

Philips Consumer Electronics B.V.

Application For Certification

Bluetooth Headset

(FCC ID: OYMHB9000)

Superseded report no. HK08050497-1 dated June 30, 2008

HK08050497-1(R1) KS/ ac September 8, 2008

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MEASUREMENT/TECHNICAL REPORT

Philips Consumer Electronics B.V. - Model: SHB9000/00, SHB9000/05,

SHB9000/10, SHB9000/27, SHB9000/37, SHB9000/97

FCC ID: OYMHB9000

This report concerns (check one:)	Original Grant X Class II Change
Equipment Type : DXX - Pt 15 Low Pwr	Com. Device Tx
Deferred grant requested per 47 CFR 0.457(d)(1)(ii)?	Yes NoX_
Company Name agrees to notify the Cor	If yes, defer until:date
by:	date
of the intended date of announcement of on that date.	the product so that the grant can be issued
Transition Rules Request per 15.37 ?	Yes NoX
If no, assumed Part 15, Subpart C for int Edition] Provision.	entional radiator - the new 47 CFR [09-20-07
Report prepared by:	Sit Kim Wai, Ken Intertek Testing Services Hong Kong Ltd. 2/F., Garment Centre, 576 Castle Peak Road, Kowloon, Hong Kong. Phone: 852-2173-8474 Fax: 852-2741-1693

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List of attached file

Exhibit type	File Description	filename
Test Report	Test Report	report.pdf
Operational Description	Technical Description	descri.pdf
Test Setup Photos	Radiated & Conducted Emission for Headset	config photos.pdf
Test Report	Emission Plot	emission.pdf
Test Report	Conducted Emission Test Result	conduct.pdf
External Photos	External Photo	external photos.pdf
Internal Photos	Internal Photo	internal photos.pdf
Block Diagram	Block Diagram	block.pdf
Schematics	Circuit Diagram	circuit.pdf
ID Label/Location Info	Label Artwork and Location	label.pdf
Users Manual	User Manual	manual.pdf
Cover Letter	Letter of Agency	letter of agency.pdf
Cover Letter	Confidentiality Request	request.pdf

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EXHIBIT 1 GENERAL DESCRIPTION

Test Report Number: HK08050497-1(R1) FCC ID: OYMHB9000

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1.0 **General Description**

1.1 Product Description

The Equipment Under Test (EUT) is a Bluetooth Headset. Bluetooth module operates from 2402MHz to 2480MHz. The battery for this headset is internal and rechargeable using the 5VDC 500mA supplied power adaptor through the mini USB connector. After pairing and connecting the headset with the mobile phone, the user could listen to the music and control the music wirelessly which is played from the mobile, and the Bluetooth headset can also make and receive call from the mobile. On the other hand, without any Bluetooth support, there is an option to listen to music by using and connecting with an audio cable.

The antenna used in headset is integral, and the tested sample is a prototype.

The Model: SHB9000/05, SHB9000/10, SHB9000/27, SHB9000/37 and SHB9000/97 are the same as the Model: SHB9000/00 in hardware aspect. The difference in model number serves as marketing strategy.

The circuit description is saved with filename: descri.pdf

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1.2 Related Submittal(s) Grants

This is an Application for Certification of a DXX - Part 15 Low Pwr Com. Device Tx. One Transmitter is included in this application.

1.3 Test Methodology

Both AC mains line-conducted and radiated emission measurements were performed according to the procedures in ANSI C63.4 (2003). All measurements were performed in Open Area Test Sites. Preliminary scans were performed in the Open Area Test Sites only to determine worst case modes. All Radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise in the "Justification Section" of this Application.

1.4 Test Facility

The open area test site and conducted measurement facility used to collect the radiated data is located at Garment Centre, 576 Castle Peak Road, Kowloon, Hong Kong. This test facility and site measurement data have been fully placed on file with the FCC.

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EXHIBIT 2 SYSTEM TEST CONFIGURATION

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2.0 **System Test Configuration**

2.1 Justification

For emissions testing, the equipment under test (EUT) was setup to transmit continuously to simplify the measurement methodology. Care was taken to ensure proper power supply voltages during testing. During testing, all cables (if any) were manipulated to produce worst case emissions. The EUT was powered by an AC adaptor 100-240VAC to 5.0VDC 500mA. Three types of same-rating adaptor were considered.

For the measurements, the EUT was attached to a plastic stand if necessary and placed on the wooden turntable. The signal was maximized through rotation and placement in the three orthogonal axes. The antenna height and polarization were varied during the search for maximum signal level. The antenna height was varied from 1 to 4 meters. Radiated emissions were taken at three meters unless the signal level was too low for measurement at that distance. If necessary, a pre-amplifier was used and/or the test was conducted at a closer distance.

Measurements of the radiated signal level of the fundamental frequency component of the emission was performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage.

Analyzer resolution was 100 kHz or greater for frequencies below 1000 MHz. The resolution was 1 MHz or greater for frequencies above 1000 MHz. The spurious emissions more than 20 dB below the permissible value were not reported.

