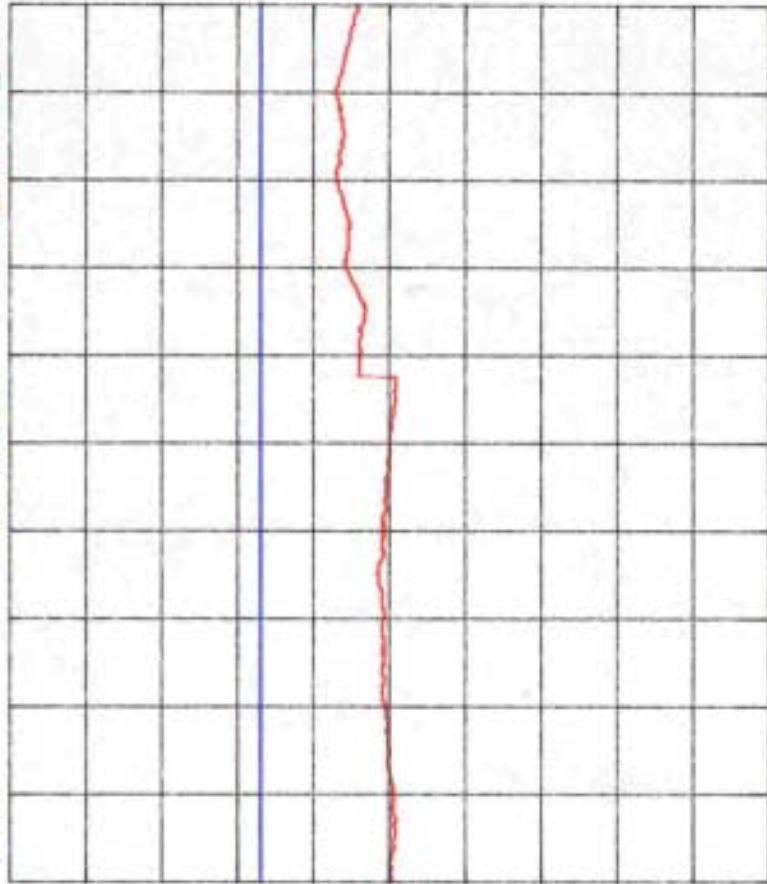




TEST: FCC RADIATED EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: 21G-25GHz SPEC: 15.247 ANT. HT/POL: H
DETECT: AVERAGE AMBIENT LINE UNDER TEST: N/A EUT POSITION:
DATE: 1-11-01 TEST SITE: 1 METER TESTER: *afg*

REF 97.0 dB μ V/m ATT 0 dB A_write B_blank
10dB/



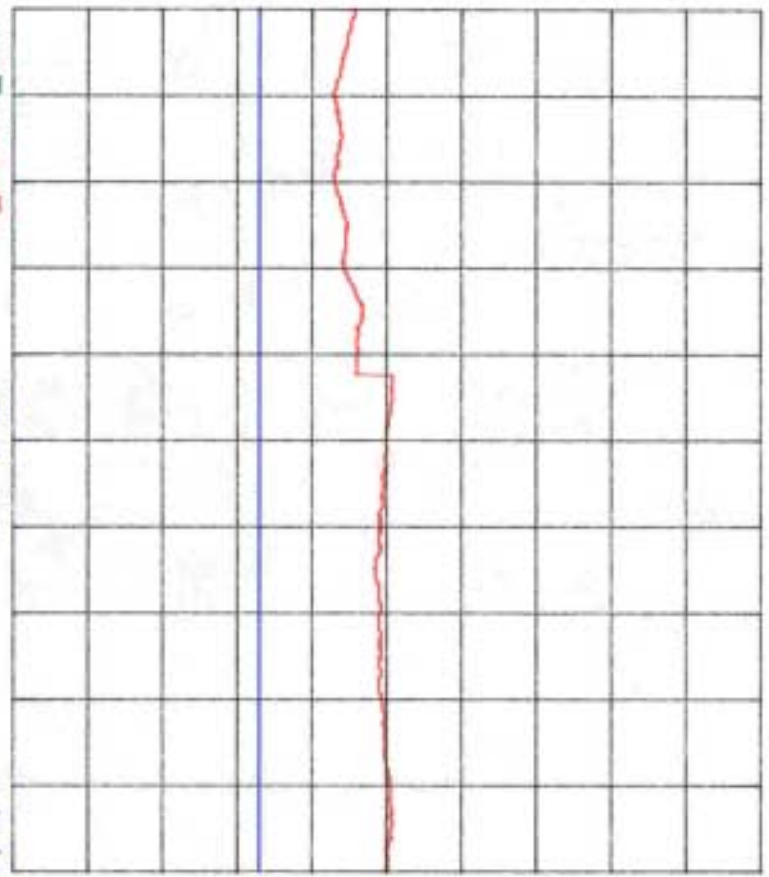
RBW 1 MHz
VBW 10 Hz
SWP 800 s

START 21.000 GHz STOP 25.000 GHz



TEST: FCC RADIATED EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: 21G-25GHz SPEC: 15.247 ANT.HI/POL: V
DETECT: AVERAGE AMBIENT LINE UNDER TEST: N/A EUT POSITION:
DATE: 1-11-01 TEST SITE: 1 METER TESTER:

REF 97.0 dB μ W/m ATT 0 dB A_write B_blank
10dB/



START 21.000 GHz STOP 25.000 GHz

RBW 1 MHz
VBW 10 Hz
SWP 800 s

DATA SHEET 6.3.3-24

6.4 Operation Within The Bands (2.4GHz-2.4835GHz)15.247(2)(b)(c)(d)

6.4.1 6dB Bandwidth 15.247(2)

The minimum 6dB bandwidth must be greater than 500KHz. Data Sheets 6.4.1-1 through 6.4.1-6 show the measured 6dB points to give bandwidths between 10.14 and 11.57MHz at the MIN, MID and MAX frequency tested. Data plots were made for the MIN and MAX data rates. The system exceeds the 500KHz minimum bandwidth.

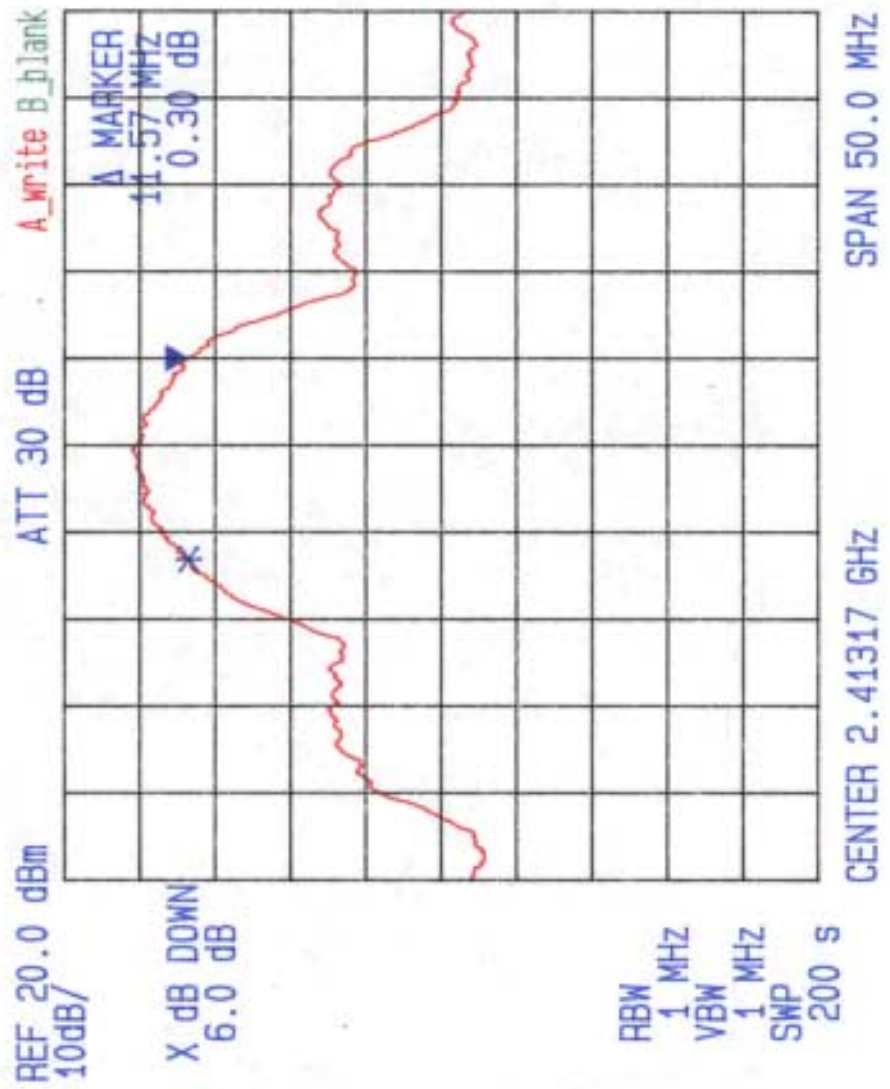
Photo 3 is representative of the 6dB bandwidth setup.



PHOTO 3

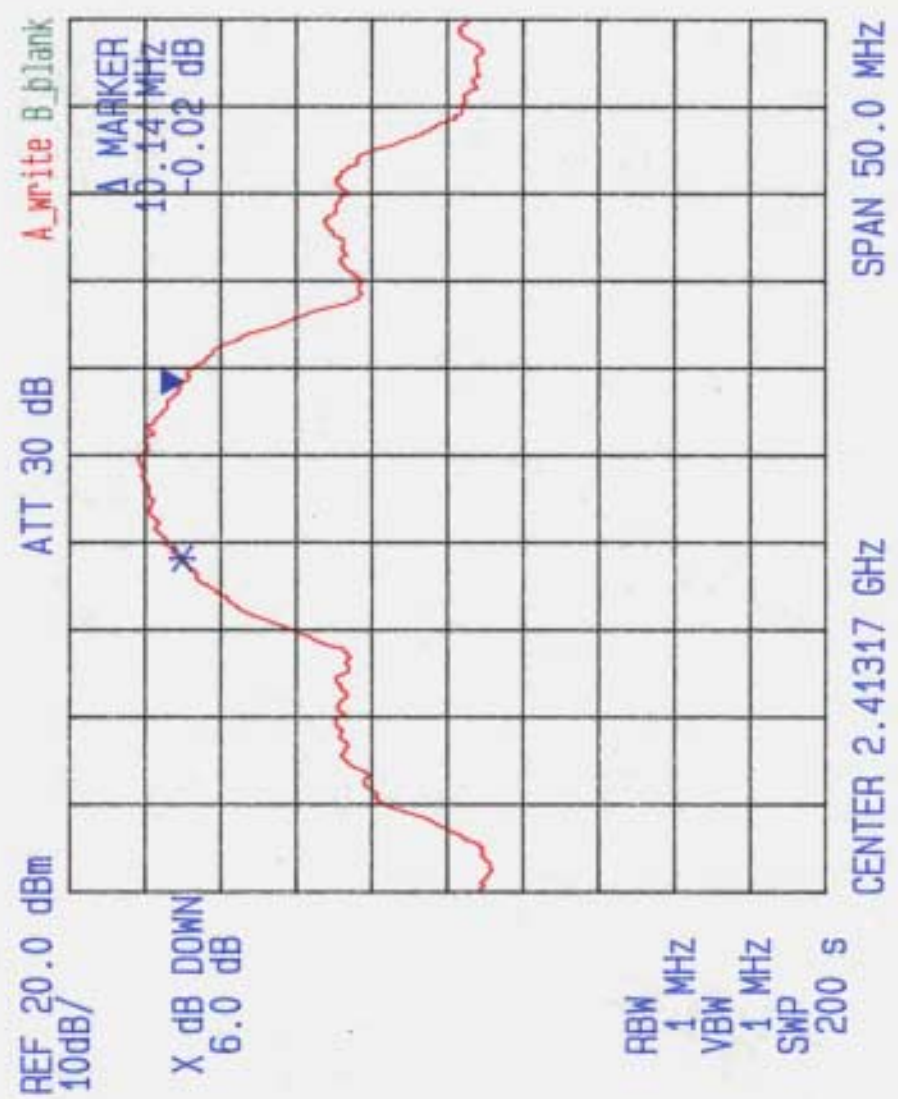


TEST: FCC 6dB BANDWIDTH EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: LOW CHANNEL SPEC: 15.247 (a) (2) ANT.HT/POL:
DETECT: PEAK LINE UNDER TEST: (1Mbps) EUT POSITION:
DATE: 1-10-01 TEST SITE: ROOM 1 TESTER: *AD*





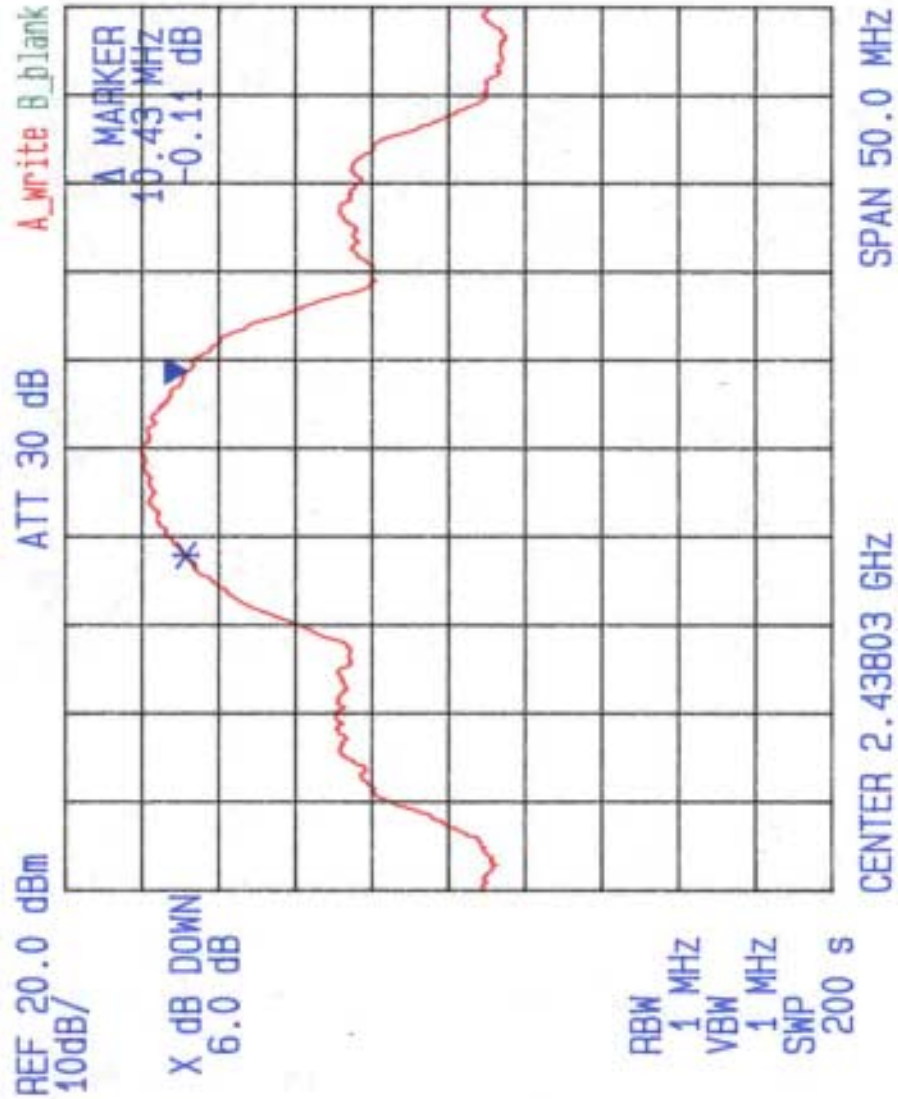
TEST: FCC 6dB BANDWIDTH EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: LOW CHANNEL SPEC: 15.247 (a) (2) ANT.HT/POL:
DETECT: PEAK LINE UNDER TEST: (11Mbps) EUT POSITION:
DATE: 1-18-01 TEST SITE: ROOM 1 TESTER: *ATB*



DATA SHEET 6.4.1-2

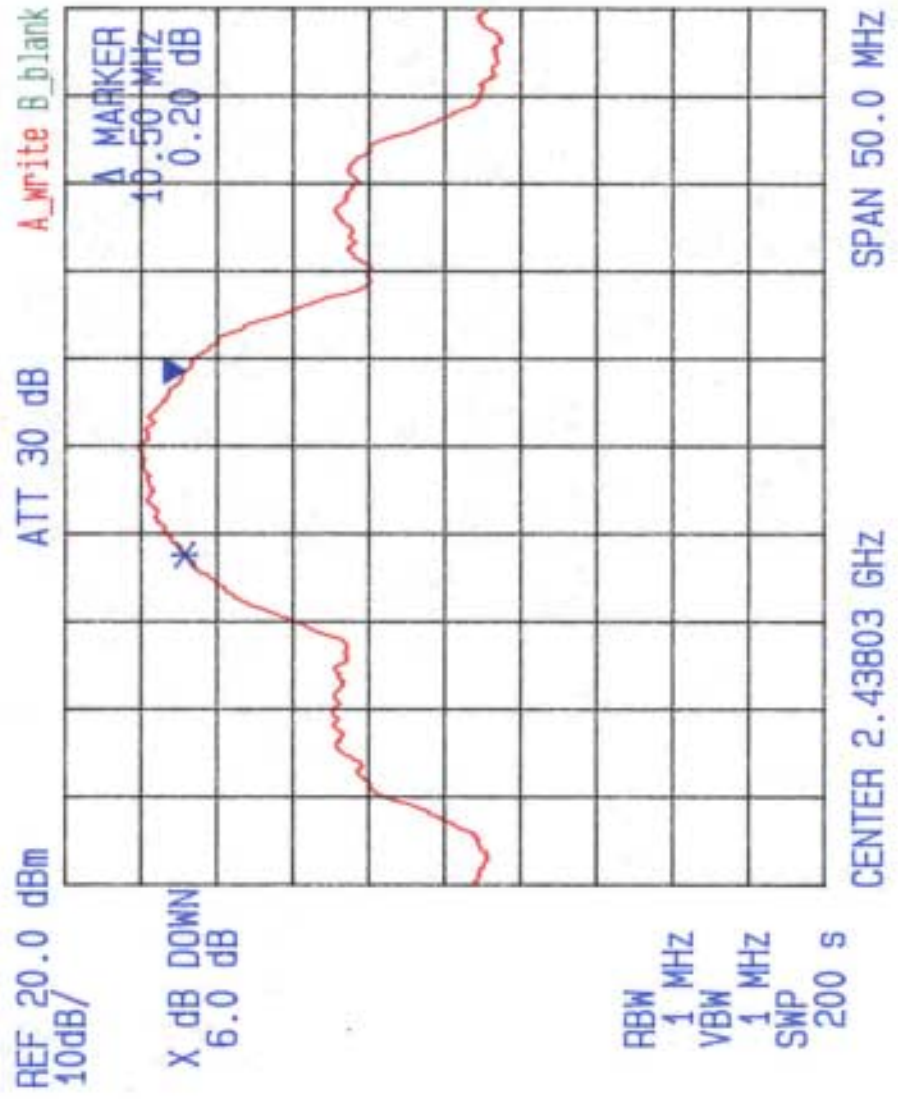


TEST: FCC 6dB BANDWIDTH EUT: ISL 36342U PRISM II USB	S/N: 00470005
FREQ: MID CHANNEL SPEC: 15.247 (a) (2)	ANT. HT/POL:
DETECT: PEAK LINE UNDER TEST: (1Mbps)	EUT POSITION:
DATE: (1-10-01)	TEST SITE: ROOM 1
	TESTER: (signature)



