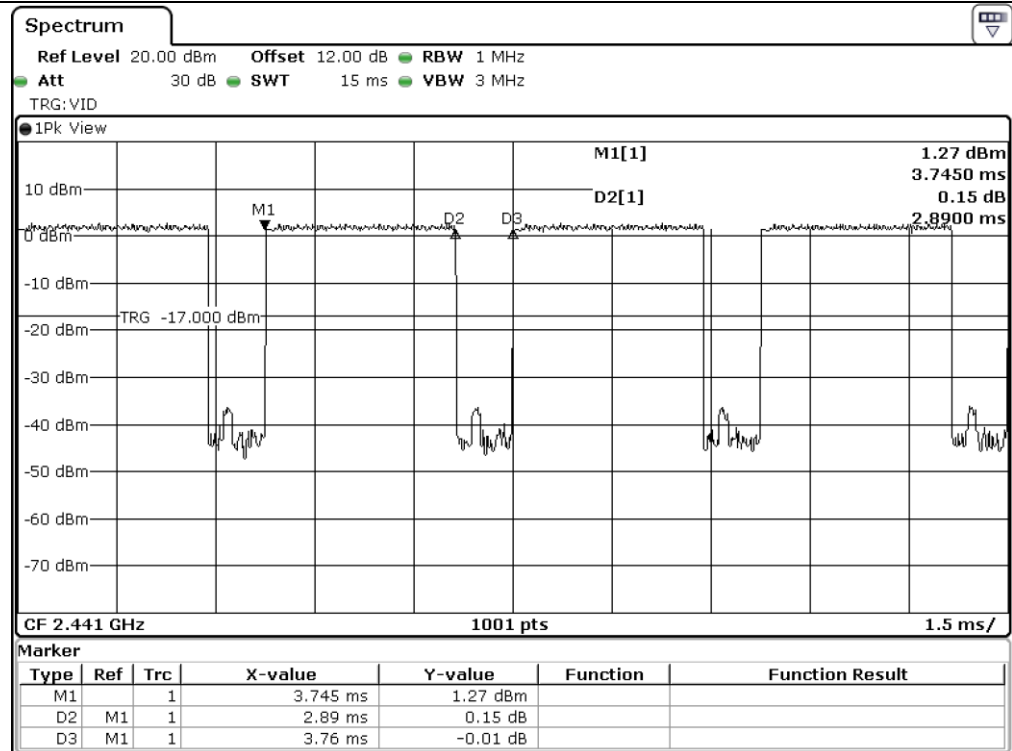


DH3



DH5

**10.5 Test Data for Right Side**

**10.5.1 Test data for 1 Mbps**

The system makes worst case 1 600 hops per second or 1 time slot has a length of 625 μs with 79 channels.

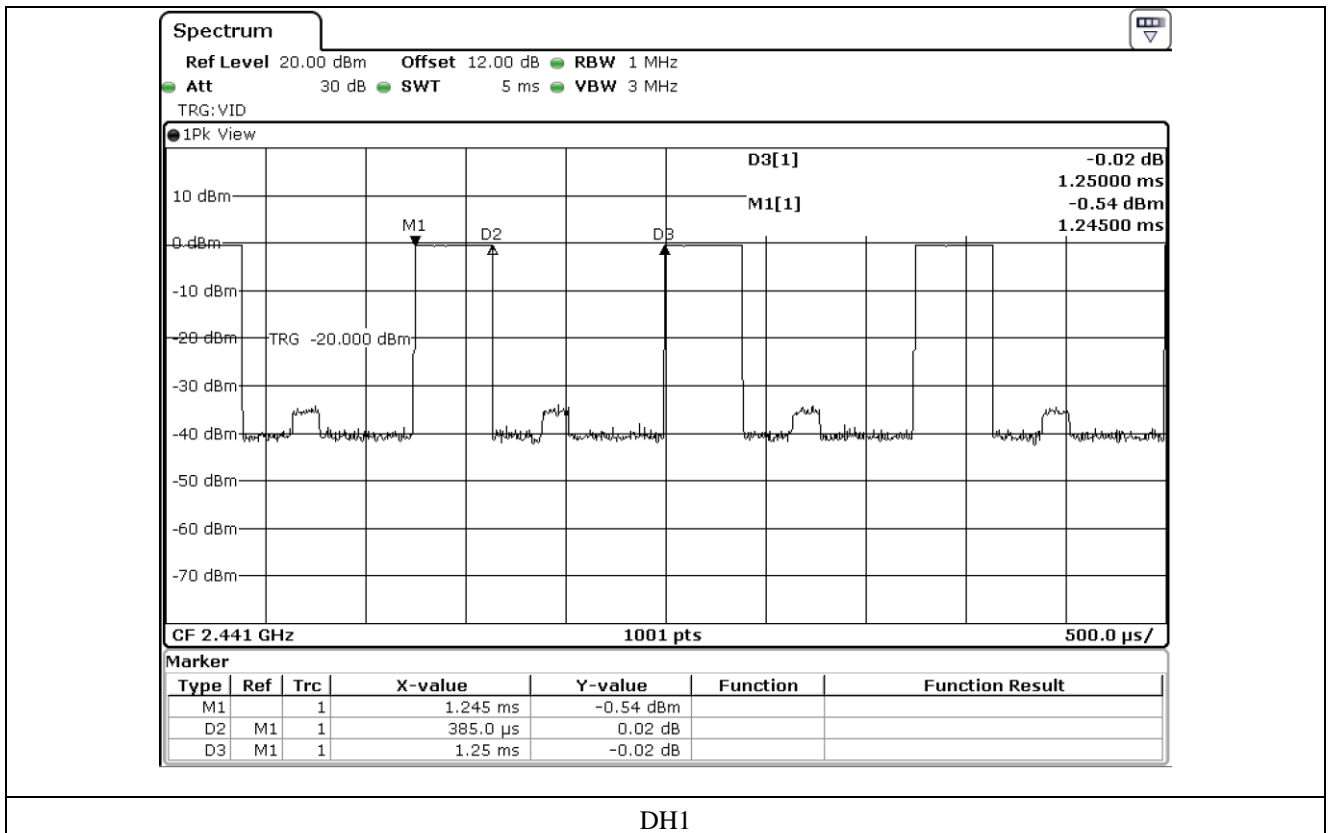
For DH1 packet type, the EUT needs 1 time slot for transmitting and 1 time slot for receiving and for DH3 packet type, the EUT needs 3 times slots for transmitting and 1 time slot for receiving, and DH5 packet needs 5 times slots for transmitting and 1 time slot for receiving. So The EUT has each channel for 10.13 times per second (= 1 600/2/79) for DH1, and 5.06 times (= 1 600/4/79) for DH3, and 3.38 times (= 1 600/6/79) for DH5.

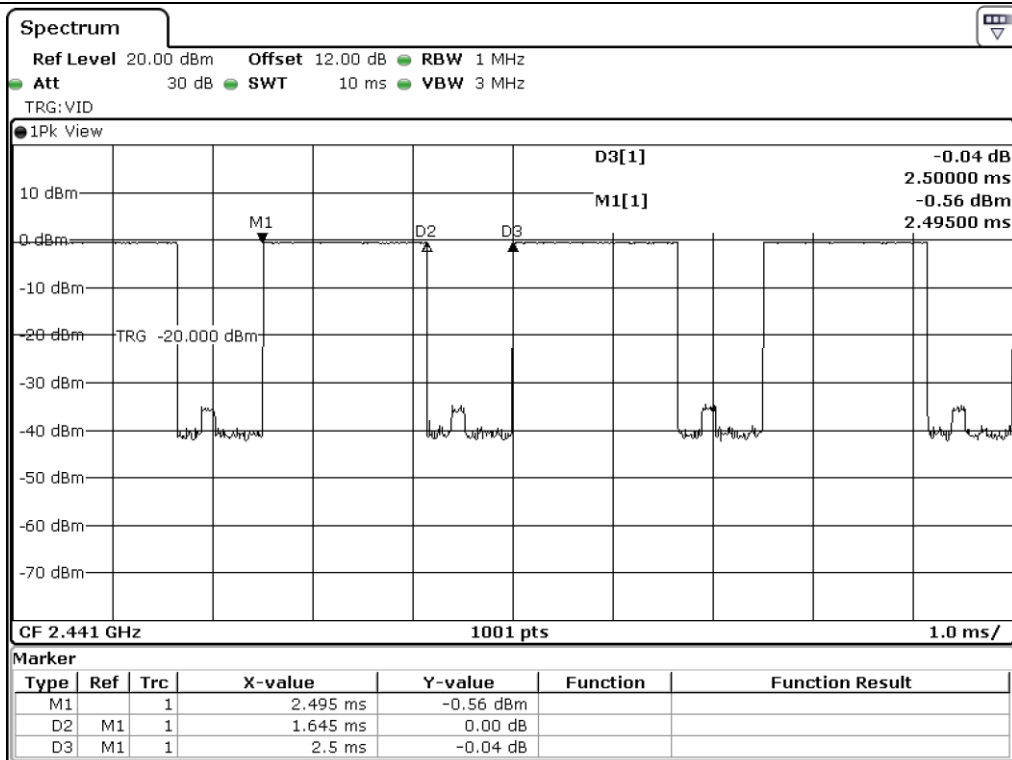
Packet Type	Pulse Time (ms)	Hops per second with channels	Period Time (ms)	Total Dwell Time (ms)	Limit (ms)	Test Result
DH1	0.385	10.13	31.60	123.24	400	PASS
DH3	1.645	5.06	31.60	263.03	400	
DH5	2.875	3.38	31.60	307.07	400	

Total dwell time is calculated as following.

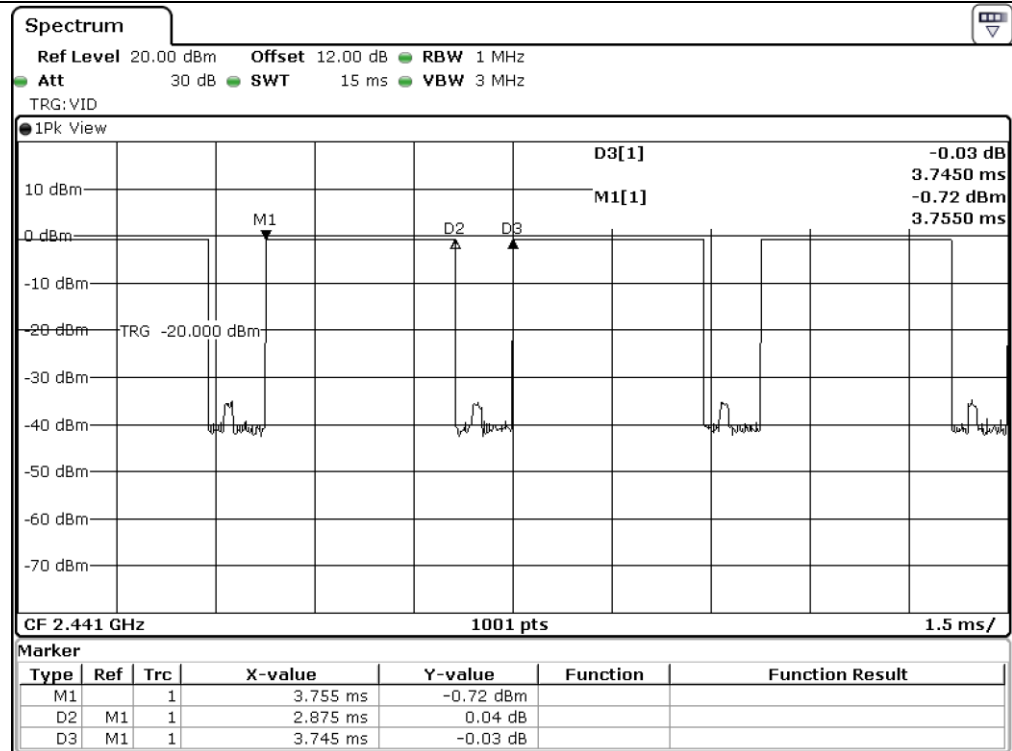
Total Dwell Time = Pulse time \* Hops per second with channels \* period time

Remark: See next page for an overview sweep performed with peak detector.





DH3



DH5

**10.5.2 Test data for 2 Mbps**

The system makes worst case 1 600 hops per second or 1 time slot has a length of 625 μs with 79 channels.

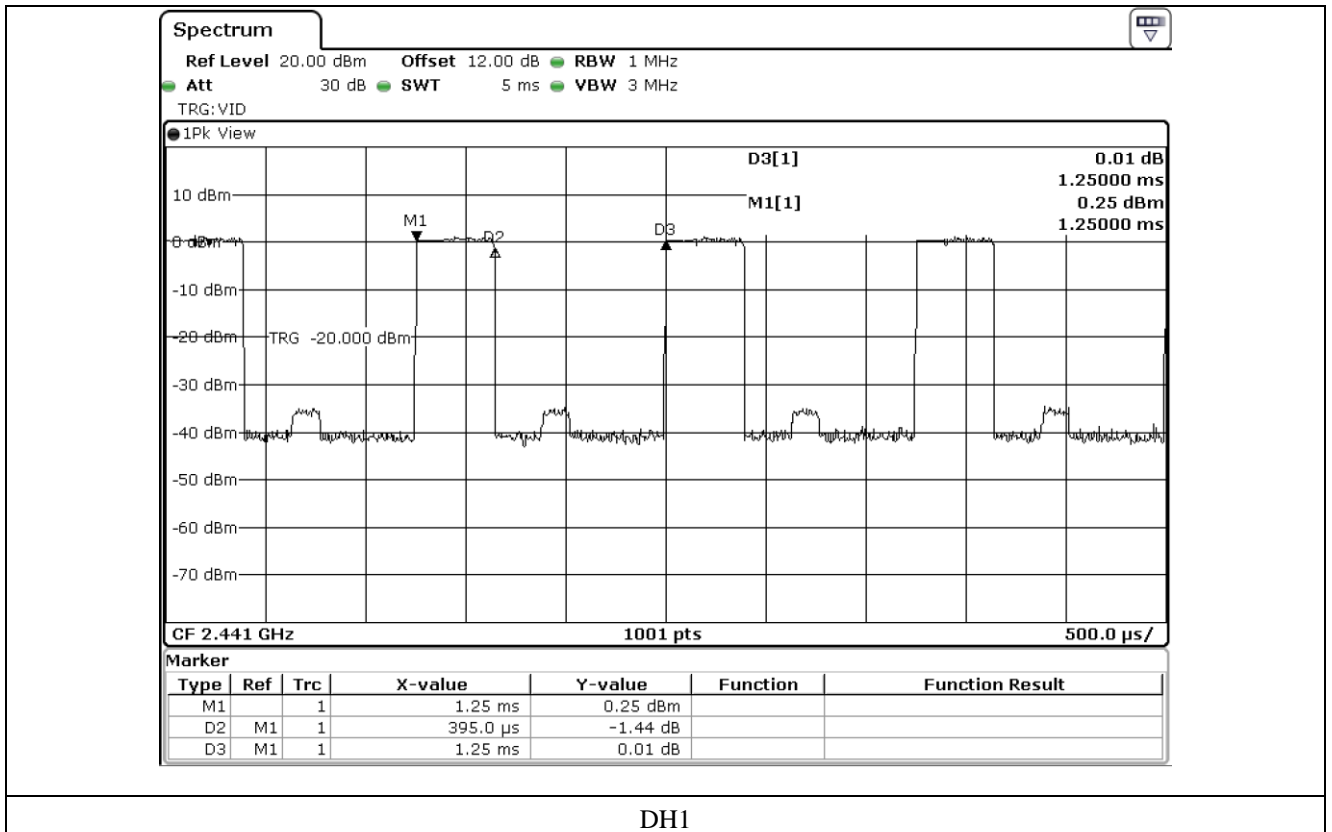
For DH1 packet type, the EUT needs 1 time slot for transmitting and 1 time slot for receiving and for DH3 packet type, the EUT needs 3 times slots for transmitting and 1 time slot for receiving, and DH5 packet needs 5 times slots for transmitting and 1 time slot for receiving. So The EUT has each channel for 10.13 times per second (= 1 600/2/79) for DH1, and 5.06 times (= 1 600/4/79) for DH3, and 3.38 times (= 1 600/6/79) for DH5.

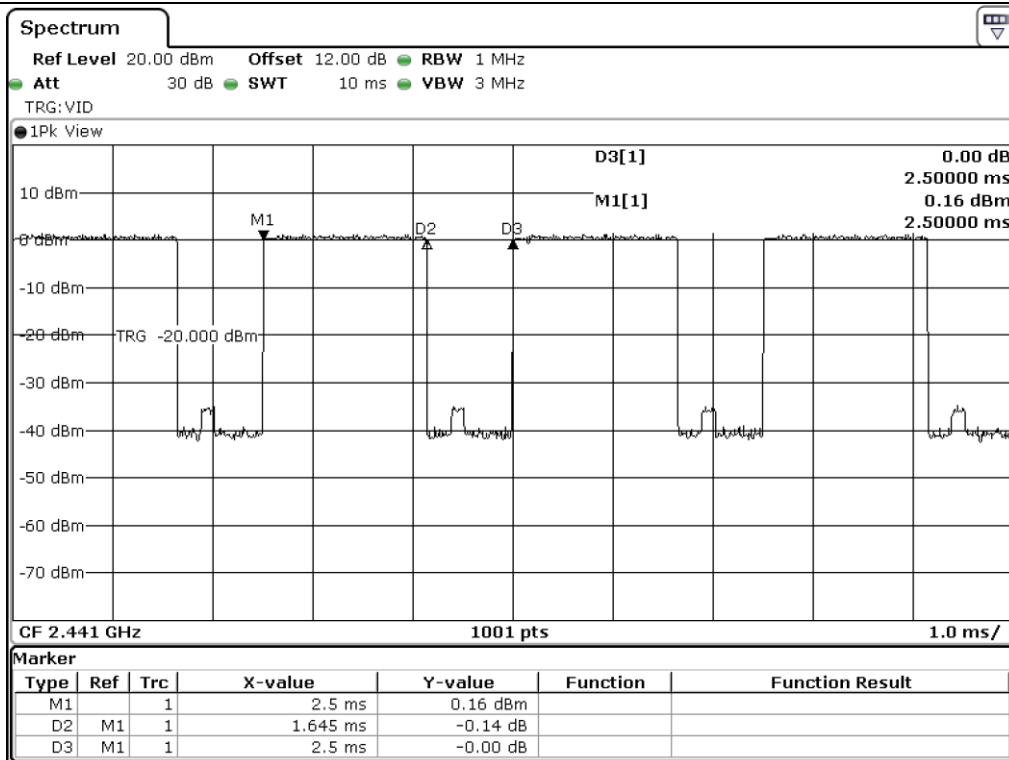
Packet Type	Pulse Time (ms)	Hops per second with channels	Period Time (ms)	Total Dwell Time (ms)	Limit (ms)	Test Result
DH1	0.395	10.13	31.60	126.44	400	PASS
DH3	1.645	5.06	31.60	263.03	400	
DH5	2.890	3.38	31.60	308.68	400	

Total dwell time is calculated as following.

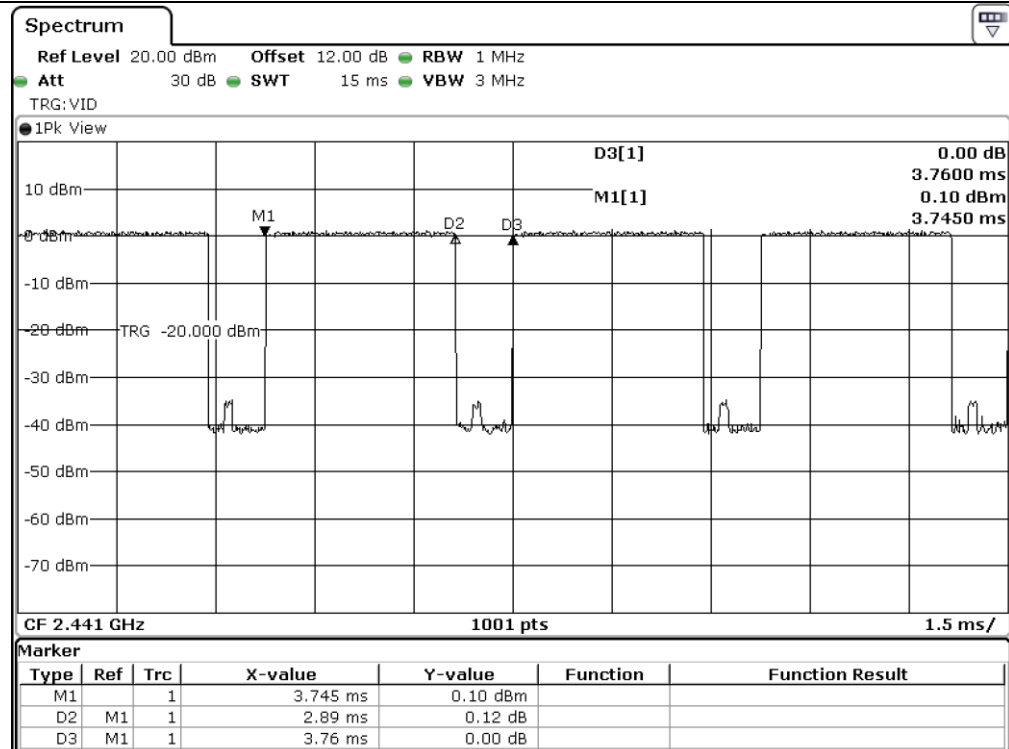
Total Dwell Time = Pulse time \* Hops per second with channels \* period time

Remark: See next page for an overview sweep performed with peak detector.





DH3



DH5

### 10.5.3 Test data for 3 Mbps

The system makes worst case 1 600 hops per second or 1 time slot has a length of 625 μs with 79 channels.

