

IDT Technology Limited

### Application For Certification (FCC ID: NMTBBR211-01)

### Transmitter

0600636 TL/Ann Choy March 1, 2006

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<sup>•</sup> 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.

# LIST OF EXHIBITS

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### MEASUREMENT/TECHNICAL REPORT

# IDT Technology Limited- MODEL: BBR211 FCC ID: NMTBBR211-01

	Driginal Grant <u>X</u>	Class II Change
Equipment Type: <u>DTS - Digital Trans</u>	mission System	
Deferred grant requested per 47 CFF	R 0.457(d)(1)(ii)? Yes	No <u>X</u>
Company Name agrees to notify the		fer until : date
of the intended date of announceme issued on that date.	ent of the product so that	the grant can be
Transition Rules Request per 15.37?	Voc	
	165	No <u>X</u>
If no, assumed Part 15, Subpart C [10-01-04 Edition] provision.		

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# List of attached file

Exhibit type	File Description	filename
Cover Letter	Confidentiality Request	request.pdf
Test Report	Test Report	report.pdf
Test Report	Maximum Output Power Plot	maxop.pdf
Test Report	6 dB Bandwidth Plot	6dB.pdf
Test Report	Maximum Power Density Plot	maxpd.pdf
Test Report	Out Band Antenna Conducted Emission Plot	obantcon.pdf
Test Report	Duty Cycle Calculation and Measurement	dcc.pdf
Test Report	Conducted Emission Test Result	conduct.pdf
Test Setup Photo	Radiated Emission for Base	config photos.doc
Test Setup Photo	Radiated Emission for Handset	config photos.doc
Test Setup Photo	Conducted Emission	config photos.doc
External Photo	External Photo	external photos.doc
Internal Photo	Internal Photo	internal photos.doc
Block Diagram	Block Diagram	block.pdf
Schematics	Circuit Diagram	circuit.pdf
ID Label/Location	Label Artwork and Location	label.pdf
User Manual	User Manual	manual.pdf
User Manual	FCC Information	FCC information.pdf
<b>RF Exposure Info</b>	RF Safety	RF exposure info.pdf
Operation Description	Technical Description	descri.pdf

# EXHIBIT 1 SUMMARY OF TEST RESULTS

### 1.0 Summary of Test

#### IDT Technology Limited - MODEL: BBR211 FCC ID: NMTBBR211-01

TEST	REFERENCE	RESULTS
Max. Output power	15.247(b)	Pass
6 dB Bandwidth	15.247(a)(2)	Pass
Max. Power Density	15.247(e)	Pass
Out of Band Antenna Conducted Emission	15.247(d)	Pass
Radiated Emission in Restricted Bands	15.247(d)	Pass
AC Conducted Emission	15.207	Pass
Radiated Emission from Digital Part	15.109	Pass
Antenna Requirement	15.203	Pass (See Notes)

Notes: The EUT uses a permanently attached antenna, which in accordance to Section 15.203 is considered sufficient to comply with the provisions of this section.

# EXHIBIT 2 GENERAL DESCRIPTION

#### 2.0 General Description

#### 2.1 Product Description

The Equipment Under Test (EUT) is a Transmitter (Baby Unit of Digital Modulation Baby Monitor with Indoor Temperature) operating at 2405.000MHz to 2475.000MHz with 15 channels. The EUT is powered by 120VAC to 6VDC 200mA adaptor and/or 3 x 1.5VDC "AAA" size battery is for backup purpose. It has a power button for turning on itself and also for selecting a channel. In addition, it has another button for turning ON or OFF a nightlight. After switching on the unit, it transmits a baby's voice and a temperature data to a corresponding parent unit.

#### Antenna Type : Integral, Internal

For electronic filing, the brief circuit description and RF IC specification are saved with filename: descri.pdf.

#### 2.2 Related Submittal(s) Grants

This is an application for certification of a transmitter. The receiver, associated with this transmitter, was subjected to Verification process.

#### 2.3 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. All other measurements were made in accordance with the procedures in part 2 of CFR 47.

#### 2.4 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.

# EXHIBIT 3 SYSTEM TEST CONFIGURATION

#### 3.0 System Test Configuration

#### 3.1 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 (2003).

The EUT was powered from 120VAC to 6VDC 200mA adaptor and/or 3 x 1.5VDC "AAA" size alkaline battery.

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 3.0.

