



**FCC CFR47 CERTIFICATION
CLASS II PERMISSIVE CHANGE
TEST REPORT**

FOR

WIRELESS HAND PC / HomePAD

MODEL NUMBER: XP30, ZXP30-B16S, S160*

FCC ID: A3LS160P

REPORT NUMBER: 0513753-1

ISSUE DATE: OCTOBER 26, 2005

Prepared for

**SAMSUNG ELECTRONICS CO., LTD
#416, MAETAN-3 DONG, YEONGTONG-GU
SUWON CITY, GYEONGGI-DO 442-742
KOREA**

Prepared by

**COMPLIANCE CERTIFICATION SERVICES
561F MONTEREY ROAD,
MORGAN HILL, CA 95037, USA
TEL: (408) 463-0885
FAX: (408) 463-0888**

* Details of specific model(s) tested and model differences are identified in body of report.



Revision History

Rev.	Issue Date	Revisions	Revised By
A	10/20/05	Initial Issue	Thu Chan
A1	10/24/05	Changed client's address	Thu
A2	10/25/05	Updated Section 5.7; added LC Setup photos for "EUT only" configuration	Thu
A3	10/26/05	Changed model number ZXP30-B16H to ZXP30-B16S	Thu

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS.....	4
2. TEST METHODOLOGY	5
3. FACILITIES AND ACCREDITATION	5
4. CALIBRATION AND UNCERTAINTY.....	5
4.1. MEASURING INSTRUMENT CALIBRATION.....	5
4.2. MEASUREMENT UNCERTAINTY.....	5
5. EQUIPMENT UNDER TEST.....	6
5.1. DESCRIPTION OF EUT	6
5.2. CLASS II PERMISSIVE CHANGE DESCRIPTION	6
5.3. MANUFACTURER'S DESCRIPTION OF MODEL DIFFERENCES.....	6
5.4. MAXIMUM OUTPUT POWER	6
5.5. DESCRIPTION OF AVAILABLE ANTENNAS.....	6
5.6. SOFTWARE AND FIRMWARE	7
5.7. WORST-CASE CONFIGURATION AND MODE.....	7
5.8. DESCRIPTION OF TEST SETUP	7
6. TEST AND MEASUREMENT EQUIPMENT	9
7. LIMITS AND RESULTS	10
7.1.1. AVERAGE POWER.....	10
7.1.2. CONDUCTED SPURIOUS EMISSIONS.....	11
7.2. RADIATED EMISSIONS.....	18
7.2.1. TRANSMITTER RADIATED SPURIOUS EMISSIONS	18
7.2.2. TRANSMITTER ABOVE 1 GHz FOR 2400 TO 2483.5 MHz BAND	21
7.2.3. WORST-CASE RADIATED EMISSIONS BELOW 1 GHz	30
7.3. POWERLINE CONDUCTED EMISSIONS	34
8. SETUP PHOTOS	39

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: SAMSUNG ELECTRONICS CO., LTD
#416, MAETAN-3 DONG, YEONGTONG-GU
SUWON CITY, GYEONGGI-DO 442-742
KOREA

EUT DESCRIPTION: WIRELESS HAND PC / HomePAD

MODEL: XP30, ZXP30-B16S, S160

SERIAL NUMBER: V37292JX300016Y

DATE TESTED: OCTOBER 17-18, 2005

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC PART 15 SUBPART C	NO NON-COMPLIANCE NOTED

Compliance Certification Services, Inc. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

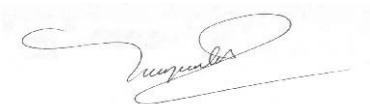
Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by Compliance Certification Services and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Compliance Certification Services will constitute fraud and shall nullify the document. No part of this report may be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any government agency.

Approved & Released For CCS By:

Tested By:



THU CHAN
EMC SUPERVISOR
COMPLIANCE CERTIFICATION SERVICES



VIEN TRAN
EMC ENGINEER
COMPLIANCE CERTIFICATION SERVICES

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4-2003, FCC CFR 47 Part 2 and FCC CFR 47 Part 15.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 561F Monterey Road, Morgan Hill, California, USA. The sites are constructed in conformance with the requirements of ANSI C63.4, ANSI C63.7 and CISPR Publication 22. All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

CCS is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at <http://www.ccsemc.com>.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Radiated Emission, 30 to 200 MHz	+/- 3.3 dB
Radiated Emission, 200 to 1000 MHz	+4.5 / -2.9 dB
Radiated Emission, 1000 to 2000 MHz	+4.5 / -2.9 dB
Power Line Conducted Emission	+/- 2.9 dB

Uncertainty figures are valid to a confidence level of 95%.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

EUT is a Wireless HAND PC that includes a wireless LAN that operates in the 2.412 to 2.462 GHz range.

5.2. CLASS II PERMISSIVE CHANGE DESCRIPTION

The EUT was originally tested and reported under CCS project no.: 02I1733-1 and granted by TCB on March 14, 2003. The major change filed under this application is:

1. Adding AC/DC Adapter (Model No: API5AD20)

5.3. MANUFACTURER'S DESCRIPTION OF MODEL DIFFERENCES

XP30, ZXP30-B16S and S160 are identical products, three different model numbers are used only for marketing purpose.

5.4. MAXIMUM OUTPUT POWER

The maximum output power keeps the same as originally granted.

5.5. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes a PIFA antennas with a maximum gain of 0 dBi.

5.6. SOFTWARE AND FIRMWARE

The test utility software used during testing was RFTTest2.

5.7. WORST-CASE CONFIGURATION AND MODE

The worst-case channel is determined as the channel with the highest output power. The highest measured output power was at 2462 MHz.

The worst-case data rate for this channel is determined to be 1 Mb/s

Thus all emissions tests were made in the 802.11b mode, 2412-2462 MHz, 1 Mb/s.

Pre-scan was performed for radiated emission tests and EUT sitting on the cradle found to be the worst-case scenario.

5.8. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	Manufacturer	Model	Serial Number	FCC ID
Cradle	Samsung	ZH-P30RD01/KR	RT2X530	NA
AC Adapter	AcBel Electronic	API5AD20	AD-1505	NA

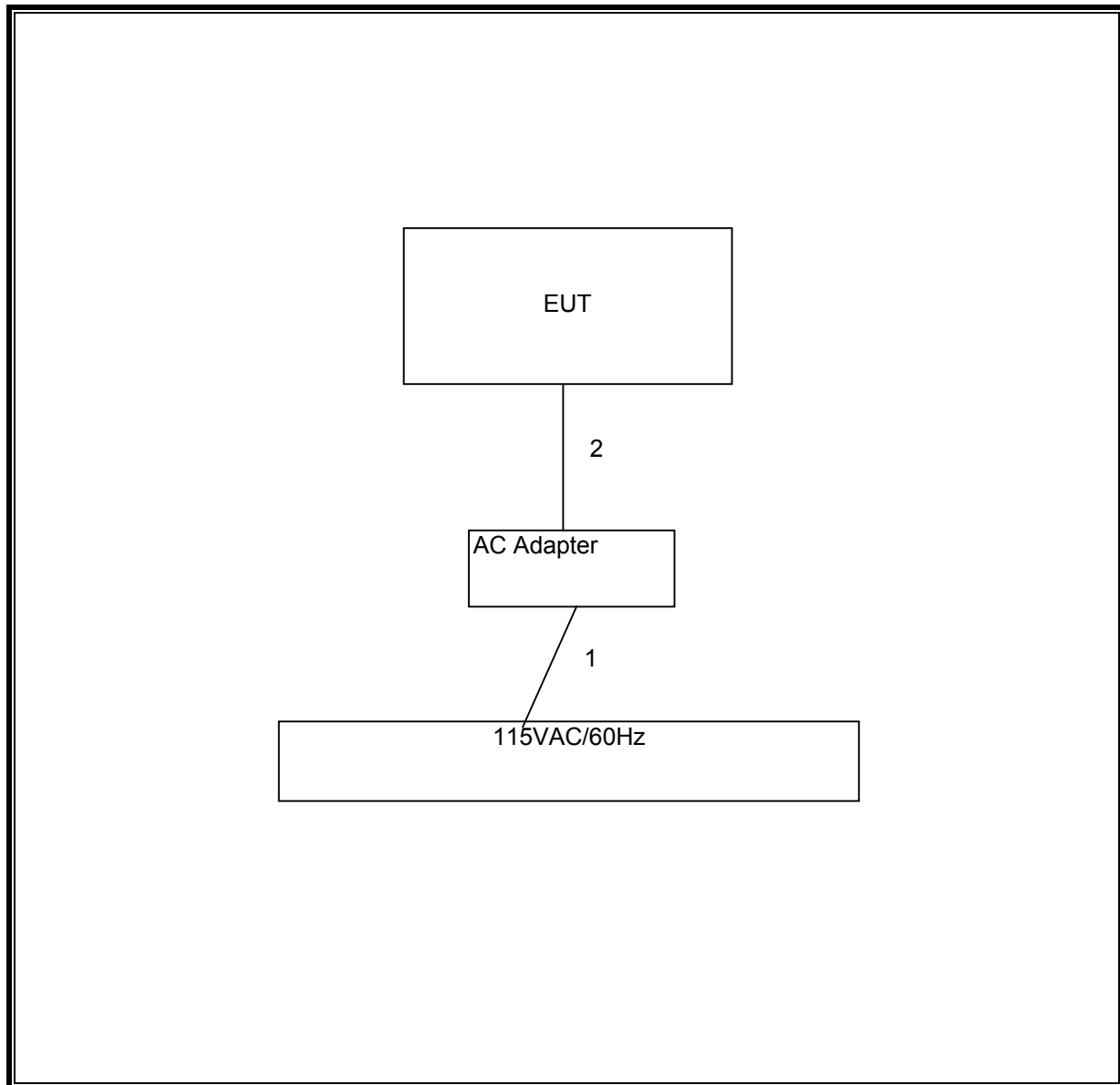
I/O CABLES

I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	AC	1	US115	Un-Shielded	2m	NA
2	DC	1	DC	Un-Shielded	1m	NA

