



FCC CFR47 PART 15 SUBPART C

CERTIFICATION TEST REPORT

FOR

GSM/WCDMA/LTE Tablet + Bluetooth, DTS/UNII a/b/g/n/ac and ANT+

MODEL NUMBER: SM-T805S, SM-T805K, SM-T805L

FCC ID: A3LSMT805KOR

REPORT NUMBER: 14I18753-E4

ISSUE DATE: SEPTEMBER 16, 2014

**Prepared for
SAMSUNG ELECTRONICS CO., LTD.
416, MAETAN 3-DONG, YEONGTONG-GU
SUWON-CITY, GYEONGGI-DO 443-742, SOUTH KOREA**

**Prepared by
UL VERIFICATION SERVICES INC.
47173 BENICIA STREET
FREMONT, CA 94538, U.S.A.
TEL: (510) 771-1000
FAX: (510) 661-088**



NVLAP LAB CODE 200065-0

Revision History

Issue			
Rev.	Date	Revisions	Revised By
--	9/16/14	Initial issue	P. Zhang

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS	6
2. TEST METHODOLOGY	7
3. CALIBRATION AND UNCERTAINTY	8
3.1. MEASURING INSTRUMENT CALIBRATION	8
3.2. SAMPLE CALCULATION	8
3.3. MEASUREMENT UNCERTAINTY	8
4. EQUIPMENT UNDER TEST	9
4.1. DESCRIPTION OF EUT	9
4.2. MAXIMUM OUTPUT POWER.....	9
4.3. DESCRIPTION OF AVAILABLE ANTENNAS	10
4.4. List of test reduction and modes covering other modes:	10
4.5. WORST-CASE CONFIGURATION AND MODE	11
4.6. DESCRIPTION OF TEST SETUP.....	12
5. TEST AND MEASUREMENT EQUIPMENT	14
6. MEASUREMENT METHODS	15
7. ON TIME, DUTY CYCLE AND MEASUREMENT METHODS	16
7.1. ON TIME AND DUTY CYCLE RESULTS.....	16
8. SUMMARY TABLE	17
9. ANTENNA PORT TEST RESULTS	18
9.1. 6 dB BANDWIDTH.....	18
9.1.1. 802.11b MODE IN THE 2.4 GHz BAND	19
9.1.2. 802.11g MODE IN THE 2.4 GHz BAND	19
9.1.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND	19
9.1.4. 802.11a MODE IN THE 5.8 GHz BAND	20
9.1.5. 802.11n HT20 MODE IN THE 5.8 GHz BAND	20
9.1.6. 802.11n HT40 MODE IN THE 5.8 GHz BAND	20
9.1.7. 802.11ac HT80 MODE IN THE 5.8 GHz BAND	20
9.1.1. 6 dB BANDWIDTH MID CH PLOTS.....	21
9.2. 99% BANDWIDTH.....	24
9.2.1. 802.11b MODE IN THE 2.4 GHz BAND	24
9.2.2. 802.11g MODE IN THE 2.4 GHz BAND	24
9.2.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND	24
9.2.4. 802.11a MODE IN THE 5.8 GHz BAND	25

9.2.5.	802.11n HT20 MODE IN THE 5.8 GHz BAND	25
9.2.6.	802.11n HT40 MODE IN THE 5.8 GHz BAND	25
9.2.7.	802.11ac HT80 MODE IN THE 5.8 GHz BAND	25
9.2.1.	99% BANDWIDTH MID CH PLOTS.....	26
9.3.	OUTPUT POWER.....	29
9.3.1.	802.11b MODE IN THE 2.4 GHz BAND	30
9.3.2.	802.11g MODE IN THE 2.4 GHz BAND	30
9.3.3.	802.11n HT20 MODE IN THE 2.4 GHz BAND	31
9.3.4.	802.11a MODE IN THE 5.8 GHz BAND	31
9.3.5.	802.11n HT20 MODE IN THE 5.8 GHz BAND	32
9.3.6.	802.11n HT40 MODE IN THE 5.8 GHz BAND	32
9.3.1.	802.11ac HT80 MODE IN THE 5.8 GHz BAND	33
9.4.	PSD	34
9.4.1.	802.11b MODE IN THE 2.4 GHz BAND	34
9.4.2.	802.11g MODE IN THE 2.4 GHz BAND	34
9.4.3.	802.11n HT20 MODE IN THE 2.4 GHz BAND	35
9.4.4.	802.11a MODE IN THE 5.8 GHz BAND	35
9.4.5.	802.11n HT20 MODE IN THE 5.8 GHz BAND	35
9.4.6.	802.11n HT40 MODE IN THE 5.8 GHz BAND	36
9.4.7.	802.11ac HT80 MODE IN THE 5.8 GHz BAND	36
9.4.1.	PSD MID CH PLOTS	37
9.5.	OUT-OF-BAND EMISSIONS	40
9.5.1.	802.11b MODE IN THE 2.4 GHz BAND CHAIN 0	41
9.5.2.	802.11b MODE IN THE 2.4 GHz BAND CHAIN 1	47
9.5.3.	802.11g MODE IN THE 2.4 GHz BAND CHAIN 0	53
9.5.4.	802.11g MODE IN THE 2.4 GHz BAND CHAIN 1	59
9.5.5.	802.11n HT20 MODE IN THE 2.4 GHz BAND CHAIN 0	65
9.5.6.	802.11n HT20 MODE IN THE 2.4 GHz BAND CHAIN 1	71
9.5.7.	802.11a MODE IN THE 5.8 GHz BAND CHAIN 0	77
9.5.8.	802.11a MODE IN THE 5.8 GHz BAND CHAIN 1	83
9.5.9.	802.11n HT20 MODE IN THE 5.8 GHz BAND CHAIN 0	89
9.5.10.	802.11n HT20 MODE IN THE 5.8 GHz BAND CHAIN 1.....	95
9.5.11.	802.11n HT40 MODE IN THE 5.8 GHz BAND CHAIN 0.....	101
9.5.12.	802.11n HT40 MODE IN THE 5.8 GHz BAND CHAIN 1.....	106
9.5.1.	802.11ac HT80 MODE IN THE 5.8 GHz BAND CHAIN 0.....	111
9.5.2.	802.11ac HT80 MODE IN THE 5.8 GHz BAND CHAIN 1.....	115
10.	RADIATED TEST RESULTS	119
10.1.	LIMITS AND PROCEDURE.....	119
10.2.	TRANSMITTER ABOVE 1 GHz.....	120
10.2.1.	TX ABOVE 1 GHz 802.11b MODE IN THE 2.4 GHz BAND.....	120
10.2.2.	TX ABOVE 1 GHz 802.11g MODE IN THE 2.4 GHz BAND.....	133
10.2.3.	TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 2.4 GHz BAND	146
10.2.1.	TX ABOVE 1 GHz 802.11a MODE IN THE 5.8 GHz BAND	159
10.2.2.	TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.8 GHz BAND	168
10.2.3.	TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.8 GHz BAND	177
10.2.4.	TX ABOVE 1 GHz 802.11ac HT80 MODE IN THE 5.8 GHz BAND	183

10.3.	WORST-CASE BELOW 1 GHz	186
11.	AC POWER LINE CONDUCTED EMISSIONS	189
12.	SETUP PHOTOS	194

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: SAMSUNG ELECTRONICS CO., LTD.

EUT DESCRIPTION: GSM/WCDMA/LTE Tablet + Bluetooth, DTS/UNII a/b/g/n/ac and ANT+

MODEL: SM-T805S, SM-T805K, SM-T805L

SERIAL NUMBER: Conducted: 1951580 Radiated: 1951579

DATE TESTED: September 4 - 16, 2014

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:



PENG ZHANG
CONSUMER TECHNOLOGY DIVISION
PROJECT LEAD
UL Verification Services Inc.

Tested By:



STEVEN TRAN
CONSUMER TECHNOLOGY DIVISION
LAB ENGINEER
UL Verification Services Inc.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, ANSI C63.4-2009.

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>.

3. CALIBRATION AND UNCERTAINTY

3.1. 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.

3.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)

36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

3.3. 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 40000 MHz	4.94 dB

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

4. EQUIPMENT UNDER TEST

4.1. DESCRIPTION OF EUT

The EUT is a The EUT is a GSM/WCDMA/LTE Tablet + Bluetooth, DTS/UNII a/b/g/n/ac and ANT+

4.2. MAXIMUM OUTPUT POWER

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

Frequency Range (MHz)	Mode	Total Output Power (dBm)	Total Output Power (mW)
2412 - 2462	802.11b	14.16	26.06
2412 - 2462	802.11g	13.51	22.44
2412 - 2462	802.11n HT20	12.16	16.44
5745 - 5825	802.11a	9.16	8.24
5745 - 5825	802.11n HT20	9.11	8.15
5755 - 5795	802.11n HT40	9.36	8.63
5775 - 5775	802.11ac HT80	9.21	8.34

The transmitter has average conducted output power as follows:

4.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an FPCB antenna, with a maximum gain of 2.4GHz Chain 0 = -4.24dBi & Chain 1 = 0.19dBi, 5GHz Chain 0 = -2.01dBi & Chain 1 = 1.35dBi.

4.4. List of test reduction and modes covering other modes:

2400 - 2483.5 MHz Authorized Frequency Band (Antenna Port & Radiated Testing)		
Frequency Range (MHz)	Mode	Covered by
2412 - 2462	802.11b Legacy 1TX	802.11b CDD 2TX
2412 - 2462	802.11g Legacy 1TX	802.11g CDD 2TX
2412 - 2462	802.11n 1TX	802.11n HT20 CDD 2TX
2412 - 2462	802.11n STBC 2TX	802.11n HT20 CDD 2TX
2412 - 2462	802.11n HT40 1TX	802.11n HT40 CDD 2TX
2412 - 2462	802.11n HT40 STBC 2TX	802.11n HT40 CDD 2TX

5725 - 5850 MHz Authorized Frequency Band (Antenna Port & Radiated Testing)		
Frequency Range (MHz)	Mode	Covered by
5745 - 5825	802.11a Legacy 1TX	802.11a CDD 2TX
5745 - 5825	802.11n HT20 1TX	802.11n HT20 CDD 2TX
5745 - 5825	802.11n HT20 STBC 2TX	802.11n HT20 CDD 2TX
5755 - 5795	802.11n HT40 1TX	802.11n HT40 CDD 2TX
5755 - 5795	802.11n HT40 STBC 2TX	802.11n HT40 CDD 2TX
5775	802.11ac VHT80 1TX	802.11ac VHT80 CDD 2TX
5775	802.11ac VHT80 STBC 2TX	802.11ac VHT80 CDD 2TX

4.5. 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 Y orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in X orientation.

Based on the baseline scan, the worst-case data rates were:

802.11b mode: 1 Mbps

802.11g mode: 6 Mbps

802.11a mode: 6 Mbps

802.11n HT20mode: MCS0

802.11n HT40mode: MCS0

802.11ac VHT80mode: MCS0

4.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
AC Adapter	Samsung	SM-G530H	ETA0U93CBC	N/A
Earphone	Samsung	GH59	N/A	N/A

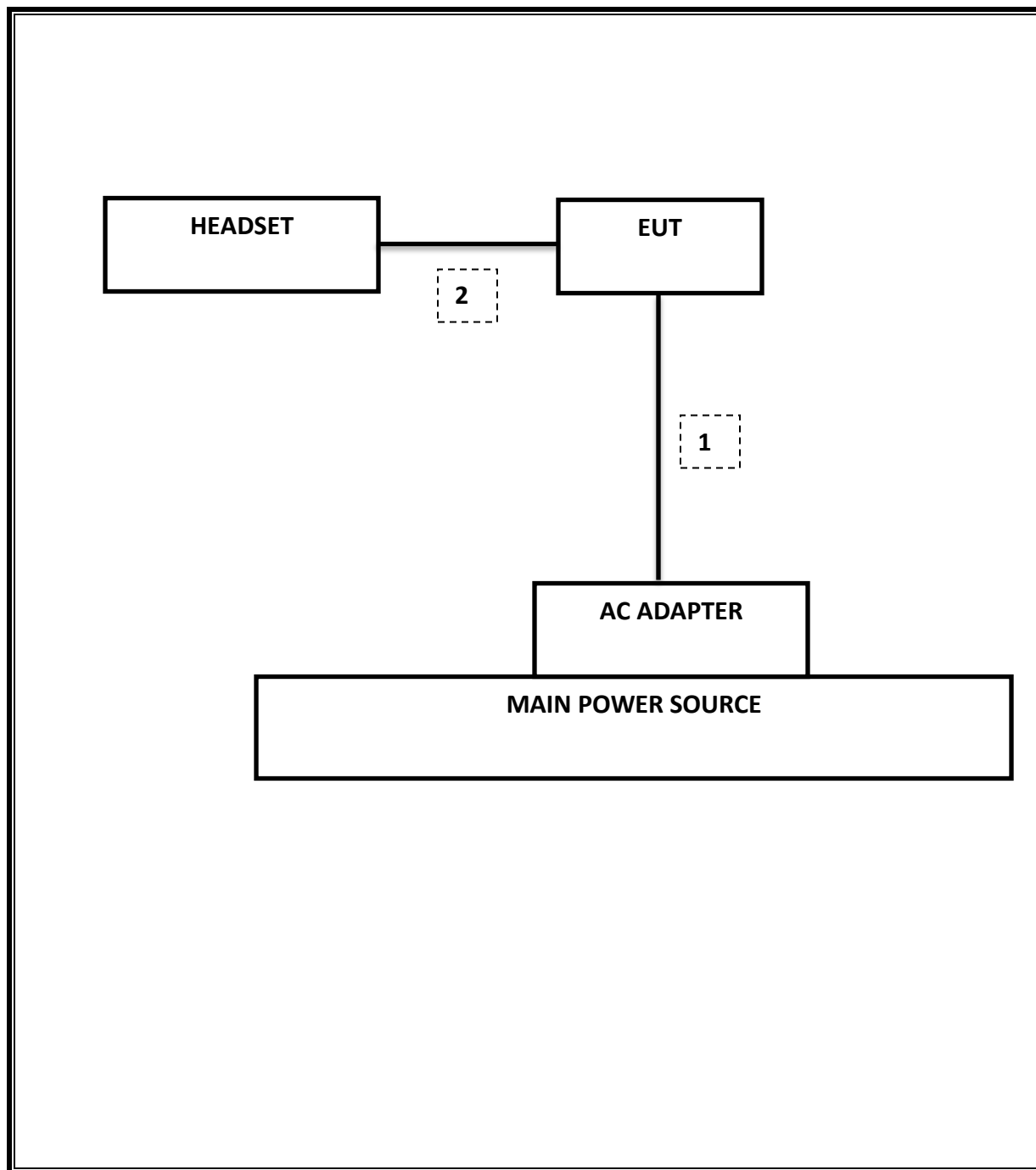
I/O CABLES

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 a stand-alone unit during the tests. Test software exercised the radio card.

SETUP DIAGRAM FOR TESTS



5. 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
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C01069	12/20/14
Spectrum Analyzer, 9KHz-40GHz	HP	8564E	C00986	04/01/15
EMI Test Receiver, 9 kHz-7 GHz	R & S	ESCI 7	1000741	08/13/15
EMI Test Receiver, 30 MHz	R & S	ESHS 20	N02396	08/18/15
Peak Power Meter	Agilent / HP	E4416A	C00963	12/13/14
Peak / Average Power Sensor	Agilent / HP	E9327A	C00964	12/13/14
Antenna, Horn, 1-18 GHz	ETS	3117	C01022	02/21/15
Antenna, Horn, 18- 26 GHz	ARA	MWH-1826/B	C00946	11/12/14
Antenna, Horn, 26-40 GHz	ARA	MWH-2640	C00891	06/28/15
Antenna, Bilog, 30MHz-1 GHz	Sunol Sciences	JB1	T243	03/06/15
RF Preamplifier, 100KHz -> 1300MHz	HP	TBD	C00825	06/01/15
RF Preamplifier, 1GHz - 18GHz	Miteq	NSP4000-SP2	924343	03/23/15
RF Preamplifier, 1GHz - 26.5GHz	HP	8449B	F00351	06/27/15
AC Power Supply, 2,500VA 45-500Hz	Elgar-Ametek	CW2501M	F00013	CNR
RF Preamplifier, 1GHz - 40GHz	Miteq	NSP4000-SP2	C00990	08/20/15
Attenuator / Switch driver	HP	11713A	F00204	CNR
Low Pass Filter 3GHz	Micro-Tronics	LPS17541	F00219	05/23/15
High Pass Filter 5GHz	Micro-Tronics	HPS17542	F00222	05/22/15
High Pass Filter 6GHz	Micro-Tronics	HPM17543	F00224	05/22/15

6. MEASUREMENT METHODS

KDB 558074 D01 DTS Meas Guidance v03r02: Measurement Procedure AVGPM-G is used for power and AVGPS-3 is used for power spectral density.

Unwanted emissions within Restricted Bands are measured using traditional radiated procedures.

Band edge emissions within Restricted Bands are measured using RMS with duty cycle factor offset method.

7. ON TIME, DUTY CYCLE AND MEASUREMENT METHODS

LIMITS

None; for reporting purposes only.

PROCEDURE

KDB 789033 Zero-Span Spectrum Analyzer Method.

7.1. ON TIME AND DUTY CYCLE RESULTS

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
2.4GHz Band						
802.11b CDD	1.860	1.872	0.994	99.36%	0.00	0.010
802.11g CDD	1.520	1.630	0.933	93.25%	0.30	0.658
802.11n HT20 CDD	1.335	1.445	0.924	92.39%	0.34	0.749
5GHz Band						
802.11a CDD	1.425	1.535	0.928	92.83%	0.32	0.702
802.11n HT20 CDD	1.330	1.430	0.930	93.01%	0.31	0.752
802.11n HT40 CDD	0.6630	0.7630	0.869	86.89%	0.61	1.508
802.11ac VHT80 CDD	0.1910	0.2910	0.656	65.64%	1.83	5.236

8. SUMMARY TABLE

FCC Part Section	RSS Section(s)	Test Description	Test Limit	Test Condition	Test Result	Worst Case
15.247 (a)(2)	RSS-210 A8.2(a)	Occupied Band width (6dB)	>500KHz	Conducted	Pass	8.055MHz
2.1051, 15.247 (d)	RSS-210 A8.5	Band Edge / Conducted Spurious Emission	-20dBc		Pass	-33.9 dBm
15.247	RSS-210 A8.4	TX conducted output power	<30dBm		Pass	14.16 dBm
15.247	RSS-210 A8.2	PSD	<8dBm		Pass	-13.24dBm
15.207 (a)	RSS-GEN 7.2.2	AC Power Line conducted emissions	Section 10	Radiated	Pass	46.95dBuV
15.205, 15.209	RSS-210 Clause 2.6, RSS-210 Clause 6	Radiated Spurious Emission	< 54dBuV/m		Pass	52.67dBmV/m

9. ANTENNA PORT TEST RESULTS

9.1. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

The minimum 6 dB bandwidth shall be at least 500 kHz.

TEST PROCEDURE

Reference to KDB 558074 D01 DTS Meas Guidance v03r02: The transmitter output is connected to a spectrum analyzer with the RBW set to 100 kHz, the VBW $\geq 3 \times$ RBW, peak detector and max hold.

RESULTS

9.1.1. 802.11b MODE IN THE 2.4 GHz BAND

Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Low	2412	8.567	8.625	0.5
Mid	2437	8.606	9.045	0.5
High	2462	9.048	8.055	0.5

9.1.2. 802.11g MODE IN THE 2.4 GHz BAND

Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Low	2412	16.450	16.410	0.5
Mid	2437	16.400	16.500	0.5
High	2462	16.450	16.500	0.5

9.1.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND

Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Low	2412	17.700	17.580	0.5
Mid	2437	17.650	17.670	0.5
High	2462	17.750	17.640	0.5

9.1.4. 802.11a MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Low	5745	16.500	16.290	0.5
Mid	5785	16.500	16.470	0.5
High	5825	16.500	16.470	0.5

9.1.5. 802.11n HT20 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Low	5745	17.700	17.730	0.5
Mid	5785	17.700	17.730	0.5
High	5825	17.650	17.730	0.5

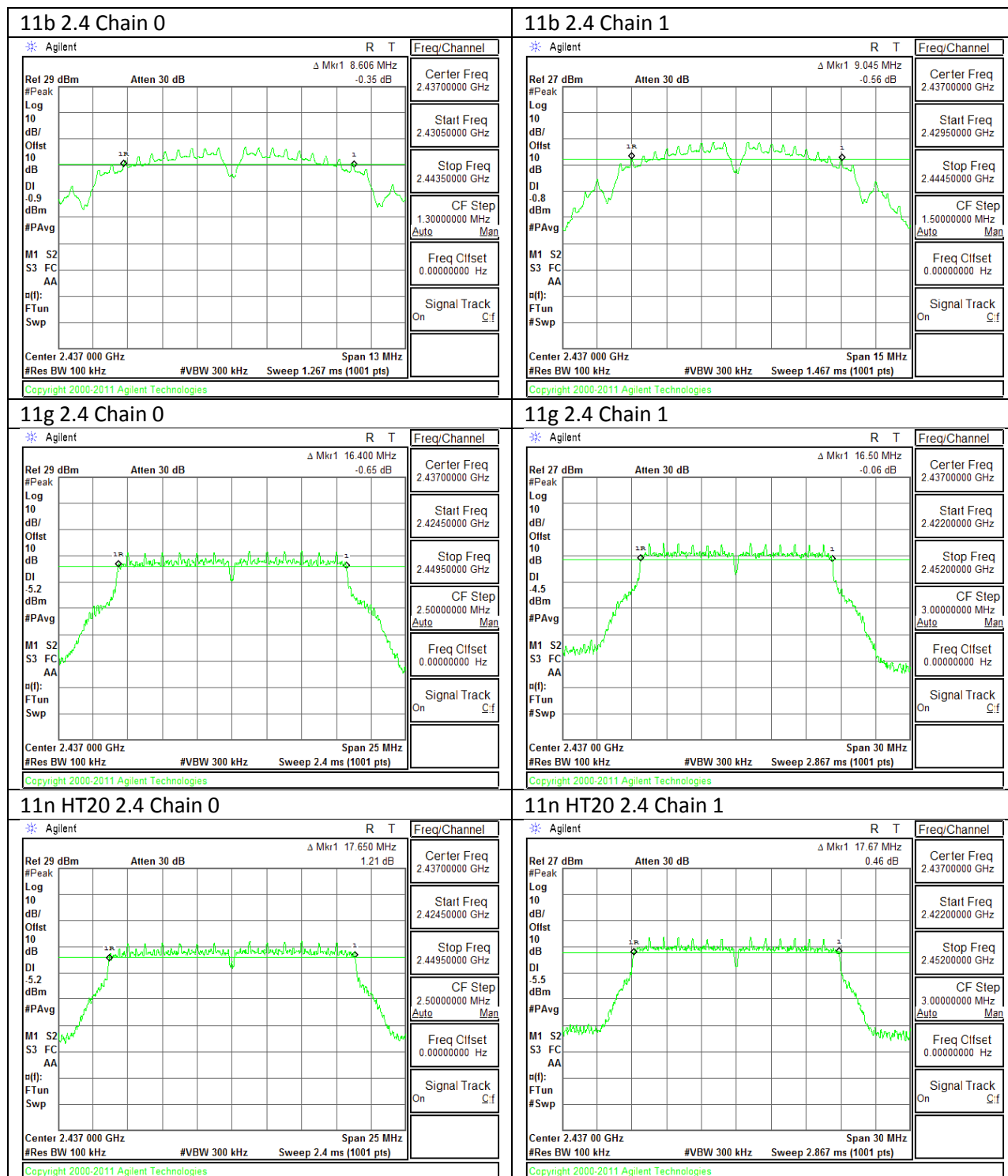
9.1.6. 802.11n HT40 MODE IN THE 5.8 GHz BAND

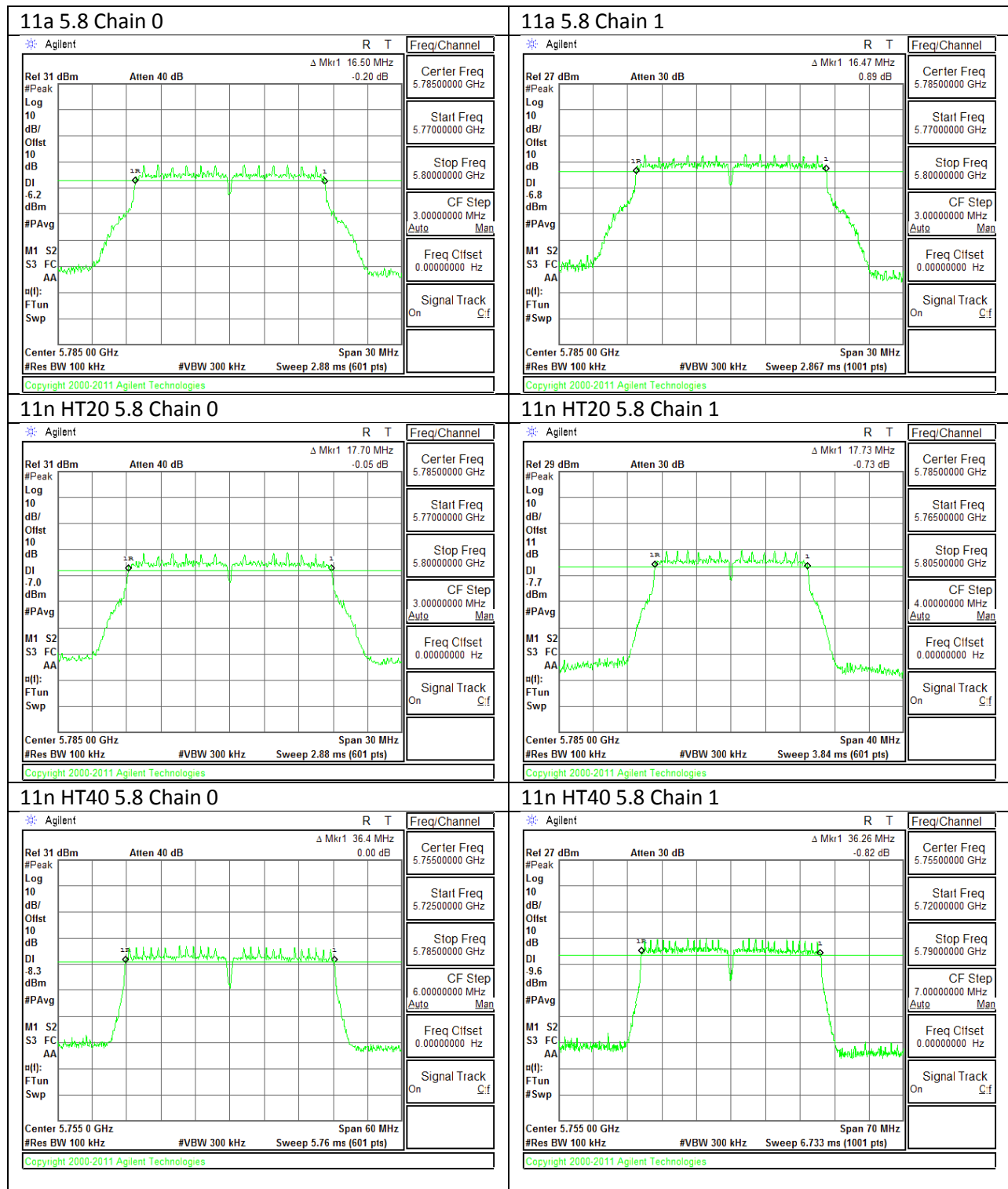
Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Low	5755	36.400	36.260	0.5
High	5795	36.300	36.190	0.5

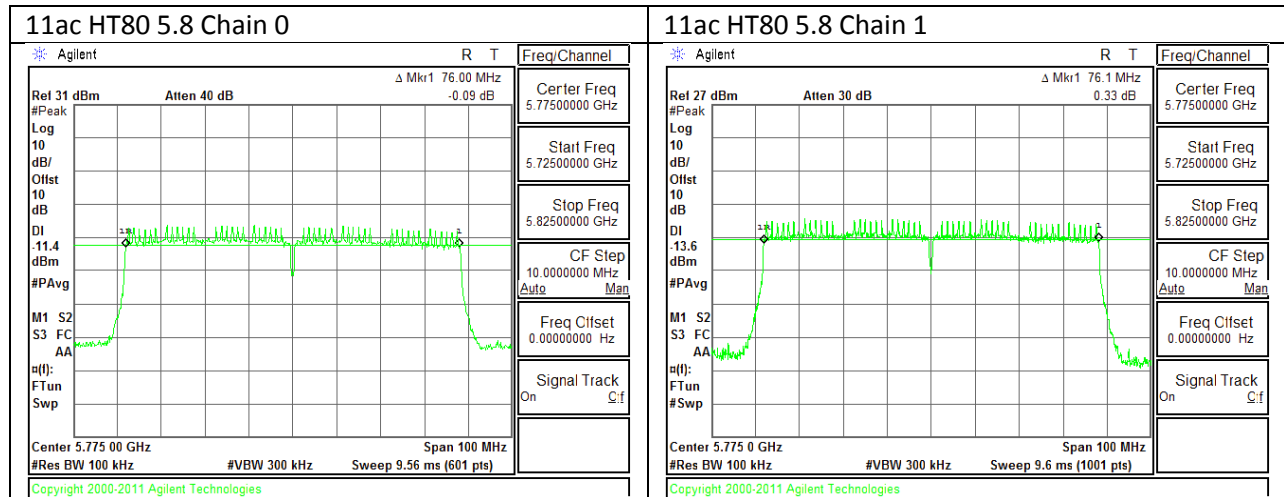
9.1.7. 802.11ac HT80 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Low	5775	76.000	76.100	0.5

9.1.1. 6 dB BANDWIDTH MID CH PLOTS







9.2. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

9.2.1. 802.11b MODE IN THE 2.4 GHz BAND

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	2412	10.90	10.88
Mid	2437	11.09	11.08
High	2462	11.31	10.75

9.2.2. 802.11g MODE IN THE 2.4 GHz BAND

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	2412	16.53	16.41
Mid	2437	16.45	16.47
High	2462	16.44	16.40

9.2.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	2412	17.75	17.69
Mid	2437	17.56	17.73
High	2462	17.74	17.61

9.2.4. 802.11a MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5745	17.70	17.51
Mid	5785	17.70	17.77
High	5825	17.72	17.47

9.2.5. 802.11n HT20 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5745	17.70	17.51
Mid	5785	17.70	17.77
High	5825	17.72	17.47

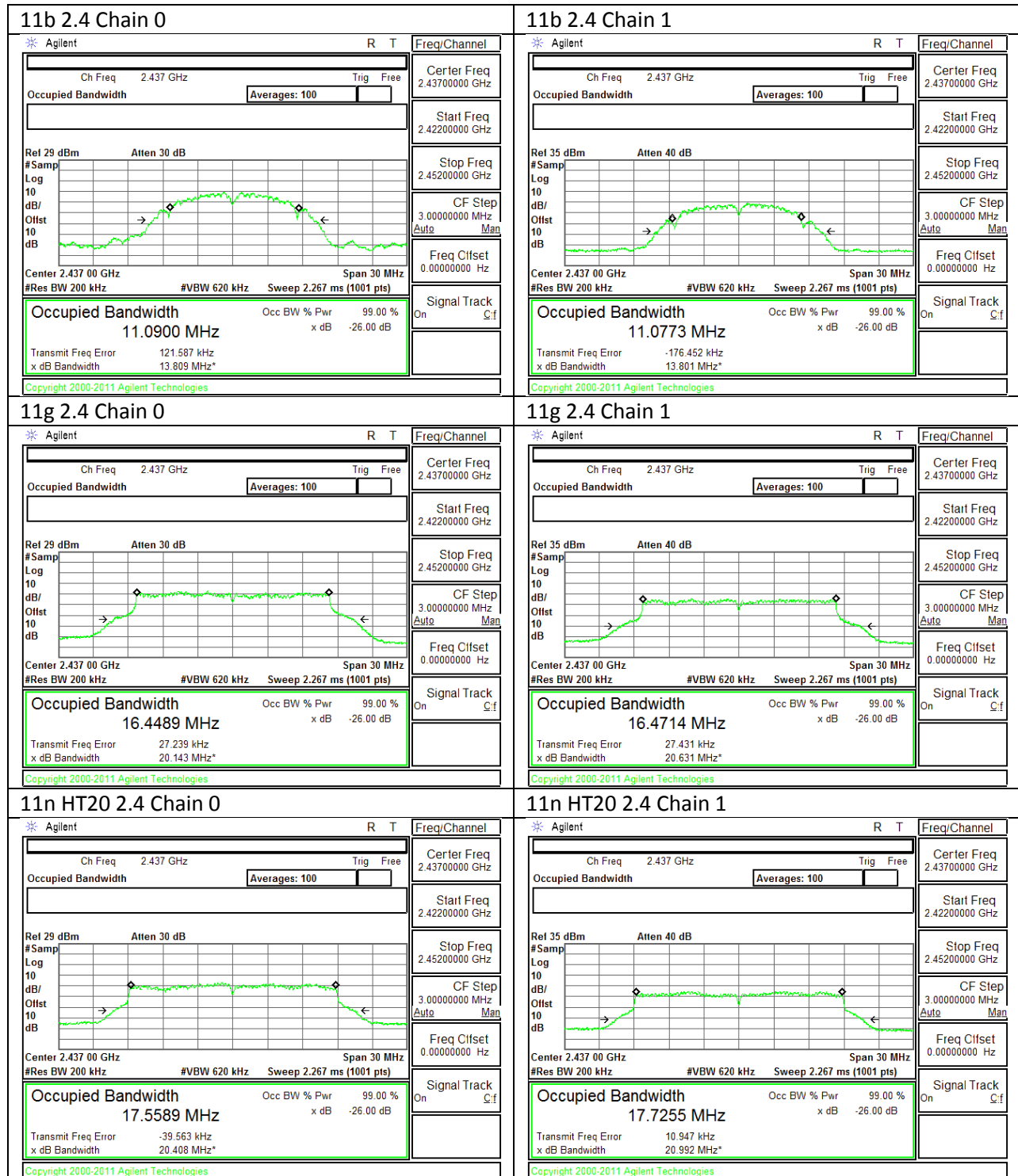
9.2.6. 802.11n HT40 MODE IN THE 5.8 GHz BAND

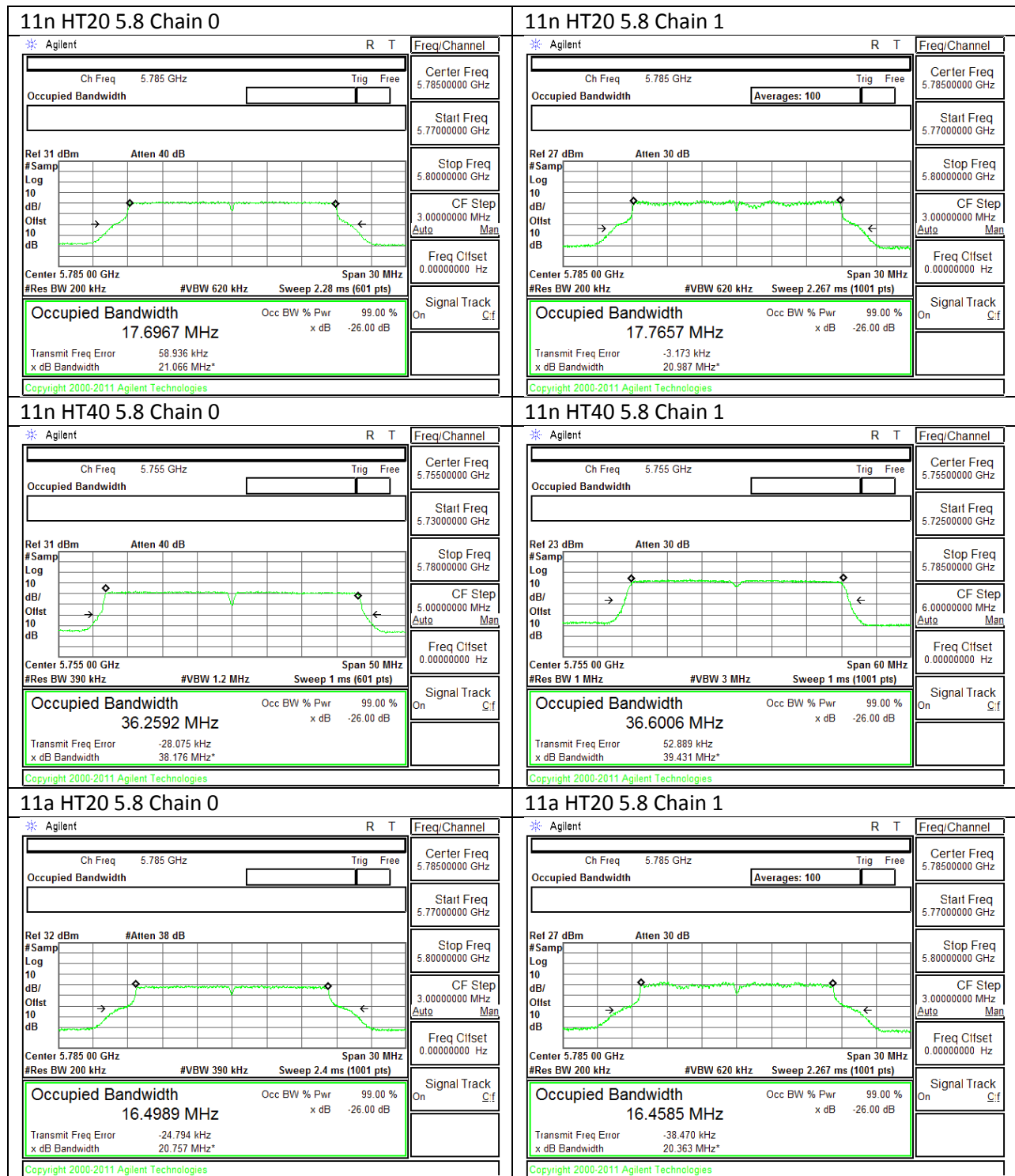
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5755	36.26	36.60
High	5795	36.35	36.19

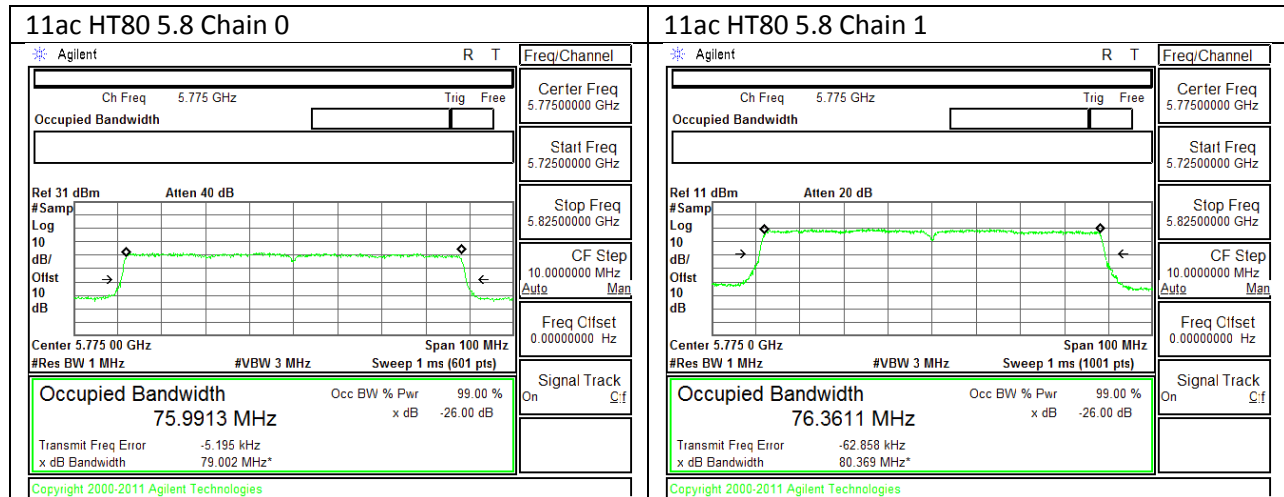
9.2.7. 802.11ac HT80 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5775	75.99	76.36

9.2.1. 99% BANDWIDTH MID CH PLOTS







9.3. OUTPUT POWER

LIMITS

FCC §15.247

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 10.2 dB (including 10 dB pad and .2 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

DIRECTIONAL ANTENNA GAIN

For power: The TX chains are uncorrelated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
-4.24	0.19	-1.48

For PSD: The TX chains are correlated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
-4.24	0.19	1.26

RESULTS

9.3.1. 802.11b MODE IN THE 2.4 GHz BAND

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	2412	-1.48	30.00	30	36	30.00
Mid	2437	-1.48	30.00	30	36	30.00
High	2462	-1.48	30.00	30	36	30.00

Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margi (dB)
Low	2412	11.20	11.10	14.16	30.00	-15.84
Mid	2437	11.10	11.10	14.11	30.00	-15.89
High	2462	10.80	10.50	13.66	30.00	-16.34

9.3.2. 802.11g MODE IN THE 2.4 GHz BAND

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	2412	-1.48	30.00	30	36	30.00
Mid	2437	-1.48	30.00	30	36	30.00
High	2462	-1.48	30.00	30	36	30.00

Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margi (dB)
Low	2412	10.40	10.5	13.46	30.00	-16.54
Mid	2437	10.50	10.5	13.51	30.00	-16.49
High	2462	10.40	10.2	13.31	30.00	-16.69

9.3.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	2412	-1.48	30.00	30	36	30.00
Mid	2437	-1.48	30.00	30	36	30.00
High	2462	-1.48	30.00	30	36	30.00

Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margi (dB)
Low	2412	9.20	9.10	12.16	30.00	-17.84
Mid	2437	9.30	9.00	12.16	30.00	-17.84
High	2462	9.00	8.80	11.91	30.00	-18.09

9.3.4. 802.11a MODE IN THE 5.8 GHz BAND

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	5745	-0.01	30.00	30	36	30.00
Mid	5785	-0.01	30.00	30	36	30.00
High	5825	-0.01	30.00	30	36	30.00

Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margi (dB)
Low	5745	6.00	6.20	9.11	30.00	-20.89
Mid	5785	6.00	6.10	9.06	30.00	-20.94
High	5825	6.30	6.00	9.16	30.00	-20.84

9.3.5. 802.11n HT20 MODE IN THE 5.8 GHz BAND

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	5745	-0.01	30.00	30	36	30.00
Mid	5785	-0.01	30.00	30	36	30.00
High	5825	-0.01	30.00	30	36	30.00

Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margi (dB)
Low	5745	6.00	6.20	9.11	30.00	-20.89
Mid	5785	6.00	6.10	9.06	30.00	-20.94
High	5825	6.20	6.00	9.11	30.00	-20.89

9.3.6. 802.11n HT40 MODE IN THE 5.8 GHz BAND

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	5755	-0.01	30.00	30	36	30.00
High	5795	-0.01	30.00	30	36	30.00

Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low	5755	6.50	6.20	9.36	30.00	-20.64
High	5795	6.50	6.00	9.27	30.00	-20.73

9.3.1. 802.11ac HT80 MODE IN THE 5.8 GHz BAND

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	5775	-0.01	36.01	30	36	30.00

Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low	5775	6.30	6.10	9.21	30.00	-20.79

9.4. PSD

LIMITS

FCC §15.247

The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

RESULTS

9.4.1. 802.11b MODE IN THE 2.4 GHz BAND

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Chain 1 Meas (dBm)	Total PSD (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-17.41	-16.50	-13.92	8.0	-21.9
Mid	2437	-15.66	-16.94	-13.24	8.0	-21.2
High	2462	-17.91	-17.46	-14.67	8.0	-22.7

9.4.2. 802.11g MODE IN THE 2.4 GHz BAND

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Chain 1 Meas (dBm)	Total PSD (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-21.92	-23.38	-19.58	8.0	-27.6
Mid	2437	-21.77	-22.11	-18.93	8.0	-26.9
High	2462	-22.35	-23.51	-19.88	8.0	-27.9

9.4.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Chain 1 Meas (dBm)	Total PSD (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-21.58	-23.98	-19.61	8.0	-27.6
Mid	2437	-21.98	-23.99	-19.86	8.0	-27.9
High	2462	-22.61	-23.63	-20.08	8.0	-28.1

9.4.4. 802.11a MODE IN THE 5.8 GHz BAND

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Chain 1 Meas (dBm)	Total PSD (dBm)	Limit (dBm)	Margin (dB)
Low	5745	-24.00	-22.87	-20.39	8.0	-28.4
Mid	5785	-24.55	-23.02	-20.71	8.0	-28.7
High	5825	-24.12	-23.12	-20.58	8.0	-28.6

9.4.5. 802.11n HT20 MODE IN THE 5.8 GHz BAND

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Chain 1 Meas (dBm)	Total PSD (dBm)	Limit (dBm)	Margin (dB)
Low	5745	-23.98	-23.97	-20.96	8.0	-29.0
Mid	5785	-24.40	-23.58	-20.96	8.0	-29.0
High	5825	-25.03	-24.49	-21.74	8.0	-29.7

9.4.6. 802.11n HT40 MODE IN THE 5.8 GHz BAND

PSD Results

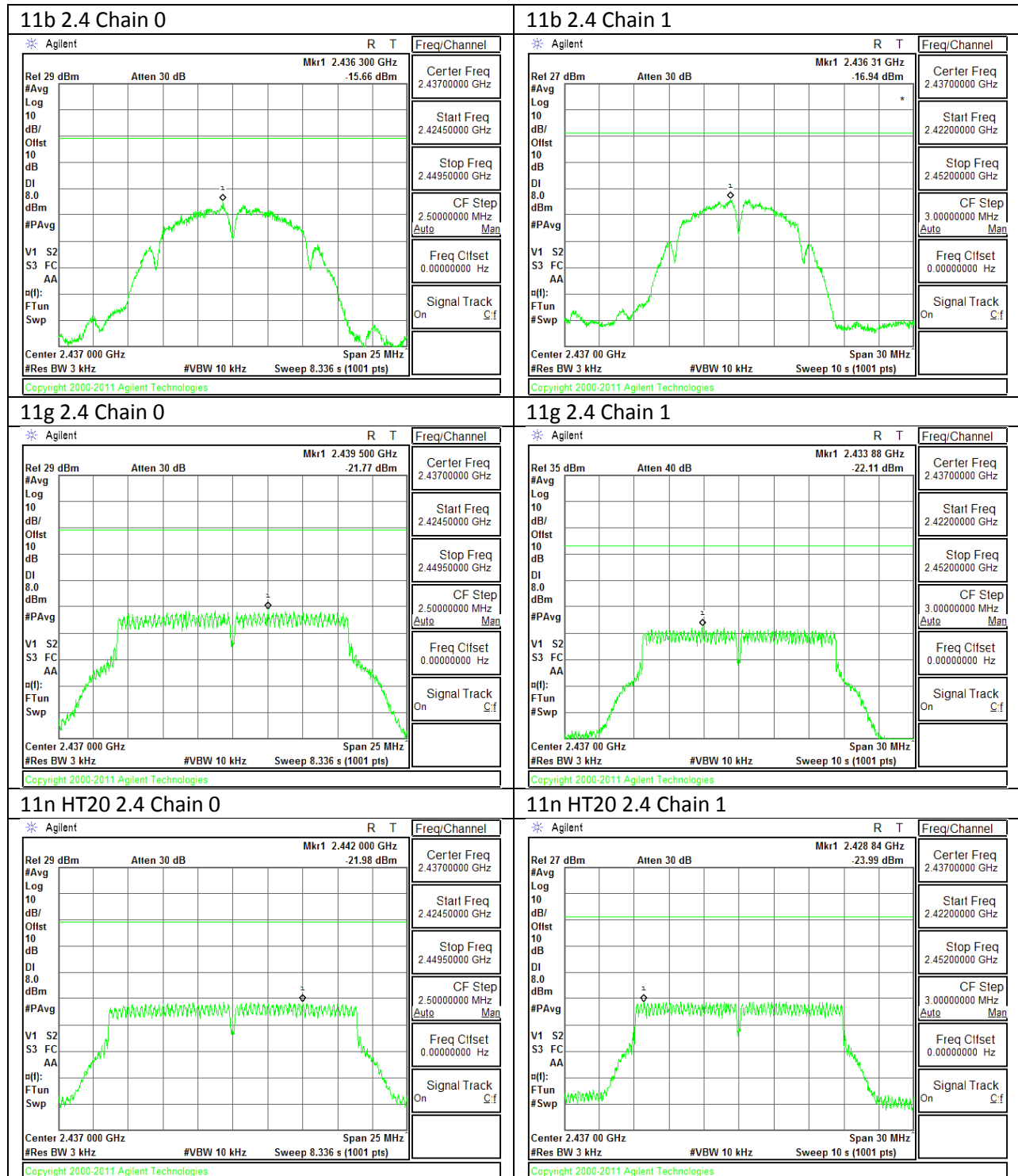
Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Chain 1 Meas (dBm)	Total PSD (dBm)	Limit (dBm)	Margin (dB)
Low	5755	-27.08	-28.77	-24.83	8.0	-32.8
High	5795	-27.15	-29.15	-25.03	8.0	-33.0

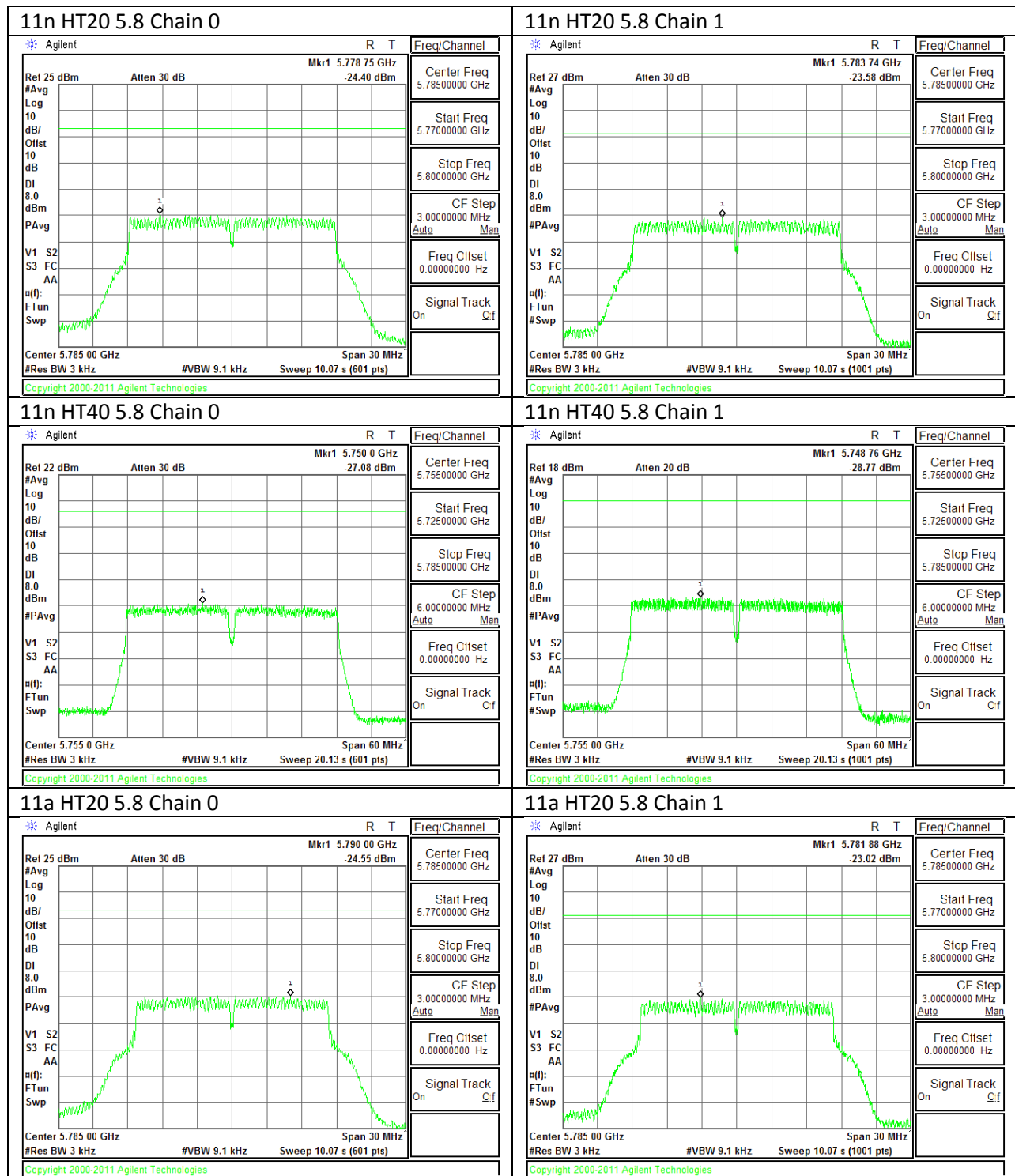
9.4.7. 802.11ac HT80 MODE IN THE 5.8 GHz BAND

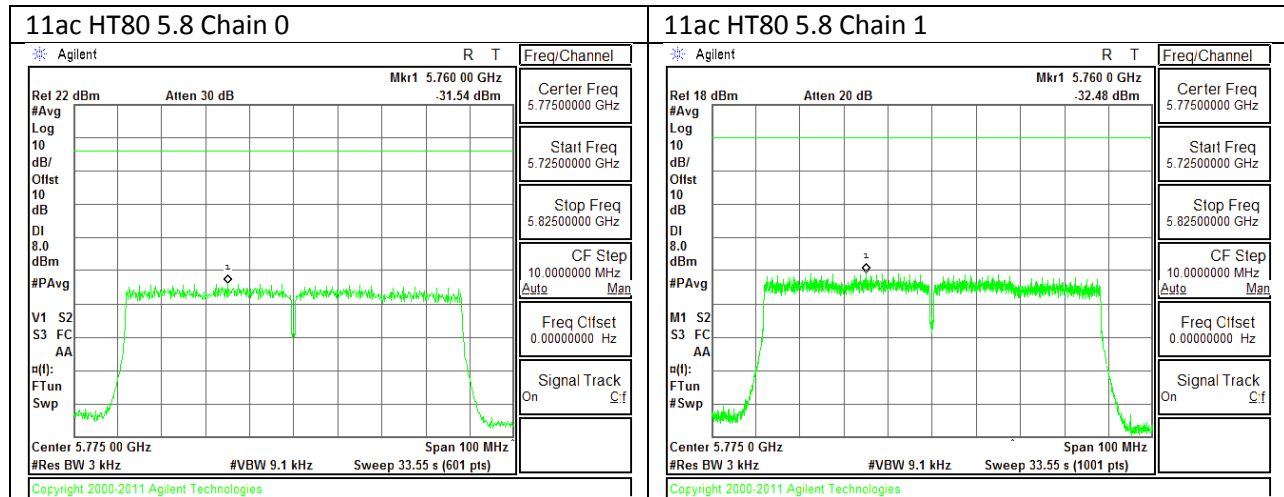
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Chain 1 Meas (dBm)	Total PSD (dBm)	Limit (dBm)	Margin (dB)
Low	5775	-31.54	-32.48	-28.97	8.0	-37.0

9.4.1. PSD MID CH PLOTS







9.5. OUT-OF-BAND EMISSIONS

LIMITS

FCC §15.247 (d)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required.

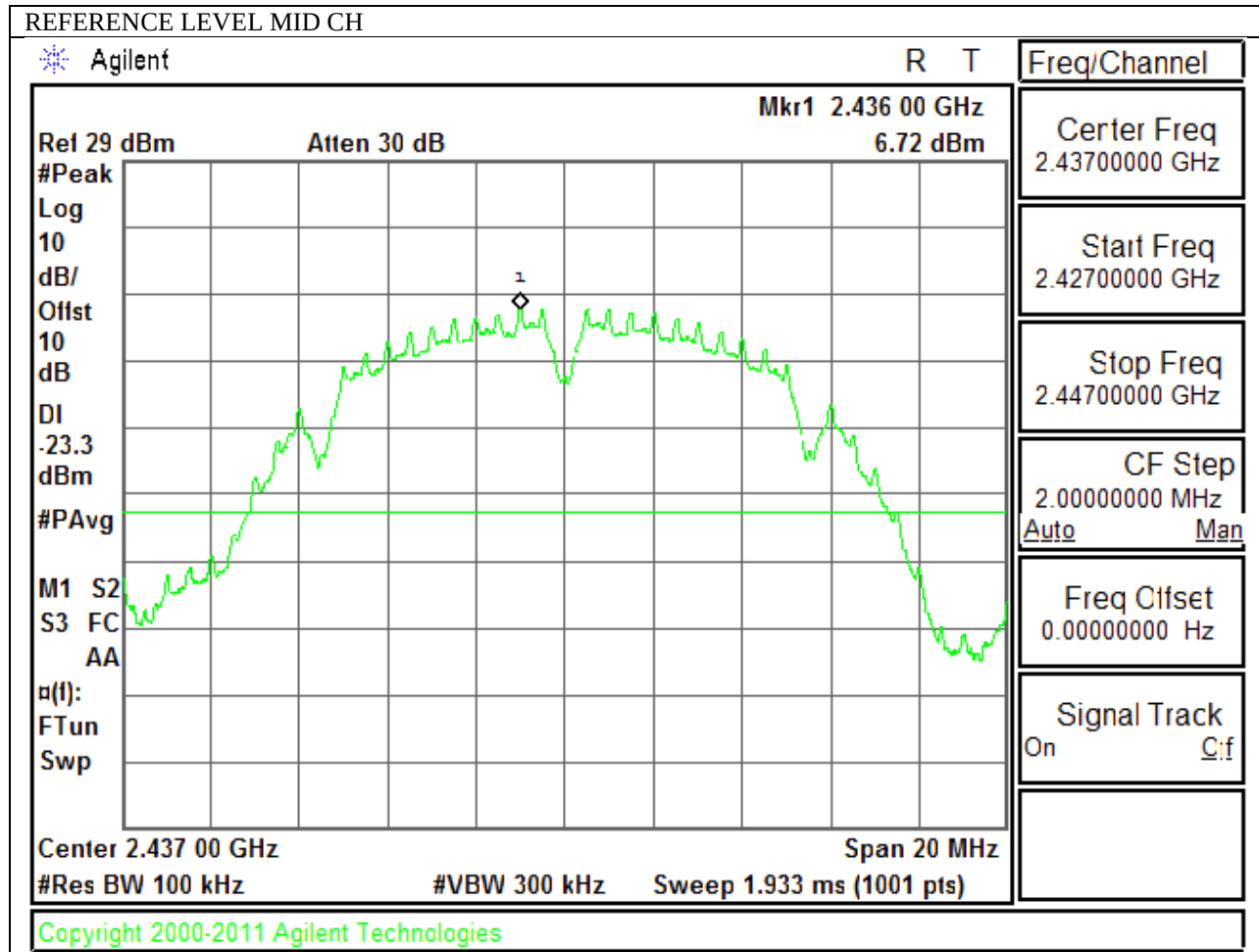
TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer with RBW = 100 kHz, VBW = 300 kHz, peak detector, and max hold. Measurements utilizing these settings are made of the in-band reference level, bandedge (where measurements to the general radiated limits will not be made) and out-of-band emissions.