Radiated emission measurement were performed the lowest radio frequency signal generated in the device which was greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever was lower.

Determination of pulse desensitization was made according to *Hewlett Packard Application Note 150-2, Spectrum Analysis... Pulsed RF.* The effective period (τ_{eff}) was 625 μs for Bluetooth. With the resolution bandwidth 1MHz and spectrum analyzer IF bandwidth 3 dB, the pulse desensitization factor was 0 dB.

2.2 EUT Exercising Software

The EUT exercise program used during radiated and conducted testing was designed to exercise the various system components in a manner similar to a typical use.

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2.3 Details of EUT and Description of Peripherals

Details of EUT:

AC adaptor (provided with the unit) were used to power the device. Its description is listed below.

- (1) An AC adaptor, 2-pin (100-240VAC to 5.0VDC 500mA, Model: CM-1AD05005/37) (Supplied by Client)
- (2) An AC adaptor, 2-pin (100-240VAC to 5.0VDC 500mA, Model: CM-1AD05005/00) (Supplied by Client)
- (3) An AC adaptor, 3-pin (100-240VAC to 5.0VDC 500mA, Model: CM-1AD05005/05) (Supplied by Client)

Description of Peripherals:

- (1) Nokia Mobile Phone, Model: 5300, IMEI: 352772015773193 (Supplied by Intertek)
- (2) 1 x USB cable A to Mini B 5-pin with 1.5 meter long (Supplied by Client)

Radiated Emission Test: (Supplied by Intertek)

- (1) Lenovo, Model: T61, S/N: L3-CF468, DoC Product
- (2) LogiTech Mouse, Model: M-UV94, S/N: LZ639AB, DoC Product
- (3) Smart-drive External 1394 HDD, Model: HD3-SU2FW, S/N: 0800261, DoC Product

Conducted Emission Test: (Supplied by Intertek)

- (1) HP Notebook, Model: NX6320, S/N: CNU6370FWN, DoC Product
- (2) LogiTech Mouse, Model: M-UV94, S/N: LZ639AB, DoC Product
- (3) Genius Modem, Model: GM56EX, S/N: ZT5505000355, DoC Product

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2.4 Measurement Uncertainty

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

2.5 Equipment Modification

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

No modifications were installed by Commercial & Electrical Division, Intertek Testing Services Hong Kong Ltd.

All the items listed under section 2.0 of this report are confirmed by:

Confirmed by:

Sit Kim Wai, Ken Supervisor Intertek Testing Services

ensit

Agent for Philips Consumer Electronics B.V.

____Signature

September 8, 2008 Date

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EXHIBIT 3 EMISSION RESULTS

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3.0 **Emission Results**

Data is included of the 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.

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3.1 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation with a sample calculation is as follows:

FS = RA + AF + CF - AG

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

In the following table(s), the reading shown on the data table reflects the preamplifier gain. An example for the calculations in the following table is as follows:-

FS = RR + LF

where $FS = Field Strength in dB\mu V/m$

 $RR = RA - AG \text{ in } dB\mu V$ LF = CF + AF in dB

Assume a receiver reading of 52.0 dB $_{\mu}V$ 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, giving a field strength of 32 dB $_{\mu}V/m$. This value in dB $_{\mu}V/m$ was converted to its corresponding level in $_{\mu}V/m$.

 $RA = 52.0 dB\mu V$

AF = 7.4 dB $RR = 23.0 \text{ dB}\mu\text{V}$ LF = 9.0 dB

AG = 29.0 dBFS = RR + LF

 $FS = 23 + 9 = 32 \, dB\mu V/m$

Level in $\mu V/m = Common Antilogarithm [(32 dB<math>\mu V/m)/20] = 39.8 \mu V/m$

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3.2 Radiated Emission Configuration Photograph - Headset

Worst Case Radiated Emission

at 4804.000 MHz

For electronic filing, the worst case radiated emission configuration photographs are saved with filename: config photos.pdf

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3.3 Radiated Emission Data - Headset

The data on the following pages list the significant emission frequencies, the limit and the margin of compliance.

Judgement : P	assed by 9.2 dB margin compare with the peak limit
***********	************
TEST PERSONNEL:	
Jess.	
Tester Signature	
Jess Tang, Lead Enginee Typed/Printed Name	er_
September 8, 2008	

Test Report Number: HK08050497-1(R1)

Date

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Company: Philips Consumer Electronics B.V. Date of Test: May 15-June 28, 2008

Model: SHB9000/00

Mode: TX-Channel 0 (Standalone)

Table 1, Headset

Radiated Emissions Pursuant to FCC Part 15 Section 15.249(a) Requirements

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m - Peak	at 3m	Margin
zation	Frequency	(dBμV)	(dB)	(dB)	$(dB\mu V/m)$	$(dB_{\mu}V/m)$	(dB)
Н	2402.000	99.3	33	29.4	95.7	114.0	-18.3
Н	*4804.000	58.9	33	34.9	60.8	74.0	-13.2
Н	7206.000	47.8	33	37.9	52.7	74.0	-21.3
Н	9608.000	41.0	33	40.4	48.4	74.0	-25.6
Н	*12010.000	37.2	33	40.5	44.7	74.0	-29.3

