

Exhibit: 20dB Bandwidth

FCC ID: PLF-ESCAN2

Justification

The individuals and/or the organization requesting the test provided the modes, configurations and settings available to evaluate. While scanning the radiated emissions, all of the EUT parameters listed below were investigated. This includes, but may not be limited to, antennas, tuned transmit frequency ranges, operating modes, and data rates.

Channels in Specified Band Investigated:

Single

Operating Modes Investigated:

Modulation

Antennas Investigated:

Whip

Data Rates Investigated:

Maximum

Output Power Setting(s) Investigated:

Maximum

Power Input Settings Investigated:

Battery

Frequency Range Investigated

Start Frequency	417 MHz	Stop Frequency	419 MHz
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Software\Firmware Applied During Test

Exercise software	Special Test Software	Version	Unknown
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Description

The system was tested using special software developed to test all functions of the device during the test.

Equipment Modifications

The following modifications were made for the product to achieve FCC compliance:

- R82 was changed to a value of 15K ohms.

EUT and Peripherals

Description	Manufacturer	Model/Part Number	Serial Number
EUT	Enalasys	eScan2 Sx	20202
Antenna	Linx Technologies	ANT-418-CW-QW	N/A

Cables

Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
Serial	Yes	1.15	No	EUT	Unterminated

PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.

Measurement Equipment

Description	Manufacturer	Model	Identifier	Last Cal	Interval
Spectrum Analyzer	Tektronix	2784	AAO	03/08/2001	24 mo

Test Description

Requirement: Per 47 CFR 15.231(c), the 20 dB bandwidth of the transmit frequency shall be no wider than 0.25% of the center frequency.

Configuration: The EUT was configured for modulated operation at its single transmit frequency of 418 MHz.

The RF output of the EUT was connected directly to the spectrum analyzer input. The bandwidth was measured 20 dB down from the modulated carrier. The spectrum analyzer's resolution bandwidth was \geq 1% of the 20dB bandwidth and the video bandwidth was greater than or equal to the resolution bandwidth.

The eScan2 Sx, eScan2 Lx, and eScan2 Rx are identical radios used in three different host units. Since the modulation scheme, duty cycle, schematics, PCB layout, and bill of materials are exactly the same for all three radios, only the eScan2 Sx was tested. It's bandwidth measurement is representative for all three radios.

Completed by:

NORTHWEST
EMC

EMISSIONS DATA SHEET

Rev BETA
01/30/01

EUT: eScan2 Sx		Work Order: ENAL0003
Serial Number:	20202	Date: 09/23/02
Customer:	Enalasys	Temperature: 23 degrees C
Attendees:	none	Humidity: 38% RH
Customer Ref. No.:	N/A	Job Site: EV06

TEST SPECIFICATIONS

Specification: 47 CFR 15.231(c) Year: Most Current Method: ANSI C63.4 Year: 1992

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated carrier

DEVIAS

None

REQUIREMENTS

The max

RESULTS BANDWIDTH

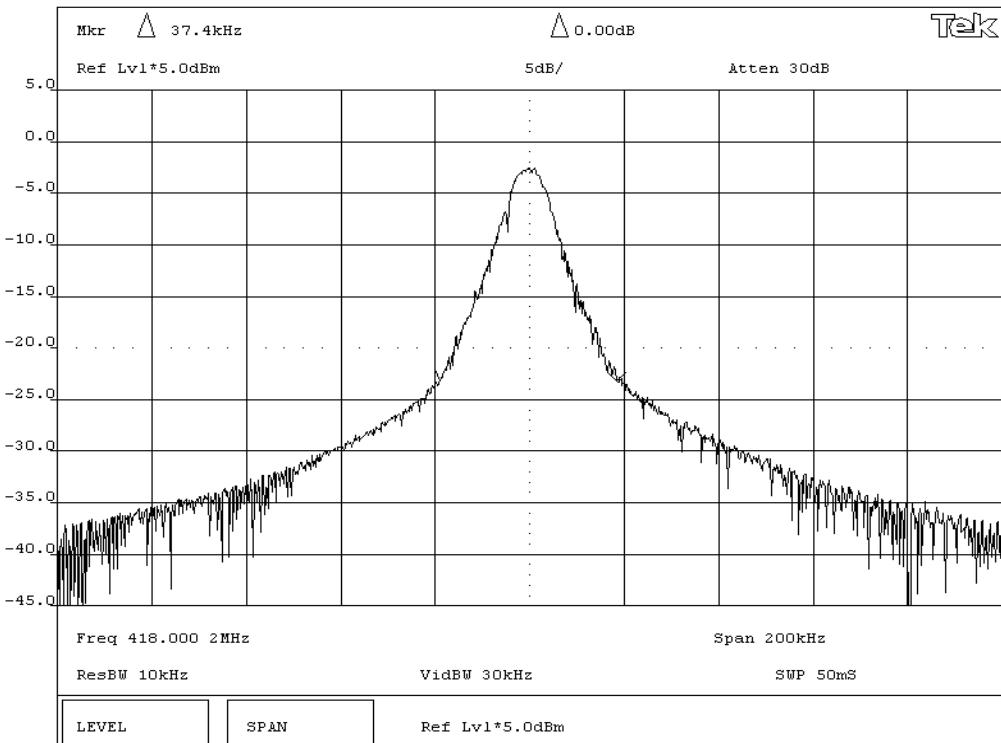
Pass 37.4 kHz

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

20dB Bandwidth



KNOB 2

KNOP

Ref Lvl*5.0dBm

tronix 2784