

DATE: 30 July 2008

I.T.L. (PRODUCT TESTING) LTD.

FCC Radio Test Report

for

Nexense Ltd.

Equipment under test:

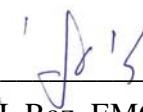
Snore Reduction Device

NexSleep*

*See customer's declaration on page 5.

Written by: 
D. Shidowsky, Documentation

Approved by: 
A. Sharabi, Test Engineer

Approved by: 
I. Raz, EMC Laboratory Manager

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This report relates only to items tested.

Measurement/Technical Report for Nexense Ltd.

Snore Reduction Device

NexSleep

FCC ID: WFN-NEXSLEEP-08A

30 July 2008

This report concerns: Original Grant X Class II Change

Class B verification Class A verification Class I Change

Equipment type: Low Power Transmitter Below 1705kHz

Limits used:

47CFR15

Measurement procedure used is ANSI C63.4-2003.

Application for Certification
prepared by:

Ishaishou Raz
ITL (Product Testing) Ltd.
Kfar Bin Nun
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Israel
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Applicant for this device:
(different from "prepared by")

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1. General Information

1.1 Administrative Information

Manufacturer: Nexense Ltd.

Manufacturer's Address: 1 Hakishon St.
P.O Box 13078
Yavne 81220
Israel
Tel: 972-8-932-8224
Fax: 972-8-932-8225

Manufacturer's Representative: Aline Peled- QA Manager

Equipment Under Test (E.U.T): Snore Reduction Device

Equipment Model No.: NexSleep (See customer's declaration on following page)

Equipment Serial No.: 72042A

Date of Receipt of E.U.T: 17.06.08

Start of Test: 17.06.08

End of Test: 17.06.08

Test Laboratory Location: I.T.L (Product Testing) Ltd.
Kfar Bin Nun,
ISRAEL 99780

Test Specifications: FCC Part 15, Sub-part C
Sections: 15.209, 15.207



June 19, 2008

DECLARATION

I HEREBY DECLARE THAT THE FOLLOWING PRODUCT:

NexSleep

IS IDENTICAL ELECTRONICALLY, PHYSICALLY, AND
MECHANICALLY TO:

Sleep Pure

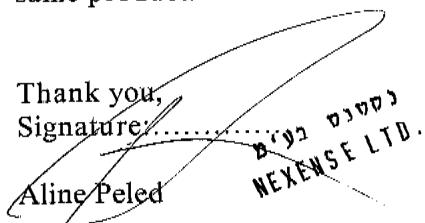
Please relate to them all (from an EMC point of view) as the
same product.

Signature:

Thank you,
Signature:

Aline Peled

QA Manager.



ת.ת. נקסנס LTD.

Page

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1.2 ***List of Accreditations***

The EMC laboratory of I.T.L. is accredited by the following bodies:

1. The American Association for Laboratory Accreditation (A2LA) (U.S.A.), Certificate No. 1152.01.
2. The Federal Communications Commission (FCC) (U.S.A.), Registration No. 90715.
3. The Israel Ministry of the Environment (Israel), Registration No. 1104/01.
4. The Voluntary Control Council for Interference by Information Technology Equipment (VCCI) (Japan), Registration Numbers: C-1350, R-1285.
5. Industry Canada (Canada), File No. IC 4025.
6. TUV Product Services, England, ASLLAS No. 97201.
7. Nemko (Norway), Authorization No. ELA 207.

I.T.L. Product Testing Ltd. is accredited by the American Association for Laboratory Accreditation (A2LA) and the results shown in this test report have been determined in accordance with I.T.L.'s terms of accreditation unless stated otherwise in the report.

1.3 Product Description

"The Nexense NexSleep™ System (NexSleep™) monitors sleep behavior to detect snoring and then gives you a gentle biofeedback signal to cause you to change your muscle tone or position to prevent your snoring. When you wake up in the morning the NexSleep™ displays your relative sleep quality in the form of LEDs embedded into the NexSleep™ Charger Unit. Over time, the NexSleep™ can improve your sleep quality and reduce the risks of long-term snoring related health problems.

The device is based on Nexense core technology of mechanical sensing. SleePure™ device comes with a two thin pliable sensor pads that easily slip under any mattress. Both users have the wrist vibrator. SleePure™ diligently monitors a users' respiration all through the night and outputs a gentle vibration of the wrist vibrator when it detects the corresponded user has respiration snore. After feeling this vibration a few times, the user learns to reposition while sleeping to allow free air flow, and as a result snoring cease. The vibration has not to awaken user or disturb the second user sleeping in the same bed. It provides the users with a better night sleep and improves overall well being. SleePure™ is easy to set up and use.

In addition, every event of detected snores is stored in the memory of the wrist vibrator. When the vibrator is put to the cradle, his battery is started to be charged and the information of sleep quality is loaded to the cradle and is showed with LED's of the cradle."

The E.U.T. transmits in FSK modulation in the frequencies of 137 kHz and 141 kHz.

1.4 Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4: 2003. Radiated testing was performed at an antenna to EUT distance of 3 meters.

1.5 Test Facility

The radiated emissions tests were performed at I.T.L.'s testing facility at Kfar Bin-Nun, Israel. This site is a FCC listed test laboratory (FCC Registration No. 90715, date of listing August 22, 2006).

