## 7.7 CONDUCTED SPURIOUS EMISSIONS

# **LIMITS**

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 +10 log10(P) dB. The limit of emission equal to -13dBm

Report No.: T160515D04-RP7

## **TEST PROCEDURES**

- The EUT was set up for the maximum peak power with LTE link data modulation. The power was measured with Spectrum Analyzer. All measurements were done at 3 channels (low, middle and high operational frequency range.).
- 2. The conducted spurious emission used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.
- 3. When the spectrum scanned from 30MHz to 3GHz, it shall be connected to the band reject filter attenuated the carried frequency. The spectrum set RB=1MHz, VB=3MHz.
- When the spectrum scanned from 3GHz to 20GHz, it shall be connected to the high pass filter attenuated the carried frequency. The spectrum set RB=1MHz, VB=3MHz.

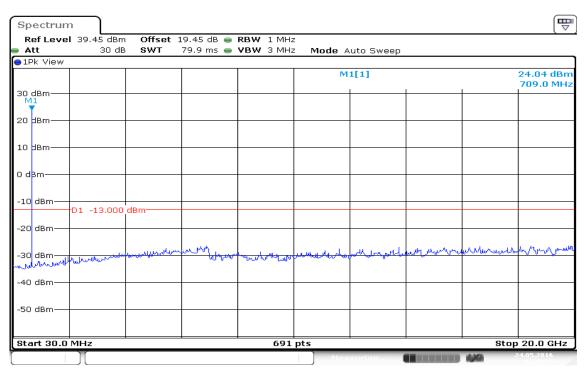
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# **TEST RESULTS**

# LTE Band 17

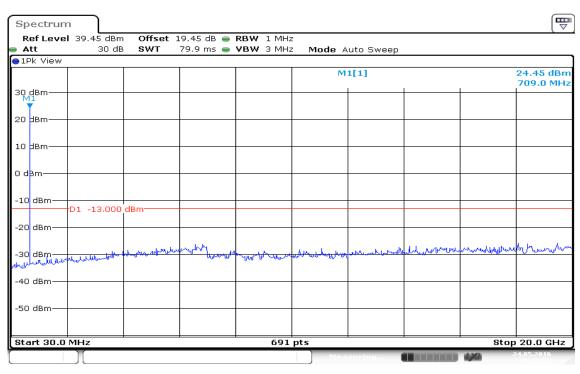
**CHANNEL BANDWIDTH: 5MHz/QPSK** 

**CH Low** 



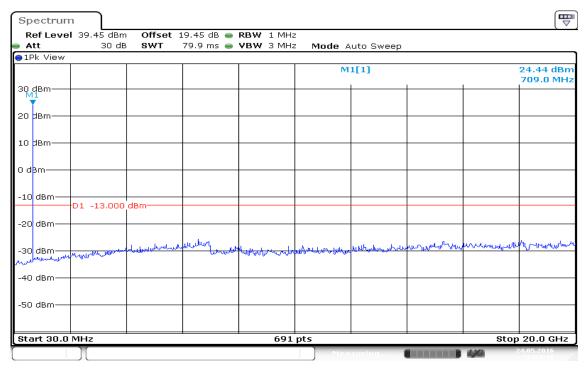
Date: 24.MAY.2016 16:20:54

### **CH Mid**



Date: 24.MAY.2016 16:21:22

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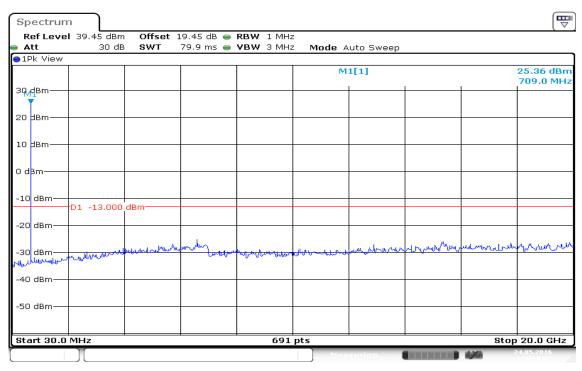
Date: 24.MAY.2016 16:21:48

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ID: M82-IVU4000 Report No.: T160515D04-RP7

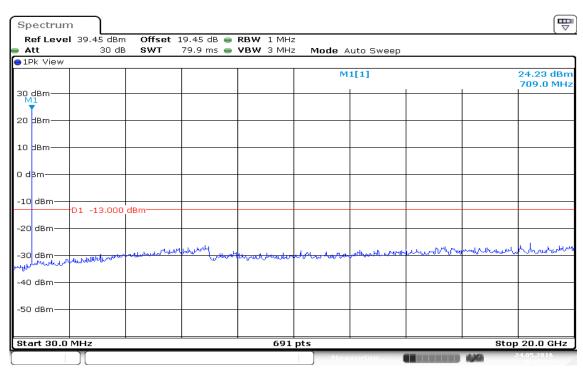
### **CHANNEL BANDWIDTH: 5MHz / 16QAM**

#### **CH Low**



Date: 24.MAY.2016 16:18:52

## **CH Mid**

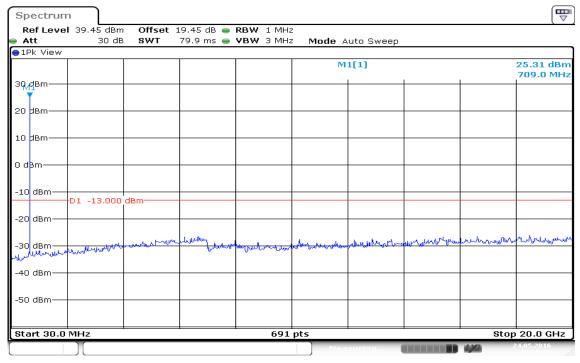


Date: 24.MAY.2016 16:17:16

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FCC ID: M82-IVU4000 Report No.: T160515D04-RP7

# **CH High**

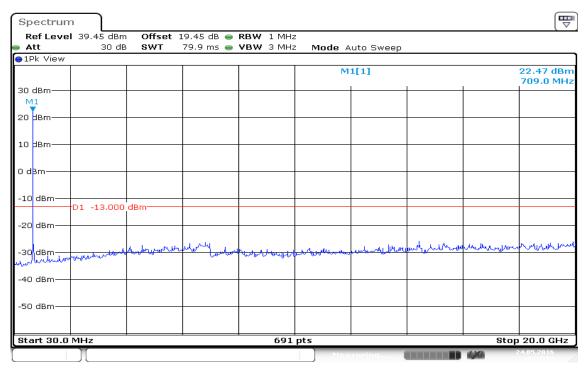


Date: 24.MAY.2016 16:18:31

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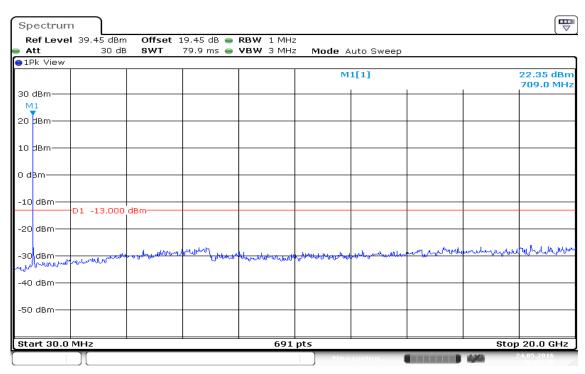
## CHANNEL BANDWIDTH: 10MHz / QPSK

#### **CH Low**



Date: 24.MAY.2016 16:23:14

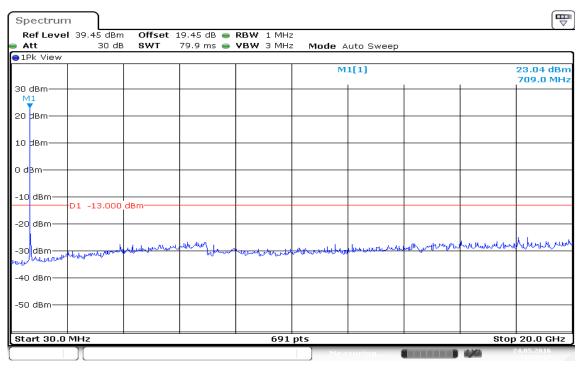
## **CH Mid**



Date: 24.MAY.2016 16:22:48

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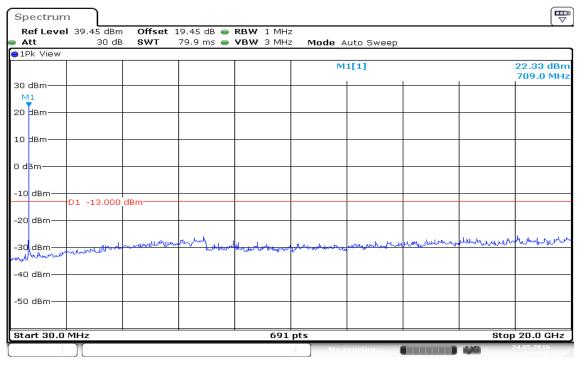
Date: 24.MAY.2016 16:23:37

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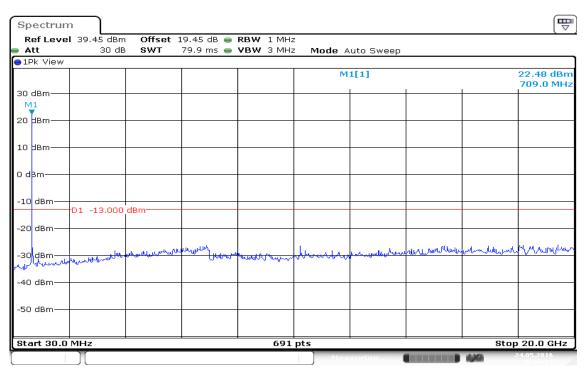
### **CHANNEL BANDWIDTH: 10MHz / 16QAM**

#### **CH Low**



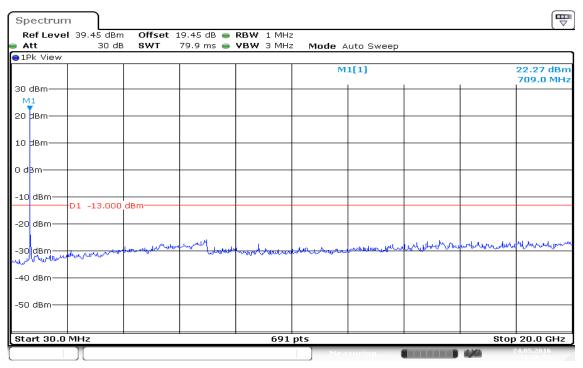
Date: 24.MAY.2016 16:16:32

## **CH Mid**



Date: 24.MAY.2016 16:16:12

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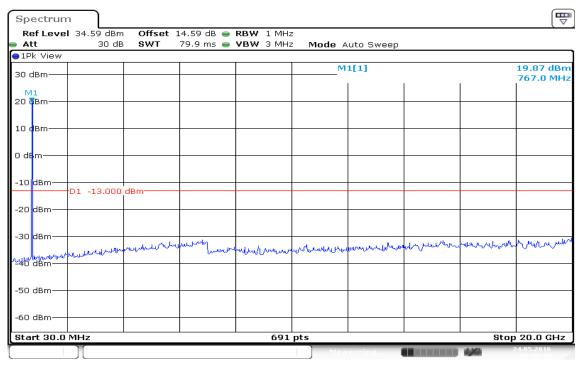
Date: 24.MAY.2016 16:16:52

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### LTE Band 13

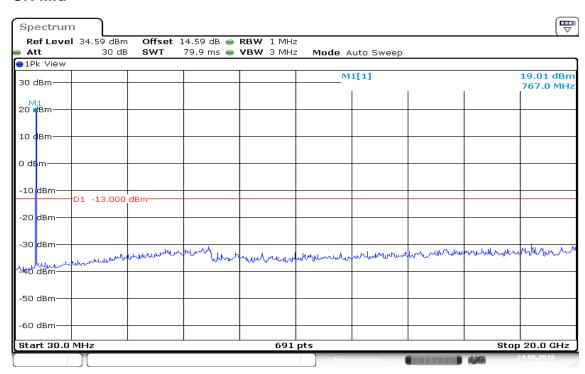
### **CHANNEL BANDWIDTH: 5MHz / QPSK**

## **CH Low**



Date: 24.MAY.2016 15:49:45

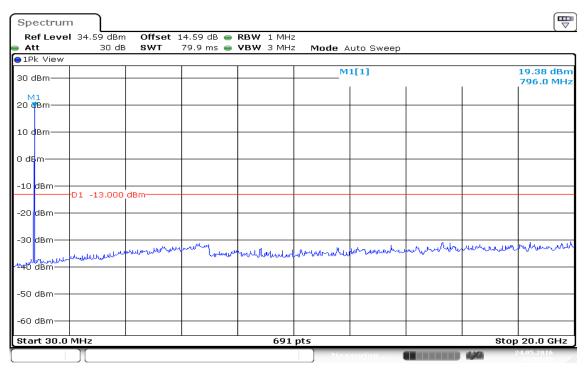
### **CH Mid**



Date: 24.MAY.2016 15:50:46

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Report No.: T160515D04-RP7



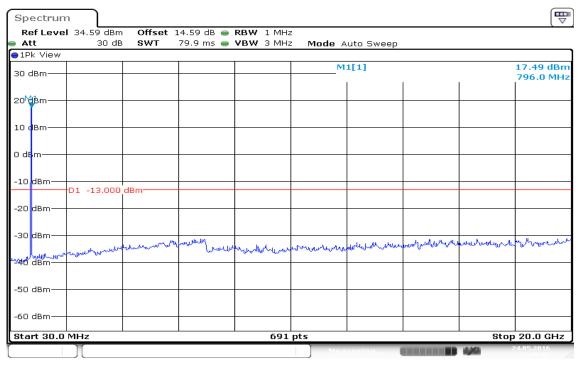
Date: 24.MAY.2016 15:50:22

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FCC ID: M82-IVU4000 Report No.: T160515D04-RP7

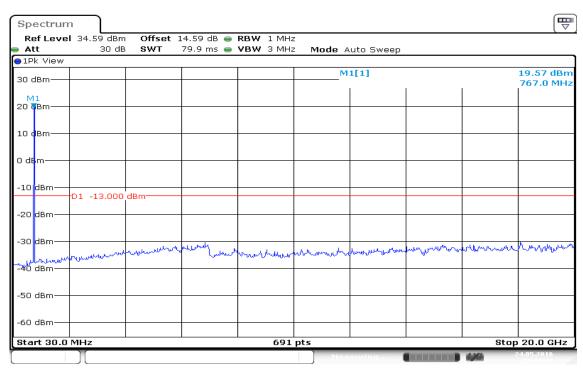
#### **CHANNEL BANDWIDTH: 5MHz / 16QAM**

#### **CH Low**



Date: 24.MAY.2016 15:49:07

### **CH Mid**

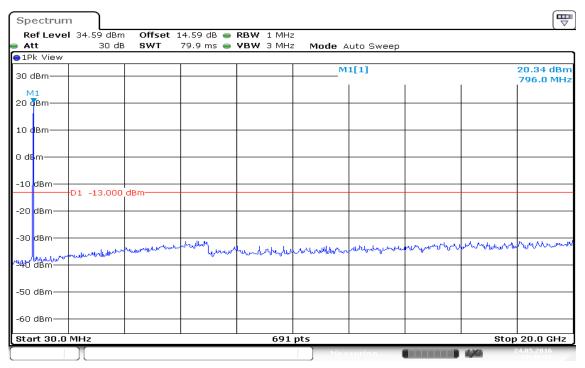


Date: 24.MAY.2016 15:47:48

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FCC ID: M82-IVU4000 Report No.: T160515D04-RP7

# **CH High**



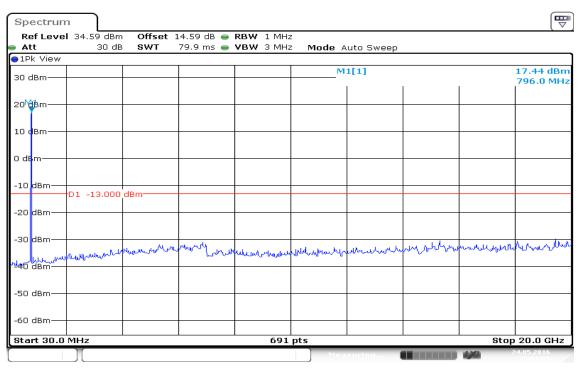
Date: 24.MAY.2016 15:48:37

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C ID: M82-IVU4000 Report No.: T160515D04-RP7