TEST SETUP

The EUT was tested stand alone.

SETUP DIAGRAM FOR TESTS



6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

TEST EQUIPMENT LIST				
Description	Manufacturer	Model	Serial Number	Cal Due
Spectrum Analyzer 3 Hz ~ 44 GHz	Agilent	E4446A	MY43360112	3/28/2006
Preamplifier, 1 ~ 26.5 GHz	HP	8449B	3008A00369	8/17/2006
Peak Power Meter	Agilent	E4416A	GB41291160	2/9/2006
Antenna, Bilog 30MHz ~ 2Ghz	Sunol Sciences	JB1	A121003	3/3/2006
EMI Receiver, 9 kHz ~ 2.9 GHz	HP	8542E	3942A00286	3/29/2006
RF Filter Section	HP	85420E	3705A00256	3/29/2006
Antenna, Horn 1 ~ 18 GHz	EMCO	3115	6717	4/22/2006
LISN, 10 kHz ~ 30 MHz	FCC	LISN-50/250-25-2	2023	8/30/2006
LISN, 10 kHz ~ 30 MHz	Solar	8012-50-R-24-BNC	8379443	10/21/2005
Line Filter	Lindgren	LMF-3489	497	CNR
Spectrum Analyzer, 1.8 GHz	HP	8591A	3009A00791	5/23/2006

7. LIMITS AND RESULTS

7.1.1. AVERAGE POWER

AVERAGE POWER LIMIT

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

RESULTS

No non-compliance noted:

The cable assembly insertion loss of 11.02 dB (including 10 dB pad and 1.02 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

Channel	Frequency (MHz)	Average Power (dBm)
Low	2412	14.95
Middle	2437	14.80
High	2462	14.70

7.1.2. CONDUCTED SPURIOUS EMISSIONS

LIMITS

§15.247 (c) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

TEST PROCEDURE

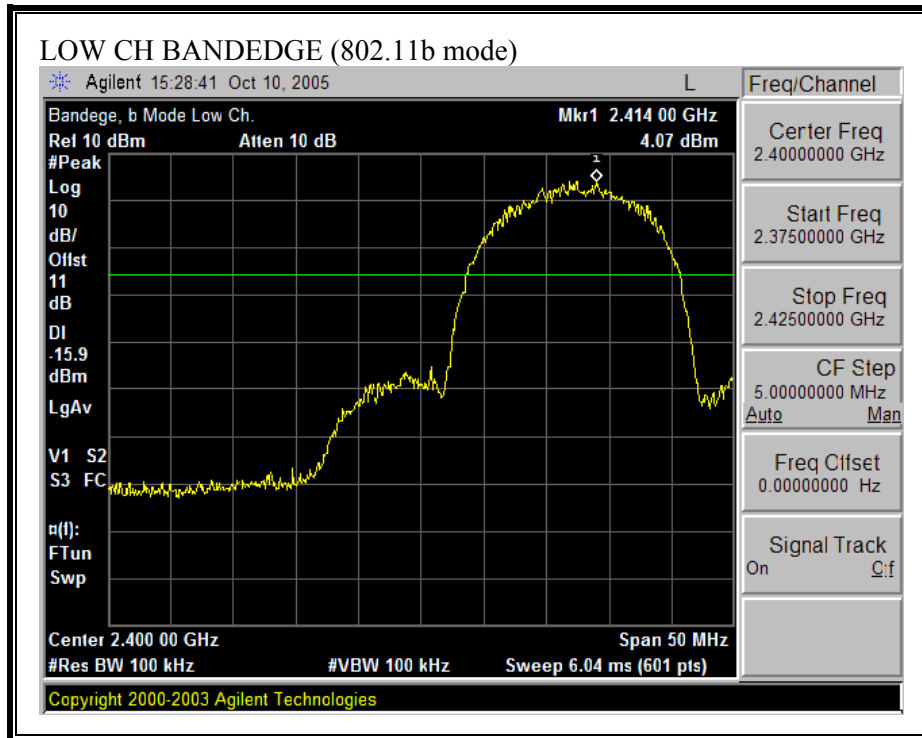
The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 100 kHz.

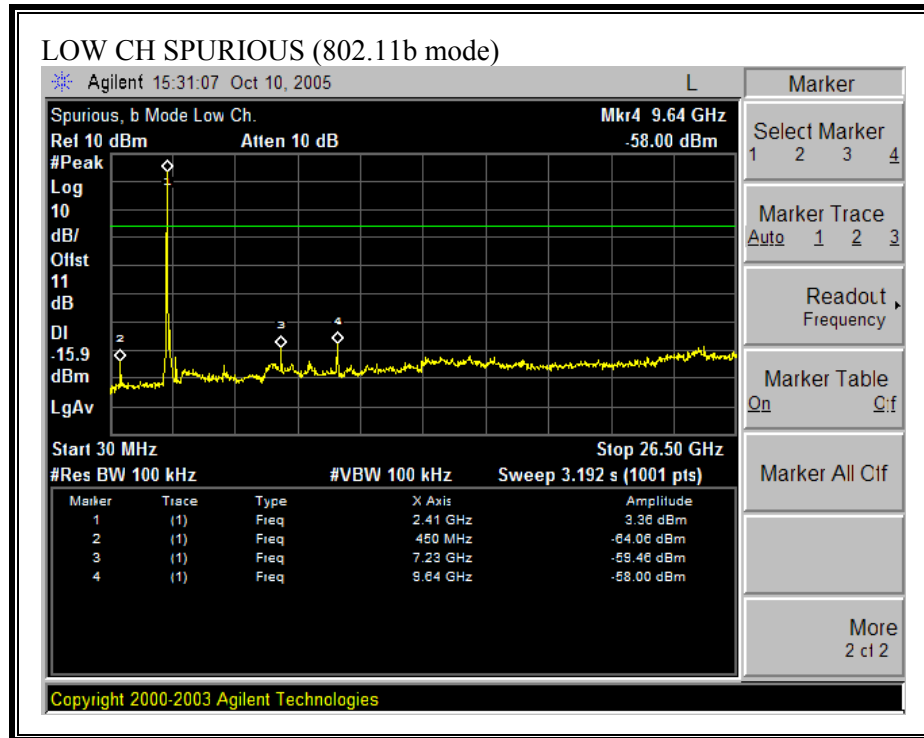
The spectrum from 30 MHz to 26.5 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

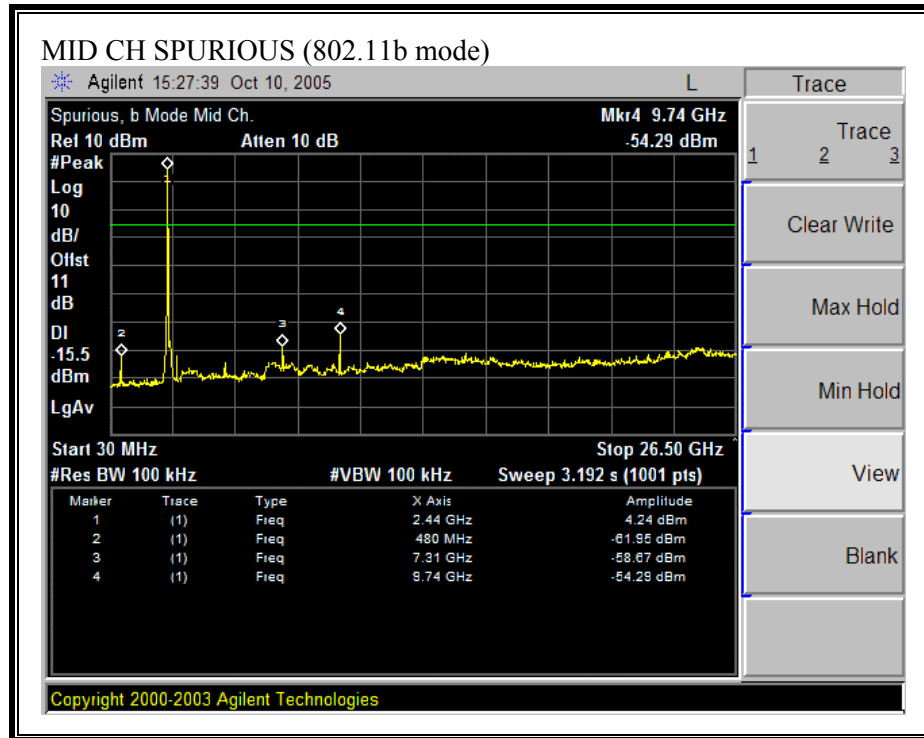
RESULTS

No non-compliance noted:

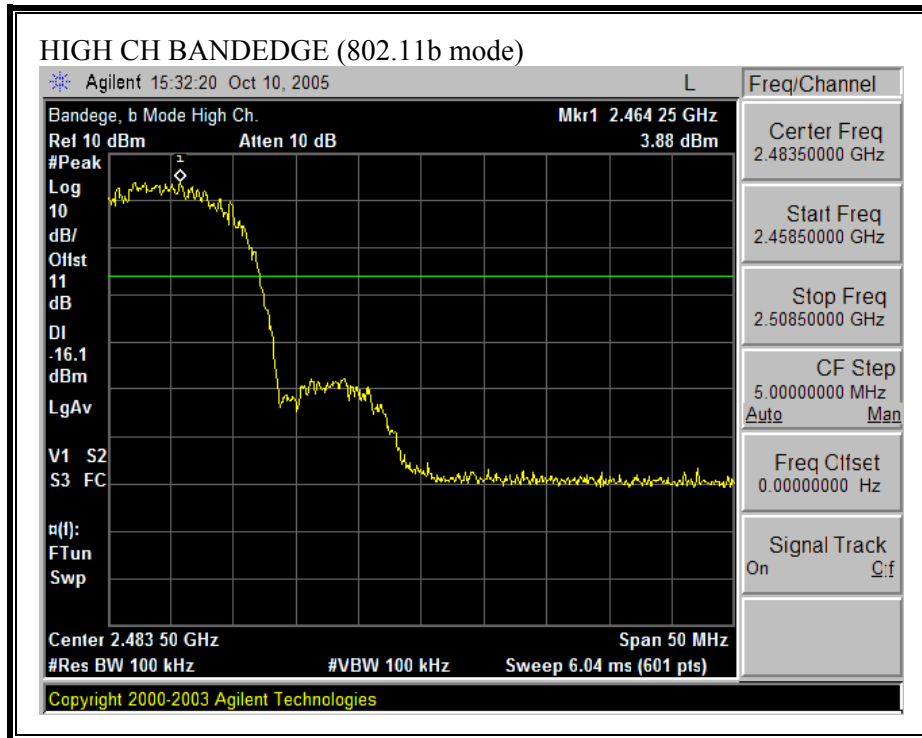
SPURIOUS EMISSIONS, LOW CHANNEL (802.11b MODE)

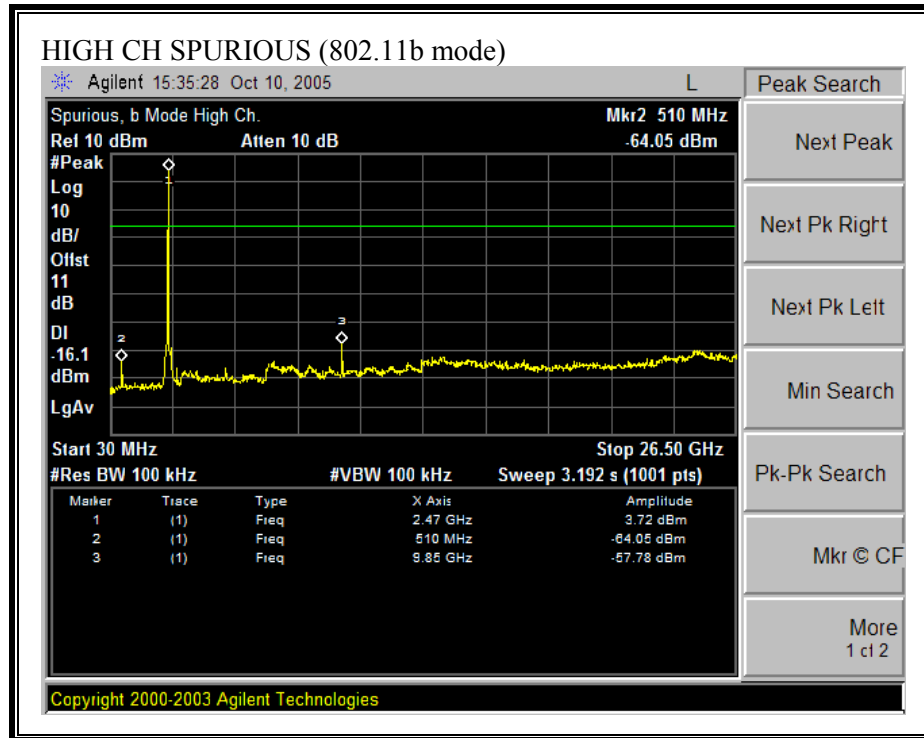






SPURIOUS EMISSIONS, HIGH CHANNEL (802.11b MODE)





7.2. RADIATED EMISSIONS

7.2.1. TRANSMITTER RADIATED SPURIOUS EMISSIONS

LIMITS

§15.205 (a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41			

¹ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

² Above 38.6

§15.205 (b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

§15.209 (a) Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 - 88	100 **	3
88 - 216	150 **	3
216 - 960	200 **	3
Above 960	500	3

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

§15.209 (b) In the emission table above, the tighter limit applies at the band edges.

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.4. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

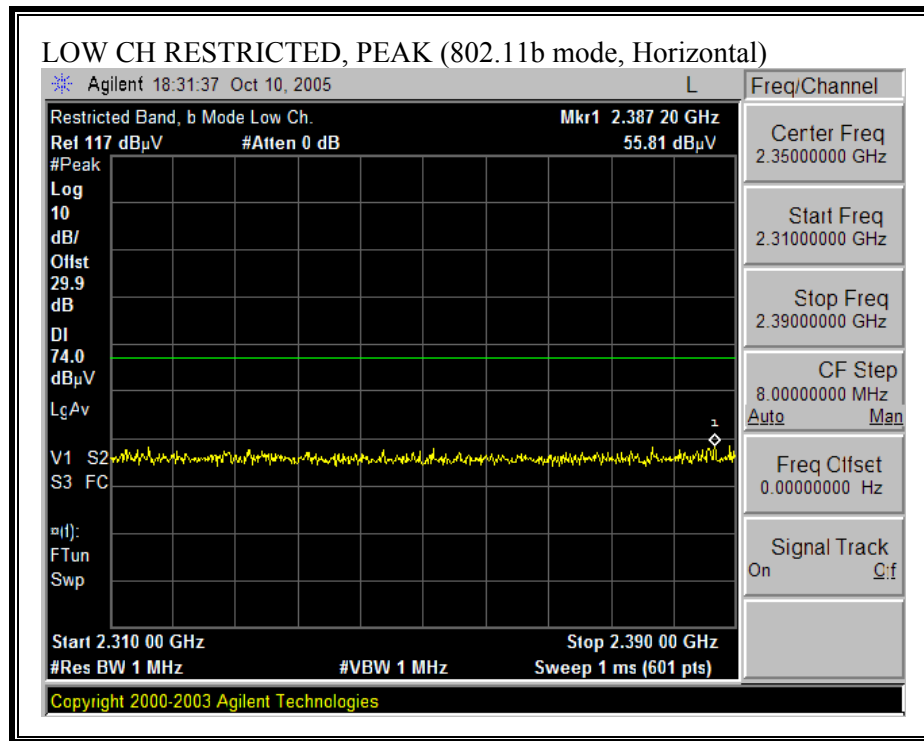
The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 2.4 GHz band.

