

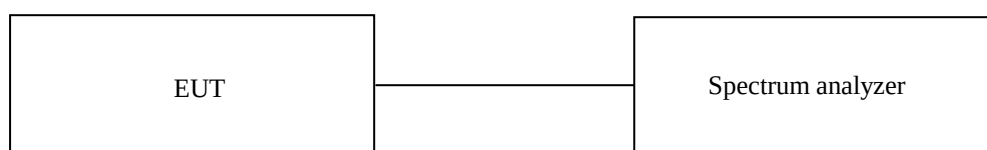
9. 100 kHz BANDWIDTH OUTSIDE THE FREQUENCY BAND

9.1 Operating environment

Temperature : 23 °C
Relative humidity : 41 % R.H.

9.2 Test set-up for conducted measurement

The antenna output of the EUT was connected to the spectrum analyzer. The resolution and video bandwidth is set to 100 kHz, and peak detection was used.



9.3 Test set-up for radiated measurement

The radiated emissions measurements were performed on the 3 m semi anechoic chamber. The EUT was placed on turntable approximately 1.5 m above the ground plane.

The frequency spectrum from 30 MHz 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.

9.4 Test equipment used

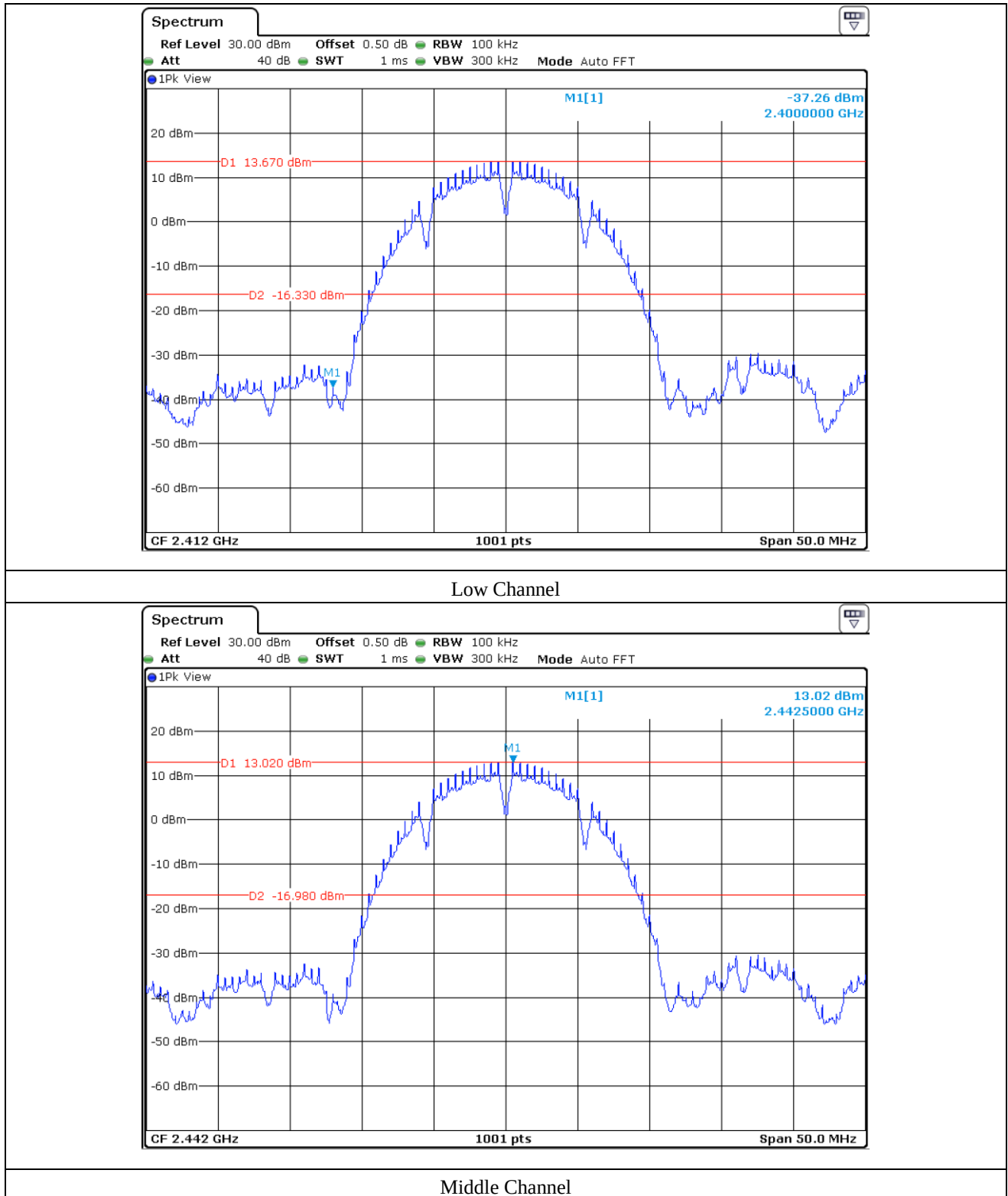
	Model Number	Manufacturer	Description	Serial Number	Last Cal.
■ -	FSV40	Rohde & Schwarz	Signal Analyzer	101009	Apr. 05, 2017 (1Y)
■ -	ESU	Rohde & Schwarz	EMI Test Receiver	100261	Apr. 06, 2017 (1Y)
■ -	310N	Sonoma Instrument	Pre-Amplifier	312544	Apr. 05, 2017 (1Y)
■ -	BBV9718	Schwarzbeck	Amplifier	310	Sep. 01, 2017 (1Y)
■	SCU40A	Rohde & Schwarz	Signal Conditioning unit	100436	Apr. 04, 2017 (1Y)
■ -	DT3000-3t	Innco System	Turn Table	DT3000/093	N/A
■ -	MA-4000XPET	Innco System	Antenna Master	MA4000/509	N/A
■ -	VULB9163	Schwarzbeck	TRILOG Broadband Antenna	9163-421	Apr. 15, 2016 (2Y)
■ -	BBHA9120D	Schwarzbeck	Horn Antenna	BBHA9120D295	May 26, 2017 (2Y)
■ -	BBHA9170	Schwarzbeck	Horn Antenna	BBHA9170178	Dec. 04, 2017 (2Y)

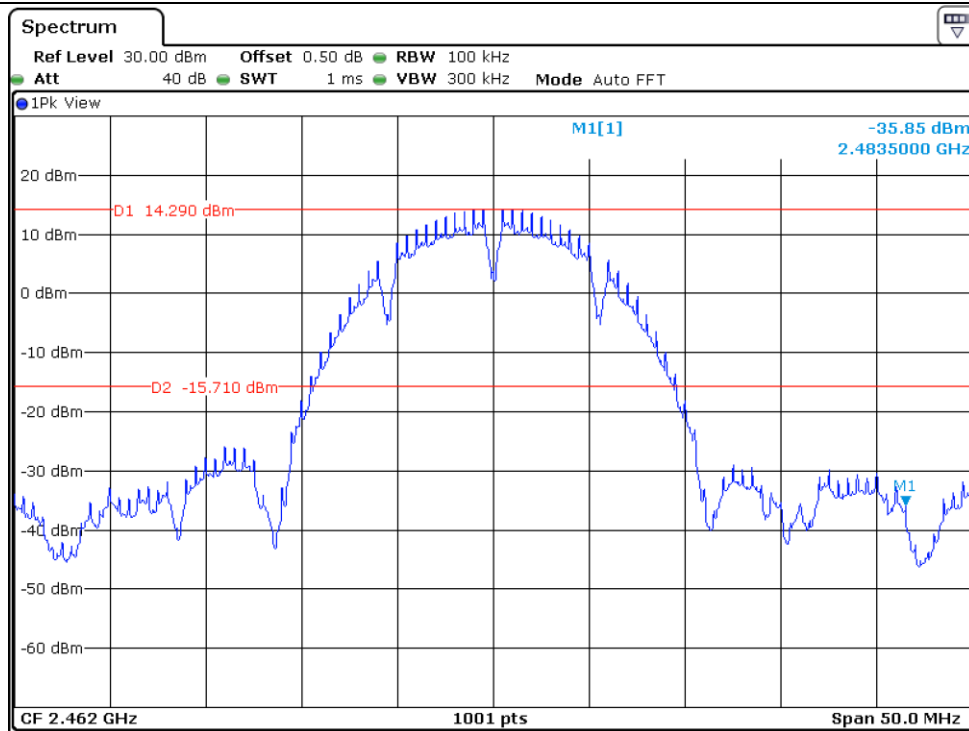
All test equipment used is calibrated on a regular basis.

9.5 Test data for conducted emission

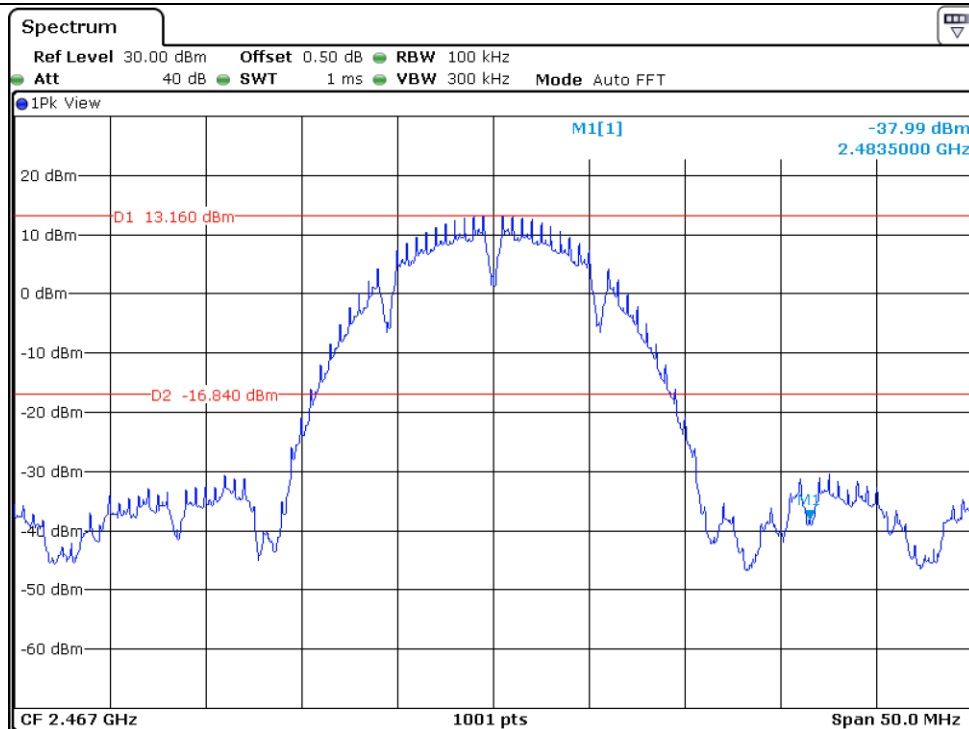
9.5.1 Test data for 802.11b WLAN Mode

9.5.1.1 Test data for Antenna 0

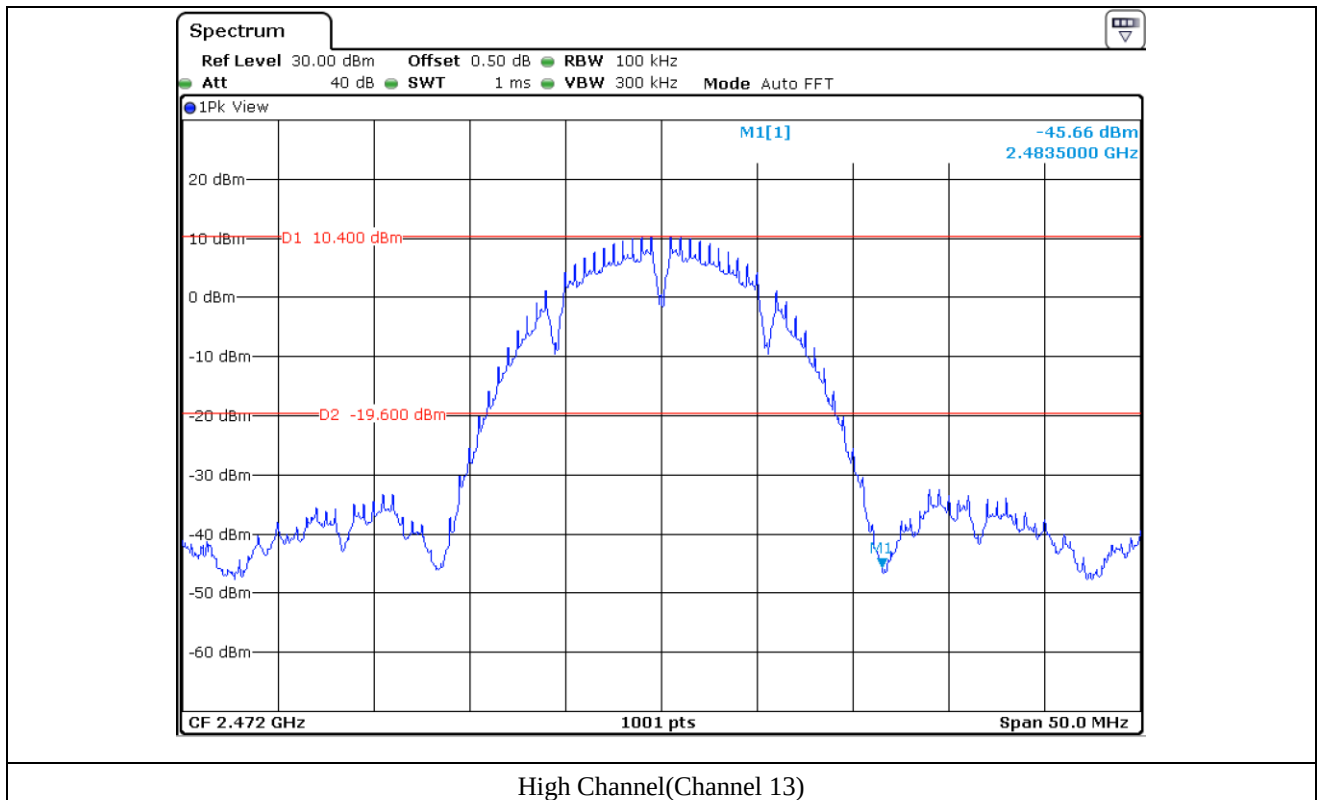


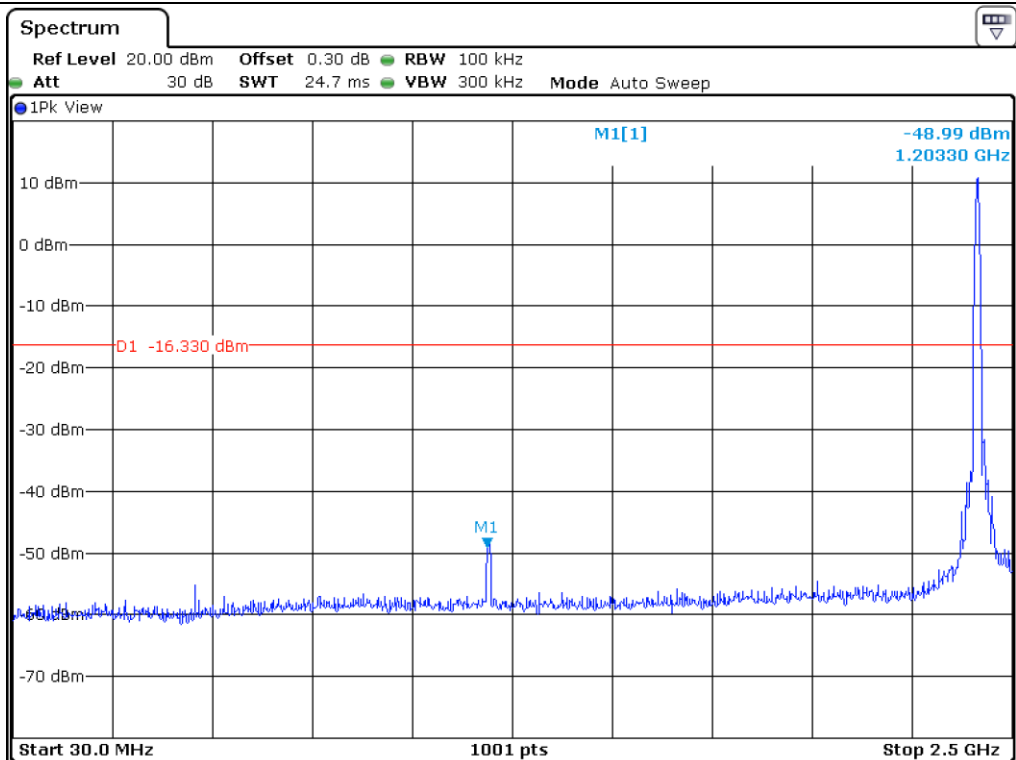


High Channel(Channel 11)

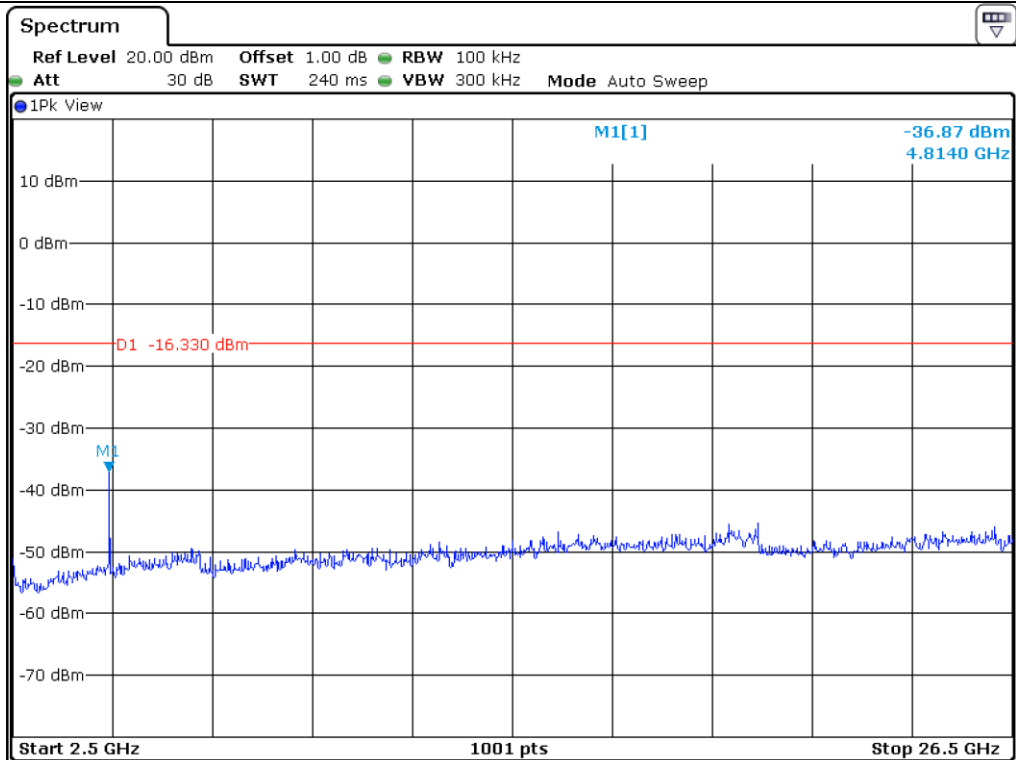


High Channel(Channel 12)

