# Test Report FCC Part15 Subpart B

Product Name: GPS Locator

Model No. : GA100

Applicant: Queclink Wireless Solutions Co., Ltd

Address: Room 501, Building 9, No 99, TianZhou Road,

Shanghai, China

Date of Receipt: 04/07/2011

Test Date : 04/07/2011~10/07/2011

Issued Date : 12/07/2011

Report No. : 117S015R-HP-US-P01V02

Report Version: V 1.0

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

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# **Test Report Certification**

Issued Date: 12/07/2011

Report No.: 117S015R-HP-US-P01V02

# QuieTek

Product Name : GPS Locator

Applicant : Queclink Wireless Solutions Co., Ltd

Address : Room 501, Building 9, No 99, TianZhou Road, Shanghai,

China

Manufacturer : Queclink Wireless Solutions Co., Ltd

Address : Room 501, Building 9, No 99, TianZhou Road, Shanghai,

China

Model No. : GA100

EUT Voltage : MIN: 3.6V, NOR: 3.8V, MAX: 4.2V

Brand Name : Queclink

Applicable Standard : FCC Part 15 Subpart B: 2008 Class B

ANSI C63.4: 2009

Test Result : Complied

Performed Location : Suzhou EMC Laboratory

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Development Zone., Suzhou, China

TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098

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(Engineering ADM: Alice Ni)

Reviewed By : Labin Wu

(Senior Engineer: Robin Wu)

Approved By : Marlinchen

(Engineering Supervisor: Marlin Chen)



Report No: 117S015R-HP-US-P01V02

#### **Laboratory Information**

We, QuieTek Corporation, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted(audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scope:

Taiwan R.O.C. **BSMI, NCC, TAF** 

**Germany TUV Rheinland** 

Nemko, DNV Norway

**USA** FCC, NVLAP

**Japan VCCI** 

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site: http://www.quietek.com/tw/ctg/cts/accreditations.htm The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site: http://www.quietek.com/

If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

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#### **LinKou Testing Laboratory:**

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# 1. General Information

# 1.1. EUT Description

Product Name	GPS Locator
Brand Name	Queclink
Model No.	GA100
Working Voltage	MIN: 3.6V, NOR: 3.8V, MAX: 4.2V
GPS Function	Yes
Support Band	GSM850/PCS1900
Ty Fraguesey Dange	GSM 850: 824MHz to 849MHz
Tx Frequency Range	PCS 1900: 1850MHz to 1910MHz
Rx Frequency Range	GSM 850: 869MHz to 894MHz
	PCS 1900: 1930MHz to 1990MHz
GPRS Class	12
Type of modulation	GMSK for GSM/GPRS
Dook Antonno Coin	GSM850: -3dBi;
Peak Antenna Gain	PCS1900: -1dBi
AC Adapter	Manufacturer: Something High Electric (Xiamen) CO., LTD.
	M/N: P-051B-050050
	Input: 100-240V~50/60Hz 0.2A
	Output: DC 5.0V, 0.5A

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# 1.2. Mode of Operation

QuieTek has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode

Mode 1: Charging + GPS receive

Mode 2: software update by USB Port



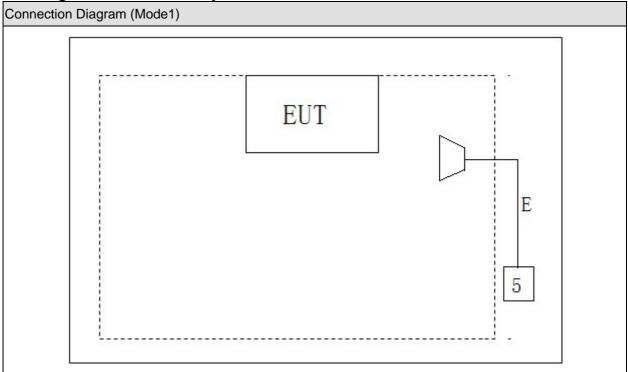
# 1.3. Tested System Details

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

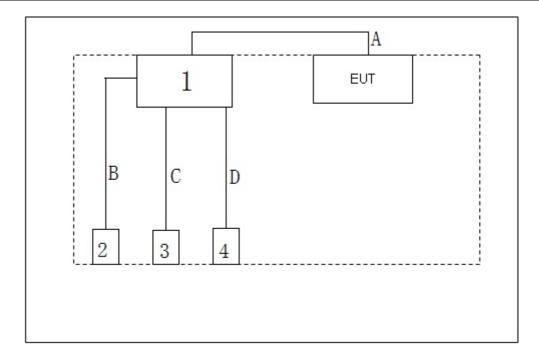
Pro	duct	Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook	DELL	E520	N/A	Non-Shielded, 1.8m
2	Microphone & Earphone	SOMIC	V85	N/A	N/A
3	iPod	Apple	A1199	7J7103ALVQ5	N/A
4	USB Mouse	DELL	M-UVDEL1	HCJ44503689	N/A
5	Signal Generator	Agilent	E4438C	MY49070163	N/A



