



FCC Test Report

FCC ID: O86T8540

Product: 8 inch Full Ruggedized Tablet
Trade Mark: N/A
Model Number: xTablet T8540
Serial Model: N/A
Report No.: NTEK- 2016NT12260898F4

Prepared for

MobileDemand, LC.
1501 Boyson Square Drive Suite 101

Prepared by

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TEST RESULT CERTIFICATION

Applicant's name : MobileDemand, LC.

Address : 1501 Boyson Square Drive Suite 101

Manufacturer's Name : Emdoor Information Co.,Ltd

Address : 3A 1/F Jinfulai Tower, No.49-1, Dabao Road, Baoan 28 District,
Shenzhen, guandong, China.

Product description

Product name..... : 8 inch Full Ruggedized Tablet

Model and/or type reference : xTablet T8540

Standards..... : FCC Part15B:01 Oct.2016

Standards..... : ANSI C63.4:2014

This device described above has been tested by NTEK, and the test results show that the equipment under test (EUT) is in compliance with Part 15 of FCC Rules. And it is applicable only to the tested sample identified in the report.

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Date of Test..... :

Date (s) of performance of tests..... : 26 Dec. 2016 ~03 Mar. 2017

Date of Issue..... : 03 Mar. 2017

Test Result..... : **Pass**

Testing Engineer : Lake Xie
(Lake Xie)

Technical Manager : Jason Chen
(Jason Chen)

Authorized Signatory : Sam Chen
(Sam Chen)

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1. TEST SUMMARY

Test procedures according to the technical standards:

EMC Emission				
Standard	Test Item	Limit	Judgment	Remark
FCC Part15B:2014 ANSI C63.4: 2014	Conducted Emission	Class B	PASS	
	Radiated Emission	Class B	PASS	

NOTE:

- (1) 'N/A' denotes test is not applicable in this Test Report
- (2) For client's request and manual description, the test will not be executed.

1.1 TEST FACILITY

NTEK Testing Technology Co., Ltd

Add. : 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen P.R. China.

FCC Registration Number:238937; IC Registration Number:9270A-1

CNAS Registration Number:L5516

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expended 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)	NOTE
NTEKC01	ANSI	150 KHz ~ 30MHz	3.2	

B. Radiated Measurement :

Test Site	Method	Measurement Frequency Range	U, (dB)	NOTE
NTEKA01	ANSI	30MHz ~ 1000MHz	4.7	
		1GHz ~12.4GHz	5.0	

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	8 inch Full Ruggedized Tablet	
Trade Mark	N/A	
Model Name	xTablet T8540	
Serial Model	N/A	
Model Difference	N/A	
Product Description	The EUT is a 8 inch Full Ruggedized Tablet.	
	Connecting I/O port:	USB, DC in
	Operation Frequency:	BT:2402~2480 MHz WIFI:802.11b/g/n(20MHz): 2412~2462MHz 5.2 WIFI: 5180-5240MHz for 802.11a/n(HT20)/AC20; 5190-5230MHz for 802.11n(HT40)/AC40; 5.8 WIFI: 5745-5825 MHz for 802.11a/n(HT20)/AC20; 5755-5795 MHz for 802.11a/n(HT40)/AC40;
	Modulation Type:	BT(1Mbps)/BLE: GFSK BT EDR(2Mbps): $\pi/4$ -DQPSK BT EDR(3Mbps): 8-DPSK IEEE 802.11b : DSSS (CCK, QPSK, DBPSK) IEEE 802.11g/n (HT20) : OFDM (64QAM, 16QAM, QPSK, BPSK) OFDM with BPSK/QPSK/16QAM/64QAM/256QAM for 802.11a/n/ac
Power Source	DC Voltage: DC 3.7V/10000mAh from Battery or DC 5V from Adapter.	
Adapter	Model:AW018WR-0500300VH Input:100-240V 50/60Hz 0.5A Output:DC 5V, 3A	
Battery	DC 3.7V, 10000mAh	
HW Version	EM_I88H_MB_PCB_V11R12	
SW Version	OS Build : 10586.633	

2.1.1 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.

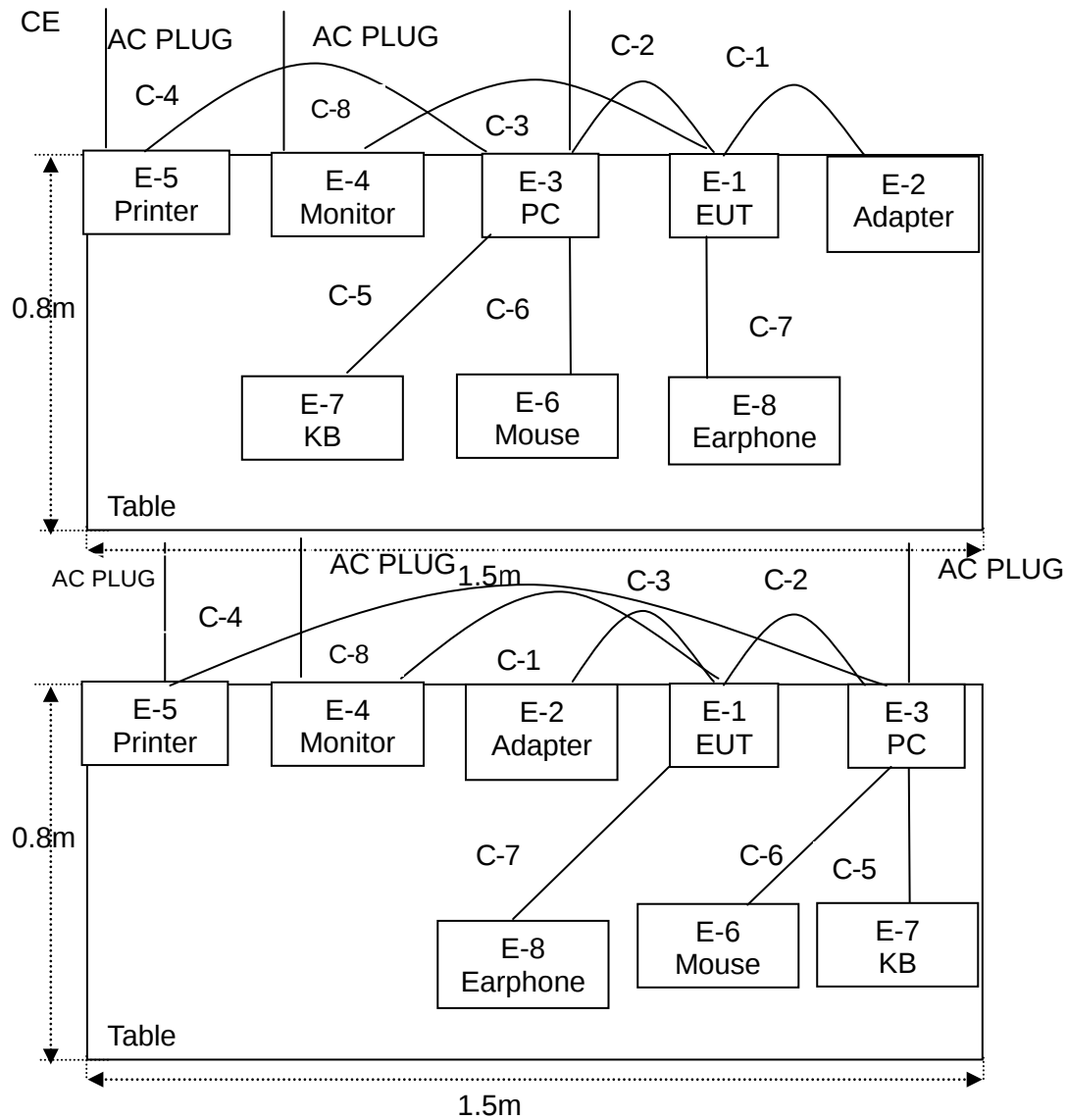
Pretest Mode	Description
Mode 1	TF CARD
Mode 2	REC
Mode 3	BT
Mode 4	2.4G/5GWIFI
Mode 5	USB
Mode 6	CAMERA

For Conducted Test	
Final Test Mode	Description
Mode 1	TF CARD
Mode 2	REC
Mode 3	BT
Mode 4	2.4G/5GWIFI
Mode 5	USB
Mode 6	CAMERA

For Radiated Test	
Final Test Mode	Description
Mode 1	TF CARD
Mode 2	REC
Mode 3	BT
Mode 4	2.4G/5GWIFI
Mode 5	USB
Mode 6	CAMERA

Note: Final Test Mode: Through Pre-scan, find the mode 1 is the worst case.
Only the worst case mode is recorded in the report.

