

Exhibit 2/A

Nurit 3010 ARDIS DataTAC

Point of Sale Device

Lipman USA

FCC ID: O2SNURIT3010A

ERP Measurement Report

(With Test Setup Photographs)



Assessment of Compliance

for

Measurement of Effective radiated Power (ERP) in Accordance with the FCC Rules & Regulations Part 2.1046

Point of Sale Device Research In Motion ARDIS Modem Nurit 3010 ARDIS

Lipman USA, Inc.



August 2000

LPMB-NURIT3010-3514

51 Spectrum Way Nepean ON K2R 1E6 Tel: (613) 820-2730 Fax: (613) 820-4161

email: info@aprel.com



Engineering Report

Subject:

Measurement of Effective Radiated

Power (ERP) in accordance with the FCC Rules & Regulations Part 2.1046

FCC ID:

O2SNURIT3010A

Equipment:

Point of Sale Device

Model:

Nurit 3010 ARDIS

Client:

Lipman USA, Inc.

50 Gordon Drive Syosset, NY 11791

U.S.A.

Project #:

LPMB-NURIT3010 3514

Prepared By:

APREL Laboratories,

Regulatory Compliance Division

Approved by:

Jay Sarkar

Technical Director, Standards & Certification

Date:

VINCE OF O

Released by:

Dr. Jack J. Wojcik, P.Eng.

"SOLUTIONS FOR THE WIRELESS FUTURE"



Consulting - Research - Training - Certification Testing Since 1981

FCC ID: O2SNURIT3010A
Applicant: Lipman USA, Inc.
Equipment: Point of Sale Device
Model: Nurit 3010 ARDIS

Standard: FCC Rules and Regulations Part 2.1046

ENGINEERING SUMMARY

This report contains the results of the effective radiated power (ERP) measurement performed on a LIPMAN Point of Sale Device operating with a built-in Research in Motion ARDIS radio transmitter. The measurements were carried out in accordance with the FCC Rules and Regulations Part 2.1046. The product was evaluated for ERP when it was set at the maximum power level.

Nurit 3010 Ardis was tested for ERP at high, middle, and low frequencies with the maximum ERP obtained at channel No.: 22D0 with the frequency being 815.00 MHz. The test data is presented in this report under the section: Test Results. The measured ERP is 2.399W

(The results presented in this report relate only to the sample tested.)



Summary of the Results

Test Description	Page	Test Set-up	Results
	No.	Figure No.	Summary
RF Power Output as Radiated Ref. Paragraph 2.1046	8	1	Passed



INTRODUCTION

General

This report describes the results of the effective radiated power (ERP) measurement conducted on a Lipman USA Point of Sale Device model Nurit 3010 Ardis operating with a built-in Research in Motion ARDIS radio transmitter, .

Test Facility

The tests were performed for Lipman USA, Inc. by APREL Laboratories at APREL's EMI facility located in Nepean, Ontario, Canada. The laboratory operates an (3m and 10m) Open Area Test Site (OATS). The measurement facility is calibrated in accordance with ANSI C63.4-1992.

A description of the measurement facility in accordance with the radiated and AC line conducted test site criteria per ANSI C63.4-1992 is on file with the Federal Communications Commission and is in compliance with the requirements of Section 2.948 of the Commissions rules and regulations.

APREL's registration number is: 90416

APREL is accredited by Standard Council of Canada, under PALCAN program (ISO Guide 25). APREL is also accredited by Industry Canada (formerly DOC) and recognised by the Federal Communications Commissions (FCC).

Standard

The evaluation and analysis were conducted in accordance with FCC Rules and Regulations Parts 2.1046 and the appropriate limits.

Test Equipment

The test equipment used during the evaluation is listed in Appendix A with calibration due dates.

Environmental Conditions

Measurements were conducted in open area test site.

- Temperature: $25 \, ^{\circ}\text{C} \pm 2$ - Relative Humidity: $30 - 50 \, \%$



Consulting - Research - Training - Certification Testing Since 1981

- Air Pressure: $101 \text{ kPa} \pm 3$

FCC SUBMISSION INFORMATION

FCC ID: O2SNURIT3010A

Equipment: Point of Sale Device

Model: Nurit 3010 ARDIS with a Research in Motion ARDIS radio transmitter

For: Certification

Applicant: Lipman USA, Inc.

50 Gordon Drive Syosset, NY 11791

U.S.A.

Manufacturer: Lipman USA, Inc.

50 Gordon Drive Syosset, NY 11791

U.S.A.

Evaluated by: APREL Laboratories

51 Spectrum Way Nepean, Ontario Canada K2R 1E6



TEST RESULTS

FOR

Of
Point of Sale Device
Nurit 3010 ARDIS with a Research in
Motion ARDIS
Radio transmitter,

Lipman USA, Inc.

Consulting - Research - Training - Certification Testing Since 1981

Test: RF Power Output as Radiated (ERP)

Ref.: FCC Part 2 paragraph 2.1046

Criteria: N/A

Set-up: See Figure No. 1.

Equipment: See Appendix A.

Methodology: RF Power Measurement by Radiated Method (ERP):

Test site: The radiated RF power measurement was taken at APREL Laboratory's open area test site (OATS). This open area test site is calibrated to ANSI C63.4 document and a description of the measurement facility is on file with the Federal Communications Commission and is in compliance with the requirement of Section 2.948 of the Commissions rules and regulations. (FCC File No.: 90416)

The test was set-up as illustrated in Fig.1. The Point of Sale Device was configured to operate at maximum power with carrier **unmodulated**. The equipment under test was placed on a turntable positioned 3 m away from the calibrated receiving antenna, which in turn was connected to the spectrum analyzer.

