

Weifang GoerTek Electronics Co.,Ltd

Application For Certification

FCC ID: SZGCECHYA0083

Wireless Stereo Headset

Model: CECHYA-0083

2.4GHz Transceiver

Report No.: 130916050SZN-001

We hereby certify that the sample of the above item is considered to comply with the requirements of FCC Part 15, Subpart C for Intentional Radiator, mention 47 CFR [10-1-12]

Prepared and Checked by:

Approved by:

Sign on file Leo Lai Project Engineer

Billy Li Supervisor Date: October 30, 2013

• The test results reported in this test report shall refer only to the sample actually tested and shall not refer or be deemed to refer to bulk from which such a sample may be said to have been obtained.

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• For Terms And Conditions of the services, it can be provided upon request.

• The evaluation data of the report will be kept for 3 years from the date of issuance.

TRF No.: FCC 15C_TX_b

Intertek Testing Services Shenzhen Ltd. Kejiyuan Branch

6F, D Block, Huahan Building, Langshan Road, Nanshan District, Shenzhen, P. R. China

Tel: (86 755) 8601 6288 Fax: (86 755) 8601 6751 Website: www.china.intertek-etlsemko.com

LIST OF EXHIBITS

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MEASUREMENT/TECHNICAL REPORT

FCC ID: SZGCECHYA0083

Model: CECHYA-0083 October 30, 2013

This report concerns (check one :)	Original Grant <u>X</u>	Class II Cha	ange	
Equipment Type: <u>DXX - Part 15 Low Pow</u>	ver Communication Dev	vice Transmitte	<u>r</u>	
Deferred grant requested per 47 CFR 0.4	.57(d)(1)(ii)? Ye	es	No _	<u>X</u>
	lf yes, defer unt	til:da		
Company Name agrees to notify the Com	mission by:			
of the intended date of announcement of		date		
date.				
Transition Rules Request per 15.37?	Ye	es	No _	<u>X</u>
If no, assumed Part 15, Subpart C for Edition] provision.	intentional radiator –	the new 47 (CFR [1	0-1-12
Report prepared by:				
	Billy Li Intertek Testing Serv Kejiyuan Branch 6F, Block D, Huahan Nanshan District, Sho Phone: (86 755) 860 Fax: (86 755) 860	Building, Lang enzhen, P. R. (01 0645	Ishan R	load,

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Exhibit type	File Description	Filename
Test Report	Test Report	report.pdf
Test Setup Photo	Radiated Emission	radiated photos.pdf
Test Setup Photo	Conducted Emission	conducted photos.pdf
Test Report	Bandedge Plot	bandedge.pdf
Test Report	20dB BW Plot	bw.pdf
External Photo	External Photo	external photos.pdf
Internal Photo	Internal Photo	internal photos.pdf
Block Diagram	Block Diagram	block.pdf
Schematics	Circuit Diagram	circuit.pdf
Operation Description	Technical Description	descri.pdf
ID Label/Location	Label Artwork and Location	label.pdf
User Manual	User Manual	manual.pdf
Cover Letter	Confidentiality Letter	request.pdf
Cover Letter	Letter of Agency	agency.pdf
Cover Letter	Certification Agreement	agreement.pdf

List of attached file

GENERAL DESCRIPTION

1.0 General Description

1.1 Product Description

The equipment under test (EUT) is a Wireless Stereo Headset. It can connect to PlayStation, PC (with Windows or Mac OS), televisions, and portable media players. The EUT is operated by D.C. 3.7V from internal rechargeable battery and can be charged by USB port via USB cable. The wireless function will stop working when connecting the audio cable. For more information, please refer to user manual.

Antenna Type: Integral antenna

Modulation Type: $\pi/4$ –DQPSK

For electronic filing, the brief circuit description is saved with filename: descri.pdf.

1.2 Related Submittal(s) Grants

This is an application for certification of a transceiver for Headset Unit of the Wireless Stereo Headset, and there has a Dongle Unit which associated with this EUT, has FCC ID: SZGCECHYA0082 and has been filed at the same time.

