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.

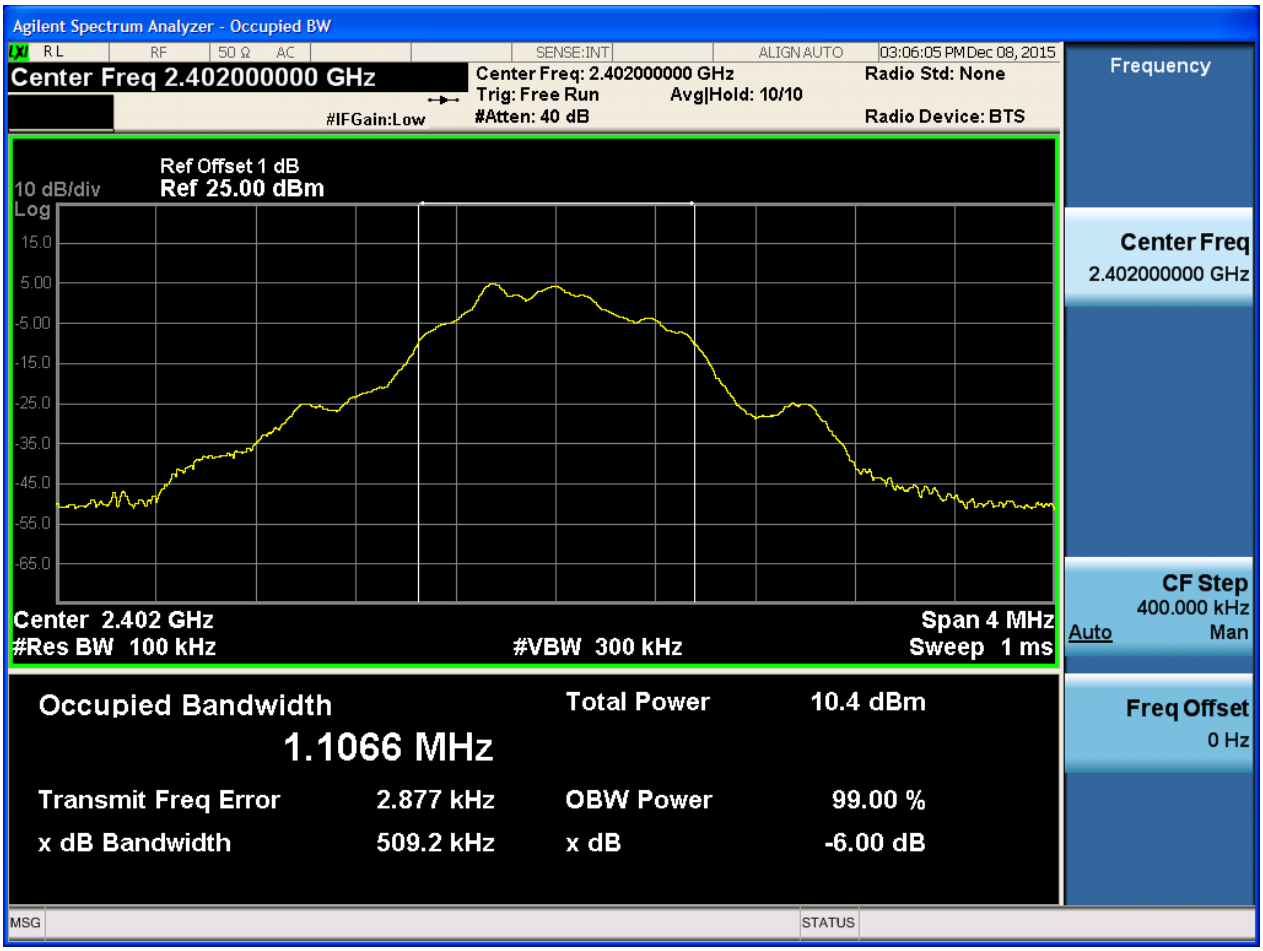
For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain, and used as respective results for each chain.

Part I - Test Results

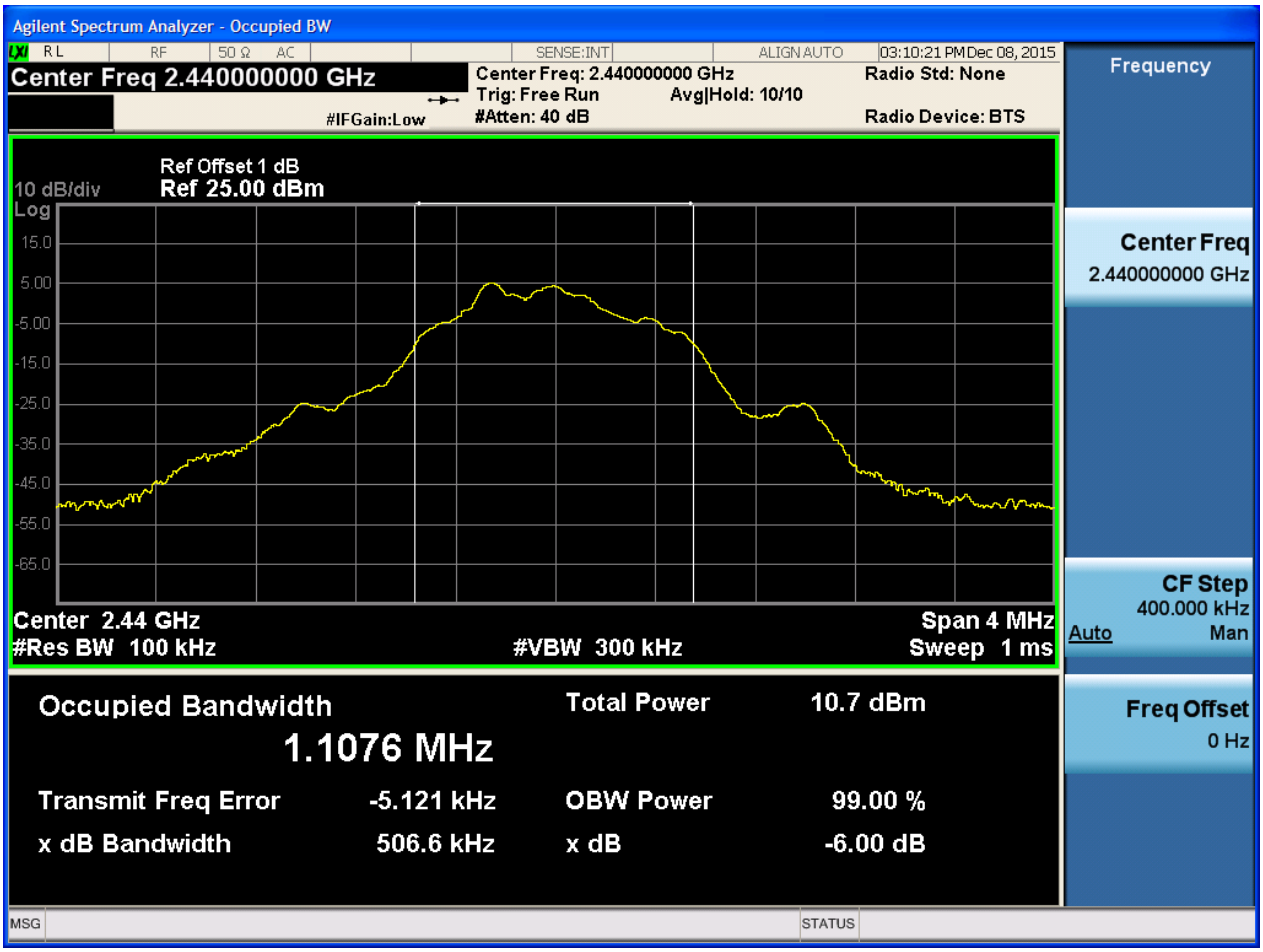
Test Mode	Test Channel	Frequency[MHz]	Ant	DTS6dBBW[MHz]	Verdict
TM1_Ch0	L	2402	Ant 1	0.51	pass
TM1_Ch19	M	2440	Ant 1	0.51	pass
TM1_Ch39	H	2480	Ant 1	0.51	pass

Part II - Test Plots

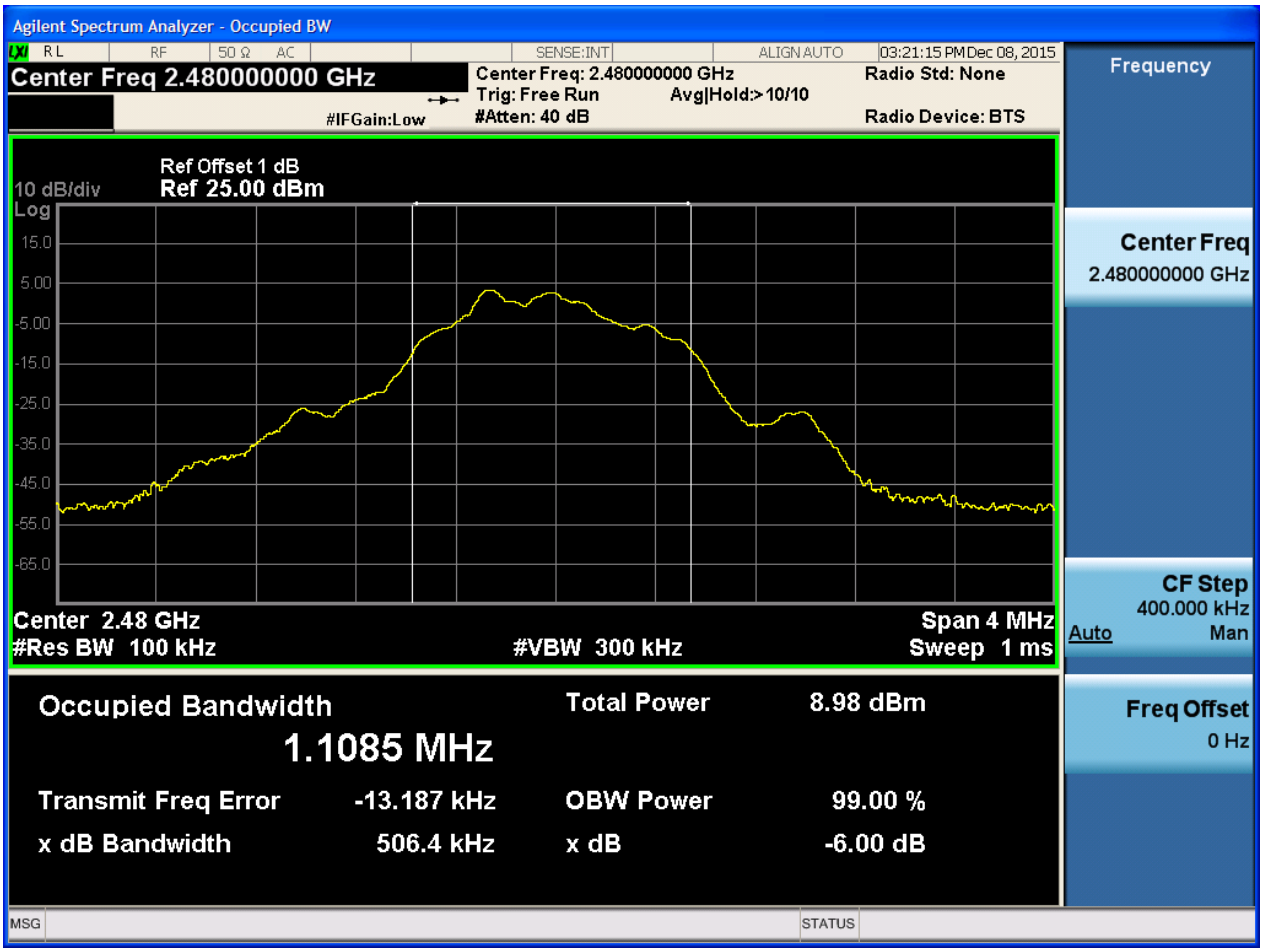
2.1 TM1_Ch0



2.3 TM1_Ch19



2.5 TM1_Ch39



Appendix B: Occupied Bandwidth

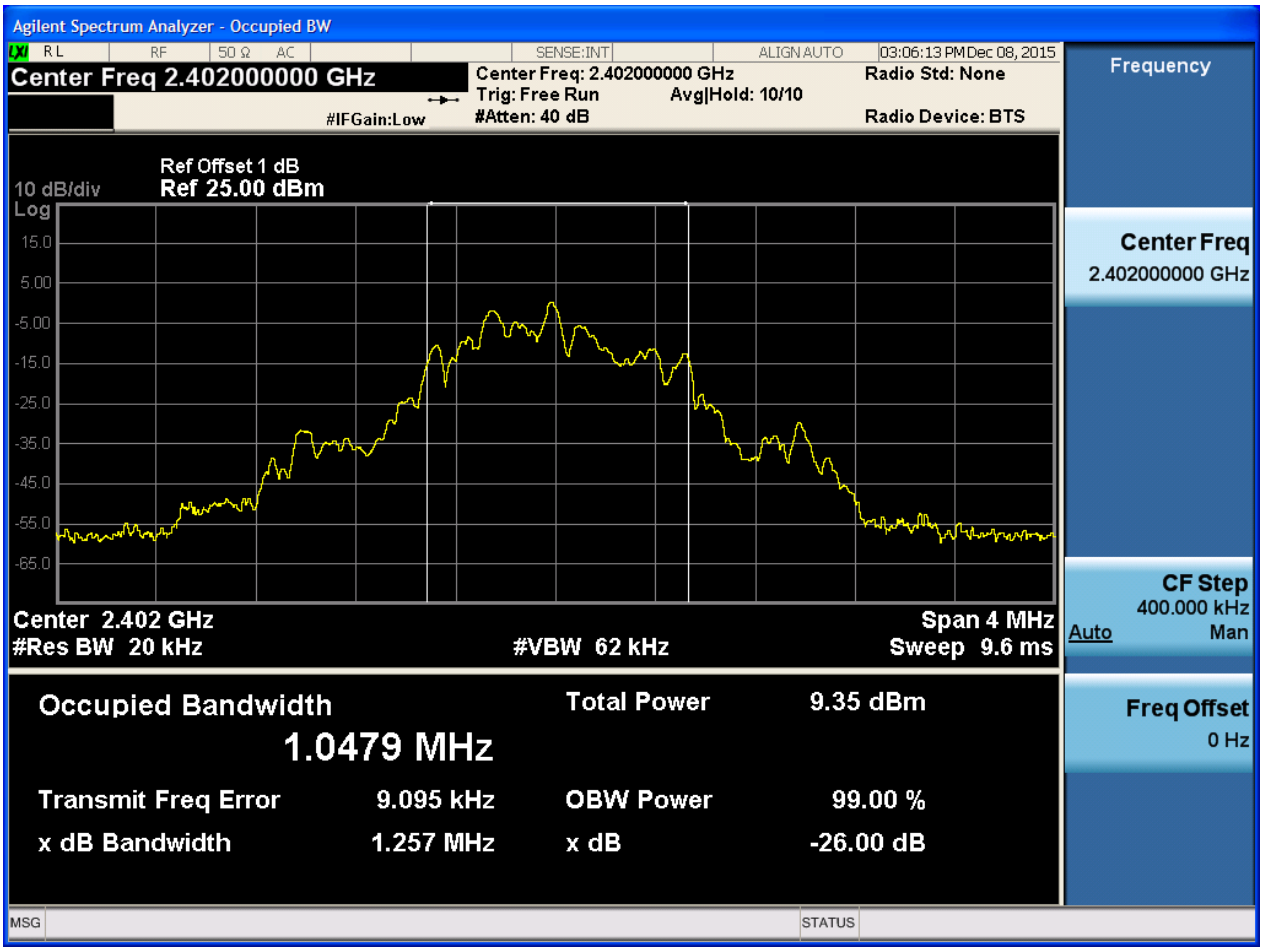
For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain, and used as respective results for each chain.

