



8.4.1.1 Reference Level Measured Graph for 802.11b



Low CH

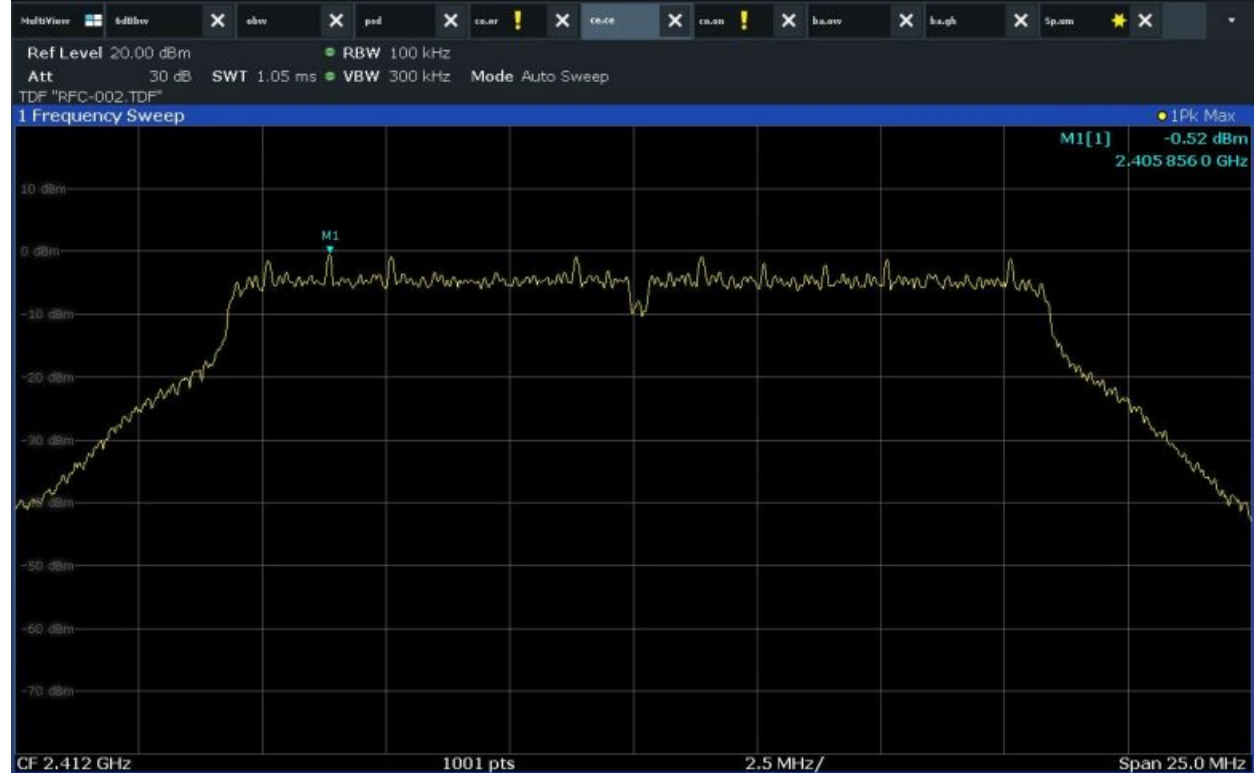


Mid CH

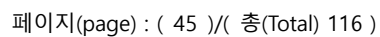


High CH

8.4.1.2 Reference Level Measured Graph for 802.11g



Low CH





8.4.1.3 Reference Level Measured Graph for 802.11n(HT20)



Low CH



Mid CH

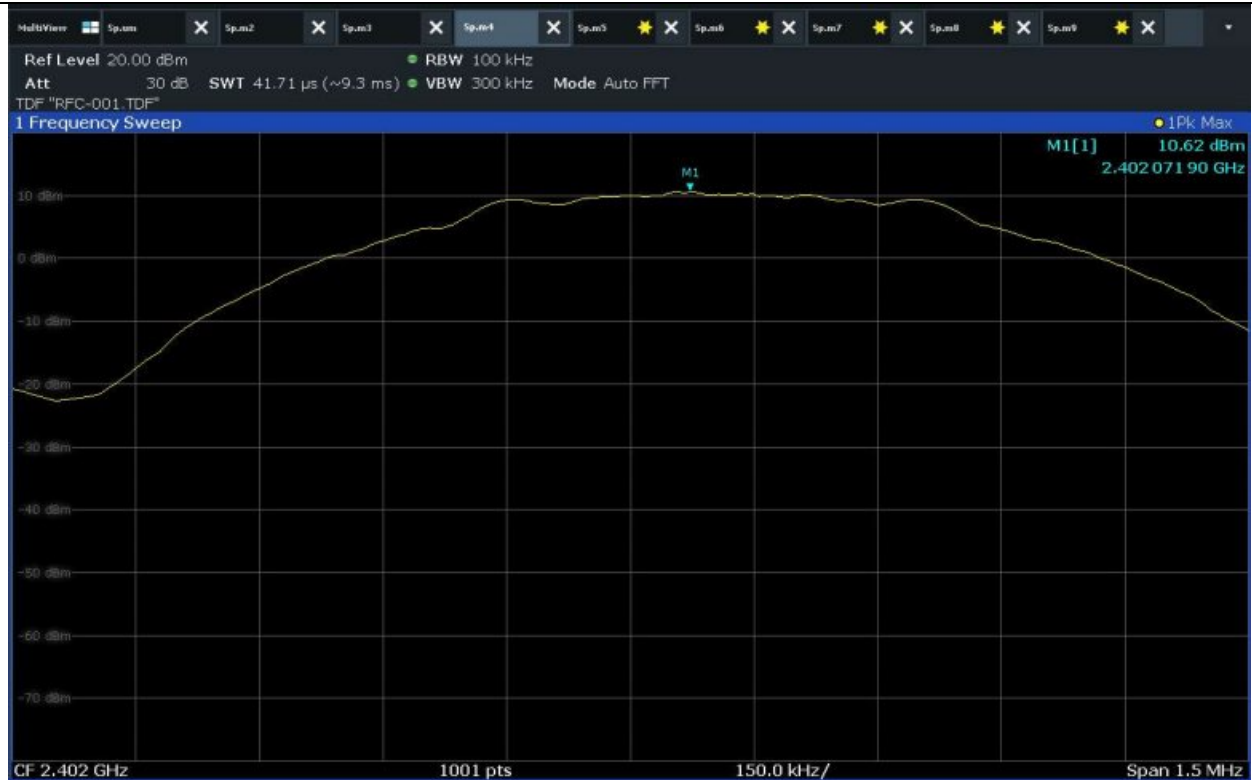


Low CH





8.4.1.5 Reference Level Measured Graph for LE 1Mbps



Low CH

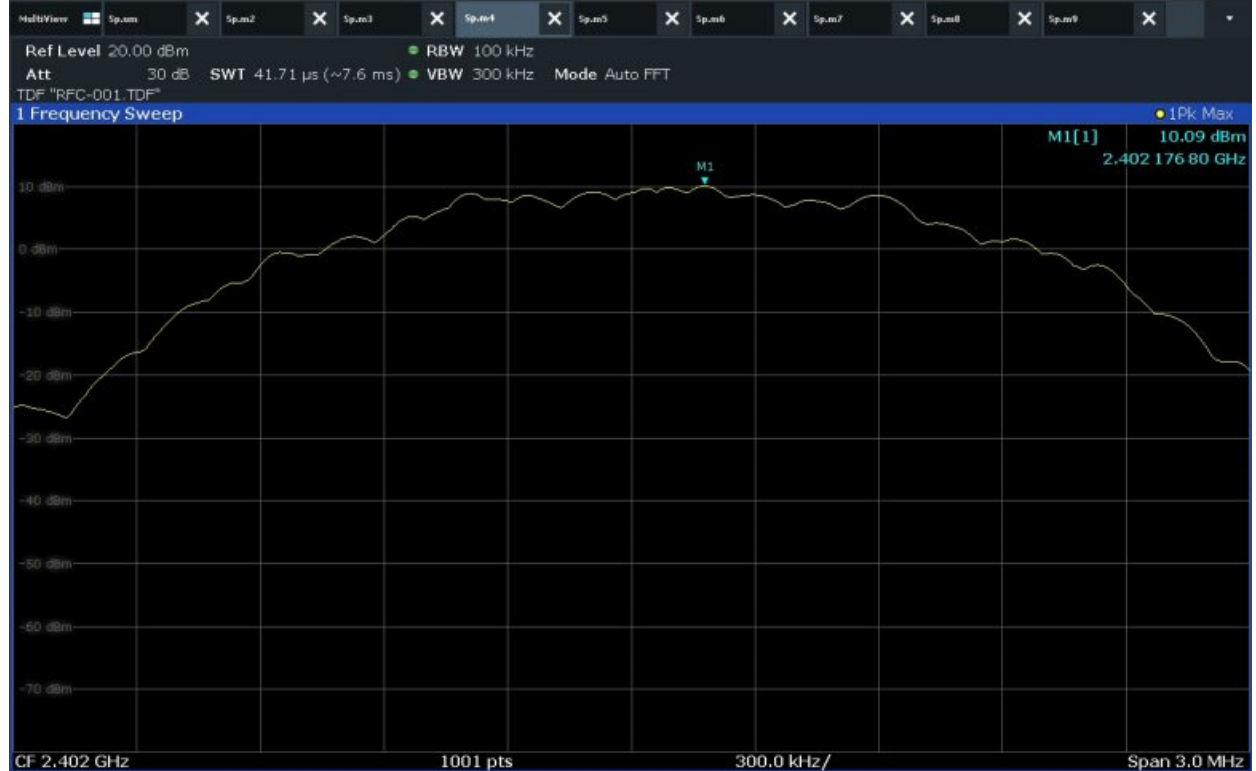


Mid CH



High CH

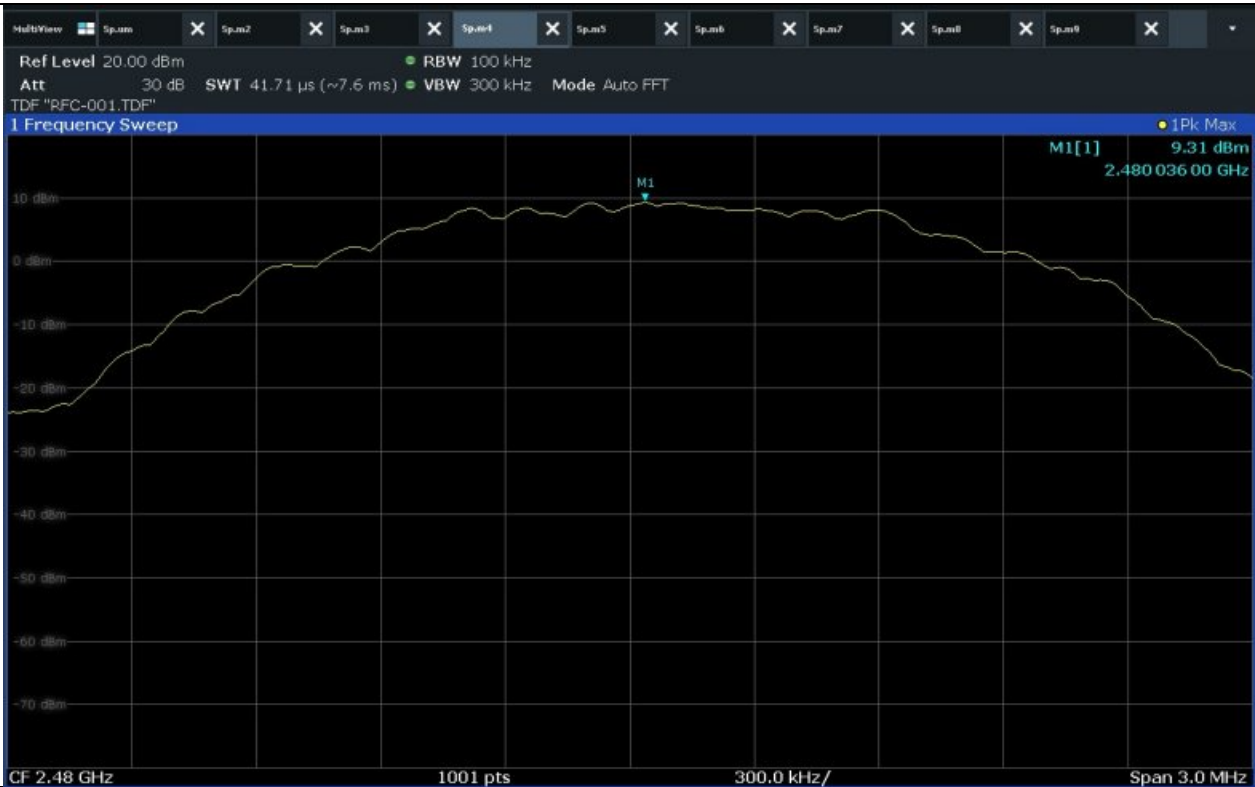
8.4.1.6 Reference Level Measured Graph for LE 2Mbps



