



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.

For Band 7

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 $55 + 10 \log (P)$ dB.

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

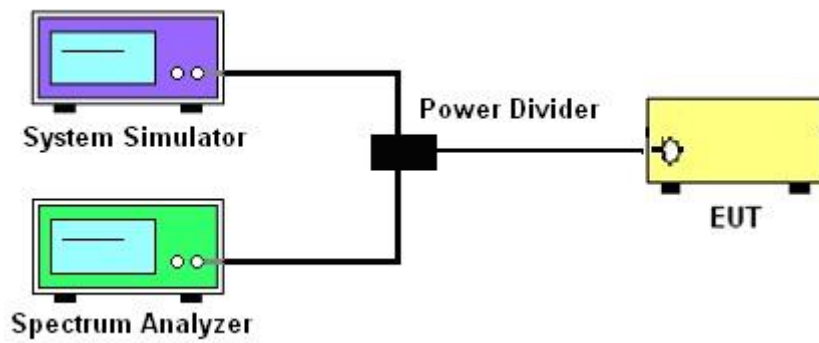
3.6.2 Measuring Instruments

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 $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)]$ (dB)
 $= [30 + 10\log(P)]$ (dBm) - $[43 + 10\log(P)]$ (dB)
 $= -13\text{dBm}$.
8. For Band 7
The limit line is derived from $55 + 10\log(P)$ dB below the transmitter power P(Watts)

3.6.4 Test Setup

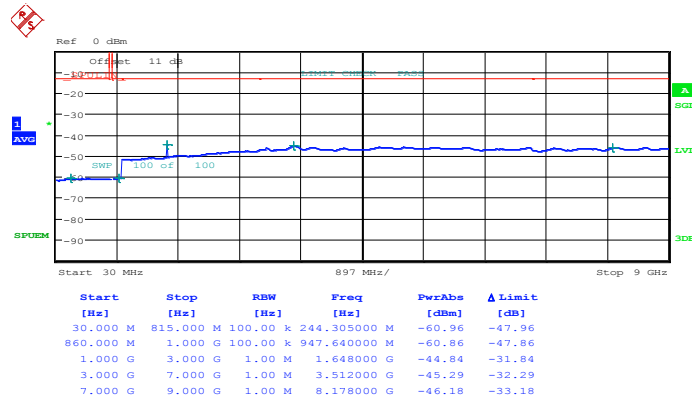




3.6.5 Test Result (Plots) of Conducted Spurious Emission

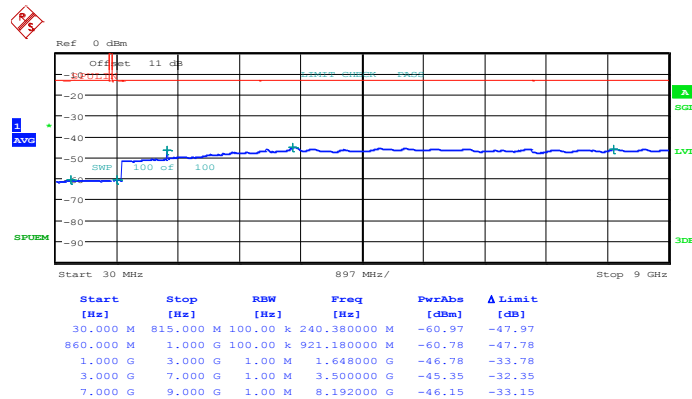
Band :	LTE Band 5	Channel :	CH20407 (Low)
Band Width :	1.4MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:07:52

16QAM (RB Size 1, RB Offset 0)

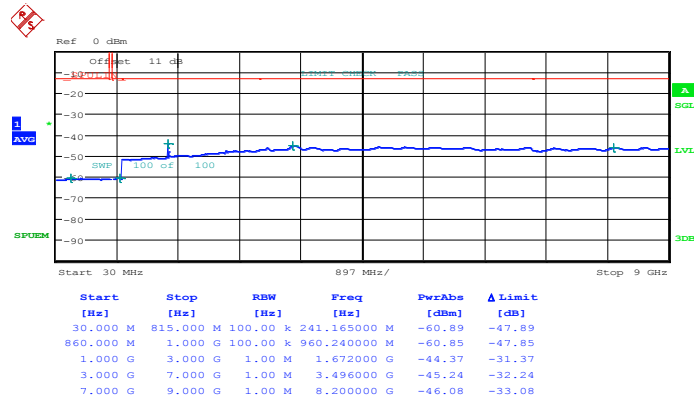


Date: 27.JUL.2014 11:08:50



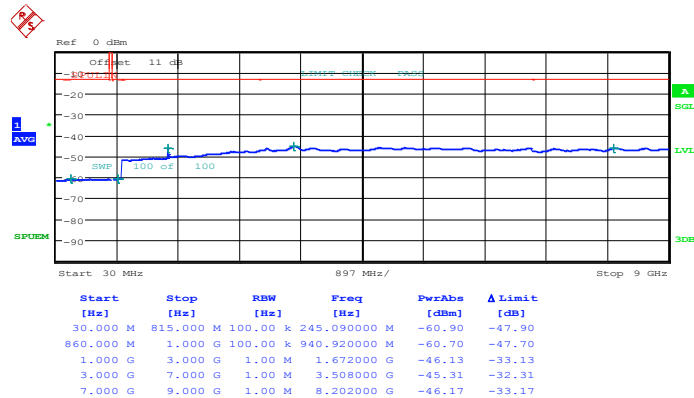
Band :	LTE Band 5	Channel :	CH20525 (Middle)
Band Width :	1.4MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:10:50

16QAM (RB Size 1, RB Offset 0)

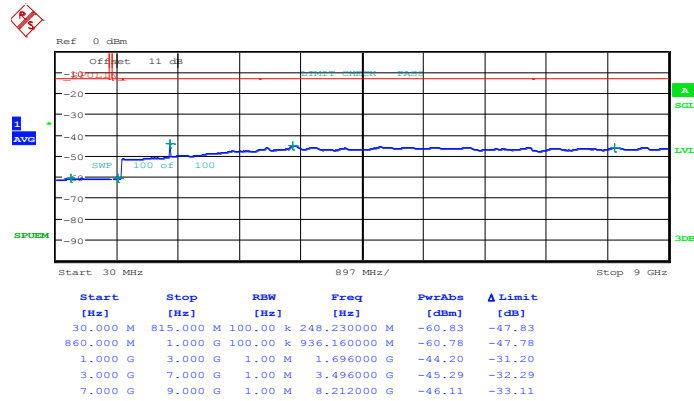


Date: 27.JUL.2014 11:11:48



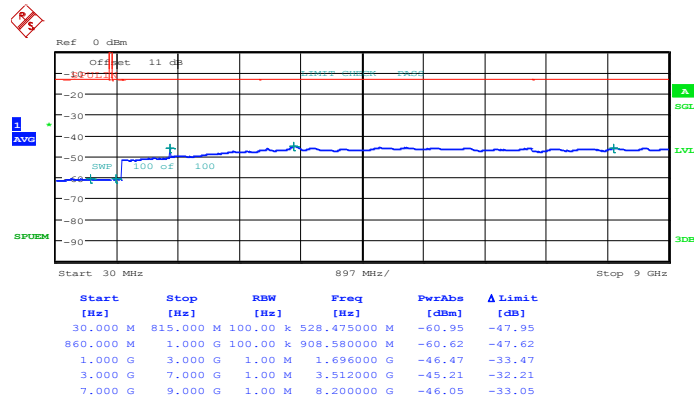
Band :	LTE Band 5	Channel :	CH20643 (High)
Band Width :	1.4MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:16:50

16QAM (RB Size 1, RB Offset 0)

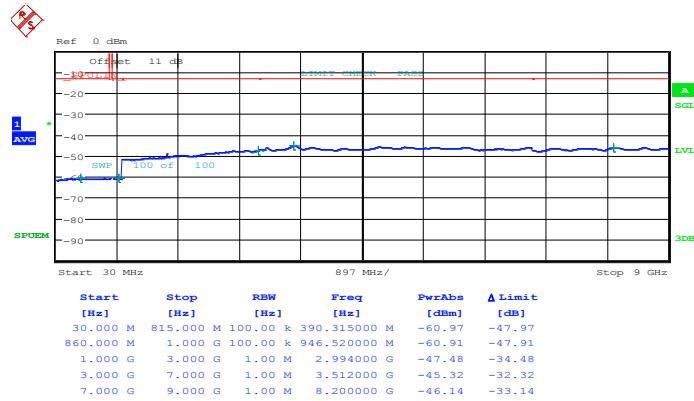


Date: 27.JUL.2014 11:17:48



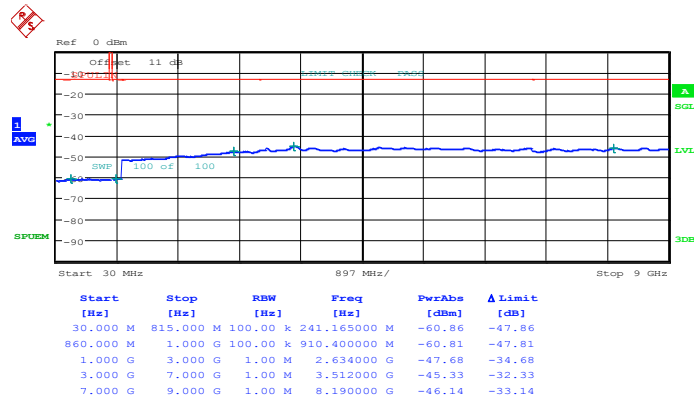
Band :	LTE Band 5	Channel :	CH20415 (Low)
Band Width :	3MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:24:19

16QAM (RB Size 1, RB Offset 0)

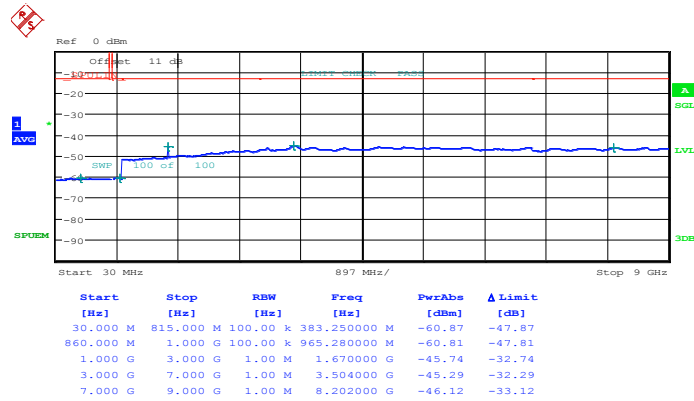


Date: 27.JUL.2014 11:26:55



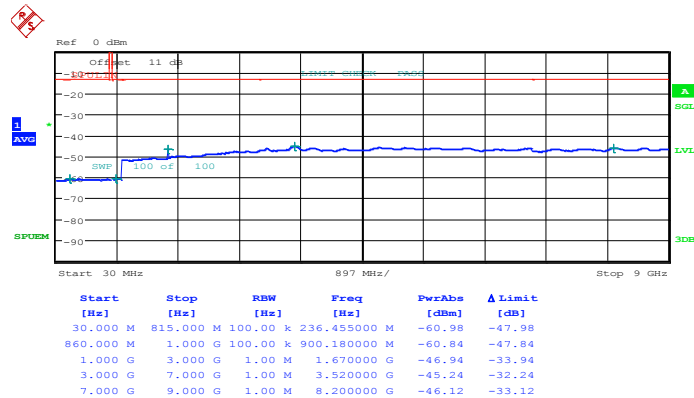
Band :	LTE Band 5	Channel :	CH20525 (Middle)
Band Width :	3MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:29:09

16QAM (RB Size 1, RB Offset 0)

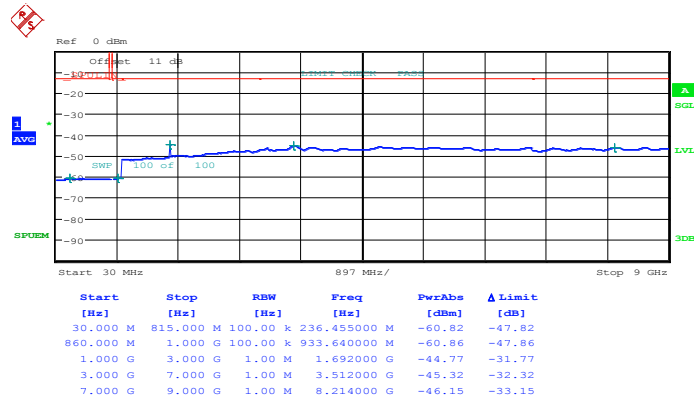


Date: 27.JUL.2014 11:30:07



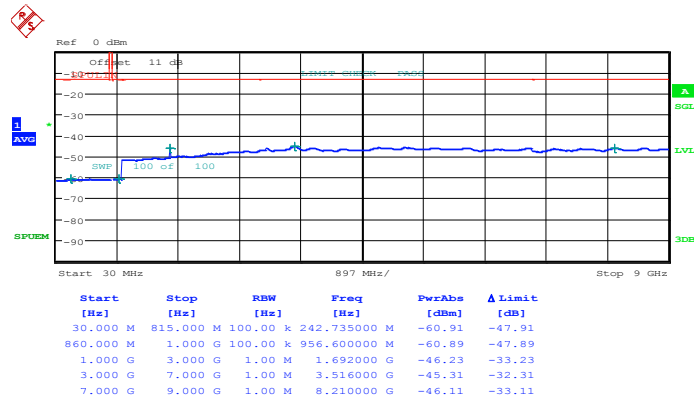
Band :	LTE Band 5	Channel :	CH20635 (High)
Band Width :	3MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:35:08

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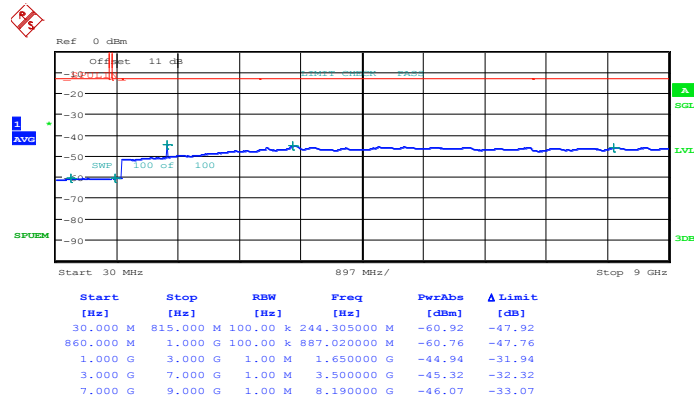


Date: 27.JUL.2014 11:36:07



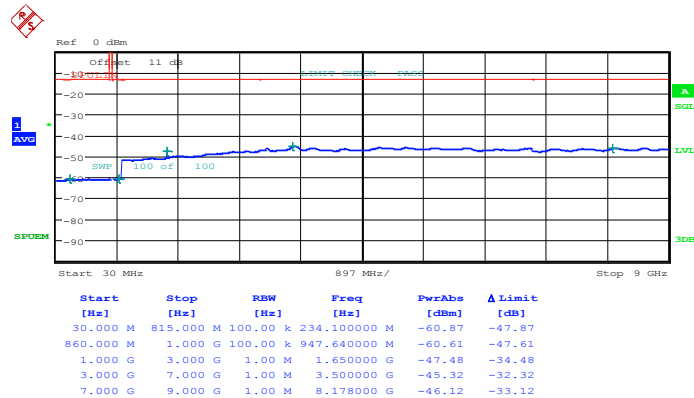
Band :	LTE Band 5	Channel :	CH20425 (Low)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:42:27

16QAM (RB Size 1, RB Offset 0)

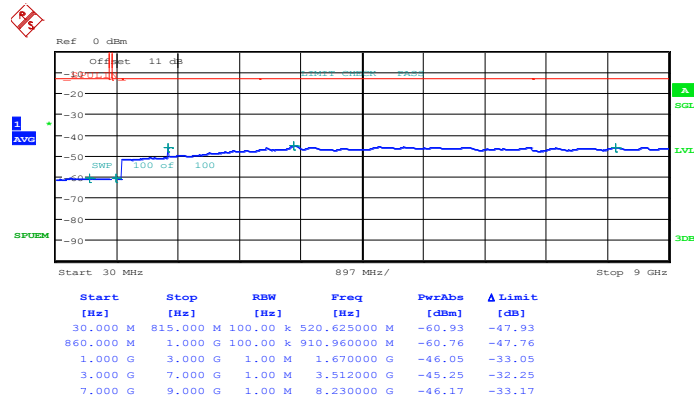


Date: 27.JUL.2014 11:43:25



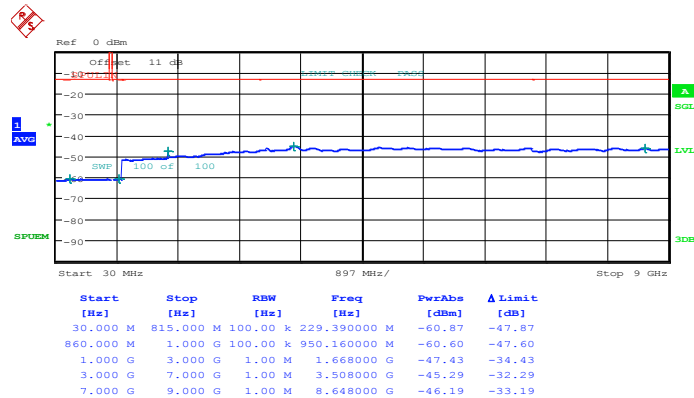
Band :	LTE Band 5	Channel :	CH20525 (Middle)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:45:25

16QAM (RB Size 1, RB Offset 0)

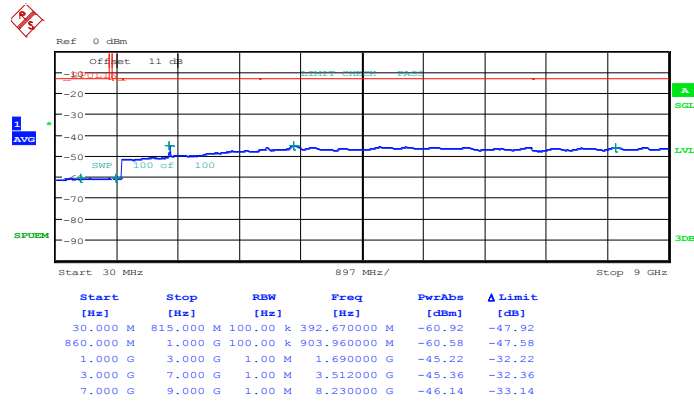


Date: 27.JUL.2014 11:46:23



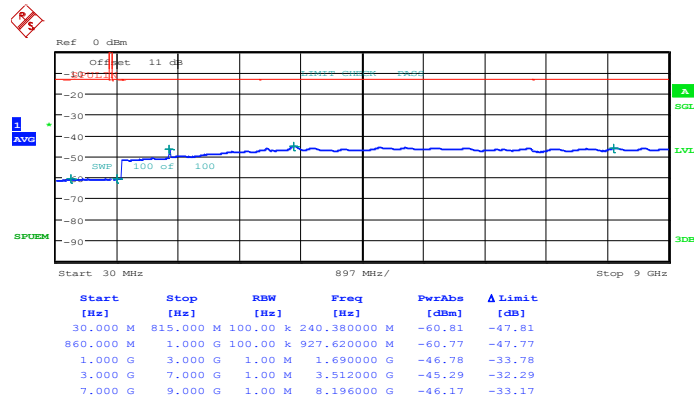
Band :	LTE Band 5	Channel :	CH20625 (High)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:51:25

16QAM (RB Size 1, RB Offset 0)

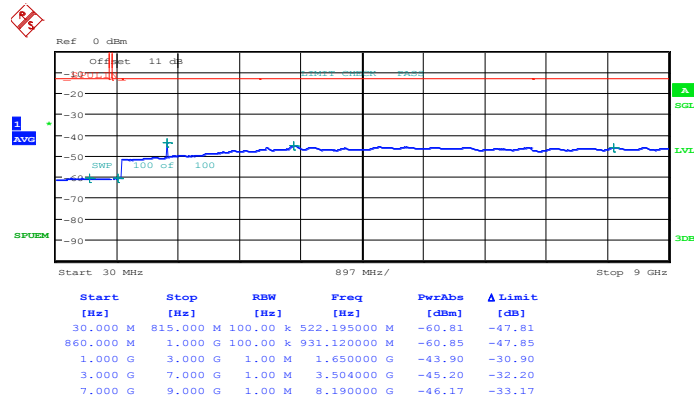


Date: 27.JUL.2014 11:52:23



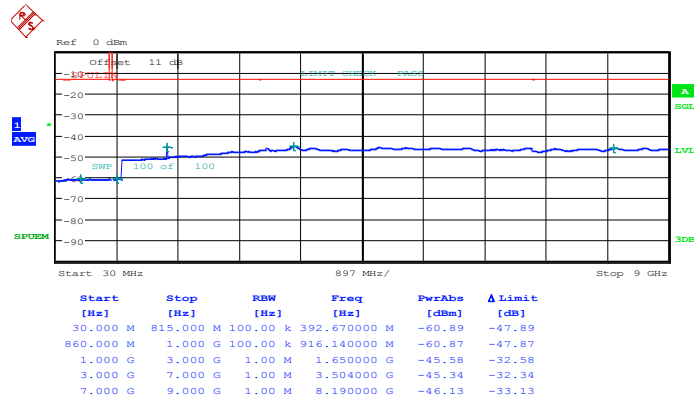
Band :	LTE Band 5	Channel :	CH20450 (Low)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 11:57:25

16QAM (RB Size 1, RB Offset 0)

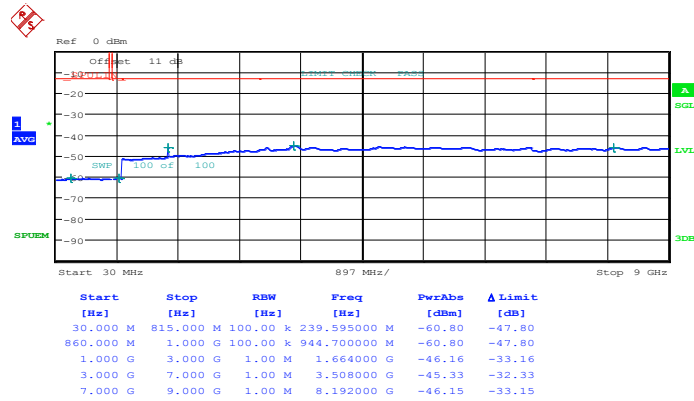


Date: 27.JUL.2014 11:58:23



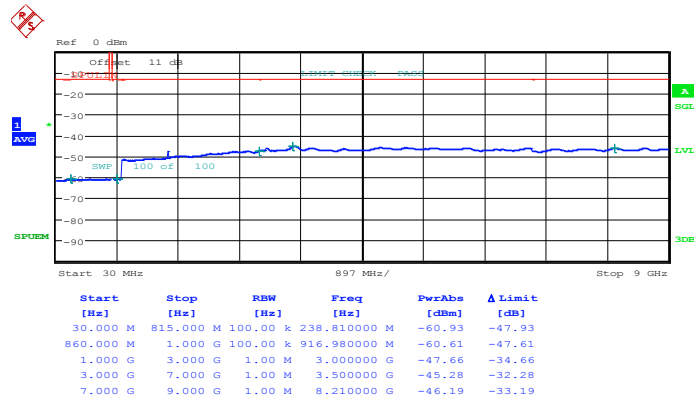
Band :	LTE Band 5	Channel :	CH20525 (Middle)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 12:00:23

16QAM (RB Size 1, RB Offset 0)

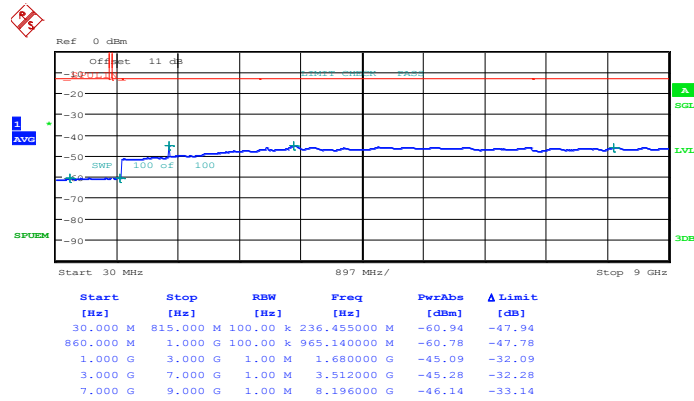


Date: 27.JUL.2014 12:01:21



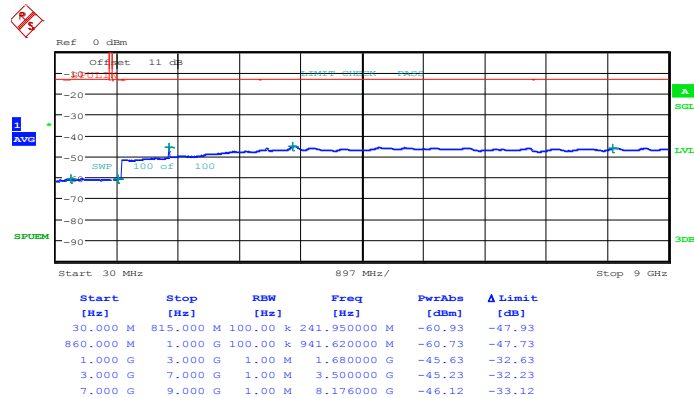
Band :	LTE Band 5	Channel :	CH20600 (High)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 12:06:23

16QAM (RB Size 1, RB Offset 0)

