Appendix for Test report

Appendix A: DTS (6 dB) Bandwidth

In this document, the "DTS6dBBW" refers to the measured "DTS (6 dB) Bandwidth" value. In this Appendix, the "fc(DTS6dBBW)" refers to the centre of the measured "DTS6dBBW". The introduction of the "fc(DTS6dBBW)" is due to that other measurements use it as the spectrum analyzer setting.

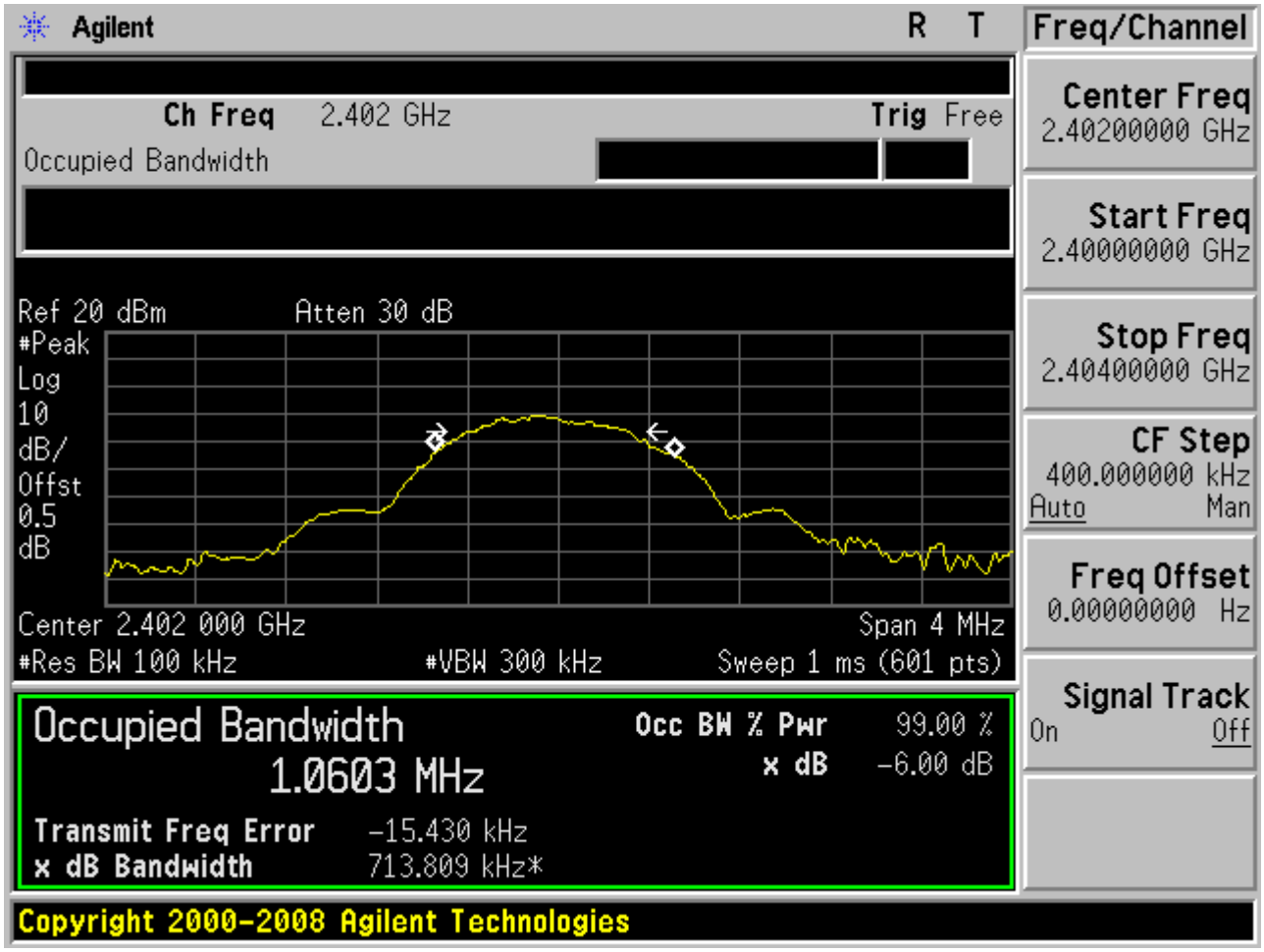
For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain, and used as respective results for each chain.

Part I - Test Results

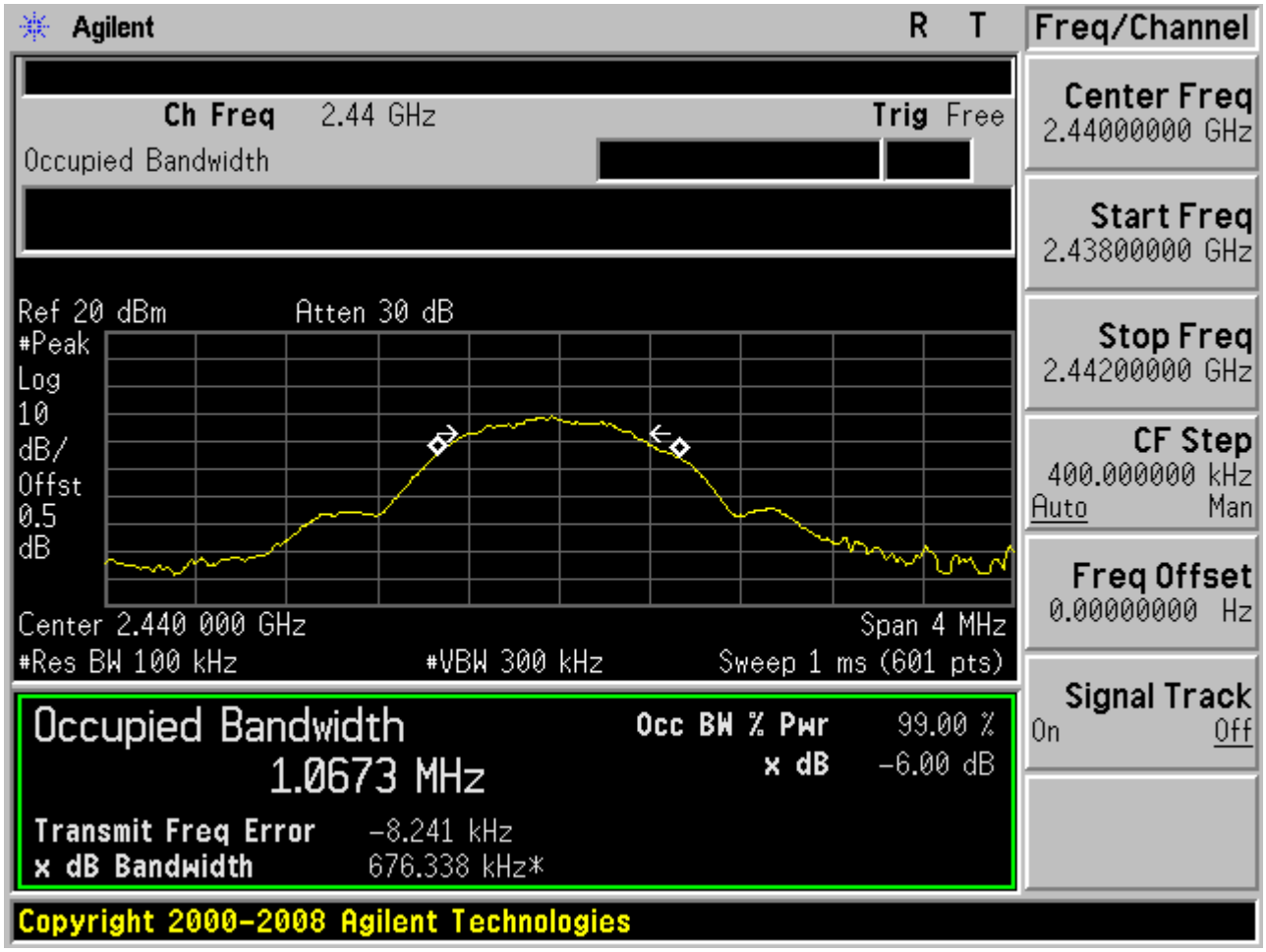
Test Mode	Test Channel	Frequency[MHz]	DTS6dBBW[KHz]	Verdict
TM1_Ch0	L	2402	0.71	pass
TM1_Ch19	M	2440	0.68	pass
TM1_Ch39	H	2480	0.67	pass

Part II - Test Plots

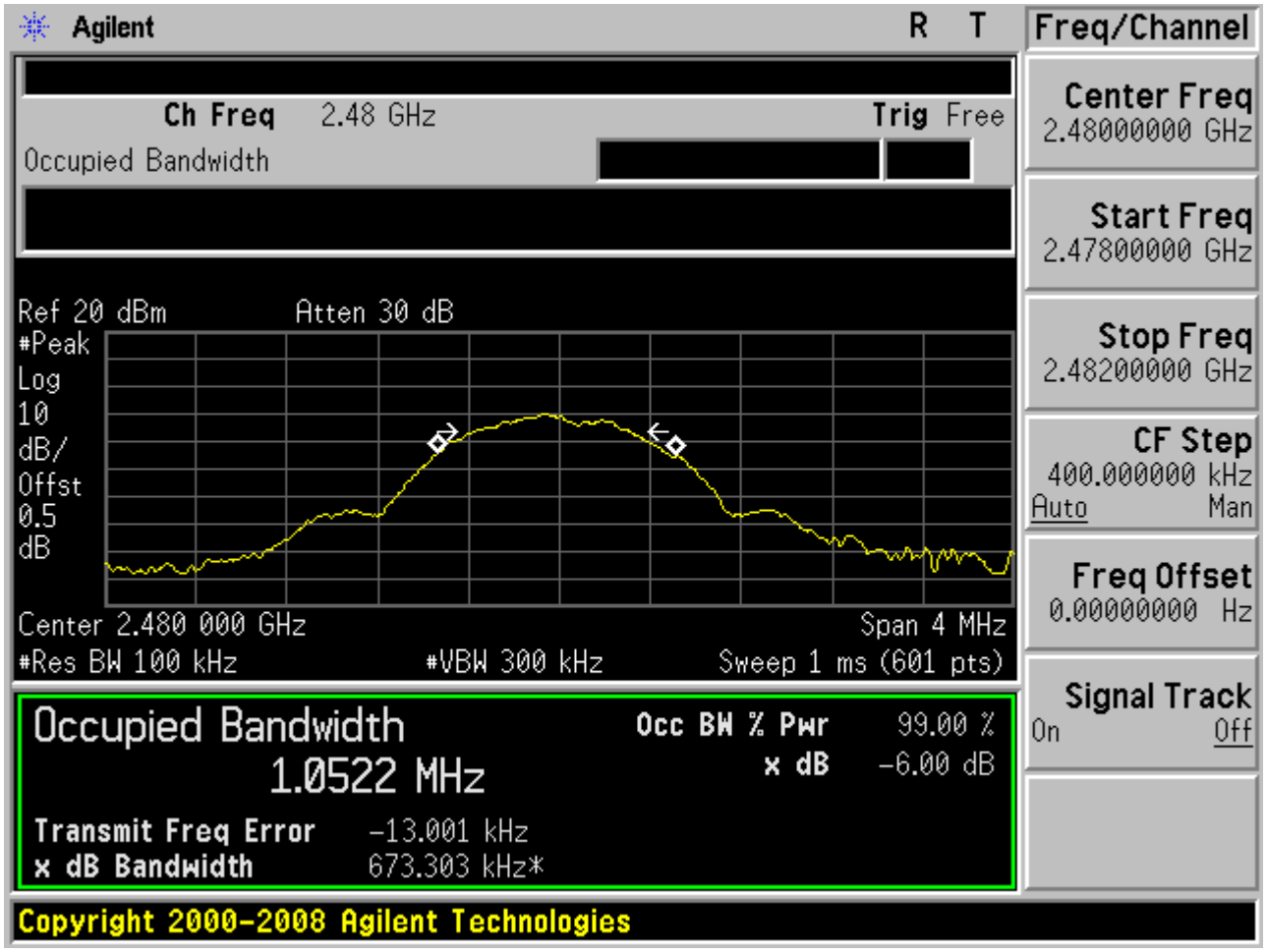
2.1 TM1_Ch0_L @Ant 1



2.3 TM1_Ch19_LM@Ant 1



2.5 TM1_Ch39_LH@Ant 1



Appendix B: Occupied Bandwidth

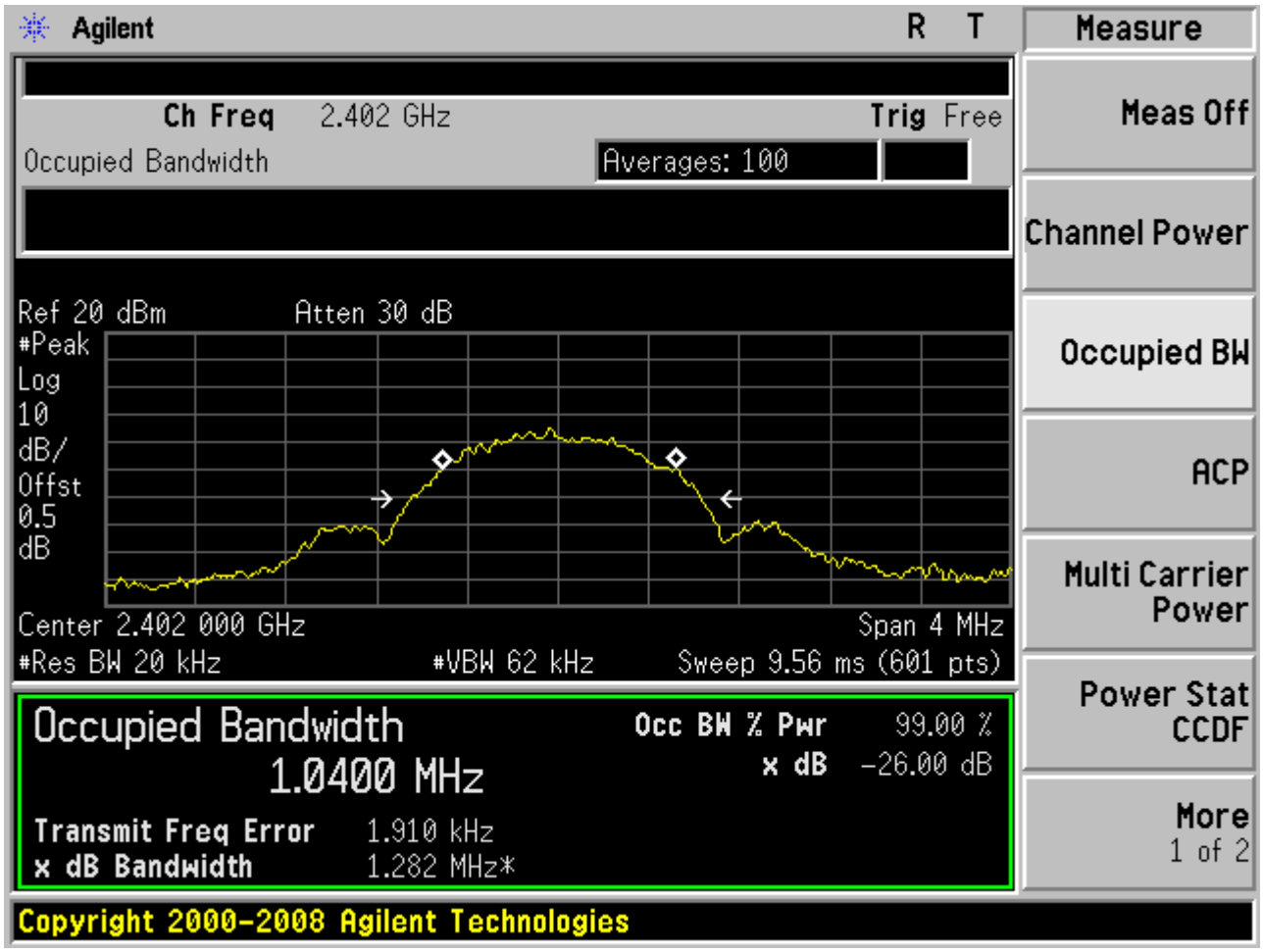
For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain, and used as respective results for each chain.

Part I - Test Results

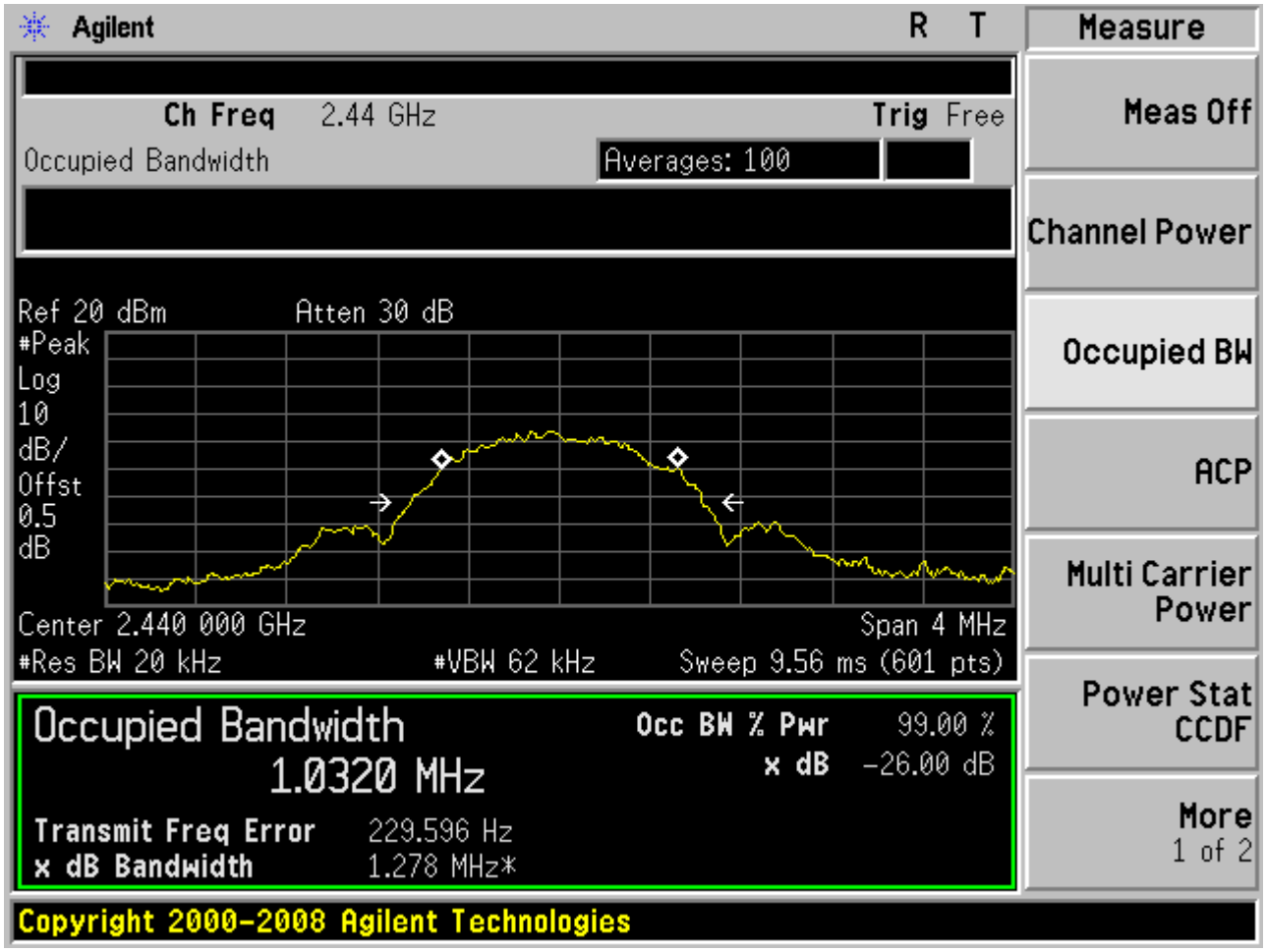
Test Mode	Test Channel	Frequency[MHz]	Occupied Bandwidth [MHz]	Verdict
TM1_Ch0	L	2402	1.04	pass
TM1_Ch19	M	2440	1.03	pass
TM1_Ch39	H	2480	1.03	pass

