

APPLICATION FOR VERIFICATION
On Behalf of
Ho Lee Co., Ltd.

Dog Trainer
Model No.: GDG4-1, GDG4-JR

FCC ID: Y4TGDG4

Prepared for : Ho Lee Co., Ltd.
Address : 27th FL., No. 29-3, Sec. 2, Chung Cheng E RD, Tamshui District, New Taipei City, Taiwan
Prepared by : Accurate Technology Co., Ltd.
Address : F1, Bldg. A&D, Changyuan New Material Port, Keyuan Rd., Science & Industry Park, Nanshan District, Shenzhen 518057, P.R. China

Tel: +86-755-26503290
Fax: +86-755-26503396

Report No. : ATE20160691
Date of Test : Apr 21, 2016-Jun 12, 2016
Date of Report : Jun 12, 2016

TABLE OF CONTENTS

Description	Page
Test Report Declaration	
1. TEST RESULTS SUMMARY	4
2. GENERAL INFORMATION	5
2.1. Product of Device (EUT)	5
2.2. Accessory and Auxiliary Equipment	5
2.3. Description of Test Facility	6
2.4. Measurement Uncertainty	6
3. MEASURING DEVICE AND TEST EQUIPMENT	7
3.1. The Equipments Used to Measure Conducted Disturbance	7
3.2. The Equipments Used to Measure Radiated Disturbance	8
4. POWER LINE CONDUCTED MEASUREMENT	9
4.1. Block Diagram of Test Setup	9
4.2. The Emission Limit	9
4.3. Configuration of EUT on Measurement	10
4.4. Operating Condition of EUT	10
4.5. Test Procedure	10
4.6. Power Line Conducted Emission Measurement Results	11
5. RADIATED EMISSION MEASUREMENT	17
5.1. Block Diagram of Test Setup	17
5.2. The Emission Limit For Section 15.109 (a)	18
5.3. EUT Configuration on Measurement	18
5.4. Operating Condition of EUT	18
5.5. Test Procedure	19
5.6. Radiated Emission Noise Measurement Result	19

Test Report Declaration

Applicant : Ho Lee Co., Ltd.
Manufacturer : Ho Lee Co., Ltd.
EUT Description : Dog Trainer
MODEL NO.: GDG4-1, GDG4-JR

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart B
ANSI C63.4: 2014

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 B Class B limits both radiated and conducted emissions. 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 :	Apr 21, 2016-Jun 12, 2016
Date of Report :	Jun 12, 2016
Prepared by :	 (Mark Chen, Engineer)
Approved & Authorized Signer :	 (Sean Liu, Manager)

1. TEST RESULTS SUMMARY

Test Items	Test Standard	Test Results
Power Line Conducted Emission	FCC Part 15.107	Pass
Radiated Emission	FCC Part 15.109	Pass

2. GENERAL INFORMATION

2.1.Product of Device (EUT)

EUT	: Dog Trainer
Model Number	: GDG4-1, GDG4-GR (Note: The internal structure is the same, The structure size is different. So we prepare GDG4-1 for test only.)
Power Supply	: AC 100-240V~50/60Hz
Adapter	: MODEL: GQ36-120300-AU Input: 100-240V~50/60Hz 1.0A Max Output: 12V/3A
RX frequency	: 315MHz
Applicant	: Ho Lee Co., Ltd.
Address	: 27th FL., No. 29-3, Sec. 2, Chung Cheng E RD, Tamshui District, New Taipei City, Taiwan
Manufacturer	: Ho Lee Co., Ltd.
Address	: 27th FL., No. 29-3, Sec. 2, Chung Cheng E RD, Tamshui District, New Taipei City, Taiwan
Date of sample received	: Apr 21, 2016
Date of Test	: Apr 21, 2016-Jun 12, 2016

2.2.Accessory and Auxiliary Equipment

NA

2.3. Description of Test Facility

EMC Lab : Accredited by TUV Rheinland Shenzhen, May 10, 2004

Listed by FCC

The Registration Number is 253065

Listed by FCC

The Registration Number is 752051

Listed by Industry Canada

The Registration Number is 5077A-1

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&D, Changyuan New Material Port, Keyuan Rd., Science & Industry Park, Nanshan District, Shenzhen 518057, P.R. China

2.4. Measurement Uncertainty

Conducted emission expanded uncertainty : U=2.23dB, k=2

Power disturbance expanded uncertainty : U=2.92dB, k=2

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

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

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

3. MEASURING DEVICE AND TEST EQUIPMENT

3.1. The Equipments Used to Measure Conducted Disturbance

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCS30	100307	Jan.9, 2016	1 Year
2.	Test Receiver	Rohde & Schwarz	ESPI	100396/003	Jan.9, 2016	1 Year
3.	Test Receiver	Rohde & Schwarz	ESPI	101526/003	Jan.9, 2016	1 Year
4.	Test Receiver	Rohde & Schwarz	ESR	101817	Jan.9, 2016	1 Year
5.	L.I.S.N.	Schwarzbeck	NLSK8126	8126431	Jan.9, 2016	1 Year
6.	L.I.S.N.	Rohde & Schwarz	ESH3-Z5	100305	Jan.9, 2016	1 Year
7.	L.I.S.N.	Rohde & Schwarz	ESH3-Z5	100310	Jan.9, 2016	1 Year
8.	L.I.S.N.	Rohde & Schwarz	ESH3-Z6	100132	Jan.9, 2016	1 Year
9.	L.I.S.N.	Rohde & Schwarz	ESH3-Z6	100979	Jan.9, 2016	1 Year
10.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100305	Jan.9, 2016	1 Year
11.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100312	Jan.9, 2016	1 Year
12.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100815	Jan.9, 2016	1 Year
13.	50Ω Coaxial Switch	Anritsu Corp	MP59B	6200283936	Jan.9, 2016	1 Year
14.	50Ω Coaxial Switch	Anritsu Corp	MP59B	6200283933	Jan.9, 2016	1 Year
15.	50Ω Coaxial Switch	Anritsu Corp	MP59B	6200506474	Jan.9, 2016	1 Year
16.	VOLTAGE PROBE	Schwarzbeck	TK9416	N/A	Jan.9, 2016	1 Year
17.	RF CURRENT PROBE	Rohde & Schwarz	EZ-17	100048	Jan.9, 2016	1 Year
18.	8-Wire Impedance Stabilisation Network	Schwarzbeck	CAT5 8158	8158-0035	Jan.9, 2016	1 Year
19.	RF Coaxial Cable	SUHNER	N-2m	No.2	Jan.9, 2016	1 Year
20.	RF Coaxial Cable	SUHNER	N-2m	No.3	Jan.9, 2016	1 Year
21.	RF Coaxial Cable	SUHNER	N-2m	No.14	Jan.9, 2016	1 Year