The unit was operated standalone and placed in the center of the turntable.

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 turntable, which enabled the engineer to maximize emissions through its placement in the three orthogonal axes. For simplicity of testing, the unit was wired to transmit continuously.

The signal is maximized through rotation and placement in the three orthogonal axes. The antenna height an polarization are varied during the search for maximum signal level. The antenna height is varied form 1 to 4 meters. Detector function is in peak mode. Radiated emissions are taken at three meters unless the signal level is too low for measurement at that distance. If necessary, a pre-amplifier is used and/or the test is conducted at a closer distance.

All readings are extrapolated back to the equivalent three meter reading using inverse scaling with distance. Analyzer resolution is 100kHz or grater for frequencies below 1000MHz. The resolution is 1MHz or greater for frequencies above 1000MHz.

All relevant operation modes have been tested, and the worst case data is included in this report.

The frequency range from the lowest radio frequency signal generated in the device which is greater than 9kHz to 25GHz was searched for spurious emissions from the device. Only those emissions reported were detected. All other emissions were at least 20 dB below the applicable limits.

#### 3.2 EUT Exercising Software

There was no special software to exercise the device. Once the button is depressed, the unit transmits the typical signal. For simplicity of testing, the unit was wired to transmit continuously.

#### 3.3 Support Equipment List and Description

The FCC ID's for all equipment, plus descriptions of all cables used in the tested system (included inserted cards, which have grants) are:

#### HARDWARE:

The unit was operated standalone. An AC adapter (provided with the unit) was used to power the device. Its description is listed below.

(1) An AC adaptor (120VAC to 6VDC 200mA, Model: KU35-6-200D)

#### CABLES:

There are no special accessories necessary for compliance of this product.

#### OTHERS:

(1) 3 x "AAA" size 1.5VDC alkaline battery

#### 3.4 Measurement Uncertainty

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

#### 3.5 Equipment Modification

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

No modifications were installed by ETL Division, Intertek Testing Services Hong Kong Ltd.

All the items listed under section 3.0 of this report are confirmed by:

Confirmed by:

Tommy Leung Assistant Manager Intertek Testing Services Hong Kong Ltd. Agent for IDT Technology Limited Signature

March 1, 2006 Date

# EXHIBIT 4 MEASUREMENT RESULTS

Company: IDT Technology Limited Model: BBR211 Date of Test: January 13-February 14, 2006

#### 4.0 Measurement Results

- 4.1 Maximum Conducted Output Power at Antenna Terminals, FCC Rules 15.247(b)(3):
  - [] The antenna power of the EUT was connected to the input of a power meter. Power was read directly and cable loss correction was added to the reading to obtain power at the EUT antenna terminals.
  - [×] The antenna port of the EUT was connected to the input of a spectrum analyzer. The analyzer was set for RBW> 6dB bandwidth and power was read directly in dBm. External attenuation and cable loss were compensated for using to OFFSET function of the analyzer.

For antennas with gains of 6 dBi or less, maximum allowed transmitter output is 1 watt (+30 dBm).

(Base Unit) Antenna Gain = -5dBi						
Frequency (MHz) Output in dBm Output in mWatt						
Low Channel:	2405.000	16.68	46.56			
Middle Channel:	2440.000	16.44	44.06			
High Channel:	2475.000	15.40	34.67			

Cable loss : 0.5 dB External Attenuation : N/A dB

Cable loss, external attenuation: [×] included in OFFSET function [ ] added to SA raw reading

EUT dBm max. output level = 16.68 dBm (30 dBm or less)

Please refer to the attached plots for details:

Plot B1A: Low Channel Output Power Plot B1B: Middle Channel Output Power Plot B1C: High Channel Output Power

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

For RF safety, the information is saved with filename: RF exposure info.pdf.

Company: IDT Technology Limited Model: BBR211 Date of Test: January 13-February 14, 2006

4.2 Minimum 6 dB RF Bandwidth, FCC Rule 15.247(a)(2):

The antenna port of the EUT was connected to the input of a spectrum analyzer. Analyzer RES BW was set to 100kHz. For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A PEAK output reading was taken, a DISPLAY line was drawn 6 dB lower than PEAK level. The 6dB bandwidth was determined from where the channel output spectrum intersected the display line.