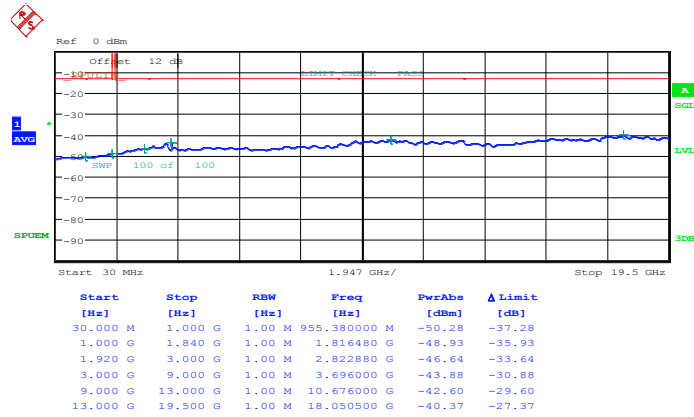


Date: 27.JUL.2014 12:07:21



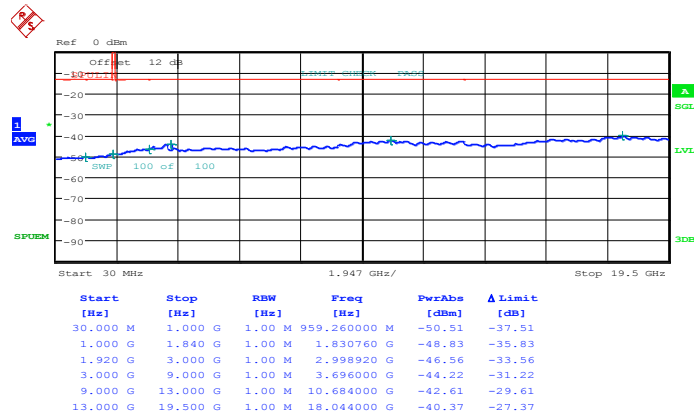
Band :	LTE Band 2	Channel :	CH18607 (Low)
Band Width :	1.4MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 07:37:01

16QAM (RB Size 1, RB Offset 0)

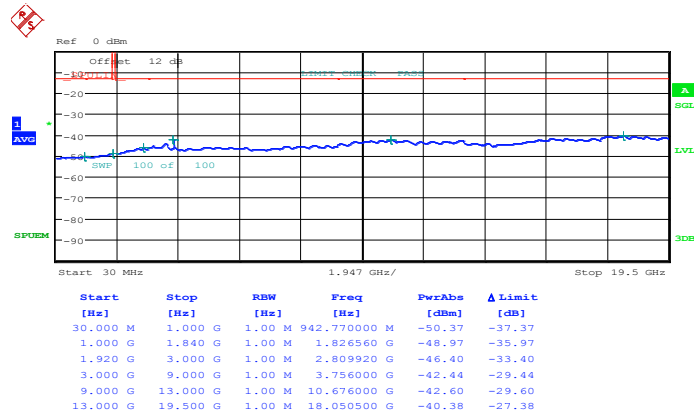


Date: 27.JUL.2014 07:37:59



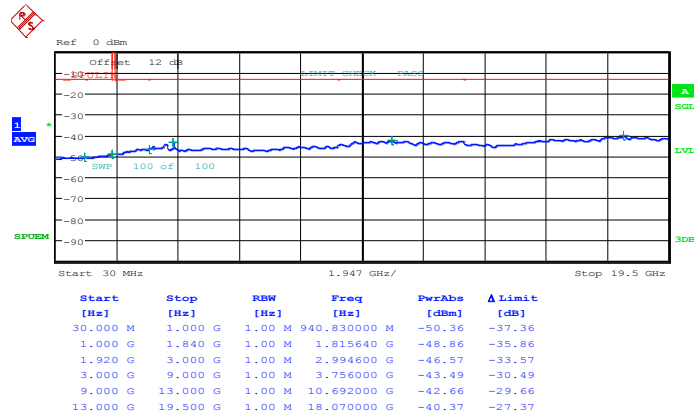
Band :	LTE Band 2	Channel :	CH18900 (Middle)
Band Width :	1.4MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 07:39:58

16QAM (RB Size 1, RB Offset 0)

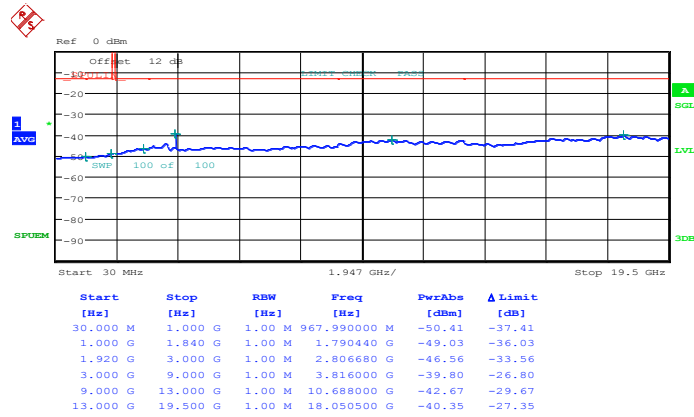


Date: 27.JUL.2014 07:40:57



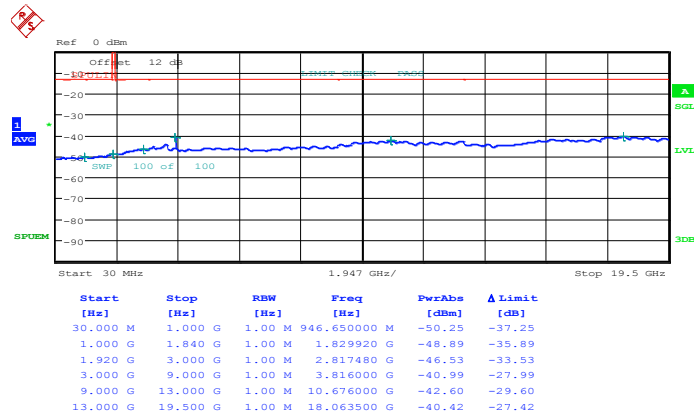
Band :	LTE Band 2	Channel :	CH19193 (High)
Band Width :	1.4MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 07:45:57

16QAM (RB Size 1, RB Offset 0)

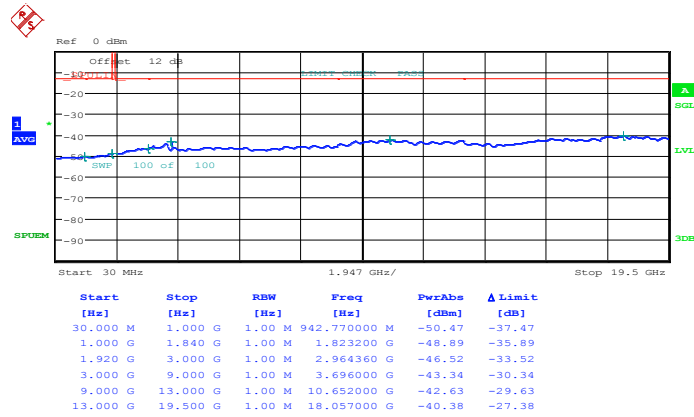


Date: 27.JUL.2014 07:46:56



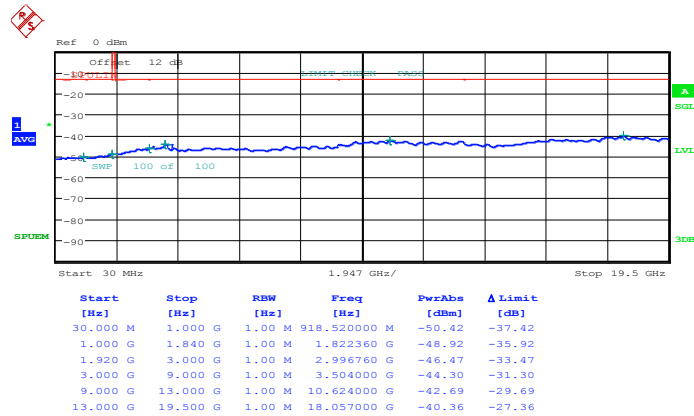
Band :	LTE Band 2	Channel :	CH18615 (Low)
Band Width :	3MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 07:57:51

16QAM (RB Size 1, RB Offset 0)

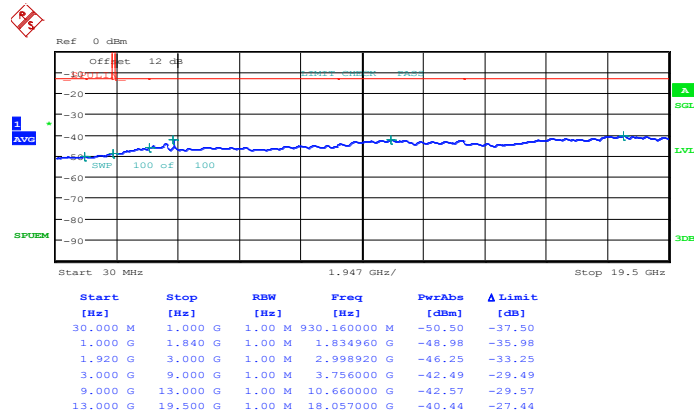


Date: 27.JUL.2014 07:58:50



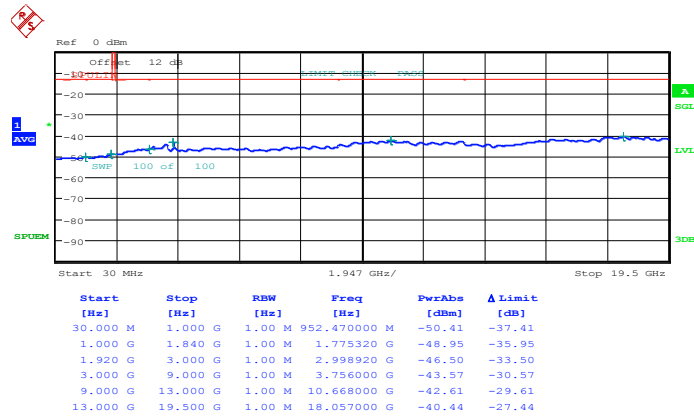
Band :	LTE Band 2	Channel :	CH18900 (Middle)
Band Width :	3MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:00:49

16QAM (RB Size 1, RB Offset 0)

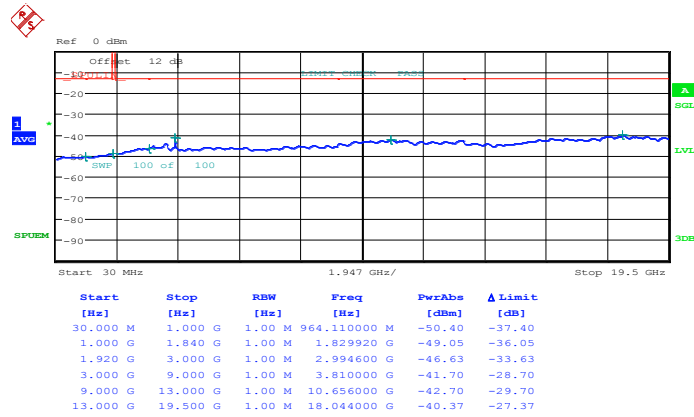


Date: 27.JUL.2014 08:01:48



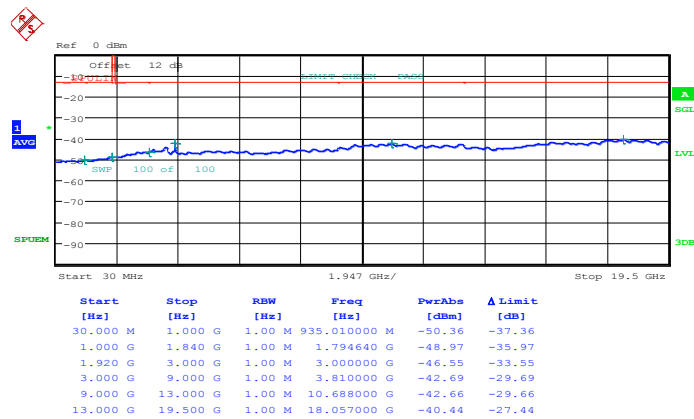
Band :	LTE Band 2	Channel :	CH19185 (High)
Band Width :	3MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:06:48

16QAM (RB Size 1, RB Offset 0)

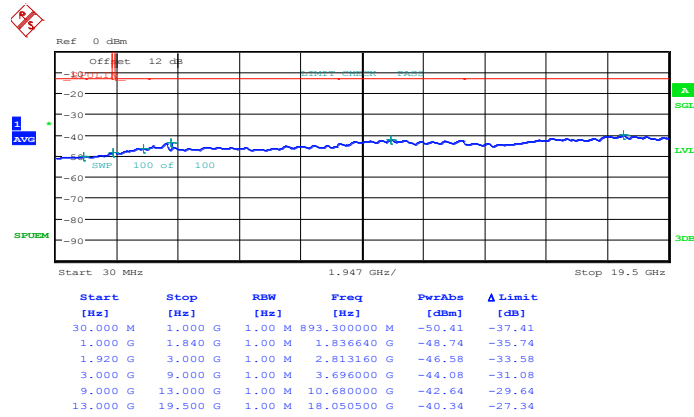


Date: 27.JUL.2014 08:07:46



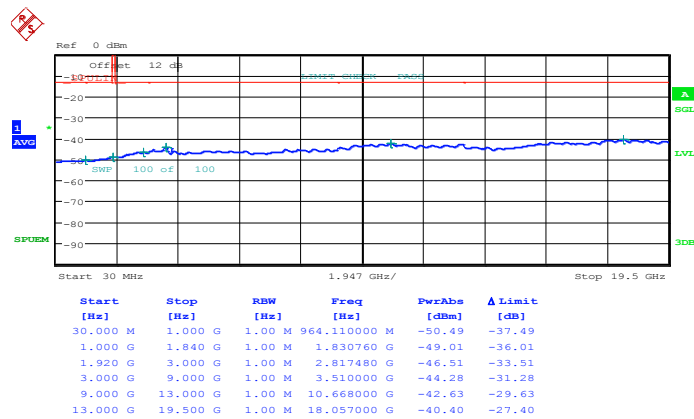
Band :	LTE Band 2	Channel :	CH18625 (Low)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:12:47

16QAM (RB Size 1, RB Offset 0)

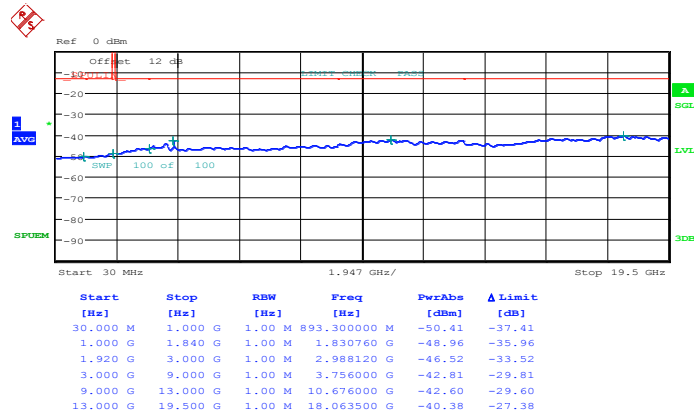


Date: 27.JUL.2014 08:13:45



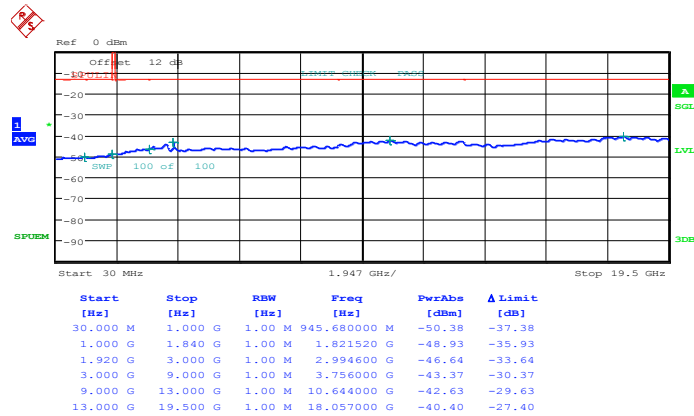
Band :	LTE Band 2	Channel :	CH18900 (Middle)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:15:44

16QAM (RB Size 1, RB Offset 0)

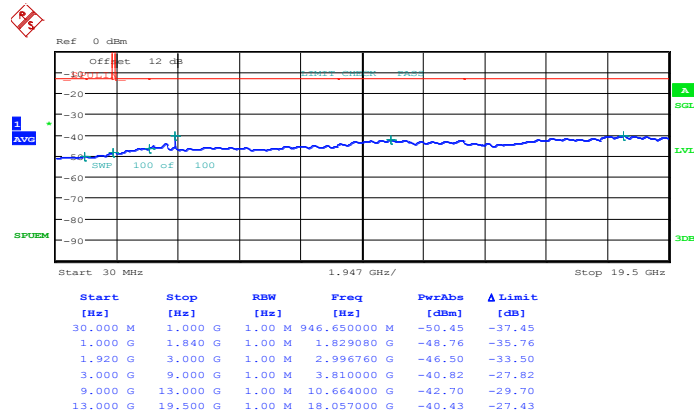


Date: 27.JUL.2014 08:16:43



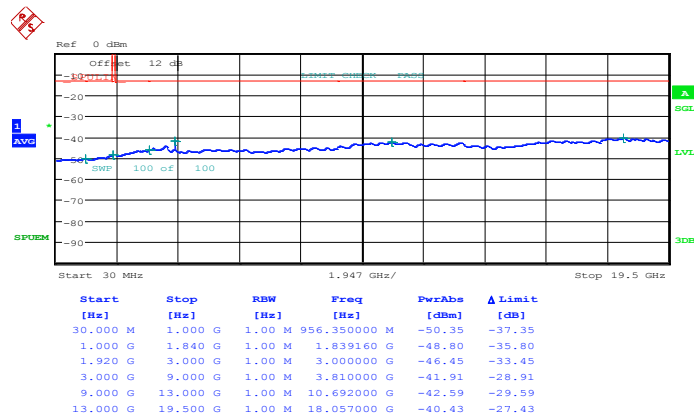
Band :	LTE Band 2	Channel :	CH19175 (High)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:21:43

16QAM (RB Size 1, RB Offset 0)

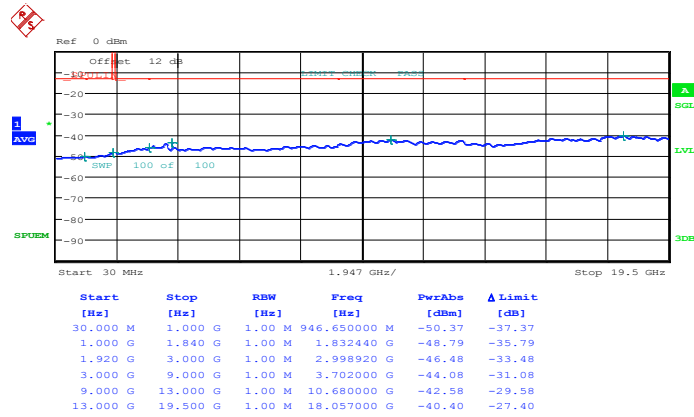


Date: 27.JUL.2014 08:22:42



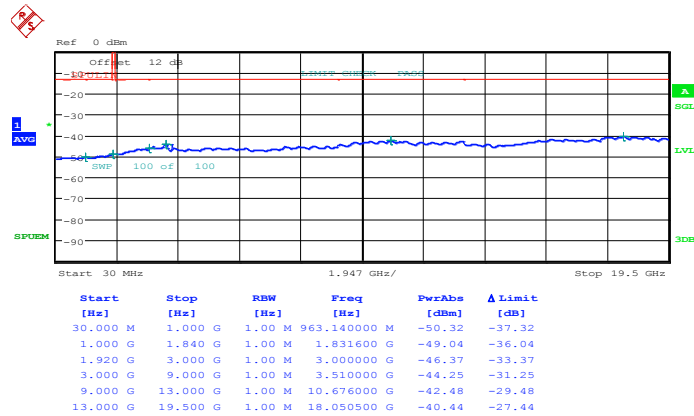
Band :	LTE Band 2	Channel :	CH18650 (Low)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:27:42

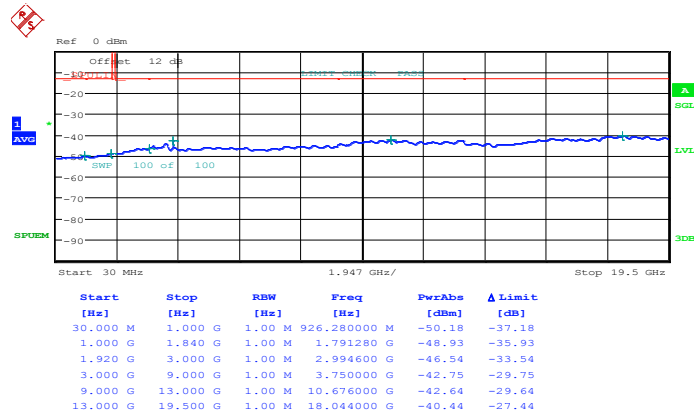
16QAM (RB Size 1, RB Offset 0)



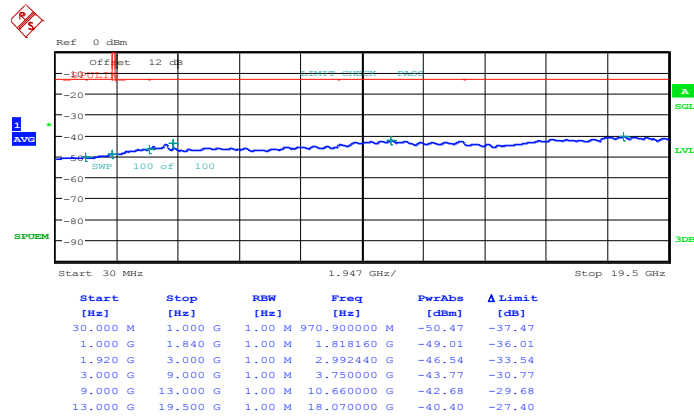
Date: 27.JUL.2014 08:28:41



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

QPSK (RB Size 1, RB Offset 0)

Date: 27.JUL.2014 08:30:40

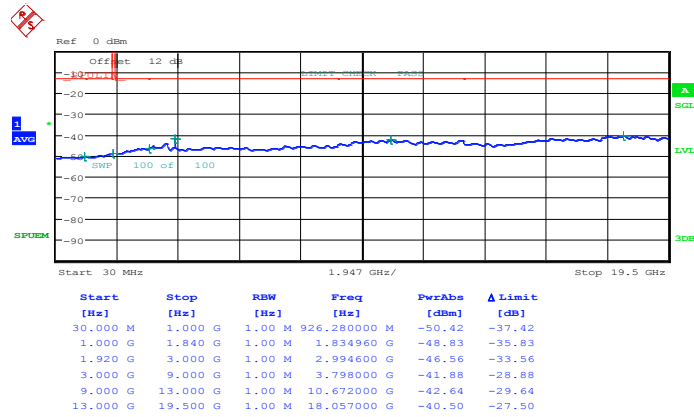
16QAM (RB Size 1, RB Offset 0)

Date: 27.JUL.2014 08:31:39



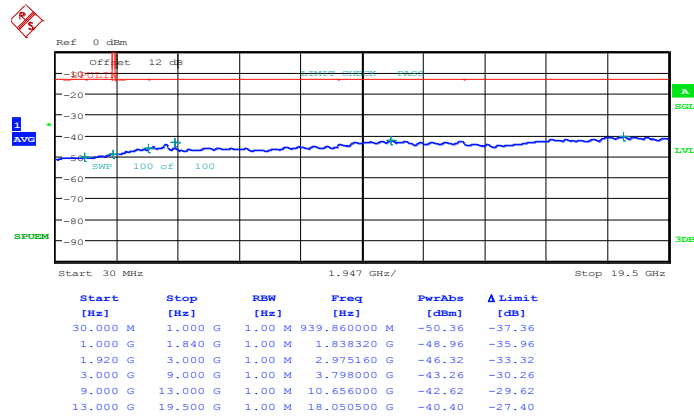
Band :	LTE Band 2	Channel :	CH19150 (High)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:36:40

16QAM (RB Size 1, RB Offset 0)

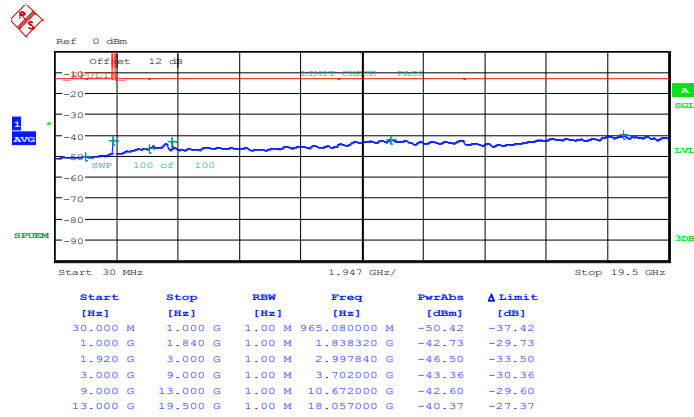


Date: 27.JUL.2014 08:37:38



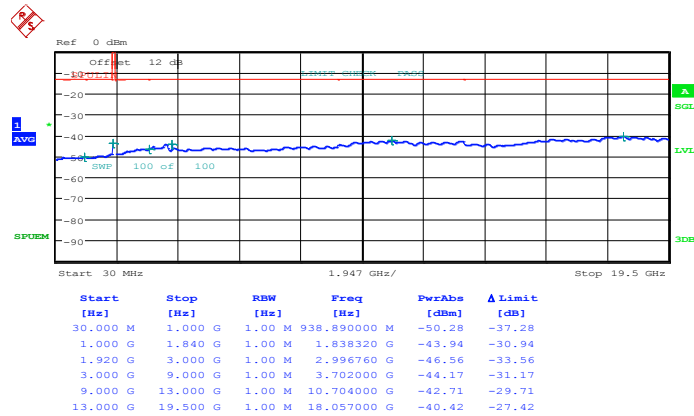
Band :	LTE Band 2	Channel :	CH18675 (Low)
Band Width :	15MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:42:39

16QAM (RB Size 1, RB Offset 0)

