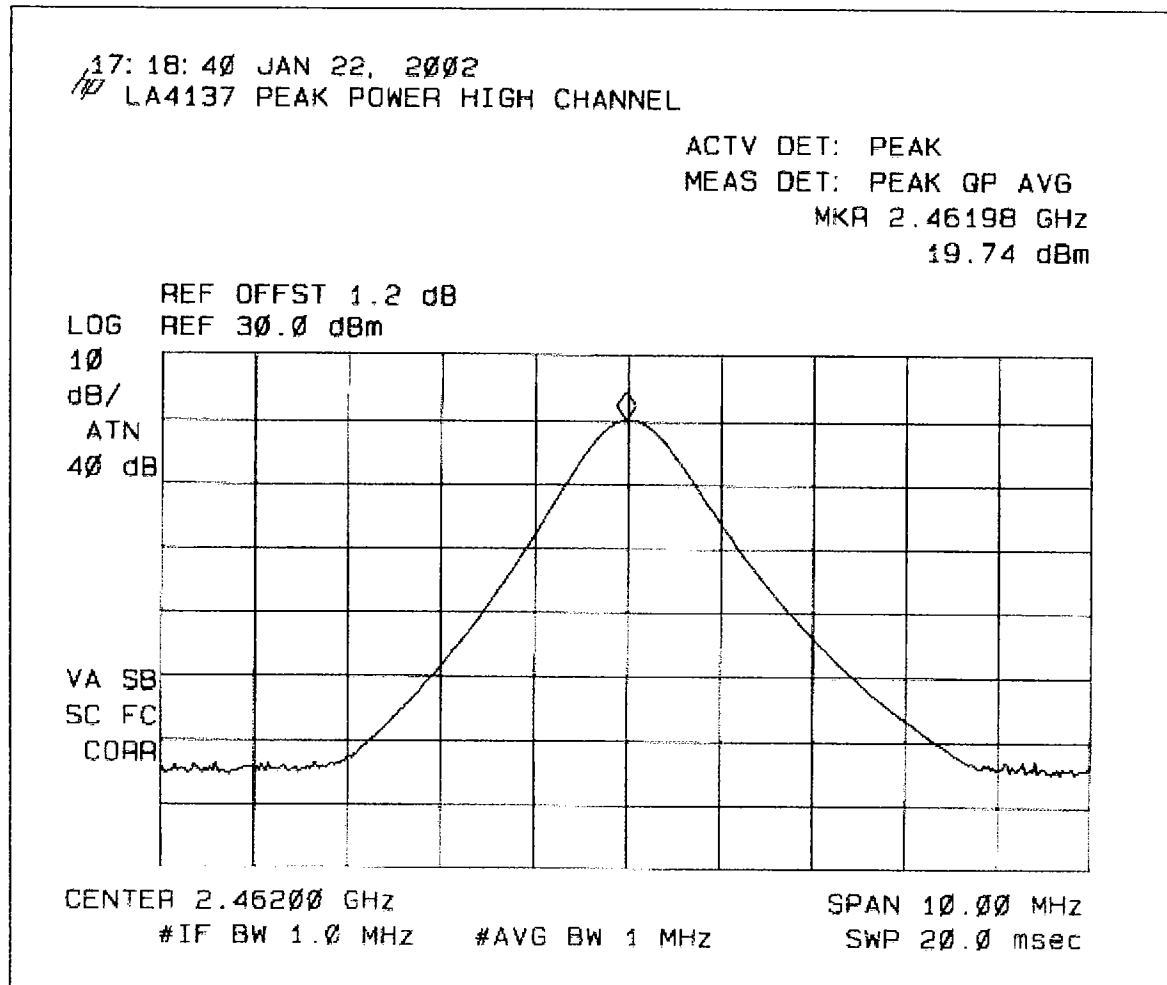


REPORT NO: 01U1098-1

FCC ID: H9PLA4137

DATE: DECEMBER 13, 2001

EUT: 802.11b 2.4 GHz WIRELESS DSSS Tx/Rx MODULE

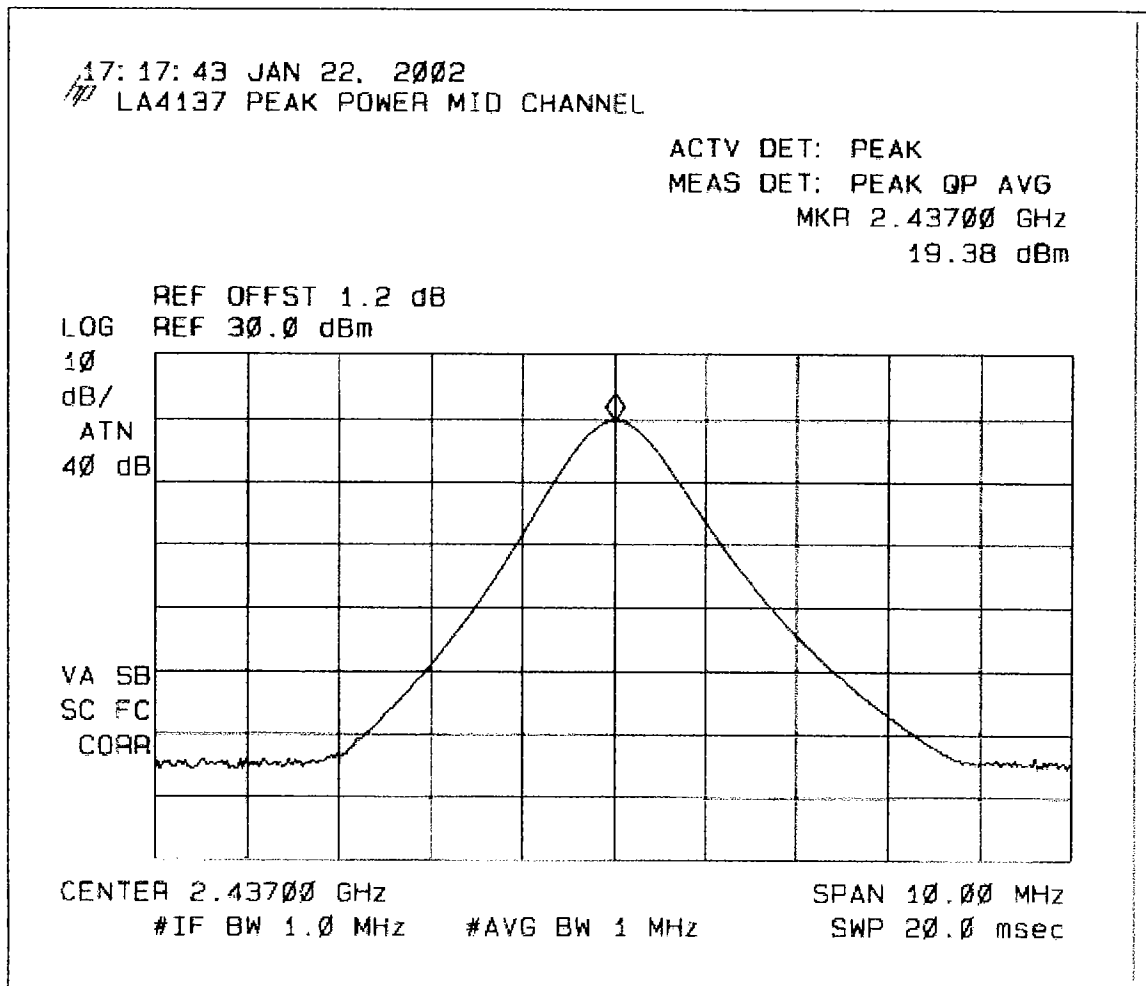


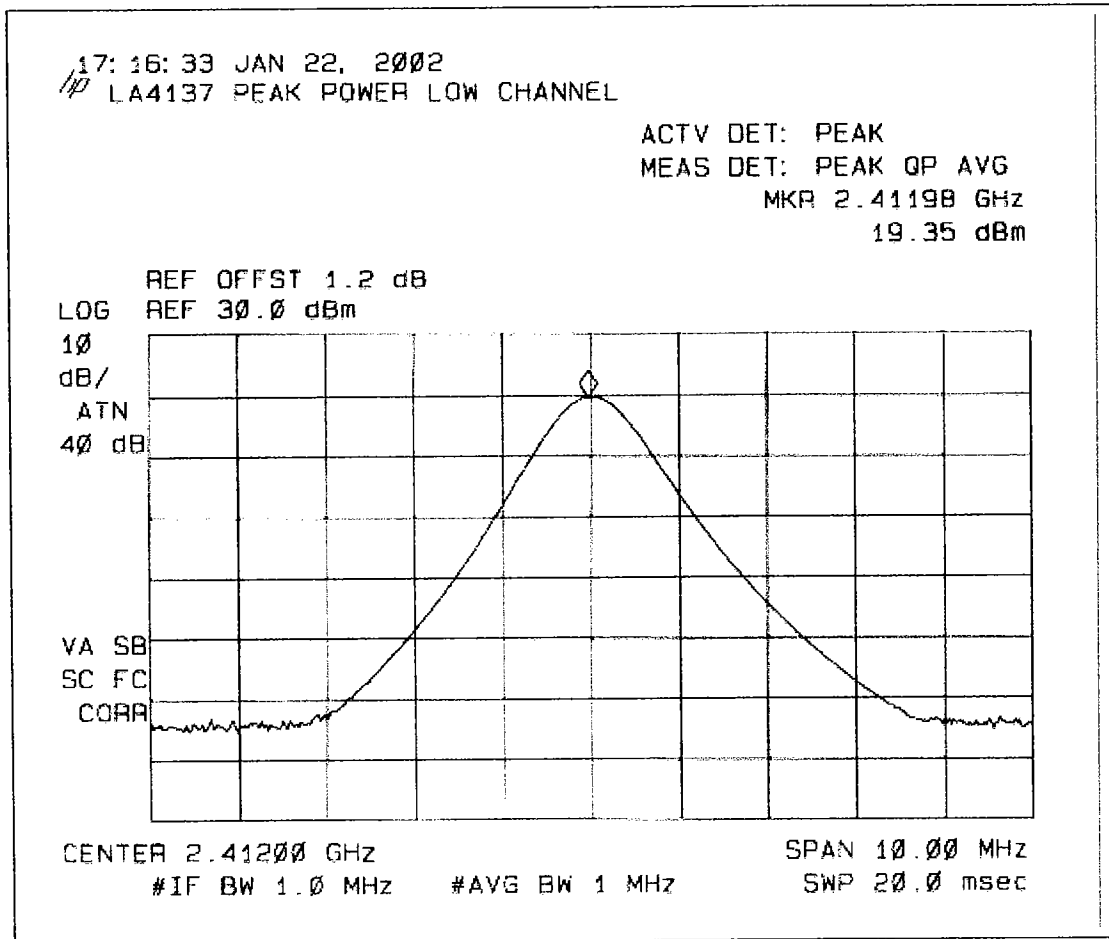
Page 14 of 46

COMPLIANCE CERTIFICATION SERVICES
 561F MONTEREY ROAD, MORGAN HILL, CA 95037 USA

DOCUMENT NO: CCSUP4031A