Low CH



Mid CH



High CH



8.4.1.7 Reference Level Measured Graph for LE Coded 500kbps



Low CH



Mid CH

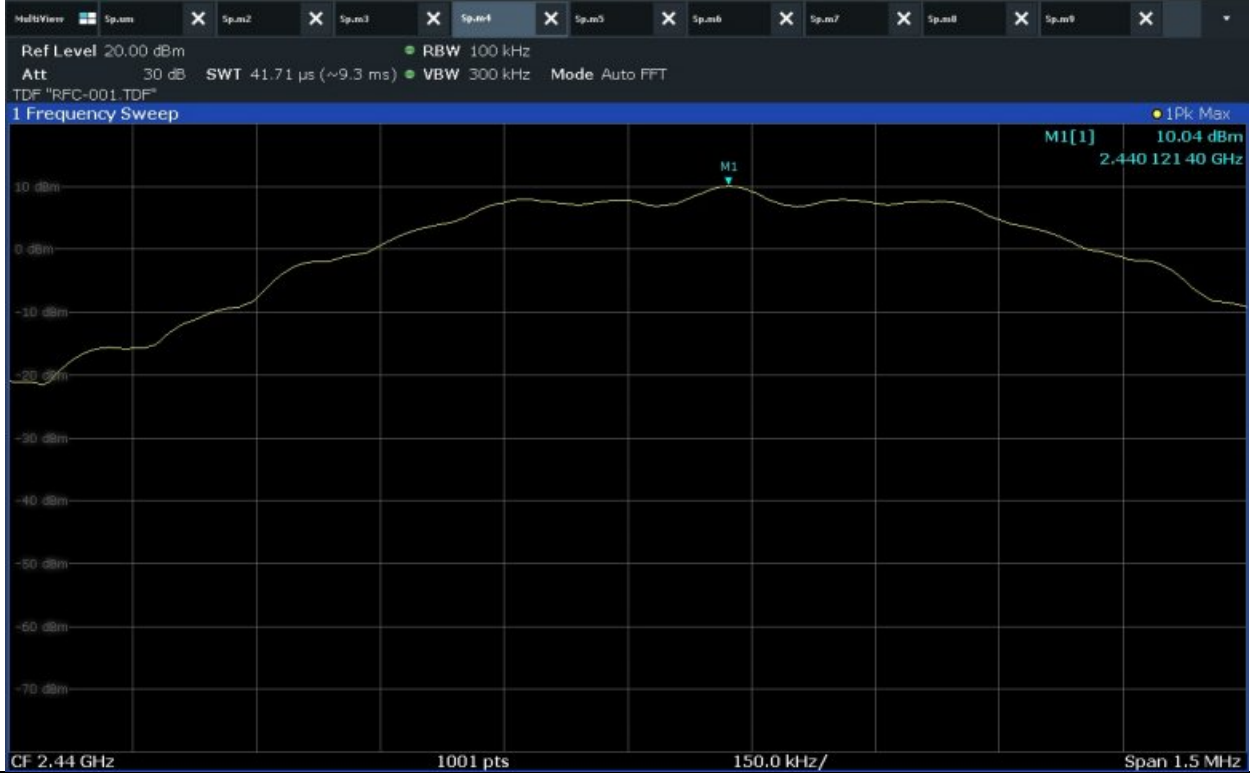


High CH

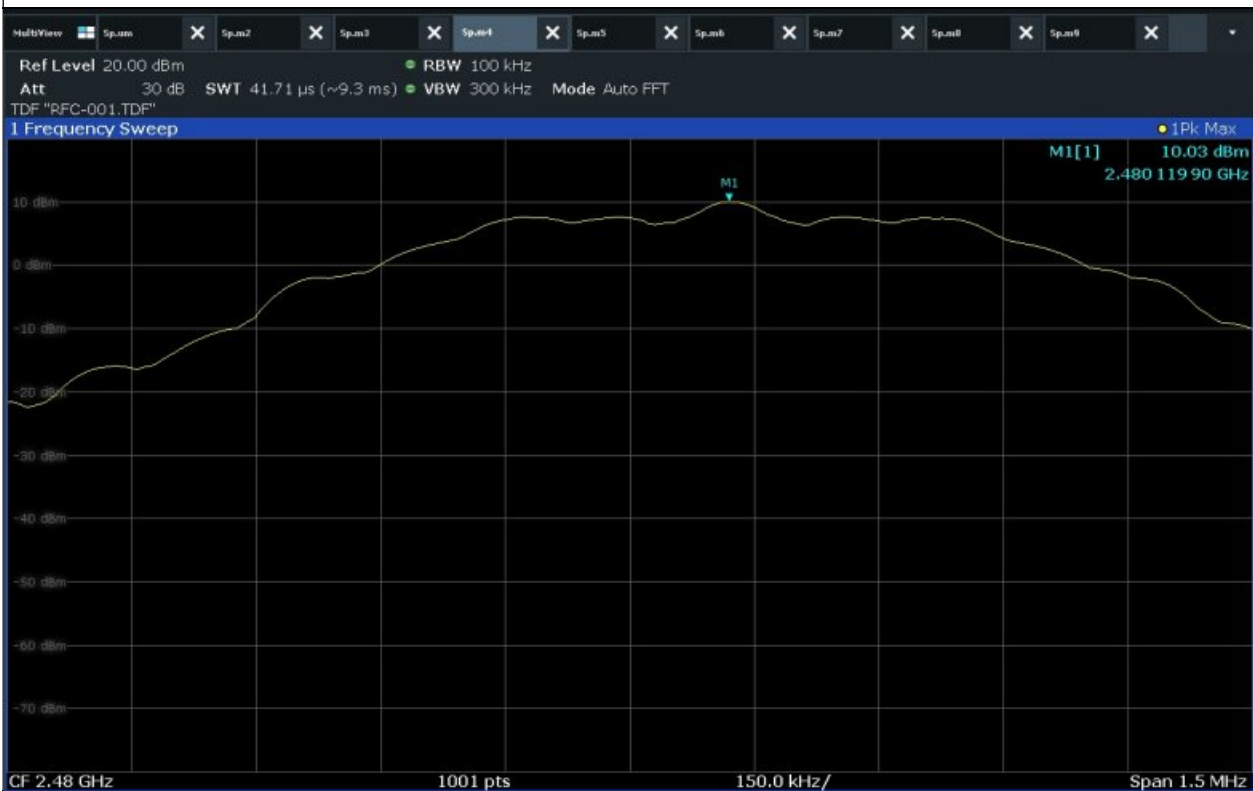
8.4.1.8 Reference Level Measured Graph for LE Coded 125kbps



Low CH



Mid CH



High CH

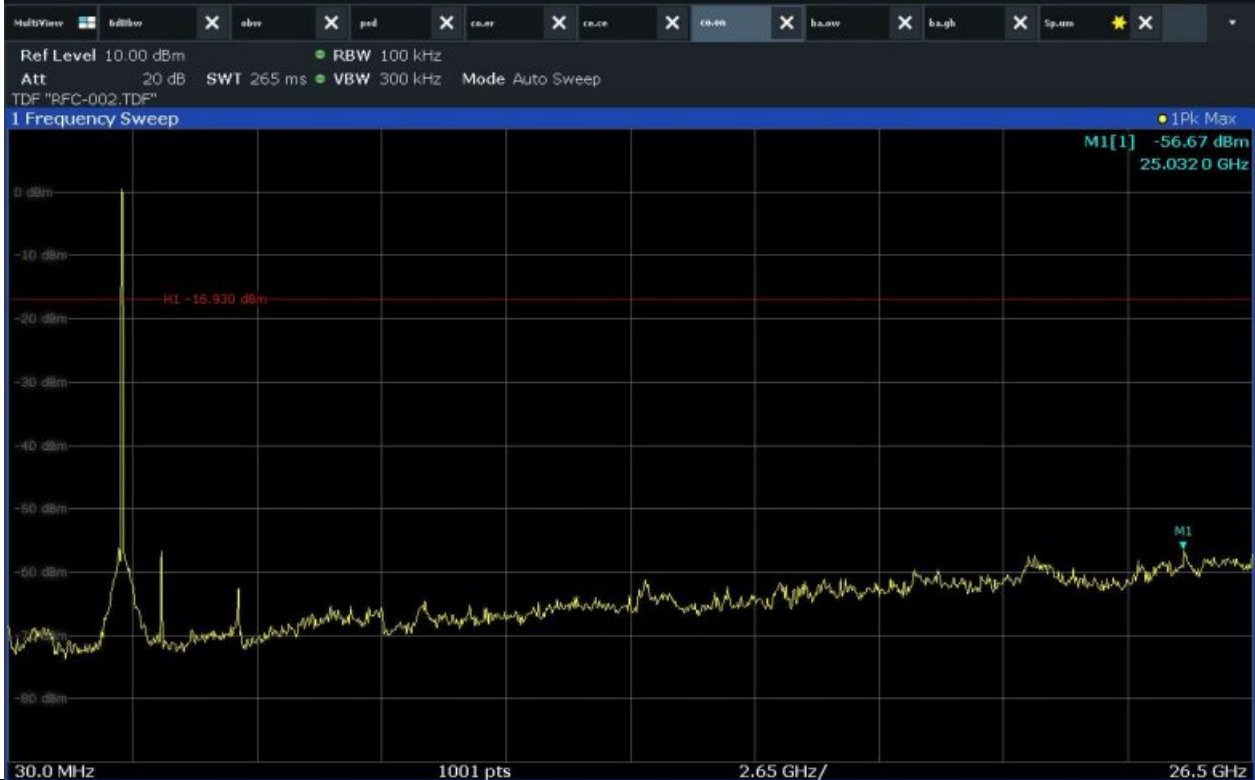
8.4.1.9 Unwanted Emissions In Non-Restricted Frequency Bands Measured Graph for 802.11b



Low CH



Mid CH



High CH

8.4.1.10 Unwanted Emissions In Non-Restricted Frequency Bands Measured Graph for 802.11g



Low CH



Mid CH



High CH

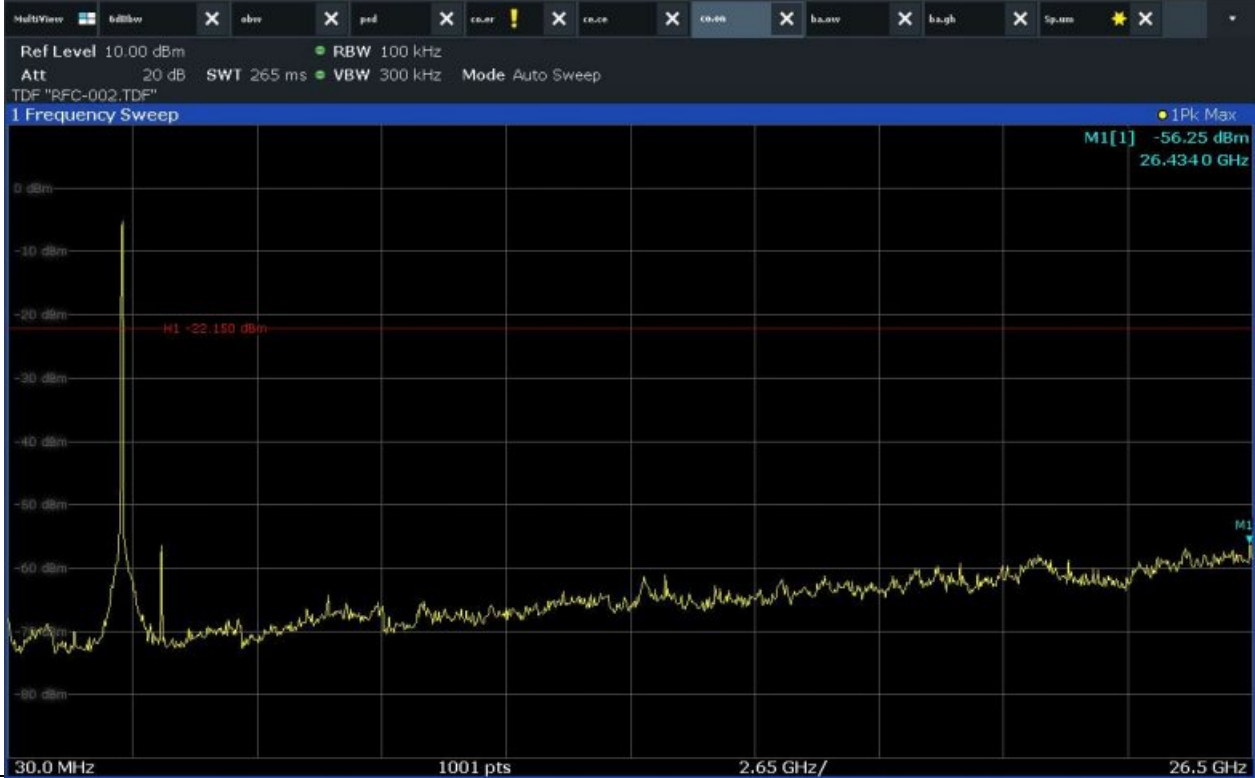
8.4.1.11 Unwanted Emissions In Non-Restricted Frequency Bands Measured Graph for 802.11n(HT20)