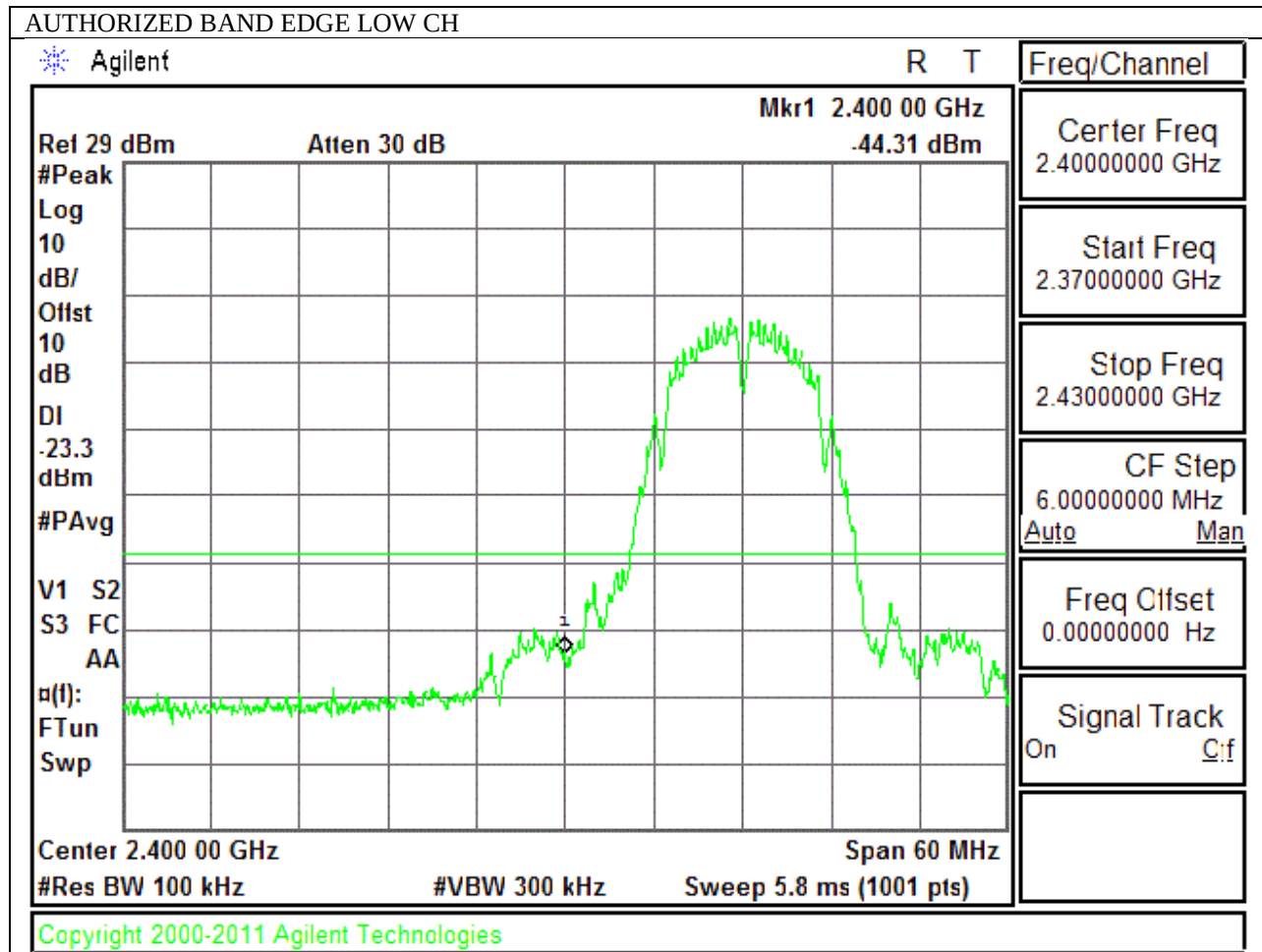
RESULTS

9.5.1. 802.11b MODE IN THE 2.4 GHz BAND CHAIN 0

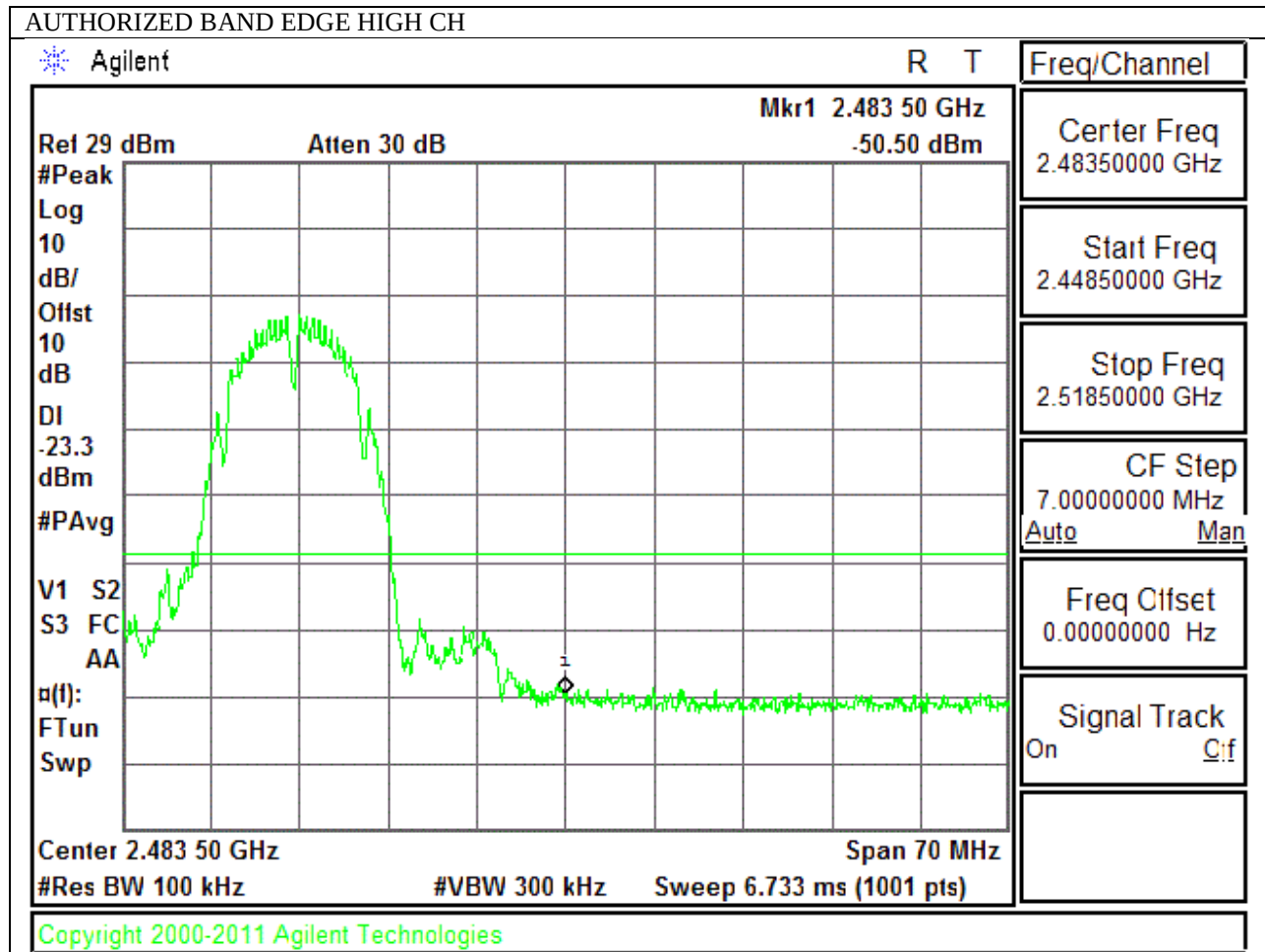
IN-BAND REFERENCE LEVEL



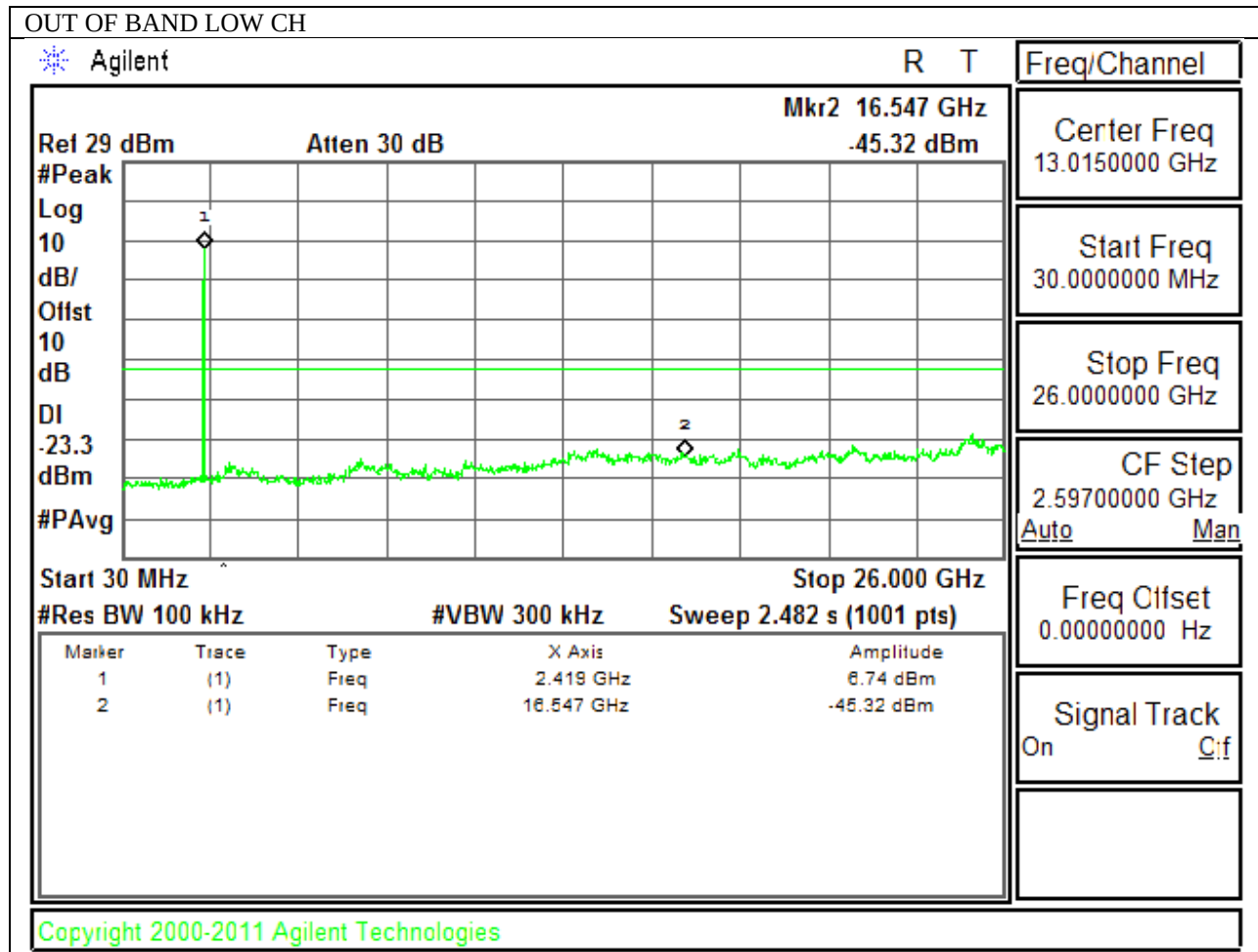
LOW CHANNEL BANDEDGE

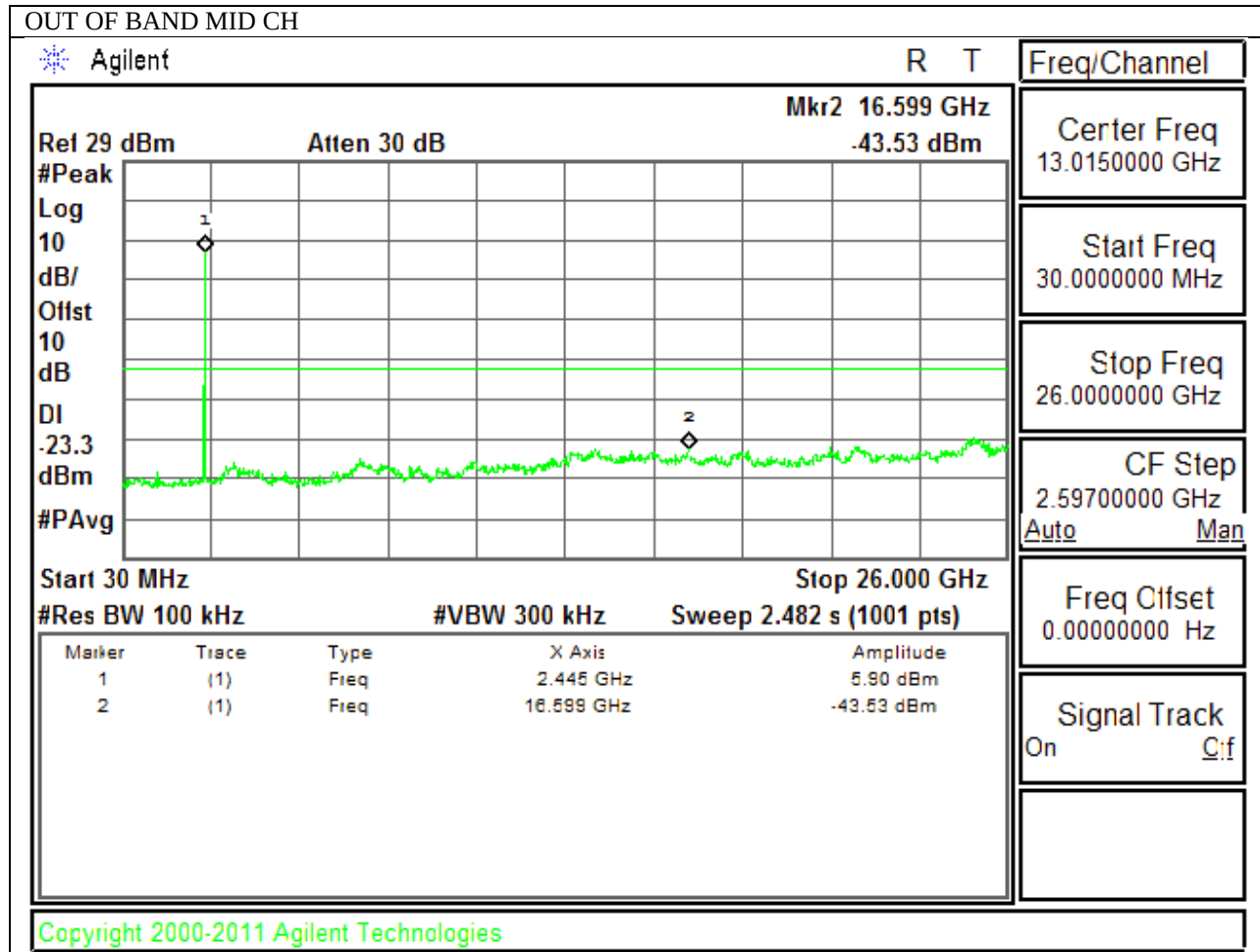


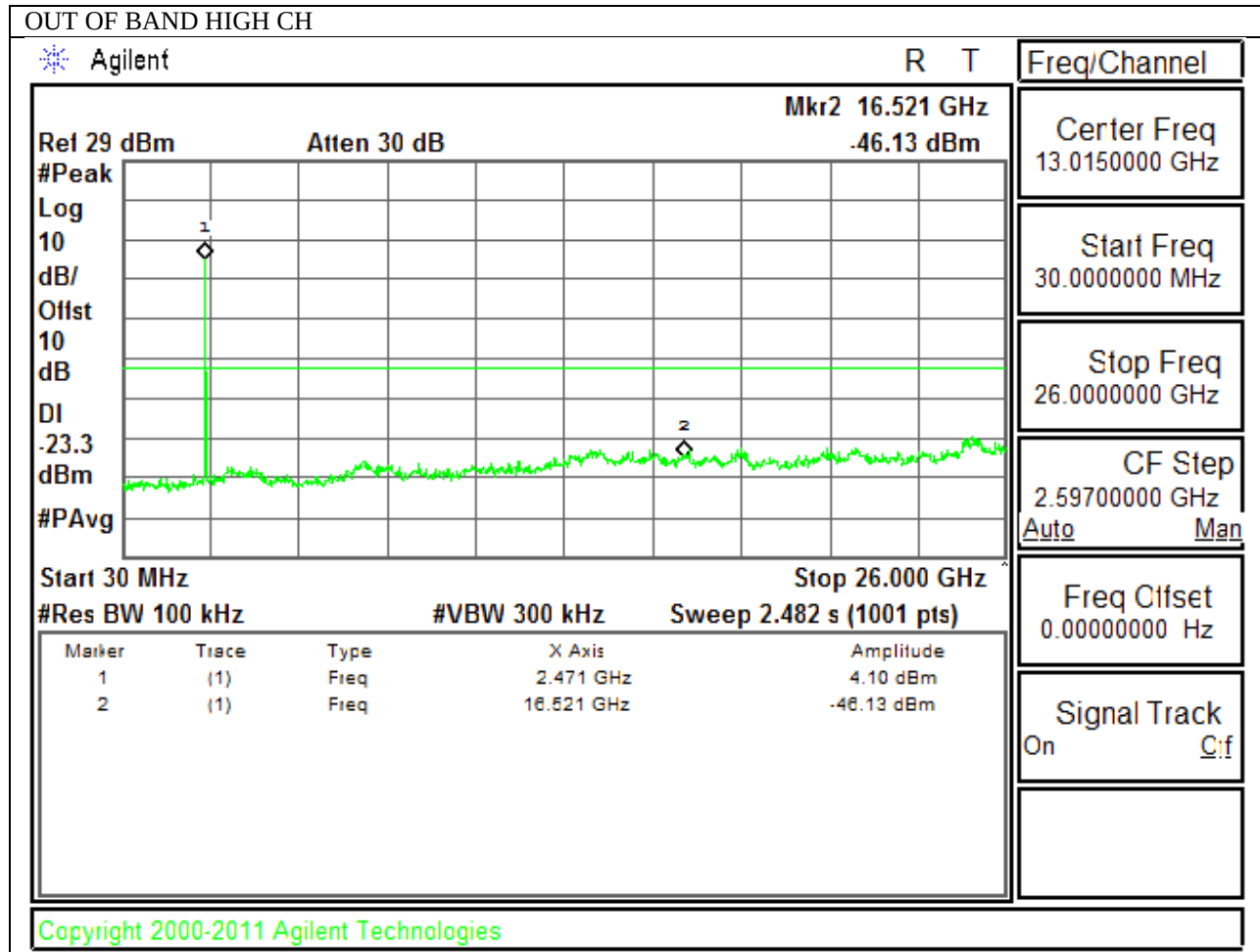
HIGH CHANNEL BANDEDGE



OUT-OF-BAND EMISSIONS

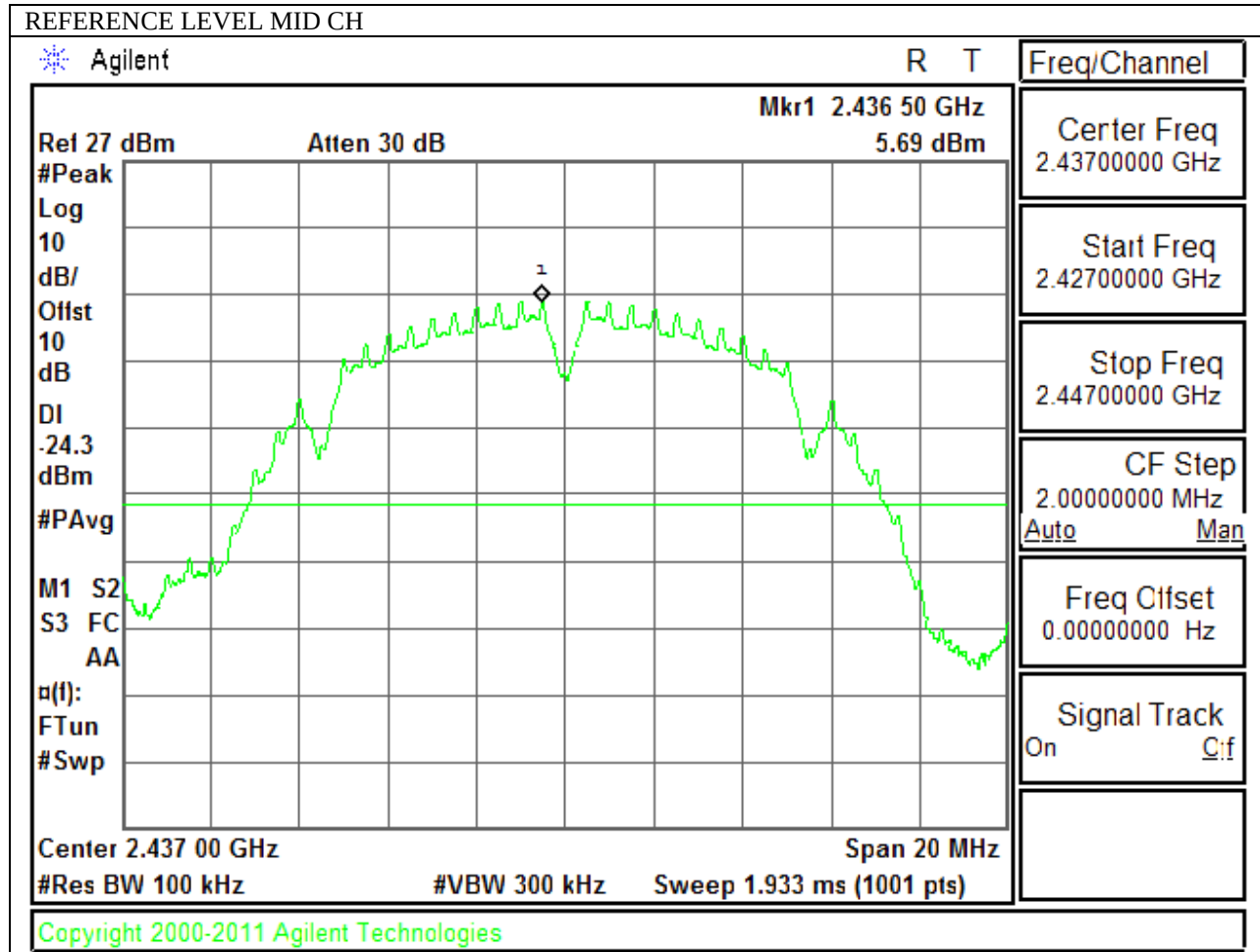




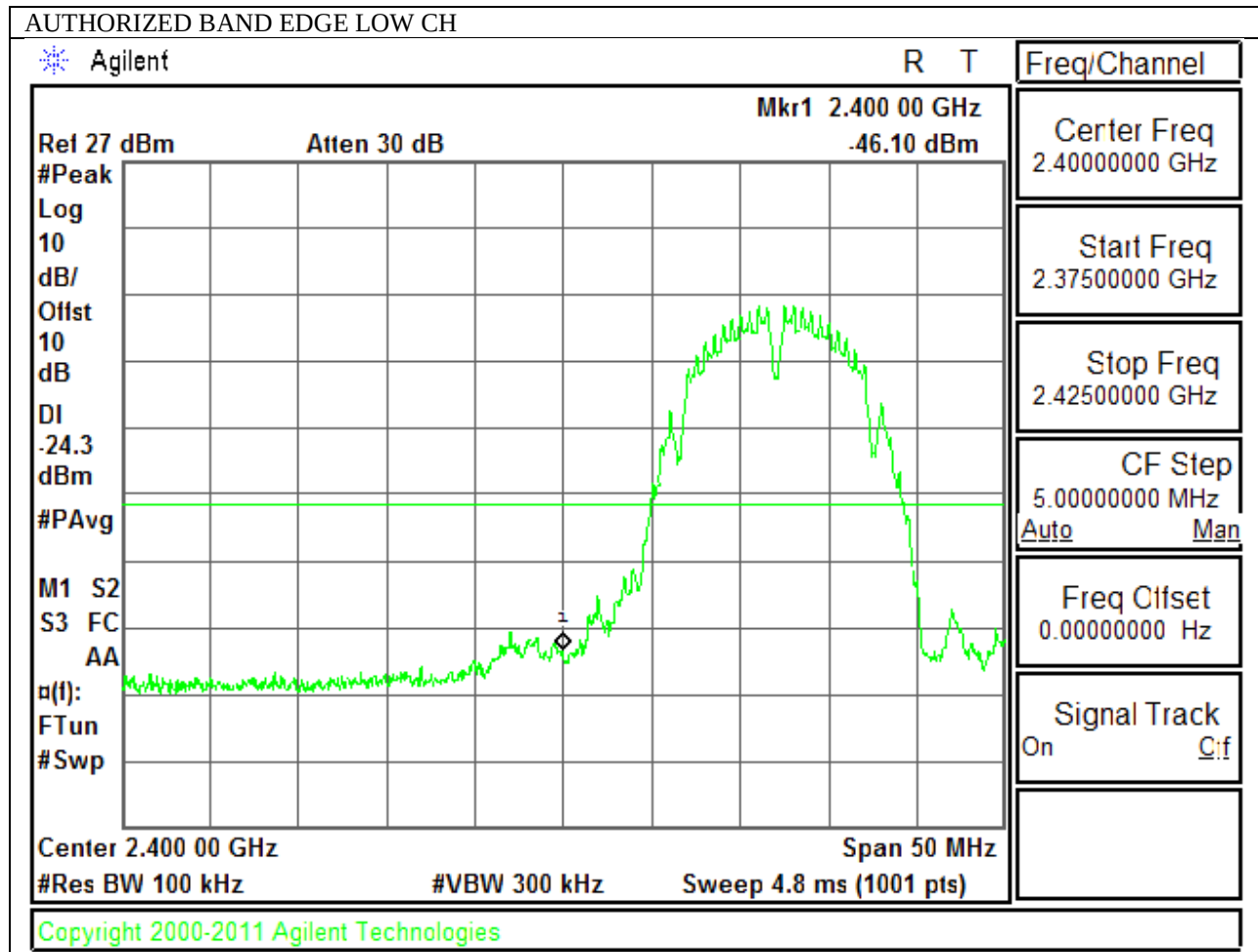


9.5.2. 802.11b MODE IN THE 2.4 GHz BAND CHAIN 1

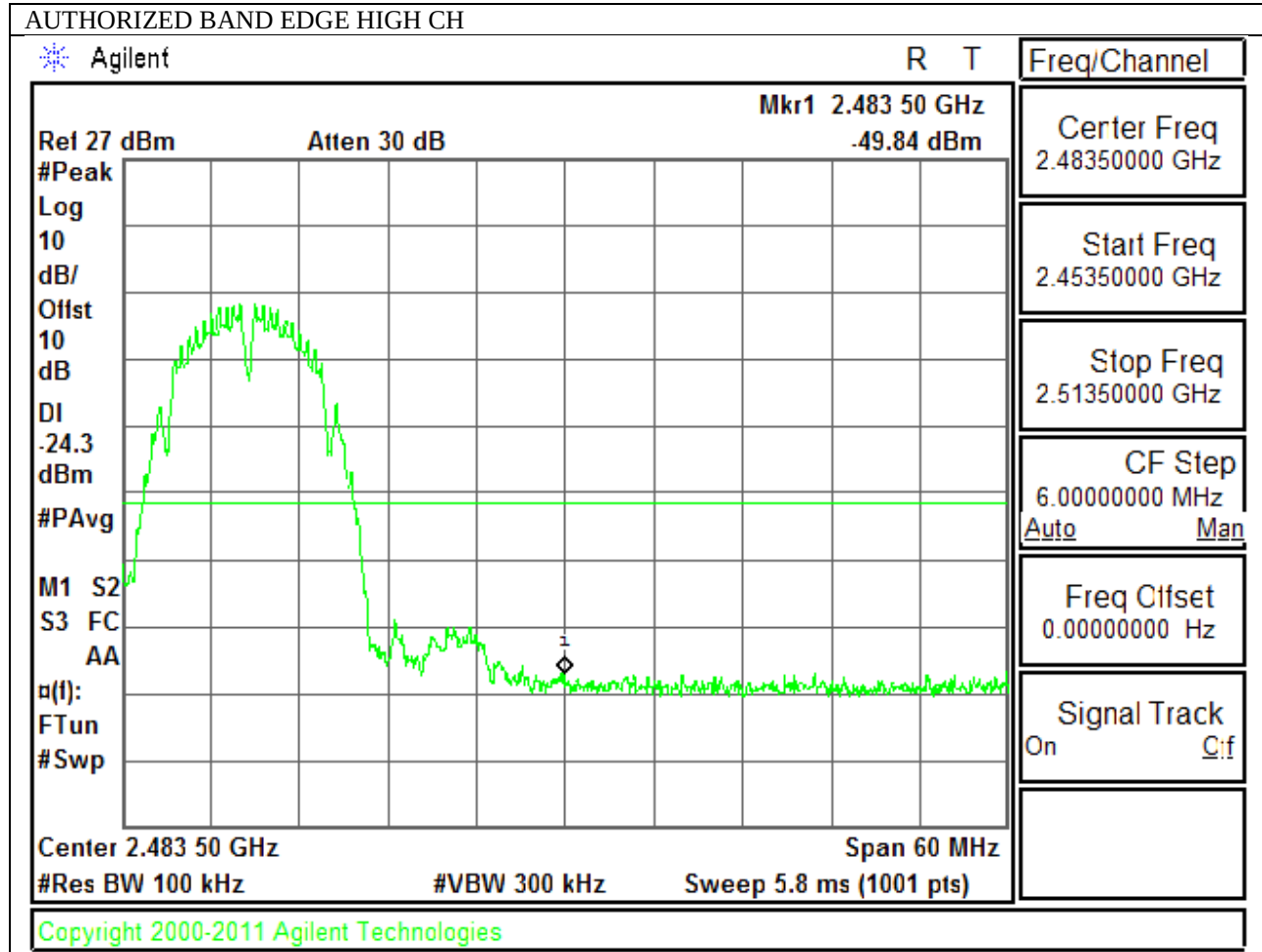
IN-BAND REFERENCE LEVEL



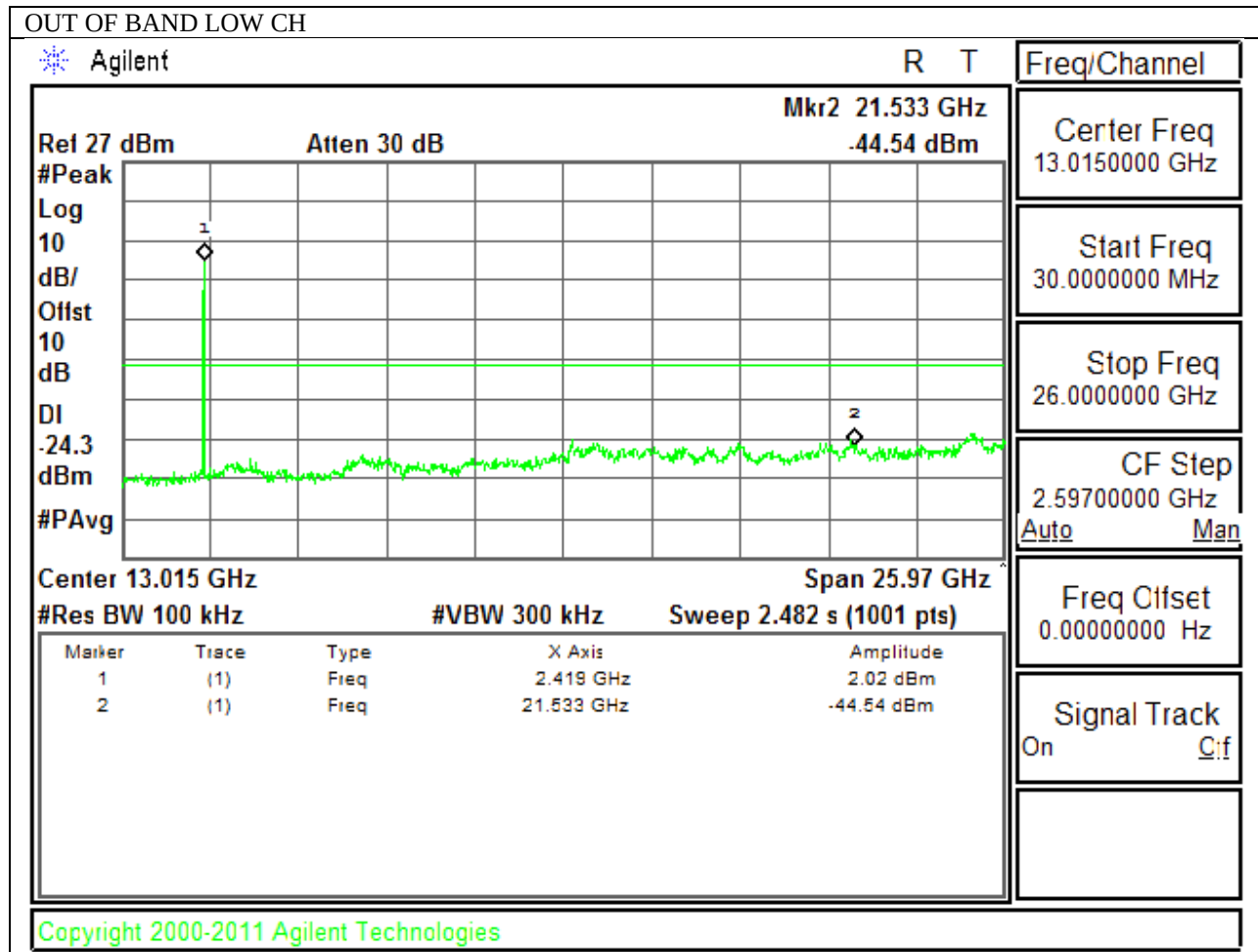
LOW CHANNEL BANDEDGE

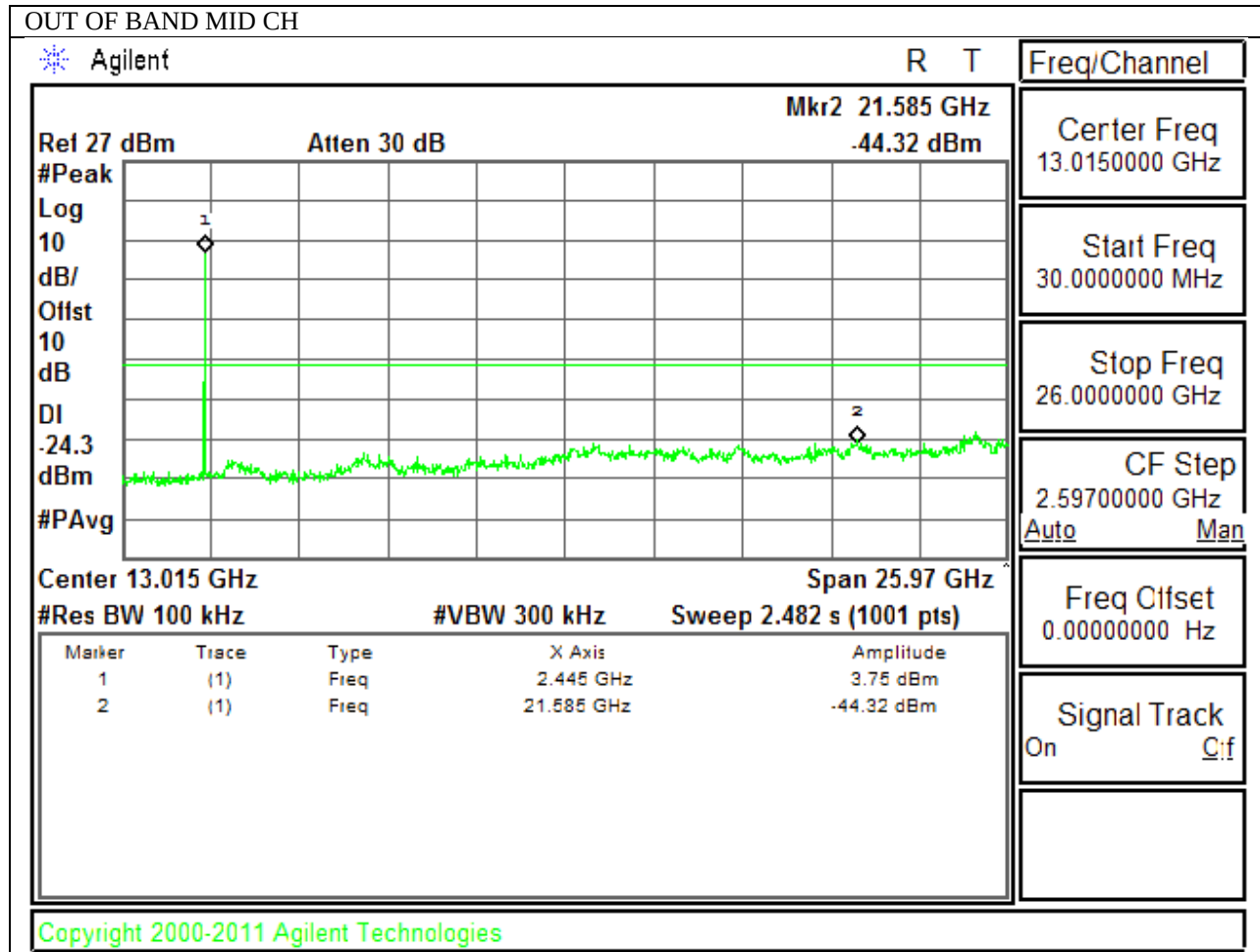


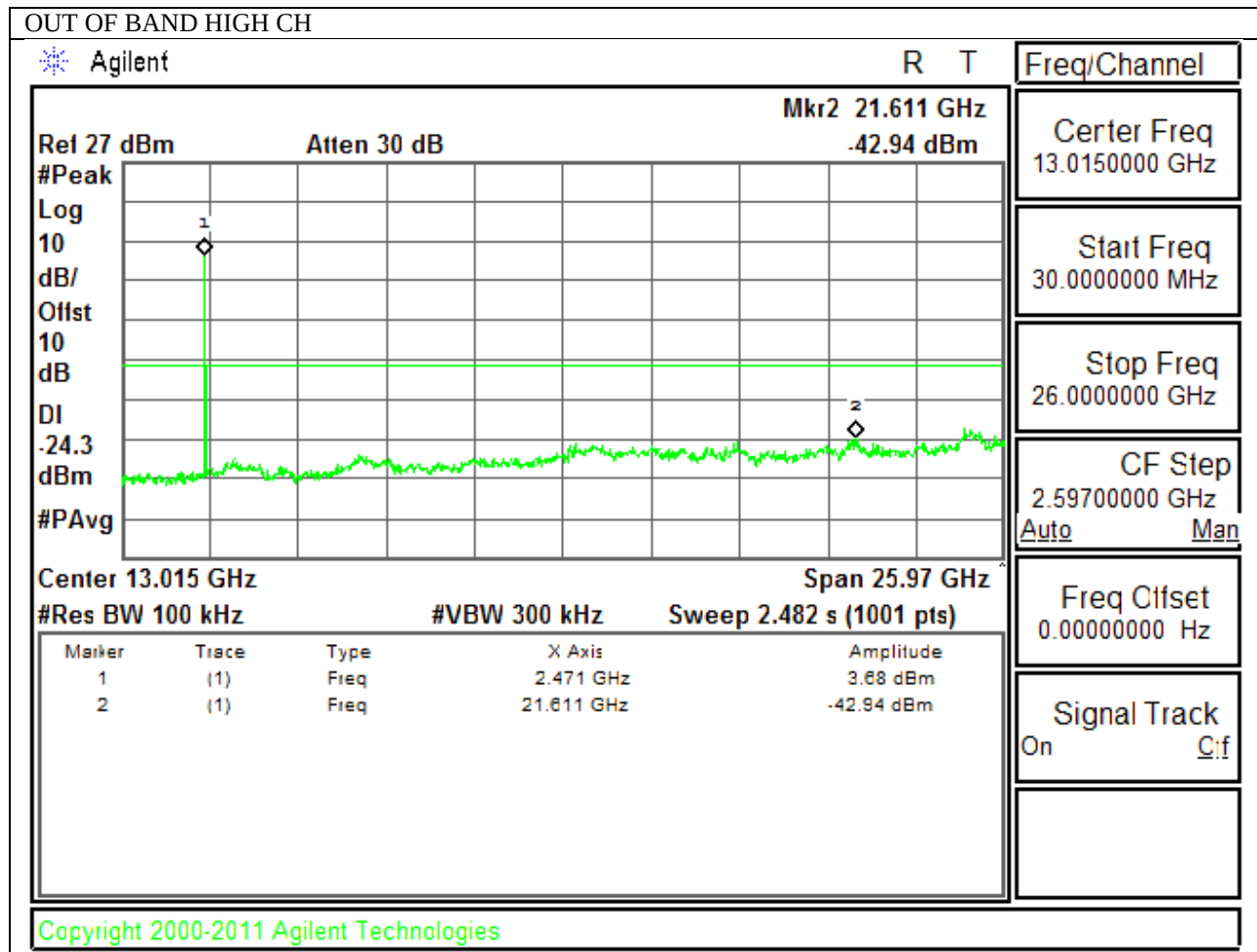
HIGH CHANNEL BANDEDGE



OUT-OF-BAND EMISSIONS

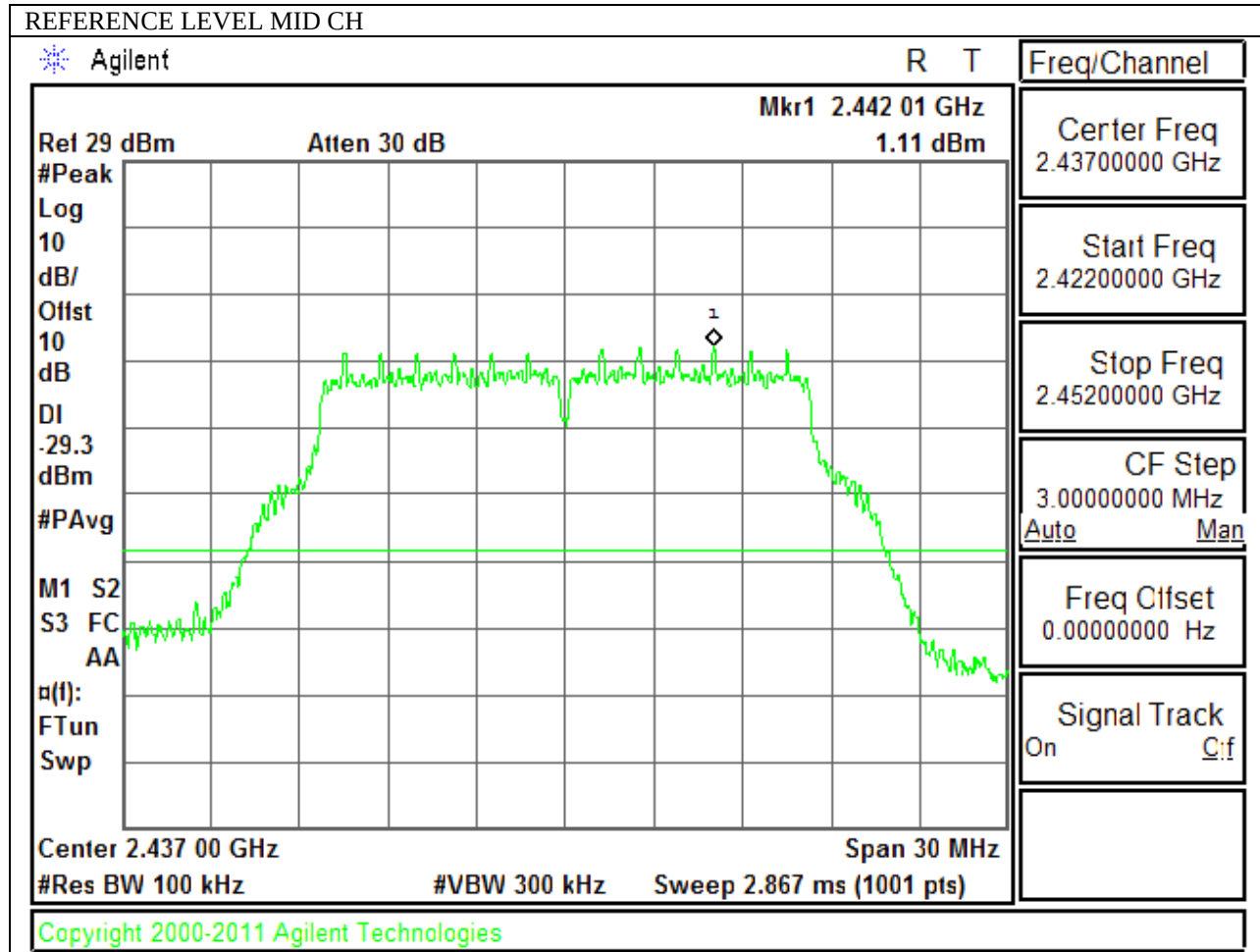




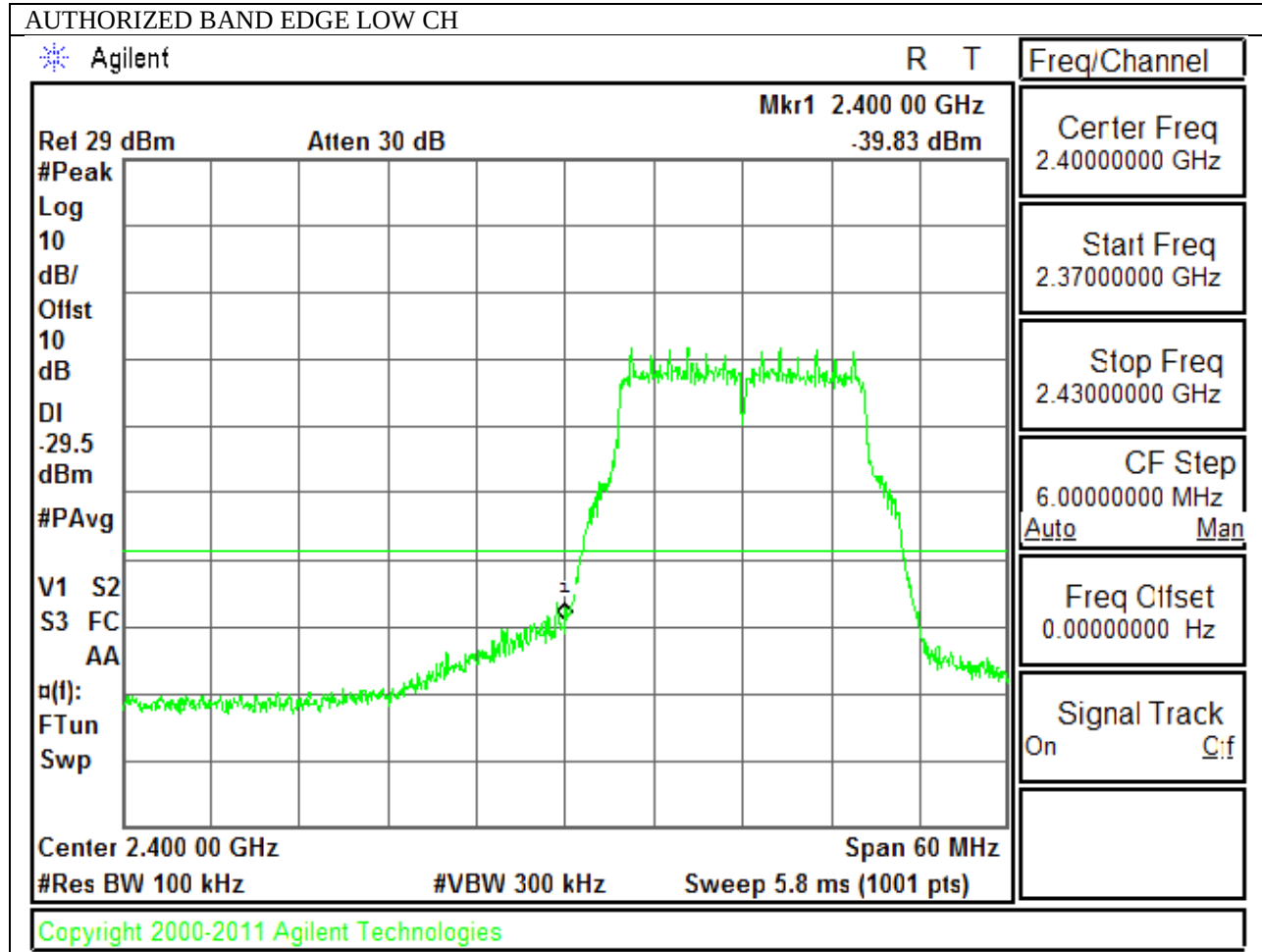


9.5.3. 802.11g MODE IN THE 2.4 GHz BAND CHAIN 0

IN-BAND REFERENCE LEVEL

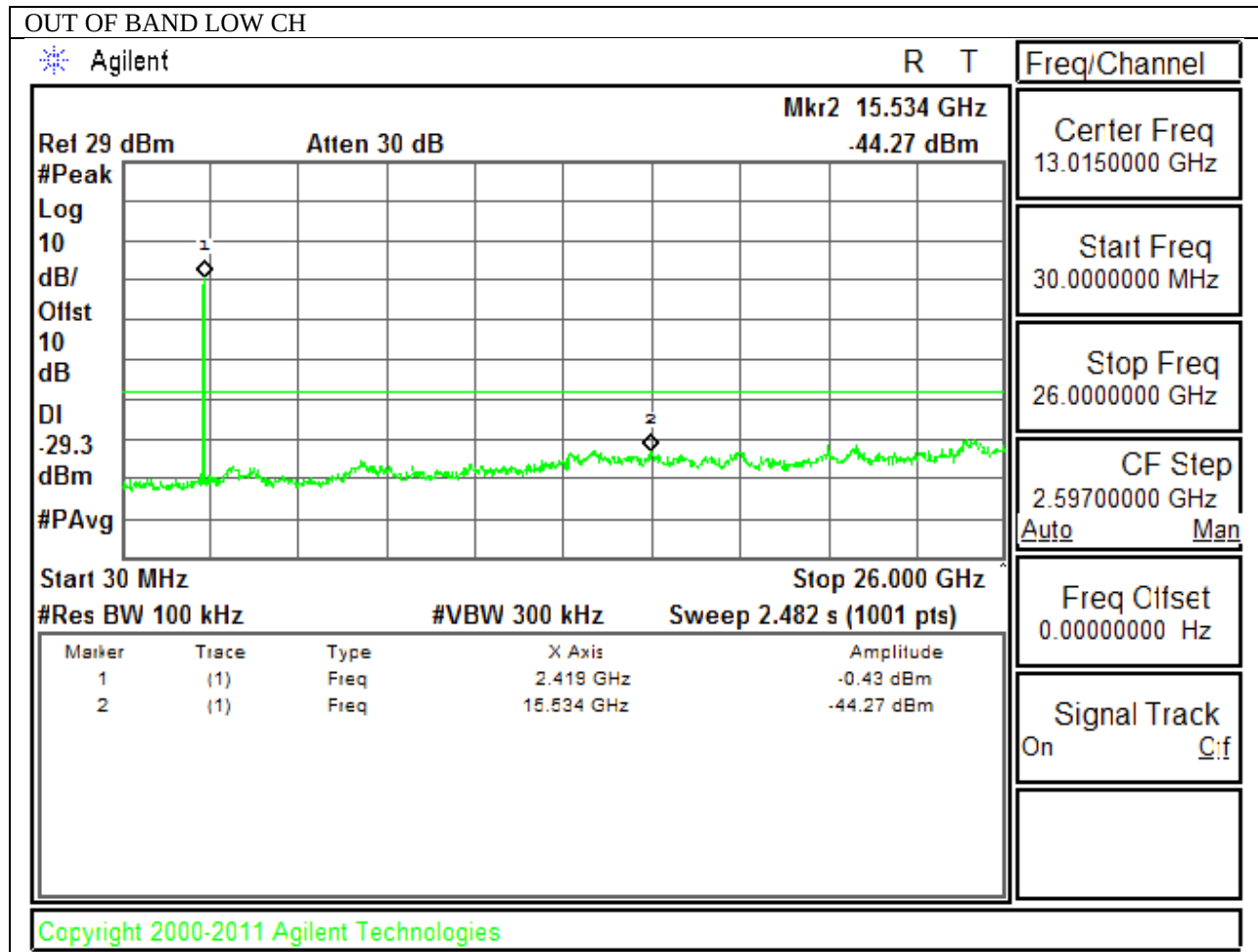


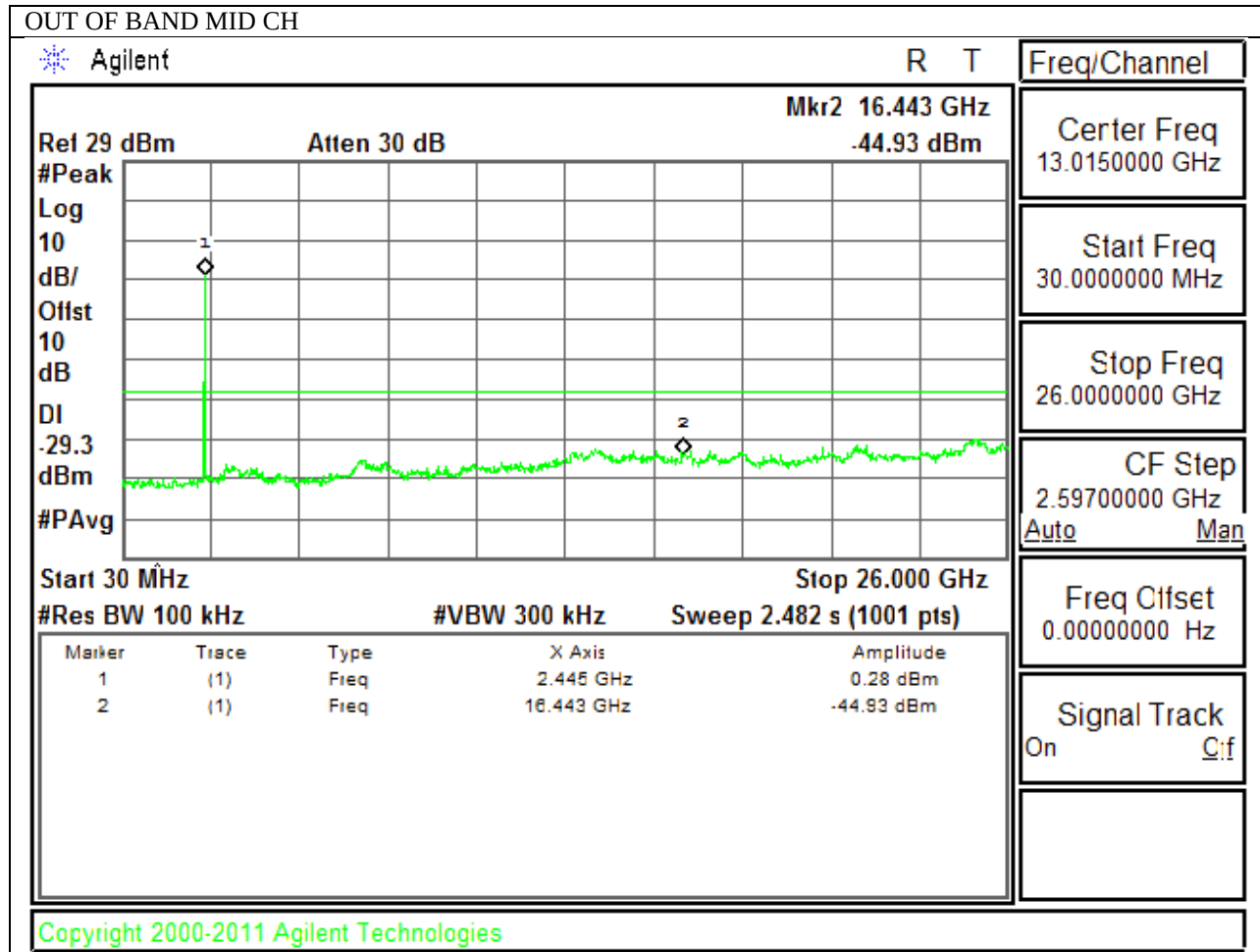
LOW CHANNEL BANDEDGE

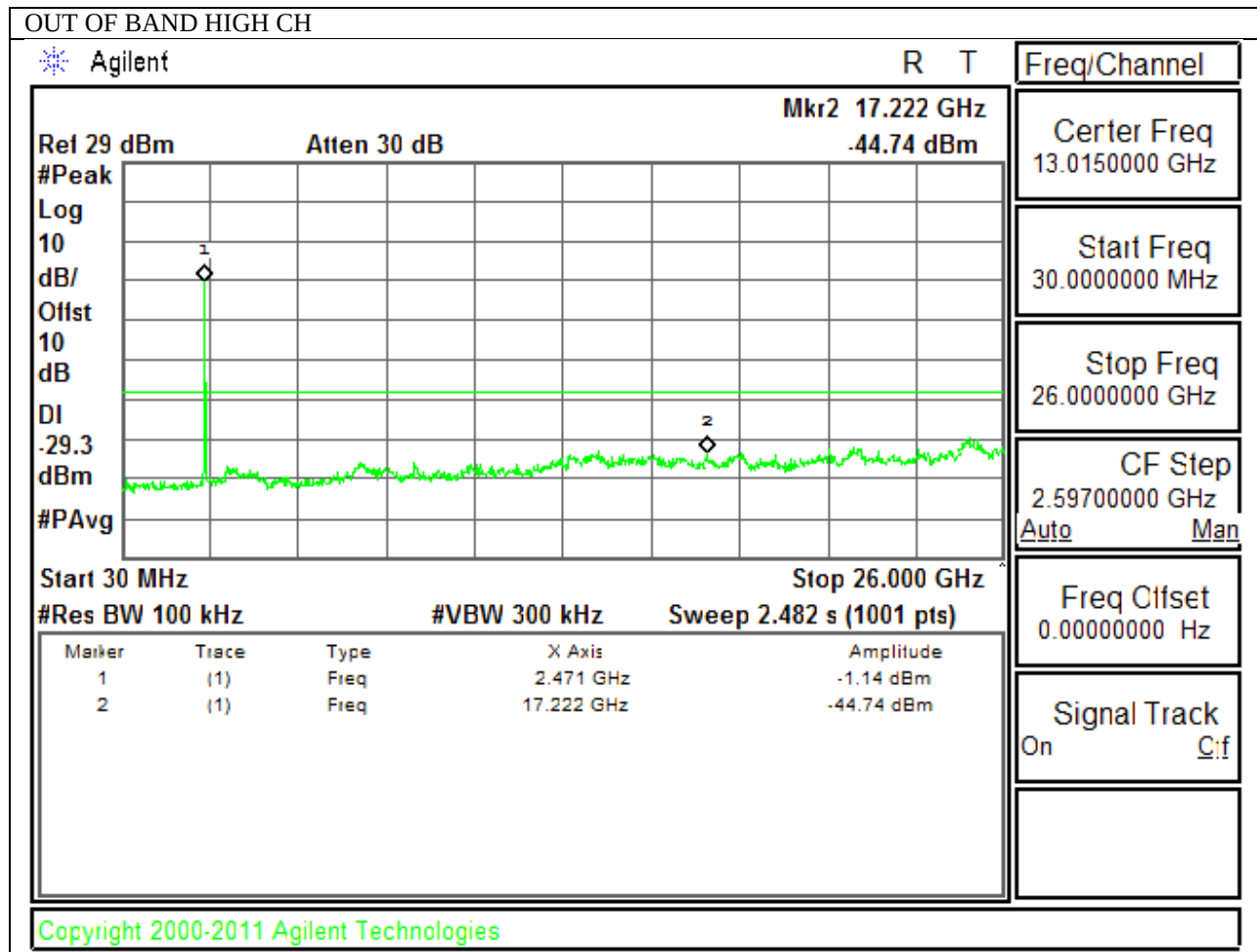


AUTHORIZED BAND EDGE HIGH CH

OUT-OF-BAND EMISSIONS

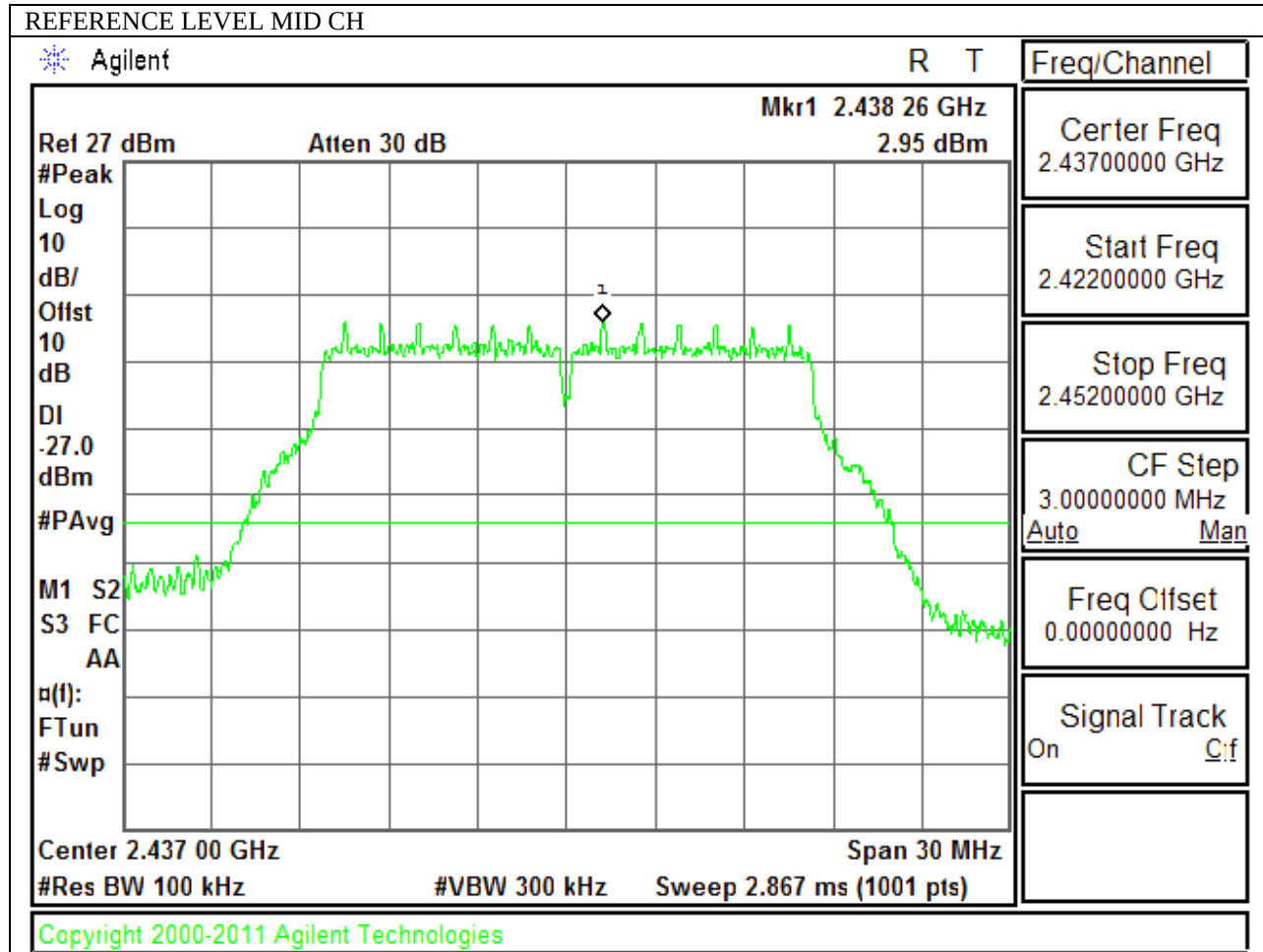




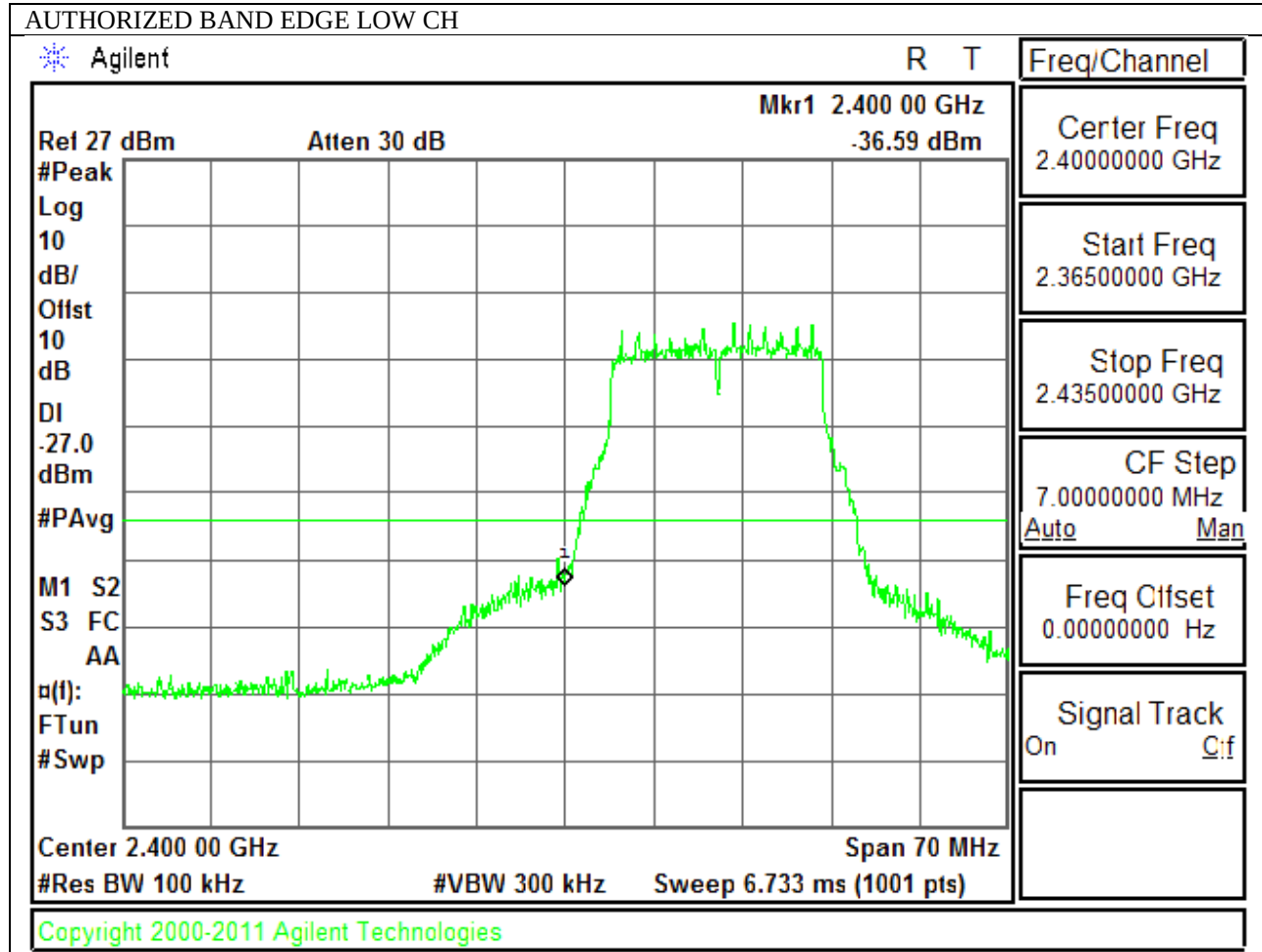


9.5.4. 802.11g MODE IN THE 2.4 GHz BAND CHAIN 1

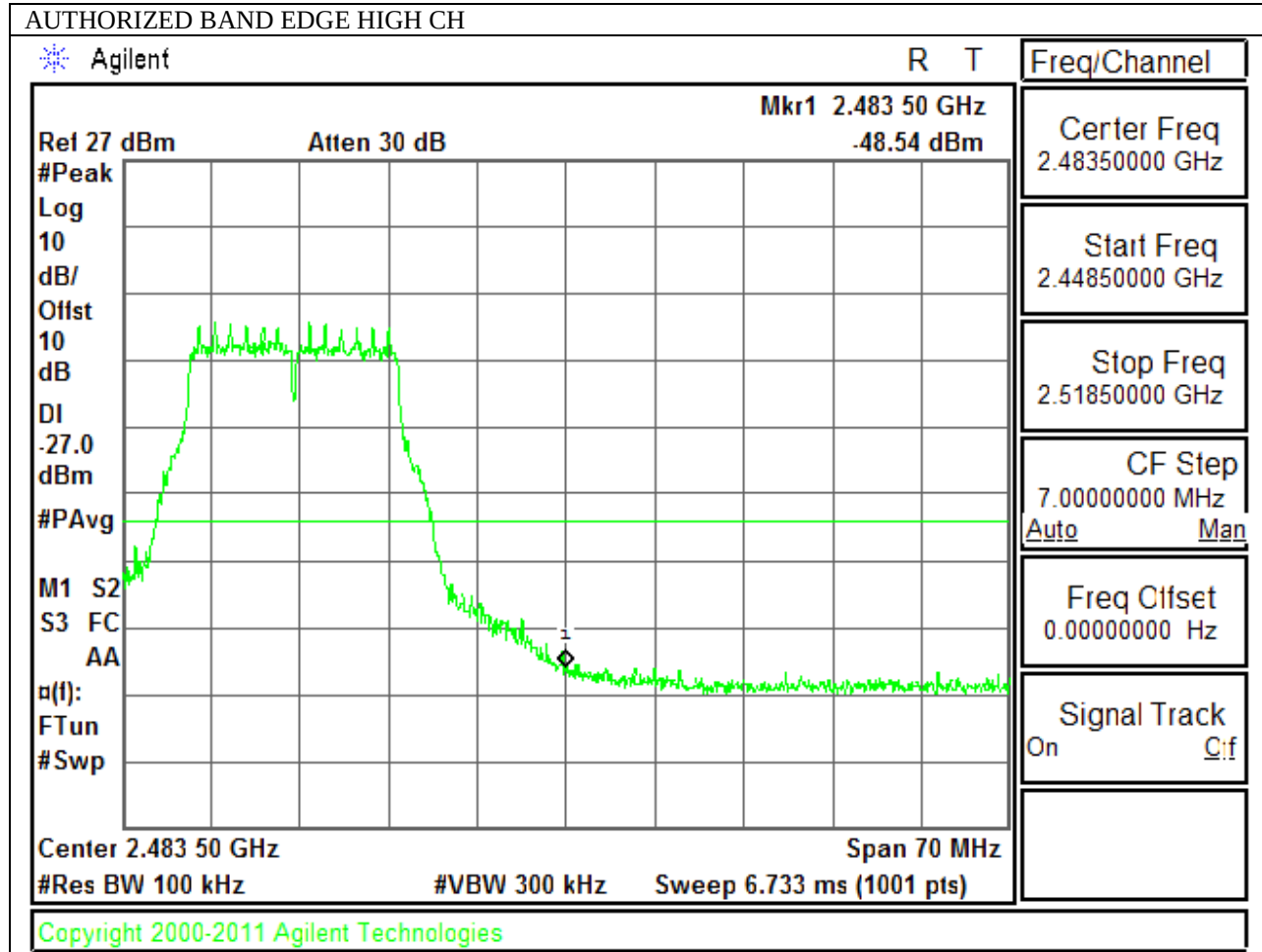
IN-BAND REFERENCE LEVEL



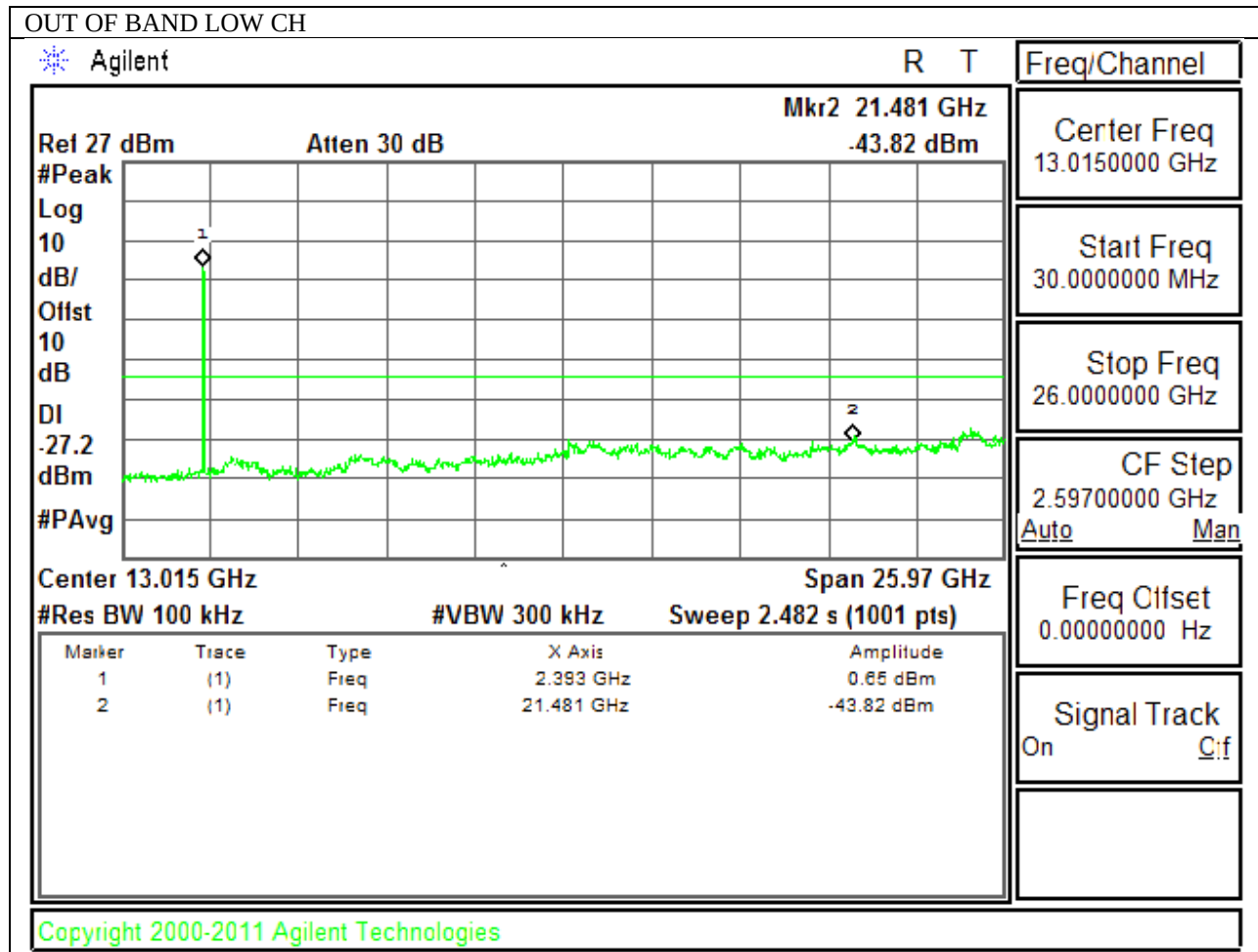
LOW CHANNEL BANDEDGE

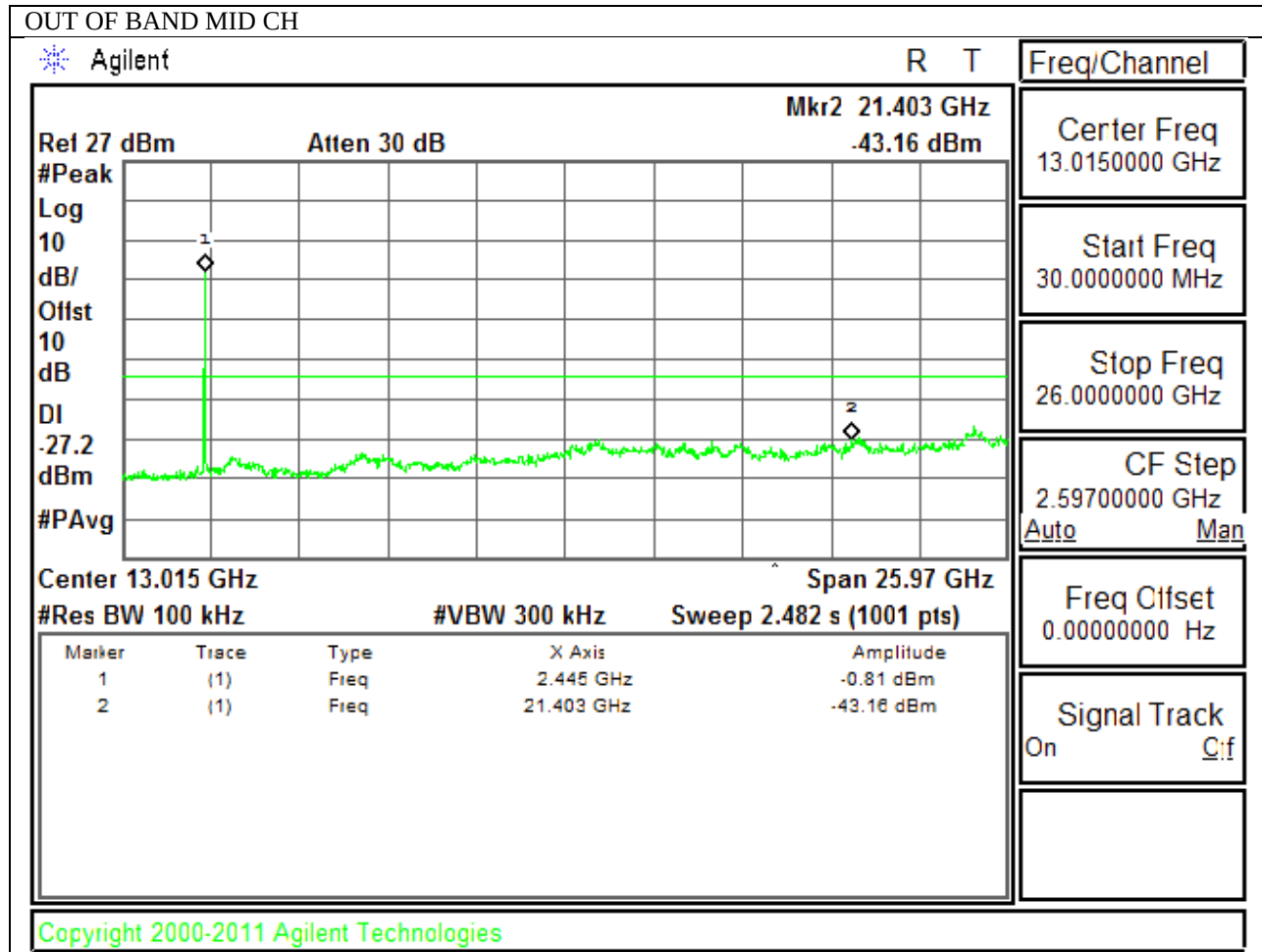


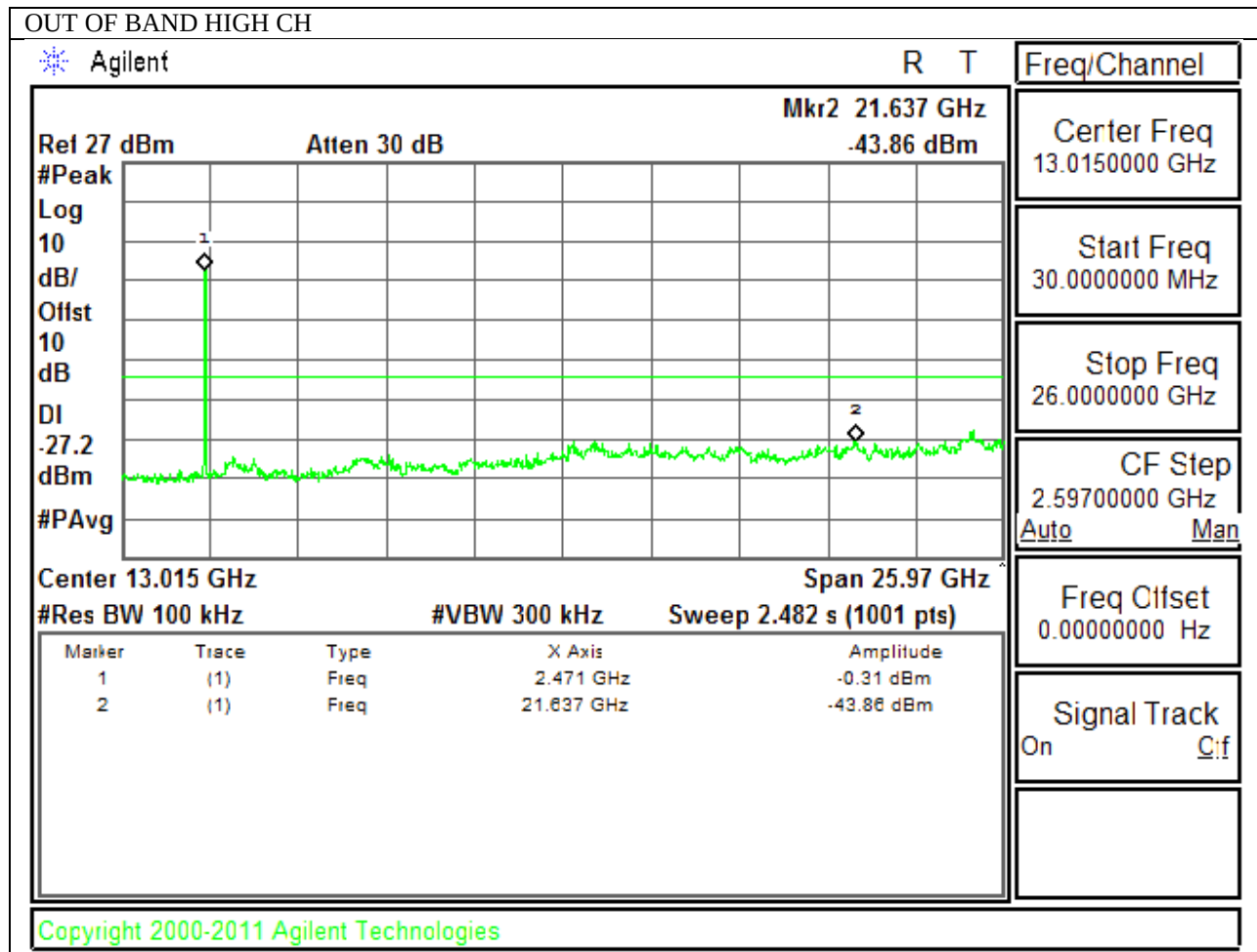
HIGH CHANNEL BANDEDGE



OUT-OF-BAND EMISSIONS

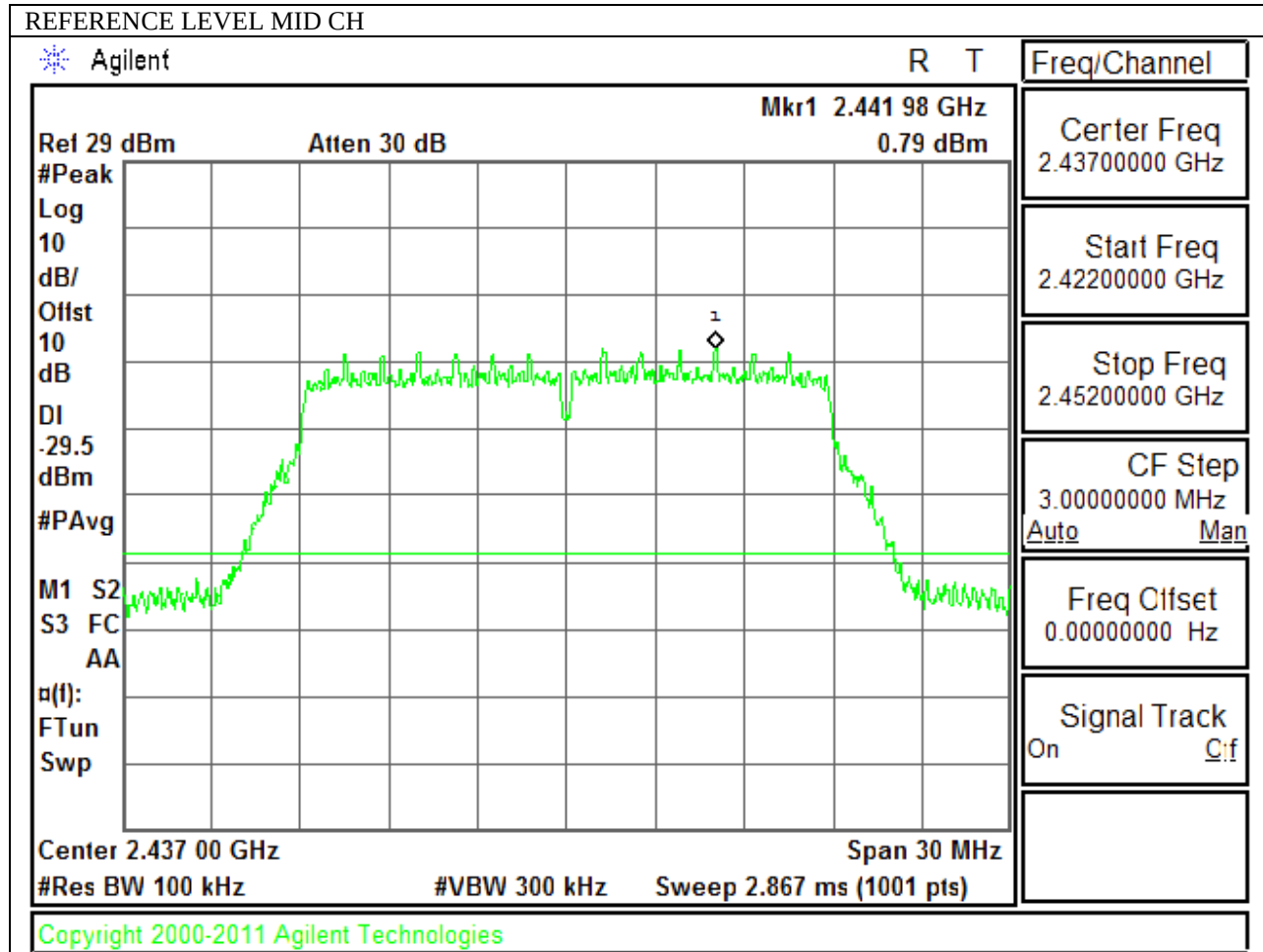




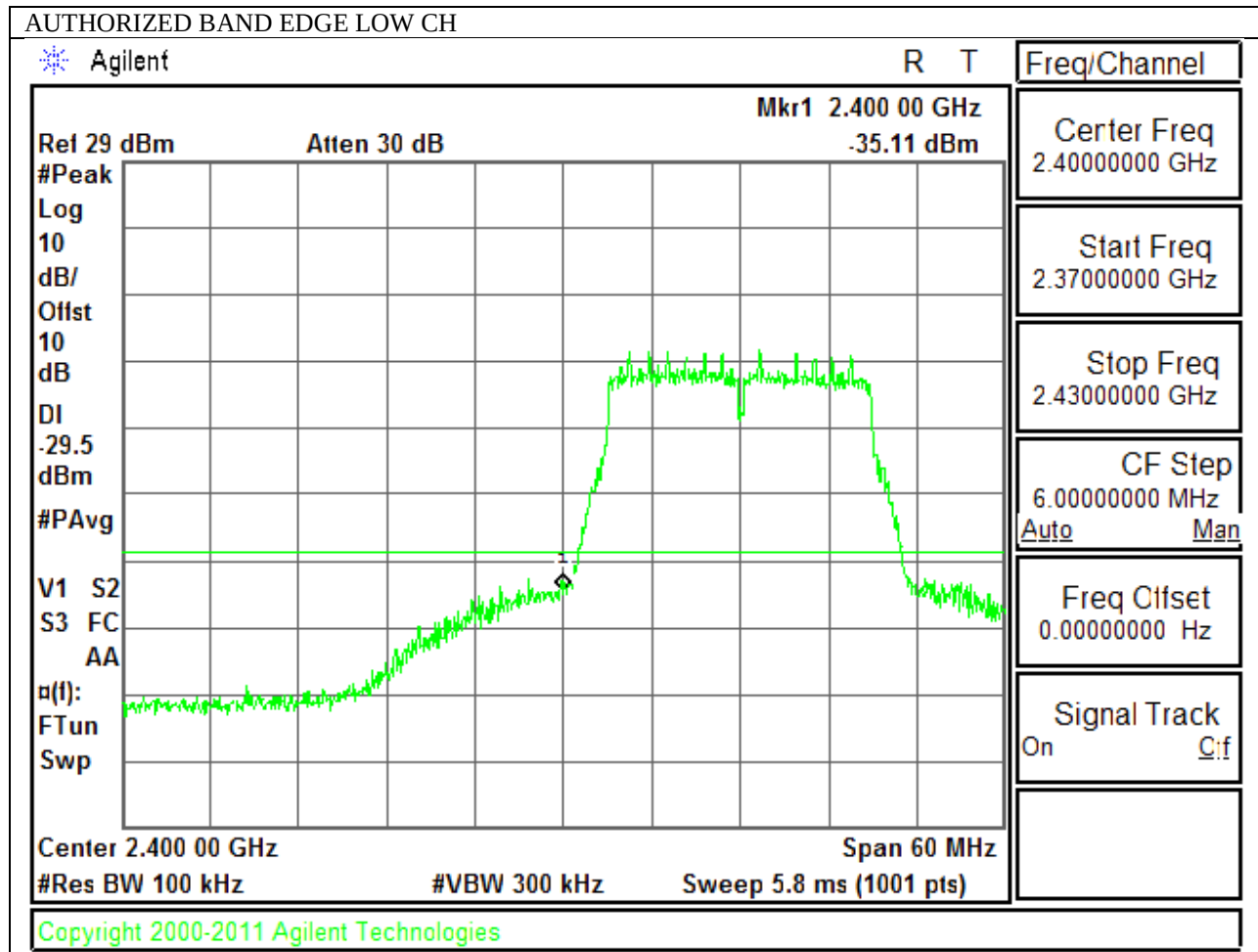


9.5.5. 802.11n HT20 MODE IN THE 2.4 GHz BAND CHAIN 0

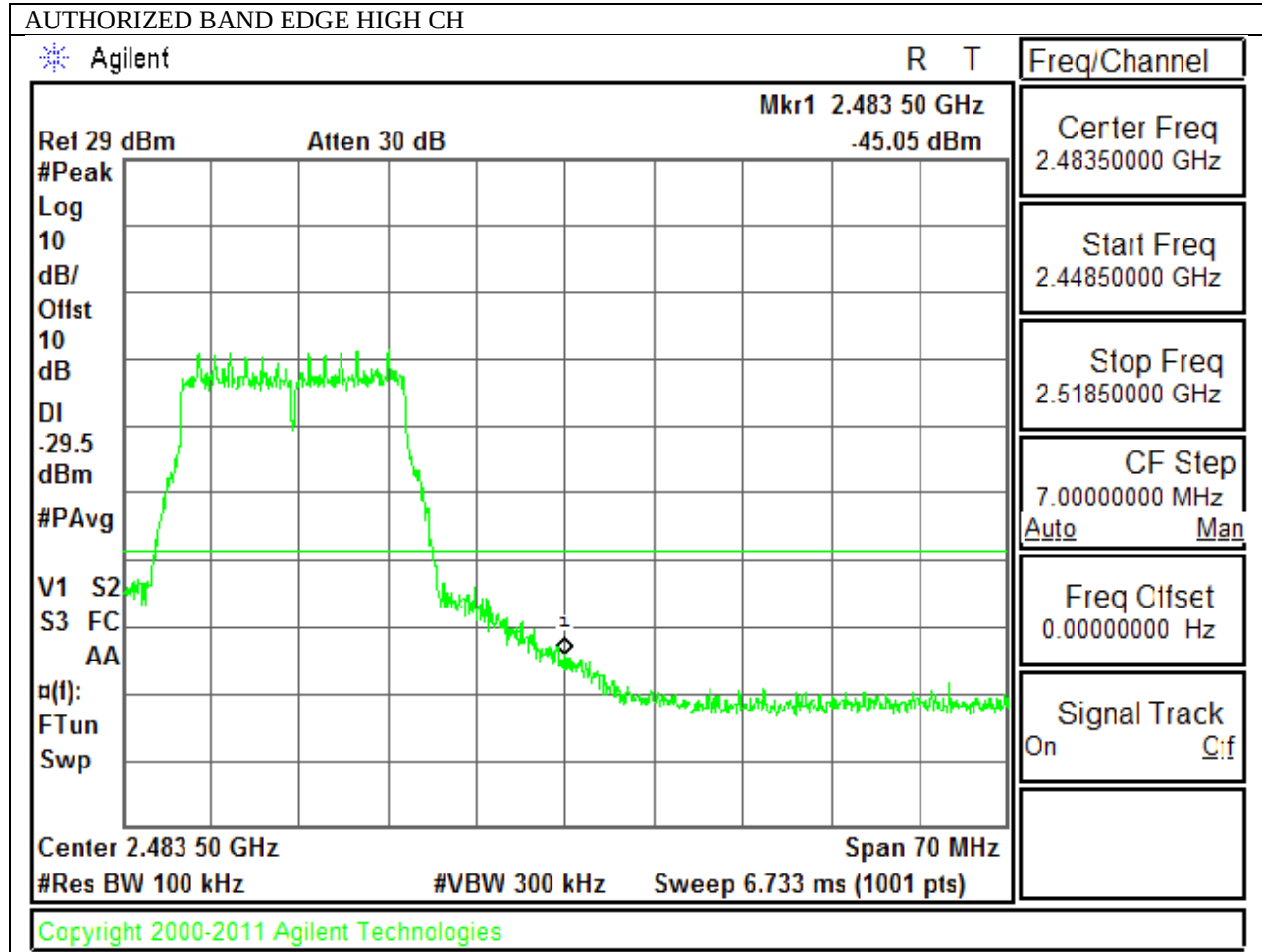
IN-BAND REFERENCE LEVEL



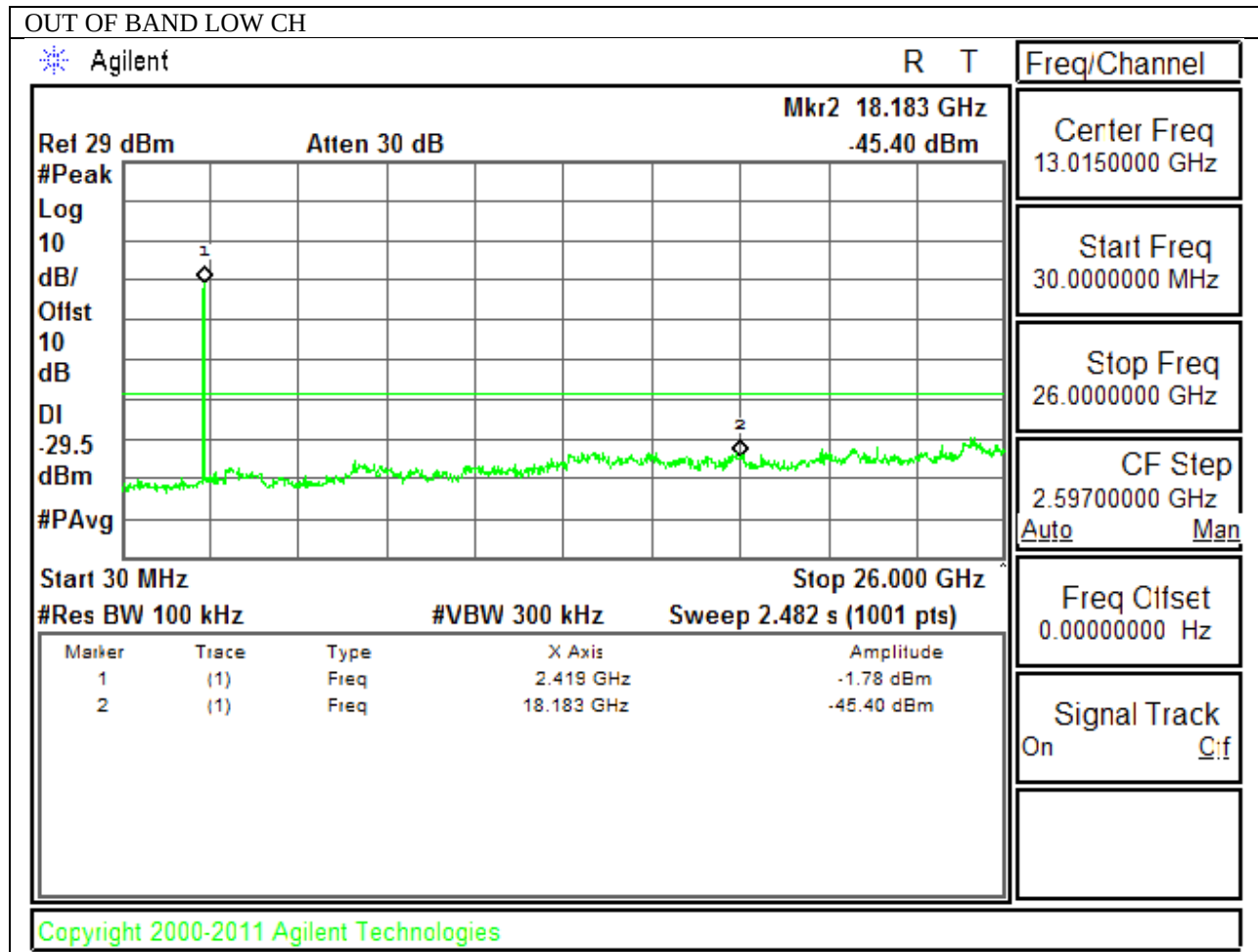
LOW CHANNEL BANDEDGE

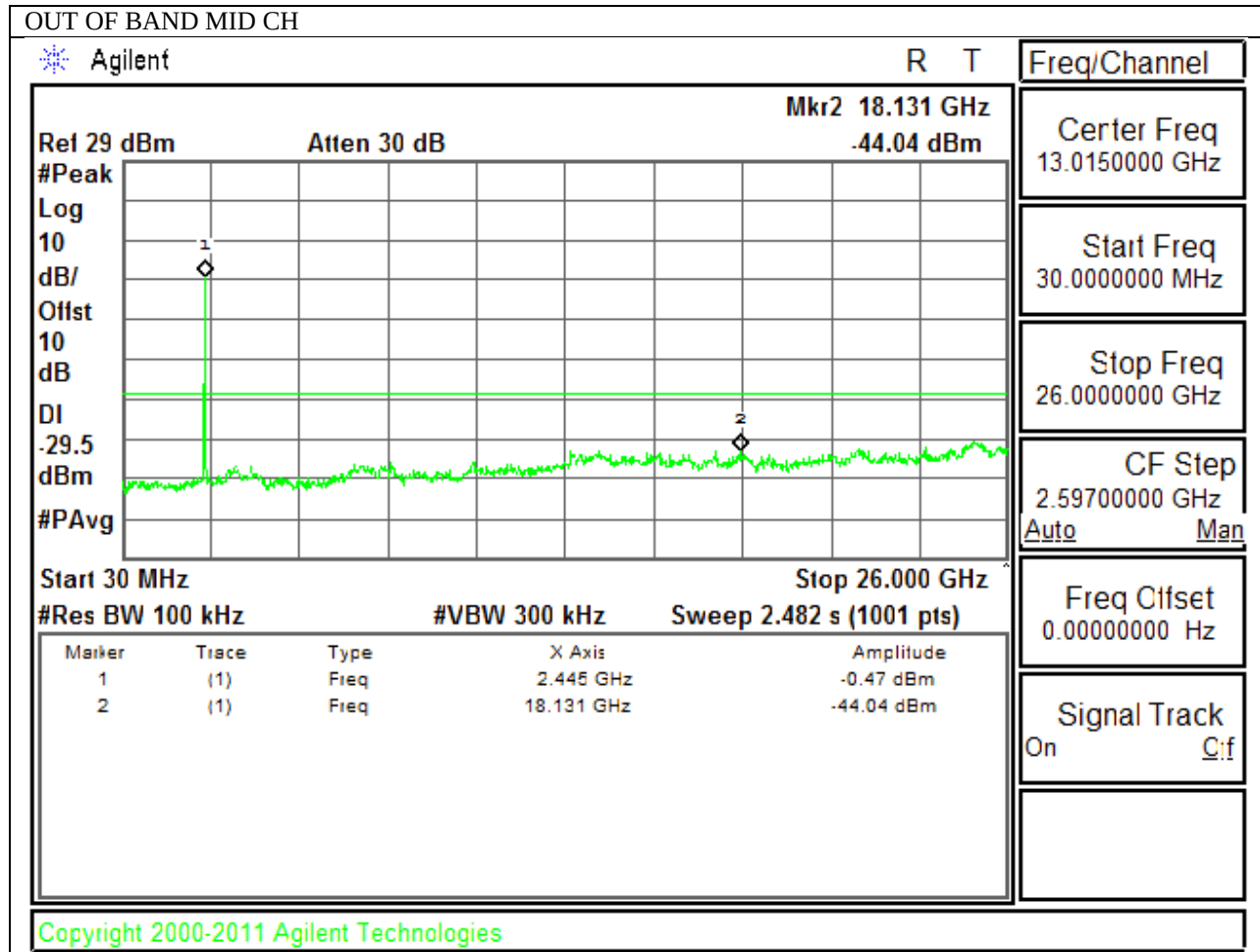


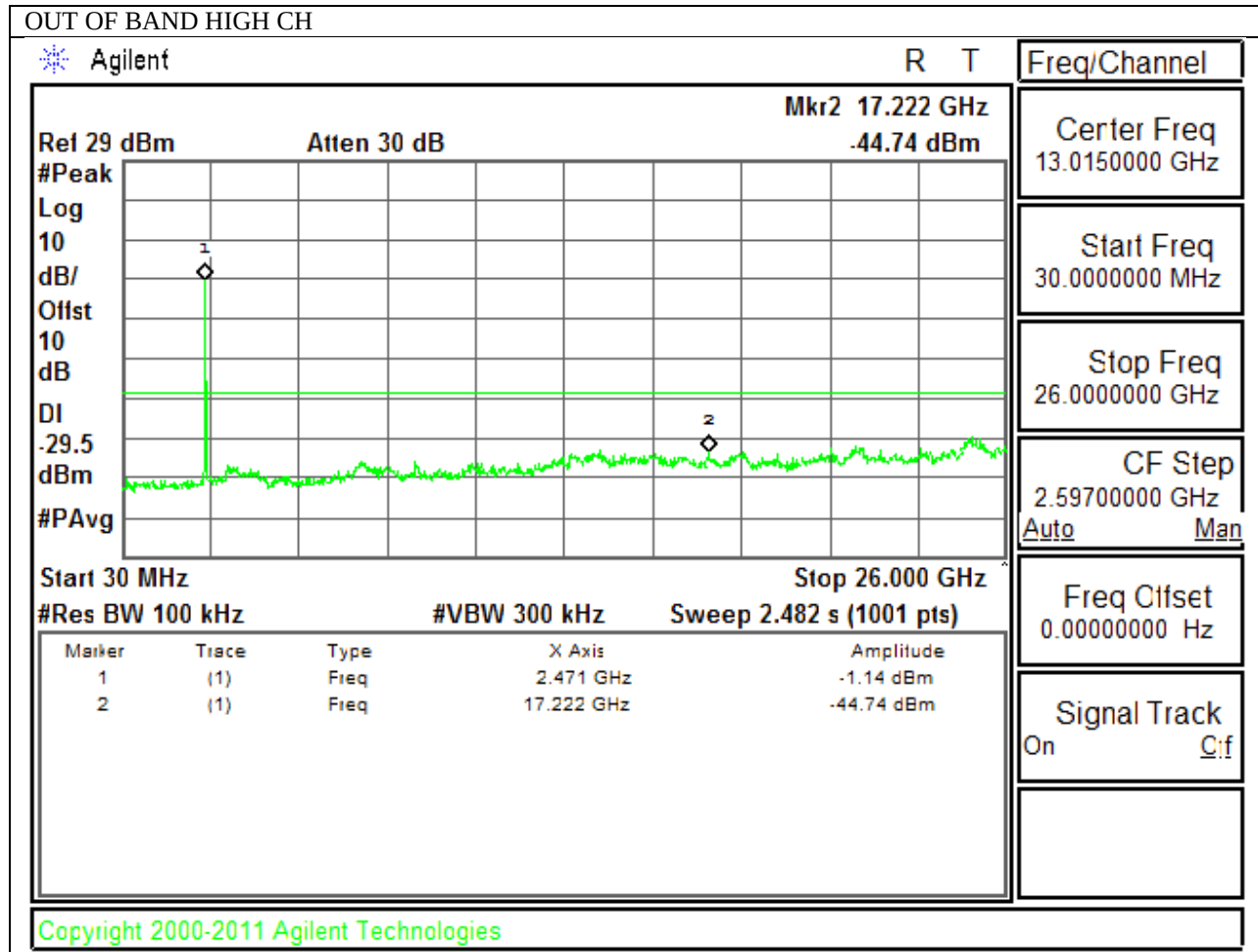
HIGH CHANNEL BANDEDGE



OUT-OF-BAND EMISSIONS

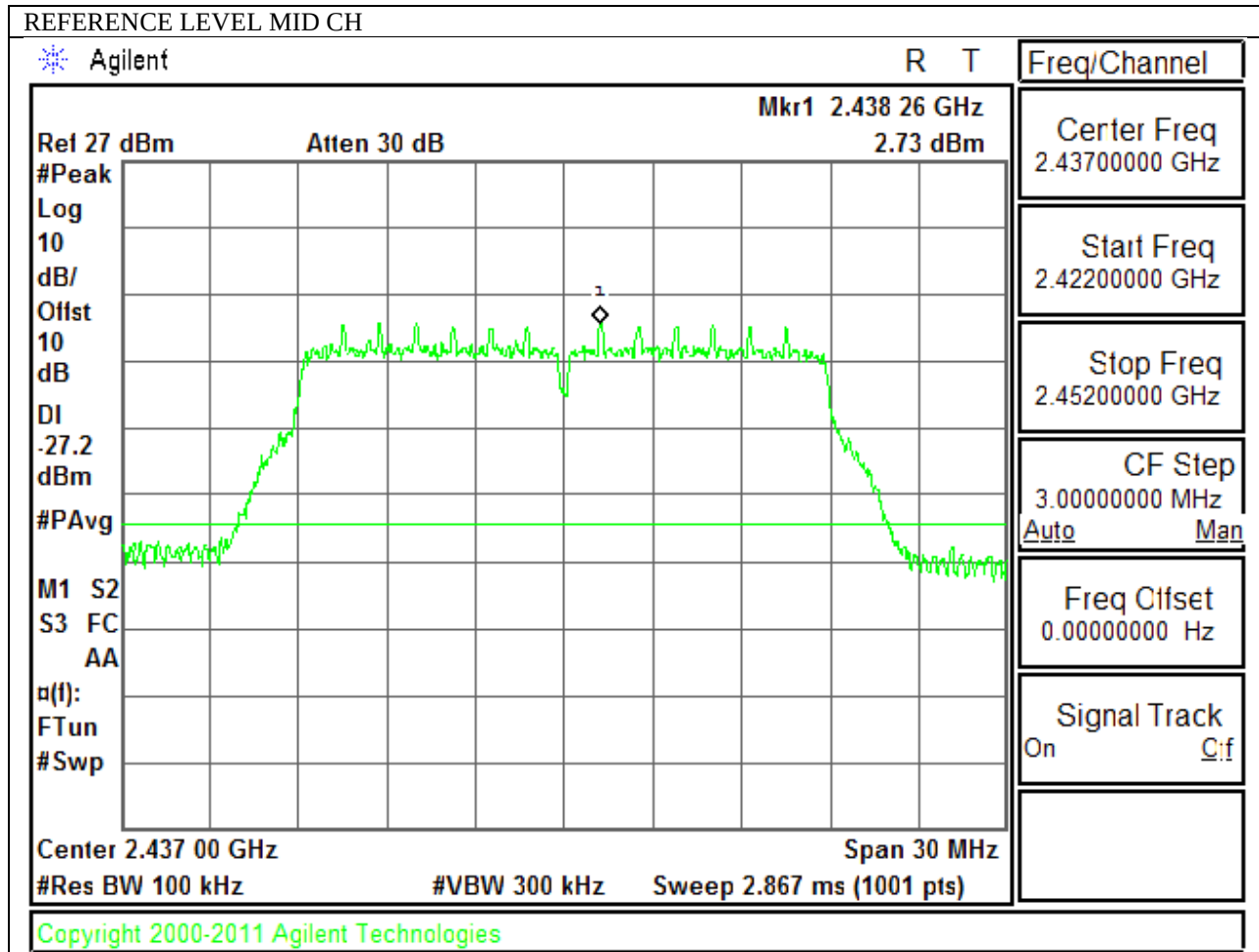




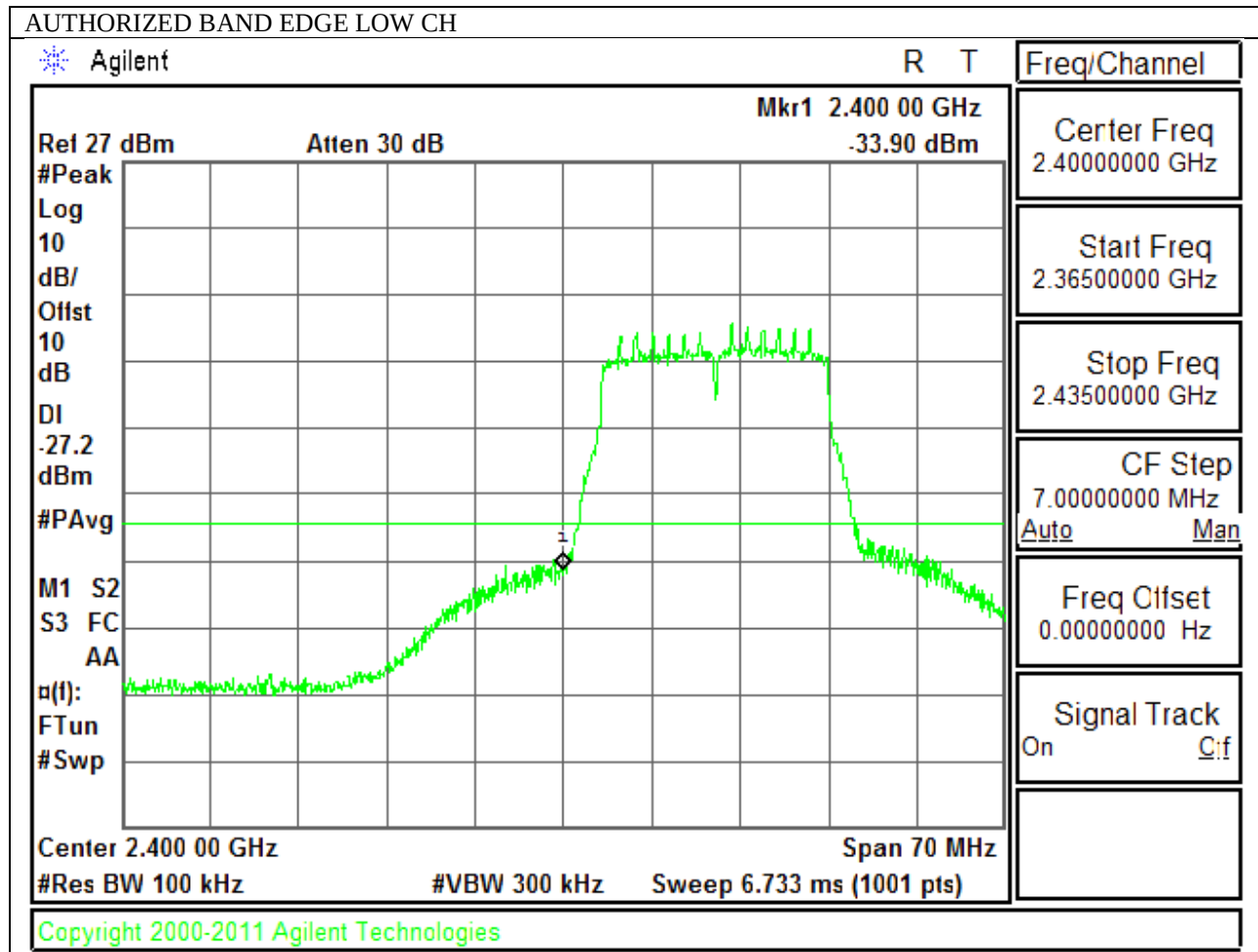


9.5.6. 802.11n HT20 MODE IN THE 2.4 GHz BAND CHAIN 1

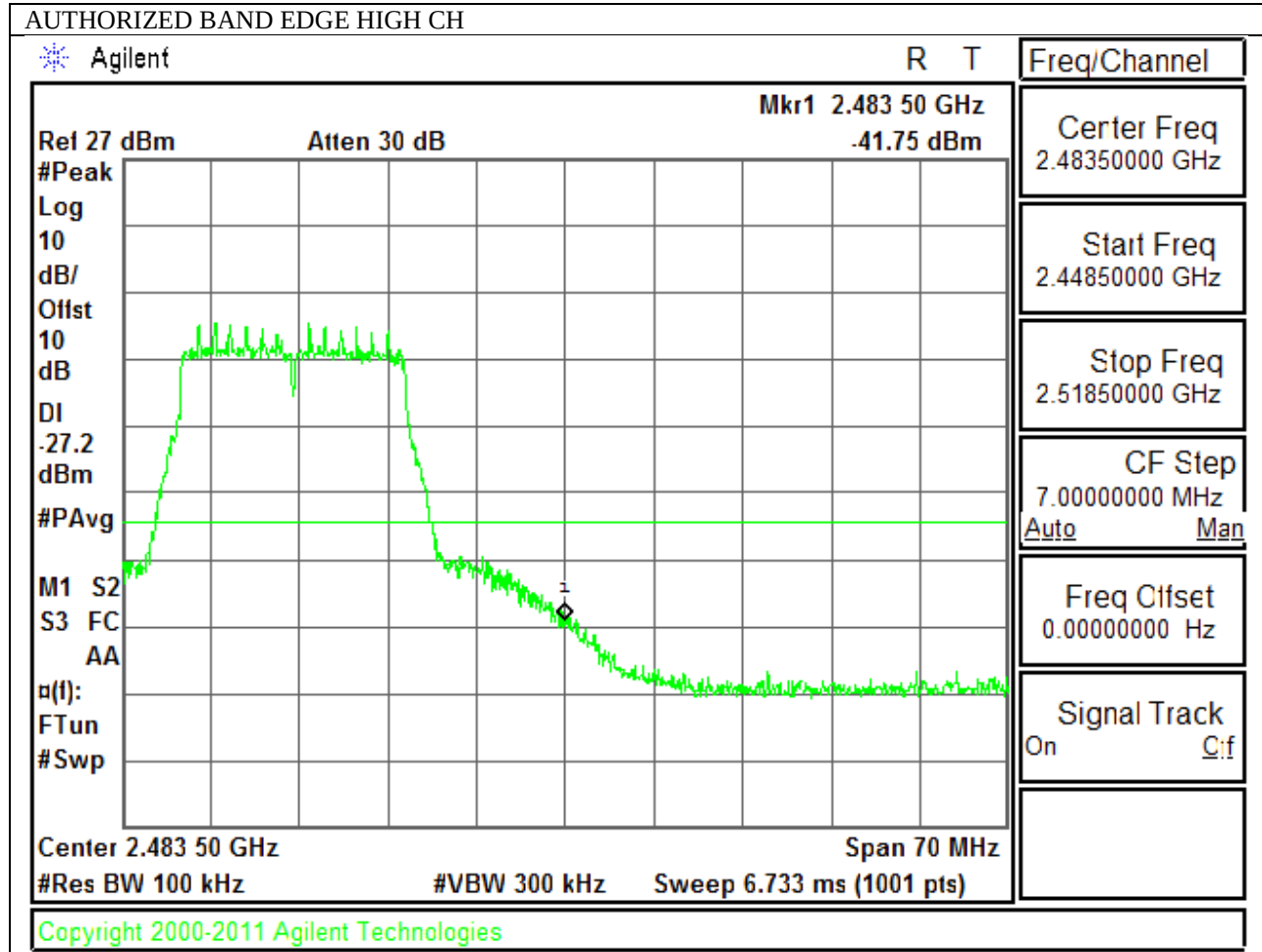
IN-BAND REFERENCE LEVEL



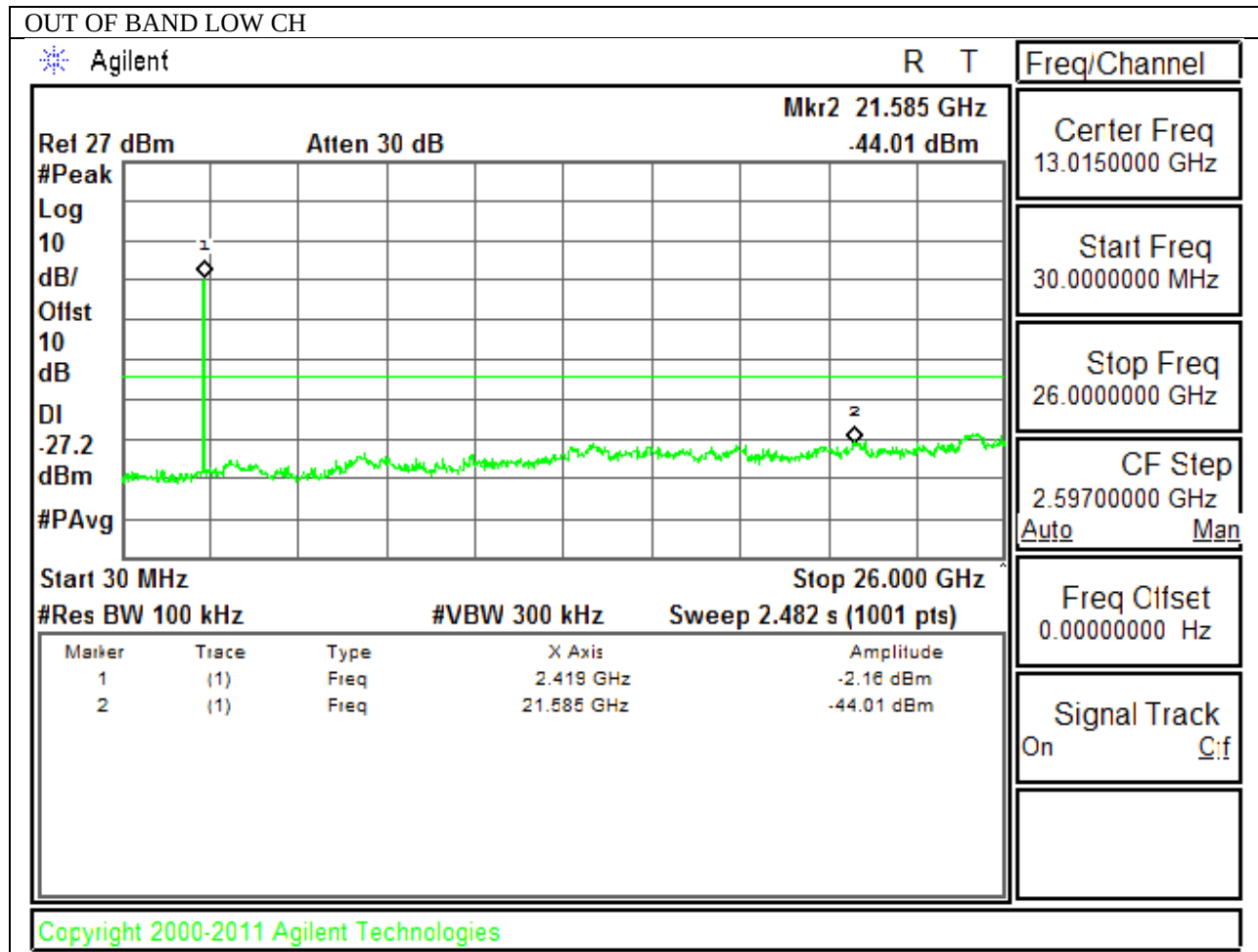
LOW CHANNEL BANDEDGE

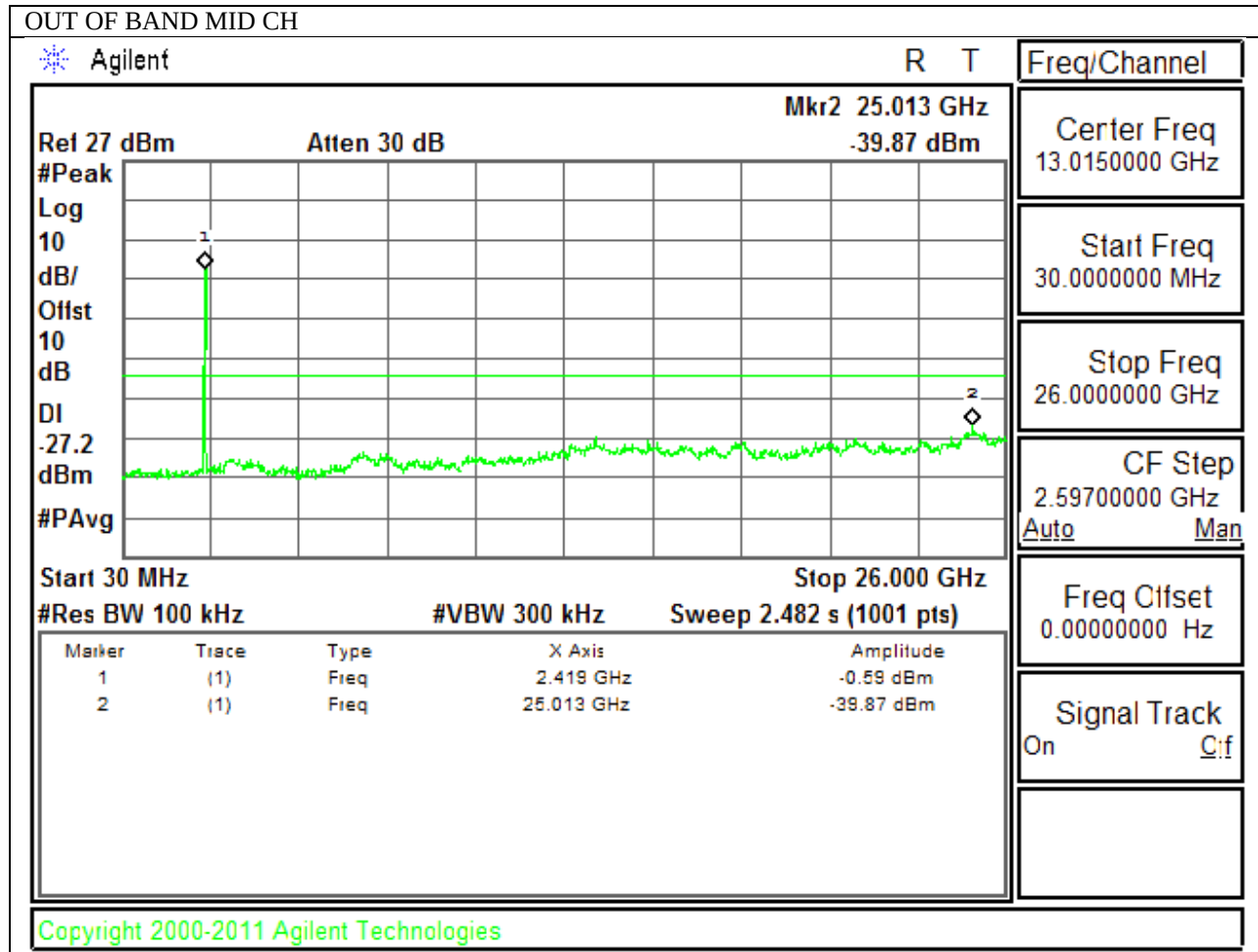


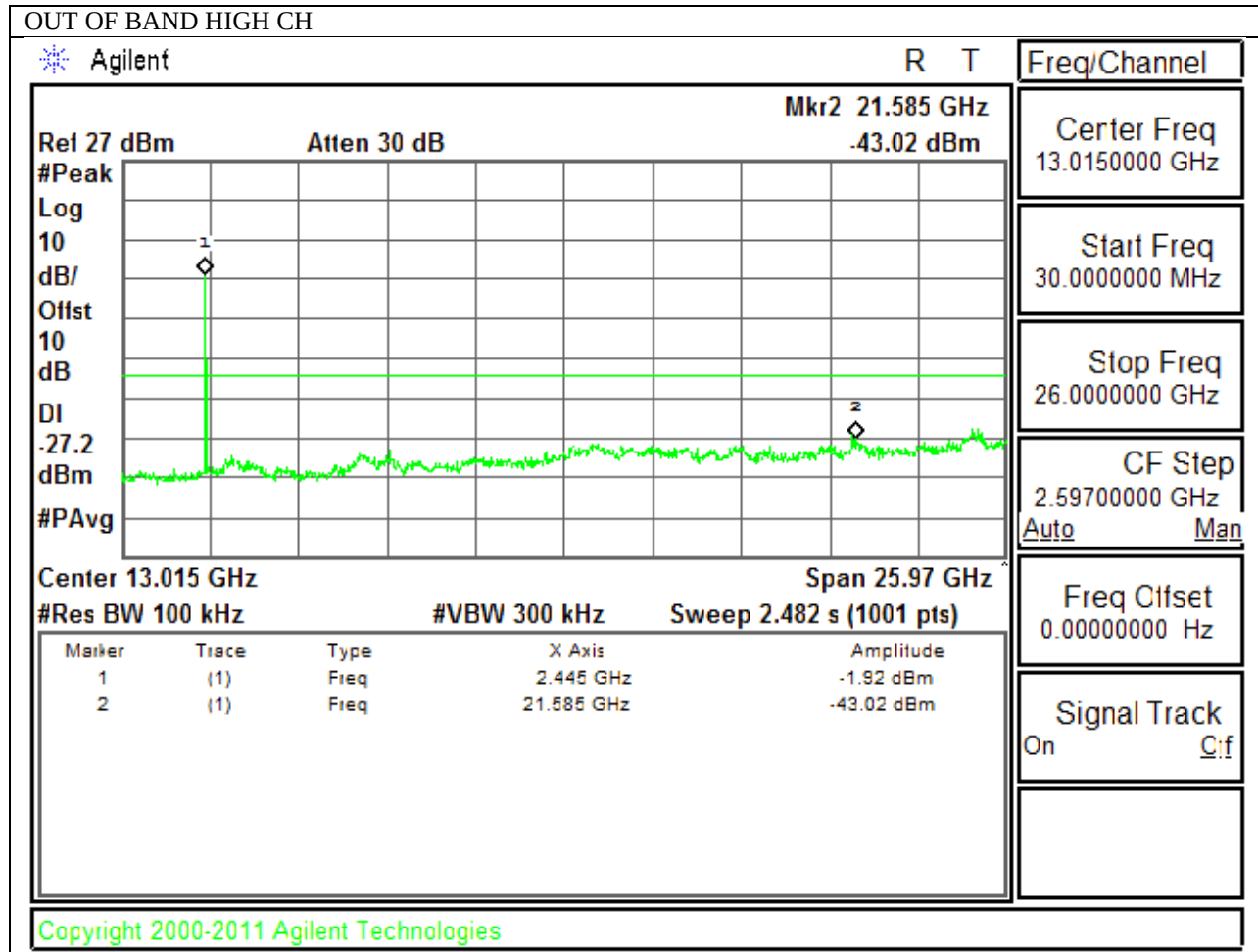
HIGH CHANNEL BANDEDGE



OUT-OF-BAND EMISSIONS

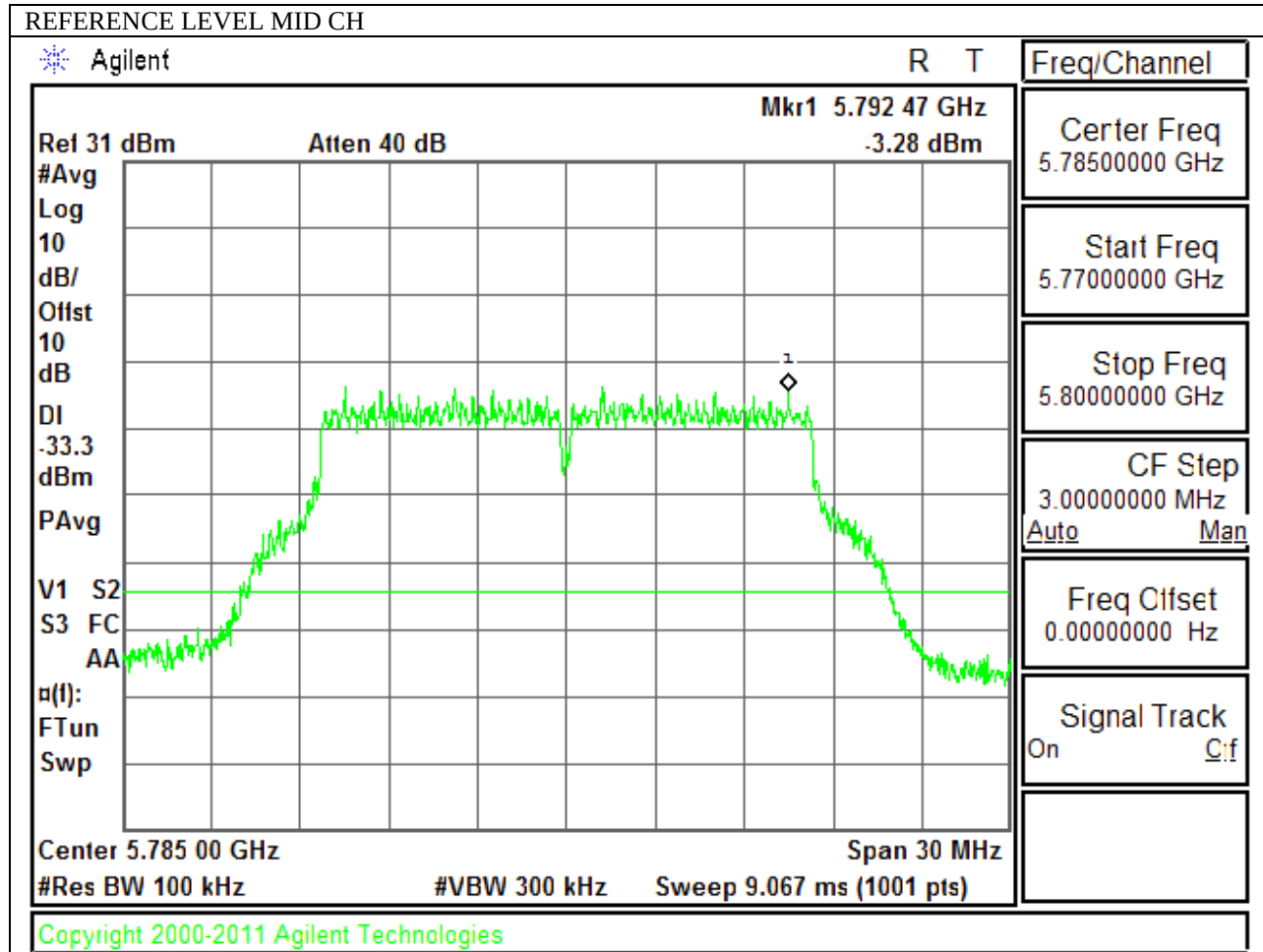




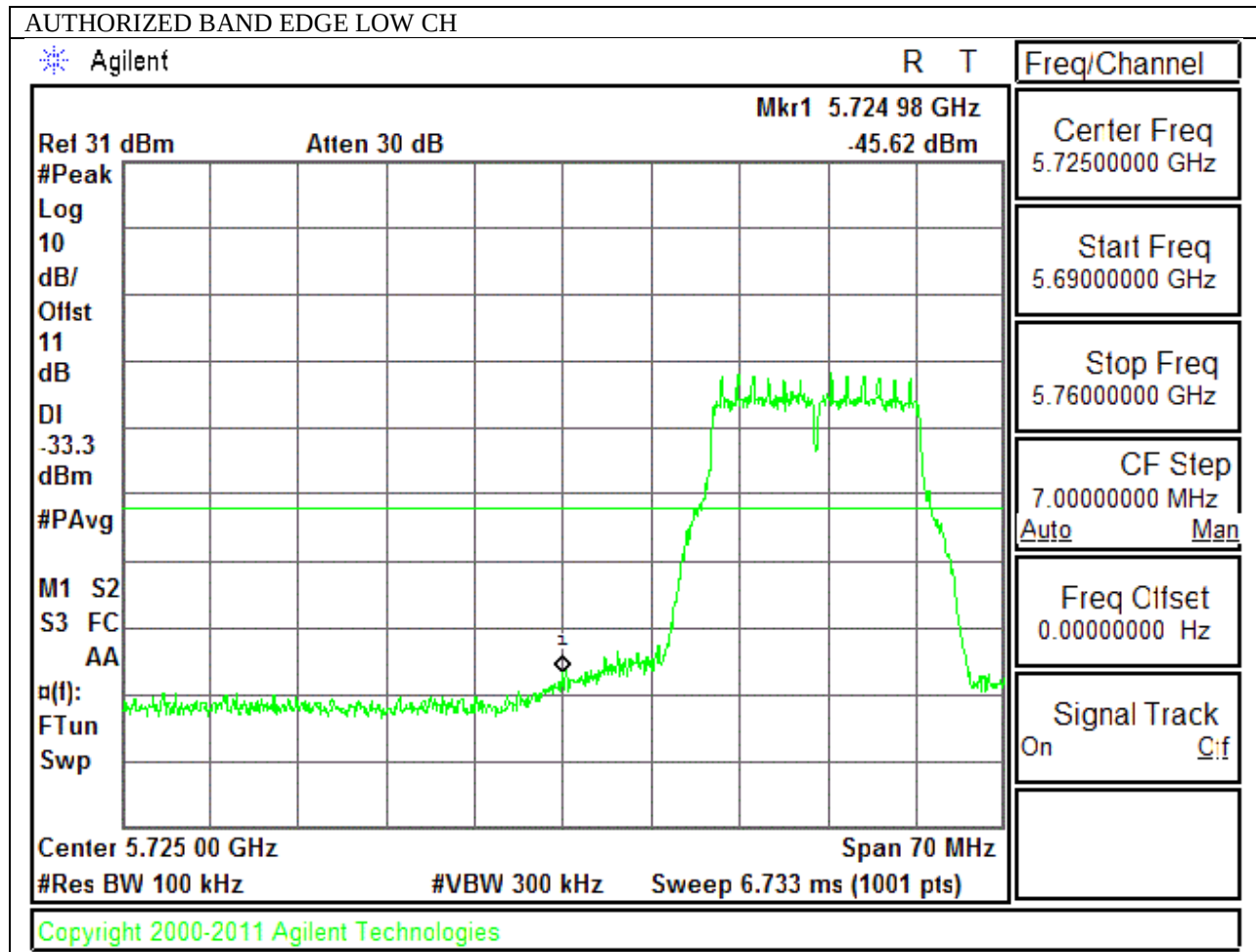


9.5.7. 802.11a MODE IN THE 5.8 GHz BAND CHAIN 0

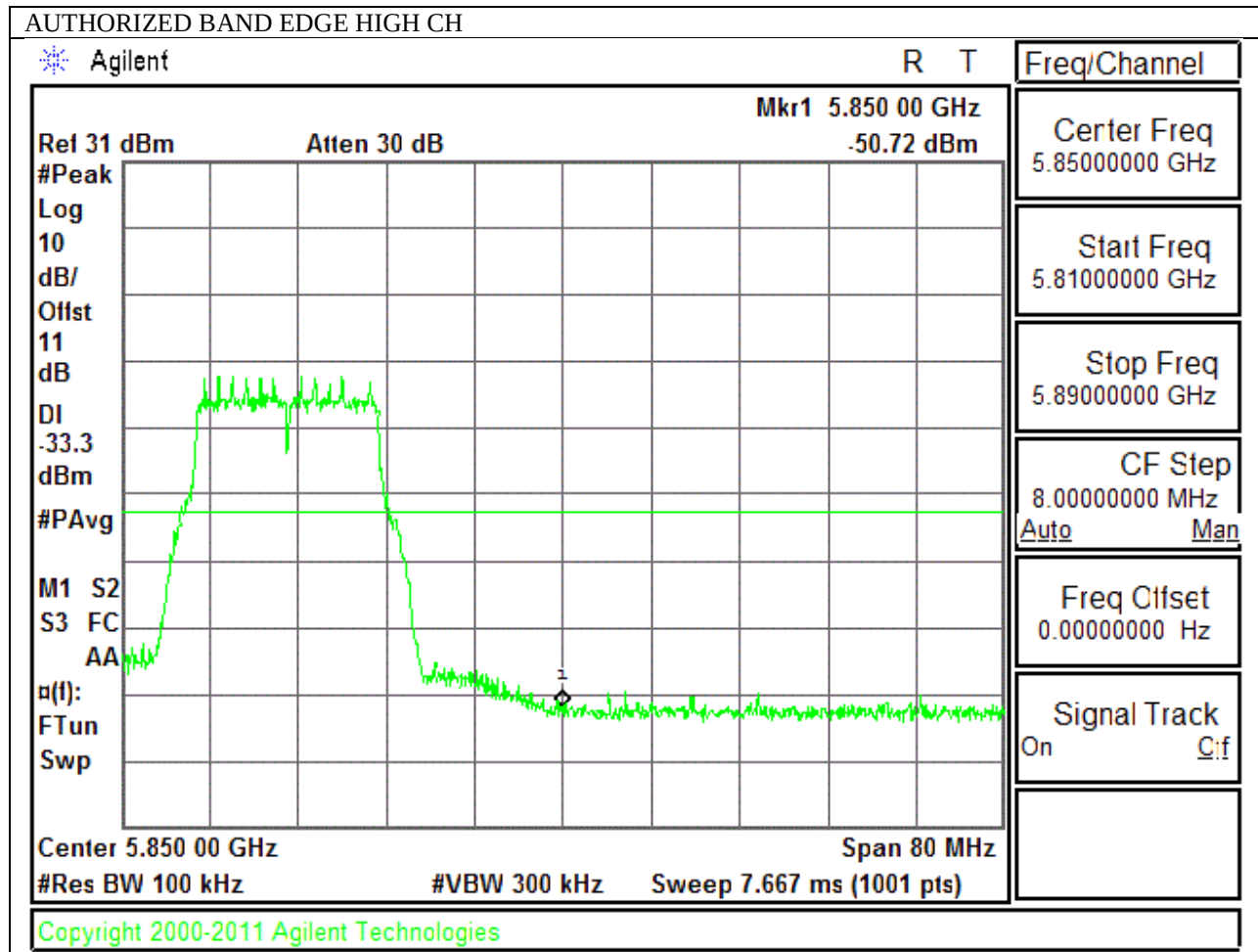
IN-BAND REFERENCE LEVEL