1.3 Test Methodology

Both AC mains line-conducted and radiated emission measurements were performed according to the procedures in ANSI C63.4 (2009). Radiated emission measurement was performed in Semi-anechoic chamber and conducted emission measurement was performed in shielding room. For radiated emission measurement, preliminary scans were performed in the semi-anechoic chamber only to determine the worst case modes. All radiated tetsts were performed at an anenna to EUT distance of 3 meters, unless stated otherwise in the "Justification Section" of this Application. All other measurements were made in accordance with the procedures in part 2 of CFR 47.

1.4 Test Facility

The Semi-anechoic chamber and shielding room used to collect the radiated data and conducted data are **Intertek Testing Services Shenzhen Ltd. Kejiyuan Branch** and located at 6F, D Block, Huahan Building, Langshan Road, Nanshan District, Shenzhen, P. R. China. This test facility and site measurement data have been fully placed on file with the FCC(Registration Number: 242492).

SYSTEM TEST CONFIGURATION

2.0 System Test Configuration

2.1 Justification

The system was configured for testing in a typical fashion (as a customer would normally use it), and in the confines as outlined in ANSI C63.4 (2009).

The EUT was powered by a fully charged 3.7V internal rechargeable battery and charged by PS3 USB Port (The PS3 powered by AC120V/60Hz) during the test. The antenna 1 and antenna 2 have been considered and only the worst data were reported.

For maximizing emissions, the EUT was rotated through 360°, the antenna height was varied from 1 meter to 4 meters above the ground plane, and the antenna polarization was changed. This step by step procedure for maximizing emissions led to the data reported in Exhibit 3.

The rear of unit shall be flushed with the rear of the table.

The equipment under test (EUT) was configured for testing in a typical fashion (as a customer would normally use it). The EUT was placed on a turn table, which enabled the engineer to maximize emissions through its placement in the three orthogonal axes.

2.2 EUT Exercising Software

The EUT exercise program (provided by client) used during testing was designed to exercise the various system components in a manner similar to a typical use.

2.3 Special Accessories

Shielded USB Cable with one ferrite core is provided with product.

2.4 Equipment Modification

Any modifications installed previous to testing by will be incorporated in each production model sold / leased in the United States.

No modifications were installed by Intertek Testing Services Shenzhen Ltd Kejiyuan Branch.

2.5 Measurement Uncertainty

When determining the test conclusion, the Measurement Uncertainty of test has been considered.

2.6 Support Equipment List and Description

Description	Manufacturer	Model No.
PS3	SONY	CECH-2512A
LCD TV	SONY	KDL-24EX520
USB cable	N/A	Shielded & Core, 25cm
HDMI Cable	N/A	Shielded, 180cm
Wireless Adaptor	Sony	CECHYA-0082

EMISSION RESULTS

3.0 Emission Results

Data is included worst-case configuration (the configuration which resulted in the highest emission levels). A sample calculation, configuration photographs and data tables of the emissions are included.

3.1 Radiated Test Results

A sample calculation, configuration photographs and data tables of the emissions are included.

3.1.1 Field Strength Calculation

The field strength is calculated by adding the reading on the Spectrum Analyzer to the factors associated with preamplifiers (if any), antennas, cables, pulse desensitization and average factors (when specified limit is in average and measurements are made with peak detectors). A sample calculation is included below.