Part I - Test Results

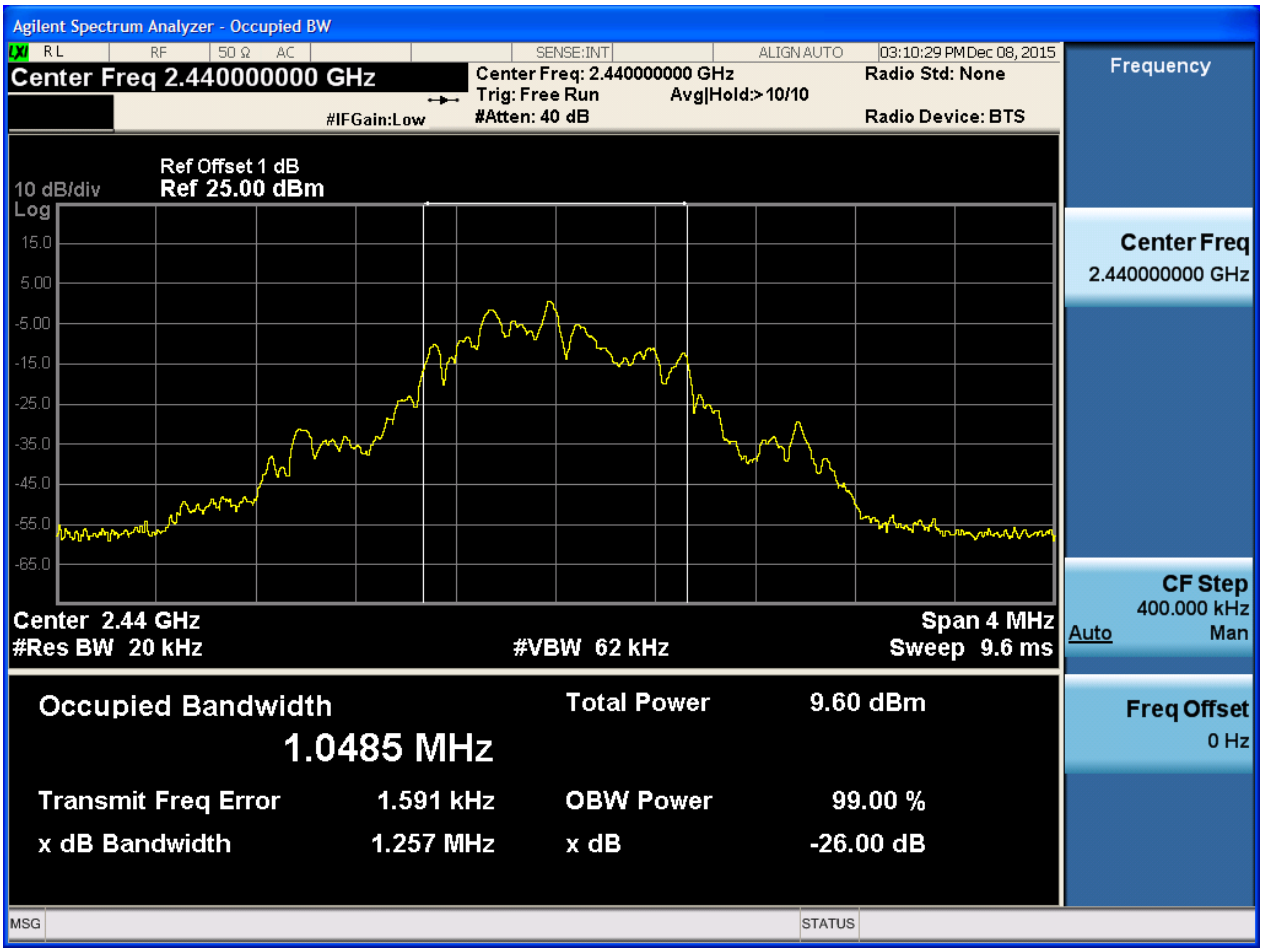
Test Mode	Test Channel	Frequency[MHz]	Ant	Occupied Bandwidth [MHz]	Verdict
TM1_Ch0	L	2402	Ant 1	1.05	pass
TM1_Ch19	M	2440	Ant 1	1.05	pass
TM1_Ch39	H	2480	Ant 1	1.05	pass

Part II - Test Plots

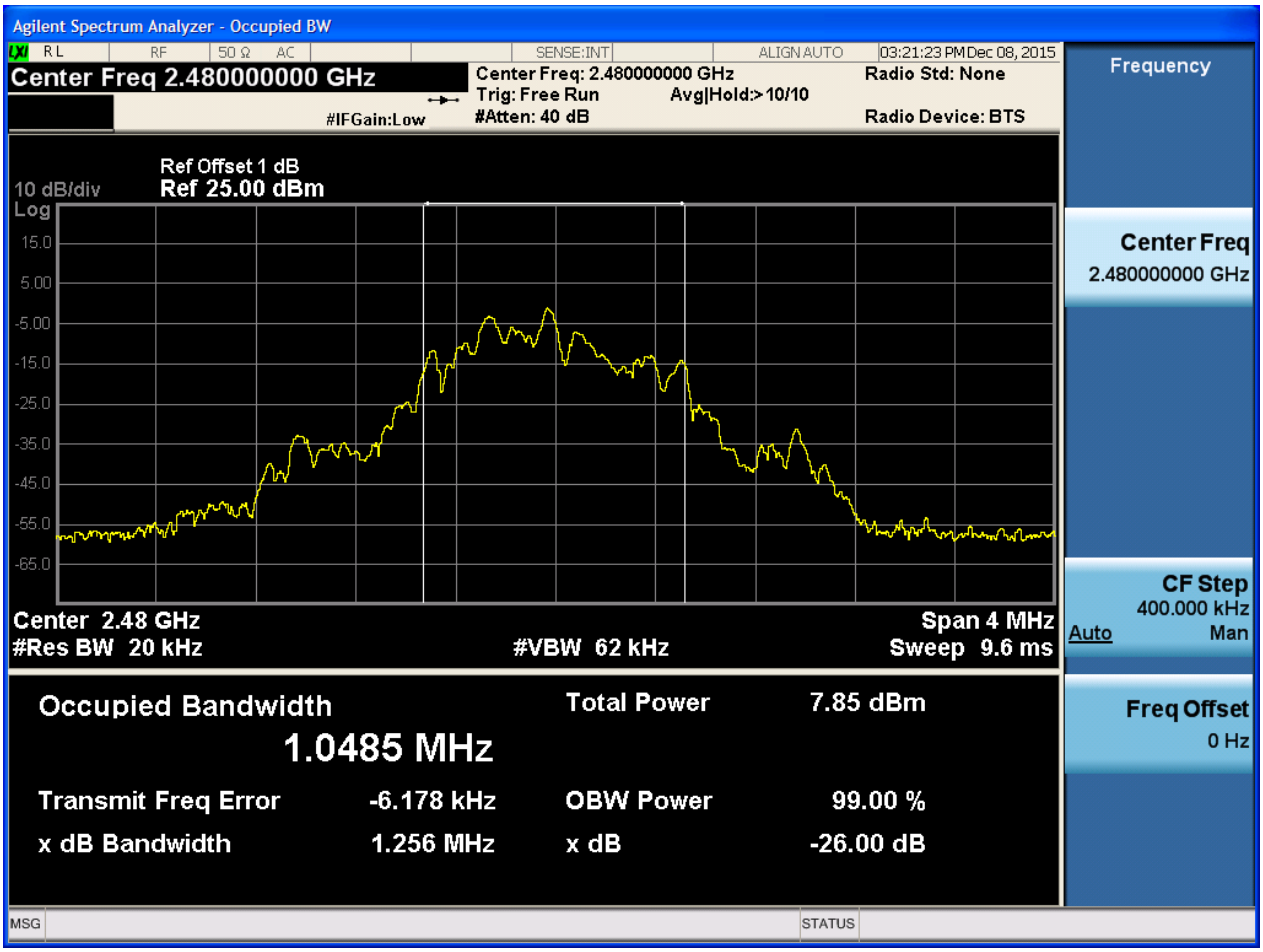
2.1 TM1_Ch0



2.1 TM1_Ch19



2.1 TM1_Ch39



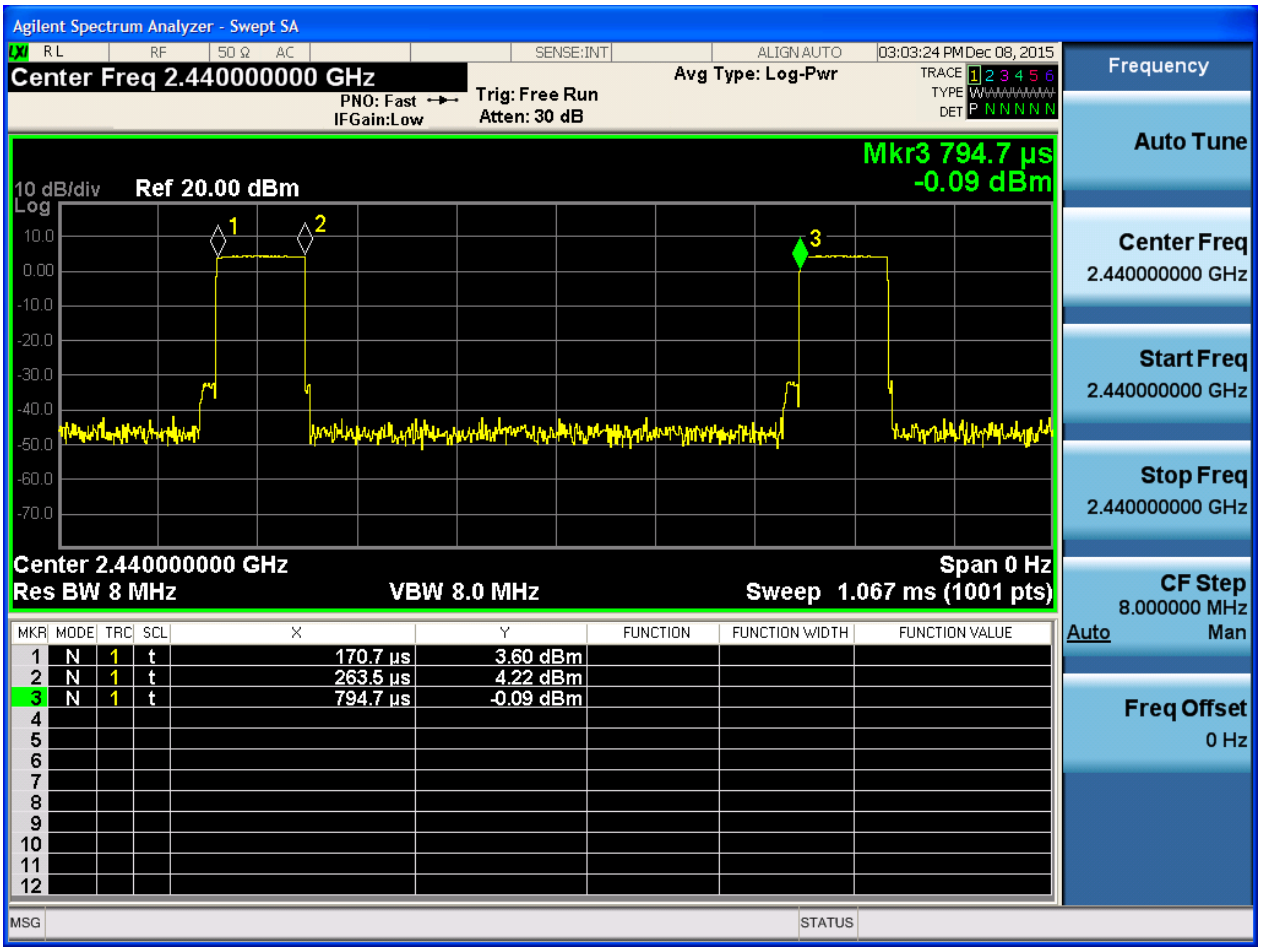
Appendix C: Duty cycle

Part I - Test Results

Test Mode	TX Freq. [MHz]	Ant	Duty cycle [%]
TM1	CH0,CH19,CH39	Ant 1	15

Part II - Test Plots

2.1 TM1_Ch19



Appendix D: Maximum Conducted Average Output Power

Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Ant	Power[dBm]	Verdict
TM1_Ch0	L	2402	Ant 1	5.00	pass
TM1_Ch19	M	2440	Ant 1	5.41	pass
TM1_Ch39	H	2480	Ant 1	3.83	pass

Part II - Test Plots

2.1 TM1_Ch0

2.3 TM1_Ch19

2.5 TM1_Ch39

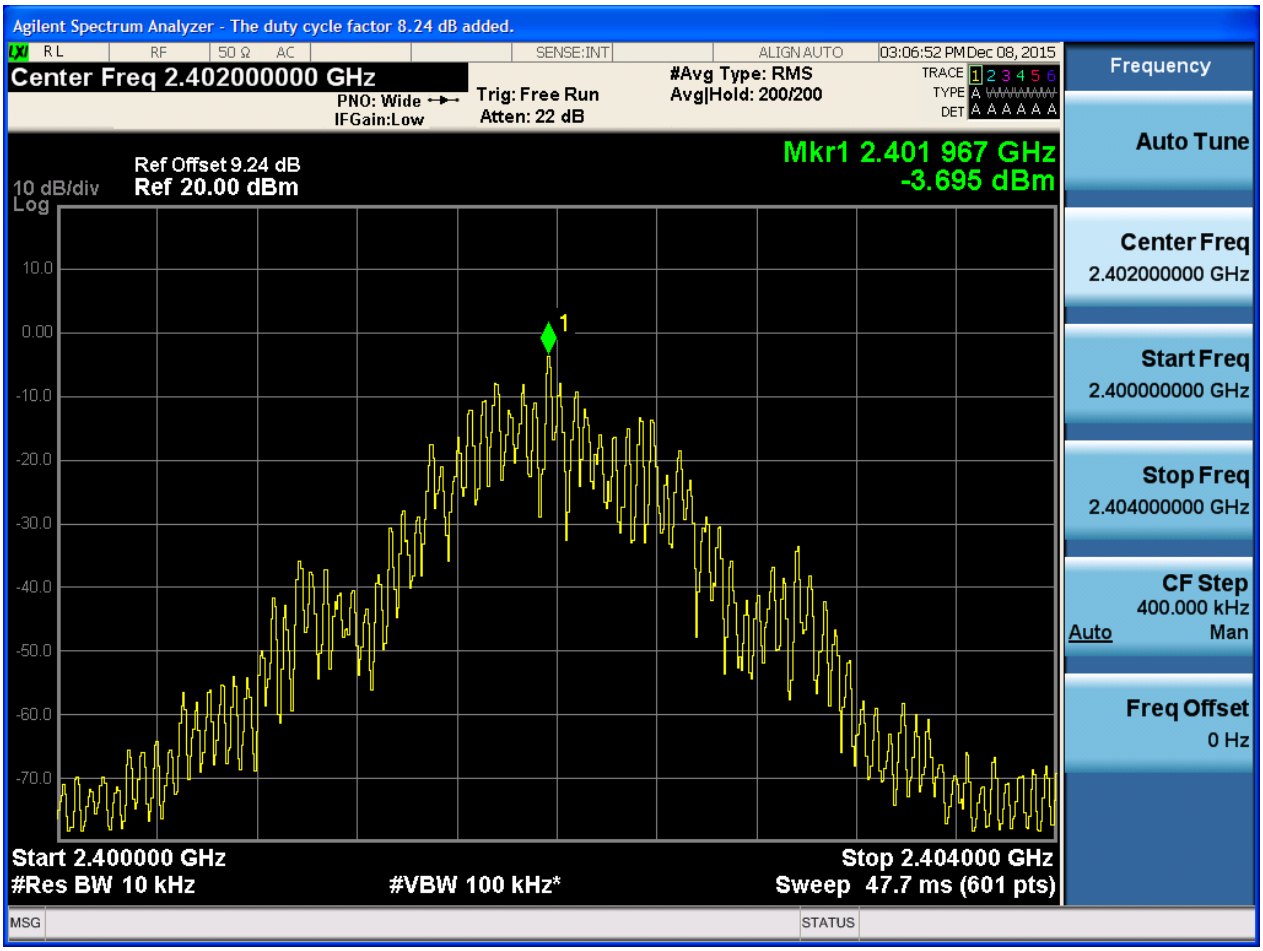
Appendix E: Maximum Power Spectral Density Level

