



# FCC Report

**Application Purpose** : Original grant  
**Applicant Name:** : TECNO MOBILE LIMITED  
**FCC ID** : 2ADYY-W5A  
**Equipment Type** : Mobile phone  
**Model Name** : W5  
**Report Number** : FCC16104036A-4  
**Standard(S)** : FCC Part 15 Subpart B  
**Date Of Receipt** : October 09, 2016  
**Date Of Issue** : October 27, 2016

**Test By** :   
\_\_\_\_\_  
(Daisy Qin)

**Reviewed By** :   
\_\_\_\_\_  
(Sol Qin)

**Authorized by** :   
\_\_\_\_\_  
(Michal Ling)

**Prepared by** : **QTC Certification & Testing Co., Ltd.**  
2nd Floor,Bl Building,Fengyeyuan Industrial Plant,,  
Liuxian 2st. Road, Xin'an Street, Bao'an  
District,,Shenzhen,518000  
**Registration Number: 588523**

**REPORT REVISE RECORD**

<b>Report Version</b>	<b>Revise Time</b>	<b>Issued Date</b>	<b>Valid Version</b>	<b>Notes</b>
V1.0	/	October 27, 2016	Valid	Original Report
V1.1	/	November 07, 2016	Valid	Original Report

<b>Table of Contents</b>	<b>Page</b>
<b>1. GENERAL INFORMATION</b>	<b>4</b>
<b>2. TEST DESCRIPTION</b>	<b>6</b>
2.1 MEASUREMENT UNCERTAINTY	6
2.2 DESCRIPTION OF TEST MODES	7
2.3 CONFIGURATION OF SYSTEM UNDER TEST	8
2.4 DESCRIPTION OF SUPPORT UNITS (CONDUCTED MODE)	9
<b>3. SUMMARY OF TEST RESULTS</b>	<b>10</b>
<b>4. MEASUREMENT INSTRUMENTS</b>	<b>11</b>
<b>5. EMC EMISSION TEST</b>	<b>12</b>
5.1 CONDUCTED EMISSION MEASUREMENT	12
5.1.1 POWER LINE CONDUCTED EMISSION LIMITS	12
5.1.2 TEST PROCEDURE	13
5.1.3 DEVIATION FROM TEST STANDARD	13
5.1.4 TEST SETUP	13
5.1.5 EUT OPERATING CONDITIONS	13
5.1.6 TEST RESULTS	14
5.2 RADIATED EMISSION MEASUREMENT	24
5.2.1 RADIATED EMISSION LIMITS	24
5.2.2 TEST PROCEDURE	25
5.2.3 DEVIATION FROM TEST STANDARD	25
5.2.4 TEST SETUP	26
5.2.5 EUT OPERATING CONDITIONS	26
5.2.5.1 TEST RESULTS (BETWEEN 30M – 1000 MHZ)	27
5.2.5.2 TEST RESULTS (1GHZ TO 6GHZ)	37
<b>6. EUT TEST PHOTO</b>	<b>40</b>
<b>7. PHOTOGRAPHS OF EUT</b>	<b>44</b>

**1. GENERAL INFORMATION**

Test Model	W5
Applicant	TECNO MOBILE LIMITED
Address	ROOMS 05-15, 13A/F., SOUTH TOWER,WORLD FINANCE CENTRE, HARBOUR CITY, 17 CANTON ROAD, TSIM SHA TSUI, KOWLOON, HONG KONG
Manufacturer	SHENZHEN TECNO TECHNOLOGY CO.,LTD.
Address	1-4th Floor,3rd Building,Pacific Industrial Park,No.2088,Shenyan Road,Yantian District,Shenzhen,Guangdong,China
Equipment Type	Mobile phone
Brand Name	<b>TECNO</b>
Hardware	V1.2
Software	W5-H373D1-M-160907V2
Battery information:	Li-Polymer Battery : BL-30RT Voltage: 3.85V Capacity: 3000mAh Limited Charge Voltage: 4.4V
Adapter Information:	Adapter: A8-501000 Input: 100-240V 50/60Hz 200mA Output: 5V 1A
Data of receipt	October 09, 2016
Date of test	October 09, 2016 to October 26 , 2016
Deviation	None
Condition of Test Sample	Normal

**We hereby certify that:**

The above equipment was tested by QTC Certification & Testing Co., Ltd.

2nd Floor, BI Building, Fengyeyuan Industrial Plant, Liuxian 2st. Road, Xin'an Street, Bao'an District, Shenzhen, 518000

Registration Number: 588523

The data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C 63.4:2014. The sample tested as described in this report is in compliance with the FCC Rules Part 15 Subpart B.

The test results of this report relate only to the tested sample identified in this report.

## 2. TEST DESCRIPTION

### 2.1 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement  $y \pm U$ , 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** %.

No.	Item	Uncertainty
1	Conducted Emission Test	$\pm 3.2\text{dB}$
2	RF power, conducted	$\pm 0.16\text{dB}$
3	Spurious emissions, conducted	$\pm 0.21\text{dB}$
4	All emissions, radiated(<1G)	$\pm 4.7\text{dB}$
5	All emissions, radiated(>1G)	$\pm 4.7\text{dB}$
6	Temperature	$\pm 0.5^\circ\text{C}$
7	Humidity	$\pm 2\%$

## 2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates 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.

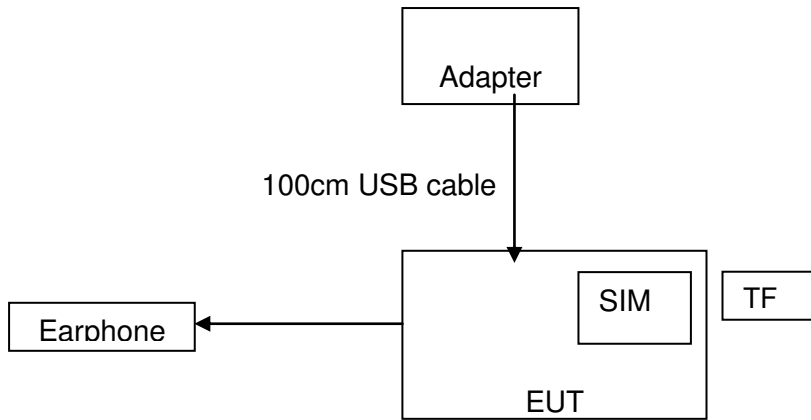
Pretest Mode	Description
Mode 1	Video Recording
Model 2	Video Playing
Mode 3	Exchange data with computer
Mode 4	GPS
Mode 5	FM

For Conducted Emission	
Final Test Mode	Test with Keyboard and Mouse
Mode 1	Video Recording
Model 2	Video Playing
Mode 3	Exchange data with computer
Mode 4	GPS
Mode 5	FM

For Radiated Emission	
Final Test Mode	Test with Keyboard and Mouse
Mode 1	Video Recording
Model 2	Video Playing
Mode 3	Exchange data with computer
Mode 4	GPS
Mode 5	FM

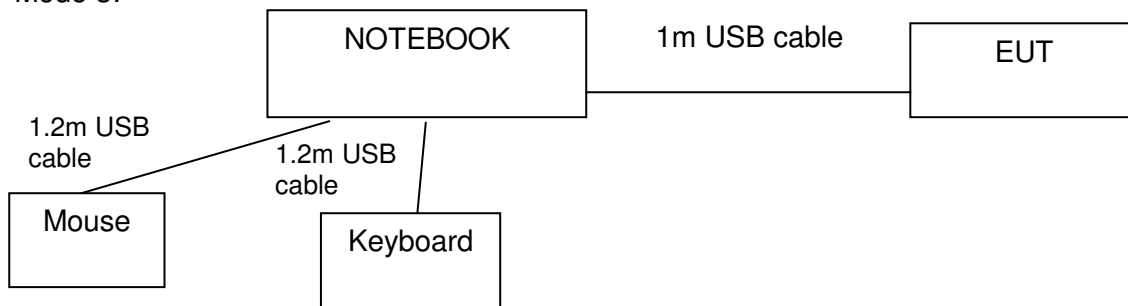
### 2.3 CONFIGURATION OF SYSTEM UNDER TEST

Mode 1&2&4&5:



(EUT: Mobile phone)

Mode 3:



(EUT: Mobile phone)

I/O Port of EUT			
I/O Port Type	Q'TY	Cable	Tested with
Power	1	1m USB cable, unshielded	1
Earphone	1	1m USB cable, unshielded	1



## 2.4 DESCRIPTION OF SUPPORT UNITS (CONDUCTED MODE)

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.	Series No.	Note
1	Adapter	/	A8-501000	/	/
2	Keyboard	HP	SK-2880	435302-AA-	/
3	Mouse	DELL	MS111-1	/	/

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.

### 3. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

<b>FCC Part15 , Subpart B</b>			
Standard Section	Test Item	Judgment	Remark
15.107	CONDUCTED EMISSION	PASS	
15.109	RADIATED EMISSION	PASS	

**NOTE:**

(1) "N/A" denotes test is not applicable in this test report.

**4. MEASUREMENT INSTRUMENTS**

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibrated	Calibrated until
ESCI Test Receiver	R&S	ESCI	100005	08/19/2016	08/18/2017
LISN	AFJ	LS16	16010222119	08/19/2016	08/18/2017
LISN(EUT)	Mestec	AN3016	04/10040	08/19/2016	08/18/2017
pre-amplifier	CDSI	PAP-1G18-38	--	08/19/2016	08/18/2017
System Controller	CT	SC100	-	08/19/2016	08/18/2017
Bi-log Antenna	Chase	CBL6111C	2576	08/19/2016	08/18/2017
Spectrum analyzer	R&S	FSU26	200409	08/19/2016	08/18/2017
Horn Antenna	SCHWARZBECK	9120D	1141	08/19/2016	08/18/2017
Bi-log Antenna	SCHWARZBECK	VULB9163	9163/340	08/19/2016	08/18/2017
Pre Amplifier	H.P.	HP8447E	2945A02715	10/13/2016	10/12/2017
9*6*6 Anechoic	--	--	--	08/21/2016	08/20/2017

## 5. EMC EMISSION TEST

### 5.1 CONDUCTED EMISSION MEASUREMENT

#### 5.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

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

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.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

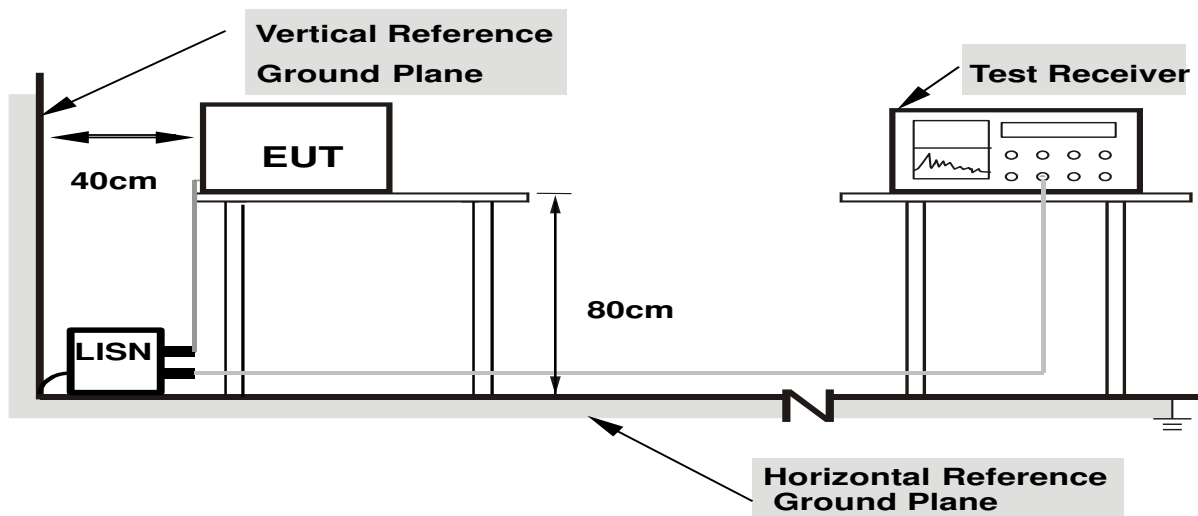
### 5.1.2 TEST PROCEDURE

- The EUT was placed 0.4 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- 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.
- 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.
- LISN at least 80 cm from nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

### 5.1.3 DEVIATION FROM TEST STANDARD

No deviation

### 5.1.4 TEST SETUP



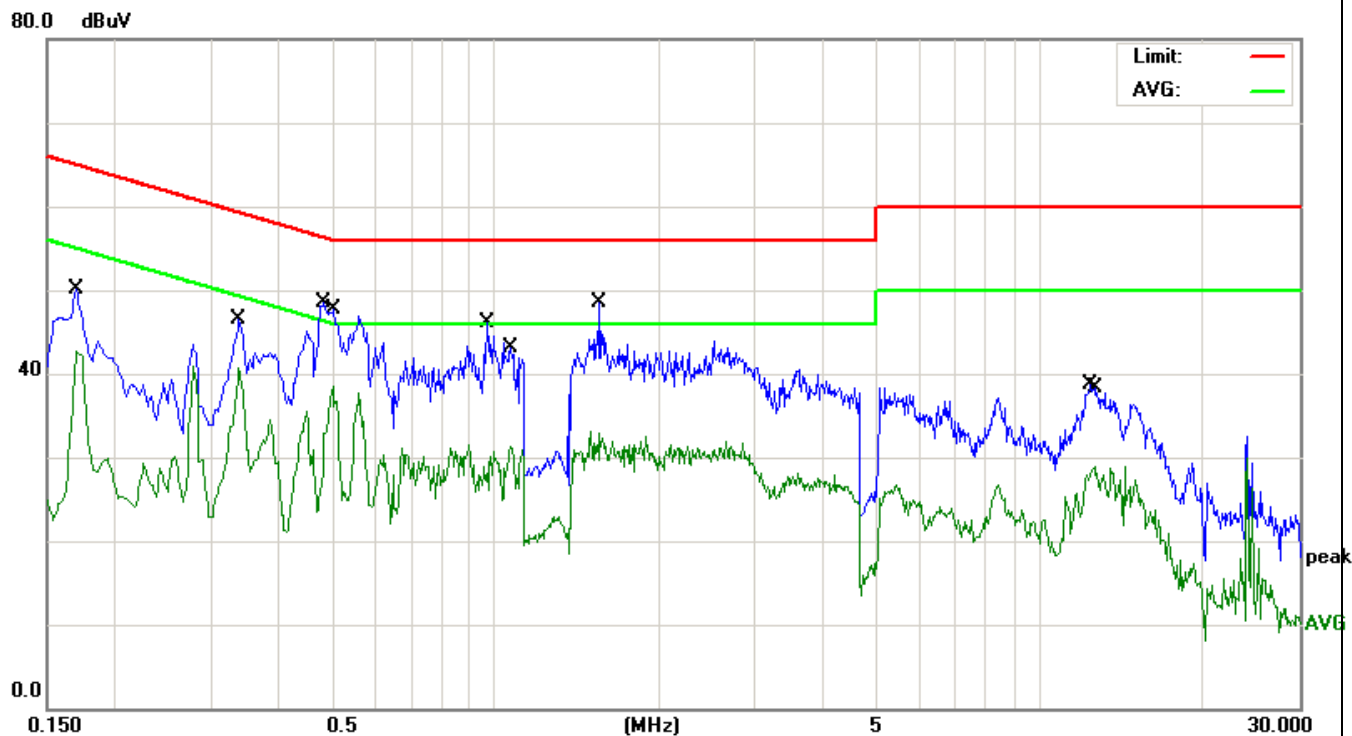
- Note: 1.Support units were connected to second LISN.**  
**2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes**