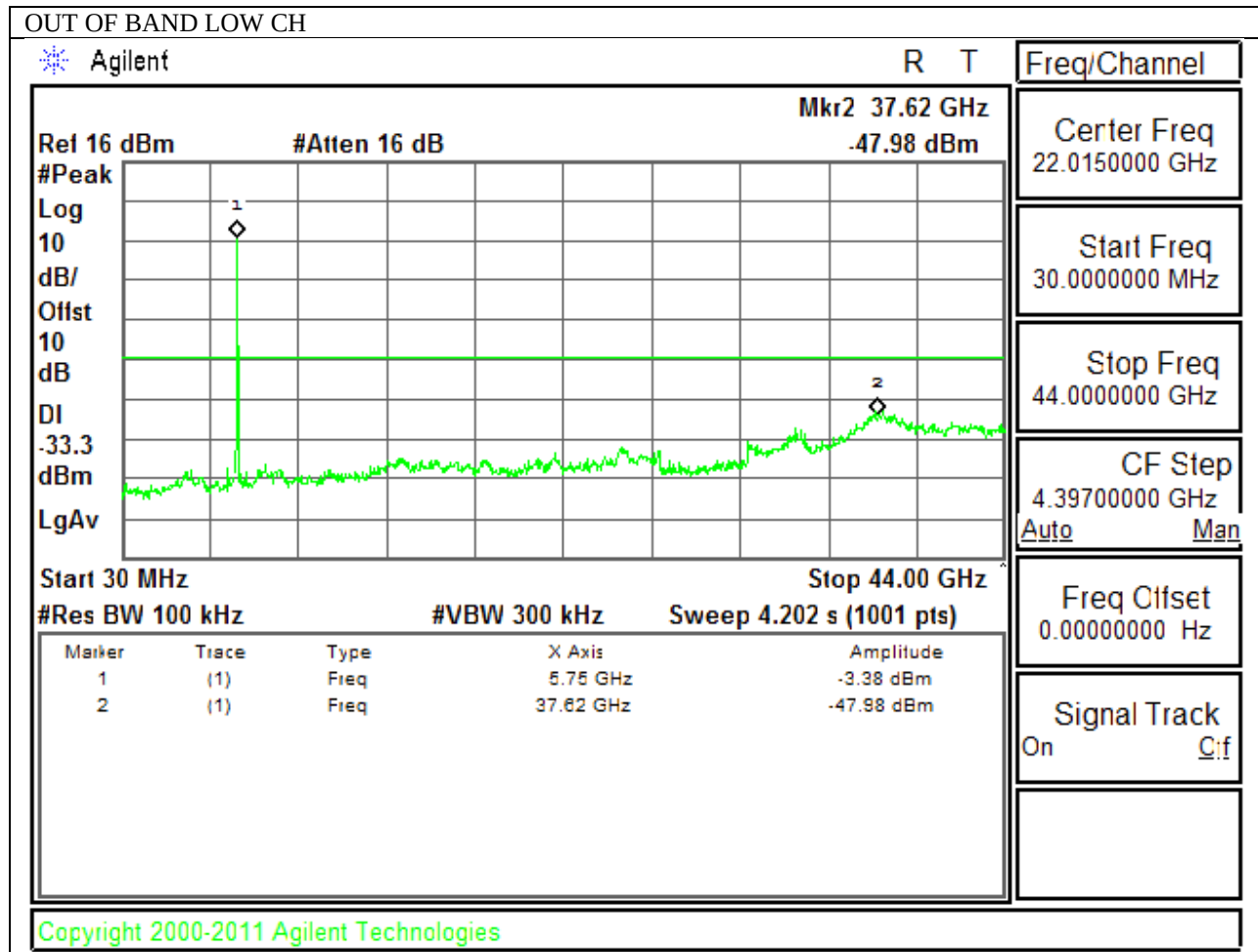
LOW CHANNEL BANDEDGE

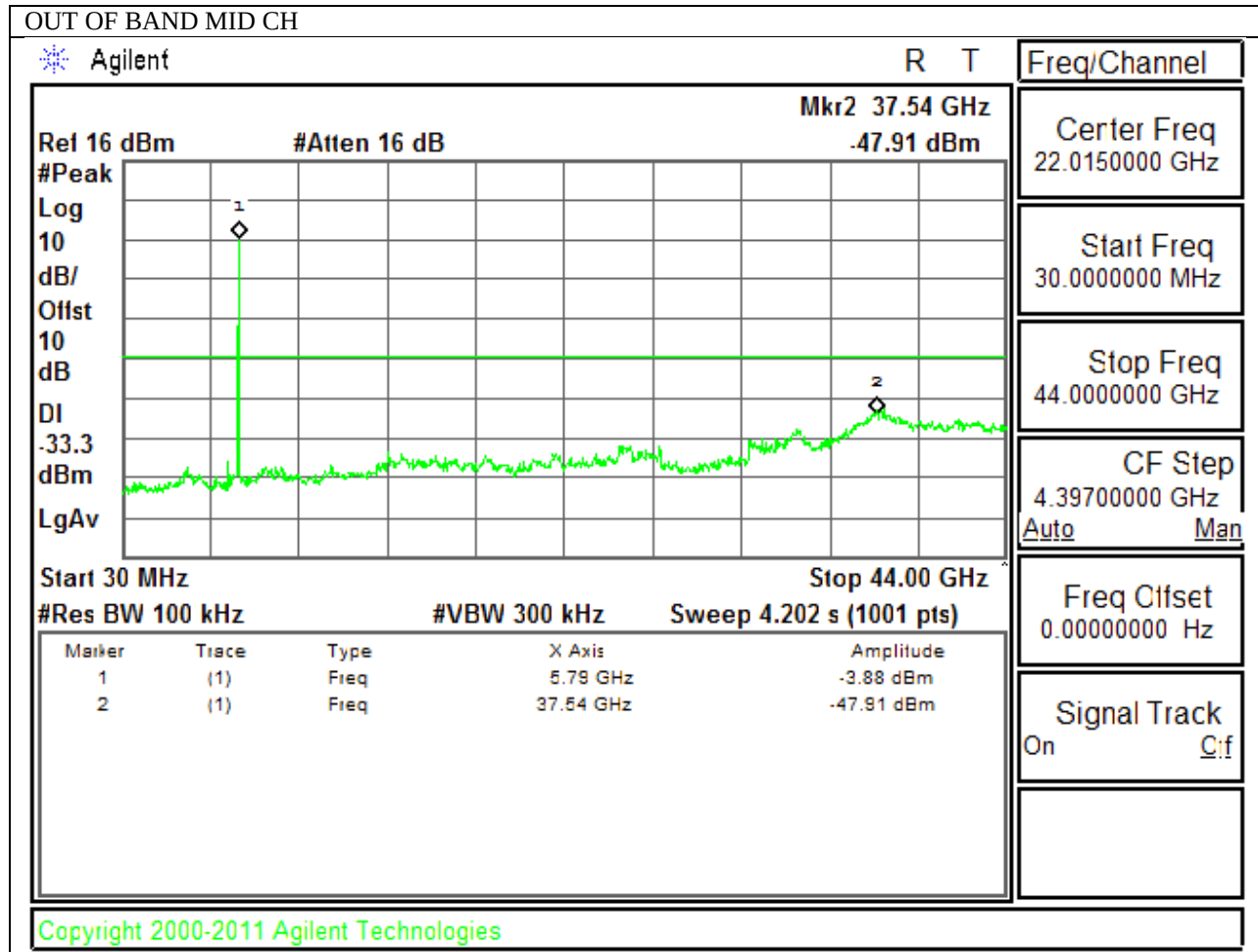


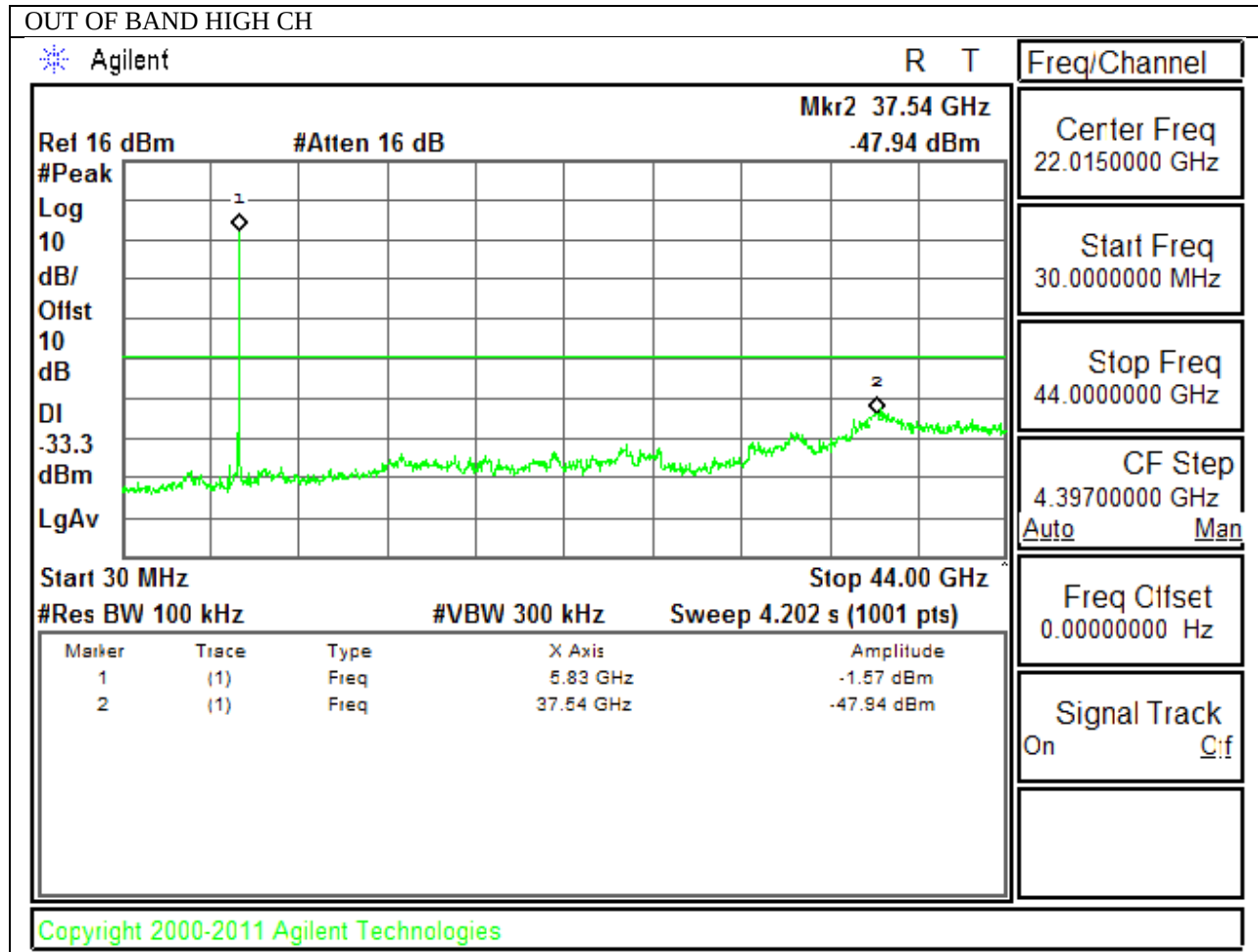
HIGH CHANNEL BANDEDGE



OUT-OF-BAND EMISSIONS

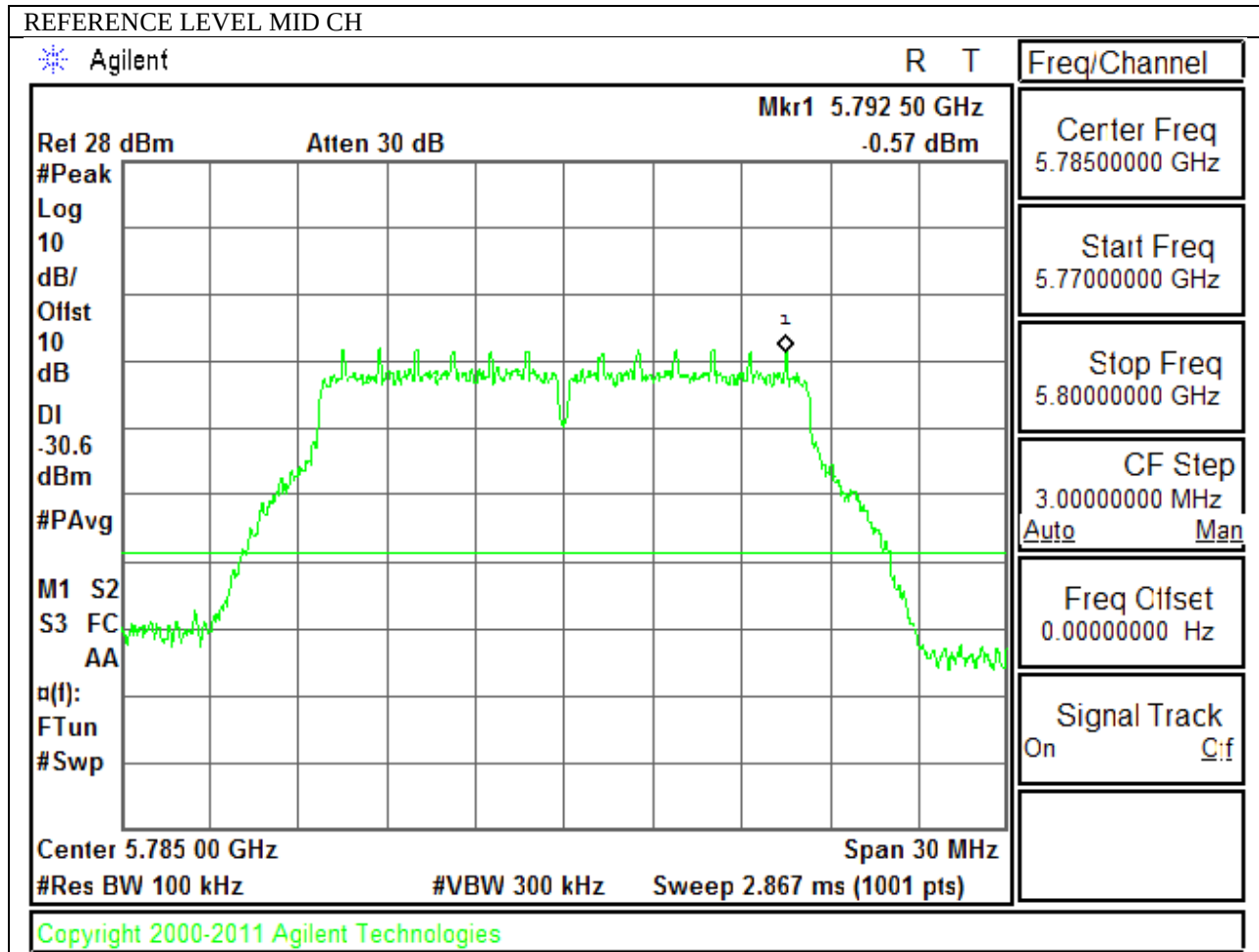




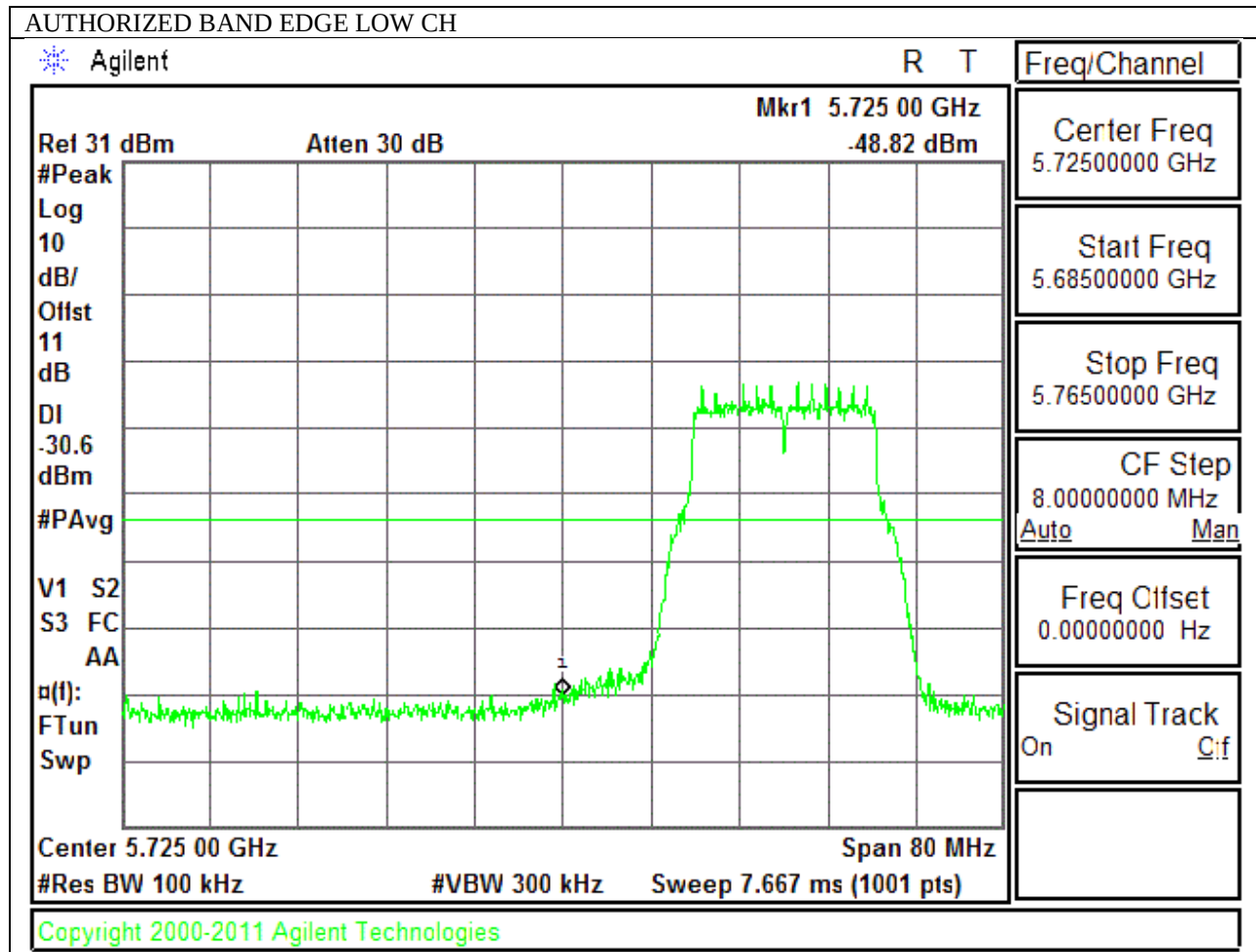


9.5.8. 802.11a MODE IN THE 5.8 GHz BAND CHAIN 1

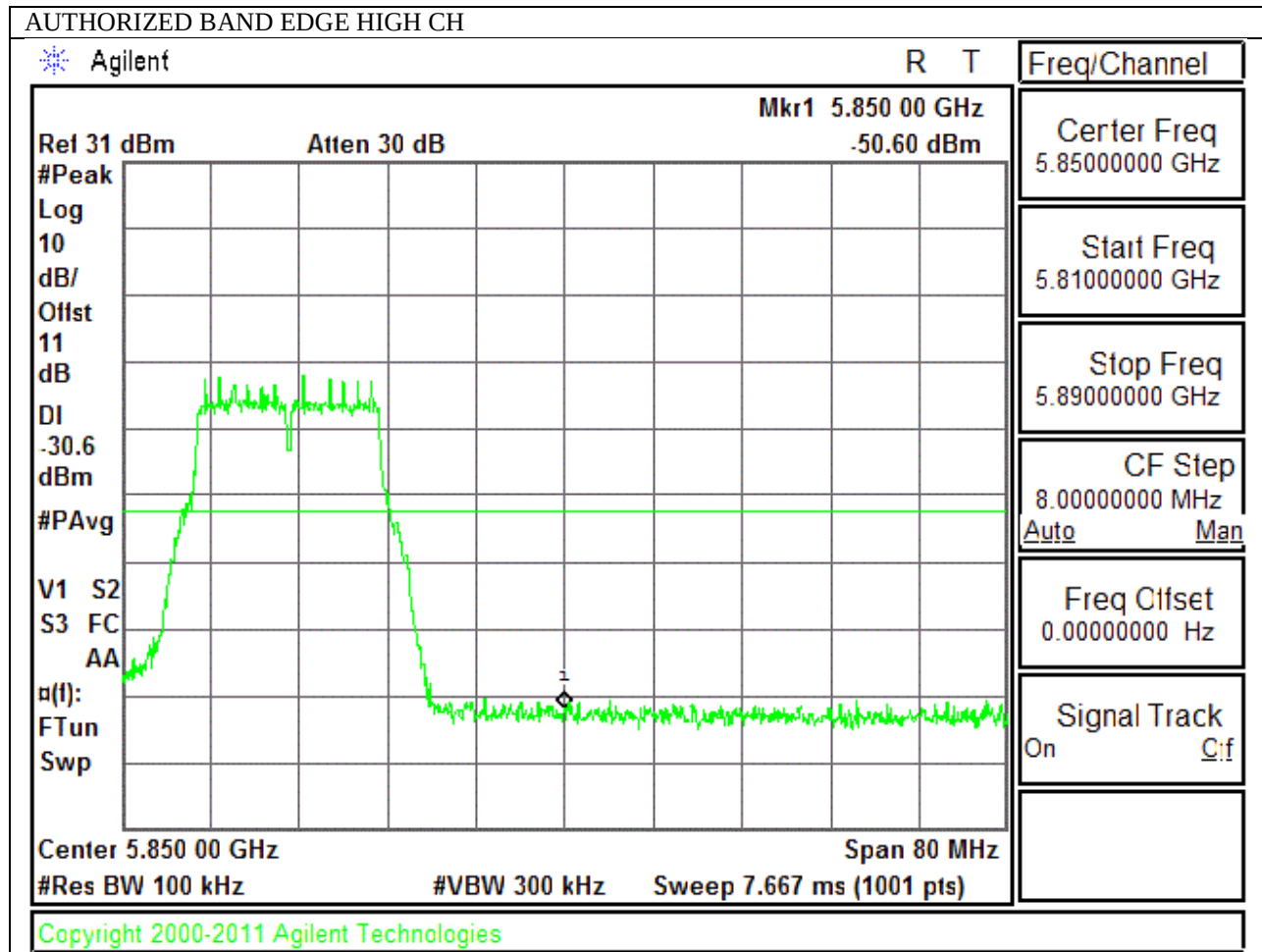
IN-BAND REFERENCE LEVEL



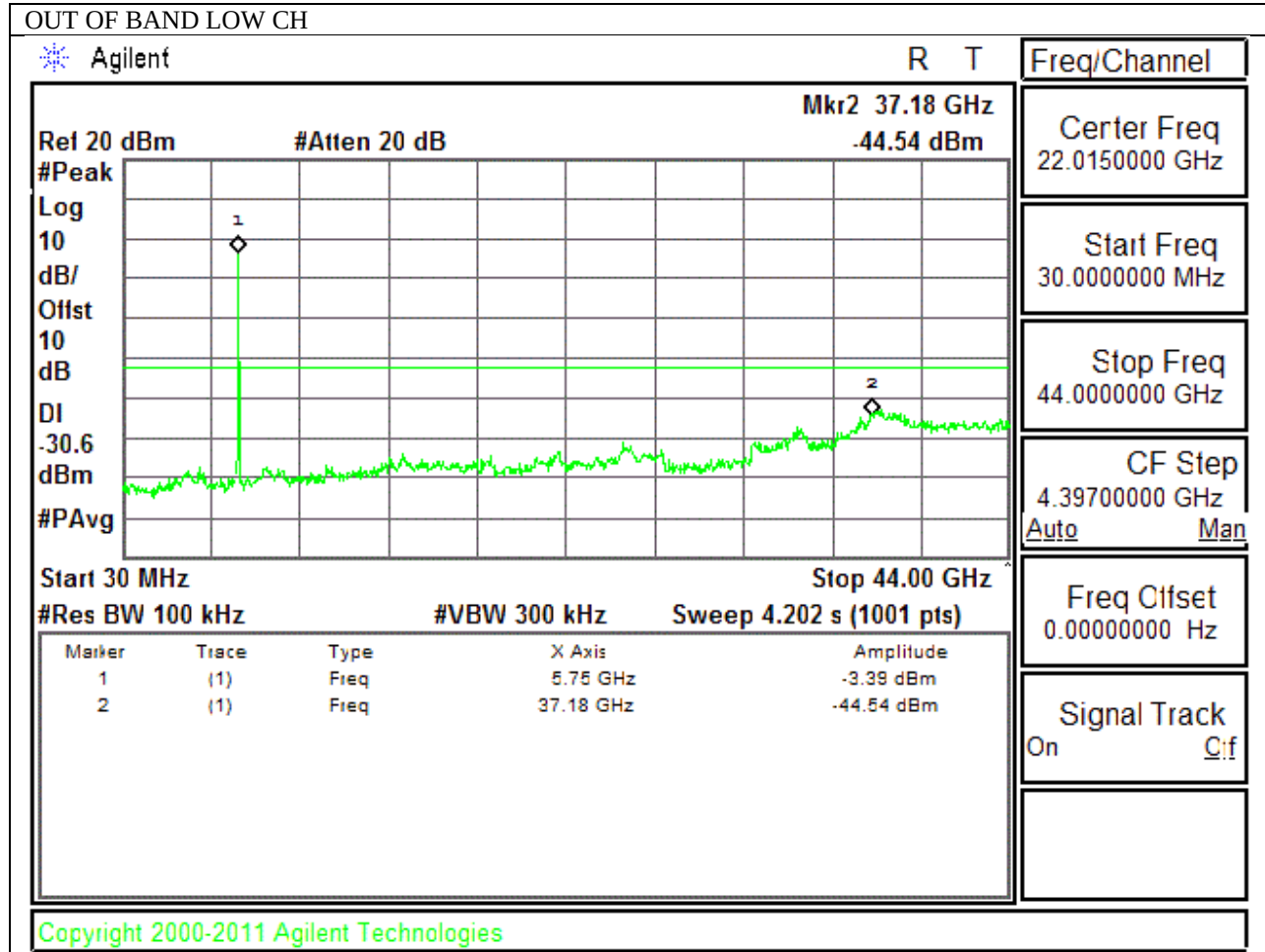
LOW CHANNEL BANDEDGE

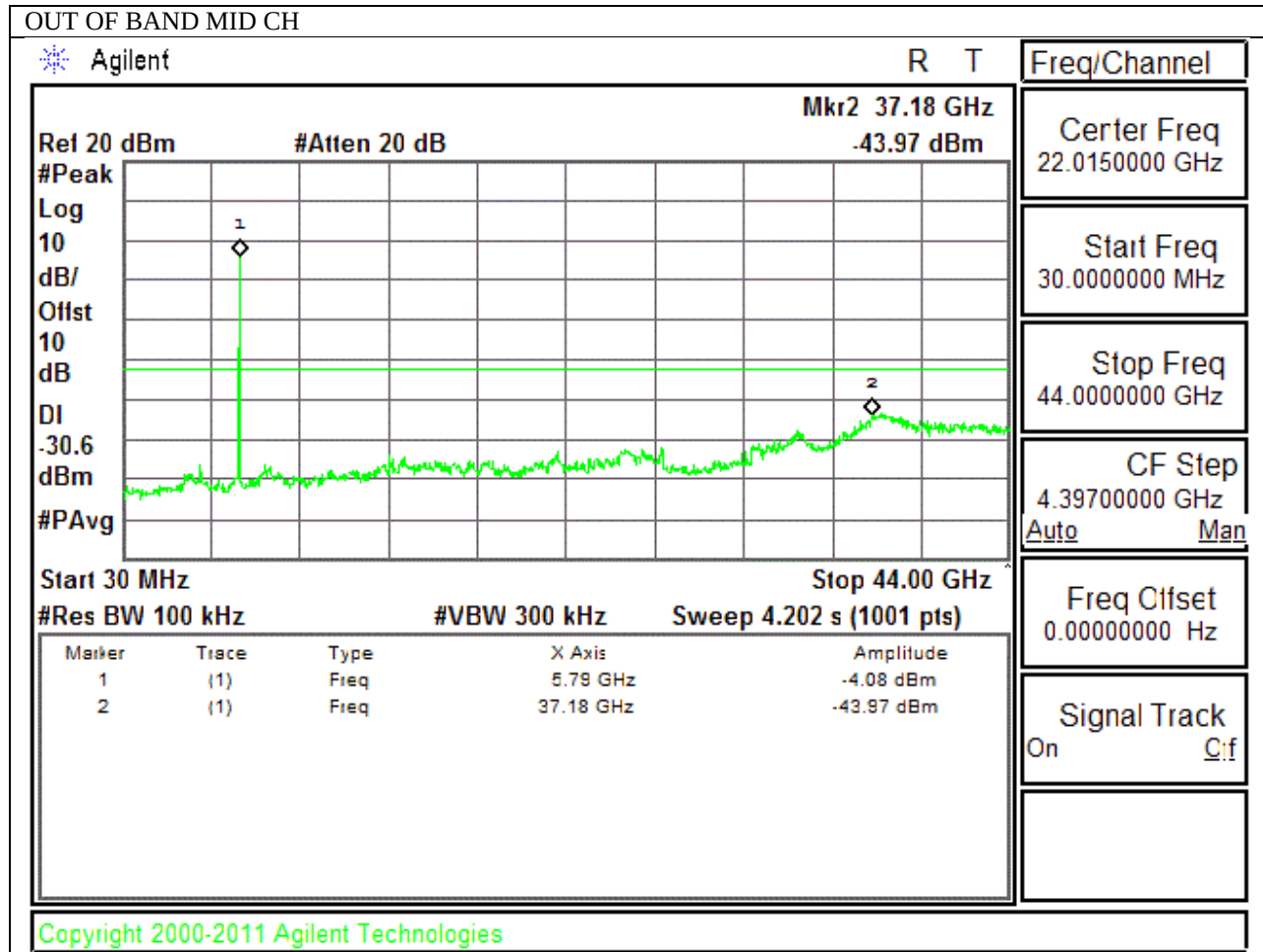


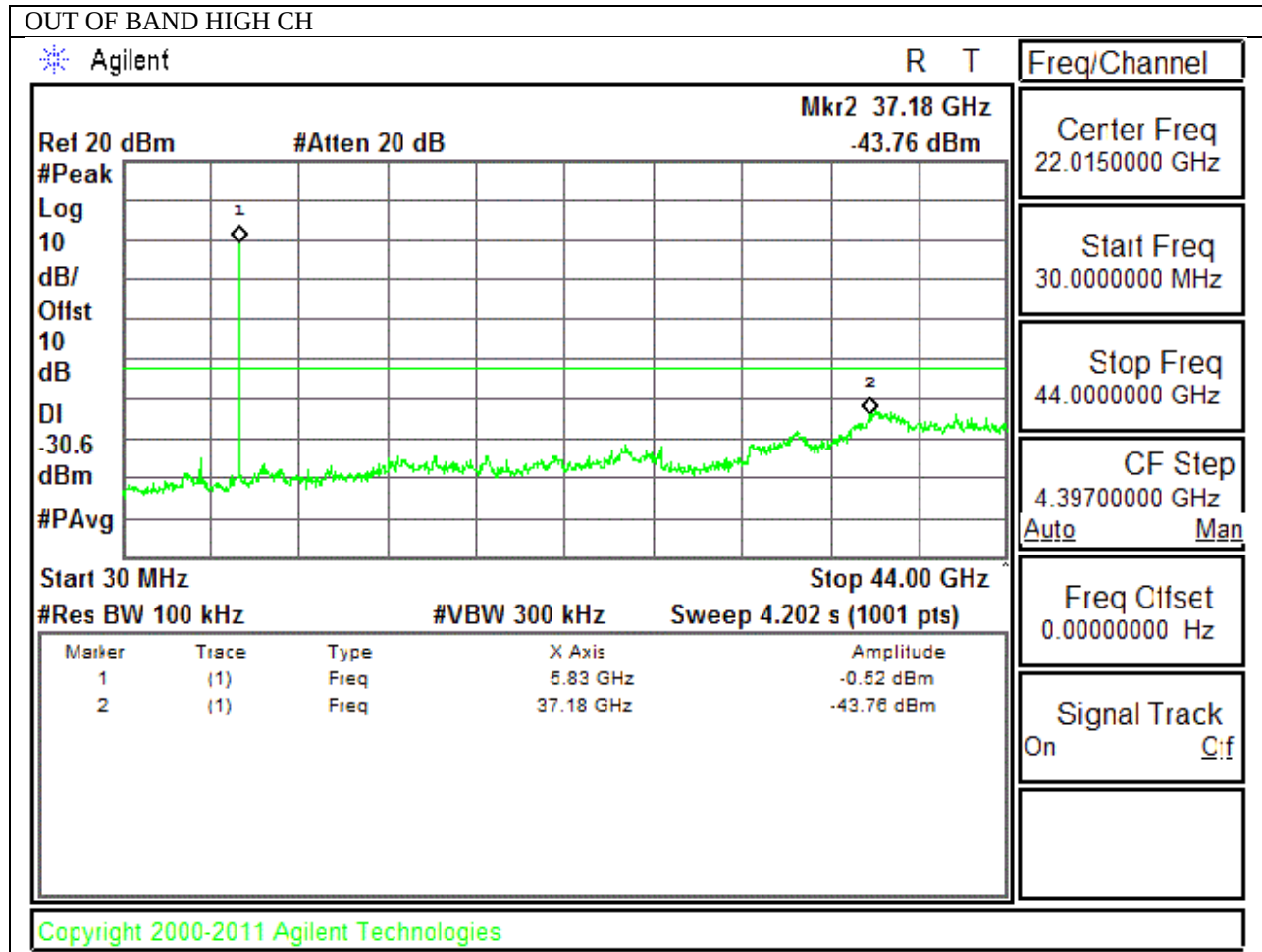
HIGH CHANNEL BANDEDGE



OUT-OF-BAND EMISSIONS

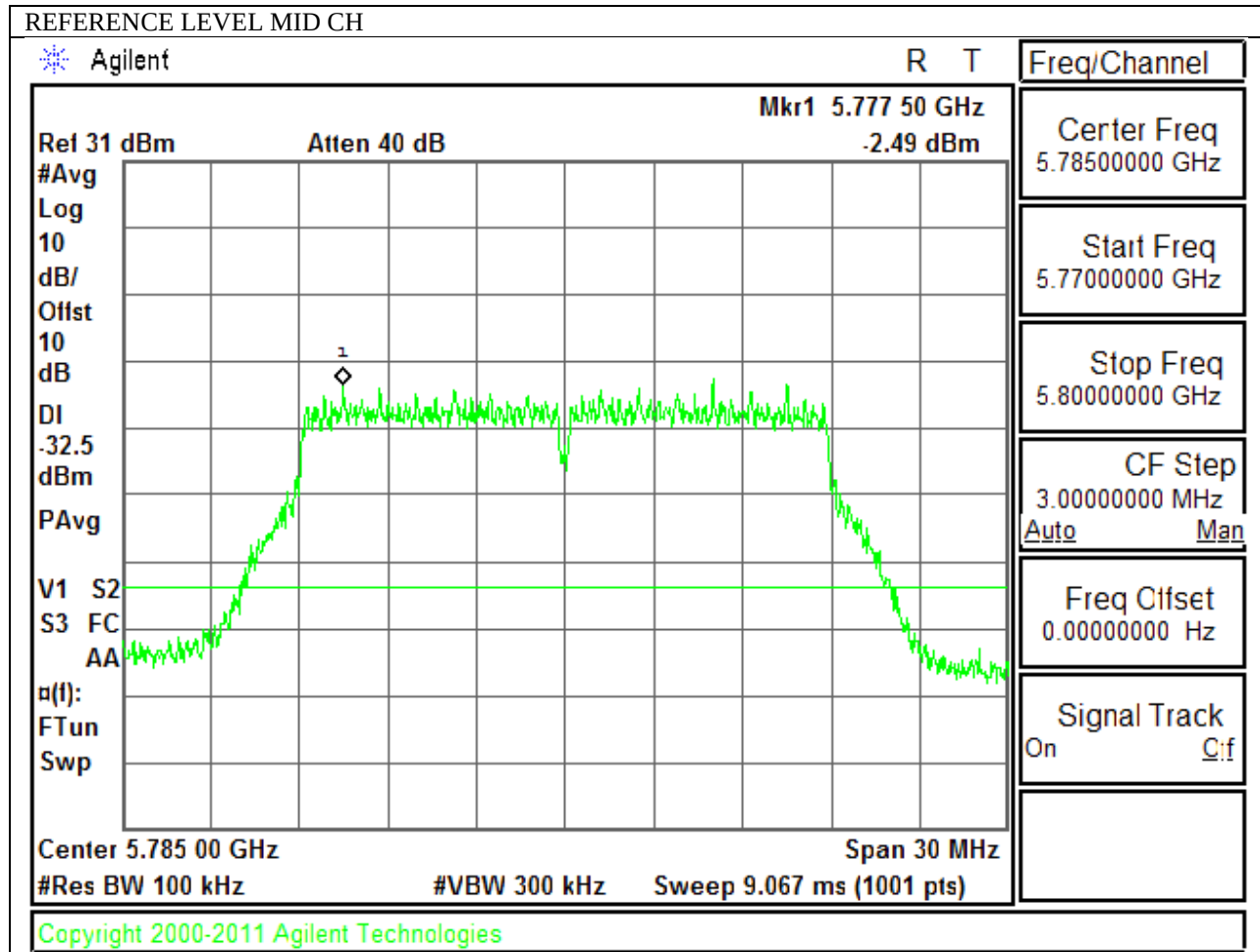




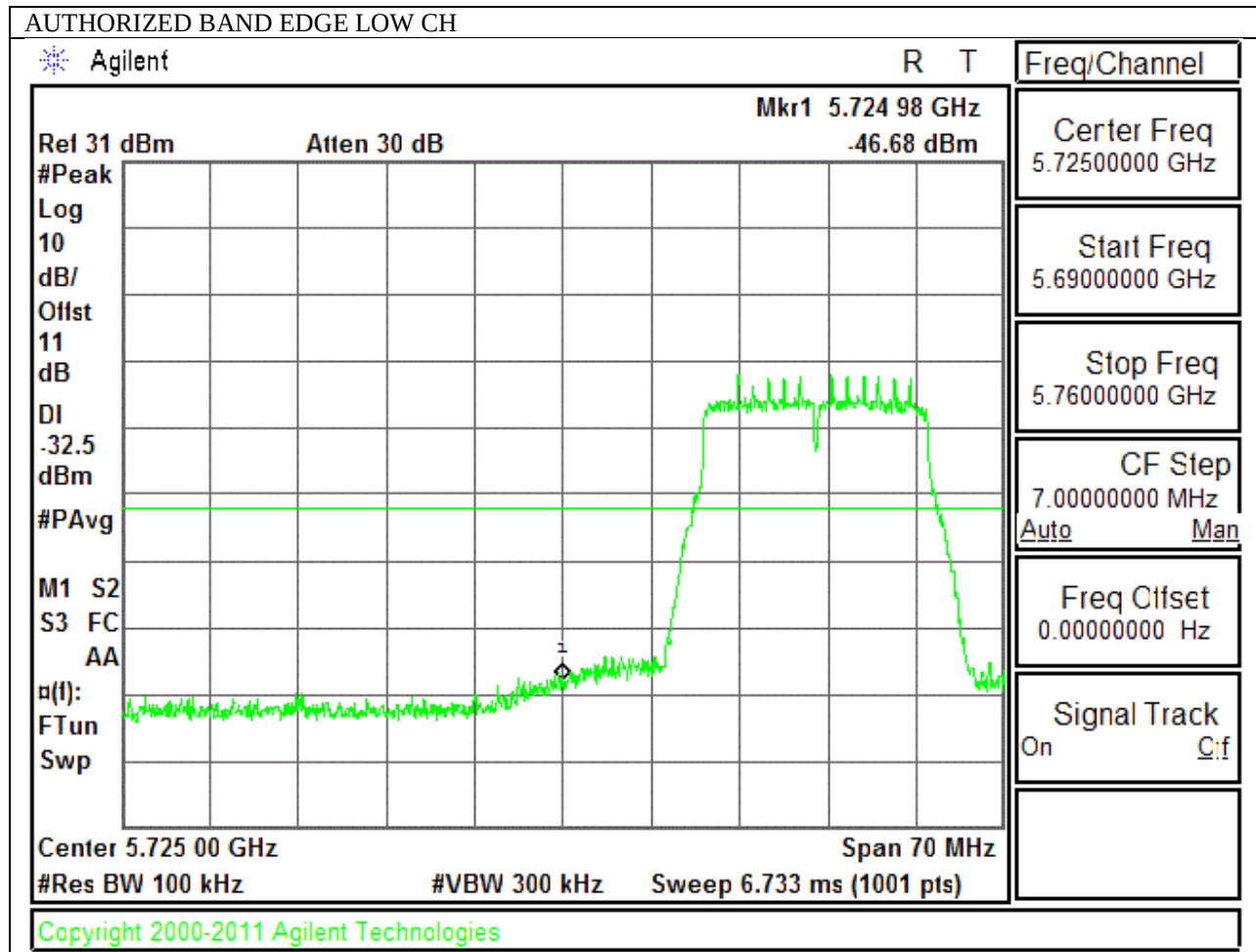


9.5.9. 802.11n HT20 MODE IN THE 5.8 GHz BAND CHAIN 0

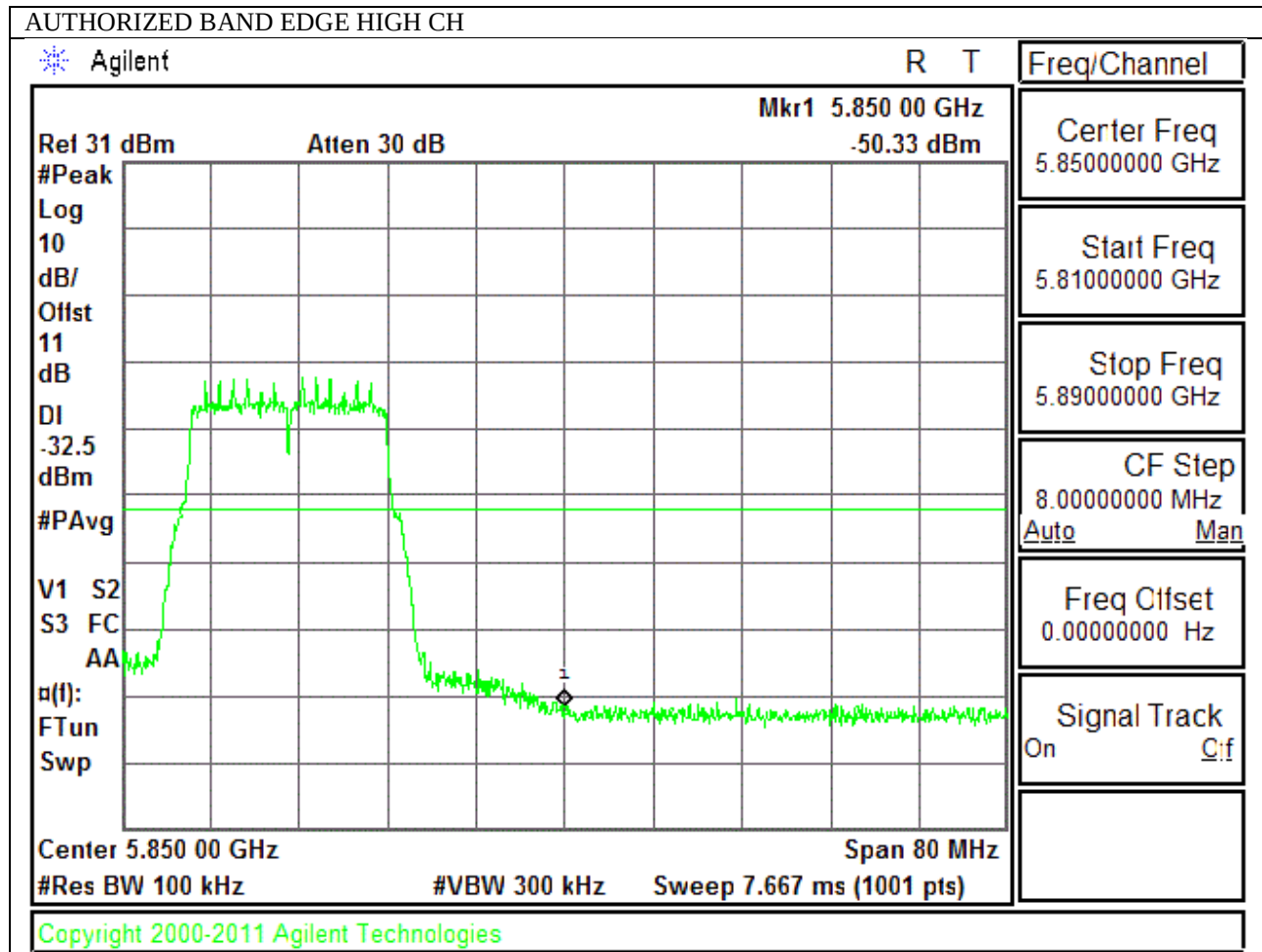
IN-BAND REFERENCE LEVEL



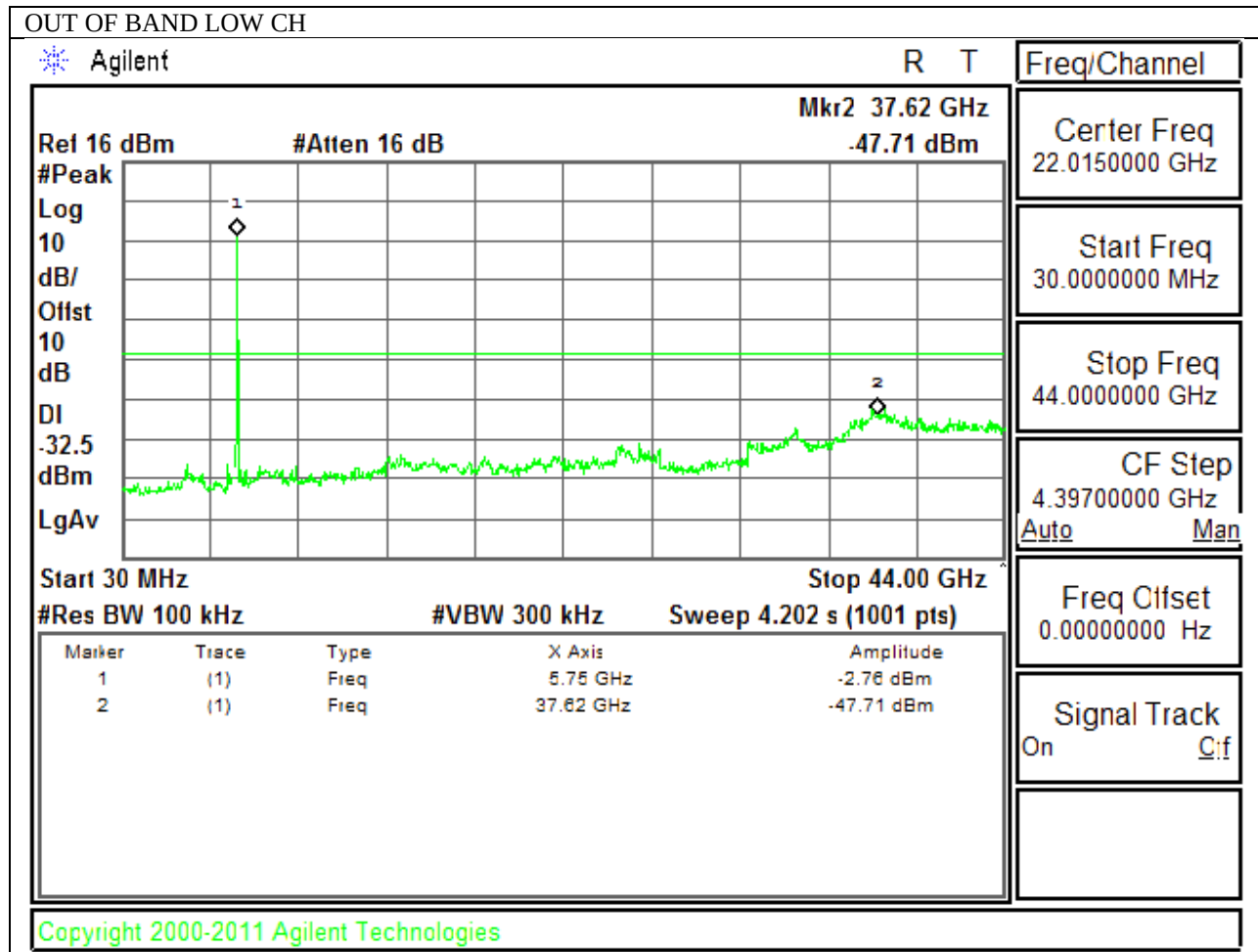
LOW CHANNEL BANDEDGE

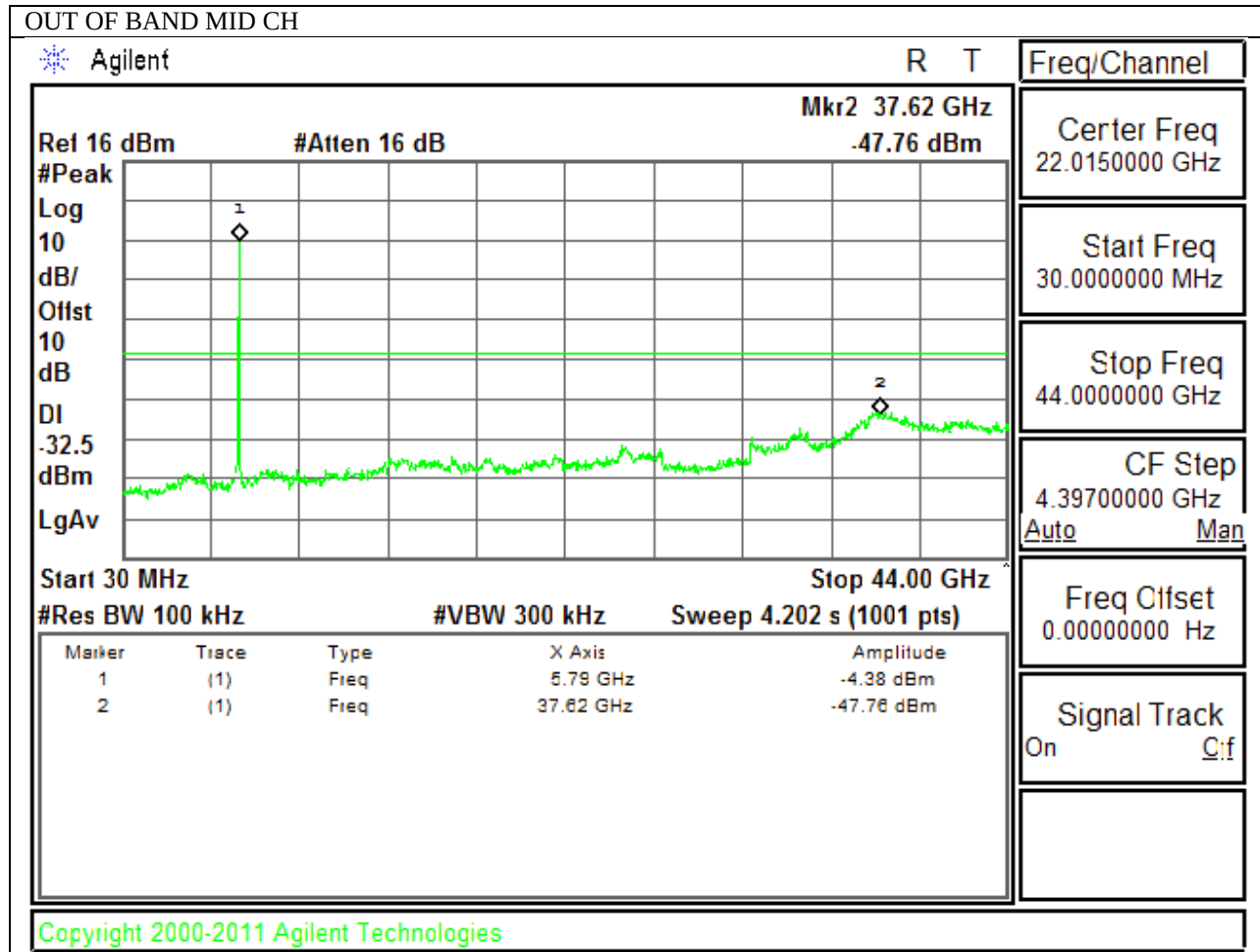


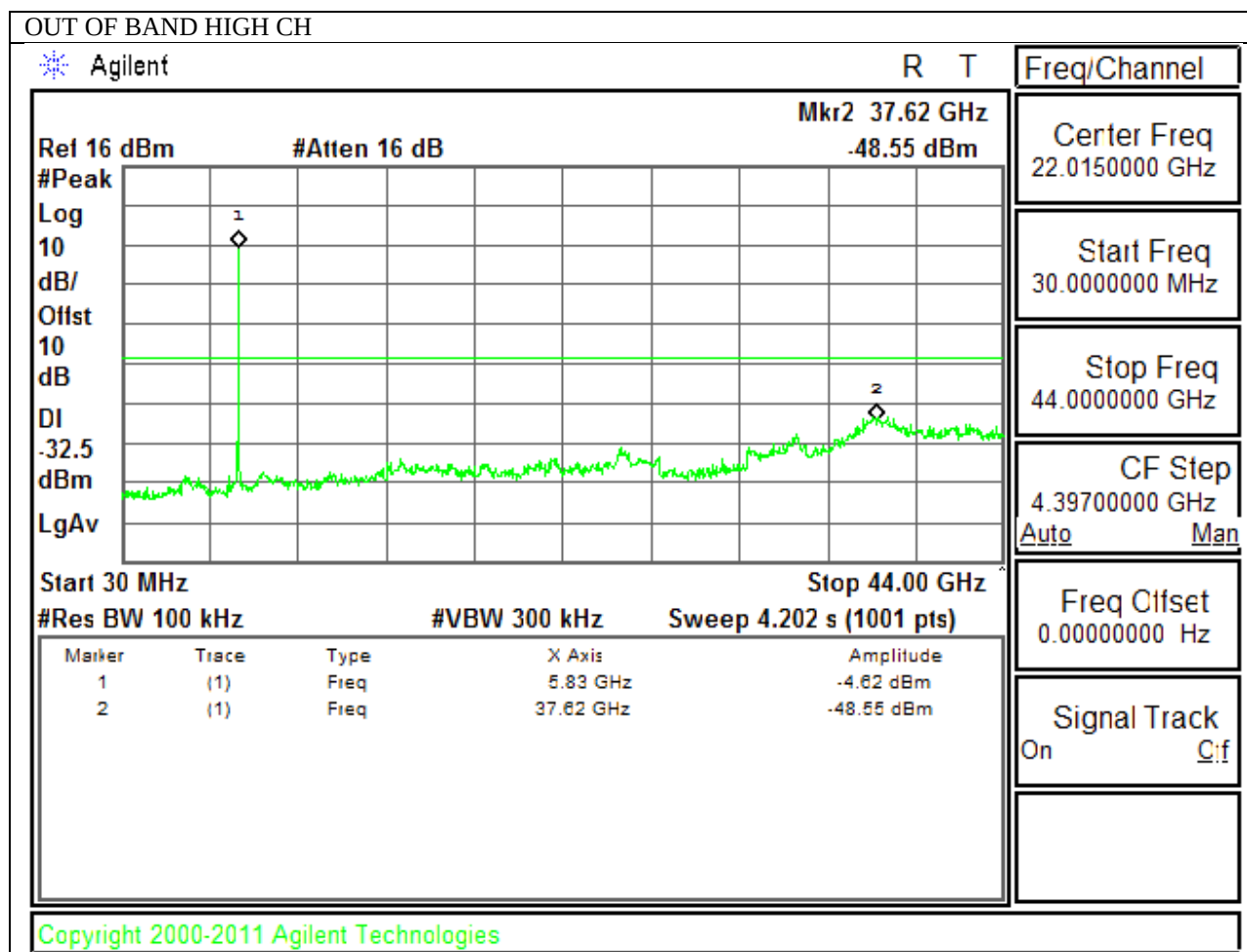
HIGH CHANNEL BANDEDGE



OUT-OF-BAND EMISSIONS

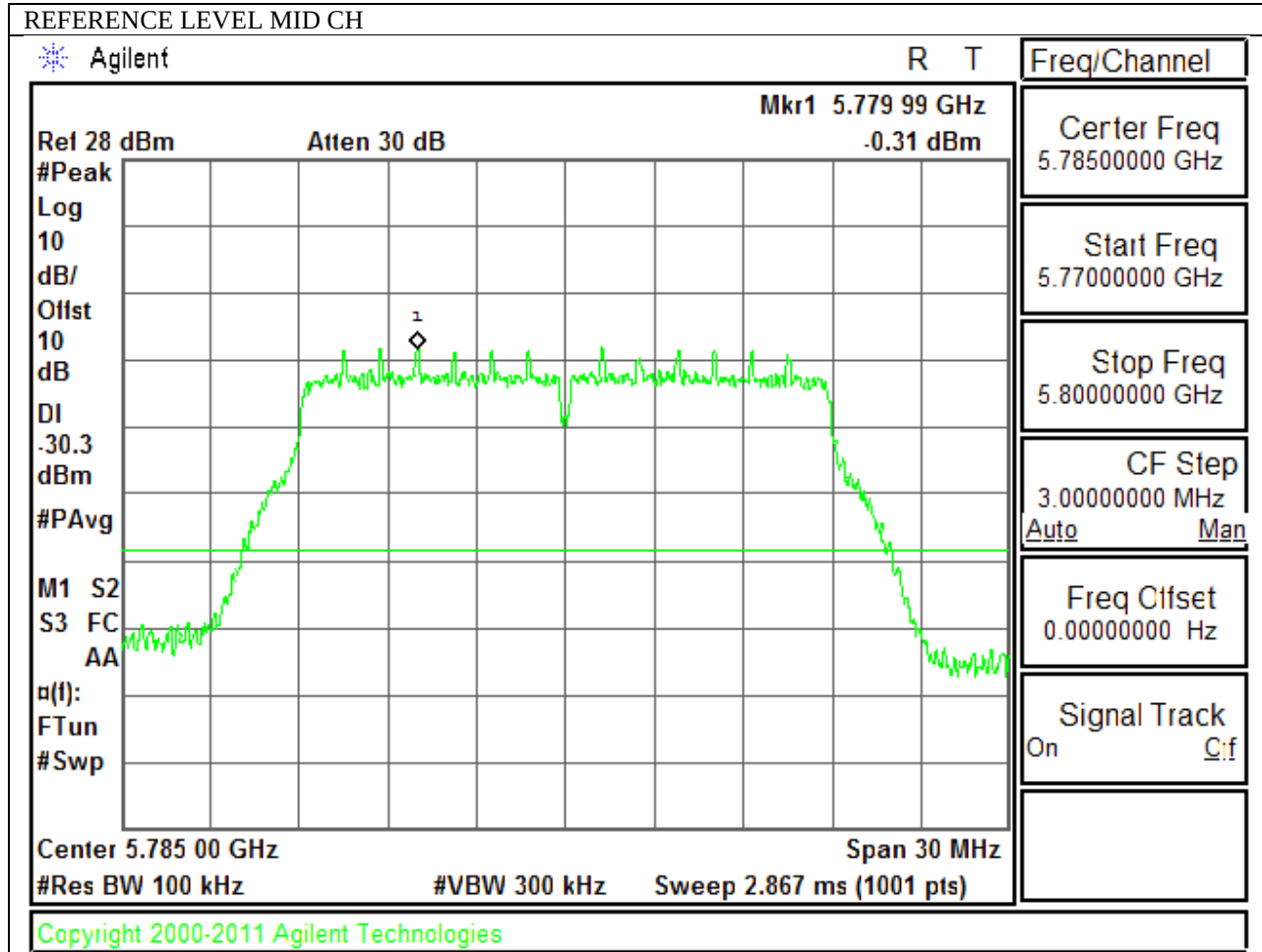




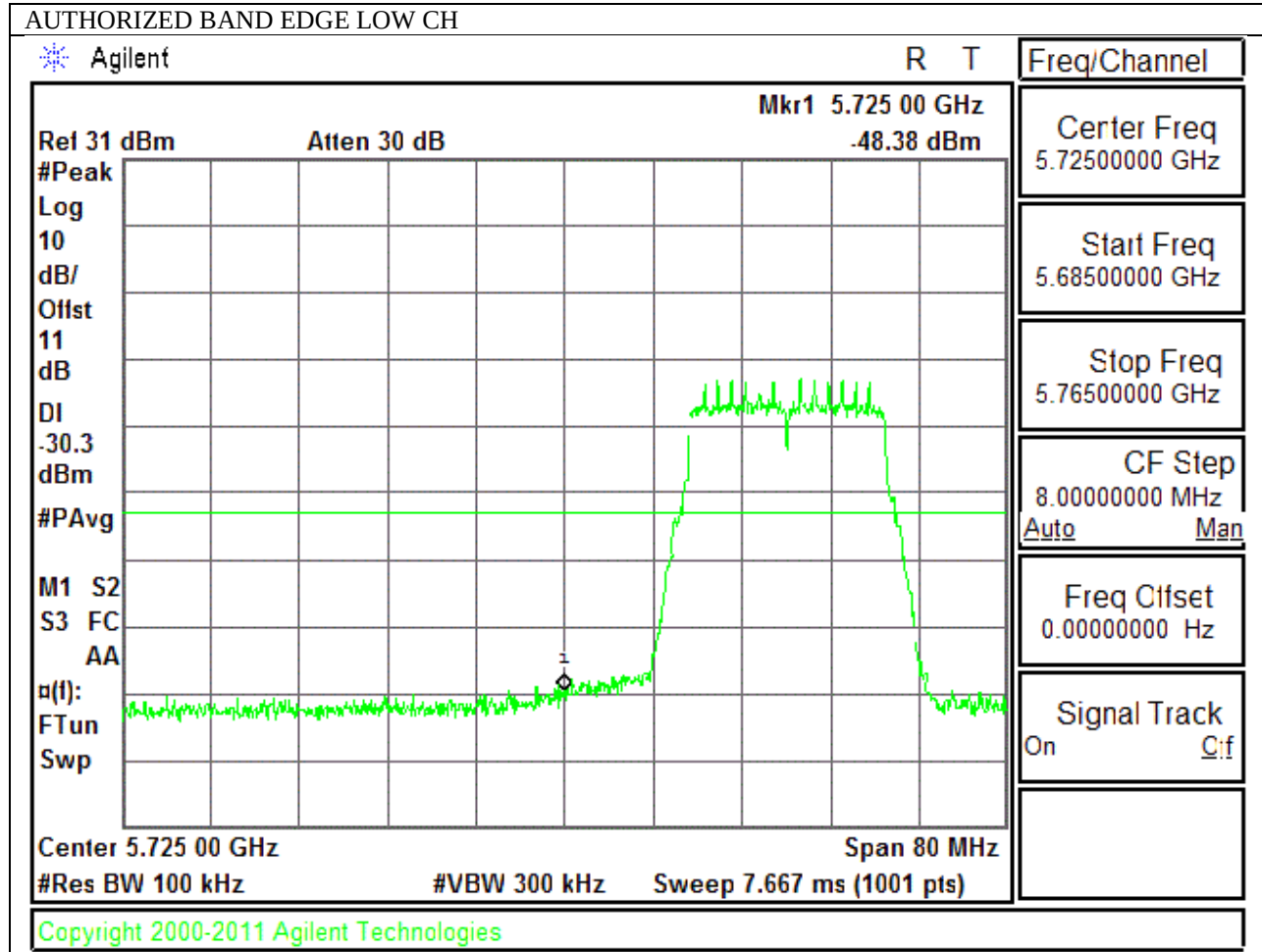


9.5.10. 802.11n HT20 MODE IN THE 5.8 GHz BAND CHAIN 1

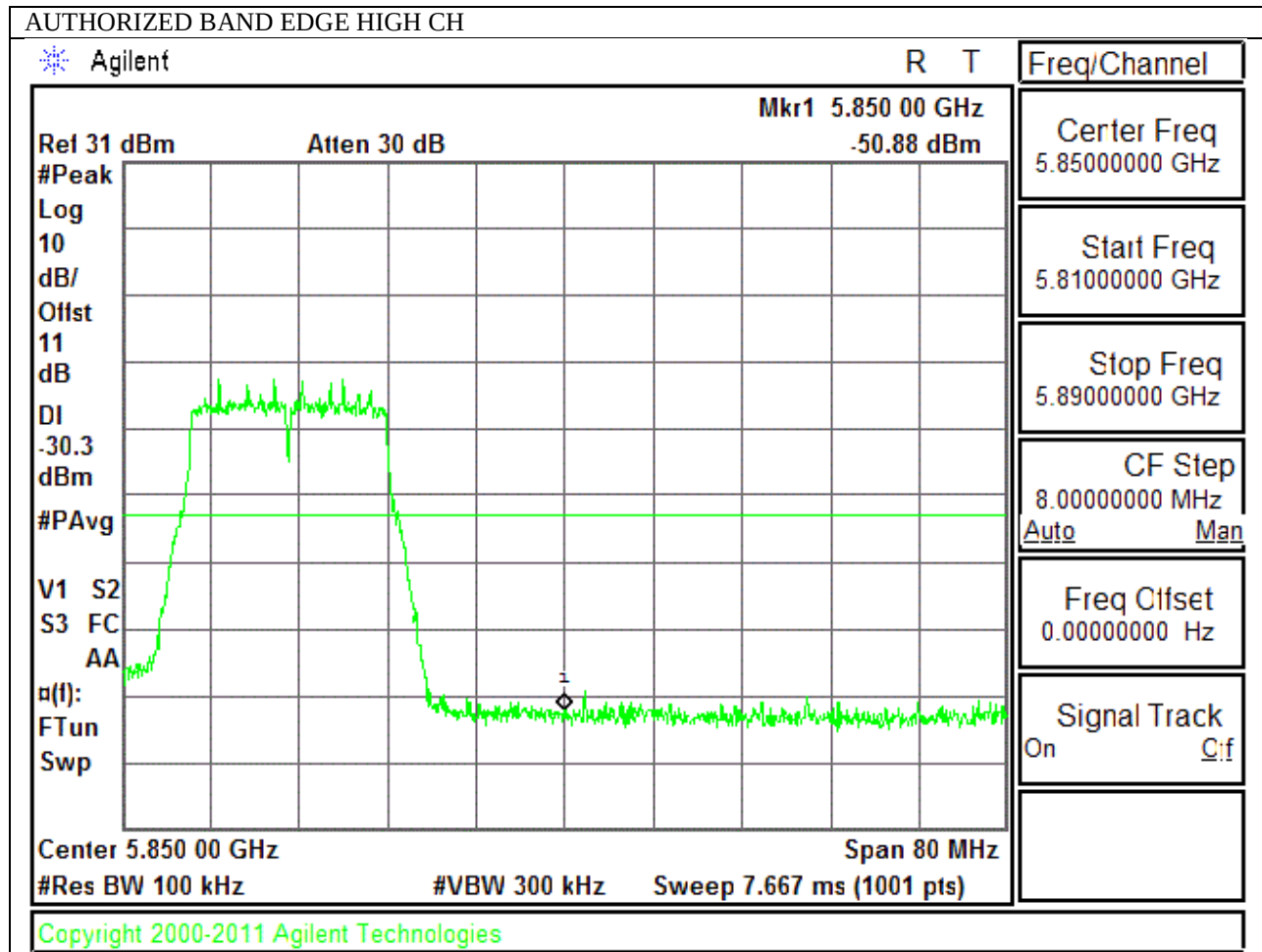
IN-BAND REFERENCE LEVEL



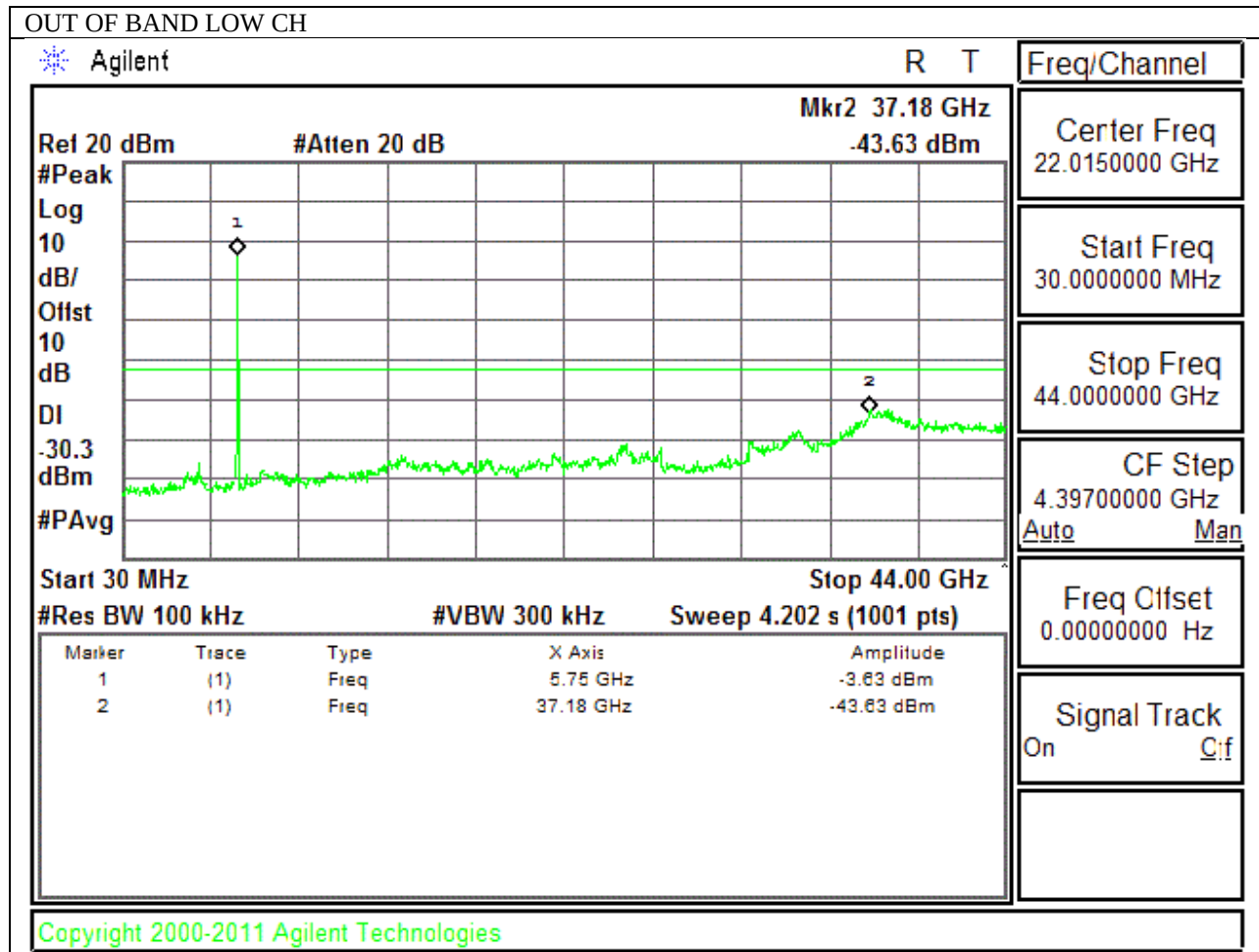
LOW CHANNEL BANDEDGE

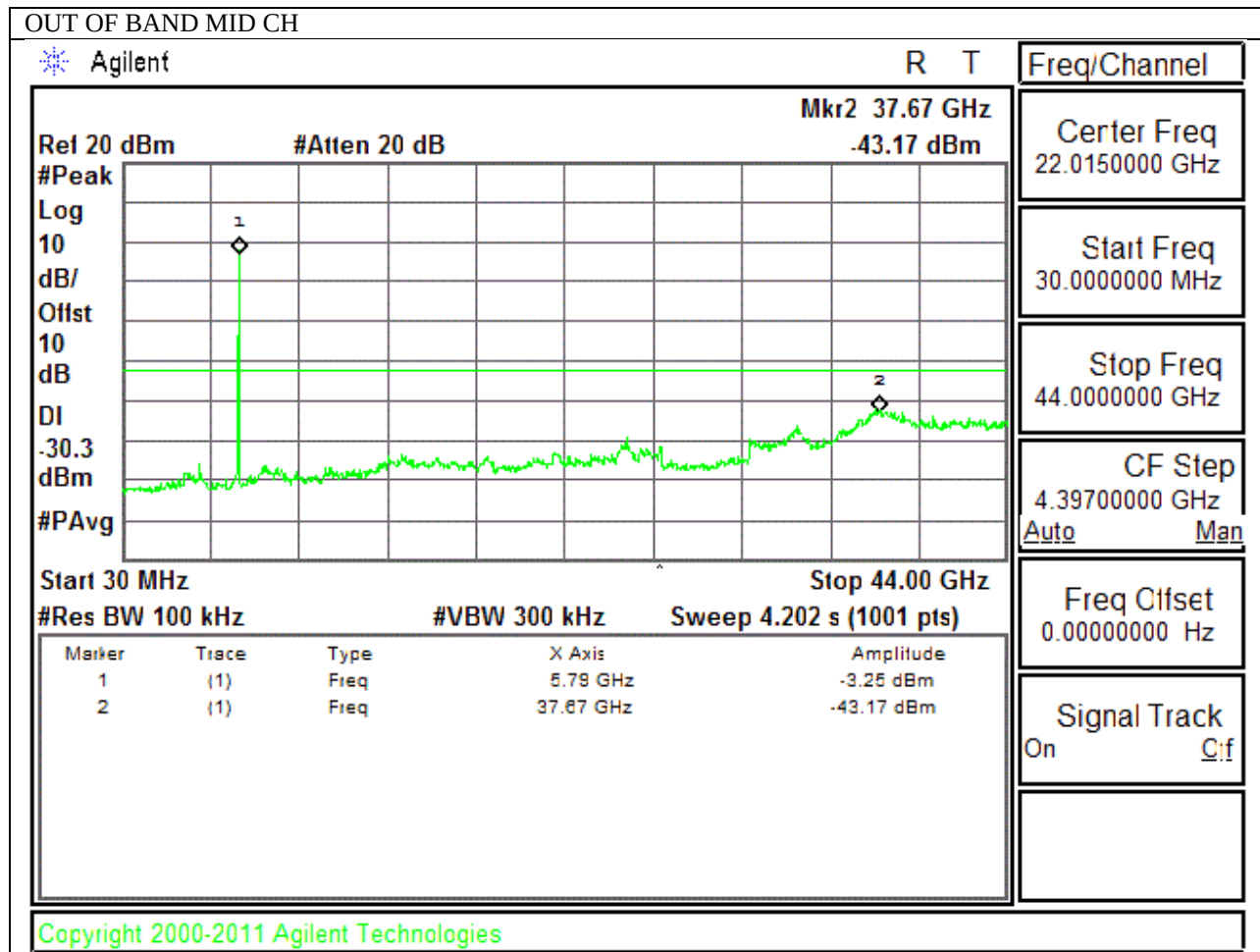


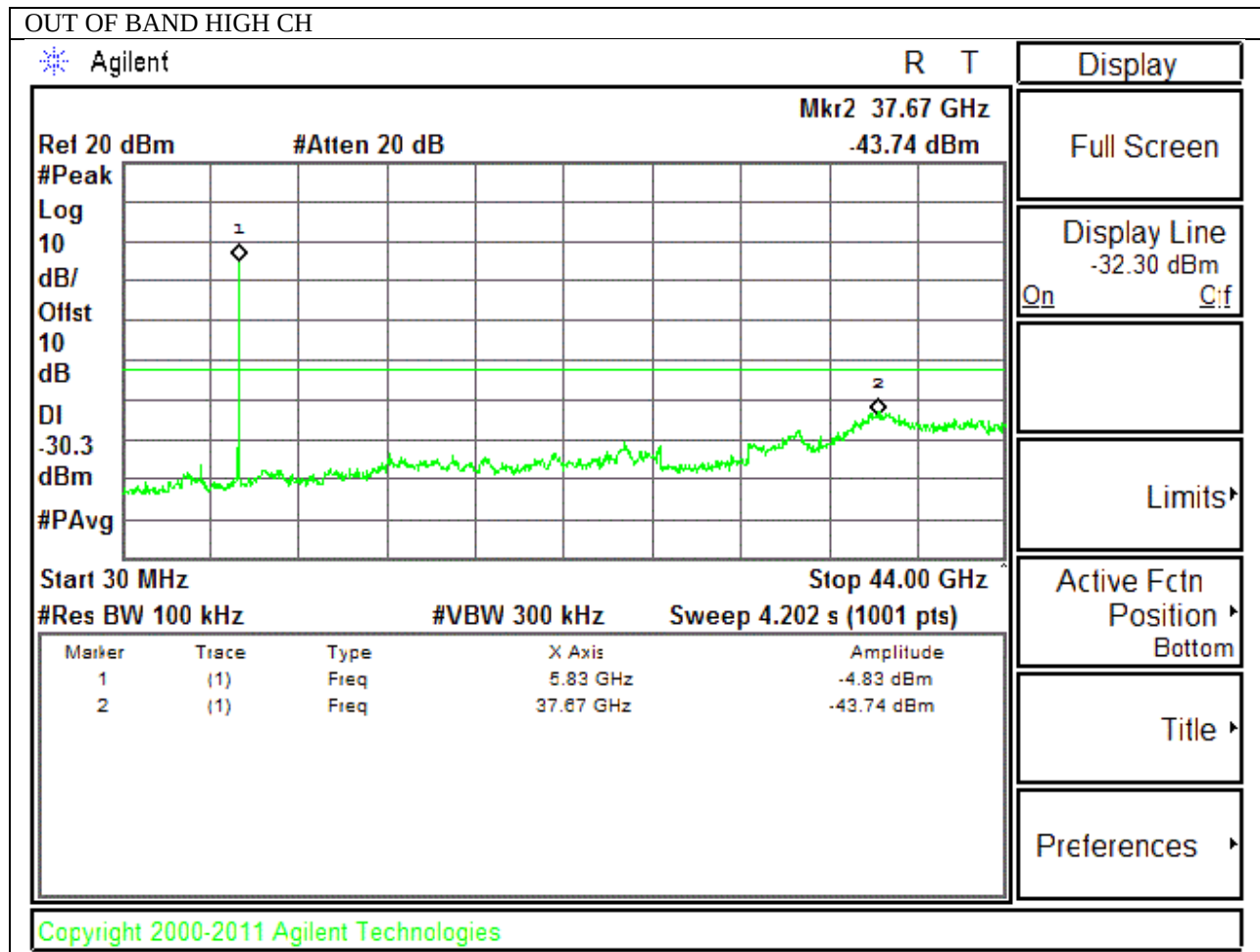
HIGH CHANNEL BANDEDGE



OUT-OF-BAND EMISSIONS

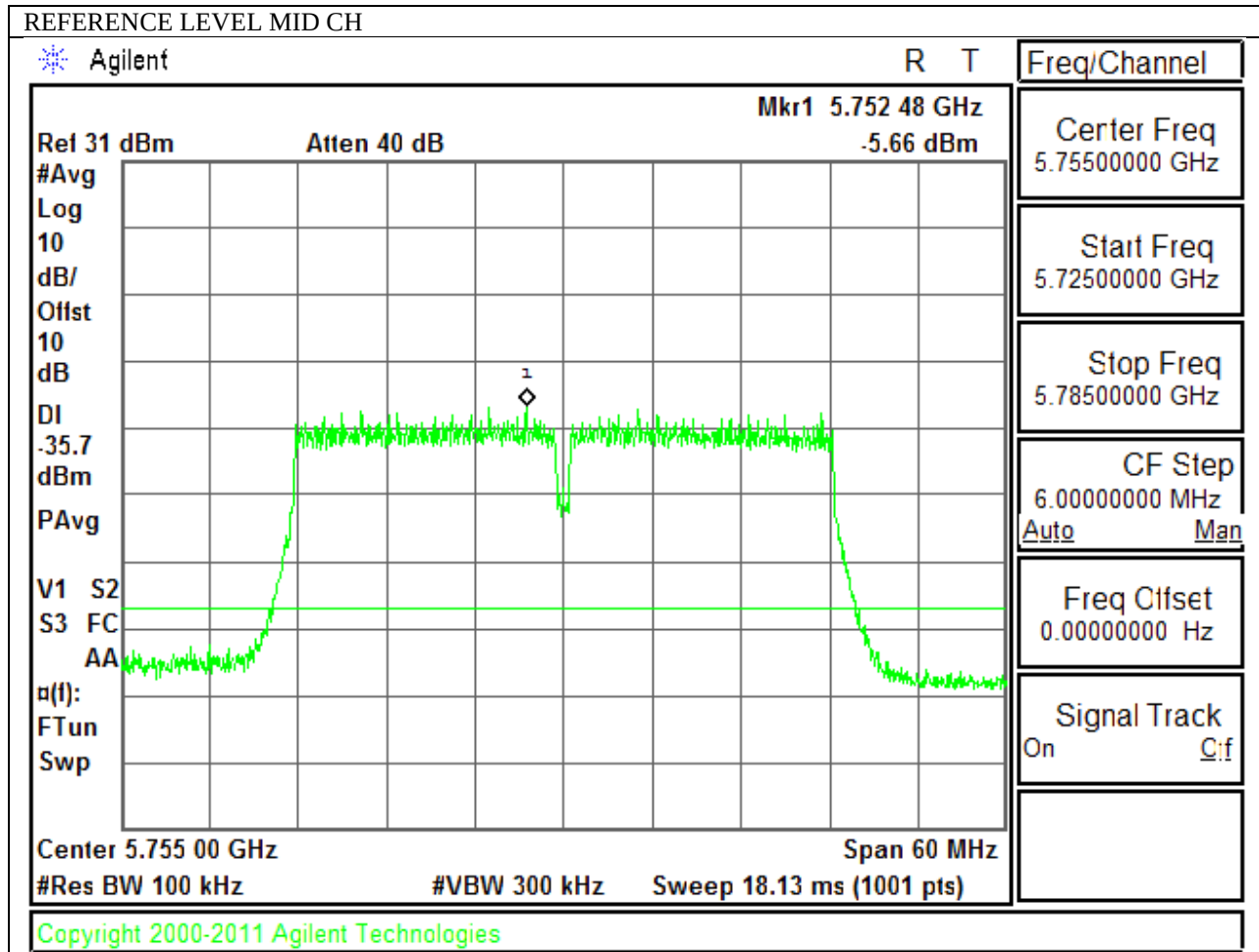




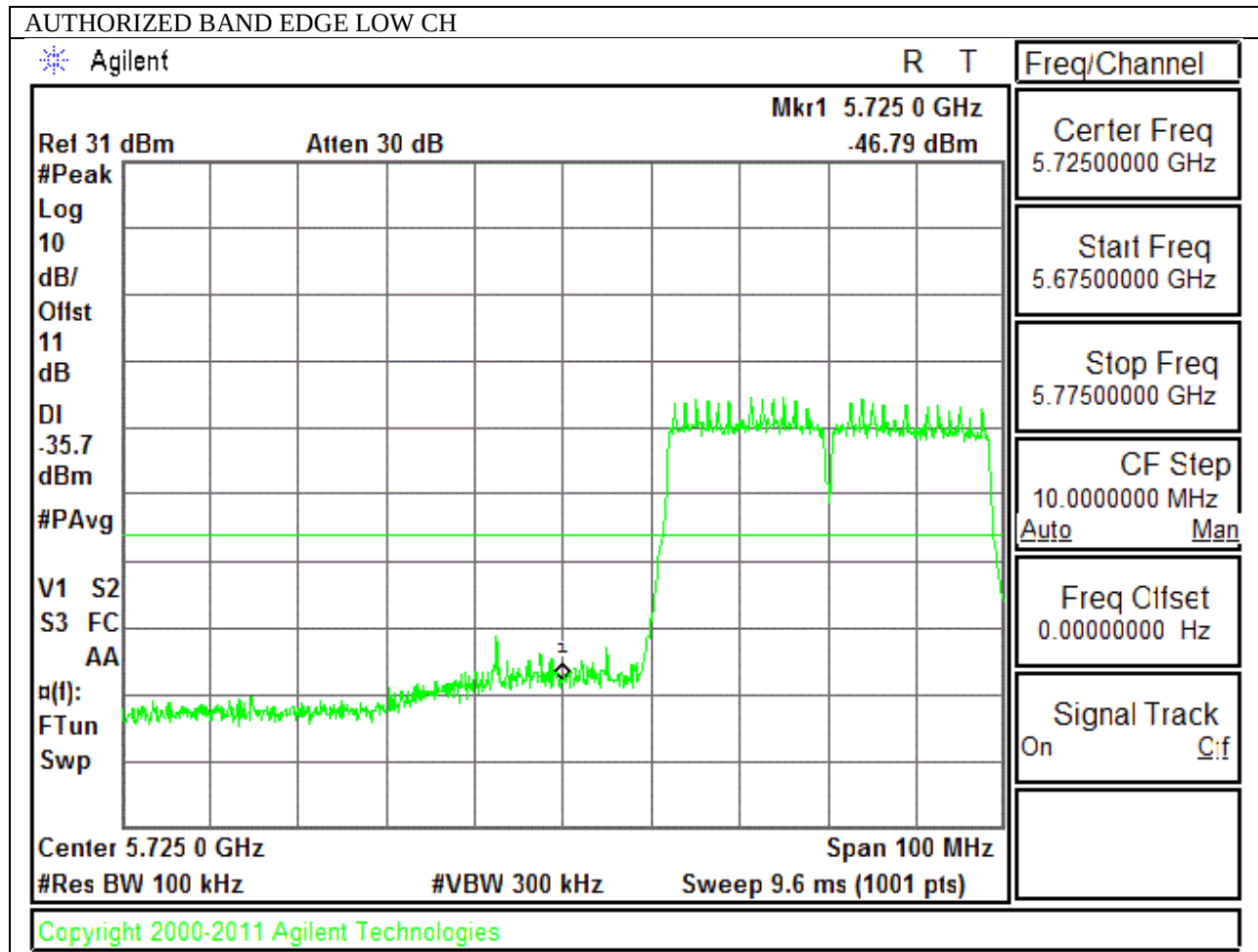


9.5.11. 802.11n HT40 MODE IN THE 5.8 GHz BAND CHAIN 0

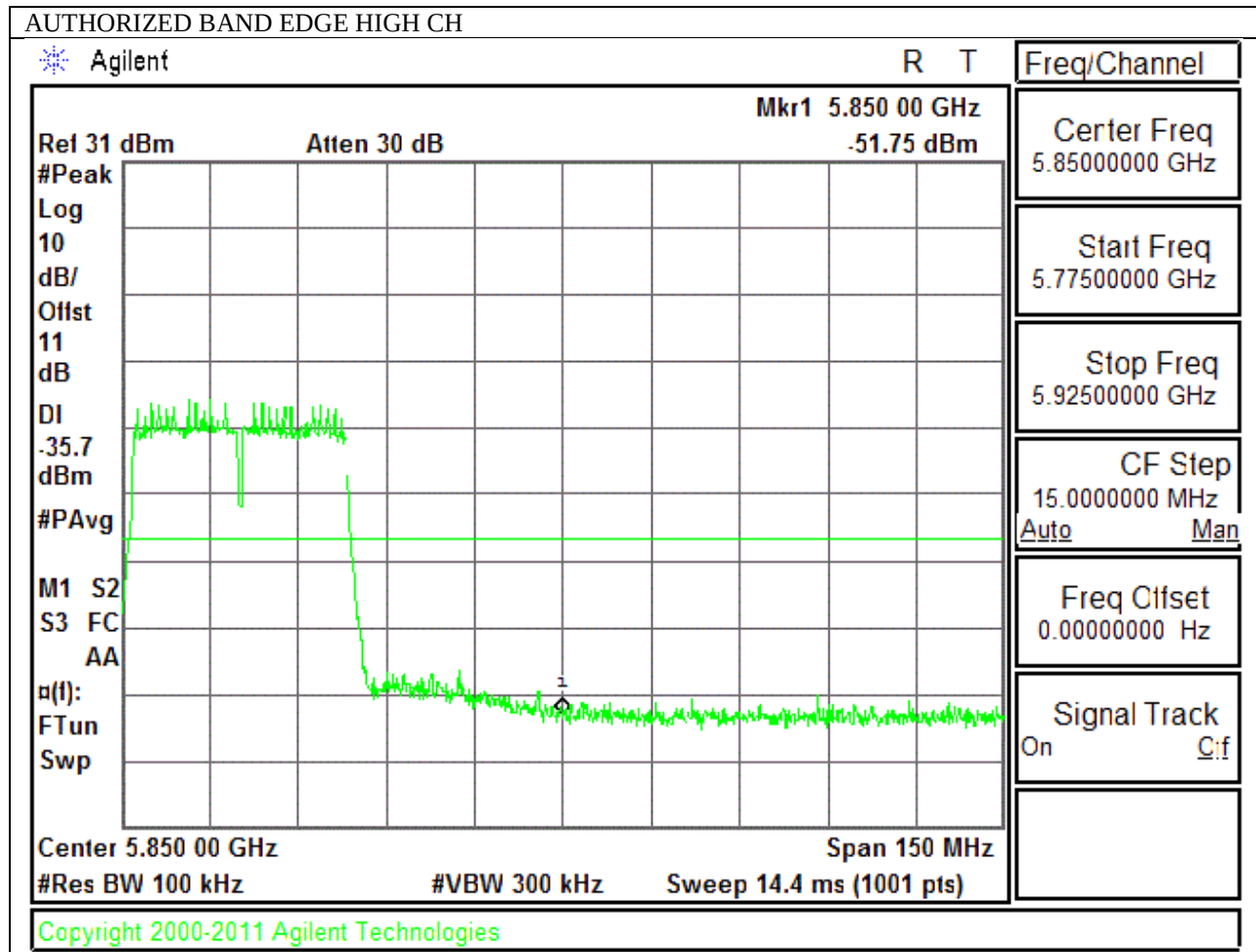
IN-BAND REFERENCE LEVEL



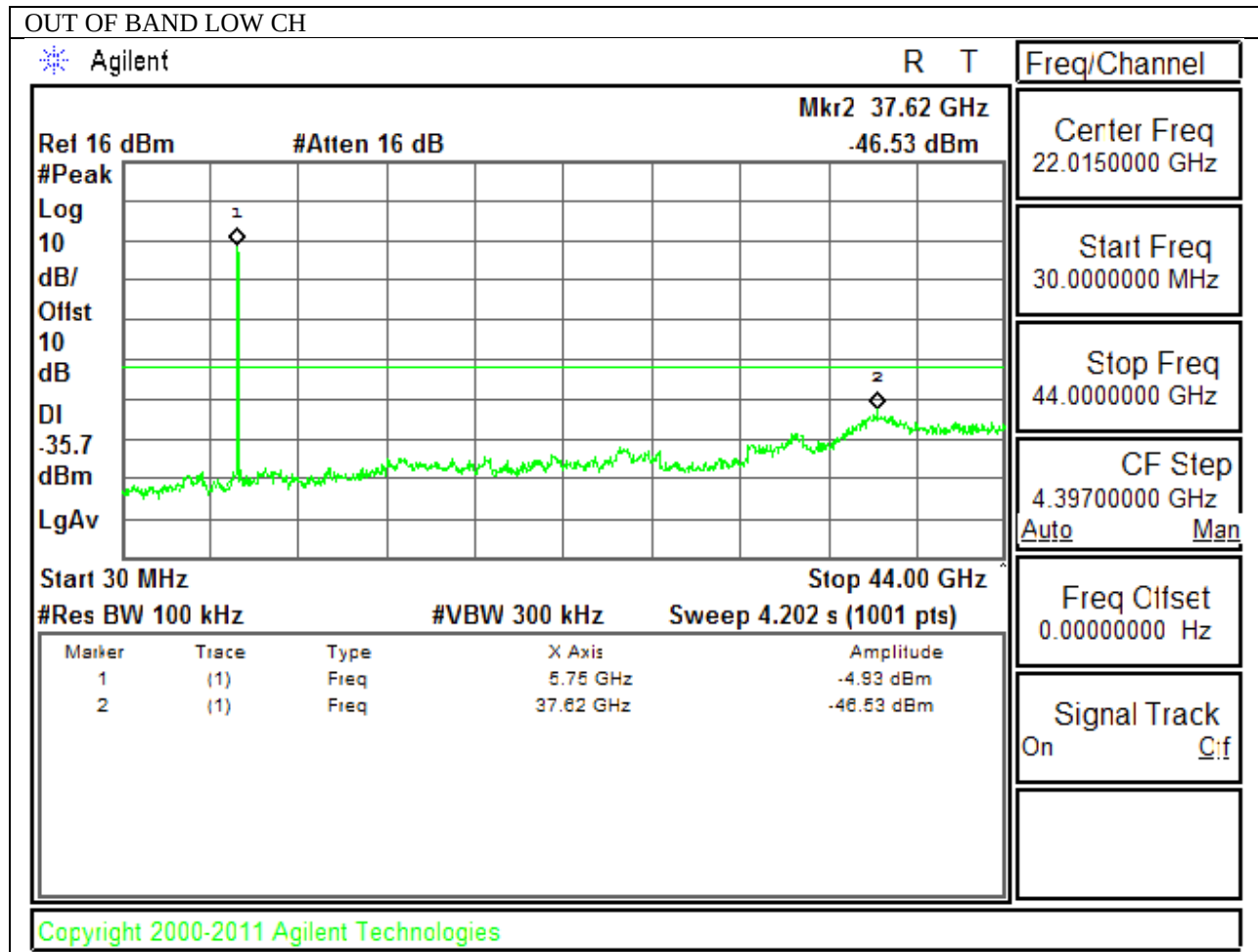
LOW CHANNEL BANDEDGE

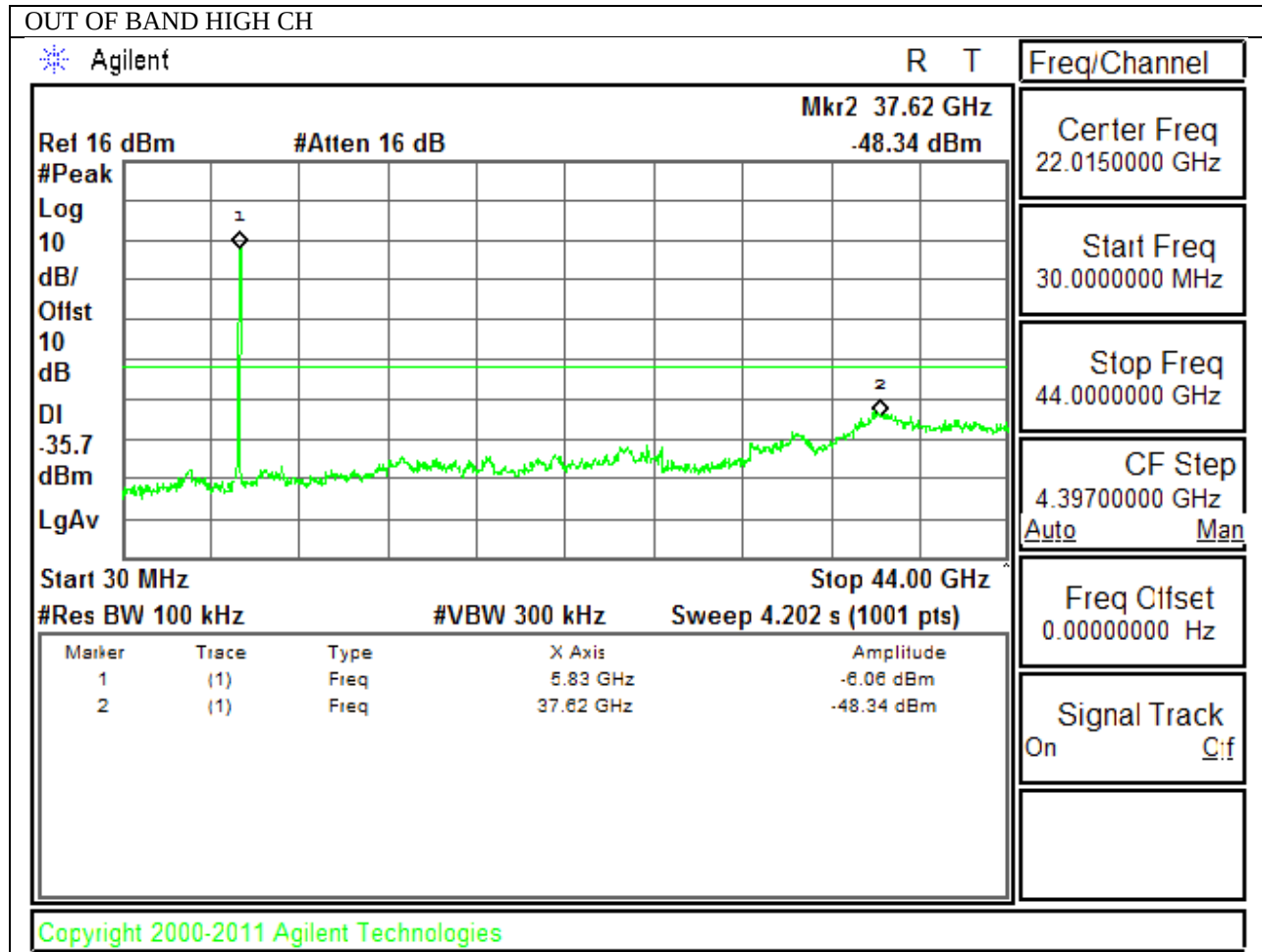


HIGH CHANNEL BANDEDGE



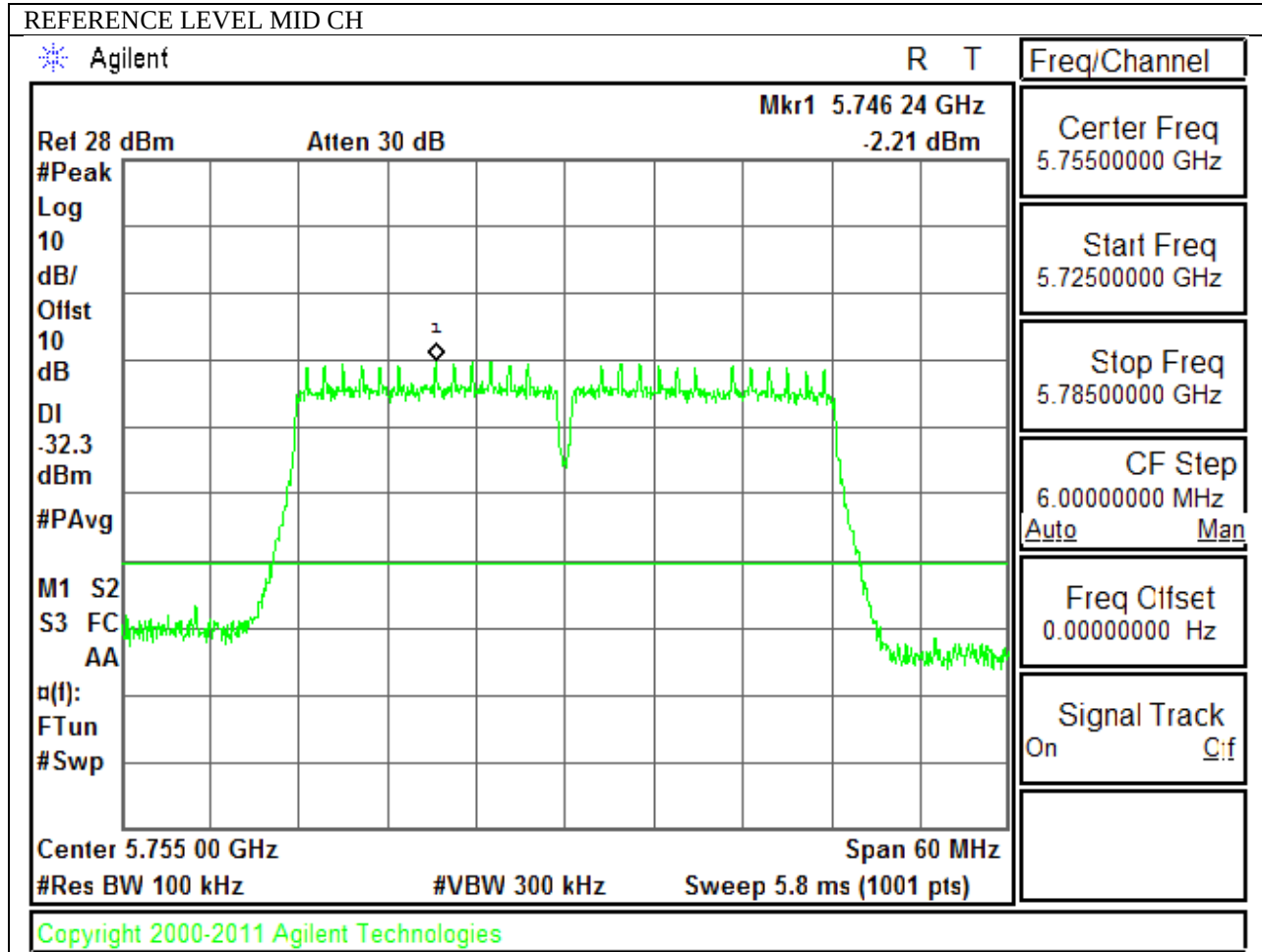
OUT-OF-BAND EMISSIONS



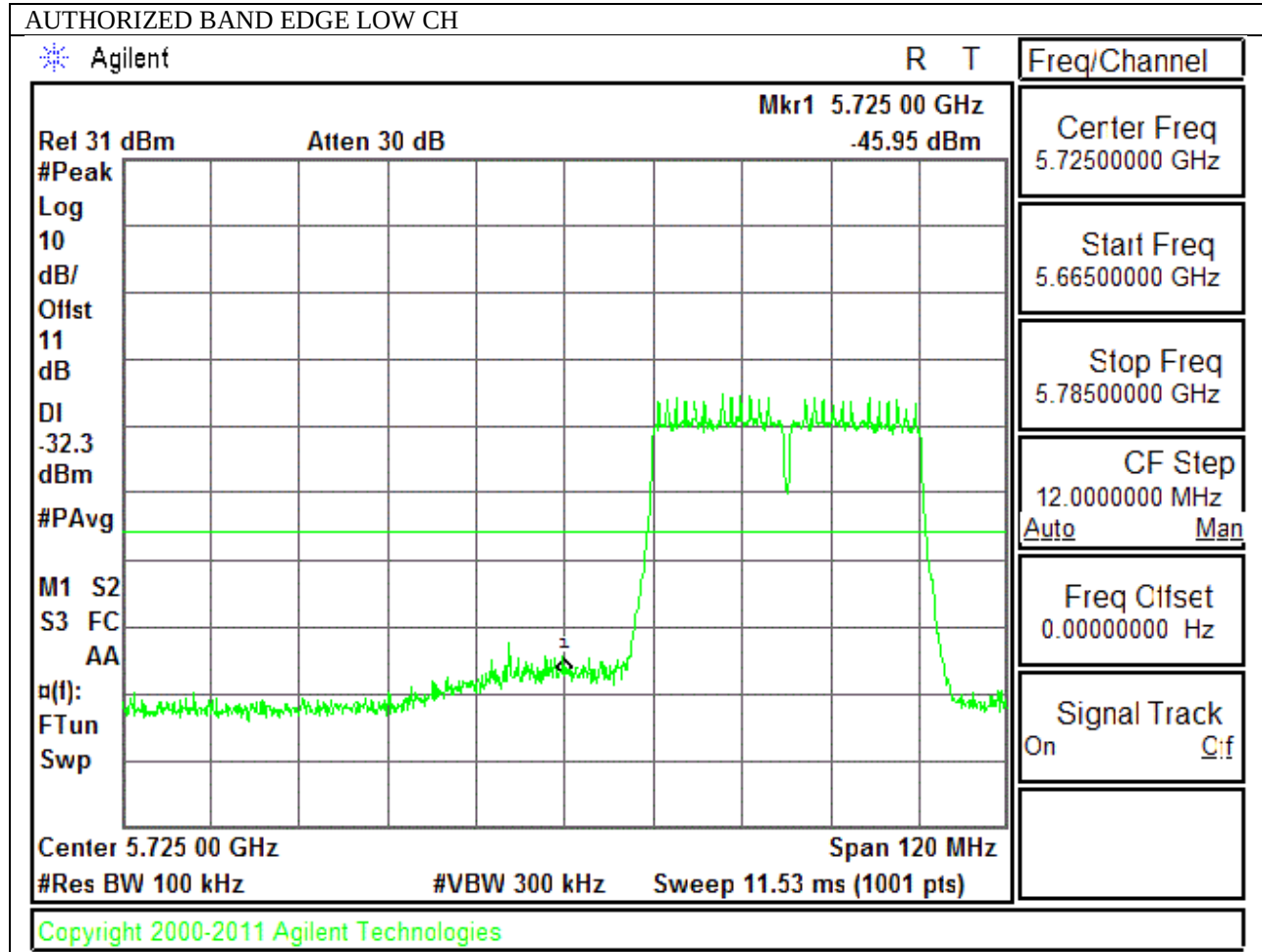


9.5.12. 802.11n HT40 MODE IN THE 5.8 GHz BAND CHAIN 1

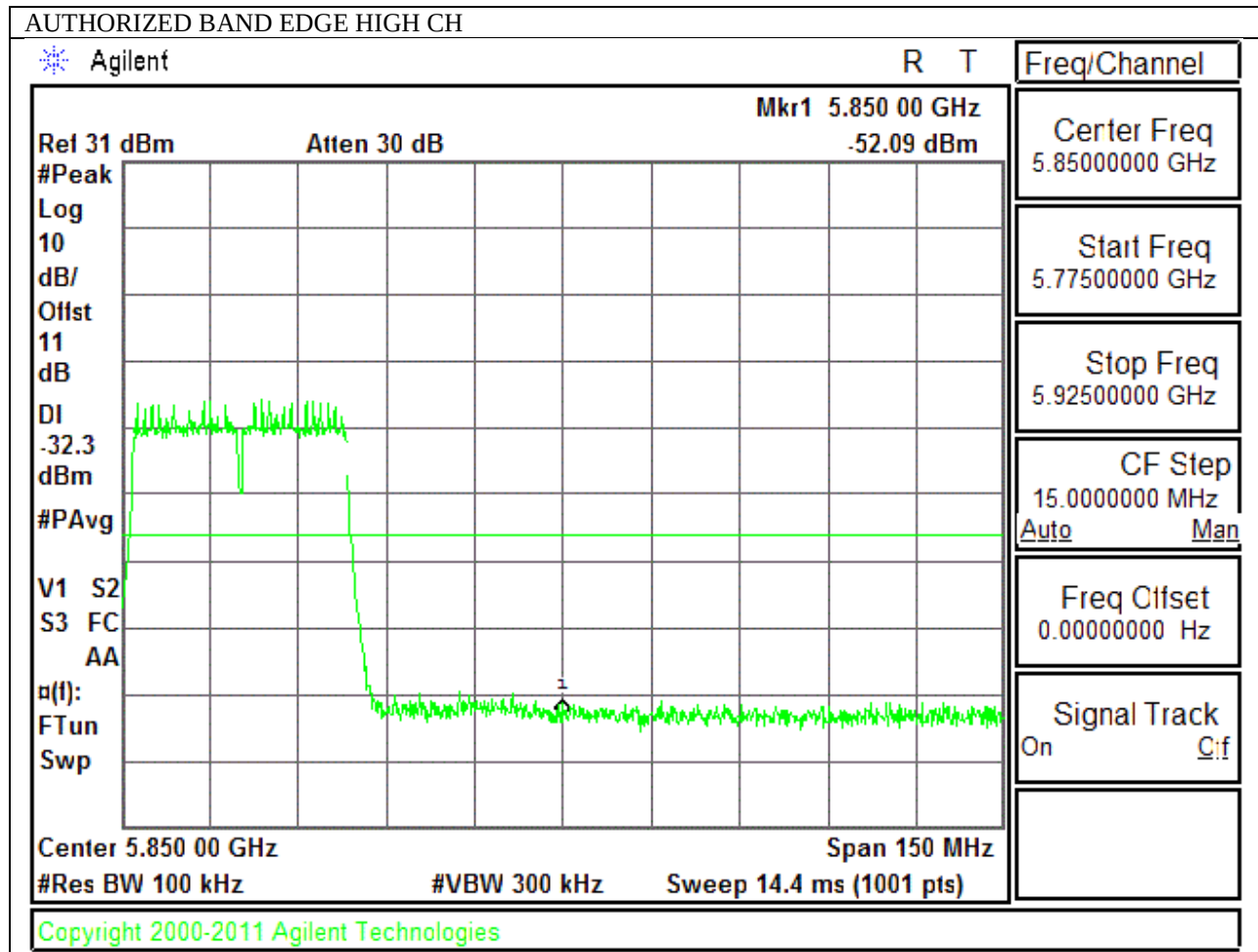
IN-BAND REFERENCE LEVEL



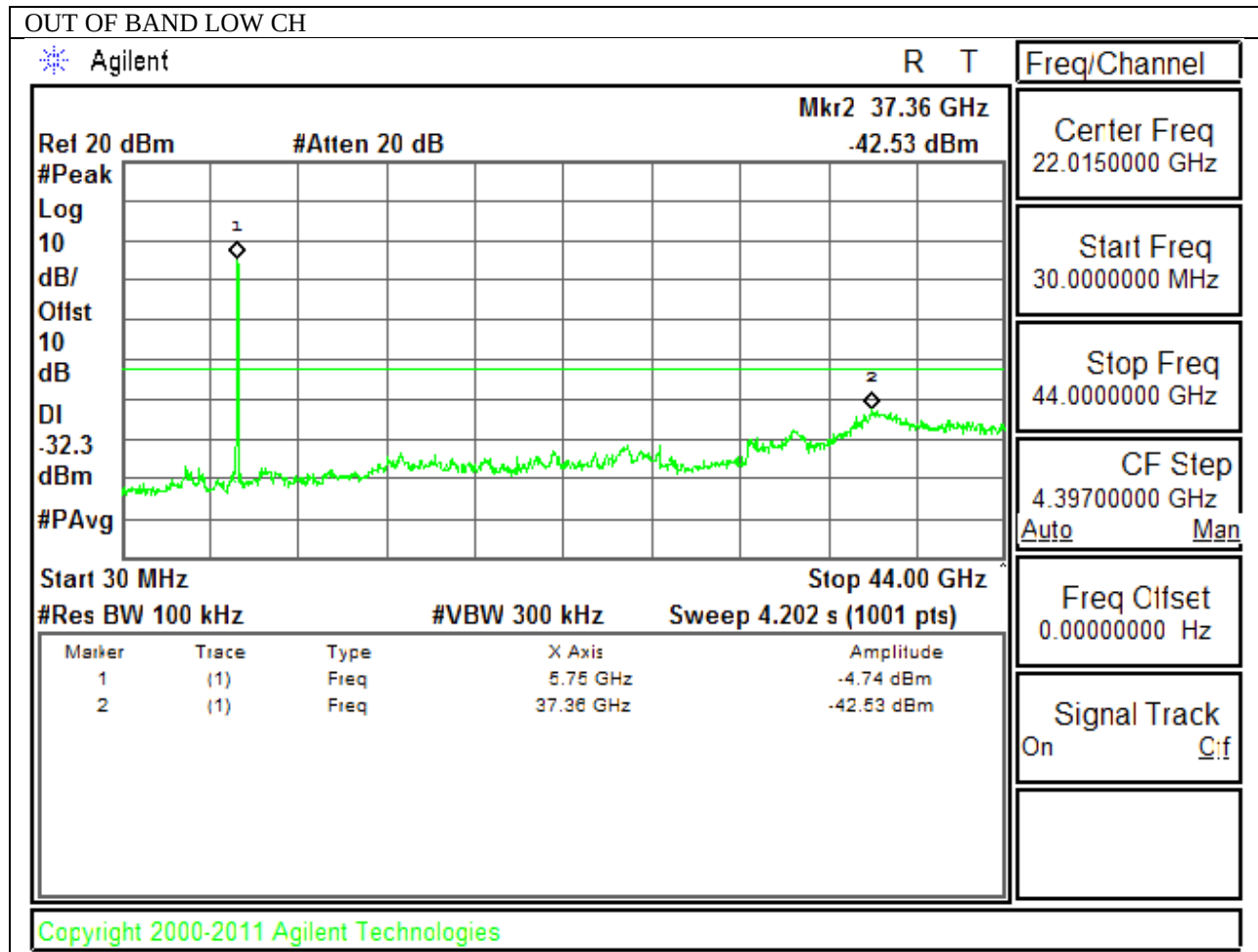
LOW CHANNEL BANDEDGE

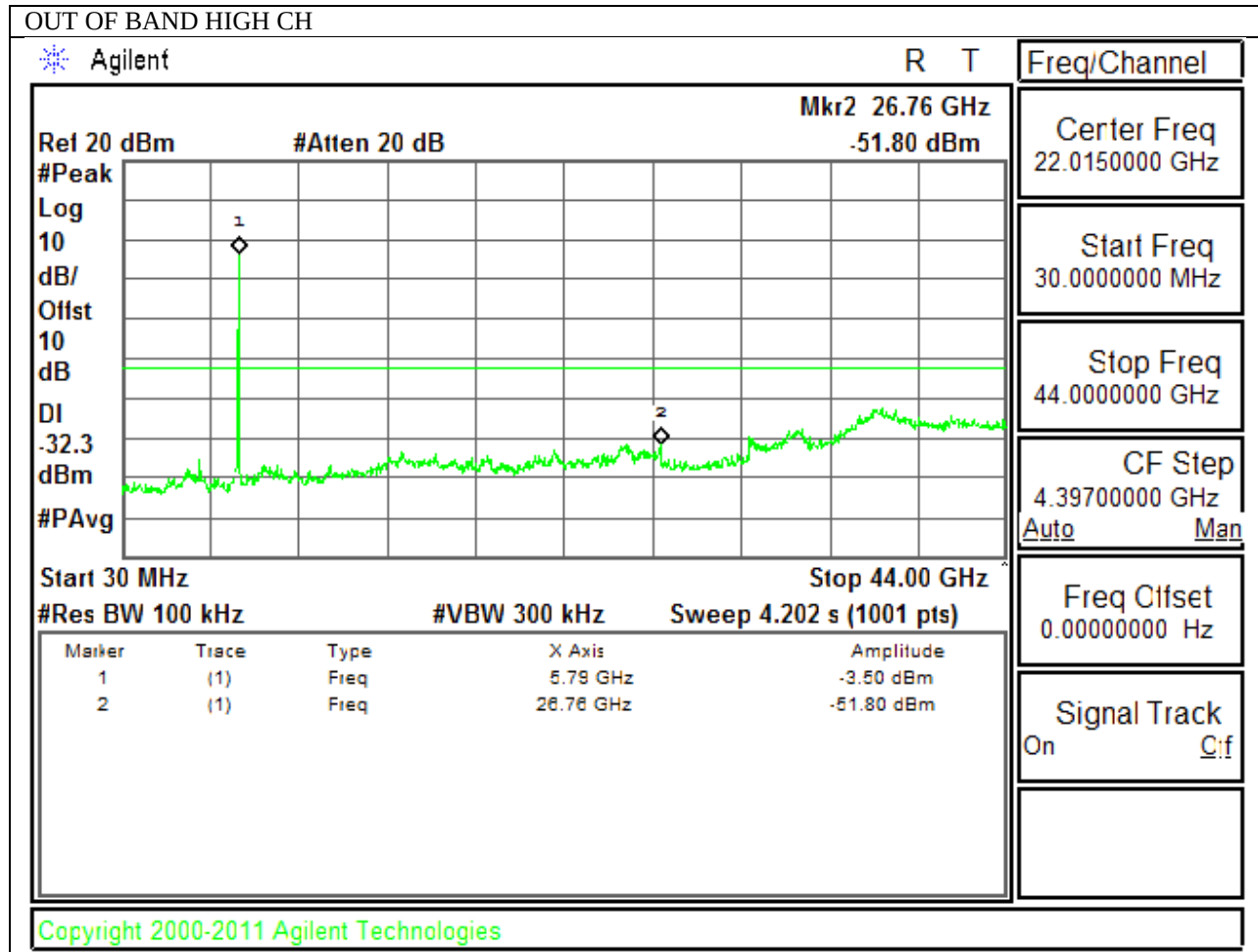


HIGH CHANNEL BANDEDGE



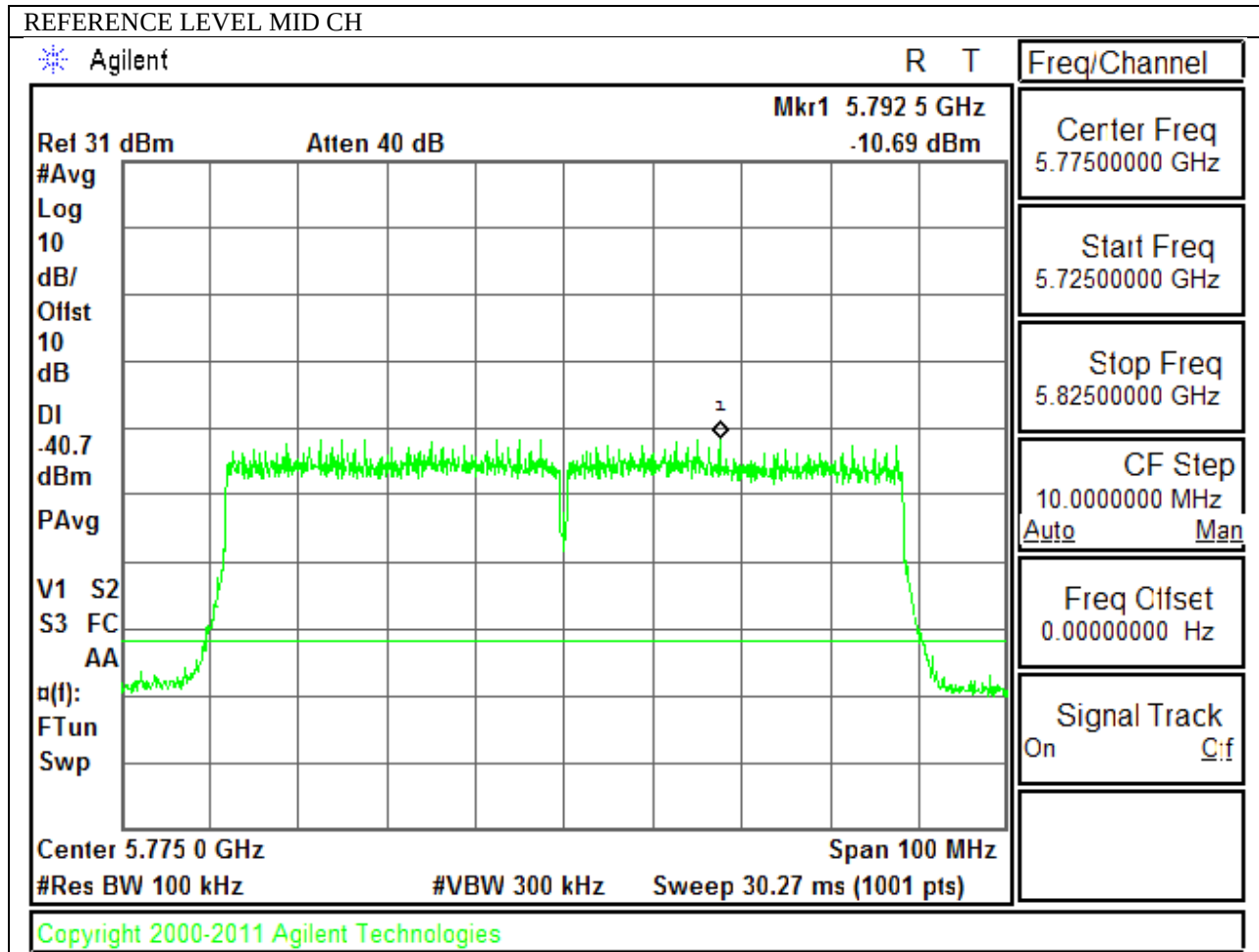
OUT-OF-BAND EMISSIONS



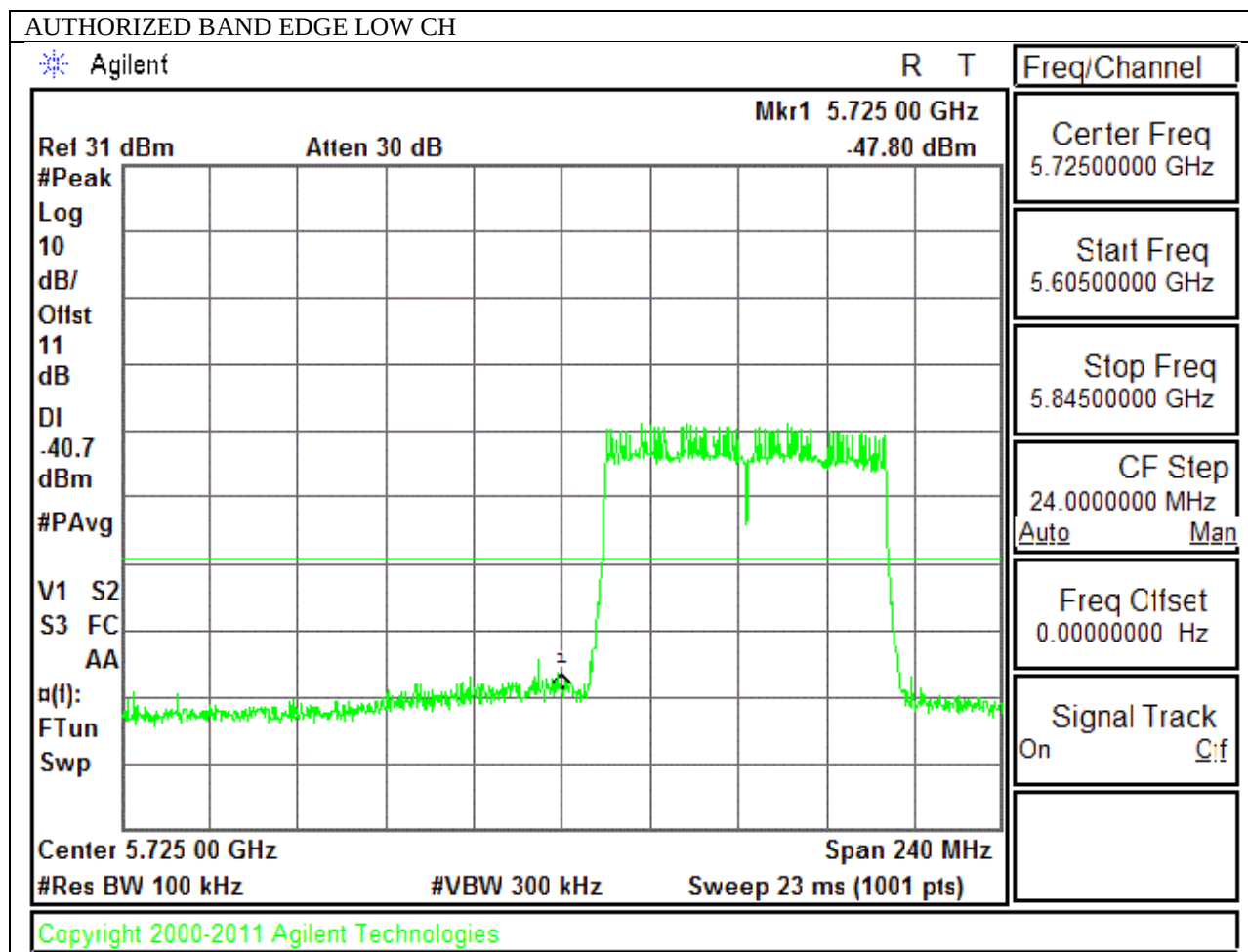


9.5.1. 802.11ac HT80 MODE IN THE 5.8 GHz BAND CHAIN 0

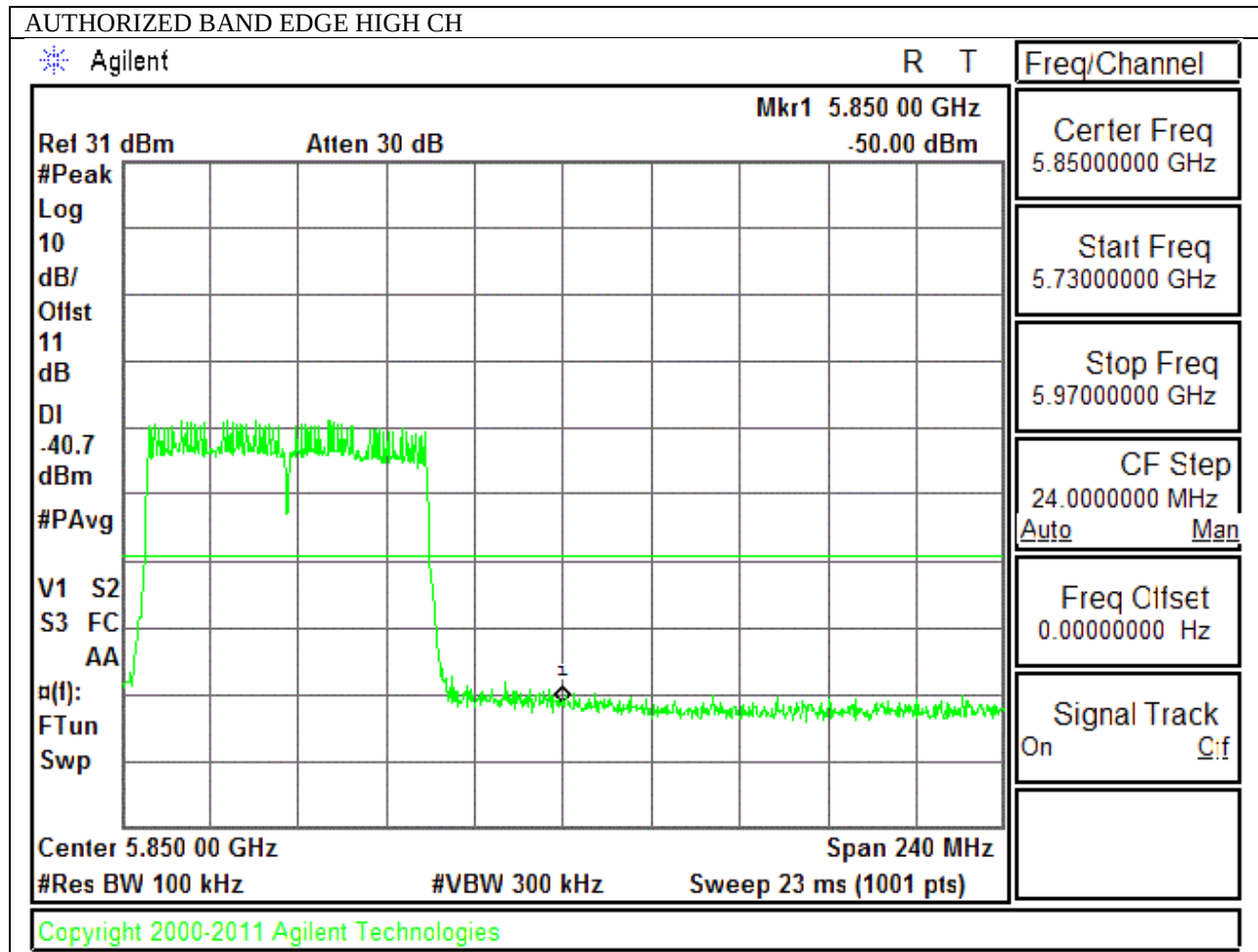
IN-BAND REFERENCE LEVEL



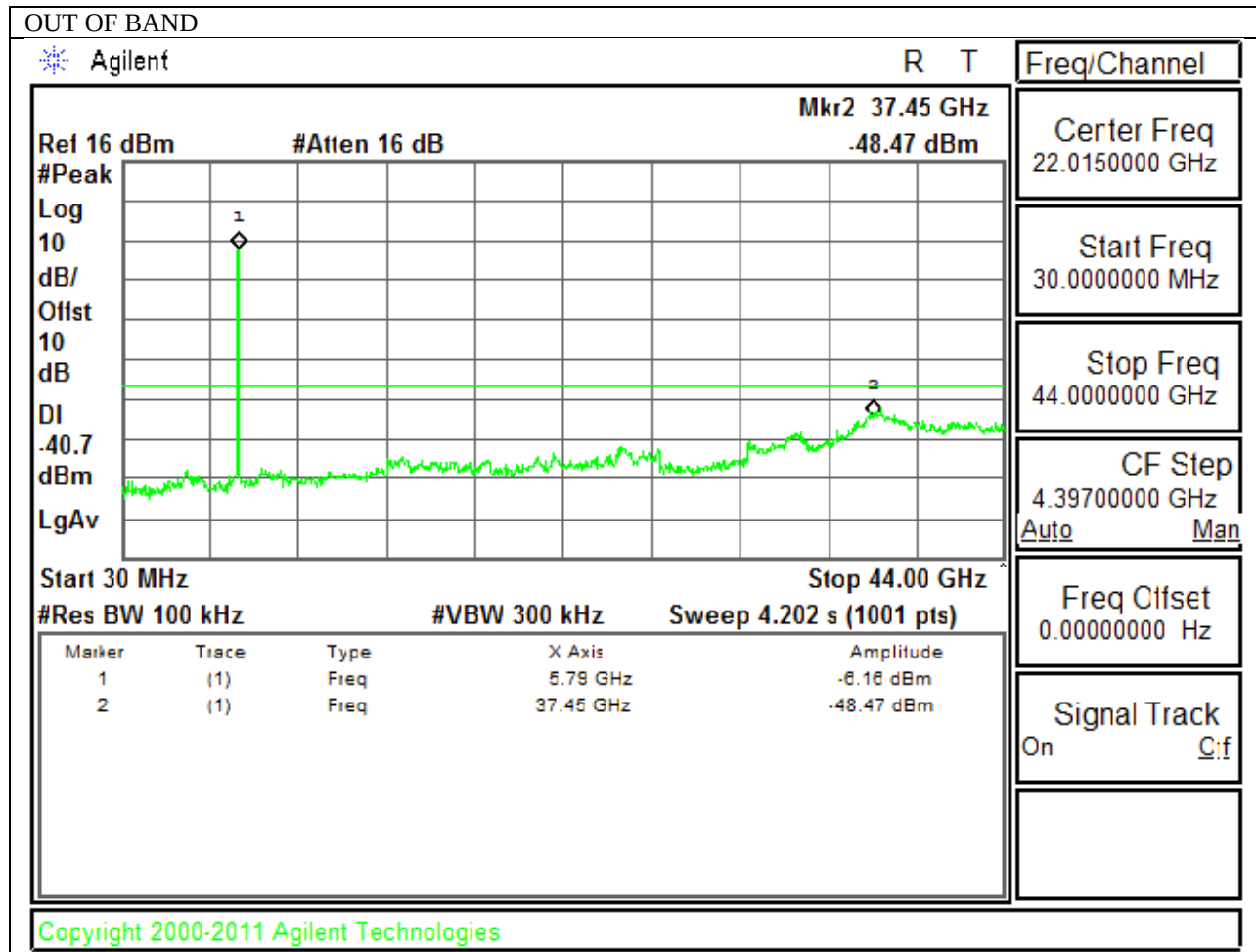
LOW CHANNEL BANDEDGE



HIGH CHANNEL BANDEDGE

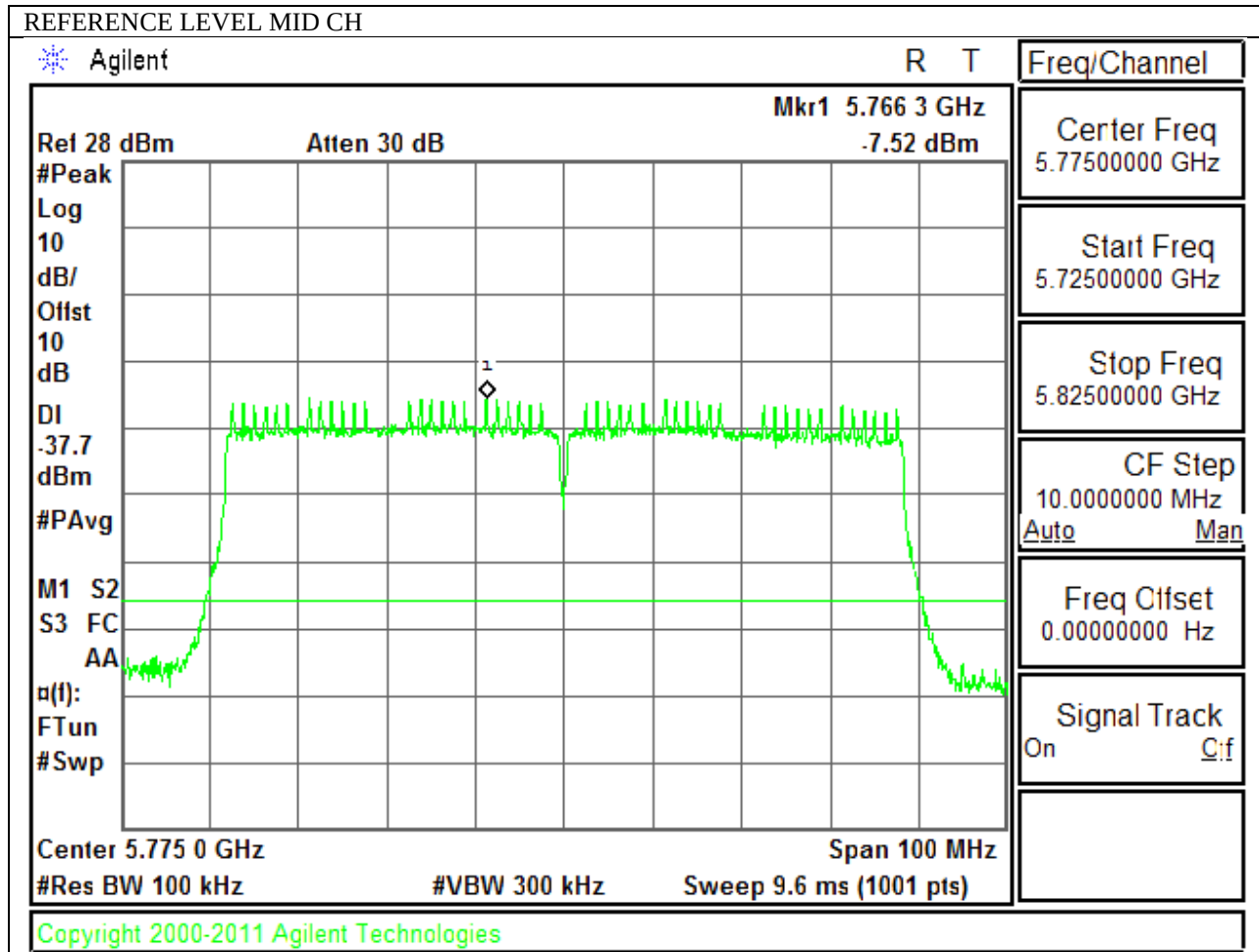


OUT-OF-BAND EMISSIONS

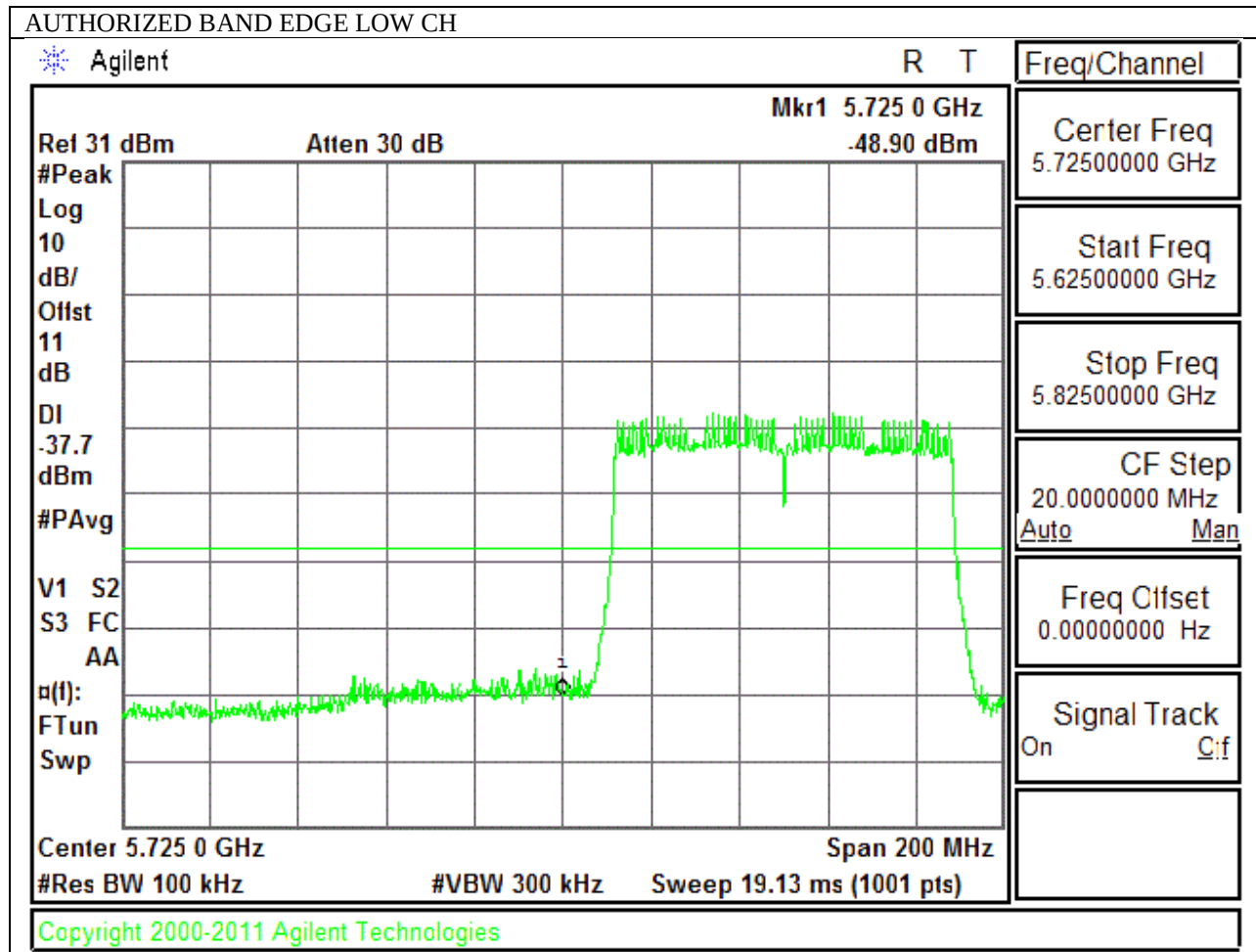


