

# TEST REPORT FROM RFI GLOBAL SERVICES LTD

Test of: Stilo srl Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

Test Report Serial No: RFI/RPTE2/RP49764JD07A

Supersedes Test Report Serial No: RFI/RPTE1/RP49764.JD07A

This Test Report Is Issued Under The Authority Of Steve Flooks, Radio Performance Group Service Leader:				
5/100-3				
Checked By: Nigel Davison	Report Copy No: PDF01			
pp 5 (1003)				
Issue Date: 18 July 2008 Test Dates: 25 March 2008 to 17 April 2008				

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**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 2 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

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**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 3 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# **Table of Contents**

1. Client Information	4
2. Equipment Under Test (EUT)	5
3. Test Specification, Methods and Procedures	8
4. Deviations from the Test Specification	8
5. Operation and Configuration of the EUT during Testing	9
6. Summary of Test Results	10
7. Measurements, Examinations and Derived Results	11
8. Measurement Uncertainty	32
Appendix 1. Test Equipment Used	33
Appendix 2. Test Configuration Drawing	35

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 4 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# 1. Client Information

Company Name:	Stilo srl
Address:	Via Piave 41/3 Treviolo (Bg) 24048 Italy
Contact Name:	Mr F Corti

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 5 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# 2. Equipment Under Test (EUT)

The following information (with the exception of the date of receipt) has been supplied by the customer:

# 2.1. Description of EUT

The NCOM2 system configuration allows the connection to one's own wireless *Bluetooth* devices. With this system, normally fitted in motorbike helmet using a basic kit, is possible to receive phone calls directly in the helmet and listen music in MP3 format or be connected with a GPS navigator. The system is upgradeable using a multimedia wire that permit a further audio input.

# 2.2. Identification of Equipment Under Test (EUT)

Description:	Bluetooth system for fitting into a Crash Helmet	
Brand Name:	NCOM2	
Model Name or Number:	EI0002	
Serial Number:	None Stated	
Hardware Version Number:	1.0	
Software Version Number:	1.2	
FCC ID Number:	WAWNCOM2	
Country of Manufacture:	Italy	
Date of Receipt:	25 March 2008	

#### 2.3. Modifications Incorporated in the EUT

During the course of testing the EUT was not modified.

#### 2.4. Accessories

No accessories were supplied with the EUT during testing.

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 6 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# 2.5. Support Equipment

The following support equipment was used to exercise the EUT during testing:

Description:	Lithium battery 3.7V	
Brand Name:	None stated	
Model Name or Number:	BAK-053448-dc-phr2	
Serial Number:	None stated	
Cable Length and Type:	Not Applicable	
Connected to Port:	N/A	

Description:	Basic kit with loudspeaker and microphone fitted	
Brand Name:	None stated	
Model Name or Number:	ANCOM000B5601	
Serial Number:	None stated	
Cable Length and Type:	Serial, 2m	
Connected to Port:	I/O	

Description:	Multimedia wire for audio input	
Brand Name:	None stated	
Model Name or Number:	CPA000000001	
Serial Number:	None stated	
Cable Length and Type:	Serial, 2m	
Connected to Port:	I/O	

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 7 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# 2.6. Additional Information Related to Testing

Power Supply Requirement:	External DC Supply of 3.7 V			
Intended Operating Environment:	Commercial			
Equipment Category:	Bluetooth			
Type of Unit:	Transceiver			
Channel Spacing:	1000 (kHz)			
Modulation Type:	GFSK/PSK			
Temperature Range:	13°C to 20°C			
Transmit Frequency Range:	2.402 MHz to 2.480 MHz			
Transmit Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)	
	Bottom	0	2.402	
	Middle	38	2.441	
	Тор	78	2.480	
Receive Frequency Range:	2.402 MHz to 2.48	0 MHz		
Receive Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)	
	Bottom	0	2.402	
	Middle	38	2.441	
	Тор	78	2.480	

# 2.7. Port Identification

Port	Description	Type/Length
1	Serial Communications	RS232, 2m

Test Report

Serial No: RFI/RPTE2/RP49764JD07A

Page: 8 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# 3. Test Specification, Methods and Procedures

## 3.1. Test Specification

Reference: FCC Part 15.247: 2006 Subpart C	
Title:	Code of Federal Regulations, Part 15.247 (47CFR15) (Intentional Radiators operating within the band 2400 MHz to 2483.5 MHz)

#### 3.2. Methods and Procedures

The methods and procedures used were as detailed in:

ANSI C63.2 (1996)

Title: American National Standard for Instrumentation - Electromagnetic Noise and Field Strength Instrumentation, 10 Hz to 40 GHz.

