



FCC 47 CFR PART 15 SUBPART C

CERTIFICATION TEST REPORT

FOR

**GT-S7275~802.11 B/G/N 1X1 HT20, + BT4.0 (LE) + GSM850/1900 AND
WCDMA850MHz BAR PHONE**

MODEL NUMBER: GT-S7275

FCC ID: A3LGTS7275

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Prepared for
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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
--		Initial Issue	
A	7/3/13	Revised sections 7.4 and 8.4 to make clear on AFH mode	I.Netto

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: SAMSUNG ELECTRONICS CO., LTD.
416, MAETAN 3-DONG, YEONGTONG-GU
SUWON-CITY, GYEONGGI-DO 443-742, SOUTH KOREA

EUT DESCRIPTION: GT-S7275~802.11 B/G/N 1X1 HT20, + BT4.0 (LE) +
GSM850/1900 AND WCDMA850MHz BAR PHONE

MODEL: GT-S7275

SERIAL NUMBER: 47901EAF5D9C3077 (RADIATED)
47901EB9147C30DD (CONDUCTED)

DATE TESTED: JUNE 8-26, 2013

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C	Pass

UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Verification Services Inc. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. 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 UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Approved & Released For
UL Verification Services Inc. By:

Tested By:



PHILIP KIM
WiSE PROGRAM MANAGER
UL Verification Services Inc.



CHARLES VERGONIO
WiSE EMC ENGINEER
UL Verification Services Inc.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2009, FCC CFR 47 Part 2, FCC CFR 47 Part 15, RSS-GEN Issue 3, and RSS-210 Issue 8.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA.

UL Verification Services Inc. 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. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

$$\begin{aligned} \text{Field Strength (dBuV/m)} &= \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \\ &\text{Cable Loss (dB)} - \text{Preamplifier Gain (dB)} \\ 36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} &= 28.9 \text{ dBuV/m} \end{aligned}$$

4.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	3.52 dB
Radiated Disturbance, 30 to 1000 MHz	4.94 dB

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a bar-style cell phone featuring 802.11 B/G/N 1X1 HT20, + BT4.0 (LE) + GSM850/1900 AND WCDMA850MHz SMART PHONE

The unit supports AFH mode. The manufacturer attested the following.

- It is in compliance with Bluetooth Core Specification 4.0 +LE.
- The number of hopping channel in AFH mode is 20 channels.
- The output power do not transmit over than 125mW
- The channel separation is based upon 2/3 of 20 dB channel bandwidth.

5.2. MAXIMUM OUTPUT POWER

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

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
2402 - 2480	Basic GFSK	10.50	11.22
2402 - 2480	Enhanced 8PSK	8.30	6.76

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an FPCB antenna, with a maximum gain of 5.93 dBi.

5.4. SOFTWARE AND FIRMWARE

The firmware installed in the EUT during testing was REV 0.1 and the software version was S7275.001.

5.5. WORST-CASE CONFIGURATION AND MODE

Radiated emission and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

The fundamental of the EUT was investigated in three orthogonal orientations X,Y,Z, it was determined that X orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in X orientation.

5.1. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
AC ADAPTER	SAMSUNG	ETA0U80EBE	DK1C220TS/A-E	DoC
Headset	SAMSUNG	N/A	N/A	DoC

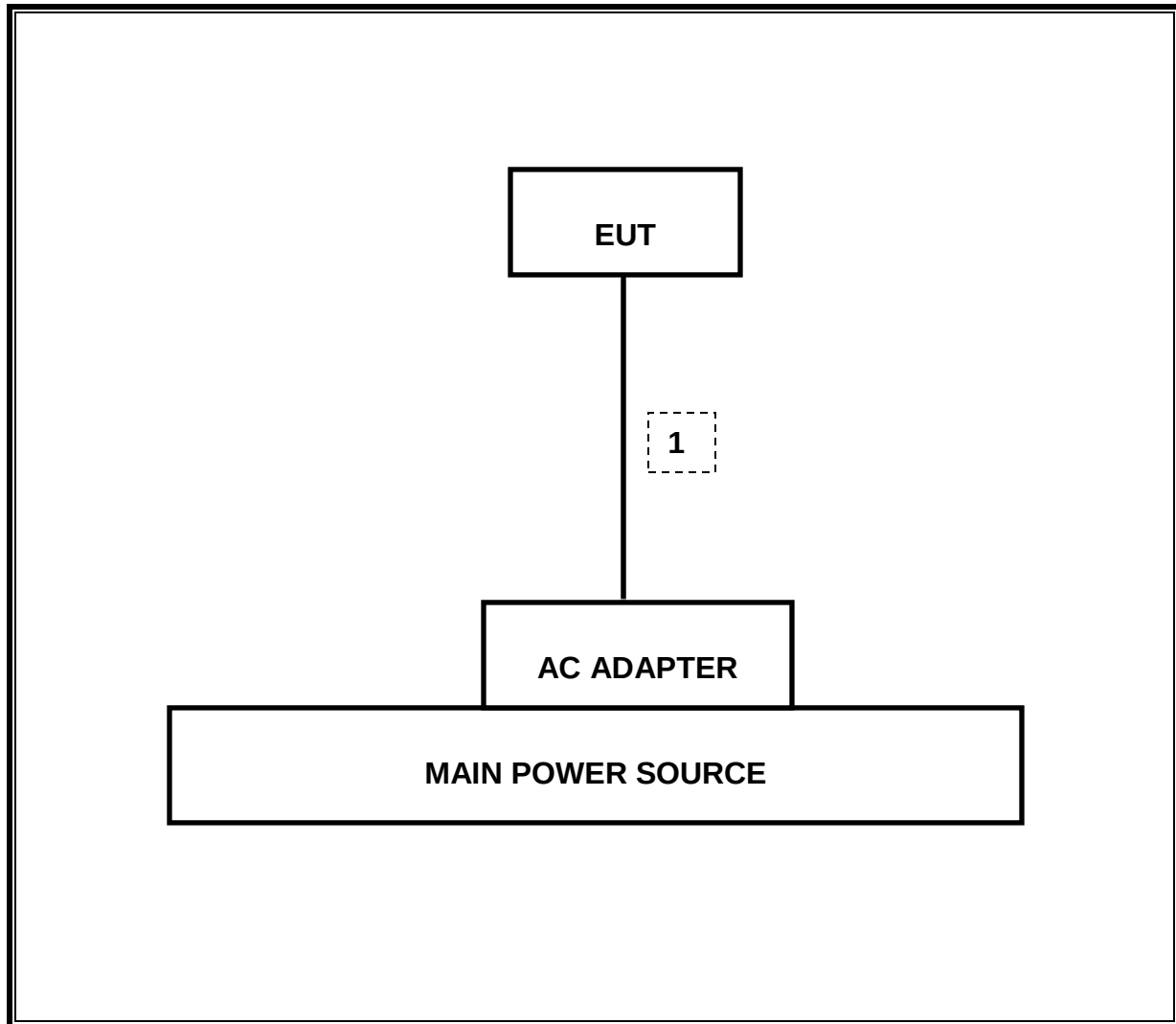
I/O CABLES

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	USB	1	USB	Shielded	1.6m	N/A
2	Headset	1	Audio	Shielded	1.5m	N/A

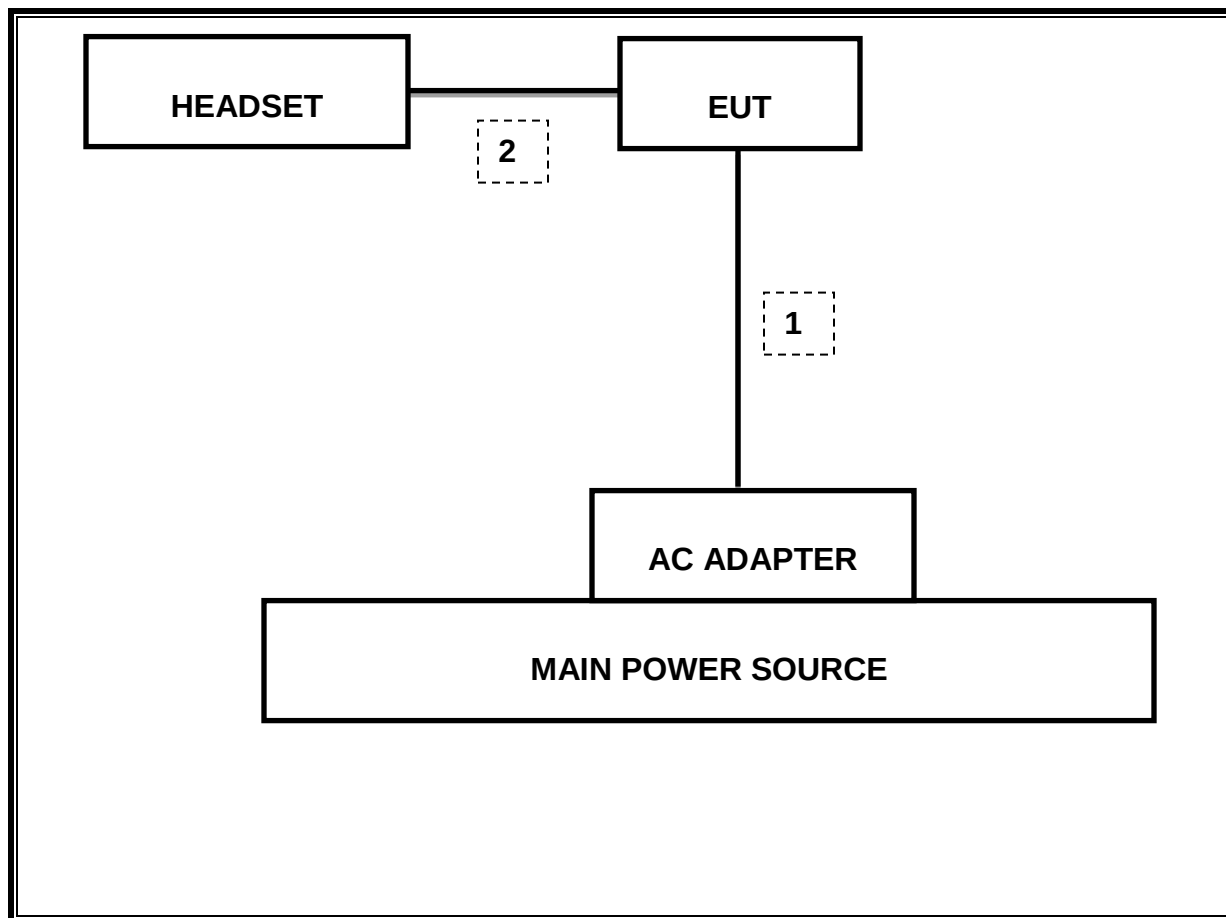
TEST SETUP

The EUT is a stand-alone unit that was tested in the worst case orientation and configuration, where applicable, during the tests. Test software exercised the radio.

SETUP DIAGRAM FOR TESTS (CONDUCTED SETUP)



SETUP DIAGRAM FOR TESTS (RADIATED SETUP)



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	Asset	Cal Date	Cal Due
Antenna, Biconolog, 30MHz-1 GHz	Sunol Sciences	JB1	C01011	03/23/12	03/28/14
Antenna, Horn, 18 GHz	ETS	3117	C01006	12/11/12	12/11/13
Antenna, Horn, 25.5 GHz	ARA	MWH-1826/B	C00980	11/14/12	11/14/13
Preamplifier, 1300 MHz	Agilent / HP	8447D	C00580	01/28/13	01/28/14
Preamplifier, 26.5 GHz	Agilent / HP	8449B	C01052	10/22/12	10/22/13
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C01012	10/21/12	10/21/13
EMI Test Receiver, 30 MHz	R & S	ESHS 20	N02396	08/08/12	08/08/13
CBT Bluetooth Tester	R & S	CBT	None	05/15/12	04/11/14
Peak Power Meter	Agilent / HP	E4416A	C00963	12/13/12	12/13/13
Peak / Average Power Sensor	Agilent / HP	E9327A	C00964	12/13/12	12/13/13
LISN, 30 MHz	FCC	50/250-25-2	C00626	01/14/13	01/14/14
Reject Filter, 2.4GHz	Micro-Tronics	BRM50702	N02684	CNR	CNR

7. BASIC DATA RATE GFSK MODULATION

7.1. 20 dB AND 99% BANDWIDTH

LIMIT

None; for reporting purposes only.

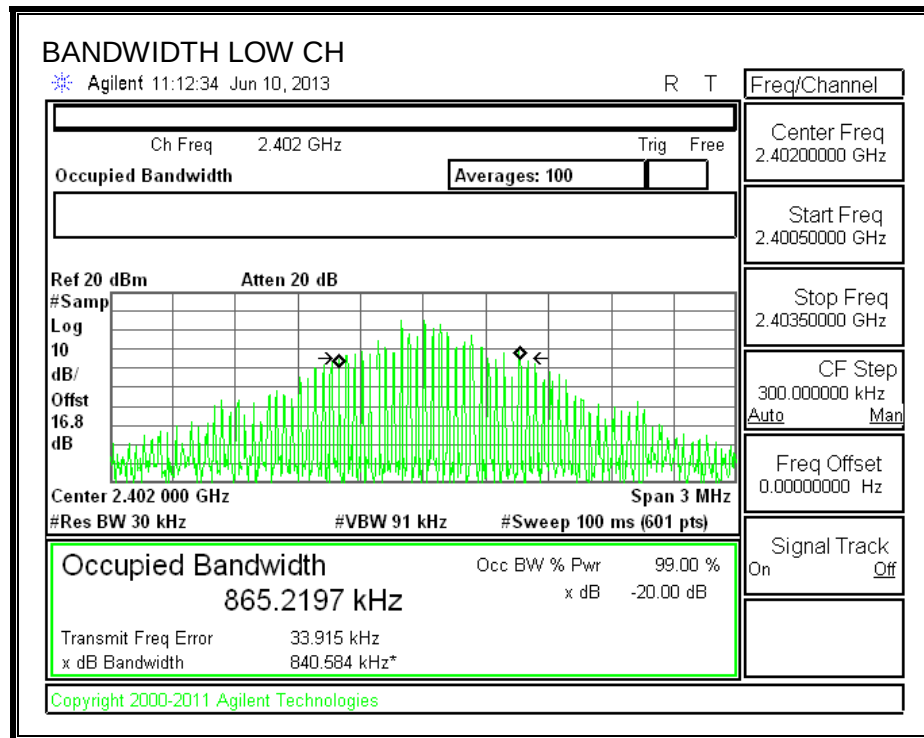
TEST PROCEDURE

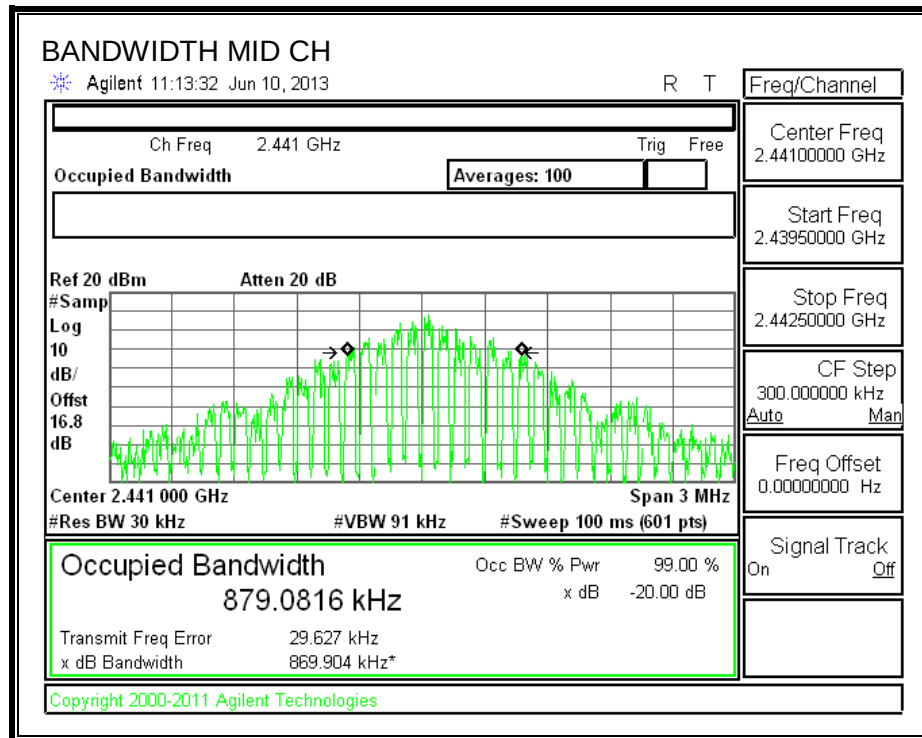
The transmitter output is connected to a spectrum analyzer. The RBW is set to $\geq 1\%$ of the 20 dB bandwidth. The VBW is set to $\geq$ RBW. The sweep time is coupled.

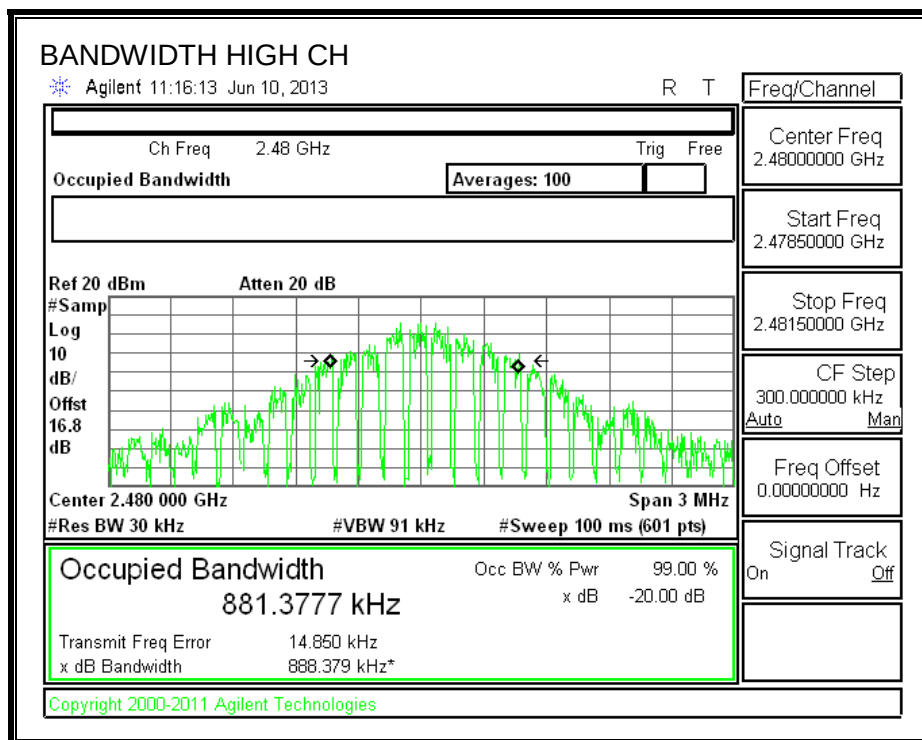
RESULTS

Channel	Frequency (MHz)	20 dB Bandwidth (kHz)	99% Bandwidth (kHz)
Low	2402	840.584	865.2197
Middle	2441	869.904	879.0816
High	2480	888.379	881.3777

20 dB AND 99% BANDWIDTH







7.2. HOPPING FREQUENCY SEPARATION

LIMIT

FCC §15.247 (a) (1)

IC RSS-210 A8.1 (b)

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

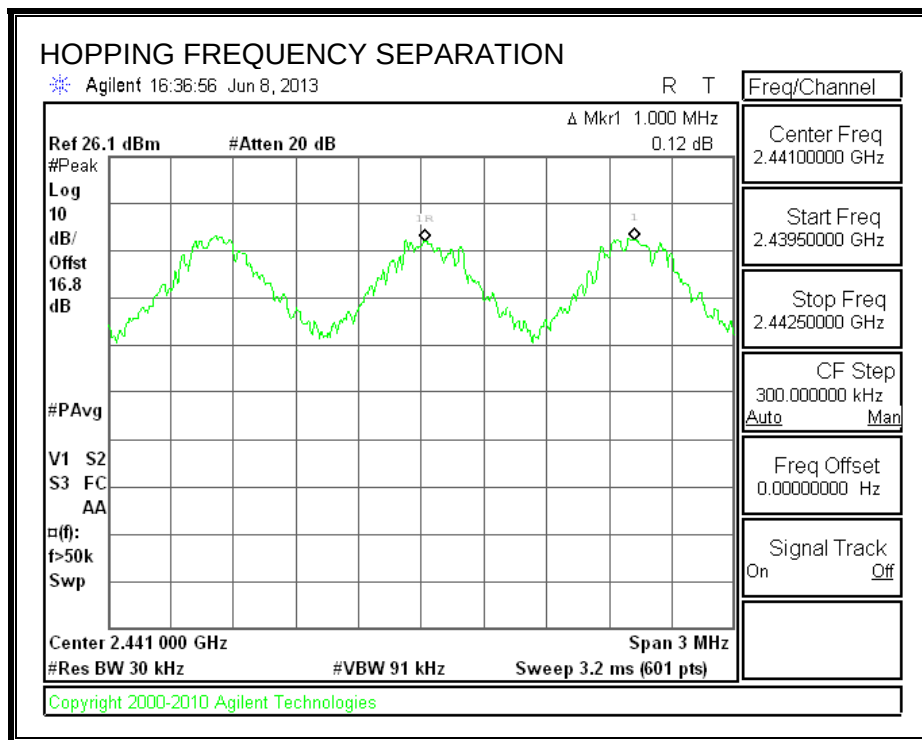
Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than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

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The RBW is set to 100 kHz and the VBW is set to 100 kHz. The sweep time is coupled.

RESULTS

HOPPING FREQUENCY SEPARATION



7.3. NUMBER OF HOPPING CHANNELS

LIMIT

FCC §15.247 (a) (1) (iii)

IC RSS-210 A8.1 (d)

Frequency hopping systems in the 2400 – 2483.5 MHz band shall use at least 15 non-overlapping channels.

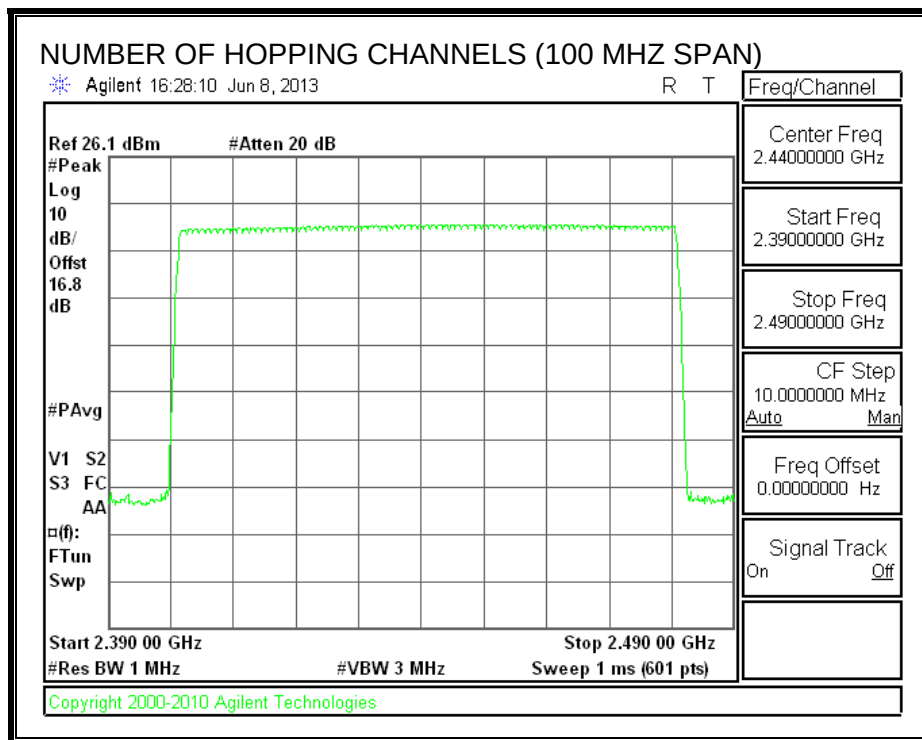
TEST PROCEDURE

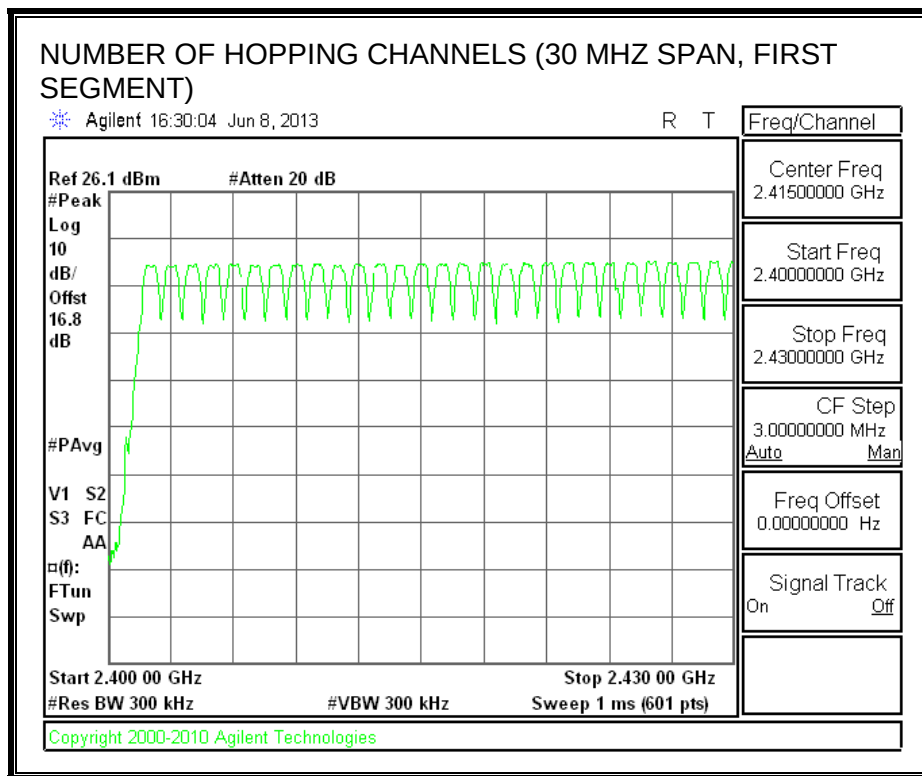
The transmitter output is connected to a spectrum analyzer. The span is set to cover the entire authorized band, in either a single sweep or in multiple contiguous sweeps. The RBW is set to a maximum of 1 % of the span. The analyzer is set to Max Hold.

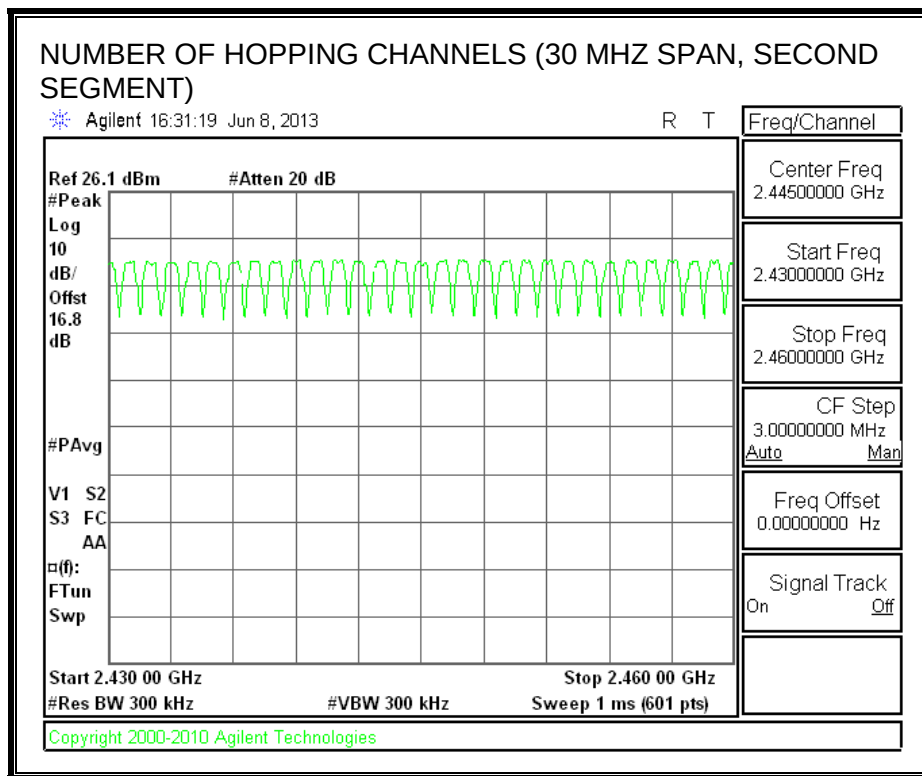
RESULTS

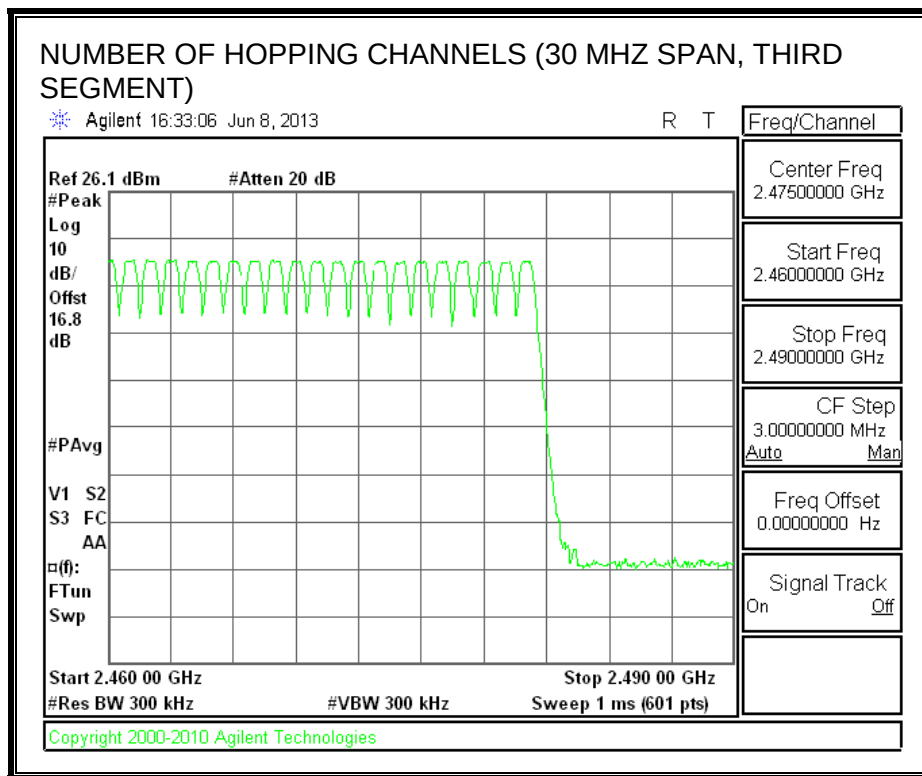
Normal Mode: 79 Channels observed.

