FCC Test Report

FCC ID: QISE8372H-609

Project No.	:	1612C018
Equipment	:	LTE Wingle
Model Name	:	E8372h-609
Applicant	:	Huawei Technologies Co.,Ltd.
Address	:	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C

Date of Receipt	:	Dec. 05, 2016
Date of Test	:	Dec. 05, 2016 ~ Dec. 12, 2016
Issued Date	:	Dec. 13, 2016
Tested by	:	BTL Inc.

Testing Engineer : (Kevin Li)

Technical Manager : (Bill Zhang)

Authorized Signatory : (Steven Lu)

BTL INC.

No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

TEL: +86-769-8318-3000 FAX: +86-769-8319-6000

Testing Laboratory 2640

Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

BTL's report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

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BTL's laboratory quality assurance procedures are in compliance with the **ISO Guide 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

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REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCE-1-1612C018	Original Issue.	Dec. 13, 2016

1. CERIFICATION

Equipment	:	LTE Wingle
Brand Name	:	HUAWEI
Model Name	:	E8372h-609
Applicant	:	Huawei Technologies Co.,Ltd.
Manufacturer	:	Huawei Technologies Co.,Ltd.
Address	:	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C
Factory	:	Huawei Technologies Co.,Ltd.
Address	:	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C
Date of Test	:	Dec. 05, 2016 ~ Dec. 05, 2016
Test Sample	:	Engineering Sample
Standard(s)	:	FCC Part 15, Subpart B ANSI C63.4-2014

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.
The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCE-1-1612C018) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

EMC Emission				
Standard(s)	Test Item	Limit	Judgment	Remark
FCC Part 15, Subpart B ANSI C63.4-2014	Conducted Emission	Class B	PASS	
	Radiated emission Below 1 GHz	Class B	PASS	
	Radiated emission Above 1 GHz	Class B	PASS	**NOTE(2)**

NOTE:

(1) ” N/A” denotes test is not applicable to this device.

(2) The EUT’s max operating frequency exceeds 108 MHz, so the test will be performed.

2.1 TEST FACILITY

The test facilities used to collect the test data in this report at the location of No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

2.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2 U_{cispr} requirement.

The reported uncertainty of measurement **y** ± **U**, where expanded uncertainty **U** is based on a standard uncertainty multiplied by a coverage factor of **k=2**, providing a level of confidence of approximately **95**%.

A. Conducted Measurement :

Test Site	Method	Measurement Frequency Range	U, (dB)
DG-C02	CISPR	150 kHz ~ 30MHz	2.32

B. Radiated Measurement :

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
DG-CB03 (3m)	CISPR	9KHz ~ 30MHz	V	3.79
		9KHz ~ 30MHz	H	3.57
		30MHz ~ 200MHz	V	3.82
		30MHz ~ 200MHz	H	3.78
		200MHz ~ 1,000MHz	V	4.10
		200MHz ~ 1,000MHz	H	4.06

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
DG-CB03 (3m)	CISPR	1GHz ~ 18GHz	V	3.12
		1GHz ~ 18GHz	H	3.68
		1GHz ~ 18GHz	V	3.12
		1GHz ~ 18GHz	H	3.68

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	LTE Wingle
Brand Name	HUAWEI
Model Name	E8372h-609
Model Difference	N/A
Frequency	GSM850/1900 WCDMA B2 LTE B7 Wi-Fi
Power Source	Supplied from USB port.
Power Rating	DC 5V
HW Version	CL1E8372HM09
SW Version	21.322.01.01.110

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

3.2 DESCRIPTION OF TEST MODES

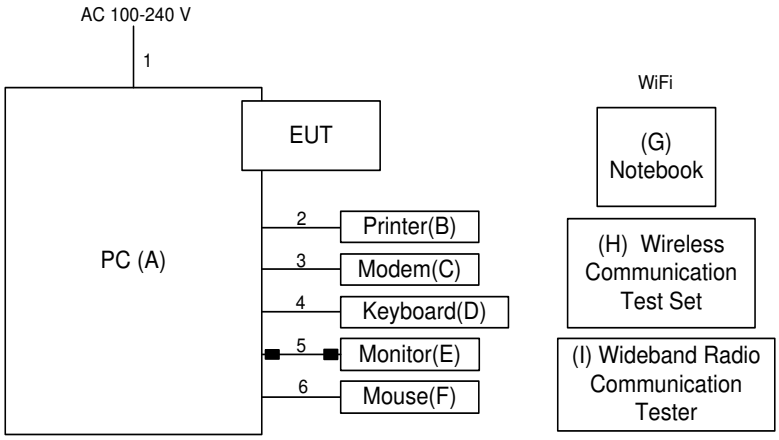
To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	USB R/W+Idle+Wifi
Mode 2	USB R/W+ Traffic(2G)+Wifi
Mode 3	USB R/W+ Traffic(3G)+Wifi
Mode 4	USB R/W+ Traffic(4G)+Wifi

For Conducted Test	
Final Test Mode	Description
Mode 1	USB R/W+Idle+Wifi
Mode 2	USB R/W+ Traffic(2G)+Wifi
Mode 3	USB R/W+ Traffic(3G)+Wifi
Mode 4	USB R/W+ Traffic(4G)+Wifi

For Radiated Test	
Final Test Mode	Description
Mode 1	USB R/W+Idle+Wifi
Mode 2	USB R/W+ Traffic(2G)+Wifi
Mode 3	USB R/W+ Traffic(3G)+Wifi
Mode 4	USB R/W+ Traffic(4G)+Wifi

3.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



Ground plane

Remote System

3.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.
A	PC	Dell	DCSM 745	DOC	G7K832X
B	Printer	SII	DPU-414	DOC	3018507B
C	Modem	ACEEX	DM-1414V	IFAXDM1414	0603002131
D	Keyboard	Dell	L100	DOC	CNORH6596589071T08NE
E	Monitor	Dell	E177FPC	DOC	CN-OFJ79-64180-763-0TKS
F	Mouse	Dell	MO56UOA	DOC	FQJ000BS
G	Notebook	Dell	E5510	N/A	OJYNHR
H	Wireless Communication Test SET	Agilent	(8960 Series) E5515C	N/A	MY48364183
I	Wideband Radio Communication Tester	RS	CMW500	N/A	122125

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	1.8m	AC Cable
2	YES	NO	1.5m	Parallel Cable
3	YES	NO	1.5m	RS232 Cable
4	YES	NO	1.8m	USB Cable
5	YES	YES	1.8m	D-SUB Cable
6	YES	NO	1.8m	USB Cable

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 POWER LINE CONDUCTED EMISSION (FREQUENCY RANGE 150KHZ-30MHZ)

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *
0.50 -5.0	73.00	60.00	56.00	46.00
5.0 -30.0	73.00	60.00	60.00	50.00

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

(3) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor(if use)
Margin Level = Measurement Value - Limit Value

4.1.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
2	LISN	EMCO	3816/2	00052765	Mar. 27, 2017
3	50Ω Terminator	SHX	TF2-3G-A	08122901	Mar. 27, 2017
4	TWO-LINE V-NETWORK	R&S	ENV216	101447	Mar. 27, 2017
5	Cable	emci	RG223(9KHz-30 MHz)(5m)	N/A	Mar. 10, 2017
6	EMI Test Receiver	R&S	ESCI	100382	Mar. 27, 2017

Remark: “N/A” denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

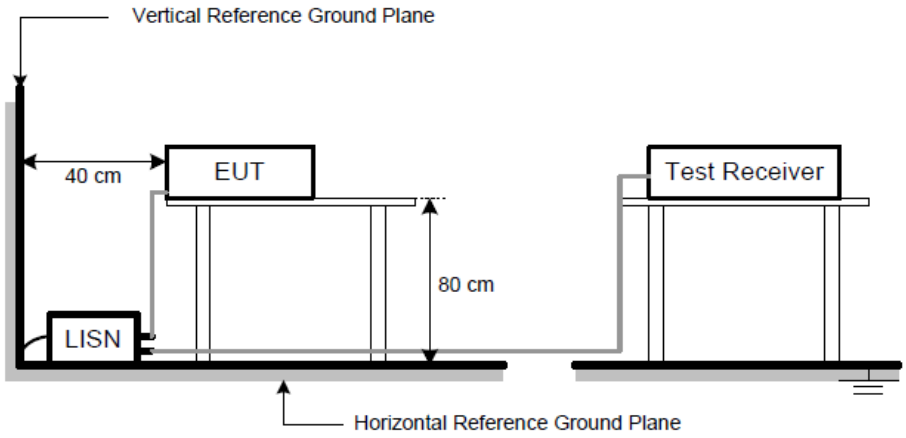
4.1.3 TEST PROCEDURE

a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipment powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
d. LISN at least 80 cm from nearest part of EUT chassis.
e. For the actual test configuration, please refer to the related Item –EUT Test Photos.
f. First the whole spectrum of emission caused by equipment under test(EUT) is recorded with Detector set to peak. Peak value recorded in table if the margin from QP Limit is larger than 2dB,otherwise,QP value is recorded, Measuring frequency range from 150KHz to 30MHz.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



4.1.6 EUT OPERATING CONDITIONS

The EUT exercise program used during radiated and/or conducted emission measurement was designed to exercise the various system components in a manner similar to a typical use.

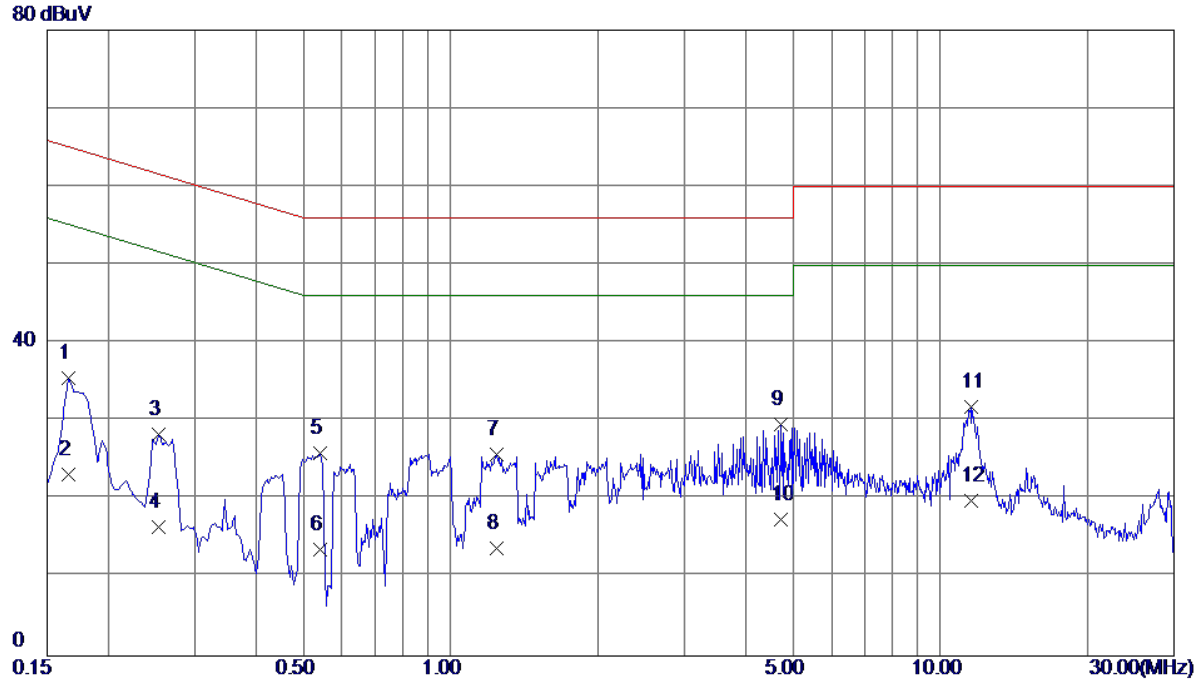
4.1.7 TEST RESULTS

Remark

(1) Reading in which marked as QP means measurements by using are Quasi-Peak Mode with Detector BW=9KHz；SPA setting in RBW=10KHz,VBW =10KHz, Swp. Time = 0.3 sec./MHz。Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW=10KHz,VBW=10KHz, Swp. Time =0.3 sec./MHz.

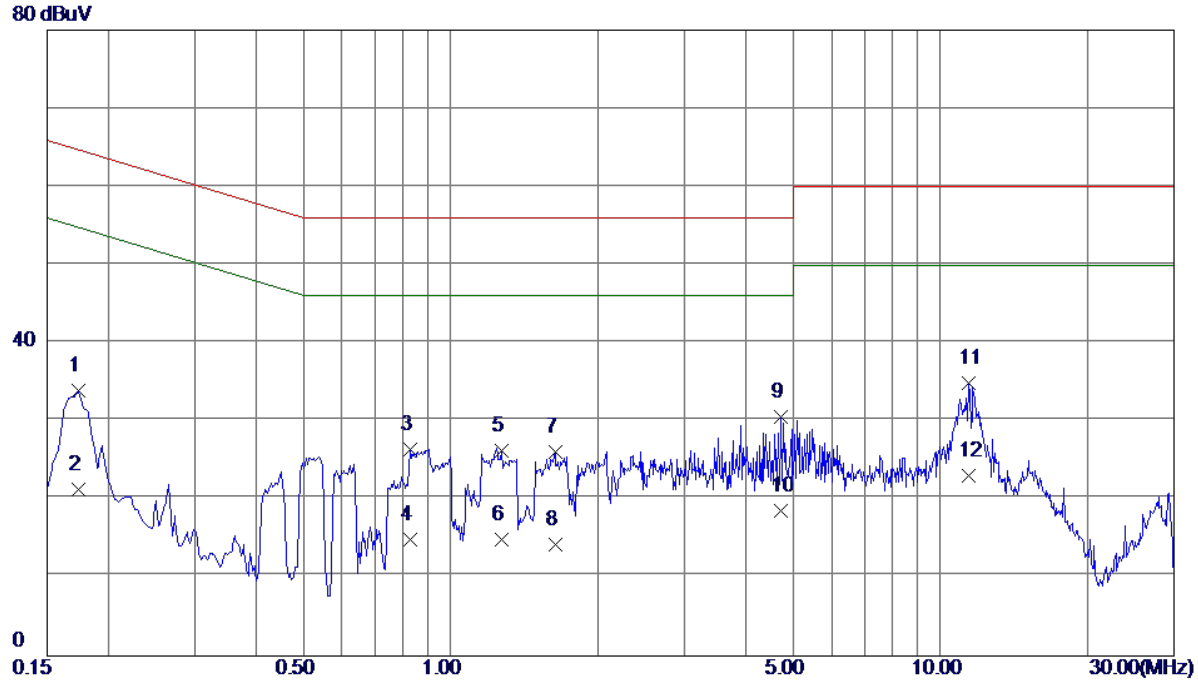
(2) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured.

