FCC CFR47 PART 15 SUBPART C
CERTIFICATION TEST REPORT

FOR

PDA PHONE

MODEL NUMBERS: KAIS100, KAIS110, KAIS120

FCC ID: NM8KS

REPORT NUMBER: 07U10984-6

ISSUE DATE: JUNE 27, 2007

Prepared for
HIGH TECH COMPUTER CORP.
23 HSIN HUA RD.
TAOYUAN 330, TAIWAN

Prepared by
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Revision History

Rev.	Issue Date	Revisions	Revised By
--	06/27/07	Initial Issue	T. Chan

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: HIGH TECH COMPUTER CORP.
23 HSIN HUA ROAD
TAOYUAN 330, TAIWAN

EUT DESCRIPTION: PDA PHONE

MODELS: KAIS100, KAIS110, KAIS120

MODEL: KAIS120

SERIAL NUMBER: TY709G000545

DATE TESTED: APRIL 13-16, 2007

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:

THU CHAN
EMC SUPERVISOR
COMPLIANCE CERTIFICATION SERVICES

Tested By:

CHIN PANG
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 47173 Benicia Street, Fremont, 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
Radiated Emission Above 2000 MHz	+/- 4.3 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

The EUT is a PDA Bluetooth Phone and is manufactured by High Tech Computer.

ACCESSORIES

Subassembly Description	Manufacturer	Part Number	Model Number
AC ADAPTER FOR EUT	Delta Electronic	79H00051-01M	ADP-5FH B
3.7V Li-ion Battery	Dynapack	35H00088-00M	KAIS160
Earphone	Merry Electronics Co., LTG	NA	EMC220
USB Cable	NA	NA	NA
PDA	HTC	TY709G000591	KAIS100
PDA	HTC	TY709G000606	KAIS110
PDA	HTC	TY709G000545	KAIS120

5.2. MANUFACTURER'S DESCRIPTION OF MODEL DIFFERENCES

The EUT was chosen as a representative model of the model series. The following table shows the model differences.

Model Name	Model Differences
KAIS100	With 3.0 Megapixel Color CMOS Camera
KAIS110	No Camera
KAIS120	With two cameras, Main Camera: 3.0 Megapixel Color CMOS Camera. Second Camera : Color CMOS CIF camera

*: Model tested: KAIS120

5.3. MAXIMUM OUTPUT POWER

The transmitter has a maximum peak conducted output power as follows:

2400 to 2483.5 MHz Authorized Band

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
2402-2480	Bluetooth	2.04	1.60

5.4. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes a fixed internal PIFA antenna with a maximum peak gain of 1.5dBi.

5.5. SOFTWARE AND FIRMWARE

The firmware installed in the EUT during testing was mapi_firmware_1150.

The EUT driver software installed in the host support equipment during testing was Kaiser_RS_V214_1025_USB.

The test utility software used during testing was radioscope.exe

5.6. 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 2402 MHz.

The EUT is a portable device, therefore X, Y, & Z positions with and without AC adapter, PDA open and closed position and mobile configuration have been investigated. The worst case is to evaluate at EUT open and at Y position with battery operated.

The EUT models-KAIS100, KAIS110 and KAIS120 have been investigated during baseline scan and found no different in these models. Since KAIS120 has more option than the other models, therefore, it's used for the test.

5.7. DESCRIPTION OF TEST SETUP

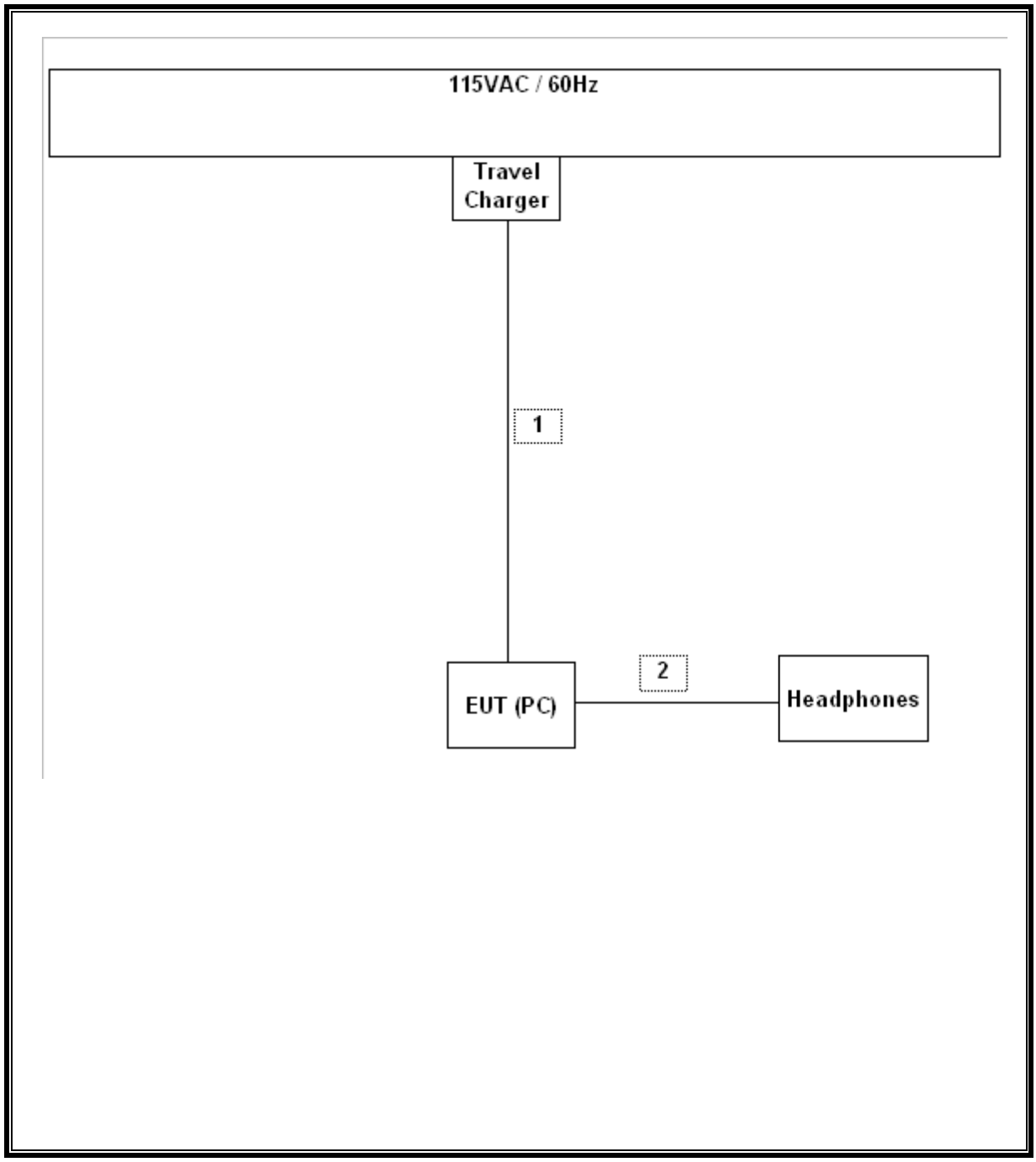
SUPPORT EQUIPMENT

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
Laptop	Toshiba	Satellite	9167937PU	DoC
AC Adapter	Toshiba	PA3083U-1ACA	0109a0043422g	DoC

I/O CABLES

I/O CABLE LIST						
Cable No.	**Port**	**# of Identical Ports**	**Connector Type**	**Cable Type**	**Cable Length**	**Remarks**
1	AC	1	US 115V	Un-shielded	2m	NA
2	DC	1	DC	Un-shielded	2m	NA

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 / HP	E4446A	US42510266	10/18/2007
Peak Power Meter	Agilent / HP	E4416A	GB41291160	12/2/2007
Peak / Average Power Sensor	Agilent	E9327A	US40440755	12/2/2007
Preamplifier, 1 ~ 26.5 GHz	Agilent / HP	8449B	3008A00369	8/17/2007
Antenna, Bilog 30 MHz ~ 2 Ghz	Sunol Sciences	JB1	A121003	9/3/2007
Antenna, Horn 1 ~ 18 GHz	EMCO	3115	6717	4/22/2008
LISN, 10 kHz ~ 30 MHz	FCC	LISN-50/250-25-2	2023	8/30/2007
EMI Test Receiver	R & S	ESHS 20	827129/006	6/3/2007
Preamplifier, 1300 MHz	Agilent / HP	8447D	1937A02062	1/23/2008
SA RF Section, 1.5 GHz	Agilent / HP	85680B	2814A04227	1/7/2008
SA Display Section 2	Agilent / HP	85662A	2816A16696	4/7/2008
Quasi-Peak Adaptor	Agilent / HP	85650A	3145A01654	1/21/2008
4.0 High Pass Filter	Micro Tronics	HPM13351	3	N/A

6.1. BLUETOOTH ANTENNA PORT CHANNEL TESTS

6.1.1. PEAK OUTPUT POWER

PEAK POWER LIMIT

§15.247 (b) The maximum peak output power of the intentional radiator shall not exceed the following:

§15.247 (b) (1) For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 hopping channels: 1 watt.

§15.247 (b) (4) Except as shown in paragraphs (b)(3) (i), (ii) and (iii) of this section, if transmitting antennas of directional gain greater than 6 dBi are used the peak output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1) or (b)(2) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

§15.247 (a) (1)
Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

TEST PROCEDURE

The transmitter output is connected to a peak power meter.

RESULTS

No non-compliance noted:

RESULTS

The maximum antenna gain is 1.5 dBi for other than fixed, point-to-point operations, therefore the limit is maintain the same.

No non-compliance noted:

GFSK Modulation

Channel	Frequency (MHz)	Peak Power (dBm)	Limit (dBm)	Margin (dB)
Low	2402	2.04	30	-27.96
Middle	2441	1.79	30	-28.21
High	2480	0.94	30	-29.06

8DPSK Modulation

Channel	Frequency (MHz)	Peak Power (dBm)	Limit (dBm)	Margin (dB)
Low	2402	1.17	20.97	-19.80
Middle	2441	0.94	20.97	-20.03
High	2480	0.01	20.97	-20.96

6.1.2. 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 1 dB was entered as an offset in the power meter to allow for direct reading of power.

GFSK

Channel	Frequency (MHz)	Average Power (dBm)
Low	2402	1.91
Middle	2441	1.70
High	2480	0.79

8DPSK

Channel	Frequency (MHz)	Average Power (dBm)
Low	2402	1.00
Middle	2441	0.79
High	2480	-0.21

6.1.3. 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 300 kHz.

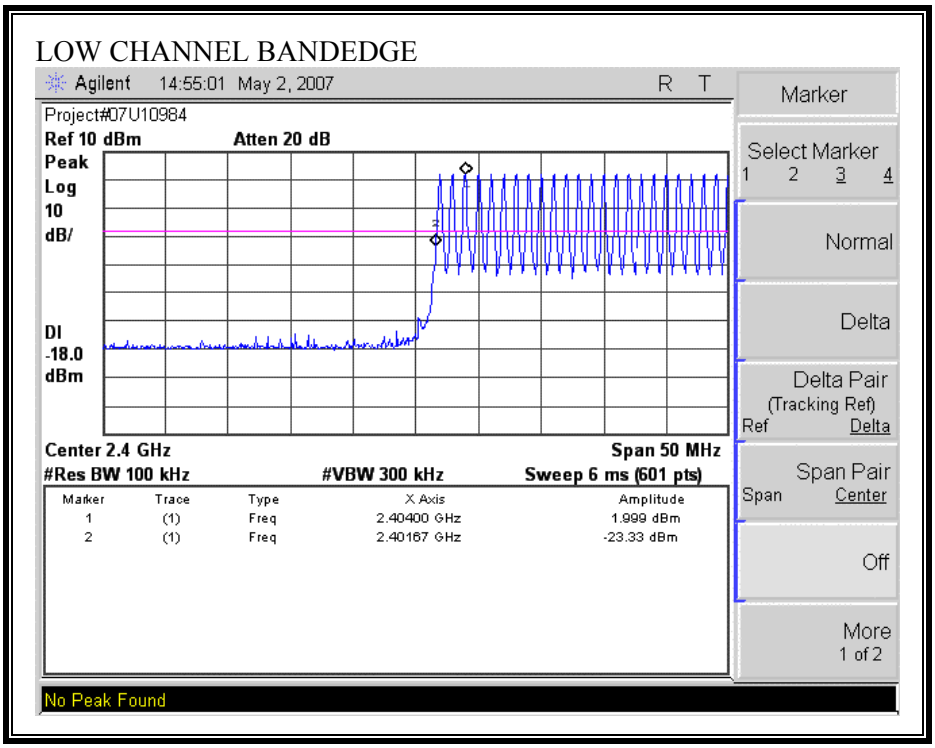
The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

RESULTS

No non-compliance noted:

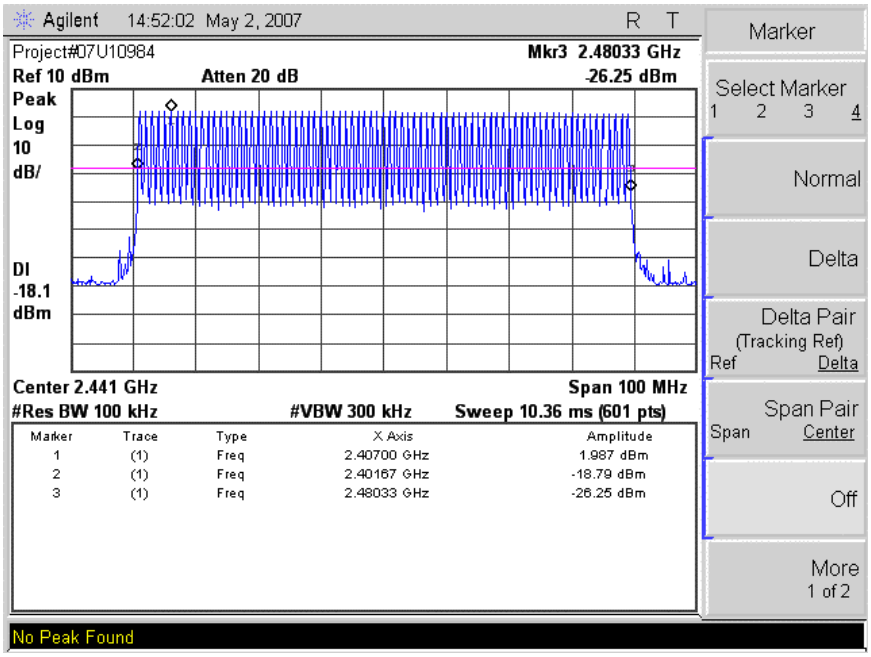
GFSK

SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON

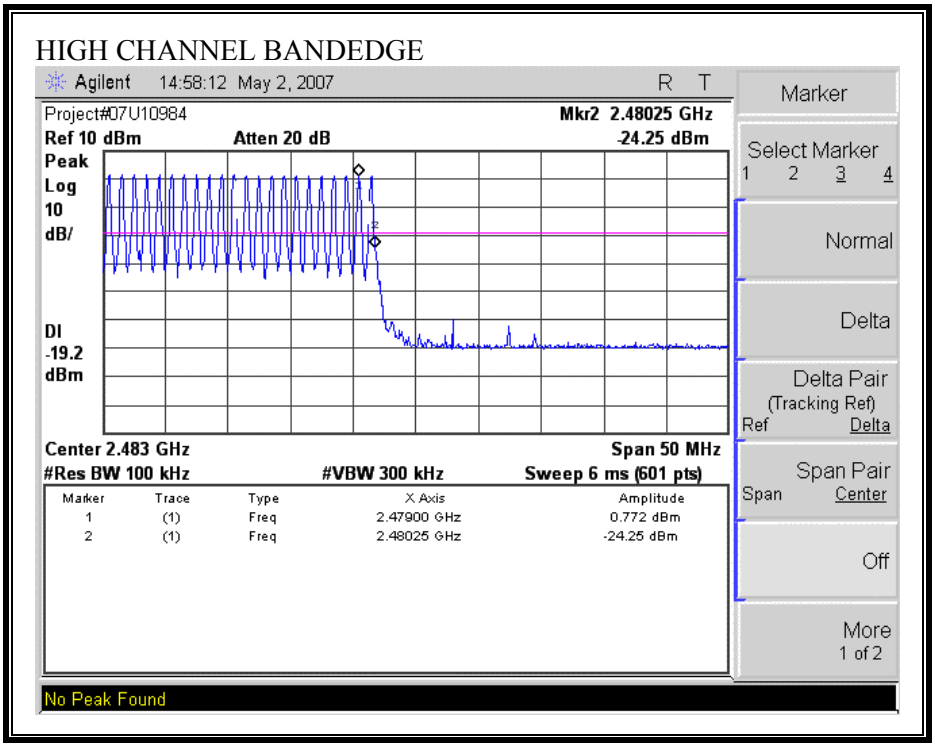


SPURIOUS EMISSIONS, MID CHANNEL

MID CHANNEL REFERENCE



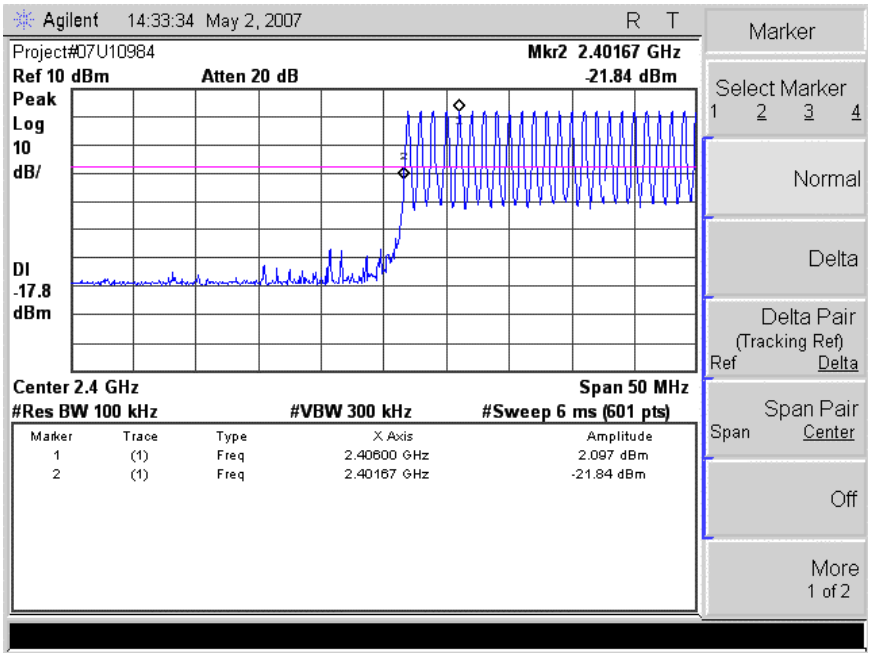
HIGH BANDEDGE WITH HOPPING ON



8DPSK

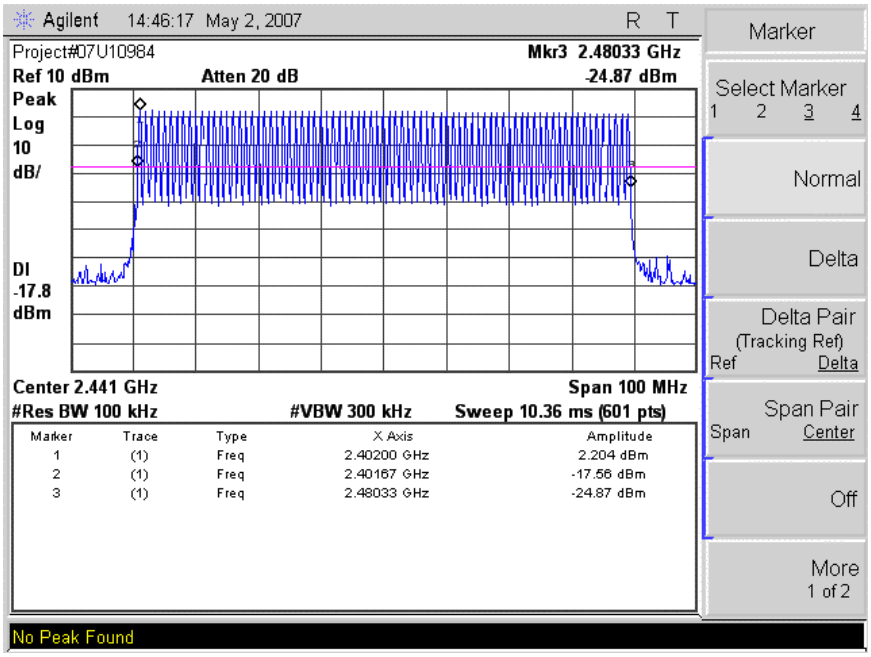
SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON

LOW BANDEDGE WITH HOPPING ON

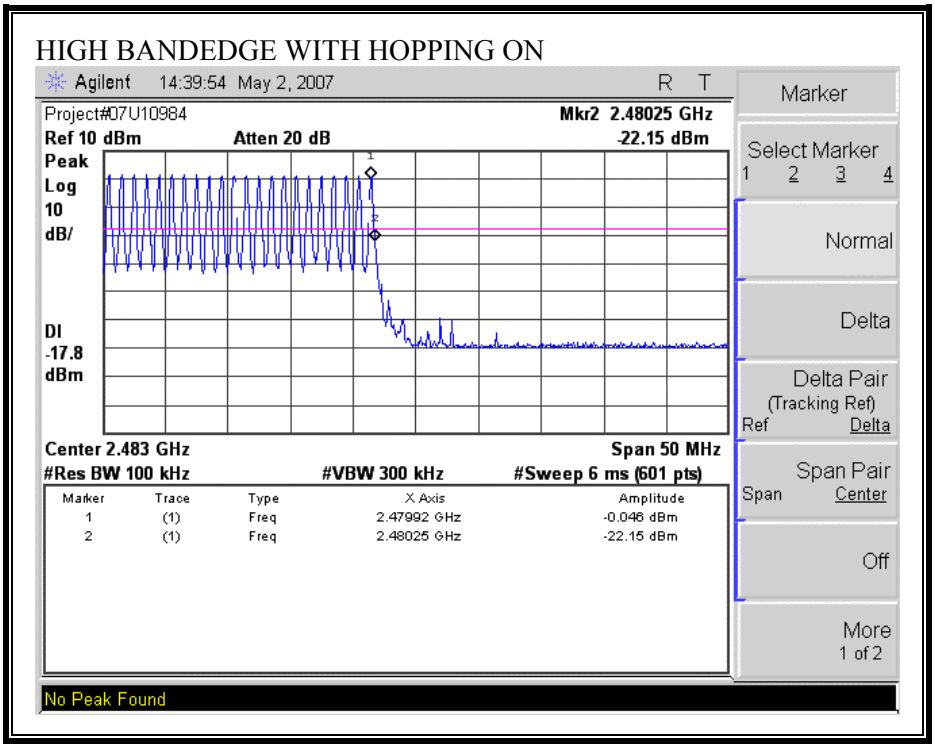


SPURIOUS EMISSIONS, MID CHANNEL

MID CHANNEL REFERENCE



HIGH BANDEDGE WITH HOPPING ON



6.1.4. PEAK POWER SPECTRAL DENSITY

LIMIT

§15.247 (f) The digital modulation operation of the hybrid system, with the frequency hopping operation turned off, shall comply with the power density requirements of paragraph (d) of this section. For direct sequence systems, the peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer, the maximum level in a 3 kHz bandwidth is measured with the spectrum analyzer using RBW = 3 kHz and VBW > 3 kHz, sweep time = span / 3 kHz, and video averaging is turned off. The PPSD is the highest level found across the emission in any 3 kHz band.

RESULTS

No non-compliance noted:

GFSK

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin (dB)
Low	2402	1.53	8	-6.47
Middle	2441	1.19	8	-6.81
High	2480	0.36	8	-7.64

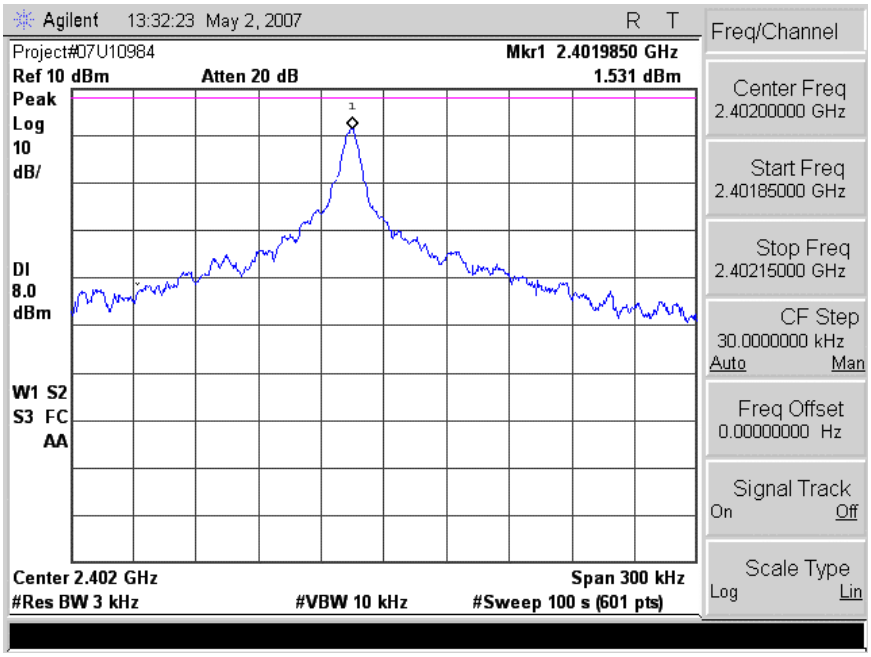
8DPSK

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin (dB)
Low	2402	0.61	8	-7.39
Middle	2441	0.22	8	-7.78
High	2480	-0.71	8	-8.71