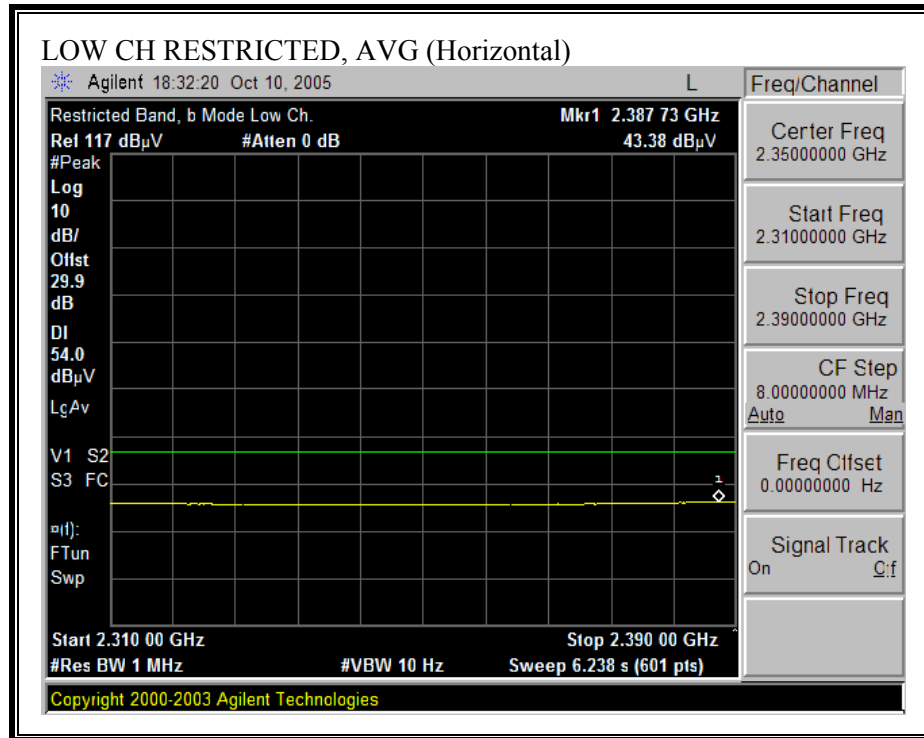
The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each 5 GHz band.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

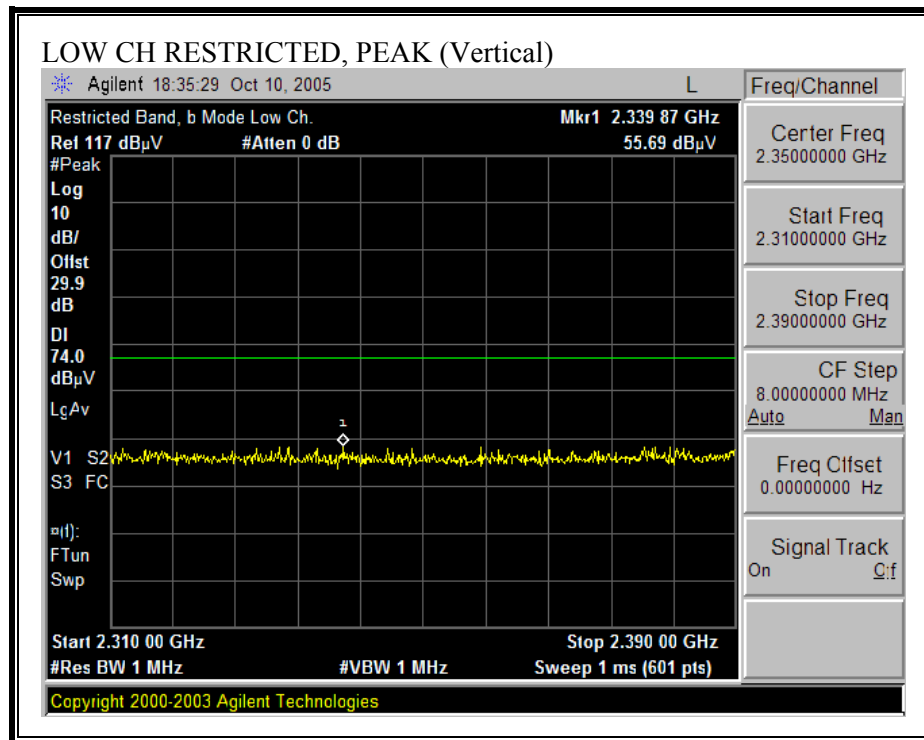
7.2.2. TRANSMITTER ABOVE 1 GHz FOR 2400 TO 2483.5 MHz BAND

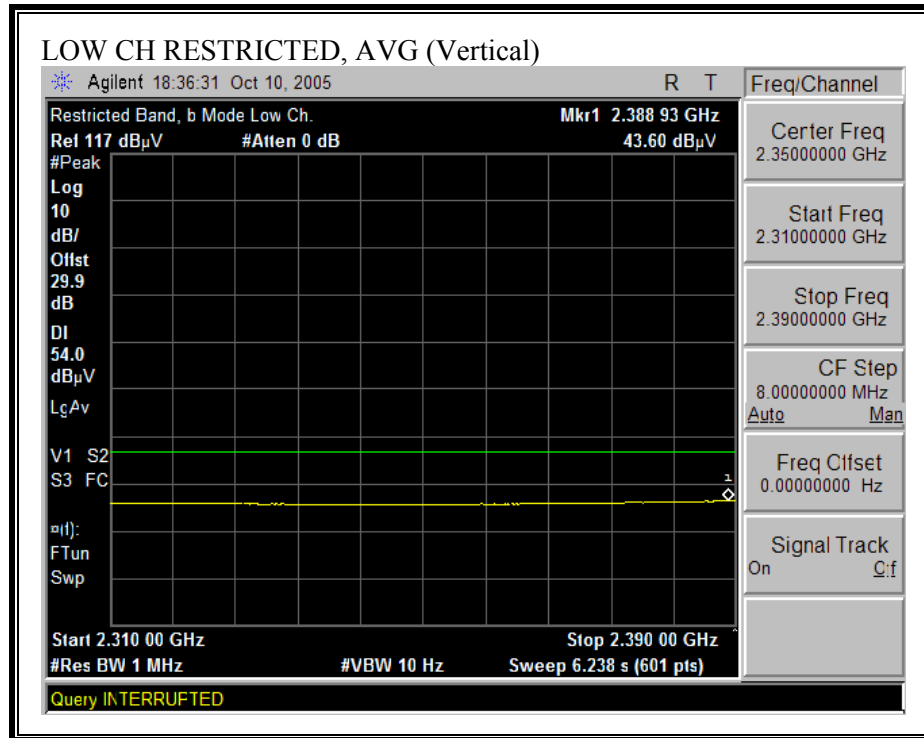
RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



