



Test Report: 5W56827.1


Applicant: Swissphone Telecom AG
Fälmisstrasse 21
Samstagern, Switzerland
CH-8833

Apparatus: RE629 Paging Receiver

In Accordance With: RSS-GEN, Issue 1
Receiver Tests

Tested By: Nemko Canada Inc.
303 River Road
Ottawa, Ontario
K1V 1H2

IC OATS Reference No.: IC 2040-1

Authorized By: 
Sim Jagpal, Resource Manager

Date: February 27, 2006

Total Number of Pages: 13

Report Summary

These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Industry Canada RSS-GEN. Radiated tests were conducted in accordance with ANSI C63.4-2003. Radiated emissions are made on an open area test site. A description of the test facility is on file with Industry Canada.

The assessment summary is as follows:

Apparatus Assessed:	RE629 Paging Receiver
Specification:	RSS-GEN, Issue 1
Compliance Status:	Complies
Exclusions:	None
Non-compliances:	None
Report Release History:	Original Release

Author: Jason Nixon, Telecom Specialist

Note that the results contained in this report relate only to the items tested and were obtained in the period between the date of initial receipt of samples and the date of issue of the report.

This test report has been completed in accordance with the requirements of ISO/IEC 17025.

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Section 1 : Equipment Under Test

1.1 Product Identification

The Equipment Under Test was identified as follows:

RE629 Paging Receiver

1.2 Samples Submitted for Assessment

The following samples of the apparatus have been submitted for type assessment:

Sample No.	Description	Serial No.
1	RE629-16M paging receiver (146.025MHz)	C200605.00001 ID: 884218
2	RE629-16M paging receiver (174.025MHz)	C200605.00001 ID: 884224
3	RE629-16M paging receiver (160.025MHz)	C200605.00001 ID: 884220

The first samples were received on: February 8, 2006

1.3 Theory of Operation

The EUT is a paging receiver, which is preset to receive paging messages in the 138 to 174MHz band.

1.4 Technical Specifications of the EUT

Manufacturer: Swissphone Telecom AG

Receive Frequency: 138 to 174MHz (Fixed)

Receiver Type: Superheterodyne

Antenna Data: Integral

Power Source: 1 AA Battery

Section 2 : Test Conditions

2.1 Specifications

The apparatus was assessed against the following specifications:

IC RSS-GEN, Issue 1 September 2005

2.2 Deviations From Laboratory Test Procedures

No deviations were made from laboratory test procedures.

2.3 Test Environment

All tests were performed under the following environmental conditions:

Temperature range	:	15 – 30 °C
Humidity range	:	20 - 75 %
Pressure range	:	86 - 106 kPa
Power supply range	:	+/- 5% of rated voltages

2.4 Test Equipment

Equipment	Manufacturer	Model No.	Asset/Serial No.	Next Cal.
Spectrum Analyzer	Hewlett-Packard	8566B	FA001309	May 18/06
Spectrum Analyzer Display	Hewlett-Packard	85662A	FA001309	May 18/06
Bilog	Schaffner	CBL6112B	FA001504	NCR
Horn Antenna #2	EMCO	3115	FA000825	Dec. 16/06
1.0 – 2.0 GHz Amplifier	JCA	12-400	FA001498	July 14/06
Receiver	Rohde & Schwarz	ESVS-30	FA001437	July 27/06
Biconical (1) Antenna	EMCO	3109	FA000805	April 22/06

NCR – No Cal. Required

Section 3 : Observations

3.1 Modifications Performed During Assessment

No modifications were performed during assessment.

3.2 Record Of Technical Judgements

No technical judgements were made during the assessment.

3.3 EUT Parameters Affecting Compliance

The user of the apparatus could not alter parameters that would affect compliance.

3.4 Test Deleted

No Tests were deleted from this assessment.

3.5 Additional Observations

There were no additional observations made during this assessment.

Section 4 : Results Summary

This section contains the following:

IC RSS-GEN, Issue 1 : Test Results

The column headed 'Required' indicates whether the associated clauses were invoked for the apparatus under test. The following abbreviations are used:

- N No : not applicable / not relevant.
- Y Yes : Mandatory i.e. the apparatus shall conform to these tests.
- N/T Not Tested, mandatory but not assessed. (See section 3.4 Test deleted)

The results contained in this section are representative of the operation of the apparatus as originally submitted.

4.1 IC RSS-GEN, Issue 1 : Test Results

Clause 7	Test Description	Required	Result
7.1	General	—	—
7.2	Measurement Methods and Standard Specifications	—	—
7.2.1	Emission Limits for Pulsed Operation Devices	—	—
7.2.2	Transmitter and Receiver AC Power Lines Conducted Emission Limits	N (1)	—
7.2.3	Receiver Spurious Emission Limits	—	—
7.2.3.1	Antenna Conducted Measurement	N (2)	—
7.2.3.2	Radiated Measurement	Y	PASS
7.2.4	Transmitter Frequency Stability	N	

Notes:

- (1) The EUT was battery powered.
- (2) The EUT used an integral antenna.

Appendix A : Test Results

Clause 7.2.3.2 Receiver Spurious Emissions (Radiated)

All spurious emissions shall comply with the limits of Table 1 (see Section 6).

Table 1 - Spurious Emission Limits for Receivers Spurious	
Frequency (MHz)	Field Strength (microvolt/m at 3 metres)
30-88	100
88-216	150
216-960	200
Above 960	500

Test Conditions:

Sample Number:	1,2,3	Temperature:	10
Date:	February 13, 2006	Humidity:	46
Modification State:	0	Tester:	Jason Nixon
		Laboratory:	OATS

Test Results:

See Attached Table for Results

Additional Observations:

The Spectrum was searched up to 2GHz.

The EUT was measured on three orthogonal axis. Fresh new batteries were used during this assessment.

All measurements were performed using a Quasi-Peak Detector with 120kHz RBW below 1GHz and a 1MHz RBW above 1GHz at a distance of 3 meters.

Freq. (MHz)	Ant	Pol. V/H	RCVD Signal (dBμV)	Ant. Factor (dB)	Amp. Gain (dB)	Duty Cycle Corr. (dB)	Cable Loss (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)
Low Channel										
124.7750	BC1	V	15.6	12.6	N/A	N/A	1.8	30.0	43.5	13.5
124.7750	BC1	H	9.5	12.0	N/A	N/A	1.8	23.3	43.5	20.2
Mid Channel										
138.7750	BC1	V	16.5	13.3	N/A	N/A	1.9	31.7	43.5	11.8
138.7750	BC1	H	9.3	12.7	N/A	N/A	1.9	23.9	43.5	19.6
High Channel										
152.7750	BC1	V	10.1	13.0	N/A	N/A	1.9	25.0	43.5	18.5
152.7750	BC1	H	10.9	12.5	N/A	N/A	1.9	25.3	43.5	18.2
Note 1: Antenna Legend: BC = Biconical, BL = Bilog, LP = Log-Periodic, Horn = Horn, ED = EMCO Dipole Note 2: Positive Peak detector used										

Appendix B : Setup Photographs

Spurious Emissions Setup:



Appendix C : Block Diagram of Test Setups

Test Site For Radiated Emissions

