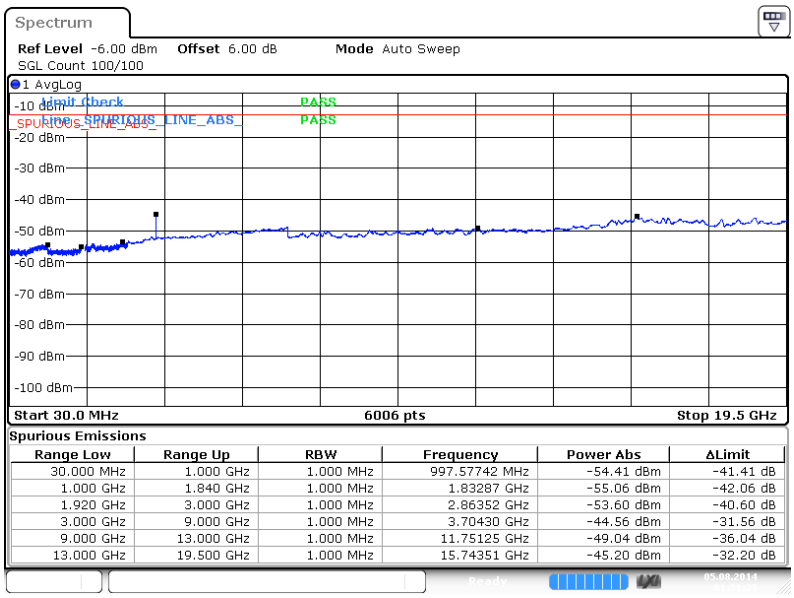


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	969.47552 MHz	-54.36 dBm	-41.36 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83958 GHz	-55.03 dBm	-42.03 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.84194 GHz	-53.73 dBm	-40.73 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.70430 GHz	-43.65 dBm	-30.65 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.63237 GHz	-49.06 dBm	-36.06 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.73701 GHz	-45.26 dBm	-32.26 dB

Date:5.AUG.2014 01:32:36

16QAM (RB Size 1, RB Offset 24)



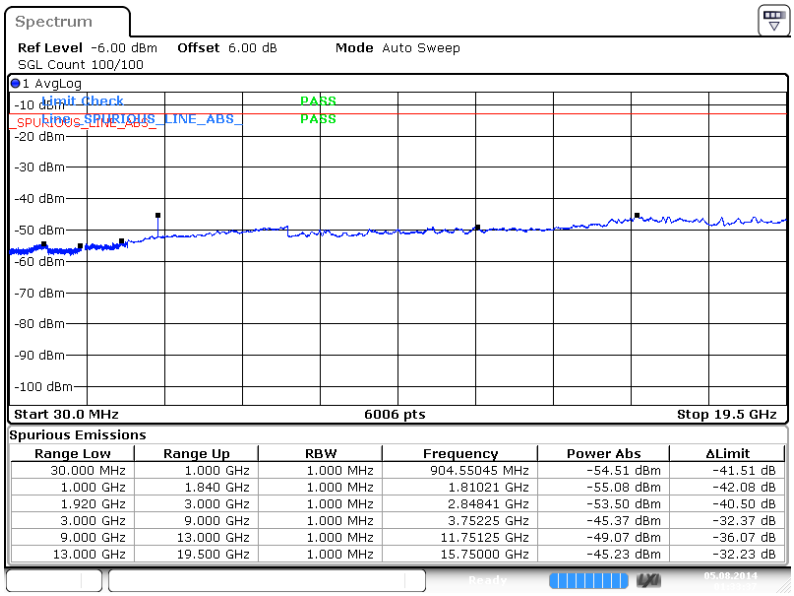
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	997.57742 MHz	-54.41 dBm	-41.41 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83287 GHz	-55.06 dBm	-42.06 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.86352 GHz	-53.60 dBm	-40.60 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.70430 GHz	-44.56 dBm	-31.56 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75125 GHz	-49.04 dBm	-36.04 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.74351 GHz	-45.20 dBm	-32.20 dB

Date:5.AUG.2014 01:31:23

Band :	LTE Band 2	Channel :	CH18900 (Middle)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 49)

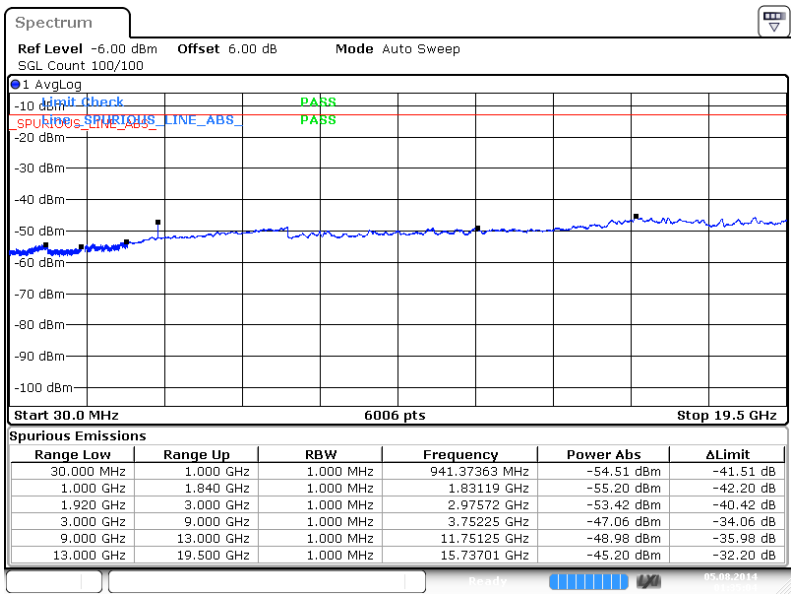


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	904.55045 MHz	-54.51 dBm	-41.51 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.81021 GHz	-55.08 dBm	-42.08 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.84841 GHz	-53.50 dBm	-40.50 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.75225 GHz	-45.37 dBm	-32.37 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75125 GHz	-49.07 dBm	-36.07 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.75000 GHz	-45.23 dBm	-32.23 dB

Date:5.AUG.2014 01:33:37

16QAM (RB Size 1, RB Offset 24)



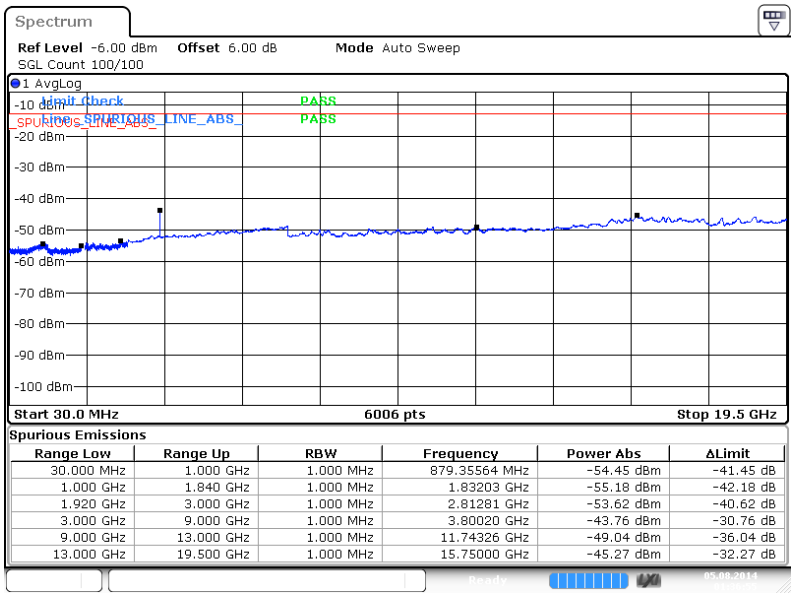
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	941.37363 MHz	-54.51 dBm	-41.51 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83119 GHz	-55.20 dBm	-42.20 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.97572 GHz	-53.42 dBm	-40.42 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.75225 GHz	-47.06 dBm	-34.06 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75125 GHz	-48.98 dBm	-35.98 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.73701 GHz	-45.20 dBm	-32.20 dB

Date:5.AUG.2014 01:35:04

Band :	LTE Band 2	Channel :	CH19150 (High)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 49)

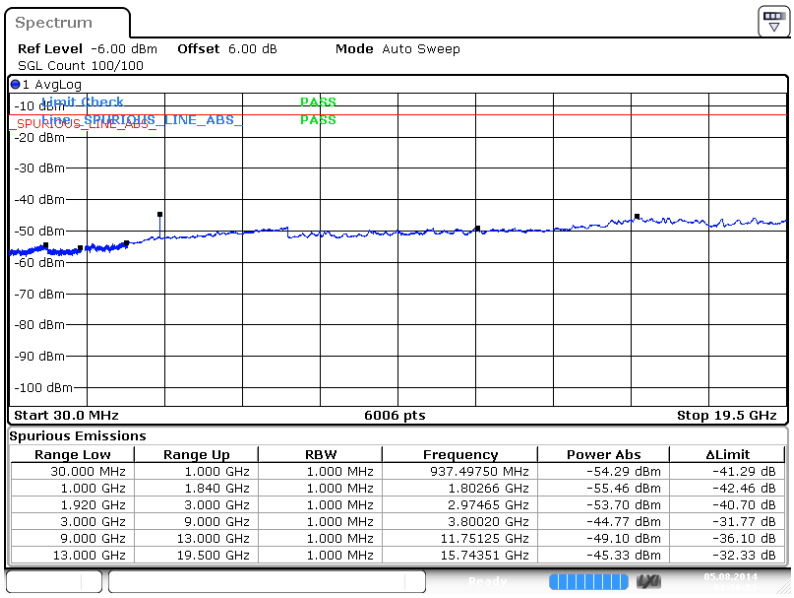


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	879.35564 MHz	-54.45 dBm	-41.45 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83203 GHz	-55.18 dBm	-42.18 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.81281 GHz	-53.62 dBm	-40.62 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.80020 GHz	-43.76 dBm	-30.76 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.74326 GHz	-49.04 dBm	-36.04 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.75000 GHz	-45.27 dBm	-32.27 dB

Date:5.AUG.2014 01:36:54

16QAM (RB Size 1, RB Offset 24)



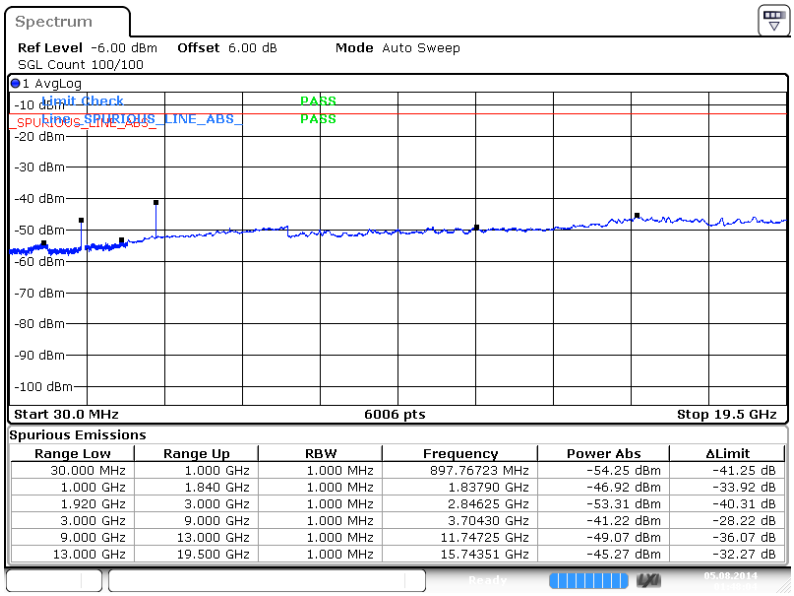
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	937.49750 MHz	-54.29 dBm	-41.29 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.80266 GHz	-55.46 dBm	-42.46 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.97465 GHz	-53.70 dBm	-40.70 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.80020 GHz	-44.77 dBm	-31.77 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75125 GHz	-49.10 dBm	-36.10 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.74351 GHz	-45.33 dBm	-32.33 dB

Date:5.AUG.2014 01:36:03

Band :	LTE Band 2	Channel :	CH18675 (Low)
Band Width :	15MHz		

QPSK (RB Size 1, RB Offset 74)

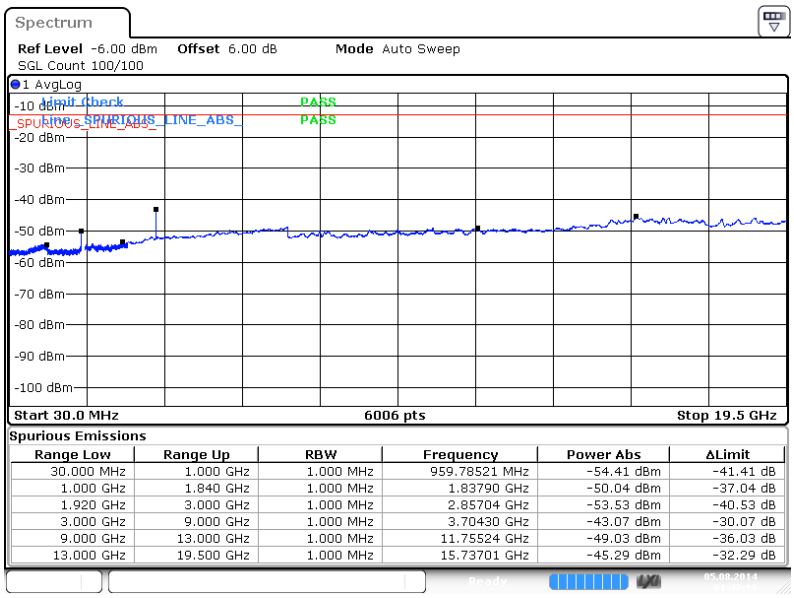


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	897.76723 MHz	-54.25 dBm	-41.25 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83790 GHz	-46.92 dBm	-33.92 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.84625 GHz	-53.31 dBm	-40.31 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.70430 GHz	-41.22 dBm	-28.22 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.74725 GHz	-49.07 dBm	-36.07 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.74351 GHz	-45.27 dBm	-32.27 dB

Date:5.AUG.2014 01:48:04

16QAM (RB Size 1, RB Offset 37)



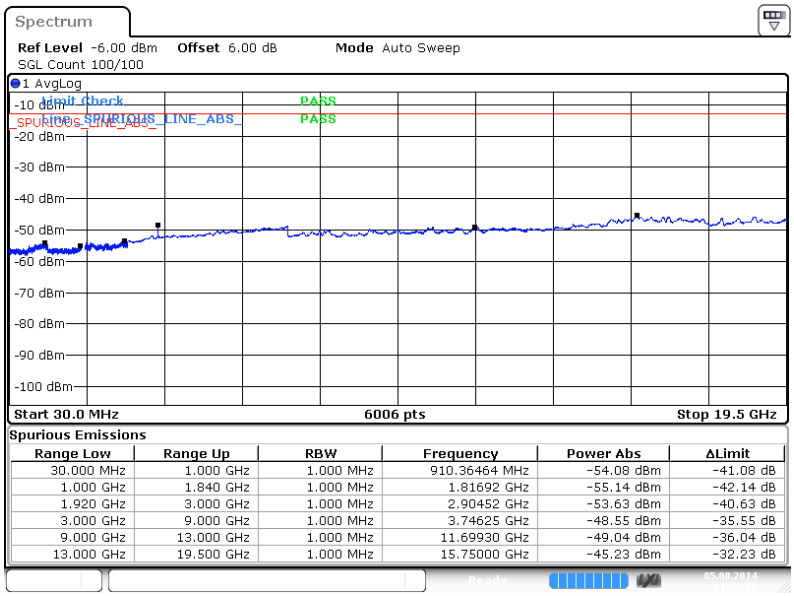
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	959.78521 MHz	-54.41 dBm	-41.41 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83790 GHz	-50.04 dBm	-37.04 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.85704 GHz	-53.53 dBm	-40.53 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.70430 GHz	-43.07 dBm	-30.07 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75524 GHz	-49.03 dBm	-36.03 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.73701 GHz	-45.29 dBm	-32.29 dB

Date:5.AUG.2014 01:47:19

Band :	LTE Band 2	Channel :	CH18900 (Middle)
Band Width :	15MHz		

QPSK (RB Size 1, RB Offset 74)

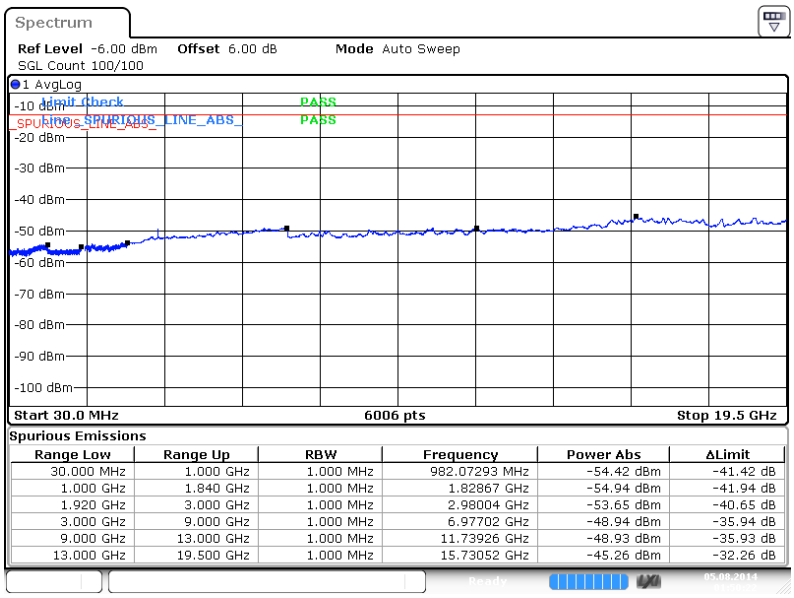


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	910.36464 MHz	-54.08 dBm	-41.08 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.81692 GHz	-55.14 dBm	-42.14 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.90452 GHz	-53.63 dBm	-40.63 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.74625 GHz	-48.55 dBm	-35.55 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.69930 GHz	-49.04 dBm	-36.04 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.75000 GHz	-45.23 dBm	-32.23 dB

Date:5.AUG.2014 01:49:13

16QAM (RB Size 1, RB Offset 37)



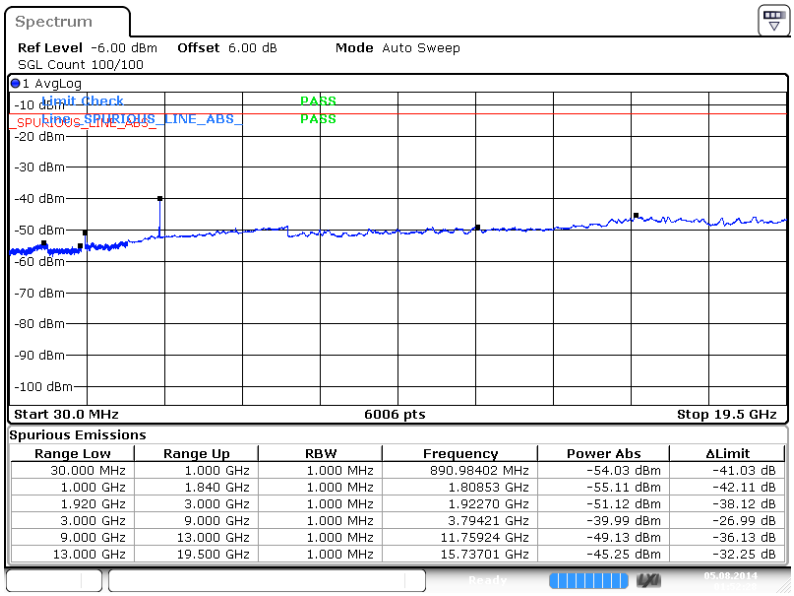
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	982.07293 MHz	-54.42 dBm	-41.42 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.82867 GHz	-54.94 dBm	-41.94 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.98004 GHz	-53.65 dBm	-40.65 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.97702 GHz	-48.94 dBm	-35.94 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.73926 GHz	-48.93 dBm	-35.93 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.73052 GHz	-45.26 dBm	-32.26 dB

Date:5.AUG.2014 01:50:21

Band :	LTE Band 2	Channel :	CH19125 (High)
Band Width :	15MHz		

QPSK (RB Size 1, RB Offset 74)

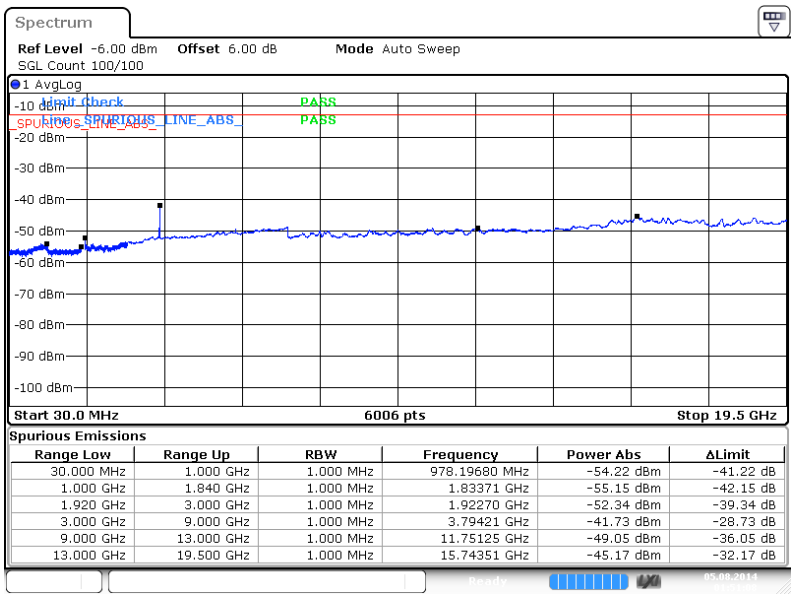


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	890.98402 MHz	-54.03 dBm	-41.03 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.80853 GHz	-55.11 dBm	-42.11 dB
1.920 GHz	3.000 GHz	1.000 MHz	1.92270 GHz	-51.12 dBm	-38.12 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.79421 GHz	-39.99 dBm	-26.99 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75924 GHz	-49.13 dBm	-36.13 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.73701 GHz	-45.25 dBm	-32.25 dB

Date:5.AUG.2014 01:52:28

16QAM (RB Size 1, RB Offset 37)



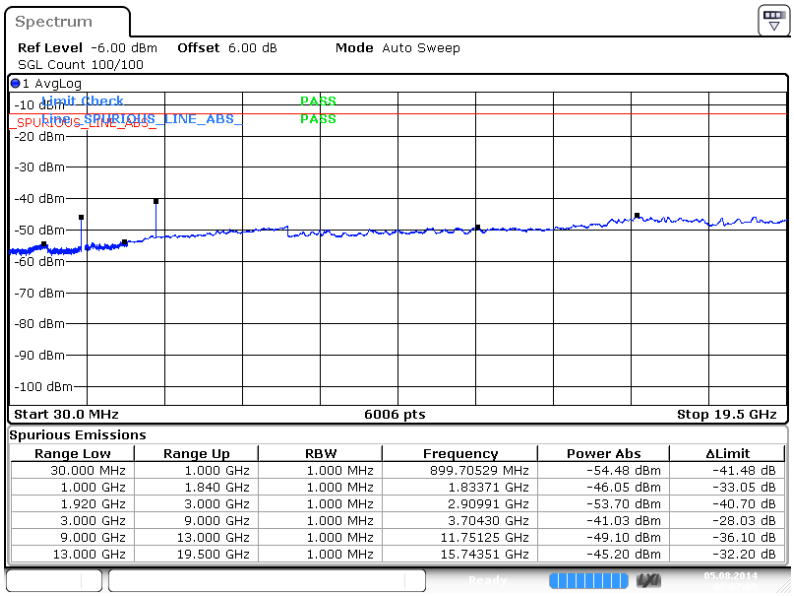
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	978.19680 MHz	-54.22 dBm	-41.22 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83371 GHz	-55.15 dBm	-42.15 dB
1.920 GHz	3.000 GHz	1.000 MHz	1.92270 GHz	-52.34 dBm	-39.34 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.79421 GHz	-41.73 dBm	-28.73 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75125 GHz	-49.05 dBm	-36.05 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.74351 GHz	-45.17 dBm	-32.17 dB

Date:5.AUG.2014 01:51:09

Band :	LTE Band 2	Channel :	CH18700 (Low)
Band Width :	20MHz		

QPSK (RB Size 1, RB Offset 0)