NUMBER OF HOPPING CHANNELS









7.4. AVERAGE TIME OF OCCUPANCY

LIMIT

FCC §15.247 (a) (1) (iii)

IC RSS-210 A8.1 (d)

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

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.

This device complies with the Bluetooth protocol for FHSS operation, with or without AFH enabled, by employing a pseudo random channel selection and hopping rate to ensure that the occupancy time in $N \times 0.4s$, where N is the number of channels being used in the hopping sequence ($20 \geq N \leq 79$), is always less than 0.4s regardless of packet size (DH1, DH3 or DH5). This was confirmed for $N=79$ by the measurements below.

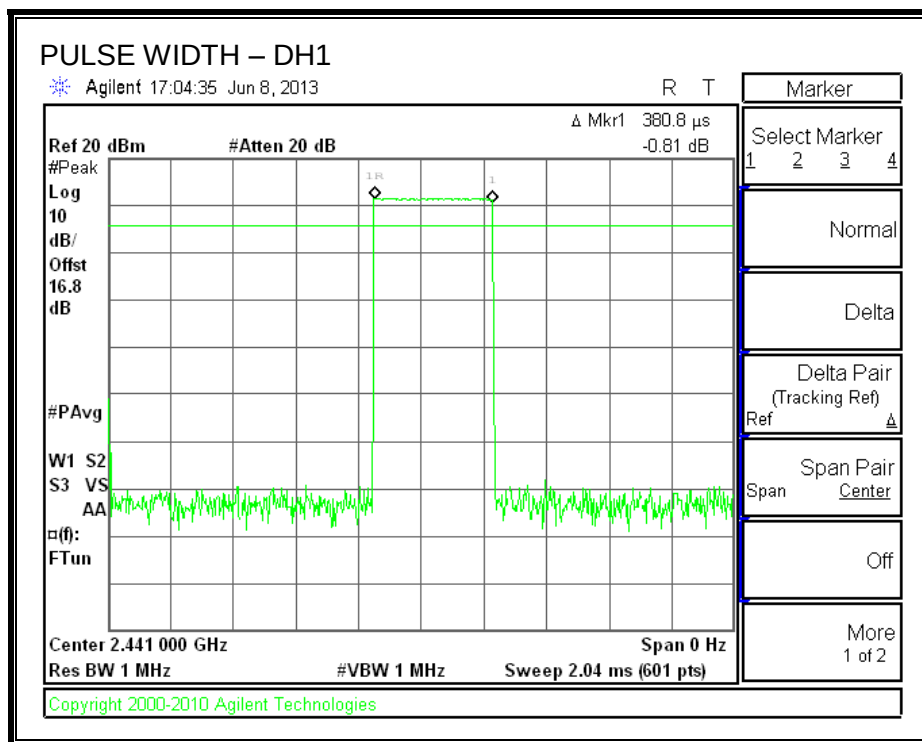
The number of pulses is measured in a 3.16 second scan, to enable resolution of each occurrence.

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

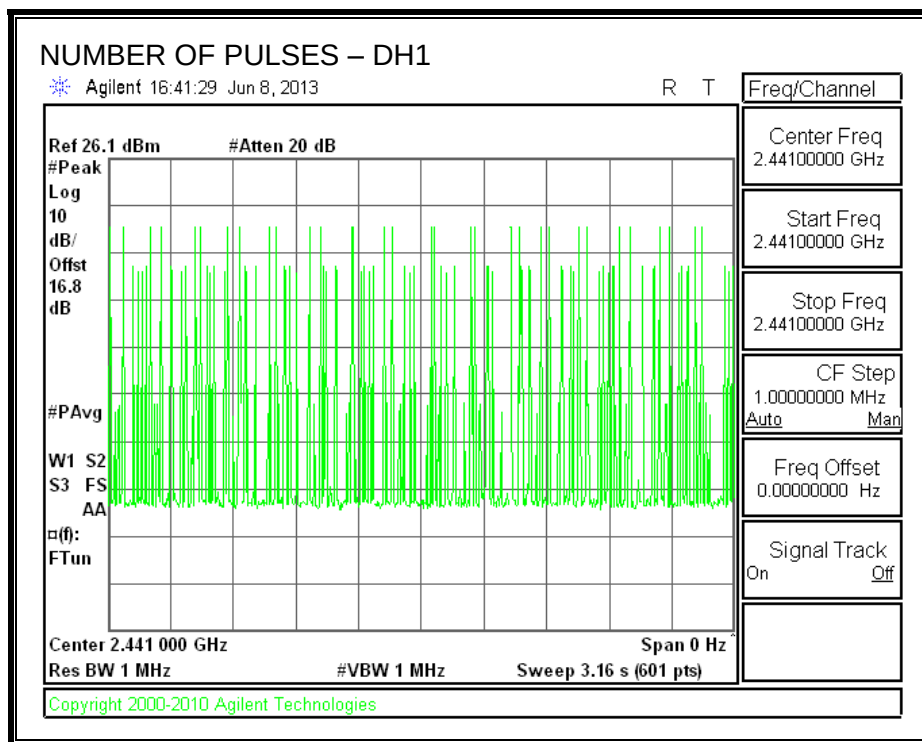
RESULTS

DH Packet	Pulse Width (msec)	Number of Pulses in 3.16 seconds	Average Time of Occupancy (sec)	Limit (sec)	Margin (sec)
GFSK Normal Mode					
DH1	0.3808	30	0.114	0.4	-0.286
DH3	1.635	15	0.245	0.4	-0.155
DH5	2.882	11	0.317	0.4	-0.083

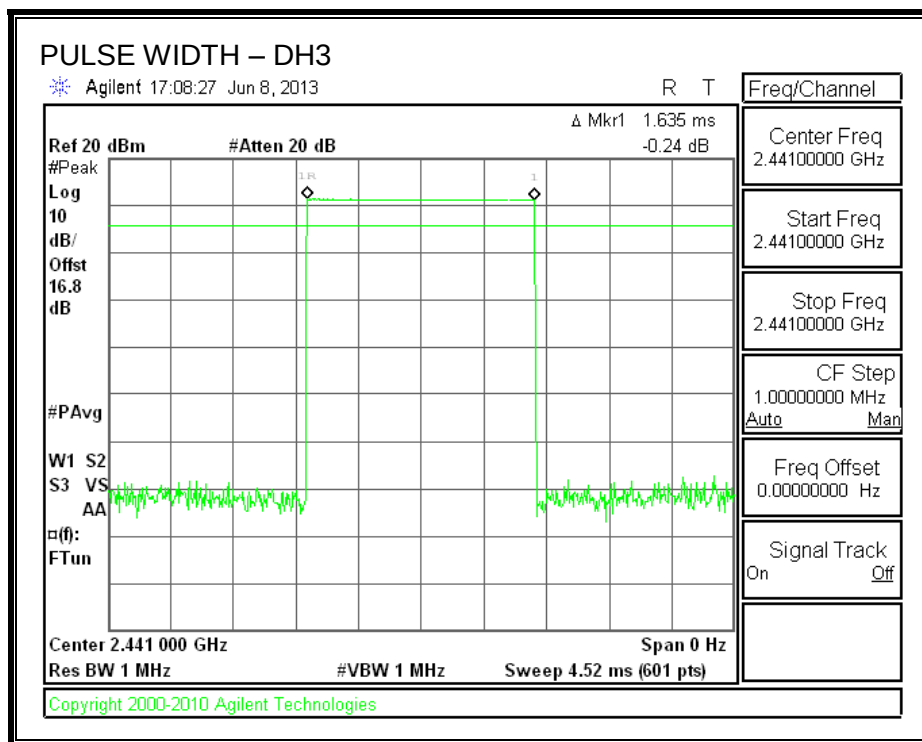
PULSE WIDTH - DH1



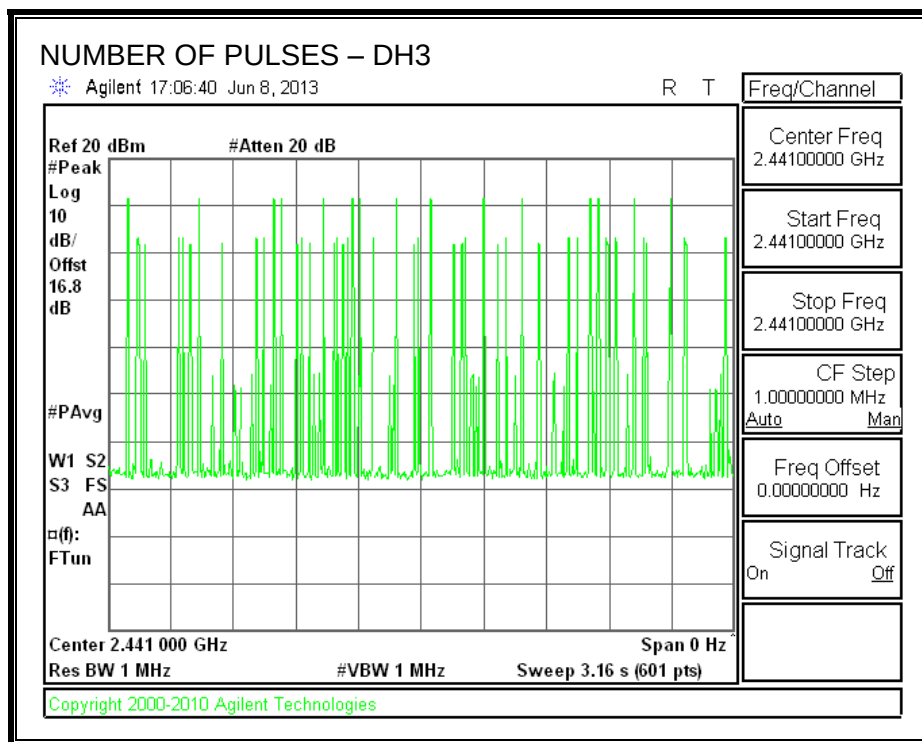
NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD – DH1



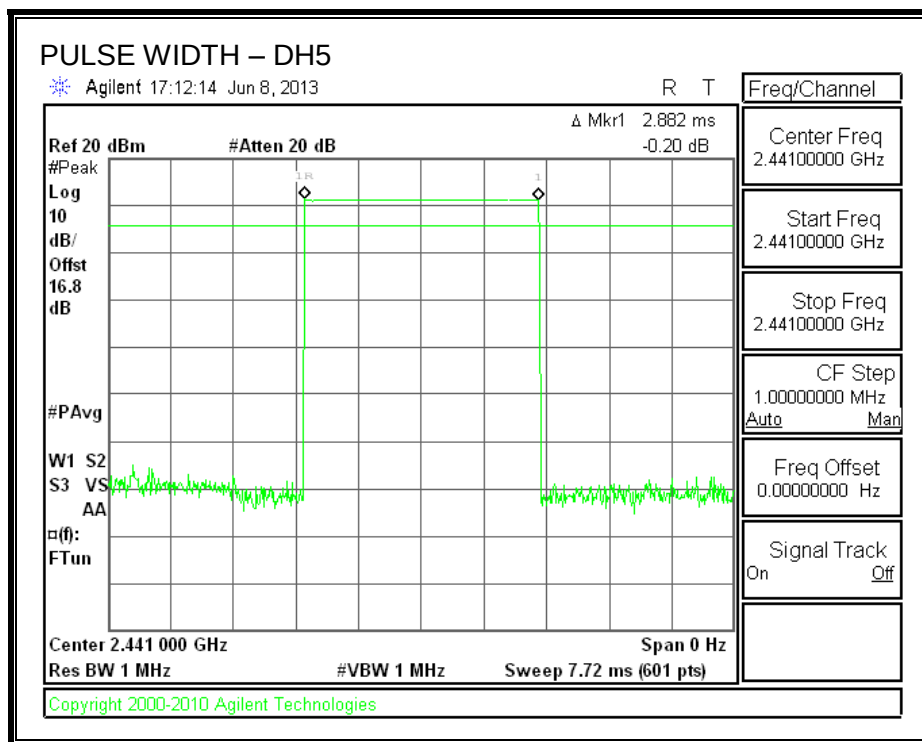
PULSE WIDTH – DH3



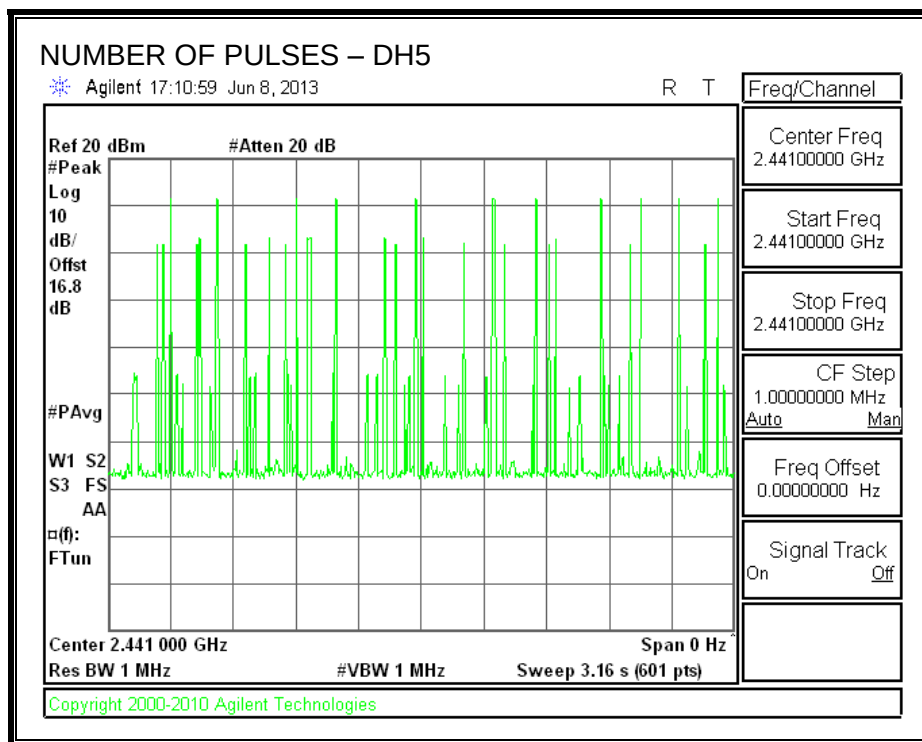
NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD – DH3



PULSE WIDTH – DH5



NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD – DH5



7.5. OUTPUT POWER

LIMIT

§15.247 (b) (1)

RSS-210 Issue 7 Clause A8.4

The maximum antenna gain is less than 6 dBi, therefore the limit is 30 dBm.

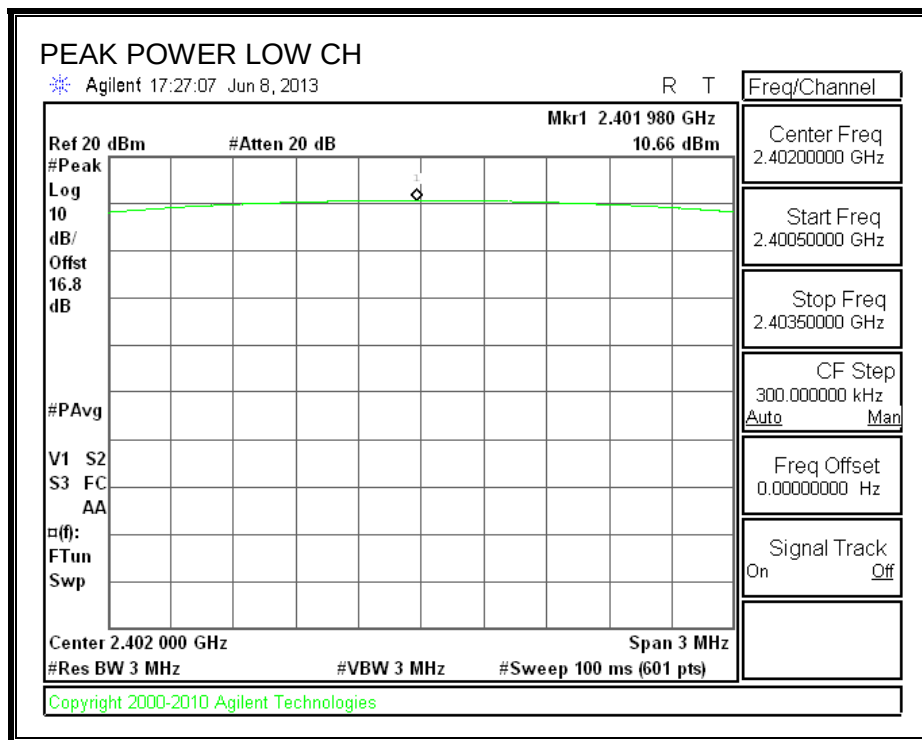
TEST PROCEDURE

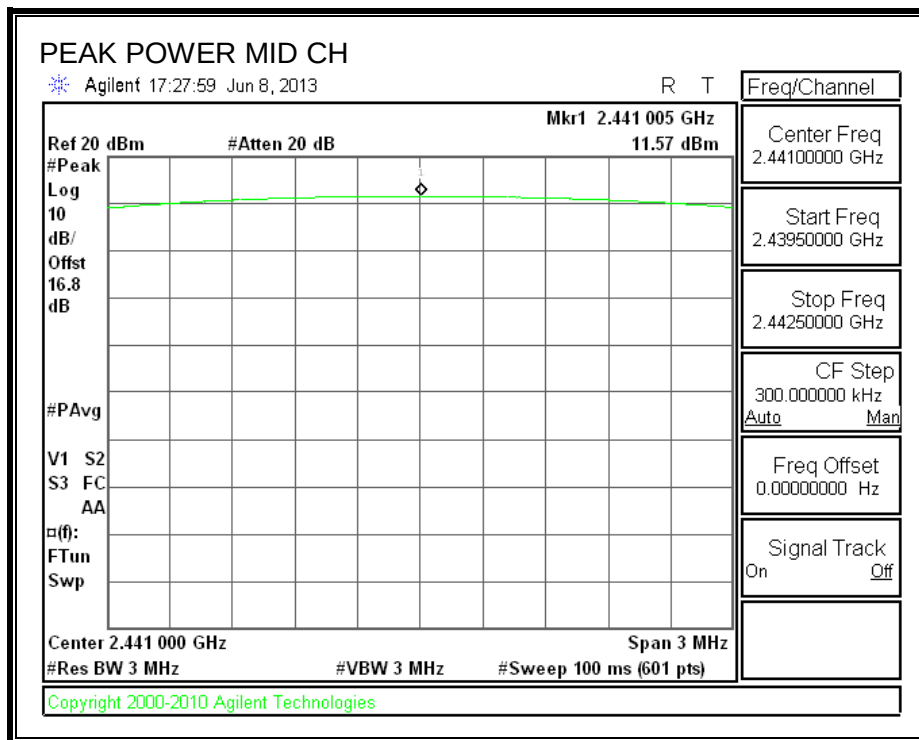
The transmitter output is connected to a spectrum analyzer the analyzer bandwidth is set to a value greater than the 20 dB bandwidth of the EUT.

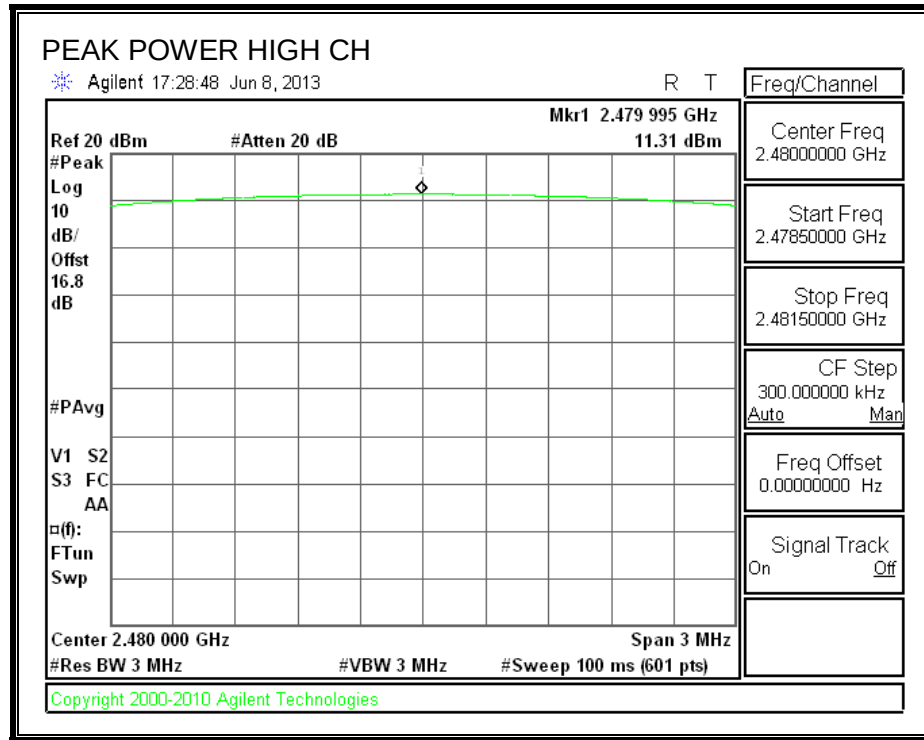
RESULTS

Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Margin (dB)
Low	2402	10.66	30	-19.34
Middle	2441	11.57	30	-18.43
High	2480	11.31	30	-18.69

OUTPUT POWER







7.6. AVERAGE POWER

LIMIT

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

RESULTS

The cable assembly insertion loss of 10.7dB (including 10 dB pad and 0.7 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	2402	9.60
Middle	2441	10.50
High	2480	8.20

7.7. CONDUCTED SPURIOUS EMISSIONS

LIMITS

FCC §15.247 (d)

IC RSS-210 A8.5

Limit = -20 dBc

TEST PROCEDURE

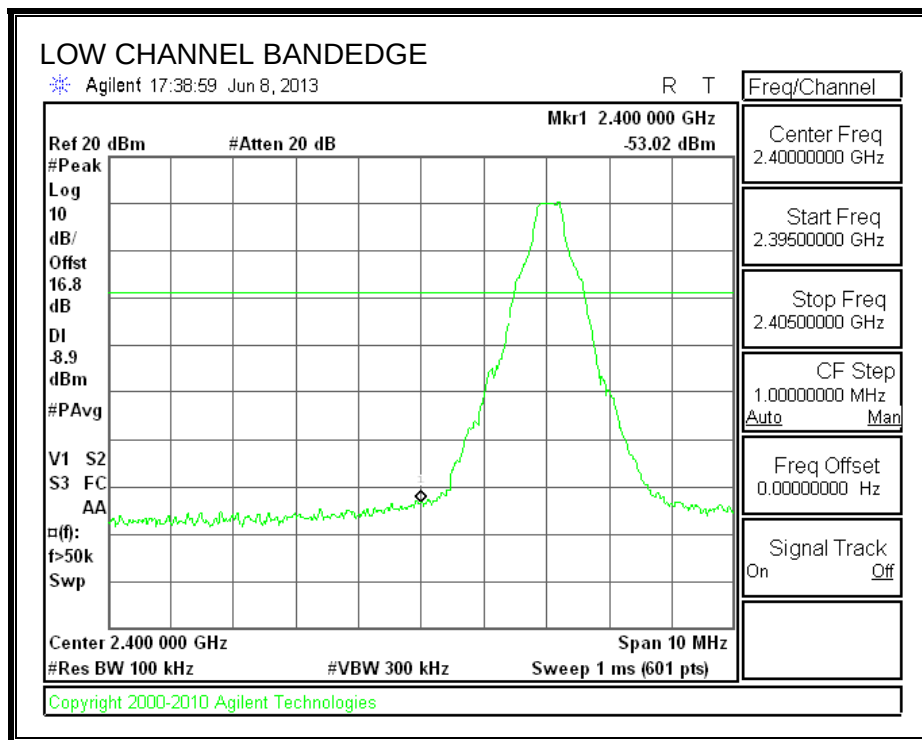
The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

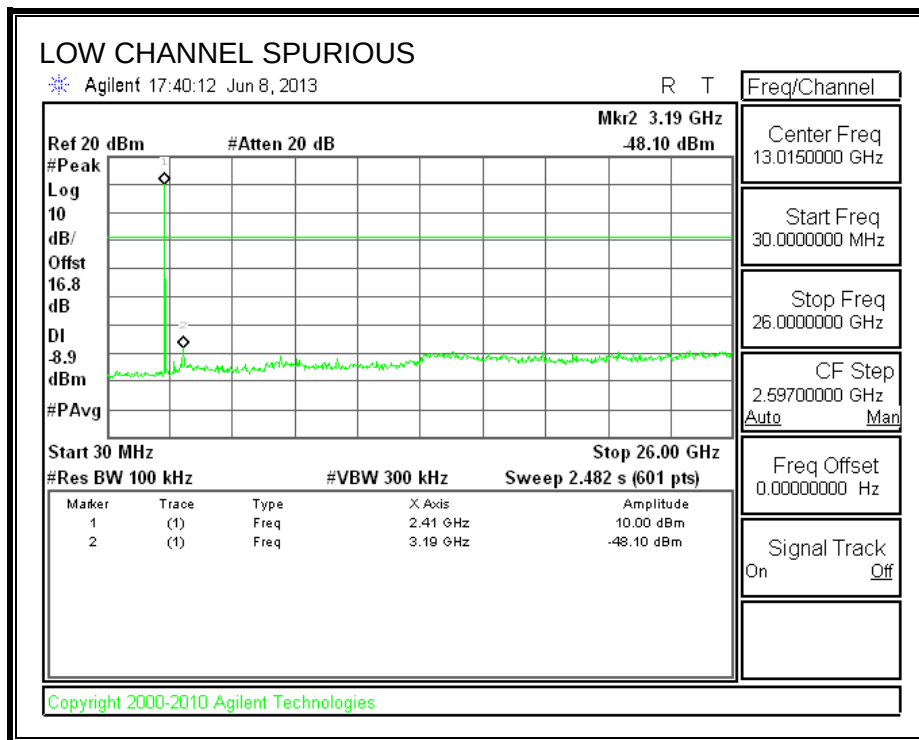
The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

The bandedges at 2.4 and 2.4835 GHz are investigated with the transmitter set to the normal hopping mode.