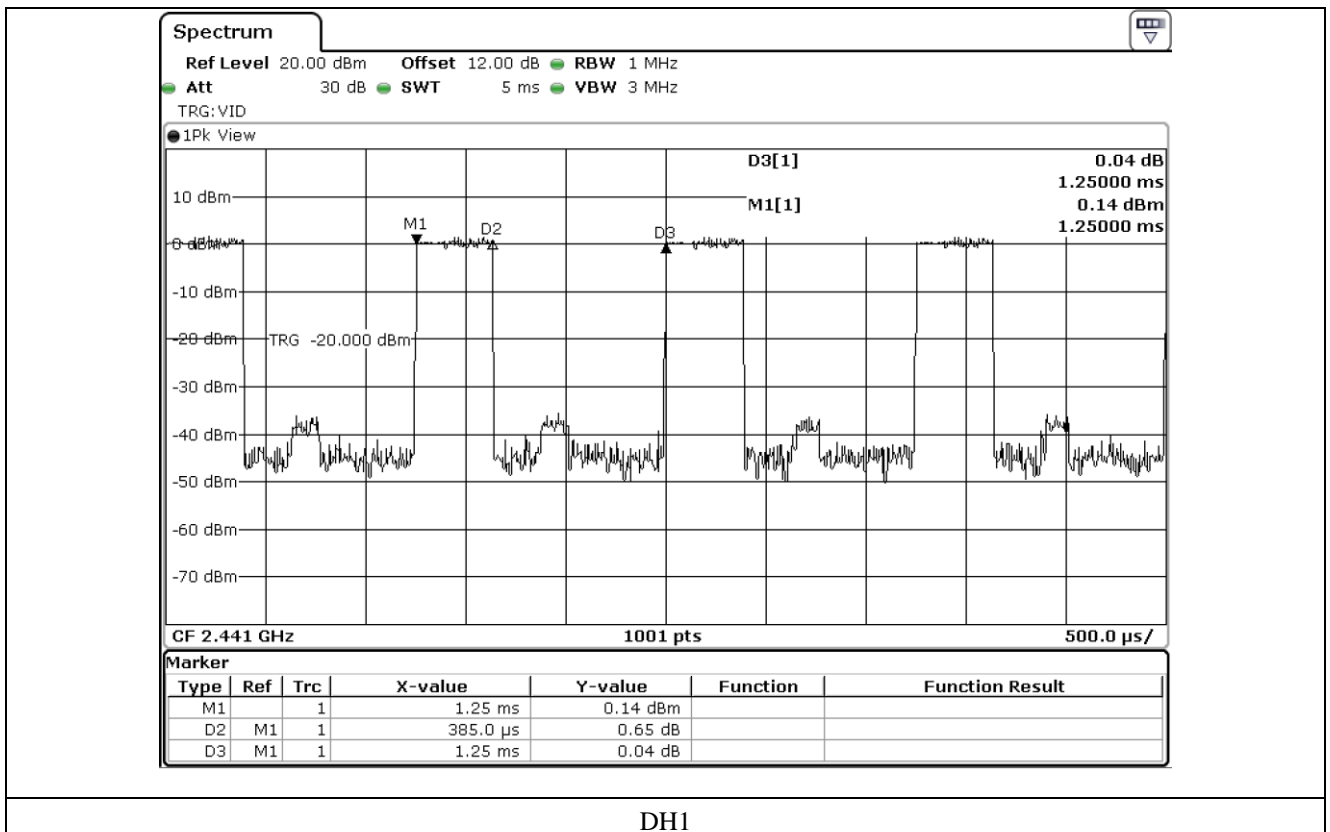
For DH1 packet type, the EUT needs 1 time slot for transmitting and 1 time slot for receiving and for DH3 packet type, the EUT needs 3 times slots for transmitting and 1 time slot for receiving, and DH5 packet needs 5 times slots for transmitting and 1 time slot for receiving. So The EUT has each channel for 10.13 times per second (= 1 600/2/79) for DH1, and 5.06 times (= 1 600/4/79) for DH3, and 3.38 times (= 1 600/6/79) for DH5.

Packet Type	Pulse Time (ms)	Hops per second with channels	Period Time (ms)	Total Dwell Time (ms)	Limit (ms)	Test Result
DH1	0.385	10.13	31.60	123.24	400	PASS
DH3	1.635	5.06	31.60	261.43	400	
DH5	2.895	3.38	31.60	309.21	400	

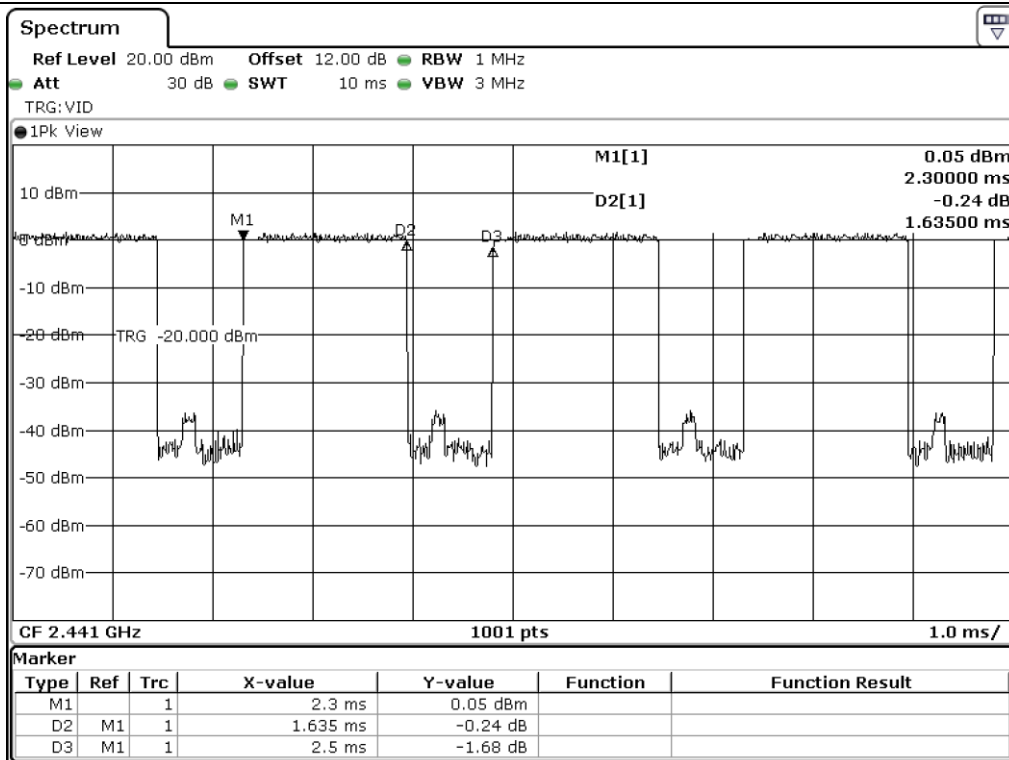
Total dwell time is calculated as following.

Total Dwell Time = Pulse time \* Hops per second with channels \* period time

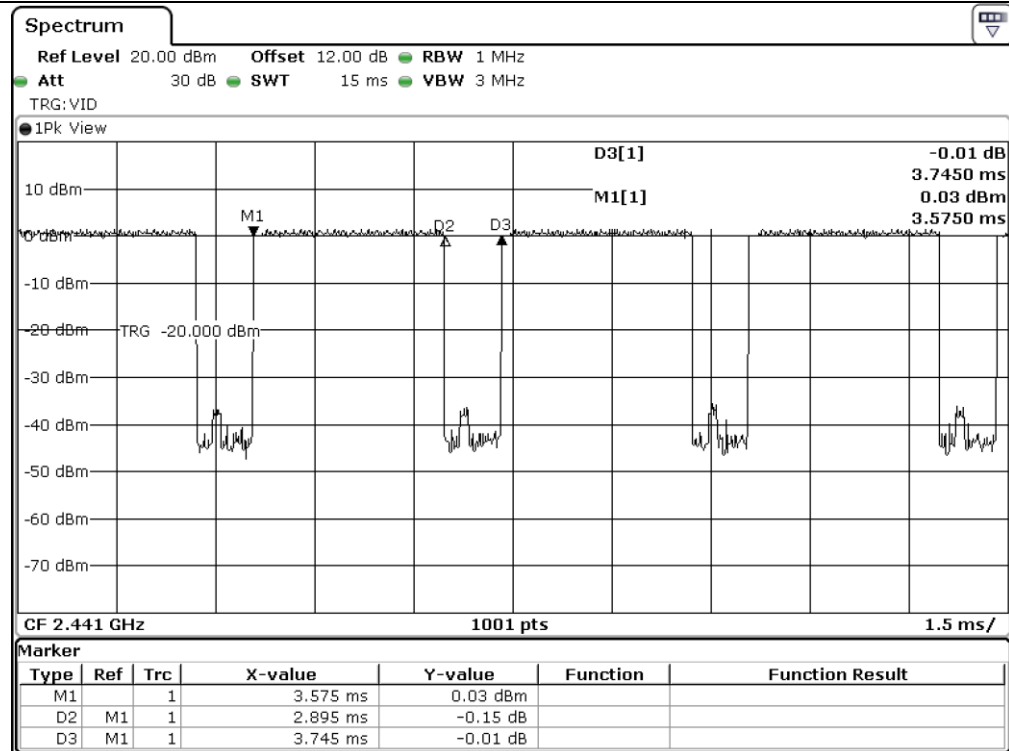
Remark: See next page for an overview sweep performed with peak detector.



DH1



DH3



DH5

## 11. MAXIMUM PEAK OUTPUT POWER

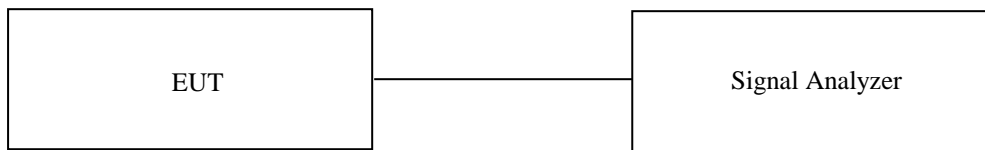
### 11.1 Operating environment

Temperature : 23 °C  
 Relative humidity : 45 % R.H.

### 11.2 Test set-up

The antenna output of the EUT was connected to the spectrum analyzer.

The resolution bandwidth is set to  $\geq$  DTS Bandwidth, the video bandwidth is set to 3 times the resolution bandwidth.



### 11.3 Test Date

January 07, 2021 ~ January 28, 2021



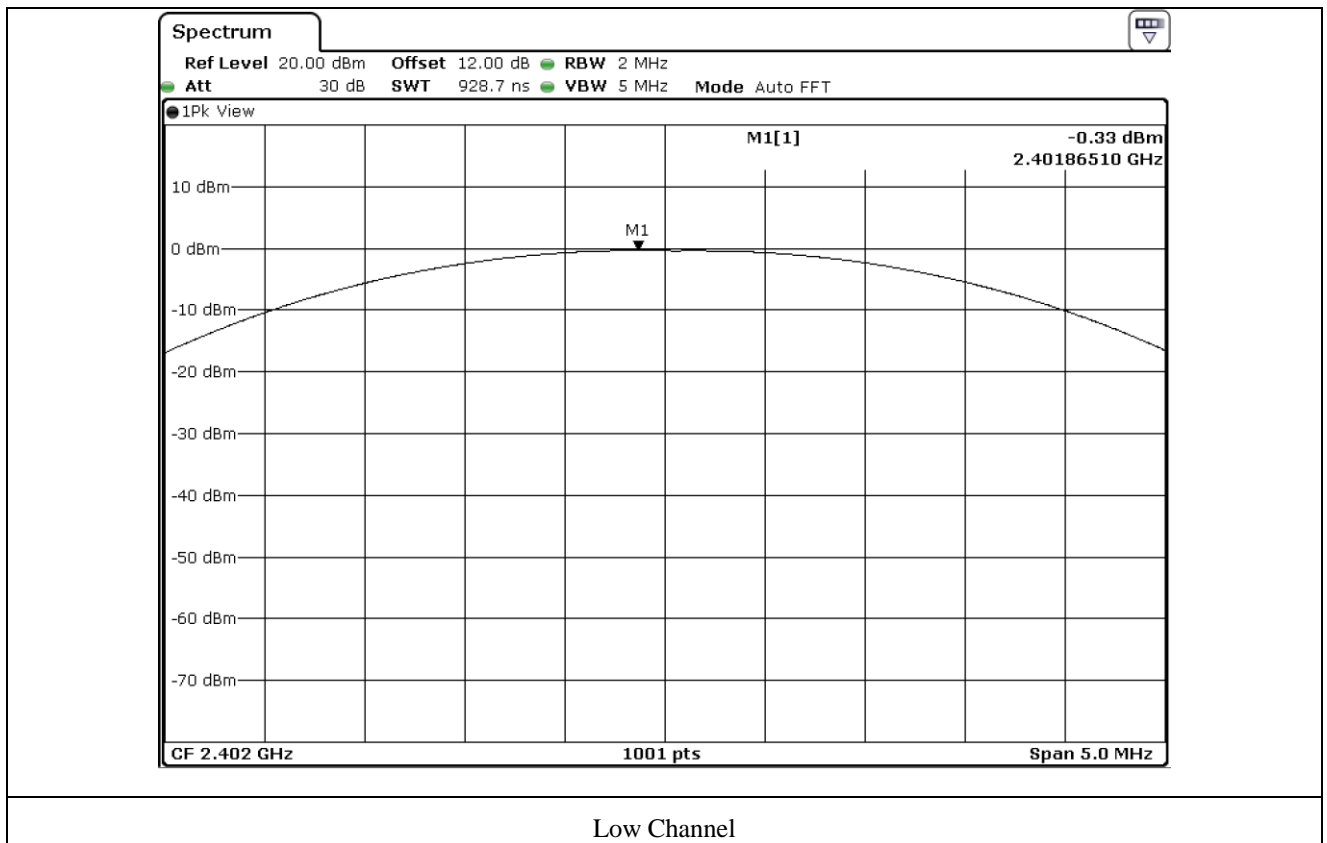
**11.4 Test Data for Left Side**

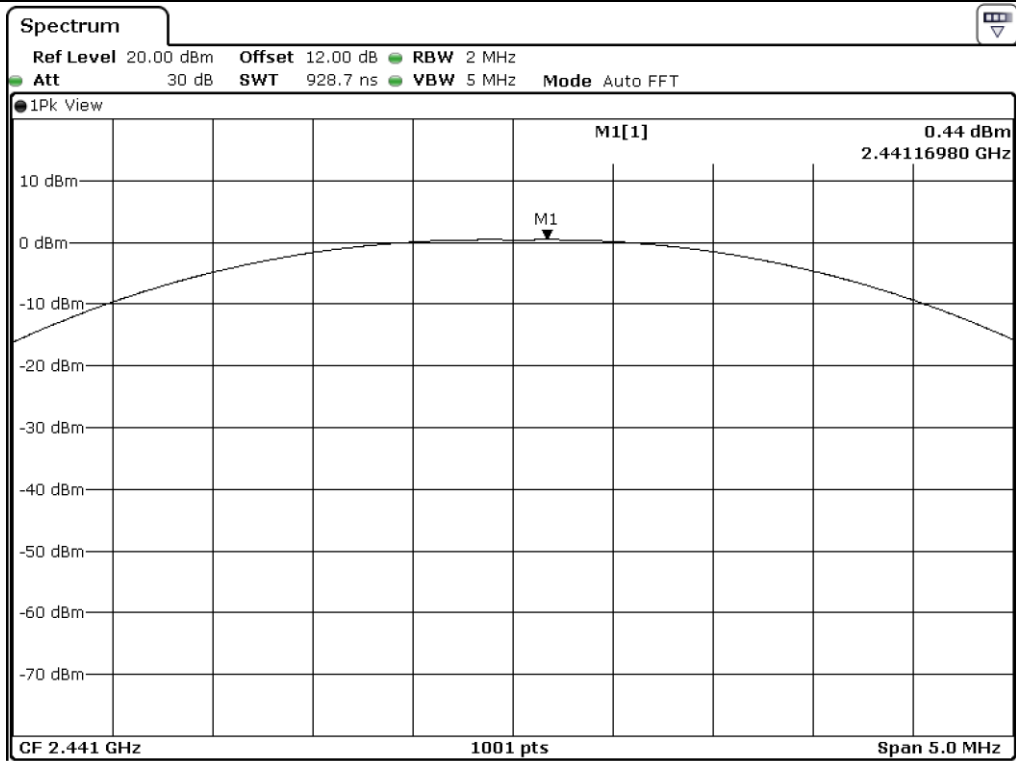
**11.4.1 Test data for 1 Mbps**

-. Test Result : Pass

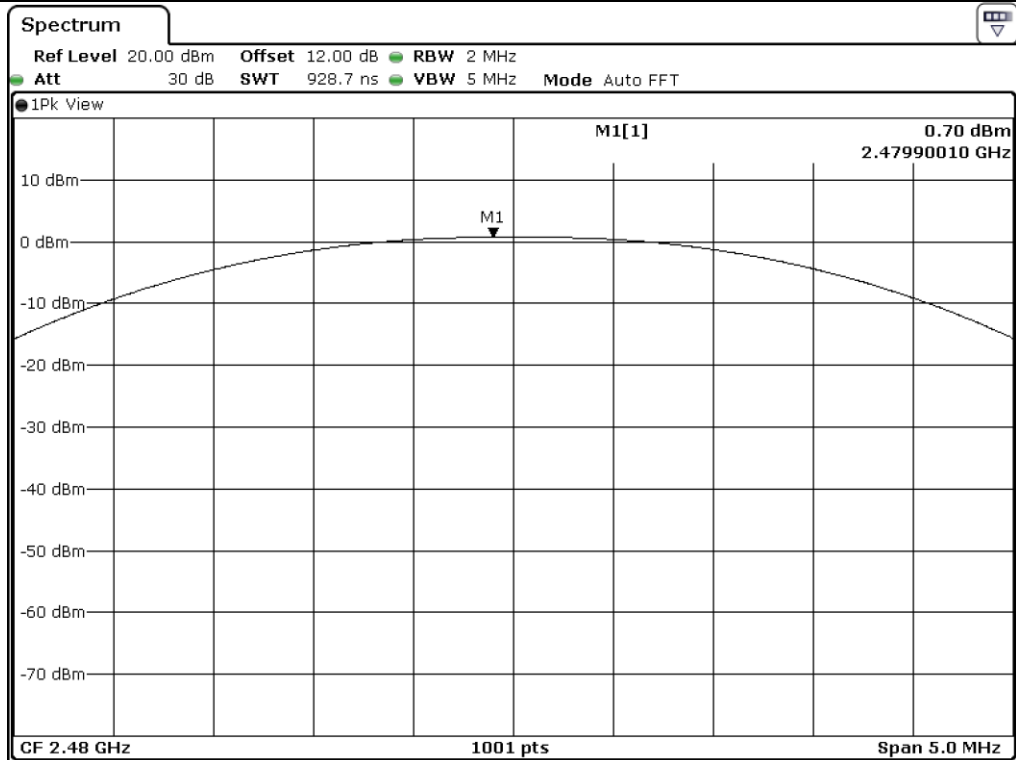
Channel	Frequency (MHz)	Measured Value (dBm)	Limit (dBm)	Margin (dB)
Low	2 402.00	-0.33	21.00	21.33
Middle	2 441.00	0.44	21.00	20.56
High	2 480.00	0.70	21.00	20.30

Remark. Margin = Limit – Measured Value (=Receiver Reading + Cable Loss)





Middle Channel



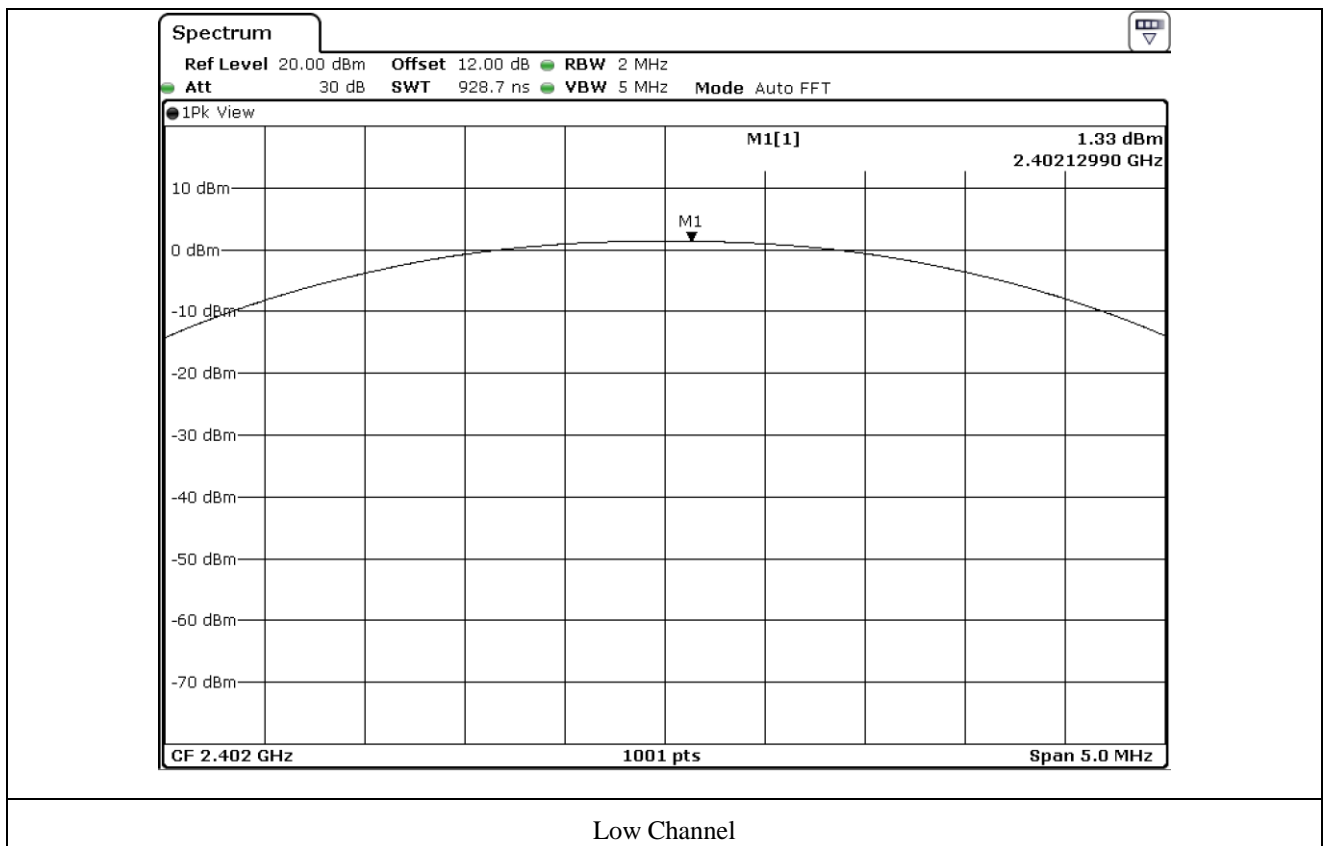
High Channel

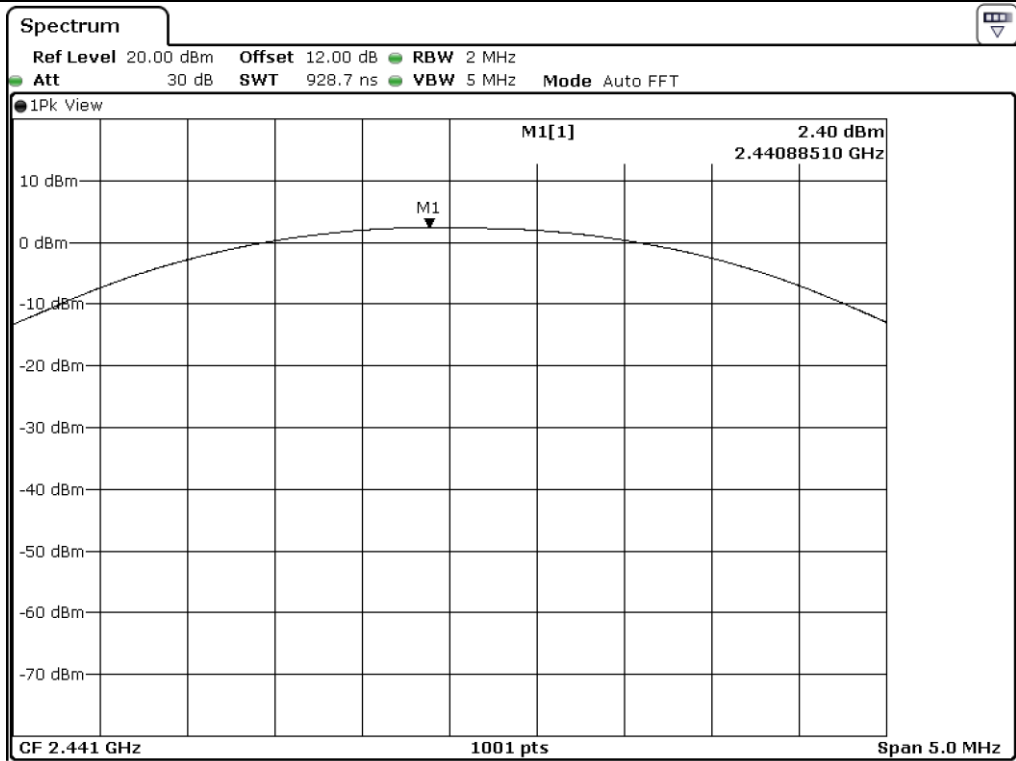
### 11.4.2 Test data for 2 Mbps

-. Test Result : Pass

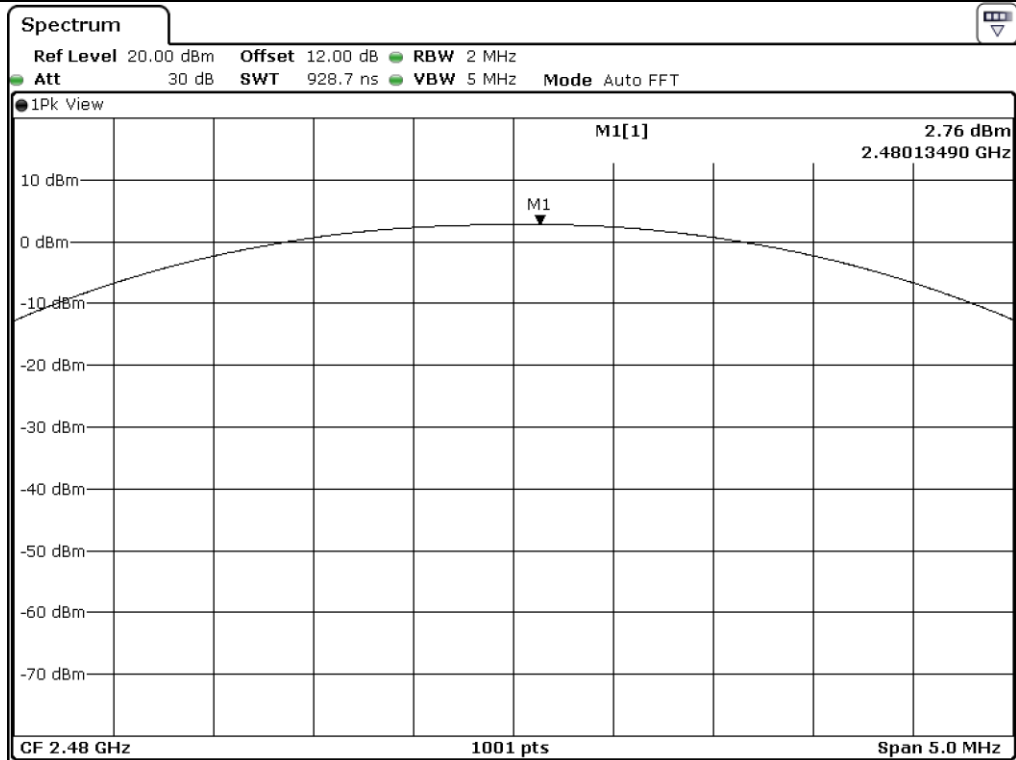
Channel	Frequency (MHz)	Measured Value (dBm)	Limit (dBm)	Margin (dB)
Low	2 402.00	1.33	21.00	19.67
Middle	2 441.00	2.40	21.00	18.60
High	2 480.00	2.76	21.00	18.24