ANSI C63.4 (2003)

Title: American National Standard Methods of Measurement of Electromagnetic Emissions from Low Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz.

ANSI C63.5 (1988)

Title: American National Standard for the Calibration of antennas used for Radiated Emission measurements in Electromagnetic Interference (EMI) control.

ANSI C63.7 (1988)

Title: American National Standard Guide for Construction of Open Area Test Sites for performing Radiated Emission Measurements.

CISPR 16-1: (1999)

Title: Specification For Radio Disturbance and Immunity Measuring Apparatus and Methods. Part 1: Radio Disturbance and Immunity Measuring Apparatus.

DA00-705 (2000)

Title: Filing and Frequency Measurement Guidelines for Frequency Hopping Spread Spectrum Systems.

# 3.3. Definition of Measurement Equipment

The measurement equipment used complied with the requirements of the standards referenced in the methods & procedures section above. Appendix 1 contains a list of the test equipment used.

# 4. Deviations from the Test Specification

There were no deviations from the test specification.

Test Report

Serial No: RFI/RPTE2/RP49764JD07A

Page: 9 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# 5. Operation and Configuration of the EUT during Testing

# **5.1. Operating Modes**

The EUT was tested in the following operating modes, unless otherwise stated.

Transmit and Receive Bluetooth modes only.

# 5.2. Configuration and Peripherals

The EUT was tested in the following configuration:

• For testing, the EUT was standalone connected to a test set (if applicable). For setup, a laptop computer was connected and the EUT switched into test mode. When completed, the laptop was disconnected and was not present during testing.

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 10 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# 6. Summary of Test Results

Range of Measurements	FCC Part 15 Reference	Port Type	Compliancy Status
Idle Mode Radiated Spurious Emissions	15.109	Antenna	Complied
Transmitter 20 dB Bandwidth	15.247(a)(1)	Antenna	Complied
Transmitter Carrier Frequency Separation	15.247(a)(1)	Antenna	Complied
Transmitter Average Time of Occupancy	15.247(a)(1)(iii)	Antenna	Complied
Transmitter Maximum Peak Output Power	15.247(b)(1)	Antenna	Complied
Transmitter Radiated Emissions	15.247(d) & 15.209(a)	Antenna	Complied
Transmitter Band Edge Radiated Emissions	15.247(d) & 15.209(a)	Antenna	Complied

# 6.1. Location of Tests

All the measurements described in this report were performed at the premises of RFI Global Services Ltd, Ewhurst Park, Ramsdell, Basingstoke, Hampshire, RG26 5RQ

# **6.2. Site Registration Numbers**

FCC: 90895 IC: 3485

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 11 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# 7. Measurements, Examinations and Derived Results

# 7.1. General Comments

This section contains test results only.

Measurement uncertainties are evaluated in accordance with current best practice. Our reported expanded uncertainties are based on standard uncertainties, which are multiplied by an appropriate coverage factor to provide a statistical confidence level of approximately 95%. Please refer to section 8 for details of measurement uncertainties.

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 12 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# 7.2. Test Results

# 7.2.1. Idle Mode Radiated Emissions

7.2.1.1. Plots of the initial scans can be found in Appendix 3.

7.2.1.2. Tests were performed using the test methods detailed in ANSI C63.4 Section 8.

7.2.1.3. Tests were performed to identify the maximum receiver or standby radiated emission levels.

## **Results:**

# **Electric Field Strength Measurements (Frequency Range: 30 MHz to 1000 MHz)**

Frequency (MHz)	Antenna Polarity	Quasi-Peak Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
75.390782	Vertical	18.2	40.0	21.8	Complied
84.108216	Vertical	14.2	40.0	25.8	Complied
110.861723	Vertical	20.8	43.5	22.7	Complied
125.324000	Horizontal	16.9	43.5	26.6	Complied
170.681363	Horizontal	30.3	43.5	13.2	Complied
245.731463	Horizontal	33.2	46.0	12.8	Complied

# Note(s):

1. The preliminary scans showed similar emission levels for bottom and middle channels below 1 GHz, therefore final radiated emissions measurements were performed with the EUT set to the top channel only.