FS = RA + AF + CF - AG + PD + AV

Where FS = Field Strength in $dB\mu V/m$ RA = Receiver Amplitude (including preamplifier) in $dB\mu V$ CF = Cable Attenuation Factor in dB AF = Antenna Factor in dB AG = Amplifier Gain in dB PD = Pulse Desensitization in dBAV = Average Factor in -dB

In the radiated emission table which follows, the reading shown on the data table may reflect the preamplifier gain. An example of the calculations, where the reading does not reflect the preamplifier gain, follows:

FS = RA + AF + CF - AG + PD + AV

Assume a receiver reading of 62.0 dB μ V is obtained. The antenna factor of 7.4 dB and cable factor of 1.6 dB is added. The amplifier gain of 29 dB is subtracted. The pulse desensitization factor of the spectrum analyzer was 0 dB, and the resultant average factor was -10 dB. The net field strength for comparison to the appropriate emission limit is 32 dB μ V/m. This value in dB μ V/m was converted to its corresponding level in μ V/m.

RA = 62.0 dB μ V AF = 7.4 dB CF = 1.6 dB AG = 29.0 dB PD = 0 dB AV = -10 dB FS = 62 + 7.4 + 1.6 - 29 + 0 + (-10) = 32 dB μ V/m

Level in μ V/m = Common Antilogarithm [(32 dB μ V/m)/20] = 39.8 μ V/m

3.1.2 Radiated Emission Configuration Photograph

For electronic filing, the worst case radiated emission configuration photograph is saved with filename: radiated photos. pdf.

3.1.3 Radiated Emissions

The data on the following page lists the significant emission frequencies, the limit and the margin of compliance. Numbers with a minus sign are below the limit.

Worst Case Radiated Emission at 891.860 MHz

Judgement: Passed by 9.2 dB

TEST PERSONNEL:

Sign on file

Leo Lai Project Engineer Typed/Printed Name

<u>Sept. 26, 2013</u> Date

Applicant: Weifang GoerTek Electronics Co.,Ltd Model: CECHYA-0083 Sample: 1/1 Worst Case Operating Mode: Transmit Date of Test: Sept. 26, 2013

Table 1

Radiated Emissions

Pre-Polarization Frequency Reading Antenna Net Limit Margin (MHz) (dBµV) Amp Factor at 3m at 3m (dB) Gain (dB) (dBµV/m) (dBµV/m) (dB) 169.700 41.4 8.1 29.5 43.5 -14.0 Horizontal 20.0 Horizontal 374.840 39.1 20.0 15.4 34.5 46.0 -11.5 -9.2 Horizontal 891.860 40.4 20.0 16.4 36.8 46.0 Vertical 34.880 35.0 20.0 8.1 23.1 40.0 -16.9 27.3 -17.2 Vertical 48.440 20.0 15.5 22.8 40.0 Vertical 155.600 27.6 20.0 24.5 43.5 -19.0 16.9

NOTES: 1. Quasi-Peak detector is used except for others stated.

- All measurements were made at 3 meters. Harmonic emissions not detected at the 3-meter distances were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other harmonic emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. All emissions are below the QP limit.

3.1.4 Transmitter Spurious Emissions (Radiated)

Worst Case Radiated Emission at 2405.350 MHz

For electronic filing, the worst case radiated emission configuration photograph is saved with filename: radiated photos. pdf.

The data on the following page lists the significant emission frequencies, the limit and the margin of compliance. Numbers with a minus sign are below the limit.

Judgement: Passed by 5.7 dB

TEST PERSONNEL:

Sign on file

Leo Lai Project Engineer Typed/Printed Name

<u>Sept. 26, 2013</u> Date

Applicant: Weifang GoerTek Electronics Co.,Ltd Model: CECHYA-0083 Sample: 1/1 Worst Case Operating Mode: Transmit Date of Test: Sept. 26, 2013

Table 2

Radiated Emissions

Polarization	Frequency	Reading	Pre-	Antenna	Net	Peak Limit	Margin
	(MHz)	Peak	Amp	Factor	at 3m	at 3m	(dB)
		(dBµV)	Gain	(dB)	(dBµV/m)	(dBµV/m)	
		,	(dB)		,		
Vertical	2405.350	100.5	36.7	28.5	92.3	114.0	-21.7
Vertical	4810.700	54.5	36.7	28.5	46.3	74.0	-27.7
Vertical	7216.050	55.4	36.1	33.1	52.4	74.0	-21.6

