

FCC CERTIFICATION
On Behalf of
TRIUMPH BOARD

TRIUMPH BOARD PORTABLE
Model No.: 8592580091001/8592580091018

FCC ID: YIP91001

Prepared for : TRIUMPH BOARD
Address : Neklanova 122/15, 12800 Praha 2, Czech Republic

Prepared by : ACCURATE TECHNOLOGY CO. LTD
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Report Number : ATE20101282
Date of Test : June 21-22, 2010
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APPENDIX I (TEST CURVES) (24 pages)

Test Report Certification

Applicant : TRIUMPH BOARD
 Manufacturer : Hanshin International Limited
 EUT Description : TRIUMPH BOARD PORTABLE
 (A) MODEL NO.: 8592580091001/8592580091018
 (B) SERIAL NO.: N/A
 (C) POWER SUPPLY: 5V DC (Connect to PC use USB terminal)

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.249
ANSI C63.4: 2003

The device described above is tested by ACCURATE TECHNOLOGY CO. LTD to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section 15.249 limits. The measurement results are contained in this test report and ACCURATE TECHNOLOGY CO. LTD is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of ACCURATE TECHNOLOGY CO. LTD.

Date of Test : June 21-22, 2010

Prepared by :

Joe

 (Engineer)

Approved & Authorized Signer :

Sean

 (Manager)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

EUT : TRIUMPH BOARD PORTABLE

Model Number : 8592580091001/8592580091018

Power Supply : 5V DC (Connect to PC use USB terminal)

:
Operate Frequency : 2412-2470MHz

Channel Number : 30 Channels

Applicant : TRIUMPH BOARD
Address : Neklanova 122/15, 12800 Praha 2, Czech Republic

Manufacturer : Hanshin International Limited
Address : East Wing, 3/F., Block H, Yushu Gongye Yuan, Science City, Guangzhou, China

Date of sample received : June 17, 2010

Date of Test : June 21, 2010

1.2.Description of Test Facility

EMC Lab	: Accredited by TUV Rheinland Shenzhen
	Listed by FCC The Registration Number is 752051
	Listed by Industry Canada The Registration Number is 5077A-2
	Accredited by China National Accreditation Committee for Laboratories The Certificate Registration Number is L3193
Name of Firm	: ACCURATE TECHNOLOGY CO. LTD
Site Location	: F1, Bldg. A, Changyuan New Material Port, Keyuan Rd. Science & Industry Park, Nanshan, Shenzhen, Guangdong P.R. China

1.3.Measurement Uncertainty

Conducted Emission Expanded Uncertainty = 2.23dB, k=2

Radiated emission expanded uncertainty = 3.08dB, k=2
(9kHz-30MHz)

Radiated emission expanded uncertainty = 4.42dB, k=2
(30MHz-1000MHz)

Radiated emission expanded uncertainty = 4.06dB, k=2
(Above 1GHz)

2. MEASURING DEVICE AND TEST EQUIPMENT

Table 1: List of Test and Measurement Equipment

Kind of equipment	Manufacturer	Type	S/N	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 9, 2011
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 9, 2011
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 9, 2011
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	Jan. 9, 2011
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 9, 2011
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 9, 2011
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 9, 2011
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Jan. 9, 2011
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 9, 2011
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 9, 2011

3. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
Section 15.207	Conducted Emission	Compliant
Section 15.249(a)	Fundamental and Harmonics Radiated Emission	Compliant
Section 15.249(d)	Spurious Radiated Emission	Compliant
Section 15.249(d)	Band Edge	Compliant
Section 15.203	Antenna Requirement	Compliant

Remark: “N/A” means “Not applicable”.

4. FUNDAMENTAL AND HARMONICS RADIATED EMISSION FOR SECTION 15.249(A)

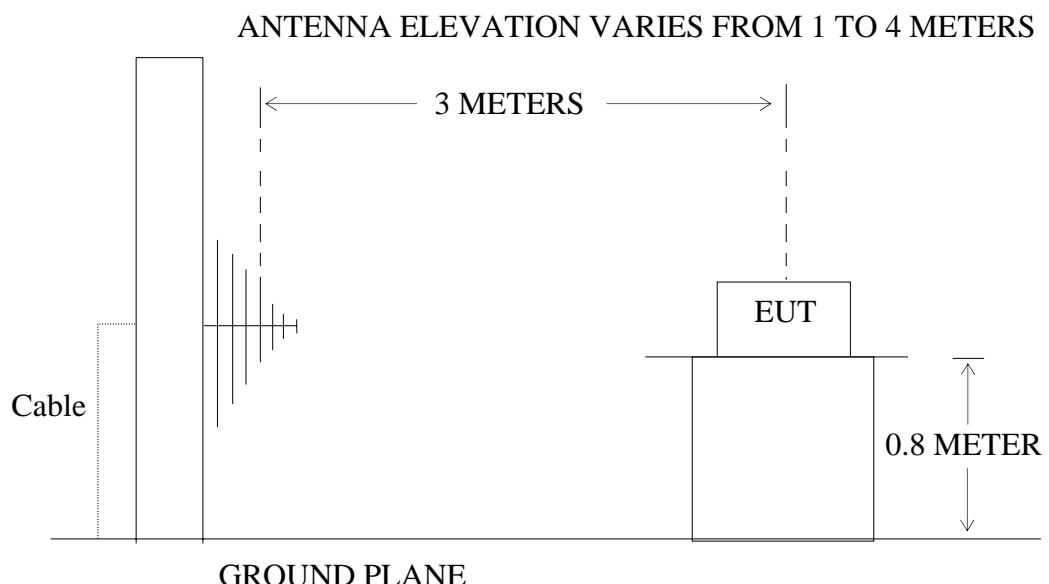
4.1. Block Diagram of Test Setup

4.1.1. Block diagram of connection between the EUT and simulators



(EUT: TRIUMPH BOARD PORTABLE)

4.1.2. Semi-Anechoic Chamber Test Setup Diagram



4.2.The Emission Limit

4.2.1.For intentional radiators, According to section 15.249(a), Operation within the frequency band of 2.4 to 2.4835GHz, The fundamental field strength shall not exceed 94 dB μ V/m and the harmonics shall not exceed 54 dB μ V/m.

Fundamental Frequency	Field Strength of Fundamental (millivolts/meter)	Field Strength of harmonics (microvolts/meter)
902-928MHz	50	500
2400-2483.5MHz	50	500
5725-5875MHz	50	500
24.0-24.25GHz	250	2500

4.2.2.According to section 15.249(e), as shown in section 15.35(b), the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

4.3.Configuration of EUT on Measurement

The following equipment is installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

4.3.1. TRIUMPH BOARD PORTABLE (EUT)

Model Number : 8592580091001/8592580091018
 Serial Number : N/A
 Manufacturer : Hanshin International Limited

4.4.Operating Condition of EUT

4.4.1.Setup the EUT and simulator as shown as Section 4.1.

4.4.2.Turn on the power of all equipment.

4.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2412-2470MHz. We are select 2412MHz, 2440MHz, 2470MHz TX frequency to transmit.

4.5. Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4: 2003 on radiated emission measurement.

The bandwidth of test receiver is set at 1MHz.

**4.6.The Field Strength of Radiation Emission Measurement Results
PASS.**

Date of Test:	June 21, 2010	Temperature:	25°C
EUT:	TRIUMPH BOARD PORTABLE	Humidity:	50%
Model No.:	8592580091001/8592580091018	Power Supply:	(Connect to PC use USB terminal)
Test Mode:	TX Channel 1: 2412MHz	Test Engineer:	Joe

Fundamental Radiated Emissions

Frequency (MHz)	Reading(dB μ V/m)		Factor(dB) Corr.	Result(dB μ V/m)		Limit(dB μ V/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2412.018	96.61	102.65	-7.43	89.18	95.22	94	114	-4.82	-18.78	Vertical
2412.018	96.24	102.28	-7.43	88.81	94.85	94	114	-5.19	-19.15	Horizontal

Harmonics Radiated Emissions

Frequency (MHz)	Reading(dB μ V/m)		Factor(dB) Corr.	Result(dB μ V/m)		Limit(dB μ V/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
4824.030	46.40	52.41	-0.19	46.21	52.22	54	74	-7.79	-21.78	Vertical
4824.030	46.45	52.48	-0.19	46.26	52.29	54	74	-7.74	-21.71	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain

3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	June 21, 2010	Temperature:	<u>25°C</u>
EUT:	TRIUMPH BOARD PORTABLE	Humidity:	<u>50%</u>
Model No.:	8592580091001/8592580091018	Power Supply:	<u>(Connect to PC use USB terminal)</u>
Test Mode:	TX Channel 15: 2440MHz	Test Engineer:	<u>Joe</u>

Fundamental Radiated Emissions

Frequency (MHz)	Reading(dB μ V/m)		Factor(dB)	Result(dB μ V/m)		Limit(dB μ V/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2440.012	96.36	102.42	-7.36	89.00	95.06	94	114	-5.00	-18.94	Vertical
2440.012	95.92	101.94	-7.36	88.56	94.58	94	114	-5.44	-19.42	Horizontal

Harmonics Radiated Emissions

Frequency (MHz)	Reading(dB μ V/m)		Factor(dB)	Result(dB μ V/m)		Limit(dB μ V/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
4880.022	45.76	51.77	0.13	45.89	51.90	54	74	-8.11	-22.10	Vertical
4880.022	46.26	52.25	0.13	46.39	52.38	54	74	-7.61	-21.62	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain

3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	June 21, 2010	Temperature:	25°C
EUT:	TRIUMPH BOARD PORTABLE	Humidity:	50%
Model No.:	8592580091001/8592580091018	Power Supply:	(Connect to PC use USB terminal)
Test Mode:	TX Channel 30: 2470MHz	Test Engineer:	Joe

Fundamental Radiated Emissions

Frequency (MHz)	Reading(dB μ V/m)		Factor(dB)	Result(dB μ V/m)		Limit(dB μ V/m)		Margin(dB)		Polarization
	AV	PEAK		Corr.	AV	PEAK	AV	PEAK	AV	
2470.016	96.58	102.58	-7.36	89.22	95.22	94	114	-4.78	-18.78	Vertical
2470.016	95.94	101.99	-7.36	88.58	94.63	94	114	-5.42	-19.37	Horizontal

Harmonics Radiated Emissions

Frequency (MHz)	Reading(dB μ V/m)		Factor(dB)	Result(dB μ V/m)		Limit(dB μ V/m)		Margin(dB)		Polarization
	AV	PEAK		Corr.	AV	PEAK	AV	PEAK	AV	
4940.028	47.41	53.43	0.42	47.83	53.85	54	74	-6.17	-20.15	Vertical
4940.028	45.79	51.81	0.42	46.21	52.23	54	74	-7.79	-21.77	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any) from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

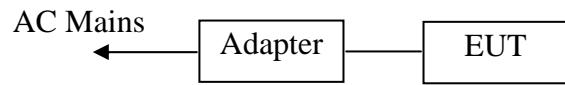
Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain

3. The spectral diagrams in appendix I display the measurement of peak values.

5. SPURIOUS RADIATED EMISSION FOR SECTION 15.249(D)

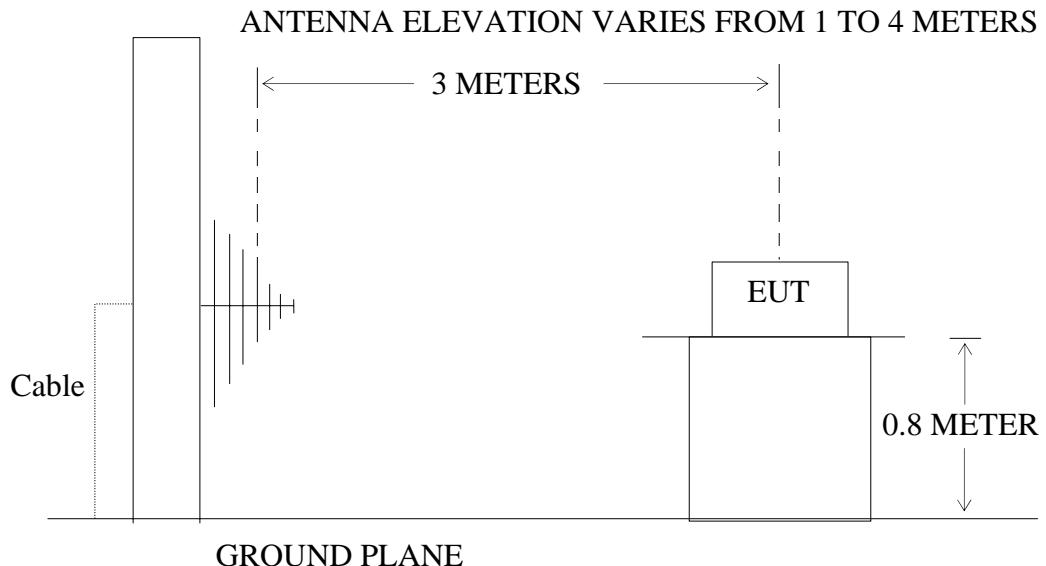
5.1. Block Diagram of Test Setup

5.1.1. Block diagram of connection between the EUT and simulators



(EUT: TRIUMPH BOARD PORTABLE)

5.1.2. Semi-Anechoic Chamber Test Setup Diagram



(EUT: TRIUMPH BOARD PORTABLE)

5.2.The Emission Limit For Section 15.249(d)

5.2.1.Emission radiated outside of the specified frequency bands, except for harmonics, shall be comply with the general radiated emission limits in Section 15.209.