1.4. Configuration of Tested System



## Connection Diagram (Mode2)



Signal Cable Type		Signal cable Description	
А	USB Cable	Shielded, 0.5m	
В	Microphone & Earphone Cable	Non-Shielded, 1.8m	
С	USB Cable	Shielded, 1.0m	
D	USB Cable	Shielded, 1.0m	
E	Coaxial Cable	Shielded, >5m	

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# 1.5. EUT Exercise Software

1	Setup the EUT and simulators as shown on above.
2	Turn on the power of equipment.
3	(1), Making EUT working on "GPS receive". (2), Making EUT connected to the computer, and then working in the super terminal.

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# 2. Technical Test

# 2.1. Summary of Test Result

$\boxtimes$	No deviations from the test standards
	Deviations from the test standards as below description:

Emission						
Derformed Test Item	Took Itama Namativa Deferences					
Performed Test Item Normative References		Performed	Deviation			
Conducted Emission	FCC CFR Title 47 Part 15 Subpart B: 2008 Class B	Yes	No			
	ANSI C63.4: 2009					
Radiated Emission	FCC CFR Title 47 Part 15 Subpart B: 2008 Class B	Yes	No			
	ANSI C63.4: 2009					

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# 2.2. List of Test Equipment

#### Conducted Emission / TR-1

Instrument	Manufacturer	Type No.	Serial No	Cali. Due Date
EMI Test Receiver	R&S	ESCI	100906	2012/01/15
Two-Line V-Network	R&S	ENV216	100043	2012/04/29
Two-Line V-Network	R&S	ENV216	100044	2011/09/07
Balanced Telecom ISN	Fischer	FCC-TLISN-T2-02	20352	2012/01/15
Balanced Telecom ISN	Fischer	FCC-TLISN-T4-02	20353	2012/01/15
Balanced Telecom ISN	Fischer	FCC-TLISN-T8-02	20354	2012/01/15
Current Probe	R&S	EZ-17	100255	2012/04/18
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	2012/05/05
50ohm Termination	SHX	TF2	07081401	2011/09/27
50ohm Termination	SHX	TF2	07081402	2011/09/27
50ohm Termination	SHX	TF2	07081403	2011/09/15
Temperature/Humidity Meter	zhicheng	ZC1-2	TR1-TH	2012/01/14

#### Radiated Emission / AC-2

Instrument	Manufacturer	Type No.	Serial No.	Cali. Due Date
EMI Test Receiver	R&S	ESCI	100573	2012/04/23
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2011/10/18
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2012/05/05
Temperature/Humidity Meter	Zhicheng	ZC1-2	AC2-TH	2012/01/14

#### Radiated Emission / AC-5

Instrument	Manufacturer	Type No.	Serial No.	Cali. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2012/04/23
Preamplifier	Quietek	AP-180C	CHM-0602013	2012/05/05
Preamplifier	QuieTek	AP-040G	CHM-0906001	2012/05/05
Bilog Antenna	Teseq GmbH	CBL6112D	27612	2011/10/18
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	499	2012/06/11
High-Pass Filter	Wainwright	WHKX2.8/18G-12SS	SN1	2012/03/03
High-Pass Filter	Wainwright	WHKX7.0/18G-8SS	SN16	2012/03/03
Lowpass Filter	Wainwright	WLKS4500-9SS	SN2	2012/03/03

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# 2.3. Measurement Uncertainty

## **Conducted Emission**

The measurement uncertainty is evaluated as  $\pm$  2.26 dB.

# **Radiated Emission**

The measurement uncertainty is evaluated as  $\pm$  3.19 dB.

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# 2.4. Test Environment

Performed Item	Items	Required	Actual
	Temperature (°C)	15-35	25
Conducted Emission	Humidity (%RH)	25-75	47
	Barometric pressure (mbar)	860-1060	950-1000
	Temperature (°C)	15-35	28
Radiated Emission	Humidity (%RH)	25-75	46
	Barometric pressure (mbar)	860-1060	950-1000

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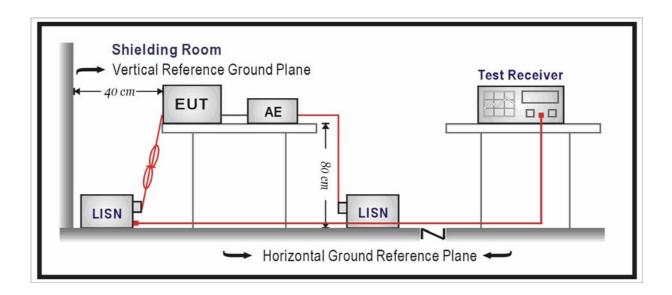


#### 3. Conducted Emission

## 3.1. Test Specification

According to EMC Standard: FCC Part 15 Subpart B Class B, ANSI C63.4

#### 3.2. Test Setup



#### 3.3. Limit

FCC Part 15 Subpart B Paragraph 15.107 Limits					
Frequency (MHz)	QP (dBuV)	AV (dBuV)			
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 0.15 MHz to 0.5 MHz.