I.T.L.'s EMC Laboratory is also accredited by A2LA, certificate No. 1152.01.

1.6 Measurement Uncertainty

Radiated Emission

The Open Site complies with the ± 4 dB Normalized Site Attenuation requirements of ANSI C63.4-2003. In accordance with Paragraph 5.4.6.1 of this standard, this tolerance includes instrumentation calibration errors, measurement technique errors, and errors due to site anomalies.

2. System Test Configuration

2.1 ***Justification***

The E.U.T. was configured to normal mode of operation.

2.2 ***EUT Exercise Software***

The software of main unit is responsible for the following functions:

- Interfaces with the sensors
- Determines when users snore
- Determines users' movement
- Sends instructions to the wireless Vibrators via the Antenna
- Performs self test

The software of Vibrator works in two alternative modes.

When monitoring the user the software is responsible for the following functions:

- Receives instructions from Main Unit
- Calculates the parameter of sleep quality
- Controls motor

When charging the battery in the Cradle the software is responsible for the following functions:

- Checks placing in the Cradle
- Sends instructions to the Cradle

The stages of charging are shown with the special LED, however it is hardware function.

The software of the Cradle is responsible for the following functions:

- Receives instructions from the Vibrators
- Controls the LEDs

The cradle provides the charging of the vibrators, however it is hardware function.

2.3 ***Special Accessories***

No special accessories were needed to achieve compliance.

2.4 ***Equipment Modifications***

No equipment modifications are required and none have been made.

2.5 Configuration of Tested System

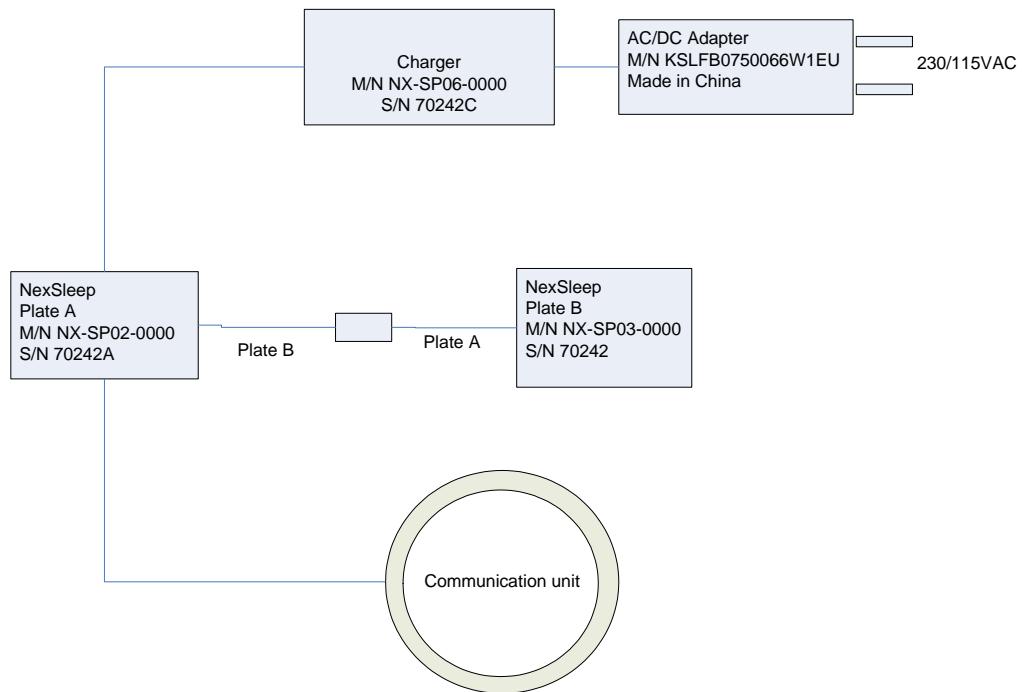


Figure 1. Configuration of Tested System

3. Test Set-up Photos



Figure 2. Conducted Emission Test



Figure 3. Radiated Emission Test

4. Conducted Emission Data

4.1 Test Specification

F.C.C., Part 15, Subpart C

4.2 Test Procedure

The E.U.T operation mode and test set-up are as described in Section 3.1. In order to minimize background noise interference, the conducted emission testing was performed inside a shielded room (see section 3), with the E.U.T placed on an 0.8 meter high wooden table, 0.4 meter from the room's vertical wall.

The E.U.T was powered from 115 V AC / 60 Hz 50 Ohm / 50 μ Hn Line Impedance Stabilization Network (LISN) on the phase and neutral lines. The LISN's were grounded to the shielded room ground plane (floor), and were kept at least 0.8 meters from the nearest boundary of the E.U.T

The center of the E.U.T AC cable was folded back and forth, in order to form a bundle less than 0.40 meters and a total cable length of 1 meter.

The emission voltages at the LISN's outputs were measured using a computerized receiver, complying with CISPR 16 requirements. The specification limits are loaded to the receiver via a 3.5" floppy disk and are displayed on the receiver's spectrum display.

A frequency scan between 0.15 and 30 MHz was performed at 9 kHz I.F. band width, and using peak detection.

The spectral components having the highest level on each line were measured using a quasi-peak and average detector.