Radiation Emission Measurement Limits According to Section 15.209

Frequency (MHz)	Limit		The final measurement in band 9-90kHz, 110-490kHz and above 1000MHz is performed with Average detector. Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.
	Field Strength of Quasi-peak Value (microvolts/m)	Field Strength of Quasi-peak Value (dB μ V/m)	
30 - 88	100	40	
88 - 216	150	43.5	
216 - 960	200	46	
Above 960	500	54	

5.3.EUT Configuration on Measurement

The following equipment is installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

5.3.1. TRIUMPH BOARD PORTABLE (EUT)

Model Number : 8592580091001/8592580091018
 Serial Number : N/A
 Manufacturer : Hanshin International Limited

5.4.Operating Condition of EUT

5.4.1.Setup the EUT and simulator as shown as Section 5.1.

5.4.2.Turn on the power of all equipment.

5.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2412-2470MHz. We are select 2412MHz, 2440MHz, 2470MHz TX frequency to transmit.

5.5. Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4: 2003 on radiated emission measurement.

The bandwidth of test receiver is set at 120kHz in 30-1000MHz. and set at 1MHz in above 1000MHz.

The frequency range from 30MHz to 25000MHz is checked.

The final measurement in band 9-90kHz, 110-490kHz and above 1000MHz is performed with Average detector. Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.

5.6.The Emission Measurement Result

PASS.

Date of Test:	June 21, 2010	Temperature:	25°C
EUT:	<u>TRIUMPH BOARD PORTABLE</u>	Humidity:	50%
Model No.:	8592580091001/8592580091018	Power Supply:	(Connect to PC use USB terminal)
Test Mode:	TX Channel 1: 2412MHz	Test Engineer:	Joe

Frequency (MHz)	Reading (dB μ V/m)	Factor(dB) Corr.	Result	Limit	Margin	Polarization
			(dB μ V/m)	(dB μ V/m)	(dB)	
48.0010	15.05	14.65	29.70	40.00	-10.30	Vertical
144.0020	13.43	14.48	27.91	43.50	-15.59	Vertical
420.0020	12.42	23.20	35.62	46.00	-10.38	Vertical
420.0020	13.49	23.20	36.69	46.00	-9.31	Horizontal
623.9970	12.45	26.05	38.50	46.00	-7.50	Horizontal
671.9980	14.67	26.17	40.84	46.00	-5.16	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain

3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test: June 21, 2010 Temperature: 25°C
 EUT: TRIUMPH BOARD PORTABLE Humidity: 50%
5V DC
 Model No.: 8592580091001/8592580091018 Power Supply: (Connect to PC use USB terminal)
 Test Mode: TX Channel 15: 2440MHz Test Engineer: Joe

Frequency (MHz)	Reading (dB μ V/m)	Factor(dB) Corr.	Result	Limit	Margin	Polarization
			(dB μ V/m)	(dB μ V/m)	(dB)	
	QP	QP	QP	QP	QP	
48.0010	12.51	14.65	27.16	40.00	-12.84	Vertical
144.0020	14.20	14.48	28.68	43.50	-14.82	Vertical
504.0000	13.11	24.01	37.12	46.00	-8.88	Vertical
504.0000	12.86	24.01	36.87	46.00	-9.13	Horizontal
623.9970	13.96	26.05	40.01	46.00	-5.99	Horizontal
671.9980	14.46	26.17	40.63	46.00	-5.37	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain

3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test: June 21, 2010 Temperature: 25°C
 EUT: TRIUMPH BOARD PORTABLE Humidity: 50%
5V DC
 Model No.: 8592580091001/8592580091018 Power Supply: (Connect to PC use USB terminal)
 Test Mode: TX Channel 30: 2470MHz Test Engineer: Joe

Frequency (MHz)	Reading (dB μ V/m)	Factor(dB) Corr.	Result	Limit	Margin	Polarization
			(dB μ V/m)	(dB μ V/m)	(dB)	
	QP	QP	QP	QP	QP	
48.0010	11.37	14.65	26.02	40.00	-13.98	Vertical
144.0020	13.67	14.48	28.15	43.50	-15.35	Vertical
504.0000	12.84	24.01	36.85	46.00	-9.15	Vertical
480.0010	13.07	23.86	36.93	46.00	-9.07	Horizontal
623.9970	14.06	26.05	40.11	46.00	-5.89	Horizontal
671.9980	13.60	26.17	39.77	46.00	-6.23	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain

3. The spectral diagrams in appendix I display the measurement of peak values.

6. BAND EDGES

6.1.The Requirement

6.1.1.Band Edge from 2400MHz to 2483.5MHz. Emission radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

6.2.EUT Configuration on Measurement

The following equipment is installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

6.2.1. TRIUMPH BOARD PORTABLE (EUT)

Model Number	:	8592580091001/8592580091018
Serial Number	:	N/A
Manufacturer	:	Hanshin International Limited

6.3.Operating Condition of EUT

6.3.1.Setup the EUT and simulator as shown as Section 4.1.

6.3.2.Turn on the power of all equipment.

6.3.3. Let the EUT work in TX modes measure it. The transmit frequency are 2412-2470MHz. We are select 2412MHz, 2470MHz TX frequency to transmit.

6.4.Test Procedure

1. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.
2. The turntable was 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 emission.
4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
RBW=1MHz, VBW=1MHz

6.5.The Measurement Result

Pass.

Date of Test:	June 21, 2010	Temperature:	25°C
EUT:	<u>TRIUMPH BOARD PORTABLE</u>	Humidity:	50%
Model No.:	<u>8592580091001/8592580091018</u>	Power Supply:	<u>(Connect to PC use USB terminal)</u>
Test Mode:	<u>TX Channel 1: 2412MHz</u>	Test Engineer:	<u>Joe</u>

Frequency (MHz)	Reading(dB μ V/m)		Factor(dB) Corr.	Result(dB μ V/m)		Limit(dB μ V/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2400.000	49.71	55.84	-7.46	42.25	48.38	54	74	-11.75	-25.62	Vertical
2400.000	49.70	55.83	-7.46	42.24	48.37	54	74	-11.76	-25.63	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain

3. The spectral diagrams in appendix I display the measurement of peak values.

Date of Test:	June 21, 2010	Temperature:	25°C
EUT:	TRIUMPH BOARD PORTABLE	Humidity:	50%
Model No.:	8592580091001/8592580091018	Power Supply:	(Connect to PC use USB terminal)
Test Mode:	TX Channel 30: 2470MHz	Test Engineer:	Joe

Frequency (MHz)	Reading(dB μ V/m)		Factor(dB) Corr.	Result(dB μ V/m)		Limit(dB μ V/m)		Margin(dB)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
2483.500	45.94	52.09	-7.37	38.57	44.72	54	74	-15.43	-29.28	Vertical
2483.500	48.89	55.01	-7.37	41.52	47.64	54	74	-12.48	-26.36	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

Where Corrected Factor = Antenna Factor + Cable Loss + High Pass Filter Loss – Amplifier Gain

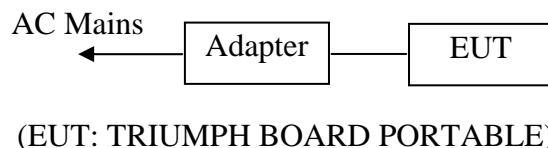
3. The spectral diagrams in appendix I display the measurement of peak values.

7. CONDUCTED EMISSION FOR FCC PART 15 SECTION

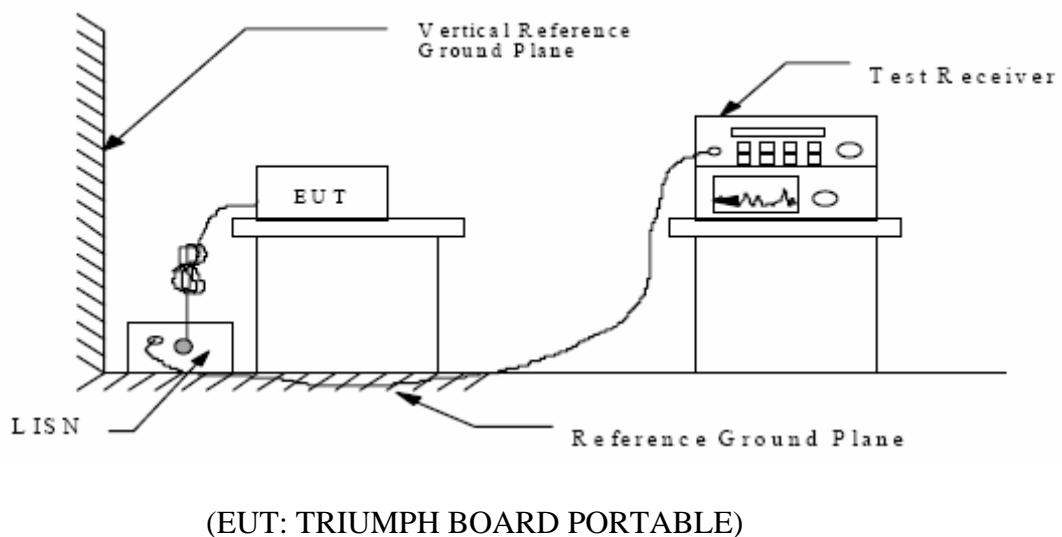
15.207(A)

7.1. Block Diagram of Test Setup

7.1.1. Block diagram of connection between the EUT and simulators



7.1.2. Shielding Room Test Setup Diagram



(EUT: TRIUMPH BOARD PORTABLE)

7.2. The Emission Limit

7.2.1. Conducted Emission Measurement Limits According to Section 15.207(a)

Frequency (MHz)	Limit dB(μ V)	
	Quasi-peak Level	Average Level
0.15 - 0.50	66.0 - 56.0 *	56.0 - 46.0 *
0.50 - 5.00	56.0	46.0
5.00 - 30.00	60.0	50.0

* Decreases with the logarithm of the frequency.

7.3.Configuration of EUT on Measurement

The following equipment is installed on the Conducted Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

7.3.1.TRIUMPH BOARD PORTABLE (EUT)

Model Number	:	8592580091001/8592580091018
Serial Number	:	N/A
Manufacturer	:	Hanshin International Limited

7.4.Operating Condition of EUT

7.4.1.Setup the EUT and simulator as shown as Section 7.1.

7.4.2.Turn on the power of all equipment.

7.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2412-2470MHz. We are select 2440MHz TX frequency to transmit.

7.5.Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4: 2003 on Conducted Emission Measurement.

The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

All the scanning waveforms are attached in Appendix I.

7.6.Power Line Conducted Emission Measurement Results

PASS.

The frequency range from 150kHz to 30MHz is checked.

Date of Test:	June 21, 2010	Temperature:	25°C
EUT:	<u>TRIUMPH BOARD PORTABLE</u>	Humidity:	50%
			5V DC
			(Connect to PC use USB)
Model No.:	<u>8592580091001/8592580091018</u>	Power Supply:	<u>terminal</u>
Test Mode:	<u>TX Channel 15: 2440MHz</u>	Test Engineer:	<u>Joe</u>

Frequency MHz	Level dB μ V	Transd dB	Limit dB μ V	Margin dB	Detector	Line	PE
0.188327	45.00	11.2	64	19.1	QP	L1	GND
0.517062	37.70	12.0	56	18.3	QP	L1	GND
0.933537	39.50	11.8	56	16.5	QP	L1	GND
Frequency MHz	Level dB μ V	Transd dB	Limit dB μ V	Margin dB	Detector	Line	PE
0.190596	38.00	11.2	54	16.0	AV	L1	GND
0.571327	30.70	12.0	46	15.3	AV	L1	GND
0.933537	29.90	11.8	46	16.1	AV	L1	GND
Frequency MHz	Level dB μ V	Transd dB	Limit dB μ V	Margin dB	Detector	Line	PE
0.189080	46.00	11.2	64	18.1	QP	N	GND
0.515002	37.90	12.0	56	18.1	QP	N	GND
0.933537	38.80	11.8	56	17.2	QP	N	GND
Frequency MHz	Level dB μ V	Transd dB	Limit dB μ V	Margin dB	Detector	Line	PE
0.190596	39.20	11.2	54	14.8	AV	N	GND
0.533841	30.30	12.0	46	15.7	AV	N	GND
0.929818	27.20	11.8	46	18.8	AV	N	GND

The spectral diagrams in appendix I display the measurement of peak values.