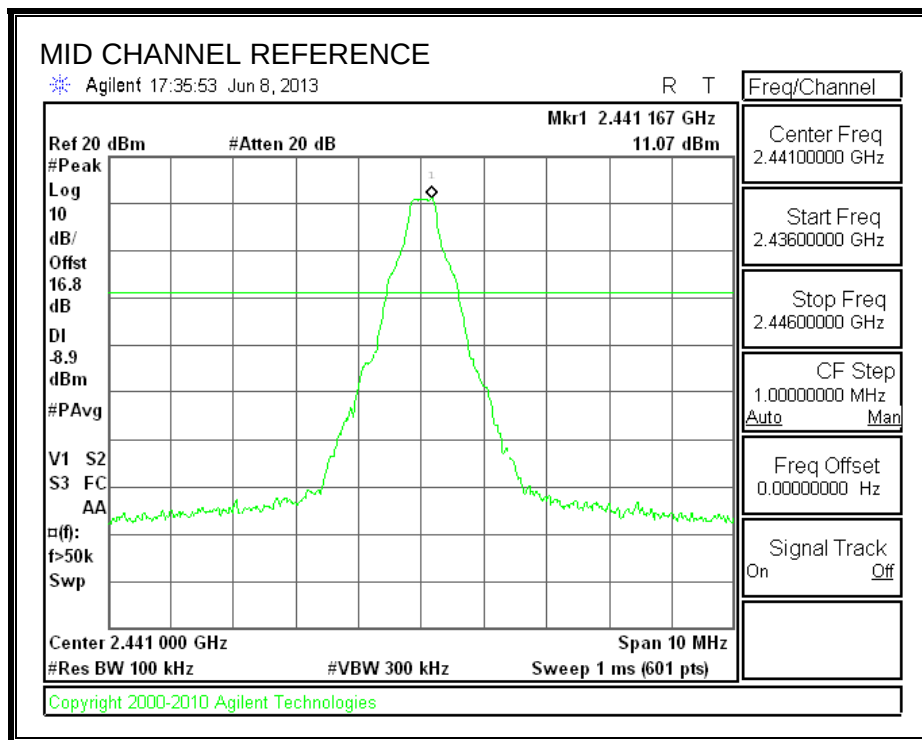
RESULTS

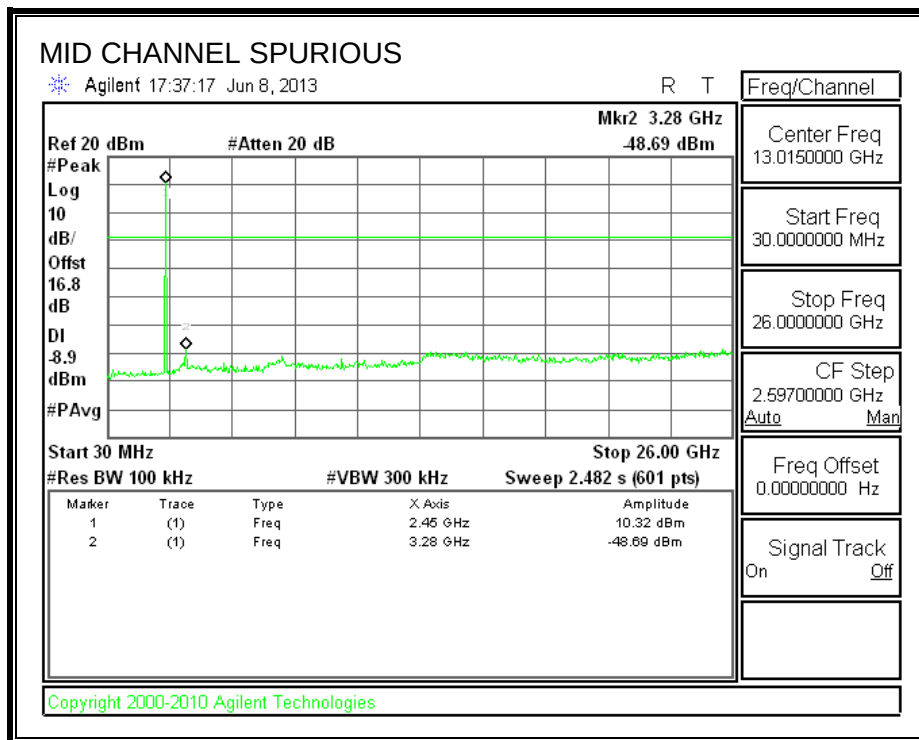
SPURIOUS EMISSIONS, LOW CHANNEL



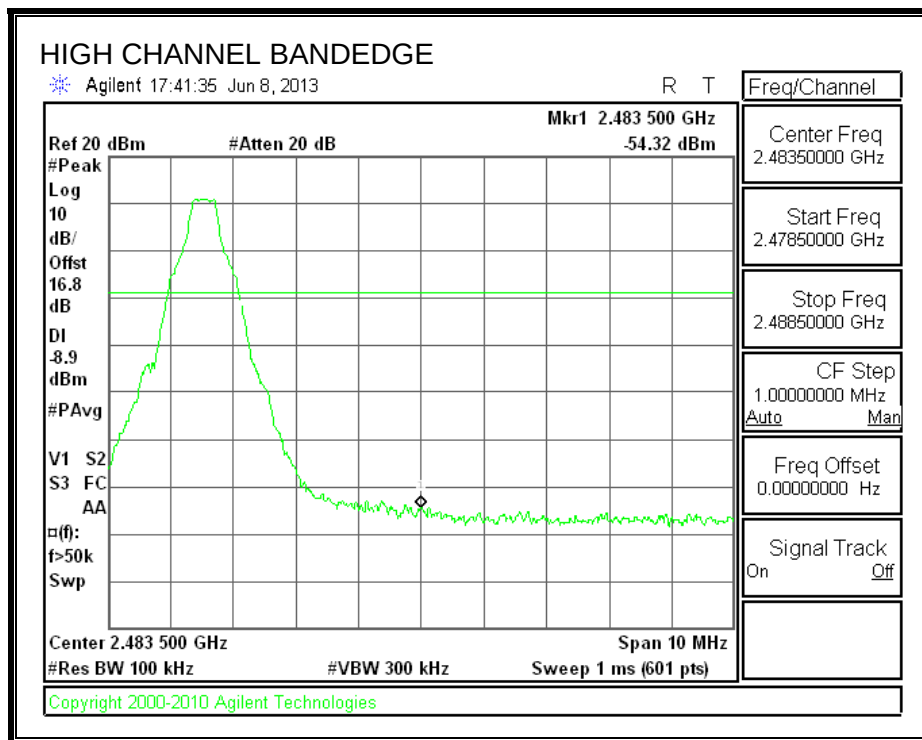


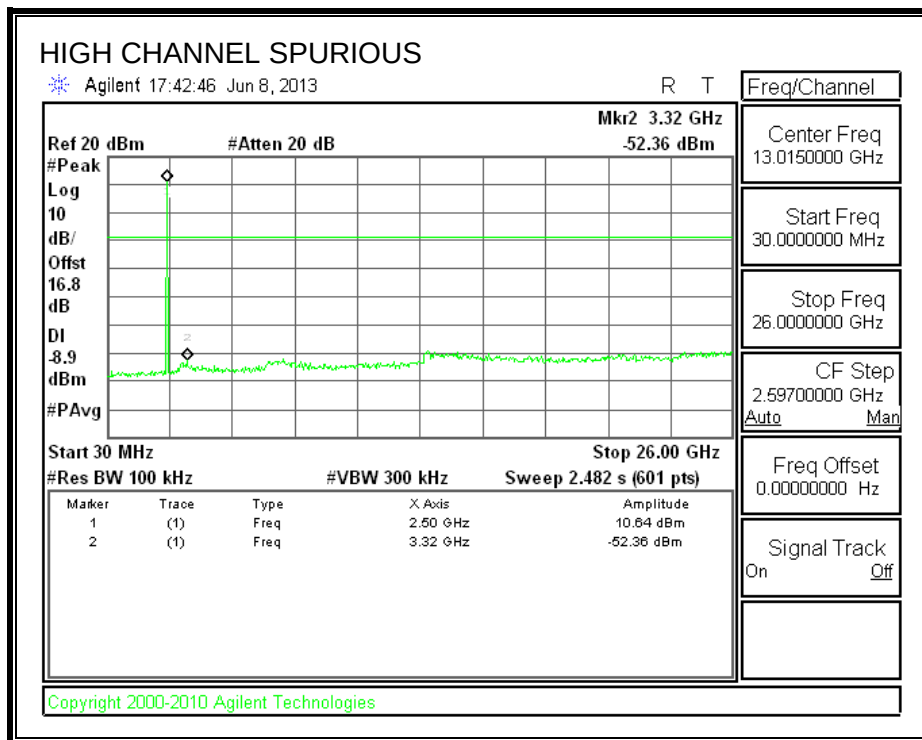
SPURIOUS EMISSIONS, MID CHANNEL



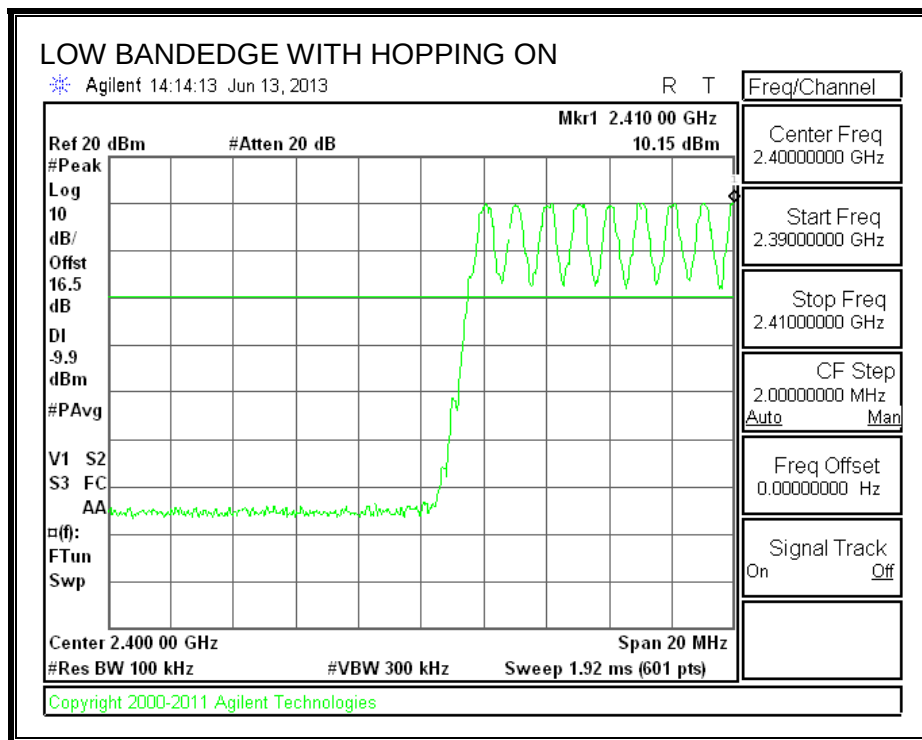


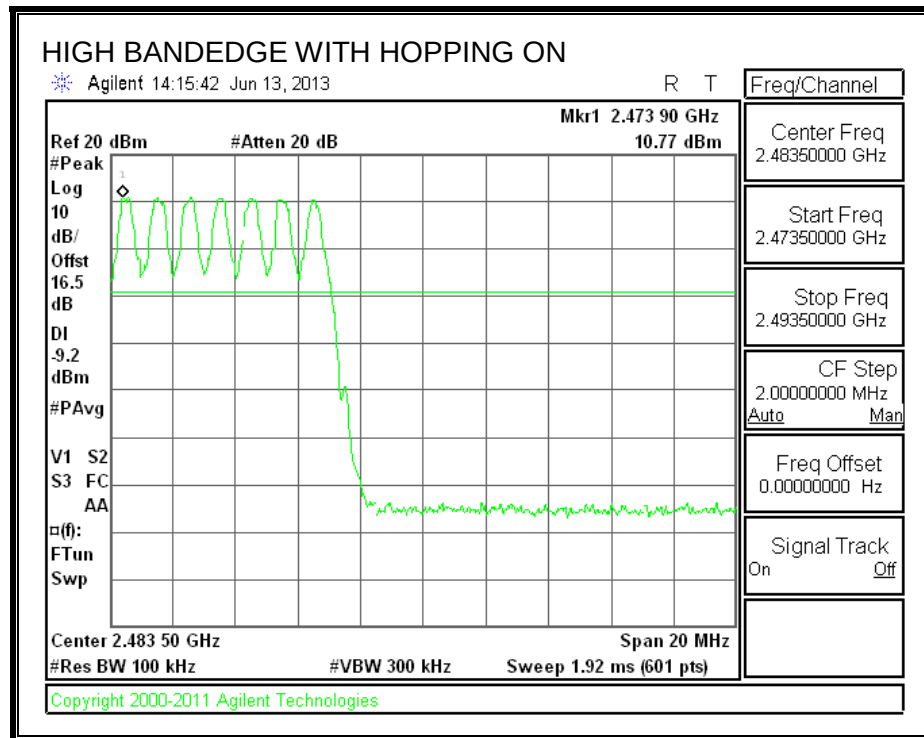
SPURIOUS EMISSIONS, HIGH CHANNEL





SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON





8. ENHANCED DATA RATE 8PSK MODULATION

8.1. 20 dB AND 99% BANDWIDTH

LIMIT

None; for reporting purposes only.

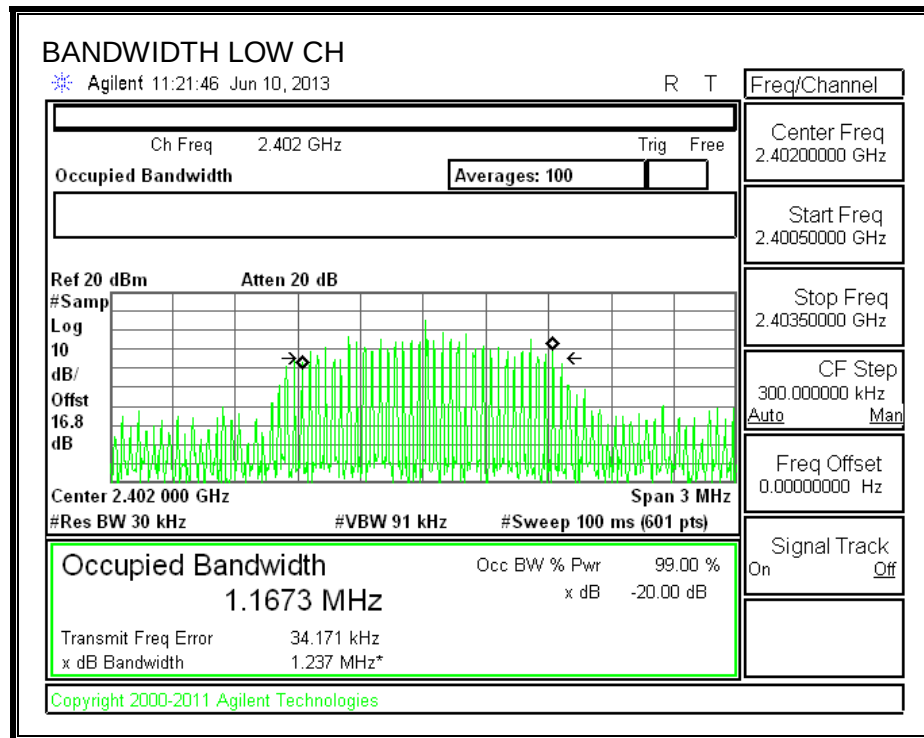
TEST PROCEDURE

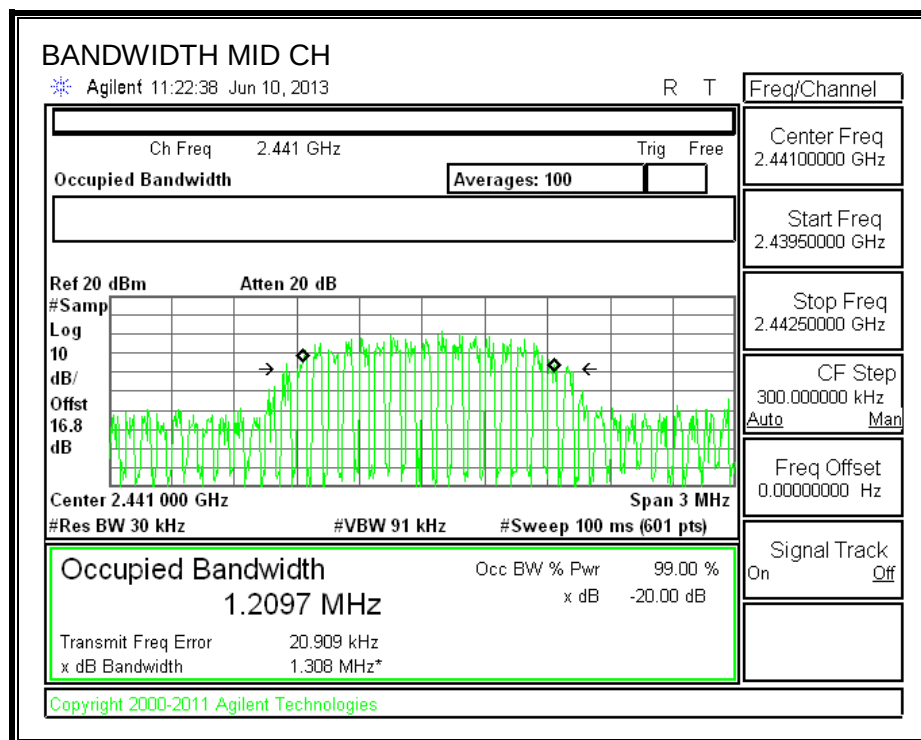
The transmitter output is connected to a spectrum analyzer. The RBW is set to $\geq 1\%$ of the 20 dB bandwidth. The VBW is set to $\geq$ RBW. The sweep time is coupled.

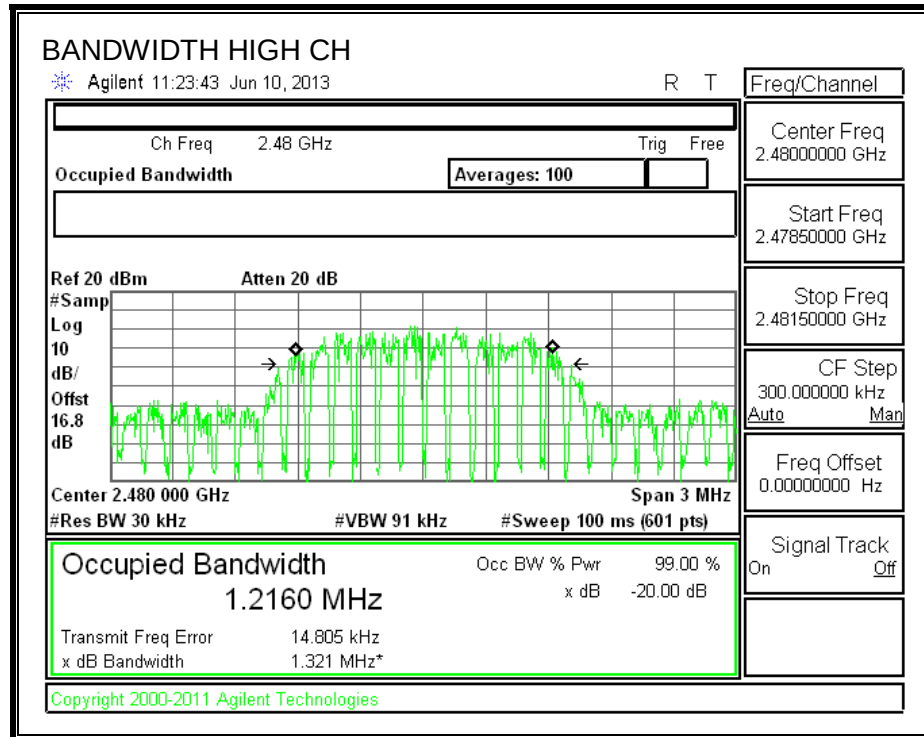
RESULTS

Channel	Frequency (MHz)	20 dB Bandwidth (MHz)	99% Bandwidth (kHz)
Low	2402	1.237	1.1673
Middle	2441	1.308	1.2097
High	2480	1.321	1.216

20 dB AND 99% BANDWIDTH







8.2. HOPPING FREQUENCY SEPARATION

LIMIT

FCC §15.247 (a) (1)

IC RSS-210 A8.1 (b)

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

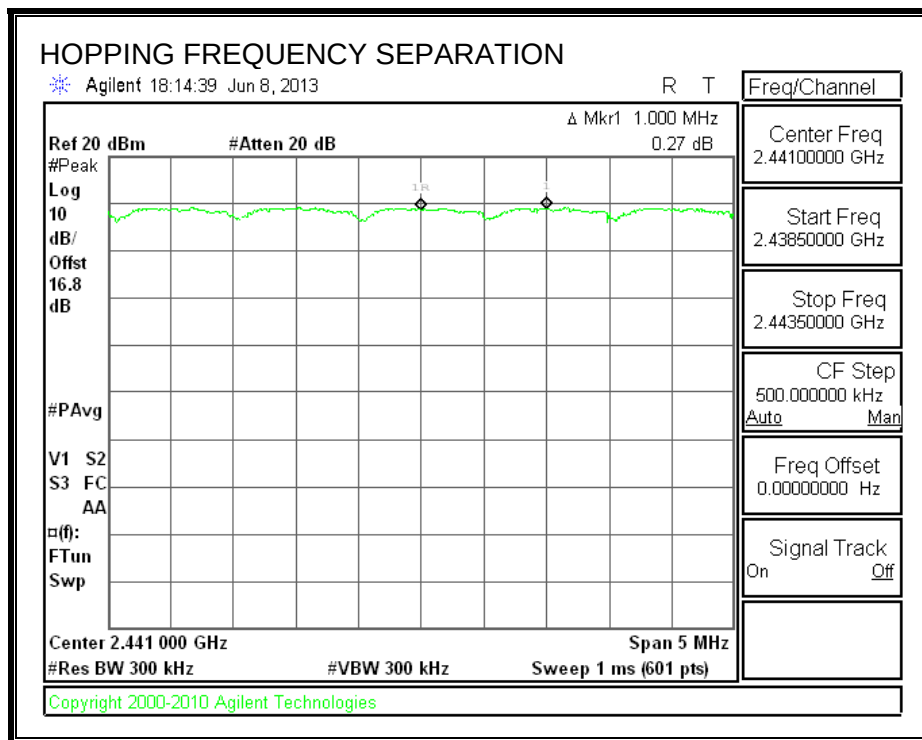
Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than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

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The RBW is set to 300 kHz and the VBW is set to 300 kHz. The sweep time is coupled.

RESULTS

HOPPING FREQUENCY SEPARATION



8.3. NUMBER OF HOPPING CHANNELS

LIMIT

FCC §15.247 (a) (1) (iii)

IC RSS-210 A8.1 (d)

Frequency hopping systems in the 2400 – 2483.5 MHz band shall use at least 15 non-overlapping channels.

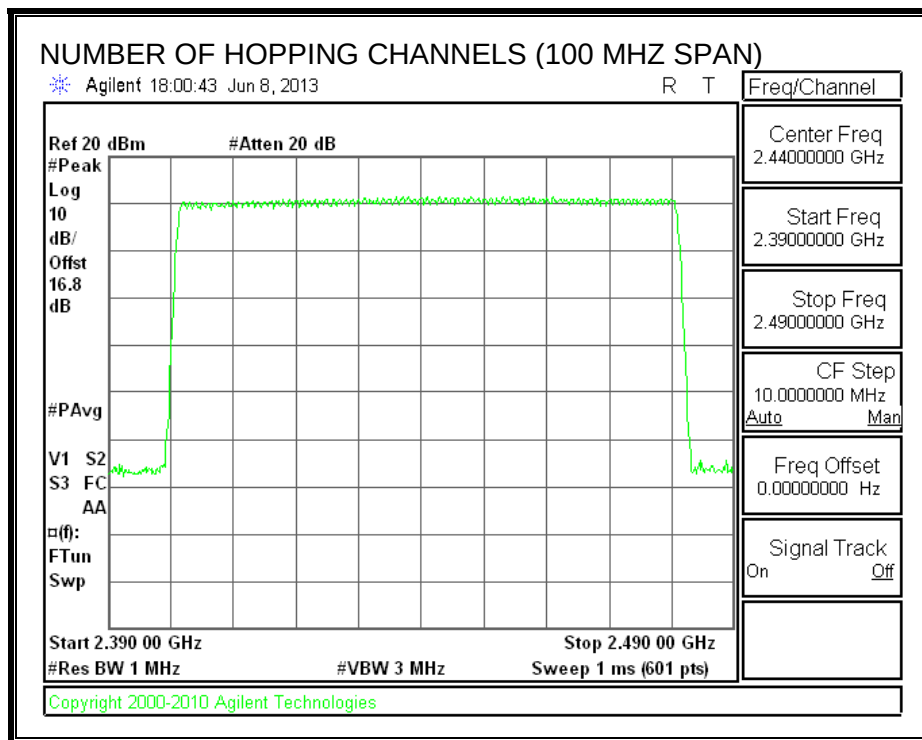
TEST PROCEDURE

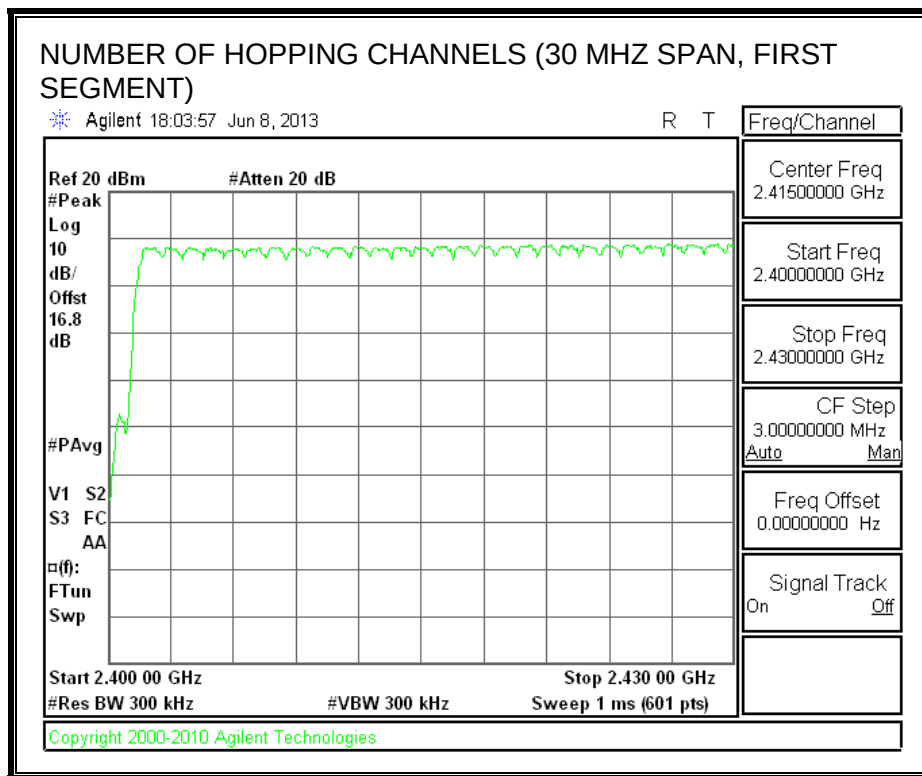
The transmitter output is connected to a spectrum analyzer. The span is set to cover the entire authorized band, in either a single sweep or in multiple contiguous sweeps. The RBW is set to a maximum of 1 % of the span. The analyzer is set to Max Hold.

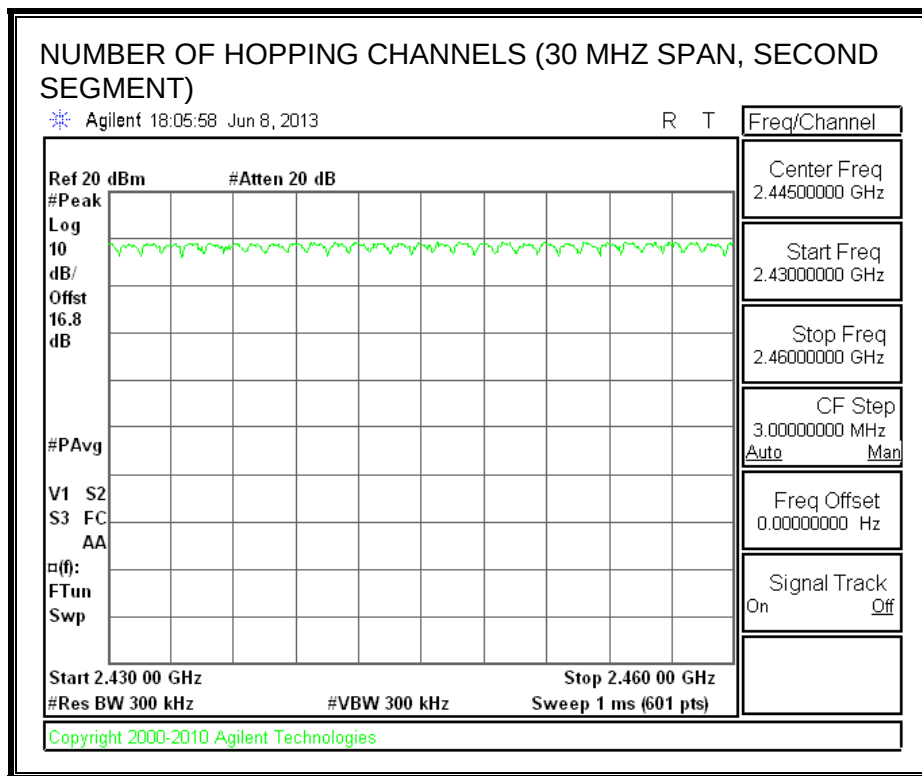
RESULTS

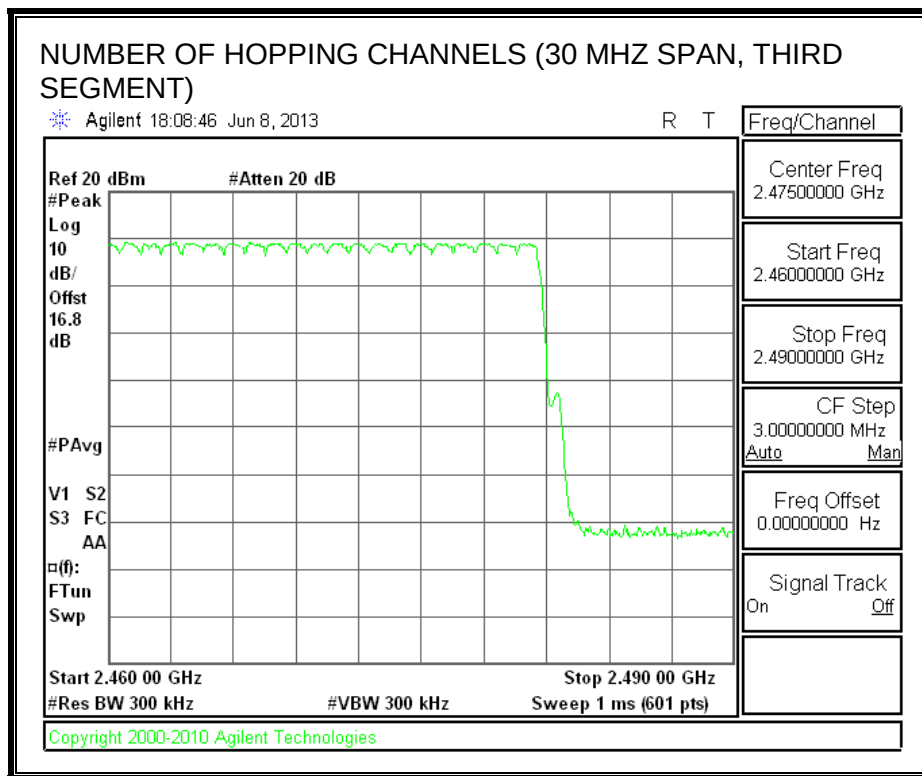
Normal Mode: 79 Channels observed.

