Shenzhen Huatongwei International Inspection Co., Ltd.
1/F,Bldg 3,Hongfa Hi-tech Industrial Park,Genyu Road,Tianliao,Gongming,Shenzhen,China
Phone:86-755-26748019 Fax:86-755-26748089 http://www.szhtw.com.cn

FCC REPORT

Report Reference No. ..... :	**TRE1607020505**	R/C….:19566
Applicant's name ..... :	**2AJE3TM101**	
Address.....:	**Tmax Digital, Inc.**	
Manufacturer.....:	4401 Eucalyptus Ave., #120,Chino, CA 91710,USA	
Address.....:	Shenzhen Alldocube technolygy and science Co.,Ltd.	
Test item description ..... :	Building No.1,Suwang Industrial Park,Xiahenglang Dalang,Longhua District,Shenzhen,China.	
Trade Mark .....:	**Tablet PC**	
Model/Type reference.....:	NUVISION	
List Model .....:	TM101W625L	
Standard ..... :	**47 CFR FCC Part 15 Subpart B - Unintentional Radiators** **ANSI C63.4: 2014**	
Date of receipt of test sample……..:	Jul.29, 2016	
Date of testing……:	Jul.30, 2016- Aug.15, 2016	
Date of issue……...:	Aug.16, 2016	
Result……...:	**Pass**	

Compiled by (position+printed name+signature)..:	File administrators Candy Liu	Candy Liu
Supervised by (position+printed name+signature)..:	Project Engineer Jeff Sun	Jeff Sun
Approved by (position+printed name+signature)..:	RF Manager Hans Hu	Hans Hu

Testing Laboratory Name ..... :	**Shenzhen Huatongwei International Inspection Co., Ltd**
Address.....:	1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China

Contents

1. TEST STANDARDS AND TEST DESCRIPTION

1.1. Test Standards

The tests were performed according to following standards:

47 CFR FCC Part 15 Subpart B - Unintentional Radiators

ANSI C63.4: 2014 – American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the
Range of 9 kHz to 40GHz

1.2. Test Description

Test Item	Section in CFR 47	Result
Conducted Emissions	15.107(a)	Pass
Radiated Emission	15.109(a)	Pass

Remark: The measurement uncertainty is not included in the test result.

2 . SUMMARY

2.1. Client Information

Applicant:	Tmax Digital, Inc.
Address:	4401 Eucalyptus Ave., #120,Chino, CA 91710,USA
Manufacturer:	Shenzhen Alldocube technolygy and science Co.,Ltd.
Address:	Building No.1,Suwang Industrial Park,Xiahenglang Dalang,Longhua District,Shenzhen,China.

2.2. Product Description

Name of EUT	Tablet PC
Trade Mark:	NUVISION
Model No.:	TM101W625L
List Model:	VT4-HD
Power supply:	DC 3.7V From internal battery
Adapter information:	Model:FJ-SW1260502000UU Input: AC 100-240V 50/60Hz 0.4A Max Output: 5Vd.c., 2000mA

2.3. EUT operation mode

The EUT has been tested under typical operating condition.

2.4. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

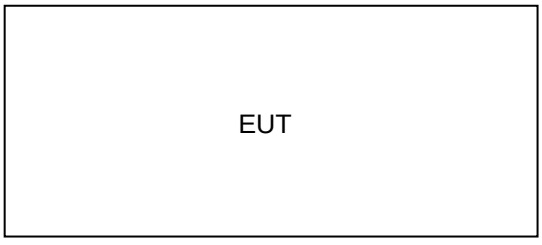
● - supplied by the manufacturer

○ - supplied by the lab

○	Power Cable	Length (m) :	/
		Shield :	/
		Detachable :	/
○	Multimeter	Manufacturer :	/
		Model No. :	/

2.5. Configuration of Tested System

Configuration of Tested System



3. TEST ENVIRONMENT

3.1. Address of the test laboratory

Laboratory:Shenzhen Huatongwei International Inspection Co., Ltd.
Address: 1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China
Phone: 86-755-26748019 Fax: 86-755-26748089

3.2. Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L1225
Shenzhen Huatongwei International Inspection Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories, Date of Registration: February 28, 2015. Valid time is until February 27, 2018.

A2LA-Lab Cert. No. 3902.01
Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing. Valid time is until December 31, 2016.

FCC-Registration No.: 317478
Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Registration 317478, Renewal date Jul. 18, 2014, valid time is until Jul. 18, 2017.

