

## **9.5. SPURIOUS EMISSIONS IN-BAND – EMISSION MASK**

### **LIMITS**

FCC §15.407 (b)(7)  
RSS-248 4.6.2 (b)

(6) For transmitters operating within the 5.925-7.125 GHz bands: power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.

### **TEST PROCEDURE**

Per KDB 987594 D02 v01r01, Section J

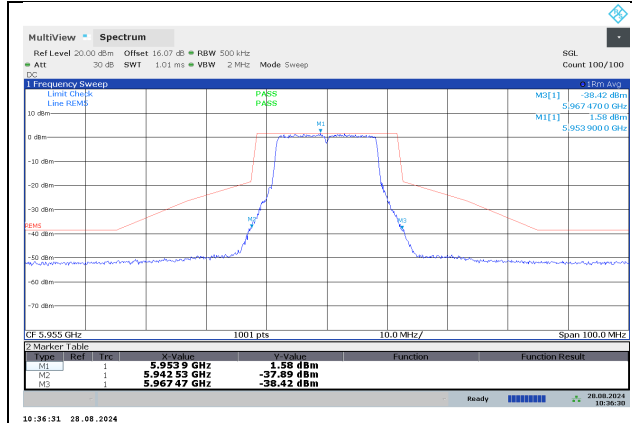
Note. In case of some of the 20 & 40 MHz bandwidth, test was performed by setting the RBW to 1MHz which is larger than that used for the 26dB bandwidth measurement.  
This is a deviation from the procedures but represents a more conservative measurement.

### **RESULTS**

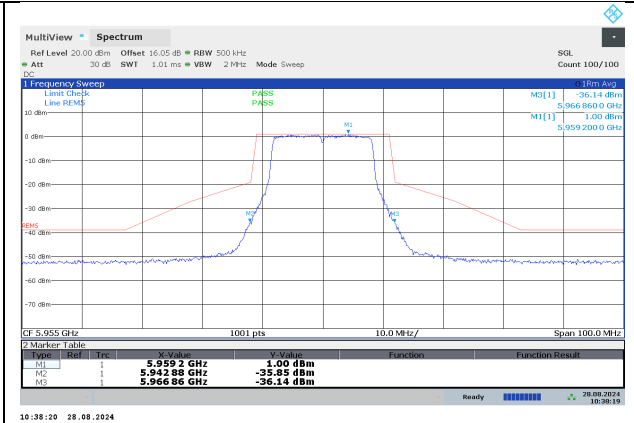
Bands UNII 5 and 7 were tested in standard power and low power indoor mode and UNII 6 and 8 were tested in Low Power Indoor mode.