#### 3.4. Test Procedure

The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the



EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)

Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

#### 3.5. Deviation from Test Standard

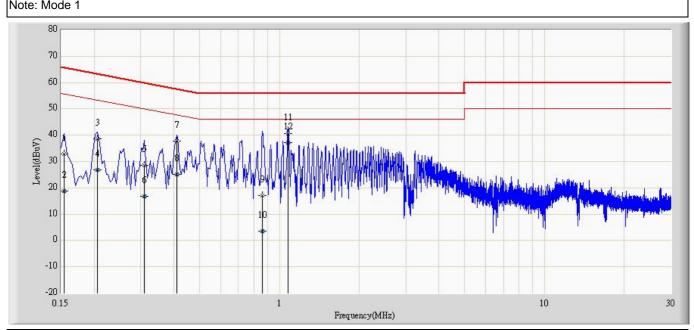
No deviation.

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# 3.6. Test Result

Engineer: Sunny		
Site: TR1	Time: 2011/07/04 - 21:59	
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0	
Probe: ENV216_101043(0.009-30MHz)	Polarity: Line	
EUT: GPS Locator	Power: AC 120V/60Hz	
Note: Mode 1	·	



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV)	(dBuV)	(dB)	(dBuV)	(dB)	
1		0.154	32.804	23.060	-32.977	65.781	9.744	QP
2		0.154	18.668	8.924	-37.114	55.781	9.744	AV
3		0.206	38.750	29.088	-24.615	63.365	9.662	QP
4		0.206	26.783	17.121	-26.582	53.365	9.662	AV
5		0.310	28.585	18.932	-31.385	59.970	9.654	QP
6		0.310	16.744	7.090	-33.227	49.970	9.654	AV
7		0.410	37.805	28.141	-19.843	57.648	9.664	QP
8		0.410	25.004	15.340	-22.644	47.648	9.664	AV
9		0.862	17.139	7.438	-38.861	56.000	9.701	QP
10		0.862	3.485	-6.216	-42.515	46.000	9.701	AV
11		1.078	40.548	30.828	-15.452	56.000	9.719	QP
12	*	1.078	37.102	27.383	-8.898	46.000	9.719	AV



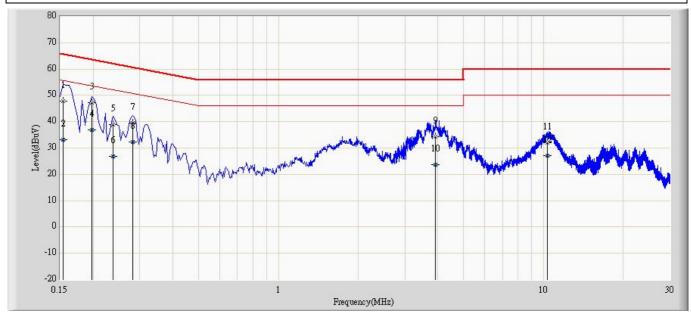
Engineer: Sunny		
Site: TR1	Time: 2011/07/04 - 22:01	
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0	
Probe: ENV216_101043(0.009-30MHz)	Polarity: Neutral	
EUT: GPS Locator	Power: AC 120V/60Hz	
Note: Mode 1		

No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV)	(dBuV)	(dB)	(dBuV)	(dB)	
1		0.150	17.983	8.242	-48.017	66.000	9.741	QP
2		0.150	3.329	-6.412	-52.671	56.000	9.741	AV
3		0.202	35.869	26.204	-27.659	63.528	9.665	QP
4		0.202	32.052	22.387	-21.476	53.528	9.665	AV
5		0.410	39.178	29.514	-18.471	57.648	9.664	QP
6		0.410	28.506	18.841	-19.143	47.648	9.664	AV
7		0.514	34.253	24.581	-21.747	56.000	9.672	QP
8		0.514	20.343	10.672	-25.657	46.000	9.672	AV
9		0.714	37.861	28.170	-18.139	56.000	9.691	QP
10		0.714	26.058	16.367	-19.942	46.000	9.691	AV
11		0.858	34.658	24.957	-21.342	56.000	9.701	QP
12	*	0.858	28.774	19.074	-17.226	46.000	9.701	AV
13		1.026	35.648	25.929	-20.352	56.000	9.720	QP
14		1.026	19.972	10.253	-26.028	46.000	9.720	AV