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 13 of 36

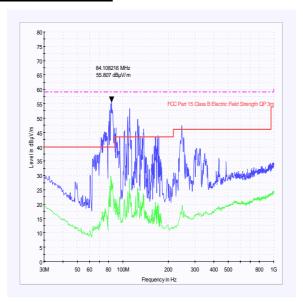
Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# **Idle Mode Radiated Emissions (Continued)**



Idle Mode; 30MHz to 1GHz

Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

Test Report

Serial No: RFI/RPTE2/RP49764JD07A

Page: 14 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

## 7.2.2. Idle Mode Radiated Emissions

Electric Field Strength Measurements (Frequency Range: 1 GHz to 13 GHz)

**Highest Peak Level: Top Channel** 

**Highest Average Level:** 

Frequency (GHz)	Antenna Polarity	Detector Level (dB <sub>µ</sub> V)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
1.963928	Vertical	53.3	-6.3	47.0	54.0	7.0	Complied
3.915831	Vertical	53	-6.1	46.9	54.0	7.1	Complied
4.765531	Vertical	39.9	-3.5	36.4	54.0	17.6	Complied
7.094188	Vertical	39.9	0.1	39.8	54.0	14.2	Complied
12.929860	Vertical	39.3	5.93	45.2	54.0	8.8	Complied

#### Note(s):

- 1. No spurious emission were detected above the noise floor of the measuring receiver, therefore the highest peak noise floor reading of the measuring receiver was recorded as shown in each plot below. The peak value in each plot was compared with the average limit which is 20dB below the peak limit.
- 2. The preliminary scans showed similar emission levels for bottom and middle channels above 1 GHz, therefore final radiated emissions measurements were performed with the EUT set to the top channel only.

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 15 of 36

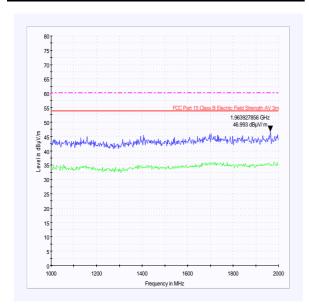
Issue Date: 18 July 2008

Test of: Stilo srl

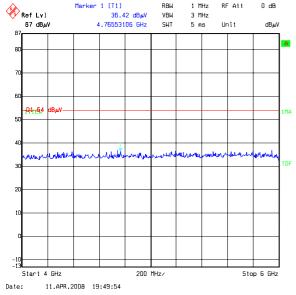
Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

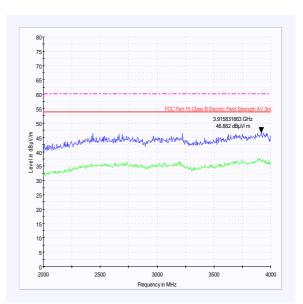
# **Idle Mode Radiated Emissions (Continued)**



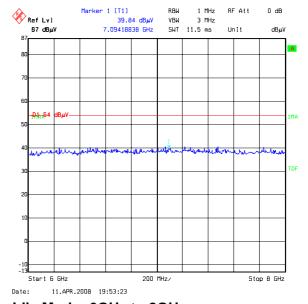




Idle Mode; 4GHz to 6GHz



Idle Mode: 2GHz to 4GHz



Idle Mode; 6GHz to 8GHz

Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 16 of 36

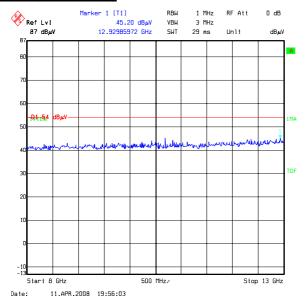
Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# **Idle Mode Radiated Emissions (Continued)**



Idle Mode; 8GHz to 13GHz

Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 17 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

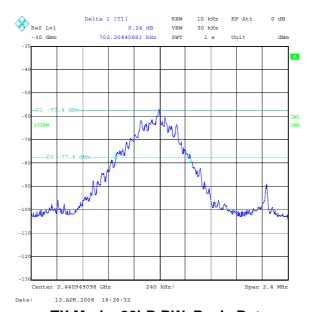
To: FCC Part 15.247: 2006 (Subpart C)

# 7.2.3. Transmitter 20 dB Bandwidth

Tests were performed using the test methods detailed in Public Notice DA 00-705 (March 30, 2000). Tests were performed to identify the 20 dB bandwidth.

