

MRT Technology (Taiwan) Co., Ltd

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# **MEASUREMENT REPORT**

# FCC Part 15B

FCC ID 2ACC5-GT500

**APPLICANT:** AMobile Intelligent Corp.

**Application Type:** Certification

**Product:** 5" Rugged Android™ Handheld Device with LTE solution

Model No.: GT-500 N

Brand Name: AMobile

FCC Classification: (JBP) Part 15 Class B Computing Device Peripheral

FCC Rule Part(s): FCC Part 15 Subpart B: 2018

Test Procedure(s): ANSI C63.4: 2014

**Test Date:** January 24 ~ 25, 2018

Tested By : Fran Chen

(Fran Chen)

Reviewed By : Paddy Chen

(Paddy Chen)

Approved By : am her

(Chenz Ker)



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.4-2014. Test results reported herein relate only to the item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Taiwan) Co., Ltd.

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# **Revision History**

Report No.	Version	Description	Issue Date	Note
1801TW1901-U1	1.0	Original Report	2018-01-31	

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# §2.1033 General Information

Applicant	AMobile Intelligent Corp.		
Applicant Address	8F1, No.700, Zhongzheng Rd., Zhonghe Dist.,New Taipei City 235, Taiwan		
Manufacturer	MAKER TECHNOLOGY		
Manufacturer Address	12th Floor,NO.82 building,NO.1198 North QinzhouRoad,Xuhui District,Shanghai,China		
Test Site	MRT Technology (Taiwan) Co., Ltd		
Test Site Address	No. 38, Fuxing Second Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C)		
MRT FCC Registration No.	153292		
Model No.	GT-500 N		
Test Device Serial No.	N/A ☐ Production ☐ Pre-Production ☐ Engineering		

# **Test Facility / Accreditations**

Measurements were performed at MRT Laboratory located in Fuxing Rd., Taoyuan, Taiwan (R.O.C)

- MRT facility is a FCC registered (Reg. No. 153292) test facility with the site description report on file and is designated by the FCC as an Accredited Test Film.
- MRT facility is an IC registered (MRT Reg. No. 21723-1) test laboratory with the site description on file at Industry Canada.
- MRT Lab is accredited to ISO 17025 by the Taiwan Accreditation Foundation (TAF Cert. No. 3261) in EMC, Telecommunications and Radio testing for FCC, Industry Taiwan, EU and TELEC Rules.

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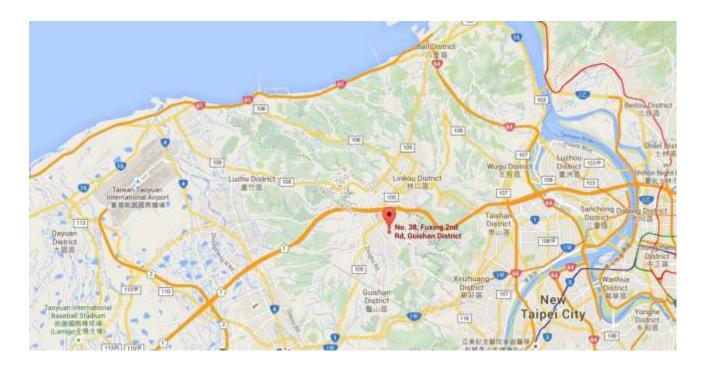
## 1. INTRODUCTION

## 1.1. Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Industry Canada Certification and Engineering Bureau.

### 1.2. MRT Test Location

The map below shows the location of the MRT LABORATORY, its proximity to the Taoyuan City. These measurement tests were conducted at the MRT Technology (Taiwan) Co., Ltd. Facility located at No.38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 33377, Taiwan (R.O.C).



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# 2. PRODUCT INFORMATION

# 2.1. Equipment Description

Product Name	5" Rugged Android™ Handheld Device with LTE solution
FCC ID	2ACC5-GT500
Model No.	GT-500 N
Trad Mark	<b>△</b> Mobile

## 2.2. Test Mode

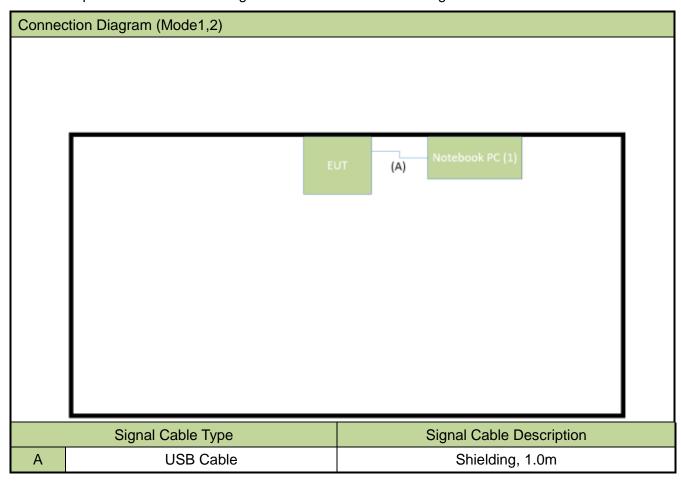
Pre-Test Mode			
EMI Mode	Mode 1: Data Link		
	Mode 2: Charging		
Final Test Mode			
EMI Mode	Mode 1: Data Link		
	Mode 2: Charging		

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# 2.3. Test Configuration

The **5" Rugged Android™ Handheld Device with LTE solution** was tested per the guidance FCC Part 15 Subpart B: 2018 and ANSI C63.4: 2014 was used to reference the appropriate EUT setup for radiated spurious emissions testing and AC line conducted testing.