Engineer: Sunny	
Site: TR1	Time: 2011/07/09 - 21:22
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101043(0.009-30MHz)	Polarity: Line
EUT: GPS Locator	Power: AC 120V/60Hz
Note: Made 2	·

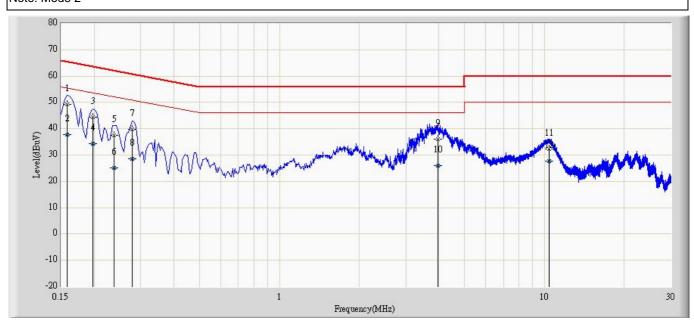
Note: Mode 2



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV)	(dBuV)	(dB)	(dBuV)	(dB)	
1		0.154	47.919	38.334	-17.862	65.781	9.585	QP
2		0.154	33.250	23.665	-22.531	55.781	9.585	AV
3	*	0.198	47.287	37.625	-16.407	63.694	9.662	QP
4		0.198	36.766	27.104	-16.928	53.694	9.662	AV
5		0.238	38.935	29.255	-23.231	62.166	9.680	QP
6		0.238	26.902	17.222	-25.264	52.166	9.680	AV
7		0.282	39.408	29.728	-21.349	60.757	9.680	QP
8		0.282	32.242	22.562	-18.514	50.757	9.680	AV
9		3.910	34.169	24.380	-21.831	56.000	9.789	QP
10		3.910	23.744	13.955	-22.256	46.000	9.789	AV
11		10.318	32.131	22.164	-27.869	60.000	9.968	QP
12		10.318	27.177	17.210	-22.823	50.000	9.968	AV



Engineer: Sunny	
Site: TR1	Time: 2011/07/09 - 21:26
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101043(0.009-30MHz)	Polarity: Neutral
EUT: GPS Locator	Power: AC 120V/60Hz
Note: Mode 2	



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV)	(dBuV)	(dB)	(dBuV)	(dB)	
1	*	0.158	49.293	39.546	-16.275	65.568	9.748	QP
2		0.158	37.800	28.052	-17.769	55.568	9.748	AV
3		0.198	44.473	34.804	-19.221	63.694	9.669	QP
4		0.198	34.303	24.634	-19.391	53.694	9.669	AV
5		0.238	37.417	27.766	-24.749	62.166	9.651	QP
6		0.238	25.148	15.497	-27.017	52.166	9.651	AV
7		0.278	39.631	29.979	-21.244	60.875	9.653	QP
8		0.278	28.581	18.928	-22.295	50.875	9.653	AV
9		3.970	35.968	26.179	-20.032	56.000	9.790	QP
10		3.970	26.006	16.216	-19.994	46.000	9.790	AV
11		10.402	32.339	22.333	-27.661	60.000	10.006	QP
12		10.402	27.578	17.572	-22.422	50.000	10.006	AV



# 3.7. Test Photograph

Description: Conducted emission Test Setup -Mode 1



Description: Conducted emission Test Setup-Mode 2





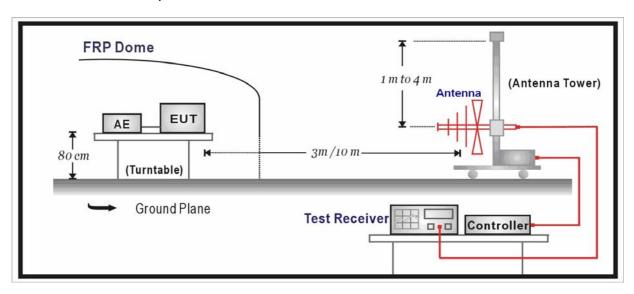
#### 4. Radiated Emission

# 4.1. Test Specification

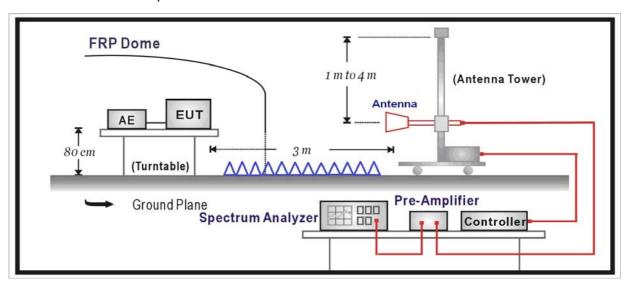
According to EMC Standard: FCC Part 15 Subpart B Class B, ANSI C63.4