## 9.5.1. 802.11a MODE 2TX IN THE UNII-5 BAND (LOW GAIN)

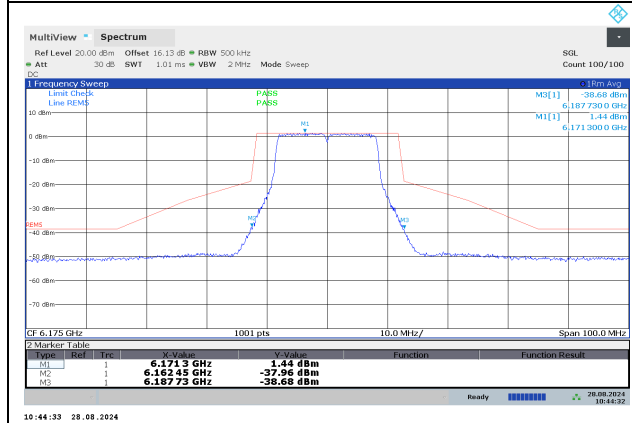
### STANDARD POWER



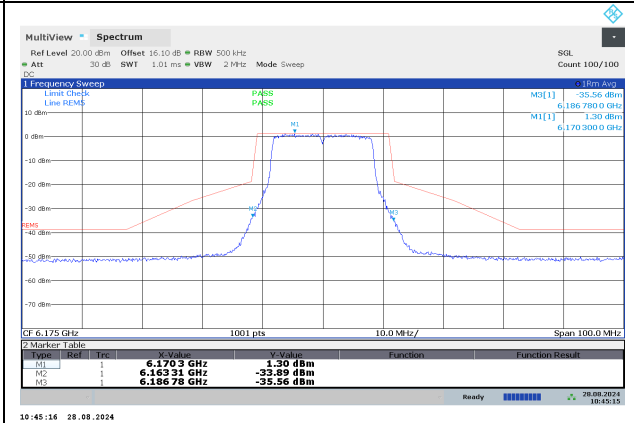
LOW CHANNEL CHAIN 0



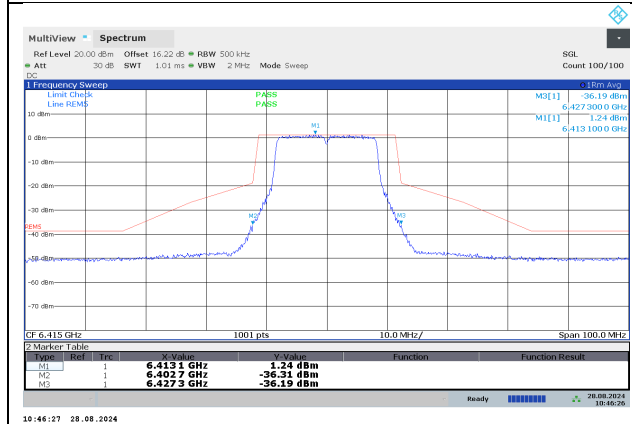
LOW CHANNEL CHAIN 1



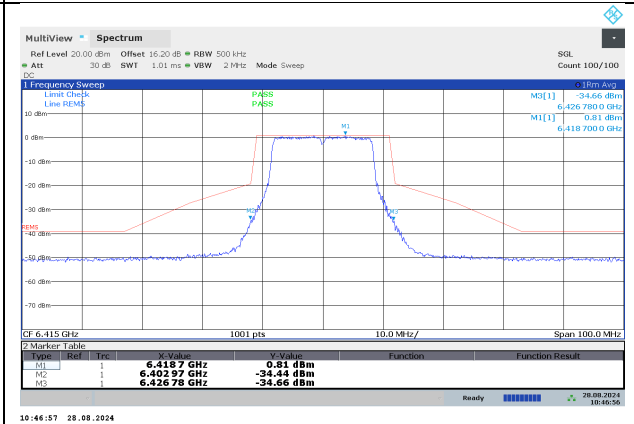
MID CHANNEL CHAIN 0



MID CHANNEL CHAIN 1