			Pre-Amp	Antenna	Average	Calculated	Average	
Polari-		Reading	Gain	Factor	Factor	at 3m	Limit at 3m	Margin
zation	Frequency	$(dB\mu V)$	(dB)	(dB)	(dB)	$(dB_{\mu}V/m)$	$(dB_{\mu}V/m)$	(dB)
Н	2402.000	99.3	33	29.4	43.9	51.8	94.0	-42.2
Н	*4804.000	58.9	33	34.9	43.9	16.9	54.0	-37.1
Н	7206.000	47.8	33	37.9	43.9	8.8	54.0	-45.2
Н	9608.000	41.0	33	40.4	43.9	4.5	54.0	-49.5
Н	*12010.000	37.2	33	40.5	43.9	0.8	54.0	-53.2

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated 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 radiated 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.
- 5. Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).
- * Emission within the restricted band meets the requirement of part 15.205.

Test Engineer: Jess Tang

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Company: Philips Consumer Electronics B.V. Date of Test: May 15-June 28, 2008

Model: SHB9000/00

Mode: TX-Channel 39 (Standalone)

Table 2, Headset

Radiated Emissions Pursuant to FCC Part 15 Section 15.249(a) Requirements

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m - Peak	at 3m	Margin
zation	Frequency	$(dB\mu V)$	(dB)	(dB)	$(dB\mu V/m)$	(dBμV/m)	(dB)
Н	2441.000	99.0	33	29.4	95.4	114.0	-18.6
Н	*4882.000	58.5	33	34.9	60.4	74.0	-13.6
Н	*7323.000	47.9	33	37.9	52.8	74.0	-21.2
Н	9764.000	40.7	33	40.4	48.1	74.0	-25.9
Н	*12205.000	37.1	33	40.5	44.6	74.0	-29.4

			Pre-Amp	Antenna	Average	Calculated	Average	
Polari-		Reading	Gain	Factor	Factor	at 3m	Limit at 3m	Margin
zation	Frequency	$(dB\mu V)$	(dB)	(dB)	(dB)	$(dB_{\mu}V/m)$	$(dB_{\mu}V/m)$	(dB)
Н	2441.000	99.0	33	29.4	43.9	51.5	94.0	-42.5
Н	*4882.000	58.5	33	34.9	43.9	16.5	54.0	-37.5
Н	*7323.000	47.9	33	37.9	43.9	8.9	54.0	-45.1
Н	9764.000	40.7	33	40.4	43.9	4.2	54.0	-49.8
Н	*12205.000	37.1	33	40.5	43.9	0.7	54.0	-53.3

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated 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 radiated 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.
- 5. Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).
- * Emission within the restricted band meets the requirement of part 15.205.

Test Engineer: Jess Tang

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Company: Philips Consumer Electronics B.V. Date of Test: May 15-June 28, 2008

Model: SHB9000/00

Mode: TX-Channel 78 (Standalone)

Table 3, Headset

Radiated Emissions Pursuant to FCC Part 15 Section 15.249(a) Requirements

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m - Peak	at 3m	Margin
zation	Frequency	$(dB\mu V)$	(dB)	(dB)	$(dB\mu V/m)$	(dBμV/m)	(dB)
Н	2480.000	99.0	33	29.4	95.4	114.0	-18.6
Н	*4960.000	58.6	33	34.9	60.5	74.0	-13.5
Н	*7440.000	47.5	33	37.9	52.4	74.0	-21.6
Н	9920.000	41.1	33	40.4	48.5	74.0	-25.5
Н	*12400.000	36.2	33	40.5	43.7	74.0	-30.3

			Pre-Amp	Antenna	Average	Calculated	Average	
Polari-		Reading	Gain	Factor	Factor	at 3m	Limit at 3m	Margin
zation	Frequency	(dBμV)	(dB)	(dB)	(dB)	(dBμV/m)	$(dB\mu V/m)$	(dB)
Н	2480.000	99.0	33	29.4	43.9	51.5	94.0	-42.5
Н	*4960.000	58.6	33	34.9	43.9	16.6	54.0	-37.4
Н	*7440.000	47.5	33	37.9	43.9	8.5	54.0	-45.5
Н	9920.000	41.1	33	40.4	43.9	4.6	54.0	-49.4
Н	*12400.000	36.2	33	40.5	43.9	-0.2	54.0	-54.2

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated 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 radiated 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.
- 5. Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).
- * Emission within the restricted band meets the requirement of part 15.205.