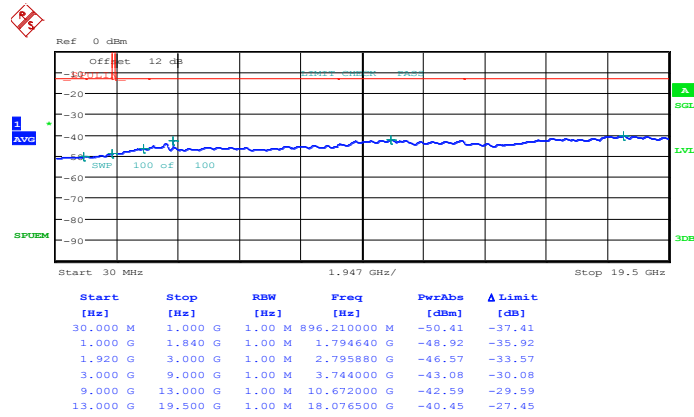


Date: 27.JUL.2014 08:43:38



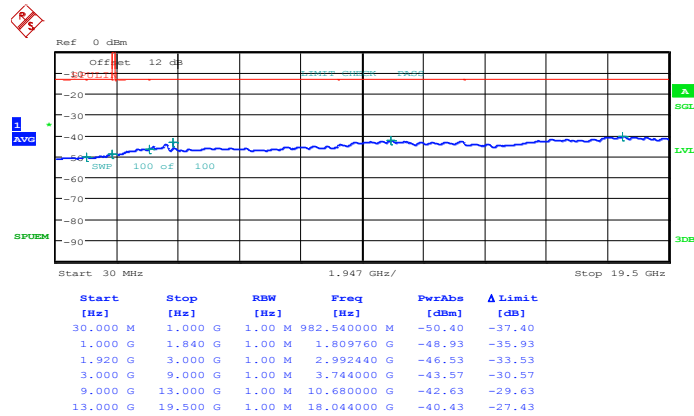
Band :	LTE Band 2	Channel :	CH18900 (Middle)
Band Width :	15MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:45:37

16QAM (RB Size 1, RB Offset 0)

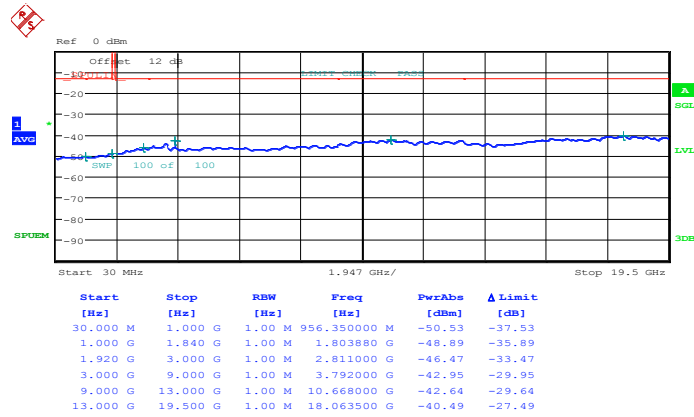


Date: 27.JUL.2014 08:46:35



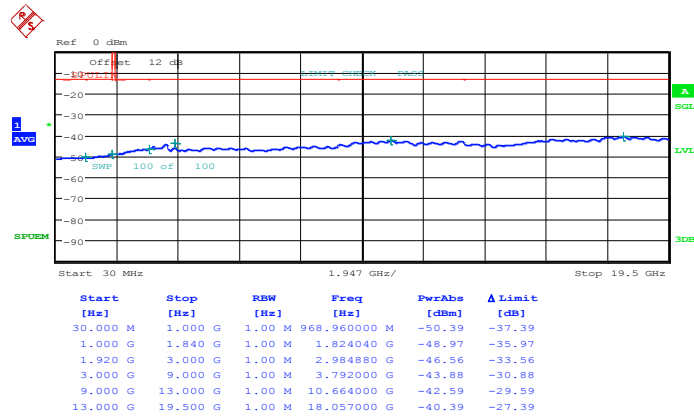
Band :	LTE Band 2	Channel :	CH19125 (High)
Band Width :	15MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:51:36

16QAM (RB Size 1, RB Offset 0)

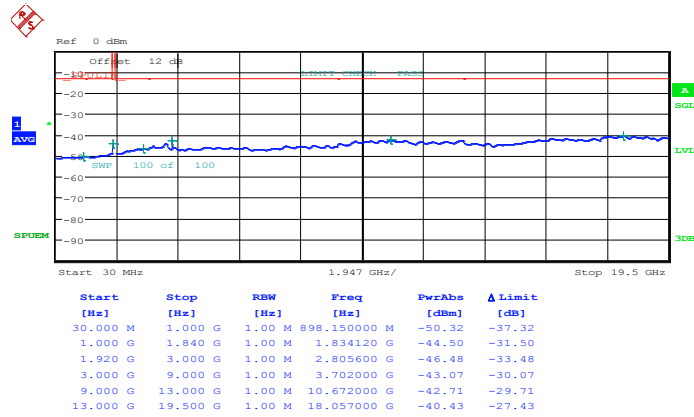


Date: 27.JUL.2014 08:52:35



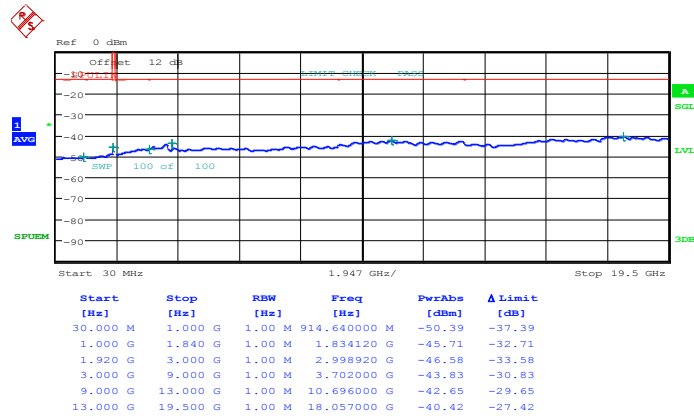
Band :	LTE Band 2	Channel :	CH18700 (Low)
Band Width :	20MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 08:57:37

16QAM (RB Size 1, RB Offset 0)

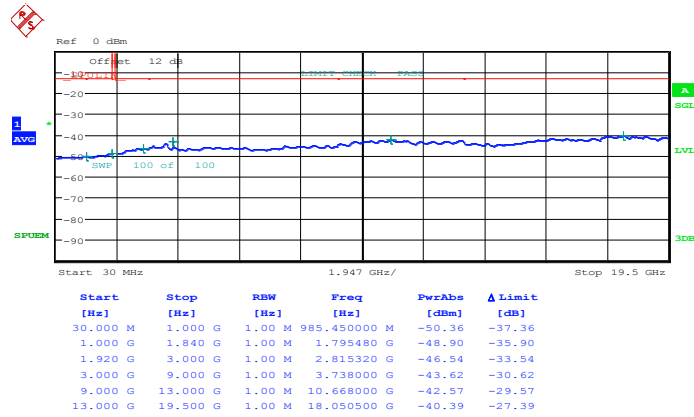


Date: 27.JUL.2014 08:58:36



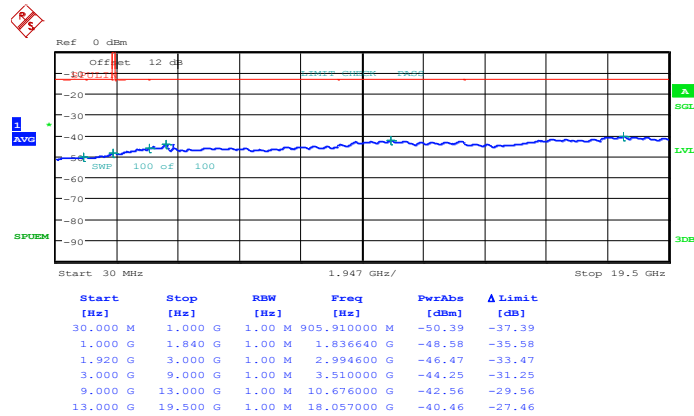
Band :	LTE Band 2	Channel :	CH18900 (Middle)
Band Width :	20MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:00:35

16QAM (RB Size 1, RB Offset 0)

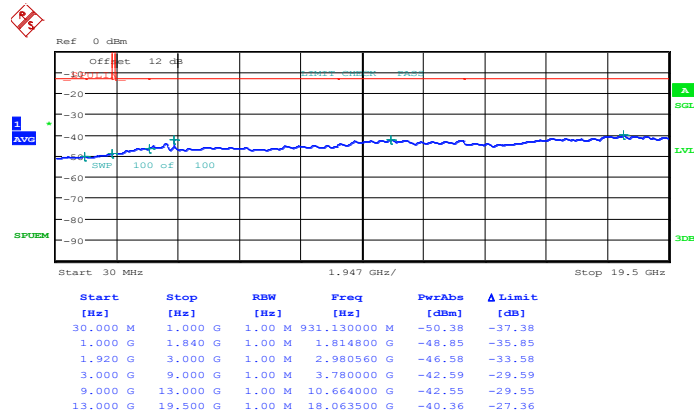


Date: 27.JUL.2014 09:01:33



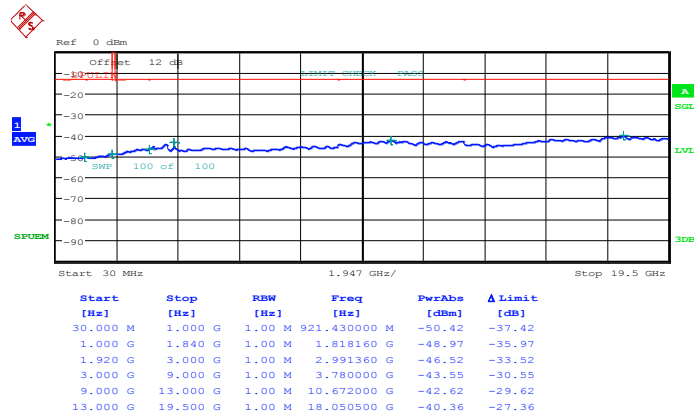
Band :	LTE Band 2	Channel :	CH19100 (High)
Band Width :	20MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:06:37

16QAM (RB Size 1, RB Offset 0)

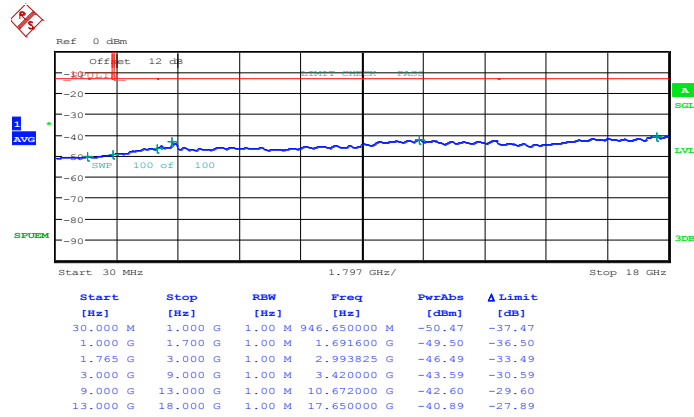


Date: 27.JUL.2014 09:07:35



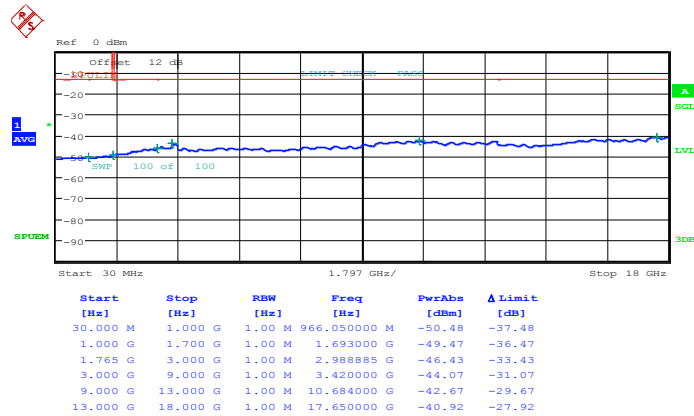
Band :	LTE Band 4	Channel :	CH19957 (Low)
Band Width :	1.4MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:14:44

16QAM (RB Size 1, RB Offset 0)

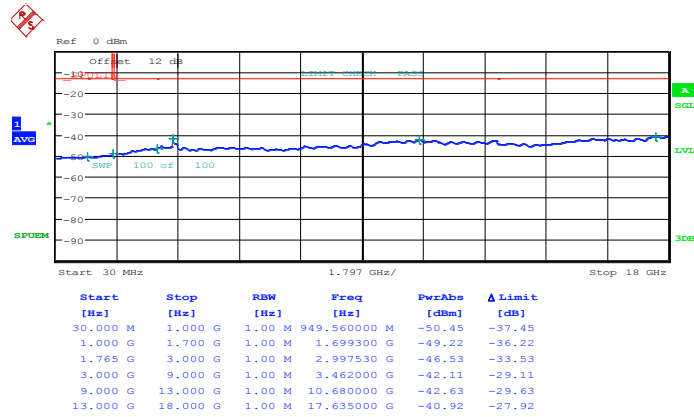


Date: 27.JUL.2014 09:15:43



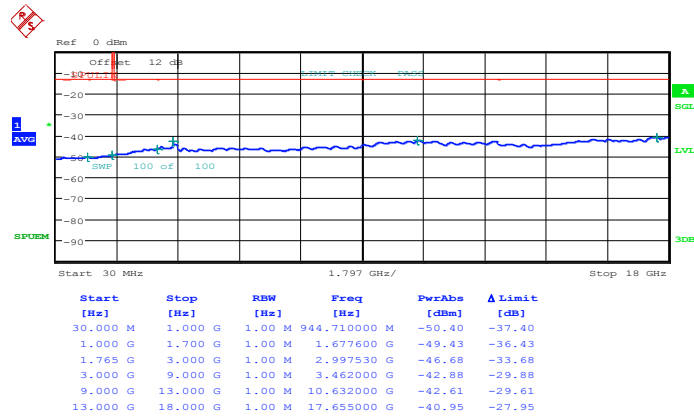
Band :	LTE Band 4	Channel :	CH20175 (Middle)
Band Width :	1.4MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:17:42

16QAM (RB Size 1, RB Offset 0)

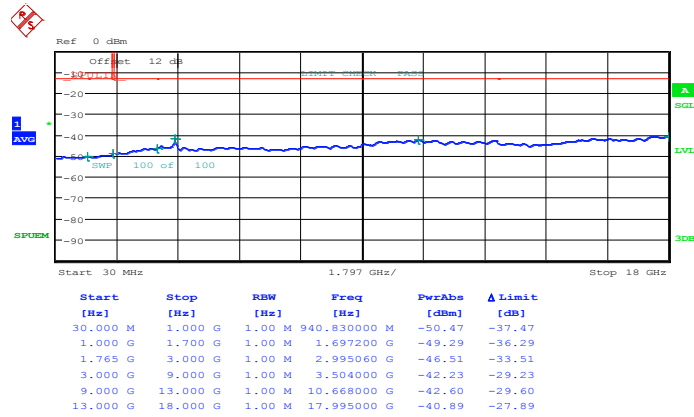


Date: 27.JUL.2014 09:18:40



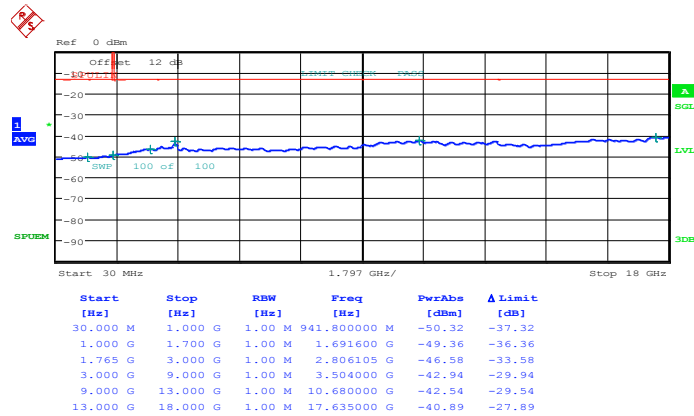
Band :	LTE Band 4	Channel :	CH20393 (High)
Band Width :	1.4MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:23:41

16QAM (RB Size 1, RB Offset 0)

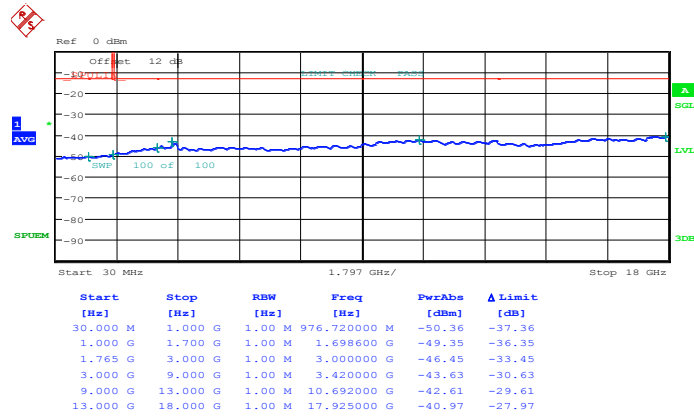


Date: 27.JUL.2014 09:24:40



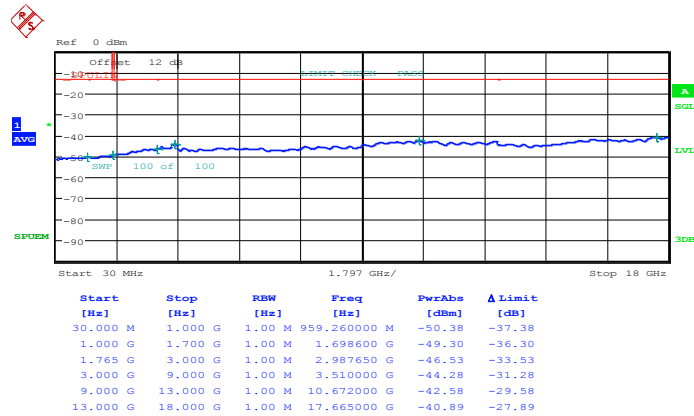
Band :	LTE Band 4	Channel :	CH19965 (Low)
Band Width :	3MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:33:30

16QAM (RB Size 1, RB Offset 0)

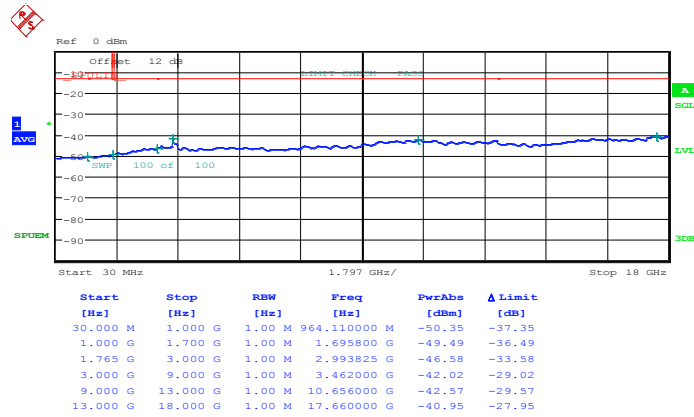


Date: 27.JUL.2014 09:34:28



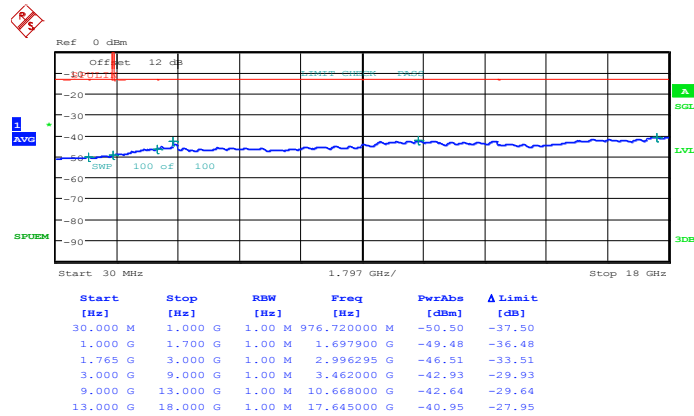
Band :	LTE Band 4	Channel :	CH20175 (Middle)
Band Width :	3MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:36:27

16QAM (RB Size 1, RB Offset 0)

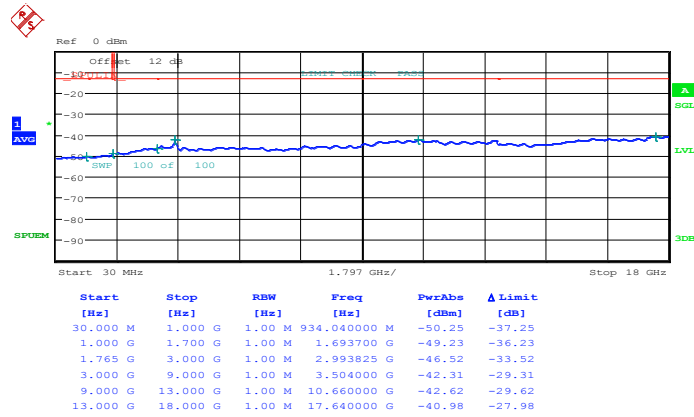


Date: 27.JUL.2014 09:37:26



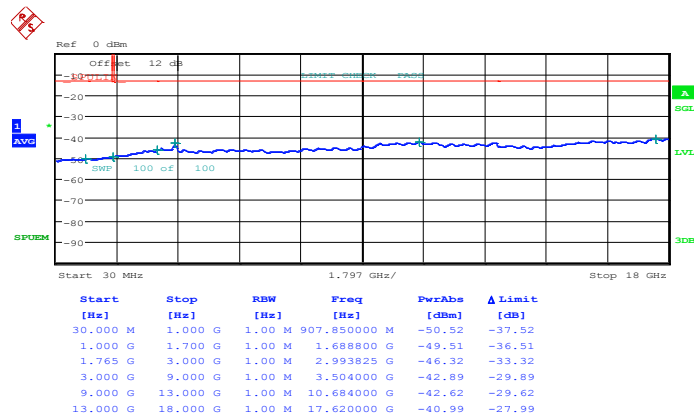
Band :	LTE Band 4	Channel :	CH20385 (High)
Band Width :	3MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:42:27

16QAM (RB Size 1, RB Offset 0)

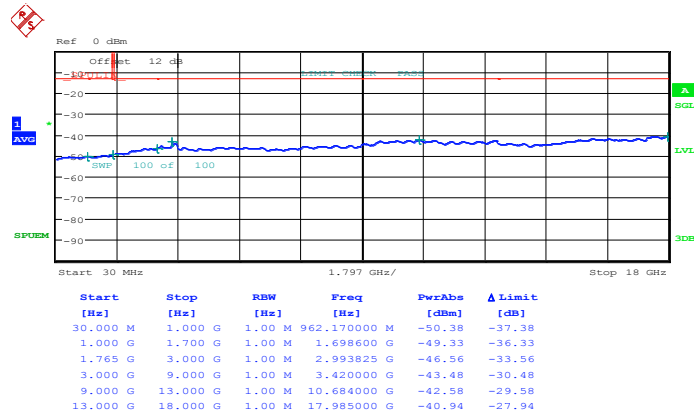


Date: 27.JUL.2014 09:43:26



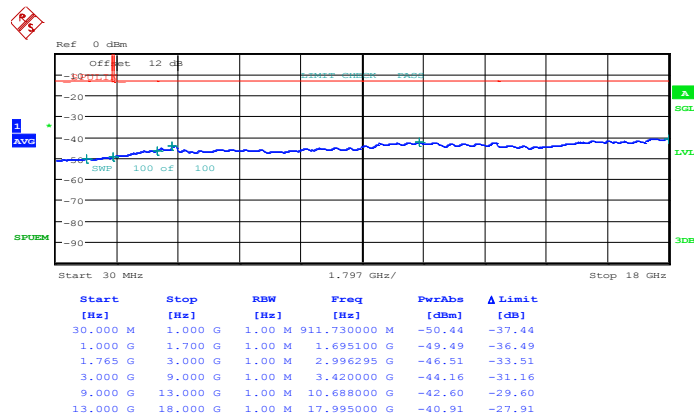
Band :	LTE Band 4	Channel :	CH19975 (Low)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:48:27

16QAM (RB Size 1, RB Offset 0)

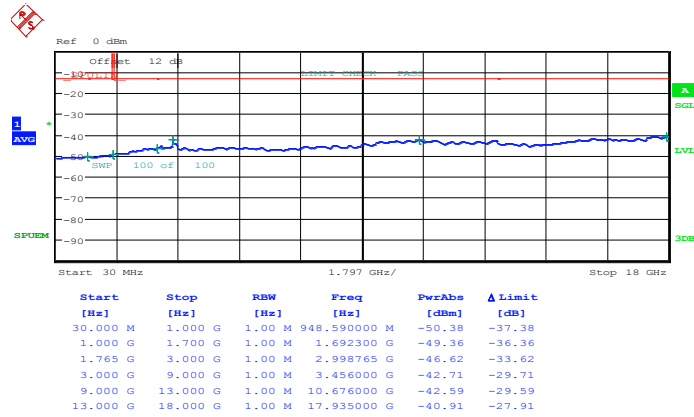


Date: 27.JUL.2014 09:49:26



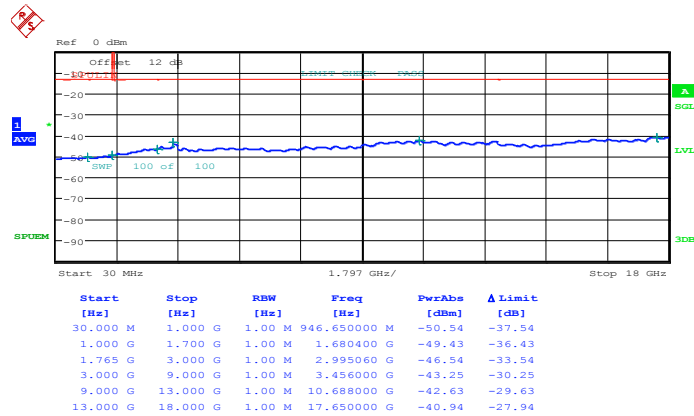
Band :	LTE Band 4	Channel :	CH20175 (Middle)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:51:25

16QAM (RB Size 1, RB Offset 0)