Remark. Margin = Limit – Measured Value (=Receiver Reading + Cable Loss)





Middle Channel



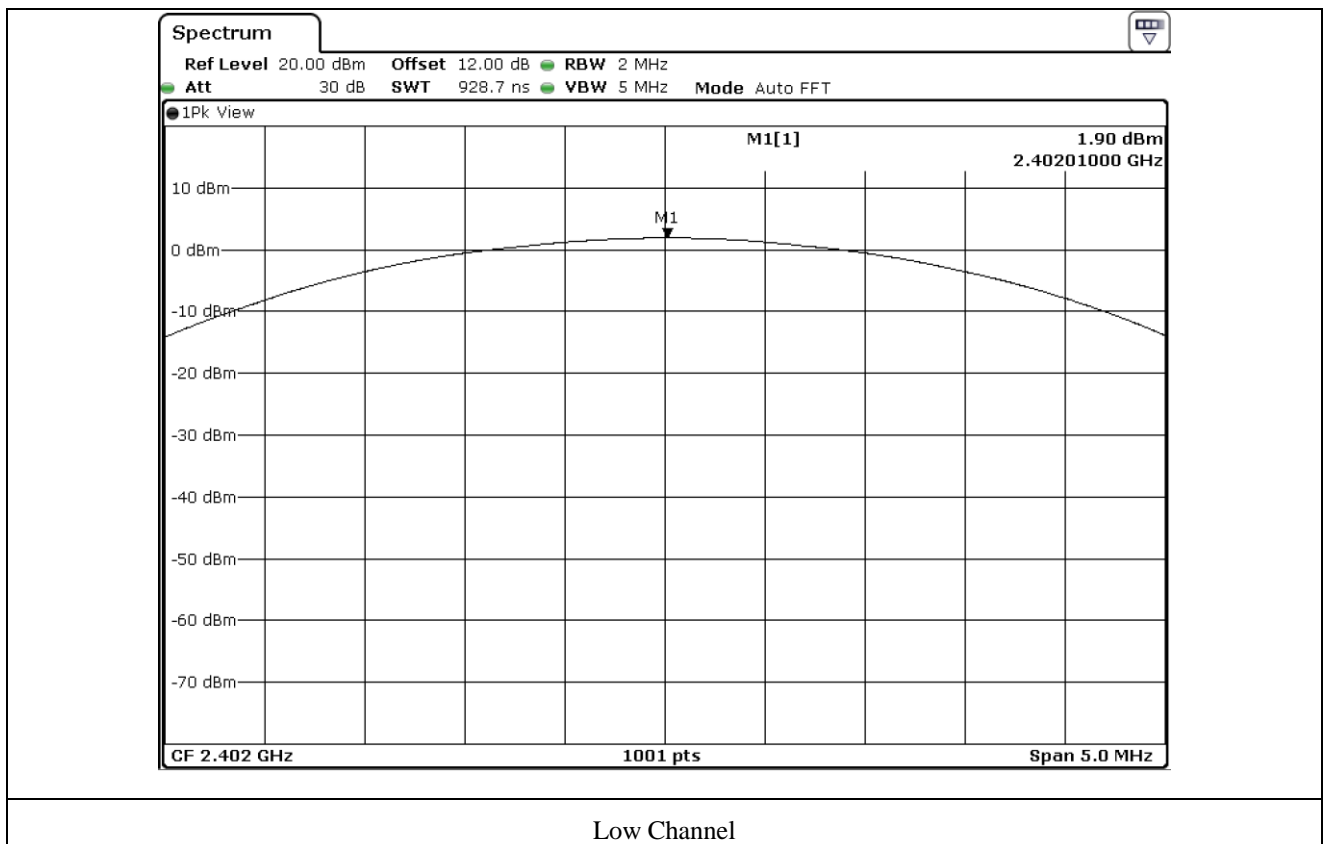
High Channel

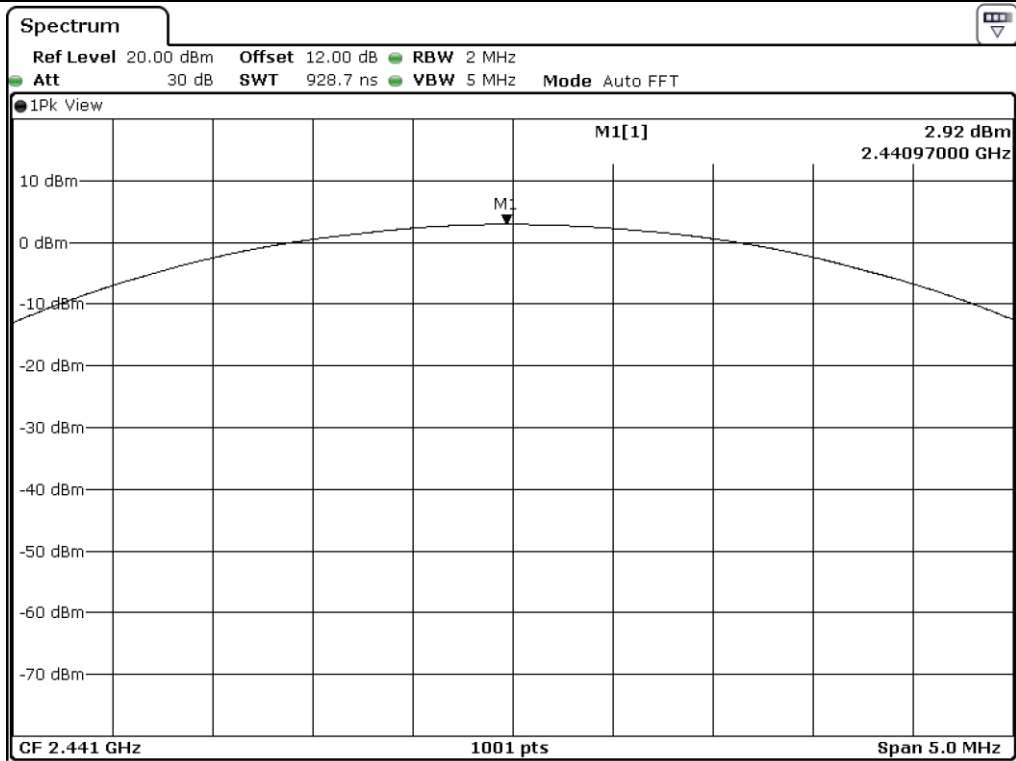
### 11.4.3 Test data for 3 Mbps

-. Test Result : Pass

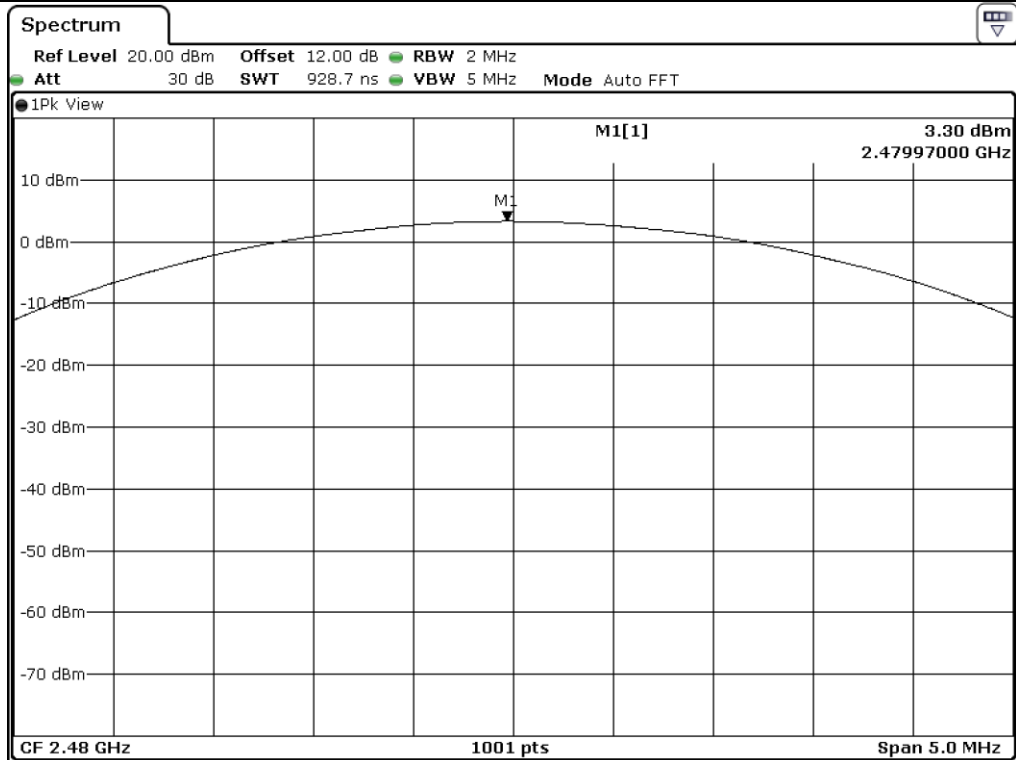
Channel	Frequency (MHz)	Measured Value (dBm)	Limit (dBm)	Margin (dB)
Low	2 402.00	1.90	21.00	19.10
Middle	2 441.00	2.92	21.00	18.08
High	2 480.00	3.30	21.00	17.70

Remark. Margin = Limit – Measured Value (=Receiver Reading + Cable Loss)





Middle Channel



High Channel

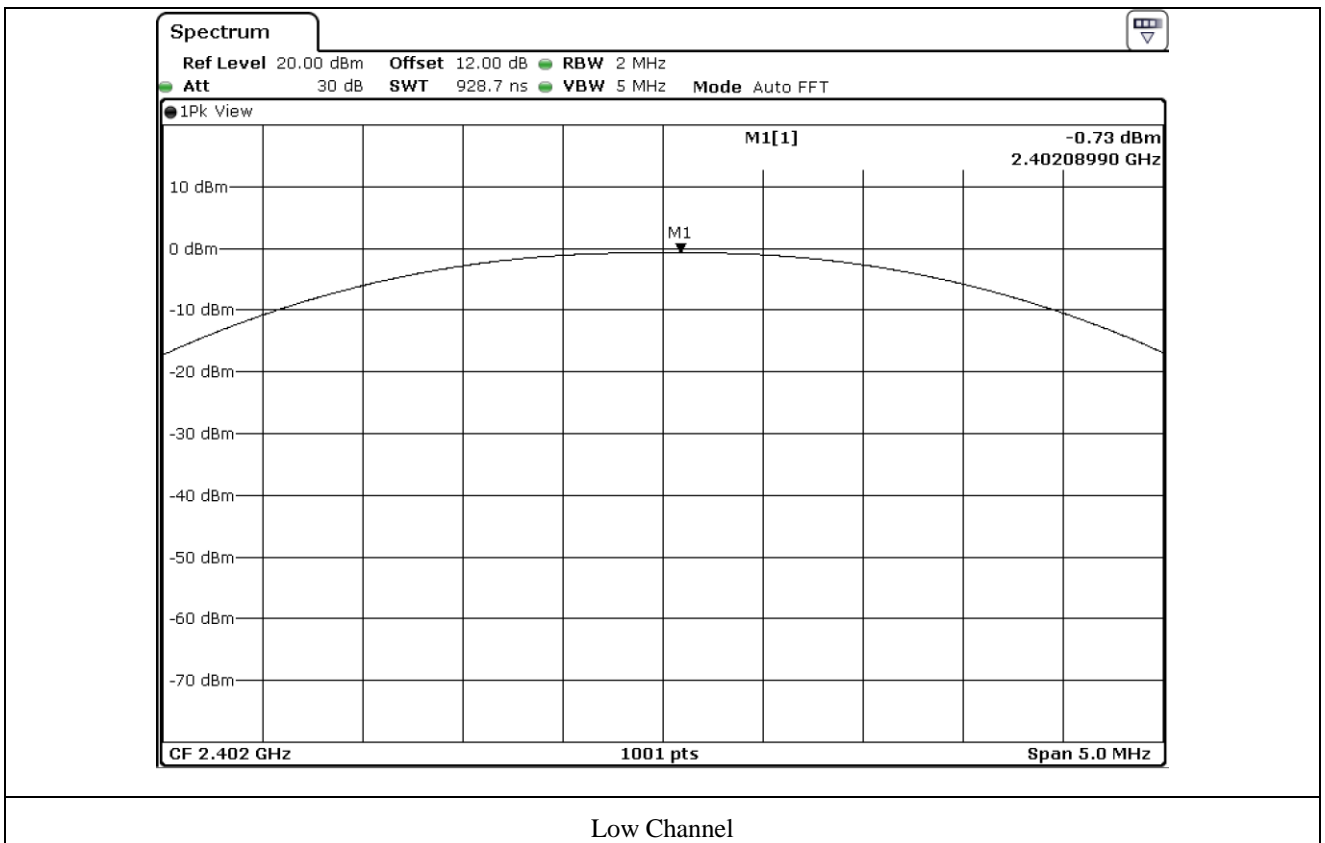
### 11.5 Test Data for Right Side

#### 11.5.1 Test data for 1 Mbps

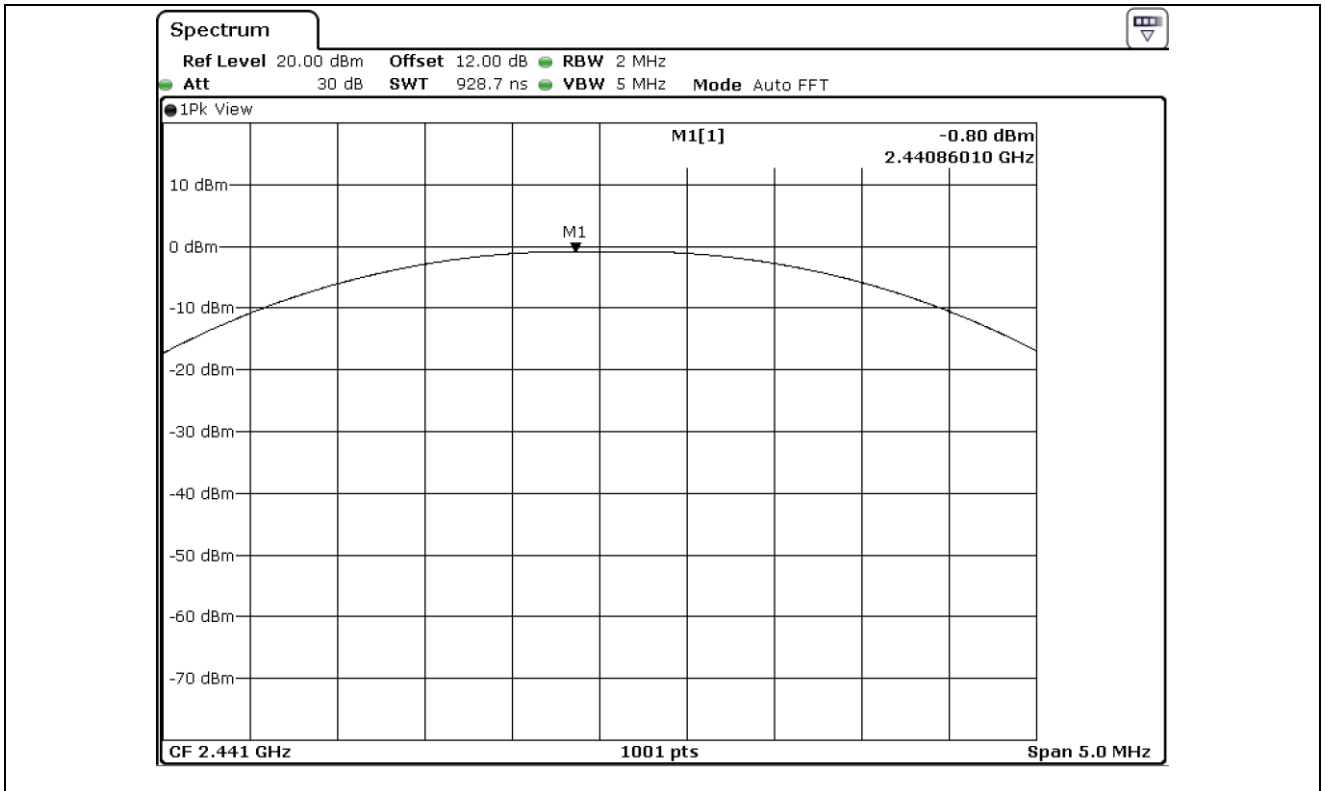
-. Test Result : Pass

Channel	Frequency (MHz)	Measured Value (dBm)	Limit (dBm)	Margin (dB)
Low	2 402.00	-0.73	21.00	21.73
Middle	2 441.00	-0.80	21.00	21.80
High	2 480.00	-0.71	21.00	21.71

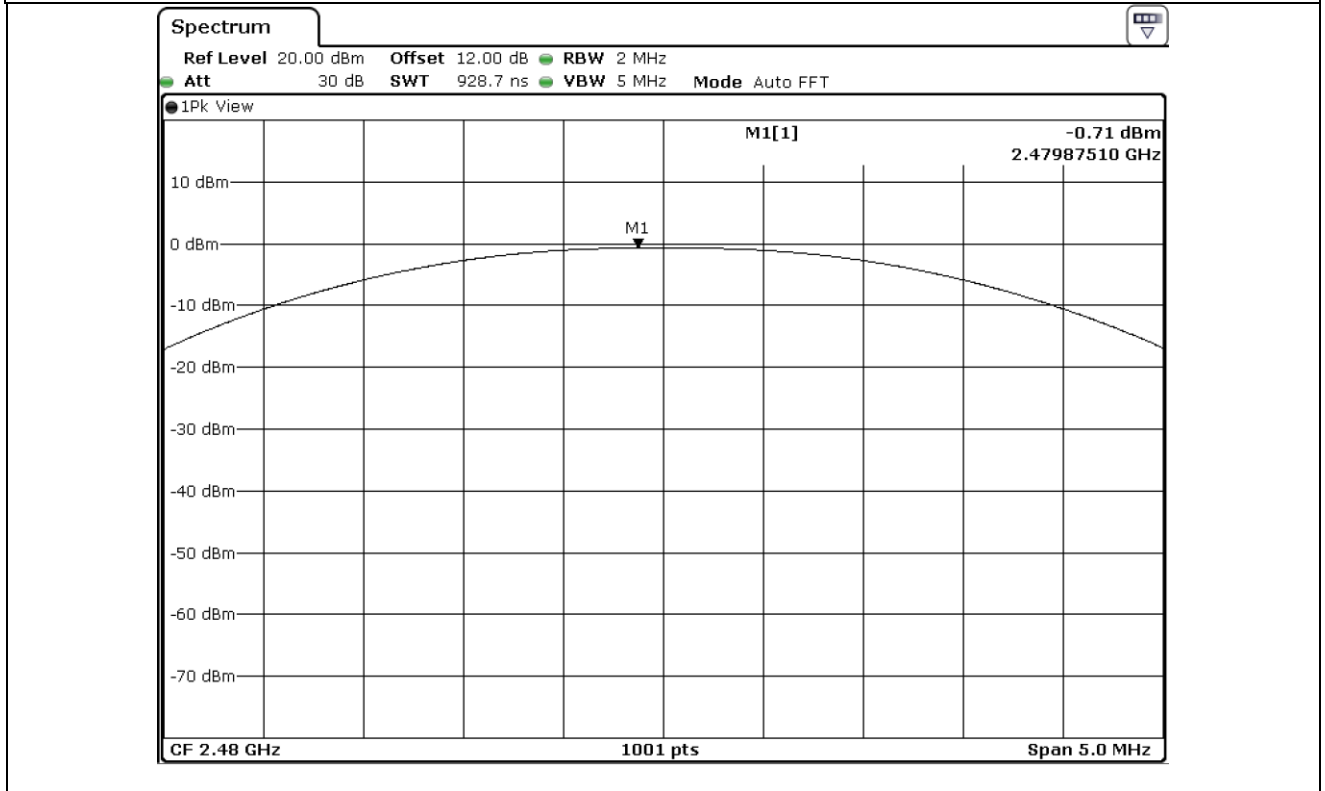
Remark. Margin = Limit – Measured Value (=Receiver Reading + Cable Loss)