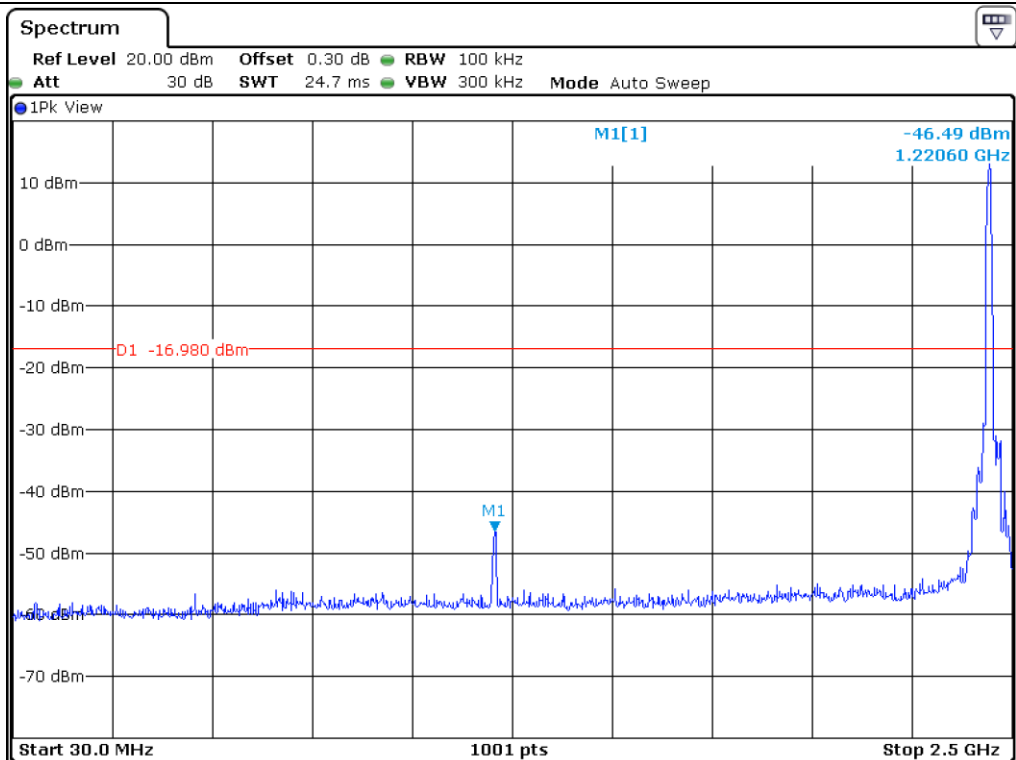




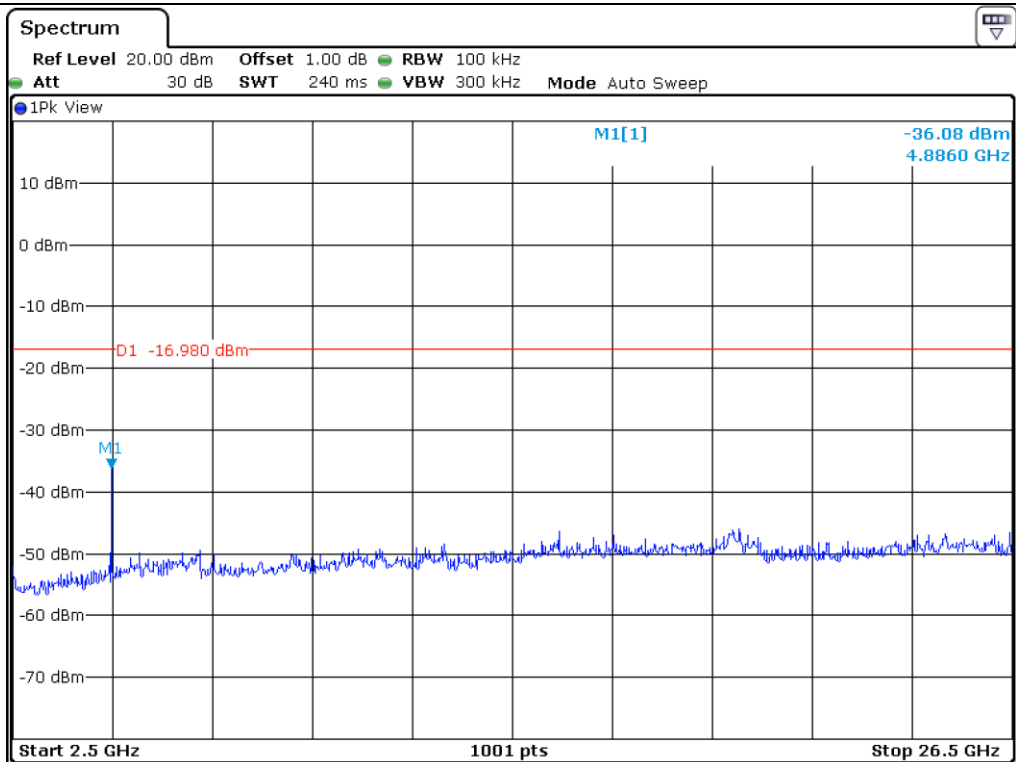
Low Channel



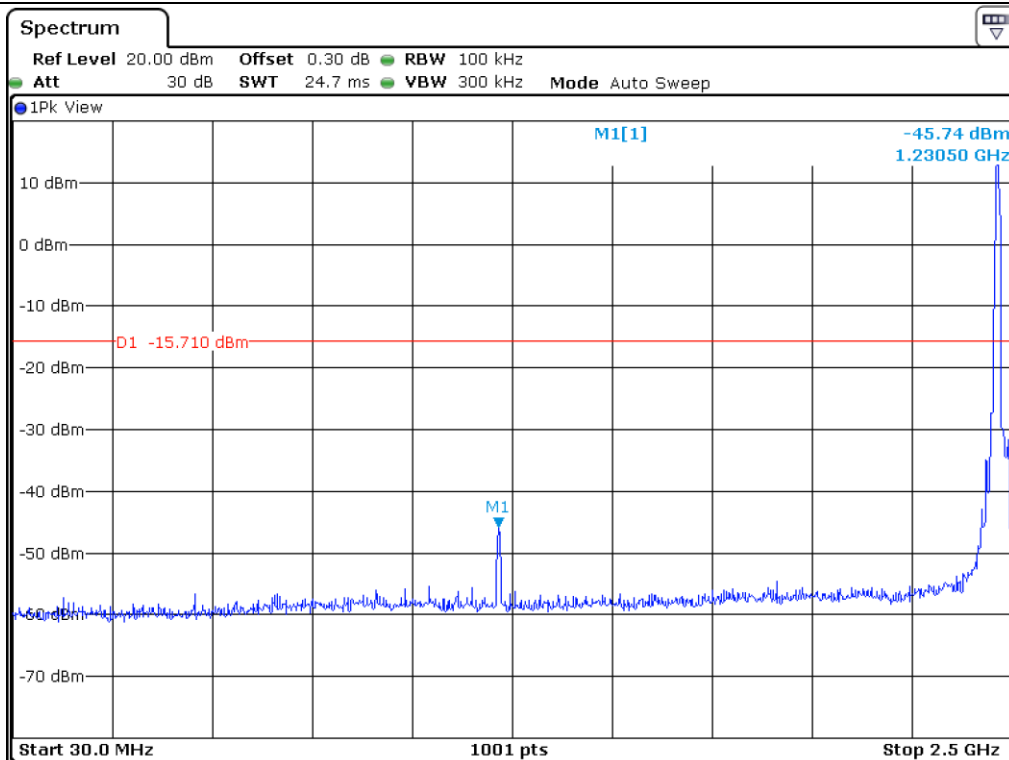
Low Channel



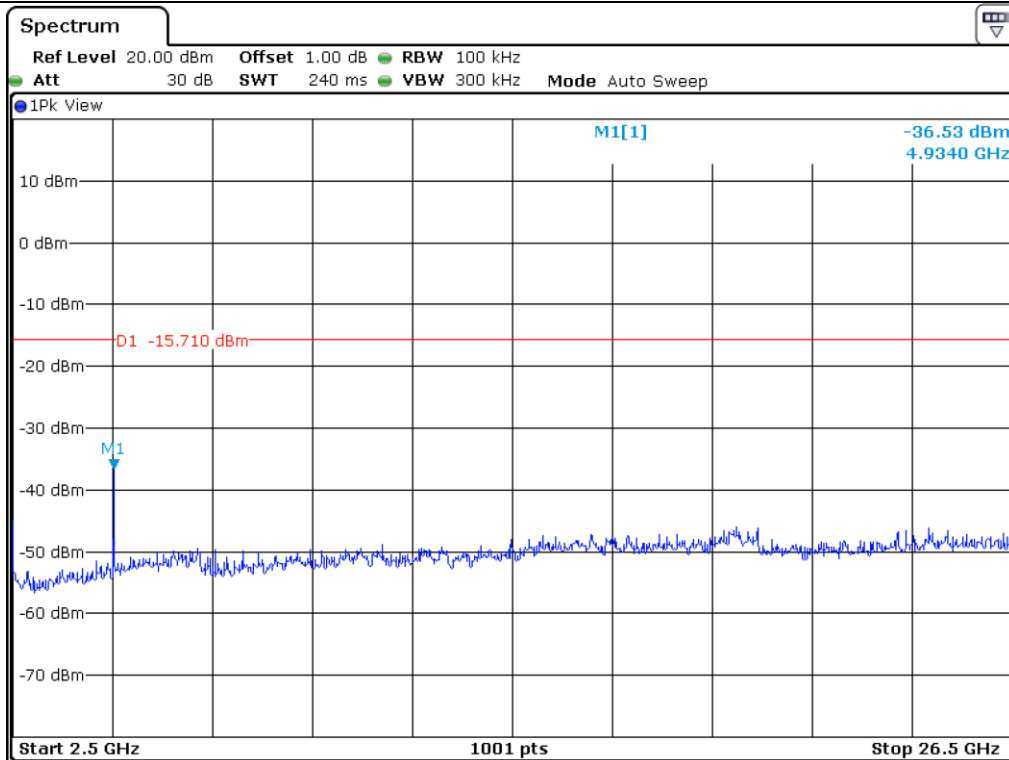
Middle Channel



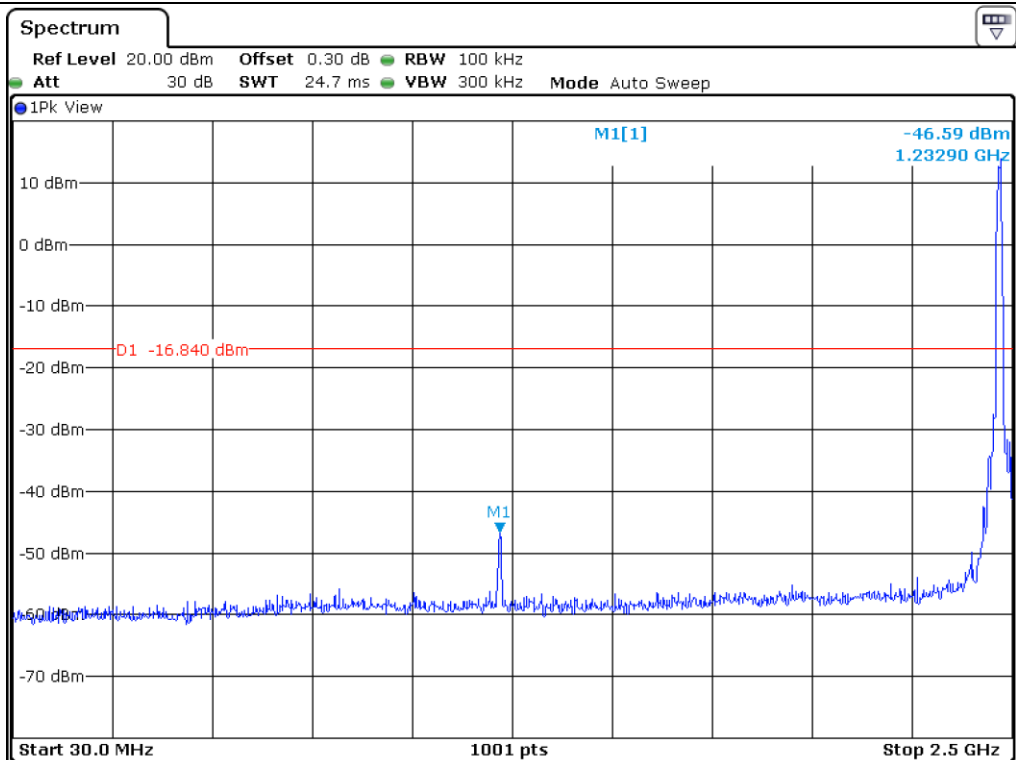
Middle Channel



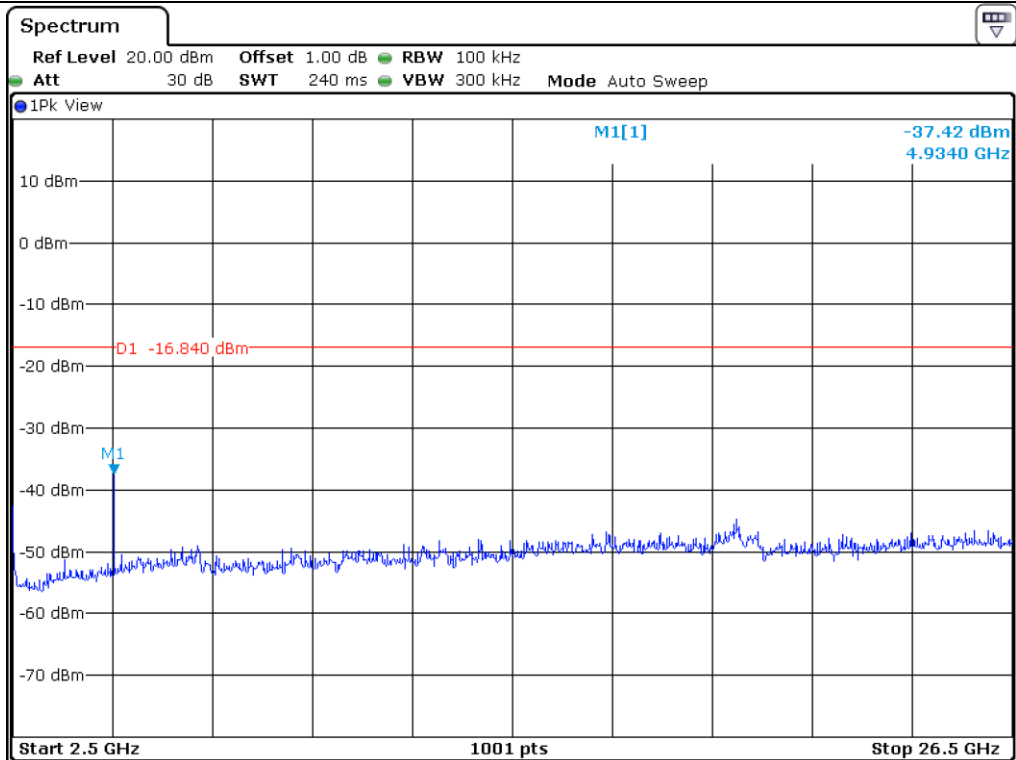
High Channel(Channel 11)



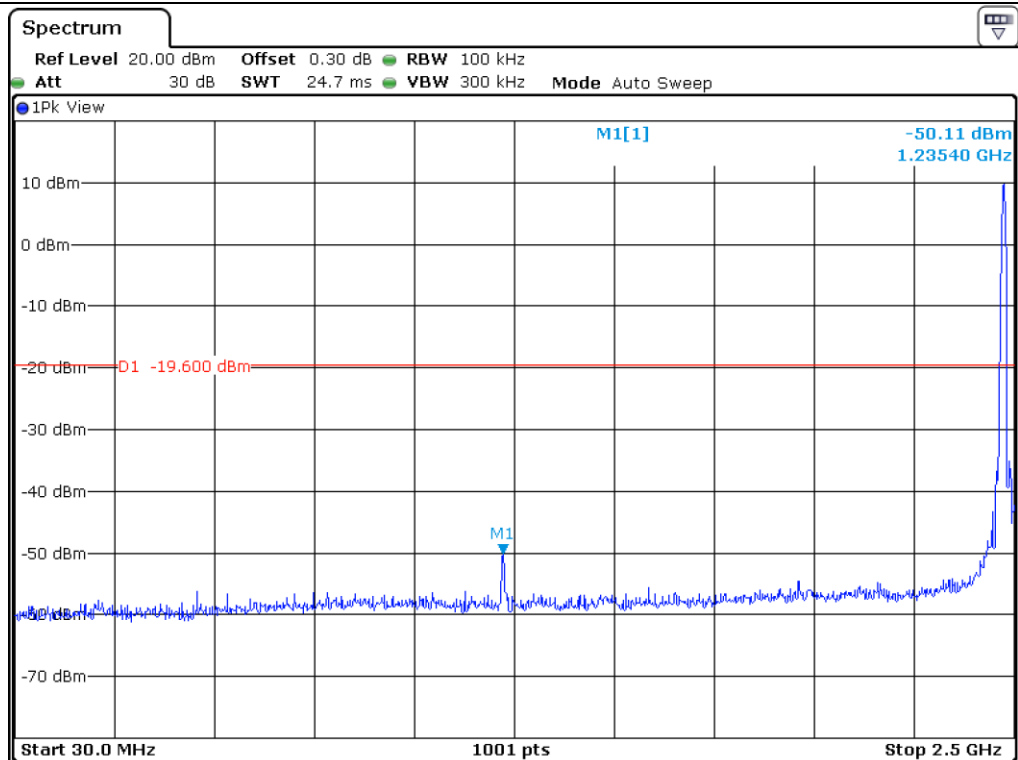
High Channel(Channel 11)



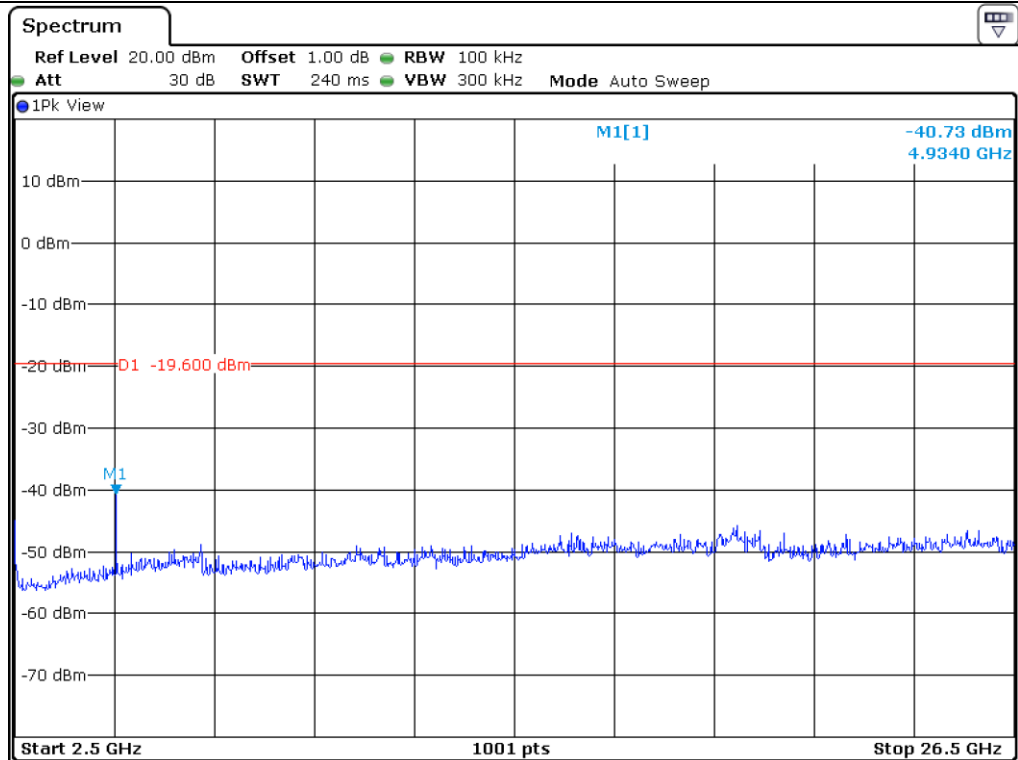
High Channel(Channel 12)



High Channel(Channel 12)

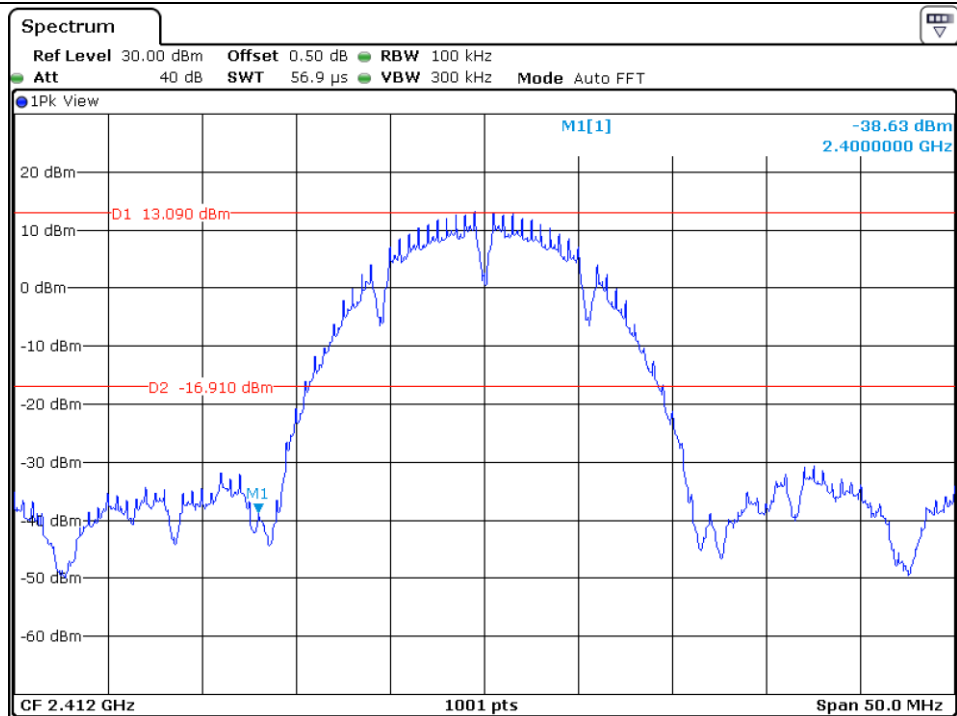


High Channel(Channel 13)

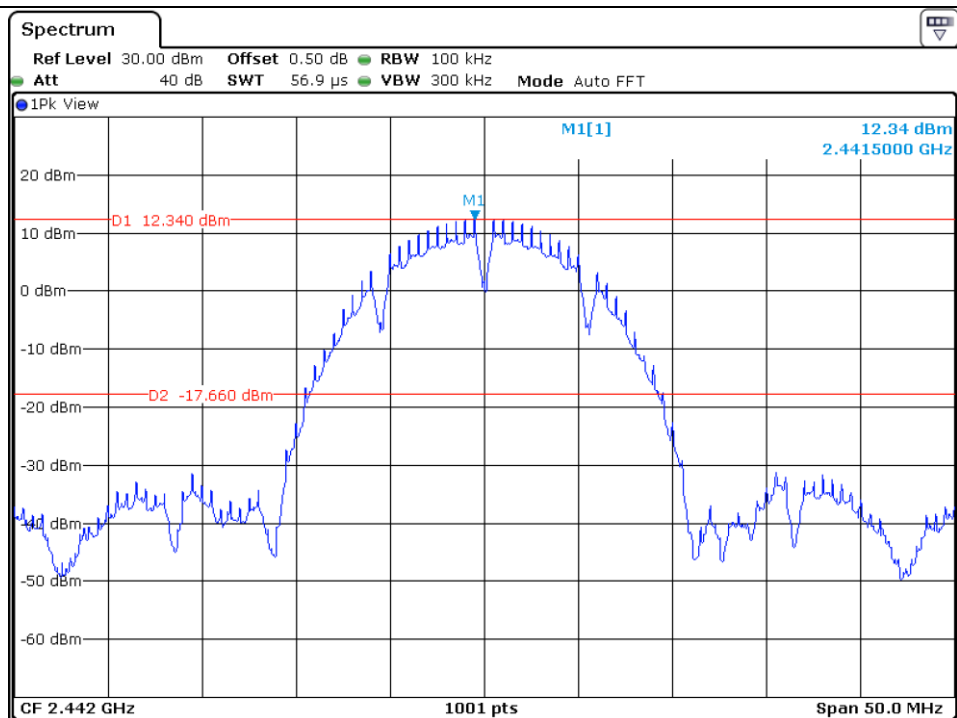


High Channel(Channel 13)

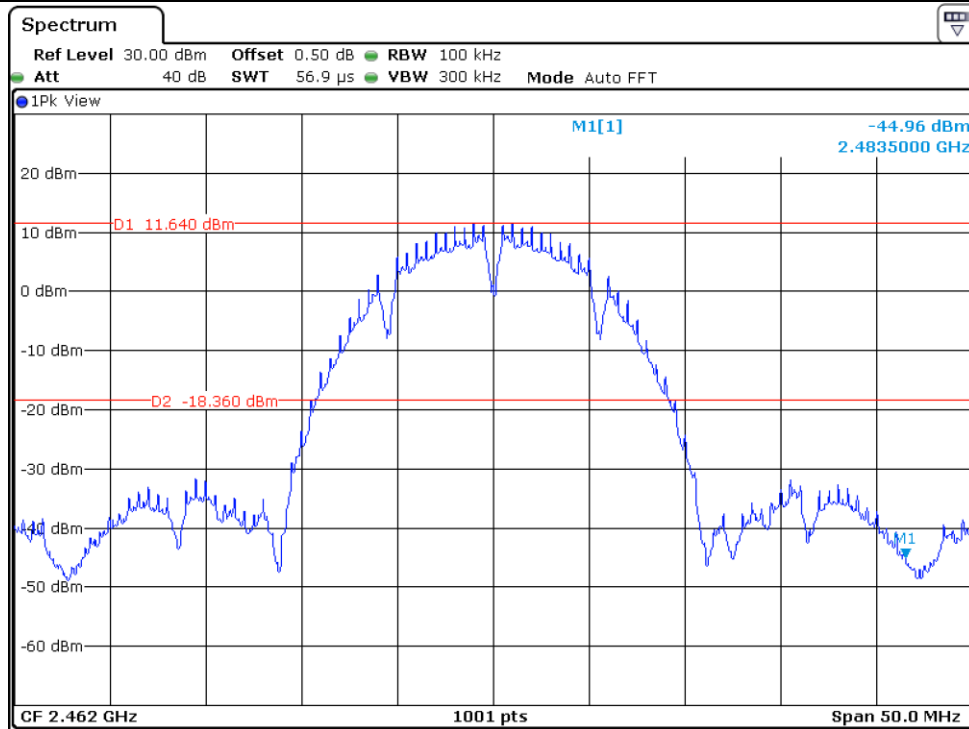
9.5.1.2 Test data for Antenna 1



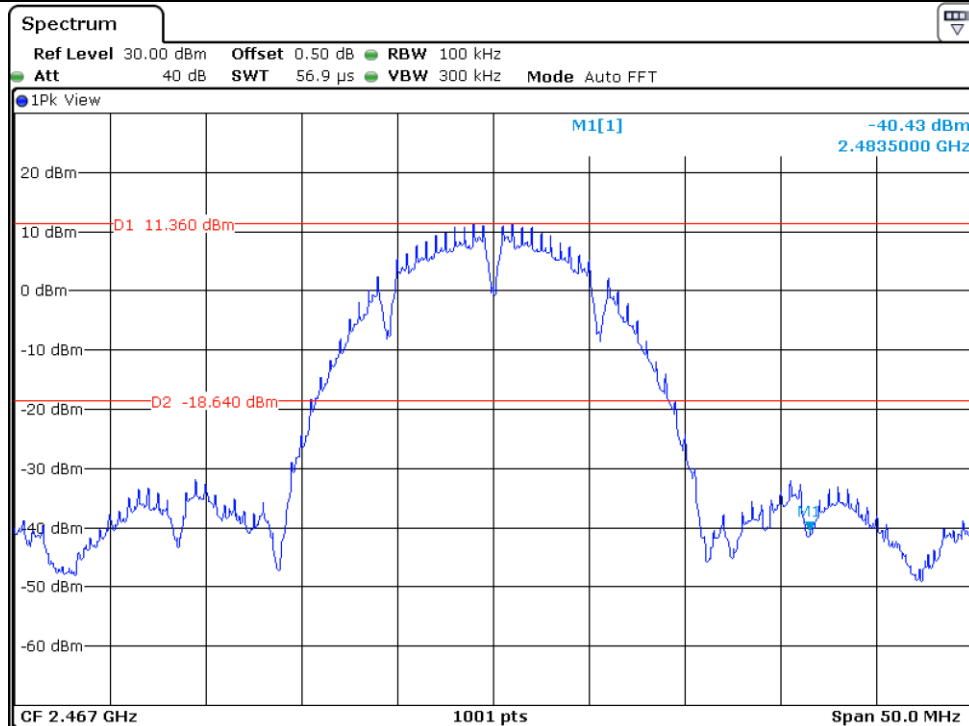
Low Channel



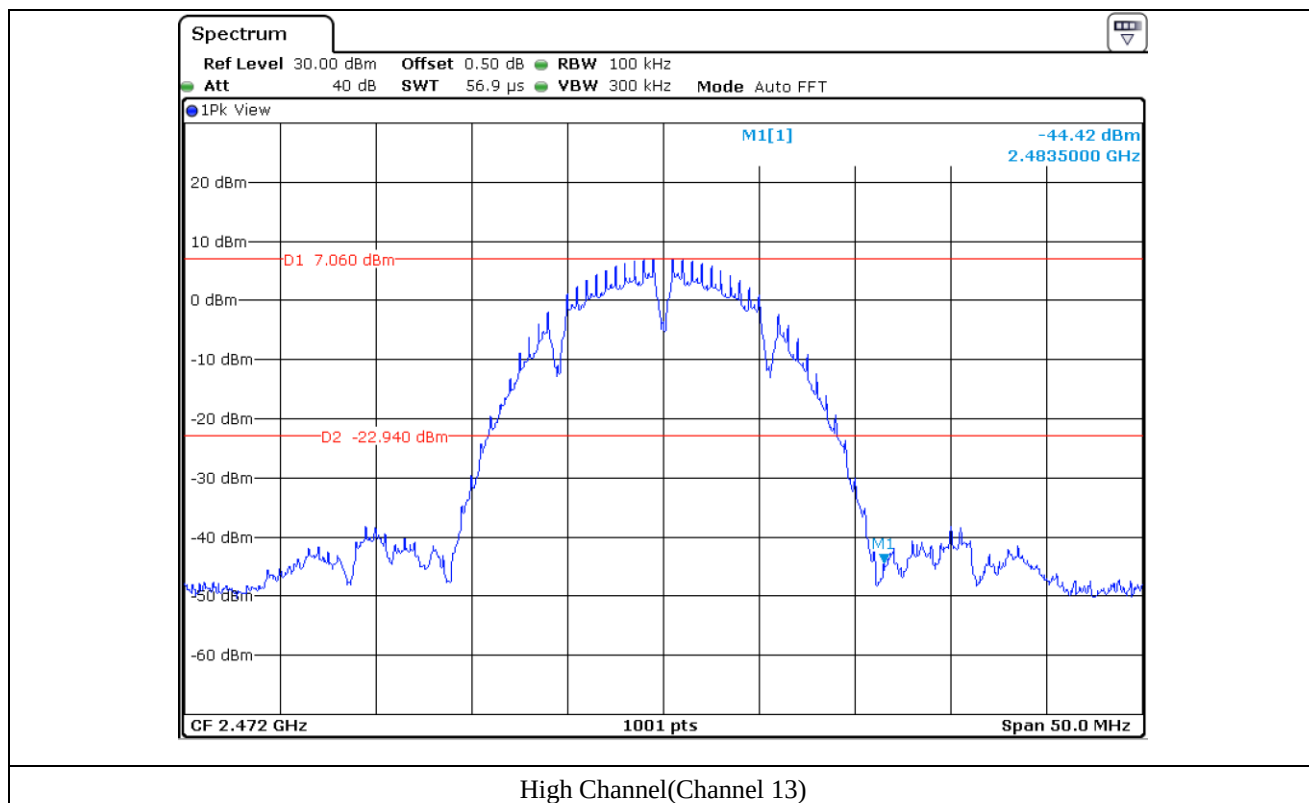
Middle Channel

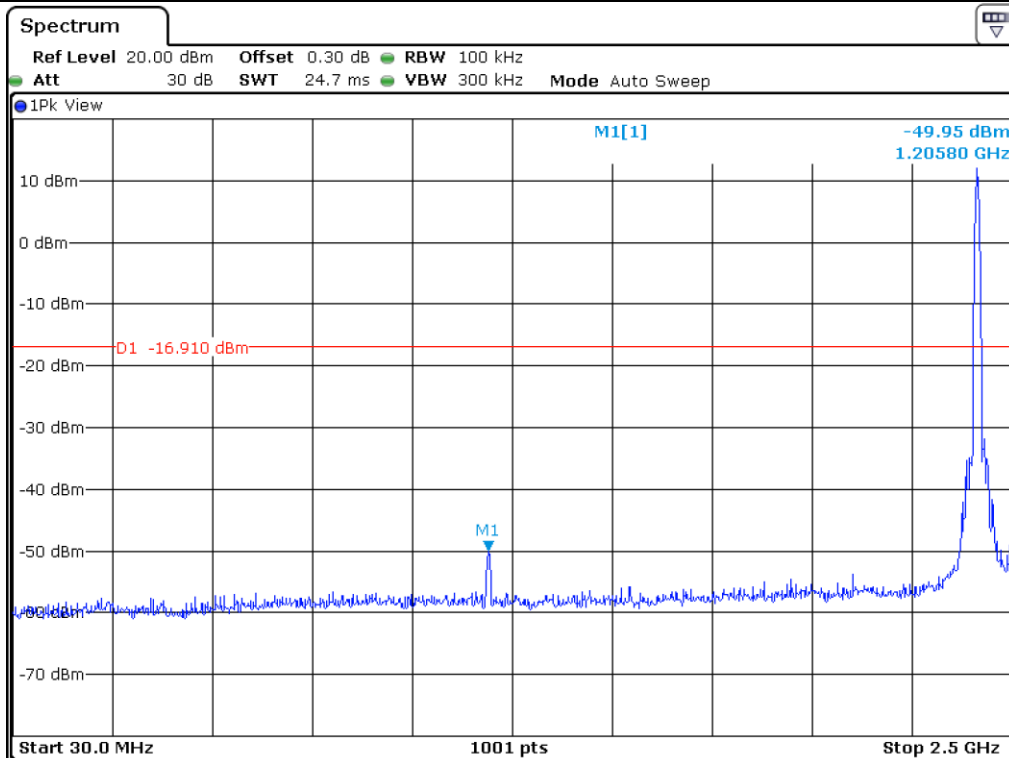


High Channel(Channel 11)

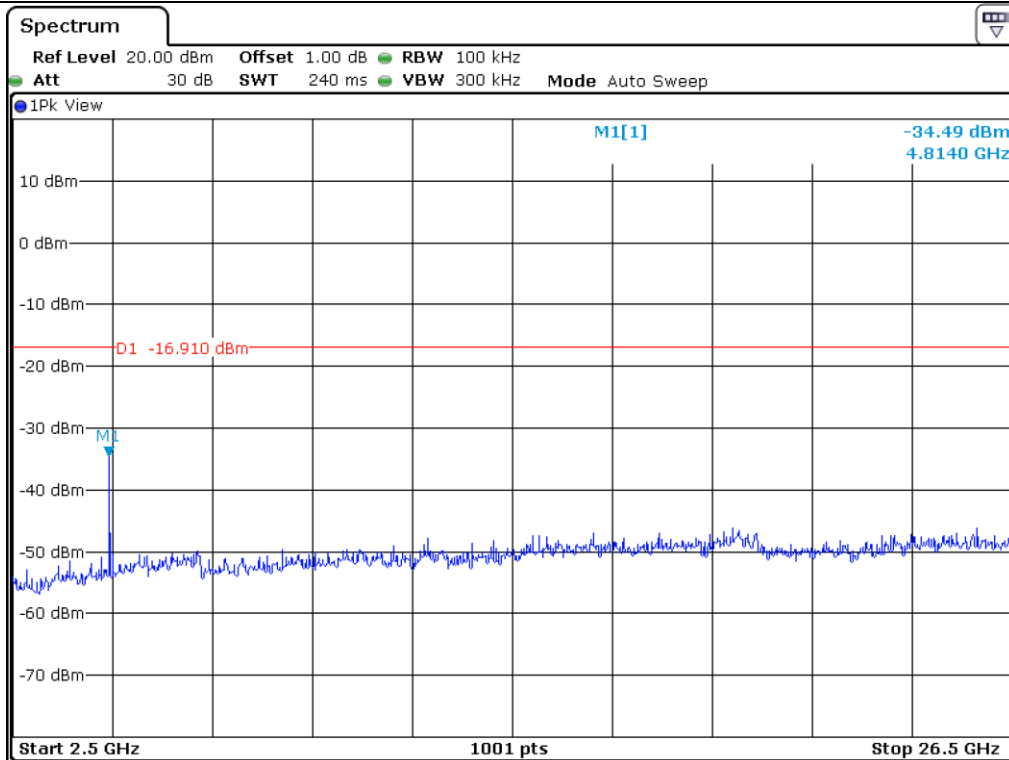


High Channel(Channel 12)

