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	0.72	pass
TM1 _Ch19	M	2440	Ant 1	0.71	pass
TM1 _Ch39	H	2480	Ant 1	0.71	pass

Part II - Test Plots

2.1 TM1 _Ch0@Ant 1

2.2 TM1 _Ch19@Ant 1

2.3 TM1 _Ch39@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]	Ant	Occupied Bandwidth [MHz]	Verdict
TM1 _Ch0	L	2402	Ant 1	1.04	pass
TM1 _Ch19	M	2440	Ant 1	1.04	pass
TM1 _Ch39	H	2480	Ant 1	1.04	pass

Part II - Test Plots

2.1 TM1 _Ch0@Ant 1

2.2 TM1 _Ch19@Ant 1

2.3 TM1 _Ch39@Ant 1

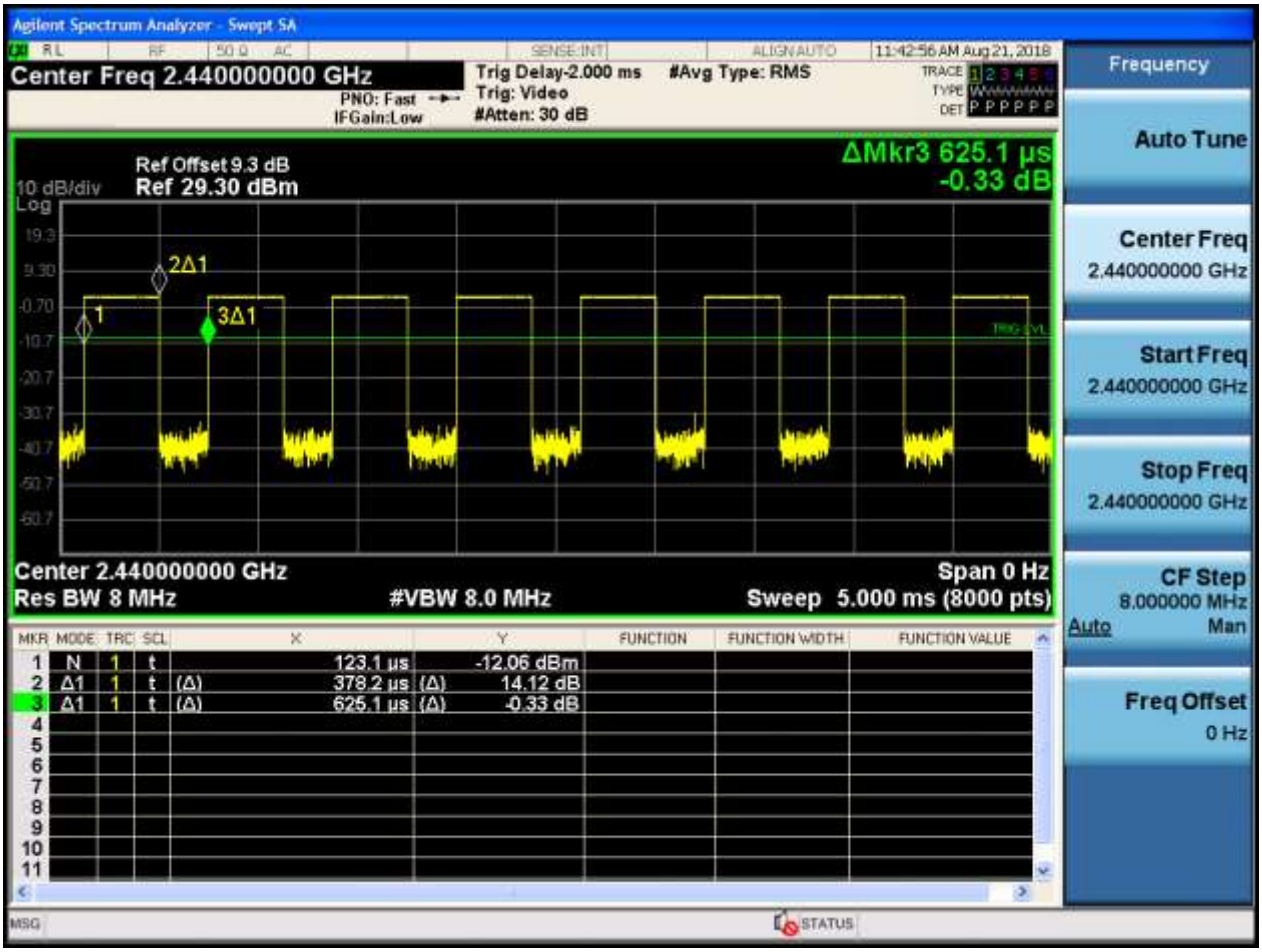
Appendix C: Duty Cycle

Part I - Test Results

Test Mode	TX Freq. [MHz]	Duty cycle [%]
TM1	CH0,CH19,CH39	60.5

Part II - Test Plots

2.1 TM1



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	3.69	pass
TM1 _Ch19	M	2440	Ant 1	1.51	pass
TM1 _Ch39	H	2480	Ant 1	5.05	pass

Part II - Test Plots

2.1 TM1 _Ch0@Ant 1

2.2 TM1 _Ch19@Ant 1

2.3 TM1 _Ch39@Ant 1

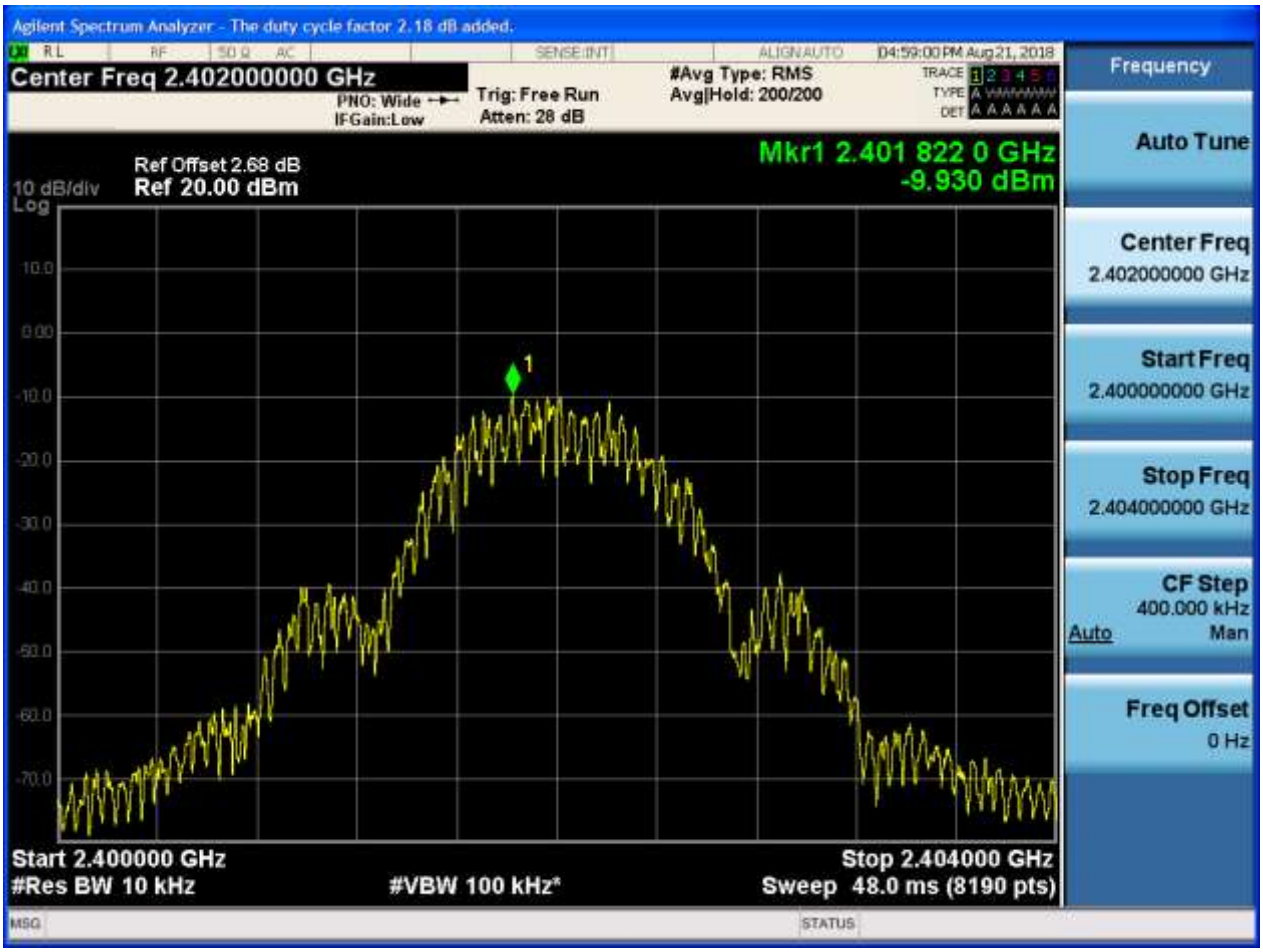
Appendix E: Maximum Power Spectral Density Level

Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Ant	PD[MHz]	Verdict
TM1 _Ch0	L	2402	Ant 1	-9.93	pass
TM1 _Ch19	M	2440	Ant 1	-9.87	pass
TM1 _Ch39	H	2480	Ant 1	-9.64	pass

Part II - Test Plots

2.1 TM1 _Ch0@Ant 1



2.2 TM1 _Ch19@Ant 1

2.3 TM1 _Ch39@Ant 1

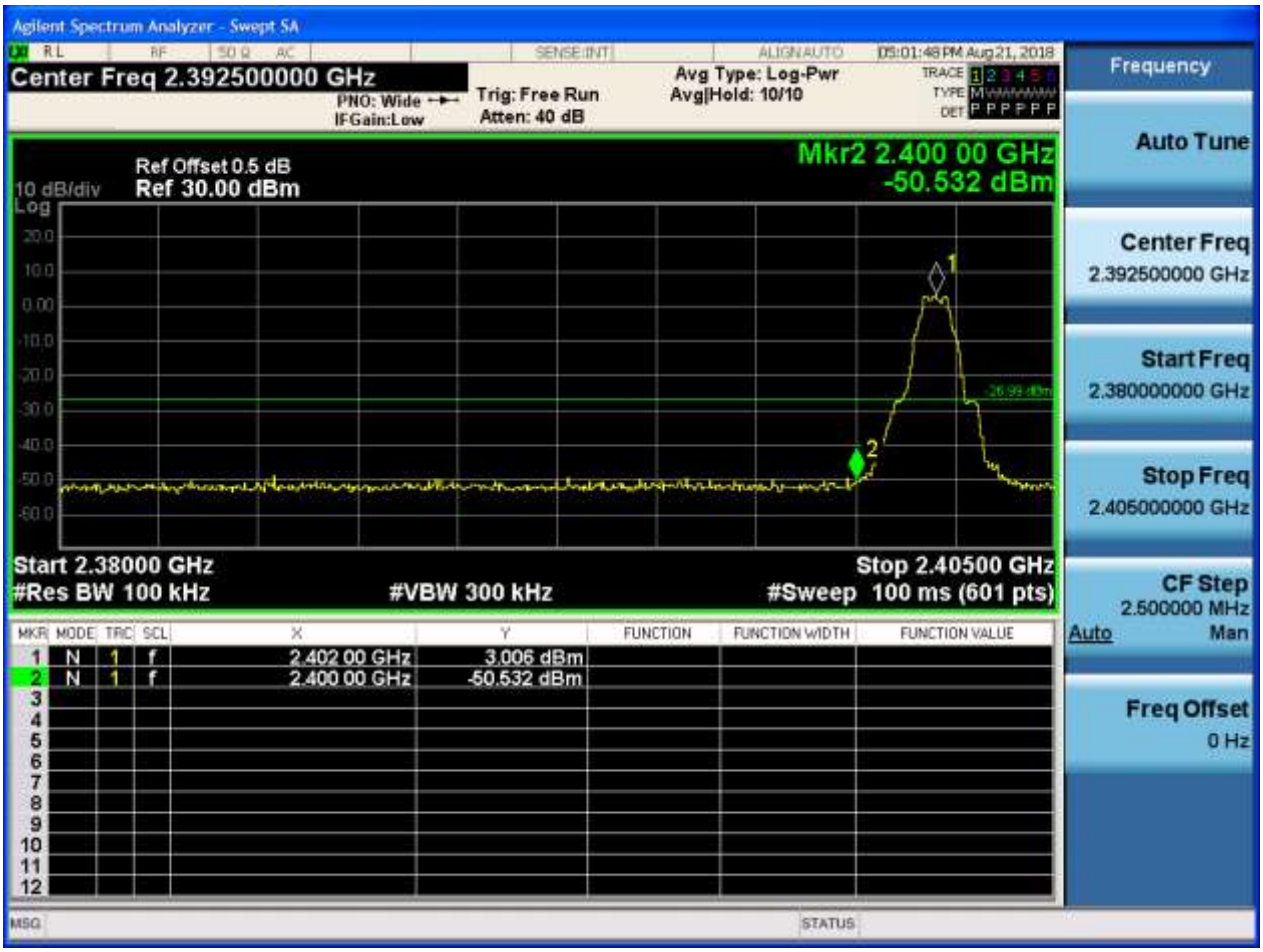
Appendix F: Band Edges Compliance

Part I - Test Results

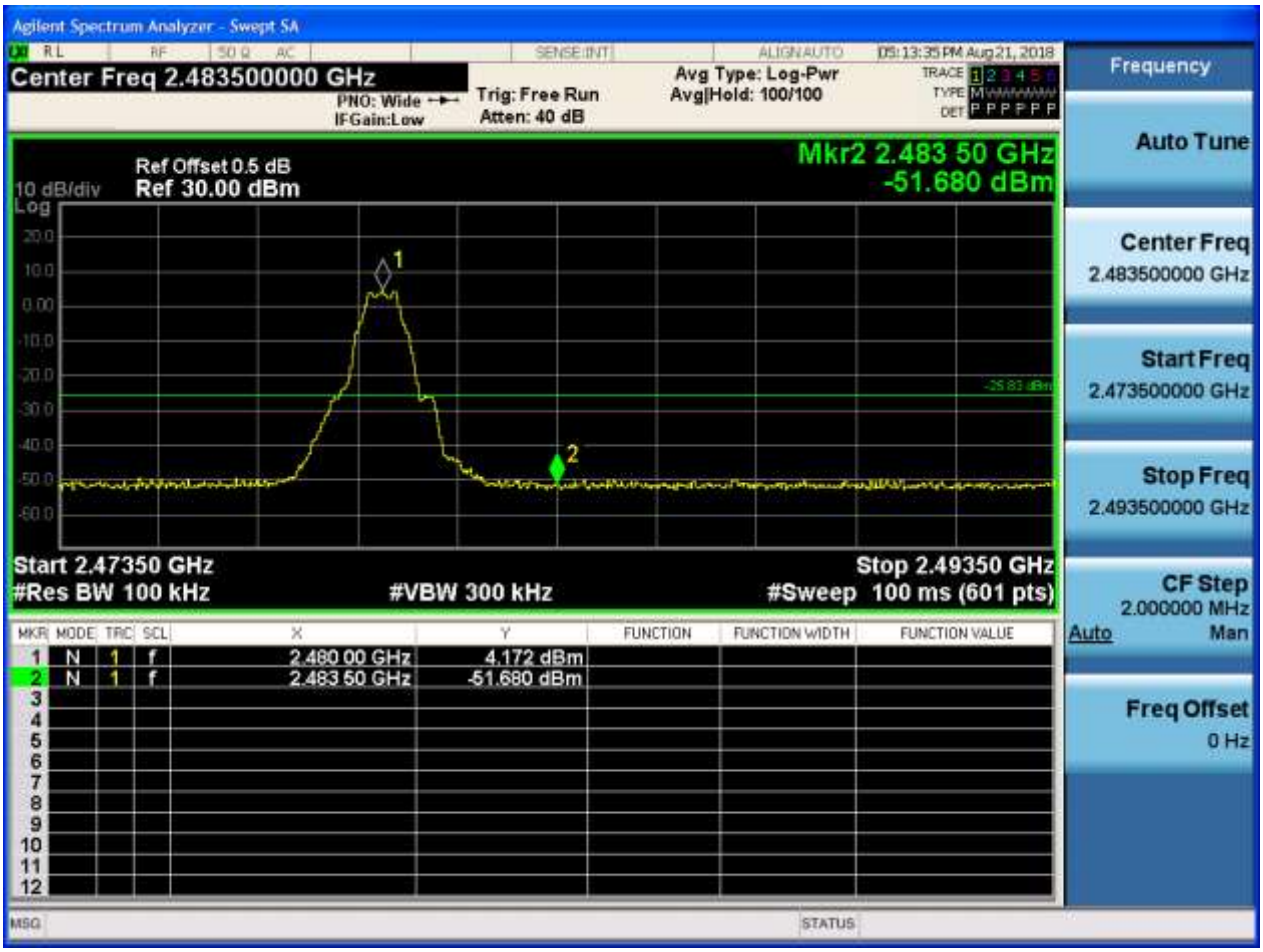
Test Mode	Test Channel	Frequency[MHz]	Ant	Carrier Power[dBm]	Max.Spurious Level[dBm]	Verdict
TM1 _Ch0	L	2402	Ant 1	3.01	-50.53	pass
TM1 _Ch39	H	2480	Ant 1	4.17	-51.68	pass