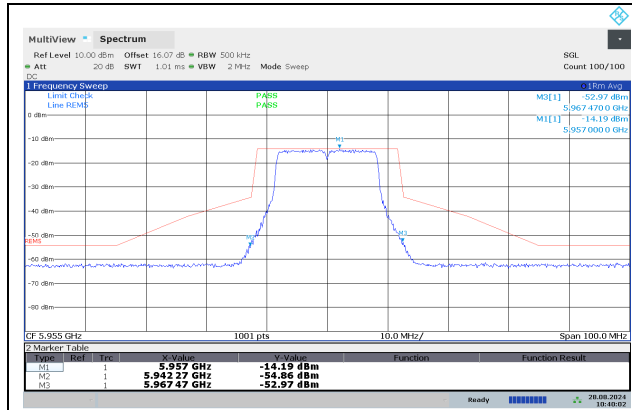


HIGH CHANNEL CHAIN 0

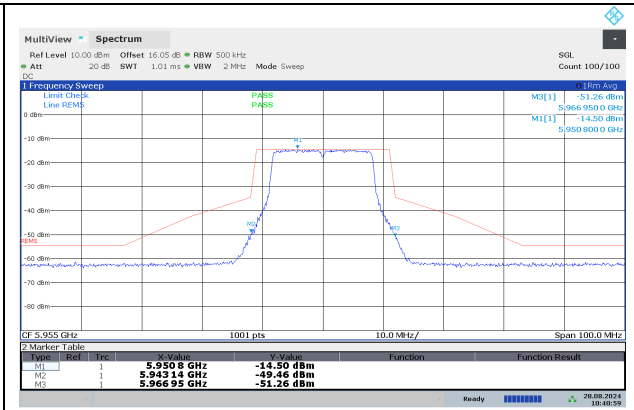


HIGH CHANNEL CHAIN 1

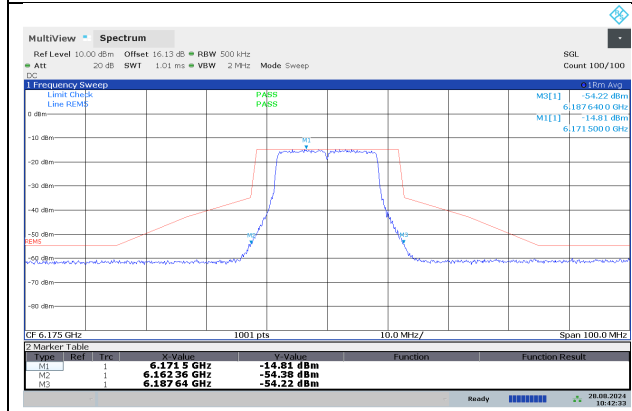
## LOW POWER INDOOR



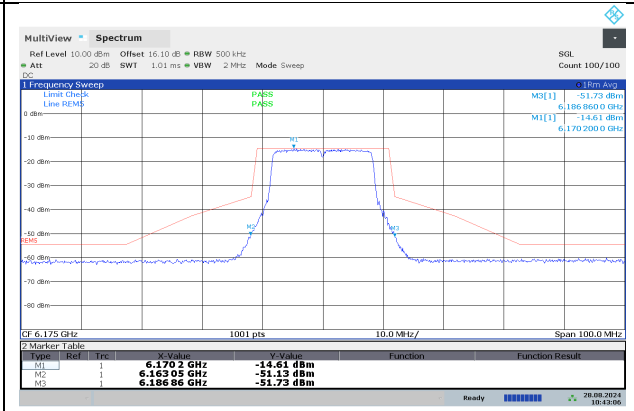
LOW CHANNEL CHAIN 0



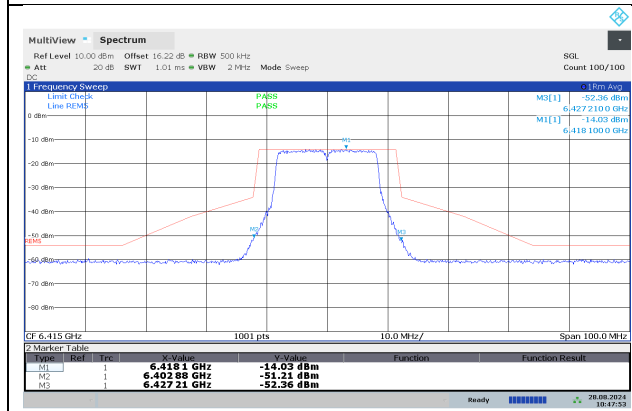
LOW CHANNEL CHAIN 1



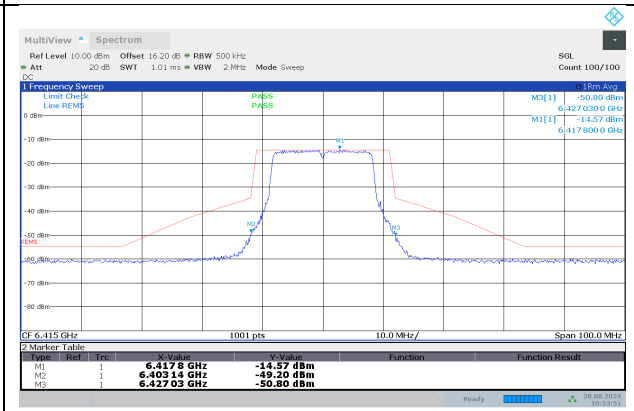