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25° C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Phase	Line
Test Mode	USB R/W+Idle+Wifi		
Test Engineer	Kevin Li		



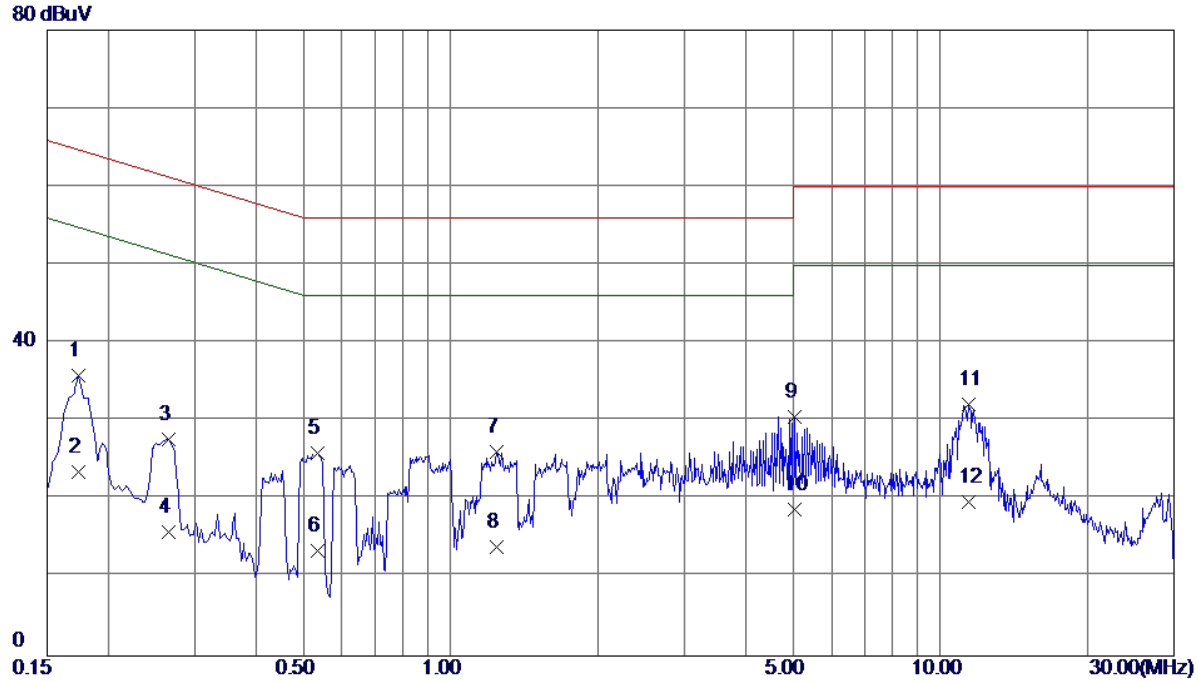
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	0.1660	35.53	0.02	35.55	65.16	-29.61	QP
2	0.1660	23.20	0.02	23.22	55.16	-31.94	AVG
3	0.2540	28.33	0.03	28.36	61.63	-33.27	QP
4	0.2540	16.50	0.03	16.53	51.63	-35.10	AVG
5	0.5420	25.83	0.04	25.87	56.00	-30.13	QP
6	0.5420	13.50	0.04	13.54	46.00	-32.46	AVG
7	1.2420	25.66	0.07	25.73	56.00	-30.27	QP
8	1.2420	13.70	0.07	13.77	46.00	-32.23	AVG
9 *	4.7220	29.45	0.09	29.54	56.00	-26.46	QP
10	4.7220	17.40	0.09	17.49	46.00	-28.51	AVG
11	11.5580	31.66	0.23	31.89	60.00	-28.11	QP
12	11.5580	19.60	0.23	19.83	50.00	-30.17	AVG

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25° C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Phase	Neutral
Test Mode	USB R/W+Idle+Wifi		
Test Engineer	Kevin Li		



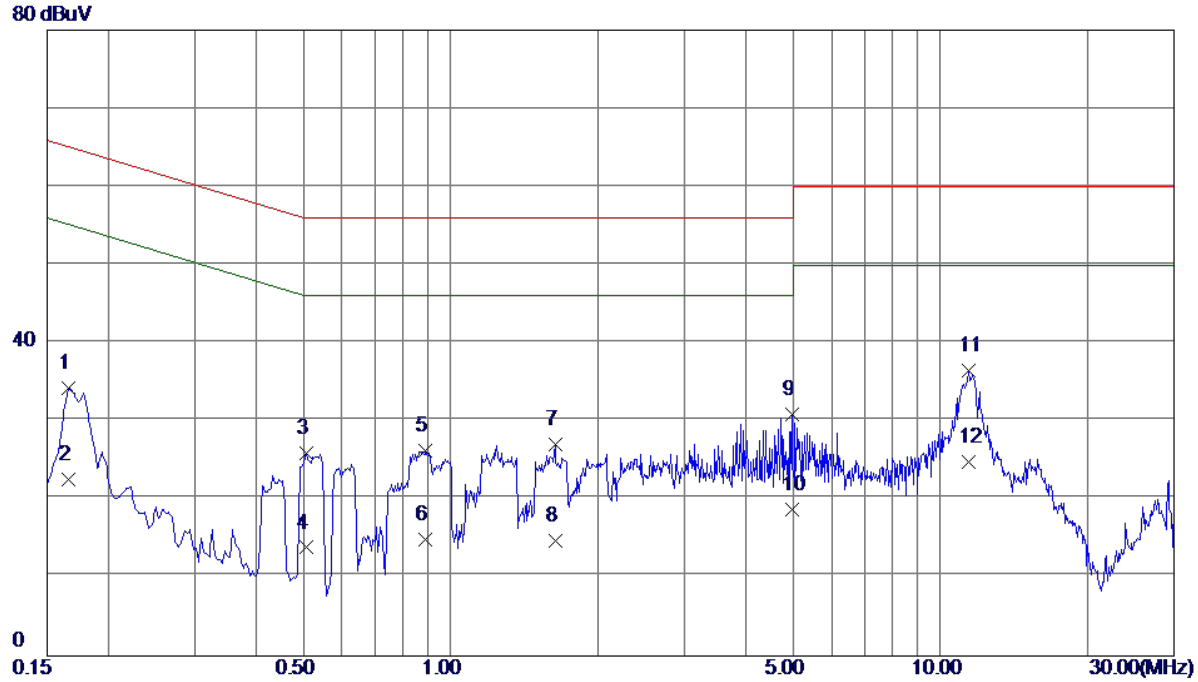
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	0.1740	33.83	0.02	33.85	64.77	-30.92	QP
2	0.1740	21.20	0.02	21.22	54.77	-33.55	AVG
3	0.8260	26.28	0.05	26.33	56.00	-29.67	QP
4	0.8260	14.80	0.05	14.85	46.00	-31.15	AVG
5	1.2700	26.12	0.07	26.19	56.00	-29.81	QP
6	1.2700	14.80	0.07	14.87	46.00	-31.13	AVG
7	1.6340	26.07	0.08	26.15	56.00	-29.85	QP
8	1.6340	14.20	0.08	14.28	46.00	-31.72	AVG
9	4.7220	30.53	0.09	30.62	56.00	-25.38	QP
10	4.7220	18.50	0.09	18.59	46.00	-27.41	AVG
11 *	11.4300	34.66	0.22	34.88	60.00	-25.12	QP
12	11.4300	22.80	0.22	23.02	50.00	-26.98	AVG

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25° C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Phase	Line
Test Mode	USB R/W+ Traffic(2G)+Wifi		
Test Engineer	Kevin Li		



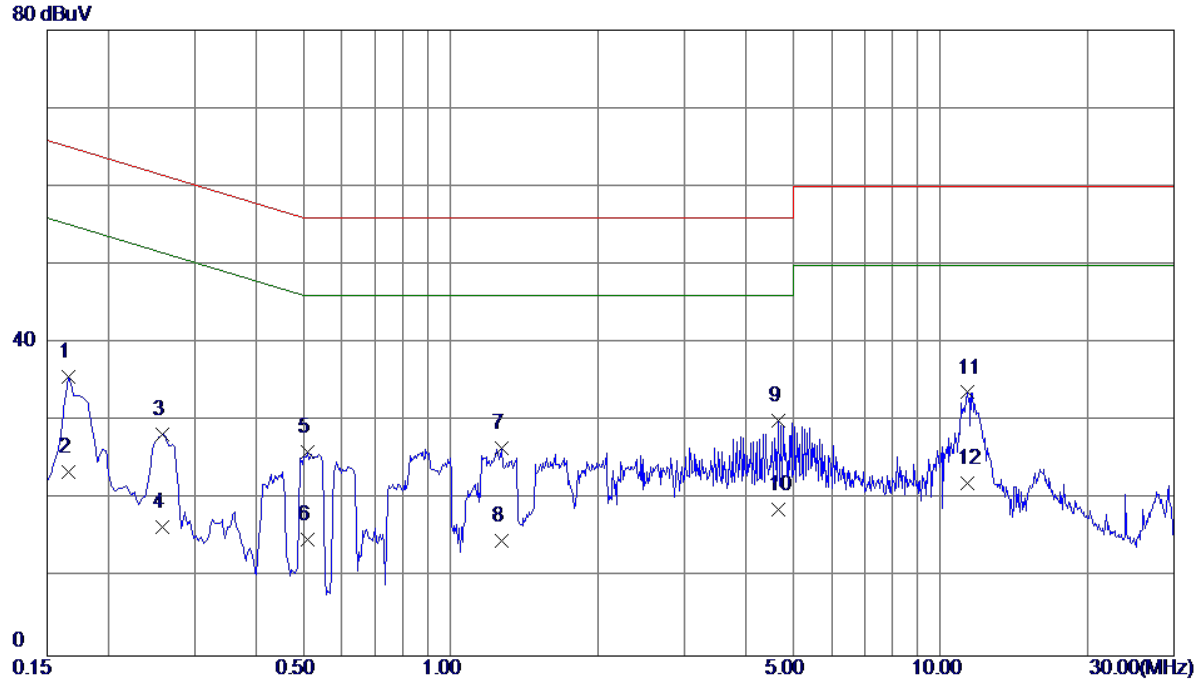
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	0.1740	35.88	0.02	35.90	64.77	-28.87	QP
2	0.1740	23.50	0.02	23.52	54.77	-31.25	AVG
3	0.2660	27.72	0.03	27.75	61.24	-33.49	QP
4	0.2660	15.80	0.03	15.83	51.24	-35.41	AVG
5	0.5340	25.85	0.04	25.89	56.00	-30.11	QP
6	0.5340	13.40	0.04	13.44	46.00	-32.56	AVG
7	1.2380	25.97	0.07	26.04	56.00	-29.96	QP
8	1.2380	13.90	0.07	13.97	46.00	-32.03	AVG
9	5.0380	30.48	0.09	30.57	60.00	-29.43	QP
10	5.0380	18.70	0.09	18.79	50.00	-31.21	AVG
11 *	11.4300	31.91	0.22	32.13	60.00	-27.87	QP
12	11.4300	19.50	0.22	19.72	50.00	-30.28	AVG

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25° C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Phase	Neutral
Test Mode	USB R/W+ Traffic(2G)+Wifi		
Test Engineer	Kevin Li		



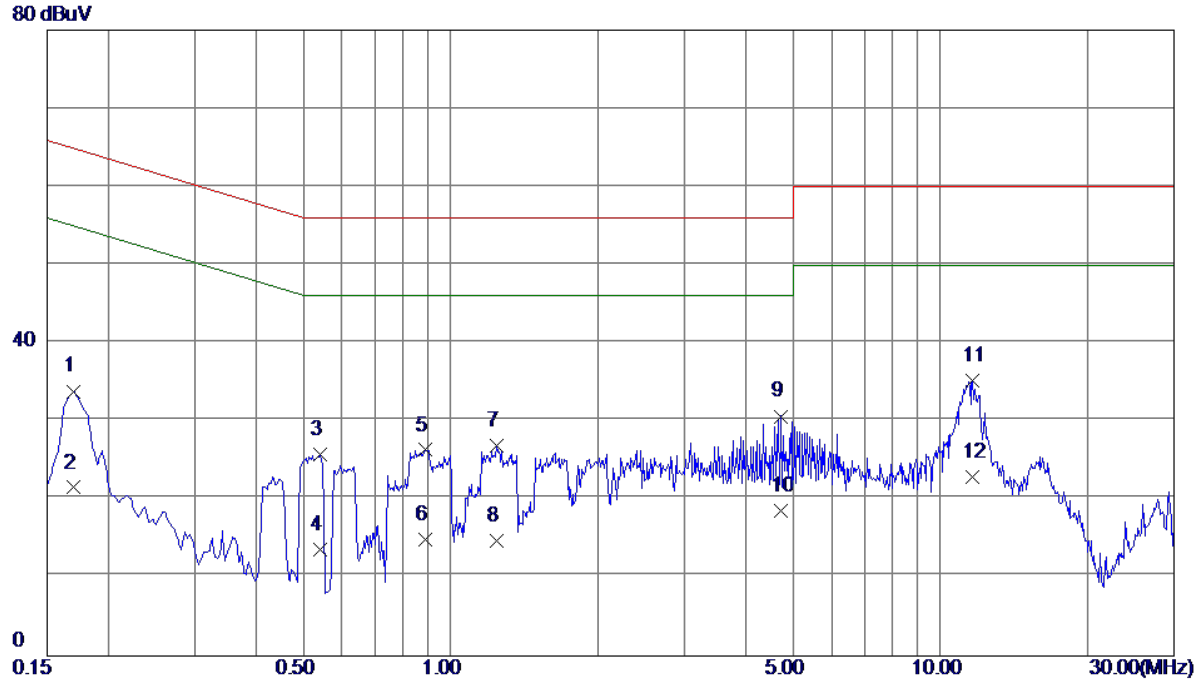
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	0.1660	34.27	0.02	34.29	65.16	-30.87	QP
2	0.1660	22.50	0.02	22.52	55.16	-32.64	AVG
3	0.5060	25.92	0.04	25.96	56.00	-30.04	QP
4	0.5060	13.80	0.04	13.84	46.00	-32.16	AVG
5	0.8900	26.19	0.05	26.24	56.00	-29.76	QP
6	0.8900	14.90	0.05	14.95	46.00	-31.05	AVG
7	1.6340	26.90	0.08	26.98	56.00	-29.02	QP
8	1.6340	14.60	0.08	14.68	46.00	-31.32	AVG
9	4.9740	30.76	0.09	30.85	56.00	-25.15	QP
10	4.9740	18.70	0.09	18.79	46.00	-27.21	AVG
11 *	11.4300	36.20	0.22	36.42	60.00	-23.58	QP
12	11.4300	24.60	0.22	24.82	50.00	-25.18	AVG

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25° C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Phase	Line
Test Mode	USB R/W+ Traffic(3G)+Wifi		
Test Engineer	Kevin Li		



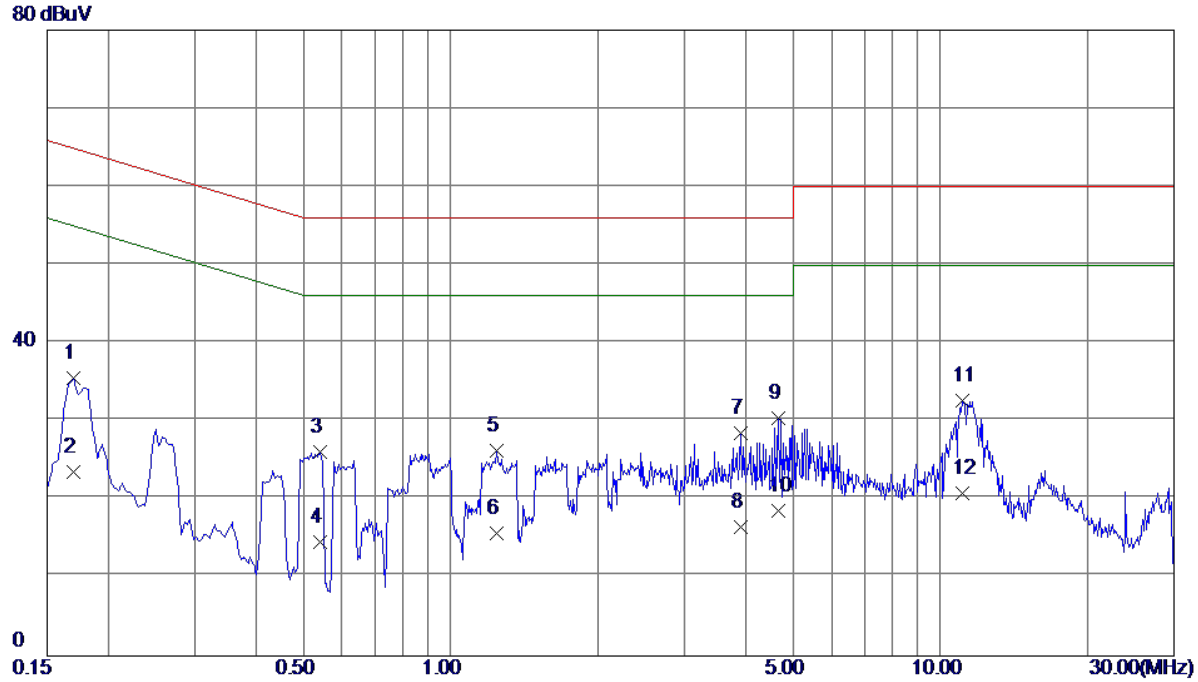
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	0.1660	35.74	0.02	35.76	65.16	-29.40	QP
2	0.1660	23.50	0.02	23.52	55.16	-31.64	AVG
3	0.2580	28.34	0.03	28.37	61.50	-33.13	QP
4	0.2580	16.40	0.03	16.43	51.50	-35.07	AVG
5	0.5100	26.06	0.04	26.10	56.00	-29.90	QP
6	0.5100	14.80	0.04	14.84	46.00	-31.16	AVG
7	1.2700	26.42	0.07	26.49	56.00	-29.51	QP
8	1.2700	14.60	0.07	14.67	46.00	-31.33	AVG
9 *	4.6579	30.06	0.09	30.15	56.00	-25.85	QP
10	4.6579	18.60	0.09	18.69	46.00	-27.31	AVG
11	11.3660	33.46	0.22	33.68	60.00	-26.32	QP
12	11.3660	21.80	0.22	22.02	50.00	-27.98	AVG

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25° C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Phase	Neutral
Test Mode	USB R/W+ Traffic(3G)+Wifi		
Test Engineer	Kevin Li		