### 5.1.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

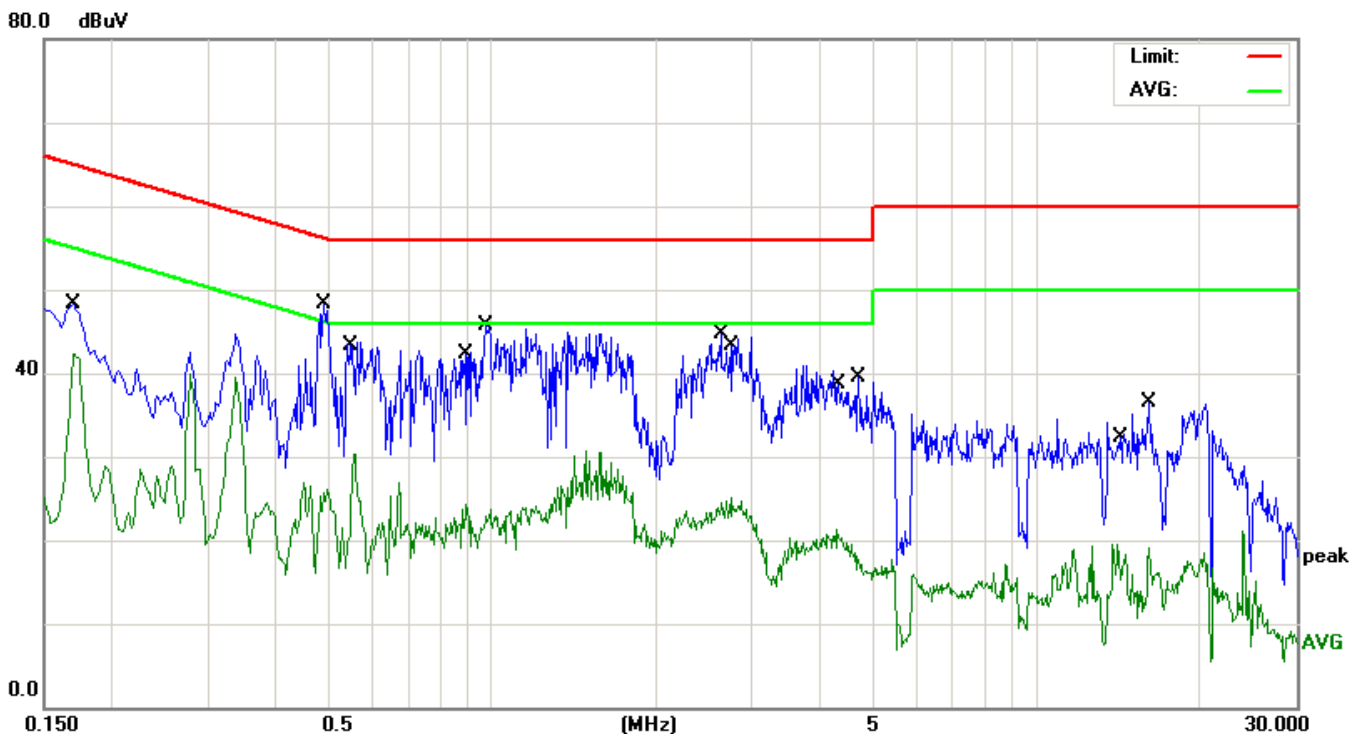
### 5.1.6 TEST RESULTS

EUT	Mobile phone	Model Name	W5
Temperature	26 °C	Relative Humidity	54%
Pressure	1010hPa	Phase	L
Test Date	October 10,2016	Test Mode	Mode 1



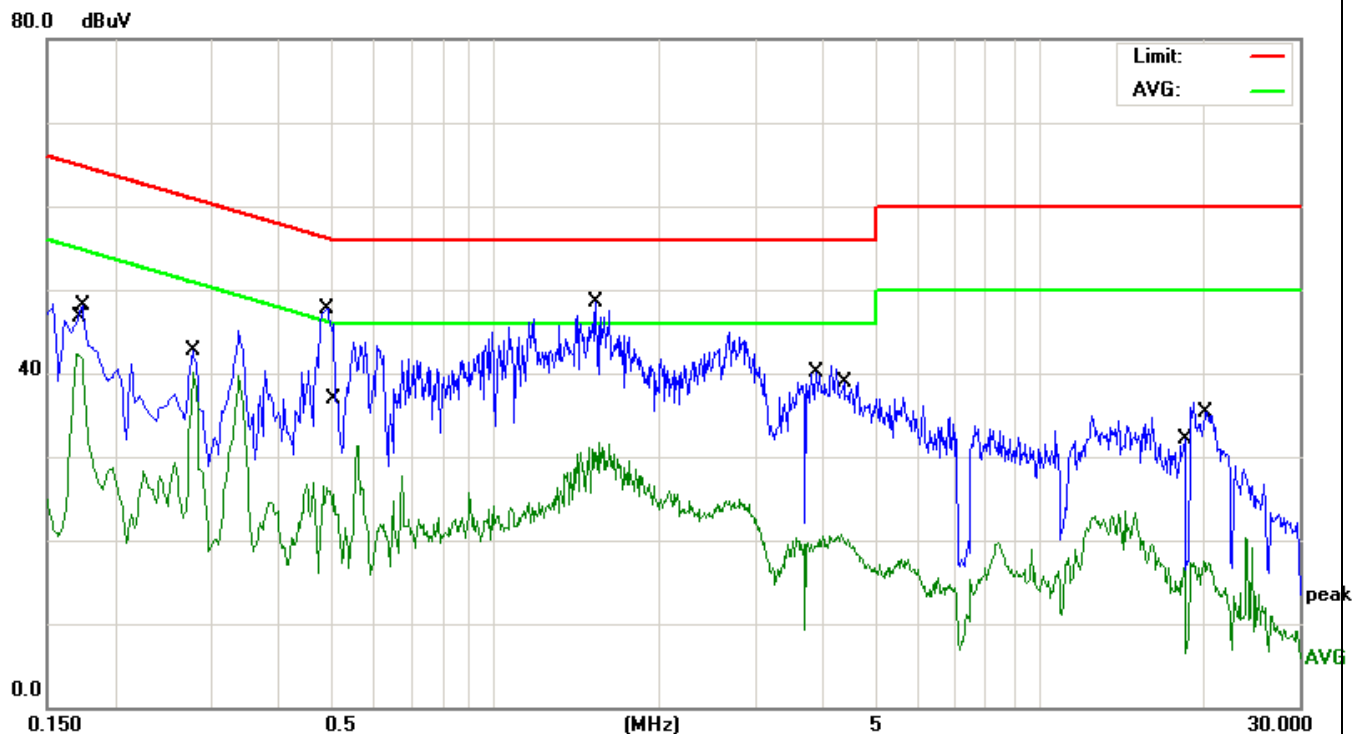
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1700	36.71	10.44	47.15	64.96	-17.81	QP
2		0.1700	32.20	10.44	42.64	54.96	-12.32	AVG
3		0.3379	33.02	10.42	43.44	59.25	-15.81	QP
4		0.3379	30.31	10.42	40.73	49.25	-8.52	AVG
5		0.4860	35.18	10.40	45.58	56.24	-10.66	QP
6	*	0.5020	28.17	10.40	38.57	46.00	-7.43	AVG
7		0.9660	32.71	10.34	43.05	56.00	-12.95	QP
8		1.0700	20.87	10.34	31.21	46.00	-14.79	AVG
9		1.5540	35.17	10.31	45.48	56.00	-10.52	QP
10		1.5540	22.64	10.31	32.95	46.00	-13.05	AVG
11		12.4460	25.48	10.17	35.65	60.00	-24.35	QP
12		12.6300	18.75	10.17	28.92	50.00	-21.08	AVG

EUT	Mobile phone	Model Name	W5
Temperature	26 °C	Relative Humidity	54%
Pressure	1010hPa	Phase	N
Test Date	October 10,2016	Test Mode	Mode 1



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1700	33.87	10.44	44.31	64.96	-20.65	QP
2		0.1700	31.93	10.44	42.37	54.96	-12.59	AVG
3	*	0.4900	33.83	10.40	44.23	56.17	-11.94	QP
4		0.5580	19.93	10.39	30.32	46.00	-15.68	AVG
5		0.8980	13.95	10.35	24.30	46.00	-21.70	AVG
6		0.9780	31.42	10.34	41.76	56.00	-14.24	QP
7		2.6260	30.41	10.28	40.69	56.00	-15.31	QP
8		2.7380	14.73	10.28	25.01	46.00	-20.99	AVG
9		4.3060	11.00	10.24	21.24	46.00	-24.76	AVG
10		4.6979	25.29	10.24	35.53	56.00	-20.47	QP
11		14.0780	9.39	10.16	19.55	50.00	-30.45	AVG
12		16.0820	22.41	10.14	32.55	60.00	-27.45	QP

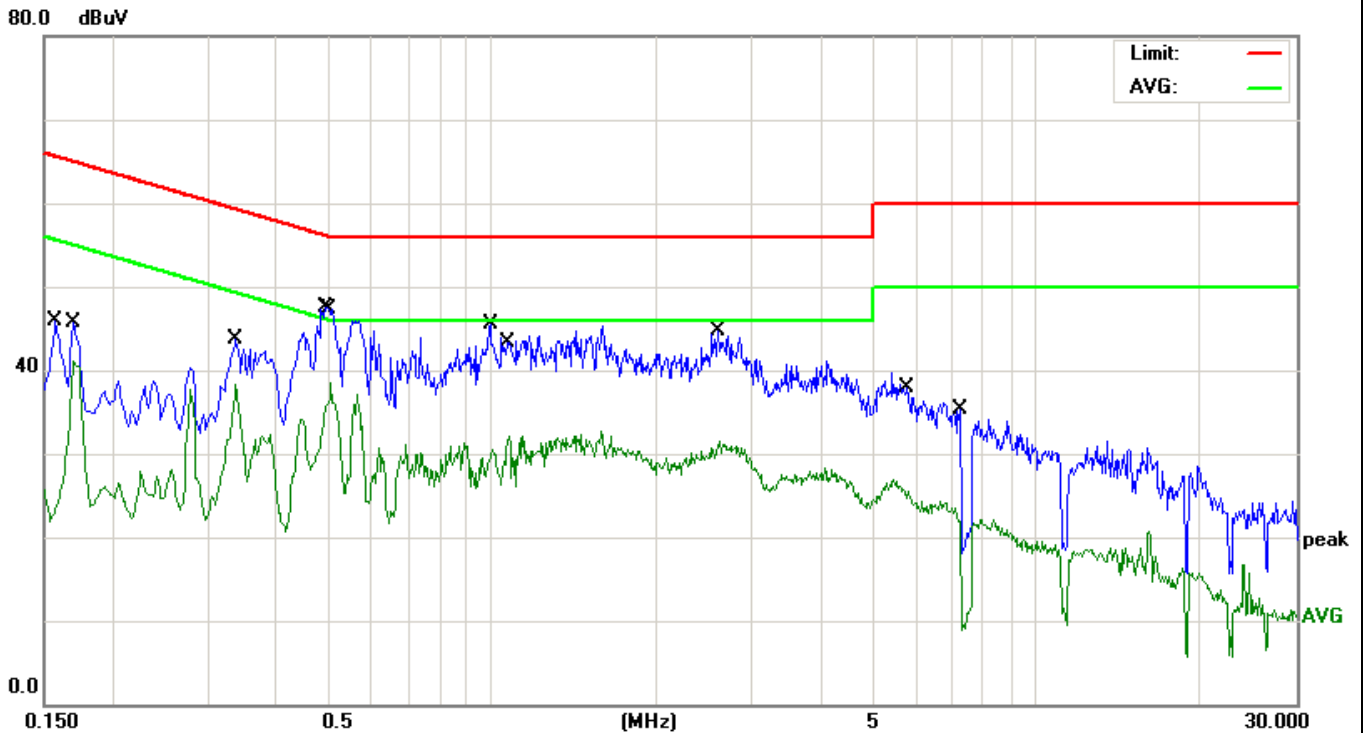
EUT	Mobile phone	Model Name	W5
Temperature	26 °C	Relative Humidity	54%
Pressure	1010hPa	Phase	L
Test Date	October 10,2016	Test Mode	Mode 2



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1700	31.89	10.44	42.33	54.96	-12.63	AVG
2		0.1740	34.65	10.44	45.09	64.76	-19.67	QP
3		0.2779	29.63	10.43	40.06	50.88	-10.82	AVG
4		0.2819	27.88	10.42	38.30	60.76	-22.46	QP
5		0.4900	34.36	10.40	44.76	56.17	-11.41	QP
6		0.5140	12.80	10.40	23.20	46.00	-22.80	AVG
7	*	1.5300	35.12	10.31	45.43	56.00	-10.57	QP
8		1.5500	21.39	10.31	31.70	46.00	-14.30	AVG
9		3.8820	26.86	10.25	37.11	56.00	-18.89	QP
10		4.3340	10.43	10.24	20.67	46.00	-25.33	AVG
11		18.4540	18.99	10.13	29.12	60.00	-30.88	QP
12		20.0100	7.30	10.12	17.42	50.00	-32.58	AVG

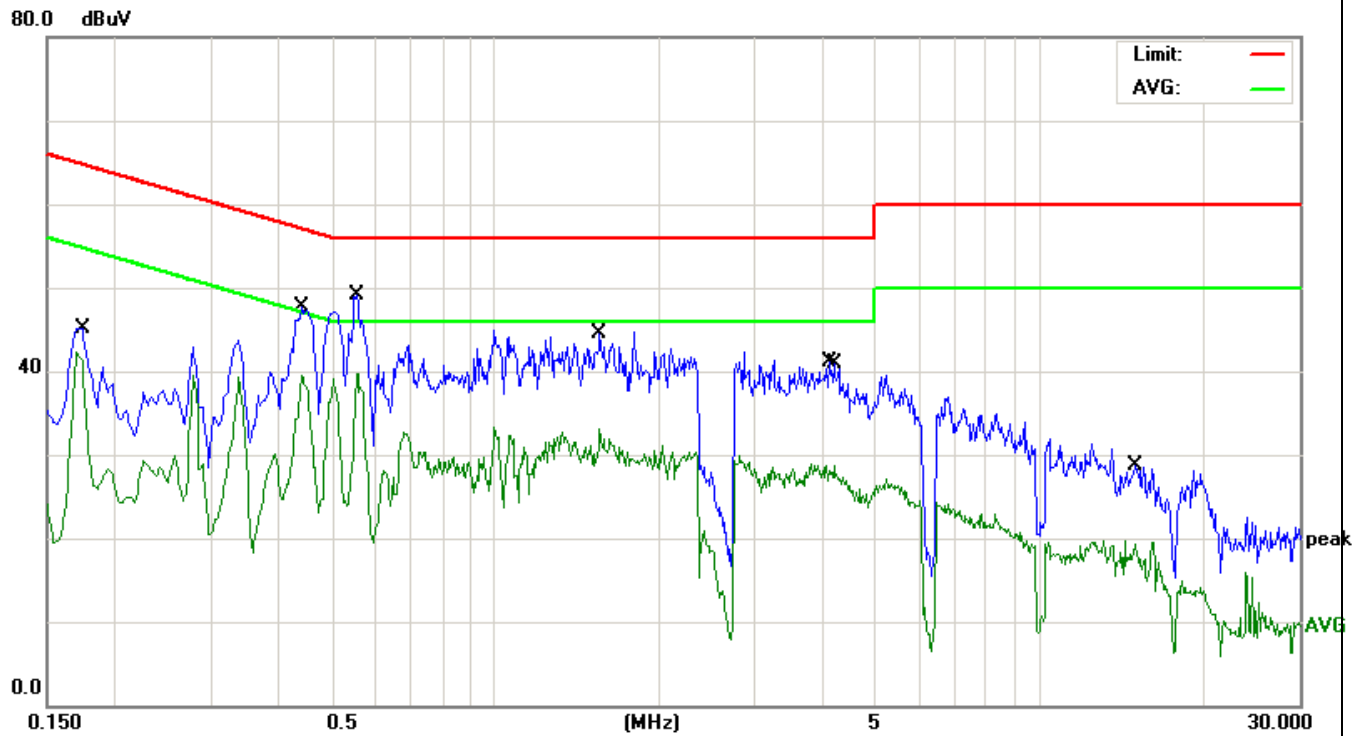


EUT	Mobile phone	Model Name	W5
Temperature	26 °C	Relative Humidity	54%
Pressure	1010hPa	Phase	N
Test Date	October 10,2016	Test Mode	Mode 2



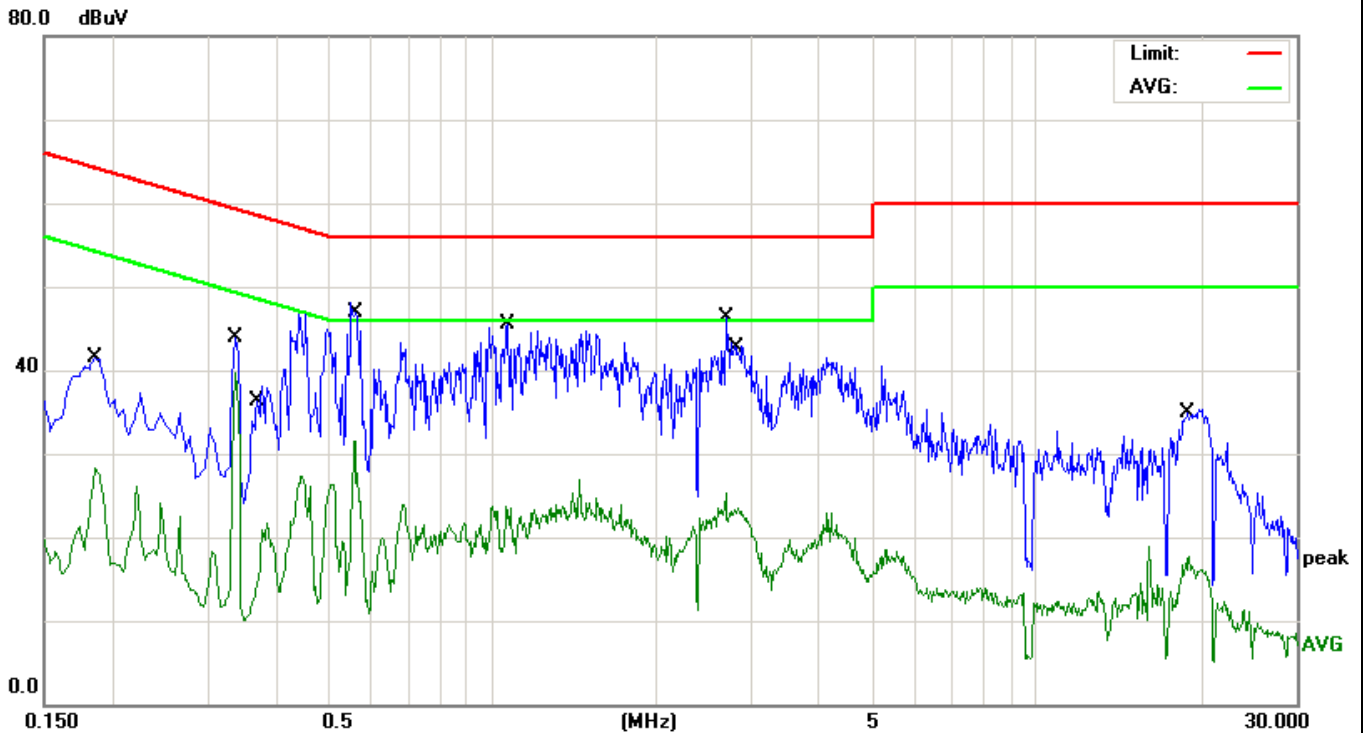
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1580	32.40	10.44	42.84	65.56	-22.72	QP
2		0.1700	30.62	10.44	41.06	54.96	-13.90	AVG
3		0.3379	30.34	10.42	40.76	59.25	-18.49	QP
4		0.3379	27.97	10.42	38.39	49.25	-10.86	AVG
5		0.4940	34.17	10.40	44.57	56.10	-11.53	QP
6	*	0.5060	28.17	10.40	38.57	46.00	-7.43	AVG
7		0.9940	32.25	10.34	42.59	56.00	-13.41	QP
8		1.0740	21.80	10.34	32.14	46.00	-13.86	AVG
9		2.6020	31.41	10.28	41.69	56.00	-14.31	QP
10		2.6140	21.15	10.28	31.43	46.00	-14.57	AVG
11		5.8659	14.49	10.22	24.71	50.00	-25.29	AVG
12		7.2180	22.19	10.21	32.40	60.00	-27.60	QP