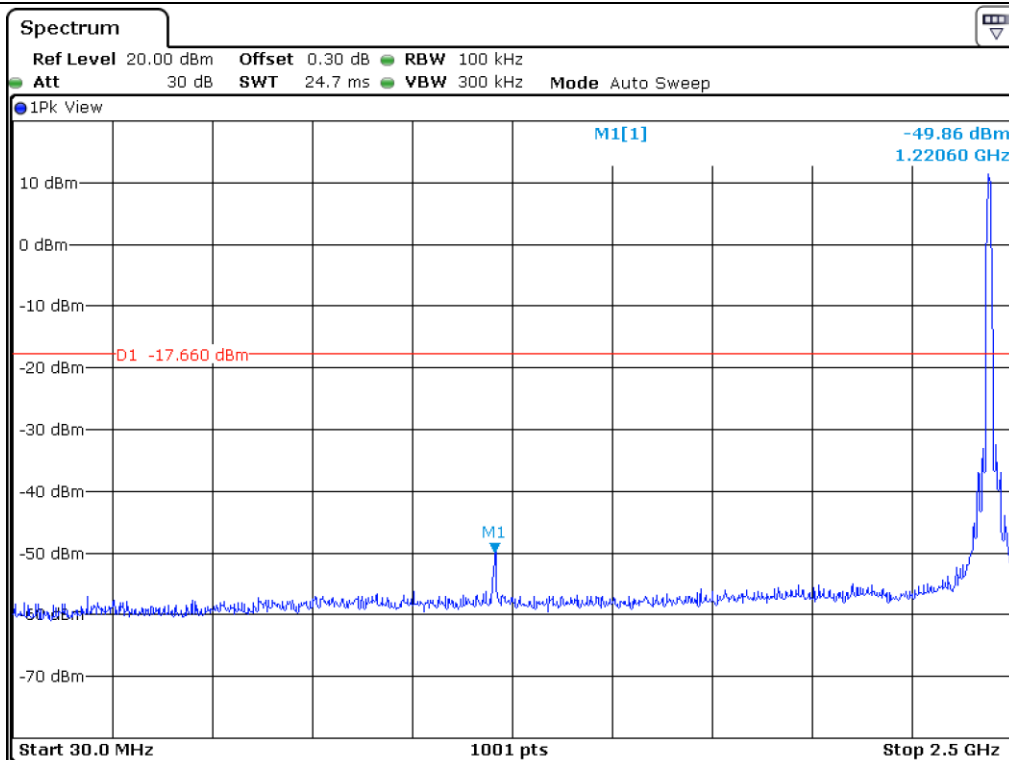




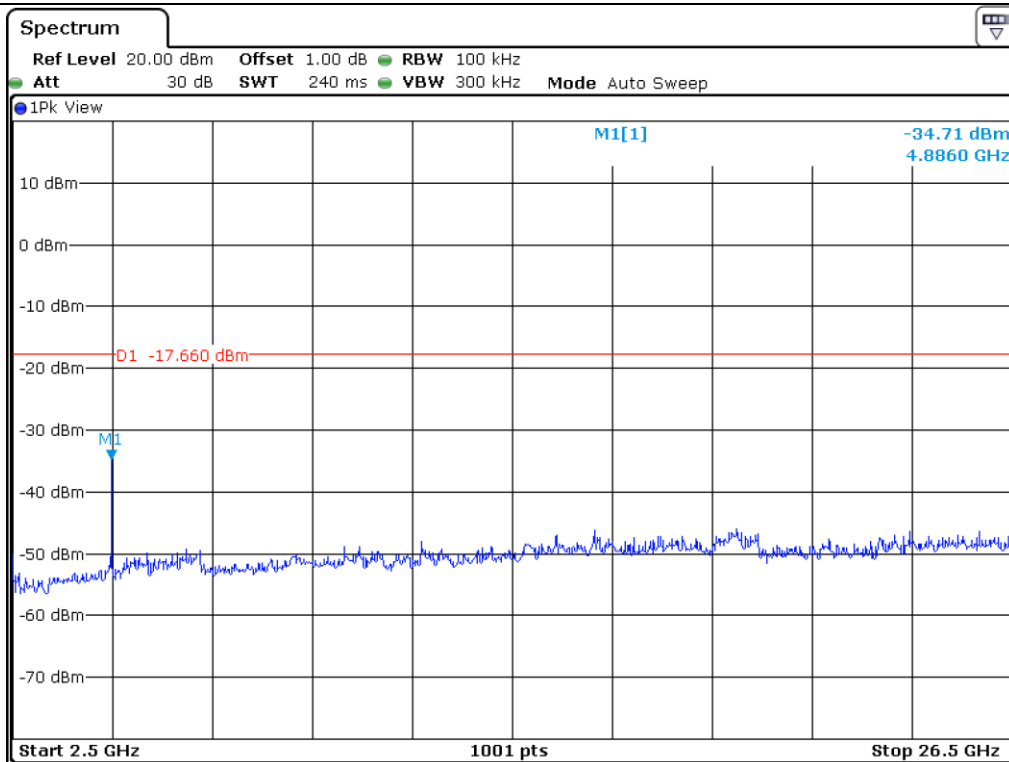
Low Channel



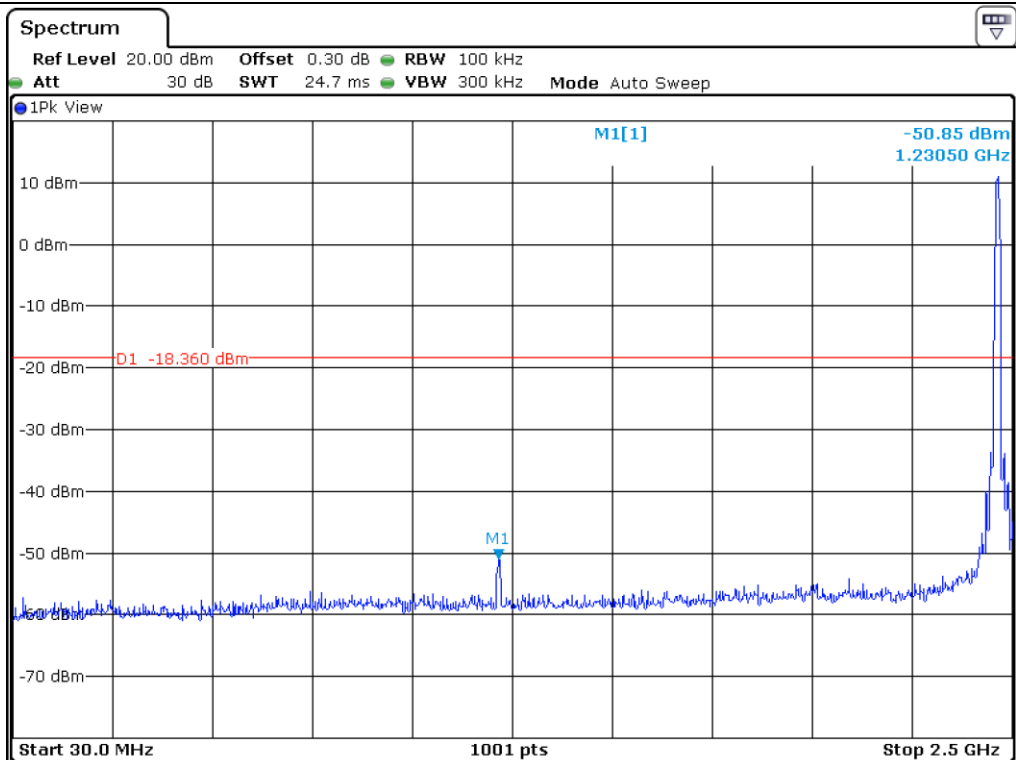
Low Channel



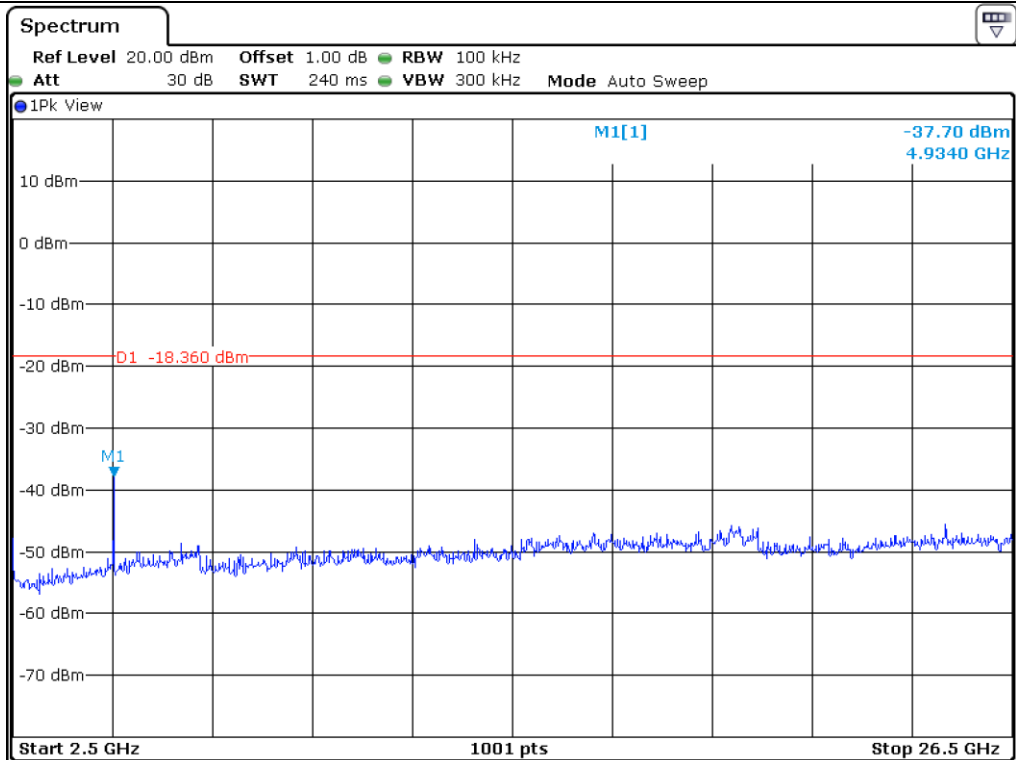
Middle Channel



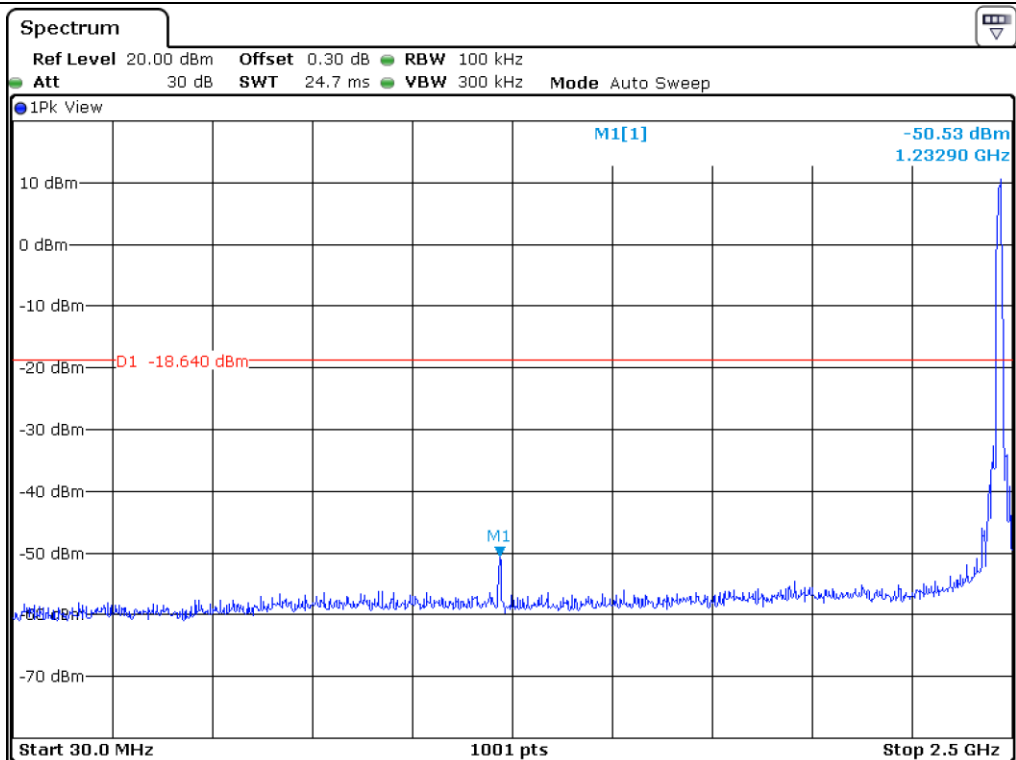
Middle Channel



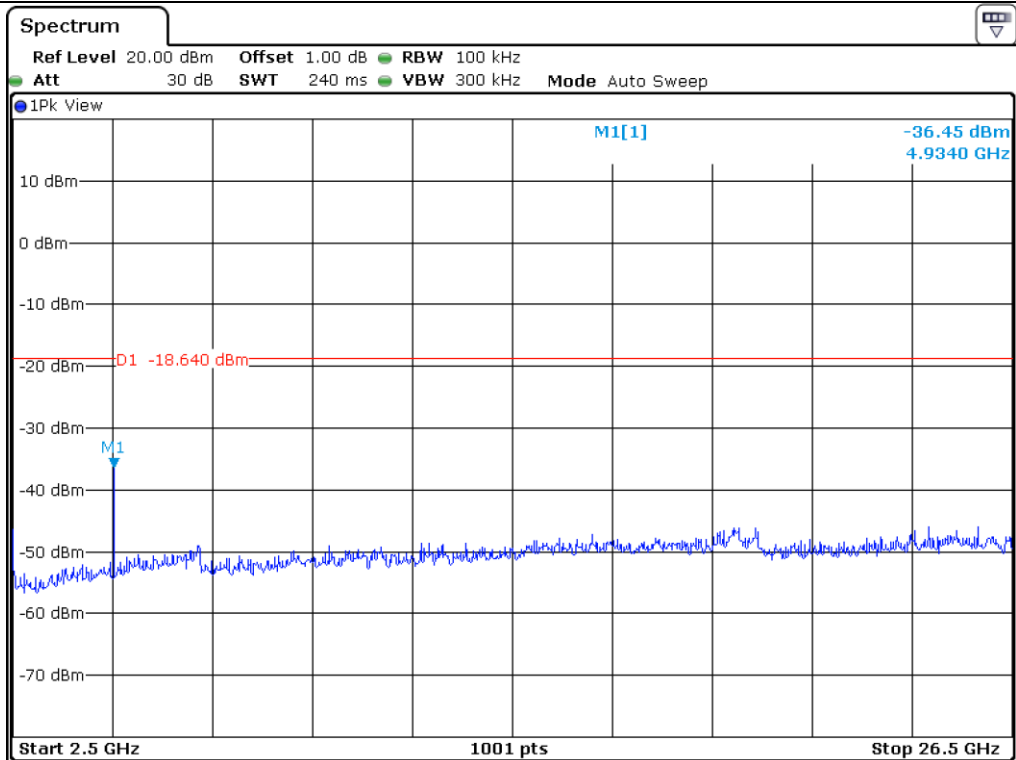
High Channel(Channel 11)



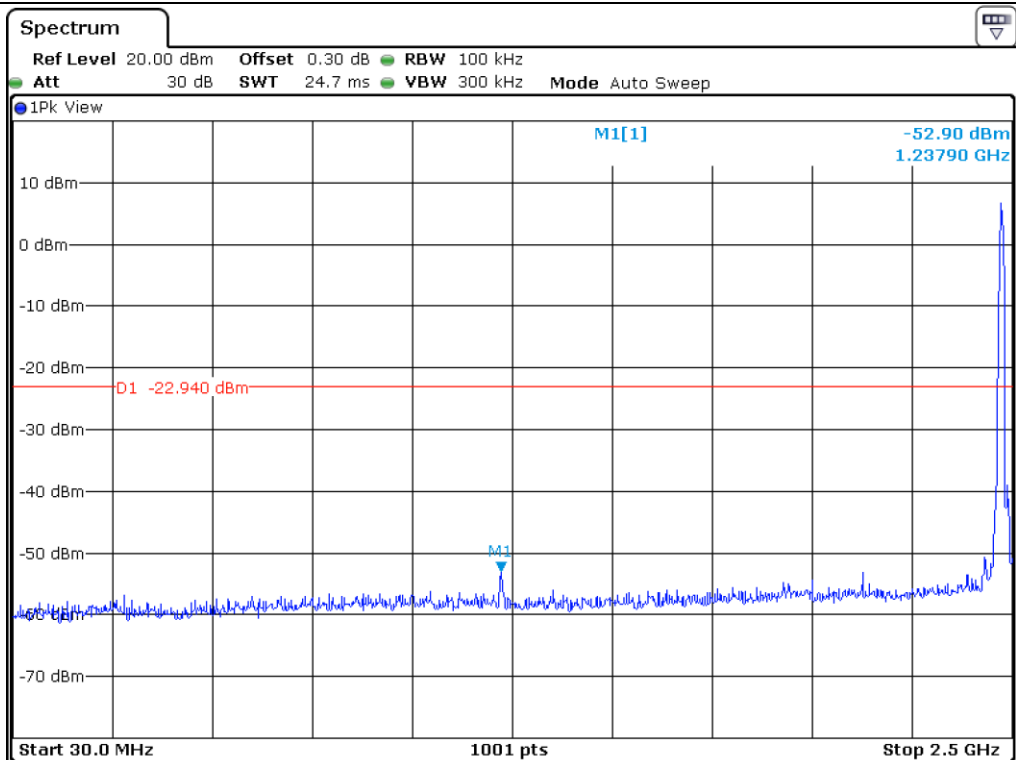
High Channel(Channel 11)



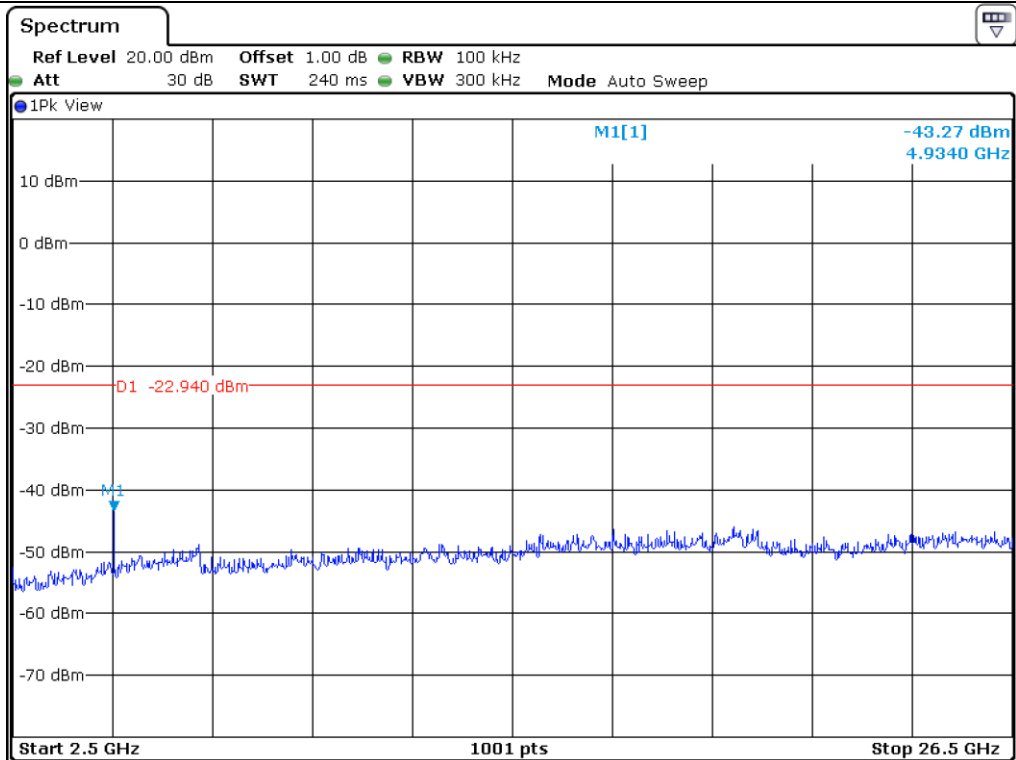
High Channel(Channel 12)



High Channel(Channel 12)



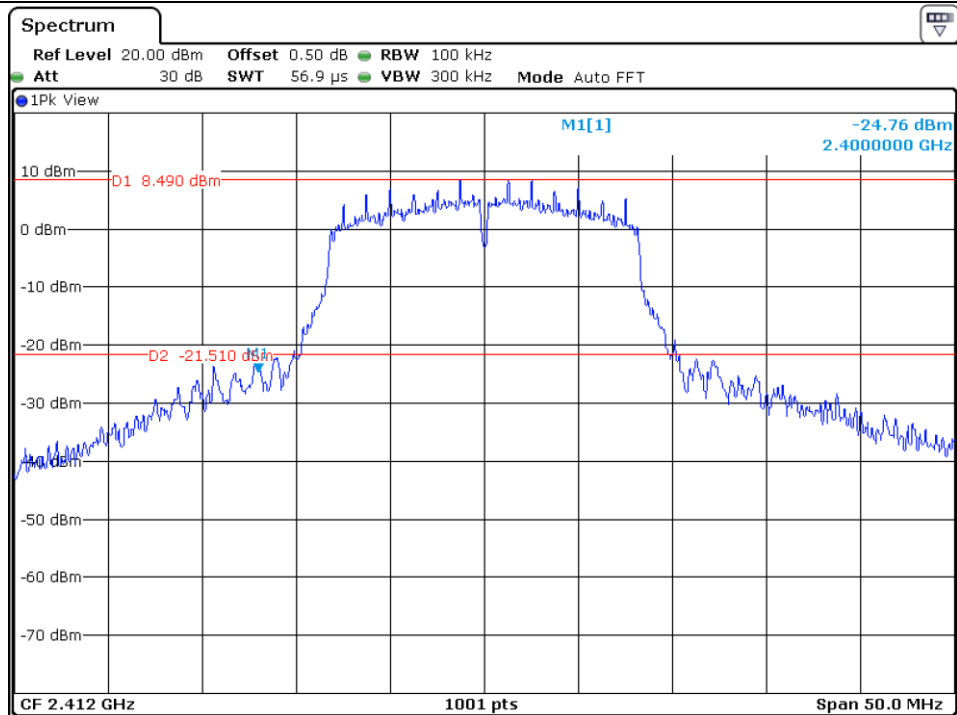
High Channel(Channel 13)



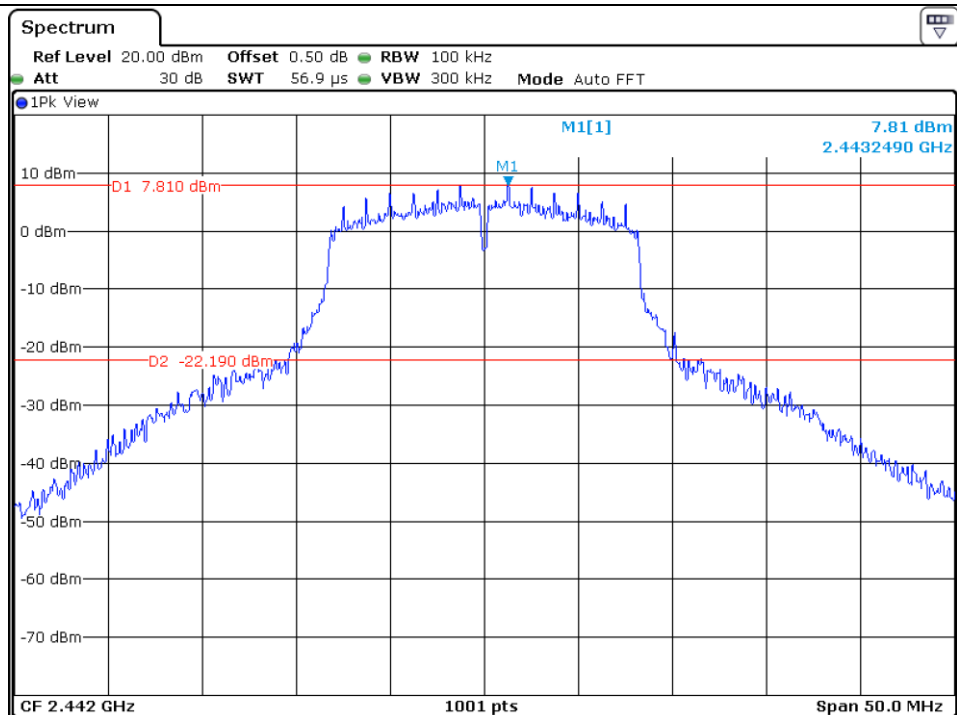
High Channel(Channel 13)