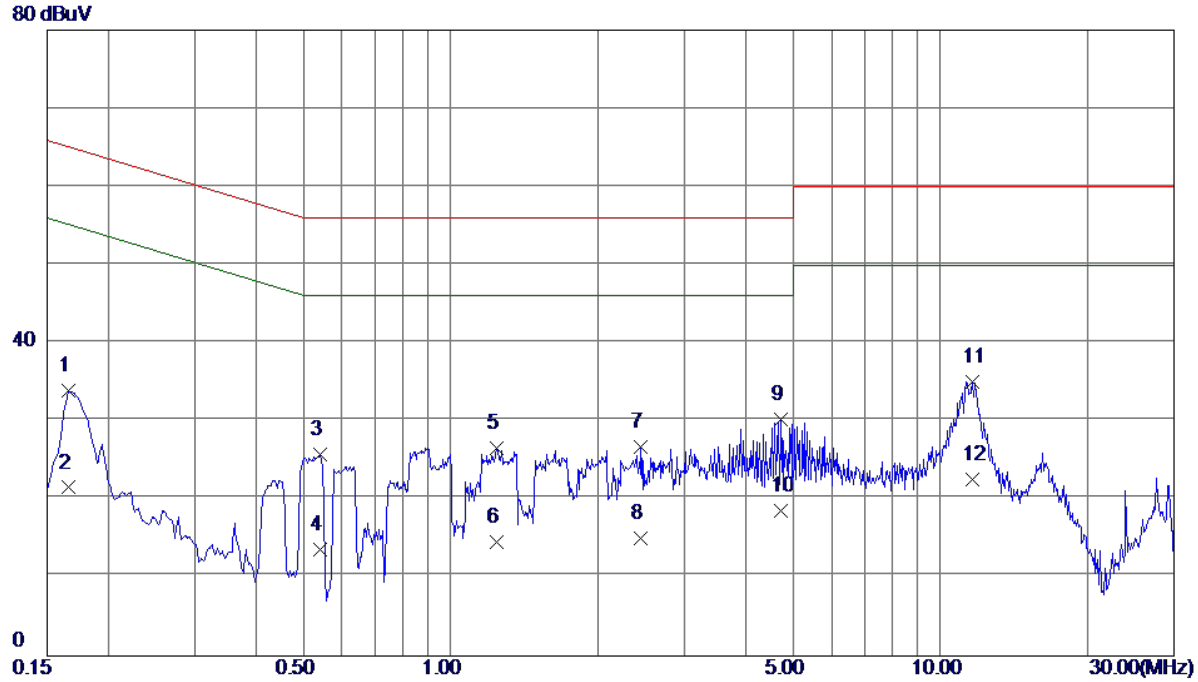
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	0.1700	33.82	0.02	33.84	64.96	-31.12	QP
2	0.1700	21.50	0.02	21.52	54.96	-33.44	AVG
3	0.5420	25.71	0.04	25.75	56.00	-30.25	QP
4	0.5420	13.50	0.04	13.54	46.00	-32.46	AVG
5	0.8860	26.27	0.05	26.32	56.00	-29.68	QP
6	0.8860	14.80	0.05	14.85	46.00	-31.15	AVG
7	1.2420	26.74	0.07	26.81	56.00	-29.19	QP
8	1.2420	14.60	0.07	14.67	46.00	-31.33	AVG
9	4.7220	30.55	0.09	30.64	56.00	-25.36	QP
10	4.7220	18.40	0.09	18.49	46.00	-27.51	AVG
11 *	11.6260	34.90	0.23	35.13	60.00	-24.87	QP
12	11.6260	22.70	0.23	22.93	50.00	-27.07	AVG

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25° C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Phase	Line
Test Mode	USB R/W+ Traffic(4G)+Wifi		
Test Engineer	Kevin Li		



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	0.1700	35.43	0.02	35.45	64.96	-29.51	QP
2	0.1700	23.50	0.02	23.52	54.96	-31.44	AVG
3	0.5420	26.01	0.04	26.05	56.00	-29.95	QP
4	0.5420	14.50	0.04	14.54	46.00	-31.46	AVG
5	1.2420	26.16	0.07	26.23	56.00	-29.77	QP
6	1.2420	15.60	0.07	15.67	46.00	-30.33	AVG
7	3.9020	28.42	0.09	28.51	56.00	-27.49	QP
8	3.9020	16.40	0.09	16.49	46.00	-29.51	AVG
9 *	4.6579	30.28	0.09	30.37	56.00	-25.63	QP
10	4.6579	18.40	0.09	18.49	46.00	-27.51	AVG
11	11.1100	32.43	0.22	32.65	60.00	-27.35	QP
12	11.1100	20.60	0.22	20.82	50.00	-29.18	AVG

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25° C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Phase	Neutral
Test Mode	USB R/W+ Traffic(4G)+Wifi		
Test Engineer	Kevin Li		



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	0.1660	33.83	0.02	33.85	65.16	-31.31	QP
2	0.1660	21.50	0.02	21.52	55.16	-33.64	AVG
3	0.5420	25.79	0.04	25.83	56.00	-30.17	QP
4	0.5420	13.58	0.04	13.62	46.00	-32.38	AVG
5	1.2420	26.55	0.07	26.62	56.00	-29.38	QP
6	1.2420	14.50	0.07	14.57	46.00	-31.43	AVG
7	2.4500	26.64	0.09	26.73	56.00	-29.27	QP
8	2.4500	14.90	0.09	14.99	46.00	-31.01	AVG
9	4.7220	30.10	0.09	30.19	56.00	-25.81	QP
10	4.7220	18.50	0.09	18.59	46.00	-27.41	AVG
11 *	11.6300	34.86	0.23	35.09	60.00	-24.91	QP
12	11.6300	22.40	0.23	22.63	50.00	-27.37	AVG

4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Below 1 GHz
Measurement Method and Applied Limits:
ANSI C63.4:

Frequency (MHz)	Class A (at 10m)		Class B (at 3m)	
	(uV/m) Field strength	(dBuV/m) Field strength	(uV/m) Field strength	(dBuV/m) Field strength
30 - 88	90	39	100	40
88 - 216	150	43.5	150	43.5
216 - 960	210	46.4	200	46
Above 960	300	49.5	500	54

Above 1 GHz
Measurement Method and Applied Limits:
ANSI C63.4:

Frequency (MHz)	Class A				Class B	
	(dBuV/m) (at 3m)		(dBuV/m) (at 10m)		(dBuV/m) (at 3m)	
	Peak	Average	Peak	Average	Peak	Average
Above 1000	80	60	69.5	49.5	74	54

FREQUENCY RANGE OF RADIATED MEASUREMENT (FOR UNINTENTIONAL RADIATORS)

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)
Below 1.705	30
1.705 - 108	1000
108 - 500	2000
500 - 1000	5000
Above 1000	5^{th} harmonic of the highest frequency or 40 GHz, whichever is lower

NOTE:
(1) The limit for radiated test was performed according to as following:
FCC Part 15, Subpart B
(2) The tighter limit applies at the band edges.
(3) Emission level (dBuV/m) = 20log Emission level (uV/m).
3m Emission level = 10m Emission level + 20log(10m/3m).
(4) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)
Margin Level = Measurement Value - Limit Value

4.2.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarbeck	VULB9160	9160-3232	Mar. 27, 2017
2	Amplifier	HP	8447D	2944A09673	Nov. 08, 2017
3	Receiver	AGILENT	N9038A	MY52130039	Oct. 10, 2017
4	Test Cable	emci	LMR-400(30MHz-1GHz)	C-01	Jun. 27, 2017
5	Control	CT	SC100	N/A	N/A
6	Position Control	MF	MF-7802	MF780208416	N/A
7	Amplifier	Agilent	8449B	3008A02274	Oct. 31, 2017
8	Receiver	AGILENT	N9038A	MY52130039	Oct. 10, 2017
9	Test Cable	emci	EMC104-SM-SM-10000(1GHz－26.5GHz)	C-68	Jun. 27, 2017
10	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Remark: “N/A” denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

4.2.3 TEST PROCEDURE

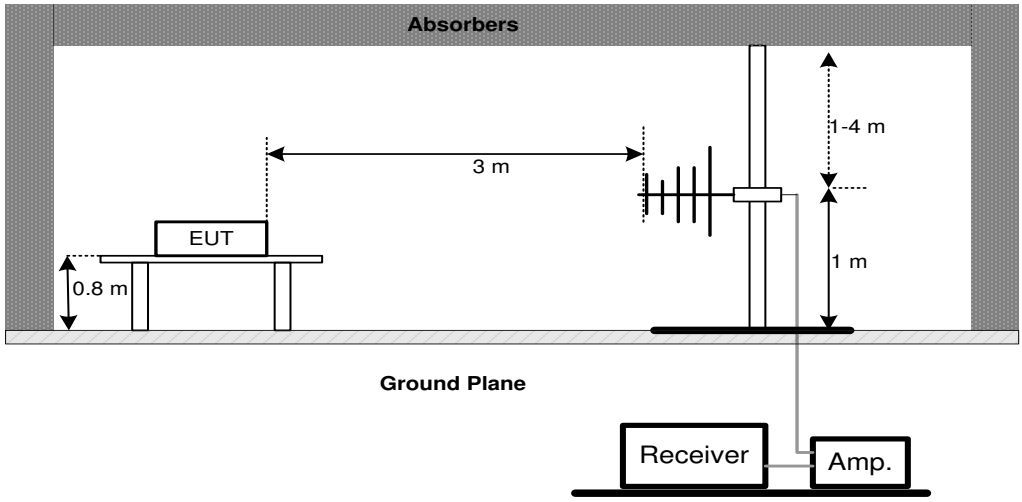
a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
b. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
c. The height of the equipment or of the substitution antenna shall be 0.8 m, the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn‘t perform. (below 1GHz)
h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn‘t perform. (above 1GHz)
i. For the actual test configuration, please refer to the related Item - Block Diagram of system tested (please refer to 3.3).

4.2.4 DEVIATION FROM TEST STANDARD

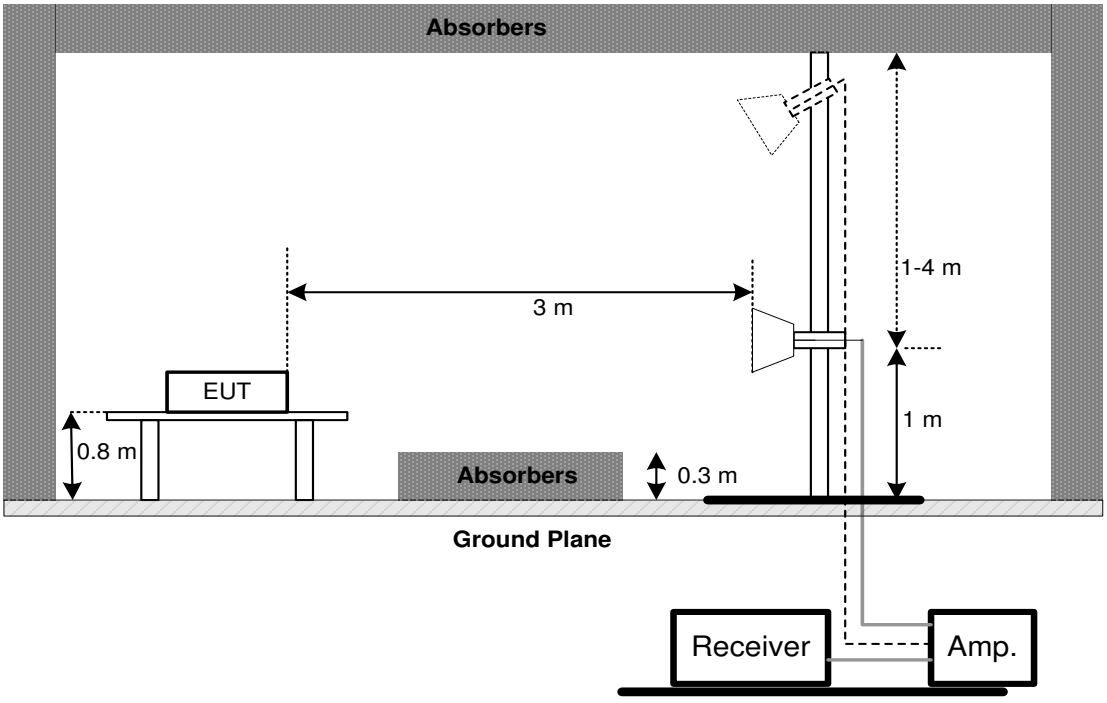
No deviation

4.2.5 TEST SETUP

(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(B) Radiated Emission Test Set-Up Frequency 1 GHz



4.2.6 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **4.1.6** unless otherwise a special operating condition is specified in the follows during the testing.

4.2.7 TEST RESULTS-BELOW 1GHZ

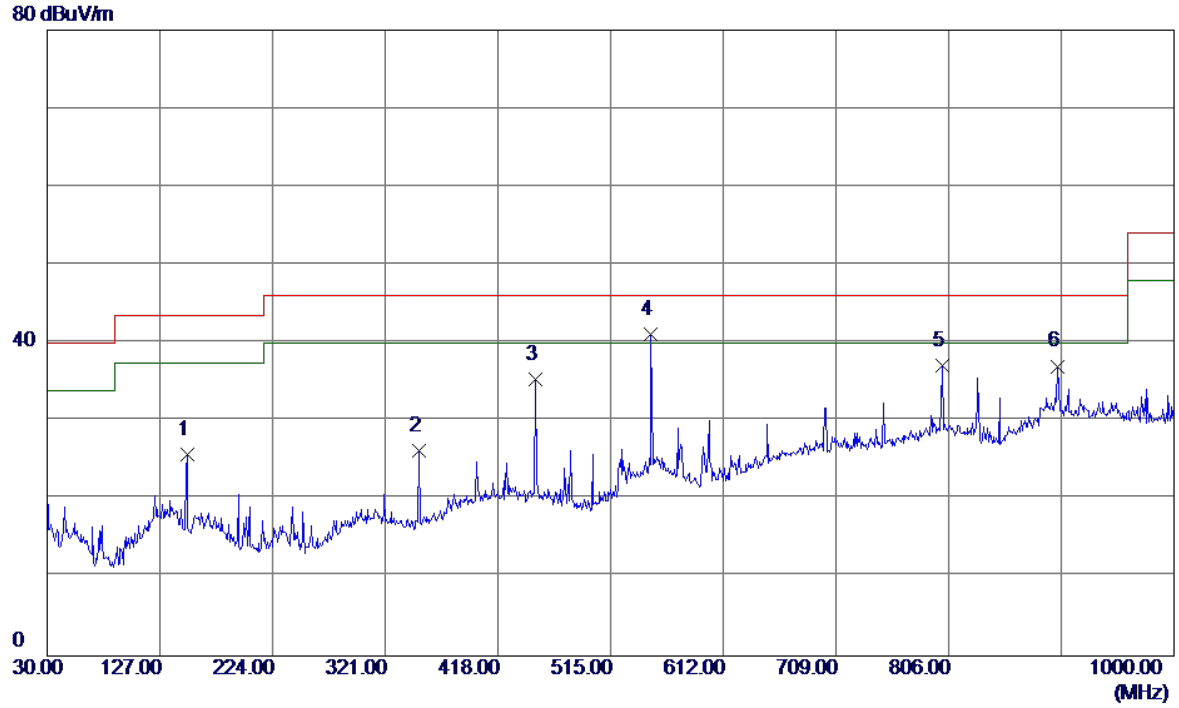
Remark：

(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(2) Measuring frequency range from 30MHz to 1000MHz。

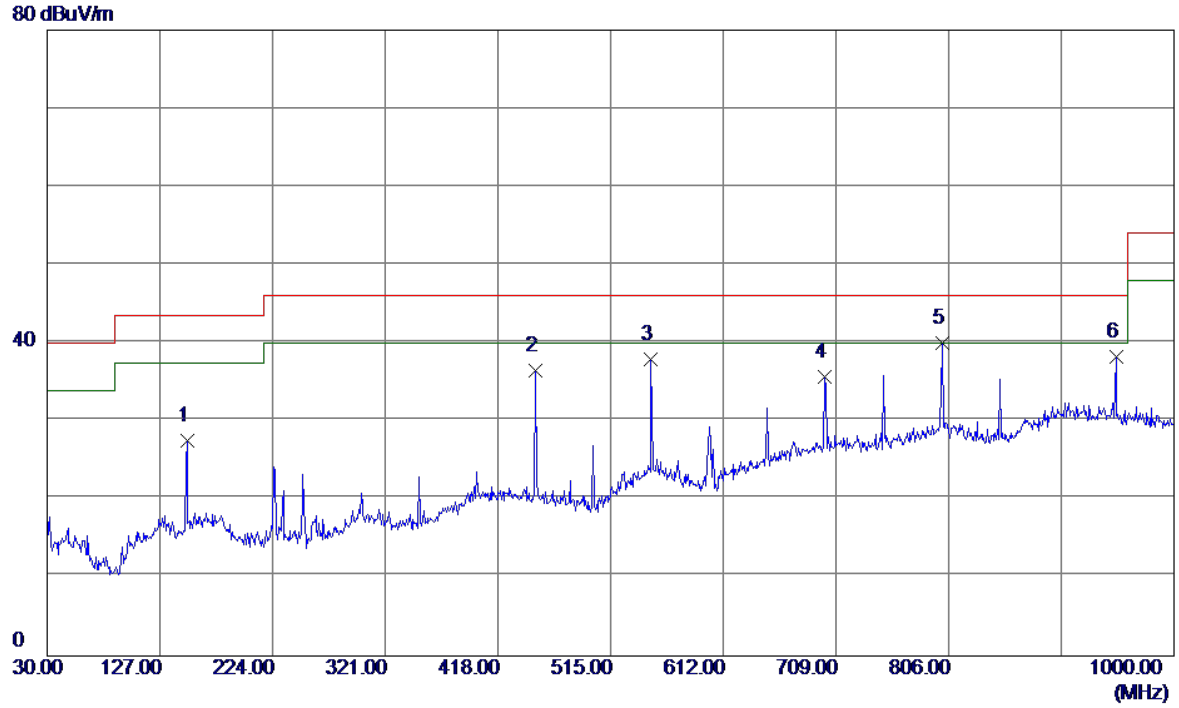
(3) If the peak scan value lower limit more than 20dB, then this signal data does not show in table。

