



**FCC CFR47 PART 15 SUBPART C
CERTIFICATION TEST REPORT**

FOR

GSM PHONE + BLUETOOTH and WLAN 2.4GHz b/g/n

MODEL NUMBER: SM-J110H/DS and SM-J110H/DD

FCC ID: A3LSMJ110H

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Prepared for

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NVLAP LAB CODE 200065-0

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: SAMSUNG ELECTRONICS CO., LTD.
EUT DESCRIPTION: GSM Phone + Bluetooth and WLAN 2.4GHz b/g/n
MODEL: SM-J110H/DS and SM-J110H/DD
SERIAL NUMBER: R31G600HD0B(Conducted), R31G600HJNP(Radiated))
DATE TESTED: JULY 2 -14, 2015

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.

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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2009 for FCC, FCC CFR 47 Part 2, FCC CFR 47 Part 15.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 and 47266 Benicia Street, Fremont, California, USA. Line conducted emissions are measured only at the 47173 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

47173 Benicia Street	47266 Benicia Street
☒ Chamber A(IC: 2324B-1)	☐ Chamber D(IC: 2324B-4)
☒ Chamber B(IC: 2324B-2)	☐ Chamber E(IC: 2324B-5)
☒ Chamber C(IC: 2324B-3)	☐ Chamber F(IC: 2324B-6)
	☐ Chamber G(IC: 2324B-7)
	☐ Chamber H(IC: 2324B-8)

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at <http://ts.nist.gov/standards/scopes/2000650.htm>.

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:

$$\text{Field Strength (dBuV/m)} = \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} - \text{Preamp Gain (dB)}$$

$$36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} = 28.9 \text{ dBuV/m}$$

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 18000 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 GSM PHONE + BLUETOOTH and WLAN 2.4GHz b/g/n

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	9.24	8.39
2402 - 2480	Enhanced 8PSK	11.06	12.76

Note: GFSK, Pi/4-DQPSK, 8PSK average Power are all investigated, The GFSK & 8PSK Power are the worst case. Testing is based on this mode to showing compliance. For average power data please refer to section 8.6.

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an FPCB antenna, with a maximum gain of 1.59 dBi.

5.4. 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.

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
AC Adapter	Samsung	ETAOU10EBE	N/A	N/A
Earphone	Samsung	N/A	N/A	N/A

I/O CABLES

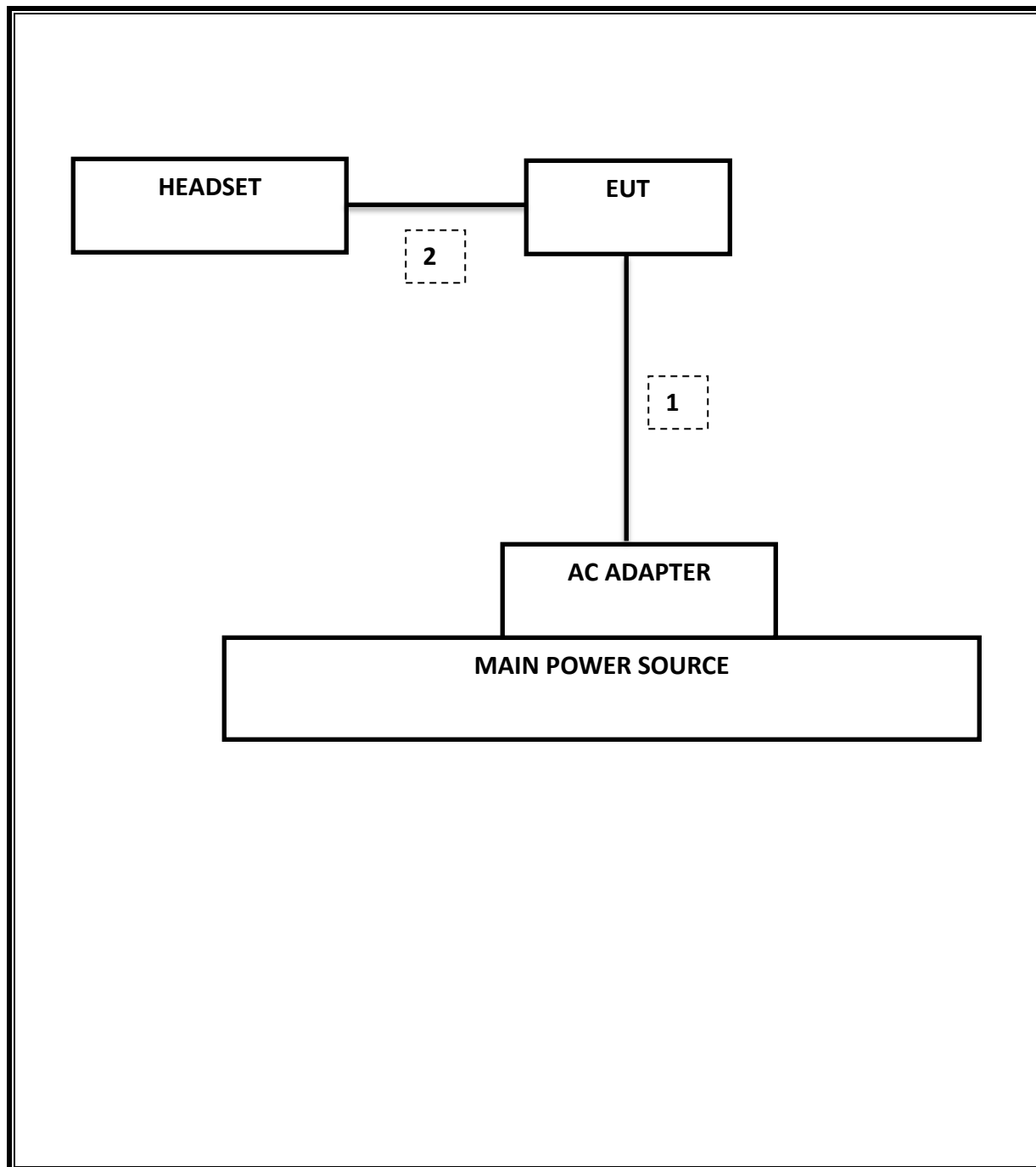
I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	DC Power	1	Mini-USB	Shielded	1.2m	N/A
2	Audio	1	Mini-Jack	Unshielded	1m	N/A

TEST SETUP

The EUT is continuously communicating to the Bluetooth tester during the tests.

EUT was set in the Hidden menu mode to enable BT communications.

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	Asset	Cal Due
Antenna, Biconolog, 30MHz-1 GHz	Sunol Sciences	JB1	C01171	02/13/16
Antenna, Horn, 18GHz	EMCO	3115	C00783	10/25/15
Antenna, Horn, 26.5 GHz	ARA	MWH-1826/B	C00980	11/14/15
RF Preamplifier, 100KHz -> 1300MHz	HP	TBD	C00825	06/01/16
RF Preamplifier, 1GHz - 18GHz	Miteq	NSP4000-SP2	924343	03/23/16
RF Preamplifier, 1GHz - 26.5GHz	HP	8449B	F00351	06/27/16
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C01069	12/20/15
CBT Bluetooth Tester	R & S	CBT	None	07/12/15
Peak Power Meter	Agilent / HP	E4416A	C00963	12/13/15
Peak / Average Power Sensor	Agilent / HP	E9327A	C00964	12/13/15
LISN, 30 MHz	FCC	50/250-25-2	C00626	01/14/16
Reject Filter, 2.4GHz	Micro-Tronics	BRM50702	N02684	CNR
Radiated Software	UL	UL EMC	Ver 9.5, July 22, 2014	
Conducted Software	UL	UL EMC	Ver 9.5, May 17 2012	
CLT Software	UL	UL RF	Ver 1.0, Feb 2 2015	
Antenna Port Software	UL	UL RF	Ver 2.1.1.1, Jan 20 2015	

7. SUMMARY TABLE

FCC Part Section	RSS Section(s)	Test Description	Test Limit	Test Condition	Test Result	Worst Case
2.1049	RSS-GEN 4.6	Occupied Band width (99%)	N/A	Conducted	Pass	1.203MHz
2.1051, 15.247 (d)	RSS-247 5.5	Band Edge / Conducted Spurious Emission	-20dBc		Pass	-40.22dBm
15.247 (b)(1)	RSS-247 5.4.2	TX conducted output power	<21dBm		Pass	11.06dBm
15.247 (a)(1)	RSS-247 5.1.2	Hopping frequency separation	> 25KHz		Pass	1MHz
15.247 (a)(1)(iii)	RSS-247 5.1.4	Number of Hopping channels	More than 15 non-overlapping channels		Pass	79
15.247 (a)(1)(iii)	RSS-247 5.1.4	Avg Time of Occupancy	< 0.4sec		Pass	0.3201sec
15.207 (a)	RSS-GEN 8.8	AC Power Line conducted emissions	Section 10	Radiated	Pass	38.55dBuV
15.205, 15.209	RSS-GEN 8.9/7	Radiated Spurious Emission	< 54dBuV/m		Pass	39.25dBuV/m

8. ANTENNA PORT TEST RESULTS

8.1. 20 dB AND 99% BANDWIDTH

LIMIT

None; for reporting purposes only.

TEST PROCEDURE

DA 00-705: 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

8.1.1. BASIC DATA RATE GFSK MODULATION

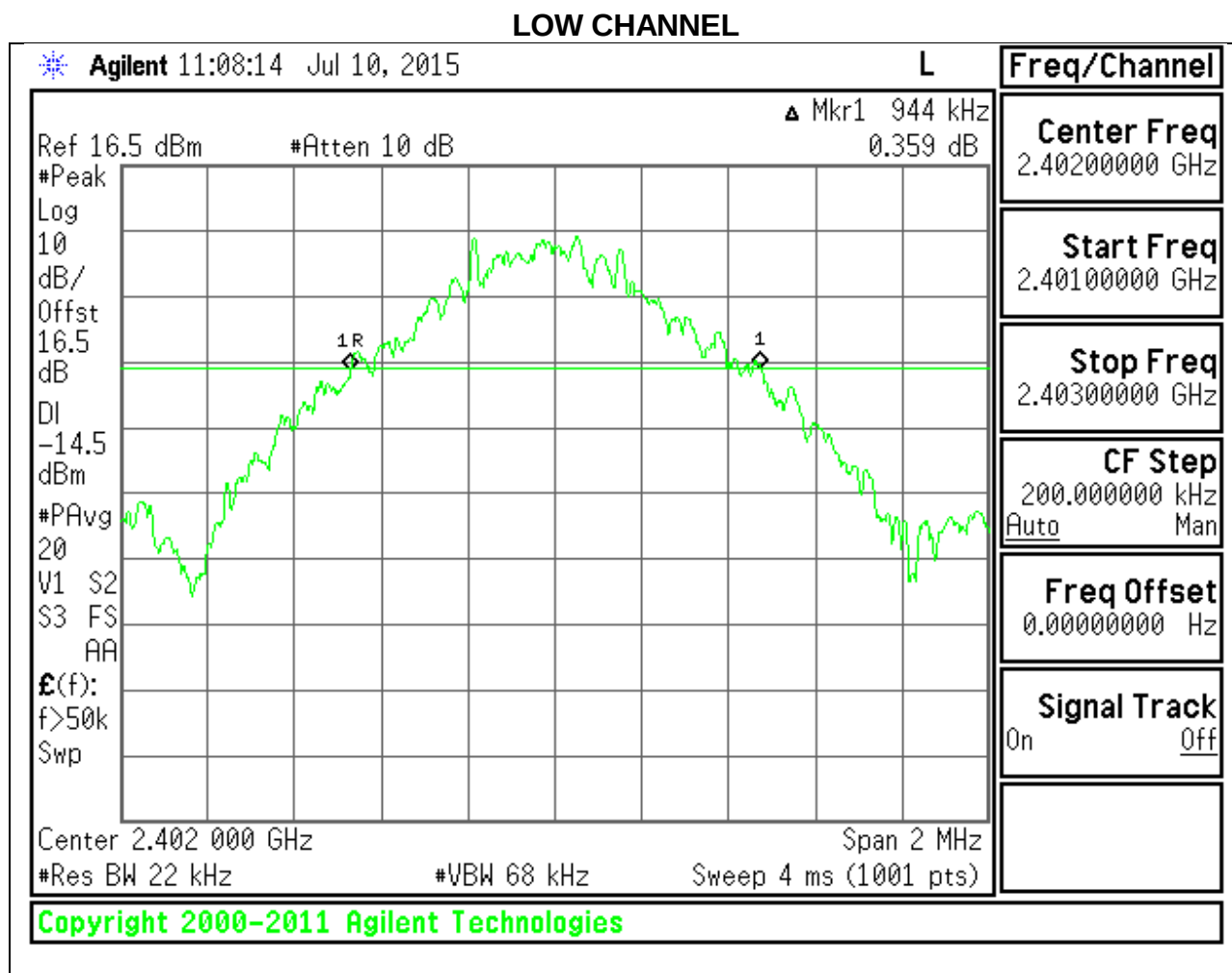
Channel	Frequency (MHz)	20 dB Bandwidth (MHz)	99% Bandwidth (MHz)
Low	2402	0.944	0.874
Middle	2441	0.930	0.877
High	2480	0.940	0.873
Worst		0.944	0.877

8.1.2. ENHANCED DATA RATE 8PSK MODULATION

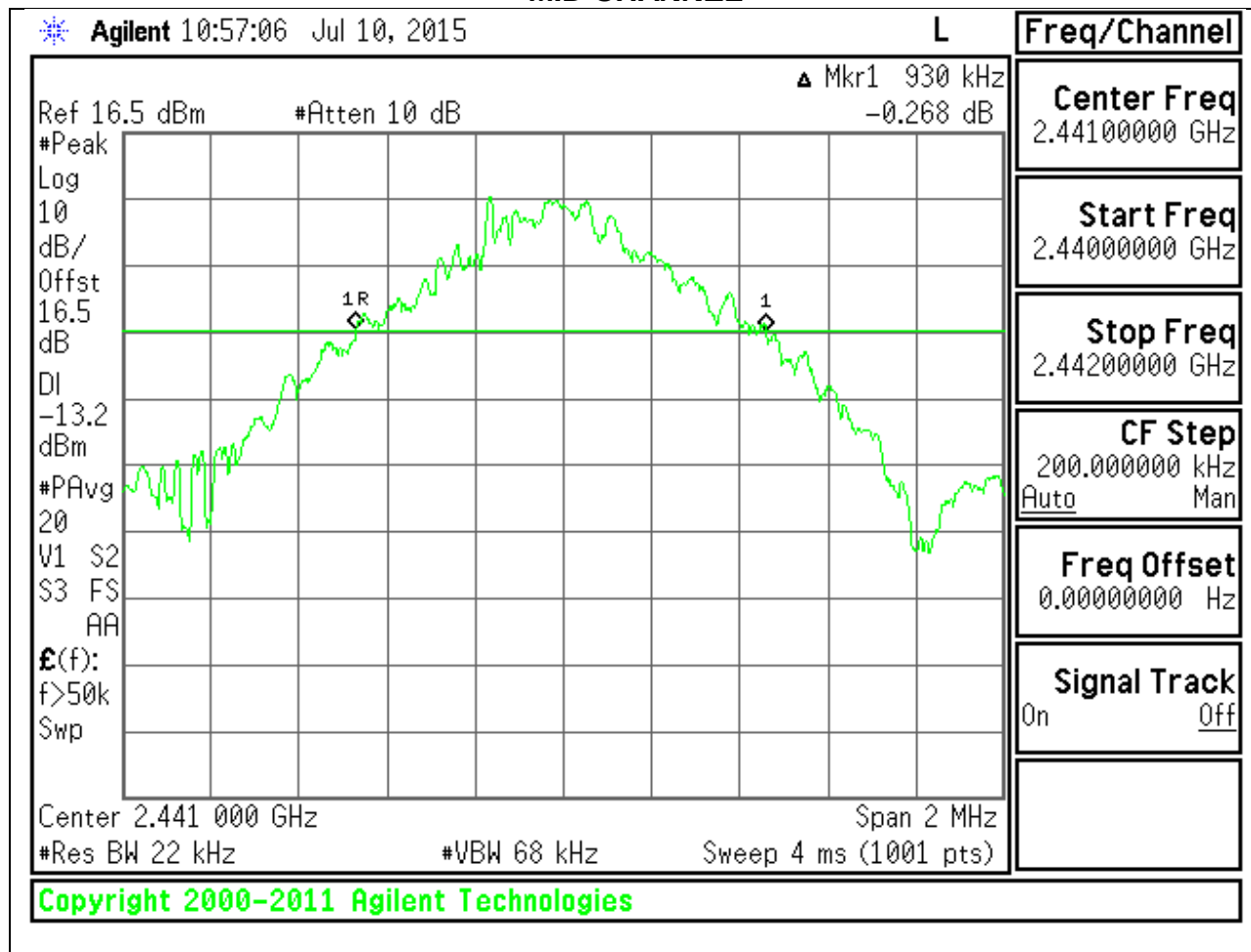
Channel	Frequency (MHz)	20 dB Bandwidth (MHz)	99% Bandwidth (MHz)
Low	2402	1.302	1.203
Middle	2441	1.299	1.197
High	2480	1.296	1.199
Worst		1.302	1.203