Base Unit			
Frequency (MHz)	6 dB Bandwidth (kHz)		
2405.000	1600		

Limit: at least 500kHz

Refer to the following plots for 6 dB bandwidth sharp:

Plot B2A: Low Channel 6 dB RF Bandwidth Plot B2B: Middle Channel 6 dB RF Bandwidth Plot B2C: High Channel 6 dB RF Bandwidth

For electronic filing, the above plots are saved with filename: 6dB.pdf

Company: IDT Technology Limited Model: BBR211 Date of Test: January 13-February 14, 2006

4.3 Maximum Power Density Reading, FCC Rule 15.247(e) :

The spectrum analyzer RES BW was set to 3 kHz. The START and STOP frequencies were set to the band edges of the maximum output passband. If there is no clear maximum amplitude in any given portion of the band, it may be necessary to make measurements at a number of bands defined by several START and STOP frequency pairs. The specification calls for a 1 second interval at each 3 kHz bandwidth; total SWEEP TIME is calculated as follows:

SWEEP TIME (SEC) = (Fstop, kHz - Fstart, kHz)/3kHz

Antenna output of the EUT was coupled directly to spectrum analyzer; if an external attenuator and/or cable was used, these losses are compensated for with the analyzer OFFSET function.

Base Unit				
Frequency (MHz)	Power Density (dBm)			
2439.889	2.60			

Frequency Span = 1500 kHz

Sweep Time = Frequency Span/3kHz = 500 seconds

Cable Loss: 0.5 dB

Limit: 8dBm

Refer to the following plots for power density data :

Plot B3A: Low Channel power density Plot B3B: Middle Channel power density Plot B3C: High Channel power density

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

Company: IDT Technology Limited Model: BBR211 Date of Test: January 13-February 14, 2006

4.4 Out of Band Conducted Emissions, FCC Rule 15.247(d):

In any 100 kHz bandwidth outside the EUT passband, the RF power produced by the modulation products of the spreading sequence, the information sequence, and the carrier frequency shall be at least 20dB below that of the maximum in-band 100 kHz emission, or else shall meet the general limits for radiated emissions at frequencies outside the passband, whichever results in lower attenuation.

All other types of emissions from the EUT shall meet the general limits for radiated frequencies outside the passband.

Refer to the following plots for out of band conducted emissions data:

Plot B4A1 - B4A2: Low Channel Emissions Plot B4B1 - B4B2: Middle Channel Emissions Plot B4C1 - B4C2: High Channel Emissions Plot B4D1 - B4D2: Modulation Products Emissions\*

The plots showed the 2<sup>nd</sup> harmonic and modulation products at the band edges of 2400MHz and 2483.5MHz. In addition, all spurious emission and up to the tenth harmonic was measured and they were found to be at least 20dB below the highest level of the desired power in the passband.

Furthermore, delta measurement technique for measuring bandedge emissions was incorporated in the test of the edge at 2483.5MHz.

\*These 2 plots are shown the worst-case which has been already considered between enable and disable the hopping function of the EUT.

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

Company: IDT Technology Limited Model: BBR211 Date of Test: January 13-February 14, 2006

4.5 Out of Band Radiated Emissions (for emissions in 4.4 above that are less than 20dB below carrier), FCC Rule 15.247(d):

For out of band emissions that are close to or that exceed the 20dB attenuation requirement described in the specification, radiated measurements were performed at a 3m separation distance to determine whether these emissions complied with the general radiated emission requirement.

- [×] Not required, since all emissions are more than 20dB below fundamental
- [] See attached data sheet
- 4.6 Transmitter Radiated Emissions in Restricted Bands, FCC Rule 15.35(b), (c):

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. All measurements were performed with peak detection unless otherwise specified.

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

Company: IDT Technology Limited Model: BBR211

Date of Test: January 13-February 14, 2006

#### 4.7 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  $dB\mu V/m$ 

 $\label{eq:RA} \begin{array}{l} \mathsf{RA} = \mathsf{Receiver} \; \mathsf{Amplitude} \; (\mathsf{including} \; \mathsf{preamplifier}) \; \mathsf{in} \; \mathsf{dB} \mu \mathsf{V} \\ \mathsf{CF} = \mathsf{Cable} \; \mathsf{Attenuation} \; \mathsf{Factor} \; \mathsf{in} \; \mathsf{dB} \\ \mathsf{AF} = \mathsf{Antenna} \; \mathsf{Factor} \; \mathsf{in} \; \mathsf{dB} \\ \mathsf{AG} = \mathsf{Amplifier} \; \mathsf{Gain} \; \mathsf{in} \; \mathsf{dB} \\ \mathsf{AG} = \mathsf{Amplifier} \; \mathsf{Gain} \; \mathsf{in} \; \mathsf{dB} \\ \mathsf{PD} = \mathsf{Pulse} \; \mathsf{Desensitization} \; \mathsf{in} \; \mathsf{dB} \\ \mathsf{AV} = \mathsf{Average} \; \mathsf{Factor} \; \mathsf{in} \; \mathsf{-dB} \\ \end{array}$ 