Polarization	Frequency	Reading	Pre-	Antenna	Net	Average	Margin
	(MHz)	Average	Amp	Factor	at 3m	Limit	(dB)
		(dBµV)	Gain	(dB)	(dBµV/m)	at 3m	
			(dB)			(dBµV/m)	
Vertical	2405.350	96.5	36.7	28.5	88.3	94.0	-5.7
Vertical	4810.700	41.6	36.7	28.5	33.4	54.0	-20.6
Vertical	7216.050	41.5	36.1	33.1	38.5	54.0	-15.5

- Notes: 1. Peak detector Data unless otherwise stated. Above 1000 MHz, RBW=1MHz, VBW=3MHz is used for Peak measurement, RBW=1MHz, VBW=10Hz is used for Average measurement.
 - 2. All measurements were made at 3 meter. Harmonic emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other harmonic emissions than those reported were detected at a test distance of 0.3-meter.
 - 3. Negative value in the margin column shows emission below limit.
 - 4. Horn antenna is used for the emission over 1000MHz.

Test Engineer: Leo Lai

Applicant: Weifang GoerTek Electronics Co.,Ltd Model: CECHYA-0083 Sample: 1/1 Worst Case Operating Mode: Transmit Date of Test: Sept. 26, 2013

Table 3

Radiated Emissions

(2441.350MHz)
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Polarization	Frequency	Reading	Pre-	Antenna	Net	Peak Limit	Margin
	(MHz)	Peak	Amp	Factor	at 3m	at 3m	(dB)
		(dBµV)	Gain	(dB)	(dBµV/m)	(dBµV/m)	
			(dB)				
Vertical	2441.350	99.8	36.7	28.5	91.6	114.0	-22.4
Vertical	4882.700	54.8	36.7	28.5	46.6	74.0	-27.4
Vertical	7324.050	56.2	36.1	33.1	53.2	74.0	-20.8

Polarization	Frequency	Reading	Pre-	Antenna	Net	Average	Margin
	(MHz)	Average	Amp	Factor	at 3m	Limit	(dB)
		(dBµV)	Gain	(dB)	(dBµV/m)	at 3m	
			(dB)			(dBµV/m)	
Vertical	2441.350	96.0	36.7	28.5	87.8	94.0	-6.2
Vertical	4882.700	42.4	36.7	28.5	34.2	54.0	-19.8
Vertical	7324.050	41.4	36.1	33.1	38.4	54.0	-15.6

- Notes: 1. Peak detector Data unless otherwise stated. Above 1000 MHz, RBW=1MHz, VBW=3MHz is used for Peak measurement, RBW=1MHz, VBW=10Hz is used for Average measurement.
 - 2. All measurements were made at 3 meter. Harmonic emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other harmonic emissions than those reported were detected at a test distance of 0.3-meter.
 - 3. Negative value in the margin column shows emission below limit.
 - 4. Horn antenna is used for the emission over 1000MHz.

Test Engineer: Leo Lai

Applicant: Weifang GoerTek Electronics Co.,Ltd Model: CECHYA-0083 Sample: 1/1 Worst Case Operating Mode: Transmit Date of Test: Sept. 26, 2013

Table 4

Radiated Emissions

(2477.350MHz)

Polarization	Frequency	Reading	Pre-	Antenna	Net	Peak Limit	Margin
	(MHz)	Peak	Amp	Factor	at 3m	at 3m	(dB)
		(dBµV)	Gain	(dB)	(dBµV/m)	(dBµV/m)	
			(dB)				
Vertical	2477.350	99.1	36.7	28.5	90.9	114.0	-23.1
Vertical	4954.700	54.8	36.7	28.5	46.6	74.0	-27.4
Vertical	7432.050	55.8	36.1	33.1	52.8	74.0	-21.2