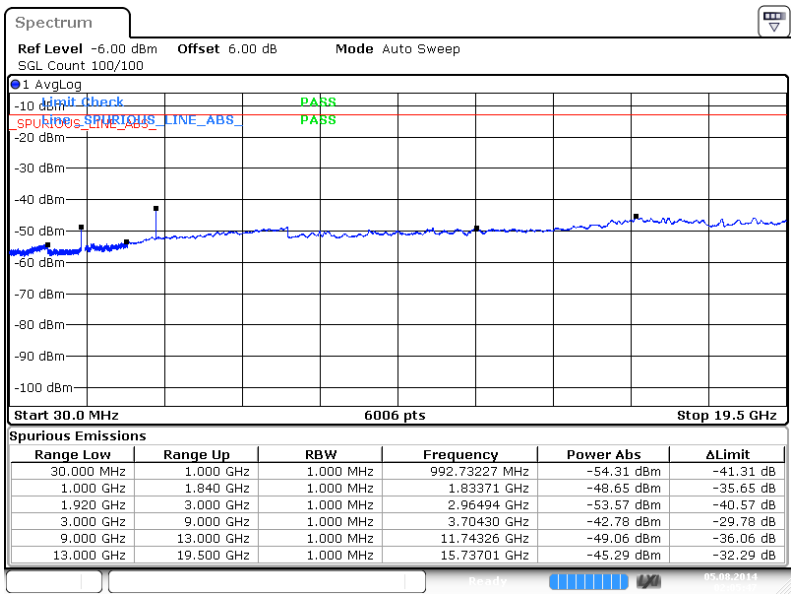


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	899.70529 MHz	-54.48 dBm	-41.48 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83371 GHz	-46.05 dBm	-33.05 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.90991 GHz	-53.70 dBm	-40.70 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.70430 GHz	-41.03 dBm	-28.03 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75125 GHz	-49.10 dBm	-36.10 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.74351 GHz	-45.20 dBm	-32.20 dB

Date:5.AUG.2014 02:07:39

16QAM (RB Size 1, RB Offset 49)



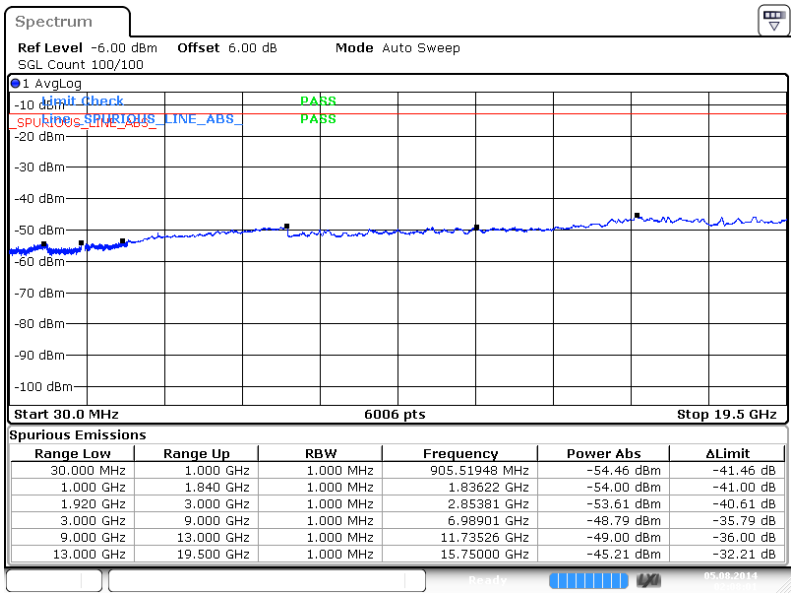
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	992.73227 MHz	-54.31 dBm	-41.31 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83371 GHz	-48.65 dBm	-35.65 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.96494 GHz	-53.57 dBm	-40.57 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.70430 GHz	-42.78 dBm	-29.78 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.74326 GHz	-49.06 dBm	-36.06 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.73701 GHz	-45.29 dBm	-32.29 dB

Date:5.AUG.2014 02:05:47

Band :	LTE Band 2	Channel :	CH18900 (Middle)
Band Width :	20MHz		

QPSK (RB Size 1, RB Offset 0)

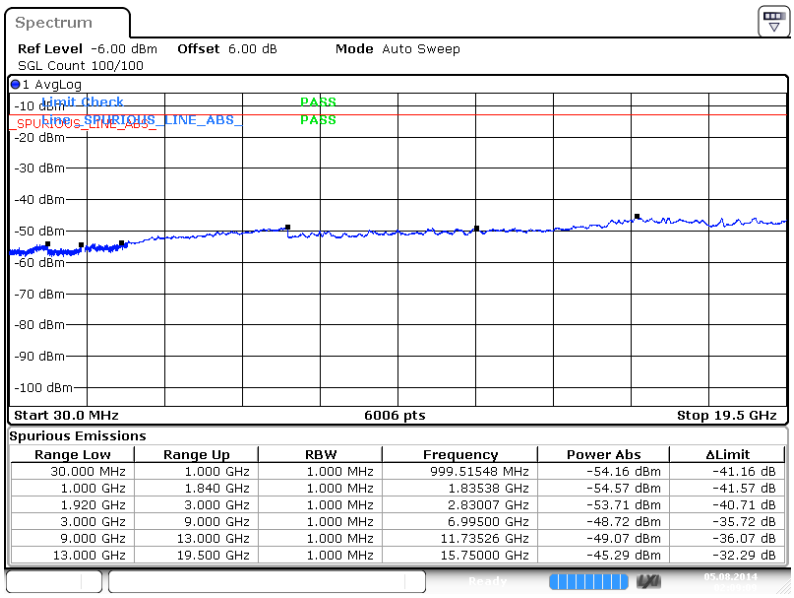


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	905.51948 MHz	-54.46 dBm	-41.46 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83622 GHz	-54.00 dBm	-41.00 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.85381 GHz	-53.61 dBm	-40.61 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98901 GHz	-48.79 dBm	-35.79 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.73526 GHz	-49.00 dBm	-36.00 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.75000 GHz	-45.21 dBm	-32.21 dB

Date:5.AUG.2014 02:08:01

16QAM (RB Size 1, RB Offset 0)



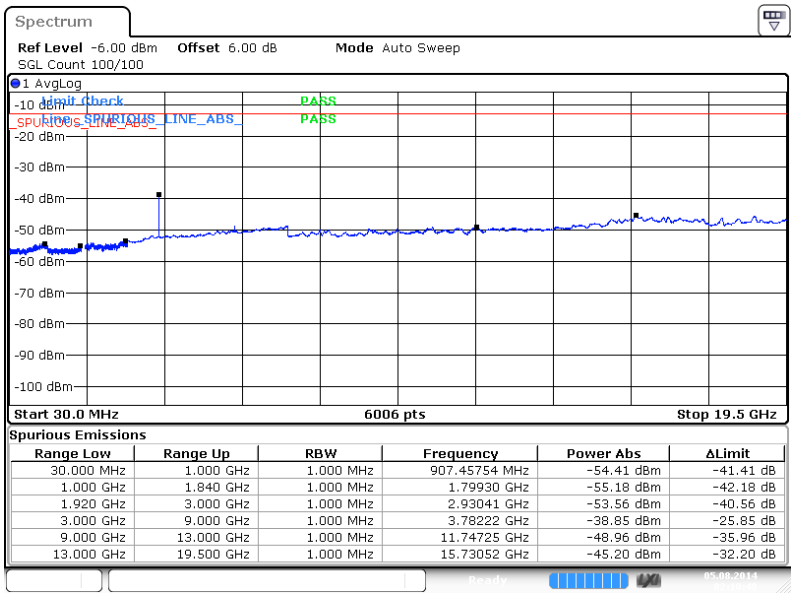
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	999.51548 MHz	-54.16 dBm	-41.16 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.83538 GHz	-54.57 dBm	-41.57 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.83007 GHz	-53.71 dBm	-40.71 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.72 dBm	-35.72 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.73526 GHz	-49.07 dBm	-36.07 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.75000 GHz	-45.29 dBm	-32.29 dB

Date:5.AUG.2014 02:09:10

Band :	LTE Band 2	Channel :	CH19100 (High)
Band Width :	20MHz		

QPSK (RB Size 1, RB Offset 0)

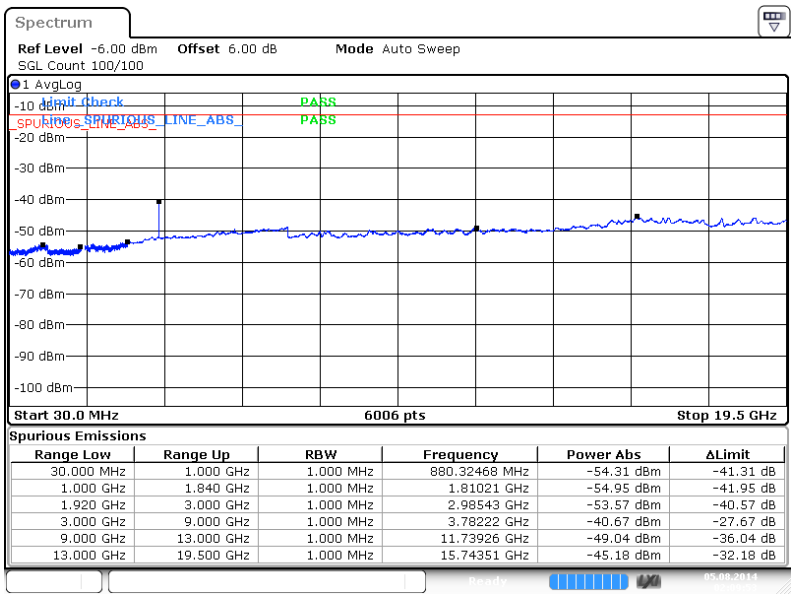


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	907.45754 MHz	-54.41 dBm	-41.41 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.79930 GHz	-55.18 dBm	-42.18 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.93041 GHz	-53.56 dBm	-40.56 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.78222 GHz	-38.85 dBm	-25.85 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.74725 GHz	-48.96 dBm	-35.96 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.73052 GHz	-45.20 dBm	-32.20 dB

Date:5.AUG.2014 02:10:48

16QAM (RB Size 1, RB Offset 0)



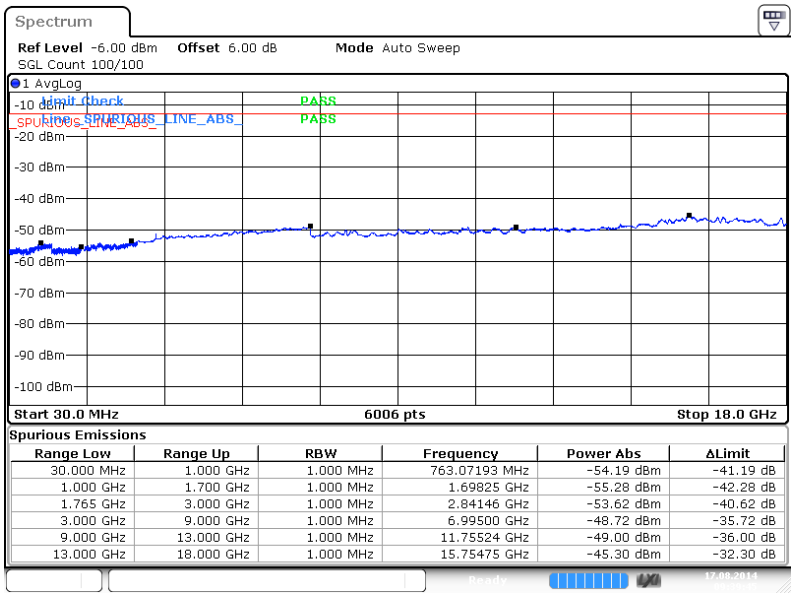
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	880.32468 MHz	-54.31 dBm	-41.31 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.81021 GHz	-54.95 dBm	-41.95 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.98543 GHz	-53.57 dBm	-40.57 dB
3.000 GHz	9.000 GHz	1.000 MHz	3.78222 GHz	-40.67 dBm	-27.67 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.73926 GHz	-49.04 dBm	-36.04 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.74351 GHz	-45.18 dBm	-32.18 dB

Date:5.AUG.2014 02:09:53

Band :	LTE Band 4	Channel :	CH19957 (Low)
Band Width :	1.4MHz		

QPSK (RB Size 1, RB Offset 0)

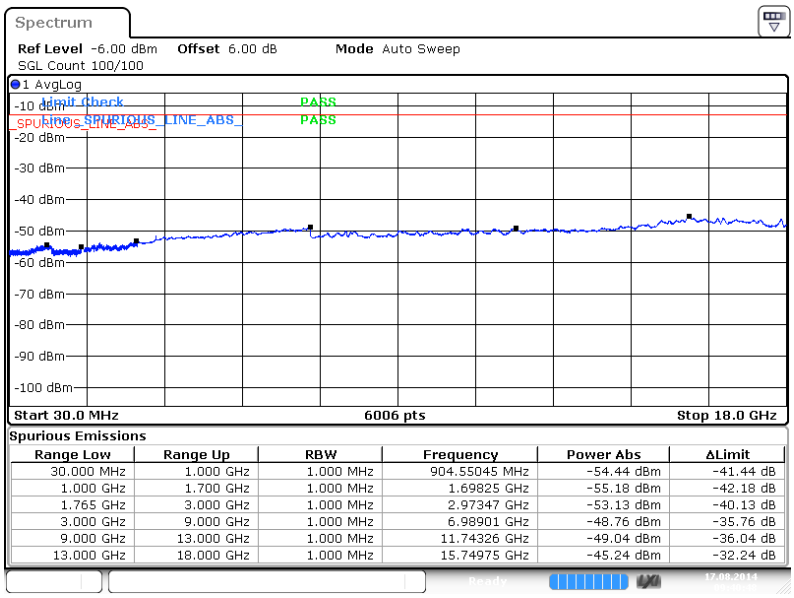


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	763.07193 MHz	-54.19 dBm	-41.19 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69825 GHz	-55.28 dBm	-42.28 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.84146 GHz	-53.62 dBm	-40.62 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.72 dBm	-35.72 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75524 GHz	-49.00 dBm	-36.00 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.75475 GHz	-45.30 dBm	-32.30 dB

Date:17 AUG 2014 09:39:45

16QAM (RB Size 1, RB Offset 0)



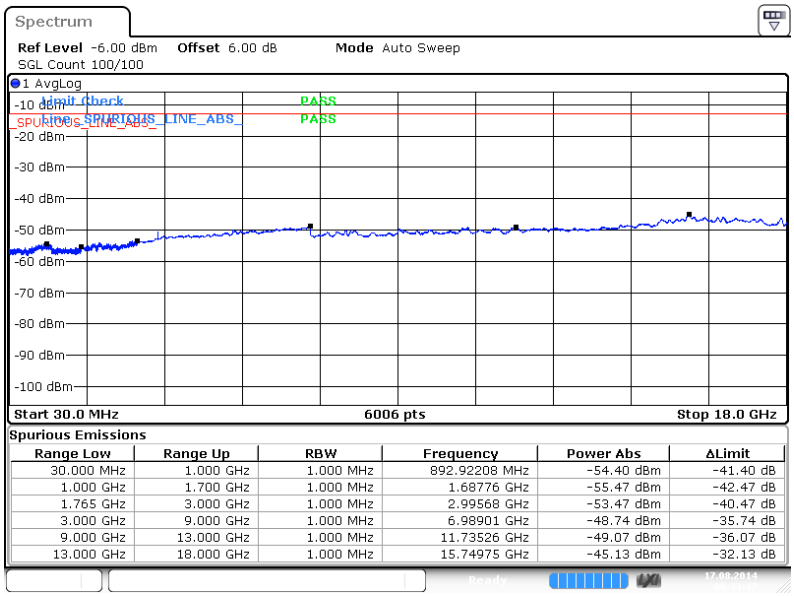
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	904.55045 MHz	-54.44 dBm	-41.44 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69825 GHz	-55.18 dBm	-42.18 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.97347 GHz	-53.13 dBm	-40.13 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98901 GHz	-48.76 dBm	-35.76 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.74326 GHz	-49.04 dBm	-36.04 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.74975 GHz	-45.24 dBm	-32.24 dB

Date:17 AUG 2014 09:40:48

Band :	LTE Band 4	Channel :	CH20175 (Middle)
Band Width :	1.4MHz		

QPSK (RB Size 3, RB Offset 0)

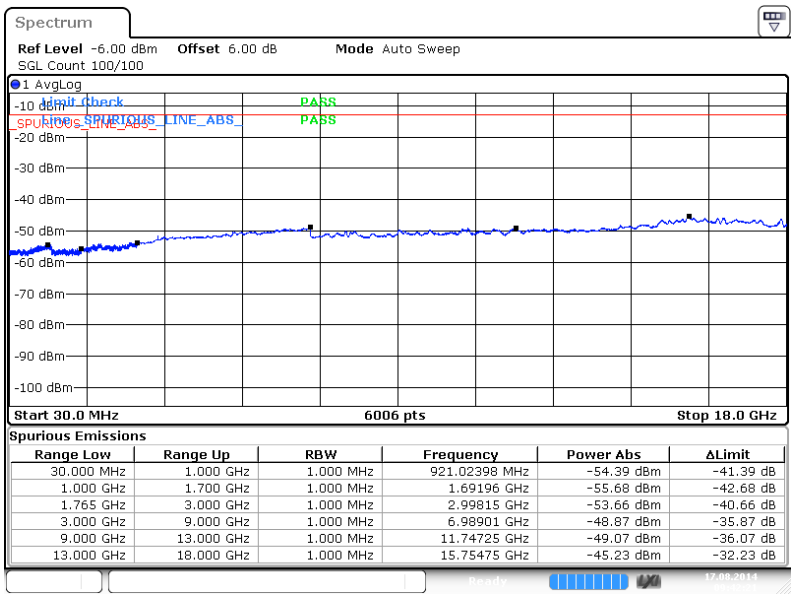


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	892.92208 MHz	-54.40 dBm	-41.40 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.68776 GHz	-55.47 dBm	-42.47 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.99568 GHz	-53.47 dBm	-40.47 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98901 GHz	-48.74 dBm	-35.74 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.73526 GHz	-49.07 dBm	-36.07 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.74975 GHz	-45.13 dBm	-32.13 dB

Date:17 AUG 2014 09:43:48

16QAM (RB Size 1, RB Offset 2)



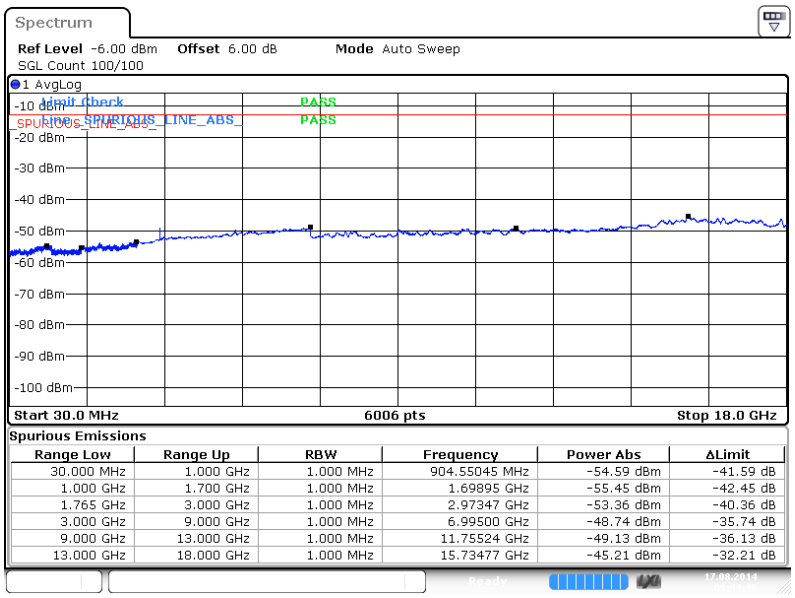
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	921.02398 MHz	-54.39 dBm	-41.39 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69196 GHz	-55.68 dBm	-42.68 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.99815 GHz	-53.66 dBm	-40.66 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98901 GHz	-48.87 dBm	-35.87 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.74725 GHz	-49.07 dBm	-36.07 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.75475 GHz	-45.23 dBm	-32.23 dB

Date:17 AUG 2014 09:42:21

Band :	LTE Band 4	Channel :	CH20393 (High)
Band Width :	1.4MHz		

QPSK (RB Size 3, RB Offset 0)

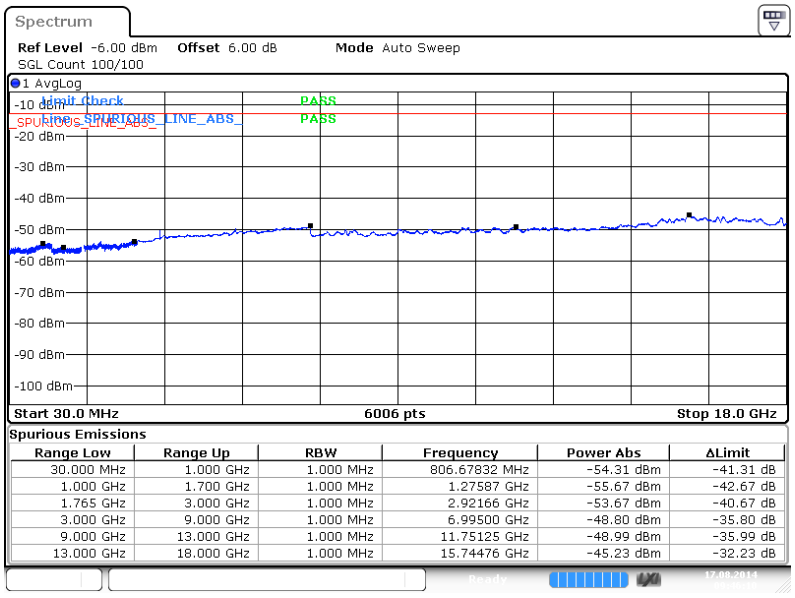


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	904.55045 MHz	-54.59 dBm	-41.59 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69895 GHz	-55.45 dBm	-42.45 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.97347 GHz	-53.36 dBm	-40.36 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.74 dBm	-35.74 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75524 GHz	-49.13 dBm	-36.13 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.73477 GHz	-45.21 dBm	-32.21 dB

Date:17 AUG 2014 09:44:46

16QAM (RB Size 1, RB Offset 2)



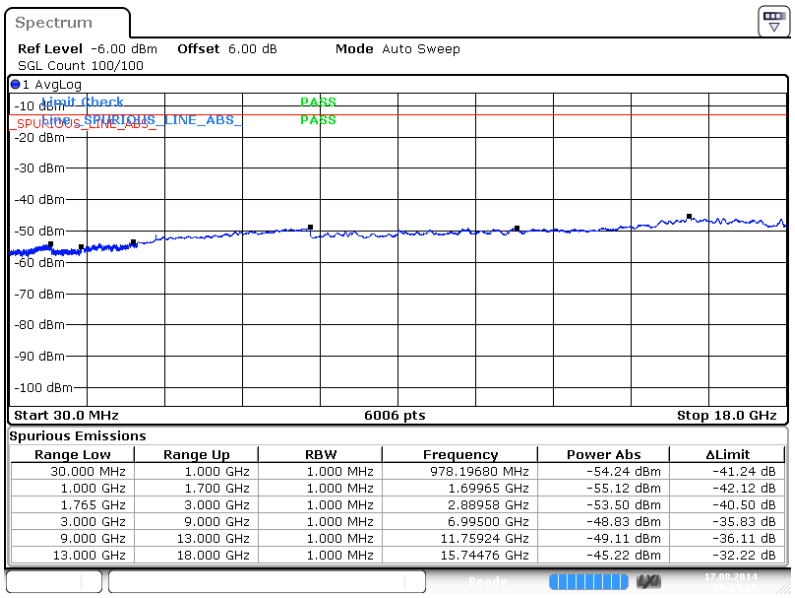
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	806.67832 MHz	-54.31 dBm	-41.31 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.27587 GHz	-55.67 dBm	-42.67 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.92166 GHz	-53.67 dBm	-40.67 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.80 dBm	-35.80 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75125 GHz	-48.99 dBm	-35.99 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.74476 GHz	-45.23 dBm	-32.23 dB

Date:17 AUG 2014 09:46:10

Band :	LTE Band 4	Channel :	CH19965 (Low)
Band Width :	3MHz		

QPSK (RB Size 1, RB Offset 0)

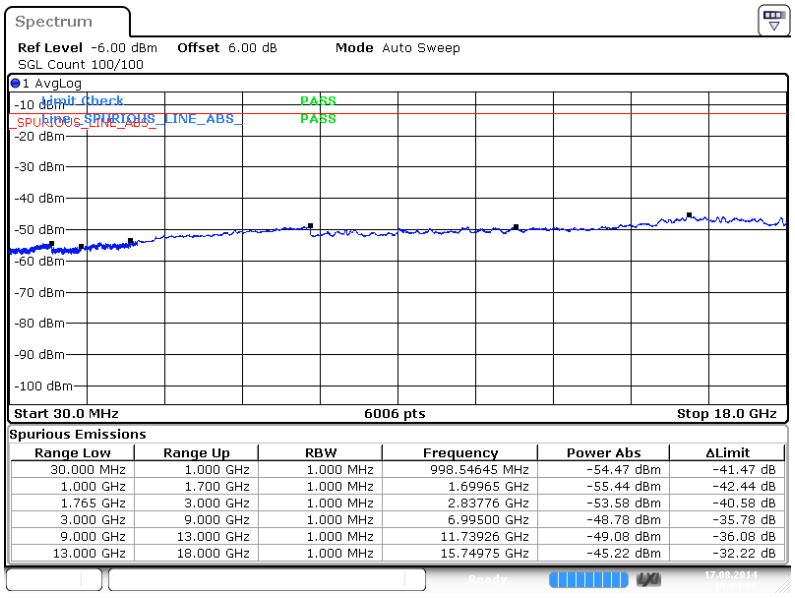


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	978.19680 MHz	-54.24 dBm	-41.24 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69965 GHz	-55.12 dBm	-42.12 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.88958 GHz	-53.50 dBm	-40.50 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.83 dBm	-35.83 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75924 GHz	-49.11 dBm	-36.11 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.74476 GHz	-45.22 dBm	-32.22 dB

