FCC Report

Application Purpose : Original grant

Applicant Name: : Hallmark Global LTD.dba HEXA

FCC ID : 2AEJL-KALEIDO8

Equipment Type : Android tablet PC

Model Name : Kaleidoscope

Report Number: FCC16124190A-4

Standard(S) : FCC Part 15 Subpart B

Date Of Receipt : December 08, 2016

Date Of Issue : December 27, 2016

Test By :

(Daisy Qin)

Reviewed By

(Sol Oin)

Authorized by :

<u>(</u>Michal Ling)

Prepared by : QTC Certification & Testing Co., Ltd.

2nd Floor, Bl Building, Fengyeyuan Industrial Plant,,

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District,,Shenzhen,518000

Registration Number: 588523

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| | ISE RECORD | | | |
| port Version | Revise Time | Issued Date | Valid Version | Notes |
| V1.0 | / | December 27, 2016 | Valid | Original Report |
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1. GENERAL INFORMATION

| Test Model | kaleidoscope |
|-----------------------------|--|
| Applicant | Hallmark Global LTD.dba HEXA |
| Address | Suite 1801, 1 Yonge Street, Toronto Ontario , Canada , M5E 1W7 |
| Manufacturer | SHENZHEN LUCKYSTAR TECHNOLOGY CO.,LTD. |
| Address | Fl.4,Block 1,Yu Jing Tai Industrial Park, Huarong Rd., Shuiwei Village, Dalang Office, Longhua New District, Shenzhen, Guangdong, China |
| Equipment Type | Android tablet PC |
| Brand Name | HEXA |
| Hardware | M826-MB-2.0 |
| Software | Android 5.1 |
| Battery information: | Li-Polymer Battery : PL0392103P Voltage: 3.7V Capacity: 3600mAh Limited Charge Voltage: 4.2V |
| Adapter Information: | Adapter: THX-050200KE Input: 100-240V 50/60Hz 650mA Output: 5V 2A |
| Data of receipt | December 08, 2016 |
| Date of test | December 08, 2016 to December 27, 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,Bl 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 Part15 Subpart B. |
| The test results of this report relate only to the tested sample identified in this report. |
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2. TEST DESCRIPTION

2.1 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $\mathbf{y} \pm \mathbf{U}$, where expended uncertainty \mathbf{U} is based on a standard uncertainty multiplied by a coverage factor of $\mathbf{k=2}$, providing a level of confidence of approximately 95 % $^{\circ}$

| No. | Item | Uncertainty |
|-----|-------------------------------|-------------|
| 1 | Conducted Emission Test | ±3.2dB |
| 2 | RF power, conducted | ±0.16dB |
| 3 | Spurious emissions, conducted | ±0.21dB |
| 4 | All emissions, radiated(<1G) | ±4.7dB |
| 5 | All emissions, radiated(>1G) | ±4.7dB |
| 6 | Temperature | ±0.5°C |
| 7 | Humidity | ±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.

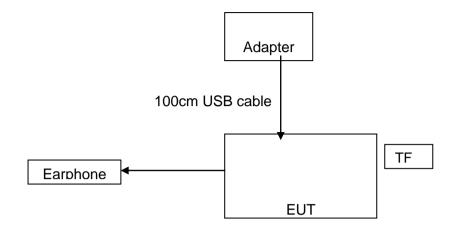
| Pretest Mode | Description |
|--------------|-----------------------------|
| Mode 1 | Video Recording |
| Model 2 | Video Playing |
| Mode 3 | Exchange data with computer |

| 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 | | |

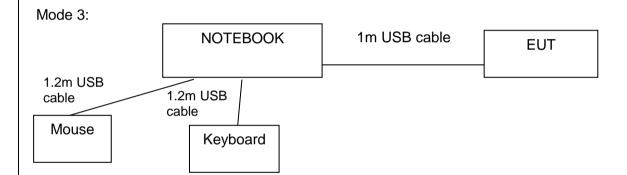
| For Radiated Emission | | | |
|-----------------------|------------------------------|--|--|
| Final Test Mode | Test with Keyboard and Mouse | | |
| Mode 1 | Video Recording | | |
| Model 2 Video Playing | | | |
| Mode 3 | Exchange data with computer | | |

2.3 CONFIGURATION OF SYSTEM UNDER TEST

Mode 1&2&4&5:



(EUT: kaleidoscope)



(EUT: kaleidoscope)

| 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 | 1 | THX-050200KE | / | / |
| 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:

| FCC Part15 , Subpart 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 | СТ | 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 | SCHWAREBECK | 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 | Standard | |
|------------------|----------------|---------|------------|-----------|-----------|
| PREQUENCY (MINZ) | Quasi-peak | Average | Quasi-peak | Average | Stariuaru |
| 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 |

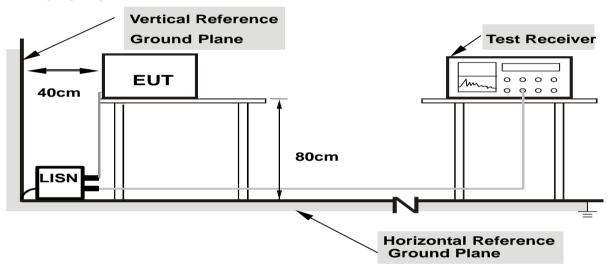
5.1.2 TEST PROCEDURE

- a. 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.
- 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.

5.1.3 DEVIATION FROM TEST STANDARD

No deviation

5.1.4 TEST SETUP



Note: 1.Support units were connected to second LISN.

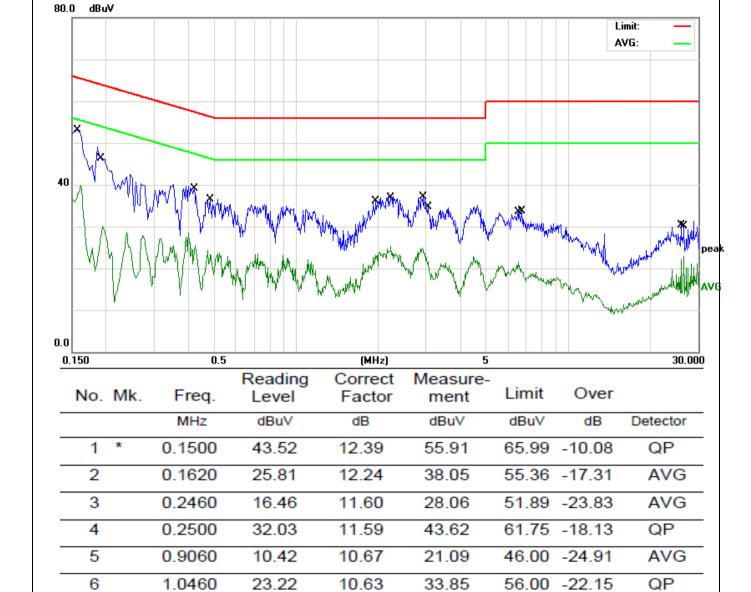
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