8.1.3. 20 dB AND 99% BANDWIDTH PLOTS

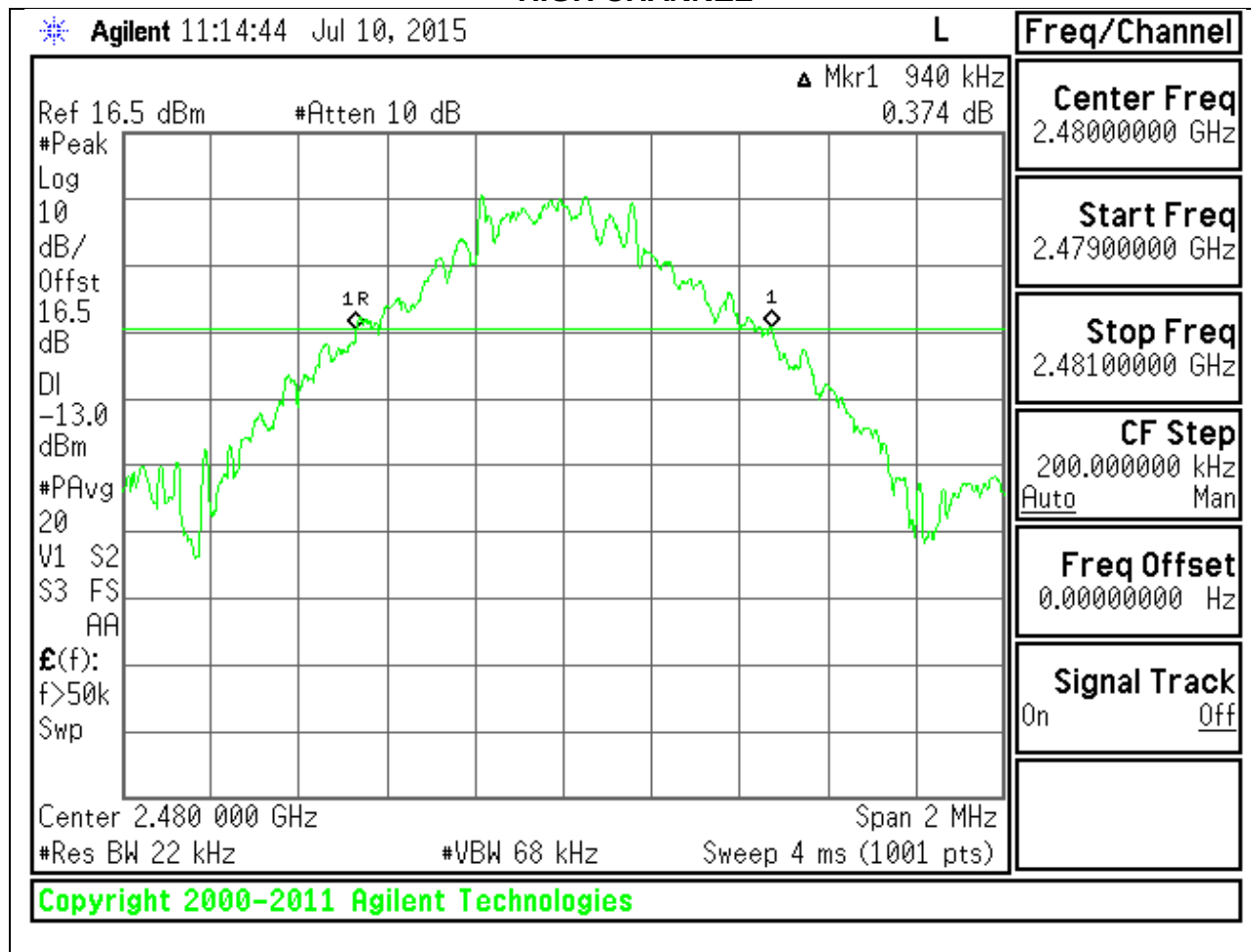
GFSK 20 dB BANDWIDTH



MID CHANNEL

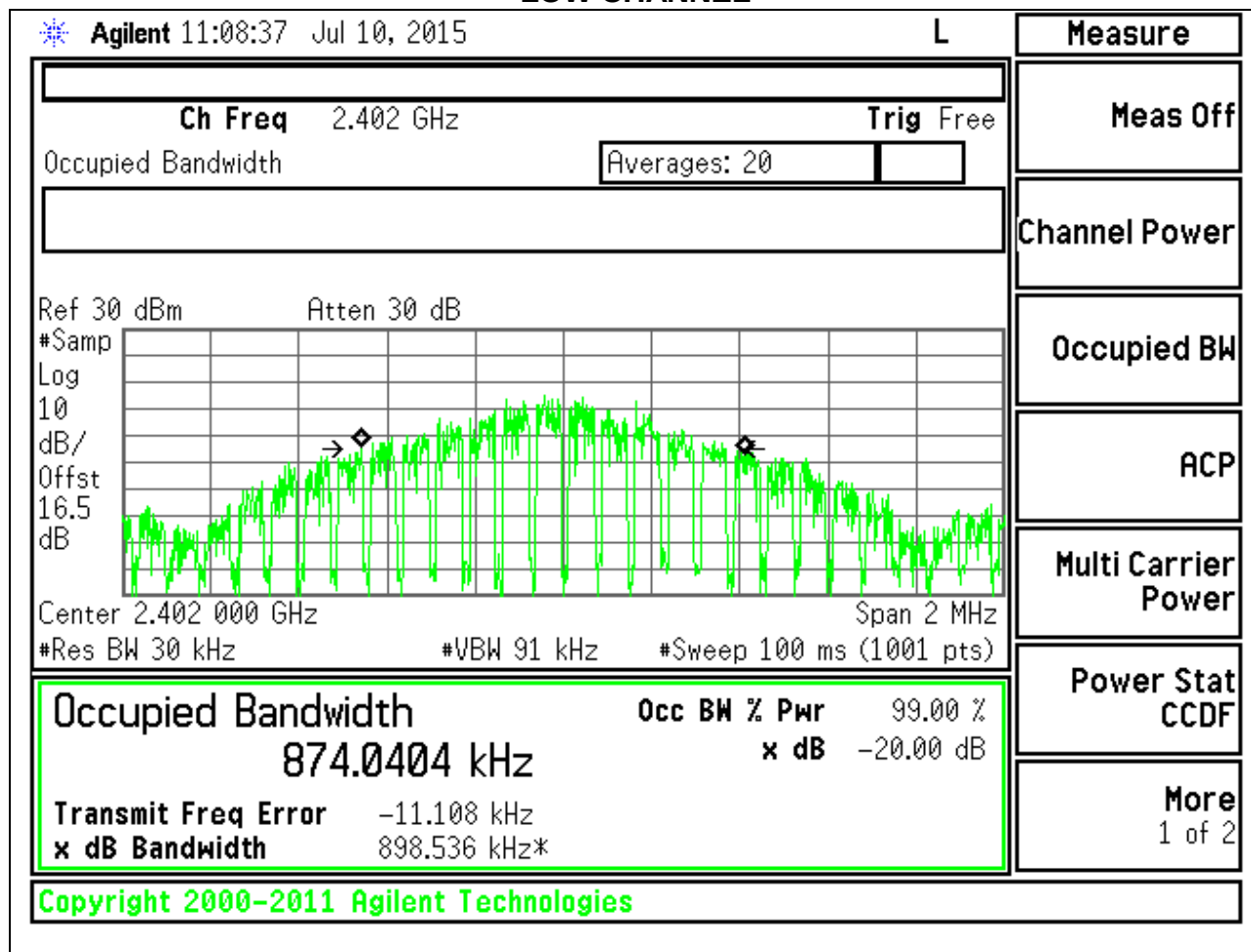


HIGH CHANNEL

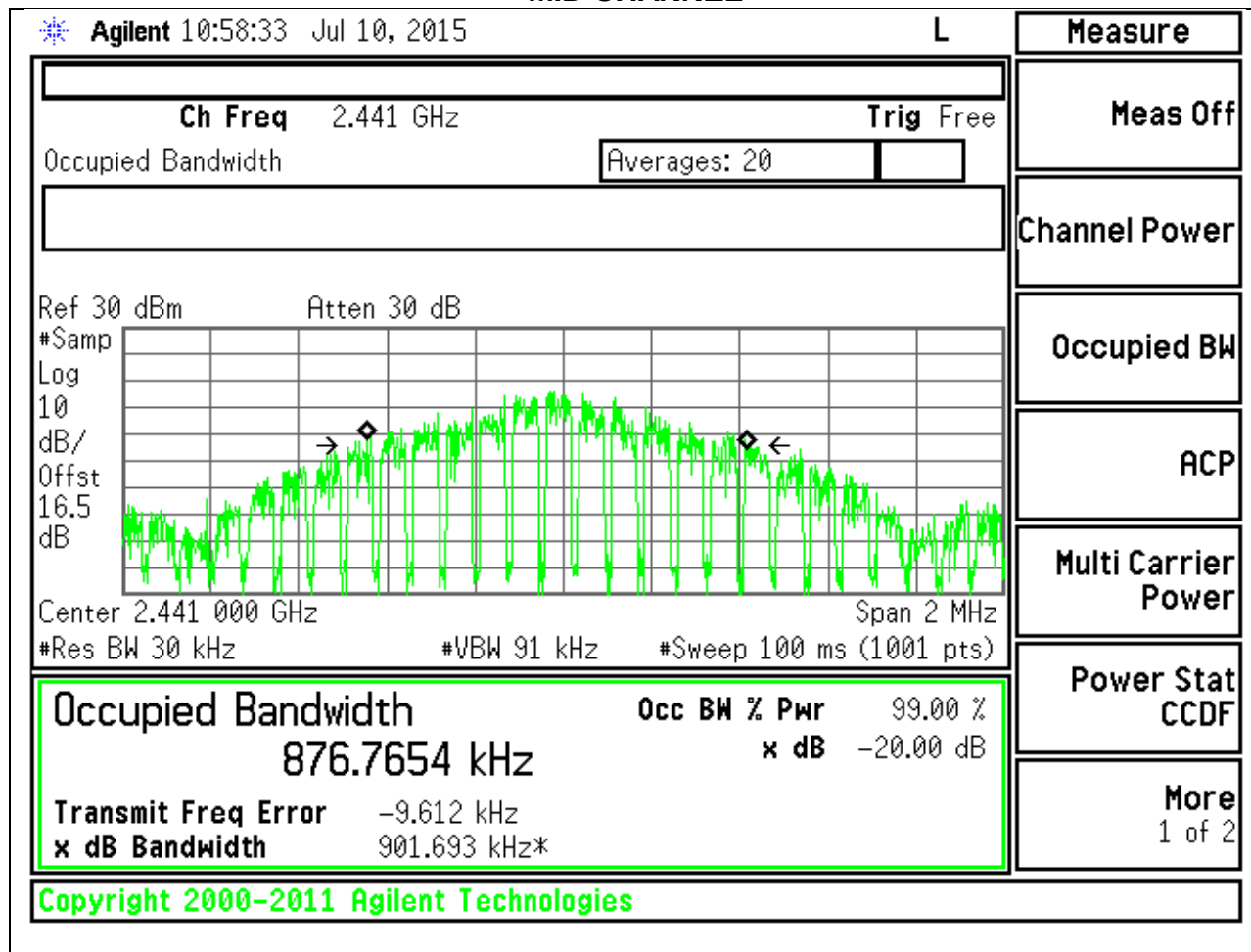


GFSK 99% BANDWIDTH

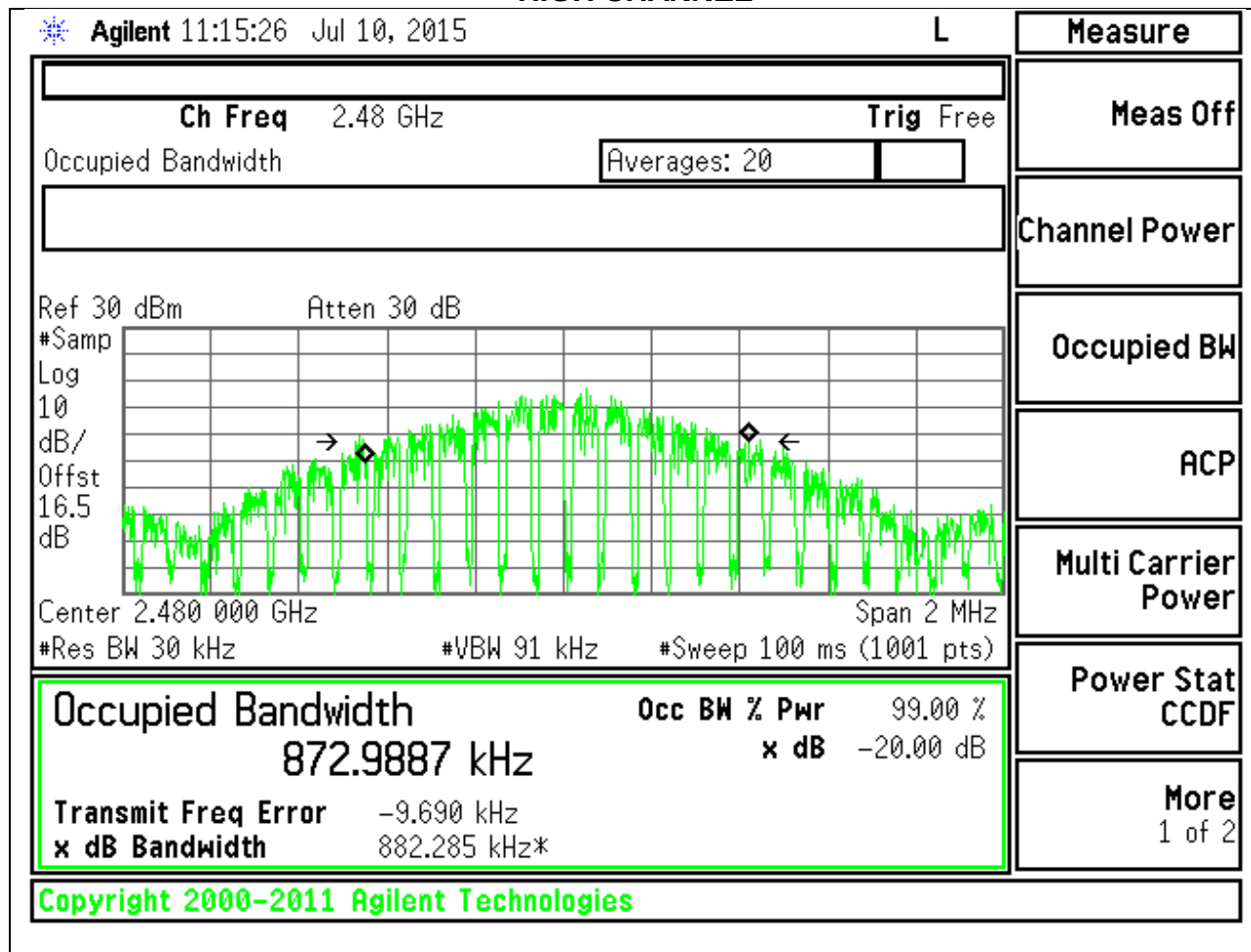
LOW CHANNEL



MID CHANNEL

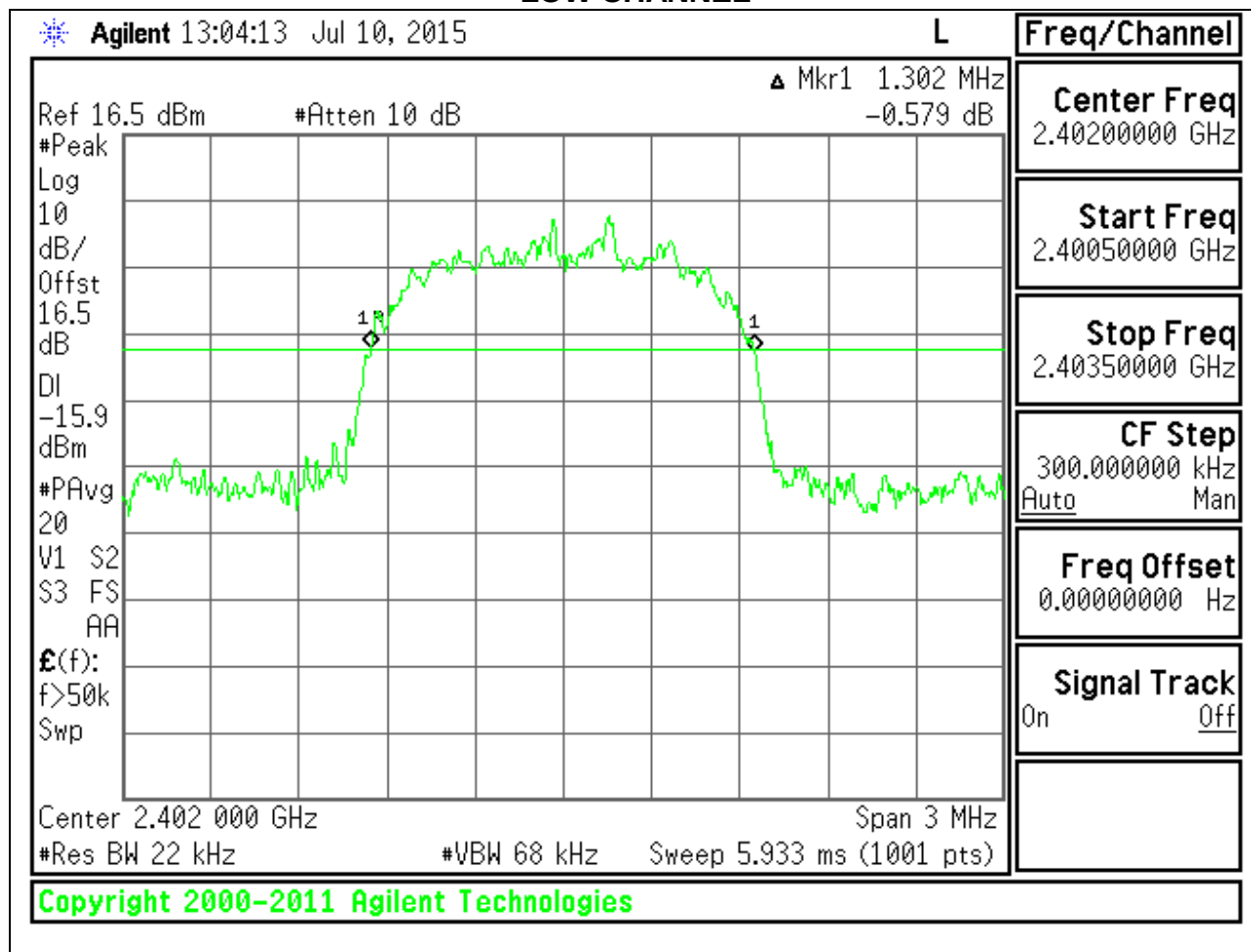


HIGH CHANNEL

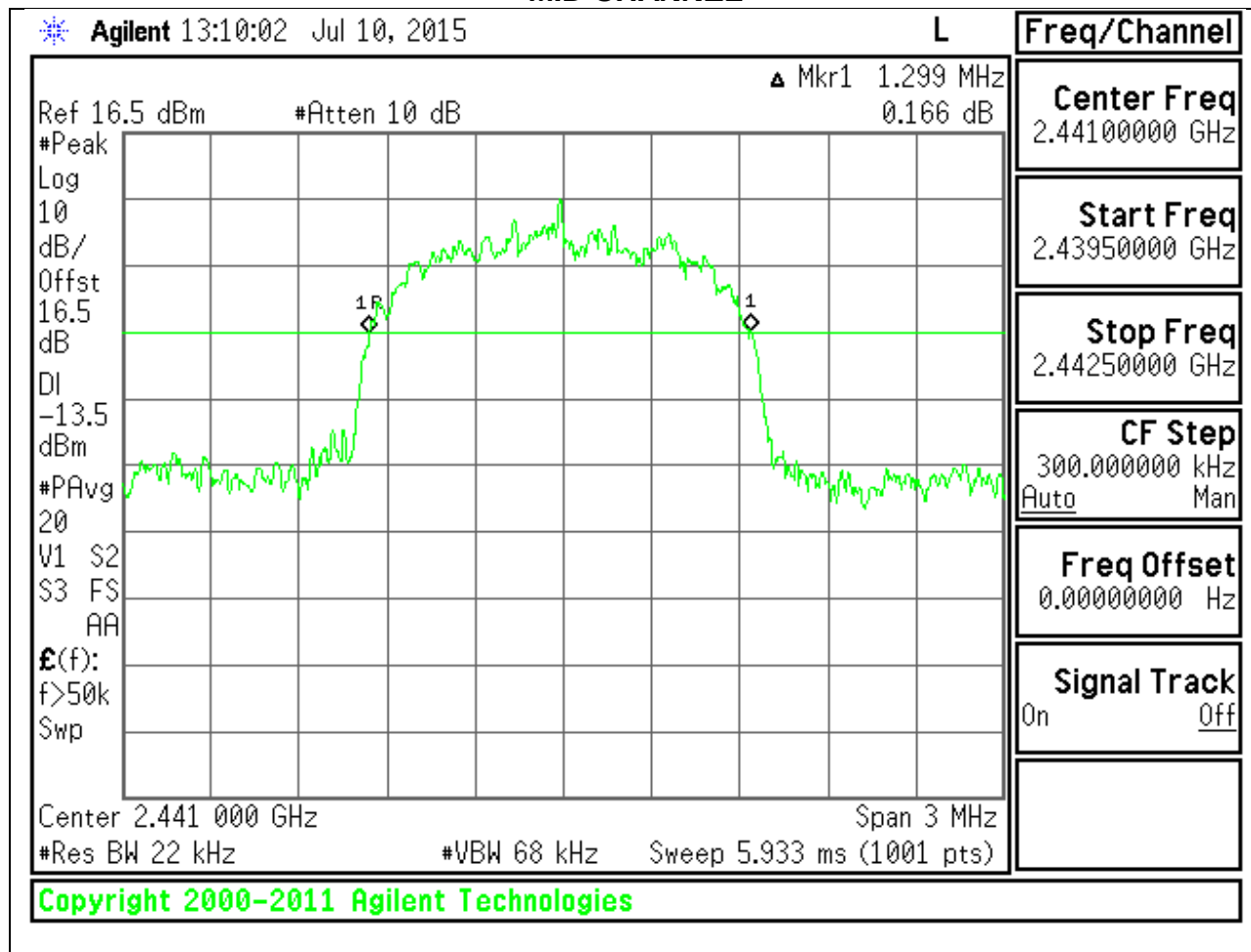


8PSK 20 dB BANDWIDTH

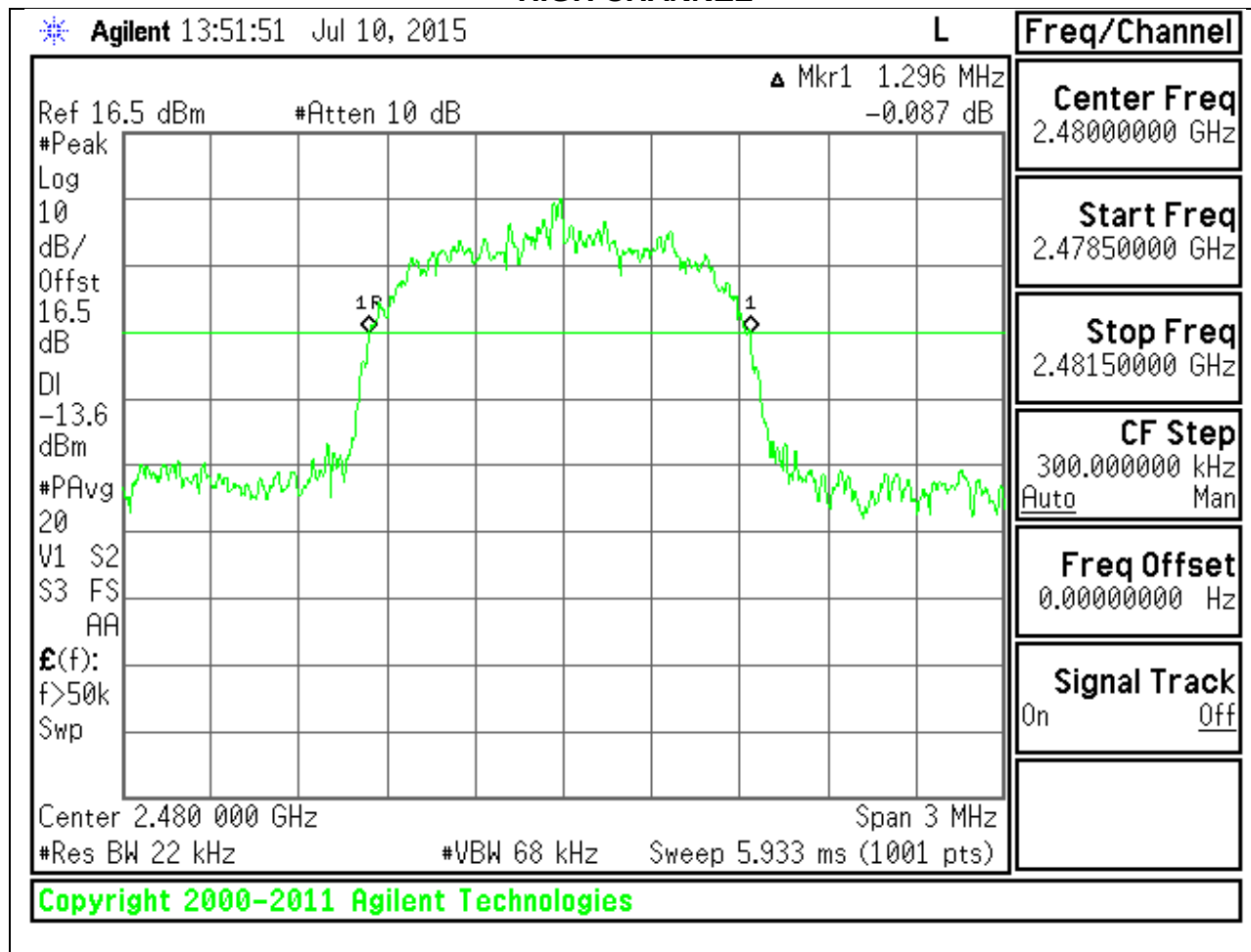
LOW CHANNEL



MID CHANNEL

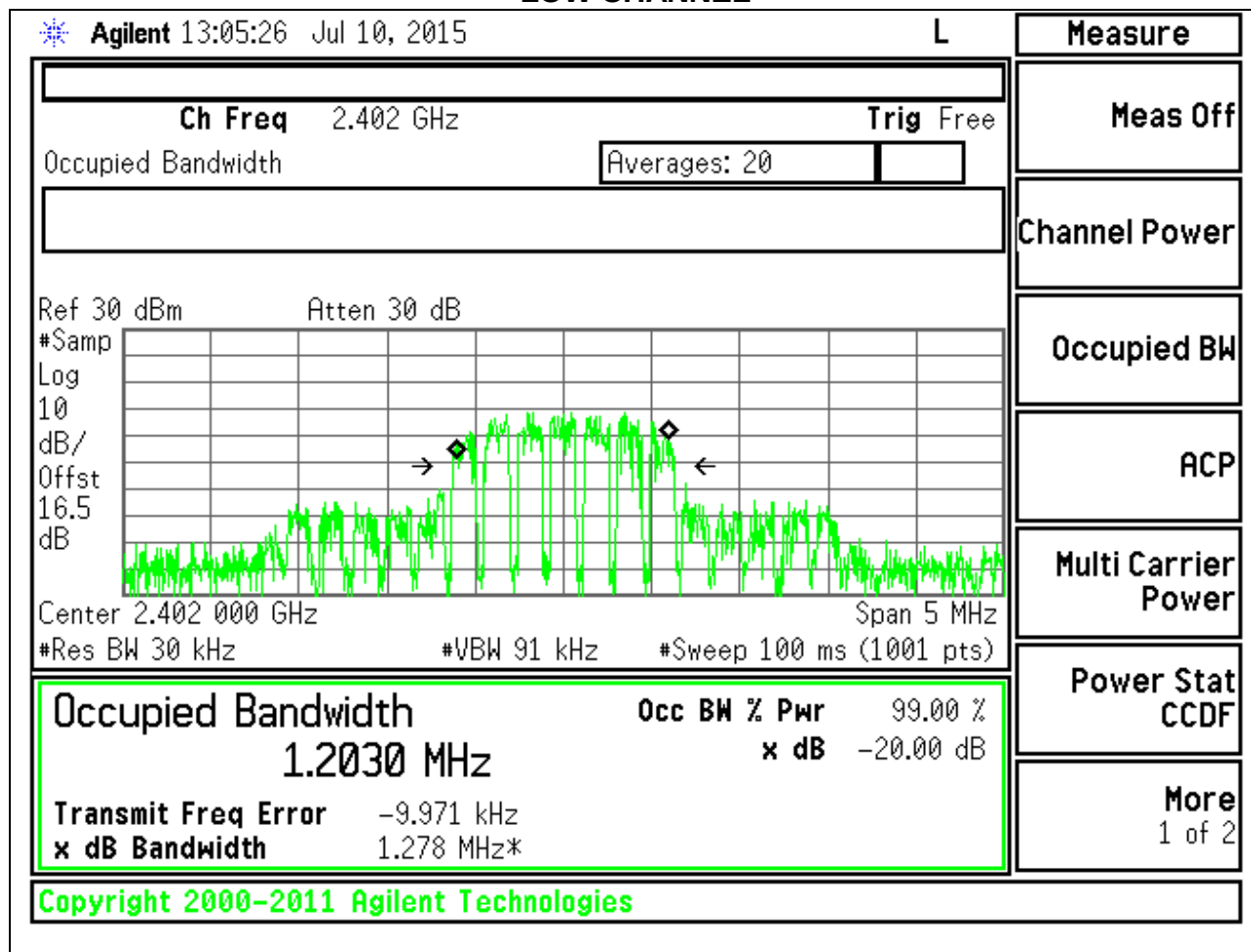


HIGH CHANNEL

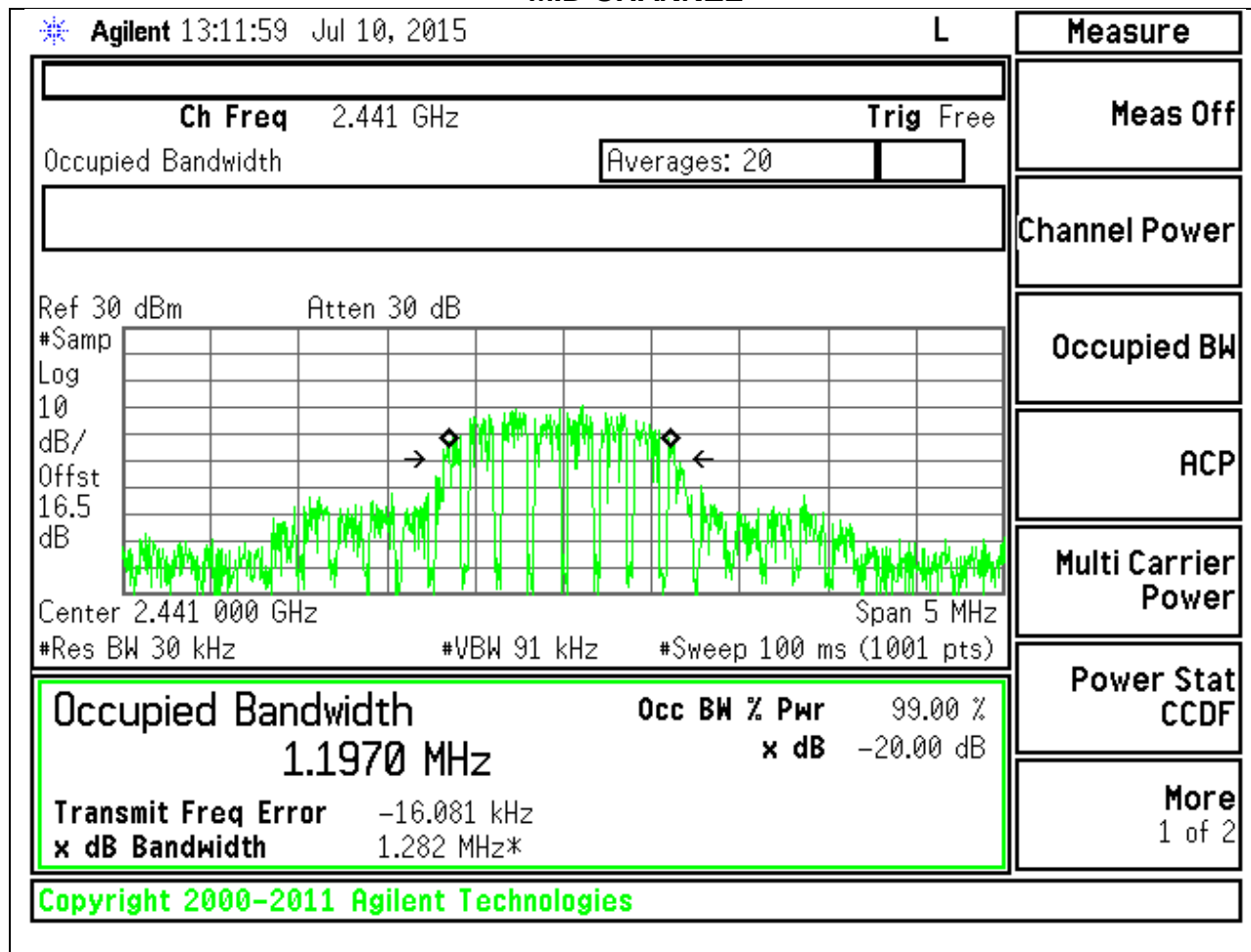


8PSK 99% BANDWIDTH

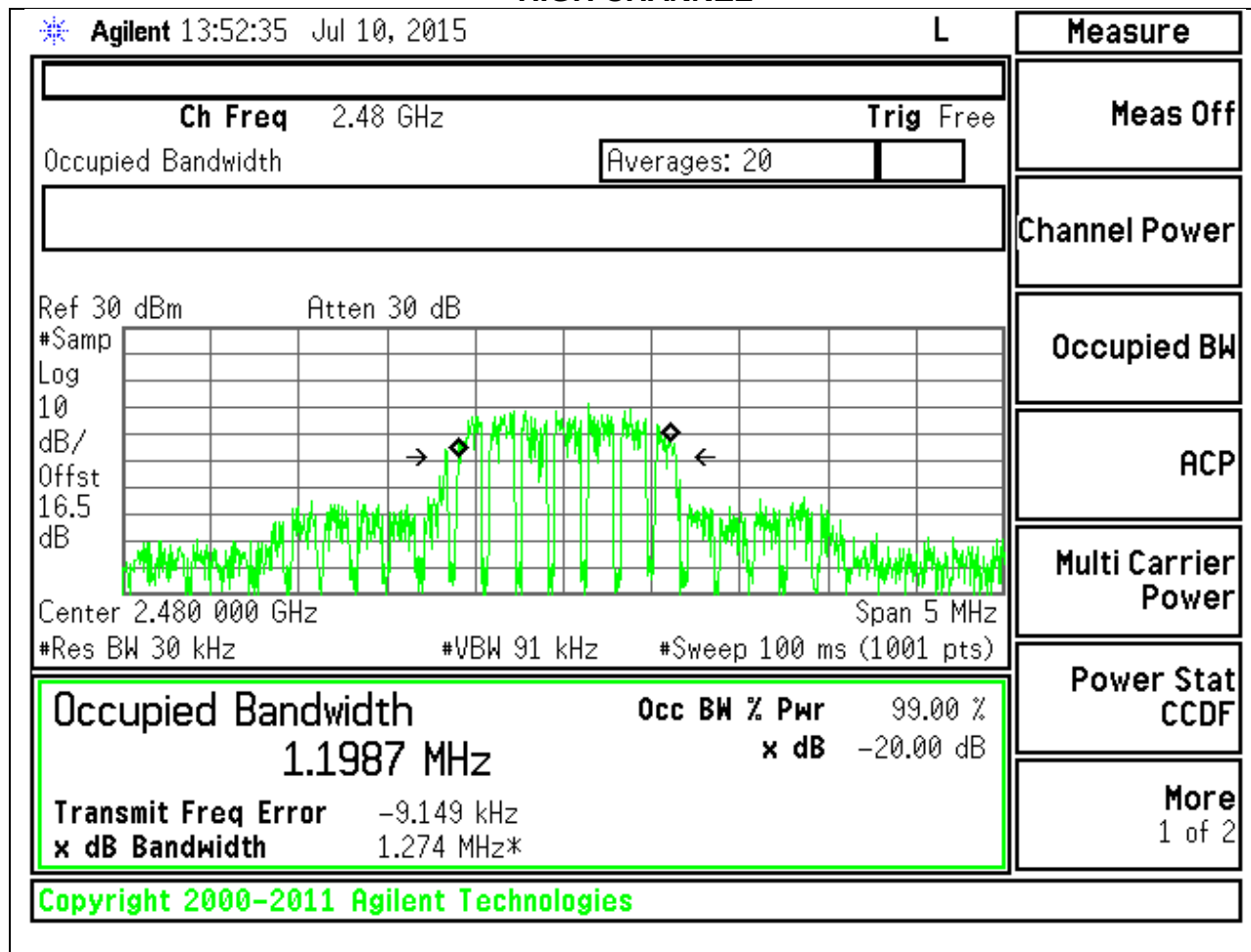
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL



8.2. HOPPING FREQUENCY SEPARATION

LIMIT

FCC §15.247 (a) (1)

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.

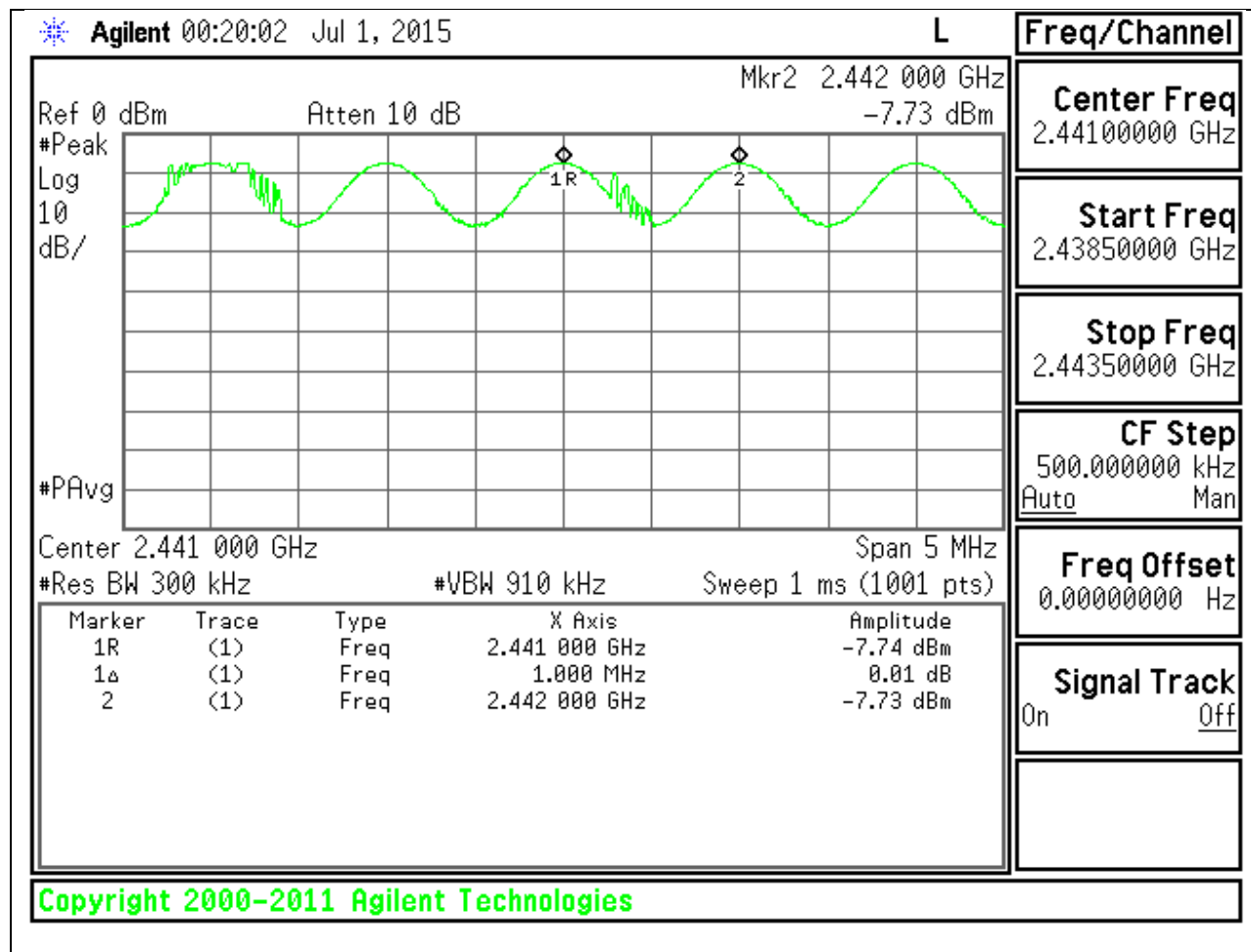
Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than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

TEST PROCEDURE

DA 00-705: 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 PLOT



8.3. NUMBER OF HOPPING CHANNELS

LIMIT

FCC §15.247 (a) (1) (iii)

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

TEST PROCEDURE

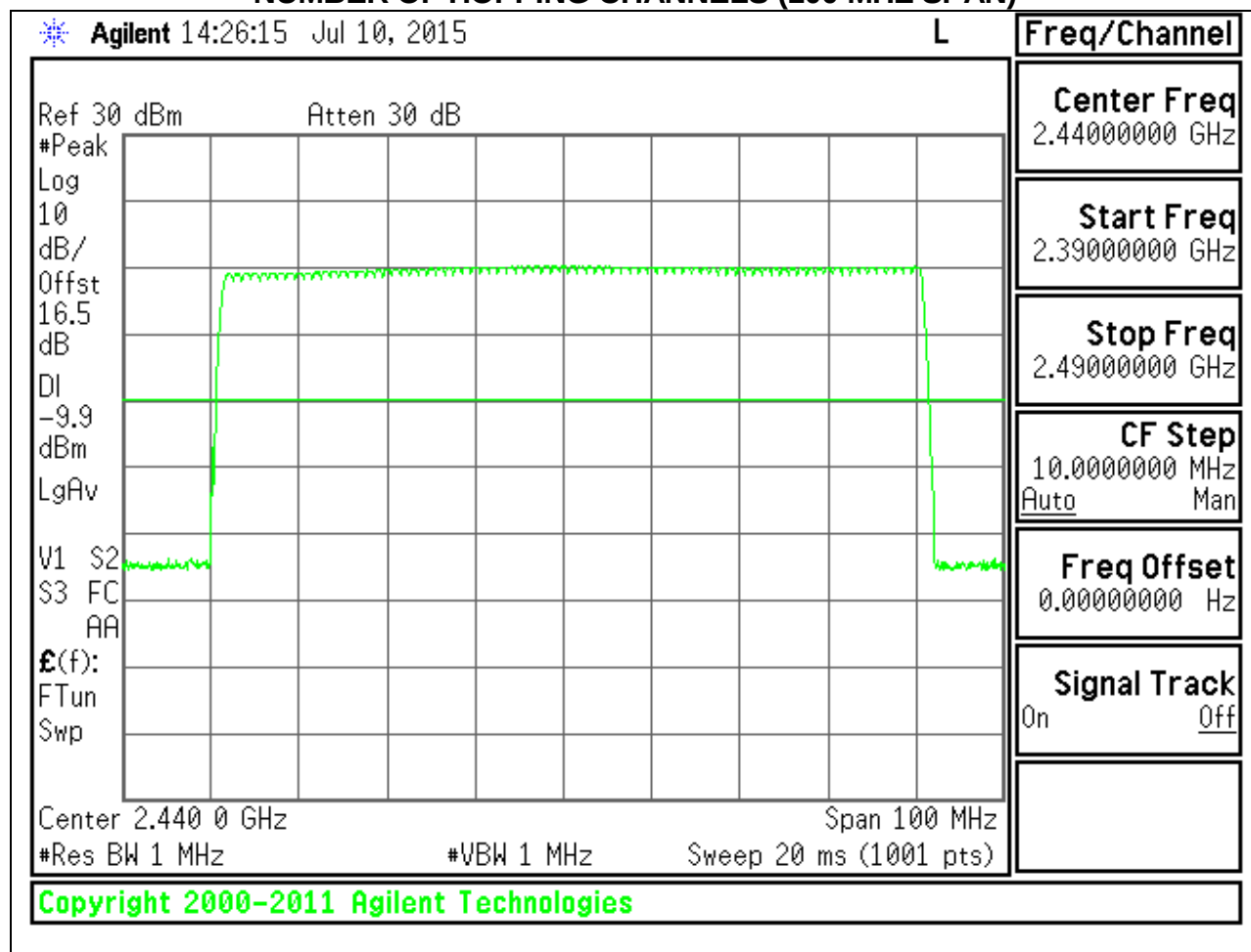
DA 00-705: The transmitter output is connected to a spectrum analyzer. The span is set to cover the entire authorized band, in either a single sweep or in multiple contiguous sweeps. The RBW is set to a maximum of 1 % of the span. The analyzer is set to Max Hold.

RESULTS

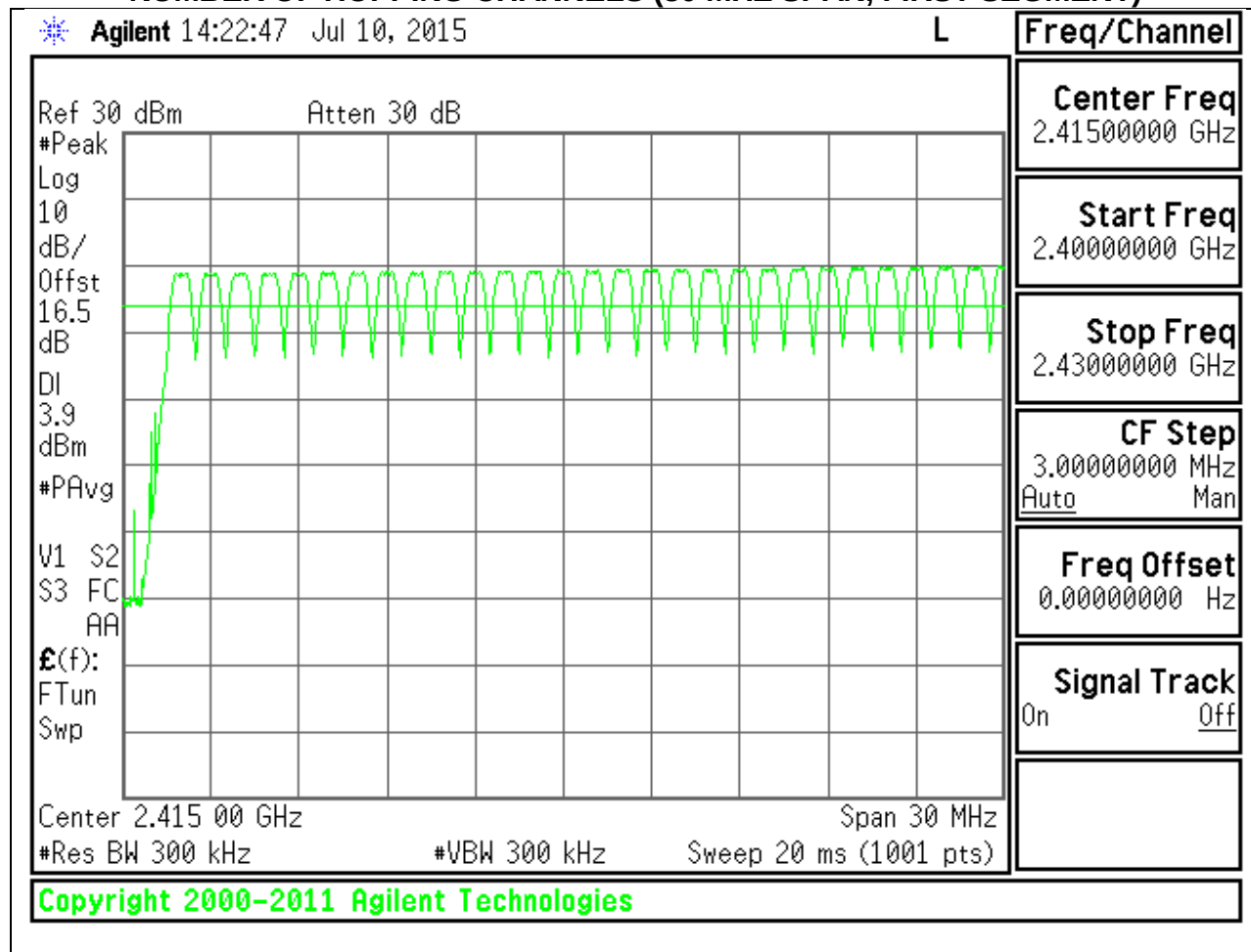
Normal Mode: 79 Channels observed.

