

Test Report:

Applicant:

5W41728, Issue 3.

N7TAC301-T

Angelcare Monitors Inc. 500 CHEMIN DU GOLF – SUITE 202 NUN'S ISLAND QC H3E 1A8

Angelcare Movement and Sound Monitor AC301-T, Nursery Unit (Transmitter)

Equipment Under Test:

FCC ID:

In Accordance With:

FCC Part 15, Subpart C, 15.249

Tested By:

Nemko Canada Inc. 303 River Road, R.R. 5 Ottawa, Ontario K1V 1H2

Authorized By:

Sim Jagpal, General Manager

Date:

28 April 2005

17

Total Number of Pages:

EQUIPMENT: Angelcare Movement and Sound Monitor Nursery Unit(Transmitter)

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EQUIPMENT: Angelcare Movement and Sound Monitor Nursery Unit(Transmitter)

Section 1. Summary Of Test Results

General

All measurements are traceable to national standards.

These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with FCC Part 15.249. All tests were conducted using measurement procedure ANSI C63.4-2003. Radiated Emissions were made on an open area test site. A description of the test facility is on file with the FCC.

THIS TEST REPORT RELATES ONLY TO THE ITEM(S) TESTED.

THE FOLLOWING DEVIATIONS FROM, ADDITIONS TO, OR EXCLUSIONS FROM THE TEST SPECIFICATIONS HAVE BEEN MADE. See "Summary of Test Data".

TESTED BY:

Xu Jin, Wireless Specialist

DATE: 28 April 2005

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This report applies only to the items tested.

EQUIPMENT: Angelcare Movement and Sound Monitor Nursery Unit(Transmitter)

Section 2. Summary Of Test Data

Summary Of Test Data

Name Of Test	Para. No.	Result
Power line Conducted Emissions	15.207(a)	Complies
Radiated Emissions	15.249	Complies

Test Conditions:

Indoor	Temperature: Humidity:	21°C 30%
Outdoor	Temperature: Humidity:	10°C 60%

EQUIPMENT: Angelcare Movement and Sound Monitor Nursery Unit(Transmitter)

Section 3. General Equipment Specification

Manufacturer:	Angelcare Monitors Inc.
Model No.:	AC301-T
Serial No.:	N.A.
Date Received In Laboratory:	Mar.28, 2005
Nemko Identification No.:	#2
Frequency Range:	2460.6MHz to 2462.5 MHz
Number of Channels:	20
Modulation:	FM
Power Source:	120VAC

EQUIPMENT: Angelcare Movement and Sound Monitor *Nursery Unit(Transmitter)*

Section 4. **Powerline Conducted Emissions**

Para. No.: 15.207 (a)

Test Performed By: Xu Jin	Date of Test: Mar. 28, 2005
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Complies. **Test Results:**

Measurement Data: See attached graph(s).

Limits For Conducted Disturbance At The Mains Ports Of Class B

Frequency Range MHz	Limits	Result	
	Quasi-Peak	Average	
0.15 to 0.50 66 to 56		56 to 46	
0.5 to 5	56	46	Complies.
5 to 30	60	50	
Note:			

Note:

1. The lower limit shall apply at the transition frequency.

2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 to 0.50MHz.

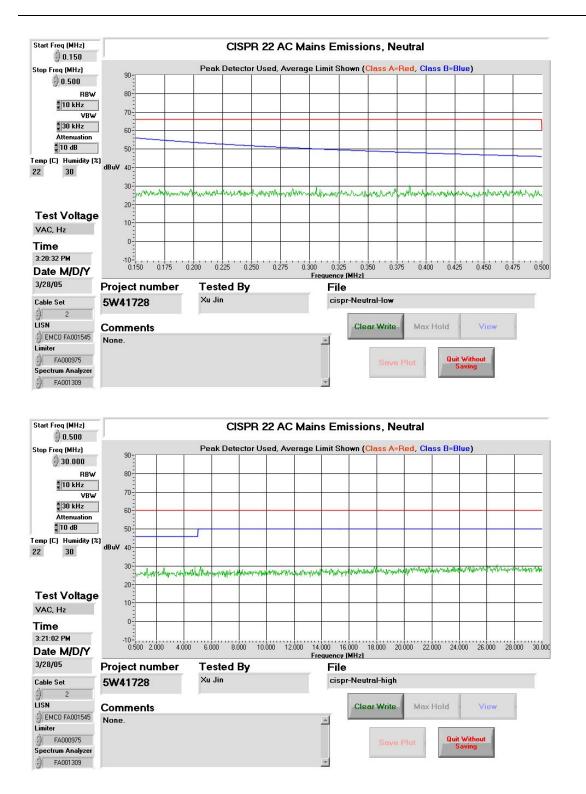
3. The test was performed using a peak detector.