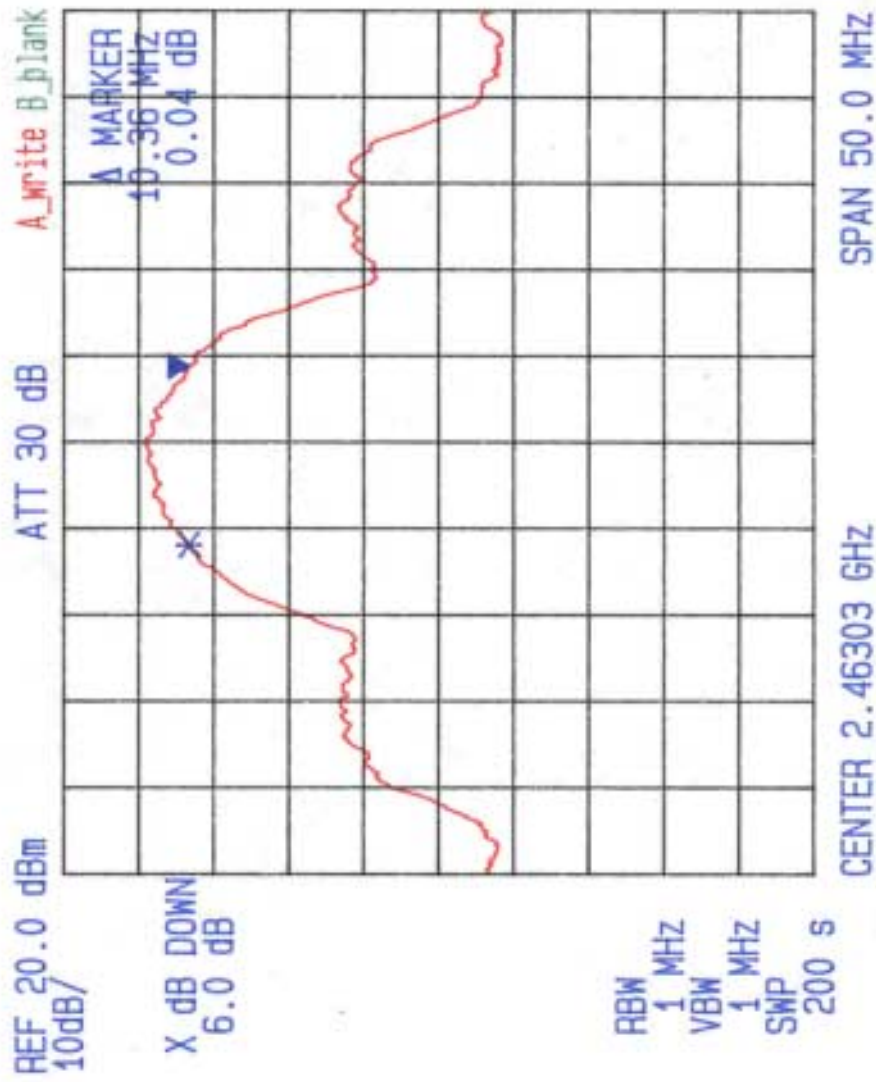


TEST: FCC 6dB BANDWIDTH EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: MID CHANNEL SPEC: 15.247 (a) (2) ANT. HT/POL:
DETECT: PEAK LINE UNDER TEST: (11Mbps) EUT POSITION:
DATE: 1-10-01 TEST SITE: ROOM 1 TESTER: *AS*



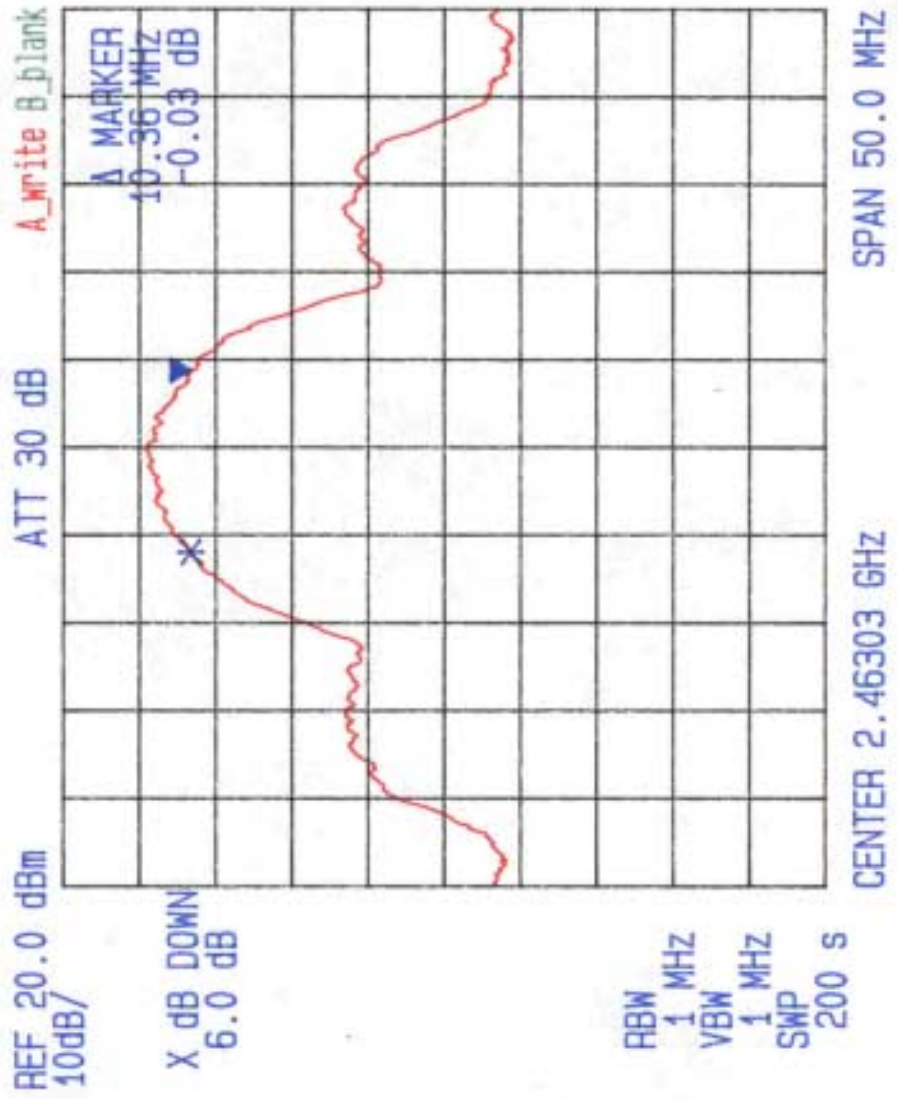


TEST: FCC 6dB BANDWIDTH EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: HIGH CHANNEL SPEC: 15.247 (a) (2) ANT.HT/POL:
DETECT: PEAK LINE UNDER TEST: (1Mbps) EUT POSITION:
DATE: 1-10-01 TEST SITE: ROOM 1 TESTER: *[Signature]*





TEST: FCC 6dB BANDWIDTH EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: HIGH CHANNEL SPEC: 15.247 (a) (2) ANT.HT/POL:
DETECT: PEAK LINE UNDER TEST: (11Mbps) EUT POSITION:
DATE: 1-16-01 TEST SITE: ROOM 1 TESTER: *ATB*



6.4.2 Peak Output Power 15.247(2)(b)

The peak output power to the antenna shall not exceed 1 watt.

The unit under test (UUT) was configured to continuously transmit. The highest emission level within the authorized band was measured. The peak power level is recorded below. The carrier frequency of the UUT was 2412MHz, 2437MHz and 2462MHz. The MID, MIN and MAX data rates were used.

The data is presented below for each frequency. All levels were below the 1 watt peak power limit.

MIN TX FREQ. 2412GHz	DATA RATE MIN - 14.7dBm MID - 14.7dBm MAX - 14.6dBm
MID TX FREQ. 2437GHz	DATA RATE MIN - 15.3dBm MID - 15.3dBm MAX - 15.2dBm
MAX TX FREQ. 2462GHz	DATA RATE MIN - 14.2dBm MID - 14.3dBm MAX - 14.3dBm

6.4.3 Out of Band Emission 15.247(2)(c)

Out of band measurements were made on the antenna port of the RF unit. The measurement was made over the 2-25GHz range using the 100KHz RBW. Data Sheets 6.4.3-1 through 6.4.3-6 present the scan across the entire range at the MIN, MID and MAX frequency. The plot demonstrates that there is greater than 20dB separation between the intended signal and any other signals in the range.

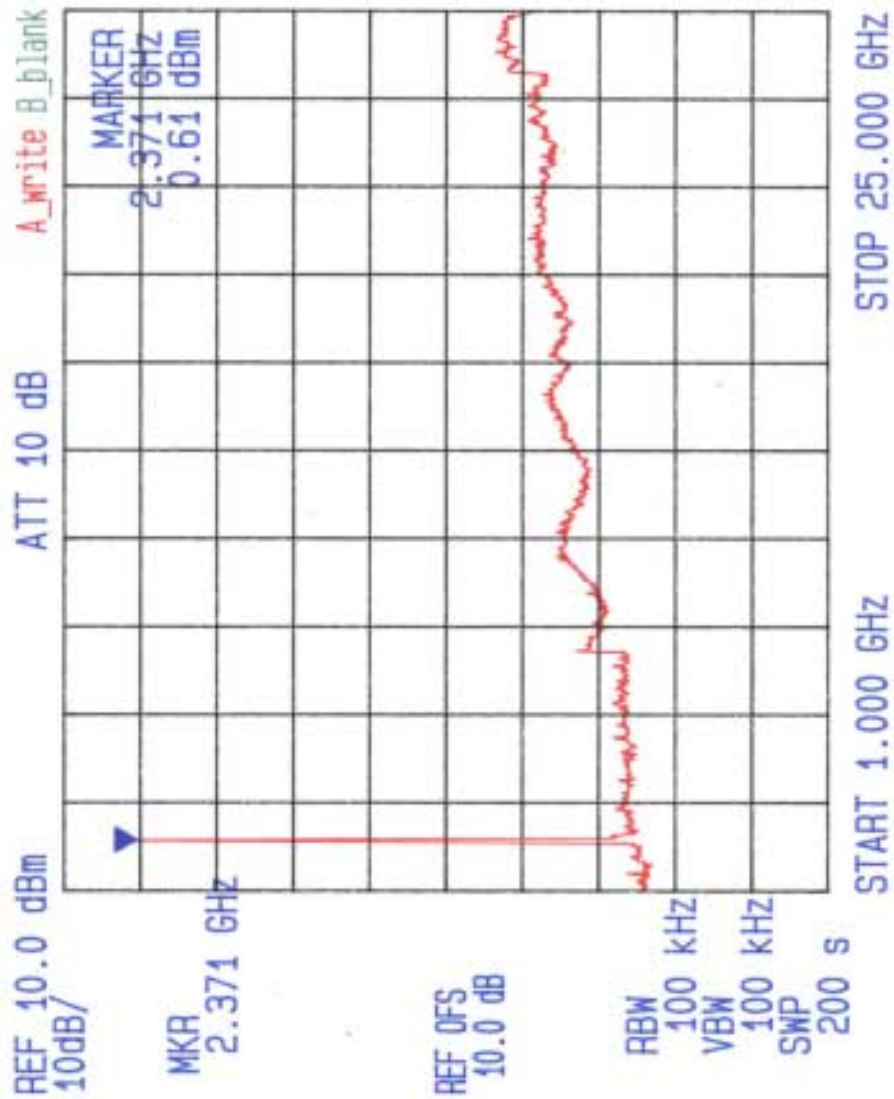
Data Sheets 6.4.3-7 is included to show the spectrum analyzer setup for restricted band testing where the start frequency and marker number "1" represented one restricted band (2.310-2.390GHz). Marker number "2" is the beginning of the 2.4835-2.5GHz restricted band. All signals falling into the restricted band were below the display line which represents the peak or average limit. These measurements were radiated measurements therefore are measured in both horizontal and vertical polarities.

Data Sheets 6.4.3-8 through 6.4.3-15 present the peak and average measurements for the low channel at the MIN and MAX data rates. Data Sheets 6.4.3-16 through 6.4.3-23 present the same data for the highest channel.

All signals that fall into the restricted bands are below the requirement of 15.209(a).

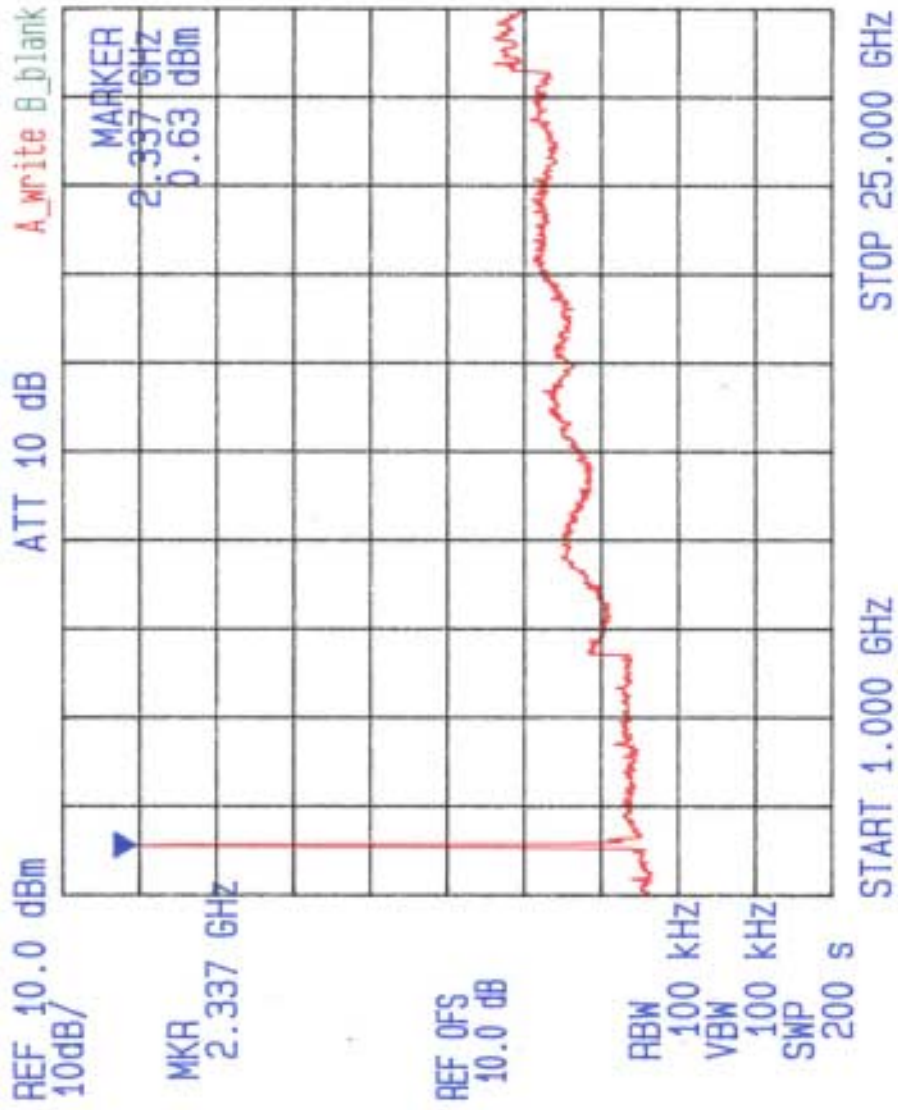


TEST: SPURIOUS EM. CON. EUT: ISL 36342U PRISM II USB S/N: 004700005
FREQ: 1GHz-25GHz SPEC: 15.247 (C) (1) ANT.HT/POL:
DETECT: PEAK (TRANSMIT) LINE UNDER TEST: LOW CH.(1Mbps) EUT POSITION:
DATE: 1-10-01 TEST SITE: ROOM 1 TESTER: *AD*