Low Channel



Middle Channel



High Channel

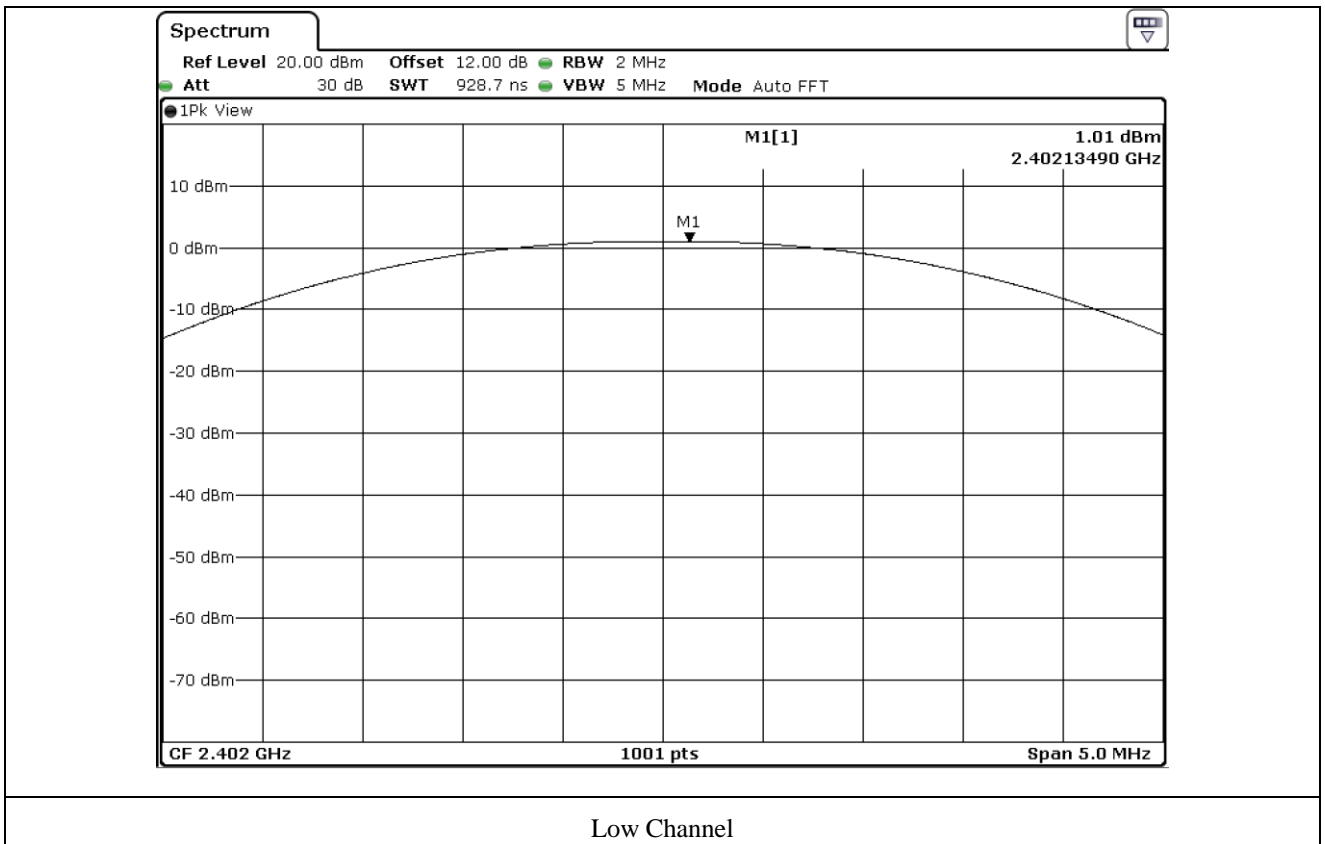


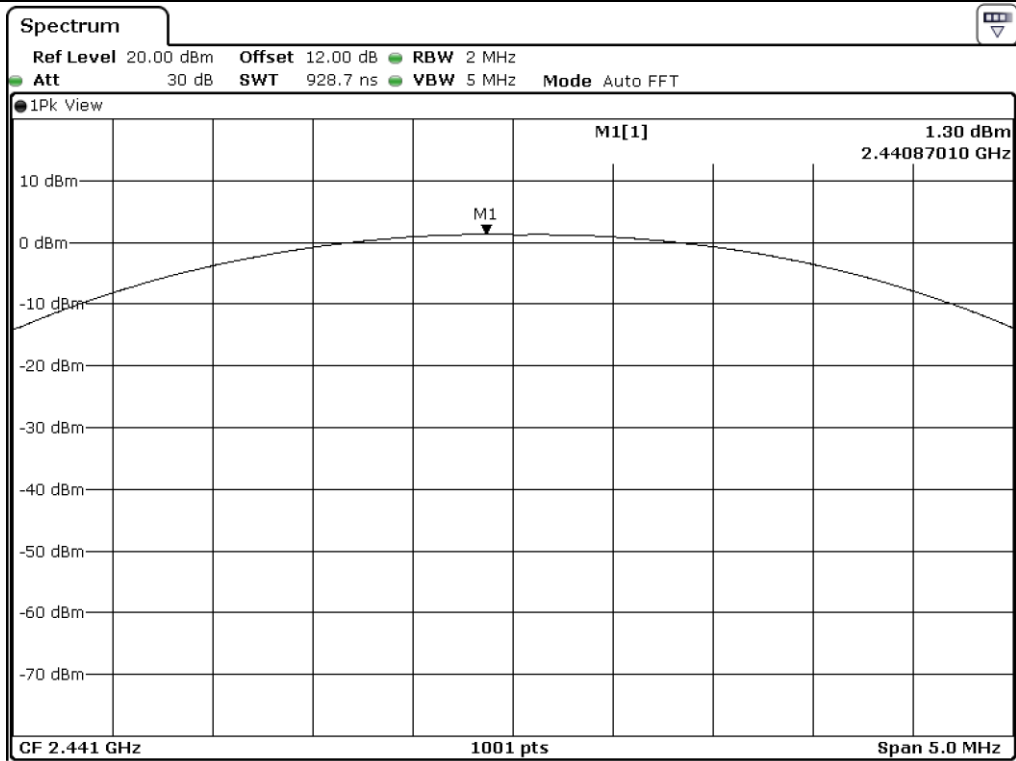
### 11.5.2 Test data for 2 Mbps

-. Test Result : Pass

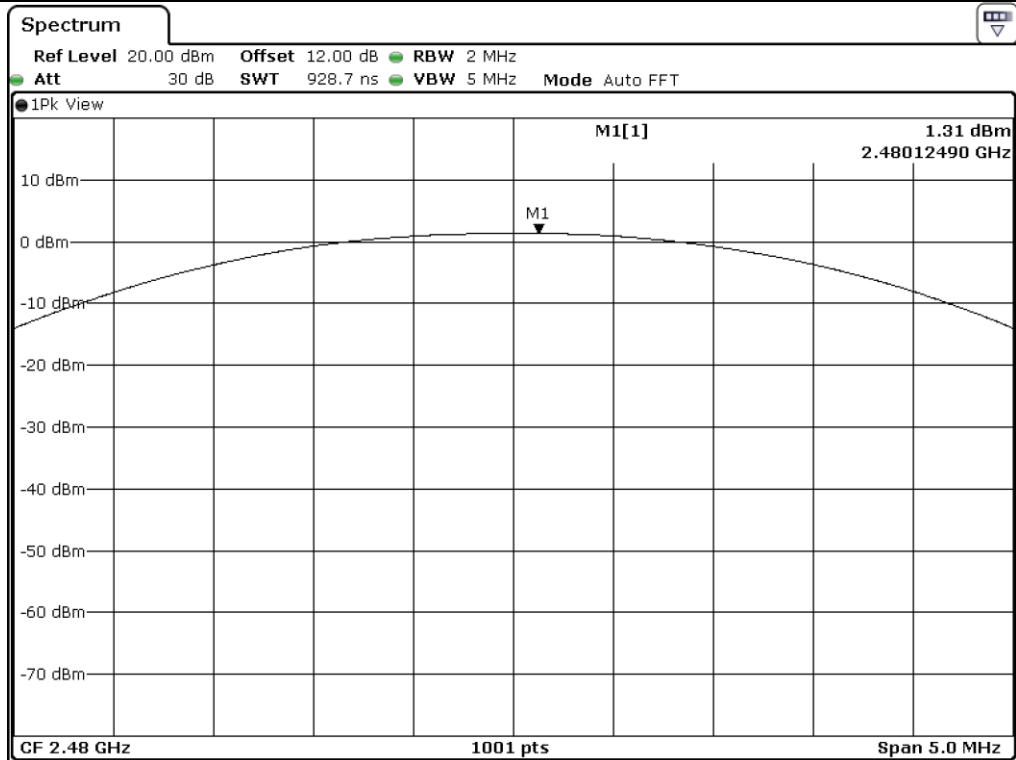
Channel	Frequency (MHz)	Measured Value (dBm)	Limit (dBm)	Margin (dB)
Low	2 402.00	1.01	21.00	19.99
Middle	2 441.00	1.30	21.00	19.70
High	2 480.00	1.31	21.00	19.69

Remark. Margin = Limit – Measured Value (=Receiver Reading + Cable Loss)





Middle Channel



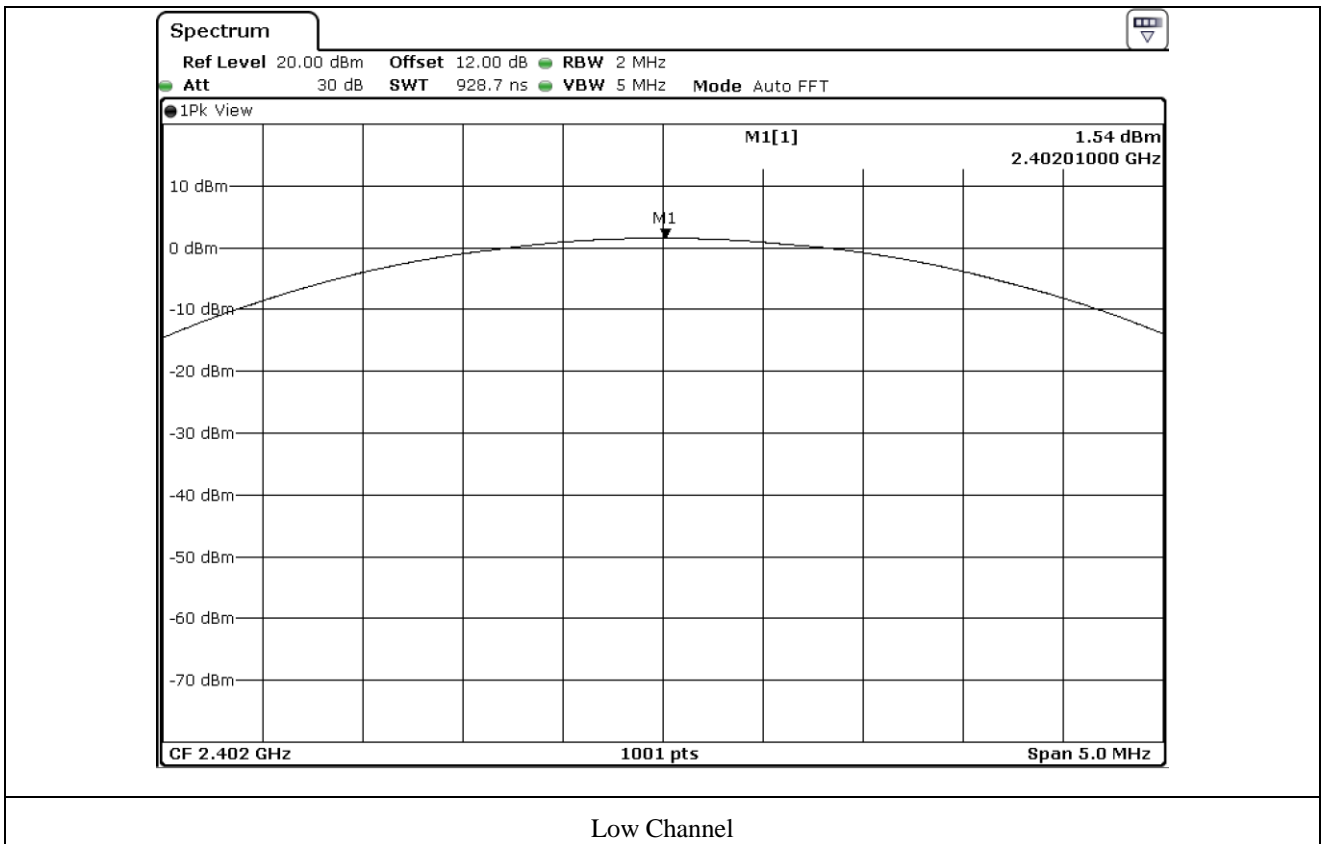
High Channel

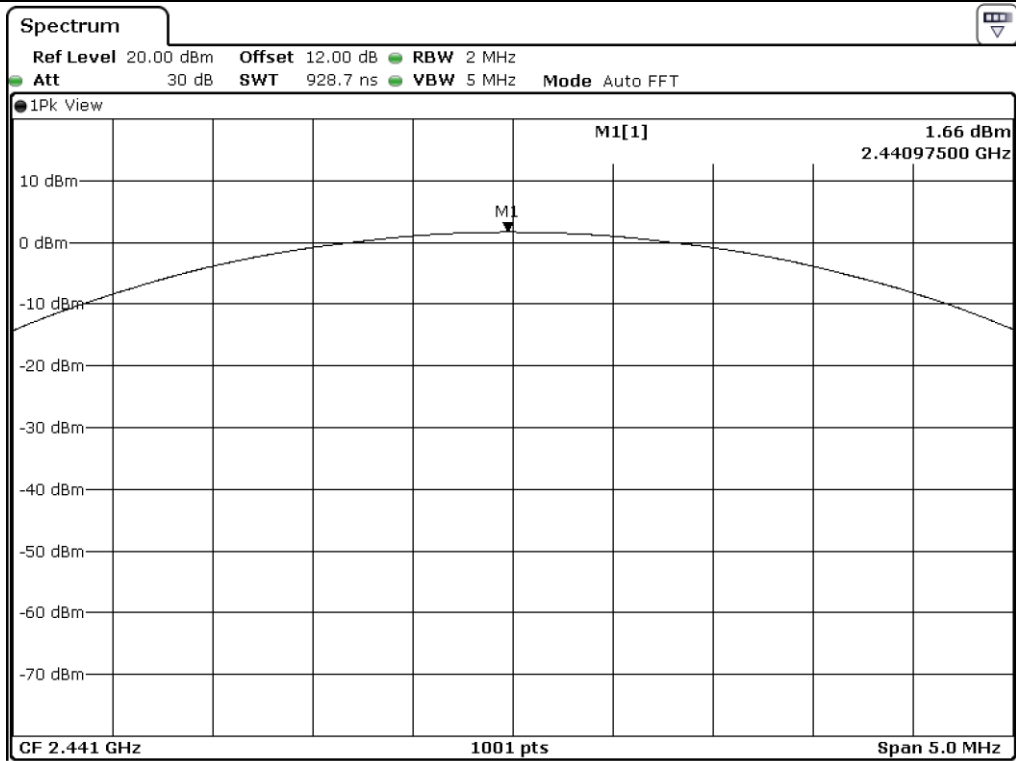
**11.5.3 Test data for 3 Mbps**

-. Test Result : Pass

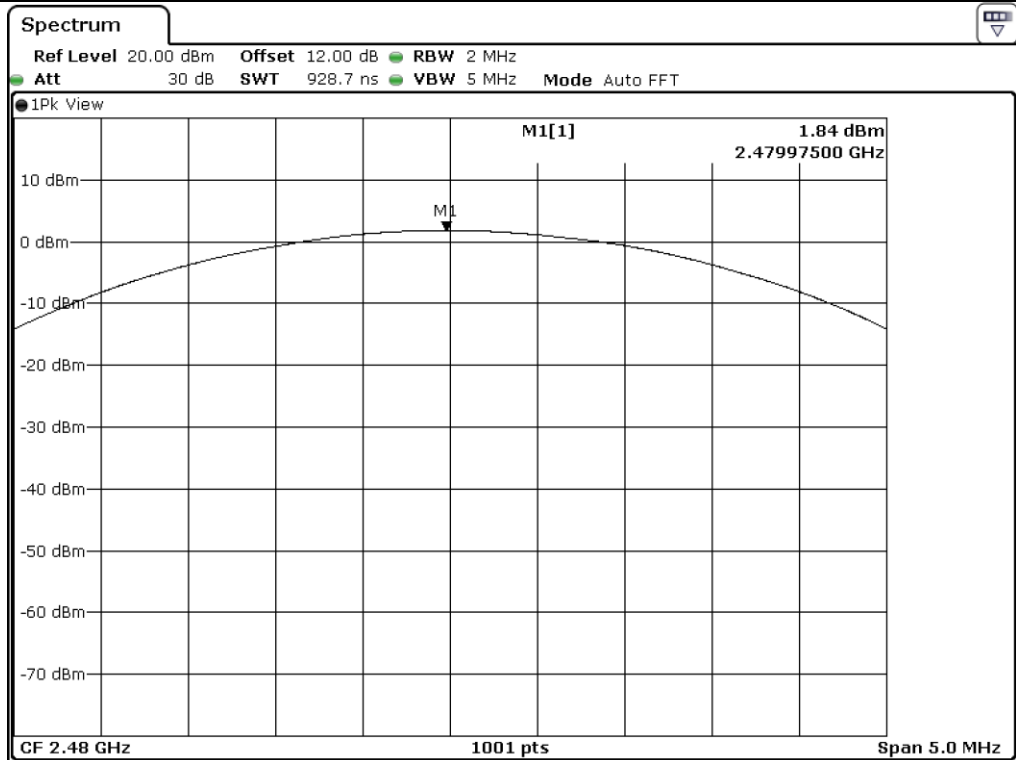
Channel	Frequency (MHz)	Measured Value (dBm)	Limit (dBm)	Margin (dB)
Low	2 402.00	1.54	21.00	19.46
Middle	2 441.00	1.66	21.00	19.34
High	2 480.00	1.84	21.00	19.16

Remark. Margin = Limit – Measured Value (=Receiver Reading + Cable Loss)





Middle Channel



High Channel

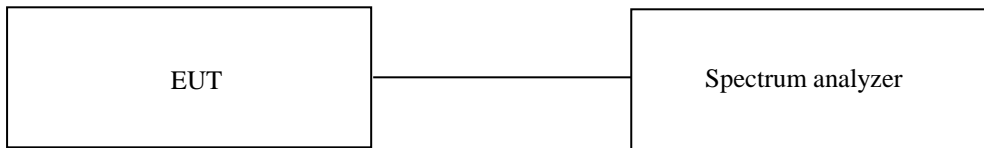
## 12. 100 kHz BANDWIDTH OUTSIDE THE FREQUENCY BAND

### 12.1 Operating environment

Temperature : 23 °C  
 Relative humidity : 45 % R.H.

### 12.2 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.



### 12.3 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.

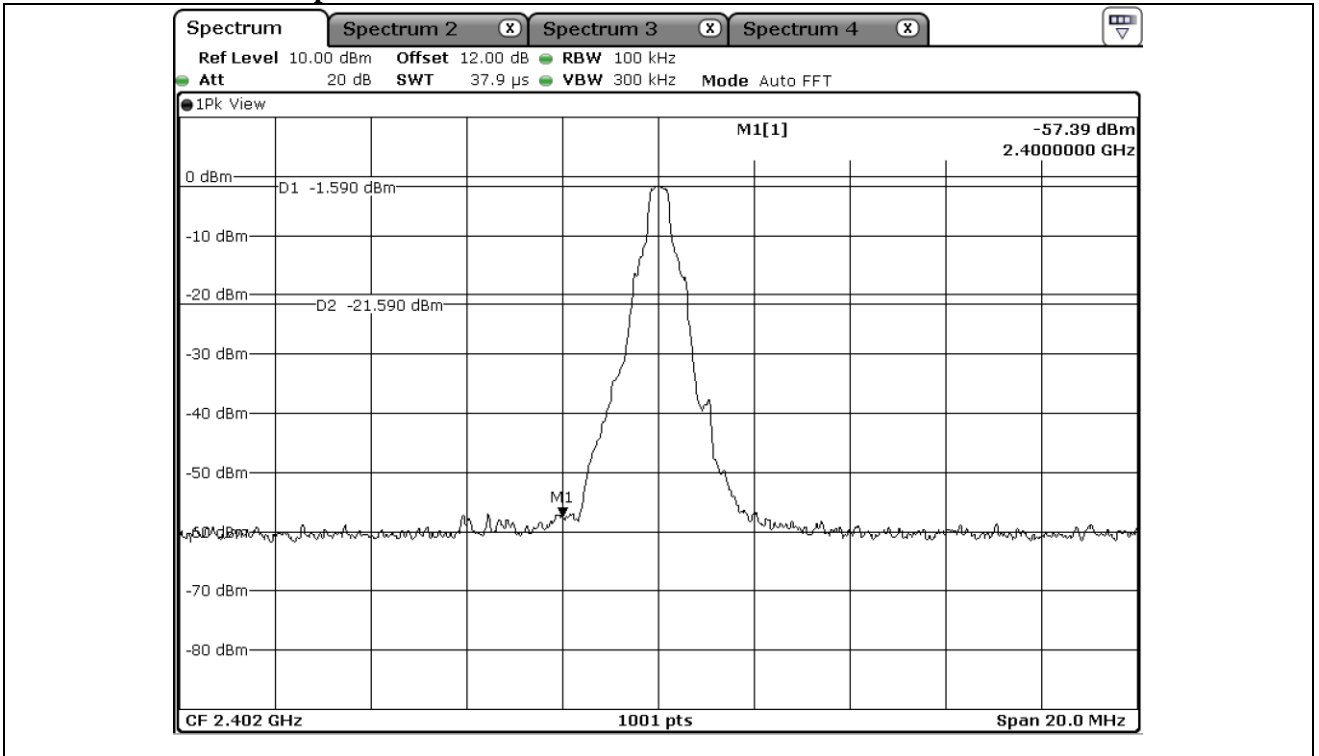
The frequency spectrum from 30 MHz to 26.5 GHz was scanned and maximum emission levels at each frequency recorded. The system was rotated 360°, and the antenna was varied in the height between 1.0 m and 4.0 m in order to determine the maximum emission levels. This procedure was performed for horizontal and vertical polarization of the receiving antenna.