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 | Android tablet PC | Model Name | kaleidoscope |
|-------------|-------------------|-------------------|--------------|
| Temperature | 26 ℃ | Relative Humidity | 54% |
| Pressure | 1010hPa | Phase | L |
| Test Date | December 10, 2016 | Test Mode | Mode 1 |



10.58

10.58

10.56

10.57

10.60

10.60

35 69

23.68

31.95

19.31

31.50

21.83

56.00 -20.31

46.00 -22.32

60.00 -28.05

50.00 -30.69

60.00 -28.50

50.00 -28.17

QΡ

AVG

QP

AVG

QP

AVG

Report No.: FCC16124190A-4

2 3820

2.4539

6.7220

6.7620

25.8700

25.8700

25 11

13.10

21.39

8.74

20.90

11.23

7

8

9

10

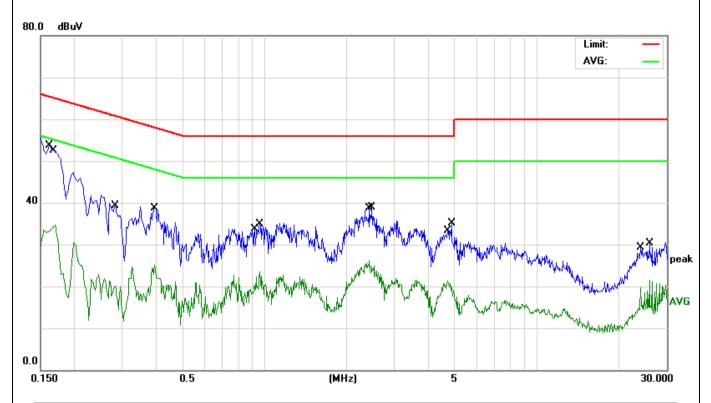
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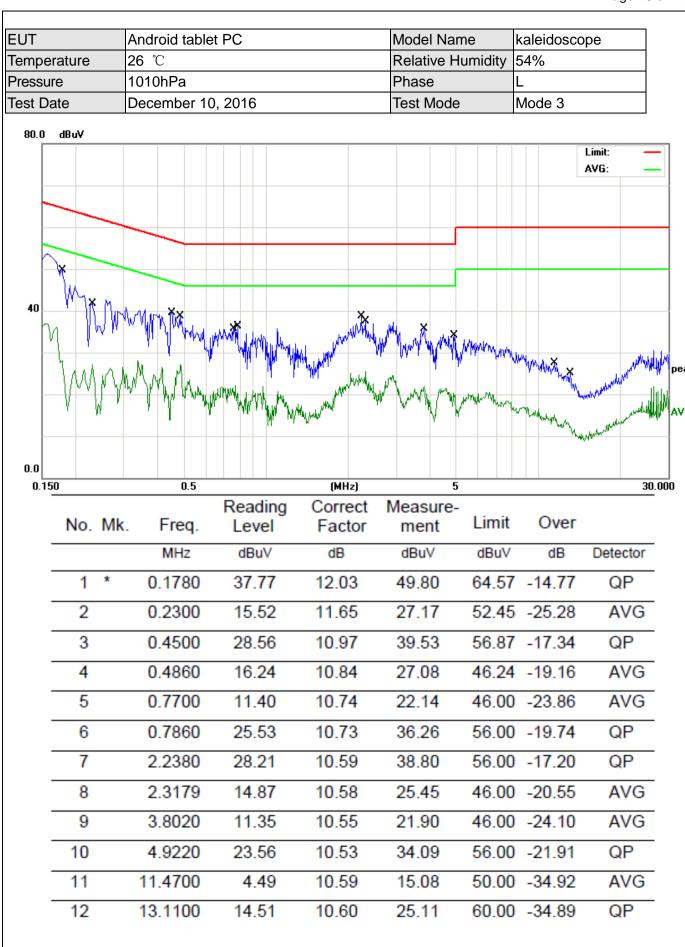
| EU | Т | Android tablet PC | | Model Name | | kaleidoscope | | | |
|------|----------------|-------------------|-------------------|------------------------------|-------------------|------------------|--|----------------------------|--|
| Ten | nperat | ture | 26 ℃ | 26 °C F | | | lumidity | 54% | |
| Pre | ssure | | 1010hPa | | | Phase | | N | |
| Tes | t Date |) | December | 10, 2016 | | Test Mode |) | Mode 1 | |
| 80.0 |) dBu\ | v | | | | | | | |
| | | | | | | | | Limit AVG | |
| | | | | | | | | | |
| | X | | | | | | | | |
| | ₩ `]/ | \ _{Max} | | | | | | | |
| 40 | ΄ Ψ | ₩₩ | | . X | | | | | |
| | \mathbb{M} . | <u> </u> | This walk In W | h'y quant hit hadan kanan ka | MANAN MANAN | | Maria Ma | 1 _m hua i | John William P |
| |)' \{ | V)MV | | propriet and the second | Mayora James May | MMM | | 11 Me Jugar | |
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| 0.0 | | | | | | | | | |
| 0. | 150 | | 0.5 | | (MHz) | 5 | | | 30.000 |
| | No. | Mk. | Freq. | Reading Level | Correct Factor | Measure- ment | Limit | Over | |
| | | | MHz | dBuV | dB | dBuV | dBuV | dB | Detector |
| | 1 | * | 0.1660 | 40.63 | 12.18 | 52.81 | 65.15 | -12.34 | QP |
| | 2 | | 0.1711 | 19.93 | 12.12 | 32.05 | 54.90 | -22.85 | AVG |
| | 3 | | 0.3620 | 11.73 | 11.24 | 22.97 | 48.68 | 3 -25.71 | AVG |
| | 4 | | 0.3940 | 26.82 | 11.13 | 37.95 | 57.98 | 3 -20.03 | QP |
| | 5 | | 0.9380 | 24.08 | 10.66 | 34.74 | 56.00 | -21.26 | QP |
| | 6 | | 1.1700 | 11.52 | 10.62 | 22.14 | 46.00 | -23.86 | AVG |
| | 7 | | 2.3740 | 26.22 | 10.58 | 36.80 | 56.00 | -19.20 | QP |
| | 8 | | 2.5540 | 14.50 | 10.58 | 25.08 | 46.00 | -20.92 | AVG |
| | 9 | | 4.6659 | 22.84 | 10.54 | 33.38 | 56.00 | -22.62 | QP |
| | 10 | | 4.7619 | 10.08 | 10.53 | 20.61 | 46.00 | -25.39 | AVG |
| | 11 | | 26.5260 | 11.70 | 10.61 | 22.31 | 50.00 | -27.69 | AVG |
| | | | 28.1460 | 19.58 | 10.65 | 30.23 | 00.00 | -29.77 | QP |