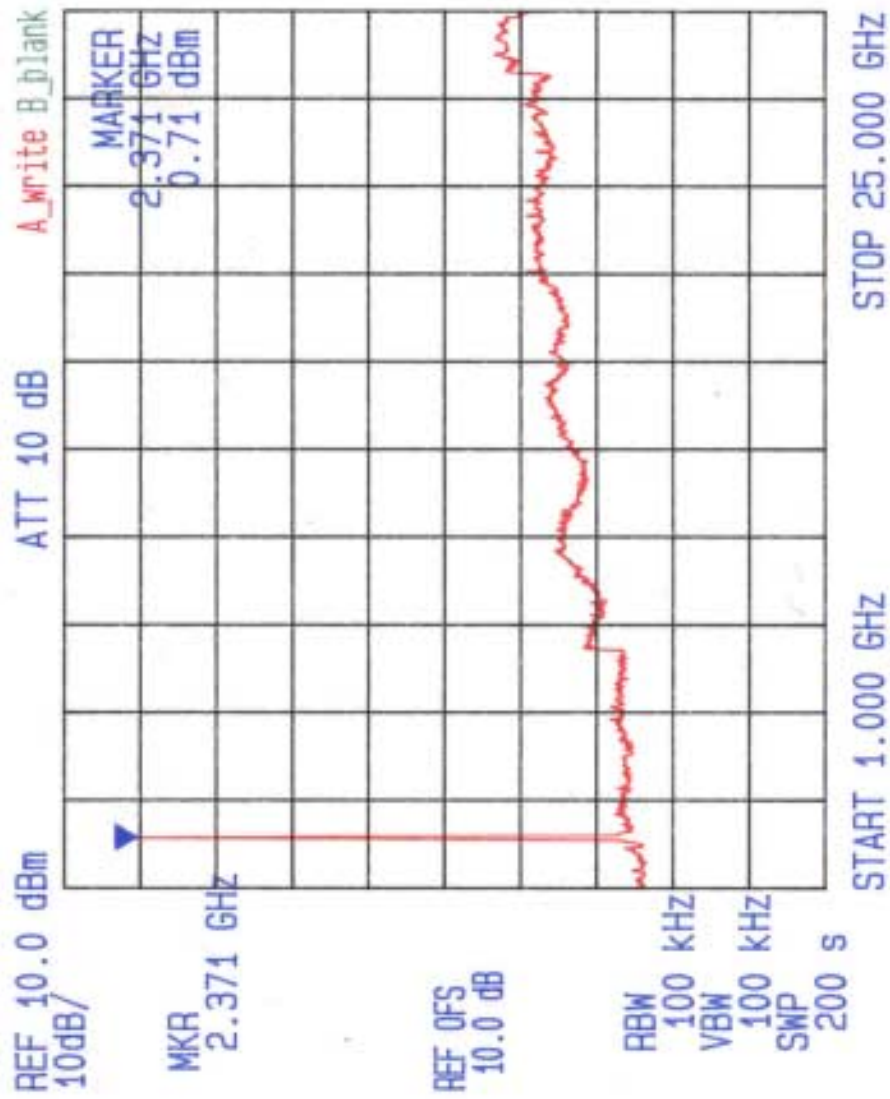


TEST: SPURIOUS EM. CON. EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: 1GHz-25GHz SPEC: 15.247 (C) (1) ANT.HT/POL:
DETECT: PEAK (TRANSMIT) LINE UNDER TEST: LOW CH.(11Mbps) EUT POSITION:
DATE: 1-10-01 TEST SITE: ROOM 1 TESTER: *[Signature]*



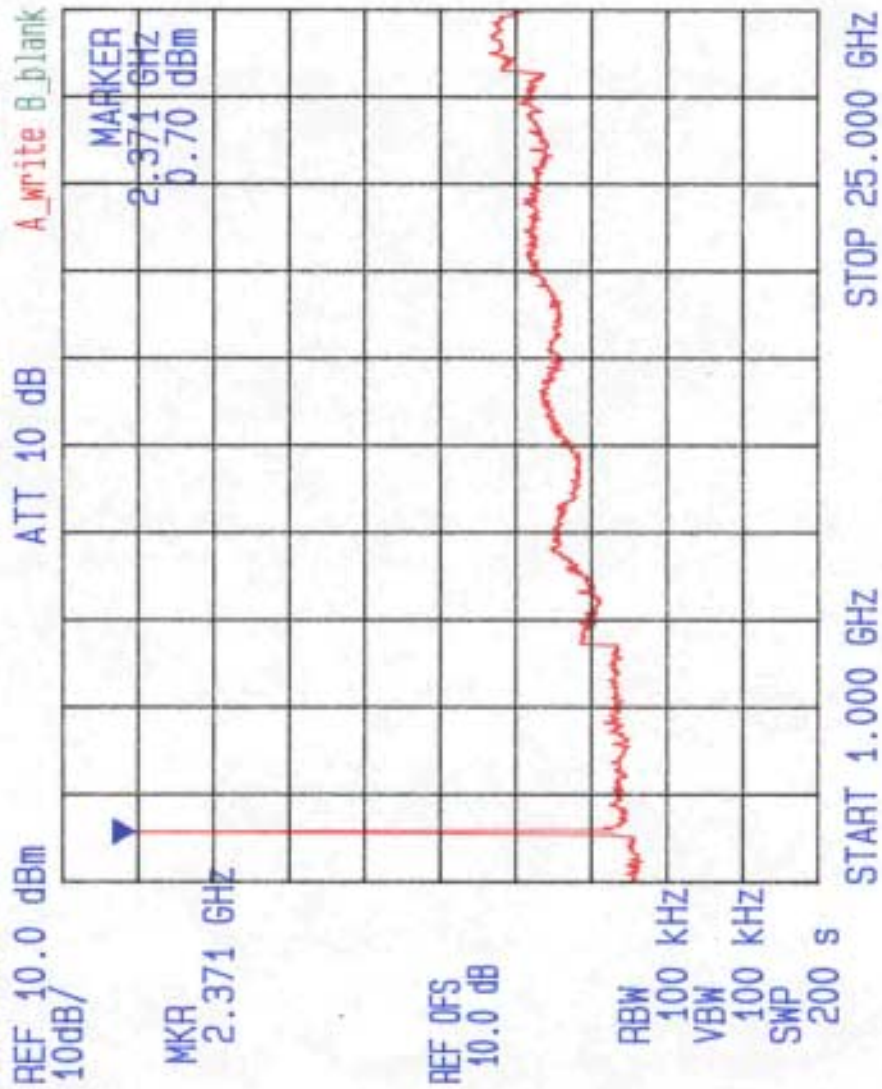


TEST: SPURIOUS EM. CON. EUT: ISL 36342U PRISM II USB S/N: 004700005
FREQ: 1GHz-25GHz SPEC: 15.247 (C) (1) ANT.HT/POL:
DETECT: PEAK (TRANSMIT) LINE UNDER TEST: MID CH.(1Mbps) EUT POSITION:
DATE: 1-10-01 TEST SITE: ROOM 1 TESTER: *AB*



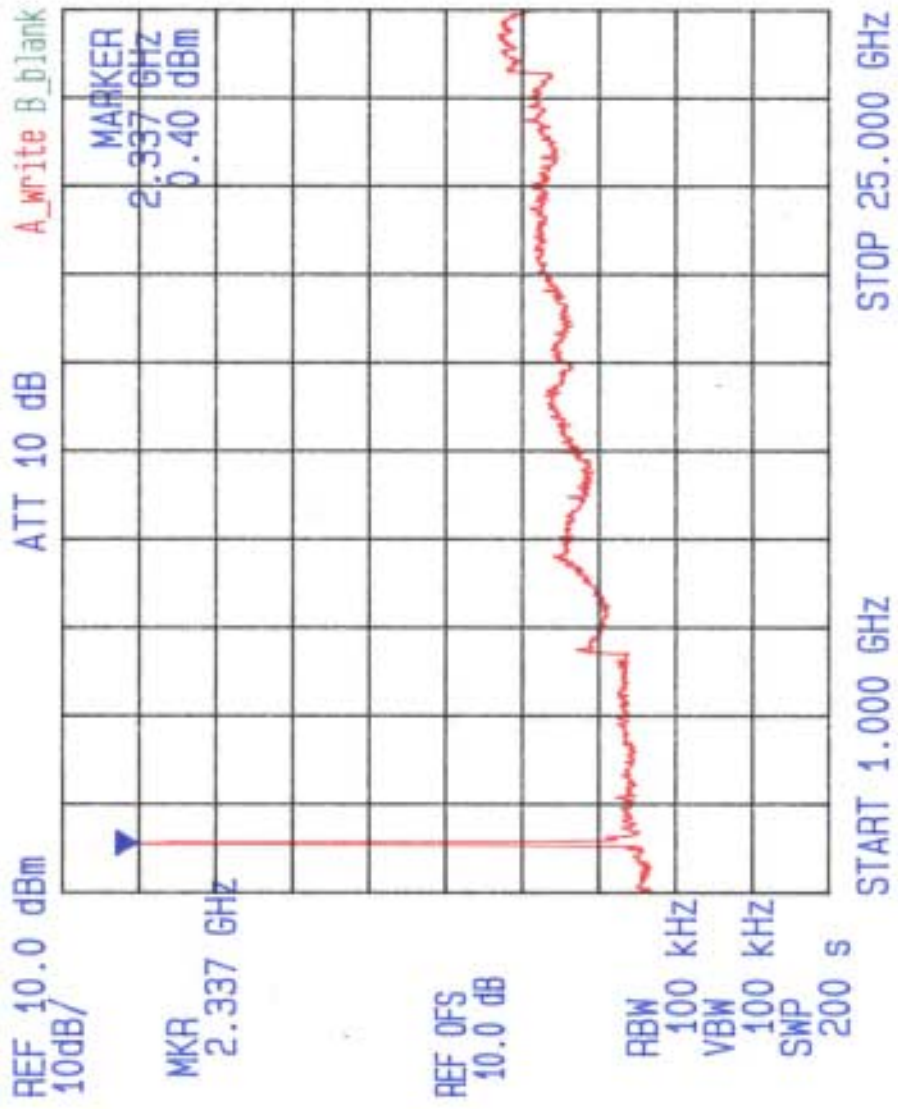


TEST: SPURIOUS EM. CON. EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: 1GHz-25GHz SPEC: 15.247 (C) (1) ANT.HI/POL:
DETECT: PEAK (TRANSMIT) LINE UNDER TEST: MID CH. (11Mbps) EUT POSITION:
DATE: 1-10-01 TEST SITE: ROOM 1 TESTER: *[Signature]*



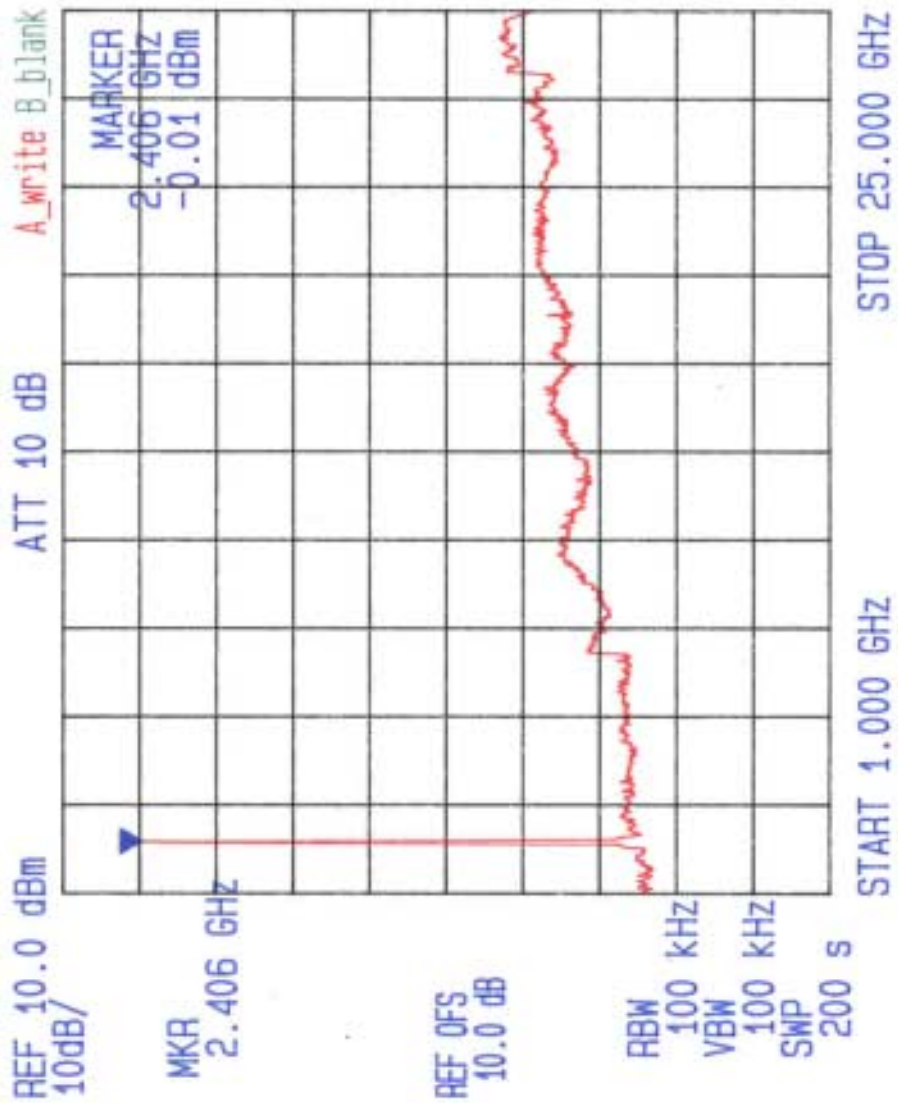


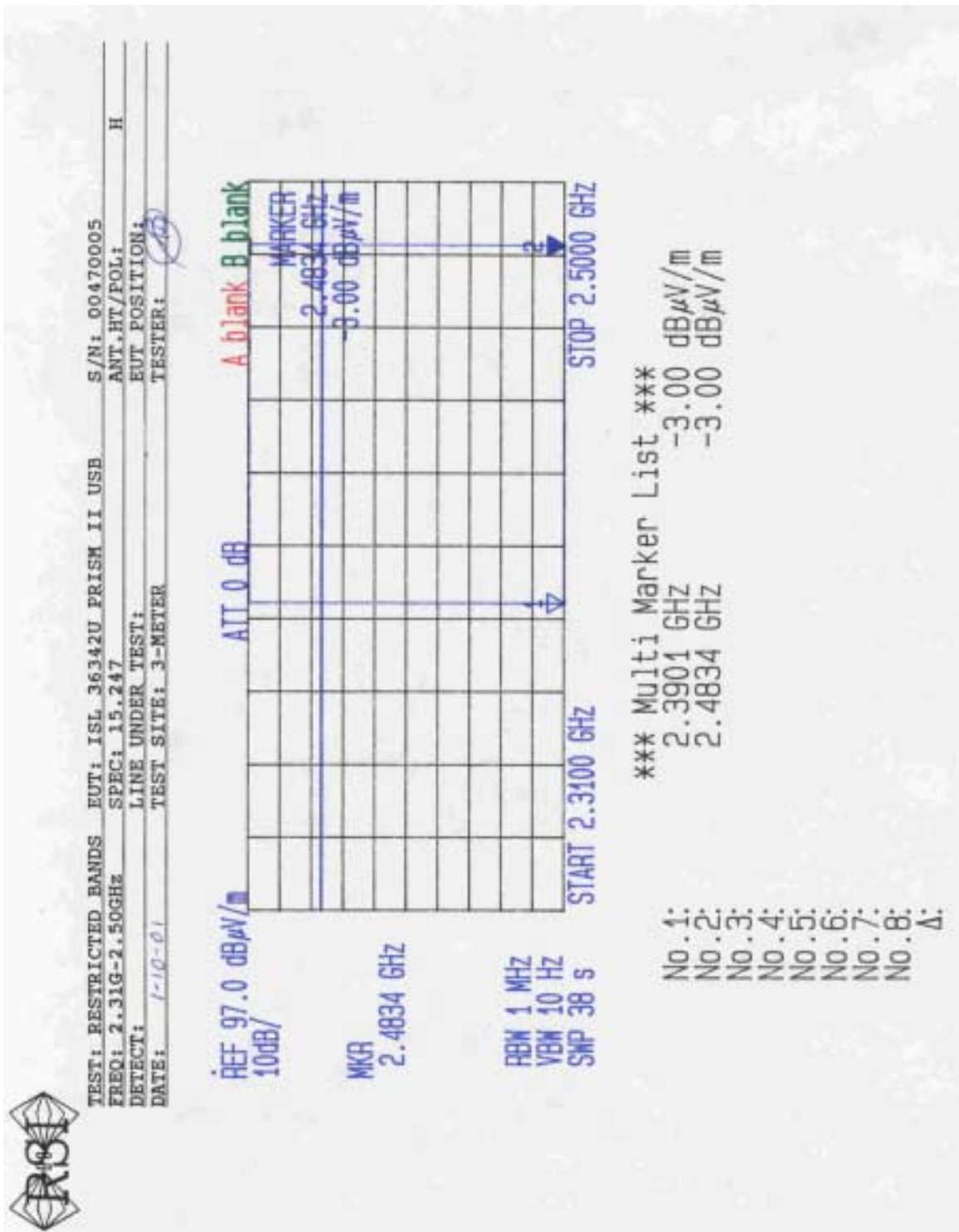
TEST: SPURIOUS EM. CON. EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: 1GHz-25GHz SPEC: 15.247 (C) (1) ANT.HT/POL:
DETECT: PEAK (TRANSMIT) LINE UNDER TEST: HIGH CH.(1Mbps) EUT POSITION:
DATE: 1-10-01 TEST SITE: ROOM 1 TESTER: *AD*





TEST: SPURIOUS EM. CON. EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: 1GHz-25GHz SPEC: 15.247 (C) (1) ANT.HT/POL:
DETECT: PEAK (TRANSMIT) LINE UNDER TEST: HIGH CH.(11Mbps) EUT POSITION:
DATE: 1-10-01 TEST SITE: ROOM 1 TESTER: *AG*