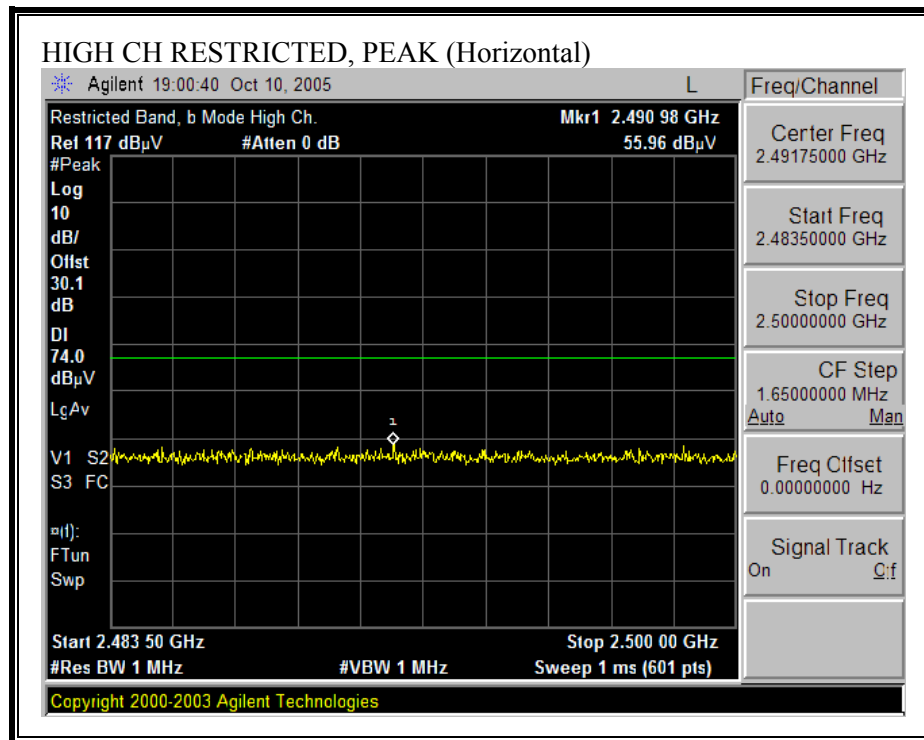


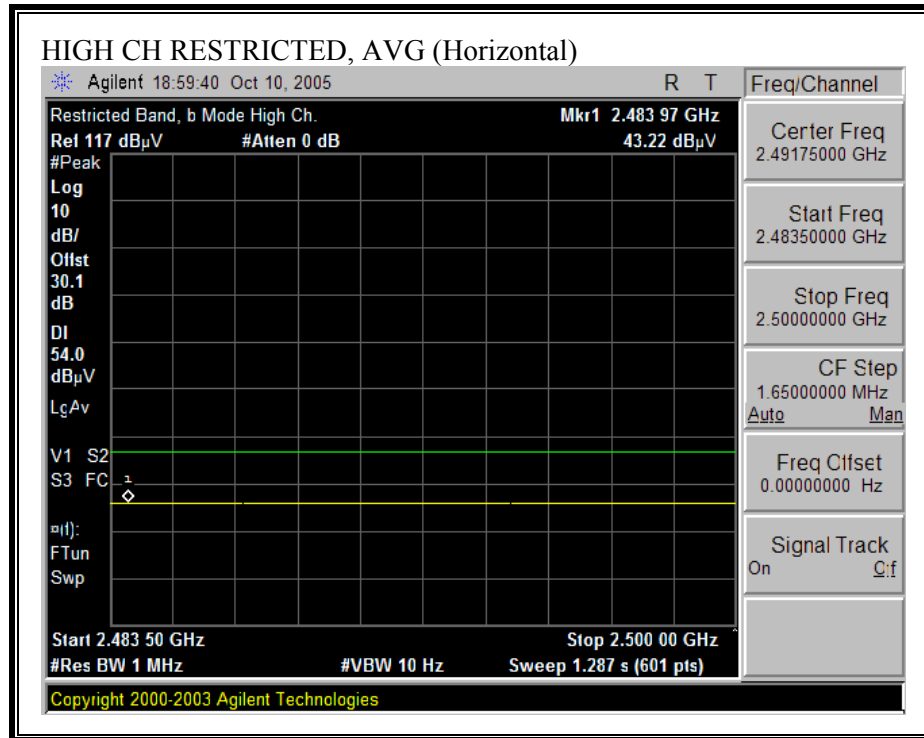
RESTRICTED BANDEDGE (b MODE, LOW CHANNEL, VERTICAL)



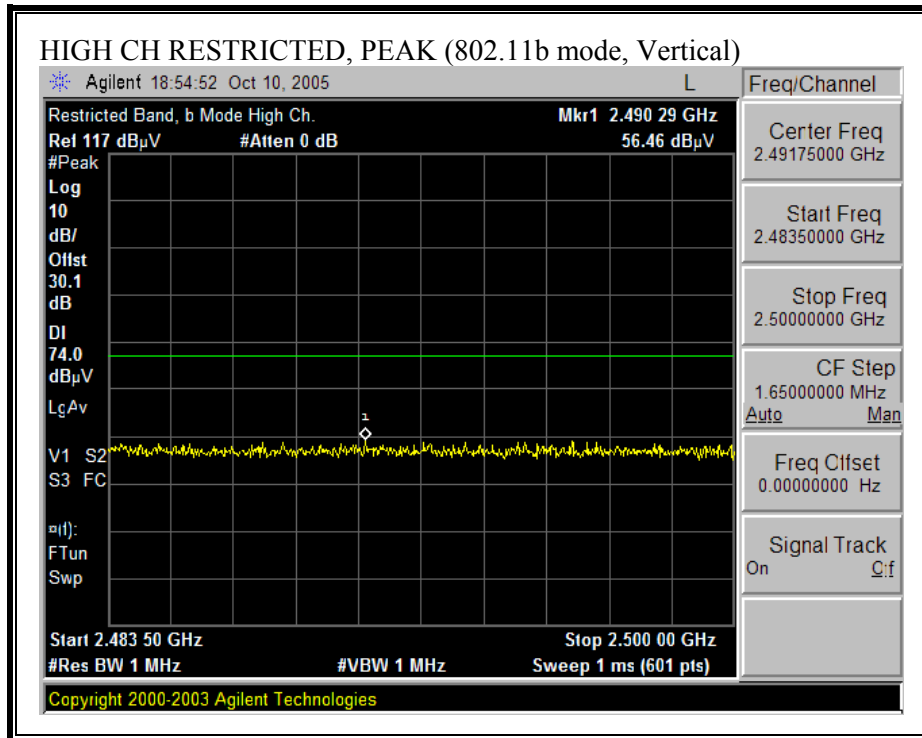


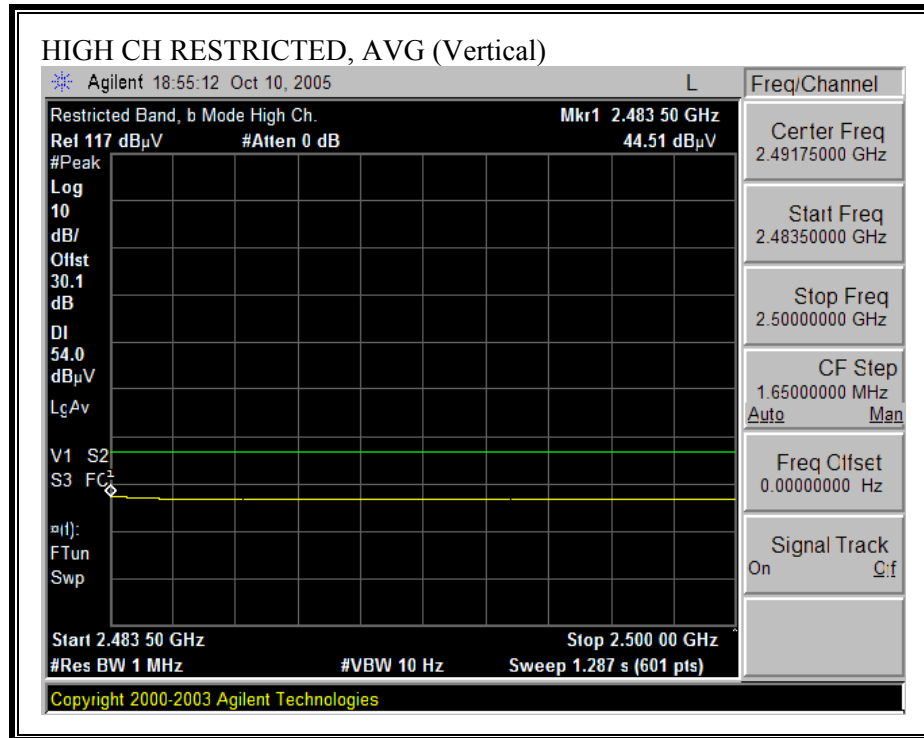
RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)