# 2.4. Test System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

	Product	Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook PC	Lenovo	T450	PC0BH4FR	Non-shielding, 0.8m

## 2.5. Test Software

Not applicable.

# 2.6. EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and/or no modifications were made during testing.

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### 3. DESCRIPTION OF TEST

#### 3.1. Evaluation Procedure

The measurement procedures described in the American National Standard for Methods of Measurement of Radio-Noise Emission from Low-Voltage Electrical Equipment in the Range of 9kHz to 18GHz (ANSI C63.4-2014) was used in the measurement of the **5" Rugged Android™** Handheld Device with LTE solution.

Deviation from measurement procedure......None

#### 3.2. AC Line Conducted Emissions

The line-conducted facility is located inside an 8'x4'x3' shielded enclosure. A 1m x 2m wooden table 80cm high is placed 40cm away from the vertical wall and 80cm away from the sidewall of the shielded room. Two 10kHz-30MHz,  $50\Omega/50$ uH Line-Impedance Stabilization Networks (LISNs) are bonded to the shielded room floor. Power to the LISNs is filtered by external high-current high-insertion loss power line filters. These filters attenuate ambient signal noise from entering the measurement lines. These filters are also bonded to the shielded enclosure.

The EUT is powered from one LISN and the support equipment is powered from the second LISN. If the EUT is a DC-powered device, power will be derived from the source power supply it normally will be powered from and this supply line(s) will be connected to the second LISN. All interconnecting cables more than 1 meter were shortened to a 1 meter length by non-inductive bundling (serpentine fashion) and draped over the back edge of the test table. All cables were at least 40cm above the horizontal reference ground-plane. Power cables for support equipment were routed down to the second LISN while ensuring that that cables were not draped over the second LISN. Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The RF output of the LISN was connected to the receiver and exploratory measurements were made to determine the frequencies producing the maximum emission from the EUT. The receiver was scanned from 150 kHz to 30 MHz. The detector function was set to peak mode for exploratory measurements while the bandwidth of the analyzer was set to 9 kHz. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Each emission was also maximized by varying: power lines, the mode of operation or resolution, clock or data exchange speed, scrolling H pattern to the EUT and/or support equipment whichever determined the worst-case emission. Once the worst case emissions have been identified, the one EUT cable configuration/arrangement and mode of operation that produced these emissions are used for final measurements on the same test site.

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Line conducted emissions test results are shown in Section 6.2.



#### 3.3. Radiated Emissions

The radiated test facilities consisted of an indoor 3 meter semi-anechoic chamber used for final measurements and exploratory measurements, when necessary. The measurement area is contained within the semi-anechoic chamber which is shielded from any ambient interference. For measurements above 1GHz absorbers are arranged on the floor between the turn table and the antenna mast in such a way so as to maximize the reduction of reflections. For measurements below 1GHz, the absorbers are removed. An MF Model 210SS turntable is used for radiated measurement. It is a continuously rotatable, remote controlled, metallic turntable and 2 meters (6.56 ft.) in diameter. The turn table is flush with the raised floor of the chamber in order to maintain its function as a ground plane. An 80cm high PVC support structure is placed on top of the turntable. For all measurements, the spectrum was scanned through all EUT azimuths and from 1 to 4 meter receive antenna height using a broadband antenna from 30 MHz up to the upper frequency shown in 15.33(b)(1) depending on the highest frequency generated or used in the device or on which the device operates or tunes. For frequencies above 1GHz, linearly polarized double ridge horn antennas were used. For frequencies below 30 MHz, a calibrated loop antenna was used. When exploratory measurements were necessary, they were performed at 1 meter test distance inside the semi-anechoic chamber using broadband antennas, broadband amplifiers, and spectrum analyzers to determine the frequencies and modes producing the maximum emissions. Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The test set-up was placed on top of the 0.8 meter high, 1 x 1.5 meter table. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Appropriate precaution was taken to ensure that all emissions from the EUT were maximized and investigated. The system configuration, mode of operation, if applicable, turntable azimuth, and receive antenna height was noted for each frequency found. Final measurements were made in the semi-anechoic chamber using calibrated, linearly polarized broadband and horn antennas. The test setup was configured to the setup that produced the worst case emissions. The spectrum analyzer was set to investigate all frequencies required for testing to compare the highest radiated disturbances with respect to the specified limits. The turntable containing the EUT was rotated through 360 degrees and the height of the receive antenna was varied 1 to 4 meters and stopped at the azimuth and height producing the maximum emission. Each emission was maximized by changing the orientation of the EUT through three orthogonal planes and changing the polarity of the receive antenna, whichever produced the worst-case emissions. According to 3dB beam-width of horn antenna, the horn antenna should be always directed to the EUT when rising height.