NUMBER OF HOPPING CHANNELS PLOTS

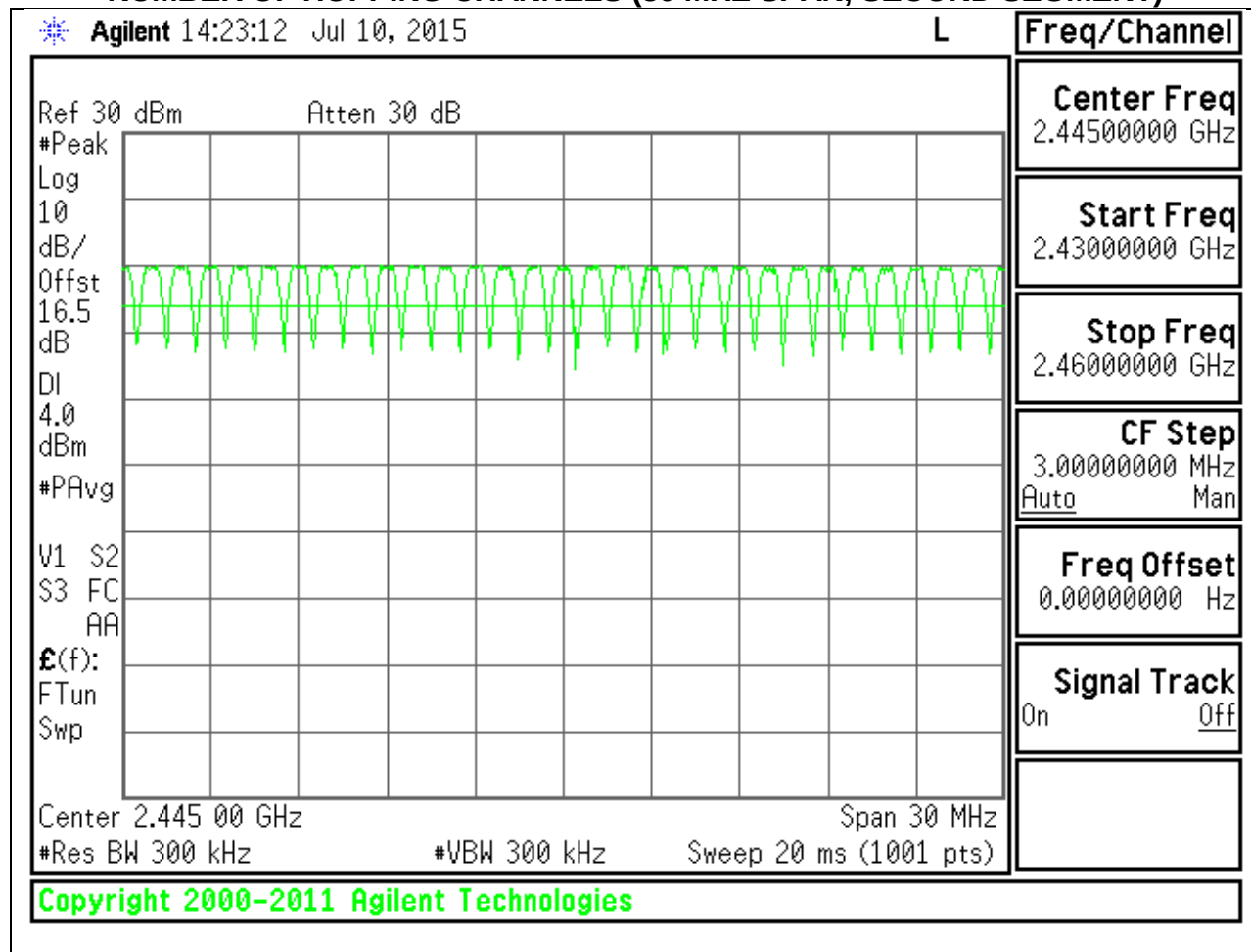
NUMBER OF HOPPING CHANNELS (100 MHz SPAN)



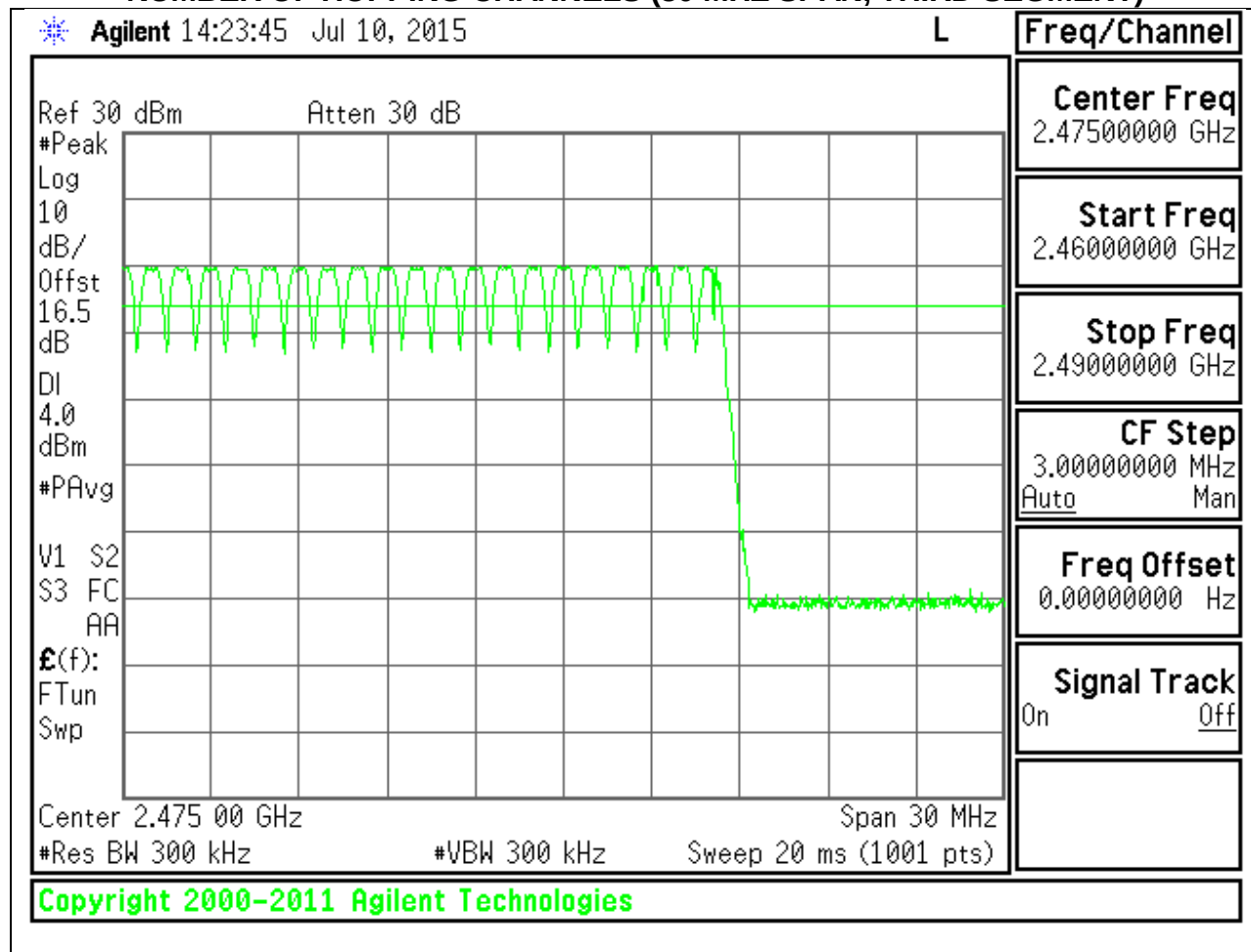
NUMBER OF HOPPING CHANNELS (30 MHZ SPAN, FIRST SEGMENT)



NUMBER OF HOPPING CHANNELS (30 MHZ SPAN, SECOND SEGMENT)



NUMBER OF HOPPING CHANNELS (30 MHz SPAN, THIRD SEGMENT)



8.4. AVERAGE TIME OF OCCUPANCY

LIMIT

FCC §15.247 (a) (1) (iii)

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

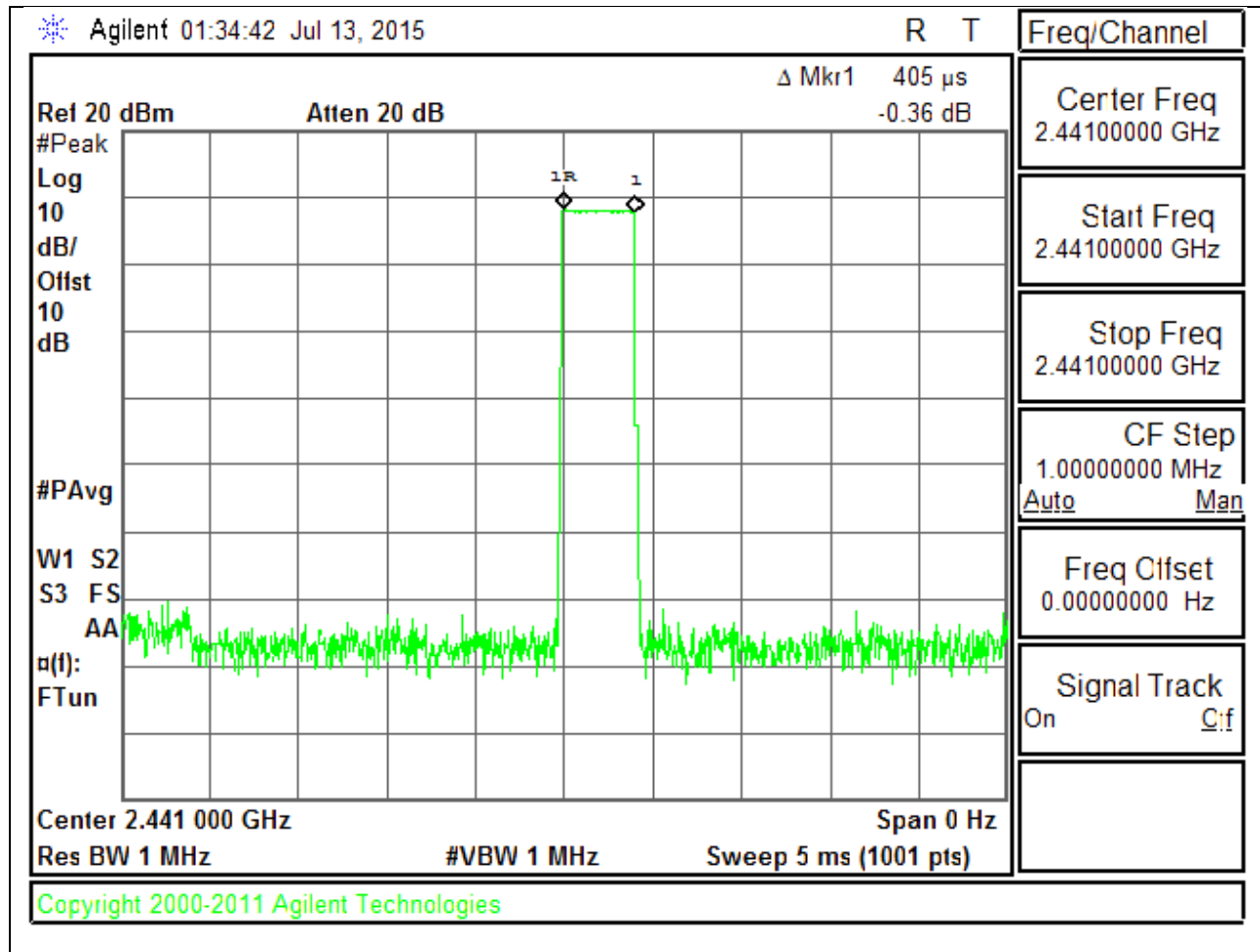
The average time of occupancy in the specified 31.6 second period (79 channels * 0.4 s) is equal to $10 * (\text{\# of pulses in 3.16 s}) * \text{pulse width}$.

For AFH mode, the average time of occupancy in the specified 8 second period (20 channels * 0.4 seconds) is equal to $10 * (\text{\# of pulses in 0.8 s}) * \text{pulse width}$.

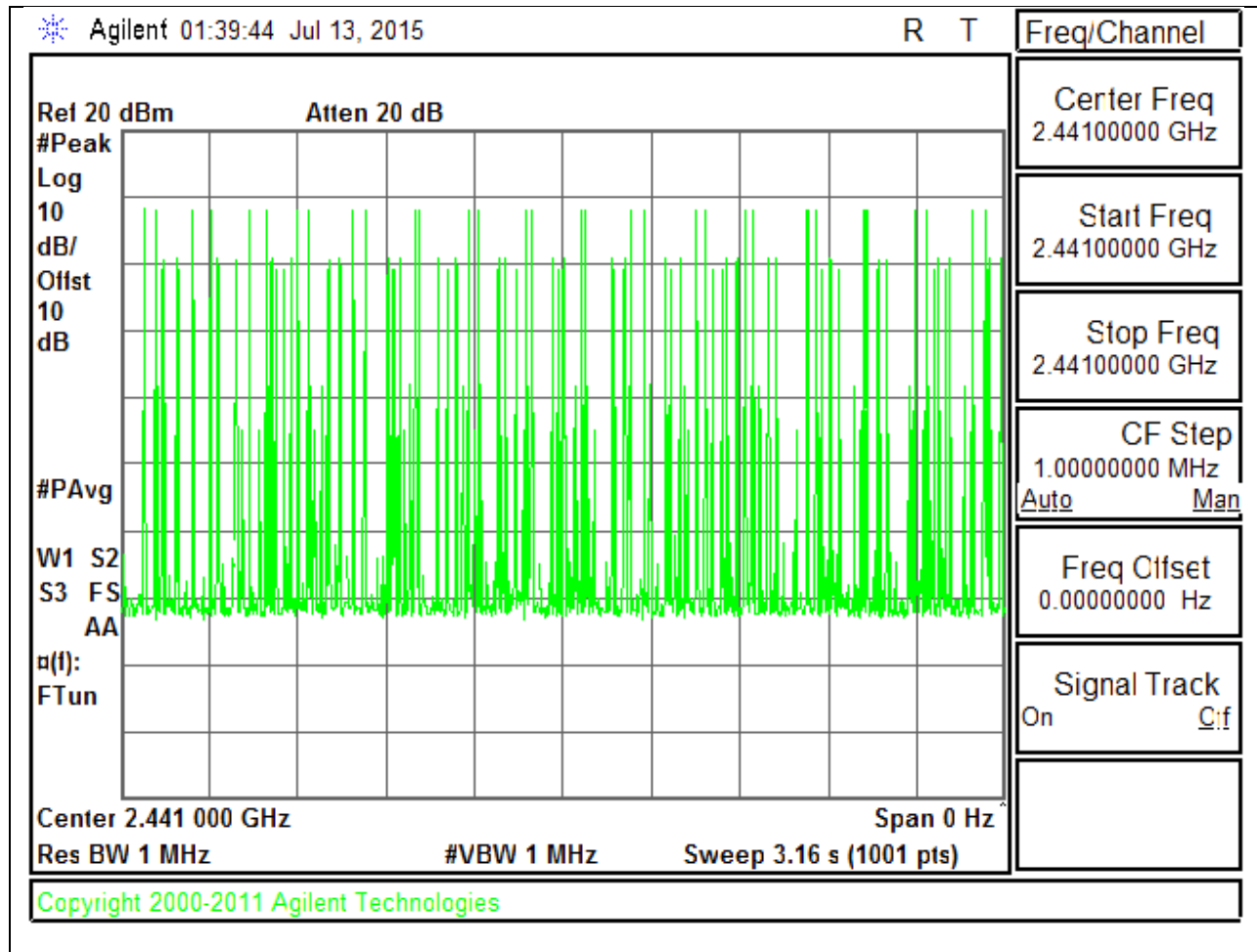
RESULTS

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	0.405	31	0.12555	0.4	-0.27445
DH3	1.657	15	0.24855	0.4	-0.15145
DH5	2.91	11	0.3201	0.4	-0.0799
DH Packet	Pulse Width (msec)	Number of Pulses in 0.8 seconds	Average Time of Occupancy (sec)	Limit (sec)	Margin (sec)
GFSK AFH Mode					
DH1	0.405	7.75	0.0313875	0.4	-0.36861
DH3	1.657	3.75	0.0621375	0.4	-0.33786
DH5	2.91	2.75	0.080025	0.4	-0.31998

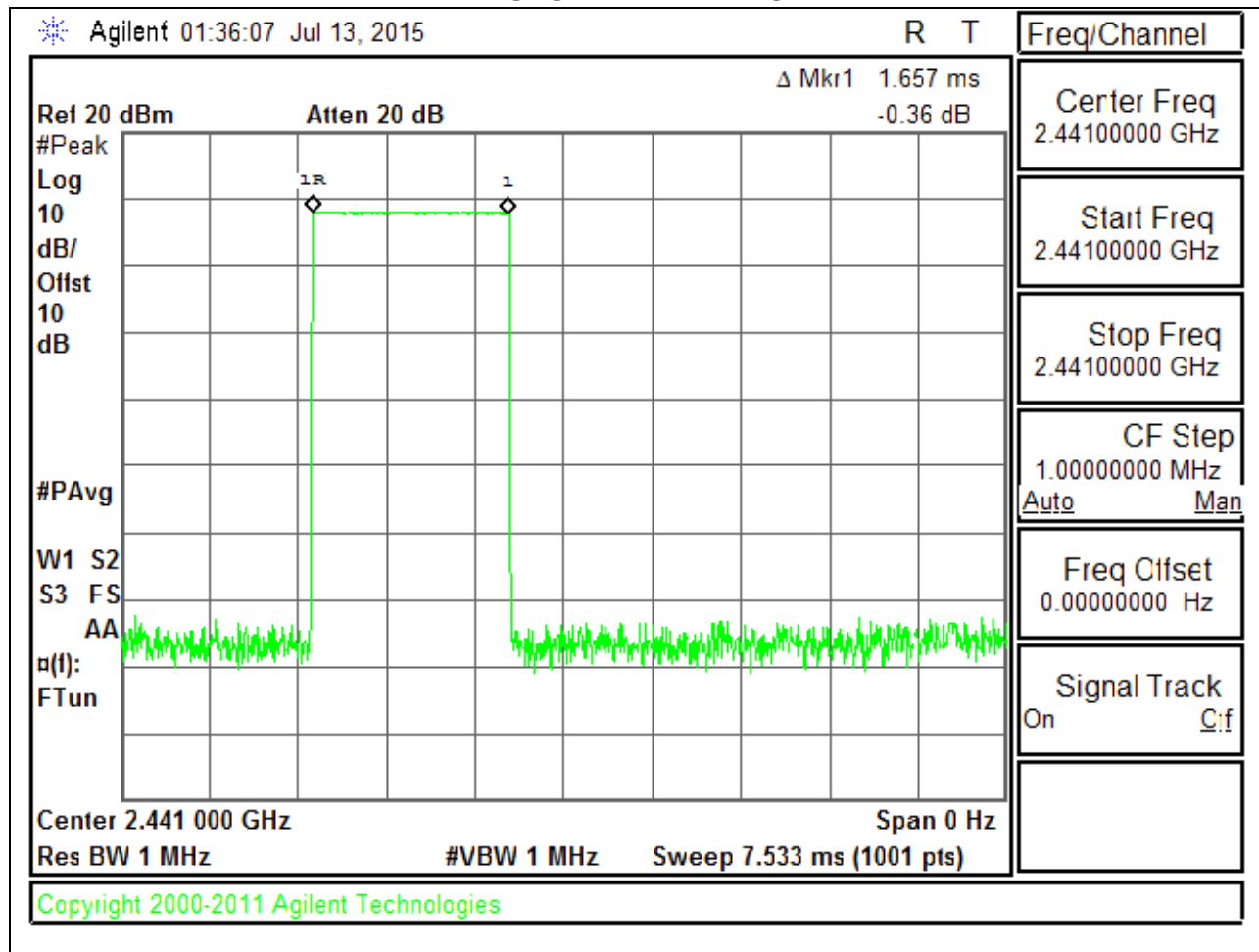
PULSE WIDTH - DH1



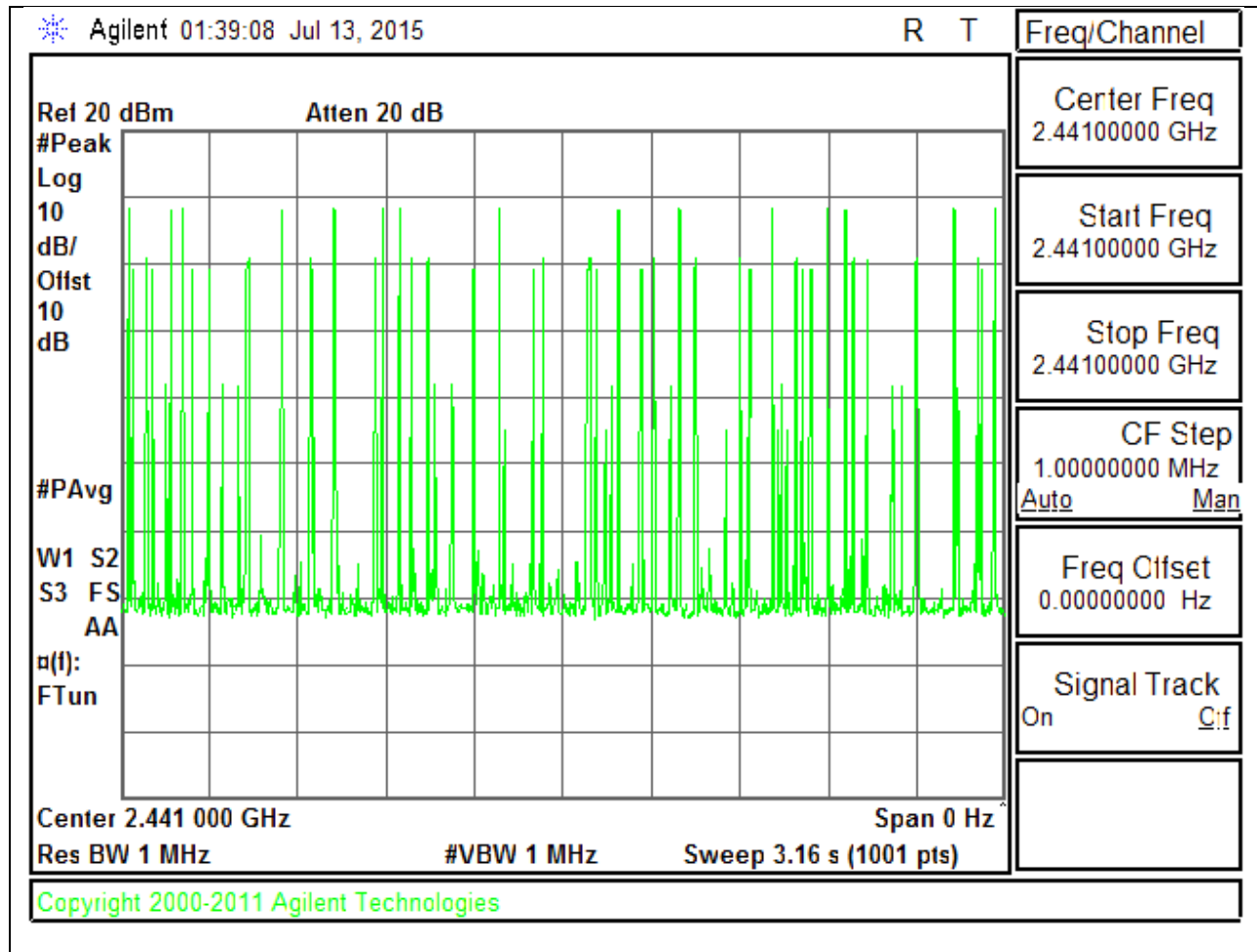
NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD - DH1



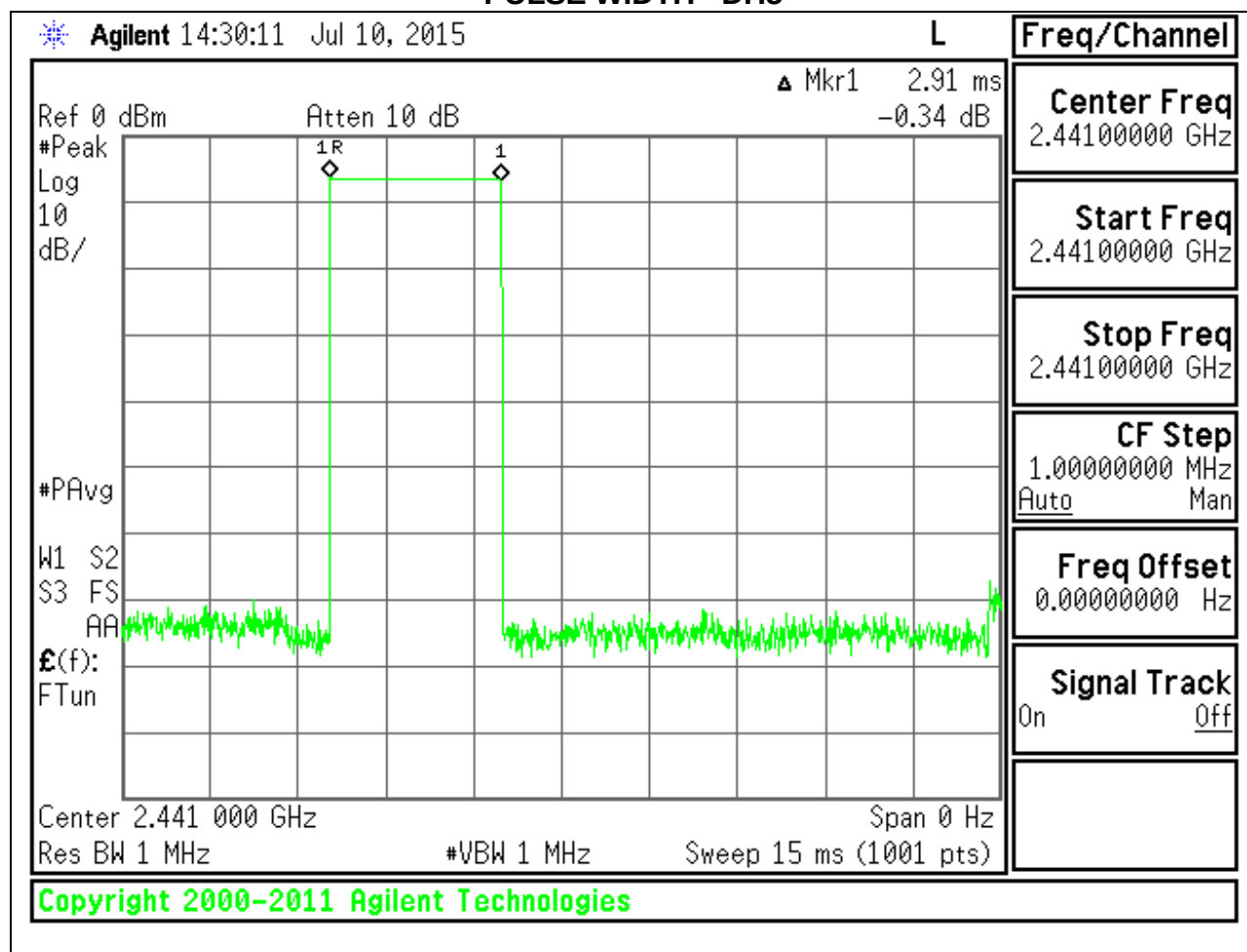
PULSE WIDTH - DH3



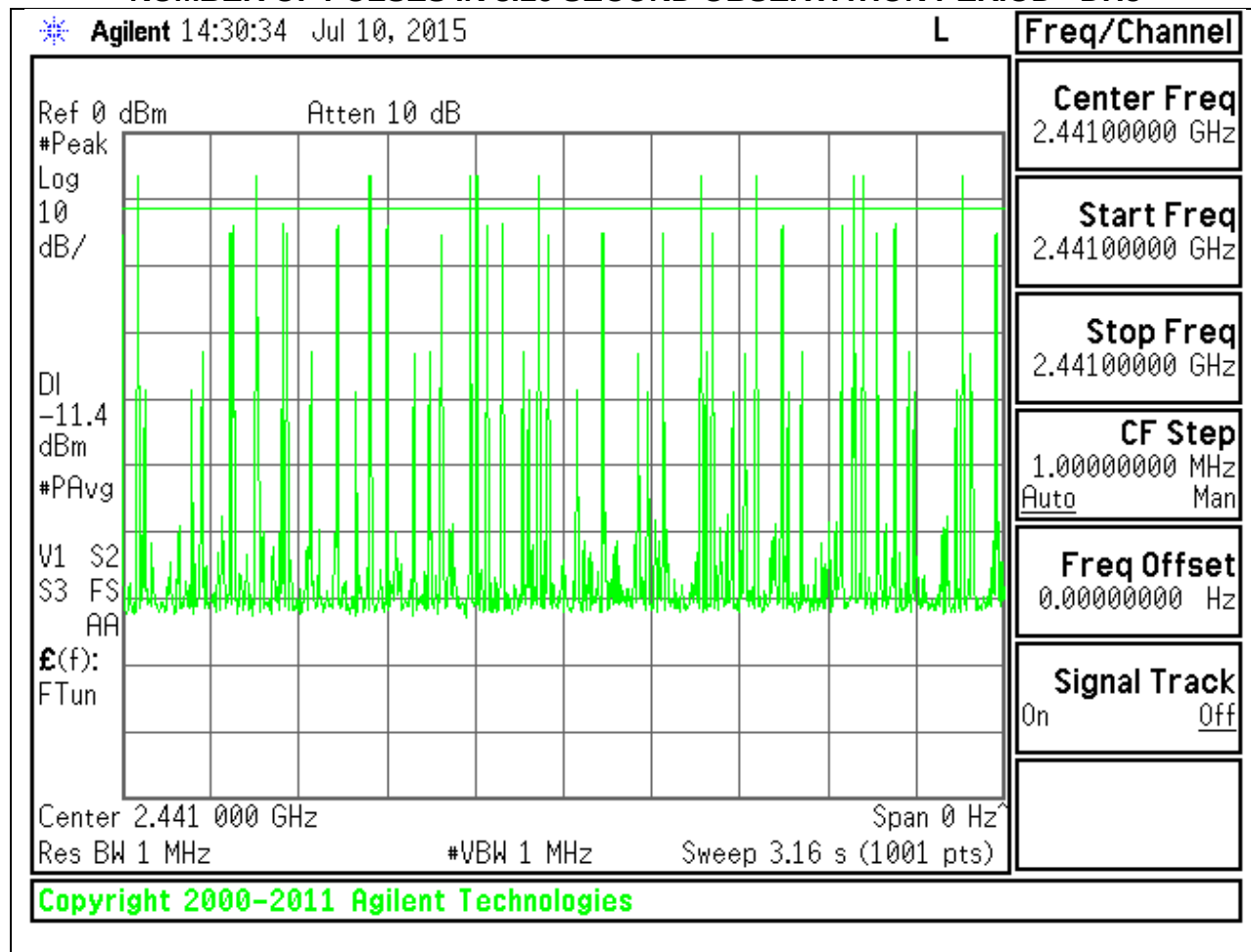
NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD - DH3



PULSE WIDTH - DH5



NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD - DH5



8.5. OUTPUT POWER

LIMIT

§15.247 (b) (1)

The maximum antenna gain is less than 6 dBi, therefore the limit is 21 dBm.

