

# FCC REPORT

**Applicant:** BLUE IDEA LIMITED

**Address of Applicant:** ROOMS 1318-19, 13F, HOLLYWOOD PLAZA, 610 NATHAN ROAD, KOWLOON, HONG KONG CHINA

## Equipment Under Test (EUT)

**Product Name:** GPS tracker

**Model No.:** T1, T3, T4, T5, T6, T7, T8

**Trade mark:** TAKIT

**FCC ID:** 2AIQ2-T1

**Applicable standards:** FCC CFR Title 47 Part 15 Subpart B

**Date of sample receipt:** 16 Jan., 2019

**Date of Test:** 16 Jan., to 22 May, 2019

**Date of report issued:** 23 May, 2019

**Test Result:** PASS \*

\* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Bruce Zhang  
Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the CCIS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

## 2 Version

Version No.	Date	Description
00	23 May, 2019	Original

**Tested by:**



**Date:**

23 May, 2019

**Test Engineer**

**Reviewed by:**



**Date:**

23 May, 2019

**Project Engineer**

### 3 Contents

	Page
<b>1 COVER PAGE.....</b>	<b>1</b>
<b>2 VERSION.....</b>	<b>2</b>
<b>3 CONTENTS.....</b>	<b>3</b>
<b>4 TEST SUMMARY.....</b>	<b>4</b>
<b>5 GENERAL INFORMATION.....</b>	<b>5</b>
5.1 CLIENT INFORMATION .....	5
5.2 GENERAL DESCRIPTION OF E.U.T. ....	5
5.3 TEST MODE.....	5
5.4 MEASUREMENT UNCERTAINTY.....	5
5.5 DESCRIPTION OF SUPPORT UNITS .....	6
5.6 RELATED SUBMITTAL(S) / GRANT (s).....	6
5.7 DESCRIPTION OF CABLE USED .....	6
5.8 LABORATORY FACILITY.....	6
5.9 LABORATORY LOCATION .....	6
5.10 TEST INSTRUMENTS LIST.....	7
<b>6 TEST RESULTS AND MEASUREMENT DATA.....</b>	<b>8</b>
6.1 CONDUCTED EMISSION.....	8
6.2 RADIATED EMISSION.....	13
<b>7 TEST SETUP PHOTO .....</b>	<b>23</b>
<b>8 EUT CONSTRUCTIONAL DETAILS .....</b>	<b>26</b>

## 4 Test Summary

Test Item	Section in CFR 47	Result
Conducted Emission	Part 15.107	Pass
Radiated Emission	Part 15.109	Pass

*Remark:*  
*Pass: The EUT complies with the essential requirements in the standard.*  
*N/A: The EUT not applicable of the test item.*

## 5 General Information

### 5.1 Client Information

Applicant:	BLUE IDEA LIMITED
Address:	ROOMS 1318-19, 13F, HOLLYWOOD PLAZA, 610 NATHAN ROAD, KOWLOON, HONG KONG CHINA
Manufacturer/ Factory:	BLUE IDEA LIMITED
Address:	ROOMS 1318-19, 13F, HOLLYWOOD PLAZA, 610 NATHAN ROAD, KOWLOON, HONG KONG CHINA

### 5.2 General Description of E.U.T.

Product Name:	GPS tracker
Model No.:	T1, T3, T4, T5, T6, T7, T8
Power supply:	Rechargeable Li-ion polymer Battery DC 3.8V/680mAh
Remark:	<ol style="list-style-type: none"> <li>Item No.: T1, T3, T4, T5, T6, T7, T8 were identical inside, the electrical circuit design, layout, components used and internal wiring, with only difference being model name.</li> <li>There are two kinds of machines for each model, with only difference being charging pin and have different charging dock: Machine A charging pin is on the bottom of the machine Machine B has two charging pin, on the side of the machine and on the bottom of the machine</li> </ol>
Test Sample Condition:	The test samples were provided in good working order with no visible defects.

### 5.3 Test Mode

Operating mode	Detail description
Charging+Recording mode	Keep the EUT in Charging(by Charging dock or adapter) +Recording mode (Charging by Charging dock was worse case mode)
Charging+Playing mode	Keep the EUT in Charging(by Charging dock or adapter)+Playing mode
GPS mode	Keep the EUT in GPS receiver mode

The sample was placed 0.8m above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

### 5.4 Measurement Uncertainty

Parameters	Expanded Uncertainty
Conducted Emission (9kHz ~ 30MHz)	±1.60 dB (k=2)
Radiated Emission (9kHz ~ 30MHz)	±3.12 dB (k=2)
Radiated Emission (30MHz ~ 1000MHz)	±4.54 dB (k=2)
Radiated Emission (1GHz ~ 18GHz)	±5.84 dB (k=2)
Radiated Emission (18GHz ~ 40GHz)	±3.36 dB (k=2)

## 5.5 Description of Support Units

Manufacturer	Description	Model	Serial Number	FCC ID/DoC
TU GAO	Adapter	BP-0501E01-9	N/A	N/A

## 5.6 Related Submittal(s) / Grant (s)

This is an original grant, no related submittals and grants.

## 5.7 Description of Cable Used

Cable Type	Description	Length	From	To
Detached USB Cable	Unshielded	0.6m	EUT	Adapter

## 5.8 Laboratory Facility

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

- **FCC - Registration No.: 727551**

Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been accredited as a testing laboratory by FCC (Federal Communications Commission). The Registration No. is 727551.

- **IC - Registration No.: 10106A-1**

The 3m Semi-anechoic chamber of Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

- **CNAS - Registration No.: CNAS L6048**

Shenzhen Zhongjian Nanfang Testing Co., Ltd. is accredited to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L6048.

- **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: <https://portal.a2la.org/scopepdf/4346-01.pdf>

## 5.9 Laboratory Location

Shenzhen Zhongjian Nanfang Testing Co., Ltd.  
 Address: No. B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road,  
 Bao'an District, Shenzhen, Guangdong, China  
 Tel: +86-755-23118282, Fax: +86-755-23116366  
 Email: info@ccis-cb.com, Website: http://www.ccis-cb.com

## 5.10 Test Instruments list

Radiated Emission:					
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
3m SAC	SAEMC	9m*6m*6m	966	07-22-2017	07-21-2020
Loop Antenna	SCHWARZBECK	FMZB1519B	00044	03-18-2018	03-17-2019
				03-18-2019	03-17-2020
BiConiLog Antenna	SCHWARZBECK	VULB9163	497	03-18-2018	03-17-2019
				03-18-2019	03-17-2020
Horn Antenna	SCHWARZBECK	BBHA9120D	916	03-18-2018	03-17-2019
				03-18-2019	03-17-2020
Horn Antenna	SCHWARZBECK	BBHA9120D	1805	06-22-2017	06-21-2020
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170582	11-21-2018	11-20-2019
EMI Test Software	AUDIX	E3	Version: 6.110919b		
Pre-amplifier	HP	8447D	2944A09358	03-18-2018	03-17-2019
				03-18-2019	03-17-2020
Pre-amplifier	CD	PAP-1G18	11804	03-18-2018	03-17-2019
				03-18-2019	03-17-2020
Spectrum analyzer	Rohde & Schwarz	FSP30	101454	03-18-2018	03-17-2019
				03-18-2019	03-17-2020
Spectrum analyzer	Rohde & Schwarz	FSP40	100363	11-21-2018	11-20-2019
EMI Test Receiver	Rohde & Schwarz	ESRP7	101070	03-18-2018	03-17-2019
				03-18-2019	03-17-2020
Cable	ZDECL	Z108-NJ-NJ-81	1608458	03-18-2018	03-17-2019
				03-18-2019	03-17-2020
Cable	MICRO-COAX	MFR64639	K10742-5	03-18-2018	03-17-2019
				03-18-2019	03-17-2020
Cable	SUHNER	SUCOFLEX100	58193/4PE	03-18-2018	03-17-2019
				03-18-2019	03-17-2020