EUT	Mobile phone	Model Name	W5
Temperature	26 °C	Relative Humidity	54%
Pressure	1010hPa	Phase	L
Test Date	October 10,2016	Test Mode	Mode 3



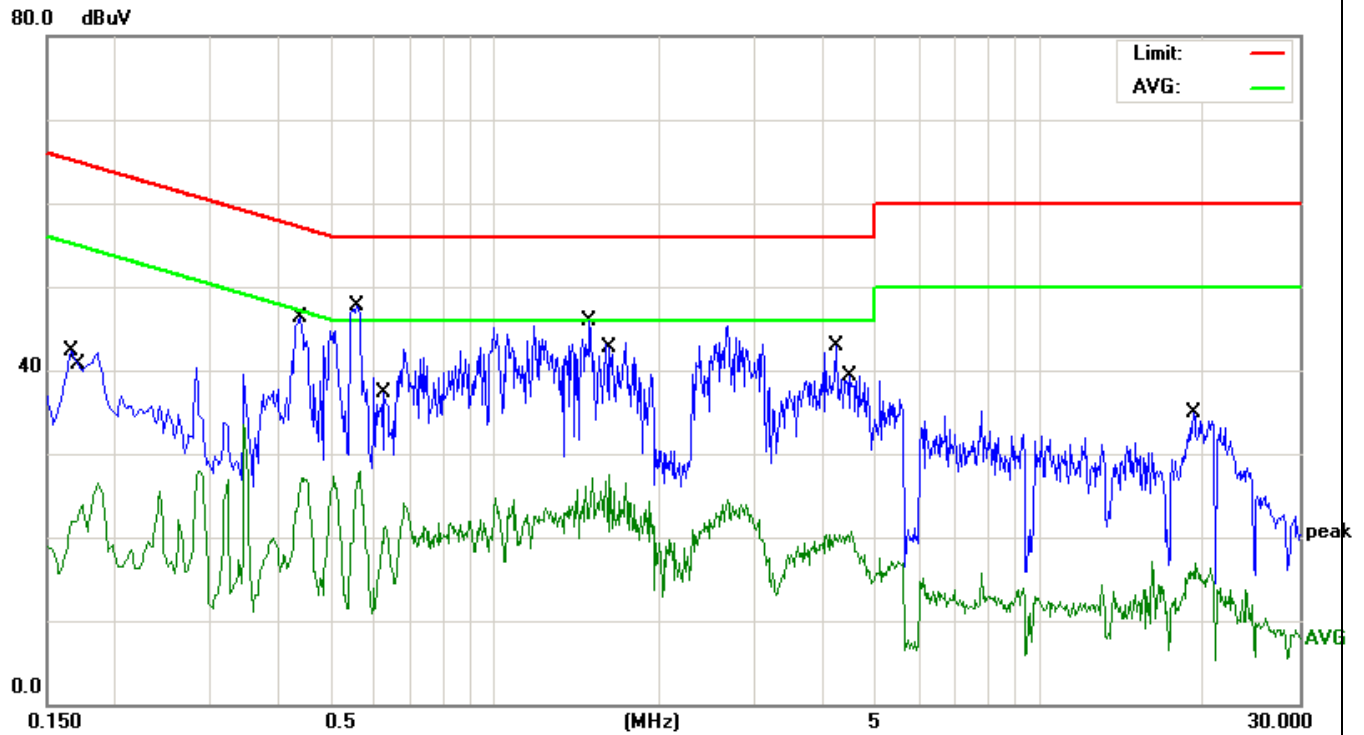
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1712	31.52	10.44	41.96	54.90	-12.94	AVG
2		0.1758	29.78	10.44	40.22	64.68	-24.46	QP
3		0.4420	34.31	10.41	44.72	57.02	-12.30	QP
4	*	0.4420	29.00	10.41	39.41	47.02	-7.61	AVG
5		0.5580	35.63	10.39	46.02	56.00	-9.98	QP
6		0.5660	27.64	10.39	38.03	46.00	-7.97	AVG
7		1.5580	31.22	10.31	41.53	56.00	-14.47	QP
8		1.5580	22.75	10.31	33.06	46.00	-12.94	AVG
9		4.0580	27.00	10.25	37.25	56.00	-18.75	QP
10		4.1820	18.46	10.25	28.71	46.00	-17.29	AVG
11		14.9460	15.62	10.15	25.77	60.00	-34.23	QP
12		14.9460	9.13	10.15	19.28	50.00	-30.72	AVG

EUT	Mobile phone	Model Name	W5
Temperature	26 °C	Relative Humidity	54%
Pressure	1010hPa	Phase	N
Test Date	October 10,2016	Test Mode	Mode 3



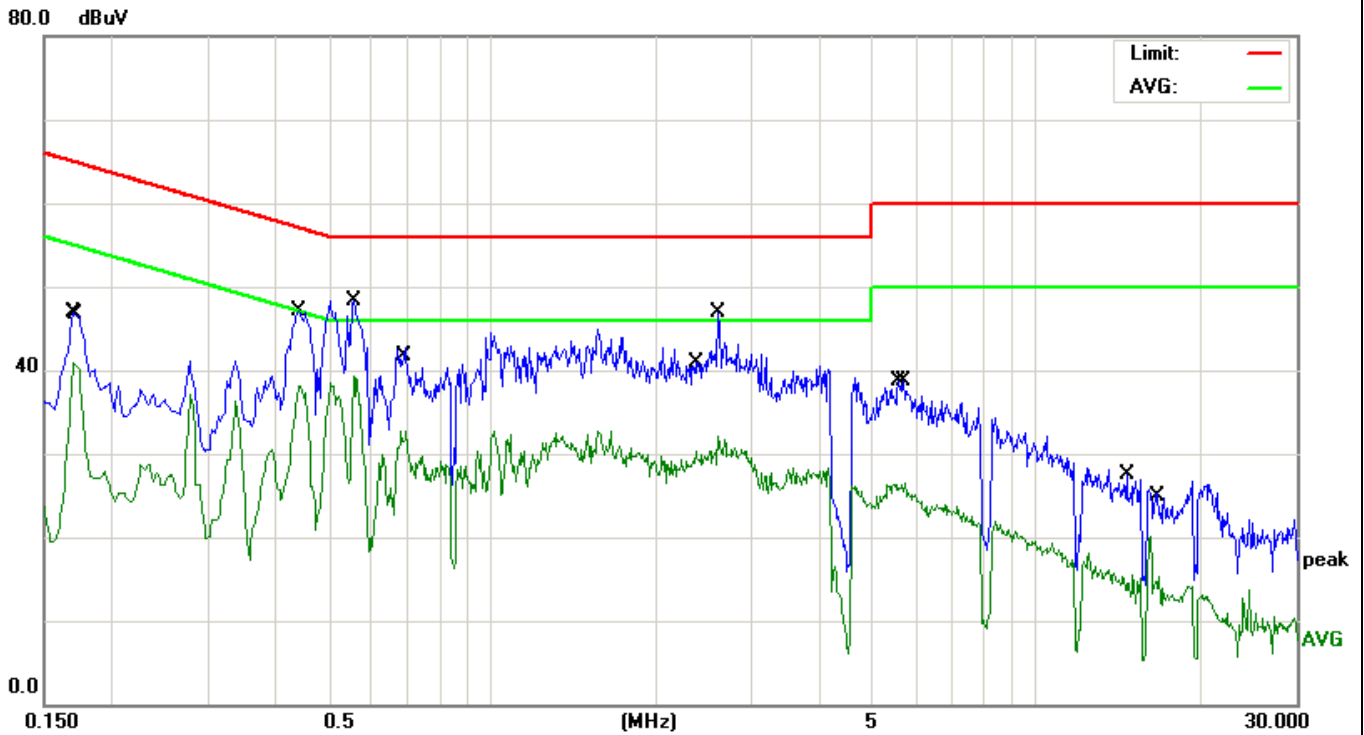
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1860	27.07	10.44	37.51	64.21	-26.70	QP
2		0.1860	17.86	10.44	28.30	54.21	-25.91	AVG
3	*	0.3379	29.23	10.42	39.65	49.25	-9.60	AVG
4		0.3700	21.94	10.41	32.35	58.50	-26.15	QP
5		0.5620	32.42	10.39	42.81	56.00	-13.19	QP
6		0.5660	17.41	10.39	27.80	46.00	-18.20	AVG
7		1.0660	31.13	10.34	41.47	56.00	-14.53	QP
8		1.0859	12.29	10.34	22.63	46.00	-23.37	AVG
9		2.7100	30.12	10.28	40.40	56.00	-15.60	QP
10		2.8380	13.31	10.27	23.58	46.00	-22.42	AVG
11		19.0100	20.79	10.13	30.92	60.00	-29.08	QP
12		19.0260	7.50	10.13	17.63	50.00	-32.37	AVG

EUT	Mobile phone	Model Name	W5
Temperature	26 °C	Relative Humidity	54%
Pressure	1010hPa	Phase	L
Test Date	October 10,2016	Test Mode	Mode 4



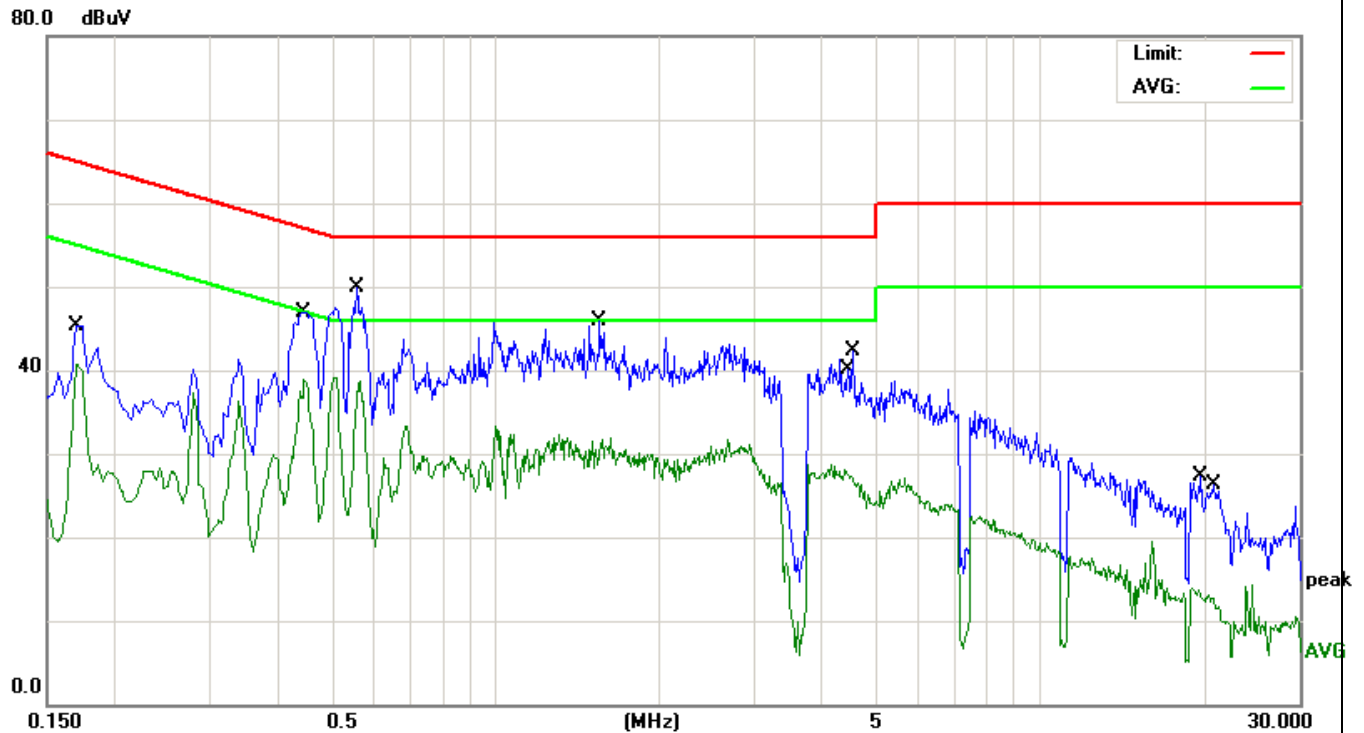
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1677	28.29	10.44	38.73	65.07	-26.34	QP
2		0.1740	13.47	10.44	23.91	54.76	-30.85	AVG
3		0.4380	32.96	10.41	43.37	57.10	-13.73	QP
4		0.4420	16.71	10.41	27.12	47.02	-19.90	AVG
5	*	0.5580	34.24	10.39	44.63	56.00	-11.37	QP
6		0.6300	10.88	10.38	21.26	46.00	-24.74	AVG
7		1.4940	32.68	10.32	43.00	56.00	-13.00	QP
8		1.6220	17.27	10.31	27.58	46.00	-18.42	AVG
9		4.2340	29.65	10.25	39.90	56.00	-16.10	QP
10		4.5140	10.38	10.24	20.62	46.00	-25.38	AVG
11		19.1900	21.75	10.12	31.87	60.00	-28.13	QP
12		19.3020	6.68	10.12	16.80	50.00	-33.20	AVG

EUT	Mobile phone	Model Name	W5
Temperature	26 °C	Relative Humidity	54%
Pressure	1010hPa	Phase	N
Test Date	October 10,2016	Test Mode	Mode 4