## 4.2. Test Setup

Below 1GHz Test Setup:



#### Above 1GHz Test Setup:





#### 4.3. Limit

FCC	FCC Part 15 Subpart B Paragraph 15.109					
Frequency (MHz)	Distance (m)	Level (dBuV/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  $(dBuV/m) = 20 \log E$  field strength (uV/m)

#### 4.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated on radiated measurement.

For an unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a radiated emission limit is specified, up to the frequency shown in the following table:

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705 - 108	1000
108 - 500	2000

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500 - 1000	5000
Above 1000	5th harmonic of the highest frequency or 40
Above 1000	GHz, whichever is lower

On any frequency or frequencies below or equal to 1000 MHz, the radiated limits shown are based on measuring equipment employing a quasi-peak detector function and above 1000 MHz, the radiated limits shown are based measuring equipment employing an average detector function.

When average radiated emission measurement are included emission measurement Above 1000 MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.

For class A, the measurement distance between the EUT and antenna is 3 meters for under 1GHz and above 1GHz.

For class B, the measurement distance between the EUT and antenna is 3 meters for under 1GHz and 3 meters for above 1GHz.

The bandwidth below 1GHz setting on the field strength meter (R&S Test Receiver ESCI) is 120 kHz and above 1GHz is 1MHz.

Note: When measurement above 1GHz, the horn antenna will bend down a little (as horn antenna have the narrow beamwidth) in order to find the maximum emission of EUT.

#### 4.5. Deviation from Test Standard

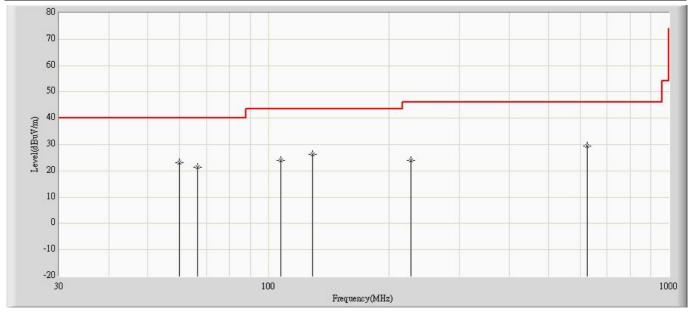
No deviation.



# 4.6. Test Result

Engineer: Sunny		
Site: AC2	Time: 2011/07/06 - 09:14	
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0	
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Horizontal	
EUT: GPS Locator	Power: AC 120V/60Hz	
Note: Mode 1		

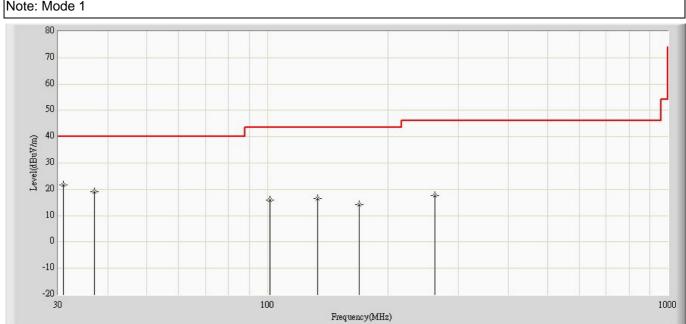
Note: Mode 1



No	Flag	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
			(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)		
1			59.949	23.200	11.147	-16.800	40.000	12.053	QP
2			66.375	21.467	7.918	-18.533	40.000	13.549	QP
3			107.236	24.011	6.082	-19.489	43.500	17.928	QP
4			128.819	26.157	7.774	-17.343	43.500	18.383	QP
5			226.910	24.104	6.528	-21.896	46.000	17.576	QP
6		*	624.246	29.381	7.118	-16.619	46.000	22.263	QP



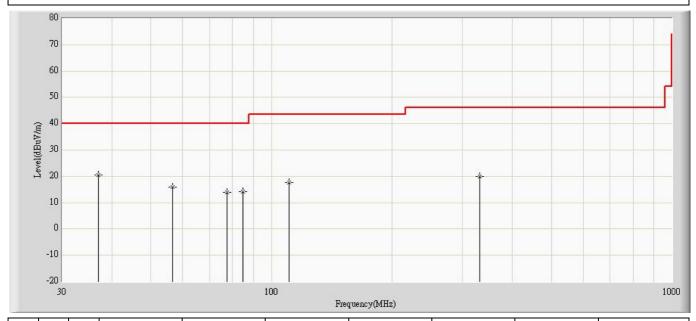
Engineer: Sunny					
Site: AC2	Time: 2011/07/06 - 10:09				
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0				
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Vertical				
EUT: GPS Locator	Power: AC 120V/60Hz				
Note: Mode 1					