NUMBER OF HOPPING CHANNELS









8.4. AVERAGE TIME OF OCCUPANCY

LIMIT

FCC §15.247 (a) (1) (iii)

IC RSS-210 A8.1 (d)

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

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.

This device complies with the Bluetooth protocol for FHSS operation, with or without AFH enabled, by employing a pseudo random channel selection and hopping rate to ensure that the occupancy time in $N \times 0.4s$, where N is the number of channels being used in the hopping sequence ($20 \geq N \leq 79$), is always less than 0.4s regardless of packet size (DH1, DH3 or DH5). This was confirmed for $N=79$ by the measurements below.

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 $10 * (\# \text{ of pulses in } 3.16 \text{ s}) * \text{pulse width}$.

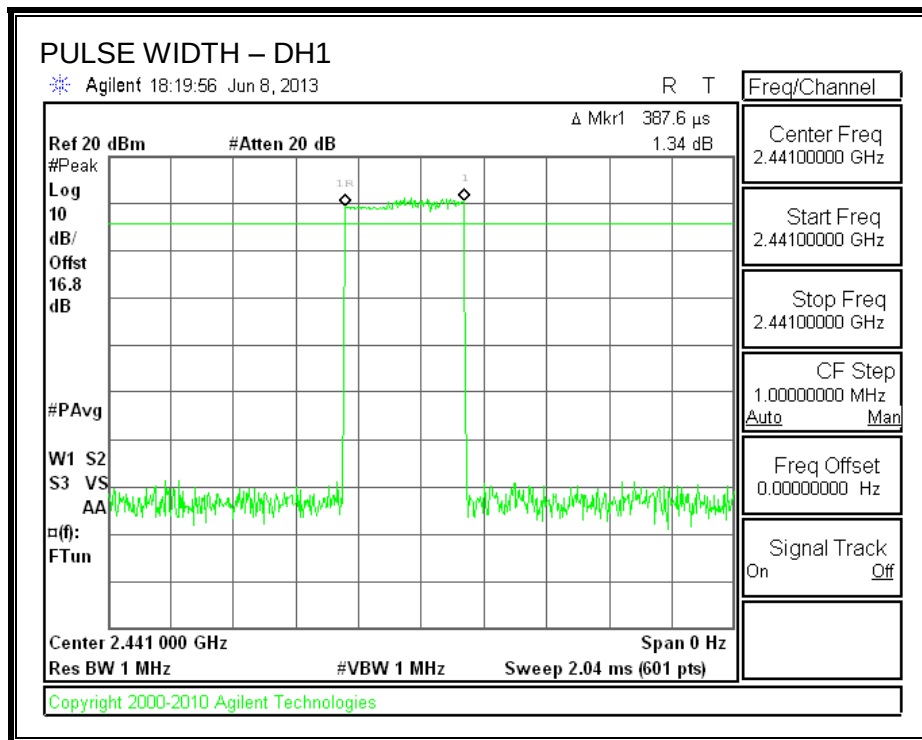
RESULTS

Time Of Occupancy = $10 * xx \text{ pulses} * yy \text{ msec} = zz \text{ msec}$

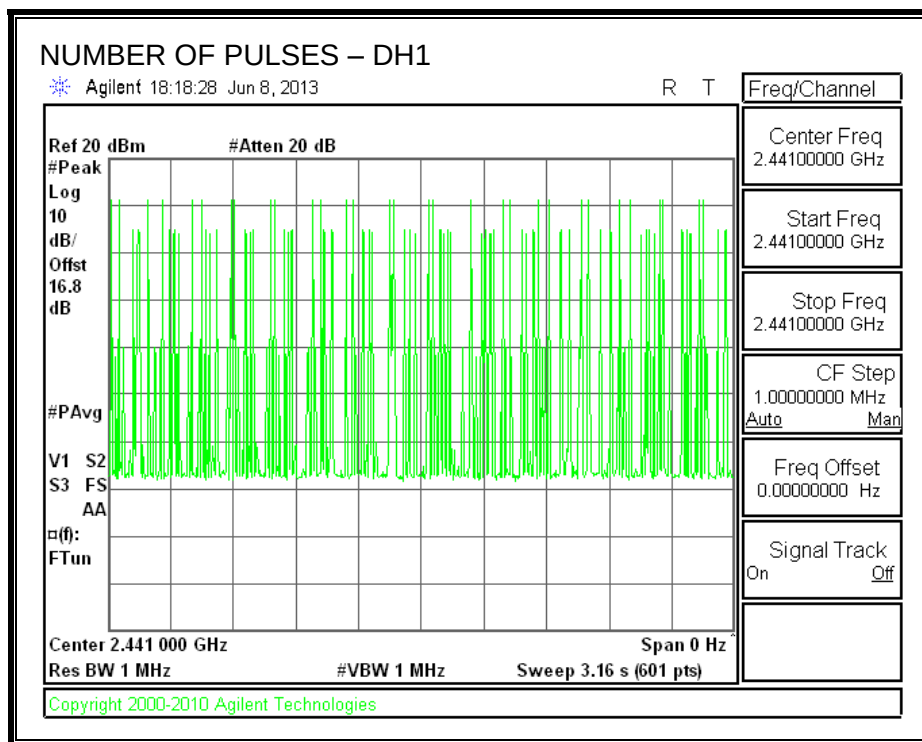
8PSK (EDR) Mode

DH Packet	Pulse Width (msec)	Number of Pulses in 3.16 seconds	Average Time of (sec)	Limit (sec)	Margin (sec)
DH1	0.3876	31	0.120	0.4	-0.280
DH3	1.635	11	0.180	0.4	-0.220
DH5	2.89	7	0.202	0.4	-0.198

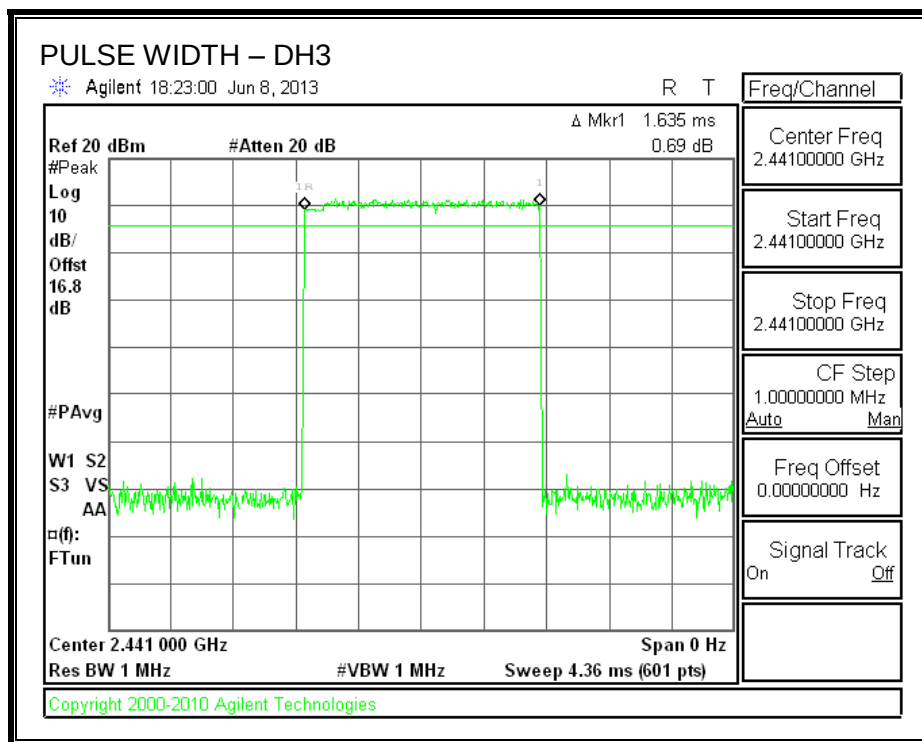
PULSE WIDTH - DH1



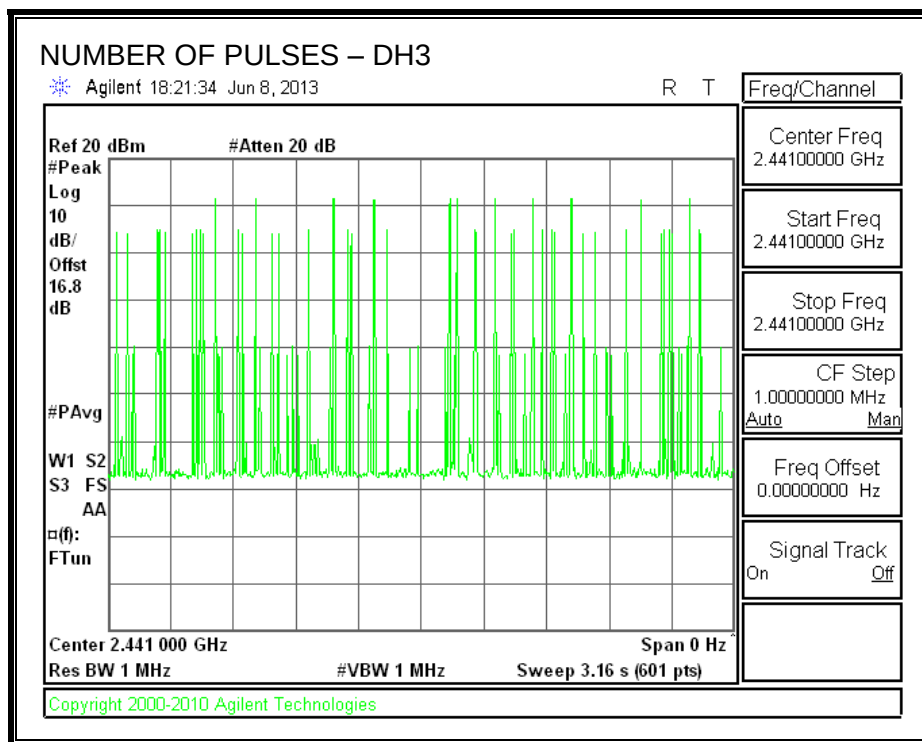
NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD – DH1



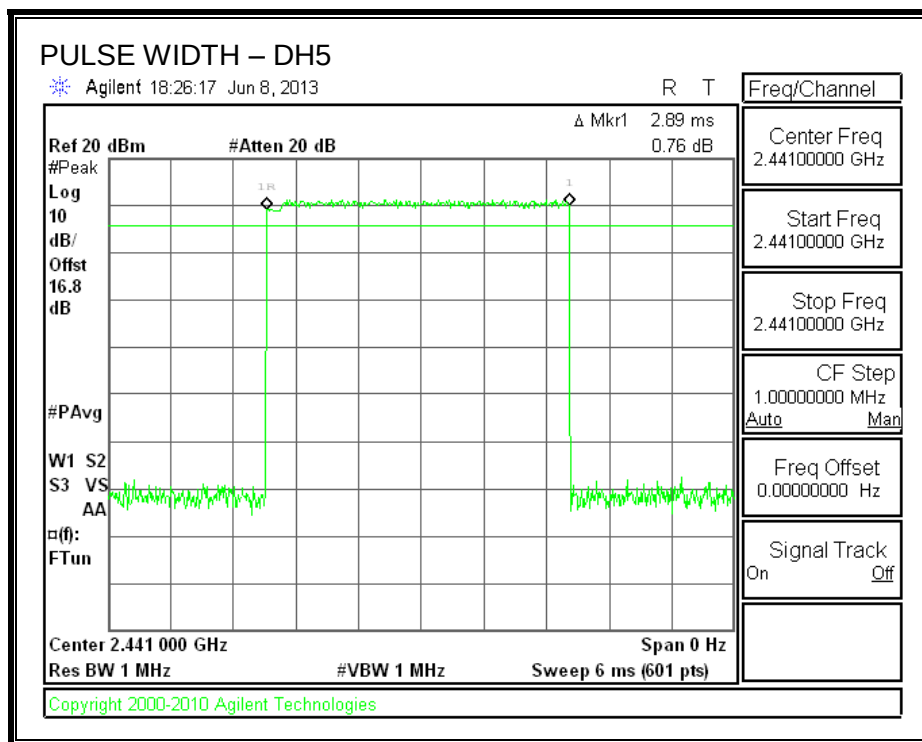
PULSE WIDTH – DH3



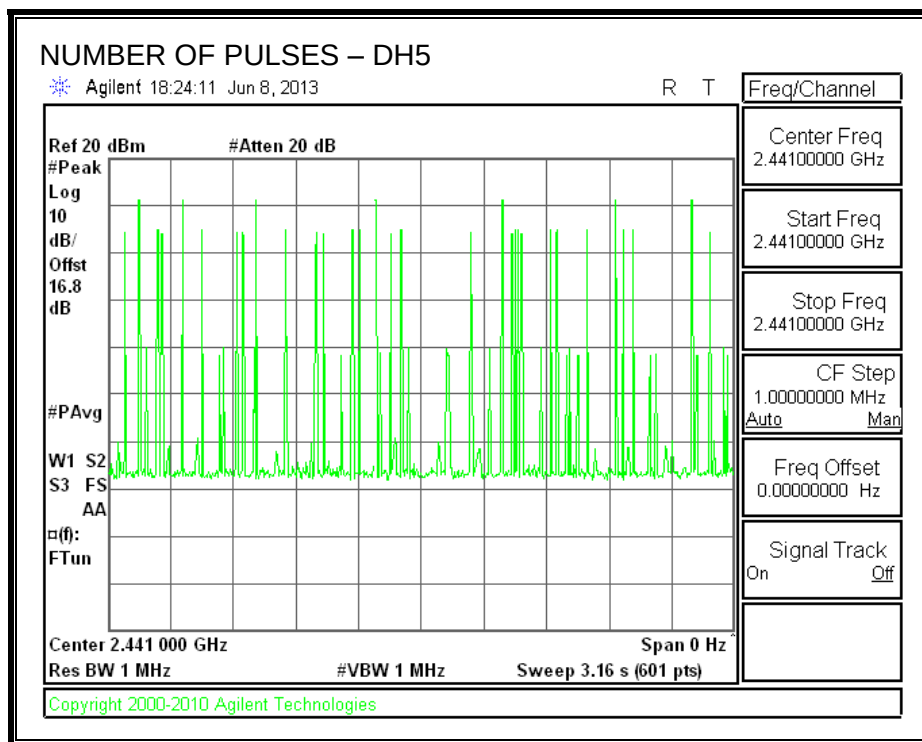
NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD – DH3



PULSE WIDTH – DH5



NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD – DH5



8.5. OUTPUT POWER

LIMIT

§15.247 (b) (1)

RSS-210 Issue 7 Clause A8.4

The maximum antenna gain is less than 6 dBi, therefore the limit is 30 dBm.

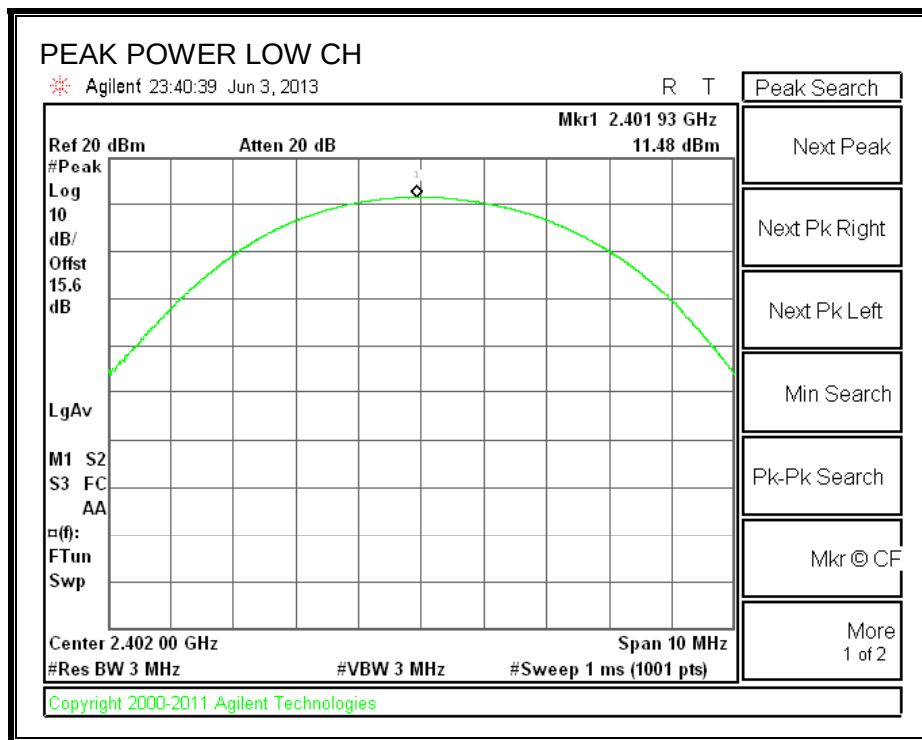
TEST PROCEDURE

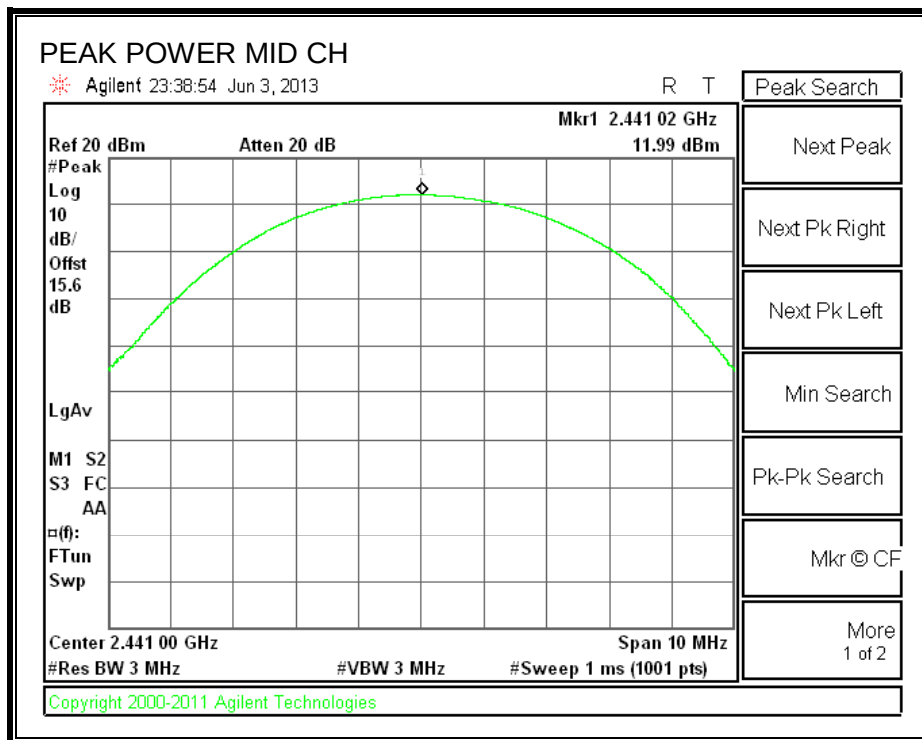
The transmitter output is connected to a spectrum analyzer the analyzer bandwidth is set to a value greater than the 20 dB bandwidth of the EUT.

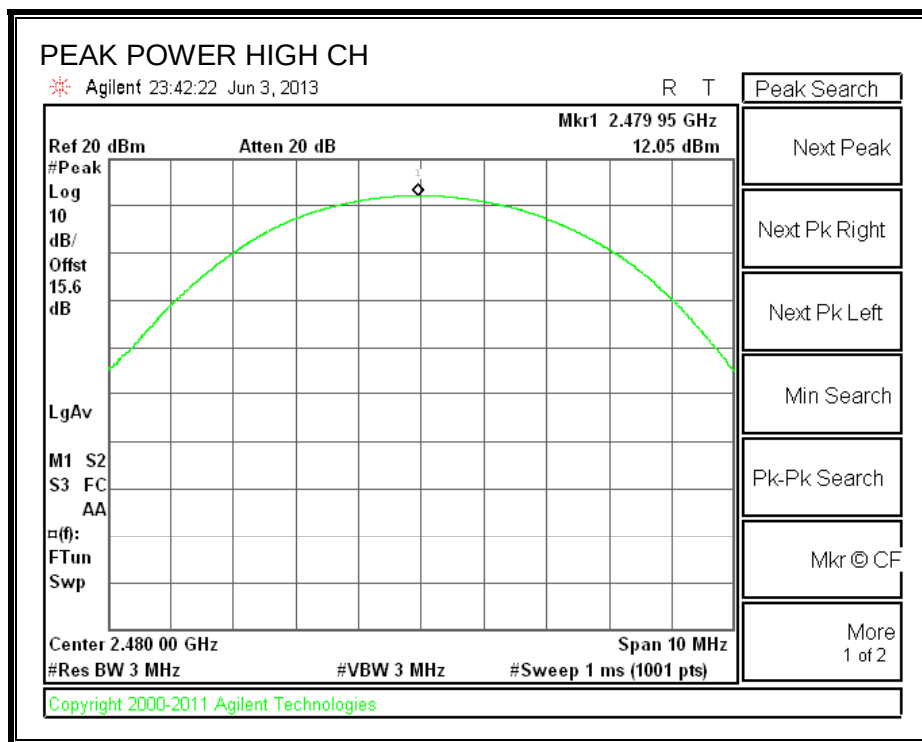
RESULTS

Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Margin (dB)
Low	2402	11.48	30	-18.52
Middle	2441	11.99	30	-18.01
High	2480	12.05	30	-17.95

OUTPUT POWER







8.6. AVERAGE POWER

LIMIT

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

RESULTS

The cable assembly insertion loss of 10.7 dB (including 10 dB pad and 0.7 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	2402	7.40
Middle	2441	8.30
High	2480	8.20

8.7. CONDUCTED SPURIOUS EMISSIONS

LIMITS

FCC §15.247 (d)

IC RSS-210 A8.5

Limit = -20 dBc

TEST PROCEDURE

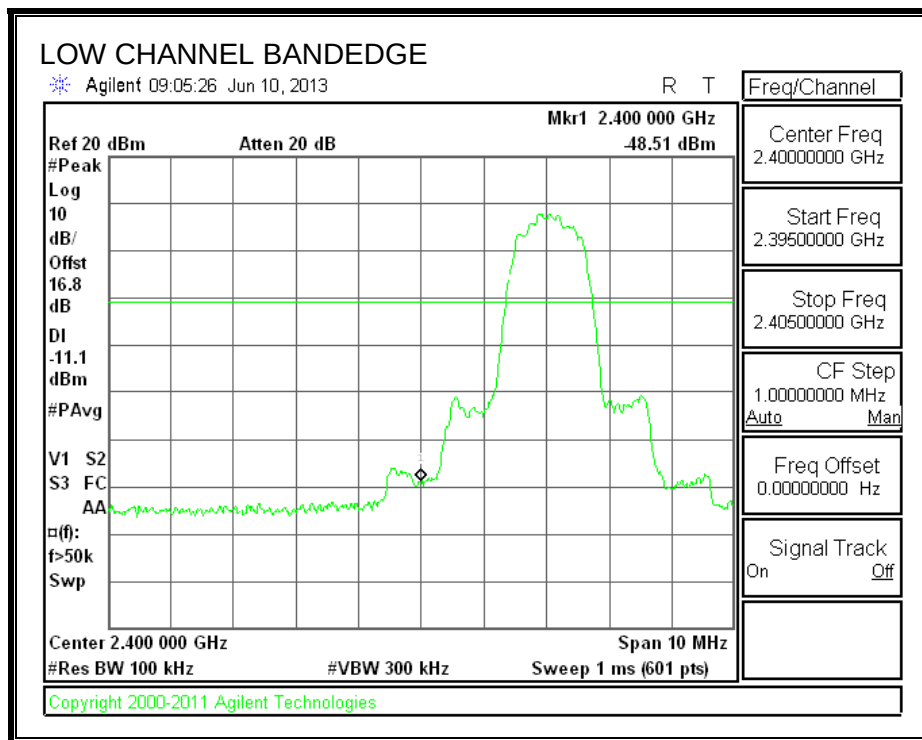
The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

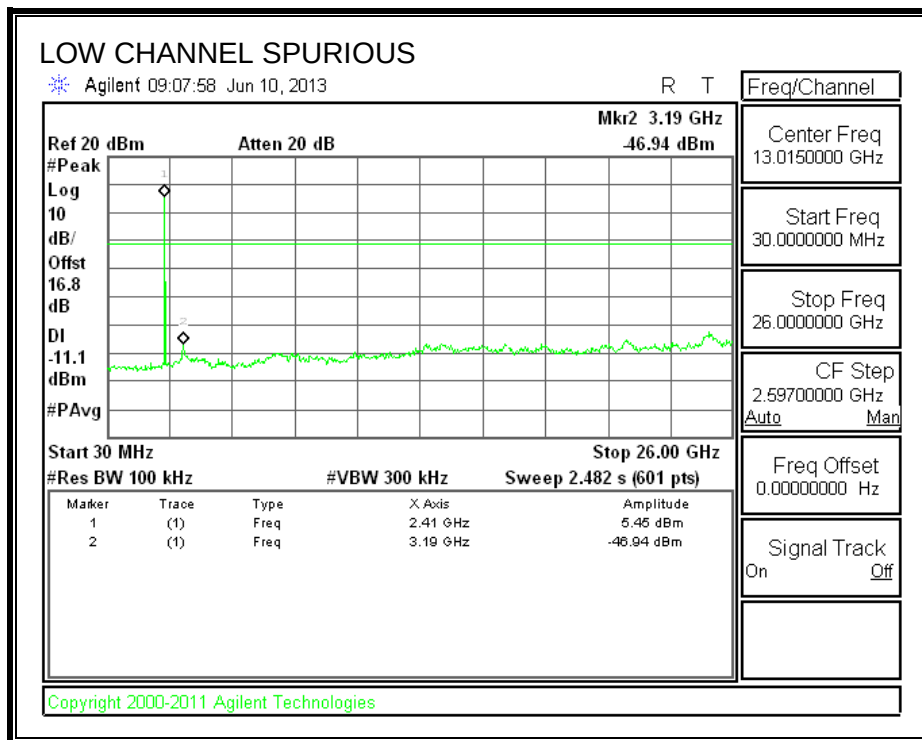
The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

The bandedges at 2.4 and 2.4835 GHz are investigated with the transmitter set to the normal hopping mode.