Test Engineer: Jess Tang

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Company: Philips Consumer Electronics B.V. Date of Test: May 15-June 28, 2008

Model: SHB9000/00

Mode: TX-Channel 0 (Charging by USB)

Table 4, Headset

Radiated Emissions Pursuant to FCC Part 15 Section 15.249(a) Requirements

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m - Peak	at 3m	Margin
zation	Frequency	$(dB\mu V)$	(dB)	(dB)	$(dB_{\mu}V/m)$	$(dB_{\mu}V/m)$	(dB)
Н	2402.000	99.3	33	29.4	95.7	114.0	-18.3
Н	*4804.000	62.4	33	34.9	64.3	74.0	-9.7
Н	7206.000	47.8	33	37.9	52.7	74.0	-21.3
Н	9608.000	42.1	33	40.4	49.5	74.0	-24.5
Н	*12010.000	36.3	33	40.5	43.8	74.0	-30.2

			Pre-Amp	Antenna	Average	Calculated	Average	
Polari-		Reading	Gain	Factor	Factor	at 3m	Limit at 3m	Margin
zation	Frequency	(dBμV)	(dB)	(dB)	(dB)	$(dB\mu V/m)$	(dBμV/m)	(dB)
Н	2402.000	99.3	33	29.4	43.9	51.8	94.0	-42.2
Н	*4804.000	62.4	33	34.9	43.9	20.4	54.0	-33.6
Н	7206.000	47.8	33	37.9	43.9	8.8	54.0	-45.2
Н	9608.000	42.1	33	40.4	43.9	5.6	54.0	-48.4
Н	*12010.000	36.3	33	40.5	43.9	-0.1	54.0	-54.1

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated 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 radiated 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.
- 5. Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).
- * Emission within the restricted band meets the requirement of part 15.205.

Test Engineer: Jess Tang

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Company: Philips Consumer Electronics B.V. Date of Test: May 15-June 28, 2008

Model: SHB9000/00

Mode: TX-Channel 39 (Charging by USB)

Table 5, Headset

Radiated Emissions Pursuant to FCC Part 15 Section 15.249(a) Requirements

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m - Peak	at 3m	Margin
zation	Frequency	(dBμV)	(dB)	(dB)	$(dB\mu V/m)$	$(dB\mu V/m)$	(dB)
Н	2441.000	99.0	33	29.4	95.4	114.0	-18.6
Н	*4882.000	61.9	33	34.9	63.8	74.0	-10.2
Н	*7323.000	47.7	33	37.9	52.6	74.0	-21.4
Н	9764.000	42.0	33	40.4	49.4	74.0	-24.6
Н	*12205.000	36.0	33	40.5	43.5	74.0	-30.5

			Pre-Amp	Antenna	Average	Calculated	Average	
Polari-		Reading	Gain	Factor	Factor	at 3m	Limit at 3m	Margin
zation	Frequency	(dBμV)	(dB)	(dB)	(dB)	(dBμV/m)	$(dB\mu V/m)$	(dB)
Н	2441.000	99.0	33	29.4	43.9	51.5	94.0	-42.5
Н	*4882.000	61.9	33	34.9	43.9	19.9	54.0	-34.1
Н	*7323.000	47.7	33	37.9	43.9	8.7	54.0	-45.3
Н	9764.000	42.0	33	40.4	43.9	5.5	54.0	-48.5
Н	*12205.000	36.0	33	40.5	43.9	-0.4	54.0	-54.4

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated 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 radiated 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.
- 5. Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).
- * Emission within the restricted band meets the requirement of part 15.205.

Test Engineer: Jess Tang

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Company: Philips Consumer Electronics B.V. Date of Test: May 15-June 28, 2008

Model: SHB9000/00

Mode: TX-Channel 78 (Charging by USB)

Table 6, Headset

Radiated Emissions Pursuant to FCC Part 15 Section 15.249(a) Requirements

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m - Peak	at 3m	Margin
zation	Frequency	$(dB\mu V)$	(dB)	(dB)	$(dB_{\mu}V/m)$	$(dB_{\mu}V/m)$	(dB)
Н	2480.000	98.5	33	29.4	94.9	114.0	-19.1
Н	*4960.000	61.7	33	34.9	63.6	74.0	-10.4
Н	*7440.000	47.2	33	37.9	52.1	74.0	-21.9
Н	9920.000	41.6	33	40.4	49.0	74.0	-25.0
Н	*12400.000	35.5	33	40.5	43.0	74.0	-31.0

			Pre-Amp	Antenna	Average	Calculated	Average	
Polari-		Reading	Gain	Factor	Factor	at 3m	Limit at 3m	Margin
zation	Frequency	(dBμV)	(dB)	(dB)	(dB)	(dBμV/m)	$(dB\mu V/m)$	(dB)
Н	2480.000	98.5	33	29.4	43.9	51.0	94.0	-43.0
Н	*4960.000	61.7	33	34.9	43.9	19.7	54.0	-34.3
Н	*7440.000	47.2	33	37.9	43.9	8.2	54.0	-45.8
Н	9920.000	41.6	33	40.4	43.9	5.1	54.0	-48.9
Н	*12400.000	35.5	33	40.5	43.9	-0.9	54.0	-54.9

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated 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 radiated 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.
- 5. Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).
- * Emission within the restricted band meets the requirement of part 15.205.