 TEL: (408) 463-0885 FAX: (408) 463-0888

This report shall not be reproduced except in full, without the written approval of CCS. This document may be altered or revised by Compliance Certification Services personnel only, and shall be noted in the revision section of the document.





09: 21: 37 JAN 24, 2002

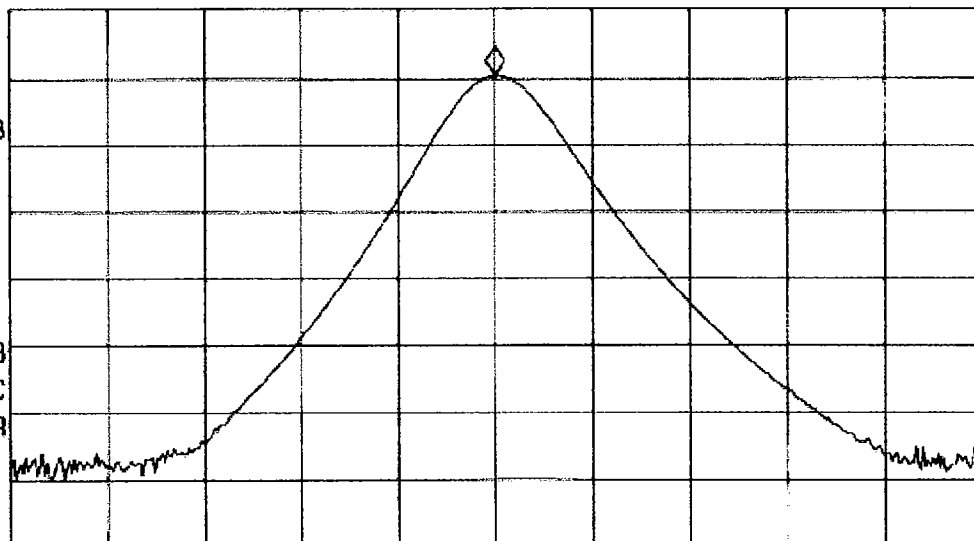