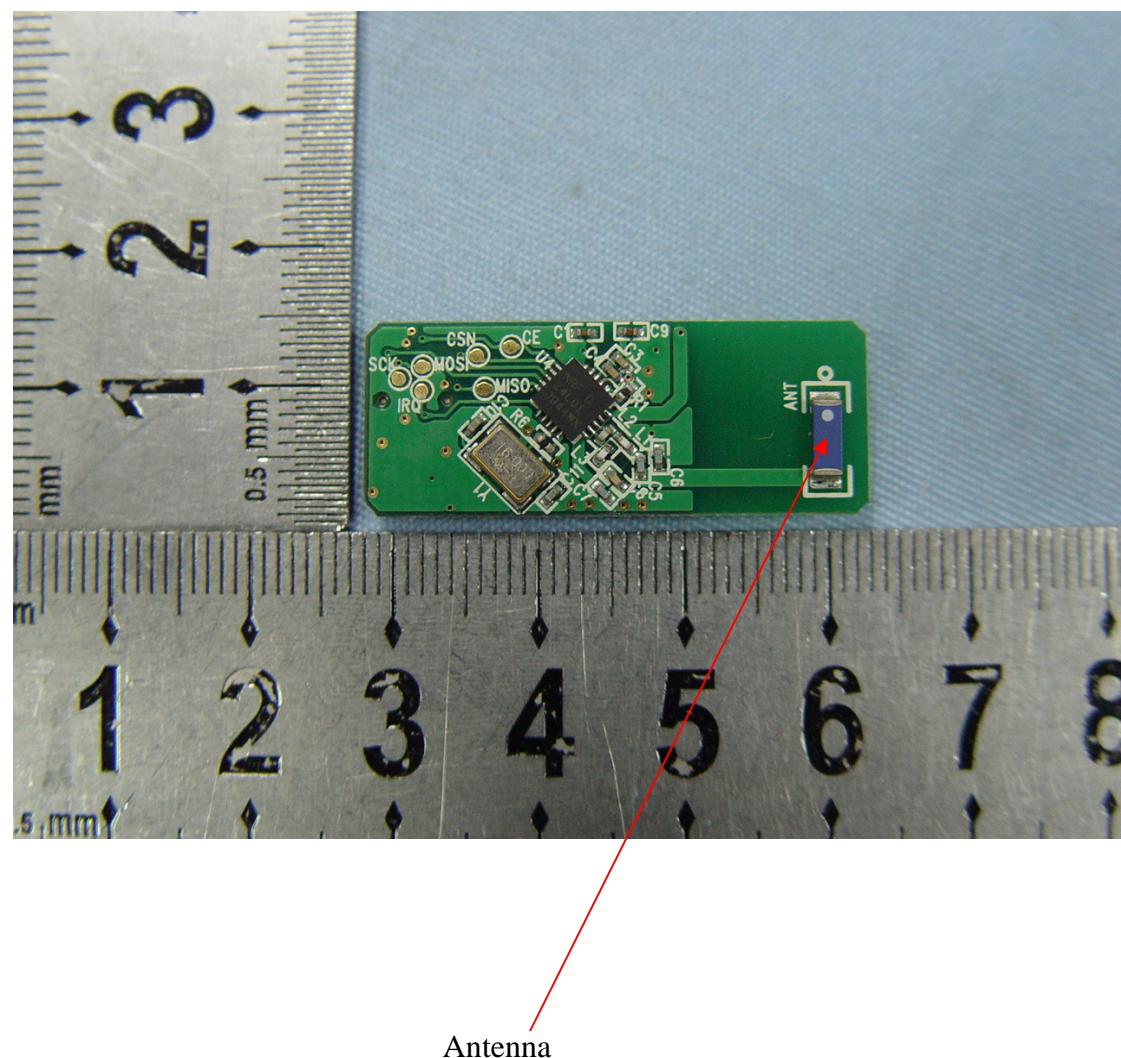
8. ANTENNA REQUIREMENT

8.1.The Requirement

8.1.1.According to Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

8.2.Antenna Construction

The transmitter utilizes SMD chip antenna, no consideration of replacement.



APPENDIX I (Test Curves)


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 Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: RTTE #5258

Polarization: Horizontal

Standard: FCC Class B 3M Radiated

Power Source: DC 5V

Test item: Radiation Test

Date: 2010/06/21

Temp.(C)/Hum.(%) 25 C / 50 %

Time: 10:08:03

EUT: TRIUMPH BOARD PORTABLE

Engineer Signature: Joe

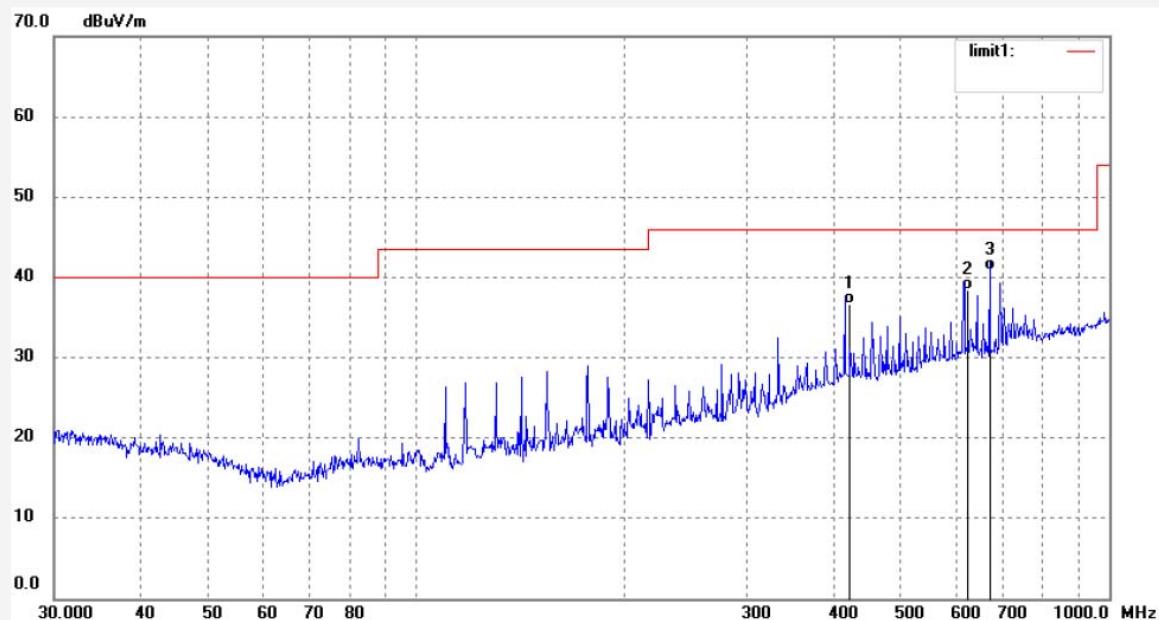
Mode: TX Channel 1

Distance: 3m

Model: 8592580091001/8592580091018

Manufacturer: Hanshin International Limited

Note: Sample No.:101460 Report No.:ATE20101282



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	420.0020	13.49	23.20	36.69	46.00	-9.31	QP			
2	623.9970	12.45	26.05	38.50	46.00	-7.50	QP			
3	671.9980	14.67	26.17	40.84	46.00	-5.16	QP			


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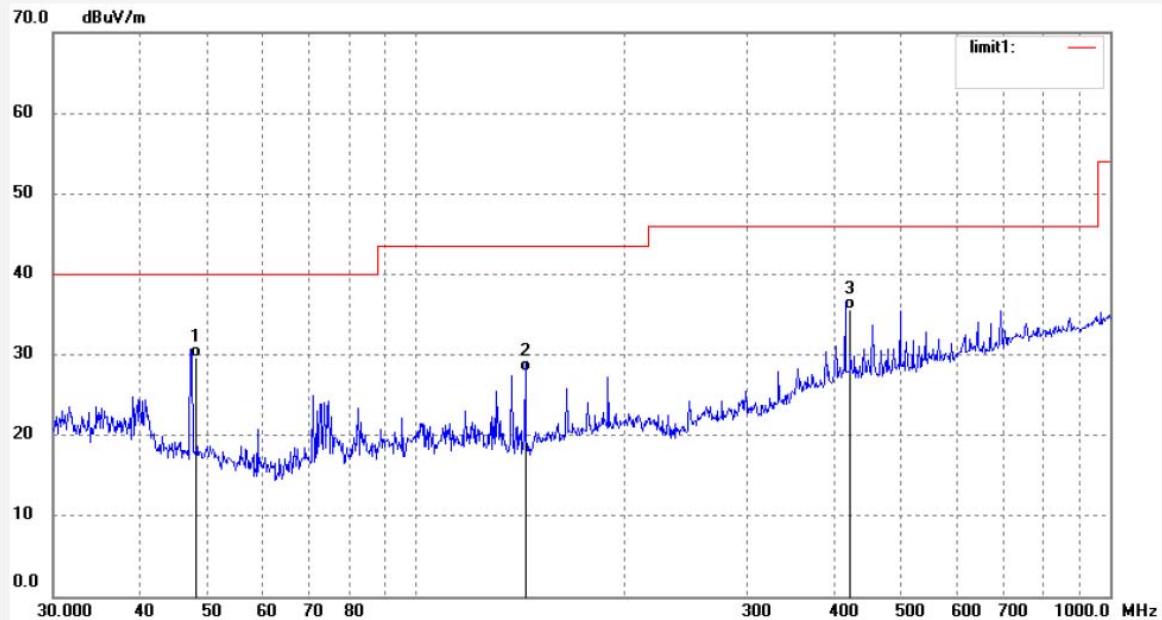
 F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
 Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.:	RTTE #5259	Polarization:	Vertical
Standard:	FCC Class B 3M Radiated	Power Source:	DC 5V
Test item:	Radiation Test	Date:	2010/06/21
Temp.(C)/Hum.(%)	25 C / 50 %	Time:	10:11:38
EUT:	TRIUMPH BOARD PORTABLE	Engineer Signature:	Joe
Mode:	TX Channel 1	Distance:	3m
Model:	8592580091001/8592580091018		
Manufacturer:	Hanshin International Limited		
Note:	Sample No.:101460 Report No.:ATE20101282		



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	48.0010	15.05	14.65	29.70	40.00	-10.30	QP			
2	144.0020	13.43	14.48	27.91	43.50	-15.59	QP			
3	420.0020	12.42	23.20	35.62	46.00	-10.38	QP			


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Fax:+86-0755-26503396

Job No.: RTTE #5264

Polarization: Horizontal

Standard: FCC Class B 3M Radiated

Power Source: DC 5V

Test item: Radiation Test

Date: 2010/06/21

Temp.(C)/Hum.(%) 25 C / 50 %

Time: 10:36:32

EUT: TRIUMPH BOARD PORTABLE

Engineer Signature: Joe

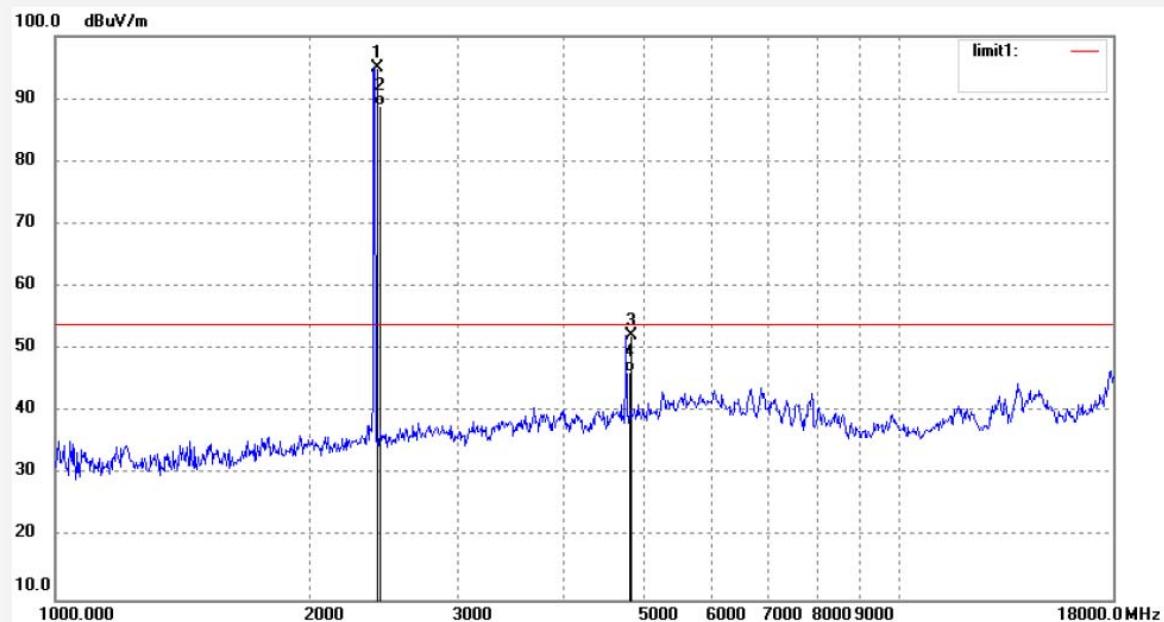
Mode: TX Channel 1

Distance: 3m

Model: 8592580091001/8592580091018

Manufacturer: Hanshin International Limited

Note: Sample No.:101460 Report No.:ATE20101282



No.	Freq. (MHz)	Reading (dB _{UV} /m)	Factor (dB)	Result (dB _{UV} /m)	Limit (dB _{UV} /m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2412.018	102.28	-7.43	94.85	114.00	-19.15	peak			
2	2412.018	96.24	-7.43	88.81	94.00	-5.19	AVG			
3	4824.030	52.48	-0.19	52.29	74.00	-21.71	peak			
4	4824.030	46.45	-0.19	46.26	54.00	-7.74	AVG			