Polarization	Frequency	Reading	Pre-	Antenna	Net	Average	Margin
	(MHz)	Average	Amp	Factor	at 3m	Limit	(dB)
		(dBµV)	Gain	(dB)	(dBµV/m)	at 3m	
			(dB)			(dBµV/m)	
Vertical	2477.350	95.6	36.7	28.5	87.4	94.0	-6.6
Vertical	4954.700	41.7	36.7	28.5	33.5	54.0	-20.5
Vertical	7432.050	41.8	36.1	33.1	38.8	54.0	-15.2

- Notes: 1. Peak detector Data unless otherwise stated. Above 1000 MHz, RBW=1MHz, VBW=3MHz is used for Peak measurement, RBW=1MHz, VBW=10Hz is used for Average measurement.
 - 2. All measurements were made at 3 meter. Harmonic emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other harmonic emissions than those reported were detected at a test distance of 0.3-meter.
 - 3. Negative value in the margin column shows emission below limit.
 - 4. Horn antenna is used for the emission over 1000MHz.

Test Engineer: Leo Lai

- 3.2 Conducted Emission at Mains Terminal
- 3.2.1 Conducted Emissions Configuration Photograph

For electronic filing, the worst case conducted emission configuration photograph is saved with filename: conducted photos.pdf.

3.2.2 Conducted Emissions

Worst Case Live-Conducted Configuration At

0.474 MHz

Judgement: Passed by 13.2 dB margin

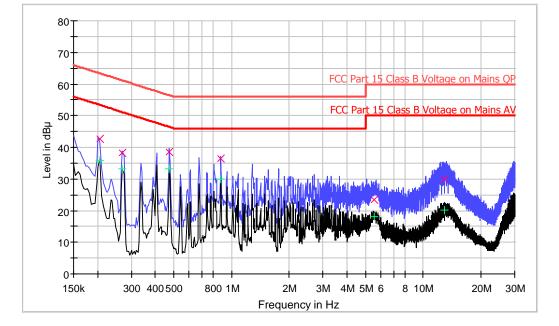
TEST PERSONNEL:

Sign on file

Leo Lai Project Engineer Typed/Printed Name

Sept. 26, 2013 Date

Applicant: Weifang GoerTek Electronics Co.,Ltd Model: CECHYA-0083 Sample: 1/1 Worst Case Operating Mode: Transmit Date of Test: Sept. 26, 2013



Conducted Emission Test - FCC

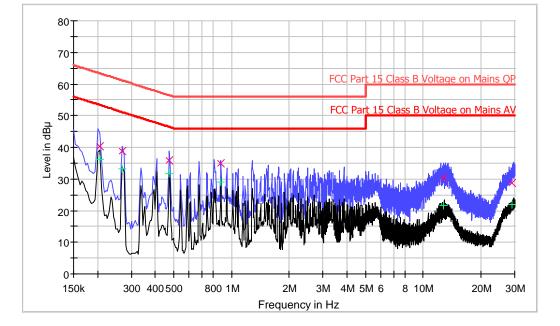
Result Table QP

Frequency (MHz)	QuasiPeak (dB µ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
0.206000	42.8	L1	9.7	20.6	63.4
0.270000	38.2	L1	9.7	22.9	61.1
0.474000	38.6	L1	9.7	17.8	56.4
0.878000	36.5	L1	9.7	19.5	56.0
5.534000	23.4	L1	9.9	36.6	60.0
12.946000	30.0	L1	10.1	30.0	60.0

Result Table AV

Frequency (MHz)	Average (dB μ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
0.206000	36.0	L1	9.7	17.4	53.4
0.270000	33.1	L1	9.7	18.0	51.1
0.474000	33.2	L1	9.7	13.2	46.4
0.878000	30.0	L1	9.7	16.0	46.0
5.534000	18.1	L1	9.9	31.9	50.0
12.946000	20.3	L1	10.1	29.7	50.0

Applicant: Weifang GoerTek Electronics Co.,Ltd Model: CECHYA-0083 Sample: 1/1 Worst Case Operating Mode: Transmit Date of Test: Sept. 26, 2013