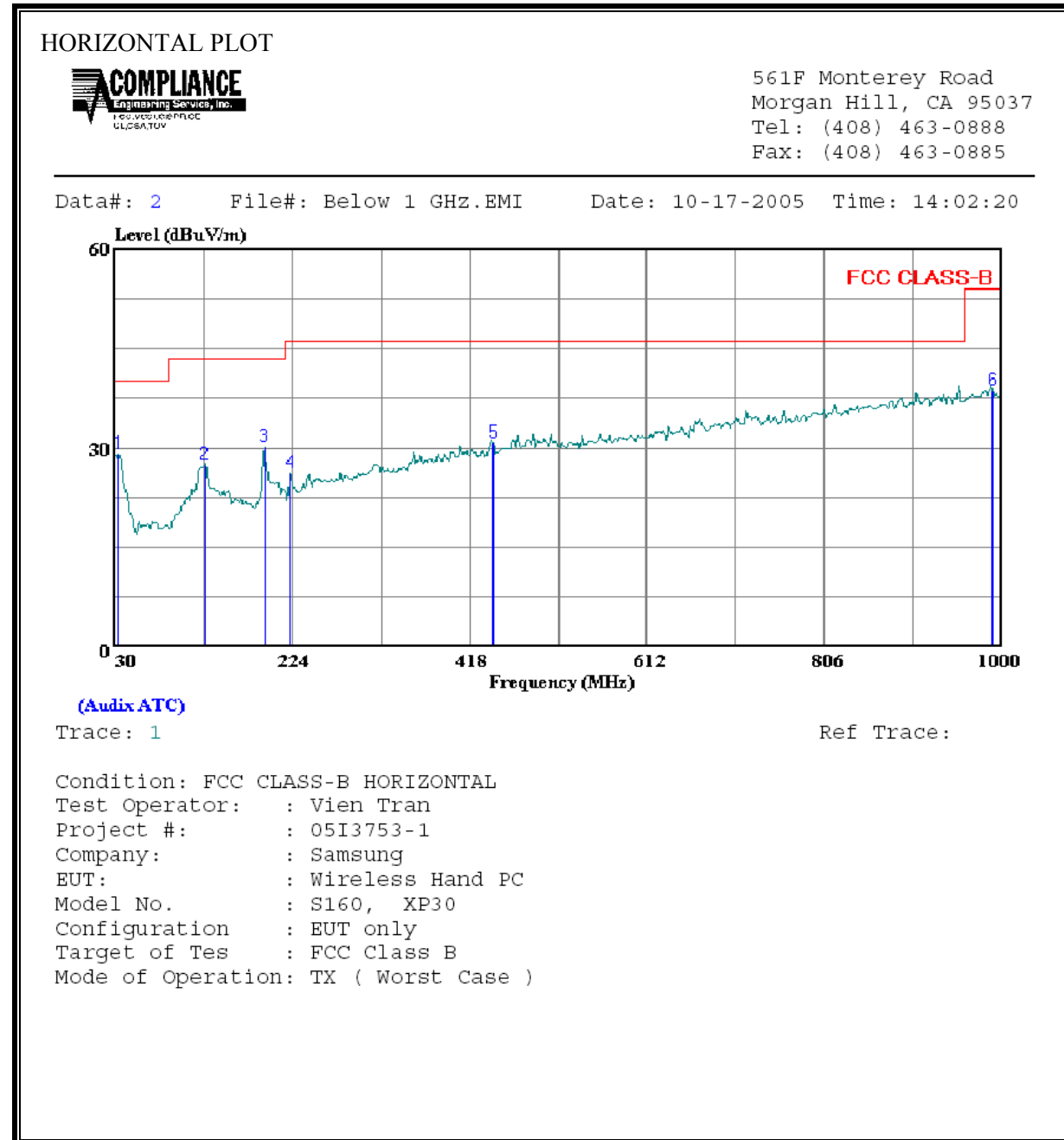


HARMONICS AND SPURIOUS EMISSIONS (b MODE)

10/17/05/21 High Frequency Measurement Compliance Certification Services, Morgan Hill Open Field Site Test Engr: Vien Tran Project #: 0513753-1 Company: Samsung Electronics EUT Descrip.: Wireless Hand PC / Home PAD EUT M/N: ZXP30-B16H, S160 & XP30 Test Target: FCC Class B Mode Oper: Transmitting Low, Mid & Hi Channels_Harmonic & Spur																											
Test Equipment:																											
Horn 1-18GHz		Pre-amplifier 1-26GHz		Pre-amplifier 26-40GHz		Horn > 18GHz		Limit																			
T73; S/N: 6717 @3m		T144 Miteq 3008A00931						FCC 15.209																			
Hi Frequency Cables <table border="1"> <tr> <td>2 foot cable</td> <td>3 foot cable</td> <td>12 foot cable</td> <td>HPF</td> <td>Reject Filter</td> <td>Peak Measurements RBW=VBW=1MHz</td> </tr> <tr> <td></td> <td>Vien 187215002</td> <td>Vien 197209005</td> <td>HPF_4.0GHz</td> <td></td> <td>Average Measurements RBW=1MHz ; VBW=10Hz</td> </tr> </table>																2 foot cable	3 foot cable	12 foot cable	HPF	Reject Filter	Peak Measurements RBW=VBW=1MHz		Vien 187215002	Vien 197209005	HPF_4.0GHz		Average Measurements RBW=1MHz ; VBW=10Hz
2 foot cable	3 foot cable	12 foot cable	HPF	Reject Filter	Peak Measurements RBW=VBW=1MHz																						
	Vien 187215002	Vien 197209005	HPF_4.0GHz		Average Measurements RBW=1MHz ; VBW=10Hz																						
f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filtr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)												
LOW CH 2412 MHz																											
4.075	3.0	49.5	44.7	32.9	2.7	-36.6	0.0	0.4	48.9	44.1	74	54	-25.1	-9.9	V, Spur												
4.824	3.0	47.0	34.5	33.7	2.9	-36.5	0.0	0.6	47.8	35.3	74	54	-26.2	-18.7	V												
7.236	3.0	45.4	33.0	35.4	4.2	-36.2	0.0	0.6	49.4	37.0	74	54	-24.6	-17.0	V												
8.151	3.0	48.0	43.4	36.5	4.4	-36.3	0.0	0.7	53.4	48.8	74	54	-20.6	-5.2	V, Spur												
4.075	3.0	51.9	47.9	32.9	2.7	-36.6	0.0	0.4	51.3	47.3	74	54	-22.7	-6.7	H, Spur												
4.824	3.0	50.5	38.0	33.7	2.9	-36.5	0.0	0.6	51.3	38.8	74	54	-22.7	-15.2	H												
7.236	3.0	44.8	32.8	35.4	4.2	-36.2	0.0	0.6	48.7	36.8	74	54	-25.3	-17.2	H												
8.151	3.0	48.9	43.9	36.5	4.4	-36.3	0.0	0.7	54.3	49.3	74	54	-19.7	-4.7	H, Spur												
MID CH 2437 MHz																											
4.125	3.0	45.4	33.8	32.9	2.7	-36.6	0.0	0.4	44.9	33.3	74	54	-29.1	-20.7	V, Spur												
4.875	3.0	45.4	33.8	33.8	3.0	-36.5	0.0	0.6	46.3	34.7	74	54	-27.7	-19.3	V												
7.312	3.0	44.2	32.9	35.5	4.2	-36.2	0.0	0.6	48.3	37.0	74	54	-25.7	-17.0	V												
8.251	3.0	47.8	40.4	36.6	4.5	-36.3	0.0	0.7	53.2	45.8	74	54	-20.8	-8.2	V, Spur												
4.125	3.0	51.3	47.8	32.9	2.7	-36.6	0.0	0.4	50.8	47.3	74	54	-23.2	-6.7	H, Spur												
4.875	3.0	48.0	35.7	33.8	3.0	-36.5	0.0	0.6	48.9	36.6	74	54	-25.1	-17.4	H												
7.312	3.0	45.0	32.9	35.5	4.2	-36.2	0.0	0.6	49.1	37.0	74	54	-24.9	-17.0	H												
8.251	3.0	48.8	42.8	36.6	4.5	-36.3	0.0	0.7	54.2	48.2	74	54	-19.8	-5.8	H, Spur												
HI CH 2462 MHz																											
4.175	3.0	49.0	43.5	33.0	2.8	-36.6	0.0	0.4	48.6	43.1	74	54	-25.4	-10.9	V, Spur												
4.924	3.0	45.5	32.9	33.8	3.1	-36.5	0.0	0.6	46.6	34.0	74	54	-27.4	-20.0	V												
7.386	3.0	44.7	32.7	35.6	4.2	-36.2	0.0	0.6	48.9	36.9	74	54	-25.1	-17.1	V												
8.351	3.0	51.0	43.0	36.6	4.5	-36.4	0.0	0.7	56.5	48.5	74	54	-17.5	-5.5	V, Spur												
4.175	3.0	51.0	47.0	33.0	2.8	-36.6	0.0	0.4	50.6	46.6	74	54	-23.4	-7.4	H, Spur												
4.924	3.0	48.1	35.8	33.8	3.1	-36.5	0.0	0.6	49.2	36.9	74	54	-24.8	-17.1	H												
7.386	3.0	44.9	32.6	35.6	4.2	-36.2	0.0	0.6	49.1	40.0	74	54	-24.9	-14.0	H												
8.351	3.0	50.0	45.0	36.6	4.5	-36.4	0.0	0.7	55.5	50.5	74	54	-18.5	-3.5	H, Spur												
No other emissions were detected above system noise floor.																											
f	Measurement Frequency		Amp	Preamp Gain		Avg Lim	Average Field Strength Limit																				
Dist	Distance to Antenna		D Corr	Distance Correct to 3 meters		Pk Lim	Peak Field Strength Limit																				
Read	Analyzer Reading		Avg	Average Field Strength @ 3 m		Avg Mar	Margin vs. Average Limit																				
AF	Antenna Factor		Peak	Calculated Peak Field Strength		Pk Mar	Margin vs. Peak Limit																				
CL	Cable Loss		HPF	High Pass Filter																							

7.2.3. WORST-CASE RADIATED EMISSIONS BELOW 1 GHz

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)



HORIZONTAL DATA

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	33.880	10.11	19.05	29.16	40.00	-10.84	Peak
2	127.970	12.23	15.18	27.41	43.50	-16.09	Peak
3	193.930	16.62	13.56	30.18	43.50	-13.32	Peak
4	221.090	13.60	12.67	26.27	46.00	-19.73	Peak
5	444.190	11.59	19.04	30.63	46.00	-15.37	Peak
6	990.300	11.81	26.88	38.70	54.00	-15.31	Peak