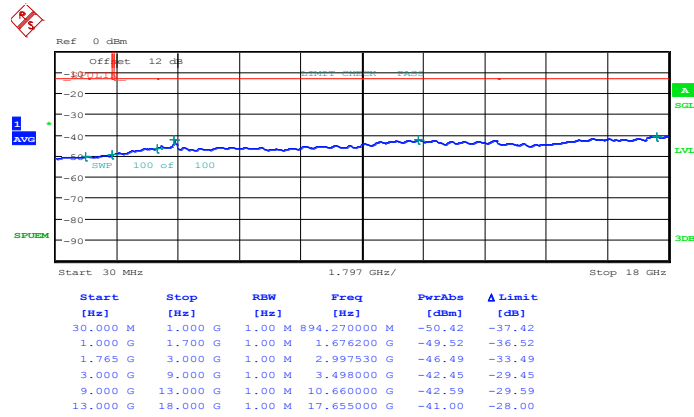


Date: 27.JUL.2014 09:52:23



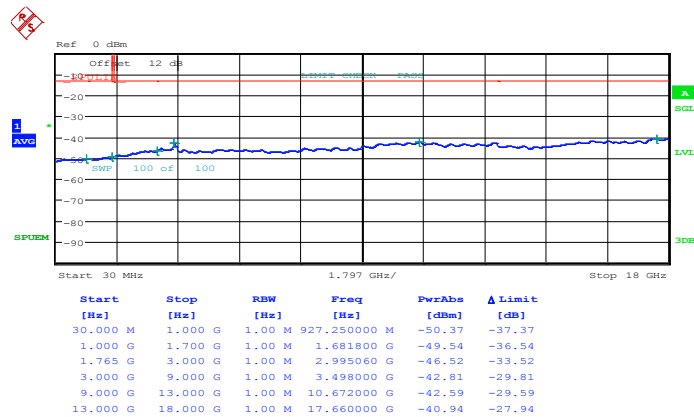
Band :	LTE Band 4	Channel :	CH20375 (High)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 09:57:24

16QAM (RB Size 1, RB Offset 0)

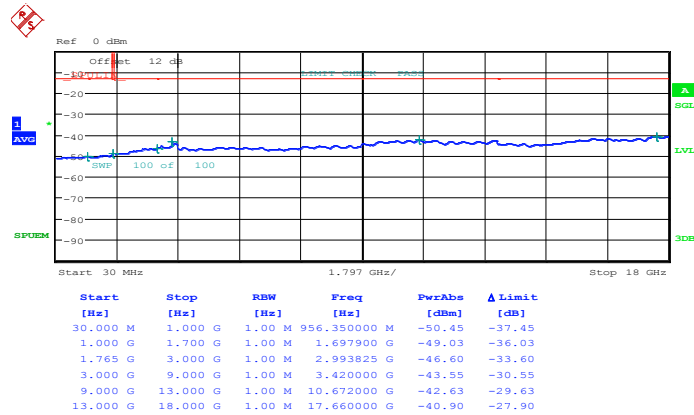


Date: 27.JUL.2014 09:58:23



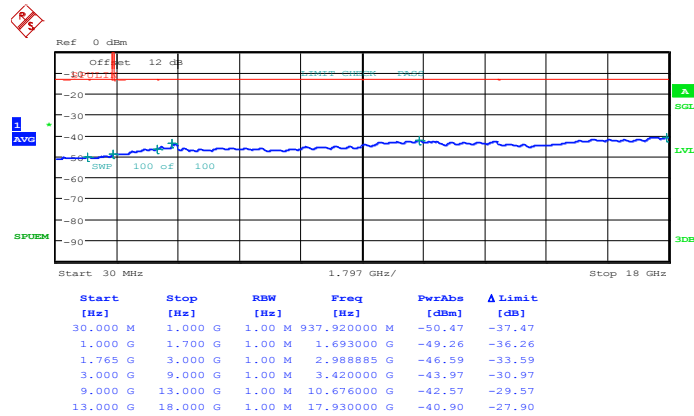
Band :	LTE Band 4	Channel :	CH20000 (Low)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 10:11:56

16QAM (RB Size 1, RB Offset 0)

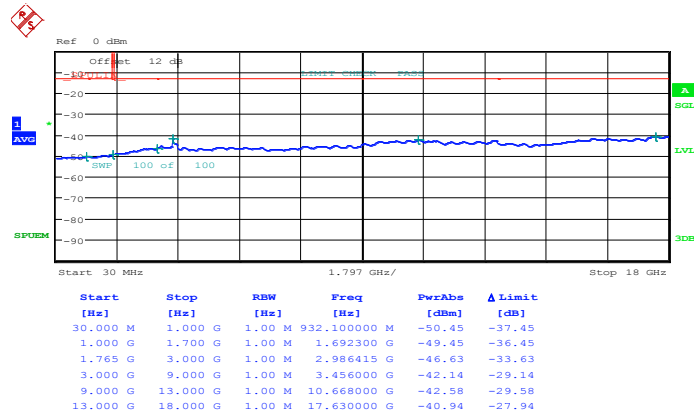


Date: 27.JUL.2014 10:12:55



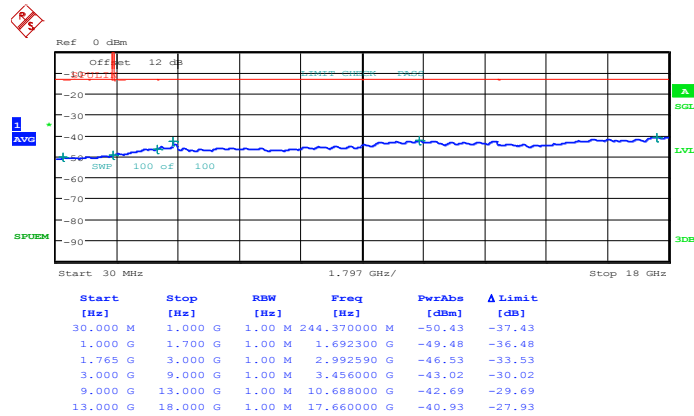
Band :	LTE Band 4	Channel :	CH20175 (Middle)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 10:14:55

16QAM (RB Size 1, RB Offset 0)

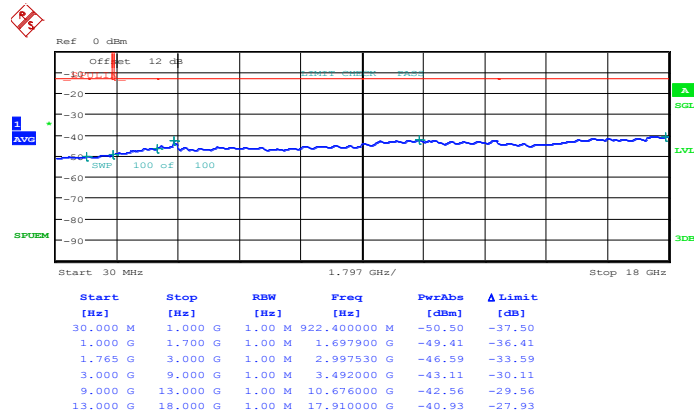


Date: 27.JUL.2014 10:15:53



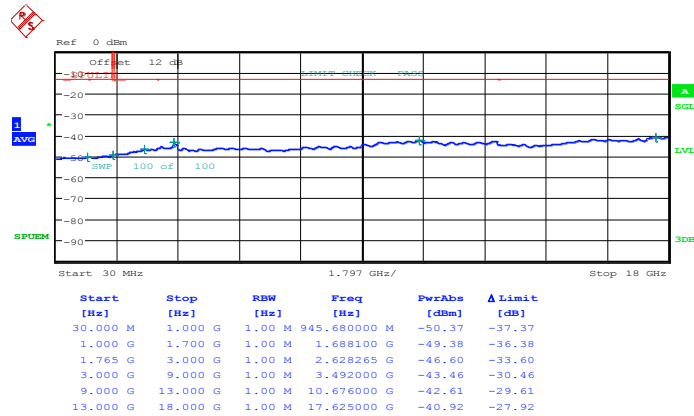
Band :	LTE Band 4	Channel :	CH20350 (High)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 10:20:55

16QAM (RB Size 1, RB Offset 0)

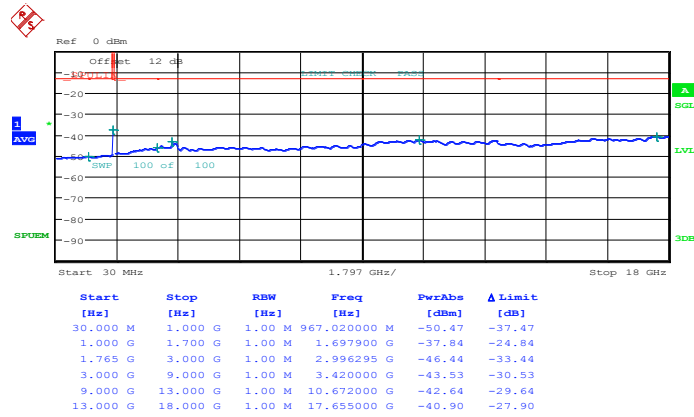


Date: 27.JUL.2014 10:21:54



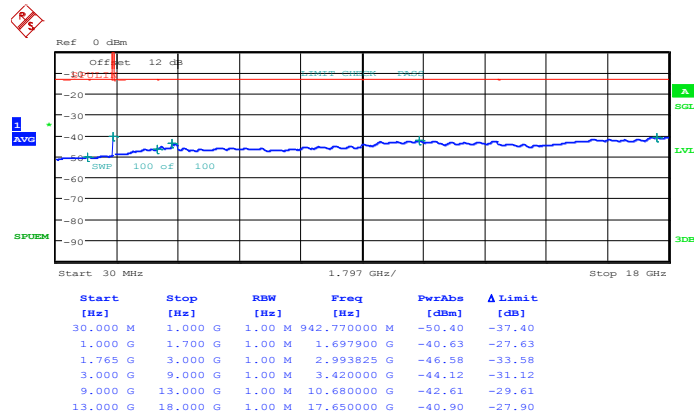
Band :	LTE Band 4	Channel :	CH20025 (Low)
Band Width :	15MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 10:26:56

16QAM (RB Size 1, RB Offset 0)

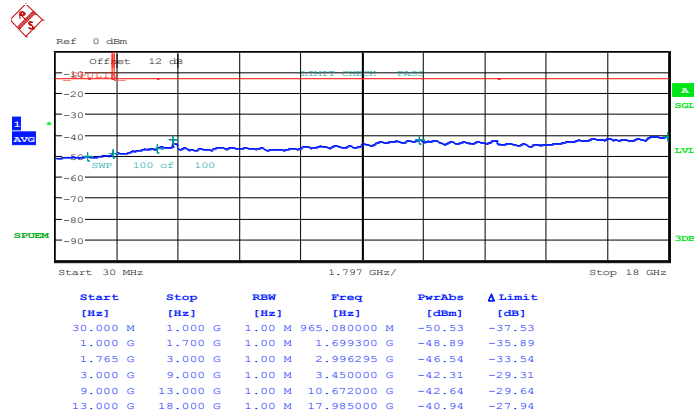


Date: 27.JUL.2014 10:27:54



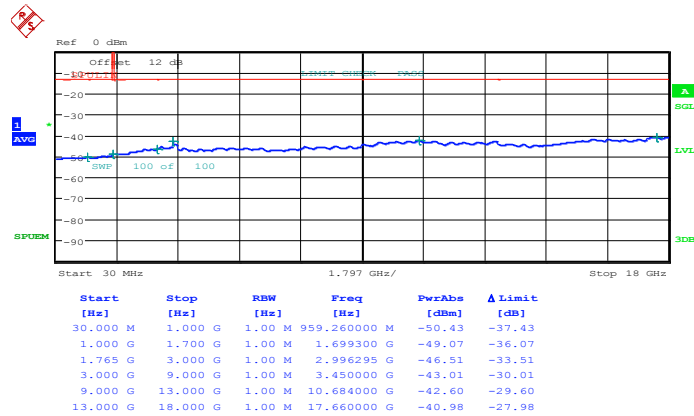
Band :	LTE Band 4	Channel :	CH20175 (Middle)
Band Width :	15MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 10:29:53

16QAM (RB Size 1, RB Offset 0)

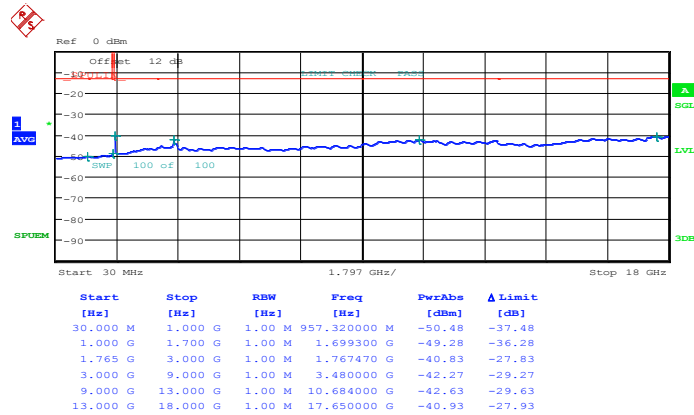


Date: 27.JUL.2014 10:30:52



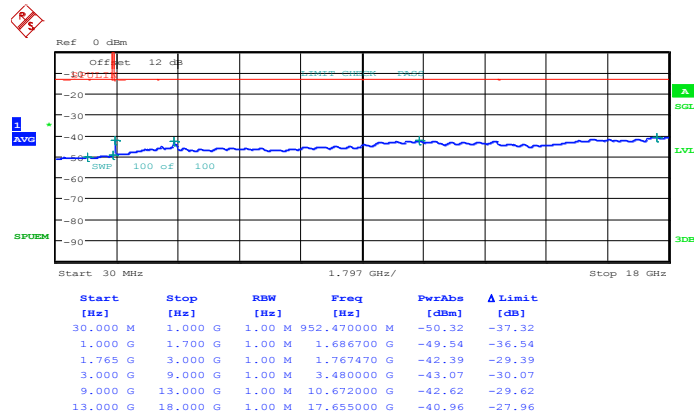
Band :	LTE Band 4	Channel :	CH20325 (High)
Band Width :	15MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 10:35:54

16QAM (RB Size 1, RB Offset 0)

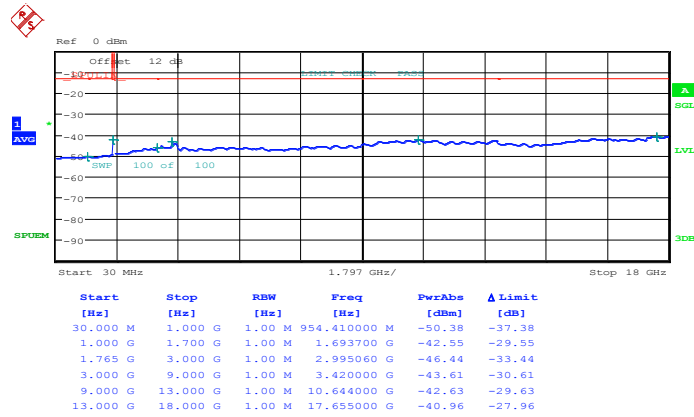


Date: 27.JUL.2014 10:36:52



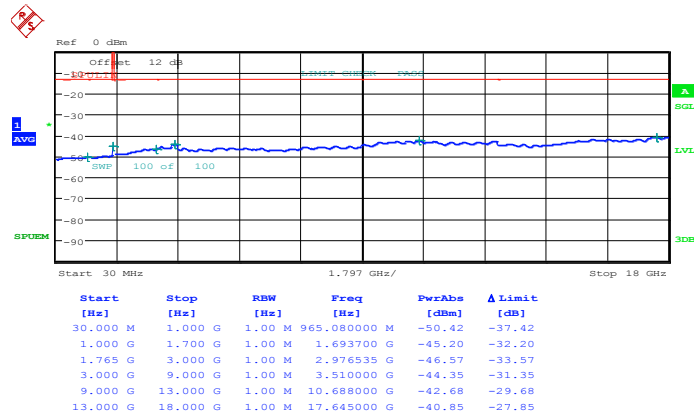
Band :	LTE Band 4	Channel :	CH20050 (Low)
Band Width :	20MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 10:42:01

16QAM (RB Size 1, RB Offset 0)

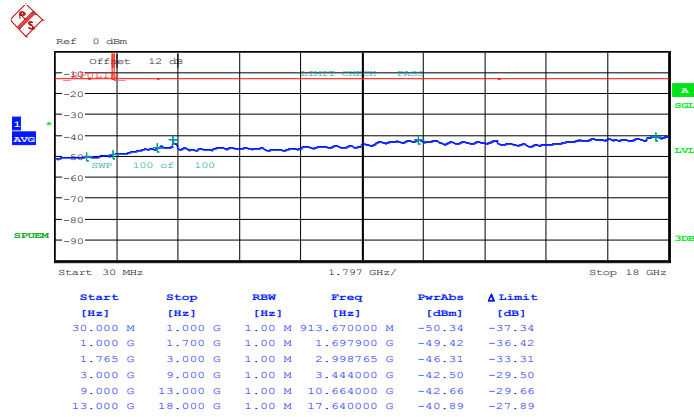


Date: 27.JUL.2014 10:43:00



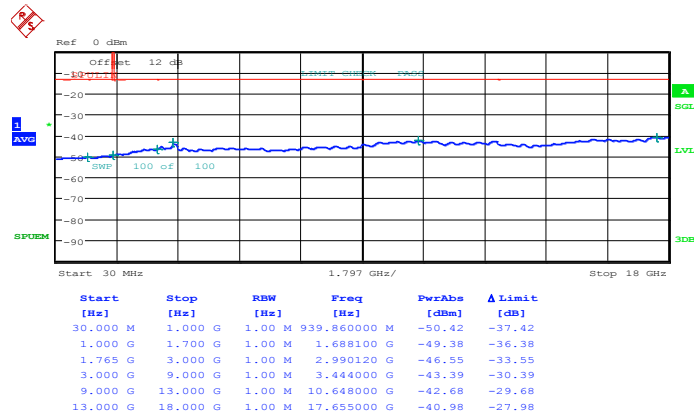
Band :	LTE Band 4	Channel :	CH20175 (Middle)
Band Width :	20MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 10:44:59

16QAM (RB Size 1, RB Offset 0)

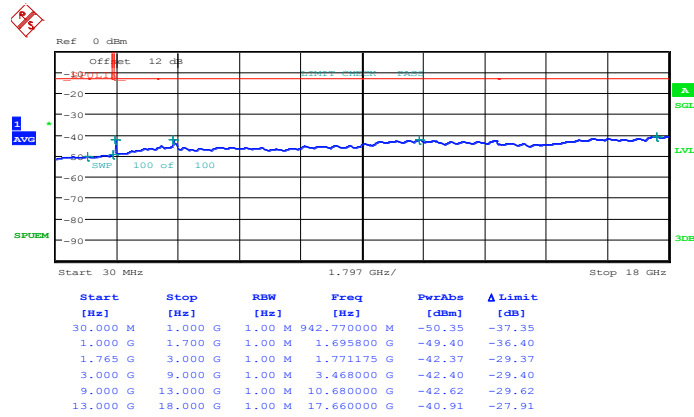


Date: 27.JUL.2014 10:45:58



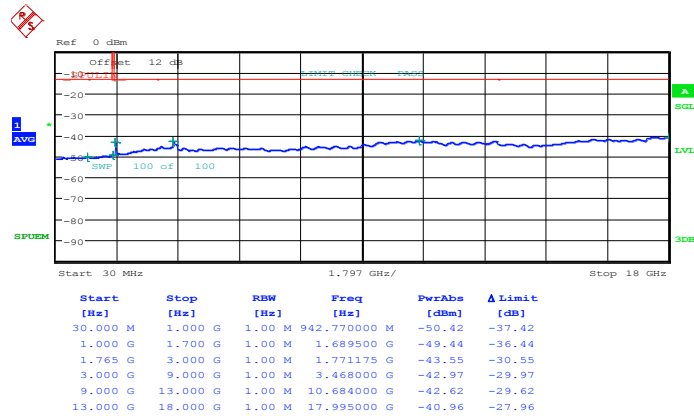
Band :	LTE Band 4	Channel :	CH20300 (High)
Band Width :	20MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 27.JUL.2014 10:50:59

16QAM (RB Size 1, RB Offset 0)

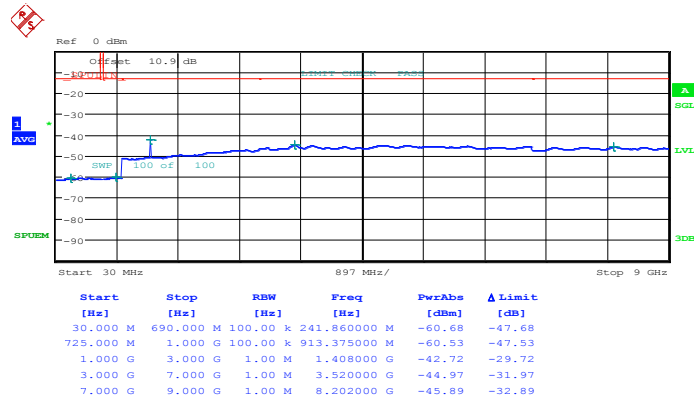


Date: 27.JUL.2014 10:51:57



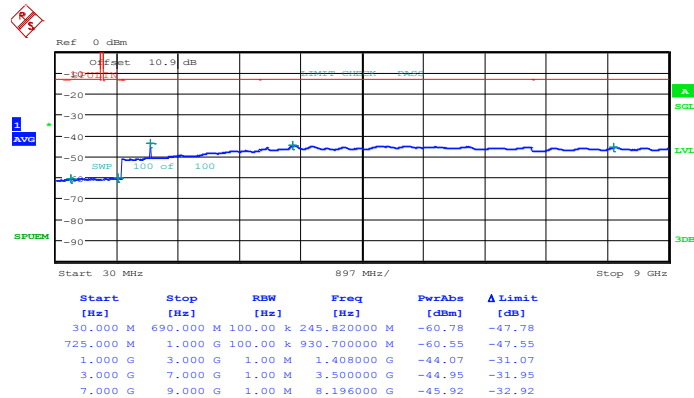
Band :	LTE Band 17	Channel :	CH23755 (Low)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 28.JUL.2014 19:46:45

16QAM (RB Size 1, RB Offset 0)

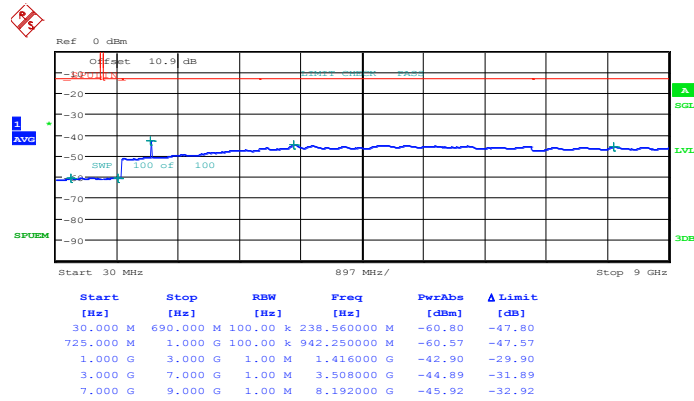


Date: 28.JUL.2014 19:47:44



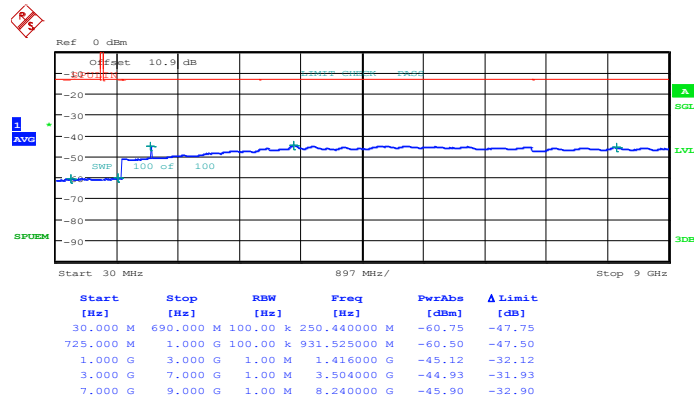
Band :	LTE Band 17	Channel :	CH23790 (Middle)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 28.JUL.2014 19:49:42

16QAM (RB Size 1, RB Offset 0)

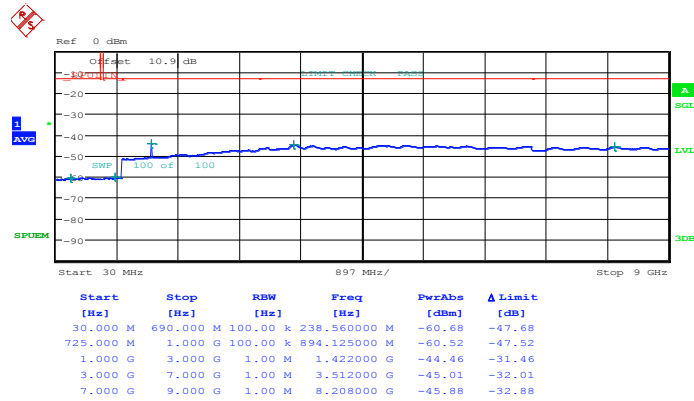


Date: 28.JUL.2014 19:50:41



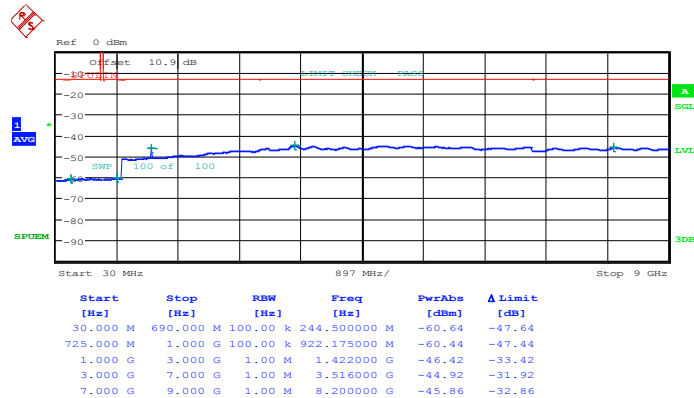
Band :	LTE Band 17	Channel :	CH23825 (High)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 28.JUL.2014 19:55:40

16QAM (RB Size 1, RB Offset 0)