| EUT | | Android tablet PC | | Model Name | | kaleidoscope | | |
|----------|---|-------------------|-----------------------|-------------------|------------------|--------------------------|------------------------------|-----------------|
| Tempera | ature | 26 °C | | | | | · | |
| Pressure | | 1010hPa Phase | | | L | | | |
| Test Dat | | December 1 | 0, 2016 | | Test Mode | | Mode 2 | |
| | dBuV | | -, | | 1,22,1112 | | | |
| / | | | | | | | | mit: — /G: — |
| 40 | MM | | JAMA JAMA JAMA | | | /^ /~ * \~ | | a luile |
| 0.0 | 1/14/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/ | | Ullynder of hypertole | P P VIALAP | | Vyranova (| word by de hope his his hope | AV |
| 0.150 | <u> </u> | 0.5 | | (MHz) | 5 | | | 30.000 |
| N | o. Mk. | Freq. | Reading Level | Correct Factor | Measure- ment | Limit | t Over | |
| | | MHz | dBuV | dB | dBuV | dBu\ | / dB | Detector |
| | 1 | 0.1620 | 26.40 | 12.24 | 38.64 | 55.3 | 6 -16.72 | AVG |
| | 2 * | 0.1677 | 39.70 | 12.16 | 51.86 | 65.0 | 7 -13.21 | QP |
| | 3 | 0.3268 | 14.62 | 11.35 | 25.97 | 49.5 | 3 -23.56 | AVG |
| | 4 | 0.3980 | 28.39 | 11.12 | 39.51 | 57.8 | 9 -18.38 | QP |
| | 5 | 0.6540 | 24.76 | 10.78 | 35.54 | 56.0 | 0 -20.46 | QP |
| | 6 | 0.6780 | 13.33 | 10.77 | 24.10 | 46.0 | 0 -21.90 | AVG |
| | 7 | 2.0660 | 24.88 | 10.59 | 35.47 | 56.0 | 0 -20.53 | QP |
| | 8 | 2.2460 | 14.26 | 10.58 | 24.84 | 46.0 | 0 -21.16 | AVG |
| | 9 | 3.7460 | 10.85 | 10.56 | 21.41 | 46.0 | 0 -24.59 | AVG |
| 1 | 0 | 3.8420 | 24.70 | 10.55 | 35.25 | 56.0 | 0 -20.75 | QP |
| 1 | 1 | 6.4899 | 21.76 | 10.56 | 32.32 | 60.0 | 0 -27.68 | QP |
| 1 | 2 | 6.6540 | 10.15 | 10.56 | 20.71 | 50.0 | 0 -29.29 | AVG |

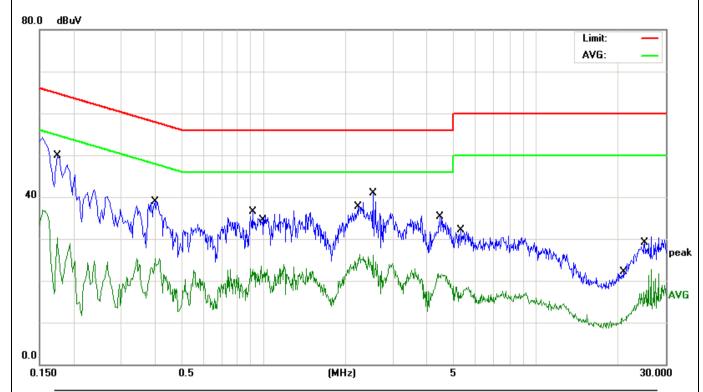
| EUT | Android tablet PC | Model Name | kaleidoscope |
|-------------|-------------------|-------------------|--------------|
| Temperature | 26 ℃ | Relative Humidity | 54% |
| Pressure | 1010hPa | Phase | N |
| Test Date | December 10, 2016 | Test Mode | Mode 2 |



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure- ment | Limit | Over | |
|-----|-----|---------|------------------|-------------------|------------------|-------|--------|----------|
| | | MHz | dBuV | dB | dBuV | dBu∨ | dB | Detector |
| 1 | * | 0.1620 | 41.42 | 12.24 | 53.66 | 65.36 | -11.70 | QP |
| 2 | | 0.1700 | 22.57 | 12.13 | 34.70 | 54.96 | -20.26 | AVG |
| 3 | | 0.2819 | 27.91 | 11.48 | 39.39 | 60.76 | -21.37 | QP |
| 4 | | 0.3940 | 13.97 | 11.13 | 25.10 | 47.98 | -22.88 | AVG |
| 5 | | 0.9220 | 23.11 | 10.67 | 33.78 | 56.00 | -22.22 | QP |
| 6 | | 0.9620 | 12.94 | 10.64 | 23.58 | 46.00 | -22.42 | AVG |
| 7 | | 2.4300 | 15.44 | 10.58 | 26.02 | 46.00 | -19.98 | AVG |
| 8 | | 2.4739 | 28.27 | 10.58 | 38.85 | 56.00 | -17.15 | QP |
| 9 | | 4.7060 | 10.81 | 10.54 | 21.35 | 46.00 | -24.65 | AVG |
| 10 | | 4.8500 | 24.50 | 10.53 | 35.03 | 56.00 | -20.97 | QP |
| 11 | | 24.0340 | 9.10 | 10.59 | 19.69 | 50.00 | -30.31 | AVG |
| 12 | | 25.8900 | 19.65 | 10.60 | 30.25 | 60.00 | -29.75 | QP |



| EUT | Android tablet PC | Model Name kaleidoscope | |
|-------------|-------------------|-------------------------|--|
| Temperature | 26 ℃ | Relative Humidity 54% | |
| Pressure | 1010hPa | Phase N | |
| Test Date | December 10, 2016 | Test Mode Mode 3 | |