Conducted Emission Test - FCC

Result Table QP

Frequency (MHz)	QuasiPeak (dB µ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
0.206000	40.3	N	10.2	23.1	63.4
0.270000	38.8	N	10.2	22.3	61.1
0.474000	35.9	N	10.2	20.5	56.4
0.878000	34.8	N	10.3	21.2	56.0
12.722000	30.3	N	10.5	29.7	60.0
29.146000	28.7	N	10.8	31.3	60.0

Result Table AV

Frequency (MHz)	Average (dB μ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
0.206000	36.0	N	10.2	17.4	53.4
0.270000	33.2	Ν	10.2	17.9	51.1
0.474000	31.6	N	10.2	14.8	46.4
0.878000	29.1	Ν	10.3	16.9	46.0
12.722000	21.7	Ν	10.5	28.3	50.0
29.146000	21.9	N	10.8	28.1	50.0

EQUIPMENT PHOTOGRAPHS

4.0 Equipment Photographs

For electronic filing, the photographs of the tested EUT are saved with filename: external photos.pdf & internal photos.pdf.

PRODUCT LABELLING

5.0 **Product Labelling**

For electronic filing, the FCC ID label artwork and the label location are saved with filename: label.pdf.

TECHNICAL SPECIFICATIONS

6.0 **Technical Specifications**

For electronic filing, the block diagram and schematics of the tested EUT are saved with filename: block.pdf and circuit.pdf respectively.

INSTRUCTION MANUAL

7.0 Instruction Manual

For electronic filing, a preliminary copy of the Instruction Manual is saved with filename: manual.pdf.

This manual will be provided to the end-user with each unit sold/leased in the United States.

MISCELLANEOUS INFORMATION

8.0 Miscellaneous Information

This miscellaneous information includes details of the measured bandedge, the test procedure and calculation of factor such as pulse desensitization.

8.1 Bandedge Plot

For electronic filing, the plot shows the fundamental emission when modulated is saved with filename: bandedge.pdf. From the plot, the field strength of any emissions outside of the specified frequency band are attenuated to the general radiated emission limits in section 15.209. It fulfils the requirement of 15.249(d).

Peak Measurement

Bandedge compliance is determined by applying marker-delta method, i.e (Bandedge Plot).

(i) Lower channel 2405.35MHz:

Peak Resultant field strength = Fundamental emissions (peak value) – delta from the bandedge plot

= 92.3 dBµv/m - 36.63dB = 55.67 dBµv/m

Average Resultant field strength = Fundamental emissions (average value) delta from the bandedge plot = 88.3 dBµv/m -36.63dB

= 51.67 dBµv/m

(ii) Upper channel 2477.35MHz:

Peak Resultant field strength = Fundamental emissions (peak value) – delta from the bandedge plot

= 90.9 dBµv/m - 44.34dB = 46.56 dBµv/m

Average Resultant field strength = Fundamental emissions (average value) delta from the bandedge plot = $87.4 \text{ dB}\mu\text{v/m} - 44.34\text{dB}$ = $43.06 \text{ dB}\mu\text{v/m}$

The resultant field strength meets the general radiated emission limit in section 15.209, which does not exceed 74dB μ v/m (Peak Limit) and 54dB μ v/m (Average Limit).

8.1 Bandedge Plot (cont'd)

Pursuant to FCC part 15 Section 15.215(c), the 20dB bandwidth of the emission was contained within the frequency band designated (mentioned as above) which the EUT operated. The effects, if any, from frequency sweeping, frequency hopping, other modulation techniques and frequency stability over excepted variations in temperature and supply voltage were considered.

Figure 8.1 Bandwidth

8.2 Emissions Test Procedures

The following is a description of the test procedure used by Intertek Testing Services in the measurements of transmitters operating under Part 15, Subpart C rules.