4.3 Measured Data

JUDGEMENT: Passed by 12.2 dB

The margin between the emission levels and the specification limit is, in the worst case, 17.7 dB for the phase line at 0.37 MHz and 12.2 dB at 0.57 MHz for the neutral line.

The EUT met the F.C.C. Part 15, Subpart C specification requirements.

The details of the highest emissions are given in *Figure 4* to *Figure 7*.

TEST PERSONNEL:

Tester Signature:  Date: 20.07.08

Typed/Printed Name: A. Sharabi

Conducted Emission

E.U.T Description Snore Reduction Device
 Type NexSleep
 Serial Number: 72042A

Specification: F.C.C., Part 15, Subpart C

Lead: Phase

Detectors: Peak, Quasi-peak, Average

Signal Number	Frequency (MHz)	Peak (dBuV)	QP (dBuV)	QP Delta L 1 (dB)	Avg (dBuV)	Av Delta L 2 (dB)	Corr (dB)
1	0.231155	44.7	38.2	-24.2	19.9	-32.6	0.0
2	0.372748	47.0	40.8	-17.7	25.0	-23.5	0.0
3	0.626200	42.5	36.5	-19.5	18.0	-28.0	0.0
4	1.183525	42.9	33.7	-22.3	17.5	-28.5	0.0
5	20.316355	23.1	16.4	-43.6	-2.3	-52.3	0.0
6	22.605553	36.2	27.0	-33.0	8.9	-41.1	0.0

Figure 4. Detectors: Peak, Quasi-peak, AVERAGE .

Note: QP Delta/Av Delta refer to the test results obtained minus specified requirement; thus a positive number indicates failure, and a negative result indicates that the product passes the test.

Conducted Emission

E.U.T Description Snore Reduction Device
 Type NexSleep
 Serial Number: 72042A

Specification: F.C.C., Part 15, Subpart C

Lead: Phase

Detectors: Peak, Quasi-peak, Average

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ACTV DET: PEAK
 MEAS DET: PEAK QP AVG
 MKR 340 kHz
 46.94 dB μ V

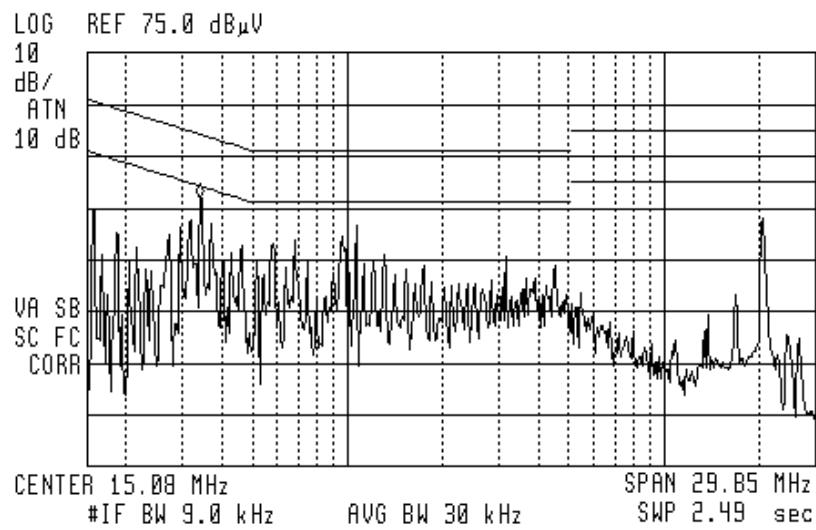


Figure 5. Detectors: Peak, Quasi-peak, Average

Conducted Emission

E.U.T Description: Snore Reduction Device
 Type: NexSleep
 Serial Number: 72042A

Specification: F.C.C., Part 15, Subpart C
 Lead: Neutral
 Detectors: Peak, Quasi-peak, Average

Signal Number	Frequency (MHz)	Peak (dBuV)	QP (dBuV)	QP Delta L 1 (dB)	Avg (dBuV)	Av Delta L 2 (dB)	Corr (dB)
1	0.352408	52.6	46.0	-13.0	31.3	-17.6	0.0
2	0.568722	51.9	43.8	-12.2	28.3	-17.7	0.0
3	1.012811	43.5	40.3	-15.7	25.7	-20.3	0.0
4	1.436357	42.8	39.0	-17.0	25.1	-20.9	0.0
5	1.961109	40.6	36.6	-19.4	23.4	-22.6	0.0
6	24.114577	28.2	21.4	-38.6	7.7	-42.3	0.0

Figure 6. Detectors: Peak, Quasi-peak, AVERAGE

Note: QP Delta/Av Delta refer to the test results obtained minus specified requirement; thus a positive number indicates failure, and a negative result indicates that the product passes the test.