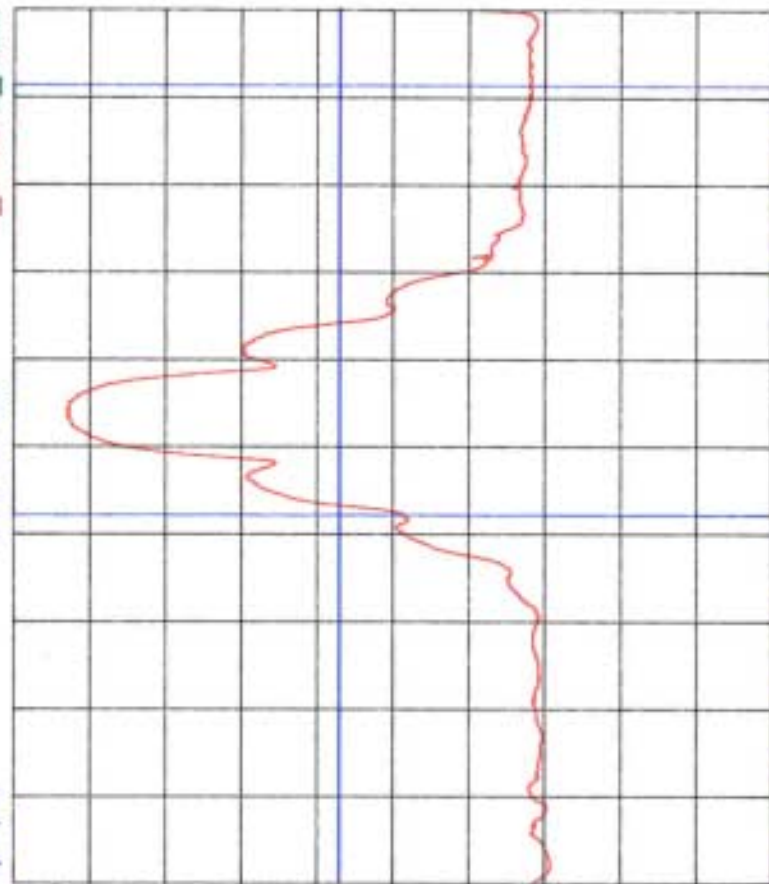


DATA SHEET 6.4.3-7



TEST: RESTRICTED BANDS	EUT: ISL 36342U PRISM II USB	S/N: 00470005
FREQ: 2.31G-2.50GHz	SPEC: 15.247	ANT. HT/POL: 1.5m H
DETECT: AVERAGE	LINE UNDER TEST: LOW CH. (1Mbps)	EUT POSITION: 123
DATE: 1-16-01	TEST SITE: 3-METER	TESTER: AB

REF 97.0 dB μ V/m ATT 0 dB A_write B_blank
10dB/

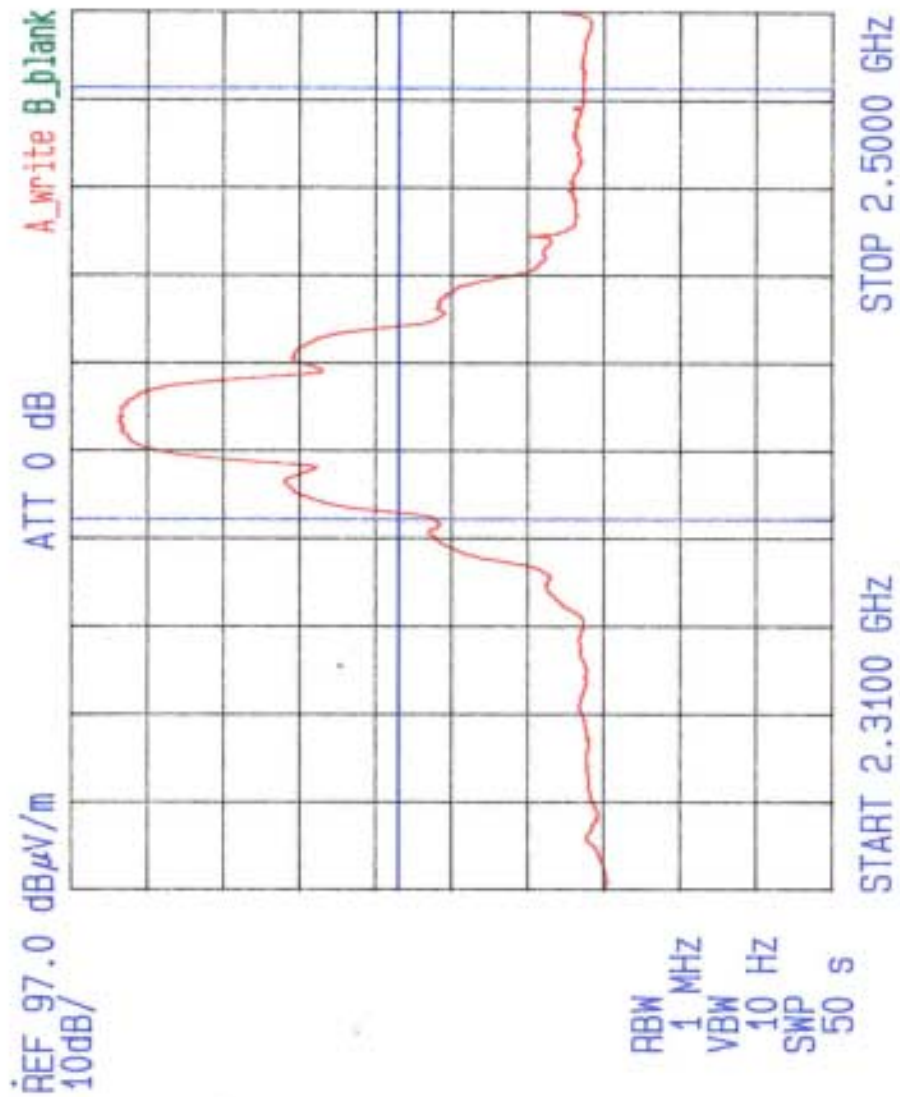


RBW 1 MHz
VBW 10 Hz
SWP 50 s

START 2.3100 GHz STOP 2.5000 GHz

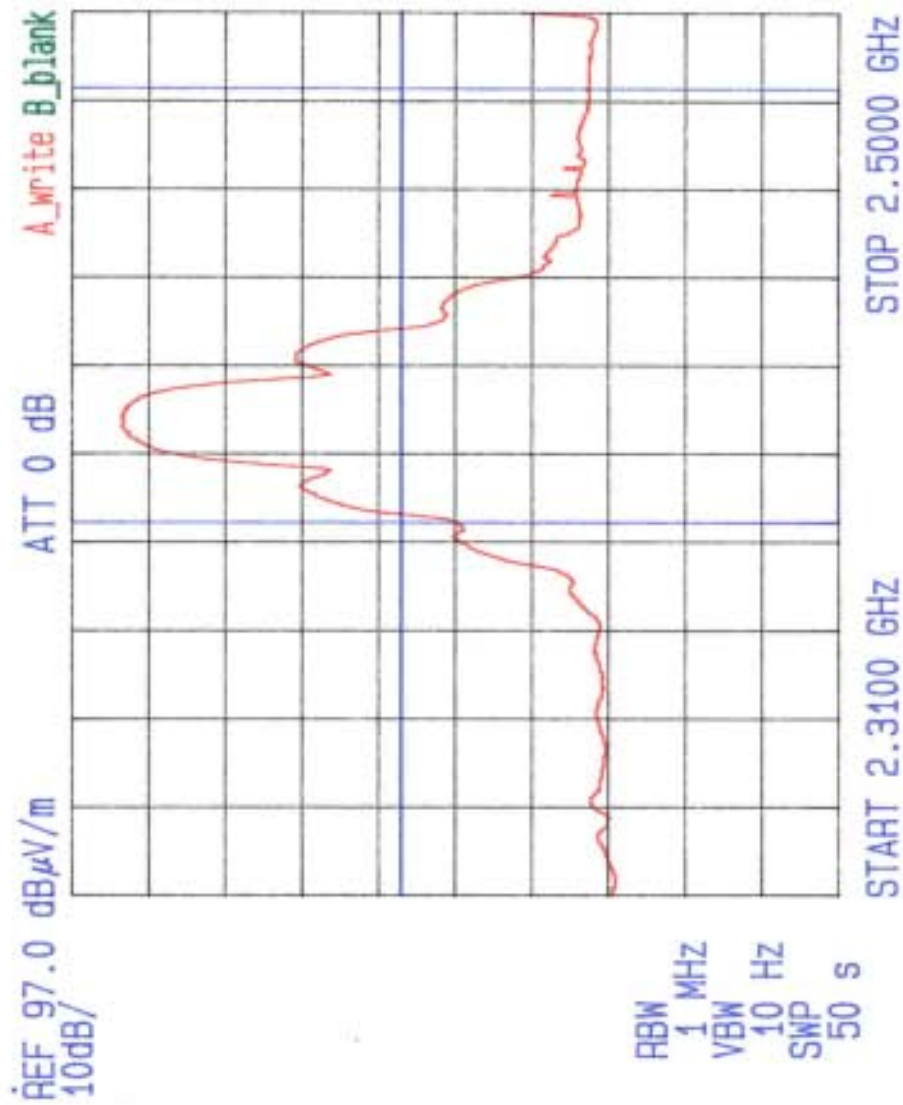


TEST: RESTRICTED BANDS EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: 2.31G-2.50GHz SPEC: 15.247 ANT. HT/POL: 1.5m \ V
DETECT: AVERAGE LINE UNDER TEST: LOW CH. (1Mbps) EUT POSITION: 180°
DATE: 1-18-01 TEST SITE: 3-METER TESTER:





TEST: RESTRICTED BANDS	EUT: ISL 36342U PRISM II USB	S/N: 00470005
FREQ: 2.31G-2.50GHz	SPEC: 15.247	ANT.HT/POL: 12.5m\H
DETECT: AVERAGE	LINE UNDER TEST: LOW CH.(11Mbps)	EUT POSITION: 2.25m
DATE: 1-10-01	TEST SITE: 3-METER	TESTER: <i>AB</i>



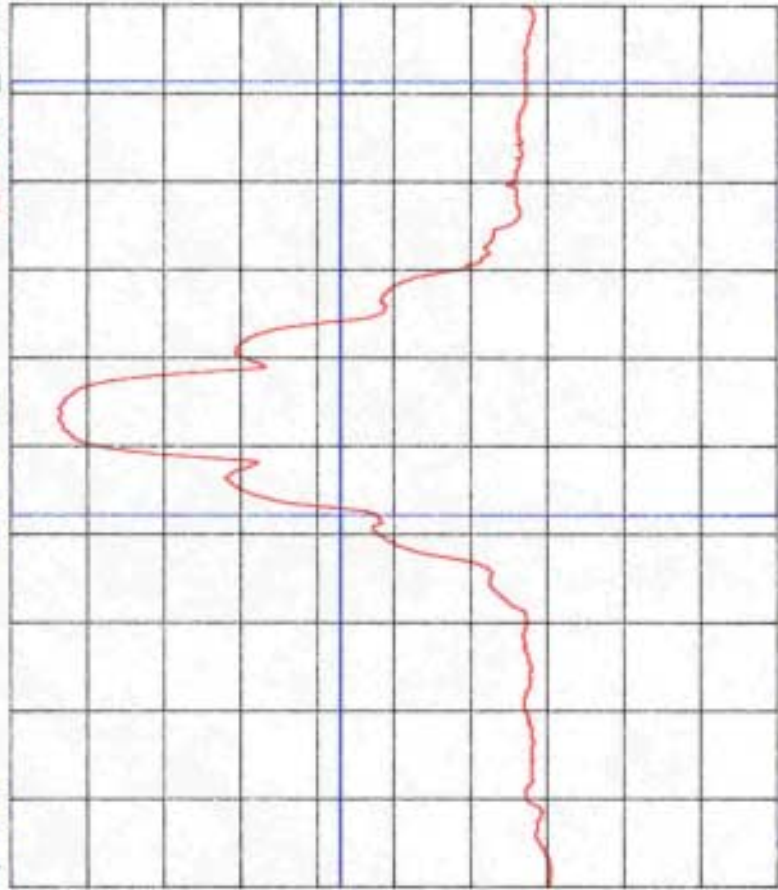


TEST: RESTRICTED BANDS	EUT: ISL 36342U PRISM II USB	S/N: 00470005
FREQ: 2.31G-2.50GHz	SPEC: 15.247	ANT.HT/FOL: 1.5m \ V
DETECT: AVERAGE	LINE UNDER TEST: LOW CH. (11Mbps)	EUT POSITION: 180
DATE: 1-16-01	TEST SITE: 3-METER	TESTER: <u>AK</u>

REF 97.0 dB μ V/m
10dB/

ATT 0 dB

A_write B_blank



START 2.3100 GHz

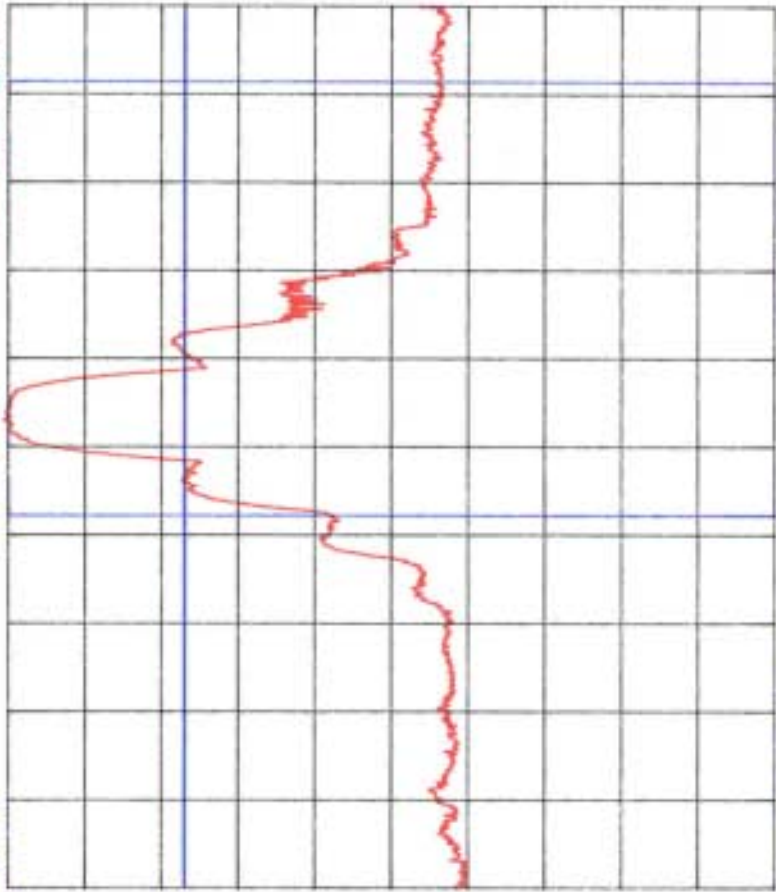
STOP 2.5000 GHz

RBW 1 MHz
VBW 10 Hz
SWP 50 s



TEST: RESTRICTED BANDS	EUT: ISL 36342U PRISM II USB	S/N: 004700005
FREQ: 2.31G-2.50GHz	SPEC: 15.247	ANT.HT/POL: 1.25m H
DETECT: PEAK	LINE UNDER TEST: LOW CH.(11Mbps)	EUT POSITION: 225°
DATE: 1-10-01	TEST SITE: 3-METER	TESTER:

REF 97.0 dB μ V/m ATT 0 dB A_write B_blank



RBW 1 MHz
VBW 1 MHz
SWP 50 s

START 2.3100 GHz STOP 2.5000 GHz

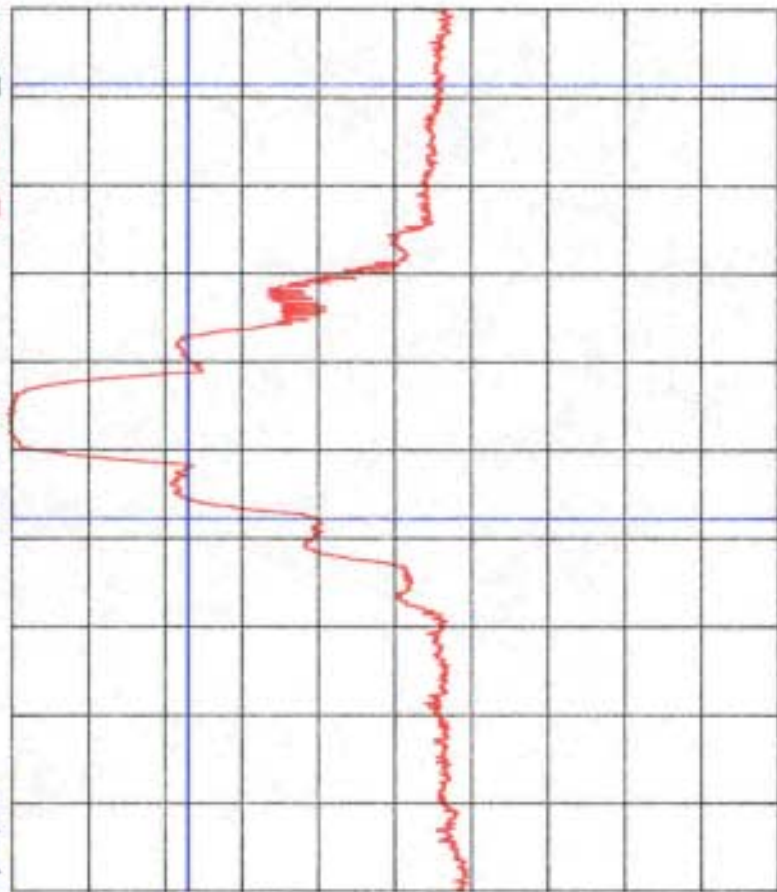


TEST: RESTRICTED BANDS	EUT: ISL 36342U PRISM II USB	S/N: 00470005
FREQ: 2.31G-2.50GHz	SPEC: 15.247	ANT.HT/POL: 1.5m\ V
DETECT: PEAK	LINE UNDER TEST: LOW CH.(11Mbps)	EUT POSITION: 150
DATE: 1-10-01	TEST SITE: 3-METER	TESTER: <i>AB</i>