Test Engineer: Jess Tang

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Company: Philips Consumer Electronics B.V. Date of Test: May 15-June 28, 2008

Model: SHB9000/00

Mode: TX-Channel 0 (Charging by /37 2-pin adaptor)

Table 7, Headset

Radiated Emissions Pursuant to FCC Part 15 Section 15.249(a) Requirements

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m - Peak	at 3m	Margin
zation	Frequency	$(dB\mu V)$	(dB)	(dB)	$(dB\mu V/m)$	$(dB_{\mu}V/m)$	(dB)
Н	2402.000	100.0	33	29.4	96.4	114.0	-17.6
Н	*4804.000	62.4	33	34.9	64.3	74.0	-9.7
Н	7206.000	48.5	33	37.9	53.4	74.0	-20.6
Н	9608.000	42.1	33	40.4	49.5	74.0	-24.5
Н	*12010.000	36.4	33	40.5	43.9	74.0	-30.1

			Pre-Amp	Antenna	Average	Calculated	Average	
Polari-		Reading	Gain	Factor	Factor	at 3m	Limit at 3m	Margin
zation	Frequency	(dBμV)	(dB)	(dB)	(dB)	(dBμV/m)	$(dB\mu V/m)$	(dB)
Н	2402.000	100.0	33	29.4	43.9	52.5	94.0	-41.5
Н	*4804.000	62.4	33	34.9	43.9	20.4	54.0	-33.6
Н	7206.000	48.5	33	37.9	43.9	9.5	54.0	-44.5
Н	9608.000	42.1	33	40.4	43.9	5.6	54.0	-48.4
Н	*12010.000	36.4	33	40.5	43.9	0.0	54.0	-54.0

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated 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 radiated 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.
- 5. Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).
- * Emission within the restricted band meets the requirement of part 15.205.

Test Engineer: Jess Tang

Test Report Number: HK08050497-1(R1)

FCC ID: OYMHB9000 Page 23 of 47

Company: Philips Consumer Electronics B.V. Date of Test: May 15-June 28, 2008

Model: SHB9000/00

Mode: TX-Channel 39 (Charging by /37 2-pin adaptor)

Table 8, Headset

Radiated Emissions Pursuant to FCC Part 15 Section 15.249(a) Requirements

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m - Peak	at 3m	Margin
zation	Frequency	(dBμV)	(dB)	(dB)	$(dB\mu V/m)$	$(dB\mu V/m)$	(dB)
Н	2441.000	99.9	33	29.4	96.3	114.0	-17.7
Н	*4882.000	62.1	33	34.9	64.0	74.0	-10.0
Н	*7323.000	48.3	33	37.9	53.2	74.0	-20.8
Н	9764.000	42.4	33	40.4	49.8	74.0	-24.2
Н	*12205.000	36.2	33	40.5	43.7	74.0	-30.3

			Pre-Amp	Antenna	Average	Calculated	Average	
Polari-		Reading	Gain	Factor	Factor	at 3m	Limit at 3m	Margin
zation	Frequency	(dBμV)	(dB)	(dB)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
Н	2441.000	99.9	33	29.4	43.9	52.4	94.0	-41.6
Н	*4882.000	62.1	33	34.9	43.9	20.1	54.0	-33.9
Н	*7323.000	48.3	33	37.9	43.9	9.3	54.0	-44.7
Н	9764.000	42.4	33	40.4	43.9	5.9	54.0	-48.1
Н	*12205.000	36.2	33	40.5	43.9	-0.2	54.0	-54.2

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated 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 radiated 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.
- 5. Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).
- * Emission within the restricted band meets the requirement of part 15.205.

Test Engineer: Jess Tang

Test Report Number: HK08050497-1(R1)

FCC ID: OYMHB9000 Page 24 of 47

Company: Philips Consumer Electronics B.V. Date of Test: May 15-June 28, 2008

Model: SHB9000/00

Mode: TX-Channel 78 (Charging by /37 2-pin adaptor)

Table 9, Headset

Radiated Emissions Pursuant to FCC Part 15 Section 15.249(a) Requirements

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m - Peak	at 3m	Margin
zation	Frequency	$(dB\mu V)$	(dB)	(dB)	$(dB_{\mu}V/m)$	$(dB_{\mu}V/m)$	(dB)
Н	2480.000	99.7	33	29.4	96.1	114.0	-17.9
Н	*4960.000	61.9	33	34.9	63.8	74.0	-10.2
Н	*7440.000	47.9	33	37.9	52.8	74.0	-21.2
Н	9920.000	42.1	33	40.4	49.5	74.0	-24.5
Н	*12400.000	35.7	33	40.5	43.2	74.0	-30.8

			Pre-Amp	Antenna	Average	Calculated	Average	
Polari-		Reading	Gain	Factor	Factor	at 3m	Limit at 3m	Margin
zation	Frequency	(dBμV)	(dB)	(dB)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
Н	2480.000	99.7	33	29.4	43.9	52.2	94.0	-41.8
Н	*4960.000	61.9	33	34.9	43.9	19.9	54.0	-34.1
Н	*7440.000	47.9	33	37.9	43.9	8.9	54.0	-45.1
Н	9920.000	42.1	33	40.4	43.9	5.6	54.0	-48.4
Н	*12400.000	35.7	33	40.5	43.9	-0.7	54.0	-54.7

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated 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 radiated 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.
- 5. Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).
- * Emission within the restricted band meets the requirement of part 15.205.