Radiated emissions test results are shown in Section 6.3.

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# 4. TEST EQUIPMENT CALIBRATION DATE

## Conducted Emissions - SR2

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR3	MRTTWA00009	1 year	2018/3/16
Two-Line V-Network	R&S	ENV216	MRTTWA00019	1 year	2018/3/15
Two-Line V-Network	R&S	ENV216	MRTTWA00020	1 year	2018/4/18

## Radiated Emissions - AC1

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR3	MRTTWA00009	1 year	2018/3/16
Signal Analyzer	R&S	FSV40	MRTTWA00007	1 year	2018/3/16
Broadband Preamplifier	Schwarzbeck	BBV 9718	MRTTWA00005	1 year	2018/4/19
Broadband TRILOG Antenna	Schwarzbeck	VULB 9162	MRTTWA00001	1 year	2018/5/14
Broadband Horn antenna	Schwarzbeck	BBHA 9120D	MRTTWA00003	1 year	2018/4/17

#### **Test Software**

Software	Version	Function
e3	9.160520a	EMI Test Software
EMI	V3	EMI Test Software

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## 5. MEASUREMENT UNCERTAINTY

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.

## AC Conducted Emission Measurement – SR2

Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 150kHz~30MHz: 2.42dB

## Radiated Emission Measurement – AC1

Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 4.22dB

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# 6. TEST RESULT

# 6.1. Summary

Product Name: 5" Rugged Android™ Handheld Device with LTE solution

Applicant: AMobile Intelligent Corp.

Test Mode: Mode 1: Data Link

Mode 2: Charging

FCC Part Section(s)	Test Description	Test Result
15.107	Conducted Emissions	Pass
15.109	Radiated Emissions	Pass

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## 6.2. Conducted Emission Measurement

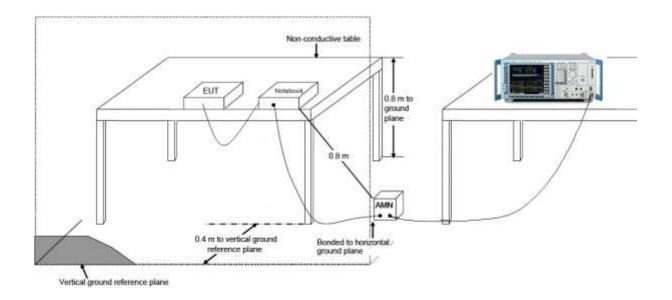
## 6.2.1. Test Limit

FCC Part 15.107 Limits				
Frequency (MHz)	QP (dBµV)	ΑV (dBμV)		
0.15 - 0.50	66 - 56	56 - 46		
0.50 - 5.0	56	46		
5.0 - 30	60	50		

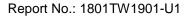
Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

## 6.2.2. Test Setup



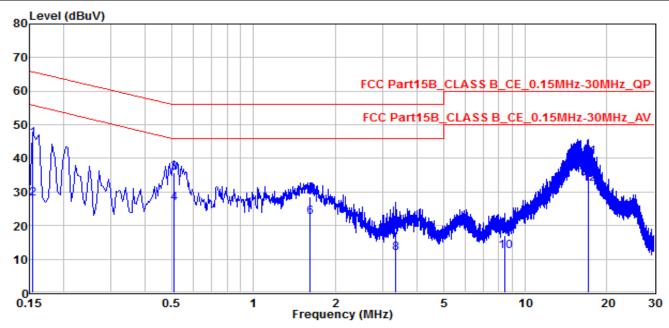
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### 6.2.3. Test Result of Conducted Emissions

EUT	GT-500 N	Date of Test	2018/01/25
Factor	CE_ENV216-L1 (Filter ON)	Temp. / Humidity	24°C / 68%
Polarity	Line1	Site / Test Engineer	SR2 / Fran
Test Mode	Mode1	Test Voltage	AC 120V/60Hz



No		Frequency	Reading	C.F	Measurement	Margin	Limit	Remark
No		(MHz)	(dBuV)	(dB)	(dBuV)	(dB)	(dBuV)	(QP/PK/AV)
1		0.1545	36.03	9.9	45.93	-19.82	65.75	QP
2		0.1545	18.17	9.9	28.07	-27.68	55.75	Average
3		0.50996	25.7	10.09	35.79	-20.21	56	QP
4		0.50996	16.57	10.09	26.66	-19.34	46	Average
5		1.617	18.8	9.87	28.67	-27.33	56	QP
6		1.617	12.78	9.87	22.65	-23.35	46	Average
7		3.336	8.46	9.81	18.27	-37.73	56	QP
8		3.336	2.08	9.81	11.89	-34.11	46	Average
9		8.434	7.32	9.8	17.12	-42.88	60	QP
10		8.434	2.45	9.8	12.25	-37.75	50	Average
11	*	17.118	30.38	9.98	40.36	-19.64	60	QP
12	*	17.118	22.58	9.98	32.56	-17.44	50	Average