3.2. The Equipments Used to Measure Radiated Disturbance

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan.9, 2016	1 Year
2.	Spectrum Analyzer	Rohde&Schwarz	FSV40	101495	Jan.9, 2016	1 Year
3.	Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan.9, 2016	1 Year
4.	Test Receiver	Rohde& Schwarz	ESPI	100396/003	Jan.9, 2016	1 Year
5.	Test Receiver	Rohde& Schwarz	ESPI	101526/003	Jan.9, 2016	1 Year
6.	Test Receiver	Rohde& Schwarz	ESR	101817	Jan.9, 2016	1 Year
7.	Bilog Antenna	Schwarzbeck	VULB9163	9163-194	Jan.14, 2016	1 Year
8.	Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan.14, 2016	1 Year
9.	Log.-Per.Antenna	Schwarzbeck	VUSLP 9111B	9111B-074	Jan.14, 2016	1 Year
10.	Biconical Broad Band Antenna	Schwarzbeck	VHBB 9124+BBA 9106	9124-617	Jan.14, 2016	1 Year
11.	Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan.14, 2016	1 Year
12.	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan.14, 2016	1 Year
13.	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1067	Jan.14, 2016	1 Year
14.	Vertical Active Monopole Antenna	Schwarzbeck	VAMP 9243	9243-370	Jan.14, 2016	1 Year
15.	RF Switching Unit+PreAMP	Compliance Direction	RSU-M2	38322	Jan.9, 2016	1 Year
16.	Pre-Amplifier	Agilent	8447D	294A10619	Jan.9, 2016	1 Year
17.	Pre-Amplifier	Rohde&Schwarz	CBLU11835 40-01	3791	Jan.9, 2016	1 Year
18.	50 Coaxial Switch	Anritsu Corp	MP59B	6200237248	Jan.9, 2016	1 Year
19.	50 Coaxial Switch	Anritsu Corp	MP59B	6200506474	Jan.9, 2016	1 Year
20.	RF Coaxial Cable	Schwarzbeck	N-5m	No.1	Jan.9, 2016	1 Year
21.	RF Coaxial Cable	Schwarzbeck	N-1m	No.6	Jan.9, 2016	1 Year
22.	RF Coaxial Cable	Schwarzbeck	N-1m	No.7	Jan.9, 2016	1 Year
23.	RF Coaxial Cable	SUHNER	N-3m	No.8	Jan.9, 2016	1 Year
24.	RF Coaxial Cable	RESENBERGER	N-3.5m	No.9	Jan.9, 2016	1 Year
25.	RF Coaxial Cable	SUHNER	N-6m	No.10	Jan.9, 2016	1 Year
26.	RF Coaxial Cable	RESENBERGER	N-12m	No.11	Jan.9, 2016	1 Year
27.	RF Coaxial Cable	RESENBERGER	N-0.5m	No.12	Jan.9, 2016	1 Year
28.	RF Coaxial Cable	SUHNER	N-2m	No.13	Jan.9, 2016	1 Year
29.	RF Coaxial Cable	SUHNER	N-0.5m	No.15	Jan.9, 2016	1 Year
30.	RF Coaxial Cable	SUHNER	N-2m	No.16	Jan.9, 2016	1 Year
31.	RF Coaxial Cable	RESENBERGER	N-6m	No.17	Jan.9, 2016	1 Year

4. POWER LINE CONDUCTED MEASUREMENT

4.1. Block Diagram of Test Setup

4.1.1. Block diagram of connection between the EUT and simulators

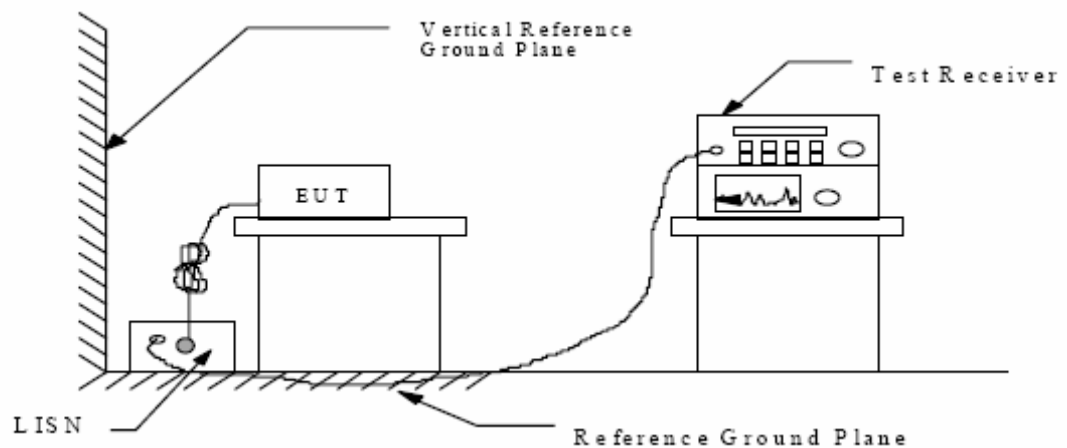
4.1.1.1. For RX

AC 120V/60Hz/240V/60HZ



(EUT: Dog Trainer)

4.1.2. Shielding Room Test Setup Diagram



(EUT: Dog Trainer)

4.2. The Emission Limit

4.2.1. Conducted Emission Measurement Limits According to Section 15.107(a)

Frequency (MHz)	Limit dB(μV)	
	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.