9.5.2 Test data for 802.11g WLAN Mode

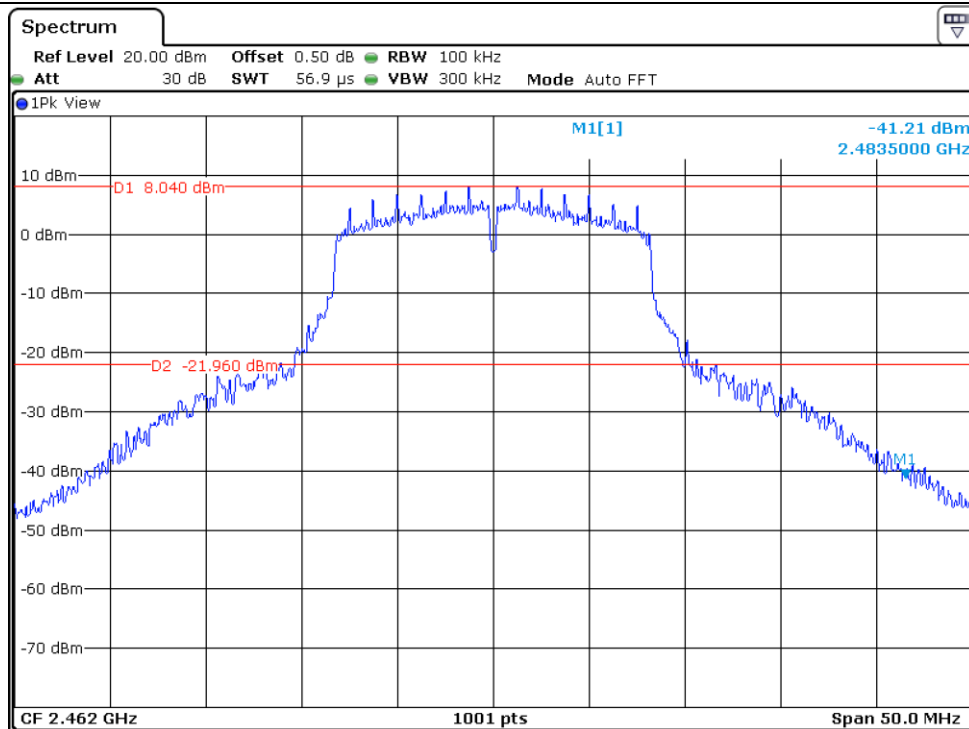
9.5.2.1 Test data for Antenna 0



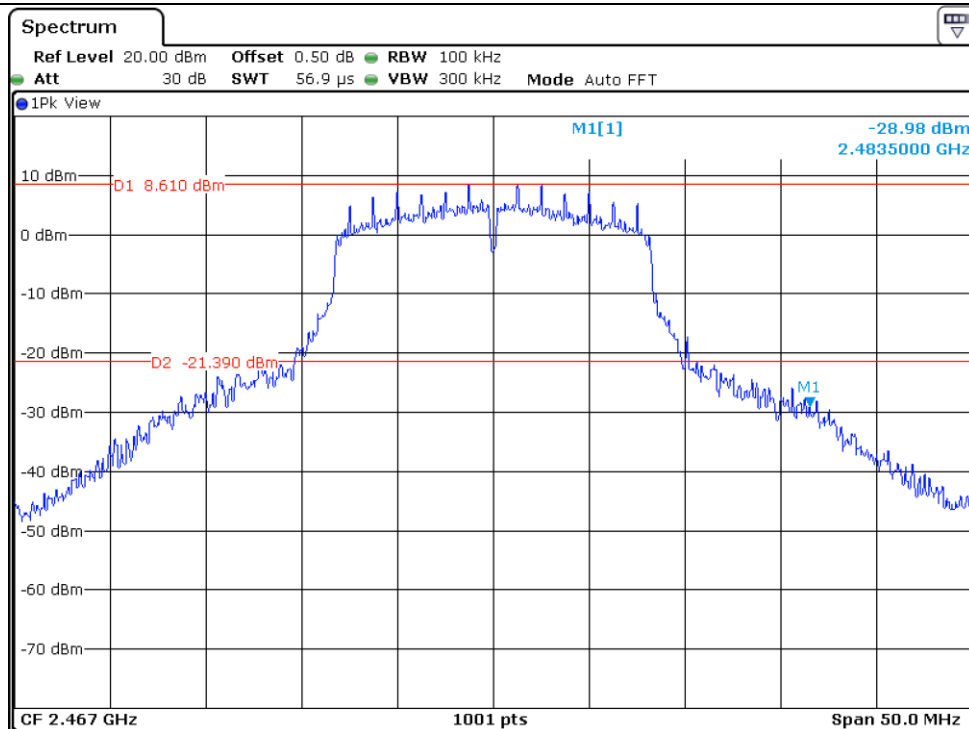
Low Channel



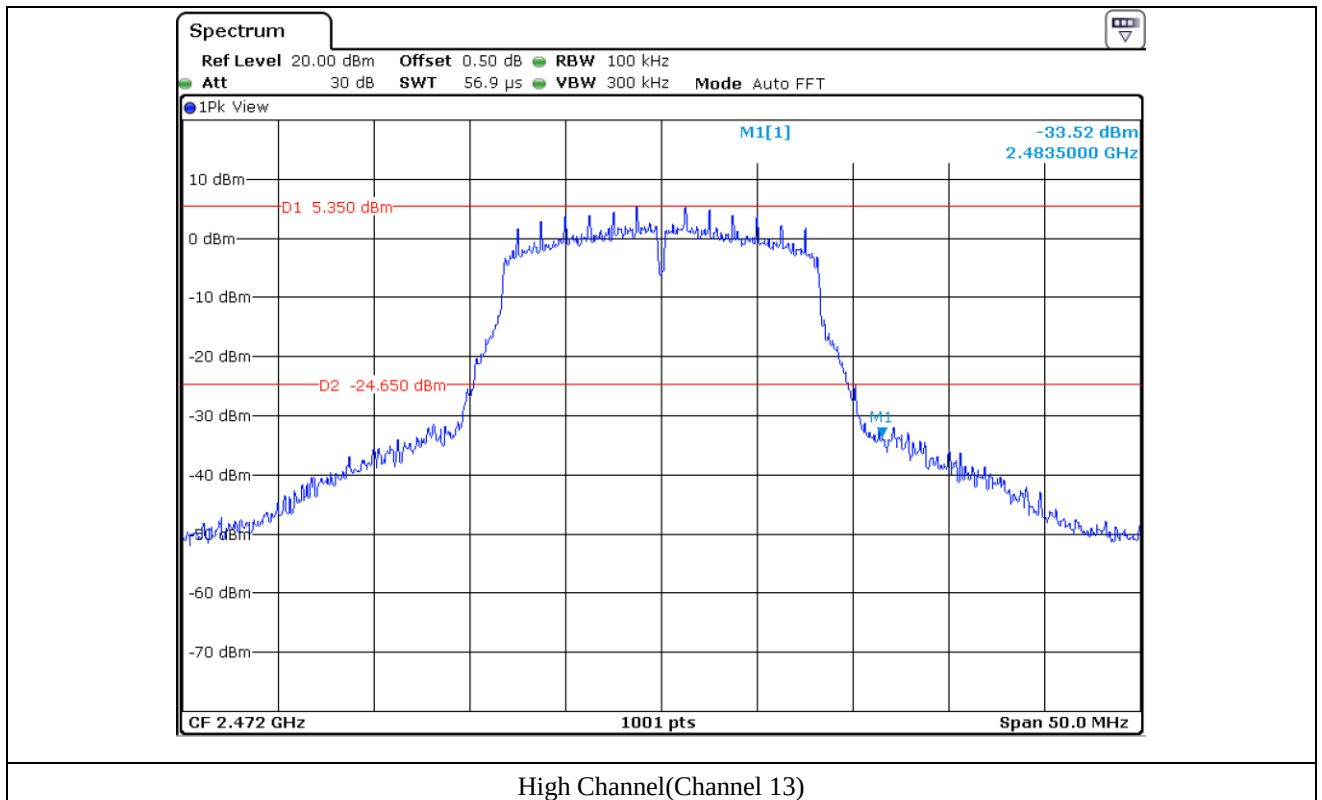
Middle Channel

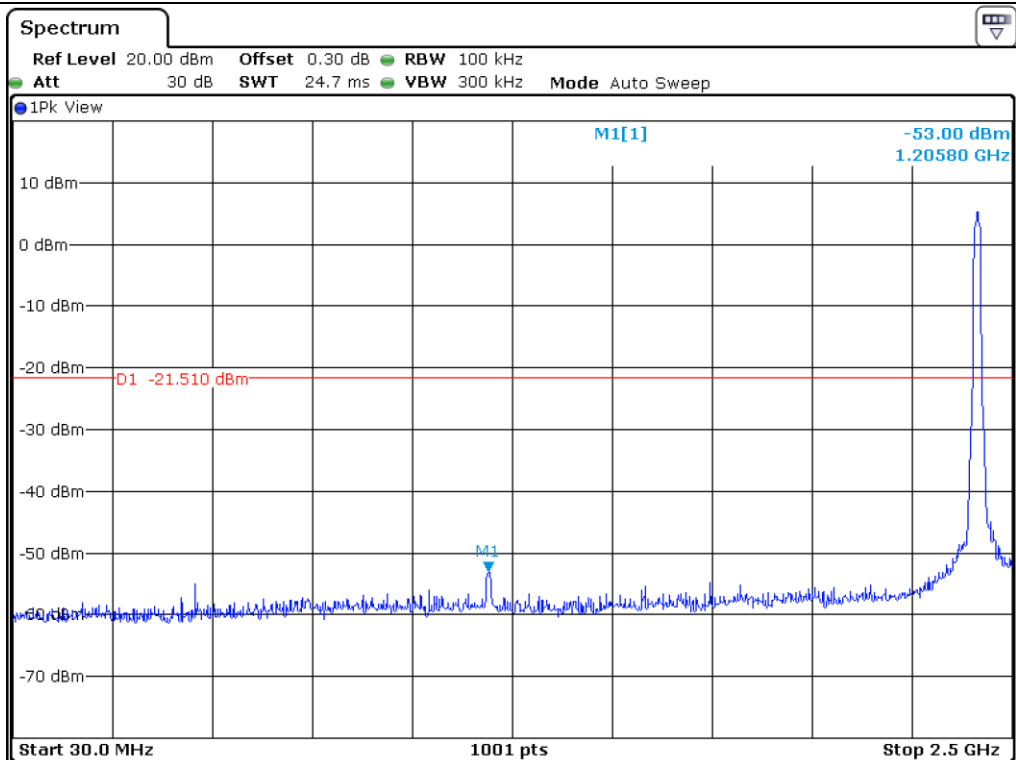


High Channel(Channel 11)

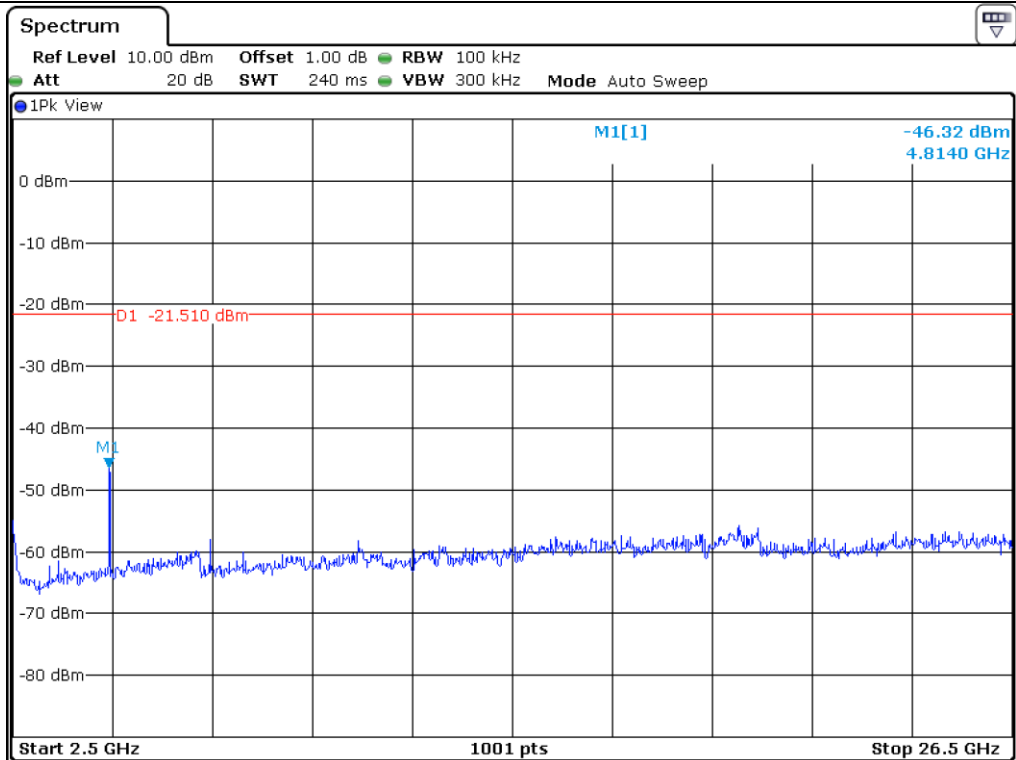


High Channel(Channel 12)

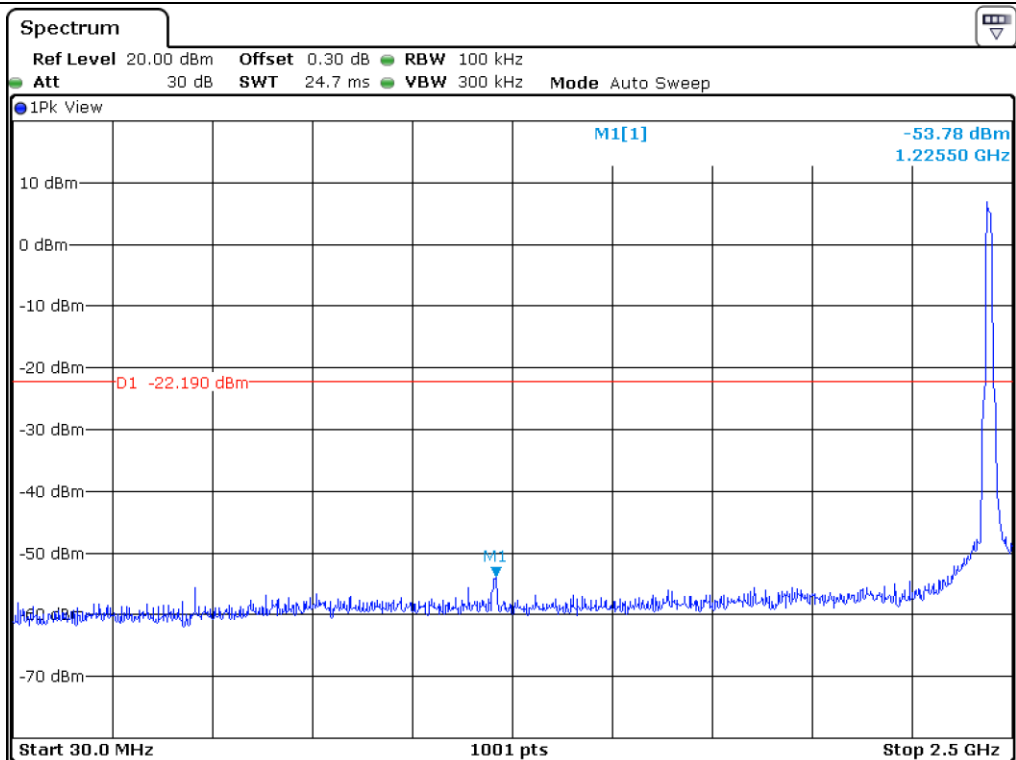




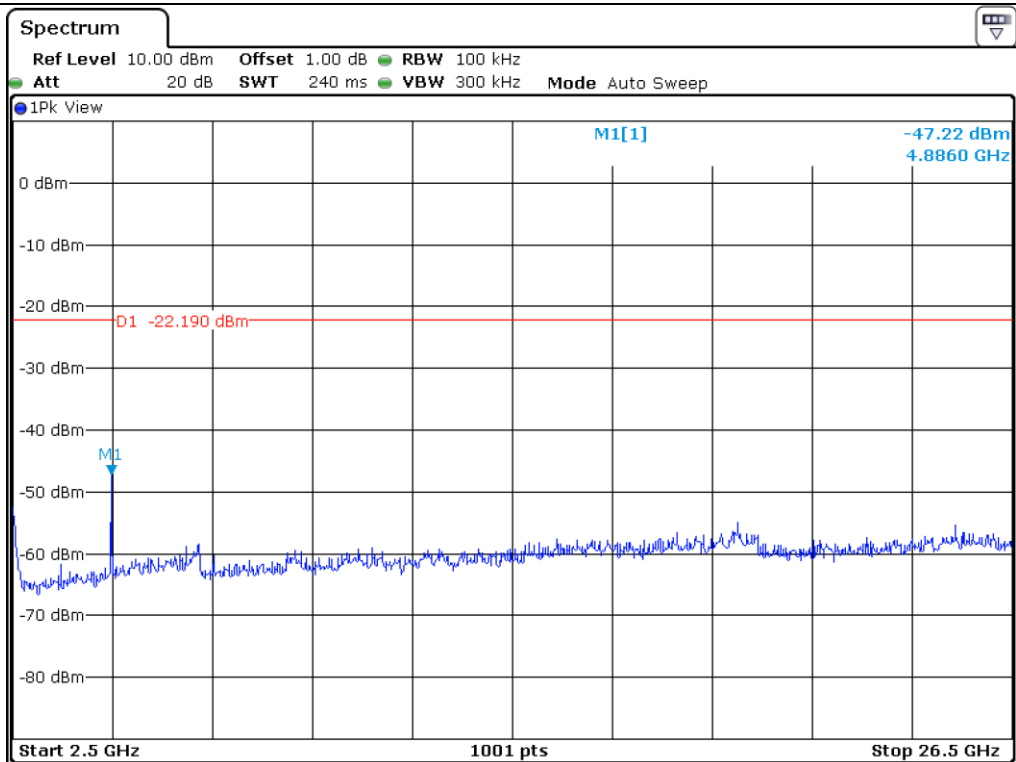
Low Channel



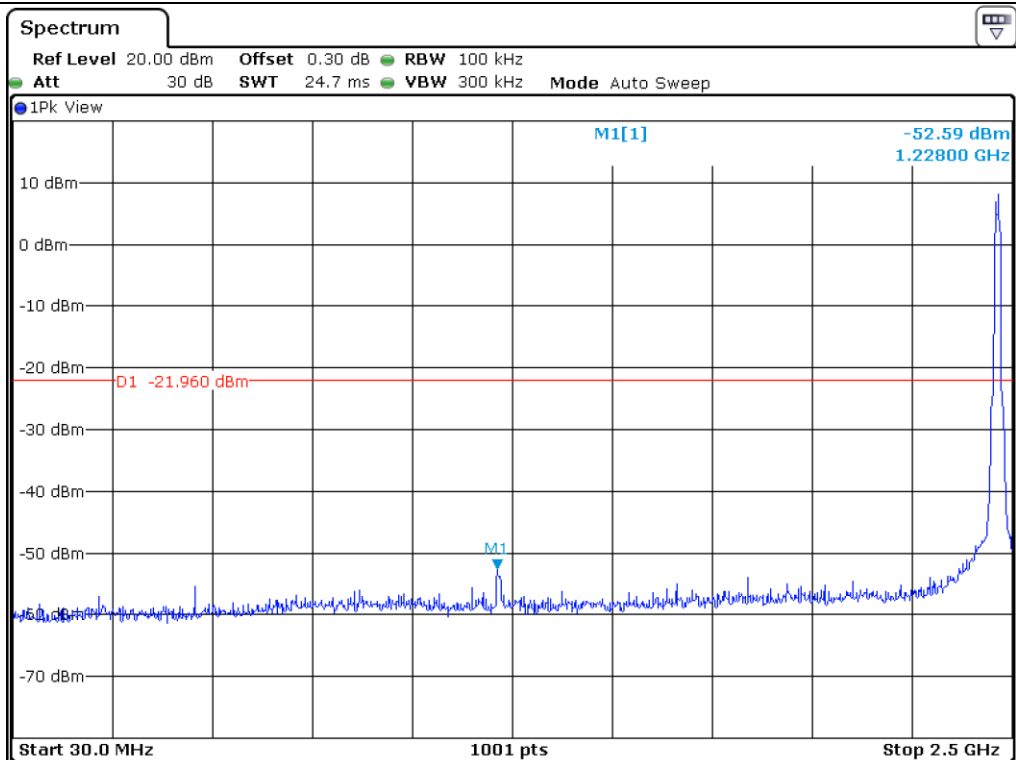
Low Channel



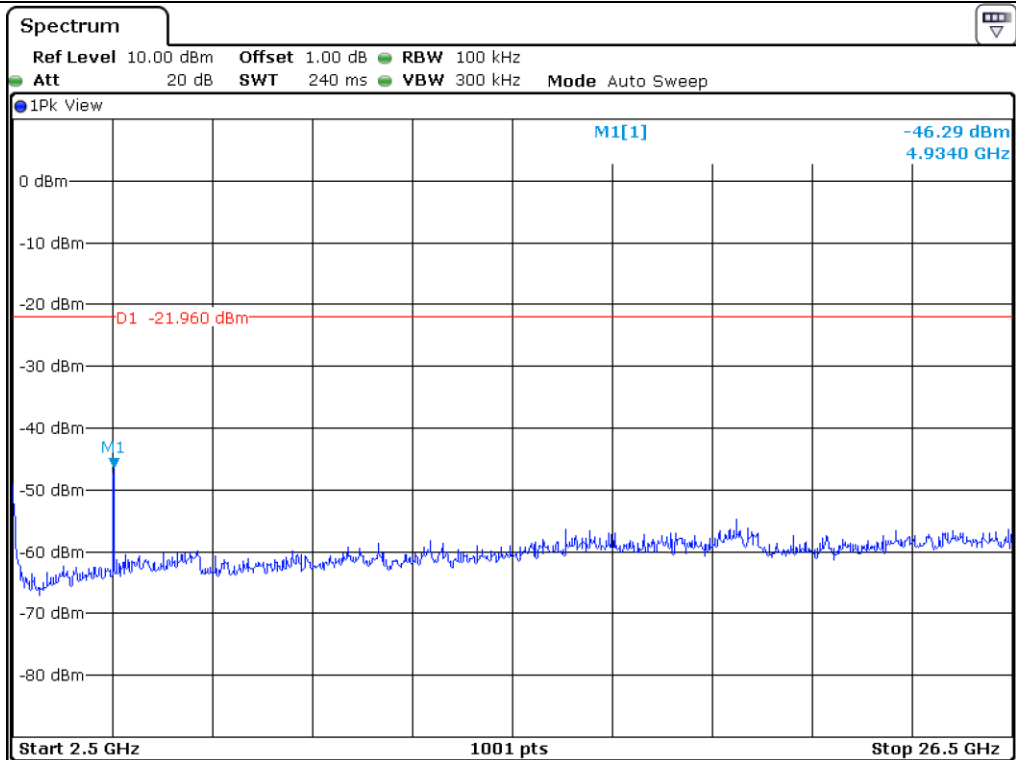
Middle Channel



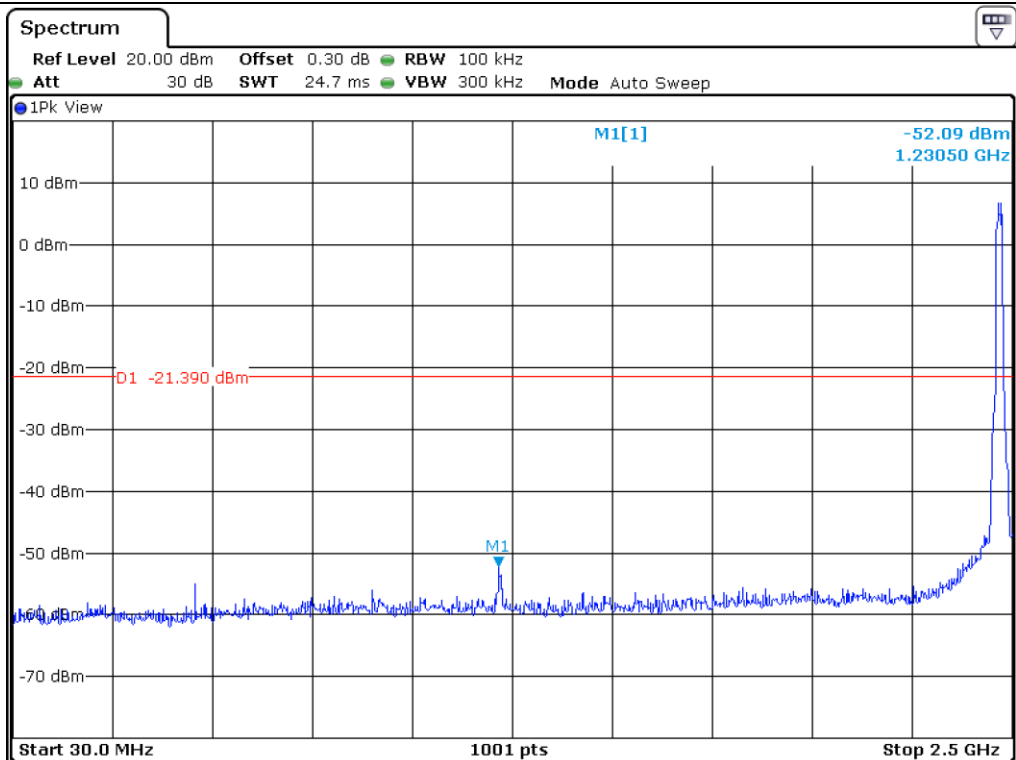
Middle Channel



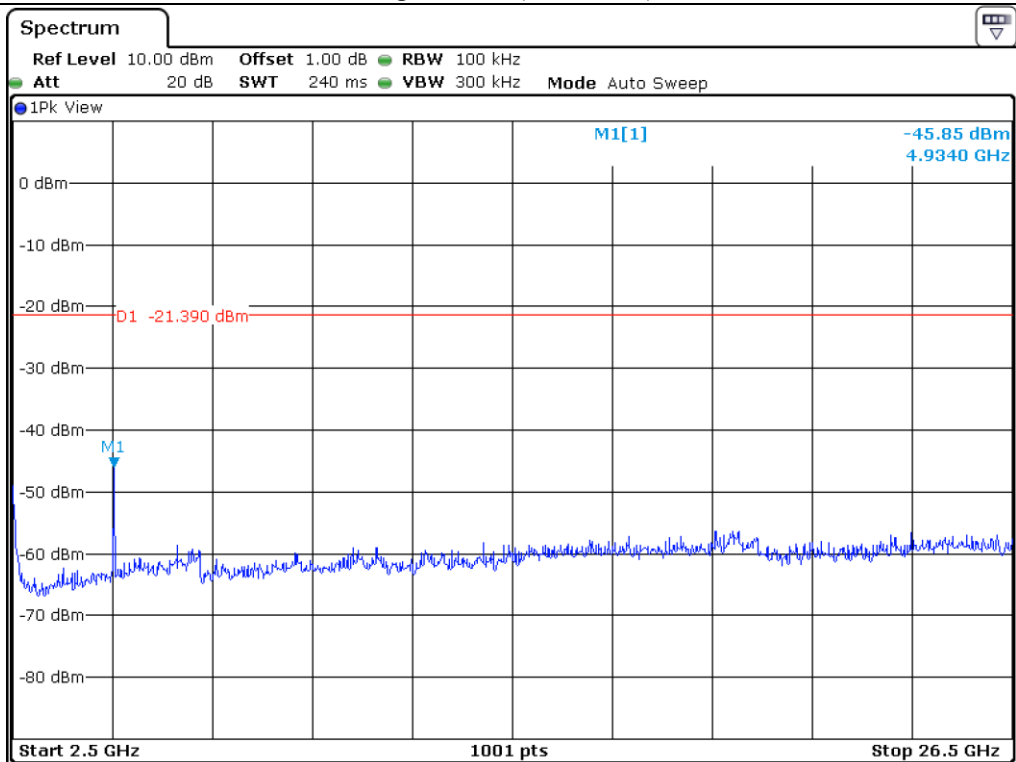
High Channel(Channel 11)



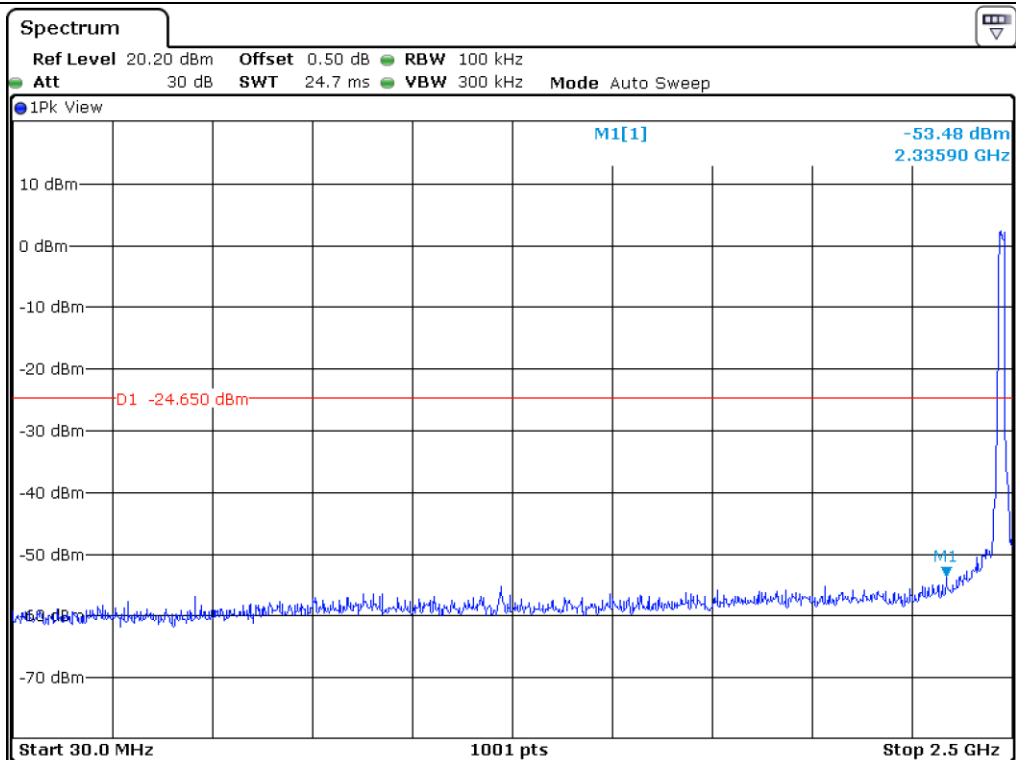
High Channel(Channel 11)



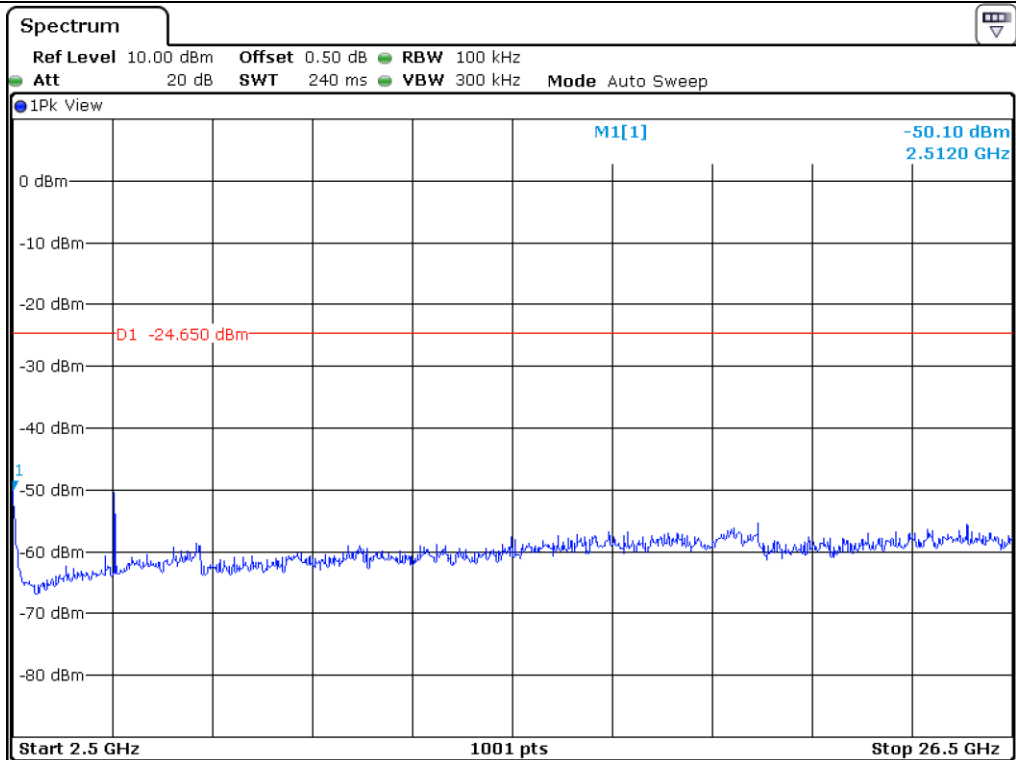
High Channel(Channel 12)