MID CHANNEL CHAIN 0



MID CHANNEL CHAIN 1



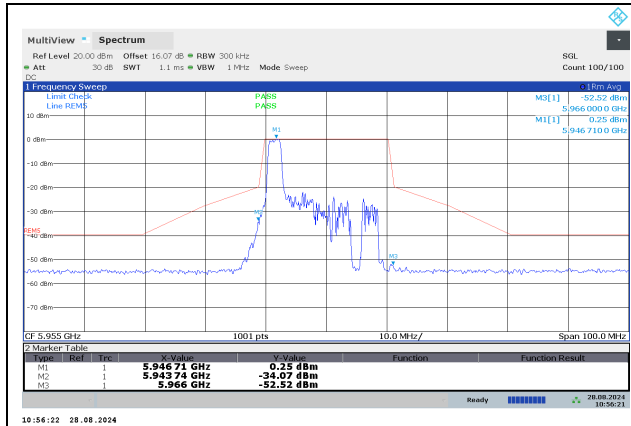
HIGH CHANNEL CHAIN 0



HIGH CHANNEL CHAIN 1

## 9.5.2. 802.11be EHT20 MODE 2TX IN THE UNII-5 BAND (LOW GAIN)

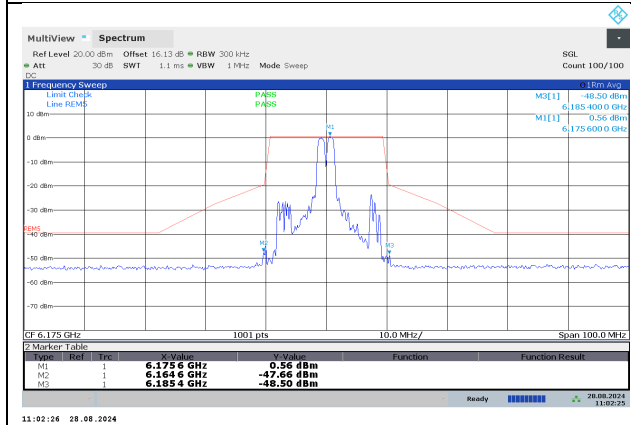
### 2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 26T STANDARD POWER