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Vertical
Test Mode	USB R/W+Idle+Wifi		
Test Engineer	Kevin Li		



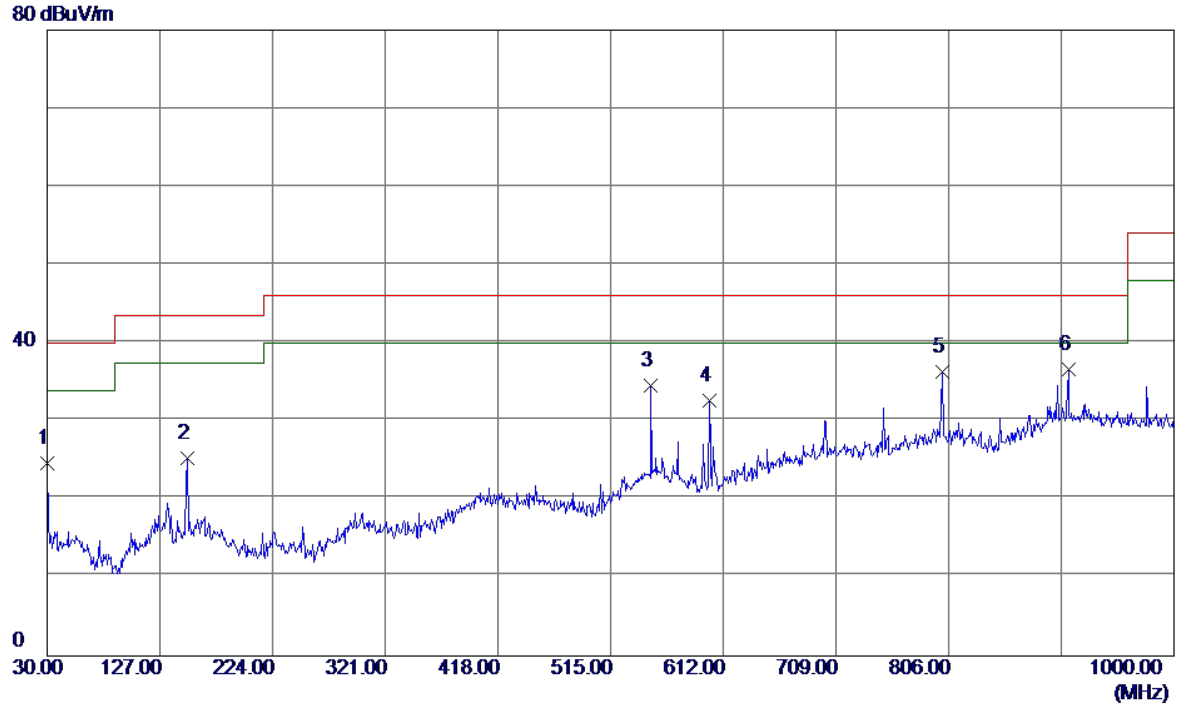
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	150.2800	38.72	-12.93	25.79	43.50	-17.71	QP
2	350.1000	37.48	-11.21	26.27	46.00	-19.73	QP
3	450.0100	43.41	-8.00	35.41	46.00	-10.59	QP
4 *	549.9200	45.60	-4.55	41.05	46.00	-4.95	QP
5	800.1800	36.94	0.25	37.19	46.00	-8.81	QP
6	900.0900	34.40	2.64	37.04	46.00	-8.96	QP

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Horizontal
Test Mode	USB R/W+Idle+Wifi		
Test Engineer	Kevin Li		



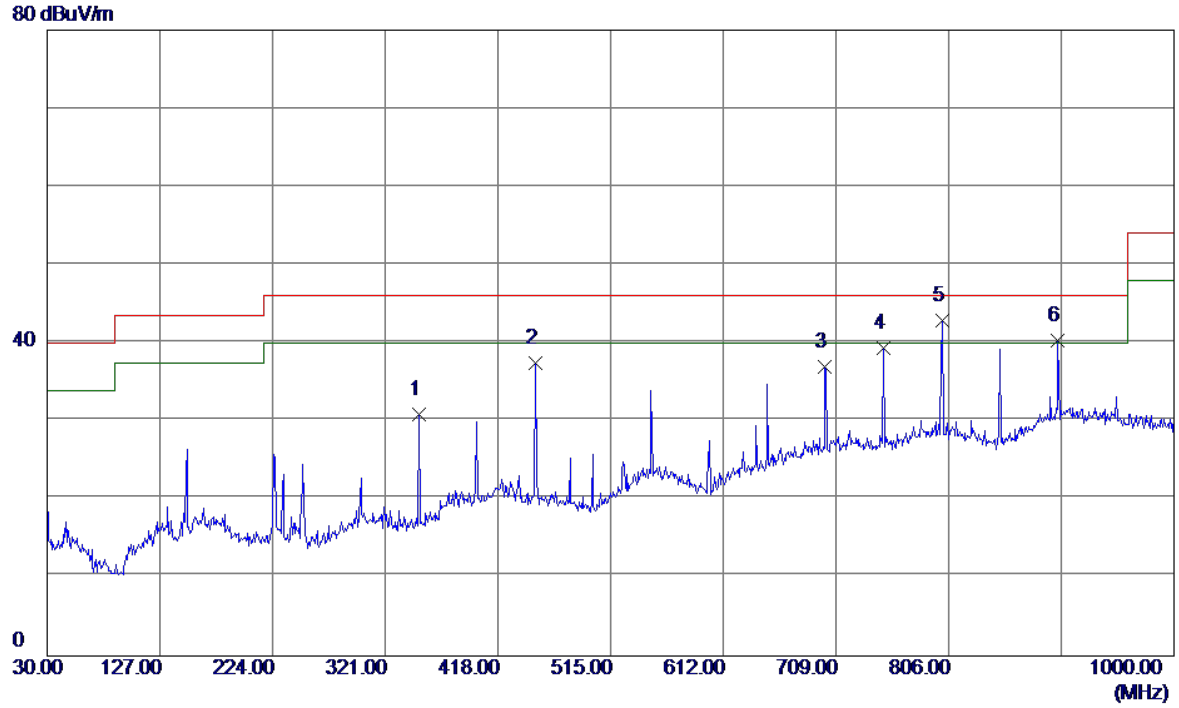
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	150.2800	40.38	-12.93	27.45	43.50	-16.05	QP
2	450.0100	44.48	-8.00	36.48	46.00	-9.52	QP
3	549.9200	42.49	-4.55	37.94	46.00	-8.06	QP
4	699.7849	37.81	-2.11	35.70	46.00	-10.30	QP
5 *	800.1800	39.69	0.25	39.94	46.00	-6.06	QP
6	950.0450	35.78	2.44	38.22	46.00	-7.78	QP

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Vertical
Test Mode	USB R/W+ Traffic(2G)+Wifi		
Test Engineer	Kevin Li		



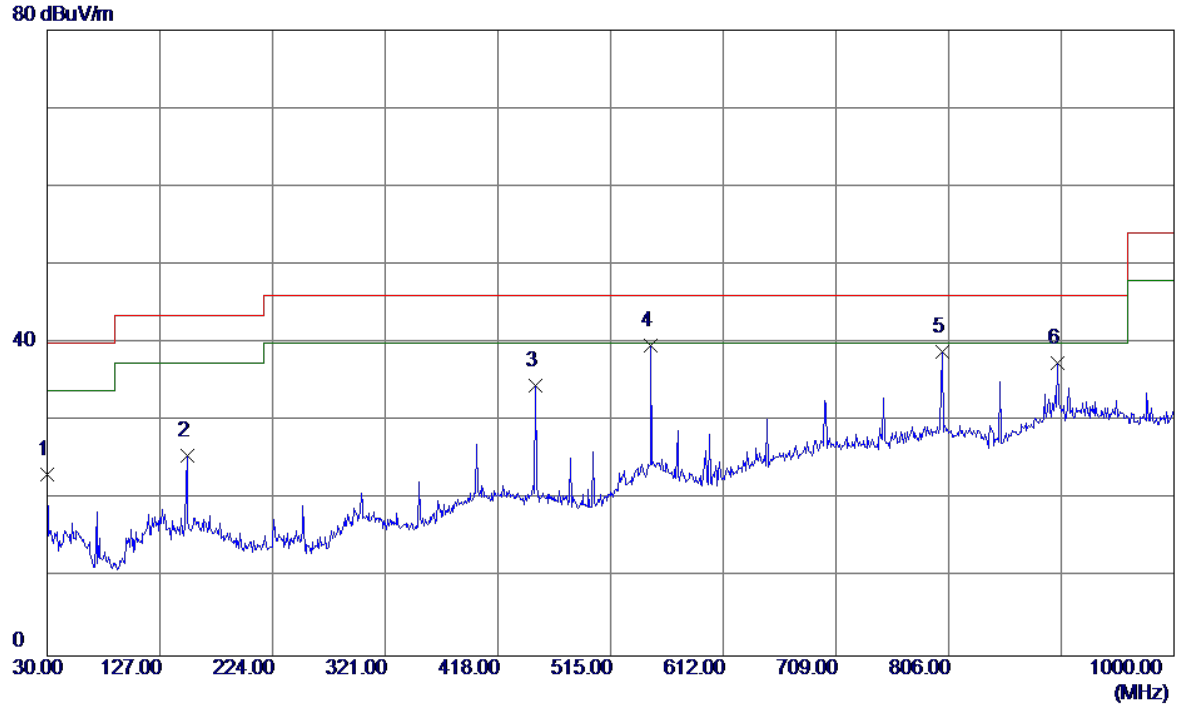
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	30.0000	38.67	-14.03	24.64	40.00	-15.36	QP
2	150.2800	38.25	-12.93	25.32	43.50	-18.18	QP
3	549.9200	39.16	-4.55	34.61	46.00	-11.39	QP
4	599.8750	39.69	-7.05	32.64	46.00	-13.36	QP
5	800.1800	36.09	0.25	36.34	46.00	-9.66	QP
6 *	909.3050	34.03	2.60	36.63	46.00	-9.37	QP

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Horizontal
Test Mode	USB R/W+ Traffic(2G)+Wifi		
Test Engineer	Kevin Li		



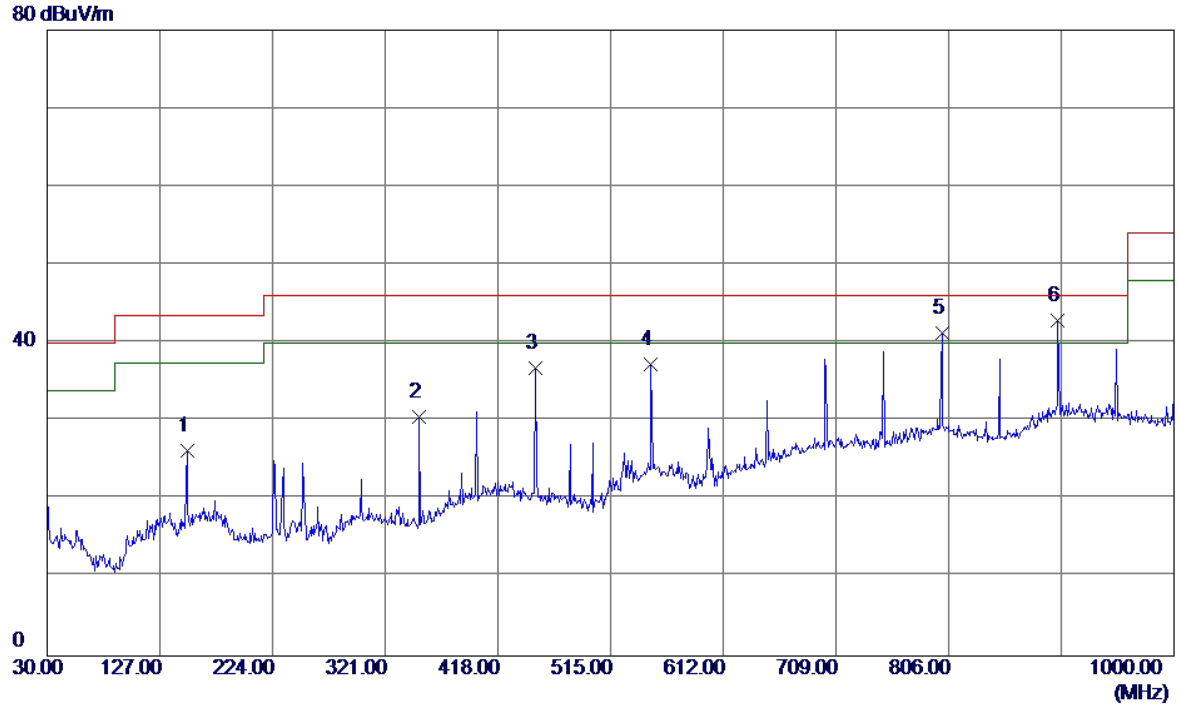
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	350.1000	42.15	-11.21	30.94	46.00	-15.06	QP
2	450.0100	45.43	-8.00	37.43	46.00	-8.57	QP
3	699.7849	39.11	-2.11	37.00	46.00	-9.00	QP
4	750.2250	41.37	-1.96	39.41	46.00	-6.59	QP
5 *	800.1800	42.57	0.25	42.82	46.00	-3.18	QP
6	900.0900	37.66	2.64	40.30	46.00	-5.70	QP

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Vertical
Test Mode	USB R/W+ Traffic(3G)+Wifi		
Test Engineer	Kevin Li		



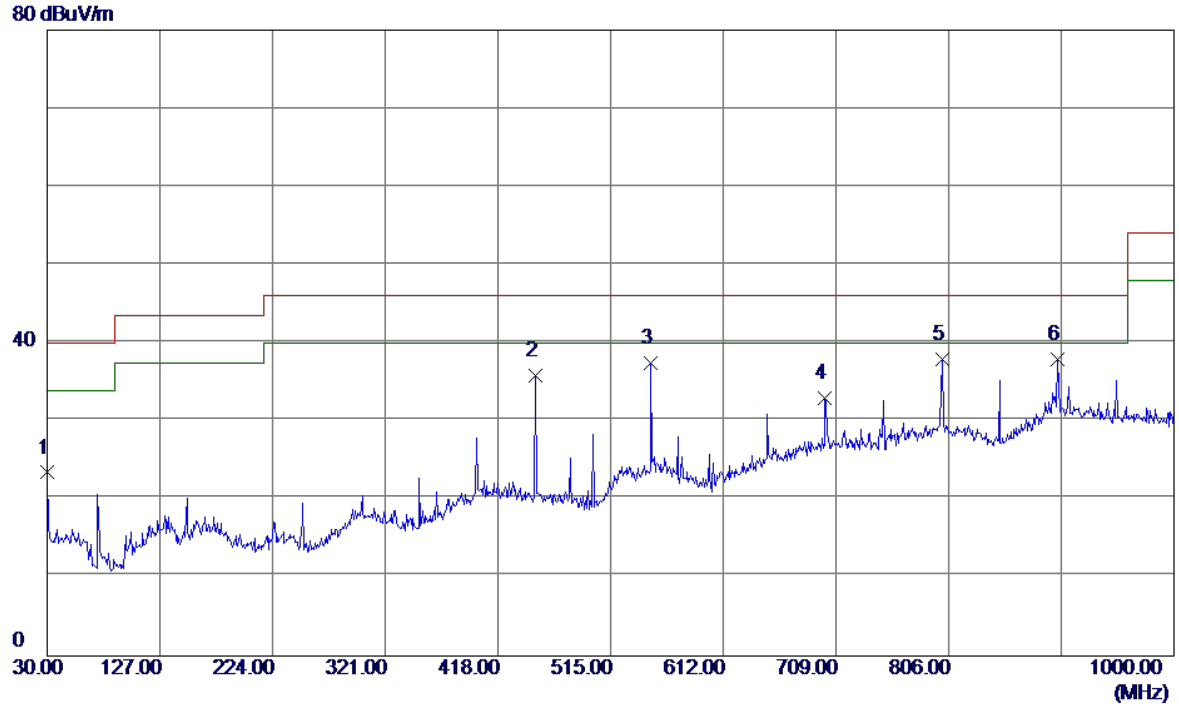
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	30.0000	37.19	-14.03	23.16	40.00	-16.84	QP
2	150.7650	38.54	-12.89	25.65	43.50	-17.85	QP
3	450.0100	42.60	-8.00	34.60	46.00	-11.40	QP
4 *	549.9200	44.27	-4.55	39.72	46.00	-6.28	QP
5	800.1800	38.58	0.25	38.83	46.00	-7.17	QP
6	900.0900	34.80	2.64	37.44	46.00	-8.56	QP