LA4137 POWER OUTPUT HIGH CH ANT 2

ACTV DET: PEAK

MEAS DET: PEAK QP AVG

MKR 2.46200 GHz

19.95 dBm

REF OFFST 1.2 dB
LOG REF 30.0 dBm10
dB/
ATN
40 dBVA SB
SC FC
CORR

CENTER 2.46200 GHz

#IF BW 1.0 MHz

#AVG BW 1 MHz

SPAN 10.00 MHz

SWP 20.0 msec

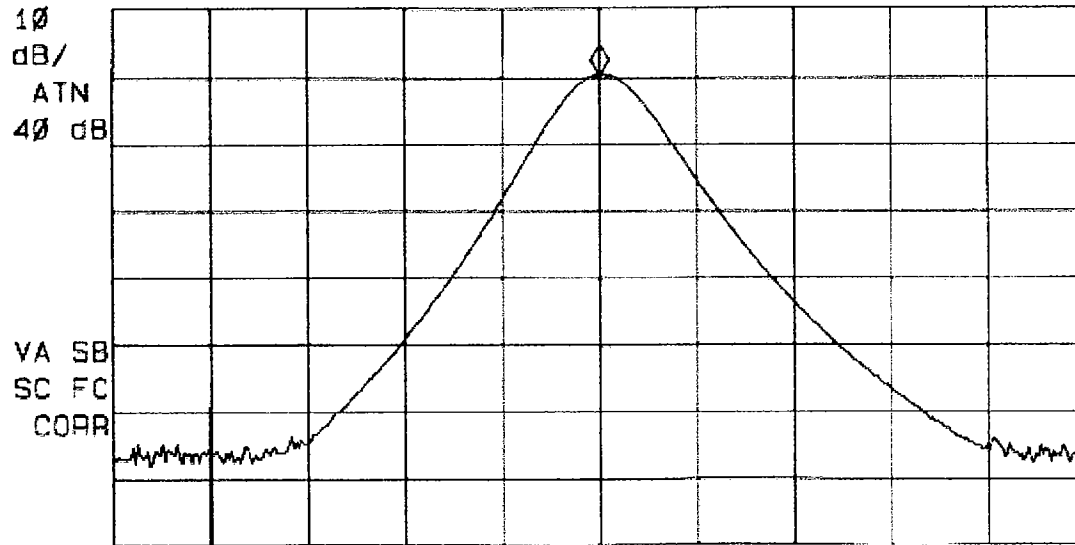
~~09:20:10~~ JAN 24, 2002~~10~~ LA4137 POWER OUTPUT MID CH ANT 2