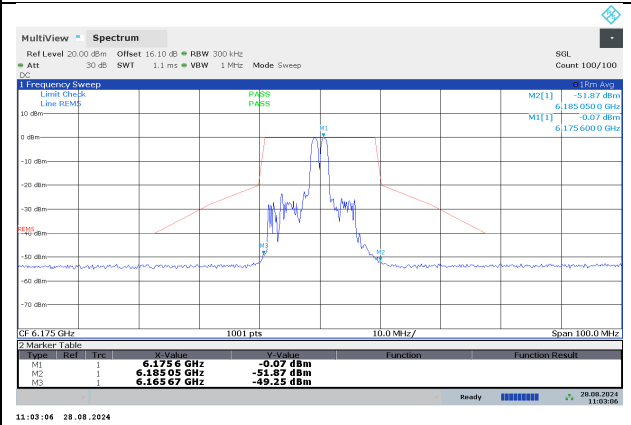
LOW CHANNEL CHAIN 0



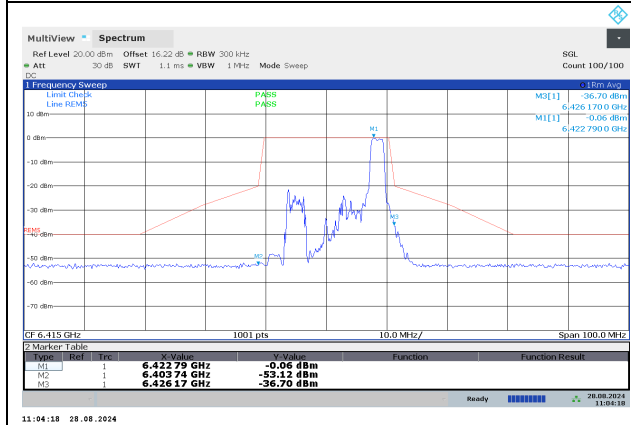
LOW CHANNEL CHAIN 1



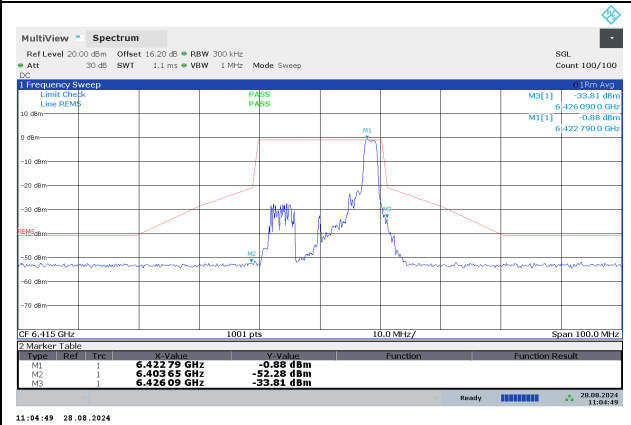
MID CHANNEL CHAIN 0



MID CHANNEL CHAIN 1



HIGH CHANNEL CHAIN 0

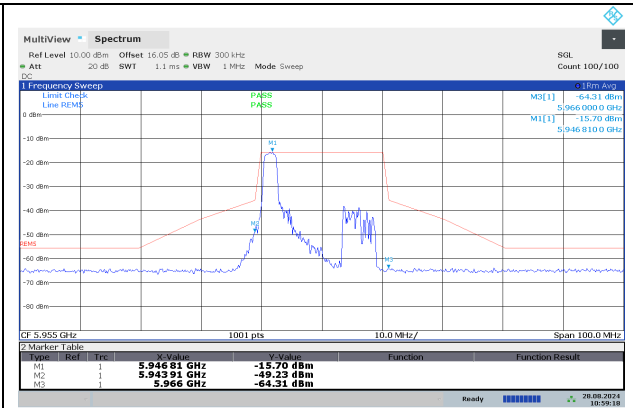


HIGH CHANNEL CHAIN 1

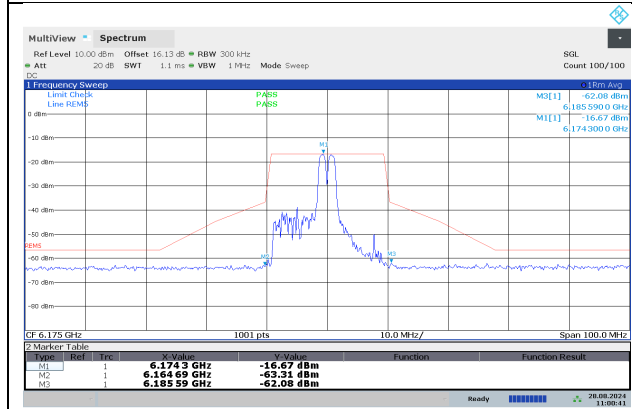
## 2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 26T LOW POWER INDOOR