Test Engineer: Jess Tang

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FCC ID: OYMHB9000 Page 25 of 47

Company: Philips Consumer Electronics B.V. Date of Test: May 15-June 28, 2008

Model: SHB9000/00

Mode: TX-Channel 0 (Charging by /00 2-pin adaptor)

Table 10, Headset

Radiated Emissions Pursuant to FCC Part 15 Section 15.249(a) Requirements

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m - Peak	at 3m	Margin
zation	Frequency	$(dB\mu V)$	(dB)	(dB)	$(dB\mu V/m)$	$(dB_{\mu}V/m)$	(dB)
Н	2402.000	100.1	33	29.4	96.5	114.0	-17.5
Н	*4804.000	62.3	33	34.9	64.2	74.0	-9.8
Н	7206.000	48.1	33	37.9	53.0	74.0	-21.0
Н	9608.000	42.4	33	40.4	49.8	74.0	-24.2
Н	*12010.000	36.1	33	40.5	43.6	74.0	-30.4

			Pre-Amp	Antenna	Average	Calculated	Average	
Polari-		Reading	Gain	Factor	Factor	at 3m	Limit at 3m	Margin
zation	Frequency	$(dB\mu V)$	(dB)	(dB)	(dB)	$(dB_{\mu}V/m)$	$(dB_{\mu}V/m)$	(dB)
Н	2402.000	100.1	33	29.4	43.9	52.6	94.0	-41.4
Н	*4804.000	62.3	33	34.9	43.9	20.3	54.0	-33.7
Н	7206.000	48.1	33	37.9	43.9	9.1	54.0	-44.9
Н	9608.000	42.4	33	40.4	43.9	5.9	54.0	-48.1
Н	*12010.000	36.1	33	40.5	43.9	-0.3	54.0	-54.3

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated 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 radiated 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.
- 5. Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).
- * Emission within the restricted band meets the requirement of part 15.205.

Test Engineer: Jess Tang

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Company: Philips Consumer Electronics B.V. Date of Test: May 15-June 28, 2008

Model: SHB9000/00

Mode: TX-Channel 39 (Charging by /00 2-pin adaptor)

Table 11, Headset

Radiated Emissions Pursuant to FCC Part 15 Section 15.249(a) Requirements

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m - Peak	at 3m	Margin
zation	Frequency	(dBμV)	(dB)	(dB)	$(dB\mu V/m)$	$(dB\mu V/m)$	(dB)
Н	2441.000	100.0	33	29.4	96.4	114.0	-17.6
Н	*4882.000	62.1	33	34.9	64.0	74.0	-10.0
Н	*7323.000	48.2	33	37.9	53.1	74.0	-20.9
Н	9764.000	42.2	33	40.4	49.6	74.0	-24.4
Н	*12205.000	36.0	33	40.5	43.5	74.0	-30.5

			Pre-Amp	Antenna	Average	Calculated	Average	
Polari-		Reading	Gain	Factor	Factor	at 3m	Limit at 3m	Margin
zation	Frequency	(dBμV)	(dB)	(dB)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
Н	2441.000	100.0	33	29.4	43.9	52.5	94.0	-41.5
Н	*4882.000	62.1	33	34.9	43.9	20.1	54.0	-33.9
Н	*7323.000	48.2	33	37.9	43.9	9.2	54.0	-44.8
Н	9764.000	42.2	33	40.4	43.9	5.7	54.0	-48.3
Н	*12205.000	36.0	33	40.5	43.9	-0.4	54.0	-54.4

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated 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 radiated 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.
- 5. Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).
- * Emission within the restricted band meets the requirement of part 15.205.

Test Engineer: Jess Tang

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Company: Philips Consumer Electronics B.V. Date of Test: May 15-June 28, 2008

Model: SHB9000/00

Mode: TX-Channel 78 (Charging by /00 2-pin adaptor)

Table 12, Headset

Radiated Emissions Pursuant to FCC Part 15 Section 15.249(a) Requirements

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m - Peak	at 3m	Margin
zation	Frequency	$(dB\mu V)$	(dB)	(dB)	$(dB_{\mu}V/m)$	$(dB_{\mu}V/m)$	(dB)
Н	2480.000	99.9	33	29.4	96.3	114.0	-17.7
Н	*4960.000	61.9	33	34.9	63.8	74.0	-10.2
Н	*7440.000	48.1	33	37.9	53.0	74.0	-21.0
Н	9920.000	42.0	33	40.4	49.4	74.0	-24.6
Н	*12400.000	35.9	33	40.5	43.4	74.0	-30.6

			Pre-Amp	Antenna	Average	Calculated	Average	
Polari-		Reading	Gain	Factor	Factor	at 3m	Limit at 3m	Margin
zation	Frequency	(dBμV)	(dB)	(dB)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
Н	2480.000	99.9	33	29.4	43.9	52.4	94.0	-41.6
Н	*4960.000	61.9	33	34.9	43.9	19.9	54.0	-34.1
Н	*7440.000	48.1	33	37.9	43.9	9.1	54.0	-44.9
Н	9920.000	42.0	33	40.4	43.9	5.5	54.0	-48.5
Н	*12400.000	35.9	33	40.5	43.9	-0.5	54.0	-54.5

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated 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 radiated 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.
- 5. Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).
- * Emission within the restricted band meets the requirement of part 15.205.