TEST PROCEDURE

DA 00-705: 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

8.5.1. BASIC DATA RATE GFSK MODULATION

Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Margin (dB)
Low	2402	8.62	21	-12.38
Middle	2441	8.53	21	-12.47
High	2480	9.24	21	-11.76
Worst		9.24		-11.76

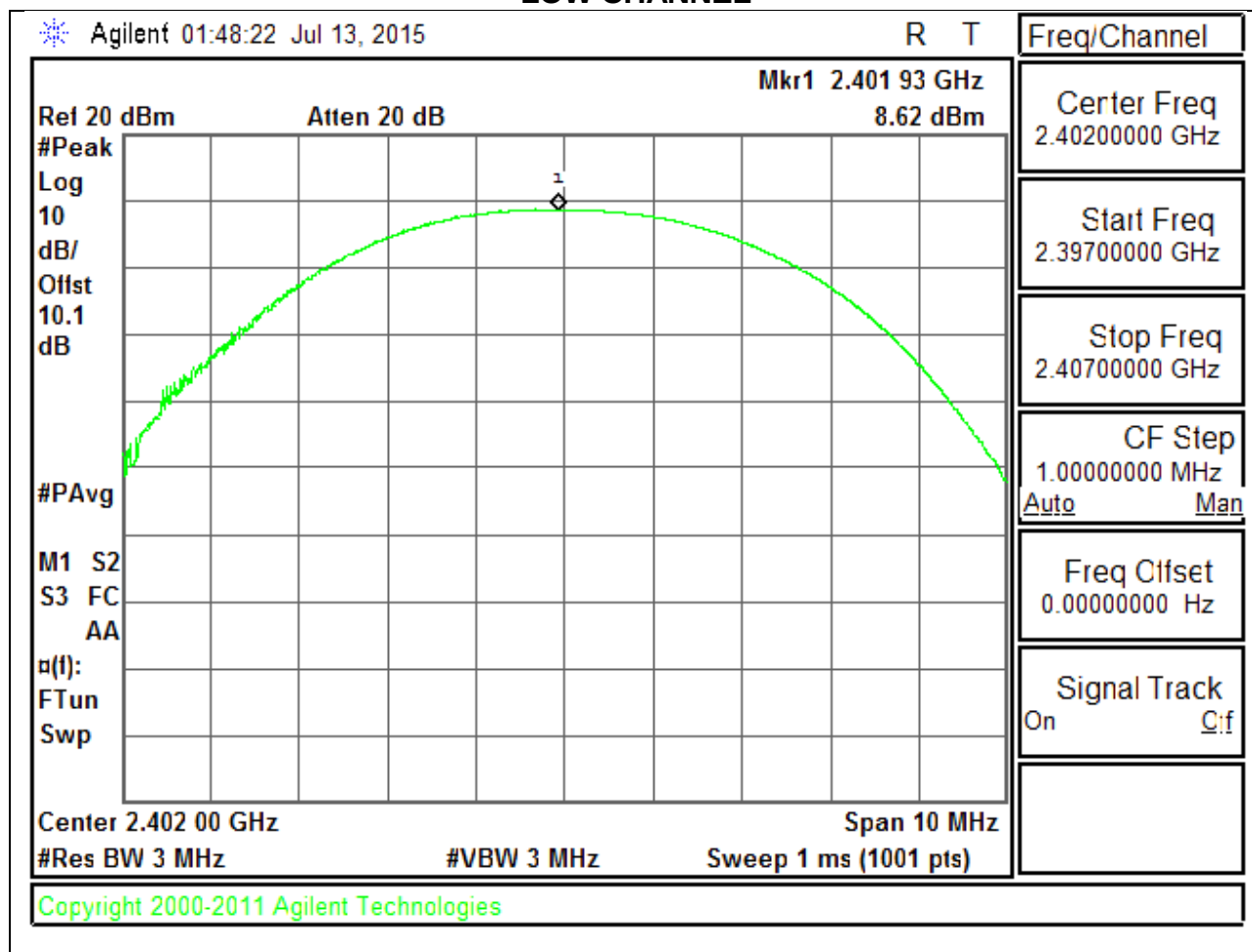
8.5.2. ENHANCED DATA RATE 8PSK MODULATION

Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Margin (dB)
Low	2402	10.46	21	-10.54
Middle	2441	10.32	21	-10.68
High	2480	11.06	21	-9.94
Worst		11.06		-9.94

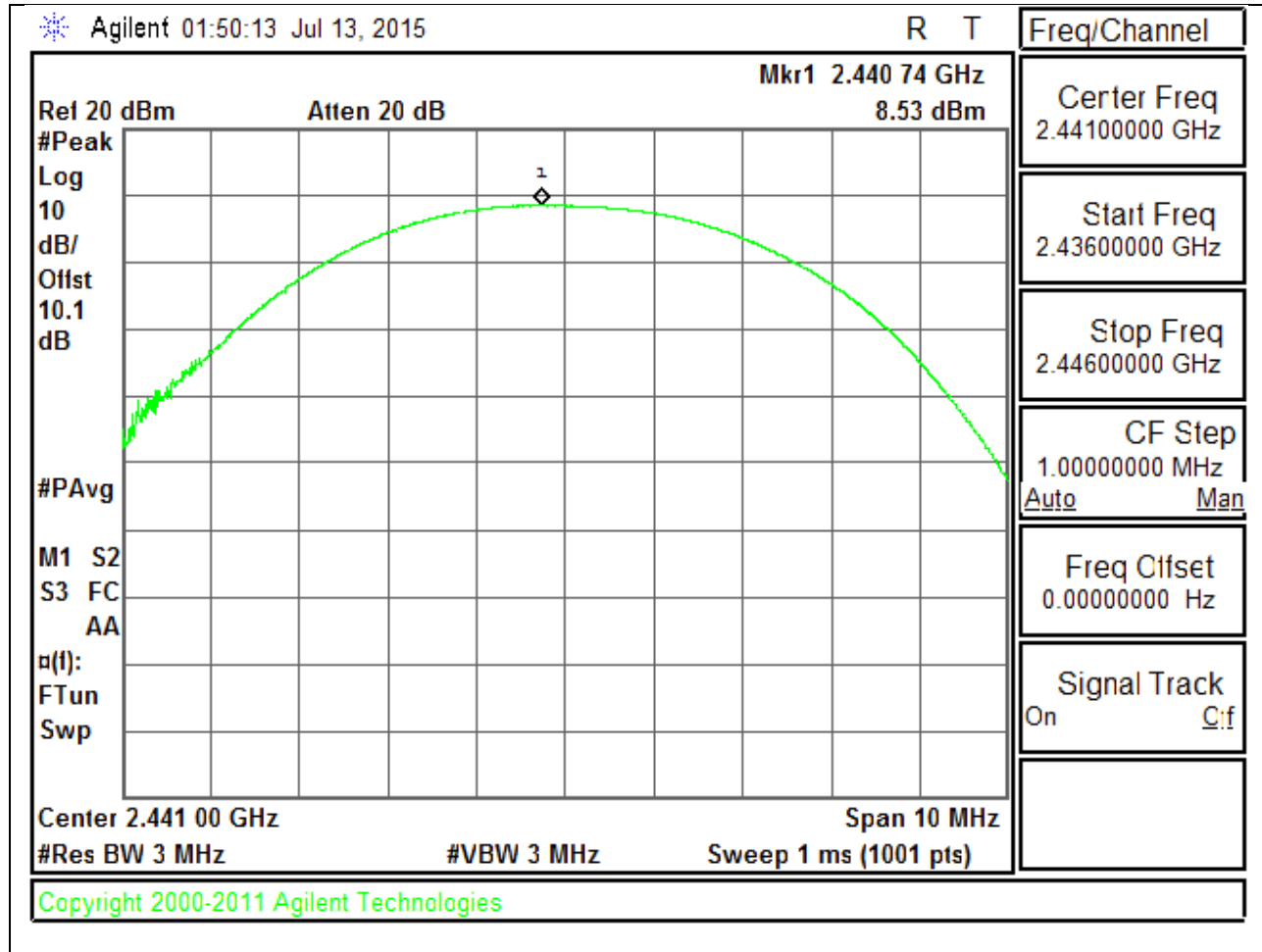
8.5.3. OUTPUT POWER PLOTS

GFSK OUTPUT POWER

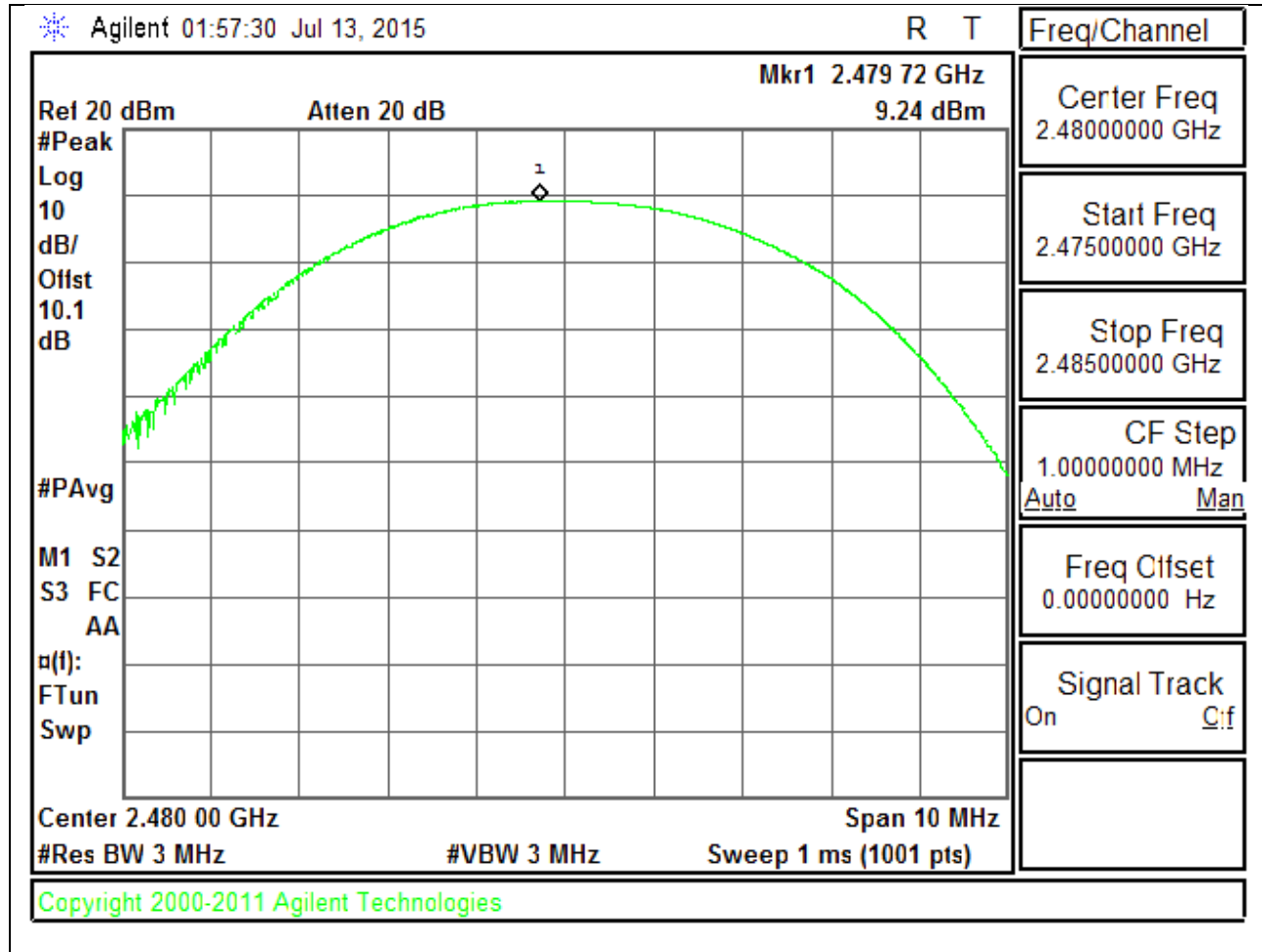
LOW CHANNEL



MID CHANNEL

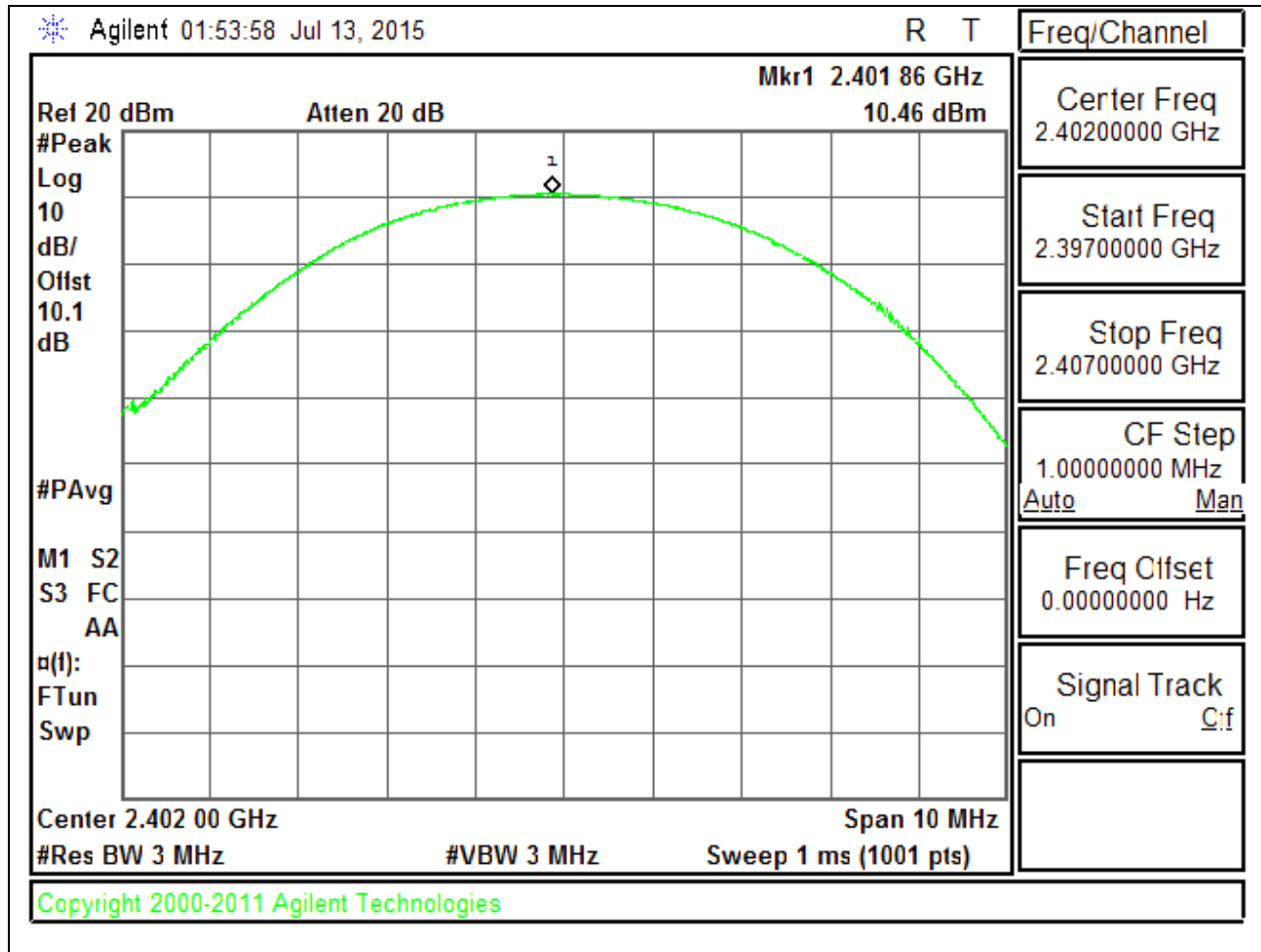


HIGH CHANNEL

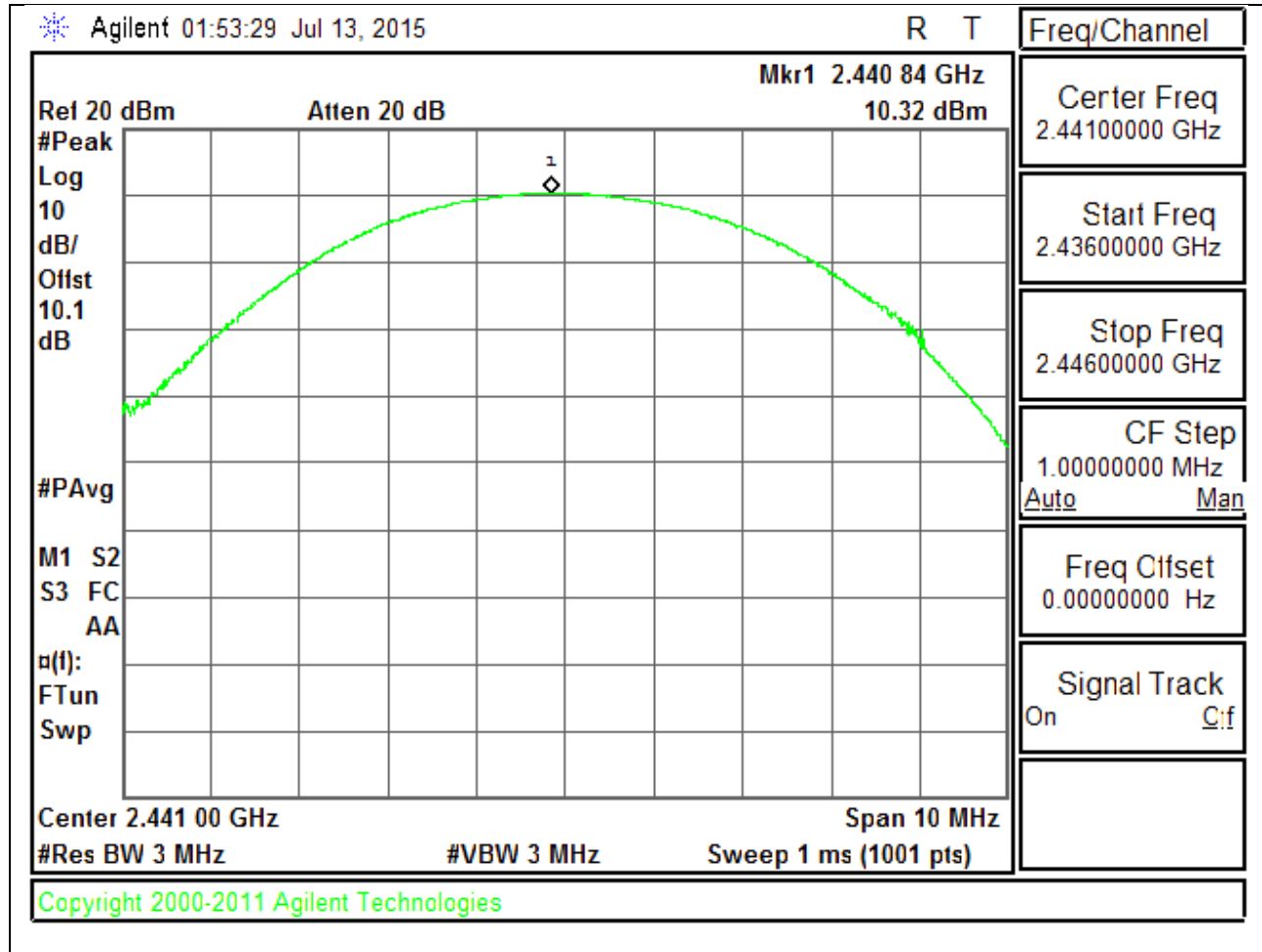


8PSK OUTPUT POWER

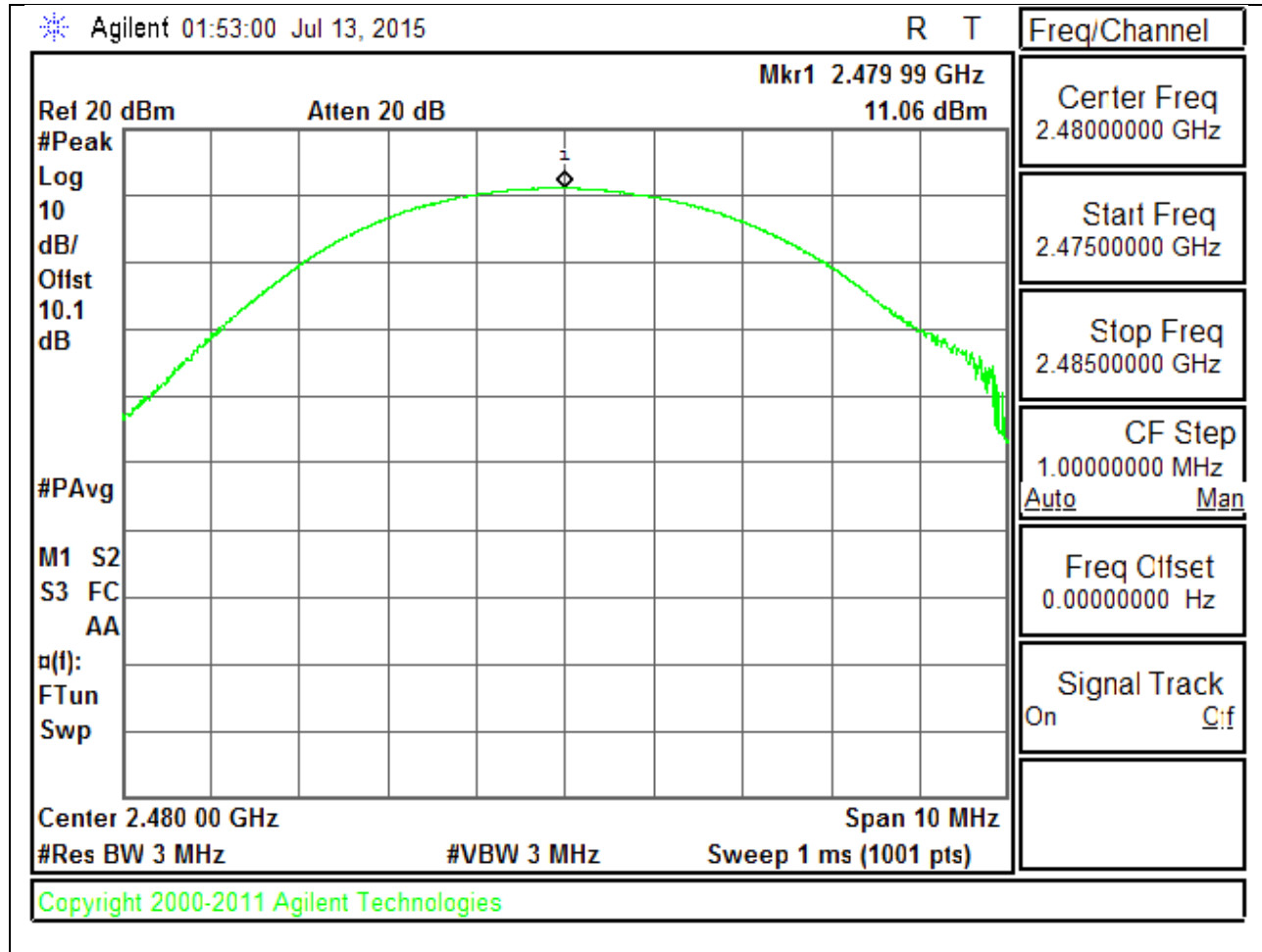
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL



8.6. AVERAGE POWER

LIMIT

None; for reporting purposes only.

TEST PROCEDURE

DA 00-705: 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.

8.6.1. BASIC DATA RATE GFSK MODULATION

Channel	Frequency (MHz)	Average Power (dBm)
Low	2402	8.5
Middle	2441	8.5
High	2480	9.1
Worst		9.1

8.6.2. DATA RATE PI/4-DQPSK MODULATION

Channel	Frequency (MHz)	Average Power (dBm)
Low	2402	7.9
Middle	2441	8.5
High	2480	9
Worst		9

8.6.3. ENHANCED DATA RATE 8PSK MODULATION

Channel	Frequency (MHz)	Average Power (dBm)
Low	2402	7.9
Middle	2441	8.5
High	2480	9.1
Worst		9.1

8.7. CONDUCTED SPURIOUS EMISSIONS

LIMITS

FCC §15.247 (d)

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.

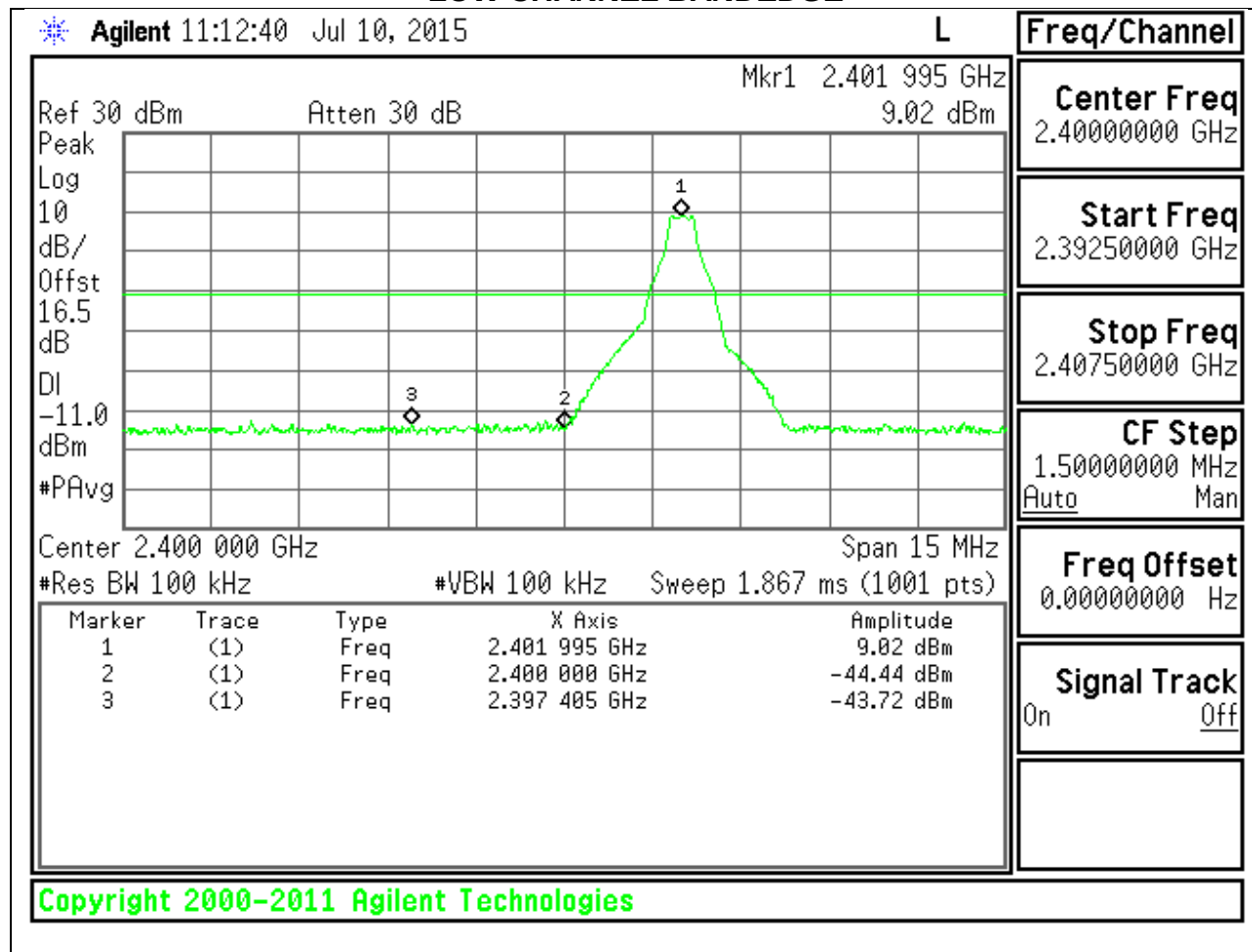
The bandedges at 2.4 and 2.4835 GHz are investigated with the transmitter set to the normal hopping mode.