REF 97.0 dB μ V/m
10dB/

ATT 0 dB

A_write B_blank



START 2.3100 GHz

STOP 2.5000 GHz

RBW 1 MHz
VBW 1 MHz
SWP 50 s

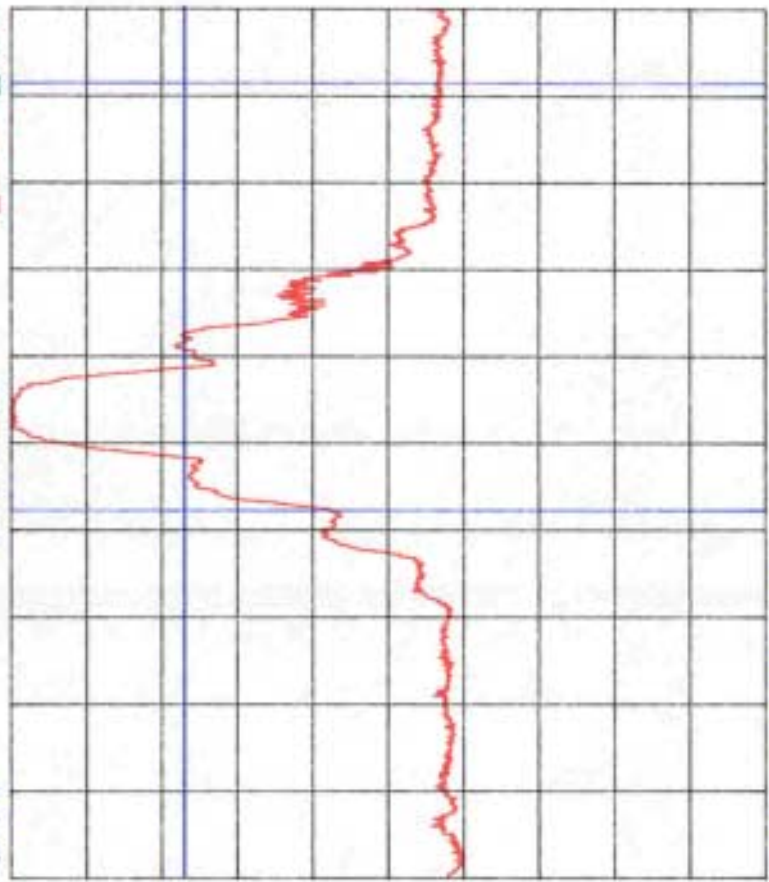


TEST: RESTRICTED BANDS	EUT: ISL 36342U PRISM II USE	S/N: 00470005
FREQ: 2.31G-2.50GHz	SPEC: 15.247	ANT.HT/POL: 1.5m H
DETECT: PEAK	LINE UNDER TEST: LOW CH.(1Mbps)	EUT POSITION: 120
DATE: 1-10-01	TEST SITE: 3-METER	TESTER: <i>[Signature]</i>

REF 97.0 dB μ V/m
10dB/

ATT 0 dB

A_write B_blank



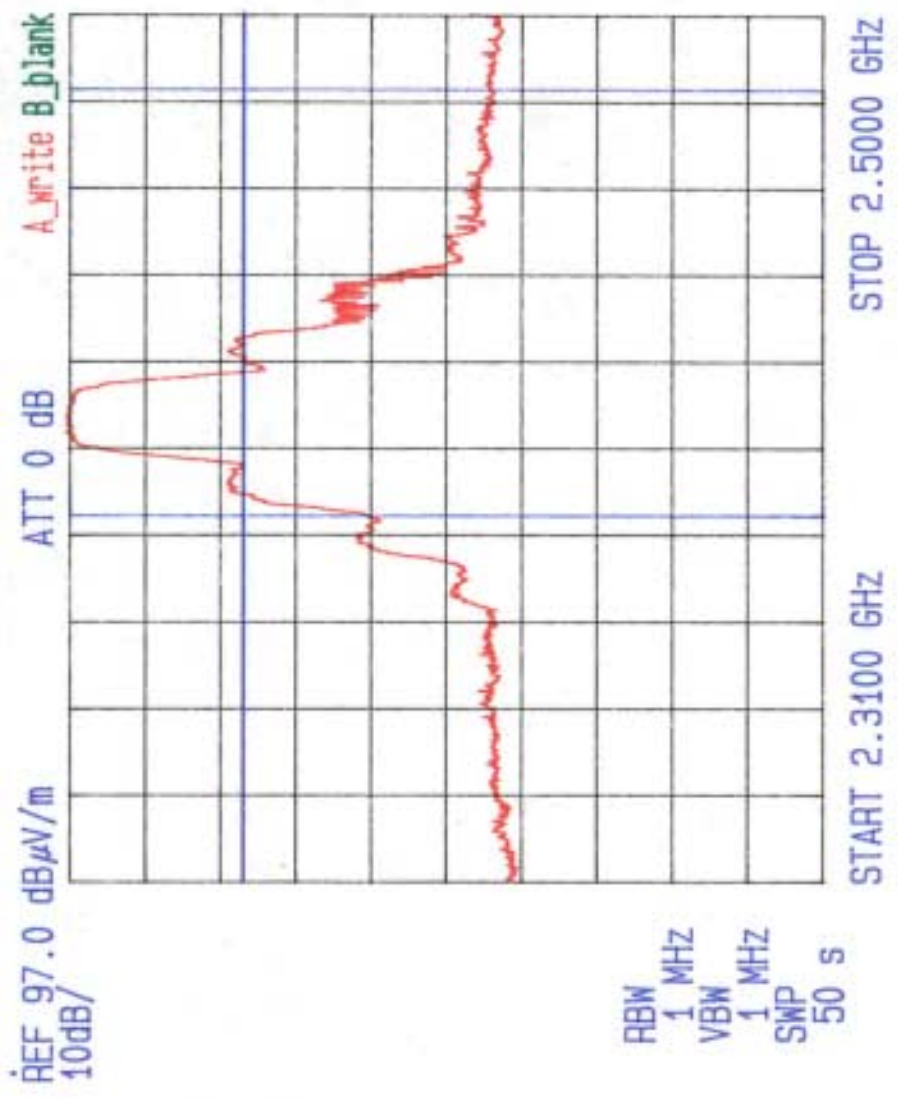
START 2.3100 GHz

STOP 2.5000 GHz

RBW 1 MHz
VBW 1 MHz
SWP 50 s



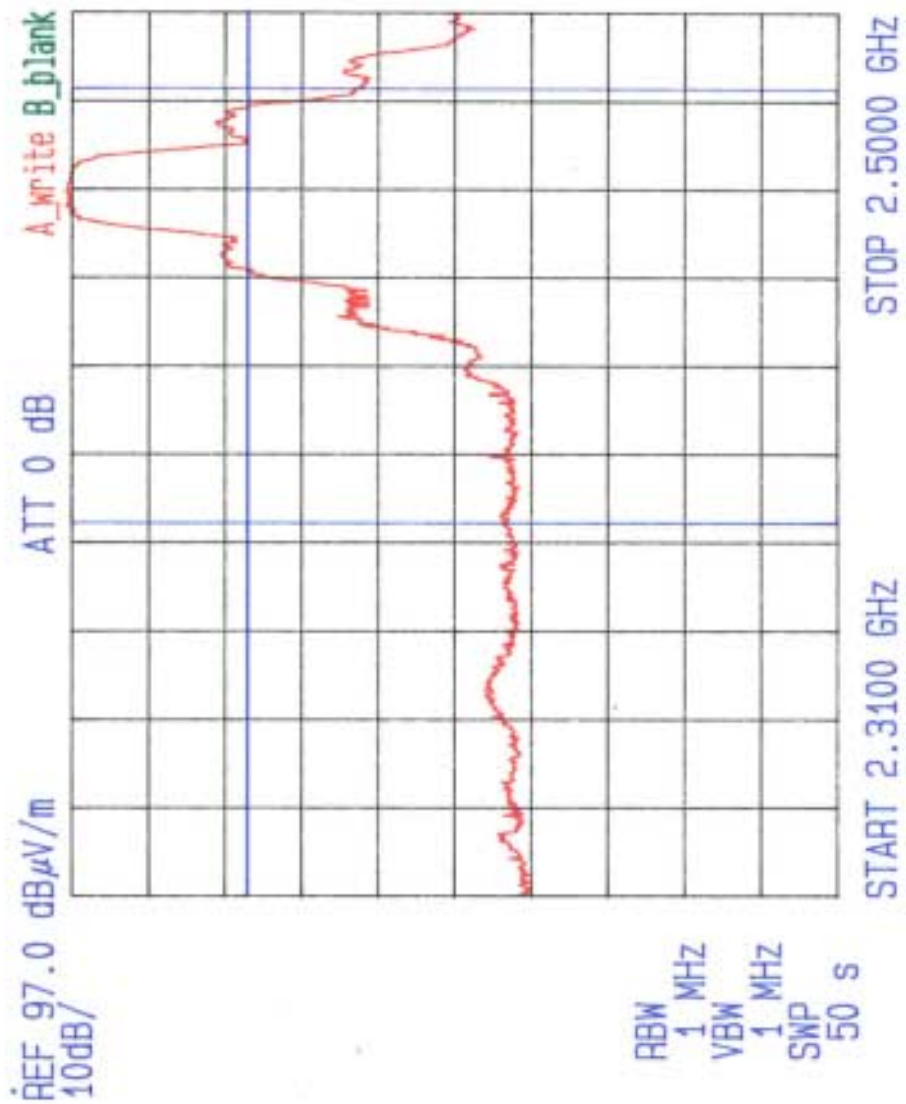
TEST: RESTRICTED BANDS EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: 2.31G-2.50GHz SPEC: 15.247 ANT.HT/POL: 1.5m\ V
DETECT: PEAK LINE UNDER TEST: LOW CH.(1Mbps) EUT POSITION: 1A0
DATE: 1-10-01 TEST SITE: 3-METER TESTER: *AB*



DATA SHEET 6.4.3-15



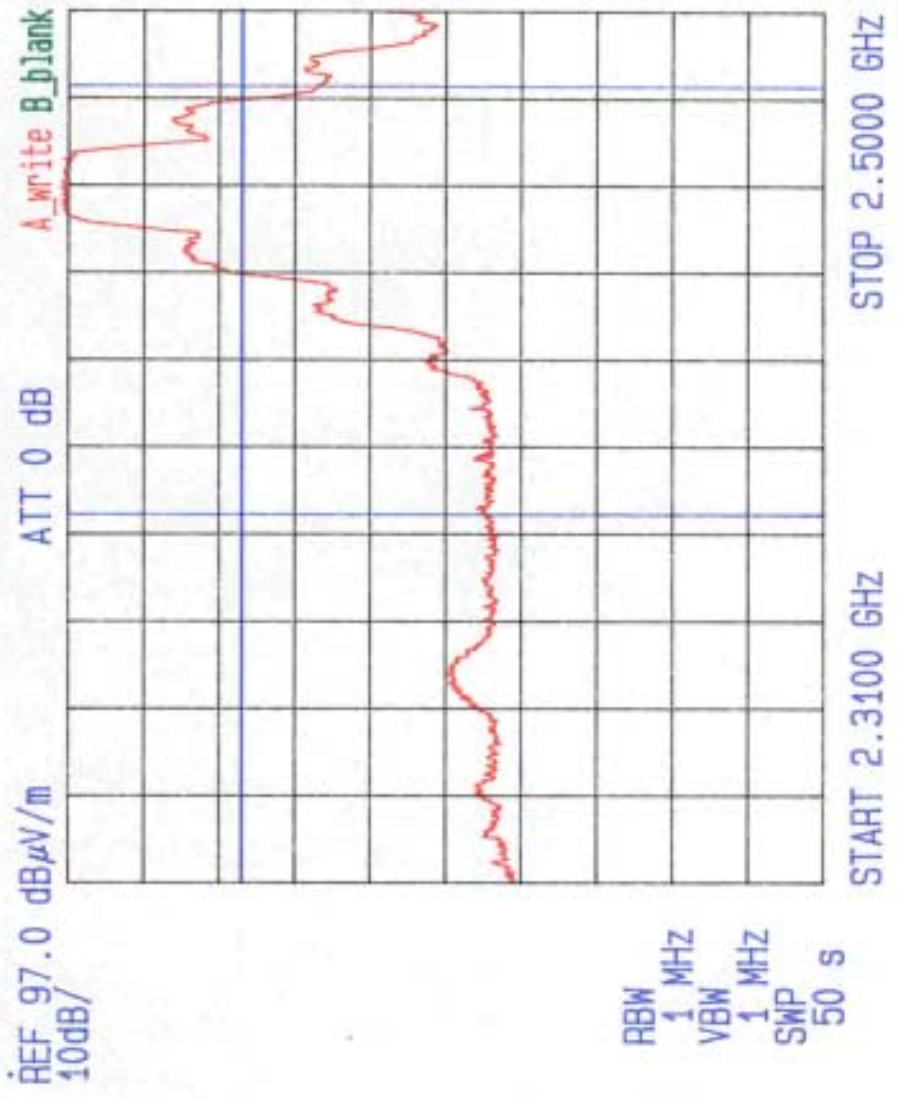
TEST: RESTRICTED BANDS	EUT: ISL 36342U PRISM II USB	S/N: 00470005
FREQ: 2.31G-2.50GHz	SPEC: 15.247	ANT.HT/POL: 15° \ H
DETECT: PEAK	LINE UNDER TEST: HIGH CH.(1Mbps)	EUT POSITION: 225'
DATE: 1-10-01	TEST SITE: 3-METER	TESTER: <i>AB</i>



DATA SHEET 6.4.3-16



TEST: RESTRICTED BANDS	EUT: ISL 36342U PRISM II USB	S/N: 00470005
FREQ: 2.31G-2.50GHz	SPEC: 15.247	ANT. HT/POL: 1.25uV
DETECT: PEAK	LINE UNDER TEST: HIGH CH. (1Mbps)	EUT POSITION: 152'
DATE: 1-10-01	TEST SITE: 3-METER	TESTER: [Signature]



DATA SHEET 6.4.3-17



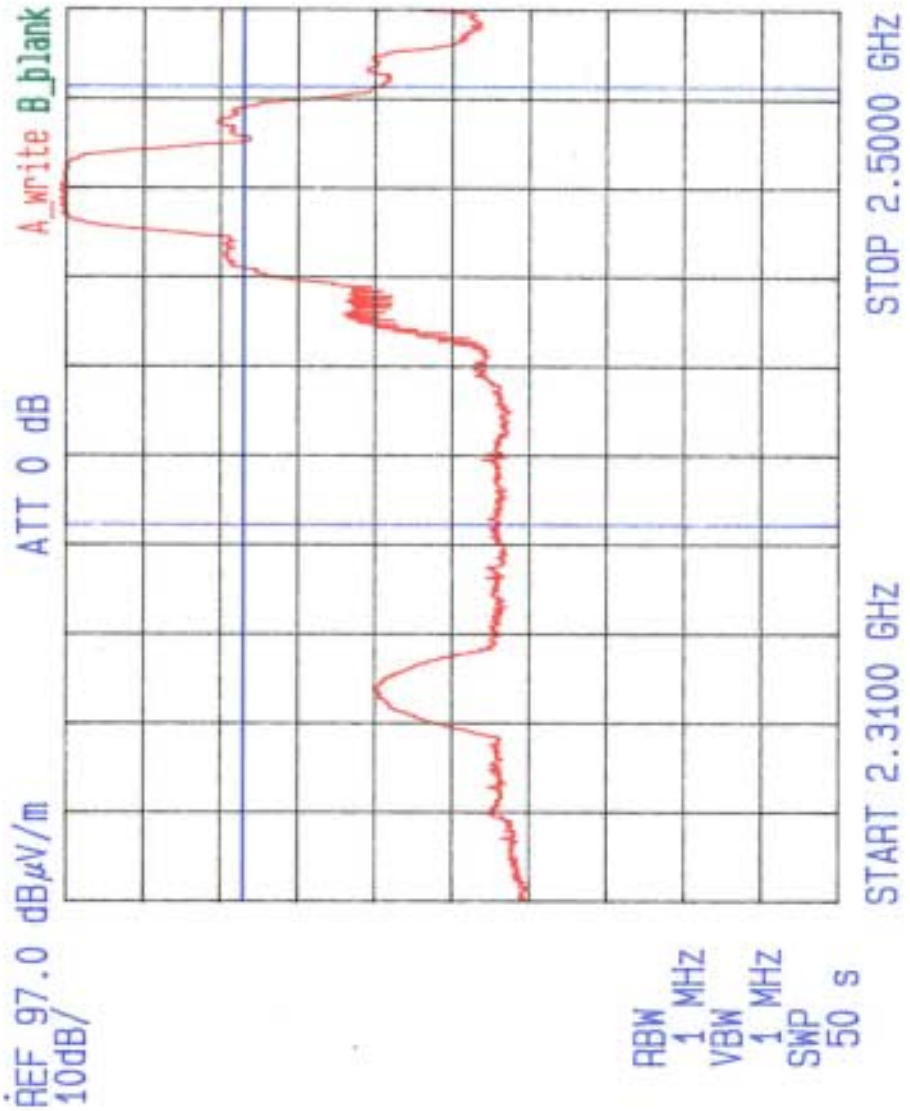
TEST: RESTRICTED BANDS EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: 2.31G-2.50GHz SPEC: 15.247 ANT. HT/POL: 1.5m H
DETECT: PEAK LINE UNDER TEST: HIGH CH. (11Mbps) EUT POSITION: 247°
DATE: 1-10-01 TEST SITE: 3-METER TESTER: *CHB*



DATA SHEET 6.4.3-18



TEST: RESTRICTED BANDS	EUT: ISL 36342U PRISM II USB	S/N: 00470005
FREQ: 2.31G-2.50GHz	SPEC: 15.247	ANT.HT/POL: 1, 2, 3, 4 V
DETECT: PEAK	LINE UNDER TEST: HIGH CH. (11Mbps)	EUT POSITION: 1A00
DATE: 1-10-01	TEST SITE: 3-METER	TESTER: (Signature)