### 12.4 Test Date

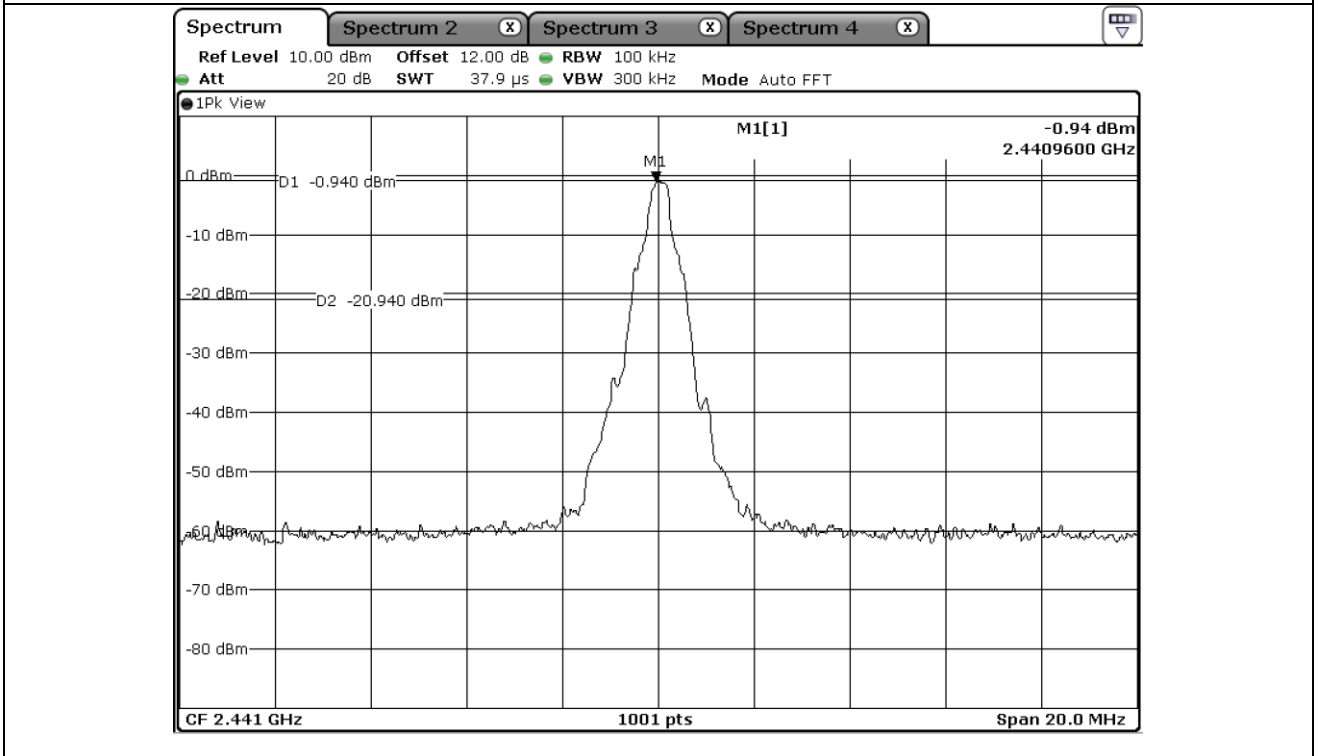
January 07, 2021 ~ January 28, 2021

12.5 Test data for conducted emission (Left Side)

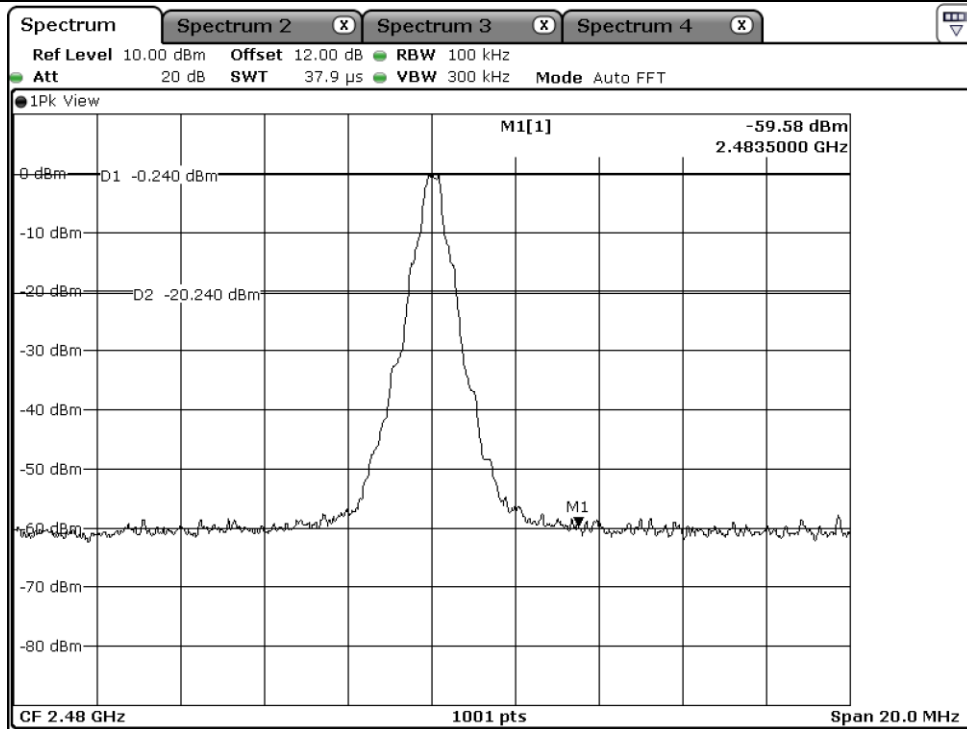
12.5.1 Test data for 1 Mbps



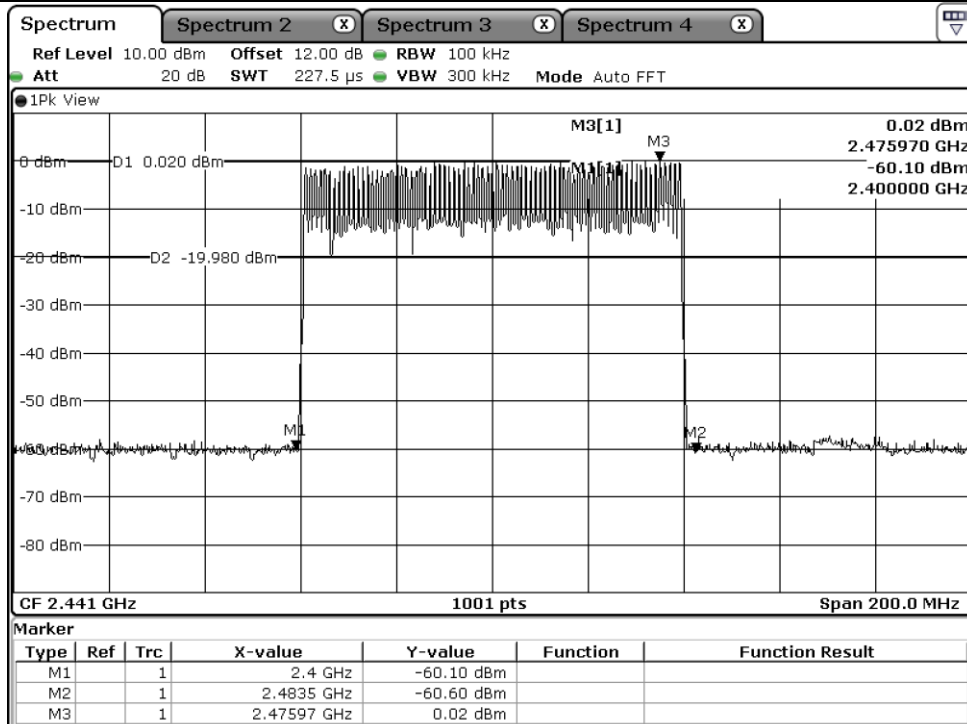
Low Channel



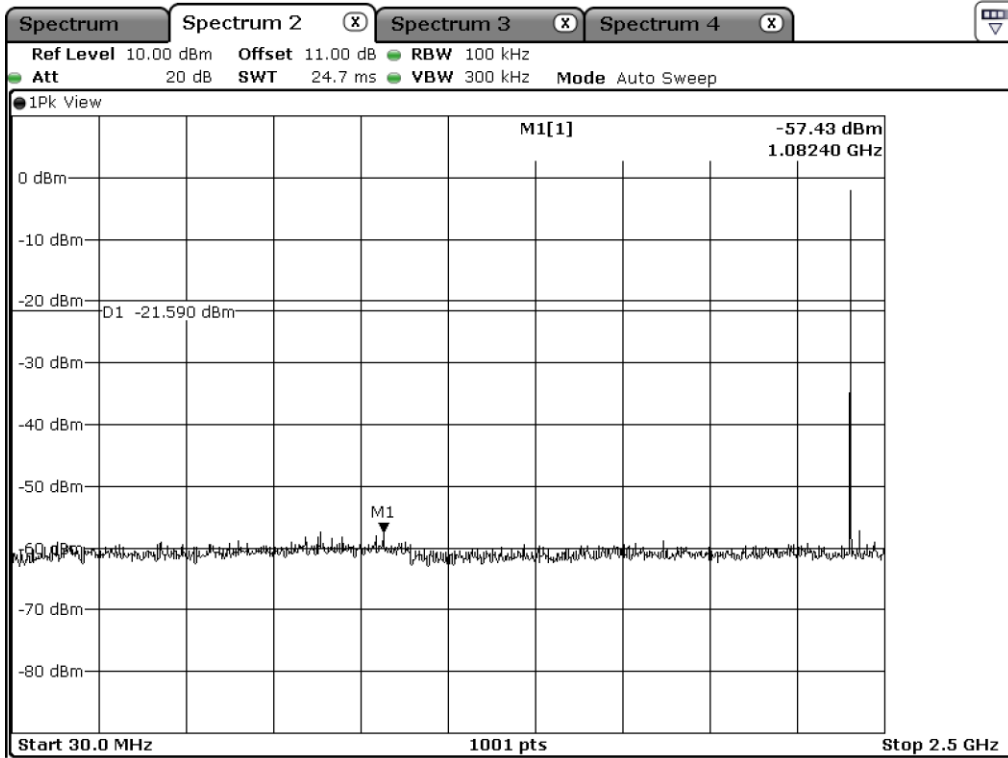
Middle Channel



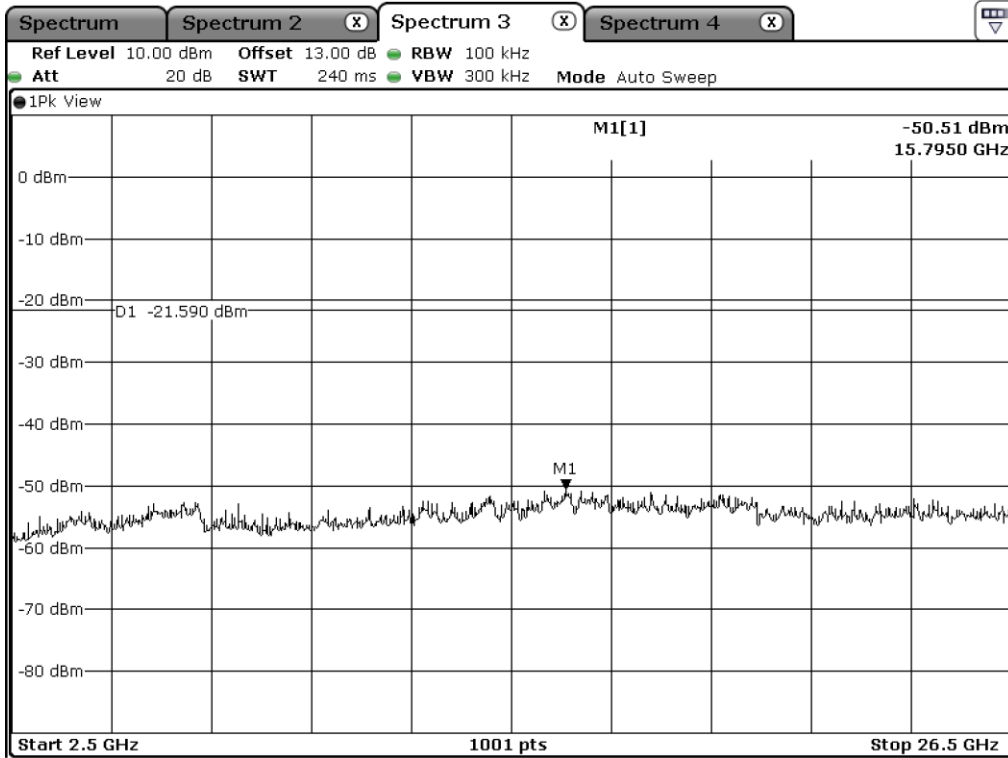
High Channel



Hopping Mode

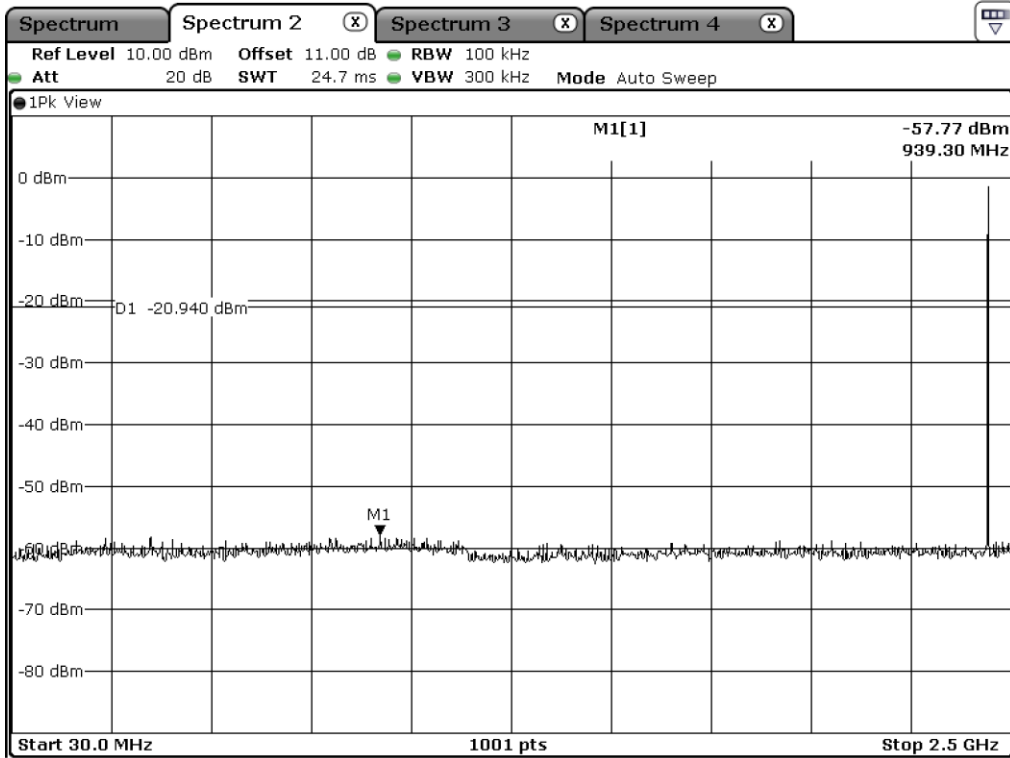


Low Channel

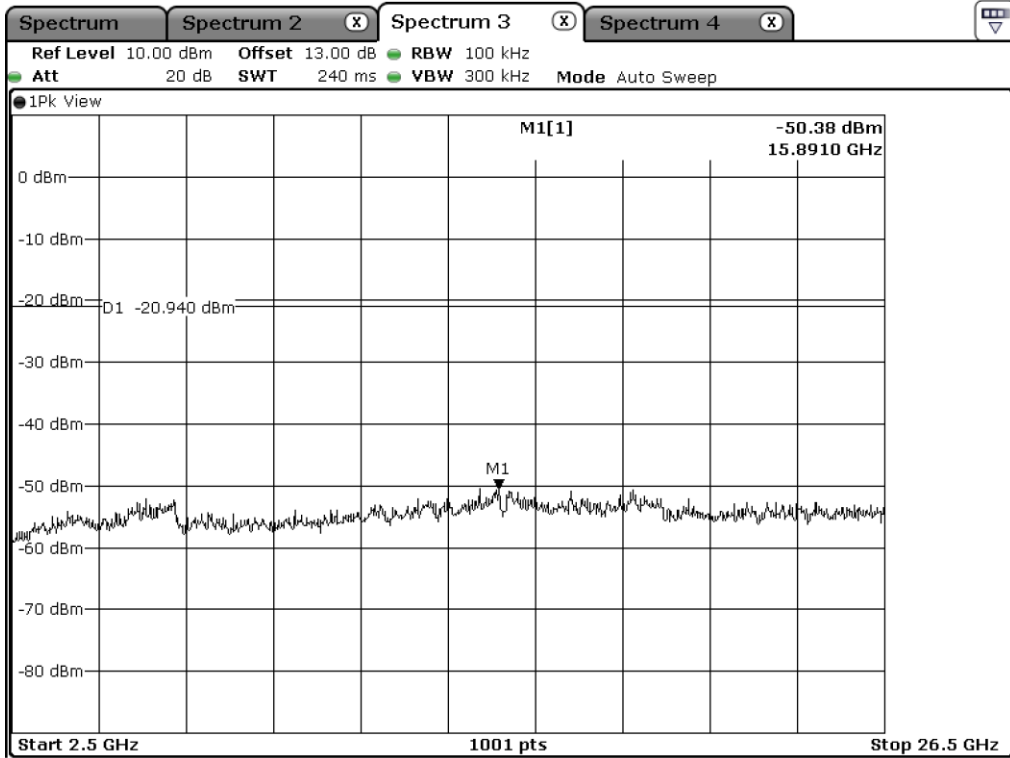


Low Channel

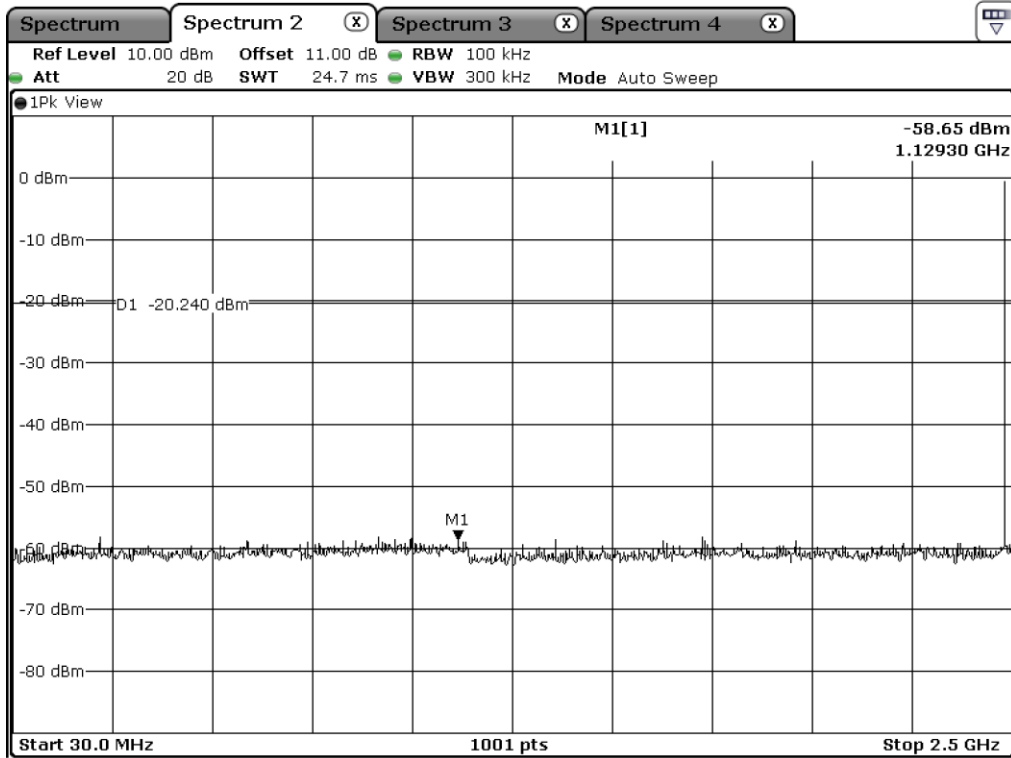




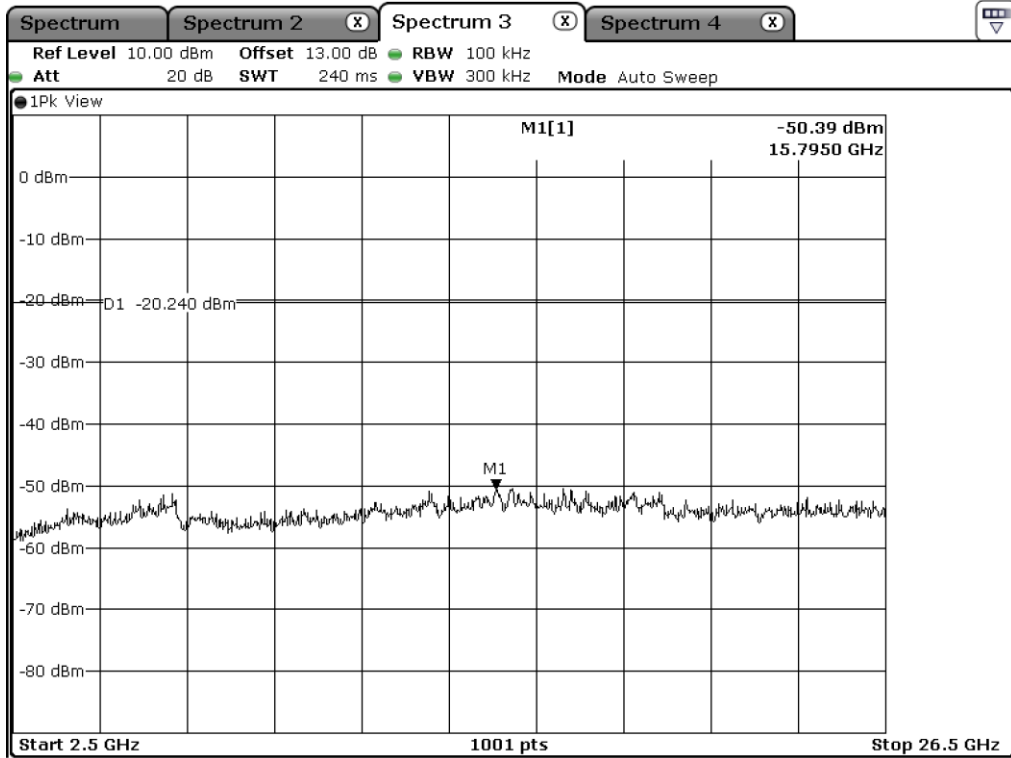