Part I - Test Results

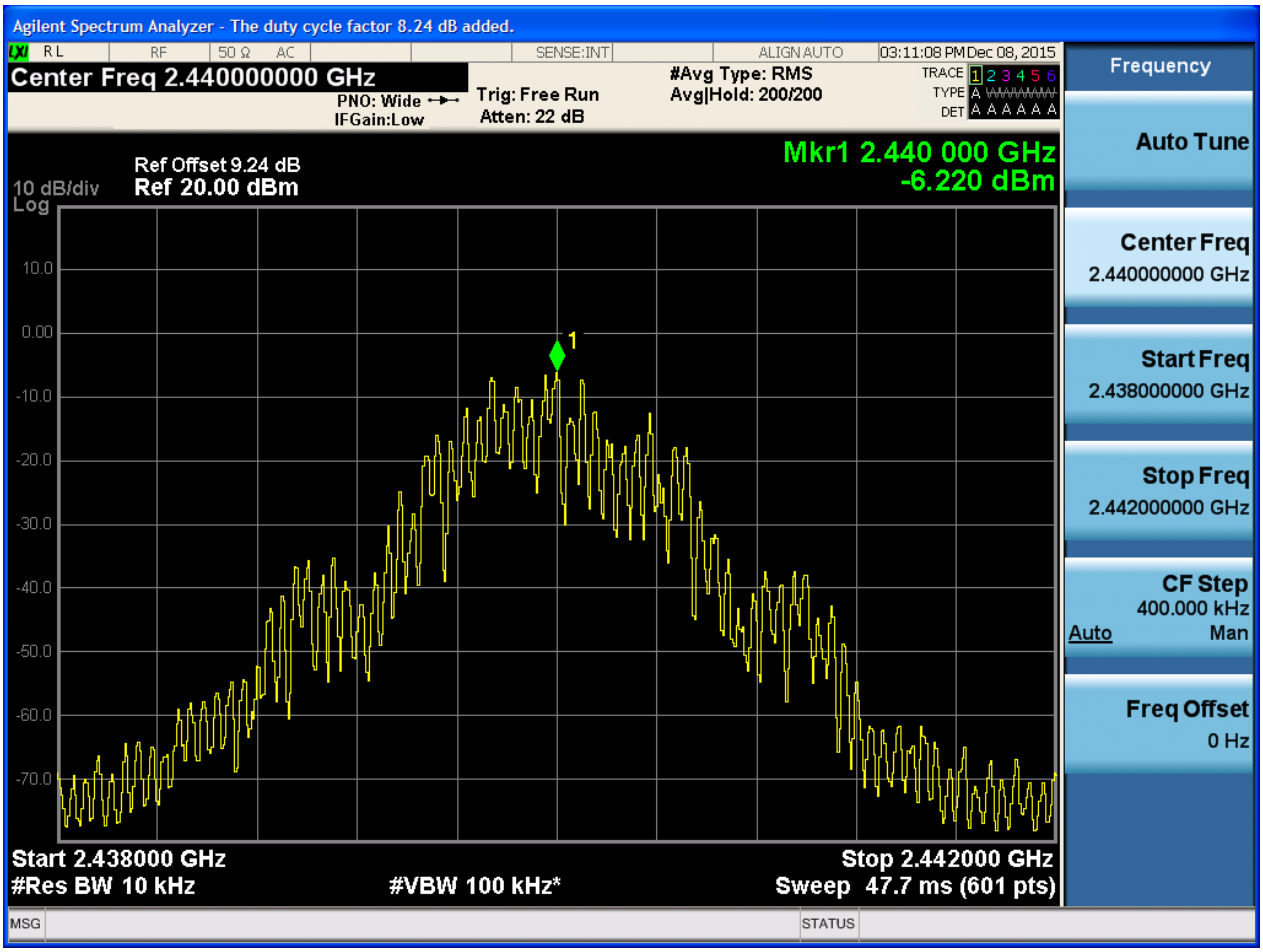
Test Mode	Test Channel	Frequency[MHz]	Ant	PD[MHz]	Verdict
TM1_Ch0	L	2402	Ant 1	-3.70	pass
TM1_Ch19	M	2440	Ant 1	-6.22	pass
TM1_Ch39	H	2480	Ant 1	-4.97	pass

Part II - Test Plots

2.1 TM1_Ch0



2.3 TM1_Ch19



2.5 TM1_Ch39

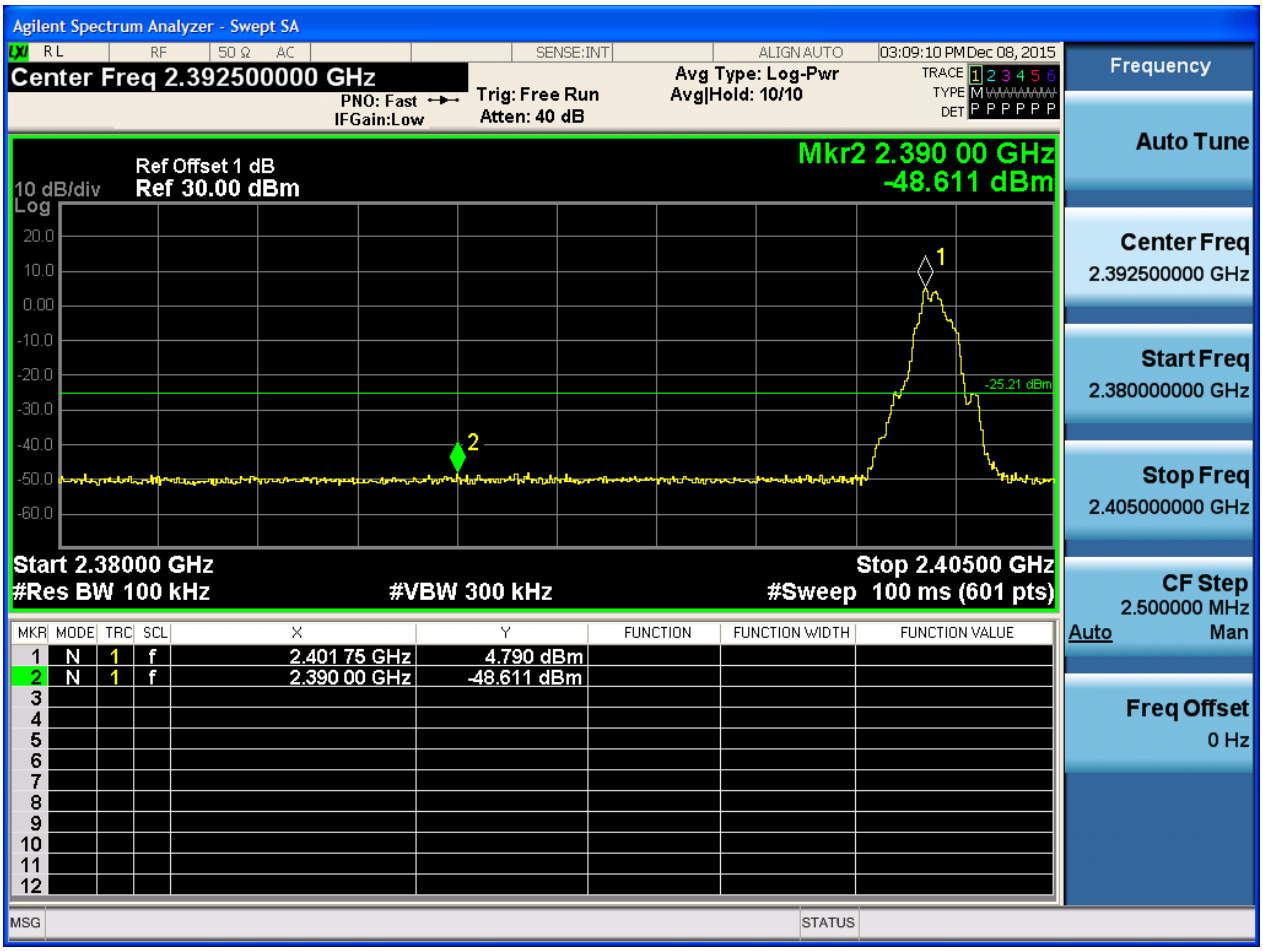
Appendix F: Band Edges Compliance

Part I - Test Results

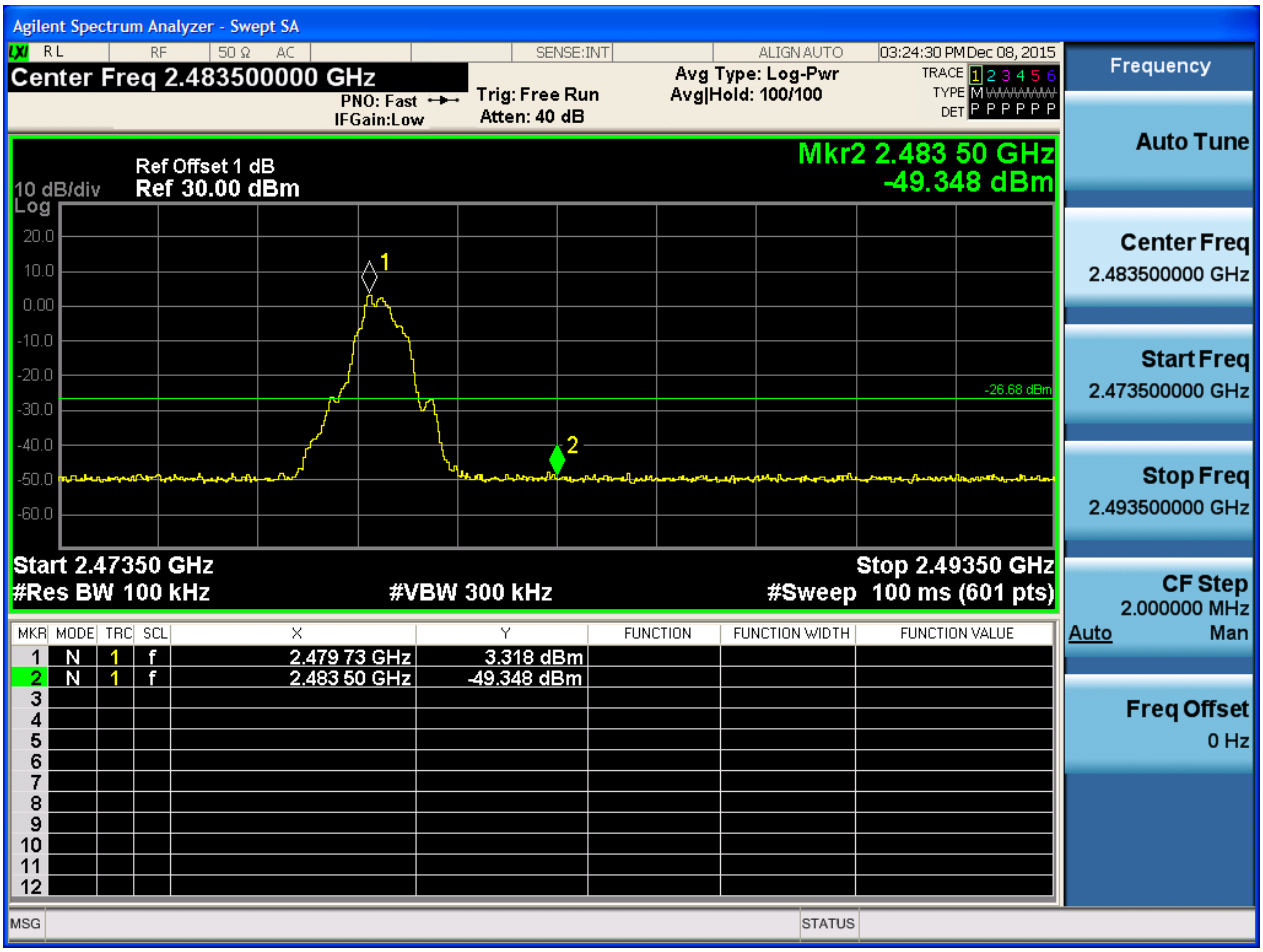
Test Mode	Test Channel	Frequency[MHz]	Ant	Carrier Power[dBm]	Max.Spurious Level[dBm]	Verdict
TM1_Ch0	L	2402	Ant 1	4.79	-48.61	pass
TM1_Ch39	H	2480	Ant 1	3.32	-49.35	pass