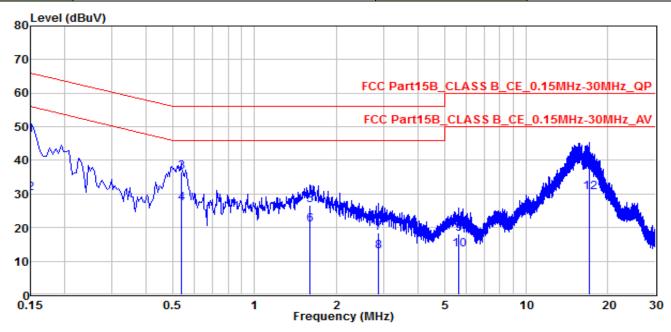
# Note:

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Factor (dB)+ Cable Loss (dB)
- 3. Measurement (dBuV) = Reading(dBuV)+ C.F ( Correction Factor )

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EUT	GT-500 N	Date of Test	2018/01/25
Factor	CE_ENV216-N (Filter ON)	Temp. / Humidity	24°C / 68%
Polarity	Neutral	Site / Test Engineer	SR2 / Fran
Test Mode	Mode1	Test Voltage	AC 120V/60Hz



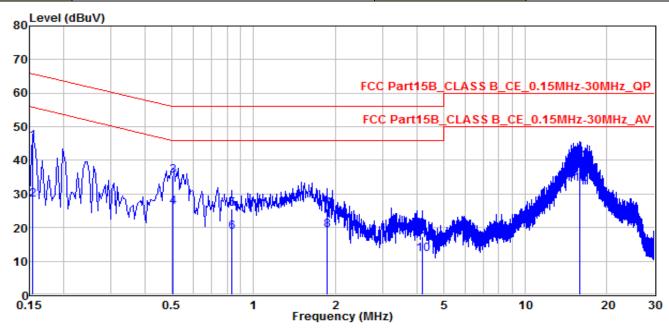
NIa		Frequency	Reading	C.F	Measurement	Margin	Limit	Remark
No		(MHz)	(dBuV)	(dB)	(dBuV)	(dB)	(dBuV)	(QP/PK/AV)
1	*	0.15	37.88	9.8	47.68	-18.32	66	QP
2	*	0.15	20.43	9.8	30.23	-25.77	56	Average
3		0.53696	26.38	10.1	36.48	-19.52	56	QP
4		0.53696	17.2	10.1	27.3	-18.7	46	Average
5		1.608	16.82	9.87	26.69	-29.31	56	QP
6		1.608	10.92	9.87	20.79	-25.21	46	Average
7		2.872	8.69	9.84	18.53	-37.47	56	QP
8		2.872	3.19	9.84	13.03	-32.97	46	Average
9		5.662	8.31	9.78	18.09	-41.91	60	QP
10		5.662	3.62	9.78	13.4	-36.6	50	Average
11		17.095	27.62	10.03	37.65	-22.35	60	QP
12		17.095	20.56	10.03	30.59	-19.41	50	Average

- 1. "  $^*$ ", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Factor (dB)+ Cable Loss (dB)
- 3. Measurement (dBuV) = Reading(dBuV)+ C.F ( Correction Factor )

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EUT	GT-500 N	Date of Test	2018/01/25
Factor	CE_ENV216-L1 (Filter ON)	Temp. / Humidity	24°C / 68%
Polarity	Line1	Site / Test Engineer	SR2 / Fran
Test Mode	Mode2	Test Voltage	AC 120V/60Hz