9.5.2. 802.11ac HT80 MODE IN THE 5.8 GHz BAND CHAIN 1

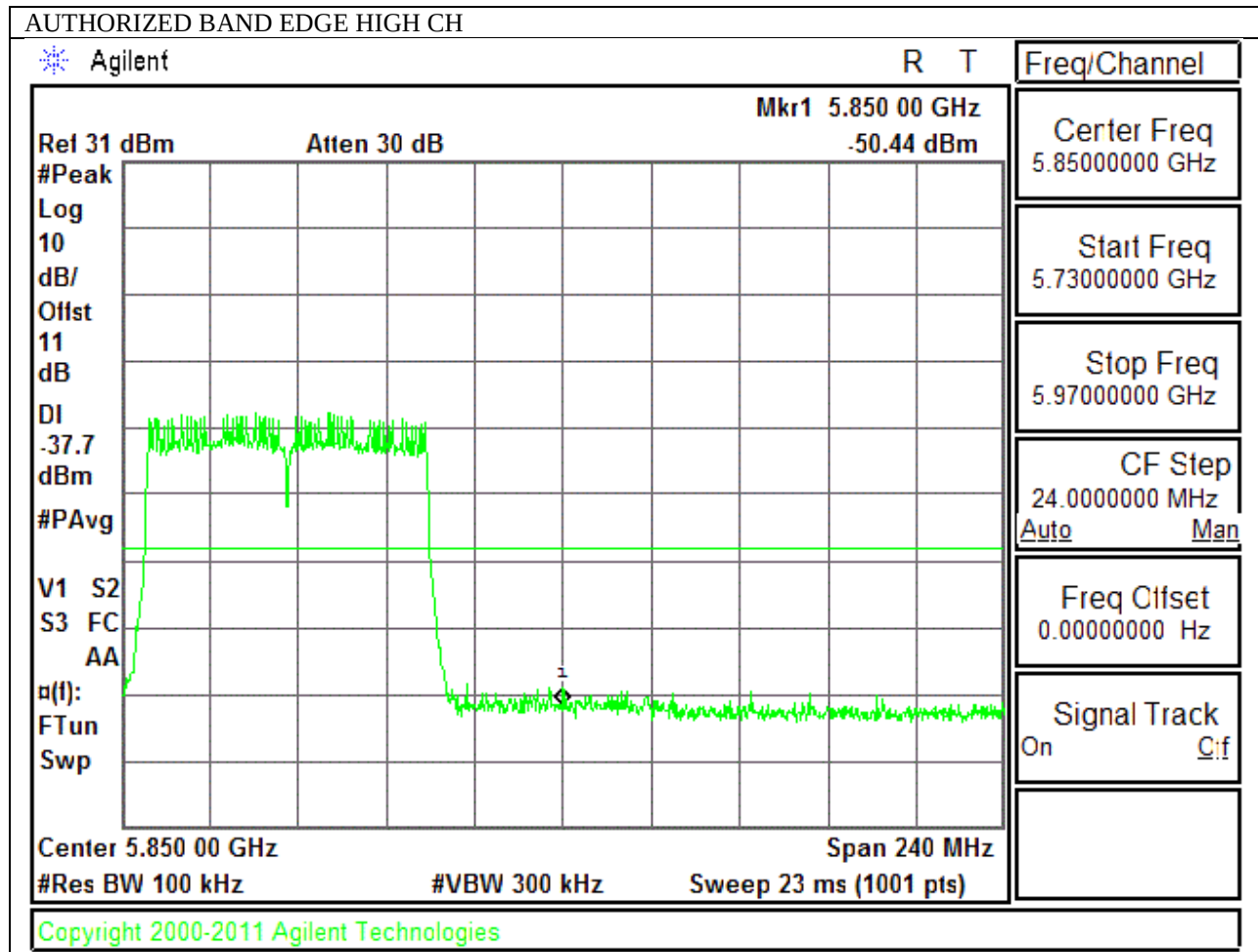
IN-BAND REFERENCE LEVEL



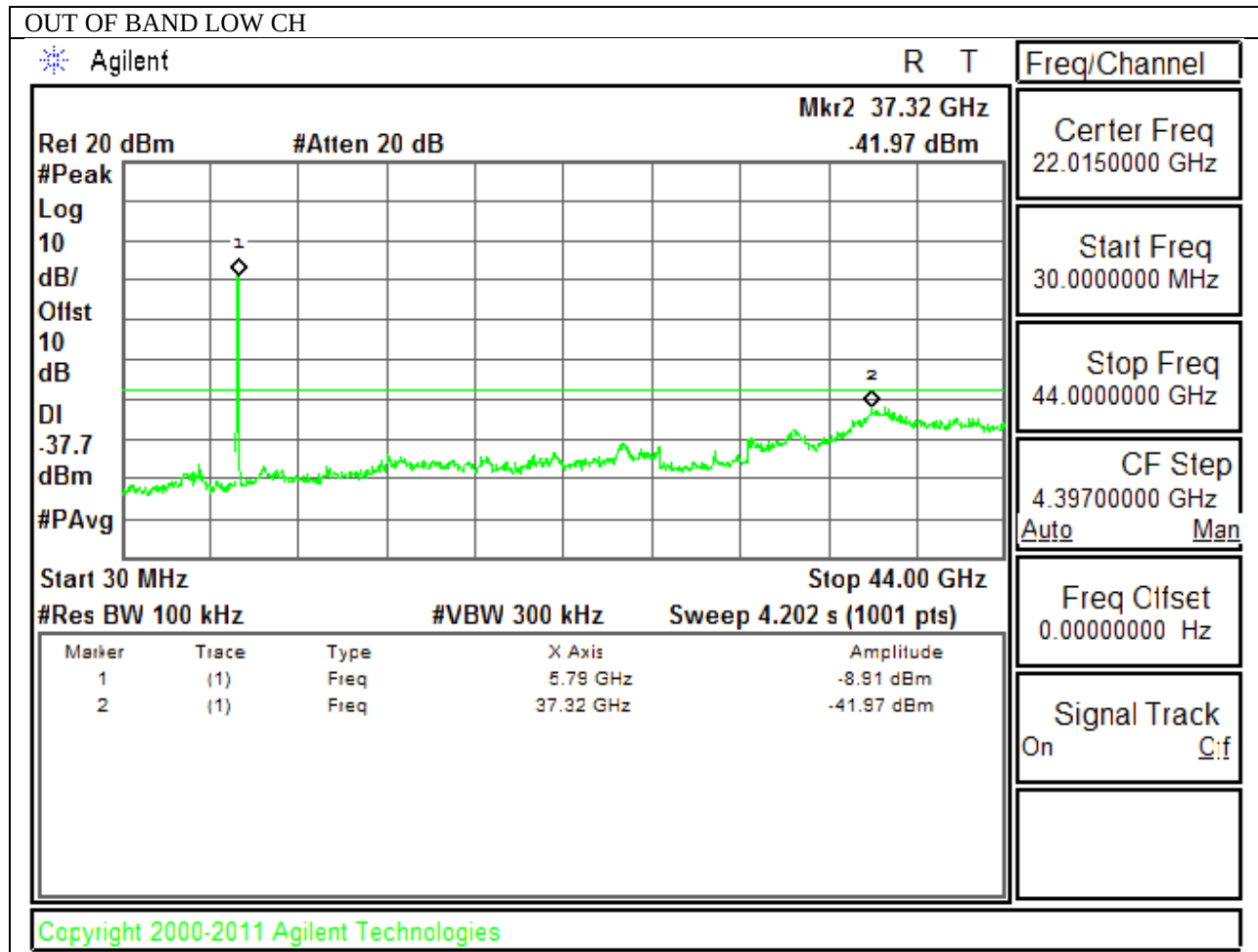
LOW CHANNEL BANDEDGE



HIGH CHANNEL BANDEDGE



OUT-OF-BAND EMISSIONS



10. RADIATED TEST RESULTS

10.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

Frequency Range (MHz)	Field Strength Limit ($\mu\text{V/m}$) at 3 m	Field Strength Limit (dB $\mu\text{V/m}$) 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.

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; the video bandwidth is set to 3 MHz for peak measurements and add duty cycle factor for average measurements.

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

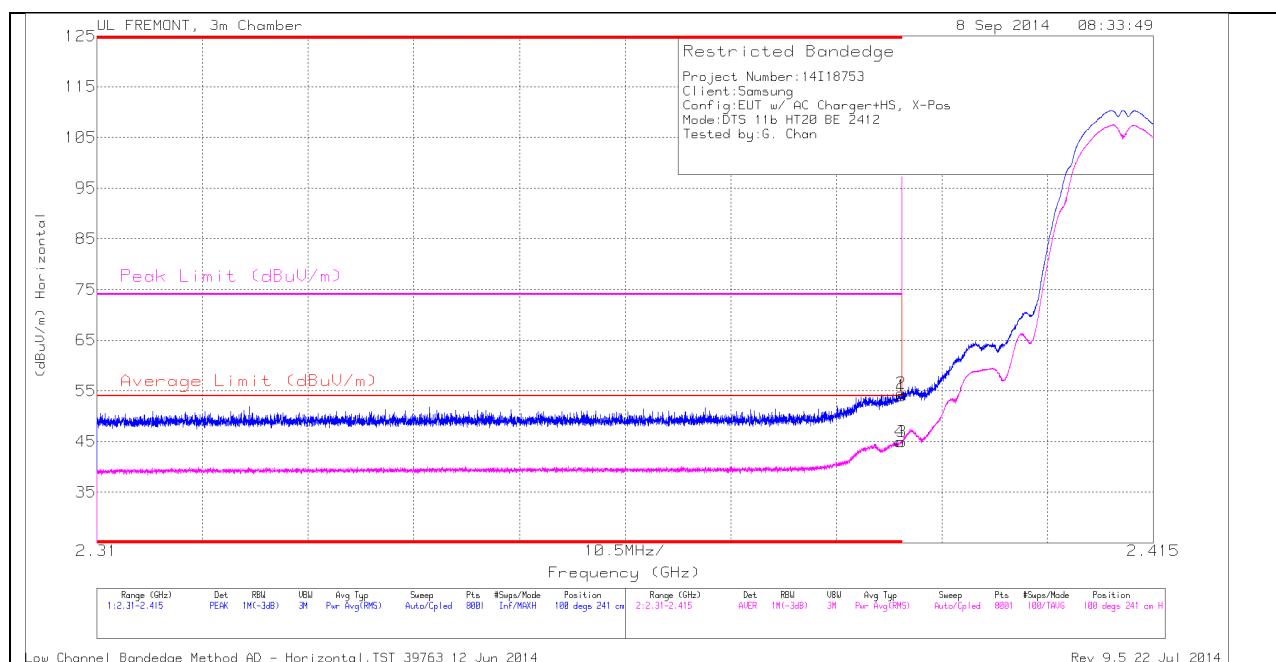
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

10.2. TRANSMITTER ABOVE 1 GHz

10.2.1. TX ABOVE 1 GHz 802.11b MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

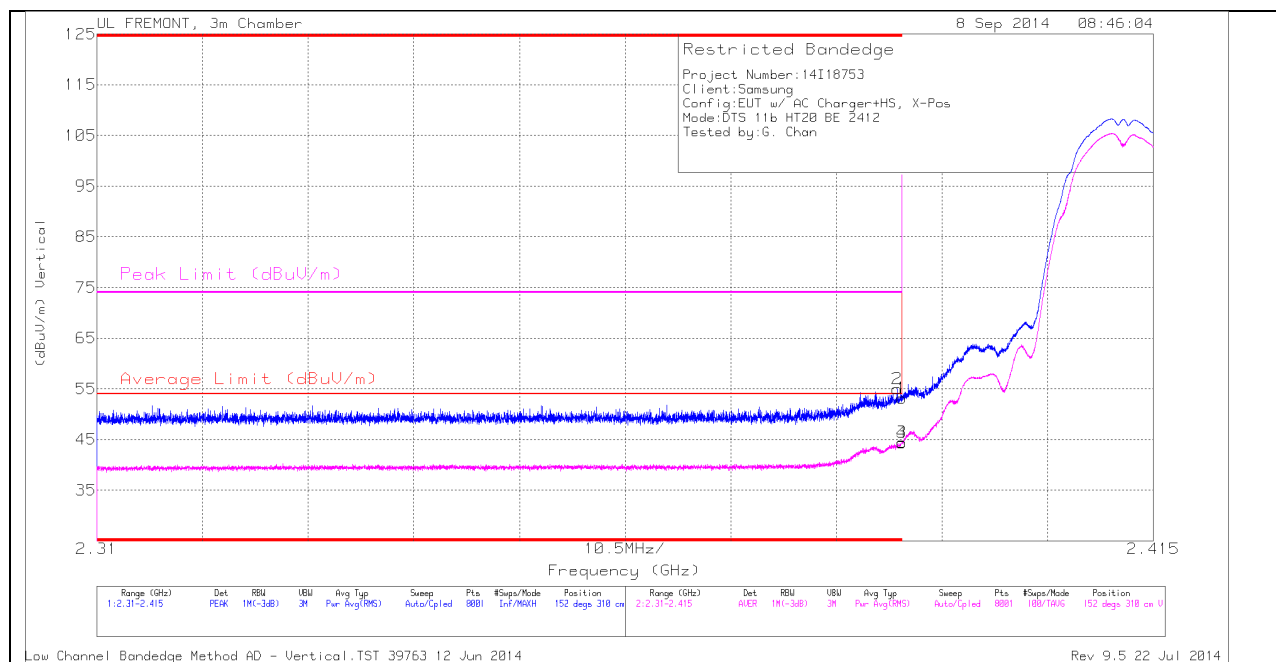
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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	45.03	PK	32.1	-23.1	54.03	-	-	74	-19.97	100	241	H
2	* 2.39	45.54	PK	32.1	-23.1	54.54	-	-	74	-19.46	100	241	H
3	* 2.39	35.93	RMS	32.1	-23.1	44.93	54	-9.07	-	-	100	241	H
4	* 2.39	35.99	RMS	32.1	-23.1	44.99	54	-9.01	-	-	100	241	H

VERTICAL PEAK AND AVERAGE PLOT

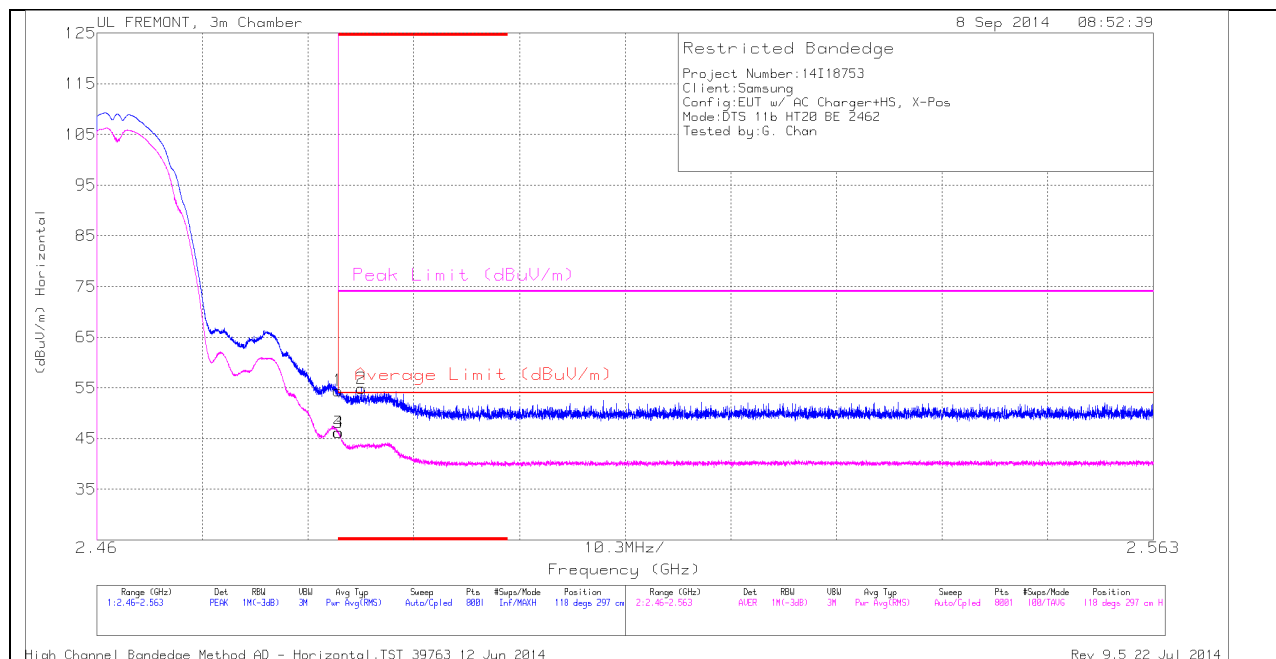


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filt r/Pad (dB)	DC Corr (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	44.12	PK	32.1	-23.1	0	53.12	-	-	74	-20.88	152	310	V
2	* 2.39	45.97	PK	32.1	-23.1	0	54.97	-	-	74	-19.03	152	310	V
3	* 2.39	35.38	RMS	32.1	-23.1	0	44.43	54	-9.57	-	-	152	310	V
4	* 2.39	35.29	RMS	32.1	-23.1	0	44.34	54	-9.66	-	-	152	310	V

AUTHORIZED BANDEDGE (HIGH CHANNEL)

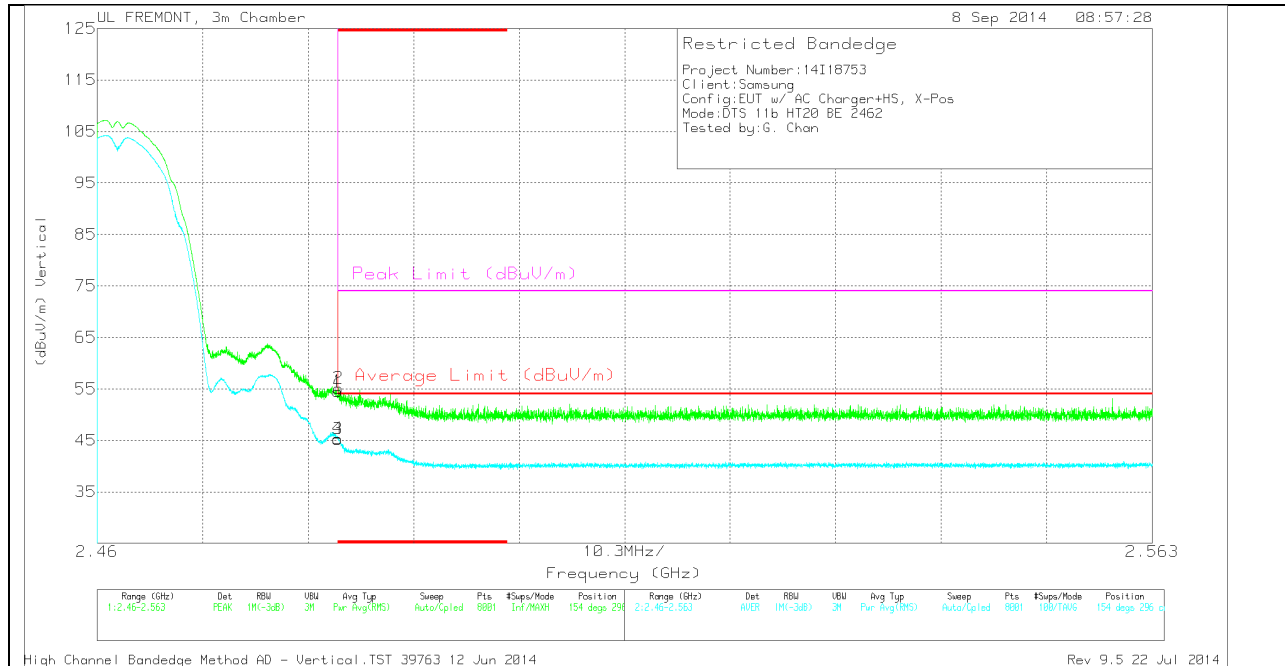
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (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	44.95	PK	32.3	-22.8	0	54.45	-	-	74	-19.55	118	297	H
2	* 2.486	45.42	PK	32.3	-22.8	0	54.92	-	-	74	-19.08	118	297	H
3	* 2.484	36.59	RMS	32.3	-22.8	0	46.14	54	-7.86	-	-	118	297	H
4	* 2.484	36.7	RMS	32.3	-22.8	0	46.25	54	-7.75	-	-	118	297	H

VERTICAL PEAK AND AVERAGE PLOT

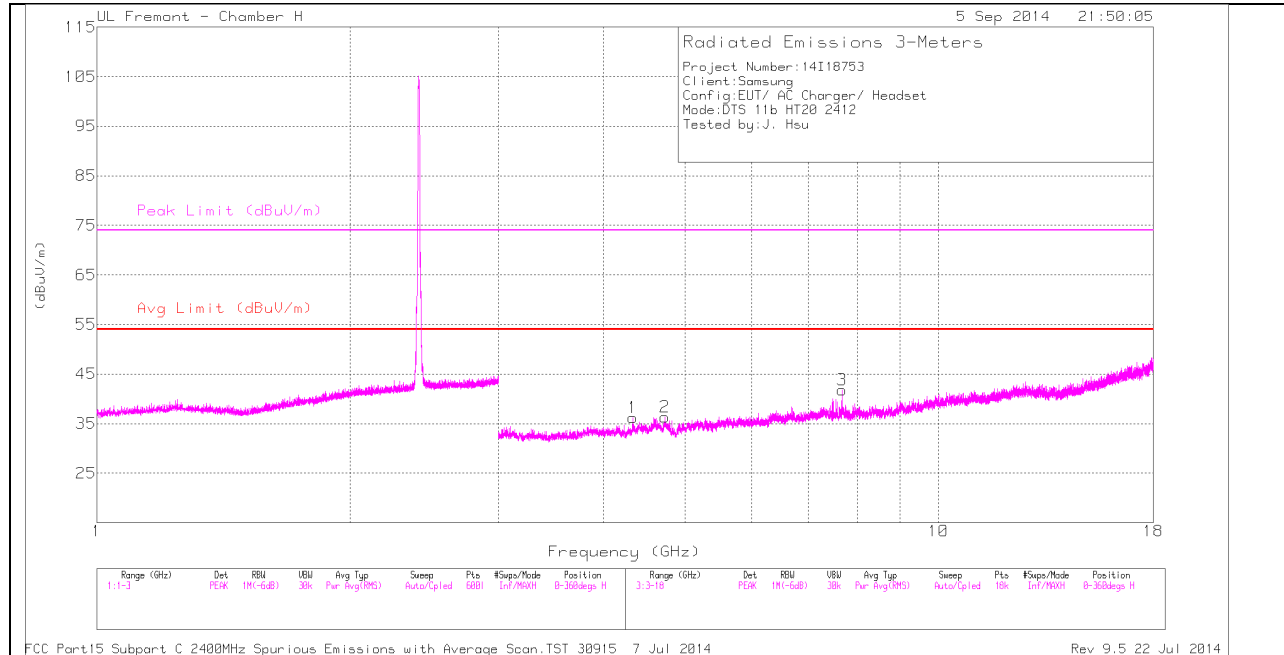


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filt r/Pad (dB)	DC Corr (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	45.01	PK	32.3	-22.8	0	54.51	-	-	74	-19.49	154	296	V
2	* 2.484	45.63	PK	32.3	-22.8	0	55.13	-	-	74	-18.87	154	296	V