2.2 DESCRIPTION OF TEST SETUP



2.3 DESCRIPTION TEST PERIPHERAL AND EUT PERIPHERAL

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	Brand	Model/Type No.	Series No.	Note
E-1	8 inch Full Ruggedized Tablet	N/A	xTablet T8540	N/A	EUT
E-2	Adapter	N/A	AW018WR-050030 0VH	N/A	
E-3	PC	DELL	FT4Y23X	34413561645	
E-4	Monitor	SONY	IN2020MB	cn-0y6mhx-74261-11f-67e s	Peripherals
E-5	Printer	Canon	L11121E	LBP2900	
E-6	Mouse	DELL	MS111-P	cn-011d3v-71581-11e-1th7	
E-7	KB	DELL	SK-8185	OY526KUS	
E-8	Earphone	N/A	L662	N/A	Peripherals

Item	Cable Type	Shielded Type	Ferrite Core	Length	Note
C-1	USB Cable	NO	NO	1.2m	
C-2	Power Cable	NO	NO	1.2m	
C-3	HDMI Cable	NO	NO	1.5m	
C-4	AC Cable	NO	NO	0.8m	
C-5	USB Cable	NO	NO	1.2m	
C-6	USB Cable	NO	NO	1.2m	
C-7	Earphone	NO	NO	0.8m	
C-8	USB Cable	NO	NO	1.2m	

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) “YES” means “shielded” “with core”; “NO” means “unshielded” “without core”.

2.4 MEASUREMENT INSTRUMENTS LIST

Radiation Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Spectrum Analyzer	Agilent	E4407B	MY45108040	2016.07.06	2017.07.05	1 year
2	Test Receiver	R&S	ESPI	101318	2016.06.07	2017.06.06	1 year
3	Bilog Antenna	TESEQ	CBL6111D	31216	2016.07.06	2017.07.05	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264416	2016.06.07	2017.06.06	1 year
5	Spectrum Analyzer	ADVANTEST	R3132	150900201	2016.06.07	2017.06.06	1 year
6	Horn Antenna	EM	EM-AH-10180	2011071402	2016.07.06	2017.07.05	1 year
7	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2016.07.06	2017.07.05	1 year
8	Amplifier	EM	EM-30180	060538	2016.07.06	2017.07.05	1 year
9	Loop Antenna	ARA	PLA-1030/B	1029	2016.06.08	2017.06.07	1 year
10	Power Meter	R&S	NRVS	100696	2016.07.06	2017.07.05	1 year
11	Power Sensor	R&S	URV5-Z4	0395.1619.05	2016.07.06	2017.07.05	1 year
12	Test Cable	N/A	R-01	N/A	2016.07.06	2017.07.05	1 year
13	Test Cable	N/A	R-02	N/A	2016.07.06	2017.07.05	1 year

Conduction Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Test Receiver	R&S	ESCI	101160	2016.06.06	2017.06.05	1 year
2	LISN	R&S	ENV216	101313	2016.08.24	2017.08.23	1 year
3	LISN	EMCO	3816/2	00042990	2016.08.24	2017.08.23	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264417	2016.06.07	2017.06.06	1 year
5	Passive Voltage Probe	R&S	ESH2-Z3	100196	2016.06.07	2017.06.06	1 year
6	Absorbing clamp	R&S	MOS-21	100423	2016.06.08	2017.06.07	1 year
7	Test Cable	N/A	C01	N/A	2016.06.08	2017.06.07	1 year
8	Test Cable	N/A	C02	N/A	2016.06.08	2017.06.07	1 year
9	Test Cable	N/A	C03	N/A	2016.06.08	2017.06.07	1 year

3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 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.

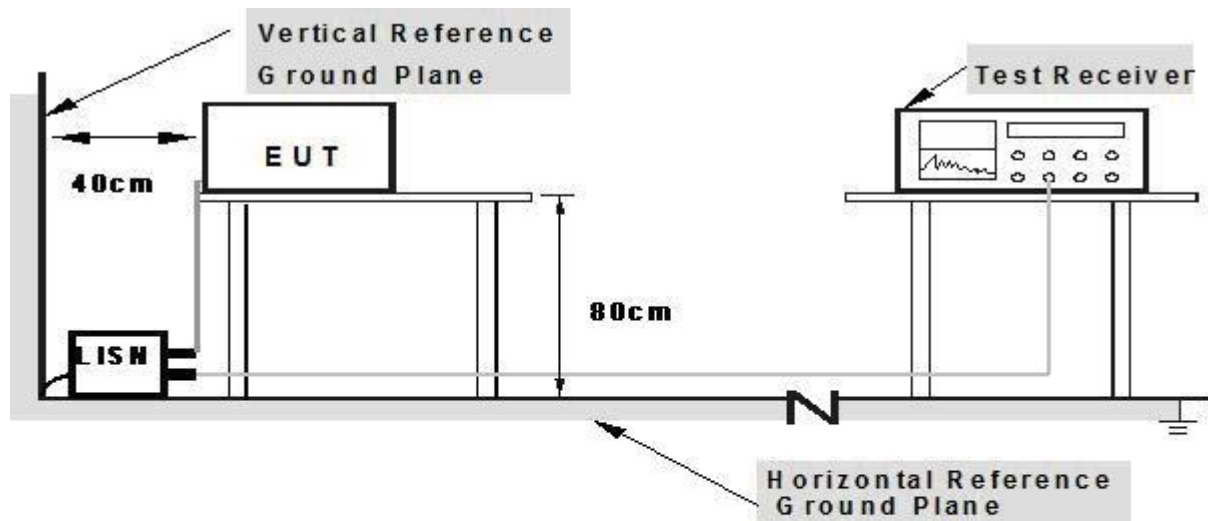
The following table is the setting of the receiver

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

3.1.2 TEST PROCEDURE

- 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 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.

3.1.3 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

3.1.4 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **2.3** Unless otherwise a special operating condition is specified in the follows during the testing.