Part II - Test Plots

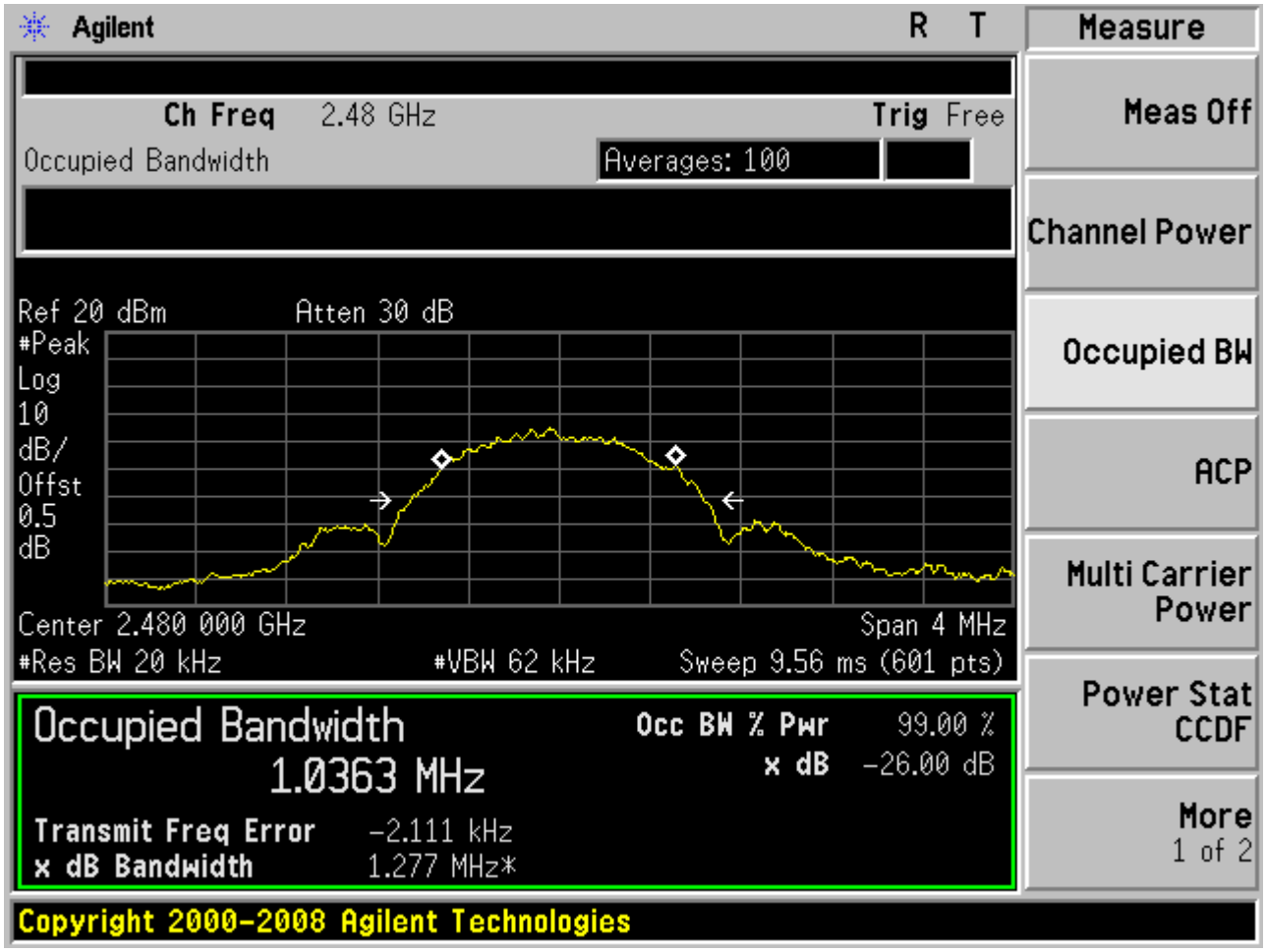
2.1 TM1_Ch0 @Ant 1



2.1 TM1_Ch19@Ant 1



2.1 TM1_Ch39@Ant 1



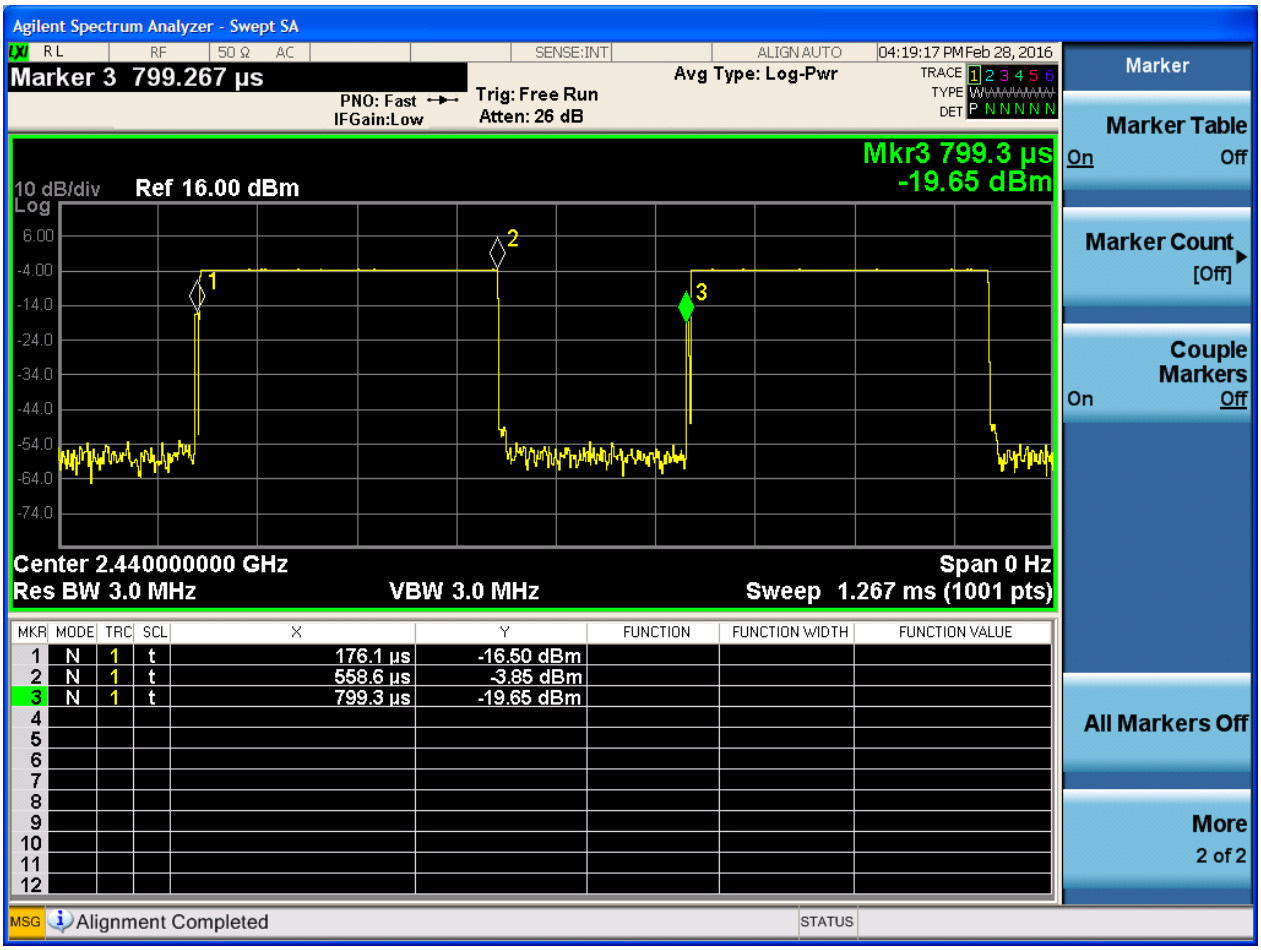
Appendix C: Duty cycle

Part I - Test Results

Test Mode	Test Channel	TX Freq. [MHz]	Duty cycle [%]
TM1_Ch19	M	2440	61.4

Part II - Test Plots

2.1 TM1_Ch19 @Ant 1



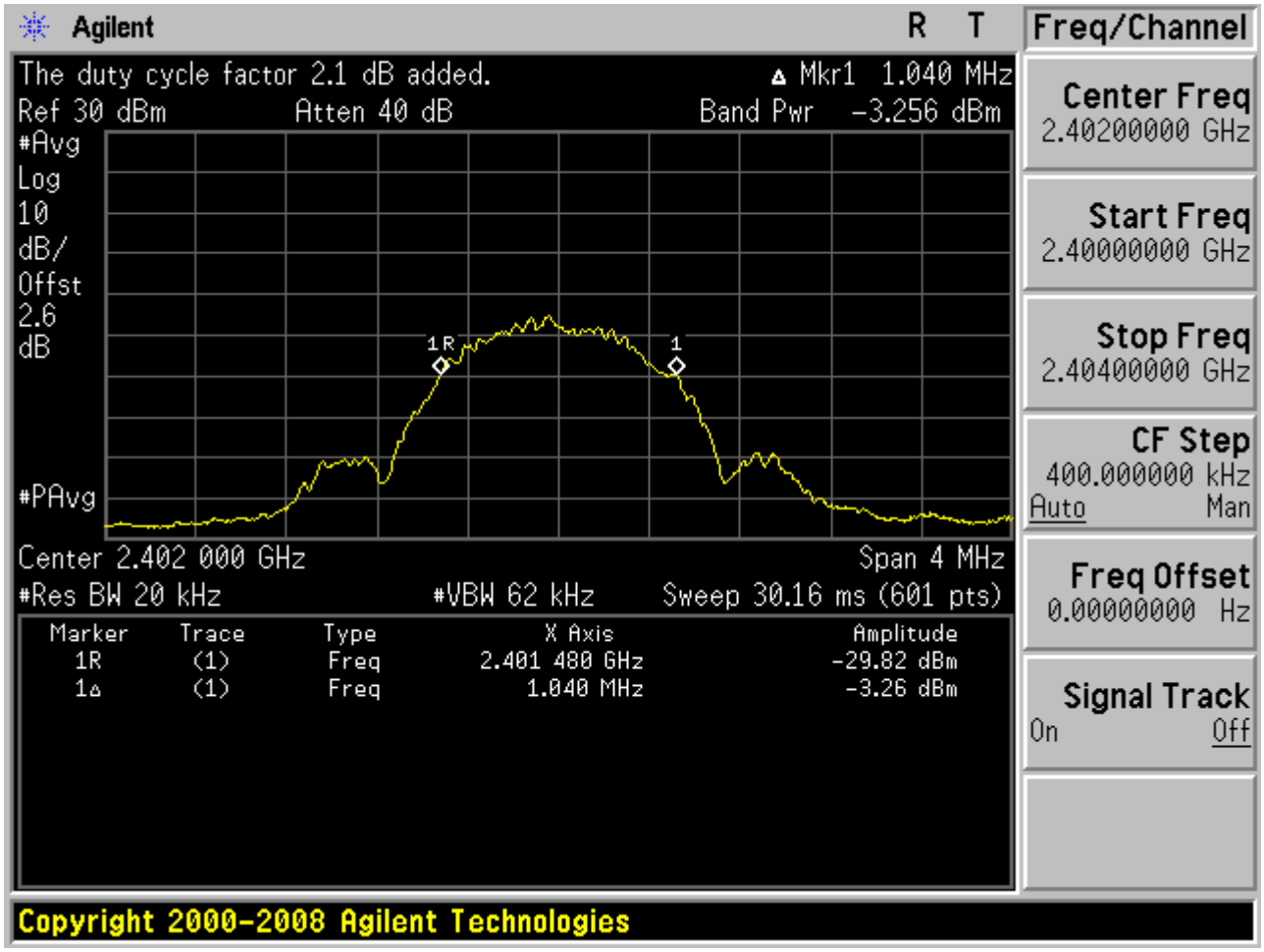
Appendix D: Maximum Conducted Average Output Power

Part I - Test Results

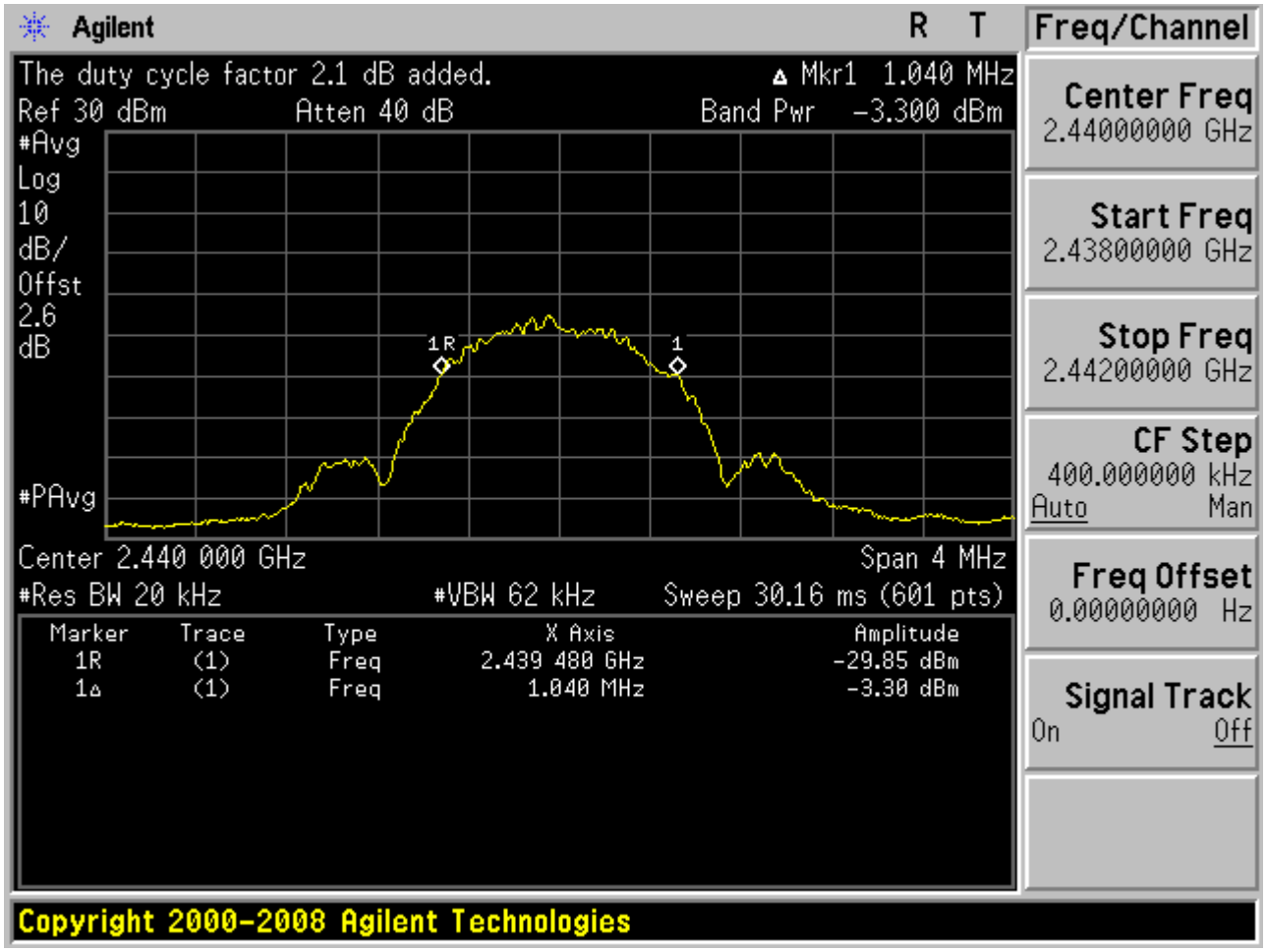
Test Mode	Test Channel	Frequency[MHz]	Power[dBm]	Verdict
TM1_Ch0	L	2402	-3.26	pass
TM1_Ch19	M	2440	-3.30	pass
TM1_Ch39	H	2480	-3.01	pass