Date:17 AUG 2014 10:03:09

16QAM (RB Size 1, RB Offset 7)



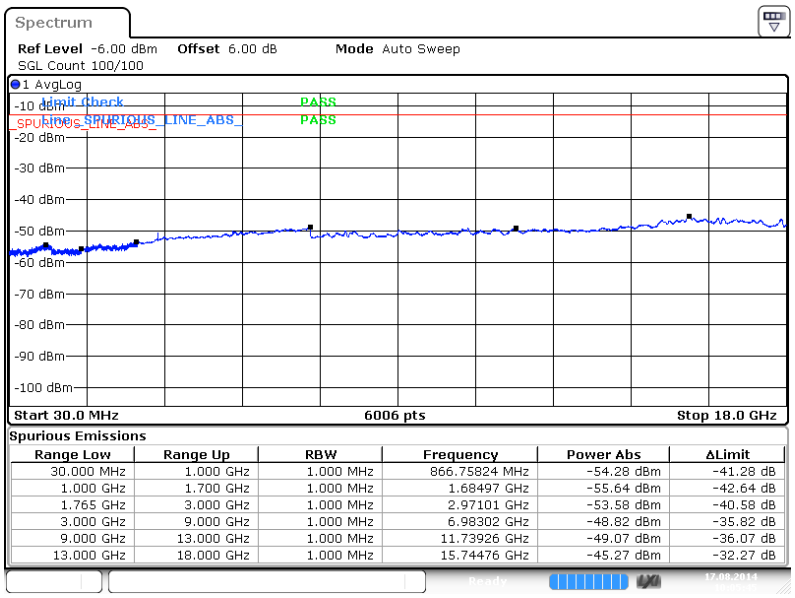
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	998.54645 MHz	-54.47 dBm	-41.47 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69965 GHz	-55.44 dBm	-42.44 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.83776 GHz	-53.58 dBm	-40.58 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.78 dBm	-35.78 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.73926 GHz	-49.08 dBm	-36.08 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.74975 GHz	-45.22 dBm	-32.22 dB

Date:17 AUG 2014 10:04:09

Band :	LTE Band 4	Channel :	CH20175 (Middle)
Band Width :	3MHz		

QPSK (RB Size 1, RB Offset 0)

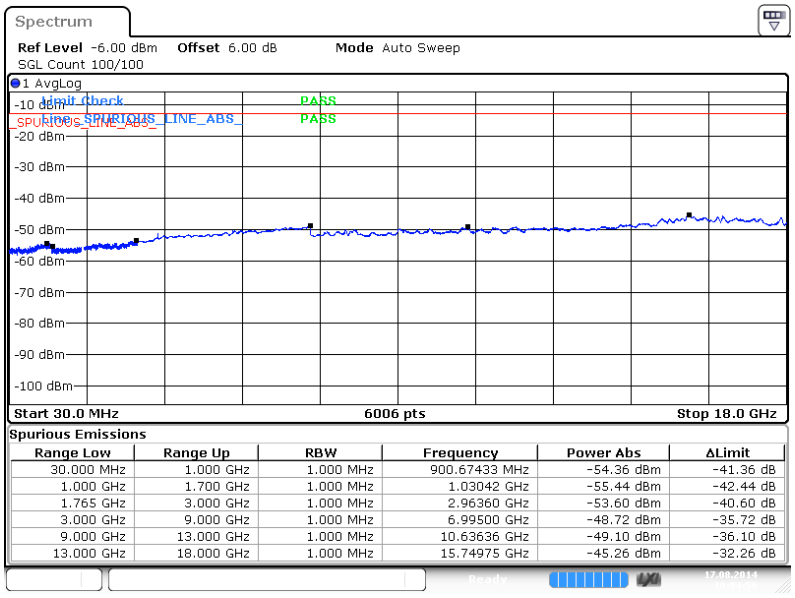


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	866.75824 MHz	-54.28 dBm	-41.28 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.68497 GHz	-55.64 dBm	-42.64 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.97101 GHz	-53.58 dBm	-40.58 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98302 GHz	-48.82 dBm	-35.82 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.73926 GHz	-49.07 dBm	-36.07 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.74476 GHz	-45.27 dBm	-32.27 dB

Date:17 AUG 2014 10:05:45

16QAM (RB Size 1, RB Offset 7)



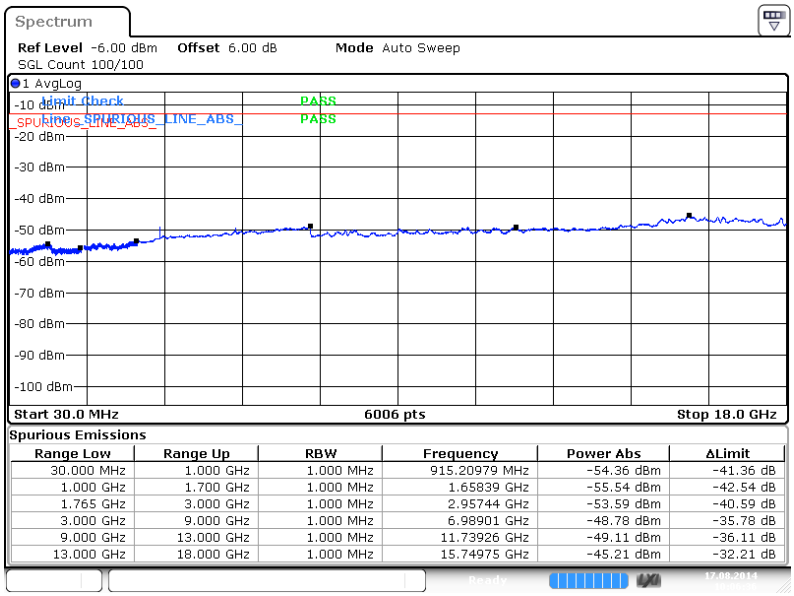
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	900.67433 MHz	-54.36 dBm	-41.36 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.03042 GHz	-55.44 dBm	-42.44 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.96360 GHz	-53.60 dBm	-40.60 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.72 dBm	-35.72 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.63636 GHz	-49.10 dBm	-36.10 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.74975 GHz	-45.26 dBm	-32.26 dB

Date:17 AUG 2014 10:04:59

Band :	LTE Band 4	Channel :	CH20385 (High)
Band Width :	3MHz		

QPSK (RB Size 1, RB Offset 0)

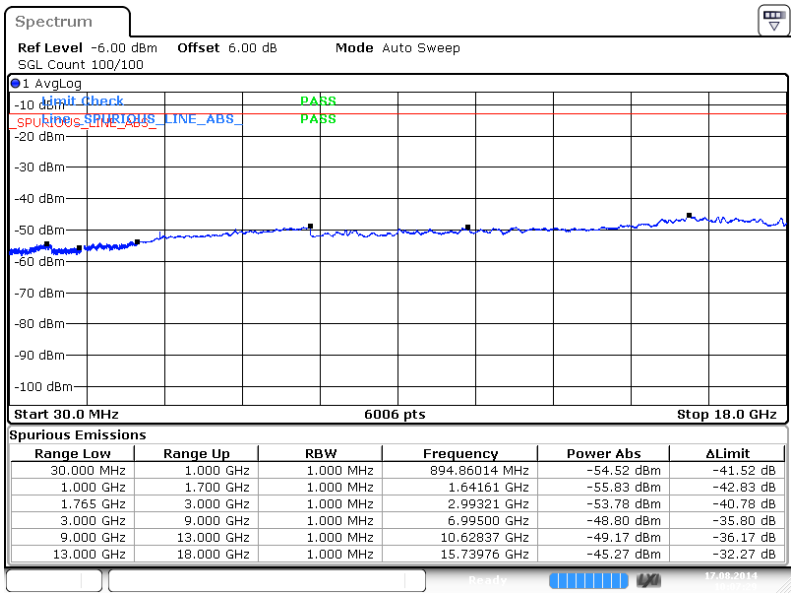


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	915.20979 MHz	-54.36 dBm	-41.36 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.65839 GHz	-55.54 dBm	-42.54 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.95744 GHz	-53.59 dBm	-40.59 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98901 GHz	-48.78 dBm	-35.78 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.73926 GHz	-49.11 dBm	-36.11 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.74975 GHz	-45.21 dBm	-32.21 dB

Date:17 AUG 2014 10:06:36

16QAM (RB Size 1, RB Offset 7)



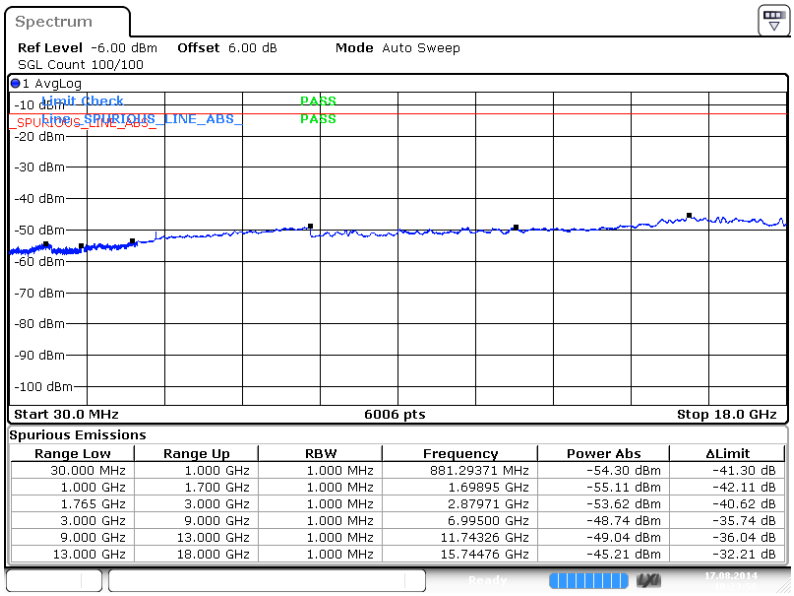
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	894.86014 MHz	-54.52 dBm	-41.52 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.64161 GHz	-55.83 dBm	-42.83 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.99321 GHz	-53.78 dBm	-40.78 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.80 dBm	-35.80 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.62837 GHz	-49.17 dBm	-36.17 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.73976 GHz	-45.27 dBm	-32.27 dB

Date:17 AUG 2014 10:07:29

Band :	LTE Band 4	Channel :	CH19975 (Low)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 0)

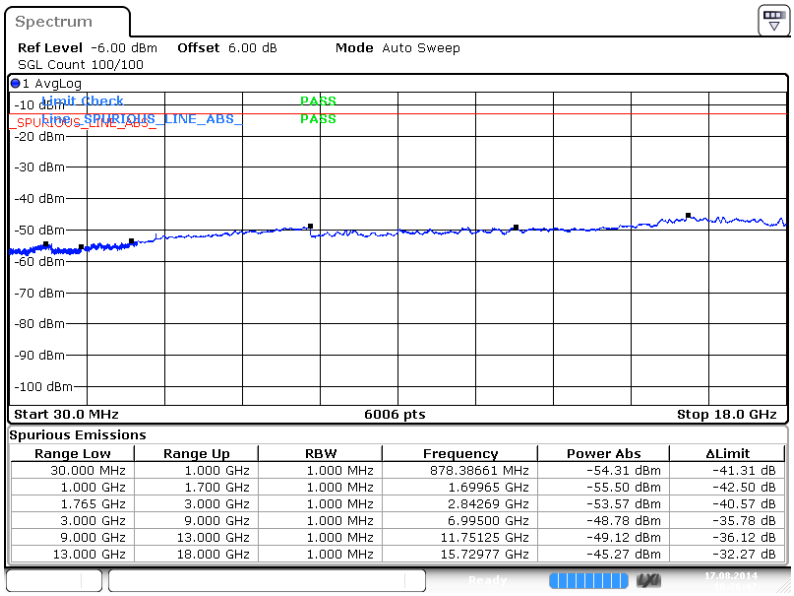


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	881.29371 MHz	-54.30 dBm	-41.30 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69895 GHz	-55.11 dBm	-42.11 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.87971 GHz	-53.62 dBm	-40.62 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.74 dBm	-35.74 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.74326 GHz	-49.04 dBm	-36.04 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.74476 GHz	-45.21 dBm	-32.21 dB

Date:17 AUG 2014 10:23:58

16QAM (RB Size 1, RB Offset 0)



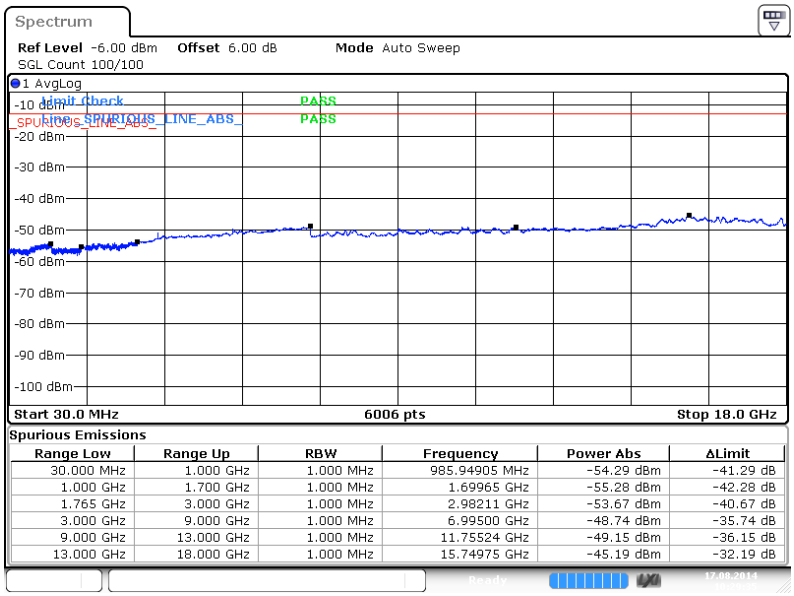
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	878.38661 MHz	-54.31 dBm	-41.31 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69965 GHz	-55.50 dBm	-42.50 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.84269 GHz	-53.57 dBm	-40.57 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.78 dBm	-35.78 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75125 GHz	-49.12 dBm	-36.12 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.72977 GHz	-45.27 dBm	-32.27 dB

Date:17 AUG 2014 10:26:47

Band :	LTE Band 4	Channel :	CH20175 (Middle)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 0)

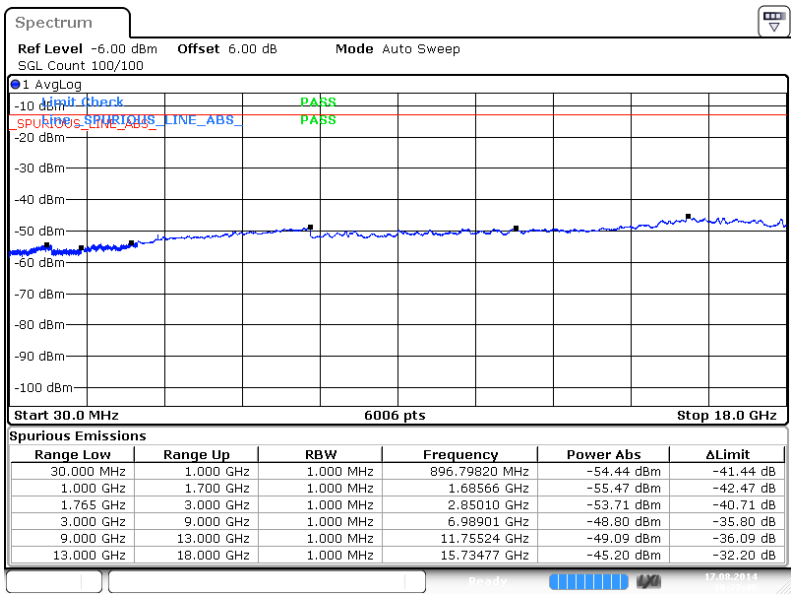


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	985.94905 MHz	-54.29 dBm	-41.29 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69965 GHz	-55.28 dBm	-42.28 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.98211 GHz	-53.67 dBm	-40.67 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.74 dBm	-35.74 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75524 GHz	-49.15 dBm	-36.15 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.74975 GHz	-45.19 dBm	-32.19 dB

Date:17 AUG 2014 10:29:35

16QAM (RB Size 1, RB Offset 0)



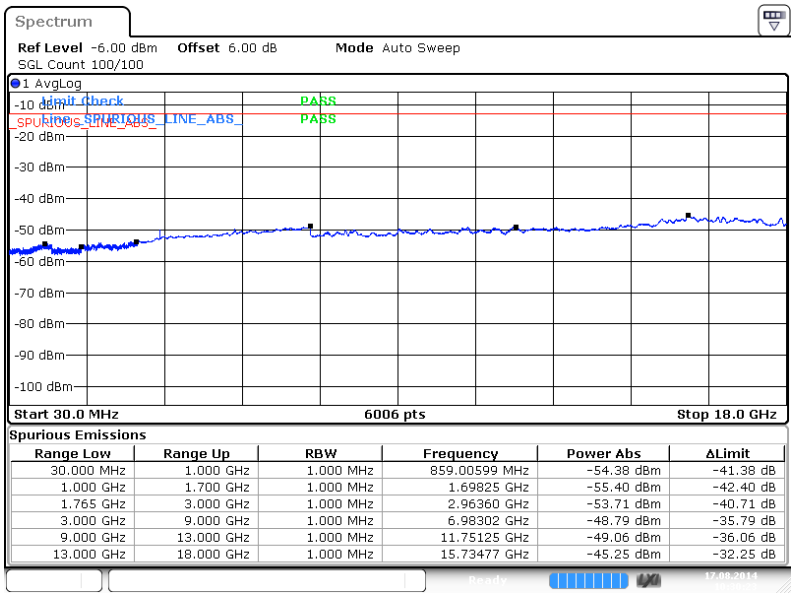
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	896.79820 MHz	-54.44 dBm	-41.44 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.68566 GHz	-55.47 dBm	-42.47 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.85010 GHz	-53.71 dBm	-40.71 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98901 GHz	-48.80 dBm	-35.80 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75524 GHz	-49.09 dBm	-36.09 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.73477 GHz	-45.20 dBm	-32.20 dB

Date:17 AUG 2014 10:27:40

Band :	LTE Band 4	Channel :	CH20375 (High)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 0)

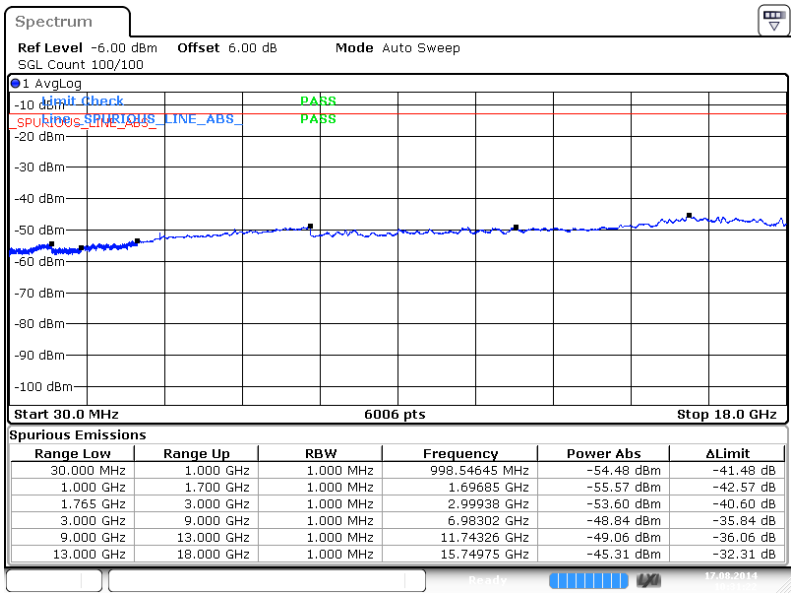


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	859.00599 MHz	-54.38 dBm	-41.38 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69825 GHz	-55.40 dBm	-42.40 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.96360 GHz	-53.71 dBm	-40.71 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98302 GHz	-48.79 dBm	-35.79 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75125 GHz	-49.06 dBm	-36.06 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.73477 GHz	-45.25 dBm	-32.25 dB

Date:17 AUG 2014 10:30:23

16QAM (RB Size 1, RB Offset 0)



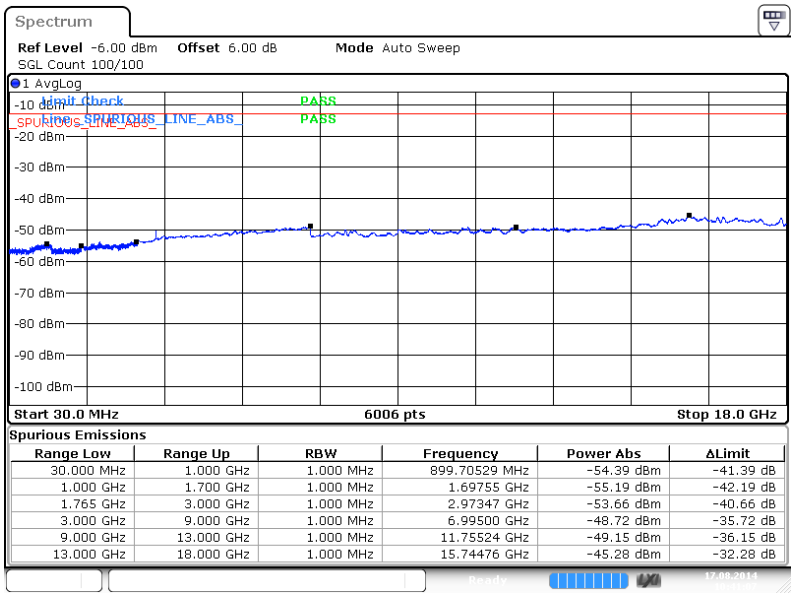
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	998.54645 MHz	-54.48 dBm	-41.48 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69685 GHz	-55.57 dBm	-42.57 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.99938 GHz	-53.60 dBm	-40.60 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98302 GHz	-48.84 dBm	-35.84 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.74326 GHz	-49.06 dBm	-36.06 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.74975 GHz	-45.31 dBm	-32.31 dB

Date:17 AUG 2014 10:31:22

Band :	LTE Band 4	Channel :	CH20000 (Low)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 49)

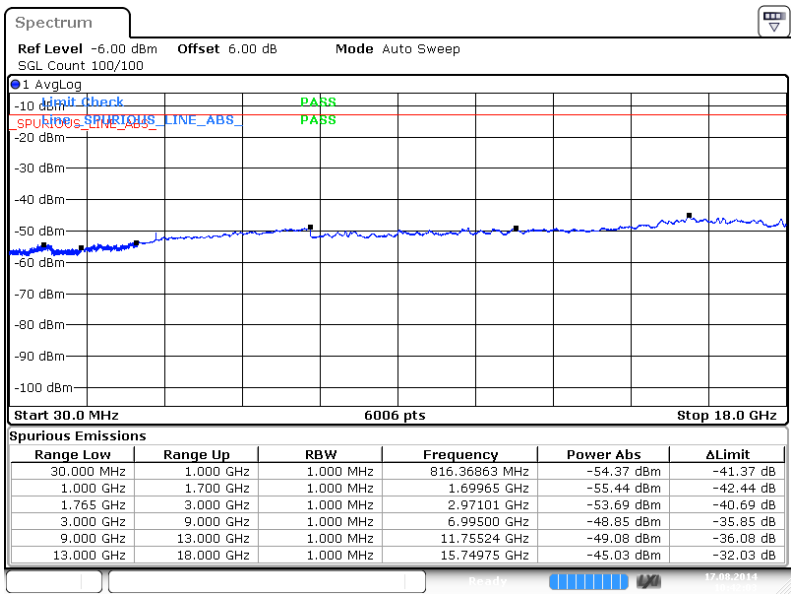


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	899.70529 MHz	-54.39 dBm	-41.39 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69755 GHz	-55.19 dBm	-42.19 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.97347 GHz	-53.66 dBm	-40.66 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.72 dBm	-35.72 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75524 GHz	-49.15 dBm	-36.15 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.74476 GHz	-45.28 dBm	-32.28 dB

Date:17 AUG 2014 10:41:07

16QAM (RB Size 1, RB Offset 0)



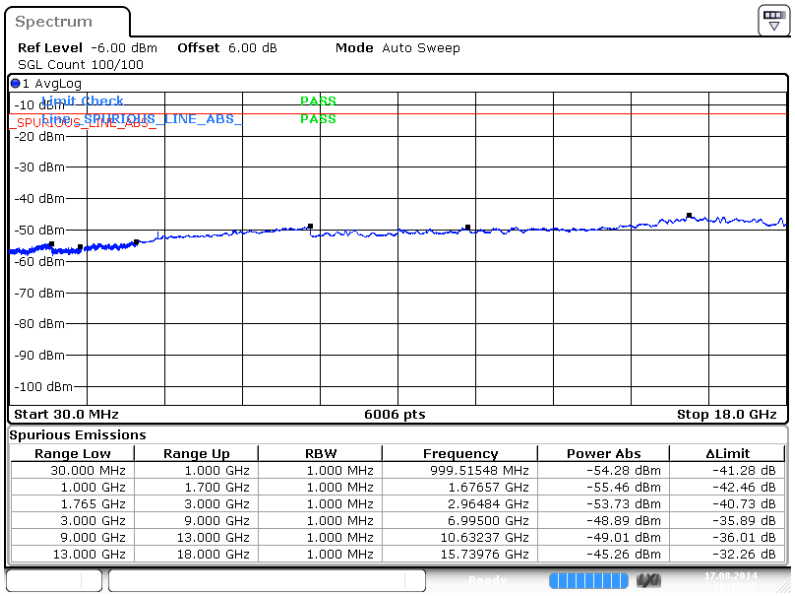
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	816.36863 MHz	-54.37 dBm	-41.37 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69965 GHz	-55.44 dBm	-42.44 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.97101 GHz	-53.69 dBm	-40.69 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.85 dBm	-35.85 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75524 GHz	-49.08 dBm	-36.08 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.74975 GHz	-45.03 dBm	-32.03 dB