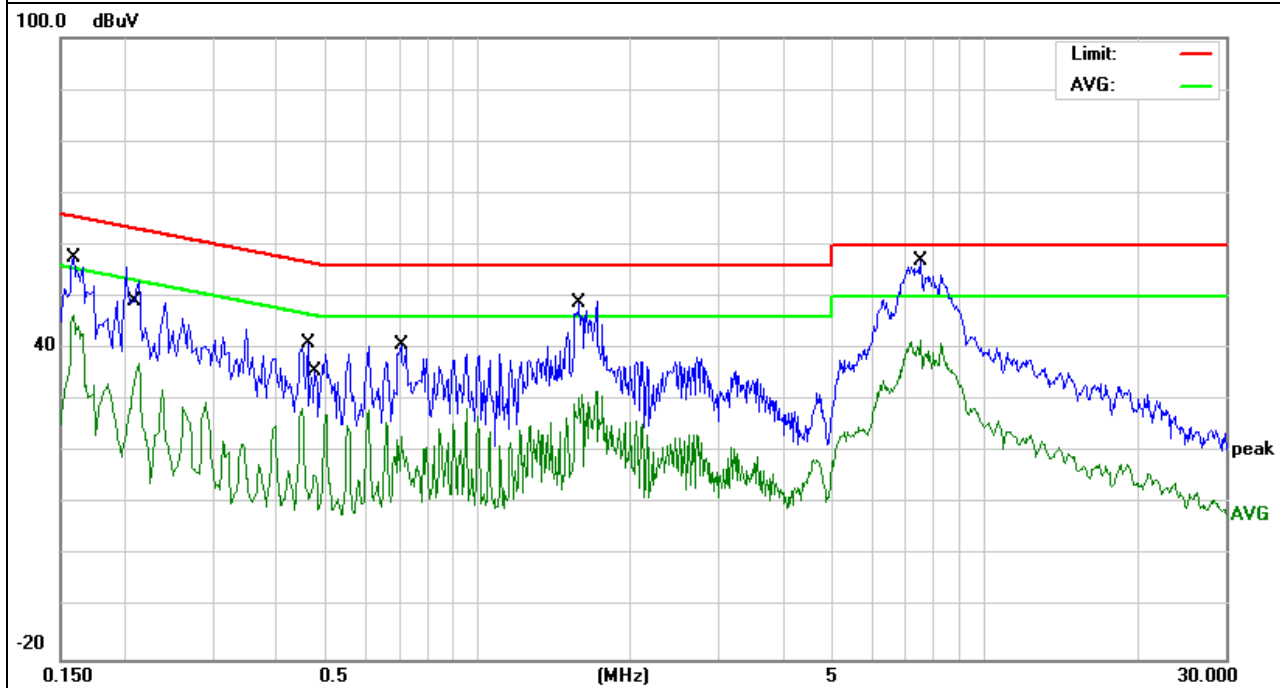
3.1.5 TEST RESULTS

EUT:	8 inch Full Ruggedized Tablet	Model Name. :	xTablet T8540
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2016-12-28
Test Mode:	Mode 1	Phase :	L
Test Voltage:	DC 5V from Adapter AC 120V/60Hz		

Frequency (MHz)	Reading Level (dBμV)	Correct Factor (dB)	Measure-ment (dBμV)	Limits (dBμV)	Margin (dB)	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.159	47.48	10.12	57.6	65.51	-7.91	QP
0.159	36.33	10.12	46.45	55.51	-9.06	AVG
0.207	45.47	10.13	55.6	63.32	-7.72	QP
0.2071	19.97	10.13	30.1	53.32	-23.22	AVG
0.462	31.16	9.9	41.06	56.66	-15.6	QP
0.4778	5.81	9.86	15.67	46.38	-30.71	AVG
0.7058	31.01	9.79	40.8	56	-15.2	QP
0.7058	13.23	9.79	23.02	46	-22.98	AVG
1.5859	38.89	9.81	48.7	56	-7.3	QP
1.61	21.19	9.81	31	46	-15	AVG
7.5	31.57	9.85	41.42	50	-8.58	QP
7.5019	47.05	9.85	56.9	60	-3.1	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

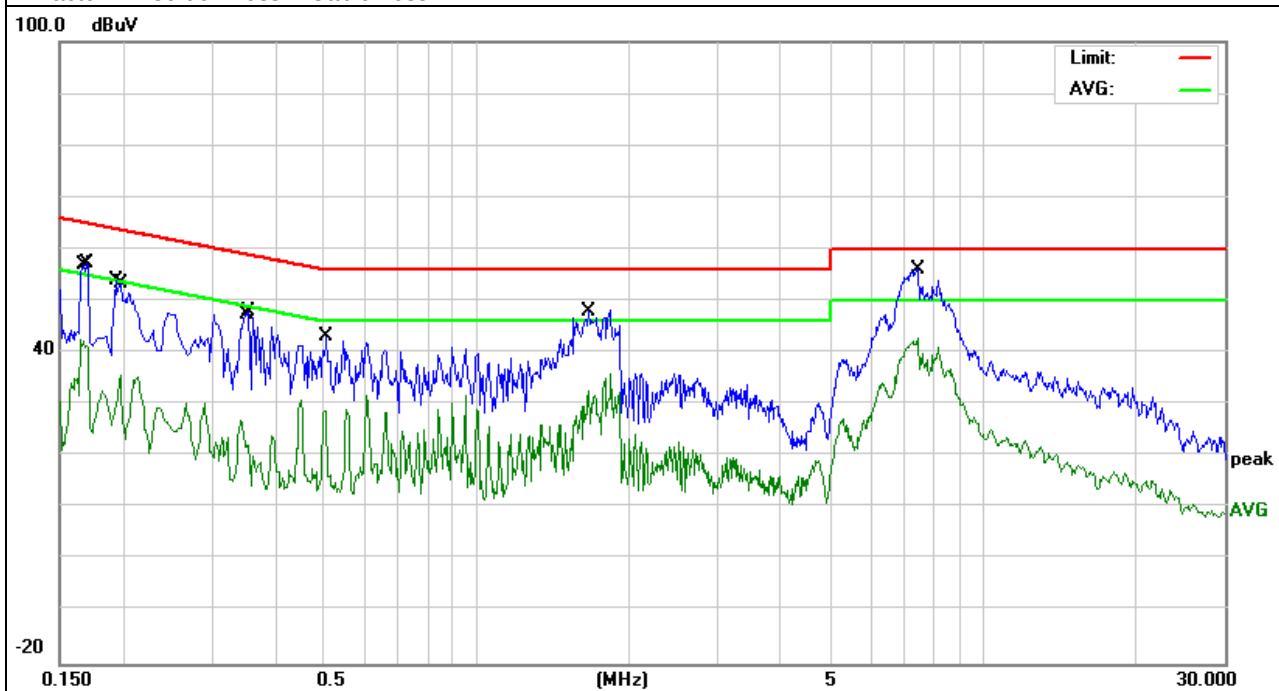


EUT:	8 inch Full Ruggedized Tablet	Model Name. :	xTablet T8540
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2016-12-28
Test Mode:	Mode 1	Phase :	N
Test Voltage:	DC 5V from Adapter AC 120V/60Hz		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.165	32.45	10.06	42.51	55.2	-12.69	QP
0.17	47.34	10.06	57.4	64.96	-7.56	AVG
0.194	44.05	10.03	54.08	63.86	-9.78	QP
0.198	25.64	10.02	35.66	53.69	-18.03	AVG
0.3458	15.21	10.09	25.3	49.06	-23.76	QP
0.3537	37.72	10.09	47.81	58.87	-11.06	AVG
0.502	18.87	9.83	28.7	46	-17.3	QP
0.506	33.17	9.83	43	56	-13	AVG
1.6658	38.18	9.82	48	56	-8	QP
1.6658	22.87	9.82	32.69	46	-13.31	AVG
7.4378	46.3	9.82	56.12	60	-3.88	QP
7.4378	33.11	9.82	42.93	50	-7.07	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