3	* 2.484	35.71	RMS	32.3	-22.8	0	45.26	54	-8.74	-	-	154	296	V
4	* 2.484	35.81	RMS	32.3	-22.8	0	45.36	54	-8.64	-	-	154	296	V

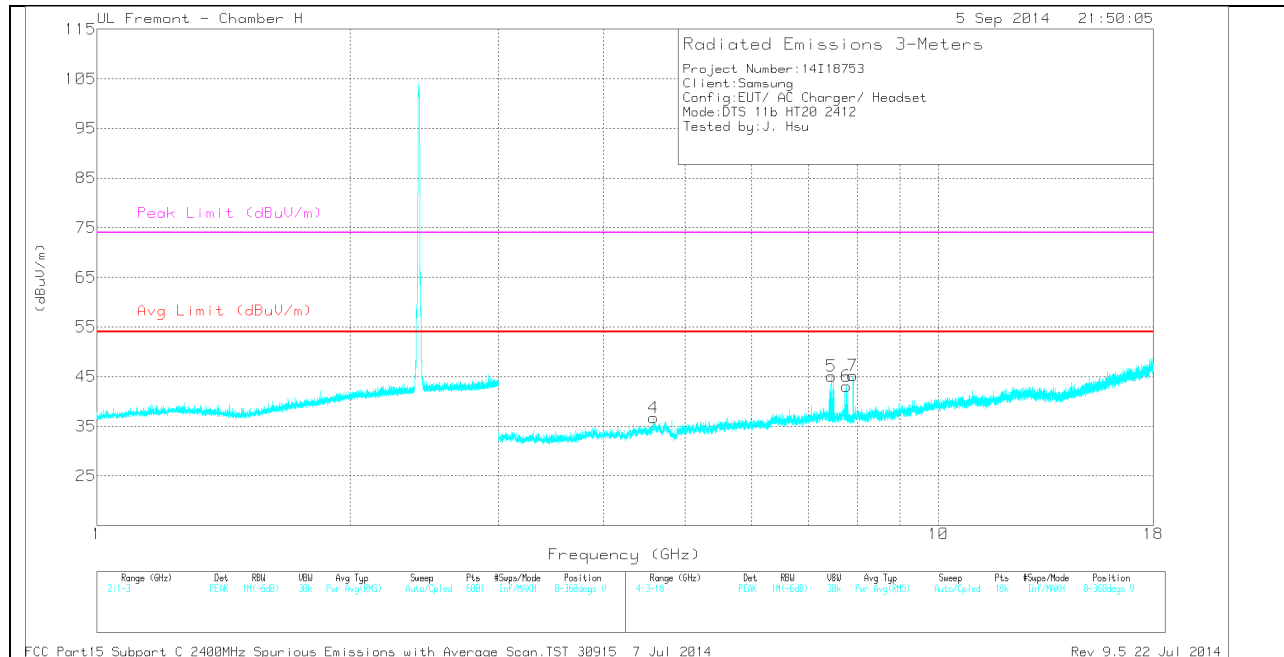
HARMONICS AND SPURIOUS EMISSIONS

LOW 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.

LOW CHANNEL VERTICAL



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 T863 (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	* 4.337	34.35	PK	33.7	-31.9	36.15	-	-	74	-37.85	0-360	100	H
2	* 4.73	33.89	PK	34.3	-31.9	36.29	-	-	74	-37.71	0-360	201	H
3	* 7.678	34.54	PK	36.1	-28.9	41.74	-	-	74	-32.26	0-360	100	H
4	* 4.587	35.09	PK	34.1	-32.5	36.69	-	-	74	-37.31	0-360	201	V
5	* 7.462	38.47	PK	36.1	-29.5	45.07	-	-	74	-28.93	0-360	100	V
6	7.772	35.52	PK	36.1	-28.6	43.02	-	-	-	-	0-360	201	V
7	7.911	38.81	PK	36	-29.6	45.21	-	-	-	-	0-360	100	V

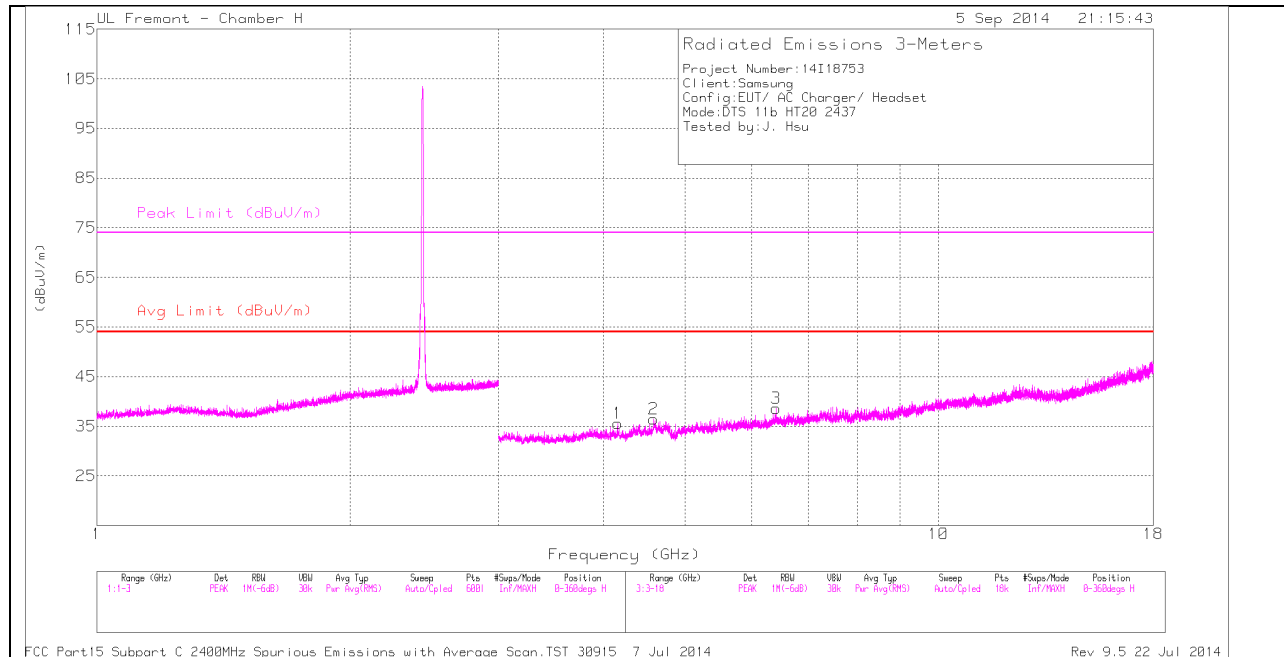
PK - Peak detector

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (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
* 7.68	38.65	PK2	36.1	-28.8	45.95	-	-	74	-28.05	225	118	H
* 7.68	27.1	MAV1	36.1	-28.8	34.4	54	-19.6	-	-	225	118	H
* 7.461	39.2	PK2	36.1	-29.4	45.9	-	-	74	-28.1	42	200	V
* 7.463	27.26	MAV1	36.1	-29.5	33.86	54	-20.14	-	-	42	200	V

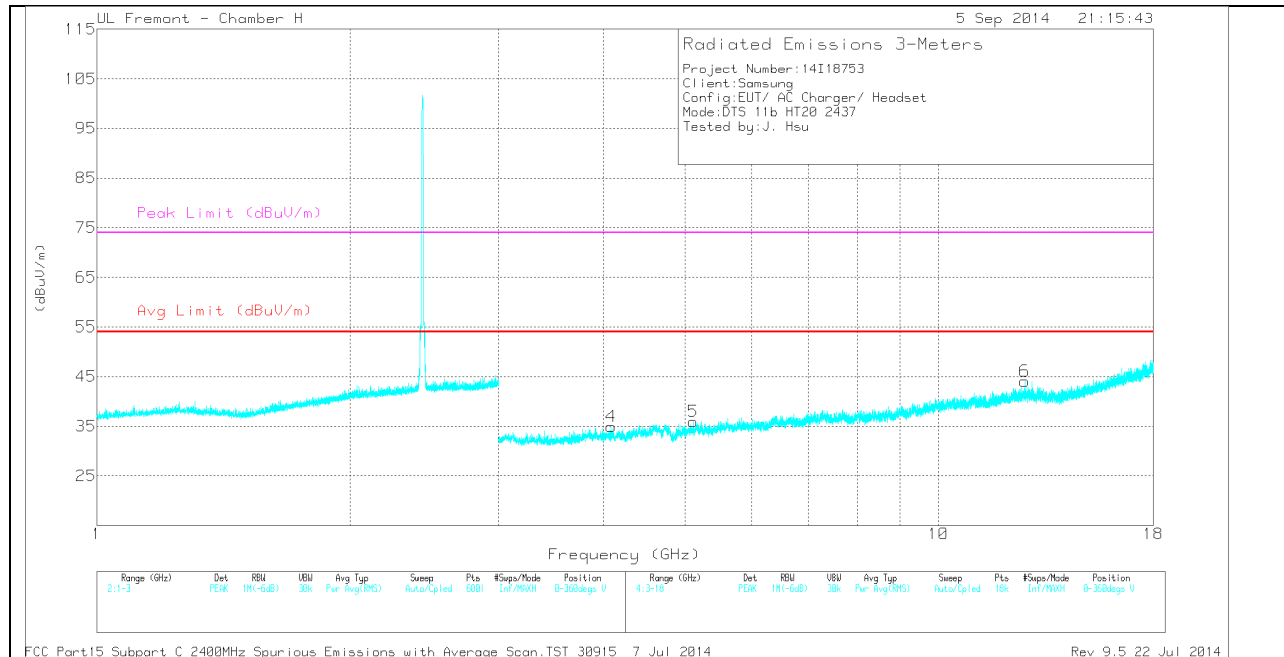
FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013

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.

MID CHANNEL VERTICAL



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 T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.159	34.23	PK	33.5	-32.2	0	35.53	-	-	74	-38.47	0-360	100	H
2	* 4.589	34.91	PK	34.1	-32.5	0	36.51	-	-	74	-37.49	0-360	201	H
4	* 4.084	33.22	PK	33.5	-31.8	0	34.92	-	-	74	-39.08	0-360	201	V
5	* 5.109	33.8	PK	34.5	-32.4	0	35.9	-	-	74	-38.1	0-360	201	V
6	* 12.66	30.13	PK	39.2	-25.3	0	44.03	-	-	74	-29.97	0-360	201	V
3	6.418	33.4	PK	35.5	-30.3	0	38.6	-	-	-	-	0-360	201	H

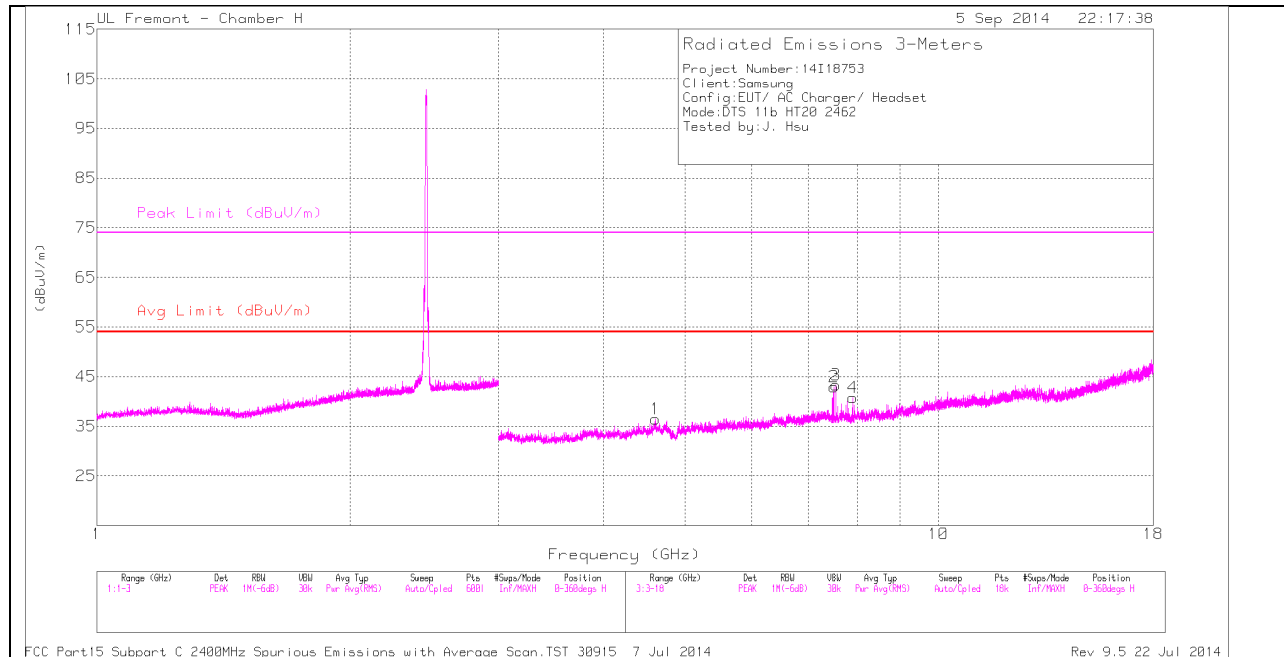
PK - Peak detector

RADIATED EMISSIONS

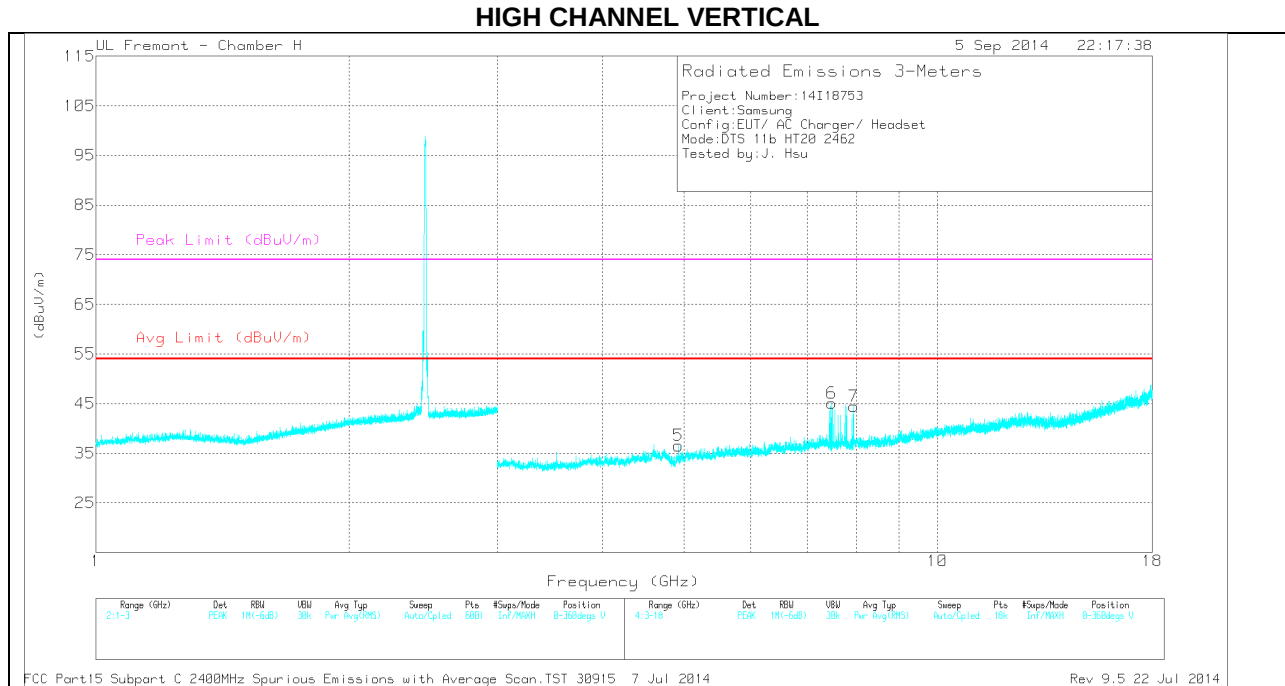
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 12.659	36.55	PK2	39.2	-25.3	0	50.45	-	-	74	-23.55	1	100	V
* 12.662	25.86	MAv1	39.2	-25.3	0	39.76	54	-14.24	-	-	1	100	V

FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013

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 T863 (dB/m)	Amp/Cbl/Filtr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.614	34.77	PK	34.1	-32.4	0	36.47	-	-	74	-37.53	0-360	201	H
2	* 7.507	37.09	PK	36.1	-30.2	0	42.99	-	-	74	-31.01	0-360	100	H
3	* 7.556	37.17	PK	36.1	-30	0	43.27	-	-	74	-30.73	0-360	201	H