ACTV DET: PEAK

MEAS DET: PEAK GP AVG

MKR 2.43700 GHz

19.97 dBm

REF OFFST 1.2 dB
LOG REF 30.0 dBm

CENTER 2.43700 GHz

#IF BW 1.0 MHz

#AVG BW 1 MHz

SPAN 10.000 MHz

SWP 20.0 msec

09: 18: 56 JAN 24, 2002

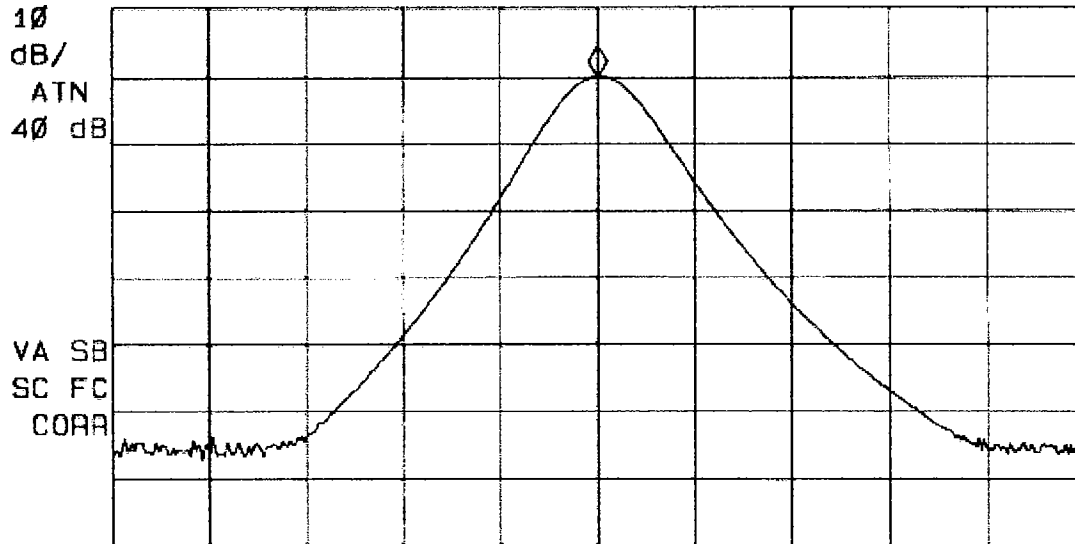
LA4137 POWER OUTPUT LOW CH ANT 2

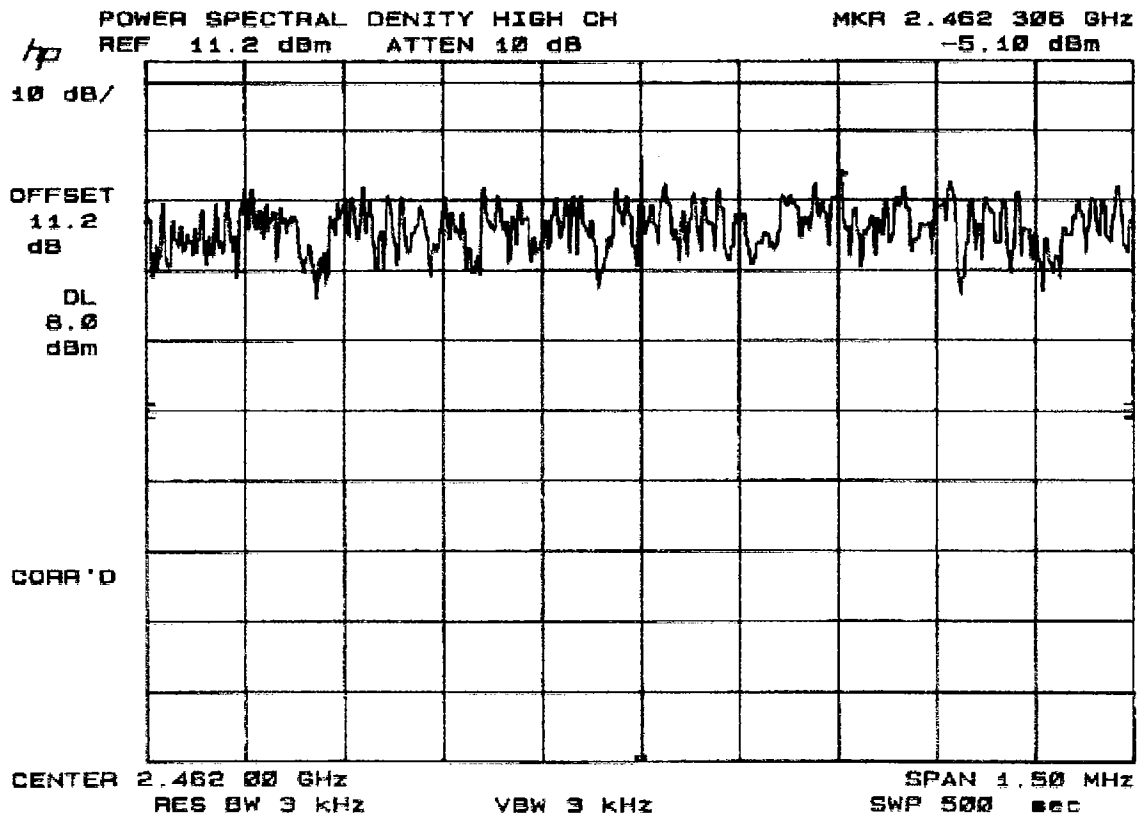
ACTV DET: PEAK

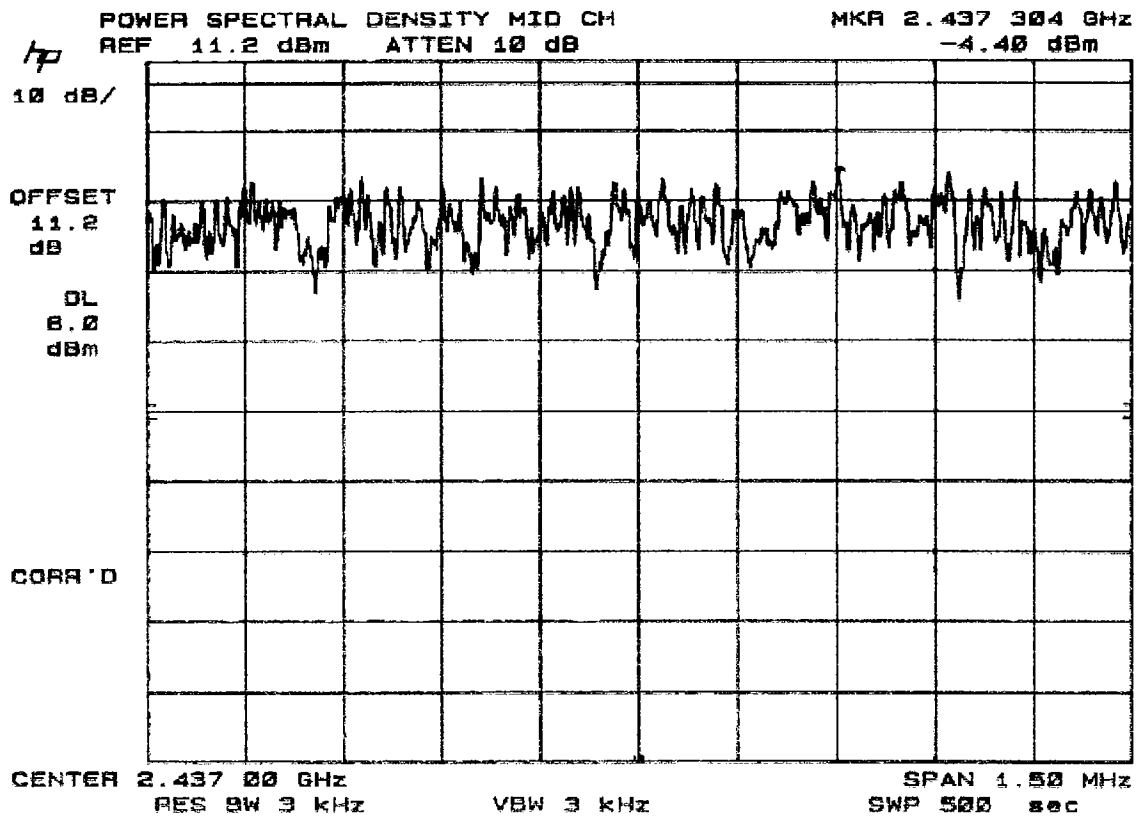
MEAS DET: PEAK QP AVG

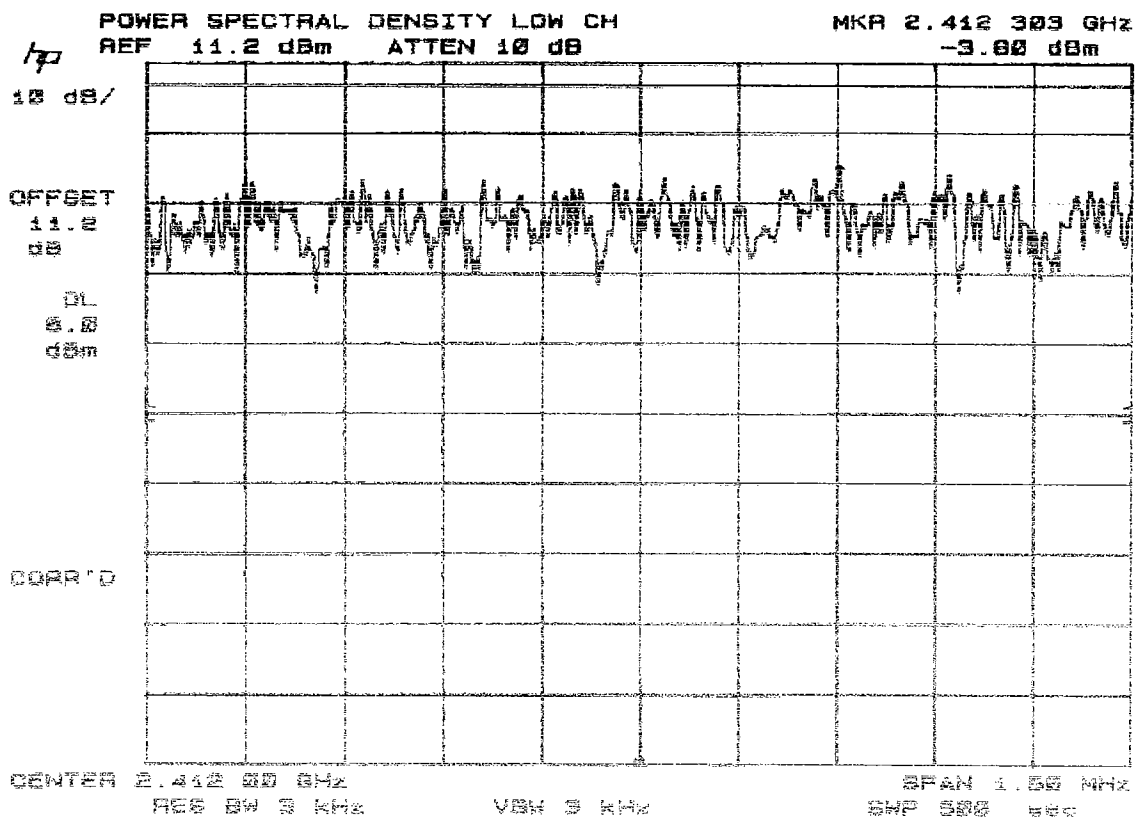