No	Flag	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
			(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)		
1		*	30.970	21.668	4.348	-18.332	40.000	17.320	QP
2			36.911	19.156	5.253	-20.844	40.000	13.903	QP
3			101.537	15.827	5.027	-27.673	43.500	10.800	QP
4			133.548	16.539	5.142	-26.961	43.500	11.397	QP
5			169.801	14.336	5.133	-29.164	43.500	9.203	QP
6			262.194	17.727	5.113	-28.273	46.000	12.614	QP



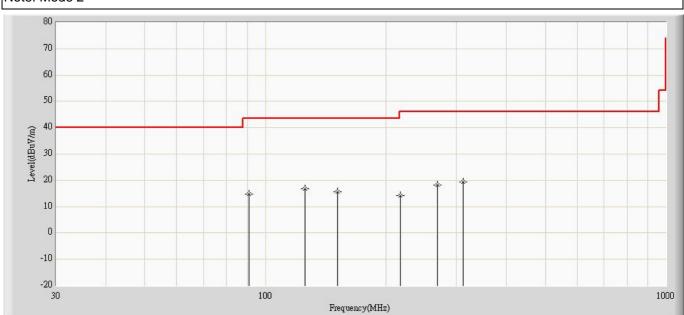
Engineer: Sunny					
Site: AC2	Time: 2011/07/06 - 10:29				
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0				
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Horizontal				
EUT: GPS Locator	Power: AC 120V/60Hz				
Note: Mode 2					



No	Flag	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
			(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)		
1		*	36.911	20.388	6.485	-19.612	40.000	13.903	QP
2			56.675	16.003	9.988	-23.997	40.000	6.015	QP
3			77.409	14.005	7.705	-25.995	40.000	6.300	QP
4			84.684	14.188	6.450	-25.812	40.000	7.738	QP
5			110.753	17.752	6.052	-25.748	43.500	11.700	QP
6			331.670	19.866	6.016	-26.134	46.000	13.850	QP



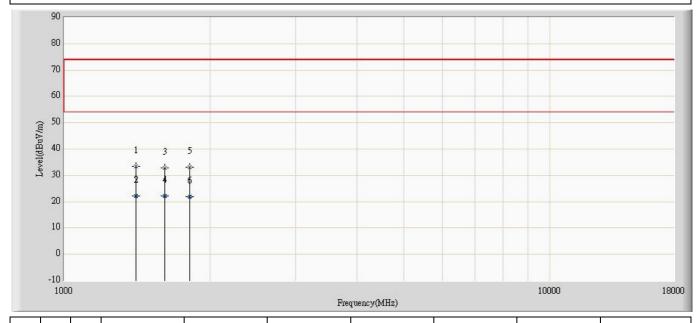
Engineer: Sunny					
Site: AC2	Time: 2011/07/06 - 10:32				
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0				
Probe: CBL6112D_27611(30-1000MHz)	Polarity: Vertical				
EUT: GPS Locator	Power: AC 120V/60Hz				
Note: Mode 2	•				



No	Flag	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
			(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)		
1			91.110	14.703	5.613	-28.797	43.500	9.090	QP
2			125.666	16.721	4.940	-26.779	43.500	11.781	QP
3			151.614	15.631	5.830	-27.869	43.500	9.801	QP
4			217.574	14.162	5.781	-31.838	46.000	8.381	QP
5			268.378	18.233	5.686	-27.767	46.000	12.547	QP
6		*	311.785	19.334	5.919	-26.666	46.000	13.415	QP



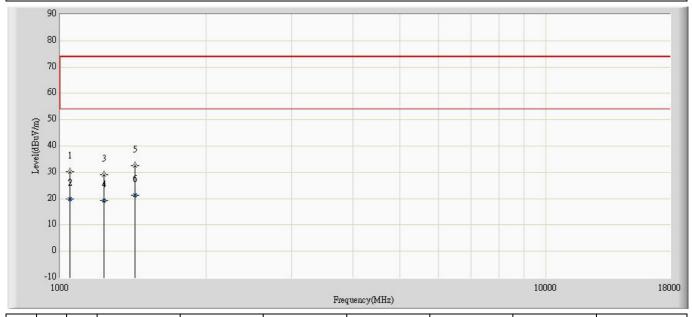
Engineer: Sunny						
Site: AC5	Time: 2011/07/09 - 16:27					
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0					
Probe: BBHA9120D_499(1-18GHz)	Polarity: Horizontal					
EUT: GPS Locator	Power: AC 120V/60Hz					
Note: Mode 1	Note: Mode 1					



No	Flag	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
			(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)		
1			1405.000	33.456	8.334	-36.544	70.000	25.122	PK
2		*	1405.000	22.242	-2.880	-27.758	50.000	25.122	AV
3			1610.000	32.778	7.936	-37.222	70.000	24.842	PK
4			1610.000	22.152	-2.690	-27.848	50.000	24.842	AV
5			1815.000	33.084	8.058	-36.916	70.000	25.026	PK
6			1815.000	21.996	-3.030	-28.004	50.000	25.026	AV