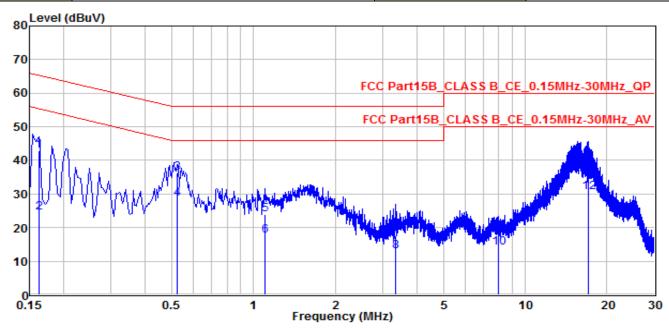
Na		Frequency	Reading	C.F	Measurement	Margin	Limit	Remark
No		(MHz)	(dBuV)	(dB)	(dBuV)	(dB)	(dBuV)	(QP/PK/AV)
1	*	0.1545	35.84	9.9	45.74	-20.01	65.75	QP
2		0.1545	18.4	9.9	28.3	-27.45	55.75	Average
3		0.50546	25.31	10.09	35.4	-20.6	56	QP
4		0.50546	16	10.09	26.09	-19.91	46	Average
5		0.83393	15.55	9.95	25.5	-30.5	56	QP
6		0.83393	8.86	9.95	18.81	-27.19	46	Average
7		1.864	15.65	9.87	25.52	-30.48	56	QP
8		1.864	9.42	9.87	19.29	-26.71	46	Average
9		4.177	7.59	9.78	17.37	-38.63	56	QP
10		4.177	2.43	9.78	12.21	-33.79	46	Average
11		15.894	29.71	9.98	39.69	-20.31	60	QP
12	*	15.894	22.92	9.98	32.9	-17.1	50	Average

- 1. "  $^*$ ", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Factor (dB)+ Cable Loss (dB)
- 3. Measurement (dBuV) = Reading(dBuV)+ C.F ( Correction Factor )

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EUT	GT-500 N	Date of Test	2018/01/25
Factor	CE_ENV216-N (Filter ON)	Temp. / Humidity	24°C / 68%
Polarity	Neutral	Site / Test Engineer	SR2 / Fran
Test Mode	Mode2	Test Voltage	AC 120V/60Hz



NIa		Frequency	Reading	C.F	Measurement	Margin	Limit	Remark
No		(MHz)	(dBuV)	(dB)	(dBuV)	(dB)	(dBuV)	(QP/PK/AV)
1		0.1635	32.88	10.09	42.97	-22.31	65.28	QP
2		0.1635	14.35	10.09	24.44	-30.84	55.28	Average
3	*	0.52346	26.15	10.11	36.26	-19.74	56	QP
4	*	0.52346	18.44	10.11	28.55	-17.45	46	Average
5		1.108	13.96	9.88	23.84	-32.16	56	QP
6		1.108	7.72	9.88	17.6	-28.4	46	Average
7		3.336	7.75	9.82	17.57	-38.43	56	QP
8		3.336	3.02	9.82	12.84	-33.16	46	Average
9		7.952	8.79	9.82	18.61	-41.39	60	QP
10		7.952	4.24	9.82	14.06	-35.94	50	Average
11		17.118	27.24	10.03	37.27	-22.73	60	QP
12		17.118	20.48	10.03	30.51	-19.49	50	Average

- 1. "  $^*$ ", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Factor (dB)+ Cable Loss (dB)
- 3. Measurement (dBuV) = Reading(dBuV)+ C.F ( Correction Factor )

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## 6.3. Radiated Emission Measurement

### 6.3.1. Test Limit

	FCC Part 15.109 Limits							
Frequency (MHz)	Distance (m)	Level (dBµV/m)						
30 - 88	3	40						
88 - 216	3	43.5						
216 - 960	3	46						
Above 960	3	54						

Note 1: The lower limit shall apply at the transition frequency.

Note 2: Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

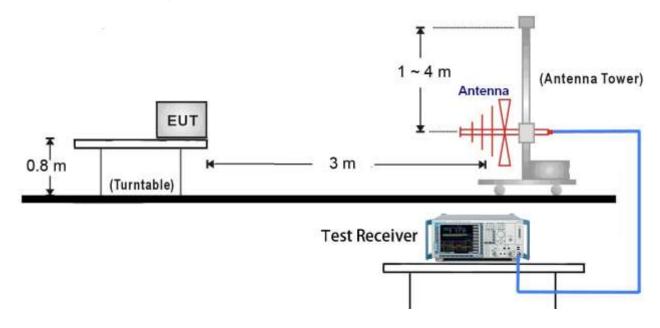
Note 3: E field strength  $(dB\mu V/m) = 20 \log E$  field strength (uV/m)

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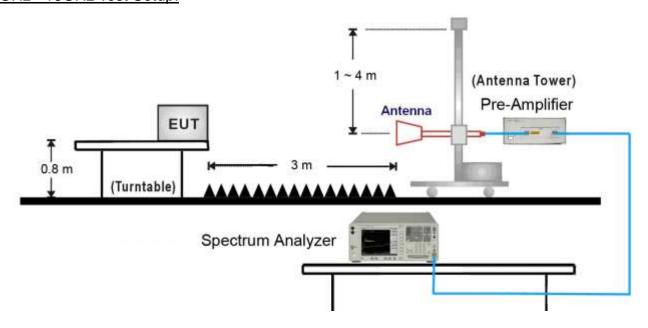