#### **Results:**

Transmitter 20 dB Bandwidth (kHz)	Limit (kHz)
702.20440881	None specified



TX Mode: 20bB BW, Basic Rate

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 18 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

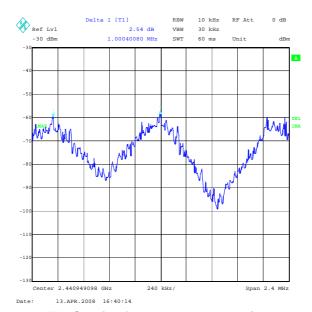
# 7.2.4. Transmitter Carrier Frequency Separation

Tests were performed using the test methods detailed in Public Notice DA 00-705 (March 30, 2000).

Tests were performed to identify the carrier frequency separation.

#### **Results:**

Transmitter Carrier Limit Frequency Separation (> 2/3 of 20 dB BW) (kHz)		Margin (kHz)	Result
1000.400802	468.1363	532.2645	Complied



**TX Carrier frequency separation** 

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 19 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

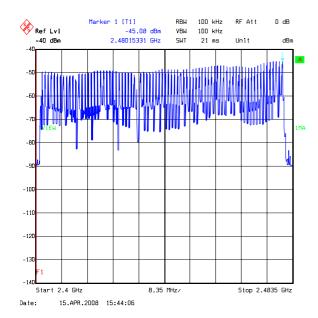
# 7.2.5. Transmitter Average Time of Occupancy

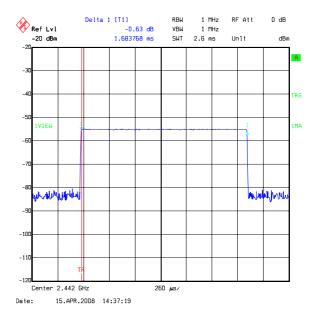
Tests were performed using the test methods detailed in Public Notice DA 00-705 (March 30, 2000).

Tests were performed to identify the average time of occupancy in number of channels  $(79) \times 0.4$  seconds. The calculated period is 31.6 seconds.

# Results:

Emission Width (μs)	Number of Hops in 31.6 Seconds	Average Time of Occupancy (s)	Limit (s)	Margin (s)	Result
1683.768	87	0.146	0.4	0.254	Complied





**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 20 of 36

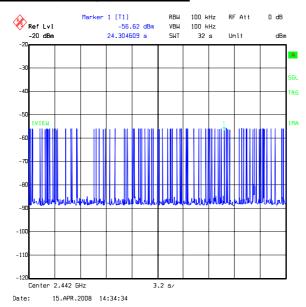
Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# **Transmitter Average Time of Occupancy (Continued)**



**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 21 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# 7.2.6. Transmitter Maximum Peak Output Power

Tests were performed using the test methods detailed in Public Notice DA 00-705 (March 30, 2000), ANSI TIA-603-C-2004 and FCC CFR Part 2.

Tests were performed to identify the transmitter maximum peak output power (EIRP) of the EUT.

#### Results:

#### **Battery Powered Devices**

Channel	Conducted Stated RF O/P Antenna Gain Power (dBm) (dB)		EIRP (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	-2.3	4.1	1.8	30.0	28.2	Complied
Middle	-3.2	4.1	0.9	30.0	29.1	Complied
Тор	-4.0	4.1	-0.1	30.0	30.1	Complied

#### Note(s):

1. As per the requirements of Public Notice DA 00-705, the stated antenna gain of the EUT is 4.1dBi which, when added to the highest (worst case) measured conducted peak output power of -2.3dBm (from the table above) gives a de facto EIRP of 1.8dBm. This is in compliance with the requirements of Section 15.247(b)(1) for de facto EIRP limitation i.e. 1 Watt (30dBm).