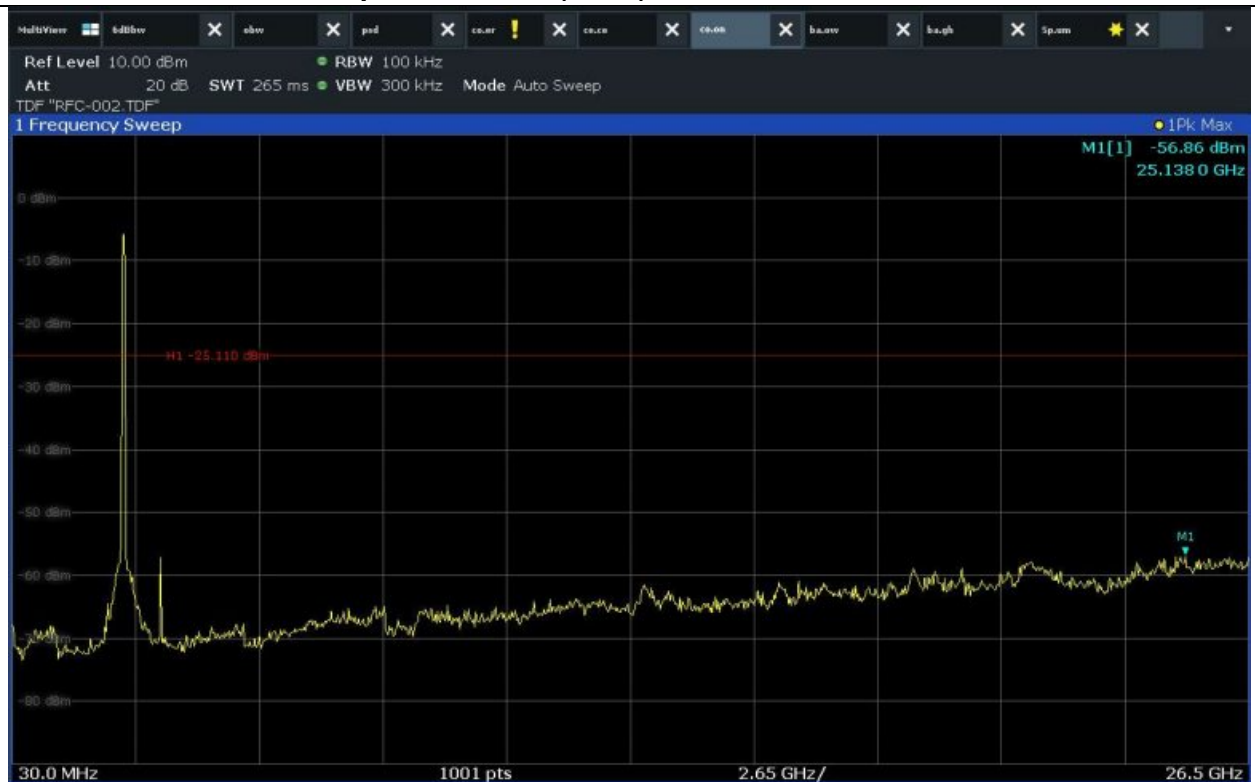
Low CH

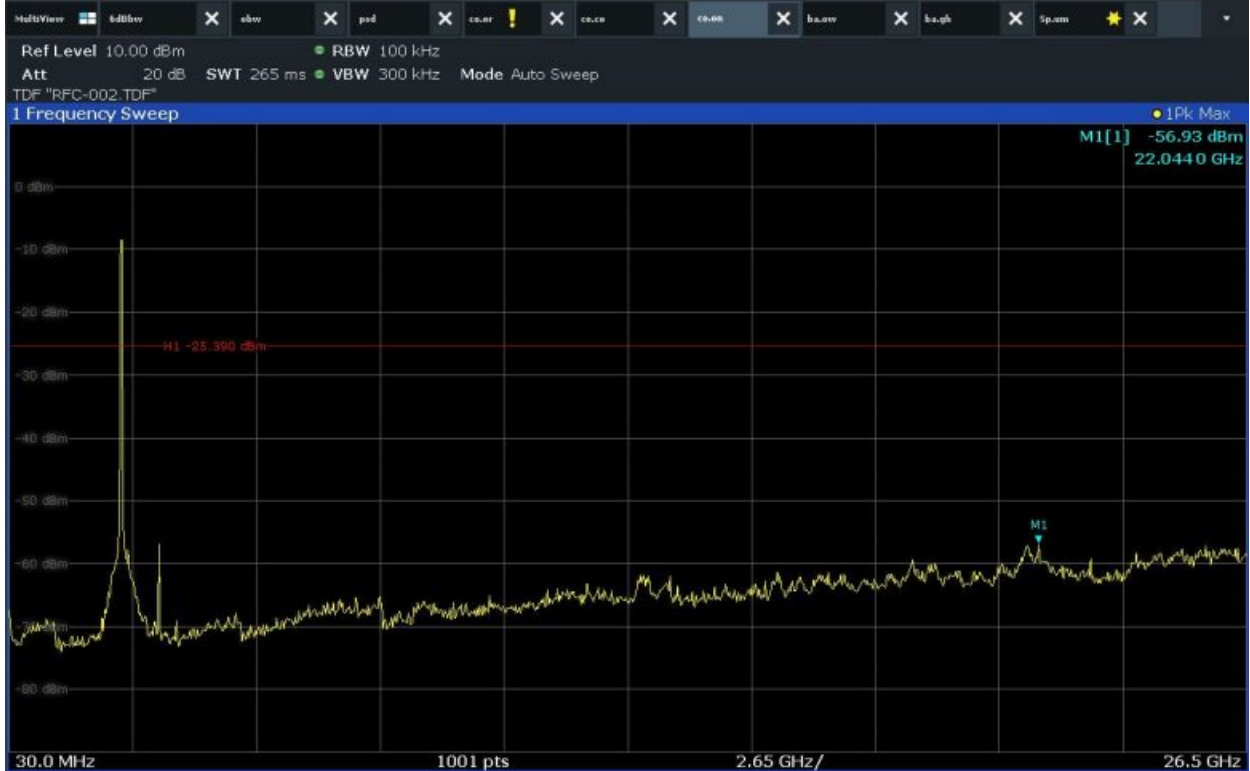


Mid CH

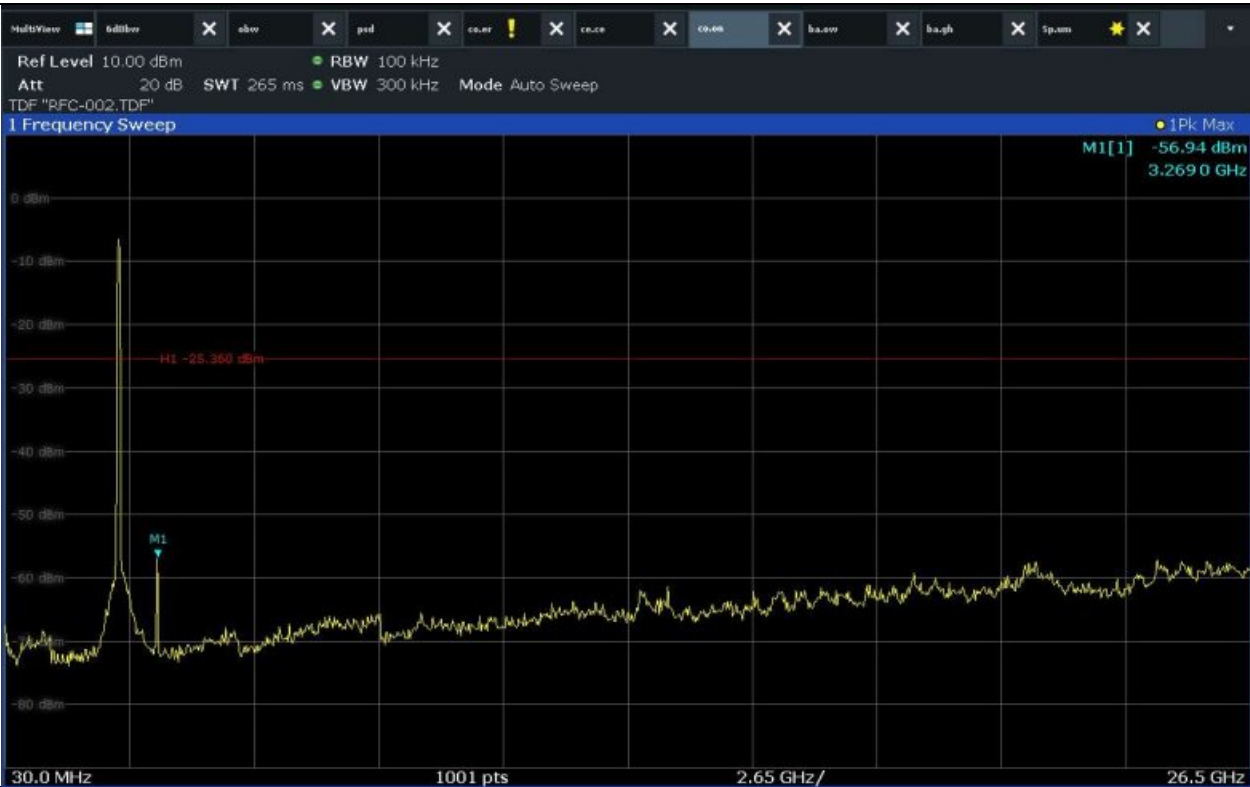


8.4.1.12 Unwanted Emissions In Non-Restricted Frequency Bands Measured Graph for 802.11n(HT40)





Mid CH



High CH

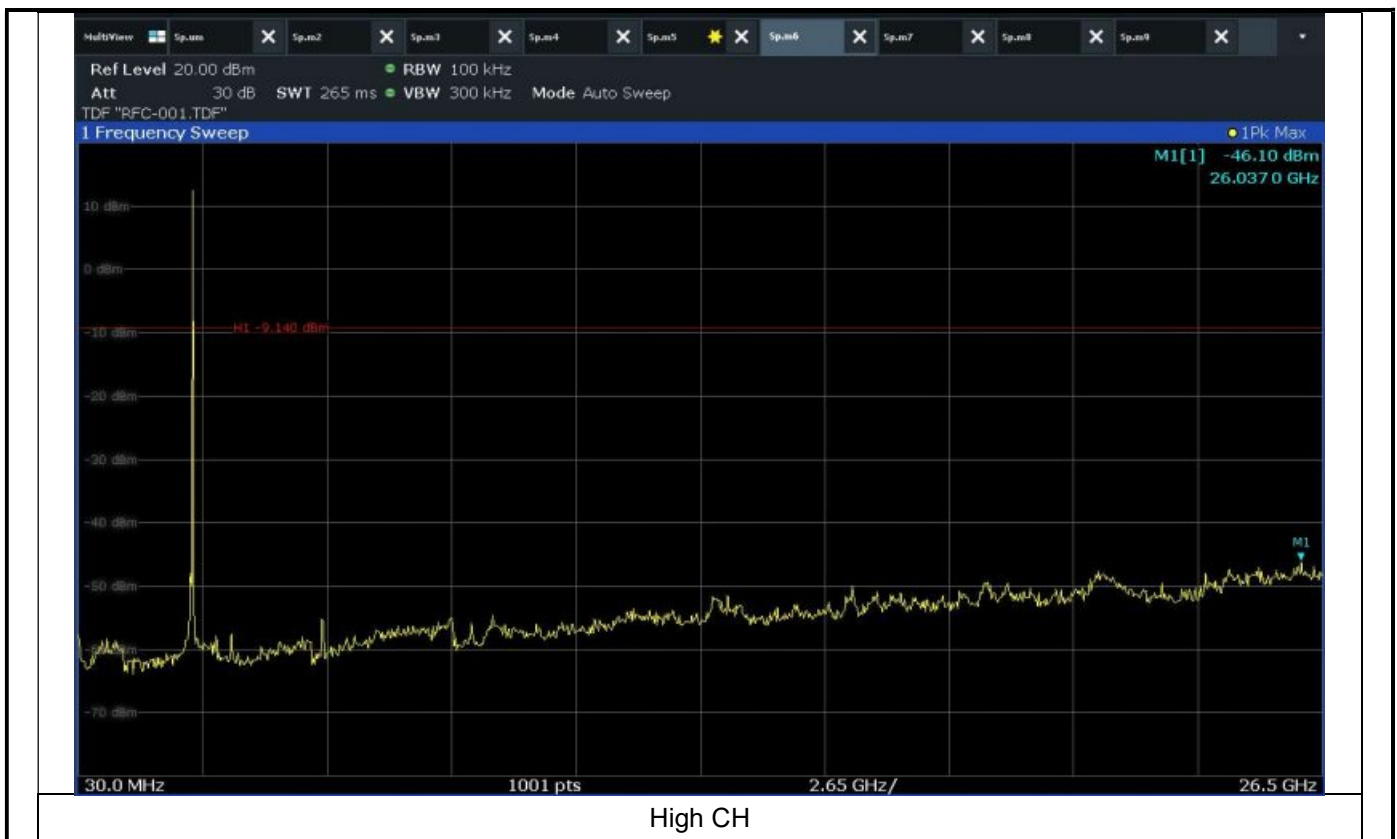
8.4.1.13 Unwanted Emissions In Non-Restricted Frequency Bands Measured Graph for LE 1Mbps



Low CH



Mid CH



8.4.1.14 Unwanted Emissions In Non-Restricted Frequency Bands Measured Graph for LE 2Mbps





Mid CH



High CH



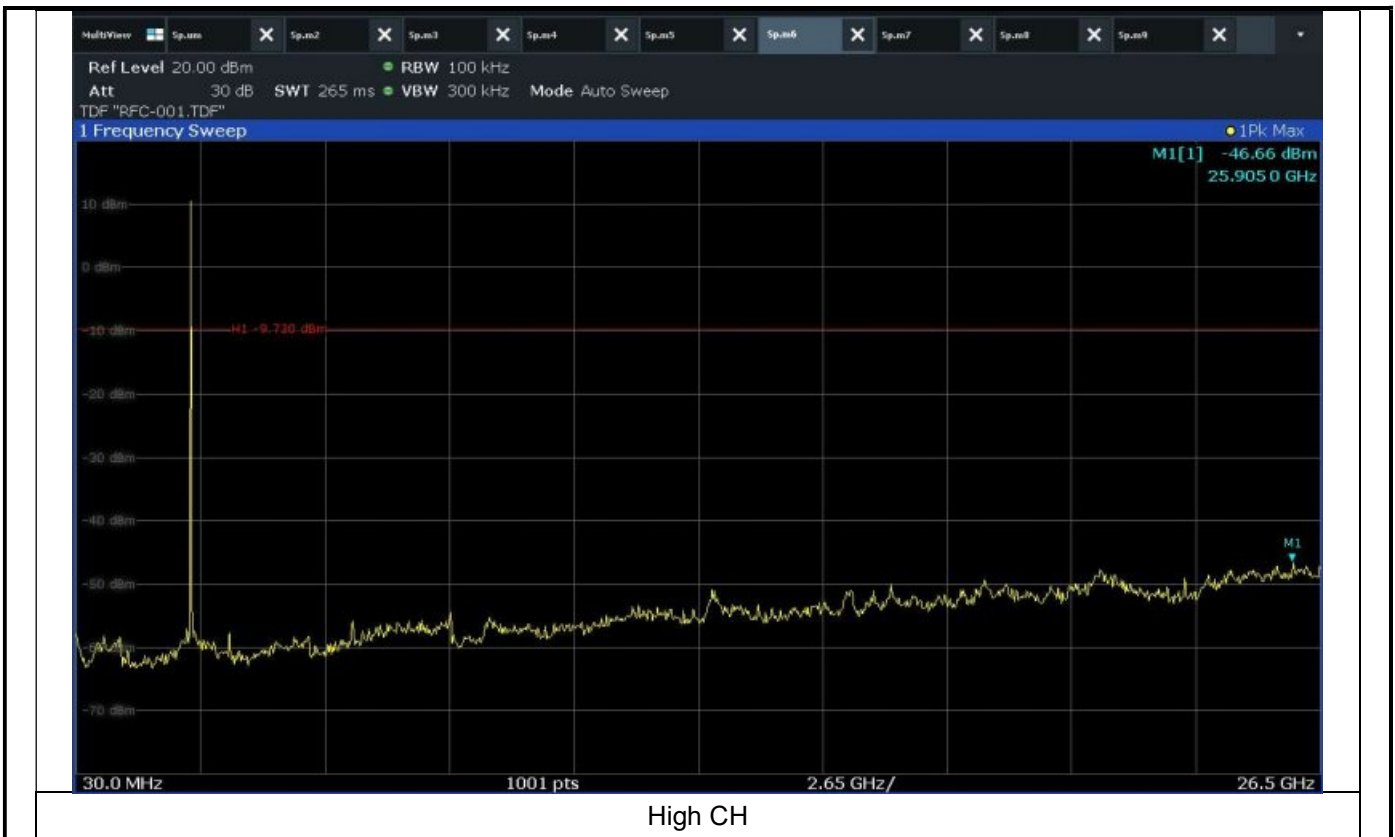
8.4.1.15 Unwanted Emissions In Non-Restricted Frequency Bands Measured Graph for LE Coded 500kbps