Date:17 AUG 2014 10:42:03

Band :	LTE Band 4	Channel :	CH20175 (Middle)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 49)

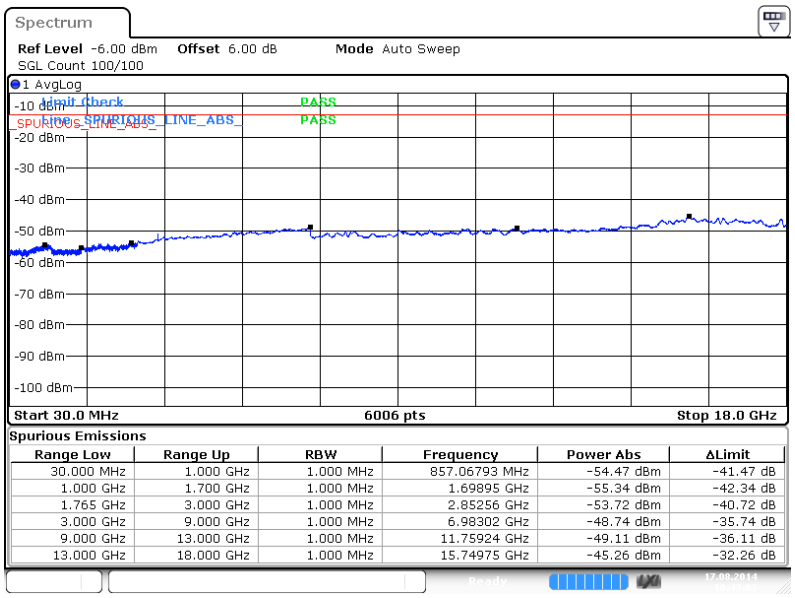


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	999.51548 MHz	-54.28 dBm	-41.28 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.67657 GHz	-55.46 dBm	-42.46 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.96484 GHz	-53.73 dBm	-40.73 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.89 dBm	-35.89 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.63237 GHz	-49.01 dBm	-36.01 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.73976 GHz	-45.26 dBm	-32.26 dB

Date:17 AUG 2014 10:43:57

16QAM (RB Size 1, RB Offset 0)



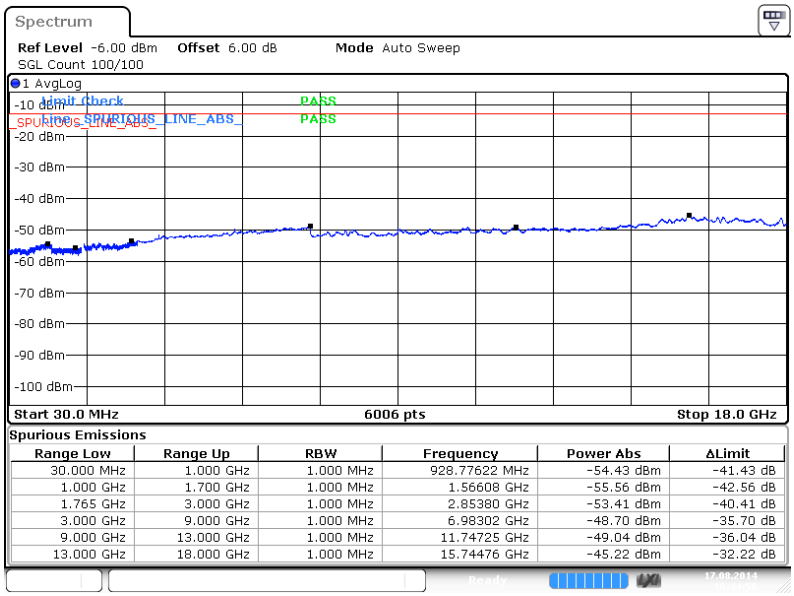
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	857.06793 MHz	-54.47 dBm	-41.47 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69895 GHz	-55.34 dBm	-42.34 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.85256 GHz	-53.72 dBm	-40.72 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98302 GHz	-48.74 dBm	-35.74 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75924 GHz	-49.11 dBm	-36.11 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.74975 GHz	-45.26 dBm	-32.26 dB

Date:17 AUG 2014 10:43:03

Band :	LTE Band 4	Channel :	CH20350 (High)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 49)

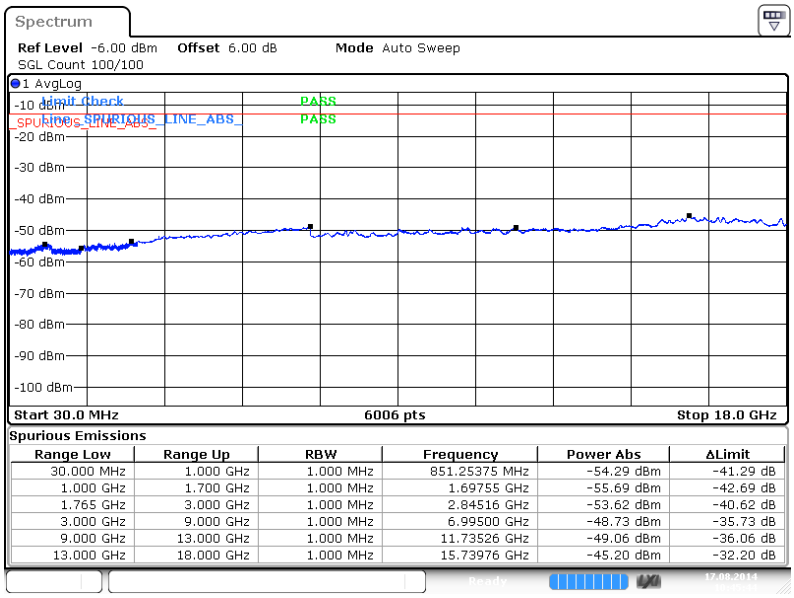


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	928.77622 MHz	-54.43 dBm	-41.43 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.56608 GHz	-55.56 dBm	-42.56 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.85380 GHz	-53.41 dBm	-40.41 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98302 GHz	-48.70 dBm	-35.70 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.74725 GHz	-49.04 dBm	-36.04 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.74476 GHz	-45.22 dBm	-32.22 dB

Date:17 AUG 2014 10:44:51

16QAM (RB Size 1, RB Offset 0)



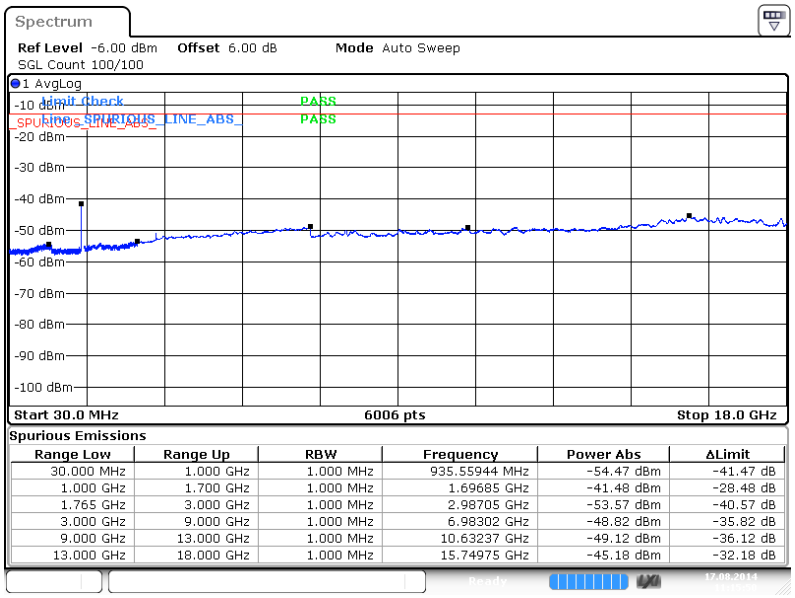
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	851.25375 MHz	-54.29 dBm	-41.29 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69755 GHz	-55.69 dBm	-42.69 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.84516 GHz	-53.62 dBm	-40.62 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.73 dBm	-35.73 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.73526 GHz	-49.06 dBm	-36.06 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.73976 GHz	-45.20 dBm	-32.20 dB

Date:17 AUG 2014 10:45:43

Band :	LTE Band 4	Channel :	CH20025 (Low)
Band Width :	15MHz		

QPSK (RB Size 1, RB Offset 37)

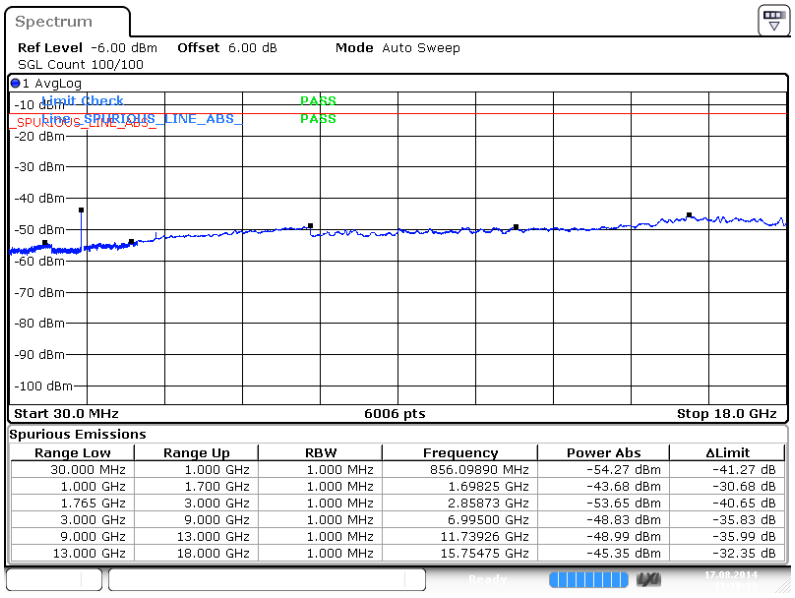


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	935.55944 MHz	-54.47 dBm	-41.47 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69685 GHz	-41.48 dBm	-28.48 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.98705 GHz	-53.57 dBm	-40.57 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98302 GHz	-48.82 dBm	-35.82 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.63237 GHz	-49.12 dBm	-36.12 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.74975 GHz	-45.18 dBm	-32.18 dB

Date:17 AUG 2014 11:15:50

16QAM (RB Size 1, RB Offset 0)



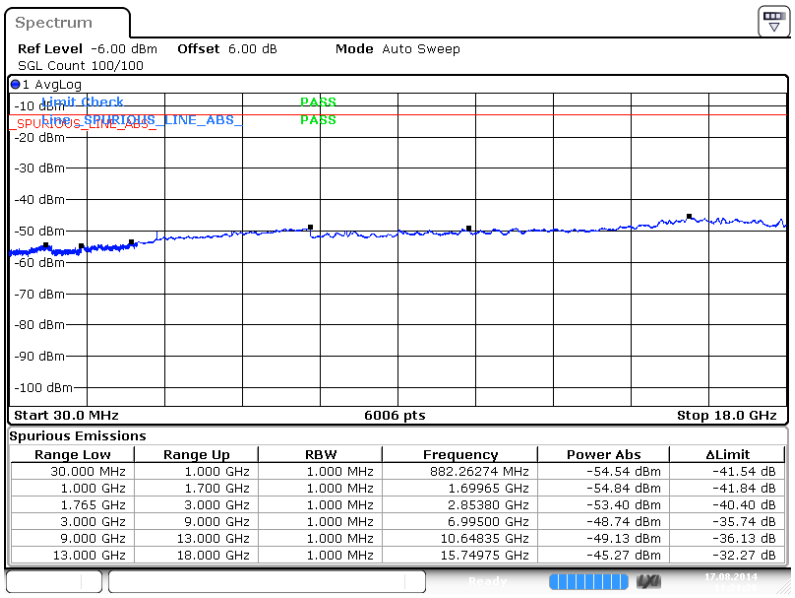
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	856.09890 MHz	-54.27 dBm	-41.27 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69825 GHz	-43.68 dBm	-30.68 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.85873 GHz	-53.65 dBm	-40.65 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.83 dBm	-35.83 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.73926 GHz	-48.99 dBm	-35.99 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.75475 GHz	-45.35 dBm	-32.35 dB

Date:17 AUG 2014 11:18:13

Band :	LTE Band 4	Channel :	CH20175 (Middle)
Band Width :	15MHz		

QPSK (RB Size 1, RB Offset 37)

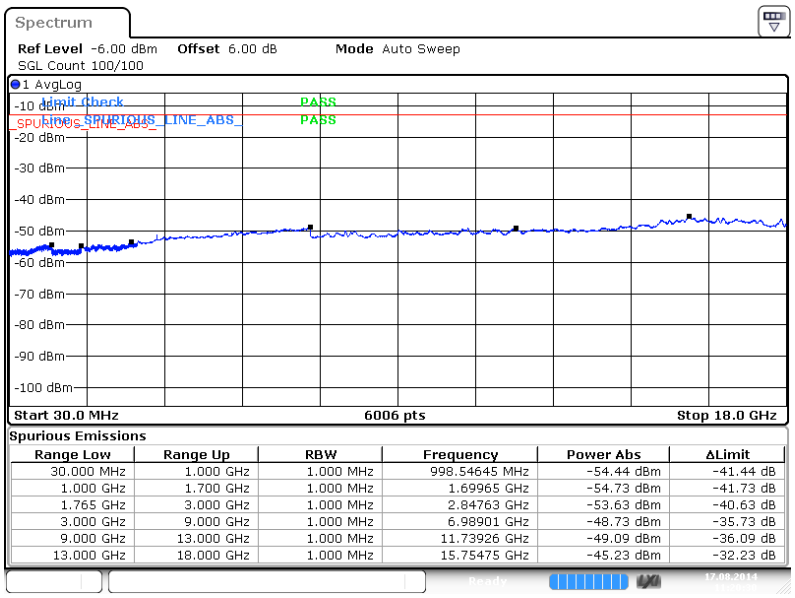


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	882.26274 MHz	-54.54 dBm	-41.54 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69965 GHz	-54.84 dBm	-41.84 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.85380 GHz	-53.40 dBm	-40.40 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.74 dBm	-35.74 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.64835 GHz	-49.13 dBm	-36.13 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.74975 GHz	-45.27 dBm	-32.27 dB

Date:17 AUG 2014 11:21:28

16QAM (RB Size 1, RB Offset 0)



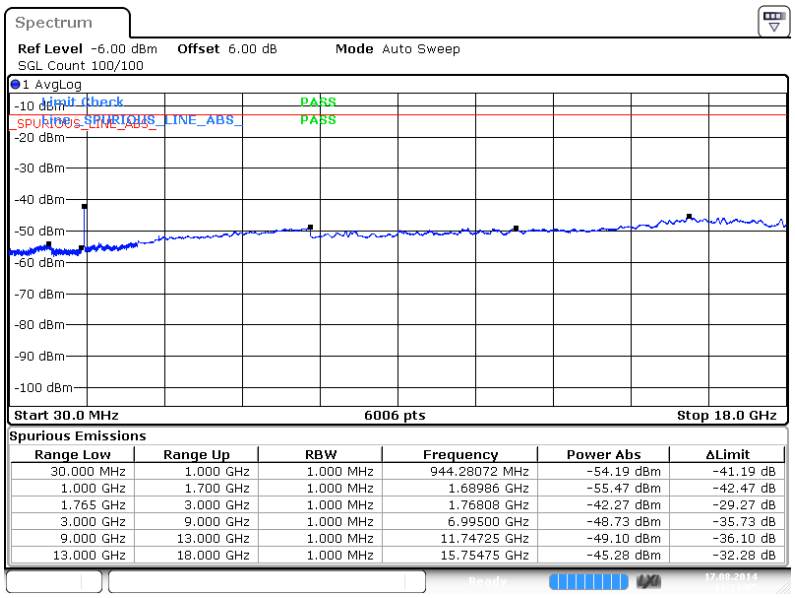
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	998.54645 MHz	-54.44 dBm	-41.44 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69965 GHz	-54.73 dBm	-41.73 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.84763 GHz	-53.63 dBm	-40.63 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98901 GHz	-48.73 dBm	-35.73 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.73926 GHz	-49.09 dBm	-36.09 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.75475 GHz	-45.23 dBm	-32.23 dB

Date:17 AUG 2014 11:20:30

Band :	LTE Band 4	Channel :	CH20325 (High)
Band Width :	15MHz		

QPSK (RB Size 1, RB Offset 37)

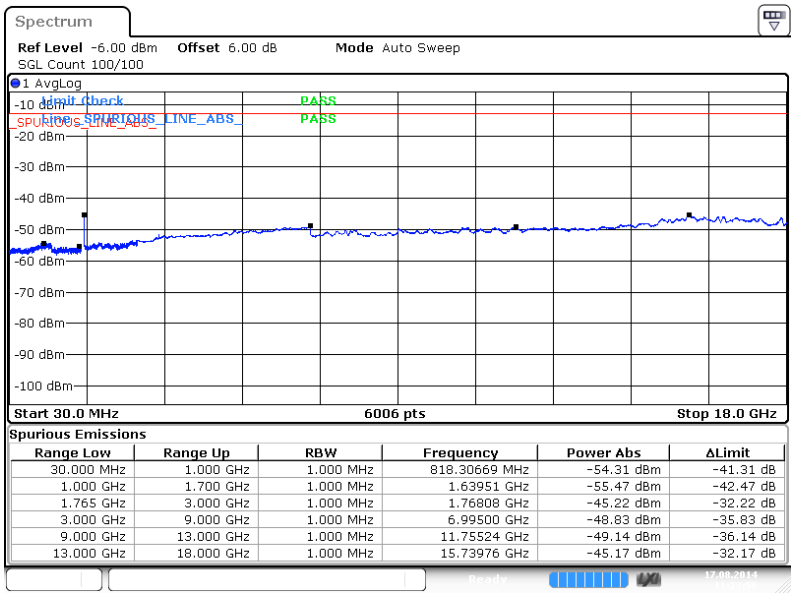


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	944.28072 MHz	-54.19 dBm	-41.19 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.68986 GHz	-55.47 dBm	-42.47 dB
1.765 GHz	3.000 GHz	1.000 MHz	1.76808 GHz	-42.27 dBm	-29.27 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.73 dBm	-35.73 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.74725 GHz	-49.10 dBm	-36.10 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.75475 GHz	-45.28 dBm	-32.28 dB

Date:17 AUG 2014 11:23:05

16QAM (RB Size 1, RB Offset 0)



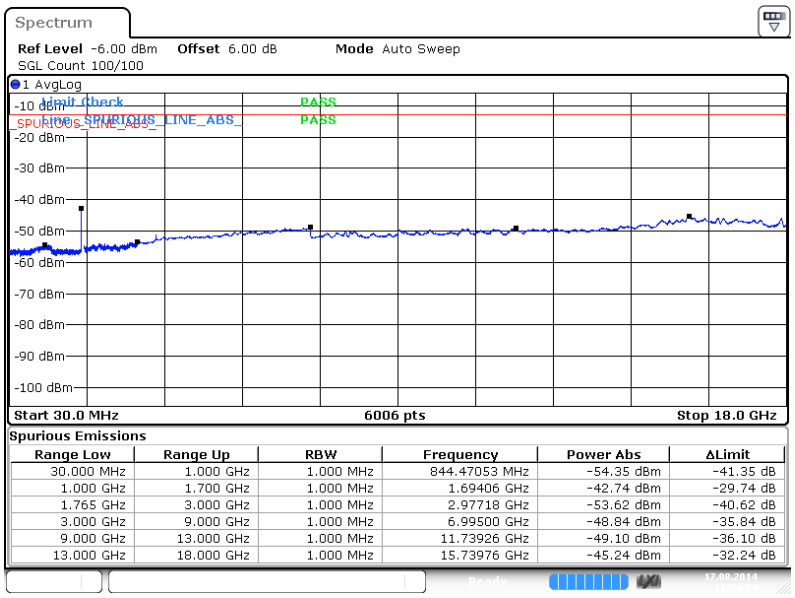
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	818.30669 MHz	-54.31 dBm	-41.31 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.63951 GHz	-55.47 dBm	-42.47 dB
1.765 GHz	3.000 GHz	1.000 MHz	1.76808 GHz	-45.22 dBm	-32.22 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.83 dBm	-35.83 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75524 GHz	-49.14 dBm	-36.14 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.73976 GHz	-45.17 dBm	-32.17 dB

Date:17 AUG 2014 11:23:57

Band :	LTE Band 4	Channel :	CH20050 (Low)
Band Width :	20MHz		

QPSK (RB Size 1, RB Offset 0)

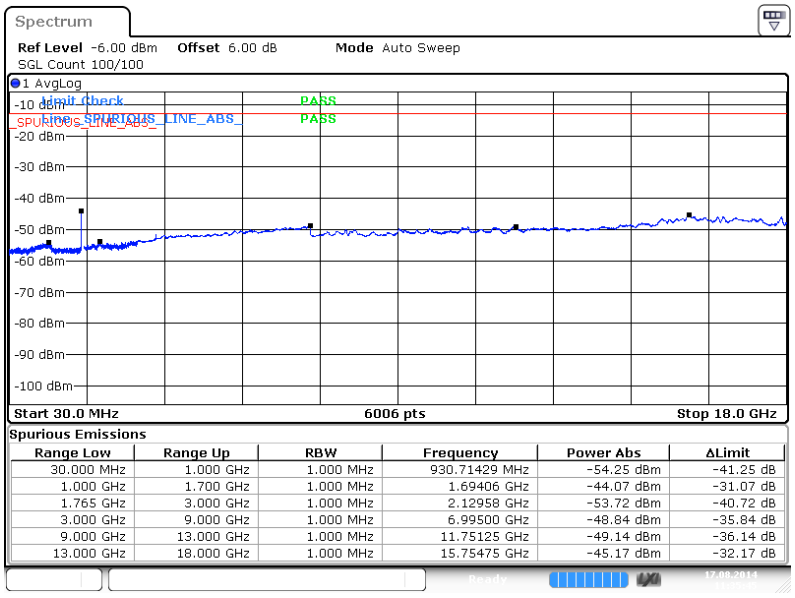


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	844.47053 MHz	-54.35 dBm	-41.35 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69406 GHz	-42.74 dBm	-29.74 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.97718 GHz	-53.62 dBm	-40.62 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.84 dBm	-35.84 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.73926 GHz	-49.10 dBm	-36.10 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.73976 GHz	-45.24 dBm	-32.24 dB

Date:17 AUG 2014 11:34:34

16QAM (RB Size 1, RB Offset 0)



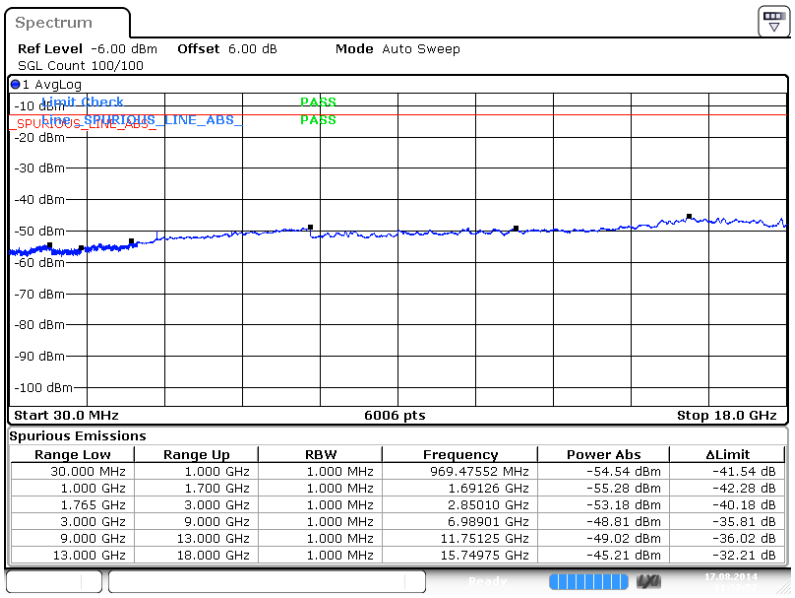
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	930.71429 MHz	-54.25 dBm	-41.25 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69406 GHz	-44.07 dBm	-31.07 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.12958 GHz	-53.72 dBm	-40.72 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.84 dBm	-35.84 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75125 GHz	-49.14 dBm	-36.14 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.75475 GHz	-45.17 dBm	-32.17 dB

Date:17 AUG 2014 11:35:46

Band :	LTE Band 4	Channel :	CH20175 (Middle)
Band Width :	20MHz		

QPSK (RB Size 1, RB Offset 0)