Conducted Emission

E.U.T Description Snore Reduction Device
 Type NexSleep
 Serial Number: 72042A

Specification: F.C.C., Part 15, Subpart C

Lead: Neutral

Detectors: Peak, Quasi-peak, Average

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ACTV DET: PEAK
 MEAS DET: PEAK QP AVG
 MKR 300 kHz
 46.61 dB μ V

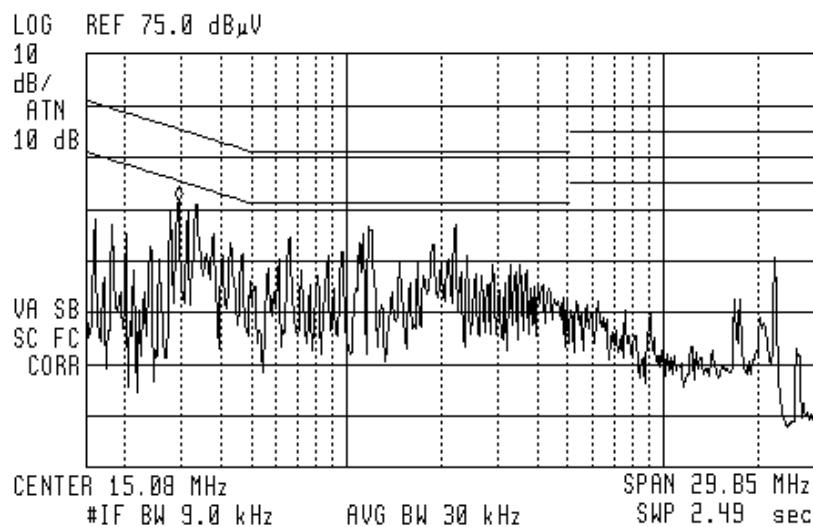


Figure 7 Conducted Emission: NEUTRAL
Detectors: Peak, Quasi-peak, Average

4.4 Test Instrumentation Used, Conducted Measurement

Instrument	Manufacturer	Model	Serial No.	Last Calibration Date	Period
LISN	Fischer	FCC-LISN-2A	127	March 8, 2008	1 Year
LISN	Fischer	FCC-LISN-2A	128	March 8, 2008	1 Year
EMI Receiver	HP	85422E	3906A00276	November 12, 2007	1 Year
RF Filter Section	HP	85420E	3705A00248	November 12, 2007	1 Year
Printer	HP	LaserJet 2200	JPKGC19982	N/A	N/A

5. Radiated Emission, 9 kHz – 30 MHz

5.1 **Test Specification**

9 kHz-30 MHz, FCC, Part 15, Subpart C

5.2 **Test Procedure**

The E.U.T. operation mode and test set-up are as described in Section 3.

A preliminary measurement to characterize the E.U.T was performed inside the shielded room at a distance of 3 meters, using peak detection mode and broadband antennas. The preliminary measurements produced a list of the highest emissions. The E.U.T was then transferred to the open site, and placed on a remote-controlled turntable. The E.U.T was placed on a non-metallic table, 0.8 meters above the ground. The configuration tested is shown in Figure 3.1.

The frequency range 9 kHz-30 MHz was scanned.

The emissions were measured using a computerized EMI receiver complying to CISPR 16 requirements. The specification limits and applicable correction factors are loaded to the receiver via a 3.5" floppy disk.

In the frequency range 9 kHz-30MHz, the loop antenna was rotated on its vertical axis. The antenna height (center of loop) was 1 meter at a distance of 3 meters.

The E.U.T. was operated at the frequency of 137.95 and 141.90 kHz. This frequency was measured using peak and average detectors.

5.3 **Measured Data**

JUDGEMENT: Passed by 26.8 dB

The margin between the emission level and the specification limit is 26.8 dB in the worst case at the frequency of 0.137 MHz.

See additional details in *Figure 8* to *Figure 10*.

TEST PERSONNEL:

Tester Signature: 

Date: 20.07.08

Typed/Printed Name: A. Sharabi

Radiated Emission 9kHz –30 MHz

E.U.T Description Snore Reduction Device
 Type NexSleep
 Serial Number: 72042A

Specification: FCC Part 15, Subpart C

Antenna: 3 meters distance Frequency range: 9 kHz to 30 MHz
 Detectors: Peak, Average

Frequency	Peak Amp	Avg Amp	Correction	Average Specification	Margin
(MHz)	(dB μ V/m)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB)
0.137	95.2	78.1	11.5	104.9	-26.8
0.141	94.9	76.3	11.5	104.6	-28.3
0.276	44.1	42.8	11.6	98.7	-55.9
0.284	43.9	53.1	11.6	98.5	-45.4

Figure 8. Radiated Emission. Detectors: Peak, Average

Note: Margin refers to the test results obtained minus specified requirement; thus a positive number indicates failure, and a negative result indicates that the product passes the test.

$$F = 0.137 \text{ MHz} \quad \text{Limit}_{300m} = 20 \log \frac{2400}{137} = 24.8 \text{ dB}\mu\text{V/m}$$

$$\text{Limit}_{3m} = 24.8 + 40 \log \frac{300}{3} = 104.9 \text{ dB}\mu\text{V/m}$$

$$F = 0.141 \text{ MHz} \quad \text{Limit}_{3m} = 24.61 + 80 = 104.6 \text{ dB}\mu\text{V/m}$$

$$F = 0.276 \text{ MHz} \quad \text{Limit}_{3m} = 18.8 + 80 = 98.7 \text{ dB}\mu\text{V/m}$$

$$F = 0.284 \text{ MHz} \quad \text{Limit}_{3m} = 18.5 + 80 = 98.5 \text{ dB}\mu\text{V/m}$$