#### **CHANNEL BANDWIDTH: 10MHz/QPSK**

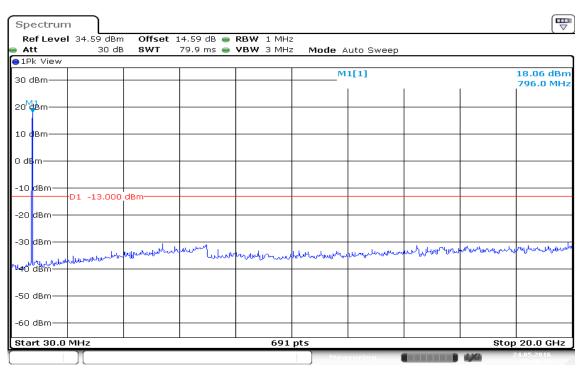
### **CH Mid**



Date: 24.MAY.2016 15:51:09

### **CHANNEL BANDWIDTH: 10MHz / 16QAM**

### **CH Mid**



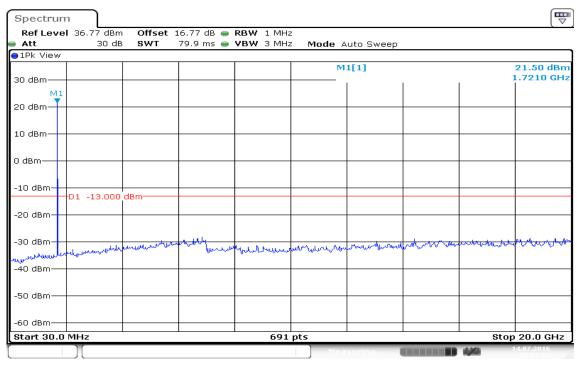
Date: 24.MAY.2016 15:48:12

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### LTE Band 4

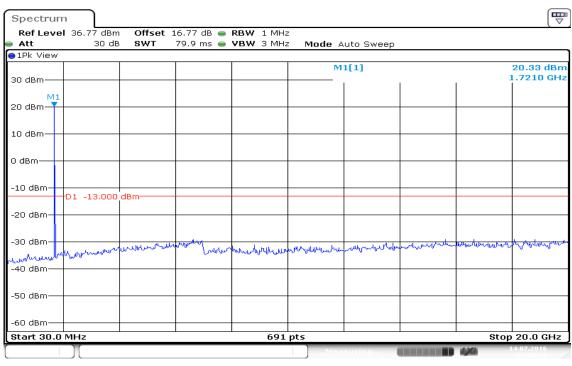
### **CHANNEL BANDWIDTH: 1.4MHz / QPSK**

#### **CH Low**



Date: 14.JUL.2016 16:01:12

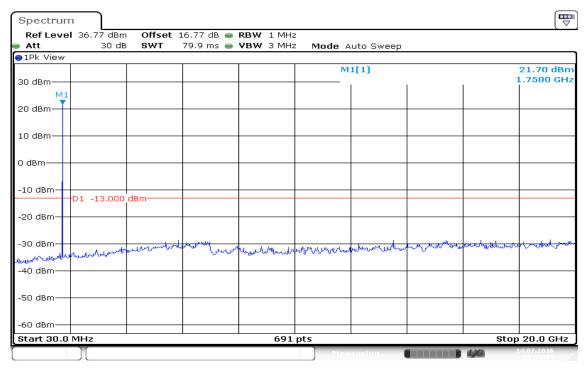
### **CH Mid**



Date: 14.JUL.2016 16:00:16

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Report No.: T160515D04-RP7

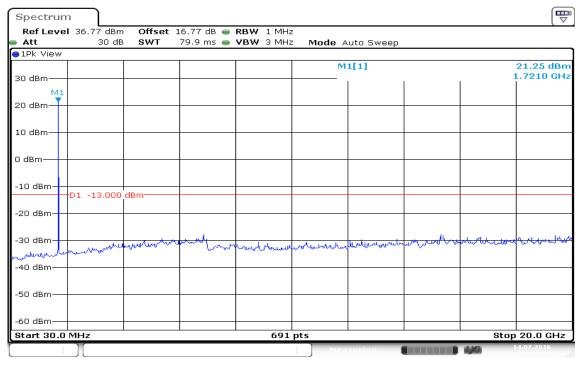


Date: 14.JUL.2016 15:55:06

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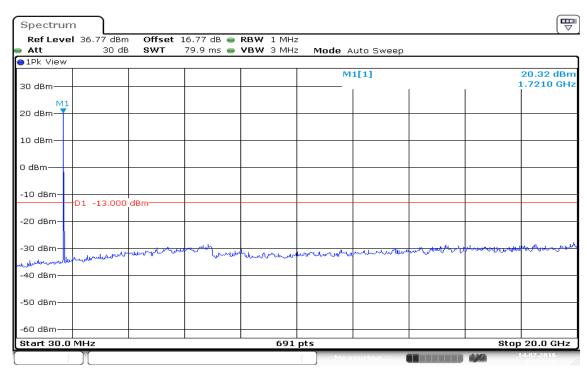
### CHANNEL BANDWIDTH: 1.4MHz / 16QAM

#### **CH Low**



Date: 14.JUL.2016 15:53:23

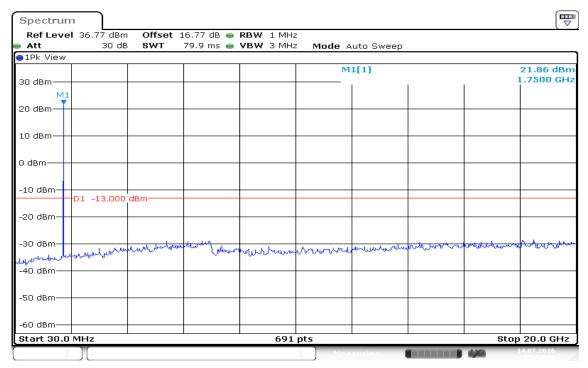
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Date: 14.JUL.2016 15:52:21

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Report No.: T160515D04-RP7



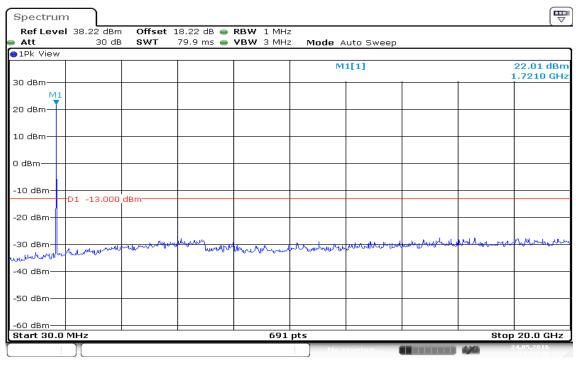
Date: 14.JUL.2016 15:54:12

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C ID: M82-IVU4000 Report No.: T160515D04-RP7

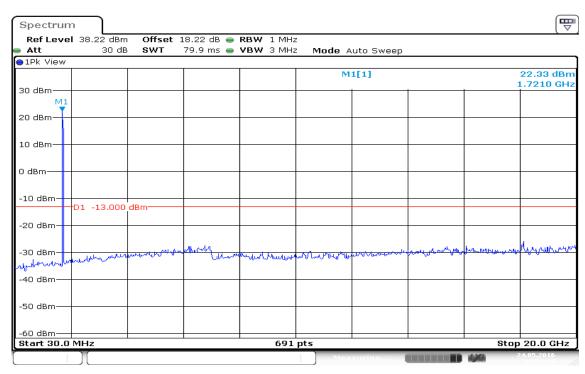
### **CHANNEL BANDWIDTH: 5MHz / QPSK**

#### **CH Low**



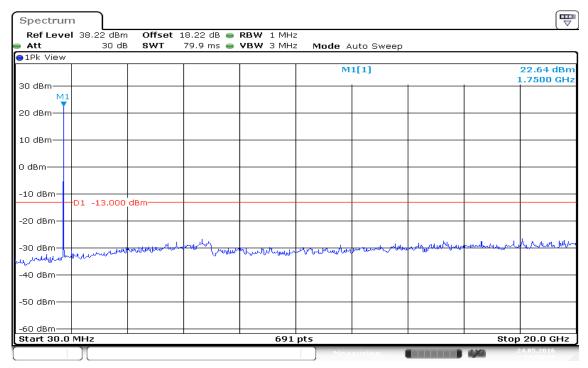
Date: 24.MAY.2016 14:52:38

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Date: 24.MAY.2016 14:52:16

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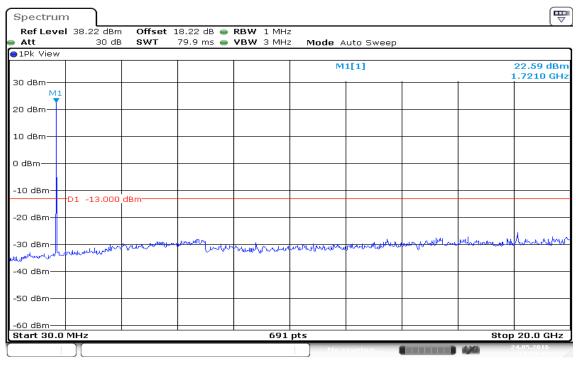
Date: 24.MAY.2016 14:50:43

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C ID: M82-IVU4000 Report No.: T160515D04-RP7

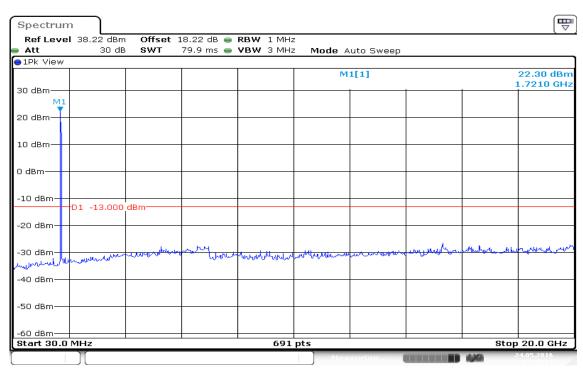
### **CHANNEL BANDWIDTH: 5MHz / 16QAM**

#### **CH Low**



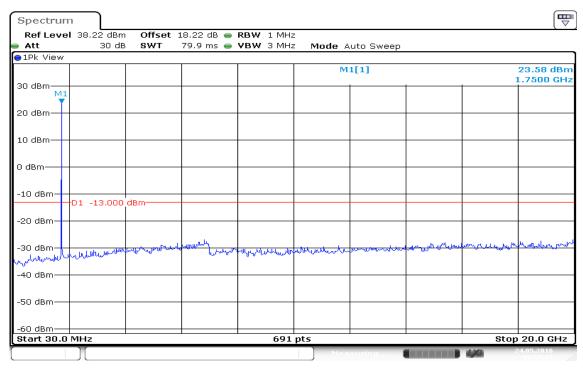
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## **CH Mid**



Date: 24.MAY.2016 14:49:19

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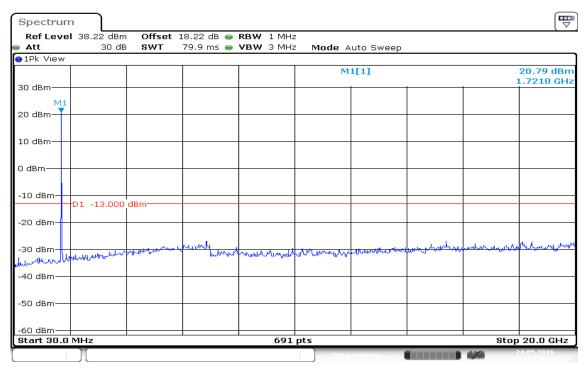


Date: 24.MAY.2016 14:50:05

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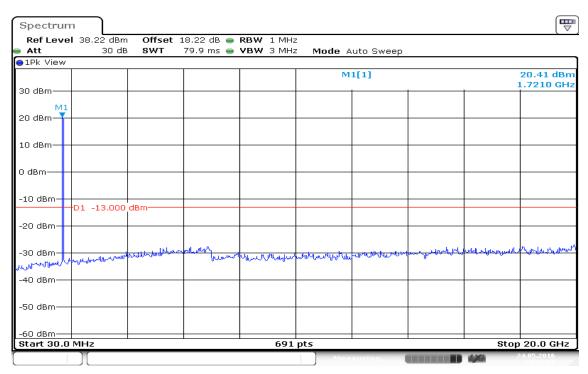
### CHANNEL BANDWIDTH: 10MHz / QPSK

#### **CH Low**



Date: 24.MAY.2016 14:53:34

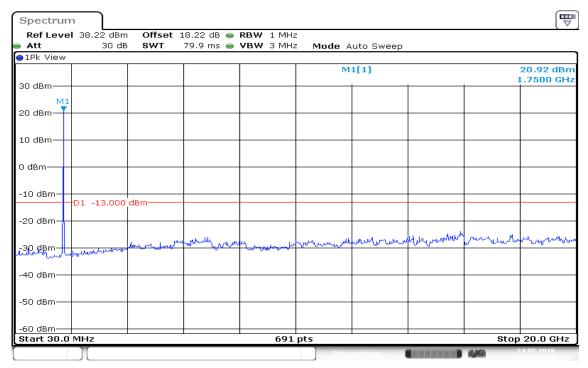
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Date: 24.MAY.2016 14:53:00

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Report No.: T160515D04-RP7



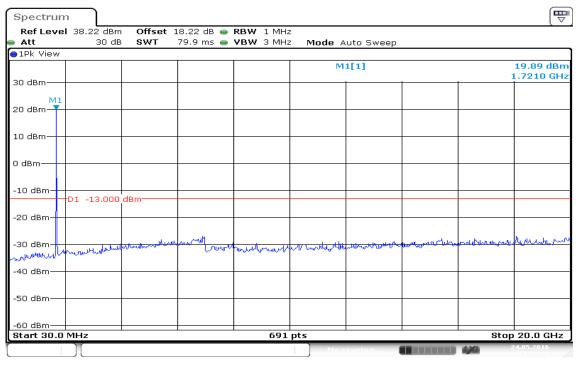
Date: 24 M AY .2016 19:14:52

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C ID: M82-IVU4000 Report No.: T160515D04-RP7

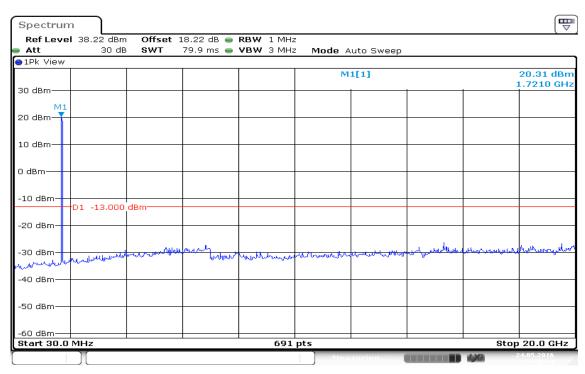
### **CHANNEL BANDWIDTH: 10MHz / 16QAM**

#### **CH Low**



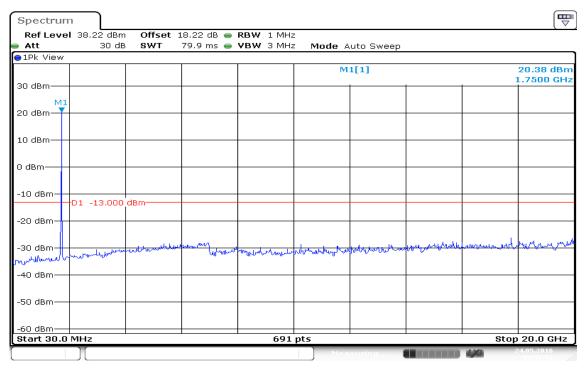
Date: 24.MAY.2016 14:48:29

## **CH Mid**



Date: 24.MAY.2016 14:48:04

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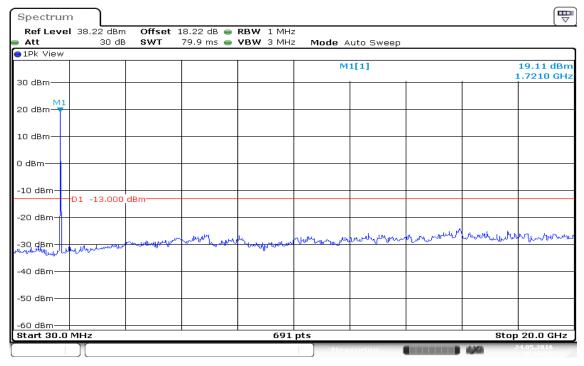
Date: 24.MAY.2016 14:48:53

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## FCC ID: M82-IVU4000 Report No.: T160515D04-RP7

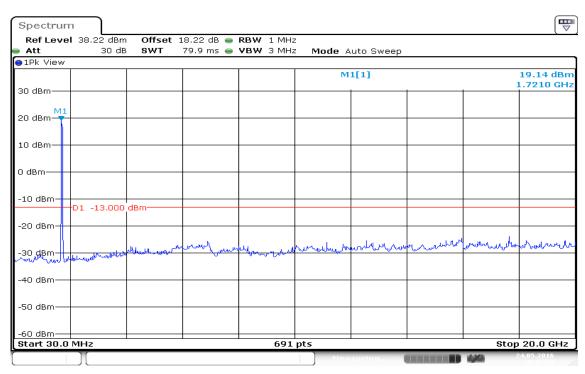
#### **CHANNEL BANDWIDTH: 20MHz / QPSK**