IC-Registration No.: 5377A&5377B
The 3m Alternate Test Site of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 5377A on Dec. 31, 2013, valid time is until Dec. 31, 2016.
Two 3m Alternate Test Site of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 5377B on Dec.03, 2014, valid time is until Dec.03, 2017.

ACA
Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our A2LA accreditation.

VCCI
Radiated disturbance above 1GHz measurement of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-292. Date of Registration: Dec. 24, 2013. Valid time is until Dec. 23, 2016.
Telecommunication Ports Conducted Interference Measurement of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: T-1837. Date of Registration: May 07, 2013. Valid time is until May 06, 2016.

DNV
Shenzhen Huatongwei International Inspection Co., Ltd. has been found to comply with the requirements of DNV towards subcontractor of EMC and safety testing services in conjunction with the EMC and Low voltage Directives and in the voluntary field. The acceptance is based on a formal quality Audit and follow-ups according to relevant parts of ISO/IEC Guide 17025 (2005), in accordance with the requirements of the DNV Laboratory Quality Manual towards subcontractors. Valid time is until Aug. 24, 2016.

3.3. Equipments Used during the Test

Conducted Emission					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal
1	EMI Test Receiver	Rohde & Schwarz	ESCI	101247	2015/11/03
2	Artificial Mains	Rohde & Schwarz	NNLK 8121	573	2015/11/03
3	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	101488	2015/11/03
4	Test Software	Rohde & Schwarz	ES-K1	N/A	N/A

Radiated Emission					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal.Due
1	Ultra-Broadband Antenna	ShwarzBeck	VULB9163	538	2015/11/08
2	EMI Test Receiver	Rohde & Schwarz	ESCI	101247	2015/11/03
3	EMI Test Software	Audix	E3	N/A	N/A
4	Turntable	MATURO	TT2.0	----	N/A
5	Antenna Mast	MATURO	TAM-4.0-P-12	----	N/A
6	EMI Test Software	Rohde & Schwarz	ESK1	N/A	N/A
7	Ultra-Broadband Antenna	Rohde&Schwarz	HL562	100015	2015/11/08
8	Amplifer	ShwarzBeck	BBV 9743	9743-0022	2015/11/03
9	TURNTABLE	ETS	2088	2149	N/A
10	HORN ANTENNA	Rohde&Schwarz	HF906	100039	2015/11/08

The calibration interval was one year.

3.4. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15~35°C
lative Humidity:	30~60 %
Air Pressure:	950~1050mba

3.5. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16 - 4 „Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements“ and is documented in the Shenzhen Huatongwei International Inspection Co., Ltd quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen Huatongwei laboratory is reported:

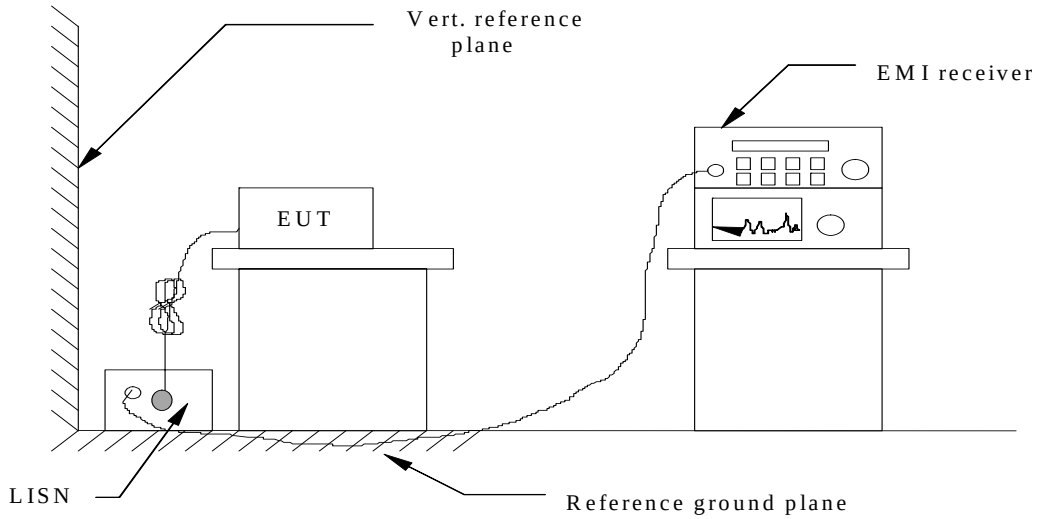
Test	Range	Measurement Uncertainty	Notes
Radiated Emission	30~1000MHz	4.24 dB	(1)
Radiated Emission	1~18GHz	5.16 dB	(1)
Radiated Emission	18-40GHz	5.54 dB	(1)
Conducted Disturbance	0.15~30MHz	3.39 dB	(1)

(1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

4. TEST CONDITIONS AND RESULTS

4.1. Conducted Emissions Test

TEST CONFIGURATION



TEST PROCEDURE

1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. The EUT is a tabletop system; a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4:2014.
2. Support equipment, if needed, was placed as per ANSI C63.4:2014.
3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4:2014.
4. The EUT received DC 5.0 from USB powered from AC120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
5. All support equipments received AC power from a second LISN, if any.
6. The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
7. Analyzer / Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes.
8. During the above scans, the emissions were maximized by cable manipulation.