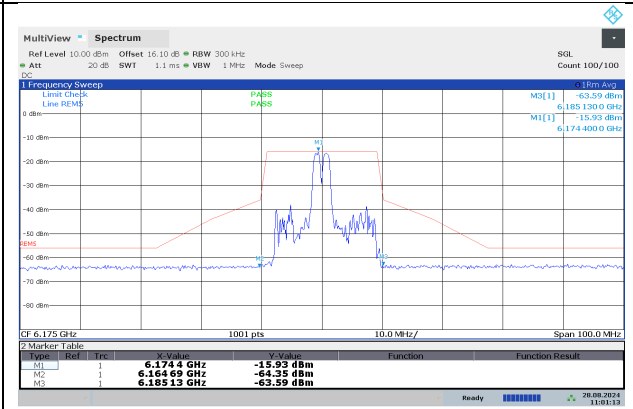
LOW CHANNEL CHAIN 0



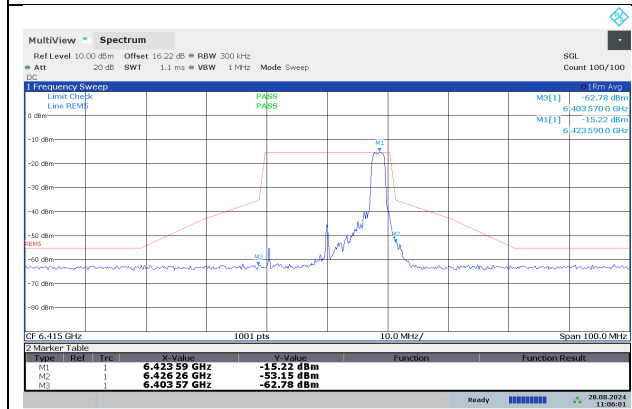
LOW CHANNEL CHAIN 1



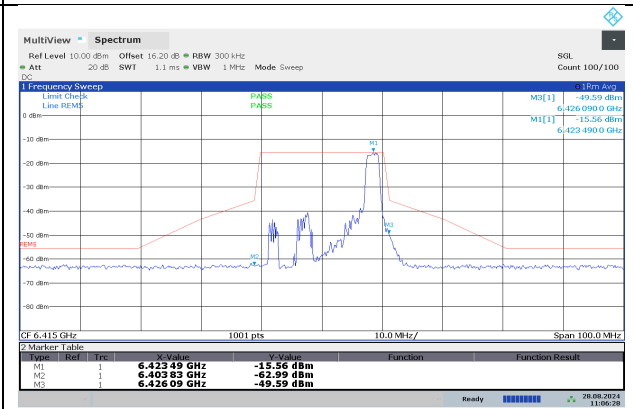
MID CHANNEL CHAIN 0



MID CHANNEL CHAIN 1



HIGH CHANNEL CHAIN 0

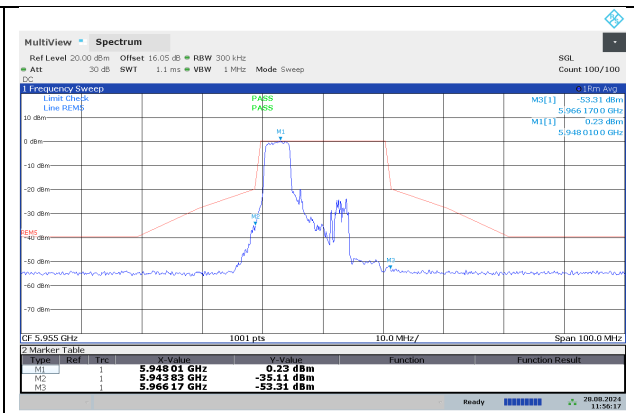


HIGH CHANNEL CHAIN 1

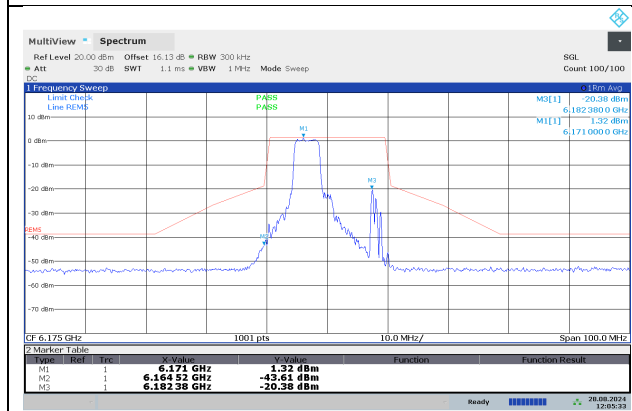
## 2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 52T STANDARD POWER