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Horizontal
Test Mode	USB R/W+ Traffic(3G)+Wifi		
Test Engineer	Kevin Li		



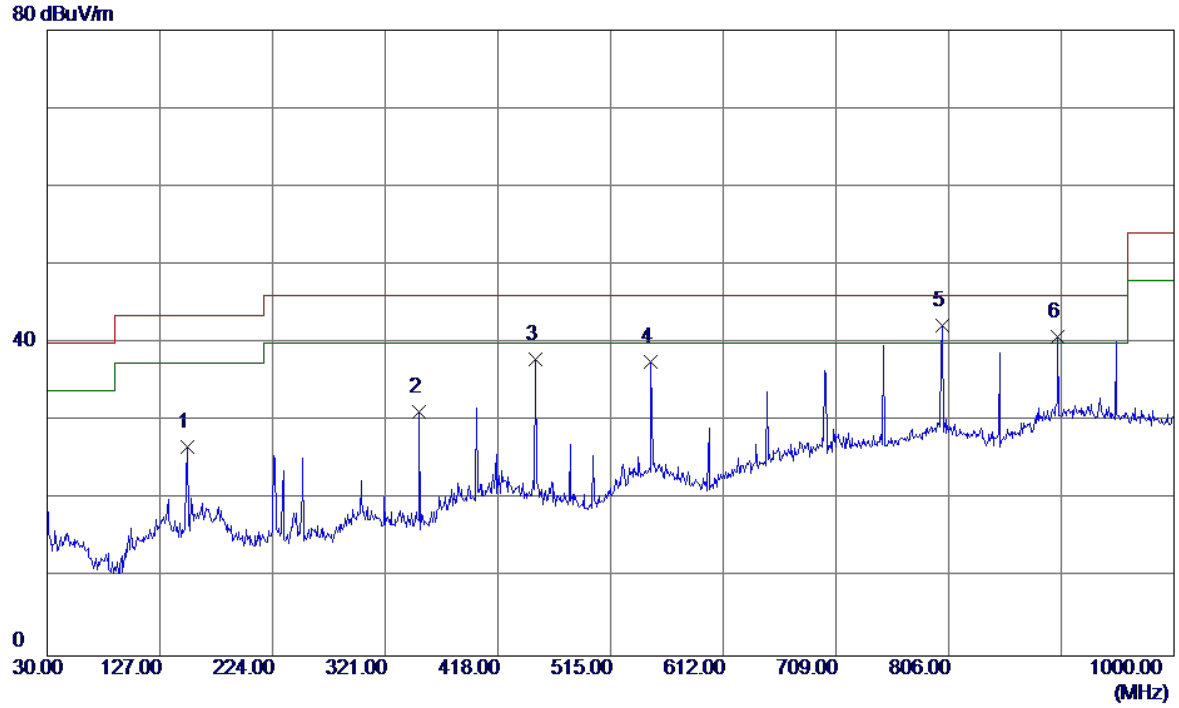
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	150.2800	39.19	-12.93	26.26	43.50	-17.24	QP
2	350.1000	41.83	-11.21	30.62	46.00	-15.38	QP
3	450.0100	44.77	-8.00	36.77	46.00	-9.23	QP
4	549.9200	41.77	-4.55	37.22	46.00	-8.78	QP
5	800.1800	41.05	0.25	41.30	46.00	-4.70	QP
6 *	900.0900	40.23	2.64	42.87	46.00	-3.13	QP

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Vertical
Test Mode	USB R/W+ Traffic(4G)+Wifi		
Test Engineer	Kevin Li		



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	30.0000	37.47	-14.03	23.44	40.00	-16.56	QP
2	450.0100	43.79	-8.00	35.79	46.00	-10.21	QP
3	549.9200	42.05	-4.55	37.50	46.00	-8.50	QP
4	699.7849	35.09	-2.11	32.98	46.00	-13.02	QP
5 *	800.1800	37.73	0.25	37.98	46.00	-8.02	QP
6	900.0900	35.32	2.64	37.96	46.00	-8.04	QP

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Horizontal
Test Mode	USB R/W+ Traffic(4G)+Wifi		
Test Engineer	Kevin Li		



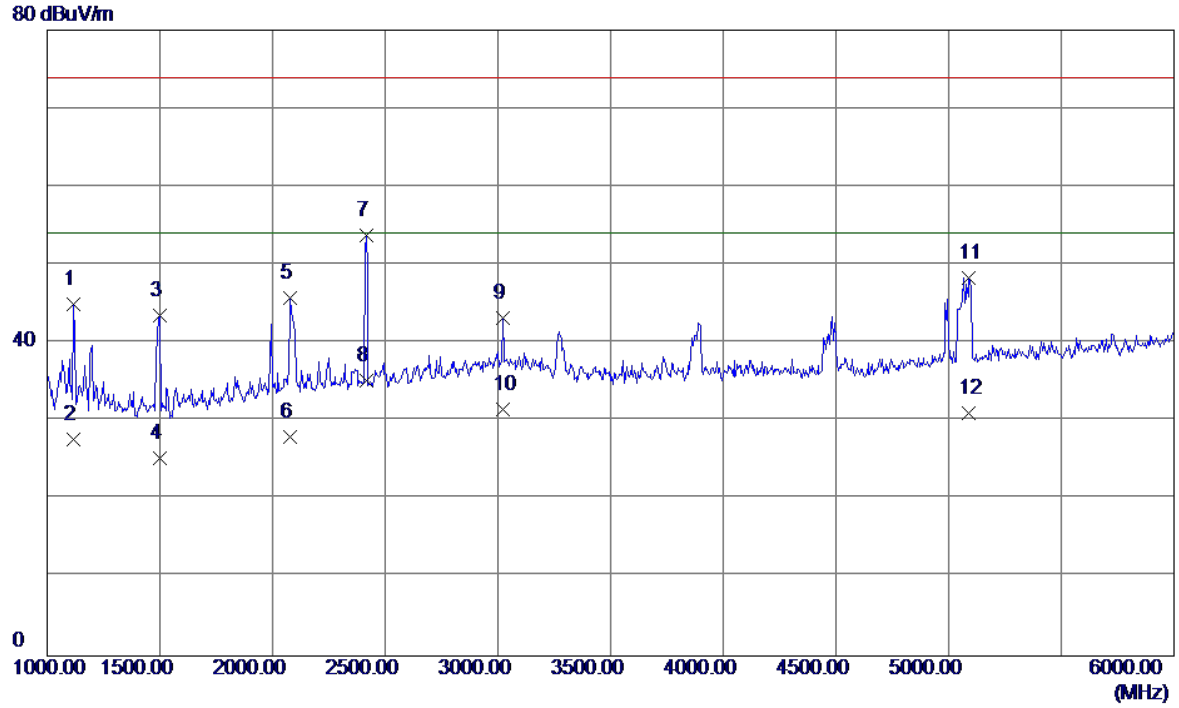
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	150.2800	39.62	-12.93	26.69	43.50	-16.81	QP
2	350.1000	42.37	-11.21	31.16	46.00	-14.84	QP
3	450.0100	45.86	-8.00	37.86	46.00	-8.14	QP
4	549.9200	42.18	-4.55	37.63	46.00	-8.37	QP
5 *	800.1800	41.95	0.25	42.20	46.00	-3.80	QP
6	900.0900	38.20	2.64	40.84	46.00	-5.16	QP

4.2.8 TEST RESULTS-ABOVE 1GHZ

Remark：

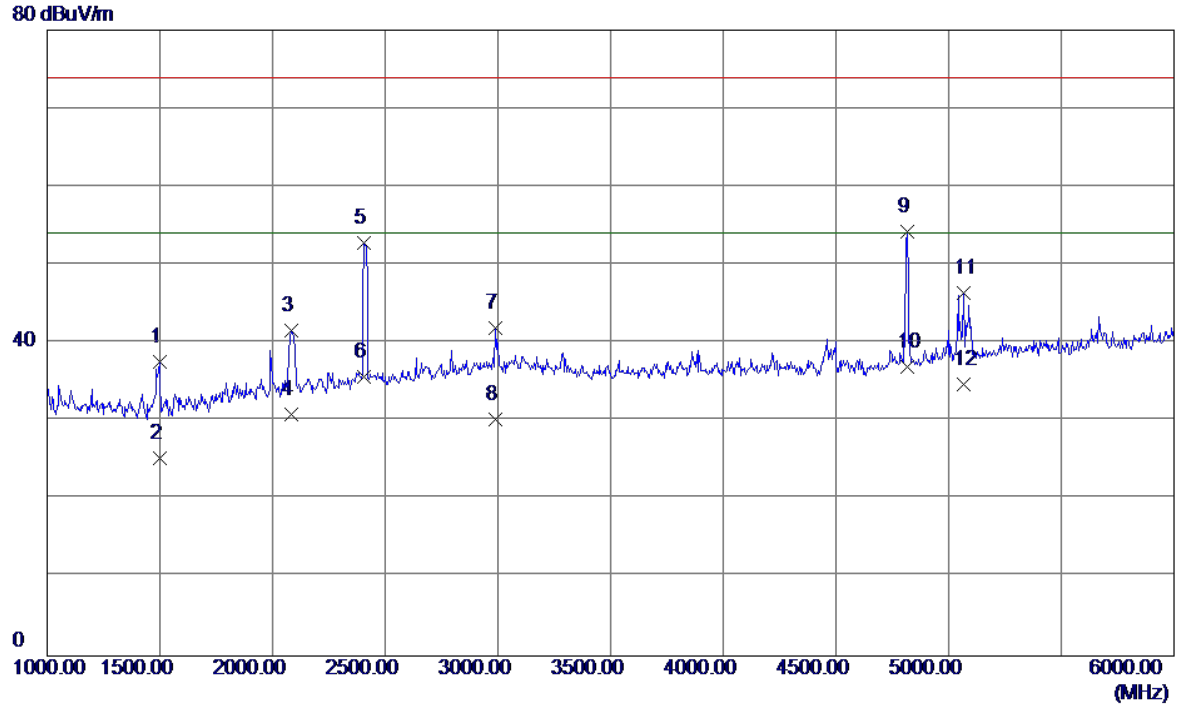
(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
(2) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission.
(3) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
(4) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Vertical
Test Mode	USB R/W+Idle+Wifi		
Test Engineer	Kevin Li		



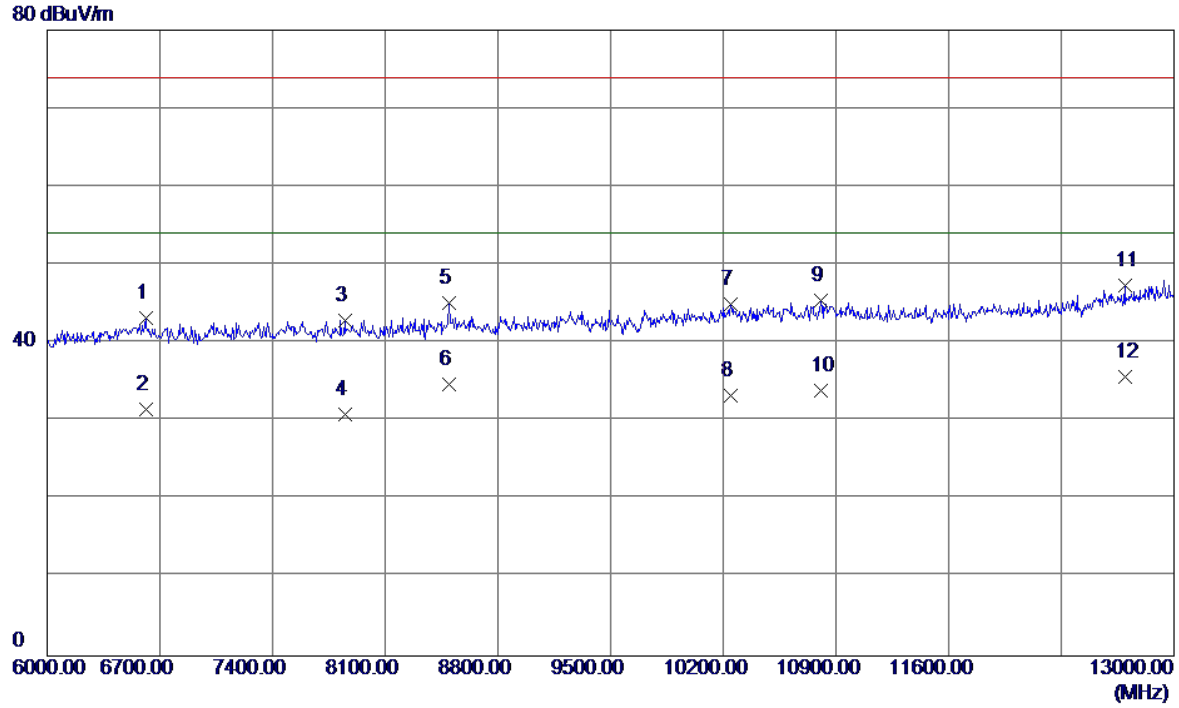
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	1115.0000	52.64	-7.64	45.00	74.00	-29.00	Peak
2	1115.0000	35.26	-7.64	27.62	54.00	-26.38	AVG
3	1500.0000	50.14	-6.65	43.49	74.00	-30.51	Peak
4	1500.0000	31.96	-6.65	25.31	54.00	-28.69	AVG
5	2080.0000	48.34	-2.52	45.82	74.00	-28.18	Peak
6	2080.0000	30.47	-2.52	27.95	54.00	-26.05	AVG
7	2415.0000	55.00	-1.28	53.72	74.00	-20.28	Peak
8 *	2415.0000	36.47	-1.28	35.19	54.00	-18.81	AVG
9	3020.0000	41.69	1.52	43.21	74.00	-30.79	Peak
10	3020.0000	29.94	1.52	31.46	54.00	-22.54	AVG
11	5090.0000	42.48	5.89	48.37	74.00	-25.63	Peak
12	5090.0000	25.08	5.89	30.97	54.00	-23.03	AVG

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Horizontal
Test Mode	USB R/W+Idle+Wifi		
Test Engineer	Kevin Li		