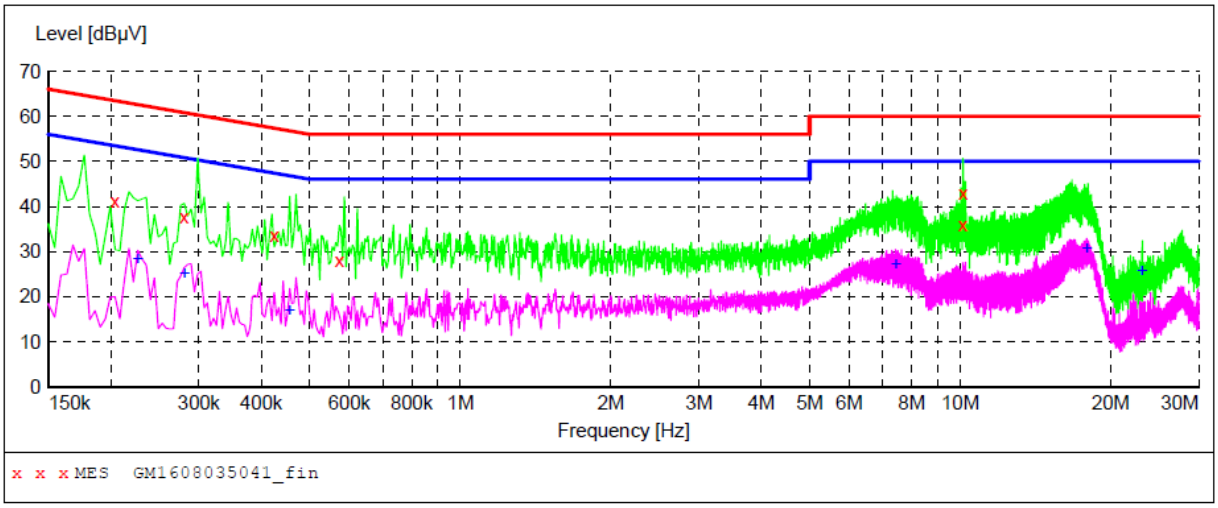
CONDUCTED POWER LINE EMISSION LIMIT

For unintentional device, according to § 15.107(a) Line Conducted Emission Limits is as following：

Frequency (MHz)	Maximum RF Line Voltage (dBμV)			
	CLASS A		CLASS B	
	Q.P.	Ave.	Q.P.	Ave.
0.15 - 0.50	79	66	66-56*	56-46*
0.50 - 5.00	73	60	56	46
5.00 - 30.0	73	60	60	50

* Decreasing linearly with the logarithm of the frequency

TEST RESULTS



MEASUREMENT RESULT: "GM1608035041_fin"