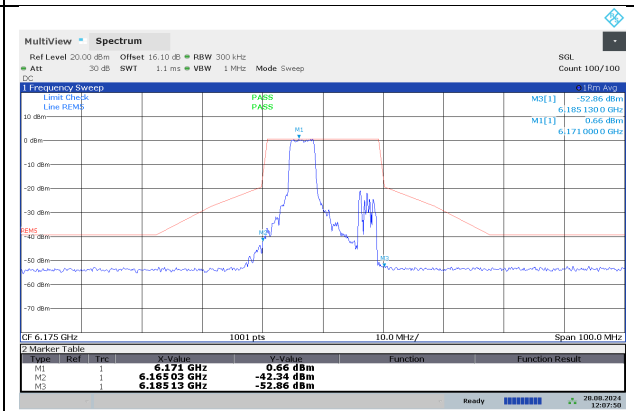
LOW CHANNEL CHAIN 0



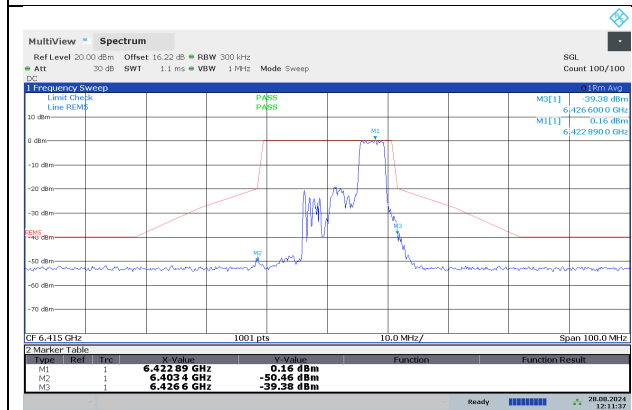
LOW CHANNEL CHAIN 1



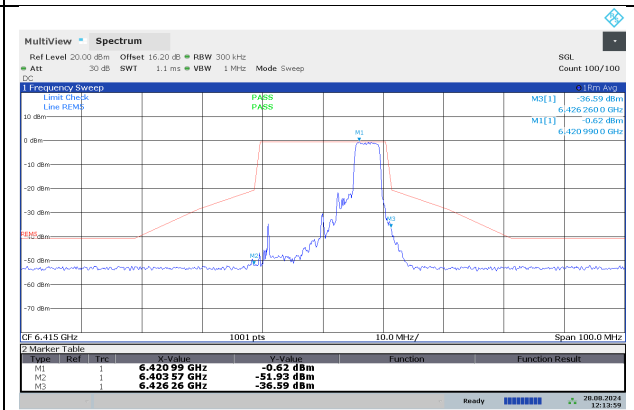
MID CHANNEL CHAIN 0



MID CHANNEL CHAIN 1

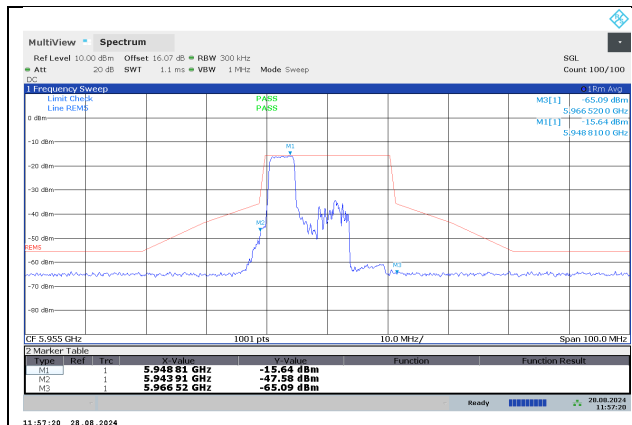


HIGH CHANNEL CHAIN 0

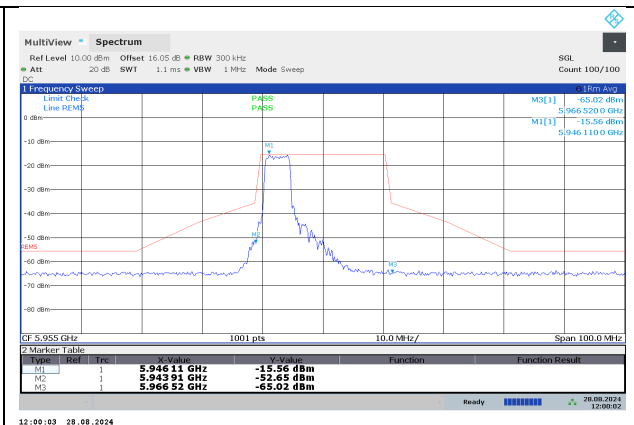


HIGH CHANNEL CHAIN 1

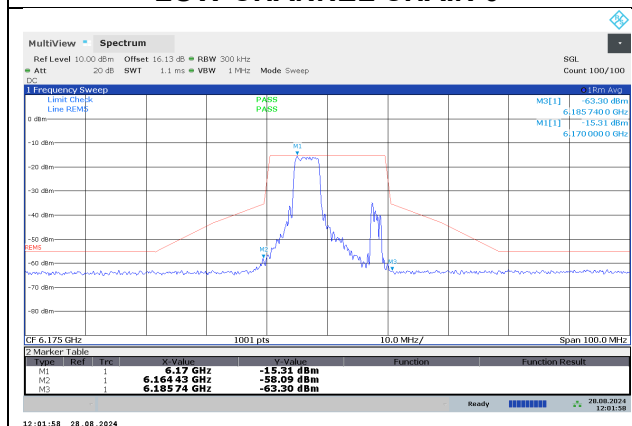
**2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 52T LOW POWER INDOOR**