Part II - Test Plots

2.1 TM1 _Ch0@Ant 1



2.2 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

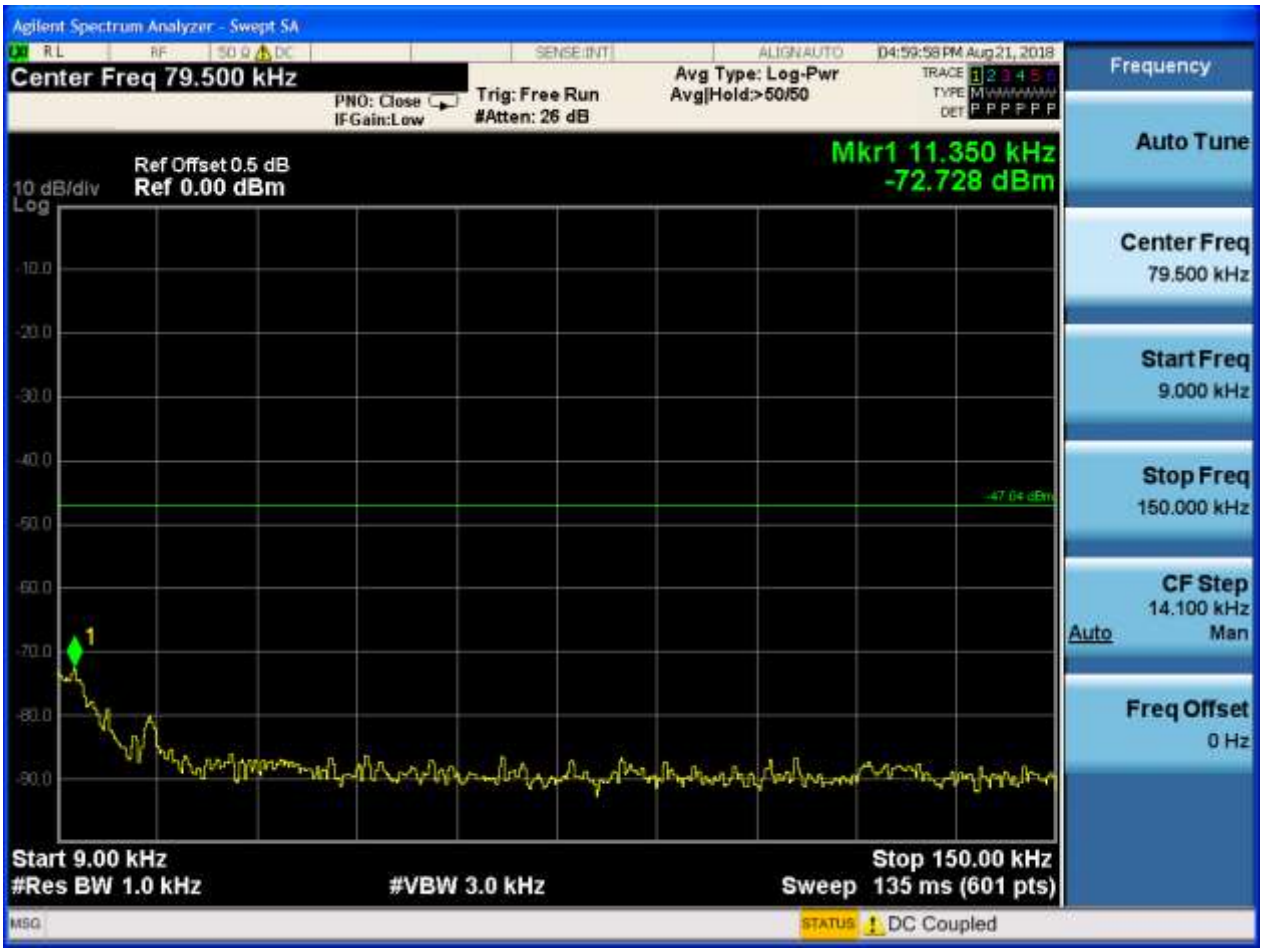
Test Mode	Test Channel	Frequency[MHz]	Ant	Pref[dBm]	Puw[dBm]	Verdict
TM1 _Ch0	L	2402	Ant 1	2.96	<limit	pass
TM1 _Ch19	M	2440	Ant 1	1.11	<limit	pass
TM1 _Ch39	H	2480	Ant 1	4.14	<limit	pass