Test Engineer: Jess Tang

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FCC ID: OYMHB9000 Page 28 of 47

Company: Philips Consumer Electronics B.V. Date of Test: May 15-June 28, 2008

Model: SHB9000/00

Mode: TX-Channel 0 (Charging by /05 3-pin adaptor)

Table 13, Headset

Radiated Emissions Pursuant to FCC Part 15 Section 15.249(a) Requirements

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m - Peak	at 3m	Margin
zation	Frequency	(dBμV)	(dB)	(dB)	$(dB\mu V/m)$	$(dB\mu V/m)$	(dB)
Н	2402.000	100.1	33	29.4	96.5	114.0	-17.5
Н	*4804.000	62.9	33	34.9	64.8	74.0	-9.2
Н	7206.000	48.7	33	37.9	53.6	74.0	-20.4
Н	9608.000	42.0	33	40.4	49.4	74.0	-24.6
Н	*12010.000	35.6	33	40.5	43.1	74.0	-30.9

			Pre-Amp	Antenna	Average	Calculated	Average	
Polari-		Reading	Gain	Factor	Factor	at 3m	Limit at 3m	Margin
zation	Frequency	$(dB\mu V)$	(dB)	(dB)	(dB)	$(dB_{\mu}V/m)$	$(dB_{\mu}V/m)$	(dB)
Н	2402.000	100.1	33	29.4	43.9	52.6	94.0	-41.4
Н	*4804.000	62.9	33	34.9	43.9	20.9	54.0	-33.1
Н	7206.000	48.7	33	37.9	43.9	9.7	54.0	-44.3
Н	9608.000	42.0	33	40.4	43.9	5.5	54.0	-48.5
Н	*12010.000	35.6	33	40.5	43.9	-0.8	54.0	-54.8

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated 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 radiated 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.
- 5. Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).
- * Emission within the restricted band meets the requirement of part 15.205.

Test Engineer: Jess Tang

Test Report Number: HK08050497-1(R1)

FCC ID: OYMHB9000 Page 29 of 47

Company: Philips Consumer Electronics B.V. Date of Test: May 15-June 28, 2008

Model: SHB9000/00

Mode: TX-Channel 39 (Charging by /05 3-pin adaptor)

Table 14, Headset

Radiated Emissions Pursuant to FCC Part 15 Section 15.249(a) Requirements

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m - Peak	at 3m	Margin
zation	Frequency	(dBμV)	(dB)	(dB)	$(dB\mu V/m)$	$(dB\mu V/m)$	(dB)
Н	2441.000	99.9	33	29.4	96.3	114.0	-17.7
Н	*4882.000	62.8	33	34.9	64.7	74.0	-9.3
Н	*7323.000	48.3	33	37.9	53.2	74.0	-20.8
Н	9764.000	41.9	33	40.4	49.3	74.0	-24.7
Н	*12205.000	35.5	33	40.5	43.0	74.0	-31.0

			Pre-Amp	Antenna	Average	Calculated	Average	
Polari-		Reading	Gain	Factor	Factor	at 3m	Limit at 3m	Margin
zation	Frequency	(dBμV)	(dB)	(dB)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
Н	2441.000	99.9	33	29.4	43.9	52.4	94.0	-41.6
Н	*4882.000	62.8	33	34.9	43.9	20.8	54.0	-33.2
Н	*7323.000	48.3	33	37.9	43.9	9.3	54.0	-44.7
Н	9764.000	41.9	33	40.4	43.9	5.4	54.0	-48.6
Н	*12205.000	35.5	33	40.5	43.9	-0.9	54.0	-54.9

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated 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 radiated 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.
- 5. Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).
- * Emission within the restricted band meets the requirement of part 15.205.

Test Engineer: Jess Tang

Test Report Number: HK08050497-1(R1)

FCC ID: OYMHB9000 Page 30 of 47

Company: Philips Consumer Electronics B.V. Date of Test: May 15-June 28, 2008

Model: SHB9000/00

Mode: TX-Channel 78 (Charging by /05 3-pin adaptor)

Table 15, Headset

Radiated Emissions Pursuant to FCC Part 15 Section 15.249(a) Requirements

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m - Peak	at 3m	Margin
zation	Frequency	$(dB\mu V)$	(dB)	(dB)	$(dB\mu V/m)$	$(dB\mu V/m)$	(dB)
Н	2480.000	99.6	33	29.4	96.0	114.0	-18.0
Н	*4960.000	62.3	33	34.9	64.2	74.0	-9.8
Н	*7440.000	47.9	33	37.9	52.8	74.0	-21.2
Н	9920.000	41.6	33	40.4	49.0	74.0	-25.0
Н	*12400.000	35.3	33	40.5	42.8	74.0	-31.2