High Channel(Channel 12)

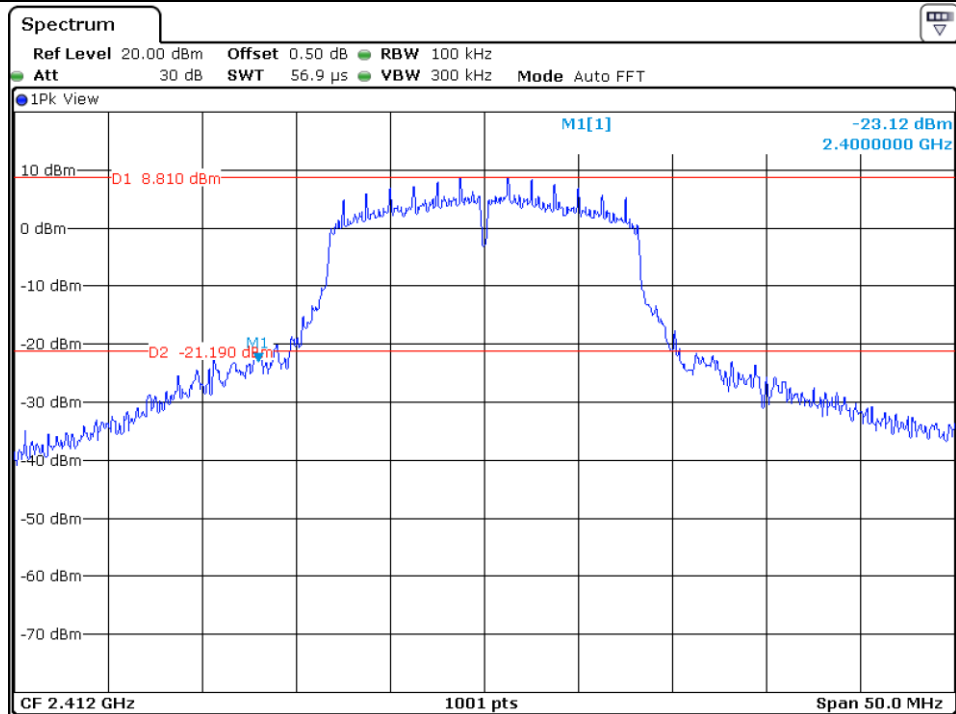


High Channel(Channel 13)

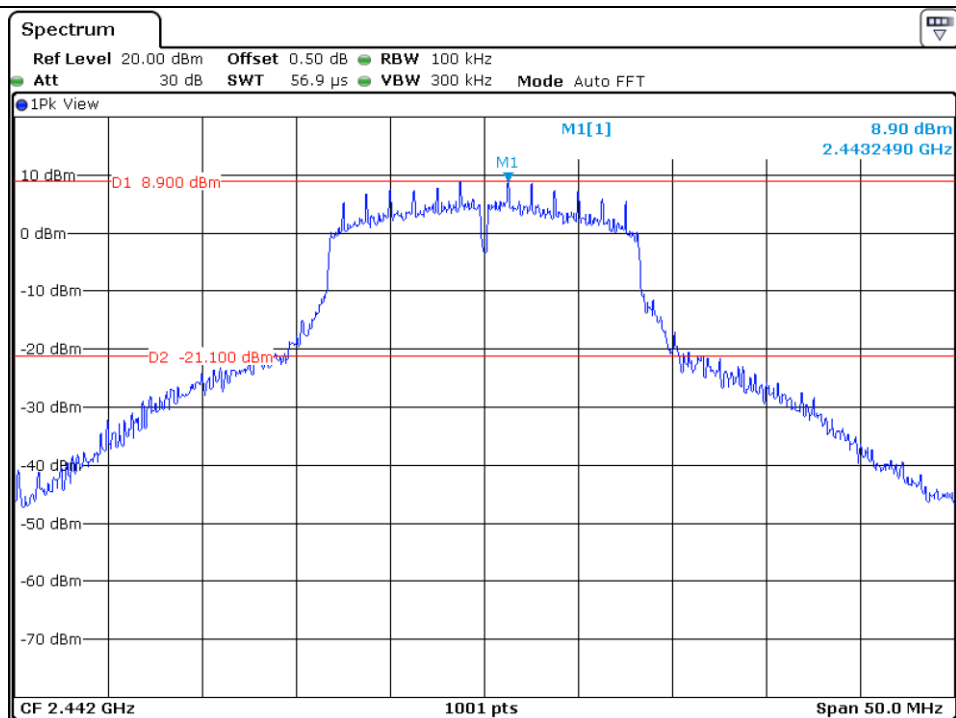


High Channel(Channel 13)

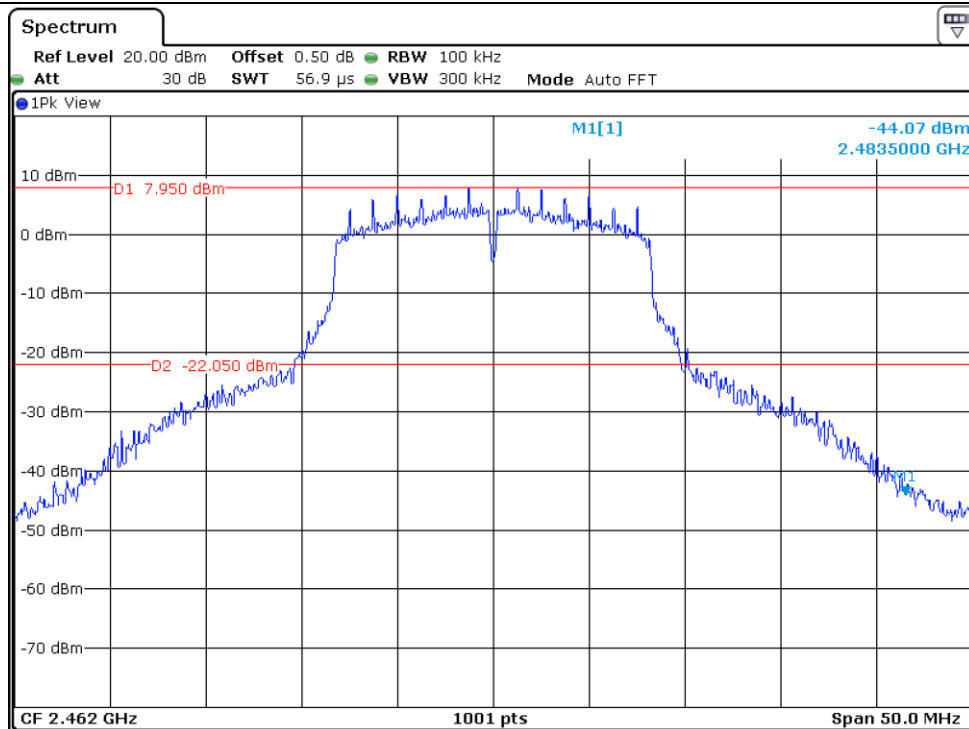
9.5.2.2 Test data for Antenna 1



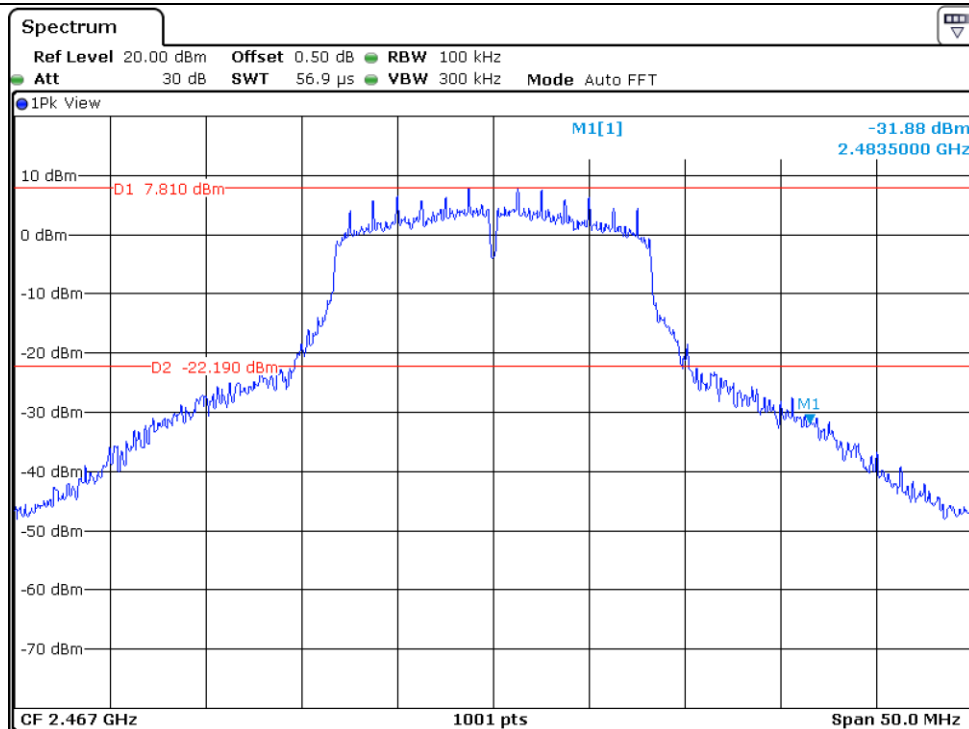
Low Channel



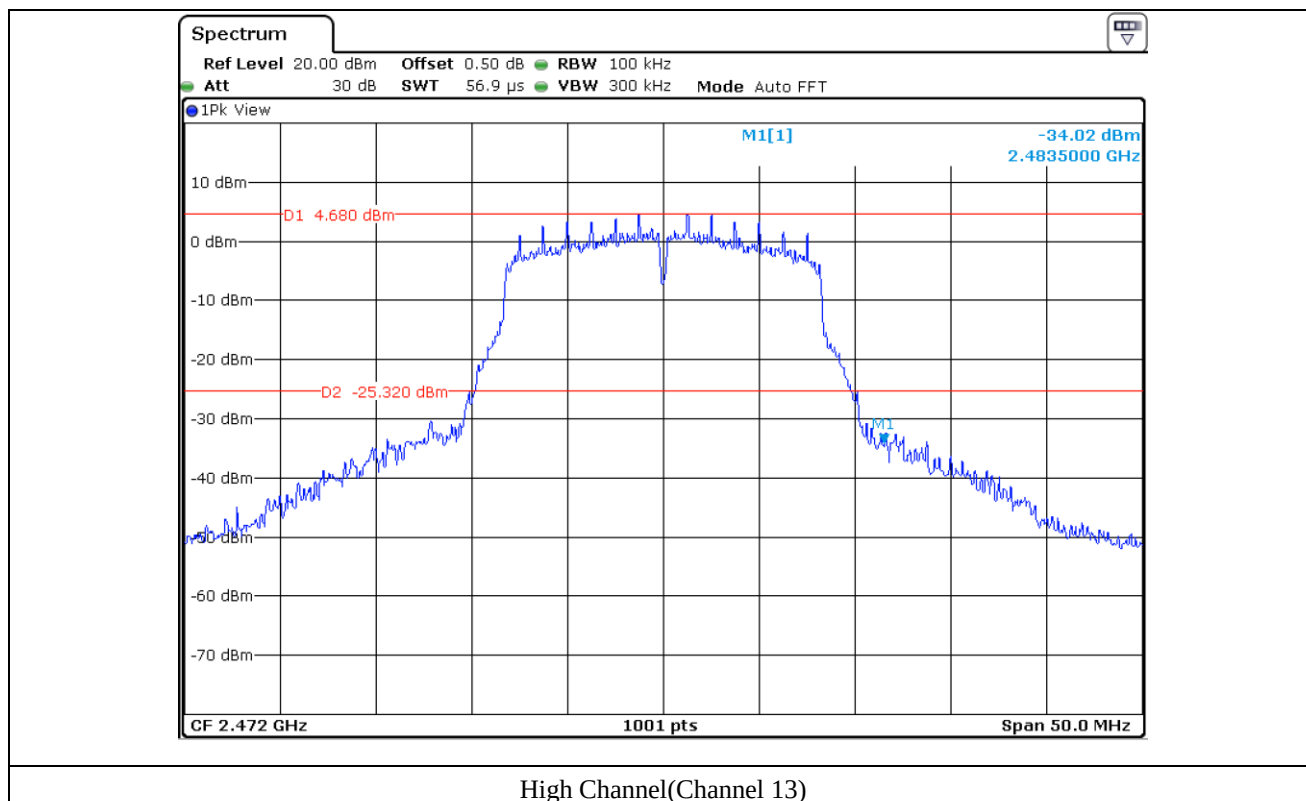
Middle Channel

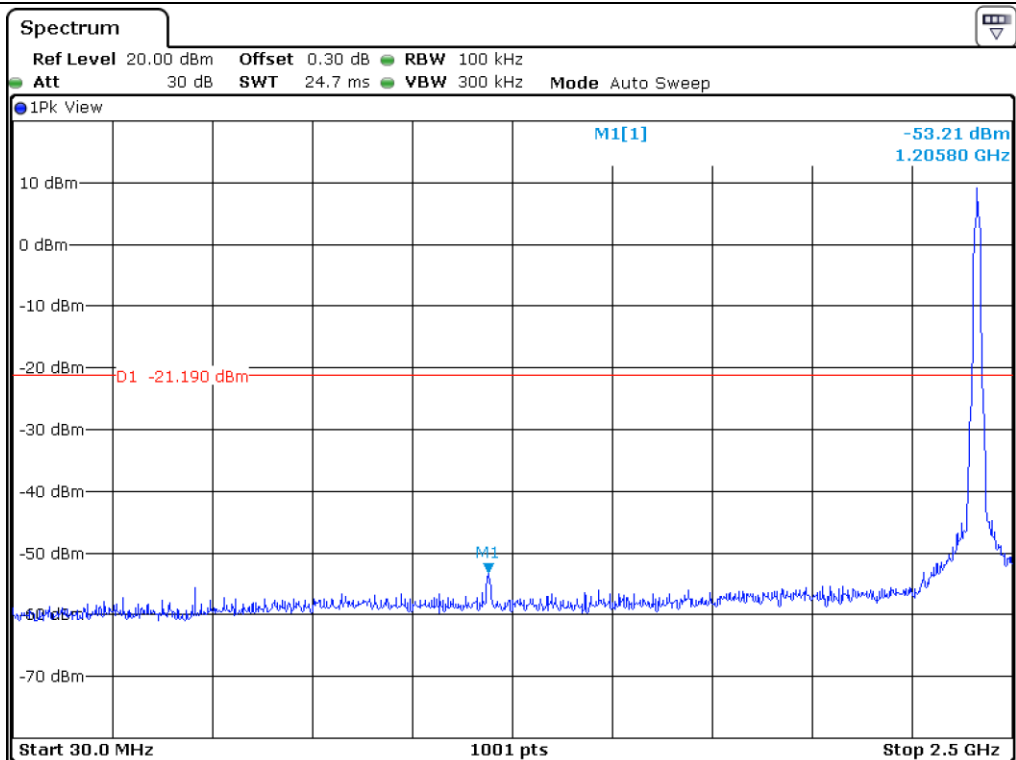


High Channel(Channel 11)

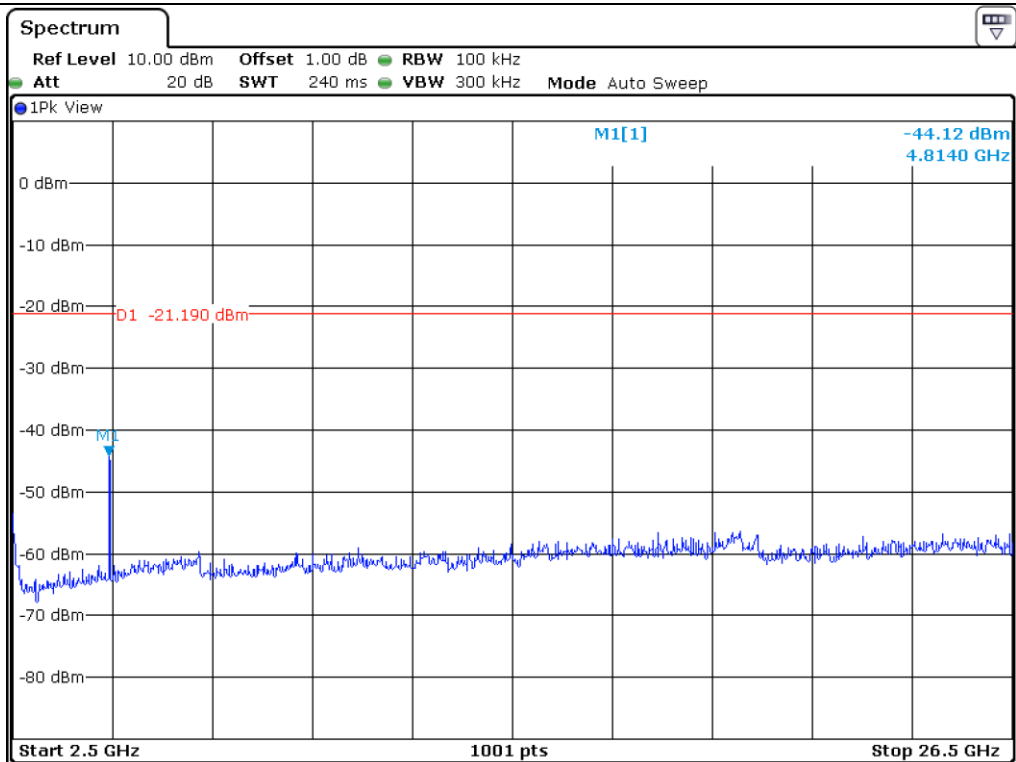


High Channel(Channel 12)