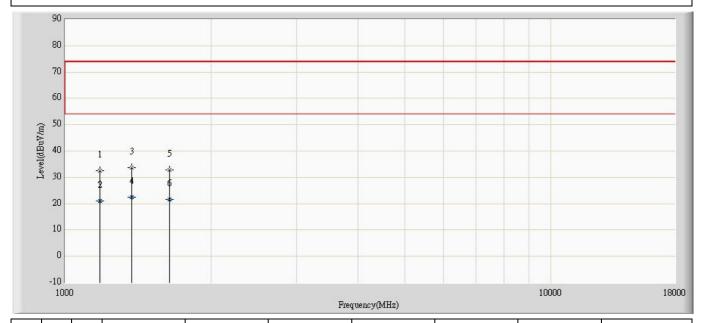
Engineer: Sunny					
Site: AC5	Time: 2011/07/09 - 16:28				
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0				
Probe: BBHA9120D_499(1-18GHz)	Polarity: Vertical				
EUT: GPS Locator Power: AC 120V/60Hz					
Note: Mode 1					



No	Flag	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
			(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)		
1			1047.500	30.180	5.912	-39.820	70.000	24.268	PK
2			1047.500	19.818	-4.450	-30.182	50.000	24.268	AV
3			1230.000	29.120	4.566	-40.880	70.000	24.554	PK
4			1230.000	19.194	-5.360	-30.806	50.000	24.554	AV
5			1425.000	32.442	7.362	-37.558	70.000	25.080	PK
6		*	1425.000	21.200	-3.880	-28.800	50.000	25.080	AV



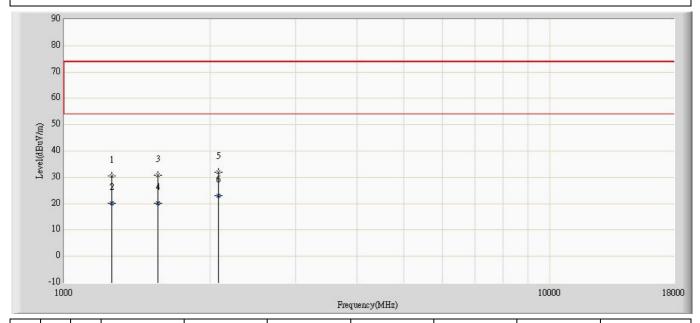
Engineer: Sunny	
Site: AC5	Time: 2011/07/09 - 16:29
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: BBHA9120D_499(1-18GHz)	Polarity: Horizontal
EUT: GPS Locator	Power: AC 120V/60Hz
Note: Mode 2	·



No	Flag	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
			(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)		
1			1177.500	32.591	8.257	-37.409	70.000	24.334	PK
2			1177.500	21.004	-3.330	-28.996	50.000	24.334	AV
3			1372.500	33.673	8.565	-36.327	70.000	25.108	PK
4		*	1372.500	22.428	-2.680	-27.572	50.000	25.108	AV
5			1637.500	32.854	8.059	-37.146	70.000	24.795	PK
6			1637.500	21.635	-3.160	-28.365	50.000	24.795	AV



Engineer: Sunny				
Site: AC5	Time: 2011/07/09 - 16:29			
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0			
Probe: BBHA9120D_499(1-18GHz)	Polarity: Vertical			
EUT: GPS Locator	Power: AC 120V/60Hz			
Note: Mode 2	·			

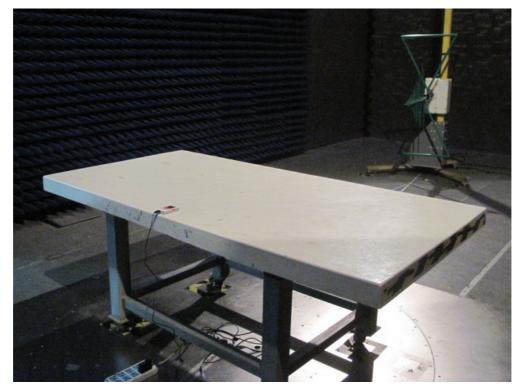


No	Flag	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
			(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)		
1			1255.000	30.528	5.808	-39.472	70.000	24.720	PK
2			1255.000	20.250	-4.470	-29.750	50.000	24.720	AV
3			1557.500	30.846	5.966	-39.154	70.000	24.880	PK
4			1557.500	20.190	-4.690	-29.810	50.000	24.880	AV
5			2077.500	32.050	5.190	-37.950	70.000	26.860	PK
6		*	2077.500	23.110	-3.750	-26.890	50.000	26.860	AV