4.3. Configuration of EUT on Measurement

The following equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner, which tends to maximize its emission characteristics in a normal application.

4.3.1. Dog Trainer (EUT)

Model Number: GDG4-1

Serial Number: N/A

Manufacturer: Ho Lee Co., Ltd.

4.4. Operating Condition of EUT

4.4.1. Setup the EUT and simulator as shown as Section 4.1.2

4.4.2. Turn on the power of all equipment.

4.4.3. Let the EUT work in test mode and measure it.

4.5. 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: 2014 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.

4.6. Power Line Conducted Emission Measurement Results

PASS.

Test Mode: RX(120V/60HZ)								
MEASUREMENT RESULT: "HOLE5305_fin"								
2016-5-3 15:59								
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE	
0.178000	57.70	10.5	65	6.9	QP	L1	GND	
0.232000	49.90	10.8	62	12.5	QP	L1	GND	
20.265500	47.10	12.0	60	12.9	QP	L1	GND	
MEASUREMENT RESULT: "HOLE5305_fin2"								
2016-5-3 15:59								
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE	
0.178000	43.70	10.5	55	10.9	AV	L1	GND	
0.240000	34.80	10.8	52	17.3	AV	L1	GND	
20.450000	42.30	12.0	50	7.7	AV	L1	GND	
MEASUREMENT RESULT: "HOLE5306_fin"								
2016-5-3 16:01								
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE	
0.174000	54.70	10.5	65	10.1	QP	N	GND	
0.238000	47.80	10.8	62	14.4	QP	N	GND	
20.099000	43.70	12.0	60	16.3	QP	N	GND	
MEASUREMENT RESULT: "HOLE5306_fin2"								
2016-5-3 16:01								
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE	
0.176000	40.40	10.5	55	14.3	AV	N	GND	
7.350500	32.50	11.8	50	17.5	AV	N	GND	
20.166500	38.90	12.0	50	11.1	AV	N	GND	

Test Mode: RX(240V/60HZ)

MEASUREMENT RESULT: "HOLE5308_fin"

2016-5-3 16:32

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.182000	57.60	10.5	64	6.8	QP	L1	GND
0.240000	53.50	10.8	62	8.6	QP	L1	GND
19.689500	48.00	11.9	60	12.0	QP	L1	GND

MEASUREMENT RESULT: "HOLE5308_fin2"

2016-5-3 16:32

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.182000	43.60	10.5	54	10.8	AV	L1	GND
15.896000	37.70	11.9	50	12.3	AV	L1	GND
19.950500	42.80	11.9	50	7.2	AV	L1	GND

MEASUREMENT RESULT: "HOLE5307_fin"

2016-5-3 16:30

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.180000	60.20	10.5	65	4.3	QP	N	GND
0.234000	54.50	10.8	62	7.8	QP	N	GND
0.300000	50.10	11.0	60	10.1	QP	N	GND

MEASUREMENT RESULT: "HOLE5307_fin2"

2016-5-3 16:30

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.180000	45.20	10.5	55	9.3	AV	N	GND
0.240000	38.40	10.8	52	13.7	AV	N	GND
20.153000	39.70	12.0	50	10.3	AV	N	GND

Emissions attenuated more than 20 dB below the permissible value are not reported.

The spectral diagrams are shown in the following pages.

ACCURATE TECHNOLOGY CO., LTD

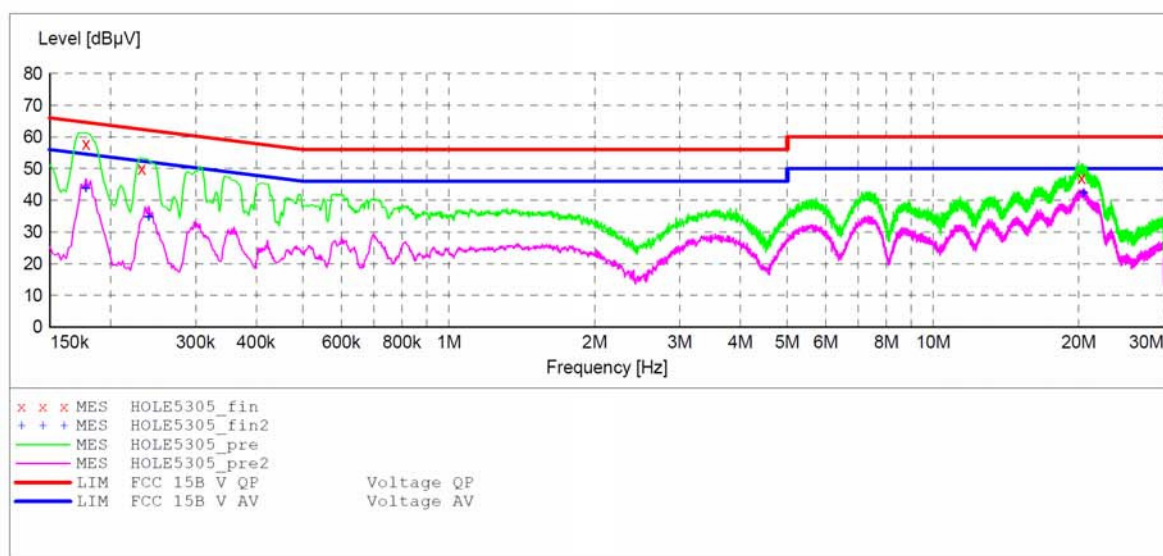
CONDUCTED EMISSION STANDARD FCC PART15B

EUT: Dog Trainer M/N:GDG4-1
 Manufacturer: Ho Lee Co., LTD
 Operating Condition: RX
 Test Site: 2#Shielding Room
 Operator: Star
 Test Specification: L 120V/60Hz
 Comment: Report NO.:ATE20160691
 Start of Test: 2016-5-3 / 15:57:28