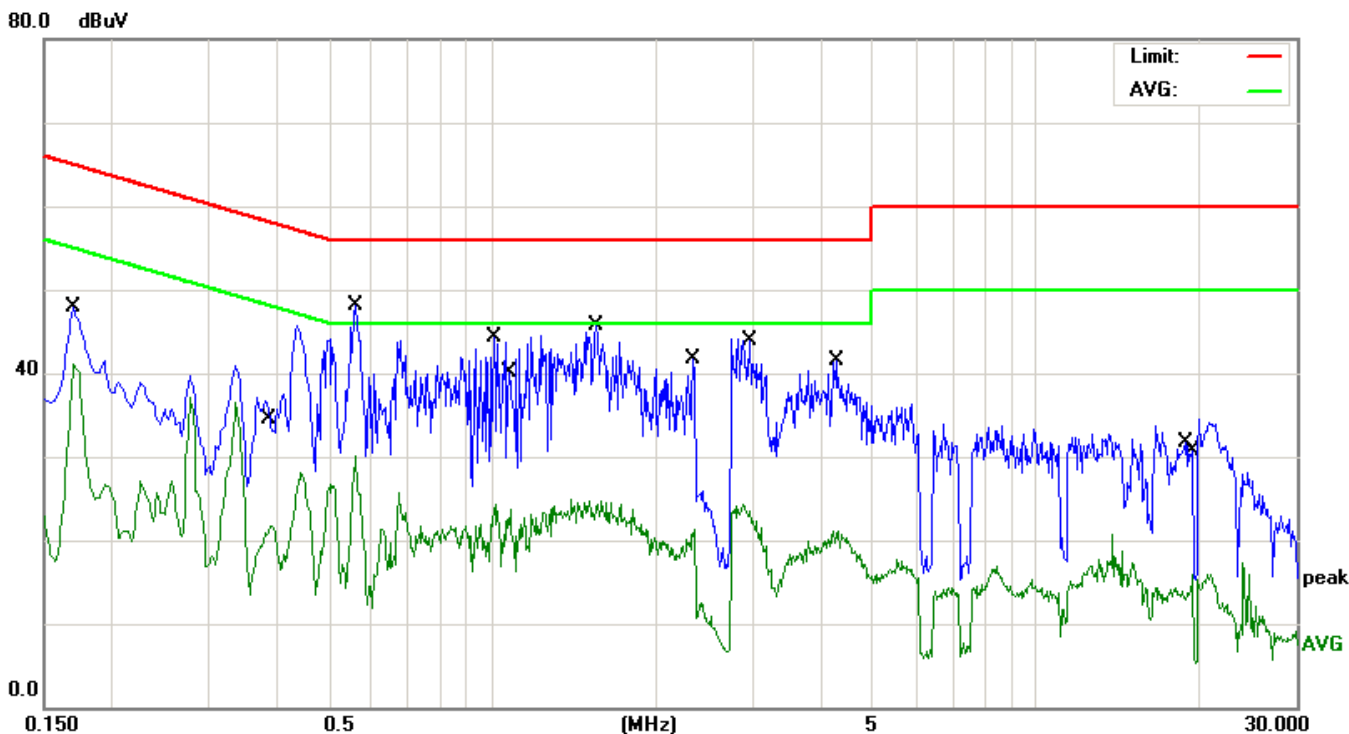
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV	dBuV	dB	
1		0.1700	33.40	10.44	43.84	64.96	-21.12	QP
2		0.1722	30.02	10.44	40.46	54.85	-14.39	AVG
3		0.4420	33.60	10.41	44.01	57.02	-13.01	QP
4	*	0.4420	27.69	10.41	38.10	47.02	-8.92	AVG
5		0.5580	34.99	10.39	45.38	56.00	-10.62	QP
6		0.6820	22.39	10.38	32.77	46.00	-13.23	AVG
7		2.3620	19.97	10.28	30.25	46.00	-15.75	AVG
8		2.6060	33.57	10.28	43.85	56.00	-12.15	QP
9		5.5660	25.51	10.23	35.74	60.00	-24.26	QP
10		5.7380	16.27	10.22	26.49	50.00	-23.51	AVG
11		14.6620	14.40	10.15	24.55	60.00	-35.45	QP
12		16.7580	5.13	10.14	15.27	50.00	-34.73	AVG

EUT	Mobile phone	Model Name	W5
Temperature	26 °C	Relative Humidity	54%
Pressure	1010hPa	Phase	L
Test Date	October 10,2016	Test Mode	Mode 5



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1700	30.87	10.44	41.31	64.96	-23.65	QP
2		0.1700	30.33	10.44	40.77	54.96	-14.19	AVG
3		0.4460	32.57	10.41	42.98	56.95	-13.97	QP
4		0.4460	28.42	10.41	38.83	46.95	-8.12	AVG
5		0.5580	35.41	10.39	45.80	56.00	-10.20	QP
6	*	0.5660	28.27	10.39	38.66	46.00	-7.34	AVG
7		1.5580	31.63	10.31	41.94	56.00	-14.06	QP
8		1.5700	21.32	10.31	31.63	46.00	-14.37	AVG
9		4.3859	17.90	10.24	28.14	46.00	-17.86	AVG
10		4.5460	28.06	10.24	38.30	56.00	-17.70	QP
11		19.5740	3.65	10.12	13.77	50.00	-36.23	AVG
12		20.8460	12.15	10.12	22.27	60.00	-37.73	QP

EUT	Mobile phone	Model Name	W5
Temperature	26 °C	Relative Humidity	54%
Pressure	1010hPa	Phase	N
Test Date	October 10,2016	Test Mode	Mode 5



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1700	34.41	10.44	44.85	64.96	-20.11	QP
2		0.1700	30.61	10.44	41.05	54.96	-13.91	AVG
3		0.3940	11.21	10.41	21.62	47.98	-26.36	AVG
4	*	0.5620	34.61	10.39	45.00	56.00	-11.00	QP
5		1.0100	30.86	10.34	41.20	56.00	-14.80	QP
6		1.0780	13.32	10.34	23.66	46.00	-22.34	AVG
7		1.5580	32.01	10.31	42.32	56.00	-13.68	QP
8		2.3220	10.40	10.28	20.68	46.00	-25.32	AVG
9		2.9660	30.65	10.27	40.92	56.00	-15.08	QP
10		4.2260	10.89	10.25	21.14	46.00	-24.86	AVG
11		18.7979	18.59	10.13	28.72	60.00	-31.28	QP
12		19.3500	5.80	10.12	15.92	50.00	-34.08	AVG

## 5.2 RADIATED EMISSION MEASUREMENT

### 5.2.1 RADIATED EMISSION LIMITS (Frequency Range 9kHz-1000MHz)

Frequency Range 9kHz-30MHz

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F (kHz)	300
0.490-1.705	24000/F (kHz)	30
1.705-30.0	30	30

Frequency Range 30MHz-1000MHz

- (a) Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency of emission (MHz)	Field strength (microvolts/meter)
30-88	100
88-216	150
216-960	200
Above 960	500

- (b) The field strength of radiated emissions from a Class A digital device, as determined at a distance of 10 meters, shall not exceed the following:

Frequency of emission (MHz)	Field strength (microvolts/meter)
30-88	90
88-216	150
216-960	210
Above 960	300

### LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

FREQUENCY (MHz)	Limit (dBuV/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	74	54

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15B.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / 1Hz for Average



Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

### 5.2.2 TEST PROCEDURE

- The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- 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.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

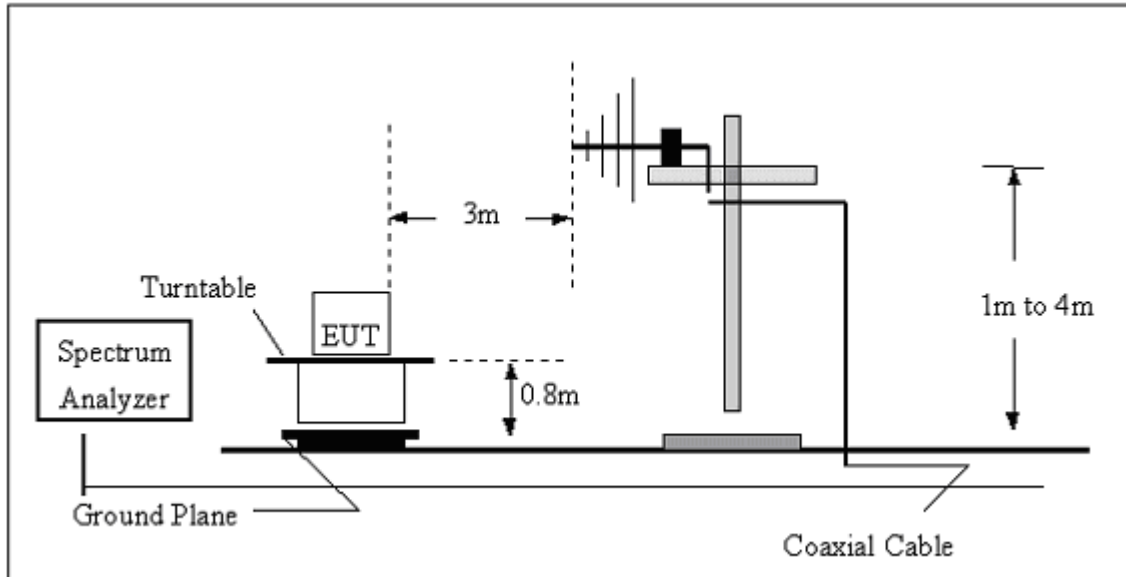
***Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported***

### 5.2.3 DEVIATION FROM TEST STANDARD

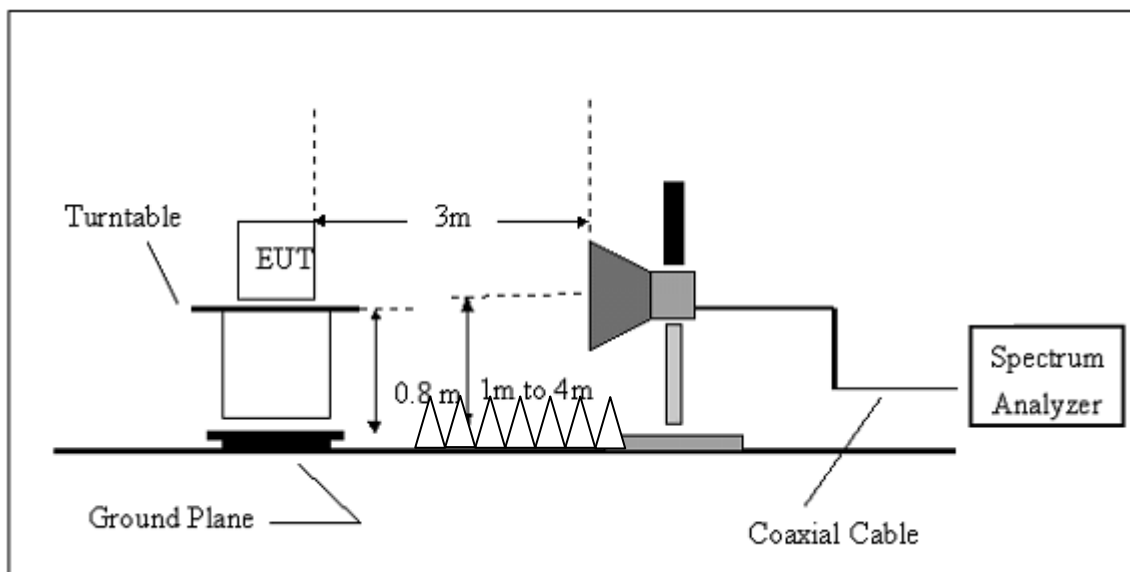
No deviation

### 5.2.4 TEST SETUP

(A) Radiated Emission Test-Up Frequency 30MHz~1GHz



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

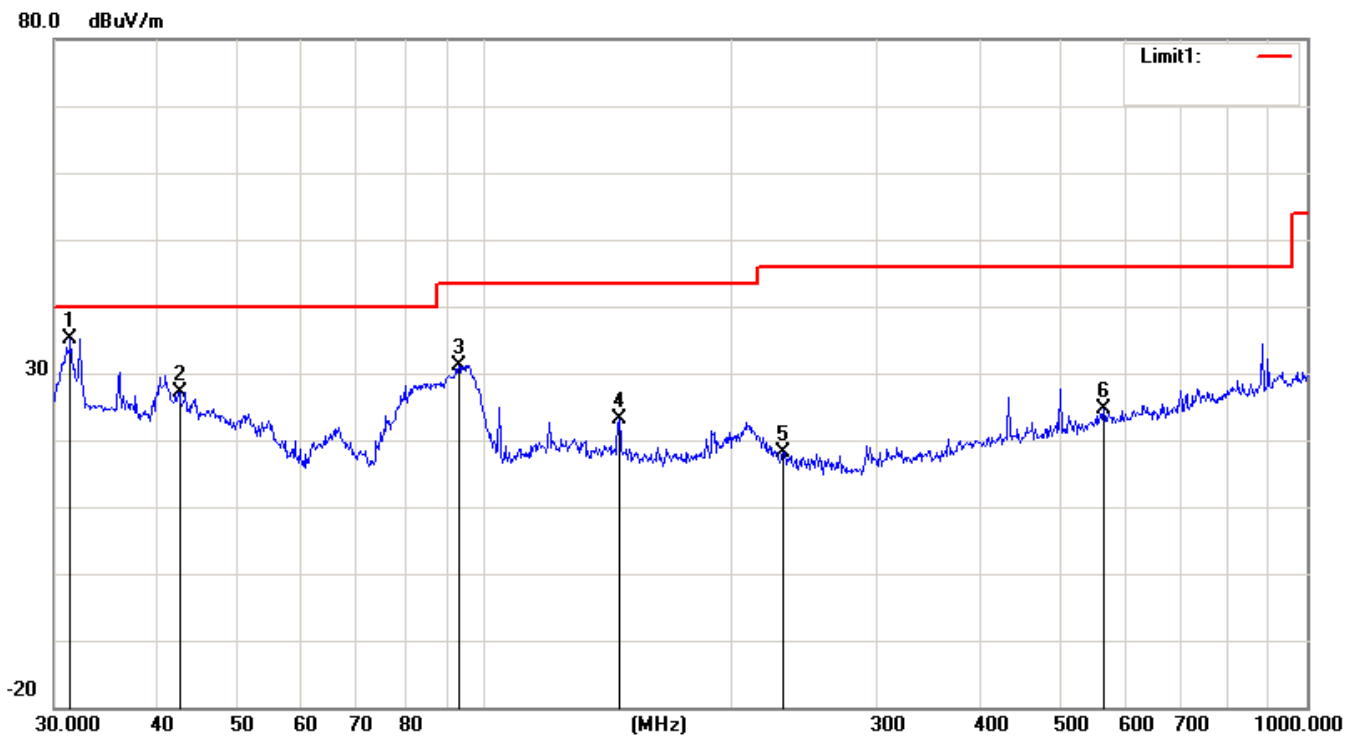


### 5.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

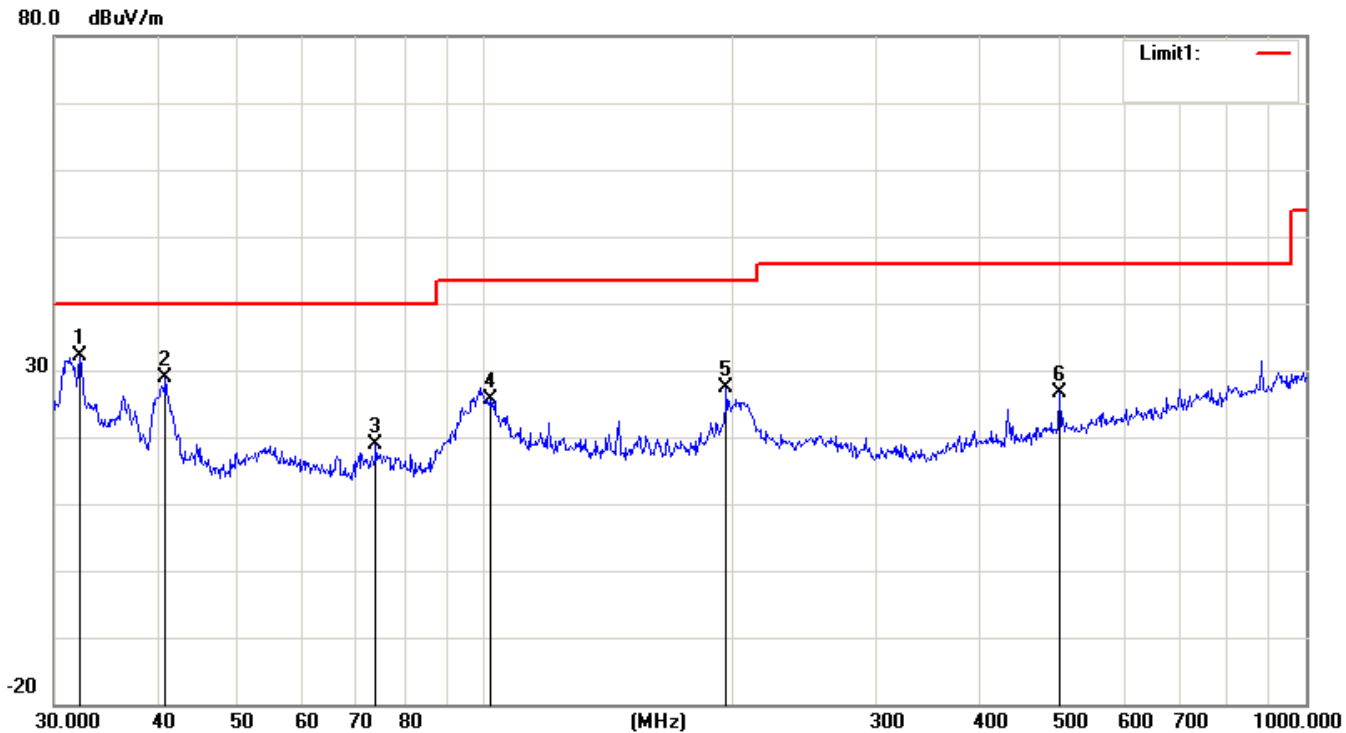
**5.2.5.1 TEST RESULTS (BETWEEN 30M – 1000 MHZ)**

EUT	Mobile phone	Model Name	W5
Temperature	20 °C	Relative Humidity	48%
Pressure	1010 hPa	Polarization :	Horizontal
Test Mode	Mode 1	Test Date	October 10,2016