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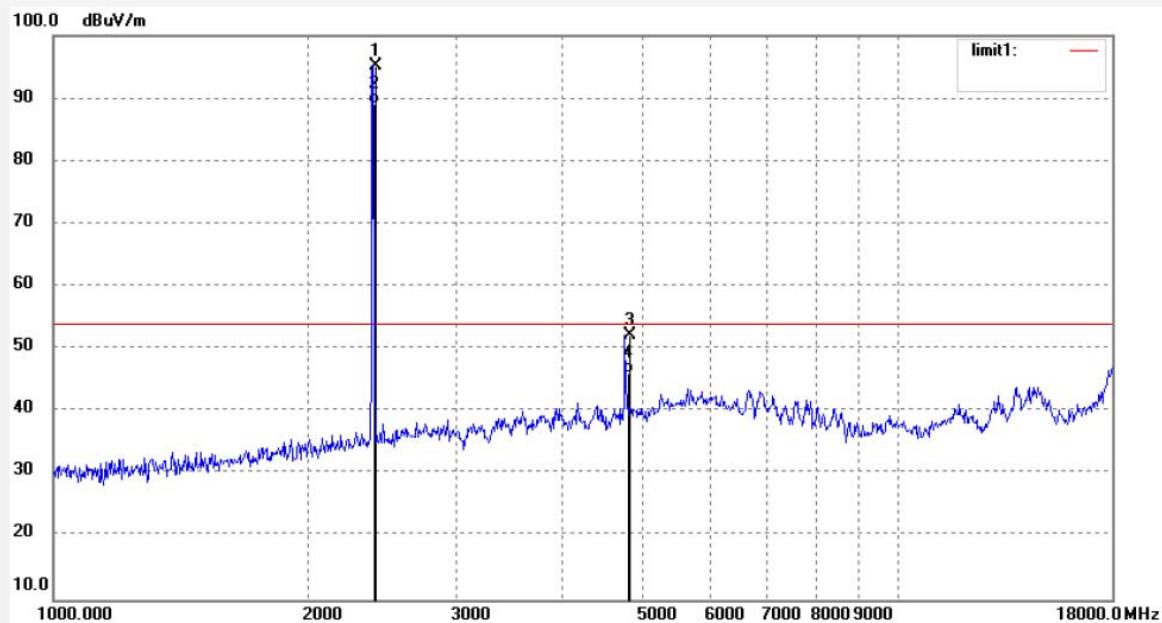
Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.:	RTTE #5265	Polarization:	Vertical
Standard:	FCC Class B 3M Radiated	Power Source:	DC 5V
Test item:	Radiation Test	Date:	2010/06/21
Temp.(C)/Hum.(%)	25 C / 50 %	Time:	10:40:35
EUT:	TRIUMPH BOARD PORTABLE	Engineer Signature:	Joe
Mode:	TX Channel 1	Distance:	3m
Model:	8592580091001/8592580091018		
Manufacturer:	Hanshin International Limited		

Note: Sample No.:101460 Report No.:ATE20101282



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2412.018	102.65	-7.43	95.22	114.00	-18.78	peak			
2	2412.018	96.61	-7.43	89.18	94.00	-4.82	AVG			
3	4824.030	52.41	-0.19	52.22	74.00	-21.78	peak			
4	4824.030	46.40	-0.19	46.21	54.00	-7.79	AVG			


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Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: RTTE #5270

Polarization: Horizontal

Standard: FCC Class B 3M Radiated

Power Source: DC 5V

Test item: Radiation Test

Date: 2010/06/21

Temp.(C)/Hum.(%) 25 C / 50 %

Time: 11:07:02

EUT: TRIUMPH BOARD PORTABLE

Engineer Signature: Joe

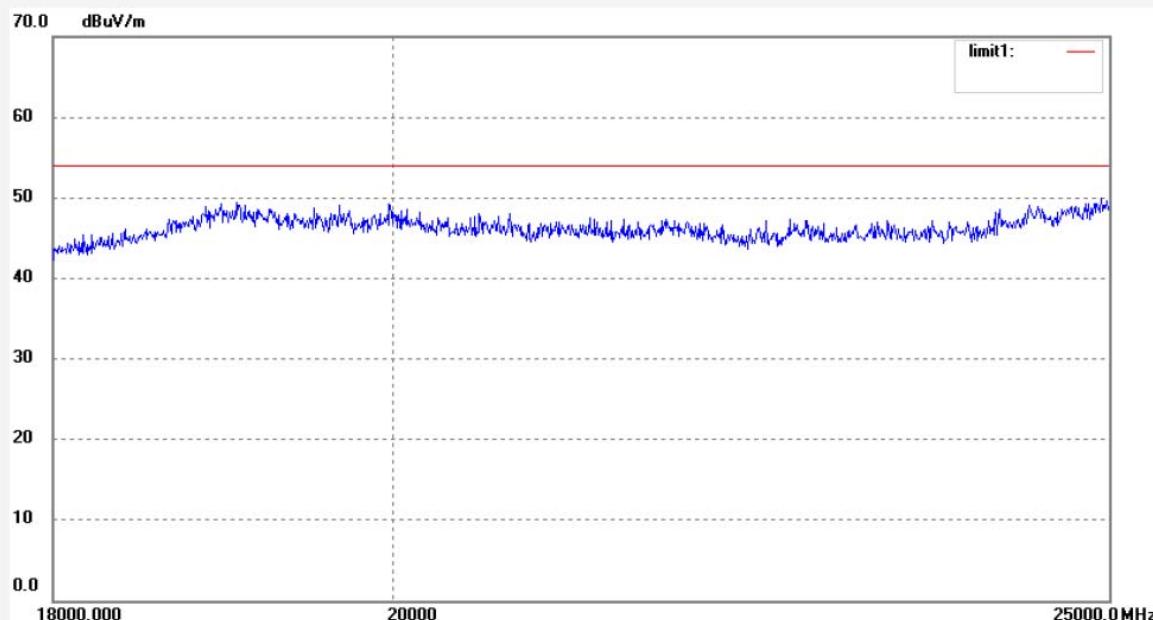
Mode: TX Channel 1

Distance: 3m

Model: 8592580091001/8592580091018

Manufacturer: Hanshin International Limited

Note: Sample No.:101460 Report No.:ATE20101282



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
-----	----------------	---------------------	----------------	--------------------	-------------------	----------------	----------	----------------	------------------	--------


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Fax:+86-0755-26503396

Job No.: RTTE #5271

Polarization: Vertical

Standard: FCC Class B 3M Radiated

Power Source: DC 5V

Test item: Radiation Test

Date: 2010/06/21

Temp.(C)/Hum.(%) 25 C / 50 %

Time: 11:11:05

EUT: TRIUMPH BOARD PORTABLE

Engineer Signature: Joe

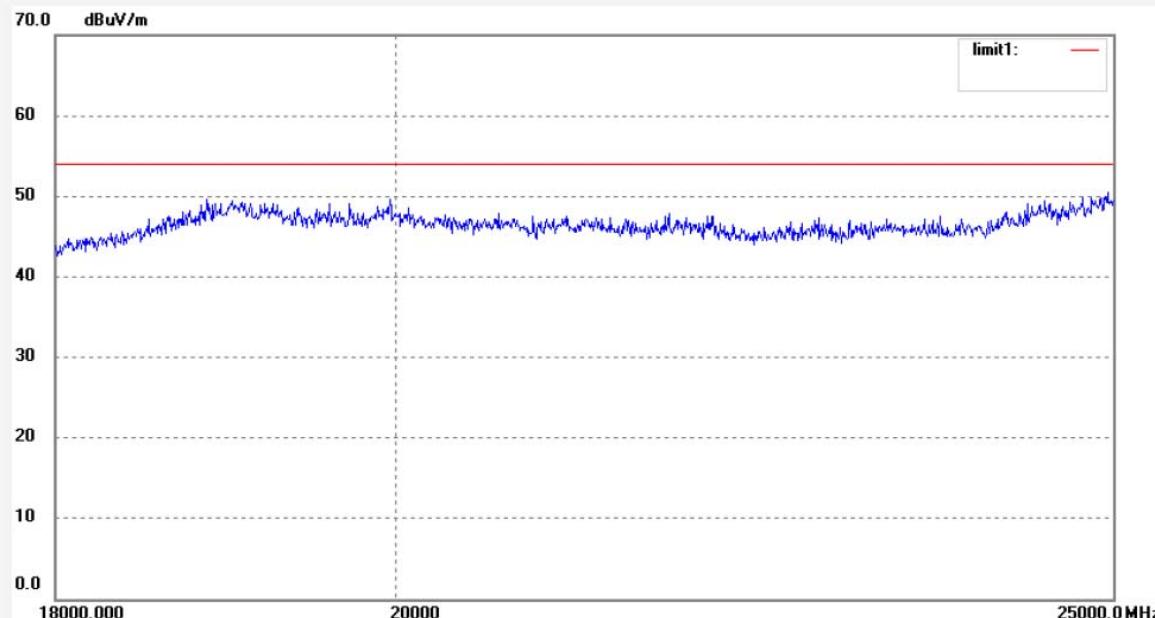
Mode: TX Channel 1

Distance: 3m

Model: 8592580091001/8592580091018

Manufacturer: Hanshin International Limited

Note: Sample No.:101460 Report No.:ATE20101282



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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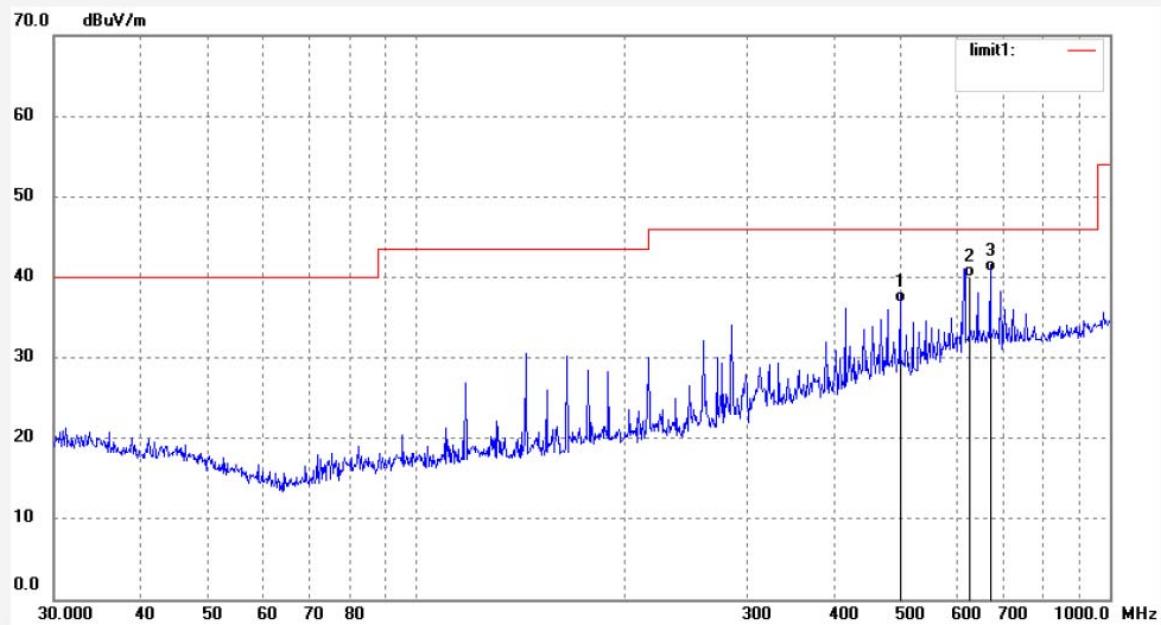
 F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
 Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.:	RTTE #5261	Polarization:	Horizontal
Standard:	FCC Class B 3M Radiated	Power Source:	DC 5V
Test item:	Radiation Test	Date:	2010/06/21
Temp. (C)/Hum.(%)	25 C / 50 %	Time:	10:19:19
EUT:	TRIUMPH BOARD PORTABLE	Engineer Signature:	Joe
Mode:	TX Channel 15	Distance:	3m
Model:	8592580091001/8592580091018		
Manufacturer:	Hanshin International Limited		
Note:	Sample No.:101460 Report No.:ATE20101282		



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	504.0000	12.86	24.01	36.87	46.00	-9.13	QP			
2	623.9970	13.96	26.05	40.01	46.00	-5.99	QP			
3	671.9980	14.46	26.17	40.63	46.00	-5.37	QP			