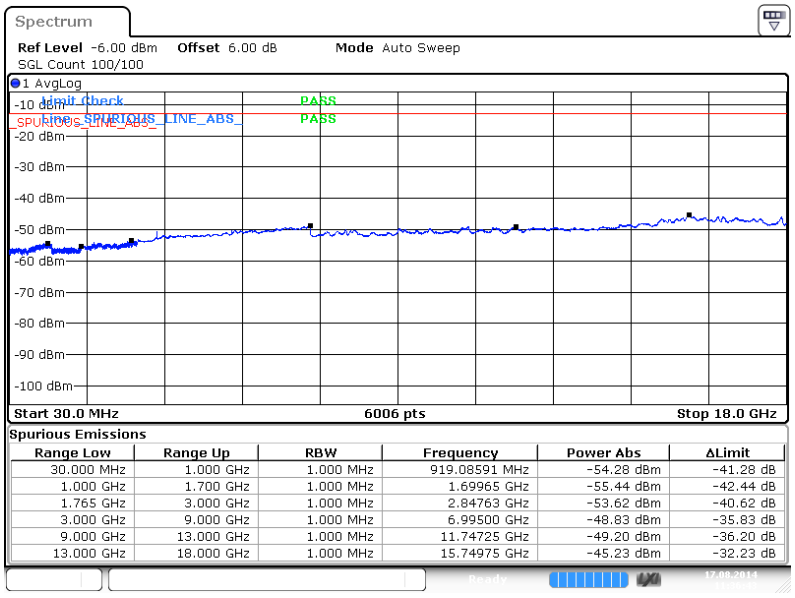


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	969.47552 MHz	-54.54 dBm	-41.54 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69126 GHz	-55.28 dBm	-42.28 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.85010 GHz	-53.18 dBm	-40.18 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98901 GHz	-48.81 dBm	-35.81 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.75125 GHz	-49.02 dBm	-36.02 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.74975 GHz	-45.21 dBm	-32.21 dB

Date:17 AUG 2014 11:37:52

16QAM (RB Size 1, RB Offset 0)



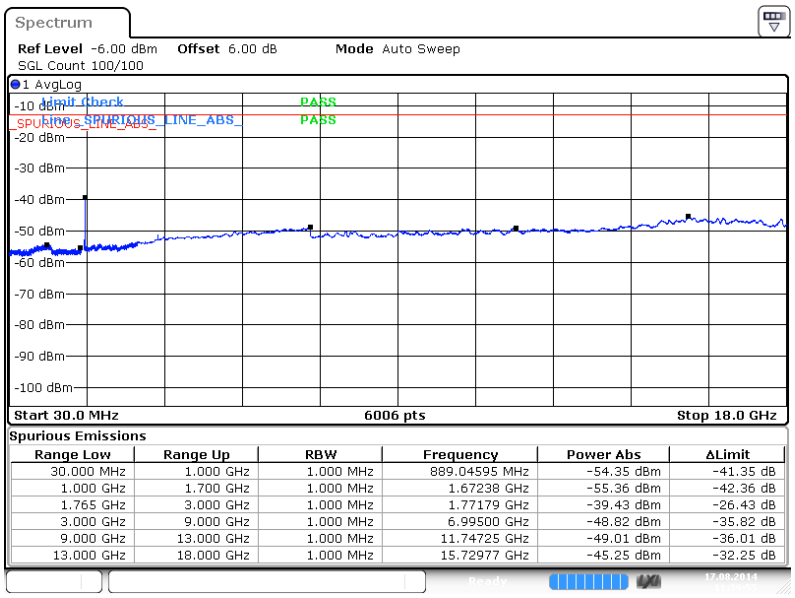
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	919.08591 MHz	-54.28 dBm	-41.28 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69965 GHz	-55.44 dBm	-42.44 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.84763 GHz	-53.62 dBm	-40.62 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.83 dBm	-35.83 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.74725 GHz	-49.20 dBm	-36.20 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.74975 GHz	-45.23 dBm	-32.23 dB

Date:17 AUG 2014 11:36:43

Band :	LTE Band 4	Channel :	CH20300 (High)
Band Width :	20MHz		

QPSK (RB Size 1, RB Offset 0)

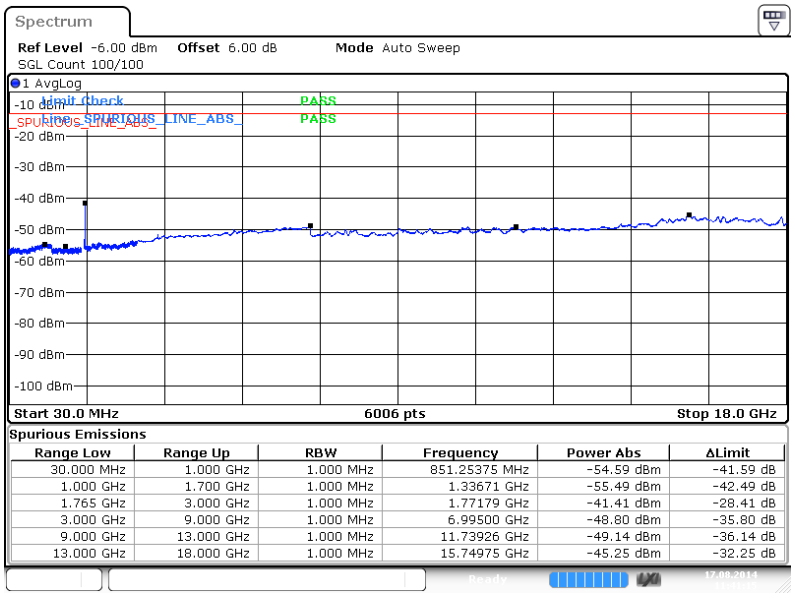


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	889.04595 MHz	-54.35 dBm	-41.35 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.67238 GHz	-55.36 dBm	-42.36 dB
1.765 GHz	3.000 GHz	1.000 MHz	1.77179 GHz	-39.43 dBm	-26.43 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.82 dBm	-35.82 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.74725 GHz	-49.01 dBm	-36.01 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.72977 GHz	-45.25 dBm	-32.25 dB

Date:17 AUG 2014 11:39:55

16QAM (RB Size 1, RB Offset 0)



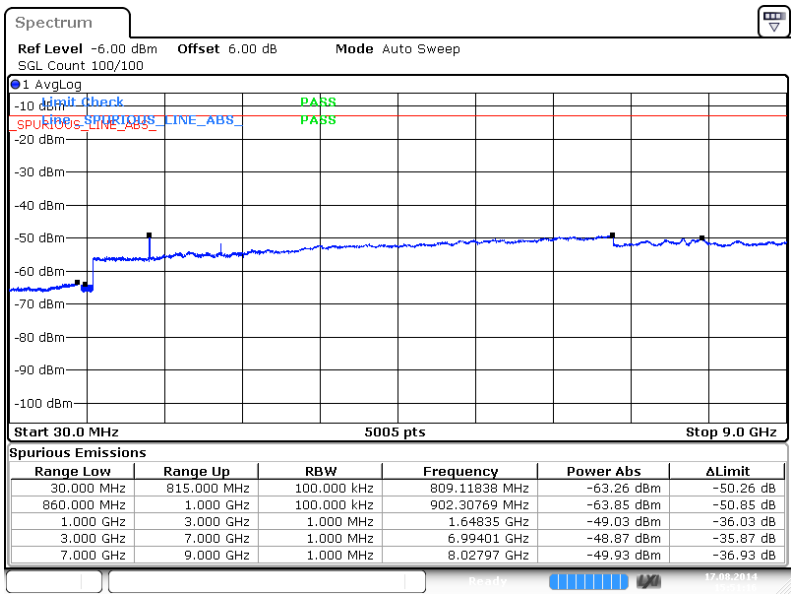
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	851.25375 MHz	-54.59 dBm	-41.59 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.33671 GHz	-55.49 dBm	-42.49 dB
1.765 GHz	3.000 GHz	1.000 MHz	1.77179 GHz	-41.41 dBm	-28.41 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99500 GHz	-48.80 dBm	-35.80 dB
9.000 GHz	13.000 GHz	1.000 MHz	11.73926 GHz	-49.14 dBm	-36.14 dB
13.000 GHz	18.000 GHz	1.000 MHz	15.74975 GHz	-45.25 dBm	-32.25 dB

Date:17 AUG 2014 11:41:15

Band :	LTE Band 5	Channel :	CH20407 (Low)
Band Width :	1.4MHz		

QPSK (RB Size 1, RB Offset 5)

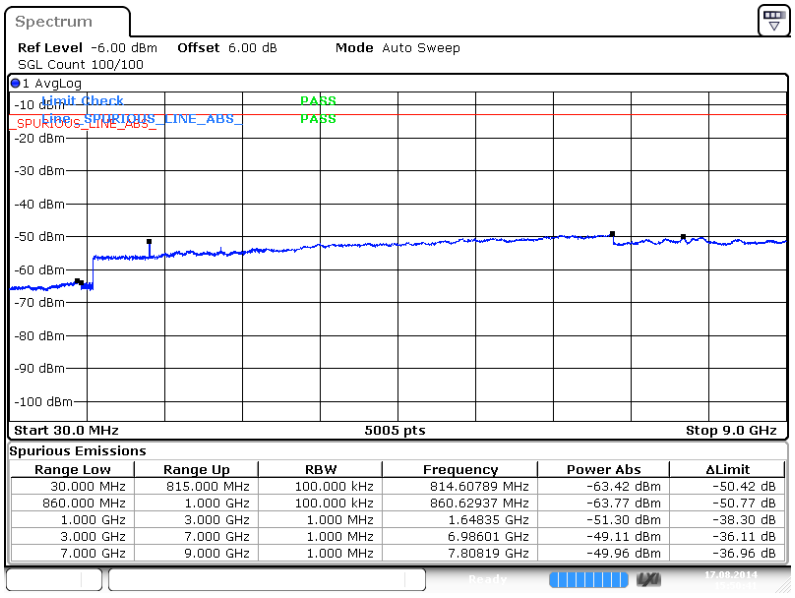


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	809.11838 MHz	-63.26 dBm	-50.26 dB
860.000 MHz	1.000 GHz	100.000 kHz	902.30769 MHz	-63.85 dBm	-50.85 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.64835 GHz	-49.03 dBm	-36.03 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99401 GHz	-48.87 dBm	-35.87 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.02797 GHz	-49.93 dBm	-36.93 dB

Date:17 AUG 2014 15:51:16

16QAM (RB Size 1, RB Offset 0)



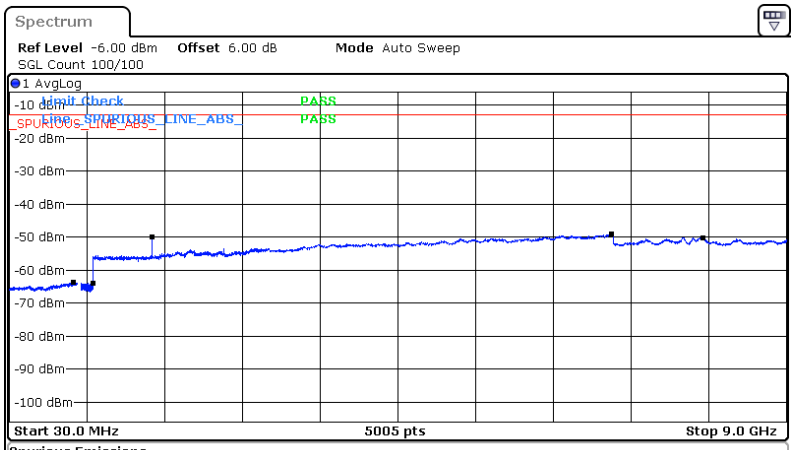
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	814.60789 MHz	-63.42 dBm	-50.42 dB
860.000 MHz	1.000 GHz	100.000 kHz	860.62937 MHz	-63.77 dBm	-50.77 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.64835 GHz	-51.30 dBm	-38.30 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98601 GHz	-49.11 dBm	-36.11 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.80819 GHz	-49.96 dBm	-36.96 dB

Date:17 AUG 2014 15:50:41

Band :	LTE Band 5	Channel :	CH20525 (Middle)
Band Width :	1.4MHz		

QPSK (RB Size 1, RB Offset 5)

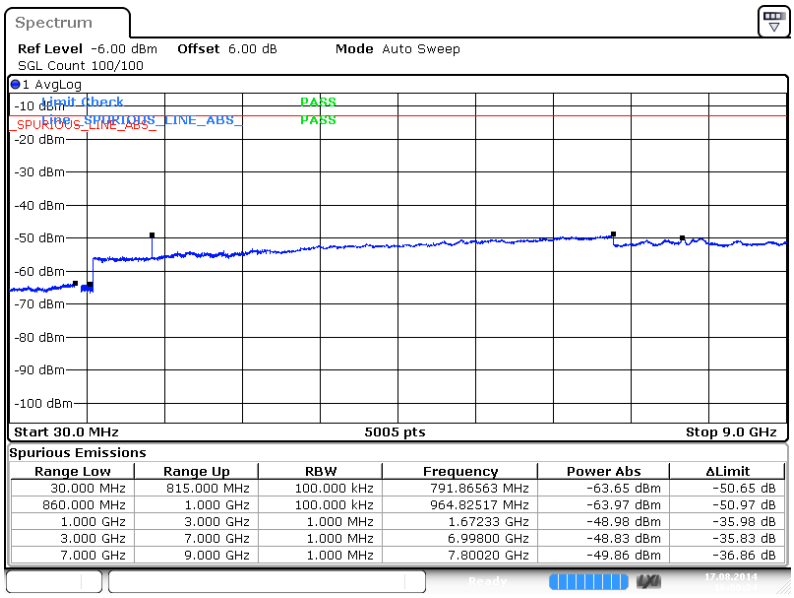


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	773.82867 MHz	-63.72 dBm	-50.72 dB
860.000 MHz	1.000 GHz	100.000 kHz	998.81119 MHz	-63.92 dBm	-50.92 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.67233 GHz	-50.02 dBm	-37.02 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98202 GHz	-49.00 dBm	-36.00 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.02997 GHz	-50.10 dBm	-37.10 dB

Date:17.AUG.2014 15:51:52

16QAM (RB Size 1, RB Offset 0)



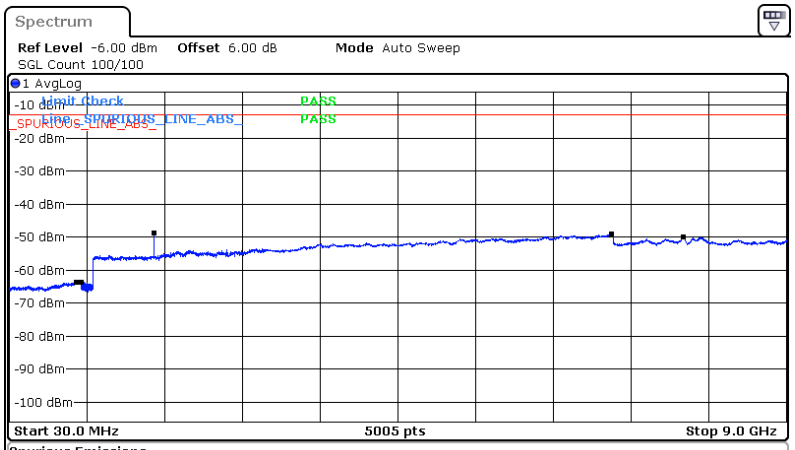
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	791.86563 MHz	-63.65 dBm	-50.65 dB
860.000 MHz	1.000 GHz	100.000 kHz	964.82517 MHz	-63.97 dBm	-50.97 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.67233 GHz	-48.98 dBm	-35.98 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99800 GHz	-48.83 dBm	-35.83 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.80020 GHz	-49.86 dBm	-36.86 dB

Date:17.AUG.2014 16:00:25

Band :	LTE Band 5	Channel :	CH20643 (High)
Band Width :	1.4MHz		

QPSK (RB Size 1, RB Offset 5)

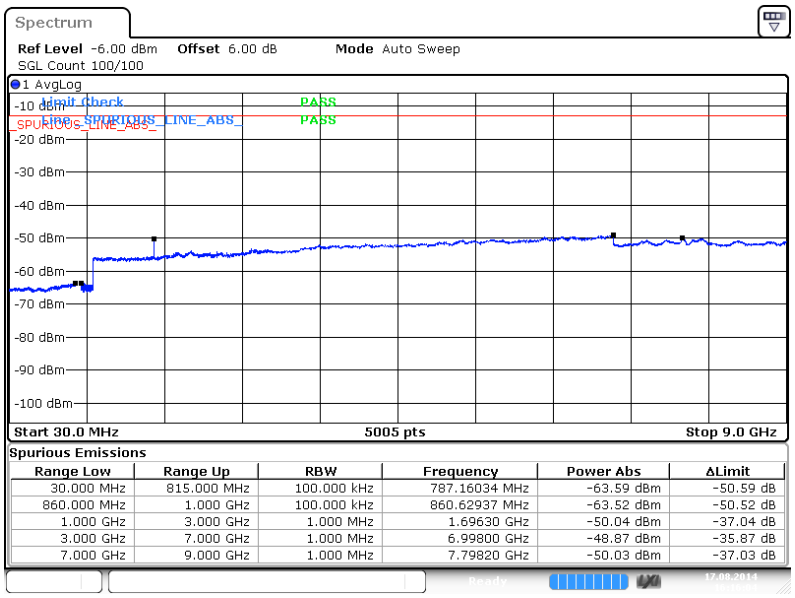


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	802.84466 MHz	-63.73 dBm	-50.73 dB
860.000 MHz	1.000 GHz	100.000 kHz	860.06993 MHz	-63.49 dBm	-50.49 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.69630 GHz	-48.71 dBm	-35.71 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.97802 GHz	-48.95 dBm	-35.95 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.80420 GHz	-49.75 dBm	-36.75 dB

Date:17.AUG.2014 16:15:16

16QAM (RB Size 1, RB Offset 0)



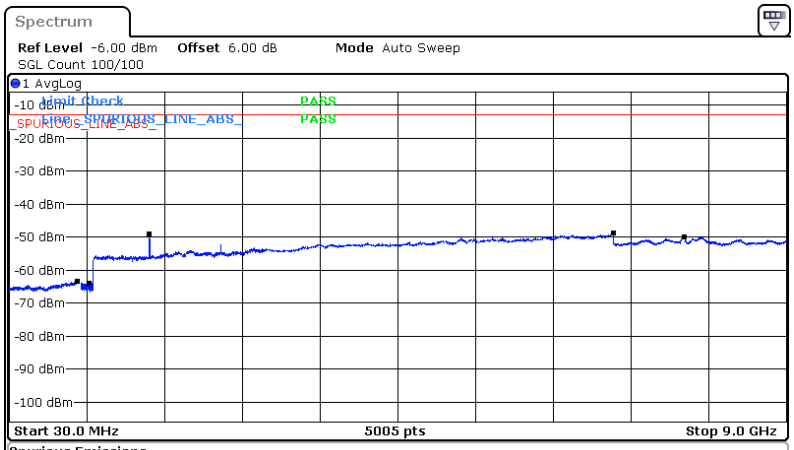
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	787.16034 MHz	-63.59 dBm	-50.59 dB
860.000 MHz	1.000 GHz	100.000 kHz	860.62937 MHz	-63.52 dBm	-50.52 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.69630 GHz	-50.04 dBm	-37.04 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99800 GHz	-48.87 dBm	-35.87 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.79820 GHz	-50.03 dBm	-37.03 dB

Date:17.AUG.2014 16:16:04

Band :	LTE Band 5	Channel :	CH20415 (Low)
Band Width :	3MHz		

QPSK (RB Size 1, RB Offset 14)

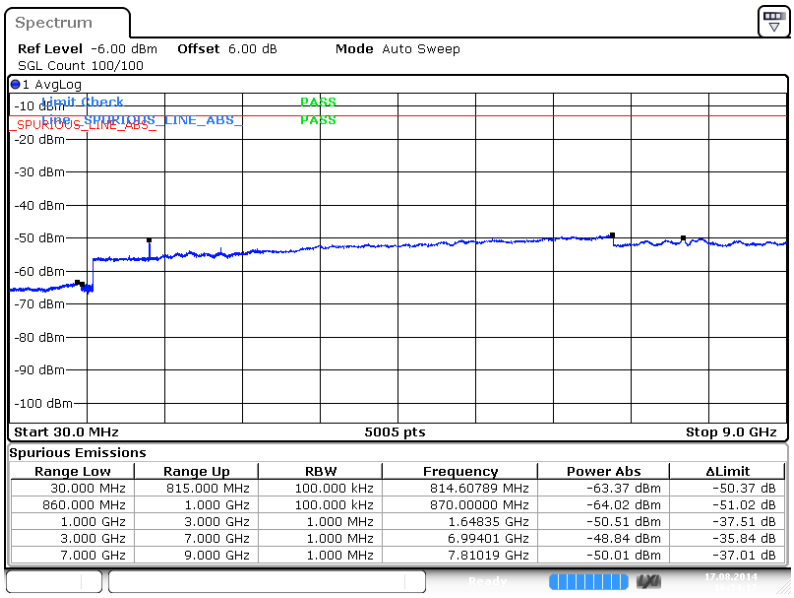


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	814.60789 MHz	-63.40 dBm	-50.40 dB
860.000 MHz	1.000 GHz	100.000 kHz	946.22378 MHz	-63.85 dBm	-50.85 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.64835 GHz	-48.99 dBm	-35.99 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99800 GHz	-48.79 dBm	-35.79 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.81618 GHz	-49.81 dBm	-36.81 dB

Date:17 AUG 2014 16:33:33

16QAM (RB Size 1, RB Offset 14)



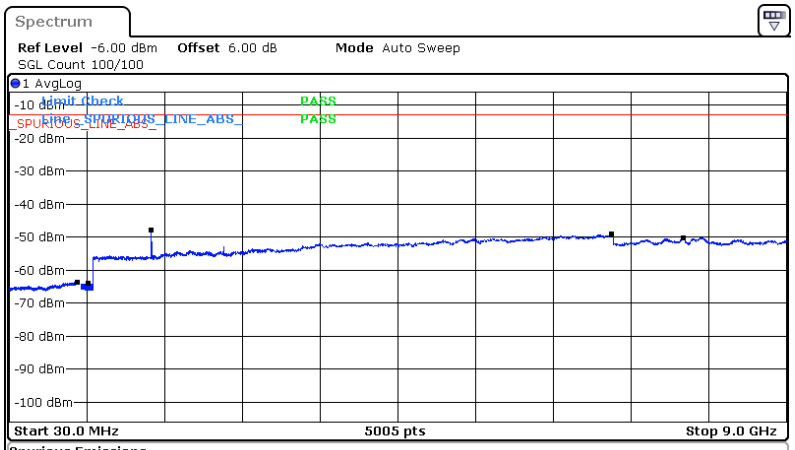
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	814.60789 MHz	-63.37 dBm	-50.37 dB
860.000 MHz	1.000 GHz	100.000 kHz	870.00000 MHz	-64.02 dBm	-51.02 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.64835 GHz	-50.51 dBm	-37.51 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99401 GHz	-48.84 dBm	-35.84 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.81019 GHz	-50.01 dBm	-37.01 dB

Date:17 AUG 2014 16:34:17

Band :	LTE Band 5	Channel :	CH20525 (Middle)
Band Width :	3MHz		

QPSK (RB Size 1, RB Offset 14)

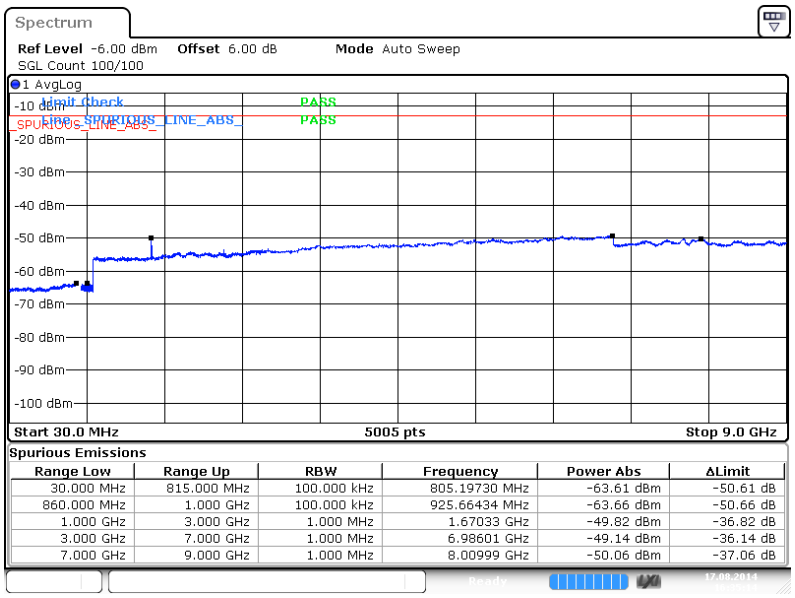


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	813.03946 MHz	-63.59 dBm	-50.59 dB
860.000 MHz	1.000 GHz	100.000 kHz	939.09091 MHz	-63.84 dBm	-50.84 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.67033 GHz	-47.86 dBm	-34.86 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98202 GHz	-49.08 dBm	-36.08 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.81019 GHz	-50.08 dBm	-37.08 dB

Date:17 AUG 2014 16:36:06

16QAM (RB Size 1, RB Offset 14)