RESULTS

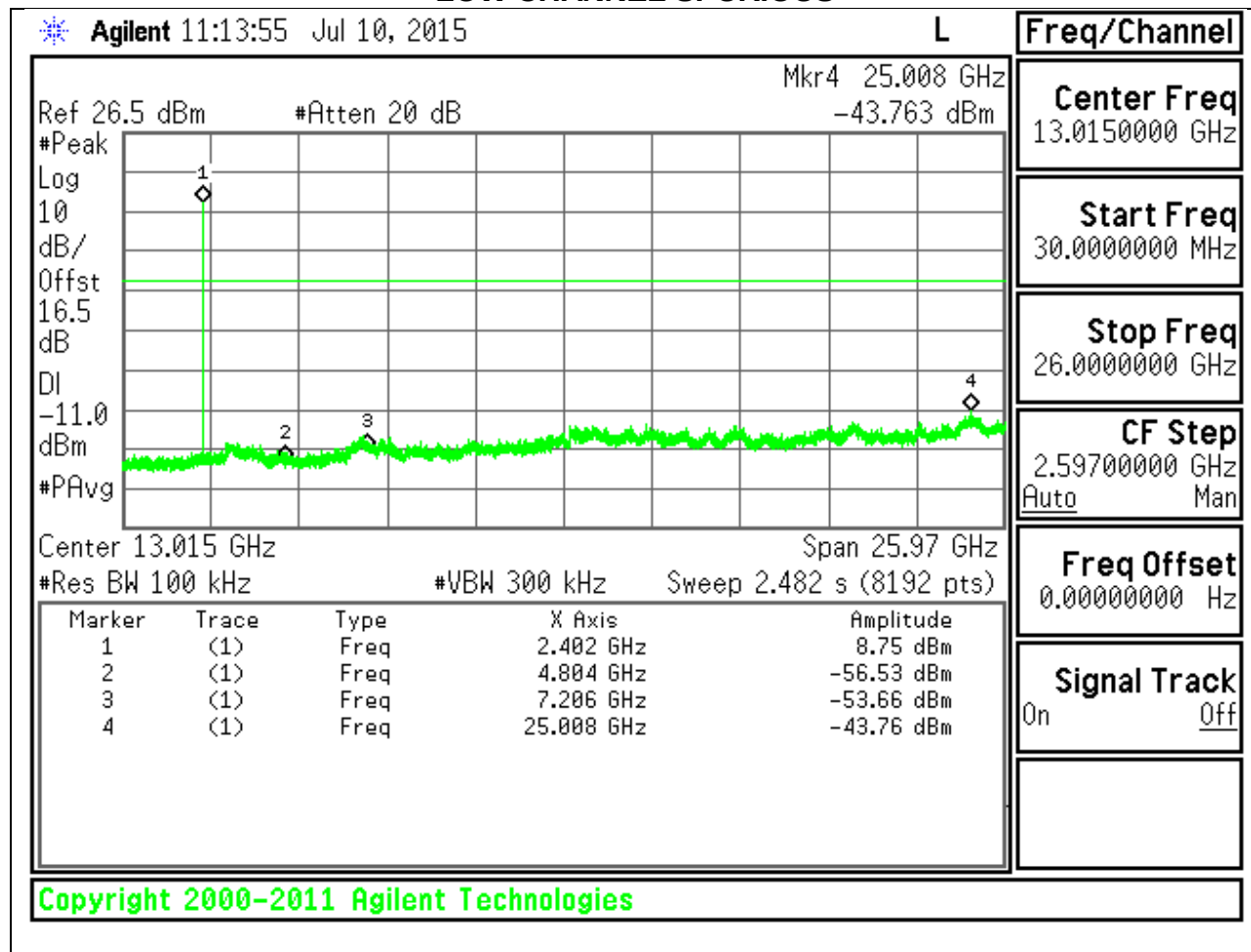
8.7.1. BASIC DATA RATE GFSK MODULATION

SPURIOUS EMISSIONS, LOW CHANNEL

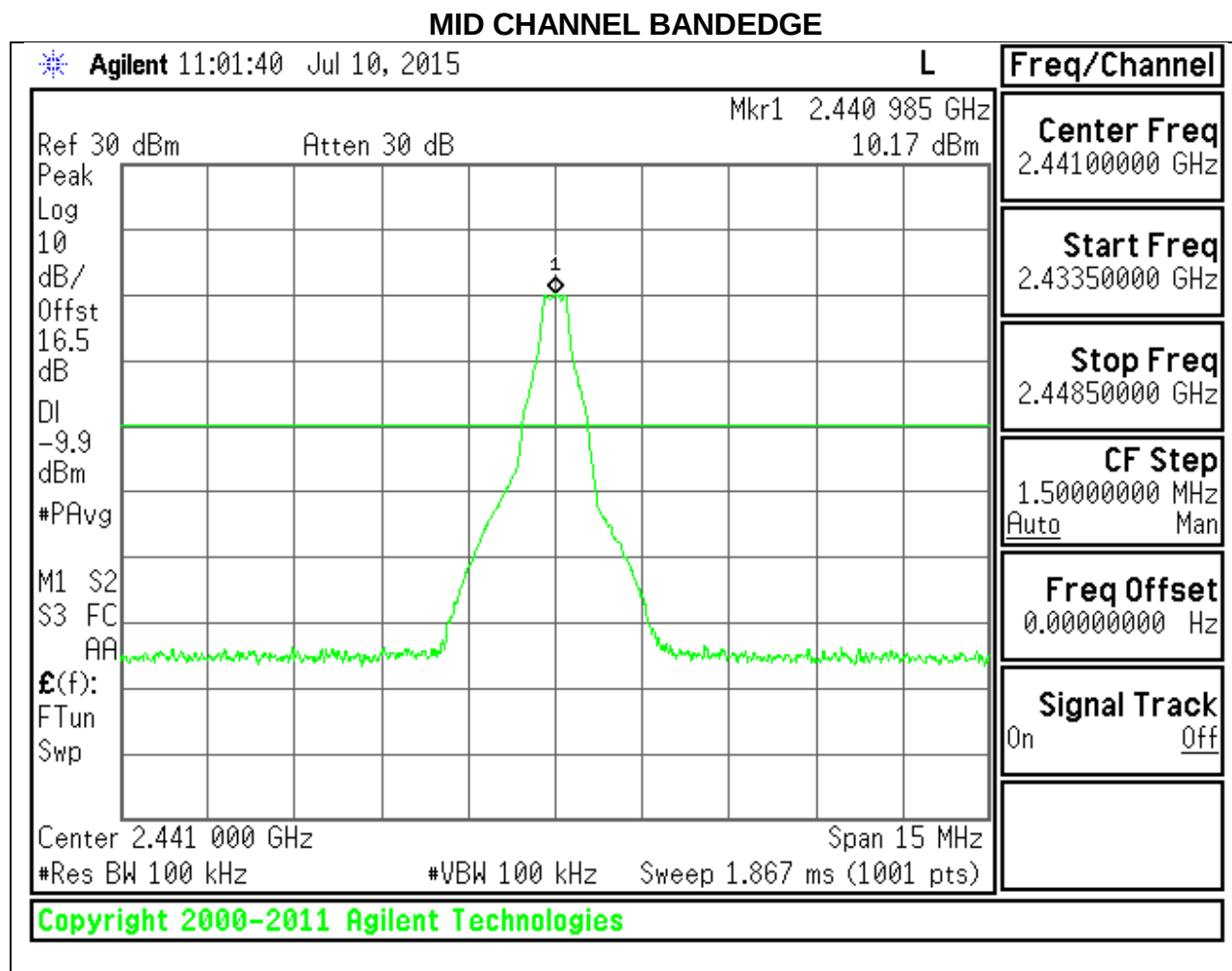
LOW CHANNEL BANDEDGE



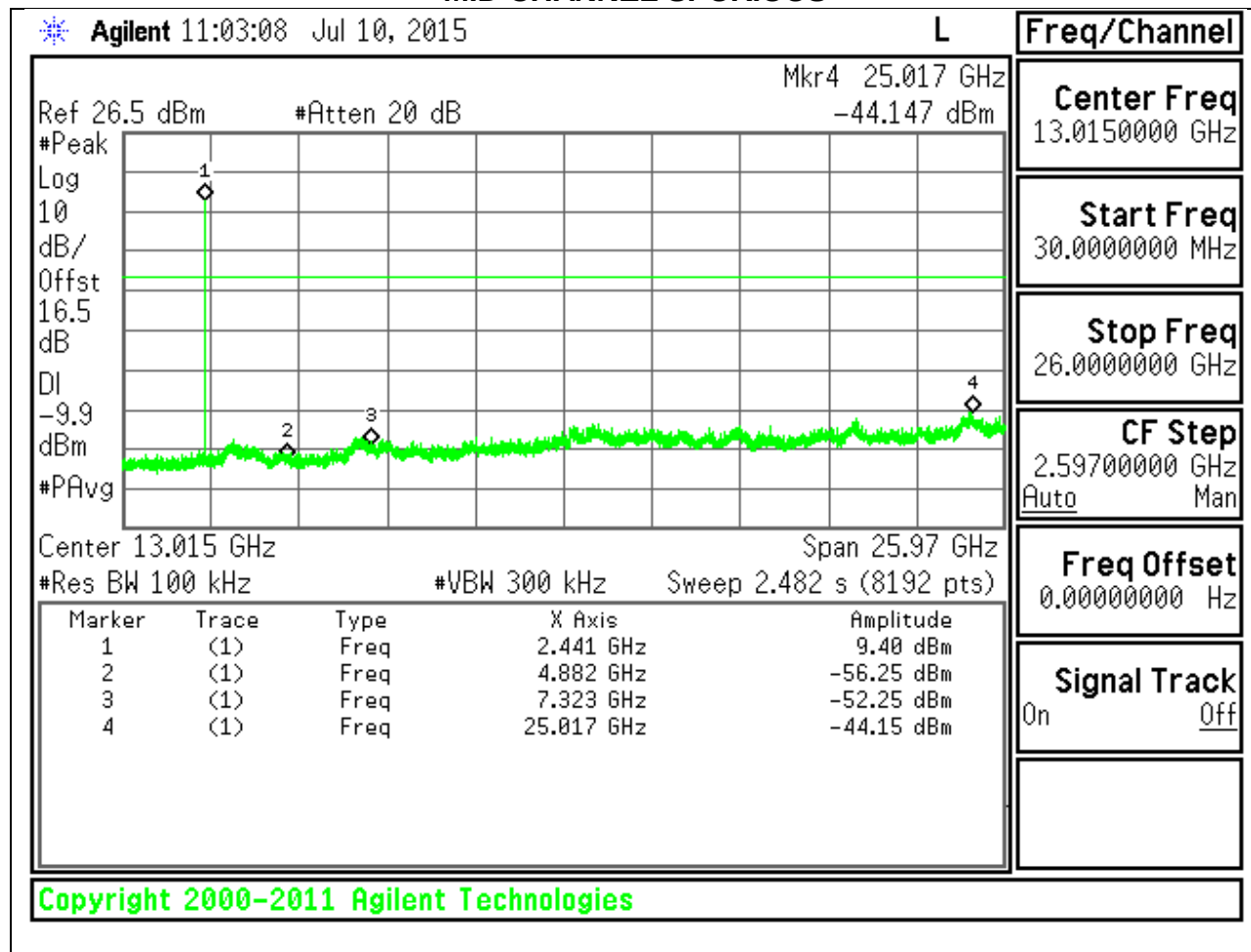
LOW CHANNEL SPURIOUS



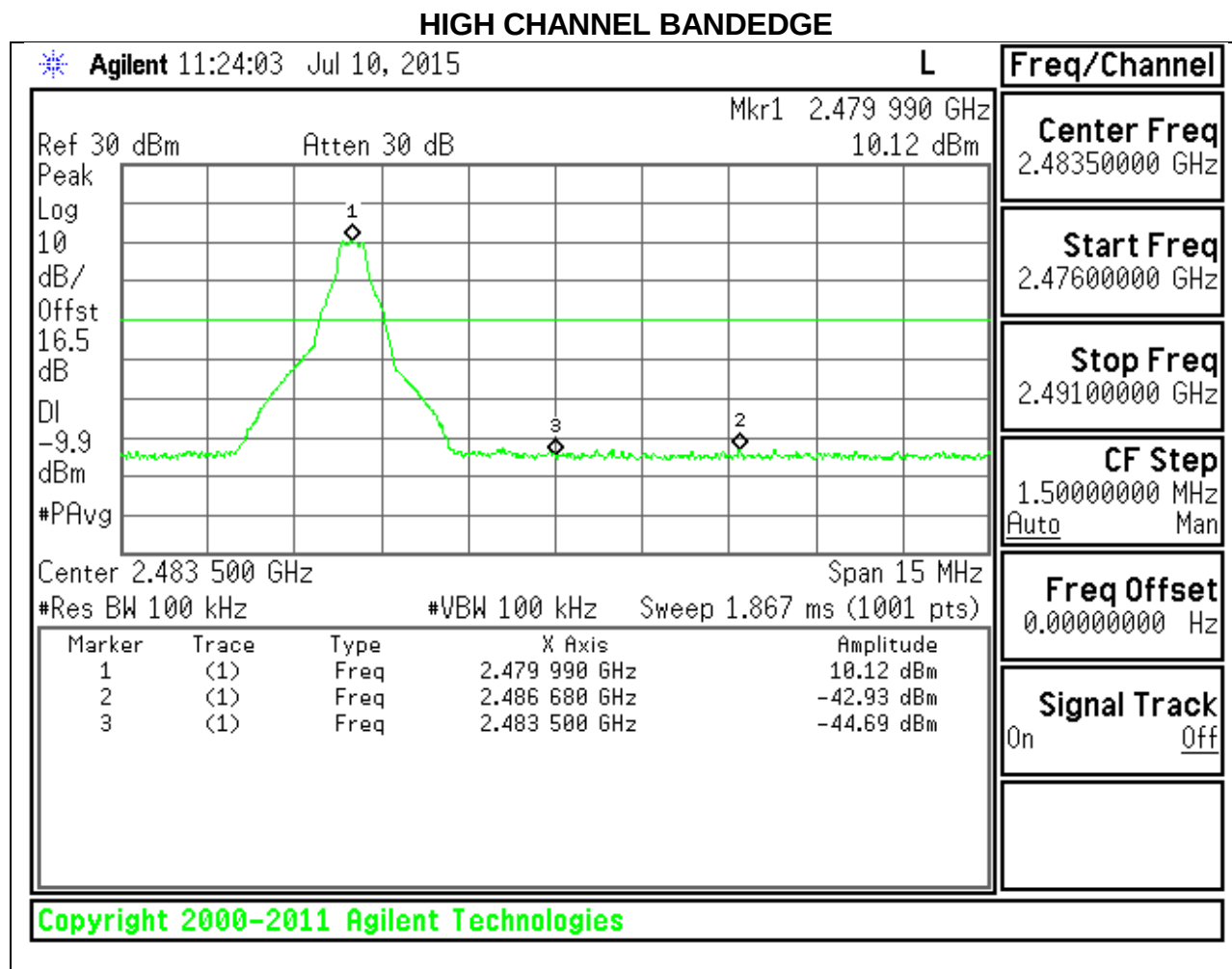
SPURIOUS EMISSIONS, MID CHANNEL



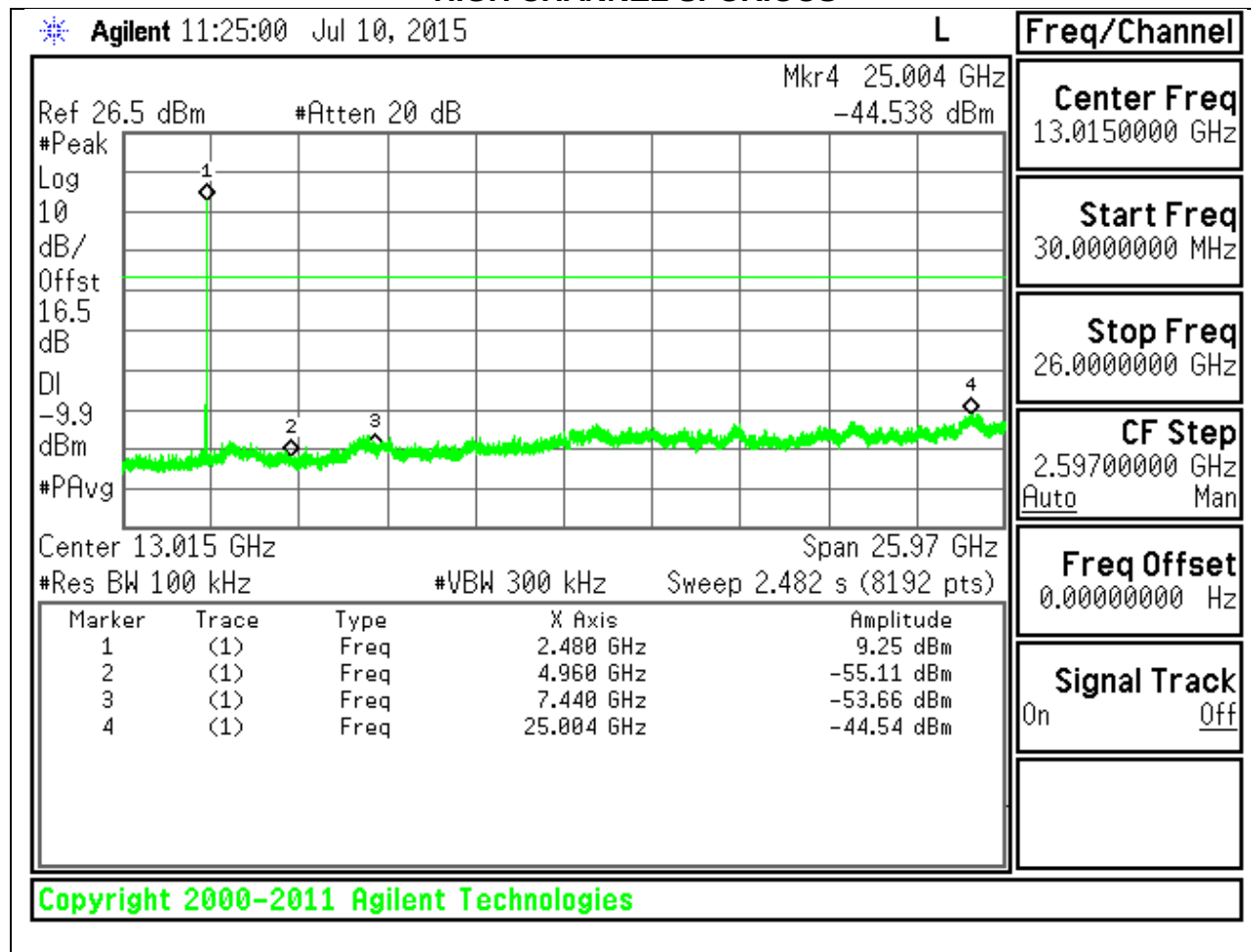
MID CHANNEL SPURIOUS



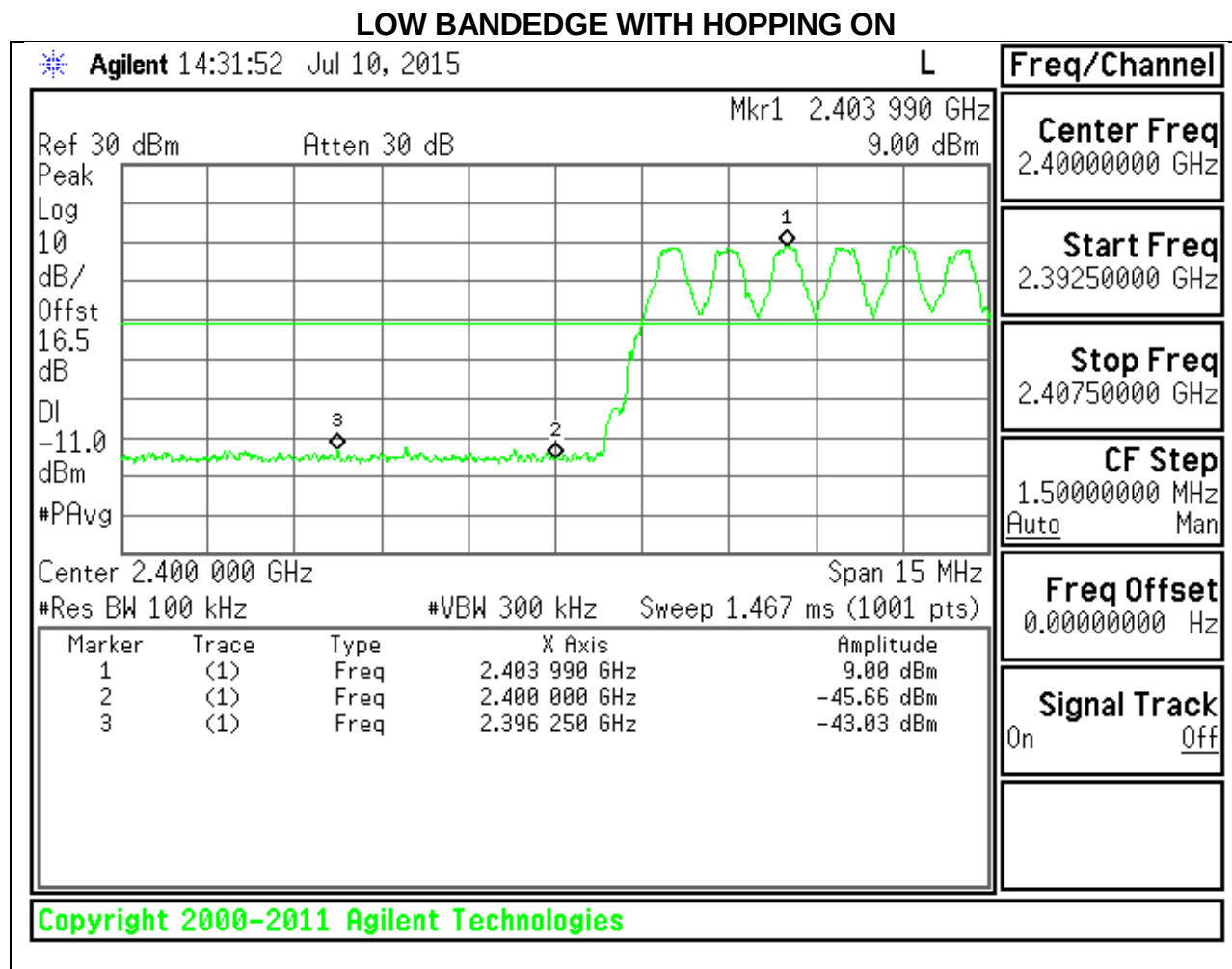
SPURIOUS EMISSIONS, HIGH CHANNEL



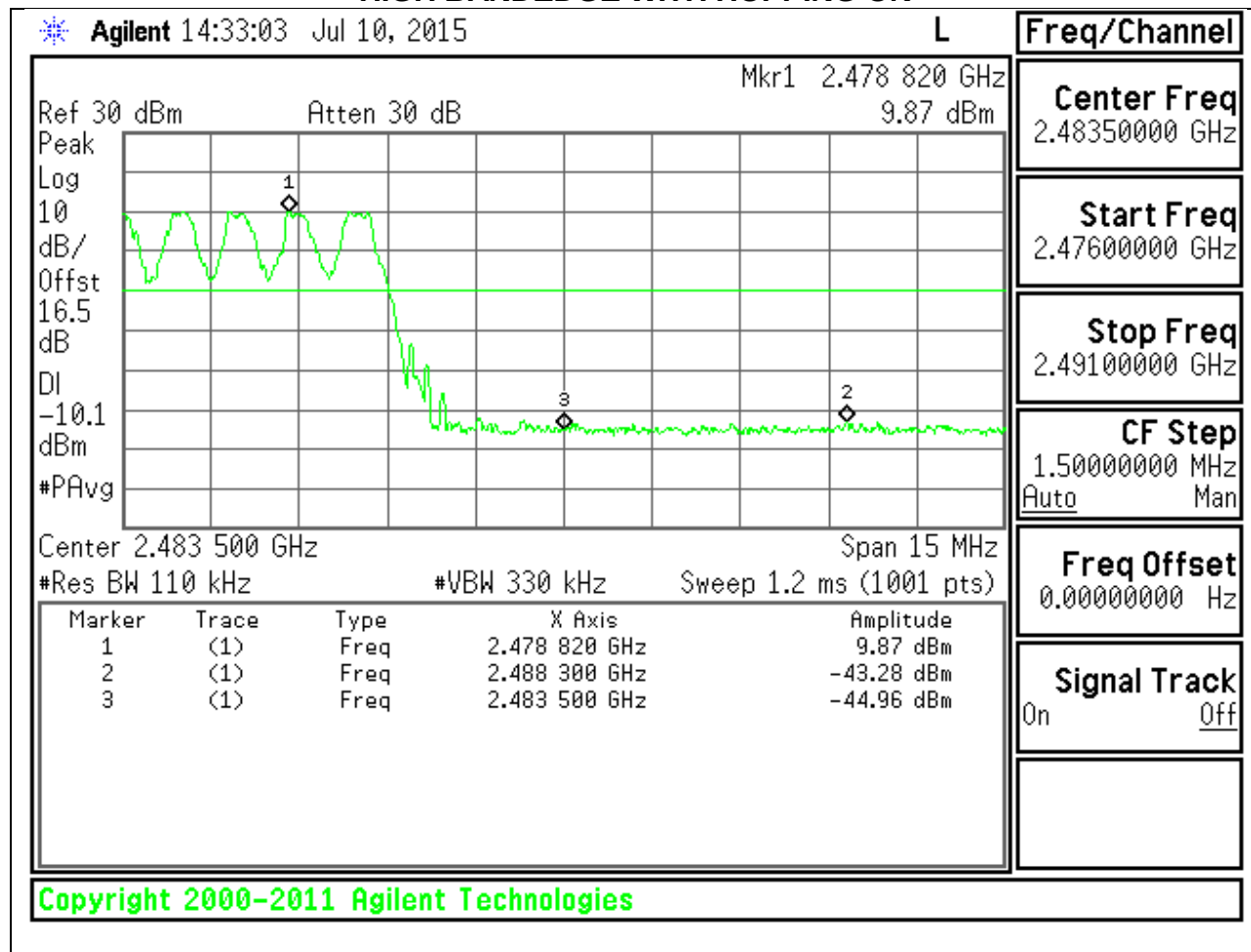
HIGH CHANNEL SPURIOUS



SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON

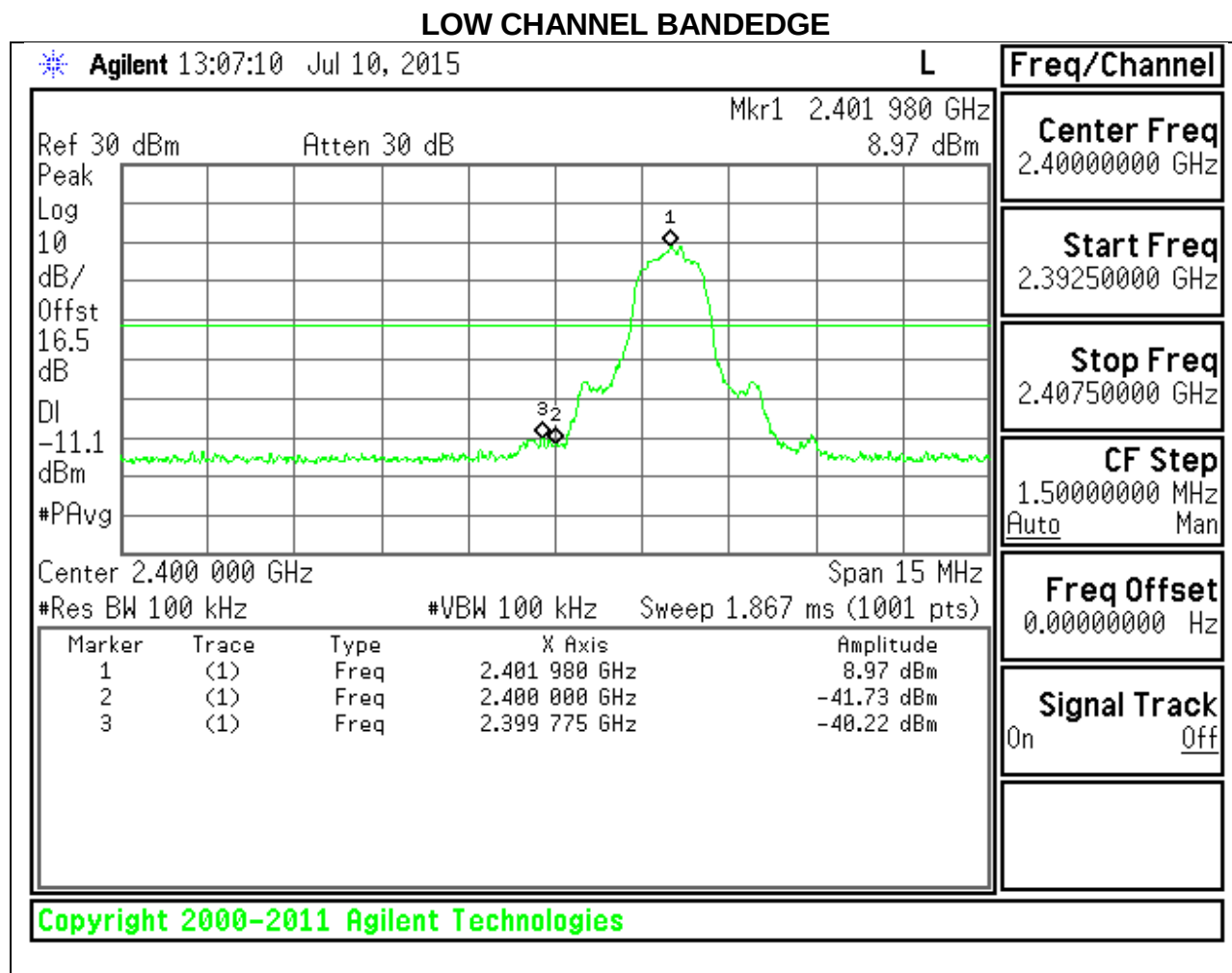


HIGH BANDEDGE WITH HOPPING ON

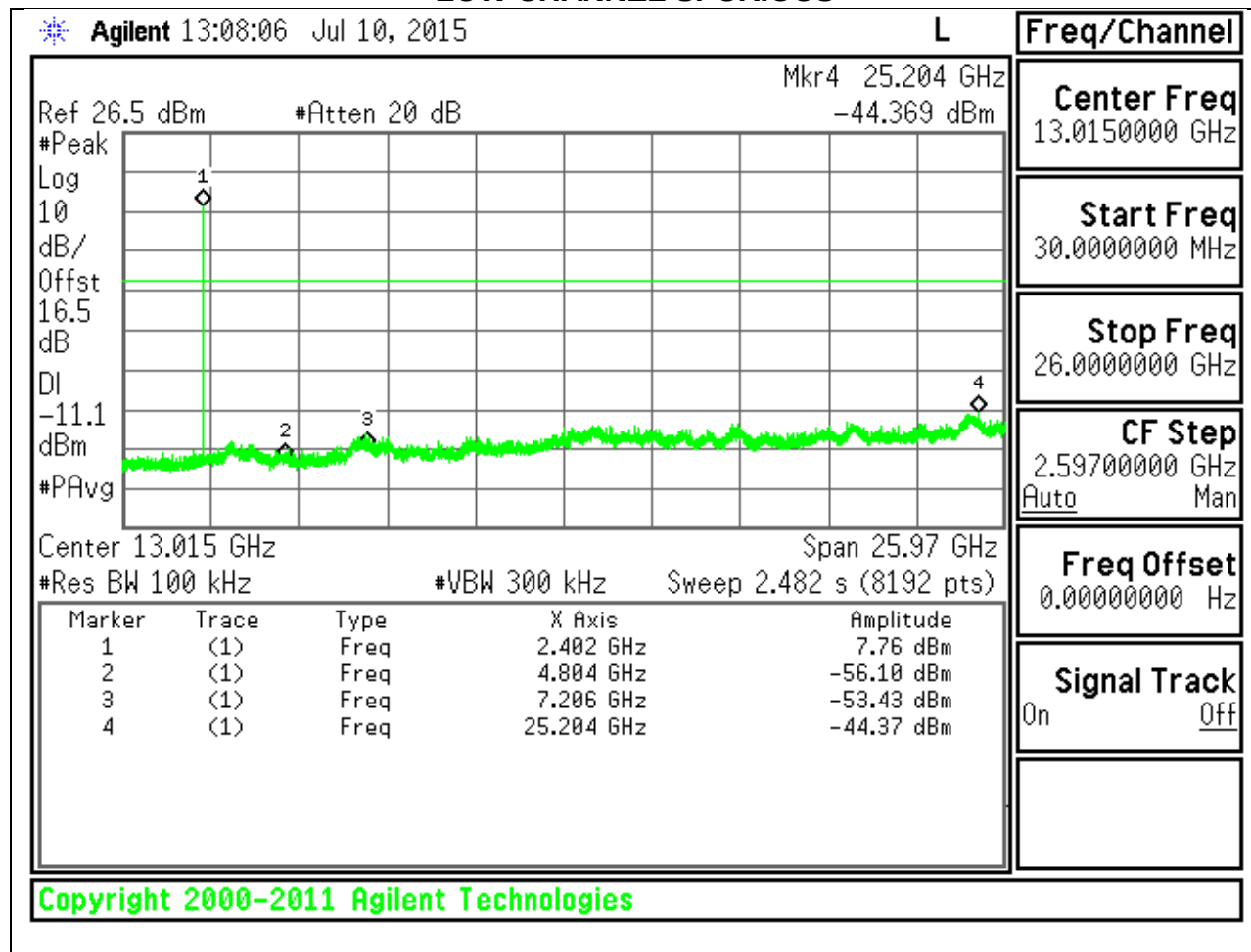


8.7.2. ENHANCED DATA RATE 8PSK MODULATION

SPURIOUS EMISSIONS, LOW CHANNEL

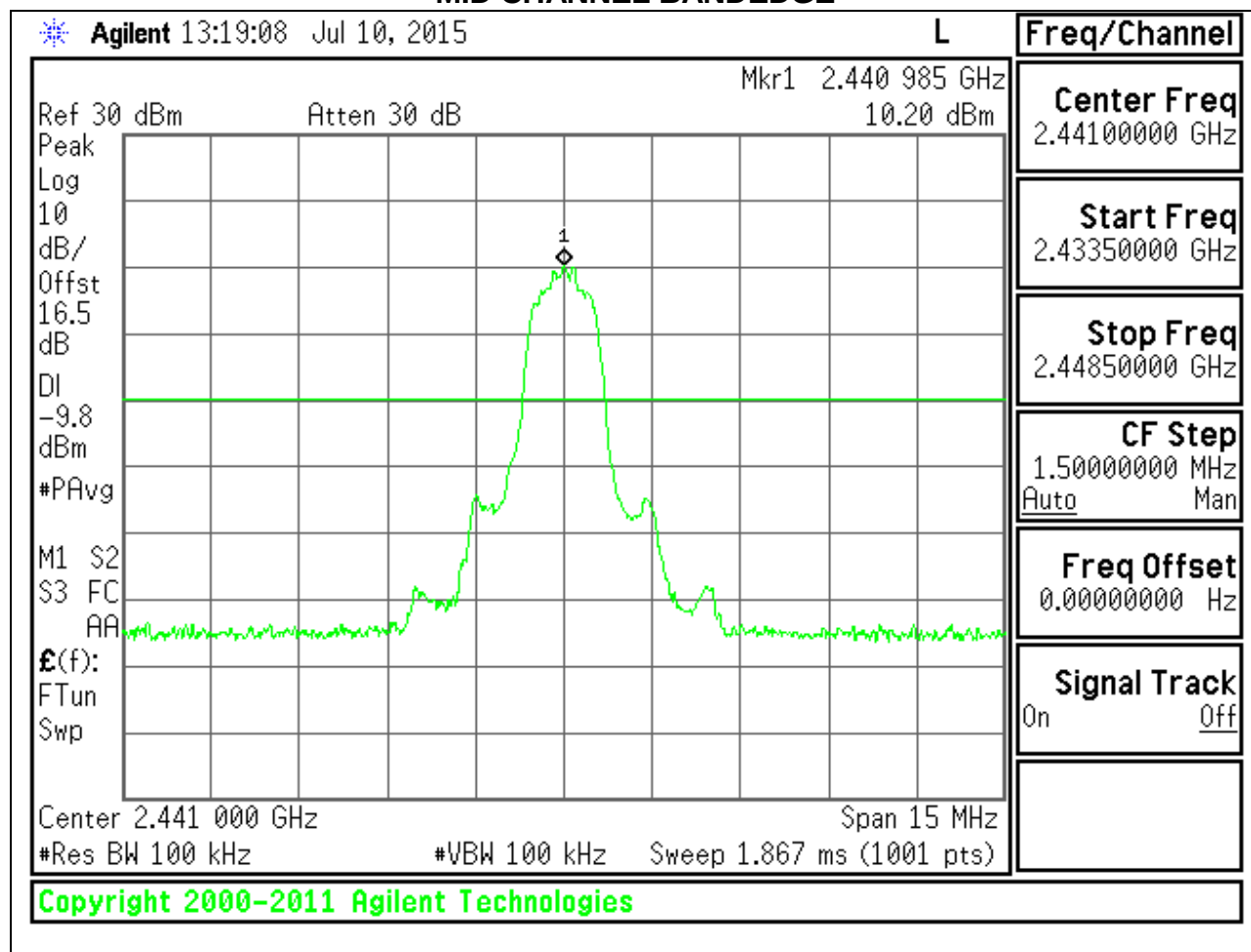


LOW CHANNEL SPURIOUS

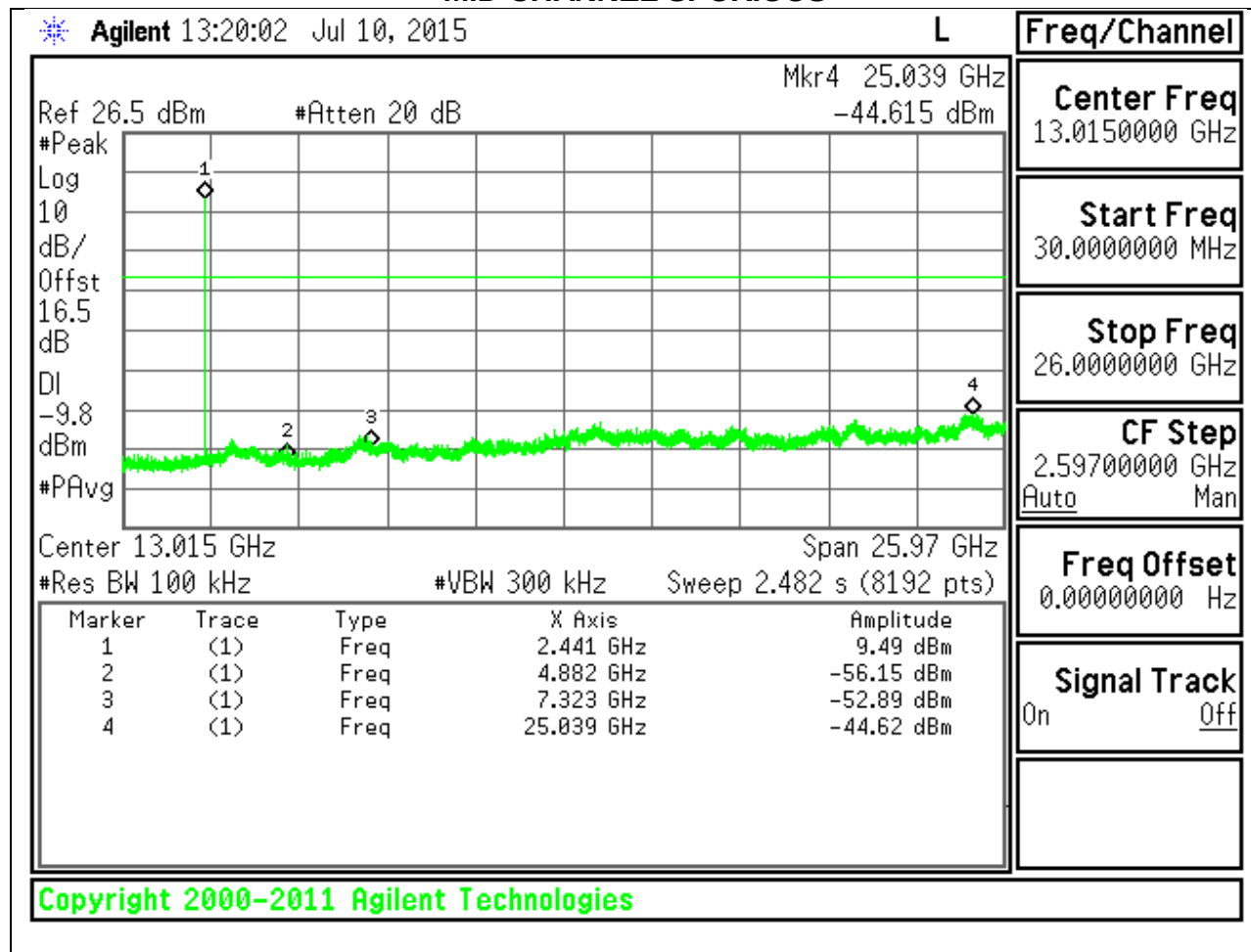


SPURIOUS EMISSIONS, MID CHANNEL

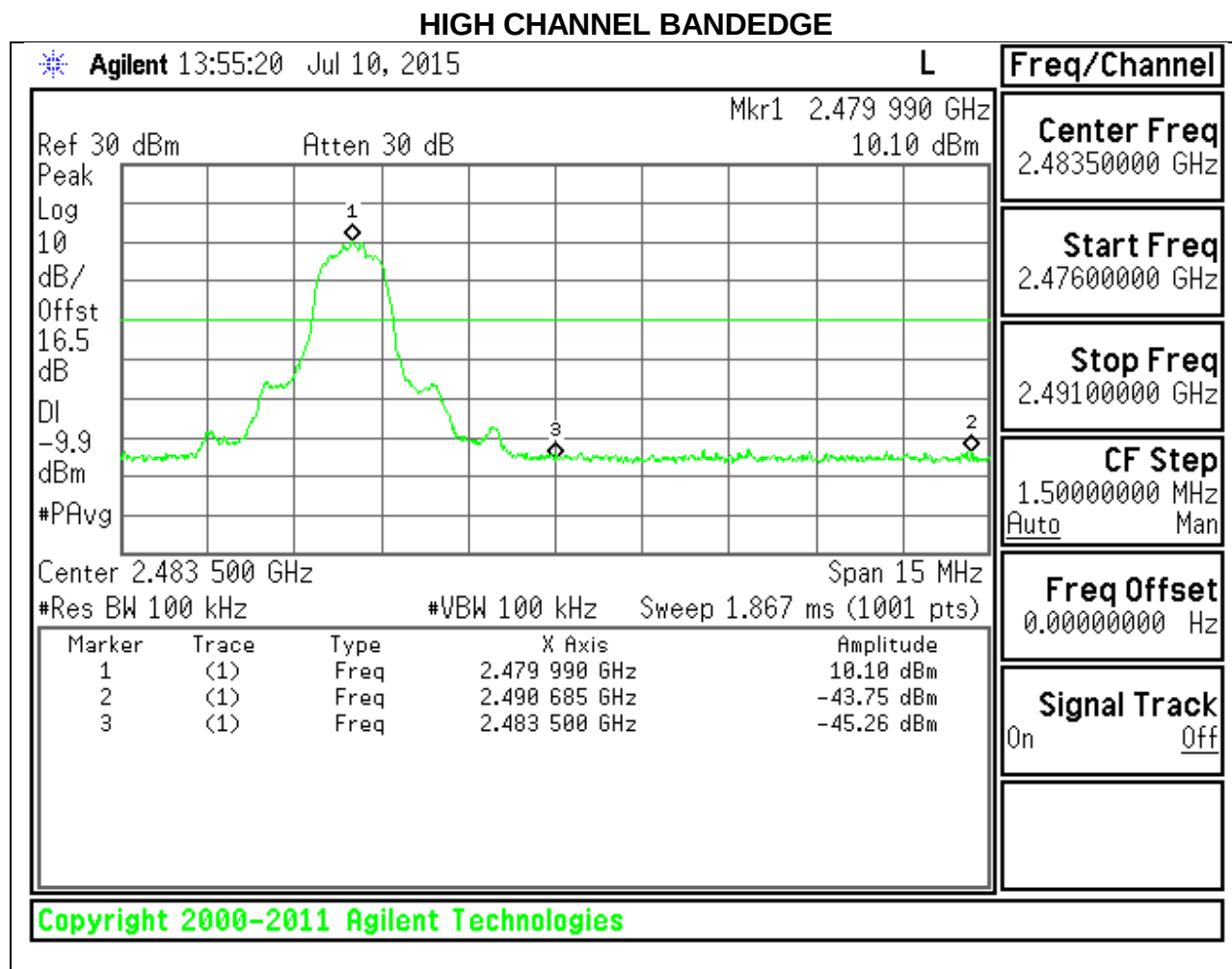
MID CHANNEL BANDEDGE



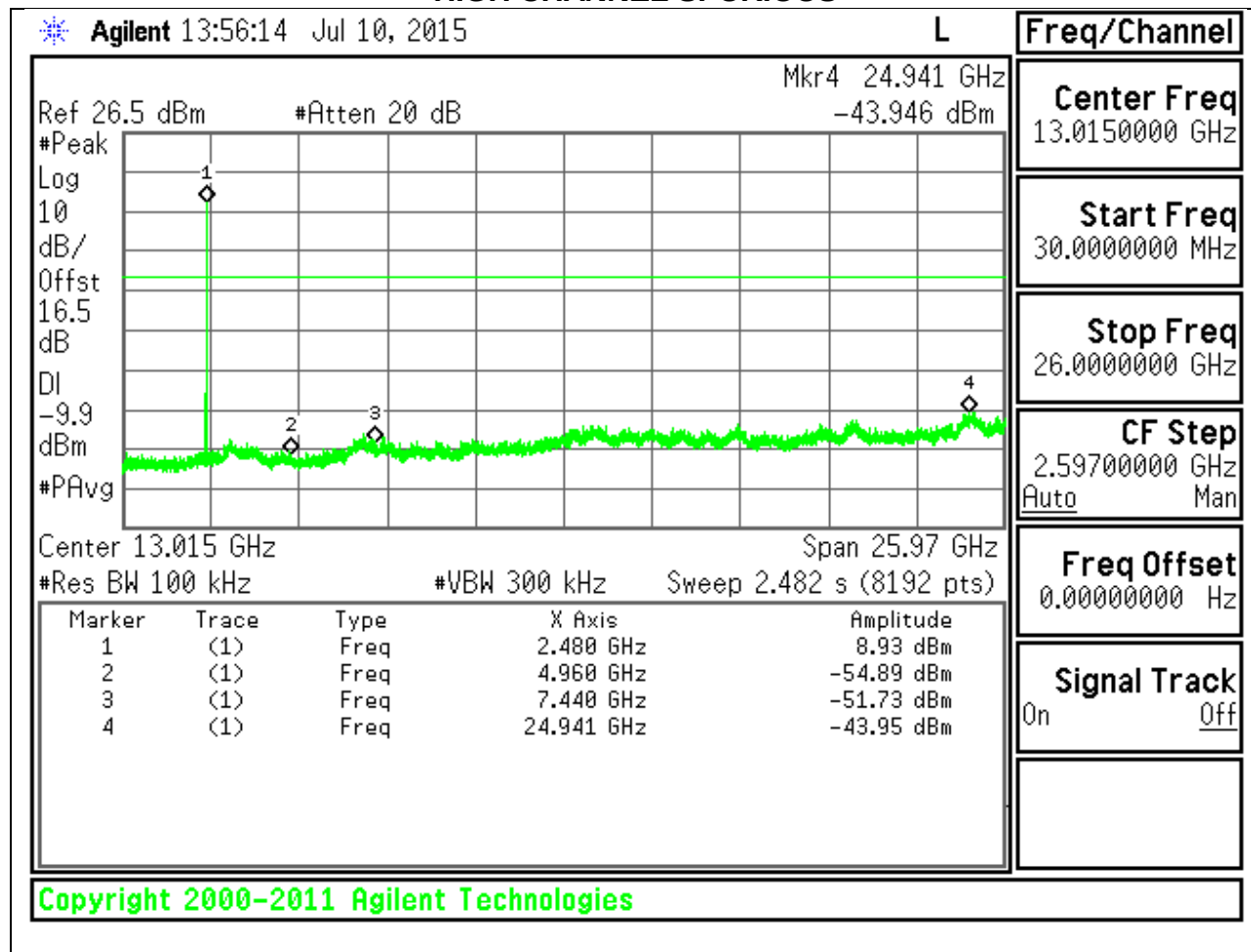
MID CHANNEL SPURIOUS



SPURIOUS EMISSIONS, HIGH CHANNEL

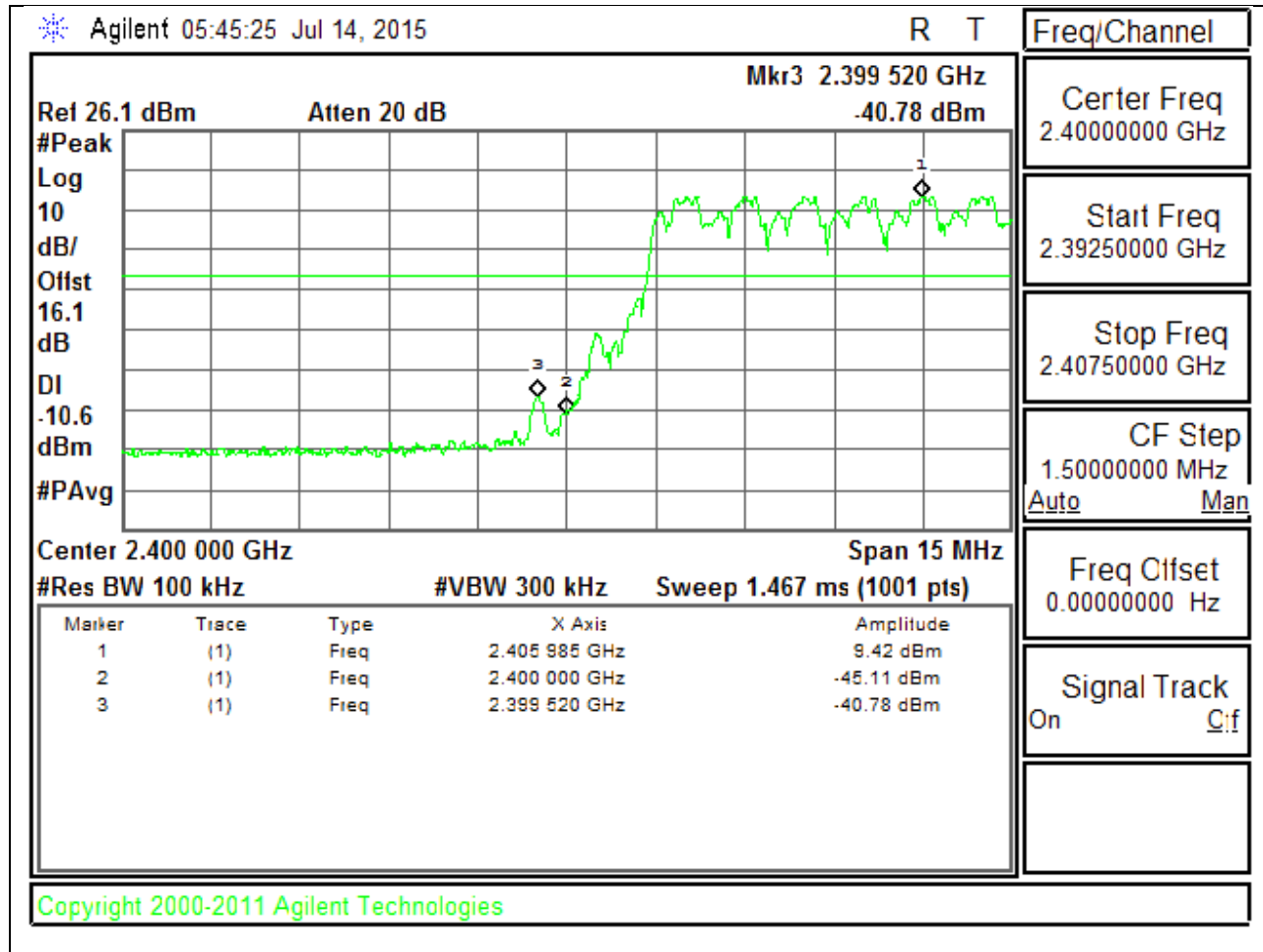


HIGH CHANNEL SPURIOUS

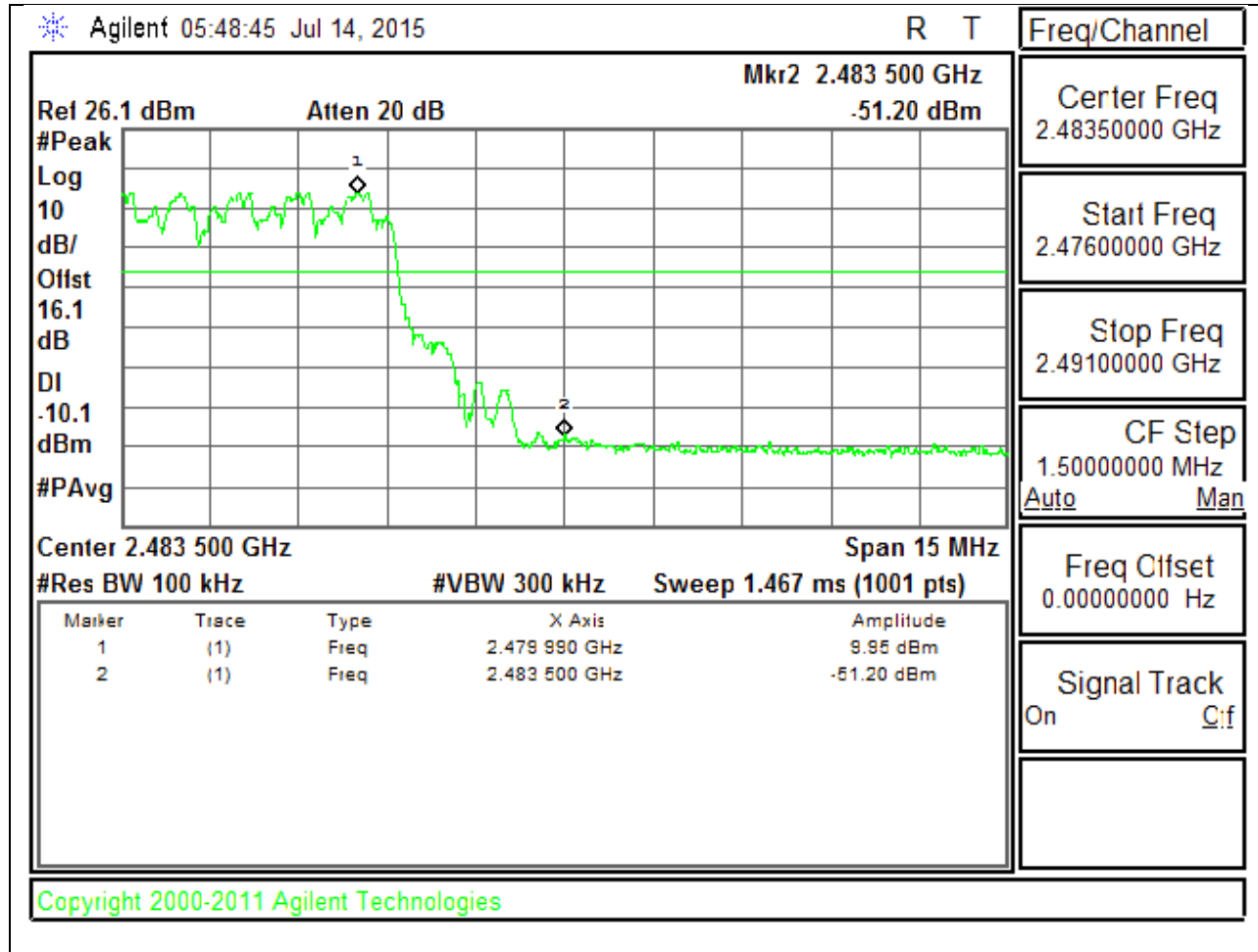


SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON

LOW BANDEDGE WITH HOPPING ON



HIGH BANDEDGE WITH HOPPING ON



9. RADIATED TEST RESULTS

9.1. LIMITS AND PROCEDURE LIMITS

FCC §15.205 and §15.209

Frequency Range (MHz)	Field Strength Limit (μ V/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 C63.10. 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 band edge 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 1/T (on time) for average measurement.
 $GFSK = 1/T = 1 / 0.0029S = 360Hz$.

The spectrum from 1GHzHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 2.4 GHz band.

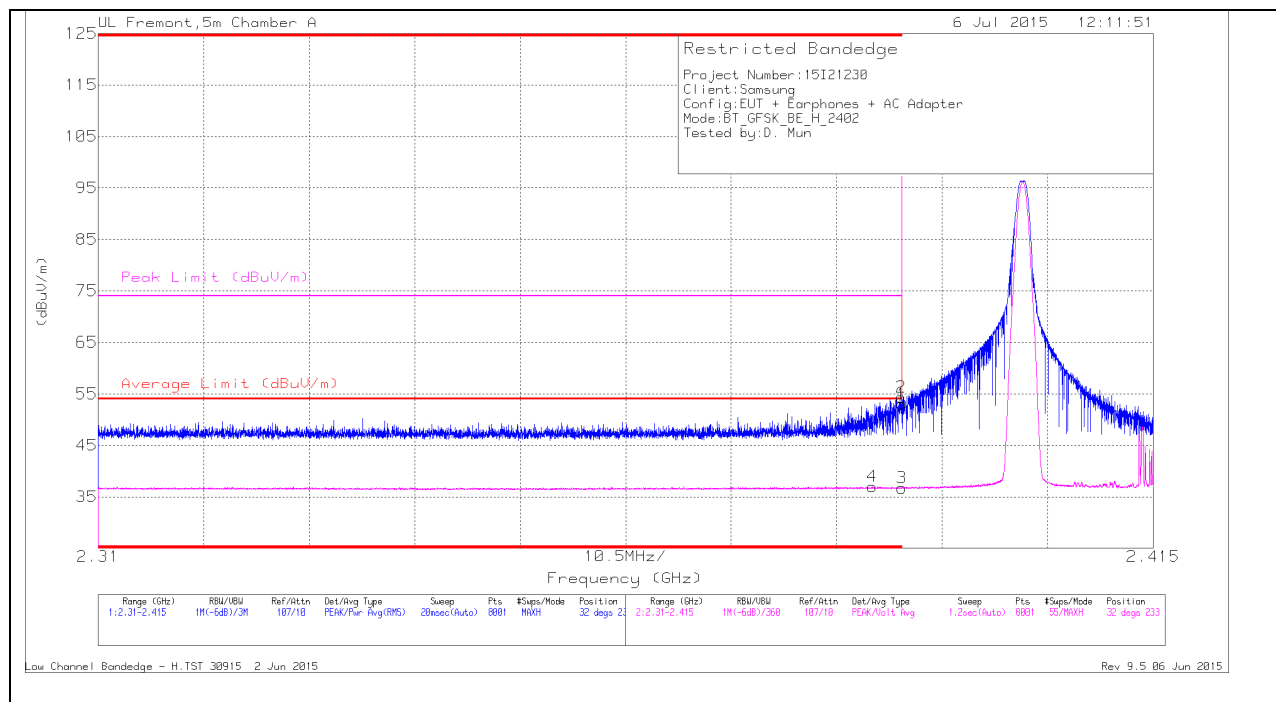
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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



HORIZONTAL DATA

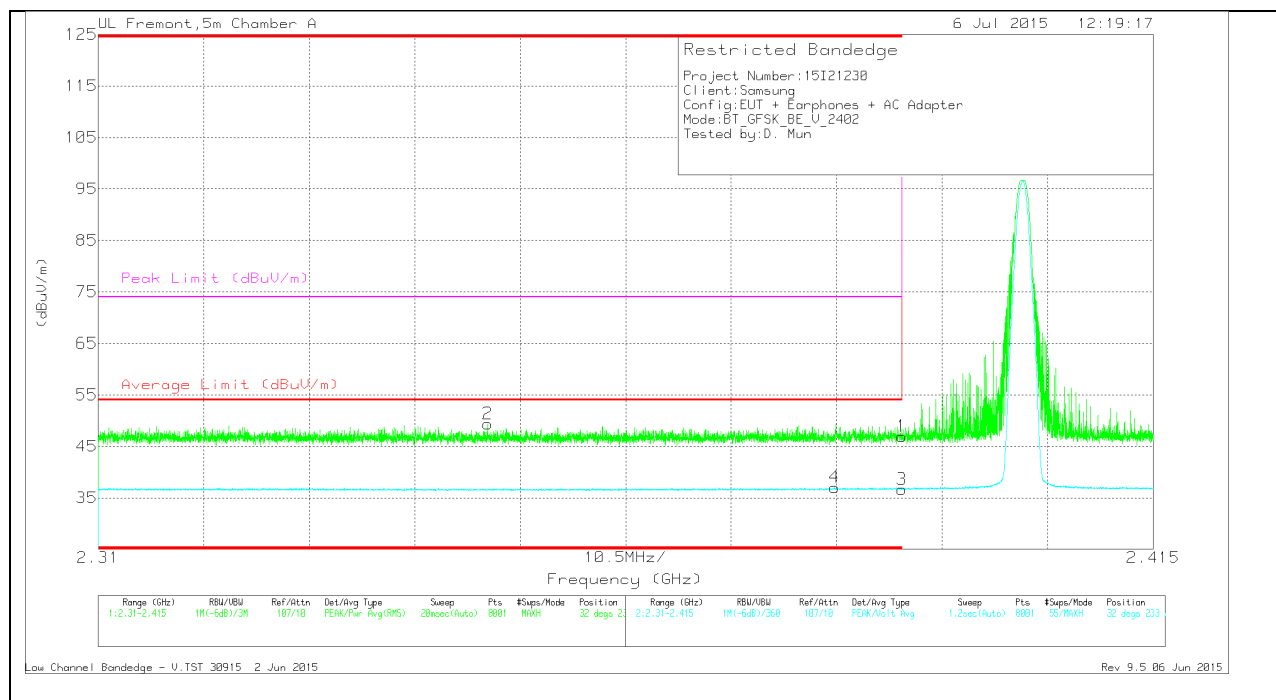
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	45.89	Pk	32	-24.9	52.99	-	-	74	-21.01	32	233	H
2	* 2.39	47.24	Pk	32	-24.9	54.34	-	-	74	-19.66	32	233	H
3	* 2.39	29.63	V1TV	32	-24.9	36.73	-	-	-	-	32	233	H