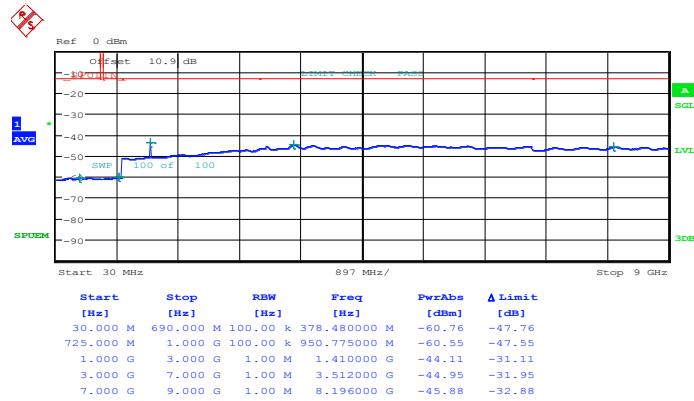


Date: 28.JUL.2014 19:56:38



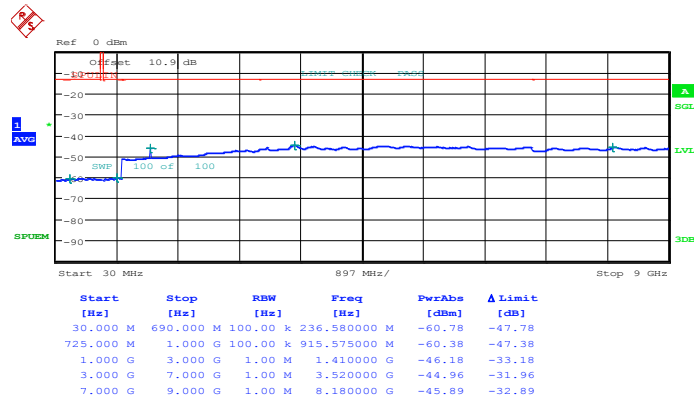
Band :	LTE Band 17	Channel :	CH23780 (Low)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 28.JUL.2014 20:01:40

16QAM (RB Size 1, RB Offset 0)

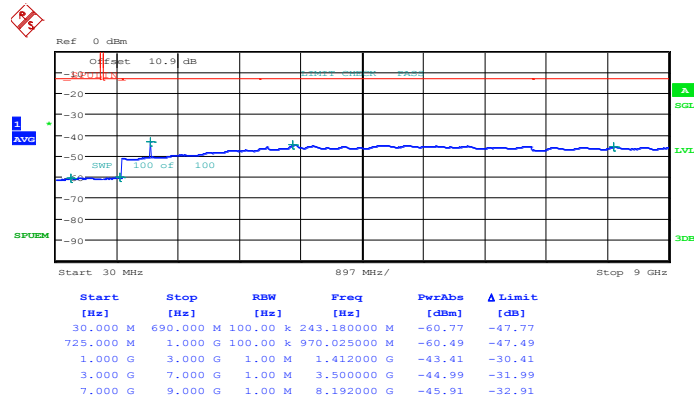


Date: 28.JUL.2014 20:02:38



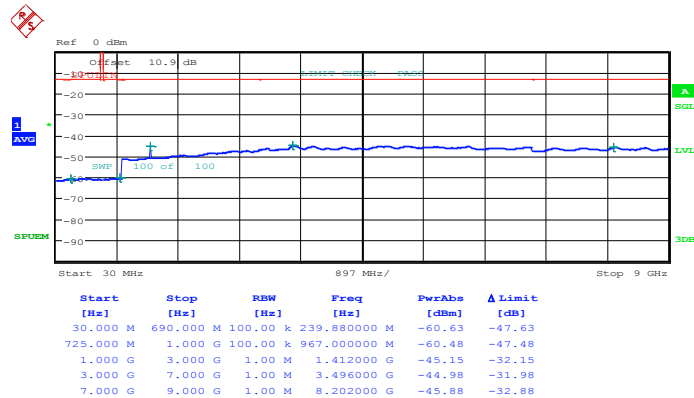
Band :	LTE Band 17	Channel :	CH23790 (Middle)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 28.JUL.2014 20:04:37

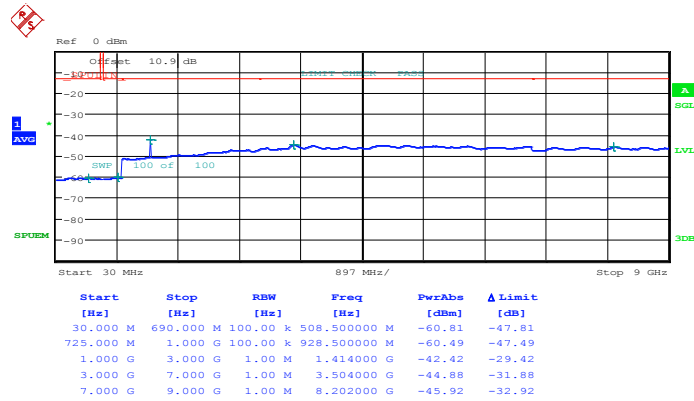
16QAM (RB Size 1, RB Offset 0)



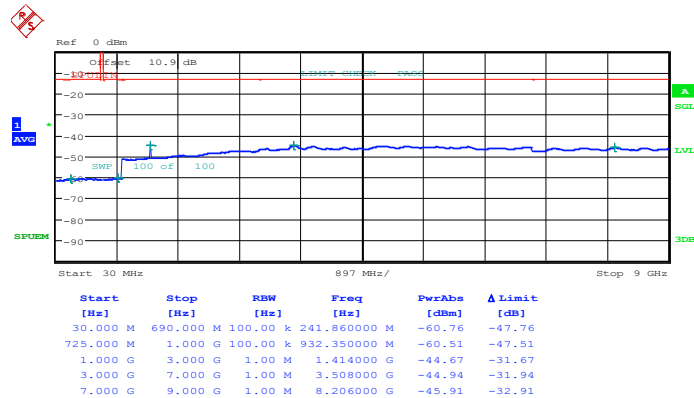
Date: 28.JUL.2014 20:05:35



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

QPSK (RB Size 1, RB Offset 0)

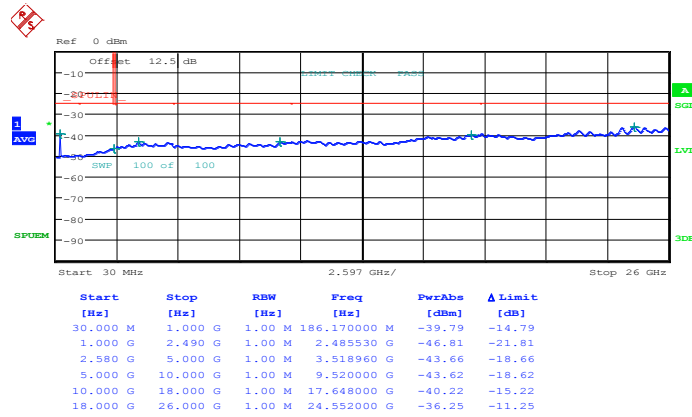
Date: 28.JUL.2014 20:10:33

16QAM (RB Size 1, RB Offset 0)

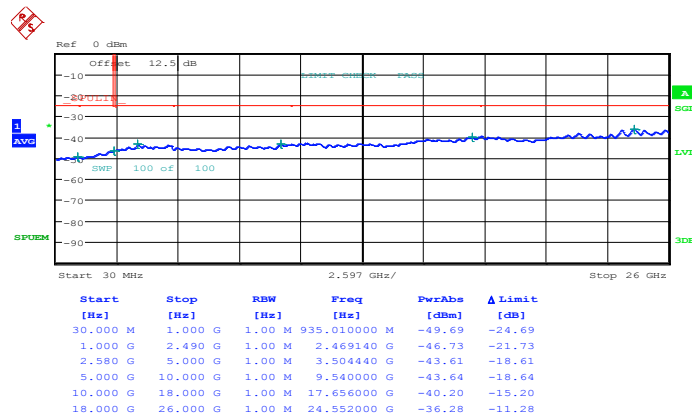
Date: 28.JUL.2014 20:11:31



Band :	LTE Band 7	Channel :	CH20775 (Low)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 0)

Date: 31.JUL.2014 09:23:35

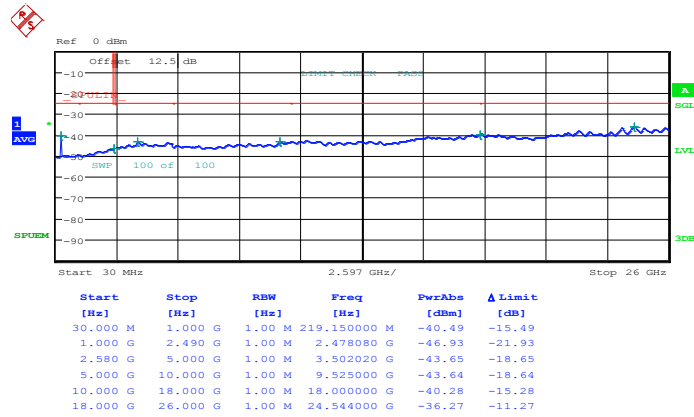
16QAM (RB Size 1, RB Offset 0)

Date: 31.JUL.2014 09:24:36



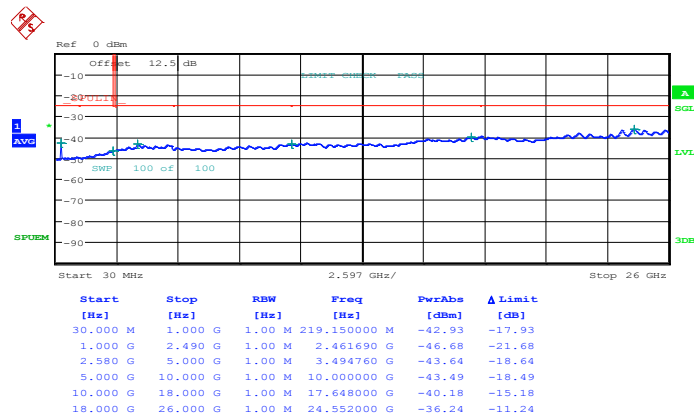
Band :	LTE Band 7	Channel :	CH21100 (Middle)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 31.JUL.2014 09:32:24

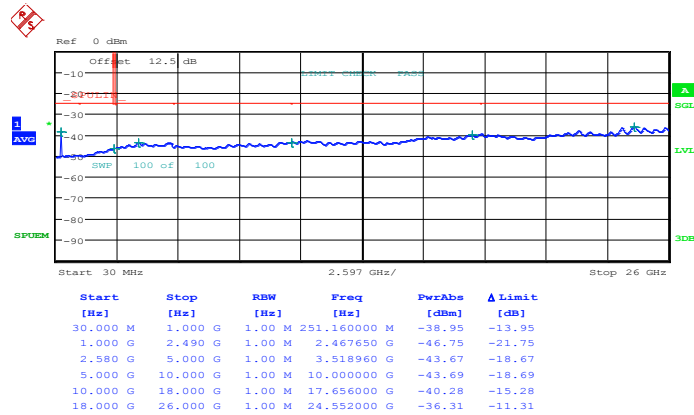
16QAM (RB Size 1, RB Offset 0)



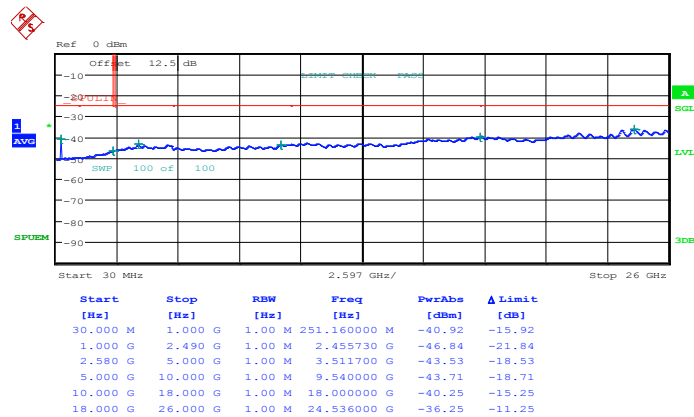
Date: 31.JUL.2014 09:33:26



Band :	LTE Band 7	Channel :	CH21425 (High)
Band Width :	5MHz		

QPSK (RB Size 1, RB Offset 0)

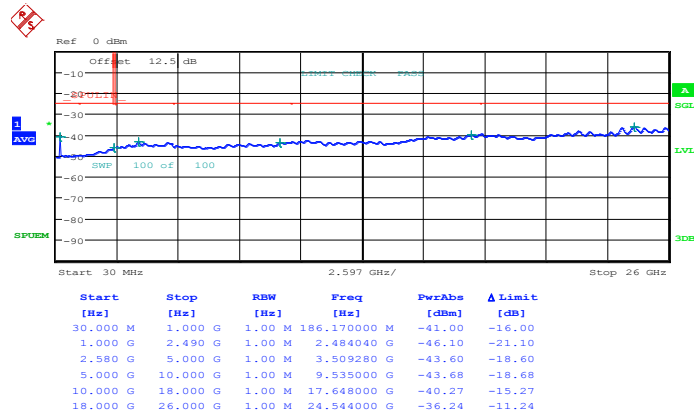
Date: 31.JUL.2014 09:38:28

16QAM (RB Size 1, RB Offset 0)

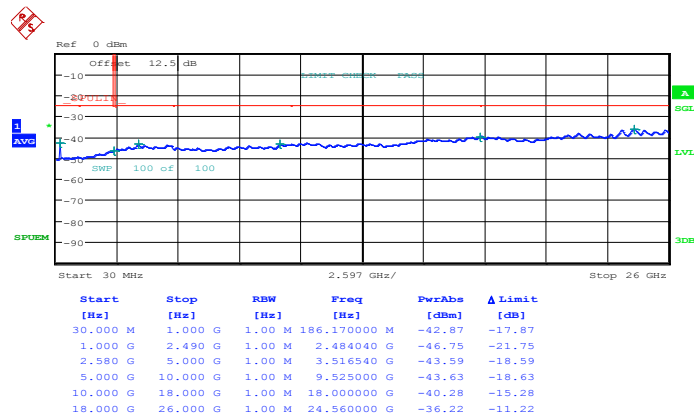
Date: 31.JUL.2014 09:39:29



Band :	LTE Band 7	Channel :	CH20800 (Low)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)

Date: 31.JUL.2014 09:44:35

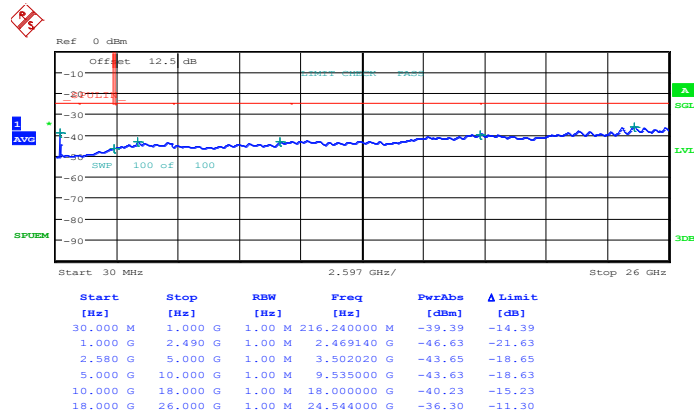
16QAM (RB Size 1, RB Offset 0)

Date: 31.JUL.2014 09:45:36



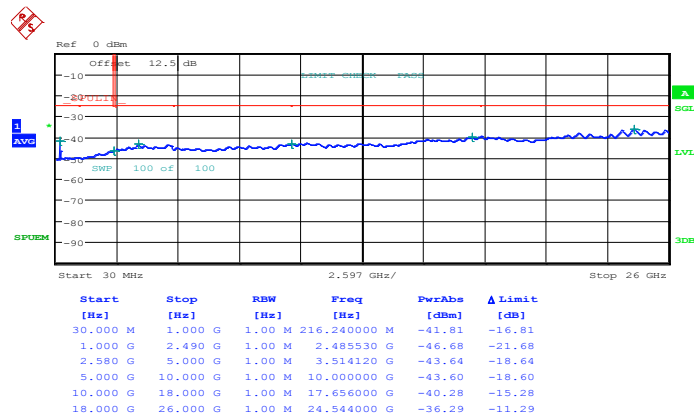
Band :	LTE Band 7	Channel :	CH21100 (Middle)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 31.JUL.2014 09:47:38

16QAM (RB Size 1, RB Offset 0)

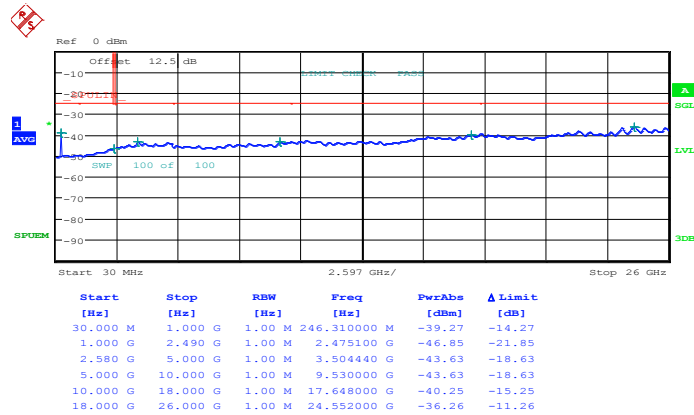


Date: 31.JUL.2014 09:48:40



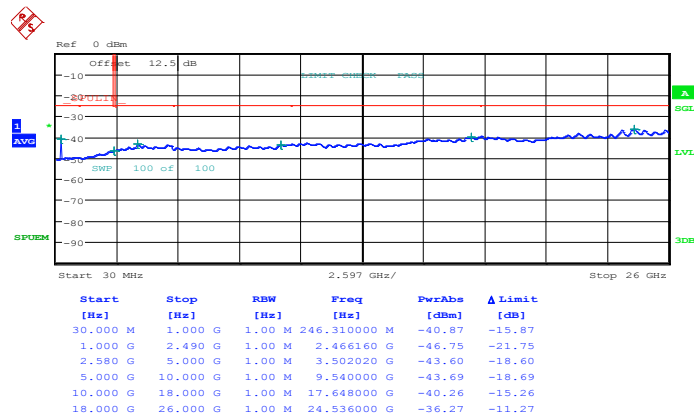
Band :	LTE Band 7	Channel :	CH21400 (High)
Band Width :	10MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 31.JUL.2014 09:53:41

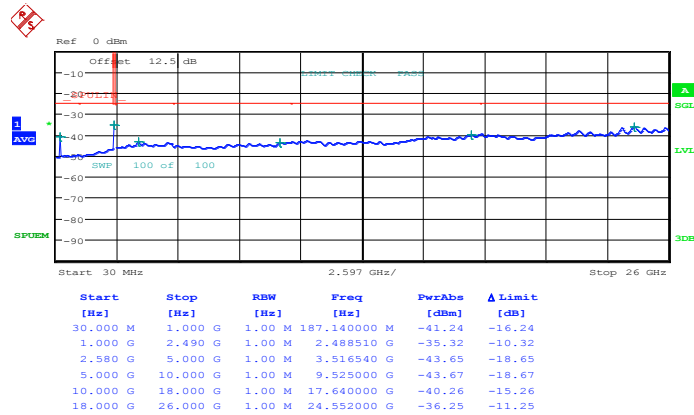
16QAM (RB Size 1, RB Offset 0)



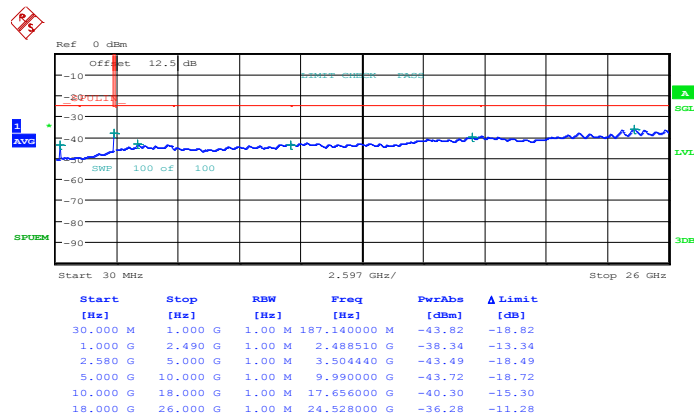
Date: 31.JUL.2014 09:54:42



Band :	LTE Band 7	Channel :	CH20825 (Low)
Band Width :	15MHz		

QPSK (RB Size 1, RB Offset 0)

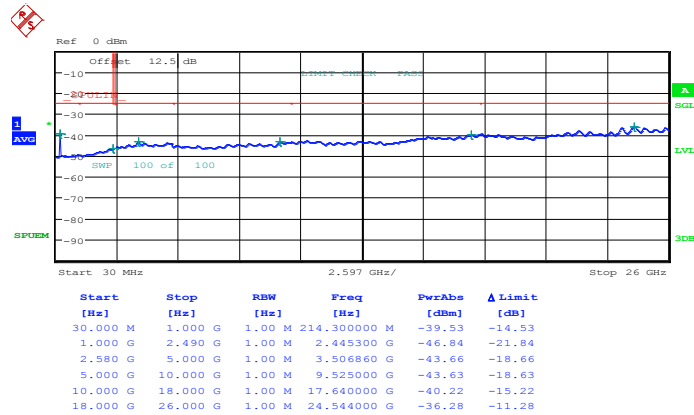
Date: 31.JUL.2014 09:59:47

16QAM (RB Size 1, RB Offset 0)

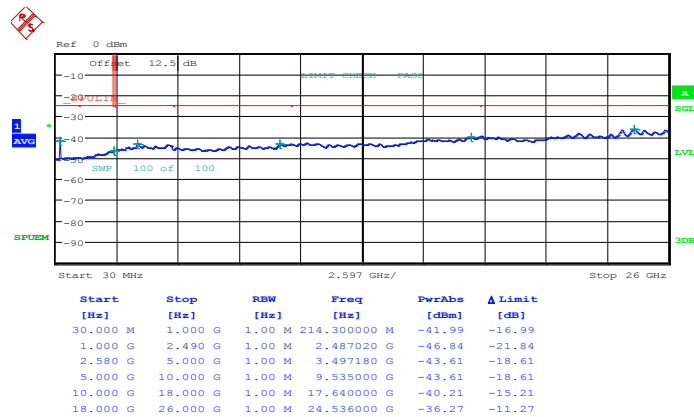
Date: 31.JUL.2014 10:00:49



Band :	LTE Band 7	Channel :	CH21100 (Middle)
Band Width :	15MHz		

QPSK (RB Size 1, RB Offset 0)

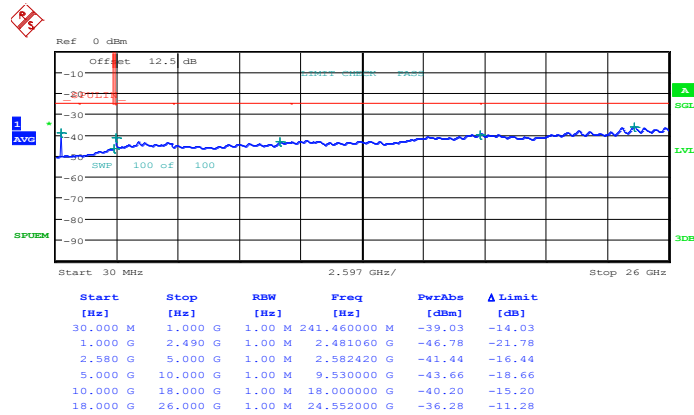
Date: 31.JUL.2014 10:02:52

16QAM (RB Size 1, RB Offset 0)

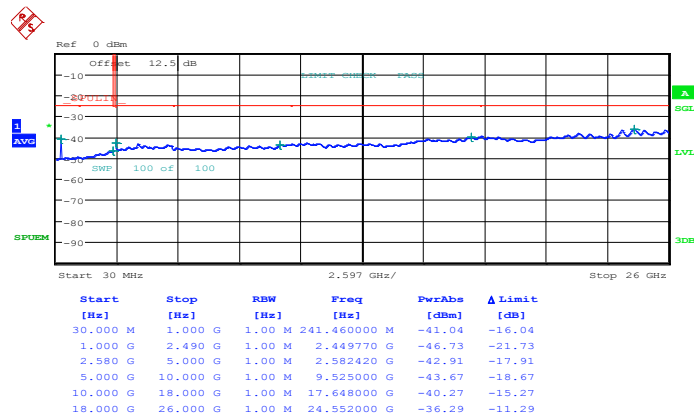
Date: 31.JUL.2014 10:03:53



Band :	LTE Band 7	Channel :	CH21375 (High)
Band Width :	15MHz		

QPSK (RB Size 1, RB Offset 0)

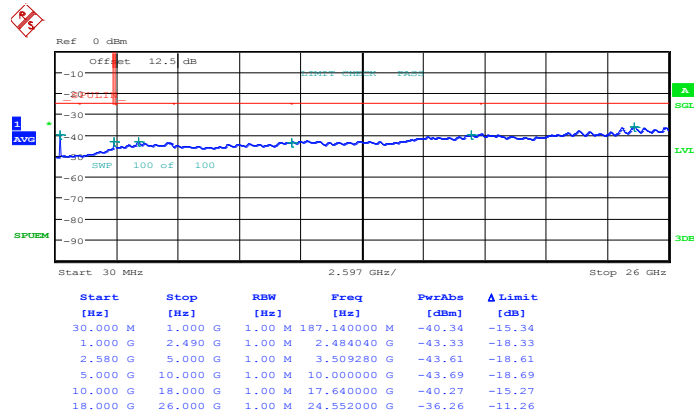
Date: 31.JUL.2014 10:08:55

16QAM (RB Size 1, RB Offset 0)

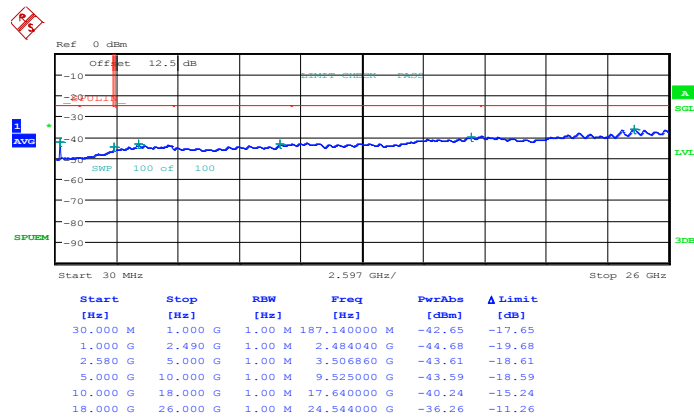
Date: 31.JUL.2014 10:09:57



Band :	LTE Band 7	Channel :	CH20850 (Low)
Band Width :	20MHz		

QPSK (RB Size 1, RB Offset 0)