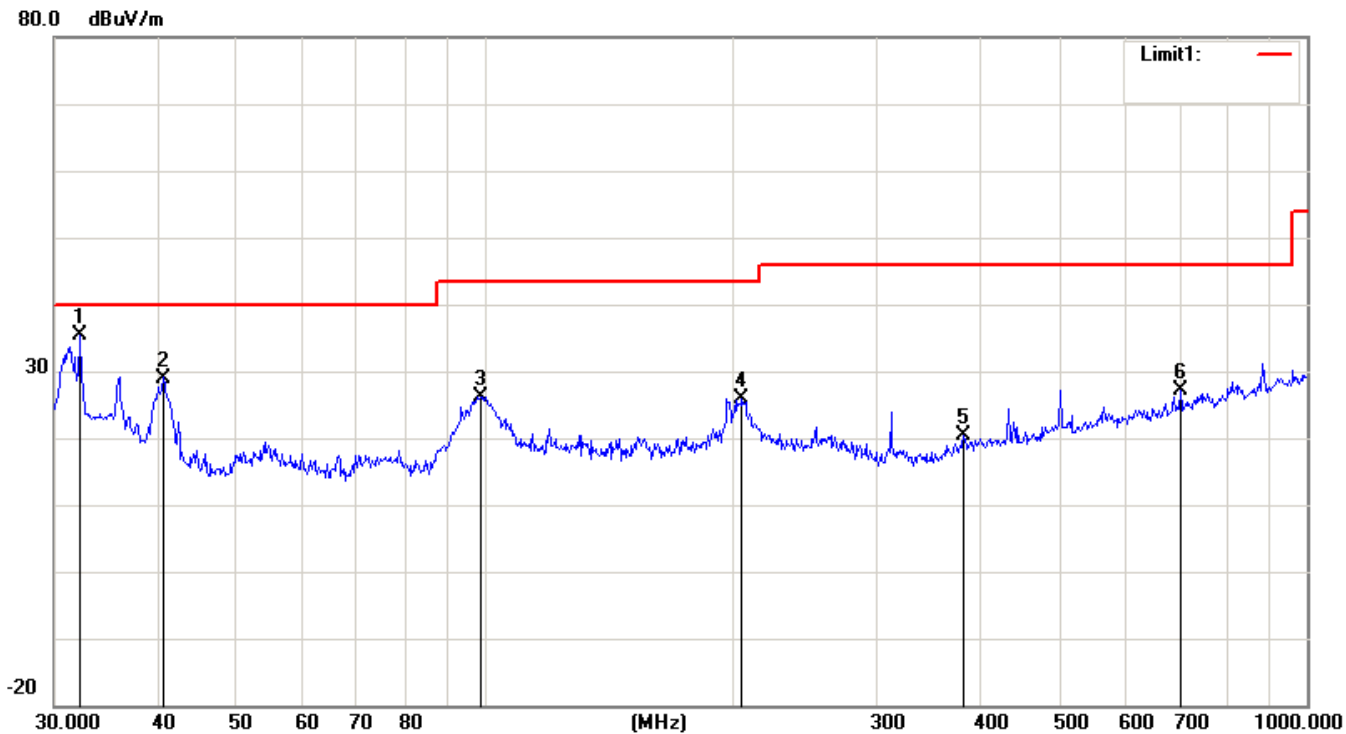
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	31.3992	32.66	2.55	35.21	40.00	-4.79	QP
2		42.6000	32.33	-5.18	27.15	40.00	-12.85	QP
3		93.1132	38.81	-7.59	31.22	43.50	-12.28	QP
4		145.8611	26.68	-3.46	23.22	43.50	-20.28	QP
5		230.9068	24.14	-5.92	18.22	46.00	-27.78	QP
6		566.6223	24.14	0.43	24.57	46.00	-21.43	QP

EUT	Mobile phone	Model Name	W5
Temperature	20 °C	Relative Humidity	48%
Pressure	1010 hPa	Polarization :	Vertical
Test Mode	Mode 1	Test Date	October 10,2016



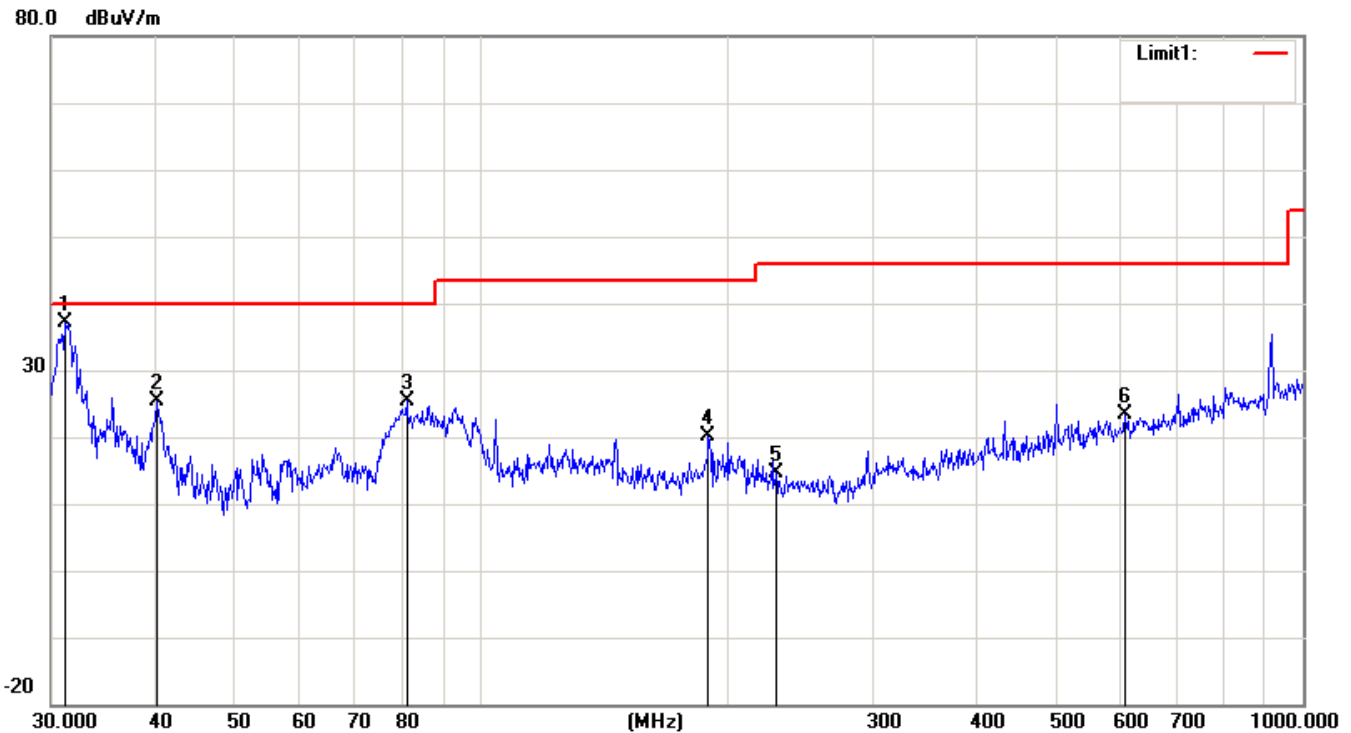
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	32.1795	30.00	2.03	32.03	40.00	-7.97	QP
2		40.9881	33.04	-4.13	28.91	40.00	-11.09	QP
3		73.8756	26.39	-7.60	18.79	40.00	-21.21	QP
4		101.6443	31.59	-5.85	25.74	43.50	-17.76	QP
5		197.2001	32.48	-5.09	27.39	43.50	-16.11	QP
6		501.1790	27.75	-1.00	26.75	46.00	-19.25	QP

EUT	Mobile phone	Model Name	W5
Temperature	20 °C	Relative Humidity	48%
Pressure	1010 hPa	Polarization :	Horizontal
Test Mode	Mode 2	Test Date	October 10,2016



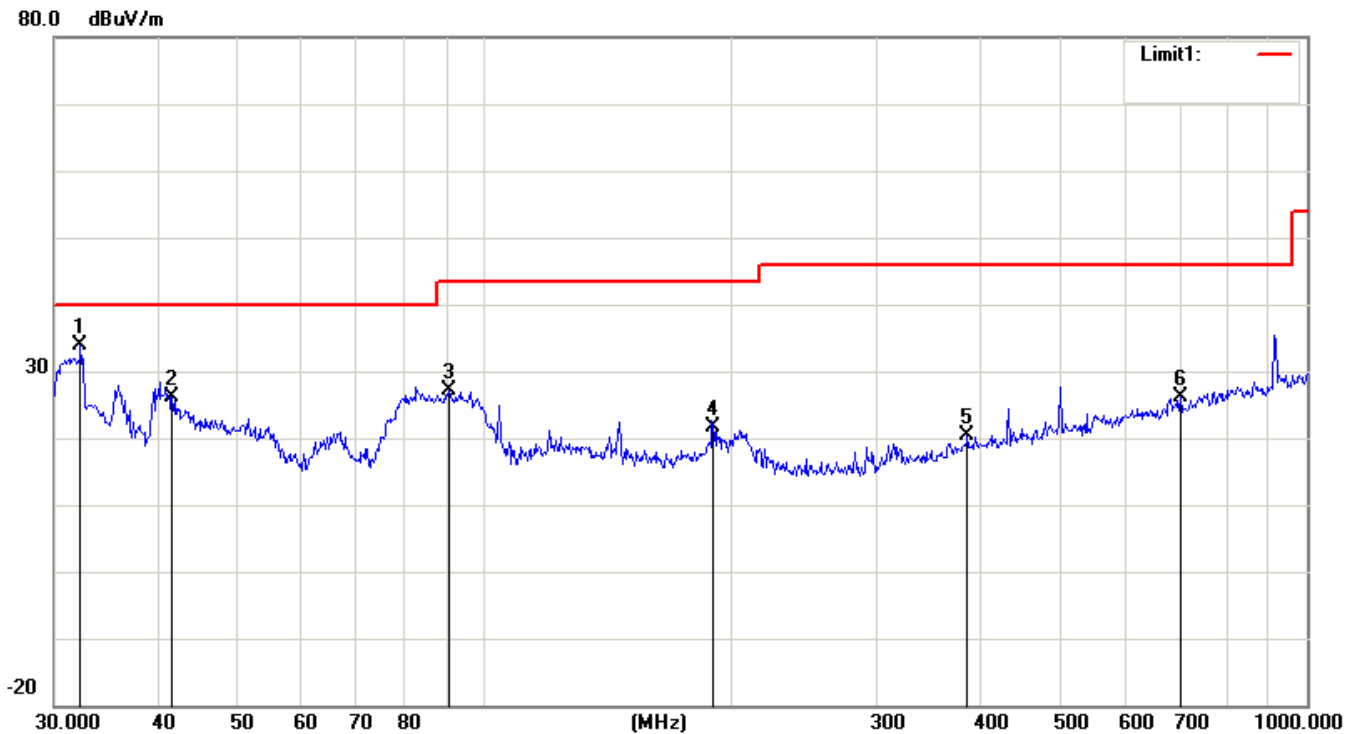
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	32.2925	33.31	1.95	35.26	40.00	-4.74	QP
2		40.7016	32.95	-3.95	29.00	40.00	-11.00	QP
3		99.1797	32.67	-6.46	26.21	43.50	-17.29	QP
4		205.6751	30.82	-5.03	25.79	43.50	-17.71	QP
5		382.5879	23.54	-3.20	20.34	46.00	-25.66	QP
6		701.7610	24.76	2.42	27.18	46.00	-18.82	QP

EUT	Mobile phone	Model Name	W5
Temperature	20 °C	Relative Humidity	48%
Pressure	1010 hPa	Polarization :	Vertical
Test Mode	Mode 2	Test Date	October 10,2016



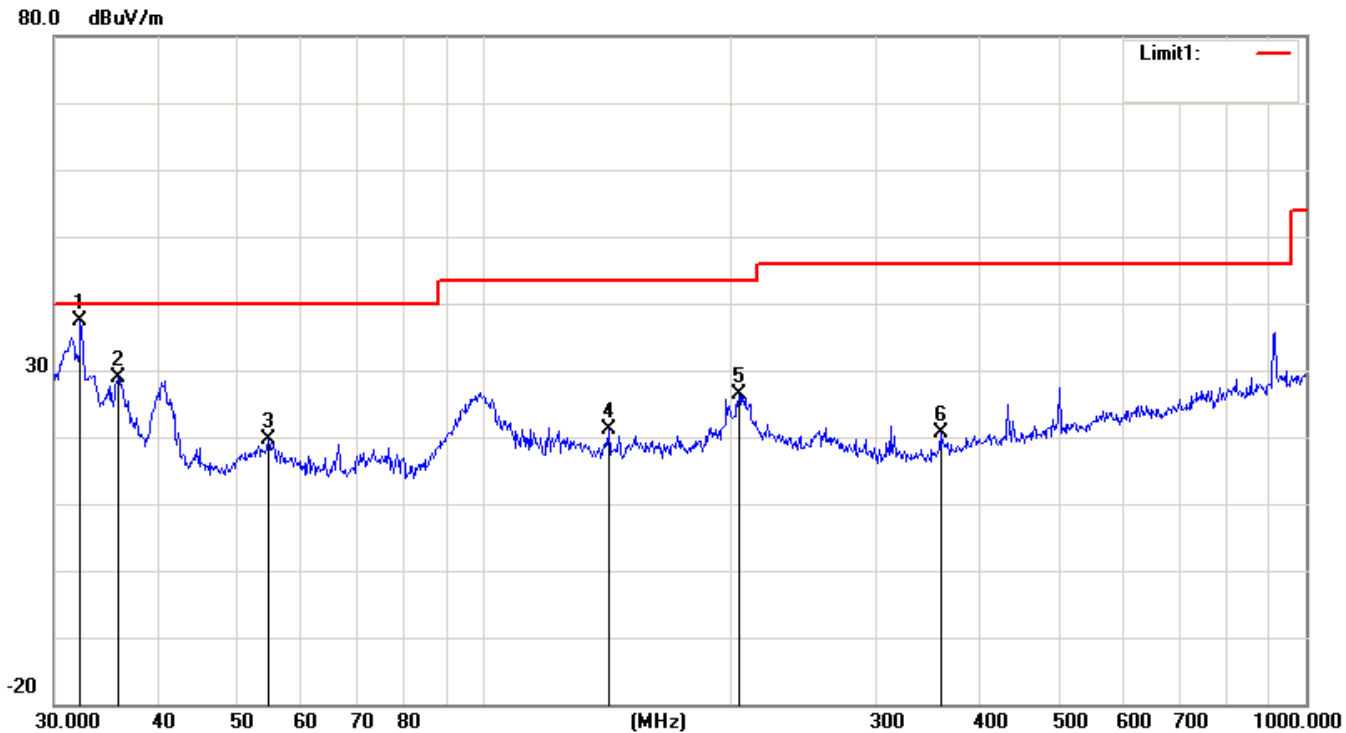
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	31.1798	34.46	2.70	37.16	40.00	-2.84	QP
2		40.4172	29.20	-3.77	25.43	40.00	-14.57	QP
3		81.2117	33.19	-7.80	25.39	40.00	-14.61	QP
4		189.0743	25.38	-5.28	20.10	43.50	-23.40	QP
5		228.4904	20.47	-5.84	14.63	46.00	-31.37	QP
6		607.7867	22.27	1.15	23.42	46.00	-22.58	QP

EUT	Mobile phone	Model Name	W5
Temperature	20 °C	Relative Humidity	48%
Pressure	1010 hPa	Polarization :	Horizontal
Test Mode	Mode 3	Test Date	October 10,2016



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	32.2925	31.94	1.95	33.89	40.00	-6.11	QP
2		41.7129	30.67	-4.60	26.07	40.00	-13.93	QP
3		90.5374	35.06	-7.92	27.14	43.50	-16.36	QP
4		189.7385	26.86	-5.28	21.58	43.50	-21.92	QP
5		386.6338	23.30	-3.02	20.28	46.00	-25.72	QP
6		701.7610	23.80	2.42	26.22	46.00	-19.78	QP

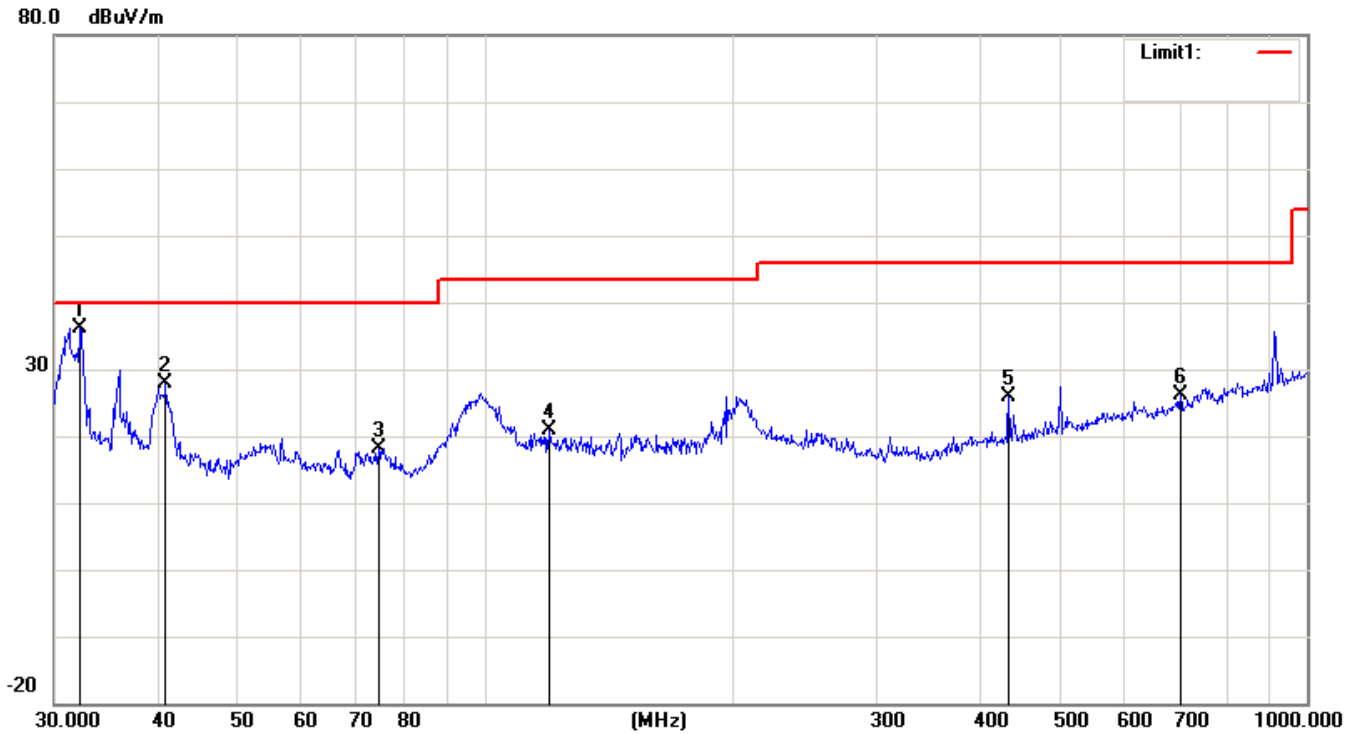
EUT	Mobile phone	Model Name	W5
Temperature	20 °C	Relative Humidity	48%
Pressure	1010 hPa	Polarization :	Vertical
Test Mode	Mode 3	Test Date	October 10,2016