#### **CH Low**



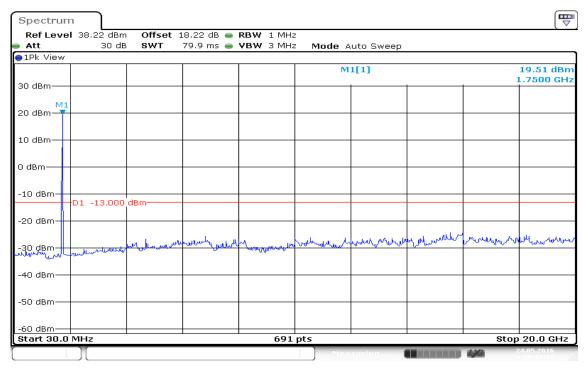
Date: 24 M AY 2016 19:16:02

## **CH Mid**



Date: 24 M AY 2016 19:16:29

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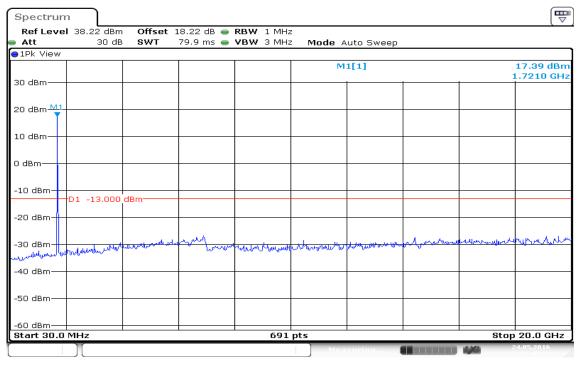


Date: 24 M AY .2016 19:16:57

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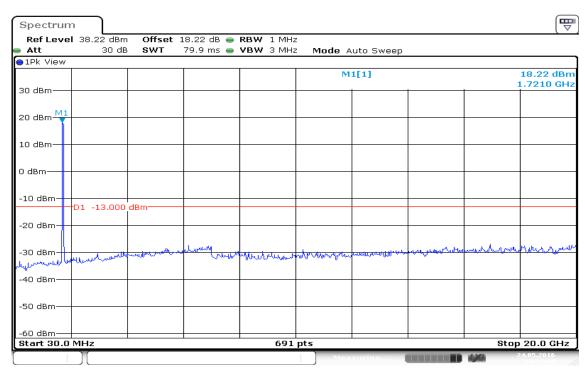
### **CHANNEL BANDWIDTH: 20MHz / 16QAM**

#### **CH Low**



Date: 24.MAY.2016 14:46:31

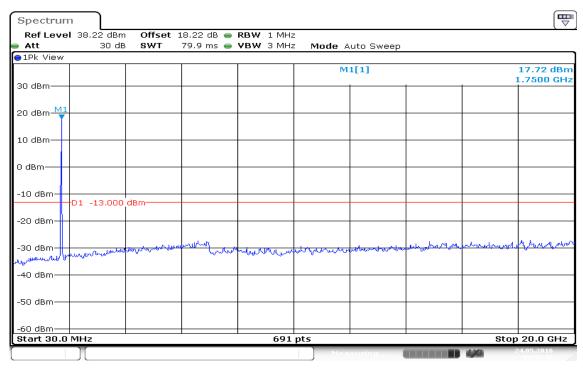
## **CH Mid**



Date: 24.MAY.2016 14:47:00

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Date: 24.MAY.2016 14:47:40

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### 7.8 RADIATED EMISSION MEASUREMENT

# **LIMITS**

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 +10 log10(P) dB. The limit of emission equal to -13dBm

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So the limit of emission is the same absolute specified line.

Limits	EQUIVALENT FIELD STRENGTH AT 3m (dBuV/m) (NOTE)
-13	82.22

**NOTE:** The following formula is used to convert the equipment radiated power to field strength.

 $E = [1000000\sqrt{(30P)}] / 3 \text{ uV/m}$ , where P is Watts

## **TEST PROCEDURES**

- 1. The EUT was placed on the top of a rotating table 0.8 meters above the ground. The table was rotated 360 degrees to determine the position of the highest radiation.
- 2. The EUT was set 3 meters away from the receiving antenna, which was mounted on antenna tower and its position at 0.8 m above the ground.
- 3. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading and recorded the value.
- 4. Repeat step 1 ~ 3 for horizontal polarization.

NOTE: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

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# **TEST RESULTS**

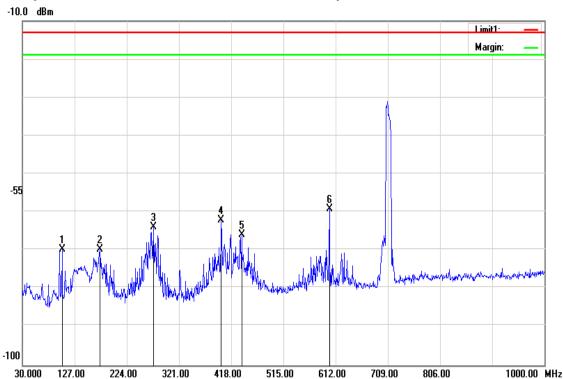
### **Below 1GHz**

## LTE Band 17 / CHANNEL BANDWIDTH: 10MHz / QPSK

**Operation Mode:** Tx / Middle channel **Test Date**: May 24, 2016

22.6°C **Temperature:** Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
103.7200	-67.75	1.17	-0.89	-69.81	-13.00	-56.81	V
174.5300	-71.04	1.59	3	-69.63	-13.00	-56.63	V
273.4700	-67.05	1.99	5.17	-63.87	-13.00	-50.87	V
399.5700	-65.6	2.39	5.98	-62.01	-13.00	-49.01	V
437.4000	-69.34	2.52	5.88	-65.98	-13.00	-52.98	V
600.3600	-62.58	2.9	6.4	-59.08	-13.00	-46.08	V

#### Remark:

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would 2. be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

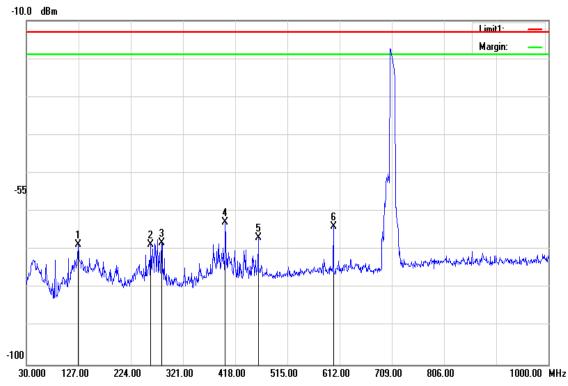
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Report No.: T160515D04-RP7

**Operation Mode:** Tx / Middle channel **Test Date:** May 24, 2016

**Temperature:** 22.6°C **Tested by:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
126.0300	-65.66	1.32	-1.69	-68.67	-13.00	-55.67	Н
260.8600	-72.29	1.91	5.56	-68.64	-13.00	-55.64	Н
281.2300	-71.59	2	5.32	-68.27	-13.00	-55.27	Н
399.5700	-66.33	2.39	5.98	-62.74	-13.00	-49.74	Н
460.6800	-70.07	2.6	5.87	-66.80	-13.00	-53.80	Н
600.3600	-67.42	2.9	6.4	-63.92	-13.00	-50.92	Н

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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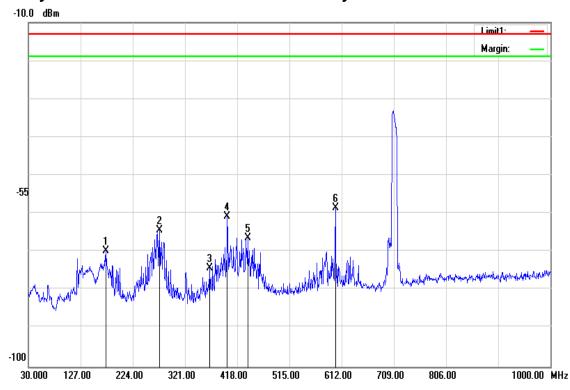


## LTE Band 17 / CHANNEL BANDWIDTH: 10MHz / 16QAM

Operation Mode: Tx / Middle channel Test Date: May 24, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
174.5300	-71.08	1.59	3	-69.67	-13.00	-56.67	V
273.4700	-67.43	1.99	5.17	-64.25	-13.00	-51.25	V
366.5900	-77.79	2.29	5.77	-74.31	-13.00	-61.31	V
399.5700	-64.23	2.39	5.98	-60.64	-13.00	-47.64	V
437.4000	-69.83	2.52	5.88	-66.47	-13.00	-53.47	V
600.3600	-61.93	2.9	6.4	-58.43	-13.00	-45.43	V

## Remark:

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

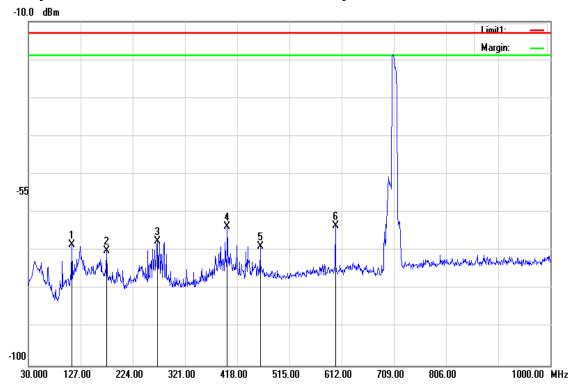
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Operation Mode: Tx / Middle channel Test Date: May 24, 2016

Report No.: T160515D04-RP7

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
110.5100	-65.53	1.21	-1.72	-68.46	-13.00	-55.46	Н
175.5000	-71.58	1.59	3.1	-70.07	-13.00	-57.07	Н
269.5900	-70.66	1.98	5.12	-67.52	-13.00	-54.52	Н
399.5700	-67.33	2.39	5.98	-63.74	-13.00	-50.74	Н
460.6800	-72.06	2.6	5.87	-68.79	-13.00	-55.79	Н
600.3600	-66.93	2.9	6.4	-63.43	-13.00	-50.43	Н

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

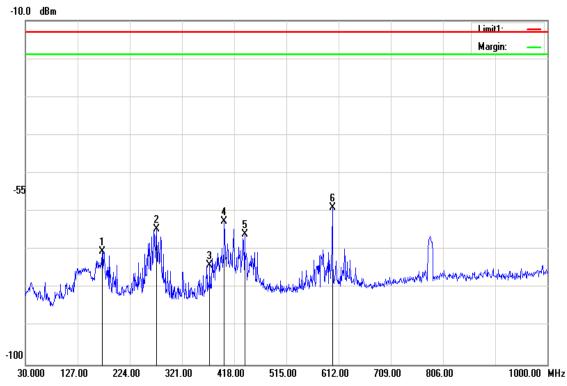
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## LTE Band 13 / CHANNEL BANDWIDTH: 10MHz / QPSK

**Operation Mode:** Tx / Middle channel **Test Date:** May 24, 2016

**Temperature:** 22.6°C **Tested by:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
172.5900	-71.56	1.58	2.8	-70.34	-13.00	-57.34	V
273.4700	-67.78	1.99	5.17	-64.60	-13.00	-51.60	V
372.4100	-77.67	2.3	5.85	-74.12	-13.00	-61.12	V
399.5700	-66.02	2.39	5.98	-62.43	-13.00	-49.43	V
437.4000	-69.2	2.52	5.88	-65.84	-13.00	-52.84	V
600.3600	-62.48	2.9	6.4	-58.98	-13.00	-45.98	V

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

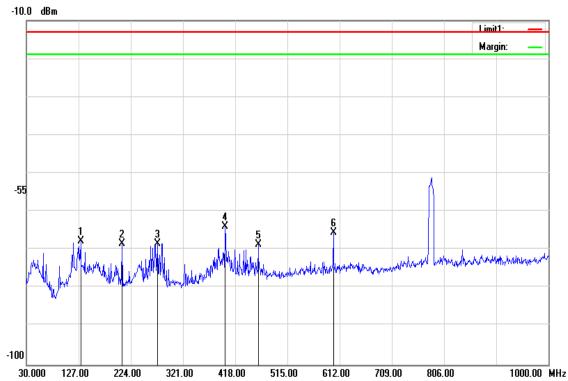
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**Operation Mode:** Tx / Middle channel May 24, 2016 **Test Date:** 

Report No.: T160515D04-RP7

22.6°C Tested by: **Temperature:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
130.8800	-65.03	1.35	-1.3	-67.68	-13.00	-54.68	Н
207.5100	-71.66	1.67	4.95	-68.38	-13.00	-55.38	Н
273.4700	-71.46	1.99	5.17	-68.28	-13.00	-55.28	Н
399.5700	-67.47	2.39	5.98	-63.88	-13.00	-50.88	Н
460.6800	-71.84	2.6	5.87	-68.57	-13.00	-55.57	Н
600.3600	-69.03	2.9	6.4	-65.53	-13.00	-52.53	Н

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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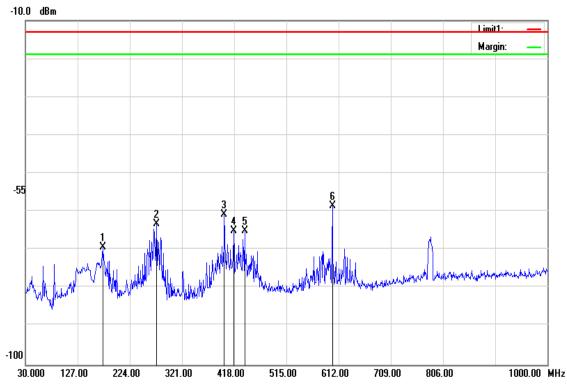


# LTE Band 13 / CHANNEL BANDWIDTH: 10MHz / 16QAM

Operation Mode: Tx / Middle channel Test Date: May 24, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
174.5300	-70.61	1.59	3	-69.20	-13.00	-56.20	V
273.4700	-66.37	1.99	5.17	-63.19	-13.00	-50.19	V
399.5700	-64.41	2.39	5.98	-60.82	-13.00	-47.82	V
417.0300	-68.32	2.46	5.84	-64.94	-13.00	-51.94	V
437.4000	-68.47	2.52	5.88	-65.11	-13.00	-52.11	V
600.3600	-62.06	2.9	6.4	-58.56	-13.00	-45.56	V

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

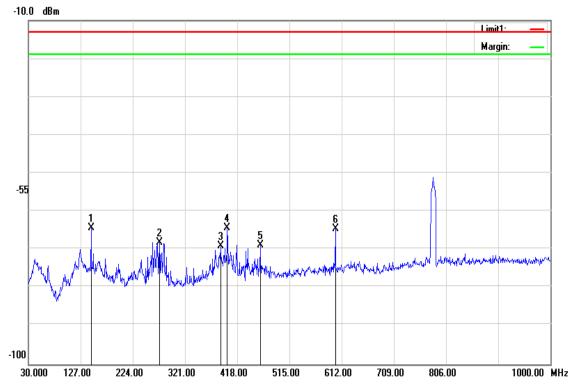
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**Operation Mode:** Tx / Middle channel May 24, 2016 **Test Date:** 

Report No.: T160515D04-RP7

22.6°C Tested by: **Temperature:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
146.4000	-63.23	1.41	0.35	-64.29	-13.00	-51.29	Н
273.4700	-71.43	1.99	5.17	-68.25	-13.00	-55.25	Н
386.9600	-72.66	2.32	6	-68.98	-13.00	-55.98	Н
399.5700	-67.9	2.39	5.98	-64.31	-13.00	-51.31	Н
460.6800	-72.21	2.6	5.87	-68.94	-13.00	-55.94	Н
600.3600	-68.04	2.9	6.4	-64.54	-13.00	-51.54	Н

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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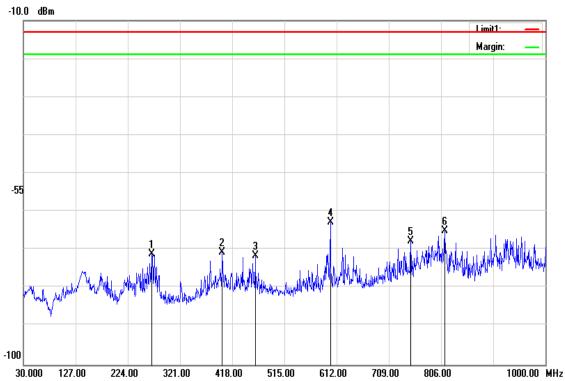