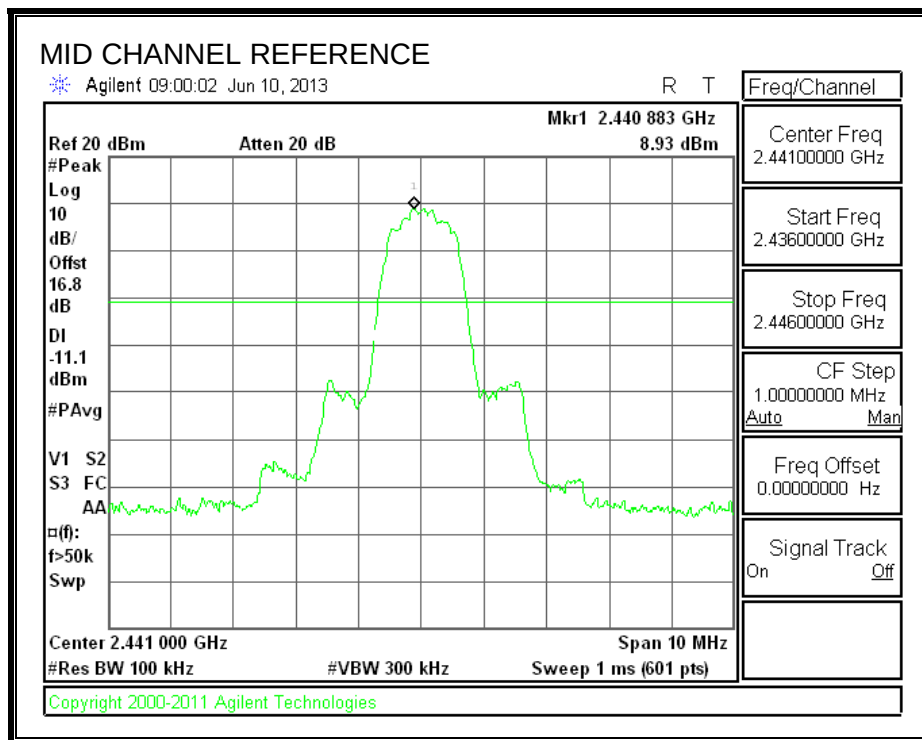
RESULTS

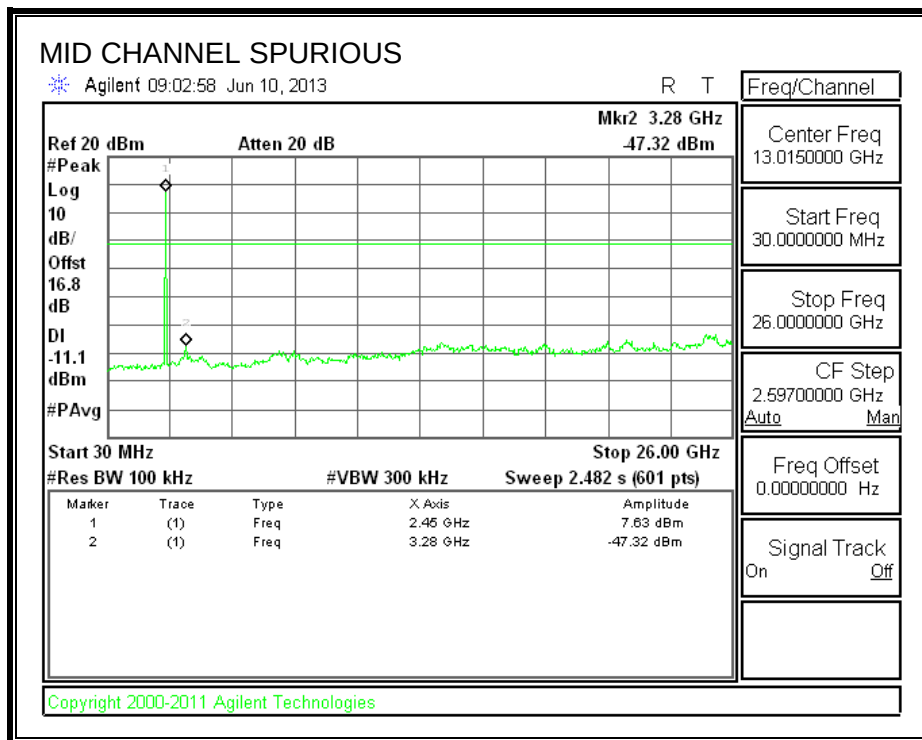
SPURIOUS EMISSIONS, LOW CHANNEL



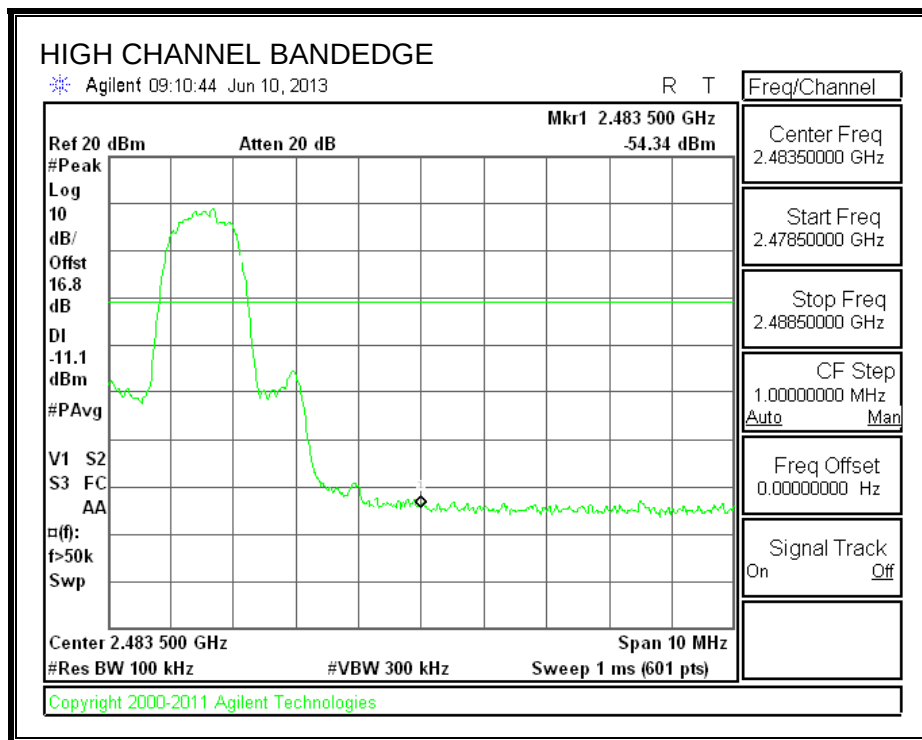


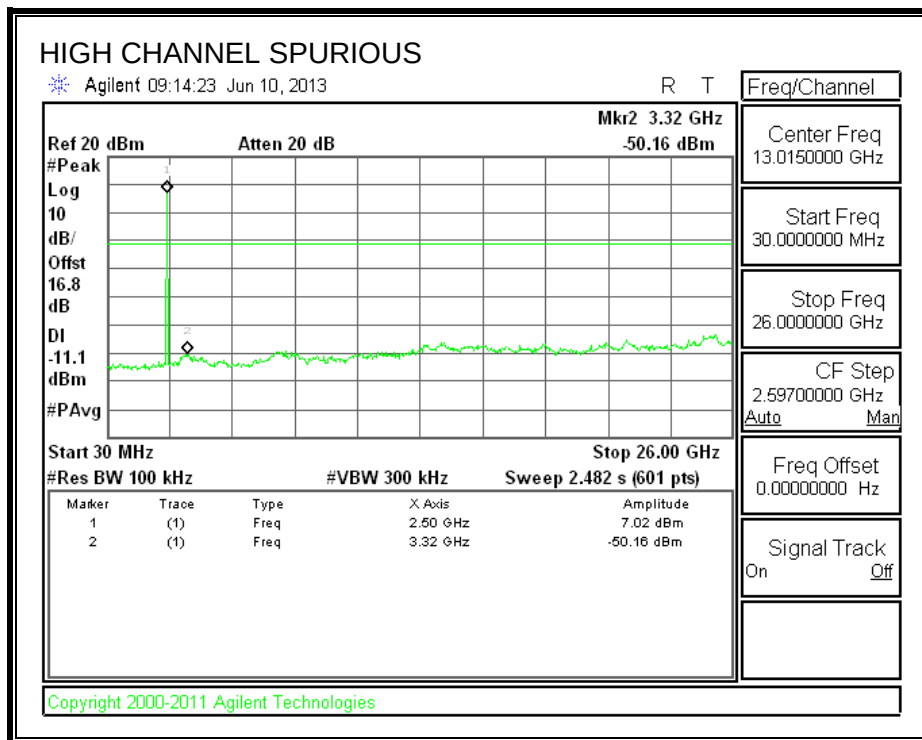
SPURIOUS EMISSIONS, MID CHANNEL



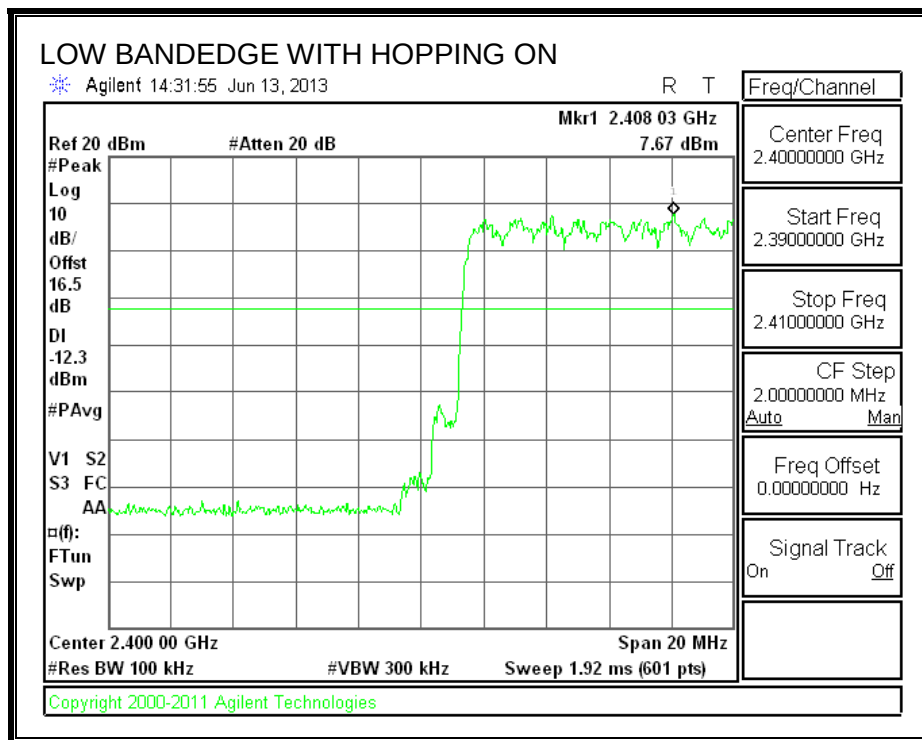


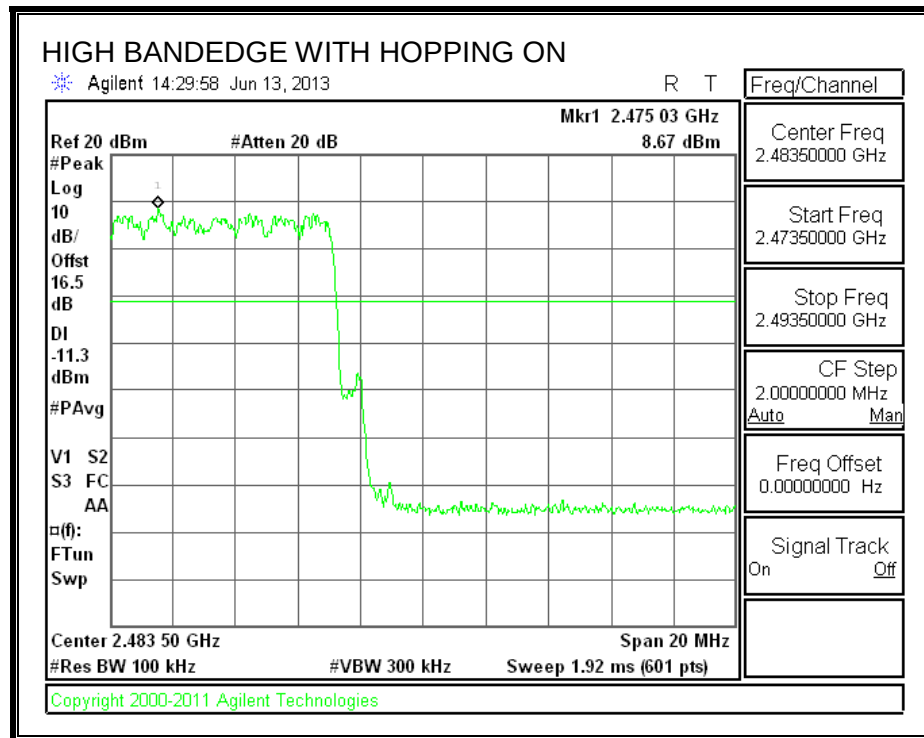
SPURIOUS EMISSIONS, HIGH CHANNEL





SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON





9. RADIATED TEST RESULTS

9.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

IC RSS-210 Clause 2.6 (Transmitter)

IC RSS-GEN Clause 6 (Receiver)

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

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.

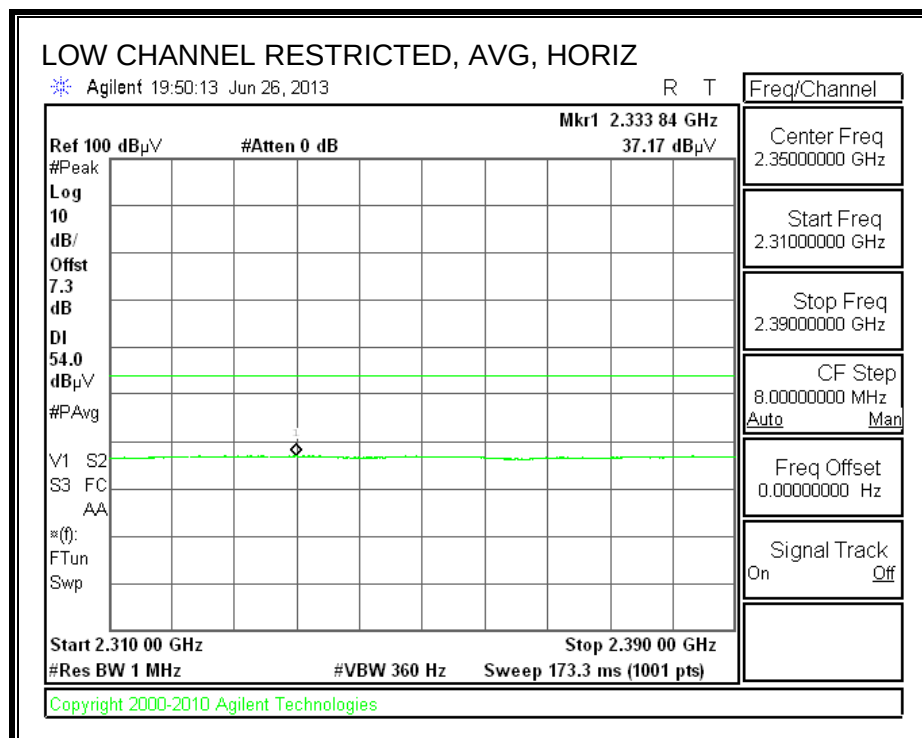
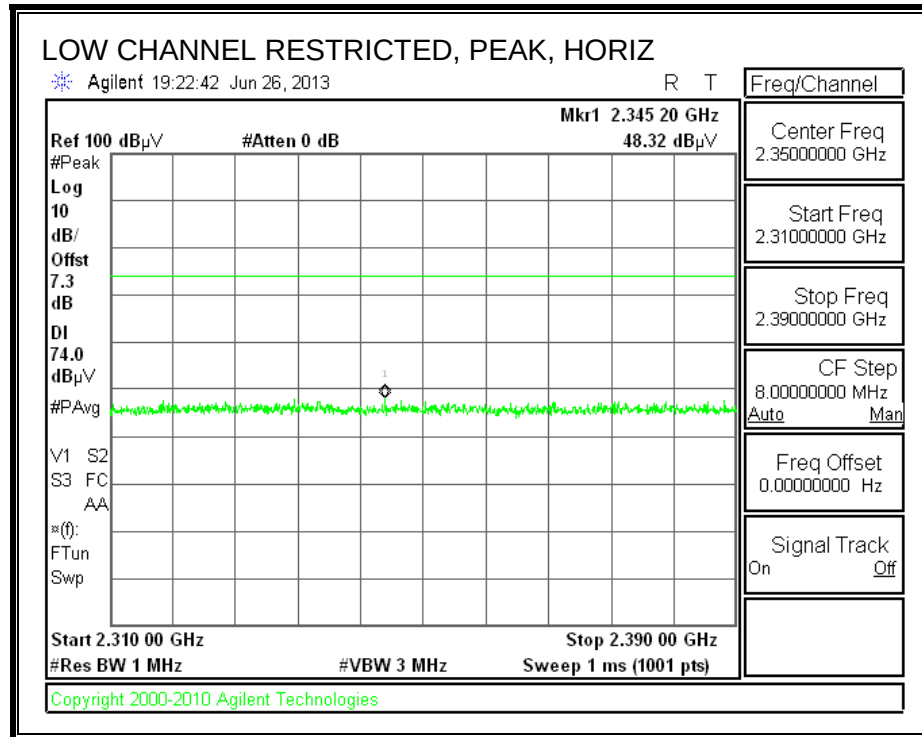
The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 2.4 GHz band.

The 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.

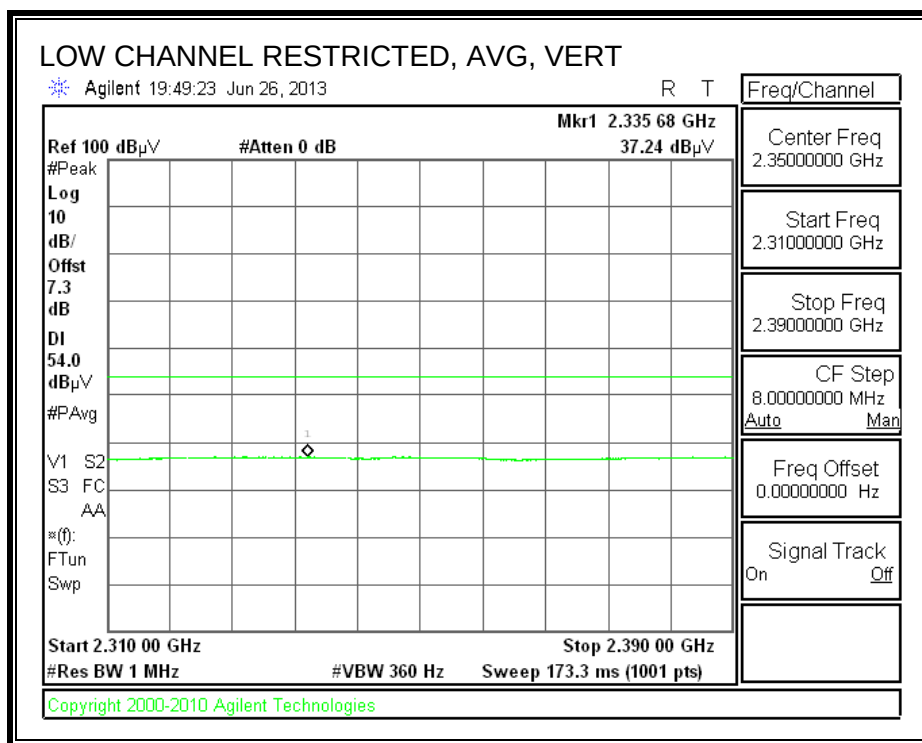
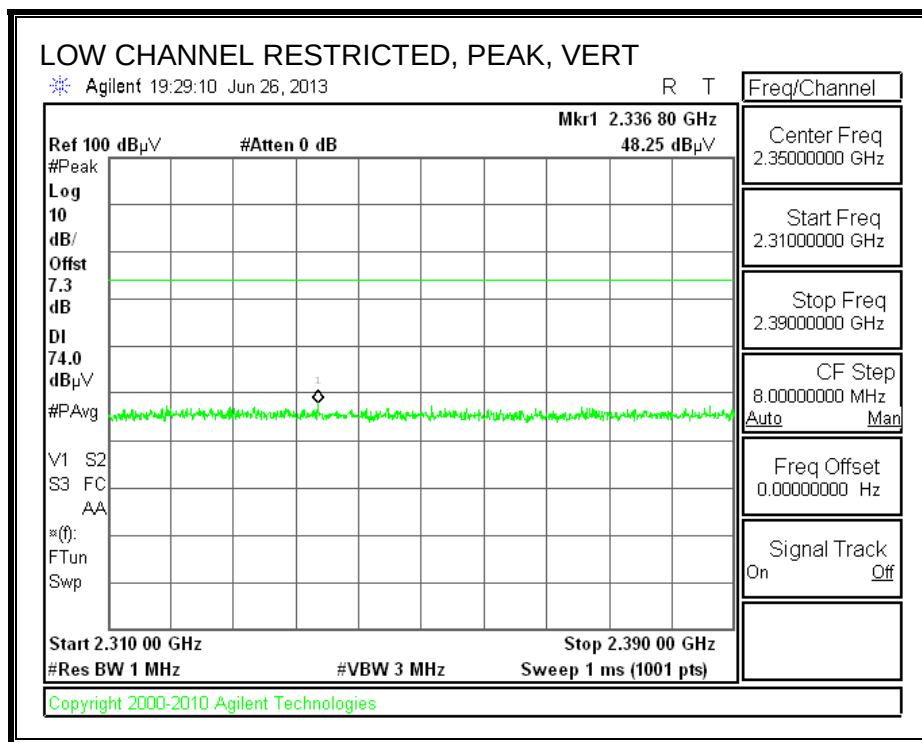
9.2. TRANSMITTER ABOVE 1 GHz

9.2.1. BASIC DATA RATE GFSK MODULATION

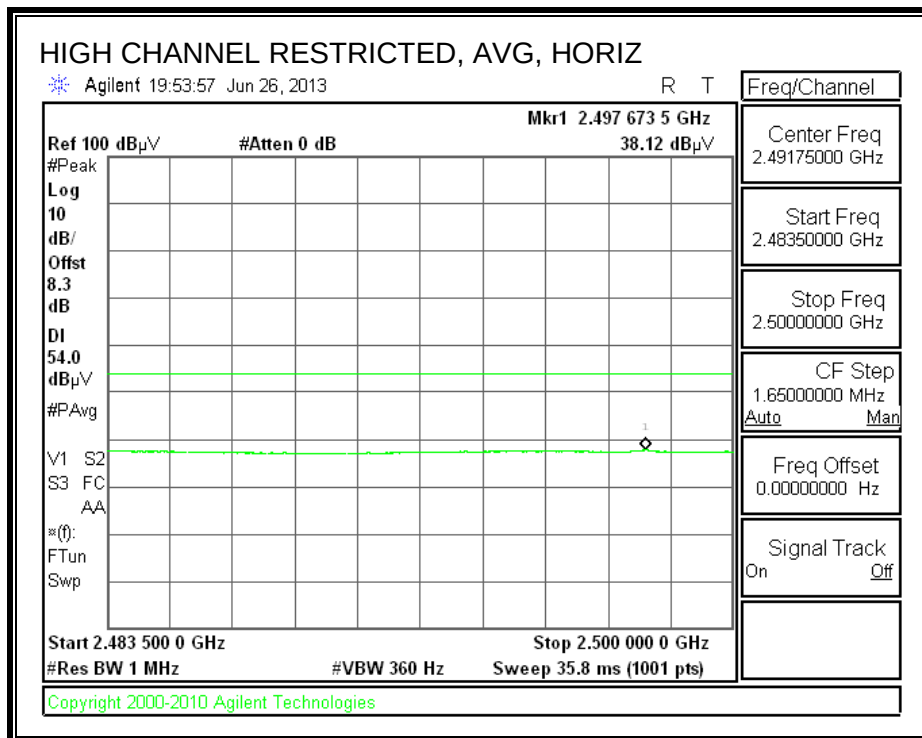
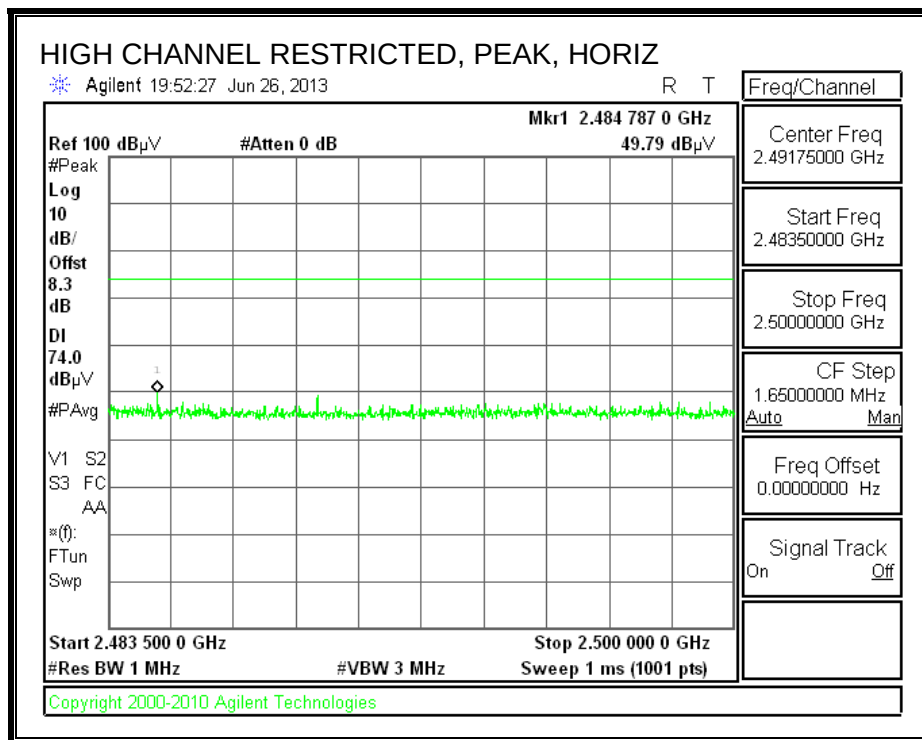
RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



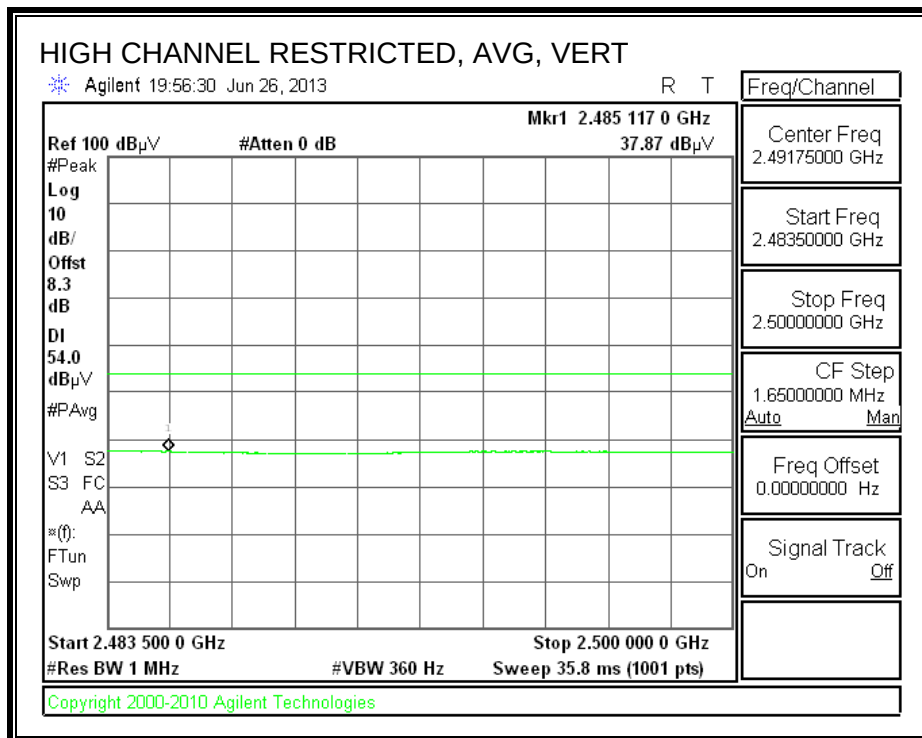
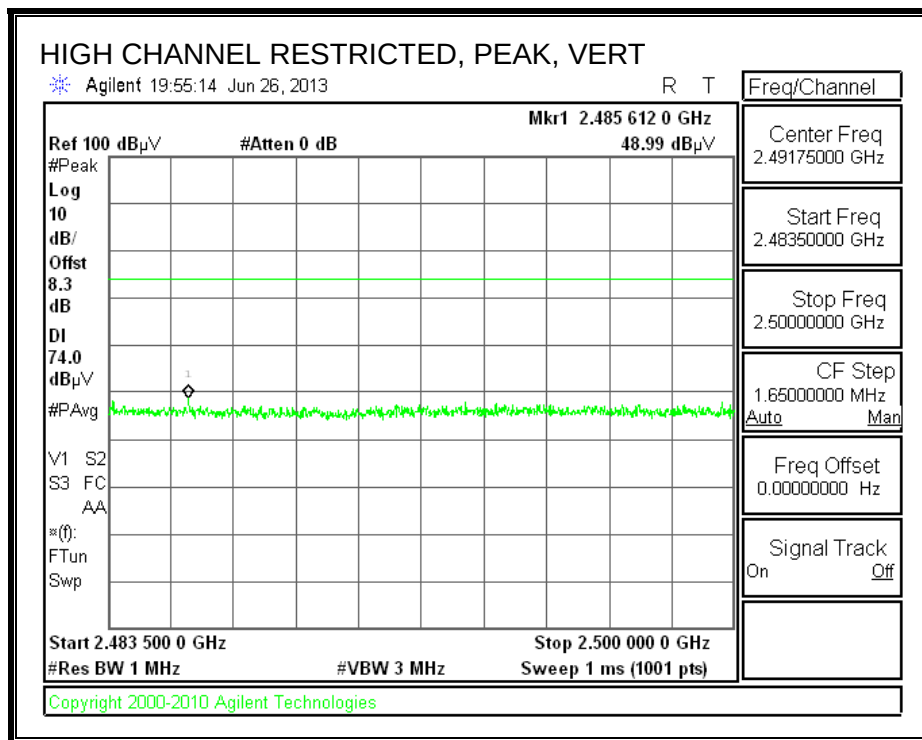
RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