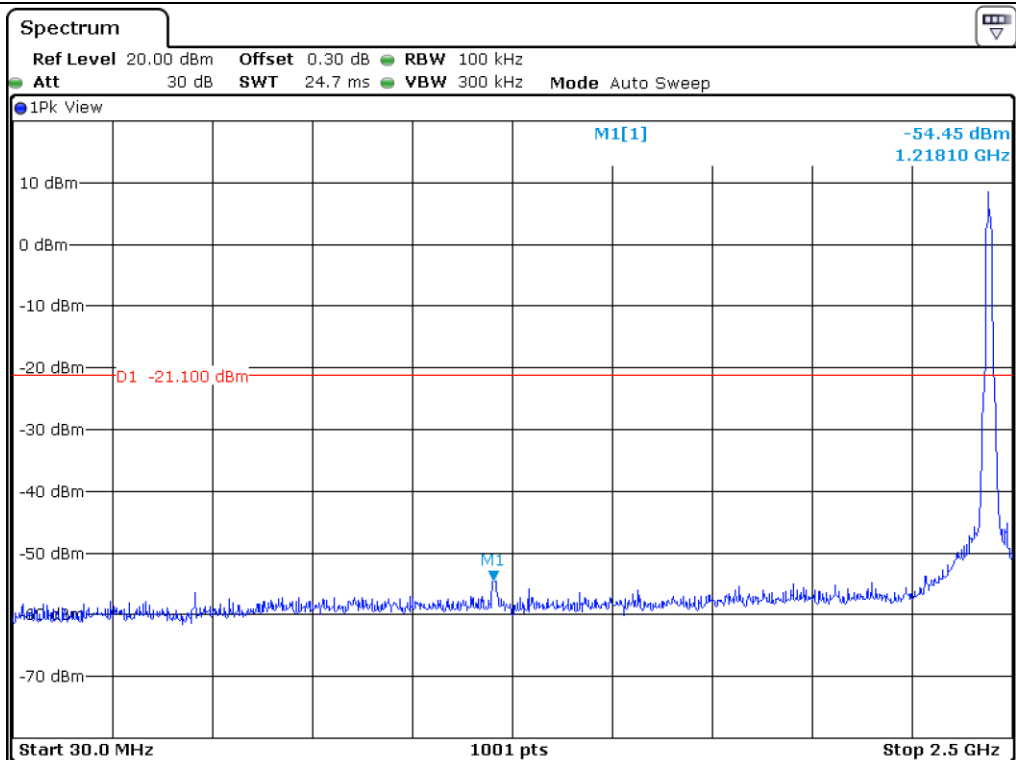




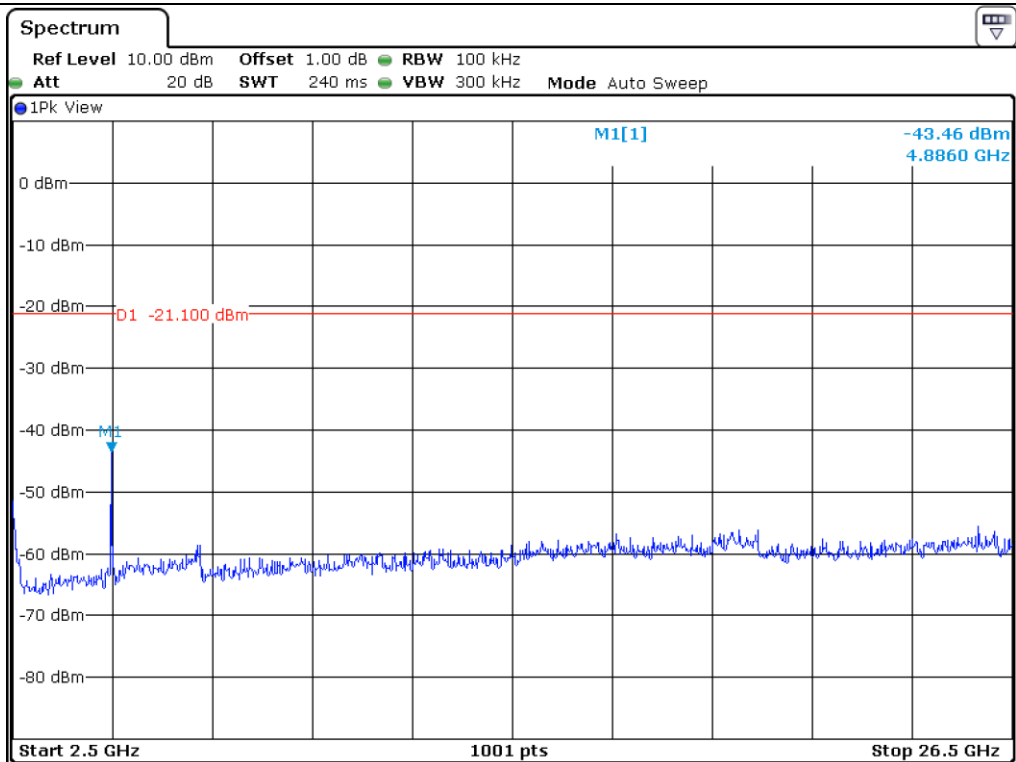
Low Channel



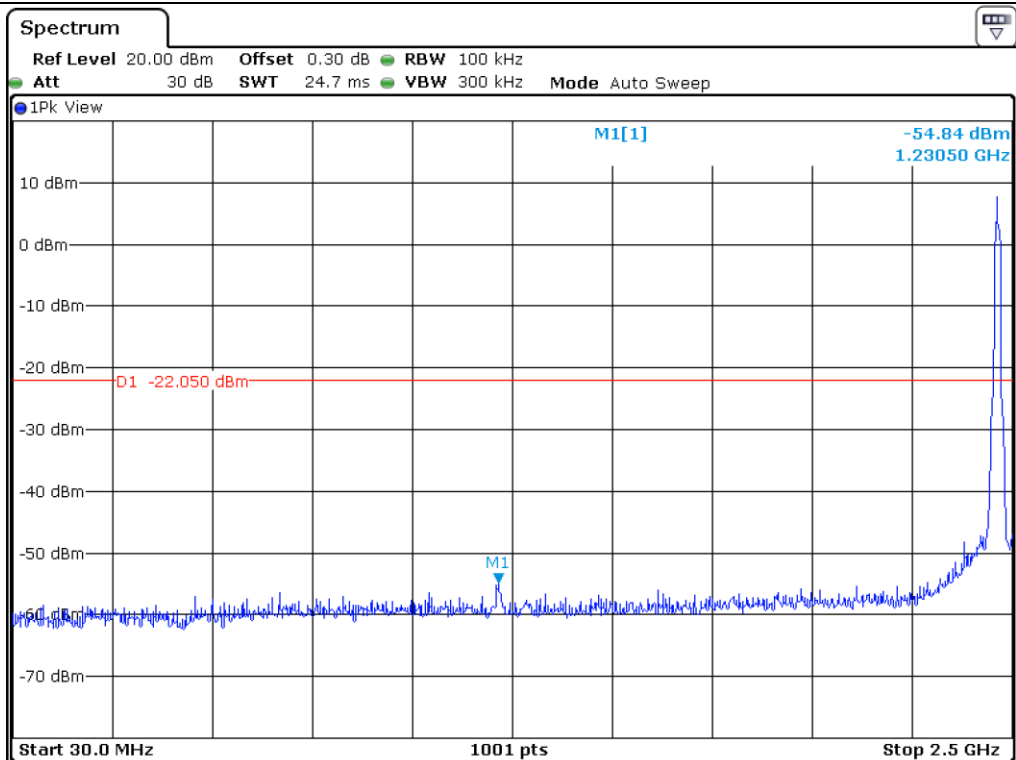
Low Channel



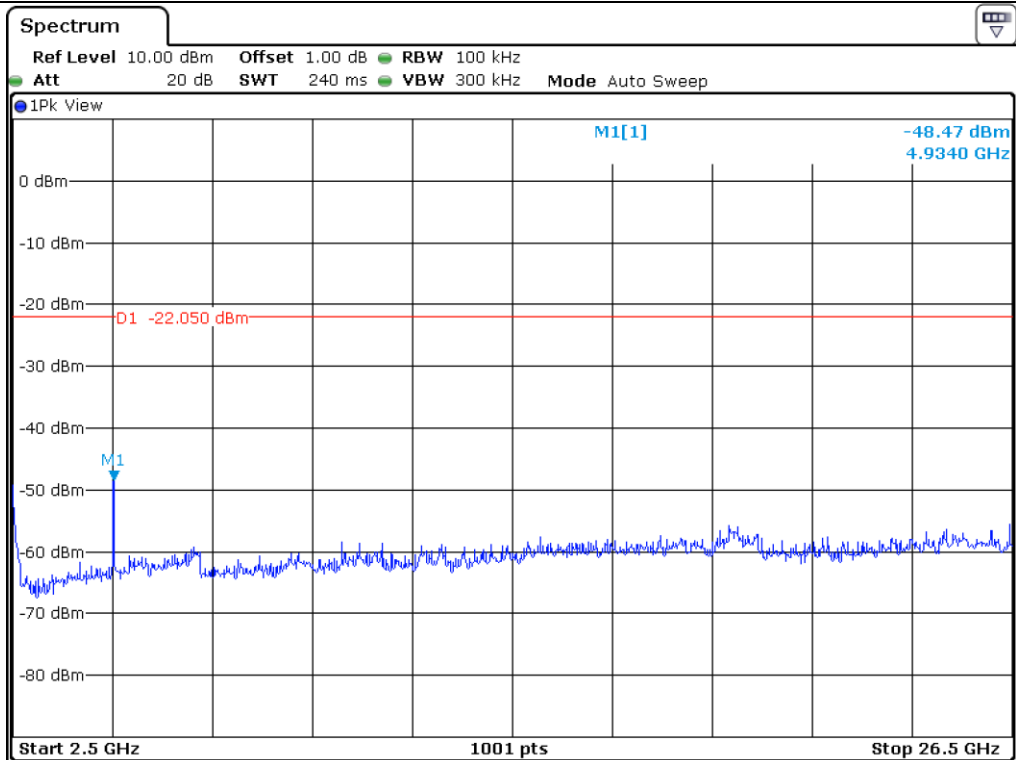
Middle Channel



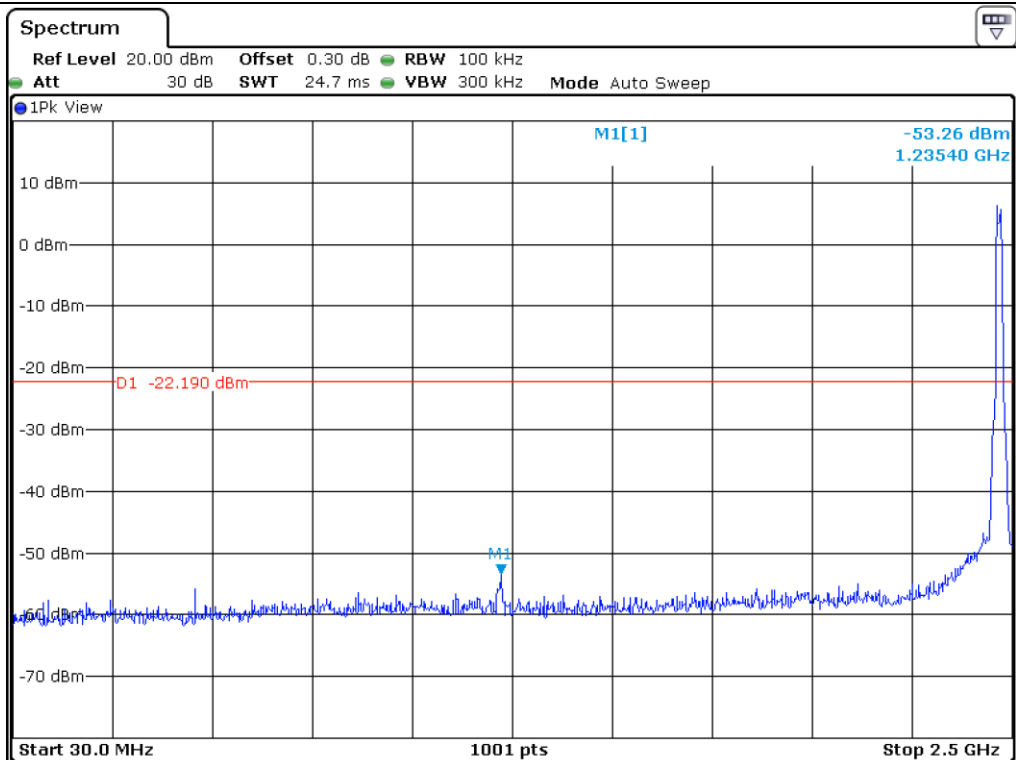
Middle Channel



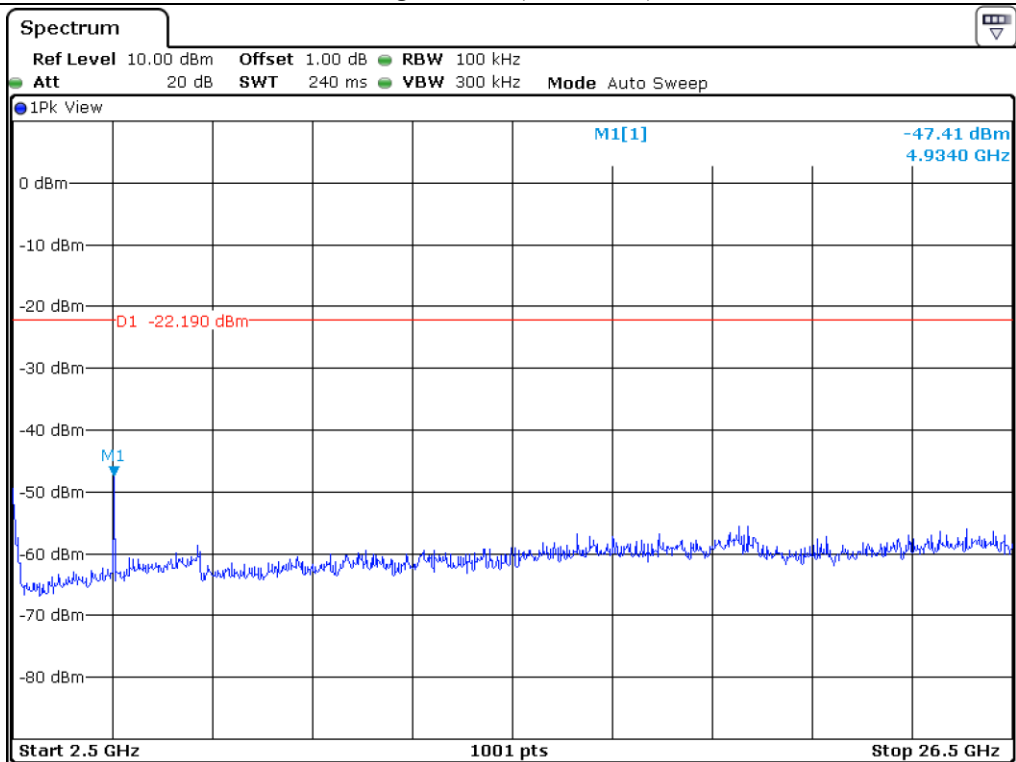
High Channel(Channel 11)



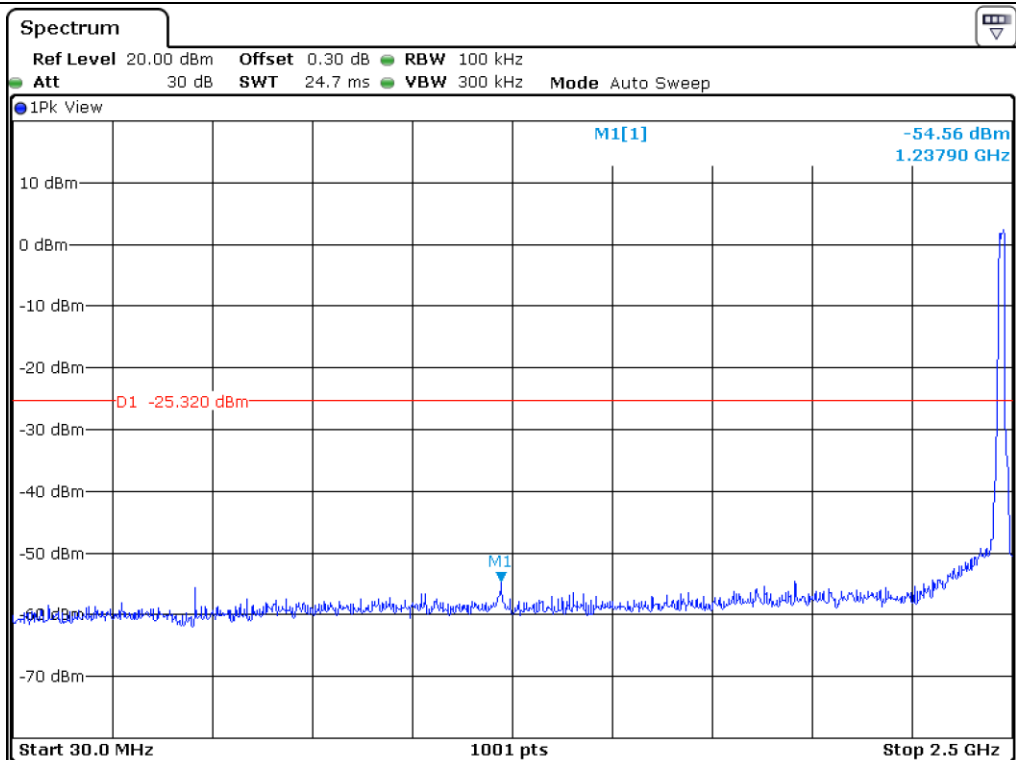
High Channel(Channel 11)



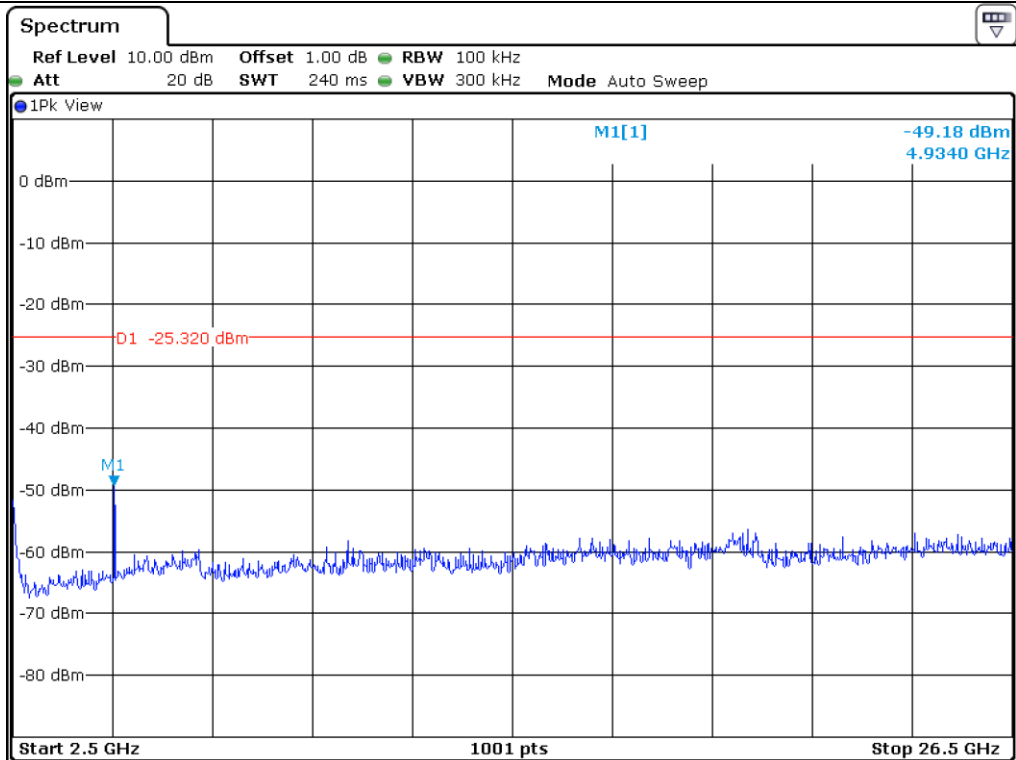
High Channel(Channel 12)



High Channel(Channel 12)



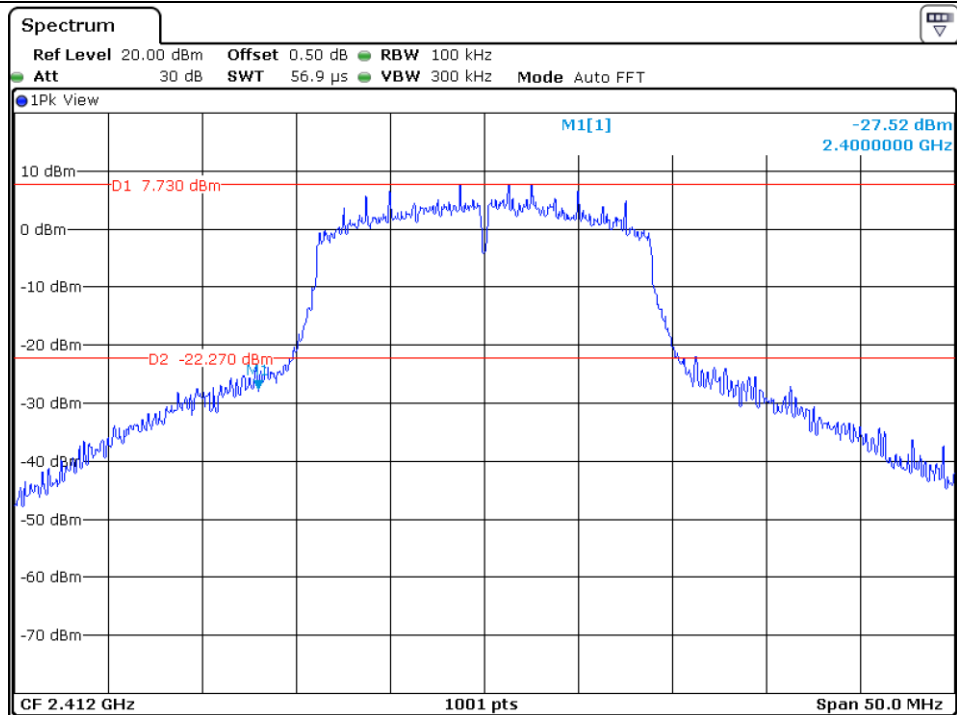
High Channel(Channel 13)



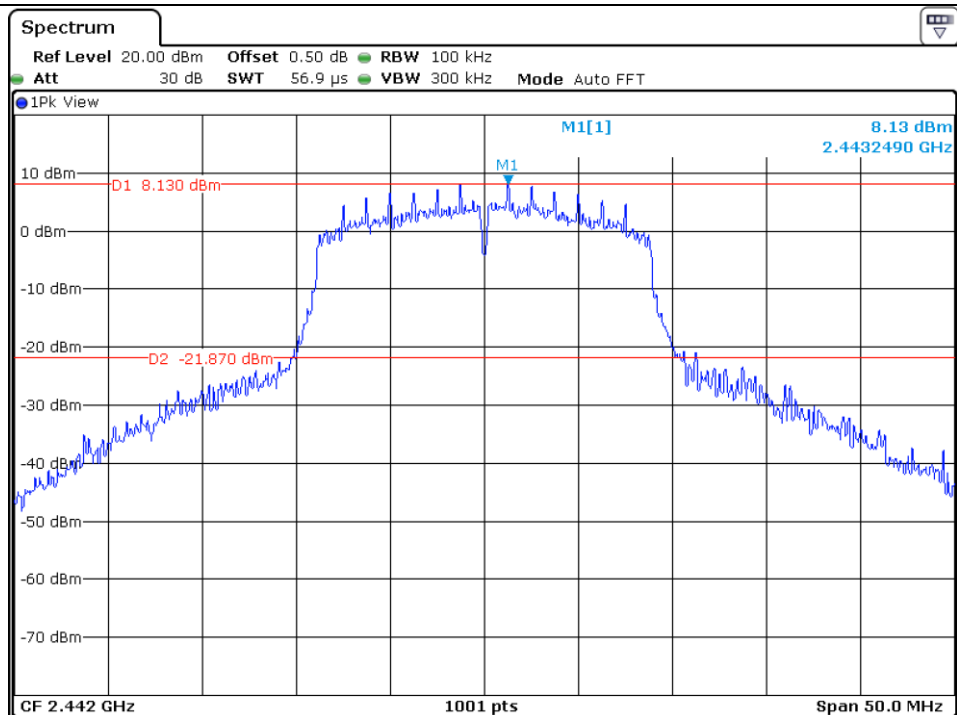
High Channel(Channel 13)

9.5.3 Test data for 802.11n_HT20 WLAN Mode

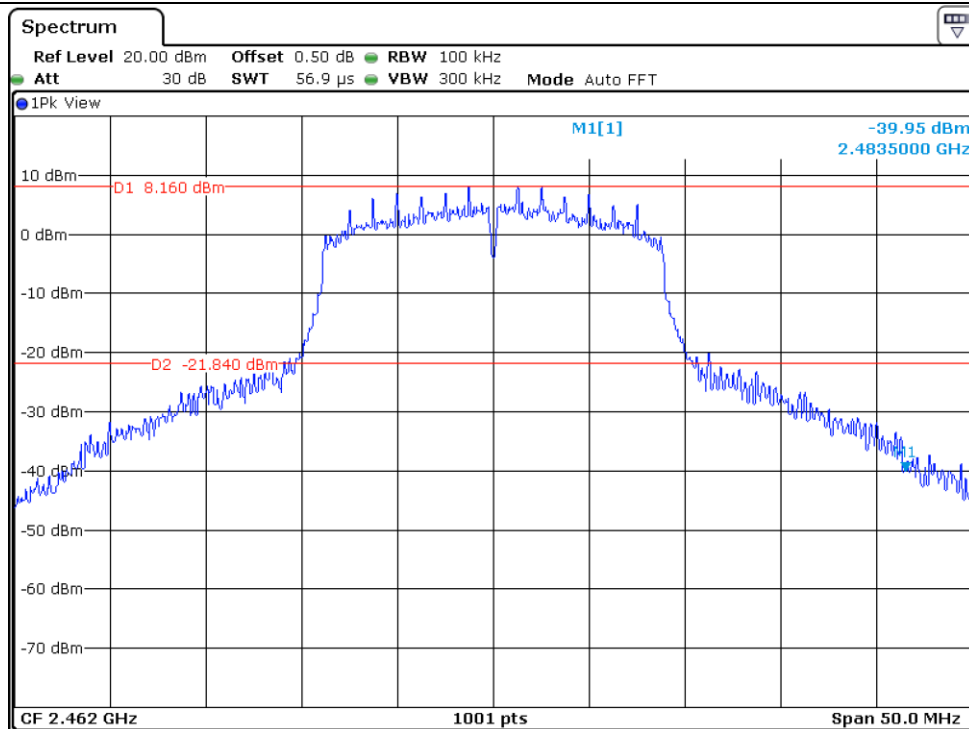
9.5.3.1 Test data for Antenna 0



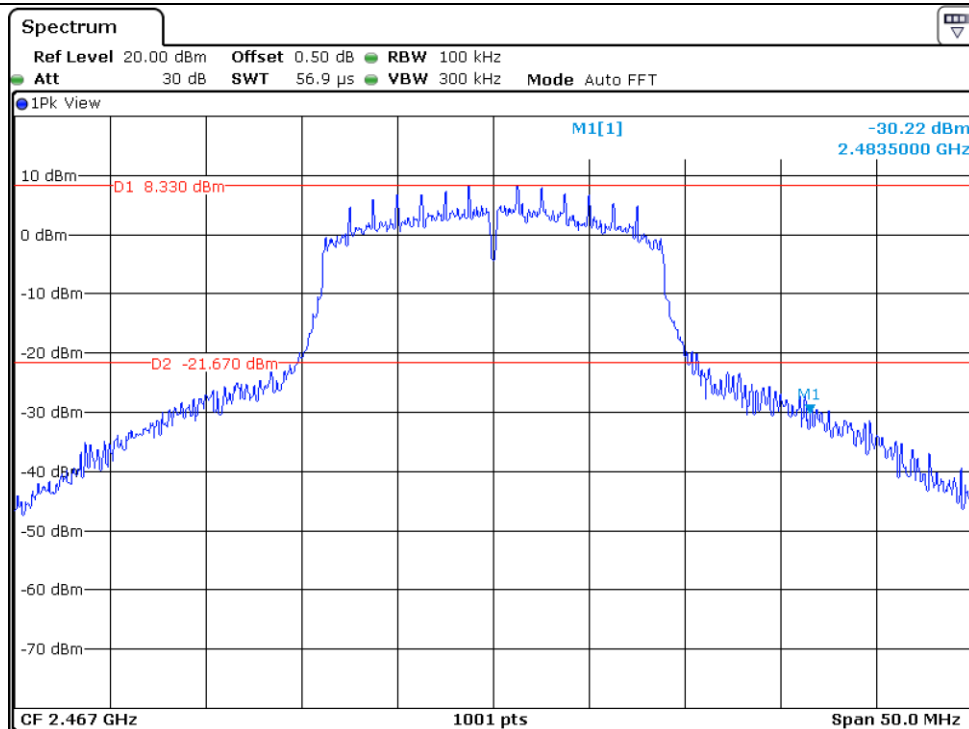
Low Channel



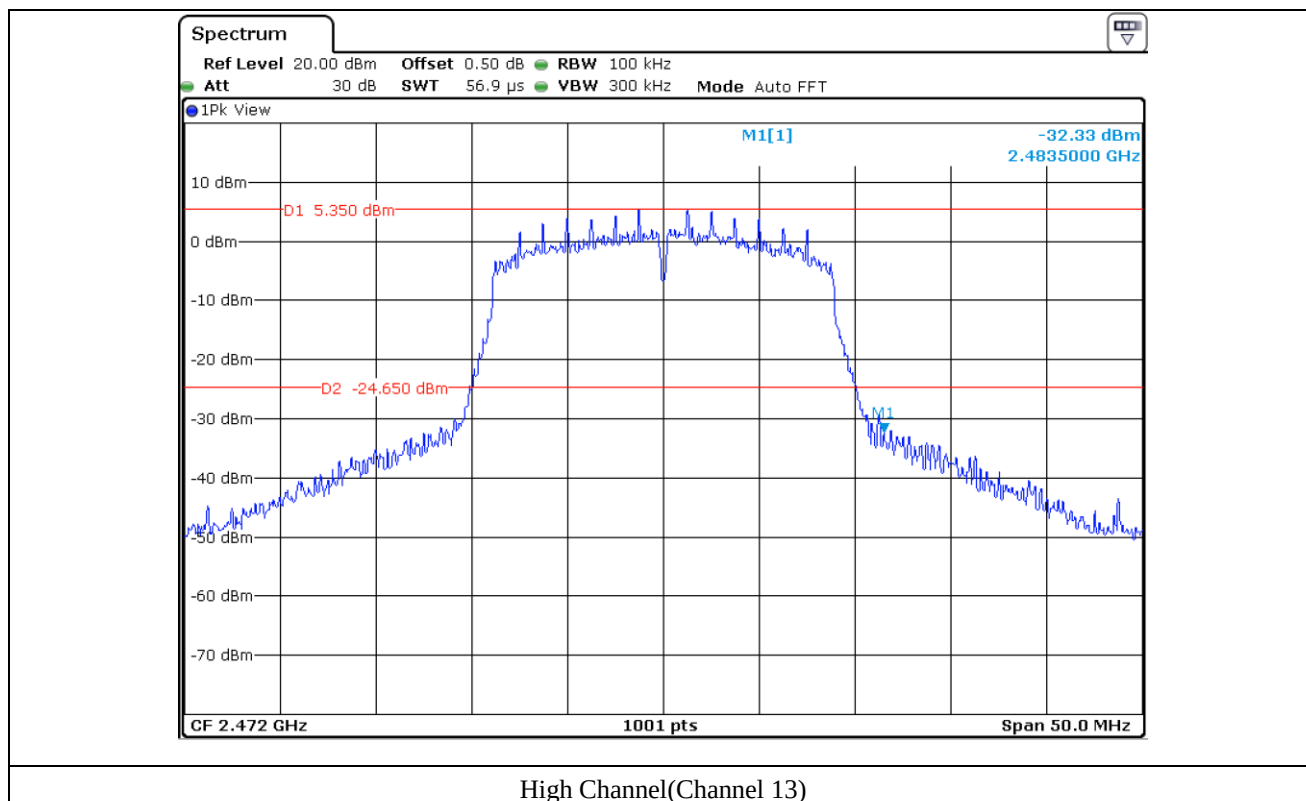
Middle Channel

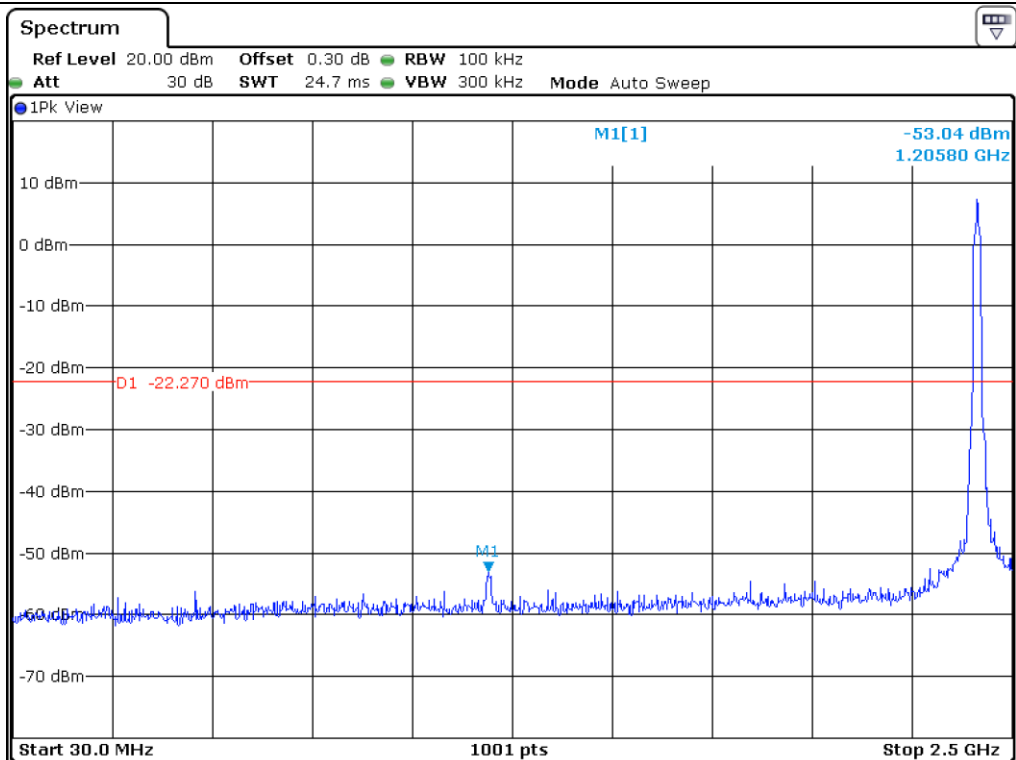


High Channel(Channel 11)

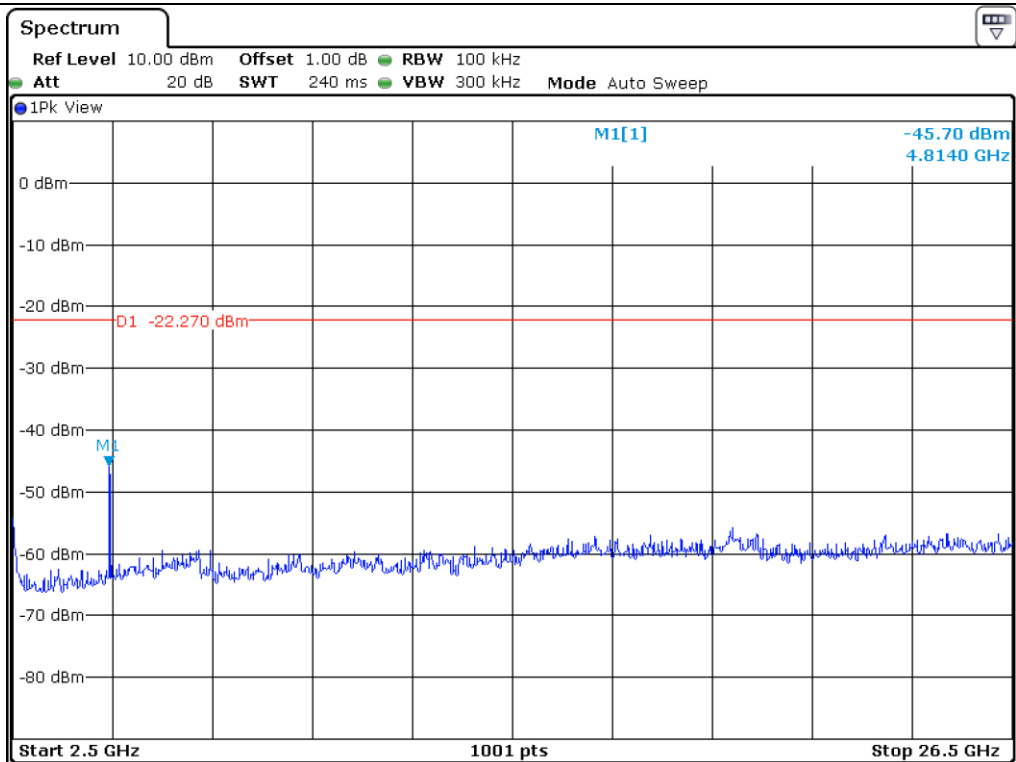


High Channel(Channel 12)