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

Short Description: SUB STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
150.0 kHz	30.0 MHz	4.5 kHz	QuasiPeak	1.0 s	9 kHz	LISN(ESH3-Z5)
			Average			



MEASUREMENT RESULT: "HOLE5305_fin"

2016-5-3 15:59

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.178000	57.70	10.5	65	6.9	QP	L1	GND
0.232000	49.90	10.8	62	12.5	QP	L1	GND
20.265500	47.10	12.0	60	12.9	QP	L1	GND

MEASUREMENT RESULT: "HOLE5305_fin2"

2016-5-3 15:59

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.178000	43.70	10.5	55	10.9	AV	L1	GND
0.240000	34.80	10.8	52	17.3	AV	L1	GND
20.450000	42.30	12.0	50	7.7	AV	L1	GND

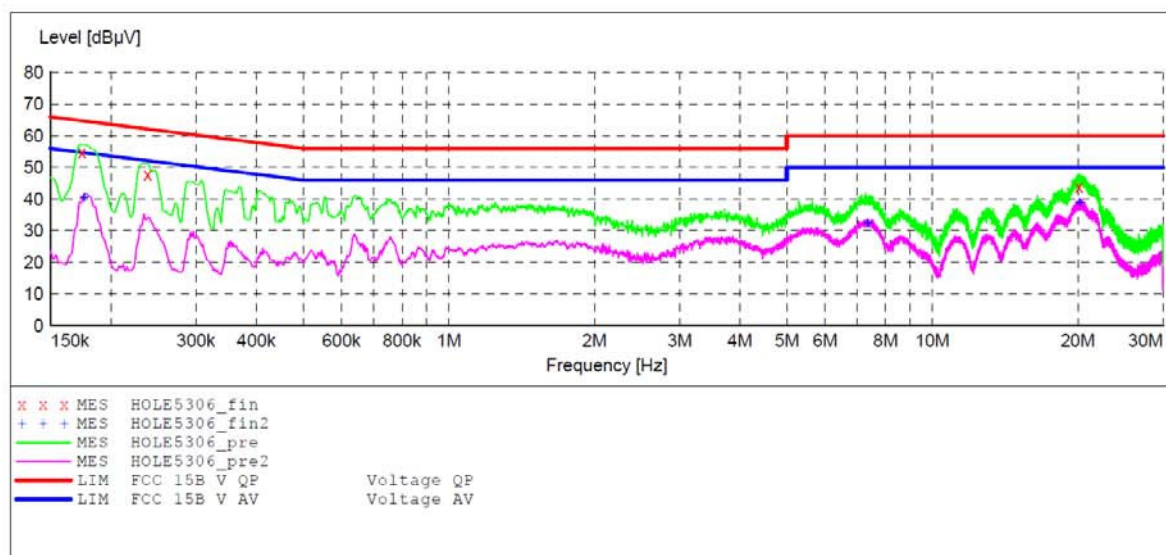
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART15B

EUT: Dog Trainer M/N:GDG4-1
Manufacturer: Ho Lee Co., LTD
Operating Condition: RX
Test Site: 2#Shielding Room
Operator: Star
Test Specification: N 120V/60Hz
Comment: Report NO.:ATE20160691
Start of Test: 2016-5-3 / 16:00:07

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 4.5 kHz QuasiPeak 1.0 s 9 kHz LISN(ESH3-Z5)
Average



MEASUREMENT RESULT: "HOLE5306_fin"

2016-5-3 16:01

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.174000	54.70	10.5	65	10.1	QP	N	GND
0.238000	47.80	10.8	62	14.4	QP	N	GND
20.099000	43.70	12.0	60	16.3	QP	N	GND

MEASUREMENT RESULT: "HOLE5306_fin2"

2016-5-3 16:01

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.176000	40.40	10.5	55	14.3	AV	N	GND
7.350500	32.50	11.8	50	17.5	AV	N	GND
20.166500	38.90	12.0	50	11.1	AV	N	GND

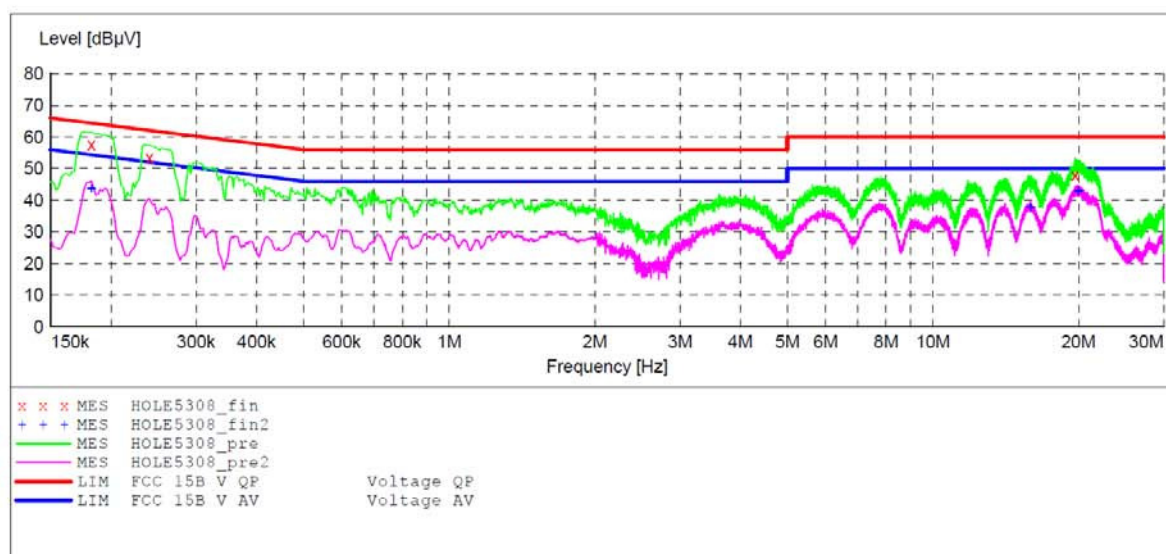
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART15B