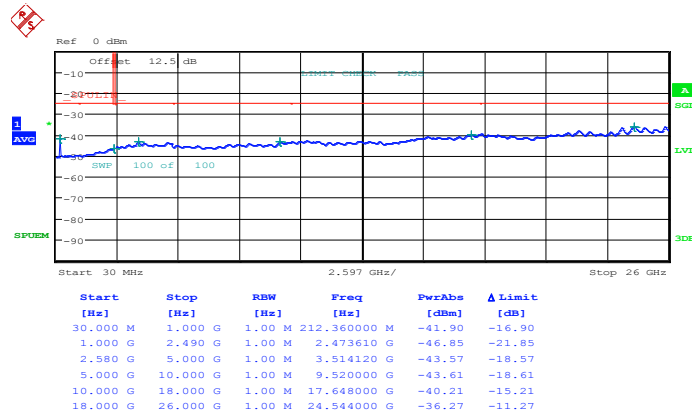
Date: 31.JUL.2014 10:15:02

16QAM (RB Size 1, RB Offset 0)

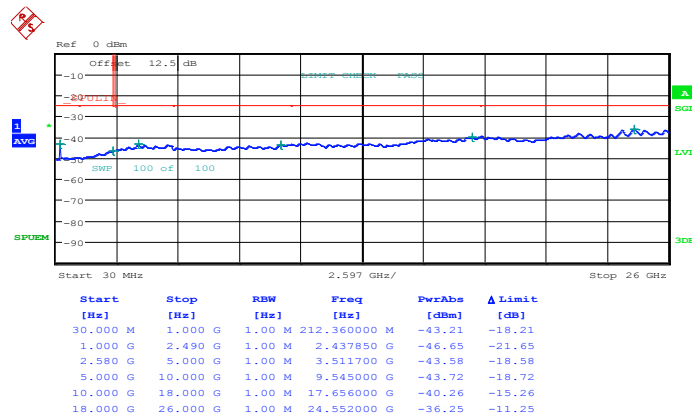
Date: 31.JUL.2014 10:16:03



Band :	LTE Band 7	Channel :	CH21100 (Middle)
Band Width :	20MHz		

QPSK (RB Size 1, RB Offset 0)

Date: 31.JUL.2014 10:18:05

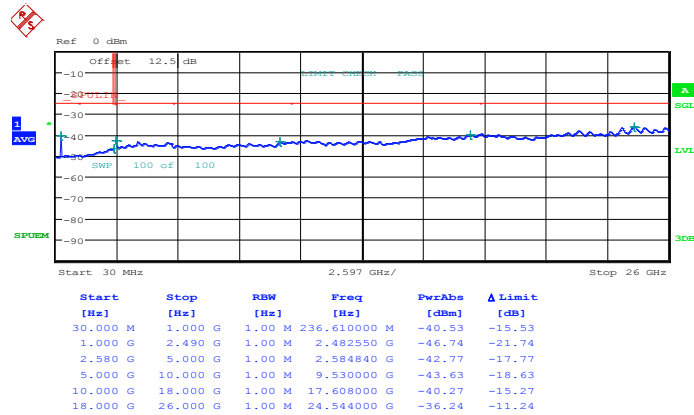
16QAM (RB Size 1, RB Offset 0)

Date: 31.JUL.2014 10:19:06



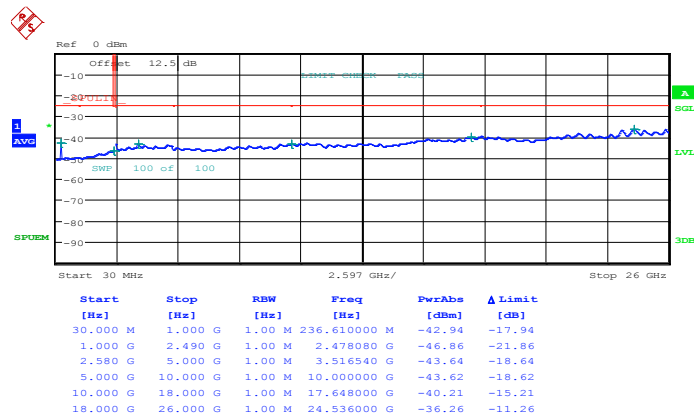
Band :	LTE Band 7	Channel :	CH21350 (High)
Band Width :	20MHz		

QPSK (RB Size 1, RB Offset 0)



Date: 31.JUL.2014 10:24:06

16QAM (RB Size 1, RB Offset 0)



Date: 31.JUL.2014 10:25:08

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.

For Band 7

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 $55 + 10 \log (P)$ dB.

For LTE Band 17

For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

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 $43 + 10\log(P)$ dB below the transmitter power P(Watts)

$$= P(W) - [43 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$$

$$= -13\text{dBm.}$$

For Band 7

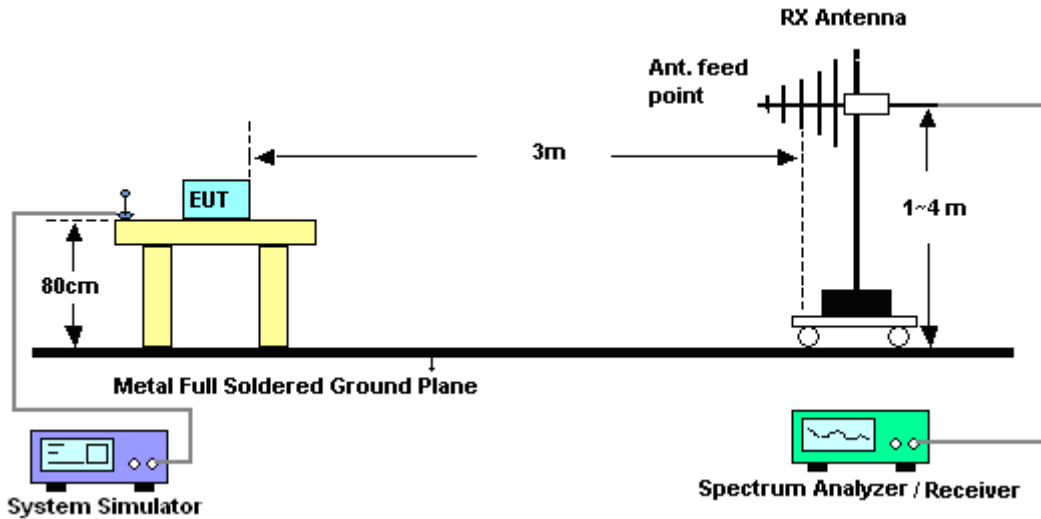
The limit line is derived from $55 + 10\log(P)$ dB below the transmitter power P(Watts)

11. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain

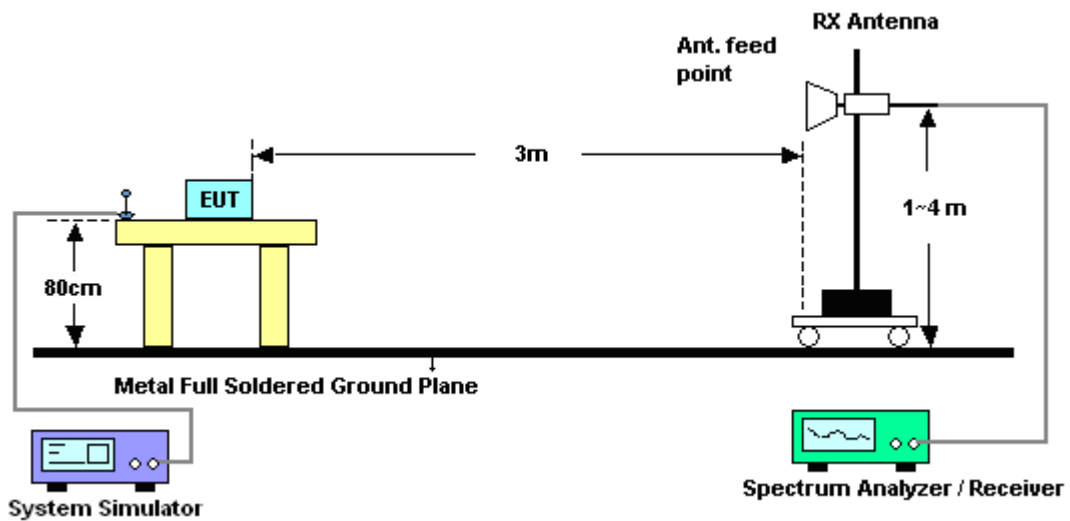
12. ERP (dBm) = EIRP - 2.15

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

<Low Channel>

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	1MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1648	-39.41	-13	-26.41	-46.01	-41.15	1.61	5.50	H	Pass
2472	-34.56	-13	-21.56	-45.51	-36.56	2.09	6.24	H	Pass
3296	-38.03	-13	-25.03	-49.9	-40.89	3.08	8.09	H	Pass
4120	-41.84	-13	-28.84	-55.95	-46.36	2.59	9.26	H	Pass

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	1MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1648	-44.09	-13	-31.09	-52.94	-45.83	1.61	5.50	V	Pass
2472	-40.46	-13	-27.46	-51.87	-42.46	2.09	6.24	V	Pass
3296	-40.56	-13	-27.56	-54	-43.42	3.08	8.09	V	Pass
4120	-46.51	-13	-33.51	-61.43	-51.03	2.59	9.26	V	Pass



<Middle Channel>

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	1MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1672	-46.00	-13	-33.00	-52.77	-47.72	1.62	5.49	H	Pass
2504	-36.87	-13	-23.87	-48	-38.84	2.1	6.22	H	Pass
3344	-42.87	-13	-29.87	-54.83	-45.76	3.03	8.07	H	Pass
4176	-46.72	-13	-33.72	-60.82	-51.26	2.52	9.21	H	Pass

Band :	LTE Band 5				Temperature :	23~25°C			
Test Mode :	1MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1672	-51.61	-13	-38.61	-60.56	-53.33	1.62	5.49	V	Pass
2504	-41.57	-13	-28.57	-53.11	-43.54	2.1	6.22	V	Pass
3344	-45.54	-13	-32.54	-58.91	-48.43	3.03	8.07	V	Pass
4176	-48.72	-13	-35.72	-63.66	-53.26	2.52	9.21	V	Pass



<High Channel>

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	1MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1696	-44.51	-13	-31.51	-51.37	-46.25	1.58	5.47	H	Pass
2544	-40.06	-13	-27.06	-51.21	-42.19	2.03	6.31	H	Pass
3392	-35.82	-13	-22.82	-47.82	-39.59	2.31	8.23	H	Pass
4240	-44.86	-13	-31.86	-58.94	-49.21	2.75	9.25	H	Pass

Band :	LTE Band 5				Temperature :	23~25°C			
Test Mode :	1MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1696	-48.54	-13	-35.54	-57.64	-50.28	1.58	5.47	V	Pass
2544	-41.13	-13	-28.13	-52.87	-43.26	2.03	6.31	V	Pass
3392	-39.68	-13	-26.68	-53.1	-43.45	2.31	8.23	V	Pass
4240	-49.49	-13	-36.49	-64.35	-53.84	2.75	9.25	V	Pass

**<Low Channel>**

Band :	LTE Band 5				Temperature :	23~25°C			
Test Mode :	3MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Horizontal			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1648	-39.64	-13	-26.64	-46.25	-41.38	1.6	5.49	H	Pass
2472	-35.09	-13	-22.09	-46.14	-37.12	2.08	6.26	H	Pass
3296	-39.03	-13	-26.03	-50.91	-41.9	3.09	8.11	H	Pass
4120	-41.48	-13	-28.48	-55.6	-46.03	2.61	9.31	H	Pass

Band :	LTE Band 5	Temperature :	23~25°C						
Test Mode :	3MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%						
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
1648	-44.29	-13	-31.29	-53.12	-46.03	1.6	5.49	V	Pass
2472	-40.36	-13	-27.36	-51.8	-42.39	2.08	6.26	V	Pass
3296	-41.02	-13	-28.02	-54.43	-43.89	3.09	8.11	V	Pass
4120	-46.30	-13	-33.30	-61.25	-50.85	2.61	9.31	V	Pass

**<Middle Channel>**

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1672	-47.29	-13	-34.29	-54.08	-49.01	1.62	5.49	H	Pass
2504	-38.92	-13	-25.92	-50.04	-40.89	2.1	6.22	H	Pass
3344	-42.96	-13	-29.96	-54.85	-45.85	3.03	8.07	H	Pass
4176	-45.25	-13	-32.25	-59.32	-49.79	2.52	9.21	H	Pass

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1672	-51.61	-13	-38.61	-60.59	-53.33	1.62	5.49	V	Pass
2504	-43.28	-13	-30.28	-54.78	-45.25	2.1	6.22	V	Pass
3344	-45.53	-13	-32.53	-58.99	-48.42	3.03	8.07	V	Pass
4176	-47.34	-13	-34.34	-62.32	-51.88	2.52	9.21	V	Pass



<High Channel>

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1688	-43.71	-13	-30.71	-50.46	-45.45	1.56	5.45	H	Pass
2536	-38.74	-13	-25.74	-49.83	-40.85	2.02	6.28	H	Pass
3384	-33.71	-13	-20.71	-45.69	-37.46	2.29	8.19	H	Pass
4232	-44.75	-13	-31.75	-58.84	-49.08	2.73	9.21	H	Pass

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1688	-45.89	-13	-32.89	-54.89	-47.63	1.56	5.45	V	Pass
2536	-40.58	-13	-27.58	-52.21	-42.69	2.02	6.28	V	Pass
3384	-40.27	-13	-27.27	-53.71	-44.02	2.29	8.19	V	Pass
4232	-47.76	-13	-34.76	-62.8	-52.09	2.73	9.21	V	Pass

**<Low Channel>**

Band :	LTE Band 5				Temperature :	23~25°C			
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Horizontal			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1648	-38.23	-13	-25.23	-44.78	-39.98	1.61	5.51	H	Pass
2472	-35.25	-13	-22.25	-46.19	-37.26	2.1	6.26	H	Pass
3296	-39.14	-13	-26.14	-51	-41.99	3.12	8.12	H	Pass
4120	-40.90	-13	-27.90	-55.05	-45.45	2.63	9.33	H	Pass

Band :	LTE Band 5				Temperature :	23~25°C			
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1648	-43.13	-13	-30.13	-51.95	-44.88	1.61	5.51	V	Pass
2472	-40.55	-13	-27.55	-52.1	-42.56	2.1	6.26	V	Pass
3296	-40.46	-13	-27.46	-53.91	-43.31	3.12	8.12	V	Pass
4120	-45.30	-13	-32.30	-60.21	-49.85	2.63	9.33	V	Pass



<Middle Channel>

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1672	-47.99	-13	-34.99	-54.76	-49.71	1.62	5.49	H	Pass
2504	-37.48	-13	-24.48	-48.59	-39.45	2.1	6.22	H	Pass
3336	-38.44	-13	-25.44	-50.33	-41.33	3.03	8.07	H	Pass
4168	-46.35	-13	-33.35	-60.35	-50.89	2.52	9.21	H	Pass

Band :	LTE Band 5				Temperature :	23~25°C			
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1664	-51.97	-13	-38.97	-60.89	-53.69	1.62	5.49	V	Pass
2504	-41.59	-13	-28.59	-53.14	-43.56	2.1	6.22	V	Pass
3336	-43.88	-13	-30.88	-57.28	-46.77	3.03	8.07	V	Pass
4168	-50.44	-13	-37.44	-65.28	-54.98	2.52	9.21	V	Pass



<High Channel>

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1688	-41.81	-13	-28.81	-48.5	-43.56	1.54	5.44	H	Pass
2536	-37.46	-13	-24.46	-48.59	-39.57	2.01	6.27	H	Pass
3376	-34.09	-13	-21.09	-46.09	-37.94	2.18	8.18	H	Pass
4224	-42.52	-13	-29.52	-56.49	-46.88	2.68	9.19	H	Pass

Band :	LTE Band 5				Temperature :	23~25°C			
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1688	-44.95	-13	-31.95	-53.98	-46.7	1.54	5.44	V	Pass
2536	-40.32	-13	-27.32	-51.95	-42.43	2.01	6.27	V	Pass
3376	-37.47	-13	-24.47	-50.9	-41.32	2.18	8.18	V	Pass
4224	-45.73	-13	-32.73	-60.67	-50.09	2.68	9.19	V	Pass

**<Low Channel>**

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1648	-38.60	-13	-25.60	-45.2	-40.4	1.63	5.58	H	Pass
2472	-35.94	-13	-22.94	-47.02	-37.89	2.21	6.31	H	Pass
3296	-39.11	-13	-26.11	-50.89	-41.99	3.1	8.13	H	Pass
4120	-41.57	-13	-28.57	-55.68	-46.12	2.65	9.35	H	Pass

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1648	-44.61	-13	-31.61	-53.45	-46.41	1.63	5.58	V	Pass
2472	-40.60	-13	-27.60	-52.06	-42.55	2.21	6.31	V	Pass
3296	-39.10	-13	-26.10	-53.57	-41.98	3.1	8.13	V	Pass
4120	-46.61	-13	-33.61	-61.5	-51.16	2.65	9.35	V	Pass

**<Middle Channel>**

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1664	-45.61	-13	-32.61	-52.28	-47.33	1.62	5.49	H	Pass
2496	-36.18	-13	-23.18	-47.32	-38.15	2.1	6.22	H	Pass
3328	-36.60	-13	-23.60	-48.47	-39.49	3.03	8.07	H	Pass
4160	-45.54	-13	-32.54	-59.65	-50.08	2.52	9.21	H	Pass

Band :	LTE Band 5				Temperature :	23~25°C			
Test Mode :	10MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1664	-48.84	-13	-35.84	-57.76	-50.56	1.62	5.49	V	Pass
2496	-39.92	-13	-26.92	-51.46	-41.89	2.1	6.22	V	Pass
3328	-39.80	-13	-26.80	-53.29	-42.69	3.03	8.07	V	Pass
4160	-48.70	-13	-35.70	-63.67	-53.24	2.52	9.21	V	Pass



<High Channel>

Band :	LTE Band 5					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1680	-41.37	-13	-28.37	-48.13	-43.12	1.52	5.42	H	Pass
2520	-39.45	-13	-26.45	-50.52	-41.56	1.99	6.25	H	Pass
3360	-37.68	-13	-24.68	-49.66	-41.53	2.14	8.14	H	Pass
4200	-44.44	-13	-31.44	-58.47	-48.82	2.63	9.16	H	Pass

Band :	LTE Band 5				Temperature :	23~25°C			
Test Mode :	10MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1680	-46.36	-13	-33.36	-55.37	-48.11	1.52	5.42	V	Pass
2520	-41.30	-13	-28.30	-52.87	-43.41	1.99	6.25	V	Pass
3360	-40.78	-13	-27.78	-54.21	-44.63	2.14	8.14	V	Pass
4200	-47.60	-13	-34.60	-62.53	-51.98	2.63	9.16	V	Pass

**<Low Channel>**

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	1MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Horizontal			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3700	-26.54	-13	-13.54	-41.77	-32.8	2.48	8.74	H	Pass
5548	-35.41	-13	-22.41	-56.11	-43.1	2.96	10.65	H	Pass
7403	-27.47	-13	-14.47	-54.81	-36.1	3.48	12.11	H	Pass

Band :	LTE Band 2	Temperature :	23~25°C						
Test Mode :	1MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%						
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3700	-34.94	-13	-21.94	-51.16	-41.2	2.48	8.74	V	Pass
5548	-39.51	-13	-26.51	-60.94	-47.2	2.96	10.65	V	Pass
7403	-30.47	-13	-17.47	-57.56	-39.1	3.48	12.11	V	Pass



<Middle Channel>

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	1MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Horizontal			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3756	-25.80	-13	-12.80	-41.58	-32.1	2.51	8.81	H	Pass
5639	-32.39	-13	-19.39	-53.4	-40.1	2.99	10.70	H	Pass
7515	-30.37	-13	-17.37	-58.31	-38.9	3.59	12.12	H	Pass

Band :	LTE Band 2	Temperature :	23~25°C						
Test Mode :	1MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%						
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3756	-35.60	-13	-22.60	-52.09	-41.9	2.51	8.81	V	Pass
5639	-37.39	-13	-24.39	-58.03	-45.1	2.99	10.70	V	Pass
7515	-31.97	-13	-18.97	-59.31	-40.5	3.59	12.12	V	Pass

**<High Channel>**

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	1MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Horizontal			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3819	-20.84	-13	-7.84	-36.5	-27.1	2.61	8.87	H	Pass
5723	-32.70	-13	-19.70	-54.08	-40.5	3.09	10.89	H	Pass
7634	-31.60	-13	-18.60	-58.21	-40.1	3.68	12.18	H	Pass

Band :	LTE Band 2	Temperature :	23~25°C						
Test Mode :	1MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%						
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)	(dBm)	(dB)	(dBm)	(dBm)	(dBm)	(dB)	(dBi)		
3819	-32.84	-13	-19.84	-49.49	-39.1	2.61	8.87	V	Pass
5723	-36.90	-13	-23.90	-57.99	-44.7	3.09	10.89	V	Pass
7634	-32.40	-13	-19.40	-59.26	-40.9	3.68	12.18	V	Pass

**<Low Channel>**

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	3MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Horizontal			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3700	-26.84	-13	-13.84	-42.12	-33.1	2.47	8.73	H	Pass
5548	-35.35	-13	-22.35	-55.76	-43.1	2.93	10.68	H	Pass
7403	-26.58	-13	-13.58	-54.45	-35.3	3.42	12.14	H	Pass

Band :	LTE Band 2	Temperature :	23~25°C						
Test Mode :	3MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%						
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3700	-34.24	-13	-21.24	-50.89	-40.5	2.47	8.73	V	Pass
5548	-40.75	-13	-27.75	-61.34	-48.5	2.93	10.68	V	Pass
7403	-30.48	-13	-17.48	-57.75	-39.2	3.42	12.14	V	Pass

**<Middle Channel>**

Band :	LTE Band 2					Temperature :	23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3756	-26.40	-13	-13.40	-41.9	-32.7	2.51	8.81	H	Pass
5639	-33.09	-13	-20.09	-54.12	-40.8	2.99	10.70	H	Pass
7515	-31.17	-13	-18.17	-58.62	-39.7	3.59	12.12	H	Pass

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	3MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3756	-35.40	-13	-22.40	-51.87	-41.7	2.51	8.81	V	Pass
5632	-38.09	-13	-25.09	-59.17	-45.8	2.99	10.70	V	Pass
7515	-32.27	-13	-19.27	-59.81	-40.8	3.59	12.12	V	Pass



<High Channel>

Band :	LTE Band 2					Temperature :	23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3812	-21.67	-13	-8.67	-37.19	-27.9	2.64	8.87	H	Pass
5723	-33.06	-13	-20.06	-54.46	-40.8	3.08	10.82	H	Pass
7627	-30.61	-13	-17.61	-57.31	-39.1	3.64	12.13	H	Pass
9538	-37.14	-13	-24.14	-63.94	-46.3	4.22	13.38	H	Pass

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	3MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3812	-31.27	-13	-18.27	-47.94	-37.5	2.64	8.87	V	Pass
5723	-37.36	-13	-24.36	-58.27	-45.1	3.08	10.82	V	Pass
7627	-31.61	-13	-18.61	-58.15	-40.1	3.64	12.13	V	Pass
9538	-39.54	-13	-26.54	-66.11	-48.7	4.22	13.38	V	Pass

**<Low Channel>**

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Horizontal			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3700	-26.87	-13	-13.87	-42.24	-33.2	2.46	8.79	H	Pass
5548	-34.63	-13	-21.63	-55.35	-42.5	2.9	10.77	H	Pass
7403	-26.28	-13	-13.28	-53.81	-35.1	3.42	12.24	H	Pass

Band :	LTE Band 2	Temperature :	23~25°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%						
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3700	-34.17	-13	-21.17	-50.51	-40.5	2.46	8.79	V	Pass
5548	-41.03	-13	-28.03	-61.55	-48.9	2.9	10.77	V	Pass
7403	-30.28	-13	-17.28	-57.3	-39.1	3.42	12.24	V	Pass

**<Middle Channel>**

Band :	LTE Band 2					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3756	-26.40	-13	-13.40	-42.05	-32.7	2.51	8.81	H	Pass
5632	-29.39	-13	-16.39	-50.43	-37.1	2.99	10.70	H	Pass
7508	-30.37	-13	-17.37	-57.99	-38.9	3.59	12.12	H	Pass

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3756	-35.20	-13	-22.20	-51.78	-41.5	2.51	8.81	V	Pass
5632	-35.79	-13	-22.79	-56.86	-43.5	2.99	10.70	V	Pass
7508	-32.37	-13	-19.37	-59.92	-40.9	3.59	12.12	V	Pass



<High Channel>

Band :	LTE Band 2					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3812	-23.16	-13	-10.16	-38.83	-29.5	2.59	8.93	H	Pass
5716	-34.20	-13	-21.20	-55.48	-42.1	3.08	10.98	H	Pass
7620	-30.17	-13	-17.17	-56.88	-38.7	3.64	12.17	H	Pass
9524	-37.90	-13	-24.90	-64.66	-47.3	4.23	13.63	H	Pass

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3812	-32.46	-13	-19.46	-48.94	-38.8	2.59	8.93	V	Pass
5716	-38.60	-13	-25.60	-59.38	-46.5	3.08	10.98	V	Pass
7620	-32.57	-13	-19.57	-58.97	-41.1	3.64	12.17	V	Pass
9524	-41.10	-13	-28.10	-67.96	-50.5	4.23	13.63	V	Pass



<Low Channel>

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	10MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Horizontal			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3700	-27.26	-13	-14.26	-42.44	-33.68	2.47	8.89	H	Pass
5548	-34.95	-13	-21.95	-54.96	-42.81	2.93	10.79	H	Pass
7403	-26.76	-13	-13.76	-53.98	-35.57	3.45	12.26	H	Pass