Part II - Test Plots

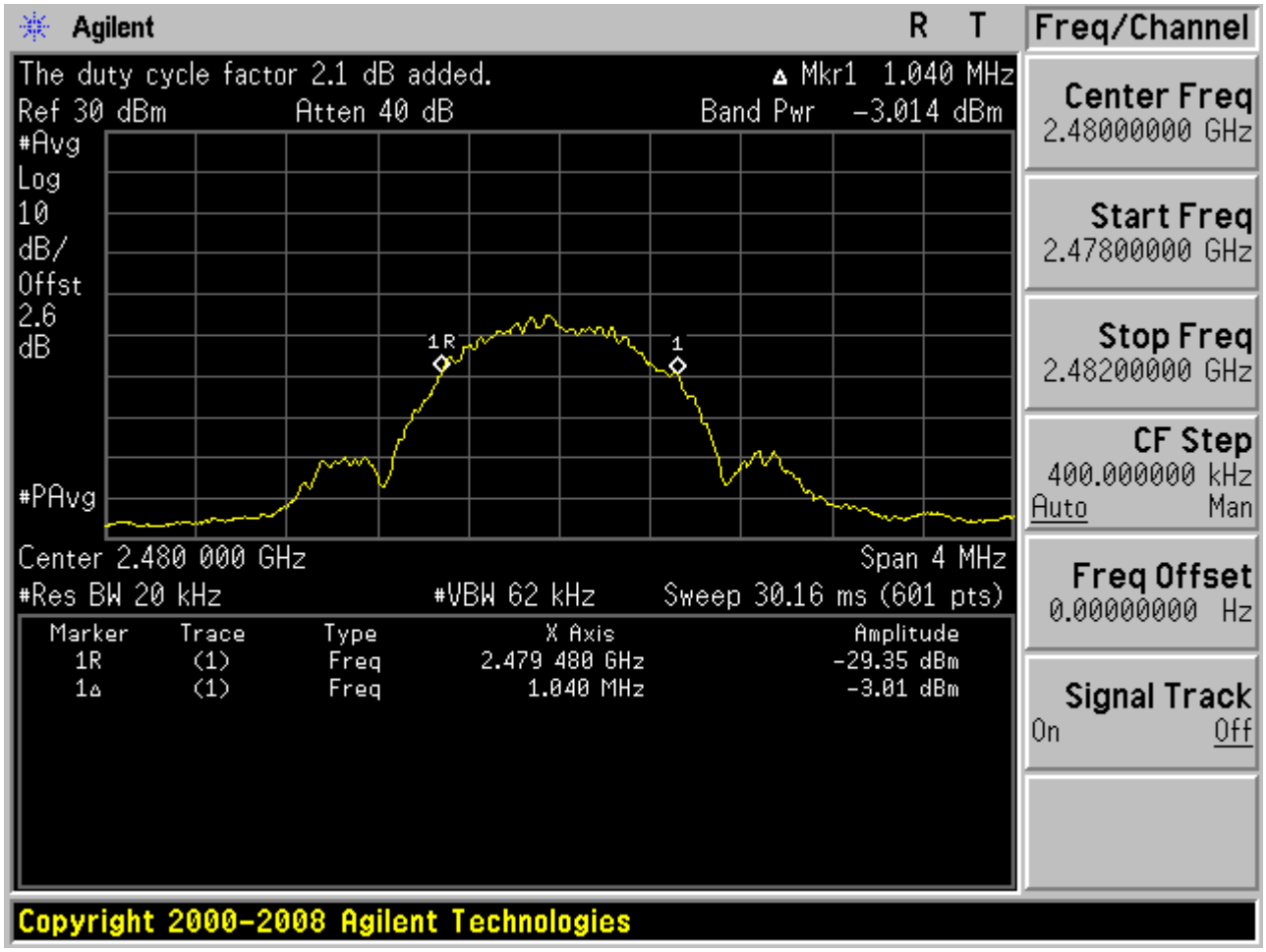
2.1 TM1_Ch0 @Ant 1



2.3 TM1_Ch19@Ant 1



2.5 TM1_Ch39 @Ant 1



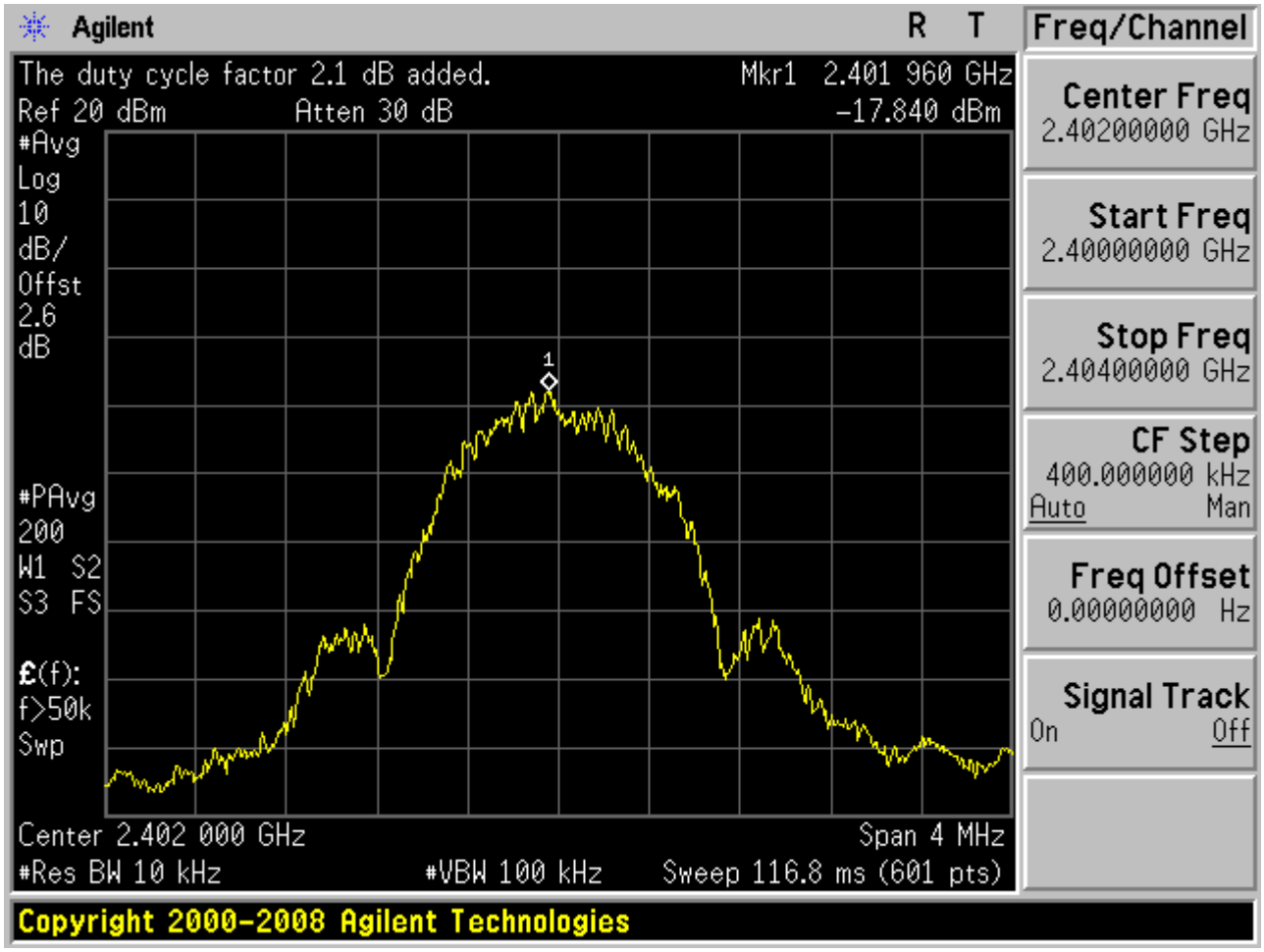
Appendix E: Maximum Power Spectral Density Level

Part I - Test Results

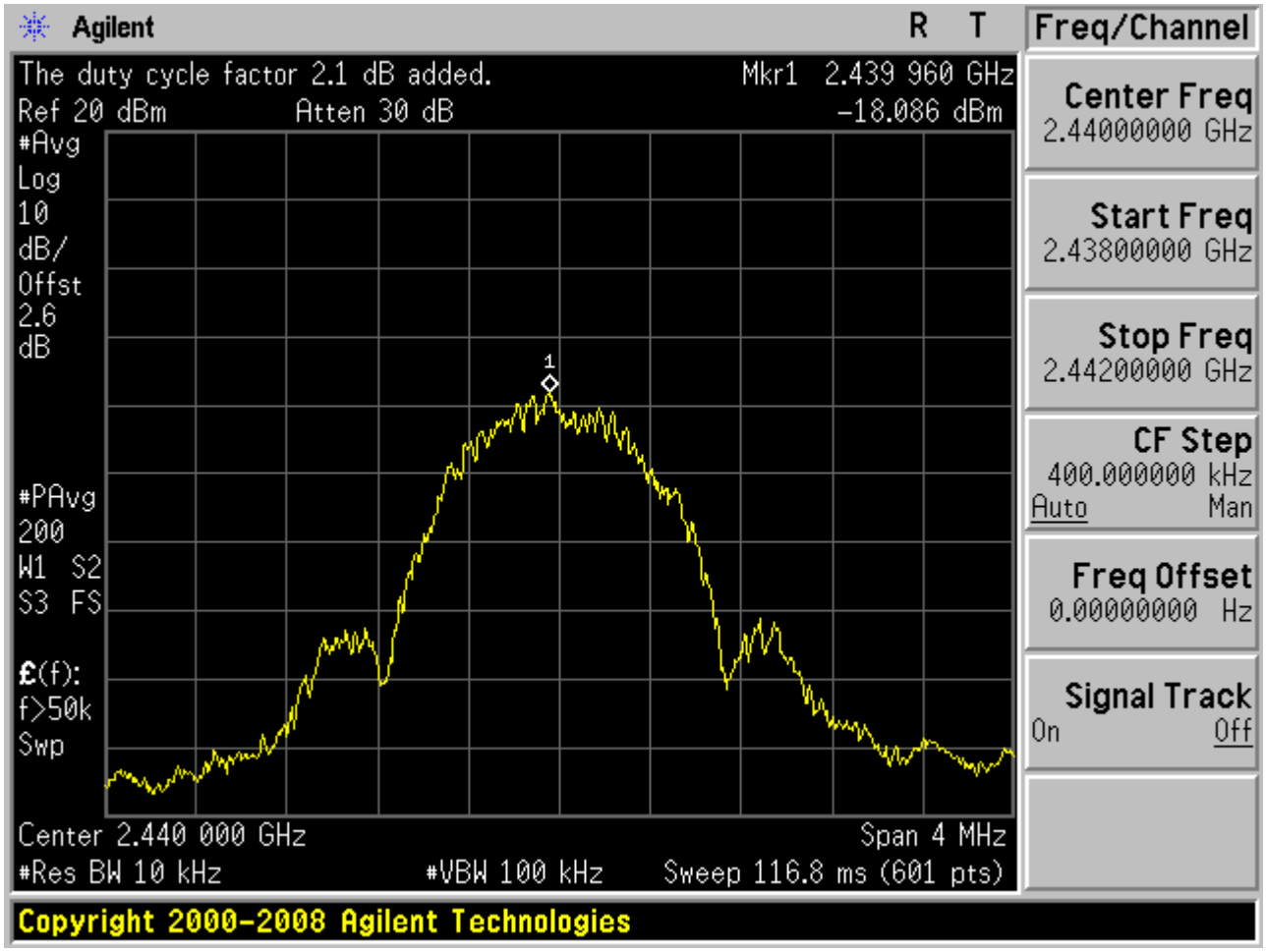
Test Mode	Test Channel	Frequency[MHz]	PD[MHz]	Verdict
TM1_Ch0	L	2402	-17.84	pass
TM1_Ch19	M	2440	-18.09	pass
TM1_Ch39	H	2480	-17.82	pass

Part II - Test Plots

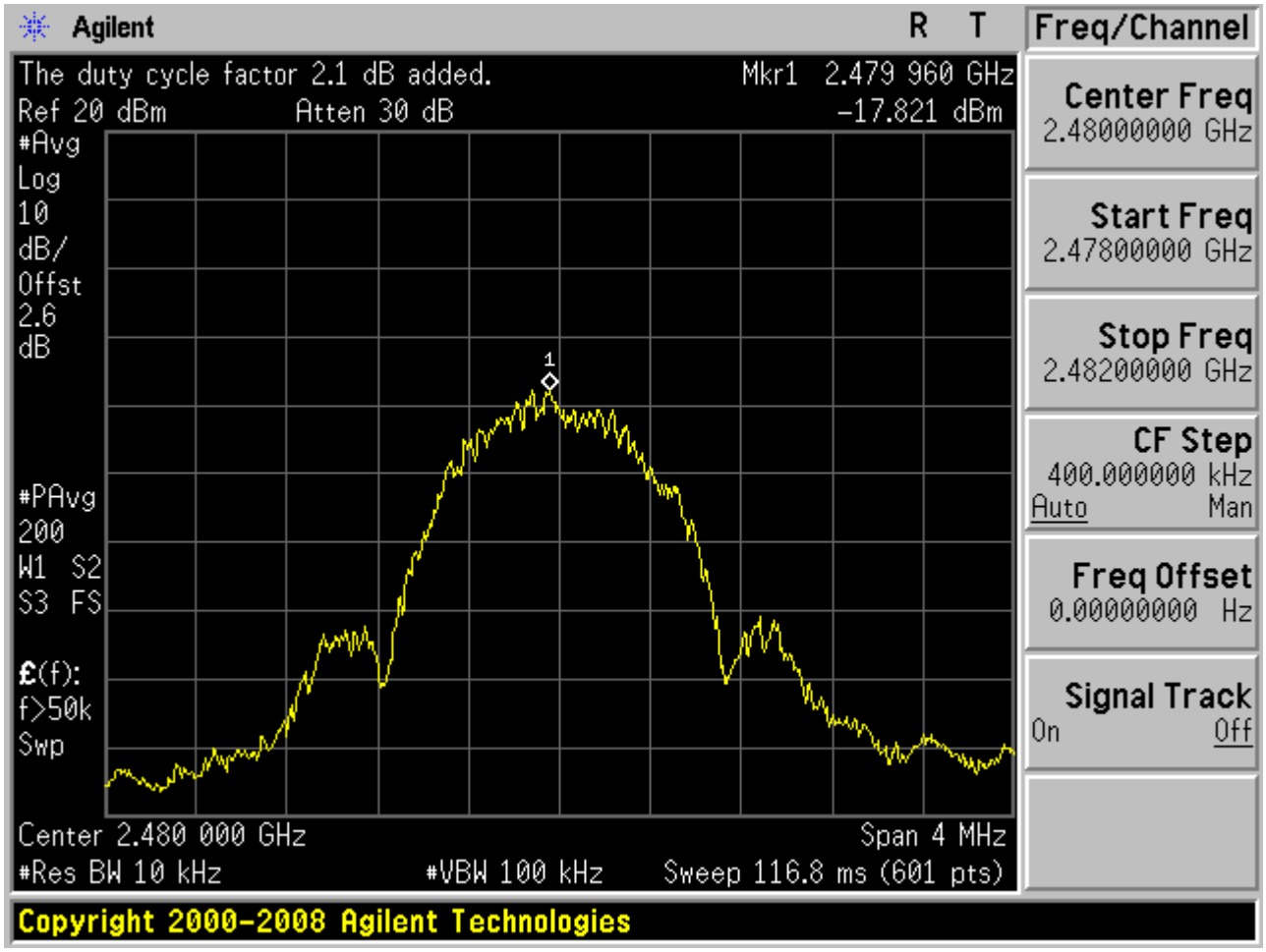
2.1 TM1_Ch0 @Ant 1



2.3 TM1_Ch19@Ant 1



2.5 TM1_Ch0 @Ant 1



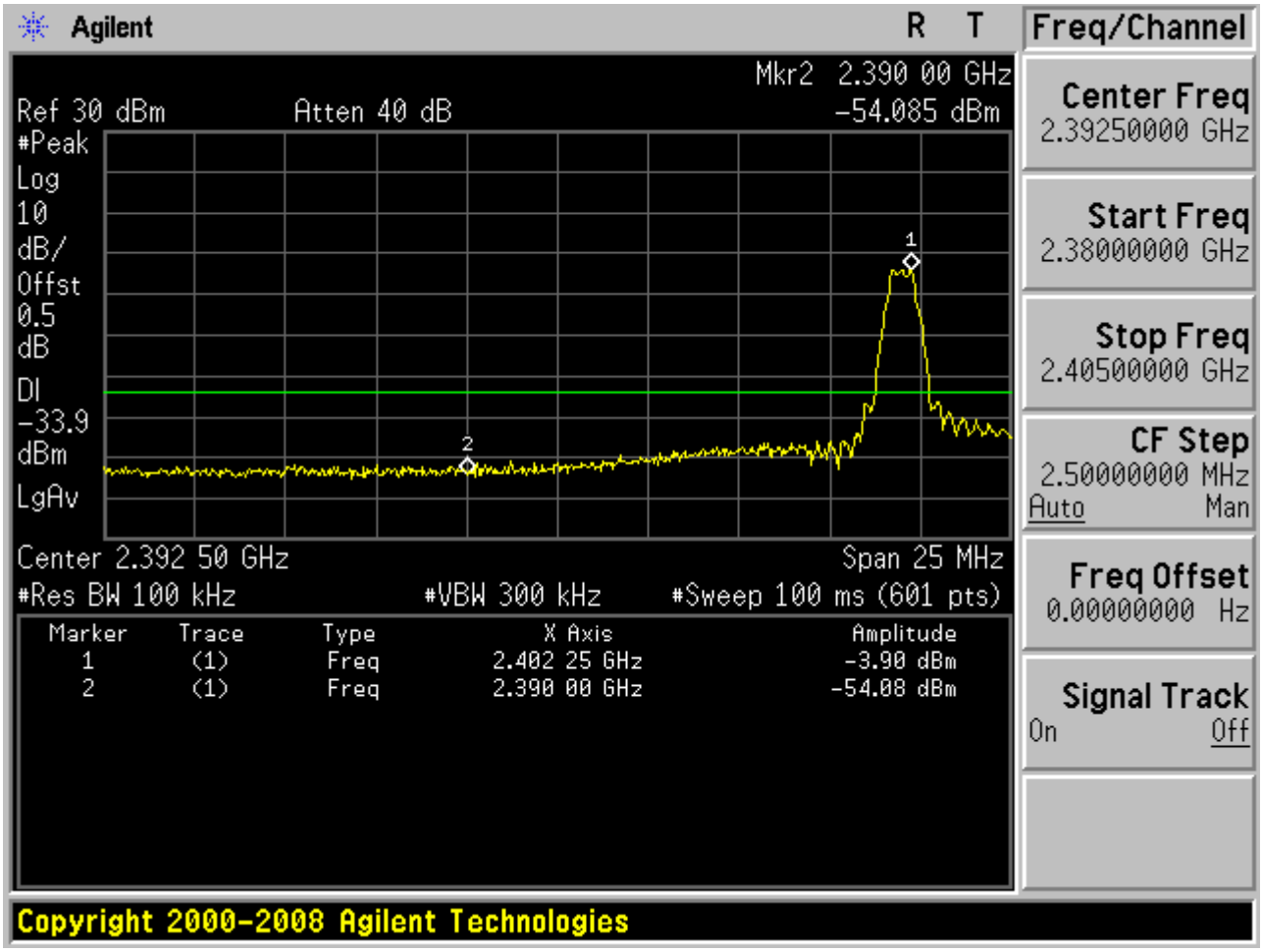
Appendix F: Band Edges Compliance

Part I - Test Results

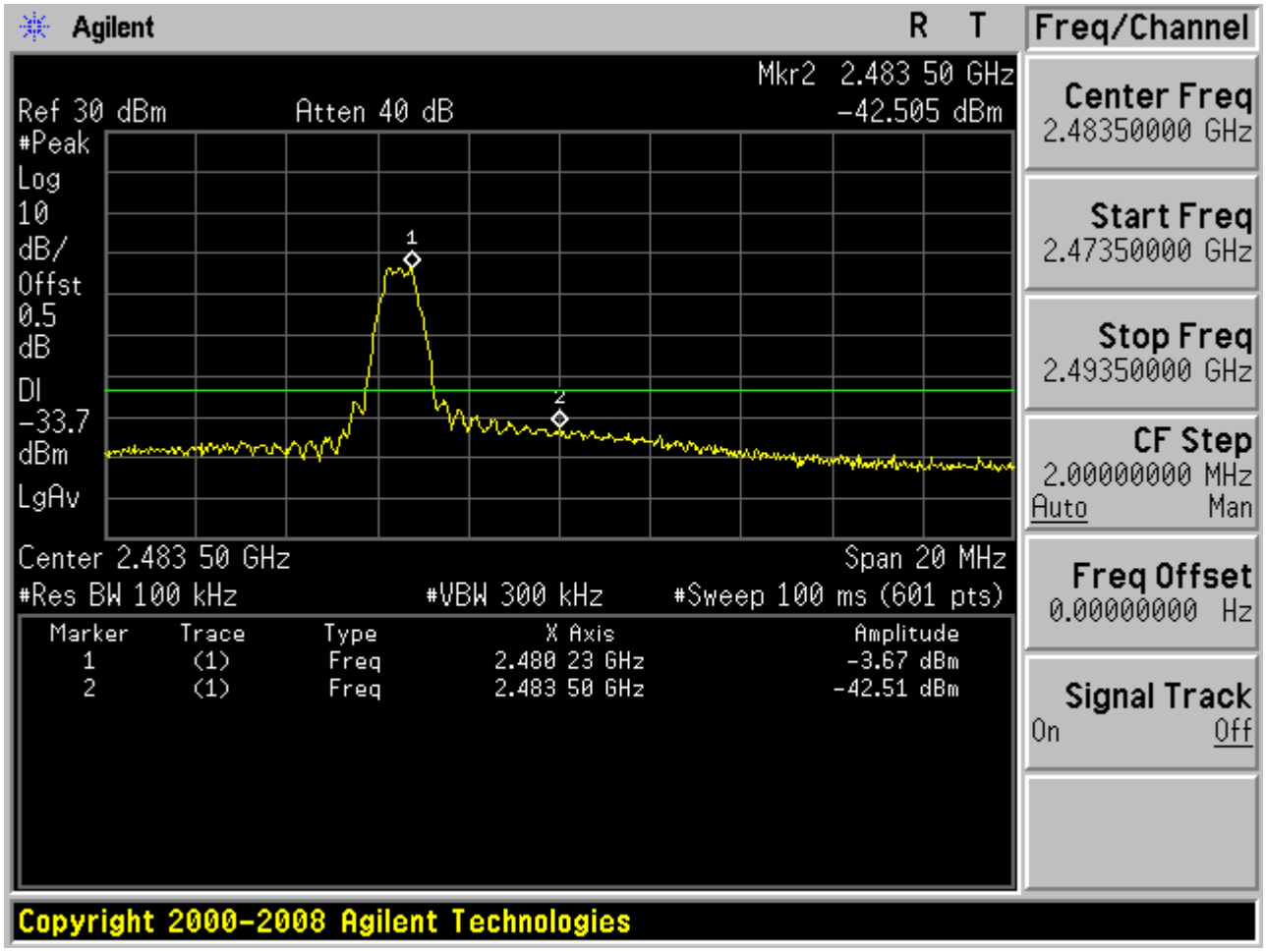
Test Mode	Test Channel	Frequency[MHz]	PD[MHz]	Max.Spurious Level[dBm]	Verdict
TM1_Ch0	L	2402	-3.9	-54.08	pass
TM1_Ch39	H	2480	-3.67	-42.51	pass

Part II - Test Plots

2.1 TM1_Ch0 @Ant 1



2.3 TM1_Ch39@Ant 1



Appendix G: Unwanted Emissions into Non-Restricted Frequency Bands

In this Appendix, the "Pref", which is used as the reference level, refers to the peak power level in any 100 kHz bandwidth within the fundamental emission, the "Puw" referrers to the maximum emission power in 100 kHz band segments outside of the authorized frequency band.