The test set-up and procedures described below are designed to meet the requirements of ANSI C63.4 - 2009.

The transmitting equipment under test (EUT) is placed on a wooden turntable which is four feet in diameter and approximately one meter in height above the ground plane. During the radiated emissions test, the turntable is rotated and any cables leaving the EUT are manipulated to find the configuration resulting in maximum emissions. The EUT is adjust through all three orthogonal axes to obtain maximum emission levels. The antenna height and polarization are varied during the testing to search for maximum signal levels.

Detector function for radiated emissions is in peak mode. Average readings, when required, are taken by measuring the duty cycle of the equipment under test and subtracting the corresponding amount in dB from the measured peak readings.

The frequency range scanned is from the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or 40 GHz, whichever is lower.

Detector function for conducted emissions is in QP & AV mode and IFBW setting is 9 kHz from the frequency band 150 kHz to 30MHz.

8.2 Emissions Test Procedures (cont'd)

The EUT is warmed up for 15 minutes prior to the test.

AC power to the unit is varied from 85% to 115% nominal and variation in the fundamental emission field strength is recorded. If battery powered, a new, fully charged battery is used.

Conducted measurements are made as described in ANSI C63.4 - 2009.

The IF bandwidth used for measurement of radiated signal strength was 10 kHz for emission below 30 MHz and 120 kHz for emission from 30 MHz to 1000 MHz. Where pulsed transmissions of short enough pulse duration warrant, a greater bandwidth is selected according to the recommendations of Hewlett Packard Application Note 150-2. Above 1000 MHz, a resolution bandwidth of 1 MHz is used.

Transmitter measurements are normally conducted at a measurement distance of three meters. However, to assure low enough noise floor in the restricted bands and above 1 GHz, signals are acquired at a distance of one meter or less. All measurements are extrapolated to three meters using inverse scaling, but those measurements taken at a closer distance are so marked.

CONFIDENTIALITY REQUEST

9.0 Confidentiality Request

For electronic filing, the confidentiality request of the tested EUT is saved with filename: Confidential request.pdf.

TEST EQUIPMENT LIST

10.0 Test Equipment List

Equipment No.	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due Date
SZ061-03	BiConiLog Antenna	ETS	3142C	00066460	29-Jun-13	29-Jun-14
SZ185-01	EMI Receiver	R&S	ESCI	100547	12-Mar-13	12-Mar-14
SZ061-08	Horn Antenna	ETS	3115	00092346	3-Nov-12	3-Nov-13
SZ061-06	Active Loop Antenna	Electro-Metrics	EM-6876	217	13-May-13	13-May-14
SZ061-07	Pyramidal Horn Antenna	ETS	3160-09	00083067	27-Aug-13	27-Aug-14
SZ056-03	Spectrum Analyzer	R&S	FSP 30	101148	12-Mar-13	12-Mar-14
SZ181-04	Preamplifier	Agilent	8449B	3008A02474	12-Mar-13	12-Mar-14
SZ188-01	Anechoic Chamber	ETS	RFD-F/A- 100	4102	2-Mar-13	2-Mar-14
SZ062-02	RF Cable	RADIALL	RG 213U		20-Jul-13	20-Jan-14
SZ062-12	RF Cable	RADIALL	R2885312 62		22-Apr-13	22-Oct-13
SZ062-19	RF Cable	HUBER+SUH NER	SF104		20-Jul-13	20-Jan-14
SZ067-04	Notch Filter	Micro-Tronics	BRM5070 2-02		21-May-13	21-May-14
SZ185-02	EMI Test Receiver	R&S	ESCI	100692	5-Nov-12	5-Nov-13
SZ187-01	Two-Line V- Network	R&S	ENV216	100072	5-Nov-12	5-Nov-13
SZ187-02	Two-Line V- Network	R&S	ENV216	100073	5-Nov-12	5-Nov-13
SZ188-03	Shielding Room	ETS	RFD-100	4100	23-Aug-13	23-Aug-14