## LTE Band 4 / CHANNEL BANDWIDTH: 20MHz / QPSK

Operation Mode: Tx / Middle channel Test Date: May 24, 2016

**Temperature:** 22.6°C **Tested by:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
268.6200	-74.3	1.97	5.17	-71.10	-13.00	-58.10	V
399.5700	-74.21	2.39	5.98	-70.62	-13.00	-57.62	V
460.6800	-74.77	2.6	5.87	-71.50	-13.00	-58.50	V
600.3600	-66.15	2.9	6.4	-62.65	-13.00	-49.65	V
749.7400	-70.56	3.2	6.1	-67.66	-13.00	-54.66	V
812.7900	-67.83	3.35	6.2	-64.98	-13.00	-51.98	V

#### Remark:

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

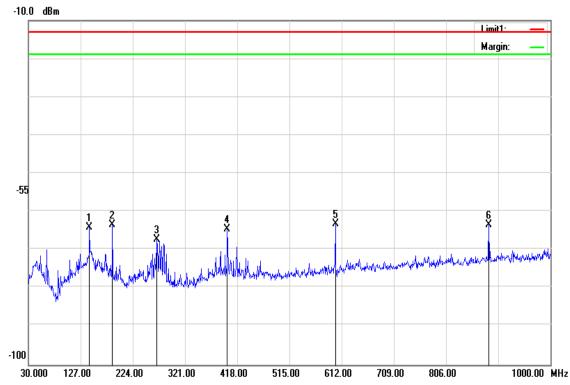
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Operation Mode: Tx / Middle channel Test Date: May 24, 2016

Report No.: T160515D04-RP7

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
143.4900	-62.8	1.4	0.08	-64.12	-13.00	-51.12	Н
186.1700	-65.69	1.62	3.85	-63.46	-13.00	-50.46	Н
268.6200	-70.41	1.97	5.17	-67.21	-13.00	-54.21	Н
399.5700	-68.13	2.39	5.98	-64.54	-13.00	-51.54	Н
600.3600	-66.79	2.9	6.4	-63.29	-13.00	-50.29	Н
885.5400	-66.73	3.48	6.7	-63.51	-13.00	-50.51	Н

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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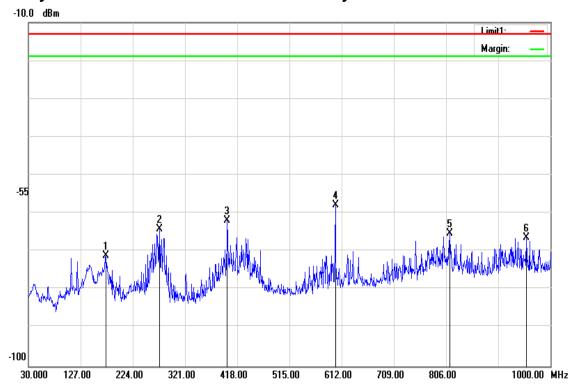


# LTE Band 4 / CHANNEL BANDWIDTH: 20MHz / 16QAM

**Operation Mode:** Tx / Middle channel **Test Date:** May 24, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
174.5300	-72.43	1.59	3	-71.02	-13.00	-58.02	V
273.4700	-67.4	1.99	5.17	-64.22	-13.00	-51.22	V
399.5700	-65.43	2.39	5.98	-61.84	-13.00	-48.84	V
600.3600	-61.42	2.9	6.4	-57.92	-13.00	-44.92	V
812.7900	-68.1	3.35	6.2	-65.25	-13.00	-52.25	V
955.3800	-69.1	3.65	6.37	-66.38	-13.00	-53.38	V

#### Remark:

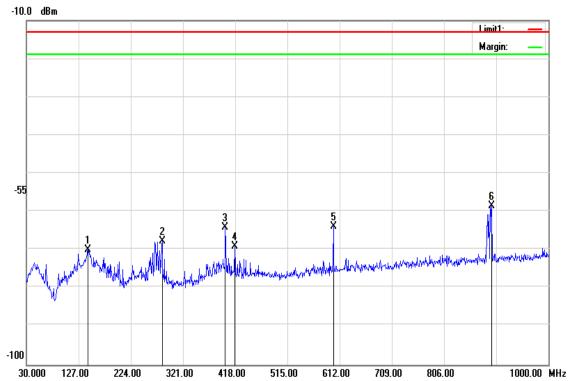
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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Operation Mode: Tx / Middle channel Test Date: May 24, 2016

**Temperature:** 22.6°C **Tested by:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
144.4600	-68.76	1.41	0.17	-70.00	-13.00	-57.00	Н
282.2000	-71.13	2.01	5.33	-67.81	-13.00	-54.81	Н
399.5700	-67.72	2.39	5.98	-64.13	-13.00	-51.13	Н
417.0300	-72.43	2.46	5.84	-69.05	-13.00	-56.05	Н
600.3600	-67.35	2.9	6.4	-63.85	-13.00	-50.85	Н
894.2700	-61.62	3.51	6.67	-58.46	-13.00	-45.46	Н

# Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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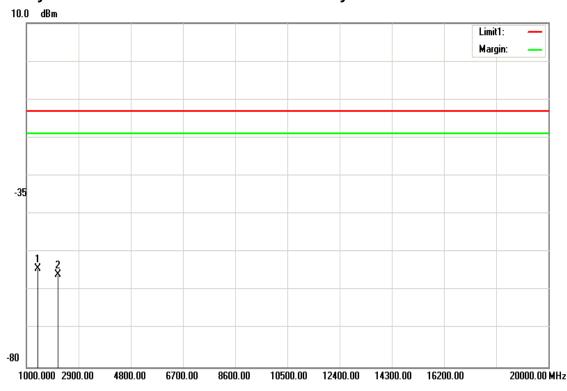
#### **Above 1GHz**

## LTE Band 17 / CHANNEL BANDWIDTH: 5MHz / QPSK

Operation Mode: Tx / Low channel Test Date: May 24, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1413.000	-55.28	4.67	5.67	-54.28	-13.00	-41.28	V
2141.000	-55.54	5.85	5.6	-55.79	-13.00	-42.79	V
N/A							

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Low channel **Test Date:** May 24, 2016

**Temperature:** 22.6°C **Tested by:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1413.000	-54.68	4.67	5.67	-53.68	-13.00	-40.68	Н
2141.000	-55.19	5.85	5.6	-55.44	-13.00	-42.44	Н
N/A							

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel May 24, 2016 Test Date:

Report No.: T160515D04-RP7

22.6°C Tested by: **Temperature:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1427.000	-54.26	4.7	5.77	-53.19	-13.00	-40.19	V
2134.000	-56.22	5.84	5.59	-56.47	-13.00	-43.47	V
N/A							

## Remark:

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would 2. be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel May 24, 2016 Test Date:

Report No.: T160515D04-RP7

22.6°C Tested by: **Temperature:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1427.000	-50.02	4.7	5.77	-48.95	-13.00	-35.95	Н
2134.000	-49.63	5.84	5.59	-49.88	-13.00	-36.88	Н
N/A							

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

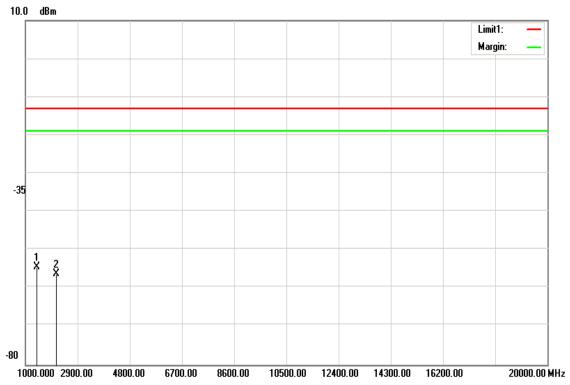
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**Operation Mode:** May 24, 2016 Tx / High channel **Test Date:** 

Report No.: T160515D04-RP7

22.6°C Tested by: **Temperature:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1427.000	-55.44	4.7	5.77	-54.37	-13.00	-41.37	V
2139.000	-55.96	5.85	5.59	-56.22	-13.00	-43.22	V
N/A							

## Remark:

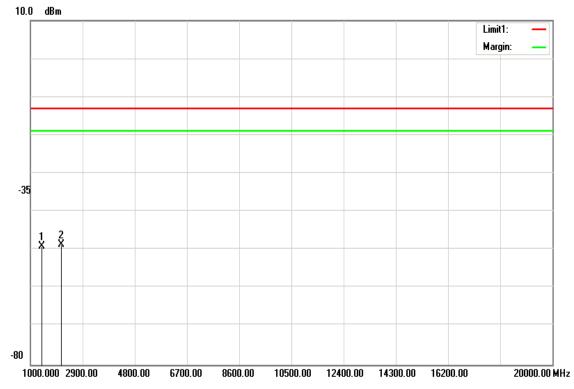
- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would 2. be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 24, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1427.000	-50.09	4.7	5.77	-49.02	-13.00	-36.02	Н
2139.000	-48.35	5.85	5.59	-48.61	-13.00	-35.61	Н
N/A							

# Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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## LTE Band 17 / CHANNEL BANDWIDTH: 10MHz / QPSK

Tx / Low channel May 24, 2016 **Operation Mode: Test Date:** 

22.6°C Dennis Li **Temperature:** Tested by:

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1420.000	-54.88	4.68	5.72	-53.84	-13.00	-40.84	V
2197.000	-55.1	5.94	5.68	-55.36	-13.00	-42.36	V
N/A							

#### Remark:

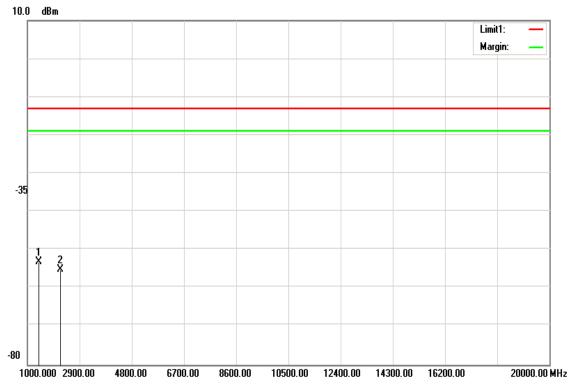
- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Low channel **Test Date:** May 24, 2016

**Temperature:** 22.6°C **Tested by:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1420.000	-54.18	4.68	5.72	-53.14	-13.00	-40.14	Н
2197.000	-54.92	5.94	5.68	-55.18	-13.00	-42.18	Н
N/A							

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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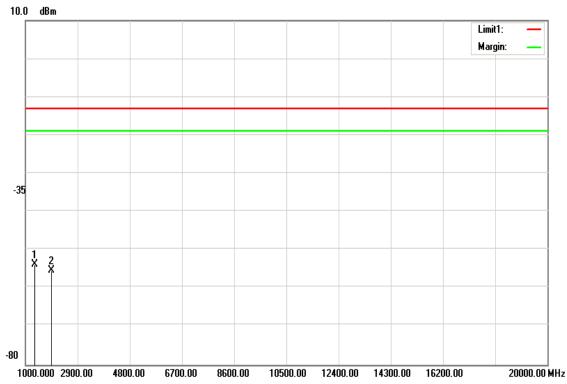


**Operation Mode:** Tx / Middle channel **Test Date:** May 24, 2016

Report No.: T160515D04-RP7

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1336.000	-54.4	4.56	5.12	-53.84	-13.00	-40.84	V
1956.000	-55.24	5.6	5.48	-55.36	-13.00	-42.36	V
N/A							

#### Remark:

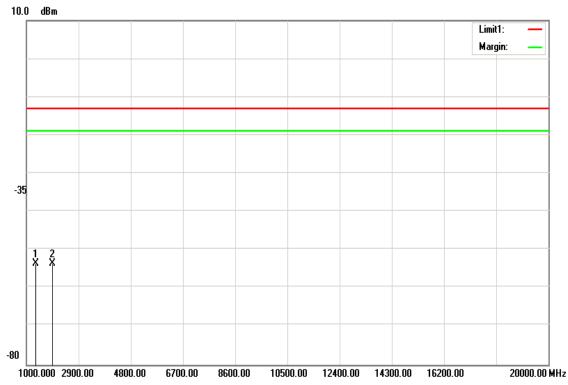
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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Operation Mode: Tx / Middle channel Test Date: May 24, 2016

**Temperature:** 22.6°C **Tested by:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1336.000	-54.12	4.56	5.12	-53.56	-13.00	-40.56	Н
1956.000	-53.39	5.6	5.48	-53.51	-13.00	-40.51	Н
N/A							

## Remark:

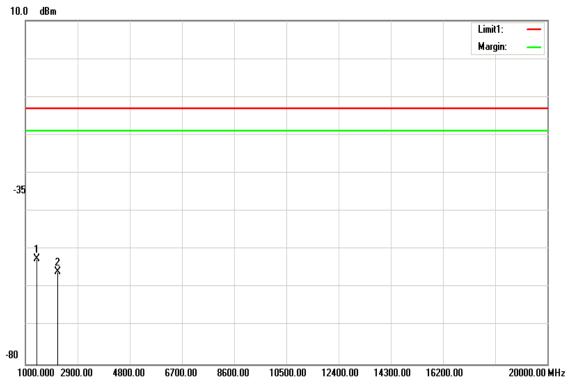
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 24, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1420.000	-53.54	4.68	5.72	-52.50	-13.00	-39.50	V
2176.000	-55.44	5.91	5.65	-55.70	-13.00	-42.70	V
N/A							

#### Remark:

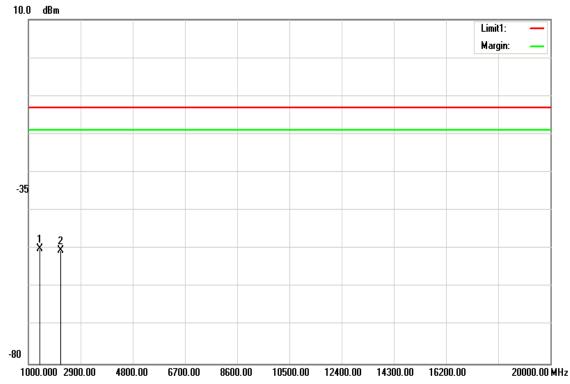
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 24, 2016

**Temperature:** 22.6°C **Tested by:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1420.000	-50.9	4.68	5.72	-49.86	-13.00	-36.86	Н
2176.000	-50.26	5.91	5.65	-50.52	-13.00	-37.52	Н
N/A							

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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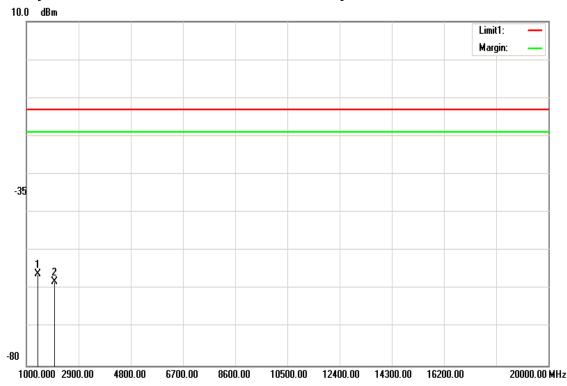


#### LTE Band 17 / CHANNEL BANDWIDTH: 5MHz / 16QAM

**Operation Mode:** Tx / Low channel **Test Date:** May 24, 2016

22.6°C **Temperature:** Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1413.000	-56.99	4.67	5.67	-55.99	-13.00	-42.99	V
2015.000	-57.64	5.73	5.42	-57.95	-13.00	-44.95	V
N/A							

#### Remark:

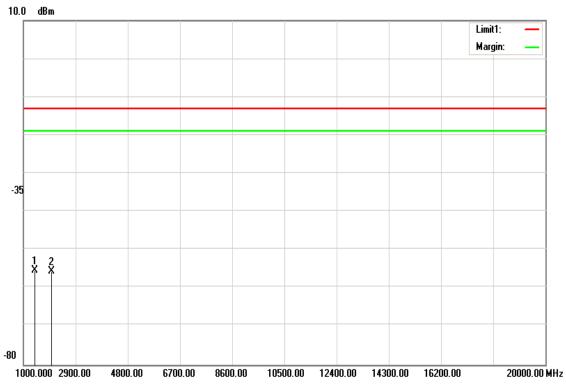
- Measuring frequencies from 1 GHz to the 10th harmonic of highest 1. fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Low channel **Test Date:** May 24, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1413.000	-56.26	4.67	5.67	-55.26	-13.00	-42.26	Н
2015.000	-55.2	5.73	5.42	-55.51	-13.00	-42.51	Н
N/A							