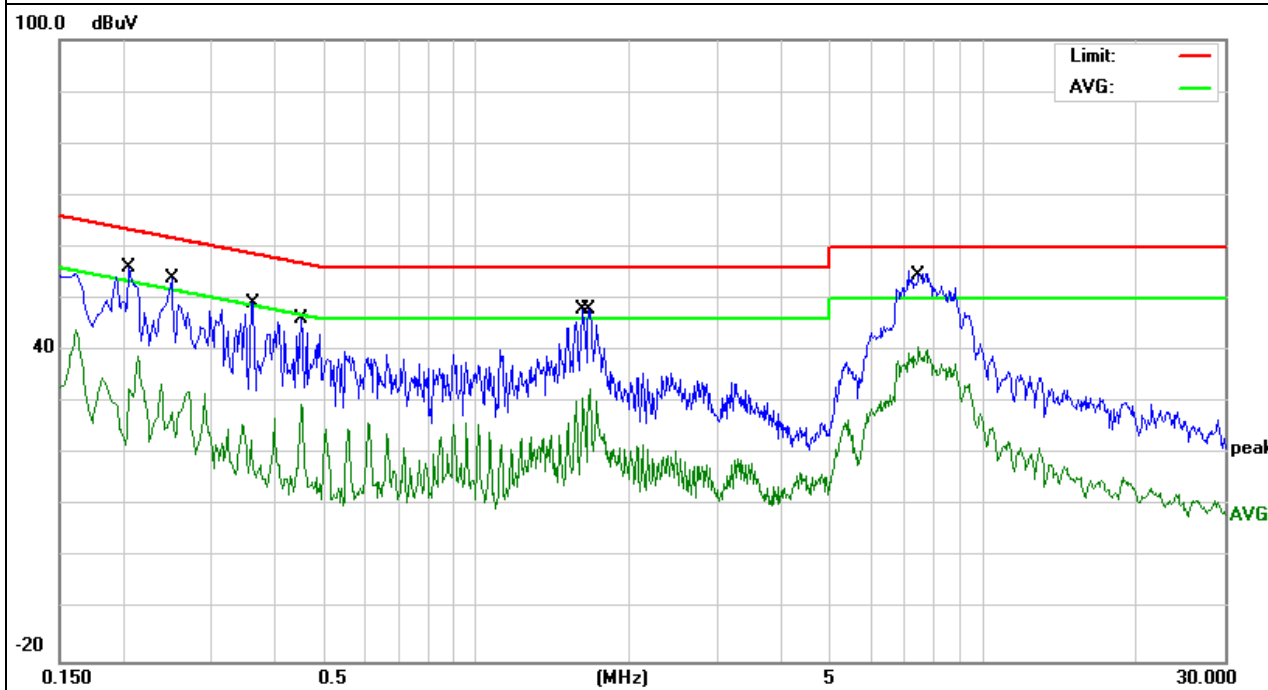


EUT:	8 inch Full Ruggedized Tablet	Model Name. :	xTablet T8540
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2016-12-28
Test Mode:	Mode 1	Phase :	L
Test Voltage:	DC 5V from Adapter AC 240V/60Hz		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.2059	46.05	10.13	56.18	63.37	-7.19	QP
0.2059	28.94	10.13	39.07	53.37	-14.3	AVG
0.25	43.77	10.14	53.91	61.75	-7.84	QP
0.25	23.35	10.14	33.49	51.75	-18.26	AVG
0.3619	39.16	10.08	49.24	58.68	-9.44	QP
0.3619	15.72	10.08	25.8	48.68	-22.88	AVG
0.45	36.23	9.93	46.16	56.87	-10.71	QP
0.45	19.57	9.93	29.5	46.87	-17.37	AVG
1.622	38.25	9.81	48.06	56	-7.94	QP
1.6779	22.85	9.8	32.65	46	-13.35	AVG
7.4778	45.75	9.85	55.6	60	-4.4	QP
7.4778	30.76	9.85	40.61	50	-9.39	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

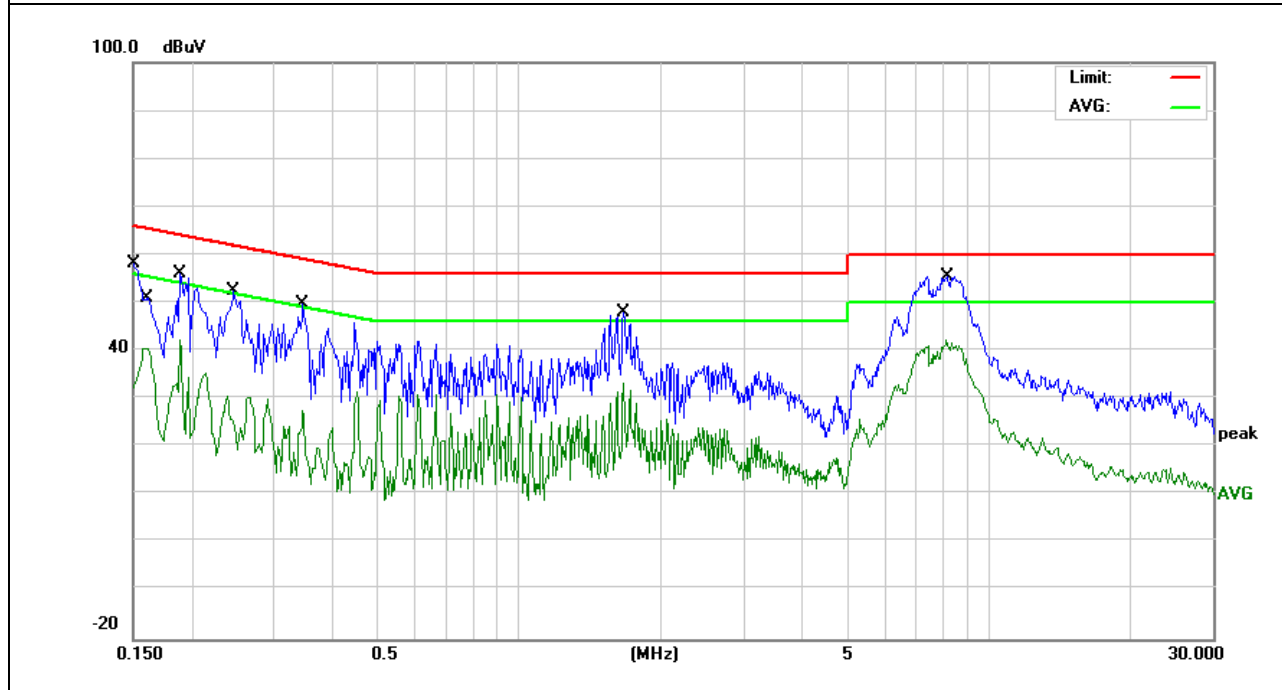


EUT:	8 inch Full Ruggedized Tablet	Model Name. :	xTablet T8540
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2016-12-28
Test Mode:	Mode 1	Phase :	N
Test Voltage:	DC 5V from Adapter AC 240V/60Hz		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.152	48.05	10.08	58.13	65.88	-7.75	QP
0.159	30.4	10.07	40.47	55.51	-15.04	AVG
0.1883	45.97	10.03	56	64.11	-8.11	QP
0.1883	32.15	10.03	42.18	54.11	-11.93	AVG
0.246	42.39	10.07	52.46	61.89	-9.43	QP
0.246	20.39	10.07	30.46	51.89	-21.43	AVG
0.346	39.63	10.09	49.72	59.06	-9.34	QP
0.346	17.56	10.09	27.65	49.06	-21.41	AVG
1.666	38.18	9.82	48	56	-8	QP
1.666	23.45	9.82	33.27	46	-12.73	AVG
8.1219	32.5	9.84	42.34	50	-7.66	QP
8.1899	45.76	9.84	55.6	60	-4.4	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