EUT: Dog Trainer M/N:GDG4-1
 Manufacturer: Ho Lee Co., LTD
 Operating Condition: RX
 Test Site: 2#Shielding Room
 Operator: Star
 Test Specification: L 240V/60Hz
 Comment: Report NO.:ATE20160691
 Start of Test: 2016-5-3 / 16:30:35

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 4.5 kHz QuasiPeak 1.0 s 9 kHz LISN(ESH3-Z5)
 Average



MEASUREMENT RESULT: "HOLE5308_fin"

2016-5-3 16:32

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.182000	57.60	10.5	64	6.8	QP	L1	GND
0.240000	53.50	10.8	62	8.6	QP	L1	GND
19.689500	48.00	11.9	60	12.0	QP	L1	GND

MEASUREMENT RESULT: "HOLE5308_fin2"

2016-5-3 16:32

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.182000	43.60	10.5	54	10.8	AV	L1	GND
15.896000	37.70	11.9	50	12.3	AV	L1	GND
19.950500	42.80	11.9	50	7.2	AV	L1	GND

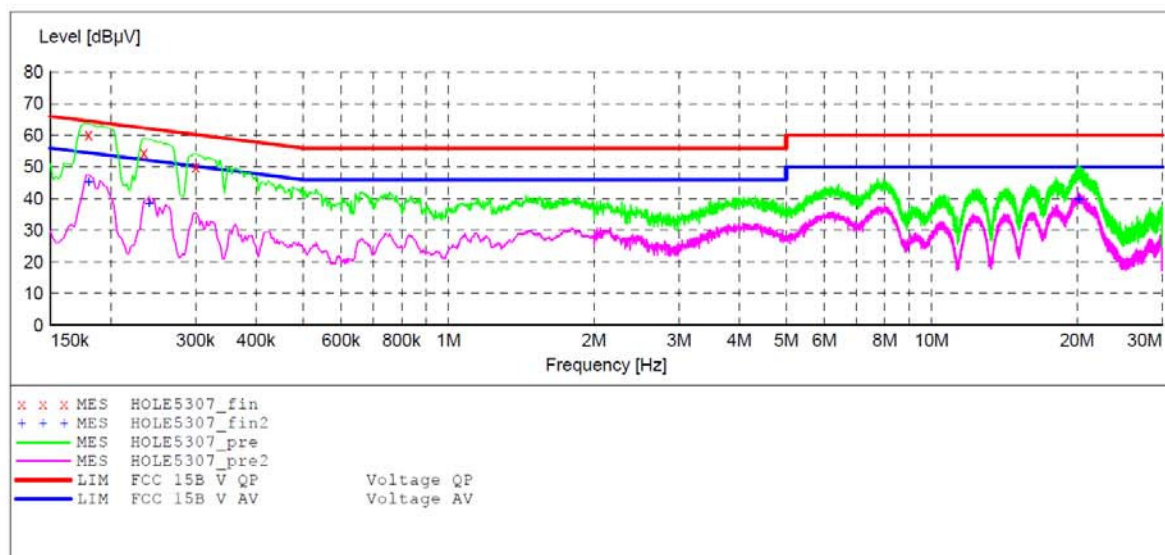
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART15B

EUT: Dog Trainer M/N:GDG4-1
 Manufacturer: Ho Lee Co., LTD
 Operating Condition: RX
 Test Site: 2#Shielding Room
 Operator: Star
 Test Specification: N 240V/60Hz
 Comment: Report NO.:ATE20160691
 Start of Test: 2016-5-3 / 16:02:51

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 4.5 kHz QuasiPeak 1.0 s 9 kHz LISN(ESH3-Z5)
 Average



MEASUREMENT RESULT: "HOLE5307_fin"

2016-5-3 16:30

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.180000	60.20	10.5	65	4.3	QP	N	GND
0.234000	54.50	10.8	62	7.8	QP	N	GND
0.300000	50.10	11.0	60	10.1	QP	N	GND

MEASUREMENT RESULT: "HOLE5307_fin2"

2016-5-3 16:30

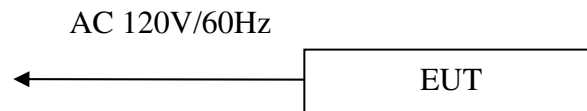
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.180000	45.20	10.5	55	9.3	AV	N	GND
0.240000	38.40	10.8	52	13.7	AV	N	GND
20.153000	39.70	12.0	50	10.3	AV	N	GND