Conducted Emission:					
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
EMI Test Receiver	Rohde & Schwarz	ESCI	101189	03-18-2018	03-17-2019
				03-18-2019	03-17-2020
Pulse Limiter	SCHWARZBECK	OSRAM 2306	9731	03-18-2018	03-17-2019
				03-18-2019	03-17-2020
LISN	CHASE	MN2050D	1447	03-18-2018	03-17-2019
				03-18-2019	03-17-2020
LISN	Rohde & Schwarz	ESH3-Z5	8438621/010	07-21-2018	07-20-2019
Cable	HP	10503A	N/A	03-18-2018	03-17-2019
				03-18-2019	03-17-2020
EMI Test Software	AUDIX	E3	Version: 6.110919b		

## 6 Test results and Measurement Data

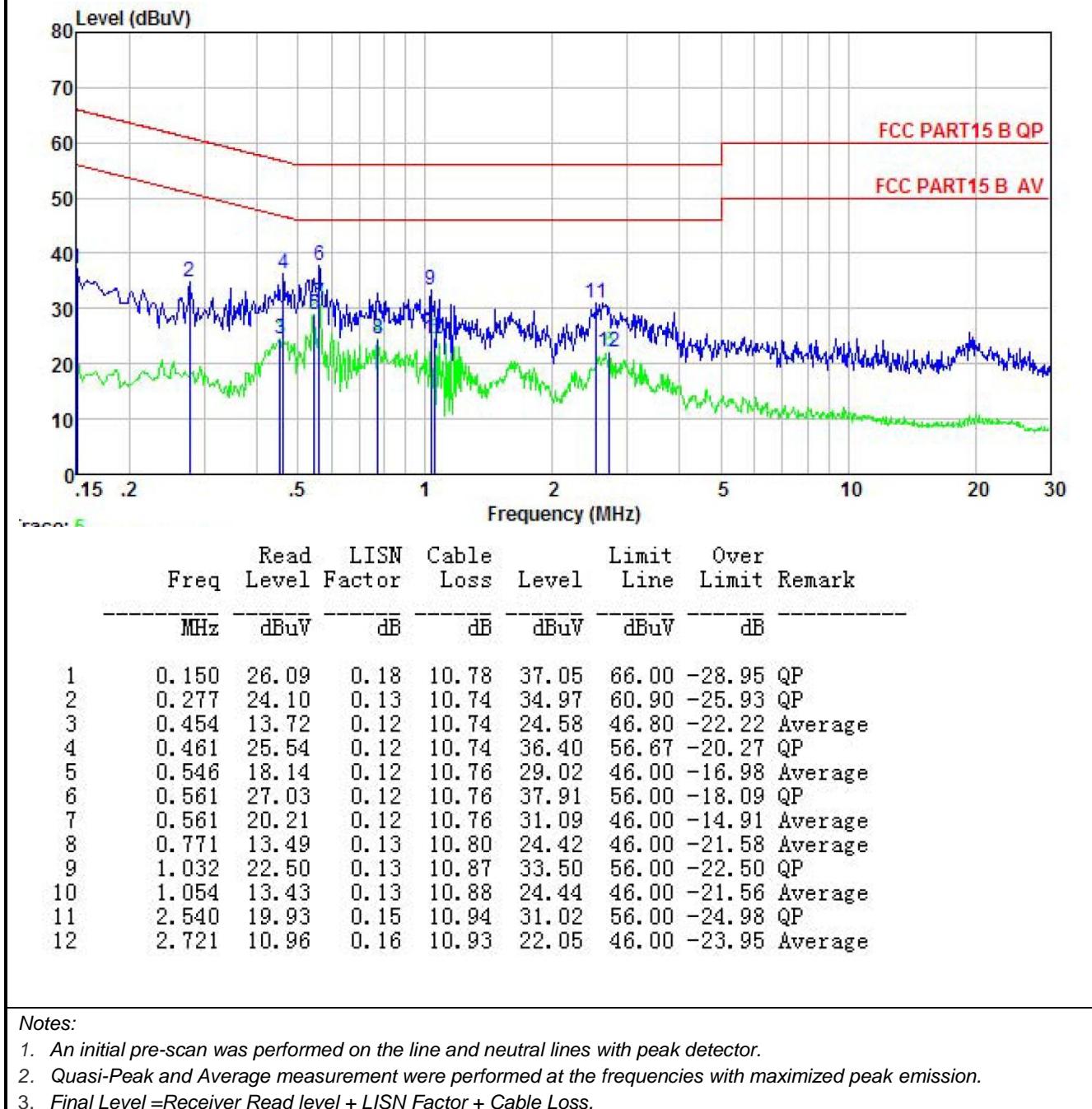
### 6.1 Conducted Emission

Test Requirement:	FCC Part 15 B Section 15.107																		
Test Method:	ANSI C63.4:2014																		
Test Frequency Range:	150kHz to 30MHz																		
Class / Severity:	Class B																		
Receiver setup:	RBW=9kHz, VBW=30kHz																		
Limit:	<table border="1"> <tr> <th>Frequency range (MHz)</th> <th colspan="2">Limit (dB<math>\mu</math>V)</th> </tr> <tr> <th></th> <th>Quasi-peak</th> <th>Average</th> </tr> <tr> <td>0.15-0.5</td> <td>66 to 56*</td> <td>56 to 46*</td> </tr> <tr> <td>0.5-5</td> <td>56</td> <td>46</td> </tr> <tr> <td>0.5-30</td> <td>60</td> <td>50</td> </tr> </table>			Frequency range (MHz)	Limit (dB $\mu$ V)			Quasi-peak	Average	0.15-0.5	66 to 56*	56 to 46*	0.5-5	56	46	0.5-30	60	50	
Frequency range (MHz)	Limit (dB $\mu$ V)																		
	Quasi-peak	Average																	
0.15-0.5	66 to 56*	56 to 46*																	
0.5-5	56	46																	
0.5-30	60	50																	
	* Decreases with the logarithm of the frequency.																		
Test setup:	<p><i>Remark:</i> E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m</p>																		
Test procedure	<ol style="list-style-type: none"> <li>The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). They provide a 50ohm/50uH coupling impedance for the measuring equipment.</li> <li>The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs).</li> <li>Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement.</li> </ol>																		
Test environment:	Temp.:	22.5 °C	Humid.:	55%															
Test Instruments:	Refer to section 5.9 for details																		
Test mode:	Refer to section 5.3 for details																		
Test results:	Pass																		