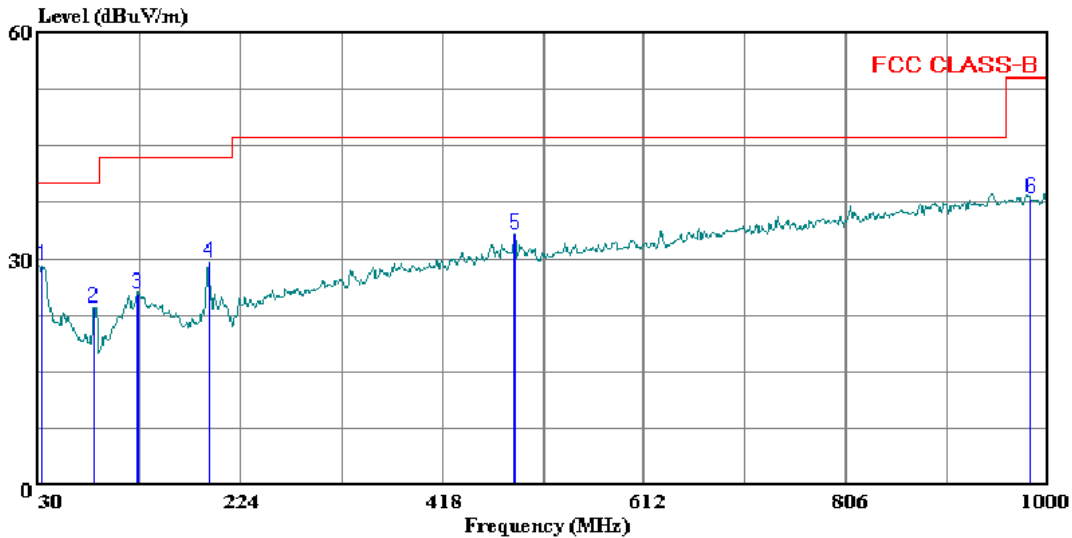
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)

VERTICAL PLOT



561F Monterey Road
Morgan Hill, CA 95037
Tel: (408) 463-0888
Fax: (408) 463-0885

Data#: 4 File#: Below 1 GHz.EMI Date: 10-17-2005 Time: 14:07:11



(Audix ATC)

Trace: 3

Ref Trace:

Condition: FCC CLASS-B VERTICAL
Test Operator: : Vien Tran
Project #: : 05I3753-1
Company: : Samsung
EUT: : Wireless Hand PC
Model No. : S160, XP30
Configuration : EUT only
Target of Test : FCC Class B
Mode of Operation: TX (Worst Case)

VERTICAL DATA

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	33.880	9.97	19.05	29.02	40.00	-10.98	Peak
2	83.350	14.98	8.50	23.47	40.00	-16.53	Peak
3	125.060	9.99	15.26	25.25	43.50	-18.26	Peak
4	193.930	15.86	13.56	29.42	43.50	-14.08	Peak
5	487.840	13.30	20.00	33.30	46.00	-12.70	Peak
6	983.510	11.23	26.76	37.99	54.00	-16.01	Peak

7.3. POWERLINE CONDUCTED EMISSIONS

LIMIT

§15.207 (a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal.

The lower limit applies at the boundary between the frequency ranges.

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.4.

The resolution bandwidth is set to 9 kHz for both peak detection and quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

Line conducted data is recorded for both NEUTRAL and HOT lines.

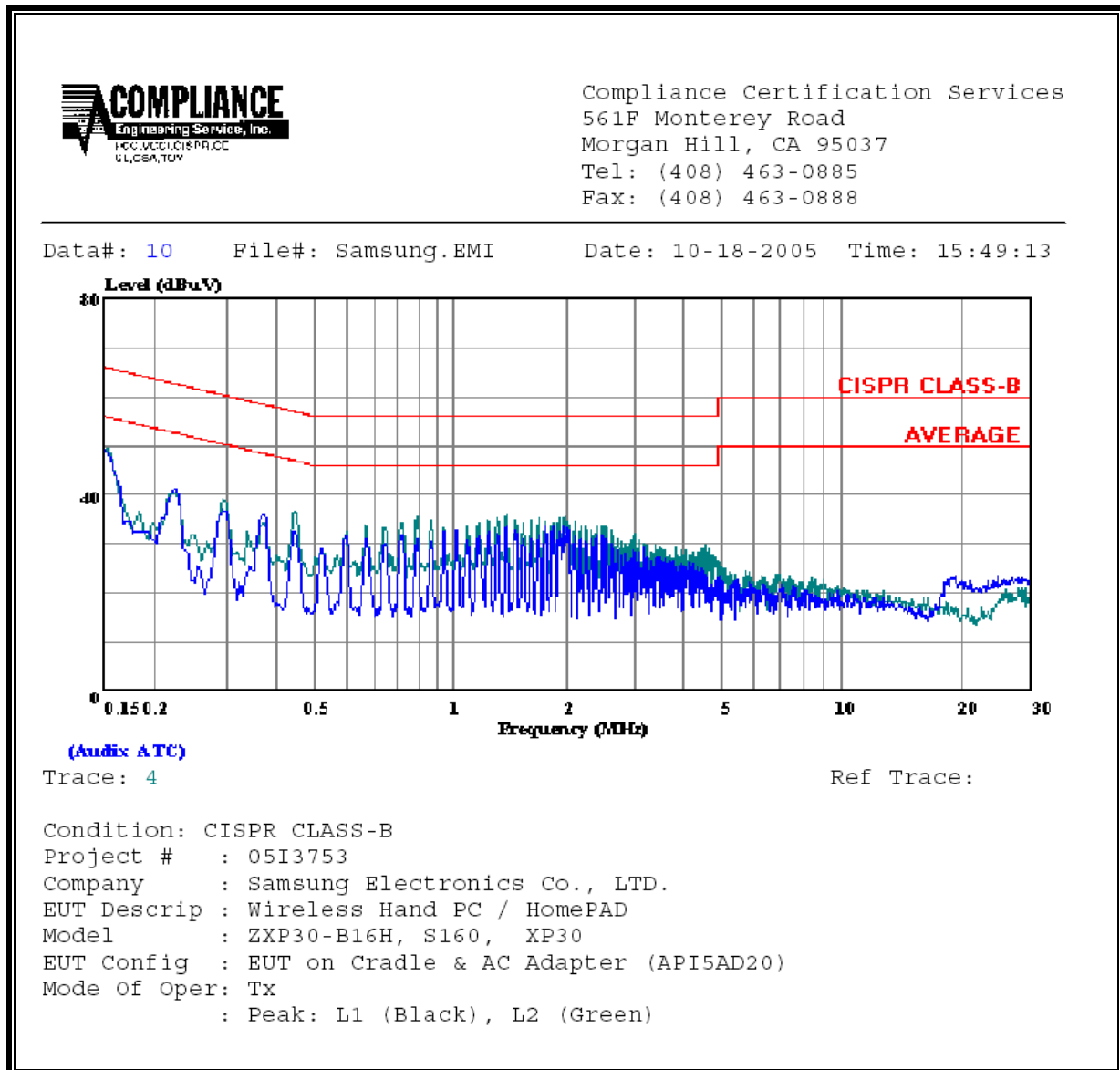
RESULTS

No non-compliance noted:

6 WORST EMISSIONS

EUT ON CRADLE									
CONDUCTED EMISSIONS DATA (115VAC 60Hz)									
Freq.	Reading			Closs	Limit	FCC B	Margin		Remark
(MHz)	PK (dBuV)	QP (dBuV)	AV (dBuV)	(dB)	QP	AV	QP (dB)	AV (dB)	L1 / L2
0.15	49.32	--	--	0.00	65.89	55.89	-16.57	-6.57	L1
0.23	39.94	--	--	0.00	62.56	52.56	-22.62	-12.62	L1
1.50	36.15	--	--	0.00	56.00	46.00	-19.85	-9.85	L1
0.15	48.62	--	--	0.00	65.89	55.89	-17.27	-7.27	L2
0.23	41.35	--	--	0.00	62.56	52.56	-21.21	-11.21	L2
1.50	33.50	--	--	0.00	56.00	46.00	-22.50	-12.50	L2
6 Worst Data									