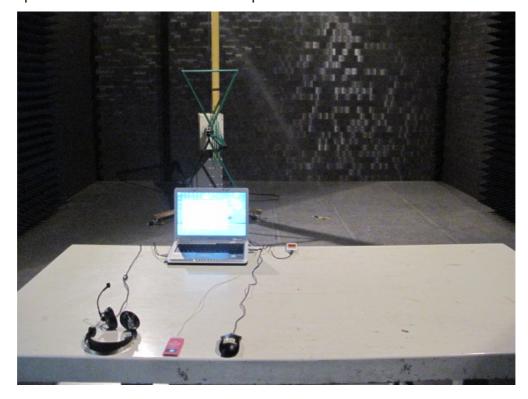


# 4.7. Test Photograph

Description: Radiated Emission Test Setup for Below 1GHz-Mode 1

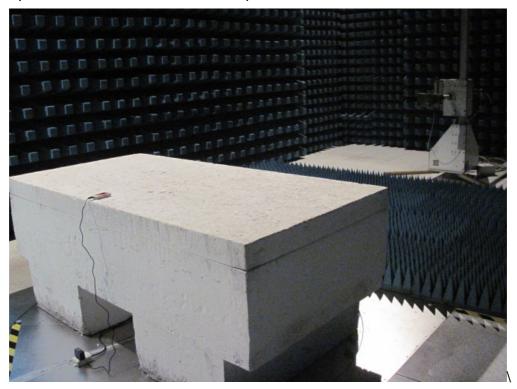


Description: Radiated Emission Test Setup for Below 1GHz-Mode 2

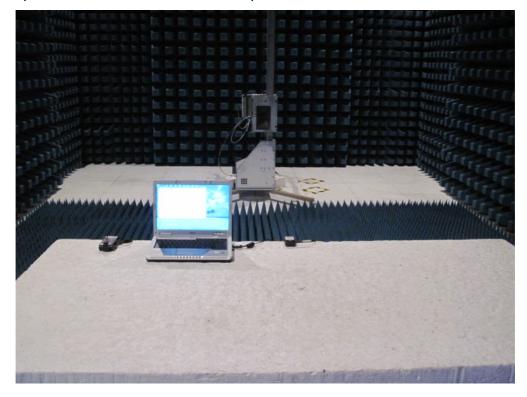




Description: Radiated Emission Test Setup for Above 1GHz-Mode 1



Description: Radiated Emission Test Setup for Above 1GHz-Mode 2





# 5. Attachment

# > EUT Photograph

(1) EUT Photo



(2) EUT Photo





# (3) EUT Photo

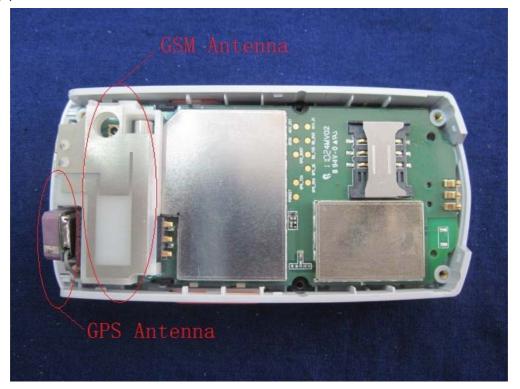


# (4) EUT Photo





# (5) EUT Photo



# (6) EUT Photo

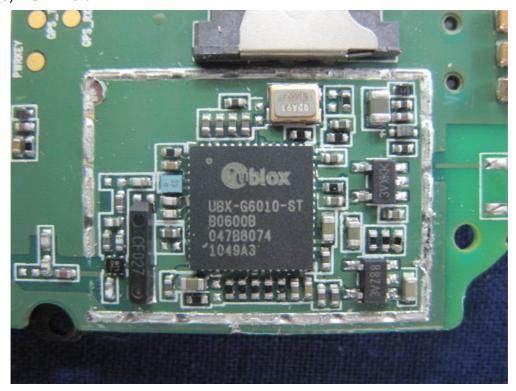




# (7) EUT Photo

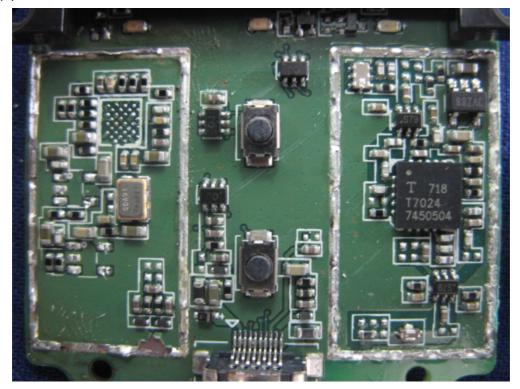


# (8) EUT Photo





# (9) EUT Photo



# (10) EUT Photo





## (11) EUT Photo



# (12) EUT Photo





## (13) EUT Photo