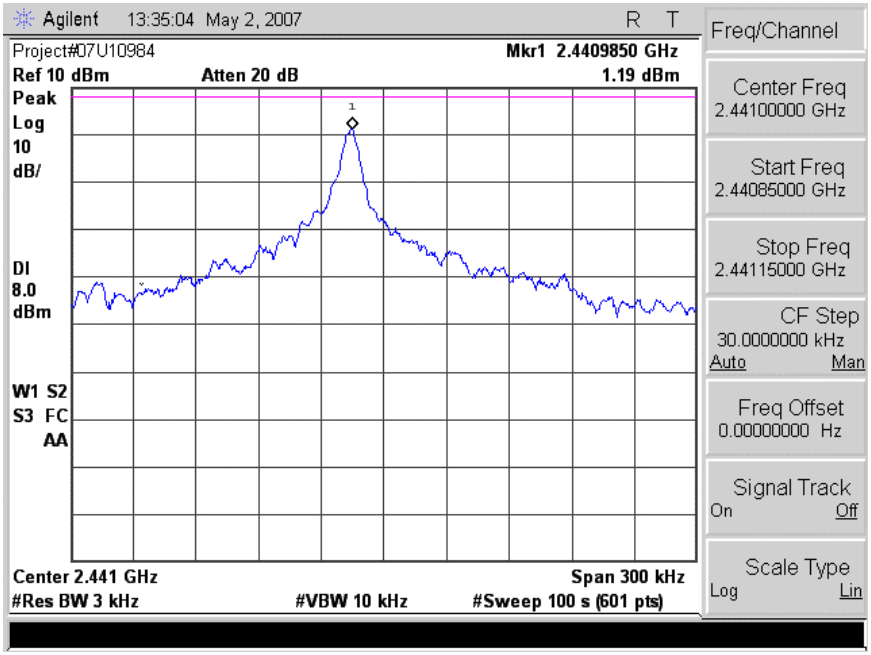
GFSK

PEAK POWER SPECTRAL DENSITY

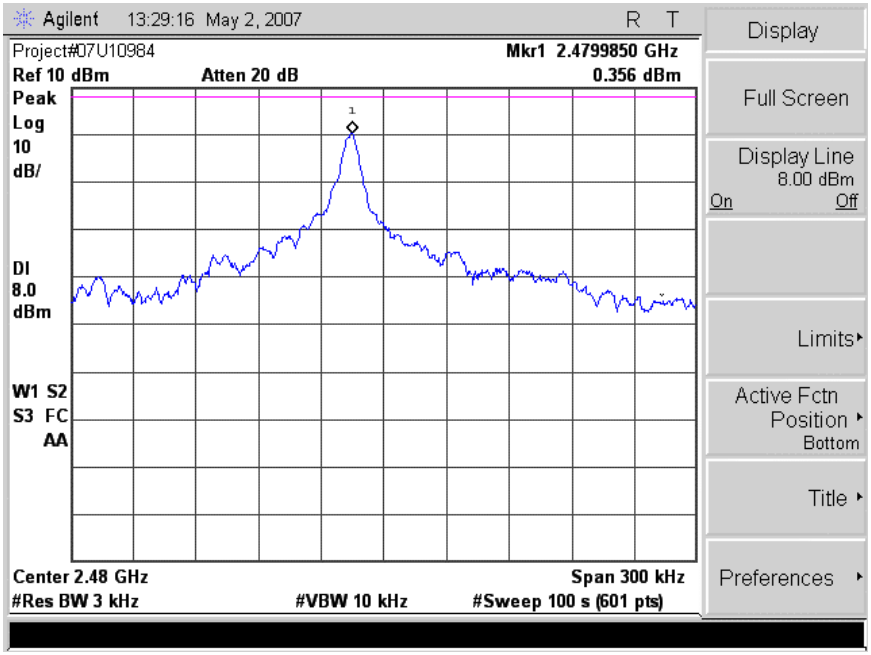
PPSD LOW CH



PPSD MID CH



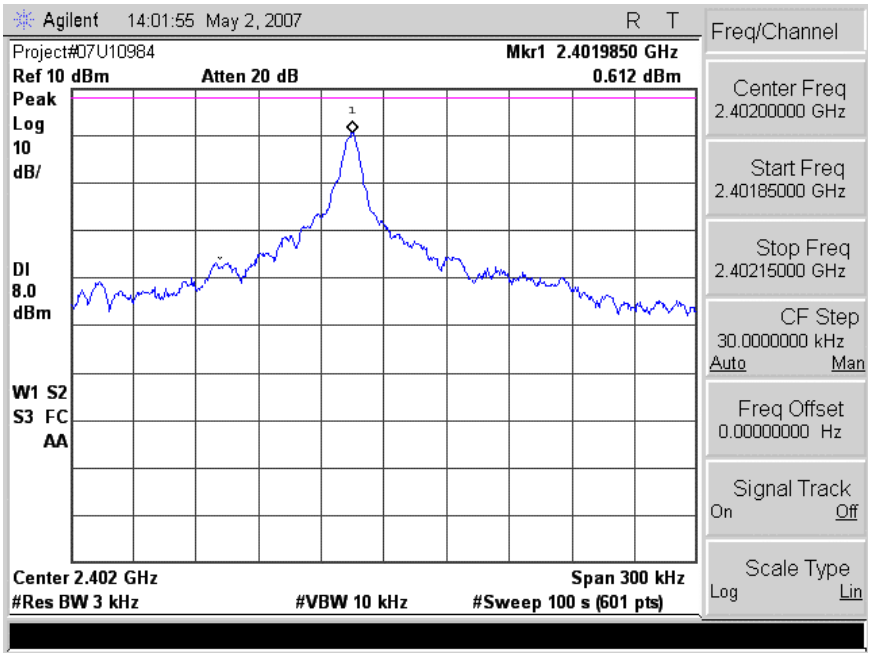
PPSD HIGH CH



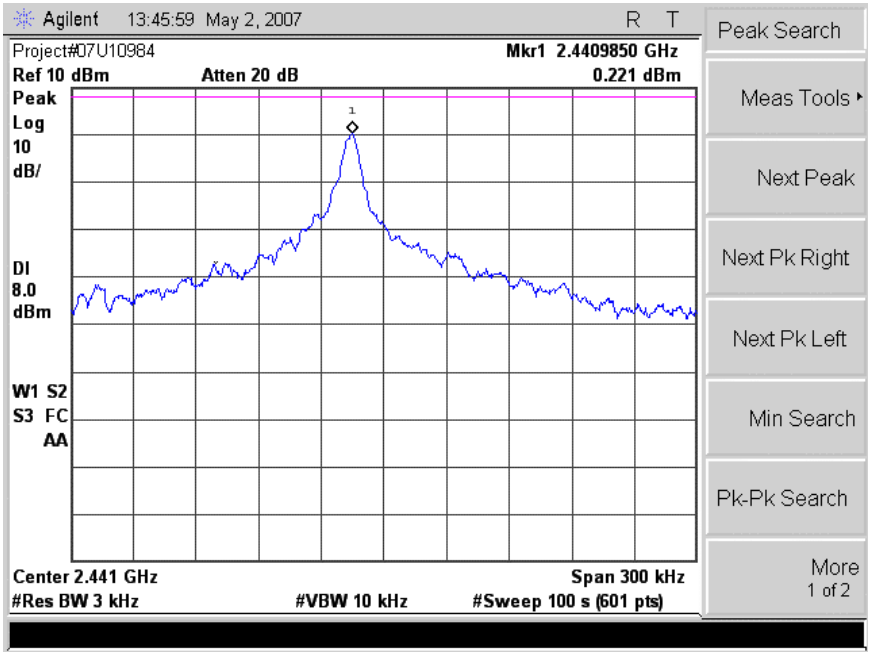
8DPSK

PEAK POWER SPECTRAL DENSITY

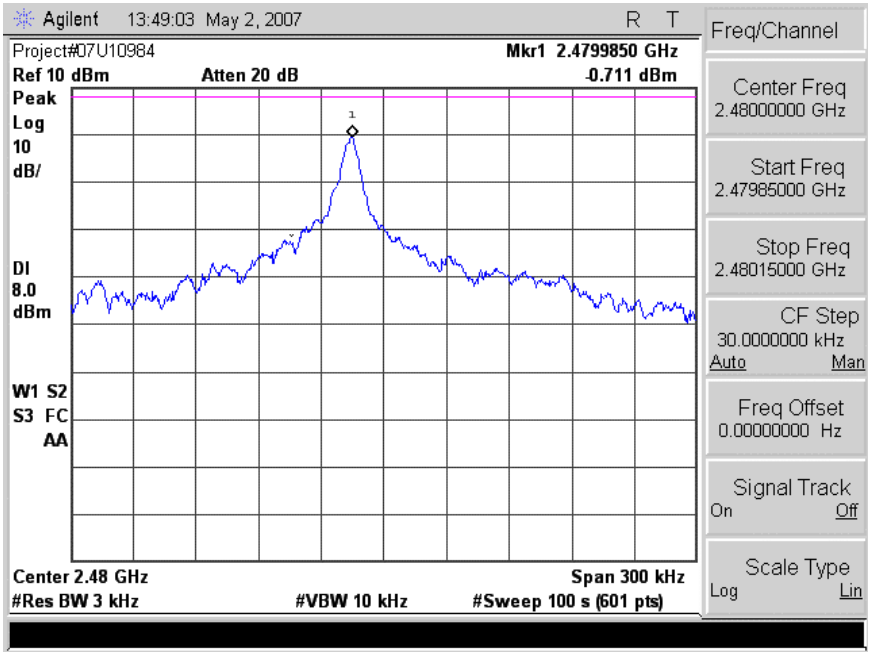
PPSD LOW CH



PPSD MID CH



PPSD HIGH CH



6.1.5. AVERAGE TIME OF OCCUPANCY

LIMIT

§15.247 (g) The frequency hopping operation of the hybrid system, with the direct sequence or digital modulation operation turned off, shall have an average time of occupancy on any frequency not to exceed 0.4 seconds within a time period in seconds equal to the number of hopping frequencies employed multiplied by 0.4.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The span is set to 0 Hz, centered on a single, selected hopping channel. The width of a single pulse is measured in a fast scan. The number of pulses is measured in a 3.16 second scan, to enable resolution of each occurrence.

The average time of occupancy in the specified 31.6 second period (79 channels * 0.4 s) is equal to 10 * (# of pulses in 3.16 s) * pulse width.

RESULTS

No non-compliance noted:

Time of Occupancy = 10 * xx pulses * yy msec = zz msec

GFSK Mode

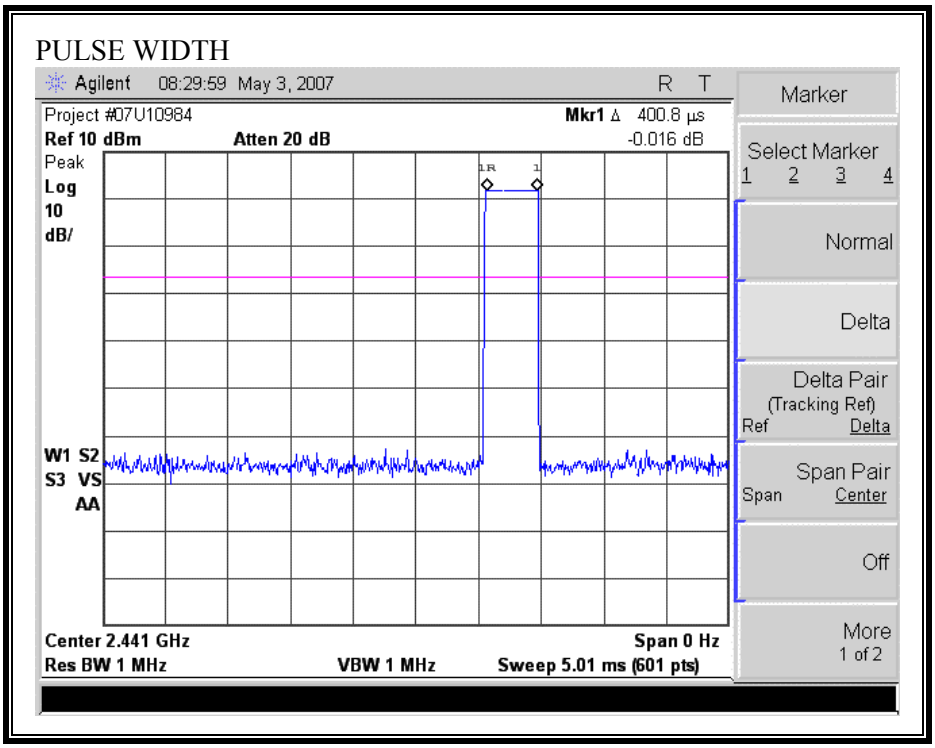
DH Packet	Pulse Width (msec)	Number of Pulses in 3.16 seconds	Average Time of Occupancy (sec)	Limit (sec)	Margin (sec)
1	0.401	32	0.128	0.4	0.272
3	1.662	14	0.233	0.4	0.167
5	2.883	10	0.288	0.4	0.112

8DPSK Mode

DH Packet	Pulse Width (msec)	Number of Pulses in 3.16 seconds	Average Time of Occupancy (sec)	Limit (sec)	Margin (sec)
1	0.404	32	0.129	0.4	0.271
3	1.650	16	0.264	0.4	0.136
5	2.925	11	0.322	0.4	0.078

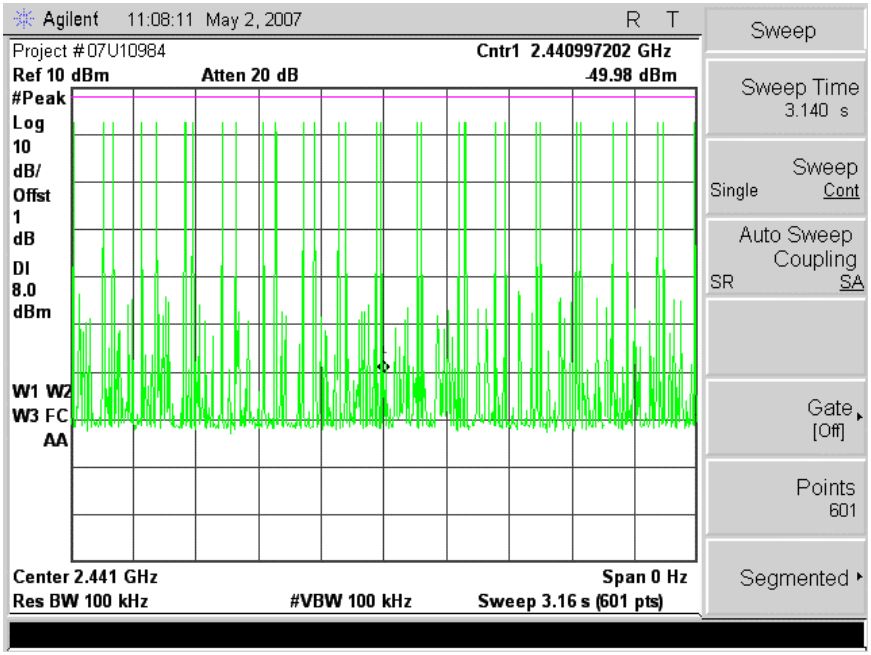
GFSK Mode

DH1
PULSE WIDTH

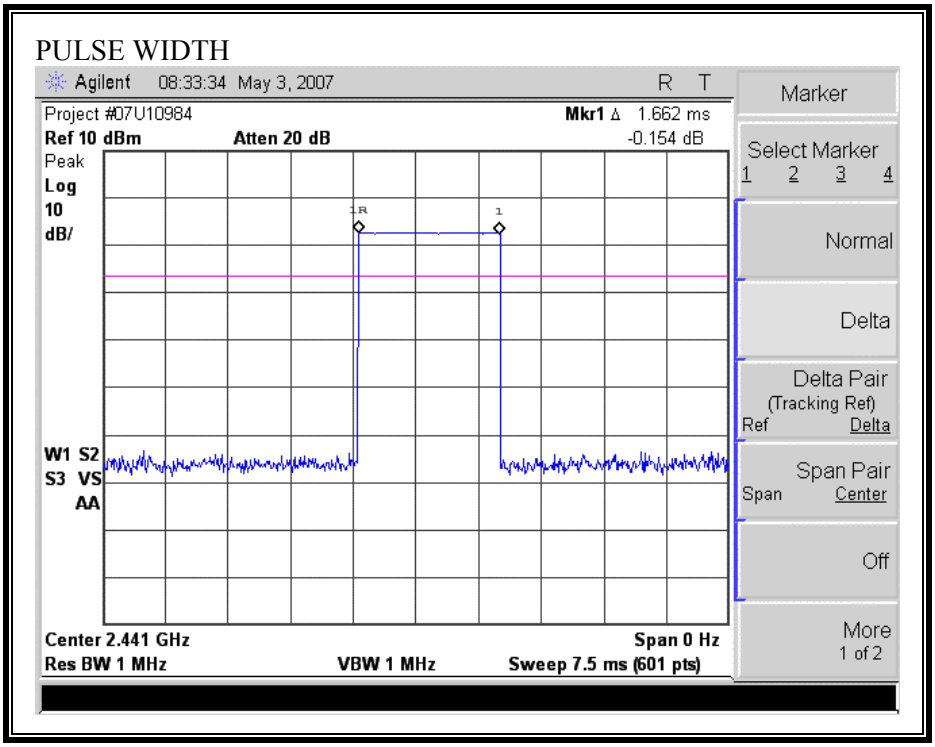


NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD

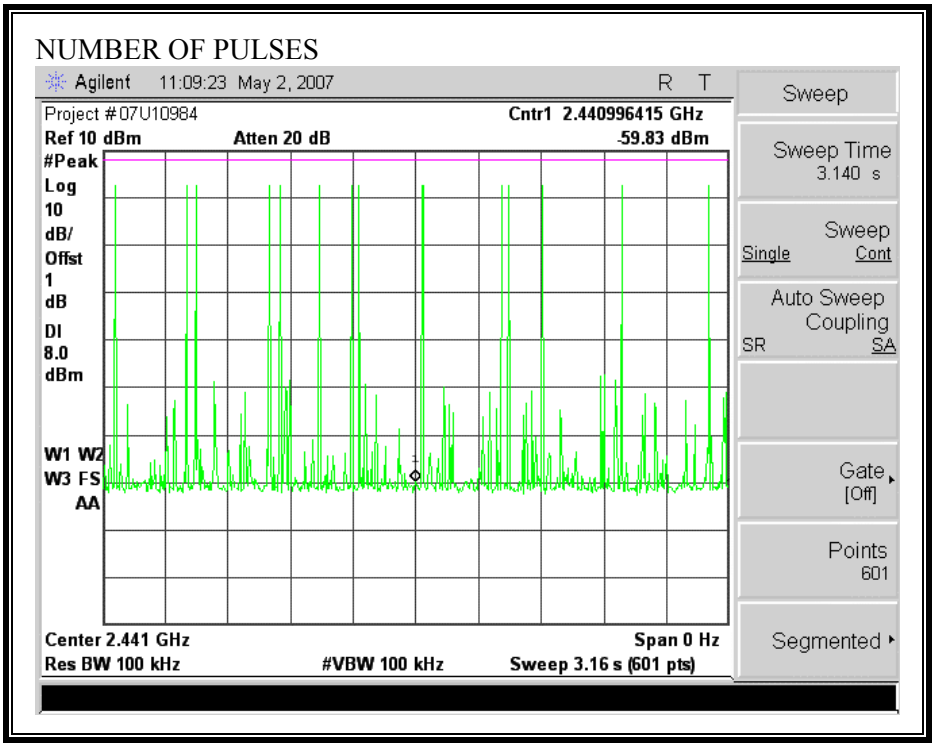
NUMBER OF PULSES



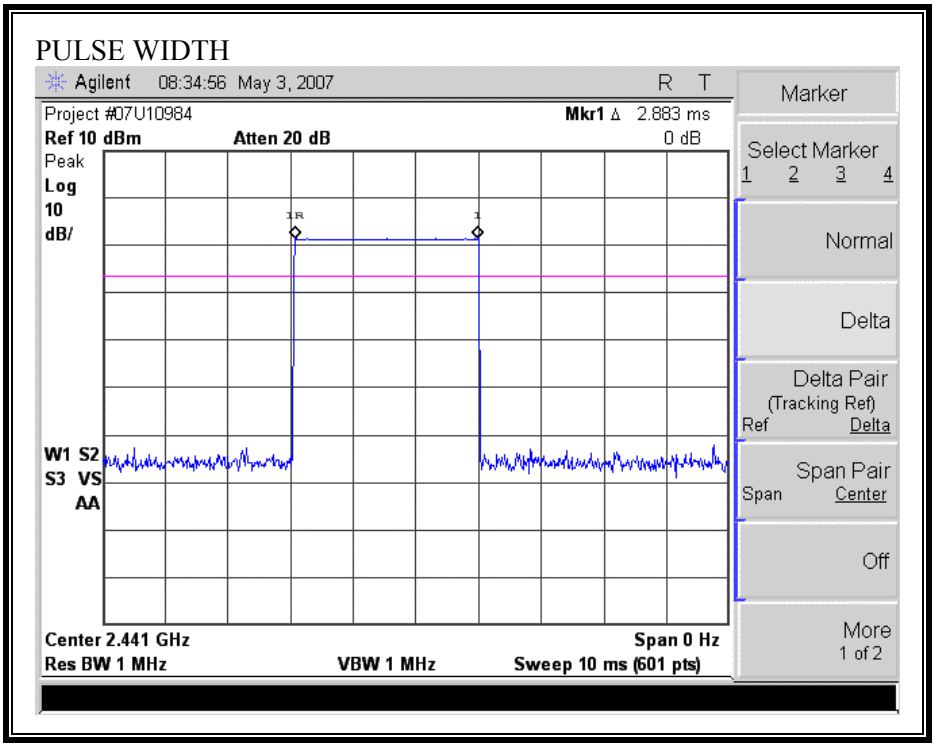
DH3
PULSE WIDTH



NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD

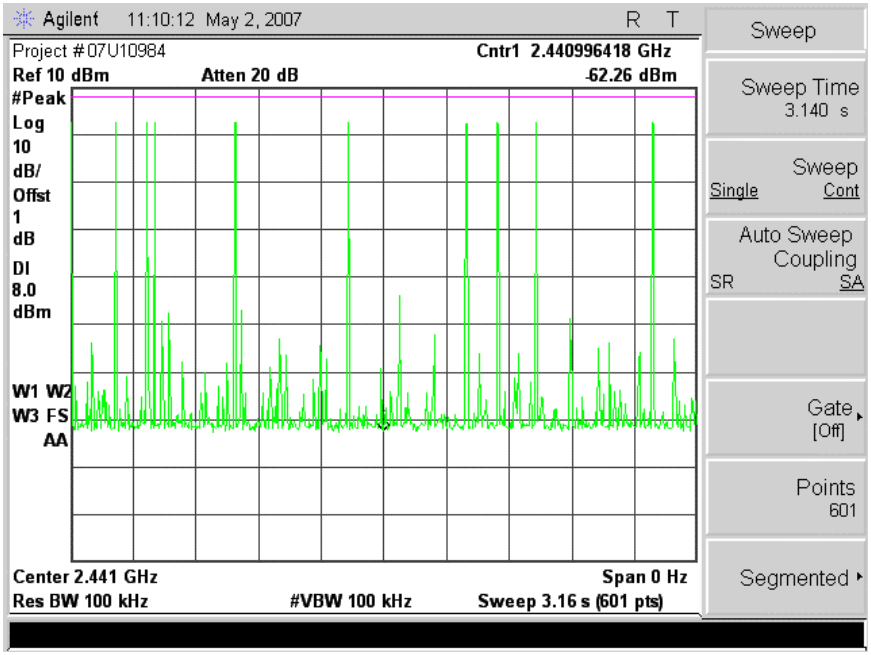


DH5
PULSE WIDTH



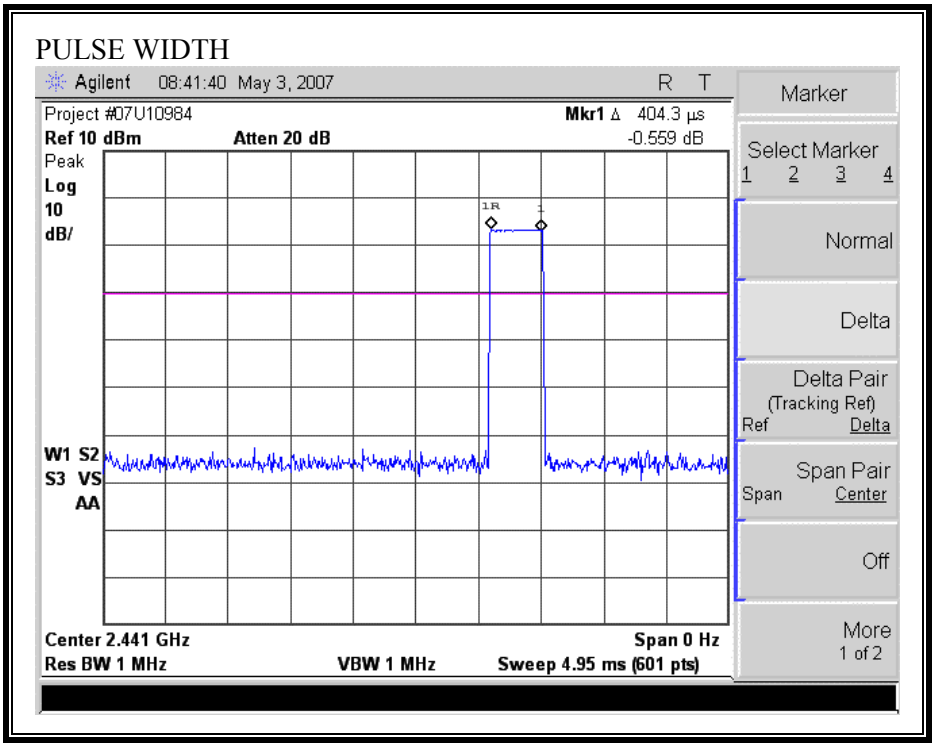
NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD

NUMBER OF PULSES



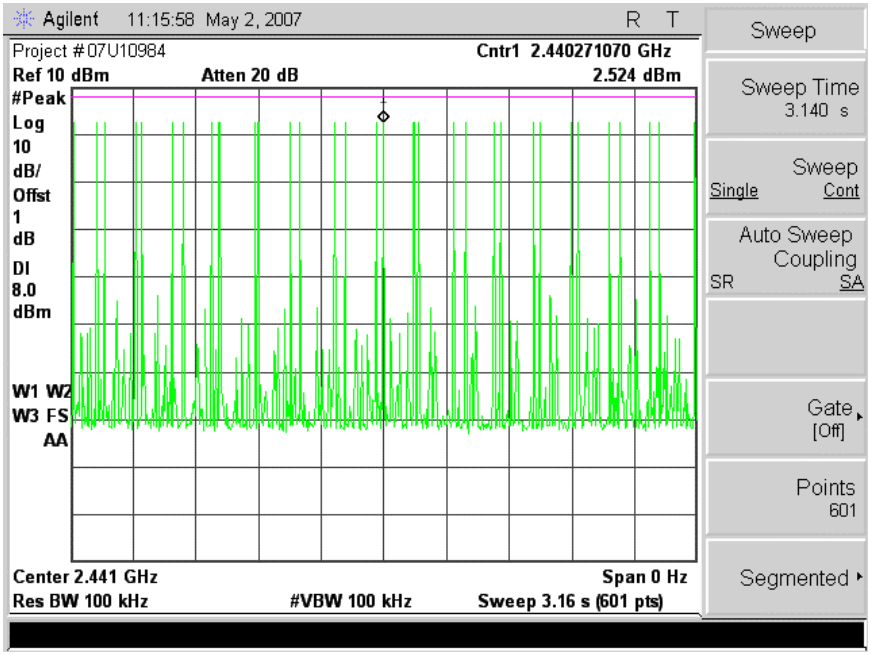
8DPSK Mode

DH1
PULSE WIDTH

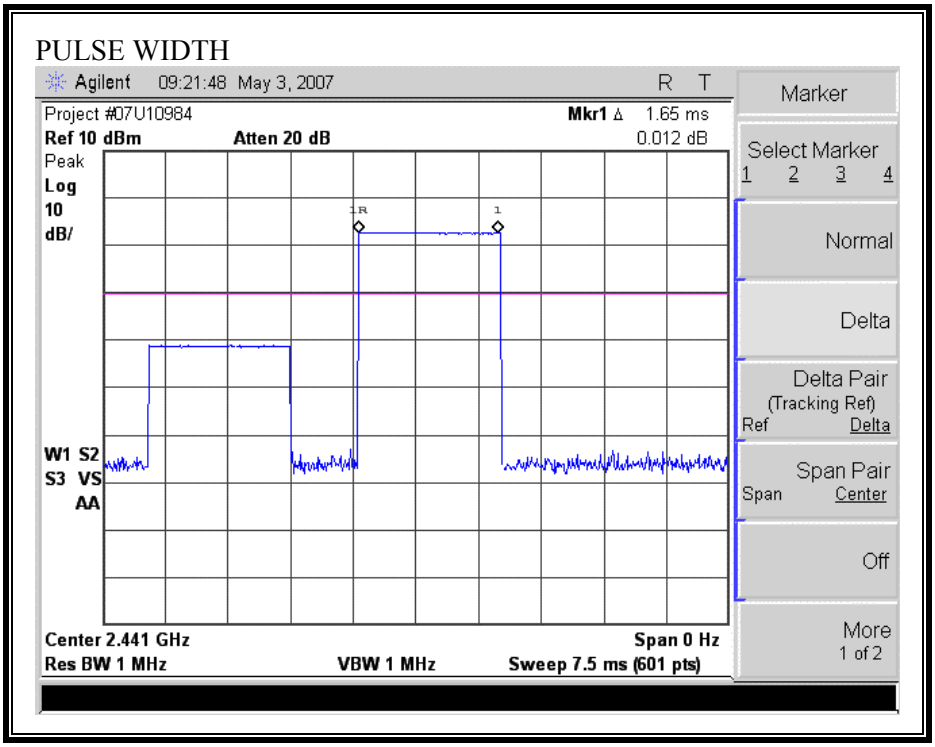


NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD

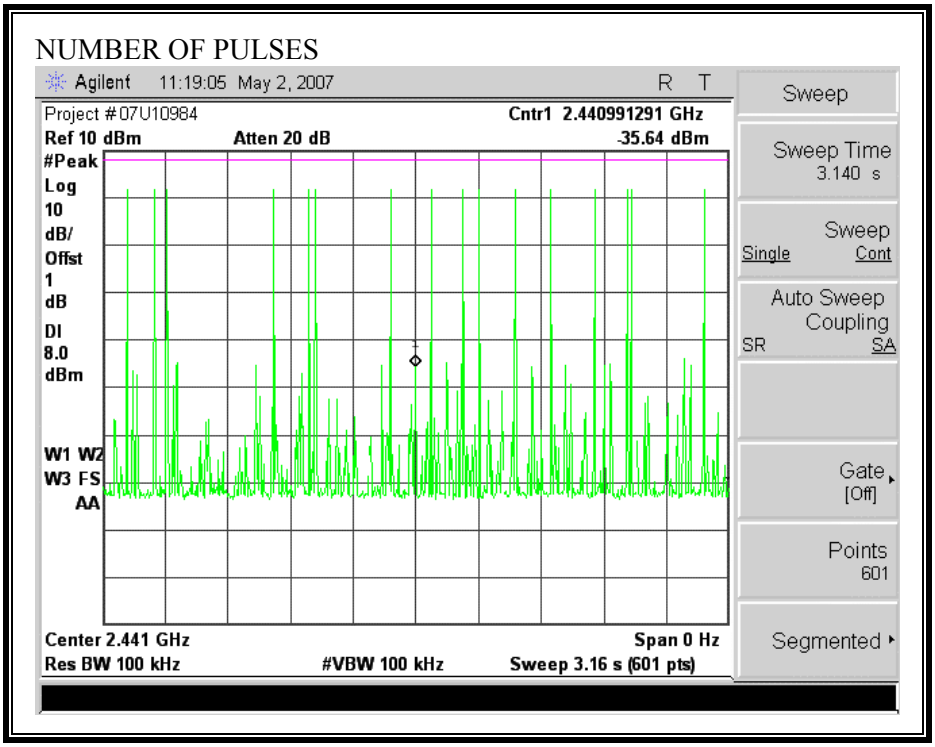
NUMBER OF PULSES



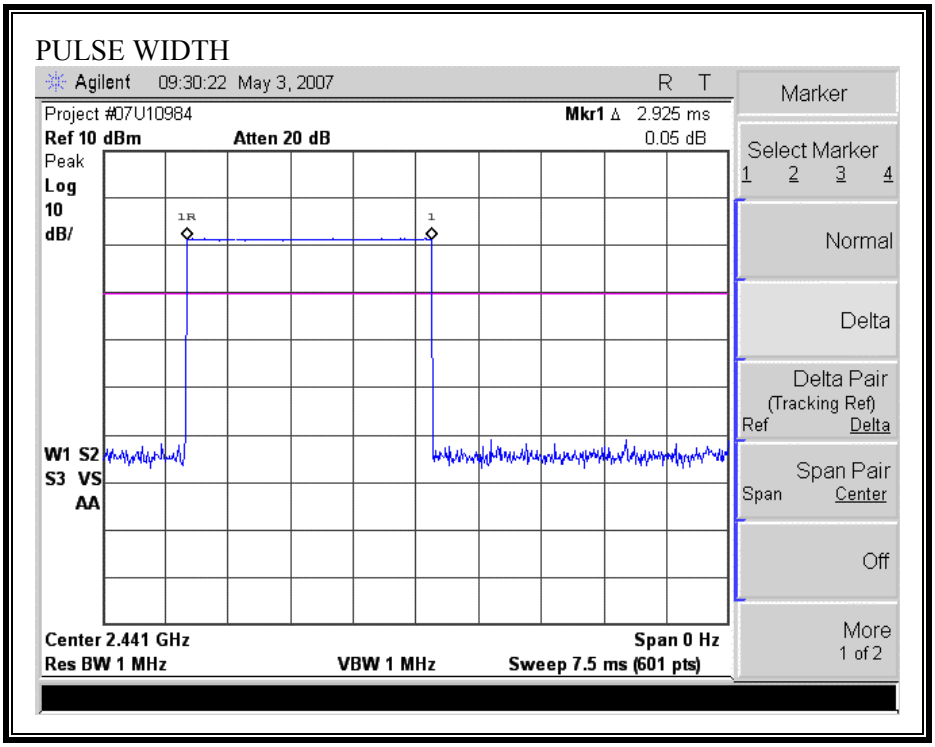
DH3
PULSE WIDTH



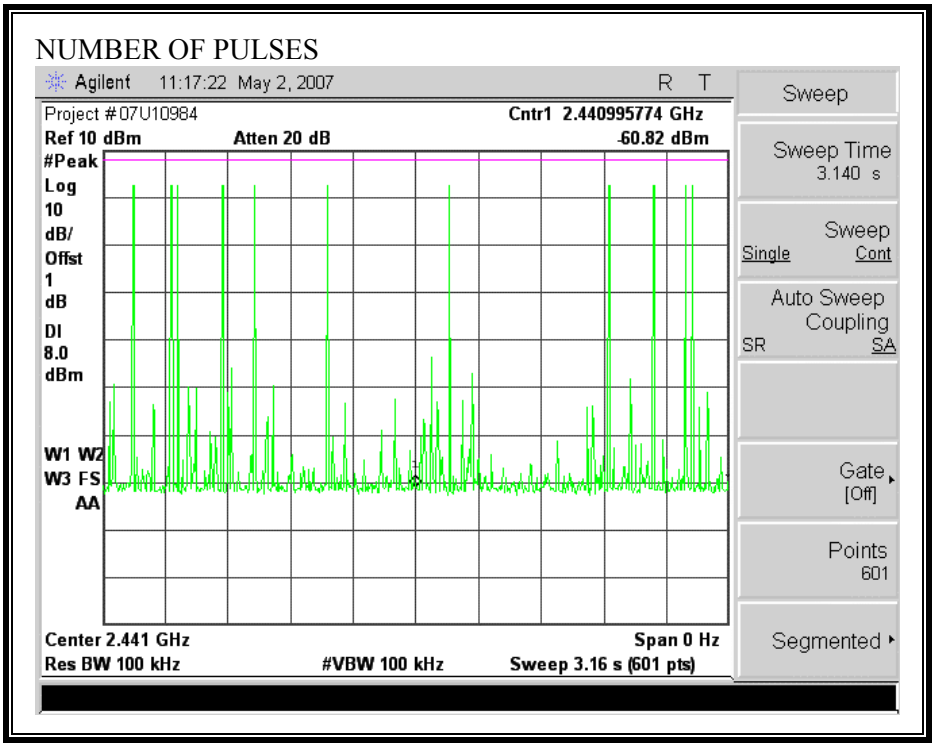
NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD



DH5
PULSE WIDTH



NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD



6.2. RADIATED EMISSIONS

6.2.1. 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.

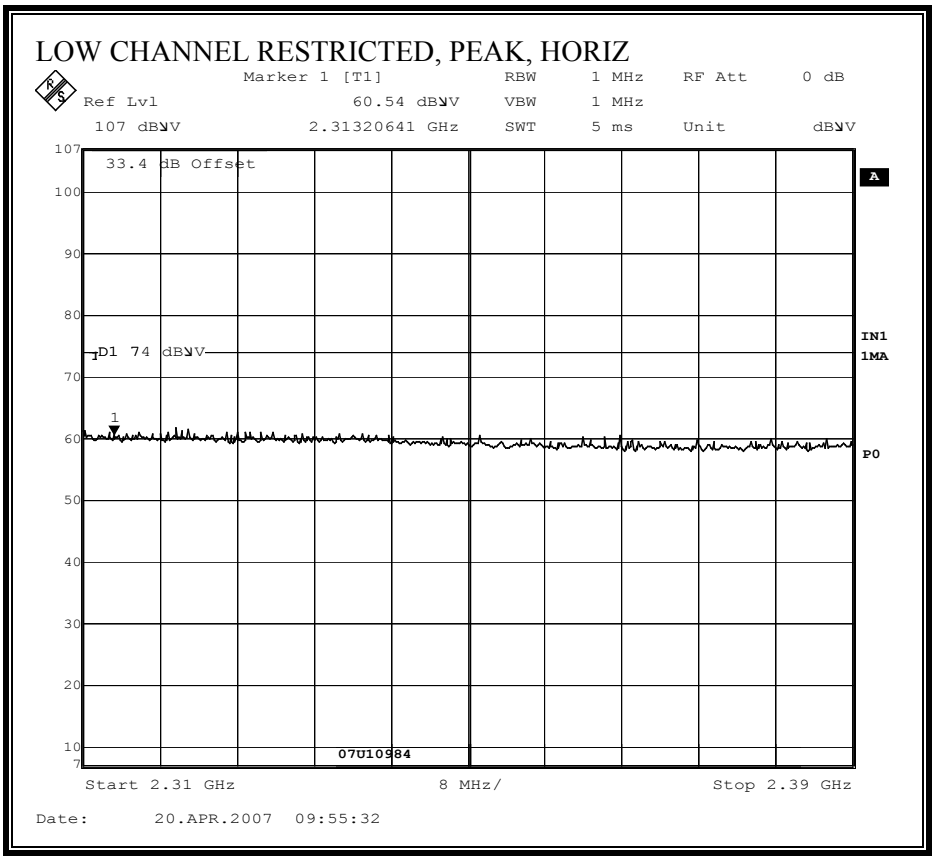
The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each 5 GHz band.