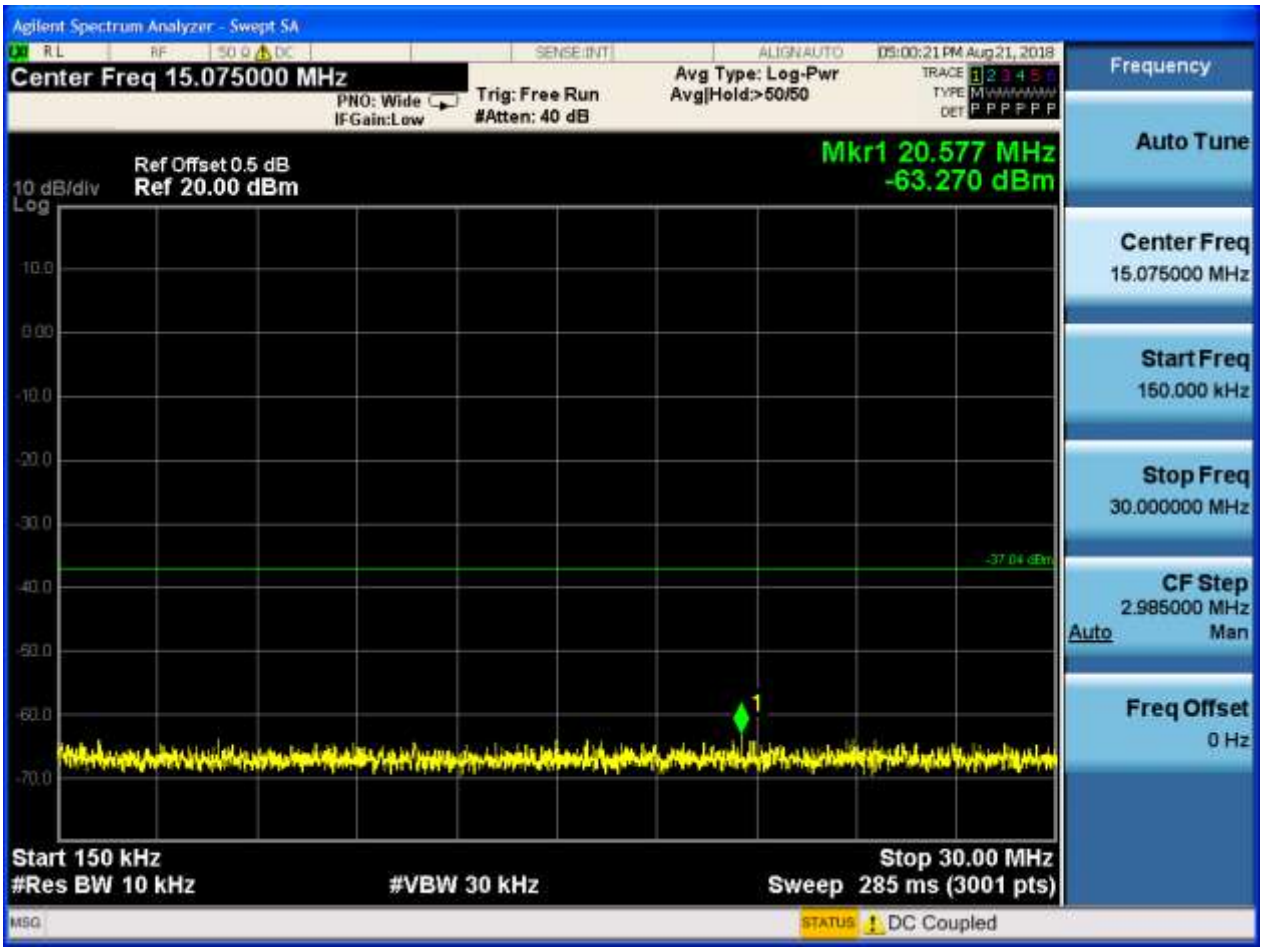
Part II - Test Plots

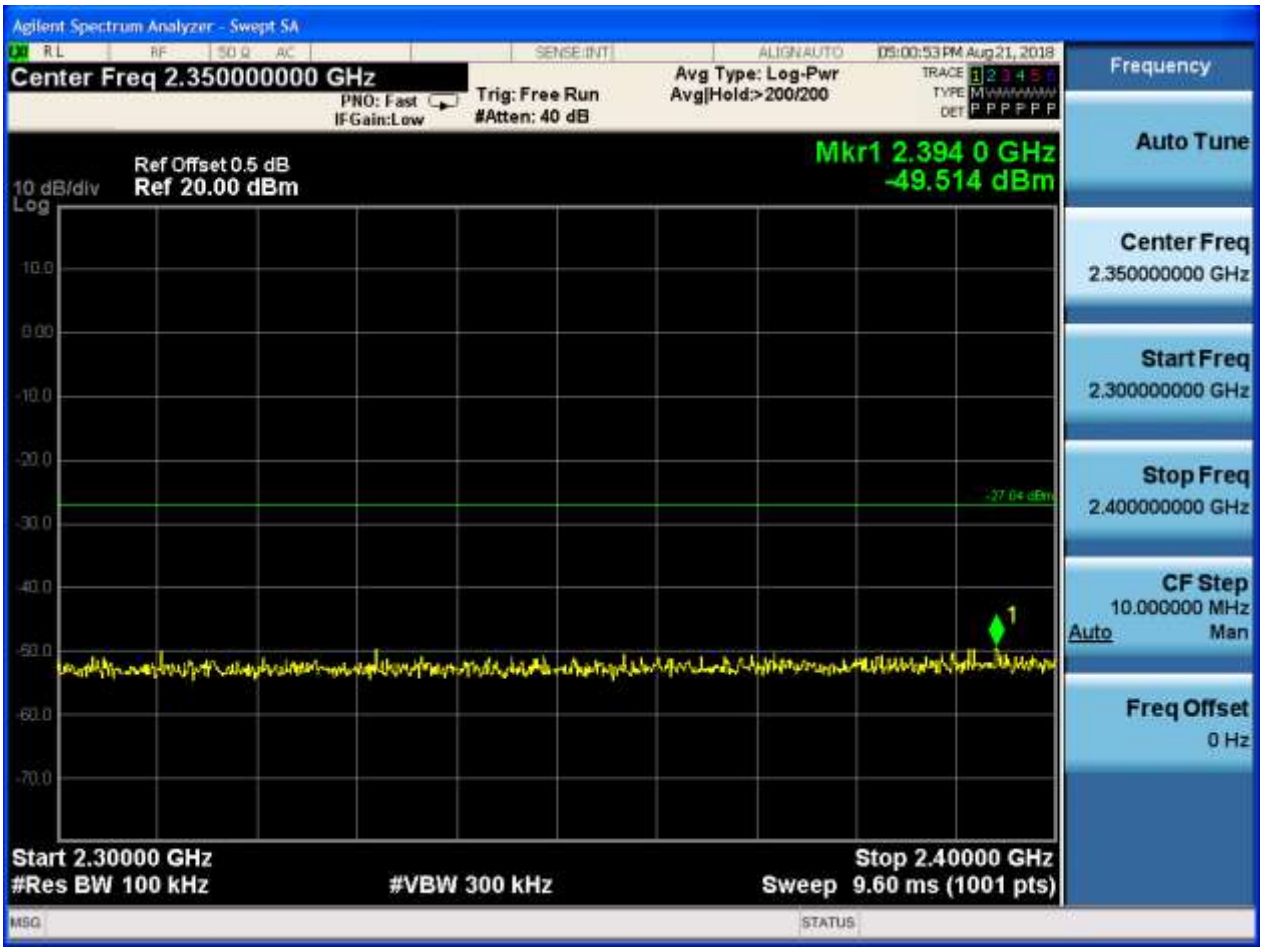
2.1 TM1 _Ch0@Ant 1

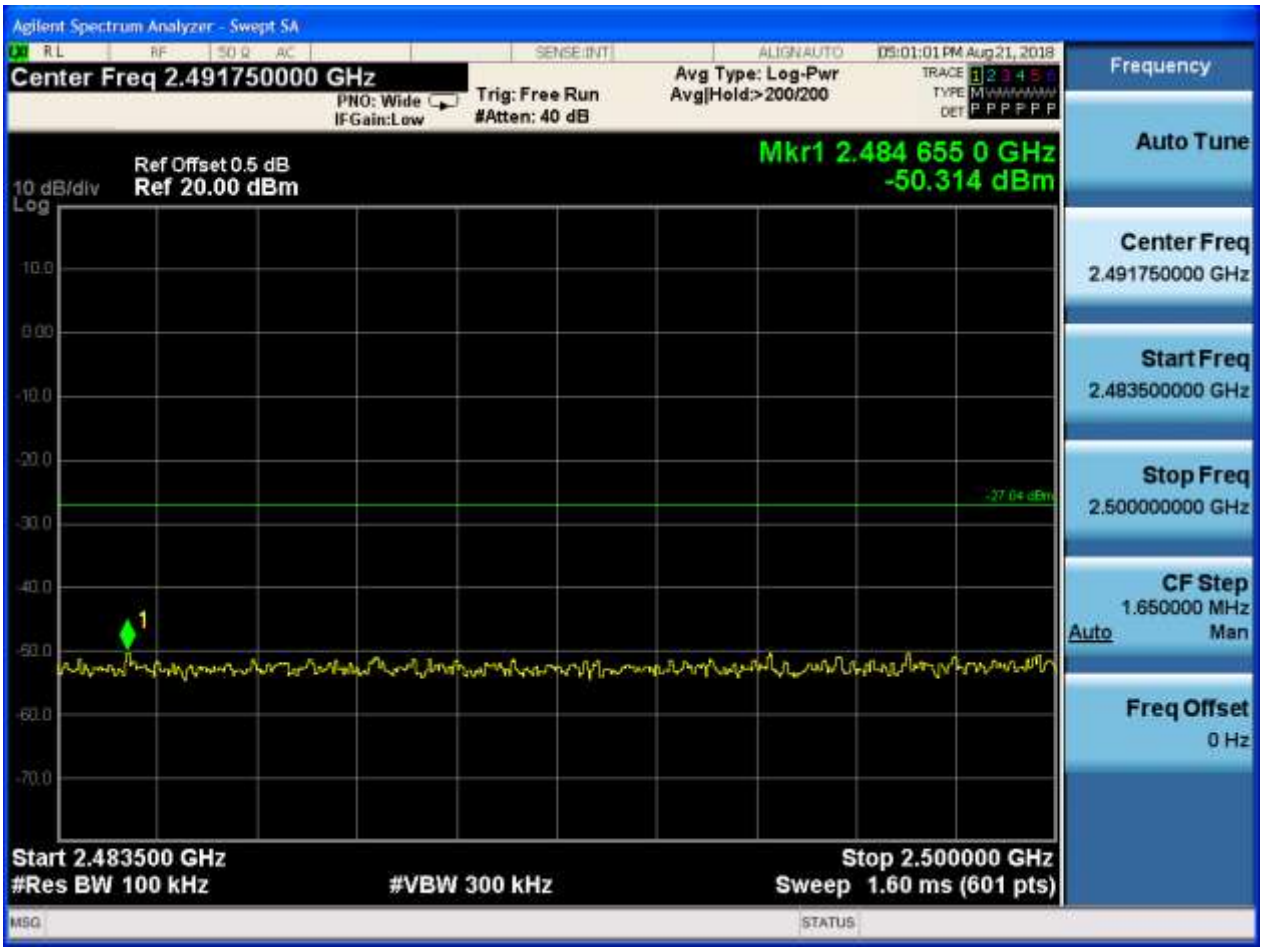
Pref:

Puw:





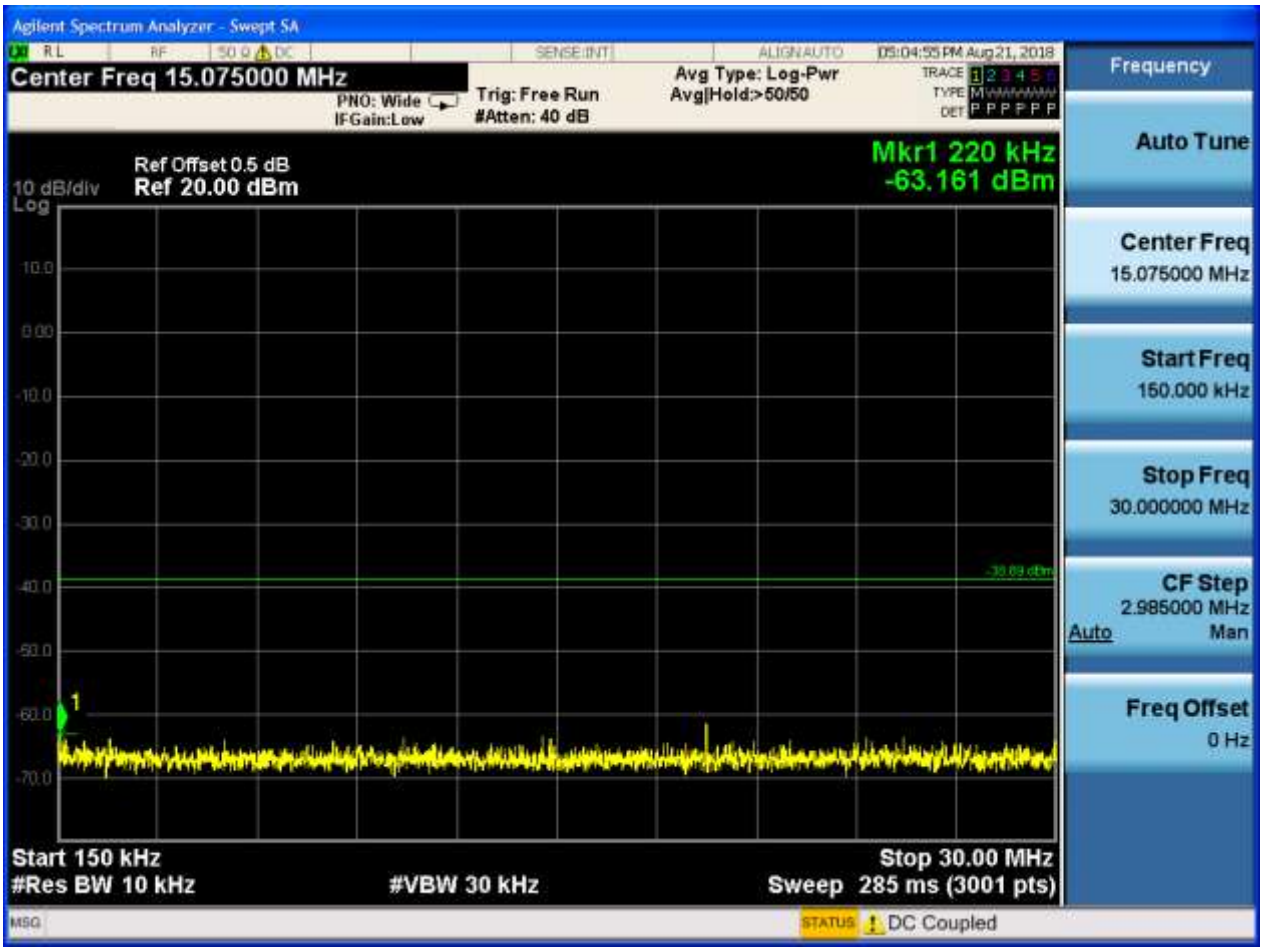


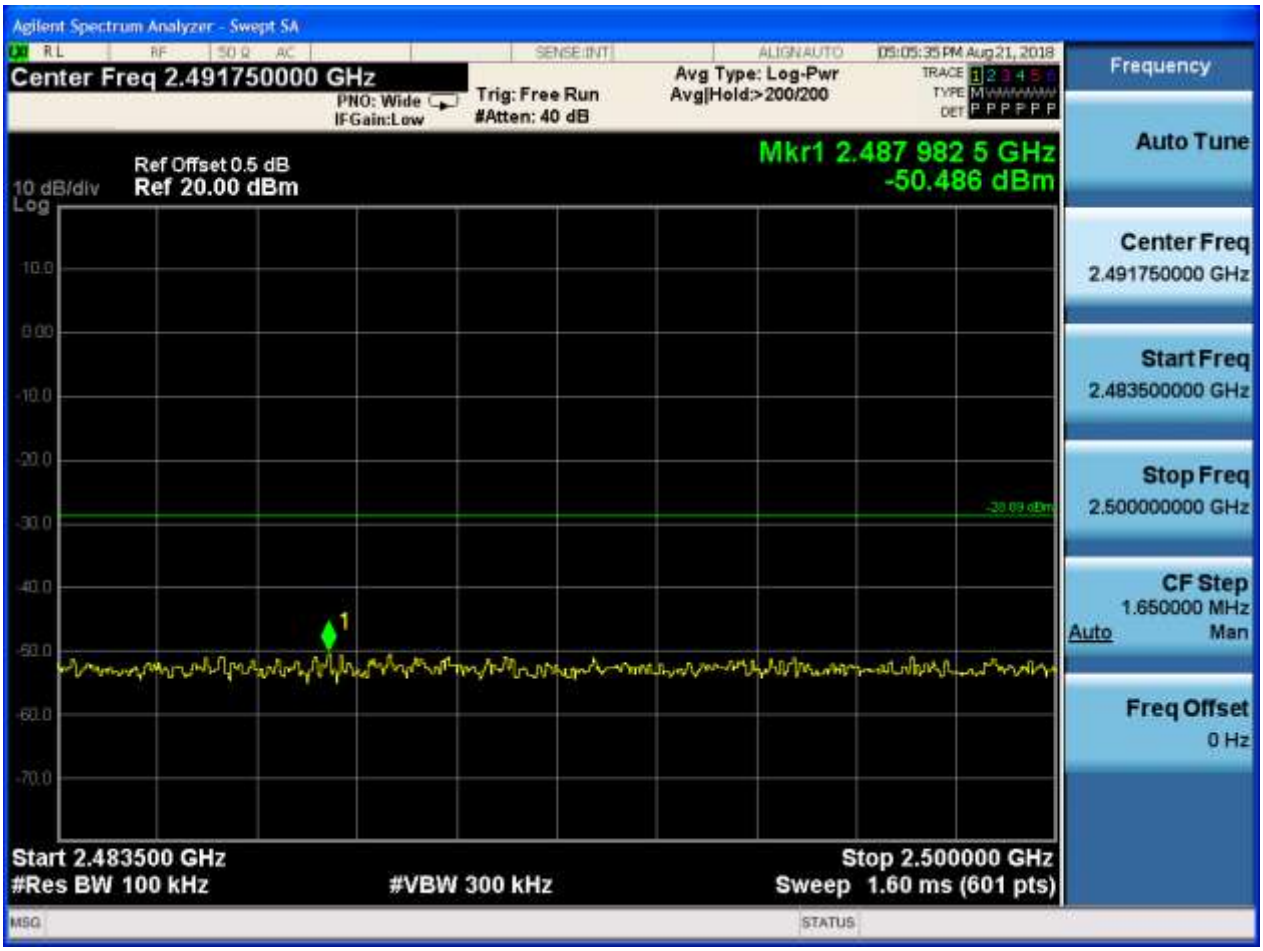


2.2 TM1 _Ch19@Ant 11

Pref:

Puw:

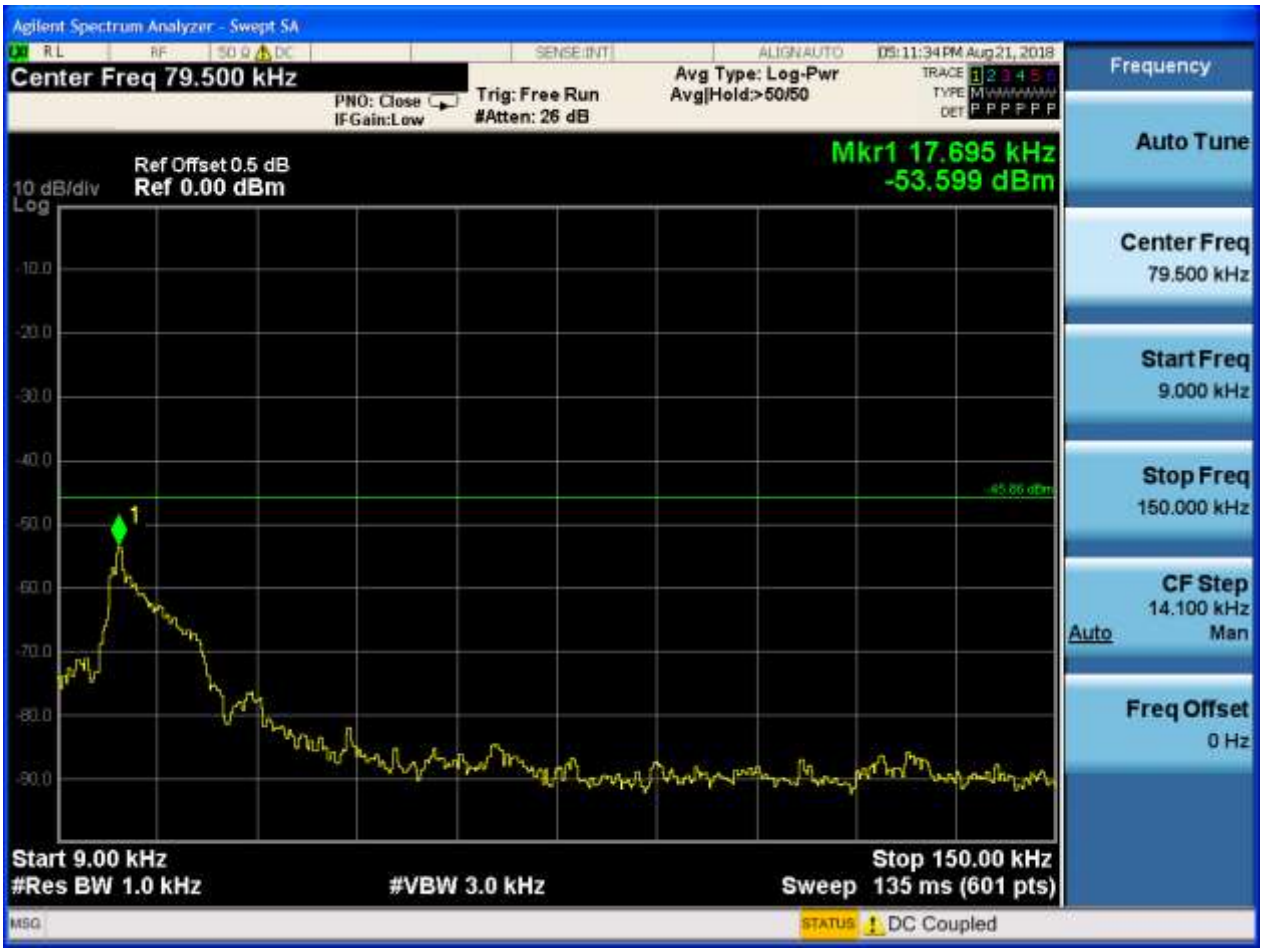




2.3 TM1 _Ch39@Ant 1

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.

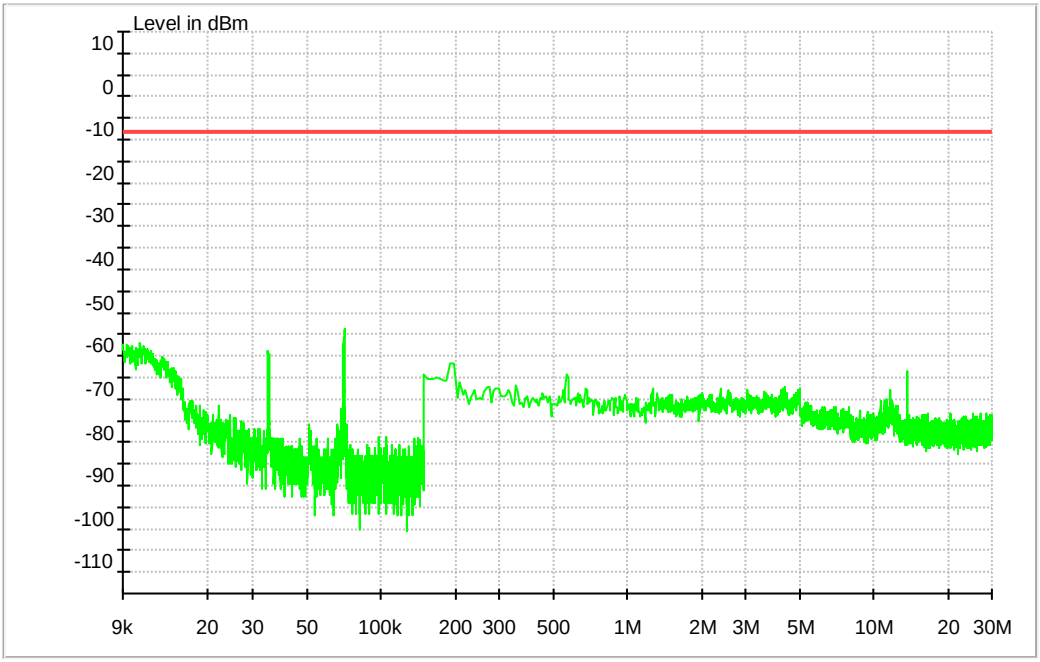
Below 1GHz, RBW = 100 kHz, VBW = 300 kHz.

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

The simultaneous transmission has been considered

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

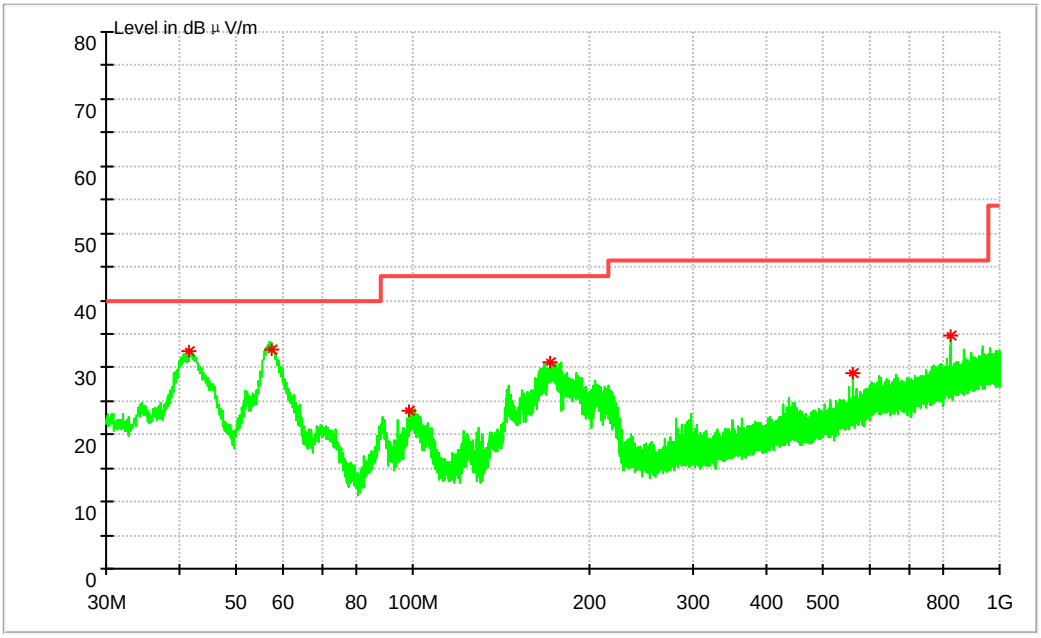
Note 1: The test results and plot for testing range of "9 kHz to 30 MHz" showed as below is the WORST case for all Test Modes and Channels. This range will not be presented for each Test Mode and each Channel.



1.2 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).



Frequency (MHz)	Level (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Transd. (dB)
41.446000	32.32	40.00	7.68	156	V	18	14.4
57.303860	32.60	40.00	7.40	226	V	17	14.0
98.676000	23.53	43.50	19.97	100	H	94	14.4
171.474500	30.73	43.50	12.77	101	V	115	10.9
561.608500	29.04	46.00	16.96	125	V	66	21.1
825.836500	34.76	46.00	11.24	200	H	94	24.4

Note:

1, Level =Reading level by receiver + Transd (Antenna factor + cable loss – preamplifier gain)

The reading level is calculated by software which is not shown in the sheet.