Low CH



Mid CH



8.4.1.16 Unwanted Emissions In Non-Restricted Frequency Bands Measured Graph for LE Coded 125kbps





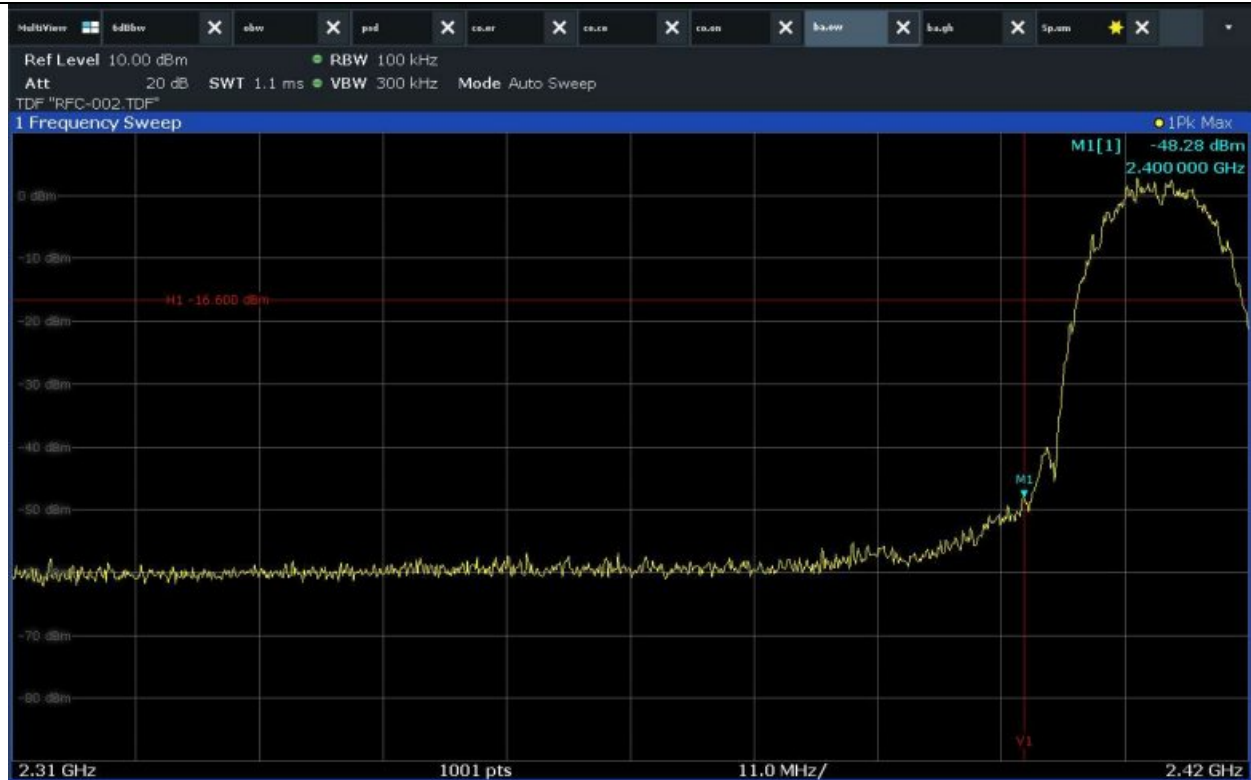
Mid CH



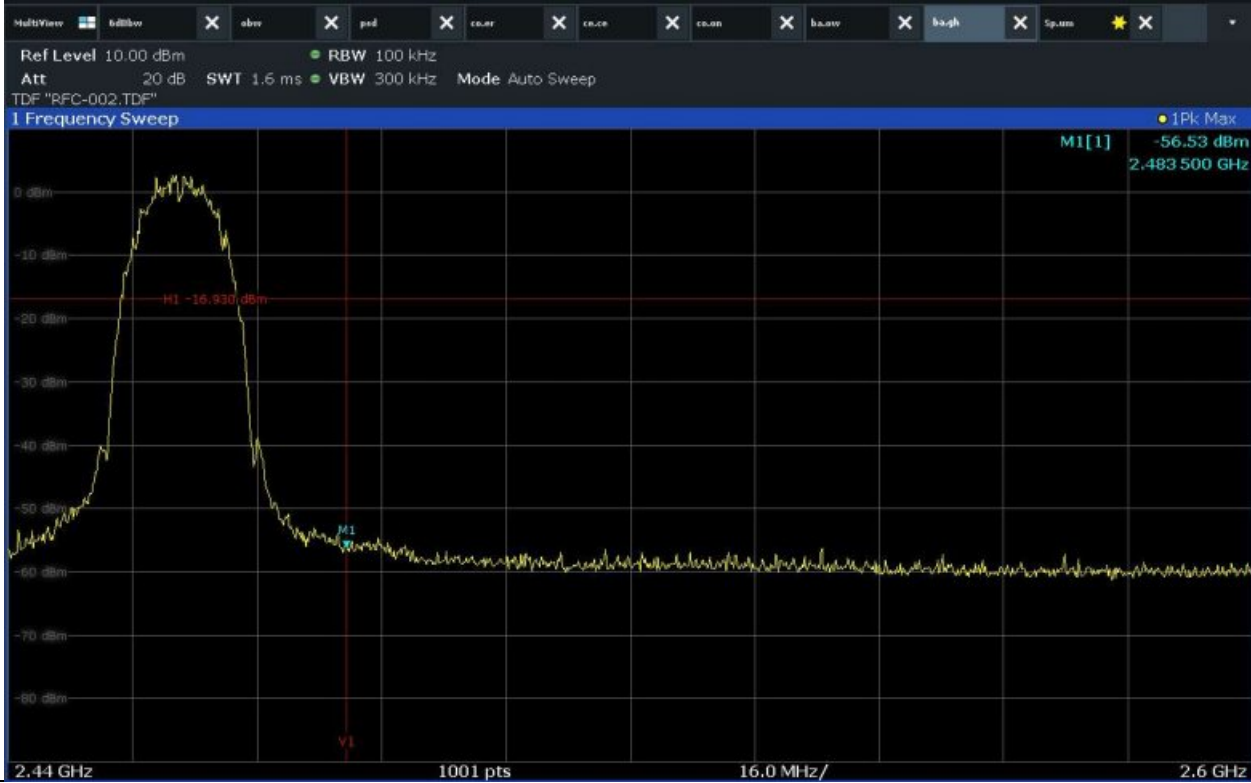
High CH



8.4.1.17 Band Edge Measured Graph for 802.11b



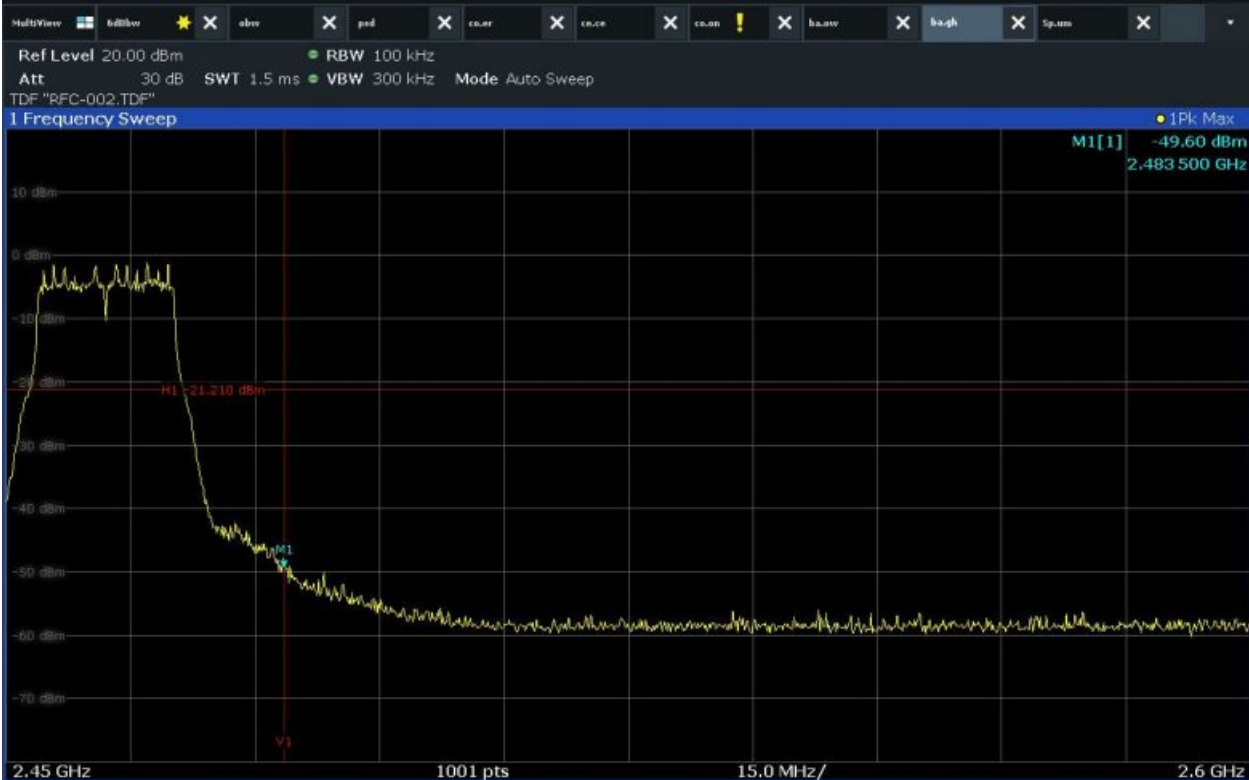
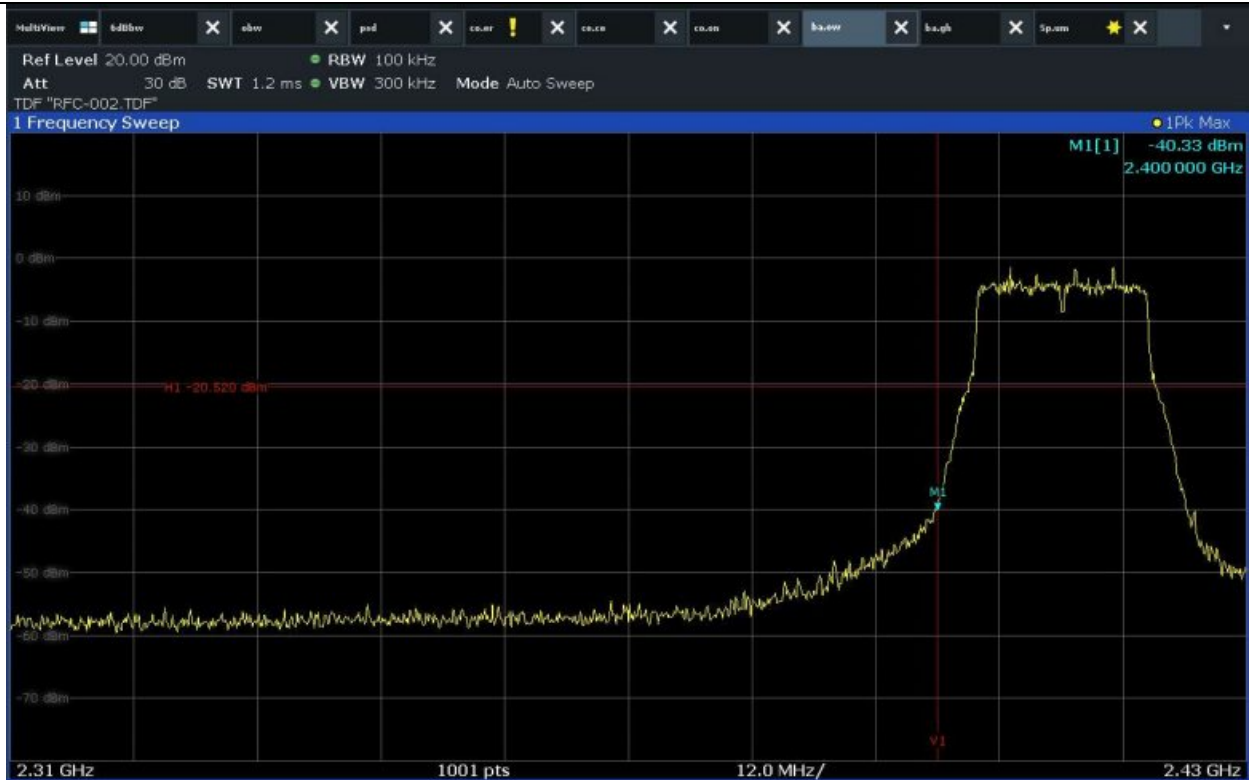
Low CH