4	* 2.387	29.9	V1TV	32	-24.9	37	-	-	-	-	32	233	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

VB-A VB=1/Ton, Linear Voltage Average where: Ton is packet duration

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Ftr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	39.84	Pk	32	-24.9	46.94	-	-	74	-27.06	32	233	V
2	* 2.349	42.39	Pk	31.9	-24.9	49.39	-	-	74	-24.61	32	233	V
3	* 2.39	29.56	V1TV	32	-24.9	36.66	-	-	-	-	32	233	V
4	* 2.383	30.06	V1TV	31.9	-24.9	37.06	-	-	-	-	32	233	V

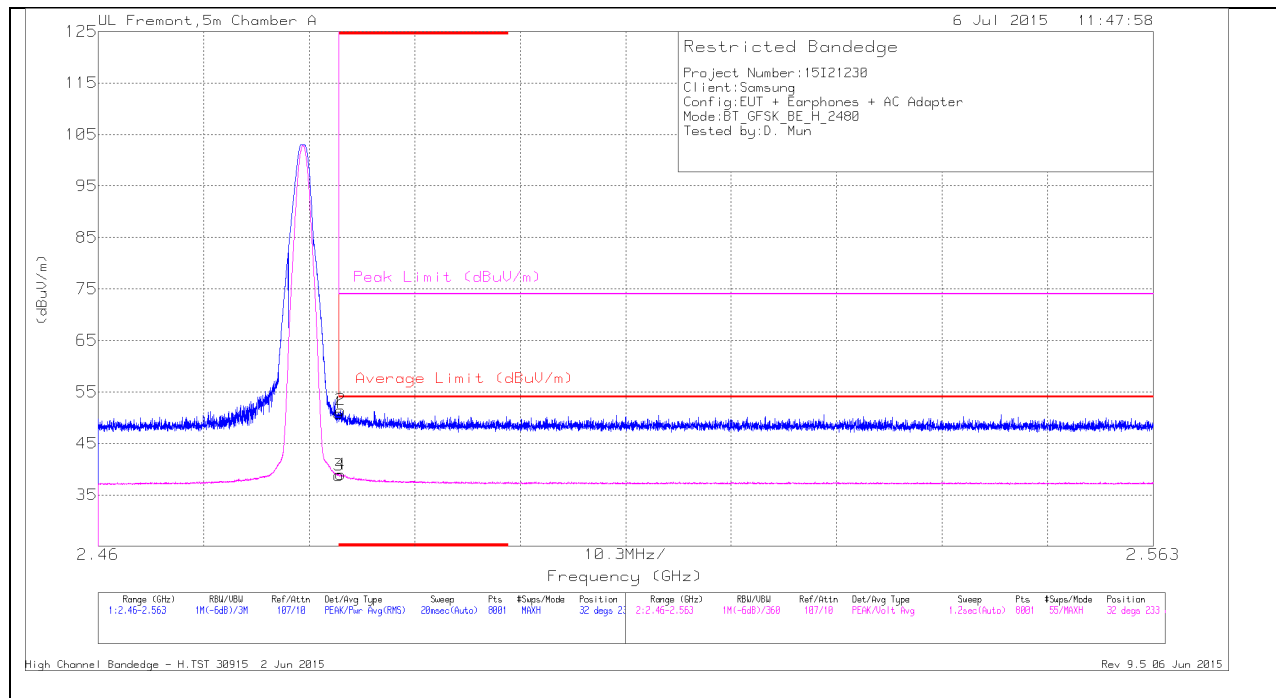
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

VB-A VB=1/Ton, Linear Voltage Average where: Ton is packet duration

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

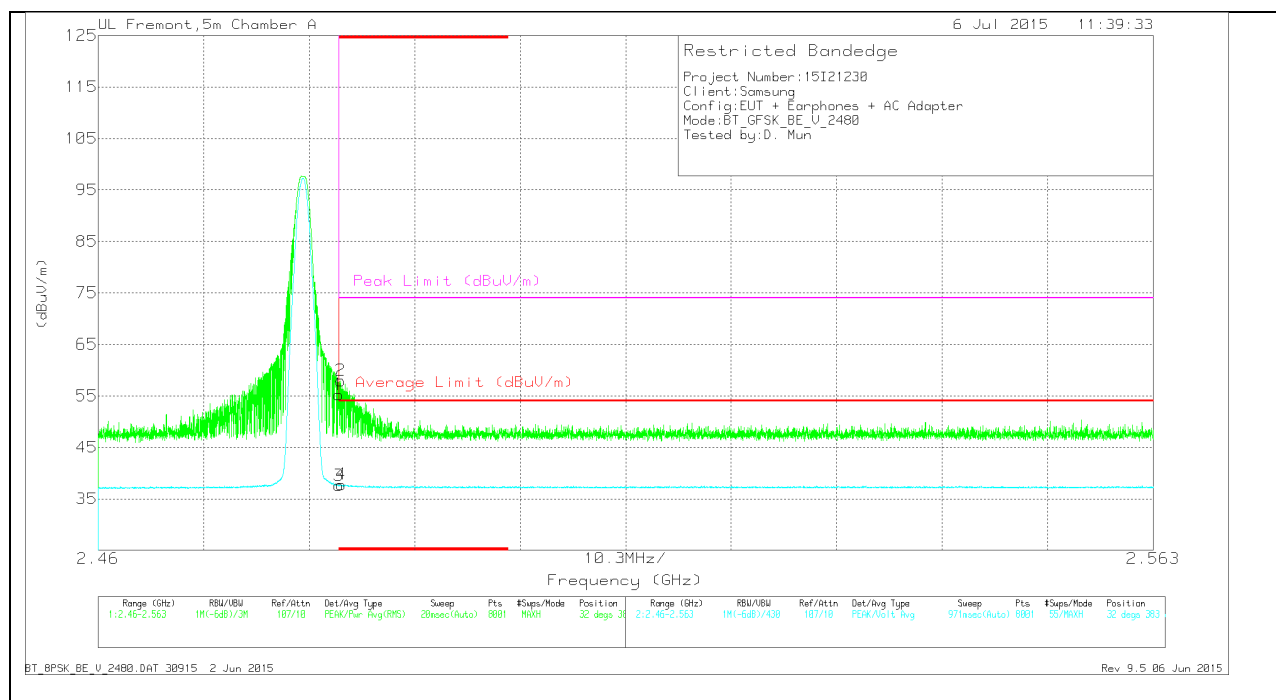
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Ftr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	43.57	Pk	32.1	-24.8	50.87	-	-	74	-23.13	32	233	H
2	* 2.484	44.18	Pk	32.1	-24.8	51.48	-	-	74	-22.52	32	233	H
3	* 2.484	31.5	V1TV	32.1	-24.8	38.8	-	-	-	-	32	233	H
4	* 2.484	31.64	V1TV	32.1	-24.8	38.94	-	-	-	-	32	233	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

VB-A VB=1/Ton, Linear Voltage Average where: Ton is packet duration

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

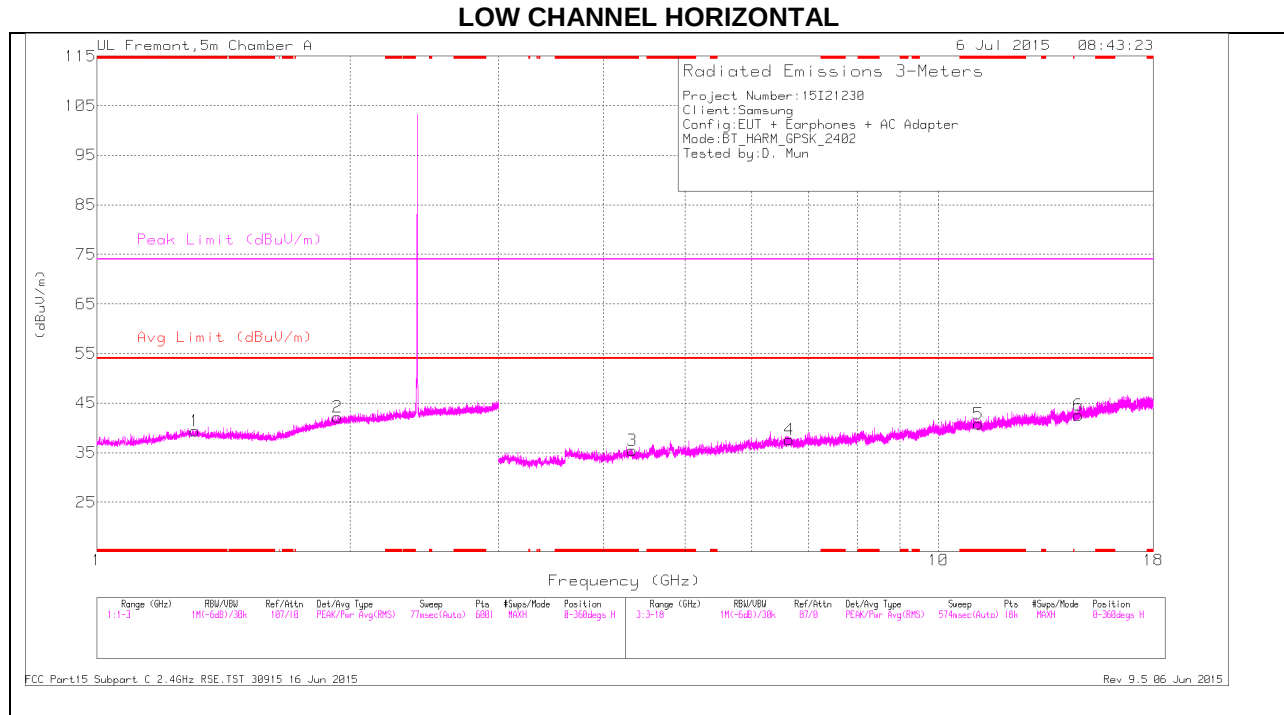
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	47.94	Pk	32.1	-24.8	55.24	-	-	74	-18.76	32	383	V
2	* 2.484	50.67	Pk	32.1	-24.8	57.97	-	-	74	-16.03	32	383	V
3	* 2.484	30.32	V1TV	32.1	-24.8	37.62	-	-	-	-	32	383	V
4	* 2.484	30.5	V1TV	32.1	-24.8	37.8	-	-	-	-	32	383	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

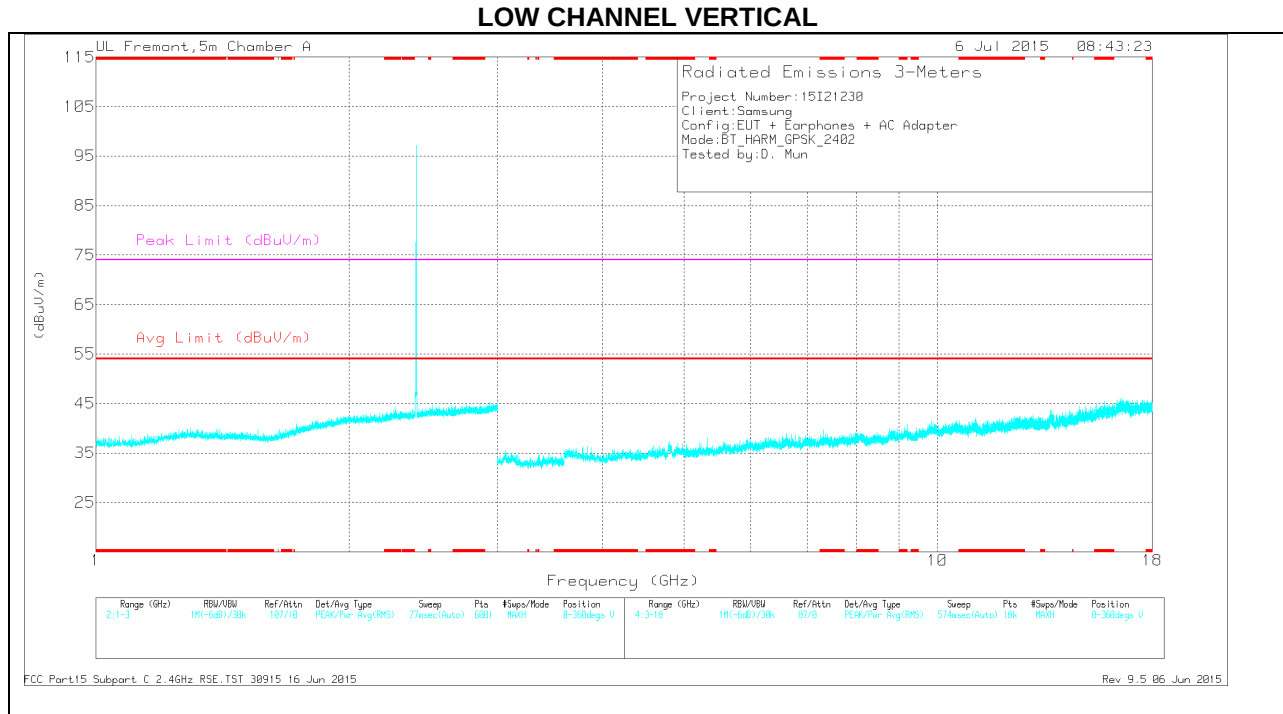
Pk - Peak detector

VB-A VB=1/Ton, Linear Voltage Average where: Ton is packet duration

HARMONICS AND SPURIOUS EMISSIONS



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.308	36.73	Pk	28.8	-26.1	39.43	-	-	74	-34.57	0-360	201	H
3	* 4.33	33.72	Pk	33.5	-31.8	35.42	-	-	74	-38.58	0-360	100	H
5	* 11.16	26.13	Pk	37.8	-23.2	40.73	-	-	74	-33.27	0-360	100	H
2	1.93	36.69	Pk	30.9	-25.4	42.19	-	-	-	-	0-360	100	H
4	6.647	29.35	Pk	35.6	-27.4	37.55	-	-	-	-	0-360	100	H
6	14.666	26.48	Pk	39.5	-23.4	42.58	-	-	-	-	0-360	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RADIATED EMISSIONS