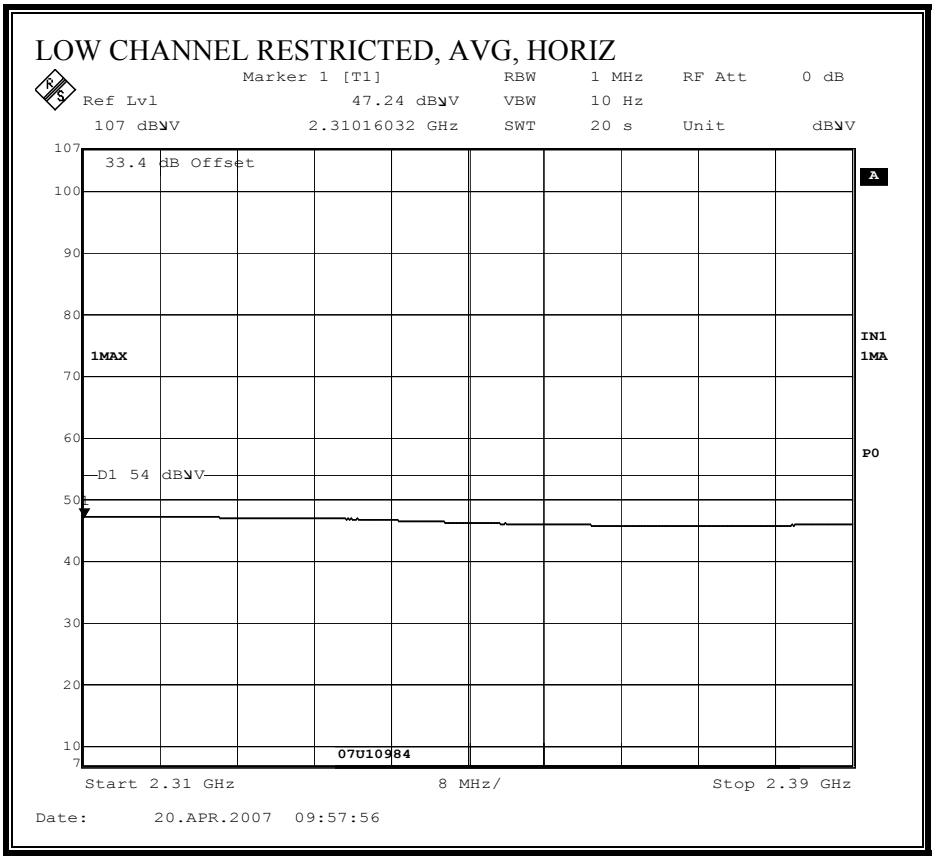
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

6.2.2. BLUETOOTH TRANSMITTER RADIATED EMISSIONS ABOVE 1 GHZ

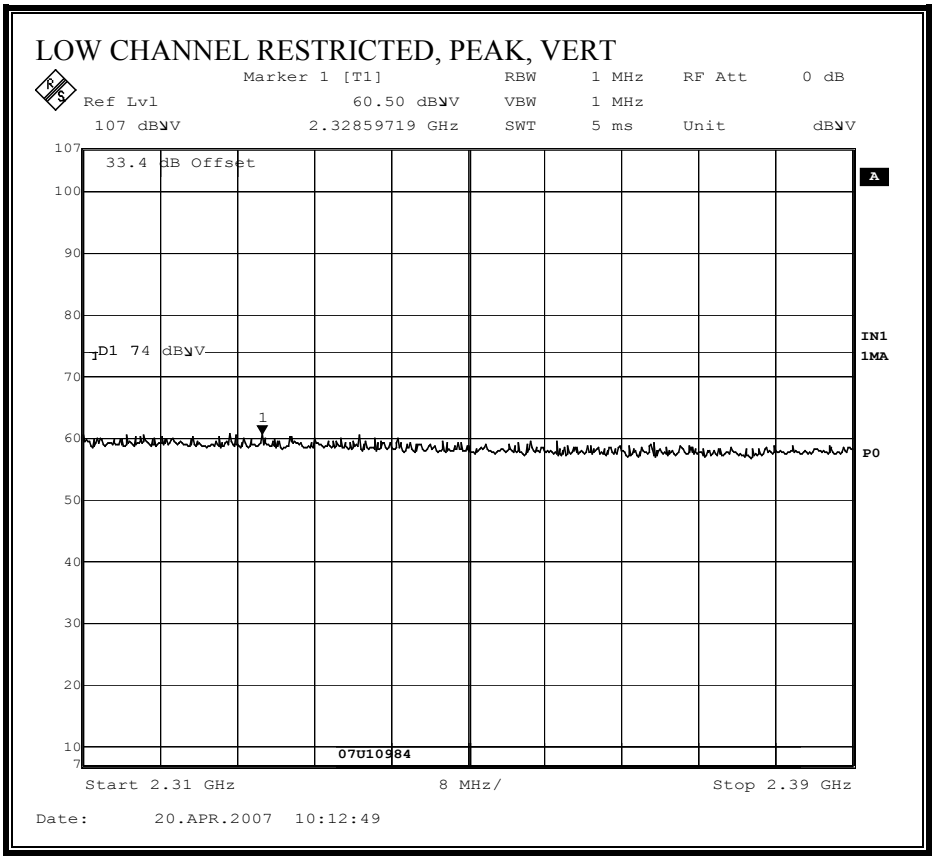
GFSK Mode

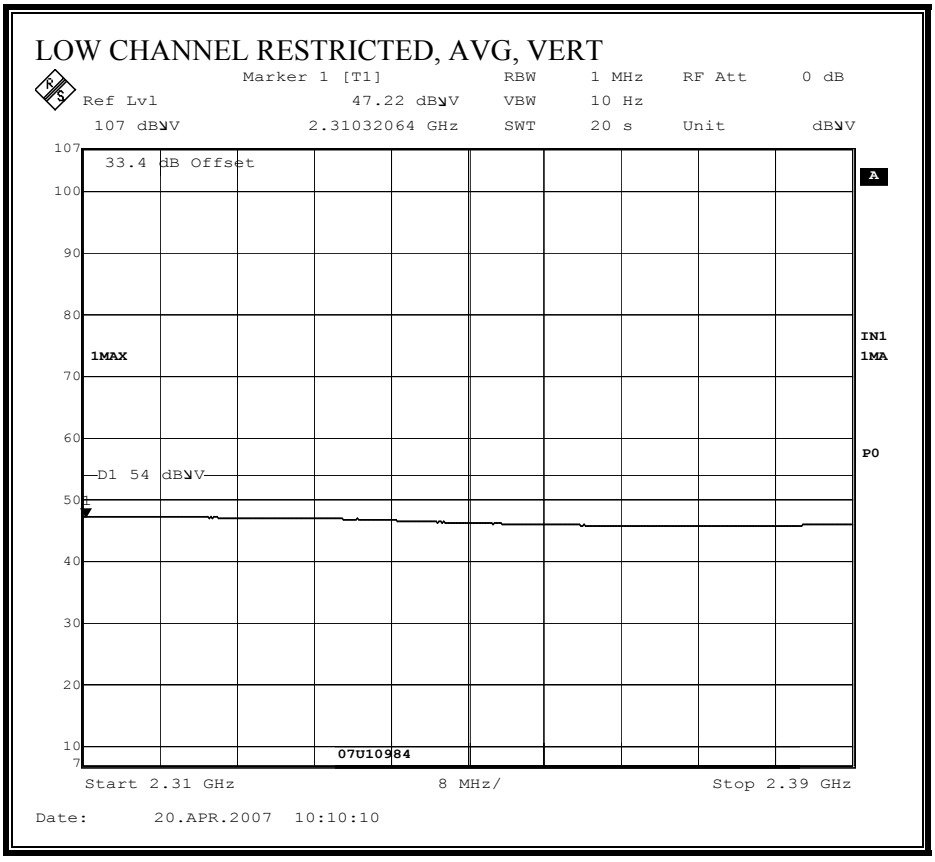
RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



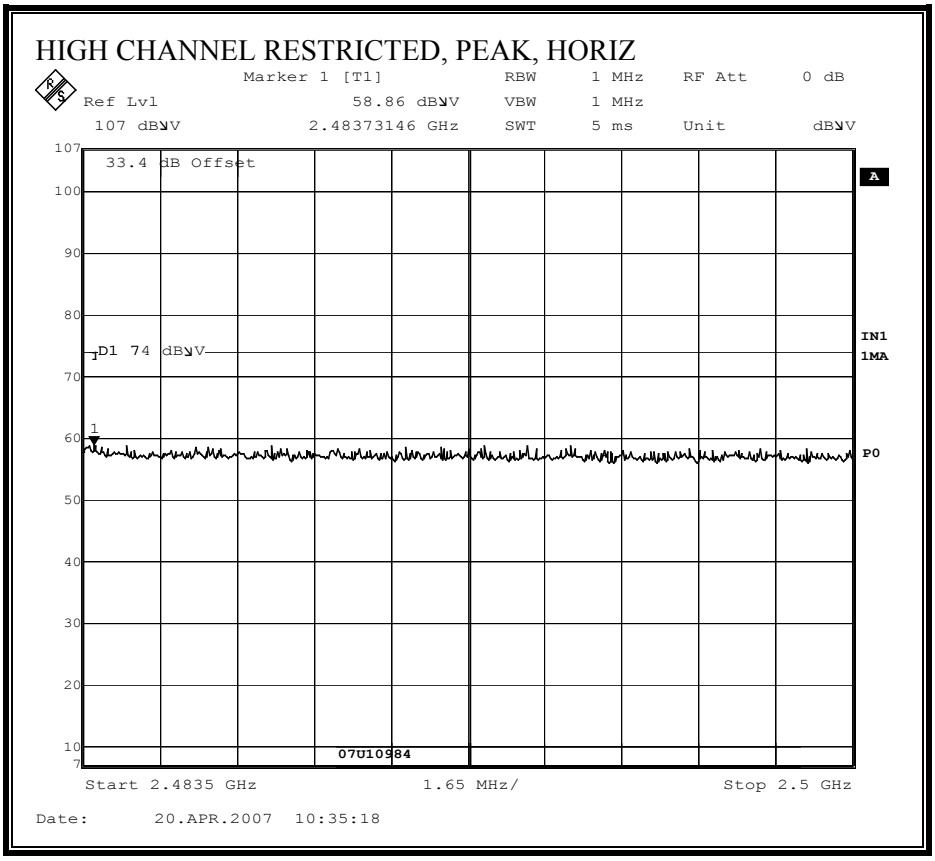


RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

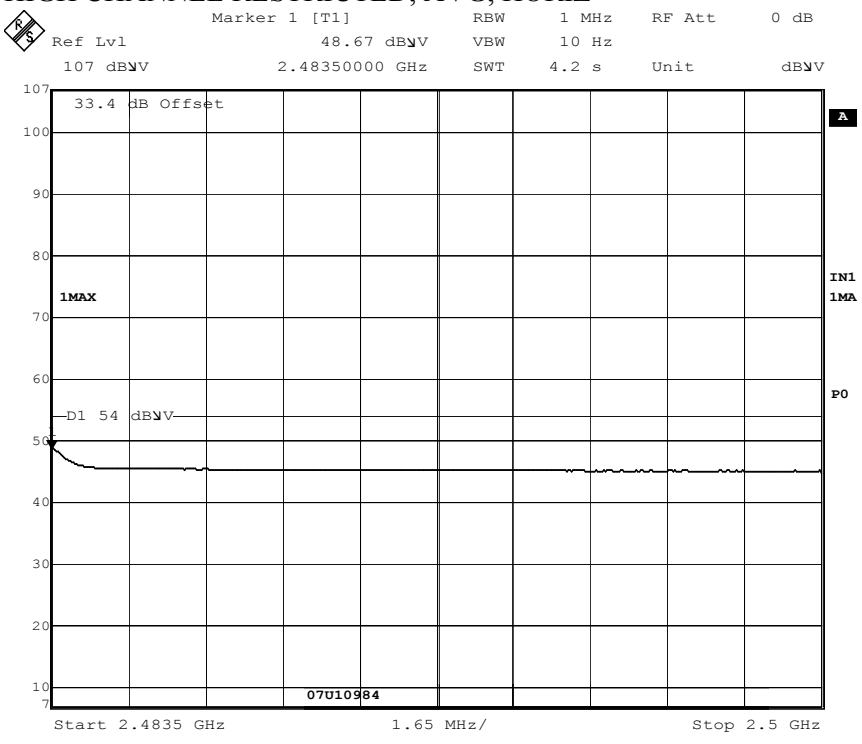




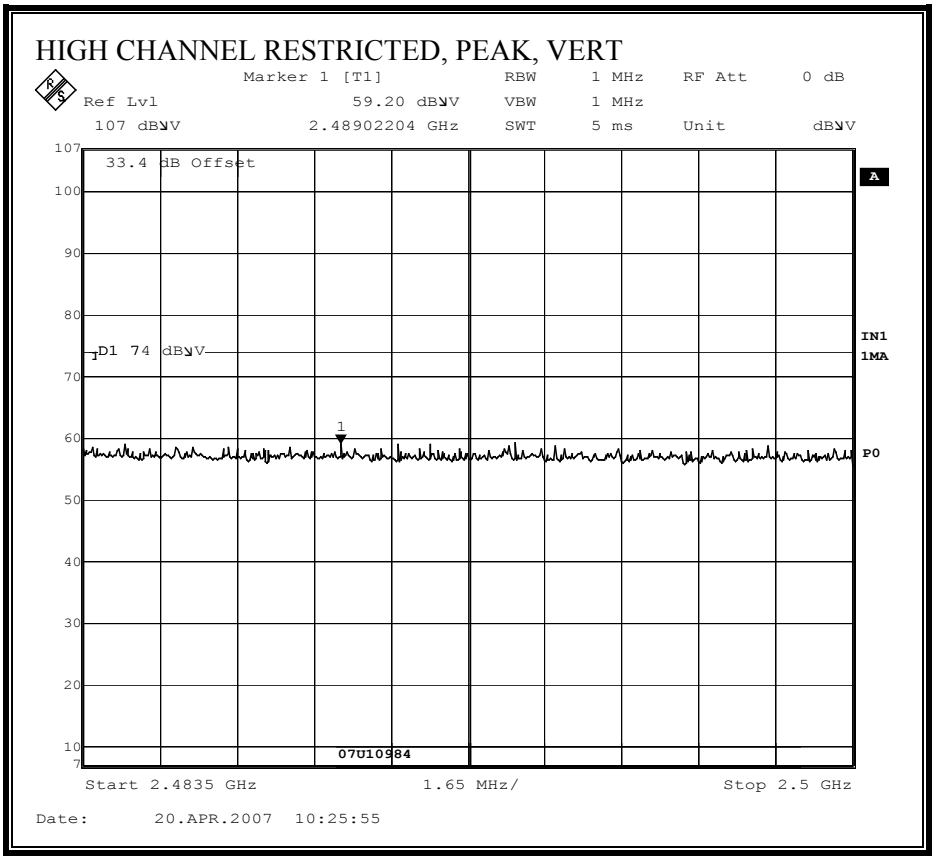
RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

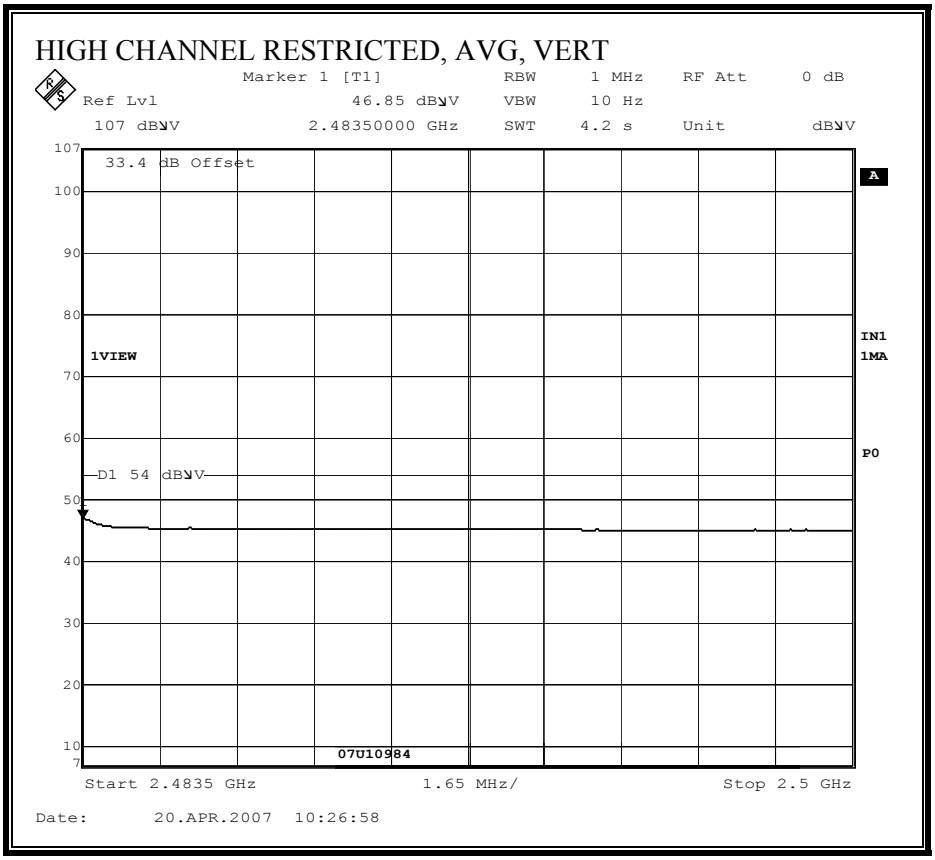


HIGH CHANNEL RESTRICTED, AVG, HORIZ



RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)