High CH

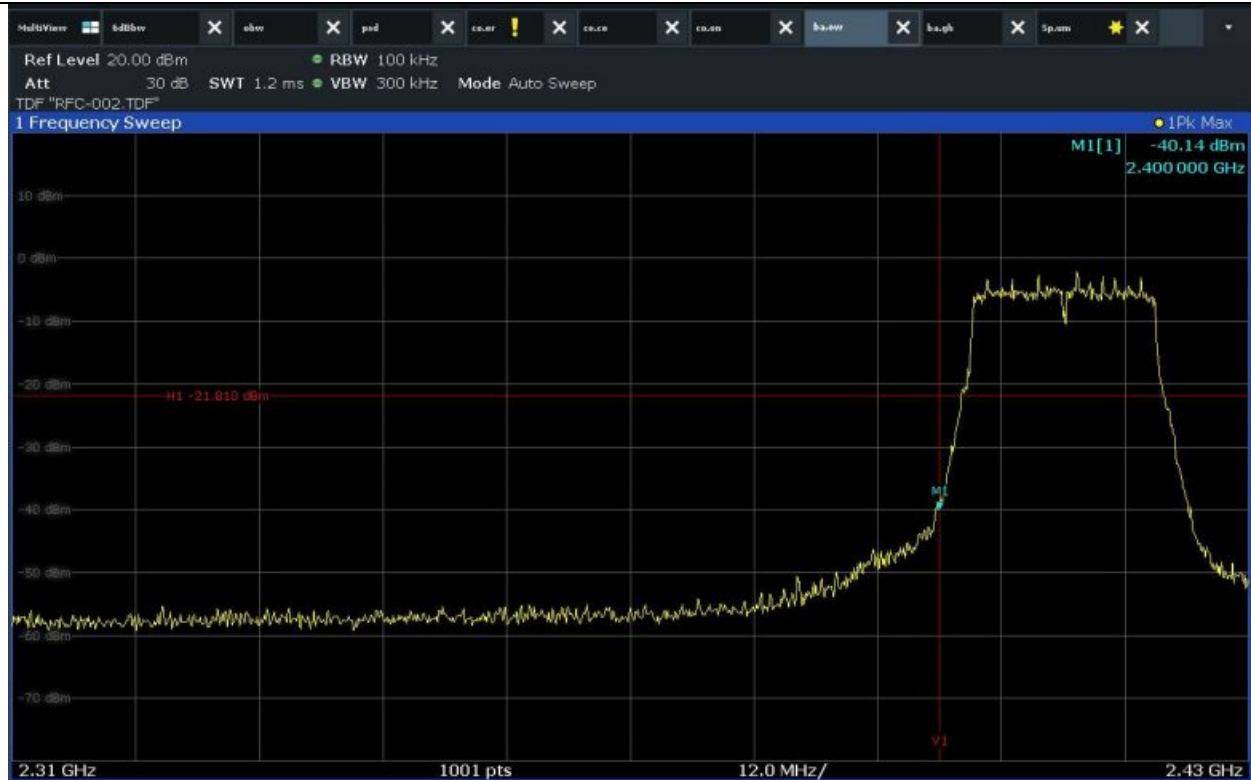


8.4.1.18 Band Edge Measured Graph for 802.11g

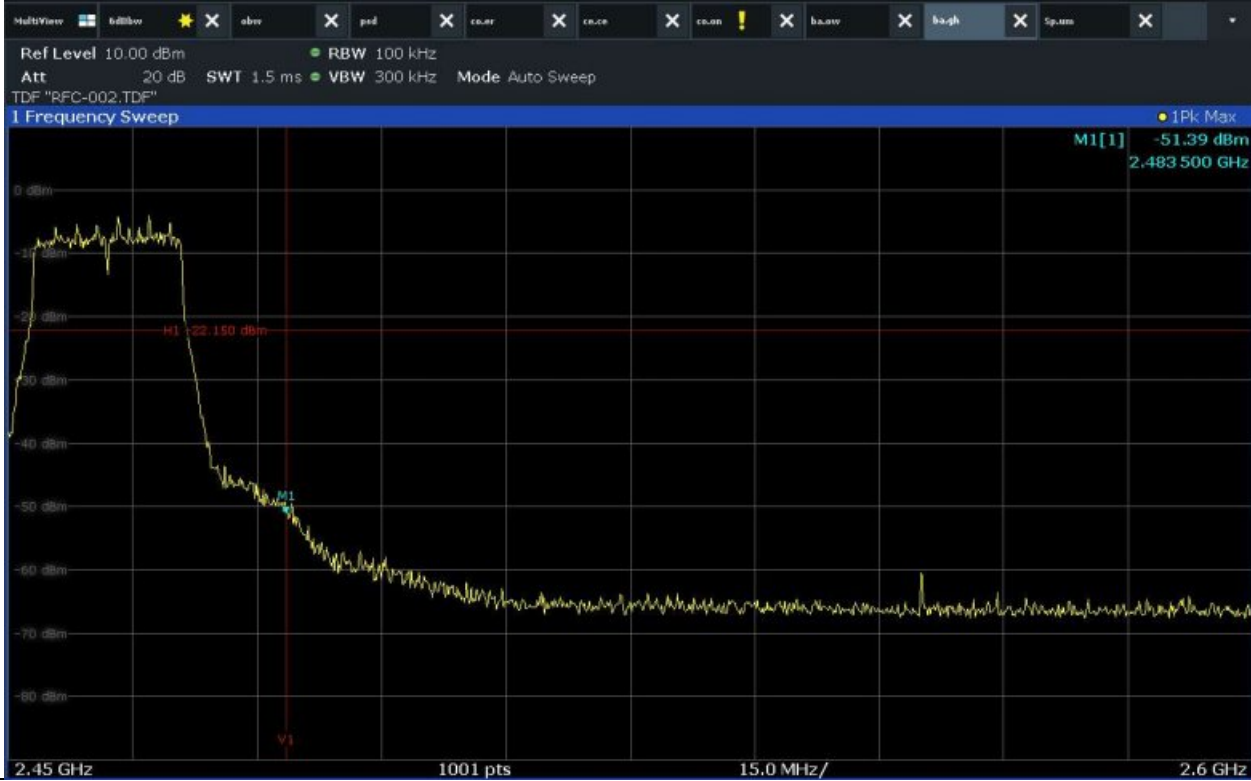




8.4.1.19 Band Edge Measured Graph for 802.11n(HT20)



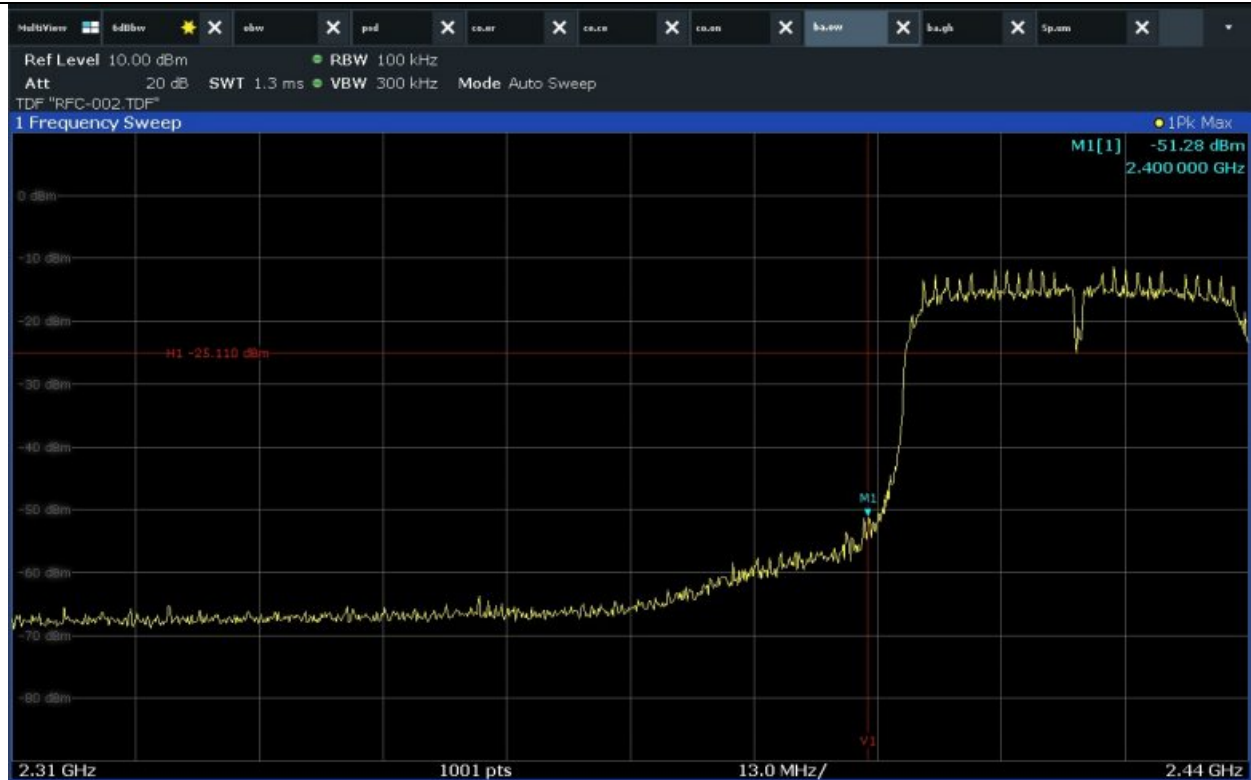
Low CH



High CH

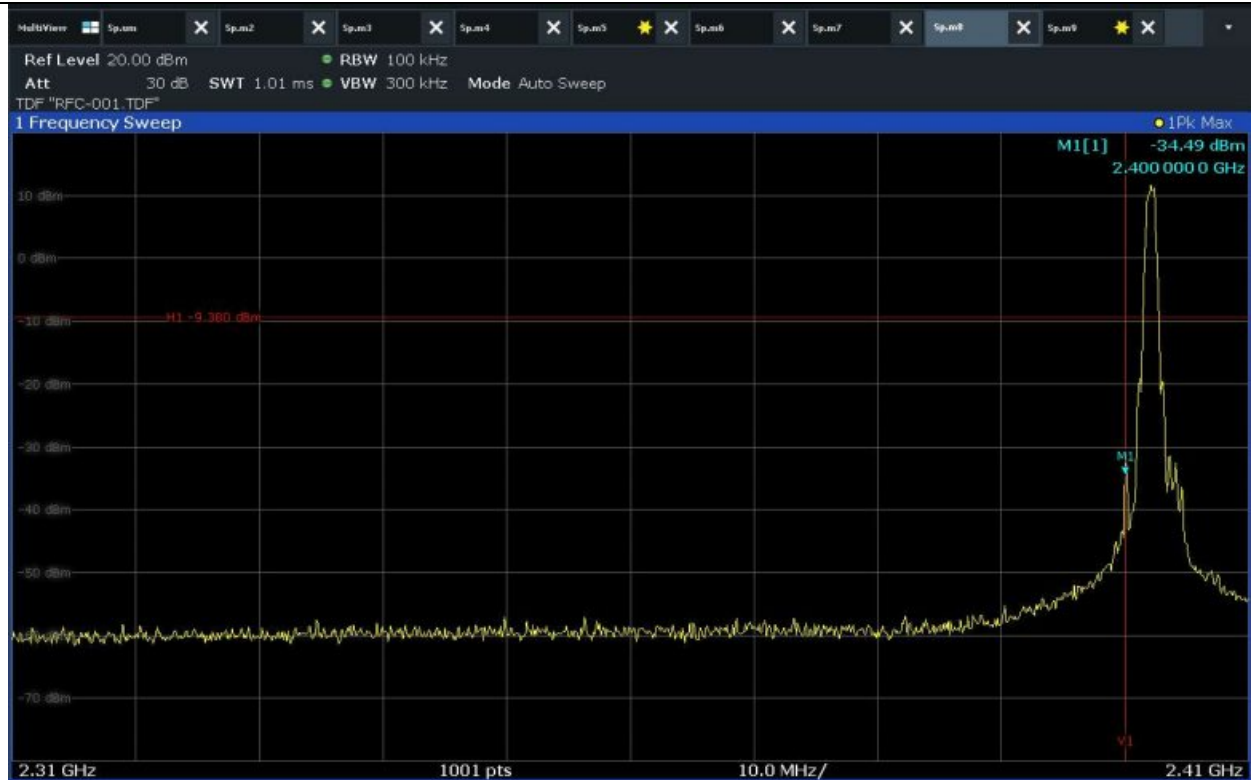


8.4.1.20 Band Edge Measured Graph for 802.11n(HT40)

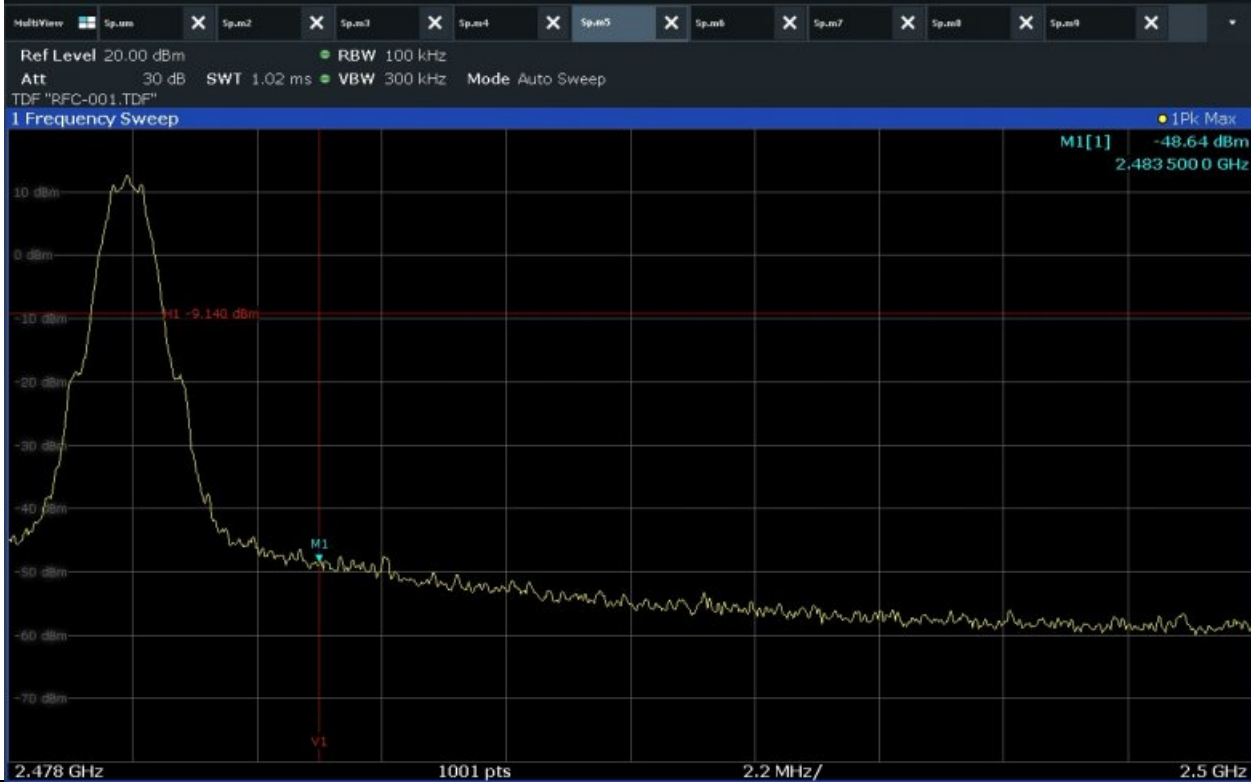




8.4.1.21 Band Edge Measured Graph for LE 1Mbps



Low CH



High CH

8.4.1.22 Band Edge Measured Graph for LE 2Mbps