DATA SHEET 6.4.3-19

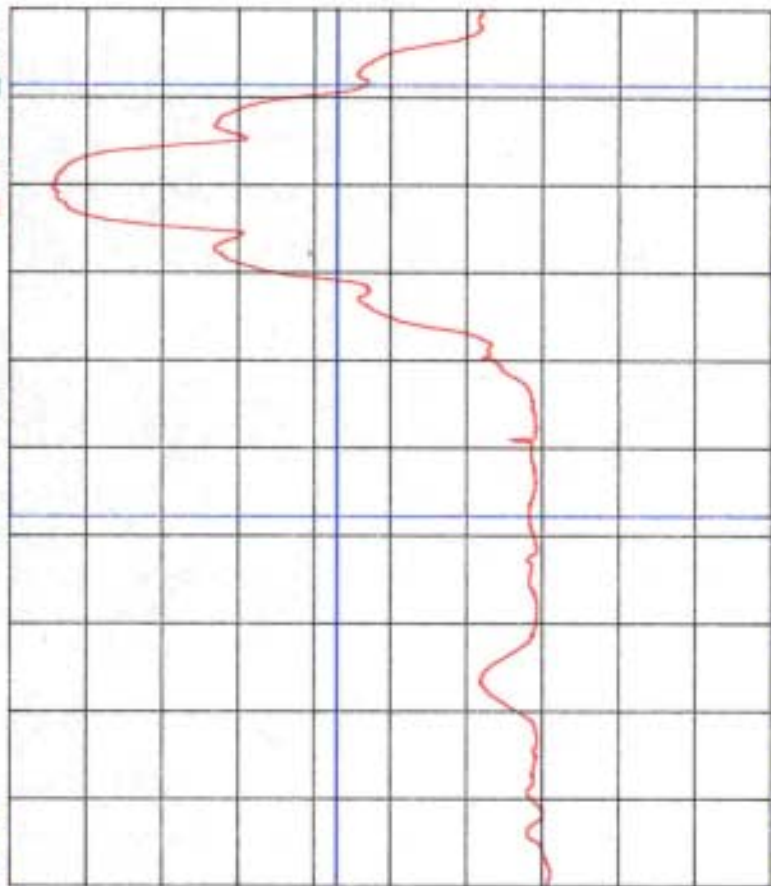


TEST: RESTRICTED BANDS	EUT: ISL 36342U PRISM II USB	S/N: 00470005
FREQ: 2.31G-2.50GHz	SPEC: 15.247	ANT.HT/POL: 1.5m\ H
DETECT: AVERAGE	LINE UNDER TEST: HIGH CH. (Mbps)	EUT POSITION: 225"
DATE: 1-10-01	TEST SITE: 3-METER	TESTER:

REF 97.0 dB μ V/m
10dB/

ATT 0 dB

A_write B_blank



START 2.3100 GHz

STOP 2.5000 GHz

RBW 1 MHz
VBW 10 Hz
SWP 50 s

DATA SHEET 6.4.3-20

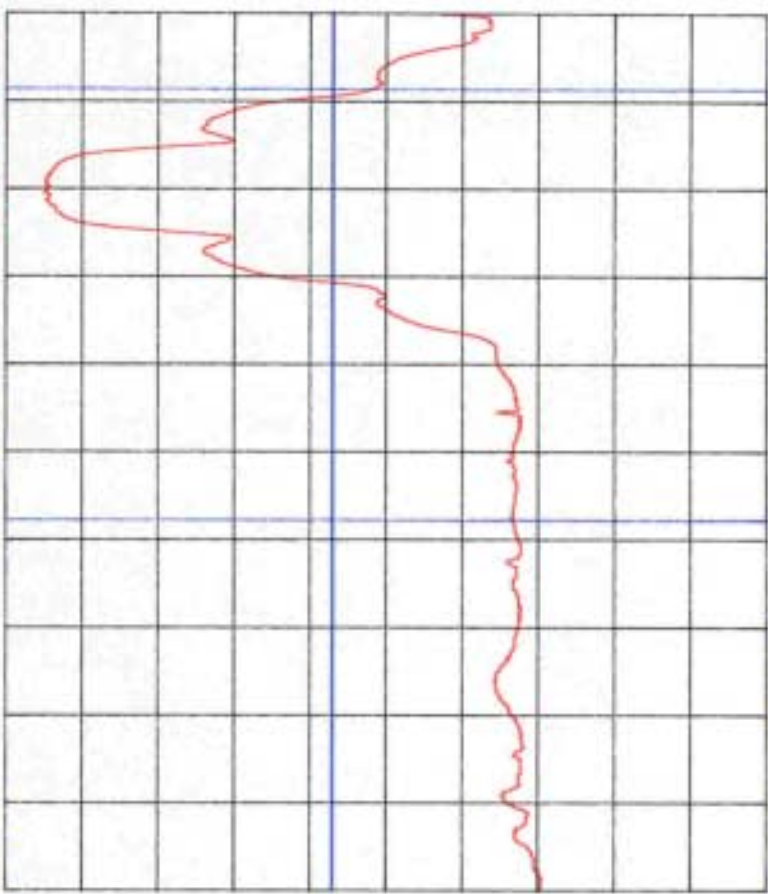


TEST: RESTRICTED BANDS	EUT: ISL 36342U PRISM II USB	S/N: 004700005
FREQ: 2.31G-2.50GHz	SPEC: 15.247	ANT. HT/POL: 1.25m\ V
DETECT: AVERAGE	LINE UNDER TEST: HIGH CH.(1Mbps)	EUT POSITION: 157°
DATE: 1-10-01	TEST SITE: 3-METER	TESTER: AB

REF 97.0 dB μ V/m
10dB/

ATT 0 dB

A_write B_blank



RBW 1 MHz
VBW 10 Hz
SWP 50 s

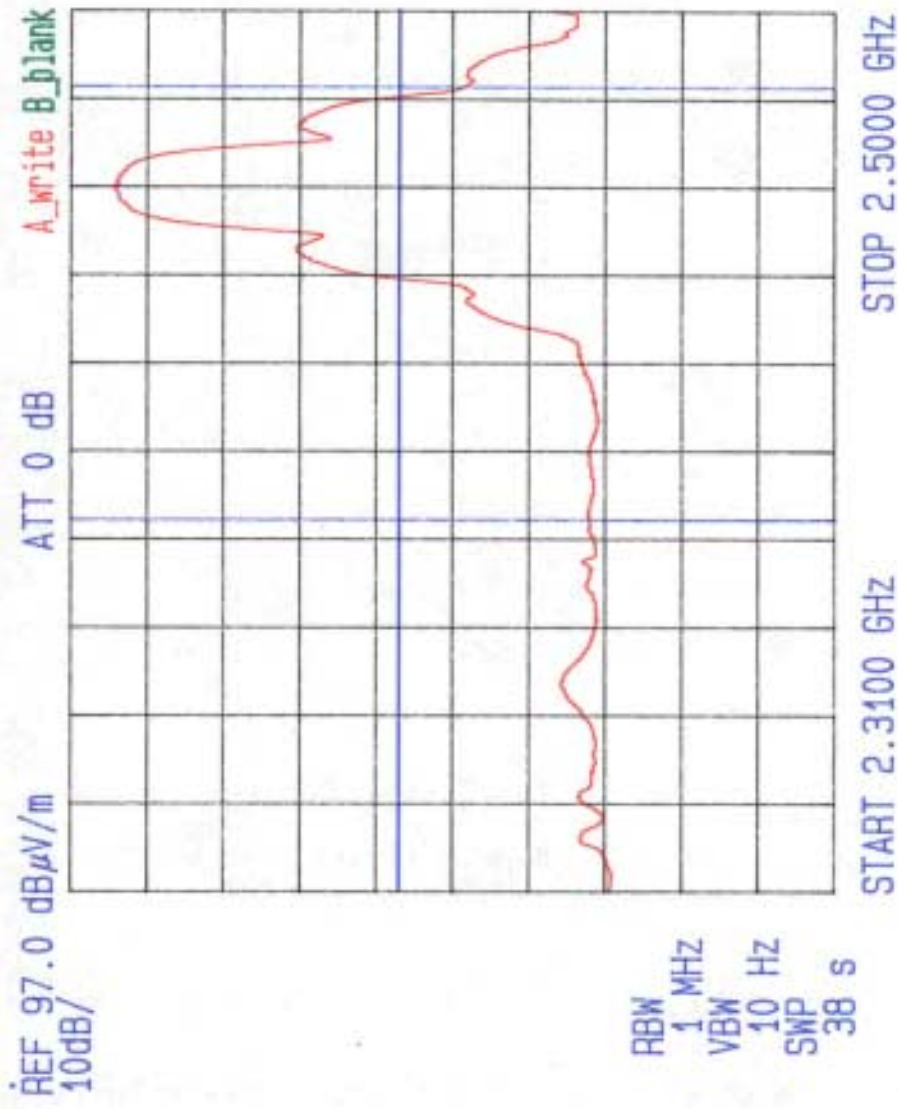
START 2.3100 GHz

STOP 2.5000 GHz

DATA SHEET 6.4.3-21



TEST: RESTRICTED BANDS	EUT: ISL 36342U PRISM II USB	S/N: 00470005
FREQ: 2.31G-2.50GHz	SPEC: 15.247	ANT.HT/POL: 1.5m H
DETECT: AVERAGE	LINE UNDER TEST: HIGH CH.(11Mbps)	EUT POSITION: 247*
DATE: 1-10-01	TEST SITE: 3-METER	TESTER:

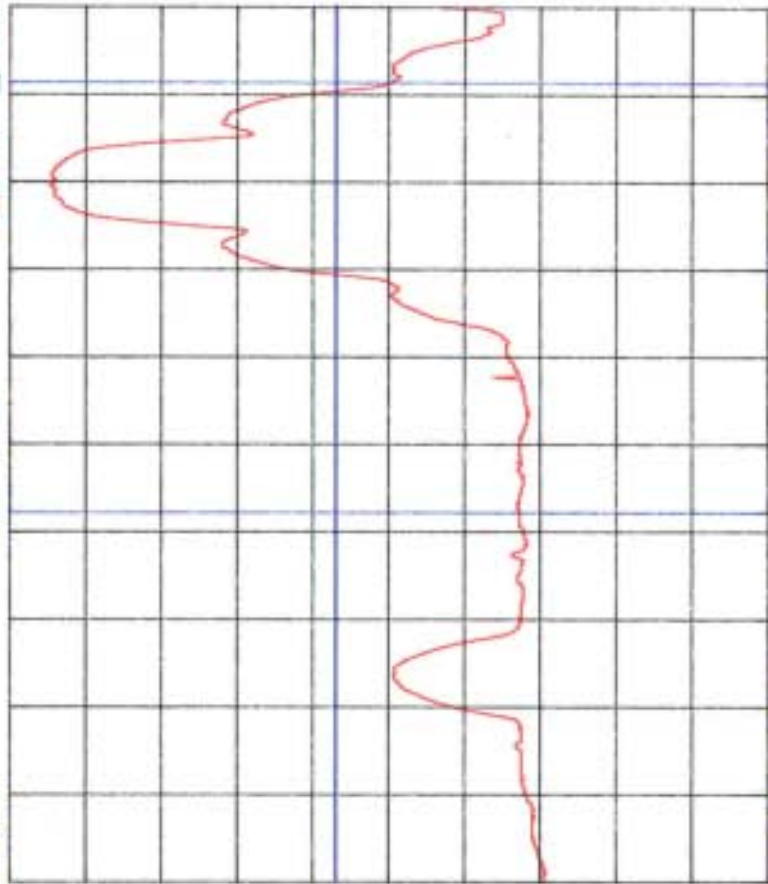


DATA SHEET 6.4.3-22



TEST: RESTRICTED BANDS EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: 2.31G-2.50GHz SPEC: 15.247 ANT.HT/POL: 1.25\ V
DETECT: AVERAGE LINE UNDER TEST: HIGH CH.(11Mbps) EUT POSITION: 1A0°
DATE: 1-16-01 TEST SITE: 3-METER TESTER: (12)

REF 97.0 dB μ V/m ATT 0 dB A_write B_blank
10dB/



START 2.3100 GHz STOP 2.5000 GHz

RBW 1 MHz
VBW 10 Hz
SWP 50 s

DATA SHEET 6.4.3-23

6.4.4 Power Spectral Density 15.247(2)(d)

The transmitted power density averaged over a 1 second interval shall not be greater than +8dBm in any 3KHz bandwidth within the band.

The peak point was selected after a max hold was performed and the spectrum analyzer peak marker was positioned. The peak frequency was used as the center frequency. The RBW was set to 3KHz and the span width of 1.5MHz and sweep time of 500 seconds selected. Data Sheets 6.4.4-1 through 6.4.4-12 present the data plots for the three channels at the MIN and MAX data rates.

The results show the spectral density to be greater than 20dB below the +8dBm requirement.

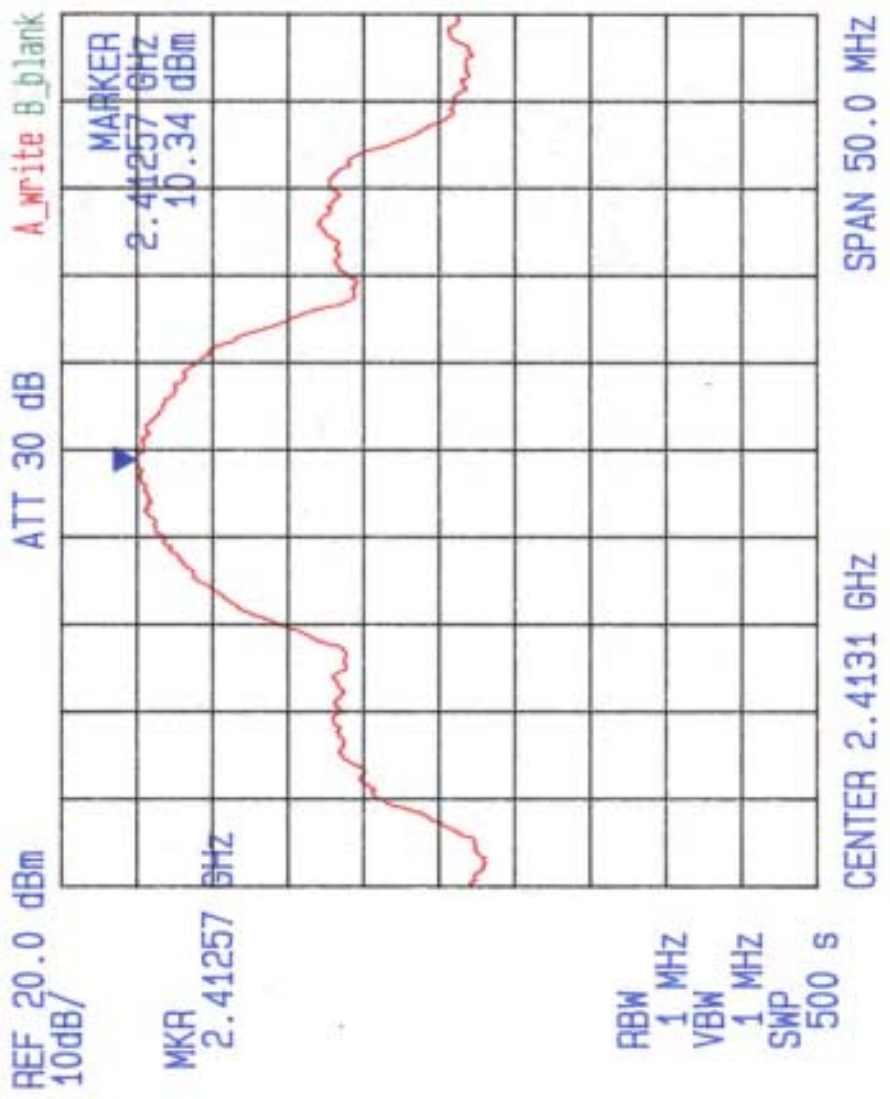
Photo 4 is representative of this setup.



PHOTO 4

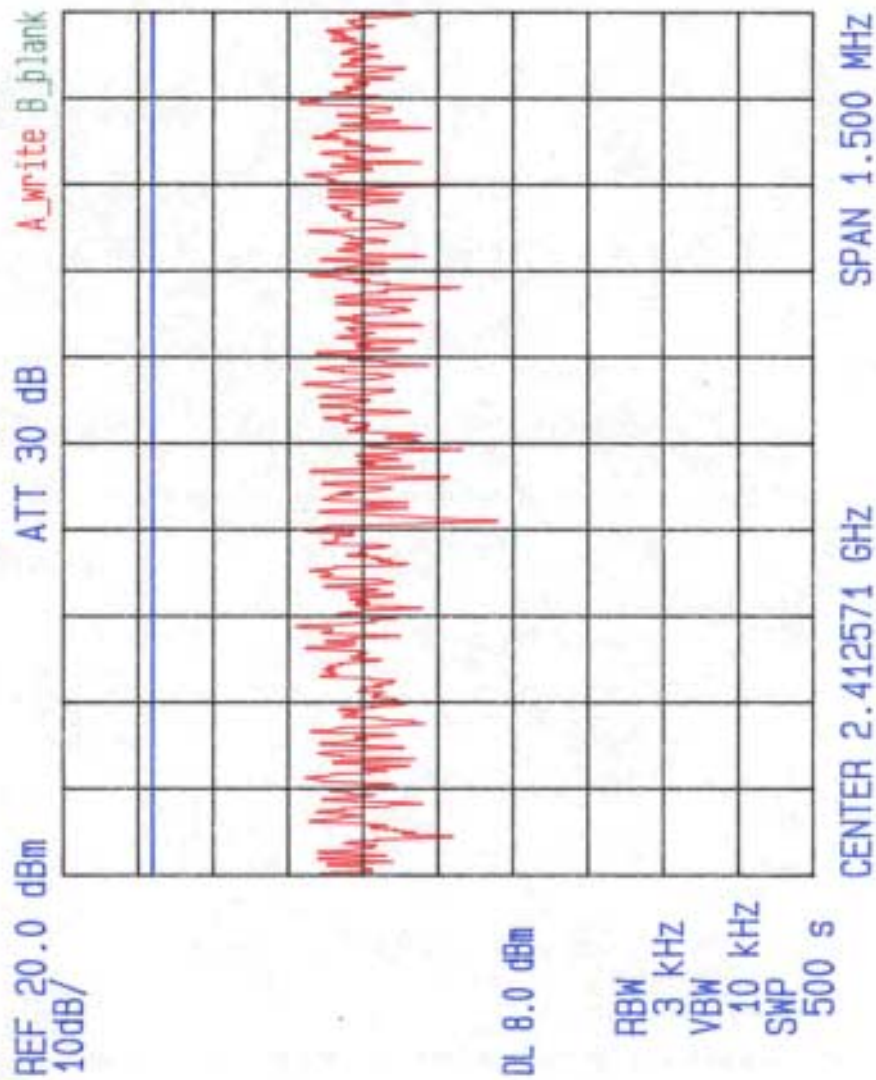


TEST: POWER DENSITY EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: LOW CHANNEL SPEC: 15.247 (d) ANT: HT/POL:
DETECT: PEAK LINE UNDER TEST: LOW CH. (1Mbps) EUT POSITION:
DATE: 1-10-01 TEST SITE: ROOM 1 TESTER: *[Signature]*