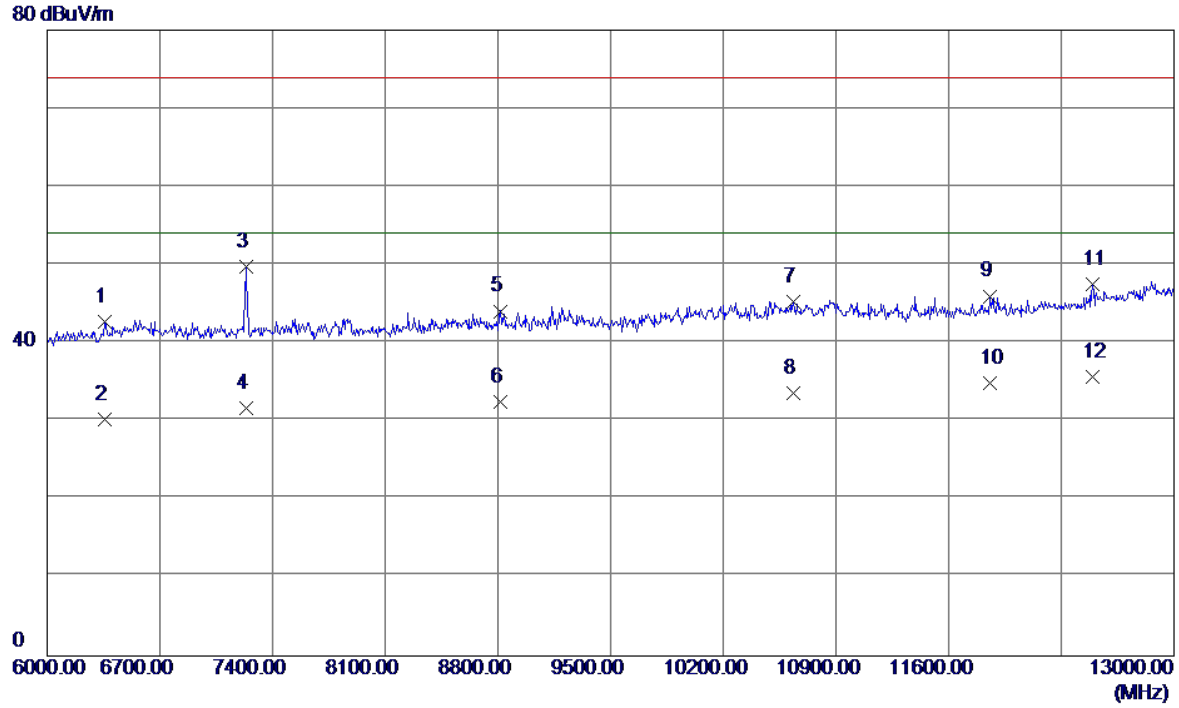
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	1497.5000	44.29	-6.66	37.63	74.00	-36.37	Peak
2	1497.5000	31.97	-6.66	25.31	54.00	-28.69	AVG
3	2085.0000	44.12	-2.51	41.61	74.00	-32.39	Peak
4	2085.0000	33.37	-2.51	30.86	54.00	-23.14	AVG
5	2407.5000	54.10	-1.31	52.79	74.00	-21.21	Peak
6	2407.5000	36.93	-1.31	35.62	54.00	-18.38	AVG
7	2987.5000	40.52	1.47	41.99	74.00	-32.01	Peak
8	2987.5000	28.71	1.47	30.18	54.00	-23.82	AVG
9	4815.0000	49.45	4.82	54.27	74.00	-19.73	Peak
10 *	4815.0000	32.10	4.82	36.92	54.00	-17.08	AVG
11	5065.0000	40.56	5.81	46.37	74.00	-27.63	Peak
12	5065.0000	28.95	5.81	34.76	54.00	-19.24	AVG

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Vertical
Test Mode	USB R/W+Idle+Wifi		
Test Engineer	Kevin Li		



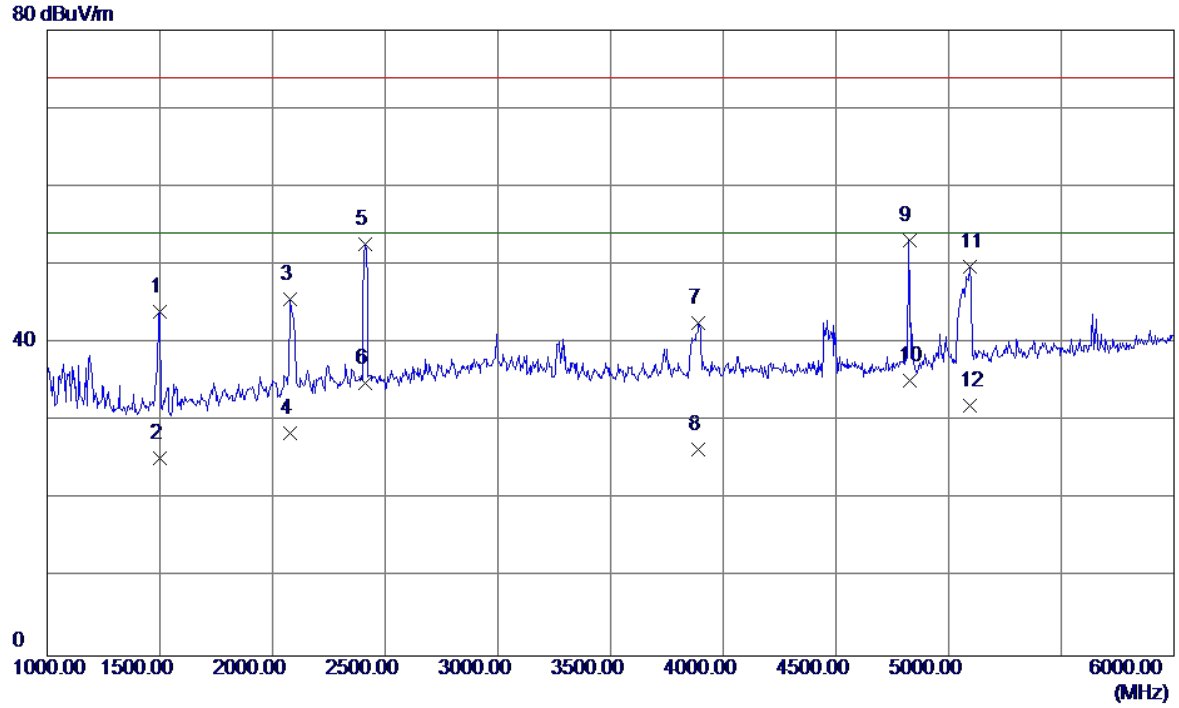
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	6612.5000	32.30	10.87	43.17	74.00	-30.83	Peak
2	6612.5000	20.72	10.87	31.59	54.00	-22.41	AVG
3	7851.5000	31.09	11.73	42.82	74.00	-31.18	Peak
4	7851.5000	19.12	11.73	30.85	54.00	-23.15	AVG
5	8499.0000	32.08	13.00	45.08	74.00	-28.92	Peak
6	8499.0000	21.76	13.00	34.76	54.00	-19.24	AVG
7	10249.0000	30.30	14.70	45.00	74.00	-29.00	Peak
8	10249.0000	18.58	14.70	33.28	54.00	-20.72	AVG
9	10809.0000	29.74	15.69	45.43	74.00	-28.57	Peak
10	10809.0000	18.25	15.69	33.94	54.00	-20.06	AVG
11	12695.5000	30.27	17.12	47.39	74.00	-26.61	Peak
12 *	12695.5000	18.56	17.12	35.68	54.00	-18.32	AVG

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Horizontal
Test Mode	USB R/W+Idle+Wifi		
Test Engineer	Kevin Li		



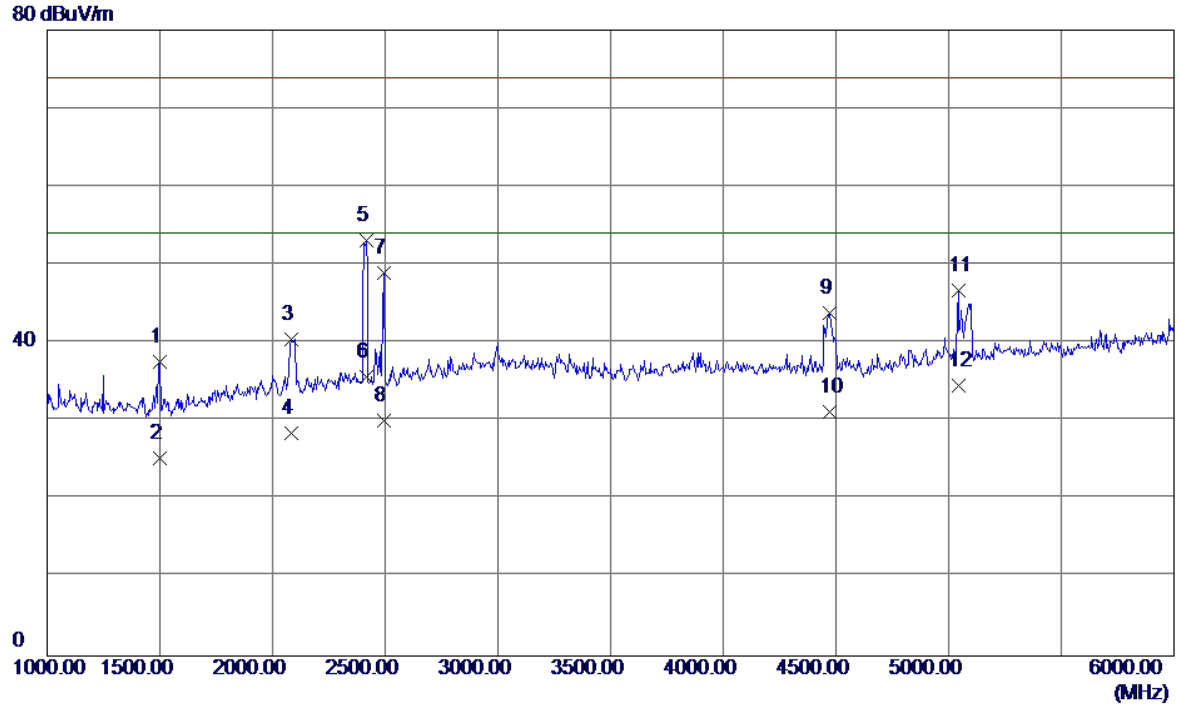
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	6357.0000	32.37	10.36	42.73	74.00	-31.27	Peak
2	6357.0000	19.89	10.36	30.25	54.00	-23.75	AVG
3	7235.5000	38.58	11.22	49.80	74.00	-24.20	Peak
4	7235.5000	20.40	11.22	31.62	54.00	-22.38	AVG
5	8814.0000	30.84	13.24	44.08	74.00	-29.92	Peak
6	8814.0000	19.24	13.24	32.48	54.00	-21.52	AVG
7	10634.0000	29.80	15.46	45.26	74.00	-28.74	Peak
8	10634.0000	18.21	15.46	33.67	54.00	-20.33	AVG
9	11855.5000	30.52	15.48	46.00	74.00	-28.00	Peak
10	11855.5000	19.47	15.48	34.95	54.00	-19.05	AVG
11	12492.5000	31.10	16.46	47.56	74.00	-26.44	Peak
12 *	12492.5000	19.26	16.46	35.72	54.00	-18.28	AVG

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Vertical
Test Mode	USB R/W+ Traffic(2G)+Wifi		
Test Engineer	Kevin Li		



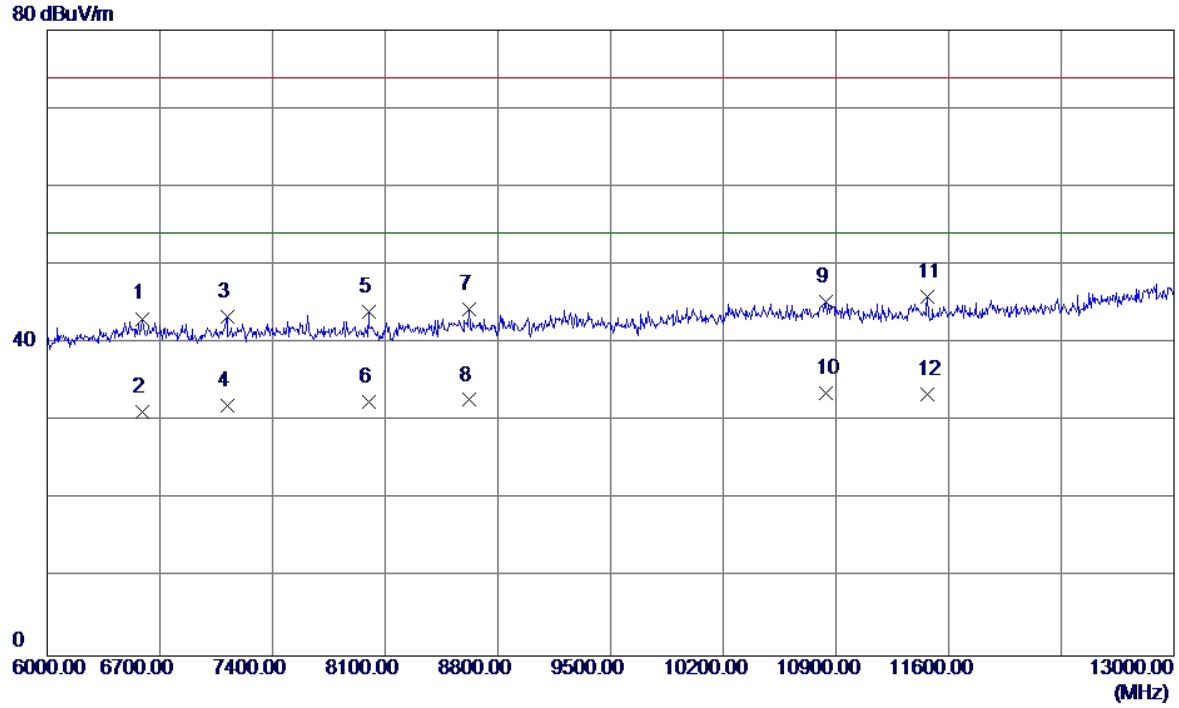
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	1500.0000	50.60	-6.65	43.95	74.00	-30.05	Peak
2	1500.0000	31.99	-6.65	25.34	54.00	-28.66	AVG
3	2080.0000	48.06	-2.52	45.54	74.00	-28.46	Peak
4	2080.0000	31.01	-2.52	28.49	54.00	-25.51	AVG
5	2410.0000	54.00	-1.30	52.70	74.00	-21.30	Peak
6	2410.0000	36.11	-1.30	34.81	54.00	-19.19	AVG
7	3890.0000	39.94	2.59	42.53	74.00	-31.47	Peak
8	3890.0000	23.76	2.59	26.35	54.00	-27.65	AVG
9	4825.0000	48.23	4.86	53.09	74.00	-20.91	Peak
10 *	4825.0000	30.40	4.86	35.26	54.00	-18.74	AVG
11	5092.5000	43.90	5.90	49.80	74.00	-24.20	Peak
12	5092.5000	26.04	5.90	31.94	54.00	-22.06	AVG

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Horizontal
Test Mode	USB R/W+ Traffic(2G)+Wifi		
Test Engineer	Kevin Li		



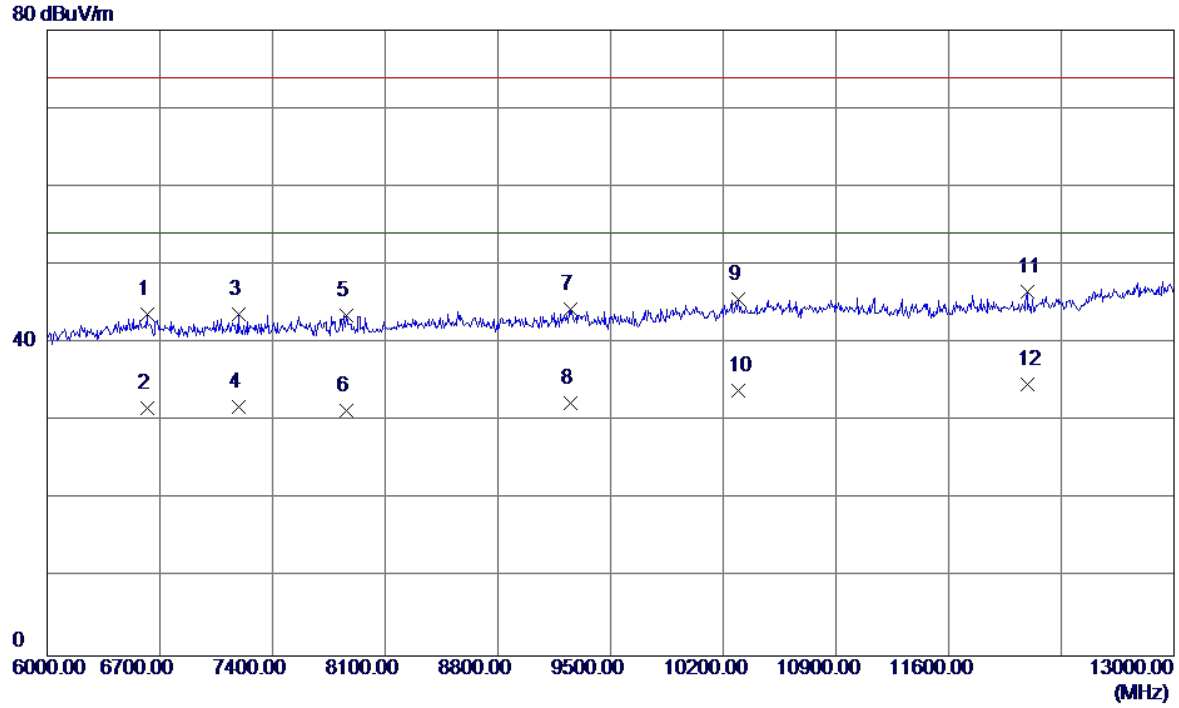
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	1500.0000	44.20	-6.65	37.55	74.00	-36.45	Peak
2	1500.0000	31.96	-6.65	25.31	54.00	-28.69	AVG
3	2082.5000	43.05	-2.51	40.54	74.00	-33.46	Peak
4	2082.5000	31.00	-2.51	28.49	54.00	-25.51	AVG
5	2415.0000	54.33	-1.28	53.05	74.00	-20.95	Peak
6 *	2415.0000	36.90	-1.28	35.62	54.00	-18.38	AVG
7	2495.0000	49.87	-0.99	48.88	74.00	-25.12	Peak
8	2495.0000	31.13	-0.99	30.14	54.00	-23.86	AVG
9	4472.5000	40.44	3.45	43.89	74.00	-30.11	Peak
10	4472.5000	27.81	3.45	31.26	54.00	-22.74	AVG
11	5042.5000	40.93	5.74	46.67	74.00	-27.33	Peak
12	5042.5000	28.85	5.74	34.59	54.00	-19.41	AVG