For each transmitter frequency, the received signal was **maximised** by rotating the turntable and adjusting the height of the receiving antenna. To obtain the actual ERP, the Point of Sale Device was replaced by a vertically polarised half-wave dipole antenna resonant to that frequency and fed by a RF power amplifier and signal generator. The center of the dipole antenna was placed precisely in the same location as the Point of Sale Device. It was ensured that the orientation of the rotating table and the height of the receiving antenna were unmoved. The signal generator level was adjusted until the peak reading on the spectrum analyzer was identical to that obtained when the Point of Sale Device was on the turntable. The two signals were matched by superimposing one signal to the other on the spectrum analyzer screen. The output of power amplifier was disconnected from the substitute dipole antenna and connected to a RF power meter. **The effective radiated power was read directly form the power meter**.

The process was repeated for two more channels.

Results: See Table 1



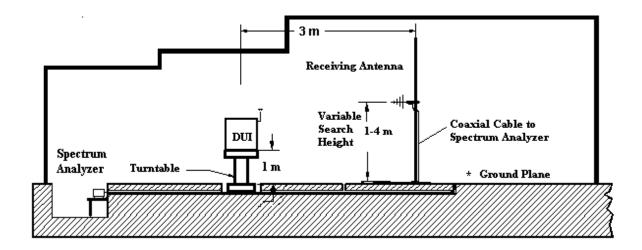


Figure 1.a Test set up for the Radiated Power (ERP) Measurement in OATS (not to scale)



Fig. 1.b APREL's OATS (Open Area Test Site)



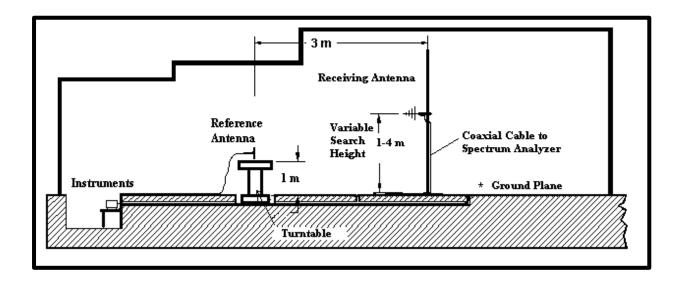


Figure 1.c Test set up for the Radiated Power (ERP) Measurement in OATS (not to scale)
The DUI is replaced by Reference Dipole Antenna.



Table 1. RF Output Power Measurement ERP

Channel No.	Nominal Transmit Frequency	Measured Output Power ERP	ERP	
	(MHz)	(dBm)	(W)	
2000	806,00	33.7	2.344	
22D0	815.00	33.8	2.399	
24B0	821.00	33.3	2.138	

Test performed by: Kulebre Found Date: Any 29, loso



APPENDIX A

List of Test Equipment



List of Equipment used

Description	Manufacturer	Model #	Asset #	Calibration Due Data
Spectrum Analyzer	Anritsu	MS2661C	301330	Dec 10, 2000
Power Meter	Rhode & Schwarz	NRVS	100851	July 21, 2001
20 dB Attenuator	Narda	4779-20	301370	May 18, 2001
Signal Generator	Hewlett-Packard	HP 8662A	100456	Nov 1, 2000
RF Power Amplifier	Amplifier Research	25W100M	100735	Sep 16, 2000
Reference Half wave Dipole	APREL Inc.	D-8355	N/A	June 16, 2001
Log Periodic Antenna	Eaton	ALP-1	100553	July 21, 2001
Turntable with Controller	EMCO	1060-1.241	100506	CNR
Computer Controlled Antenna	EMCO	1051-12	100507	CNR
Position Mast				
OATS	APREL Inc.	3m & 10m	N/A	N/A



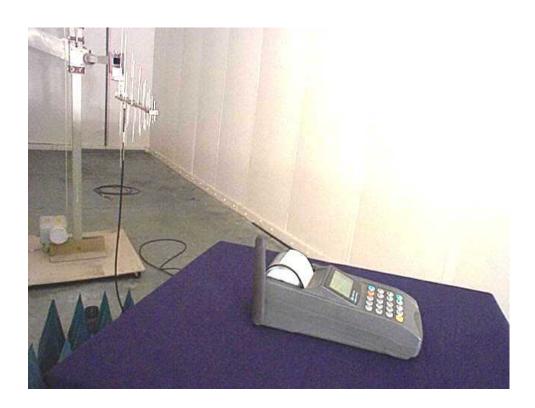
APPENDIX B PHOTOGRAPHS





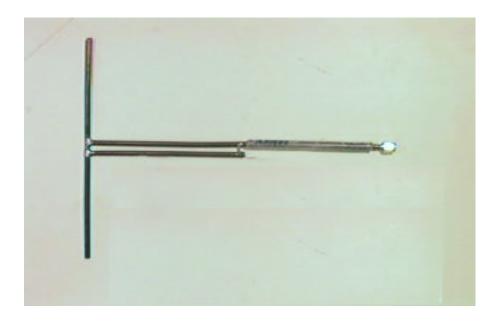
Lipnan USA Point of Sale Device Nurit 3010 ARDIS





ERP Measurements in OATS





Reference Dipole Antenna Used for ERP Measurement