EQUIPMENT: Angelcare Movement and Sound Monitor Nursery Unit(Transmitter)

Conducted Disturbance at Mains Detailed Setup Photos



EQUIPMENT: Angelcare Movement and Sound Monitor Nursery Unit(Transmitter)



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Section 5. Radiated Emissions

Para. No.: 15.249

Test Performed By: Xu Jin	Date of Test: Mar.30, 2005
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Minimum Standard:

15.209,15.249 &15.205

Band edge check must comply with 50dBc requirement. Radiated Emission must comply with 15.209 general requirement

Frequency (MHz)	Field Strength (mV/m)	Field Strength (dBµV/m)					
	Fundamental						
2400-2483.5	50	94					
Spurious o	Spurious out side the frequency band						
33-88	0.1	40.0					
88-216	0.15	43.5					
216-960	0.2	46.0					
960 above	0.5	54.0					

Test Results:

See graphic and data of this section.

Radiated emission test was conducted at 3 meter at open area test site. The EUT was searched from 30MHz to the 26GHz, and for low, medium and high frequencies at the frequency band. Only worst cases have been reported.

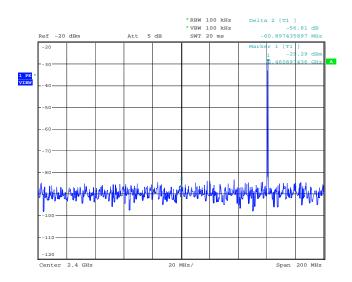
Additional radiated test was conducted from 10MHz to 30MHz, no emission was observed.

EQUIPMENT: Angelcare Movement and Sound Monitor Nursery Unit(Transmitter)

50dBc Band Edge Check

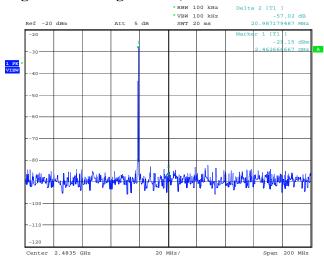
The nursery unit (Tx) was modulated with 2.5kHz during the test.

Lower Band Edge_Ch1, 2460.6MHz



Date: 1.APR.2005 13:35:49

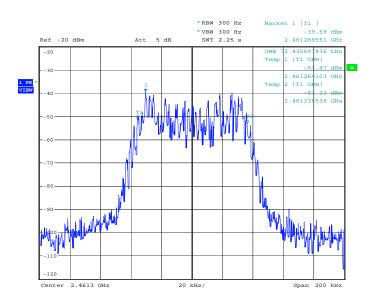
Higher Band Edge _Ch20, 2462.5MHz



Date: 1.APR.2005 13:37:55

EQUIPMENT: Angelcare Movement and Sound Monitor Nursery Unit(Transmitter)

99%Channel Bandwidth _Ch 8, 2461.3MHz



Date: 4.APR.2005 10:02:03

EQUIPMENT: Angelcare Movement and Sound Monitor Nursery Unit(Transmitter)