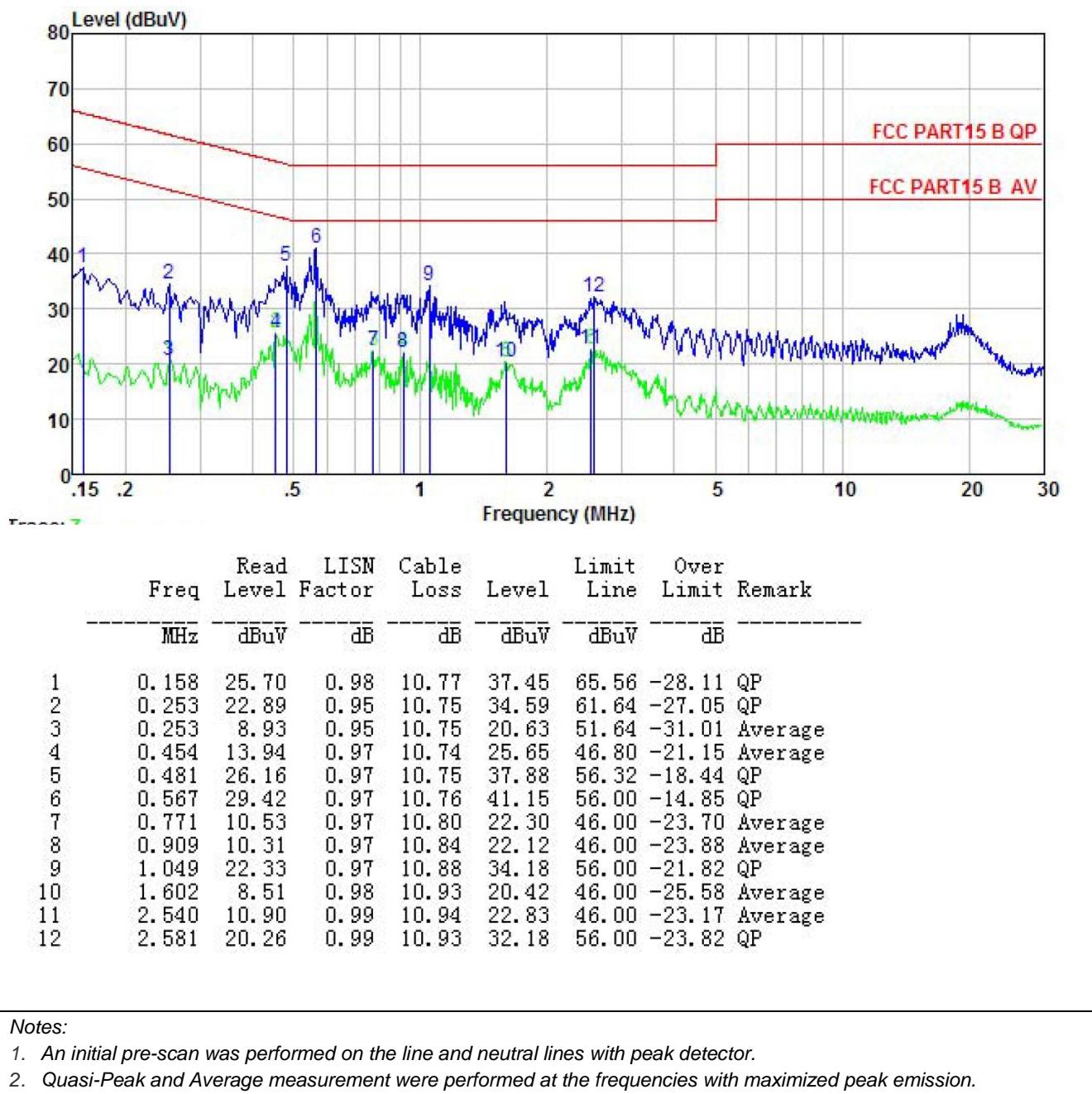
## Measurement data:

## Machine A:

Product name:	GPS tracker	Product model:	T1
Test by:	Mike	Test mode:	Charging and recording mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Line
Test voltage:	AC 120 V/60 Hz	Environment:	Temp: 22.5°C Huni: 55%

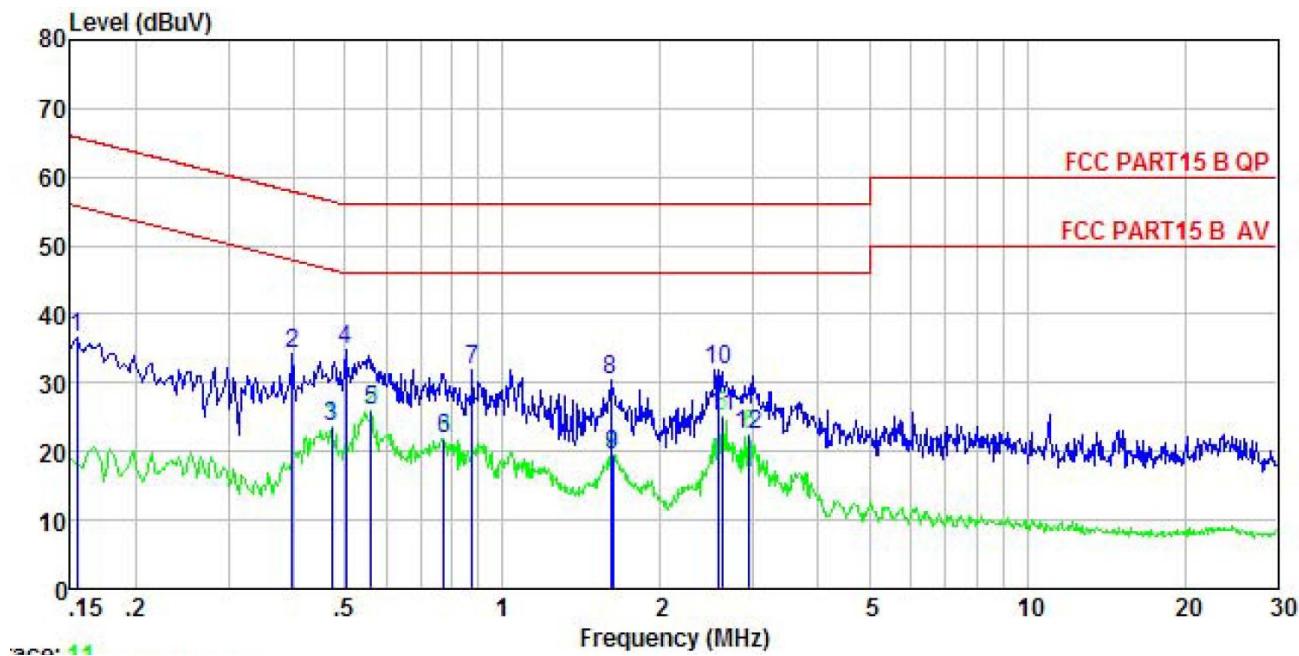


Product name:	GPS tracker	Product model:	T1
Test by:	Mike	Test mode:	Charging and recording mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Neutral
Test voltage:	AC 120 V/60 Hz	Environment:	Temp: 22.5°C Huni: 55%