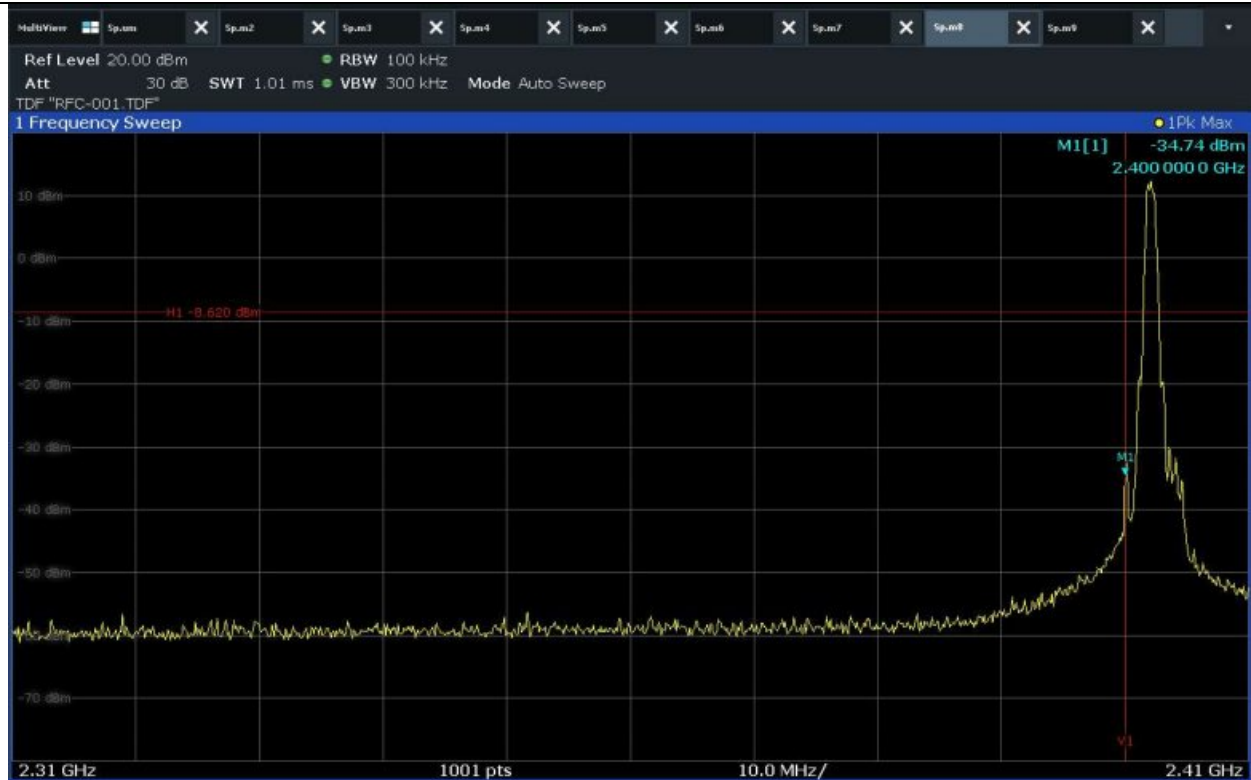


Low CH

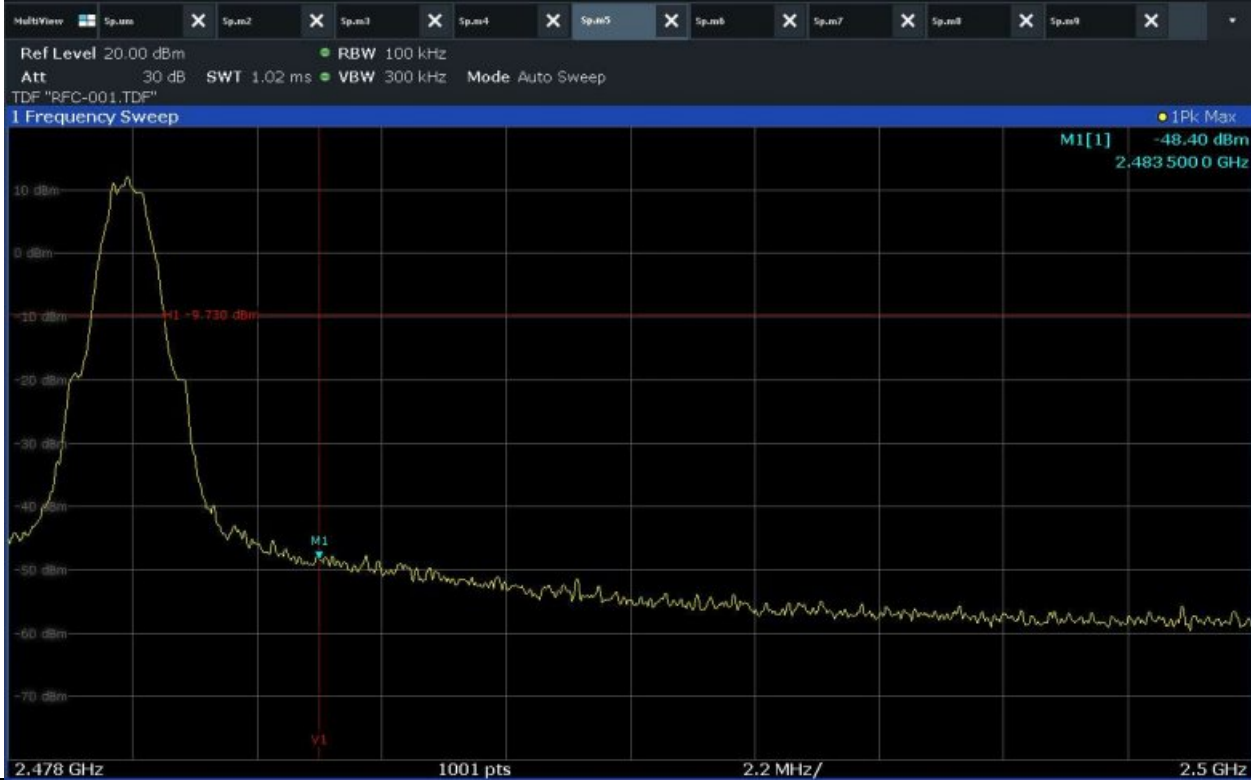


High CH

8.4.1.23 Band Edge Measured Graph for LE Coded 500kbps

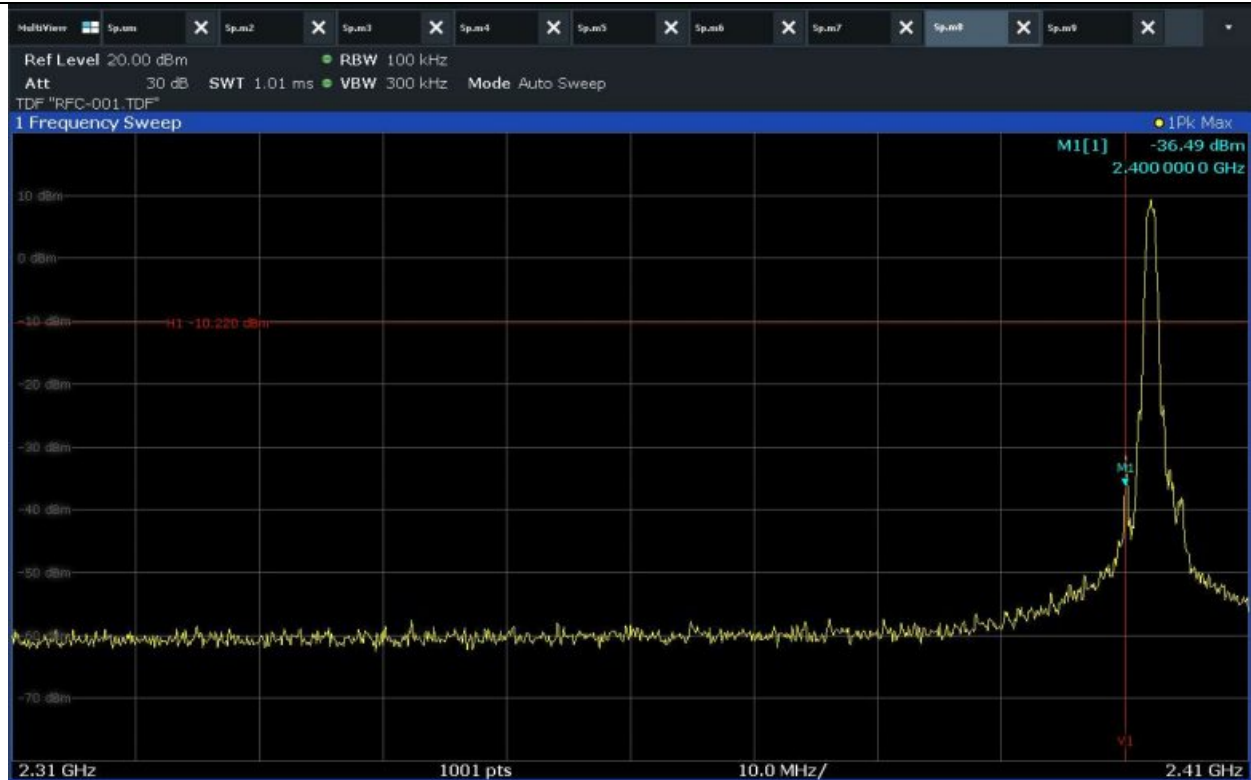


Low CH



High CH

8.4.1.24 Band Edge Measured Graph for LE Coded 125kbps



9. Radiated Spurious Emission

9.1 Operating environment

Temperature : 24 °C
Relative humidity : 48 %

9.2 Measurement method

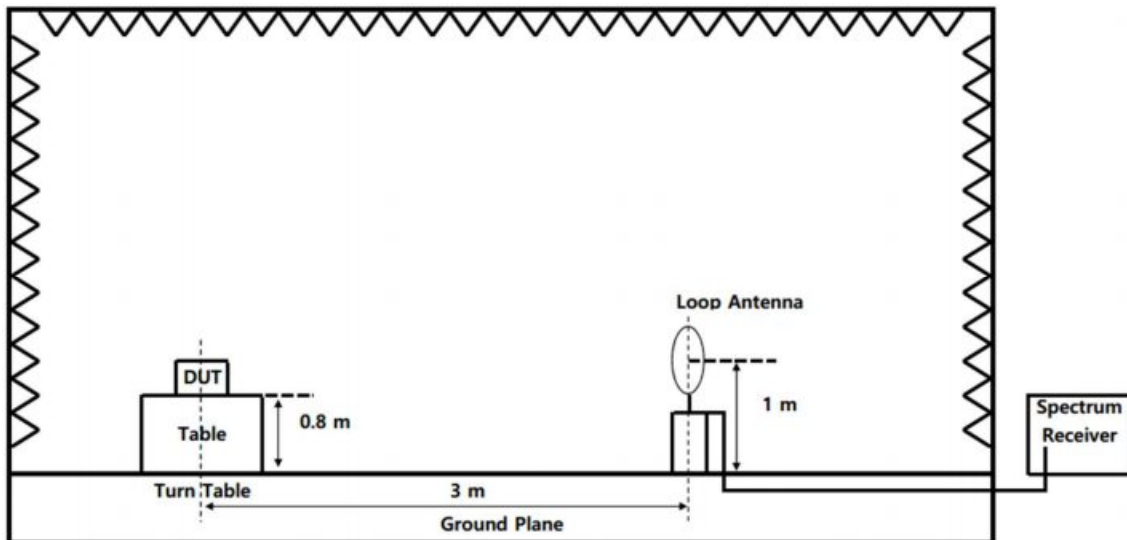
Standard : §15.247 (d), §15.209, §15.205