## Remark:

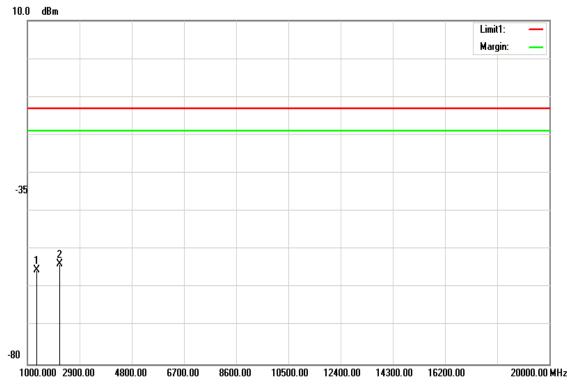
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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Operation Mode: Tx / Middle channel Test Date: May 24, 2016

**Temperature:** 22.6°C **Tested by:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1336.000	-55.84	4.56	5.12	-55.28	-13.00	-42.28	V
2174.000	-53.56	5.91	5.64	-53.83	-13.00	-40.83	V
N/A							

## Remark:

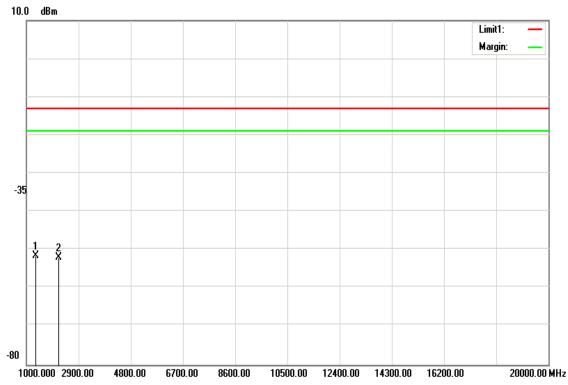
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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Operation Mode: Tx / Middle channel Test Date: May 24, 2016

**Temperature:** 22.6°C **Tested by:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1336.000	-52.09	4.56	5.12	-51.53	-13.00	-38.53	Н
2174.000	-51.62	5.91	5.64	-51.89	-13.00	-38.89	Н
N/A							

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 24, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1427.000	-56.06	4.7	5.77	-54.99	-13.00	-41.99	V
2134.000	-57.1	5.84	5.59	-57.35	-13.00	-44.35	V
N/A							

#### Remark:

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 24, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1427.000	-48.65	4.7	5.77	-47.58	-13.00	-34.58	Н
2134.000	-50.56	5.84	5.59	-50.81	-13.00	-37.81	Н
N/A							

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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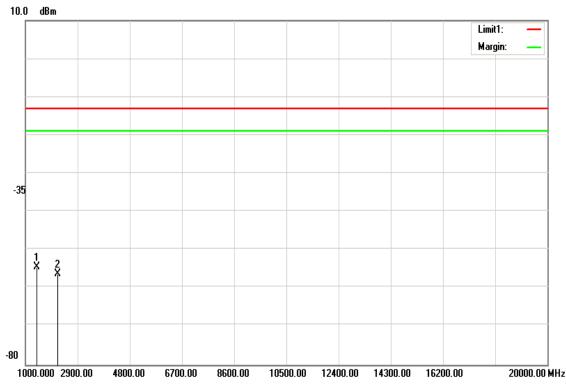


# LTE Band 17 / CHANNEL BANDWIDTH: 10MHz / 16QAM

**Operation Mode:** Tx / Low channel **Test Date:** May 24, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1420.000	-55.49	4.68	5.72	-54.45	-13.00	-41.45	V
2176.000	-55.98	5.91	5.65	-56.24	-13.00	-43.24	V
N/A							

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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Operation Mode: Tx / Low channel Test Date: May 24, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1420.000	-56.92	4.68	5.72	-55.88	-13.00	-42.88	Н
2176.000	-55.24	5.91	5.65	-55.50	-13.00	-42.50	Н
N/A							

## Remark:

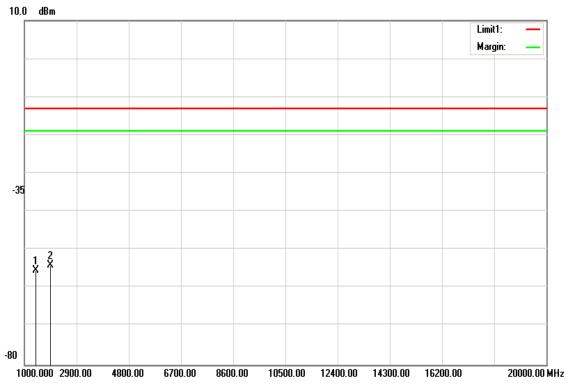
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** May 24, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1420.000	-56.47	4.68	5.72	-55.43	-13.00	-42.43	V
1952.000	-53.95	5.59	5.49	-54.05	-13.00	-41.05	V
N/A							

## Remark:

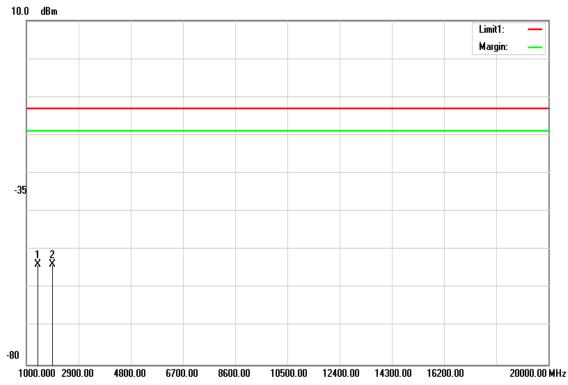
- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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Operation Mode: Tx / Middle channel Test Date: May 24, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1420.000	-54.91	4.68	5.72	-53.87	-13.00	-40.87	Н
1952.000	-53.67	5.59	5.49	-53.77	-13.00	-40.77	Н
N/A							

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

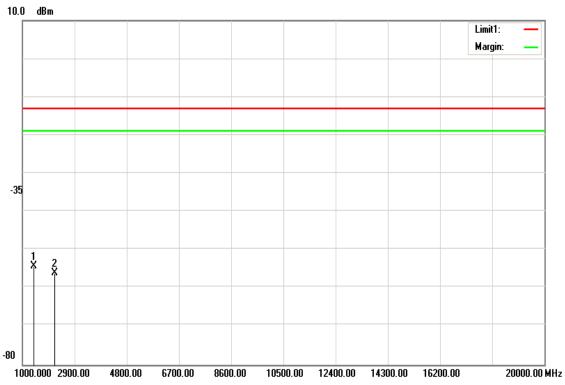
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**Operation Mode:** May 24, 2016 Tx / High channel **Test Date:** 

Report No.: T160515D04-RP7

22.6°C Tested by: **Temperature:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1420.000	-55.28	4.68	5.72	-54.24	-13.00	-41.24	V
2176.000	-55.69	5.91	5.65	-55.95	-13.00	-42.95	V
N/A							

## Remark:

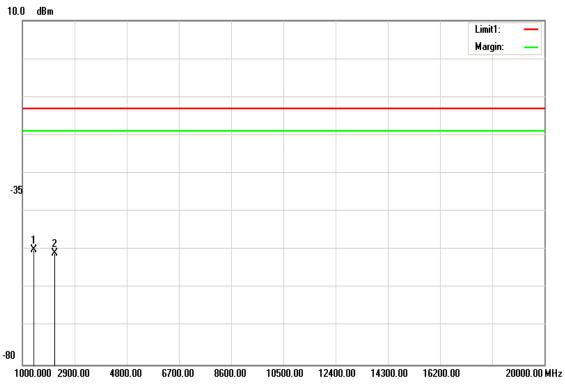
- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would 2. be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 24, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1420.000	-50.97	4.68	5.72	-49.93	-13.00	-36.93	Н
2176.000	-50.63	5.91	5.65	-50.89	-13.00	-37.89	Н
N/A							

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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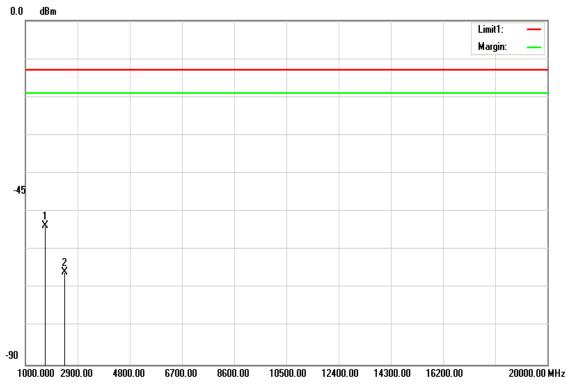


## LTE Band 13 / CHANNEL BANDWIDTH: 5MHz / QPSK

Operation Mode: Tx / Low channel Test Date: May 24, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1721.000	-54.51	5.15	5.9	-53.76	-13.00	-40.76	V
2442.000	-65.57	6.25	6.02	-65.80	-13.00	-52.80	V
N/A							

#### Remark:

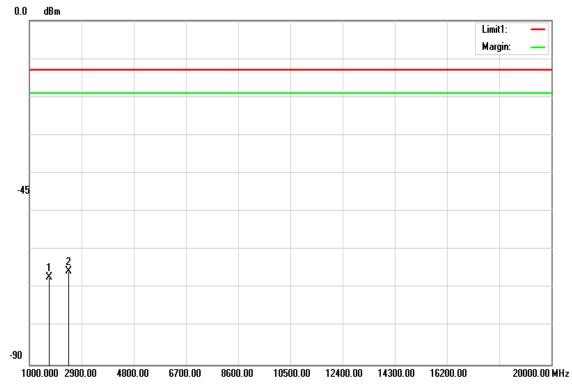
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Low channel **Test Date:** May 24, 2016

**Temperature:** 22.6°C **Tested by:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1721.000	-67.83	5.15	5.9	-67.08	-13.00	-54.08	Н
2442.000	-65.46	6.25	6.02	-65.69	-13.00	-52.69	Н
N/A							

## Remark:

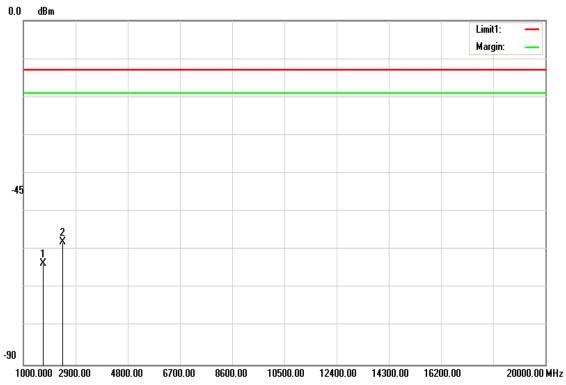
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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Operation Mode: Tx / Middle channel Test Date: May 24, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1721.000	-64.24	5.15	5.9	-63.49	-13.00	-50.49	V
2435.000	-57.6	6.24	6.01	-57.83	-13.00	-44.83	V
N/A							

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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Operation Mode: Tx / Middle channel Test Date: May 24, 2016

**Temperature:** 22.6°C **Tested by:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1721.000	-64.35	5.15	5.9	-63.60	-13.00	-50.60	Н
2435.000	-64.66	6.24	6.01	-64.89	-13.00	-51.89	Н
N/A							

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 24, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1756.000	-63.63	5.21	5.84	-63.00	-13.00	-50.00	V
2435.000	-65.24	6.24	6.01	-65.47	-13.00	-52.47	V
N/A							

#### Remark:

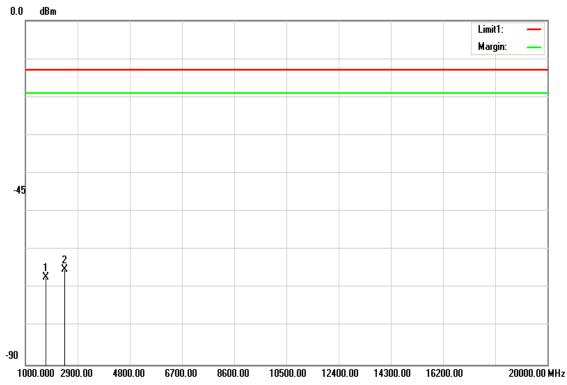
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 24, 2016

**Temperature:** 22.6°C **Tested by:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1756.000	-67.73	5.21	5.84	-67.10	-13.00	-54.10	Н
2435.000	-64.93	6.24	6.01	-65.16	-13.00	-52.16	Н
N/A							

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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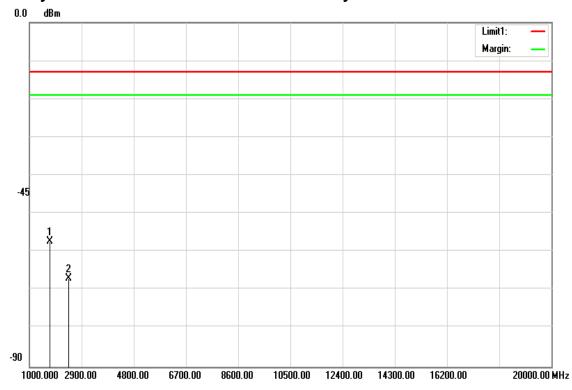


## LTE Band 13 / CHANNEL BANDWIDTH: 10MHz / QPSK

**Operation Mode:** Tx / Middle channel **Test Date:** May 24, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1735.000	-57.88	5.17	5.88	-57.17	-13.00	-44.17	V
2442.000	-66.75	6.25	6.02	-66.98	-13.00	-53.98	V
N/A							

#### Remark:

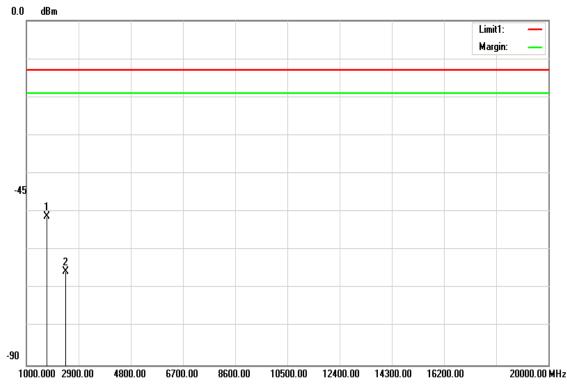
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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Operation Mode: Tx / Middle channel Test Date: May 24, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1735.000	-51.84	5.17	5.88	-51.13	-13.00	-38.13	Н
2442.000	-65.43	6.25	6.02	-65.66	-13.00	-52.66	Н
N/A							

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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# LTE Band 13 / CHANNEL BANDWIDTH: 5MHz / 16QAM

**Operation Mode:** Tx / Low channel **Test Date:** May 24, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1721.000	-52.07	5.15	5.9	-51.32	-13.00	-38.32	V
2582.000	-55.31	6.46	6.31	-55.46	-13.00	-42.46	V
N/A							

#### Remark:

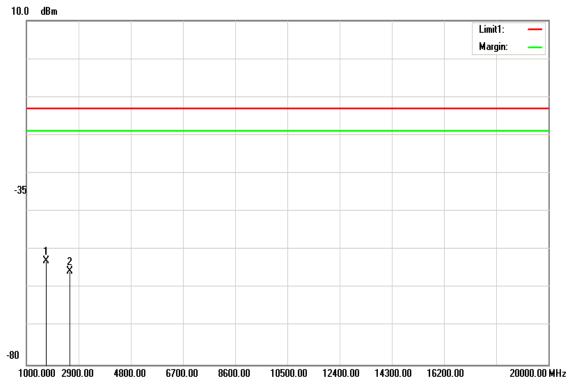
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Low channel **Test Date:** May 24, 2016

**Temperature:** 22.6°C **Tested by:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1721.000	-53.54	5.15	5.9	-52.79	-13.00	-39.79	Н
2582.000	-55.33	6.46	6.31	-55.48	-13.00	-42.48	Н
N/A							

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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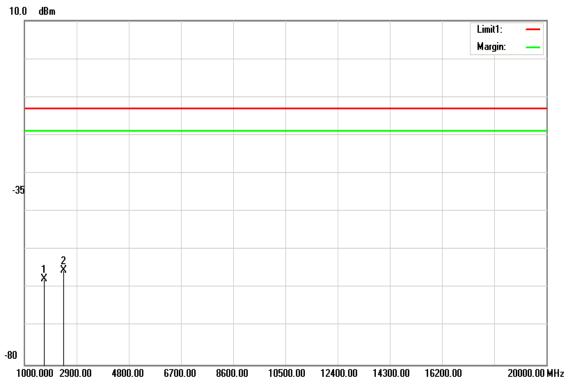
FCC ID: M82-IVU4000

**Operation Mode:** Tx / Middle channel May 24, 2016 Test Date:

Report No.: T160515D04-RP7

22.6°C Tested by: **Temperature:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1721.000	-58.42	5.15	5.9	-57.67	-13.00	-44.67	V
2435.000	-55.22	6.24	6.01	-55.45	-13.00	-42.45	V
N/A							

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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Operation Mode: Tx / Middle channel Test Date: May 24, 2016