## Machine B:

Product name:	GPS tracker	Product model:	T1
Test by:	Mike	Test mode:	Charging and recording mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Line
Test voltage:	AC 120 V/60 Hz	Environment:	Temp: 22.5°C Huni: 55%

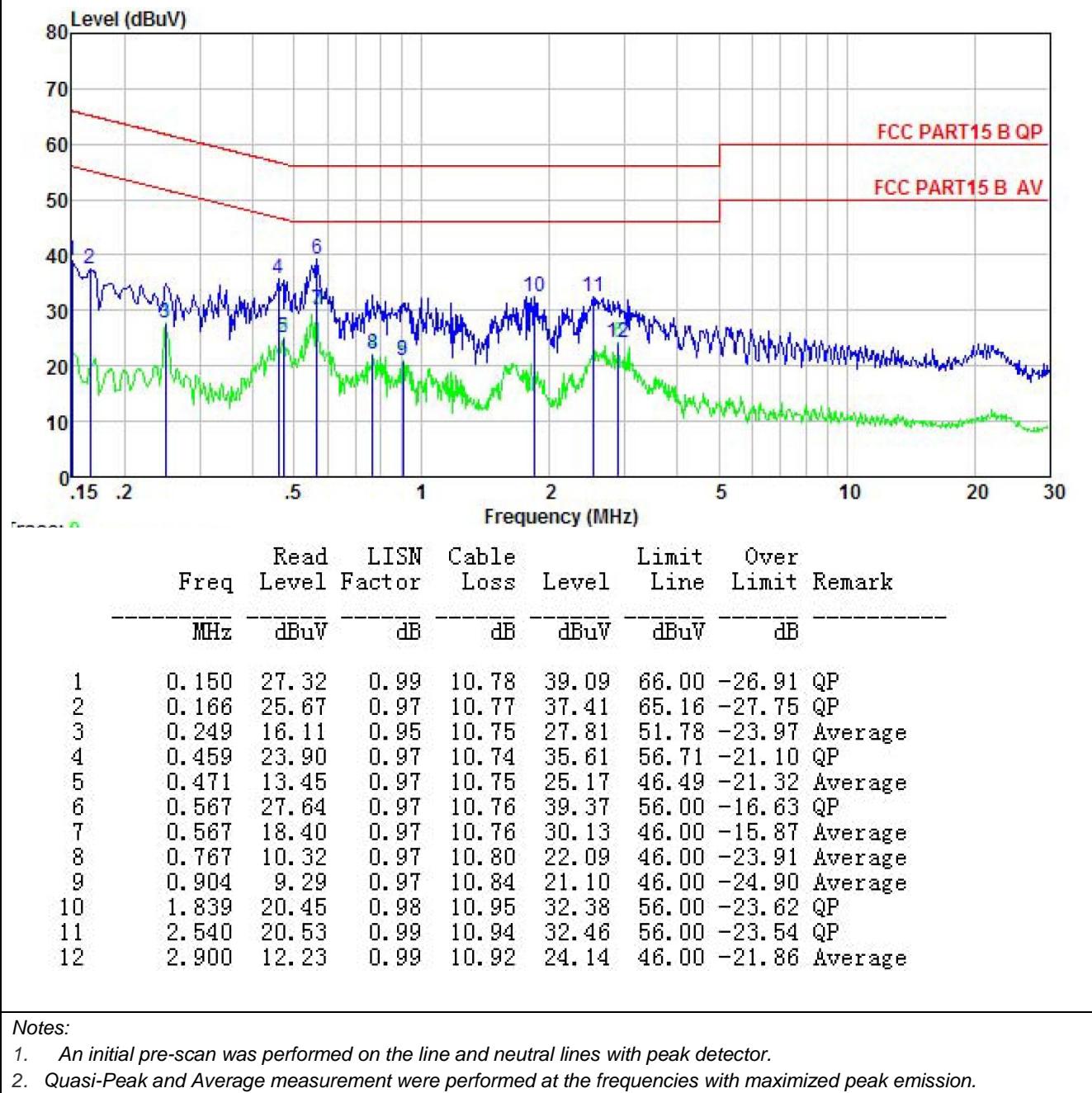


Freq MHz	Read Level dBuV	LISN Factor dB	Cable Loss dB	Level dBuV	Limit Line dBuV	Over Line dB	Over Limit Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.154	25.71	0.18	10.78	36.67	65.78	-29.11 QP
2	0.398	23.32	0.12	10.72	34.16	57.90	-23.74 QP
3	0.471	12.61	0.12	10.75	23.48	46.49	-23.01 Average
4	0.502	24.08	0.12	10.76	34.96	56.00	-21.04 QP
5	0.561	15.13	0.12	10.76	26.01	46.00	-19.99 Average
6	0.771	10.91	0.13	10.80	21.84	46.00	-24.16 Average
7	0.876	20.98	0.13	10.83	31.94	56.00	-24.06 QP
8	1.610	19.31	0.14	10.93	30.38	56.00	-25.62 QP
9	1.619	8.46	0.14	10.93	19.53	46.00	-26.47 Average
10	2.581	20.77	0.15	10.93	31.85	56.00	-24.15 QP
11	2.622	13.89	0.16	10.93	24.98	46.00	-21.02 Average
12	2.946	11.28	0.16	10.92	22.36	46.00	-23.64 Average

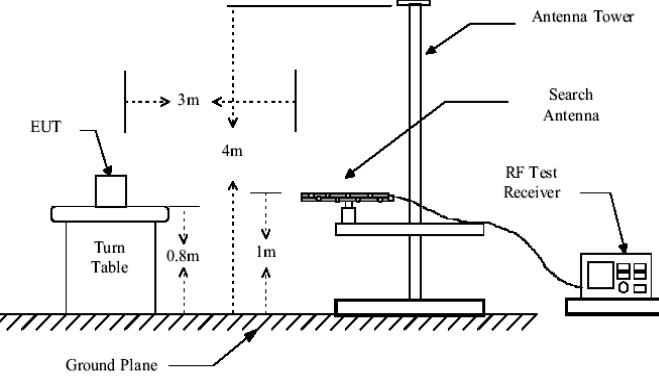
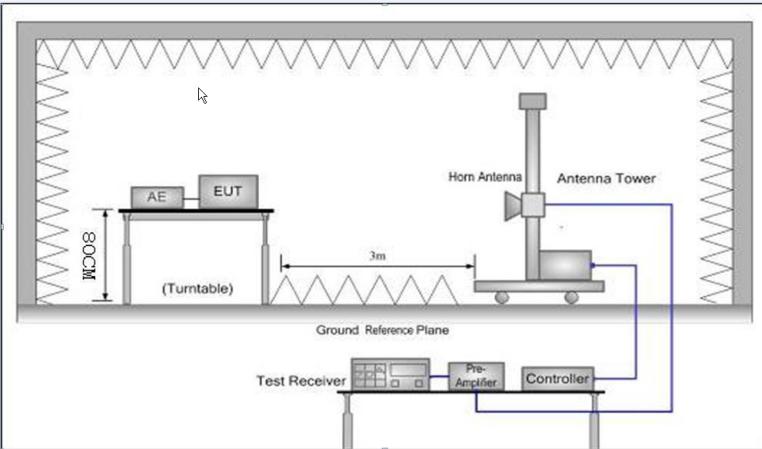
## Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level =Receiver Read level + LISN Factor + Cable Loss.