Considering that the higher ratio of RBW to the span for the frequency ranges below 30 MHz makes the results determination be complicated,a narrower RBW other than 100 kHz is used for these ranges. The measured value should add a RBW correction factor (RBWCF) where RBWCF [dB] = 10 x lg(100 [kHz]/narrower RBW [kHz]). As to this Appendix, the narrower RBW is 1 kHz and RBWCF is 20 dB for the frequency 9 kHz to 150 kHz, and the narrower RBW is 10 kHz and RBWCF is 10 dB for the frequency 150 kHz to 30 MHz.

For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain and used as respective results for each chain, due to the relative-limit requirement.

In the result table, the "< Limit" denotes that "The Puw [dBm] is less than Pref[dBm]-30[dBm],see test plots for detailed".

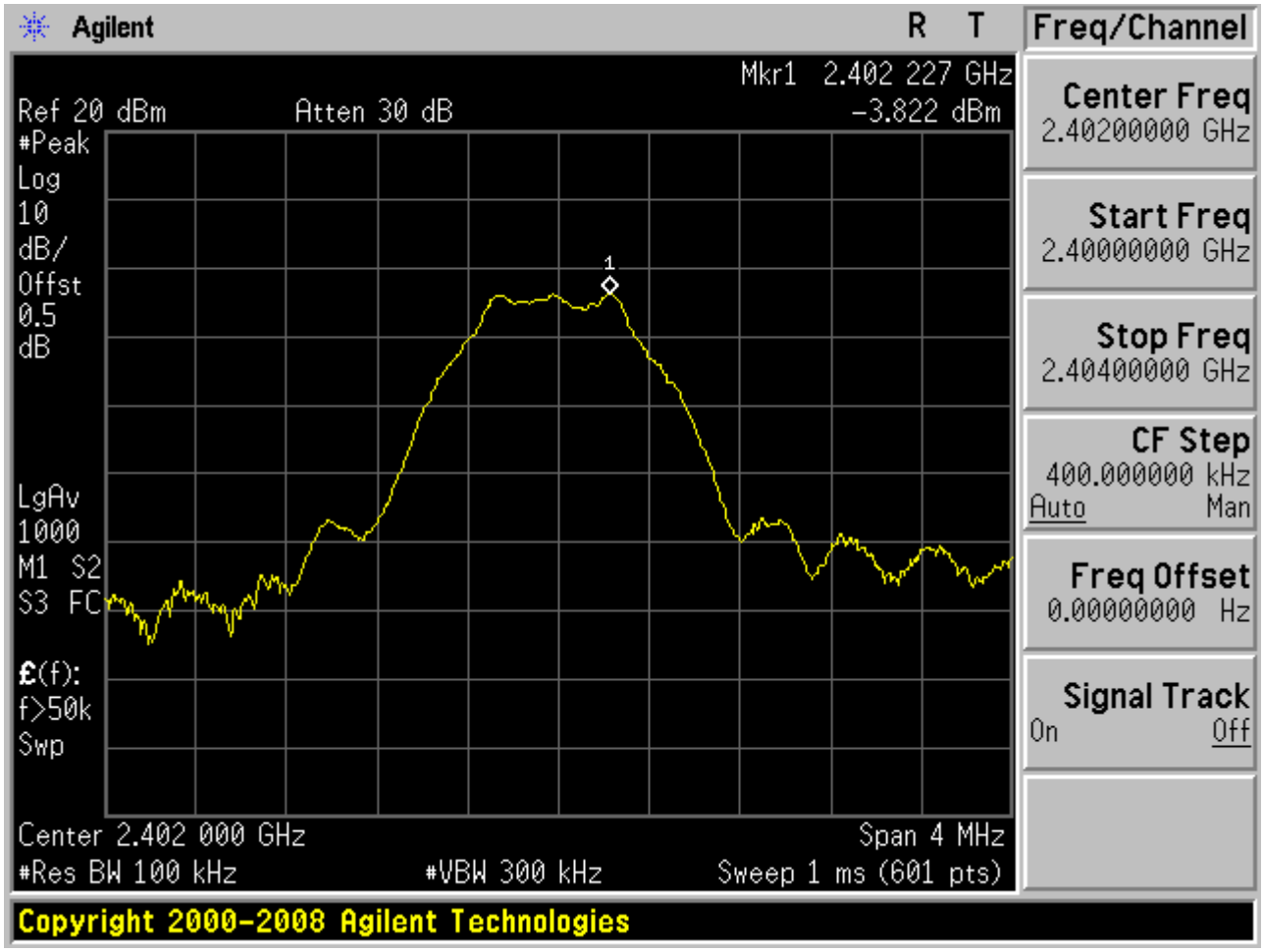
Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Pref[dBm]	Puw[dBm]	Verdict
TM1_Ch0	L	2402	-3.822	<limit	pass
TM1_Ch19	M	2440	-4.001	<limit	pass
TM1_Ch39	H	2480	-3.703	<limit	pass

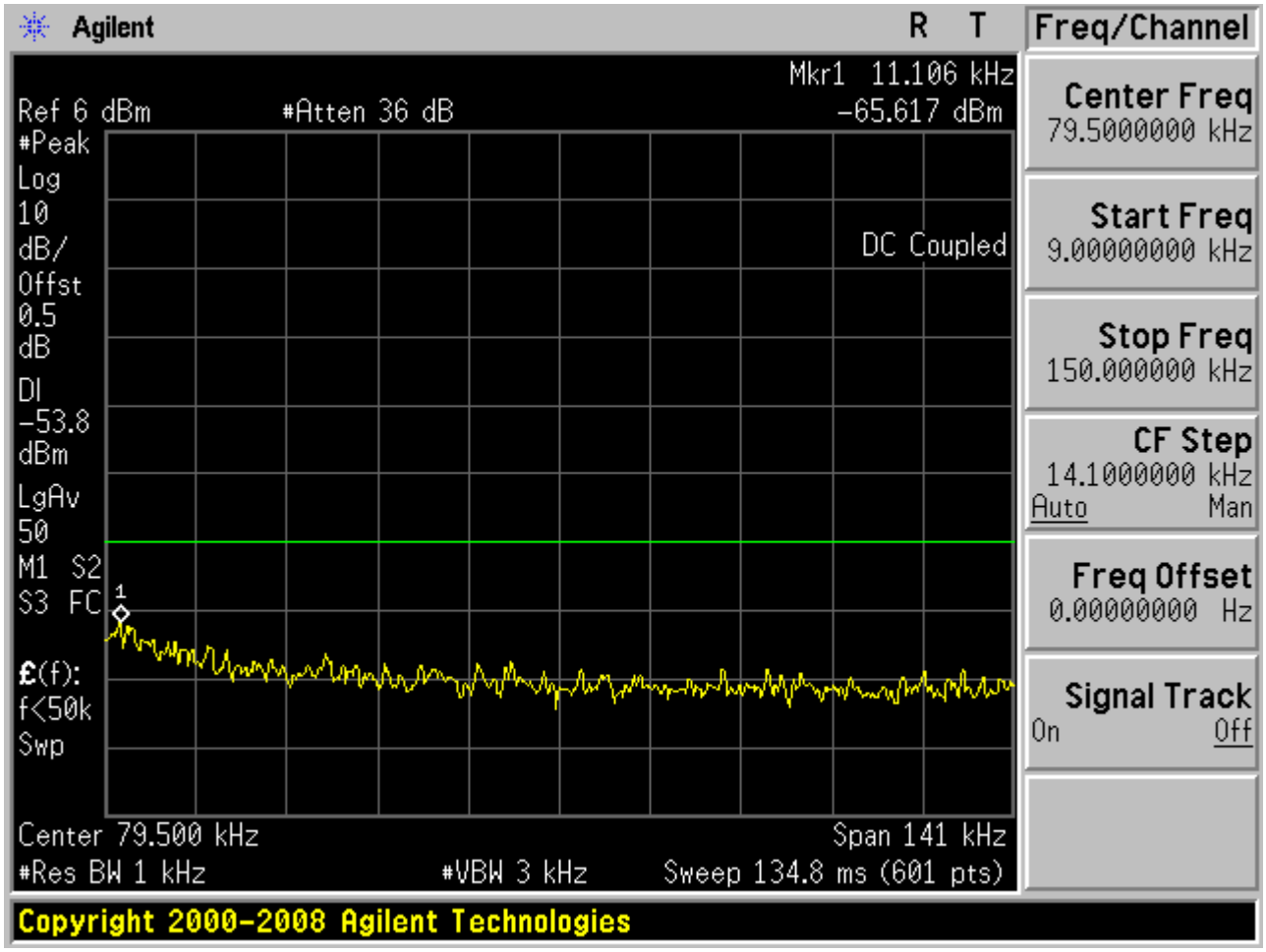
Part II - Test Plots

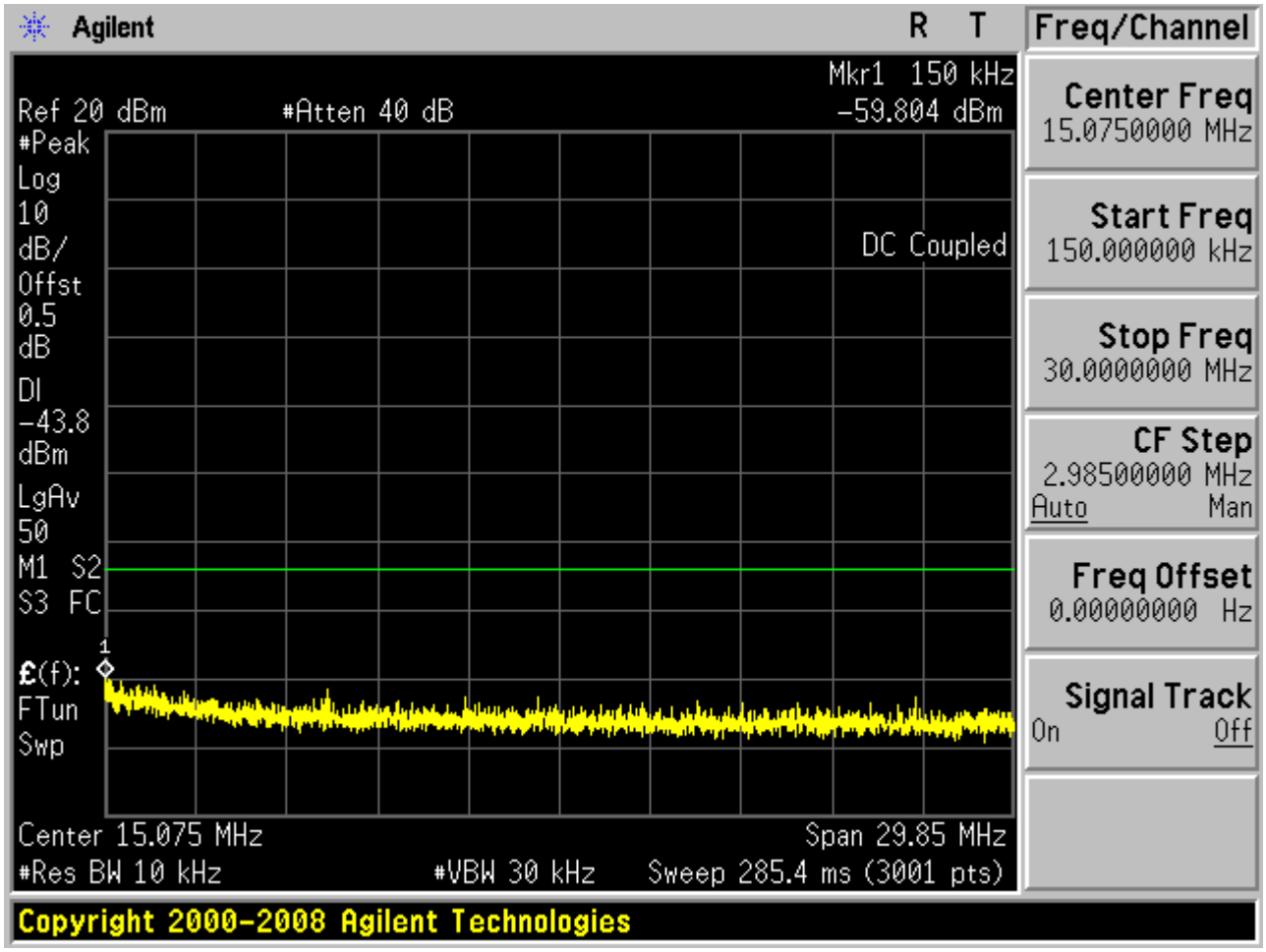
2.1 TM1_Ch0 @Ant 1

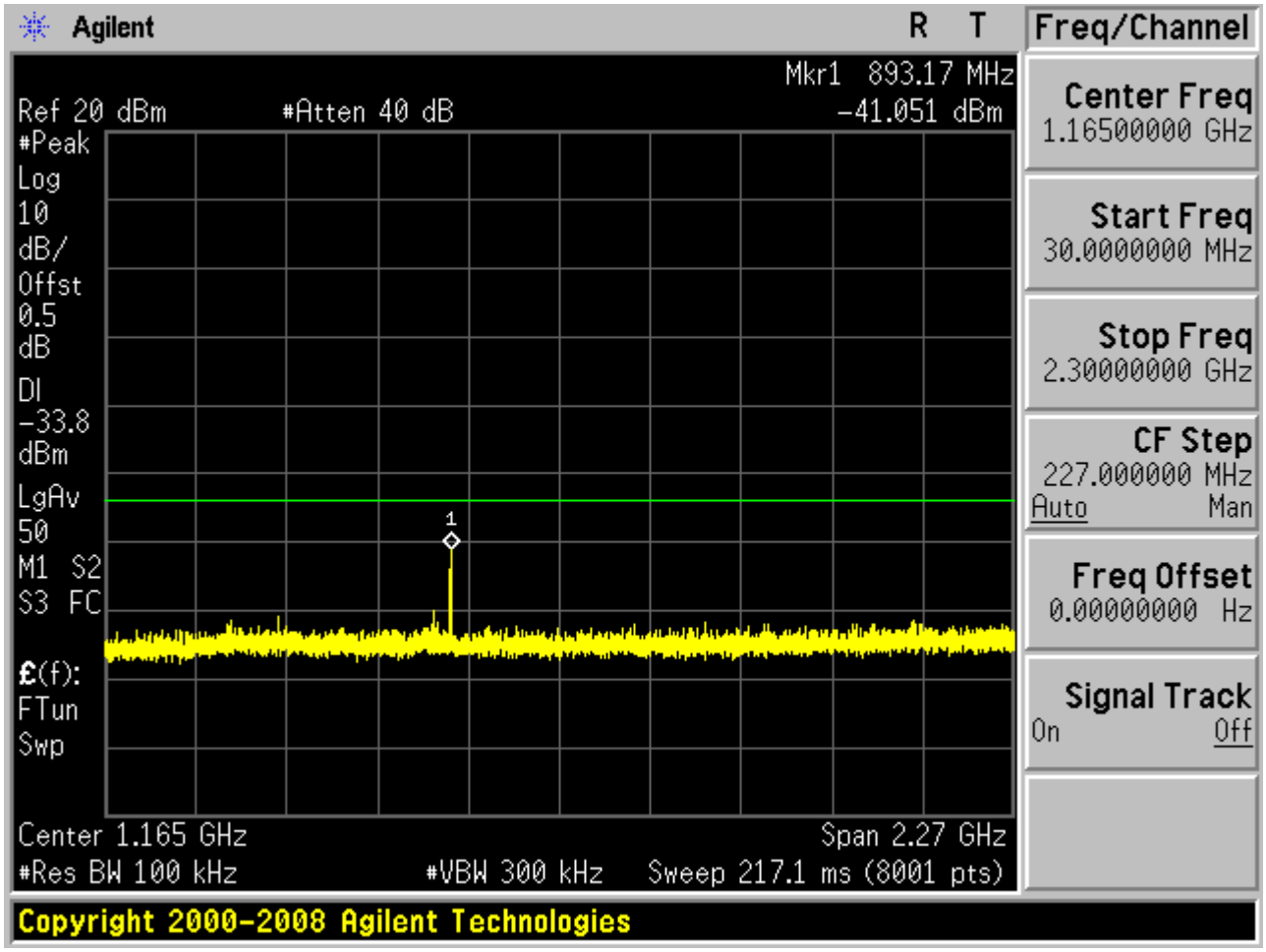
Pref:

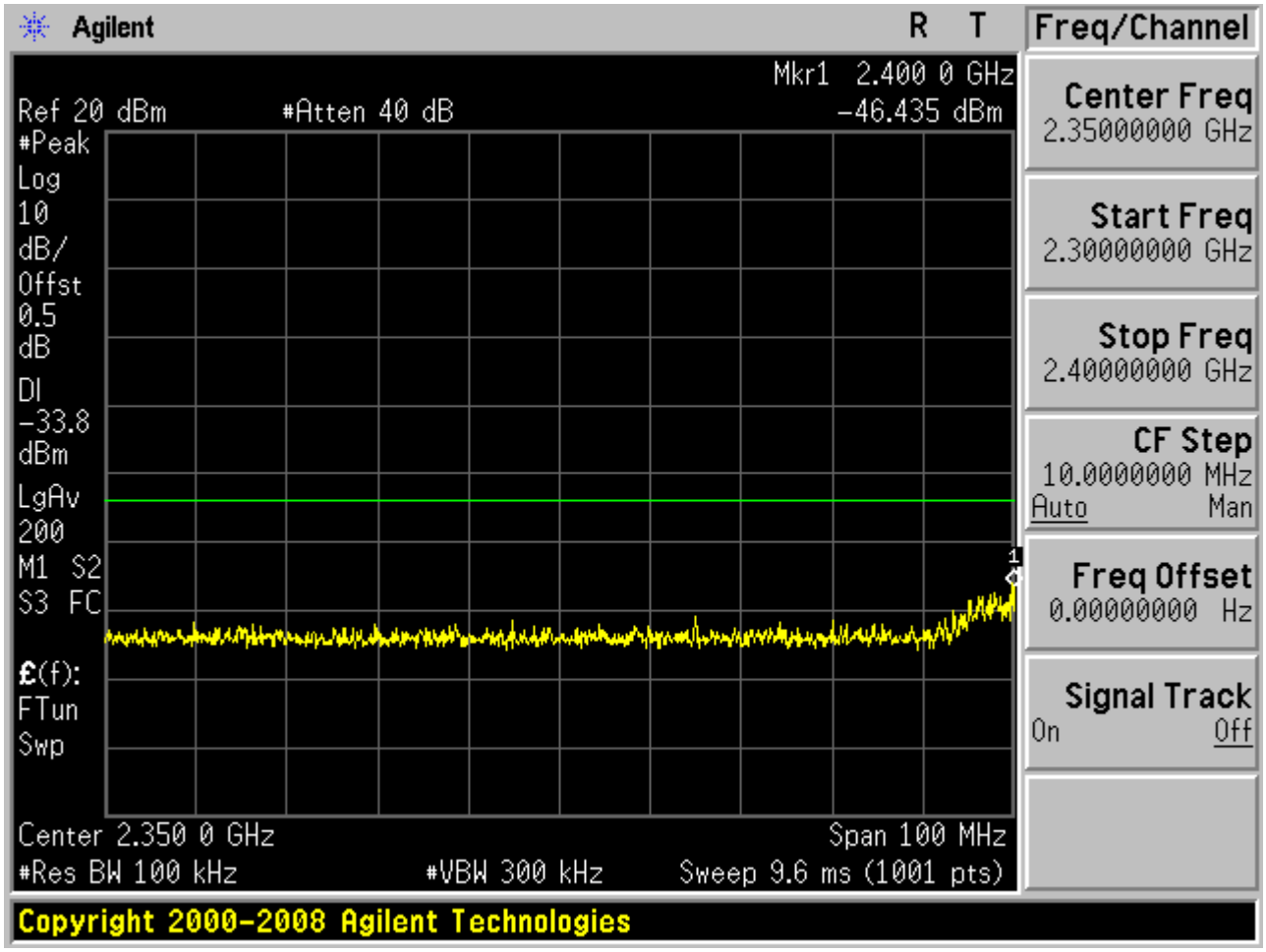


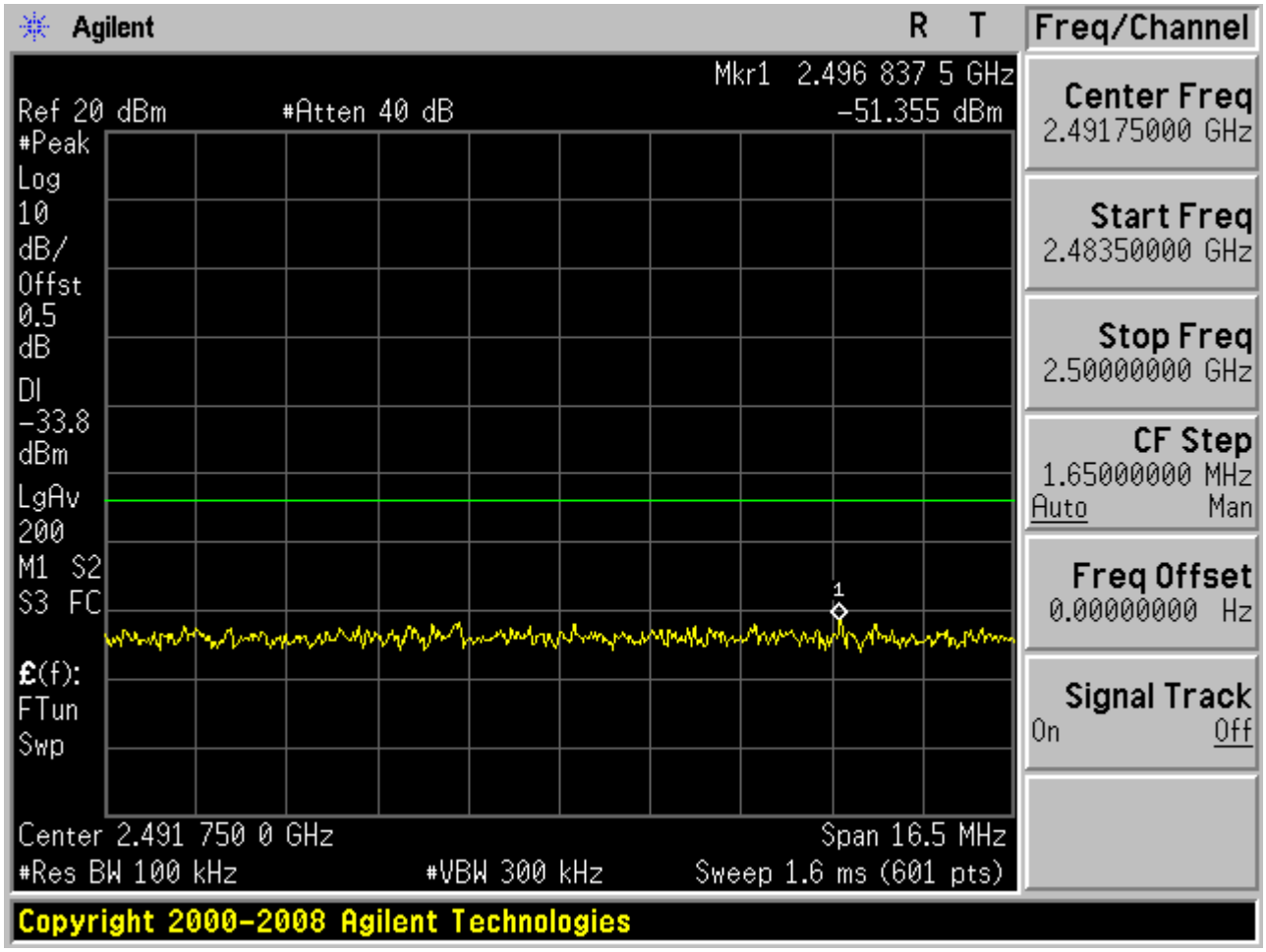
Puw:

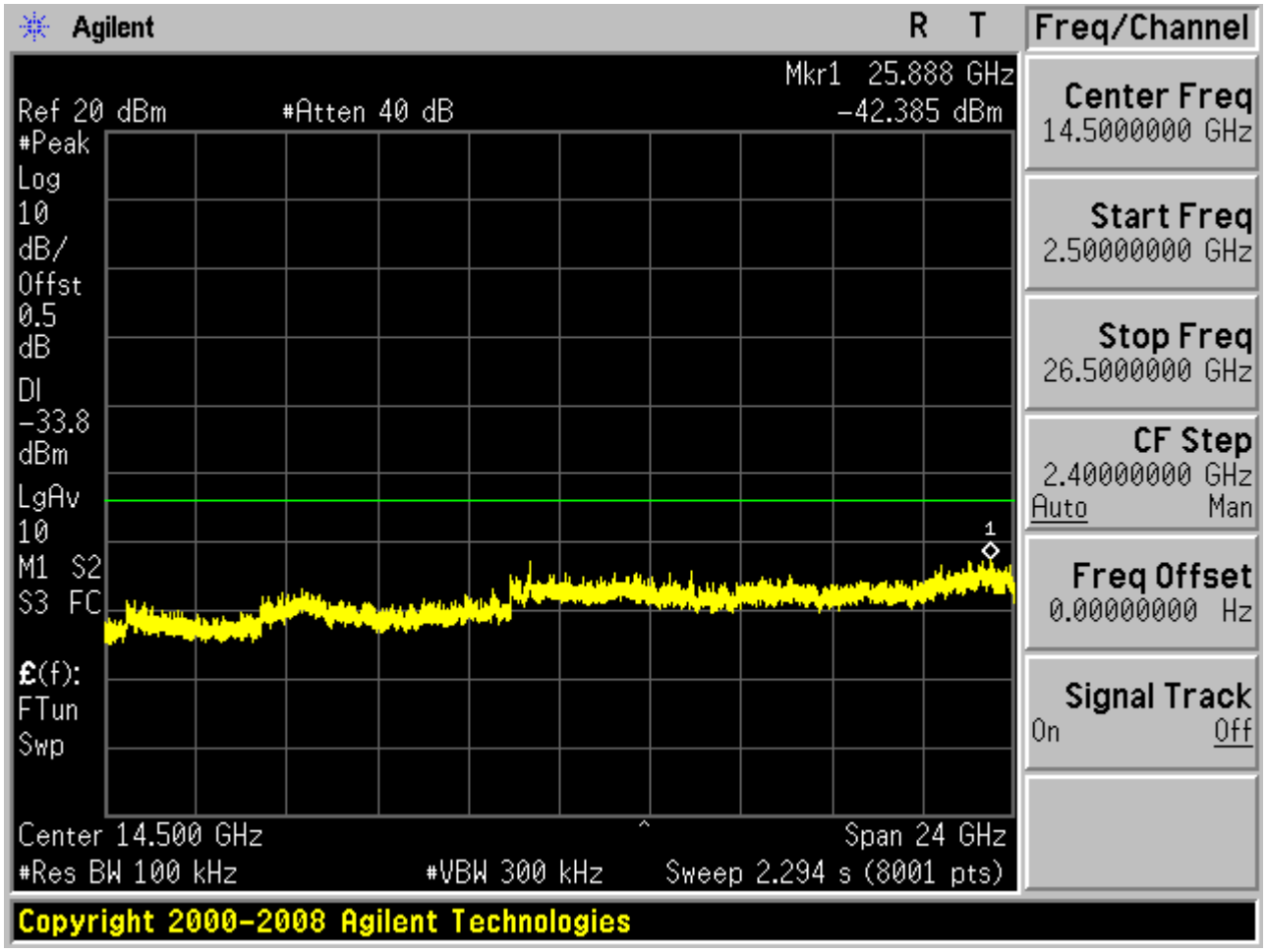






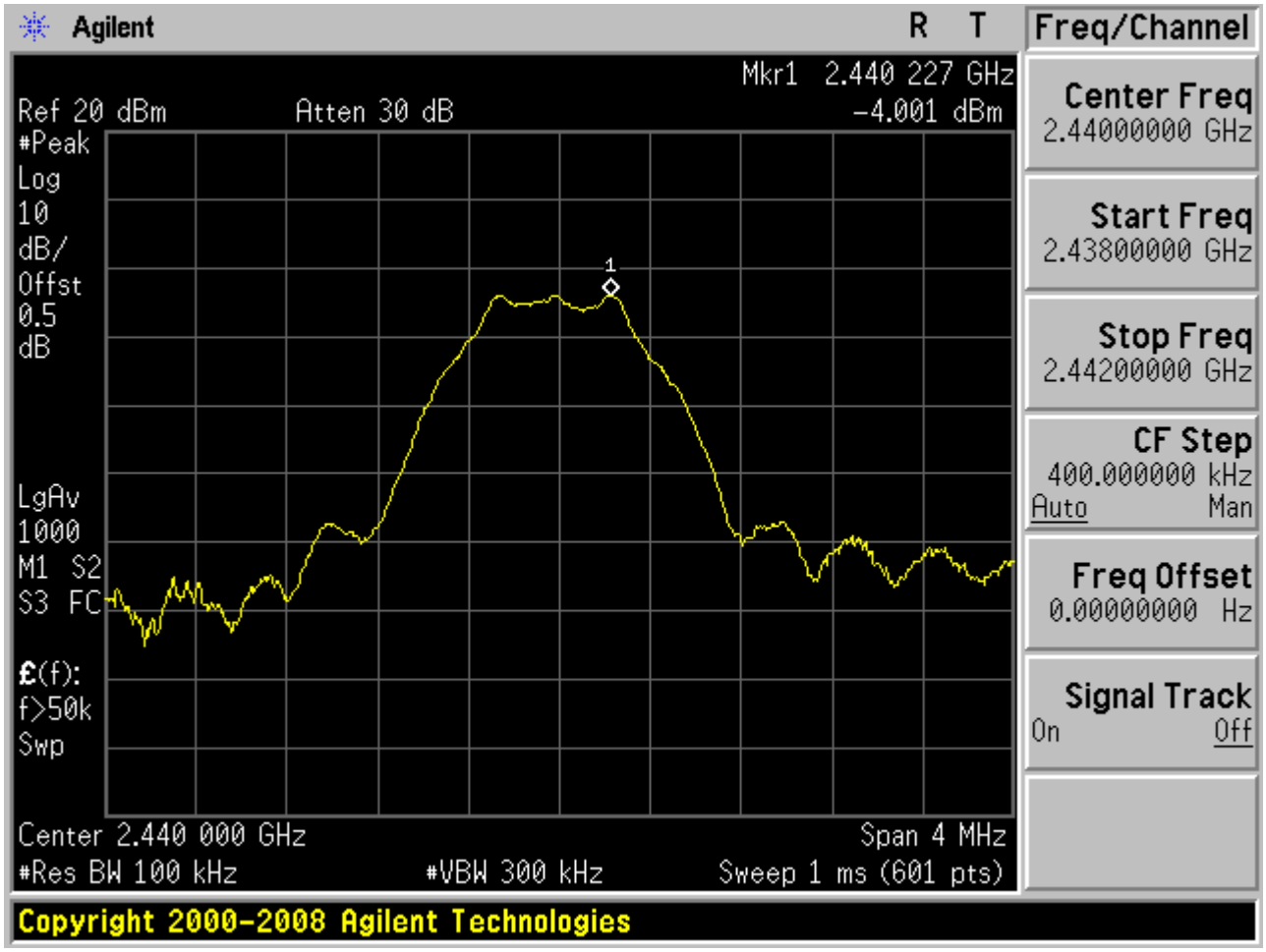




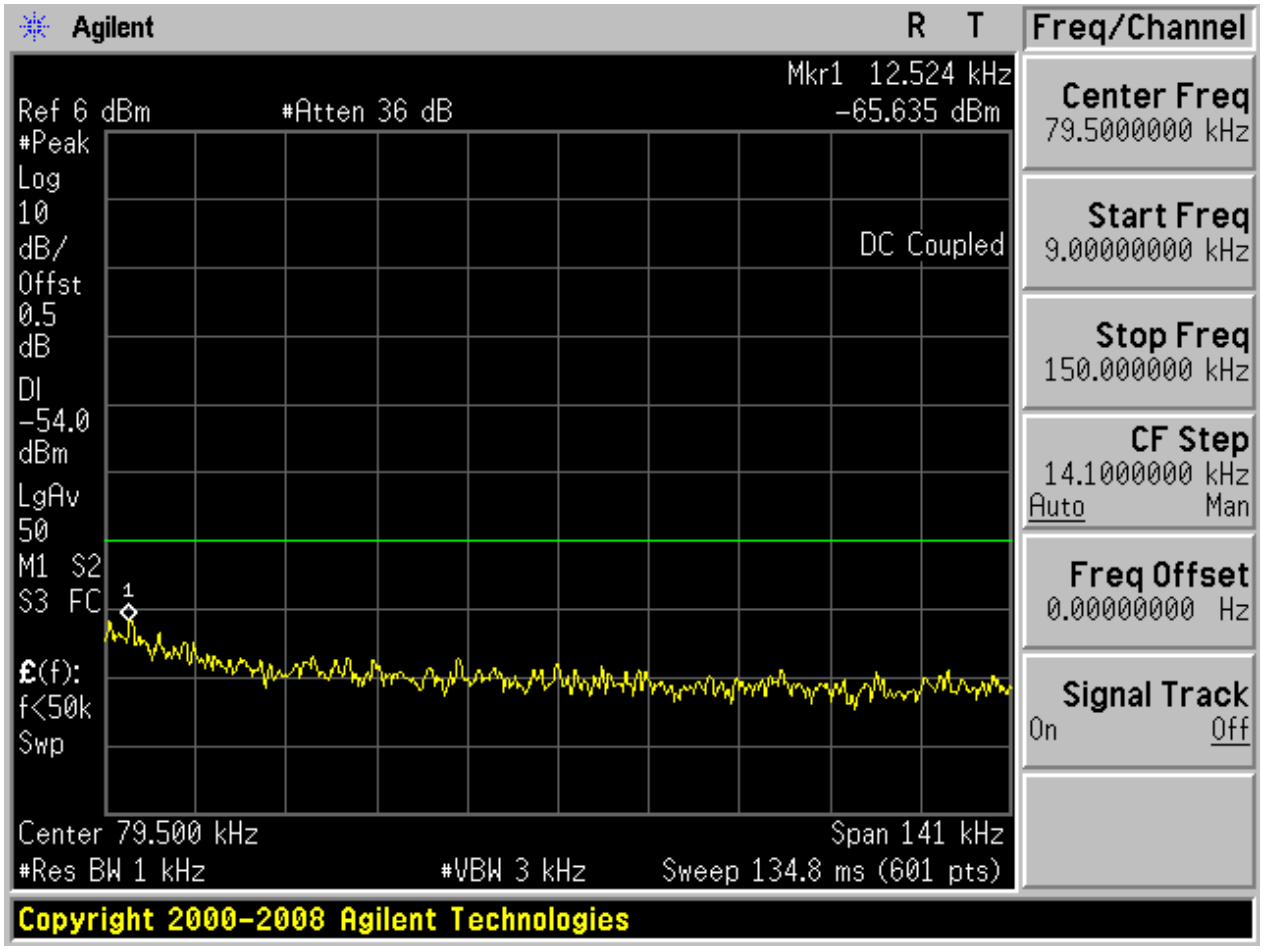


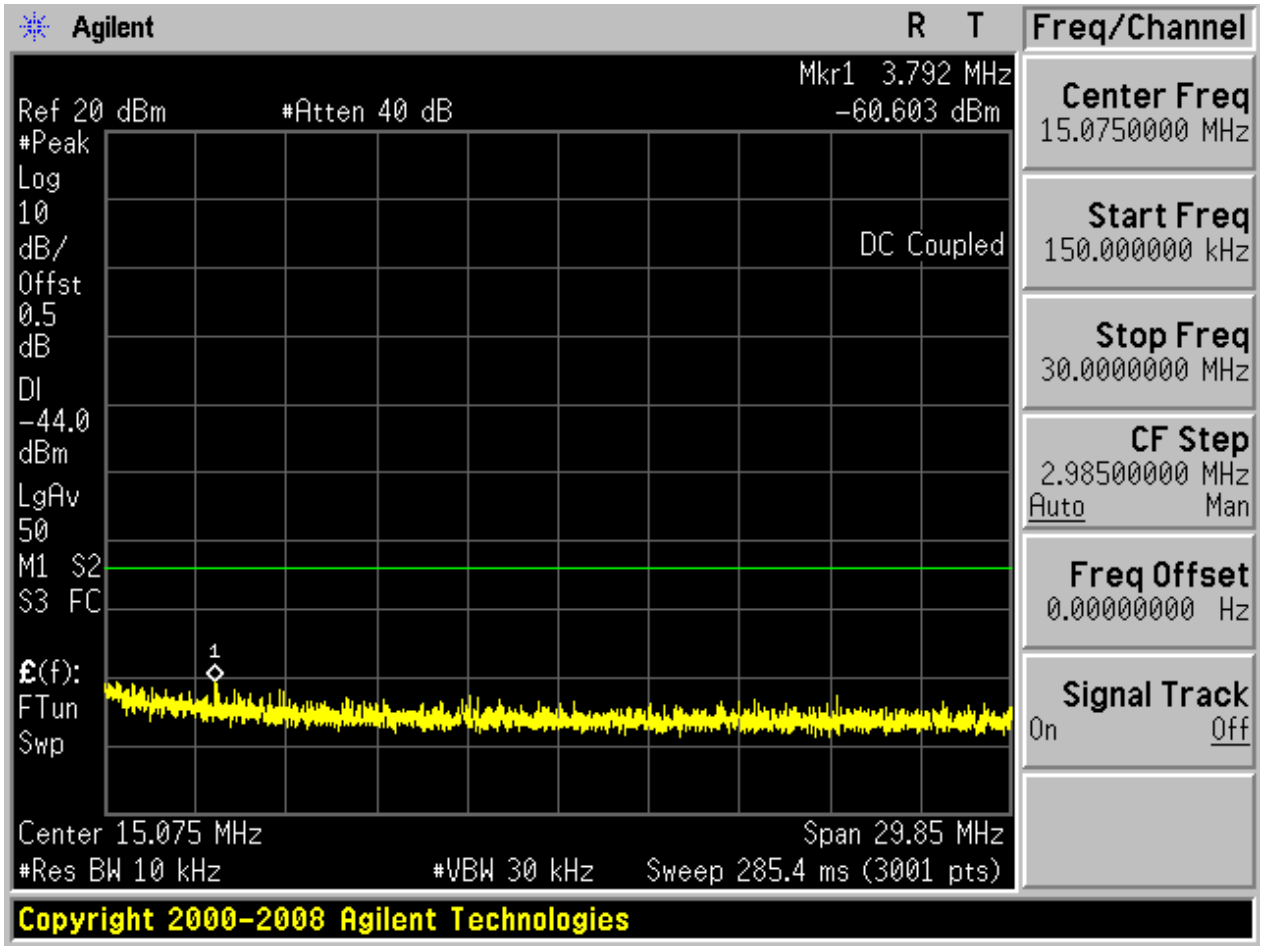
2.2 TM1_Ch19 @Ant 1

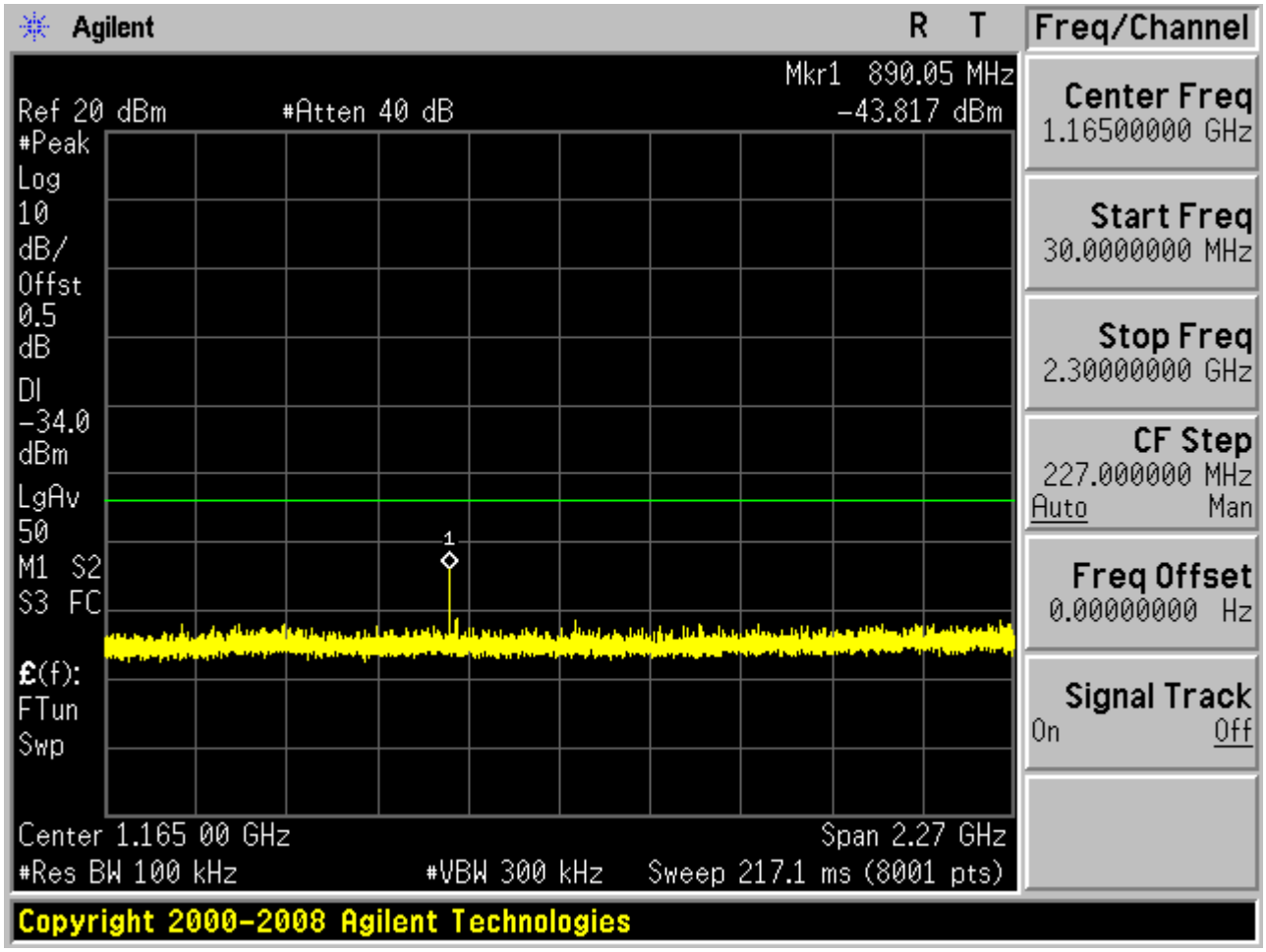
Pref:

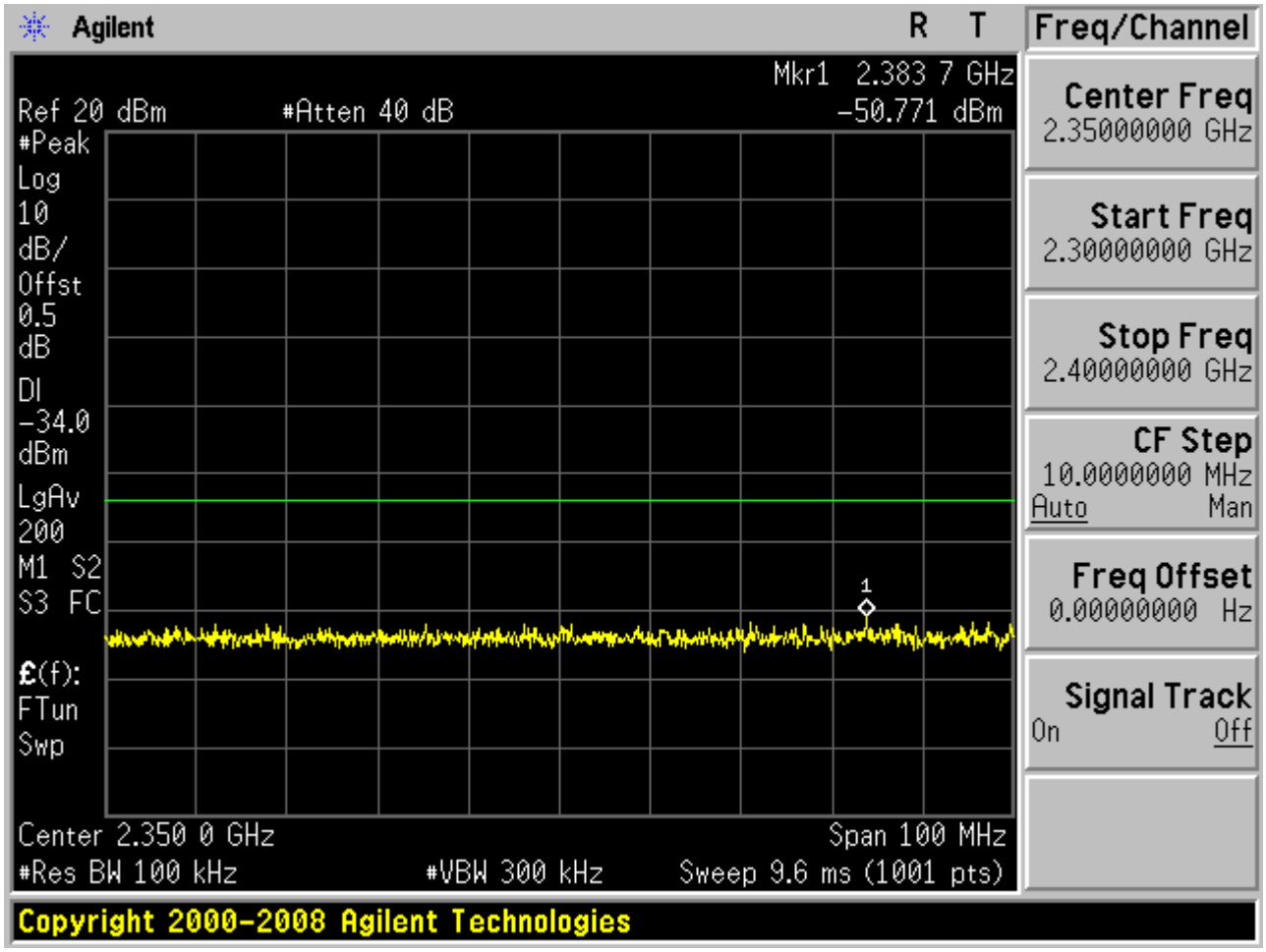


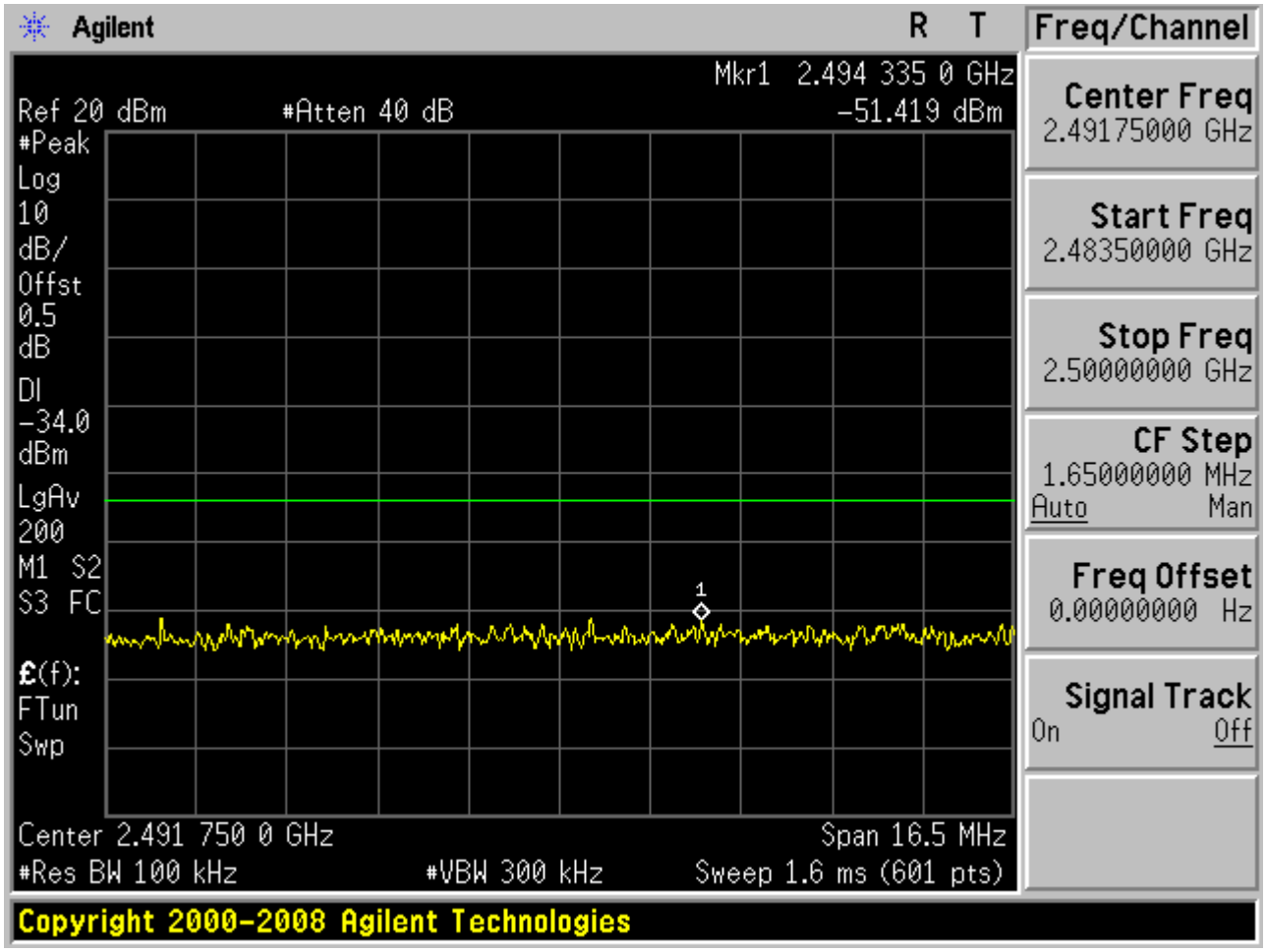
Puw:

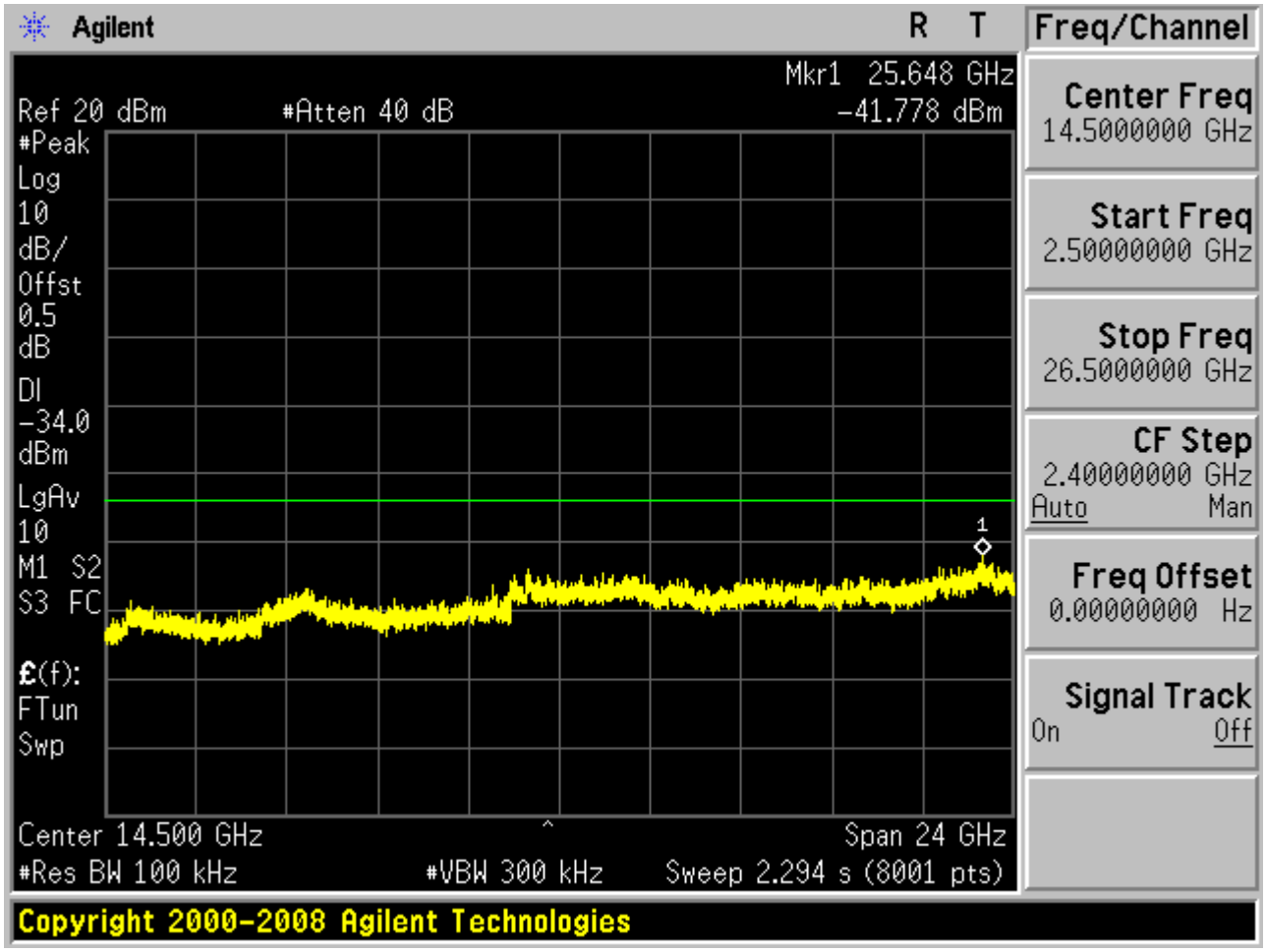






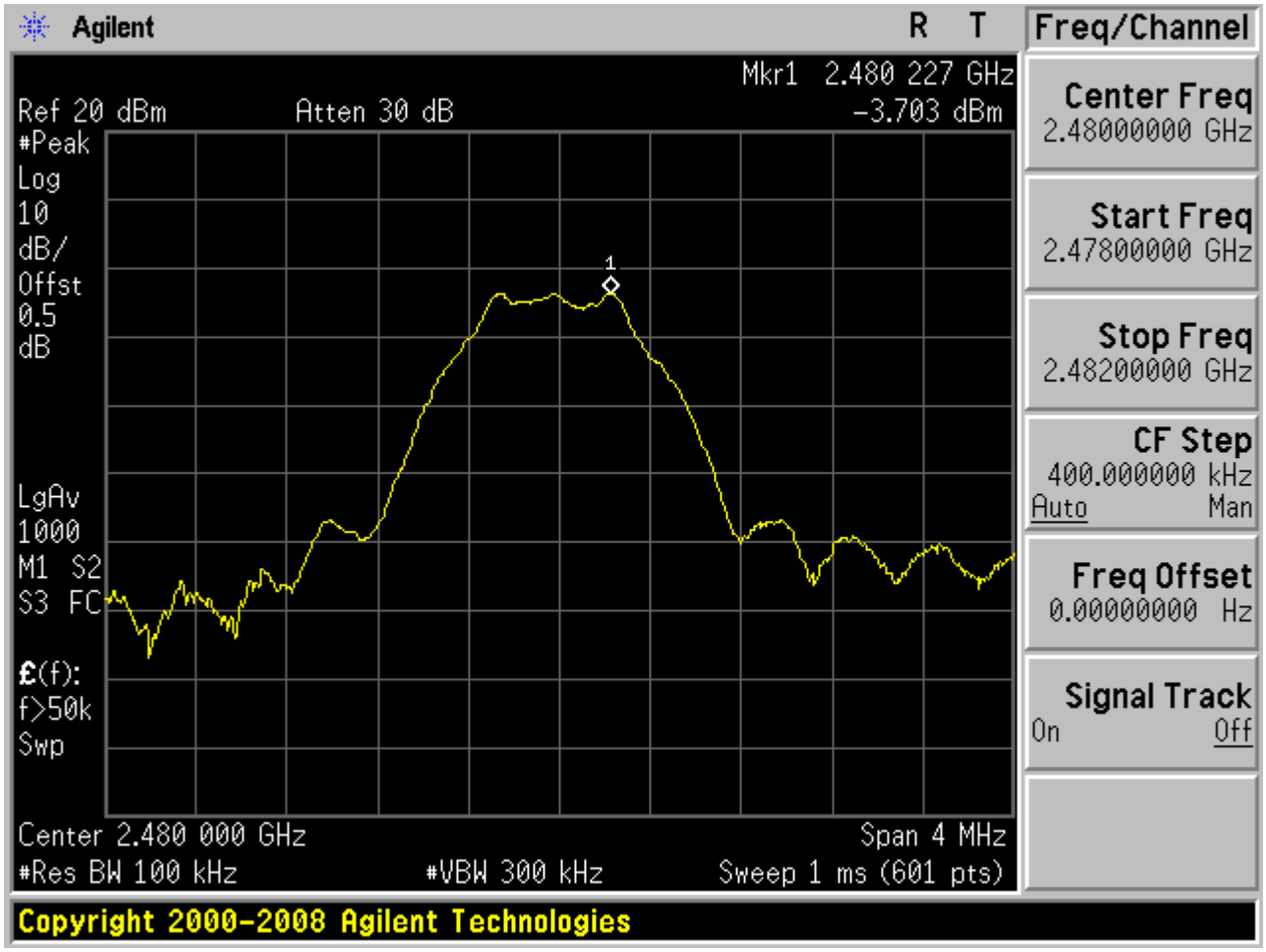



Agilent
R T
Freq/Channel
Mkr1 2.494 335 0 GHz
Ref 20 dBm
#Atten 40 dB
-51.419 dBm
#Peak
Log
10
dB/
Offst
0.5
dB
Dl
-34.0
dBm
LgAv
200
M1 S2
S3 FC
£(f):
FTun
Swp
1
Center Freq
2.49175000 GHz
Start Freq
2.48350000 GHz
Stop Freq
2.50000000 GHz
CF Step
1.65000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 2.491 750 0 GHz
Span 16.5 MHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.6 ms (601 pts)
Copyright 2000-2008 Agilent Technologies