Radiated Emission 9kHz –30 MHz

E.U.T Description Snore Reduction Device
 Type NexSleep
 Serial Number: 72042A

Specification: FCC Part 15, Subpart C

Antenna: 3 meters distance

Frequency range: 9 kHz to 30 MHz

Detectors: Peak, Average

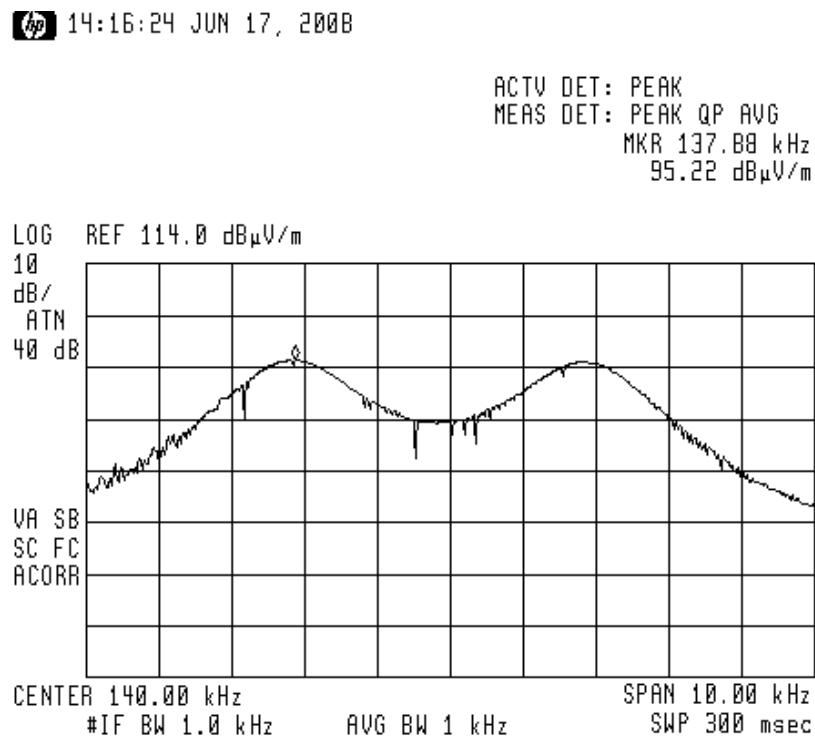


Figure 9 Spurious Radiated Emissions 9 kHz – 30 MHz

Radiated Emission 9kHz –30 MHz

E.U.T Description Snore Reduction Device
 Type NexSleep
 Serial Number: 72042A

Specification: FCC Part 15, Subpart C

Antenna: 3 meters distance

Frequency range: 9 kHz to 30 MHz

Detectors: Peak, Average

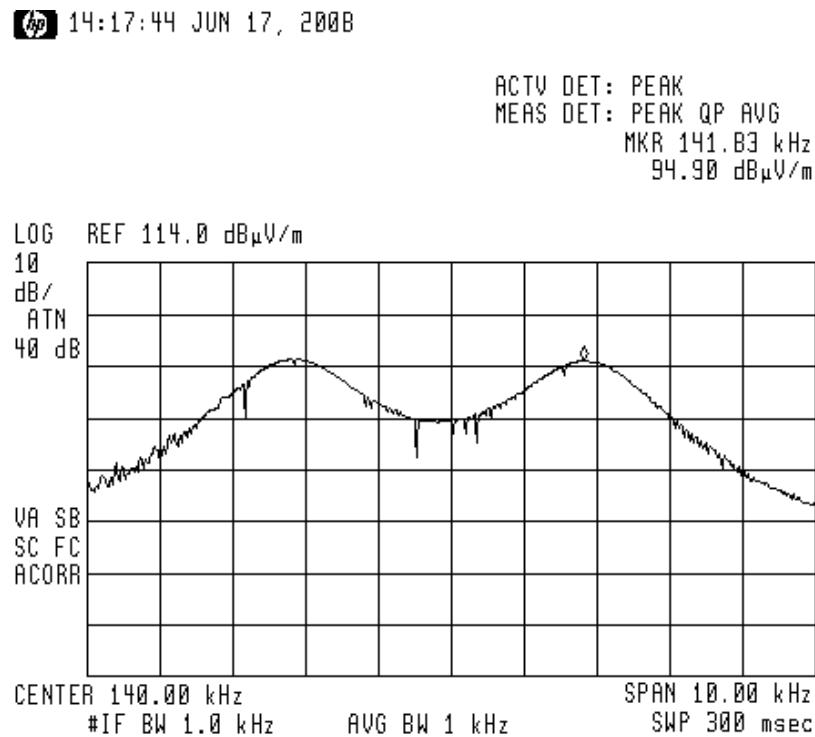


Figure 10 Spurious Radiated Emissions 9 kHz – 30 MHz

5.4 ***Test Instrumentation Used, Radiated Measurements***

Instrument	Manufacturer	Model	Serial Number	Calibration	Period
EMI Receiver	HP	85422E	3411A00102	November 12, 2007	1 year
RF Section	HP	85420E	3427A00103	November 12, 2007	1 year
Active Loop Antenna	EMCO	6502	9506-2950	October 15, 2007	1 year
Antenna Mast	ARA	AAM-4A	1001	N/A	N/A
Turntable	ARA	ART-1001/4	1001	N/A	N/A
Mast & Table Controller	ARA	ACU-2/5	1001	N/A	N/A
Printer	HP	LaserJet 2200	JPKGC19982	N/A	N/A

5.5 **Field Strength Calculation**

The field strength is calculated directly by the EMI Receiver software, and a "Correction Factors" data disk, using the following equation:

$$FS = RA + AF + CF$$

FS: Field Strength [dB μ v/m]

RA: Receiver Amplitude [dB μ v]

AF: Receiving Antenna Correction Factor [dB/m]

CF: Cable Attenuation Factor [dB]

No external pre-amplifiers are used.