MKR 2.41200 GHz

19.68 dBm

REF OFFST 1.2 dB
LOG REF 30.0 dBm







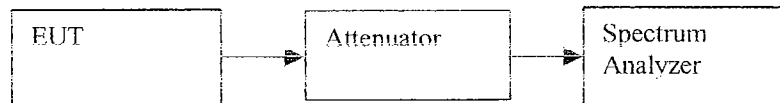
PAGE 27 OF 30

9.4. PEAK POWER SPECTRAL DENSITY

Detector Setting of Spectrum Analyzer

Frequency Range (MHz)	Detector Function	Resolution Bandwidth	Video Bandwidth
Above 1000	☒ Peak	☒ 3 kHz	☒ 3 kHz

TEST SETUP



TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3 kHz RBW and 3 kHz VBW, set sweep time=span/3kHz. The power spectral density was measured and recorded.

The sweep time is allowed to be longer than span/3KHz for a full response of the mixer in the spectrum analyzer.

Result:

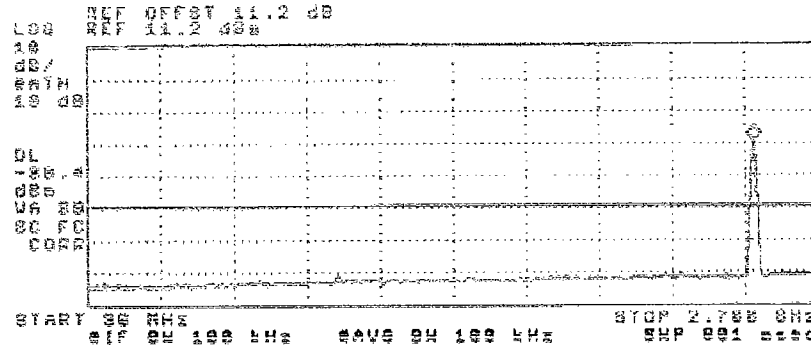
No non-compliance noted. See plots:

Page 20 of 20

18:07:14 DEC 13, 2001

Conducted Spurious Emissions CN 11

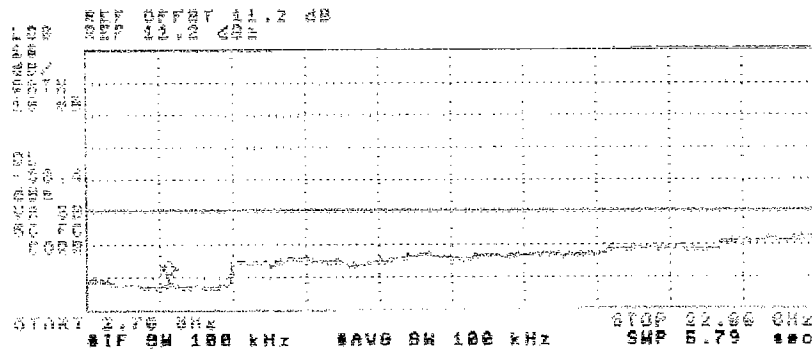
ACTV DET: PEAK
 REAR DET: PEAK OF AVG
 FREQ 2.456 GHz
 -10.50 dBm