Part II - Test Plots

2.1 TM1_Ch0



2.3 TM1_Ch39



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

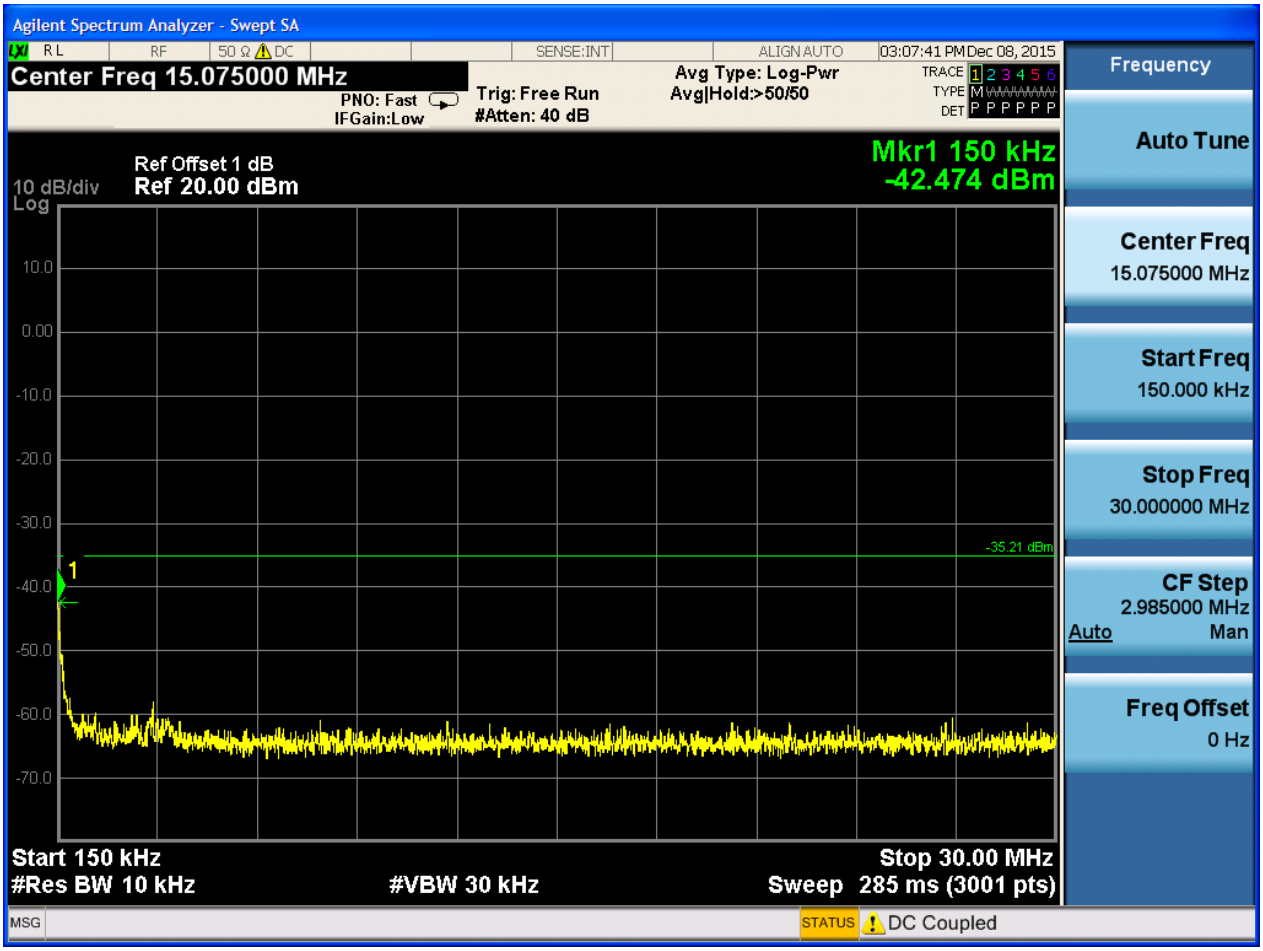
Test Mode	Test Channel	Frequency[MHz]	Ant	Pref[dBm]	Puw[dBm]	Verdict
TM1_Ch0	L	2402	Ant 1	4.79	<limit	pass
TM1_Ch19	M	2440	Ant 1	5.09	<limit	pass
TM1_Ch39	H	2480	Ant 1	3.39	<limit	pass

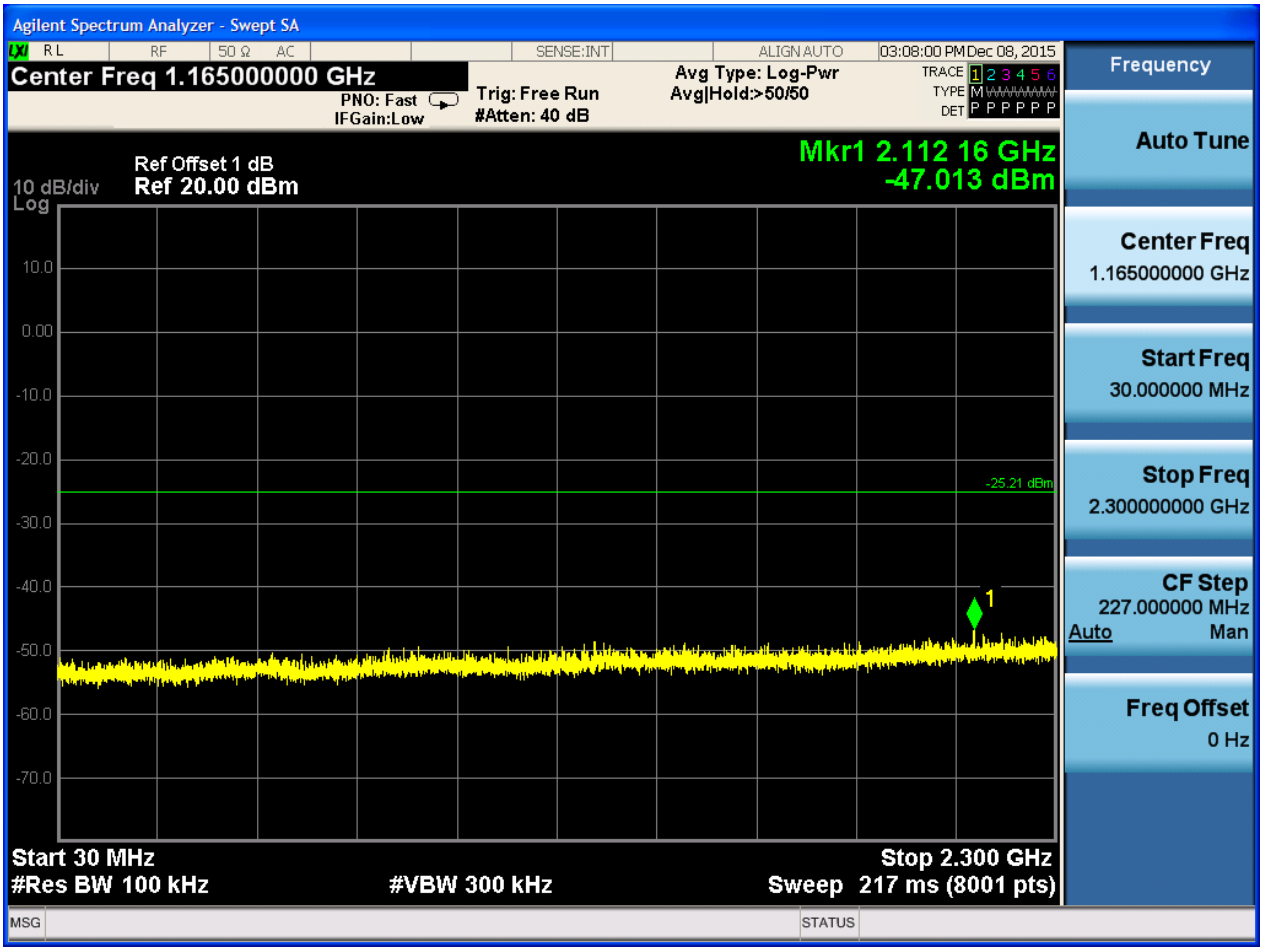
Part II - Test Plots

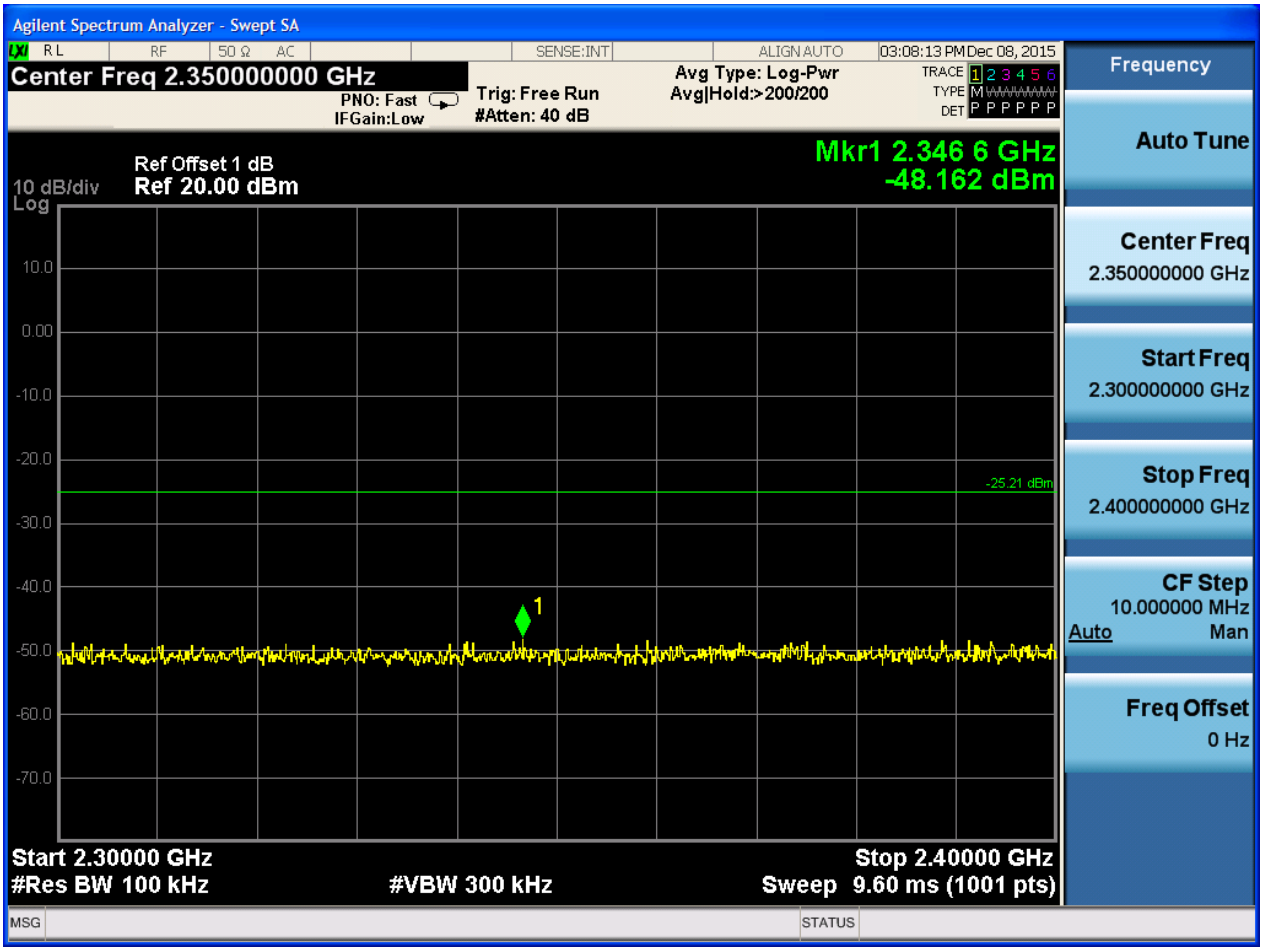
2.1 TM1_Ch0

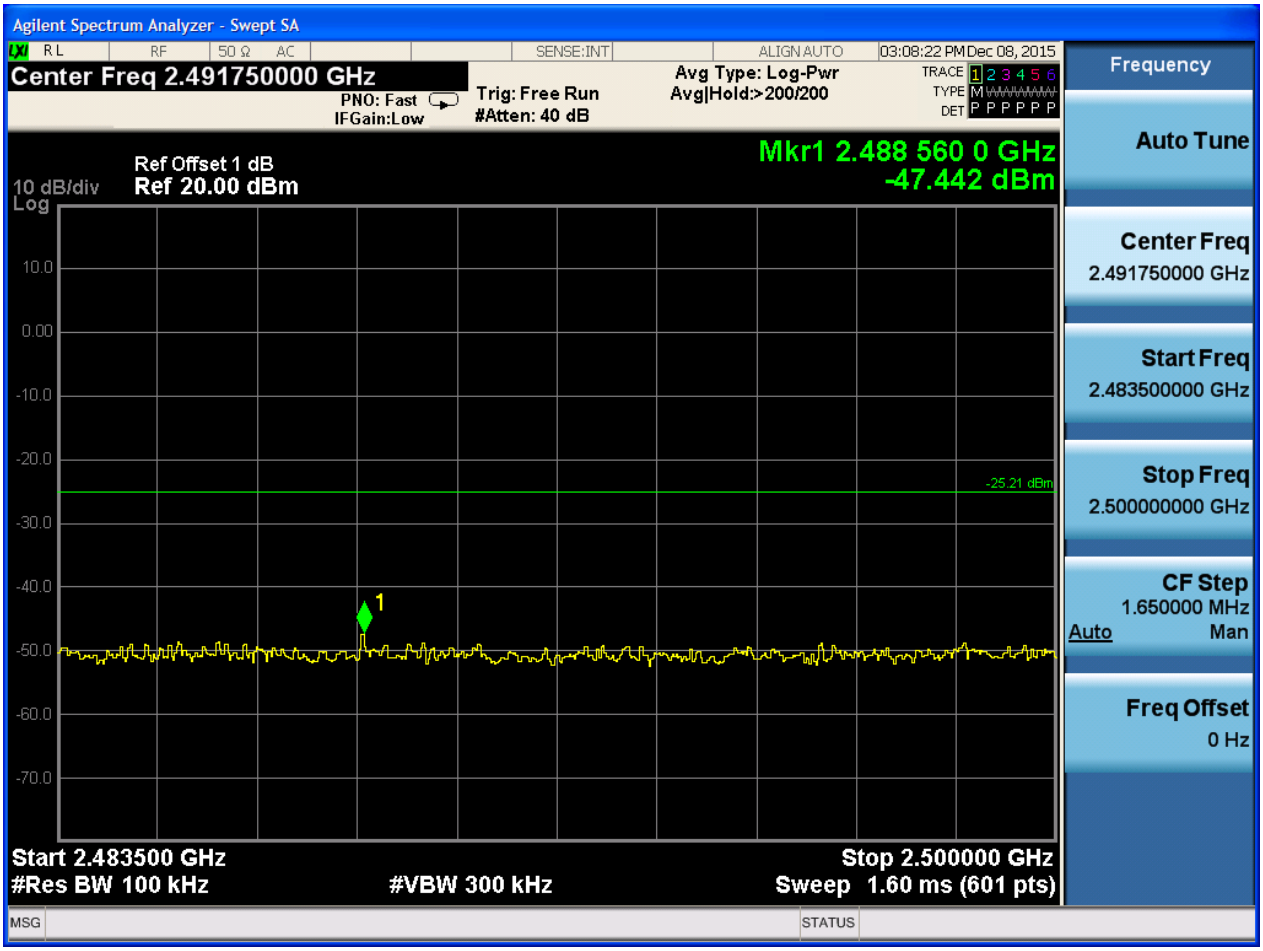
Pref:

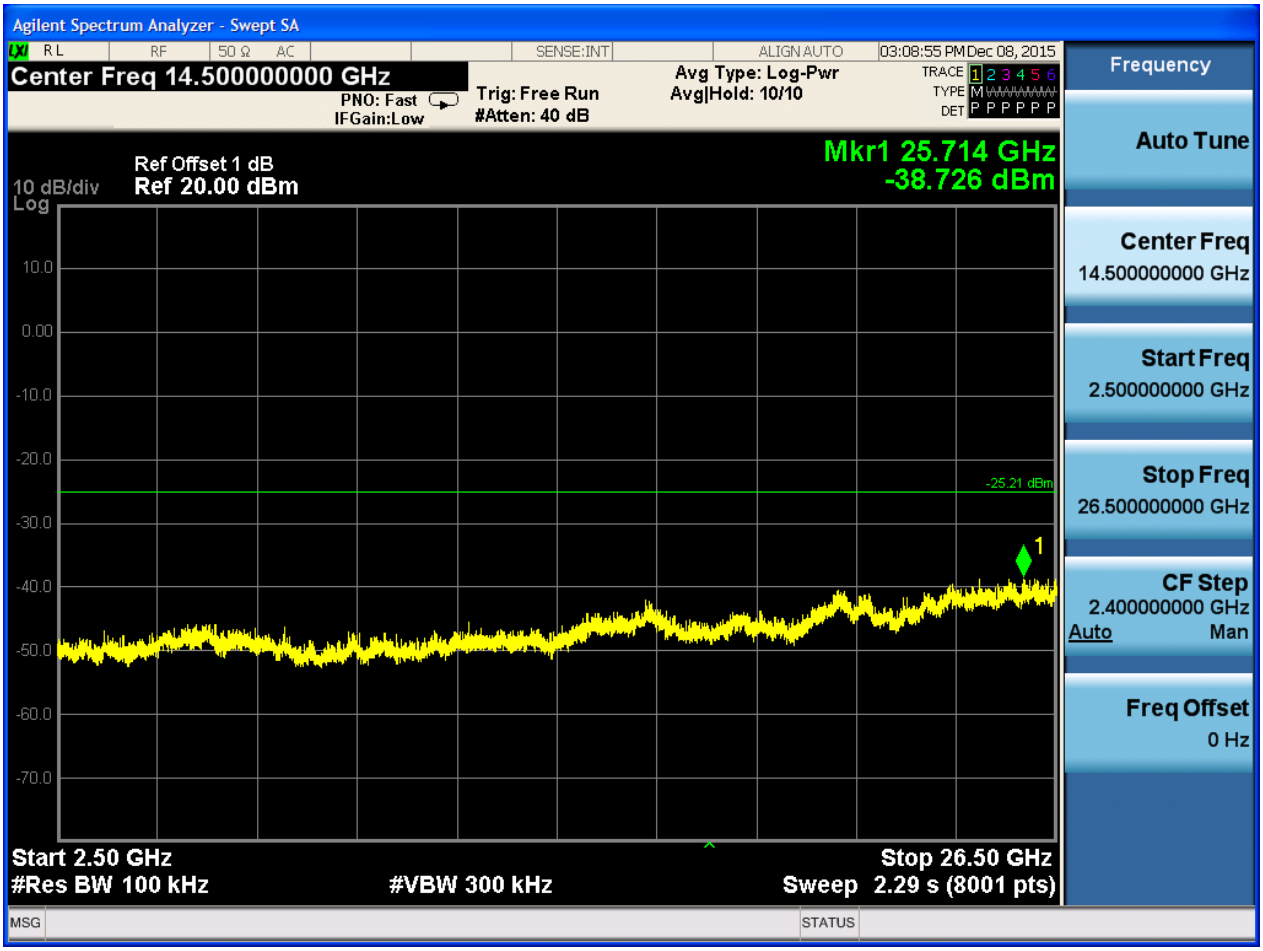
Puw:







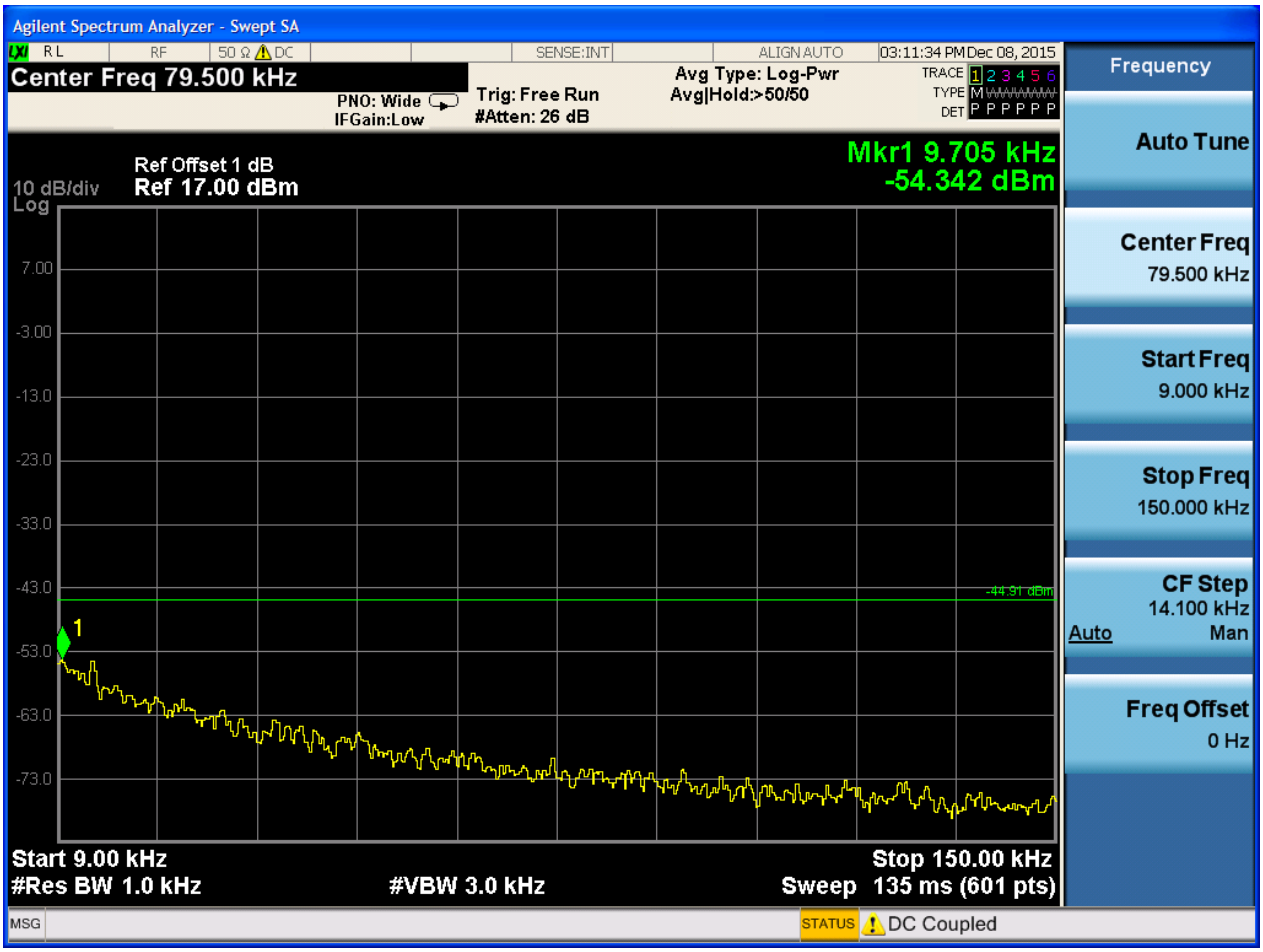


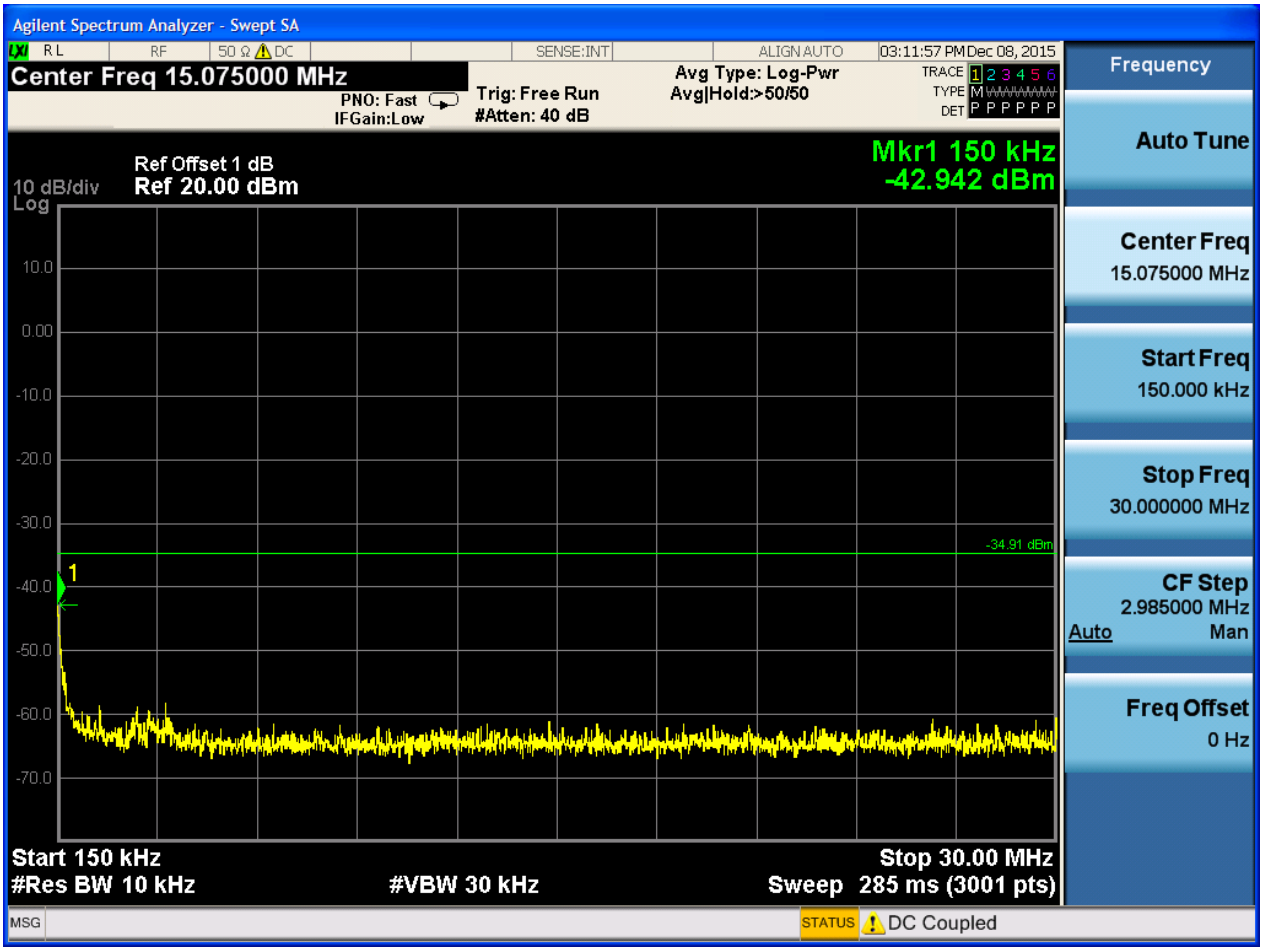


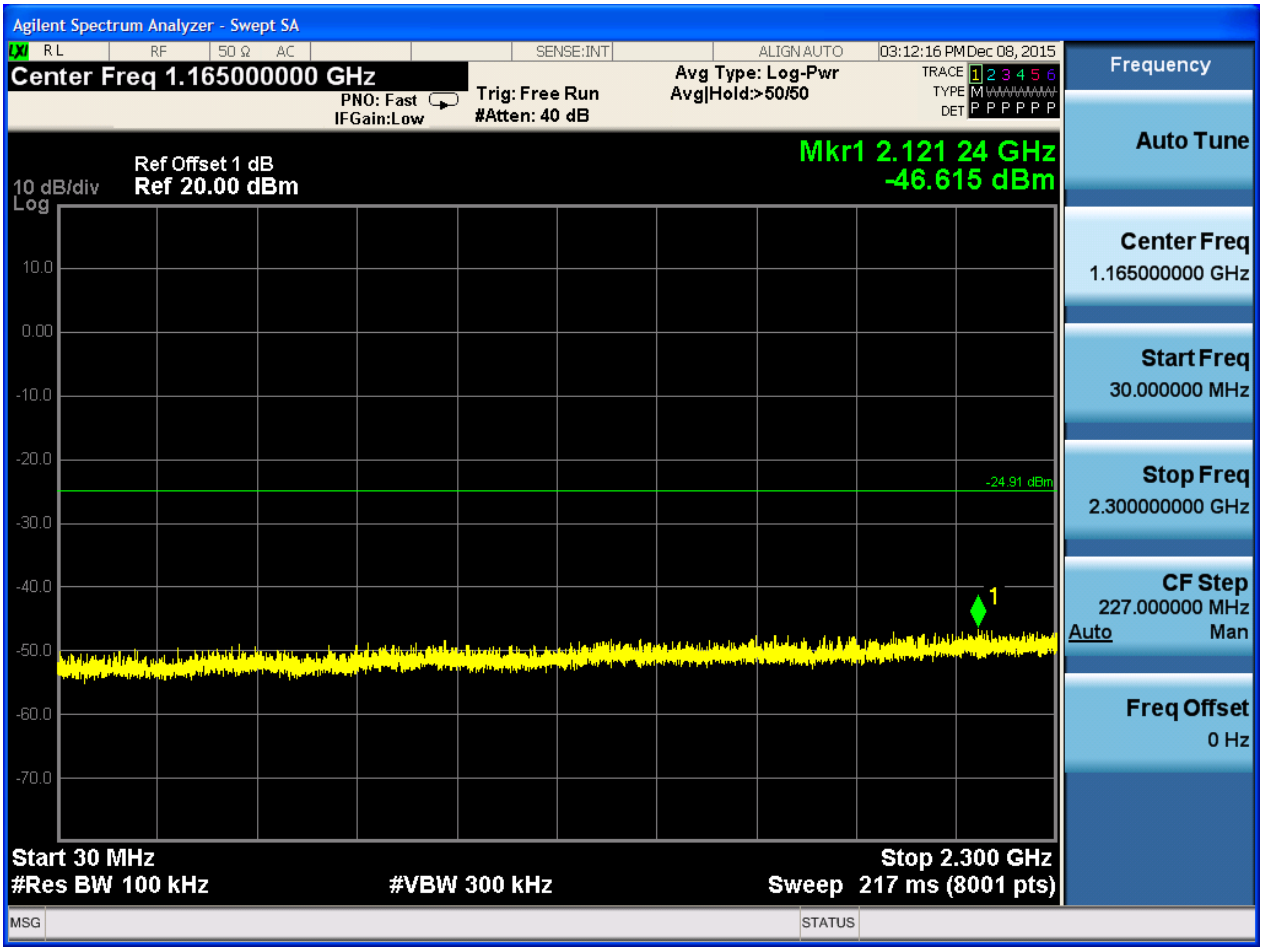
2.3 TM1_Ch19

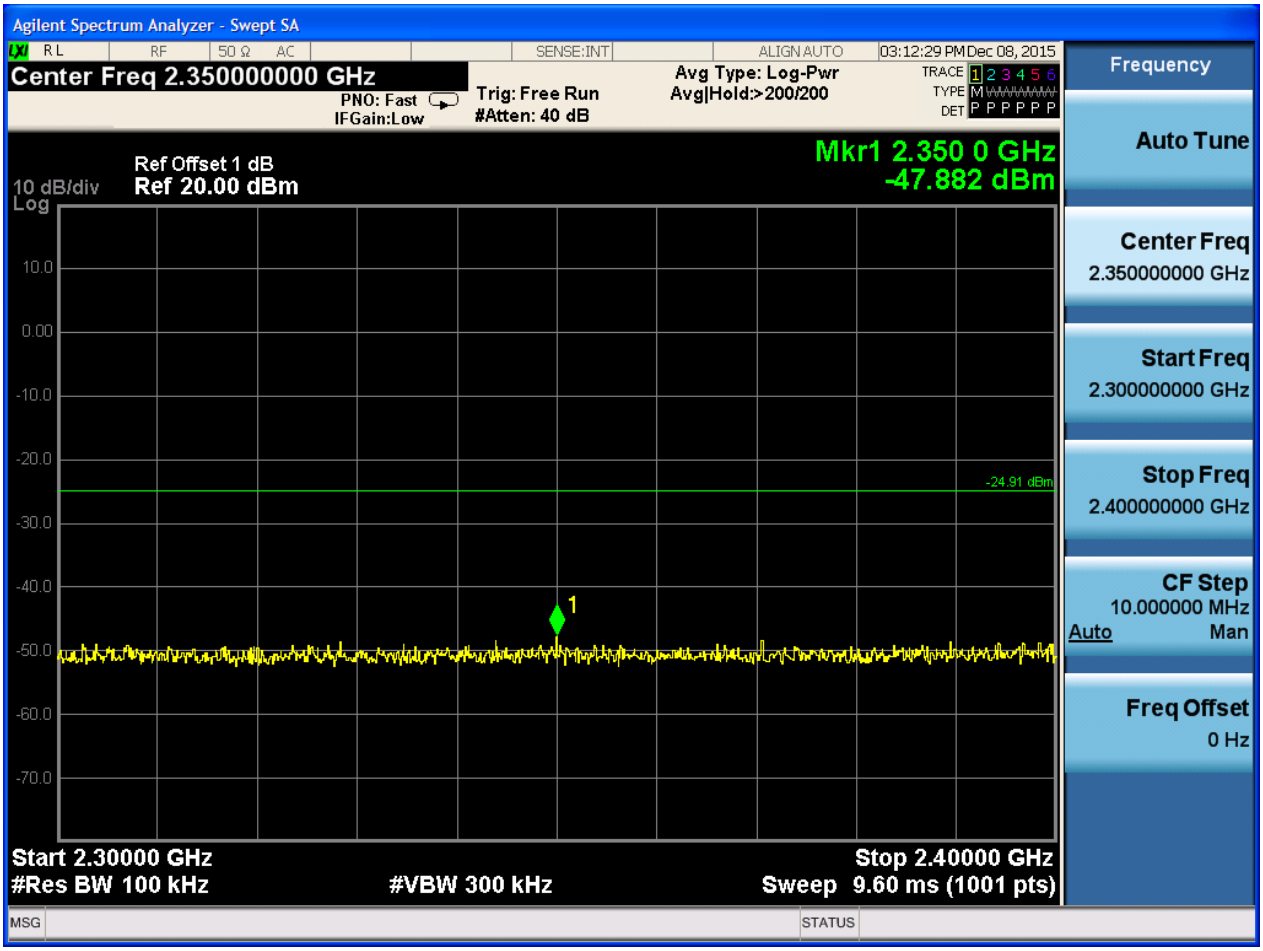
Pref:

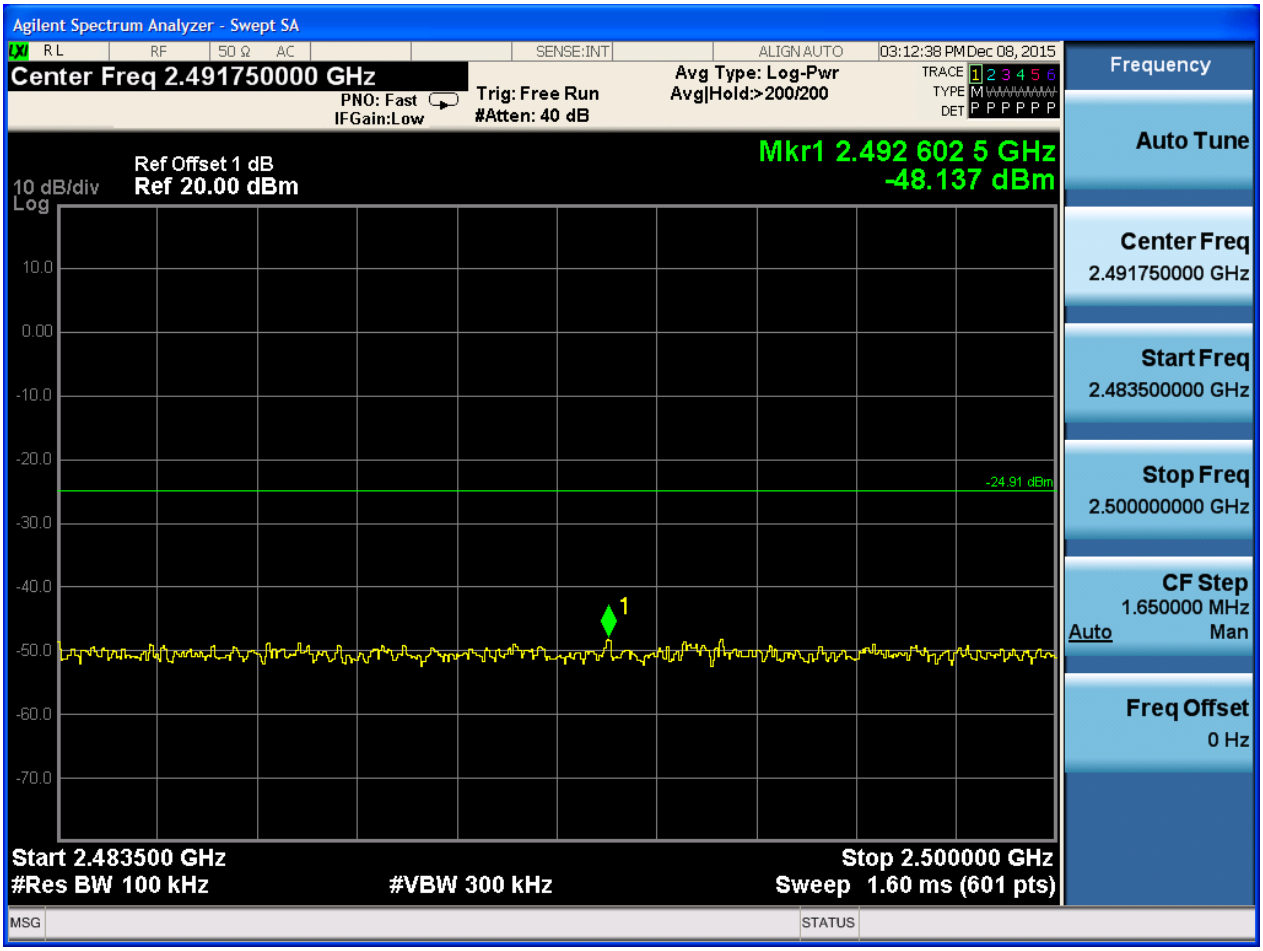
Puw:

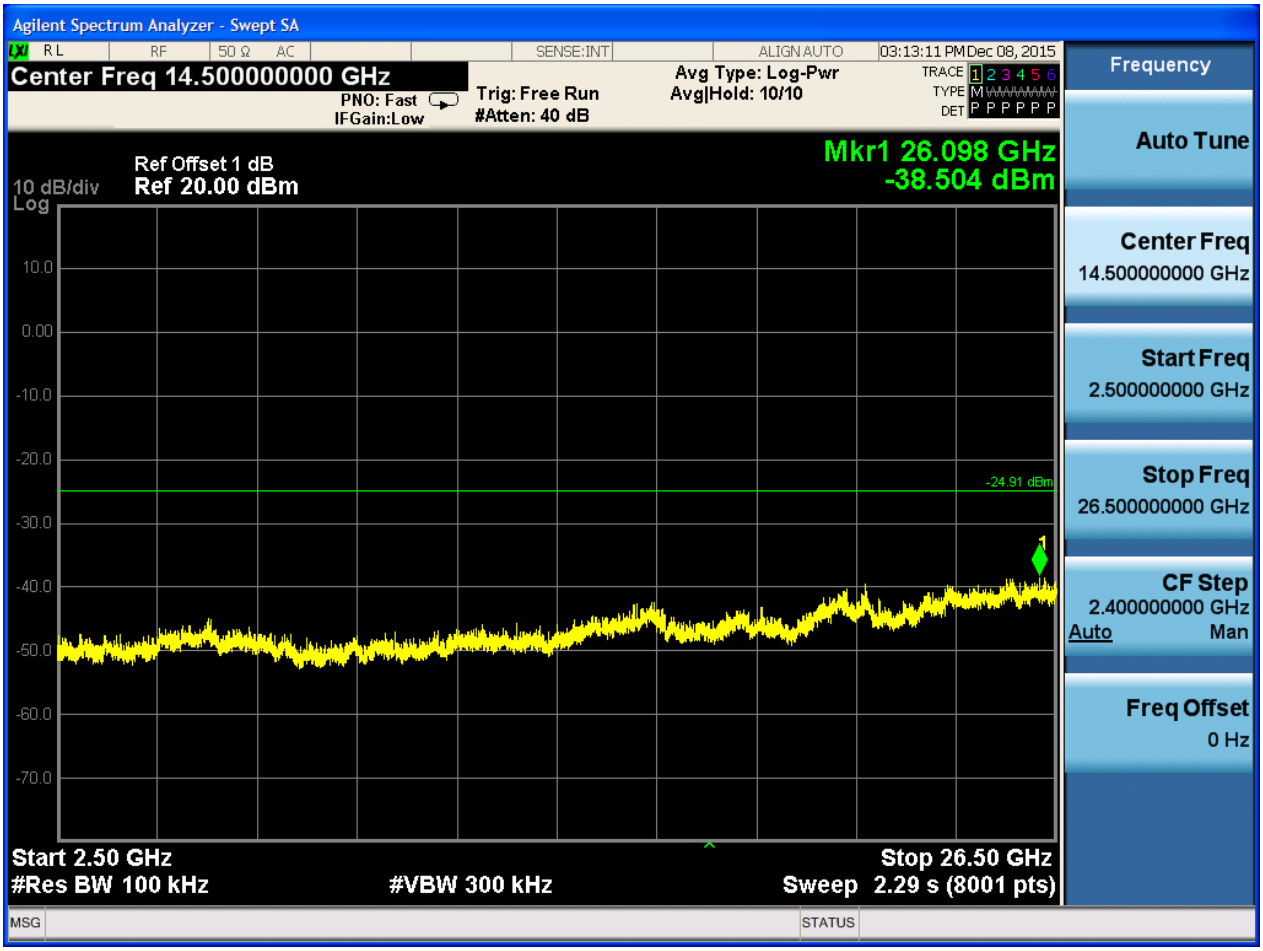








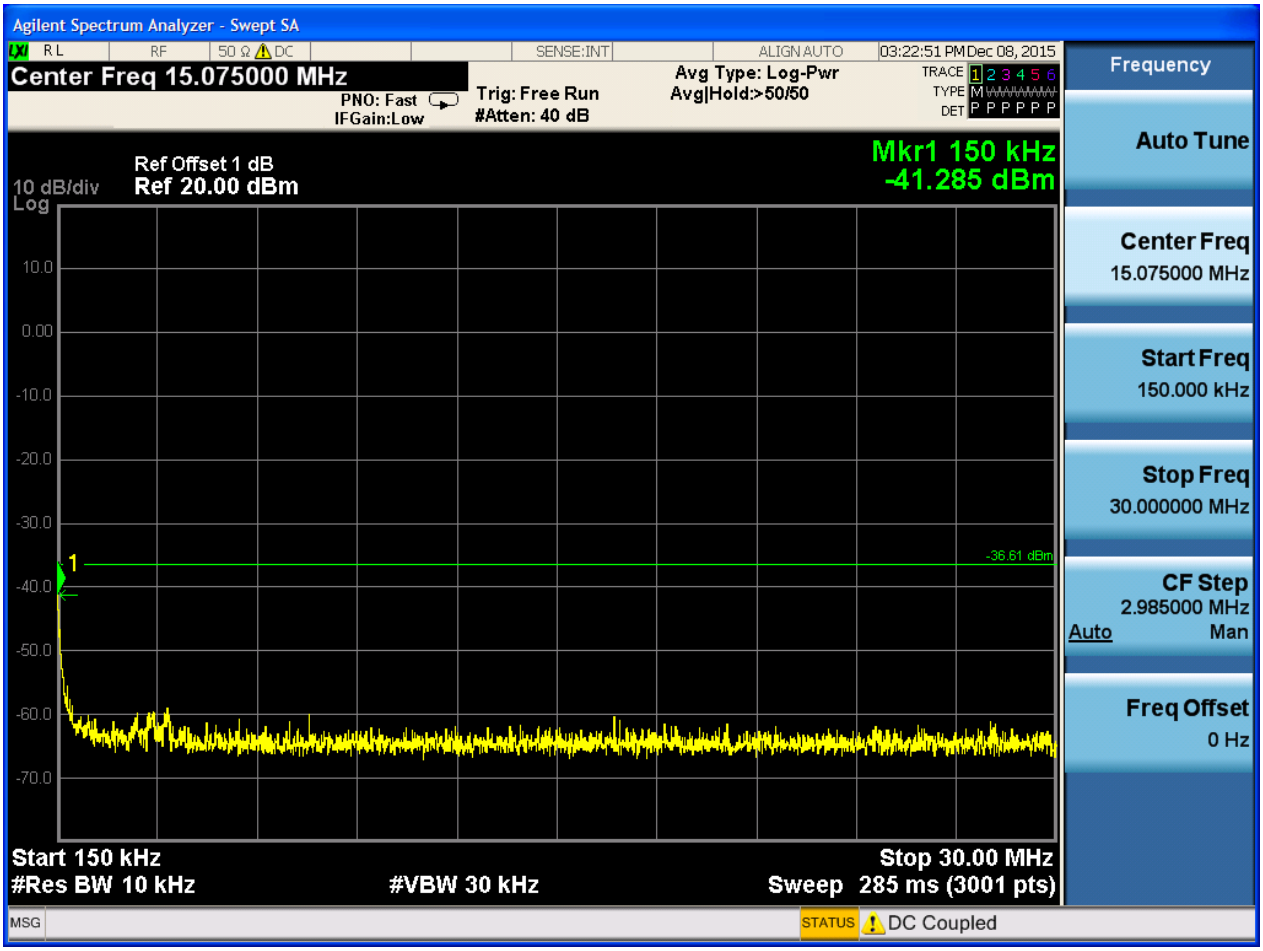


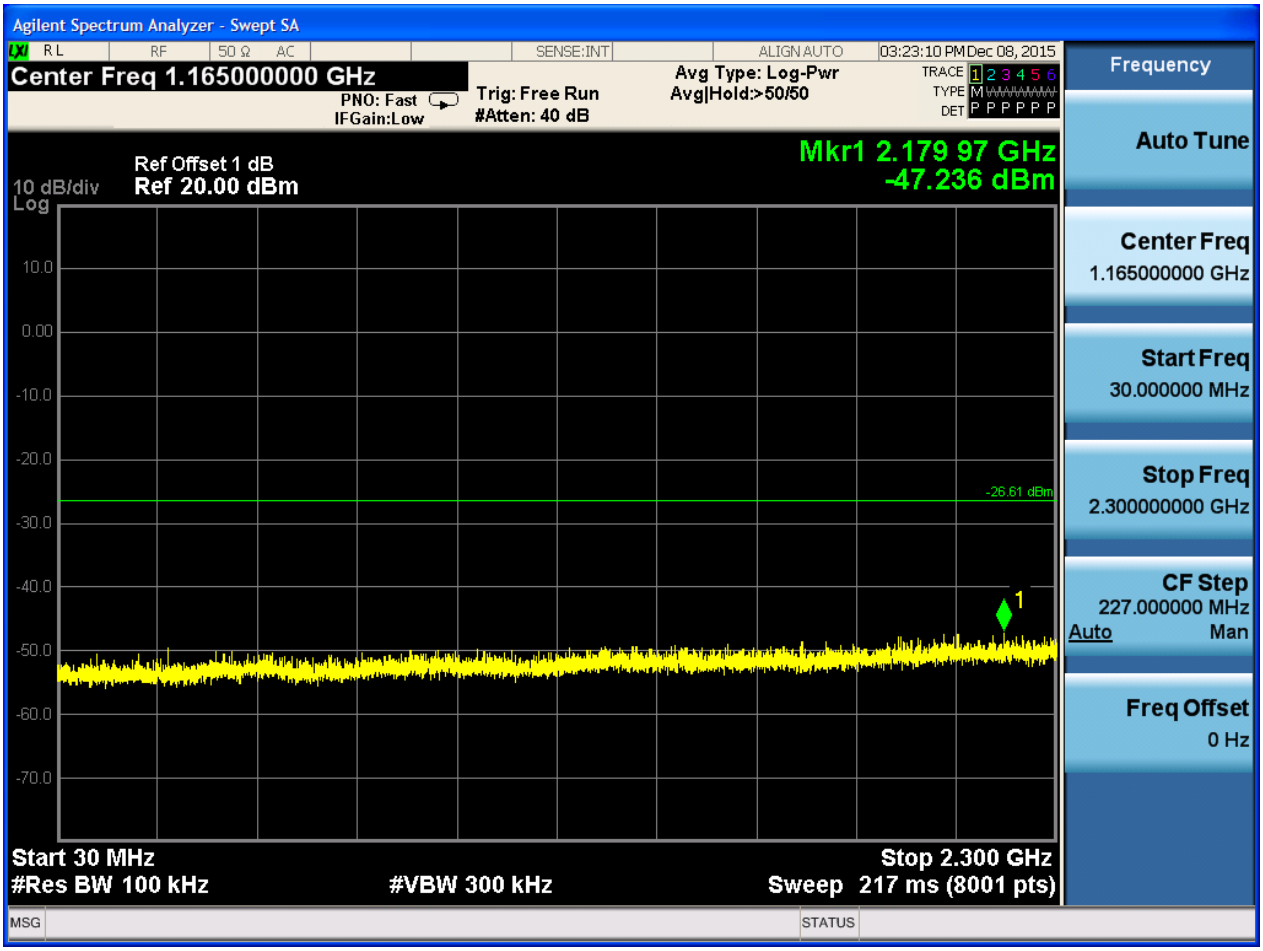


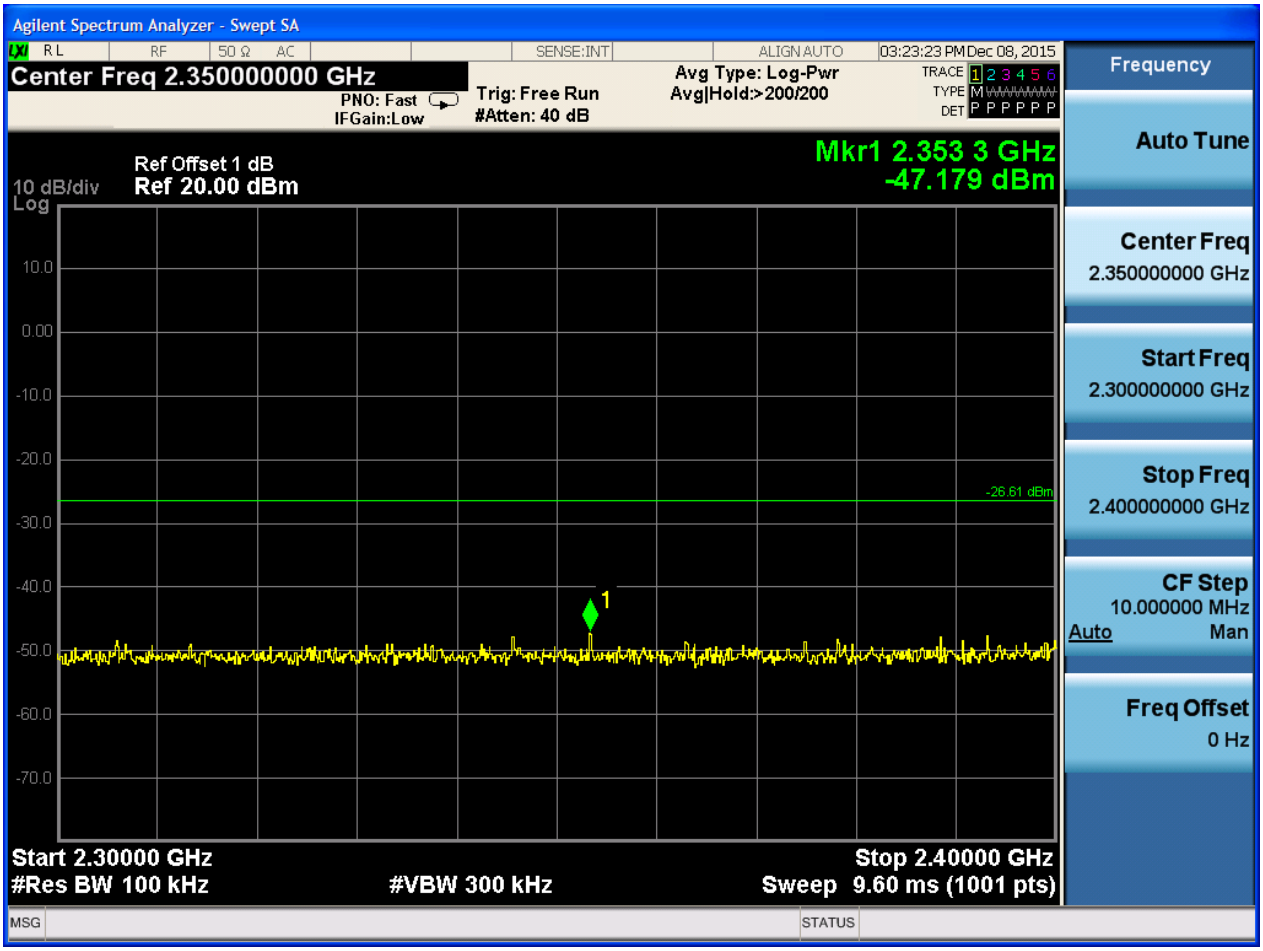
2.5 TM1_Ch39

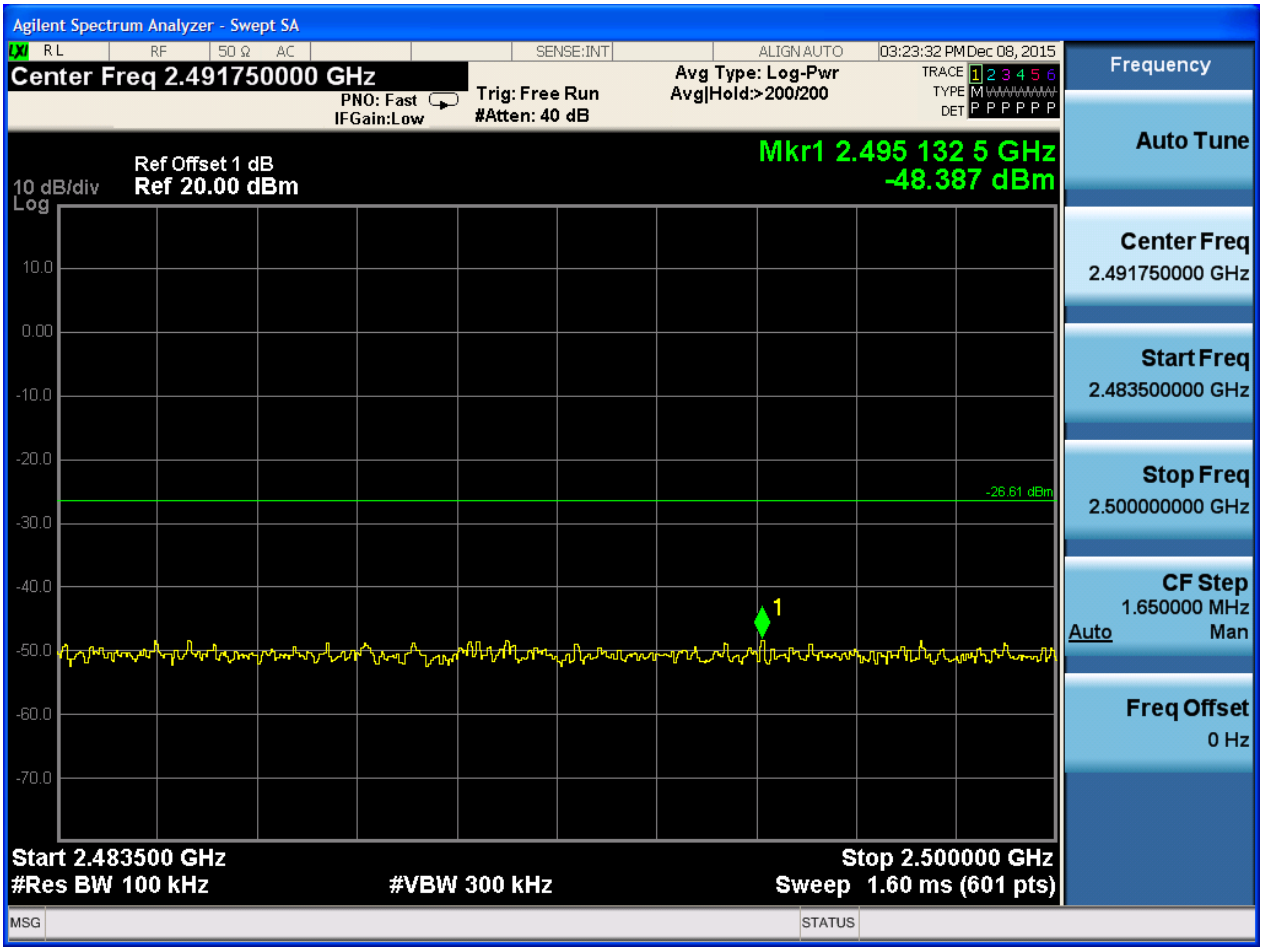
Pref:

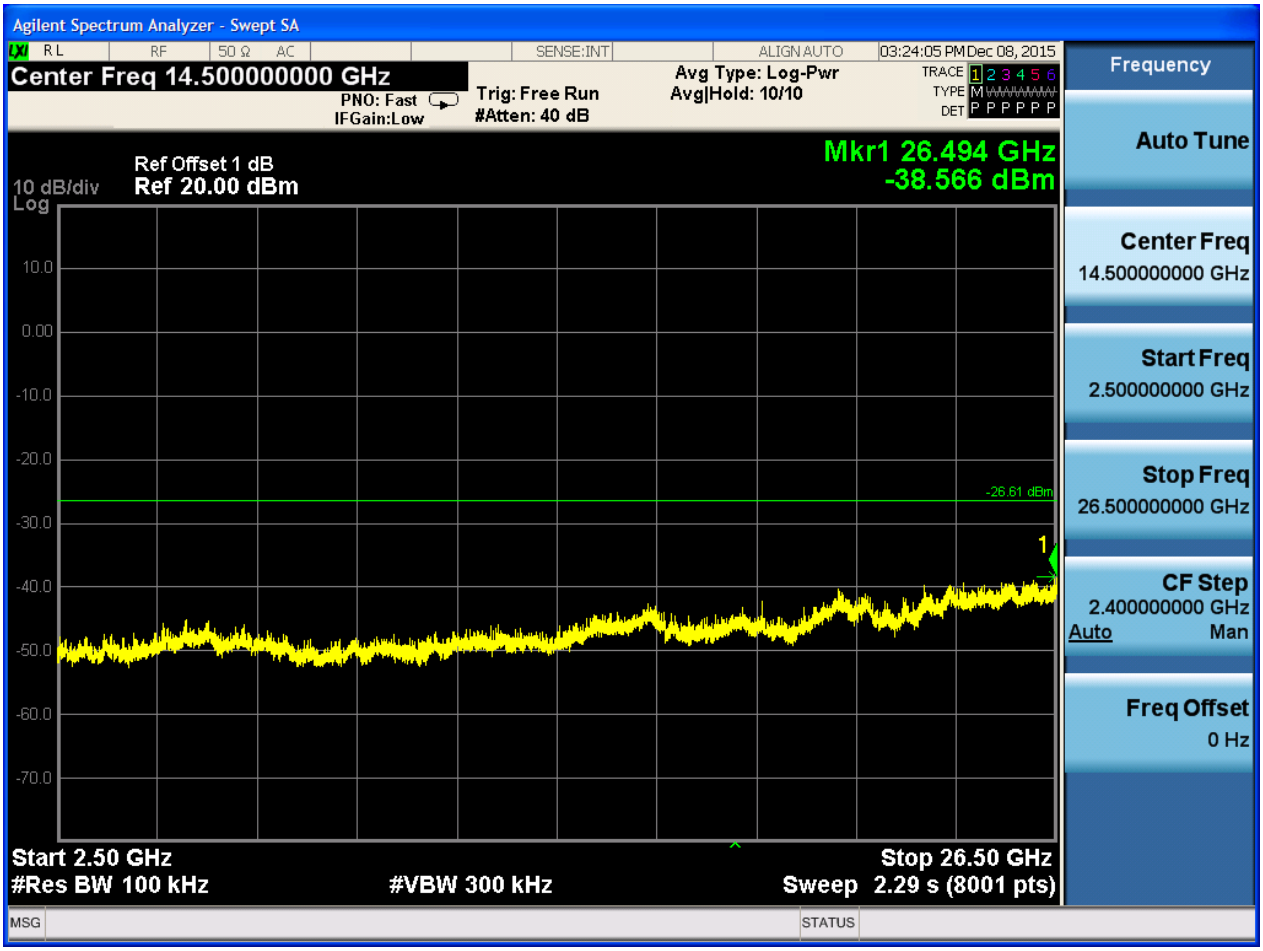
Puw:











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

Part 1: Testing Range of "9 kHz to 30MHz"

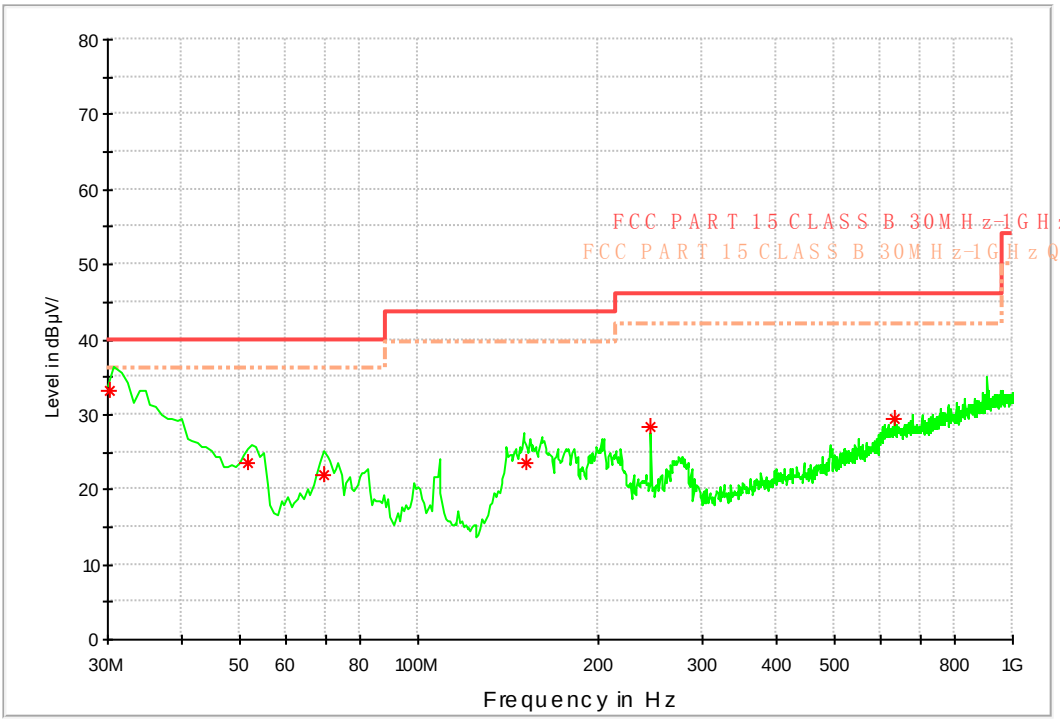
NOTE1: No peak found in the Test Range of "9 kHz to 30MHz"

Part 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).