5. RADIATED EMISSION MEASUREMENT

5.1. Block Diagram of Test Setup

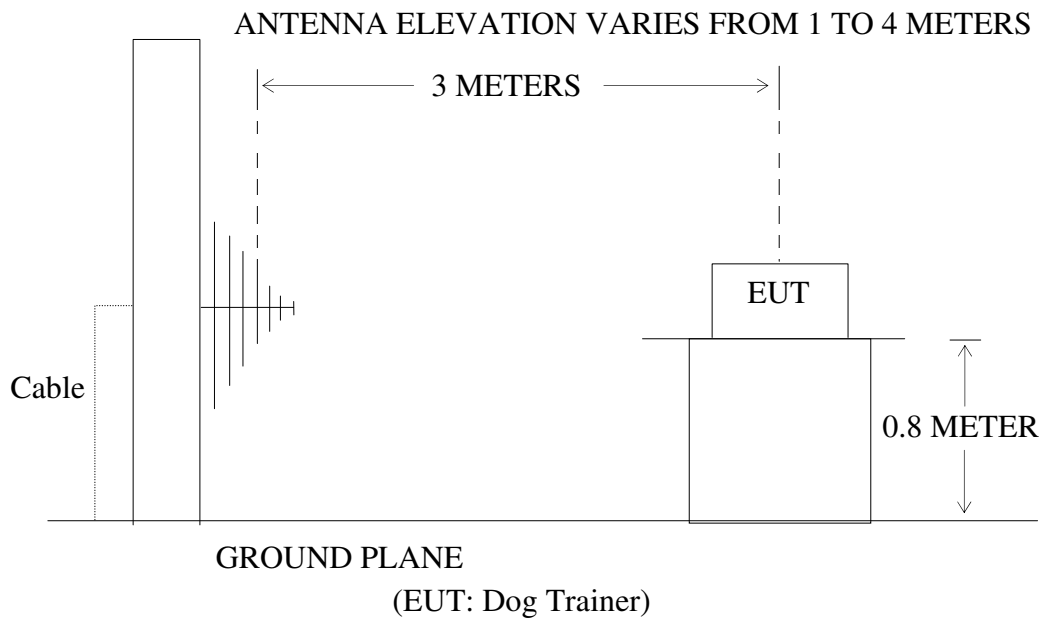
5.1.1. Block diagram of connection between the EUT and simulators

5.1.1.1 For RX



(EUT: Dog Trainer)

5.1.2. Semi-Anechoic Chamber Test Setup Diagram



5.2.The Emission Limit For Section 15.109 (a)

5.2.1.Radiation Emission Measurement Limits According to Section 15.109 (a).

Frequency MHz	Distance Meters	Field Strengths Limit	
		$\mu\text{V/m}$	$\text{dB}(\mu\text{V/m})$
30-88	3	100	40.0
88-216	3	150	43.5
216-960	3	200	46.0
960-1000	3	500	54.0
Remark: (1) Emission level $\text{dB}(\mu\text{V}) = 20 \log$ Emission level $\mu\text{V/m}$. (2)The smaller limit shall apply at the cross point between two frequency bands. (3)Distance is the distance in meters between the measuring instrument antenna and the closest point of any part of the device or system.			

5.3.EUT Configuration 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.

5.3.1.Dog Trainer (EUT)

Model Number: GDG4-1

Serial Number: N/A

Manufacturer: Ho Lee Co., Ltd.

5.4.Operating Condition of EUT

5.4.1.Setup the EUT and simulator as shown as Section 4.2.

5.4.2.Turn on the power of all equipment.

5.4.3.Let the EUT work in test mode (RX) and measure it.

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: 2014 on radiated emission measurement.

The bandwidth of the EMI test receiver (R&S ESCS30) is set at 120kHz from 30MHz to 4000MHz.

The frequency range from 30MHz to 4000MHz is checked.

5.6. Radiated Emission Noise Measurement Result

PASS.

Model Number: GDG4-1								
Test mode: RX(Blow 1G)								
Horizontal	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	50.9961	40.57	-20.76	19.81	40.00	-20.19	QP
	2	110.8581	42.66	-21.08	21.58	43.50	-21.92	QP
	3	403.9335	43.70	-13.92	29.78	46.00	-16.22	QP
Vertical	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	35.0157	42.22	-17.51	24.71	40.00	-15.29	QP
	2	51.8998	48.72	-20.80	27.92	40.00	-12.08	QP
	3	112.0328	50.10	-21.12	28.98	43.50	-14.52	QP

Model Number: GDG4-1								
Test mode: RX(Above 1G)								
Horizontal	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	2669.369	42.87	-3.27	39.60	74.00	-34.40	peak
	2	2669.369	34.17	-3.27	30.90	54.00	-23.10	AVG
Vertical	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	2834.350	41.90	-2.57	39.33	74.00	-34.67	peak
	2	2834.350	33.62	-2.57	31.05	54.00	-22.95	AVG