2, Margin=Limit - Level

1.3 Part 3: Testing Range of “1GHz to 3GHz”

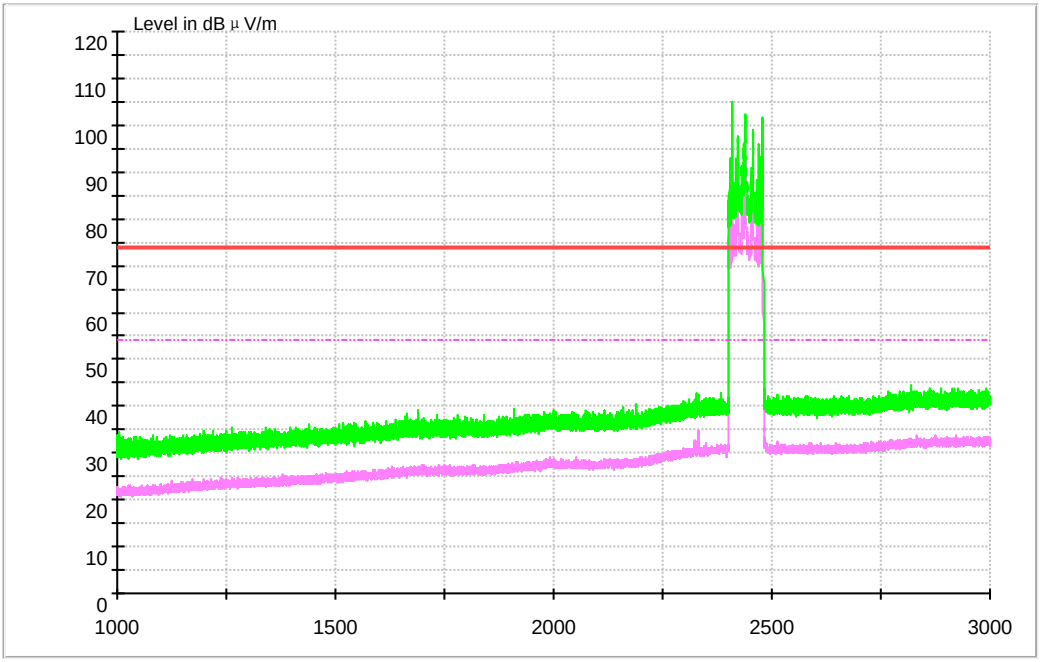
Note 1: The testing range of “1GHz to 3 GHz” is for checking radiated emissions located in restricted bands near the EUT operating bands.

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).

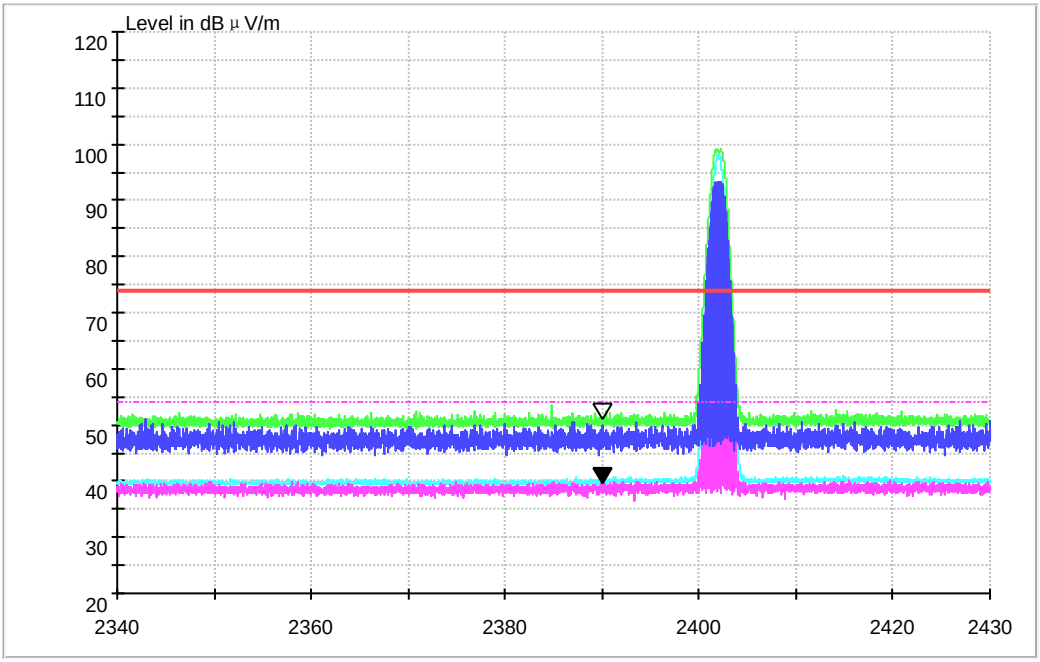
Note 3: The peak spike exceeds the limit line is EUT’s operating frequency.

Test Mode:

1.3.1Test Mode: TM1



1.3.1.1 Channel 0



MEASUREMENT RESULT: AV Detector

Frequency (MHz)	Level (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth	Transd. (dB)
2390	39.95	54.00	14.05	150.0	V	190.0	8.1

MEASUREMENT RESULT: PK Detector

Frequency (MHz)	Level (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Transd. (dB)
2390	51.39	74.00	22.61	150.0	V	190.0	8.1

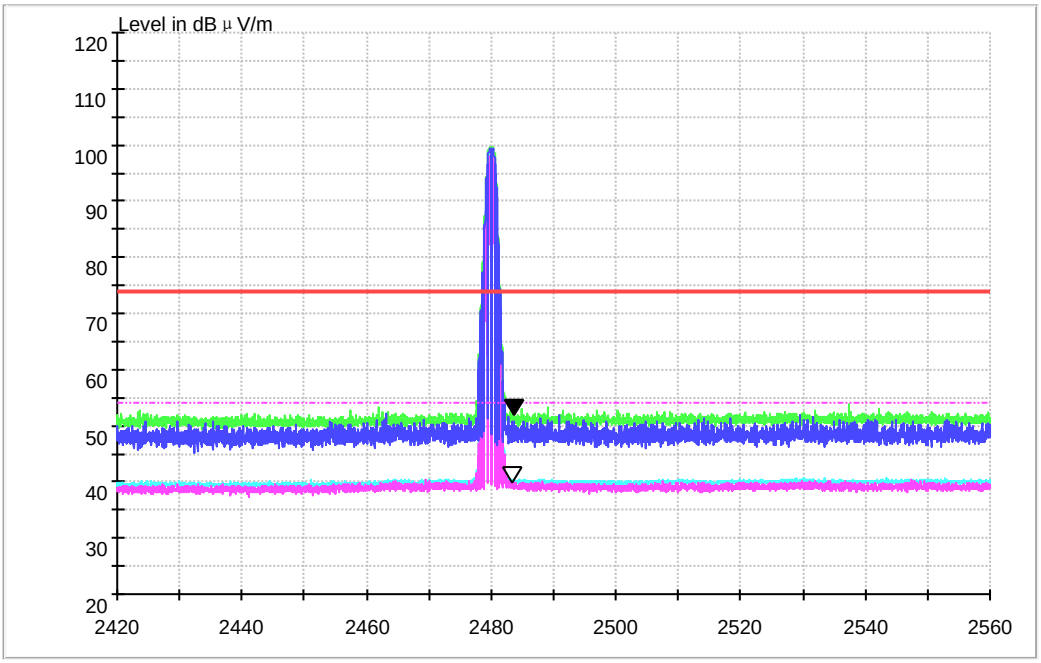
Note:

1, Level =Reading level by receiver + Transd (Antenna factor + cable loss – preamplifier gain)

The reading level is calculated by software which is not shown in the sheet.

2, Margin=Limit - Level

1.3.1.2 Channel 39



MEASUREMENT RESULT: AV Detector

Frequency (MHz)	Level (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth(deg)	Transd. (dB)
2483.5	40.13	54.00	13.87	175.0	H	230.0	8.5

MEASUREMENT RESULT: PK Detector

Frequency (MHz)	Level (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Transd. (dB)
2483.5	52.15	74.00	21.85	175.0	H	230.0	8.5

Note:

1, Level =Reading level by receiver + Transd (Antenna factor + cable loss – preamplifier gain)

The reading level is calculated by software which is not shown in the sheet.