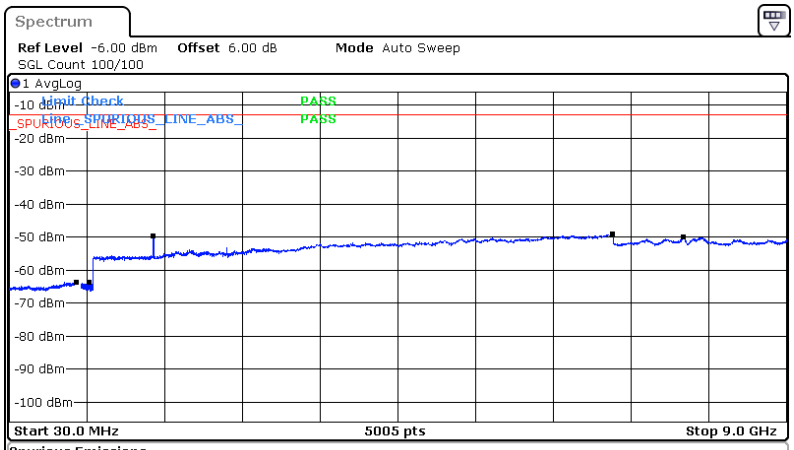
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	805.19730 MHz	-63.61 dBm	-50.61 dB
860.000 MHz	1.000 GHz	100.000 kHz	925.66434 MHz	-63.66 dBm	-50.66 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.67033 GHz	-49.82 dBm	-36.82 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98601 GHz	-49.14 dBm	-36.14 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.00999 GHz	-50.06 dBm	-37.06 dB

Date:17 AUG 2014 16:35:14

Band :	LTE Band 5	Channel :	CH20635 (High)
Band Width :	3MHz		

QPSK (RB Size 1, RB Offset 14)

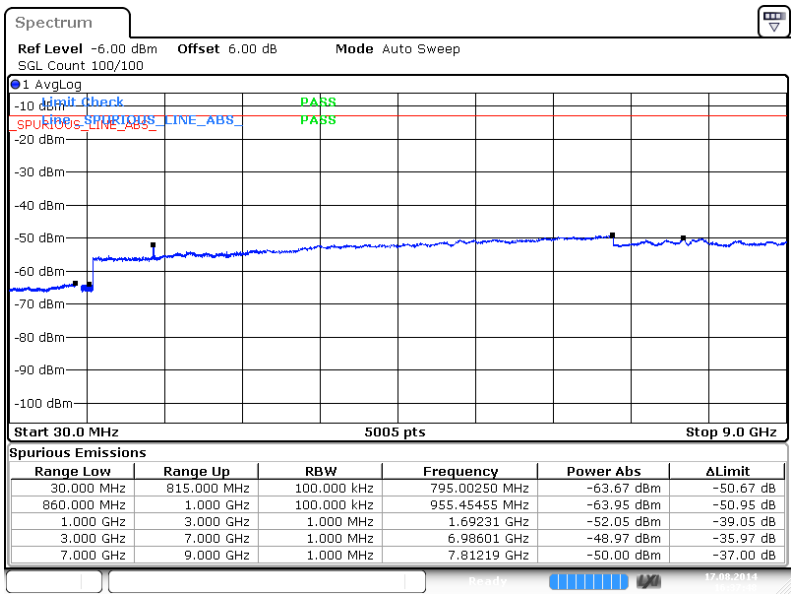


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	801.27622 MHz	-63.63 dBm	-50.63 dB
860.000 MHz	1.000 GHz	100.000 kHz	954.19580 MHz	-63.62 dBm	-50.62 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.69231 GHz	-49.67 dBm	-36.67 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99401 GHz	-48.92 dBm	-35.92 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.80819 GHz	-49.95 dBm	-36.95 dB

Date:17 AUG 2014 16:36:48

16QAM (RB Size 1, RB Offset 14)



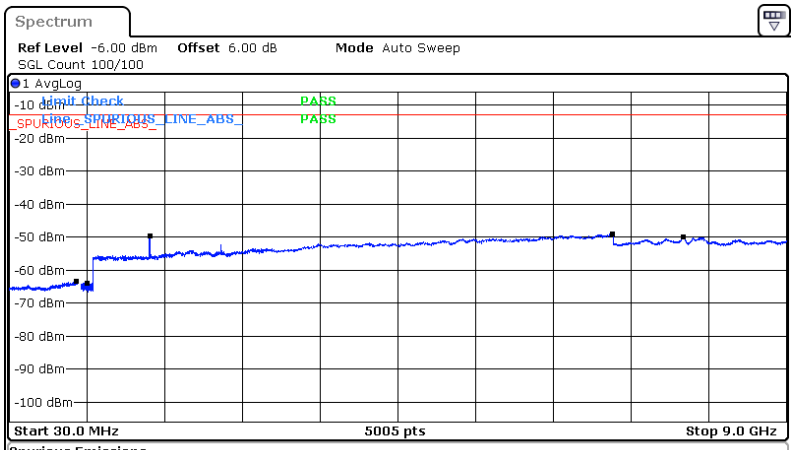
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	795.00250 MHz	-63.67 dBm	-50.67 dB
860.000 MHz	1.000 GHz	100.000 kHz	955.45455 MHz	-63.95 dBm	-50.95 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.69231 GHz	-52.05 dBm	-39.05 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98601 GHz	-48.97 dBm	-35.97 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.81219 GHz	-50.00 dBm	-37.00 dB

Date:17 AUG 2014 16:37:48

Band :	LTE Band 5	Channel :	CH20425 (Low)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 24)



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	800.49201 MHz	-63.40 dBm	-50.40 dB
860.000 MHz	1.000 GHz	100.000 kHz	926.64336 MHz	-63.83 dBm	-50.83 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.65035 GHz	-49.46 dBm	-36.46 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99001 GHz	-48.87 dBm	-35.87 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.80420 GHz	-49.93 dBm	-36.93 dB

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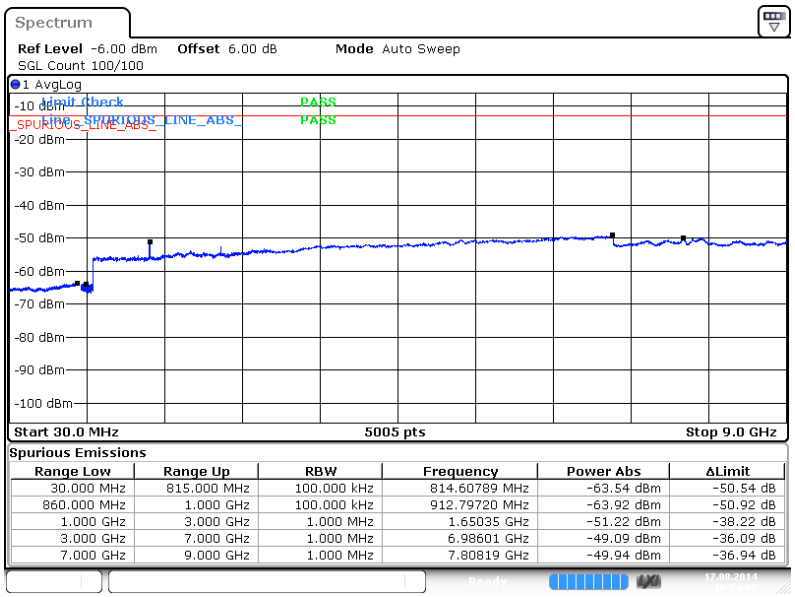
16QAM (RB Size 1, RB Offset 12)



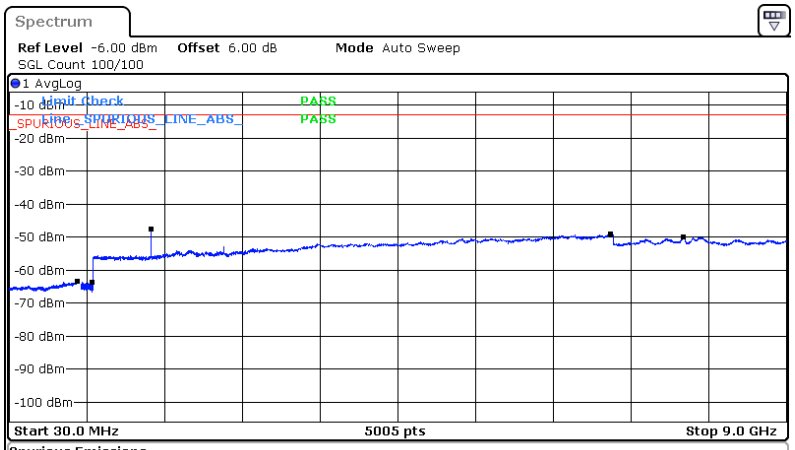
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	814.60789 MHz	-63.54 dBm	-50.54 dB
860.000 MHz	1.000 GHz	100.000 kHz	912.79720 MHz	-63.92 dBm	-50.92 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.65035 GHz	-51.22 dBm	-38.22 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98601 GHz	-49.09 dBm	-36.09 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.80819 GHz	-49.94 dBm	-36.94 dB

Date:17.AUG.2014 16:54:09

Band :	LTE Band 5	Channel :	CH20525 (Middle)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 24)

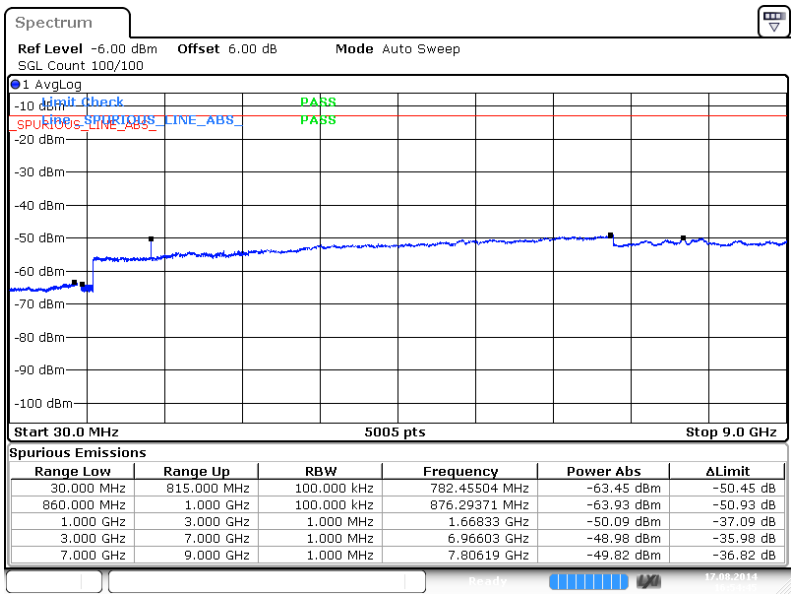


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	813.82368 MHz	-63.44 dBm	-50.44 dB
860.000 MHz	1.000 GHz	100.000 kHz	983.42657 MHz	-63.71 dBm	-50.71 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.66833 GHz	-47.51 dBm	-34.51 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.96204 GHz	-48.96 dBm	-35.96 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.80819 GHz	-49.90 dBm	-36.90 dB

Date:17.AUG.2014 16:55:53

16QAM (RB Size 1, RB Offset 12)



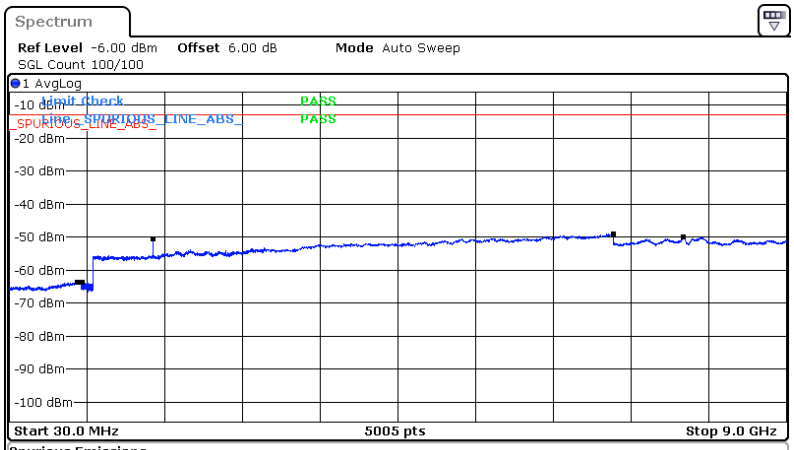
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	782.45504 MHz	-63.45 dBm	-50.45 dB
860.000 MHz	1.000 GHz	100.000 kHz	876.29371 MHz	-63.93 dBm	-50.93 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.66833 GHz	-50.09 dBm	-37.09 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.96603 GHz	-48.98 dBm	-35.98 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.80619 GHz	-49.82 dBm	-36.82 dB

Date:17.AUG.2014 16:54:46

Band :	LTE Band 5	Channel :	CH20625 (High)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 24)



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	810.68681 MHz	-63.72 dBm	-50.72 dB
860.000 MHz	1.000 GHz	100.000 kHz	866.92308 MHz	-63.63 dBm	-50.63 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.68831 GHz	-50.35 dBm	-37.35 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99800 GHz	-48.99 dBm	-35.99 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.80420 GHz	-49.89 dBm	-36.89 dB

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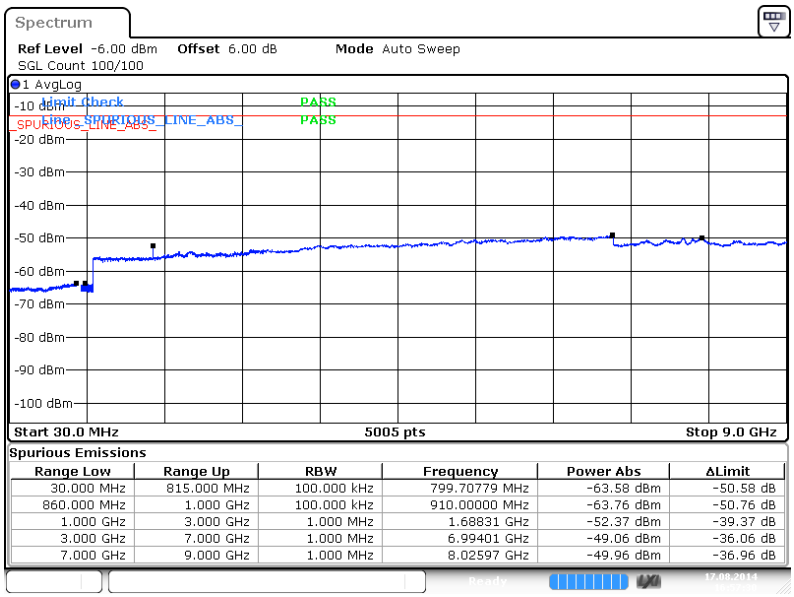
16QAM (RB Size 1, RB Offset 12)



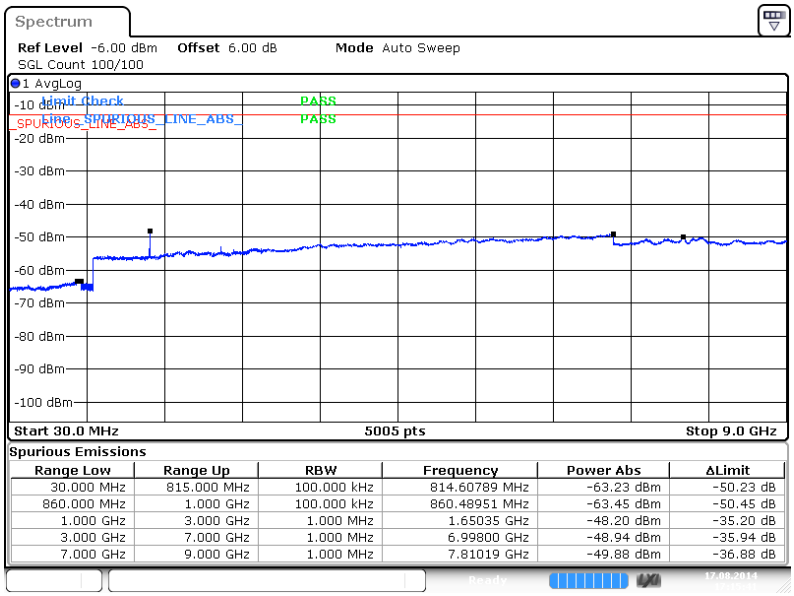
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	799.70779 MHz	-63.58 dBm	-50.58 dB
860.000 MHz	1.000 GHz	100.000 kHz	910.00000 MHz	-63.76 dBm	-50.76 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.68831 GHz	-52.37 dBm	-39.37 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99401 GHz	-49.06 dBm	-36.06 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.02597 GHz	-49.96 dBm	-36.96 dB

Date:17 AUG 2014 16:57:31

Band :	LTE Band 5	Channel :	CH20450 (Low)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	814.60789 MHz	-63.23 dBm	-50.23 dB
860.000 MHz	1.000 GHz	100.000 kHz	860.48951 MHz	-63.45 dBm	-50.45 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.65035 GHz	-48.20 dBm	-35.20 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99800 GHz	-48.94 dBm	-35.94 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.81019 GHz	-49.88 dBm	-36.88 dB

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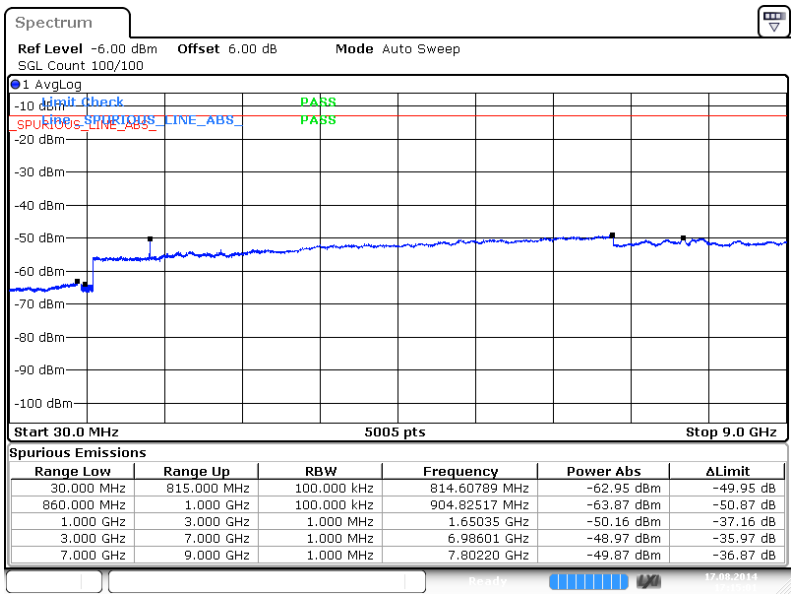
16QAM (RB Size 1, RB Offset 49)



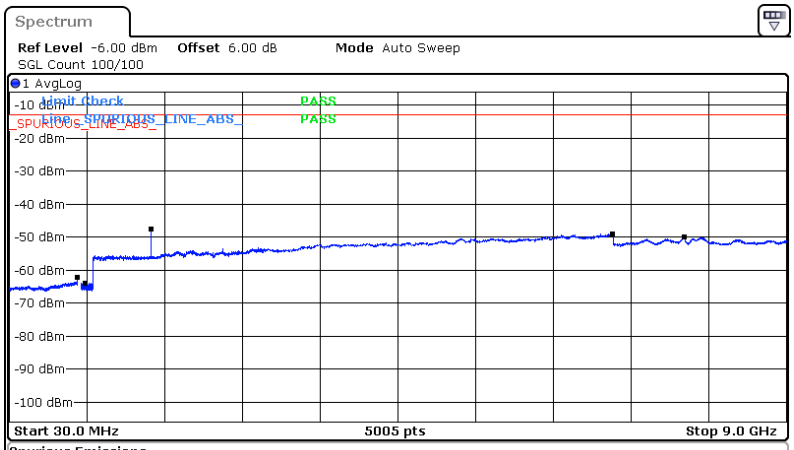
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	814.60789 MHz	-62.95 dBm	-49.95 dB
860.000 MHz	1.000 GHz	100.000 kHz	904.82517 MHz	-63.87 dBm	-50.87 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.65035 GHz	-50.16 dBm	-37.16 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98601 GHz	-48.97 dBm	-35.97 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.80220 GHz	-49.87 dBm	-36.87 dB

Date:17 AUG 2014 17:15:01

Band :	LTE Band 5	Channel :	CH20525 (Middle)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	814.60789 MHz	-62.04 dBm	-49.04 dB
860.000 MHz	1.000 GHz	100.000 kHz	902.58741 MHz	-63.87 dBm	-50.87 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.66434 GHz	-47.46 dBm	-34.46 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99401 GHz	-48.87 dBm	-35.87 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.81419 GHz	-49.88 dBm	-36.88 dB

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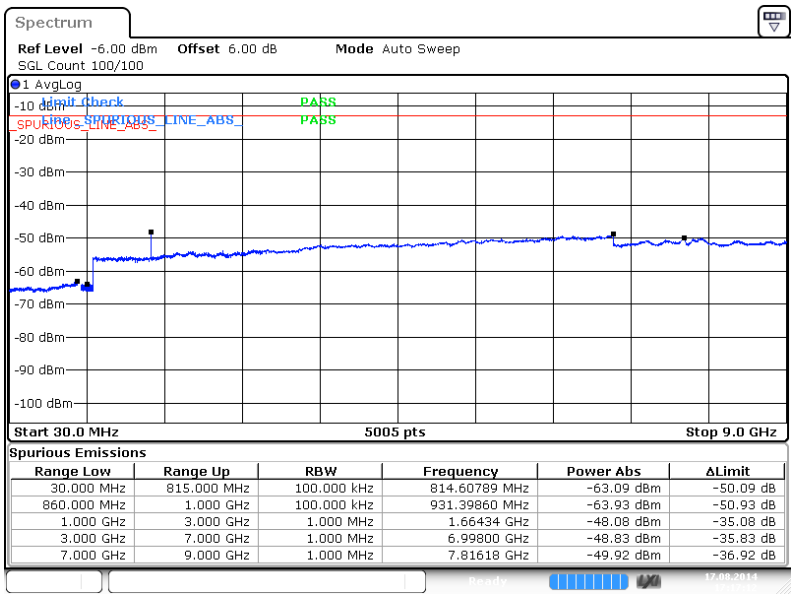
16QAM (RB Size 1, RB Offset 49)



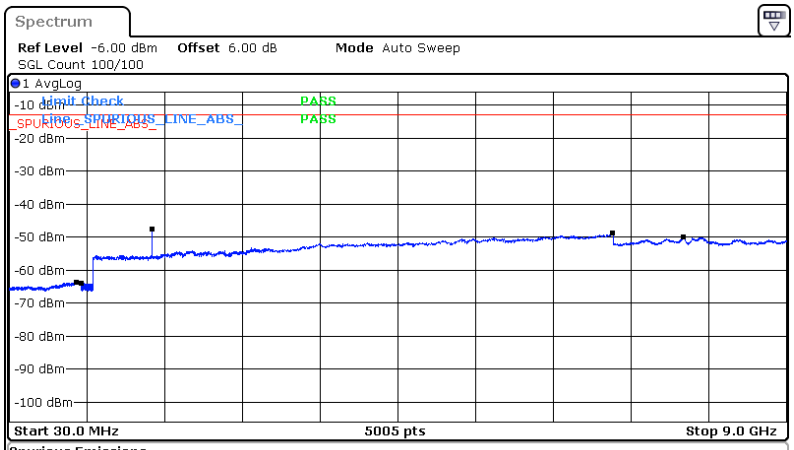
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	814.60789 MHz	-63.09 dBm	-50.09 dB
860.000 MHz	1.000 GHz	100.000 kHz	931.39860 MHz	-63.93 dBm	-50.93 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.66434 GHz	-48.08 dBm	-35.08 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99800 GHz	-48.83 dBm	-35.83 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.81618 GHz	-49.92 dBm	-36.92 dB

Date:17 AUG 2014 17:17:11

Band :	LTE Band 5	Channel :	CH20600 (High)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	805.19730 MHz	-63.53 dBm	-50.53 dB
860.000 MHz	1.000 GHz	100.000 kHz	860.90909 MHz	-63.84 dBm	-50.84 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.68032 GHz	-47.48 dBm	-34.48 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98601 GHz	-48.61 dBm	-35.61 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.81219 GHz	-49.94 dBm	-36.94 dB

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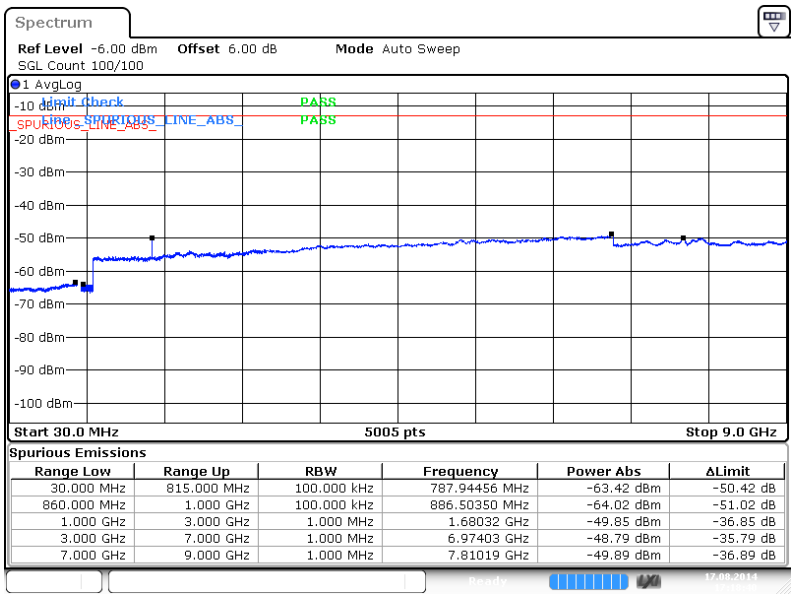
16QAM (RB Size 1, RB Offset 49)