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	32.2925	35.53	1.95	37.48	40.00	-2.52	QP
2		35.8746	29.44	-0.51	28.93	40.00	-11.07	QP
3		54.6429	29.10	-9.47	19.63	40.00	-20.37	QP
4		141.8262	24.37	-3.19	21.18	43.50	-22.32	QP
5		204.2377	31.37	-4.97	26.40	43.50	-17.10	QP
6		359.1860	24.48	-3.94	20.54	46.00	-25.46	QP

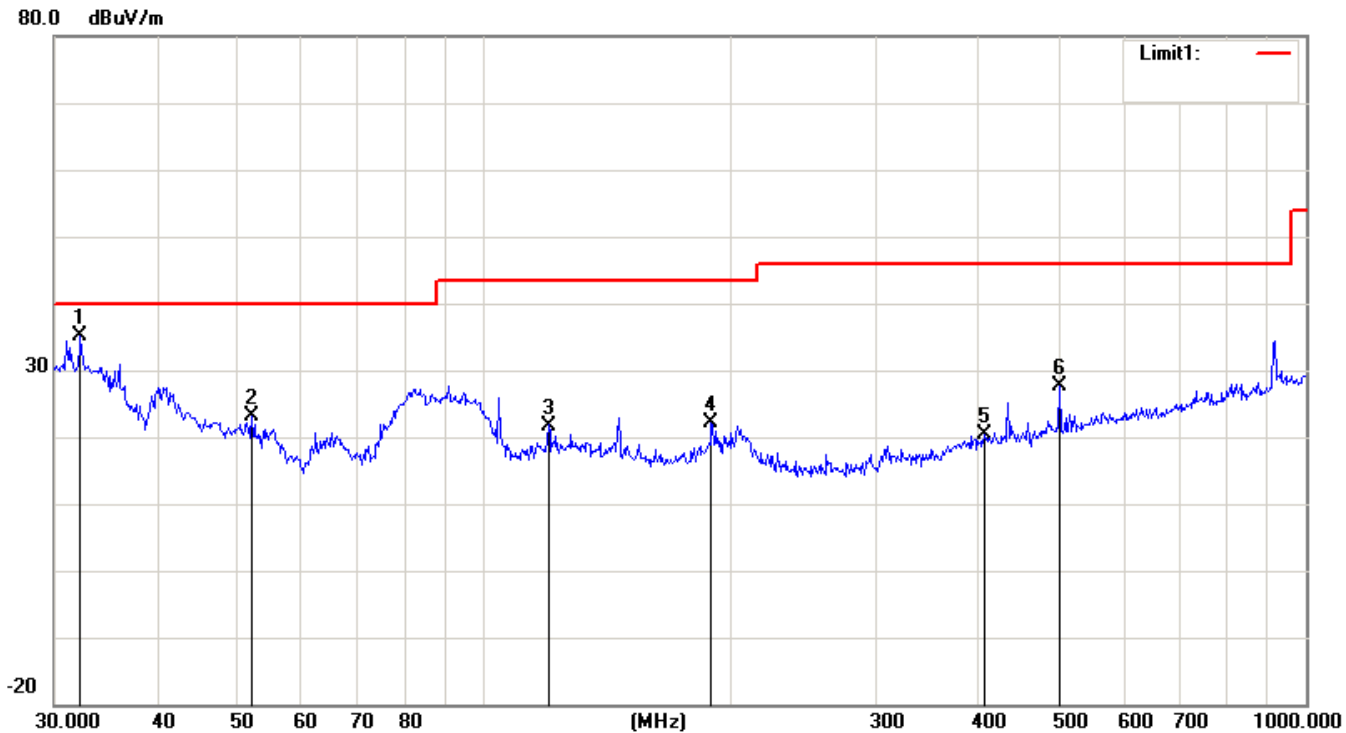


EUT	Mobile phone	Model Name	W5
Temperature	20 °C	Relative Humidity	48%
Pressure	1010 hPa	Polarization :	Horizontal
Test Mode	Mode 4	Test Date	October 10,2016



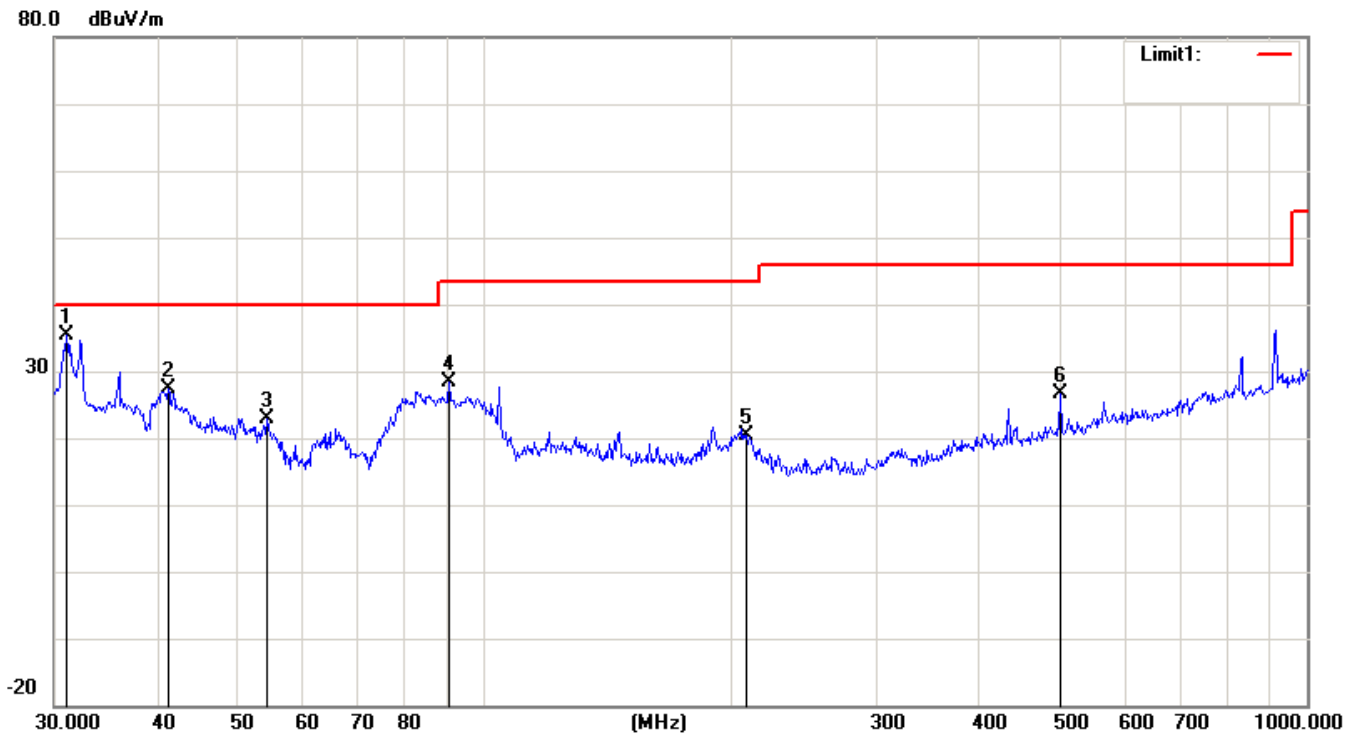
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	32.2925	34.23	1.95	36.18	40.00	-3.82	QP
2		40.9881	32.01	-4.13	27.88	40.00	-12.12	QP
3		74.3955	25.66	-7.57	18.09	40.00	-21.91	QP
4		119.8556	23.25	-2.33	20.92	43.50	-22.58	QP
5		434.0651	28.34	-2.39	25.95	46.00	-20.05	QP
6		701.7610	23.81	2.42	26.23	46.00	-19.77	QP

EUT	Mobile phone	Model Name	W5
Temperature	20 °C	Relative Humidity	48%
Pressure	1010 hPa	Polarization :	Vertical
Test Mode	Mode 4	Test Date	October 10,2016



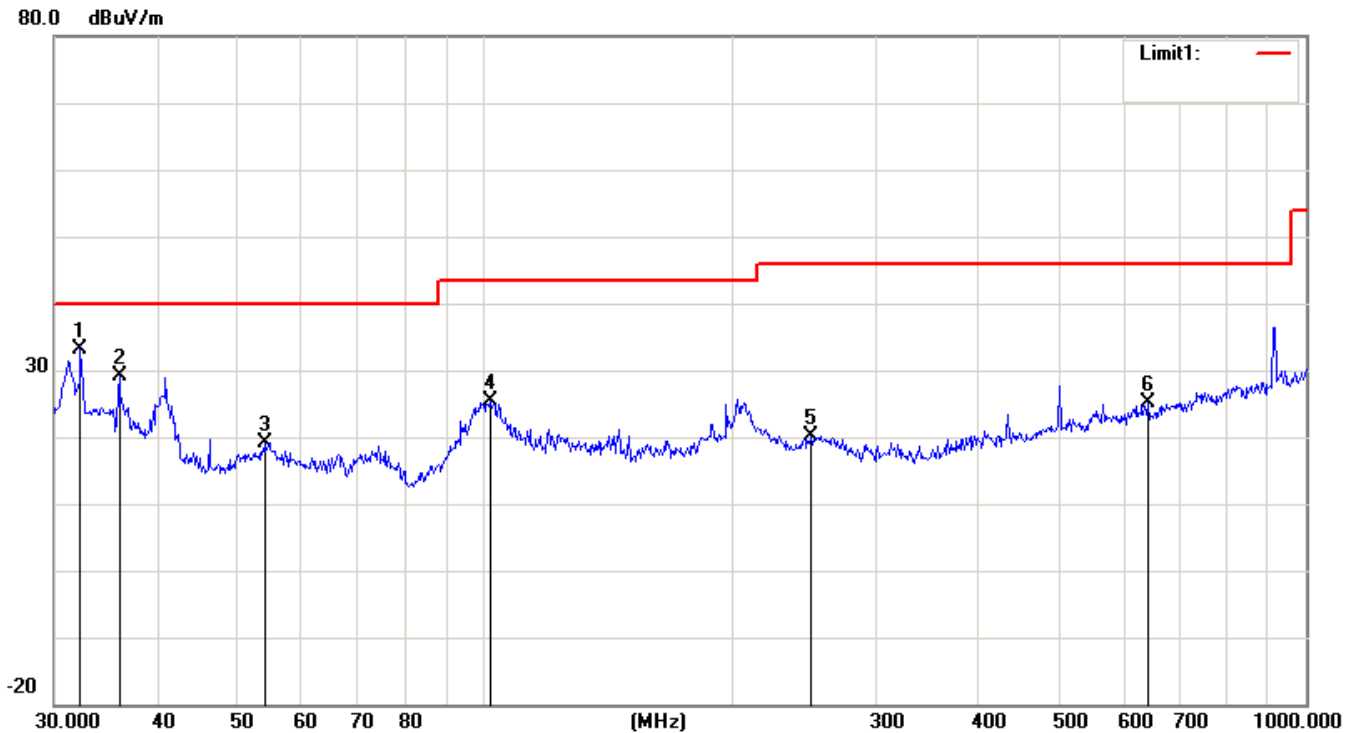
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	32.2925	33.15	1.95	35.10	40.00	-4.90	QP
2		52.2079	32.28	-9.23	23.05	40.00	-16.95	QP
3		119.8556	24.08	-2.33	21.75	43.50	-21.75	QP
4		189.0743	27.44	-5.28	22.16	43.50	-21.34	QP
5		406.0880	22.53	-2.12	20.41	46.00	-25.59	QP
6		501.1790	28.66	-1.00	27.66	46.00	-18.34	QP

EUT	Mobile phone	Model Name	W5
Temperature	20 °C	Relative Humidity	48%
Pressure	1010 hPa	Polarization :	Horizontal
Test Mode	Mode 5	Test Date	October 10,2016



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	31.0706	32.61	2.77	35.38	40.00	-4.62	QP
2		41.2765	31.58	-4.32	27.26	40.00	-12.74	QP
3		54.4516	32.43	-9.44	22.99	40.00	-17.01	QP
4		90.5374	36.29	-7.92	28.37	43.50	-15.13	QP
5		208.5803	25.49	-5.13	20.36	43.50	-23.14	QP
6		501.1790	27.69	-1.00	26.69	46.00	-19.31	QP

EUT	Mobile phone	Model Name	W5
Temperature	20 °C	Relative Humidity	48%
Pressure	1010 hPa	Polarization :	Vertical
Test Mode	Mode 5	Test Date	October 10,2016



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	32.2925	31.21	1.95	33.16	40.00	-6.84	QP
2		36.0007	29.78	-0.60	29.18	40.00	-10.82	QP
3		54.0711	28.46	-9.41	19.05	40.00	-20.95	QP
4		101.6443	31.31	-5.85	25.46	43.50	-18.04	QP
5		250.3012	26.83	-6.59	20.24	46.00	-25.76	QP
6		642.8613	23.52	1.52	25.04	46.00	-20.96	QP

**5.2.5.2 TEST RESULTS (1GHZ TO 6GHZ)**

EUT	Mobile phone	Model Name	W5
Temperature	20 °C	Relative Humidity	48%
Pressure	1010 hPa	Test Mode	Mode 1
Test Date	October 10,2016		

Freq. (MHz)	Ant. Pol.	Emission Level(dBuV)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
1252.63	V	62.62	37.33	70	50	-7.38	-12.67
1923.41	V	60.51	36.12	70	50	-9.49	-13.88
1320.15	H	70.01	46.62	74	54	-3.99	-7.38
1831.31	H	63.31	43.42	70	50	-6.69	-6.58

**Remark:**

All emissions not reported were more than 20dB below the specified limit or in the noise floor.  
Factor = Antenna Factor + Cable Loss – Pre-amplifier.  
All the x/y/z orientation has been investigated, and only worst case is presented in this report.

EUT	Mobile phone	Model Name	W5
Temperature	20 °C	Relative Humidity	48%
Pressure	1010 hPa	Test Mode	Mode 2
Test Date	October 10,2016		

Freq. (MHz)	Ant. Pol.	Emission Level(dBuV)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
1313.35	V	56.48	42.41	70	50	-13.52	-7.59
2301.28	V	58.88	36.51	70	50	-11.12	-13.49
1763.27	H	70.61	46.73	74	54	-3.39	-7.27
1921.14	H	61.42	42.32	70	50	-8.58	-7.68

**Remark:**

All emissions not reported were more than 20dB below the specified limit or in the noise floor.  
Factor = Antenna Factor + Cable Loss – Pre-amplifier.  
All the x/y/z orientation has been investigated, and only worst case is presented in this report.

EUT	Mobile phone	Model Name	W5
Temperature	20 °C	Relative Humidity	48%
Pressure	1010 hPa	Test Mode	Mode 3
Test Date	October 10,2016		

Freq. (MHz)	Ant. Pol.	Emission Level(dBuV)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
1634.84	V	59.27	35.48	70	50	-10.73	-14.52
2221.38	V	57.45	42.66	70	50	-12.55	-7.34
1896.33	H	66.70	43.24	74	54	-7.30	-10.76
2411.42	H	59.33	37.02	70	50	-10.67	-12.98

## Remark:

All emissions not reported were more than 20dB below the specified limit or in the noise floor.  
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

All the x/y/z orientation has been investigated, and only worst case is presented in this report.