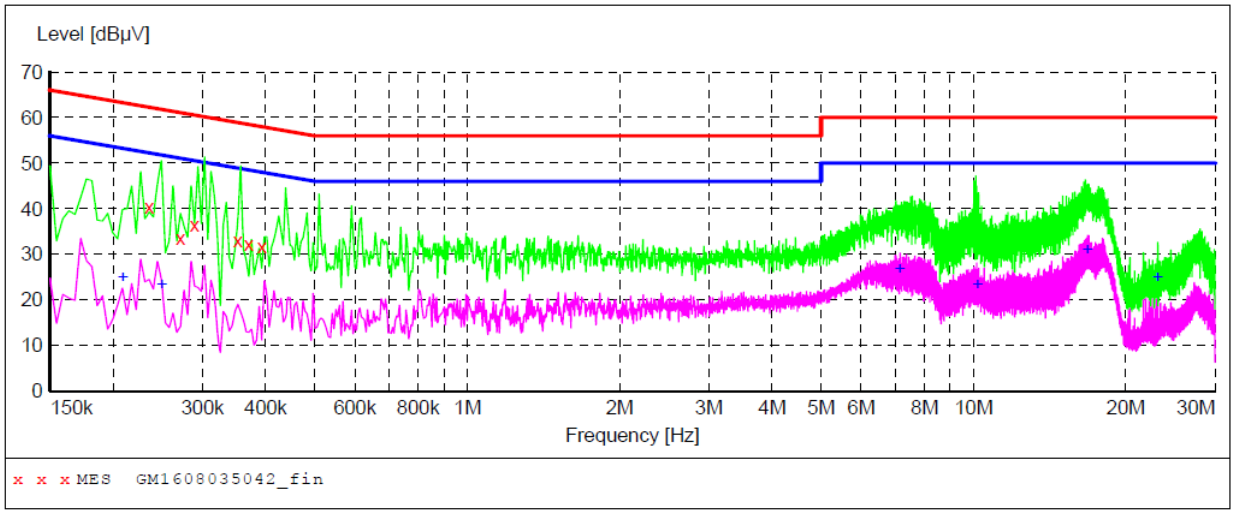
8/3/2016 1:56PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.204000	41.20	10.2	63	22.2	QP	L1	GND
0.280500	37.80	10.2	61	23.0	QP	L1	GND
0.424500	33.50	10.2	57	23.9	QP	L1	GND
0.573000	28.00	10.2	56	28.0	QP	L1	GND
10.117500	35.90	10.7	60	24.1	QP	L1	GND
10.135500	42.80	10.7	60	17.2	QP	L1	GND

MEASUREMENT RESULT: "GM1608035041_fin2"

8/3/2016 1:56PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.226500	28.30	10.2	53	24.3	AV	L1	GND
0.280500	25.20	10.2	51	25.6	AV	L1	GND
0.456000	17.00	10.2	47	29.8	AV	L1	GND
7.435500	27.10	10.6	50	22.9	AV	L1	GND
17.889000	30.70	10.7	50	19.3	AV	L1	GND
23.131500	25.80	10.8	50	24.2	AV	L1	GND



MEASUREMENT RESULT: "GM1608035042_fin"

8/3/2016 1:59PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.235500	40.30	10.2	62	22.0	QP	N	GND
0.271500	33.60	10.2	61	27.5	QP	N	GND
0.289500	36.50	10.2	61	24.0	QP	N	GND
0.352500	33.10	10.2	59	25.8	QP	N	GND
0.370500	32.20	10.2	59	26.3	QP	N	GND
0.393000	31.80	10.2	58	26.2	QP	N	GND

MEASUREMENT RESULT: "GM1608035042_fin2"

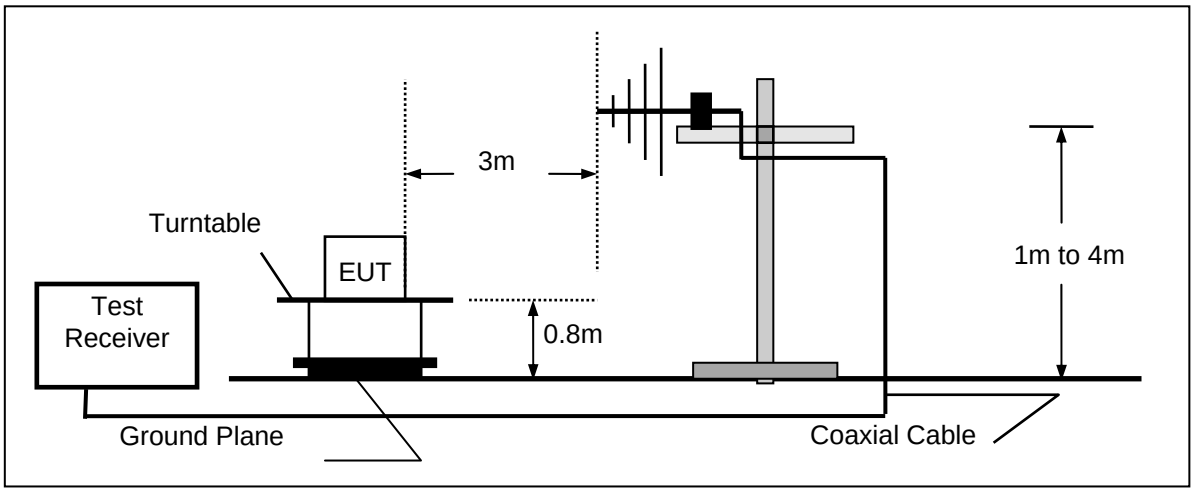
8/3/2016 1:59PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.208500	24.80	10.2	53	28.5	AV	N	GND
0.249000	23.30	10.2	52	28.5	AV	N	GND
7.138500	26.60	10.6	50	23.4	AV	N	GND
10.171500	23.20	10.7	50	26.8	AV	N	GND
16.773000	30.90	10.7	50	19.1	AV	N	GND
23.131500	24.90	10.8	50	25.1	AV	N	GND