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Vertical
Test Mode	USB R/W+ Traffic(2G)+Wifi		
Test Engineer	Kevin Li		



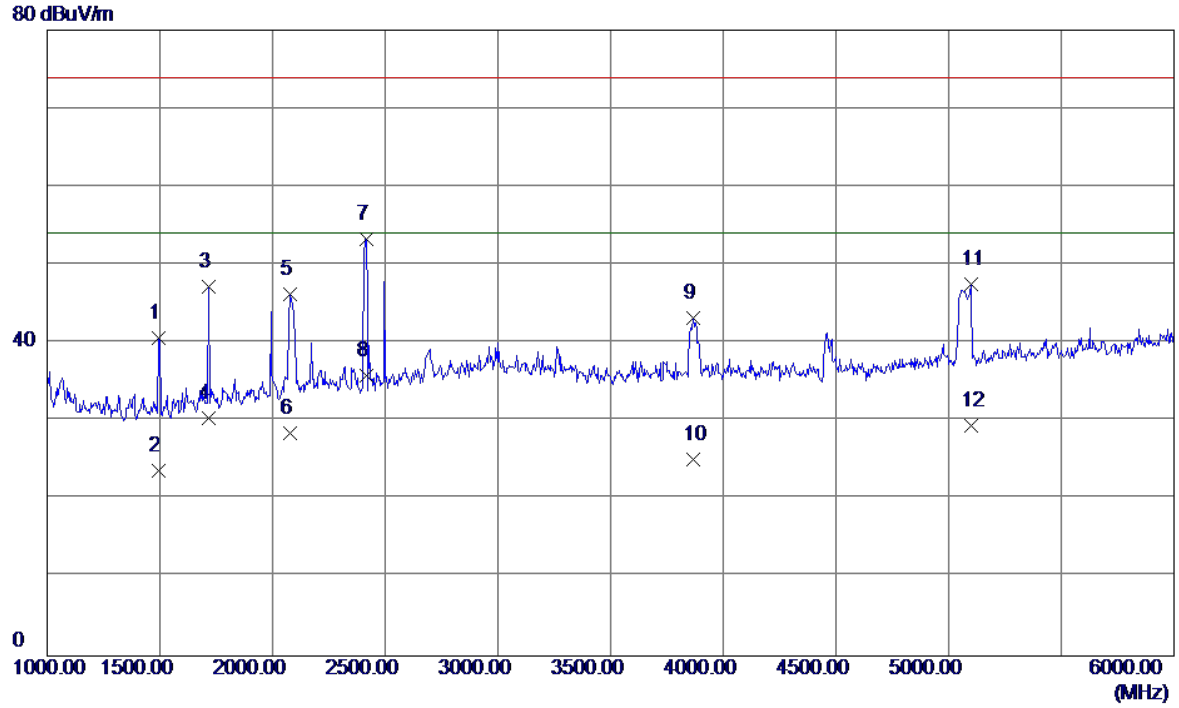
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	6591.5000	32.24	10.88	43.12	74.00	-30.88	Peak
2	6591.5000	20.38	10.88	31.26	54.00	-22.74	AVG
3	7116.5000	32.33	10.98	43.31	74.00	-30.69	Peak
4	7116.5000	20.97	10.98	31.95	54.00	-22.05	AVG
5	7998.5000	32.31	11.72	44.03	74.00	-29.97	Peak
6	7998.5000	20.76	11.72	32.48	54.00	-21.52	AVG
7	8618.0000	31.22	13.09	44.31	74.00	-29.69	Peak
8	8618.0000	19.63	13.09	32.72	54.00	-21.28	AVG
9	10840.5000	29.53	15.73	45.26	74.00	-28.74	Peak
10 *	10840.5000	17.89	15.73	33.62	54.00	-20.38	AVG
11	11470.5000	30.42	15.51	45.93	74.00	-28.07	Peak
12	11470.5000	17.98	15.51	33.49	54.00	-20.51	AVG

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Horizontal
Test Mode	USB R/W+ Traffic(2G)+Wifi		
Test Engineer	Kevin Li		



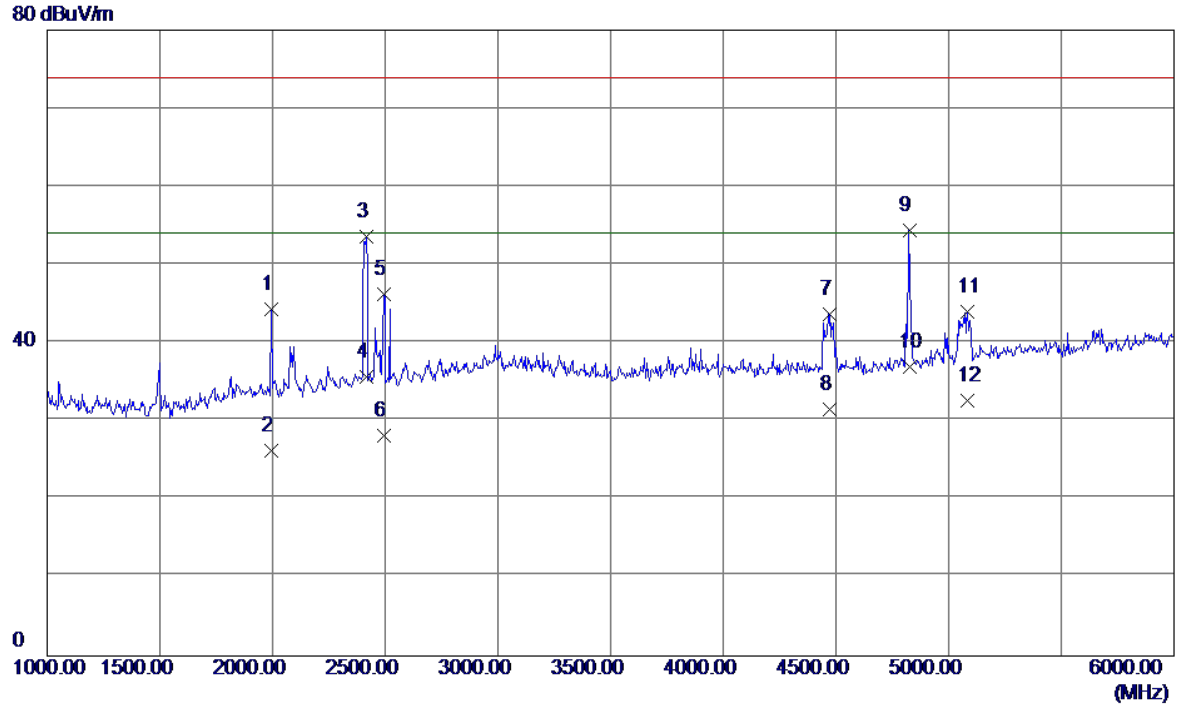
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	6619.5000	32.74	10.87	43.61	74.00	-30.39	Peak
2	6619.5000	20.75	10.87	31.62	54.00	-22.38	AVG
3	7186.5000	32.62	11.12	43.74	74.00	-30.26	Peak
4	7186.5000	20.72	11.12	31.84	54.00	-22.16	AVG
5	7858.5000	31.81	11.73	43.54	74.00	-30.46	Peak
6	7858.5000	19.56	11.73	31.29	54.00	-22.71	AVG
7	9255.0000	31.03	13.29	44.32	74.00	-29.68	Peak
8	9255.0000	19.05	13.29	32.34	54.00	-21.66	AVG
9	10294.5000	30.81	14.81	45.62	74.00	-28.38	Peak
10	10294.5000	19.13	14.81	33.94	54.00	-20.06	AVG
11	12086.5000	30.97	15.65	46.62	74.00	-27.38	Peak
12 *	12086.5000	19.11	15.65	34.76	54.00	-19.24	AVG

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Vertical
Test Mode	USB R/W+ Traffic(3G)+Wifi		
Test Engineer	Kevin Li		



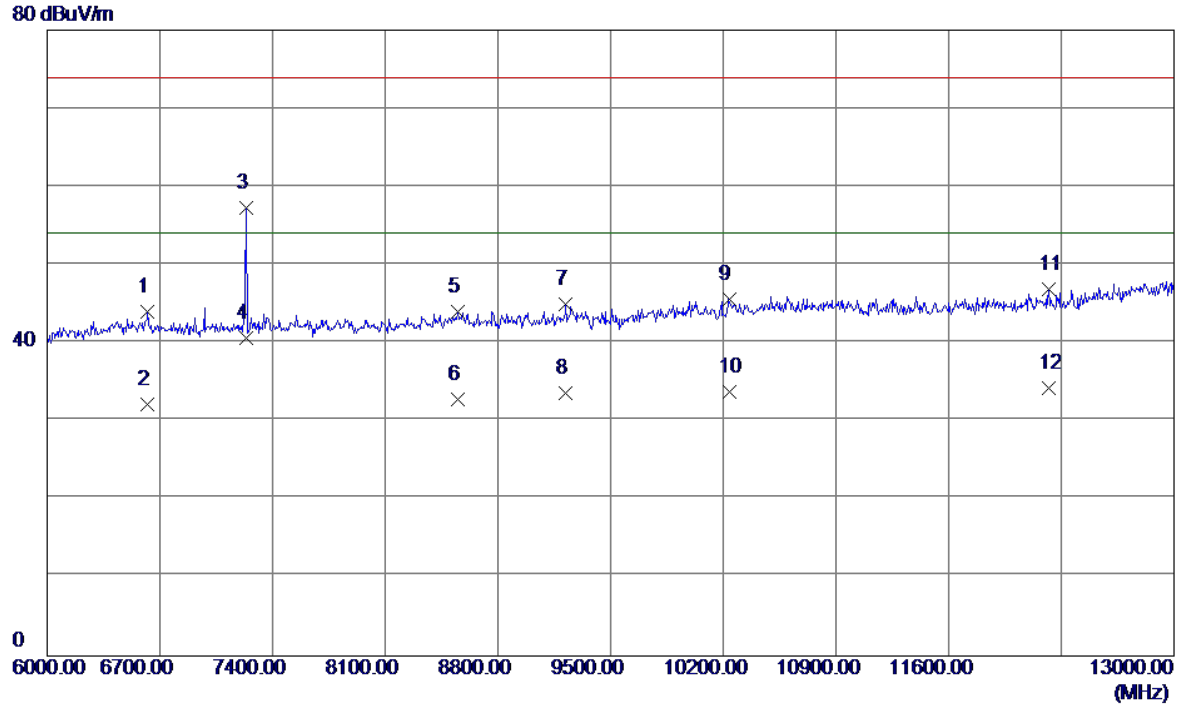
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	1492.5000	47.33	-6.67	40.66	74.00	-33.34	Peak
2	1492.5000	30.31	-6.67	23.64	54.00	-30.36	AVG
3	1715.0000	52.22	-5.00	47.22	74.00	-26.78	Peak
4	1715.0000	35.42	-5.00	30.42	54.00	-23.58	AVG
5	2077.5000	48.76	-2.53	46.23	74.00	-27.77	Peak
6	2077.5000	30.99	-2.53	28.46	54.00	-25.54	AVG
7	2415.0000	54.62	-1.28	53.34	74.00	-20.66	Peak
8 *	2415.0000	37.20	-1.28	35.92	54.00	-18.08	AVG
9	3865.0000	40.74	2.51	43.25	74.00	-30.75	Peak
10	3865.0000	22.68	2.51	25.19	54.00	-28.81	AVG
11	5097.5000	41.56	5.92	47.48	74.00	-26.52	Peak
12	5097.5000	23.54	5.92	29.46	54.00	-24.54	AVG

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Horizontal
Test Mode	USB R/W+ Traffic(3G)+Wifi		
Test Engineer	Kevin Li		



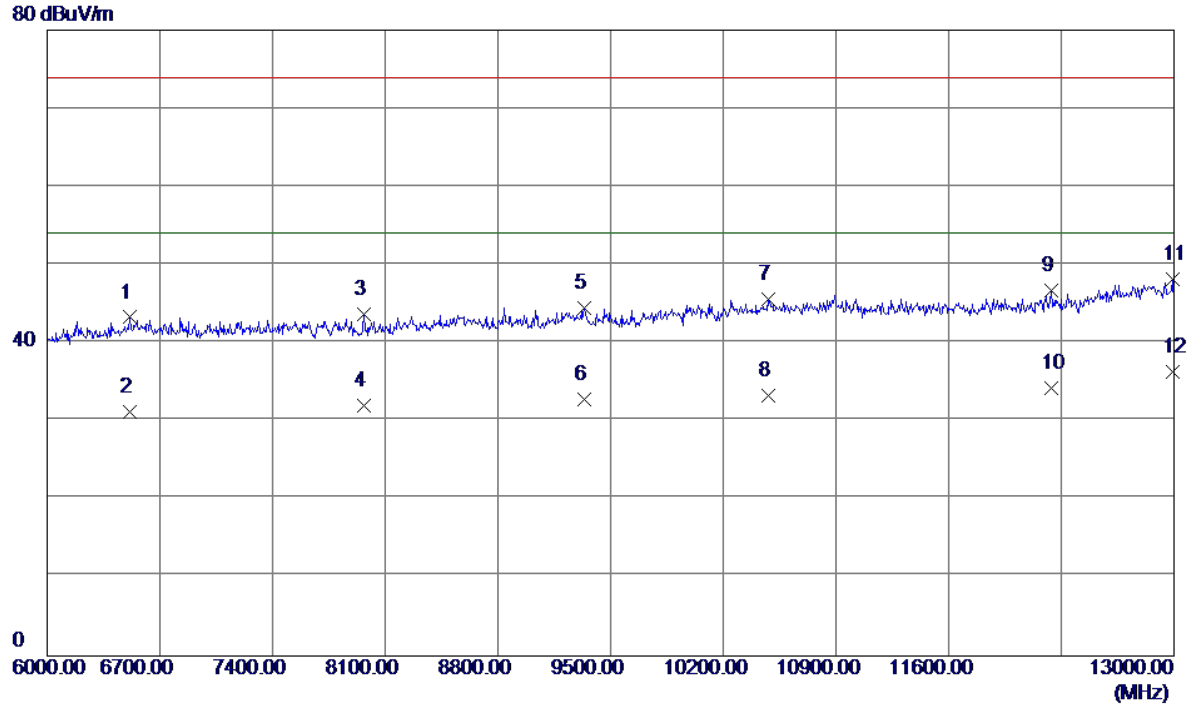
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	1992.5000	47.27	-2.88	44.39	74.00	-29.61	Peak
2	1992.5000	29.19	-2.88	26.31	54.00	-27.69	AVG
3	2415.0000	54.88	-1.28	53.60	74.00	-20.40	Peak
4	2415.0000	37.00	-1.28	35.72	54.00	-18.28	AVG
5	2492.5000	47.22	-1.00	46.22	74.00	-27.78	Peak
6	2492.5000	29.19	-1.00	28.19	54.00	-25.81	AVG
7	4472.5000	40.20	3.45	43.65	74.00	-30.35	Peak
8	4472.5000	28.04	3.45	31.49	54.00	-22.51	AVG
9	4825.0000	49.59	4.86	54.45	74.00	-19.55	Peak
10 *	4825.0000	32.09	4.86	36.95	54.00	-17.05	AVG
11	5085.0000	38.14	5.88	44.02	74.00	-29.98	Peak
12	5085.0000	26.83	5.88	32.71	54.00	-21.29	AVG

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Vertical
Test Mode	USB R/W+ Traffic(3G)+Wifi		
Test Engineer	Kevin Li		