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 1# Chamber

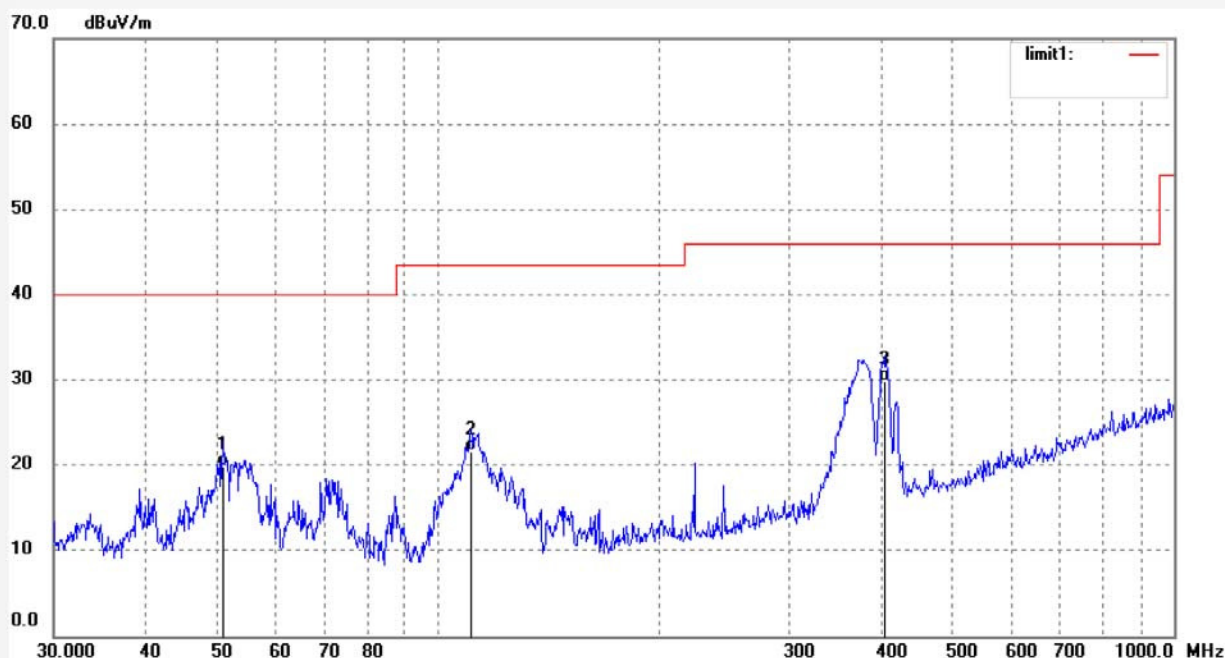
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: star2016 #663
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Dog Trainer
Mode: RX
Model: GDG4-1
Manufacturer: Ho Lee Co., LTD

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 16/05/06/
Time: 8/58/58
Engineer Signature: star
Distance: 3m

Note: Report No.:ATE20160691



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	50.9961	40.57	-20.76	19.81	40.00	-20.19	QP			
2	110.8581	42.66	-21.08	21.58	43.50	-21.92	QP			
3	403.9335	43.70	-13.92	29.78	46.00	-16.22	QP			



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 1# Chamber

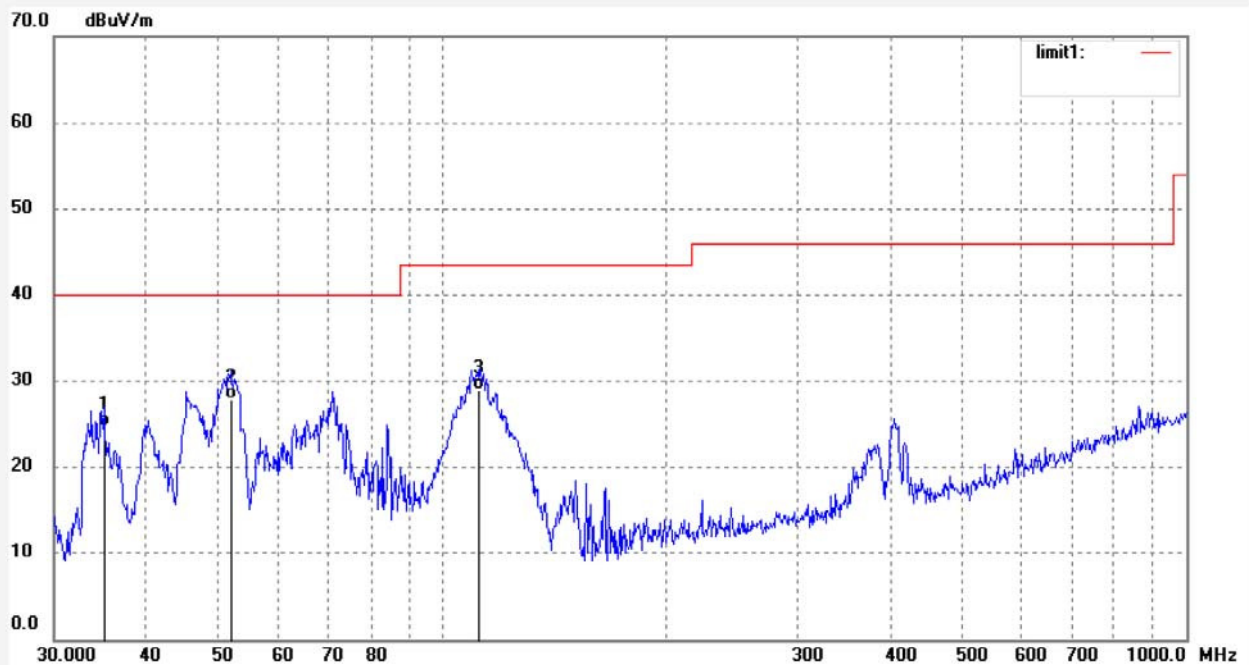
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: star2016 #662
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Dog Trainer
Mode: RX
Model: GDG4-1
Manufacturer: Ho Lee Co., LTD

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 16/05/06/
Time: 8/57/36
Engineer Signature: star
Distance: 3m

Note: Report No.:ATE20160691



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	35.0157	42.22	-17.51	24.71	40.00	-15.29	QP			
2	51.8998	48.72	-20.80	27.92	40.00	-12.08	QP			
3	112.0328	50.10	-21.12	28.98	43.50	-14.52	QP			