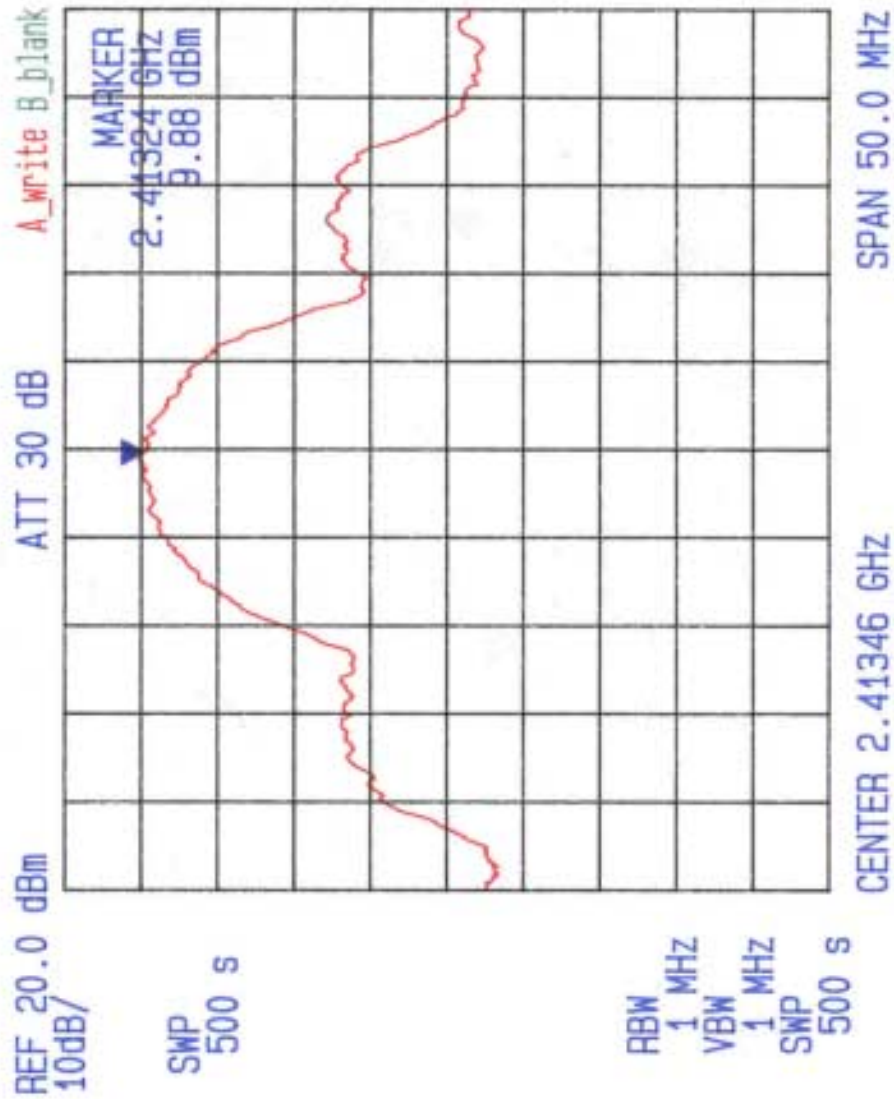


TEST: POWER DENSITY EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: LOW CHANNEL SPEC: 15.247 (d) ANT: HT/POL:
DETECT: PEAK LINE UNDER TEST: LOW CH. (1Mbps) EUT POSITION:
DATE: 1-10-01 TEST SITE: ROOM 1 TESTER: AB



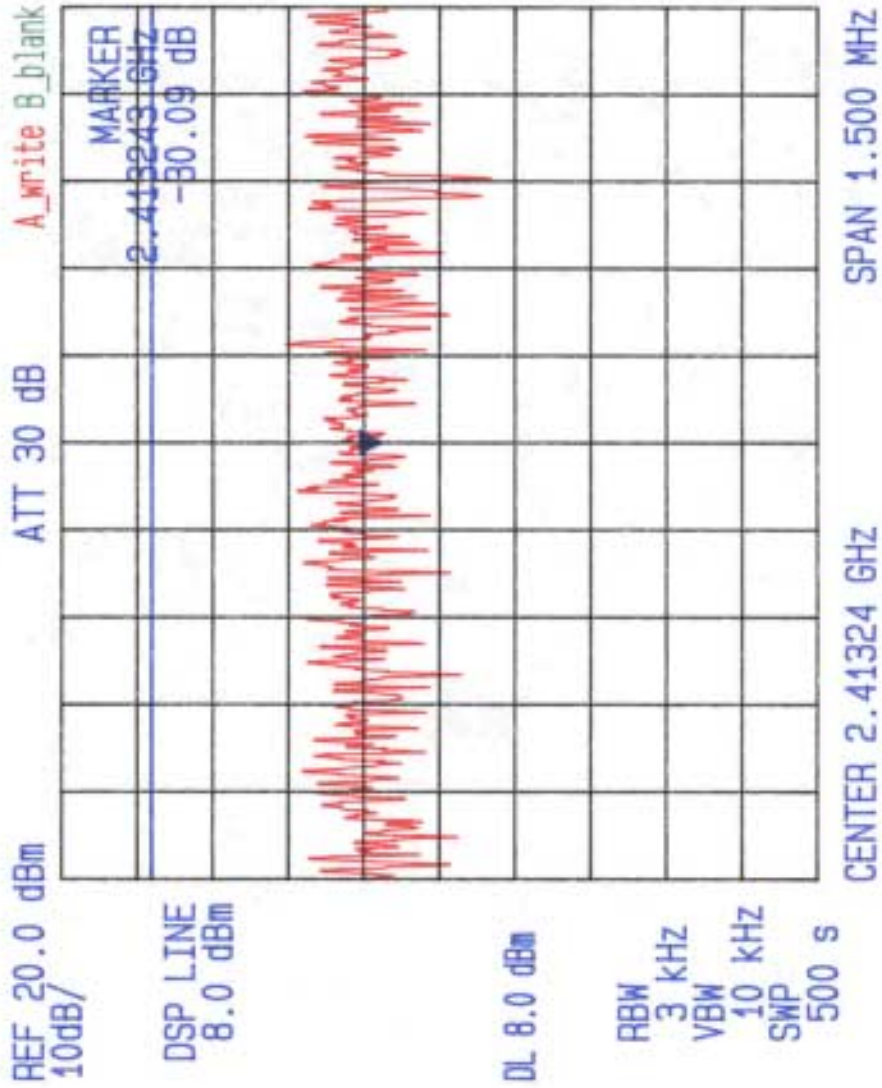


TEST: POWER DENSITY EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: LOW CHANNEL SPEC: 15.247 (d) ANT.HT/POL:
DETECT: PEAK LINE UNDER TEST: LOW CH.(11Mbps) EUT POSITION:
DATE: 1-10-01 TEST SITE: ROOM 1 TESTER: *AB*



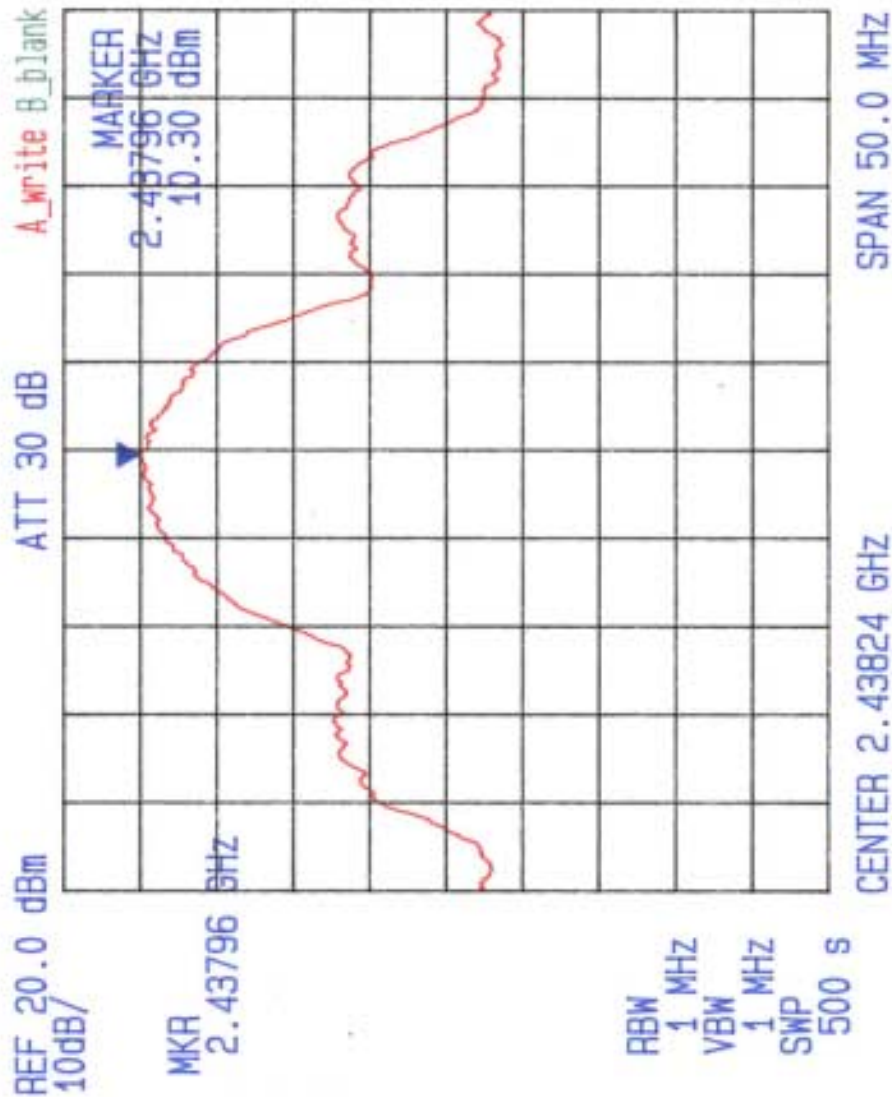


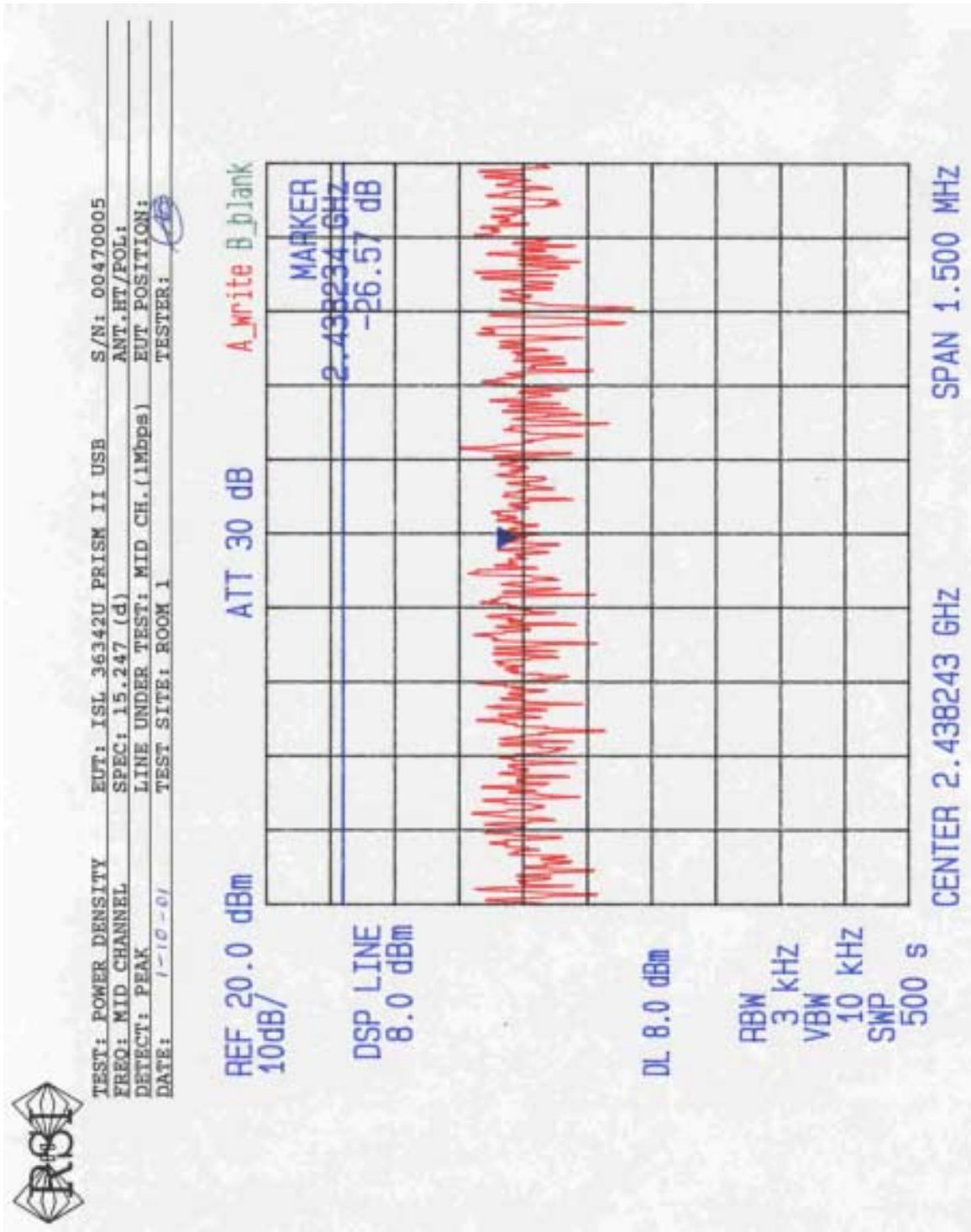
TEST: POWER DENSITY EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: LOW CHANNEL SPEC: 15.247 (d) ANT.HT/POL:
DETECT: PEAK LINE UNDER TEST: LOW CH.(11Mbps) EUT POSITION:
DATE: 1-10-01 TEST SITE: ROOM 1 TESTER: *AD*





TEST: POWER DENSITY EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: MID CHANNEL SPEC: 15.247 (d) ANT. HT/POL:
DETECT: PEAK LINE UNDER TEST: MID CH.(1Mbps) EUT POSITION:
DATE: 1-10-01 TEST SITE: ROOM 1 TESTER: *AB*

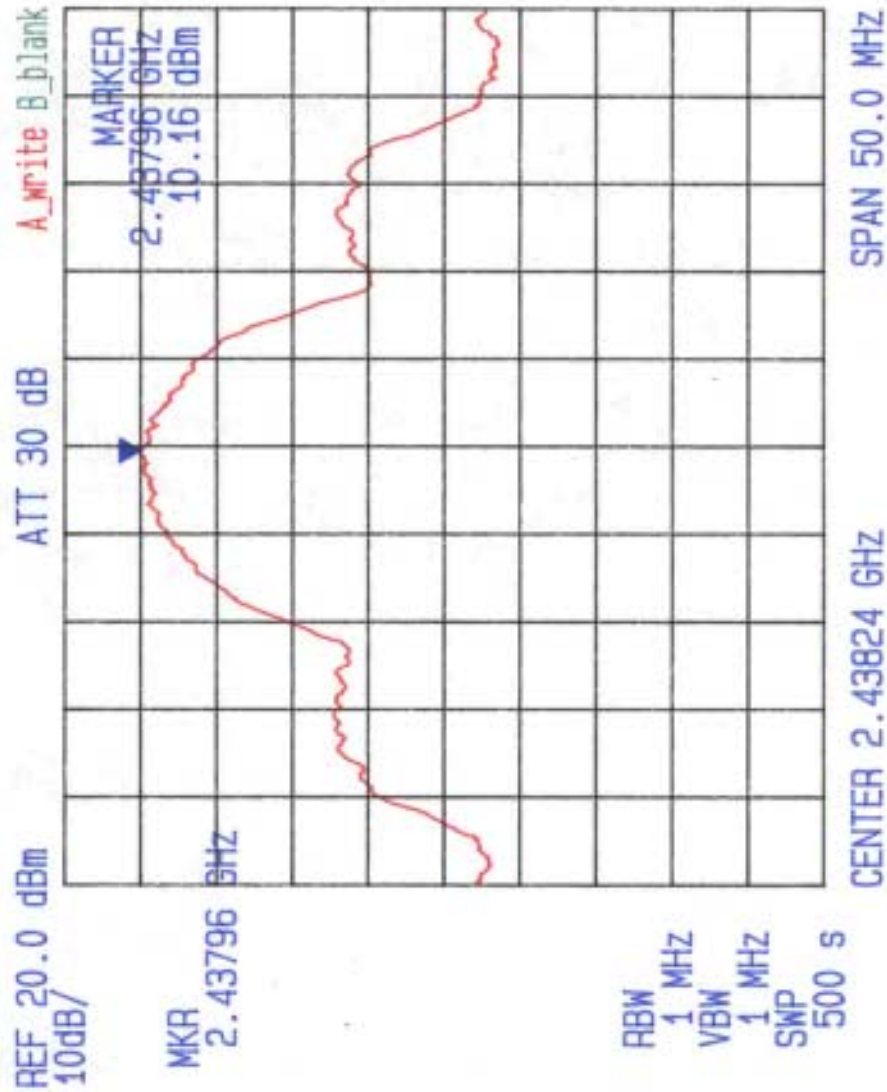




DATA SHEET 6.4.4-6

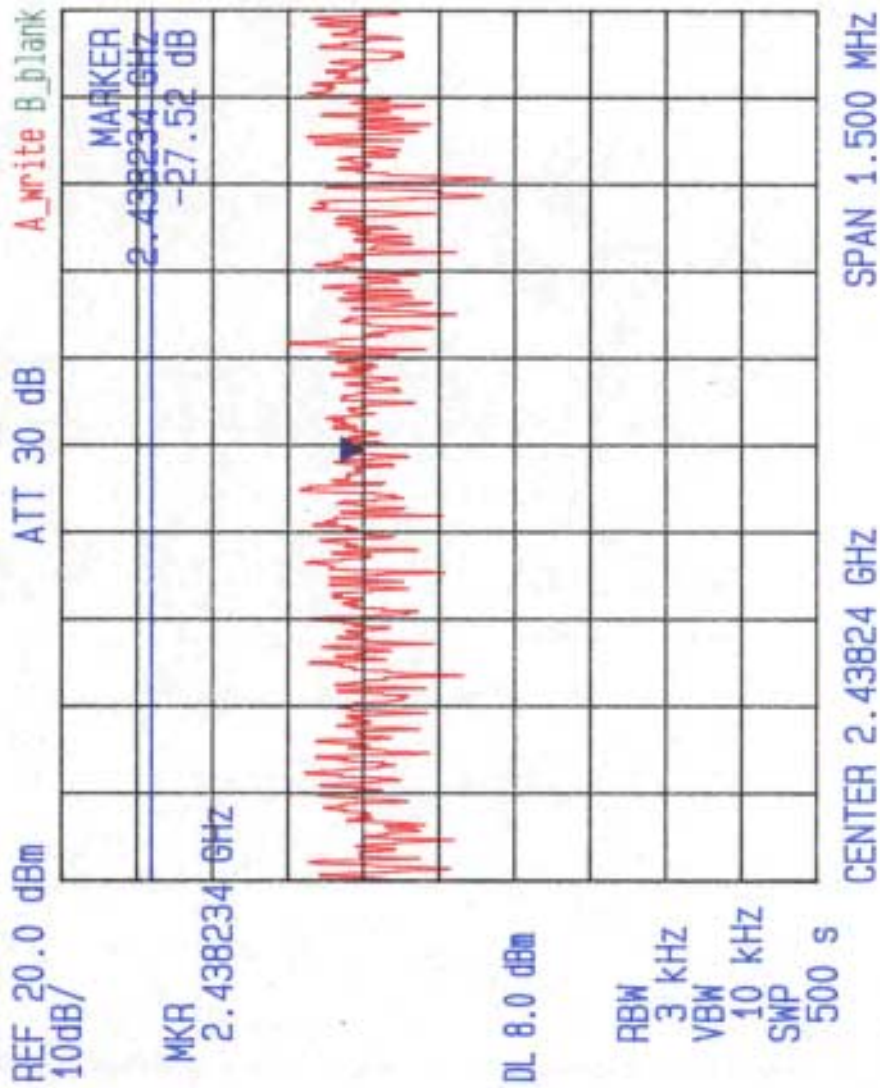


TEST: POWER DENSITY EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: MID CHANNEL SPEC: 15.247 (d) ANT: HT/POL:
DETECT: PEAK LINE UNDER TEST: MID CH. (11Mbps) EUT POSITION:
DATE: 1-10-01 TEST SITE: ROOM 1 TESTER: *ATB*