			Pre-Amp	Antenna	Average	Calculated	Average	
Polari-		Reading	Gain	Factor	Factor	at 3m	Limit at 3m	Margin
zation	Frequency	$(dB\mu V)$	(dB)	(dB)	(dB)	$(dB_{\mu}V/m)$	$(dB_{\mu}V/m)$	(dB)
Н	2480.000	99.6	33	29.4	43.9	52.1	94.0	-41.9
Н	*4960.000	62.3	33	34.9	43.9	20.3	54.0	-33.7
Н	*7440.000	47.9	33	37.9	43.9	8.9	54.0	-45.1
Н	9920.000	41.6	33	40.4	43.9	5.1	54.0	-48.9
Н	*12400.000	35.3	33	40.5	43.9	-1.1	54.0	-55.1

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated 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 radiated 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.
- 5. Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).
- * Emission within the restricted band meets the requirement of part 15.205.

Test Engineer: Jess Tang

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3.4 Radiated Emission on the Bandedge

From the following plots, they show that the fundamental emissions are confined in the specified band (2400MHz and 2483.5MHz). In case of the fundamental emissions are within two standard bandwidths from the bandedge, the delta measurement technique is used for determining bandedge compliance. Standard bandwidth is the bandwidth specified by ANSI C63.4 (2003) for frequency being measured.

Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).

Please refer to the following plots for radiated emission on the bandedge:

Plot H1A*: Headset - Low Channel Emissions Plot H1B**: Headset - High Channel Emissions

For electronic filing, the above plots are saved with filename: emission.pdf

* Bandedge compliance is determined by applying marker-delta method, i.e.

Peak Resultant: Resultant field strength = Fundamental emissions - delta from the plot = $96.5 dB\mu V/m - 35.14 dB$ = $61.36 dB\mu V/m$

Average Resultant: Resultant field strength = Fundamental emissions - delta from the plot = $52.6dB\mu V/m - 35.14dB$ = $17.46dB\mu V/m$

** Bandedge compliance is determined by applying marker-delta method, i.e.

Peak Resultant: Resultant field strength = Fundamental emissions - delta from the plot = $96.3 dB\mu V/m - 50.02 dB$ = $46.28 dB\mu V/m$

Average Resultant: Resultant field strength = Fundamental emissions - delta from the plot = $52.4dB\mu V/m - 50.02dB$ = $2.38dB\mu V/m$

The resultant field strength meets the general radiated emission limit in section 15.209, which does not exceed $54dB\mu V/m$ for average limit and $74dB\mu V/m$ for peak limit.

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 expected variations in temperature and supply voltage were considered.

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3.5 Line Conducted Configuration Photograph - Headset

Worst Case Line-Conducted Configuration

at 1.495 MHz

For electronic filing, the worst case line conducted configuration photographs are saved with filename: config photos.pdf

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3.6 Line Conducted Emission Data

The data on the following pages list the significant emission frequencies, the limit, and the margin of compliance.

Judgement : Passed by 8.4 dB margin compare with the average limit

For electronic filing, the conducted emission test result is saved with filename: conduct.pdf

TEST PERSONNEL:

Jess.	
Tester Signature	

Jess	Tang,	Lead Engineer	
Type	d/Printe	ed Name	

September 8, 2008	
Date	

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Company: Philips Consumer Electronics B.V. Date of Test: May 15-June 28, 2008

Model: SHB9000/00

3.7 Transmitter Duty Cycle Calculation, FCC Rule 15.35(b, c)

Based on the Bluetooth Specification Version 2.1 + EDR, transmitter ON time is independent of the packet type (DH1, DH3 and DH5) and packet length (single-slot and multi-slot). The maximum transmitter ON time for the Bluetooth is 625µs.

Each TX and RX time slot is $625\mu s$ in length. A TDD scheme is used where master and slave alternately transmit. For one period for a pseudo-random hopping through all 79 RF channels, it takes: $79 \times (0.625 \times 2) ms = 98.75 ms$.

Therefore,

Average Factor (AF) of Bluetooth in dB = $20 \log_{10} (0.625/98.75)$ dB = $20 \log_{10} (0.00633)$ dB = -43.9dB

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EXHIBIT 4 EQUIPMENT PHOTOGRAPHS

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4.0 **Equipment Photographs**

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

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EXHIBIT 5 PRODUCT LABELLING

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5.0 **Product Labelling**

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

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EXHIBIT 6 TECHNICAL SPECIFICATIONS

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6.0 <u>Technical Specifications</u>

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

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EXHIBIT 7 INSTRUCTION MANUAL

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7.0 **Instruction Manual**

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

The required FCC Information to the User is stated on P.5 of the Instruction Manual.

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

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EXHIBIT 8 LETTER OF AGENCY

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8.0 **Letter of Agency**

For electronic filing, a letter of agency is saved with filename: letter of agency.pdf

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EXHIBIT 9 CONFIDENTIALITY REQUEST

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9.0 **Confidentiality Request**

For electronic filing, a preliminary copy of the Confidentiality Request is saved with filename: request.pdf

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