Product name:	GPS tracker	Product model:	T1
Test by:	Mike	Test mode:	Charging and recording mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Neutral
Test voltage:	AC 120 V/60 Hz	Environment:	Temp: 22.5°C Huni: 55%



## 6.2 Radiated Emission

Test Requirement:	FCC Part 15 B Section 15.109			
Test Method:	ANSI C63.4:2014			
Test Frequency Range:	30MHz to 6000MHz			
Test site:	Measurement Distance: 3m (Semi-Anechoic Chamber)			
Receiver setup:	Frequency	Detector	RBW	VBW
	30MHz-1GHz	Quasi-peak	120kHz	300kHz
	Above 1GHz	Peak	1MHz	3MHz
Limit:	RMS	1MHz	3MHz	Average Value
	Frequency	Limit (dBuV/m @3m)		Remark
	30MHz-88MHz	40.0		Quasi-peak Value
88MHz-216MHz		43.5		Quasi-peak Value
216MHz-960MHz		46.0		Quasi-peak Value
960MHz-1GHz		54.0		Quasi-peak Value
Above 1GHz		54.0		Average Value
		74.0		Peak Value
Test setup:	<p>Below 1GHz</p>  <p>Above 1GHz</p> 			

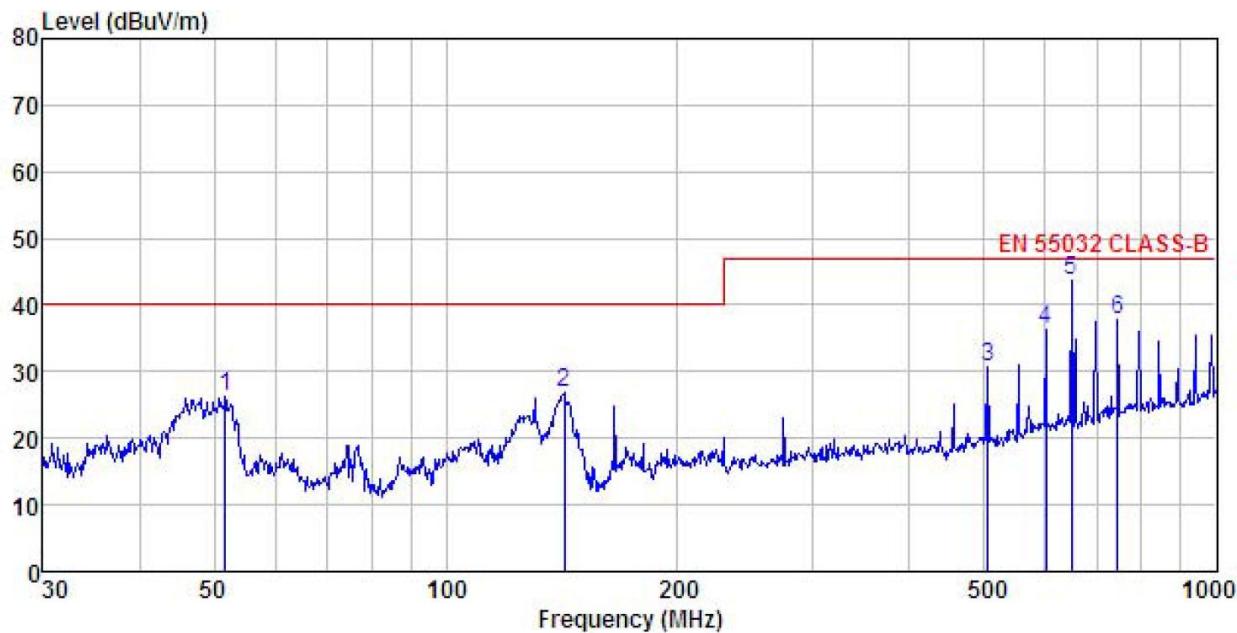
Test Procedure:	1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna 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. 4. 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. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.					
Test environment:	Temp.:	24 °C	Humid.:	57%	Press.:	1 01kPa
Test Instruments:	Refer to section 5.9 for details					
Test mode:	Refer to section 5.3 for details					
Test results:	Passed					
Remark:	All of the observed value above 6GHz were the noise floor , which were no recorded					

## Measurement Data:

## Machine A:

## Below 1GHz:

Product Name:	GPS tracker	Product model:	T1
Test By:	Mike	Test mode:	Charging and recording mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Vertical
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%