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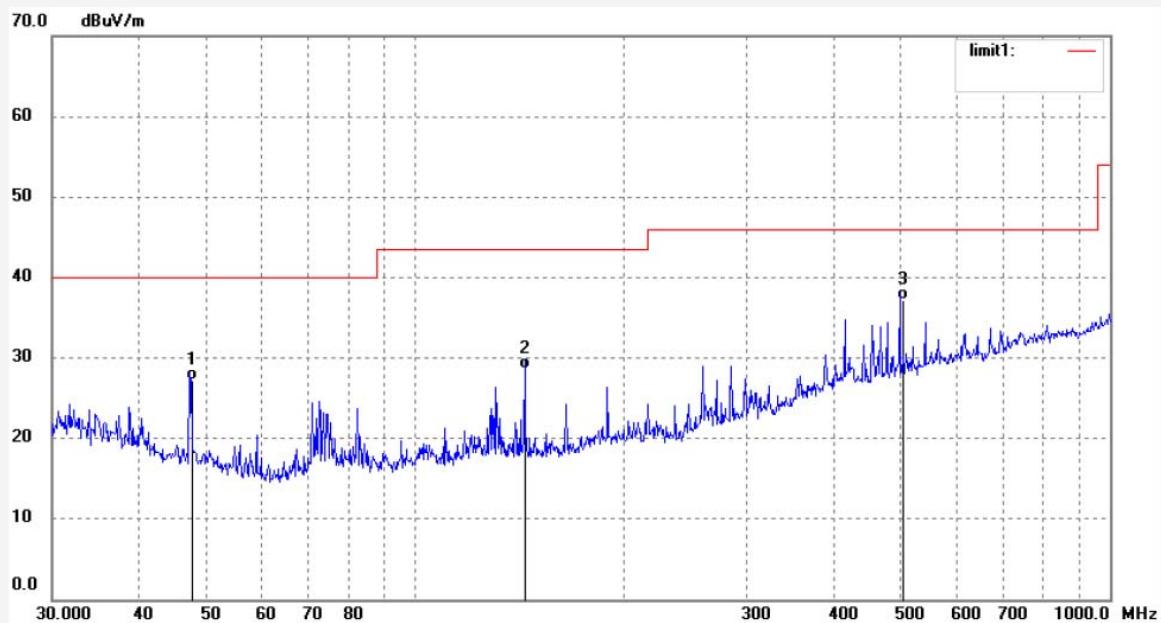
 F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
 Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.:	RTTE #5260	Polarization:	Vertical
Standard:	FCC Class B 3M Radiated	Power Source:	DC 5V
Test item:	Radiation Test	Date:	2010/06/21
Temp. (C)/Hum.(%)	25 C / 50 %	Time:	10:15:43
EUT:	TRIUMPH BOARD PORTABLE	Engineer Signature:	Joe
Mode:	TX Channel 15	Distance:	3m
Model:	8592580091001/8592580091018		
Manufacturer:	Hanshin International Limited		
Note:	Sample No.:101460 Report No.:ATE20101282		



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	48.0010	12.51	14.65	27.16	40.00	-12.84	QP			
2	144.0020	14.20	14.48	28.68	43.50	-14.82	QP			
3	504.0000	13.11	24.01	37.12	46.00	-8.88	QP			


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Site: 966 chamber

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Fax:+86-0755-26503396

Job No.: RTTE #5267

Polarization: Horizontal

Standard: FCC Class B 3M Radiated

Power Source: DC 5V

Test item: Radiation Test

Date: 2010/06/21

Temp.(C)/Hum.(%) 25 C / 50 %

Time: 10:49:27

EUT: TRIUMPH BOARD PORTABLE

Engineer Signature: Joe

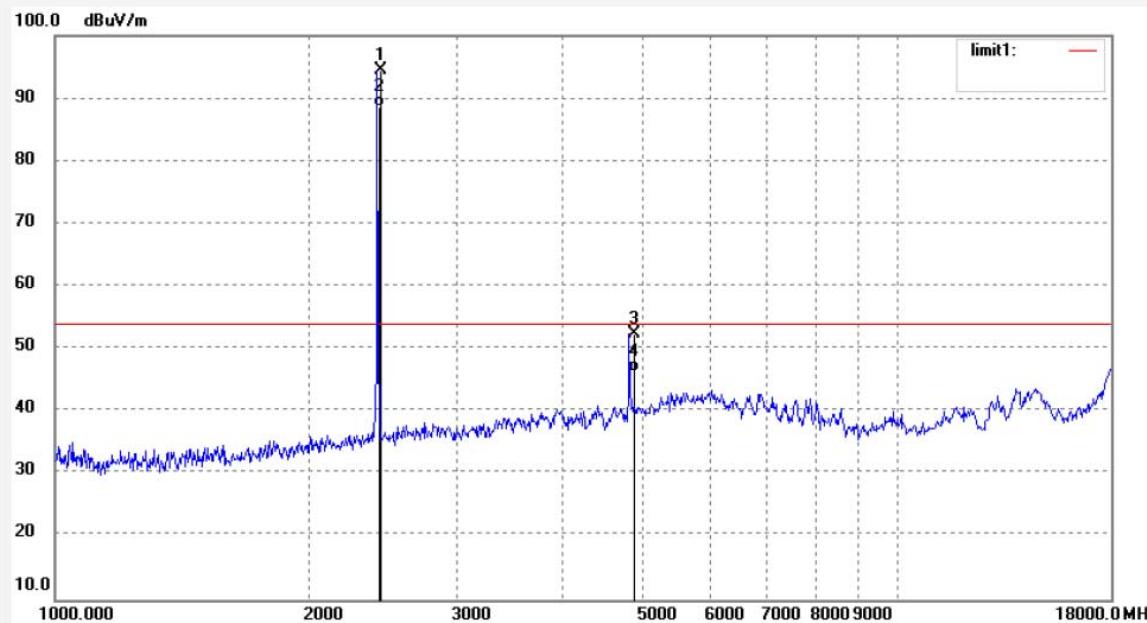
Mode: TX Channel 15

Distance: 3m

Model: 8592580091001/8592580091018

Manufacturer: Hanshin International Limited

Note: Sample No.:101460 Report No.:ATE20101282



No.	Freq. (MHz)	Reading (dB _{uV/m})	Factor (dB)	Result (dB _{uV/m})	Limit (dB _{uV/m})	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2440.012	101.94	-7.36	94.58	114.00	-19.42	peak			
2	2440.012	95.92	-7.36	88.56	94.00	-5.44	AVG			
3	4880.022	52.25	0.13	52.38	74.00	-21.62	peak			
4	4880.022	46.26	0.13	46.39	54.00	-7.61	AVG			


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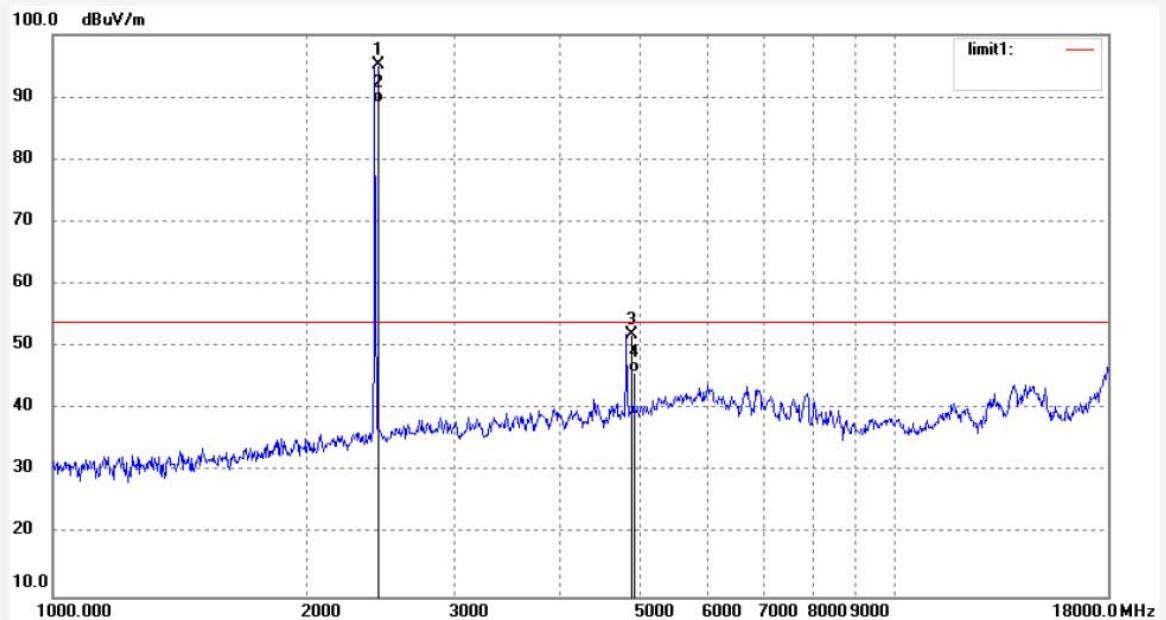
Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: RTTE #5266	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 5V
Test item: Radiation Test	Date: 2010/06/21
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 10:45:19
EUT: TRIUMPH BOARD PORTABLE	Engineer Signature: Joe
Mode: TX Channel 15	Distance: 3m
Model: 8592580091001/8592580091018	
Manufacturer: Hanshin International Limited	

Note: Sample No.:101460 Report No.:ATE20101282



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2440.012	102.42	-7.36	95.06	114.00	-18.94	peak			
2	2440.012	96.36	-7.36	89.00	94.00	-5.00	AVG			
3	4880.022	51.77	0.13	51.90	74.00	-22.10	peak			
4	4880.022	45.76	0.13	45.89	54.00	-8.11	AVG			


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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: RTTE #5273

Polarization: Horizontal

Standard: FCC Class B 3M Radiated

Power Source: DC 5V

Test item: Radiation Test

Date: 2010/06/21

Temp.(C)/Hum.(%) 25 C / 50 %

Time: 11:19:52

EUT: TRIUMPH BOARD PORTABLE

Engineer Signature: Joe

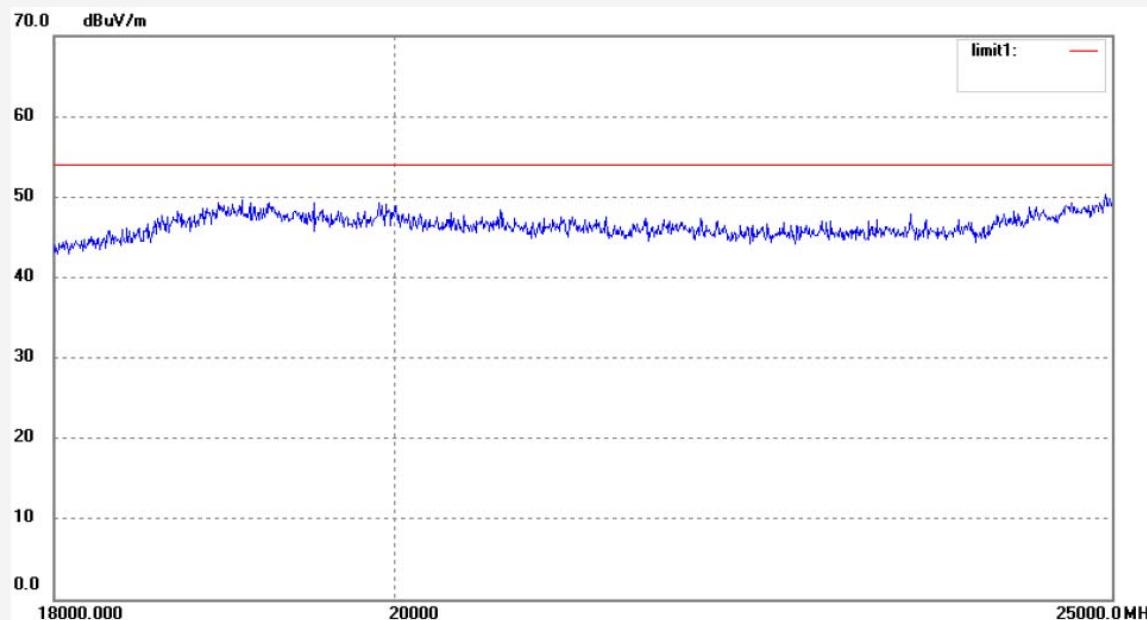
Mode: TX Channel 15

Distance: 3m

Model: 8592580091001/8592580091018

Manufacturer: Hanshin International Limited

Note: Sample No.:101460 Report No.:ATE20101282



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
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Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: RTTE #5272

Polarization: Vertical

Standard: FCC Class B 3M Radiated

Power Source: DC 5V

Test item: Radiation Test

Date: 2010/06/21

Temp.(C)/Hum.(%) 25 C / 50 %

Time: 11:15:49

EUT: TRIUMPH BOARD PORTABLE

Engineer Signature: Joe

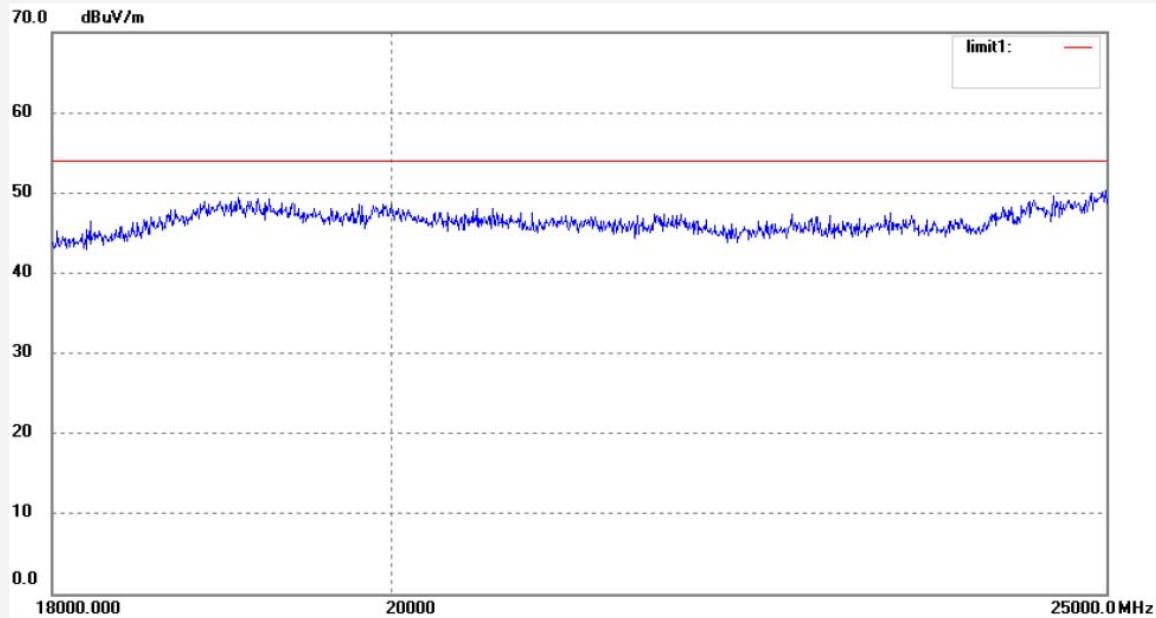
Mode: TX Channel 15

Distance: 3m

Model: 8592580091001/8592580091018

Manufacturer: Hanshin International Limited

Note: Sample No.:101460 Report No.:ATE20101282



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
-----	----------------	---------------------	----------------	--------------------	-------------------	----------------	----------	----------------	------------------	--------