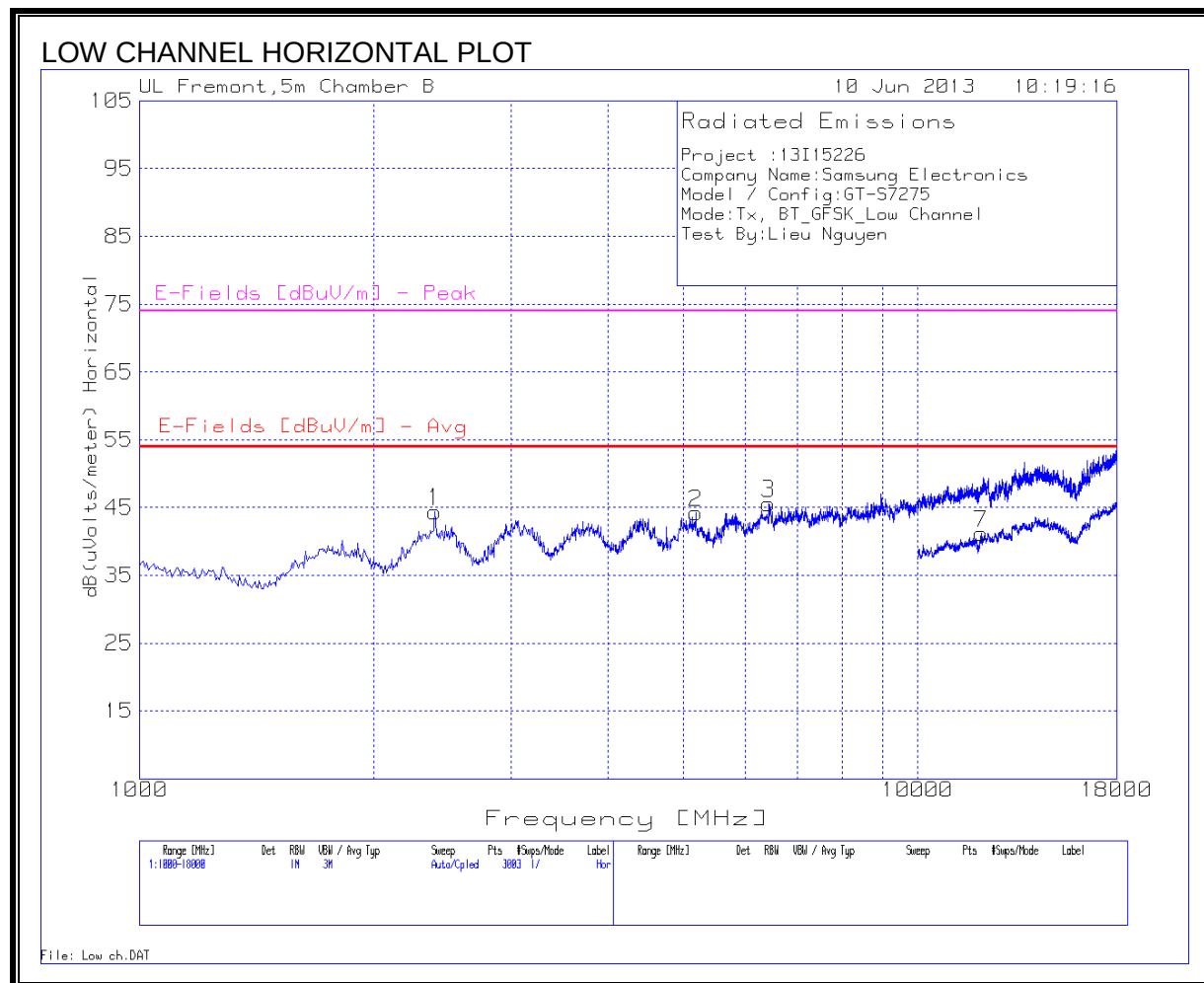
RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

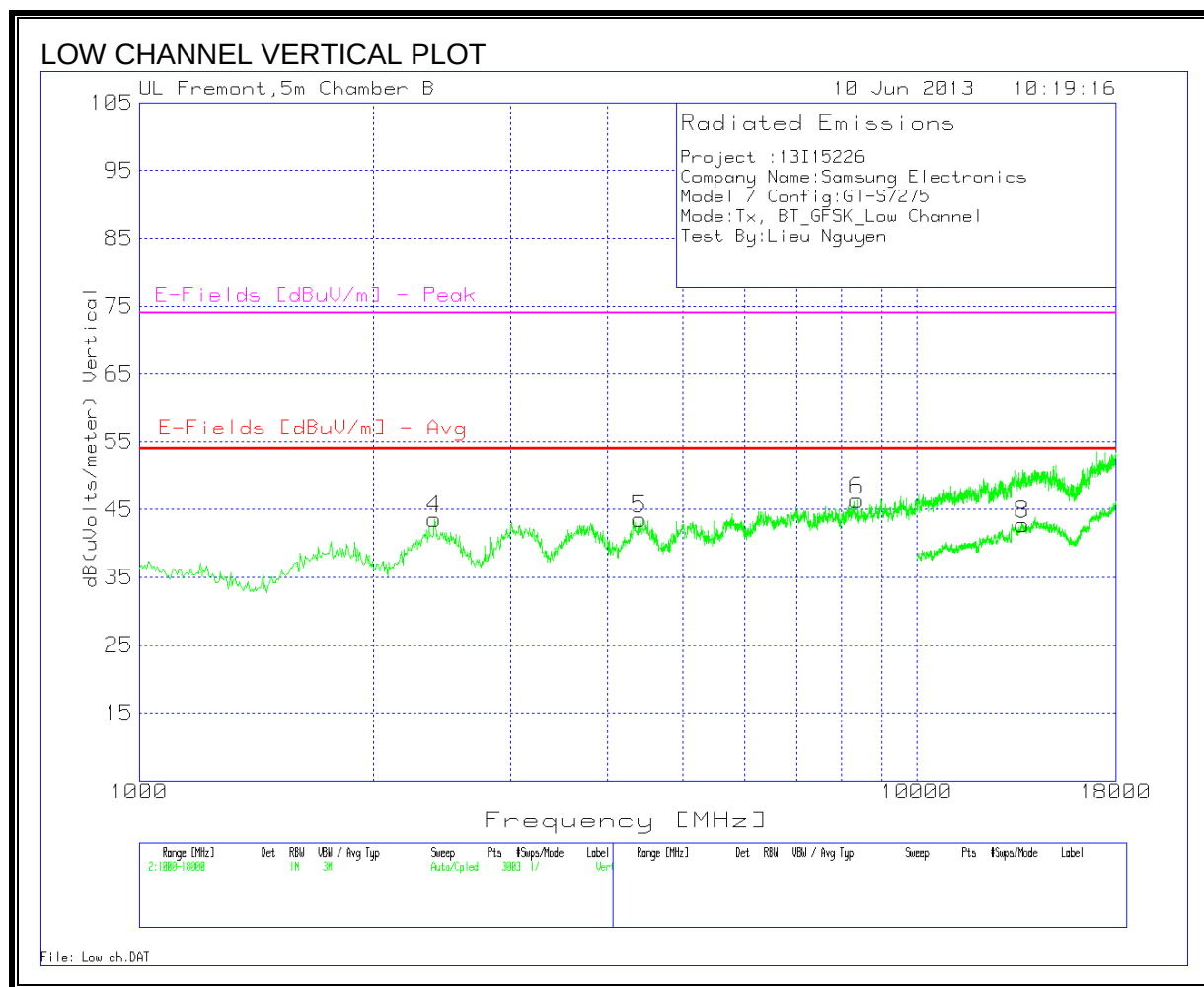


RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)



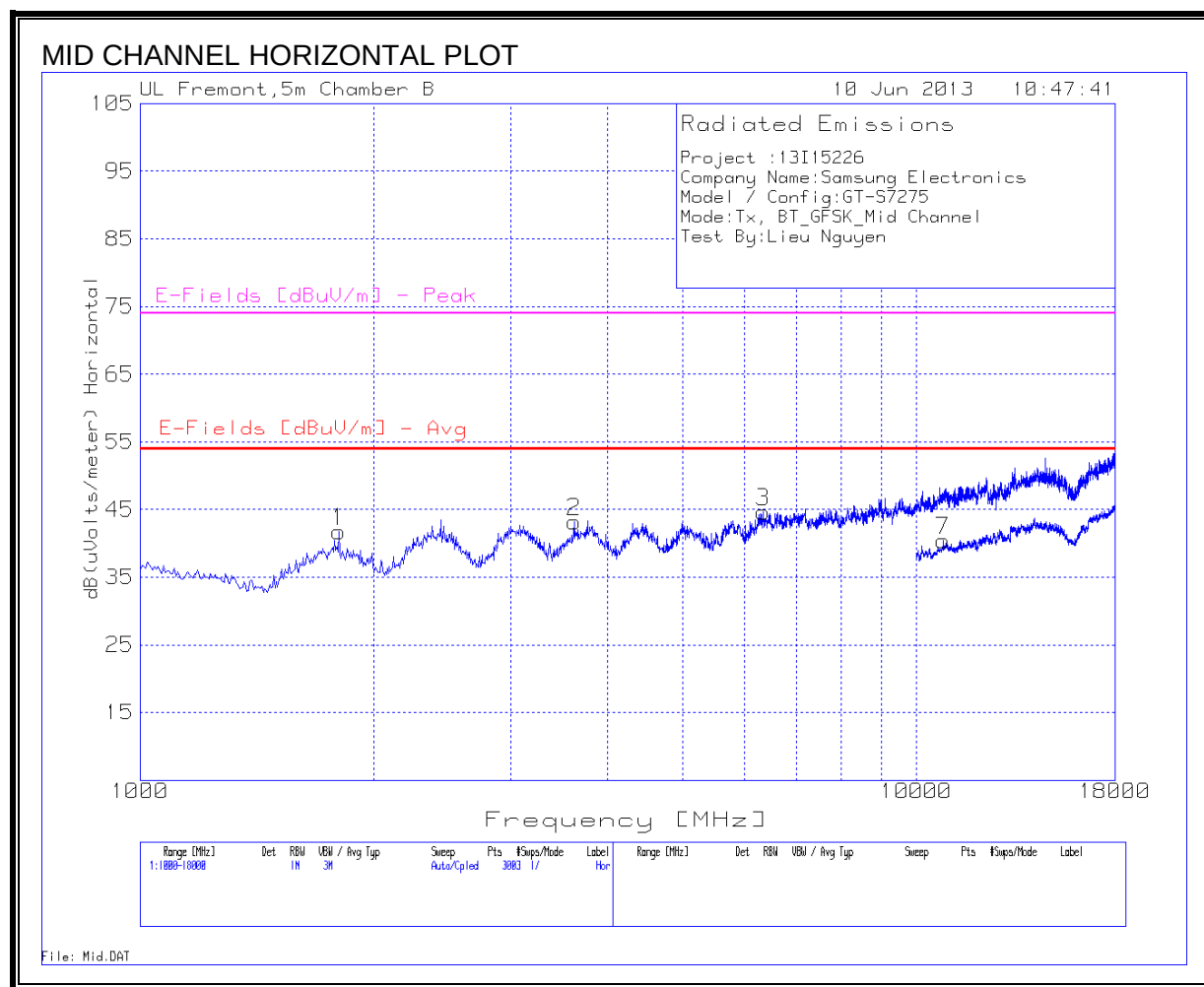
HARMONICS AND SPURIOUS EMISSIONS

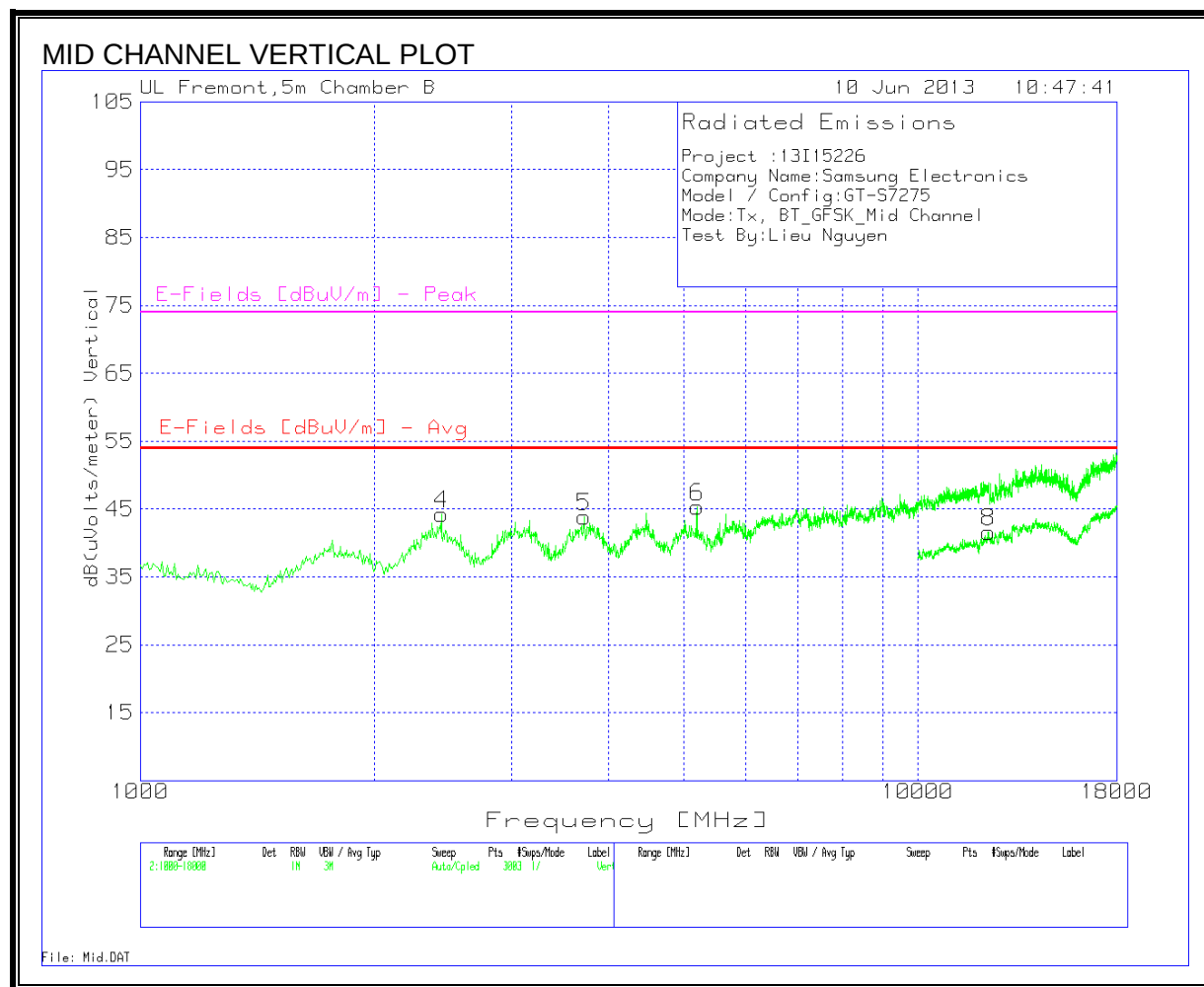




LOW CHANNEL DATA

Project :13115226														
Company Name:Samsung Electronics														
Model / Config:GT-S7275														
Mode:Tx, BT_GFSK_Low Channel														
Test By:Lieu Nguyen														
Horizontal 1000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector (Pk/Av)	T136 Ant Factor (dB/m)	T144 Preamp Gain (dB)	Cable Factor (dB)	T160 BRF (dB)	Corrected Reading dB(uV/s/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height (cm)	Polarity
1	2398.734	43.89	PK	32.1	-36.9	4.4	0.9	44.39	53.97	-9.58	74	-29.61	200	Vert
2	5184.877	38.29	PK	34.2	-35.5	7	0.2	44.19	53.97	-9.78	74	-29.81	200	Vert
3	6436.376	37.39	PK	35.5	-35.6	8	0.3	45.59	53.97	-8.38	74	-28.41	101	Vert
Vertical 1000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector (Pk/Av)	T136 Ant Factor (dB/m)	T144 Preamp Gain (dB)	Cable Factor (dB)	T160 BRF (dB)	Corrected Reading dB(uV/s/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height (cm)	Polarity
4	2398.734	43.1	PK	32.1	-36.9	4.4	0.9	43.6	53.97	-10.37	74	-30.4	200	Vert
5	4403.398	39.07	PK	33.6	-35.8	6.4	0.3	43.57	53.97	-10.4	74	-30.43	100	Vert
6	8367.422	36.98	PK	35.7	-36	9.4	0.3	46.38	53.97	-7.59	74	-27.62	100	Vert
Horizontal 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector (Pk/Av)	T136 Ant Factor (dB/m)	T144 Preamp Gain (dB)	Cable Factor (dB)	T160 BRF (dB)	Corrected Reading dB(uV/s/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height (cm)	Polarity
7	12054.973	25.55	PK	38.9	-35.6	11.5	0.8	41.15	53.97	-12.82	74	-32.85	100	Vert
Vertical 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector (Pk/Av)	T136 Ant Factor (dB/m)	T144 Preamp Gain (dB)	Cable Factor (dB)	T160 BRF (dB)	Corrected Reading dB(uV/s/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height (cm)	Polarity
8	13686.157	25.34	PK	38.8	-33.9	12.3	0.3	42.84	53.97	-11.13	74	-31.16	100	Vert
PK - Peak detector														
QP - Quasi-Peak detector														
Av - Average detector														





MID CHANNEL DATA

Project :1315226
Company Name:Samsung Electronics
Model / Config:GT-S7275
Mode:Tx, BT_GFSK_Mid Channel
Test By:Lieu Nguyen

Horizontal 1000 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector (Pk/Av)	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T160 BRF [dB]	Corrected Reading dB(uV/s/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	1804.131	44.04	PK	30.5	-37.3	3.8	0.7	41.74	53.97	-12.23	74	-32.26	101	Vert
2	3621.919	40.21	PK	33.1	-36.2	5.7	0.4	43.21	53.97	-10.76	74	-30.79	200	Vert
3	6351.432	36.53	PK	35.5	-35.6	8	0.2	44.63	53.97	-9.34	74	-29.37	101	Vert

Vertical 1000 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector (Pk/Av)	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T160 BRF [dB]	Corrected Reading dB(uV/s/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
4	2438.374	43.49	PK	32.3	-36.9	4.5	0.9	44.29	53.97	-9.68	74	-29.71	200	Vert
5	3723.851	40.73	PK	33.3	-36.2	5.8	0.2	43.83	53.97	-10.14	74	-30.17	200	Vert
6	5196.203	39.38	PK	34.2	-35.5	7	0.2	45.28	53.97	-8.69	74	-28.72	100	Vert

Horizontal 10000 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector (Pk/Av)	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T160 BRF [dB]	Corrected Reading dB(uV/s/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
7	10831.584	26.71	PK	38	-35.7	10.8	0.6	40.41	53.97	-13.56	74	-33.59	200	Vert

Vertical 10000 - 18000MHz

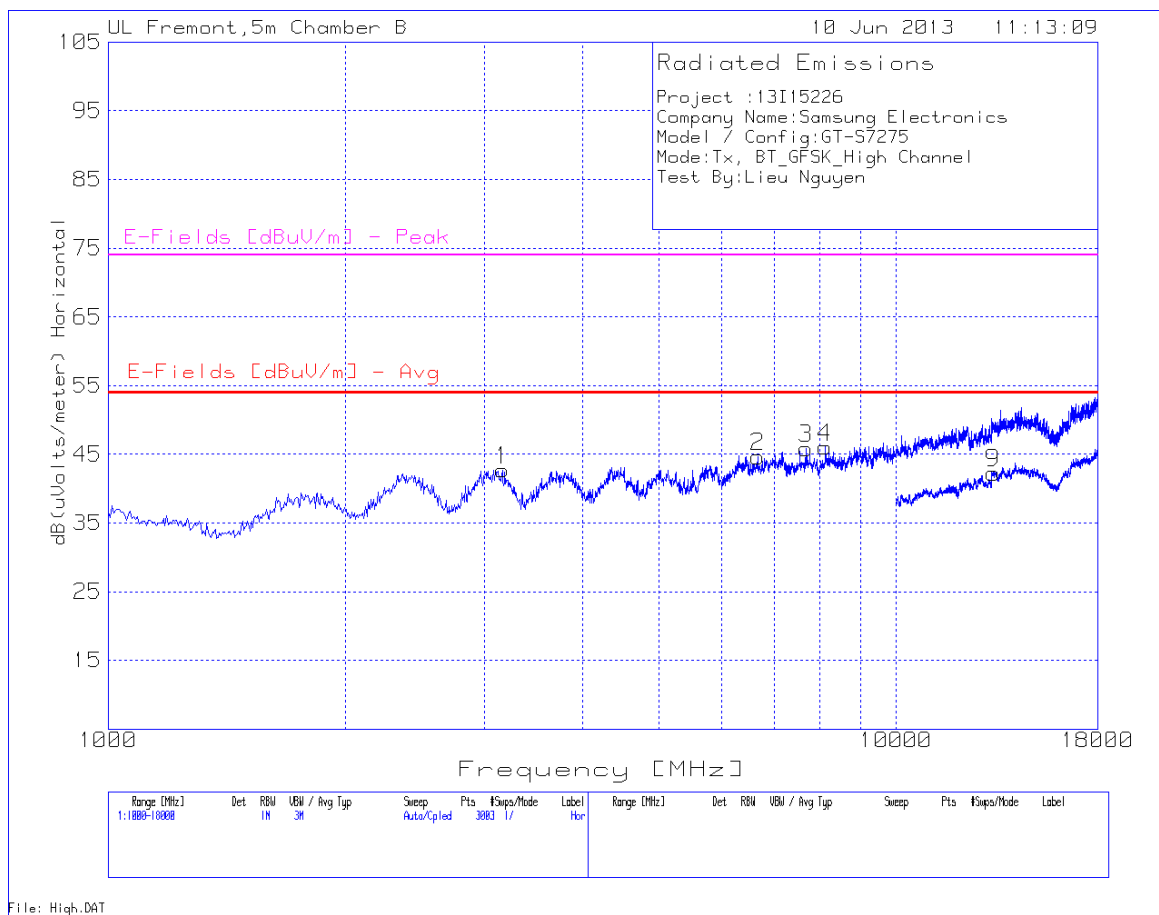
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector (Pk/Av)	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T160 BRF [dB]	Corrected Reading dB(uV/s/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
8	12326.837	25.7	PK	39	-35.2	11.6	0.5	41.6	53.97	-12.37	74	-32.4	100	Vert

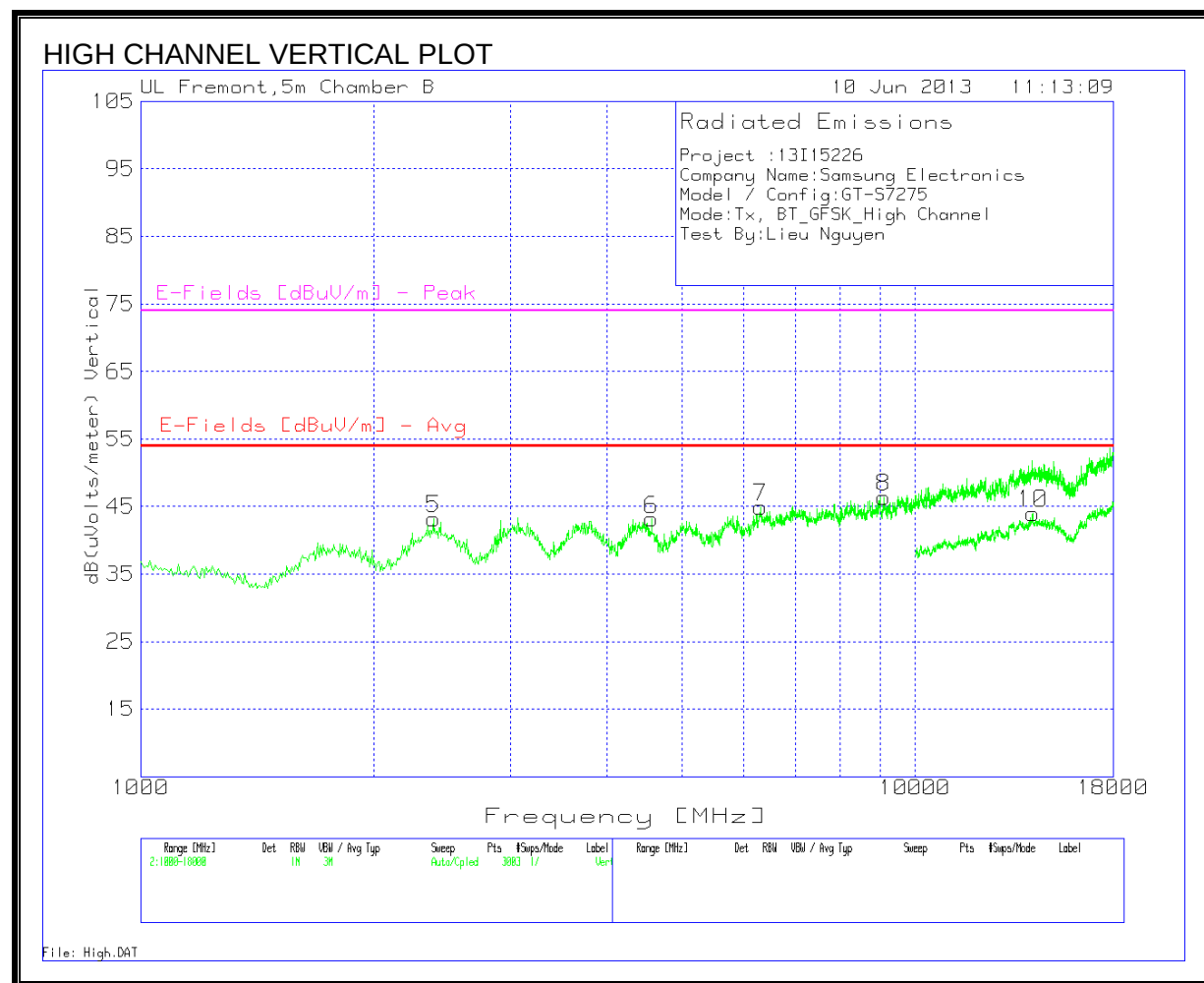
PK - Peak detector

QP - Quasi-Peak detector

Av - Average detector

HIGH CHANNEL HORIZONTAL PLOT





HIGH CHANNEL DATA

Project :1315226

Company Name:Samsung Electronics

Model / Config:GT-S7275

Mode:Tx, BT_GFSK_High Channel

Test By:Lieu Nguyen

Horizontal 1000 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector (Pk/Av)	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T160 BRF [dB]	Corrected Reading dB(uV/s/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	3163.225	40.23	PK	33.3	-36.6	5.2	0.6	42.73	53.97	-11.24	74	-31.27	101	Vert
2	6668.554	36.38	PK	35.4	-35.6	8.2	0.3	44.68	53.97	-9.29	74	-29.32	101	Vert
3	7676.549	37	PK	35.5	-35.8	8.9	0.3	45.9	53.97	-8.07	74	-28.1	101	Vert
4	8129.58	36.94	PK	35.5	-35.9	9.2	0.3	46.04	53.97	-7.93	74	-27.96	200	Vert

Vertical 1000 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector (Pk/Av)	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T160 BRF [dB]	Corrected Reading dB(uV/s/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
5	2387.408	42.79	PK	32	-36.9	4.4	0.9	43.19	53.97	-10.78	74	-30.81	100	Vert
6	4567.622	38.33	PK	33.9	-35.8	6.5	0.2	43.13	53.97	-10.84	74	-30.87	100	Vert
7	6317.455	36.8	PK	35.5	-35.6	8	0.2	44.9	53.97	-9.07	74	-29.1	100	Vert
8	9114.923	36.07	PK	36	-36.1	9.9	0.5	46.37	53.97	-7.6	74	-27.63	200	Vert

Horizontal 10000 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector (Pk/Av)	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T160 BRF [dB]	Corrected Reading dB(uV/s/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
9	13278.361	24.6	PK	39.2	-34	12.1	0.4	42.3	53.97	-11.67	74	-31.7	200	Vert

Vertical 10000 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector (Pk/Av)	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T160 BRF [dB]	Corrected Reading dB(uV/s/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
10	14169.915	25.81	PK	39.3	-34	12.5	0.4	44.01	53.97	-9.96	74	-29.99	200	Vert