9.3 Test setup

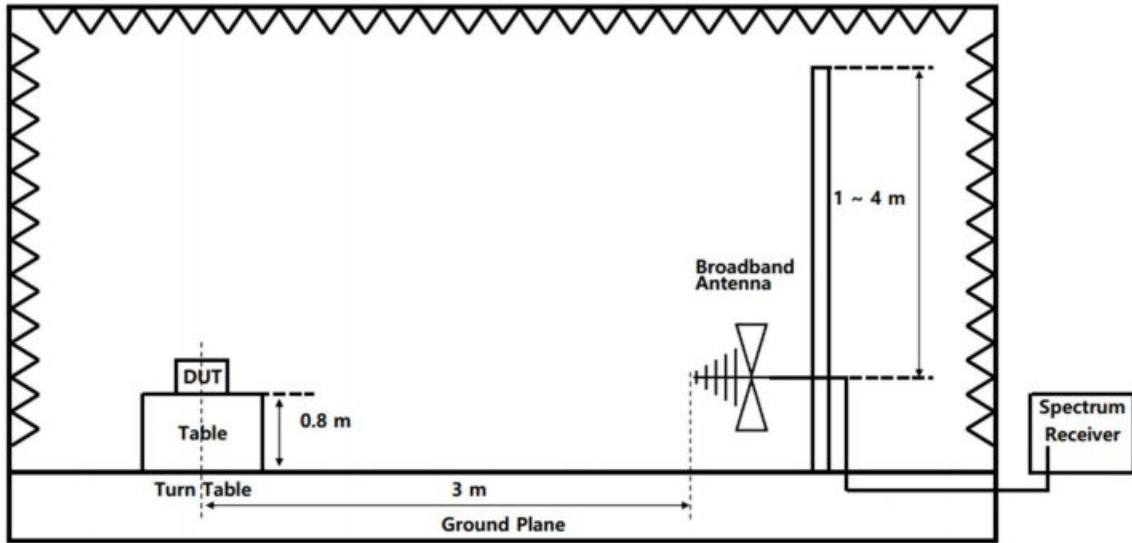
The radiated emissions measurements were performed on the 3 m, Semi-Anechoic Chamber. The EUT was placed on a non-conductive turntable above the ground plane.

The frequency spectrum from 9 kHz to 26.5 GHz was scanned and maximum emission levels at each frequency recorded. The system was rotated 360°, and the antenna was varied in the height between 1.0 m and 4.0 m in order to determine the maximum emission levels. This procedure was performed for horizontal and vertical polarization of the receiving antenna.

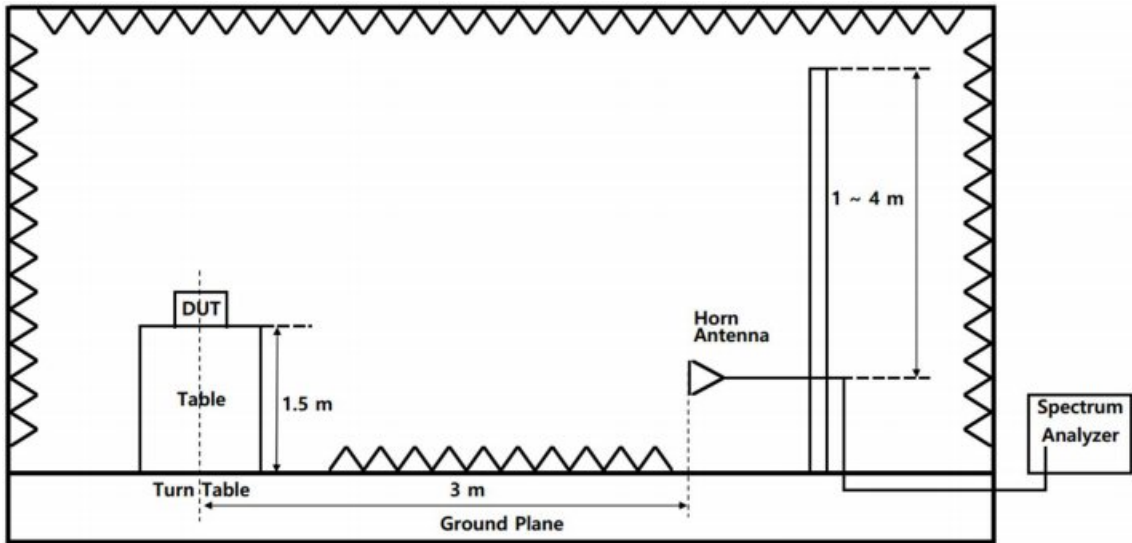
9.3.1 Below 30 MHz



9.3.2 30 MHz to 1 GHz



9.3.3 Above 1 GHz



**9.4 Test data**

Operating mode : Transmit mode

Test Result : Pass

9.4.1 Measurement Result for 802.11b**9.4.1.1 Measurement Results for Restricted Band**

Frequency (MHz)	Reading (dBμV)	Detector	Ant. Pol. (H/V)	Corr. Factor (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
Low CH							
2386.68	33.80	Peak	H	-14.50	48.30	73.98	25.68
	21.94	Average	H		36.44	53.98	17.54
High CH							
2 485.69	31.90	Peak	H	-14.10	46.00	73.98	27.98
	18.35	Average	H		32.45	53.98	21.53

※ Ant. Pol. : Antenna Polarization

※ Corr. Factor. : Antenna Factor + Cable Loss - Amplifier Gain

※ Result = Reading + Corr. Factor

※ Margin = Limit - Result

9.4.1.2 Measurement Results for below 30 MHz

Frequency (MHz)	Reading (dBμV)	Detector	Ant. Pol. (H/V)	Corr. Factor (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
Low CH							
It was not found any emissions peaks found from the EUT.							
Mid CH							
It was not found any emissions peaks found from the EUT.							
High CH							
It was not found any emissions peaks found from the EUT.							

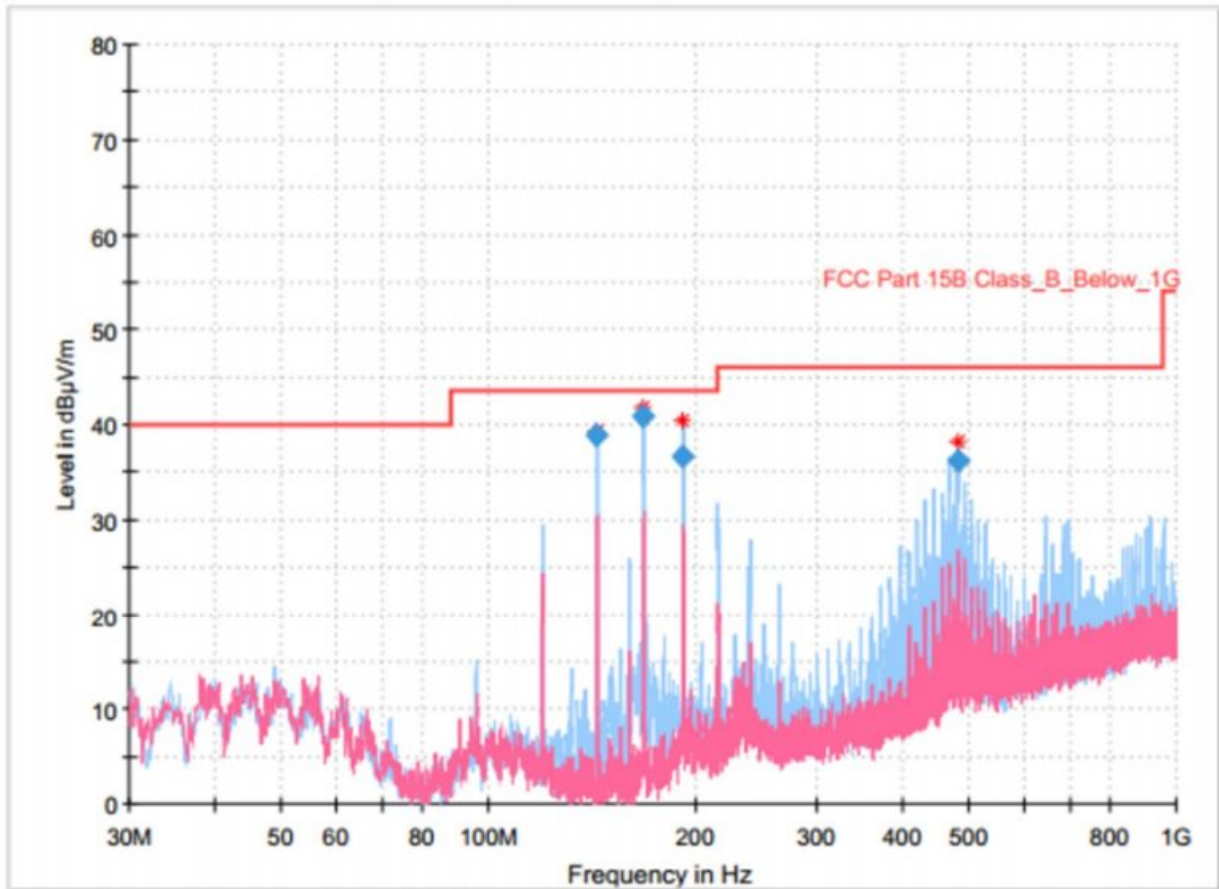
※ Ant. Pol. : Antenna Polarization

※ Corr. Factor. : Antenna Factor + Cable Loss - Amplifier Gain

※ Result = Reading + Corr. Factor

※ Margin = Limit – Result

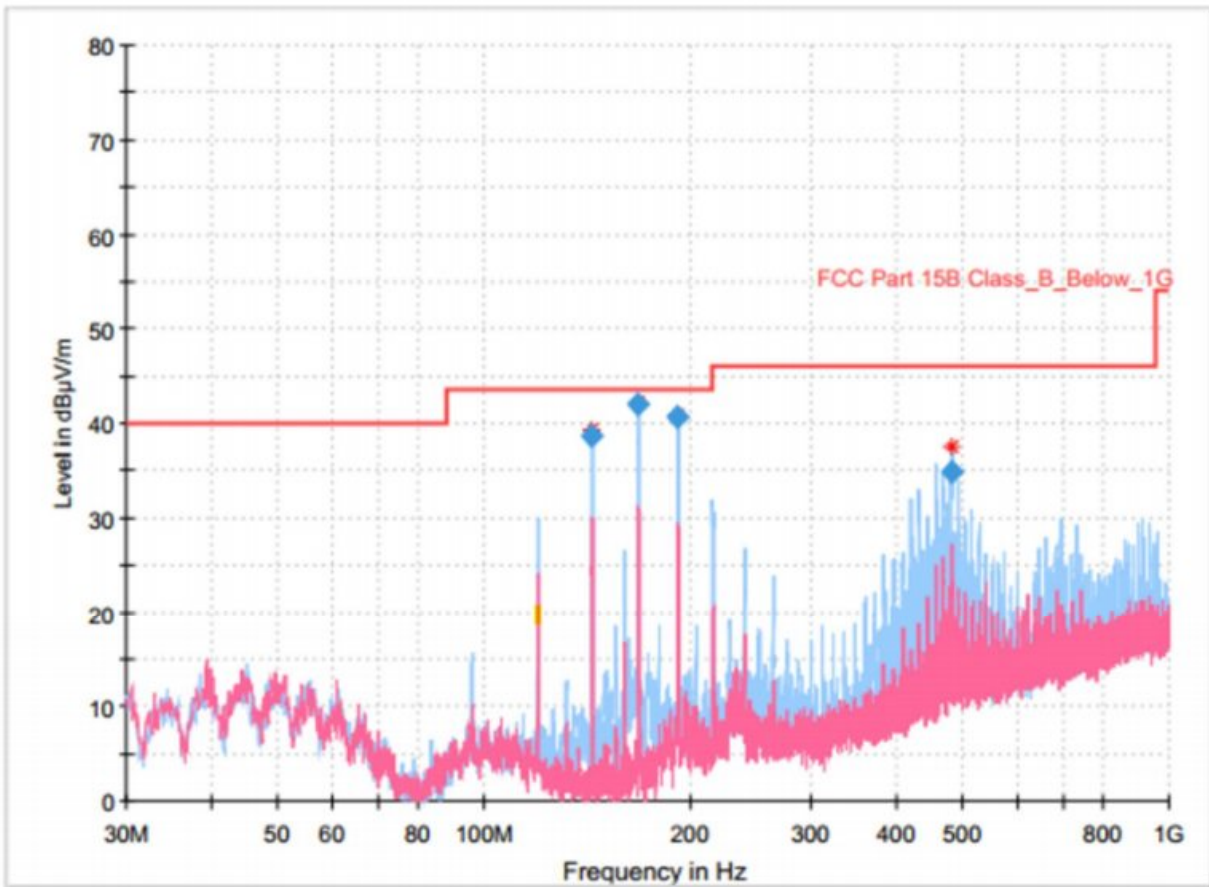
9.4.1.3 Measurement Results for below 1 GHz



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
143.975000	38.82	43.50	4.68	1000.0	120.000	99.9	H	0.0	-27.9
167.934000	40.94	43.50	2.56	1000.0	120.000	99.9	H	204.0	-26.9
191.699000	36.67	43.50	6.83	1000.0	120.000	99.9	H	0.0	-24.7
479.983000	36.10	46.00	9.90	1000.0	120.000	99.9	H	317.0	-16.1