FCC CLASS B RE 30MHz-1GHz



Frequency (MHz)	QuasiPeak (dBµ V/m)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµ V/m)
30.306675	33.2	120.000	100.0	V	-12.0	13.8	8.8	40.0
51.438400	23.5	120.000	100.0	V	28.0	15.5	16.5	40.0
69.264960	22.0	120.000	139.0	V	130.0	11.0	18.0	40.0
151.38016	23.5	120.000	100.0	V	279.0	10.4	20.0	43.5
246.39072	28.4	120.000	155.0	H	51.0	14.3	17.6	46.0
632.88256	29.6	120.000	114.0	V	109.0	22.3	16.4	46.0

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

NOTE1: No peak found in the Test Range of “18 GHz to 26.5GHz”

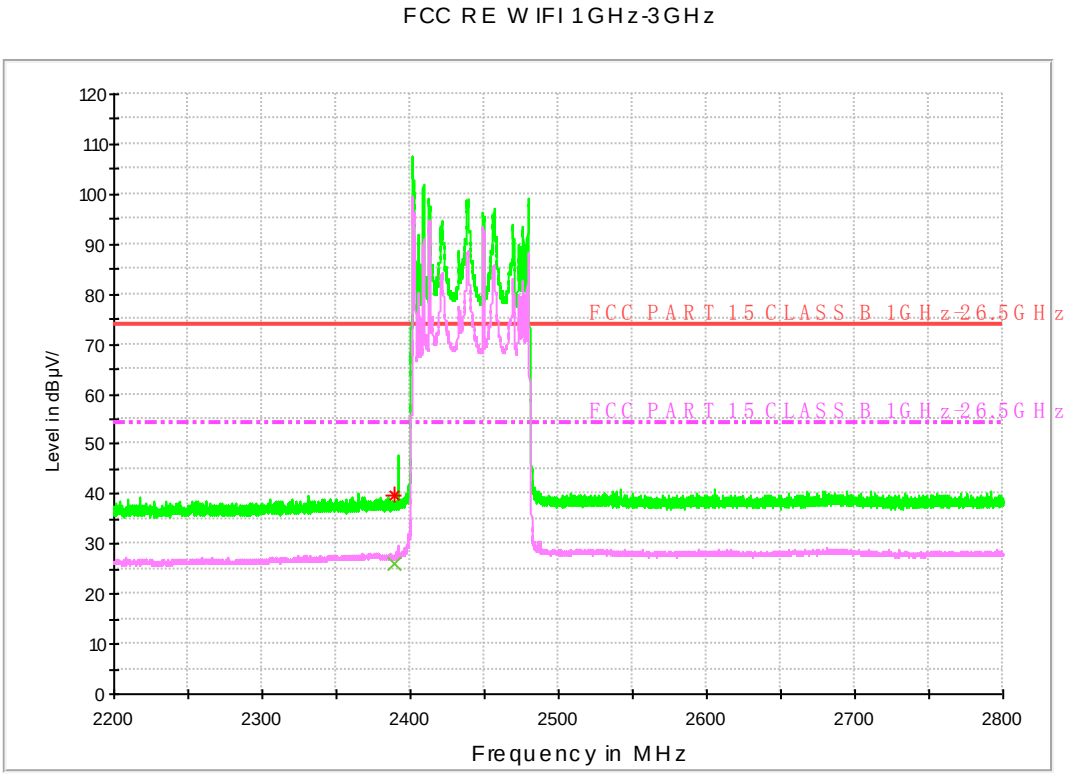
Part 4: Testing Range of "2.3GHz to 2.5GHz"

Note 1: The testing range of "2.3 GHz to 2.5 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.

Channel 0

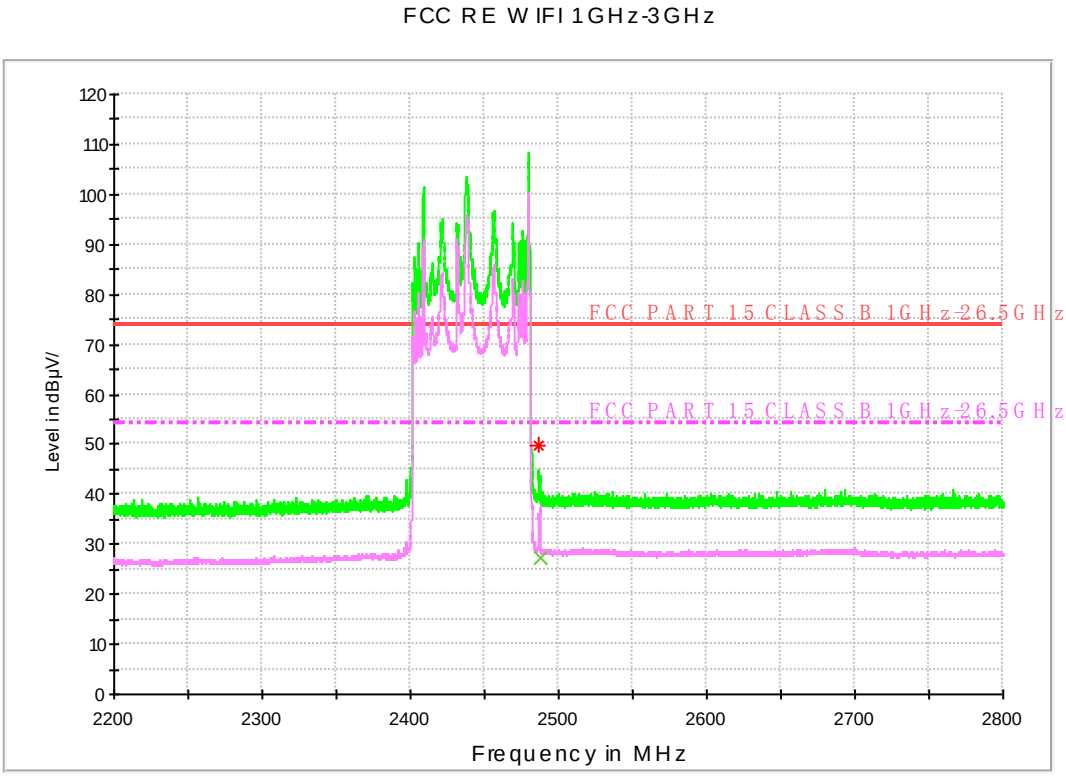


Note: The peak exceeds the limit line is carrier frequency.

MEASUREMENT RESULT: PK/ AV Detector

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin
2389.08700	39.7	15000.0	1000.000	100.0	H	86.0	-7.6	34.3
Frequency (MHz)	**Average (dBµV/m)**	**Meas. Time**	**Bandwidth (kHz)**	**Height (cm)**	**Polarization**	**Azimuth (deg)**	**Corr. (dB)**	**Margin**
2389.84480	26.3	15000.0	1000.000	100.0	V	305.0	-7.6	27.7

Channel 39



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

MEASUREMENT RESULT: PK/ AV Detector

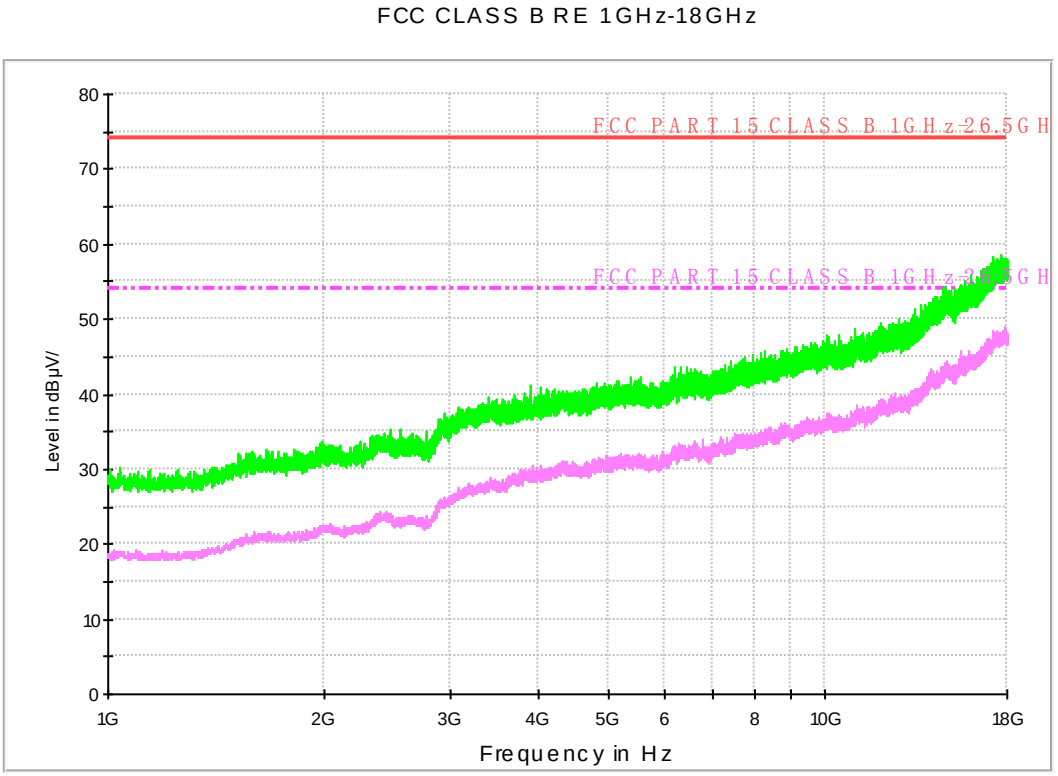
Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin
2485.99740	49.6	15000.0	1000.000	100.0	V	357.0	-5.9	24.4
Frequency (MHz)	**Average (dBµV/m)**	**Meas. Time**	**Bandwidth (kHz)**	**Height (cm)**	**Polarization**	**Azimuth (deg)**	**Corr. (dB)**	**Margin**
2488.38500	27.3	15000.0	1000.000	100.0	V	357.0	-6.4	26.7

Part 5: Testing Range of "1 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.

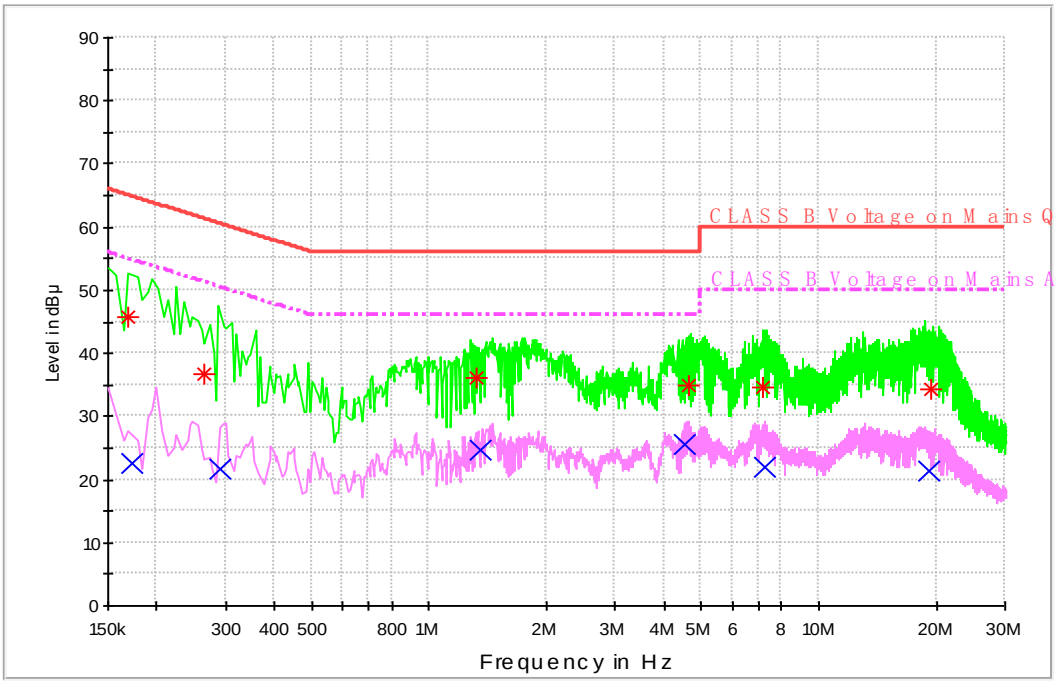
Note 2: The testing range of "1 GHz to 18 GHz" is for checking radiated emissions located in restricted bands faraway from the EUT operating bands.

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 =30kHz



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.168288	45.7	N	9.8	19.3	65.0
0.265295	36.8	N	9.8	24.5	61.3
1.318624	36.0	N	9.7	20.0	56.0
4.631045	34.8	N	9.9	21.2	56.0
7.200848	34.6	N	10.0	25.4	60.0
19.382366	34.2	L1	10.2	25.8	60.0

Final Result 2

Frequency (MHz)	Average (dBµ V)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.173274	22.7	L1	9.8	32.2	54.8
0.289339	21.7	L1	9.8	28.8	50.5
1.349898	24.8	N	9.8	21.2	46.0
4.527355	25.5	N	9.9	20.5	46.0
7.257555	22.0	N	10.0	28.0	50.0
19.223946	21.4	N	10.2	28.6	50.0

END