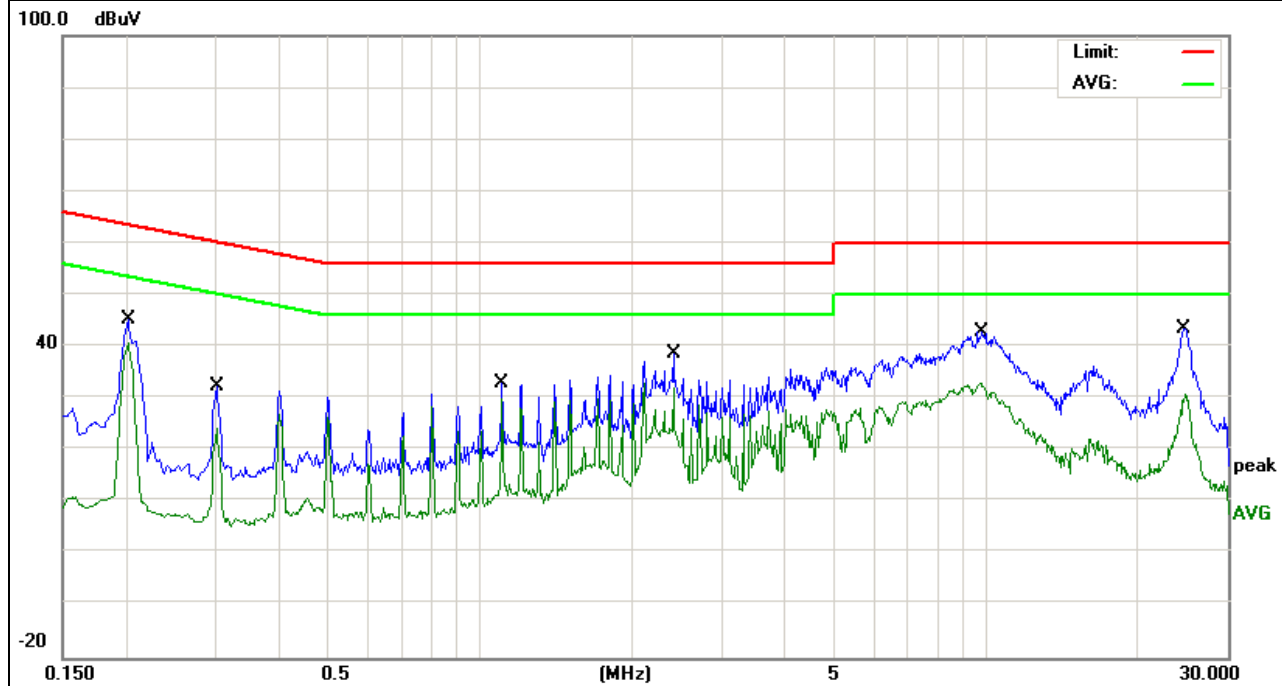


EUT:	8 inch Full Ruggedized Tablet	Model Name. :	xTablet T8540
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2016-12-28
Test Mode:	Mode 1	Phase :	L
Test Voltage:	DC 5V from PC AC 120V/60Hz		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.202	34.98	10.13	45.11	63.52	-18.41	QP
0.202	18.99	10.13	29.12	53.52	-24.4	AVG
0.3019	22.18	10.12	32.3	60.19	-27.89	QP
0.3019	15.2	10.12	25.32	50.19	-24.87	AVG
1.106	23.15	9.76	32.91	56	-23.09	QP
1.106	15.69	9.76	25.45	46	-20.55	AVG
2.414	28.82	9.76	38.58	56	-17.42	QP
2.414	19.38	9.76	29.14	46	-16.86	AVG
9.8498	33.08	9.89	42.97	60	-17.03	QP
9.8498	19.44	9.89	29.33	50	-20.67	AVG
24.646	33.38	10.16	43.54	60	-16.46	QP
24.646	19.94	10.16	30.1	50	-19.9	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

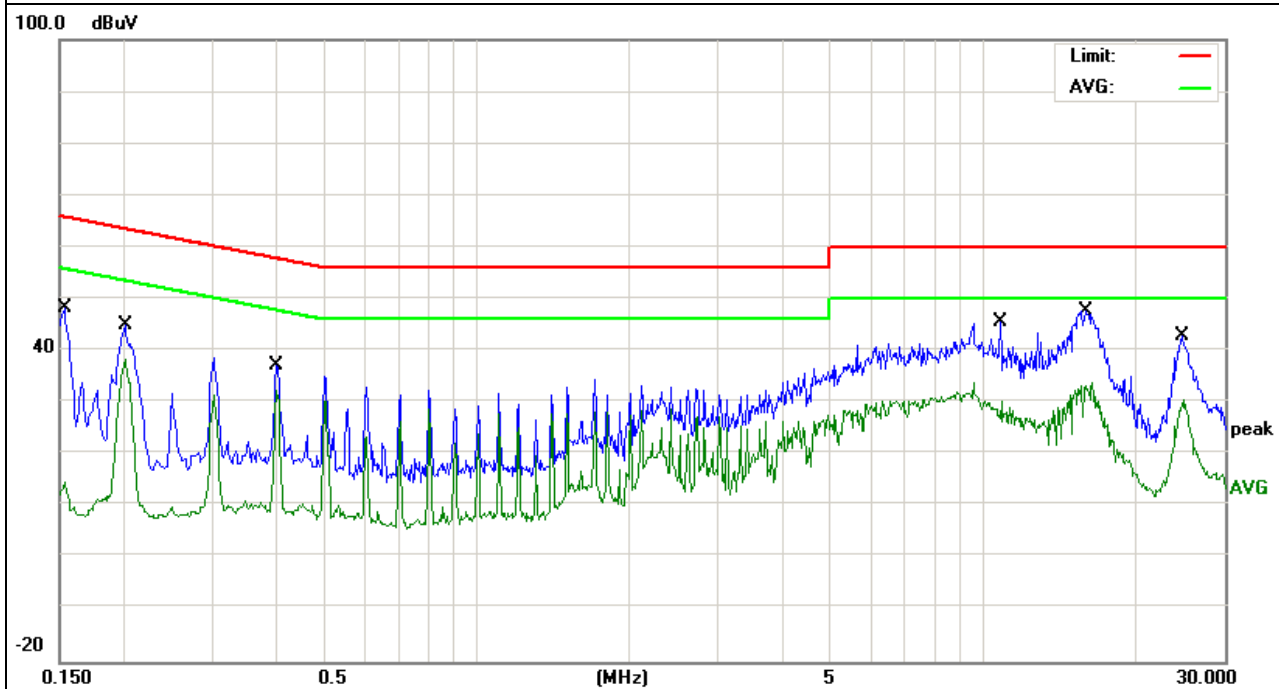


EUT:	8 inch Full Ruggedized Tablet	Model Name. :	xTablet T8540
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2016-12-28
Test Mode:	Mode 1	Phase :	N
Test Voltage:	DC 5V from PC AC 120V/60Hz		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.1539	38.17	10.07	48.24	65.78	-17.54	QP
0.1539	19.26	10.07	29.33	55.78	-26.45	AVG
0.202	34.7	10.13	44.83	63.52	-18.69	QP
0.202	18.32	10.13	28.45	53.52	-25.07	AVG
0.402	27.31	9.94	37.25	57.81	-20.56	QP
0.402	19.47	9.94	29.41	47.81	-18.4	AVG
10.8258	35.54	9.9	45.44	60	-14.56	QP
10.8258	20.35	9.9	30.25	50	-19.75	AVG
16.0092	37.69	10	47.69	60	-12.31	QP
16.0092	20.12	10	30.12	50	-19.88	AVG
24.7654	32.83	10.16	42.99	60	-17.01	QP
24.7654	16.39	10.16	26.55	50	-23.45	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

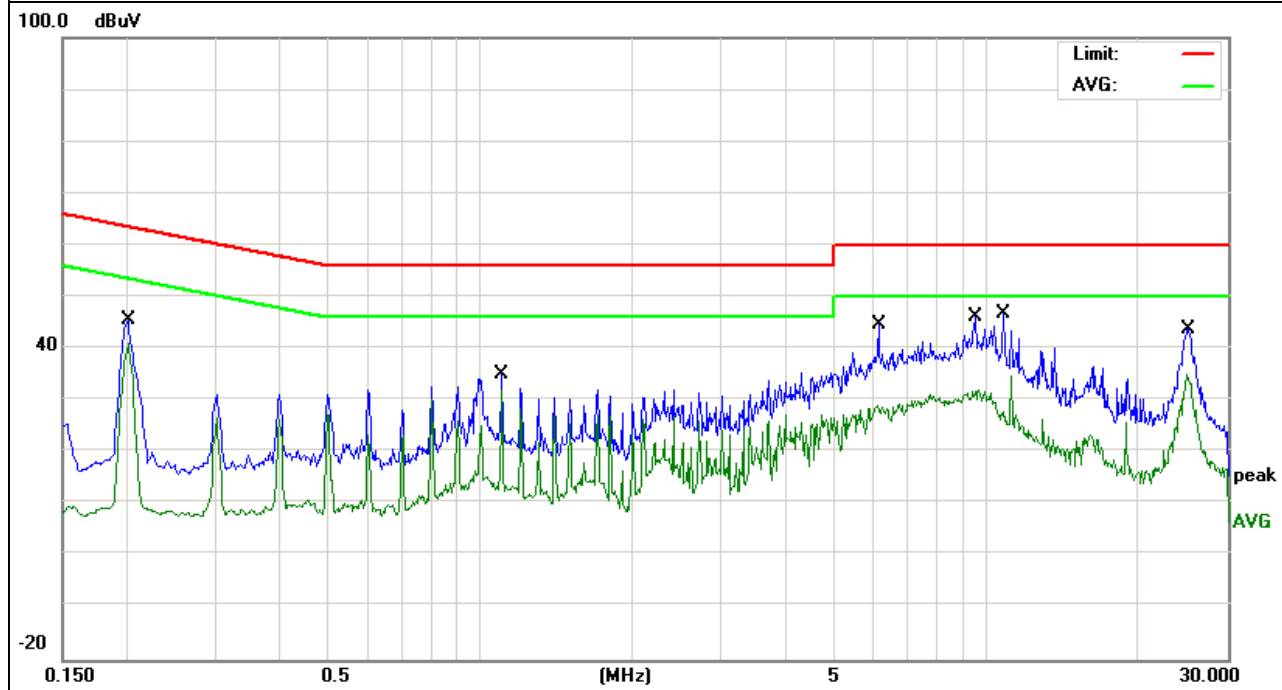


EUT:	8 inch Full Ruggedized Tablet	Model Name. :	xTablet T8540
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2016-12-28
Test Mode:	Mode 1	Phase :	L
Test Voltage:	DC 5V from PC AC 240V/60Hz		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.202	35.53	10.13	45.66	63.52	-17.86	QP
0.202	19.31	10.13	29.44	53.52	-24.08	AVG
1.106	25.36	9.76	35.12	56	-20.88	QP
1.106	15.49	9.76	25.25	46	-20.75	AVG
6.1299	34.93	9.83	44.76	60	-15.24	QP
6.1299	20.19	9.83	30.02	50	-19.98	AVG
9.5099	36.31	9.88	46.19	60	-13.81	QP
9.5099	16.57	9.88	26.45	50	-23.55	AVG
10.8215	36.94	9.9	46.84	60	-13.16	QP
10.8215	19.51	9.9	29.41	50	-20.59	AVG
25.1295	33.71	10.16	43.87	60	-16.13	QP
25.1295	19.86	10.16	30.02	50	-19.98	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