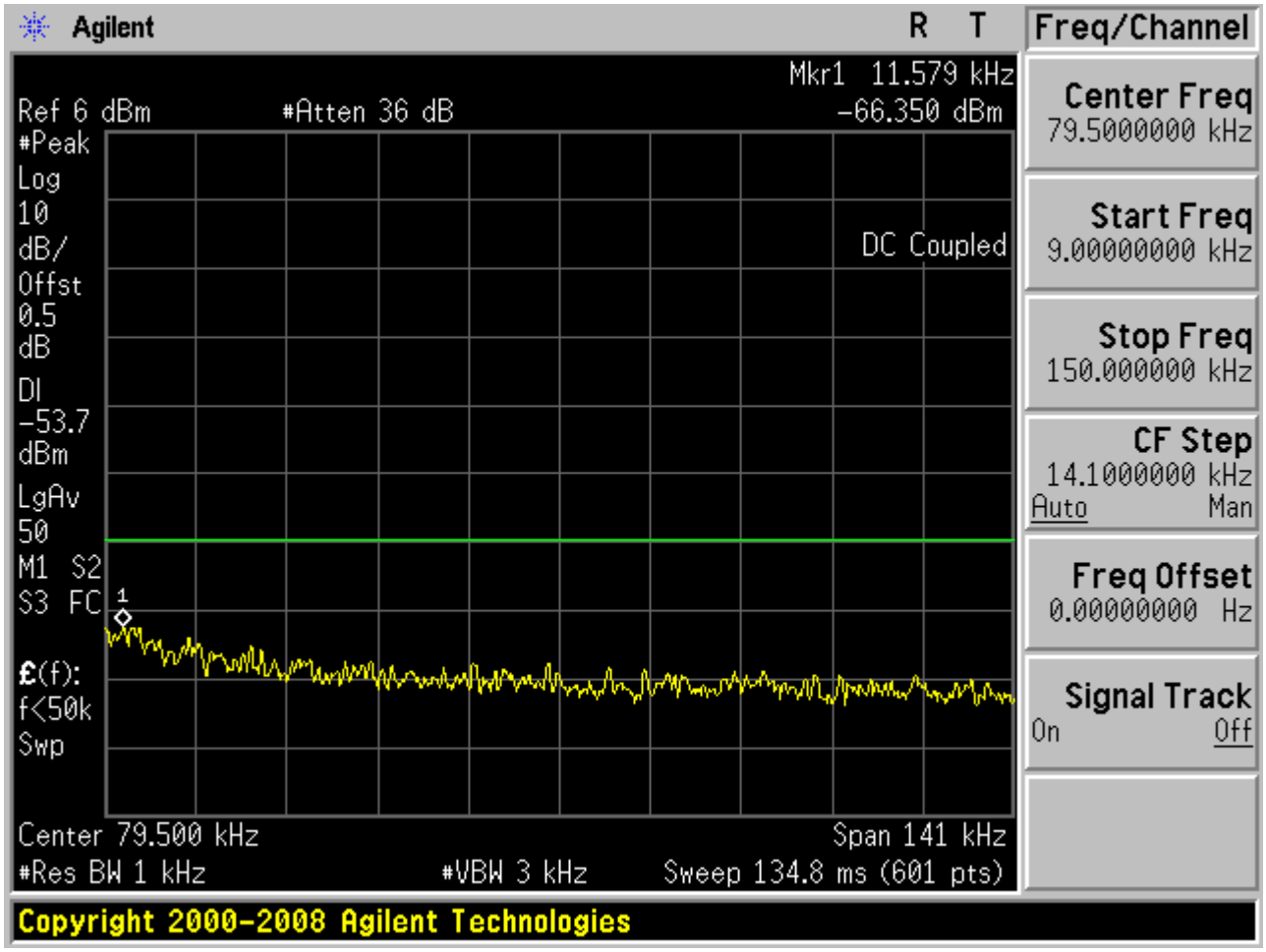


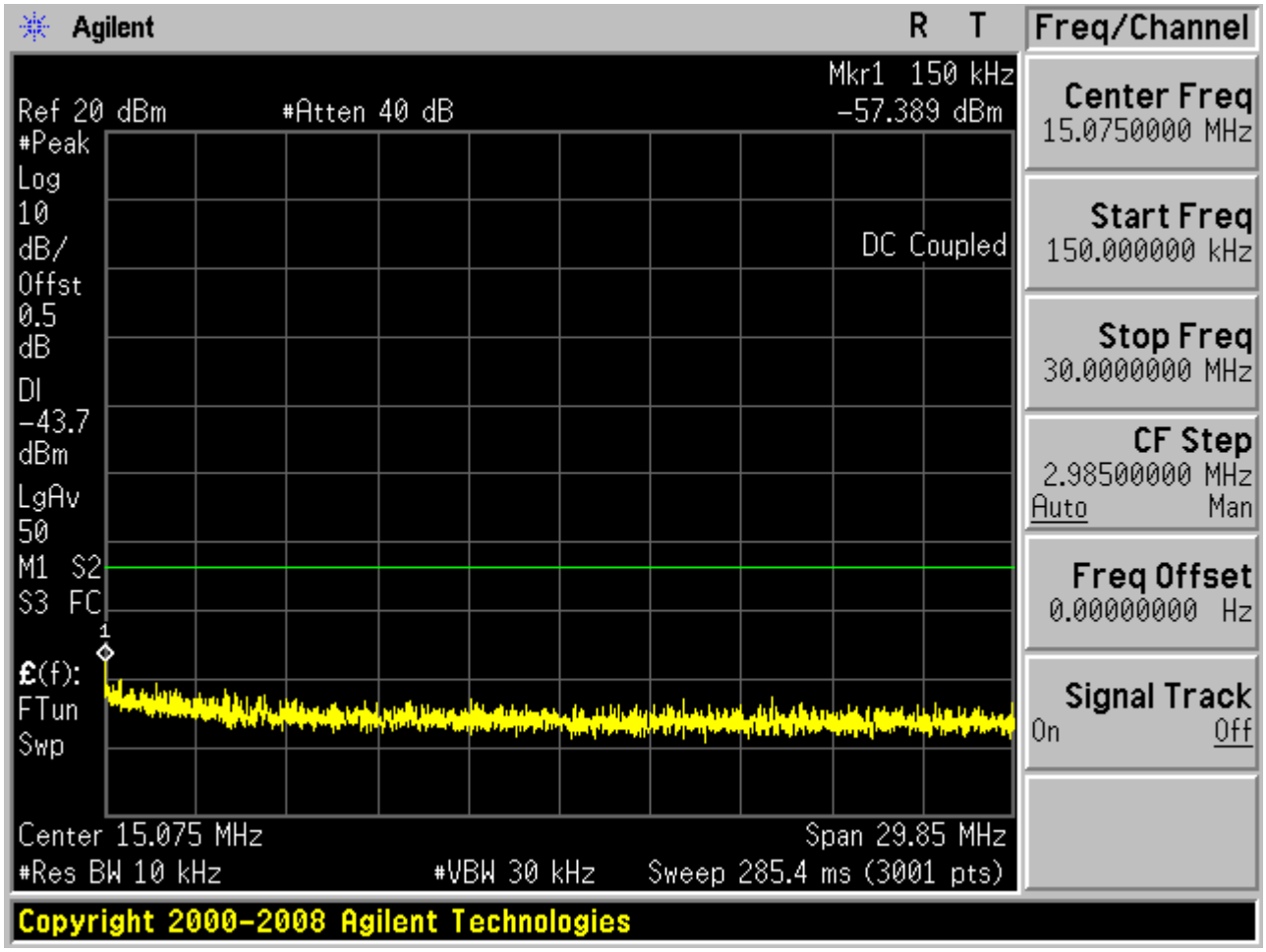
2.3 TM1_Ch39@Ant 1

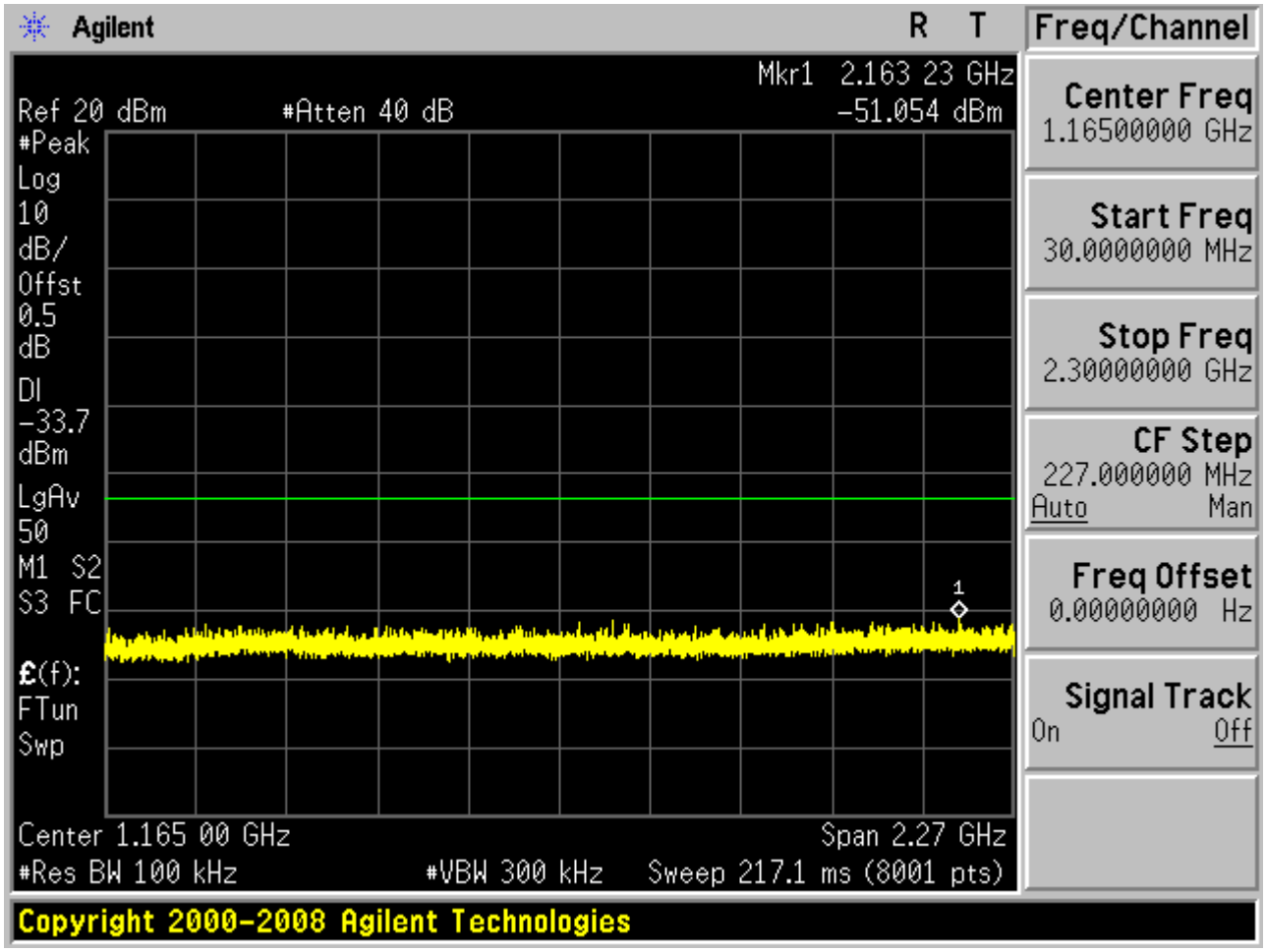
Pref:

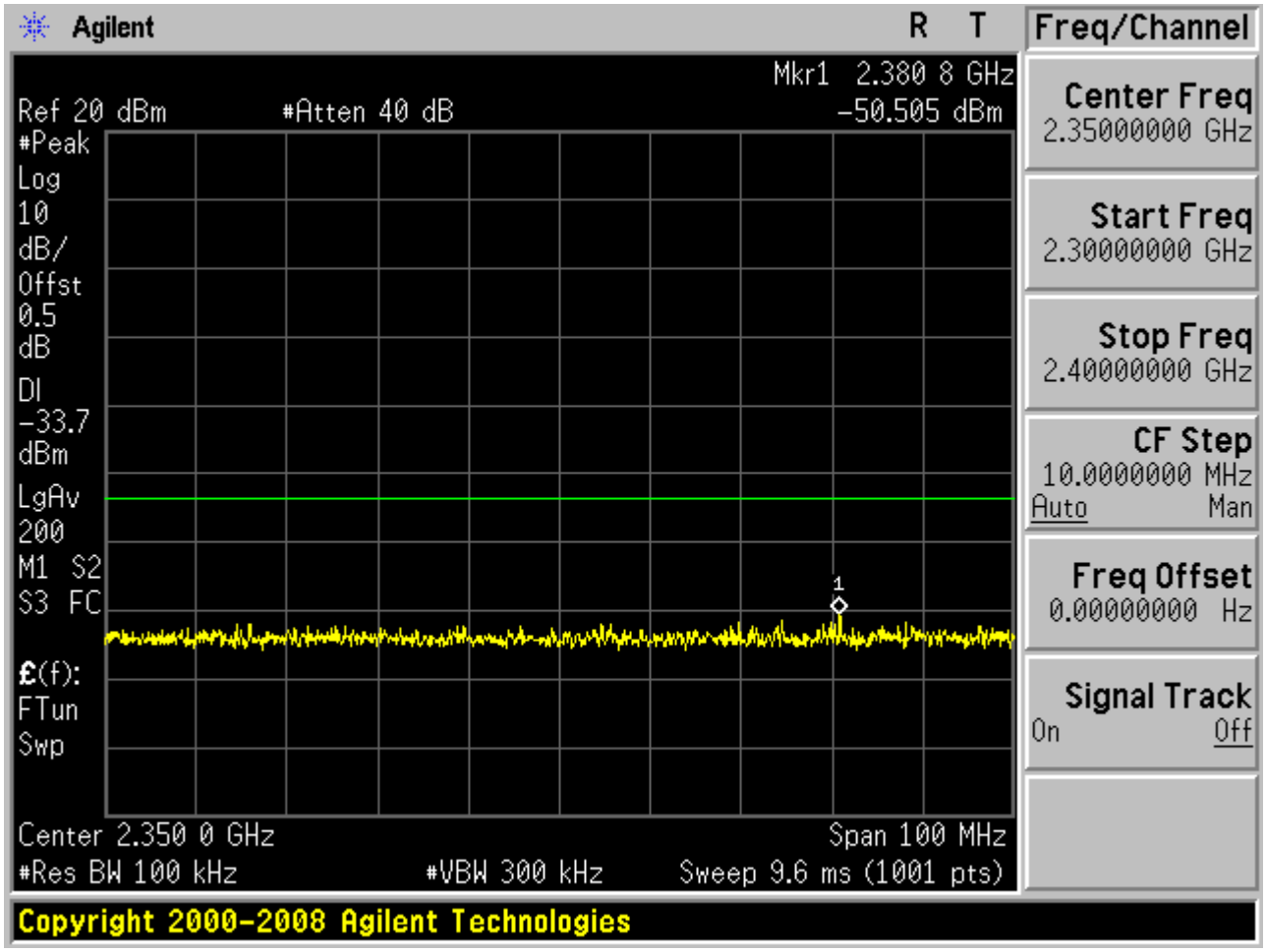


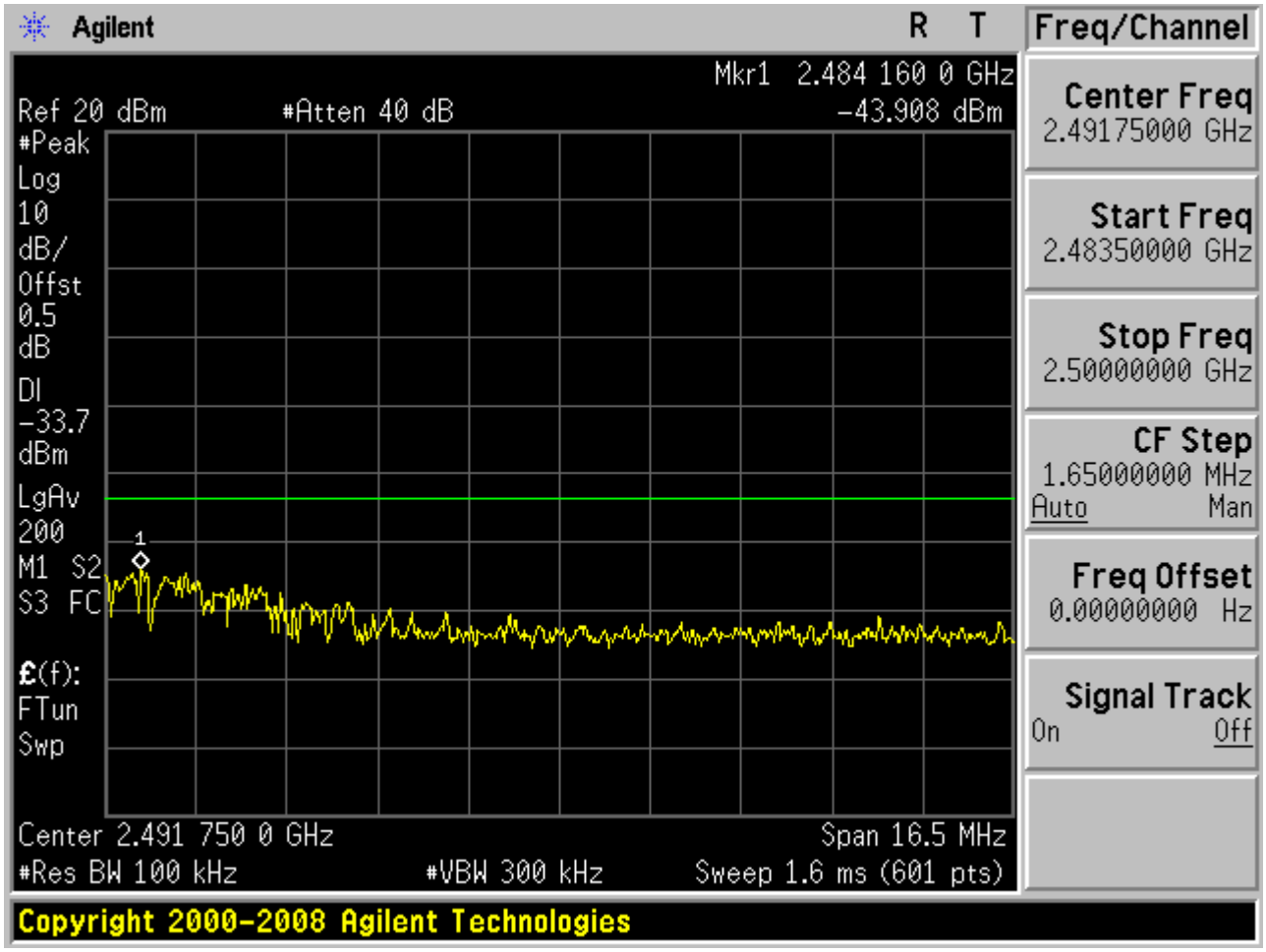
Puw:

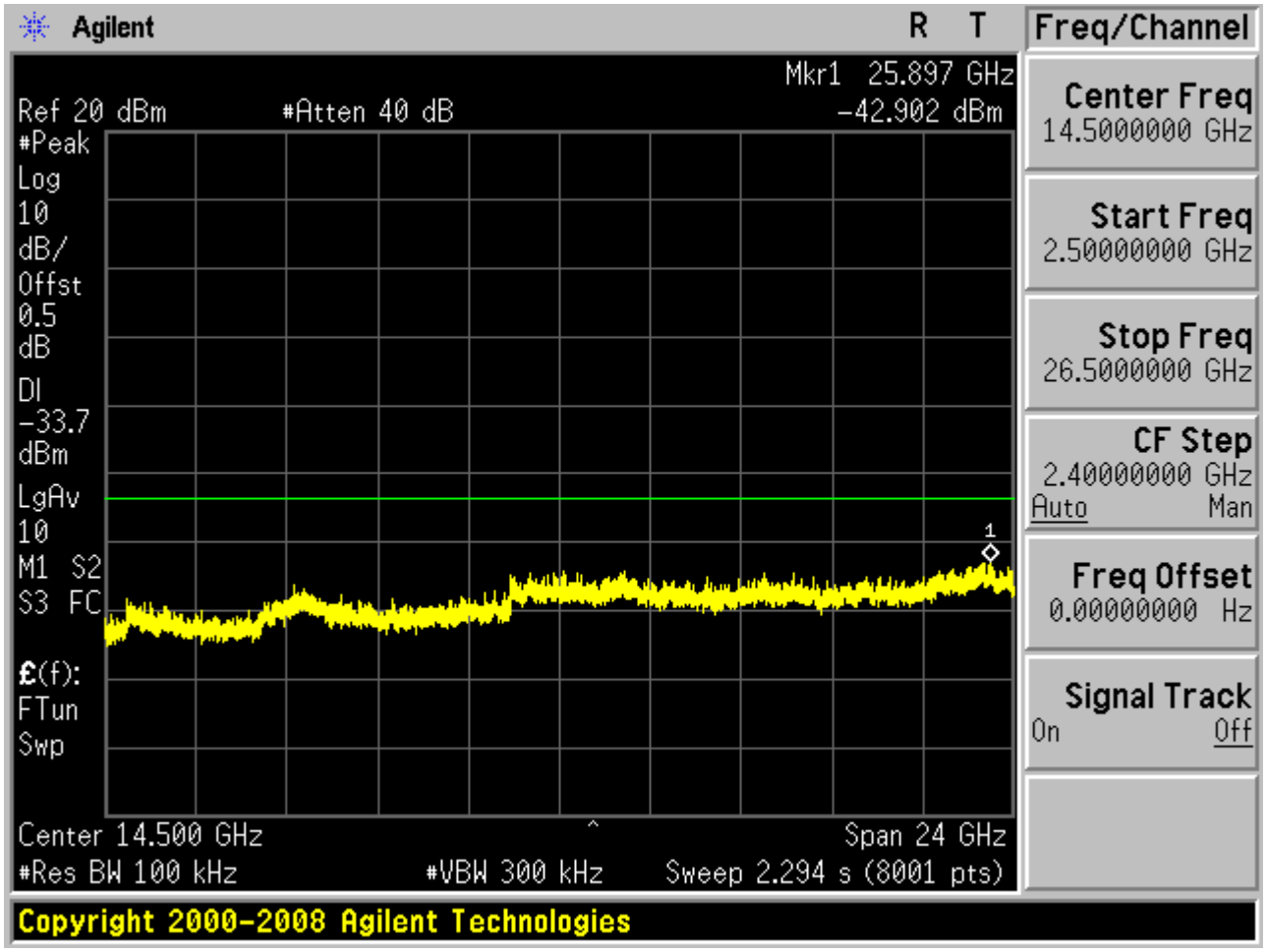







Agilent
R T
Freq/Channel
Mkr1 2.380 8 GHz
Ref 20 dBm
#Atten 40 dB
-50.505 dBm
#Peak
Log
10
dB/
Offst
0.5
dB
Dl
-33.7
dBm
LgAv
200
M1 S2
S3 FC
£(f):
FTun
Swp
1
Center 2.350 0 GHz
Span 100 MHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 9.6 ms (1001 pts)
Center Freq
2.35000000 GHz
Start Freq
2.30000000 GHz
Stop Freq
2.40000000 GHz
CF Step
10.0000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Copyright 2000-2008 Agilent Technologies


Agilent
R T
Freq/Channel
Mkr1 2.484 160 0 GHz
Ref 20 dBm
#Atten 40 dB
-43.908 dBm
#Peak
Log
10
dB/
Offst
0.5
dB
Dl
-33.7
dBm
LgAv
200
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
2.49175000 GHz
Start Freq
2.48350000 GHz
Stop Freq
2.50000000 GHz
CF Step
1.65000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 2.491 750 0 GHz
Span 16.5 MHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.6 ms (601 pts)
Copyright 2000-2008 Agilent Technologies



Appendix H: Radiated Spurious Emission & Spurious in Restricted Band

Note: We tested all modes, but the data presented below is the worst case.Below 1GHz, RBW = 100 kHz, VBW = 300 kHz.