Band :	LTE Band 2	Temperature :	23~25°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%						
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3700	-34.10	-13	-21.10	-50.29	-40.52	2.47	8.89	V	Pass
5548	-41.27	-13	-28.27	-61.58	-49.13	2.93	10.79	V	Pass
7403	-30.42	-13	-17.42	-57.09	-39.23	3.45	12.26	V	Pass

**<Middle Channel>**

Band :	LTE Band 2					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3749	-26.26	-13	-13.26	-41.58	-32.56	2.51	8.81	H	Pass
5625	-28.54	-13	-15.54	-49.68	-36.25	2.99	10.70	H	Pass
7501	-29.22	-13	-16.22	-57.27	-37.75	3.59	12.12	H	Pass

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	10MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3749	-34.68	-13	-21.68	-50.71	-40.98	2.51	8.81	V	Pass
5625	-35.52	-13	-22.52	-56.47	-43.23	2.99	10.70	V	Pass
7501	-32.12	-13	-19.12	-59.45	-40.65	3.59	12.12	V	Pass

**<High Channel>**

Band :	LTE Band 2				Temperature :		23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0				Relative Humidity :		44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :		Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3798	-24.60	-13	-11.60	-40.4	-30.96	2.52	8.88	H	Pass
5702	-30.97	-13	-17.97	-51.59	-38.63	3.09	10.75	H	Pass
7599	-32.94	-13	-19.94	-59.1	-41.58	3.65	12.29	H	Pass

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	10MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3798	-34.88	-13	-21.88	-50.57	-41.24	2.52	8.88	V	Pass
5702	-35.79	-13	-22.79	-56.3	-43.45	3.09	10.75	V	Pass
7599	-33.44	-13	-20.44	-59.88	-42.08	3.65	12.29	V	Pass

**<Low Channel>**

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	15MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Horizontal			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3700	-27.89	-13	-14.89	-42.82	-34.24	2.49	8.84	H	Pass
5555	-34.83	-13	-21.83	-54.44	-42.68	3.01	10.86	H	Pass
7403	-26.11	-13	-13.11	-54.19	-35.08	3.38	12.35	H	Pass

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	15MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3700	-30.30	-13	-17.30	-46.8	-36.65	2.49	8.84	V	Pass
5555	-38.40	-13	-25.40	-58.76	-46.25	3.01	10.86	V	Pass
7403	-29.02	-13	-16.02	-56.44	-37.99	3.38	12.35	V	Pass

**<Middle Channel>**

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	15MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Horizontal			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3749	-26.22	-13	-13.22	-41.91	-32.52	2.51	8.81	H	Pass
5618	-30.72	-13	-17.72	-51.16	-38.43	2.99	10.70	H	Pass
7494	-29.16	-13	-16.16	-57.17	-37.69	3.59	12.12	H	Pass

Band :	LTE Band 2	Temperature :	23~25°C						
Test Mode :	15MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%						
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading	Power	loss	Gain	(H/V)	
3749	-28.41	-13	-15.41	-45.14	-34.71	2.51	8.81	V	Pass
5618	-35.54	-13	-22.54	-55.94	-43.25	2.99	10.70	V	Pass
7494	-31.10	-13	-18.10	-59.18	-39.63	3.59	12.12	V	Pass

**<High Channel>**

Band :	LTE Band 2				Temperature :		23~25°C		
Test Mode :	15MHz QPSK RB Size 1 Offset 0				Relative Humidity :		44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :		Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3791	-24.77	-13	-11.77	-40.1	-31.08	2.52	8.83	H	Pass
5688	-28.26	-13	-15.26	-49.52	-35.99	3.03	10.76	H	Pass
7585	-31.70	-13	-18.70	-58.29	-40.25	3.61	12.16	H	Pass

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	15MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3791	-28.83	-13	-15.83	-45.23	-35.14	2.52	8.83	V	Pass
5688	-32.95	-13	-19.95	-53.01	-40.68	3.03	10.76	V	Pass
7585	-32.34	-13	-19.34	-58.87	-40.89	3.61	12.16	V	Pass

**<Low Channel>**

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	20MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Horizontal			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3700	-27.57	-13	-14.57	-42.86	-33.95	2.51	8.89	H	Pass
5555	-33.43	-13	-20.43	-54.23	-41.29	3.03	10.89	H	Pass
7403	-30.86	-13	-17.86	-54.03	-40	3.24	12.38	H	Pass

Band :	LTE Band 2	Temperature :	23~25℃						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%						
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)	(dBm)	(dB)	(dBm)	(dBm)	(dBm)	(dB)	(dBi)		
3700	-31.15	-13	-18.15	-47.35	-37.53	2.51	8.89	V	Pass
5555	-38.87	-13	-25.87	-59.17	-46.73	3.03	10.89	V	Pass
7440	-29.74	-13	-16.74	-56.78	-38.88	3.24	12.38	V	Pass

**<Middle Channel>**

Band :	LTE Band 2					Temperature :	23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3742	-27.98	-13	-14.98	-42.49	-34.28	2.51	8.81	H	Pass
5611	-28.28	-13	-15.28	-49.55	-35.99	2.99	10.70	H	Pass
7487	-30.04	-13	-17.04	-58.02	-38.57	3.59	12.12	H	Pass

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	20MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3742	-28.39	-13	-15.39	-44.98	-34.69	2.51	8.81	V	Pass
5611	-34.10	-13	-21.10	-55.4	-41.81	2.99	10.70	V	Pass
7487	-31.10	-13	-18.10	-58.93	-39.63	3.59	12.12	V	Pass

**<High Channel>**

Band :	LTE Band 2				Temperature :	23~25°C			
Test Mode :	20MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Horizontal			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3784	-25.18	-13	-12.18	-40.7	-31.56	2.52	8.90	H	Pass
5674	-32.09	-13	-19.09	-53.01	-39.84	3.01	10.76	H	Pass
7564	-29.56	-13	-16.56	-56.62	-38.09	3.62	12.15	H	Pass

Band :	LTE Band 2	Temperature :	23~25°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%						
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3784	-27.65	-13	-14.65	-44.09	-34.03	2.52	8.90	V	Pass
5674	-36.72	-13	-23.72	-57.42	-44.47	3.01	10.76	V	Pass
7564	-30.64	-13	-17.64	-57.48	-39.17	3.62	12.15	V	Pass



<Low Channel>

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	1MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3420	-37.23	-13	-24.23	-51.43	-41.1	4.41	8.28	H	Pass
5128	-32.93	-13	-19.93	-51.52	-37.5	5.28	9.85	H	Pass
6843	-28.57	-13	-15.57	-54.29	-33.8	6.01	11.24	H	Pass
8551	-32.27	-13	-19.27	-58.1	-37.2	8.15	13.08	H	Pass
10264	-33.52	-13	-20.52	-62.73	-37.8	8.54	12.82	H	Pass
11968	-32.17	-13	-19.17	-63.47	-36.5	8.48	12.81	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	1MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3420	-38.93	-13	-25.93	-54.59	-42.8	4.41	8.28	V	Pass
5128	-34.93	-13	-21.93	-53.68	-39.5	5.28	9.85	V	Pass
6843	-32.27	-13	-19.27	-57.22	-37.5	6.01	11.24	V	Pass
8551	-36.27	-13	-23.27	-61.6	-41.2	8.15	13.08	V	Pass
10264	-35.92	-13	-22.92	-63.89	-40.2	8.54	12.82	V	Pass
11968	-34.17	-13	-21.17	-64.34	-38.5	8.48	12.81	V	Pass



<Middle Channel>

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	1MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3462	-34.97	-13	-21.97	-49.68	-38.8	4.48	8.31	H	Pass
5198	-35.56	-13	-22.56	-54.48	-40.2	5.332	9.98	H	Pass
6927	-26.16	-13	-13.16	-52.55	-31.4	6.1	11.34	H	Pass
8663	-34.18	-13	-21.18	-60.03	-39.1	8.25	13.17	H	Pass
10392	-31.21	-13	-18.21	-60.55	-35.5	8.65	12.94	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	1MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3462	-37.27	-13	-24.27	-53.06	-41.1	4.48	8.31	V	Pass
5198	-35.36	-13	-22.36	-54.57	-40	5.332	9.98	V	Pass
6927	-30.26	-13	-17.26	-56.08	-35.5	6.1	11.34	V	Pass
8663	-38.78	-13	-25.78	-64.36	-43.7	8.25	13.17	V	Pass
10392	-33.41	-13	-20.41	-61.76	-37.7	8.65	12.94	V	Pass



<High Channel>

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	1MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3504	-32.53	-13	-19.53	-47.07	-36.8	4.14	8.41	H	Pass
5261	-29.05	-13	-16.05	-48.57	-34	5.12	10.07	H	Pass
7018	-26.41	-13	-13.41	-53.06	-31.7	6.13	11.42	H	Pass
8768	-30.20	-13	-17.20	-56.39	-35.3	8.05	13.15	H	Pass
10520	-32.26	-13	-19.26	-62.24	-37.8	7.38	12.92	H	Pass
12280	-34.00	-13	-21.00	-66.23	-37.1	9.8	12.90	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	1MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3504	-39.33	-13	-26.33	-55.18	-43.6	4.14	8.41	V	Pass
5261	-30.35	-13	-17.35	-50.01	-35.3	5.12	10.07	V	Pass
7018	-30.51	-13	-17.51	-56.36	-35.8	6.13	11.42	V	Pass
8768	-36.60	-13	-23.60	-61.66	-41.7	8.05	13.15	V	Pass
10520	-35.96	-13	-22.96	-64.37	-41.5	7.38	12.92	V	Pass
12272	-35.50	-13	-22.50	-66.29	-38.6	9.8	12.90	V	Pass



<Low Channel>

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3420	-37.22	-13	-24.22	-51.92	-41.1	4.43	8.31	H	Pass
5128	-34.13	-13	-21.13	-52.5	-38.7	5.31	9.88	H	Pass
6843	-28.27	-13	-15.27	-53.89	-33.6	6.02	11.35	H	Pass
8551	-32.12	-13	-19.12	-58.08	-37.1	8.13	13.11	H	Pass
10264	-32.50	-13	-19.50	-61.97	-36.8	8.56	12.86	H	Pass
11968	-33.18	-13	-20.18	-64.49	-37.5	8.5	12.82	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3420	-38.82	-13	-25.82	-54.52	-42.7	4.43	8.31	V	Pass
5128	-34.23	-13	-21.23	-53.1	-38.8	5.31	9.88	V	Pass
6843	-31.87	-13	-18.87	-57.16	-37.2	6.02	11.35	V	Pass
8551	-37.52	-13	-24.52	-63.08	-42.5	8.13	13.11	V	Pass
10256	-35.20	-13	-22.20	-63.91	-39.5	8.56	12.86	V	Pass
11968	-34.08	-13	-21.08	-63.84	-38.4	8.5	12.82	V	Pass



<Middle Channel>

Band :	LTE Band 4					Temperature :	23~25℃		
Test Mode :	3MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3462	-35.07	-13	-22.07	-49.69	-38.9	4.48	8.31	H	Pass
5191	-35.46	-13	-22.46	-54.46	-40.1	5.332	9.98	H	Pass
6927	-25.56	-13	-12.56	-51.97	-30.8	6.1	11.34	H	Pass
8656	-34.18	-13	-21.18	-60.07	-39.1	8.25	13.17	H	Pass
10384	-31.51	-13	-18.51	-60.61	-35.8	8.65	12.94	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3462	-36.97	-13	-23.97	-53.19	-40.8	4.48	8.31	V	Pass
5191	-36.36	-13	-23.36	-55.17	-41	5.332	9.98	V	Pass
6927	-30.26	-13	-17.26	-55.85	-35.5	6.1	11.34	V	Pass
8656	-40.18	-13	-27.18	-65.64	-45.1	8.25	13.17	V	Pass
10384	-34.21	-13	-21.21	-62.71	-38.5	8.65	12.94	V	Pass



<High Channel>

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3504	-32.43	-13	-19.43	-49.96	-36.7	4.14	8.41	H	Pass
5254	-30.15	-13	-17.15	-49.27	-35.1	5.12	10.07	H	Pass
7011	-26.91	-13	-13.91	-53.54	-32.2	6.13	11.42	H	Pass
8761	-31.40	-13	-18.40	-57	-36.5	8.05	13.15	H	Pass
10512	-30.96	-13	-17.96	-61.06	-36.5	7.38	12.92	H	Pass
12264	-34.10	-13	-21.10	-66.59	-37.2	9.8	12.90	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	3MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3504	-39.23	-13	-26.23	-55.26	-43.5	4.14	8.41	V	Pass
5254	-31.95	-13	-18.95	-51.57	-36.9	5.12	10.07	V	Pass
7011	-31.81	-13	-18.81	-57.65	-37.1	6.13	11.42	V	Pass
8761	-34.90	-13	-21.90	-60.37	-40	8.05	13.15	V	Pass
10512	-35.26	-13	-22.26	-63.64	-40.8	7.38	12.92	V	Pass
12264	-34.40	-13	-21.40	-64.9	-37.5	9.8	12.90	V	Pass



<Low Channel>

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3420	-36.37	-13	-23.37	-50.9	-40.2	4.48	8.31	H	Pass
5128	-32.46	-13	-19.46	-51.3	-37.1	5.332	9.98	H	Pass
6843	-28.86	-13	-15.86	-54.62	-34.1	6.1	11.34	H	Pass
8551	-30.98	-13	-17.98	-57.06	-35.9	8.25	13.17	H	Pass
10264	-33.51	-13	-20.51	-63.03	-37.8	8.65	12.94	H	Pass
11968	-33.19	-13	-20.19	-64.58	-37.5	8.59	12.90	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3420	-38.27	-13	-25.27	-54.08	-42.1	4.48	8.31	V	Pass
5128	-36.06	-13	-23.06	-54.69	-40.7	5.332	9.98	V	Pass
6843	-32.26	-13	-19.26	-57.27	-37.5	6.1	11.34	V	Pass
8551	-37.58	-13	-24.58	-63.05	-42.5	8.25	13.17	V	Pass
10264	-35.91	-13	-22.91	-64.19	-40.2	8.65	12.94	V	Pass
11968	-35.89	-13	-22.89	-65.78	-40.2	8.59	12.90	V	Pass



<Middle Channel>

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3462	-34.47	-13	-21.47	-40.09	-38.3	4.48	8.31	H	Pass
5191	-35.56	-13	-22.56	-54.56	-40.2	5.332	9.98	H	Pass
6920	-25.56	-13	-12.56	-51.66	-30.8	6.1	11.34	H	Pass
8649	-35.58	-13	-22.58	-61.41	-40.5	8.25	13.17	H	Pass
10384	-32.61	-13	-19.61	-62.03	-36.9	8.65	12.94	H	Pass

Band :	LTE Band 4				Temperature :	23~25°C			
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3462	-37.47	-13	-24.47	-53.22	-41.3	4.48	8.31	V	Pass
5191	-36.56	-13	-23.56	-55.81	-41.2	5.332	9.98	V	Pass
6920	-29.86	-13	-16.86	-55.08	-35.1	6.1	11.34	V	Pass
8649	-39.28	-13	-26.28	-65.01	-44.2	8.25	13.17	V	Pass
10384	-34.51	-13	-21.51	-62.64	-38.8	8.65	12.94	V	Pass



<High Channel>

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3497	-32.83	-13	-19.83	-47.2	-37.1	4.16	8.43	H	Pass
5247	-29.54	-13	-16.54	-48.89	-34.5	5.13	10.09	H	Pass
7004	-26.22	-13	-13.22	-53.29	-31.5	6.15	11.43	H	Pass
8754	-29.94	-13	-16.94	-56.54	-35	8.09	13.15	H	Pass
10504	-31.58	-13	-18.58	-61.16	-37.1	7.41	12.93	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3497	-39.43	-13	-26.43	-54.77	-43.7	4.16	8.43	V	Pass
5254	-30.84	-13	-17.84	-50.38	-35.8	5.13	10.09	V	Pass
7004	-31.22	-13	-18.22	-56.83	-36.5	6.15	11.43	V	Pass
8754	-35.74	-13	-22.74	-61.13	-40.8	8.09	13.15	V	Pass
10504	-35.28	-13	-22.28	-63.65	-40.8	7.41	12.93	V	Pass

**<Low Channel>**

Band :	LTE Band 4					Temperature :	23~25℃		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3420	-38.28	-13	-25.28	-52.62	-42.1	4.51	8.33	H	Pass
5128	-34.43	-13	-21.43	-52.91	-39.1	5.36	10.03	H	Pass
6843	-27.97	-13	-14.97	-53.78	-33.2	6.13	11.36	H	Pass
8551	-29.00	-13	-16.00	-55.12	-33.9	8.29	13.19	H	Pass
10264	-33.55	-13	-20.55	-62.85	-37.8	8.74	12.99	H	Pass
11976	-32.01	-13	-19.01	-63.39	-36.3	8.65	12.94	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3420	-40.18	-13	-27.18	-55.93	-44	4.51	8.33	V	Pass
5128	-34.03	-13	-21.03	-52.31	-38.7	5.36	10.03	V	Pass
6843	-31.37	-13	-18.37	-56.46	-36.6	6.13	11.36	V	Pass
8551	-36.30	-13	-23.30	-61.76	-41.2	8.29	13.19	V	Pass
10264	-37.35	-13	-24.35	-65.33	-41.6	8.74	12.99	V	Pass
11976	-35.31	-13	-22.31	-65.05	-39.6	8.65	12.94	V	Pass



<Middle Channel>

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3455	-34.27	-13	-21.27	-48.9	-38.1	4.48	8.31	H	Pass
5184	-36.16	-13	-23.16	-55.43	-40.8	5.332	9.98	H	Pass
6913	-26.06	-13	-13.06	-52.41	-31.3	6.1	11.34	H	Pass
8642	-34.18	-13	-21.18	-59.79	-39.1	8.25	13.17	H	Pass
10368	-32.91	-13	-19.91	-62.05	-37.2	8.65	12.94	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3455	-37.27	-13	-24.27	-52.89	-41.1	4.48	8.31	V	Pass
5184	-38.06	-13	-25.06	-57.02	-42.7	5.332	9.98	V	Pass
6913	-29.46	-13	-16.46	-54.94	-34.7	6.1	11.34	V	Pass
8642	-39.58	-13	-26.58	-65.2	-44.5	8.25	13.17	V	Pass
10368	-35.01	-13	-22.01	-63.05	-39.3	8.65	12.94	V	Pass



<High Channel>

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3490	-34.51	-13	-21.51	-48.82	-38.7	4.2	8.39	H	Pass
5233	-30.72	-13	-17.72	-50.31	-35.6	5.17	10.05	H	Pass
6983	-26.20	-13	-13.20	-52.58	-31.4	6.2	11.40	H	Pass
8726	-32.49	-13	-19.49	-57.36	-37.5	8.11	13.12	H	Pass
10472	-32.06	-13	-19.06	-61.6	-37.5	7.45	12.89	H	Pass
12216	-33.22	-13	-20.22	-65.57	-36.2	9.88	12.86	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3490	-38.91	-13	-25.91	-54.54	-43.1	4.2	8.39	V	Pass
5233	-32.92	-13	-19.92	-51.97	-37.8	5.17	10.05	V	Pass
6983	-30.40	-13	-17.40	-56.23	-35.6	6.2	11.40	V	Pass
8726	-35.19	-13	-22.19	-60.91	-40.2	8.11	13.12	V	Pass
10472	-35.66	-13	-22.66	-64.01	-41.1	7.45	12.89	V	Pass
12216	-35.12	-13	-22.12	-65.4	-38.1	9.88	12.86	V	Pass



<Low Channel>

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	15MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3420	-38.23	-13	-25.23	-52.48	-42	4.59	8.36	H	Pass
5135	-33.46	-13	-20.46	-51.68	-38.1	5.41	10.05	H	Pass
6843	-28.46	-13	-15.46	-54.28	-33.7	6.15	11.39	H	Pass
8551	-30.22	-13	-17.22	-56.1	-35.1	8.36	13.24	H	Pass
10264	-33.22	-13	-20.22	-62.46	-37.5	8.75	13.03	H	Pass
11976	-32.51	-13	-19.51	-63.9	-36.7	8.77	12.96	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	15MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3420	-39.03	-13	-26.03	-55.12	-42.8	4.59	8.36	V	Pass
5135	-35.06	-13	-22.06	-53.77	-39.7	5.41	10.05	V	Pass
6843	-31.26	-13	-18.26	-56.82	-36.5	6.15	11.39	V	Pass
8551	-37.12	-13	-24.12	-62.47	-42	8.36	13.24	V	Pass
10264	-36.52	-13	-23.52	-64.88	-40.8	8.75	13.03	V	Pass
11976	-35.51	-13	-22.51	-65.33	-39.7	8.77	12.96	V	Pass



<Middle Channel>

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	15MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3448	-36.57	-13	-23.57	-51.17	-40.4	4.48	8.31	H	Pass
5177	-36.26	-13	-23.26	-55.32	-40.9	5.332	9.98	H	Pass
6906	-26.76	-13	-13.76	-52.91	-32	6.1	11.34	H	Pass
8628	-32.98	-13	-19.98	-59.01	-37.9	8.25	13.17	H	Pass
10352	-33.21	-13	-20.21	-62.42	-37.5	8.65	12.94	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	15MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3448	-38.27	-13	-25.27	-54.16	-42.1	4.48	8.31	V	Pass
5177	-38.26	-13	-25.26	-57.11	-42.9	5.332	9.98	V	Pass
6906	-28.46	-13	-15.46	-54.04	-33.7	6.1	11.34	V	Pass
8628	-39.68	-13	-26.68	-65.3	-44.6	8.25	13.17	V	Pass
10352	-36.21	-13	-23.21	-64.62	-40.5	8.65	12.94	V	Pass



<High Channel>

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	15MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3483	-34.36	-13	-21.36	-49.12	-38.5	4.24	8.38	H	Pass
5219	-30.63	-13	-17.63	-49.89	-35.5	5.18	10.05	H	Pass
6962	-27.31	-13	-14.31	-53.65	-32.5	6.19	11.38	H	Pass
8705	-30.81	-13	-17.81	-56.8	-35.8	8.1	13.09	H	Pass
10448	-31.25	-13	-18.25	-60.63	-36.7	7.43	12.88	H	Pass
12184	-33.55	-13	-20.55	-65.6	-36.5	9.89	12.84	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	15MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3483	-39.36	-13	-26.36	-54.68	-43.5	4.24	8.38	V	Pass
5219	-32.23	-13	-19.23	-51.59	-37.1	5.18	10.05	V	Pass
6962	-30.51	-13	-17.51	-56.17	-35.7	6.19	11.38	V	Pass
8705	-36.31	-13	-23.31	-62.17	-41.3	8.1	13.09	V	Pass
10448	-35.35	-13	-22.35	-64.04	-40.8	7.43	12.88	V	Pass
12184	-34.95	-13	-21.95	-65.34	-37.9	9.89	12.84	V	Pass



<Low Channel>

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3420	-37.92	-13	-24.92	-52.41	-41.7	4.62	8.40	H	Pass
5135	-33.87	-13	-20.87	-52.7	-38.5	5.45	10.08	H	Pass
6843	-28.26	-13	-15.26	-54.72	-33.5	6.18	11.42	H	Pass
8558	-30.33	-13	-17.33	-56.45	-35.2	8.39	13.26	H	Pass
10264	-32.86	-13	-19.86	-62.38	-37.2	8.77	13.11	H	Pass
11976	-31.91	-13	-18.91	-63.32	-36.1	8.8	12.99	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3420	-40.22	-13	-27.22	-56.05	-44	4.62	8.40	V	Pass
5135	-33.17	-13	-20.17	-51.84	-37.8	5.45	10.08	V	Pass
6843	-32.36	-13	-19.36	-57.87	-37.6	6.18	11.42	V	Pass
8558	-37.53	-13	-24.53	-62.93	-42.4	8.39	13.26	V	Pass
10264	-37.36	-13	-24.36	-65.86	-41.7	8.77	13.11	V	Pass
11976	-35.81	-13	-22.81	-65.71	-40	8.8	12.99	V	Pass



<Middle Channel>

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3448	-36.07	-13	-23.07	-50.42	-39.9	4.48	8.31	H	Pass
5170	-37.56	-13	-24.56	-56.41	-42.2	5.332	9.98	H	Pass
6892	-26.56	-13	-13.56	-52.85	-31.8	6.1	11.34	H	Pass
8621	-33.98	-13	-20.98	-59.68	-38.9	8.25	13.17	H	Pass
10344	-32.91	-13	-19.91	-62.24	-37.2	8.65	12.94	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3448	-37.57	-13	-24.57	-53.54	-41.4	4.48	8.31	V	Pass
5170	-36.96	-13	-23.96	-55.71	-41.6	5.332	9.98	V	Pass
6892	-29.86	-13	-16.86	-55.3	-35.1	6.1	11.34	V	Pass
8621	-38.78	-13	-25.78	-64.69	-43.7	8.25	13.17	V	Pass
10344	-37.01	-13	-24.01	-65.37	-41.3	8.65	12.94	V	Pass



<High Channel>

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3469	-34.41	-13	-21.41	-48.8	-38.5	4.28	8.37	H	Pass
5205	-35.39	-13	-22.39	-54.23	-40.2	5.22	10.03	H	Pass
6941	-26.97	-13	-13.97	-53.31	-32.1	6.23	11.36	H	Pass
8677	-36.17	-13	-23.17	-61.83	-41.1	8.15	13.08	H	Pass
10416	-31.38	-13	-18.38	-60.66	-36.8	7.47	12.89	H	Pass

Band :	LTE Band 4					Temperature :	23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3469	-38.01	-13	-25.01	-53.76	-42.1	4.28	8.37	V	Pass
5205	-35.89	-13	-22.89	-54.88	-40.7	5.22	10.03	V	Pass
6941	-31.07	-13	-18.07	-56.47	-36.2	6.23	11.36	V	Pass
8677	-39.87	-13	-26.87	-65.41	-44.8	8.15	13.08	V	Pass
10416	-34.08	-13	-21.08	-63.01	-39.5	7.47	12.89	V	Pass

**<Low Channel>**

Band :	LTE Band 7					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
4998	-31.79	-25	-6.79	-49.64	-35.35	6.78	10.34	H	Pass
7500	-34.51	-25	-9.51	-56.1	-37.55	9.22	12.26	H	Pass
10002	-33.86	-25	-8.86	-62.61	-38.2	8.51	12.85	H	Pass