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure- ment | Limit | Over | |
|-----|-----|---------|------------------|-------------------|------------------|-------|--------|----------|
| | | MHz | dBuV | dB | dBuV | dBuV | dB | Detector |
| 1 | | 0.1740 | 18.14 | 12.08 | 30.22 | 54.76 | -24.54 | AVG |
| 2 | * | 0.1749 | 37.56 | 12.07 | 49.63 | 64.72 | -15.09 | QP |
| 3 | | 0.3980 | 27.80 | 11.12 | 38.92 | 57.89 | -18.97 | QP |
| 4 | | 0.3980 | 14.17 | 11.12 | 25.29 | 47.89 | -22.60 | AVG |
| 5 | | 0.9100 | 25.75 | 10.67 | 36.42 | 56.00 | -19.58 | QP |
| 6 | | 0.9820 | 12.91 | 10.64 | 23.55 | 46.00 | -22.45 | AVG |
| 7 | | 2.2580 | 15.79 | 10.58 | 26.37 | 46.00 | -19.63 | AVG |
| 8 | | 2.5220 | 30.30 | 10.58 | 40.88 | 56.00 | -15.12 | QP |
| 9 | | 4.3820 | 11.07 | 10.54 | 21.61 | 46.00 | -24.39 | AVG |
| 10 | | 5.3300 | 21.66 | 10.54 | 32.20 | 60.00 | -27.80 | QP |
| 11 | | 21.0020 | 11.45 | 10.63 | 22.08 | 60.00 | -37.92 | QP |
| 12 | | 24.9340 | 6.63 | 10.59 | 17.22 | 50.00 | -32.78 | AVG |

5.2 RADIATED EMISSION MEASUREMENT

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

The field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

| Frequencies | Field Strength | Measurement Distance |
|-------------|--------------------|----------------------|
| (MHz) | (micorvolts/meter) | (meters) |
| 0.009~0.490 | 2400/F(KHz) | 300 |
| 0.490~1.705 | 24000/F(KHz) | 30 |
| 1.705~30.0 | 30 | 30 |
| 30~88 | 100 | 3 |
| 88~216 | 150 | 3 |
| 216~960 | 200 | 3 |
| Above 960 | 500 | 3 |

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

| EDECHENCY (MH-) | Limit (dBuV/m) (at 3M) | | | |
|-----------------|------------------------|---------|--|--|
| FREQUENCY (MHz) | 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 | 4 Mills / 4 Mills for Dook 4 Mills / 41 Is for Average |
| 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 |

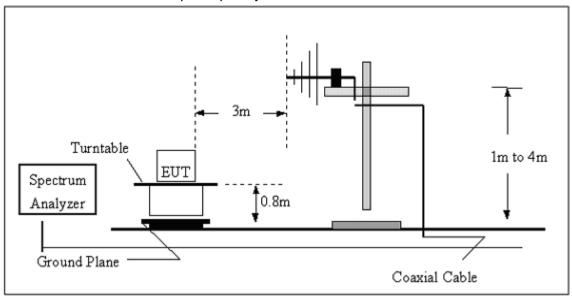
5.2.2 TEST PROCEDURE

- a. 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.
- b. 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
- 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. 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.
- e. 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

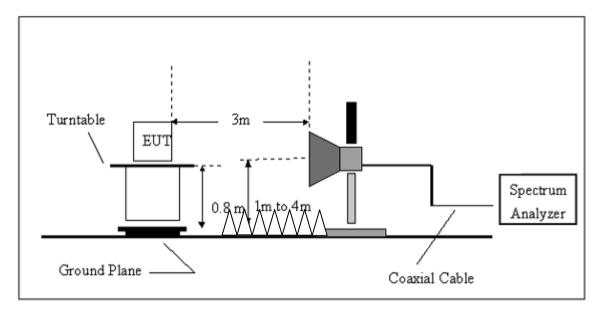
performed. f. For the actual test configuration, please refer to the related Item –EUT Test Photos. Note: Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported **5.2.3 DEVIATION FROM TEST STANDARD** No deviation

5.2.4 TEST SETUP

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



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

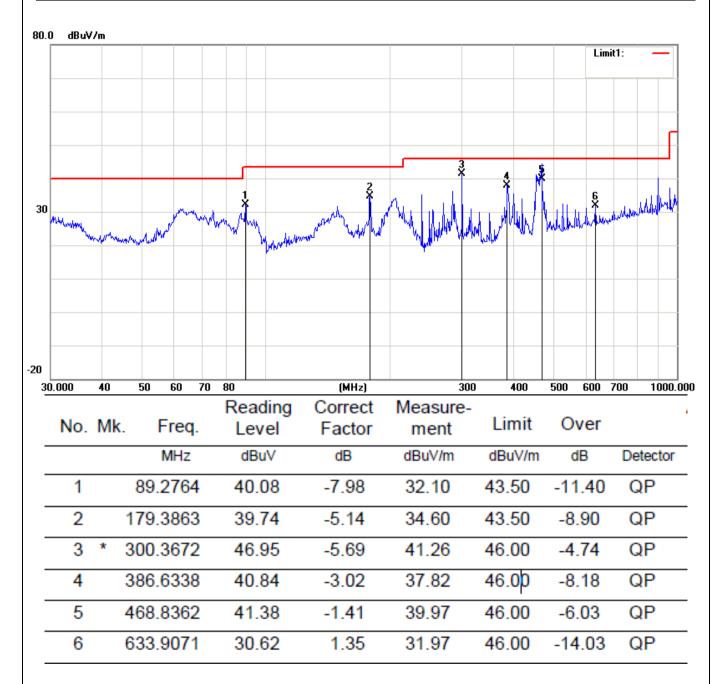


5.2.5 EUT OPERATING CONDITIONS

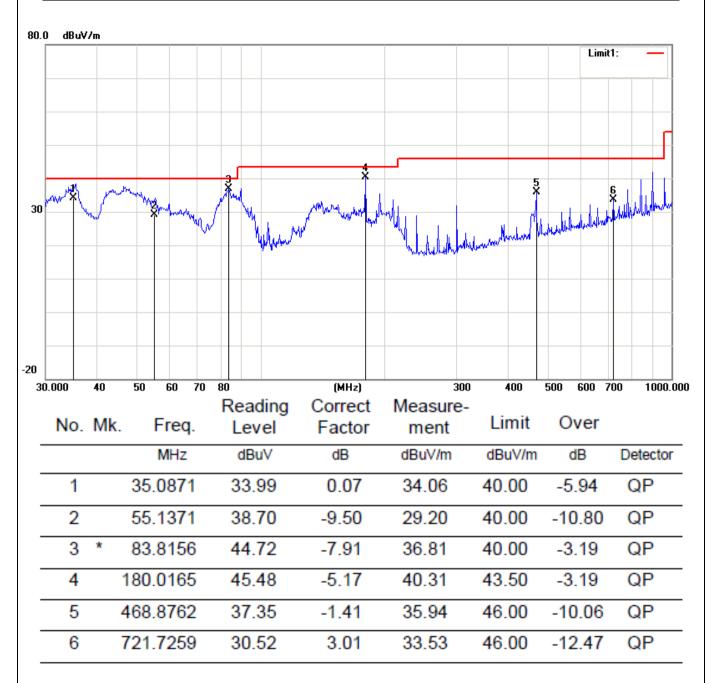
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