Above 1GHz, RBW = 1 MHz, VBW = 3 MHz.

The simultaneous transmission has been considered

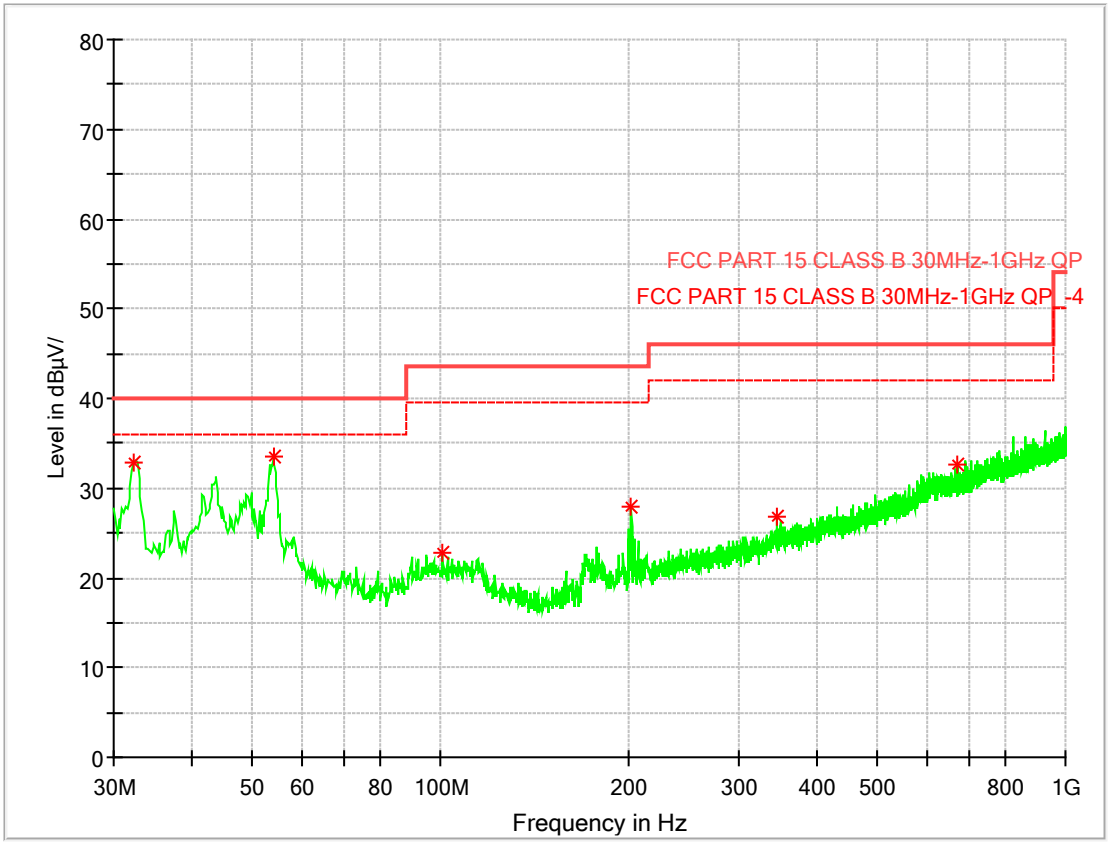
7.1Part 1: Testing Range of “9 kHz to 30MHz”

NOTE1: No peak found in the Test Range of “9 kHz to 30MHz”

7.2Part 2: Testing Range of “30 MHz to 1 GHz”

Note 1: The test results and plot for testing range of “30 MHz to 1 GHz” showed as below is the WORST case for all Test Modes and Channels. This range will not be presented for each Test Mode and each Channel.

Note 2: The emissions in this range are mainly from the Platform Device (Notepad PC and its ancillary components).



Frequency (MHz)	QuasiPeak (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
32.328000	32.95	40.00	-7.05	100.0	V	161.0	14.7
54.056000	33.49	40.00	-6.51	100.0	V	87.0	14.8
100.616000	22.70	43.50	-20.80	100.0	H	99.0	13.7
202.078000	27.91	43.50	-15.59	100.0	V	266.0	12.7
345.638000	26.70	46.00	-19.30	100.0	H	247.0	17.0
670.588000	32.66	46.00	-13.34	100.0	V	174.0	22.6

7.3Part 3: Testing Range of “18 GHz to 26.5 GHz”

NOTE: No peak found in the Test Range of “18 GHz to 26.5GHz”

7.4Part 4: Testing Range of “1GHz to 3GHz”

Note 1: The testing range of “1 GHz to3 GHz” is for checking radiated emissions located in restricted bands near the EUT operating bands.

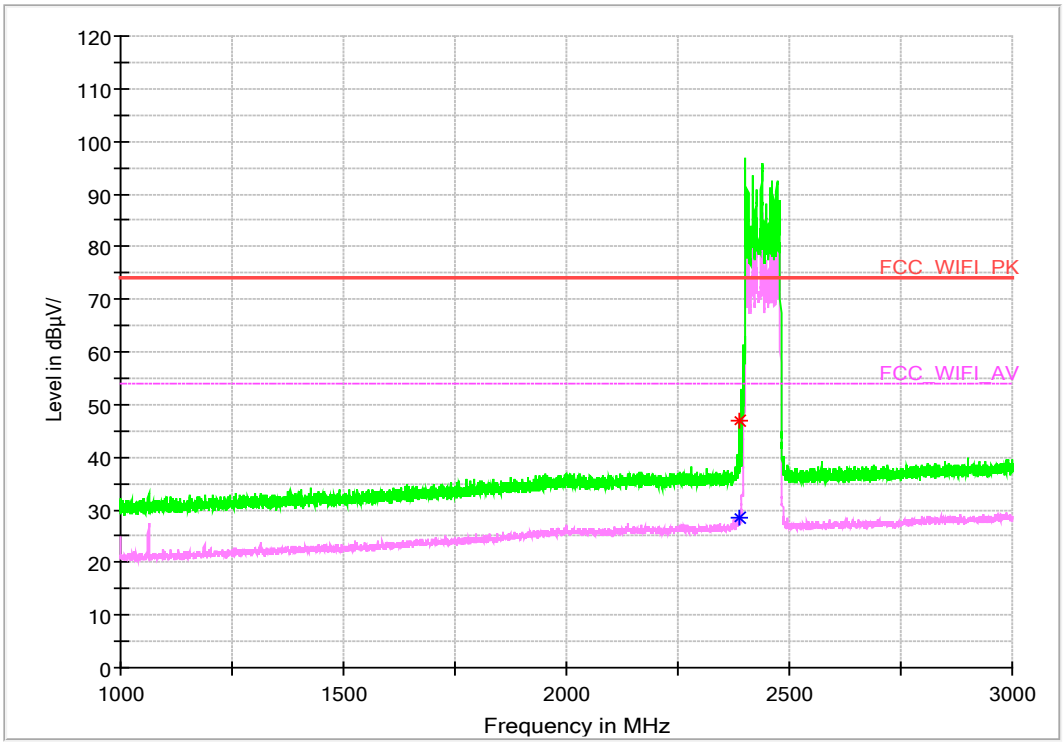
Note 2: Two limits are required in the testing range above 1 GHz, that is Peak limit (74 dBµV/m) and Average Limit (54 dBµV/m).

Note 3: The peak spike exceeds the limit line is EUT’s operating frequency.

Test Mode:

7.4.1Test Mode: TM1

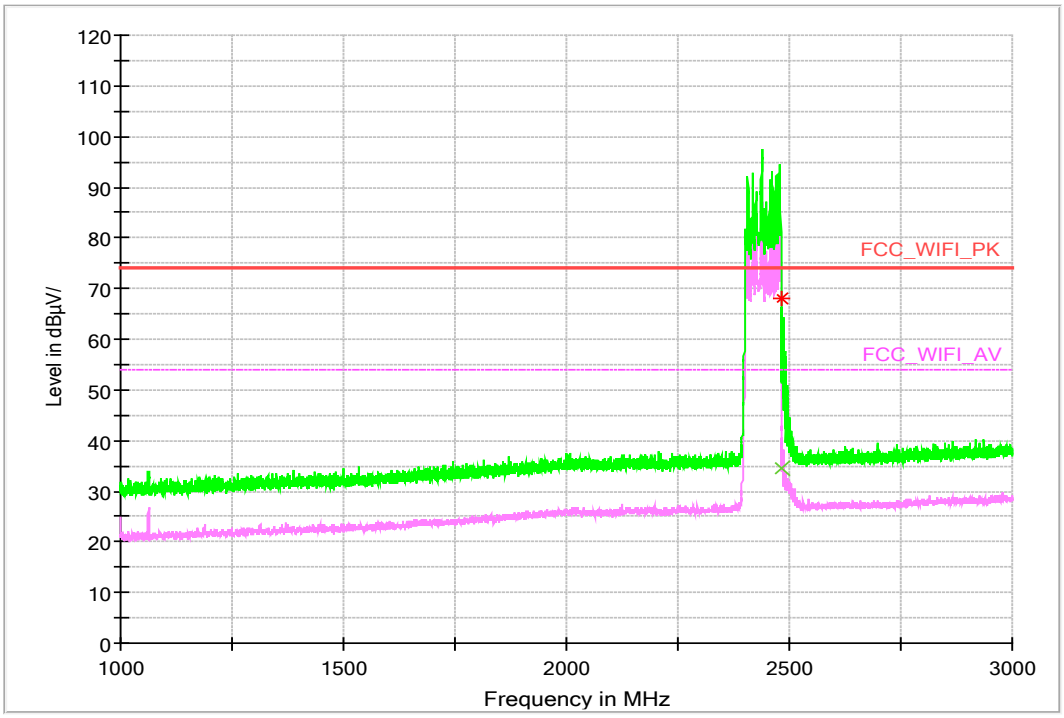
7.4.1.1Channel 0



Note: The peak exceeds the limit line is carrier frequency.

Frequency	MaxPea	Averag	Limit	Margi	Heig	Pol	Azimut	Cor
2390.0000	---	28.62	54.00	-25.38	100.0	H	46.0	-7.8
2390.0000	47.06	---	74.00	-26.94	100.0	H	46.0	-7.8

7.4.1.2 Channel 39



Note: The peak exceeds the limit line is carrier frequency.

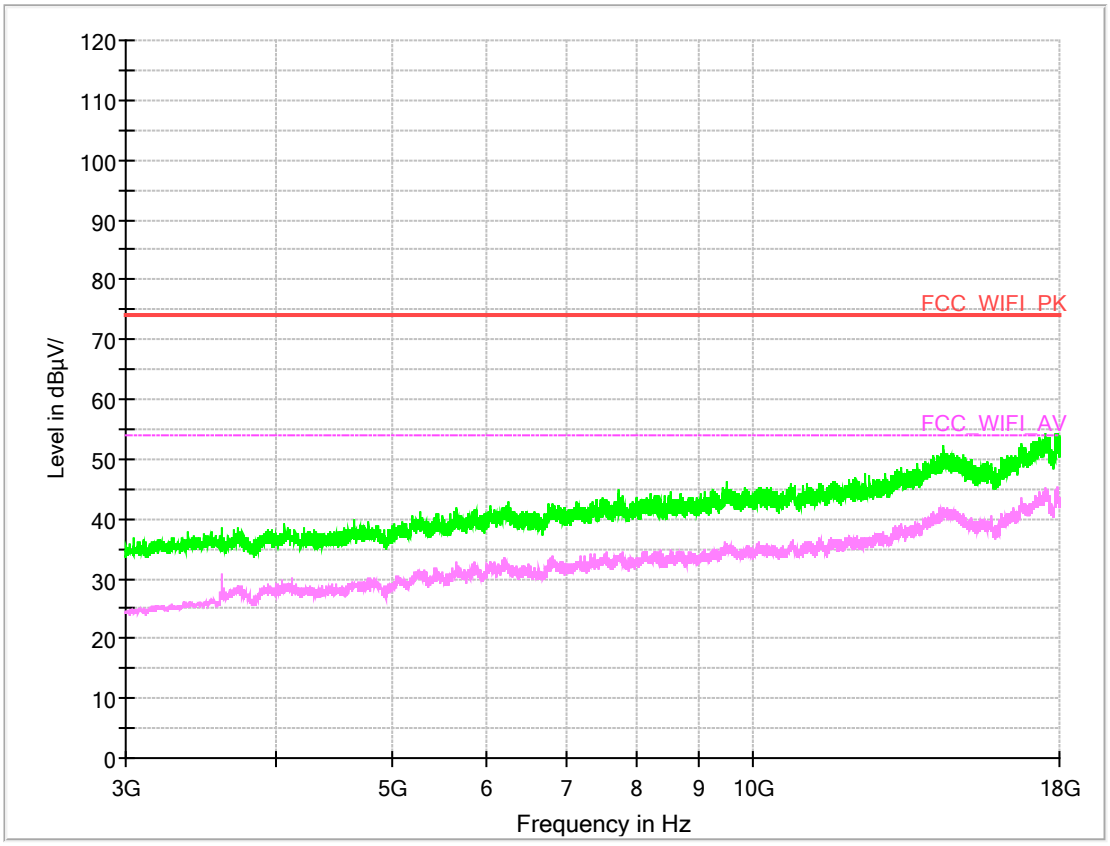
Frequency	MaxPea	Averag	Limit	Margi	Heig	Pol	Azimut	Cor
2483.5000	---	34.64	54.00	-19.36	100.0	H	36.0	-0.4
2483.5000	67.94	---	74.00	-6.06	100.0	H	33.0	-0.4

7.5Part 5: Testing Range of “3 GHz to 18 GHz”

Note 1: The test results and plot for testing range of “1 GHz to 18 GHz” showed as below is the WORST case for all Test Modes and Channels. This range will not be presented for each Test Mode and each Channel.

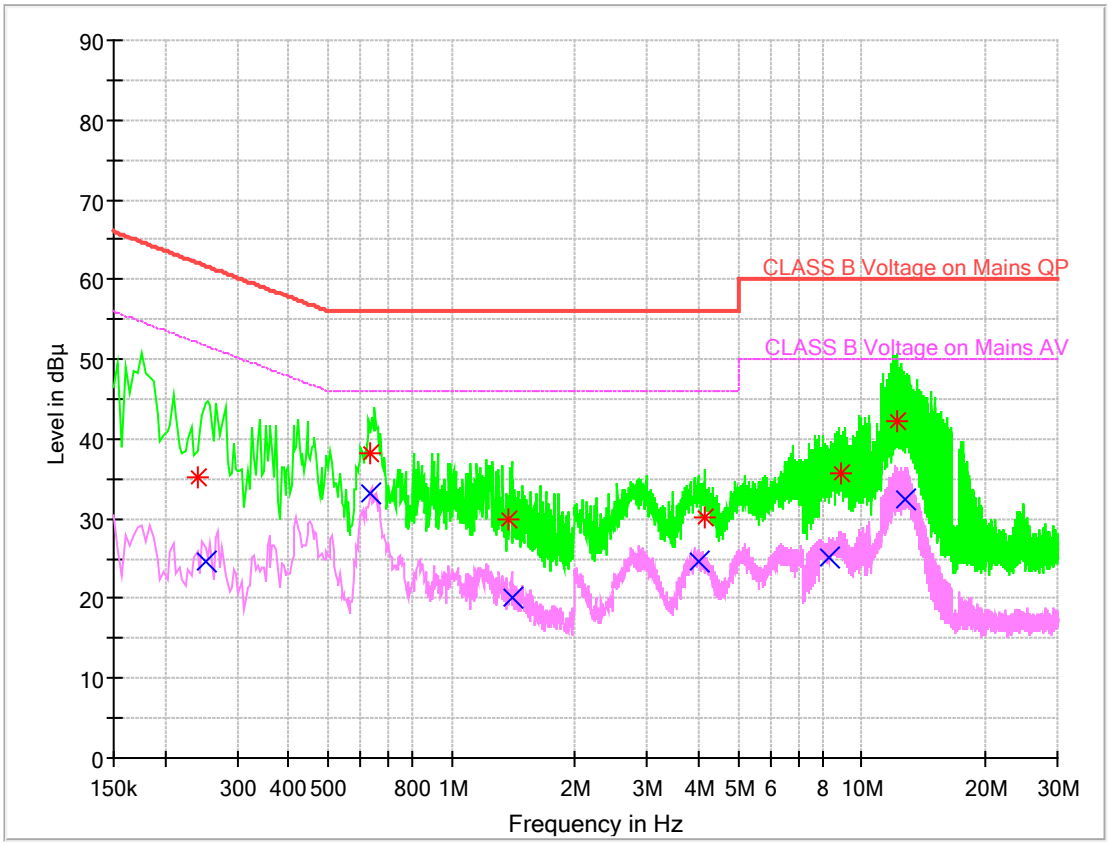
Note 2: The testing range of “1 GHz to 18 GHz” is for checking radiated emissions located in restricted bands faraway from the EUT operating bands.

Note 3: Two limits are required in the testing range above 1 GHz, that is Peak limit (74 dBµV/m) and Average Limit (54 dBµV/m).



Appendix I: Conducted Emission at Power Port

Note: RBW =9 kHz, VBW = 30 kHz



Final Result 1

Frequency (MHz)	QuasiPeak	Average	Limit (dBµ	Margin (dB)	Line	Filter	Corr. (dB)
0.240072	35.23	---	62.09	-26.86	L1	ON	9.7
0.251317	---	24.56	51.71	-27.15	L1	ON	9.7
0.634416	38.11	---	56.00	-17.89	N	ON	9.7
0.635210	---	33.06	46.00	-12.94	L1	ON	9.7
1.378896	29.95	---	56.00	-26.05	N	ON	9.7
1.404917	---	20.21	46.00	-25.79	N	ON	9.7
4.015733	---	24.65	46.00	-21.35	L1	ON	9.8
4.160420	30.09	---	56.00	-25.91	L1	ON	9.8
8.318997	---	25.14	50.00	-24.86	L1	ON	9.9
8.861843	35.67	---	60.00	-24.33	N	ON	9.9
12.205518	42.28	---	60.00	-17.72	N	ON	10.0
12.734010	---	32.34	50.00	-17.66	N	ON	10.0

END