EUT	Mobile phone	Model Name	W5
Temperature	20 °C	Relative Humidity	48%
Pressure	1010 hPa	Test Mode	Mode 4
Test Date	October 10,2016		

Freq. (MHz)	Ant. Pol.	Emission Level(dBuV)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
1123.35	V	57.24	39.43	70	50	-12.76	-10.57
1611.52	V	57.82	36.28	70	50	-12.18	-13.72
1928.42	H	65.47	44.40	74	54	-8.53	-9.60
1510.39	H	58.45	37.06	70	50	-11.55	-12.94

## Remark:

All emissions not reported were more than 20dB below the specified limit or in the noise floor.  
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

All the x/y/z orientation has been investigated, and only worst case is presented in this report.

EUT	Mobile phone	Model Name	W5
Temperature	20 °C	Relative Humidity	48%
Pressure	1010 hPa	Test Mode	Mode 5
Test Date	October 10,2016		

Freq. (MHz)	Ant. Pol.	Emission Level(dBuV)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
1577.35	V	62.74	44.92	70	50	-7.26	-5.08
1991.23	V	64.02	38.76	70	50	-5.98	-11.24
1544.11	H	70.79	42.05	74	54	-3.21	-11.95
3181.98	H	64.59	44.52	70	50	-5.41	-5.48

## Remark:

All emissions not reported were more than 20dB below the specified limit or in the noise floor.  
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

All the x/y/z orientation has been investigated, and only worst case is presented in this report.