5.2.5.1 TEST RESULTS (BETWEEN 30M - 1000 MHZ)

| EUT | Android tablet PC | Model Name | kaleidoscope |
|-------------|-------------------|-------------------|-------------------|
| Temperature | 20 ℃ | Relative Humidity | 48% |
| Pressure | 1010 hPa | Polarization: | Horizontal |
| Test Mode | Mode 1 | Test Date | December 10, 2016 |

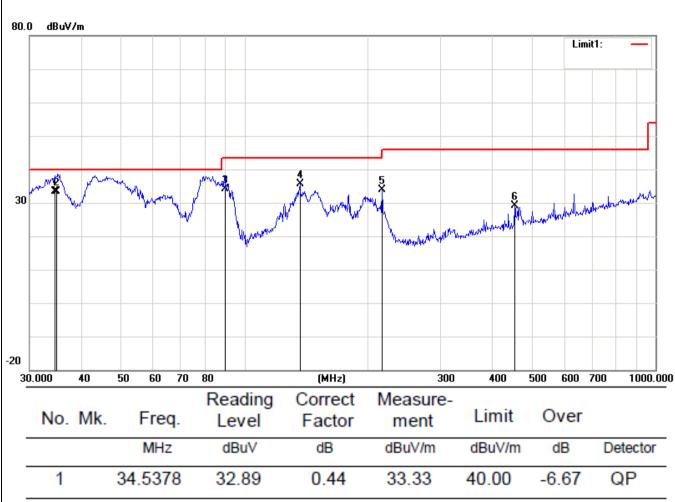


| EUT | Android tablet PC | Model Name | kaleidoscope |
|-------------|-------------------|-------------------|-------------------|
| Temperature | 20 ℃ | Relative Humidity | 48% |
| Pressure | 1010 hPa | Polarization : | Vertical |
| Test Mode | Mode 1 | Test Date | December 10, 2016 |



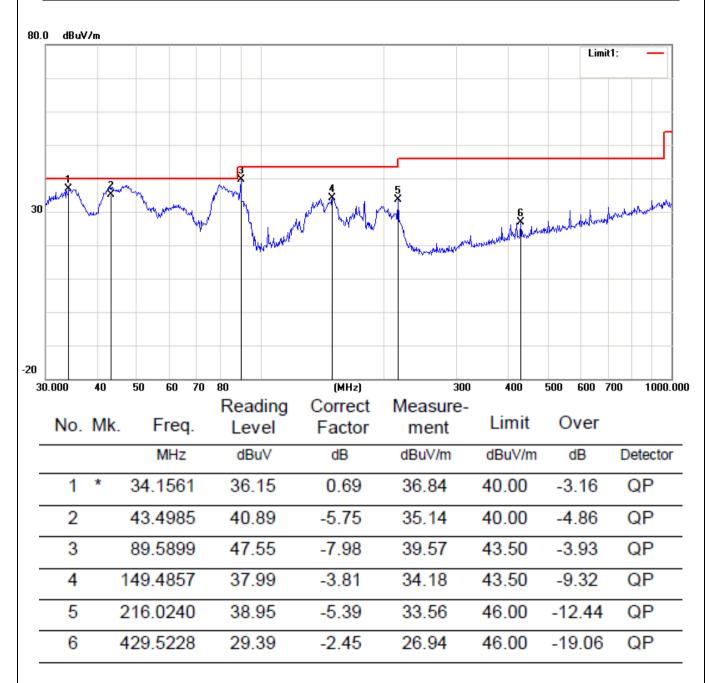
| Ε | UT | | | | An | Android tablet PC | | | | | | | N | lodel | Nam | ne | | | ļ | kaleidoscope | | | | | |
|------|-----------------------------|---------------------|----------|---------|------|-------------------|----|---|-------------|----------------------|-------|--------------|------------|---|------------|------|---------|-----|-----|--------------|-----|-----|-------|----------|-------|
| Te | empera | ature | | | 20 | 20 ℃ | | | | | | R | elativ | е Ни | ımid | dity | | 4 | 48% | | | | | | |
| | ressure | | | | | 10 ł | | l | | | | | _ | olariz | | າ : | | | | Horiz | | | | | |
| Te | est Mo | de | | | Mc | ode | 2 | | | | | | T | est D | ate | | | | | Dece | eml | oer | 10, | 201 | 6 |
| 80.0 | 0 dBuV | //m | | | | | | | | | | | | | | | | | | | | Lim | i+1 - | <u>.</u> | |
| 30 | Ar had weed production with | Wash of the Comment | entropy. | Andland | | | 3 | *************************************** | "Dohn-like" | riman ^{d h} | nardy | 2 | al control | 1 May | | 33 | الماليك | * | N | tud (l.b | | | | . Mahah | |
| 30 | 0.000 | 40 | ţ | 50 | 60 | 70 | 80 | | | | (1 | HHz) | | | | 300 | | 400 | | 500 | 60 | 00 | 700 | 10 | 00.00 |
| | No. | Mk | | F | req. | | | eac .ev | ding el | | | rect ctor | | Mea m | sur ent | e- | L | imi | it | C |)ve | er | | | |
| _ | | | | N | ИHZ | | (| dΒι | ıV | | d | В | | dBu | iV/m | | dE | BuV | /m | | dB | | De | etect | or |
| _ | 1 | | 8 | 39.2 | 764 | 1 | 4 | 0.0 | 08 | | -7. | 98 | | 32 | .10 | | 43 | .50 |) | -1 | 1.4 | 10 | (| QΡ | |
| _ | 2 | | 17 | 9.3 | 863 | 3 | 3 | 9. | 74 | | -5. | 14 | | 34. | .60 | | 43 | .50 |) | -8 | 3.9 | 0 | (| QΡ | |
| _ | 3 | * | 30 | 0.3 | 672 |) | 4 | 6.9 | 95 | | -5. | 69 | | 41. | 26 | | 46 | .00 |) | -4 | 1.7 | 4 | (| QΡ | |
| - | 4 | | 38 | 36.6 | 338 | } | 4 | 0.8 | 34 | | -3. | 02 | | 37. | .82 | | 46 | .00 |) | -8 | 3.1 | 8 | (| QΡ | |
| _ | 5 | | 46 | 8.8 | 362 |) | 4 | 1.3 | 38 | | -1. | 41 | | 39. | .97 | | 46 | .00 |) | -6 | 0.6 | 3 | (| QΡ | |
| - | 6 | | 63 | 33.9 | 071 | | 2 | 0.6 | 32 | | -1 | 35 | | 31. | 07 | | 46 | .00 | 1 | -1 | 4 (| 13 | (| QΡ | |