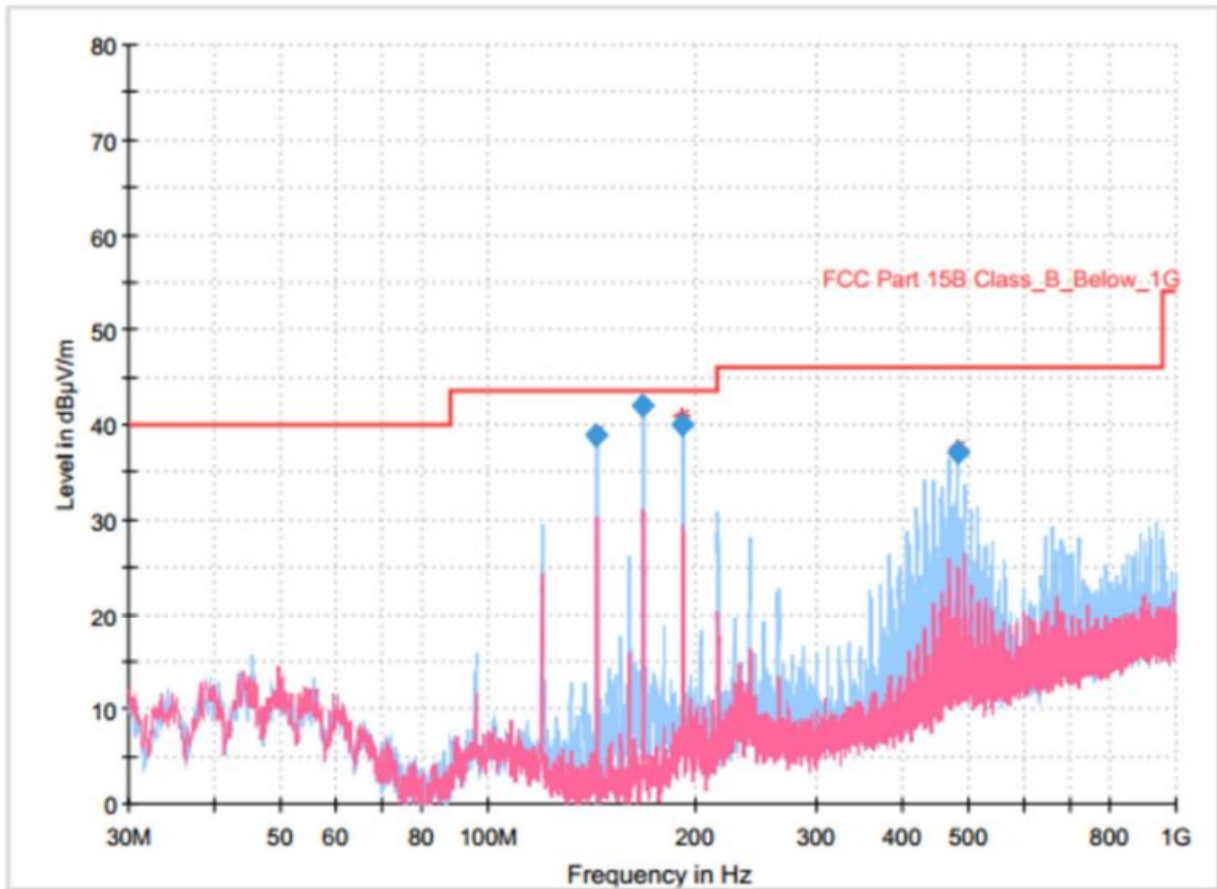
Low CH



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
143.975000	38.77	43.50	4.73	1000.0	120.000	99.9	H	341.0	-27.9
168.031000	41.11	43.50	2.39	1000.0	120.000	99.9	H	341.0	-26.9
191.990000	40.77	43.50	2.73	1000.0	120.000	99.9	H	341.0	-24.7
480.468000	34.96	46.00	11.04	1000.0	120.000	99.9	H	112.0	-16.0

Mid CH



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
143.975000	38.82	43.50	4.68	1000.0	120.000	99.9	H	358.0	-27.9
168.031000	41.04	43.50	2.46	1000.0	120.000	99.9	H	352.0	-26.9
191.990000	39.98	43.50	3.52	1000.0	120.000	99.9	H	328.0	-24.7
479.983000	36.99	46.00	9.01	1000.0	120.000	99.9	H	298.0	-16.1

High CH



9.4.1.4 Measurement Results for Above 1 GHz(802.11b)

Frequency (MHz)	Reading (dBμV)	Detector	Ant. Pol. (H/V)	Corr. Factor (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
Low CH							
4 826.70	34.43	Peak	V	-3.80	38.23	73.98	35.75
	20.96	Average	V		24.76	53.98	29.22
7 205.00	40.64	Peak	H	0.70	39.94	73.98	34.04
	27.09	Average	H		26.39	53.98	27.59
9 608.80	45.61	Peak	H	3.60	42.01	73.98	31.97
	32.26	Average	H		28.66	53.98	25.32
Mid CH							
4 872.60	35.59	Peak	V	-3.50	39.09	73.98	34.89
	21.83	Average	V		25.33	53.98	28.65
7 310.40	40.68	Peak	V	0.70	39.98	73.98	34.00
	26.44	Average	V		25.74	53.98	28.24
9 746.50	46.50	Peak	V	3.90	42.60	73.98	31.38
	33.06	Average	V		29.16	53.98	24.82
High CH							
4 923.60	37.23	Peak	H	-3.20	40.43	73.98	33.55
	24.19	Average	H		27.39	53.98	26.59
7 381.80	40.21	Peak	H	0.90	39.31	73.98	34.67
	26.93	Average	H		26.03	53.98	27.95
9 843.40	45.35	Peak	H	4.10	41.25	73.98	32.73
	31.90	Average	H		27.80	53.98	26.18

※ Ant. Pol. : Antenna Polarization

※ Corr. Factor. : Antenna Factor + Cable Loss - Amplifier Gain

※ Result = Reading + Corr. Factor

※ Margin = Limit – Result



9.4.2 Measurement Result for 802.11g

9.4.2.1 Measurement Results for Restricted Band for 802.11g

Frequency (MHz)	Reading (dBμV)	Detector	Ant. Pol. (H/V)	Corr. Factor (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
Low CH							
2389.58	55.41	Peak	H	-14.50	69.91	73.98	4.07
	37.43	Average	H		51.93	53.98	2.05
High CH							
2484.28	52.00	Peak	H	-14.10	66.10	73.98	7.88
	35.12	Average	H		49.22	53.98	4.76

※ Ant. Pol. : Antenna Polarization

※ Corr. Factor. : Antenna Factor + Cable Loss - Amplifier Gain

※ Result = Reading + Corr. Factor

※ Margin = Limit - Result

9.4.2.2 Measurement Results for below 30 MHz

Frequency (MHz)	Reading (dBμV)	Detector	Ant. Pol. (H/V)	Corr. Factor (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
Low CH							
It was not found any emissions peaks found from the EUT.							
Mid CH							
It was not found any emissions peaks found from the EUT.							
High CH							
It was not found any emissions peaks found from the EUT.							

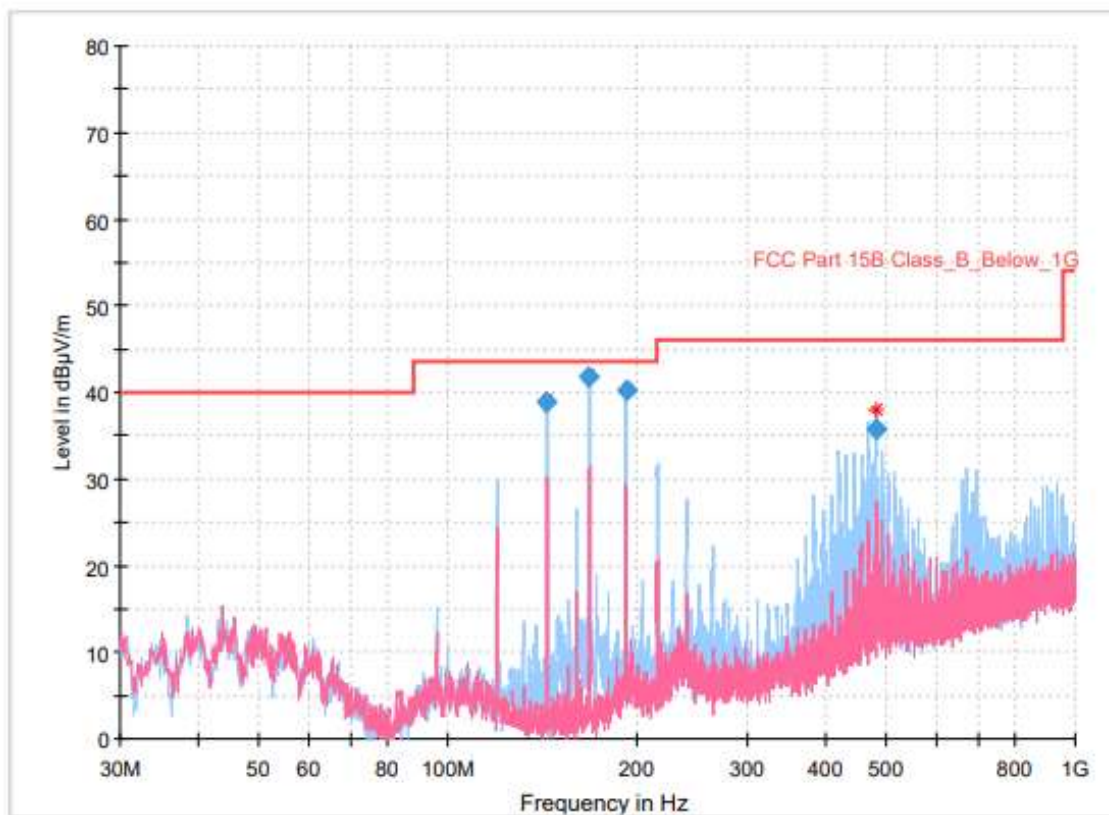
※ Ant. Pol. : Antenna Polarization

※ Corr. Factor. : Antenna Factor + Cable Loss - Amplifier Gain

※ Result = Reading + Corr. Factor

※ Margin = Limit – Result

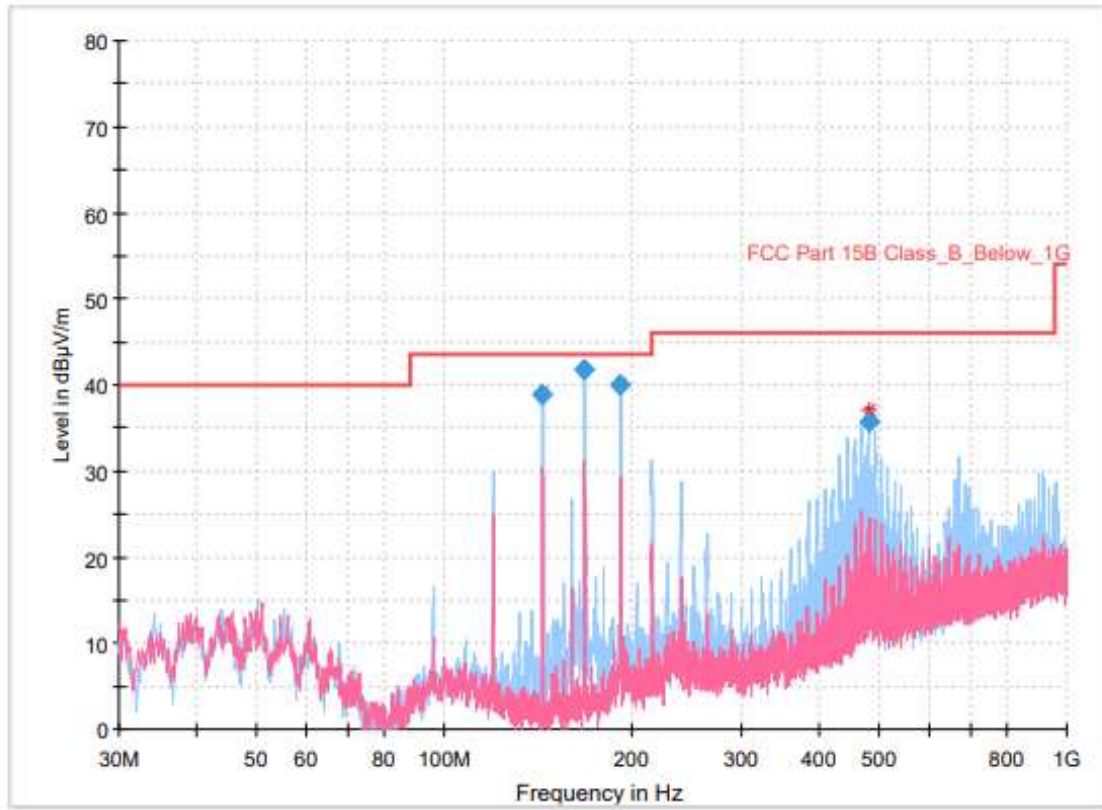
9.4.2.3 Measurement Results for below 1 GHz



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
143.975000	38.80	43.50	4.70	1000.0	120.000	99.9	H	0.0	-27.9
168.031000	40.81	43.50	2.69	1000.0	120.000	99.9	H	0.0	-26.9
192.087000	40.21	43.50	3.29	1000.0	120.000	99.9	H	0.0	-24.7
480.177000	35.83	46.00	10.17	1000.0	120.000	99.9	H	143.0	-16.0

Low CH



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
143.975000	38.81	43.50	4.69	1000.0	120.000	99.9	H	0.0	-27.9
168.031000	40.69	43.50	2.81	1000.0	120.000	99.9	H	3.0	-26.9
191.796000	39.96	43.50	3.54	1000.0	120.000	99.9	H	0.0	-24.7
479.886000	35.70	46.00	10.30	1000.0	120.000	99.9	H	145.0	-16.1

Mid CH