Test Report

Serial No: RFI/RPTE2/RP49764JD07A

Page: 22 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# 7.2.7. Transmitter Radiated Emissions

Tests were performed using the test methods detailed in ANSI C63.4 Section 8 and Public Notice DA 00-705 (March 30, 2000).

Tests were performed to identify the maximum transmitter radiated emission levels.

#### Results:

# <u>Electric Field Strength Measurements: 30 MHz to 1000 MHz</u> (<u>Emissions Occurring in the Restricted Bands</u>)

#### **Top Channel**

Frequency (MHz)	Antenna Polarity	Q-P Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
76.292585	Vertical	16.3	40.0	23.7	Complied
83.206413	Vertical	14.8	40.0	25.2	Complied
110.861723	Vertical	20.0	43.5	23.5	Complied
125.290581	Horizontal	18.6	43.5	24.9	Complied
137.314629	Horizontal	24.9	43.5	18.6	Complied
164.037000	Horizontal	30.7	43.5	12.8	Complied
245.731463	Horizontal	33.2	46.0	12.8	Complied

## Note(s):

<sup>1.</sup> The preliminary scans showed similar emission levels for bottom and middle channels below 1 GHz, therefore final radiated emissions measurements were performed with the EUT set to the top channel only.

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 23 of 36

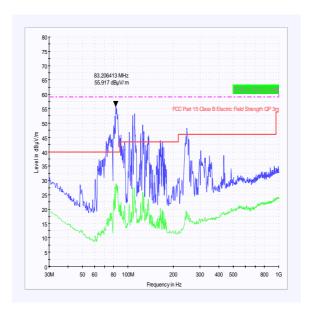
Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# **Transmitter Radiated Emissions (Continued)**



TX Mode: 30MHz to 1GHz

Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 24 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

#### **Transmitter Radiated Emissions (Continued)**

## **Results:**

<u>Electric Field Strength Measurements (Frequency Range: 1 to 26.5GHz)</u> (emissions occurring in the restricted bands)

# **Highest Peak Level: Bottom Channel**

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
7.206000	Vertical	53.6	-0.6	53.0	74.0	21	Complied

# **Highest Average Level: Bottom Channel**

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
7.206000	Vertical	43.6	-0.6	43.0	54.0	11	Complied

#### **Highest Peak Level: Middle Channel**

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
7.323000	Vertical	54.9	-0.6	54.3	74.0	19.7	Complied

# **Highest Average Level: Middle Channel**

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
7.323000	Vertical	45.7	-0.6	45.1	54.0	8.9	Complied

#### Note(s):

<sup>1.</sup> The preliminary scans showed similar emission levels below 1 GHz, for each channel of operation. Therefore final radiated emissions measurements were performed with the EUT set to the top channel only.

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 25 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# **Transmitter Radiated Emissions (Continued)**

**Results:** 

**Highest Peak Level: Top Channel** 

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
7.440005	Vertical	45.8	-0.6	45.2	74.0	28.8	Complied

# **Highest Average Level: Top Channel**

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
7.440005	Vertical	35.9	-0.6	35.3	54.0	18.7	Complied

# **Highest Peak Level: Hopping Mode**

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
7.333079	Vertical	55.4	-0.6	54.8	74.0	19.2	Complied

# **Highest Average Level: Hopping Mode**

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
7.333079	Vertical	31.8	-0.6	31.2	54.0	22.8	Complied

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 26 of 36

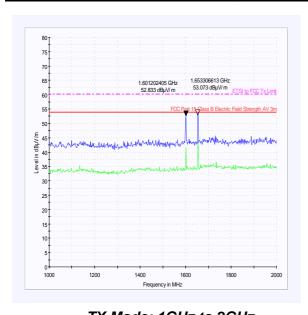
Issue Date: 18 July 2008

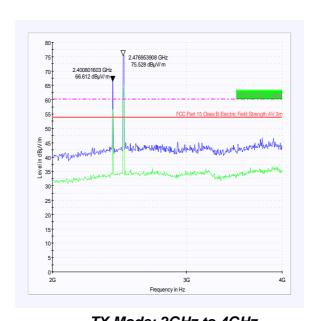
Test of: Stilo srl

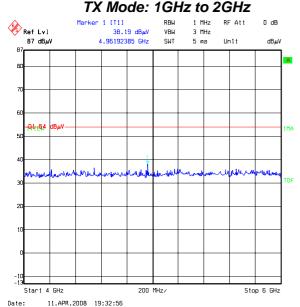
Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