| EUT | Android tablet PC | Model Name | kaleidoscope |
|-------------|-------------------|-------------------|-------------------|
| Temperature | 20 ℃ | Relative Humidity | 48% |
| Pressure | 1010 hPa | Polarization: | Vertical |
| Test Mode | Mode 2 | Test Date | December 10, 2016 |



| EUT | Γ | | | Android tablet PC | | | | | | | Model Name | | | | | | kalei | dosc | ope | | | | |
|-------|-----------------|-----------|---------------------------------------|-------------------|-----------------------|---------------------------------------|------------------|----------------------|------------------------------------|------------|-------------------------|---|-------|---|--------------------------------------|------------|---|--------------------------------------|-------------------|-----------------------------------|------------|------------------|-------|
| Tem | pera | ture | | 2 | 20 ℃ | | | | | | Re | elativ | ∕е Нι | umic | dity | | 48% | | | | | | |
| Pres | ssure | | | | 101 | 010 hPa Polarization : | | | | Horizontal | | | | | | | | | | | | | |
| Test | t Moc | de | | | Mo | de 3 | 3 | | | | | | Te | est Date | | | | December | | | 20 | 16 | |
| 0.0 | dBuV∕ | /m | | | | | | | | | | | | | | | | | | Liu | mit1: | | |
| 30 | nder had decode | له د ادا | Muna I | 1 | ~ | wh. | | | | И÷ | 2 | 3 X | J. | * | , , , | 5 K | Jun | Mu a / | | المراما | البديموايس | dparts | Mari |
| | | TWOY " | · · · · · · · · · · · · · · · · · · · | Ψ | | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | Y | - V | ghdustmor | Alverta . | \ | (Interviole) | wit . | half ha | MV. | 14./M | H. WY | WV | All Low | | | | |
| | | 40 | 50 | 60 | | | 30 | ~~ ~ | ophdysylmir | diograph . | (1-) | (Hz) | JI . | Wh. | MW | 300 | thank! | 400 | 500 | 600 | 700 | 1 | 000.0 |
| | | | | 60 | | ⁷ 0 8 | 30 | | ding. | | | (Hz) | wif | | asur | 300 | | 400 | | 600 | 700 | 1 | 000.0 |
| 30.00 | 00 | | 50 | 60 Fre | 7 | 70 8 | 30 Re | | ling | C | ori | | | Mea | | 300 re- | | | | | 700 | 1 | 000.0 |
| 30.00 | 00 | 40 | 50 | | <u>7</u> | 70 8 | Re L | eac | ding el | C | ori | rect ctor | | Mea | asur | 300 re- | Li | 400 | C | 600 | 700 | 1 etec | |
| 30.00 | 00 | 40 | 50 | Fre | eq. | 70 { | Re L | eac .ev | ding el | C | Cori | rect ctor | | Mea m dBr | asur | 300 re- | Li | 400 mit | C | 600)ver | 700 D | | ctor |
| 30.00 | 00 No. | 40 Mk. | 50 | Fre MH | 7eq. | 70 8 | Re L | eac ev | ding el | C | Cori Fac | rect ctor 3 | | Mea m dBi | asur ient | 300 re- | Li | 400 mit uV/m | C 19 | 600 Over | 700 | etec | ctor |
| 30.00 | 00 No. | 40 Mk. | 50 | Fre MH .64 | 7eq. | 70 { | 80 Re L | eac ev dBu | ding el iv 68 | C | Fac dl | rect ctor 3 40 56 | | Mea m dBi | asur ient uv/m | 300 re- | Li dB | 400 mit uV/m 00 | -9 -1: | 600 Over dB | 700 D | etec QP | ctor |
| 30.00 | No. | 40 Mk. | 59 | Fre MH .64 | eq. Iz 93 77 | 70 { | Re L 3 | eac .ev dBu | ding el iv 68 78 | C | Fac dl -9. | rect ctor 8 40 56 | | Mea m dBi 30 30 | asur ient uV/m | 300 re- | Li dB 40 43 | 400 mit uV/m 00 50 | -9 -1 -7 | 600 Over dB 0.72 | 700 D | etec QP QP | ctor |
| 30.00 | No. | 40 Mk. | 59 146 179 | .64 .88 | 93 77 63 | 70 { | 3 3 3 4 | eac.ev dBu 9.6 | ding el iv 68 78 08 | C | ori Fac dl -9. | rect ctor 8 40 56 14 39 | | Mea m dBi 30 30 35 32 | asur ient uv/m 0.28 0.22 | 300 re- | Li dB 40 43 43 | 400 mit uv/m 00 50 50 | -1: -7: -1: | 000 0ver dB 0.72 3.28 | 700 D | etec QP QP | ctor |

| EUT | Android tablet PC | Model Name | kaleidoscope |
|-------------|-------------------|-------------------|-------------------|
| Temperature | 20 ℃ | Relative Humidity | 48% |
| Pressure | 1010 hPa | Polarization : | Vertical |
| Test Mode | Mode 3 | Test Date | December 10, 2016 |



5.2.5.2 TEST RESULTS (1GHZ TO 6GHZ)

| EUT | Android tablet PC | Model Name | kaleidoscope |
|-------------|-------------------|----------------------|--------------|
| Temperature | 1/() (| Relative Humidity | 48% |
| Pressure | 1010 hPa | Test Mode | Mode 1 |
| Test Date | December 10, 2016 | | |

| Freq. | Ant. | Emis | ssion | Limi | t | Over(dB) | | |
|---------|------|--------|-------|---------|------------|----------|--------|--|
| (MHz) | Pol. | Level(| dBuV) | 3m(dBu) | 3m(dBuV/m) | | | |
| | H/V | PK | AV | PK | AV | PK | AV | |
| 1632.45 | V | 59.81 | 41.64 | 74 | 54 | -14.19 | -12.36 | |
| 2829.27 | V | 58.68 | 40.79 | 74 | 54 | -15.32 | -13.21 | |
| 1684.52 | Н | 59.08 | 39.15 | 74 | 54 | -14.92 | -14.85 | |
| 2831.6 | Н | 58.89 | 39.89 | 74 | 54 | -15.11 | -14.11 | |

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 | Android tablet PC | Model Name | kaleidoscope |
|-------------|-------------------|----------------------|--------------|
| Temperature | 120 (| Relative Humidity | 48% |
| Pressure | 1010 hPa | Test Mode | Mode 2 |
| Test Date | December 10, 2016 | | |

| Freq. | Ant. | Emis | ssion | Limi | t | Over(dB) | | |
|---------|------|--------|-------|---------|------|----------|--------|--|
| (MHz) | Pol. | Level(| dBuV) | 3m(dBu) | V/m) | | | |
| | H/V | PK | AV | PK | AV | PK | AV | |
| 1583.35 | V | 58.60 | 41.30 | 74 | 54 | -15.40 | -12.70 | |
| 2641.52 | V | 58.76 | 40.27 | 74 | 54 | -15.24 | -13.73 | |
| 1628.42 | Н | 58.87 | 40.23 | 74 | 54 | -15.13 | -13.77 | |
| 2810.39 | Н | 58.68 | 39.68 | 74 | 54 | -15.32 | -14.32 | |