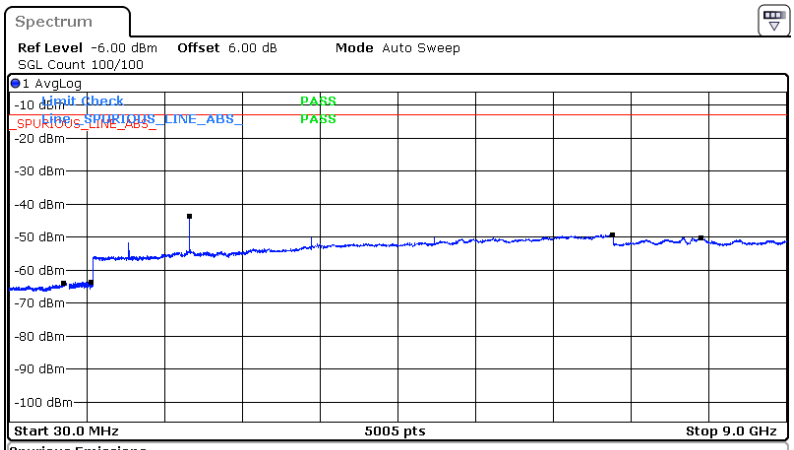
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	787.94456 MHz	-63.42 dBm	-50.42 dB
860.000 MHz	1.000 GHz	100.000 kHz	886.50350 MHz	-64.02 dBm	-51.02 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.68032 GHz	-49.85 dBm	-36.85 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.97403 GHz	-48.79 dBm	-35.79 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.81019 GHz	-49.89 dBm	-36.89 dB

Date:17.AUG.2014 17:18:39

Band :	LTE Band 17	Channel :	CH23755 (Low)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 24)

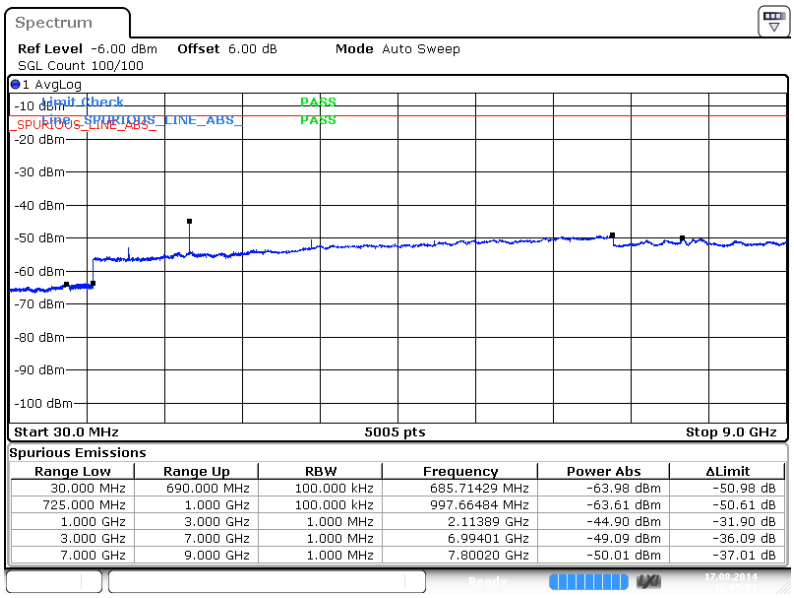


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	659.34066 MHz	-63.90 dBm	-50.90 dB
725.000 MHz	1.000 GHz	100.000 kHz	976.78571 MHz	-63.59 dBm	-50.59 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.11389 GHz	-43.59 dBm	-30.59 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99401 GHz	-49.21 dBm	-36.21 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.00999 GHz	-50.12 dBm	-37.12 dB

Date:17.AUG.2014 12:07:03

16QAM (RB Size 1, RB Offset 24)



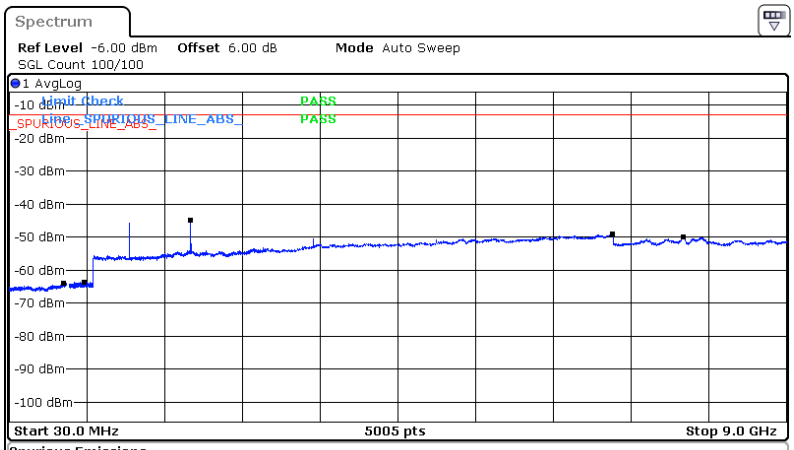
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	685.71429 MHz	-63.98 dBm	-50.98 dB
725.000 MHz	1.000 GHz	100.000 kHz	997.66484 MHz	-63.61 dBm	-50.61 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.11389 GHz	-44.90 dBm	-31.90 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99401 GHz	-49.09 dBm	-36.09 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.80020 GHz	-50.01 dBm	-37.01 dB

Date:17.AUG.2014 12:05:51

Band :	LTE Band 17	Channel :	CH23790 (Middle)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 24)

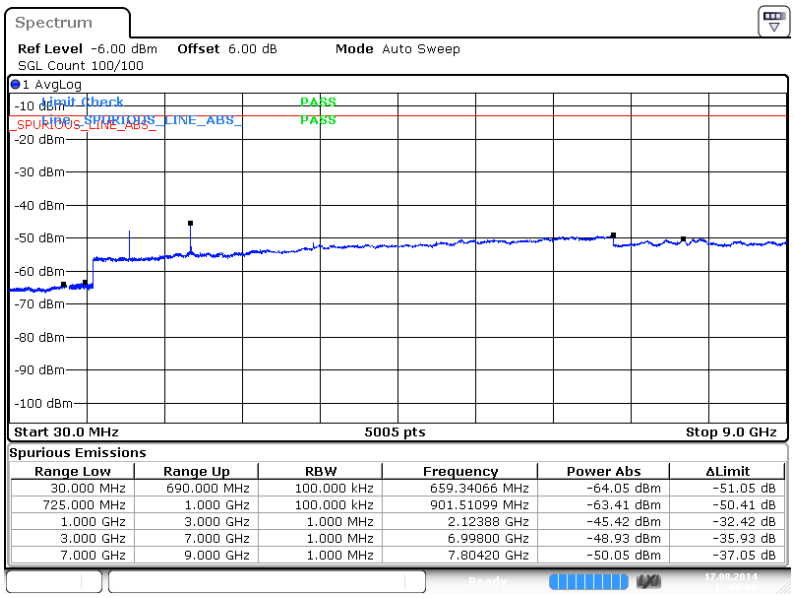


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	660.00000 MHz	-63.96 dBm	-50.96 dB
725.000 MHz	1.000 GHz	100.000 kHz	889.14835 MHz	-63.56 dBm	-50.56 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.12388 GHz	-44.94 dBm	-31.94 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98601 GHz	-48.97 dBm	-35.97 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.80220 GHz	-49.97 dBm	-36.97 dB

Date:17.AUG.2014 12:08:04

16QAM (RB Size 1, RB Offset 24)



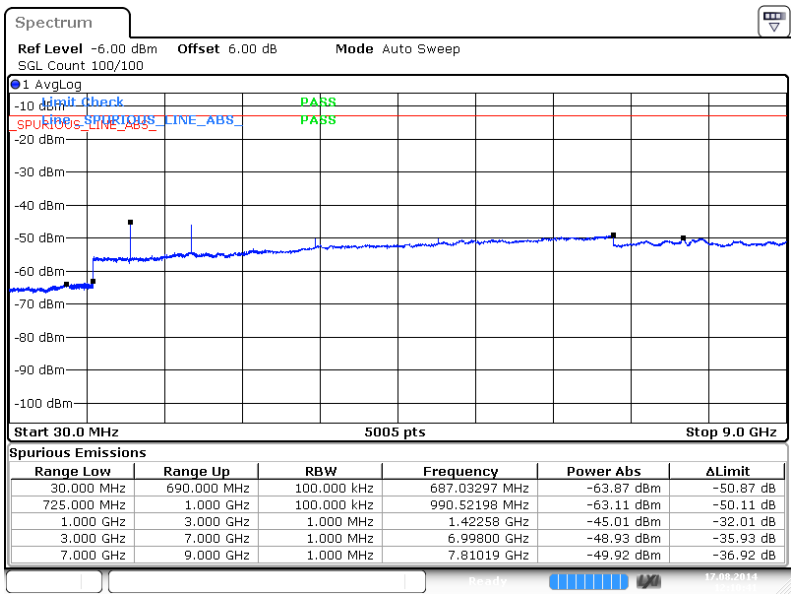
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	659.34066 MHz	-64.05 dBm	-51.05 dB
725.000 MHz	1.000 GHz	100.000 kHz	901.51099 MHz	-63.41 dBm	-50.41 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.12388 GHz	-45.42 dBm	-32.42 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99800 GHz	-48.93 dBm	-35.93 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.80420 GHz	-50.05 dBm	-37.05 dB

Date:17.AUG.2014 12:09:00

Band :	LTE Band 17	Channel :	CH23825 (High)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 24)

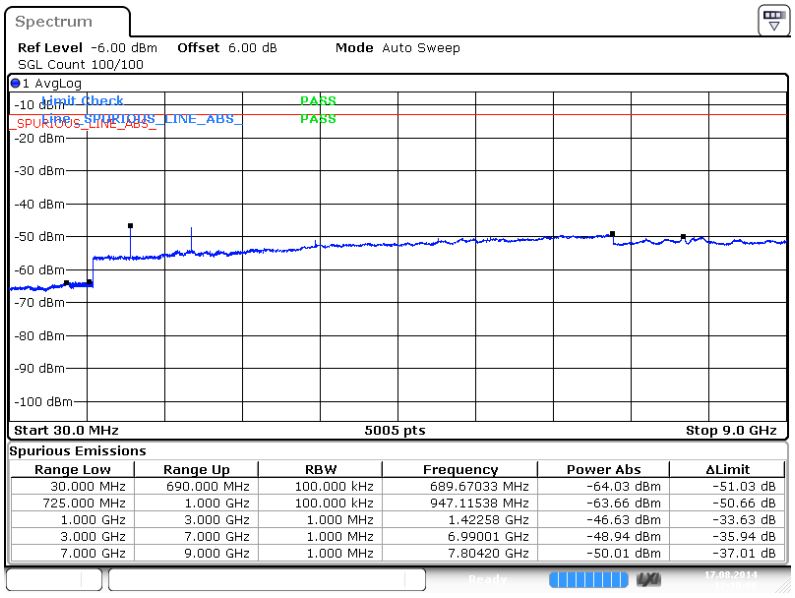


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	687.03297 MHz	-63.87 dBm	-50.87 dB
725.000 MHz	1.000 GHz	100.000 kHz	990.52198 MHz	-63.11 dBm	-50.11 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.42258 GHz	-45.01 dBm	-32.01 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99800 GHz	-48.93 dBm	-35.93 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.81019 GHz	-49.92 dBm	-36.92 dB

Date:17 AUG 2014 12:10:41

16QAM (RB Size 1, RB Offset 24)



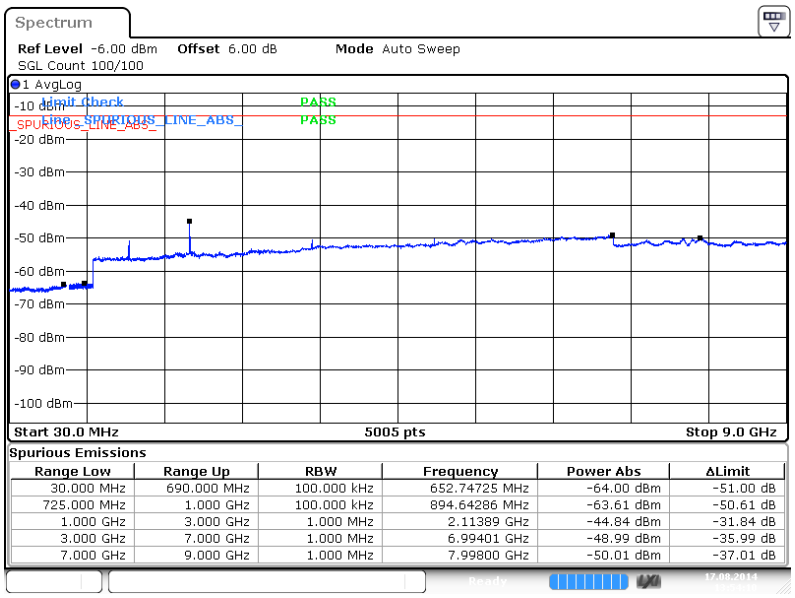
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	689.67033 MHz	-64.03 dBm	-51.03 dB
725.000 MHz	1.000 GHz	100.000 kHz	947.11538 MHz	-63.66 dBm	-50.66 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.42258 GHz	-46.63 dBm	-33.63 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99001 GHz	-48.94 dBm	-35.94 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.80420 GHz	-50.01 dBm	-37.01 dB

Date:17 AUG 2014 12:10:08

Band :	LTE Band 17	Channel :	CH23780 (Low)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 49)



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	652.74725 MHz	-64.00 dBm	-51.00 dB
725.000 MHz	1.000 GHz	100.000 kHz	894.64286 MHz	-63.61 dBm	-50.61 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.11389 GHz	-44.84 dBm	-31.84 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99401 GHz	-48.99 dBm	-35.99 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.99800 GHz	-50.01 dBm	-37.01 dB

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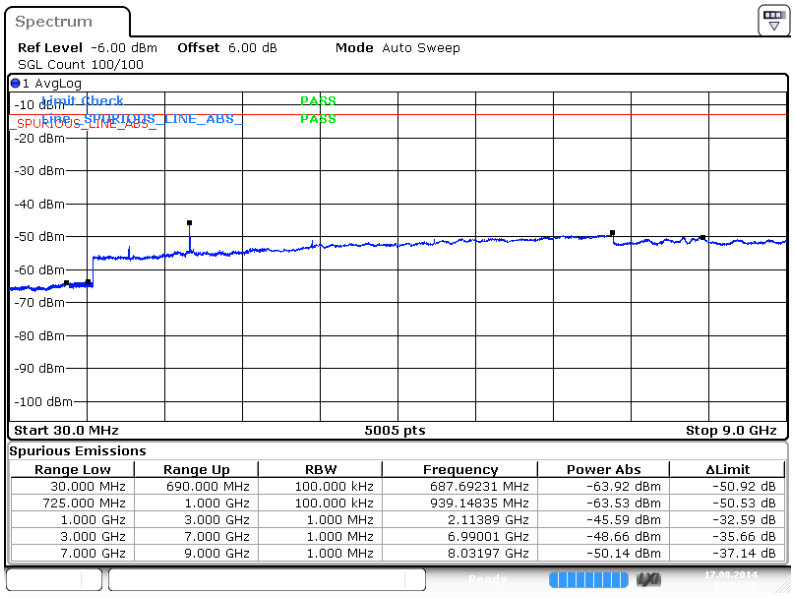
16QAM (RB Size 1, RB Offset 49)



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	687.69231 MHz	-63.92 dBm	-50.92 dB
725.000 MHz	1.000 GHz	100.000 kHz	939.14835 MHz	-63.53 dBm	-50.53 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.11389 GHz	-45.59 dBm	-32.59 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99001 GHz	-48.66 dBm	-35.66 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.03197 GHz	-50.14 dBm	-37.14 dB

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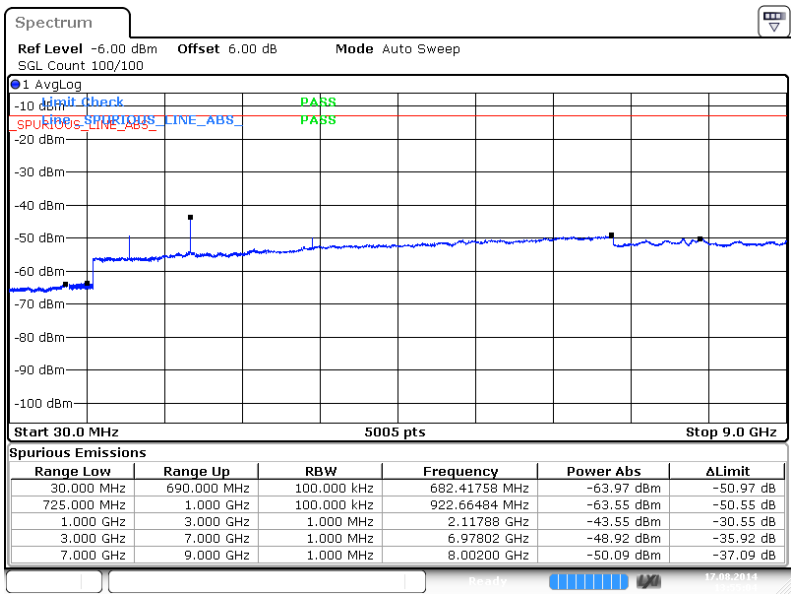
Band :	LTE Band 17	Channel :	CH23790 (Middle)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 49)



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	682.41758 MHz	-63.97 dBm	-50.97 dB
725.000 MHz	1.000 GHz	100.000 kHz	922.66484 MHz	-63.55 dBm	-50.55 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.11788 GHz	-43.55 dBm	-30.55 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.97802 GHz	-48.92 dBm	-35.92 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.00200 GHz	-50.09 dBm	-37.09 dB

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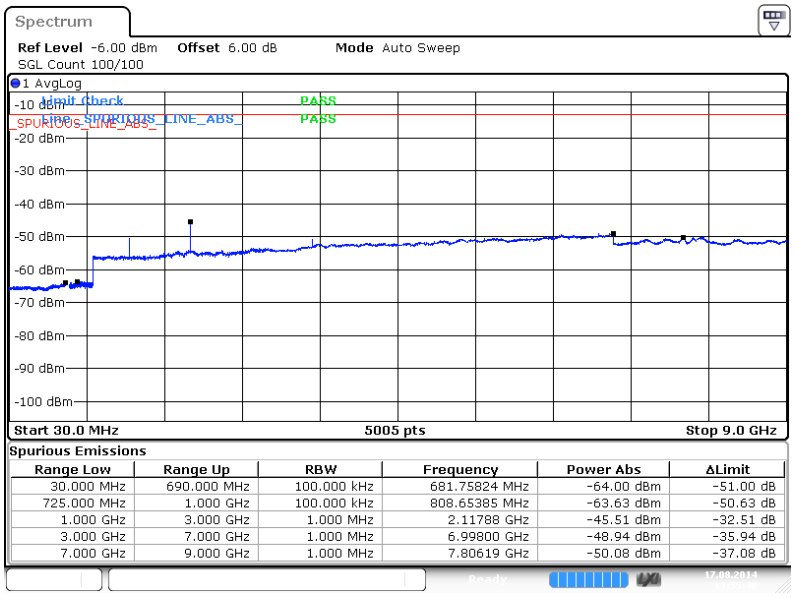
16QAM (RB Size 1, RB Offset 49)



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	681.75824 MHz	-64.00 dBm	-51.00 dB
725.000 MHz	1.000 GHz	100.000 kHz	808.65385 MHz	-63.63 dBm	-50.63 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.11788 GHz	-45.51 dBm	-32.51 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99800 GHz	-48.94 dBm	-35.94 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.80619 GHz	-50.08 dBm	-37.08 dB

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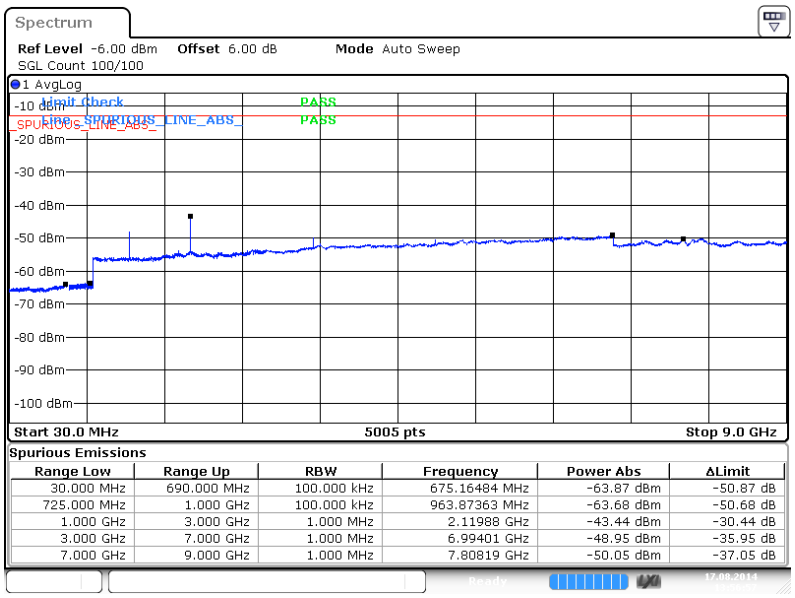
Band :	LTE Band 17	Channel :	CH23800 (High)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 49)



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	675.16484 MHz	-63.87 dBm	-50.87 dB
725.000 MHz	1.000 GHz	100.000 kHz	963.87363 MHz	-63.68 dBm	-50.68 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.11988 GHz	-43.44 dBm	-30.44 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99401 GHz	-48.95 dBm	-35.95 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.80819 GHz	-50.05 dBm	-37.05 dB

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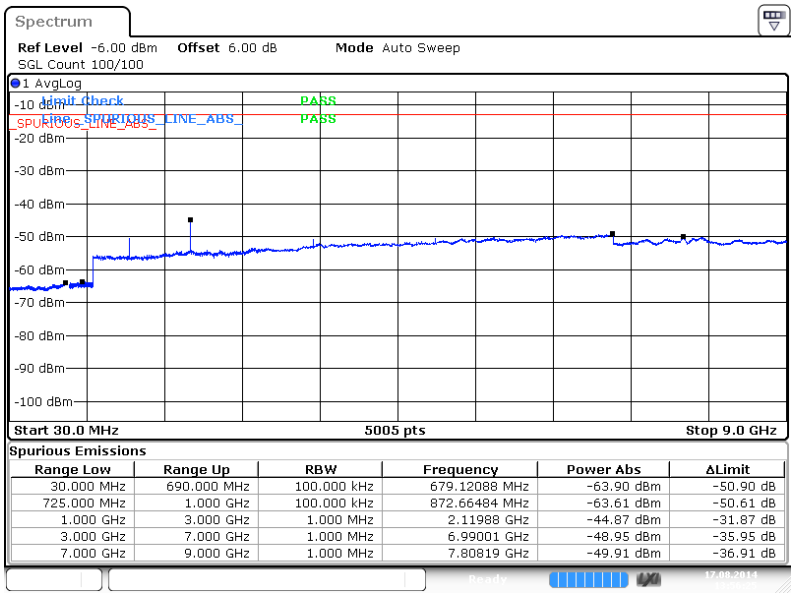
16QAM (RB Size 1, RB Offset 49)



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	679.12088 MHz	-63.90 dBm	-50.90 dB
725.000 MHz	1.000 GHz	100.000 kHz	872.66484 MHz	-63.61 dBm	-50.61 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.11988 GHz	-44.87 dBm	-31.87 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99001 GHz	-48.95 dBm	-35.95 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.80819 GHz	-49.91 dBm	-36.91 dB

Date:17 AUG 2014 13:56:25

3.7 Radiated Spurious Emission Measurement

3.7.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI / TIA / EIA-603-C-2004. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

3.7.2 Measuring Instruments

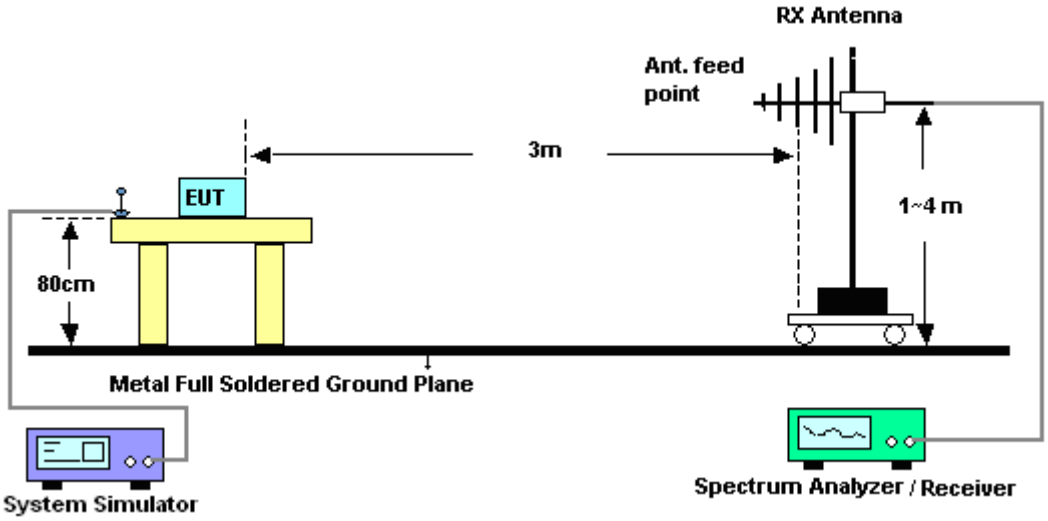
The measuring equipment is listed in the section 4 of this test report.