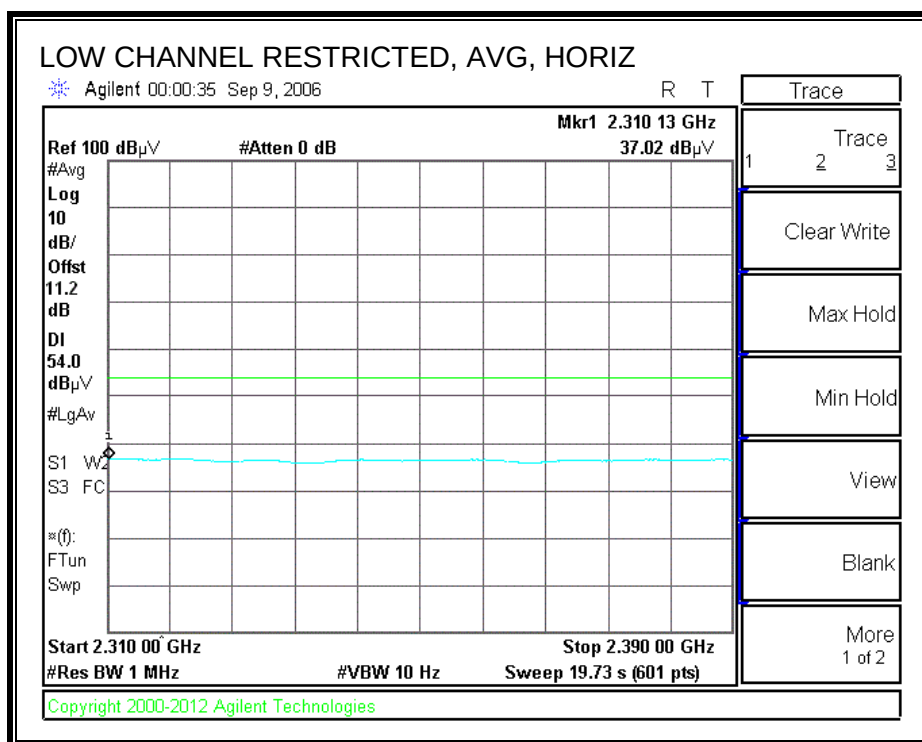
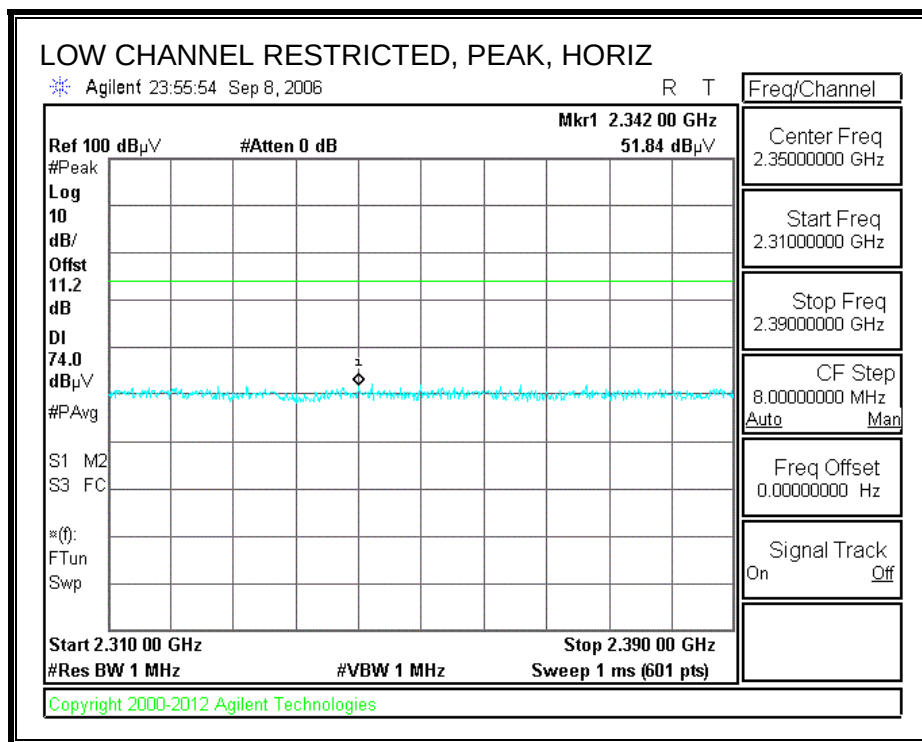
PK - Peak detector

QP - Quasi-Peak detector

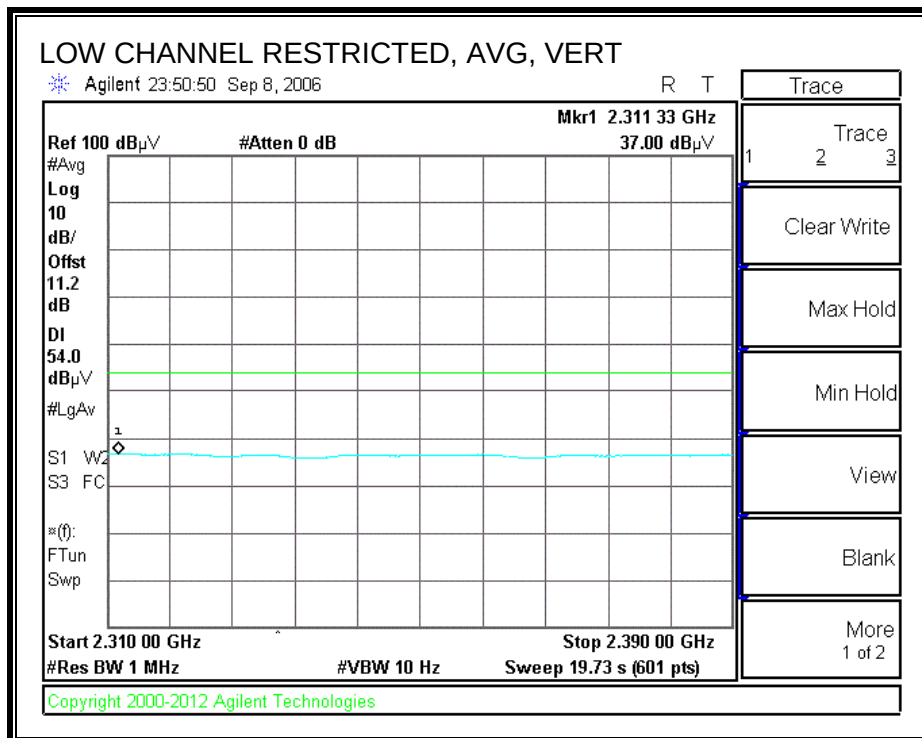
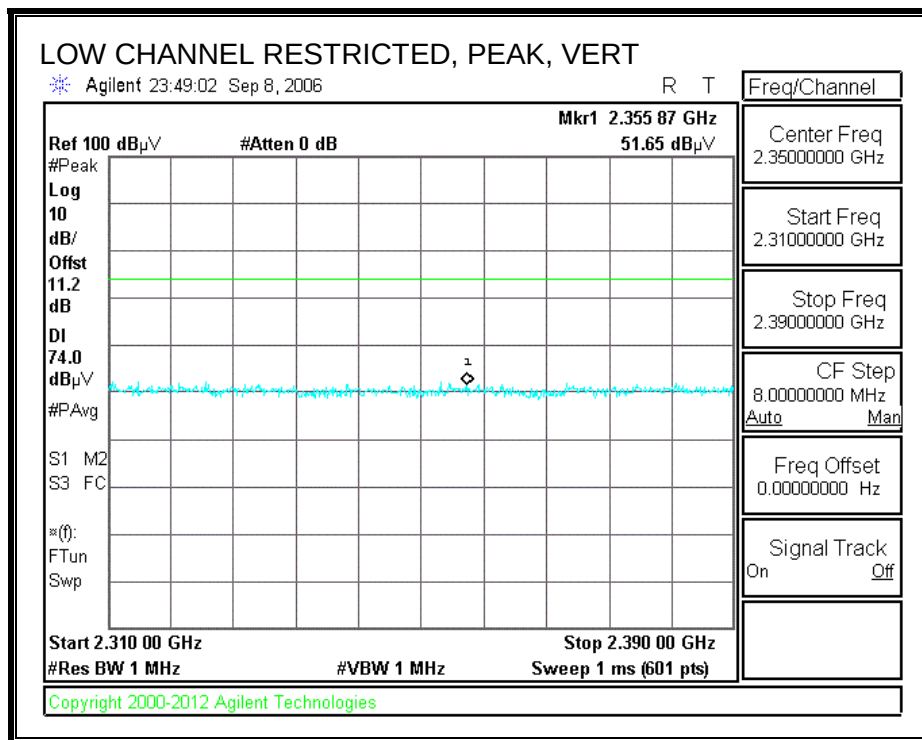
Av - Average detector

9.2.2. ENHANCED DATA RATE 8PSK MODULATION

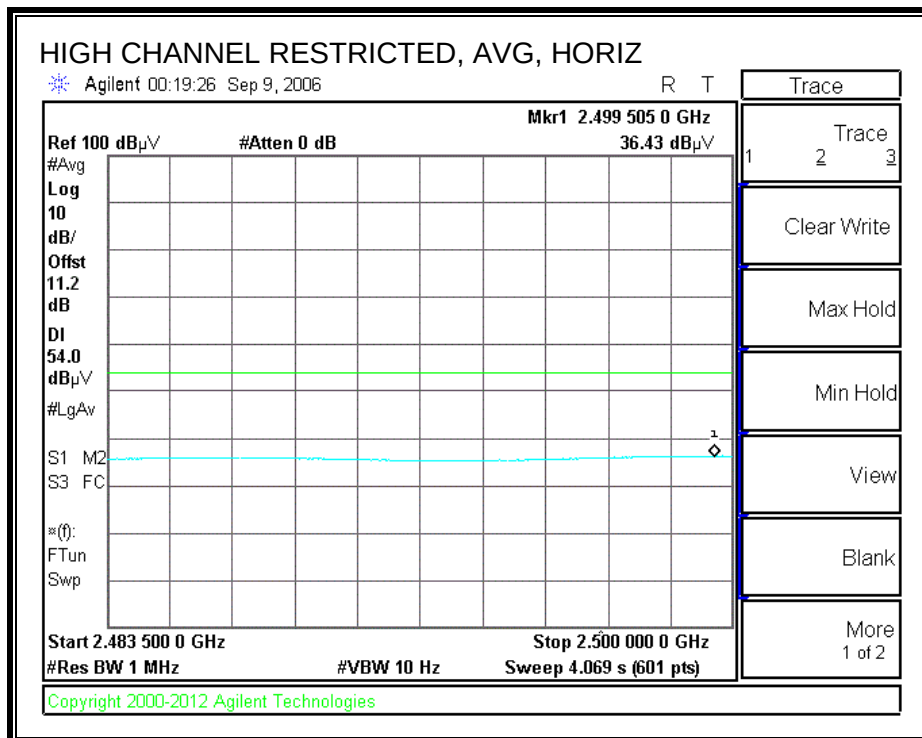
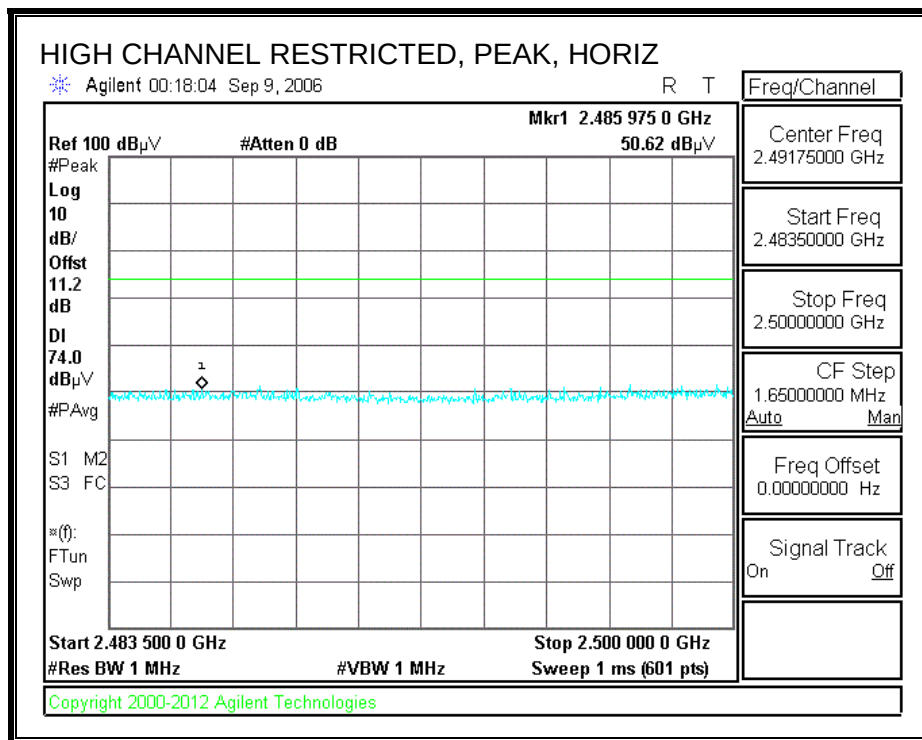
RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



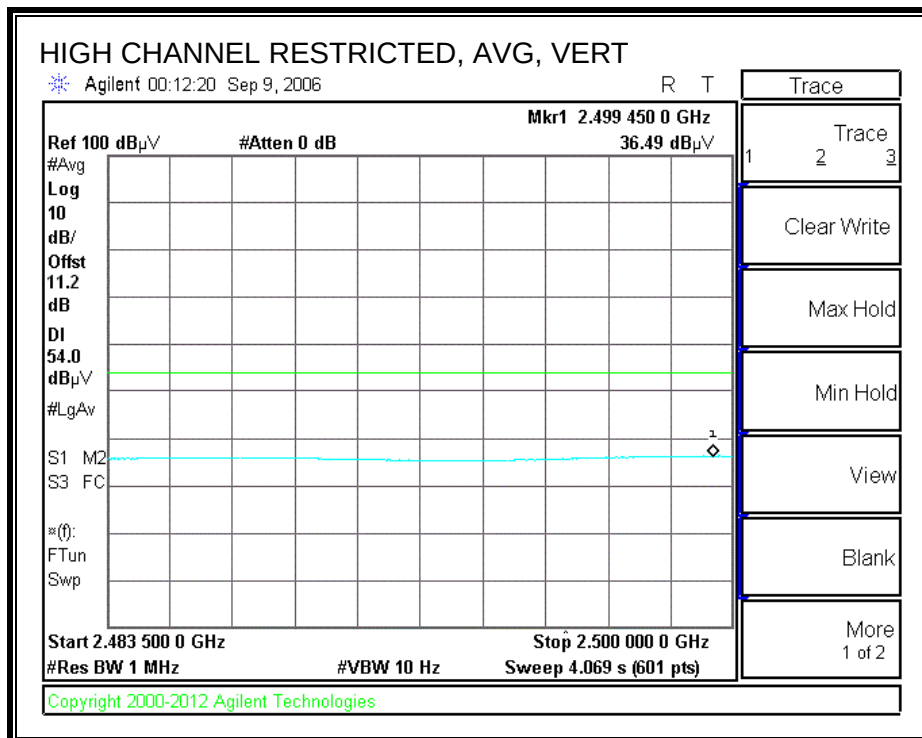
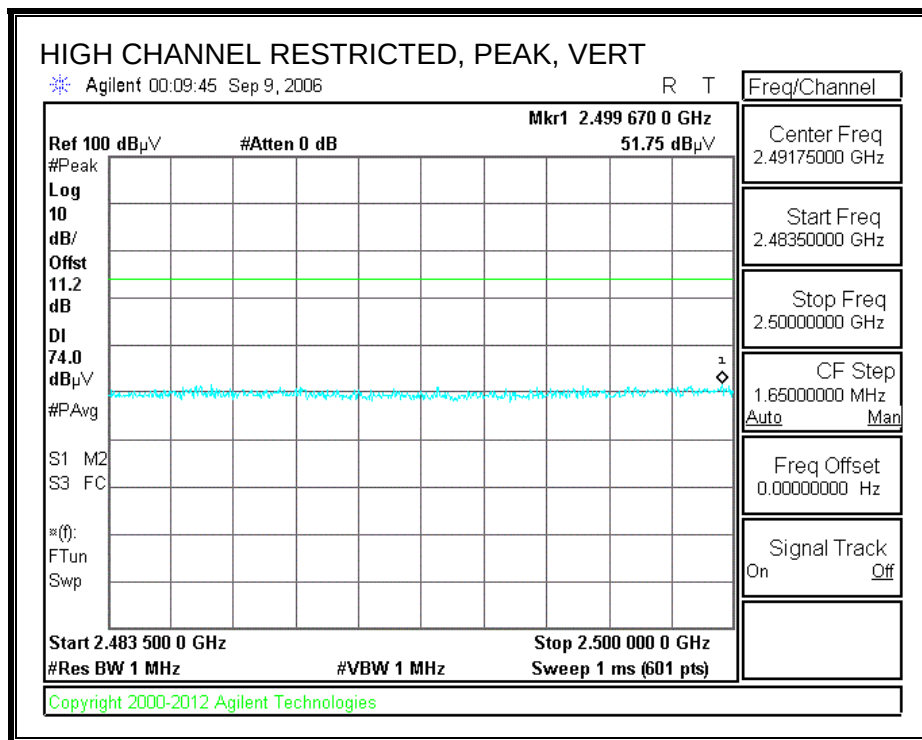
RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



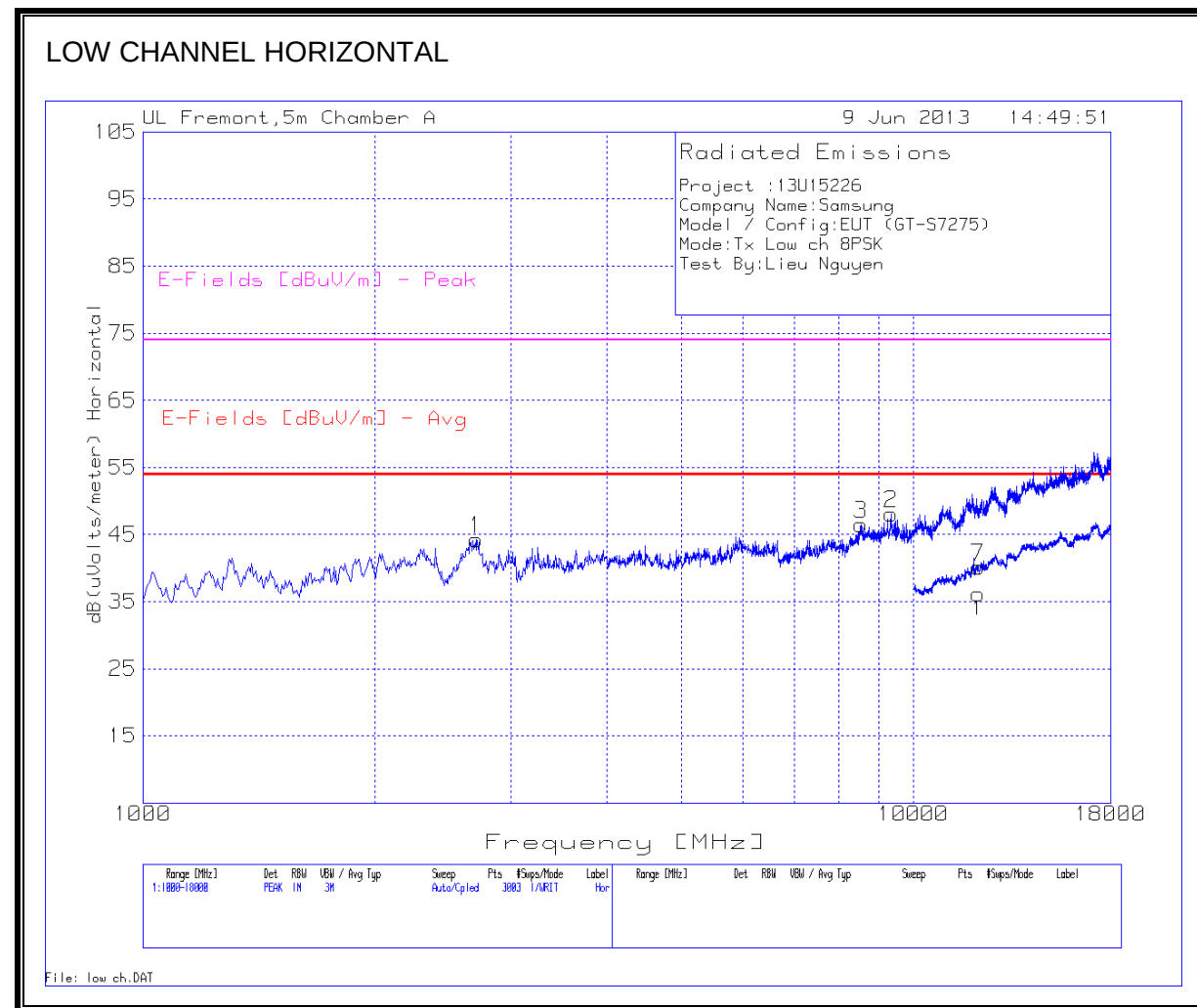
RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



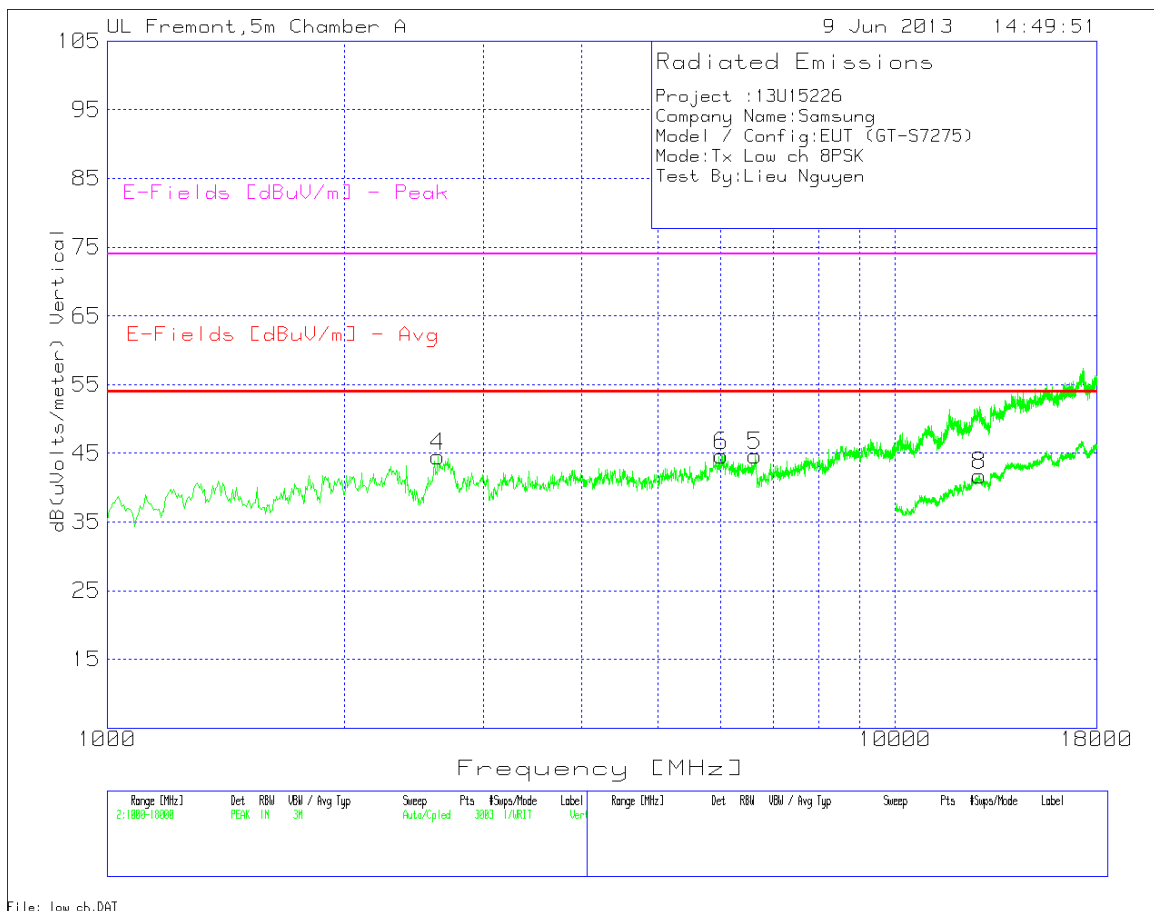
RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)



HARMONICS AND SPURIOUS EMISSIONS



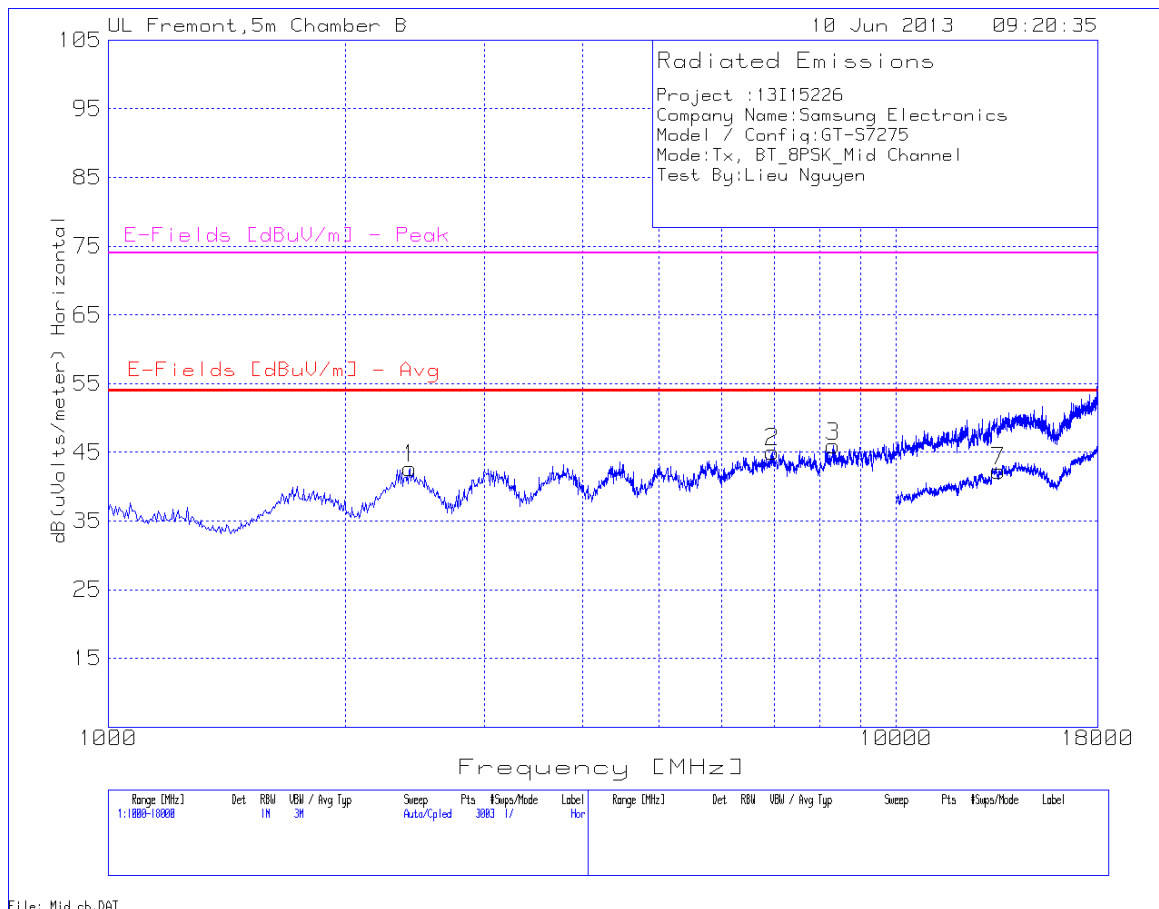
LOW CHANNEL VERTICAL PLOT

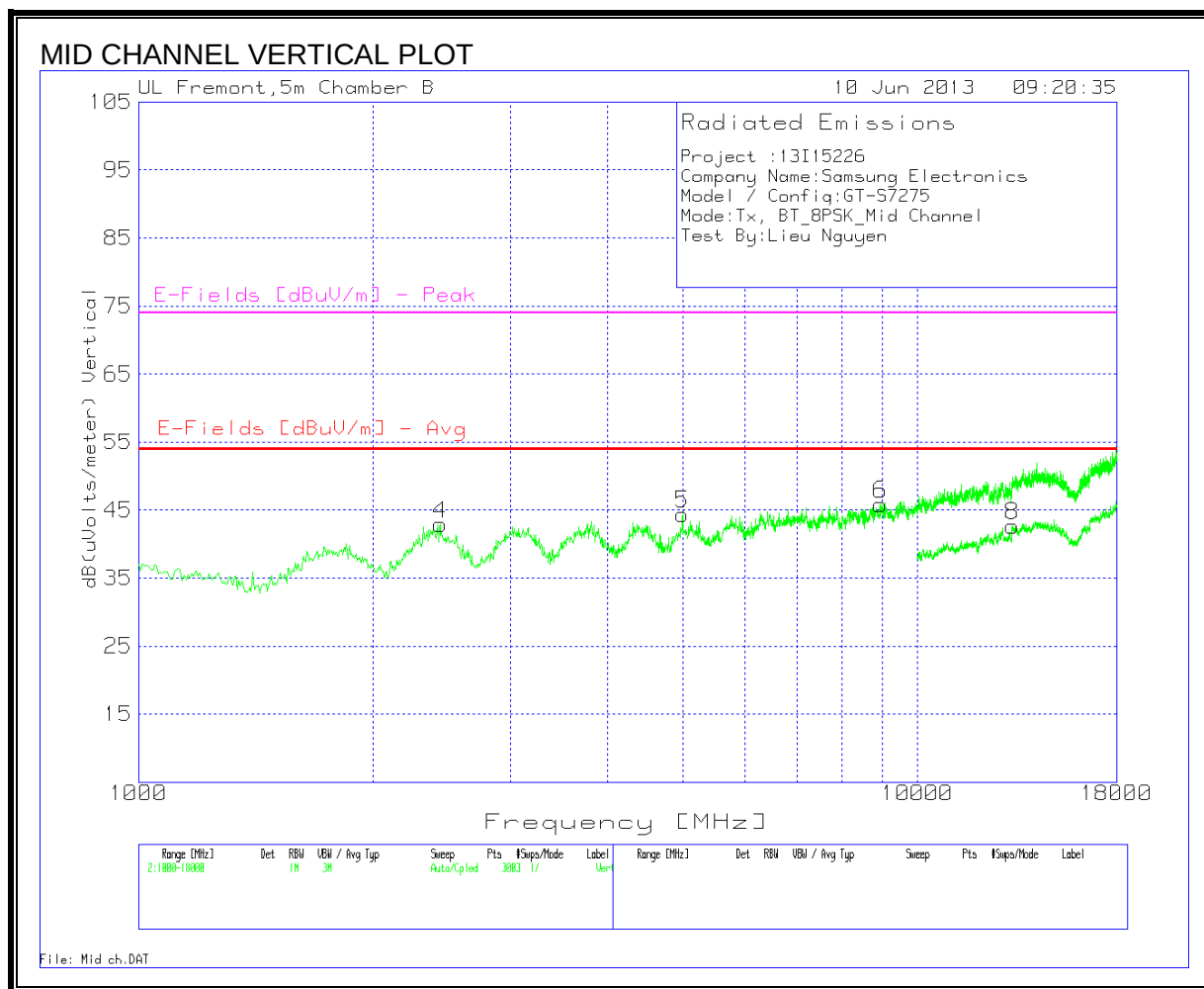


LOW CHANNEL DATA

Project :13I15226															
Company Name:Samsung															
Model / Config:EUT (GT-S7275)															
Mode:Tx Low ch 8PSK															
Test By:Lieu Nguyen															
Horizontal 1000 - 18000MHz															
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector Pk/Avg	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T160 BRF [dB]	DC Corr [dB]	Corrected Reading dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	2710.193	42.61	PK	32.7	-36.8	4.8	0.9	0	44.21	53.97	-9.76	74	-29.79	100	Horz
2	9352.765	37.45	PK	36.4	-36.2	10	0.5	0	48.15	53.97	-5.82	74	-25.85	100	Horz
3	8554.297	36.87	PK	35.7	-36	9.5	0.4	0	46.47	53.97	-7.5	74	-27.53	200	Horz
Vertical 1000 - 18000MHz															
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector Pk/Avg	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T160 BRF [dB]	DC Corr [dB]	Corrected Reading dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
4	2630.913	42.98	PK	32.7	-36.8	4.7	0.9	0	44.48	53.97	-9.49	74	-29.52	100	Vert
5	6645.903	36.22	PK	35.5	-35.6	8.2	0.3	0	44.62	53.97	-9.35	74	-29.38	200	Vert
6	6022.985	37.16	PK	35.2	-35.6	7.7	0.2	0	44.66	53.97	-9.31	74	-29.34	200	Vert
Horizontal 10000 - 18000MHz															
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector Pk/Avg	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T160 BRF [dB]	DC Corr [dB]	Corrected Reading dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
7	12122.939	24.47	PK	38.9	-35.5	11.5	0.8	0	40.17	53.97	-13.8	74	-33.83	200	Horz
Vertical 10000 - 18000MHz															
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector Pk/Avg	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T160 BRF [dB]	DC Corr [dB]	Corrected Reading dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
8	12782.609	24.89	PK	39.1	-34.5	11.8	0.4	0	41.69	53.97	-12.28	74	-32.31	100	Vert
PK - Peak detector															
Av - Average detector															