5	* 4.924	34.33	PK	34.3	-32.1	0	36.53	-	-	74	-37.47	0-360	201	V
6	* 7.487	38.94	PK	36.1	-29.9	0	45.14	-	-	74	-28.86	0-360	201	V
4	7.908	34.35	PK	36	-29.6	0	40.75	-	-	-	-	0-360	100	H
7	7.951	37.48	PK	36	-29	0	44.48	-	-	-	-	0-360	201	V

PK - Peak detector

RADIATED EMISSIONS

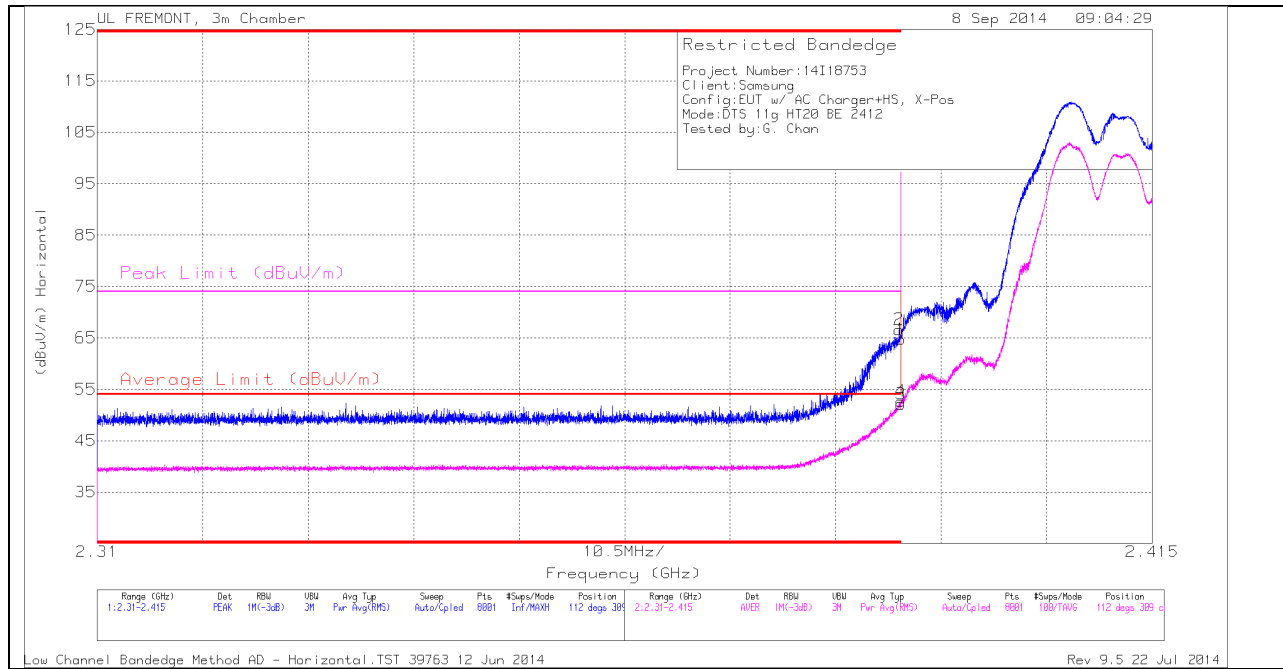
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.485	38.61	PK2	36.1	-29.9	0	44.81	-	-	74	-29.19	45	369	V
* 7.487	27.38	MAV1	36.1	-29.9	0	33.58	54	-20.42	-	-	45	369	V
7.952	41.55	PK2	36	-29	0	48.55	-	-	-	-	183	125	V
7.953	27.35	MAV1	36	-29	0	34.35	-	-	-	-	183	125	V

FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013

10.2.2. TX ABOVE 1 GHz 802.11g MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

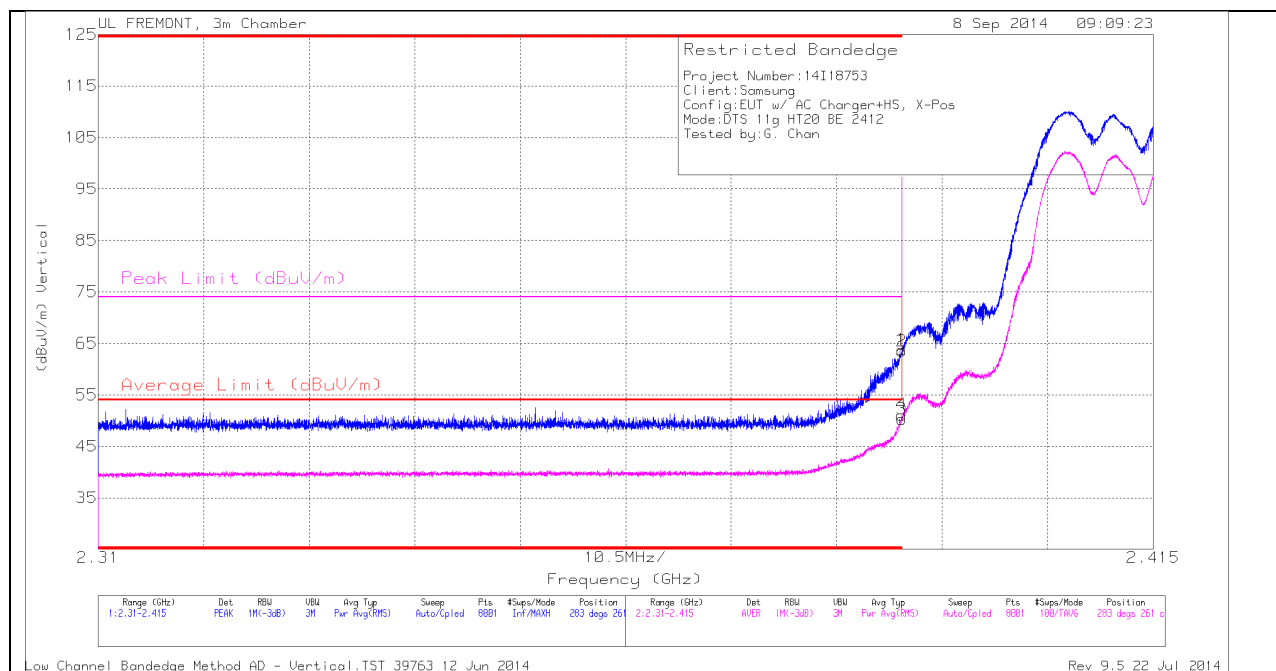
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (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	55.75	PK	32.1	-23.1	0	64.75	-	-	74	-9.25	112	309	H
2	* 2.39	57.62	PK	32.1	-23.1	0	66.62	-	-	74	-7.38	112	309	H
3	* 2.39	42.91	RMS	32.1	-23.1	.3	52.12	54	-1.88	-	-	112	309	H
4	* 2.39	43.46	RMS	32.1	-23.1	.3	52.67	54	-1.33	-	-	112	309	H

VERTICAL PEAK AND AVERAGE PLOT

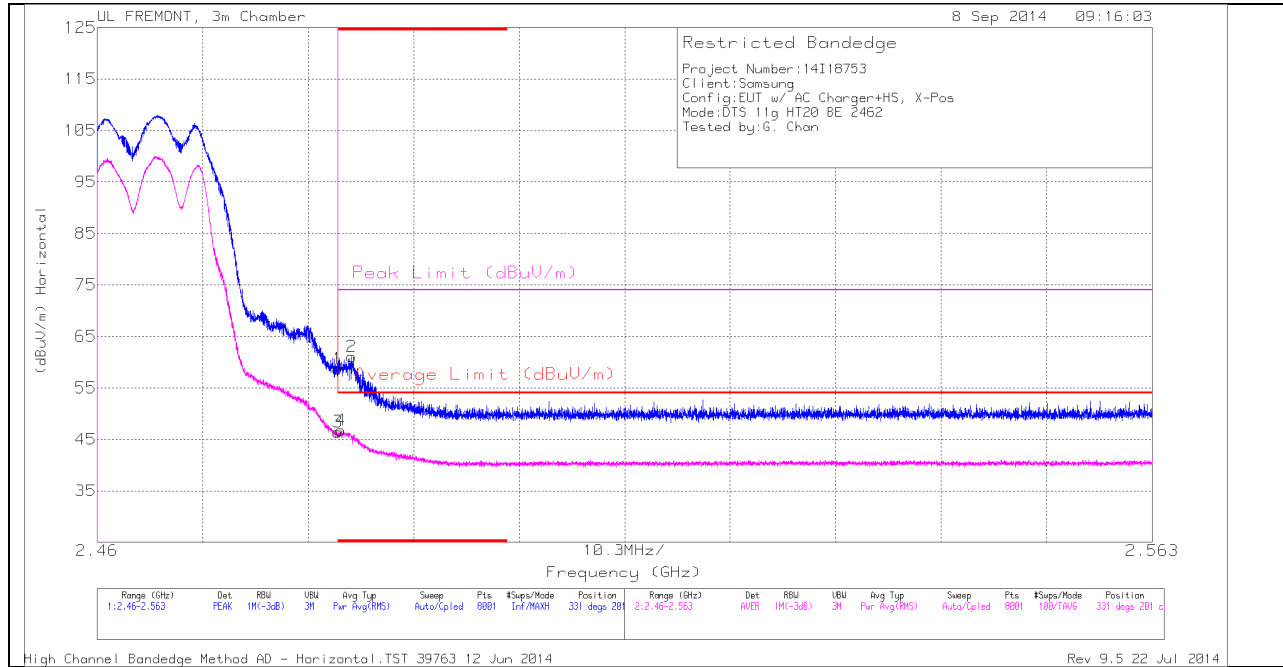


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (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	54.77	PK	32.1	-23.1	0	63.77	-	-	74	-10.23	283	261	V
2	* 2.39	54.52	PK	32.1	-23.1	0	63.52	-	-	74	-10.48	283	261	V
3	* 2.39	41.08	RMS	32.1	-23.1	.3	50.29	54	-3.71	-	-	283	261	V
4	* 2.39	41.91	RMS	32.1	-23.1	.3	51.12	54	-2.88	-	-	283	261	V

AUTHORIZED BANDEDGE (HIGH CHANNEL)

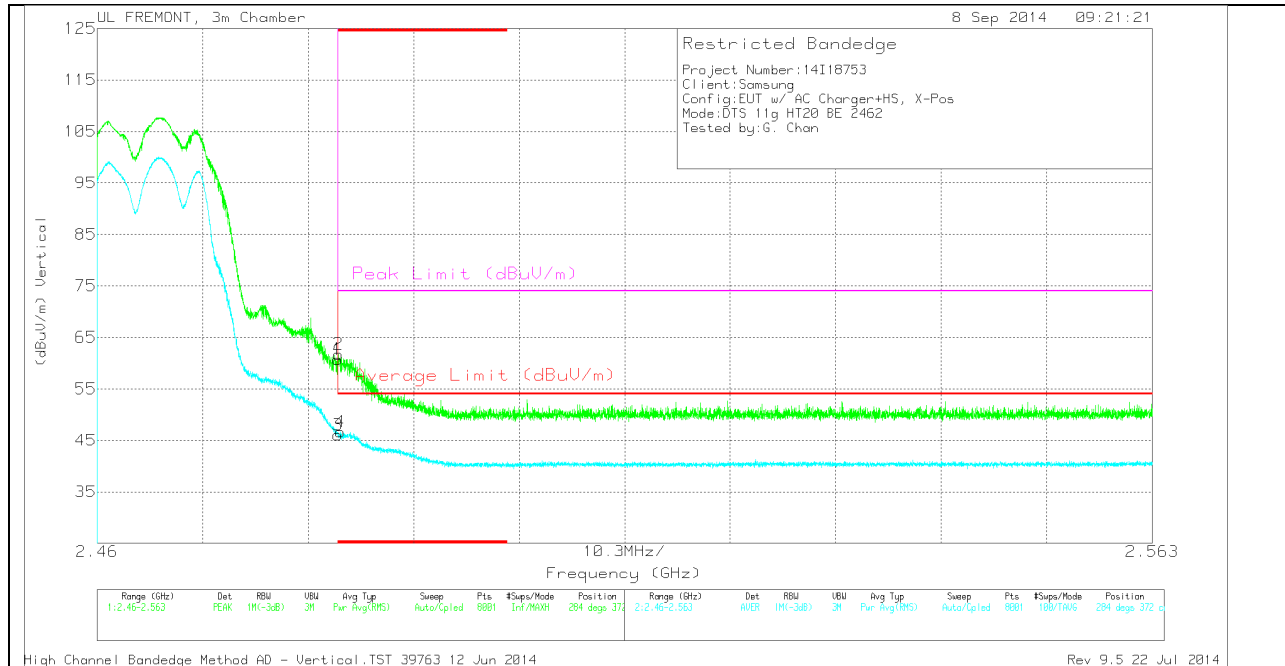
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fitter/Pad (dB)	DC Corr (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	49.22	PK	32.3	-22.8	0	58.72	-	-	74	-15.28	331	201	H
3	* 2.484	36.74	RMS	32.3	-22.8	.3	46.45	54	-7.55	-	-	331	201	H
4	* 2.484	37.07	RMS	32.3	-22.8	.3	46.78	54	-7.22	-	-	331	201	H
2	* 2.485	51.58	PK	32.3	-22.8	0	61.08	-	-	74	-12.92	331	201	H

VERTICAL PEAK AND AVERAGE PLOT

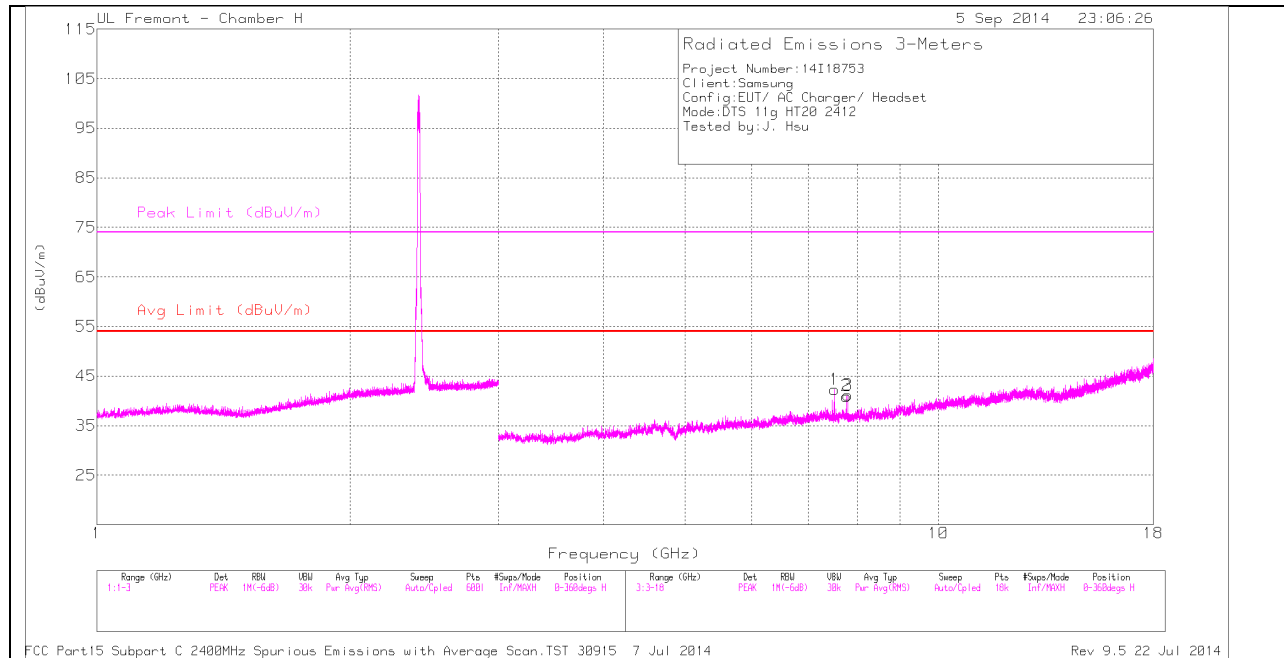


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (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	51.25	PK	32.3	-22.8	0	60.75	-	-	74	-13.25	284	372	V
2	* 2.484	52.23	PK	32.3	-22.8	0	61.73	-	-	74	-12.27	284	372	V
3	* 2.484	36.33	RMS	32.3	-22.8	.3	46.04	54	-7.96	-	-	284	372	V
4	* 2.484	36.94	RMS	32.3	-22.8	.3	46.65	54	-7.35	-	-	284	372	V

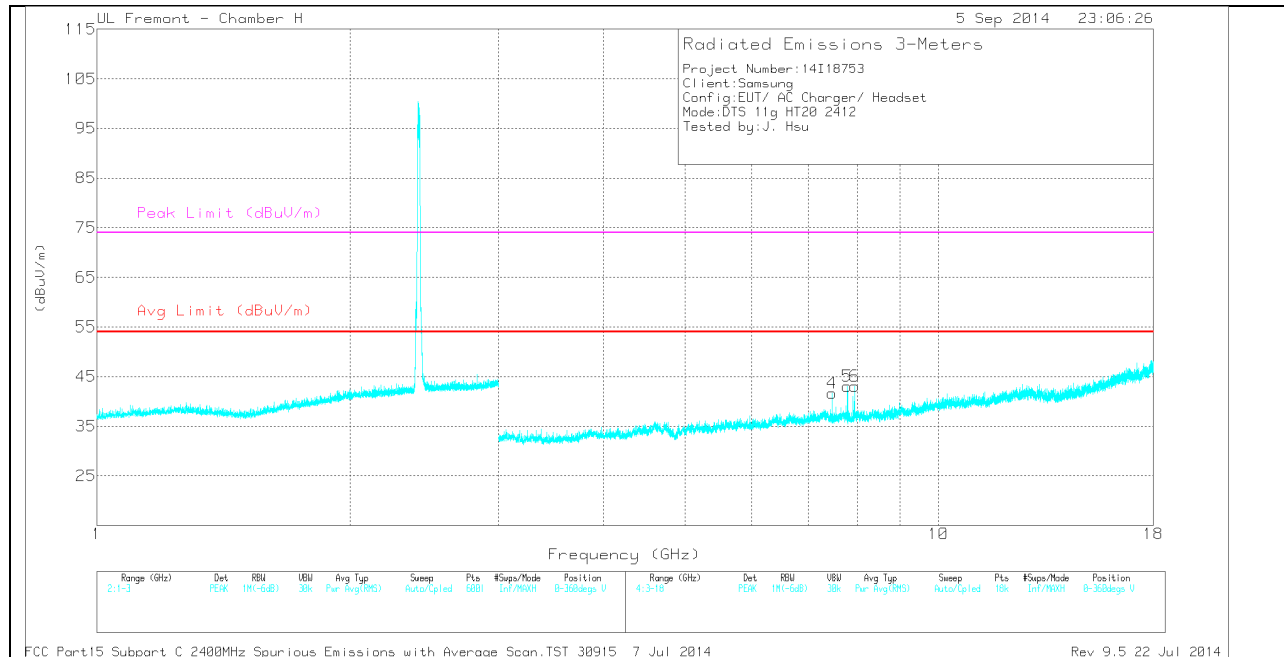
HARMONICS AND SPURIOUS EMISSIONS

LOW 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.