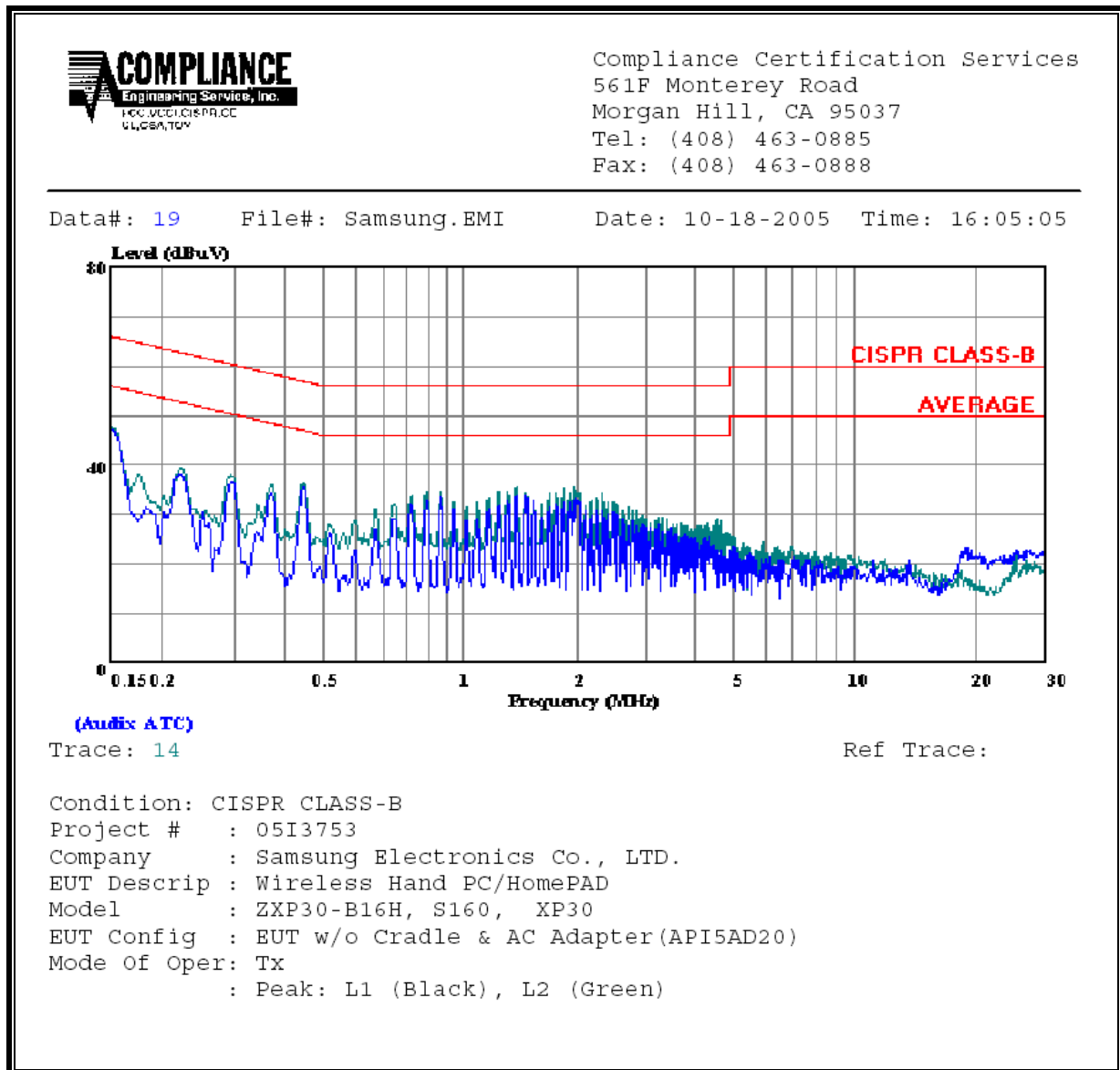
LINE 1 AND LINE 2 RESULTS



6 WORST EMISSIONS

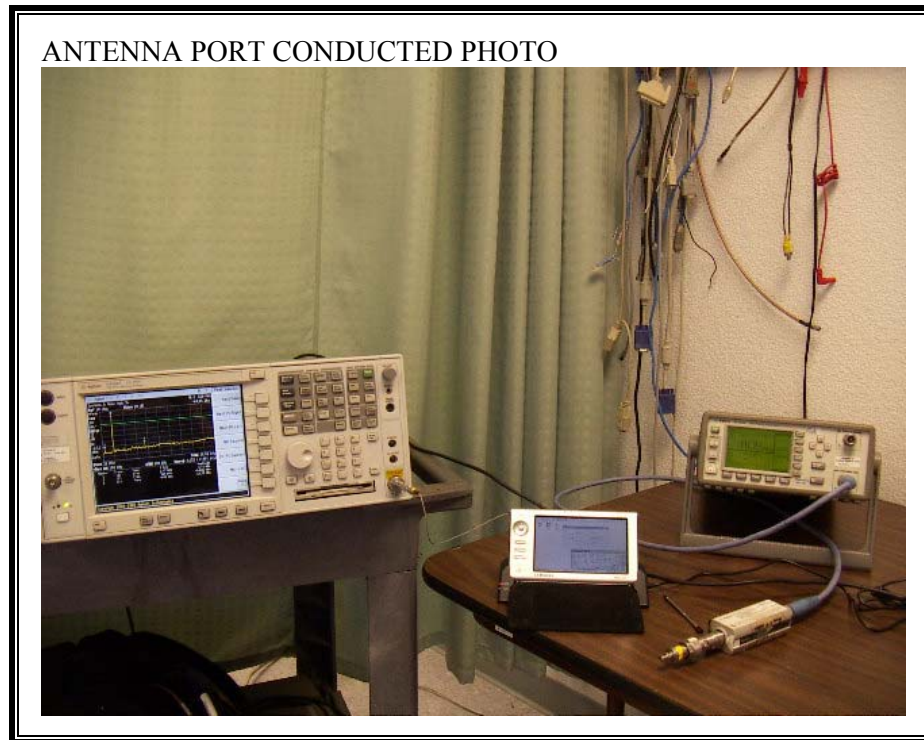
EUT STAND ALONE (Without Cradle)									
CONDUCTED EMISSIONS DATA (115VAC 60Hz)									
Freq.	Reading			Closs	Limit	FCC B	Margin		Remark
(MHz)	PK (dBuV)	QP (dBuV)	AV (dBuV)	(dB)	QP	AV	QP (dB)	AV (dB)	L1 / L2
0.15	47.30	--	--	0.00	65.89	55.89	-18.59	-8.59	L1
0.23	39.00	--	--	0.00	62.56	52.56	-23.56	-13.56	L1
1.50	35.70	--	--	0.00	56.00	46.00	-20.30	-10.30	L1
0.15	46.70	--	--	0.00	65.89	55.89	-19.19	-9.19	L2
0.23	38.10	--	--	0.00	62.56	52.56	-24.46	-14.46	L2
1.50	33.96	--	--	0.00	56.00	46.00	-22.04	-12.04	L2
6 Worst Data									

LINE 1 AND LINE 2 RESULTS

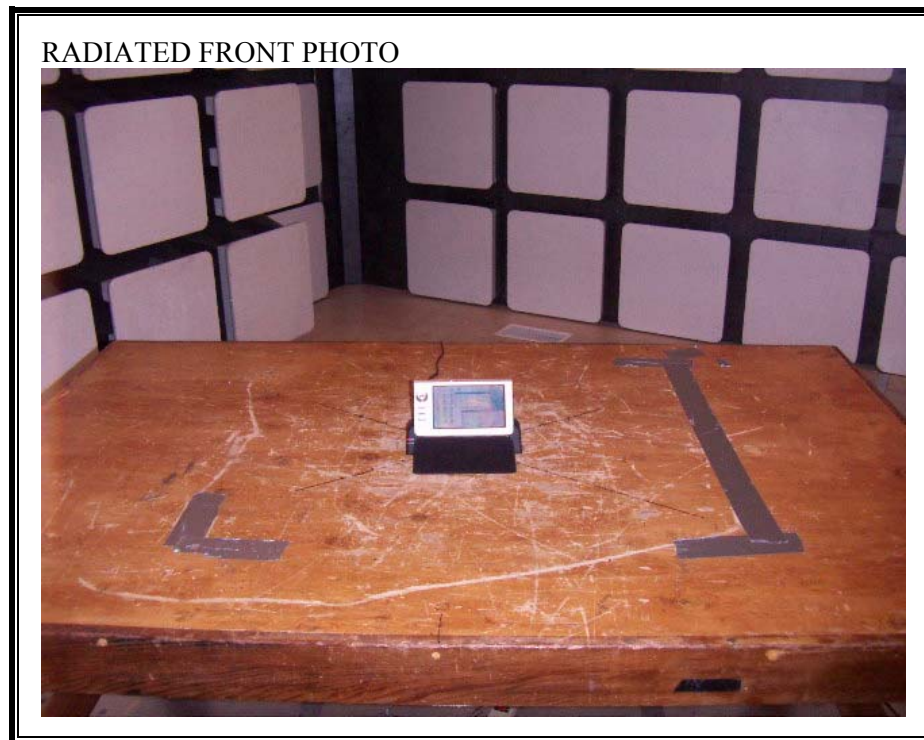


8. SETUP PHOTOS

ANTENNA PORT CONDUCTED RF MEASUREMENT SETUP



RADIATED RF MEASUREMENT SETUP



RADIATED BACK PHOTO



POWERLINE CONDUCTED EMISSIONS MEASUREMENT SETUP

EUT on Cradle



LINE CONDUCTED BACK PHOTO



POWERLINE CONDUCTED EMISSIONS MEASUREMENT SETUP

EUT only



LINE CONDUCTED BACK PHOTO



END OF REPORT