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 Science & Industry Park,Nanshan Shenzhen,P.R.China

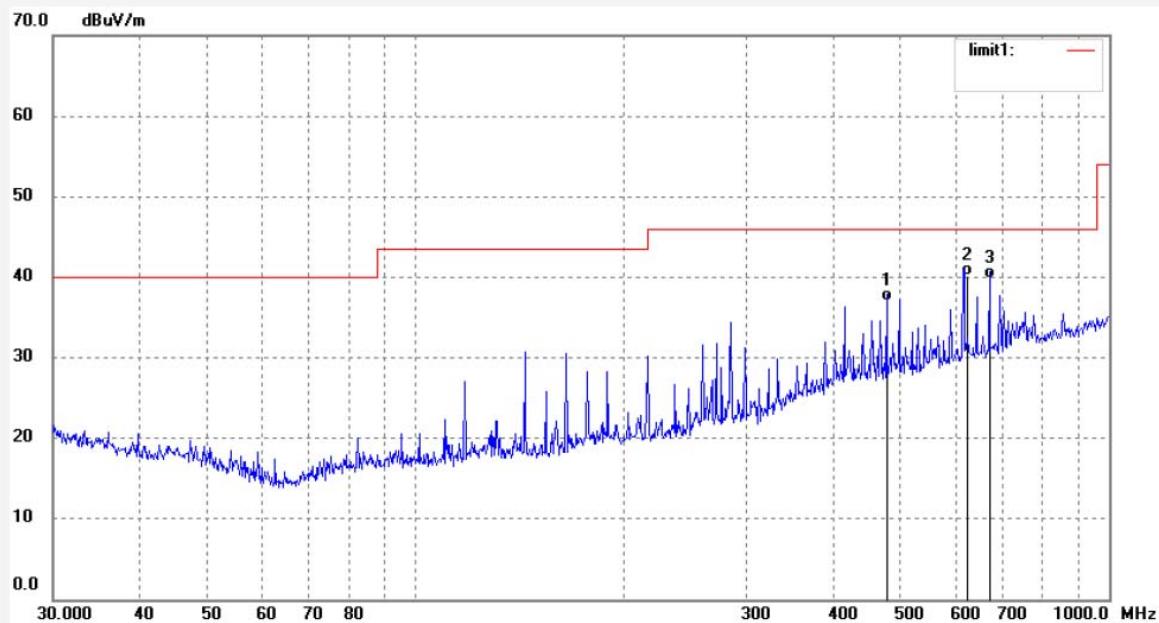
Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.:	RTTE #5262	Polarization:	Horizontal
Standard:	FCC Class B 3M Radiated	Power Source:	DC 5V
Test item:	Radiation Test	Date:	2010/06/21
Temp.(C)/Hum.(%)	25 C / 50 %	Time:	10:23:26
EUT:	TRIUMPH BOARD PORTABLE	Engineer Signature:	Joe
Mode:	TX Channel 30	Distance:	3m
Model:	8592580091001/8592580091018		
Manufacturer:	Hanshin International Limited		

Note: Sample No.:101460 Report No.:ATE20101282



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	480.0010	13.07	23.86	36.93	46.00	-9.07	QP			
2	623.9970	14.06	26.05	40.11	46.00	-5.89	QP			
3	671.9980	13.60	26.17	39.77	46.00	-6.23	QP			


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Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: RTTE #5263

Polarization: Vertical

Standard: FCC Class B 3M Radiated

Power Source: DC 5V

Test item: Radiation Test

Date: 2010/06/21

Temp.(C)/Hum.(%) 25 C / 50 %

Time: 10:26:59

EUT: TRIUMPH BOARD PORTABLE

Engineer Signature: Joe

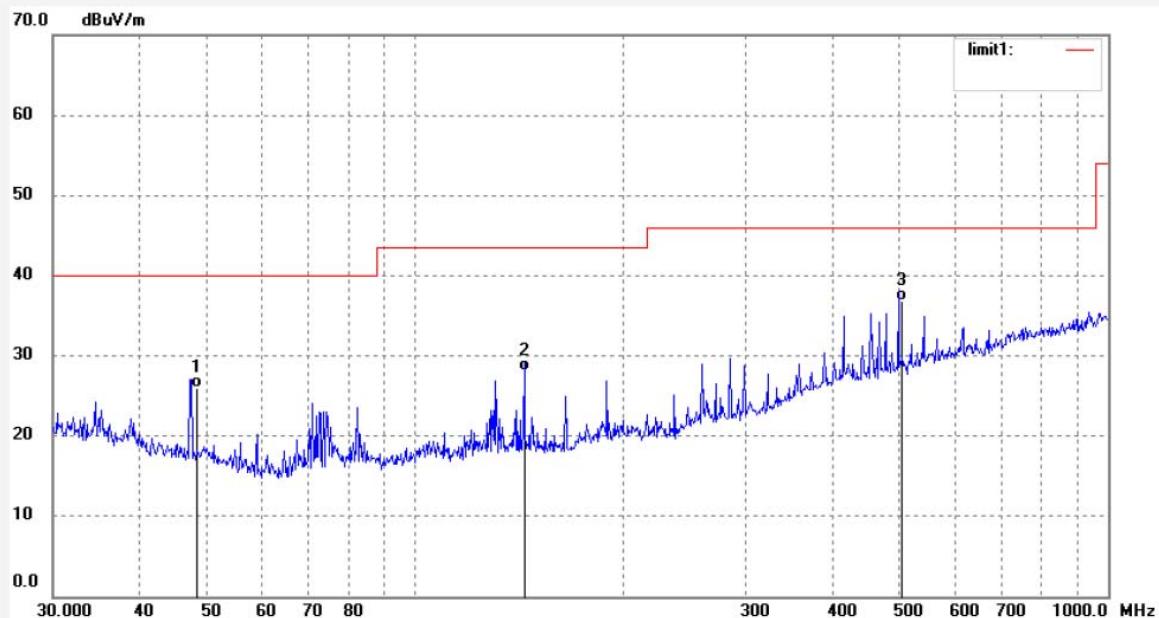
Mode: TX Channel 30

Distance: 3m

Model: 8592580091001/8592580091018

Manufacturer: Hanshin International Limited

Note: Sample No.:101460 Report No.:ATE20101282



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	48.0010	11.37	14.65	26.02	40.00	-13.98	QP			
2	144.0020	13.67	14.48	28.15	43.50	-15.35	QP			
3	504.0000	12.84	24.01	36.85	46.00	-9.15	QP			


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 Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: RTTE #5268

Polarization: Horizontal

Standard: FCC Class B 3M Radiated

Power Source: DC 5V

Test item: Radiation Test

Date: 2010/06/21

Temp.(C)/Hum.(%) 25 C / 50 %

Time: 10:54:22

EUT: TRIUMPH BOARD PORTABLE

Engineer Signature: Joe

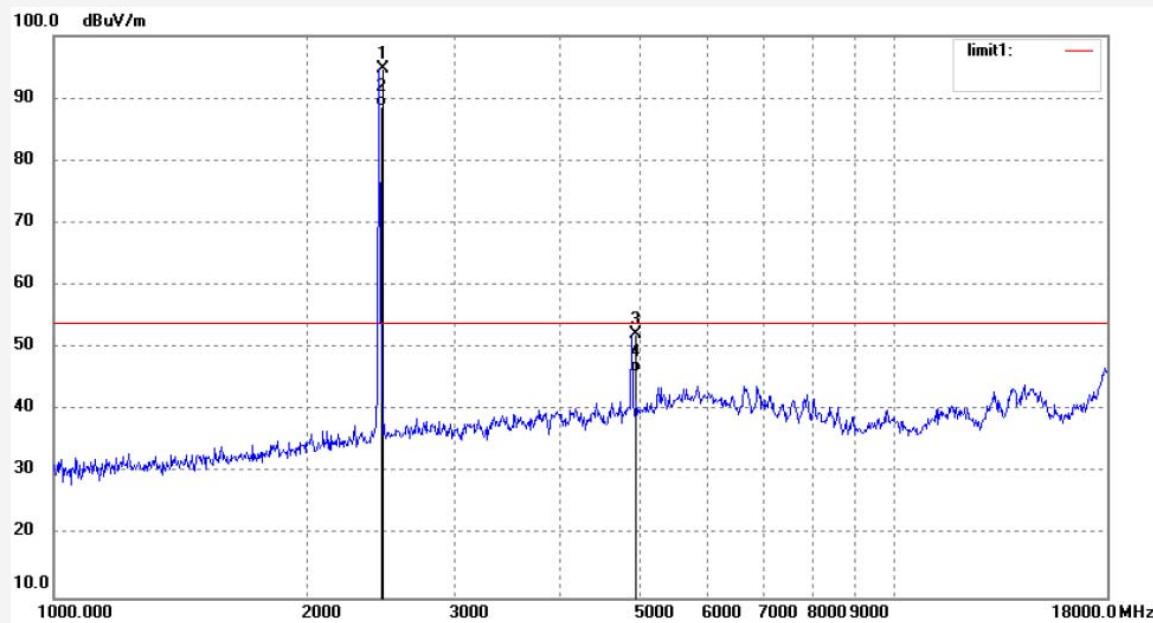
Mode: TX Channel 30

Distance: 3m

Model: 8592580091001/8592580091018

Manufacturer: Hanshin International Limited

Note: Sample No.:101460 Report No.:ATE20101282



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2470.016	101.99	-7.36	94.63	114.00	-19.37	peak			
2	2470.016	95.94	-7.36	88.58	94.00	-5.42	AVG			
3	4940.028	51.81	0.42	52.23	74.00	-21.77	peak			
4	4940.028	45.79	0.42	46.21	54.00	-7.79	AVG			


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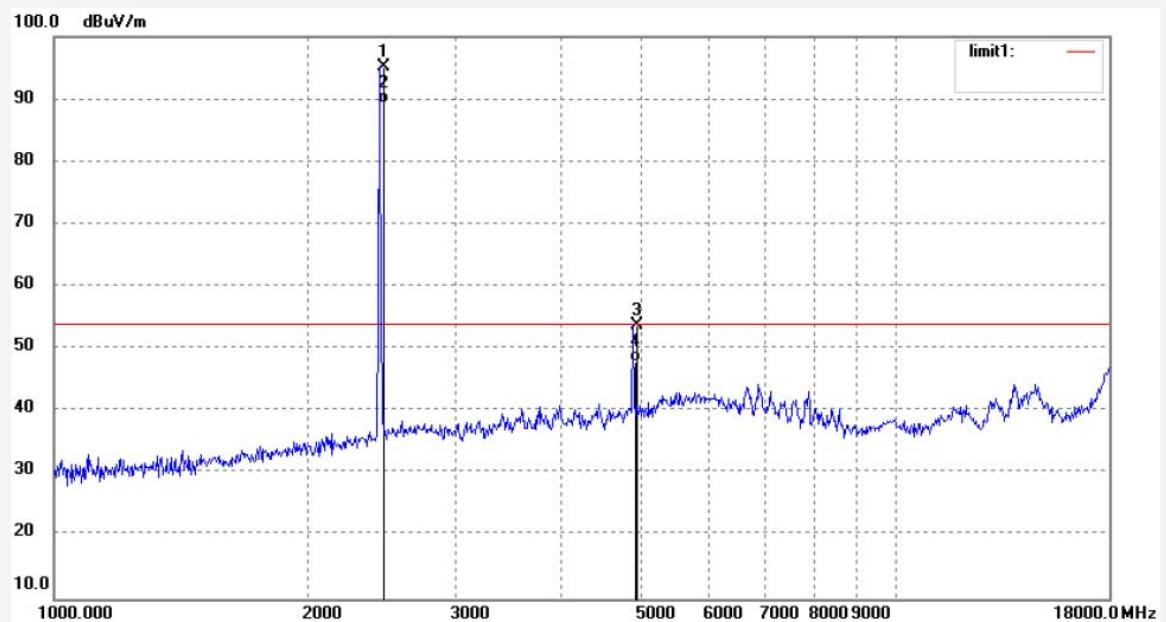
 F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
 Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.:	RTTE #5269	Polarization:	Vertical
Standard:	FCC Class B 3M Radiated	Power Source:	DC 5V
Test item:	Radiation Test	Date:	2010/06/21
Temp.(C)/Hum.(%)	25 C / 50 %	Time:	10:58:35
EUT:	TRIUMPH BOARD PORTABLE	Engineer Signature:	Joe
Mode:	TX Channel 30	Distance:	3m
Model:	8592580091001/8592580091018		
Manufacturer:	Hanshin International Limited		
Note:	Sample No.:101460 Report No.:ATE20101282		