**Temperature:** 22.6°C **Tested by:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1721.000	-42.26	5.15	5.9	-41.51	-13.00	-28.51	Н
2435.000	-54.26	6.24	6.01	-54.49	-13.00	-41.49	Н
N/A							

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 24, 2016

**Temperature:** 22.6°C **Tested by:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1749.000	-55.61	5.2	5.85	-54.96	-13.00	-41.96	V
2540.000	-55.45	6.41	6.2	-55.66	-13.00	-42.66	V
N/A							

## Remark:

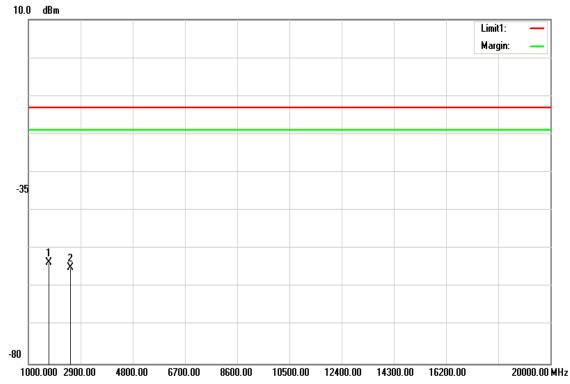
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** May 24, 2016

**Temperature:** 22.6°C **Tested by:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1749.000	-54.16	5.2	5.85	-53.51	-13.00	-40.51	Н
2540.000	-54.64	6.41	6.2	-54.85	-13.00	-41.85	Н
N/A							

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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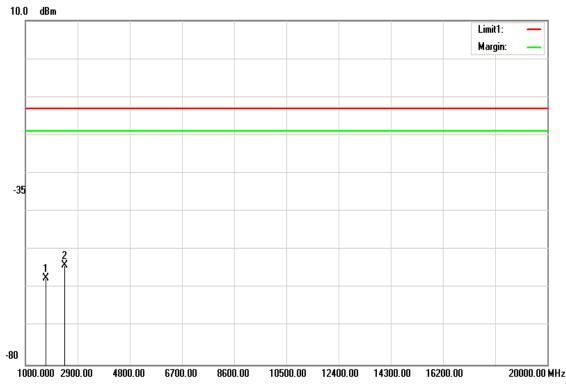


# LTE Band 13 / CHANNEL BANDWIDTH: 10MHz / 16QAM

**Operation Mode:** Tx / Middle channel **Test Date:** May 24, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1735.000	-58.09	5.17	5.88	-57.38	-13.00	-44.38	V
2442.000	-53.78	6.25	6.02	-54.01	-13.00	-41.01	V
N/A							

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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Operation Mode: Tx / Middle channel Test Date: May 24, 2016

**Temperature:** 22.6°C **Tested by:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
1735.000	-57.11	5.17	5.88	-56.40	-13.00	-43.40	Н
2442.000	-54.03	6.25	6.02	-54.26	-13.00	-41.26	Н
N/A							

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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FCC ID: M82-IVU4000

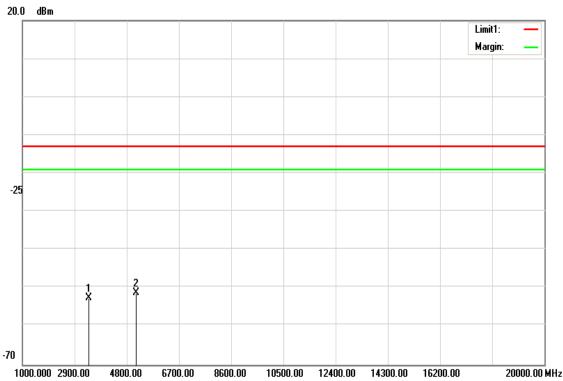
Report No.: T160515D04-RP7

#### LTE Band 4 / CHANNEL BANDWIDTH: 1.4MHz / QPSK

April 21, 2016 **Operation Mode:** Tx / Low channel **Test Date:** 

22.6°C Dennis Li **Temperature:** Tested by:

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3420.000	-53.62	7.63	8.66	-52.59	-13.00	-39.59	V
5130.000	-52.46	9.48	10.65	-51.29	-13.00	-38.29	V
N/A							

#### Remark:

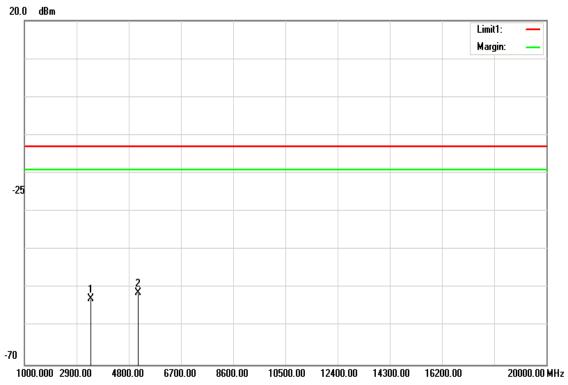
- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Low channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3420.000	-53.72	7.63	8.66	-52.69	-13.00	-39.69	Н
5130.000	-52.33	9.48	10.65	-51.16	-13.00	-38.16	Н
N/A							

#### Remark:

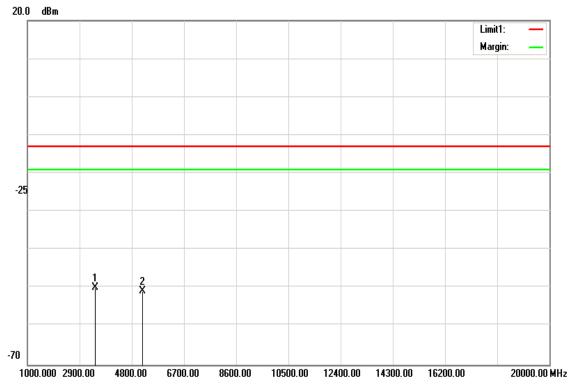
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3465.000	-50.78	7.77	8.79	-49.76	-13.00	-36.76	V
5197.000	-51.86	9.56	10.68	-50.74	-13.00	-37.74	V
N/A							

## Remark:

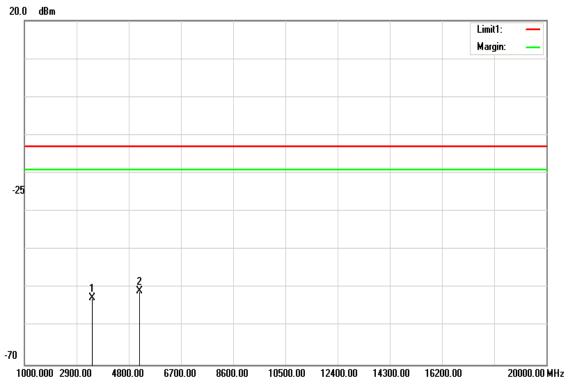
- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3465.000	-53.64	7.77	8.79	-52.62	-13.00	-39.62	Н
5197.000	-51.99	9.56	10.68	-50.87	-13.00	-37.87	Н
N/A							

## Remark:

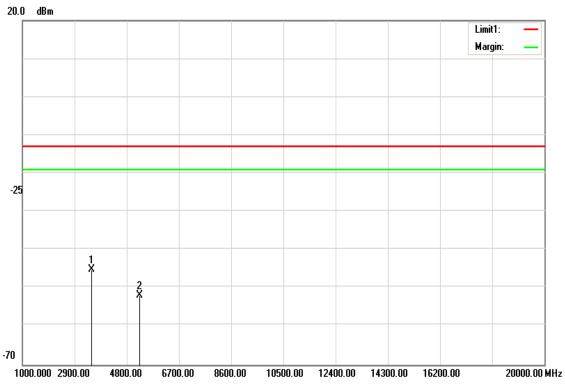
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3508.000	-46.21	7.89	8.91	-45.19	-13.00	-32.19	V
5262.000	-53.07	9.62	10.7	-51.99	-13.00	-38.99	V
N/A							

## Remark:

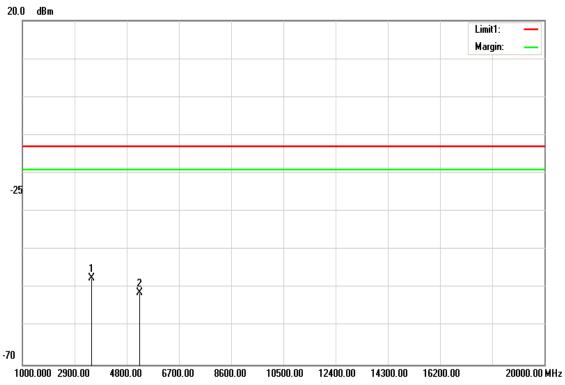
- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3508.000	-48.41	7.89	8.91	-47.39	-13.00	-34.39	Н
5262.000	-52.29	9.62	10.7	-51.21	-13.00	-38.21	Н
N/A							

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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FCC ID: M82-IVU4000

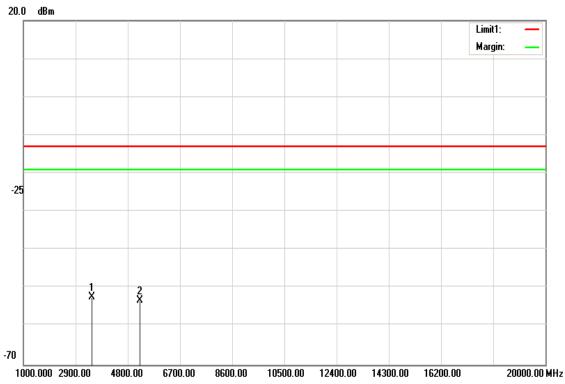
#### LTE Band 4 / CHANNEL BANDWIDTH: 5MHz / QPSK

**Operation Mode:** Tx / Low channel **Test Date:** April 19, 2016

Report No.: T160515D04-RP7

22.6°C **Temperature:** Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3500.000	-53.38	7.87	8.9	-52.35	-13.00	-39.35	V
5250.000	-54.26	9.61	10.7	-53.17	-13.00	-40.17	V
N/A							
	_						

#### Remark:

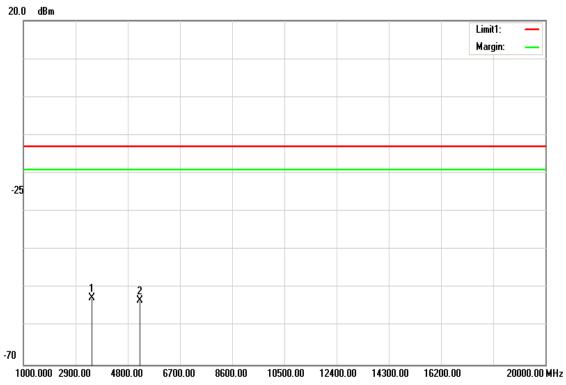
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Low channel **Test Date:** April 19, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3500.000	-53.59	7.87	8.9	-52.56	-13.00	-39.56	Н
5250.000	-54.43	9.61	10.7	-53.34	-13.00	-40.34	Н
N/A							

## Remark:

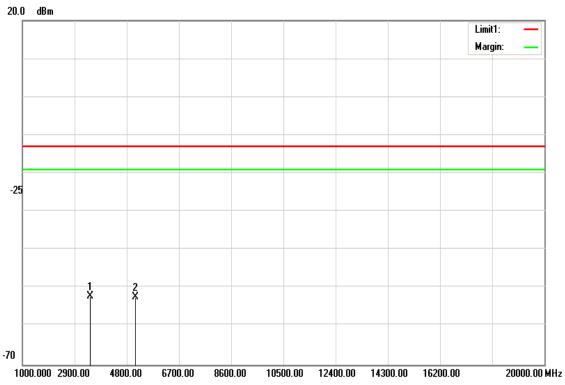
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** April 19, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3464.000	-53.19	7.76	8.79	-52.16	-13.00	-39.16	V
5109.000	-53.54	9.46	10.64	-52.36	-13.00	-39.36	V
N/A							

## Remark:

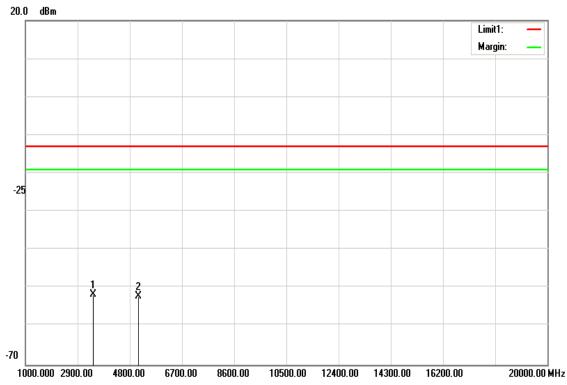
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** April 19, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3464.000	-52.64	7.76	8.79	-51.61	-13.00	-38.61	Н
5109.000	-53.21	9.46	10.64	-52.03	-13.00	-39.03	Н
N/A							

## Remark:

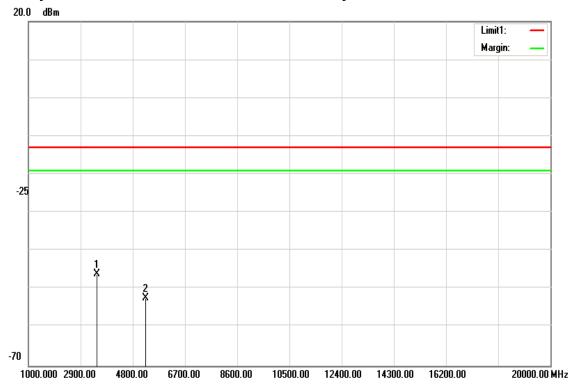
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** April 19, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3505.000	-47.16	7.88	8.91	-46.13	-13.00	-33.13	V
5257.000	-53.38	9.61	10.7	-52.29	-13.00	-39.29	V
N/A							

## Remark:

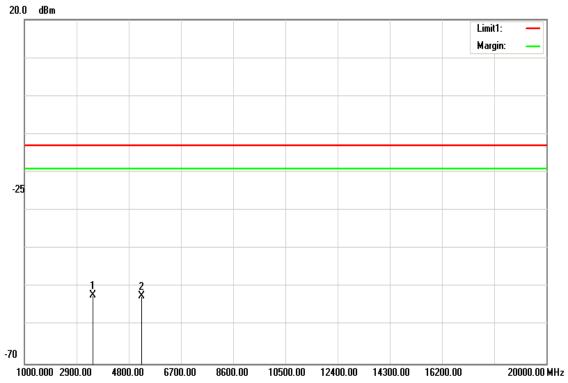
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** April 19, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3505.000	-53.12	7.88	8.91	-52.09	-13.00	-39.09	Н
5257.000	-53.39	9.61	10.7	-52.30	-13.00	-39.30	Н
N/A							

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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FCC ID: M82-IVU4000

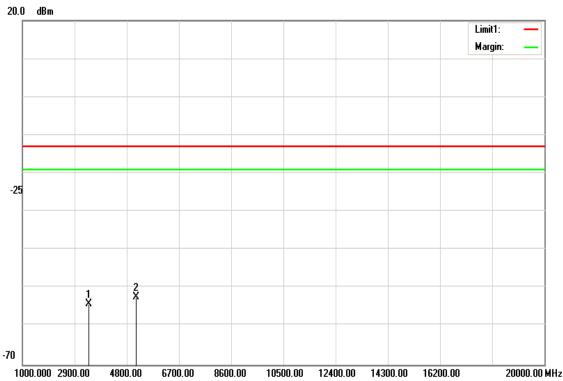
#### LTE Band 4 / CHANNEL BANDWIDTH: 10MHz / QPSK

April 19, 2016 **Operation Mode:** Tx / Low channel **Test Date:** 

Report No.: T160515D04-RP7

22.6°C Dennis Li **Temperature:** Tested by:

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3430.000	-55.2	7.66	8.69	-54.17	-13.00	-41.17	V
5145.000	-53.55	9.5	10.66	-52.39	-13.00	-39.39	V
N/A							

#### Remark:

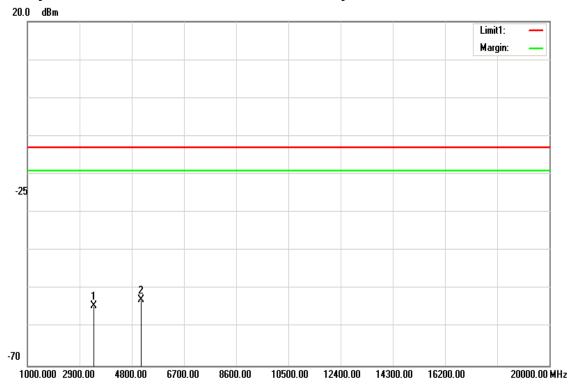
- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Low channel **Test Date:** April 19, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3430.000	-55.46	7.66	8.69	-54.43	-13.00	-41.43	Н
5145.000	-53.87	9.5	10.66	-52.71	-13.00	-39.71	Н
N/A							