LOW CHANNEL VERTICAL



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 T863 (dB/m)	Amp/Cbl/Filtr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 7.53	36.42	PK	36.1	-30.2	0	42.32	-	-	74	-31.68	0-360	100	H
4	* 7.475	35.36	PK	36.1	-29.8	0	41.66	-	-	74	-32.34	0-360	100	V
2	7.774	33.57	PK	36.1	-28.7	0	40.97	-	-	-	-	0-360	100	H
5	7.796	36.07	PK	36.1	-29.1	0	43.07	-	-	-	-	0-360	100	V
3	7.798	34.38	PK	36.1	-29.3	0	41.18	-	-	-	-	0-360	100	H
6	7.948	36.02	PK	36	-29	0	43.02	-	-	-	-	0-360	100	V

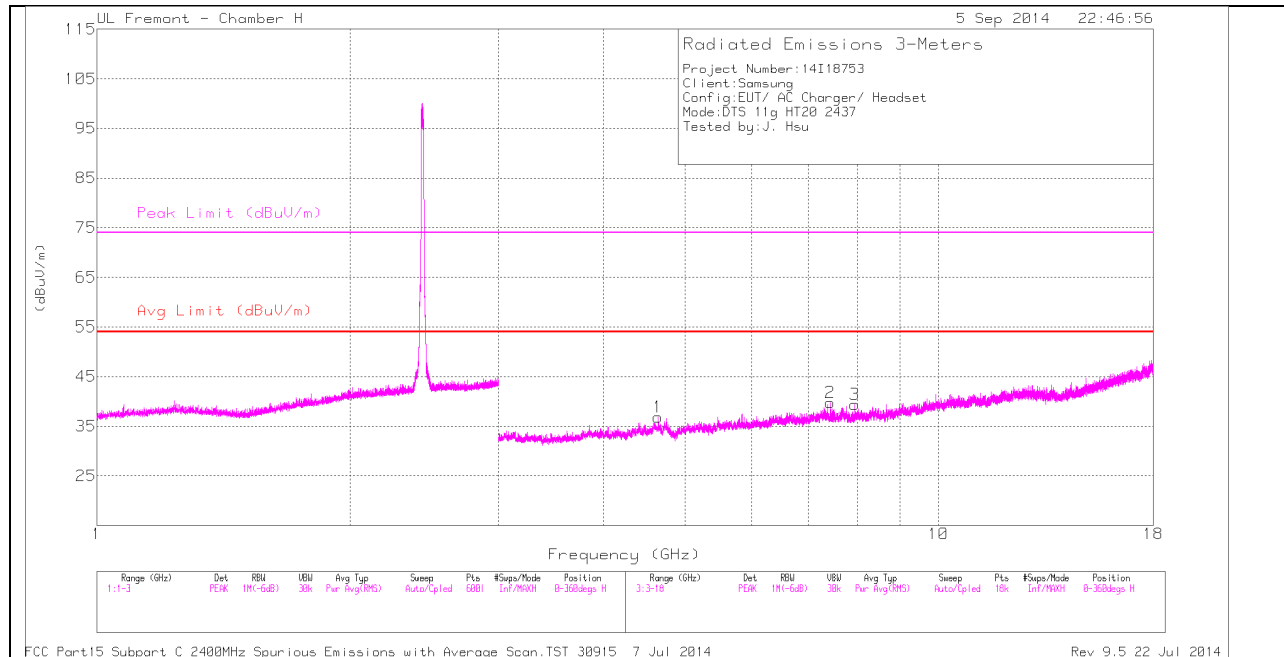
PK - Peak detector

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.529	39.18	PK2	36.1	-30.2	0	45.08	-	-	74	-28.92	161	129	H
* 7.529	27.87	MAV1	36.1	-30.2	.3	34.13	54	-19.87	-	-	161	129	H
* 7.474	39.31	PK2	36.1	-29.7	0	45.71	-	-	74	-28.29	152	231	V
* 7.476	27.13	MAV1	36.1	-29.8	.3	33.79	54	-20.21	-	-	152	231	V

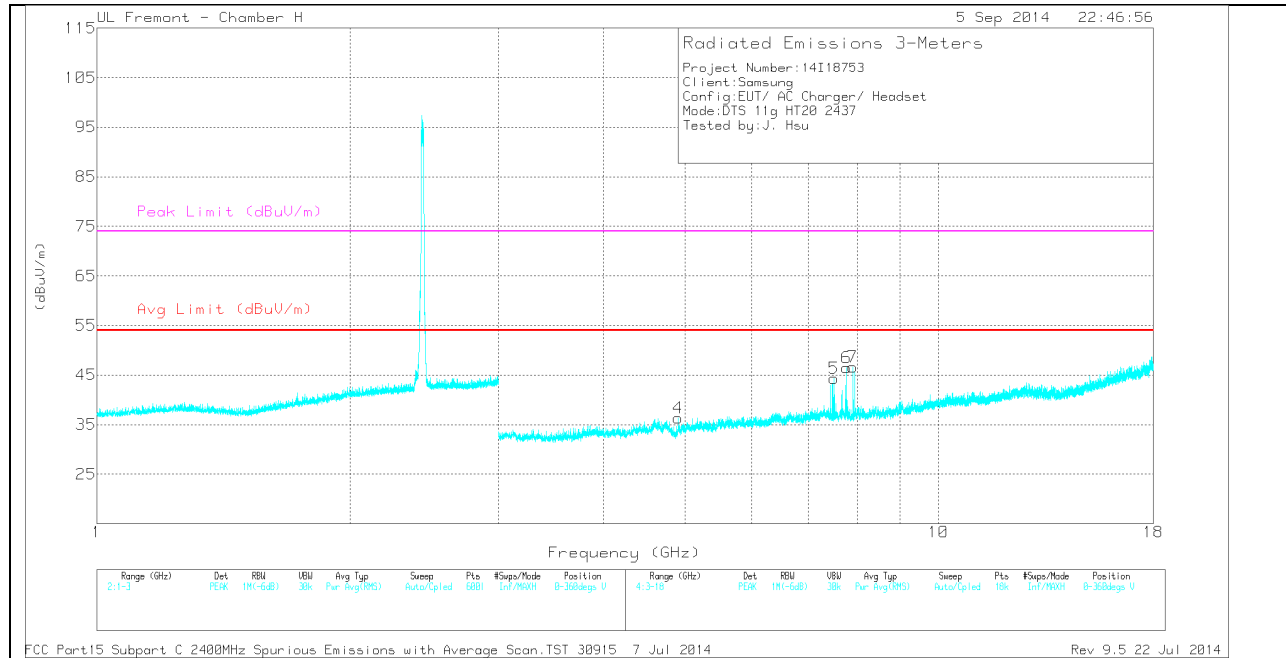
FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013

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.

MID CHANNEL VERTICAL



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 T863 (dB/m)	Amp/Cbl/Filtr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.645	34.31	PK	34.2	-31.7	0	36.81	-	-	74	-37.19	0-360	100	H
2	* 7.44	32.95	PK	36.1	-29.3	0	39.75	-	-	74	-34.25	0-360	100	H
4	* 4.908	33.97	PK	34.3	-31.9	0	36.37	-	-	74	-37.63	0-360	100	V
5	* 7.51	38.45	PK	36.1	-30.2	0	44.35	-	-	74	-29.65	0-360	100	V
6	7.776	39.14	PK	36.1	-28.8	0	46.44	-	-	-	-	0-360	100	V
7	7.916	40.08	PK	36	-29.5	0	46.58	-	-	-	-	0-360	100	V
3	7.956	32.33	PK	36	-28.9	0	39.43	-	-	-	-	0-360	100	H

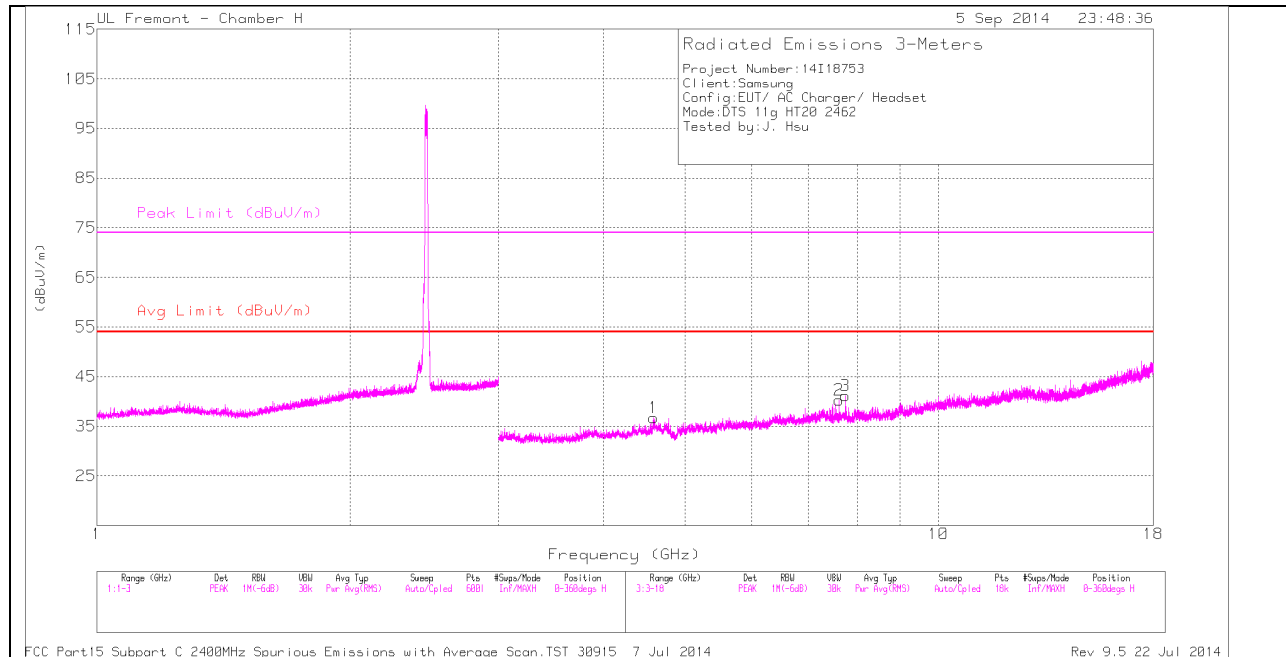
PK - Peak detector

RADIATED EMISSIONS

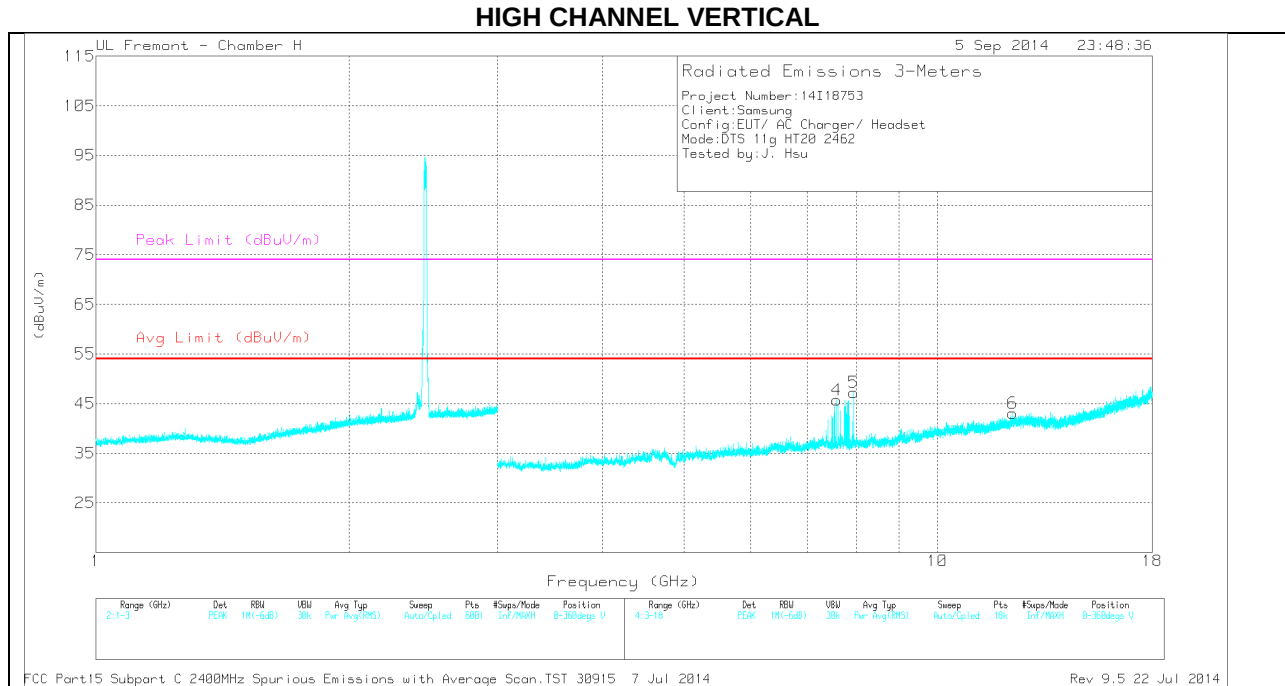
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.511	40.49	PK2	36.1	-30.2	0	46.39	-	-	74	-27.61	4	189	V
* 7.509	28.07	MAV1	36.1	-30.2	.3	34.33	54	-19.67	-	-	4	189	V
7.915	27.75	MAV1	36	-29.5	.3	34.61	-	-	-	-	28	209	V
7.917	39.19	PK2	36	-29.5	0	45.69	-	-	-	-	28	209	V

FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013

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 T863 (dB/m)	Amp/Cbl/Filtr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.584	35.16	PK	34.1	-32.5	0	36.76	-	-	74	-37.24	0-360	100	H
2	* 7.612	33.61	PK	36.1	-29.4	0	40.31	-	-	74	-33.69	0-360	100	H
4	* 7.592	39.27	PK	36.1	-29.6	0	45.77	-	-	74	-28.23	0-360	100	V
6	* 12.283	28.92	PK	39	-24.9	0	43.02	-	-	74	-30.98	0-360	201	V
3	7.755	33.91	PK	36.1	-28.8	0	41.21	-	-	-	-	0-360	201	H
5	7.948	40.27	PK	36	-29	0	47.27	-	-	-	-	0-360	100	V

PK - Peak detector

RADIATED EMISSIONS

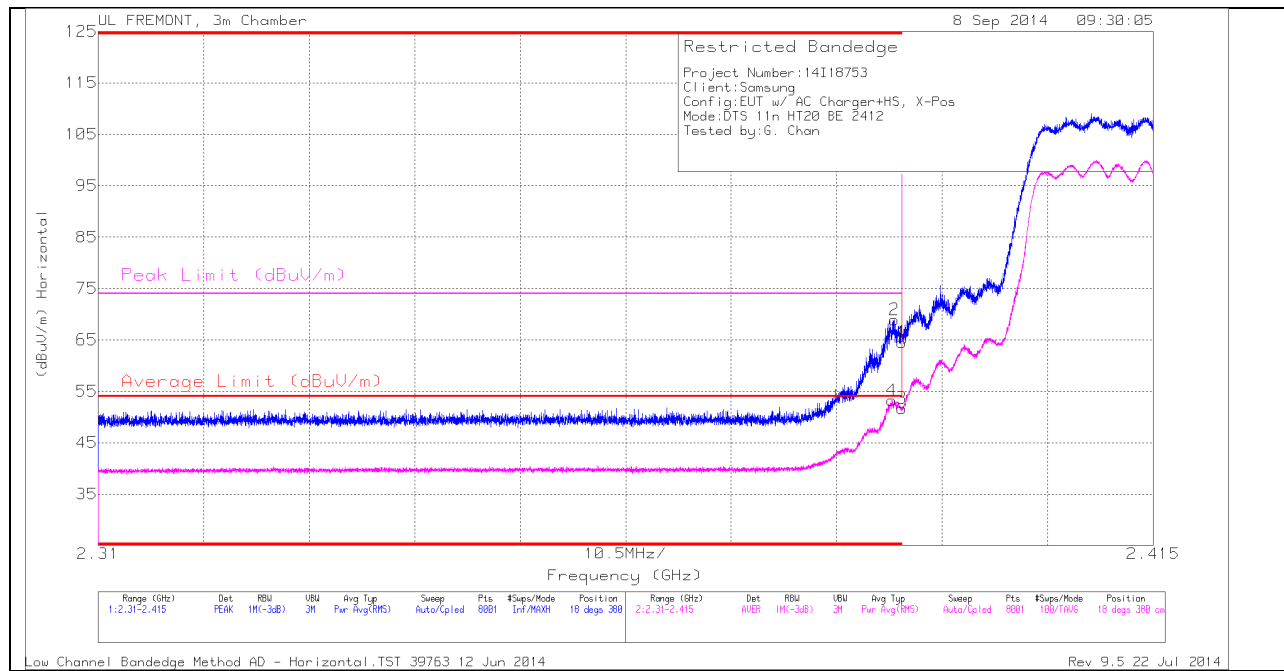
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.594	38.84	PK2	36.1	-29.6	0	45.34	-	-	74	-28.66	2	100	V
* 7.591	27.94	MAV1	36.1	-29.6	.3	34.8	54	-19.2	-	-	2	100	V

FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013

10.2.3. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

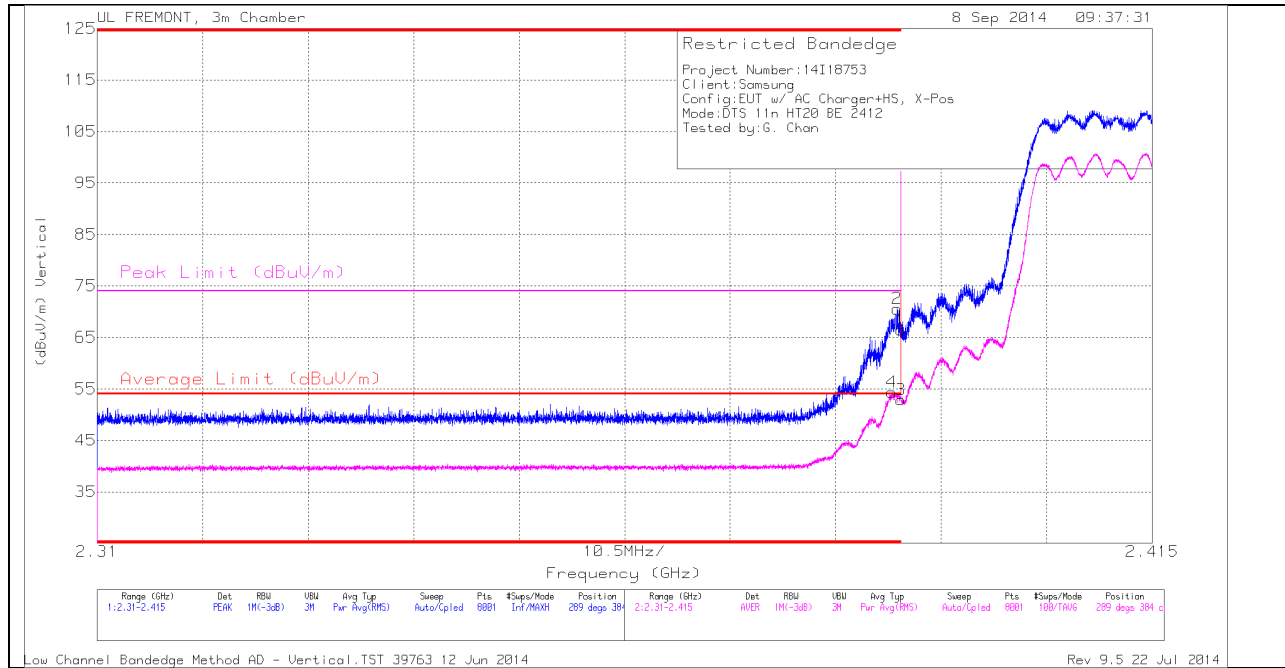
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.389	59.91	PK	32.1	-23.1	0	68.91	-	-	74	-5.09	18	380	H
4	* 2.389	44.01	RMS	32.1	-23.1	.34	53.23	54	-7.7	-	-	18	380	H
1	* 2.39	55.49	PK	32.1	-23.1	0	64.49	-	-	74	-9.51	18	380	H
3	* 2.39	42.48	RMS	32.1	-23.1	.34	51.7	54	-2.3	-	-	18	380	H

VERTICAL PEAK AND AVERAGE PLOT

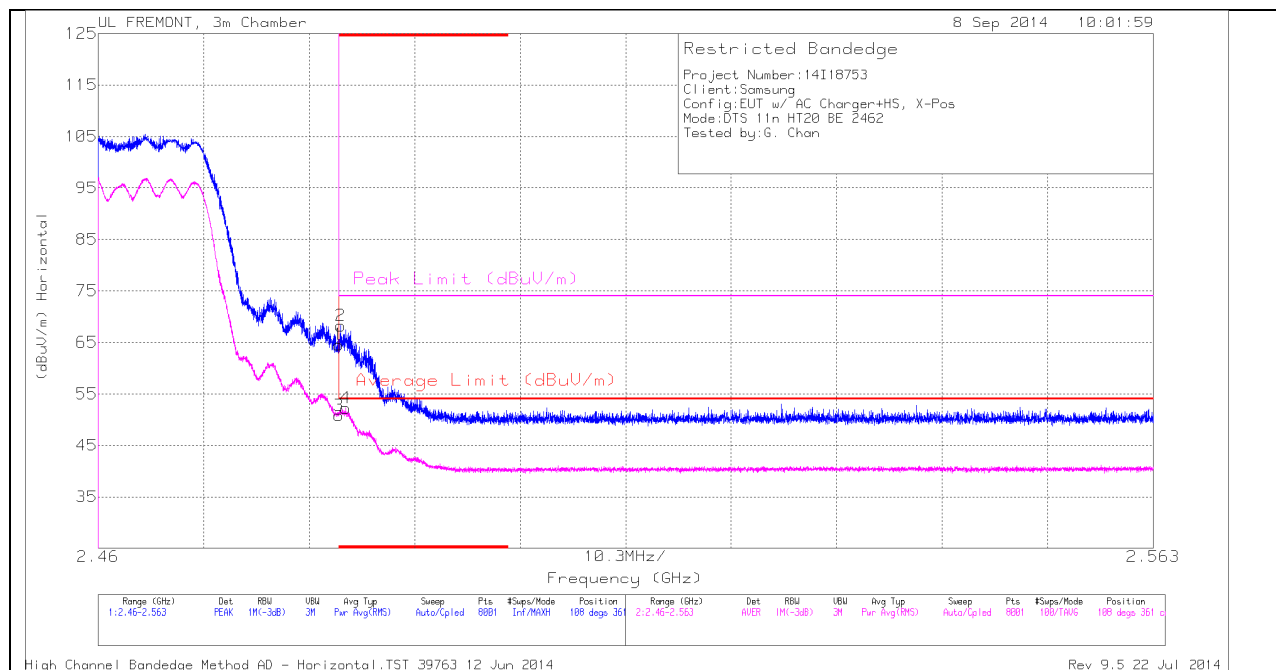


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 2.389	44.12	RMS	32.1	-23.1	.34	53.46	54	-0.54	-	-	289	384	V
1	* 2.39	57.44	PK	32.1	-23.1	0	66.44	-	-	74	-7.56	289	384	V
2	* 2.39	61.56	PK	32.1	-23.1	0	70.56	-	-	74	-3.44	289	384	V
3	* 2.39	43.65	RMS	32.1	-23.1	.34	52.87	54	-1.13	-	-	289	384	V

AUTHORIZED BANDEDGE (HIGH CHANNEL)

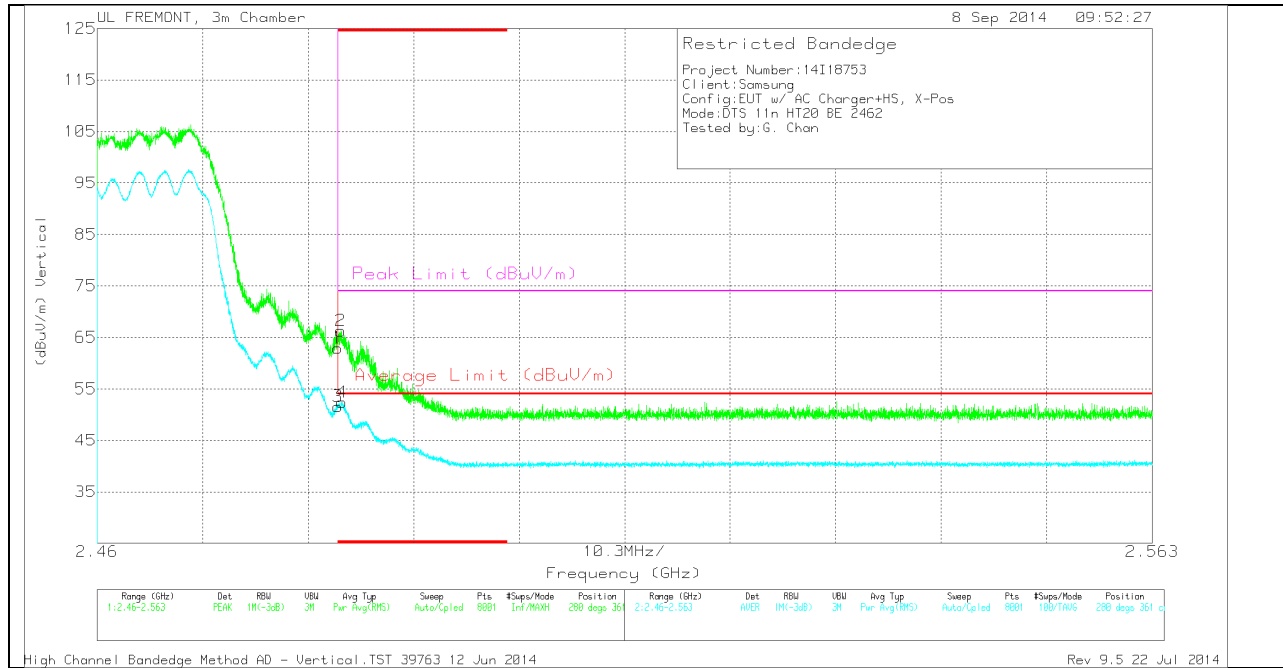
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fitter/Pad (dB)	DC Corr (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	55.06	PK	32.3	-22.8	0	64.56	-	-	74	-9.44	108	361	H
2	* 2.484	58.74	PK	32.3	-22.8	0	68.24	-	-	74	-5.76	108	361	H
3	* 2.484	41.08	RMS	32.3	-22.8	.34	50.8	54	-3.2	-	-	108	361	H
4	* 2.484	42.52	RMS	32.3	-22.8	.34	52.24	54	-1.76	-	-	108	361	H

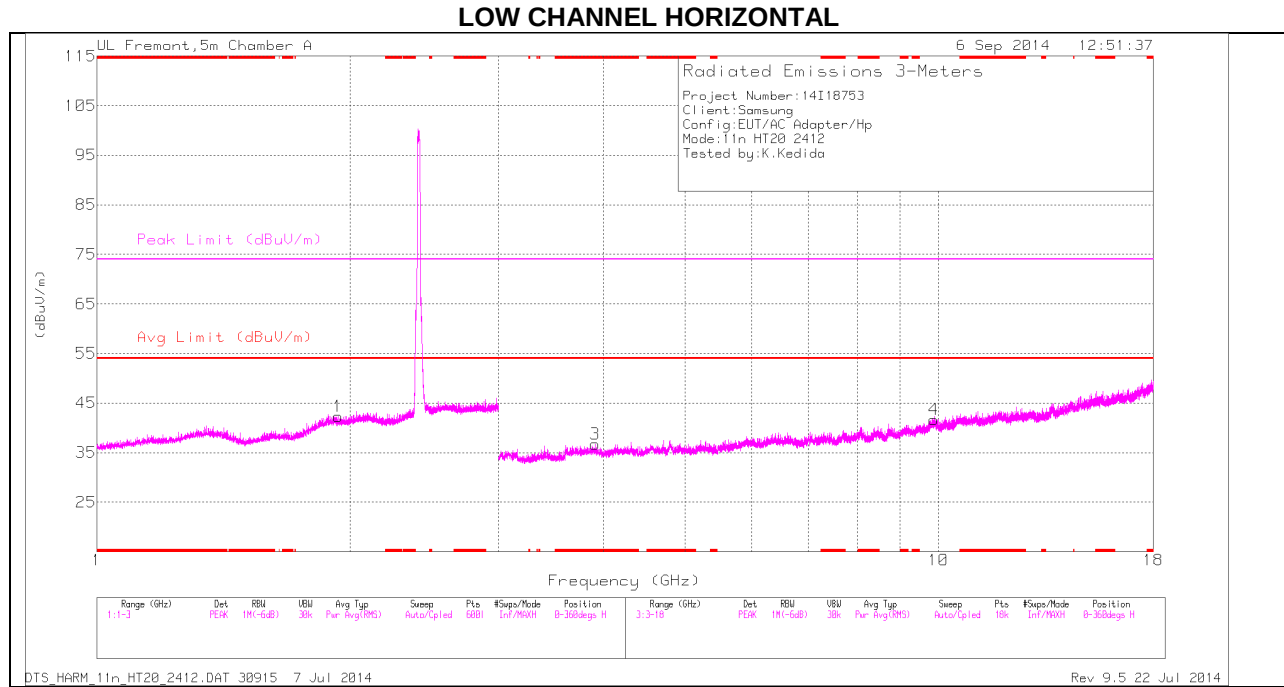
VERTICAL PEAK AND AVERAGE PLOT



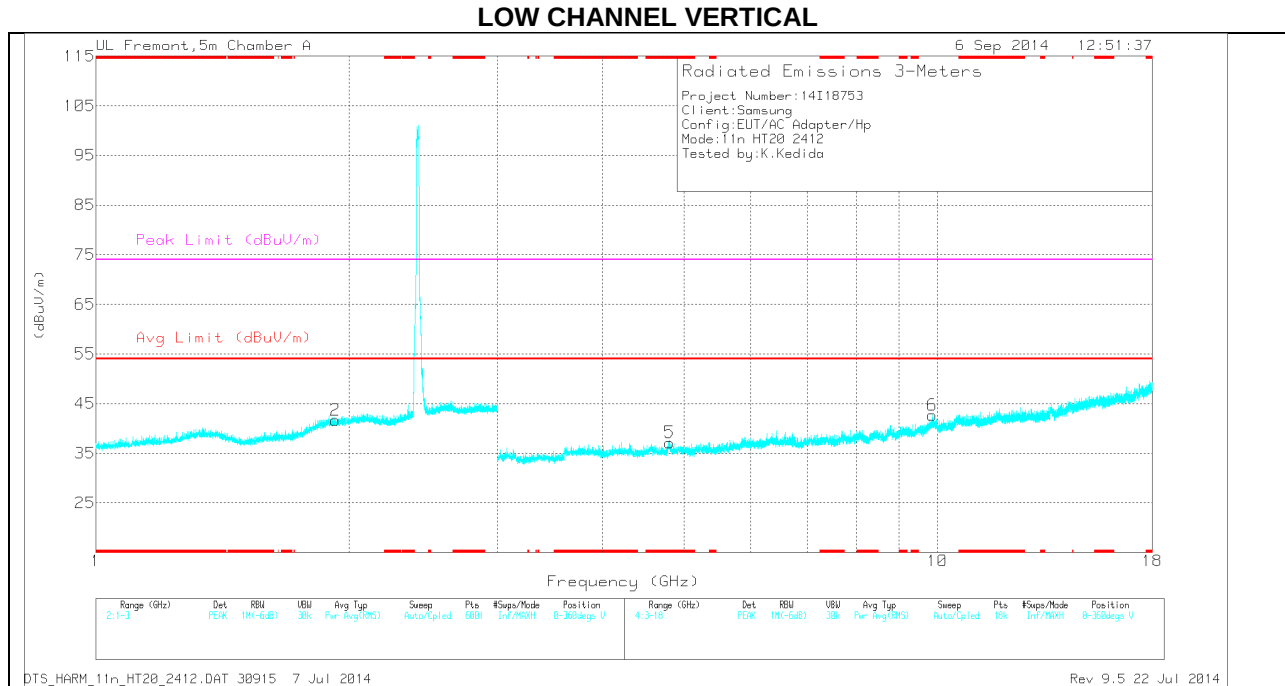
VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (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	53.46	PK	32.3	-22.8	0	62.96	-	-	74	-11.04	280	361	V
2	* 2.484	56.78	PK	32.3	-22.8	0	66.28	-	-	74	-7.72	280	361	V
3	* 2.484	41.85	RMS	32.3	-22.8	.34	51.57	54	-2.43	-	-	280	361	V
4	* 2.484	42.67	RMS	32.3	-22.8	.34	52.39	54	-1.61	-	-	280	361	V

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
3	* 3.906	33.38	PK	33.8	-30.5	36.68	-	-	74	-37.32	0-360	100	H
5	* 4.806	32.36	PK	34	-29.2	37.16	-	-	74	-36.84	0-360	201	V
2	1.924	35.22	PK	31.8	-25.3	41.72	-	-	-	-	0-360	201	V
1	1.935	35.9	PK	31.8	-25.4	42.3	-	-	-	-	0-360	100	H
6	9.865	28.03	PK	37	-22.4	42.63	-	-	-	-	0-360	100	V
4	9.88	26.94	PK	37	-22.3	41.64	-	-	-	-	0-360	201	H

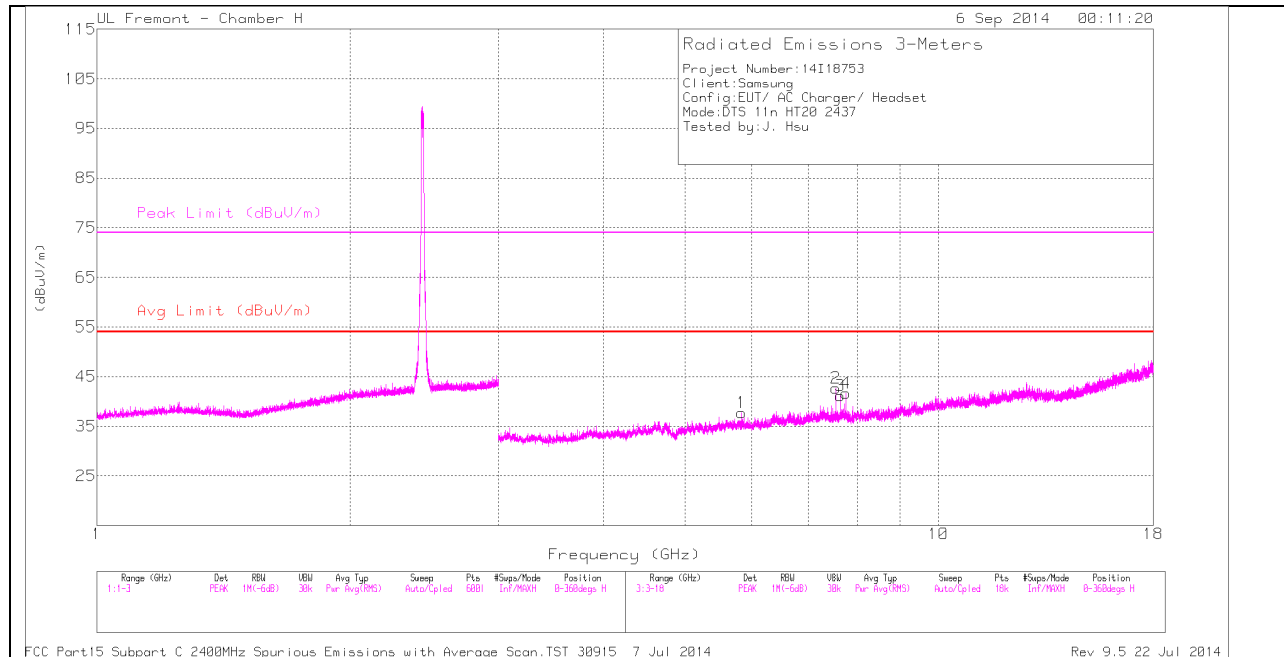
PK - Peak detector

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	DC factor	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.905	29.94	MAV1	33.8	-30.5	.34	33.24	54	-20.76	-	-	359	100	H
* 4.805	39.77	PK2	34	-29.2	0	44.57	-	-	74	-29.43	359	202	V

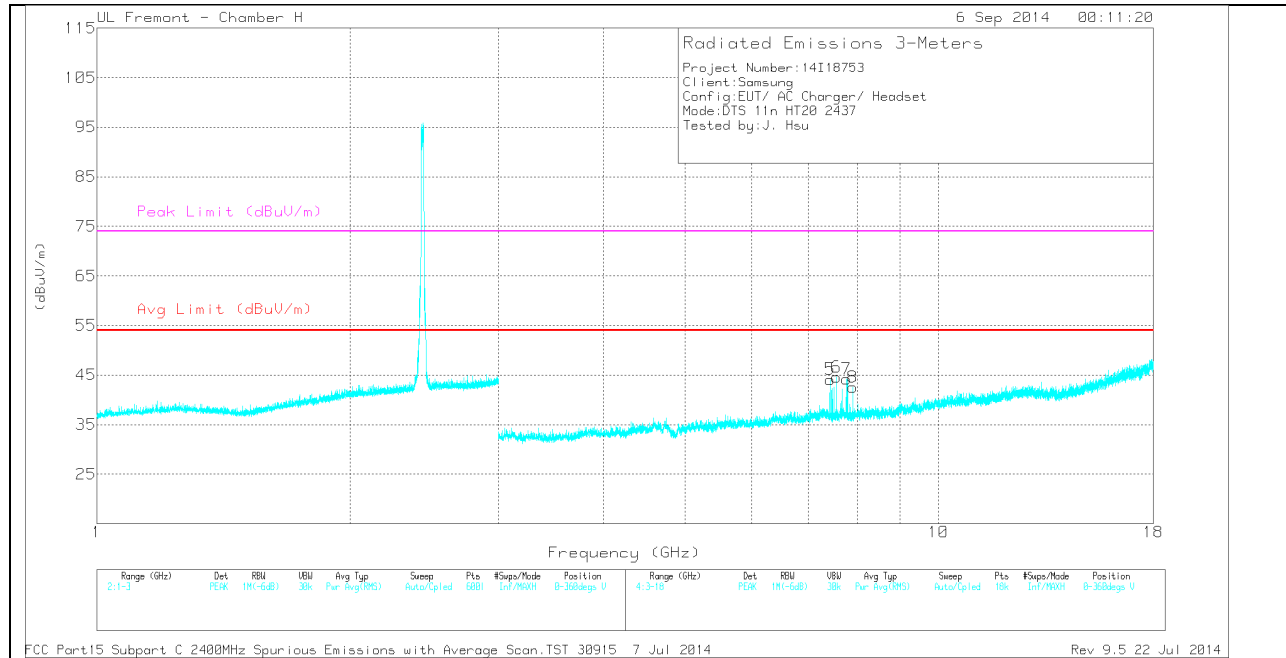
FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013

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.

MID CHANNEL VERTICAL



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

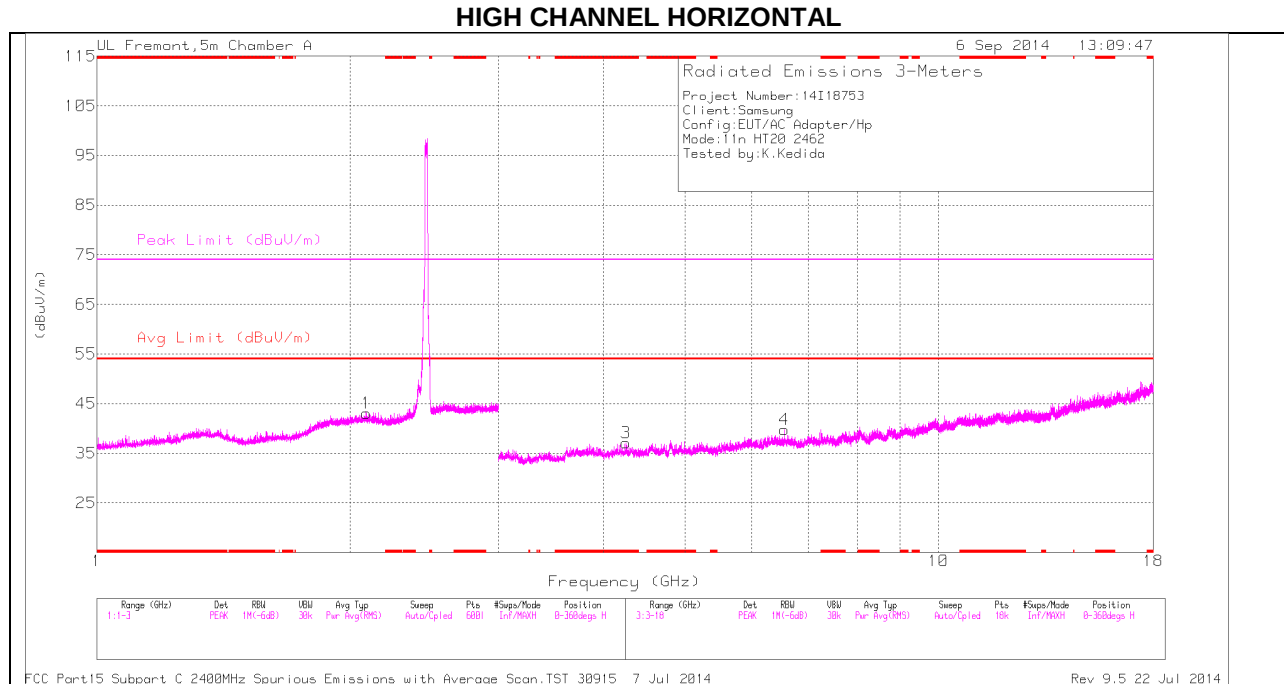
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 7.553	36.72	PK	36.1	-30.1	0	42.72	-	-	74	-31.28	0-360	201	H
3	* 7.645	34.28	PK	36.1	-29.2	0	41.18	-	-	74	-32.82	0-360	100	H
5	* 7.438	37.34	PK	36.1	-29.3	0	44.14	-	-	74	-29.86	0-360	201	V
6	* 7.561	38.49	PK	36.1	-30	0	44.59	-	-	74	-29.41	0-360	100	V
1	5.84	33.72	PK	35.1	-31.1	0	37.72	-	-	-	-	0-360	100	H
4	7.758	34.52	PK	36.1	-28.9	0	41.72	-	-	-	-	0-360	201	H
7	7.77	36.65	PK	36.1	-28.6	0	44.15	-	-	-	-	0-360	100	V
8	7.911	36.18	PK	36	-29.6	0	42.58	-	-	-	-	0-360	201	V

PK - Peak detector

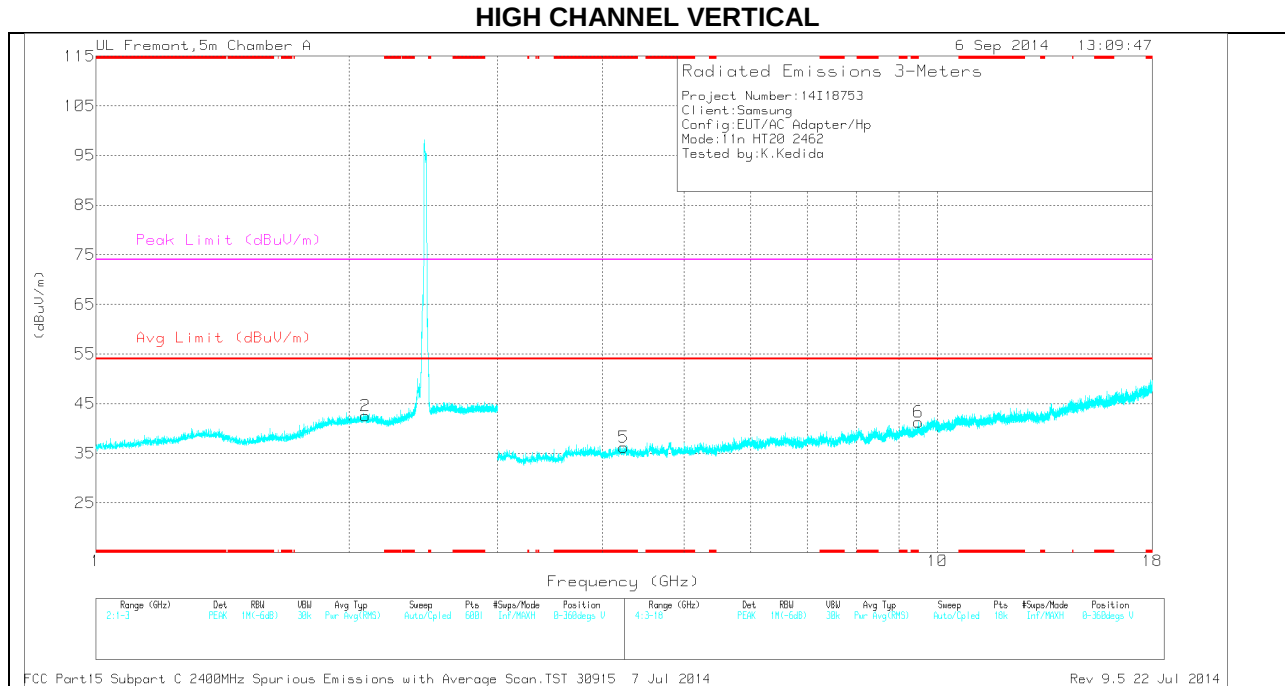
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.56	40.24	PK2	36.1	-30	0	46.34	-	-	74	-27.66	2	100	V
* 7.561	28.51	MAv1	36.1	-30	.34	34.93	54	-19.07	-	-	2	100	V

FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013



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/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
3	* 4.255	32.7	PK	34	-29.6	37.1	-	-	74	-36.9	0-360	201	H
5	* 4.241	31.68	PK	34	-29.5	36.18	-	-	74	-37.82	0-360	100	V
6	* 9.487	27.83	PK	36.5	-23.1	41.23	-	-	74	-32.77	0-360	201	V
1	2.09	35.96	PK	31.8	-24.7	43.06	-	-	-	-	0-360	100	H
2	2.091	35.5	PK	31.8	-24.7	42.6	-	-	-	-	0-360	201	V
4	6.561	31.51	PK	35.5	-27.3	39.71	-	-	-	-	0-360	100	H

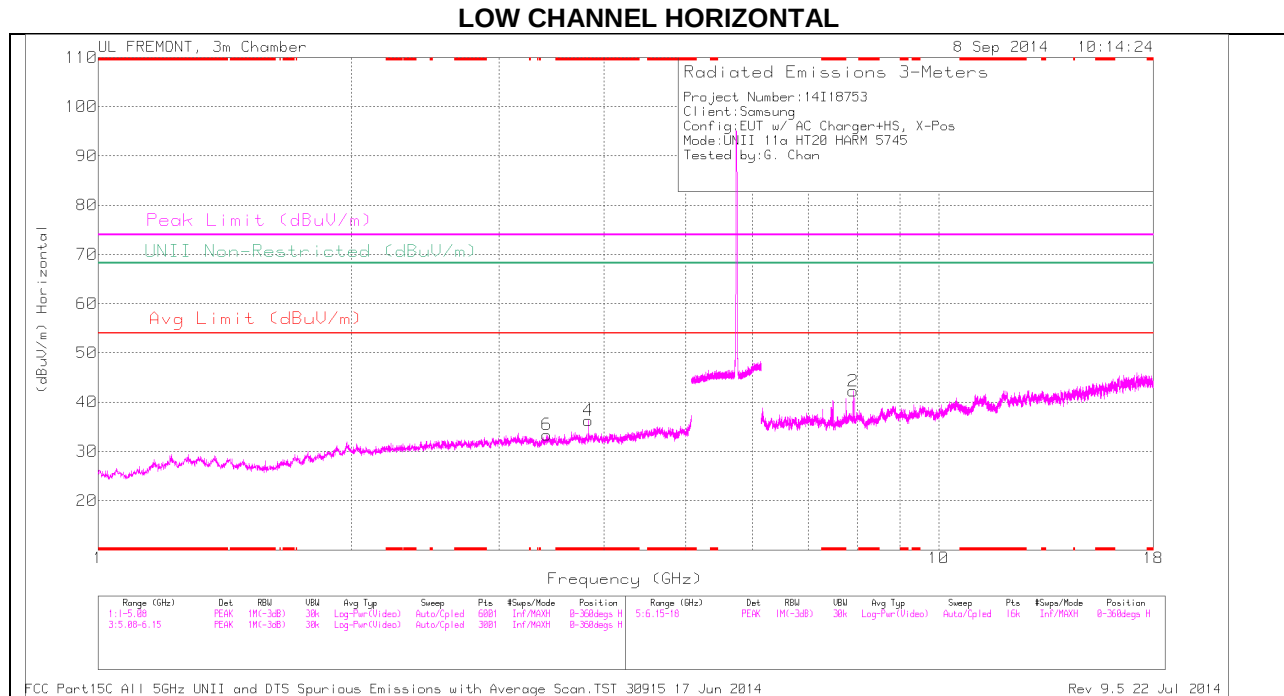
PK - Peak detector

RADIATED EMISSIONS

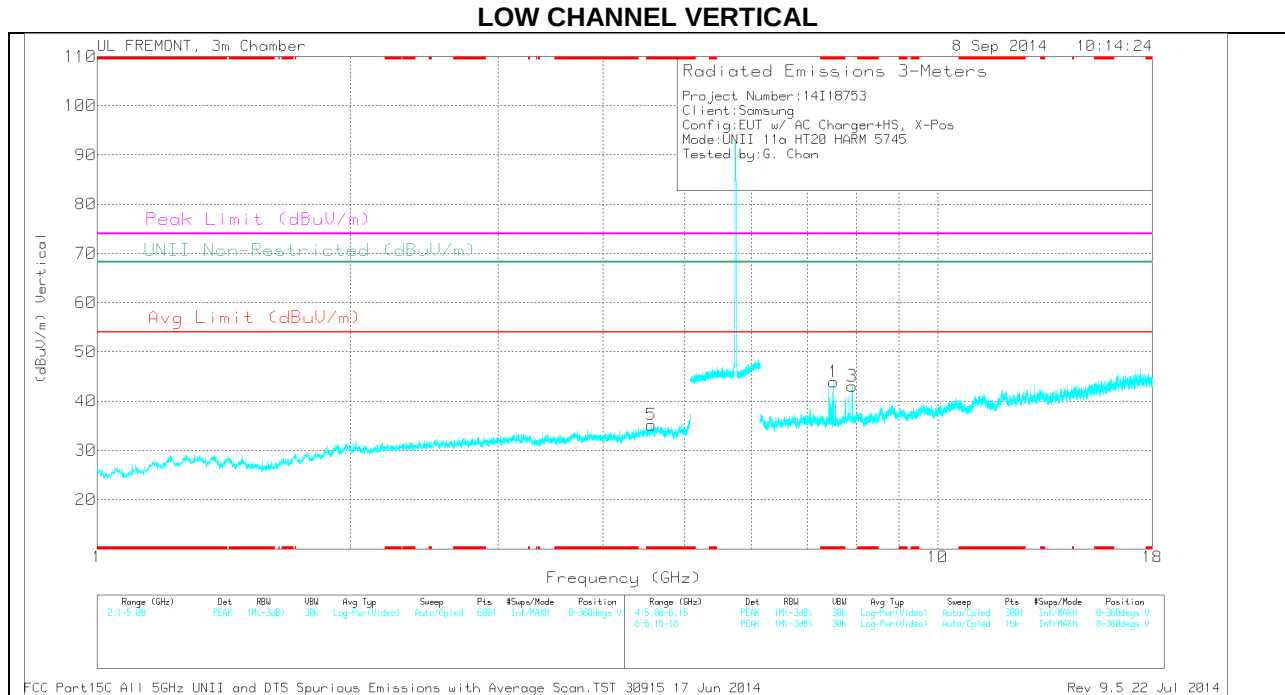
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC factor	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.255	39.86	PK2	34	-29.6	0	44.26	-	-	74	-29.74	359	202	H
* 4.257	28.81	MAV1	34	-29.7	.34	33.11	54	-20.89	-	-	359	202	H

FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013

10.2.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.8 GHz BAND 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

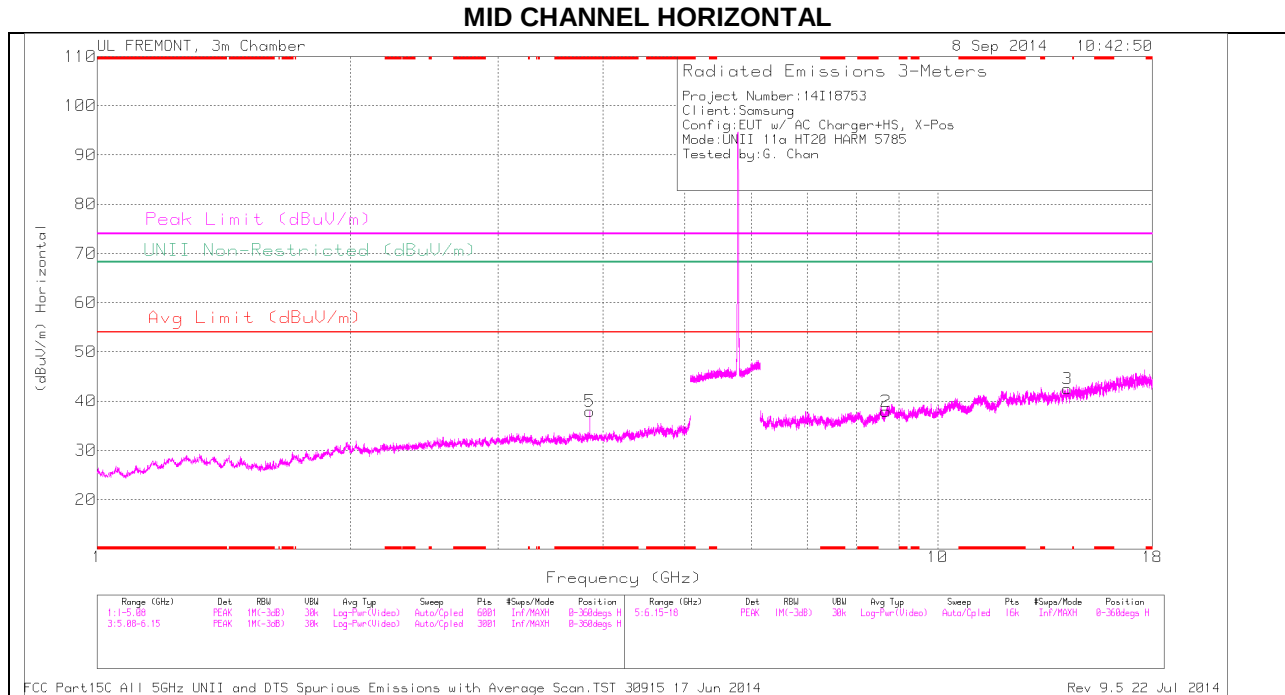
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 3.83	34.29	PK	33.2	-31.2	0	36.29	-	-	74	-37.71	-	-	0-360	100	H
5	* 4.567	32.19	PK	34	-31	0	35.19	-	-	74	-38.81	-	-	0-360	100	V
1	* 7.519	37.24	PK	35.7	-29	0	43.94	-	-	74	-30.06	-	-	0-360	200	V
6	3.418	31.98	PK	32.9	-31.5	0	33.38	-	-	-	-	68.2	-34.82	0-360	100	H
2	7.911	34.57	PK	35.8	-28.1	0	42.27	-	-	-	-	68.2	-25.93	0-360	200	H
3	7.913	35.44	PK	35.8	-28.2	0	43.04	-	-	-	-	68.2	-25.16	0-360	200	V