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2470.016	102.58	-7.36	95.22	114.00	-18.78	peak			
2	2470.016	96.58	-7.36	89.22	94.00	-4.78	AVG			
3	4940.028	53.43	0.42	53.85	74.00	-20.15	peak			
4	4940.028	47.41	0.42	47.83	54.00	-6.17	AVG			


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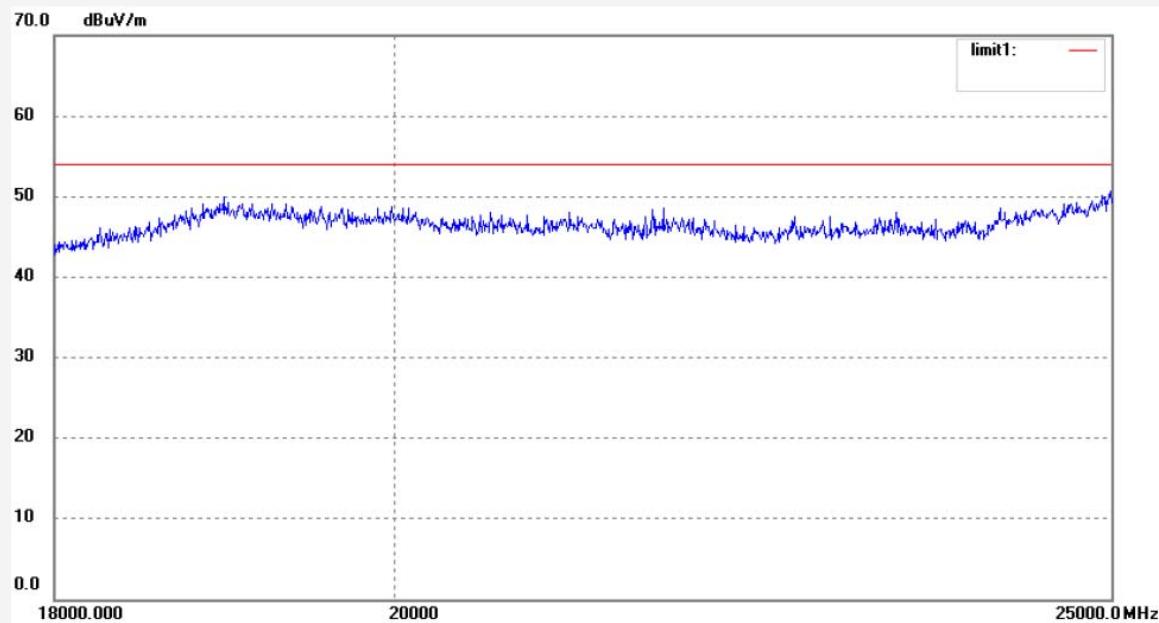
 F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
 Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.:	RTTE #5274	Polarization:	Horizontal
Standard:	FCC Class B 3M Radiated	Power Source:	DC 5V
Test item:	Radiation Test	Date:	2010/06/21
Temp.(C)/Hum.(%)	25 C / 50 %	Time:	11:24:46
EUT:	TRIUMPH BOARD PORTABLE	Engineer Signature:	Joe
Mode:	TX Channel 30	Distance:	3m
Model:	8592580091001/8592580091018		
Manufacturer:	Hanshin International Limited		
Note:	Sample No.:101460 Report No.:ATE20101282		



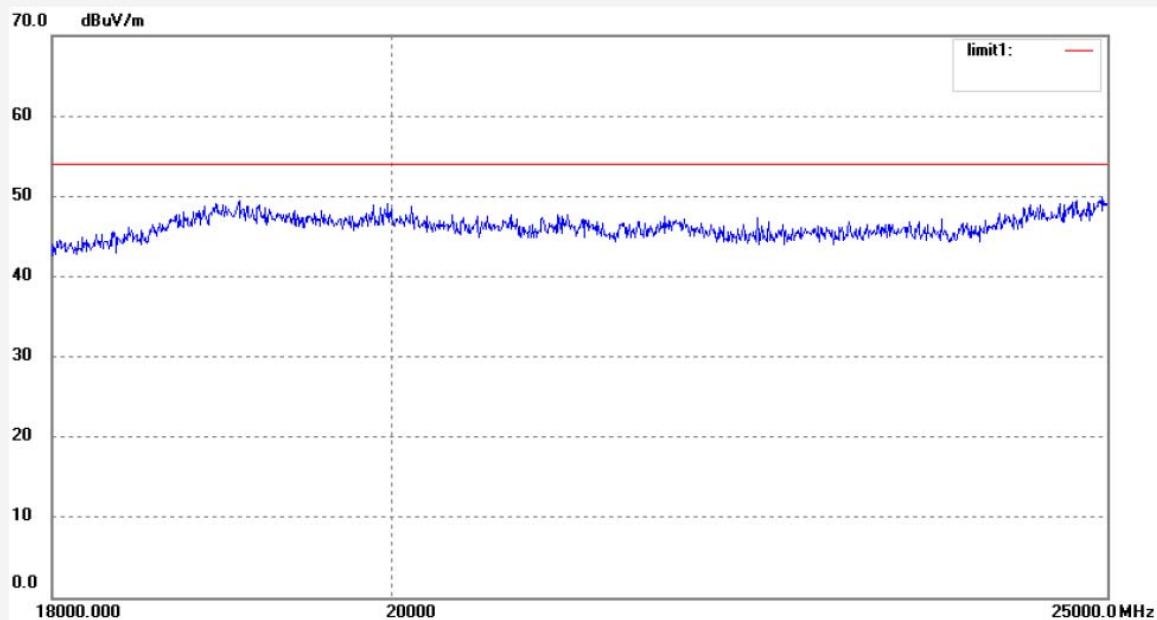
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark


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 Fax:+86-0755-26503396

Job No.:	RTTE #5275	Polarization:	Vertical
Standard:	FCC Class B 3M Radiated	Power Source:	DC 5V
Test item:	Radiation Test	Date:	2010/06/21
Temp.(C)/Hum.(%)	25 C / 50 %	Time:	11:28:45
EUT:	TRIUMPH BOARD PORTABLE	Engineer Signature:	Joe
Mode:	TX Channel 30	Distance:	3m
Model:	8592580091001/8592580091018		
Manufacturer:	Hanshin International Limited		
Note:	Sample No.:101460 Report No.:ATE20101282		



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark


ACCURATE TECHNOLOGY CO., LTD.

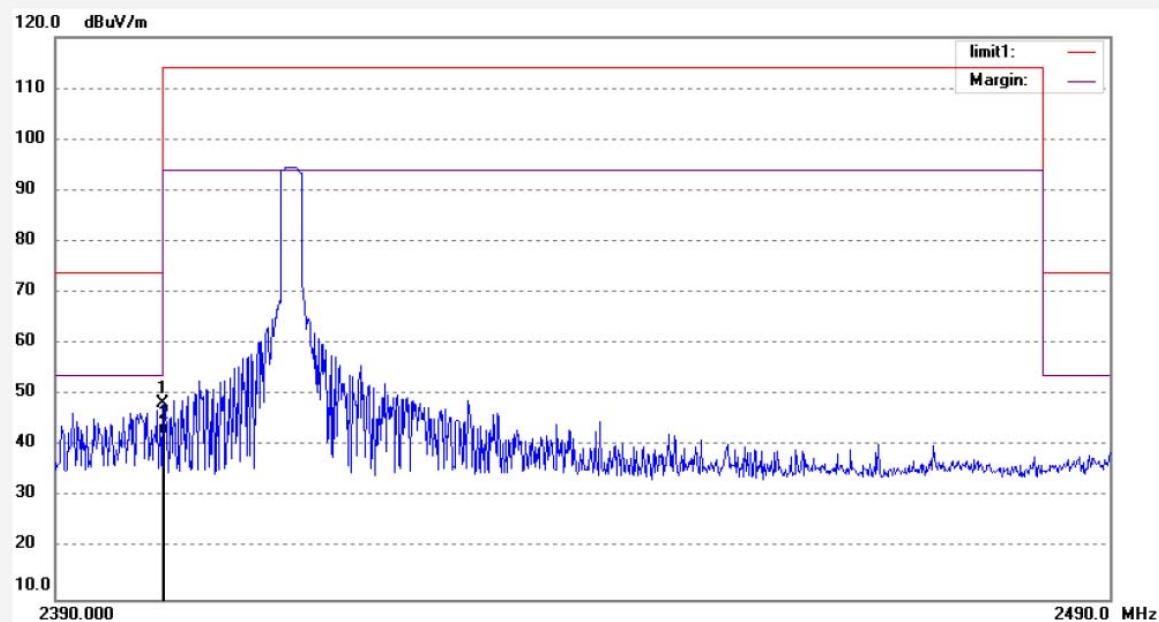
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 966 chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.:	RTTE #5276	Polarization:	Horizontal
Standard:	FCC Part 15 PEAK 2.4G	Power Source:	DC 5V
Test item:	Radiation Test	Date:	2010/06/21
Temp.(C)/Hum.(%)	25 C / 50 %	Time:	11:37:36
EUT:	TRIUMPH BOARD PORTABLE	Engineer Signature:	Joe
Mode:	TX Channel 1	Distance:	3m
Model:	8592580091001/8592580091018		
Manufacturer:	Hanshin International Limited		
Note:	Sample No.:101460 Report No.:ATE20101282		



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2400.000	55.83	-7.46	48.37	74.00	-25.63	peak			
2	2400.000	49.70	-7.46	42.24	54.00	-11.76	AVG			


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Site: 966 chamber

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Fax:+86-0755-26503396

Job No.: RTTE #5277

Polarization: Vertical

Standard: FCC Part 15 PEAK 2.4G

Power Source: DC 5V

Test item: Radiation Test

Date: 2010/06/21

Temp.(C)/Hum.(%) 25 C / 50 %

Time: 11:41:27

EUT: TRIUMPH BOARD PORTABLE

Engineer Signature: Joe

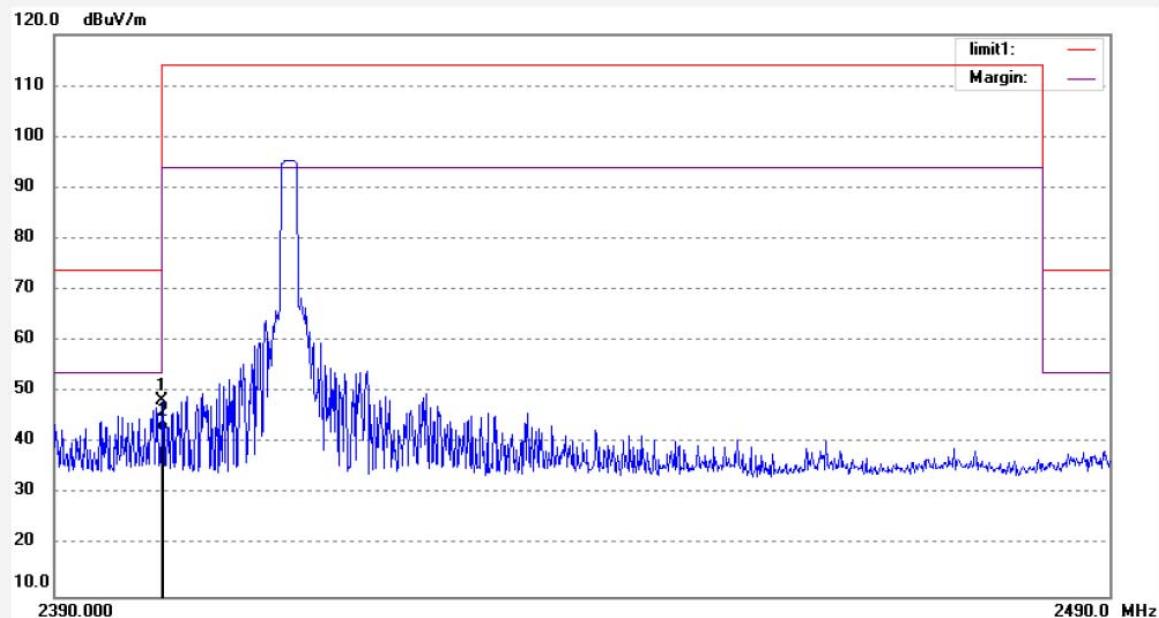
Mode: TX Channel 1

Distance: 3m

Model: 8592580091001/8592580091018

Manufacturer: Hanshin International Limited

Note: Sample No.:101460 Report No.:ATE20101282



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2400.000	55.84	-7.46	48.38	74.00	-25.62	peak			
2	2400.000	49.71	-7.46	42.25	54.00	-11.75	AVG			