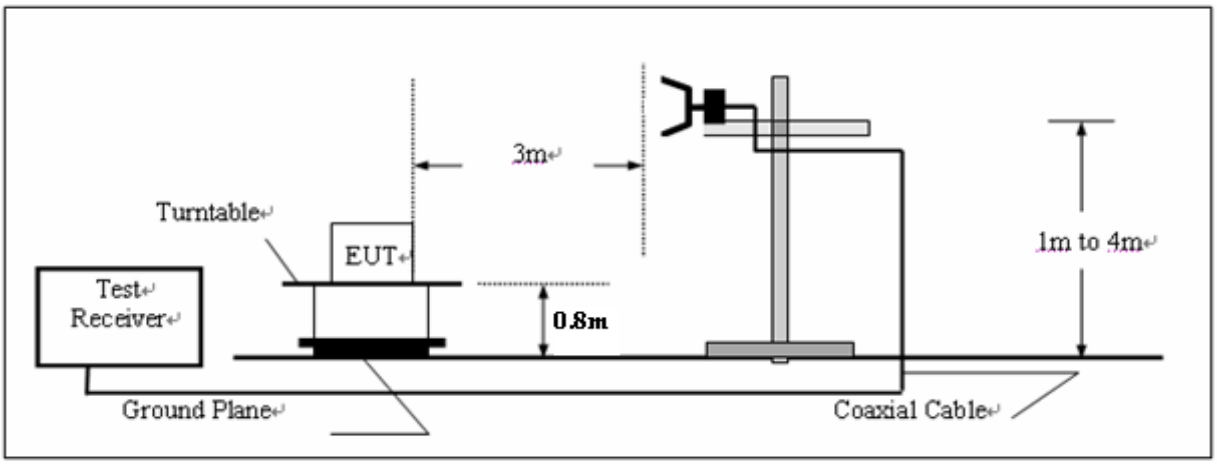
4.2. Radiated Emission Test

TEST CONFIGURATION

a) Radiated Emission Test Set-Up, Frequency below 1000MHz



b) Radiated Emission Test Set-Up, Frequency above 1000MHz



TEST PROCEDURE

1. The EUT is placed on a turntable, which is 0.8m above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until the measurements for all frequencies are complete.
7. The maximum operation frequency was 512MHz, the radiated emission test frequency from 30MHz to 18GHz.

FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

FS = RA + AF + CL - AG

Where FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
RA = Reading Amplitude	AG = Amplifier Gain
AF = Antenna Factor	

For example

Frequency (MHz)	FS (dBμV/m)	RA (dBμV/m)	AF (dB)	CL (dB)	AG (dB)	Transd (dB)
300.00	40	58.1	12.2	1.6	31.90	-18.1

Transd=AF +CL-AG

RADIATION LIMIT

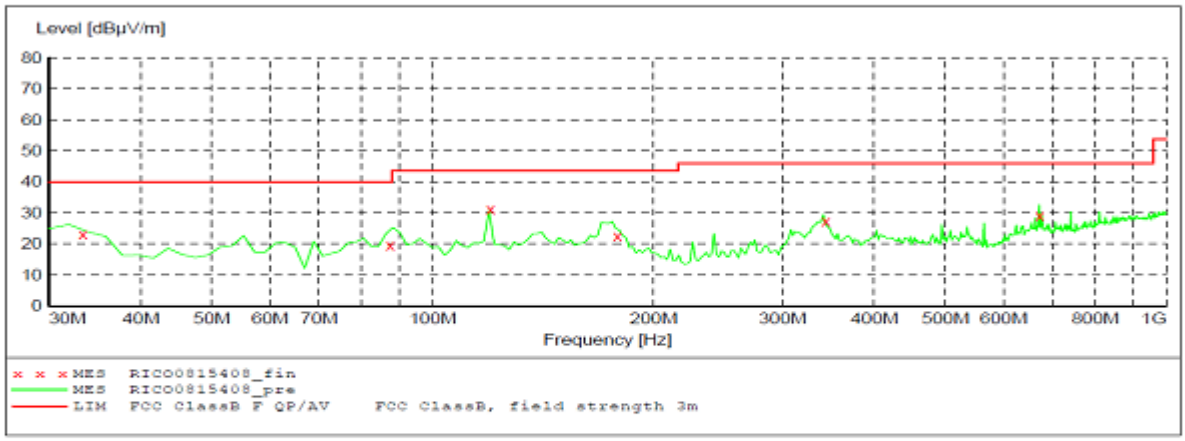
For unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values：