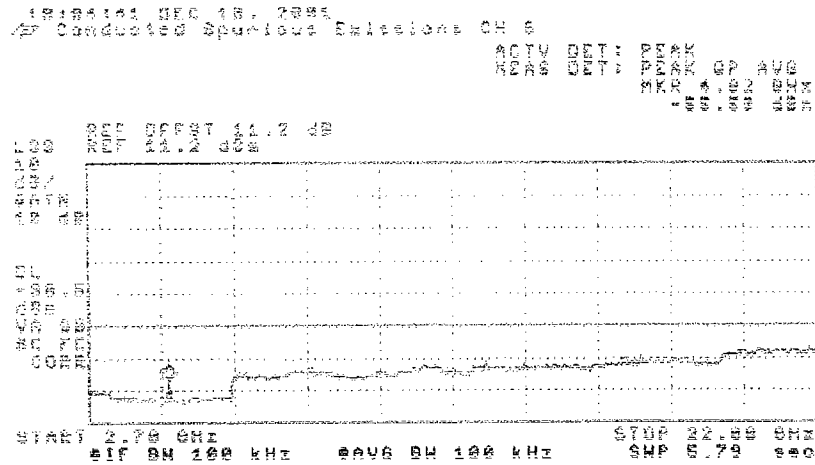
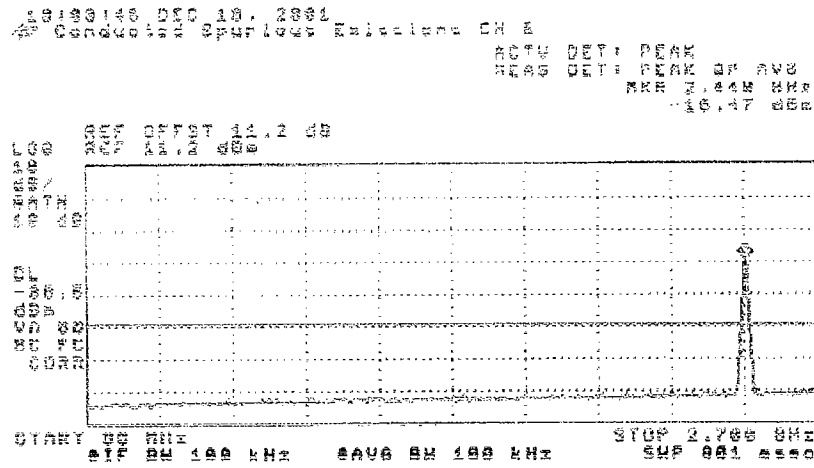