## Remark:

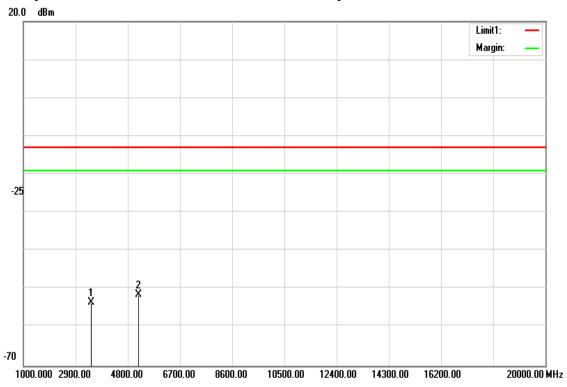
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** April 19, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3464.000	-54.48	7.76	8.79	-53.45	-13.00	-40.45	V
5196.000	-52.62	9.56	10.68	-51.50	-13.00	-38.50	V
N/A							

## Remark:

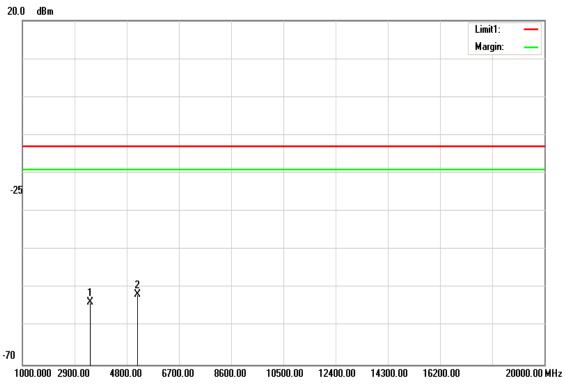
- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** April 19, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3464.000	-54.68	7.76	8.79	-53.65	-13.00	-40.65	Н
5196.000	-52.7	9.56	10.68	-51.58	-13.00	-38.58	Н
N/A							

## Remark:

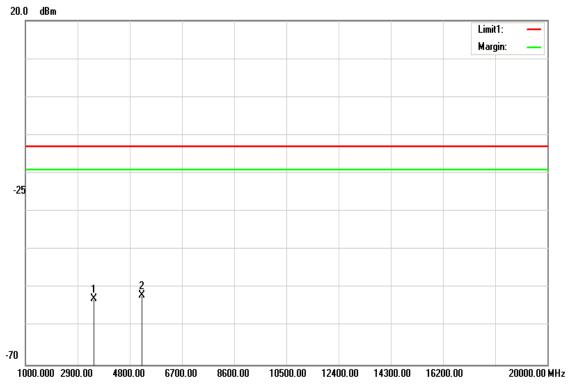
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** April 19, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3500.000	-53.84	7.87	8.9	-52.81	-13.00	-39.81	V
5250.000	-52.94	9.61	10.7	-51.85	-13.00	-38.85	V
N/A							

#### Remark:

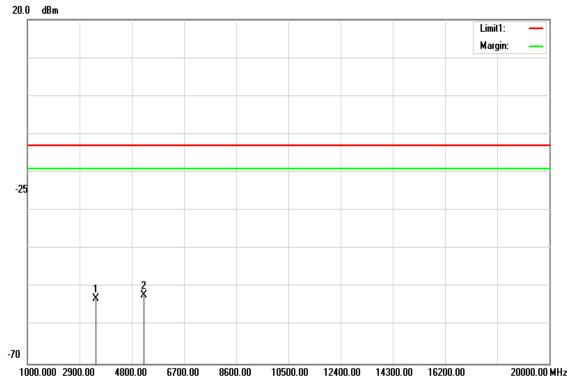
- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** April 19, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3500.000	-54.11	7.87	8.9	-53.08	-13.00	-40.08	Н
5250.000	-53.19	9.61	10.7	-52.10	-13.00	-39.10	Н
N/A							

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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FCC ID: M82-IVU4000

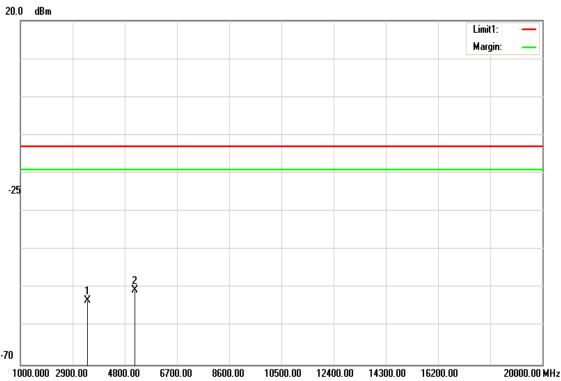
# LTE Band 4 / CHANNEL BANDWIDTH: 20MHz / QPSK

April 21, 2016 **Operation Mode:** Tx / Low channel **Test Date:** 

Report No.: T160515D04-RP7

22.6°C Dennis Li **Temperature:** Tested by:

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3440.000	-54.24	7.69	8.72	-53.21	-13.00	-40.21	V
5160.000	-51.74	9.52	10.66	-50.60	-13.00	-37.60	V
N/A							

#### Remark:

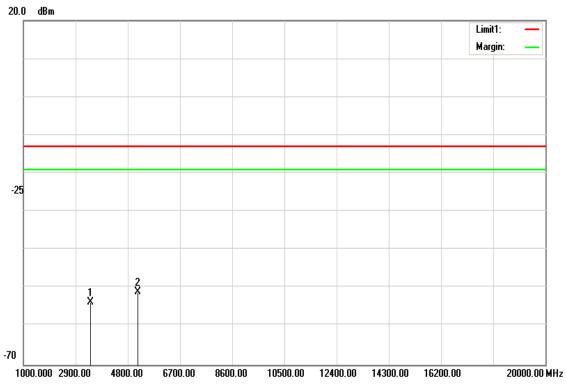
- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Low channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3440.000	-54.75	7.69	8.72	-53.72	-13.00	-40.72	Н
5160.000	-52.21	9.52	10.66	-51.07	-13.00	-38.07	Н
N/A							

## Remark:

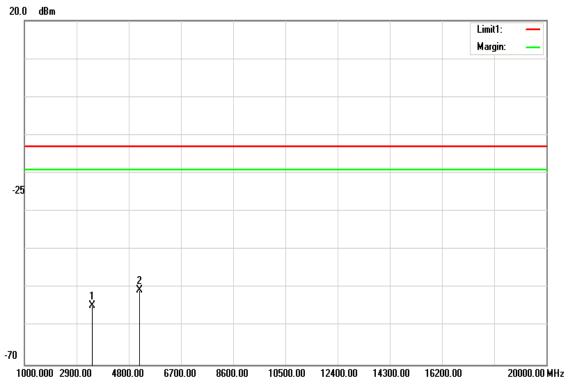
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3465.000	-55.51	7.77	8.79	-54.49	-13.00	-41.49	V
5197.000	-51.66	9.56	10.68	-50.54	-13.00	-37.54	V
N/A							

## Remark:

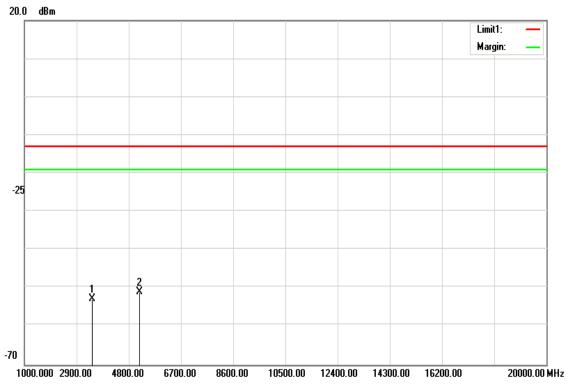
- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** April 21, 2016

**Temperature:** 22.6°C **Tested by:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3465.000	-53.71	7.77	8.79	-52.69	-13.00	-39.69	Н
5197.000	-52.05	9.56	10.68	-50.93	-13.00	-37.93	Н
N/A							

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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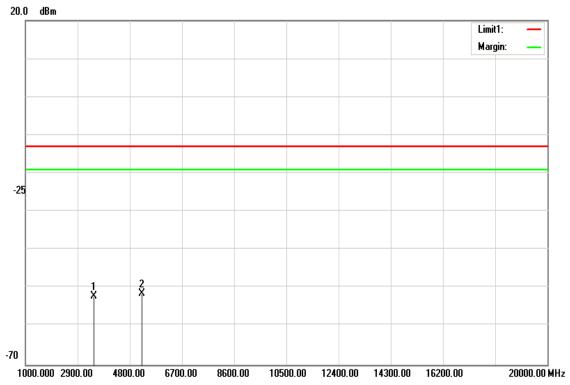
FCC ID: M82-IVU4000

Report No.: T160515D04-RP7

**Operation Mode:** Tx / High channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3490.000	-53.05	7.84	8.87	-52.02	-13.00	-39.02	V
5235.000	-52.49	9.59	10.69	-51.39	-13.00	-38.39	V
N/A							
			_	_		_	

## Remark:

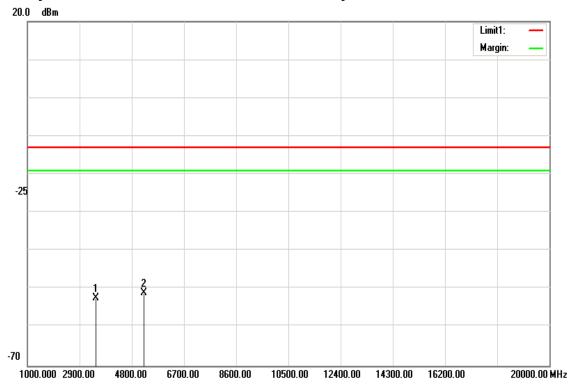
- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3490.000	-53.29	7.84	8.87	-52.26	-13.00	-39.26	Н
5235.000	-52	9.59	10.69	-50.90	-13.00	-37.90	Н
N/A							

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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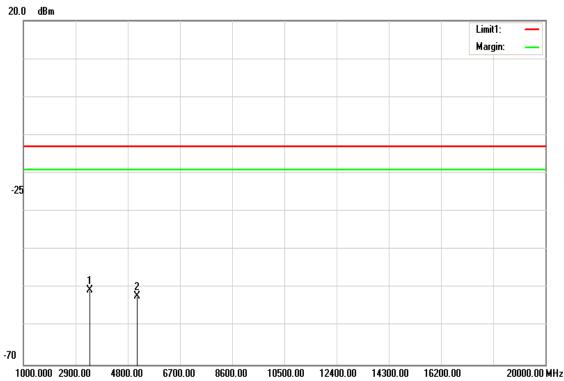
LTE Band 4 / CHANNEL BANDWIDTH: 1.4MHz / 16QAM

April 21, 2016 **Operation Mode:** Tx / Low channel **Test Date:** 

Report No.: T160515D04-RP7

22.6°C Dennis Li **Temperature:** Tested by:

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3420.000	-51.57	7.63	8.66	-50.54	-13.00	-37.54	V
5130.000	-53.32	9.48	10.65	-52.15	-13.00	-39.15	V
N/A							

#### Remark:

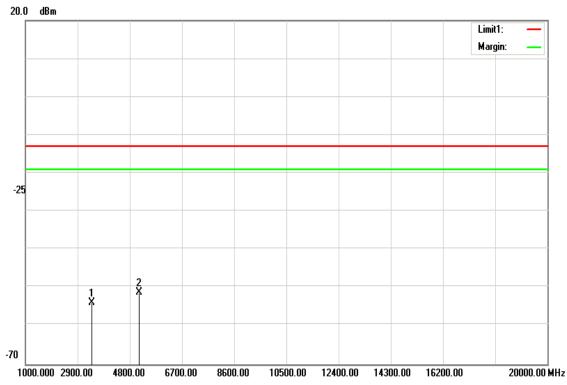
- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Low channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3420.000	-54.93	7.63	8.66	-53.90	-13.00	-40.90	Н
5130.000	-52.43	9.48	10.65	-51.26	-13.00	-38.26	Н
N/A							

#### Remark:

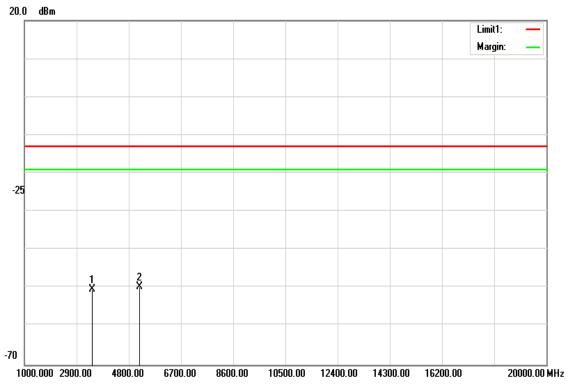
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3465.000	-51.3	7.77	8.79	-50.28	-13.00	-37.28	V
5197.000	-50.73	9.56	10.68	-49.61	-13.00	-36.61	V
N/A							

# Remark:

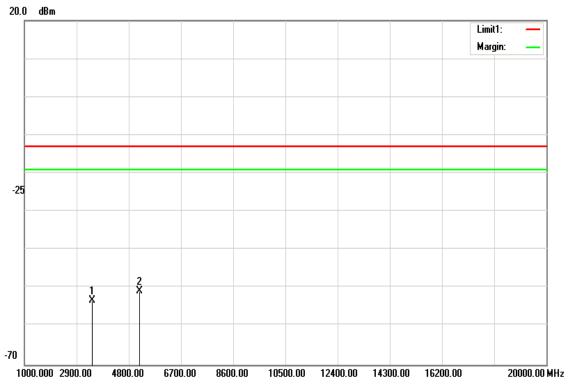
- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3465.000	-54.32	7.77	8.79	-53.30	-13.00	-40.30	Н
5197.000	-51.82	9.56	10.68	-50.70	-13.00	-37.70	Н
N/A							

# Remark:

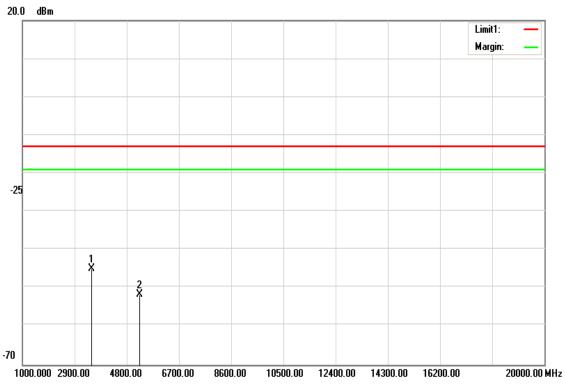
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3508.000	-45.95	7.89	8.91	-44.93	-13.00	-31.93	V
5262.000	-52.79	9.62	10.7	-51.71	-13.00	-38.71	V
N/A							

# Remark:

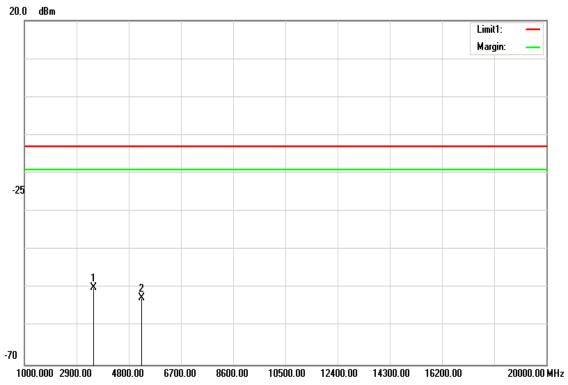
- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3508.000	-50.77	7.89	8.91	-49.75	-13.00	-36.75	Н
5262.000	-53.67	9.62	10.7	-52.59	-13.00	-39.59	Н
N/A							

# Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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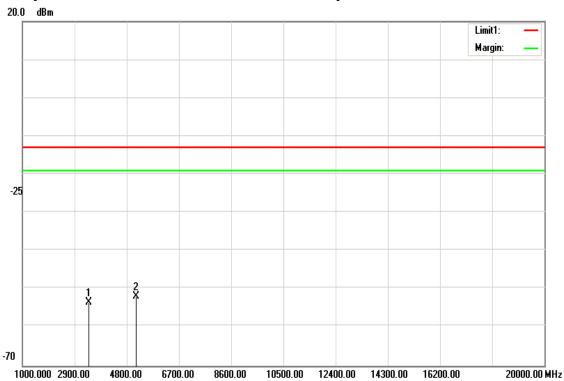
#### LTE Band 4 / CHANNEL BANDWIDTH: 5MHz / 16QAM

**Operation Mode:** Tx / Low channel **Test Date:** April 21, 2016

Report No.: T160515D04-RP7

22.6°C **Temperature:** Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3425.000	-54.47	7.65	8.68	-53.44	-13.00	-40.44	V
5137.000	-53.07	9.49	10.65	-51.91	-13.00	-38.91	V
N/A							