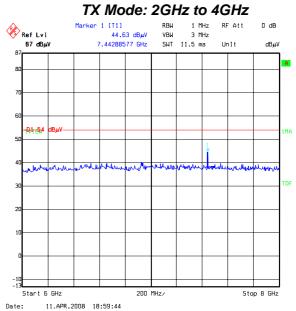
# **Transmitter Radiated Emissions (Continued)**







TX Mode: 4GHz to 6GHz



TX Mode: 6GHz to 8GHz

Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 27 of 36

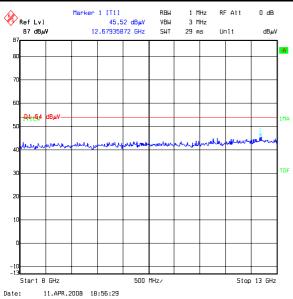
Issue Date: 18 July 2008

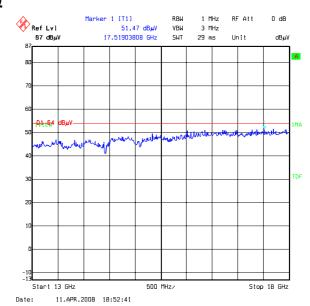
Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

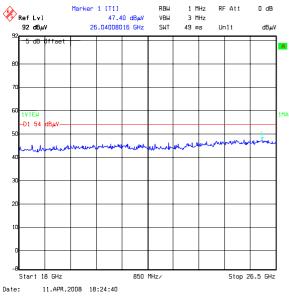
To: FCC Part 15.247: 2006 (Subpart C)

#### **Transmitter Radiated Emissions (Continued)**





TX Mode: 8GHz to 13GHz



TX Mode: 13GHz to 18GHz

TX Mode: 18GHz to 26.5GHz

Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

Test Report

Serial No: RFI/RPTE2/RP49764JD07A

Page: 28 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

#### 7.2.8. Transmitter Band Edge Radiated Emissions

Tests were performed using the test methods detailed in ANSI C63.4 Section 8 and Public Notice DA 00-705 (March 30, 2000).

Tests were performed to identify the maximum radiated band edge emissions.

#### **Results:**

#### **Electric Field Strength Measurements**

#### **Peak Power Level Hopping Mode:**

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2.4000	Vertical	26.0	32.0	58.0	74.9*	16.9	Complied
2.4835	Vertical	29.2	32.0	61.2	74.0	12.8	Complied

# **Average Power Level Hopping Mode:**

Frequency (GHz)	Antenna Polarity	Detector Level (dB <sub>µ</sub> V)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2.4835	Vertical	14.9	32.0	46.9	54.0	7.1	Complied

#### Note(s):

- 1. \* -20 dBc limit.
- 2. The bottom side of the radiated band edge measurement was performed without an offset. The transducer factors were then added after the final measurement to give an absolute final value.

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 29 of 36

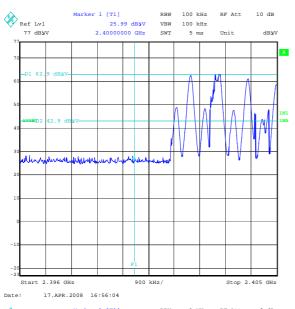
Issue Date: 18 July 2008

Test of: Stilo srl

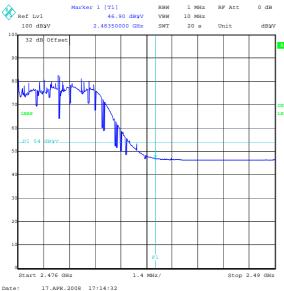
Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# **Transmitter Band Edge Radiated Emissions (Continued)**







**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 30 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# **Transmitter Band Edge Radiated Emissions (Continued)**