3.7.3 Test Procedures

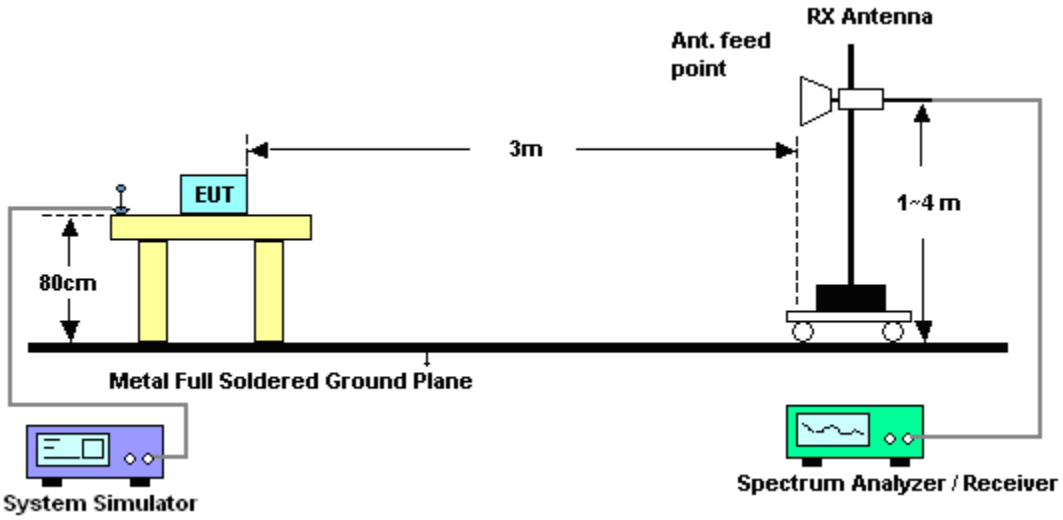
1. The EUT was placed on a rotatable wooden table with 0.8 meter above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
    The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.
11. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
12. ERP (dBm) = EIRP - 2.15

3.7.4 Test Setup

For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.7.5 Test Result of Field Strength of Spurious Radiated

Band :	LTE Band 2	**Temperature :**	22~23°C
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3759	-43.78	-13	-30.78	-52.97	-50.16	0.78	7.16	H	Pass
5640	-48.30	-13	-35.30	-59.86	-56.84	1.04	9.58	H	Pass
7518	-35.11	-13	-22.11	-52.49	-45.22	1.35	11.46	H	Pass

Band :	LTE Band 2	**Temperature :**	22~23°C
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3759	-41.80	-13	-28.80	-52.94	-48.18	0.78	7.16	V	Pass
5638	-54.45	-13	-41.45	-67.1	-62.99	1.04	9.58	V	Pass
7518	-45.39	-13	-32.39	-60.31	-55.50	1.35	11.46	V	Pass

Band :	LTE Band 2	**Temperature :**	22~23°C
Test Mode :	3MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3756	-44.34	-13	-31.34	-53.41	-50.72	0.78	7.16	H	Pass
5636	-55.69	-13	-42.69	-65.75	-64.23	1.04	9.58	H	Pass
7515	-41.14	-13	-28.14	-56.95	-51.25	1.35	11.46	H	Pass

Band :	LTE Band 2	**Temperature :**	22~23°C
Test Mode :	3MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3756	-42.59	-13	-29.59	-53.61	-48.97	0.78	7.16	V	Pass
5637	-50.85	-13	-37.85	-63.5	-59.39	1.04	9.58	V	Pass
7515	-49.20	-13	-36.20	-63.29	-59.31	1.35	11.46	V	Pass

Band :	LTE Band 2	**Temperature :**	22~23°C
Test Mode :	5MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3756	-43.26	-13	-30.26	-52.49	-49.64	0.78	7.16	H	Pass
5634	-54.47	-13	-41.47	-64.53	-63.01	1.04	9.58	H	Pass
7512	-40.79	-13	-27.79	-56.73	-50.90	1.35	11.46	H	Pass

Band :	LTE Band 2	**Temperature :**	22~23°C
Test Mode :	5MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3756	-42.11	-13	-29.11	-53.18	-48.49	0.78	7.16	V	Pass
5634	-47.77	-13	-34.77	-61.58	-56.31	1.04	9.58	V	Pass
7512	-49.15	-13	-36.15	-63.24	-59.26	1.35	11.46	V	Pass

Band :	LTE Band 2	**Temperature :**	22~23°C
Test Mode :	10MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3750	-38.71	-13	-25.71	-48.71	-45.09	0.78	7.16	H	Pass
5628	-51.71	-13	-38.71	-61.84	-60.25	1.04	9.58	H	Pass
7503	-40.52	-13	-27.52	-56.51	-50.63	1.35	11.46	H	Pass

Band :	LTE Band 2	**Temperature :**	22~23°C
Test Mode :	10MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3750	-40.59	-13	-27.59	-52.05	-46.97	0.78	7.16	V	Pass
5628	-52.42	-13	-39.42	-65.07	-60.96	1.04	9.58	V	Pass
7503	-48.57	-13	-35.57	-62.66	-58.68	1.35	11.46	V	Pass

Band :	LTE Band 2	**Temperature :**	22~23°C
Test Mode :	15MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3747	-41.29	-13	-28.29	-50.87	-47.67	0.78	7.16	H	Pass
5622	-45.87	-13	-32.87	-58.51	-54.41	1.04	9.58	H	Pass
7494	-39.52	-13	-26.52	-55.68	-49.63	1.35	11.46	H	Pass

Band :	LTE Band 2	**Temperature :**	22~23°C
Test Mode :	15MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3747	-38.87	-13	-25.87	-50.64	-45.25	0.78	7.16	V	Pass
5622	-44.42	-13	-31.42	-59.19	-52.96	1.04	9.58	V	Pass
7494	-47.95	-13	-34.95	-62.04	-58.06	1.35	11.46	V	Pass

Band :	LTE Band 2	**Temperature :**	22~23°C
Test Mode :	20MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3741	-39.52	-13	-26.52	-49.38	-45.90	0.78	7.16	H	Pass
5610	-57.36	-13	-44.36	-67.42	-65.90	1.04	9.58	H	Pass
7485	-37.95	-13	-24.95	-54.59	-48.06	1.35	11.46	H	Pass

Band :	LTE Band 2	**Temperature :**	22~23°C
Test Mode :	20MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3741	-40.97	-13	-27.97	-52.34	-47.35	0.78	7.16	V	Pass
5610	-55.32	-13	-42.32	-67.97	-63.86	1.04	9.58	V	Pass
7485	-44.67	-13	-31.67	-59.91	-54.78	1.35	11.46	V	Pass

Band :	LTE Band 4	**Temperature :**	22~23°C
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3464	-62.12	-13	-49.12	-64.35	-67.52	2.2	7.60	H	Pass
5196	-45.94	-13	-32.94	-59.96	-52.72	3.12	9.90	H	Pass
6930	-55.61	-13	-42.61	-63.90	-63.50	2.98	10.87	H	Pass
8661	-51.88	-13	-38.88	-62.83	-61.37	2.97	12.46	H	Pass

Band :	LTE Band 4	**Temperature :**	22~23°C
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3464	-64.20	-13	-51.20	-65.22	-69.60	2.2	7.6	V	Pass
5196	-46.00	-13	-33.00	-58.25	-52.78	3.12	9.9	V	Pass
6930	-52.17	-13	-39.17	-62.69	-60.06	2.98	10.87	V	Pass
8661	-43.20	-13	-30.20	-57.5	-52.69	2.97	12.46	V	Pass

Band :	LTE Band 4	**Temperature :**	22~23°C
Test Mode :	3MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3462	-60.71	-13	-47.71	-62.94	-66.11	2.2	7.60	H	Pass
5196	-43.24	-13	-30.24	-58.42	-50.02	3.12	9.90	H	Pass
6924	-54.90	-13	-41.90	-63.19	-62.79	2.98	10.87	H	Pass
8658	-51.27	-13	-38.27	-62.22	-60.76	2.97	12.46	H	Pass

Band :	LTE Band 4	**Temperature :**	22~23°C
Test Mode :	3MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3462	-63.59	-13	-50.59	-64.61	-68.99	2.2	7.6	V	Pass
5196	-46.13	-13	-33.13	-58.32	-52.91	3.12	9.9	V	Pass
6924	-52.97	-13	-39.97	-63.49	-60.86	2.98	10.87	V	Pass
8658	-45.00	-13	-32.00	-58.51	-54.49	2.97	12.46	V	Pass

Band :	LTE Band 4	**Temperature :**	22~23°C
Test Mode :	5MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3640	-65.33	-13	-52.33	-67.56	-70.73	2.2	7.60	H	Pass
5193	-47.11	-13	-34.11	-60.64	-53.89	3.12	9.90	H	Pass
6921	-53.47	-13	-40.47	-62.01	-61.36	2.98	10.87	H	Pass
8655	-52.86	-13	-39.86	-63.81	-62.35	2.97	12.46	H	Pass

Band :	LTE Band 4	**Temperature :**	22~23°C
Test Mode :	5MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3460	-63.24	-13	-50.24	-64.26	-68.64	2.2	7.6	V	Pass
5193	-47.17	-13	-34.17	-58.92	-53.95	3.12	9.9	V	Pass
6921	-52.93	-13	-39.93	-63.45	-60.82	2.98	10.87	V	Pass
8655	-47.97	-13	-34.97	-60.12	-57.46	2.97	12.46	V	Pass

Band :	LTE Band 4	**Temperature :**	22~23°C
Test Mode :	10MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3456	-62.61	-13	-49.61	-64.84	-68.01	2.2	7.60	H	Pass
5184	-34.23	-13	-21.23	-51.13	-41.01	3.12	9.90	H	Pass
6912	-54.79	-13	-41.79	-63.08	-62.68	2.98	10.87	H	Pass
8652	-55.03	-13	-42.03	-65.98	-64.52	2.97	12.46	H	Pass

Band :	LTE Band 4	**Temperature :**	22~23°C
Test Mode :	10MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3456	-64.28	-13	-51.28	-65.3	-69.68	2.2	7.6	V	Pass
5184	-36.35	-13	-23.35	-51.15	-43.13	3.12	9.9	V	Pass
6912	-52.98	-13	-39.98	-63.5	-60.87	2.98	10.87	V	Pass
8643	-47.62	-13	-34.62	-59.87	-57.11	2.97	12.46	V	Pass

Band :	LTE Band 4	**Temperature :**	22~23°C
Test Mode :	15MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3450	-61.43	-13	-48.43	-63.66	-66.83	2.2	7.60	H	Pass
5178	-45.58	-13	-32.58	-59.76	-52.36	3.12	9.90	H	Pass
6903	-56.85	-13	-43.85	-65.14	-64.74	2.98	10.87	H	Pass
8631	-53.80	-13	-40.80	-64.75	-63.29	2.97	12.46	H	Pass

Band :	LTE Band 4	**Temperature :**	22~23°C
Test Mode :	15MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3450	-64.66	-13	-51.66	-65.68	-70.06	2.2	7.6	V	Pass
5178	-47.00	-13	-34.00	-58.77	-53.78	3.12	9.9	V	Pass
6900	-56.01	-13	-43.01	-66.53	-63.90	2.98	10.87	V	Pass
8631	-50.83	-13	-37.83	-61.98	-60.32	2.97	12.46	V	Pass

Band :	LTE Band 4	**Temperature :**	22~23°C
Test Mode :	20MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3447	-62.39	-13	-49.39	-64.62	-67.79	2.2	7.60	H	Pass
5172	-43.79	-13	-30.79	-58.76	-50.57	3.12	9.90	H	Pass
6891	-58.95	-13	-45.95	-67.24	-66.84	2.98	10.87	H	Pass
8612	-54.88	-13	-41.88	-65.83	-64.37	2.97	12.46	H	Pass

Band :	LTE Band 4	**Temperature :**	22~23°C
Test Mode :	20MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3445	-65.17	-13	-52.17	-66.19	-70.57	2.2	7.6	V	Pass
5172	-46.11	-13	-33.11	-58.31	-52.89	3.12	9.9	V	Pass
6890	-56.66	-13	-43.66	-67.18	-64.55	2.98	10.87	V	Pass
8619	-50.92	-13	-37.92	-62.07	-60.41	2.97	12.46	V	Pass

Band :	LTE Band 5	**Temperature :**	22~23°C
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-75.71	-13	-62.71	-66.83	-76.36	0.57	3.37	H	Pass
2510	-57.81	-13	-44.81	-58.01	-60.04	0.78	5.16	H	Pass
3344	-66.49	-13	-53.49	-66.12	-70.13	0.87	6.66	H	Pass

Band :	LTE Band 5	**Temperature :**	22~23°C
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1671	-68.96	-13	-55.96	-65.16	-69.61	0.57	3.37	V	Pass
2510	-42.55	-13	-29.55	-51.26	-44.78	0.78	5.16	V	Pass
3344	-65.27	-13	-52.27	-66.33	-68.91	0.87	6.66	V	Pass

Band :	LTE Band 5	**Temperature :**	22~23°C
Test Mode :	3MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1670	-75.59	-13	-62.59	-66.71	-76.24	0.57	3.37	H	Pass
2506	-63.31	-13	-50.31	-61.98	-65.54	0.78	5.16	H	Pass
3340	-66.77	-13	-53.77	-66.40	-70.41	0.87	6.66	H	Pass

Band :	LTE Band 5	**Temperature :**	22~23°C
Test Mode :	3MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1670	-69.64	-13	-56.64	-65.84	-70.29	0.57	3.37	V	Pass
2506	-39.91	-13	-26.91	-49.02	-42.14	0.78	5.16	V	Pass
3340	-64.06	-13	-51.06	-65.12	-67.70	0.87	6.66	V	Pass

Band :	LTE Band 5	**Temperature :**	22~23°C
Test Mode :	5MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1668	-75.22	-13	-62.22	-66.34	-75.87	0.57	3.37	H	Pass
2504	-63.96	-13	-50.96	-62.63	-66.19	0.78	5.16	H	Pass
3336	-66.17	-13	-53.17	-65.80	-69.81	0.87	6.66	H	Pass

Band :	LTE Band 5	**Temperature :**	22~23°C
Test Mode :	5MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1668	-69.76	-13	-56.76	-65.96	-70.41	0.57	3.37	V	Pass
2504	-52.75	-13	-39.75	-58.76	-54.98	0.78	5.16	V	Pass
3336	-64.97	-13	-51.97	-66.03	-68.61	0.87	6.66	V	Pass

Band :	LTE Band 5	**Temperature :**	22~23°C
Test Mode :	10MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1663	-74.48	-13	-61.48	-65.60	-75.13	0.57	3.37	H	Pass
2498	-60.04	-13	-47.04	-58.87	-62.27	0.78	5.16	H	Pass
3326	-66.75	-13	-53.75	-66.38	-70.39	0.87	6.66	H	Pass

Band :	LTE Band 5	**Temperature :**	22~23°C
Test Mode :	10MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1663	-69.10	-13	-56.10	-65.30	-69.75	0.57	3.37	V	Pass
2498	-44.42	-13	-31.42	-52.84	-46.65	0.78	5.16	V	Pass
3326	-65.36	-13	-52.36	-66.42	-69.00	0.87	6.66	V	Pass

Band :	LTE Band 17	**Temperature :**	22~23°C
Test Mode :	5MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1416	-67.26	-13	-54.26	-59.11	-67.91	0.57	3.37	H	Pass
2124	-44.16	-13	-31.16	-47.89	-46.39	0.78	5.16	H	Pass
2820	-67.79	-13	-54.79	-67.42	-71.43	0.87	6.66	H	Pass

Band :	LTE Band 17	**Temperature :**	22~23°C
Test Mode :	5MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1410	-70.61	-13	-57.61	-66.81	-71.26	0.57	3.37	V	Pass
2124	-50.05	-13	-37.05	-56.88	-52.28	0.78	5.16	V	Pass
2820	-66.30	-13	-53.30	-67.36	-69.94	0.87	6.66	V	Pass

Band :	LTE Band 17	**Temperature :**	22~23°C
Test Mode :	10MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1410	-70.02	-13	-57.02	-61.14	-70.67	0.57	3.37	H	Pass
2118	-44.50	-13	-31.50	-48.15	-46.73	0.78	5.16	H	Pass
2820	-66.66	-13	-53.66	-66.29	-70.30	0.87	6.66	H	Pass

Band :	LTE Band 17	**Temperature :**	22~23°C
Test Mode :	10MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	42~43%
Test Engineer :	Star Wei	**Polarization :**	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1474	-68.20	-13	-55.20	-64.40	-68.85	0.57	3.37	V	Pass
2118	-52.35	-13	-39.35	-58.42	-54.58	0.78	5.16	V	Pass
2820	-66.69	-13	-53.69	-67.75	-70.33	0.87	6.66	V	Pass

3.8 Frequency Stability Measurement

3.8.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5ppm) of the center frequency.

3.8.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

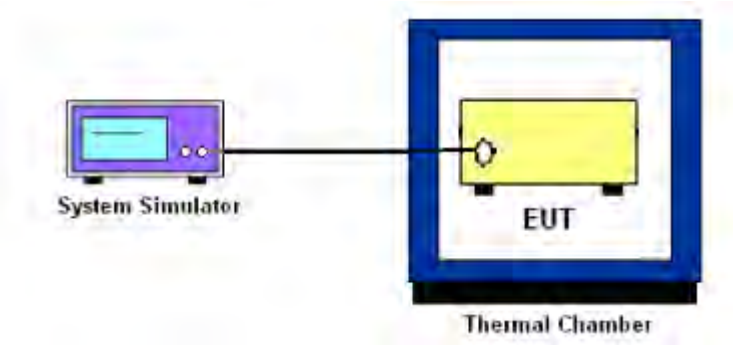
3.8.3 Test Procedures for Temperature Variation

1. The EUT was set up in the thermal chamber and connected with the system simulator.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in 10°C step up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

3.8.4 Test Procedures for Voltage Variation

1. The EUT was placed in a temperature chamber at 25±5° C and connected with the system simulator.
2. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

3.8.5 Test Setup



3.8.6 Test Result of Temperature Variation (FCC)

Band :	LTE Band 2 (QPSK)	Limit (ppm) :	2.5

Temperature (°C)	BW 10MHz	Result
	Deviation (ppm)	
50	+0.0010	PASS
40	+0.0051	
30	+0.0103	
20(Ref.)	+0.0001	
10	+0.0033	
0	+0.0093	
-10	+0.0010	
-20	+0.0011	
-30	+0.0072	

Band :	LTE Band 4 (QPSK)	Limit (ppm) :	2.5

Temperature (°C)	BW 10MHz	Result
	Deviation (ppm)	
50	+0.0013	PASS
40	+0.0054	
30	+0.0026	
20(Ref.)	+0.0001	
10	+0.0125	
0	+0.0085	
-10	+0.0081	
-20	+0.0066	
-30	+0.0056	

Band :	LTE Band 5 (QPSK)	Limit (ppm) :	2.5

Temperature (°C)	BW 10MHz	Result
	Deviation (ppm)	
50	+0.0225	PASS
40	+0.0196	
30	+0.0013	
20(Ref.)	+0.0001	
10	+0.0176	
0	+0.0093	
-10	+0.0227	
-20	+0.0139	
-30	+0.0047	

Band :	LTE Band 17 (QPSK)	Limit (ppm) :	2.5

Temperature (°C)	BW 10MHz	Result
	Deviation (ppm)	
50	+0.0056	PASS
40	+0.0289	
30	+0.0273	
20(Ref.)	+0.0001	
10	+0.0052	
0	+0.0025	
-10	+0.0055	
-20	+0.0301	
-30	+0.0231	

3.8.7 Test Result of Voltage Variation (FCC)

Band	Bandwidth	Voltage (Volt)	Deviation (ppm)	Limit (ppm)	Result
LTE Band 2	10M	4.35	+0.0075	2.5	PASS
		Normal	+0.0026		
		3.5	+0.0010		
LTE Band 4	10M	4.35	+0.0033		
		Normal	+0.0020		
		3.5	+0.0040		
LTE Band 5	10M	4.35	+0.0219		
		Normal	+0.0161		
		3.5	+0.0243		
LTE Band 17	10M	4.35	+0.0249		
		Normal	+0.0263		
		3.5	+0.0161		

Remark:

1. Normal Voltage = 3.8V.
2. The manufacturer declared that the EUT could work properly between voltage 3.5V ~ 4.35V.

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV30	101338	9kHz~30GHz	May 04, 2014	Aug. 04, 2014~ Aug. 17, 2014	May 03, 2015	Conducted (TH01-KS)
Thermal Chamber	Ten Billion	TTC-B3S	TBN-960502	-40~+150°C	Dec. 10, 2013	Aug. 04, 2014~ Aug. 17, 2014	Dec. 09, 2014	Conducted (TH01-KS)
EMI Test Receiver	R&S	ESCI	100534	9kHz~3GHz	Nov. 05, 2013	Aug. 10, 2014~ Aug. 18, 2014	Nov. 04, 2014	Radiation (03CH01-KS)
Spectrum Analyzer	R&S	FSP30	101399	9kHz~30GHz	May 04, 2014	Aug. 10, 2014~ Aug. 18, 2014	May 03, 2015	Radiation (03CH01-KS)
Bilog Antenna	SCHAFFNER	CBL6112D	23182	25MHz~2GHz	Jan. 08, 2014	Aug. 10, 2014~ Aug. 18, 2014	Jan. 07, 2015	Radiation (03CH01-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75959	1GHz~18GHz	Jan. 08, 2014	Aug. 10, 2014~ Aug. 18, 2014	Jan. 07, 2015	Radiation (03CH01-KS)
Active Horn Antenna	com-power	AHA-118	701030	1GHz~18GHz	Nov. 18, 2013	Aug. 10, 2014~ Aug. 18, 2014	Nov. 17, 2014	Radiation (03CH01-KS)
SHF-EHF Horn	Schwarzbeck	BBHA 9170	BBHA170249	15GHz~40GHz	Mar. 10, 2014	Aug. 10, 2014~ Aug. 18, 2014	Mar. 09, 2015	Radiation (03CH01-KS)
Amplifier	com-power	PA-103A	161073	1MHz~1GHz	May 04, 2014	Aug. 10, 2014~ Aug. 18, 2014	May 03, 2015	Radiation (03CH01-KS)
Amplifier	Agilent	8449B	3008A02371	1GHz~26.5GHz	Dec. 10, 2013	Aug. 10, 2014~ Aug. 18, 2014	Dec. 09, 2014	Radiation (03CH01-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Aug. 10, 2014~ Aug. 18, 2014	NCR	Radiation (03CH01-KS)
Turn Table	MF	MF7802	N/A	0~360 degree	NCR	Aug. 10, 2014~ Aug. 18, 2014	NCR	Radiation (03CH01-KS)
Antenna Mast	MF	MF7802	N/A	1 m~4 m	NCR	Aug. 10, 2014~ Aug. 18, 2014	NCR	Radiation (03CH01-KS)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSP 7	100819	9kHz~7GHz	May 04, 2014	Aug. 14, 2014	May 03, 2015	ERP/EIRP (OTA01-KS)
Switch Control Manframe	Agilent	3499A	MY42005452	N/A	N/A	Aug. 14, 2014	N/A	ERP/EIRP (OTA01-KS)
Dual 1-to-6(4) MW MUX	Agilent	N2276A	MY42000841	N/A	N/A	Aug. 14, 2014	N/A	ERP/EIRP (OTA01-KS)
Microwave Switch	Agilent	44476A	MY42002573	N/A	N/A	Aug. 14, 2014	N/A	ERP/EIRP (OTA01-KS)
Microwave Switch	Agilent	44476A	MY42002586	N/A	N/A	Aug. 14, 2014	N/A	ERP/EIRP (OTA01-KS)
Diagonal Dual Polarized Horn	ETS-Lindgren	3164-04	00066993	700MHz~6GHz	N/A	Aug. 14, 2014	N/A	ERP/EIRP (OTA01-KS)
Multi-Devices Controller	ETS-Lindgren	2090-OPT1	00066604	N/A	N/A	Aug. 14, 2014	N/A	ERP/EIRP (OTA01-KS)
Conical Log Spiral (Small)	ETS-Lindgren	3102	00066951	1~10GHz	N/A	Aug. 14, 2014	N/A	ERP/EIRP (OTA01-KS)
Turn Table	ETS-Lindgren	2088	N/A	Resolution : 0.1degree	N/A	Aug. 14, 2014	N/A	ERP/EIRP (OTA01-KS)
Limiting Amplifier	ETS-lindgren	109643	920326	10MHz~2.5GHz	N/A	Aug. 14, 2014	N/A	ERP/EIRP (OTA01-KS)
EMQuest	ETS-Lindgren	EMQ-100	1125	N/A	N/A	Aug. 14, 2014	N/A	ERP/EIRP (OTA01-KS)
Medium Duty Holder	ETS-Lindgren	2015	N/A	N/A	N/A	Aug. 14, 2014	N/A	ERP/EIRP (OTA01-KS)

5 Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.9**