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 | Android tablet PC | Model Name | kaleidoscope |
|-------------|-------------------|----------------------|--------------|
| Temperature | 170 (| Relative Humidity | 48% |
| Pressure | 1010 hPa | Test Mode | Mode 3 |
| Test Date | December 10, 2016 | | |

| Freq. | Ant. | Emission | | Limit | | Over(dB) | |
|---------|------|-------------|-------|------------|----|----------|--------|
| (MHz) | Pol. | Level(dBuV) | | 3m(dBuV/m) | | | |
| | H/V | PK | AV | PK | AV | PK | AV |
| 1577.35 | V | 60.49 | 39.87 | 74 | 54 | -13.51 | -14.13 |
| 2652.38 | V | 58.56 | 40.12 | 74 | 54 | -15.44 | -13.88 |
| 1699.33 | Н | 58.50 | 40.50 | 74 | 54 | -15.50 | -13.50 |
| 2739.42 | Н | 58.48 | 39.48 | 74 | 54 | -15.52 | -14.52 |

Remark:

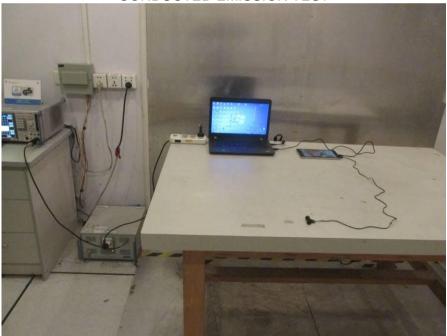
All emissions not reported were more than 20dB below the specified limit or in the noise floor. Factor = Antenna Factor + Cable Loss – Pre-amplifier. All the x/y/z orientation has been investigated, and only worst case is presented in this report.