Band :	LTE Band 7						Temperature :	23~25°C	
Test Mode :	5MHz QPSK RB Size 1 Offset 0						Relative Humidity :	44~48%	
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu						Polarization :	Vertical	
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
4998	-37.74	-25	-12.74	-55.75	-41.3	6.78	10.34	V	Pass
7500	-30.71	-25	-5.71	-58.08	-33.75	9.22	12.26	V	Pass
10002	-36.91	-25	-11.91	-64.71	-41.25	8.51	12.85	V	Pass



<Middle Channel>

Band :	LTE Band 7					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5064	-34.64	-25	-9.64	-52.83	-38.13	6.86	10.35	H	Pass
7596	-25.14	-25	-0.14	-51.89	-28.03	9.34	12.23	H	Pass
10134	-28.84	-25	-3.84	-57.76	-32.94	8.64	12.74	H	Pass

Band :	LTE Band 7						Temperature :	23~25°C	
Test Mode :	5MHz QPSK RB Size 1 Offset 0						Relative Humidity :	44~48%	
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu						Polarization :	Vertical	
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
5064	-39.98	-25	-14.98	-58.26	-43.47	6.86	10.35	V	Pass
7596	-29.16	-25	-4.16	-55.71	-32.05	9.34	12.23	V	Pass
10134	-36.92	-25	-11.92	-64.85	-41.02	8.64	12.74	V	Pass



<High Channel>

Band :	LTE Band 7						Temperature :	23~25°C	
Test Mode :	5MHz QPSK RB Size 1 Offset 0						Relative Humidity :	44~48%	
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu						Polarization :	Horizontal	
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5130	-33.87	-25	-8.87	-52.37	-37.4	6.9	10.43	H	Pass
7698	-25.77	-25	-0.77	-51.72	-28.7	9.39	12.32	H	Pass
10260	-25.09	-25	-0.09	-54.16	-29.23	8.71	12.85	H	Pass

Band :	LTE Band 7	Temperature :	23~25°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	44~48%						
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu	Polarization :	Vertical						
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5130	-39.54	-25	-14.54	-58.11	-43.07	6.9	10.43	V	Pass
7698	-28.91	-25	-3.91	-54.74	-31.84	9.39	12.32	V	Pass
10260	-29.41	-25	-4.41	-57.52	-33.55	8.71	12.85	V	Pass

**<Low Channel>**

Band :	LTE Band 7						Temperature :	23~25℃	
Test Mode :	10MHz QPSK RB Size 1 Offset 0						Relative Humidity :	44~48%	
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu						Polarization :	Horizontal	
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
4998	-32.01	-25	-7.01	-49.85	-35.55	6.81	10.35	H	Pass
7500	-29.75	-25	-4.75	-57.33	-32.73	9.26	12.24	H	Pass
10002	-33.18	-25	-8.18	-61.92	-37.47	8.54	12.83	H	Pass

Band :	LTE Band 7						Temperature :	23~25°C	
Test Mode :	10MHz QPSK RB Size 1 Offset 0						Relative Humidity :	44~48%	
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu						Polarization :	Vertical	
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
4998	-38.33	-25	-13.33	-56.37	-41.87	6.81	10.35	V	Pass
7500	-31.52	-25	-6.52	-58.86	-34.5	9.26	12.24	V	Pass
10002	-37.72	-25	-12.72	-65.55	-42.01	8.54	12.83	V	Pass

**<Middle Channel>**

Band :	LTE Band 7						Temperature :	23~25°C	
Test Mode :	10MHz QPSK RB Size 1 Offset 0						Relative Humidity :	44~48%	
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu						Polarization :	Horizontal	
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5058	-35.44	-25	-10.44	-53.64	-38.93	6.86	10.35	H	Pass
7590	-25.46	-25	-0.46	-52.22	-28.35	9.34	12.23	H	Pass
10122	-27.53	-25	-2.53	-56.44	-31.63	8.64	12.74	H	Pass

Band :	LTE Band 7						Temperature :	23~25°C	
Test Mode :	10MHz QPSK RB Size 1 Offset 0						Relative Humidity :	44~48%	
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu						Polarization :	Vertical	
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5058	-40.24	-25	-15.24	-58.56	-43.73	6.86	10.35	V	Pass
7590	-27.53	-25	-2.53	-54.12	-30.42	9.34	12.23	V	Pass
10122	-35.04	-25	-10.04	-62.98	-39.14	8.64	12.74	V	Pass



<High Channel>

Band :	LTE Band 7					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5118	-31.99	-25	-6.99	-50.42	-35.53	6.88	10.42	H	Pass
7680	-25.42	-25	-0.42	-50.85	-28.36	9.37	12.31	H	Pass
10242	-26.40	-25	-1.40	-55.45	-30.59	8.64	12.83	H	Pass

Band :	LTE Band 7						Temperature :	23~25°C	
Test Mode :	10MHz QPSK RB Size 1 Offset 0						Relative Humidity :	44~48%	
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu						Polarization :	Vertical	
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5118	-38.75	-25	-13.75	-56.86	-42.29	6.88	10.42	V	Pass
7680	-26.14	-25	-1.14	-52.29	-29.08	9.37	12.31	V	Pass
10242	-34.49	-25	-9.49	-62.81	-38.68	8.64	12.83	V	Pass



<Low Channel>

Band :	LTE Band 7					Temperature :	23~25°C		
Test Mode :	15MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5004	-32.16	-25	-7.16	-50.1	-35.71	6.82	10.37	H	Pass
7500	-29.76	-25	-4.76	-57.29	-32.75	9.27	12.26	H	Pass
10002	-32.78	-25	-7.78	-61.52	-37.11	8.55	12.88	H	Pass

Band :	LTE Band 7						Temperature :	23~25°C	
Test Mode :	15MHz QPSK RB Size 1 Offset 0						Relative Humidity :	44~48%	
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu						Polarization :	Vertical	
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5004	-38.33	-25	-13.33	-56.37	-41.88	6.82	10.37	V	Pass
7500	-31.01	-25	-6.01	-58.24	-34	9.27	12.26	V	Pass
10002	-36.71	-25	-11.71	-64.45	-41.04	8.55	12.88	V	Pass



<Middle Channel>

Band :	LTE Band 7						Temperature :	23~25℃	
Test Mode :	15MHz QPSK RB Size 1 Offset 0						Relative Humidity :	44~48%	
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu						Polarization :	Horizontal	
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5058	-38.27	-25	-13.27	-56.44	-41.76	6.86	10.35	H	Pass
7584	-28.44	-25	-3.44	-55.33	-31.33	9.34	12.23	H	Pass
10110	-26.92	-25	-1.92	-55.76	-31.02	8.64	12.74	H	Pass

Band :	LTE Band 7						Temperature :	23~25°C	
Test Mode :	15MHz QPSK RB Size 1 Offset 0						Relative Humidity :	44~48%	
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu						Polarization :	Vertical	
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5058	-40.19	-25	-15.19	-58.42	-43.68	6.86	10.35	V	Pass
7584	-28.37	-25	-3.37	-55.08	-31.26	9.34	12.23	V	Pass
10110	-34.89	-25	-9.89	-62.88	-38.99	8.64	12.74	V	Pass



<High Channel>

Band :	LTE Band 7					Temperature :	23~25°C		
Test Mode :	15MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5112	-34.08	-25	-9.08	-52.41	-37.62	6.87	10.41	H	Pass
7668	-26.54	-25	-1.54	-52.79	-29.49	9.35	12.30	H	Pass
10224	-28.19	-25	-3.19	-57.3	-32.38	8.63	12.82	H	Pass

Band :	LTE Band 7						Temperature :	23~25°C	
Test Mode :	15MHz QPSK RB Size 1 Offset 0						Relative Humidity :	44~48%	
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu						Polarization :	Vertical	
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5112	-41.57	-25	-16.57	-60.06	-45.11	6.87	10.41	V	Pass
7668	-27.10	-25	-2.10	-53.19	-30.05	9.35	12.30	V	Pass
10224	-33.57	-25	-8.57	-61.59	-37.76	8.63	12.82	V	Pass



<Low Channel>

Band :	LTE Band 7					Temperature :	23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5004	-31.90	-25	-6.90	-49.78	-35.45	6.83	10.38	H	Pass
7506	-29.09	-25	-4.09	-56.47	-32.06	9.28	12.25	H	Pass
10002	-34.09	-25	-9.09	-62.85	-38.44	8.54	12.89	H	Pass

Band :	LTE Band 7						Temperature :	23~25°C	
Test Mode :	20MHz QPSK RB Size 1 Offset 0						Relative Humidity :	44~48%	
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu						Polarization :	Vertical	
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5004	-37.45	-25	-12.45	-55.48	-41	6.83	10.38	V	Pass
7506	-31.48	-25	-6.48	-58.72	-34.45	9.28	12.25	V	Pass
10002	-37.68	-25	-12.68	-65.41	-42.03	8.54	12.89	V	Pass

**<Middle Channel>**

Band :	LTE Band 7					Temperature :	23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5052	-34.10	-25	-9.10	-52.18	-37.59	6.86	10.35	H	Pass
7578	-27.16	-25	-2.16	-53.97	-30.05	9.34	12.23	H	Pass
10104	-28.12	-25	-3.12	-56.97	-32.22	8.64	12.74	H	Pass

Band :	LTE Band 7						Temperature :	23~25°C	
Test Mode :	20MHz QPSK RB Size 1 Offset 0						Relative Humidity :	44~48%	
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu						Polarization :	Vertical	
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5052	-40.03	-25	-15.03	-58.26	-43.52	6.86	10.35	V	Pass
7578	-29.11	-25	-4.11	-55.7	-32	9.34	12.23	V	Pass
10104	-33.66	-25	-8.66	-61.45	-37.76	8.64	12.74	V	Pass

**<High Channel>**

Band :	LTE Band 7					Temperature :	23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5100	-31.23	-25	-6.23	-49.58	-35.77	5.84	10.38	H	Pass
7656	-25.60	-25	-0.60	-52.03	-28.54	9.33	12.27	H	Pass
10206	-30.33	-25	-5.33	-59.31	-34.53	8.6	12.80	H	Pass

Band :	LTE Band 7					Temperature :	23~25°C		
Test Mode :	20MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA Reading	S.G. Power	TX Cable loss	TX Antenna Gain	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5100	-35.82	-25	-10.82	-55.14	-40.36	5.84	10.38	V	Pass
7656	-25.84	-25	-0.84	-51.82	-28.78	9.33	12.27	V	Pass
10206	-35.48	-25	-10.48	-63.35	-39.68	8.6	12.80	V	Pass

**<Low Channel>**

Band :	LTE Band 17					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1408	-43.50	-13	-30.50	-49.54	-45.44	1.51	5.60	H	Pass
2112	-46.46	-13	-33.46	-55.46	-48.49	1.82	6.00	H	Pass
2816	-45.23	-13	-32.23	-56.38	-47.86	2.2	6.98	H	Pass
3520	-45.36	-13	-32.36	-57.67	-49.03	2.42	8.24	H	Pass

Band :	LTE Band 17					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1408	-35.62	-13	-22.62	-43.78	-37.56	1.51	5.60	V	Pass
2112	-40.93	-13	-27.93	-51.77	-42.96	1.82	6.00	V	Pass
2816	-43.99	-13	-30.99	-56.78	-46.62	2.2	6.98	V	Pass
3520	-42.34	-13	-29.34	-55.74	-46.01	2.42	8.24	V	Pass

**<Middle Channel>**

Band :	LTE Band 17				Temperature :	23~25°C			
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Horizontal			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
1416	-46.95	-13	-33.95	-52.99	-48.88	1.53	5.61	H	Pass
2120	-42.23	-13	-29.23	-51.35	-44.25	1.85	6.02	H	Pass
2832	-40.75	-13	-27.75	-51.97	-43.36	2.24	7.00	H	Pass
3536	-45.35	-13	-32.35	-57.64	-49	2.46	8.26	H	Pass

Band :	LTE Band 17				Temperature :	23~25°C			
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
1416	-34.82	-13	-21.82	-43.04	-36.75	1.53	5.61	V	Pass
2120	-39.00	-13	-26.00	-50.12	-41.02	1.85	6.02	V	Pass
2832	-41.78	-13	-28.78	-53.84	-44.39	2.24	7.00	V	Pass
3536	-42.01	-13	-29.01	-55.47	-45.66	2.46	8.26	V	Pass



<High Channel>

Band :	LTE Band 17					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1424	-51.60	-13	-38.60	-57.65	-53.55	1.54	5.64	H	Pass
2136	-46.70	-13	-33.70	-55.77	-48.76	1.87	6.08	H	Pass
2848	-43.68	-13	-30.68	-54.97	-46.38	2.26	7.11	H	Pass
3560	-50.10	-13	-37.10	-62.63	-53.78	2.48	8.31	H	Pass

Band :	LTE Band 17				Temperature :	23~25°C			
Test Mode :	5MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1424	-40.17	-13	-27.17	-48.33	-42.12	1.54	5.64	V	Pass
2136	-41.43	-13	-28.43	-52.47	-43.49	1.87	6.08	V	Pass
2848	-43.35	-13	-30.35	-56.25	-46.05	2.26	7.11	V	Pass
3552	-46.54	-13	-33.54	-60.07	-50.22	2.48	8.31	V	Pass



<Low Channel>

Band :	LTE Band 17					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1408	-44.58	-13	-31.58	-50.54	-46.52	1.52	5.61	H	Pass
2112	-44.59	-13	-31.59	-53.61	-46.63	1.83	6.02	H	Pass
2816	-43.59	-13	-30.59	-54.86	-46.21	2.24	7.01	H	Pass
3520	-45.01	-13	-32.01	-57.27	-48.57	2.5	8.21	H	Pass

Band :	LTE Band 17					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1408	-33.54	-13	-20.54	-41.71	-35.49	1.51	5.61	V	Pass
2112	-38.90	-13	-25.90	-49.63	-40.95	1.82	6.02	V	Pass
2816	-42.57	-13	-29.57	-55.34	-45.23	2.2	7.01	V	Pass
3520	-41.23	-13	-28.23	-54.54	-44.87	2.42	8.21	V	Pass

**<Middle Channel>**

Band :	LTE Band 17					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1408	-45.59	-13	-32.59	-51.65	-47.52	1.53	5.61	H	Pass
2112	-42.41	-13	-29.41	-51.42	-44.43	1.85	6.02	H	Pass
2824	-40.78	-13	-27.78	-52.08	-43.39	2.24	7.00	H	Pass
3528	-42.47	-13	-29.47	-54.77	-46.12	2.46	8.26	H	Pass

Band :	LTE Band 17					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Vertical		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1408	-34.82	-13	-21.82	-42.93	-36.75	1.53	5.61	V	Pass
2112	-38.67	-13	-25.67	-49.44	-40.69	1.85	6.02	V	Pass
2824	-41.13	-13	-28.13	-53.89	-43.74	2.24	7.00	V	Pass
3528	-40.46	-13	-27.46	-53.97	-44.11	2.46	8.26	V	Pass



<High Channel>

Band :	LTE Band 17					Temperature :	23~25°C		
Test Mode :	10MHz QPSK RB Size 1 Offset 0					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1416	-47.55	-13	-34.55	-51.4	-49.5	1.53	5.63	H	Pass
2120	-43.90	-13	-30.90	-51.02	-45.95	1.88	6.08	H	Pass
2824	-42.33	-13	-29.33	-51.43	-45.02	2.27	7.11	H	Pass
3536	-46.29	-13	-33.29	-56.44	-50	2.45	8.31	H	Pass

Band :	LTE Band 17				Temperature :	23~25°C			
Test Mode :	10MHz QPSK RB Size 1 Offset 0				Relative Humidity :	44~48%			
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu				Polarization :	Vertical			
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1416	-37.21	-13	-24.21	-43.26	-39.16	1.53	5.63	V	Pass
2120	-40.20	-13	-27.20	-49.01	-42.25	1.88	6.08	V	Pass
2824	-42.67	-13	-29.67	-53.38	-45.36	2.27	7.11	V	Pass
3536	-42.43	-13	-29.43	-53.73	-46.14	2.45	8.31	V	Pass



<Low Channel>

Band :	LTE Band 7					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0 + WPC Charging					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
4998	-38.28	-25	-13.28	-53.8	-41.84	6.78	10.34	H	Pass
7500	-36.73	-25	-11.73	-62.14	-39.77	9.22	12.26	H	Pass
10002	-40.99	-25	-15.99	-67.51	-45.33	8.51	12.85	H	Pass

Band :	LTE Band 7						Temperature :	23~25°C	
Test Mode :	5MHz QPSK RB Size 1 Offset 0 + WPC Charging						Relative Humidity :	44~48%	
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu						Polarization :	Vertical	
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
4998	-35.50	-25	-10.50	-51.34	-39.06	6.78	10.34	V	Pass
7500	-33.96	-25	-8.96	-58.99	-37	9.22	12.26	V	Pass
10002	-41.15	-25	-16.15	-66.75	-45.49	8.51	12.85	V	Pass

**<Middle Channel>**

Band :	LTE Band 7						Temperature :	23~25°C	
Test Mode :	5MHz QPSK RB Size 1 Offset 0 + WPC Charging						Relative Humidity :	44~48%	
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu						Polarization :	Horizontal	
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5064	-40.73	-25	-15.73	-56.74	-44.22	6.86	10.35	H	Pass
7596	-32.47	-25	-7.47	-57.03	-35.36	9.34	12.23	H	Pass
10128	-39.29	-25	-14.29	-66.01	-43.39	8.64	12.74	H	Pass

Band :	LTE Band 7						Temperature :	23~25°C	
Test Mode :	5MHz QPSK RB Size 1 Offset 0 + WPC Charging						Relative Humidity :	44~48%	
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu						Polarization :	Vertical	
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5064	-37.62	-25	-12.62	-53.81	-41.11	6.86	10.35	V	Pass
7596	-33.43	-25	-8.43	-57.82	-36.32	9.34	12.23	V	Pass
10128	-39.78	-25	-14.78	-65.44	-43.88	8.64	12.74	V	Pass



<High Channel>

Band :	LTE Band 7					Temperature :	23~25°C		
Test Mode :	5MHz QPSK RB Size 1 Offset 0 + WPC Charging					Relative Humidity :	44~48%		
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
5130	-39.34	-25	-14.34	-55.67	-42.87	6.9	10.43	H	Pass
7698	-29.70	-25	-4.70	-53.51	-32.63	9.39	12.32	H	Pass
10260	-34.72	-25	-9.72	-61.45	-38.86	8.71	12.85	H	Pass

Band :	LTE Band 7						Temperature :	23~25°C	
Test Mode :	5MHz QPSK RB Size 1 Offset 0 + WPC Charging						Relative Humidity :	44~48%	
Test Engineer :	Eric Shih & Stan Hsieh & Ken Wu						Polarization :	Vertical	
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
5130	-38.80	-25	-13.80	-55.14	-42.33	6.9	10.43	V	Pass
7698	-28.92	-25	-3.92	-52.5	-31.85	9.39	12.32	V	Pass
10260	-33.85	-25	-8.85	-59.88	-37.99	8.71	12.85	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 $\pm 0.00025\%$ ($\pm 2.5\text{ppm}$) 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.

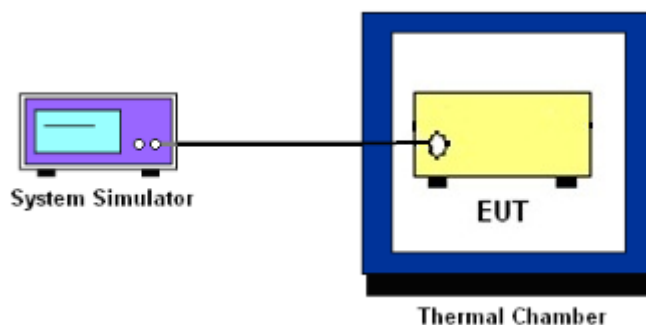
3.8.4 Test Procedures for Voltage Variation

1. The EUT was placed in a temperature chamber at $25\pm 5^{\circ}\text{C}$ 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 Procedures for Frequency Stability (IC)

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The EUT was operated at the lowest and highest channel
3. Using RBW= 1% OBW and displaying line = -13dBm.
4. The frequency at these points shall be recorded as f_L and f_H respectively.
5. Calculate frequency stability within the 704 – 716 band.

3.8.6 Test Setup



3.8.7 Test Result of Temperature Variation (FCC)

Band :	LTE Band 5 (QPSK)	Limit (ppm) :	2.5
Temperature (°C)	BW 10MHz	Result	
	Deviation (ppm)		
50	0.0049	PASS	
40	0.0060		
30	0.0085		
20(Ref.)	0.0000		
10	0.0024		
0	0.0037		
-10	0.0018		
-20	0.0038		
-30	0.0013		



Band :	LTE Band 2 (QPSK)	Limit (ppm) :	2.5
Temperature (°C)	BW 10MHz	Result	
	Deviation (ppm)		
50	0.0013	PASS	
40	0.0034		
30	0.0032		
20(Ref.)	0.0000		
10	0.0022		
0	0.0018		
-10	0.0016		
-20	0.0009		
-30	0.0008		

Band :	LTE Band 4 (QPSK)	Limit (ppm) :	2.5
Temperature (°C)	BW 10MHz	Result	
	Deviation (ppm)		
50	0.0002	PASS	
40	0.0009		
30	0.0058		
20(Ref.)	0.0000		
10	0.0005		
0	0.0016		
-10	0.0023		
-20	0.0041		
-30	0.0003		



Band :	LTE Band 7 (QPSK)	Limit (ppm) :	2.5
Temperature (°C)	BW 10MHz	Result	
	Deviation (ppm)		
50	0.0031	PASS	
40	0.0051		
30	0.0002		
20(Ref.)	0.0000		
10	0.0006		
0	0.0004		
-10	0.0014		
-20	0.0019		
-30	0.0030		

Band :	LTE Band 17 (QPSK)	Limit (ppm) :	2.5
Temperature (°C)	BW 10MHz	Result	
	Deviation (ppm)		
50	0.0045	PASS	
40	0.0061		
30	0.0058		
20(Ref.)	0.0000		
10	0.0025		
0	0.0045		
-10	0.0063		
-20	0.0038		
-30	0.0046		

3.8.8 Test Result of Voltage Variation (FCC)

Band	Bandwidth	Voltage (Volt)	Deviation (ppm)	Limit (ppm)	Result
LTE Band 5	10M	4.2	0.0050	2.5	PASS
		3.8	0.0047		
		BEP	0.0033		
LTE Band 2	10M	4.2	0.0024		
		3.8	0.0013		
		BEP	0.0020		
LTE Band 4	10M	4.2	0.0012		
		3.8	0.0012		
		BEP	0.0008		
LTE Band 7	10M	4.2	0.0007		
		3.8	0.0000		
		BEP	0.0022		
LTE Band 17	10M	4.2	0.0024		
		3.8	0.0031		
		BEP	0.0007		

Remark:

1. Normal Voltage = 3.8V.
2. Battery End Point (BEP) = 3.6 V.

3.8.9 Test Result of Temperature and Voltage Variation (IC)

Band :		LTE Band 17	
Condition		Frequency Offset (Δf) (Hz)	Note
Temperature	50 °C	2	MAX(Δf) 3.3= Hz
	40 °C	3.1	
	30 °C	2.9	
	20 °C(Ref.)	-1.2	
	10 °C	0.6	
	0 °C	2	
	-10 °C	3.3	
	-20 °C	1.5	
	-30 °C	2.1	
Voltage	4.2	0.5	
	3.8	1	
	BEP	-0.7	

Remark:

1. Normal Voltage = 3.8V.
2. Battery End Point (BEP) = 3.6 V.

3.8.10 Test Result of Frequency Stability (IC)

Band :		LTE Band 17	
Frequency Stability	Frequency (MHz)	Limit Line	Result
$f_L - \text{MAX}(\Delta f) $	704.144	$\geq 704 \text{ MHz}$	PASS
$f_H + \text{MAX}(\Delta f) $	715.856	$\leq 716 \text{ MHz}$	



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
LTE Base Station	Anritsu	MT8820C	6201026480	30MHz~2.7GHz SISO	Jan. 07, 2014	Jul. 27, 2014 ~ Jul. 31, 2014	Jan. 06, 2015	Conducted (TH02-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz~40GHz	Jun. 09, 2014	Jul. 27, 2014 ~ Jul. 31, 2014	Jun. 08, 2015	Conducted (TH02-HY)
Thermal Chamber	Ten Billion	TTH-D3SP	TBN-930701	N/A	Jul. 17, 2014	Jul. 27, 2014 ~ Jul. 31, 2014	Jul. 16, 2015	Conducted (TH02-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV30	101749	10Hz ~ 30GHz	Feb. 10, 2014	Jul. 19, 2014 ~ Jul. 30, 2014	Feb. 09, 2015	Radiation (03CH07-HY)
Bilog Antenna	Schaffner	CBL6111C	2726	30MHz ~ 1GHz	Oct. 10, 2013	Jul. 19, 2014 ~ Jul. 30, 2014	Oct. 09, 2014	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	75962	1GHz~18GHz	Aug. 22, 2013	Jul. 19, 2014 ~ Jul. 30, 2014	Aug. 21, 2014	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10 MHz ~ 1000MHz	Mar. 17, 2014	Jul. 19, 2014 ~ Jul. 30, 2014	Mar. 16, 2015	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1 GHz~26.5 GHz	Nov. 29, 2013	Jul. 19, 2014 ~ Jul. 30, 2014	Nov. 28, 2014	Radiation (03CH07-HY)
Turn Table	ChainTek	ChainTek 3000	N/A	0 ~ 360 degree	N/A	Jul. 19, 2014 ~ Jul. 30, 2014	N/A	Radiation (03CH07-HY)
Antenna Mast	ChainTek	M-400-0	114/8000604/	N/A	N/A	Jul. 19, 2014 ~ Jul. 30, 2014	N/A	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBEC K	BBHA 9170	BBHA9170251	15GHz- 40GHz	Oct. 03, 2013	Jul. 19, 2014 ~ Jul. 30, 2014	Oct. 02, 2014	Radiation (03CH07-HY)



5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.50
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