Middle Channel



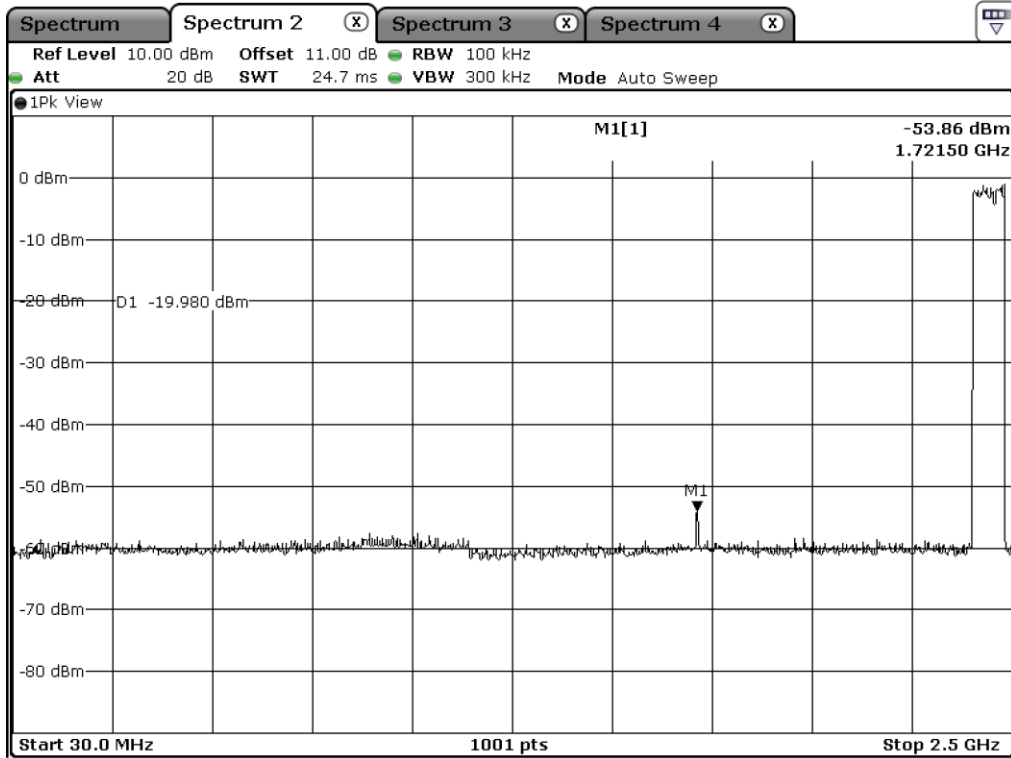
Middle Channel



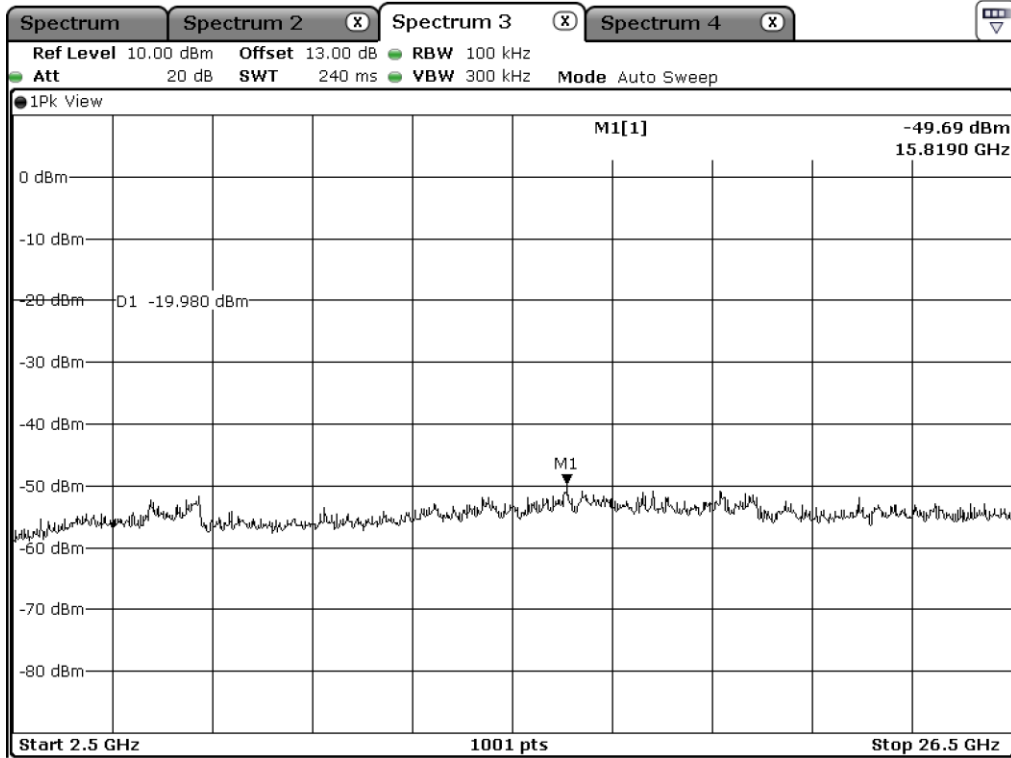
High Channel



High Channel

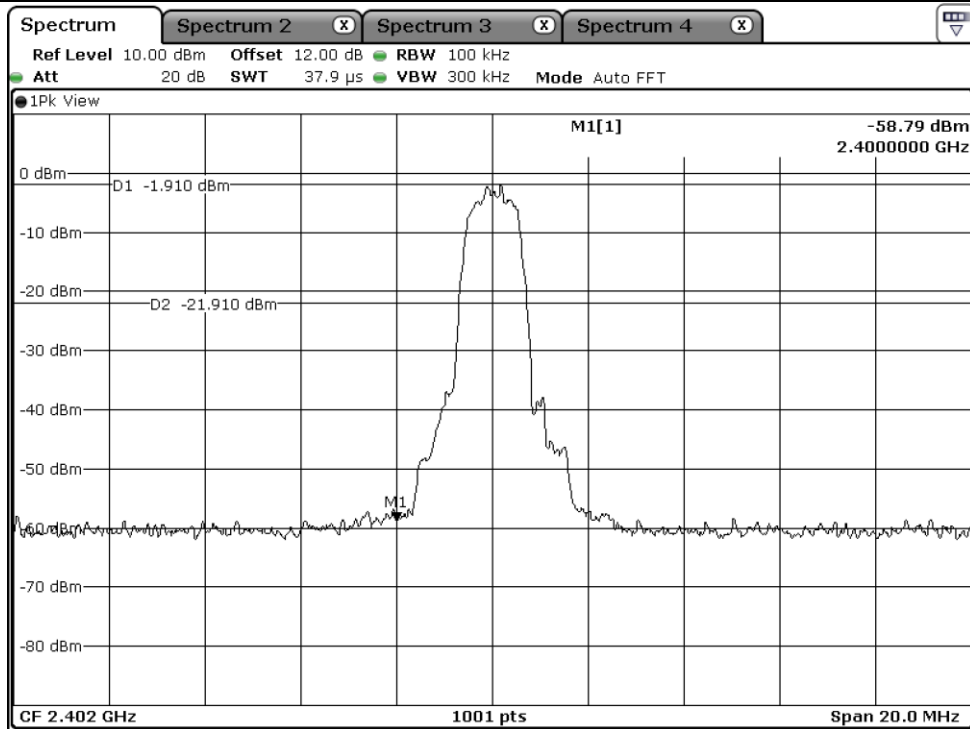


Hopping Mode

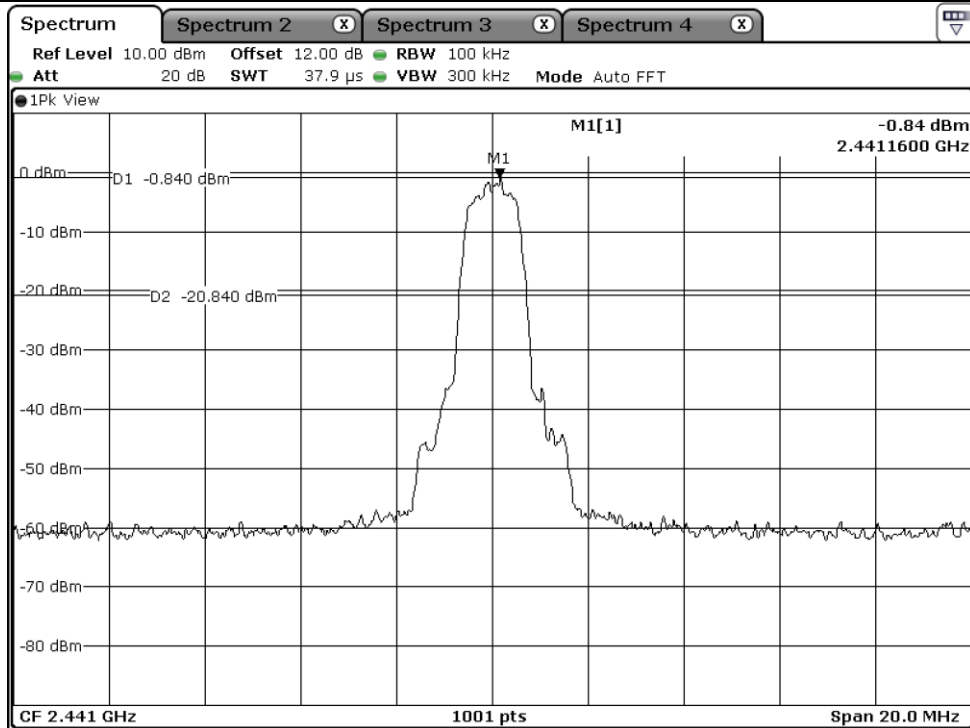


Hopping Mode

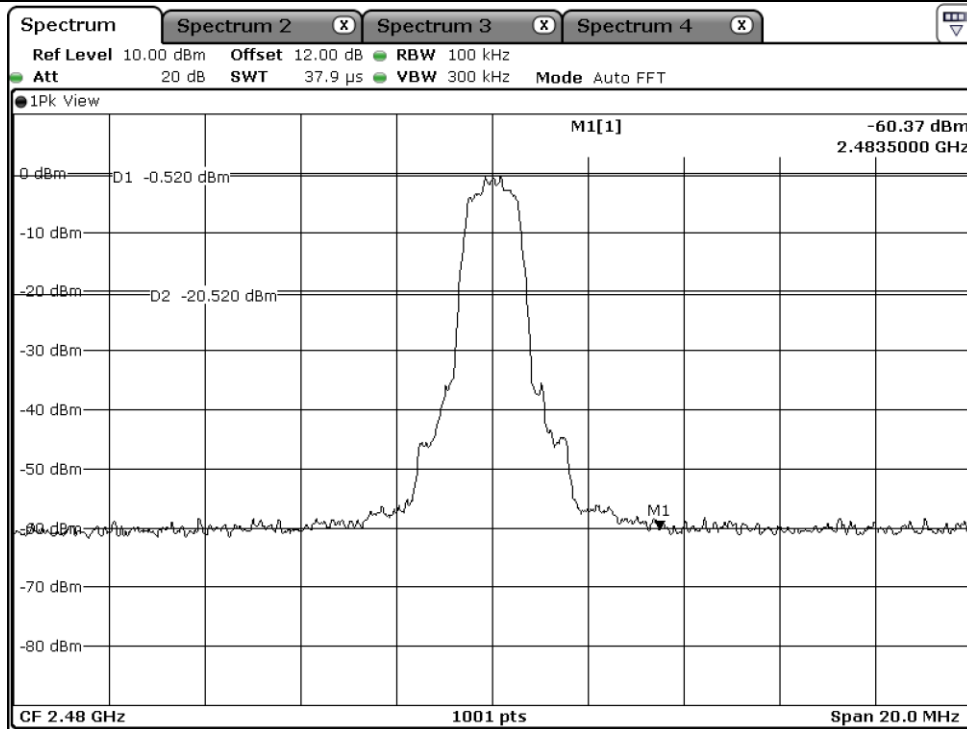
12.5.2 Test data for 2 Mbps



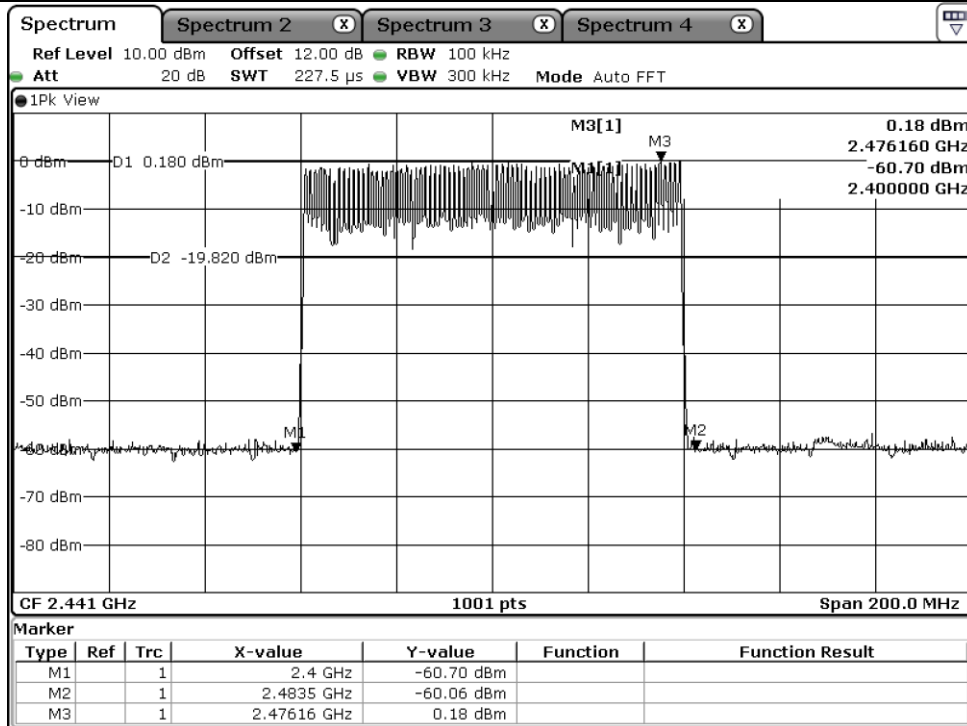
Low Channel



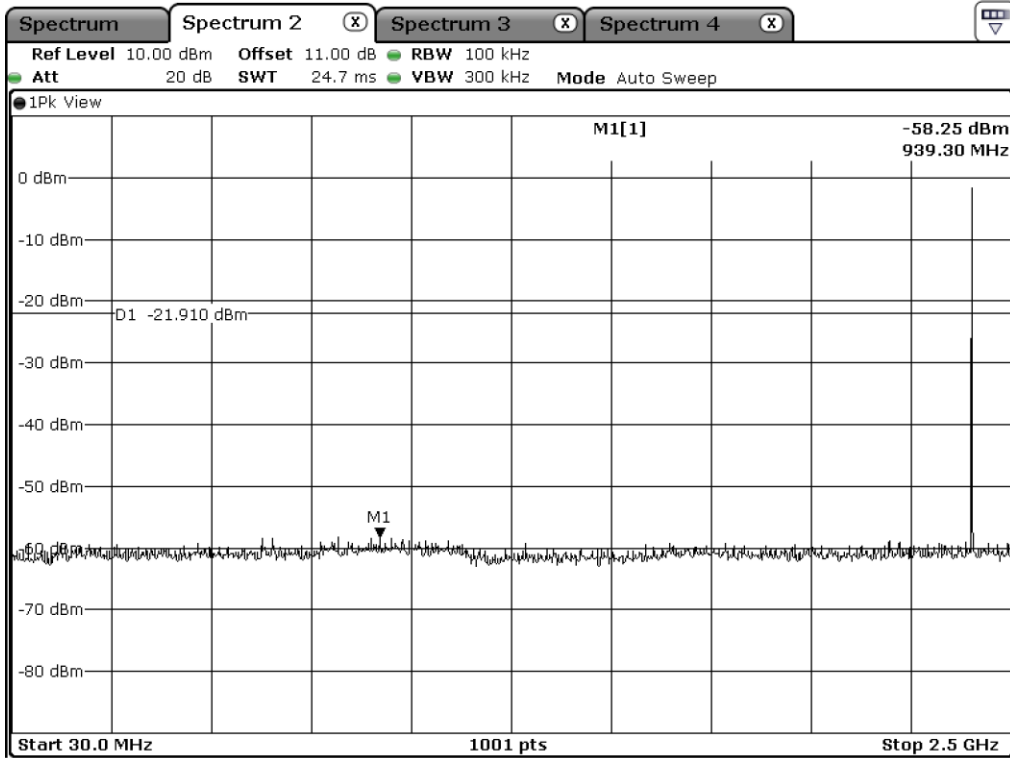
Middle Channel



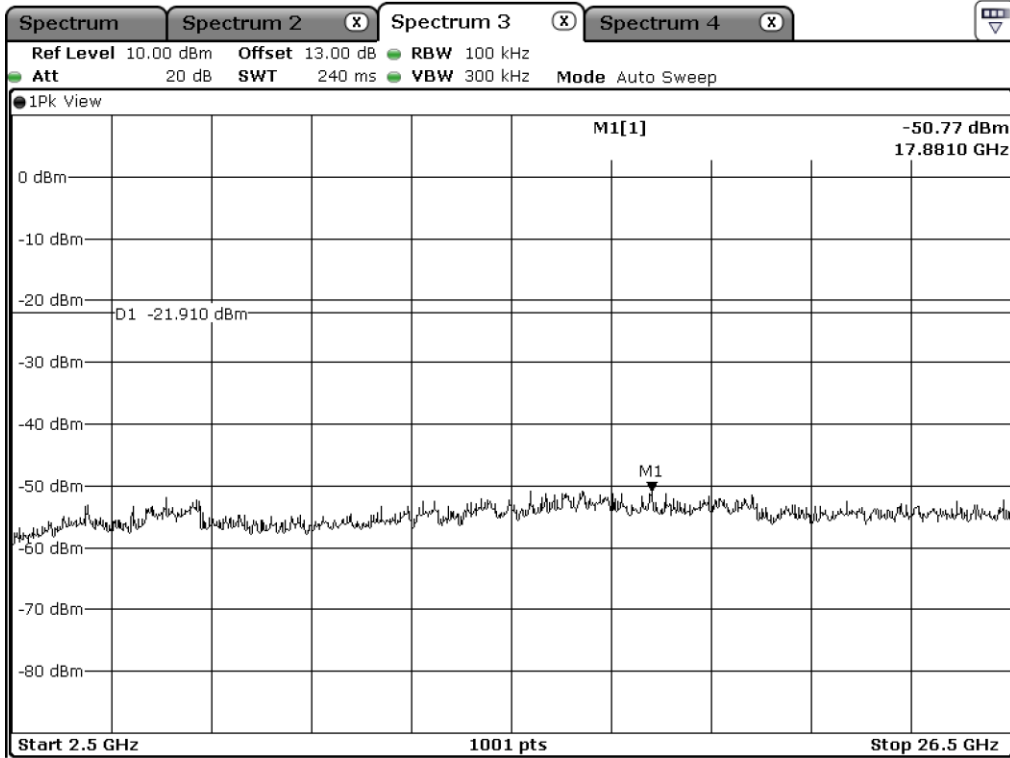
High Channel



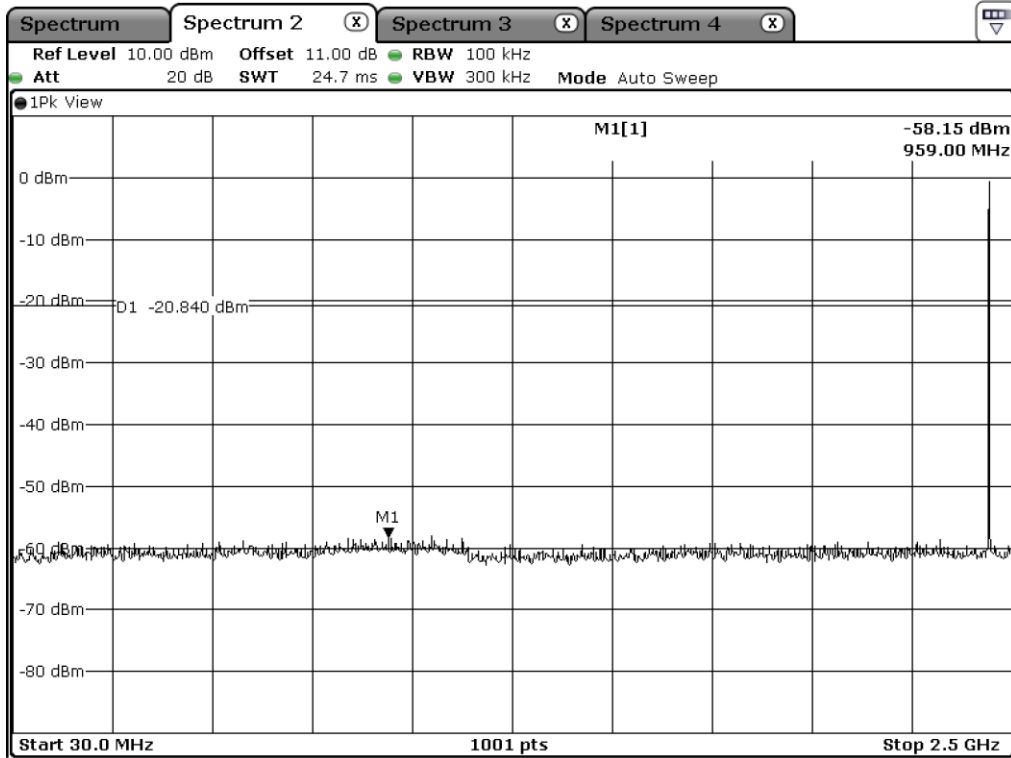
Hopping Mode



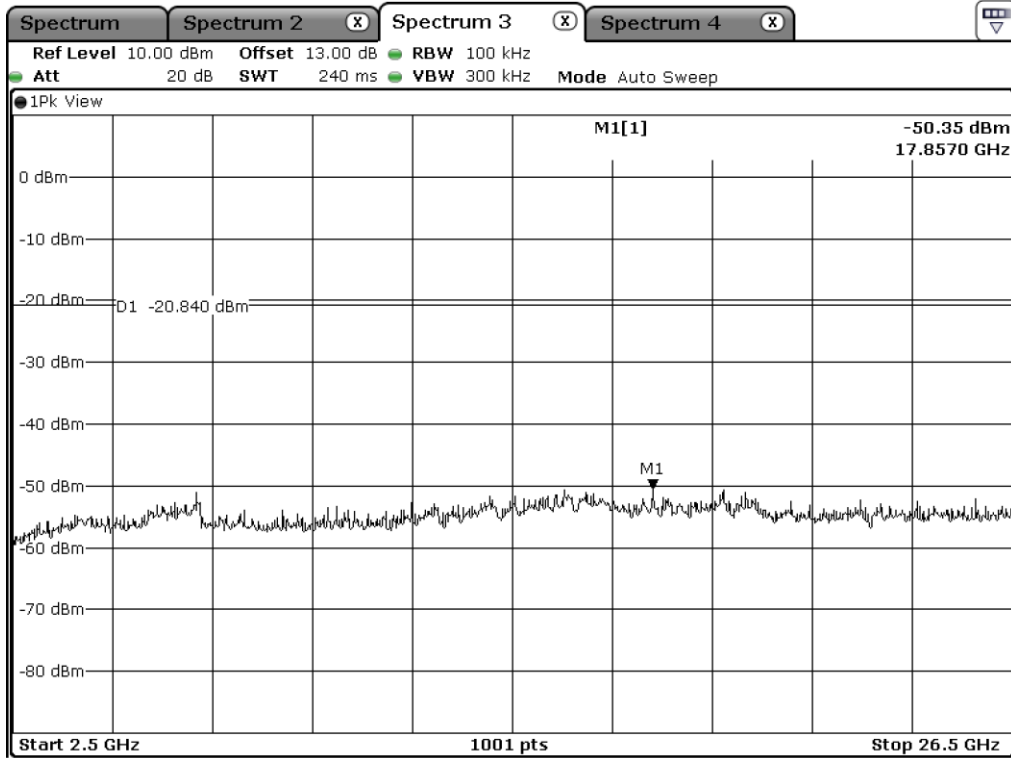