Frequency (MHz)	Distance (Meters)	Radiated (dBμV/m)	Radiated (μV/m)
30-88	3	40.0	100
88-216	3	43.5	150
216-960	3	46.0	200
Above 960	3	54.0	500

TEST RESULTS

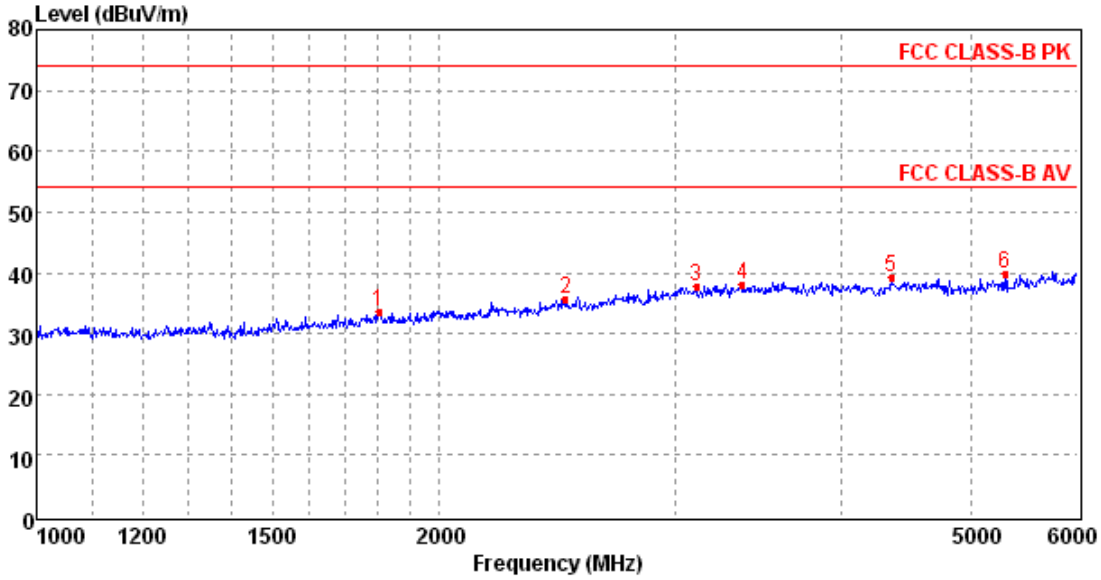
SCAN TABLE: "test Field(30M-1G)OP"

Short Description:			Field Strength(30M-1G)			
Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	60.0 kHz	QuasiPeak	1.0 s	120 kHz	HL562 201106



MEASUREMENT RESULT: "RICO0815408_fin"

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
33.360000	9.70	-11.8	40.0	30.3	QP	150.0	160.00	VERTICAL
87.600000	22.10	-19.2	40.0	17.8	QP	100.0	0.00	VERTICAL
120.000000	31.20	-17.8	43.5	12.3	QP	101.0	0.00	VERTICAL
178.740000	22.40	-20.7	43.5	21.1	QP	100.0	133.00	VERTICAL
343.740000	21.60	-14.7	46.0	24.4	QP	99.0	180.00	VERTICAL
672.720000	28.00	-7.5	46.0	18.0	QP	100.0	172.00	VERTICAL



Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	1803.07	39.44	25.60	5.80	37.10	33.74	74.00	-40.26	Peak
2	2484.85	38.52	27.85	6.96	37.65	35.68	74.00	-38.32	Peak
3	3114.21	38.91	28.55	8.33	37.99	37.80	74.00	-36.20	Peak
4	3369.66	38.74	28.65	8.64	37.99	38.04	74.00	-35.96	Peak
5	4353.74	38.17	30.51	8.88	38.24	39.32	74.00	-34.68	Peak
6	5292.74	36.72	31.93	9.51	38.41	39.75	74.00	-34.25	Peak

```
Short Description:              Field Strength(30M-1G)
Start       Stop        Step        Detector  Meas.     IF       Transducer
Frequency   Frequency   Width                 Time      Bandw.
30.0 MHz    1.0 GHz     60.0 kHz    QuasiPeak 1.0 s     120 kHz  HL562 201106
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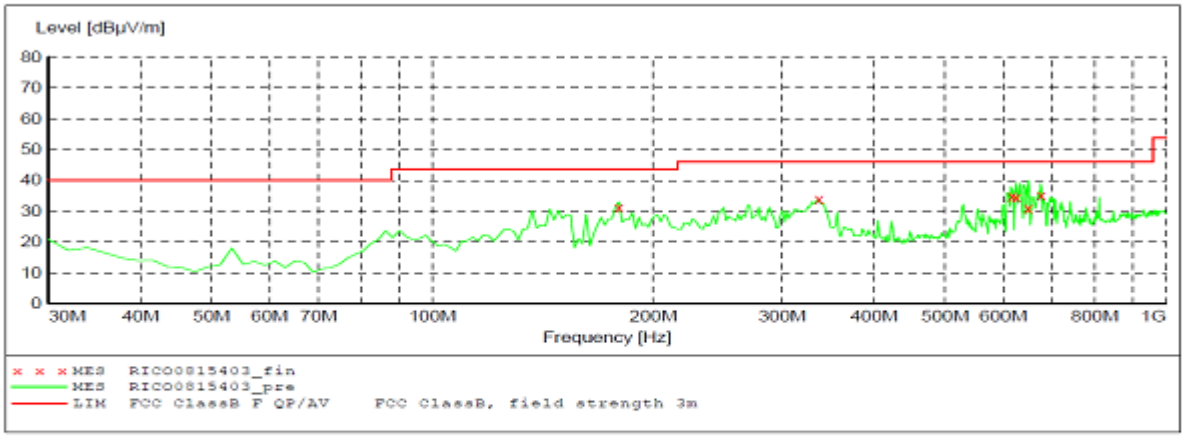
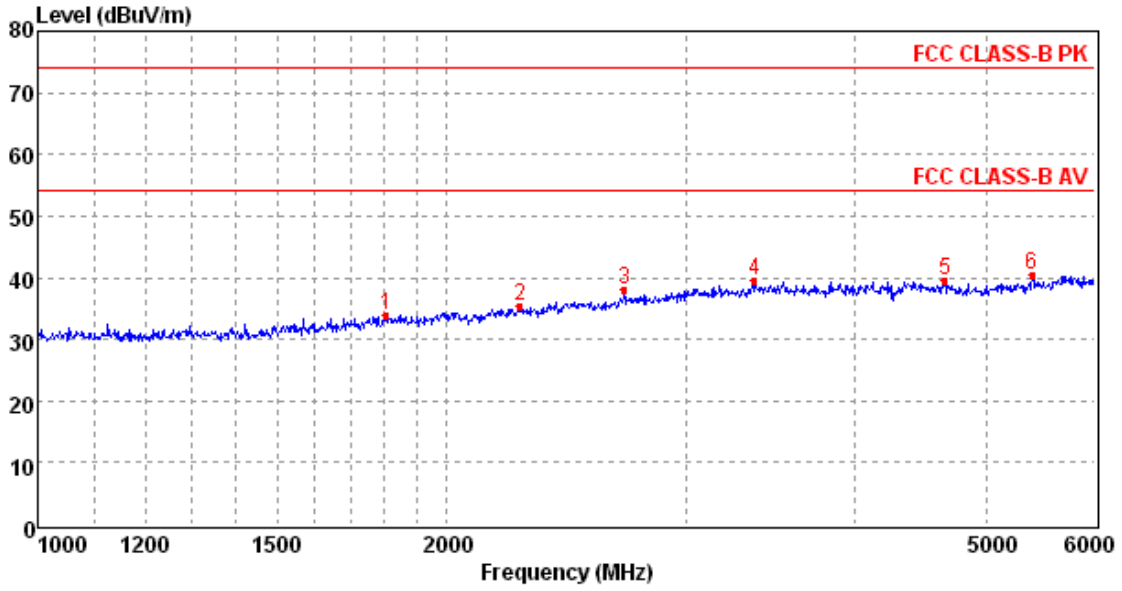


MEASUREMENT RESULT: "RICO0815403_fin"

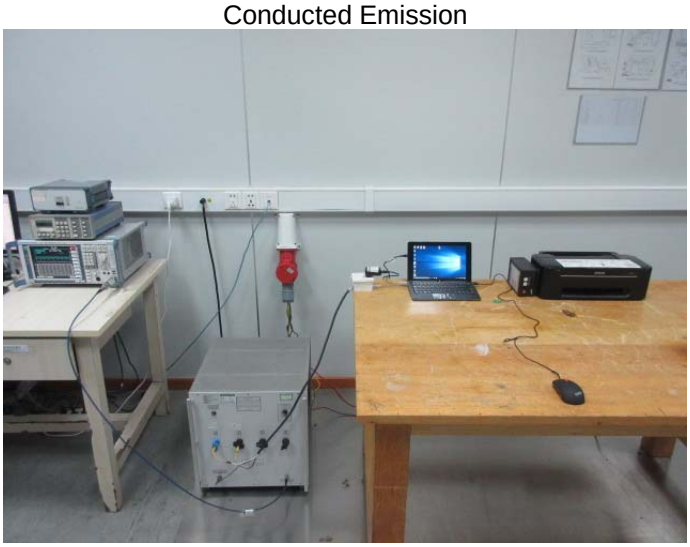
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
179.700000	31.30	-20.5	43.5	12.2	QP	150.0	225.00	HORIZONTAL