18:06:18 DEC 13, 2001

Conducted Spurious Emissions CN 11

ACTV DET: PEAK
 REAR DET: PEAK OF AVG
 FREQ 4.97 GHz
 -58.01 dBm





13:59:58 DEC 13, 2001

Conducted Spurious Emissions CH1

ACTV DET: PEAK

MEAS DET: PEAK OF AVG

FREQ 2.410 GHz

-10.10 dB

REF OFFSET 11.2 dB

L00

100

dB/

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

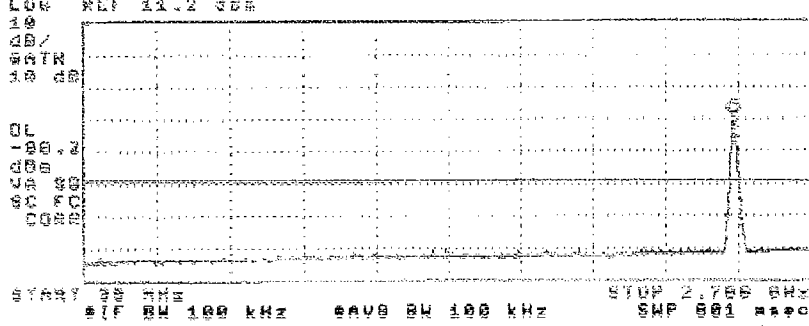
10 dB

10 dB

10 dB

10 dB

10 dB



14:00:58 DEC 13, 2001

Conducted Spurious Emissions CH2

ACTV DET: PEAK

MEAS DET: PEAK OF AVG

FREQ 4.77 GHz

-58.40 dB

REF OFFSET 11.2 dB

L00

100

dB/

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

10 dB

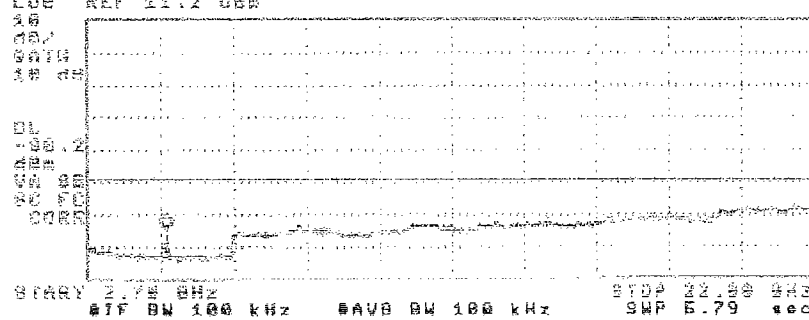
10 dB

10 dB

10 dB

10 dB

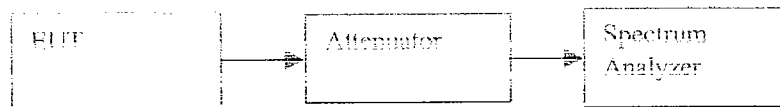
10 dB



9.3. CONDUCTED SPURIOUS EMISSION

Detector Setting of Spectrum Analyzer

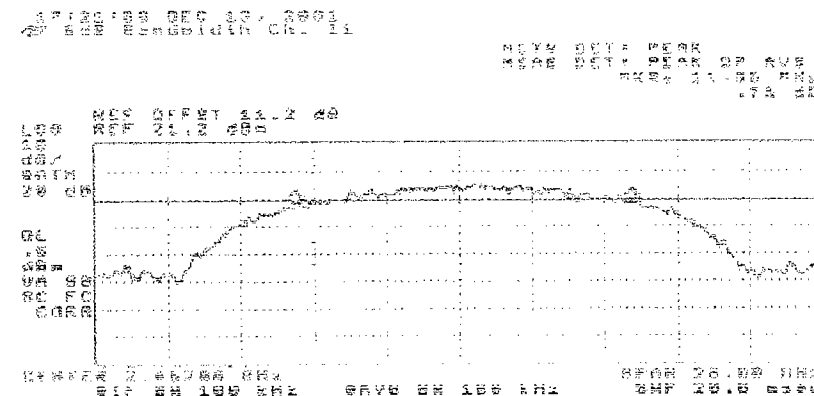
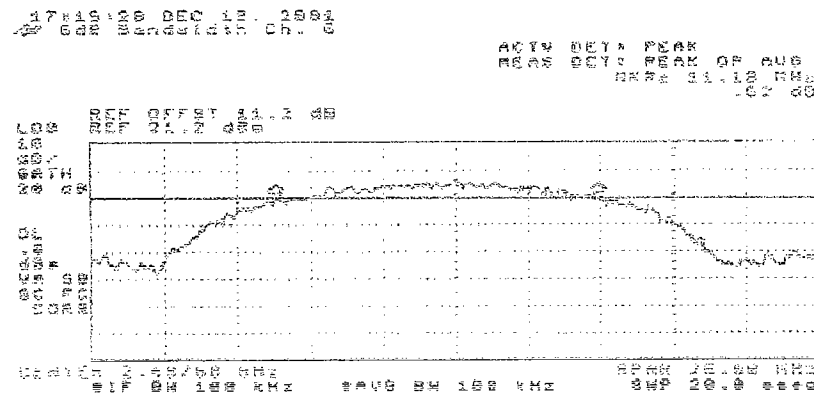
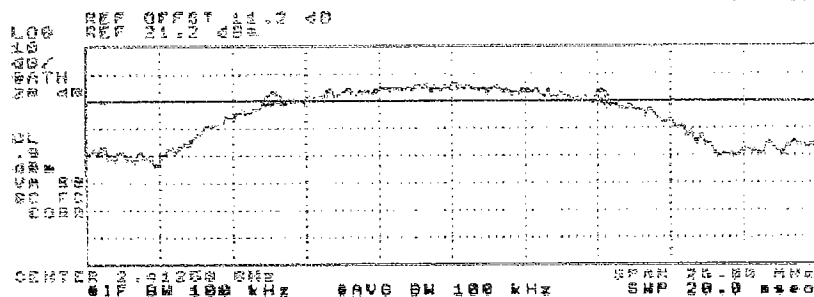
Frequency Range (MHz)	Detector Function	Resolution Bandwidth	Video Bandwidth
Below 1000	☒ Peak ☐ Average	☒ 100 kHz ☐ 1 MHz	☒ 100 kHz ☐ 10 Hz
Above 1000	☒ Peak ☐ Average	☒ 100 kHz ☐ 1 MHz	☒ 100 kHz ☐ 10 Hz

TEST SETUP**TEST PROCEDURE**

Connect the EUT's antenna port to the Spectrum Analyzer's input port.
Investigate the entire frequency of the carrier frequency, up to the tenth harmonic.

RESULT

No non-compliance noted.



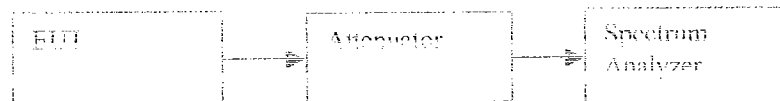
DOCUMENT NO: CCSUP4031A

This report shall not be reproduced except in full, without the written approval of CCIS. This document may be altered or revised by Compliance Certification Services personnel only, and shall be noted in the revision section of the document.

9.2. 6 dB BANDWIDTH MEASUREMENT

Detector Setting of Spectrum Analyzer

Frequency Range (MHz)	Detector Function	Resolution Bandwidth	Video Bandwidth
Active 100.	☒ Peak ☐ Average	☒ 100 kHz ☐ 1 MHz	☒ 100 kHz ☐ 1 MHz

TEST SETUP**TEST PROCEDURE**

bandwidth of the fundamental frequency was measured by spectrum analyzer with 100 kHz RBW and 100 kHz VBW.

RESULT

No non-compliance noted.