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

#### Example

Assume a receiver reading of 62.0 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. 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 $\mu$ V/m. This value in dB $\mu$ V/m was converted to its corresponding level in  $\mu$ V/m.

RA =  $62.0 \text{ dB}\mu\text{V}$ AF = 7.4 dB CF = 1.6 dB AG = 29.0 dB PD = 0 dB AV = -10 dB FS =  $62 + 7.4 + 1.6 - 29 + 0 + (-10) = 32 \text{ dB}\mu\text{V/m}$ 

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

Company: IDT Technology Limited Model: BBR211 Date of Test: January 13-February 14, 2006

4.8 Radiated Emission Configuration Photograph - Baby Unit

Worst Case Radiated Emission at 4950.000 MHz

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

Company: IDT Technology Limited Model: BBR211 Date of Test: January 13-February 14, 2006

4.9 Radiated Emission Data

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

Judgement : Passed by 3.0 dB margin

**TEST PERSONNEL:** 

Tester Signature

Jess Tang, Lead Engineer Typed/Printed Name

March 1, 2006 Date

Company: IDT Technology Limited Model: BBR211 Mode : TX-Channel 0 Date of Test: January 13-February 14, 2006

#### Table 1 (Baby Unit)

#### **Radiated Emissions**

Polari-	Frequency	Reading	Pre-Amp	Antenna	Net at	Average	Calculated	Limit	Margin
zation			Gain	Factor	3m - Peak	Factor	at 3m	at 3m	
	(MHz)	(dBµV)	(dB)	(dB)	(dBµV/m)	(-dB)	(dBµV/m)	(dBµV/m)	(dB)
V	*4810.000	57.9	34	34.9	58.8	9.3	49.5	54	-4.5
V	*12025.000	47.1	34	40.5	53.6	9.3	44.3	54	-9.7
V	*19240.000	49.8	34	37.7	53.5	9.3	44.2	54	-9.8

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

- 2. All measurements were made at 3 meters. 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 used for the emission over 1000MHz.
- \* Emission within the restricted band meets the requirement of part 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Company: IDT Technology Limited Model: BBR211 Mode : TX-Channel 7 Date of Test: January 13-February 14, 2006

#### Table 2 (Baby Unit)

#### **Radiated Emissions**

Polari-	Frequency	Reading	Pre-Amp	Antenna	Net at	Average	Calculated	Limit	Margin
zation			Gain	Factor	3m - Peak	Factor	at 3m	at 3m	
	(MHz)	(dBµV)	(dB)	(dB)	(dBµV/m)	(-dB)	(dBµV/m)	(dBµV/m)	(dB)
V	*4880.000	56.0	34	34.9	56.9	9.3	47.6	54	-6.4
V	*7320.000	56.0	34	37.9	59.9	9.3	50.6	54	-3.4
V	*12200.000	47.2	34	40.5	53.7	9.3	44.4	54	-9.6
V	*19520.000	49.8	34	37.8	53.6	9.3	44.3	54	-9.7

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

- 2. All measurements were made at 3 meters. 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 used for the emission over 1000MHz.
- \* Emission within the restricted band meets the requirement of part 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Company: IDT Technology Limited Model: BBR211 Mode : TX-Channel 14 Date of Test: January 13-February 14, 2006

Table 3 (Baby Unit)

l									
Polari-	Frequency	Reading	Pre-Amp	Antenna	Net at	Average	Calculated	Limit	Margin
zation			Gain	Factor	3m - Peak	Factor	at 3m	at 3m	
	(MHz)	(dBµV)	(dB)	(dB)	(dBµV/m)	(-dB)	(dBµV/m)	(dBµV/m)	(dB)
V	**2475.000	110.2	34	29.4	105.6	9.3	96.3		
V	*4950.000	59.4	34	34.9	60.3	9.3	51.0	54	-3.0
V	*7425.000	54.6	34	37.9	58.5	9.3	49.2	54	-4.8
V	*12375.000	47.4	34	40.5	53.9	9.3	44.6	54	-9.4
V	*19800.000	50.1	34	37.8	53.9	9.3	44.6	55	-10.4
V	*22275.000	49.6	34	38.2	53.8	9.3	44.5	56	-11.5