# 6.3.2. Test Setup

# 30MHz ~ 1GHz Test Setup:



# 1GHz ~18GHz Test Setup:



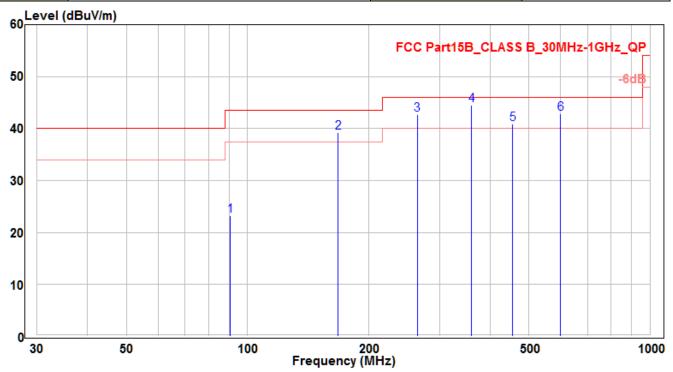
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### 6.3.3. Test Result

EUT	GT-500 N	Date of Test	2018/01/24
Factor	VULB 9162 (30MHz~8GHz)	Temp. / Humidity	25°C / 58%
Polarity	Horizontal	Site / Test Engineer	AC1 / Fran
Test Mode	Mode1	Test Voltage	AC 120V/60Hz



No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INO		(MHz)	(dBuV)	(dB)	(dBuV/m)	(dB)	(dBuV)	(cm)	(deg)	(QP/PK/AV)
1		90.716	5.9	17.35	23.25	-20.25	43.5	125	300	QP
2		167.983	22.6	16.56	39.16	-4.34	43.5	130	360	QP
3		263.982	22.1	20.62	42.72	-3.28	46	135	40	QP
4	*	359.982	20.9	23.66	44.56	-1.44	46	100	120	QP
5		456.012	15.68	25.23	40.91	-5.09	46	150	400	QP
6		599.663	15.12	27.7	42.82	-3.18	46	105	-40	QP

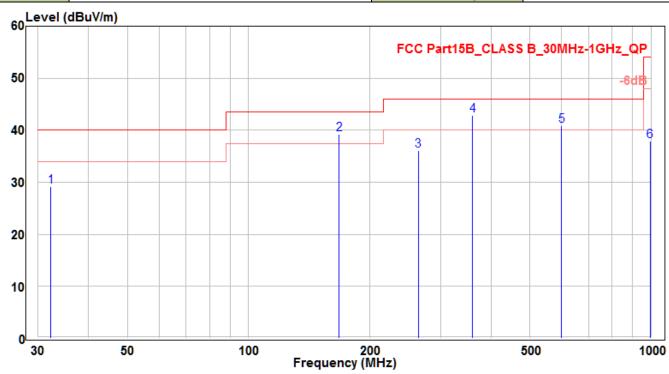
## Note:

- 1. " \* ", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB) Preamplifier(dB)
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F ( Correction Factor )

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EUT	GT-500 N	Date of Test	2018/01/24
Factor	VULB 9162 (30MHz~8GHz)	Temp. / Humidity	25°C / 58%
Polarity	Vertical	Site / Test Engineer	AC1 / Fran
Test Mode	Mode1	Test Voltage	AC 120V/60Hz



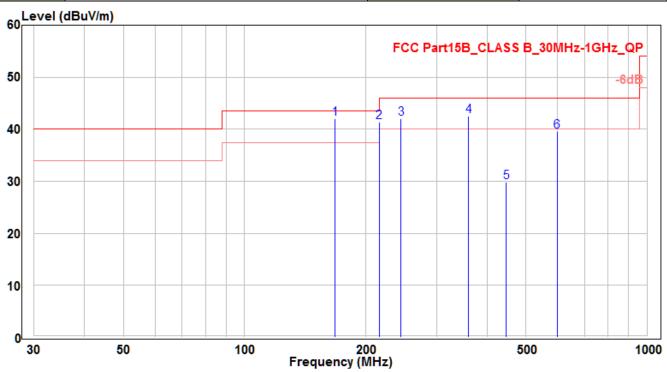
No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
No		(MHz)	(dBuV)	(dB)	(dBuV/m)	(dB)	(dBuV)	(cm)	(deg)	(QP/PK/AV)
1		32.243	10.84	18.36	29.2	-10.8	40	100	400	QP
2		167.983	22.64	16.56	39.2	-4.3	43.5	120	360	QP
3		264.013	15.44	20.62	36.06	-9.94	46	155	280	QP
4	*	359.982	19.19	23.66	42.85	-3.15	46	175	145	QP
5		599.723	13.2	27.7	40.9	-5.1	46	200	320	QP
6		996.12	5.09	32.79	37.88	-16.12	54	145	100	QP

- 1. " \* ", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB) Preamplifier(dB)
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F ( Correction Factor )

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EUT	GT-500 N	Date of Test	2018/01/24
Factor	VULB 9162 (30MHz~8GHz)	Temp. / Humidity	25°C / 58%
Polarity	Horizontal	Site / Test Engineer	AC1 / Fran
Test Mode	Mode2	Test Voltage	AC 120V/60Hz