#### **Results:**

# **Peak Power Level Static Mode:**

Frequency (GHz)	Antenna Polarity	Detector Level (dB <sub>µ</sub> V)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2.4000	Vertical	26.4	32.0	58.4	74.9*	16.5	Complied
2.4835	Vertical	29.3	32.0	61.3	74.0	12.7	Complied

# **Average Power Level Static Mode:**

Frequency (GHz)	Antenna Polarity	Detector Level (dB <sub>µ</sub> V)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2.4835	Vertical	20.1	32.0	52.1	54.0	1.9	Complied

# Note(s):

- 1. \* -20 dBc limit.
- 2. The bottom side of the radiated band edge measurement was performed without an offset. The transducer factors were then added after the final measurement to give an absolute final value.

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 31 of 36

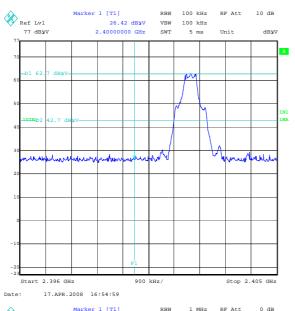
Issue Date: 18 July 2008

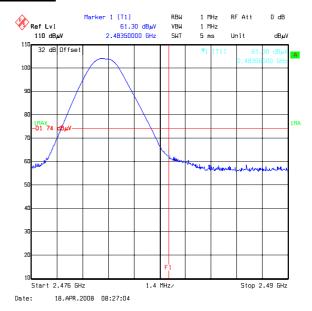
Test of: Stilo srl

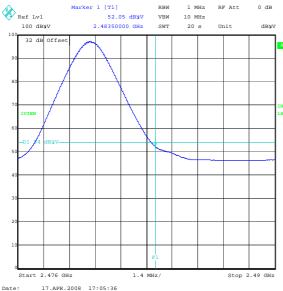
Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# **Transmitter Band Edge Radiated Emissions (Continued)**







**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 32 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# 8. Measurement Uncertainty

No measurement or test can ever be perfect and the imperfections give rise to error of measurement in the results. Consequently, the result of a measurement is only an approximation to the value of the measurand (the specific quantity subject to measurement) and is only complete when accompanied by a statement of the uncertainty of the approximation.

The expression of uncertainty of a measurement result allows realistic comparison of results with reference values and limits given in specifications and standards.

The uncertainty of the result may need to be taken into account when interpreting the measurement results.

The reported expanded uncertainties below are based on a standard uncertainty multiplied by an appropriate coverage factor, such that a confidence level of approximately 95% is maintained. For the purposes of this document "approximately" is interpreted as meaning "effectively" or "for most practical purposes".

Measurement Type	Range	Confidence Level (%)	Calculated Uncertainty	
Transmitter Maximum Peak Output Power	Not Applicable	95%	±2.94 dB	
Transmitter Carrier Frequency Separation	Not Applicable	95%	±11.4 ppm	
Transmitter Average Time of Occupancy	Not Applicable	95%	±0.3 ns	
20 dB Bandwidth	Not Applicable	95%	± 11.4 ppm	
Radiated Spurious Emissions	30 MHz to 1000 MHz	95%	±4.64 dB	
Radiated Spurious Emissions	1 GHz to 40 GHz	95%	±2.94 dB	

The methods used to calculate the above uncertainties are in line with those recommended within the various measurement specifications. Where measurement specifications do not include guidelines for the evaluation of measurement uncertainty, the published guidance of the appropriate accreditation body is followed.

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 33 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# **Appendix 1. Test Equipment Used**