PK - Peak detector

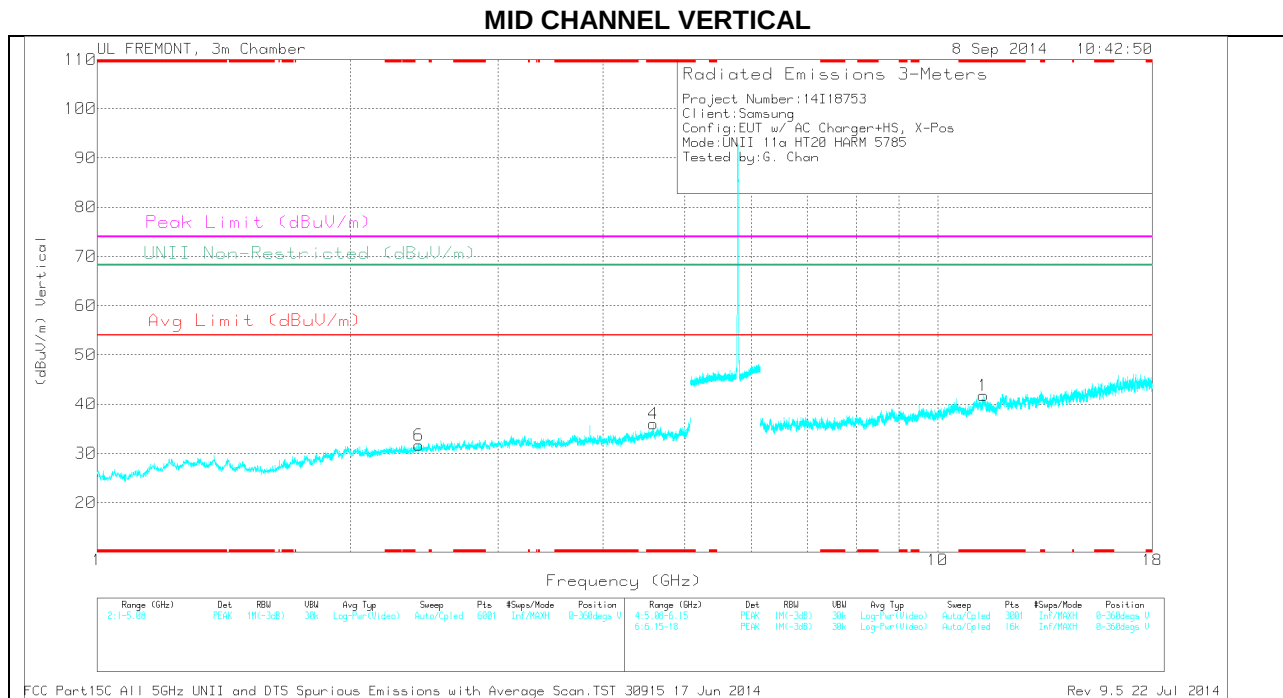
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.518	40.12	PK1	35.7	-29	0	46.82	-	-	74	-27.18	-	-	2	202	V
* 7.517	27.41	AD1	35.7	-29	.32	34.33	54	-19.67	-	-	-	-	2	202	V

FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013



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

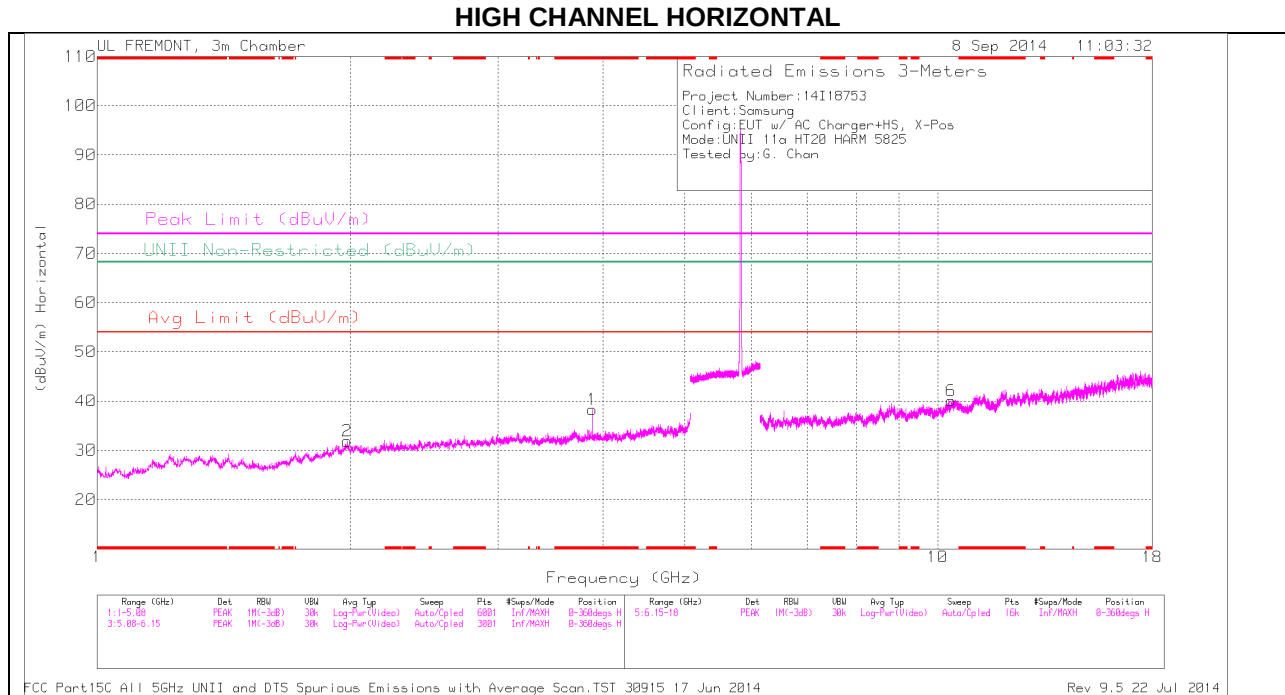
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	* 3.857	35.54	PK	33.2	-30.8	0	37.94	-	-	74	-36.06	-	-	0-360	100	H
4	* 4.588	32.5	PK	34	-30.5	0	36	-	-	74	-38	-	-	0-360	200	V
1	* 11.336	29.25	PK	38	-25.5	0	41.75	-	-	74	-32.25	-	-	0-360	100	V
6	2.414	32.23	PK	32.1	-32.7	0	31.63	-	-	-	-	68.2	-36.57	0-360	100	V
2	8.681	30.11	PK	35.9	-28.1	0	37.91	-	-	-	-	68.2	-30.29	0-360	200	H
3	14.273	30.7	PK	39.2	-27.4	0	42.5	-	-	-	-	68.2	-25.7	0-360	200	H

PK - Peak detector

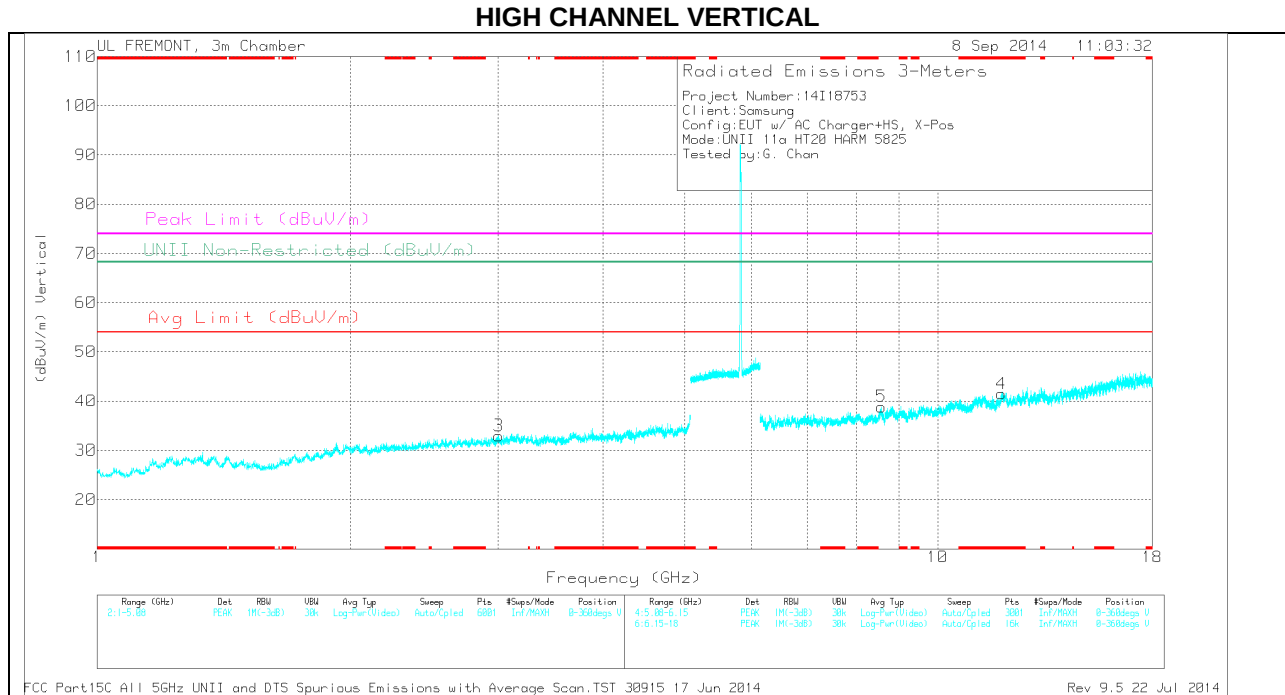
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.336	37.35	PK1	38	-25.5	0	49.85	-	-	74	-24.15	-	-	168	225	V
* 11.337	25.5	AD1	38	-25.5	.32	38.22	54	-15.78	-	-	-	-	168	225	V

FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013



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 T119 (dB/m)	Amp/Chl/ Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.883	35.91	PK	33.2	-30.8	0	38.31	-	-	74	-35.69	-	-	0-360	200	H
4	* 11.914	28.8	PK	39	-26.3	0	41.5	-	-	74	-32.5	-	-	0-360	100	V
2	1.985	32.36	PK	31.5	-32	0	31.86	-	-	-	-	68.2	-36.34	0-360	200	H
3	3.003	31.86	PK	32.9	-31.8	0	32.96	-	-	-	-	68.2	-35.24	0-360	200	V
5	8.565	29.27	PK	35.8	-26.2	0	38.87	-	-	-	-	68.2	-29.33	0-360	200	V
6	10.377	28.27	PK	37.3	-25.5	0	40.07	-	-	-	-	68.2	-28.13	0-360	100	H

PK - Peak detector

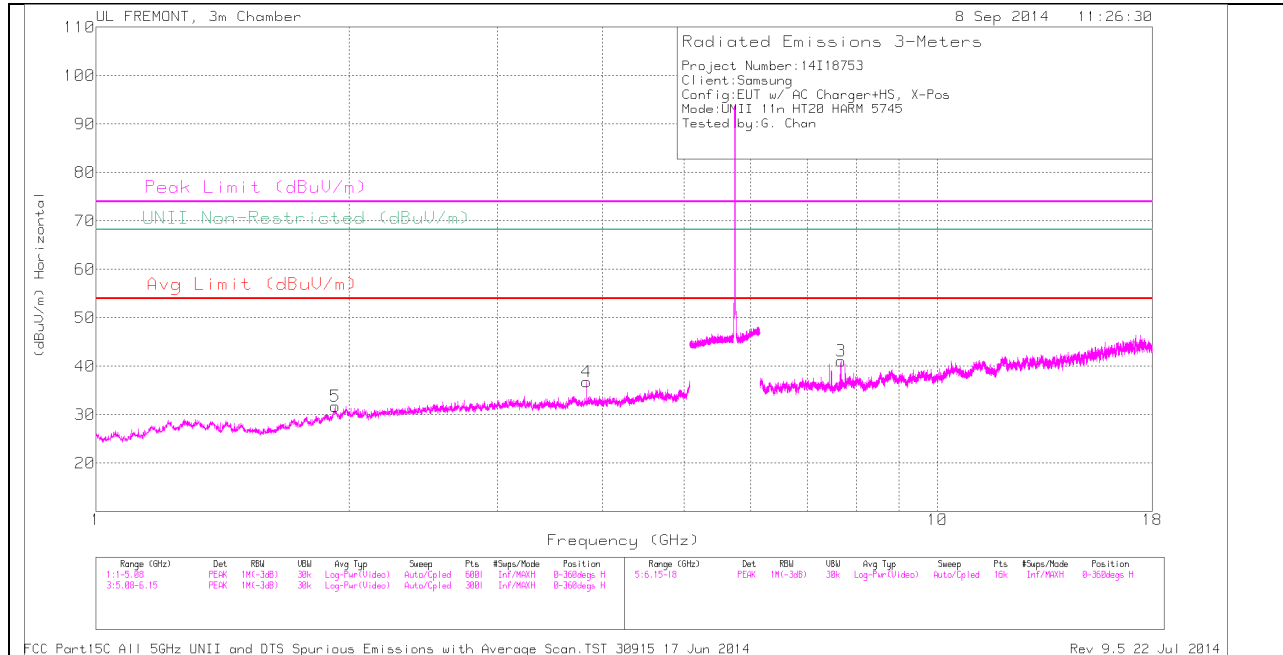
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Chl/ Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.883	42.89	PK1	33.2	-30.8	0	45.29	-	-	74	-28.71	-	-	5	302	H
* 3.883	35.41	AD1	33.2	-30.8	.32	38.03	54	-15.97	-	-	-	-	5	302	H

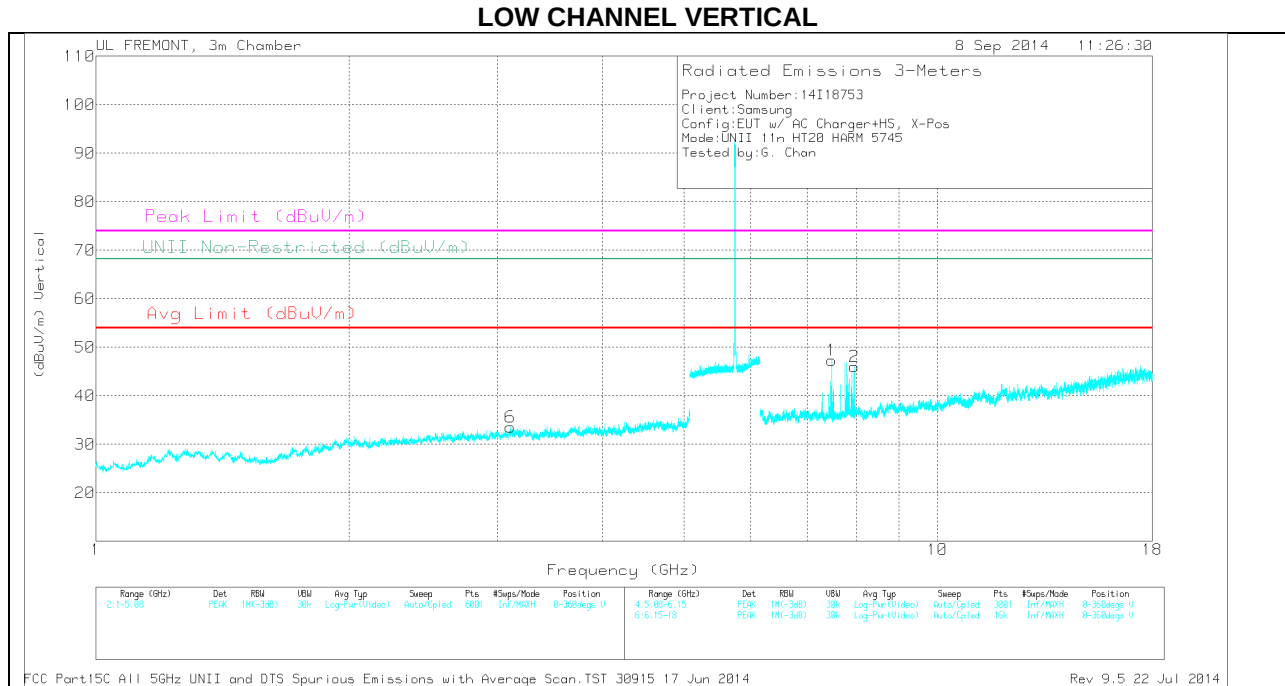
FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013

10.2.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.8 GHz BAND HARMONICS AND SPURIOUS EMISSIONS

LOW 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.

LOW CHANNEL DATA

TRACE MARKERS

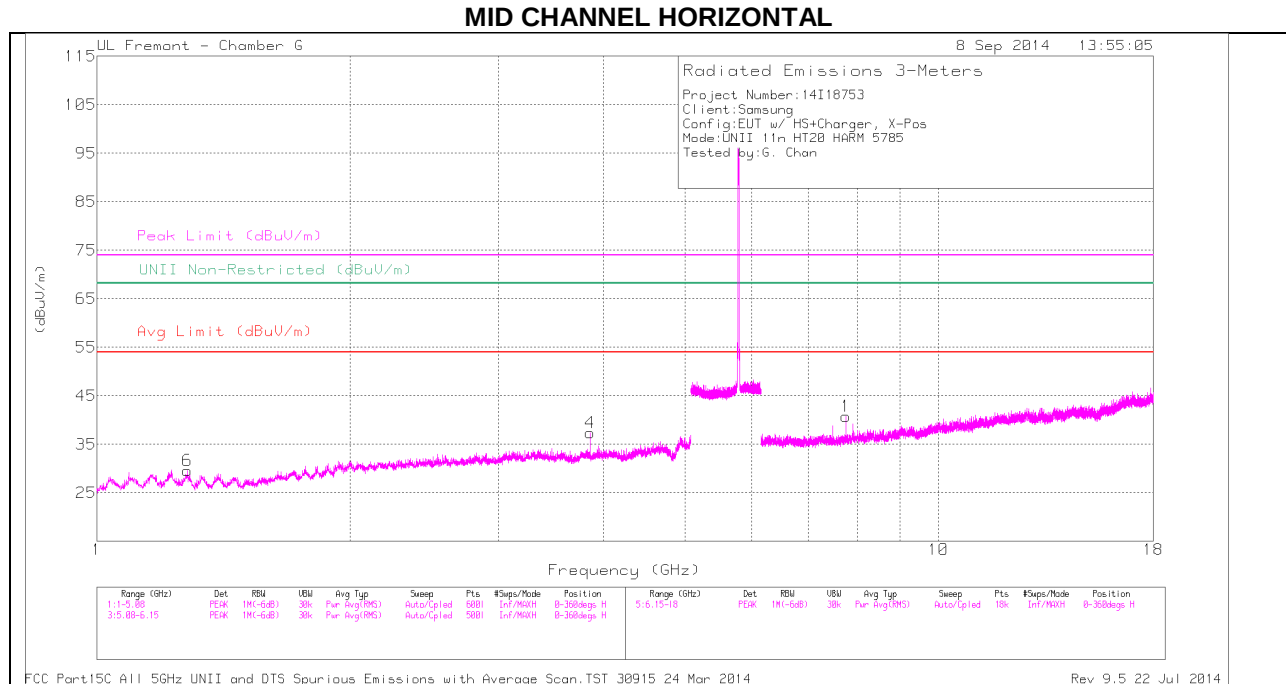
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	1.924	32.97	PK	31.3	-32.5	0	31.77	-	-	-	-	68.2	-36.43	0-360	200	H
6	3.107	32.54	PK	33.1	-32.1	0	33.54	-	-	-	-	68.2	-34.66	0-360	100	V
4	3.83	34.82	PK	33.2	-31.2	0	36.82	-	-	74	-37.18	-	-	0-360	100	H
1	7.487	40.58	PK	35.7	-28.9	0	47.38	-	-	74	-26.62	-	-	0-360	200	V
3	7.677	34.09	PK	35.8	-28.8	0	41.09	-	-	74	-32.91	-	-	0-360	200	H
2	7.959	38.93	PK	35.8	-28.7	0	46.03	-	-	-	-	68.2	-22.17	0-360	100	V

PK - Peak detector

RADIATED EMISSIONS

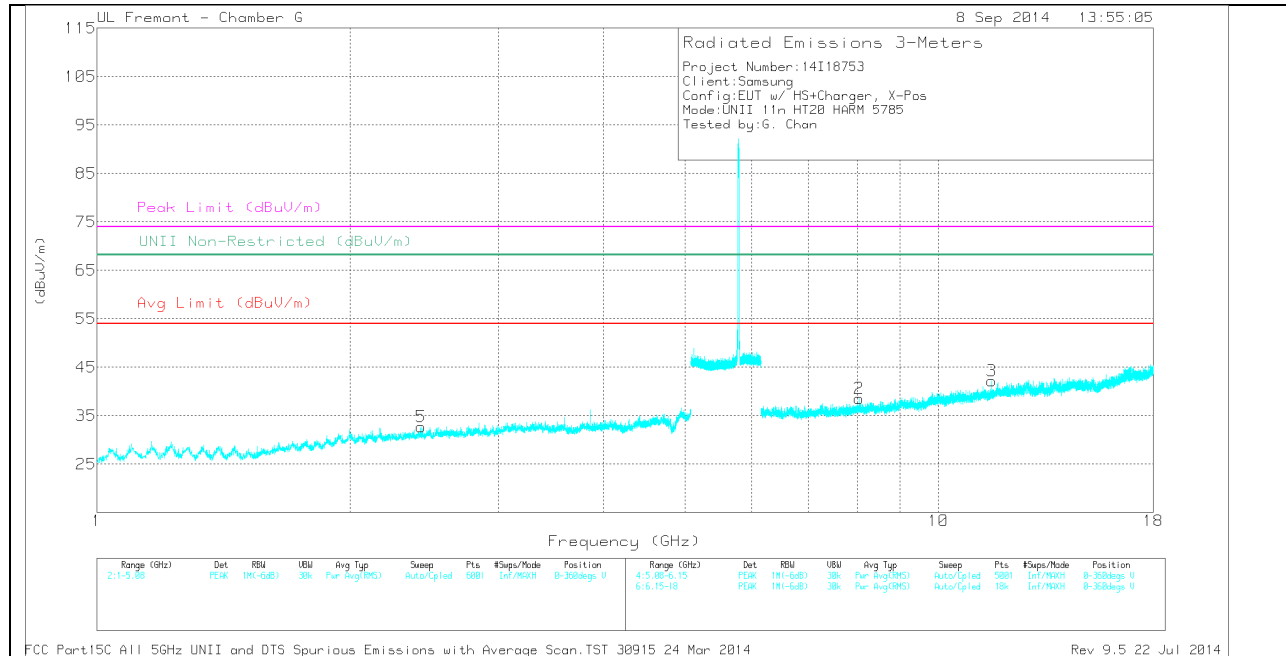
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.486	43.17	PK1	35.7	-28.9	0	49.97	-	-	74	-24.03	-	-	67	274	V
7.486	27.32	AD1	35.7	-28.9	.31	34.36	54	-19.64	-	-	-	-	67	274	V

FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013



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 VERTICAL



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

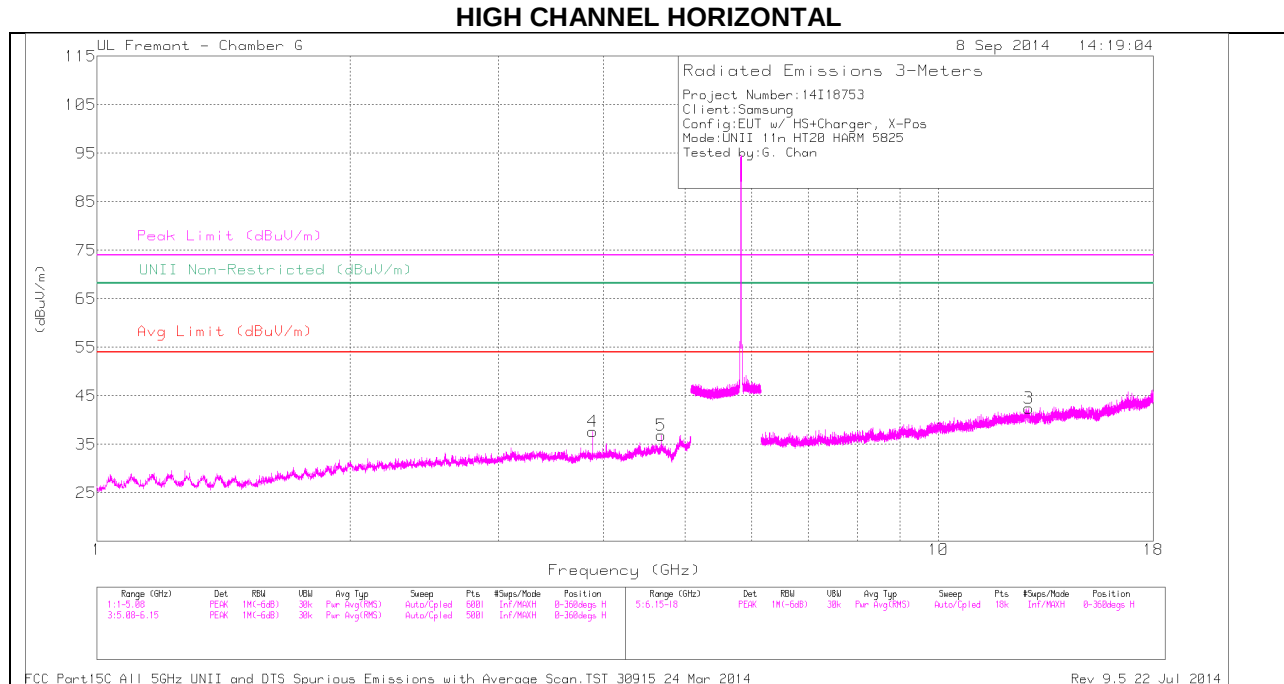
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 3.857	37.84	PK	33.1	-33.5	0	37.44	-	-	74	-36.56	-	-	0-360	101	H
6	* 1.281	36.48	PK	29	-35.9	0	29.58	-	-	74	-44.42	-	-	0-360	201	H
2	* 8.049	32.76	PK	35.8	-30	0	38.56	-	-	74	-35.44	-	-	0-360	201	V
3	* 11.561	30.72	PK	38.4	-26.9	0	42.22	-	-	74	-31.78	-	-	0-360	201	V
5	2.429	35.32	PK	31.9	-34.5	0	32.72	-	-	-	-	68.2	-35.48	0-360	101	V
1	7.765	36.01	PK	35.7	-30.9	0	40.81	-	-	-	-	68.2	-27.39	0-360	101	H

PK - Peak detector

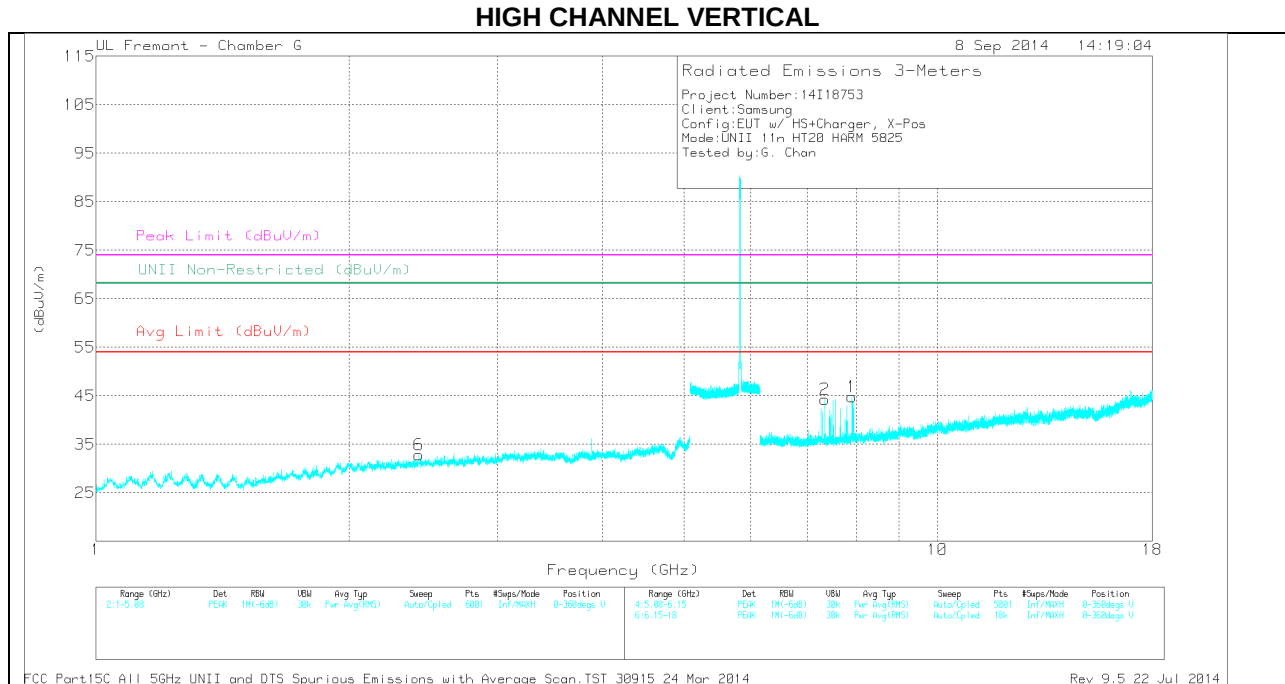
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.763	27.99	AD1	35.7	-30.9	.31	33.03	-	-	-	-	-	-	311	276	H
7.764	39.65	PK1	35.7	-30.9	0	44.45	-	-	-	-	68.2	-23.75	311	276	H

FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013



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 T862 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 3.883	38.03	PK	33.2	-33.6	0	37.63	-	-	74	-36.37	-	-	0-360	100	H
5	* 4.681	35.86	PK	34	-33	0	36.86	-	-	74	-37.14	-	-	0-360	201	H
2	* 7.346	40.12	PK	35.6	-31.4	0	44.32	-	-	74	-29.68	-	-	0-360	201	V
6	2.421	35.5	PK	31.8	-34.4	0	32.9	-	-	-	-	68.2	-35.3	0-360	101	V
1	7.912	39.7	PK	35.8	-30.7	0	44.8	-	-	-	-	68.2	-23.4	0-360	101	V
3	12.796	29.41	PK	39.1	-26	0	42.51	-	-	-	-	68.2	-25.69	0-360	101	H

PK - Peak detector

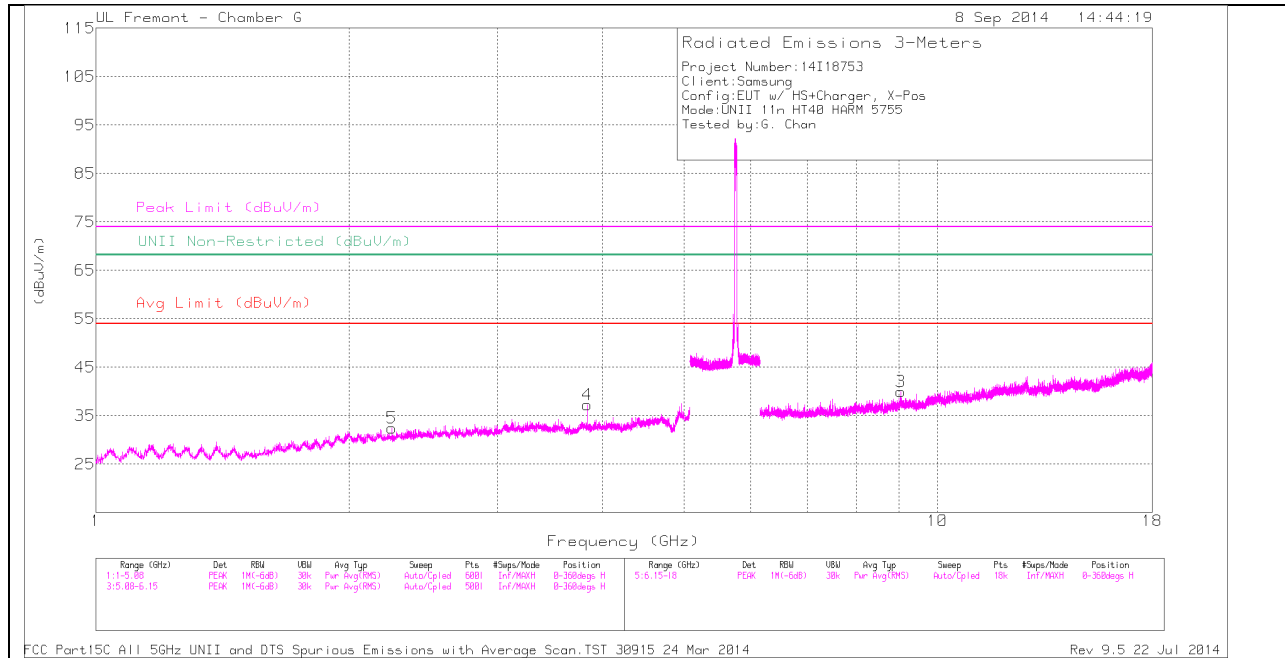
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.91	39.66	PK1	35.8	-30.6	0	44.86	-	-	-	-	68.2	-23.34	74	272	V
7.912	28.41	AD1	35.8	-30.7	.31	33.75	-	-	-	-	-	-	74	272	V

FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013

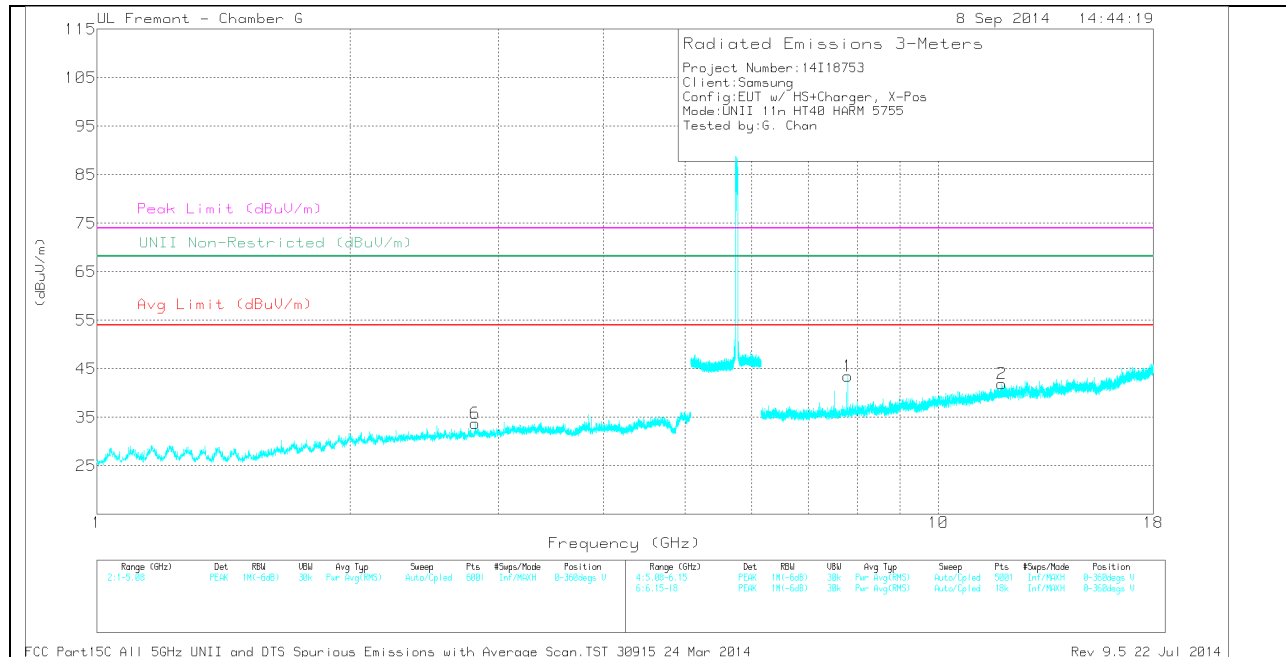
10.2.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.8 GHz BAND HARMONICS AND SPURIOUS EMISSIONS

LOW 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.

LOW CHANNEL VERTICAL



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 T862 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 3.837	37.61	PK	33.1	-33.4	0	37.31	-	-	74	-36.69	-	-	0-360	101	H
5	* 2.248	35.61	PK	31.5	-34.7	0	32.41	-	-	74	-41.59	-	-	0-360	201	H
6	* 2.817	35.23	PK	32.3	-33.8	0	33.73	-	-	74	-40.27	-	-	0-360	201	V
3	* 9.045	32.01	PK	36.4	-28.4	0	40.01	-	-	74	-33.99	-	-	0-360	201	H
2	* 11.887	30.09	PK	38.8	-27	0	41.89	-	-	74	-32.11	-	-	0-360	201	V
1	7.799	38.29	PK	35.7	-30.5	0	43.49	-	-	-	-	68.2	-24.71	0-360	201	V

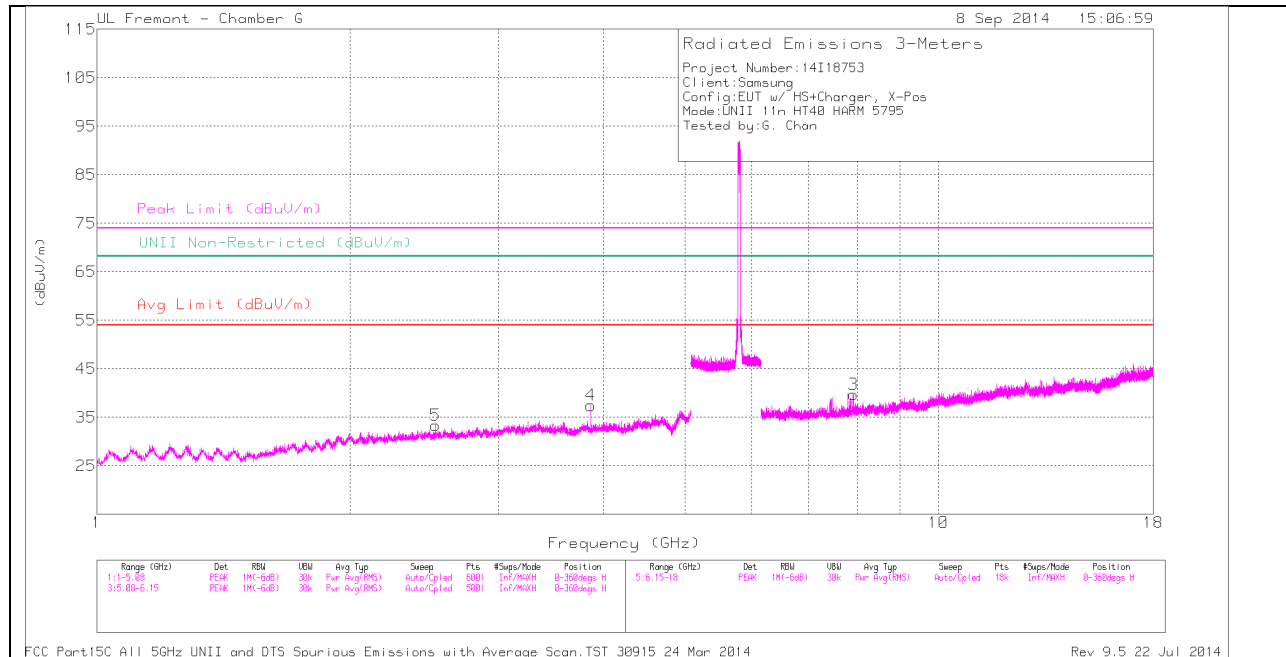
PK - Peak detector

RADIATED EMISSIONS

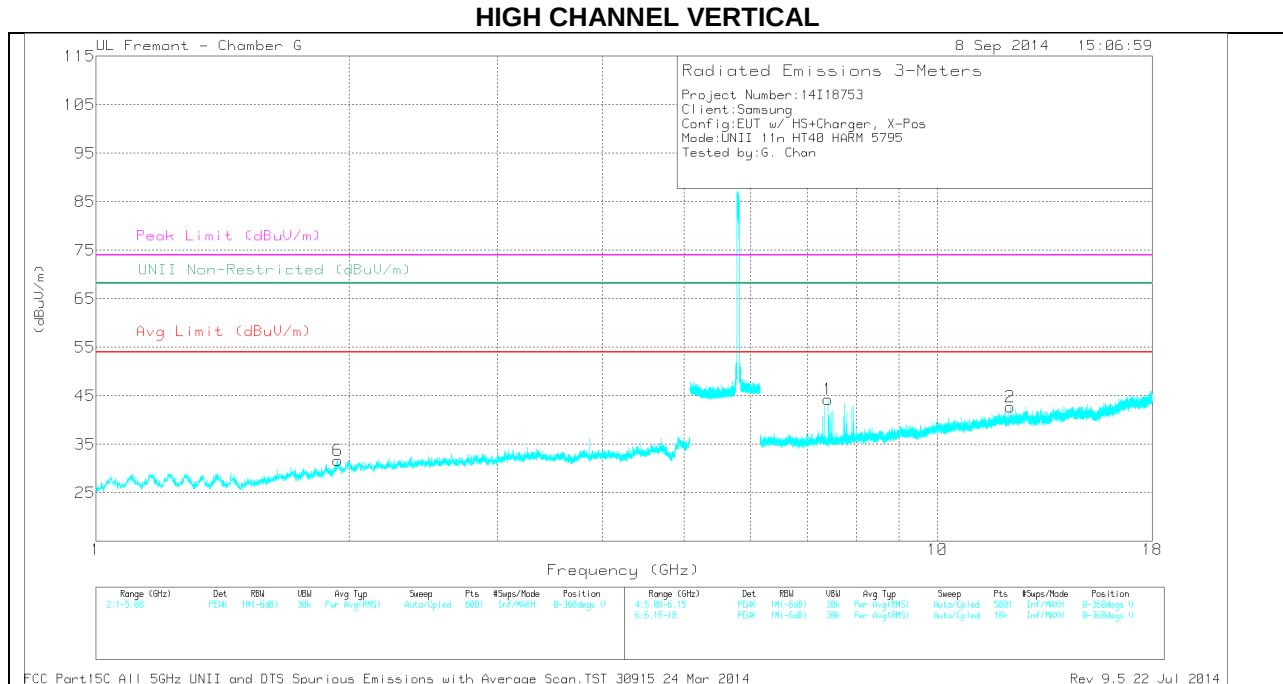
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7.798	39.5	PK1	35.7	-30.5	0	44.7	-	-	-	-	68.2	-23.5	21	342	V
7.798	28.2	AD1	35.7	-30.5	.61	33.89	-	-	-	-	-	-	21	342	V

FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013

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 T862 (dB/m)	Amp/Chl/ Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 3.863	37.86	PK	33.1	-33.5	0	37.46	-	-	74	-36.54	-	-	0-360	101	H
1	* 7.415	39.92	PK	35.6	-31.3	0	44.22	-	-	74	-29.78	-	-	0-360	201	V
2	* 12.206	30.1	PK	38.8	-26.2	0	42.7	-	-	74	-31.3	-	-	0-360	101	V
6	1.938	35.4	PK	30.9	-34.6	0	31.7	-	-	-	-	68.2	-36.5	0-360	201	V
5	2.525	35.77	PK	32	-34.4	0	33.37	-	-	-	-	68.2	-34.83	0-360	101	H
3	7.92	34.78	PK	35.8	-30.8	0	39.78	-	-	-	-	68.2	-28.42	0-360	101	H

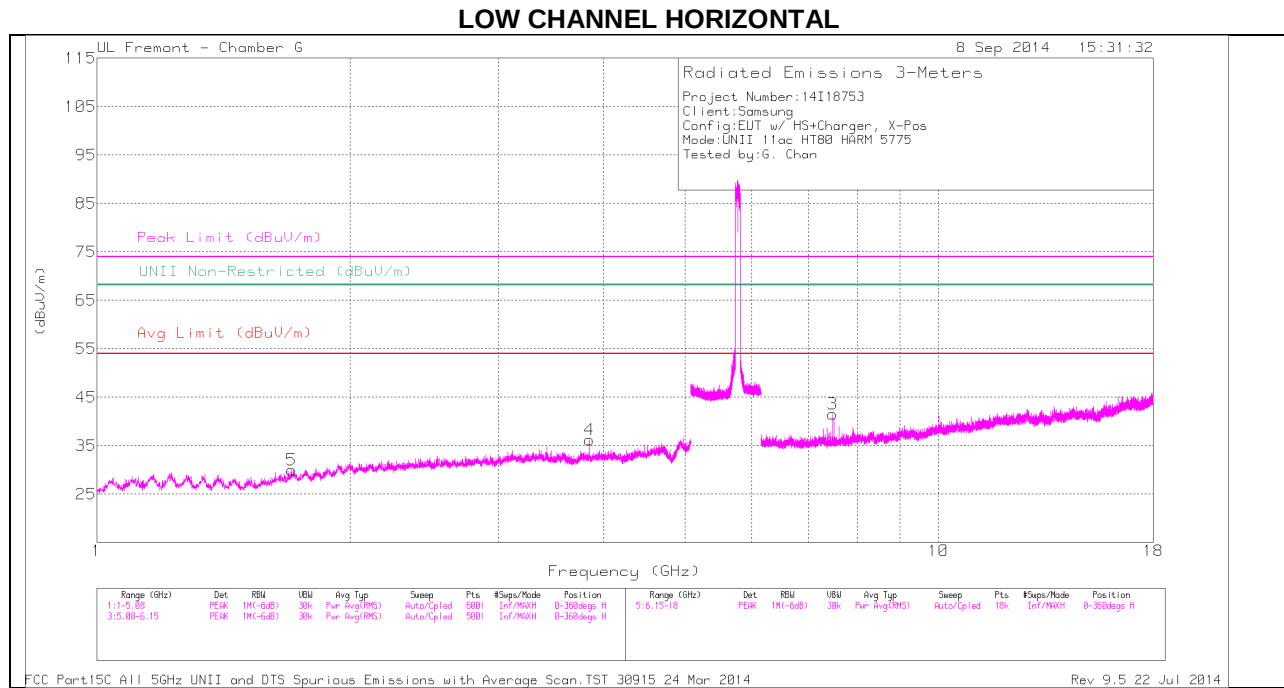
PK - Peak detector

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Chl/ Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.414	39.46	PK1	35.6	-31.3	0	43.76	-	-	74	-30.24	-	-	302	109	V
* 7.415	28.06	AD1	35.6	-31.3	.61	32.85	54	-21.15	-	-	-	-	302	109	V

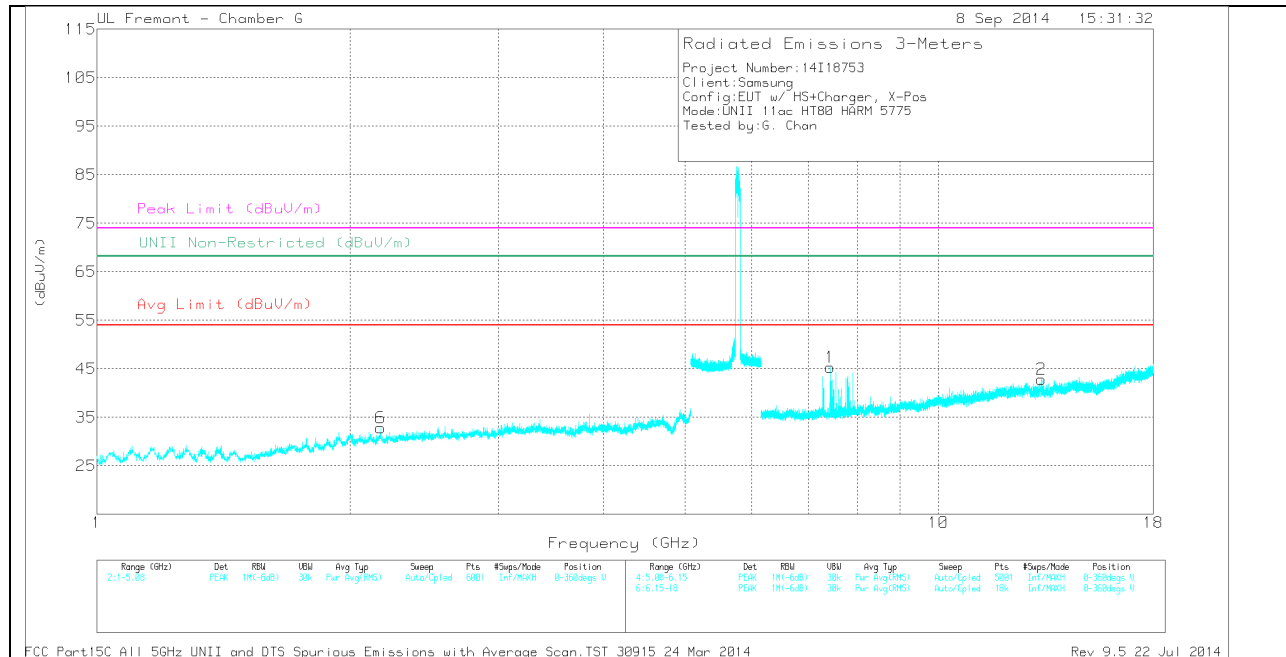
FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013

10.2.4. TX ABOVE 1 GHz 802.11ac HT80 MODE IN THE 5.8 GHz BAND 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.

LOW CHANNEL VERTICAL



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 T862 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 3.85	36.64	PK	33.1	-33.5	0	36.24	-	-	74	-37.76	-	-	0-360	101	H
5	* 1.704	35.03	PK	29.3	-34.3	0	30.03	-	-	74	-43.97	-	-	0-360	201	H
3	* 7.486	37.27	PK	35.6	-31.3	0	41.57	-	-	74	-32.43	-	-	0-360	201	H
1	* 7.434	40.69	PK	35.6	-31	0	45.29	-	-	74	-28.71	-	-	0-360	201	V
2	* 13.255	29.51	PK	39	-25.7	0	42.81	-	-	74	-31.19	-	-	0-360	201	V
6	2.173	36.18	PK	31.4	-34.7	0	32.88	-	-	-	-	68.2	-35.32	0-360	201	V

PK - Peak detector

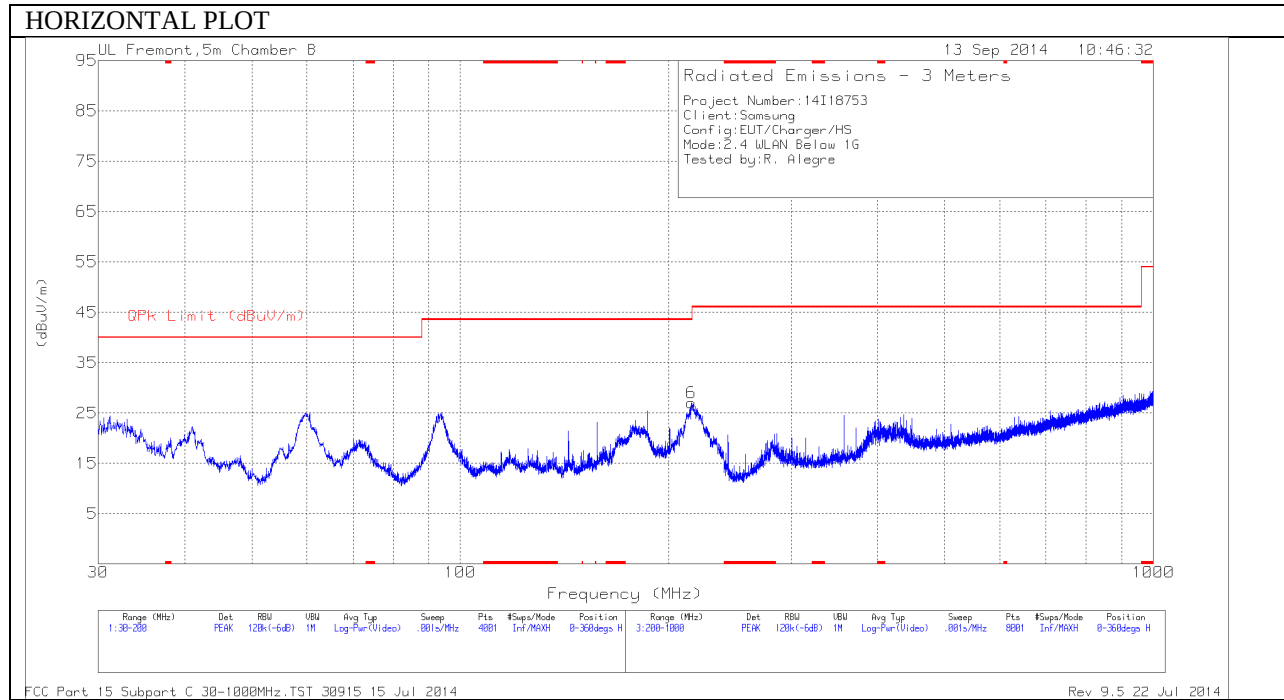
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.434	39.95	PK1	35.6	-31	0	44.55	-	-	74	-29.45	-	-	180	243	V
* 7.434	28.42	AD1	35.6	-31	1.83	34.51	54	-19.49	-	-	-	-	180	243	V

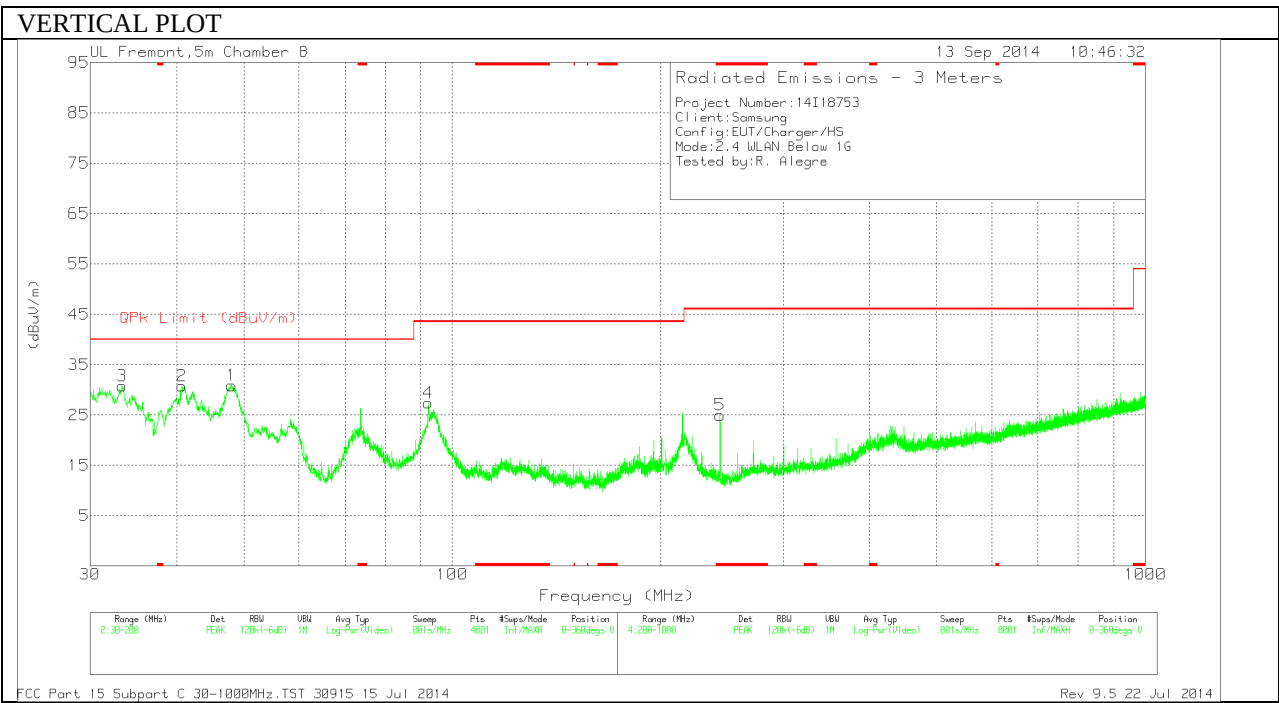
FCC Part15 Subpart C T186 2400MHz Spurious Emissions.TST 12746Rev 9.5 12 Jun 2013

10.3. 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)



Below 1G Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T243 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	* 243.4	39.67	PK	11.7	-26.4	24.97	46.02	-21.05	0-360	200	V
3	33.3575	40.45	PK	19	-28.7	30.75	40	-9.25	0-360	101	V
2	40.71	45.98	PK	13.4	-28.6	30.78	40	-9.22	0-360	101	V
1	47.9775	50.66	PK	8.8	-28.6	30.86	40	-9.14	0-360	101	V
4	92.3475	47.3	PK	8.2	-28.1	27.4	43.52	-16.12	0-360	101	V
6	215.6	43.23	PK	10.6	-26.8	27.03	43.52	-16.49	0-360	101	H

11. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

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 2009.

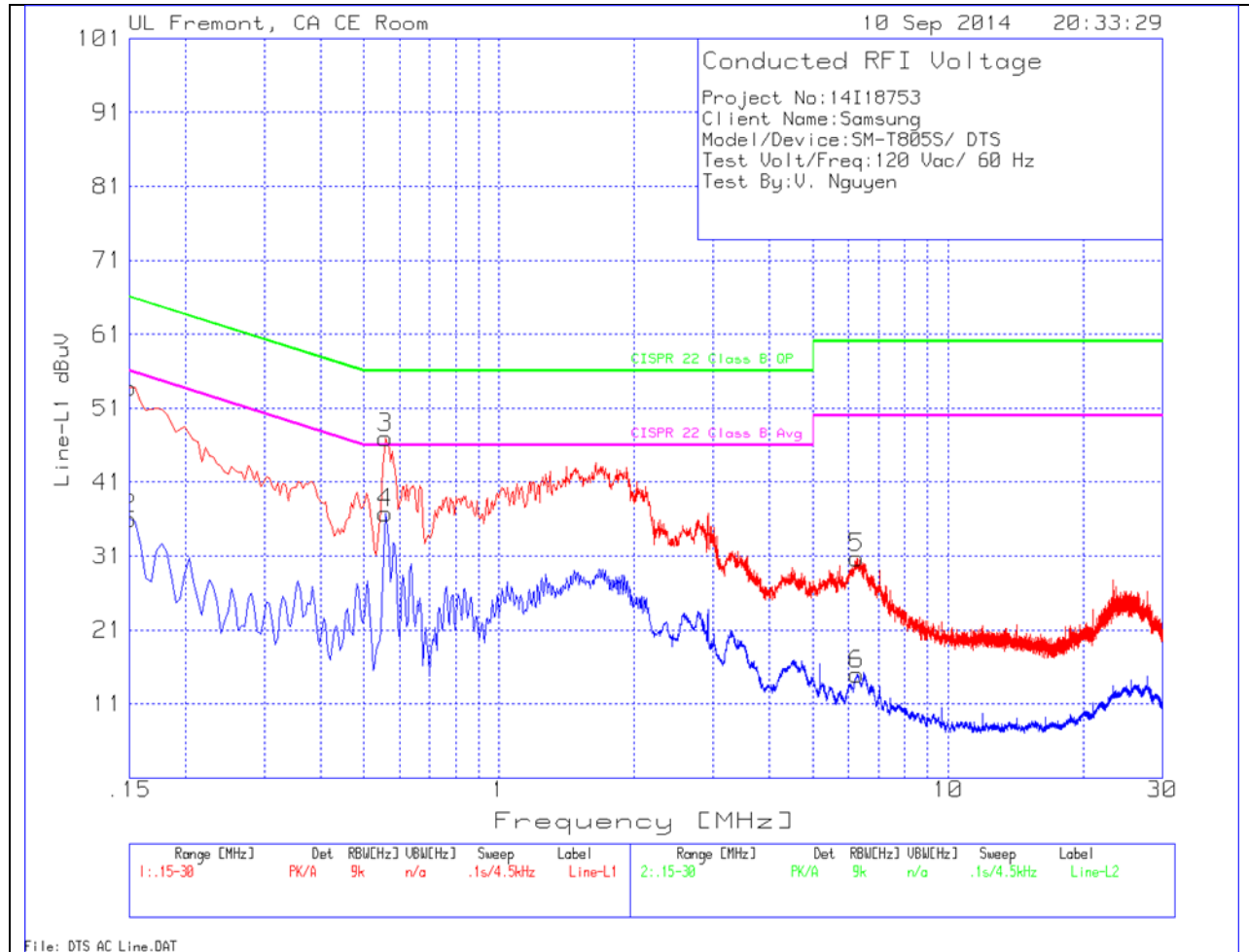
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

6 WORST EMISSIONS

LINE 1 PLOT

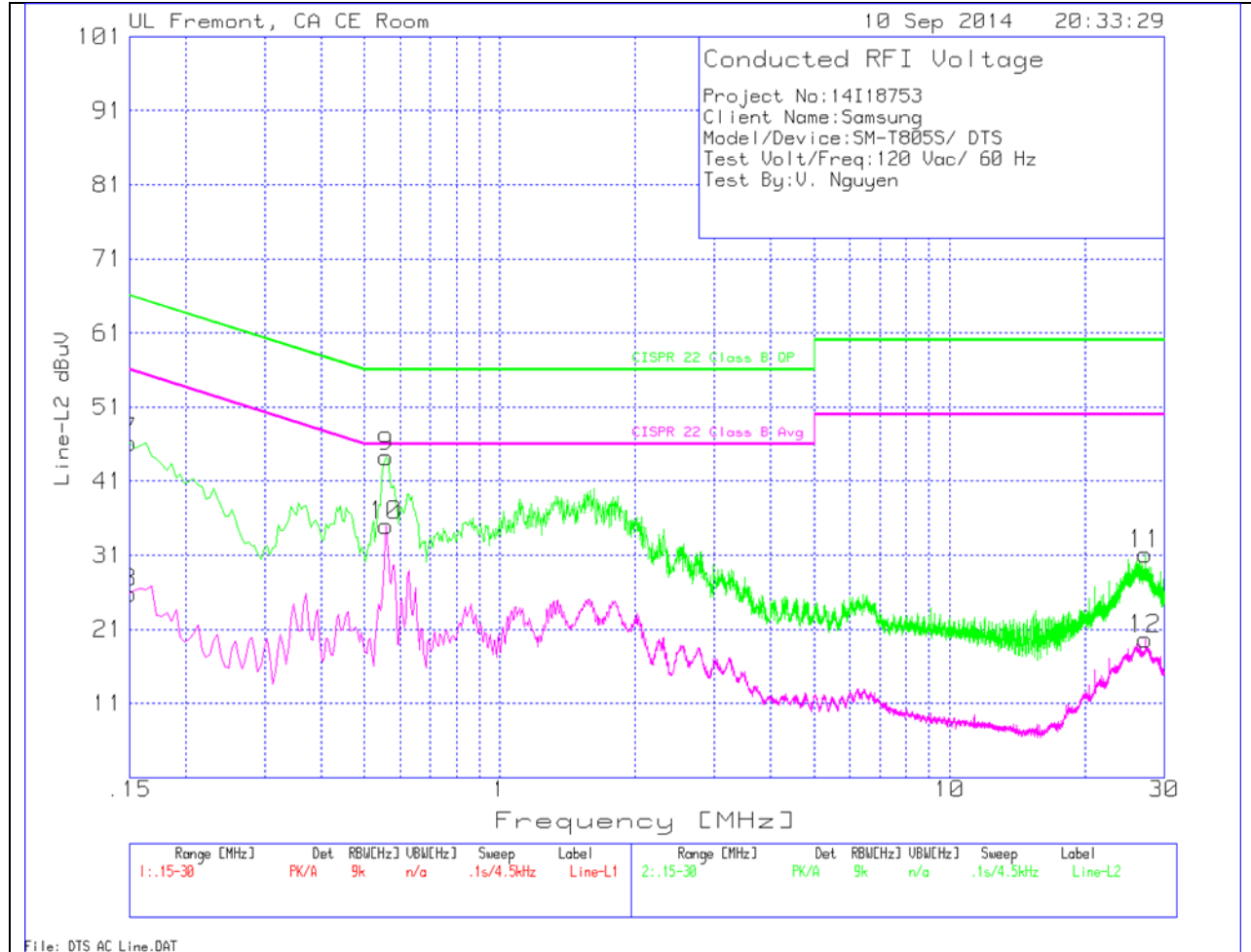


LINE 1 RESULTS

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L1 (dB)	LC Cables 1&3 (dB)	Corrected Reading dBuV	CISPR 22 Class B QP	Margin to Limit (dB)	CISPR 22 Class B Avg	Margin to Limit (dB)
1	.15	52.43	PK	1.4	0	53.83	66	-12.17	-	-
2	.15	34.68	Av	1.4	0	36.08	-	-	56	-19.92
3	.5595	46.65	PK	.3	0	46.95	56	-9.05	-	-
4	.5595	36.45	Av	.3	0	36.75	-	-	46	-9.25
5	6.261	30.39	PK	.2	.1	30.69	60	-29.31	-	-
6	6.261	14.65	Av	.2	.1	14.95	-	-	50	-35.05

LINE 2 PLOT



LINE 2 RESULTS

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L2 (dB)	LC Cables 2&3 (dB)	Corrected Reading dBuV	CISPR 22 Class B QP	Margin to Limit (dB)	CISPR 22 Class B Avg	Margin to Limit (dB)
7	.15	44.75	PK	1.5	0	46.25	66	-19.75	-	-
8	.15	24.33	Av	1.5	0	25.83	-	-	56	-30.17
9	.5595	43.94	PK	.3	0	44.24	56	-11.76	-	-
10	.5595	34.64	Av	.3	0	34.94	-	-	46	-11.06
11	27.1635	30.55	PK	.3	.3	31.15	60	-28.85	-	-
12	27.1635	19.03	Av	.3	.3	19.63	-	-	50	-30.37