Low Channel



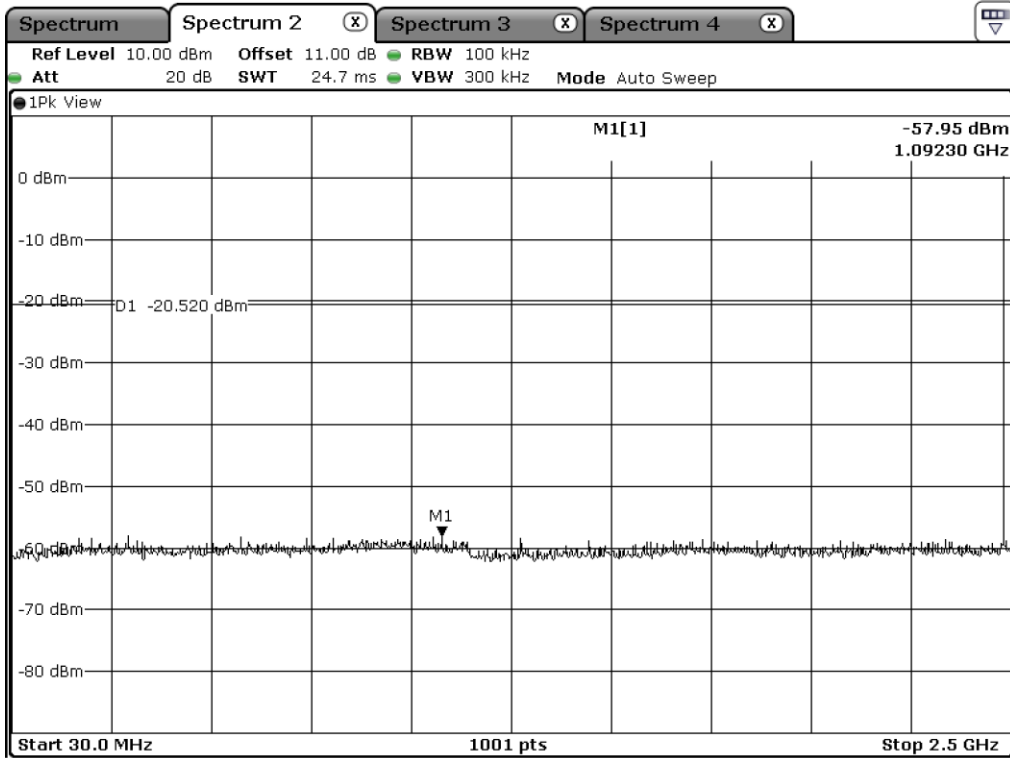
Low Channel



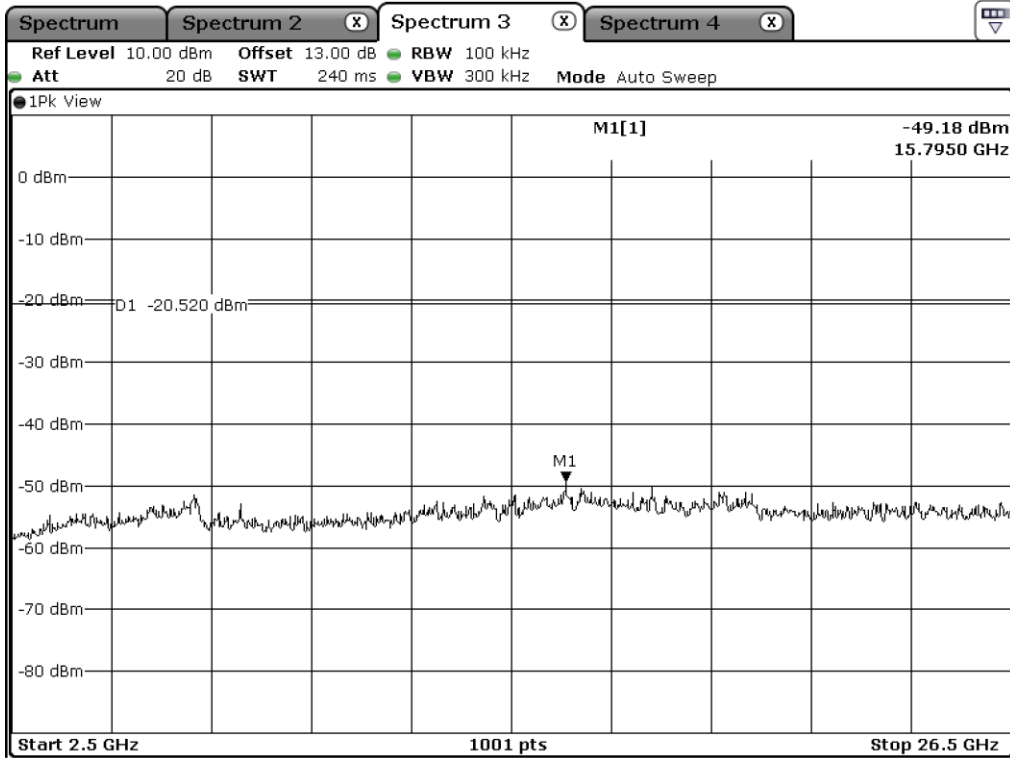
Middle Channel



Middle Channel

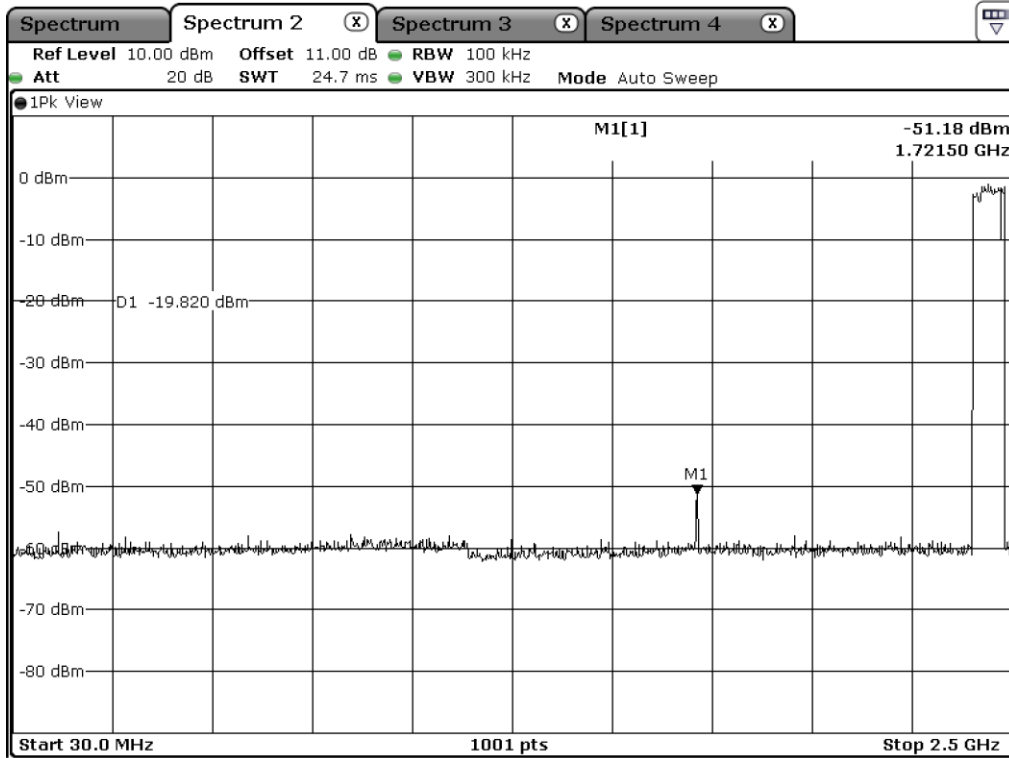


High Channel

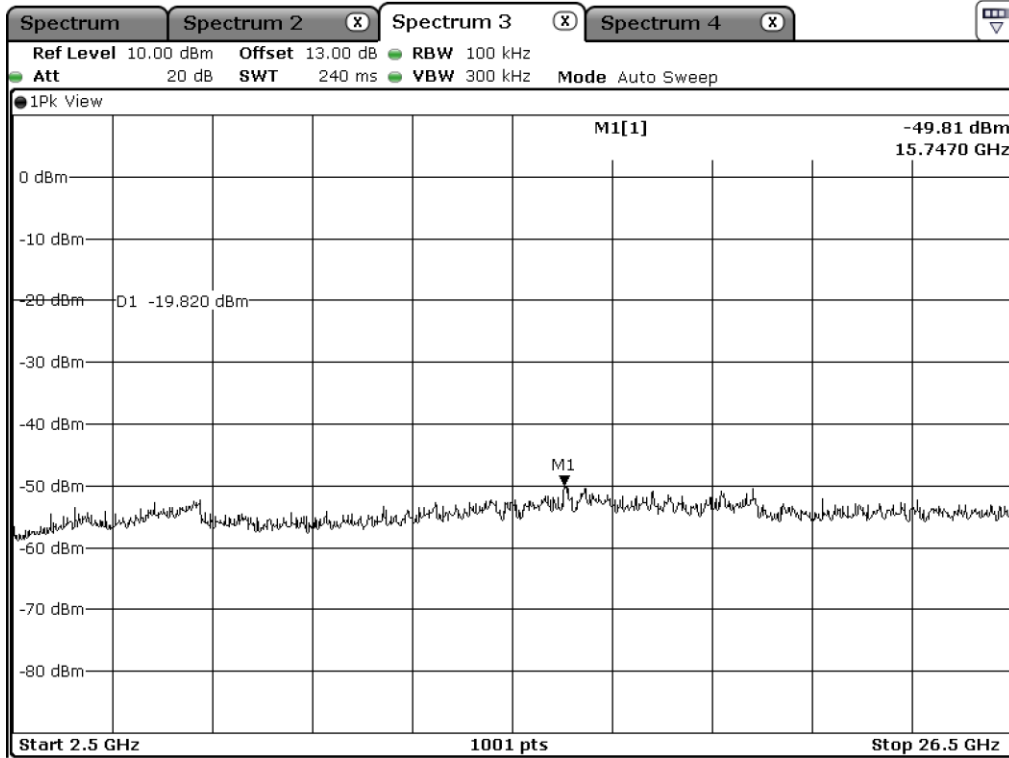


High Channel



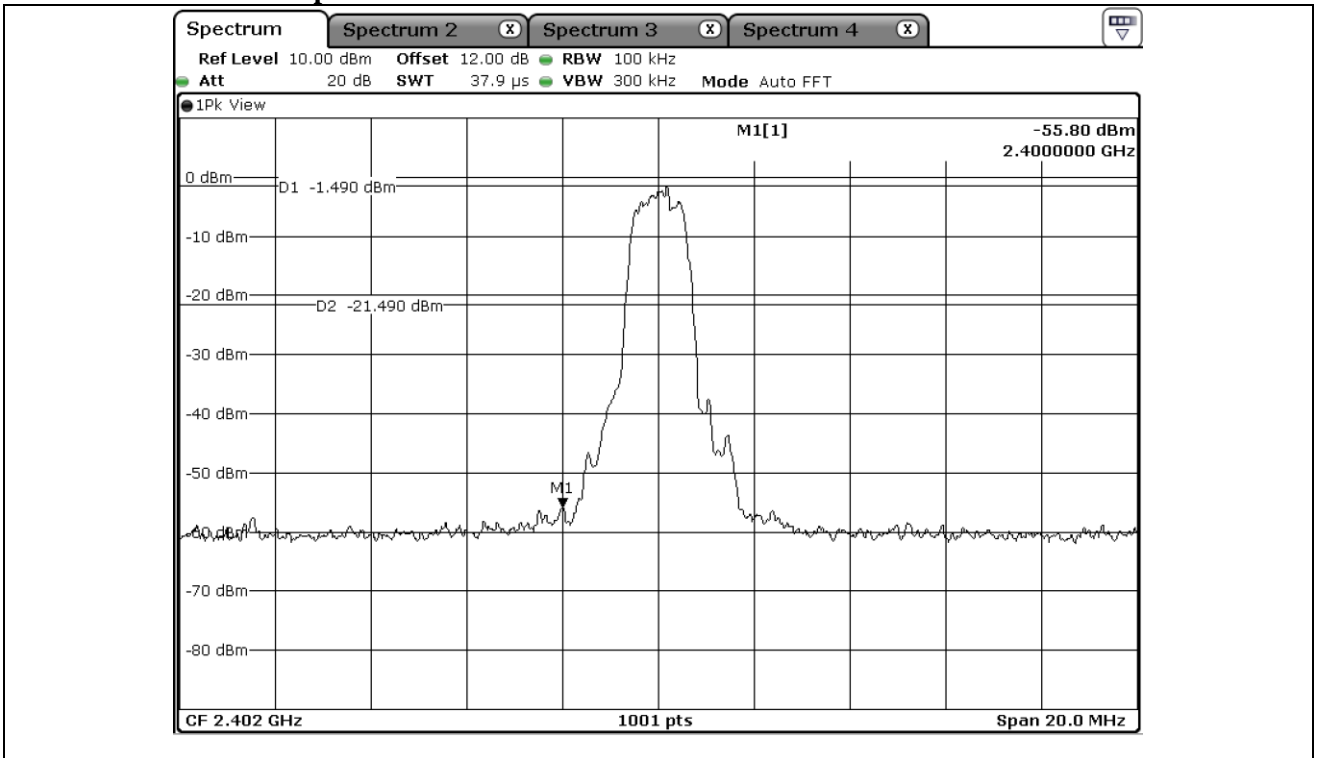


Hopping Mode

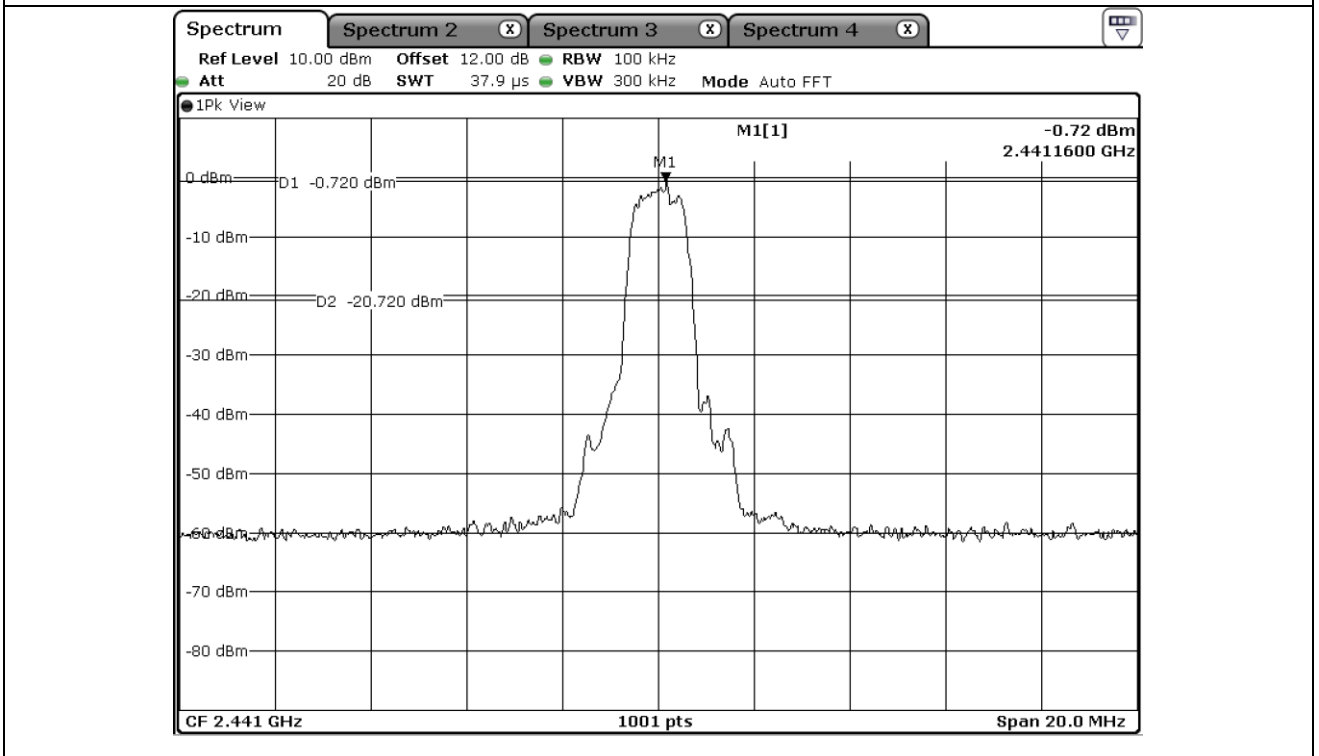


Hopping Mode

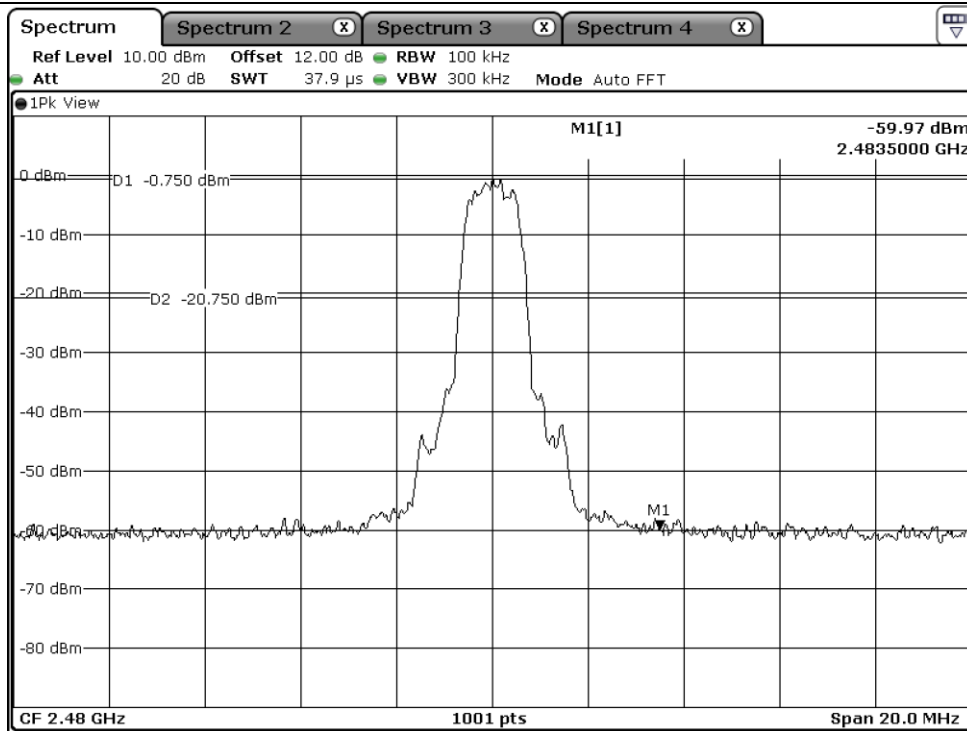
12.5.3 Test data for 3 Mbps



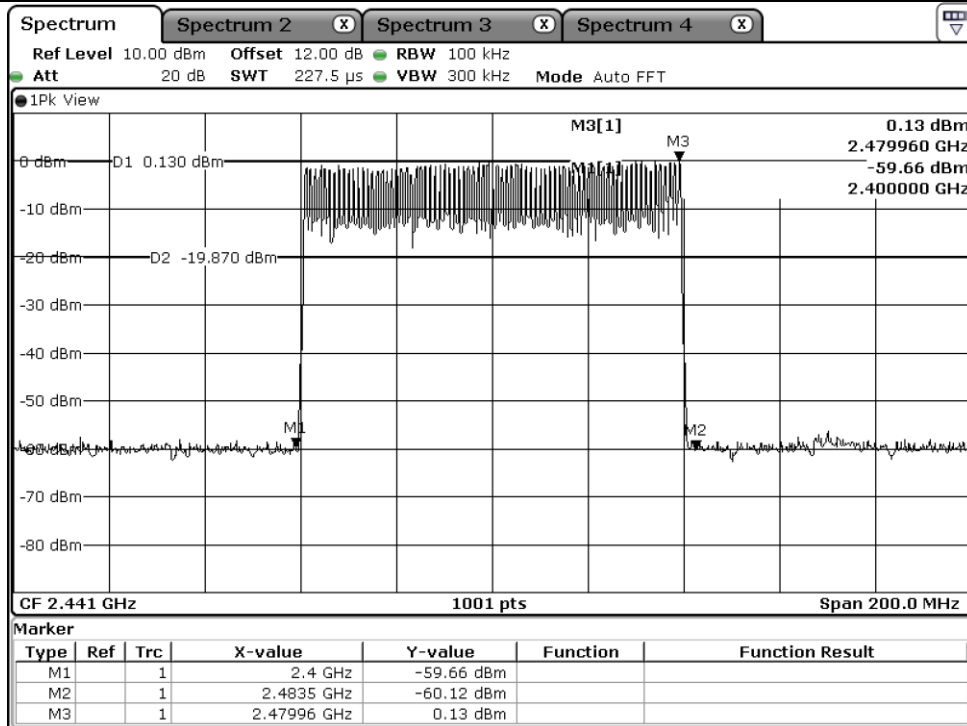
Low Channel



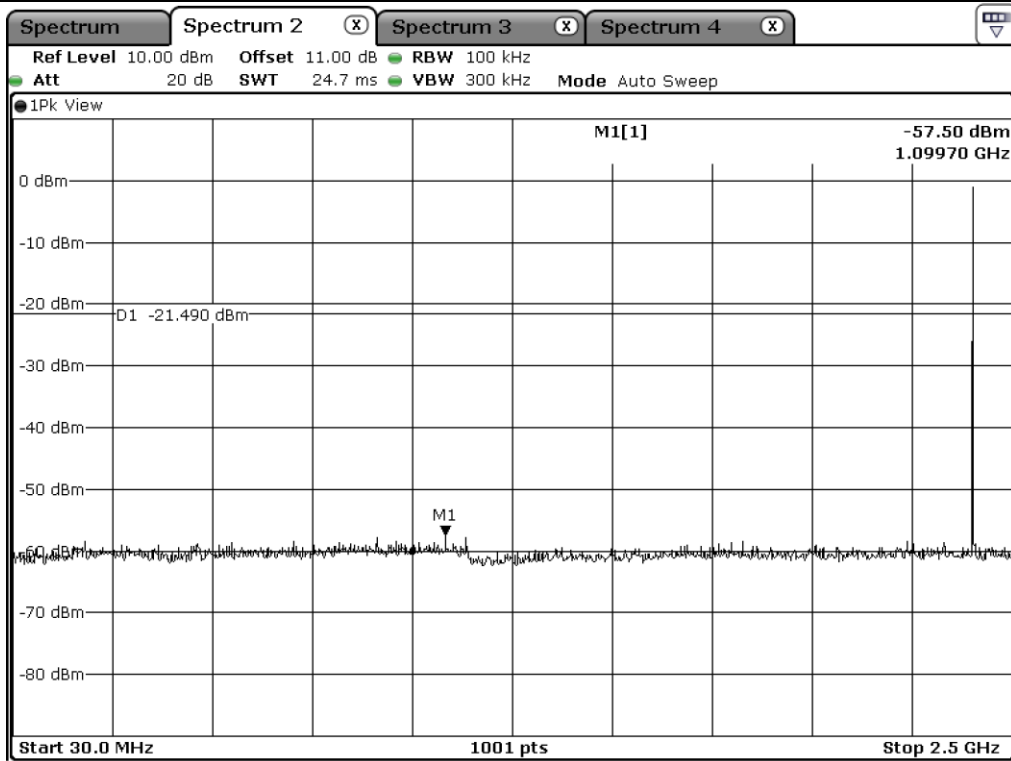
Middle Channel



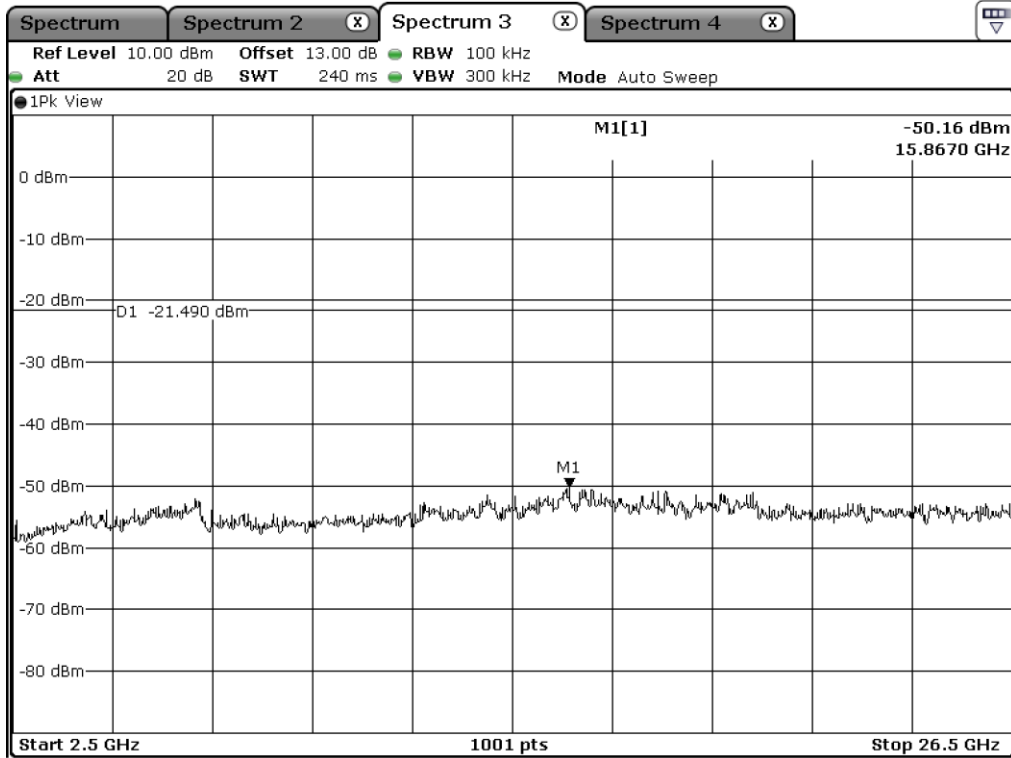