RFI No.	Instrument	Manufacturer	Type No.	Serial No.	Date Last Calibrated	Cal. Interval (Months)
A004	Line Impedance Stabilization Network	Rohde & Schwarz	ESH3-Z5	890 604/027	23 Apr 2007	12
A028	Antenna	Eaton	91888-2	304	08 Jun 2006	36
A031	Antenna	Eaton	91889-2	557	08 Jun 2006	36
A1037	Antenna	Chase EMC Ltd	CBL6112B	2413	13 Feb 2008	12
A1534	Pre Amplifier	Hewlett Packard	8449B OPT H02	3008A00405	Calibrated before use	-
A1830	Pulse Limiter	Rhode & Schwarz	ESH3-Z2	100668	16 Jan 2008	12
A253	Antenna	Flann Microwave	12240-20	128	17 Nov 2006	36
A254	Antenna	Flann Microwave	14240-20	139	17 Nov 2006	36
A255	Antenna	Flann Microwave	16240-20	519	17 Nov 2006	36
A256	Antenna	Flann Microwave	18240-20	400	17 Nov 2006	36
A259	Antenna	Chase	CBL6111	1513	30 May 2008	12
A436	Antenna	Flann	20240-20	330	24 Apr 2006	36
A512	Antenna	EMCO	3115	3993	Calibrated before use	-
C1025	Cable	Rosenberger	FA210A-1- 020m	FA00B 7564	05 Jun 2007	12
C1065	Cable	Rosenberger	UFA210-1- 7872	0985	06 Jun 2007	12
C1072	Cable	Rosenberger	FA210a1030 M5050	Not Stated	24 Apr 2007	12
C1164	Cable	Rosenberger Micro-Coax	FA210A1015 007070	43188-1	04 Jun 2007	12
C1167	Cable	Rosenberger Micro-Coax	FA210A1030 007070	43190-01	05 Jun 2007	12
C151	Cable	Rosenberger	UFA210A-1- 1181-70x70	None	24 Apr 2007	12
C160	Cable	Rosenberger	UFA210A-1- 1181-70x70	None	24 Apr 2007	12

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 34 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# **Test Equipment Used (Continued)**

RFI No.	Instrument	Manufacturer	Type No.	Serial No.	Date Last Calibrated	Cal. Interval (Months)
C172	Cable	Rosenberger	UFA210A-1- 1181-70x70	None	24 Apr 2007	12
C341	Cable	Andrews	None	None	24 Apr 2007	12
C348	Cable	Rosenberger	UFA210A-1- 1181-70x70	2993	24 Apr 2007	12
C363	Cable	Rosenberger	RG142	None	24 Apr 2007	12
C468	Cable	Rosenberger	UFA210A-1- 3937-504504	98L0440	24 Apr 2007	12
E0511	VTM 7004	Votsch Industrietechnik	VTM 7004	585660877000 10	Calibrated before use	-
G088	Power Supply Unit	Thurlby Thandar	CPX200	100700	Calibrated before use	-
M023	Test Receiver	Rohde & Schwarz	ESVP	872 991/027	24 Apr 2007	12
M024	Spectrum Monitor	Rohde & Schwarz	EZM	873 952/006	Calibrated before use	-
M1093	Communications Test Set	Will tek	4202S	0513018	29 August 2003 (Communica tion purpose only)	-
M1242	Spectrum Analyser	Rohde & Schwarz, Inc.	FSEM30	845986/022	29 Nov 2007	12
M1229	Digital Multimeter	Fluke	179	87640015	20 Apr 2007	12
M1263	Test Receiver	Rohde & Schwarz	ESIB7	100265	06 Feb 2008	12
M127	Spectrum Analyser	Rohde & Schwarz	FSEB 30	842 659/016	15 Aug 2007	12
M1379	Test Receiver	Rohde and Schwarz	ESIB7	100330	02 Aug 2007	12
S201	Open Area Test Site	RFI	1		25 May 2007	12
S202	Site 2	RFI	2	S202- 15011990	28 Jan 2008	12
S503	Antenna Mast	EMCO	1051-25	9205 1670	Calibration not required	-

**NB** In accordance with UKAS requirements, all the measurement equipment is on a calibration schedule.

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 35 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

# **Appendix 2. Test Configuration Drawing**

This appendix contains the following drawings:

Drawing Reference Number	Title
DRG\49764JD07\EMIRAD	Test configuration for measurement of radiated emissions.

**Test Report** 

Serial No: RFI/RPTE2/RP49764JD07A

Page: 36 of 36

Issue Date: 18 July 2008

Test of: Stilo srl

Stilo-Nolan Bluetooth System NCOM2 Model El0002

To: FCC Part 15.247: 2006 (Subpart C)

#### DRG\49764JD07\EMIRAD