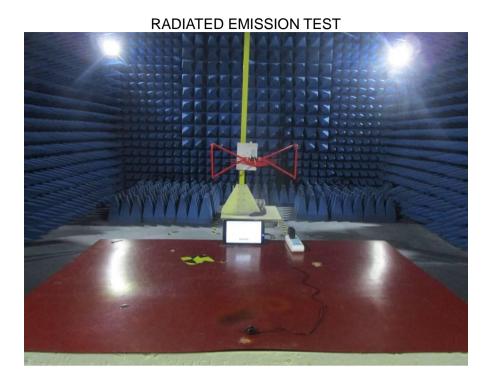
6. EUT TEST PHOTO

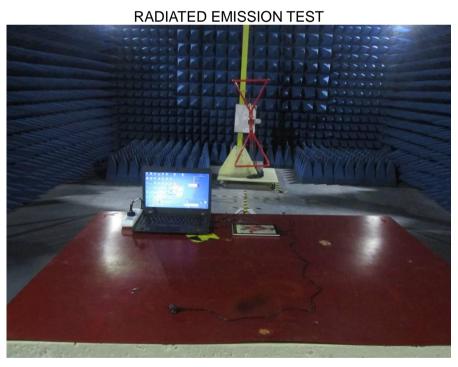


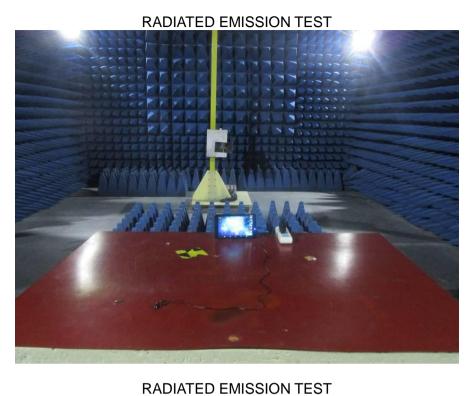


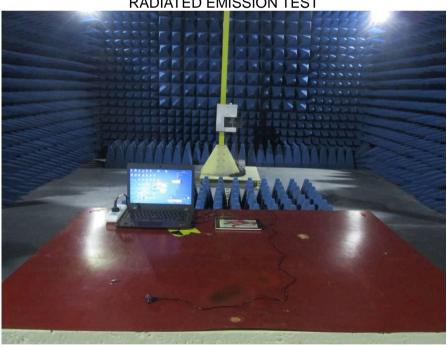
CONDUCTED EMISSION TEST

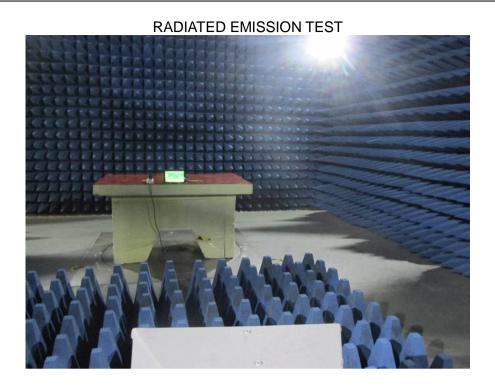


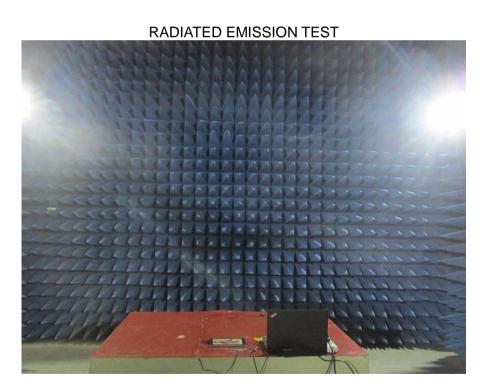












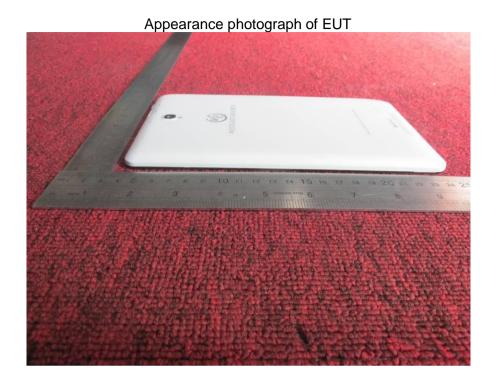
7. PHOTOGRAPHS OF EUT



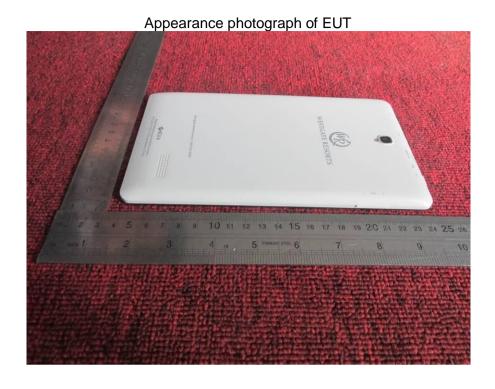


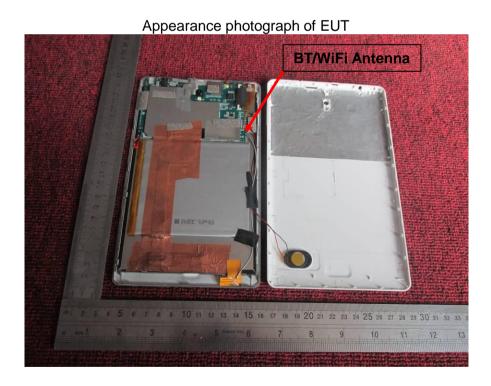


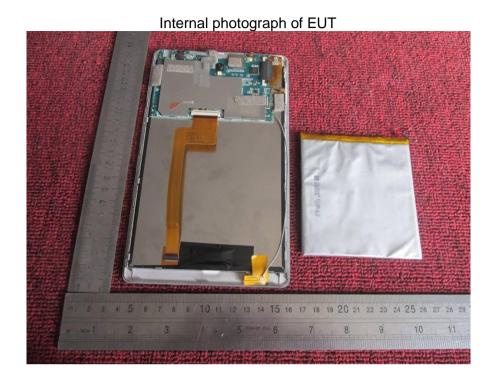






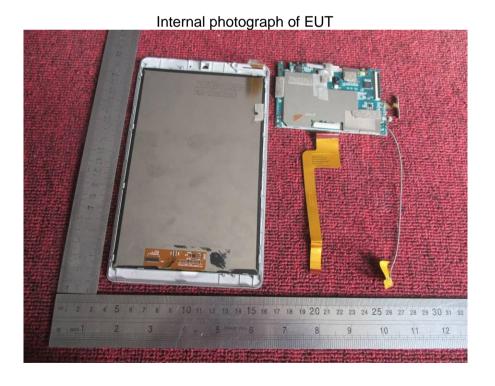


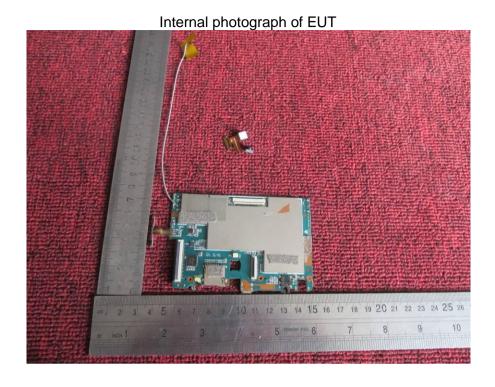




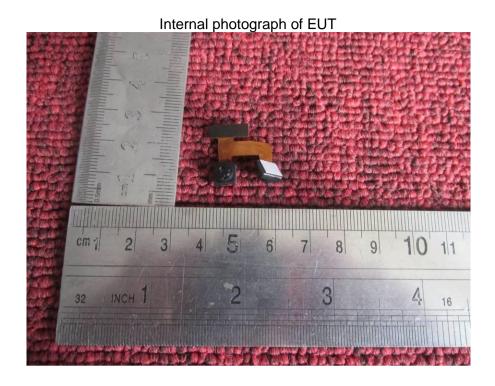


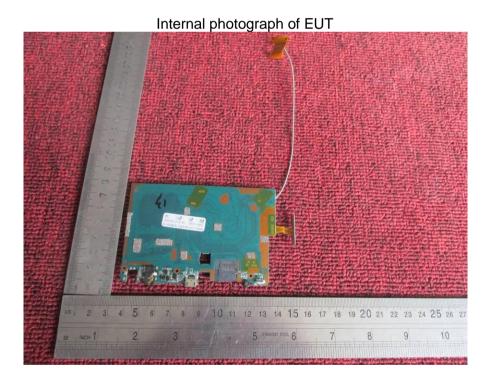


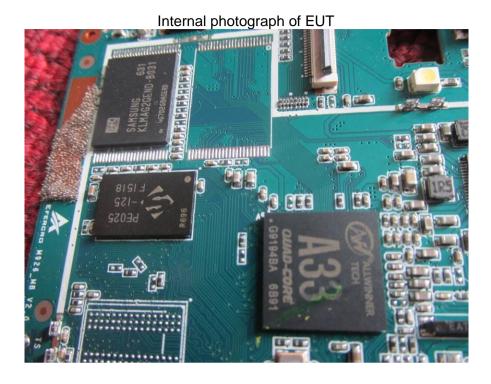


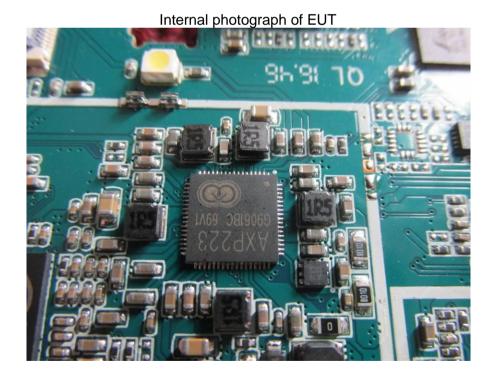


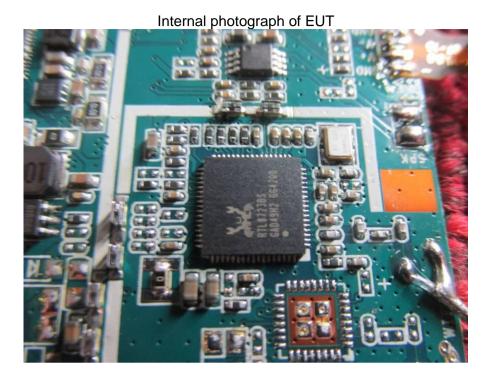


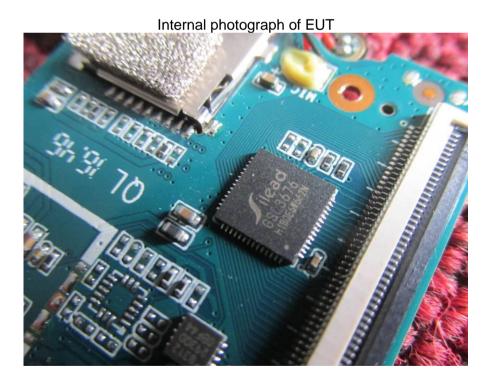












---END OF REPORT---