6. Radiated Emission, 30 MHz –1 GHz

6.1 ***Test Specification***

30 MHz-1000 MHz, FCC, Part 15, Subpart C

6.2 ***Test Procedure***

The E.U.T. operation mode and test set-up are as described in Section 3.

A preliminary measurement to characterize the E.U.T was performed inside the shielded room at a distance of 3 meters, using peak detection mode and broadband antennas. The preliminary measurements produced a list of the highest emissions. The E.U.T was then transferred to the open site, and placed on a remote-controlled turntable. The E.U.T was placed on a non-metallic table, 0.8 meters above the ground. The configuration tested is shown in Figure 3.1.

The frequency range 30 MHz-1000 MHz was scanned, and the list of the highest emissions was verified and updated accordingly.

The levels of the emissions within the frequency ranges of the restricted bands (Section 15.205 of FCC Part 15) were compared to the limits of the table in Section 15.209 (a), General Requirements.

The emissions were measured using a computerized EMI receiver complying to CISPR 16 requirements. The specification limits and applicable correction factors are loaded to the receiver via a 3.5" floppy disk.

In the frequency range 30-1000 MHz, the readings were maximized by adjusting the antenna height between 1-4 meters. The turntable azimuth between 0-360°, and the antenna polarization.

Verification of the E.U.T emissions was based on the following methods:

Turning the E.U.T on and off.

Using a frequency span less than 10 MHz.

Observation of the signal level during turntable rotation. Background noise is not affected by the rotation of the E.U.T.

6.3 **Measured Data**

JUDGEMENT: Passed by 14.1 dB

The EUT met the requirements of the F.C.C. Part 15, Subpart C specification.

The margin between the emission level and the specification limit is 14.1 dB in the worst case at the frequency of 575.09 MHz, vertical polarization.

The details of the highest emissions are given in Figure 11 to Figure 14.

TEST PERSONNEL:

Tester Signature:  Date: 20.07.08

Typed/Printed Name: A. Sharabi

Radiated Emission 30 MHz– 1 GHz

E.U.T Description Snore Reduction Device
 Type NexSleep
 Serial Number: 72042A

Specification: FCC Part 15, Subpart C

Antenna Polarization: Horizontal Frequency range: 30 MHz to 1000 MHz
 Antenna: 3 meters distance Detectors: Peak, Quasi-peak

Signal Number	Frequency (MHz)	Peak dBuV/m	QP dBuV/m	QP Delta L 1 (dB)	Corr (dB)
1	187.869575	18.1	12.4	-31.0	16.6
2	206.817625	22.5	18.9	-24.6	18.0
3	244.673375	28.7	22.3	-23.7	20.3
4	309.655200	22.8	19.9	-26.1	16.4
5	575.072600	31.3	28.8	-17.2	23.6

**Figure 11. Radiated Emission. Antenna Polarization: HORIZONTAL.
 Detectors: Peak, Quasi-peak**

Note: QP Delta refers to the test results obtained minus specified requirement; thus a positive number indicates failure, and a negative result indicates that the product passes the test.

Radiated Emission 30 MHz– 1 GHz

E.U.T Description: Snore Reduction Device
Type: NexSleep
Serial Number: 72042A

Specification: FCC Part 15, Subpart C

Antenna Polarization: Horizontal

Frequency range: 30 MHz to 1000 MHz

Antenna: 3 meters distance

Detectors: Peak, Quasi-peak

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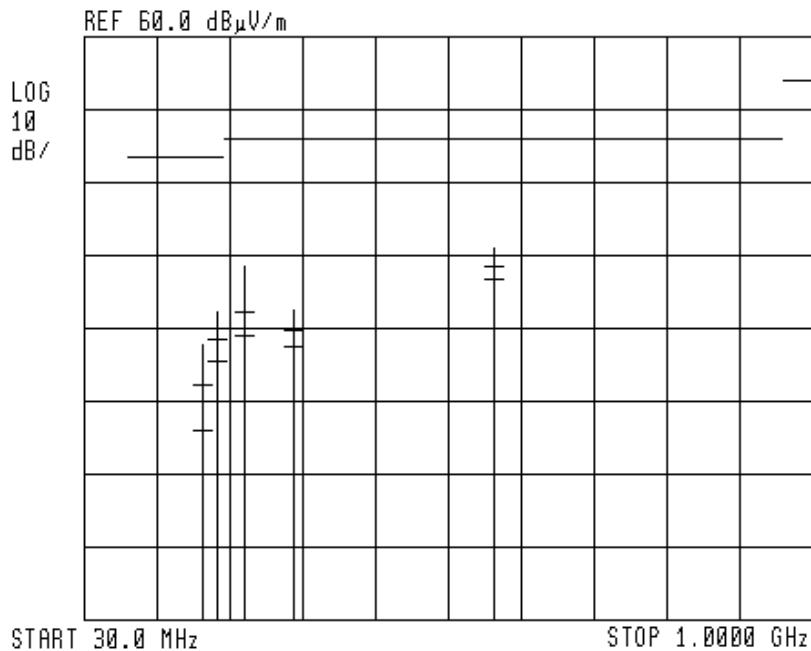


Figure 12. Radiated Emission. Antenna Polarization: HORIZONTAL Detectors: Peak, Quasi-peak

Note:

1. Horizontal axis shows logarithmic frequency scale.
2. The vertical axis shows amplitude (in dB μ V/m).
3. Peak detection is designated by the top of each vertical line.
4. Quasi-peak detection is designated by the first dash mark (from the top) of each vertical line.