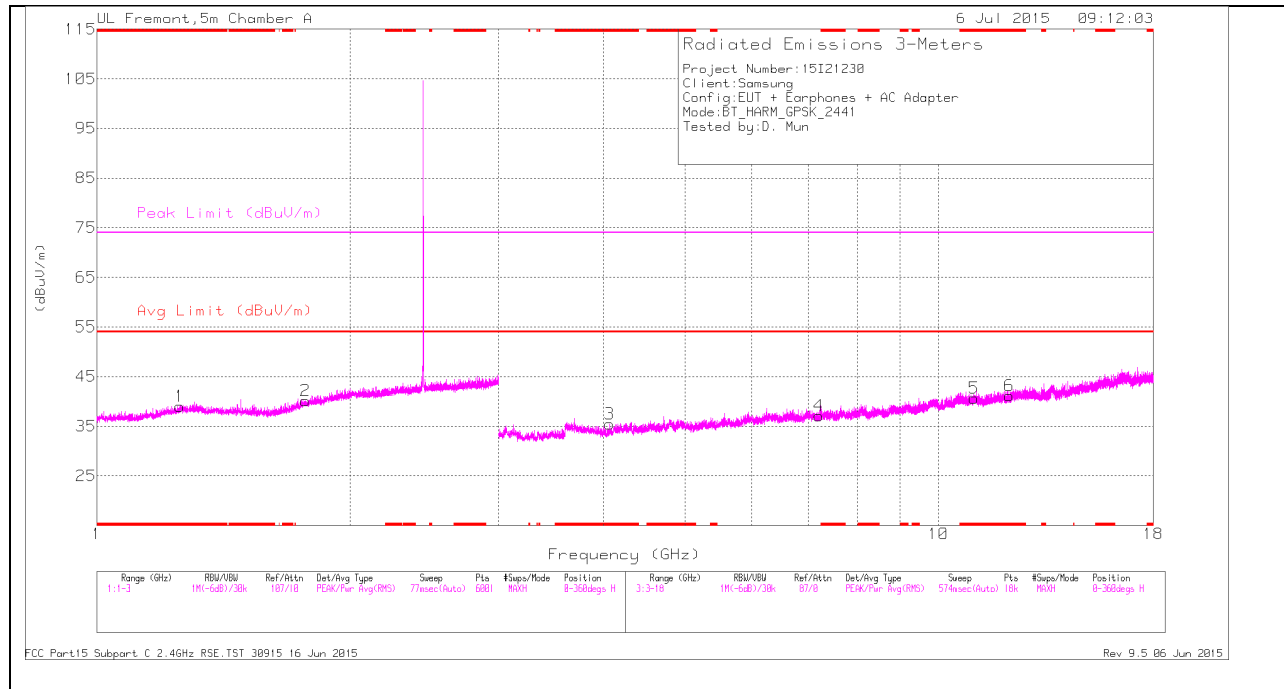
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.309	45.13	PK3	28.8	-26.1	47.83	-	-	74	-26.17	87	202	H
* 1.309	33.02	VB1T	28.8	-26.1	35.72	54	-18.28	-	-	87	202	H
* 4.331	41.71	PK3	33.5	-31.8	43.41	-	-	74	-30.59	87	100	H
* 4.332	30.09	VB1T	33.5	-31.8	31.79	54	-22.21	-	-	87	100	H
* 11.16	34.37	PK3	37.8	-23.2	48.97	-	-	74	-25.03	87	100	H
* 11.161	23.12	VB1T	37.8	-23.2	37.72	54	-16.28	-	-	87	100	H
1.929	44.36	PK3	30.9	-25.4	49.86	-	-	-	-	87	100	H
6.648	37.76	PK3	35.6	-27.4	45.96	-	-	-	-	87	100	H
14.664	35.08	PK3	39.5	-23.4	51.18	-	-	-	-	87	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

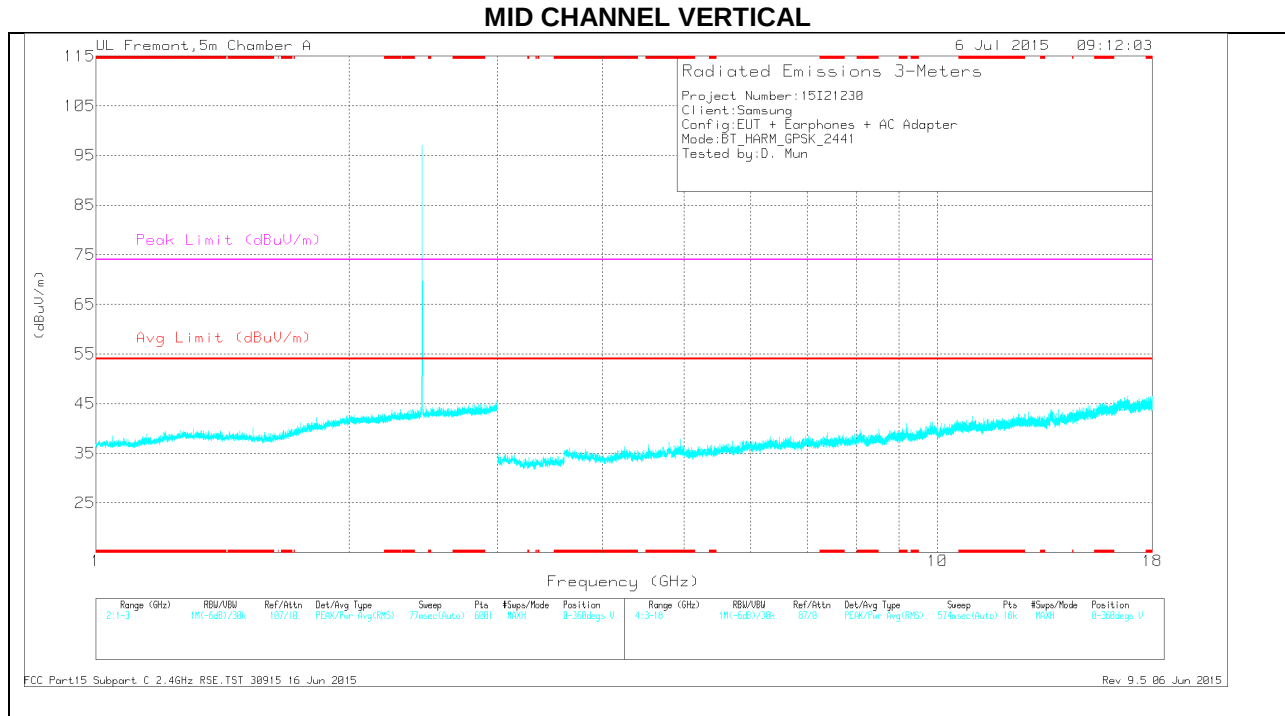
PK3: Maximum Peak

VB-A VB=1/Ton, RMS Average where: Ton is packet duration

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.255	36.63	Pk	28.5	-26.1	39.03	-	-	74	-34.97	0-360	100	H
3	* 4.064	34.19	Pk	33.3	-32.1	35.39	-	-	74	-38.61	0-360	200	H
5	* 11.027	25.85	Pk	37.9	-23.1	40.65	-	-	74	-33.35	0-360	200	H
6	* 12.14	25.64	Pk	38.8	-23.3	41.14	-	-	74	-32.86	0-360	200	H
2	1.771	35.99	Pk	29.6	-25.5	40.09	-	-	-	-	0-360	100	H
4	7.206	28.93	Pk	35.5	-27.3	37.13	-	-	-	-	0-360	200	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.254	44.97	PK3	28.5	-26.1	47.37	-	-	74	-26.63	359	100	H
* 1.254	33.21	VB1T	28.5	-26.1	35.61	54	-18.39	-	-	359	100	H
* 4.064	41.77	PK3	33.3	-32.1	42.97	-	-	74	-31.03	359	201	H
* 4.066	30.39	VB1T	33.3	-32.1	31.59	54	-22.41	-	-	359	201	H
* 11.029	34.83	PK3	37.9	-23.1	49.63	-	-	74	-24.37	359	201	H
* 11.028	23.3	VB1T	37.9	-23.1	38.1	54	-15.9	-	-	359	201	H
* 12.14	33.76	PK3	38.8	-23.3	49.26	-	-	74	-24.74	359	201	H
* 12.138	22.7	VB1T	38.8	-23.3	38.2	54	-15.8	-	-	359	201	H
1.769	44.4	PK3	29.6	-25.5	48.5	-	-	-	-	359	100	H
7.205	37.65	PK3	35.5	-27.3	45.85	-	-	-	-	359	201	H

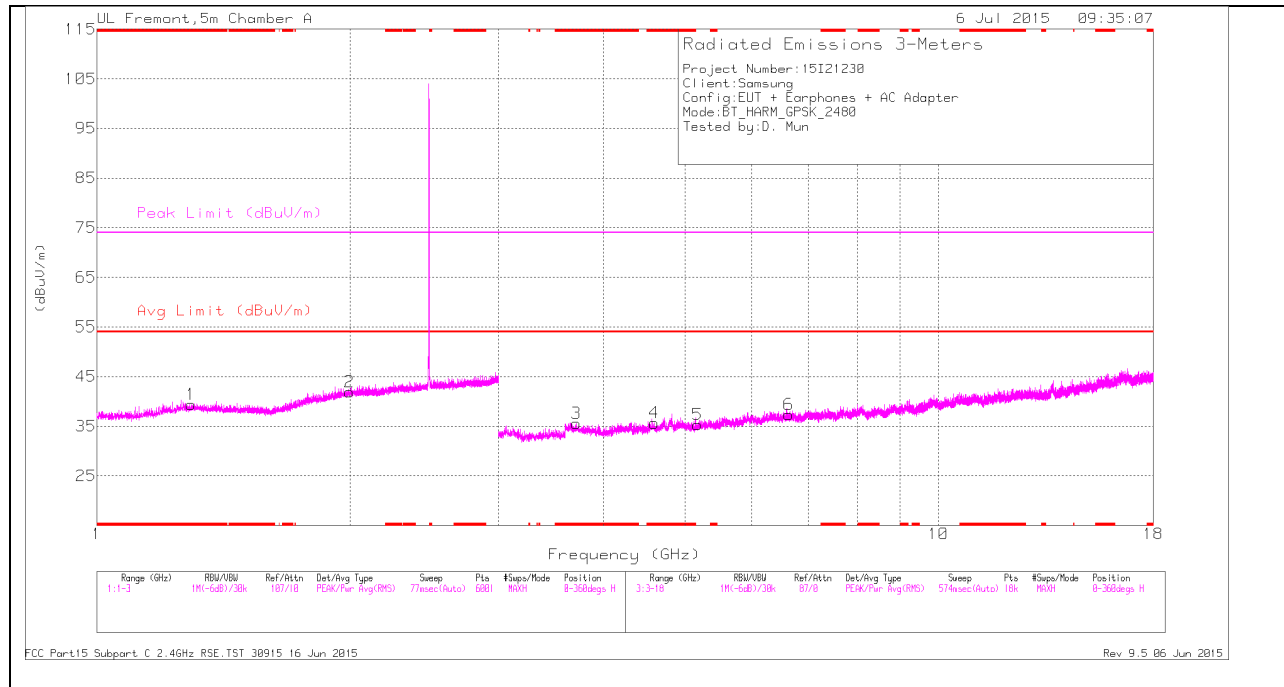
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK3: Maximum Peak

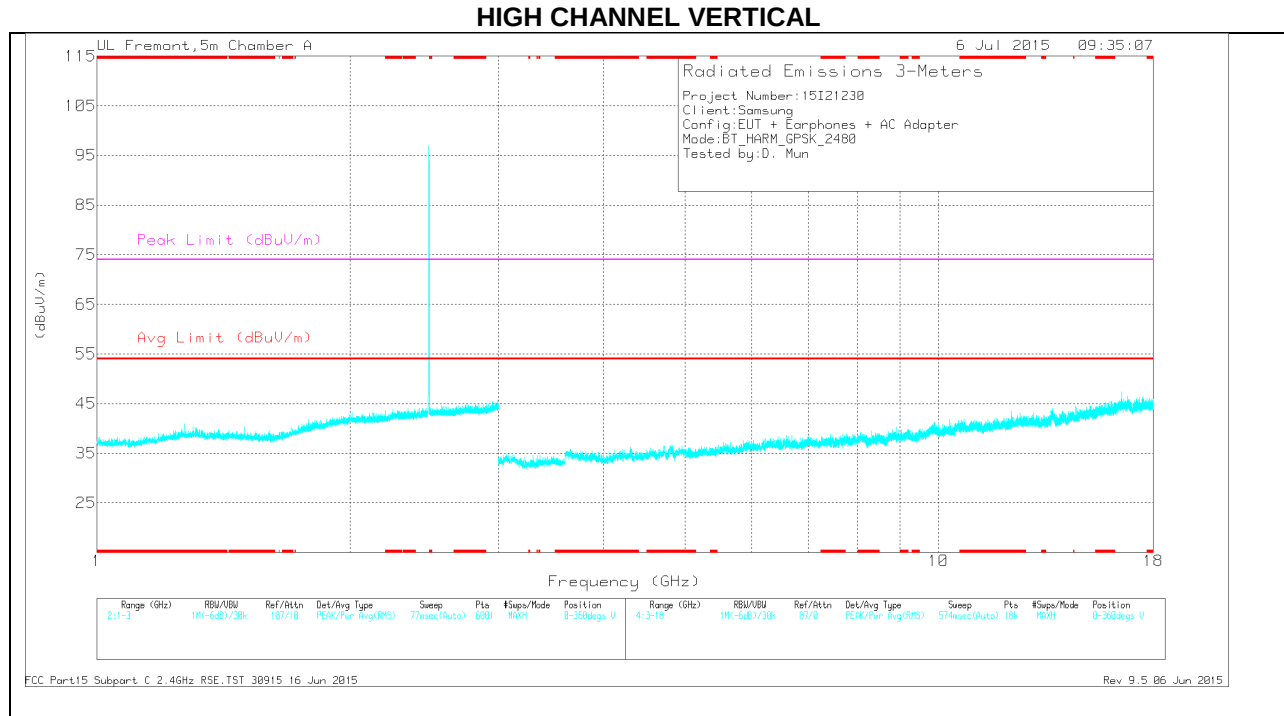
VB-A VB=1/Ton, RMS Average where: Ton is packet duration

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HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.294	36.7	Pk	28.8	-26.1	39.4	-	-	74	-34.6	0-360	201	H
3	* 3.711	34.92	Pk	33.2	-32.5	35.62	-	-	74	-38.38	0-360	100	H
4	* 4.596	32.64	Pk	34	-31	35.64	-	-	74	-38.36	0-360	100	H
2	1.995	36.11	Pk	31.1	-25.3	41.91	-	-	-	-	0-360	201	H
5	5.173	31.86	Pk	34.3	-30.8	35.36	-	-	-	-	0-360	100	H
6	6.641	29.09	Pk	35.6	-27.3	37.39	-	-	-	-	0-360	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.292	44.75	PK3	28.8	-26.1	47.45	-	-	74	-26.55	360	202	H
* 1.295	32.96	VB1T	28.8	-26.1	35.66	54	-18.34	-	-	360	202	H
* 3.709	42.66	PK3	33.2	-32.5	43.36	-	-	74	-30.64	360	100	H
* 3.709	30.95	VB1T	33.2	-32.5	31.65	54	-22.35	-	-	360	100	H
* 4.594	41.1	PK3	34	-31	44.1	-	-	74	-29.9	360	100	H
* 4.595	29.65	VB1T	34	-31	32.65	54	-21.35	-	-	360	100	H
1.995	44.3	PK3	31.1	-25.3	50.1	-	-	-	-	360	202	H
5.174	40.43	PK3	34.3	-30.8	43.93	-	-	-	-	360	100	H
6.641	37.37	PK3	35.6	-27.3	45.67	-	-	-	-	360	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

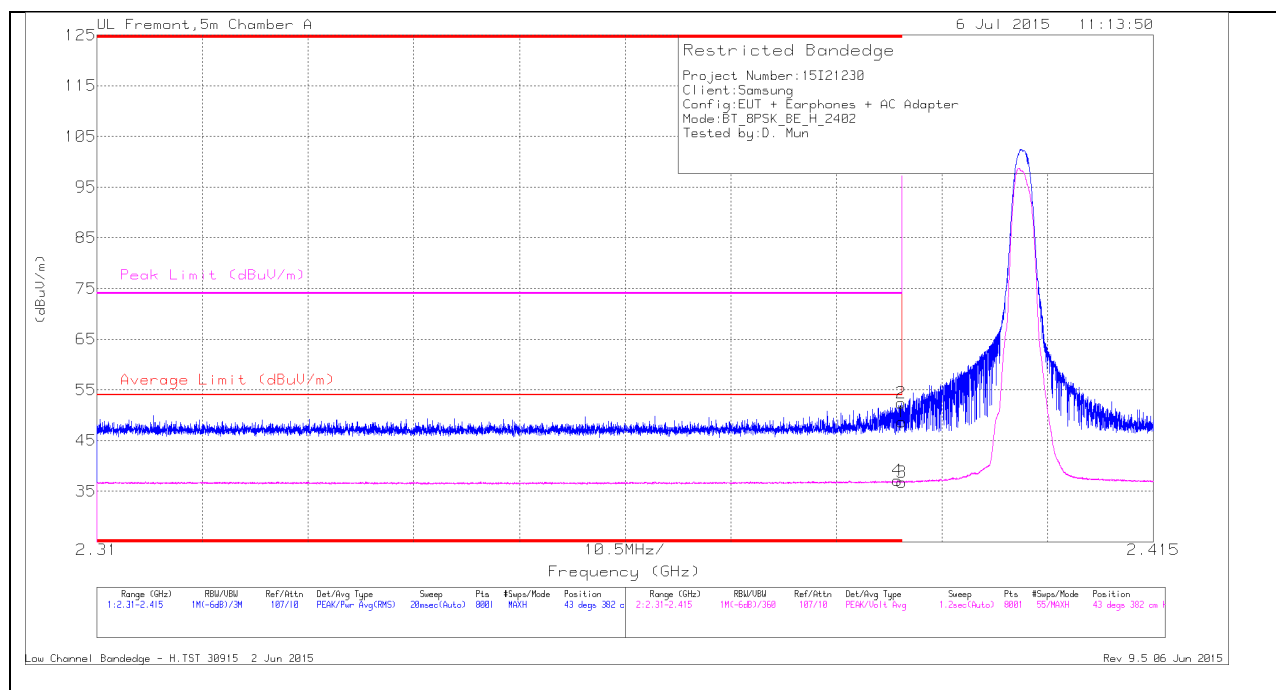
PK3: Maximum Peak

VB1T: VB-A VB=1/Ton, RMS Average where: Ton is packet duration

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9.2.2. ENHANCED DATA RATE 8PSK MODULATION RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

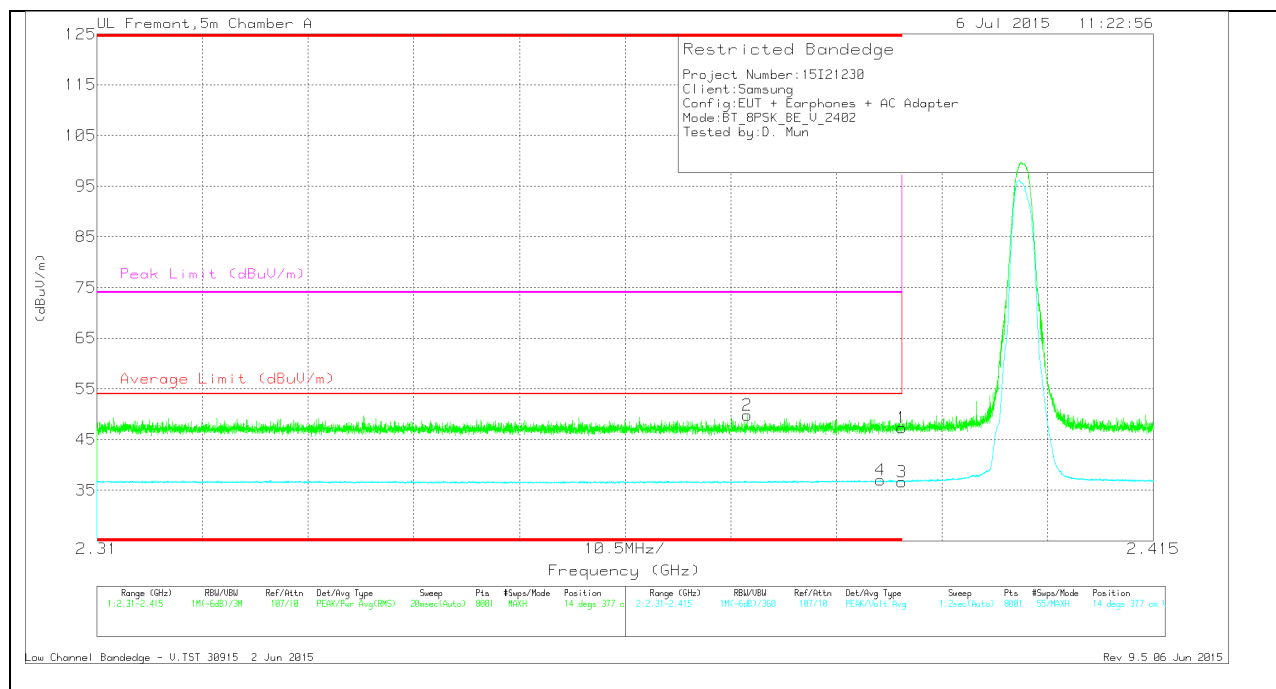
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	41.6	Pk	32	-24.9	48.7	-	-	74	-25.3	43	382	H
2	* 2.39	45.26	Pk	32	-24.9	52.36	-	-	74	-21.64	43	382	H
3	* 2.39	29.61	V1TV	32	-24.9	36.71	-	-	-	-	43	382	H
4	* 2.39	29.98	V1TV	32	-24.9	37.08	-	-	-	-	43	382	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

V1TV: VB-A VB=1/Ton, Linear Voltage Average where: Ton is packet duration

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	40.26	Pk	32	-24.9	47.36	-	-	74	-26.64	14	377	V
2	* 2.375	42.84	Pk	31.9	-24.9	49.84	-	-	74	-24.16	14	377	V
3	* 2.39	29.56	V1TV	32	-24.9	36.66	-	-	-	-	14	377	V
4	* 2.388	29.87	V1TV	32	-24.9	36.97	-	-	-	-	14	377	V

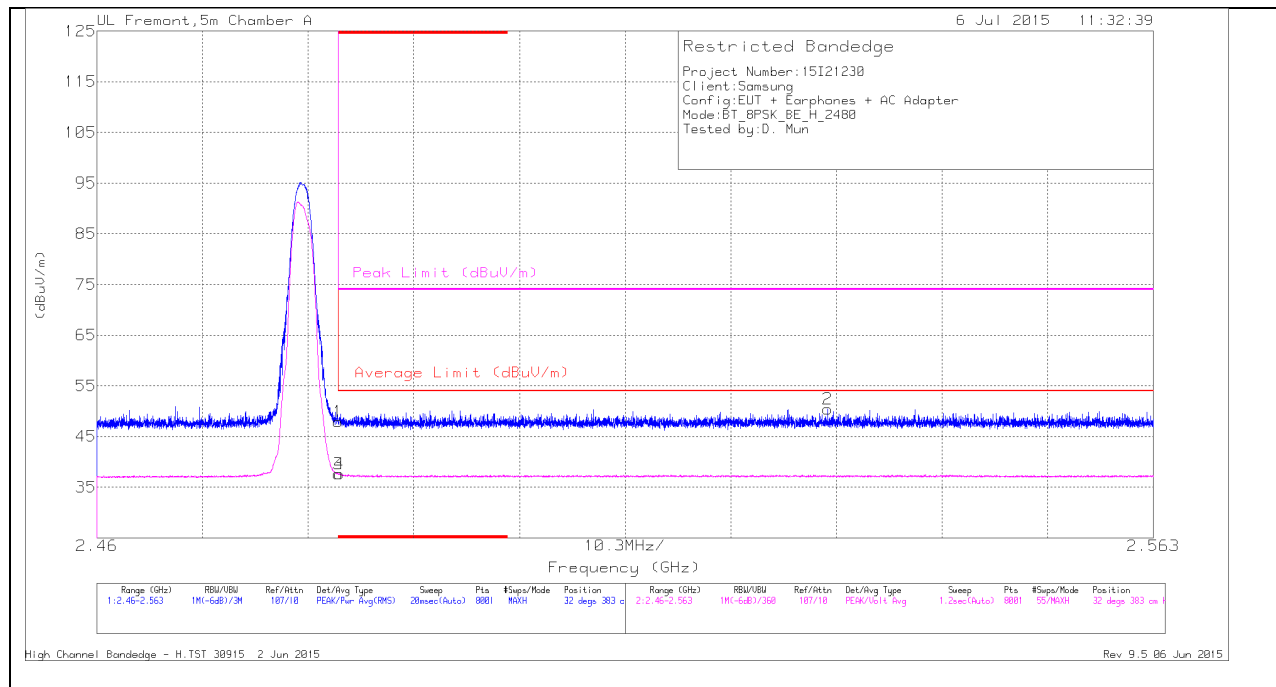
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

V1TV: VB-A VB=1/Ton, Linear Voltage Average where: Ton is packet duration

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

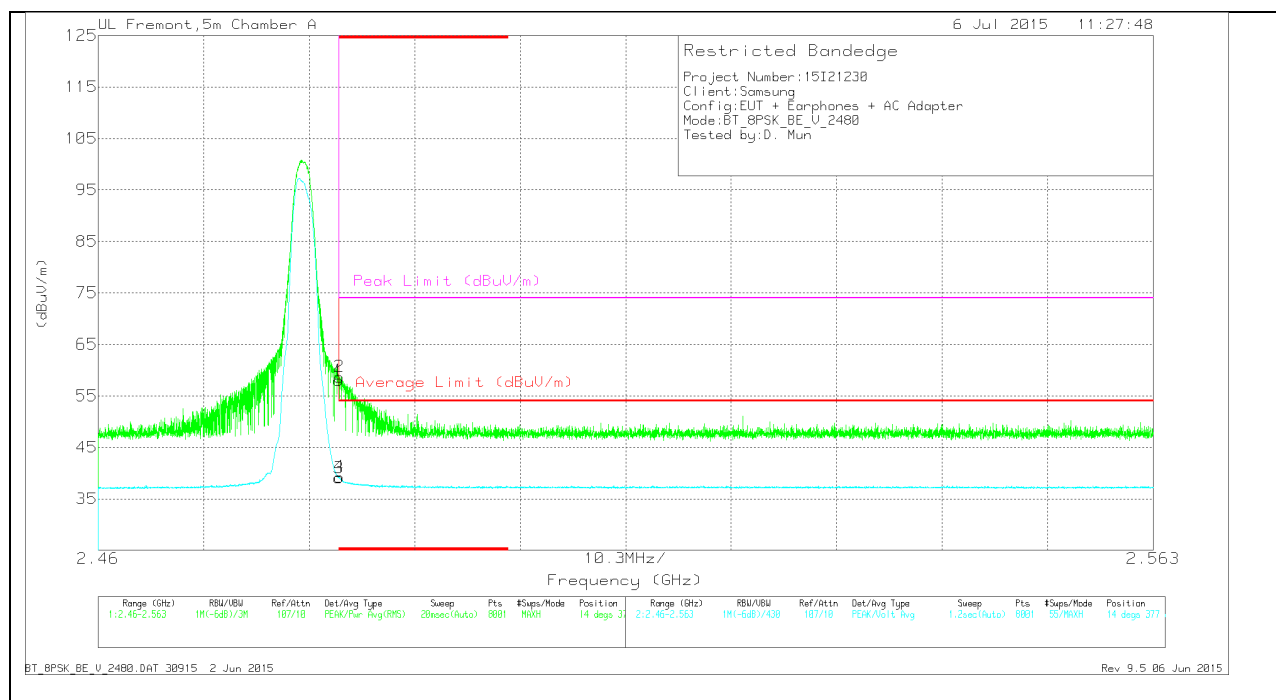
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Ftr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	40.63	Pk	32.1	-24.8	47.93	-	-	74	-26.07	32	383	H
3	* 2.484	30.3	V1TV	32.1	-24.8	37.6	-	-	-	-	32	383	H
4	* 2.484	30.35	V1TV	32.1	-24.8	37.65	-	-	-	-	32	383	H
2	2.531	42.99	Pk	32.1	-24.7	50.39	-	-	74	-23.61	32	383	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

V1TV: VB-A VB=1/Ton, Linear Voltage Average where: Ton is packet duration

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

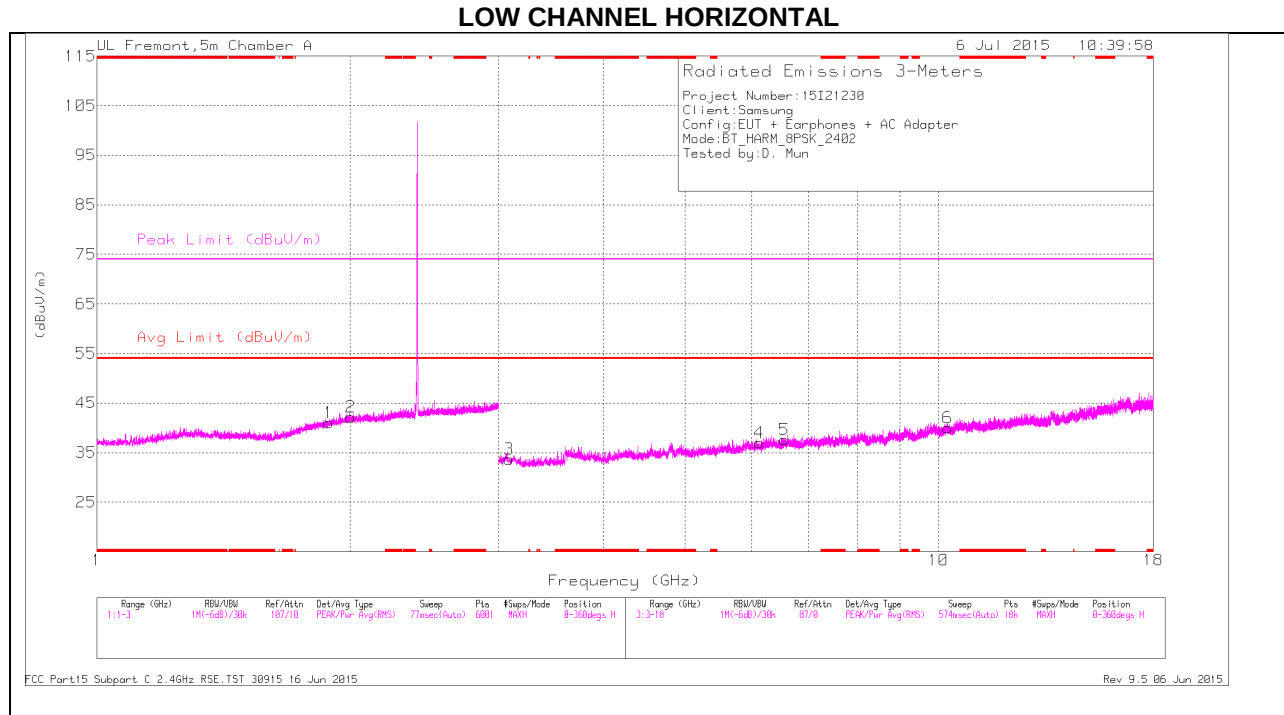
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Ftr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	50.72	Pk	32.1	-24.8	58.02	-	-	74	-15.98	14	377	V
2	* 2.484	51.39	Pk	32.1	-24.8	58.69	-	-	74	-15.31	14	377	V
3	* 2.484	31.79	V1TV	32.1	-24.8	39.09	-	-	-	-	14	377	V
4	* 2.484	31.95	V1TV	32.1	-24.8	39.25	-	-	-	-	14	377	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