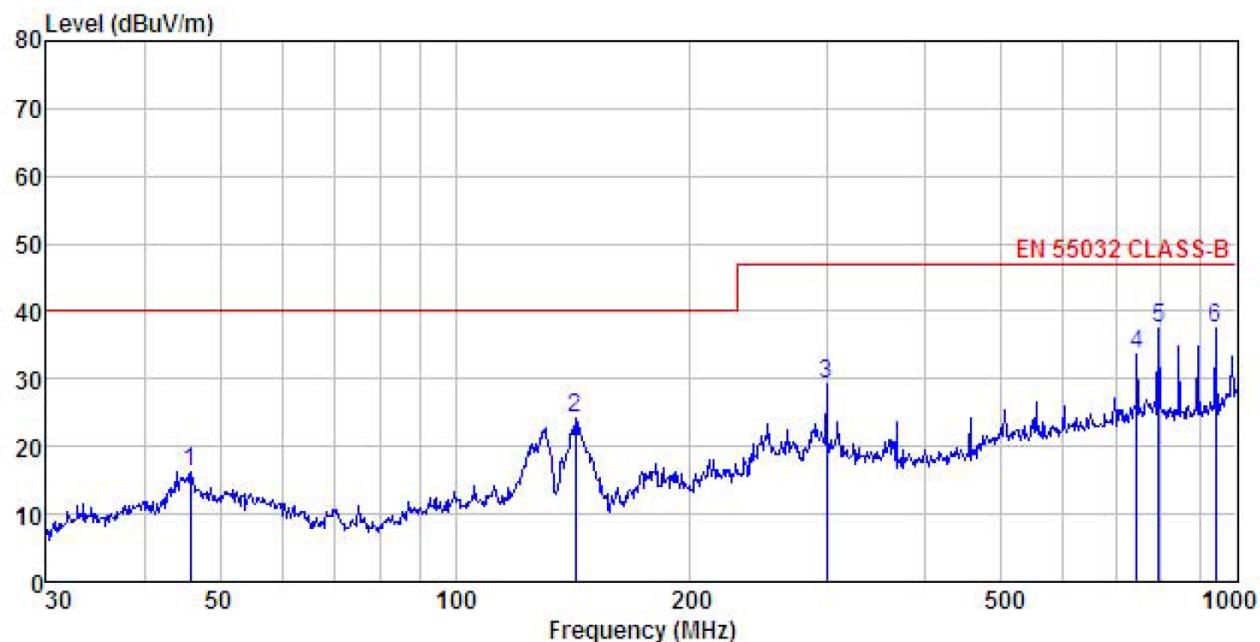


Freq	Read		Antenna		Cable		Preamp	Limit	Over	Line	Over	Limit	Remark
	Level	Antenna	Factor	Loss	Factor	Level	dBuV/m	dBuV/m	dB				
MHz	dBuV	dB/m			dB	dB	dBuV/m	dBuV/m	dB				
1	51.662	42.86	11.94	1.27	29.81	26.26	40.00	40.00	-13.74	QP			
2	142.324	44.26	9.35	2.43	29.26	26.78	40.00	40.00	-13.22	QP			
3	504.706	37.79	18.22	3.65	28.97	30.69	47.00	47.00	-16.31	QP			
4	601.427	41.84	19.51	3.94	28.93	36.36	47.00	47.00	-10.64	QP			
5	649.660	48.87	19.70	3.86	28.78	43.65	47.00	47.00	-3.35	QP			
6	744.866	41.36	20.59	4.34	28.50	37.79	47.00	47.00	-9.21	QP			

## Remark:

- Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.
- The emission levels of other frequencies are very lower than the limit and not show in test report.

<b>Product Name:</b>	GPS tracker	<b>Product model:</b>	T1
<b>Test By:</b>	Mike	<b>Test mode:</b>	Charging and recording mode
<b>Test Frequency:</b>	30 MHz ~ 1 GHz	<b>Polarization:</b>	Horizontal
<b>Test Voltage:</b>	AC 120/60Hz	<b>Environment:</b>	Temp: 24°C Huni: 57%



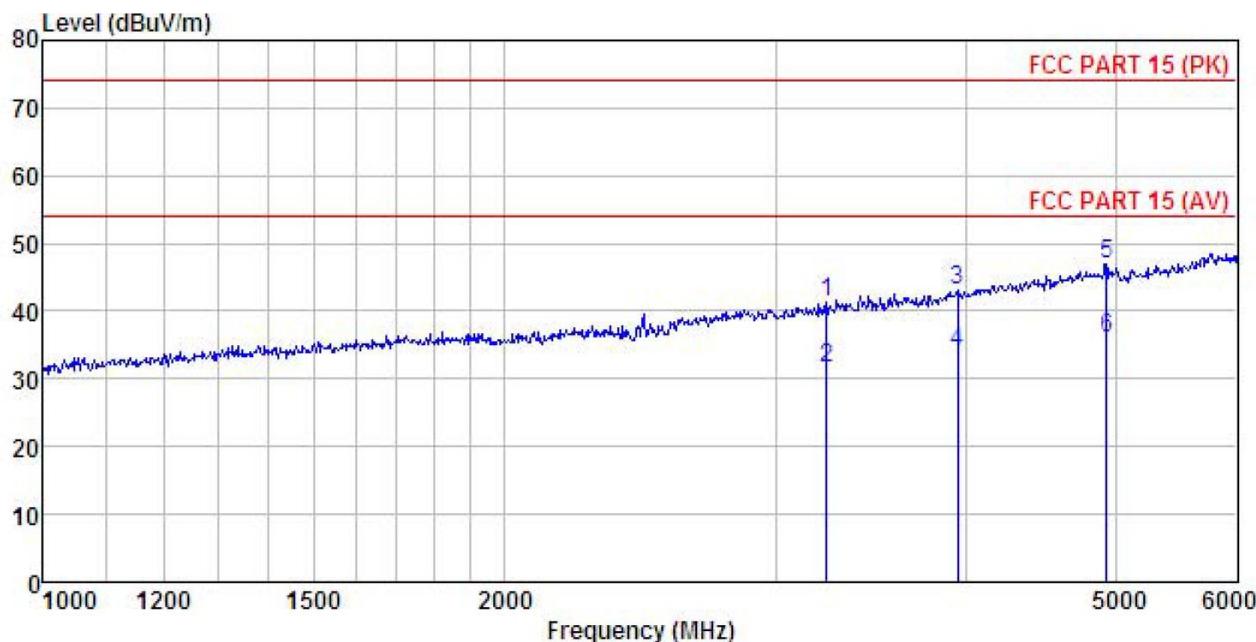
Freq	Read	Antenna	Cable	Preamp	Limit	Over	Remark
	Freq	Level	Factor	Loss	Factor	Line	
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1	45.855	32.47	12.27	1.29	29.85	16.18	40.00 -23.82 QP
2	142.324	41.66	9.35	2.43	29.26	24.18	40.00 -15.82 QP
3	298.268	41.31	13.58	2.93	28.45	29.37	47.00 -17.63 QP
4	744.866	37.24	20.59	4.34	28.50	33.67	47.00 -13.33 QP
5	793.396	40.03	21.39	4.35	28.23	37.54	47.00 -9.46 QP
6	938.833	38.47	22.65	4.10	27.76	37.46	47.00 -9.54 QP

## Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

## Above 1GHz:

<b>Product Name:</b>	GPS tracker	<b>Product model:</b>	T1
<b>Test By:</b>	Mike	<b>Test mode:</b>	Charging and recording mode
<b>Test Frequency:</b>	1 GHz ~ 6 GHz	<b>Polarization:</b>	Vertical
<b>Test Voltage:</b>	AC 120/60Hz	<b>Environment:</b>	Temp: 24°C Huni: 57%