High Channel



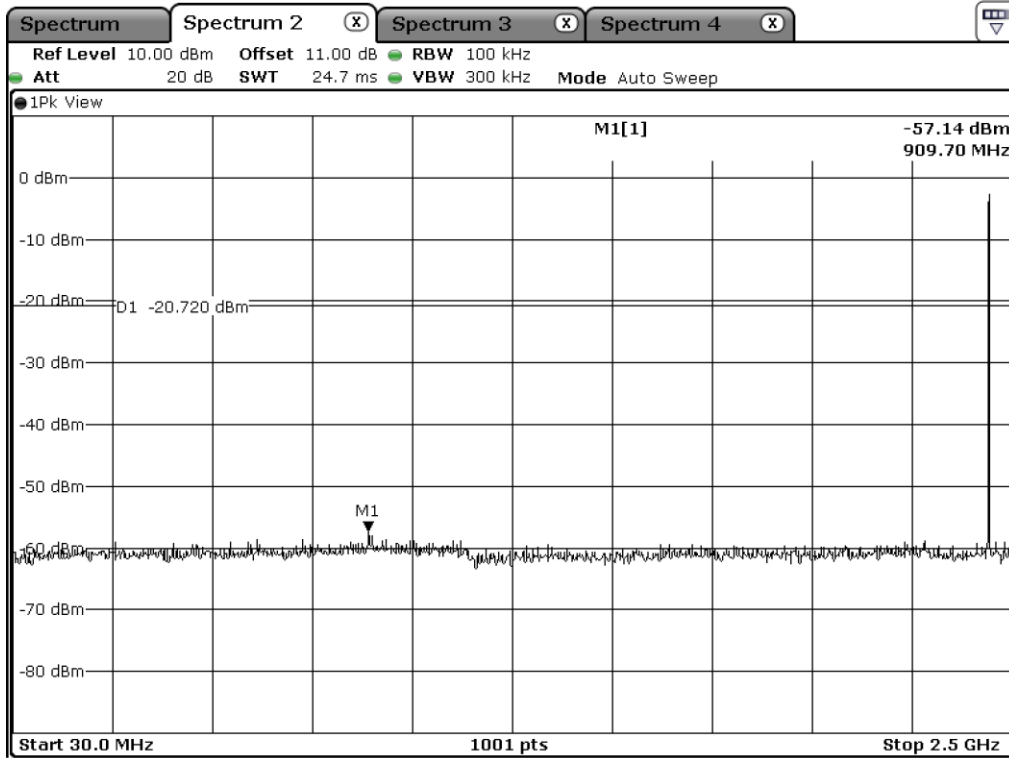
Hopping Mode



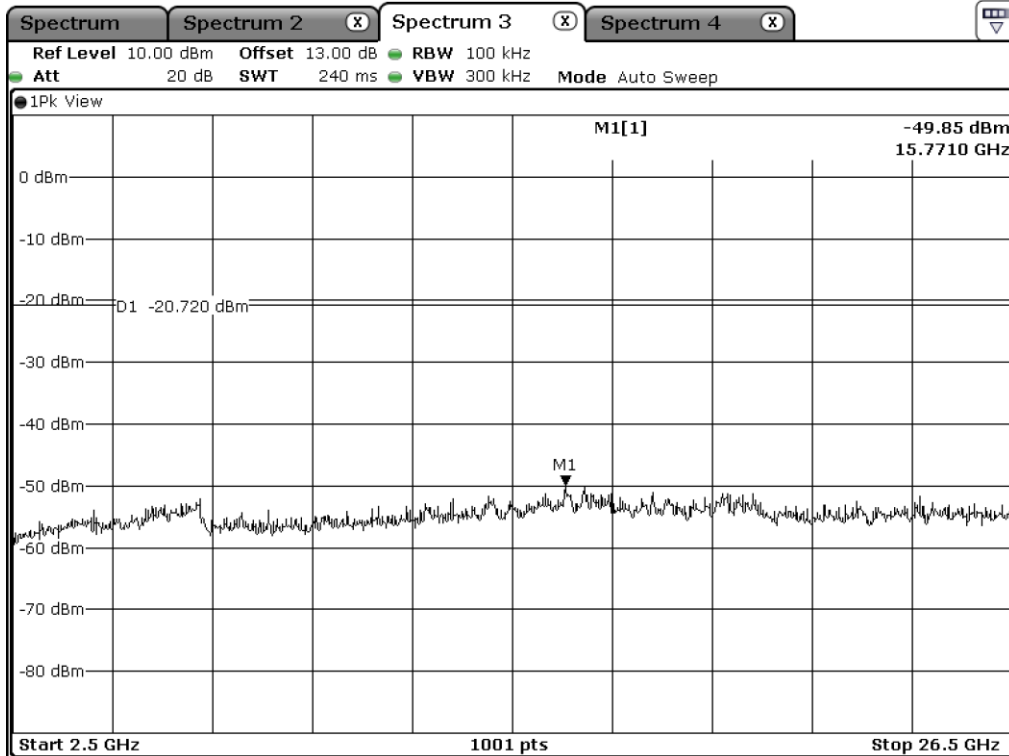
Low Channel



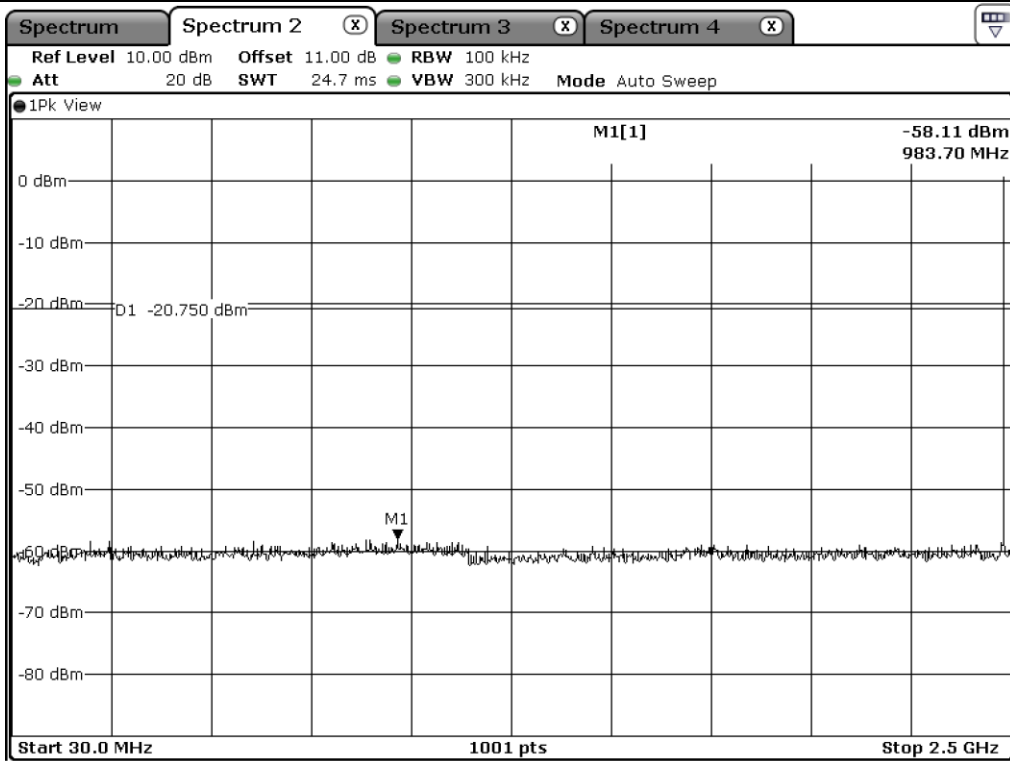
Low Channel



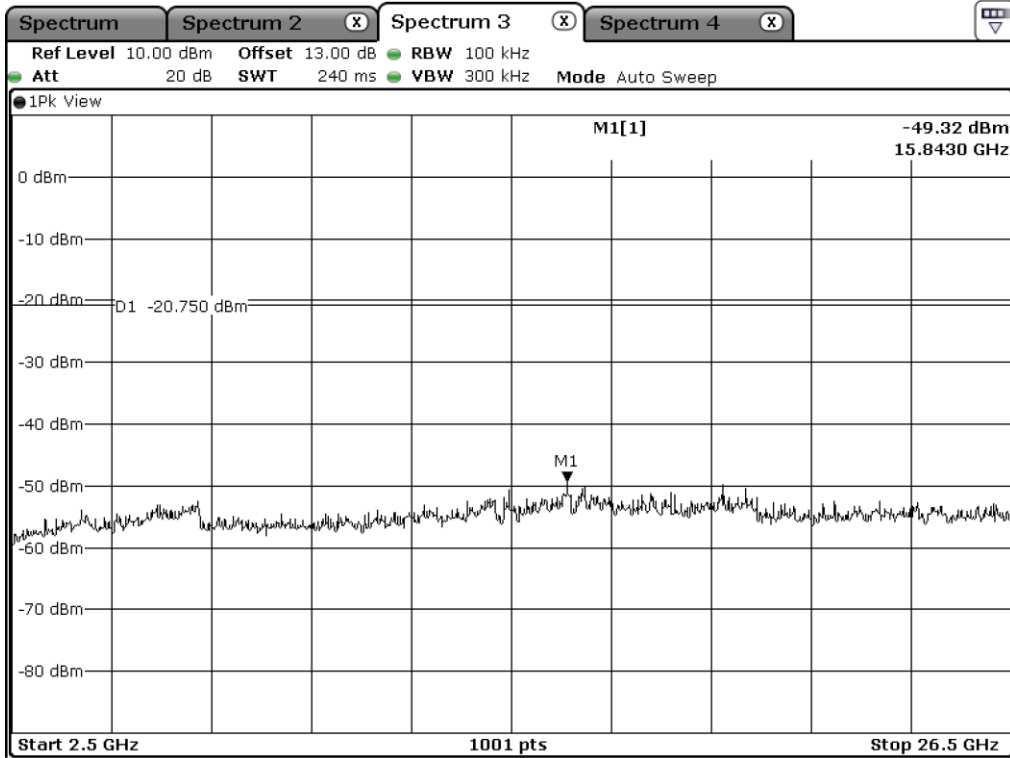
Middle Channel



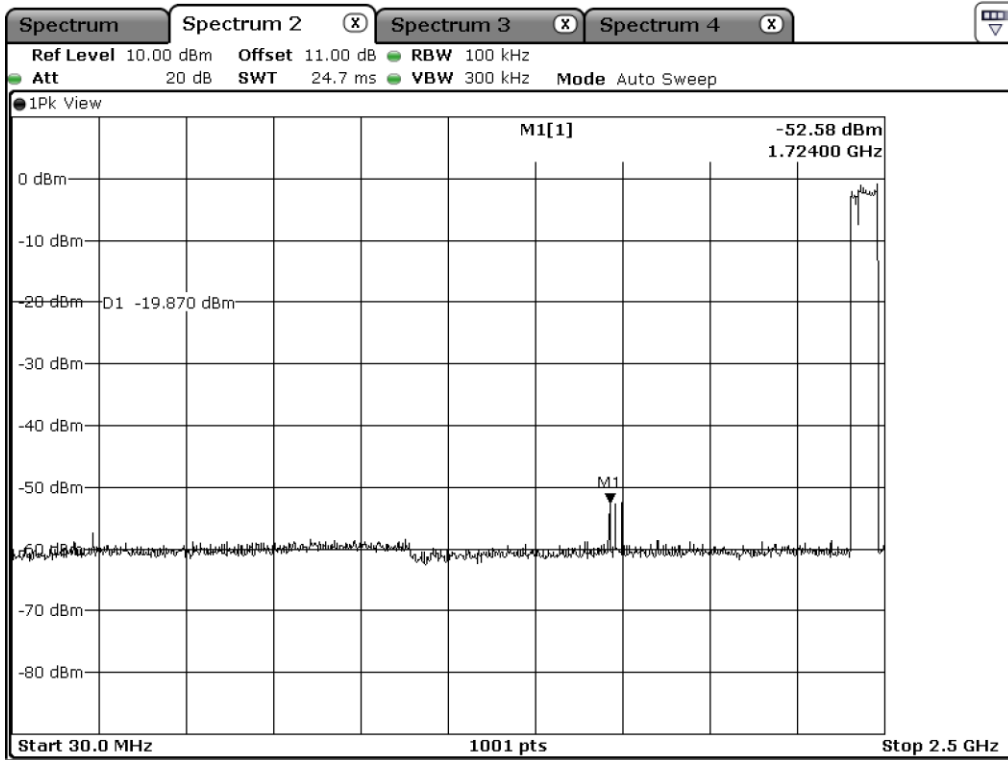
Middle Channel



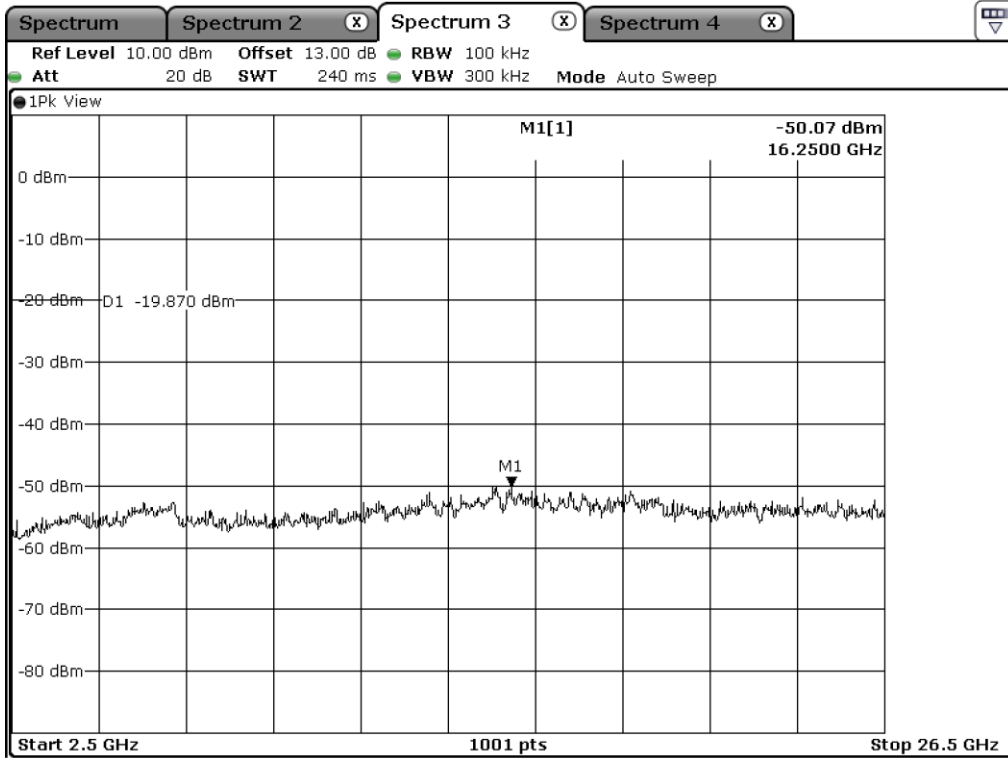
High Channel



High Channel



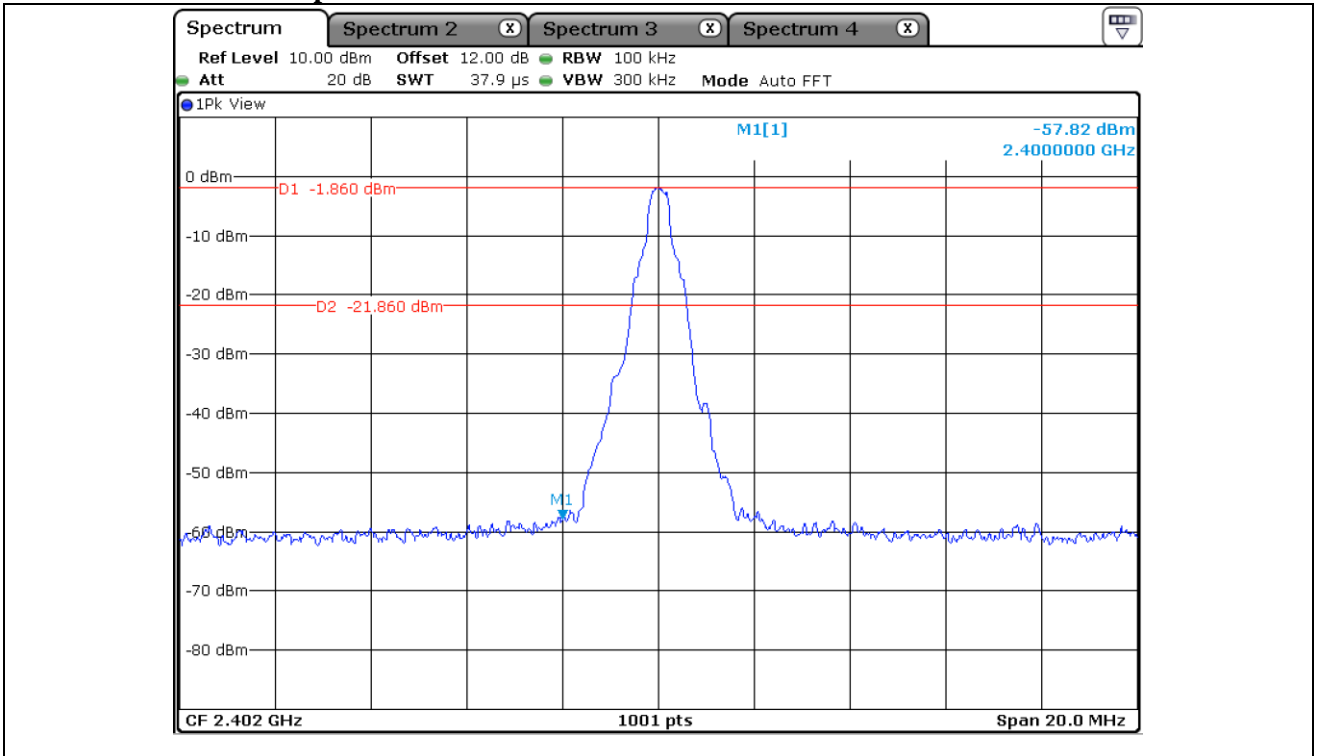
Hopping Mode



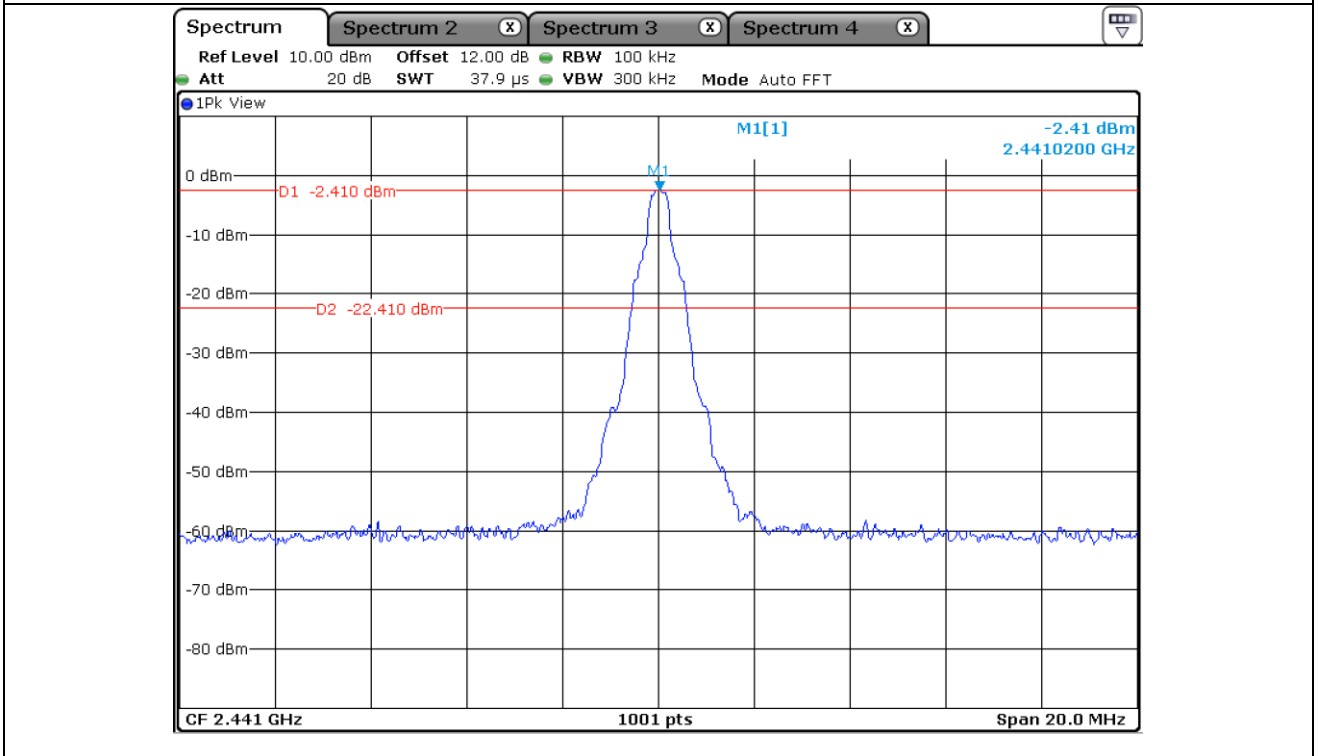
Hopping Mode

12.6 Test data for conducted emission (Right Side)

12.6.1 Test data for 1 Mbps



Low Channel



Middle Channel