HARMONICS AND SPURIOUS EMISSIONS

High Frequency Measurement
Compliance Certification Services, Fremont 5m A-Chamber

Company: High Tech Computer Corp.
Project #: 07U10984
Date: 04-20-07
Test Engineer: Tom Chen
Configuration: GFSK
Mode: Transmit

Test Equipment:

Horn 1-18GHz	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz	Limit
T73; S/N: 6717 @3m	T34 HP 8449B			FCC 15.205

Hi Frequency Cables

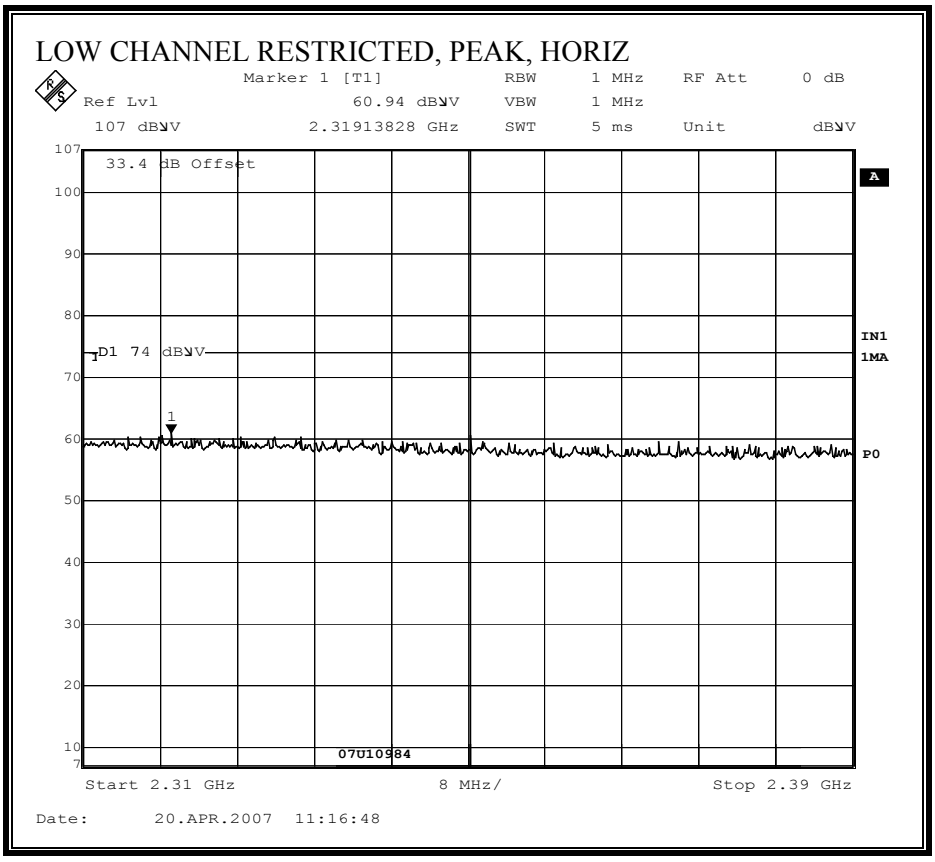
2 foot cable	3 foot cable	12 foot cable	HPF	Reject Filter
		Gordon 203134001		R_001

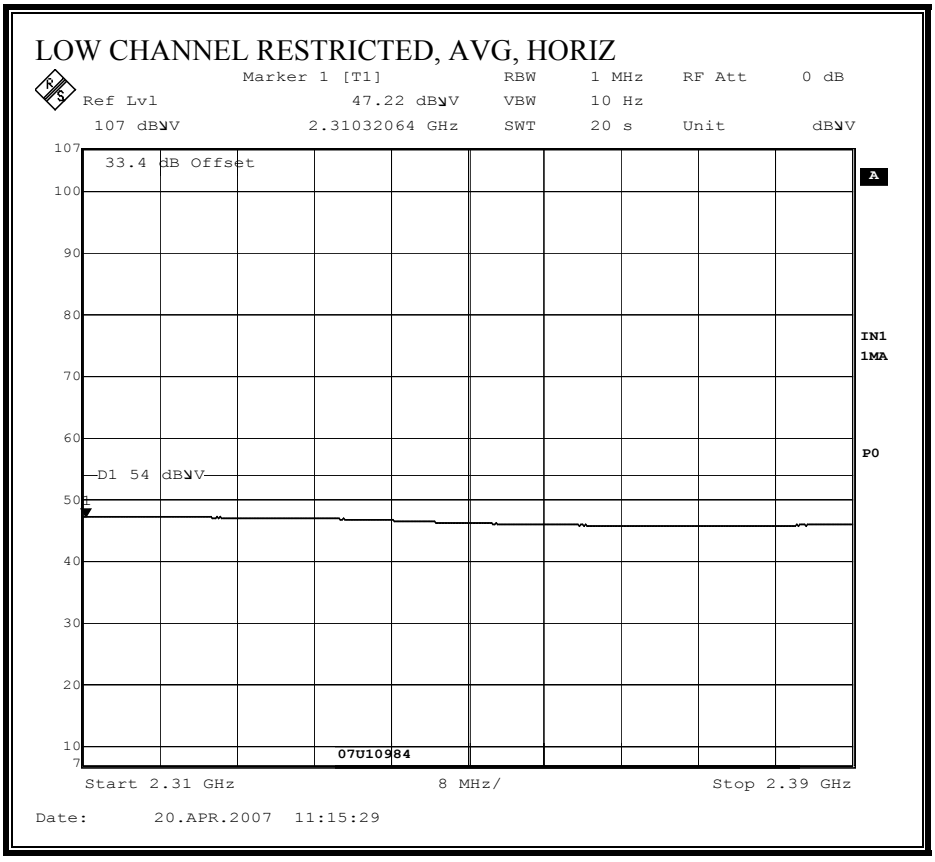
Peak Measurements
RBW=VBW=1MHz
Average Measurements
RBW=1MHz ; VBW=10Hz

f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr 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															
4.804	3.0	41.4	29.0	33.3	6.9	-34.8	0.0	0.0	46.7	34.3	74	54	-27.3	-19.7	H
4.804	3.0	41.3	27.0	33.3	6.9	-34.8	0.0	0.0	46.6	32.3	74	54	-27.4	-21.7	V
Mid CH															
4.882	3.0	41.4	28.0	33.4	6.9	-34.8	0.0	0.0	46.9	33.5	74	54	-27.1	-20.5	H
4.882	3.0	42.3	27.3	33.4	6.9	-34.8	0.0	0.0	47.8	32.8	74	54	-26.2	-21.2	V
High CH															
4.960	3.0	45.1	27.8	33.4	7.0	-34.8	0.0	0.0	50.7	33.4	74	54	-23.3	-20.6	H
4.960	3.0	41.6	27.7	33.4	7.0	-34.8	0.0	0.0	47.2	33.3	74	54	-26.8	-20.7	V

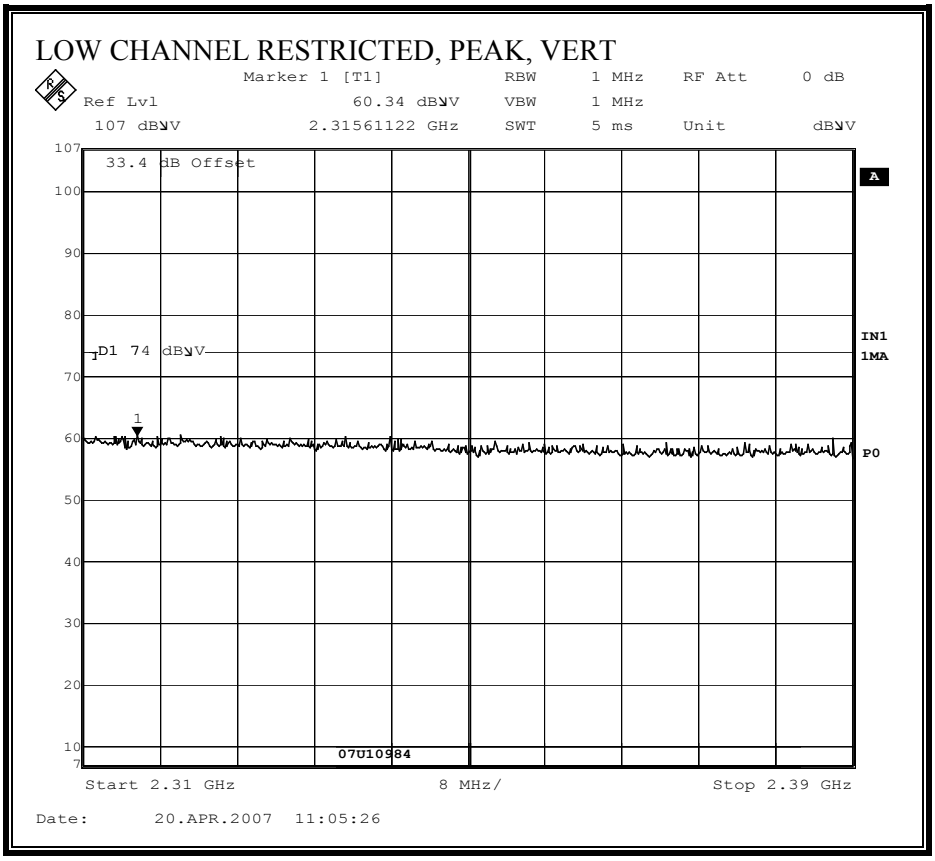
8DPSK Mode

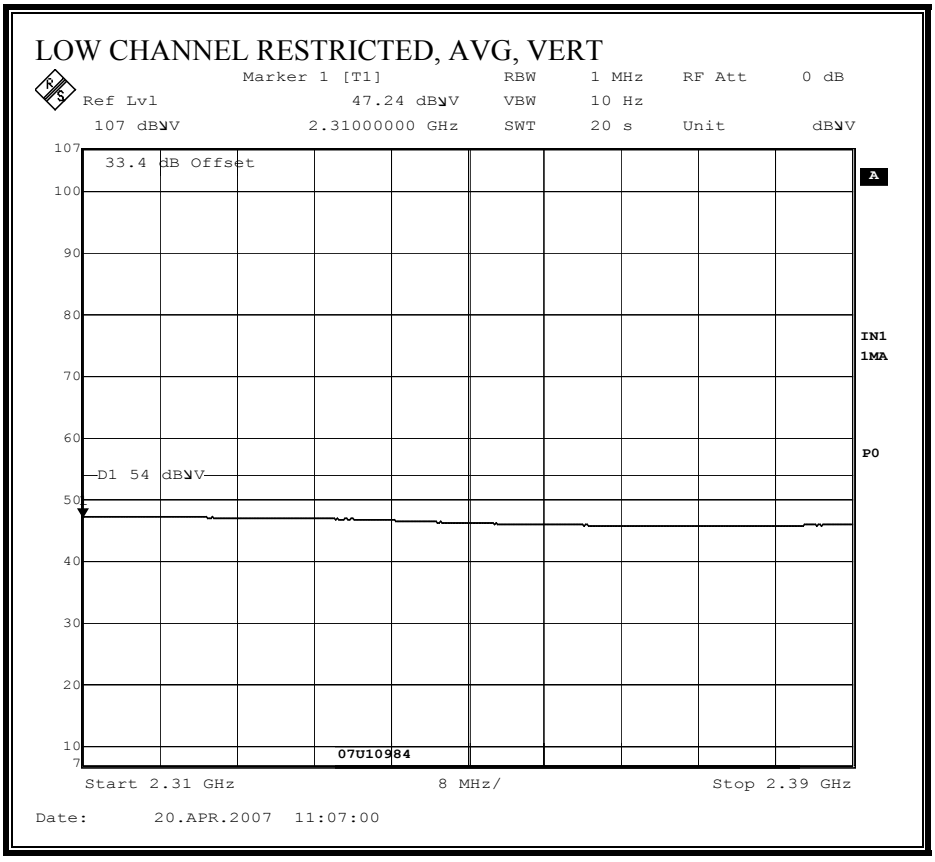
RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



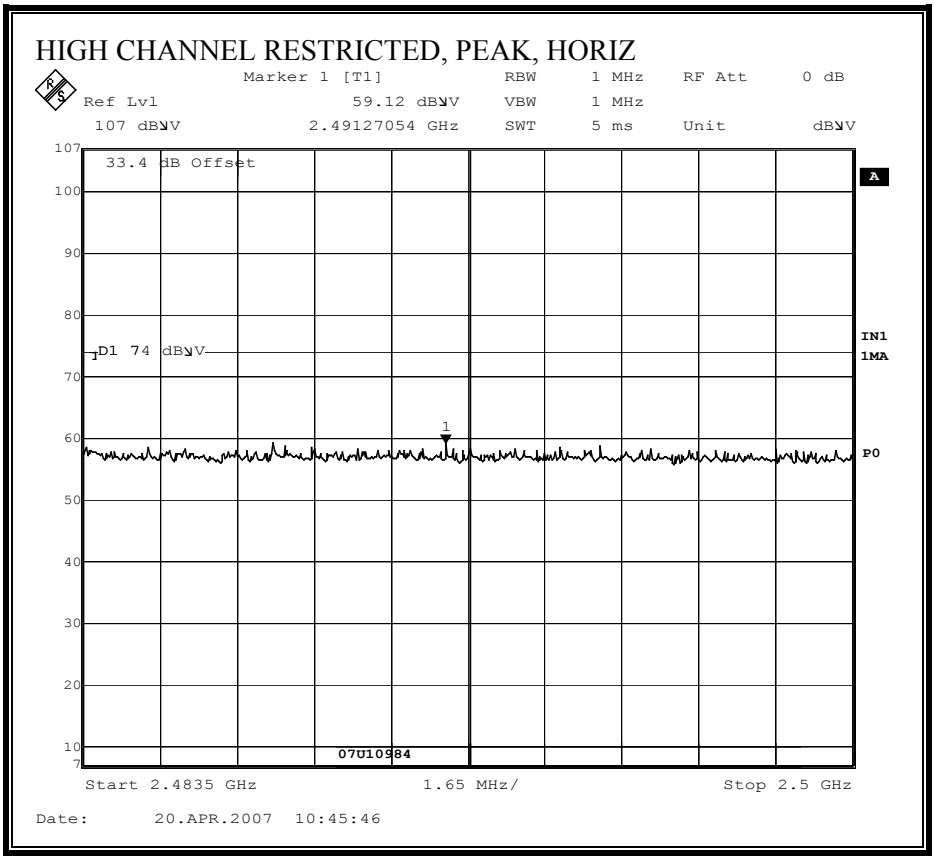


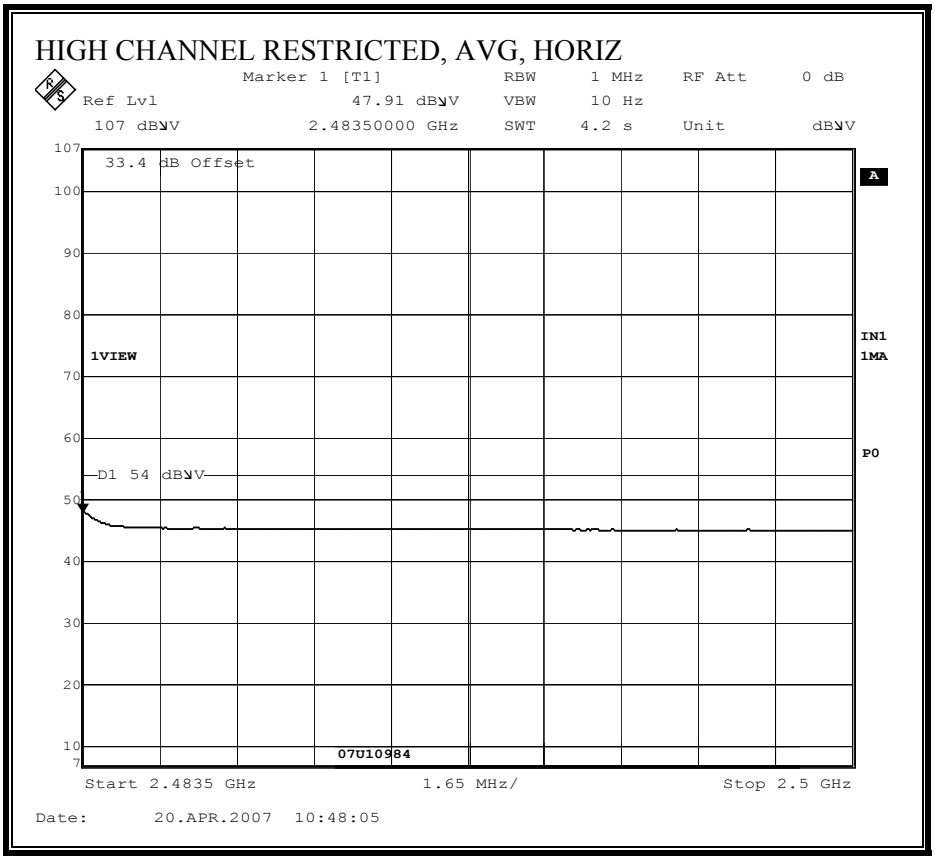
RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