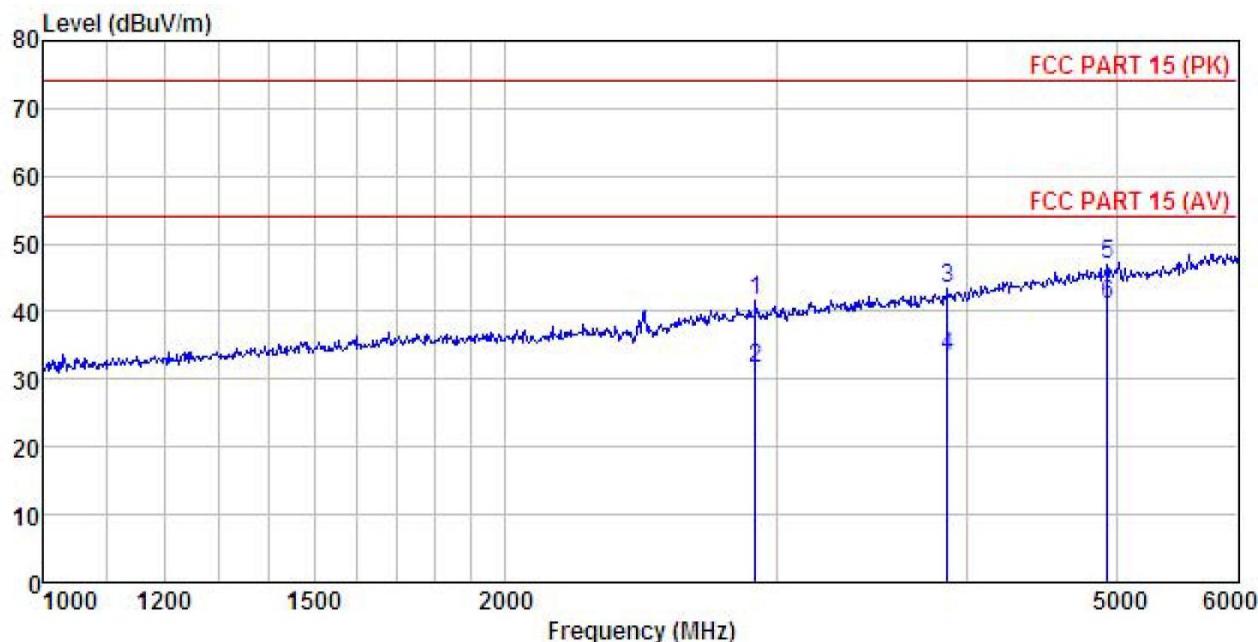


Freq	Read		Antenna Factor	Cable Loss		Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV		dB/m	dB					
1	3239.211	46.61	28.55	5.47	41.40	41.28	74.00	-32.72	Peak	
2	3239.211	36.82	28.55	5.47	41.40	31.49	54.00	-22.51	Average	
3	3942.704	46.38	30.12	6.10	41.80	43.00	74.00	-31.00	Peak	
4	3942.704	37.19	30.12	6.10	41.80	33.81	54.00	-20.19	Average	
5	4931.516	47.61	31.80	6.89	41.86	46.92	74.00	-27.08	Peak	
6	4931.516	37.37	31.26	6.89	41.86	36.14	54.00	-17.86	Average	

## Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

<b>Product Name:</b>	GPS tracker	<b>Product model:</b>	T1
<b>Test By:</b>	Mike	<b>Test mode:</b>	Charging and recording mode
<b>Test Frequency:</b>	1 GHz ~ 6 GHz	<b>Polarization:</b>	Horizontal
<b>Test Voltage:</b>	AC 120/60Hz	<b>Environment:</b>	Temp: 24°C Huni: 57%



Freq	Read		Antenna		Cable		Preamp	Limit	Over	Line	Limit	Remark
	Level	Antenna	Factor	Loss	Factor	Level	dBuV/m					
MHz	MHz	dBuV	dB/m	dB	dB	dB	dB	dB	dB	dB	dB	dB
1	2910.441	47.83	28.32	5.26	41.57	41.70	74.00	-32.30	Peak			
2	2910.441	37.66	28.32	5.26	41.57	31.53	54.00	-22.47	Average			
3	3881.802	46.89	29.92	6.09	41.80	43.30	74.00	-30.70	Peak			
4	3881.802	36.92	29.92	6.09	41.80	33.33	54.00	-20.67	Average			
5	4931.516	47.50	31.80	6.89	41.86	46.81	74.00	-27.19	Peak			
6	4931.516	41.80	31.80	6.89	41.86	41.11	54.00	-12.89	Average			

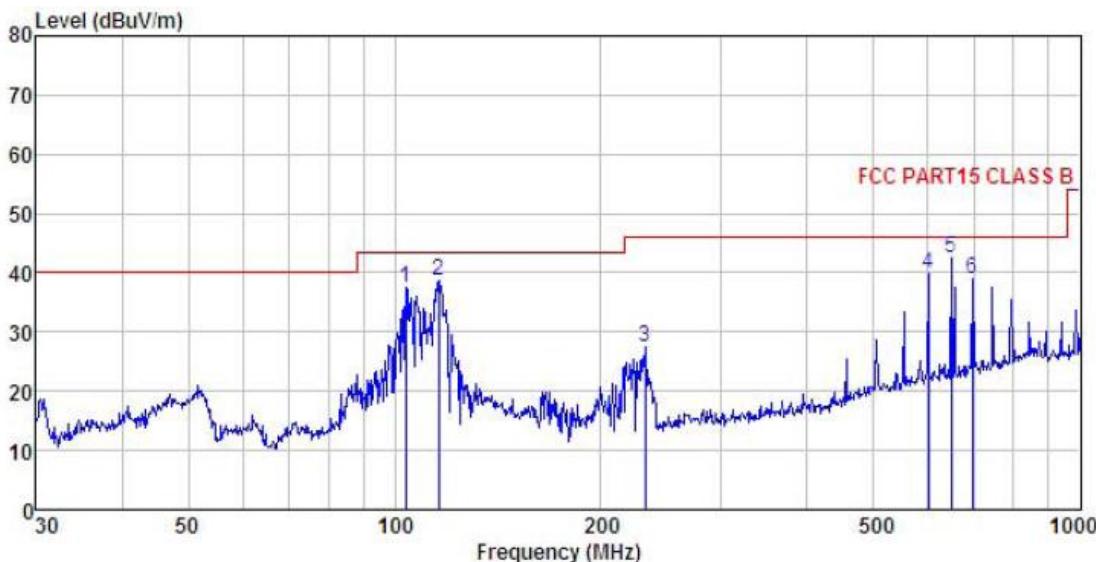
## Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

## Machine B:

## Below 1GHz:

Product Name:	GPS tracker	Product model:	T1
Test By:	Mike	Test mode:	Charging and recording mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Vertical
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%