Radiated Emission 30 MHz– 1 GHz

E.U.T Description Snore Reduction Device
 Type NexSleep
 Serial Number: 72042A

Specification: FCC Part 15, Subpart C

Antenna Polarization: Vertical Frequency range: 30 MHz to 1000 MHz
 Antenna: 3 meters distance Detectors: Peak, Quasi-peak

Signal Number	Frequency (MHz)	Peak dBuV/m	QP dBuV/m	QP Delta L 1 (dB)	Corr (dB)
1	60.018925	27.3	23.6	-16.4	10.5
2	250.184875	27.5	23.5	-22.5	20.9
3	308.516500	21.7	20.2	-25.8	16.3
4	575.087775	34.0	31.9	-14.1	23.6

**Figure 13. Radiated Emission. Antenna Polarization: VERTICAL.
Detectors: Peak, Quasi-peak**

Note: *QP Delta refers to the test results obtained minus specified requirement; thus a positive number indicates failure, and a negative result indicates that the product passes the test.*

Radiated Emission 30 MHz– 1 GHz

E.U.T Description: Snore Reduction Device
Type: NexSleep
Serial Number: 72042A

Specification: FCC Part 15, Subpart C

Antenna Polarization: Vertical
Antenna: 3 meters distance

Frequency range: 30 MHz to 1000 MHz
Detectors: Peak, Quasi-peak

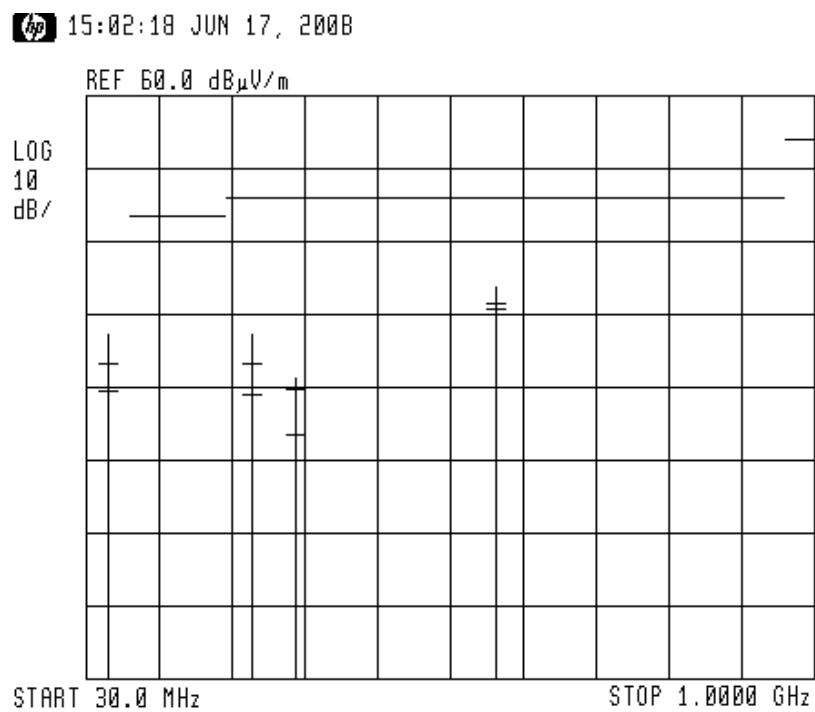


Figure 14. Radiated Emission. Antenna Polarization: VERTICAL. Detectors: Peak, Quasi-peak

Note:

1. Horizontal axis shows logarithmic frequency scale.
2. The vertical axis shows amplitude (in dB μ V/m).
3. Peak detection is designated by the top of each vertical line.
4. Quasi-peak detection is designated by the first dash mark (from the top) of each vertical line.

6.4 ***Test Instrumentation Used, Radiated Measurements***

Instrument	Manufacturer	Model	Serial Number	Calibration	Period
EMI Receiver	HP	85422E	3411A00102	November 12, 2007	1 year
RF Section	HP	85420E	3427A00103	November 12, 2007	1 year
Antenna Bioconical	ARA	BCD 235/B	1041	March 22, 2007	1 year
Antenna Log Periodic	ARA	LPD-2010/A	1038	November 22, 2007	1 year
Antenna Mast	ARA	AAM-4A	1001	N/A	N/A
Turntable	ARA	ART-1001/4	1001	N/A	N/A
Mast & Table Controller	ARA	ACU-2/5	1001	N/A	N/A
Printer	HP	LaserJet 2200	JPKGC19982	N/A	N/A

6.5 **Field Strength Calculation**

The field strength is calculated directly by the EMI Receiver software, and a "Correction Factors" data disk, using the following equation:

$$FS = RA + AF + CF$$

FS: Field Strength [dB μ v/m]

RA: Receiver Amplitude [dB μ v]

AF: Receiving Antenna Correction Factor [dB/m]

CF: Cable Attenuation Factor [dB]

No external pre-amplifiers are used.