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: star2016 #857

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Dog Trainer

Mode: RX

Model: GDG4-1

Manufacturer: Ho Lee Co., LTD

Polarization: Horizontal

Power Source: AC 120V/60Hz

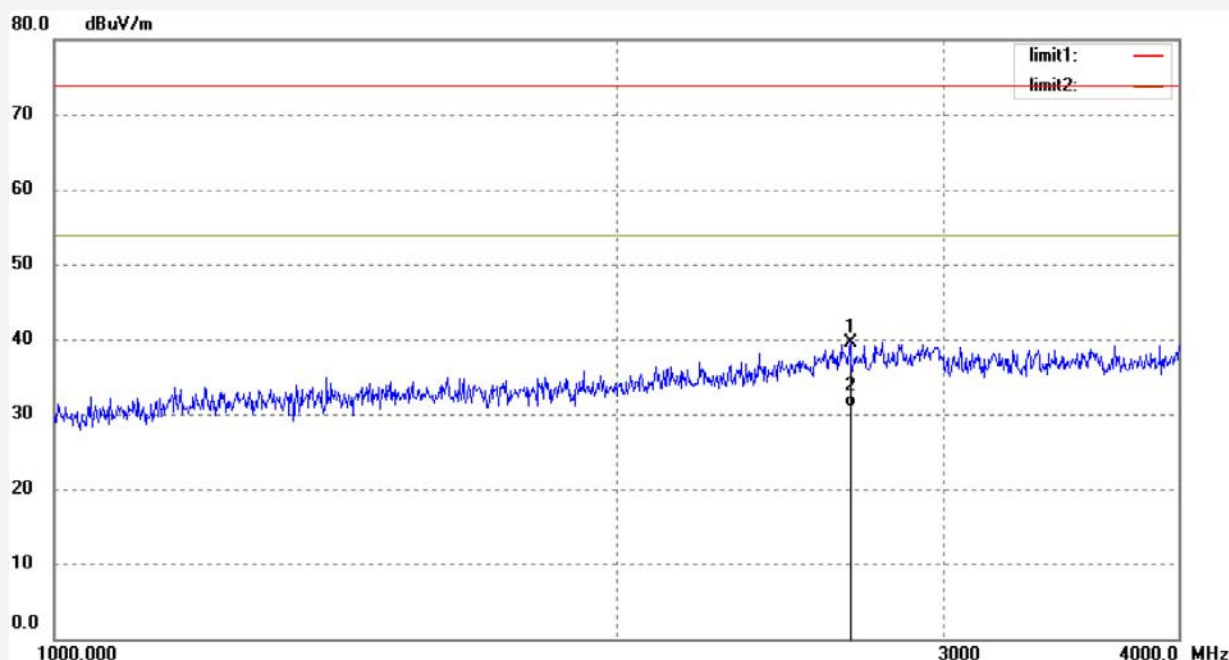
Date: 16/05/13/

Time: 13/54/38

Engineer Signature: star

Distance: 3m

Note: Report No.:ATE20160691



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2669.369	42.87	-3.27	39.60	74.00	-34.40	peak			
2	2669.369	34.17	-3.27	30.90	54.00	-23.10	AVG			



ACCURATE TECHNOLOGY CO., LTD.

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

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: star2016 #858

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Dog Trainer

Mode: RX

Model: GDG4-1

Manufacturer: Ho Lee Co., LTD

Polarization: Vertical

Power Source: AC 120V/60Hz

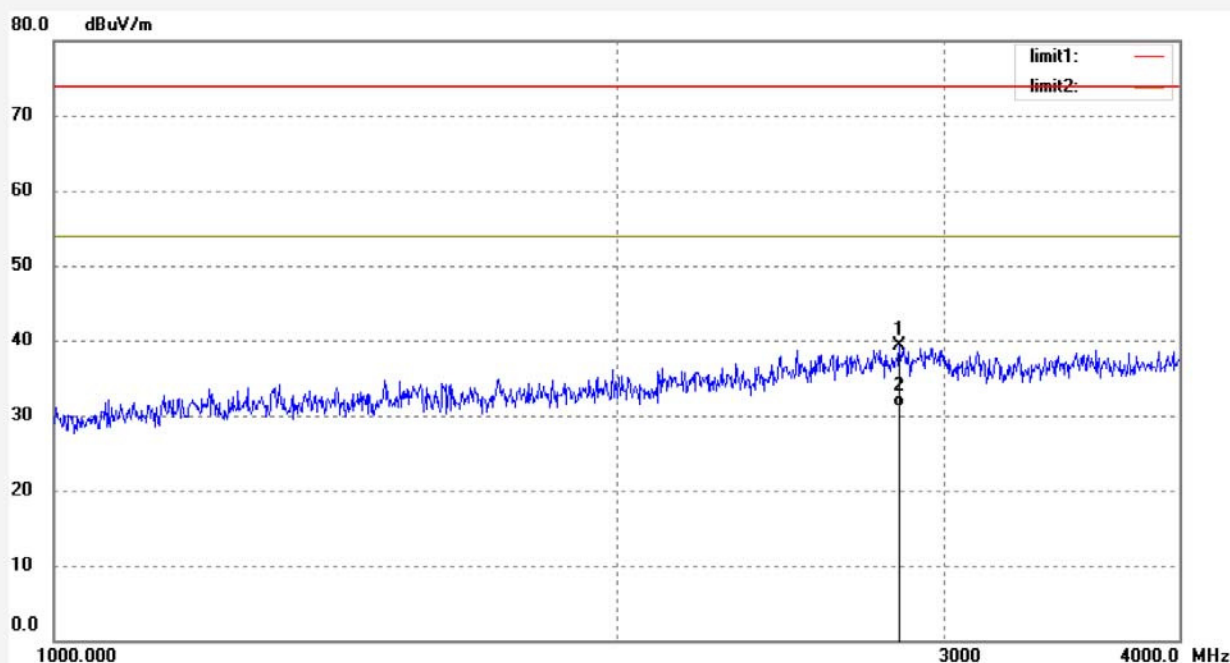
Date: 16/05/13/

Time: 13/58/54

Engineer Signature: star

Distance: 3m

Note: Report No.:ATE20160691



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2834.350	41.90	-2.57	39.33	74.00	-34.67	peak			
2	2834.350	33.62	-2.57	31.05	54.00	-22.95	AVG			