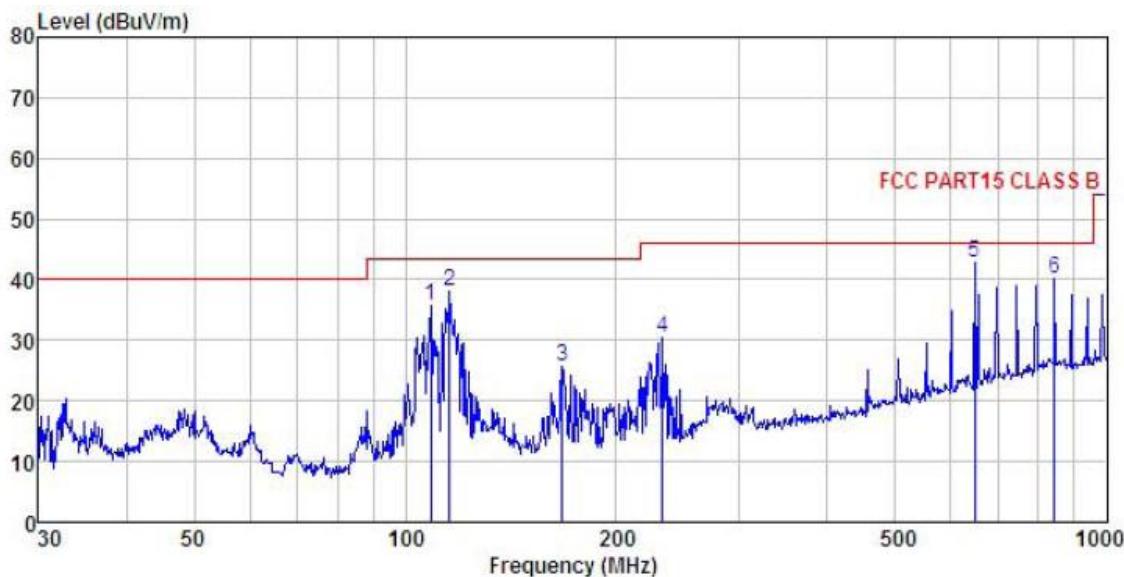


Freq MHz	Read Level dBuV	Antenna Factor dB/m	Cable Loss Factor dB	Preamp Level dB	Limit Line dBuV/m	Over Line dB	Over Limit dB	Remark
	MHz	dBuV	dB/m	dB	dBuV/m	dBuV/m	dB	
1	103.806	52.80	12.16	1.99	29.50	37.45	43.50	-6.05 QP
2	116.132	54.73	11.19	2.12	29.42	38.62	43.50	-4.88 QP
3	231.718	41.27	11.99	2.83	28.64	27.45	46.00	-18.55 QP
4	601.427	45.24	19.51	3.94	28.93	39.76	46.00	-6.24 QP
5	649.660	47.71	19.70	3.86	28.78	42.49	46.00	-3.51 QP
6	696.857	43.00	20.36	4.16	28.68	38.84	46.00	-7.16 QP

## Remark:

- Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.
- The emission levels of other frequencies are very lower than the limit and not show in test report.

<b>Product Name:</b>	GPS tracker	<b>Product model:</b>	T1
<b>Test By:</b>	Mike	<b>Test mode:</b>	Charging and recording mode
<b>Test Frequency:</b>	30 MHz ~ 1 GHz	<b>Polarization:</b>	Horizontal
<b>Test Voltage:</b>	AC 120/60Hz	<b>Environment:</b>	Temp: 24°C Huni: 57%



Freq MHz	Read	Antenna	Cable	Preamp	Limit Line dBuV/m	Over Line dBuV/m	Over Limit dB	Over Remark
	Level dBuV	Level Factor	Loss dB	Factor				
1 108.647	51.34	11.79	2.03	29.47	35.69	43.50	-7.81	QP
2 115.726	54.16	11.22	2.12	29.42	38.08	43.50	-5.42	QP
3 167.237	42.59	9.54	2.64	29.07	25.70	43.50	-17.80	QP
4 232.532	44.23	12.03	2.83	28.64	30.45	46.00	-15.55	QP
5 649.660	48.00	19.70	3.86	28.78	42.78	46.00	-3.22	QP
6 842.130	41.46	22.44	4.22	28.03	40.09	46.00	-5.91	QP

## Remark:

- Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.
- The emission levels of other frequencies are very lower than the limit and not show in test report.

## Above 1GHz:

<b>Product Name:</b>	GPS tracker			<b>Product model:</b>	T1		
<b>Test By:</b>	Mike			<b>Test mode:</b>	Charging and recording mode		
<b>Test Frequency:</b>	1 GHz ~ 6 GHz			<b>Polarization:</b>	Vertical		
<b>Test Voltage:</b>	AC 120/60Hz			<b>Environment:</b>	Temp: 24°C Huni: 57%		

Level (dBuV/m)

FCC PART 15 (PK)

FCC PART 15 (AV)

Frequency (MHz)

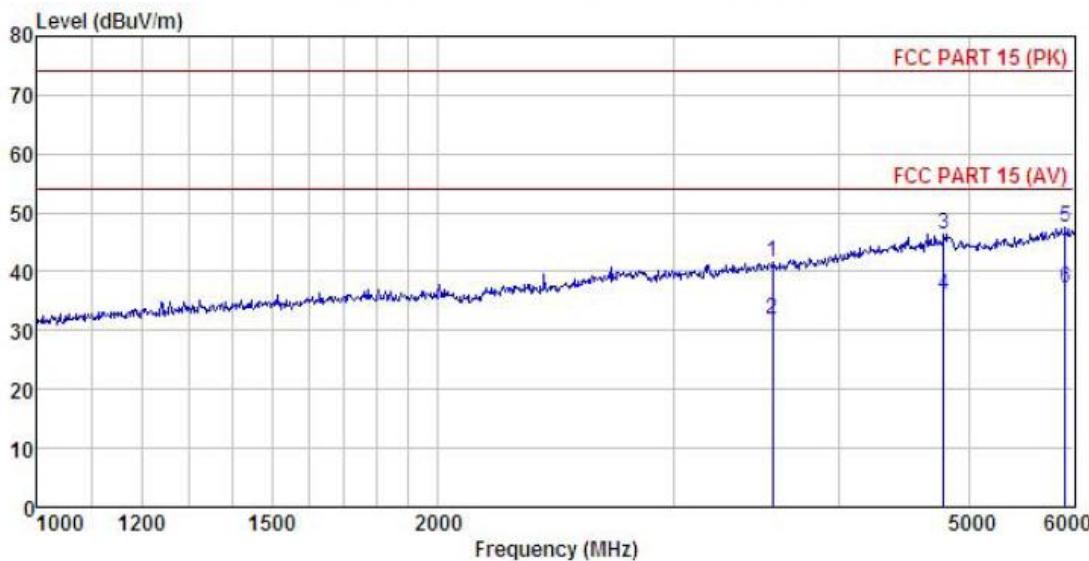
Freq	ReadAntenna		Cable Preamp		Limit Level	Over Line	Over Limit	Remark
	Level	Factor	Loss	Factor				
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	3454.041	49.48	28.59	5.70	41.41	42.36	74.00	-31.64 Peak
2	3454.041	38.93	28.59	5.70	41.41	31.81	54.00	-22.19 Average
3	4798.981	50.66	31.02	6.80	41.81	46.67	74.00	-27.33 Peak
4	4798.981	40.01	31.02	6.80	41.81	36.02	54.00	-17.98 Average
5	5852.603	49.52	32.67	7.90	42.03	48.06	74.00	-25.94 Peak
6	5852.603	38.28	32.67	7.90	42.03	36.82	54.00	-17.18 Average

Remark:

- Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.
- The emission levels of other frequencies are very lower than the limit and not show in test report.

<b>Product Name:</b>	GPS tracker	<b>Product model:</b>	T1
<b>Test By:</b>	Mike	<b>Test mode:</b>	Charging and recording mode
<b>Test Frequency:</b>	1 GHz ~ 6 GHz	<b>Polarization:</b>	Horizontal
<b>Test Voltage:</b>	AC 120/60Hz	<b>Environment:</b>	Temp: 24°C Huni: 57%



Freq	Read	Antenna	Cable	Preamp	Limit	Over	Limit	Remark
	Freq	Level	Factor	Loss				
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	3563.272	48.38	28.83	5.85	41.51	41.55	74.00	-32.45 Peak
2	3563.272	38.84	28.83	5.85	41.51	32.01	54.00	-21.99 Average
3	4789.651	50.38	30.99	6.81	41.83	46.35	74.00	-27.65 Peak
4	4789.651	40.18	30.99	6.81	41.83	36.15	54.00	-17.85 Average
5	5909.824	48.96	32.68	7.91	42.04	47.51	74.00	-26.49 Peak
6	5909.824	38.51	32.68	7.91	42.04	37.06	54.00	-16.94 Average

## Remark:

- Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.
- The emission levels of other frequencies are very lower than the limit and not show in test report.