7. APPENDIX A - CORRECTION FACTORS

7.1 Correction factors for

CABLE

from EMI receiver
to test antenna
at 3 meter range.

FREQUENCY (MHz)	CORRECTION FACTOR (dB)	FREQUENCY (MHz)	CORRECTION FACTOR (dB)
10.0	0.3	1200.0	7.3
20.0	0.6	1400.0	7.8
30.0	0.8	1600.0	8.4
40.0	0.9	1800.0	9.1
50.0	1.1	2000.0	9.9
60.0	1.2	2300.0	11.2
70.0	1.3	2600.0	12.2
80.0	1.4	2900.0	13.0
90.0	1.6		
100.0	1.7		
150.0	2.0		
200.0	2.3		
250.0	2.7		
300.0	3.1		
350.0	3.4		
400.0	3.7		
450.0	4.0		
500.0	4.3		
600.0	4.7		
700.0	5.3		
800.0	5.9		
900.0	6.3		
1000.0	6.7		

NOTES:

1. The cable type is RG-214.
2. The overall length of the cable is 27 meters.
3. The above data is located in file 27MO3MO.CBL on the disk marked "Radiated Emission Tests EMI Receiver".

7.2 *Correction factors for CABLE*

**from EMI receiver
to test antenna**

FREQUENCY (MHz)	CORRECTION FACTOR (dB)	FREQUENCY (MHz)	CORRECTION FACTOR (dB)
10.0	0.2	1200.0	1.6
20.0	0.2	1400.0	1.8
30.0	0.2	1600.0	2.1
40.0	0.2	1800.0	2.2
50.0	0.3	2000.0	2.3
60.0	0.4	2300.0	2.8
70.0	0.4	2600.0	2.7
80.0	0.4	2900.0	3.1
90.0	0.5		
100.0	0.5		
150.0	0.6		
200.0	0.6		
250.0	0.7		
300.0	0.8		
350.0	0.9		
400.0	1.0		
450.0	1.1		
500.0	1.2		
600.0	1.3		
700.0	1.4		
800.0	1.4		
900.0	1.5		
1000.0	1.5		

NOTES:

1. The cable type is RG-214.
2. The overall length of the cable is 5.5 meters.

7.3 Correction factors for

LOG PERIODIC ANTENNA

Type LPD 2010/A

at 3 and 10 meter ranges.

Distance of 3 meters

FREQUENCY (MHz)	AFE (dB/m)
200.0	9.1
250.0	10.2
300.0	11.4
400.0	14.5
500.0	15.2
600.0	17.3
700.0	19.0
850.0	20.1
1000.0	22.2

Distance of 10 meters

FREQUENCY (MHz)	AFE (dB/m)
200.0	9.0
250.0	10.1
300.0	11.2
400.0	14.4
500.0	15.2
600.0	17.2
700.0	19.0
850.0	20.1
1000.0	22.1

NOTES:

1. Antenna serial number is 1038.
2. The above lists are located in file number 38M30.ANT for a 3 meter range, and file number 38M100.ANT for a 10 meter range.
3. The files mentioned above are located on the disk marked "Radiated Emission Test EMI Receiver".

7.4 Correction factors for

BICONICAL ANTENNA

**Type BCD-235/B,
at 3 meter range**

FREQUENCY (MHz)	AFE (dB/m)
20.0	19.4
30.0	14.8
40.0	11.9
50.0	10.2
60.0	9.1
70.0	8.5
80.0	8.9
90.0	9.6
100.0	10.3
110.0	11.0
120.0	11.5
130.0	11.7
140.0	12.1
150.0	12.6
160.0	12.8
170.0	13.0
180.0	13.5
190.0	14.0
200.0	14.8
210.0	15.3
220.0	15.8
230.0	16.2
240.0	16.6
250.0	17.6
260.0	18.2
270.0	18.4
280.0	18.7
290.0	19.2
300.0	19.9
310	20.7
320	21.9
330	23.4
340	25.1
350	27.0

NOTES:

1. Antenna serial number is 1041.
2. The above list is located in file 19BC10M1.ANT on the disk marked "Radiated Emissions Tests EMI Receiver".

7.5 Correction factors for ACTIVE LOOP ANTENNA

Model 6502
S/N 9506-2950

FREQUENCY (MHz)	Magnetic Antenna Factor (dB)	Electric Antenna Factor (dB)
.009	-35.1	16.4
.010	-35.7	15.8
.020	-38.5	13.0
.050	-39.6	11.9
.075	-39.8	11.8
.100	-40.0	11.6
.150	-40.0	11.5
.250	-40.0	11.6
.500	-40.0	11.5
.750	-40.1	11.5
1.000	-39.9	11.7
2.000	-39.5	12.0
3.000	-39.4	12.1
4.000	-39.7	11.9
5.000	-39.7	11.8
10.000	40.2	11.3
15.000	-40.7	10.8
20.000	-40.5	11.0
25.000	-41.3	10.2
30.000	42.3	9.2