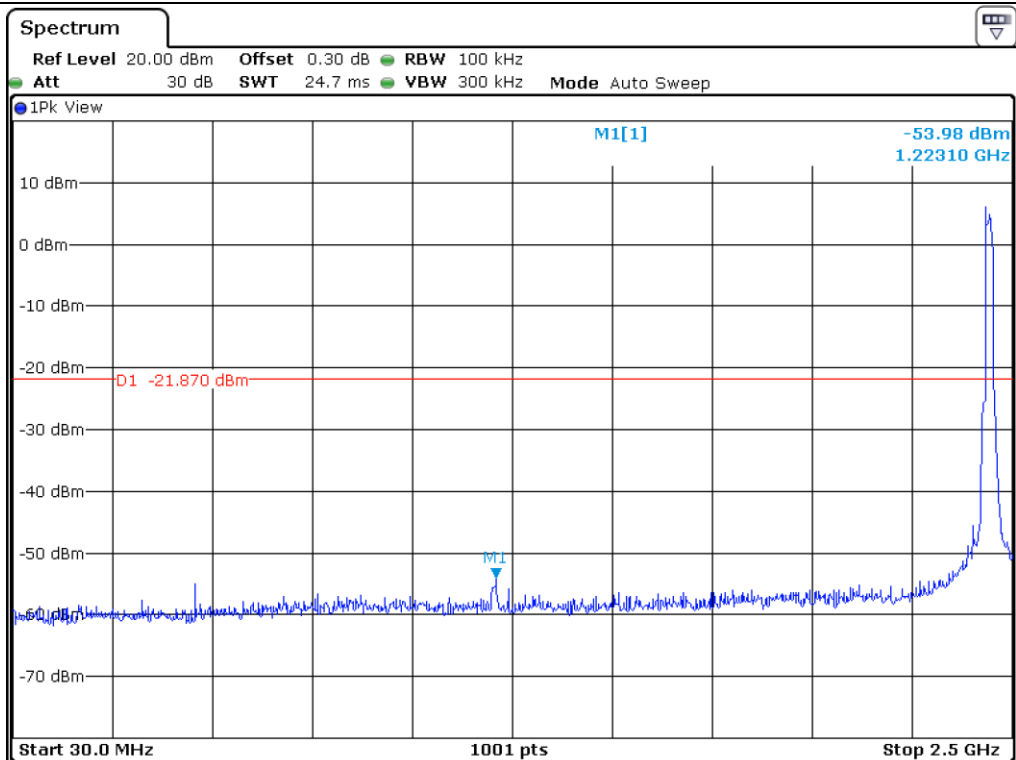




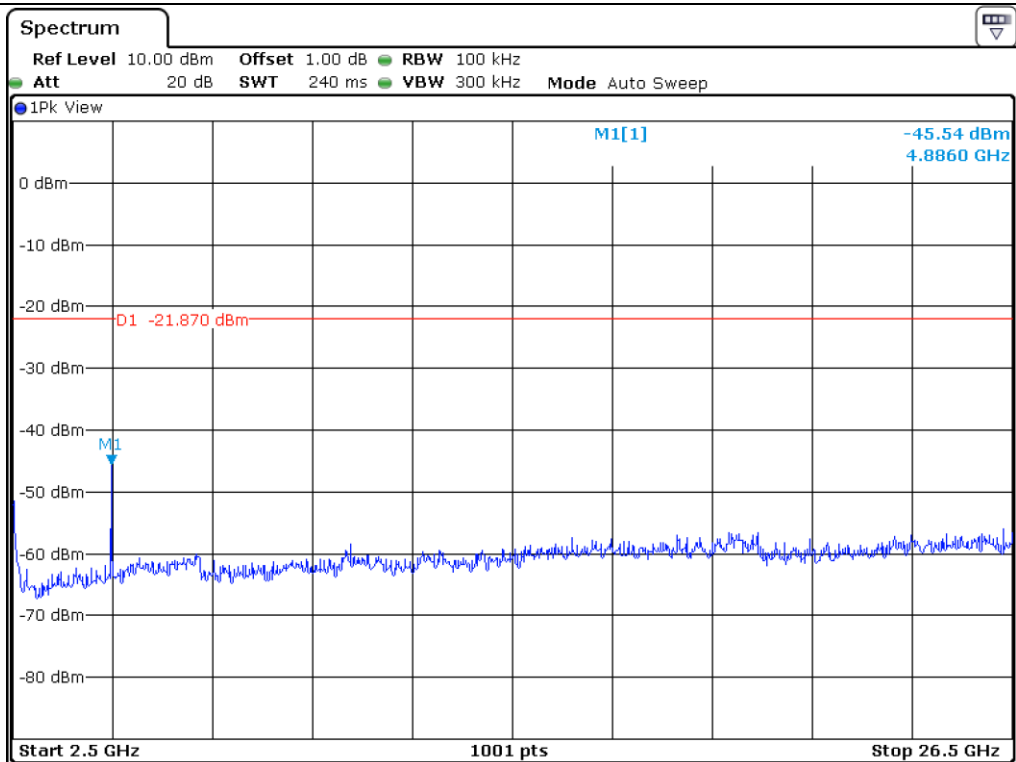
Low Channel



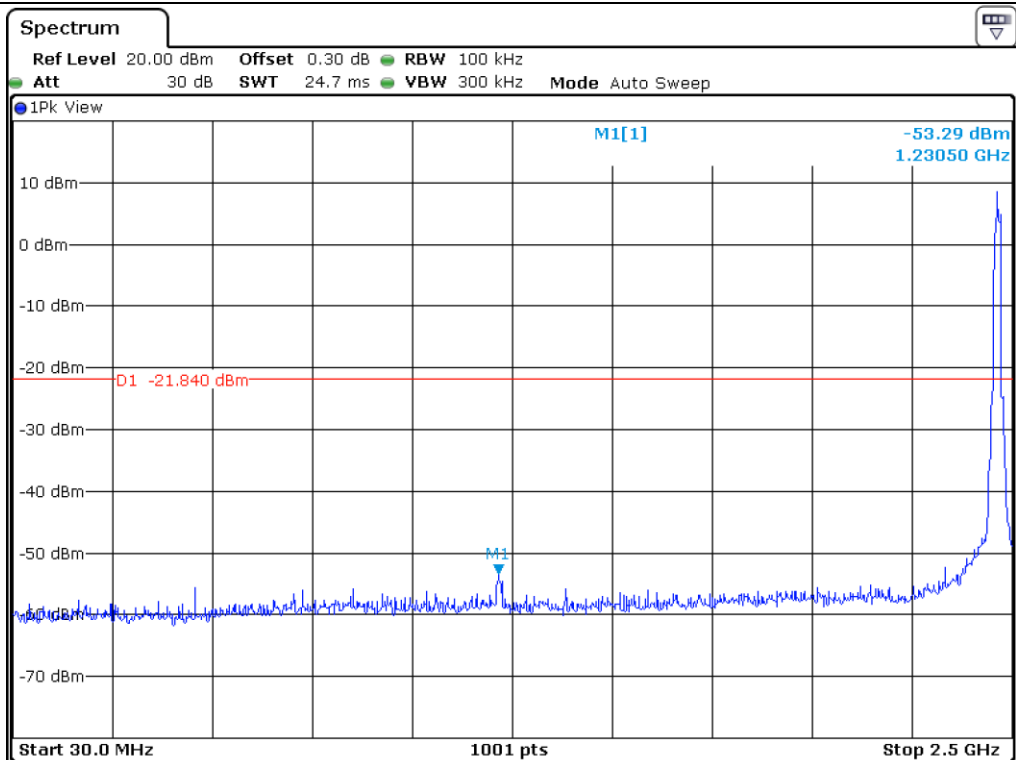
Low Channel



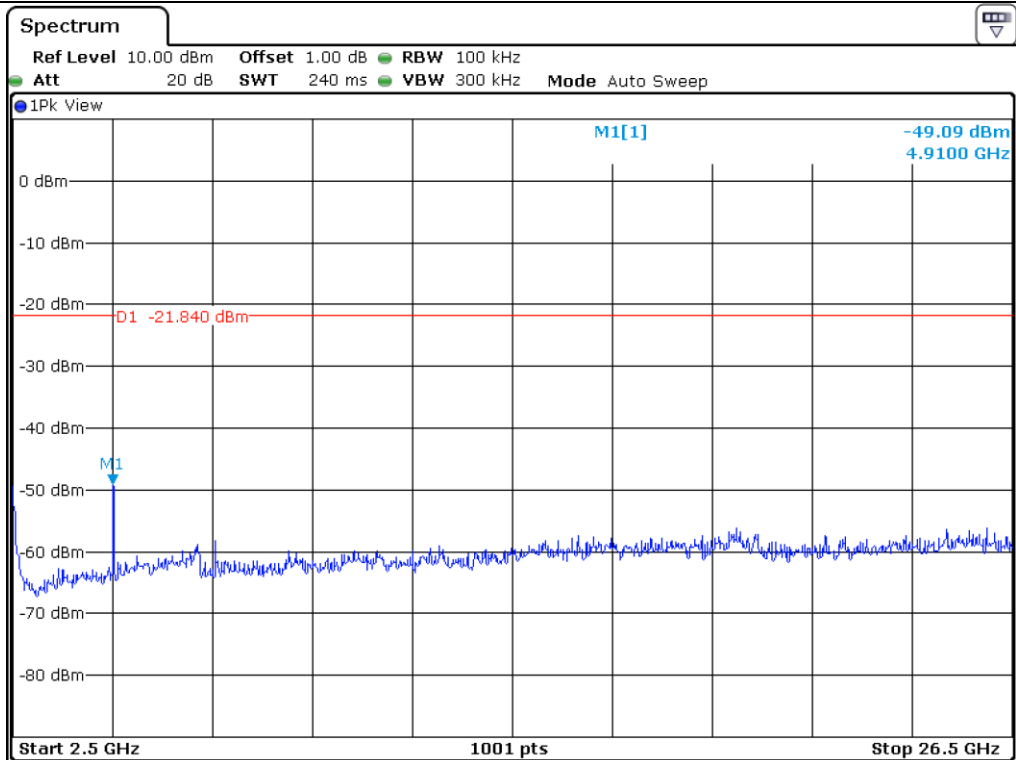
Middle Channel



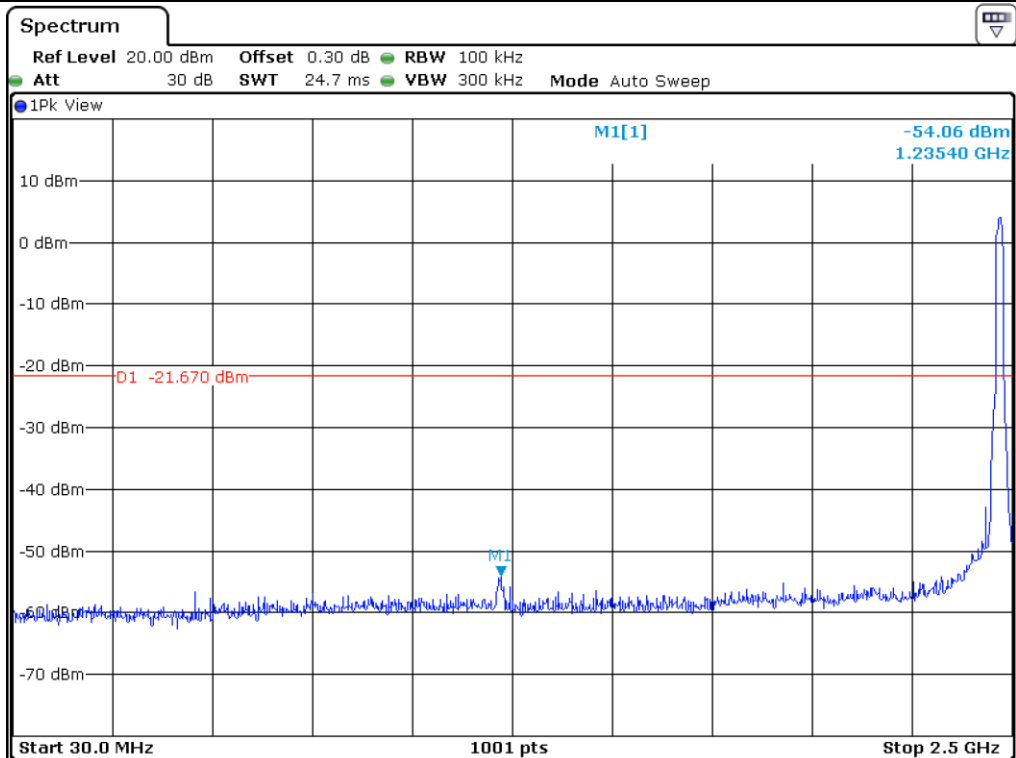
Middle Channel



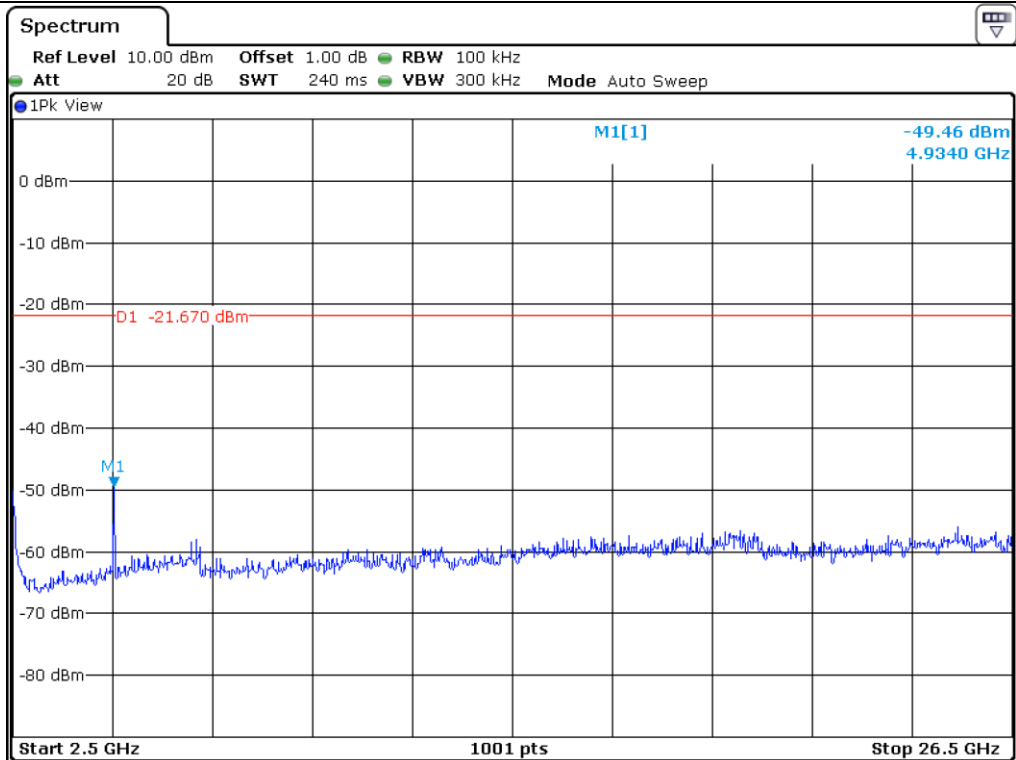
High Channel(Channel 11)



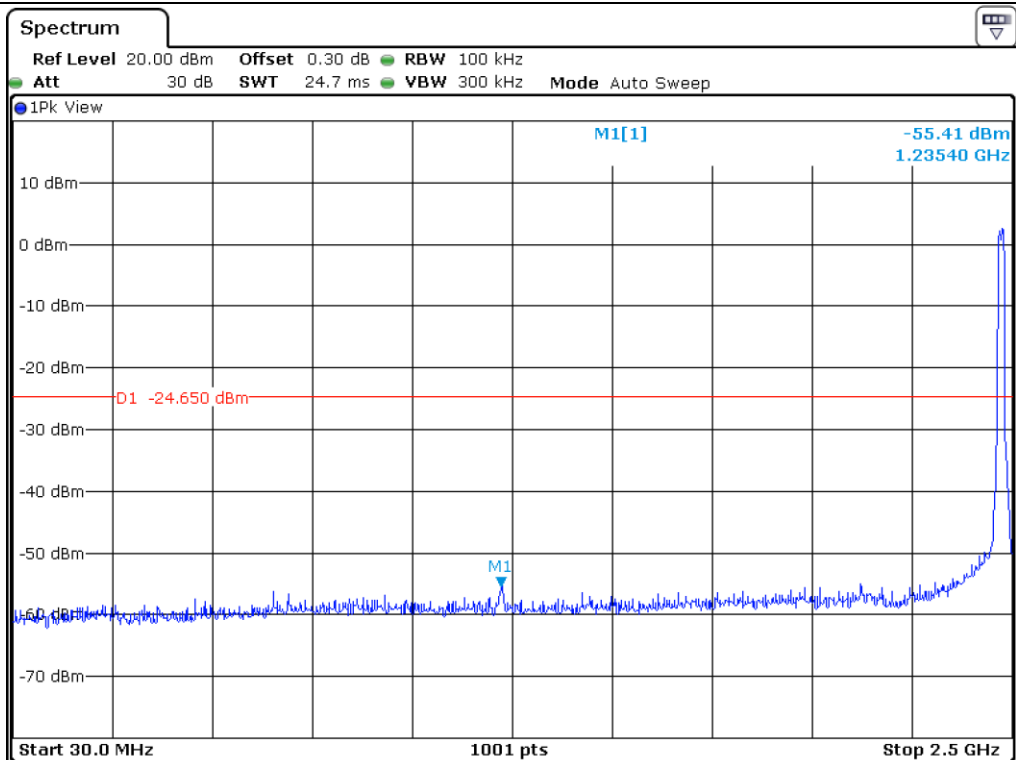
High Channel(Channel 11)



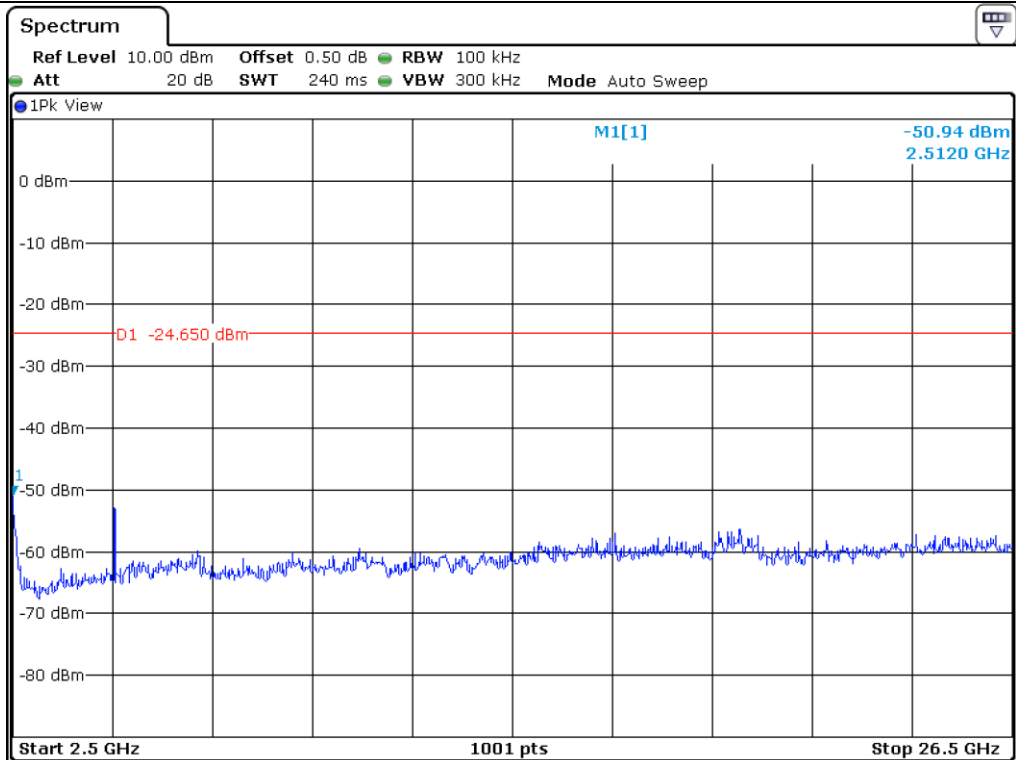
High Channel(Channel 12)



High Channel(Channel 12)

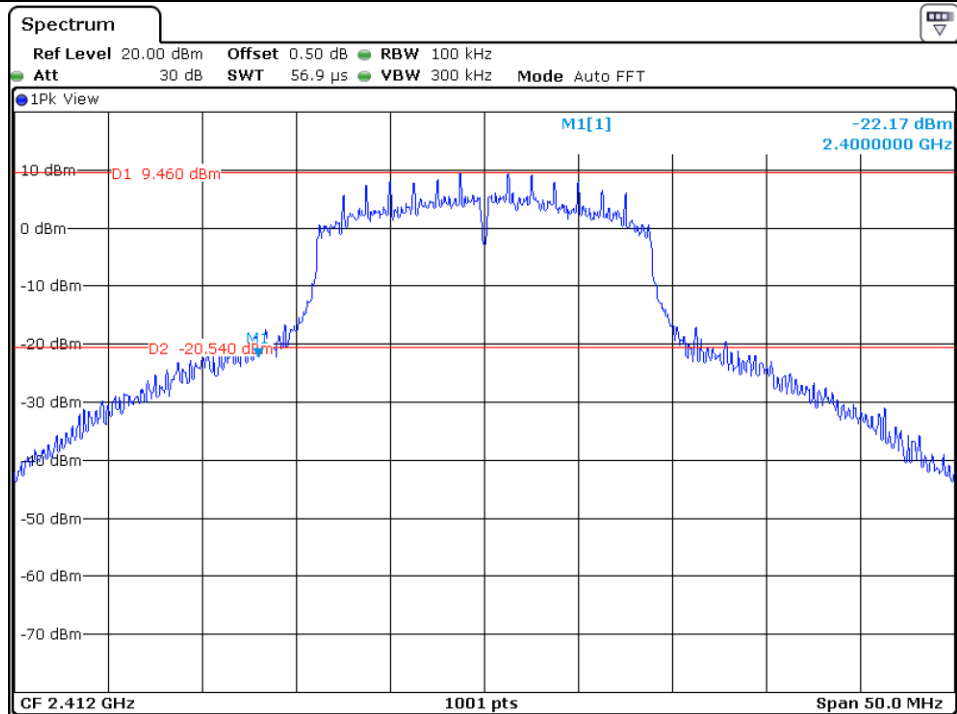


High Channel(Channel 13)

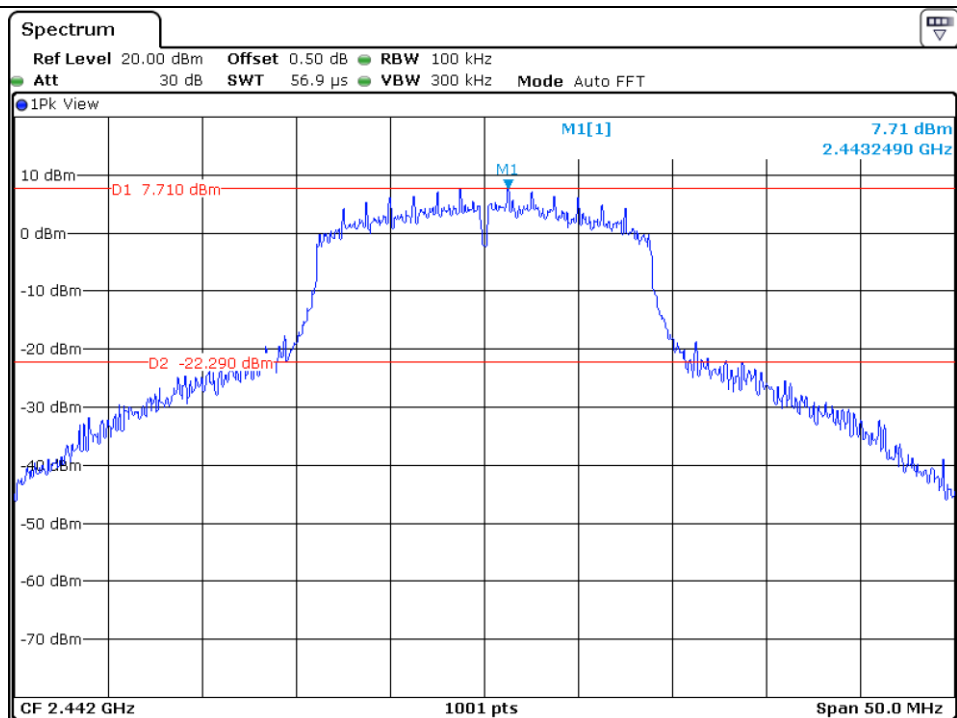


High Channel(Channel 13)