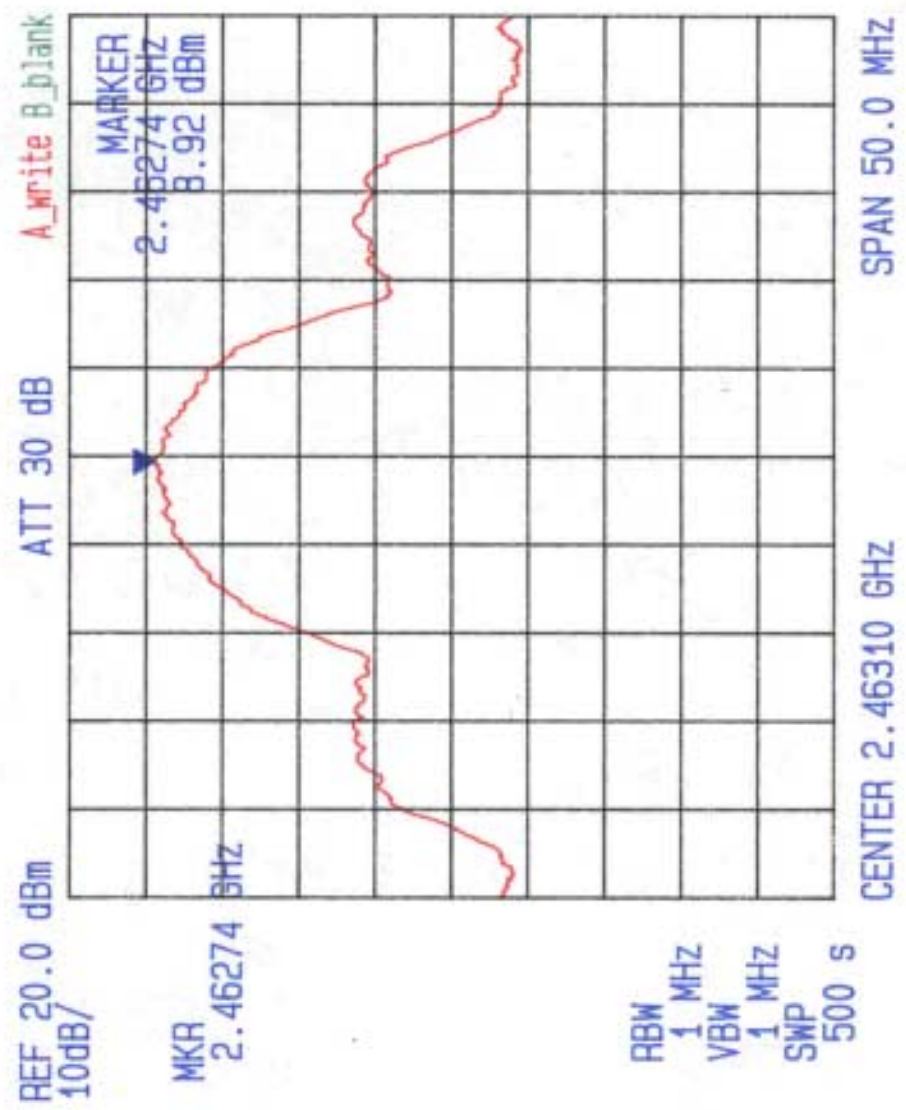


TEST: POWER DENSITY EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: MID CHANNEL SPEC: 15.247 (d) ANT. HT/POL:
DETECT: PEAK LINE UNDER TEST: MID CH. (11Mbps) EUT POSITION:
DATE: 1-10-01 TEST SITE: ROOM 1 TESTER: *AS*



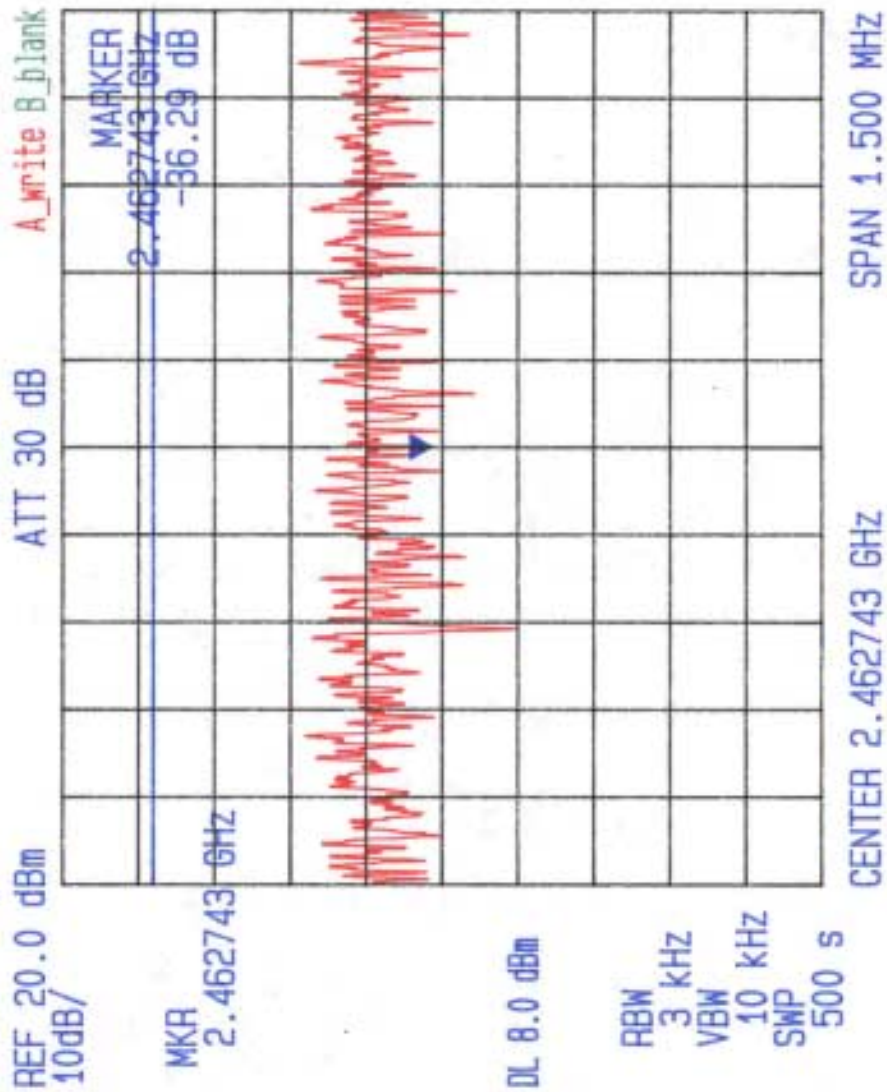


TEST: POWER DENSITY	EUT: ISL 36342U PRISM II USB	S/N: 00470005
FREQ: HIGH CHANNEL	SPEC: 15.247 (d)	ANT. HT/POL:
DETECT: PEAK	LINE UNDER TEST: HIGH CH. (1Mbps)	EUT POSITION:
DATE: 1-10-01	TEST SITE: ROOM 1	TESTER: <i>AB</i>



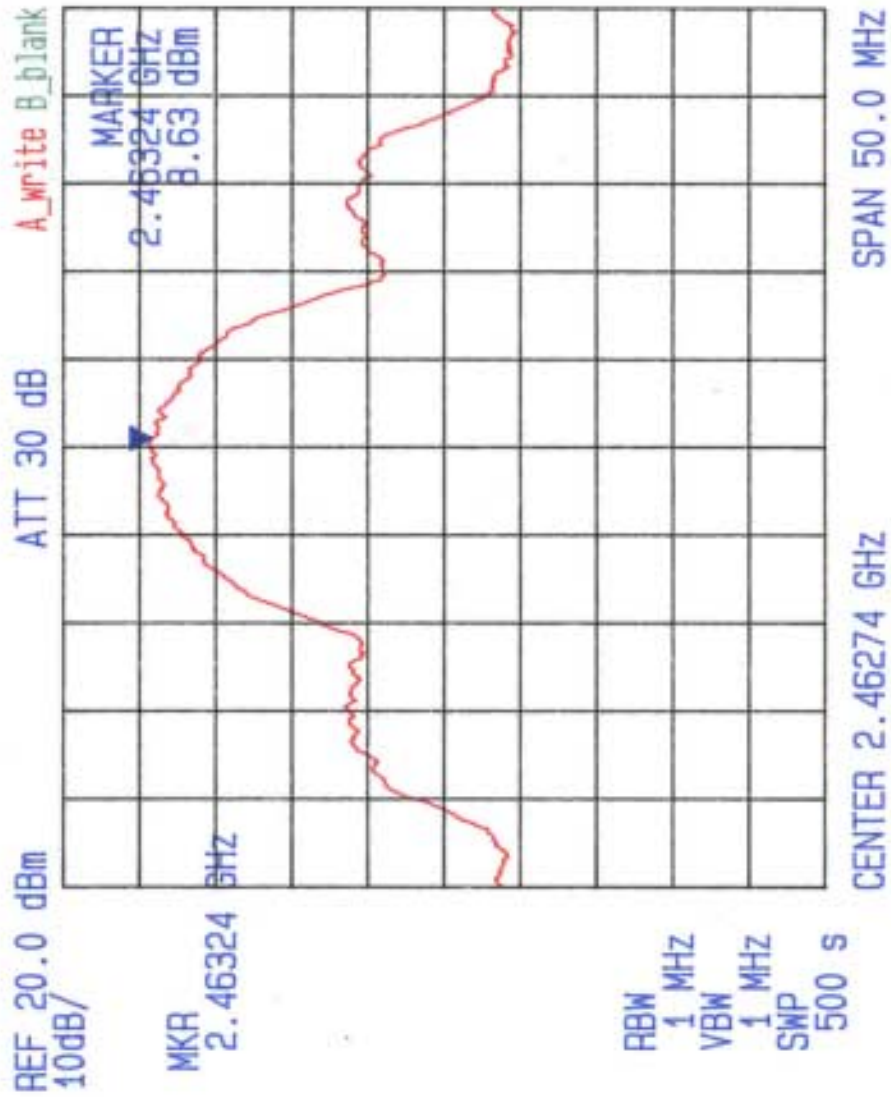


TEST: POWER DENSITY EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: HIGH CHANNEL SPEC: 15.247 (d) ANT: HT/POL:
DETECT: PEAK LINE UNDER TEST: HIGH CH. (1Mbps) EUT POSITION:
DATE: 1-10-01 TEST SITE: ROOM 1 TESTER: *[Signature]*



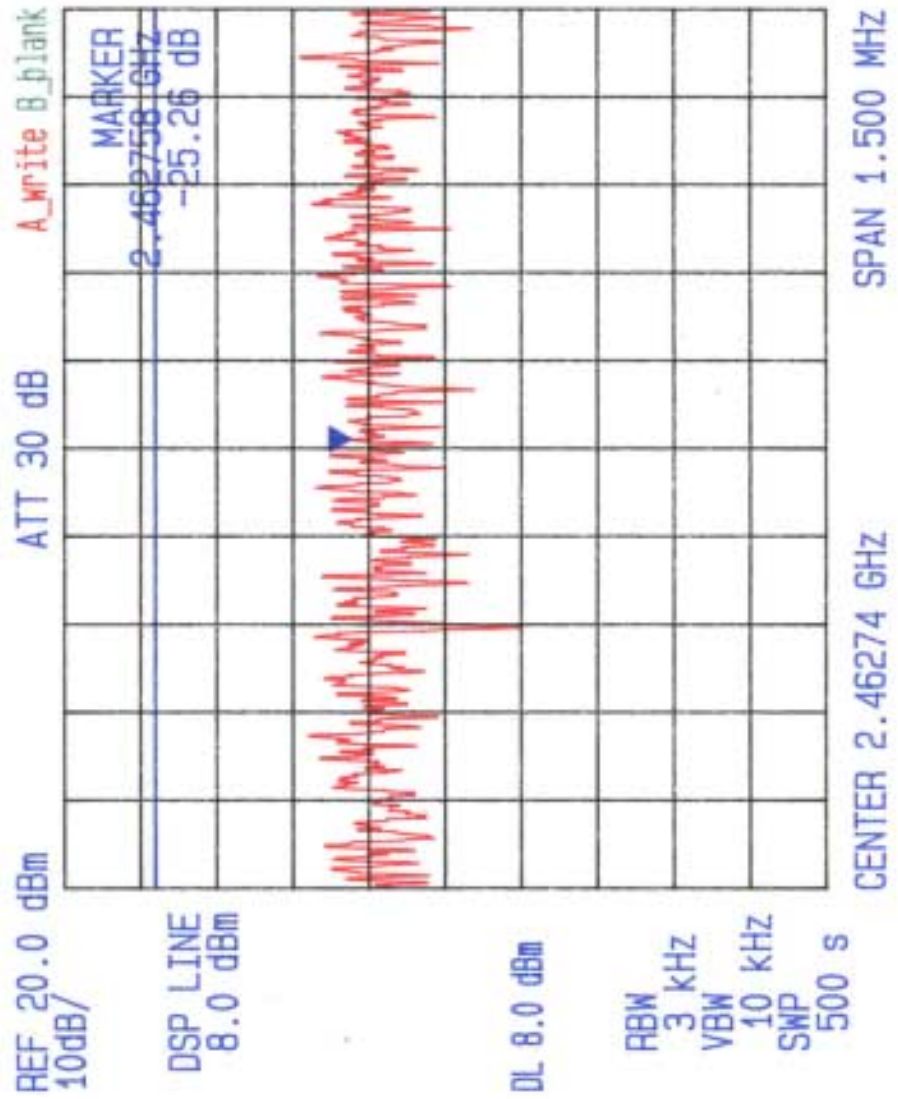


TEST: POWER DENSITY EUT: ISL_36342U PRISM II USB S/N: 00470005
FREQ: HIGH CHANNEL SPEC: 15.247 (d) ANT.HT/POL:
DETECT: PEAK LINE UNDER TEST: HIGH CH.(11Mbps) EUT POSITION:
DATE: 1-16-01 TEST SITE: ROOM 1 TESTER: *JS*





TEST: POWER DENSITY EUT: ISL 36342U PRISM II USB S/N: 00470005
FREQ: HIGH CHANNEL SPEC: 15.247 (d) ANT: HT/POL:
DETECT: PEAK LINE UNDER TEST: HIGH CH. (11Mbps) EUT POSITION:
DATE: 1-10-01 TEST SITE: ROOM 1 TESTER: *AS*



APPENDIX A
COMPLIANCE LETTER

FEDERAL COMMUNICATIONS COMMISSION
Laboratory Division
7435 Oakland Mills Road
Columbia, MD. 21046

December 16, 1999

Registration Number: 90911

Rubicom Systems, Inc.
284 West Drive, Suite B
Melbourne, FL 32904

Attention: Joseph Barbee

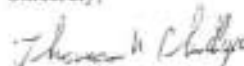
Re: Measurement facility located at Melbourne
3 meter site
Date of Listing: December 16, 1999

Gentlemen:

Your submission of the description of the subject measurement facility has been reviewed and found to be in compliance with the requirements of Section 2.948 of the FCC Rules. The description has, therefore, been placed on file and the name of your organization added to the Commission's list of facilities whose measurement data will be accepted in conjunction with applications for Certification under Parts 15 or 18 of the Commission's Rules. Please note that this filing must be updated for any changes made to the facility, and at least every three years from the date of listing the data on file must be certified as current.

If requested, the above mentioned facility has been added to our list of those who perform these measurement services for the public on a fee basis. An up-to-date list of such public test facilities is available on the Internet on the FCC Website at WWW.FCC.GOV, E-Filing, OET Equipment Authorization Electronic Filing.

Sincerely,



Thomas W Phillips
Electronics Engineer