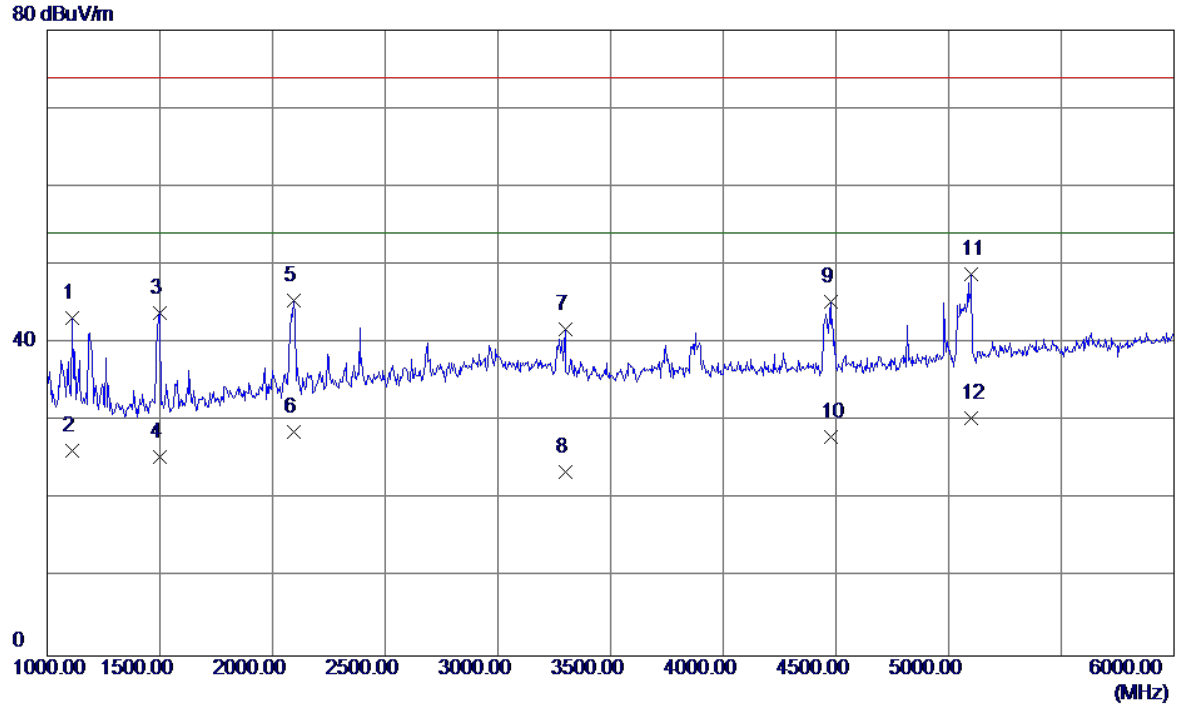
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	6623.0000	33.13	10.87	44.00	74.00	-30.00	Peak
2	6623.0000	21.32	10.87	32.19	54.00	-21.81	AVG
3	7235.5000	46.09	11.22	57.31	74.00	-16.69	Peak
4 *	7235.5000	29.40	11.22	40.62	54.00	-13.38	AVG
5	8551.5000	31.00	13.04	44.04	74.00	-29.96	Peak
6	8551.5000	19.80	13.04	32.84	54.00	-21.16	AVG
7	9220.0000	31.71	13.30	45.01	74.00	-28.99	Peak
8	9220.0000	20.35	13.30	33.65	54.00	-20.35	AVG
9	10235.0000	30.89	14.67	45.56	74.00	-28.44	Peak
10	10235.0000	19.07	14.67	33.74	54.00	-20.26	AVG
11	12223.0000	30.97	15.92	46.89	74.00	-27.11	Peak
12	12223.0000	18.34	15.92	34.26	54.00	-19.74	AVG

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Horizontal
Test Mode	USB R/W+ Traffic(3G)+Wifi		
Test Engineer	Kevin Li		



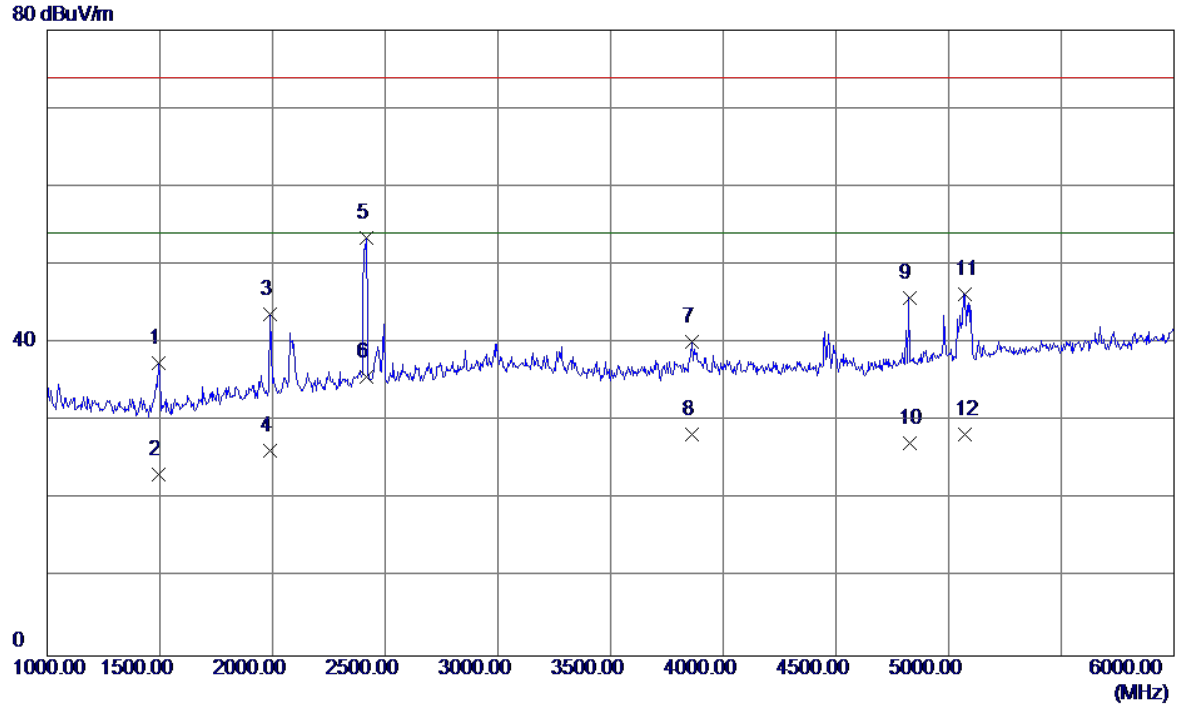
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	6514.5000	32.38	10.90	43.28	74.00	-30.72	Peak
2	6514.5000	20.36	10.90	31.26	54.00	-22.74	AVG
3	7967.0000	31.90	11.72	43.62	74.00	-30.38	Peak
4	7967.0000	20.23	11.72	31.95	54.00	-22.05	AVG
5	9339.0000	31.26	13.26	44.52	74.00	-29.48	Peak
6	9339.0000	19.48	13.26	32.74	54.00	-21.26	AVG
7	10476.5000	30.39	15.24	45.63	74.00	-28.37	Peak
8	10476.5000	18.02	15.24	33.26	54.00	-20.74	AVG
9	12237.0000	30.82	15.95	46.77	74.00	-27.23	Peak
10	12237.0000	18.23	15.95	34.18	54.00	-19.82	AVG
11	12989.5000	30.08	18.11	48.19	74.00	-25.81	Peak
12 *	12989.5000	18.18	18.11	36.29	54.00	-17.71	AVG

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Vertical
Test Mode	USB R/W+ Traffic(4G)+Wifi		
Test Engineer	Kevin Li		



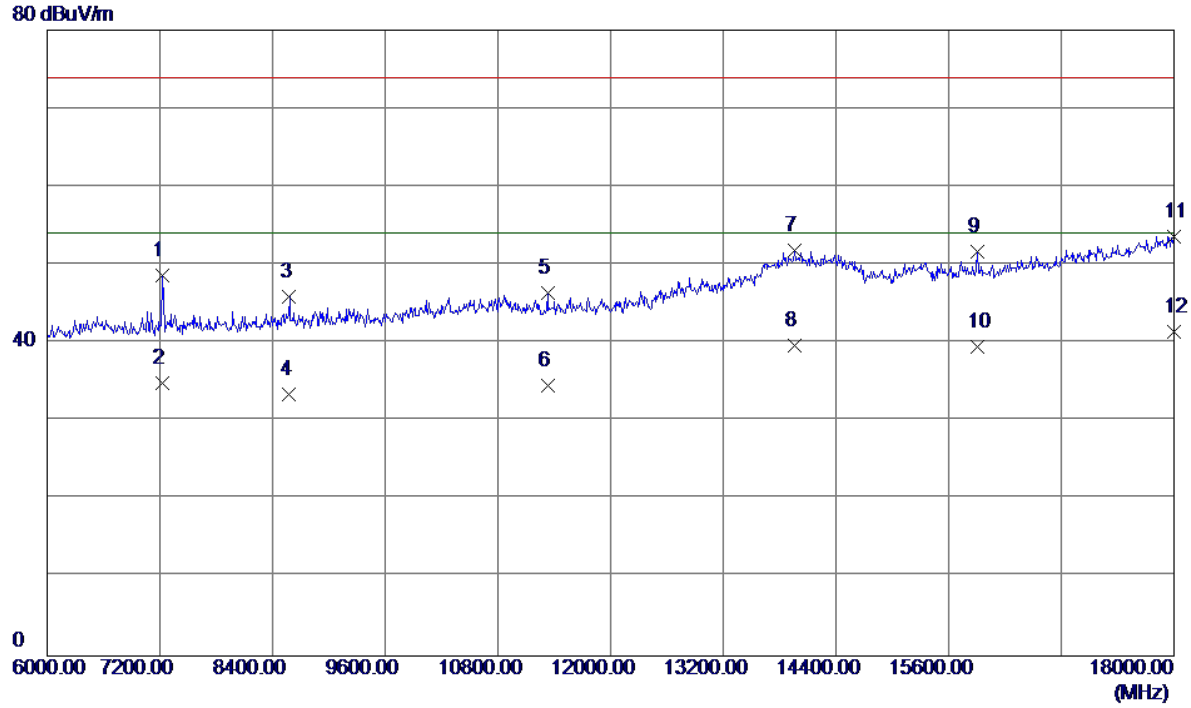
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	1112.5000	50.79	-7.64	43.15	74.00	-30.85	Peak
2	1112.5000	33.95	-7.64	26.31	54.00	-27.69	AVG
3	1497.5000	50.58	-6.66	43.92	74.00	-30.08	Peak
4	1497.5000	32.15	-6.66	25.49	54.00	-28.51	AVG
5	2095.0000	47.87	-2.47	45.40	74.00	-28.60	Peak
6	2095.0000	31.12	-2.47	28.65	54.00	-25.35	AVG
7	3297.5000	40.37	1.40	41.77	74.00	-32.23	Peak
8	3297.5000	22.06	1.40	23.46	54.00	-30.54	AVG
9	4477.5000	41.82	3.46	45.28	74.00	-28.72	Peak
10	4477.5000	24.49	3.46	27.95	54.00	-26.05	AVG
11	5100.0000	42.90	5.93	48.83	74.00	-25.17	Peak
12 *	5100.0000	24.48	5.93	30.41	54.00	-23.59	AVG

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Horizontal
Test Mode	USB R/W+ Traffic(4G)+Wifi		
Test Engineer	Kevin Li		



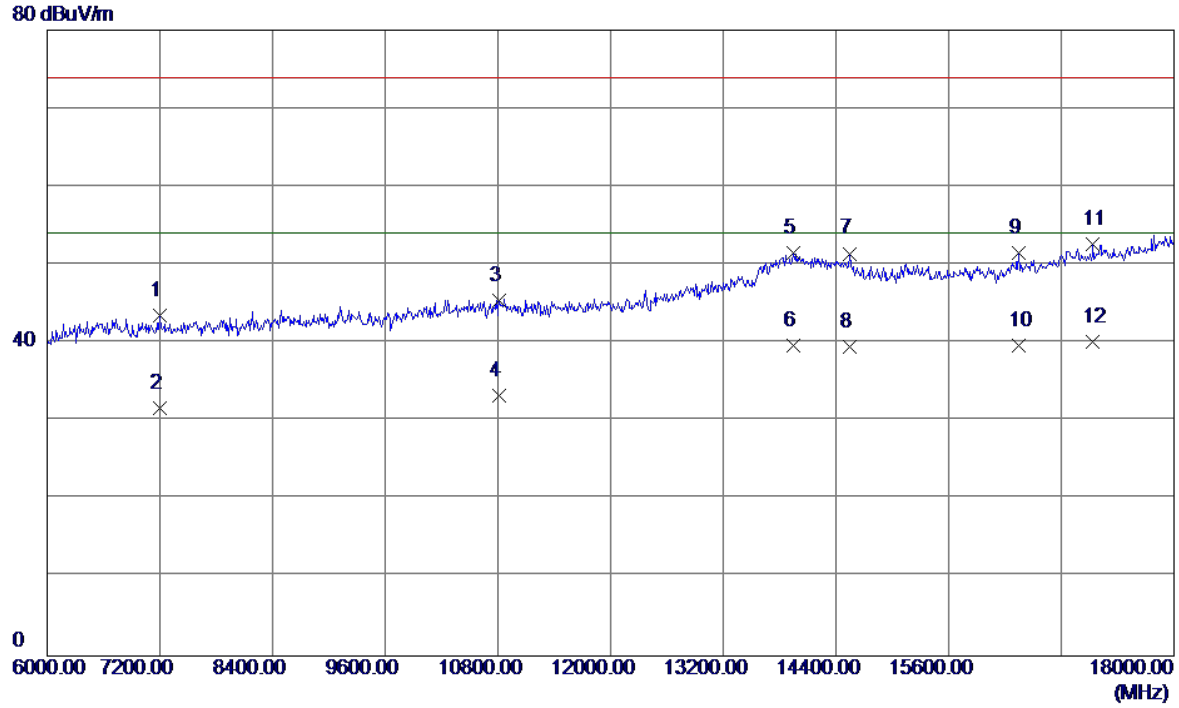
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	1492.5000	44.05	-6.67	37.38	74.00	-36.62	Peak
2	1492.5000	29.83	-6.67	23.16	54.00	-30.84	AVG
3	1990.0000	46.52	-2.90	43.62	74.00	-30.38	Peak
4	1990.0000	29.19	-2.90	26.29	54.00	-27.71	AVG
5	2415.0000	54.69	-1.28	53.41	74.00	-20.59	Peak
6 *	2415.0000	36.90	-1.28	35.62	54.00	-18.38	AVG
7	3862.5000	37.63	2.50	40.13	74.00	-33.87	Peak
8	3862.5000	25.81	2.50	28.31	54.00	-25.69	AVG
9	4825.0000	40.96	4.86	45.82	74.00	-28.18	Peak
10	4825.0000	22.30	4.86	27.16	54.00	-26.84	AVG
11	5070.0000	40.43	5.83	46.26	74.00	-27.74	Peak
12	5070.0000	22.56	5.83	28.39	54.00	-25.61	AVG

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Vertical
Test Mode	USB R/W+ Traffic(4G)+Wifi		
Test Engineer	Kevin Li		



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	7230.0000	37.45	11.21	48.66	74.00	-25.34	Peak
2	7230.0000	23.74	11.21	34.95	54.00	-19.05	AVG
3	8580.0000	32.92	13.06	45.98	74.00	-28.02	Peak
4	8580.0000	20.43	13.06	33.49	54.00	-20.51	AVG
5	11334.0000	30.76	15.63	46.39	74.00	-27.61	Peak
6	11334.0000	18.99	15.63	34.62	54.00	-19.38	AVG
7	13962.0000	30.18	21.65	51.83	74.00	-22.17	Peak
8	13962.0000	17.97	21.65	39.62	54.00	-14.38	AVG
9	15906.0000	33.84	17.86	51.70	74.00	-22.30	Peak
10	15906.0000	21.62	17.86	39.48	54.00	-14.52	AVG
11	17994.0000	30.96	22.69	53.65	74.00	-20.35	Peak
12 *	17994.0000	18.77	22.69	41.46	54.00	-12.54	AVG

EUT	LTE Wingle	Model Name	E8372h-609
Temperature	25°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz	Polarization	Horizontal
Test Mode	USB R/W+ Traffic(4G)+Wifi		
Test Engineer	Kevin Li		



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1	7200.0000	32.34	11.15	43.49	74.00	-30.51	Peak
2	7200.0000	20.50	11.15	31.65	54.00	-22.35	AVG
3	10812.0000	29.79	15.69	45.48	74.00	-28.52	Peak
4	10812.0000	17.58	15.69	33.27	54.00	-20.73	AVG
5	13950.0000	29.96	21.59	51.55	74.00	-22.45	Peak
6	13950.0000	18.06	21.59	39.65	54.00	-14.35	AVG
7	14550.0000	31.22	20.22	51.44	74.00	-22.56	Peak
8	14550.0000	19.26	20.22	39.48	54.00	-14.52	AVG
9	16344.0000	33.55	17.91	51.46	74.00	-22.54	Peak
10	16344.0000	21.71	17.91	39.62	54.00	-14.38	AVG
11	17136.0000	31.89	20.76	52.65	74.00	-21.35	Peak
12 *	17136.0000	19.40	20.76	40.16	54.00	-13.84	AVG