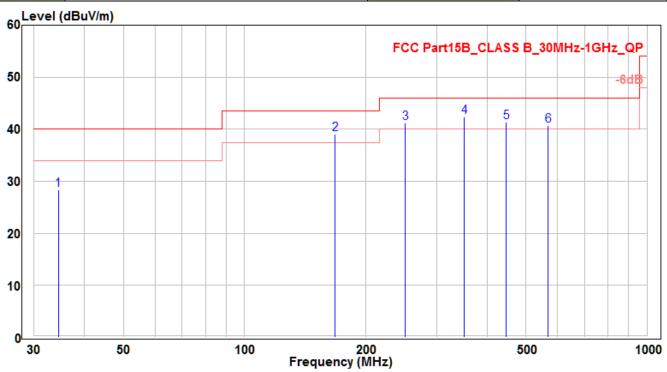
No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INO		(MHz)	(dBuV)	(dB)	(dBuV/m)	(dB)	(dBuV)	(cm)	(deg)	(QP/PK/AV)
1	*	167.983	25.5	16.56	42.06	-1.44	43.5	220	135	QP
2		215.998	22.5	18.95	41.45	-2.05	43.5	165	100	QP
3		245.007	21.7	20.37	42.07	-3.93	46	140	335	QP
4		359.982	18.8	23.66	42.46	-3.54	46	105	115	QP
5		446.918	4.8	25.03	29.83	-16.17	46	100	345	QP
6		597.844	11.82	27.67	39.49	-6.51	46	150	400	QP

- 1. " \* ", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB) Preamplifier(dB)
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F ( Correction Factor )

FCC ID: 2ACC5-GT500 Page Number: 23 of 29



EUT	GT-500 N	Date of Test	2018/01/24
Factor	VULB 9162 (30MHz~8GHz)	Temp. / Humidity	25°C / 58%
Polarity	Vertical	Site / Test Engineer	AC1 / Fran
Test Mode	Mode2	Test Voltage	AC 120V/60Hz



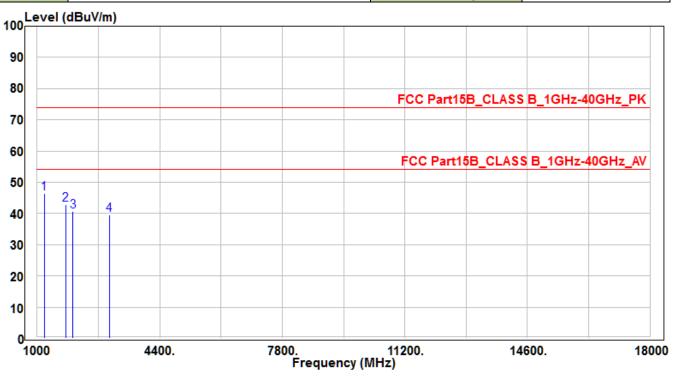
No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INO		(MHz)	(dBuV)	(dB)	(dBuV/m)	(dB)	(dBuV)	(cm)	(deg)	(QP/PK/AV)
1		34.486	9.53	18.82	28.35	-11.65	40	100	400	QP
2		167.983	22.47	16.56	39.03	-4.47	43.5	135	60	QP
3		250.675	20.73	20.54	41.27	-4.73	46	195	280	QP
4	*	351.373	18.81	23.54	42.35	-3.65	46	175	140	QP
5		446.706	16.35	25.03	41.38	-4.62	46	250	-40	QP
6		567.592	13.53	27.19	40.72	-5.28	46	115	170	QP

- 1. " \* ", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB) Preamplifier(dB)
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F ( Correction Factor )

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EUT	GT-500 N	Date of Test	2018/01/24
Factor	BBHA 9120D (1GHz~18GHz)	Temp. / Humidity	25°C / 58%
Polarity	Horizontal	Site / Test Engineer	AC1 / Fran
Test Mode	Mode1	Test Voltage	AC 120V/60Hz



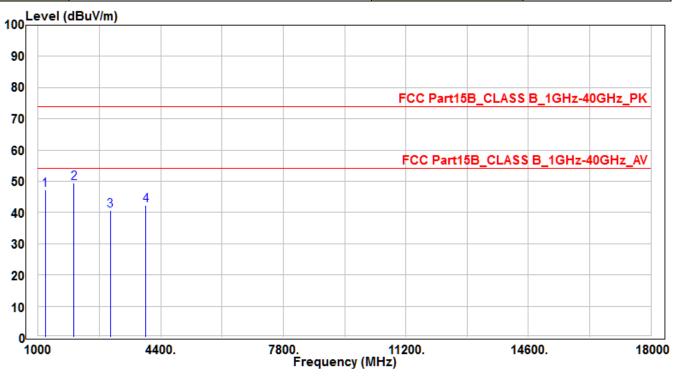
No		Frequency (MHz)	Reading (dBuV)	C.F (dB)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	1197.625	53.47	-7.07	46.4	-27.6	74	100	310	Peak
2		1795.281	48.23	-5.32	42.91	-31.09	74	100	60	Peak
3		1992.375	45.42	-4.65	40.77	-33.23	74	130	15	Peak
4		2998.031	42.6	-2.92	39.68	-34.32	74	130	260	Peak