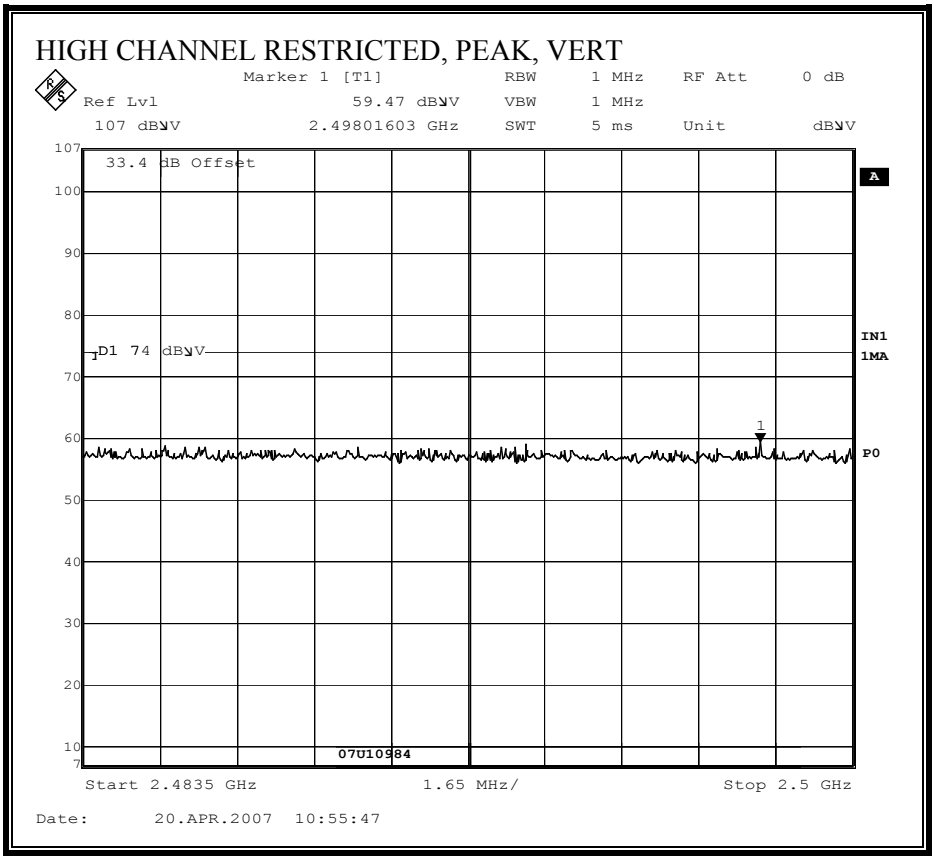


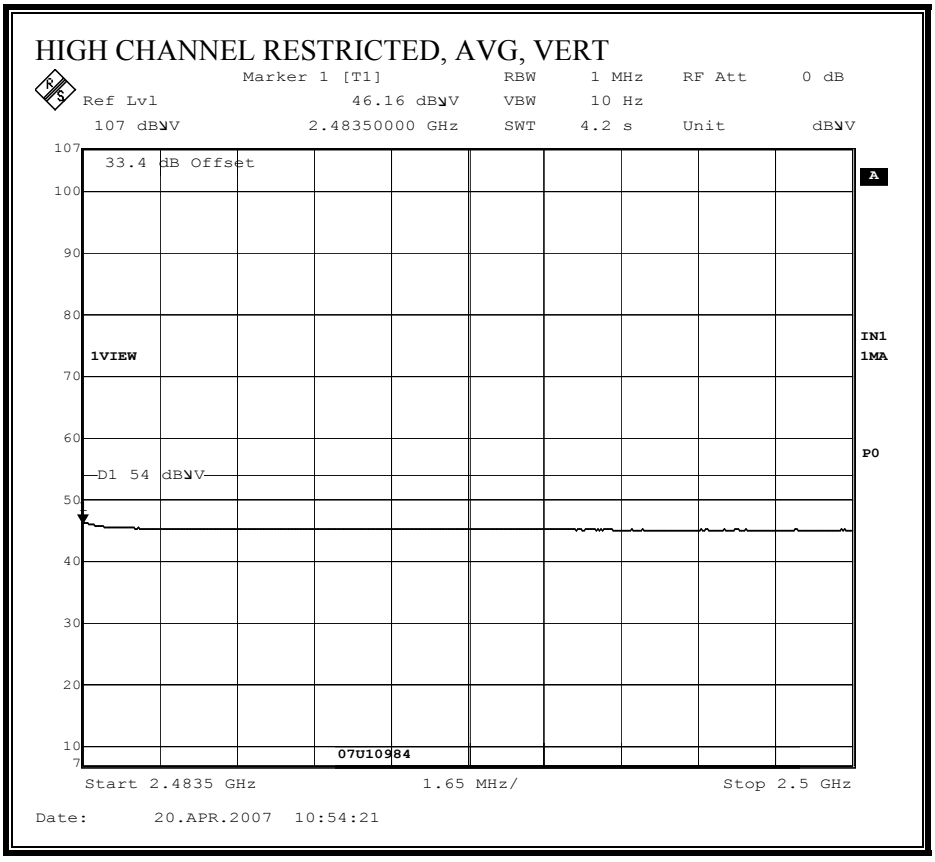
RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)





HARMONICS AND SPURIOUS EMISSIONS

High Frequency Measurement
Compliance Certification Services, Fremont 5m A-Chamber

Company: High Tech Computer Corp.
Project #: 07U10984
Date: 04-20-07
Test Engineer: Tom Chen
Configuration: 8DPSK
Mode: Transmit

Test Equipment:

Horn 1-18GHz	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz	Limit
T73; S/N: 6717 @3m	T34 HP 8449B			FCC 15.205

Hi Frequency Cables

2 foot cable	3 foot cable	12 foot cable	HPF	Reject Filter
		Gordon 203134001		R_001

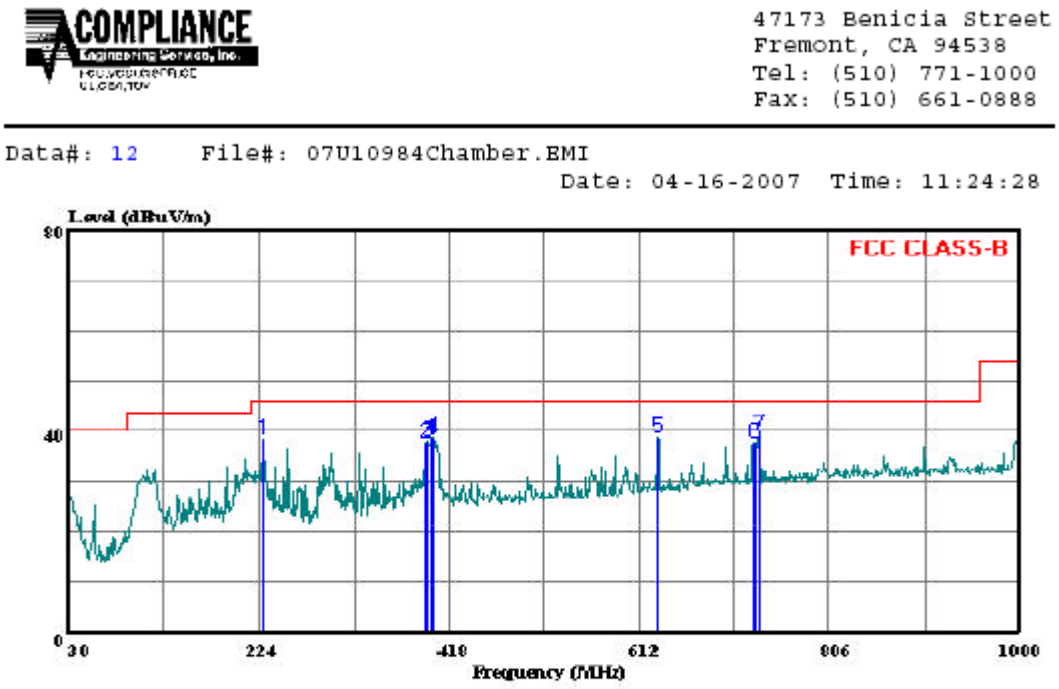
Peak Measurements
RBW=VBW=1MHz
Average Measurements
RBW=1MHz ; VBW=10Hz

f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr 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															
4.804	3.0	42.0	28.0	33.3	6.9	-34.8	0.0	0.0	47.3	33.3	74	54	-26.7	-20.7	H
4.804	3.0	44.8	27.0	33.3	6.9	-34.8	0.0	0.0	50.1	32.3	74	54	-23.9	-21.7	V
Mid CH															
4.882	3.0	41.4	27.6	33.4	6.9	-34.8	0.0	0.0	46.9	33.1	74	54	-27.1	-20.9	H
4.882	3.0	41.3	27.4	33.4	6.9	-34.8	0.0	0.0	46.8	32.9	74	54	-27.2	-21.1	V
High CH															
4.960	3.0	42.5	27.6	33.4	7.0	-34.8	0.0	0.0	48.1	33.2	74	54	-25.9	-20.8	H
4.960	3.0	42.4	27.7	33.4	7.0	-34.8	0.0	0.0	48.0	33.3	74	54	-26.0	-20.7	V

6.2.3. WORST-CASE RADIATED EMISSIONS BELOW 1 GHz

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

HORIZONTAL PLOT



HORIZONTAL DATA

Page: 1

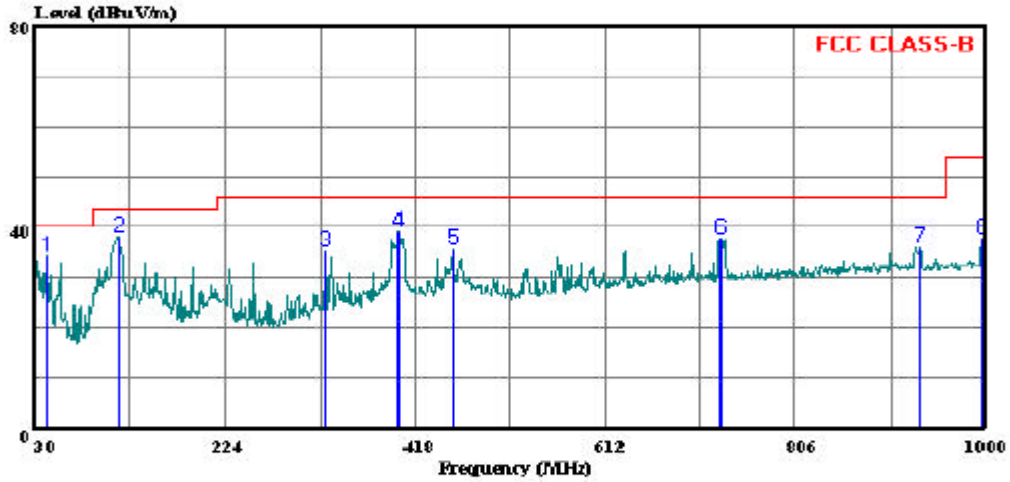
	Freq	Read Level	Probe Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	229.820	53.40	11.62	1.60	28.08	38.54	46.00	-7.46	Peak
2	394.720	47.90	15.88	2.15	28.06	37.87	46.00	-8.13	Peak
3	397.630	48.00	15.93	2.17	28.06	38.04	46.00	-7.96	Peak
4	401.510	48.80	16.01	2.17	28.06	38.93	46.00	-7.07	Peak
5	631.400	43.70	19.70	2.78	27.26	38.91	46.00	-7.09	Peak
6	730.340	40.80	20.92	3.02	26.98	37.76	46.00	-8.24	Peak
7	733.250	42.40	20.96	3.05	26.98	39.43	46.00	-6.57	Peak

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

VERTICAL PLOT

COMPLIANCE Engineering Services, Inc.
47173 Benicia Street
Fremont, CA 94538
Tel: (510) 771-1000
Fax: (510) 661-0888

Data#: 10 File#: 07U10984Chamber.EMI
Date: 04-16-2007 Time: 11:17:55



Trace: 9 Ref Trace:

Condition: FCC CLASS-B 3m B-5M CHAMBER 012007 VERTICAL
Test Operator: : Doug Anderson
Company: : HTC
Project #: : 07U10984
Configuration: : EUT via USB to Dell PC w/Printer/Modem
Mode of Operation:: GSM Standby/802.11g Mid Ch Tx (Worst Case)
Target : FCC Class B

VERTICAL DATA

Page: 1

	Freq	Read Level	Probe Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	41.640	47.09	14.89	0.68	28.42	34.24	40.00	-5.76	Peak
2	115.360	52.30	13.01	1.12	28.28	38.16	43.50	-5.34	Peak
3	325.850	47.10	14.50	1.93	28.05	35.49	46.00	-10.51	Peak
4	401.510	49.10	16.01	2.17	28.06	39.23	46.00	-6.77	Peak
5	456.800	43.90	17.19	2.34	27.90	35.52	46.00	-10.48	Peak
6	729.370	40.80	20.91	3.01	26.98	37.74	46.00	-8.26	Peak
7	933.070	36.90	23.06	3.55	27.44	36.07	46.00	-9.93	Peak
8	995.150	38.30	23.63	3.61	27.78	37.76	54.00	-16.24	Peak

6.3. 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 μH/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:

EUT CONNECTED TO PC VIA USB

6 WORST EMISSIONS

NOTEBOOK PC CONDUCTED EMISSIONS DATA (115VAC 60Hz)									
Freq.	Reading			Closs	Limit		Margin		Remark
(MHz)	PK (dBuV)	QP (dBuV)	AV (dBuV)	(dB)	QP	AV	QP (dB)	AV (dB)	L1 / L2
1.14	43.95	--	29.60	0.00	56.00	46.00	-12.05	-16.40	L1
1.40	45.44	--	31.83	0.00	56.00	46.00	-10.56	-14.17	L1
1.46	44.85	--	28.79	0.00	56.00	46.00	-11.15	-17.21	L1
1.03	43.34	--	34.93	0.00	56.00	46.00	-12.66	-11.07	L2
1.31	44.67	--	32.72	0.00	56.00	46.00	-11.33	-13.28	L2
1.55	43.86	--	30.21	0.00	56.00	46.00	-12.14	-15.79	L2
6 Worst Data									

WITH PHIHONG AC ADAPTER

CONDUCTED EMISSIONS DATA (115VAC 60Hz)									
Freq.	Reading			Closs	Limit		Margin		Remark
(MHz)	PK (dBuV)	QP (dBuV)	AV (dBuV)	(dB)	QP	AV	QP (dB)	AV (dB)	L1 / L2
0.37	50.31	--	32.34	0.00	58.57	48.57	-8.26	-16.23	L1
0.54	45.09	--	25.37	0.00	56.00	46.00	-10.91	-20.63	L1
1.70	42.82	--	24.01	0.00	56.00	46.00	-13.18	-21.99	L1
0.37	50.37	--	37.74	0.00	58.57	48.57	-8.20	-10.83	L2
0.54	47.86	--	27.79	0.00	56.00	46.00	-8.14	-18.21	L2
1.99	43.92	--	26.89	0.00	56.00	46.00	-12.08	-19.11	L2
6 Worst Data									