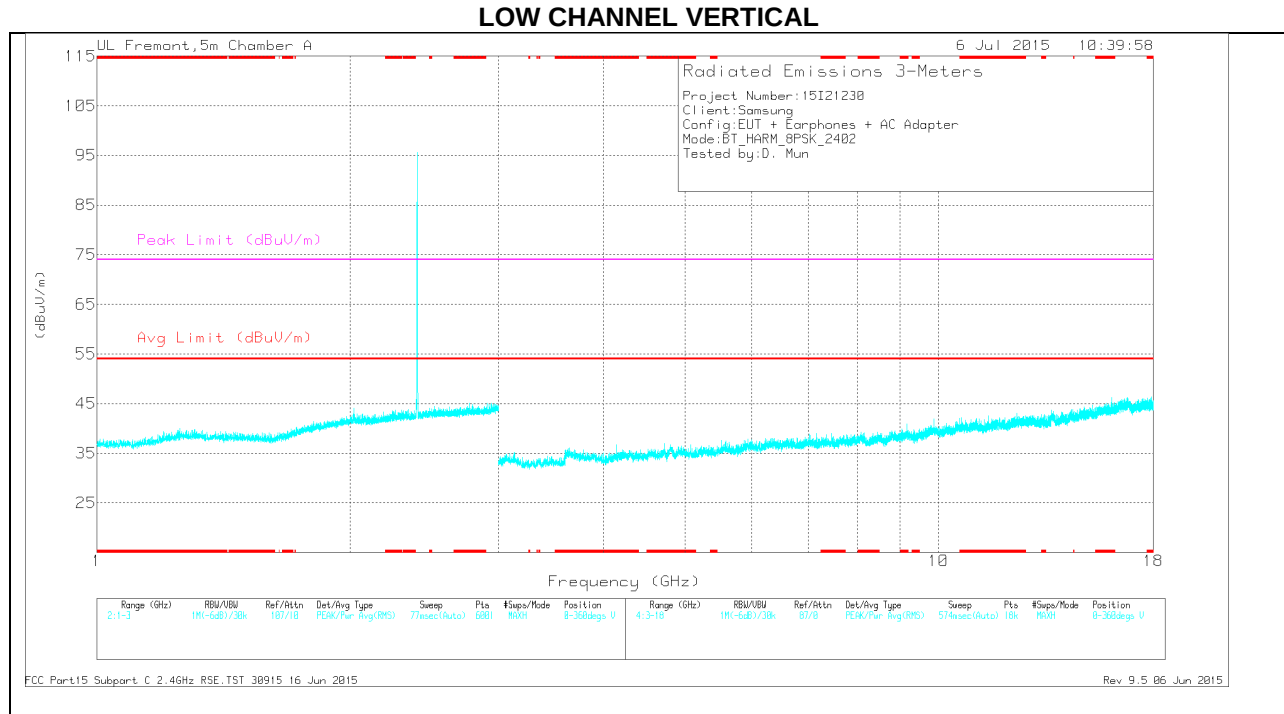
Pk - Peak detector

V1TV: VB-A VB=1/Ton, Linear Voltage Average where: Ton is packet duration

HARMONICS AND SPURIOUS EMISSIONS



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.887	35.82	Pk	30.7	-25.5	41.02	-	-	-	-	0-360	100	H
2	2.001	36.34	Pk	31.1	-25.3	42.14	-	-	-	-	0-360	100	H
3	3.089	32.75	Pk	32.9	-32	33.65	-	-	-	-	0-360	200	H
4	6.124	30.91	Pk	35.4	-29.3	37.01	-	-	-	-	0-360	200	H
5	6.558	29.91	Pk	35.6	-27.9	37.61	-	-	-	-	0-360	200	H
6	10.26	26.46	Pk	37.3	-23.7	40.06	-	-	-	-	0-360	200	H

Pk - Peak detector

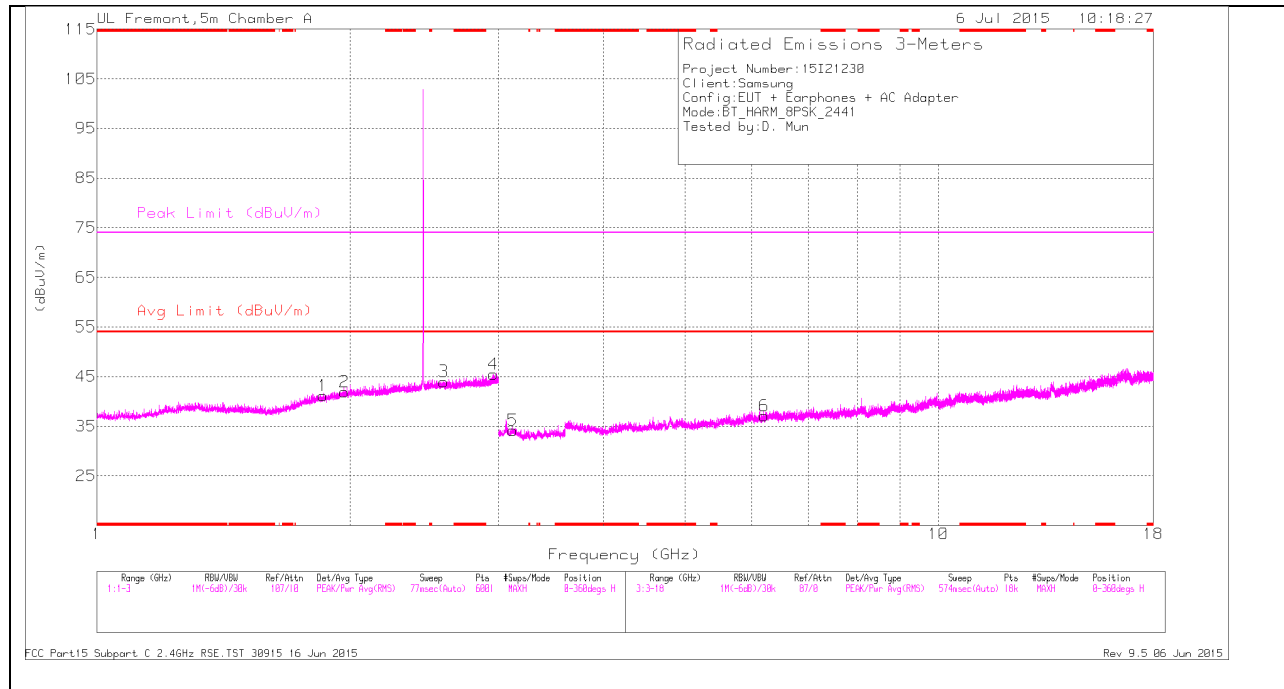
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.887	44.27	PK3	30.7	-25.5	49.47	-	-	-	-	1	100	H
2.001	44.87	PK3	31.1	-25.3	50.67	-	-	-	-	1	100	H
3.089	41.89	PK3	32.9	-32	42.79	-	-	-	-	1	201	H
6.124	39.49	PK3	35.4	-29.3	45.59	-	-	-	-	1	201	H
6.56	38.02	PK3	35.6	-27.9	45.72	-	-	-	-	1	201	H
10.262	34.62	PK3	37.3	-23.7	48.22	-	-	-	-	1	201	H

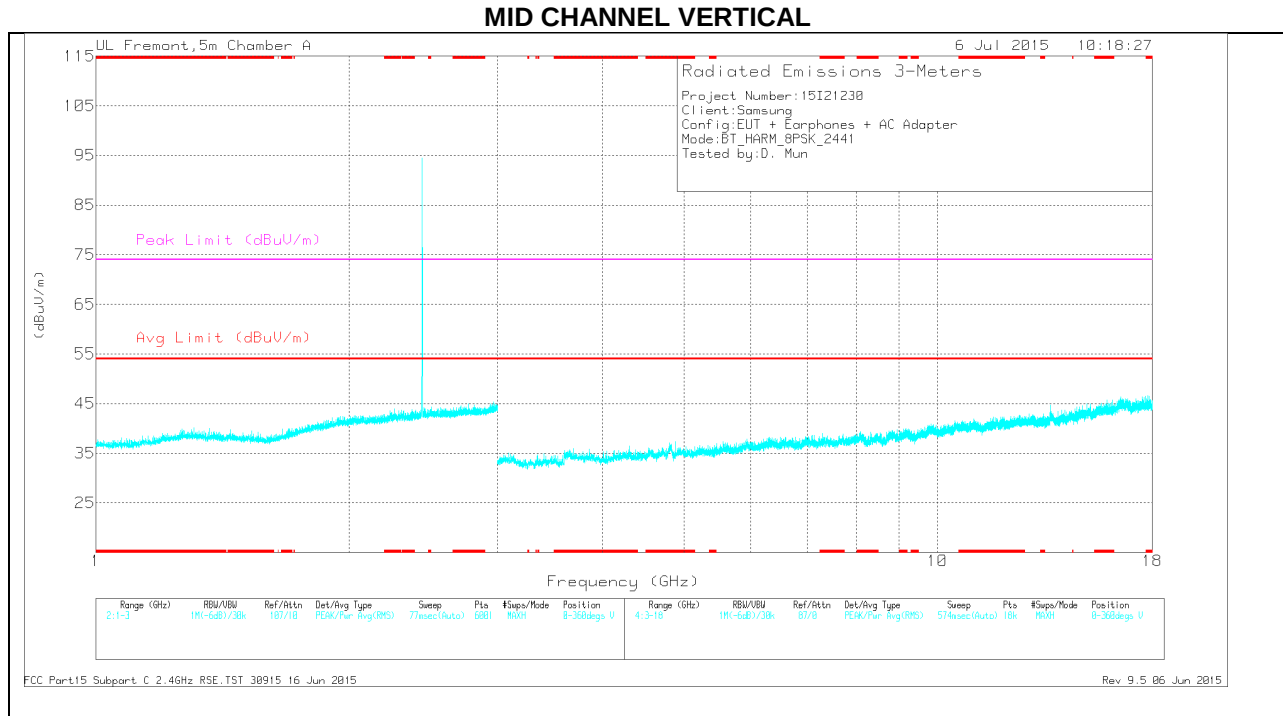
PK3: Maximum Peak

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MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



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MID CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.856	36.23	Pk	30.4	-25.5	41.13	-	-	-	-	0-360	100	H
2	1.969	36.23	Pk	31	-25.3	41.93	-	-	-	-	0-360	100	H
3	2.582	36.51	Pk	32.2	-24.7	44.01	-	-	-	-	0-360	100	H
4	2.961	36.95	Pk	32.8	-24.3	45.45	-	-	-	-	0-360	100	H
5	3.122	33.18	Pk	32.9	-31.9	34.18	-	-	-	-	0-360	200	H
6	6.205	30.59	Pk	35.4	-28.9	37.09	-	-	-	-	0-360	100	H

Pk - Peak detector

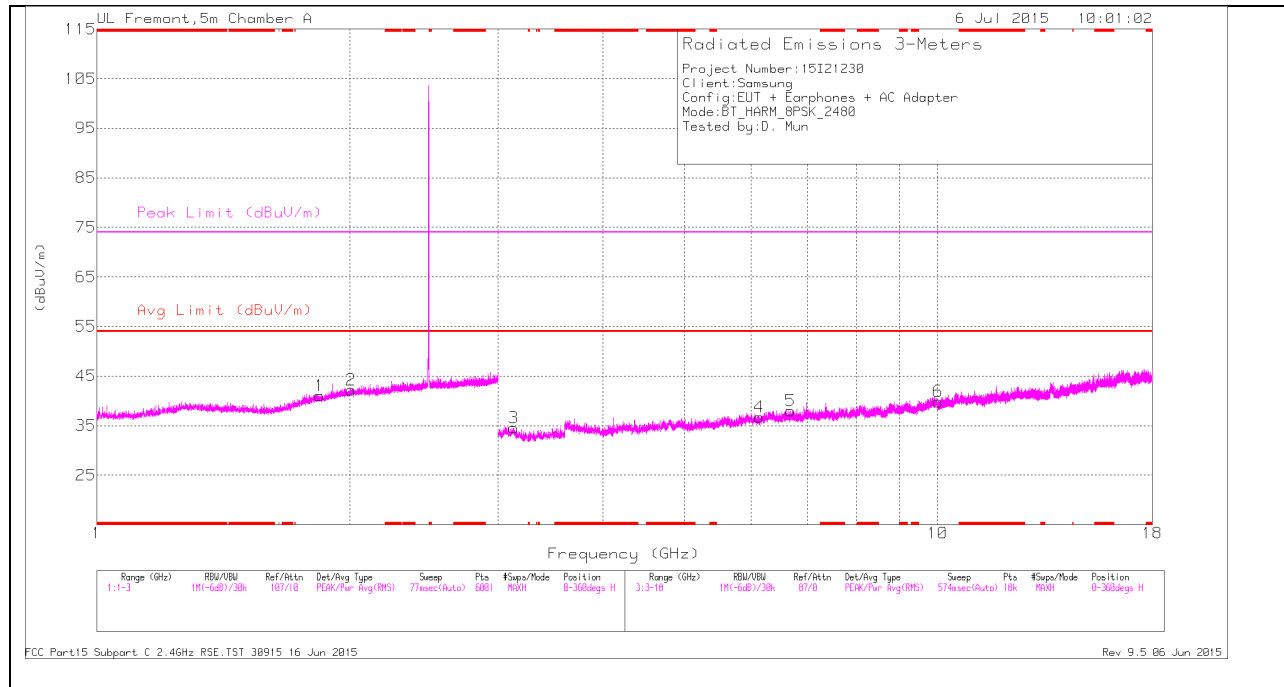
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.822	44.42	PK3	30.2	-25.5	49.12	-	-	-	-	359	202	H
1.97	44.47	PK3	31	-25.4	50.07	-	-	-	-	359	100	H
3.115	42.33	PK3	32.9	-32	43.23	-	-	-	-	359	201	H
6.081	39.88	PK3	35.4	-29.3	45.98	-	-	-	-	359	201	H
10.08	35.3	PK3	37.1	-24.2	48.2	-	-	-	-	359	100	H

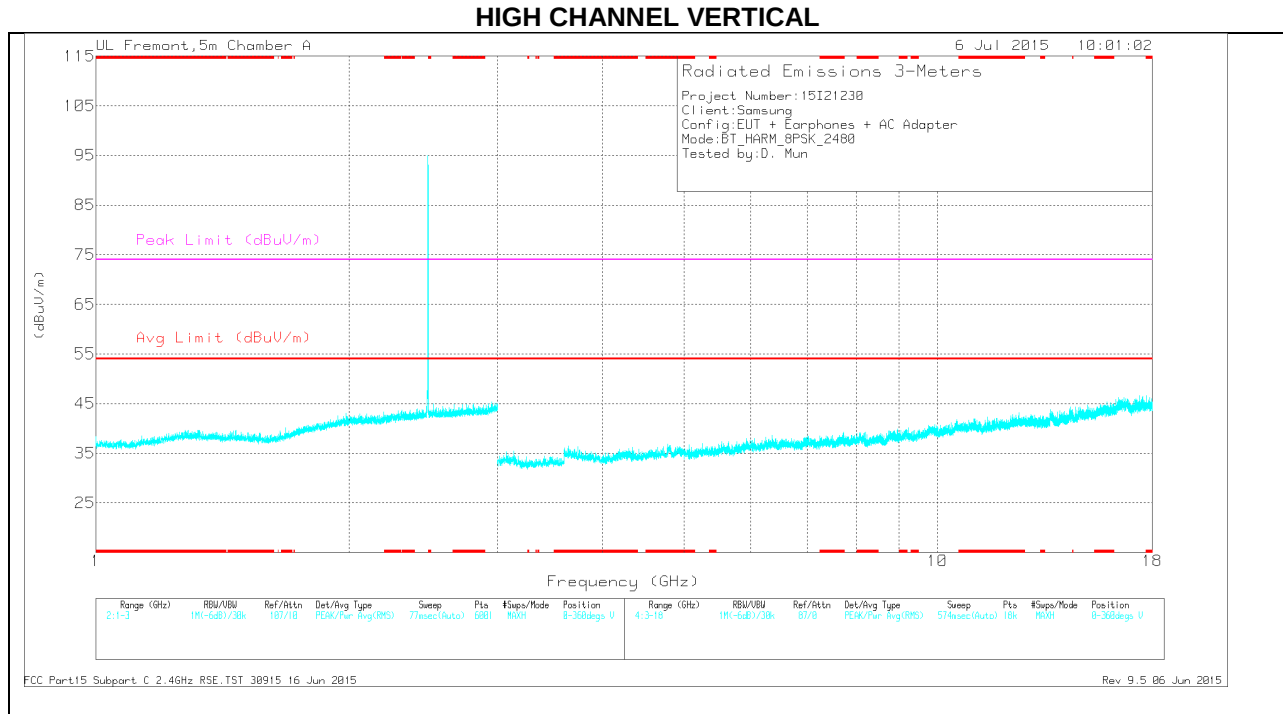
PK3: Maximum Peak

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HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.839	36.13	Pk	30.3	-25.4	41.03	-	-	-	-	0-360	201	H
2	2.006	36.28	Pk	31.2	-25.3	42.18	-	-	-	-	0-360	201	H
3	3.129	33.62	Pk	32.9	-32	34.52	-	-	-	-	0-360	200	H
4	6.134	30.58	Pk	35.4	-29.3	36.68	-	-	-	-	0-360	200	H
5	6.68	29.79	Pk	35.6	-27.4	37.99	-	-	-	-	0-360	200	H
6	10.011	26.63	Pk	37.1	-23.9	39.83	-	-	-	-	0-360	200	H

Pk - Peak detector

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.839	44.63	PK3	30.3	-25.4	49.53	-	-	-	-	0	202	H
2.004	44.62	PK3	31.1	-25.3	50.42	-	-	-	-	0	202	H
3.129	42.45	PK3	32.9	-32	43.35	-	-	-	-	0	202	H
6.135	39.48	PK3	35.4	-29.3	45.58	-	-	-	-	0	202	H
6.682	37.19	PK3	35.6	-27.4	45.39	-	-	-	-	0	202	H
10.013	35.33	PK3	37.1	-23.9	48.53	-	-	-	-	0	202	H

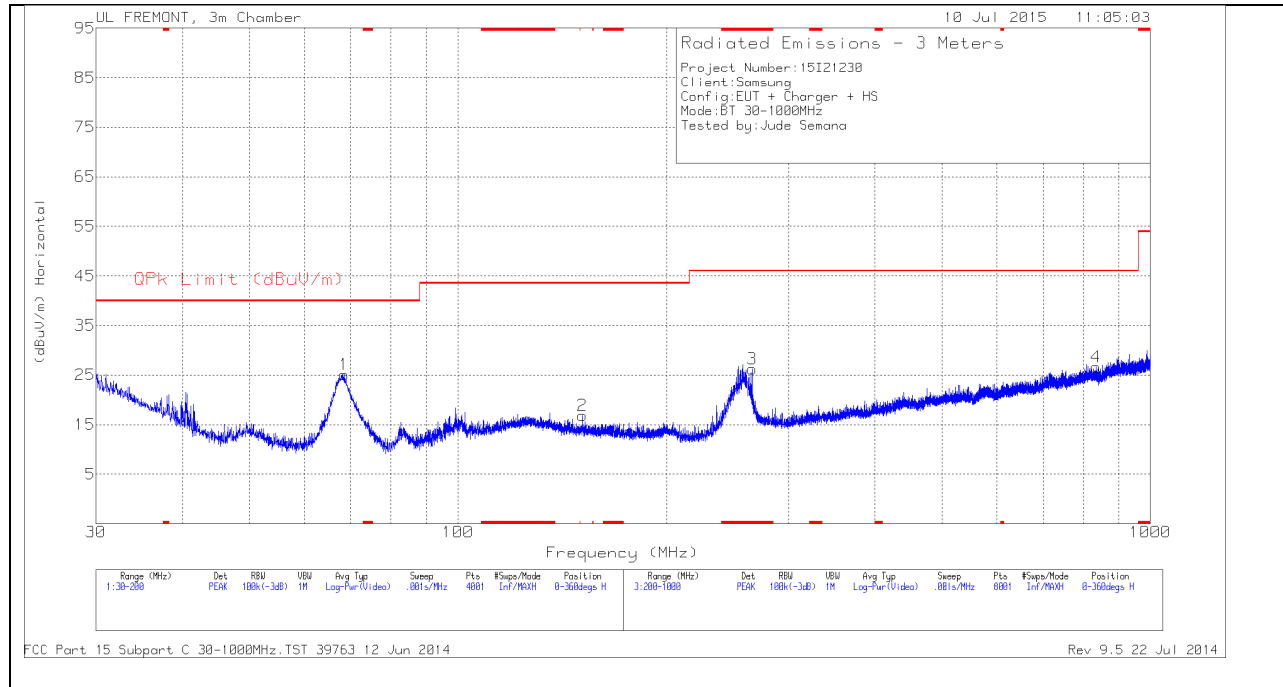
PK3: Maximum Peak

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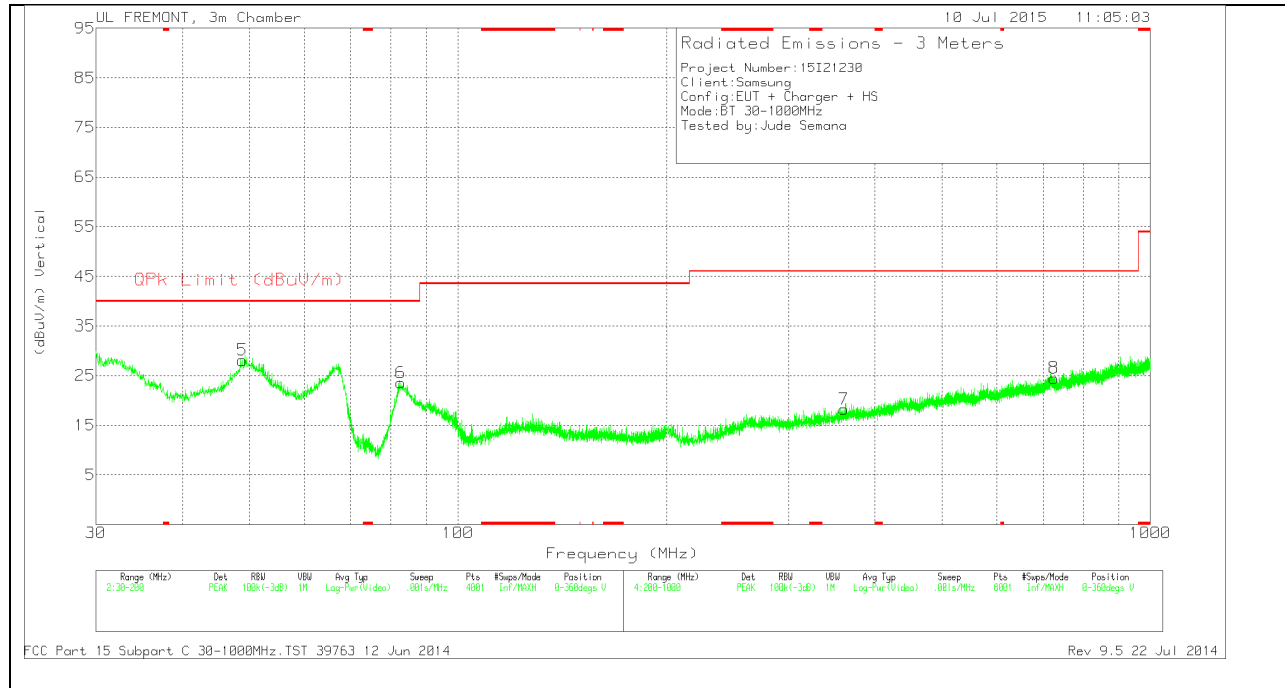
9.3. WORST-CASE BELOW 1 GHz

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

HORIZONTAL PLOT



VERTICAL PLOT



BELOW 1 GHz TABLE

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T185 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 265.8	37.91	PK	12.8	-24.5	26.21	46.02	-19.81	0-360	100	H
5	48.8275	46.28	PK	8.7	-26.9	28.08	40	-11.92	0-360	100	V
1	68.5475	43.51	PK	8.3	-26.7	25.11	40	-14.89	0-360	300	H
6	82.7425	42.37	PK	7.7	-26.5	23.57	40	-16.43	0-360	100	V
2	151.1675	30.46	PK	12.1	-25.7	16.86	43.52	-26.66	0-360	200	H
7	360.7	28.18	PK	14.7	-24.6	18.28	46.02	-27.74	0-360	300	V
8	726	28.42	PK	20.1	-24	24.52	46.02	-21.5	0-360	200	V
4	833.9	28.73	PK	21	-23.1	26.63	46.02	-19.39	0-360	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

10. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

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 C63.10.

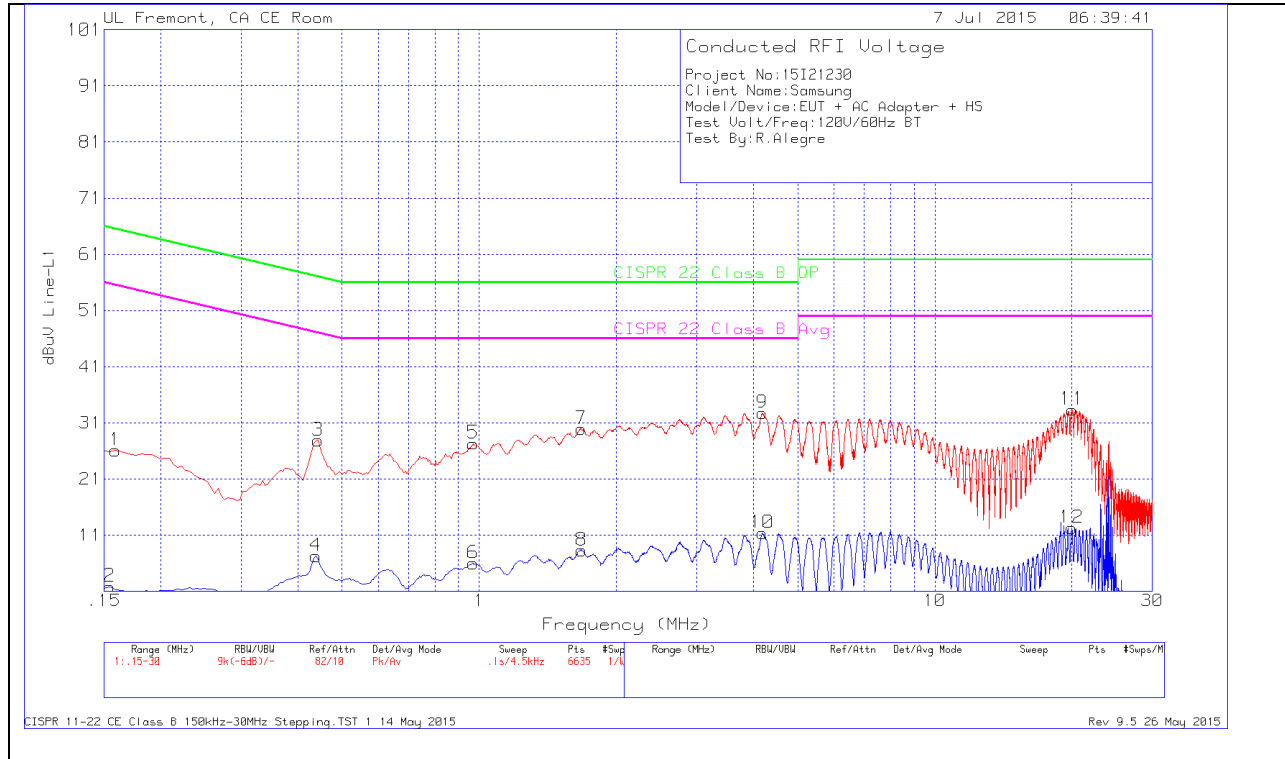
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

6 WORST EMISSIONS

LINE 1 PLOT



LINE 1 RESULTS

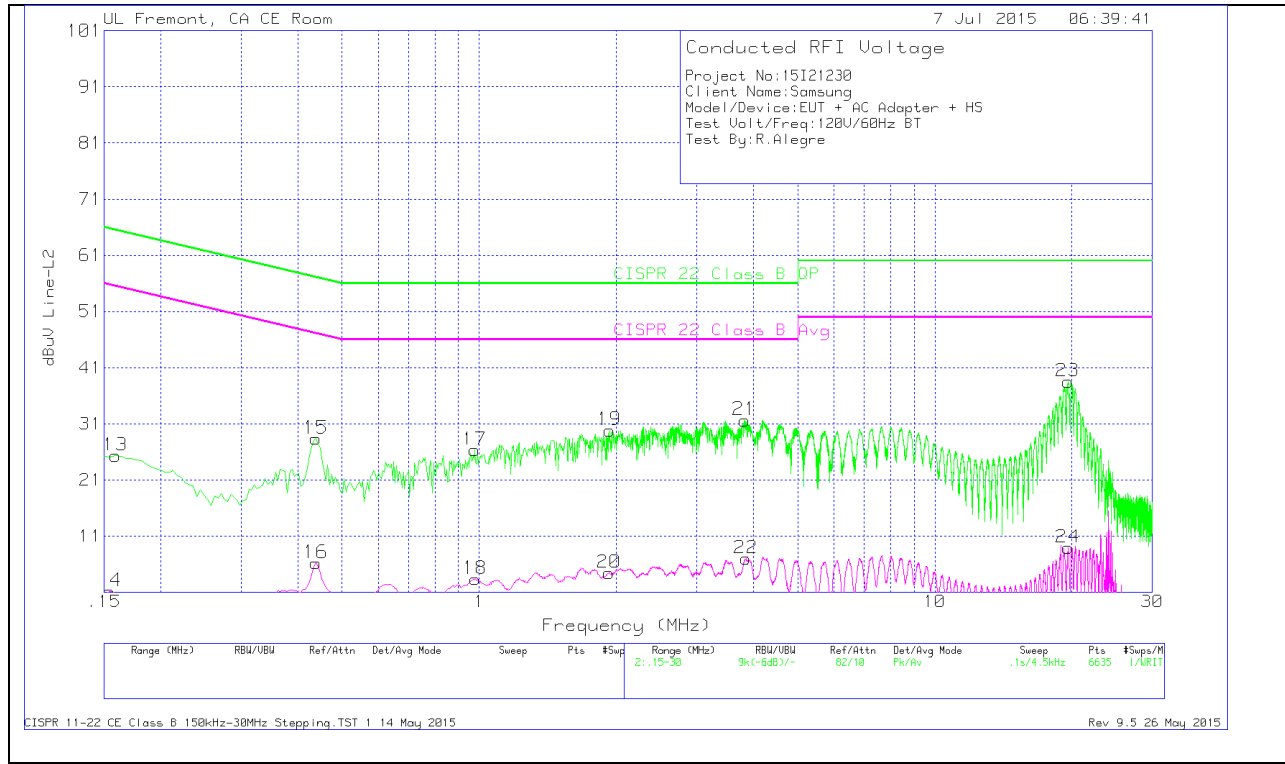
Range 1: Line-L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L1	LC Cables 1&3	Corrected Reading dBuV	CISPR 22 Class B QP	Margin (dB)	CISPR 22 Class B Avg	Margin (dB)
1	.159	24.82	Pk	1.3	0	26.12	65.52	-39.4	-	-
2	.1545	.53	Av	1.3	0	1.83	-	-	55.75	-53.92
3	.4425	27.47	Pk	.4	0	27.87	57.01	-29.14	-	-
4	.438	6.91	Av	.4	0	7.31	-	-	47.1	-39.79
5	.969	27.01	Pk	.3	0	27.31	56	-28.69	-	-
6	.969	5.68	Av	.3	0	5.98	-	-	46	-40.02
7	1.6755	29.62	Pk	.2	.1	29.92	56	-26.08	-	-
8	1.68	7.97	Av	.2	.1	8.27	-	-	46	-37.73
9	4.182	32.46	Pk	.2	.1	32.76	56	-23.24	-	-
10	4.182	11.06	Av	.2	.1	11.36	-	-	46	-34.64
11	20.04	32.83	Pk	.3	.2	33.33	60	-26.67	-	-
12	19.977	11.76	Av	.3	.2	12.26	-	-	50	-37.74

Pk - Peak detector

Av - Average detection

LINE 2 PLOT



LINE 2 RESULTS

Range 2: Line-L2 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L2	LC Cables 2&3	Corrected Reading dBuV	CISPR 22 Class B QP	Margin (dB)	CISPR 22 Class B Avg	Margin (dB)
13	.159	23.94	Pk	1.4	0	25.34	65.52	-40.18	-	-
14	.1545	-.22	Av	1.4	0	1.18	-	-	55.75	-54.57
15	.438	27.96	Pk	.4	0	28.36	57.1	-28.74	-	-
16	.438	5.81	Av	.4	0	6.21	-	-	47.1	-40.89
17	.978	25.96	Pk	.3	.1	26.36	56	-29.64	-	-
18	.98025	2.97	Av	.3	.1	3.37	-	-	46	-42.63
19	1.932	29.56	Pk	.2	.1	29.86	56	-26.14	-	-
20	1.9275	4.19	Av	.2	.1	4.49	-	-	46	-41.51
21	3.822	31.35	Pk	.2	.1	31.65	56	-24.35	-	-
22	3.849	6.71	Av	.2	.1	7.01	-	-	46	-38.99
23	19.59	38.05	Pk	.3	.2	38.55	60	-21.45	-	-
24	19.6125	8.47	Av	.3	.2	8.97	-	-	50	-41.03

Pk - Peak detector

Av - Average detection