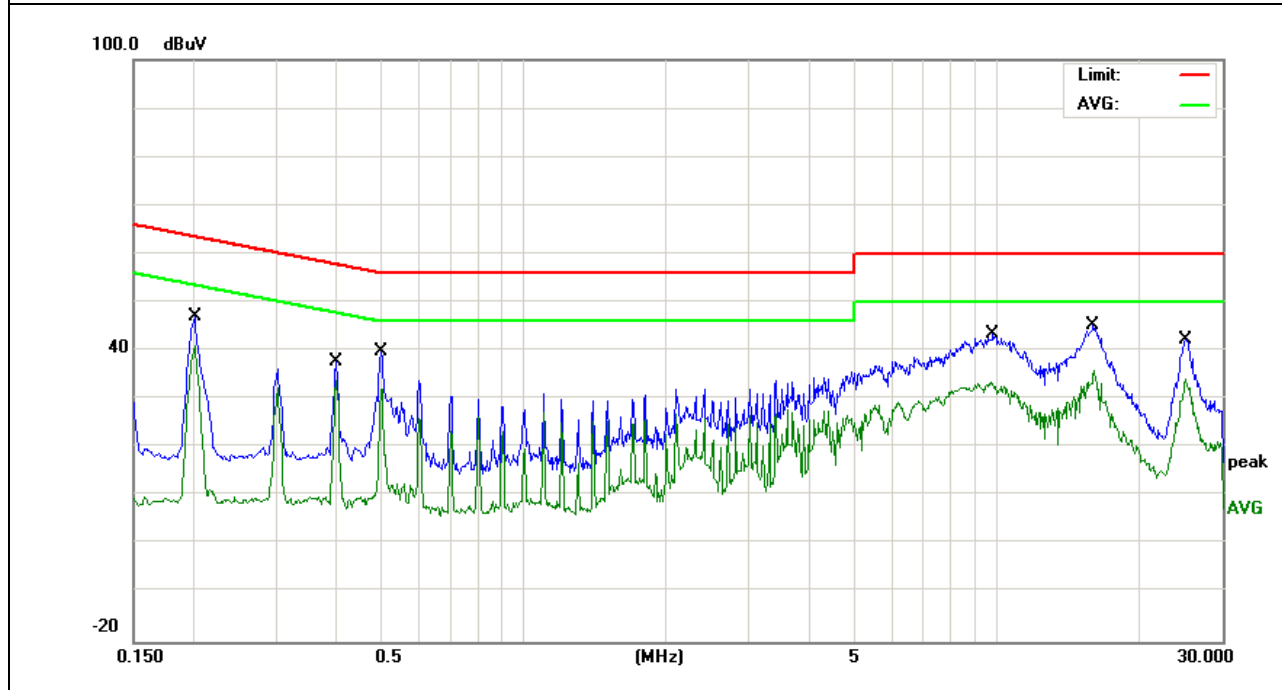


EUT:	8 inch Full Ruggedized Tablet	Model Name. :	xTablet T8540
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2016-12-28
Test Mode:	Mode 1	Phase :	N
Test Voltage:	DC 5V from PC AC 240V/60Hz		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.202	36.79	10.13	46.92	63.52	-16.6	QP
0.202	19.45	10.13	29.58	53.52	-23.94	AVG
0.402	27.76	9.94	37.7	57.81	-20.11	QP
0.402	16.51	9.94	26.45	47.81	-21.36	AVG
0.502	29.98	9.85	39.83	56	-16.17	QP
0.502	20.27	9.85	30.12	46	-15.88	AVG
9.8498	33.61	9.89	43.5	60	-16.5	QP
9.8498	18.85	9.89	28.74	50	-21.26	AVG
15.9739	35.33	10	45.33	60	-14.67	QP
15.9739	16.85	10	26.85	50	-23.15	AVG
25.1175	32.21	10.16	42.37	60	-17.63	QP
25.1175	18.25	10.16	28.41	50	-21.59	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



3.2 RADIATED EMISSION MEASUREMENT

3.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

FREQUENCY (MHz)	Class A (at 10m)	Class B (at 3m)
	dBuV/m	dBuV/m
30 ~ 88	39.0	40.0
88 ~ 216	43.5	43.5
216 ~ 960	46.5	46.0
Above 960	49.5	54.0

Notes:

- (1) The limit for radiated test was performed according to as following:
FCC PART 15B /ICES-003.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

3.2.2 TEST PROCEDURE

Test Arrangement for Radiated Emissions up to 1 GHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at an accredited test facility. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. 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 from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

Note: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for quasi-peak detection (QP) at frequency below 1GHz.

Test Arrangement for Radiated Emissions above 1 GHz.

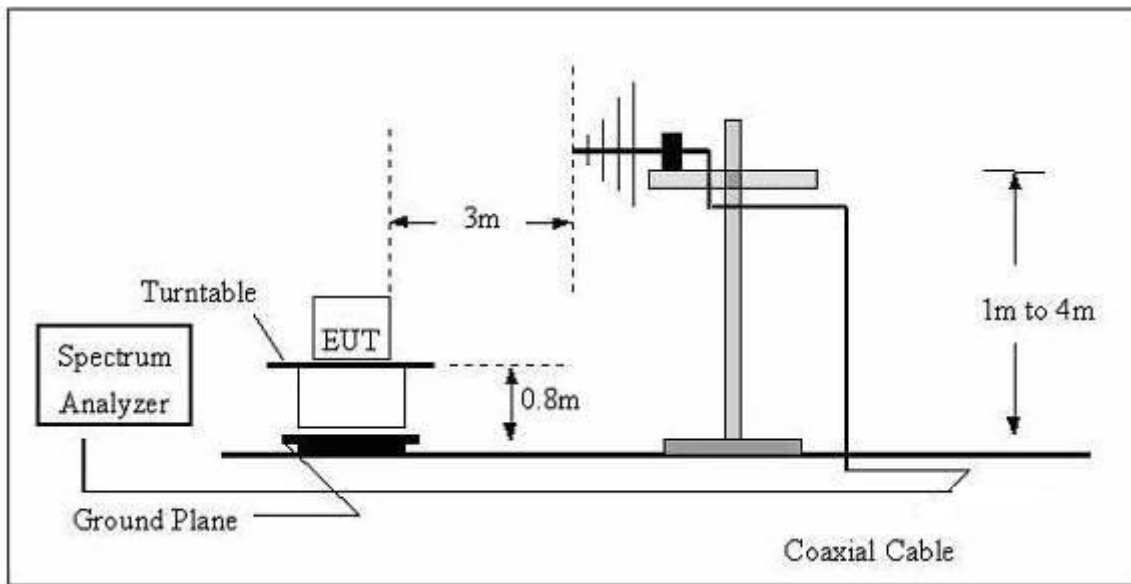
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at an accredited chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna can be varied from one meter to four meters, the height of adjustment depends on the EUT height and the antenna 3dB beamwidth both, to detect the maximum value of the field strength.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 and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

Note: For the hand-held device, the EUT should be measured for all 3 axes and only the worst case is recorded in the report
During the radiated emission test, the Spectrum Analyzer was set with the following configurations:

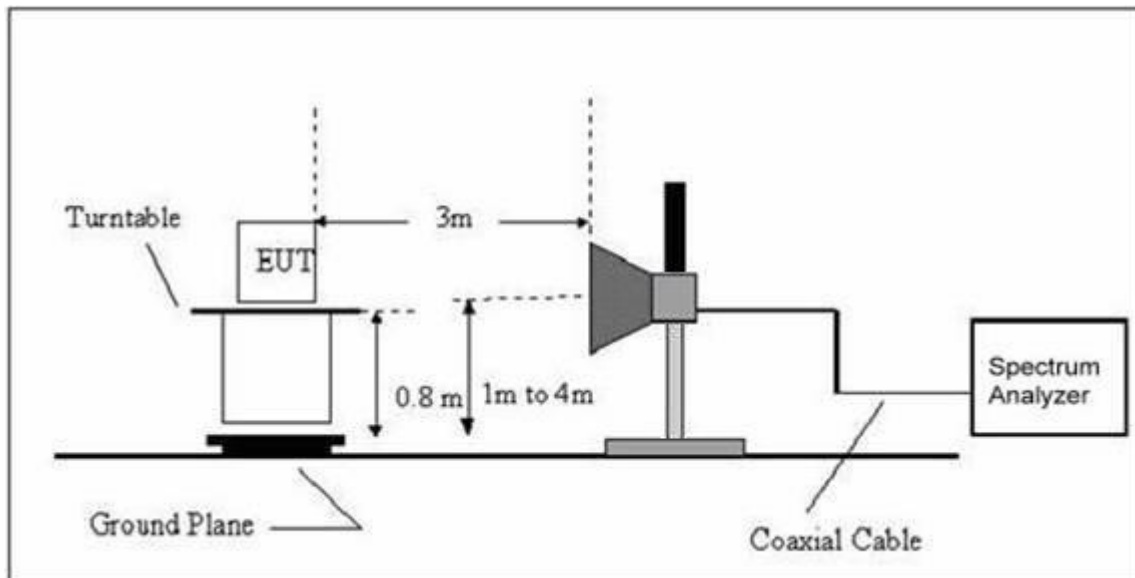
Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	QP	120 kHz	300 kHz
Above 1000	Peak	1 MHz	1 MHz
	Avg	1 MHz	10 Hz

3.2.3 TEST SETUP

For Radiated Emission 30~1000MHz



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



3.2.4 TEST RESULTS

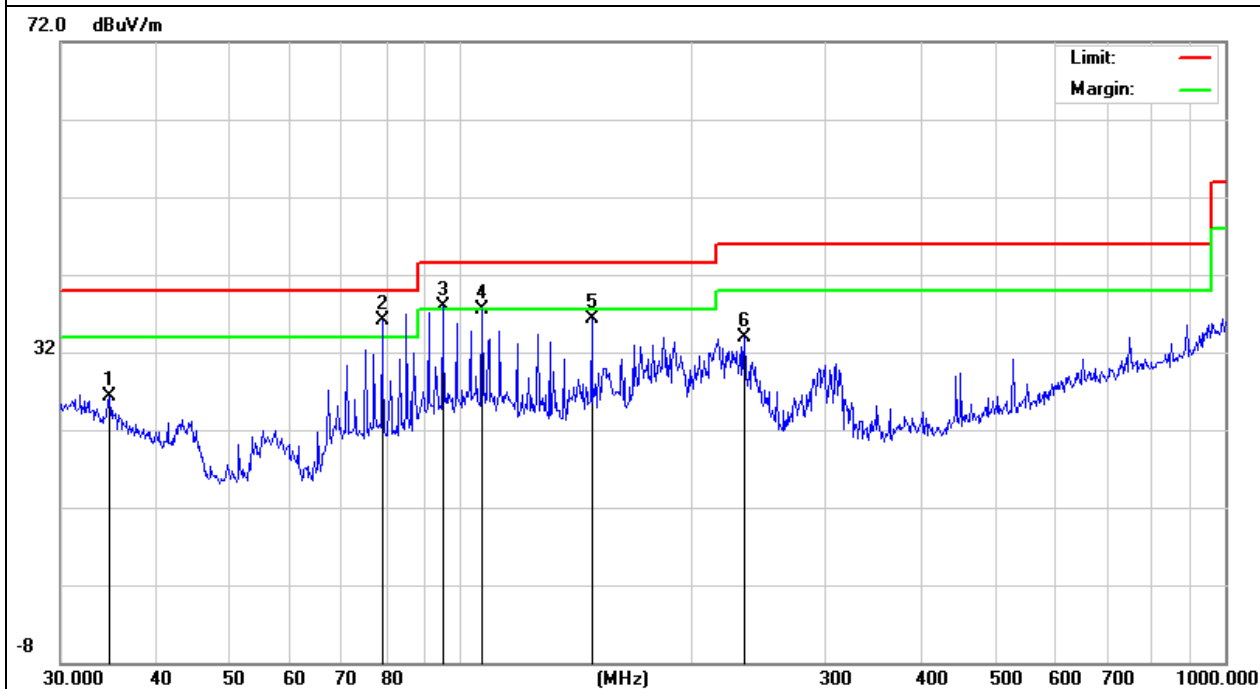
TEST RESULTS (30~1000 MHz)

EUT:	8 inch Full Ruggedized Tablet	Model Name:	xTablet T8540
Temperature:	24 °C	Relative Humidity:	54%
Pressure:	1010 hPa	Test Date :	2016-12-28
Test Mode :	Mode 1	Polarization :	Horizontal
Test Power :	DC 5V from Adapter AC 120V/60Hz		

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
H	34.7601	8.33	18.00	26.33	40	-13.67	QP
H	78.9652	25.93	10.16	36.09	40	-3.91	QP
H	94.7601	26.91	11.08	37.99	43.5	-5.51	QP
H	106.7587	26.19	11.32	37.51	43.5	-5.99	QP
H	148.441	23.58	12.69	36.27	43.5	-7.23	QP
H	234.9909	21.84	12.01	33.85	46	-12.15	QP

Remark:

Factor = Antenna Factor + Cable Loss - Amplifier.

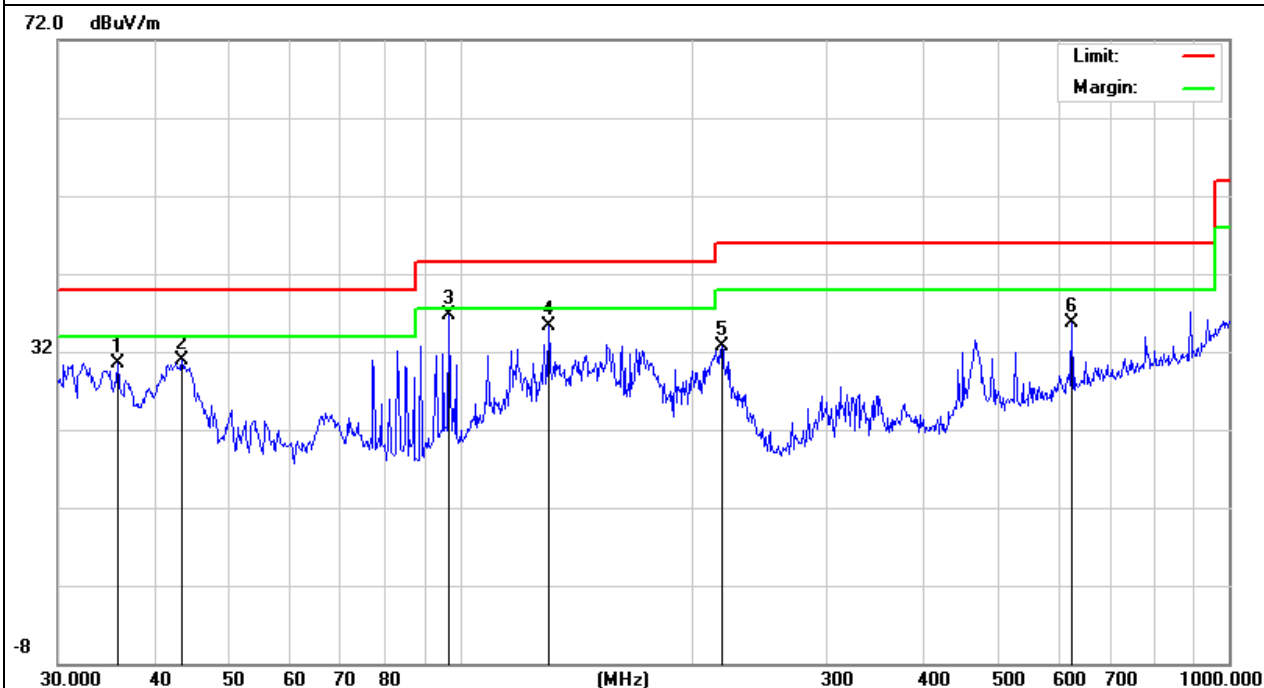


EUT:	8 inch Full Ruggedized Tablet	Model Name :	xTablet T8540
Temperature:	24 °C	Relative Humidity:	54%
Pressure:	1010 hPa	Test Date :	2016-12-28
Test Mode :	Mode 1	Polarization :	Vertical
Test Power :	DC 5V from Adapter AC 120V/60Hz		

Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark
	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
V	35.8746	12.89	17.68	30.57	40	-9.43	QP
V	43.5056	17.33	13.56	30.89	40	-9.11	QP
V	96.7749	25.44	11.27	36.71	43.5	-6.79	QP
V	130.3788	23.33	11.99	35.32	43.5	-8.18	QP
V	219.0753	20.47	12.14	32.61	46	-13.39	QP
V	625.078	14.59	21.13	35.72	46	-10.28	QP

Remark:

Factor = Antenna Factor + Cable Loss - Amplifier.



3.2.5 TEST RESULTS(1000~25000MHz)

EUT:	8 inch Full Ruggedized Tablet	Model Name :	xTablet T8540
Temperature:	24 °C	Relative Humidity:	54%
Pressure:	1010 hPa	Test Date :	2016-12-28
Test Mode :	Mode 1		
Test Power :	DC 5V from Adapter AC 120V/60Hz		

All the modulation modes have been tested, and the worst result was report as below:

Polar (H/V)	Freque ncy	Readin g	Correc t	Result	Limit	Over Limit	Remar k
	(MHz)	(dBuV/ m)	dB/m	(dBuV/ m)	(dBuV/ m)	(dB)	
V	1454.232	55.19	-13.38	41.81	74	-32.19	Pk
V	1454.232	36.82	-13.38	23.44	54	-30.56	AV
V	2397.385	53.7	-10.1	43.6	74	-30.4	Pk
V	2397.385	37.69	-10.1	27.59	54	-26.41	AV
H	1438.681	36.89	-13.4	23.49	54	-30.51	Pk
H	1438.682	55.1	-13.4	41.7	74	-32.3	AV
H	2401.684	52.76	-10.12	42.64	74	-31.36	Pk
H	2401.684	36.27	-10.12	26.15	54	-27.85	AV

Remark:

Emission Level = Read Level+Antenna Factor + Cable Loss - Amplifier.

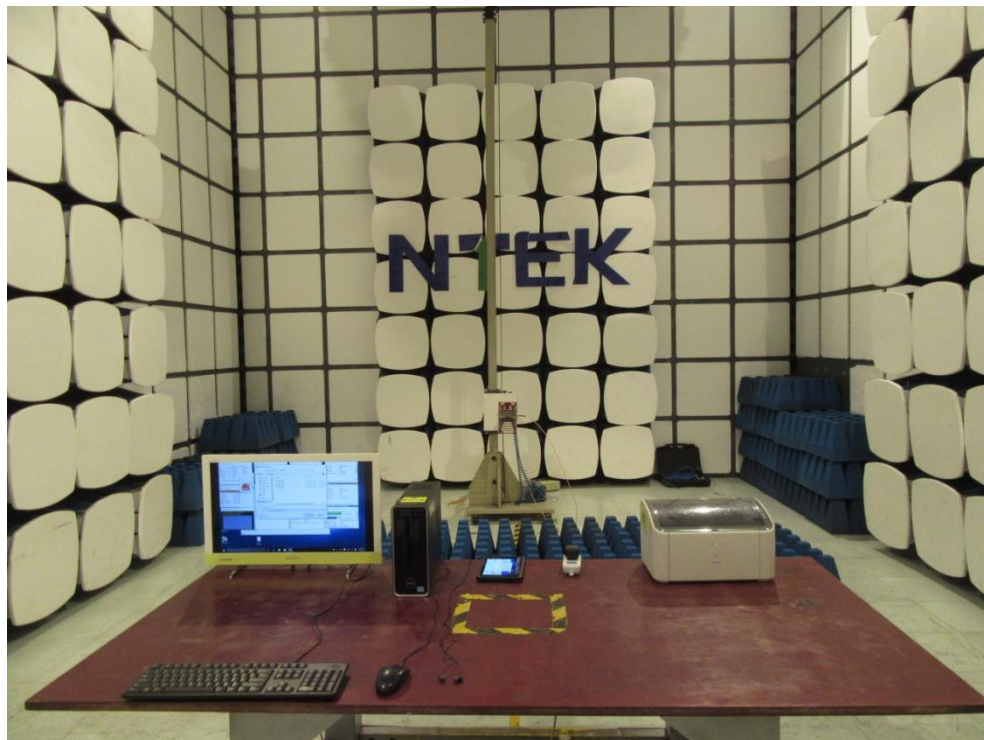
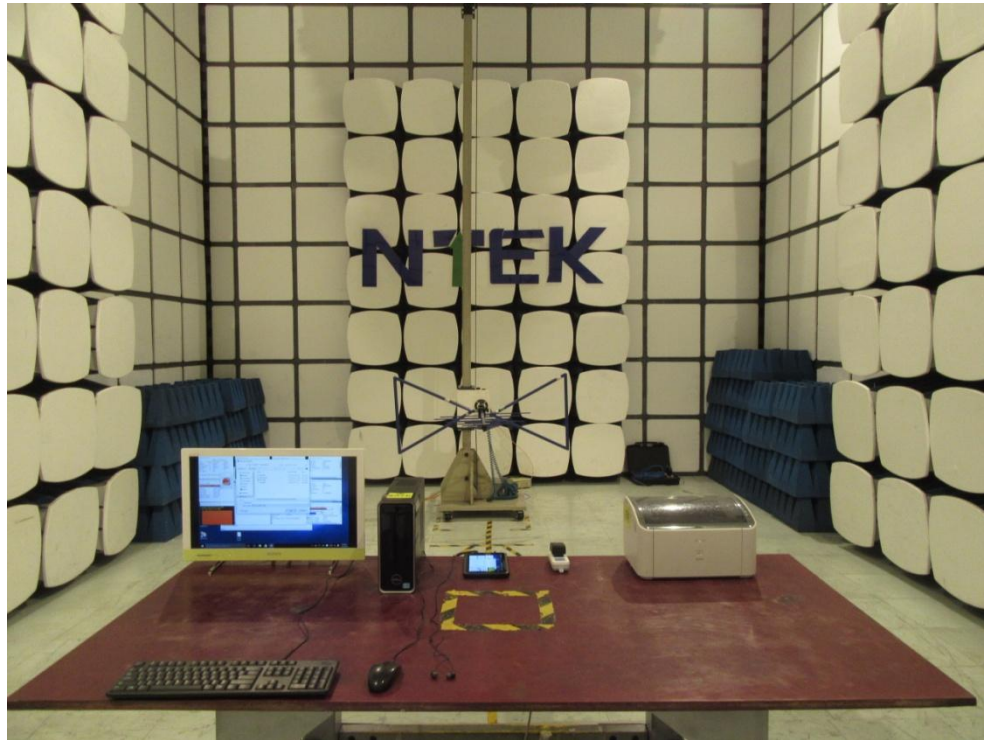
Margin= Emission Level-Limits

Note:

1. Measuring frequencies from 1 GHz to 25GHz.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode of the emission shown in Actual FS column.
3. The frequency that above 3GHz is mainly from the environment noise

4. EUT TEST PHOTO

Radiated Measurement Photos



Conducted Measurement Photos