## 6. EUT TEST PHOTO

CONDUCTED EMISSION TEST

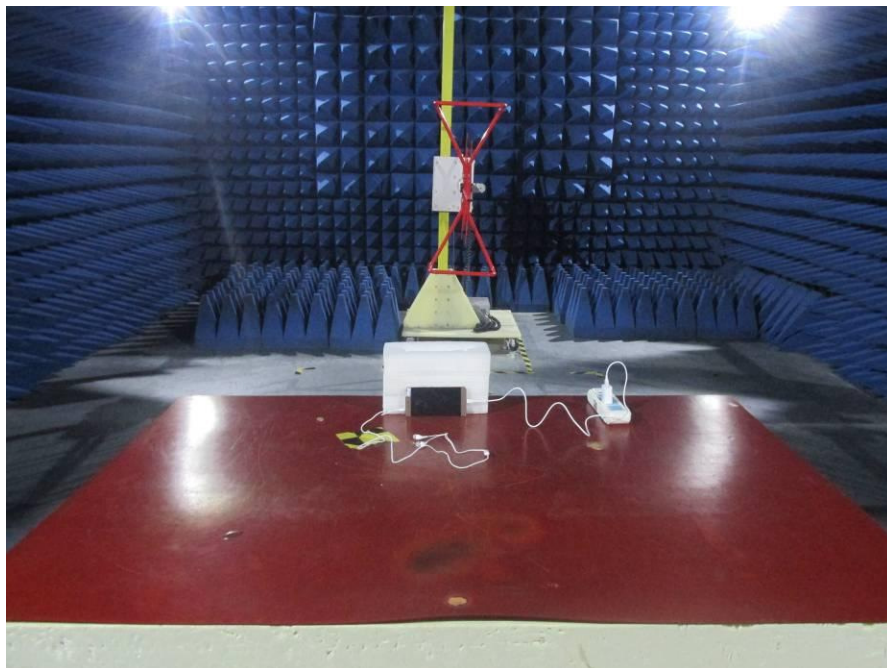


CONDUCTED EMISSION TEST

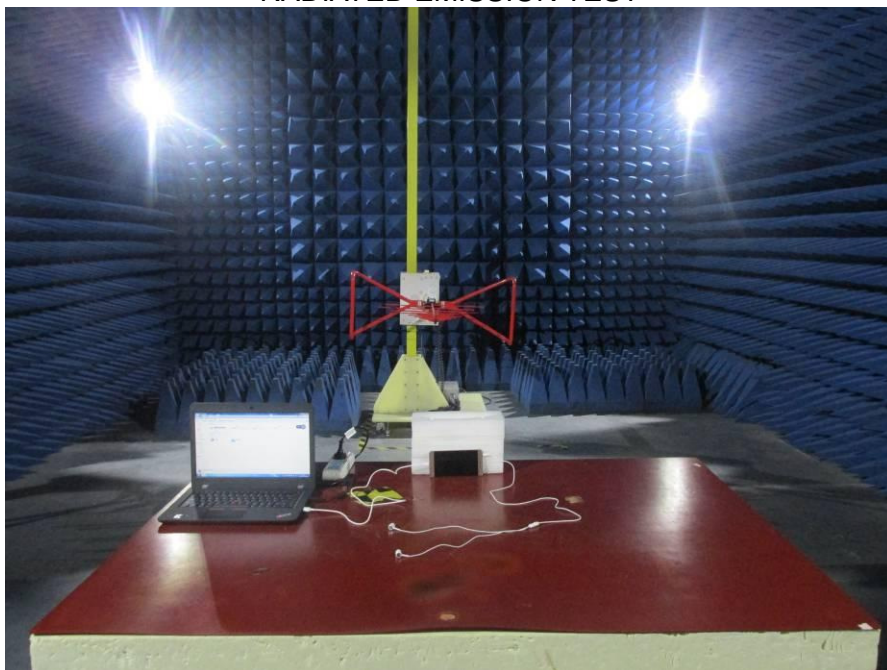




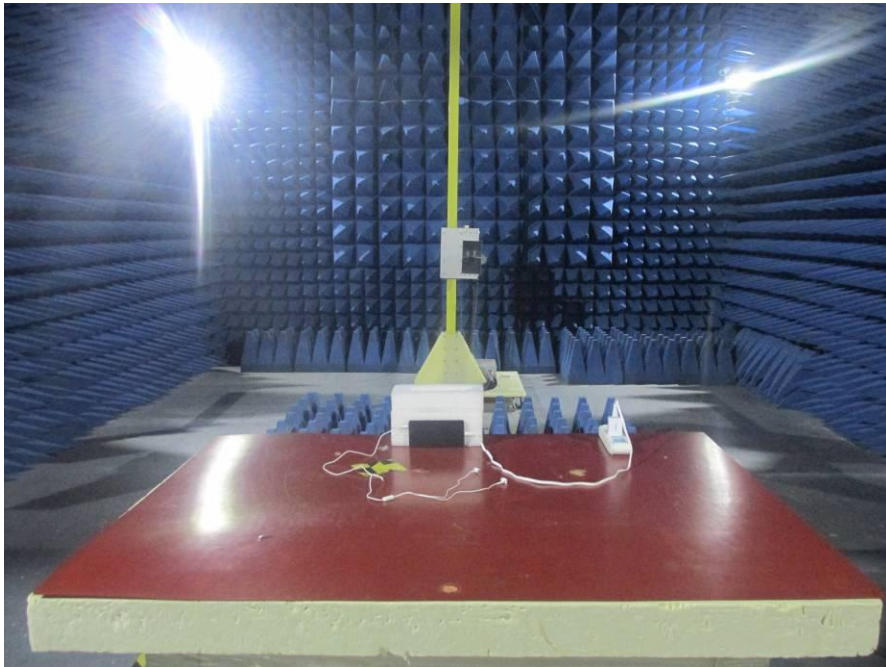
RADIATED EMISSION TEST



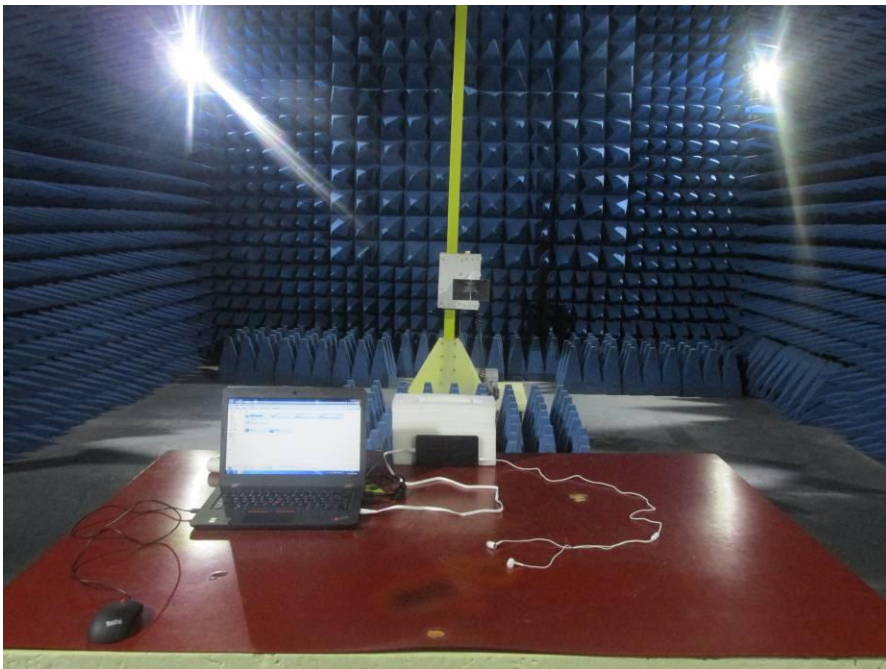
RADIATED EMISSION TEST



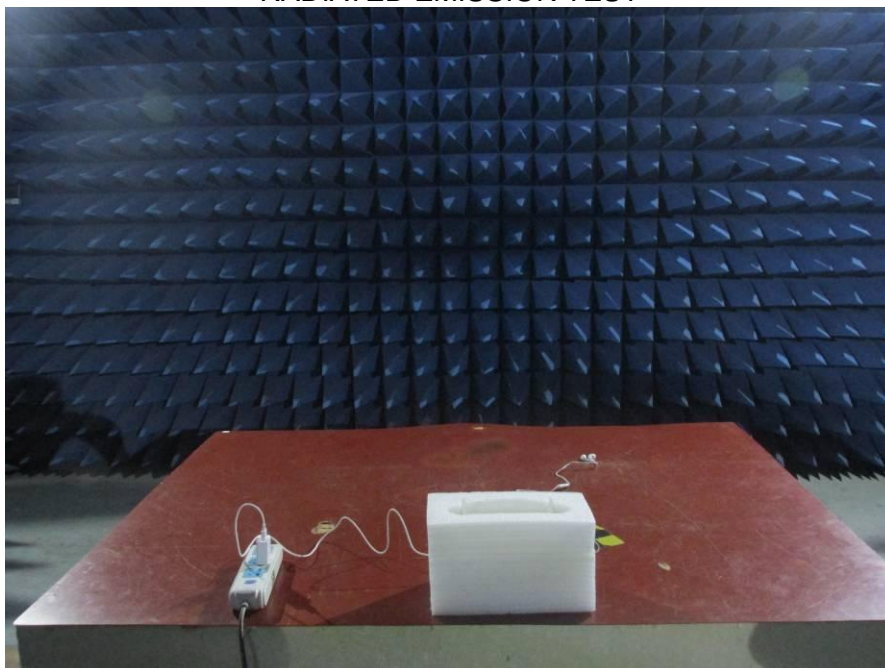
RADIATED EMISSION TEST



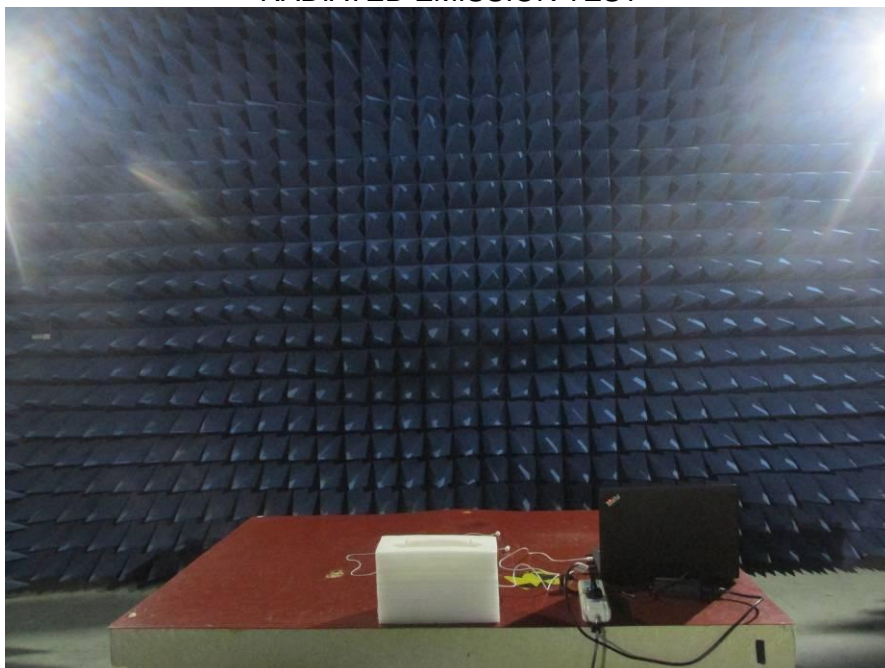
RADIATED EMISSION TEST



RADIATED EMISSION TEST



RADIATED EMISSION TEST



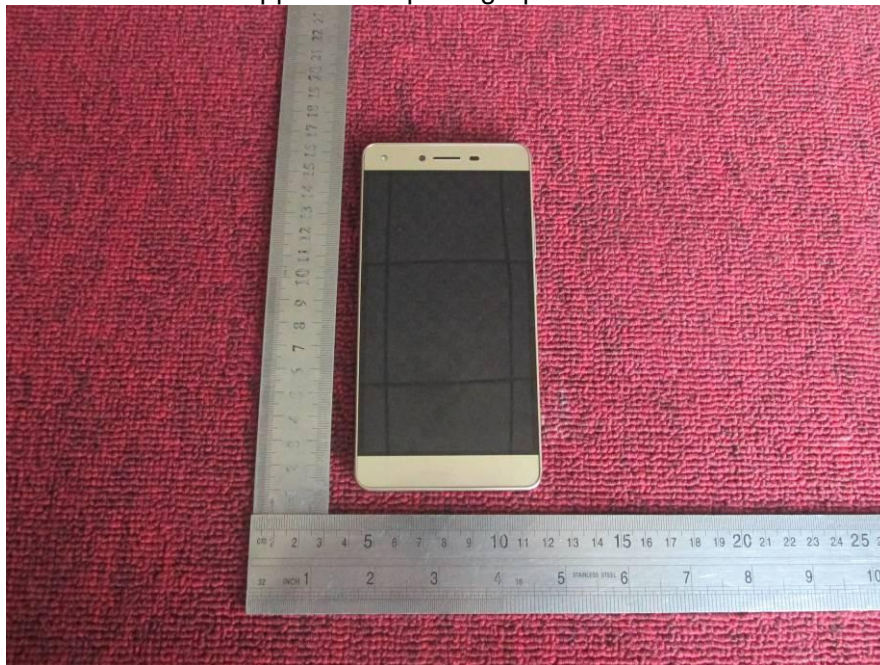


## 7. PHOTOGRAPHS OF EUT

Appearance photograph of EUT



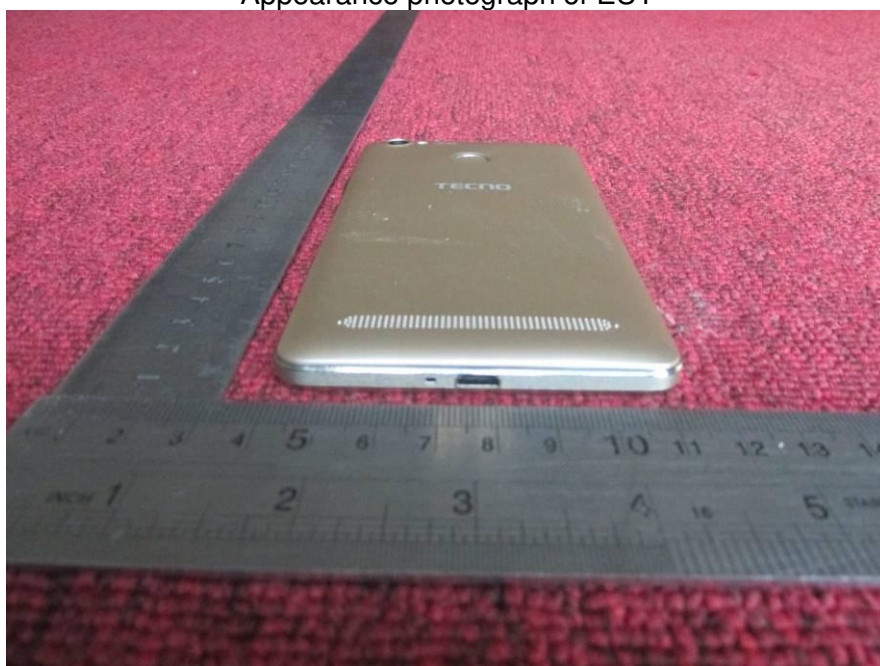
Appearance photograph of EUT



Appearance photograph of EUT

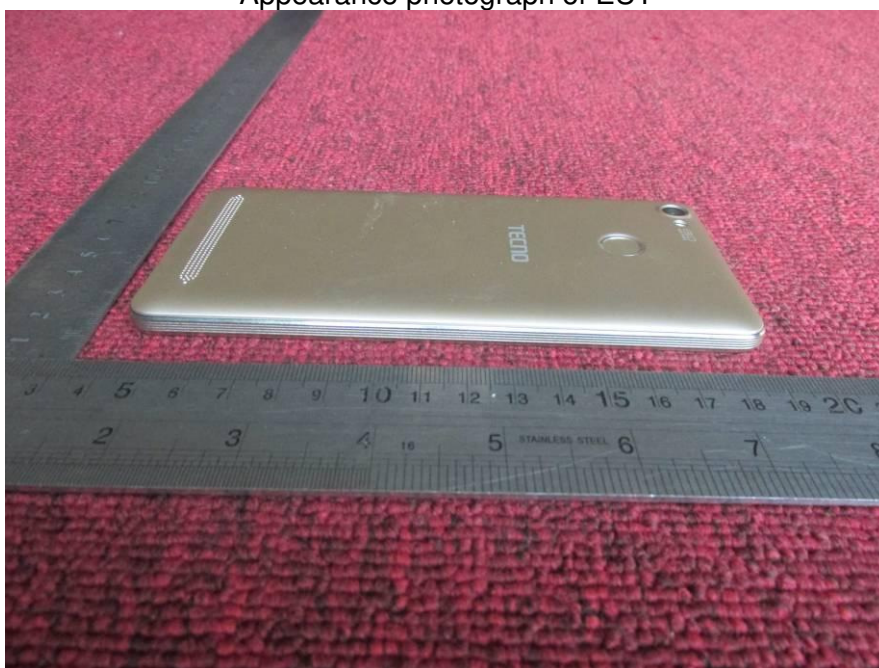


Appearance photograph of EUT





Appearance photograph of EUT



Appearance photograph of EUT



Appearance photograph of EUT



Appearance photograph of EUT

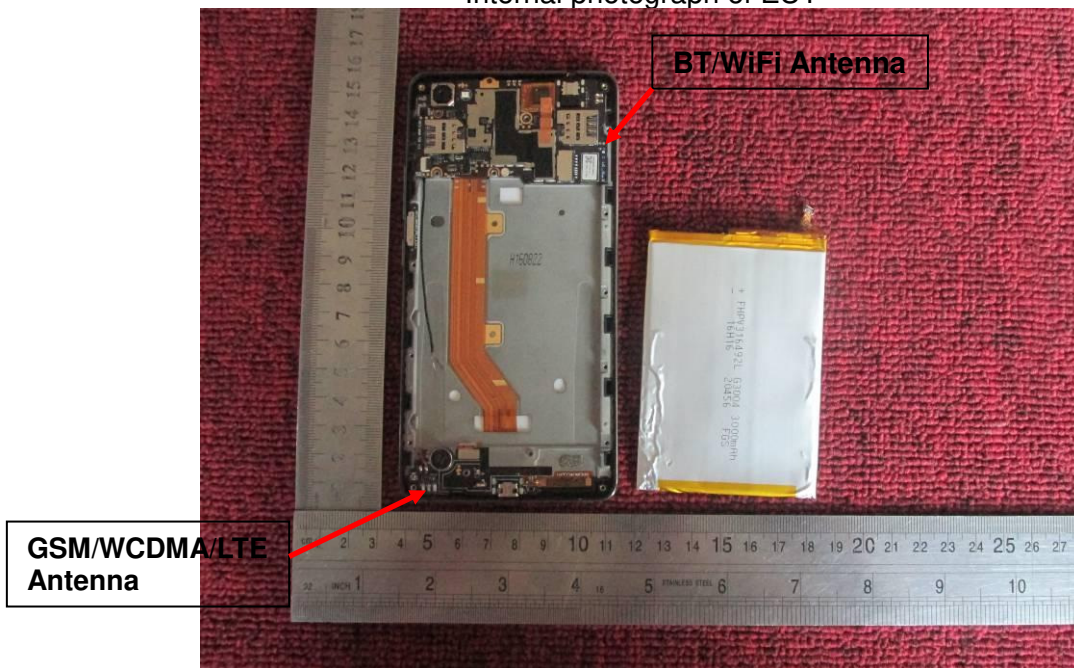




Internal photograph of EUT



Internal photograph of EUT





Internal photograph of EUT



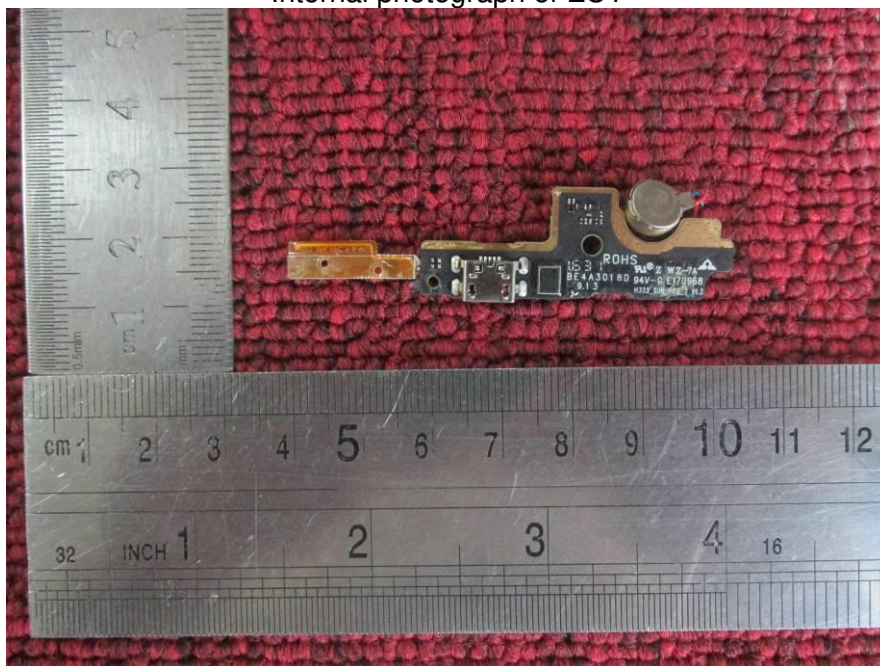
Internal photograph of EUT



Internal photograph of EUT

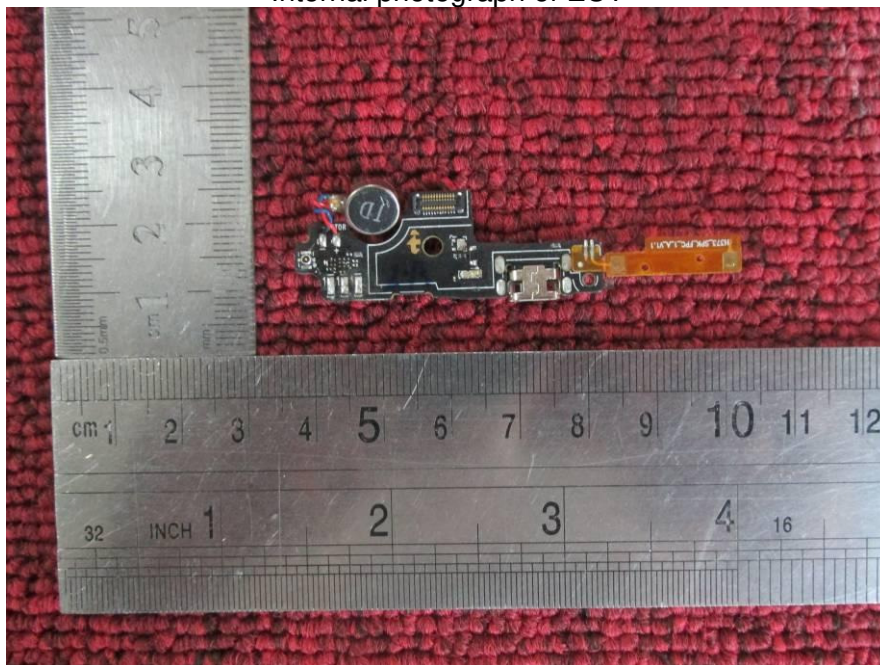


Internal photograph of EUT

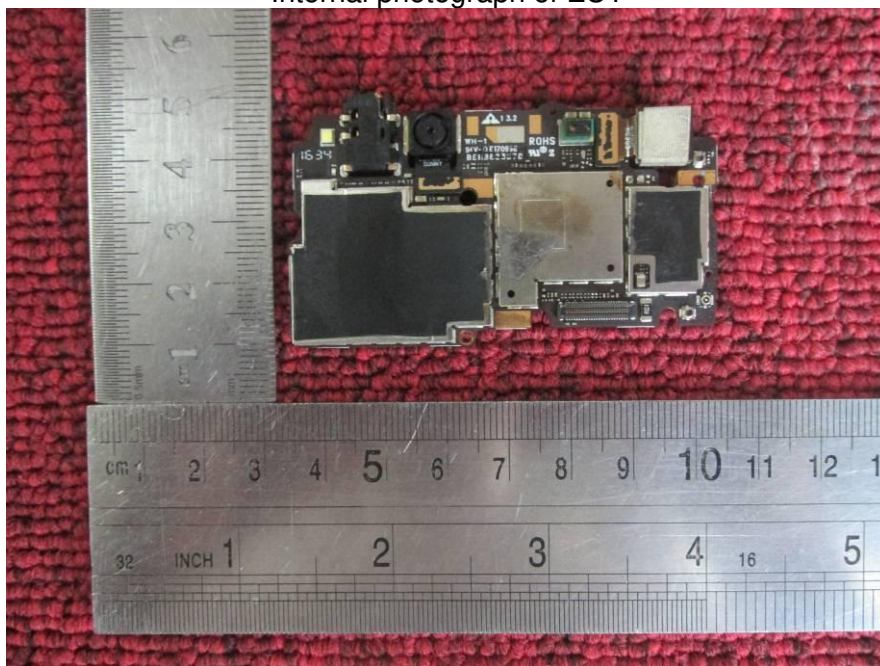




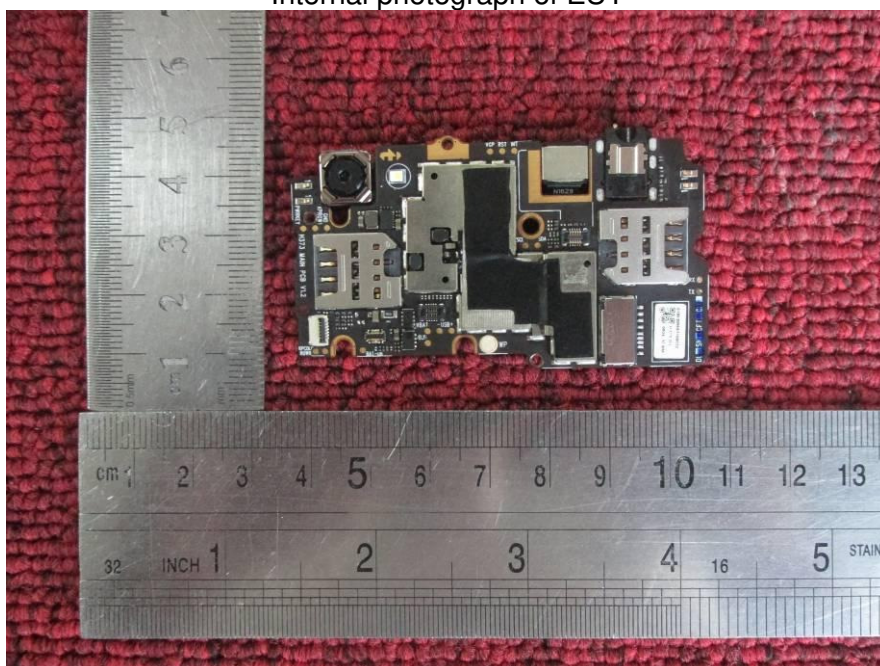
Internal photograph of EUT



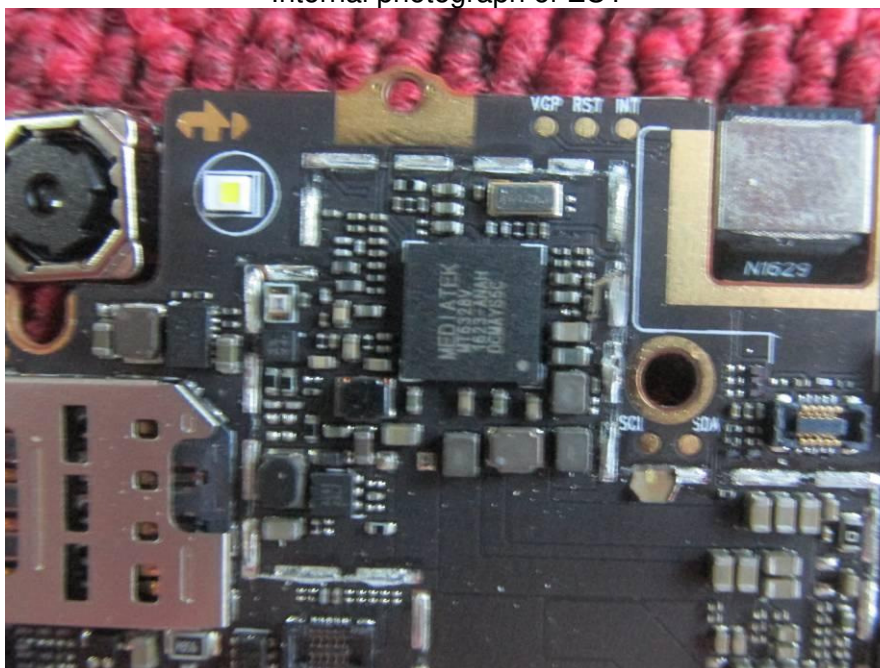
Internal photograph of EUT



Internal photograph of EUT

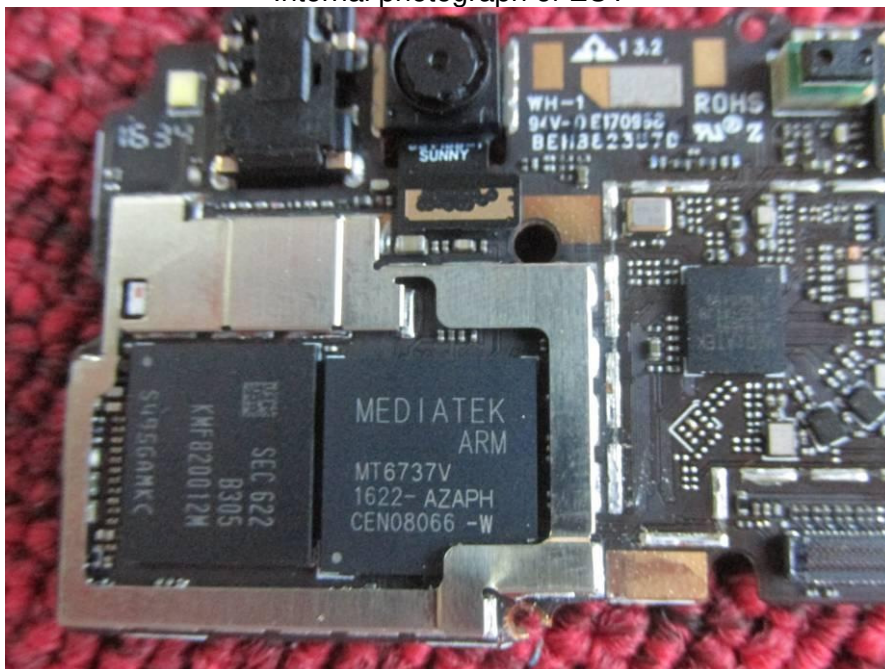


Internal photograph of EUT

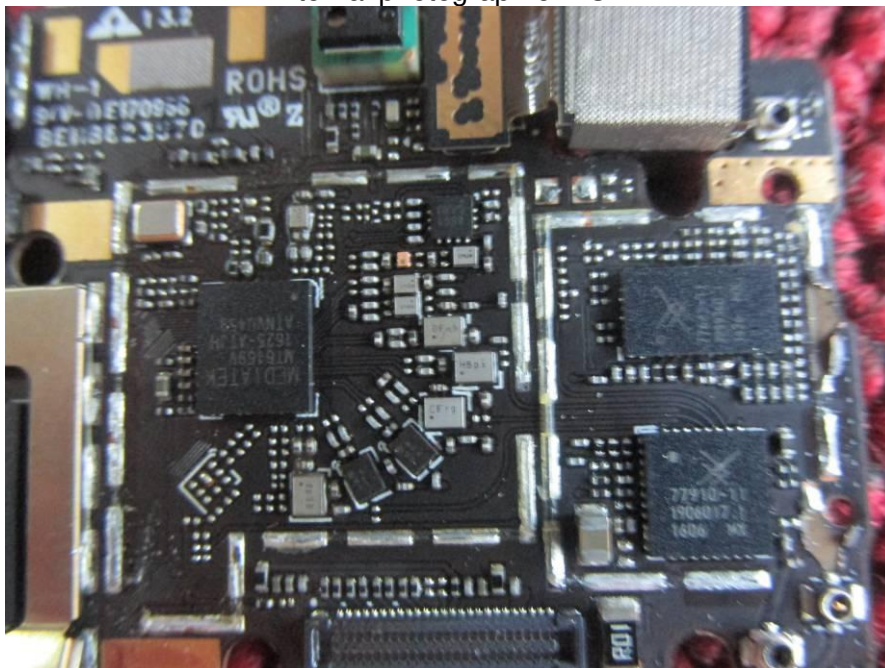




Internal photograph of EUT



Internal photograph of EUT



**---END OF REPORT---**