#### **Radiated Emissions**

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

- 2. All measurements were made at 3 meters. 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 used for the emission over 1000MHz.
- \* Emission within the restricted band meets the requirement of part 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Company: IDT Technology Limited Date of Test: January 13-February 14, 2006 Model: BBR211

- 4.10 AC Line Conducted Emission, FCC Rule 15.207:
- [] Not required; battery operation only
- [×] Test data attached

Company: IDT Technology Limited Model: BBR211

Date of Test: January 13-February 14, 2006

4.11 Line Conducted Configuration Photograph

Worst Case Line-Conducted Configuration

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

Company: IDT Technology Limited Model: BBR211

Date of Test: January 13-February 14, 2006

4.12 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 more than 20 dB margin

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

#### **TEST PERSONNEL:**

Tester Signature

Jess Tang, Lead Engineer Typed/Printed Name

March 1, 2006 Date

Company: IDT Technology Limited Model: BBR211 Date of Test: January 13-February 14, 2006

- 4.13 Radiated Emissions from Digital Section of Transceiver (Transmitter), FCC Ref: 15.109
- [] Not required No digital part
- [×] Test results are attached
- [] Included in the separated DOC report.

Company: IDT Technology Limited Model: BBR211 Date of Test: January 13-February 14, 2006

#### Table 7, Baby Unit

	Frequency	Reading	Pre-Amp	Antenna	Net	Limit	Margin
Polarization			Gain	Factor	at 3m	at 3m	
	(MHz)	(dBµV)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
V	32.001	30.9	16	10.0	24.9	40	-15.1
V	48.001	30.4	16	11.0	25.4	40	-14.6
V	256.001	27.1	16	21.0	32.1	46	-13.9
V	272.001	27.7	16	22.0	33.7	46	-12.3
V	288.001	27.9	16	22.0	33.9	46	-12.1
V	304.001	28.0	16	22.0	34.0	46	-12.0
V	320.003	26.8	16	23.0	33.8	46	-12.2
V	373.743	26.9	16	24.0	34.9	46	-11.1
V	560.003	24.1	16	28.0	36.1	46	-9.9
V	569.007	23.8	16	28.0	35.8	46	-10.2

#### **Radiated Emissions**

NOTES: 1. Quasi-peak detector is used for the emission below or equal to 1000 MHz.

- 2. All measurements were made at 3 meters. 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.

Company: IDT Technology Limited Model: BBR211 Date of Test: January 13-February 14, 2006

4.14 Transmitter Duty Cycle Calculation and Measurements, FCC Rule 15.35(b), (c)

The EUT antenna output port was connected to the input of the spectrum analyzer. The analyzer center frequency was set to EUT RF channel carrier. The SWEP function on the analyzer was set to ZERO SPAN. The transmitter ON time was determined from the resultant time-amplitude display:

Baby Unit:

Duty cycle (DC) = Maximum ON time in 4.10ms/4.10ms = 1.40ms/4.10ms

Duty cycle correction, dB =  $20^* \log (DC)$ =  $20^* \log (0.34)$ = -9.3 dB

Х	See attached spectrum analyzer chart (s) for transmitter timing Baby Unit: Plot B5
	See transmitter timing diagram provided by manufacturer
	Not applicable, duty cycle was not used.

For electronic filing, the above plot is saved with filename: dcc.pdf

# EXHIBIT 5 EQUIPMENT PHOTOGRAPHS

#### 5.0 Equipment Photographs

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

# EXHIBIT 6 PRODUCT LABELLING

#### 6.0 Product Labelling

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

# EXHIBIT 7 TECHNICAL SPECIFICATIONS

#### 7.0 Technical Specifications

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

# EXHIBIT 8 INSTRUCTION MANUAL

#### 8.0 Instruction Manual

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

Please note that the required FCC Information to the User is saved with filename: FCC information.pdf.

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

# EXHIBIT 9 CONFIDENTIALITY REQUEST

#### 9.0 Confidentiality Request

For electronic filing, the confidentiality request is saved with filename: request.pdf