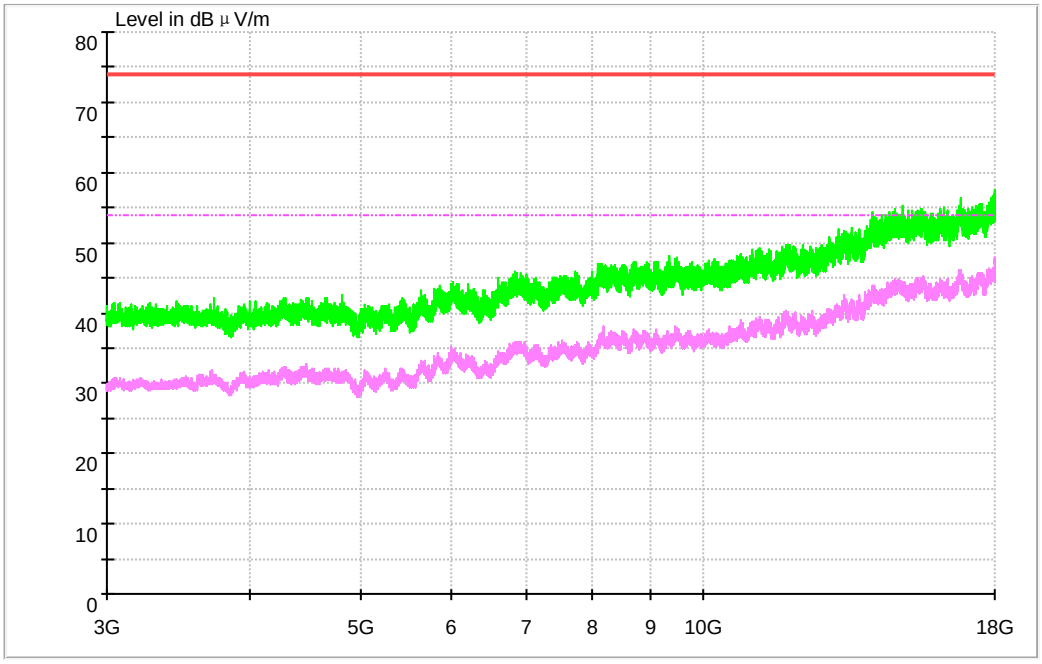
2, Margin=Limit - Level

1.4 Part 4: Testing Range of “3 GHz to 18 GHz”

Note 1: The test results and plot for testing range of “3 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 “3 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).



Note:

1, Level =Reading level by receiver + Transd (Antenna factor + cable loss – preamplifier gain)
The reading level is calculated by software which is not shown in the sheet.

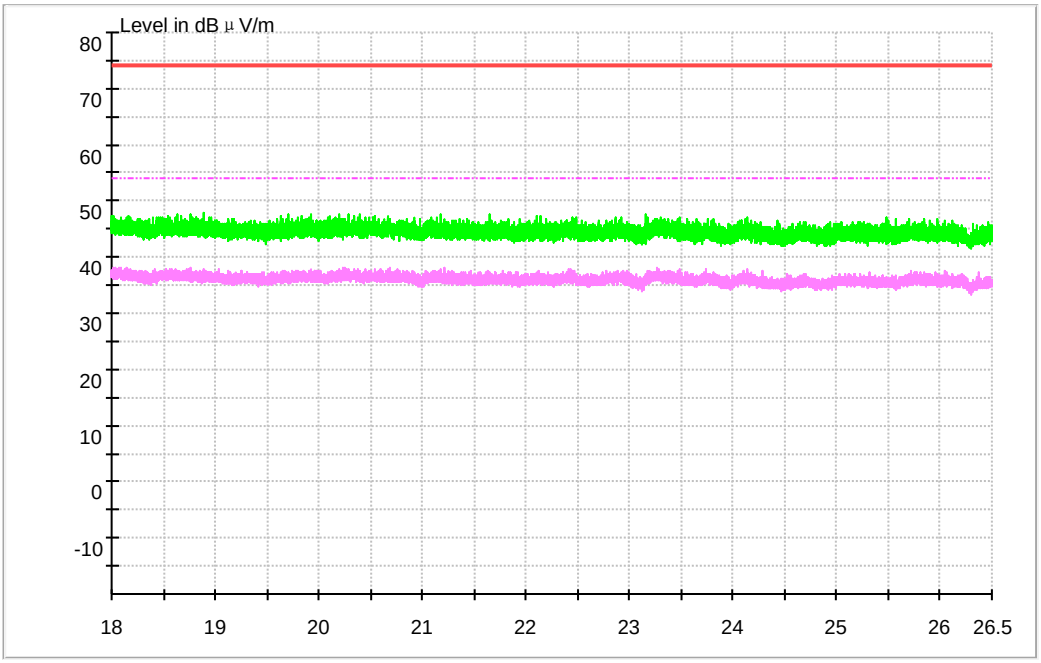
2, Margin=Limit – Level

1.5 Part 5: Testing Range of "18 GHz to 26.5 GHz"

Note 1: The test results and plot for testing range of "18 GHz to 26.5 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 "18 GHz to 26.5 GHz" is for checking radiated emissions located in restricted bands faraway from the EUT operating bands.

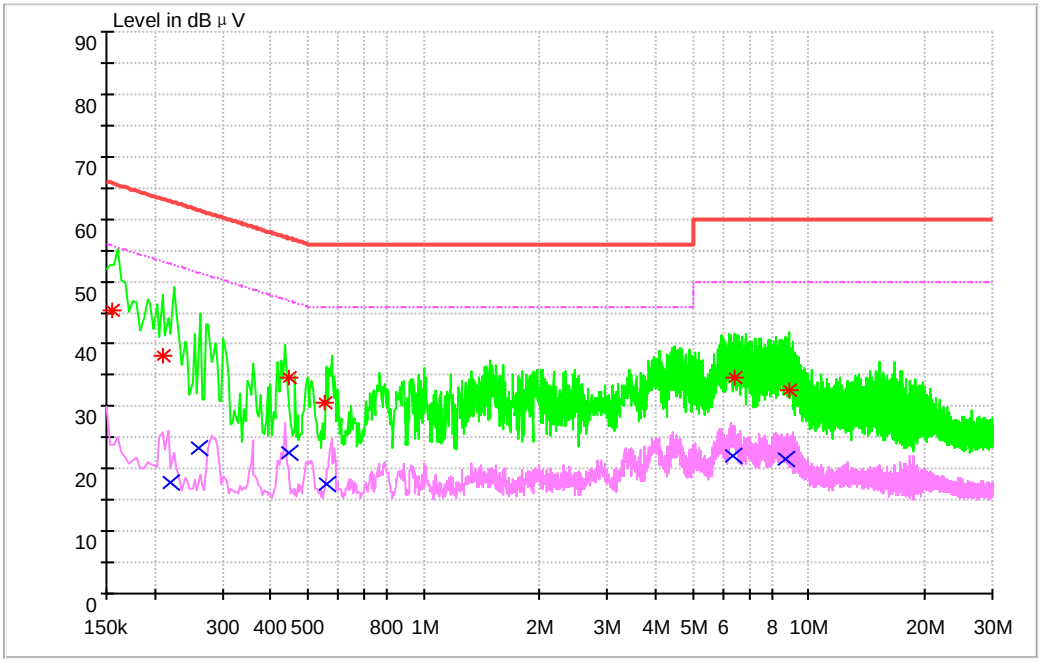
Note 3: Two limits are required in the testing range above 1 GHz, that is Peak limit (74 dBµV/m) and Average Limit (54 dBµV/m).



Appendix I: Conducted Emission at Power Port

Note: RBW =9 kHz, VBW = 30 kHz

Channel 39



MEASUREMENT RESULT: PK Detector

Frequency (MHz)	Level (dB µ V)	Limit (dB µ V)	Transd. (dB)	Margin (dB)	Line	PE
0.154846	45.38	65.73	9.7	20.35	N	FLO
0.210774	38.08	63.17	9.7	25.09	N	FLO
0.4482	34.58	56.91	9.7	22.33	N	FLO
0.553141	30.6	56	9.7	25.4	N	FLO
6.40178	34.68	60	9.9	25.32	N	FLO
8.885939	32.5	60	9.9	27.5	N	FLO

MEASUREMENT RESULT: AV Detector

Frequency (MHz)	Level (dB μ V)	Limit (dB μ V)	Transd. (dB)	Margin (dB)	Line	PE
0.21918	17.75	52.85	9.7	35.10	L1	FLO
0.261377	23.26	51.38	9.7	28.12	L1	FLO
0.447168	22.54	46.93	9.7	24.39	N	FLO
0.560735	17.51	46	9.7	28.49	N	FLO
6.321699	22.1	50	9.8	27.9	N	FLO
8.751258	21.67	50	9.9	28.33	N	FLO

Note:

1, Level =Reading level by receiver + Transd (Antenna factor + cable loss – preamplifier gain)

The reading level is calculated by software which is not shown in the sheet.

2, Margin=Limit - Level

END