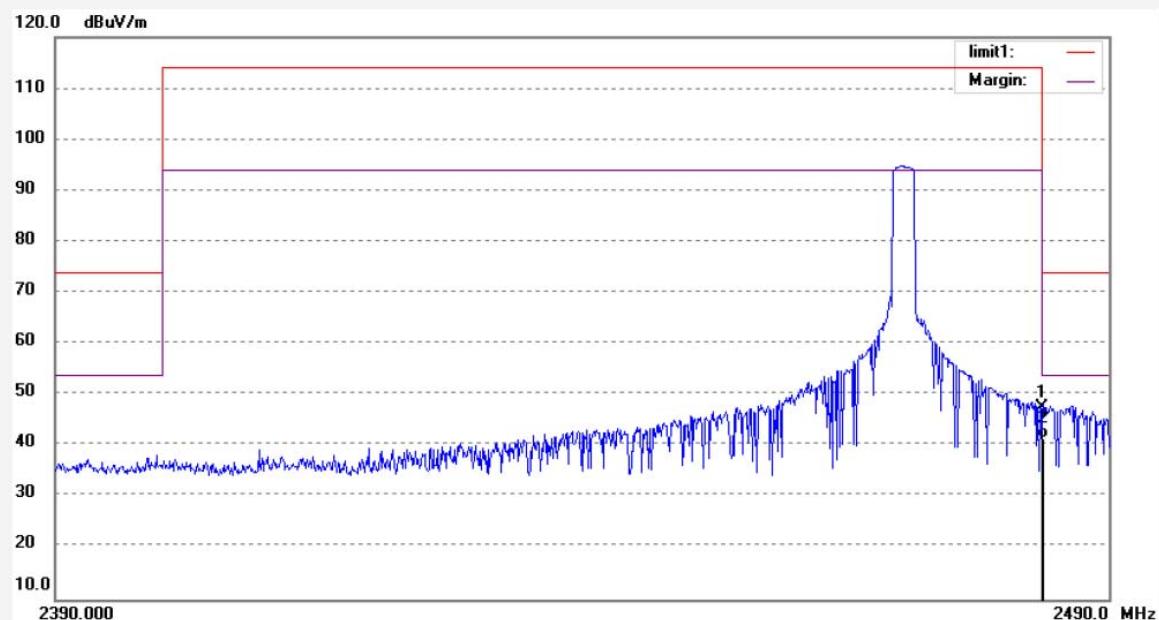

ACCURATE TECHNOLOGY CO., LTD.

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Site: 966 chamber
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Job No.: RTTE #5279	Polarization: Horizontal
Standard: FCC Part 15 PEAK 2.4G	Power Source: DC 5V
Test item: Radiation Test	Date: 2010/06/21
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:51:16
EUT: TRIUMPH BOARD PORTABLE	Engineer Signature: Joe
Mode: TX Channel 30	Distance: 3m
Model: 8592580091001/8592580091018	
Manufacturer: Hanshin International Limited	

Note: Sample No.:101460 Report No.:ATE20101282



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	55.01	-7.37	47.64	74.00	-26.36	peak			
2	2483.500	48.89	-7.37	41.52	54.00	-12.48	AVG			


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Site: 966 chamber

Tel:+86-0755-26503290

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Job No.: RTTE #5278

Polarization: Vertical

Standard: FCC Part 15 PEAK 2.4G

Power Source: DC 5V

Test item: Radiation Test

Date: 2010/06/21

Temp.(C)/Hum.(%) 25 C / 50 %

Time: 11:47:18

EUT: TRIUMPH BOARD PORTABLE

Engineer Signature: Joe

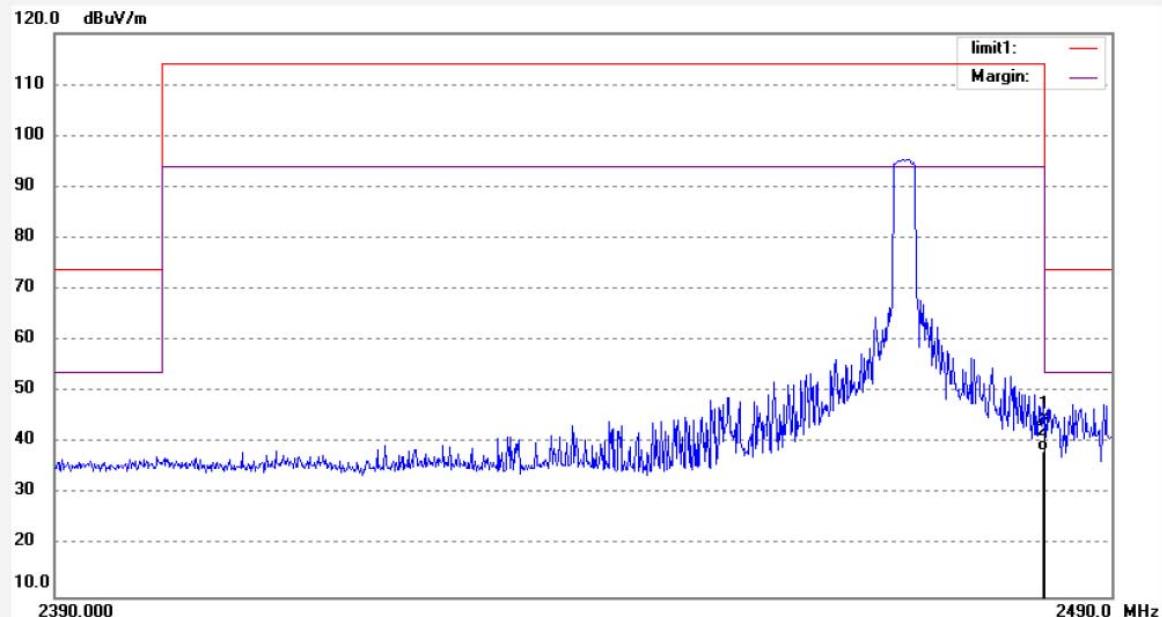
Mode: TX Channel 30

Distance: 3m

Model: 8592580091001/8592580091018

Manufacturer: Hanshin International Limited

Note: Sample No.:101460 Report No.:ATE20101282



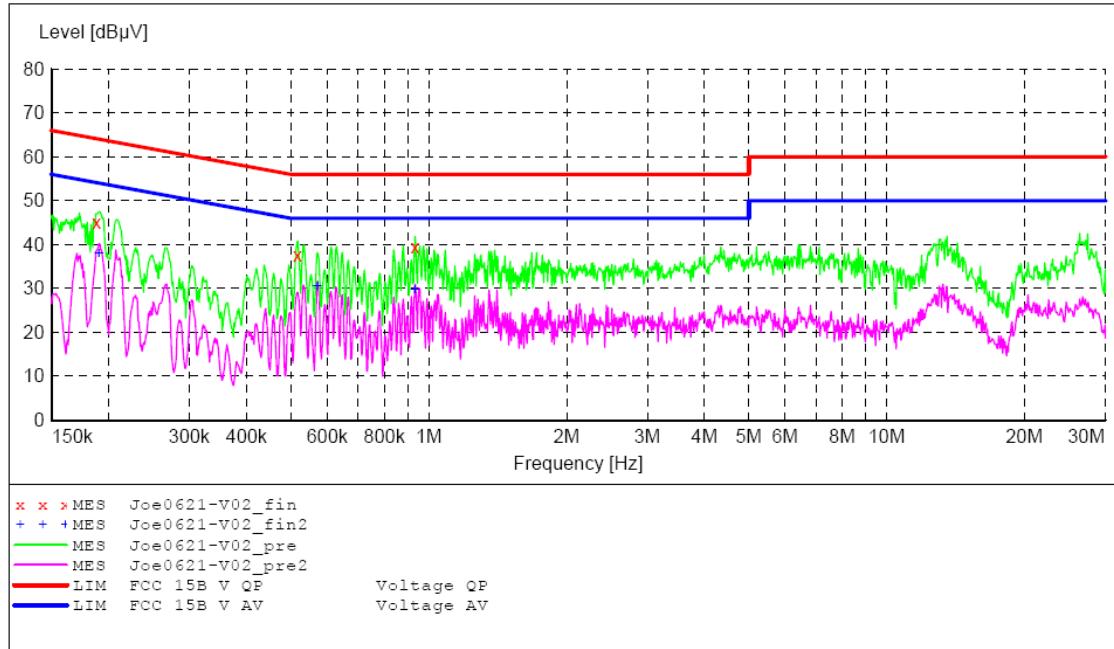
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	52.09	-7.37	44.72	74.00	-29.28	peak			
2	2483.500	45.94	-7.37	38.57	54.00	-15.43	AVG			

ACCURATE TECHNOLOGY CO., LTD**CONDUCTED EMISSION STANDARD FCC 15 Part B**

EUT: TRIUMPH BOARD PORTABLE M/N:8592580091001/8592580091018
 Manufacturer: Hanshin International Limited
 Operating Condition: TX Channel 15
 Test Site: 1#Shielding Room
 Operator: Joe
 Test Specification: L 120V/60Hz
 Comment: Report No.:ATE20101282 Sample No.:101460
 Start of Test: 6/21/2010 / 09:15:10AM

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average

**MEASUREMENT RESULT: "Joe0621-V02_fin"**

6/21/2010 11:17AM	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.188327	45.00	11.2	64	19.1	QP	L1	GND
	0.517062	37.70	12.0	56	18.3	QP	L1	GND
	0.933537	39.50	11.8	56	16.5	QP	L1	GND

MEASUREMENT RESULT: "Joe0621-V02_fin2"

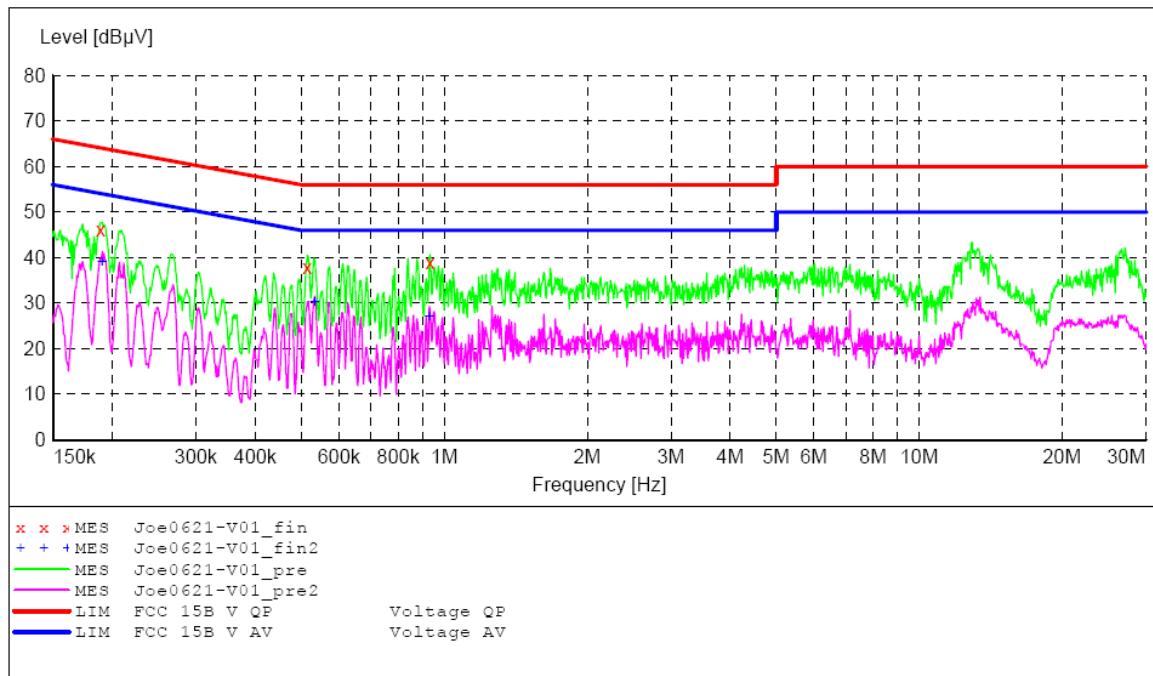
6/21/2010 11:17AM	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.190596	38.00	11.2	54	16.0	AV	L1	GND
	0.571327	30.70	12.0	46	15.3	AV	L1	GND
	0.933537	29.90	11.8	46	16.1	AV	L1	GND

ACCURATE TECHNOLOGY CO., LTD**CONDUCTED EMISSION STANDARD FCC 15 Part B**

EUT: TRIUMPH BOARD PORTABLE M/N:8592580091001/8592580091018
 Manufacturer: Hanshin International Limited
 Operating Condition: TX Channel 15
 Test Site: 1#Shielding Room
 Operator: Joe
 Test Specification: N 120V/60Hz
 Comment: Report No.:ATE20101282 Sample No.:101460
 Start of Test: 6/21/2010 / 09:08:43AM

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 150.0 kHz 30.0 MHz 0.8 % QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average

**MEASUREMENT RESULT: "Joe0621-V01_fin"**

6/21/2010 11:13AM	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.189080	46.00	11.2	64	18.1	QP	N	GND
	0.515002	37.90	12.0	56	18.1	QP	N	GND
	0.933537	38.80	11.8	56	17.2	QP	N	GND

MEASUREMENT RESULT: "Joe0621-V01_fin2"

6/21/2010 11:13AM	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.190596	39.20	11.2	54	14.8	AV	N	GND
	0.533841	30.30	12.0	46	15.7	AV	N	GND
	0.929818	27.20	11.8	46	18.8	AV	N	GND