- 1. " \* ", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB) Preamplifier(dB)
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F ( Correction Factor )

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EUT	GT-500 N	Date of Test	2018/01/24
Factor	BBHA 9120D (1GHz~18GHz)	Temp. / Humidity	25°C / 58%
Polarity	Vertical	Site / Test Engineer	AC1 / Fran
Test Mode	Mode1	Test Voltage	AC 120V/60Hz



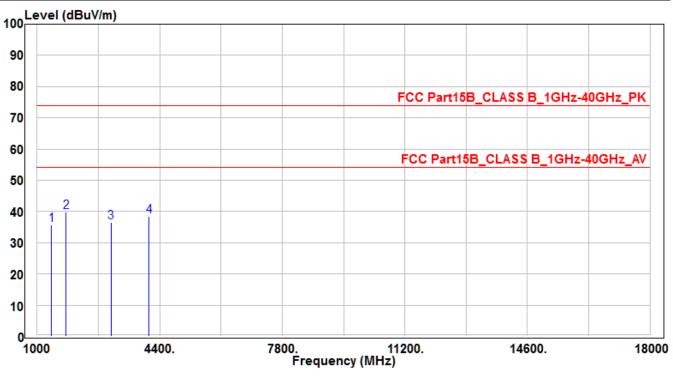
No		Frequency (MHz)	Reading (dBuV)	C.F (dB)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		1196.563	54.29	-7.07	47.22	-26.78	74	100	240	Peak
2	*	1993.969	54	-4.64	49.36	-24.64	74	100	400	Peak
3		2998.031	43.5	-2.92	40.58	-33.42	74	150	-25	Peak
4		3982.438	42.08	0.11	42.19	-31.81	74	140	110	Peak

- 1. " \* ", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB) Preamplifier(dB)
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F ( Correction Factor )

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EUT	GT-500 N	Date of Test	2018/01/24
Factor	BBHA 9120D (1GHz~18GHz)	Temp. / Humidity	25°C / 58%
Polarity	Horizontal	Site / Test Engineer	AC1 / Fran
Test Mode	Mode2	Test Voltage	AC 120V/60Hz



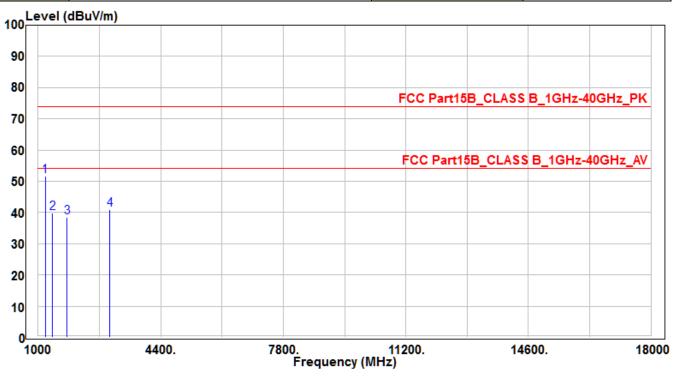
No		Frequency (MHz)	Reading (dBuV)	C.F (dB)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1		1396.313	42.31	-6.58	35.73	-38.27	74	100	105	Peak
2	*	1797.938	45.04	-5.31	39.73	-34.27	74	120	380	Peak
3		3049.563	39.24	-2.81	36.43	-37.57	74	100	70	Peak
4		4102.5	37.94	0.58	38.52	-35.48	74	135	-40	Peak

- 1. " \* ", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB) Preamplifier(dB)
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F ( Correction Factor )

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EUT	GT-500 N	Date of Test	2018/01/24
Factor	BBHA 9120D (1GHz~18GHz)	Temp. / Humidity	25°C / 58%
Polarity	Vertical	Site / Test Engineer	AC1 / Fran
Test Mode	Mode2	Test Voltage	AC 120V/60Hz



No		Frequency (MHz)	Reading (dBuV)	C.F (dB)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	1197.625	58.65	-7.07	51.58	-22.42	74	150	240	Peak
2		1398.438	46.51	-6.58	39.93	-34.07	74	120	340	Peak
3		1797.938	43.83	-5.31	38.52	-35.48	74	100	210	Peak
4		2991.656	43.74	-2.92	40.82	-33.18	74	100	310	Peak

- 1. " \* ", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB) Preamplifier(dB)
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F ( Correction Factor )

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# 7. CONCLUSION

The data collected relate only the item(s) tested and show that the 5" Rugged Android™ Handheld
Device with LTE solution has been tested to comply with the requirements specified in §15.107
and §15.109 of the FCC Rules.