336.780000	33.90	-14.6	46.0	12.1	QP	99.0	243.00	HORIZONTAL
617.340000	34.70	-9.3	46.0	11.3	QP	101.0	155.00	HORIZONTAL
625.620000	34.50	-9.0	46.0	11.5	QP	99.0	192.00	HORIZONTAL
649.140000	31.00	-8.4	46.0	15.0	QP	100.0	126.00	HORIZONTAL
676.020000	35.10	-7.5	46.0	10.9	QP	100.0	159.00	HORIZONTAL



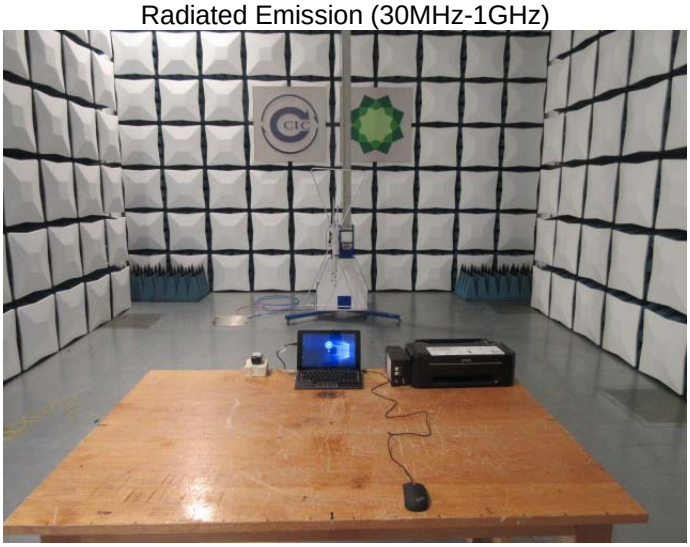
Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	1806.30	39.69	25.61	5.81	37.10	34.01	74.00	-39.99	Peak
2	2263.79	39.01	27.11	6.61	37.48	35.25	74.00	-38.75	Peak
3	2703.17	40.12	28.16	7.49	37.80	37.97	74.00	-36.03	Peak
4	3369.66	40.28	28.65	8.64	37.99	39.58	74.00	-34.42	Peak
5	4652.15	37.81	31.00	9.10	38.44	39.47	74.00	-34.53	Peak
6	5398.09	36.92	32.15	9.57	38.34	40.30	74.00	-33.70	Peak

5. Test Setup Photos of the EUT

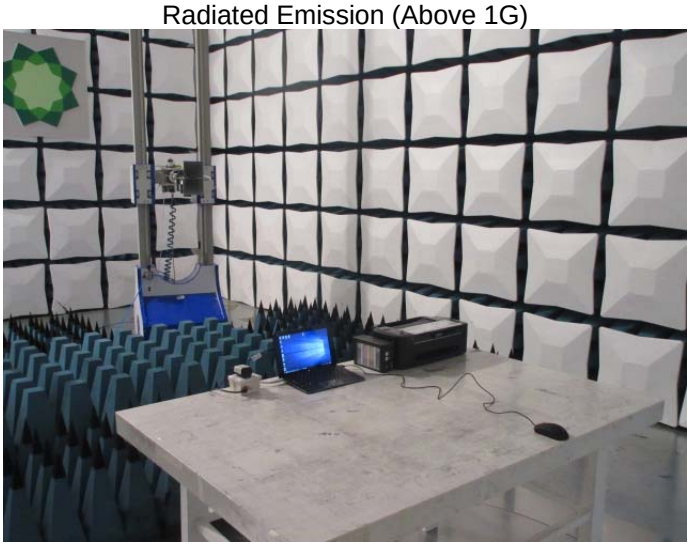
Conducted Emission



Radiated Emission (30MHz-1GHz)



Radiated Emission (Above 1G)



6. External and Internal Photos of the EUT

Reference to Test Report TRE1607020501

.....End of Report.....