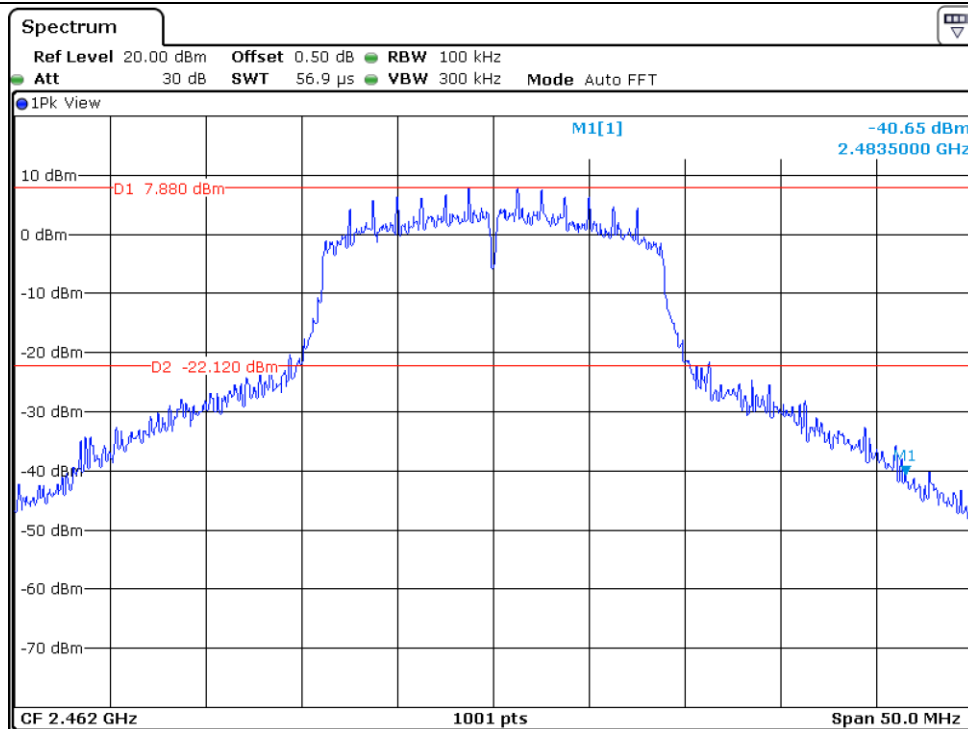
9.5.3.2 Test data for Antenna 1



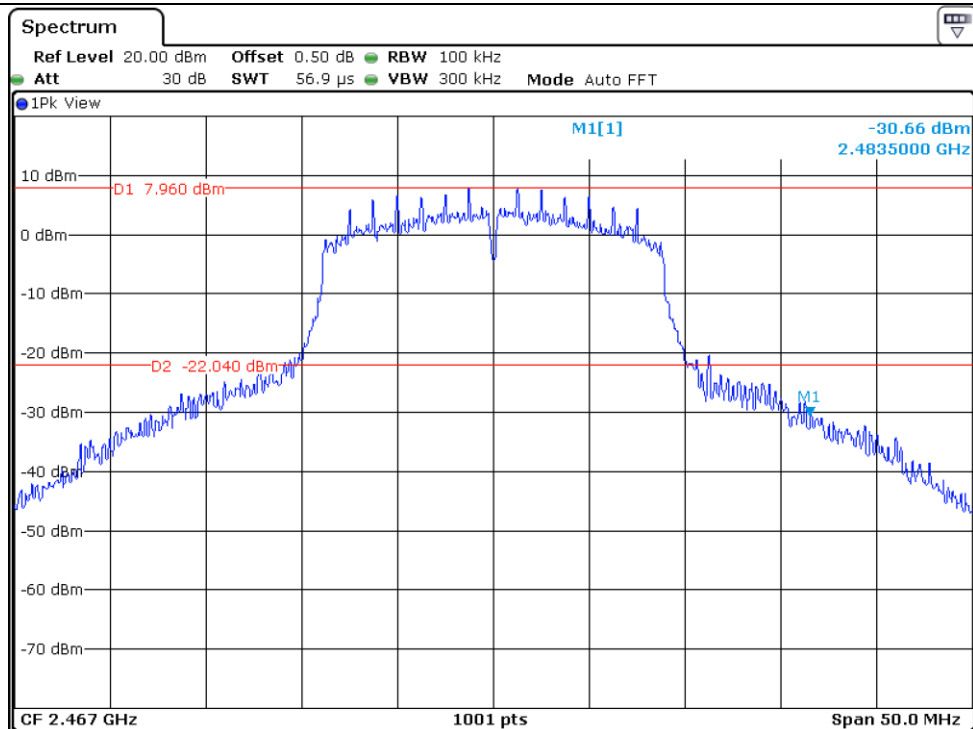
Low Channel



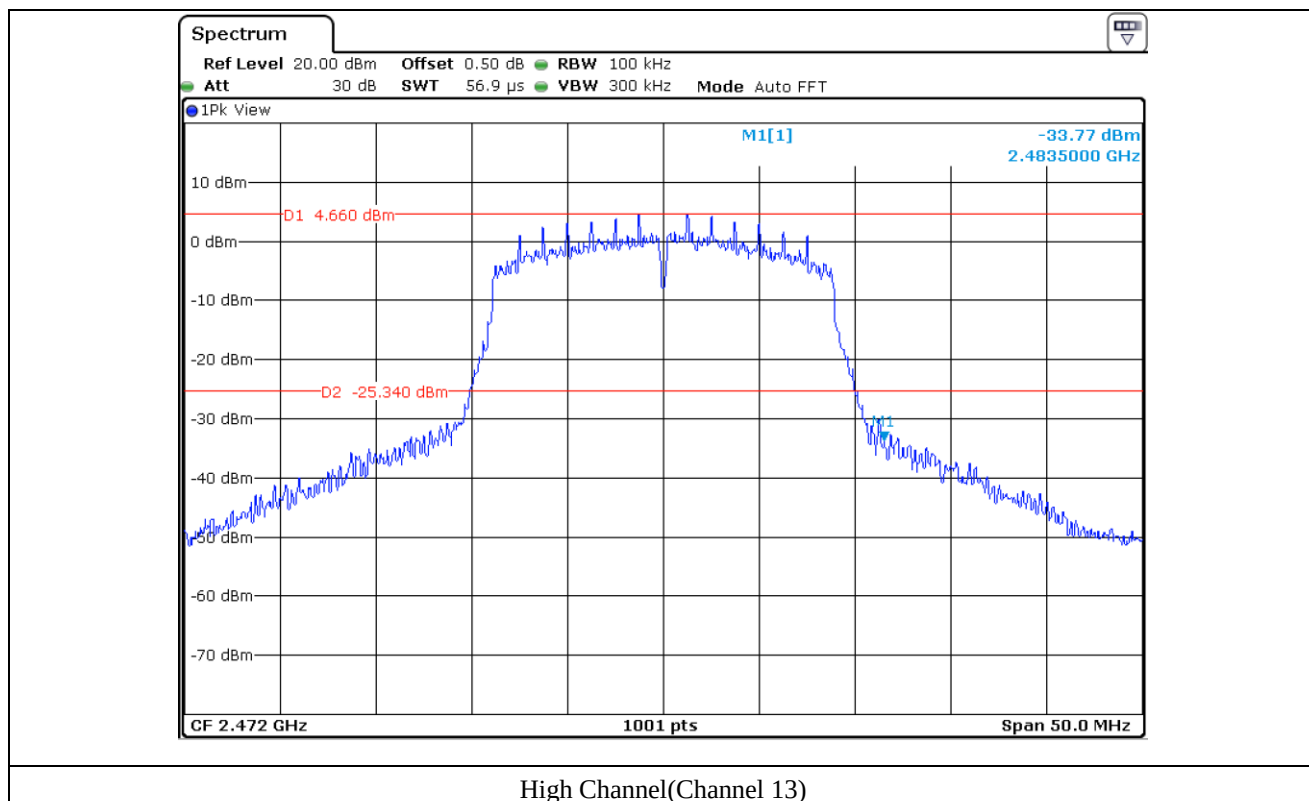
Middle Channel

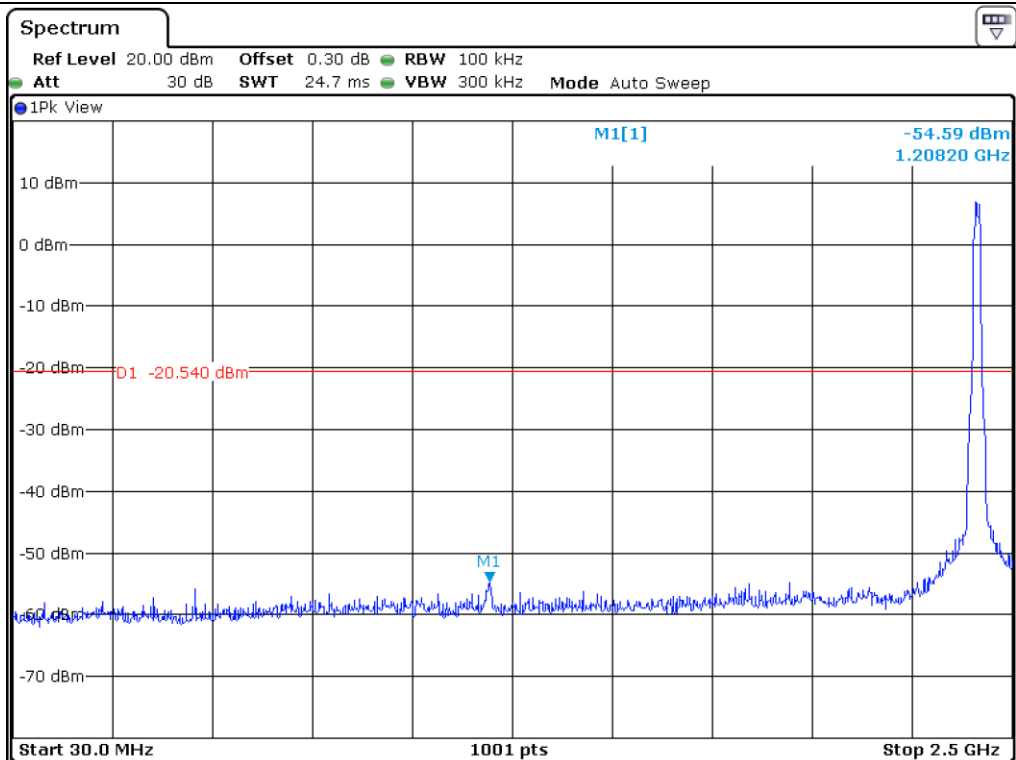


High Channel(Channel 11)

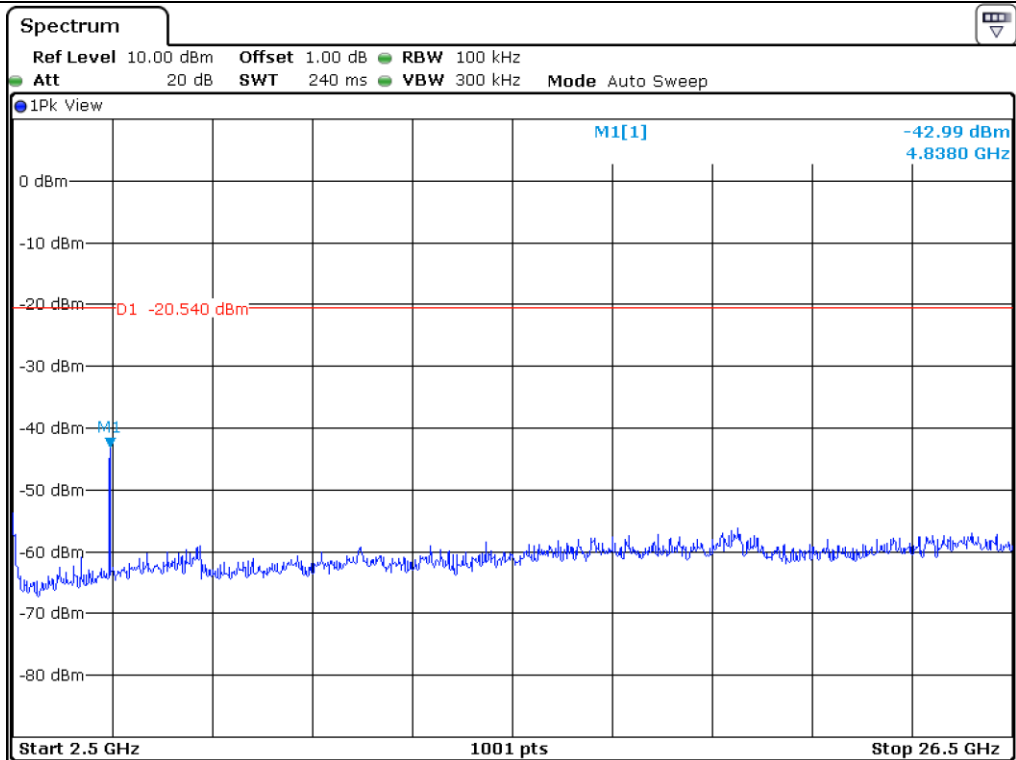


High Channel(Channel 12)

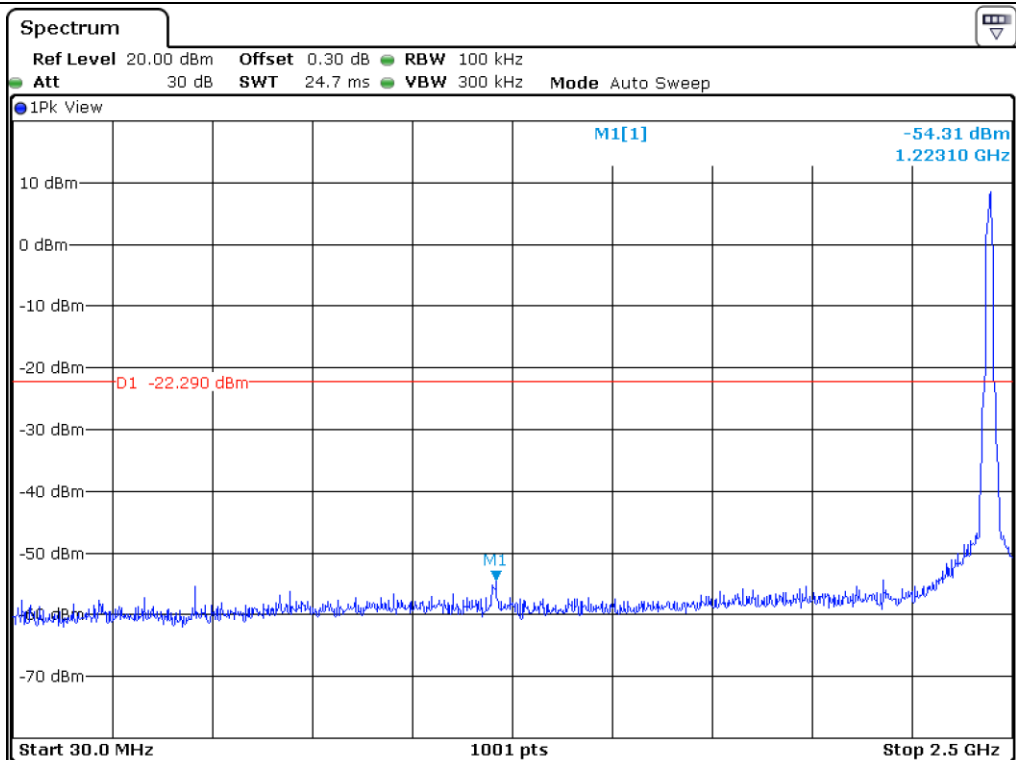




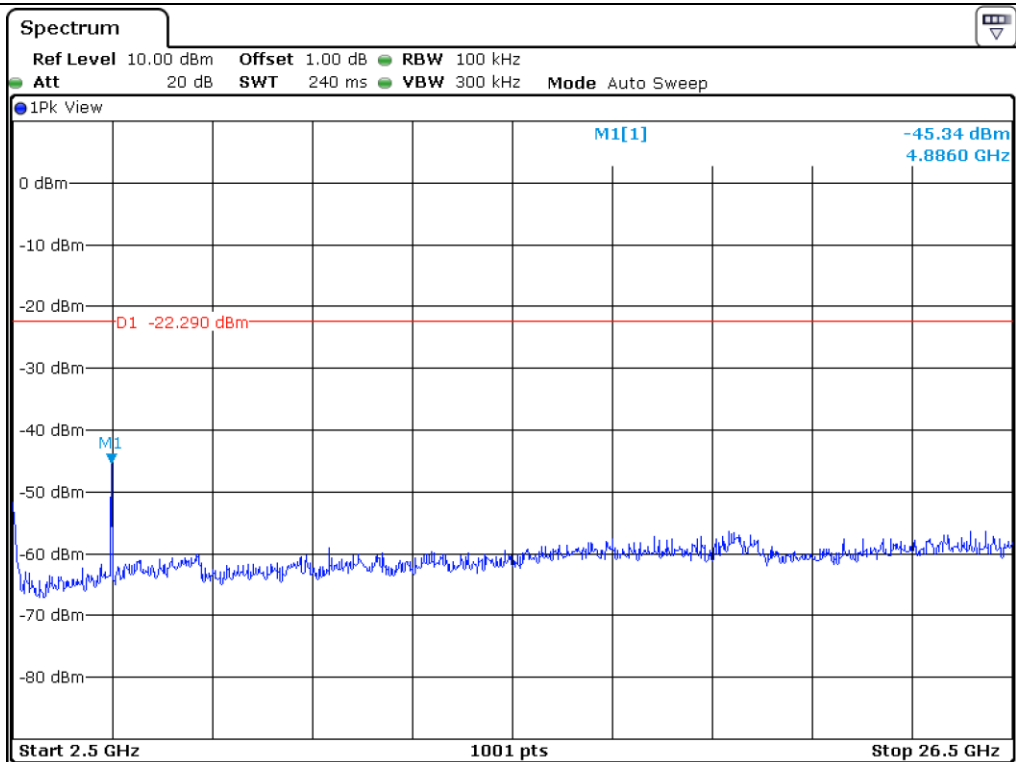
Low Channel



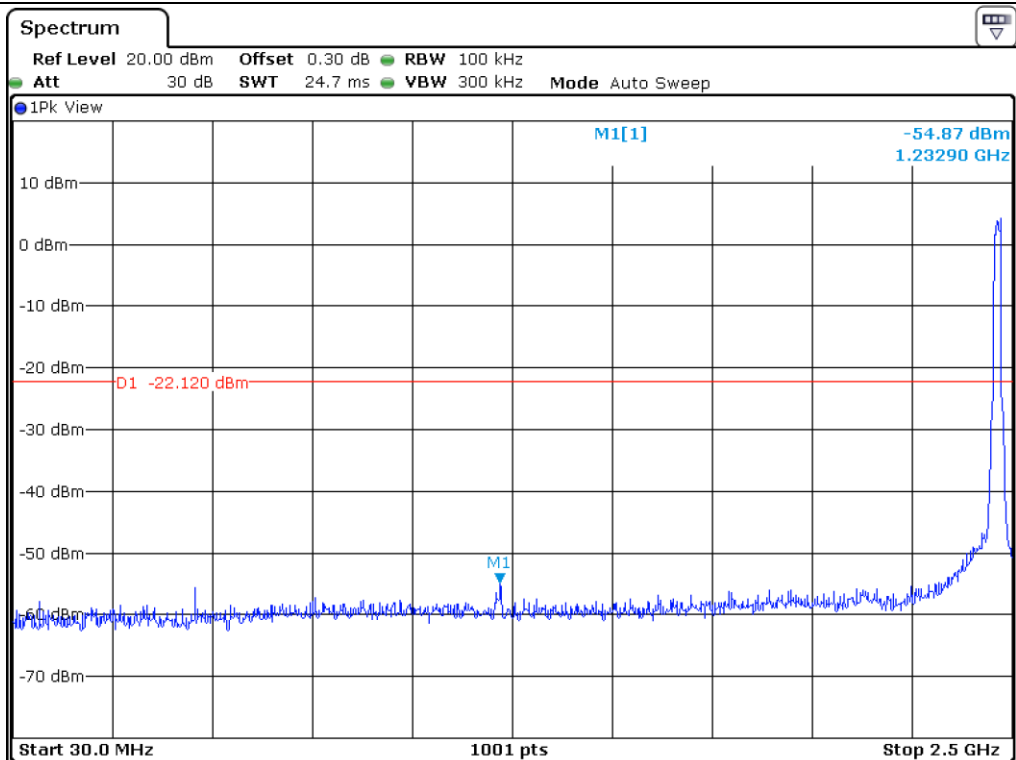
Low Channel



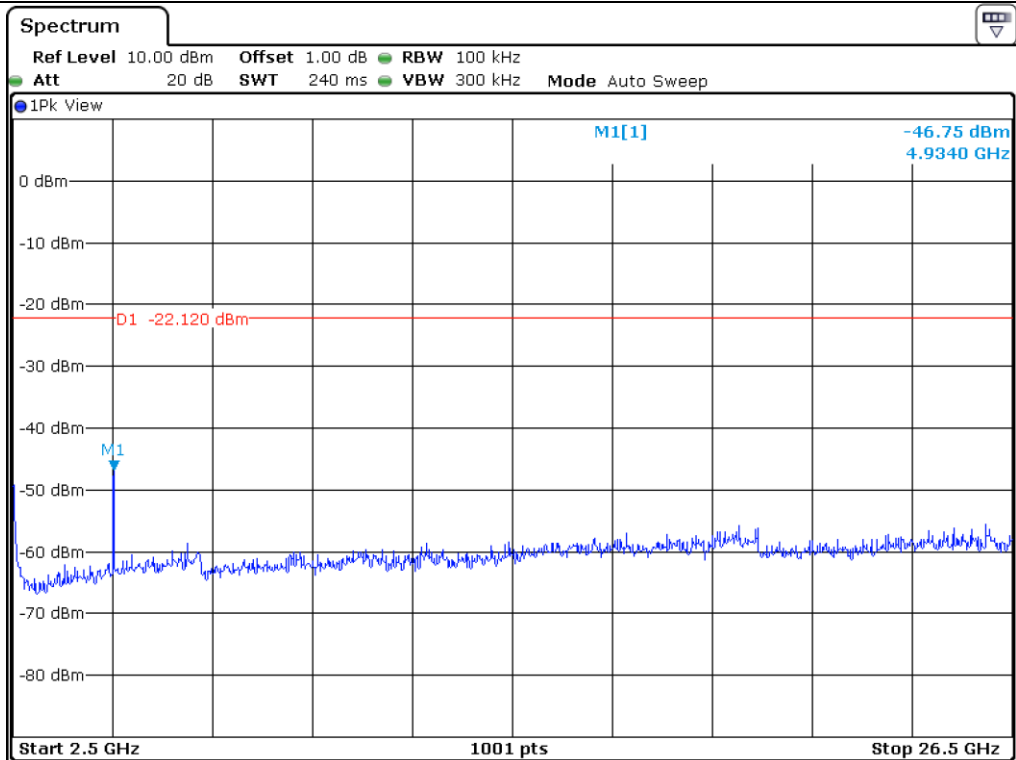
Middle Channel



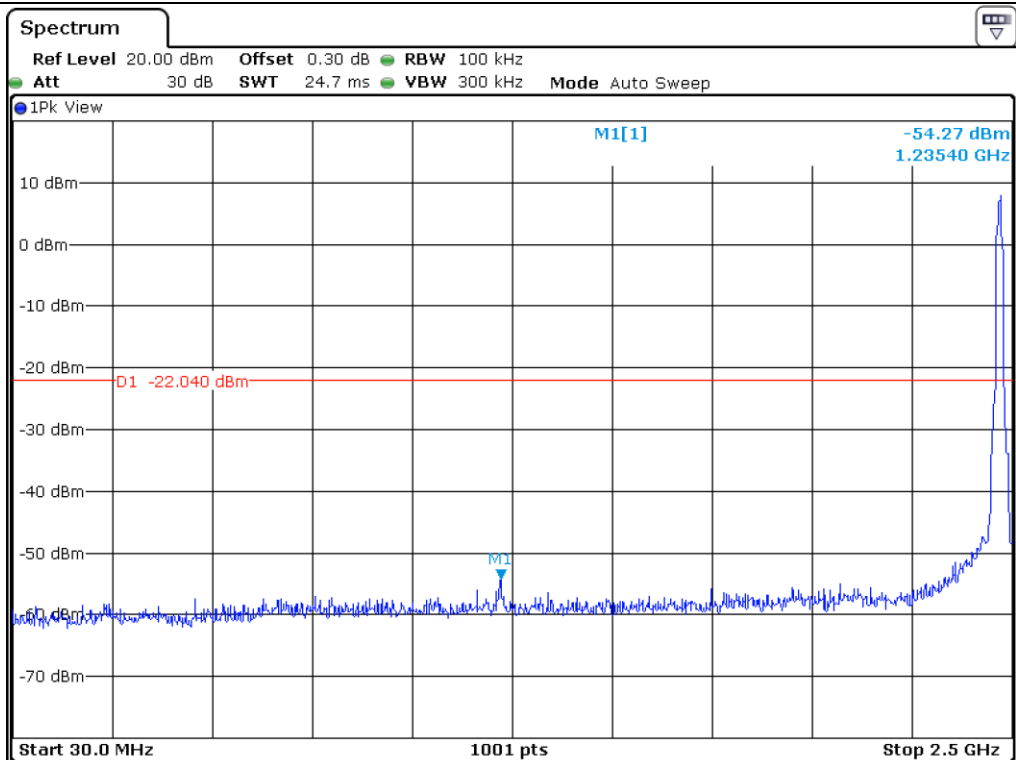
Middle Channel



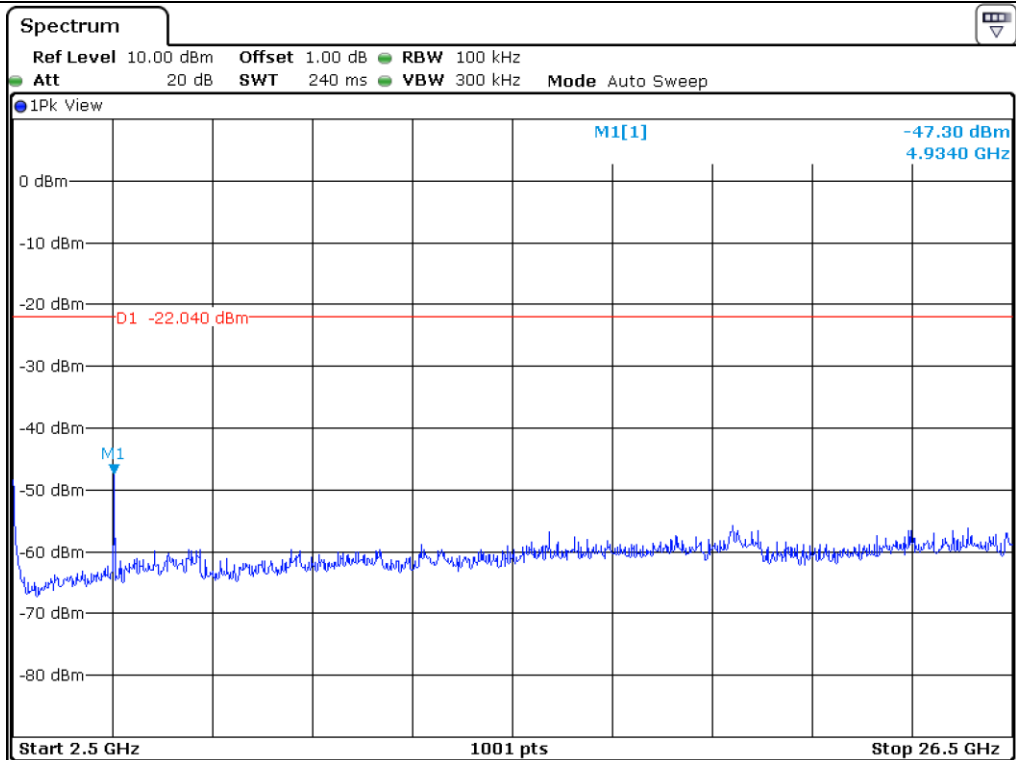
High Channel(Channel 11)



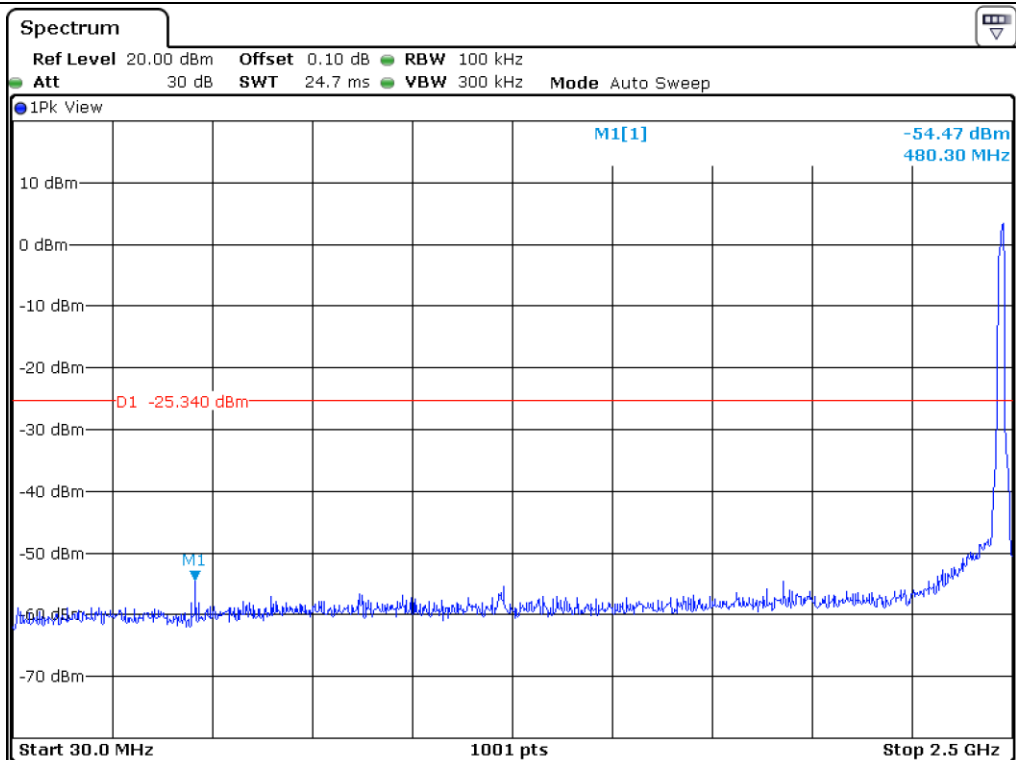
High Channel(Channel 11)



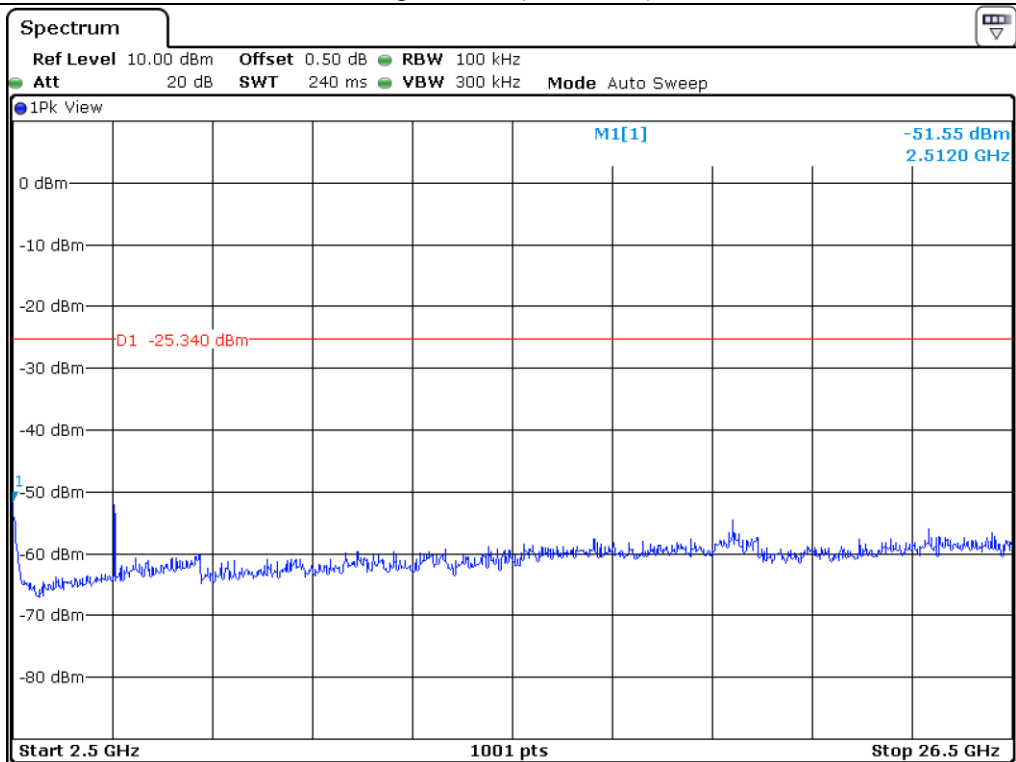
High Channel(Channel 12)



High Channel(Channel 12)



High Channel(Channel 13)



High Channel(Channel 13)