MID CHANNEL HORIZONTAL PLOT

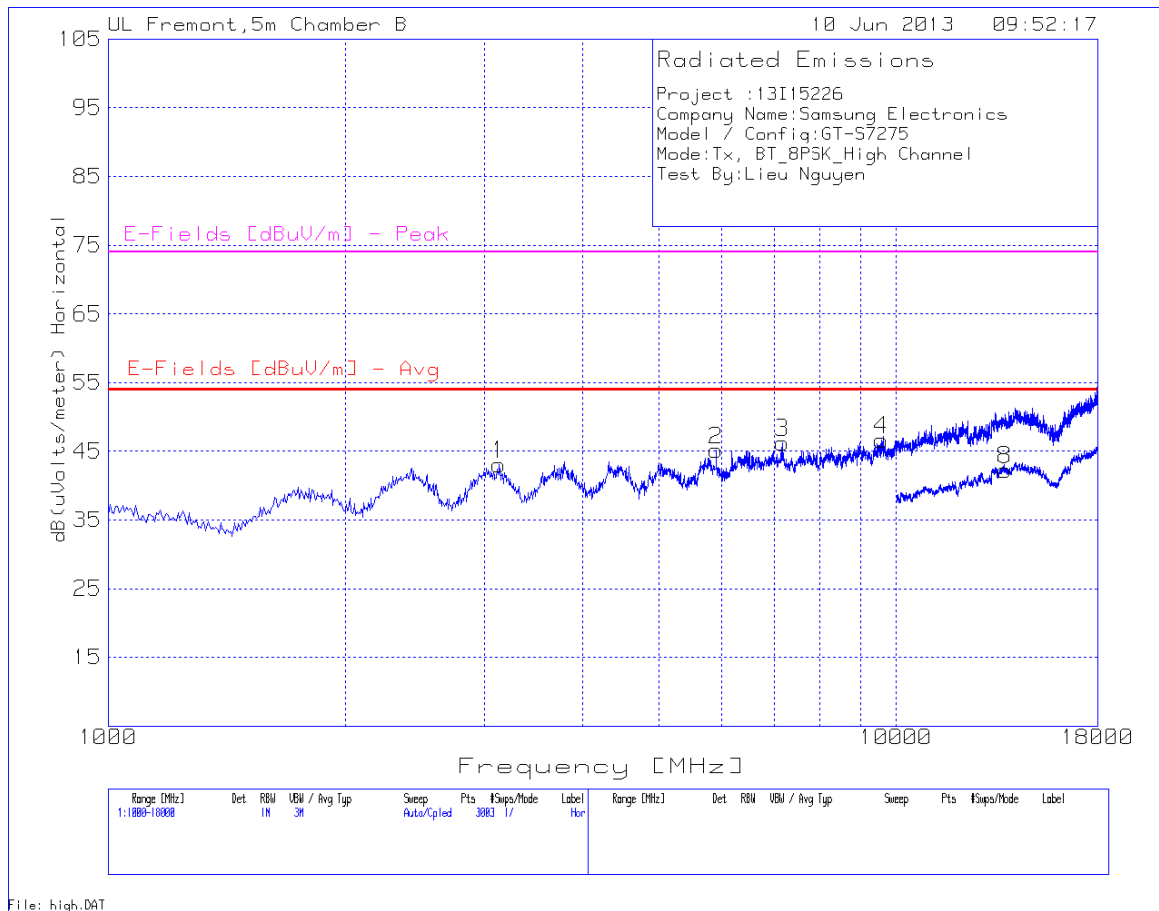


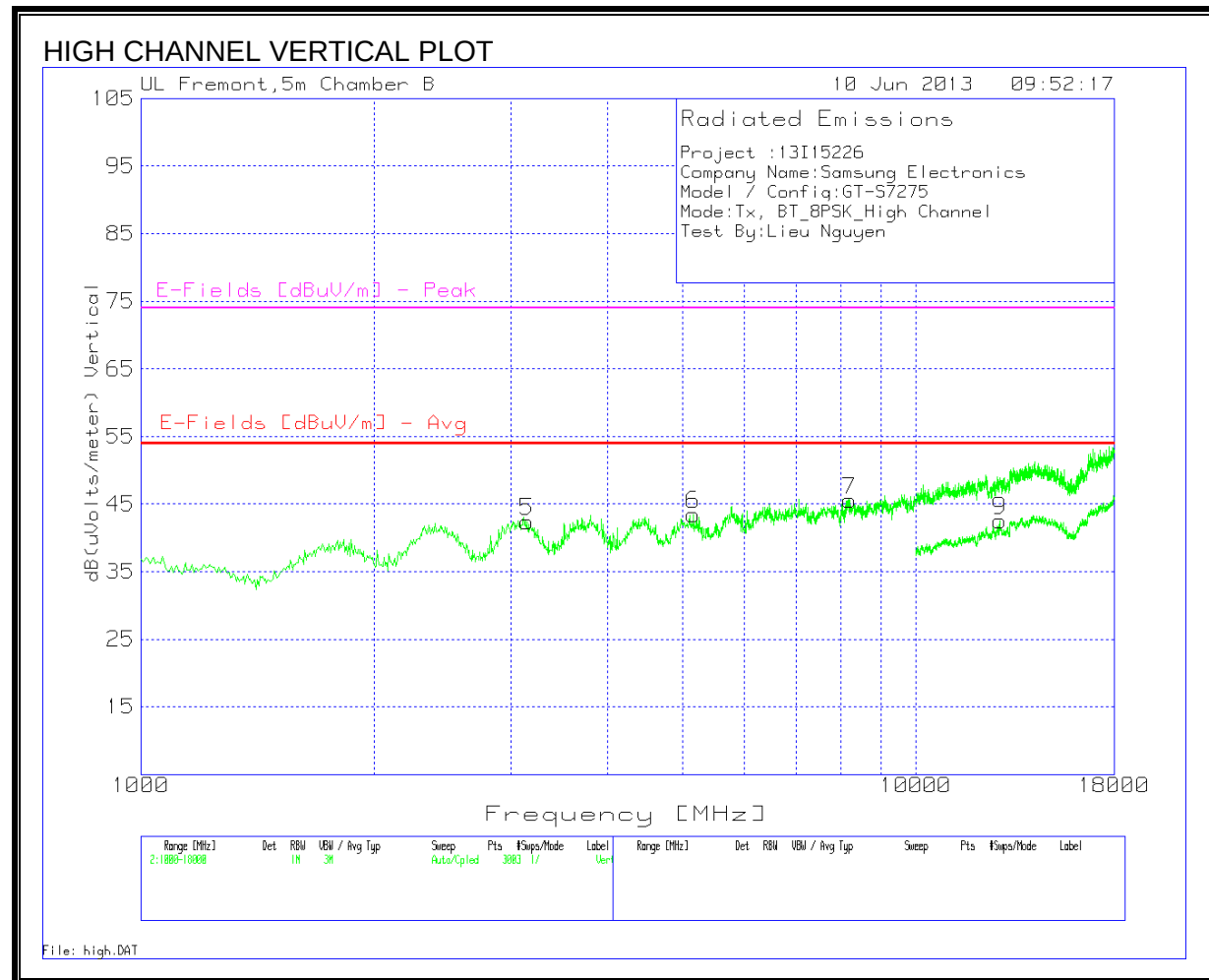


MID CHANNEL DATA

Project :13I15226														
Company Name:Samsung Electronics														
Model / Config:GT-S7275														
Mode:Tx, BT_8PSK_Mid Channel														
Test By:Lieu Nguyen														
Horizontal 1000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detect or (Pk/Av)	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T160 BRF [dB]	Corrected Reading dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	2415.723	41.97	PK	32.2	-36.9	4.5	0.9	42.67	53.97	-11.3	74	-31.33	200	Vert
2	6957.362	36.55	PK	35.4	-35.6	8.5	0.2	45.05	53.97	-8.92	74	-28.95	200	Vert
3	8310.793	36.51	PK	35.6	-35.9	9.4	0.3	45.91	53.97	-8.06	74	-28.09	101	Vert
Vertical 1000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detect or	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T160 BRF [dB]	Corrected Reading dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
4	2438.374	42.07	PK	32.3	-36.9	4.5	0.9	42.87	53.97	-11.1	74	-31.13	200	Vert
5	4992.338	38.99	PK	33.9	-35.6	6.9	0.2	44.39	53.97	-9.58	74	-29.61	100	Vert
6	8967.688	35.88	PK	35.9	-36.1	9.8	0.4	45.88	53.97	-8.09	74	-28.12	200	Vert
Horizontal 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detect or	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T160 BRF [dB]	Corrected Reading dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
7	13478.261	24.79	PK	38.9	-34	12.2	0.4	42.29	53.97	-11.68	74	-31.71	200	Vert
Vertical 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detect or	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T160 BRF [dB]	Corrected Reading dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
8	13242.379	25.14	PK	39.1	-34.1	12.1	0.4	42.64	53.97	-11.33	74	-31.36	200	Vert
PK - Peak detector														
QP - Quasi-Peak detector														
Av - Average detector														

HIGH CHANNEL HORIZONTAL PLOT





HIGH CHANNEL DATA

Project :13115226
Company Name:Samsung Electronics
Model / Config:GT-S7275
Mode:Tx, BT_8PSK_High Channel
Test By:Lieu Nguyen

Horizontal 1000 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector (Pk/Av)	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T160 BRF [dB]	Corrected Reading dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	3134.91	40.82	PK	33.1	-36.6	5.2	0.6	43.12	53.97	-10.85	74	-30.88	200	Vert
2	5909.727	37.82	PK	35.1	-35.6	7.6	0.2	45.12	53.97	-8.85	74	-28.88	200	Vert
3	7178.215	37.68	PK	35.4	-35.7	8.6	0.3	46.28	53.97	-7.69	74	-27.72	200	Vert
4	9579.28	35.53	PK	36.7	-36.2	10.1	0.5	46.63	53.97	-7.34	74	-27.37	200	Vert

Vertical 1000 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector (Pk/Av)	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T160 BRF [dB]	Corrected Reading dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
5	3146.236	39.98	PK	33.2	-36.6	5.2	0.6	42.38	53.97	-11.59	74	-31.62	100	Vert
6	5162.225	37.61	PK	34.1	-35.5	7	0.2	43.41	53.97	-10.56	74	-30.59	100	Vert
7	8203.198	36.22	PK	35.6	-35.9	9.3	0.3	45.52	53.97	-8.45	74	-28.48	200	Vert

Horizontal 10000 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector (Pk/Av)	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T160 BRF [dB]	Corrected Reading dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
8	13758.12	24.55	PK	38.9	-33.9	12.3	0.4	42.25	53.97	-11.72	74	-31.75	100	Vert

Vertical 10000 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector (Pk/Av)	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T160 BRF [dB]	Corrected Reading dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
9	12822.59	25.48	PK	39.1	-34.4	11.9	0.4	42.48	53.97	-11.49	74	-31.52	100	Vert

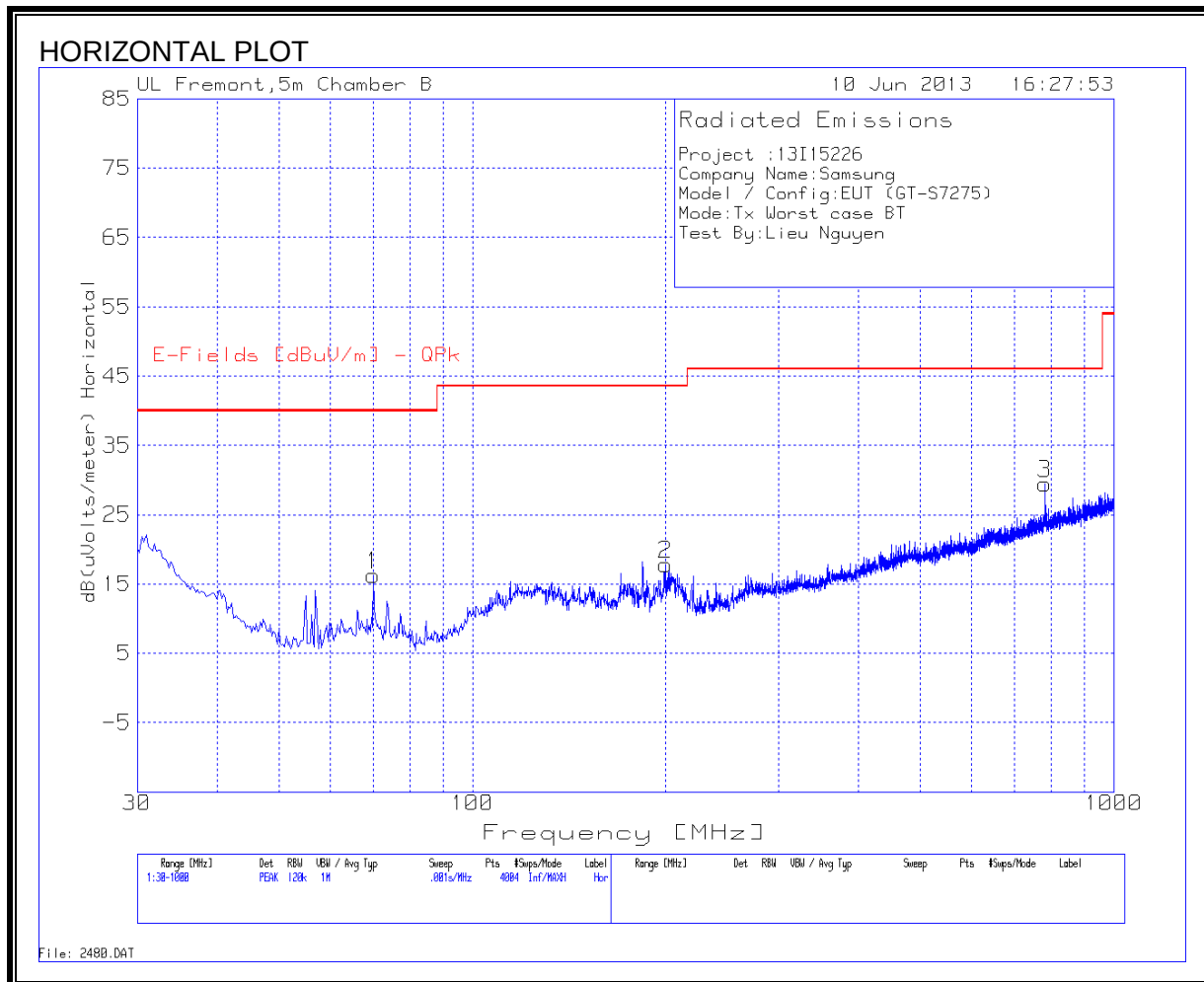
PK - Peak detector

QP - Quasi-Peak detector

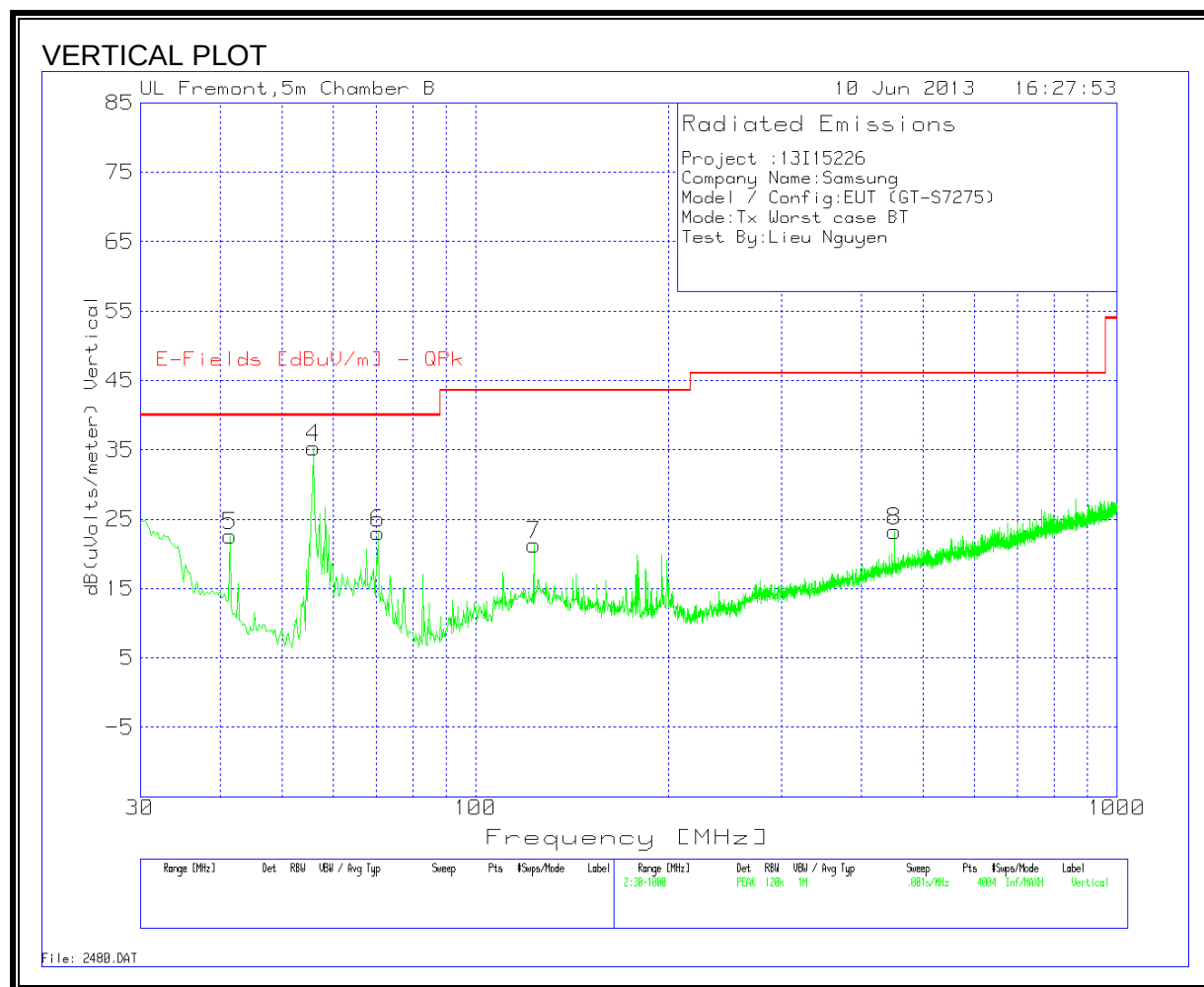
Av - Average detector

9.3. WORST-CASE BELOW 1 GHz

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



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



HORIZONTAL AND VERTICAL DATA

Project :13I15226

Company Name:Samsung

Model / Config:EUT (GT-S7275)

Mode:Tx Worst case BT

Test By:Lieu Nguyen

Horizontal 30 - 1000MHz

Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector (Pk/Av)	T243 Antenna Factor dB/m	T10 preamp/ Cable loss [dB]	Corrected Reading dB(uVolts/meter)	E-Fields [dBuV/m] - QPk	Margin (dB)	Height [cm]	Polarity
1	69.9825	37.04	PK	7.9	-28.7	16.24	40	-23.76	100	Horz
2	199.8651	32.6	PK	12.5	-27.3	17.8	43.52	-25.72	100	Horz
3	782.1559	33.04	PK	21.2	-24.8	29.44	46.02	-16.58	100	Horz

Vertical 30 - 1000MHz

Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector (Pk/Av)	T243 Antenna Factor dB/m	T10 preamp/ Cable loss [dB]	Corrected Reading dB(uVolts/meter)	E-Fields [dBuV/m] - QPk	Margin (dB)	Height [cm]	Polarity
4	55.9281	57.23	PK	6.9	-28.8	35.33	40	-4.67	100	Vert
5	41.389	39.26	PK	12.4	-29	22.66	40	-17.34	100	Vert
6	70.4672	43.86	PK	7.9	-28.7	23.06	40	-16.94	100	Vert
7	123.2925	35.44	PK	14	-28.1	21.34	43.52	-22.18	100	Vert
8	449.9375	32.95	PK	16.7	-26.4	23.25	46.02	-22.77	100	Vert

PK - Peak detector

QP - Quasi-Peak detector

Av - Average detector

10. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 7.2.2

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 receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

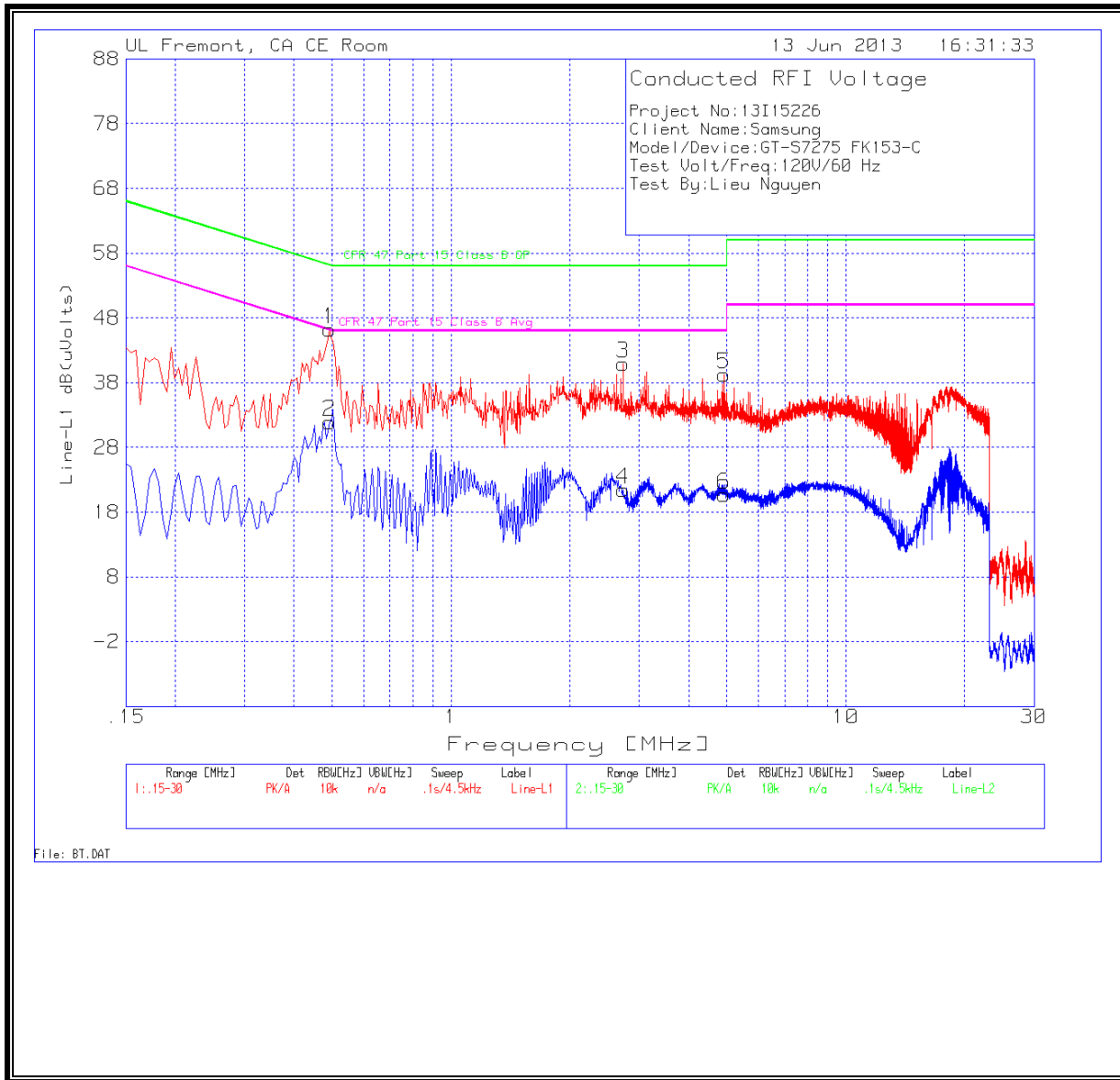
Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

6 WORST EMISSIONS

Project No:13I15226									
Client Name:Samsung									
Model/Device:GT-S7275 FK153-C									
Test Volt/Freq:120V/60 Hz									
Test By:Lieu Nguyen									
Line-L1 .15 - 30MHz									
Test Frequency	Meter Reading	Detector	T24 IL L1.TXT (dB)	LC Cables 1&3.TXT (dB)	dB(uVolts)	CFR 47 Part 15 Class B QP	Margin	CFR 47 Part 15 Class B Avg	Margin
0.492	46.08	PK	0.1	0	46.18	56.1	-9.92	-	-
0.492	31.82	Av	0.1	0	31.92	-	-	46.1	-14.18
2.7285	40.79	PK	0.1	0.1	40.99	56	-15.01	-	-
2.7285	21.22	Av	0.1	0.1	21.42	-	-	46	-24.58
4.9065	39.07	PK	0.1	0.1	39.27	56	-16.73	-	-
4.9065	20.51	Av	0.1	0.1	20.71	-	-	46	-25.29
Line-L2 .15 - 30MHz									
Test Frequency	Meter Reading	Detector	T24 IL L2.TXT (dB)	LC Cables 2&3.TXT (dB)	dB(uVolts)	CFR 47 Part 15 Class B QP	Margin	CFR 47 Part 15 Class B Avg	Margin
0.5055	30.42	PK	0.1	0	30.52	56	-25.48	-	-
0.5055	17.9	Av	0.1	0	18	-	-	46	-28
0.7125	25.91	PK	0.1	0	26.01	56	-29.99	-	-
0.7125	11.25	Av	0.1	0	11.35	-	-	46	-34.65
3.6915	21.82	PK	0.1	0.1	22.02	56	-33.98	-	-
3.6915	8.73	Av	0.1	0.1	8.93	-	-	46	-37.07
PK - Peak detector									
Av - Average detector									

LINE 1 RESULTS



LINE 2 RESULTS