#### Remark:

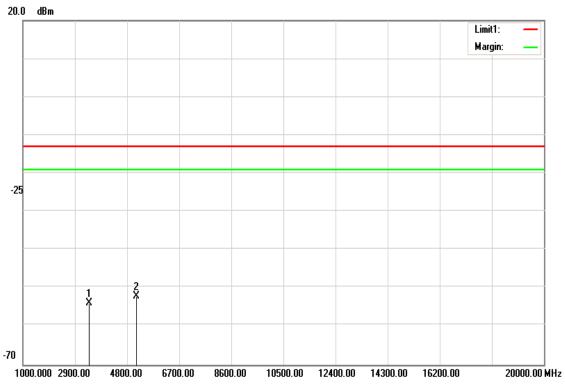
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Low channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3425.000	-54.97	7.65	8.68	-53.94	-13.00	-40.94	Н
5137.000	-53.2	9.49	10.65	-52.04	-13.00	-39.04	Н
N/A							

# Remark:

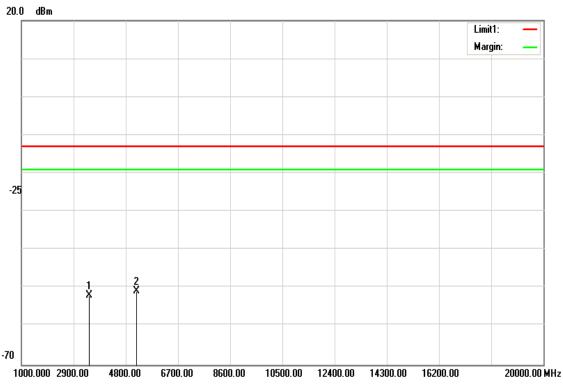
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** April 21, 2016

**Temperature:** 22.6°C **Tested by:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3465.000	-52.9	7.77	8.79	-51.88	-13.00	-38.88	V
5197.000	-51.91	9.56	10.68	-50.79	-13.00	-37.79	V
N/A							

# Remark:

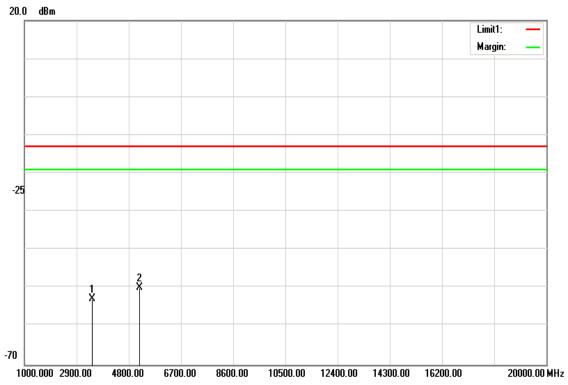
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** April 21, 2016

**Temperature:** 22.6°C **Tested by:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3465.000	-53.83	7.77	8.79	-52.81	-13.00	-39.81	Н
5197.000	-50.9	9.56	10.68	-49.78	-13.00	-36.78	Н
N/A							

# Remark:

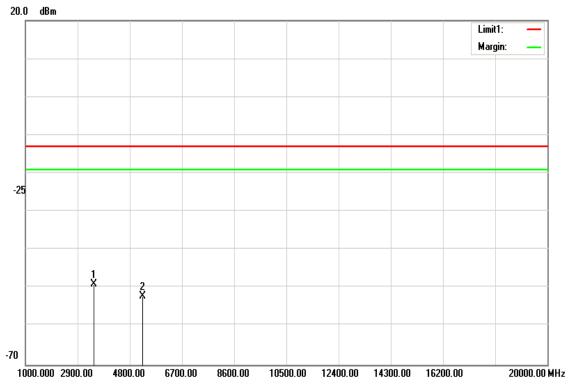
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** April 21, 2016

**Temperature:** 22.6°C **Tested by:** Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3505.000	-49.92	7.88	8.91	-48.89	-13.00	-35.89	V
5257.000	-53.17	9.61	10.7	-52.08	-13.00	-39.08	V
N/A							
	_		_	_		_	

# Remark:

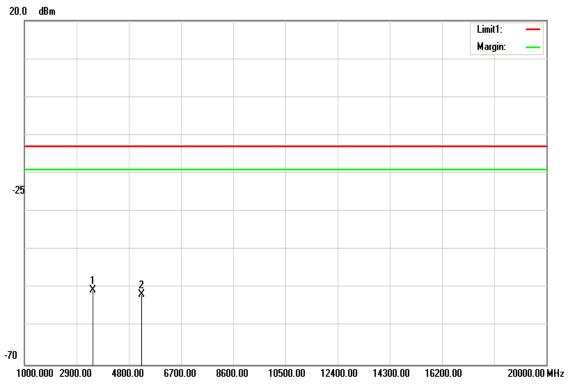
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3505.000	-51.54	7.88	8.91	-50.51	-13.00	-37.51	Н
5257.000	-52.85	9.61	10.7	-51.76	-13.00	-38.76	Н
N/A							

# Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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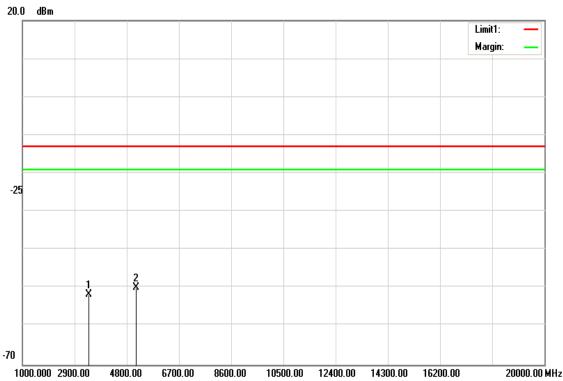
#### LTE Band 4 / CHANNEL BANDWIDTH: 10MHz / 16QAM

April 21, 2016 **Operation Mode:** Tx / Low channel **Test Date:** 

Report No.: T160515D04-RP7

22.6°C Dennis Li **Temperature:** Tested by:

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3430.000	-52.69	7.66	8.69	-51.66	-13.00	-38.66	V
5145.000	-50.93	9.5	10.66	-49.77	-13.00	-36.77	V
N/A							

#### Remark:

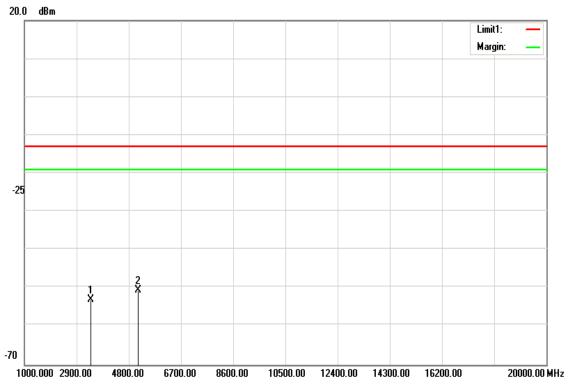
- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Low channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3430.000	-53.97	7.66	8.69	-52.94	-13.00	-39.94	Н
5145.000	-51.68	9.5	10.66	-50.52	-13.00	-37.52	Н
N/A							

# Remark:

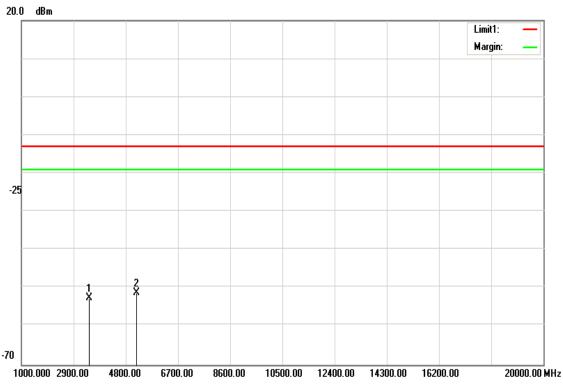
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3465.000	-53.47	7.77	8.79	-52.45	-13.00	-39.45	V
5197.000	-52.43	9.56	10.68	-51.31	-13.00	-38.31	V
N/A							

# Remark:

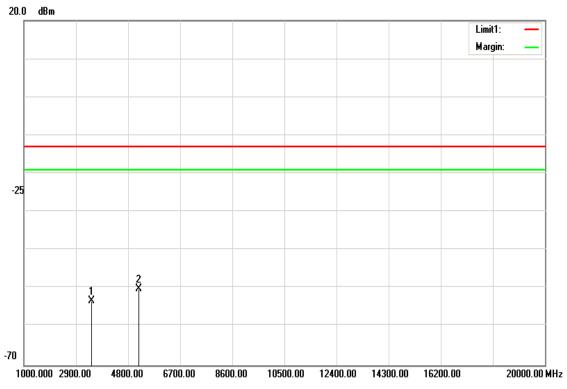
- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3465.000	-54.3	7.77	8.79	-53.28	-13.00	-40.28	Н
5197.000	-51.21	9.56	10.68	-50.09	-13.00	-37.09	Н
N/A							

# Remark:

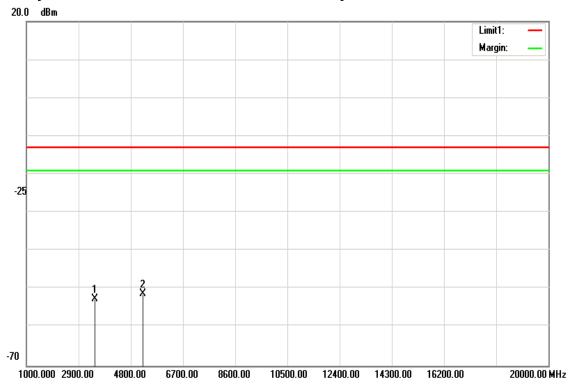
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3500.000	-53.54	7.87	8.9	-52.51	-13.00	-39.51	V
5250.000	-52.27	9.61	10.7	-51.18	-13.00	-38.18	V
N/A							

# Remark:

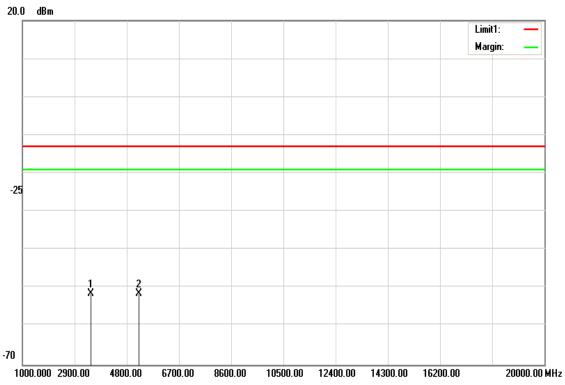
- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3500.000	-52.5	7.87	8.9	-51.47	-13.00	-38.47	Н
5250.000	-52.61	9.61	10.7	-51.52	-13.00	-38.52	Н
N/A							

# Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

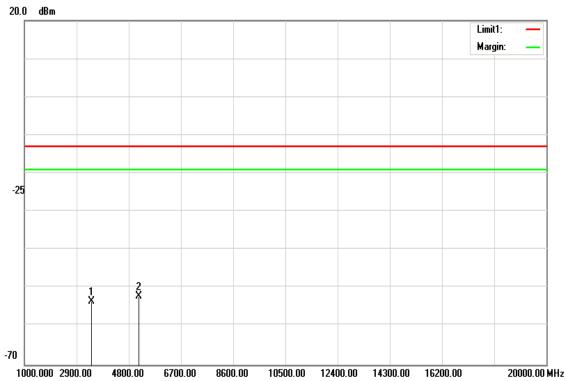
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#### LTE Band 4 / CHANNEL BANDWIDTH: 20MHz / 16QAM

**Operation Mode:** Tx / Low channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3440.000	-54.52	7.69	8.72	-53.49	-13.00	-40.49	V
5160.000	-53.27	9.52	10.66	-52.13	-13.00	-39.13	V
N/A							

#### Remark:

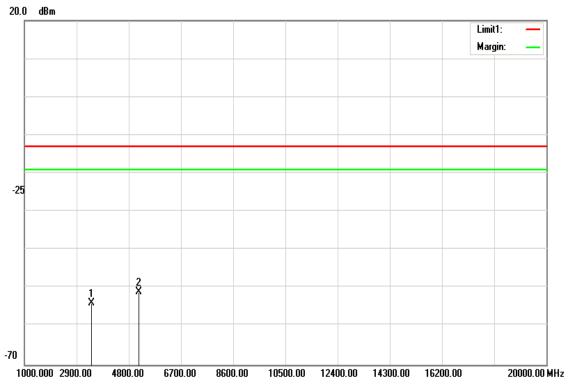
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Low channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3440.000	-55.02	7.69	8.72	-53.99	-13.00	-40.99	Н
5160.000	-52.05	9.52	10.66	-50.91	-13.00	-37.91	Н
N/A							
	_				_		

# Remark:

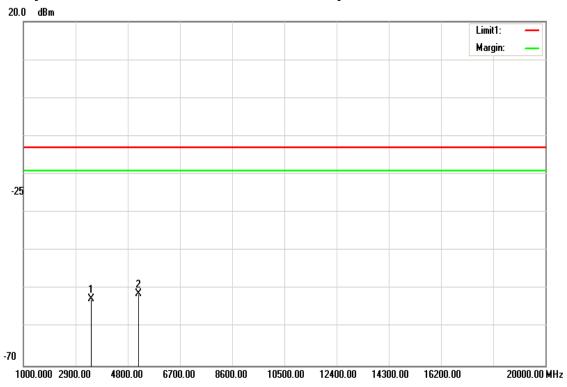
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3465.000	-53.6	7.77	8.79	-52.58	-13.00	-39.58	V
5197.000	-52.22	9.56	10.68	-51.10	-13.00	-38.10	V
N/A							

# Remark:

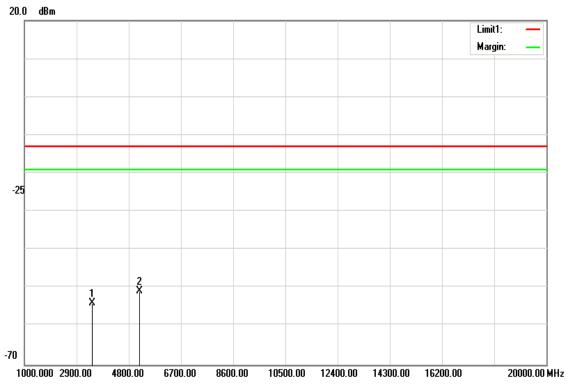
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / Middle channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3465.000	-55	7.77	8.79	-53.98	-13.00	-40.98	Н
5197.000	-51.94	9.56	10.68	-50.82	-13.00	-37.82	Н
N/A							

# Remark:

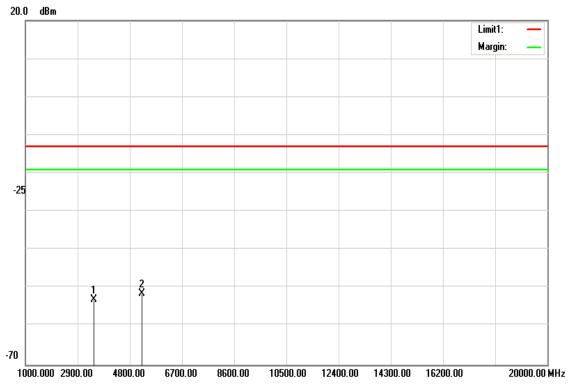
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Ver.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3490.000	-54.12	7.84	8.87	-53.09	-13.00	-40.09	V
5235.000	-52.44	9.59	10.69	-51.34	-13.00	-38.34	V
N/A							

# Remark:

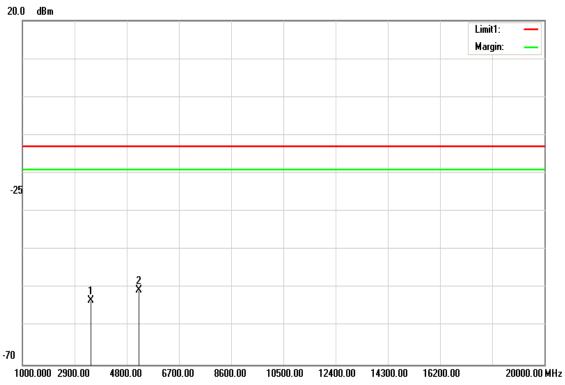
- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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**Operation Mode:** Tx / High channel **Test Date:** April 21, 2016

Temperature: 22.6°C Tested by: Dennis Li

**Humidity:** 57.2% RH **Polarity:** Hor.



Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarizatio n (V/H)
3490.000	-54.33	7.84	8.87	-53.30	-13.00	-40.30	Н
5235.000	-51.59	9.59	10.69	-50.49	-13.00	-37.49	Н
N/A							

# Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

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