WITH DELTA AC ADAPTER

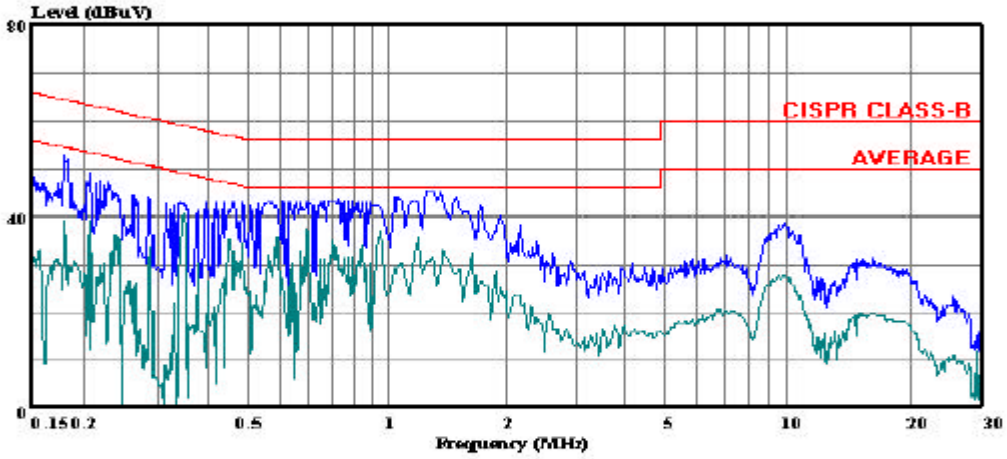
DELTA CONDUCTED EMISSIONS DATA (115VAC 60Hz)									
Freq.	Reading			Closs	Limit	0	Margin		Remark
(MHz)	PK (dBuV)	QP (dBuV)	AV (dBuV)	(dB)	QP	AV	QP (dB)	AV (dB)	L1 / L2
0.19	42.64	--	31.77	0.00	64.08	54.08	-21.44	-22.31	L1
0.88	44.55	--	15.44	0.00	56.00	46.00	-11.45	-30.56	L1
0.96	46.26	--	28.36	0.00	56.00	46.00	-9.74	-17.64	L1
0.51	41.34	--	33.93	0.00	56.00	46.00	-14.66	-12.07	L2
0.82	39.69	--	32.20	0.00	56.00	46.00	-16.31	-13.80	L2
2.51	45.45	--	32.36	0.00	56.00	46.00	-10.55	-13.64	L2
6 Worst Data									

EUT CONNECTED TO PC VIA USB

LINE 1 RESULTS

Compliance Certification Services
47173 Benicia Street
Fremont, CA 94538
Tel: (510) 771-1000
Fax: (510) 661-0888

Data#: 37 File#: 07U10984LC_Runs 8 and Up.EMI
Date: 04-13-2007 Time: 09:50:29



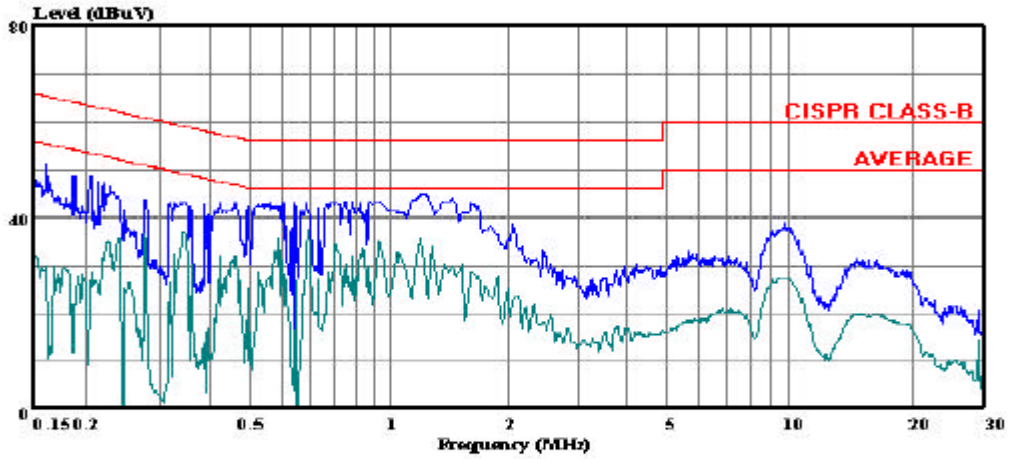
Trace: 35 Ref Trace:

Condition	: CISPR CLASS-B
Test Operator	: Doug Anderson
Project #	: 07U10984
Company	: HTC
Configuration	: PC Connected to EUT via USB
Mode of Operation	: Normal
Power Source	: 115 VAC/60Hz
	: L1: Blue(Peak), Green(Average)
Target	: FCC CLASS-B

LINE 2 RESULTS

Compliance Certification Services
47173 Benicia Street
Fremont, CA 94538
Tel: (510) 771-1000
Fax: (510) 661-0888

Data#: 44 File#: 07U10984LC_Runs 8 and Up.EMI
Date: 04-13-2007 Time: 10:10:21

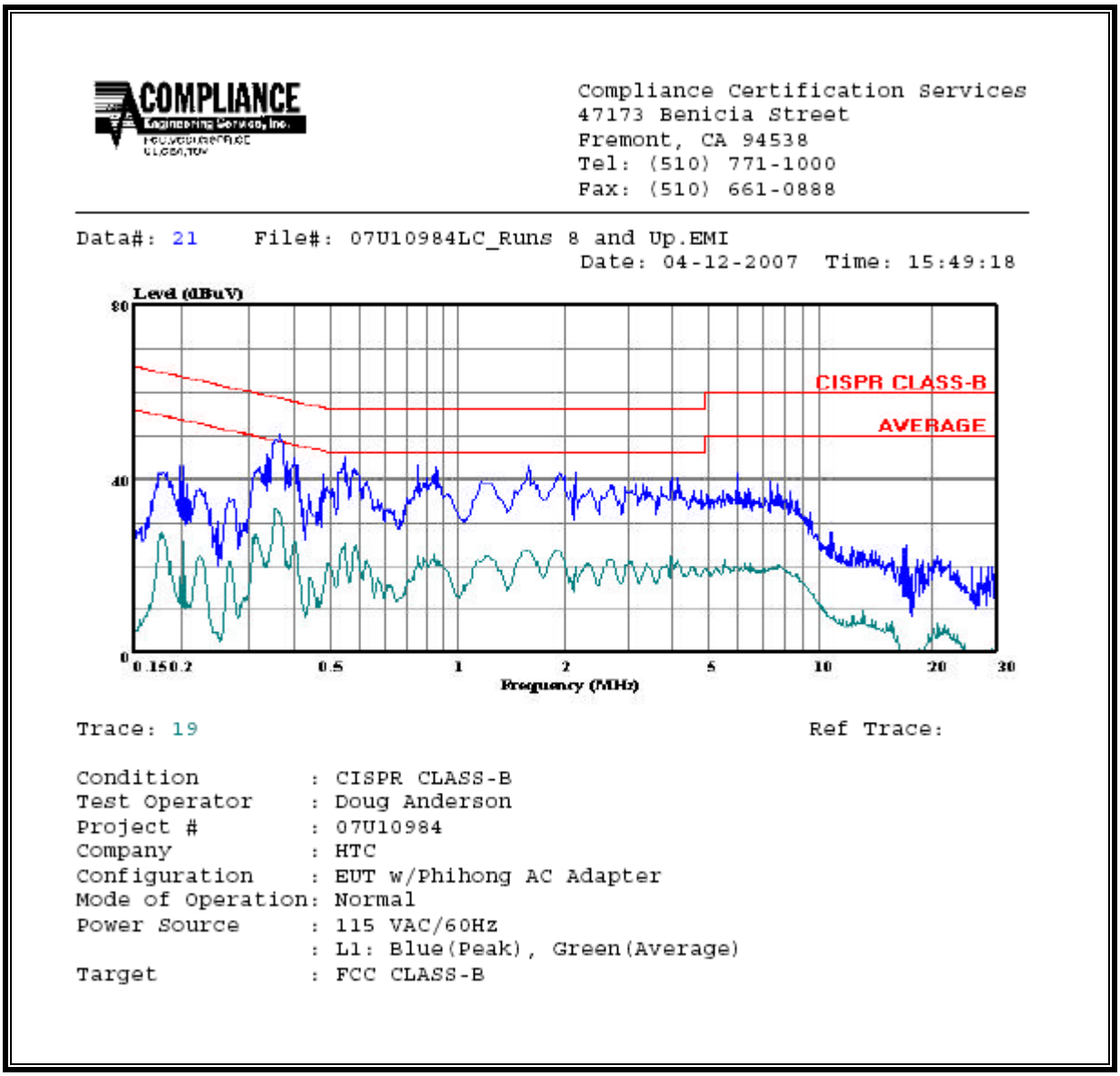


Trace: 42 Ref Trace:

Condition : CISPR CLASS-B
Test Operator : Doug Anderson
Project # : 07U10984
Company : HTC
Configuration : PC Connected to EUT via USB
Mode of Operation: Normal
Power Source : 115 VAC/60Hz
: L2: Blue(Peak), Green(Average)
Target : FCC CLASS-B

WITH PHIHONG AC ADAPTER

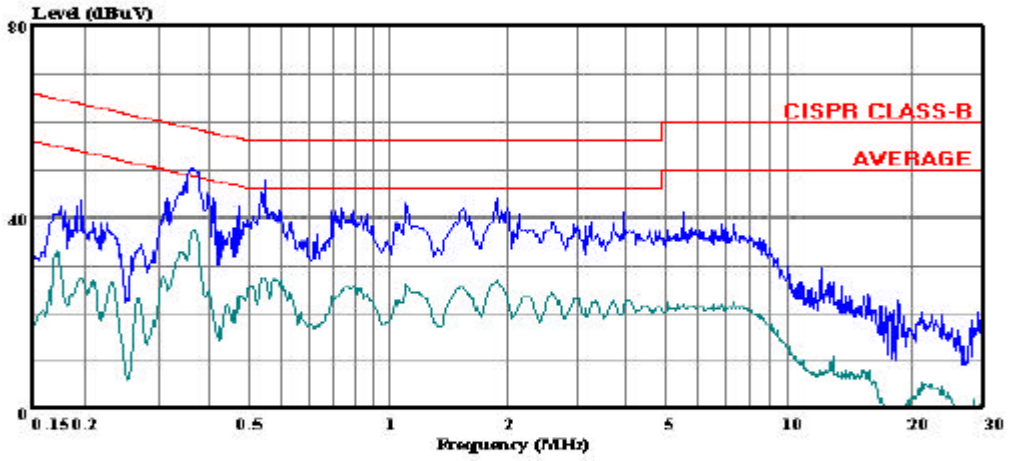
LINE 1 RESULTS



LINE 2 RESULTS

Compliance Certification Services
47173 Benicia Street
Fremont, CA 94538
Tel: (510) 771-1000
Fax: (510) 661-0888

Data#: 28 File#: 07U10984LC_Runs 8 and Up.EMI
Date: 04-12-2007 Time: 16:06:06

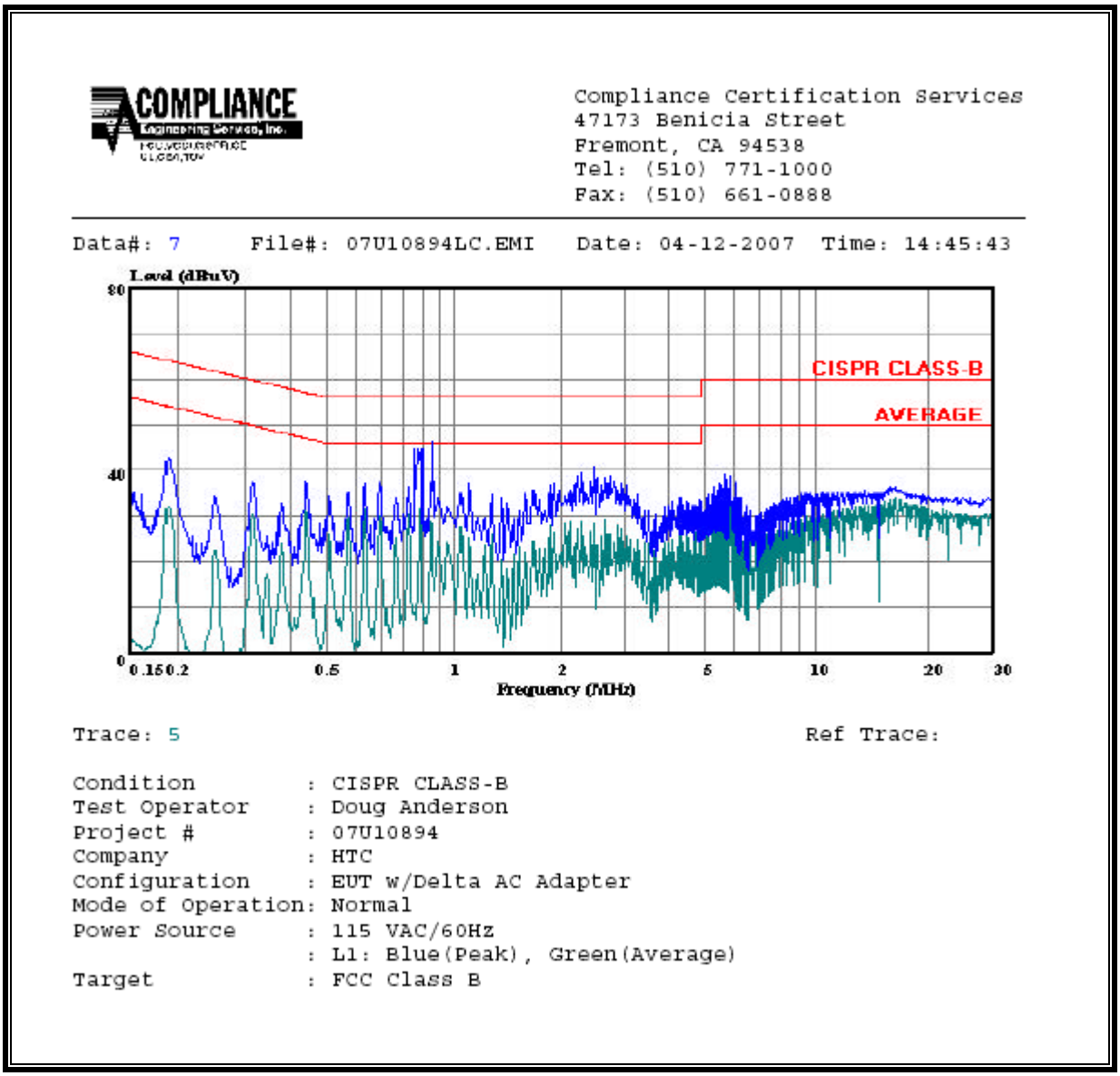


Trace: 26 Ref Trace:

Condition : CISPR CLASS-B
Test Operator : Doug Anderson
Project # : 07U10984
Company : HTC
Configuration : EUT w/Phihong AC Adapter
Mode of Operation: Normal
Power Source : 115 VAC/60Hz
: L2: Blue(Peak), Green(Average)
Target : FCC CLASS-B

WITH DELTA AC ADAPTER

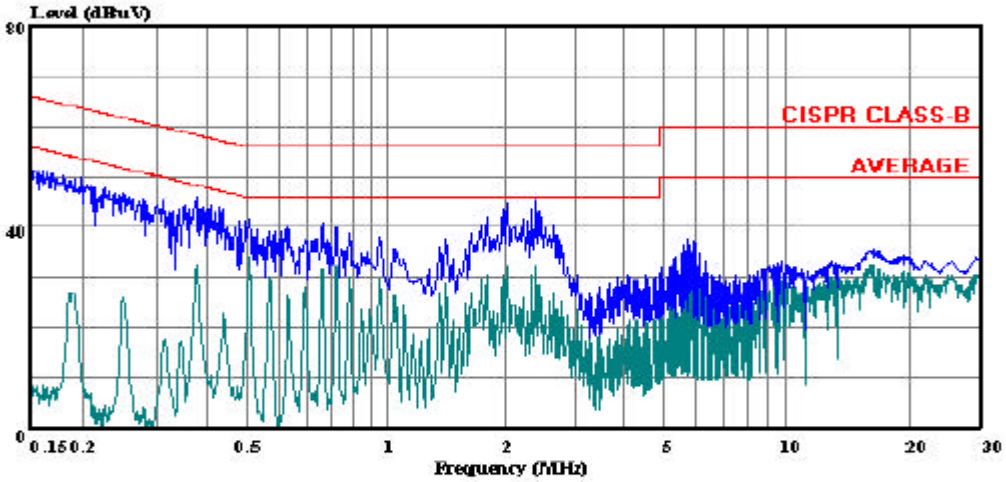
LINE 1 RESULTS



LINE 2 RESULTS

Compliance Certification Services
47173 Benicia Street
Fremont, CA 94538
Tel: (510) 771-1000
Fax: (510) 661-0888

Data#: 14 File#: 07U10894LC.EMI Date: 04-12-2007 Time: 15:08:23



Trace: 12 Ref Trace:

Condition : CISPR CLASS-B
Test Operator : Doug Anderson
Project # : 07U10894
Company : HTC
Configuration : EUT w/Delta AC Adapter
Mode of Operation: Normal
Power Source : 115 VAC/60Hz
: L2: Blue(Peak), Green(Average)
Target : FCC Class B