Radiated Emissions Test Data

Test Date: Mar 30, 2005										
Engineer's Name: Xu Jin										
Tested as per: Table Top										
Temperatu	re (C°): In	ndoor: 2	21, Outdoo	or: 10		Hu	midity %: Inc	loor: 30 , O	utdoor: 60)
Test Distar	Test Distance (meters): 3 Dome: 1									
Freq.	Ant.	Pol.	RCVD	Ant.	Amp.	Cable	Field	Limit	Margin	Detector
(MHz)		V/H	Signal	Factor	Gain	Loss	Strength	$(dB\mu V/m)$	(dB)	
			(dBµV)	(dB)	(dB)	(dB)	(dBµV/m)			
1230	Horn	Н	63.8	25	46.5	3.4	45.7	54	8.4	Peak
2461.3	Horn	Н	51.6	28.8		6.1	86.5	94	7.5	Peak
Legend: Antenna Legend: BC = Biconical, BL = Bilog, LP = Log-Periodic, Horn = Horn, ED = EMCO Dipole Detector Legend: Q-Peak = 120kHz RBW, Average = 1.0MHz RBW										

EQUIPMENT: Angelcare Movement and Sound Monitor Nursery Unit(Transmitter)

Radiated Emissions Photos



EQUIPMENT: Angelcare Movement and Sound Monitor Nursery Unit(Transmitter)

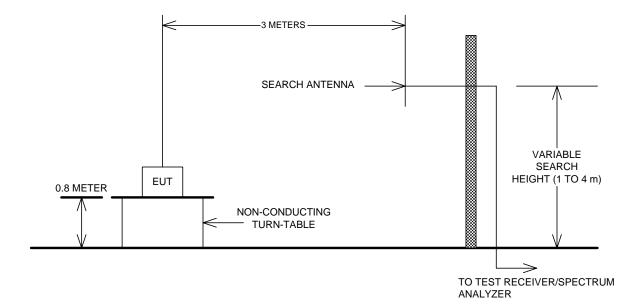
Output Power Measurement Under Extreme Voltage Conditions

Test Method:	Radiated power for selected channel 1, 2460.6MHz was verified under voltage extreme conditions.		
Extreme Voltage:	±15% of AC Mains		
Test Result:	No changed in fundamental power level was observed during the test.		

EQUIPMENT: Angelcare Movement and Sound Monitor Nursery Unit(Transmitter)

Section 5. Block Diagrams

Test Site For Radiated Emissions



EQUIPMENT: Angelcare Movement and Sound Monitor Nursery Unit(Transmitter)

Section 6. Test Equipment List

CAL	EQUIPMENT MANUFACTU		MODEL	SERIAL	LAST CAL.	NEXT
CYCLE						CAL.
1 Year	Spectrum Analyzer	Hewlett-Packard	8566B	FA001309	May 28/04	May 28/05
1 Year	Spectrum Analyzer Display	Hewlett-Packard	85662A	FA001309	May 28/04	May 28/05
NCR	0.1 – 1300 MHz Amplifier	Hewlett Packard	8447D	FA001909	Jan. 13/05	Jan. 13/06
1 Year	1.0 – 2.0 GHz Amplifier	JCA	12-400	FA001498	June 18/04	June 18/05
1 Year	2.0 – 4.0 GHz Amplifier	JCA	24-600	FA001496	June 18/04	June 18/05
1 Year	4.0 – 8.0 GHz Amplifier	JCA	48-600	FA001497	June 18/04	June 18/05
COU	5.0 – 18.0 GHz Amplifier	NARDA	DWT-186N23U40	FA001409	COU	COU
COU	18.0 – 26.0 GHz Amplifier	Narda	BBS-1826N612	FA001550	COU	COU
1 Year	Biconical (1) Antenna	EMCO	3109	FA000805	April 23/04	April 23/05
1 Year	Horn Antenna #2	EMCO	3115	FA000825	Dec. 14/04	Dec. 14/05
1 Year	Dipole Antenna Set	EMCO #1	3121C	FA000814	April 21/04	April 21/05
1 Year	LISN	EMCO	4825/2	FA001545	Jan. 13/05	Jan. 13/06
1 Year	Transient Limiter	Hewlett-Packard	1194 7A	FA000975	June 10/04	June 10/05