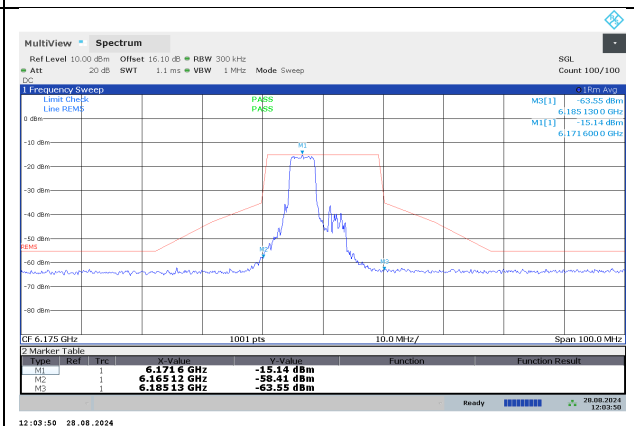
**LOW CHANNEL CHAIN 0**



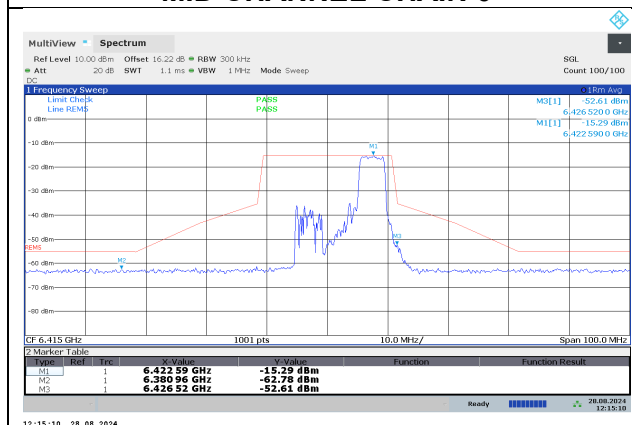
**LOW CHANNEL CHAIN 1**



**MID CHANNEL CHAIN 0**



**MID CHANNEL CHAIN 1**

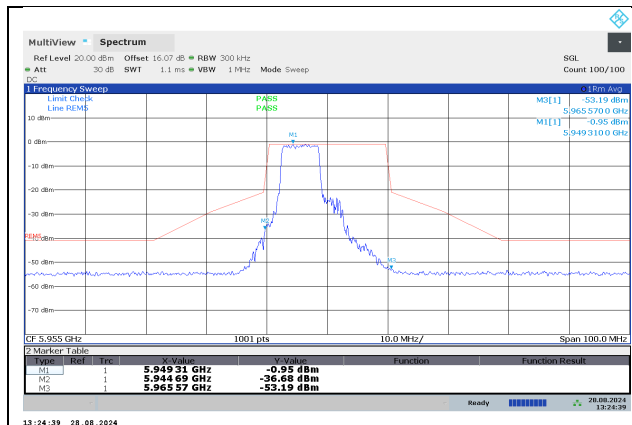


**HIGH CHANNEL CHAIN 0**

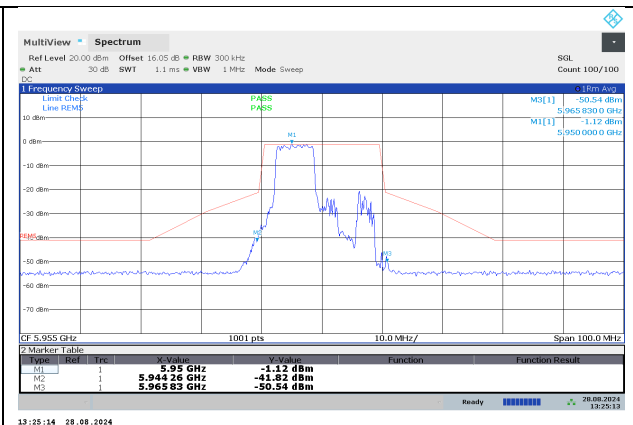


**HIGH CHANNEL CHAIN 1**

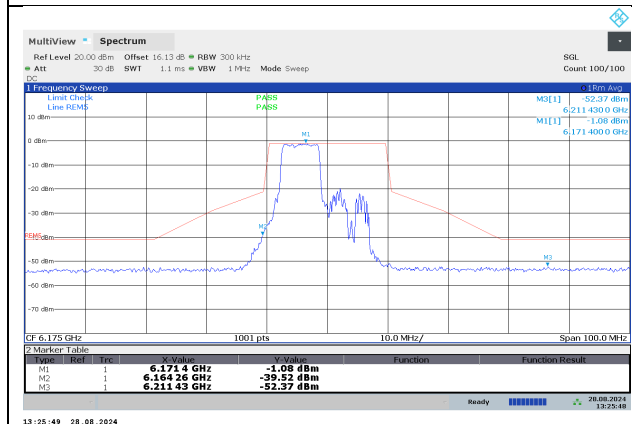
## 2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 52T+26T STANDARD POWER



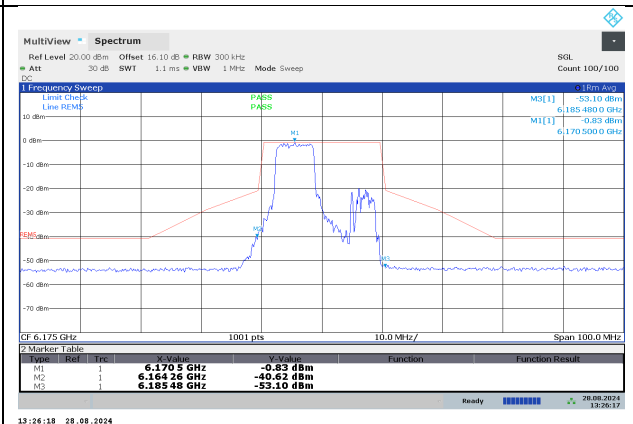
LOW CHANNEL CHAIN 0



LOW CHANNEL CHAIN 1



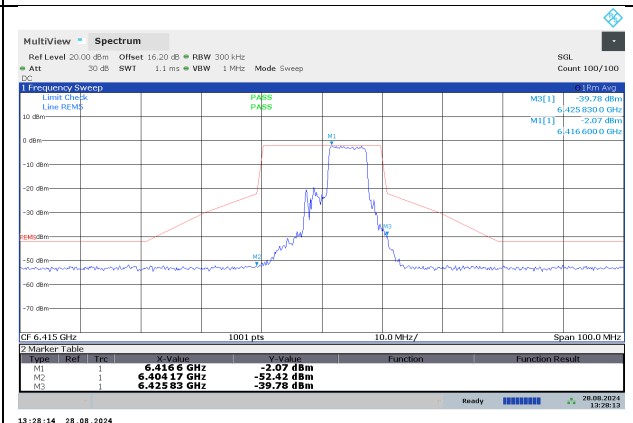
MID CHANNEL CHAIN 0



MID CHANNEL CHAIN 1



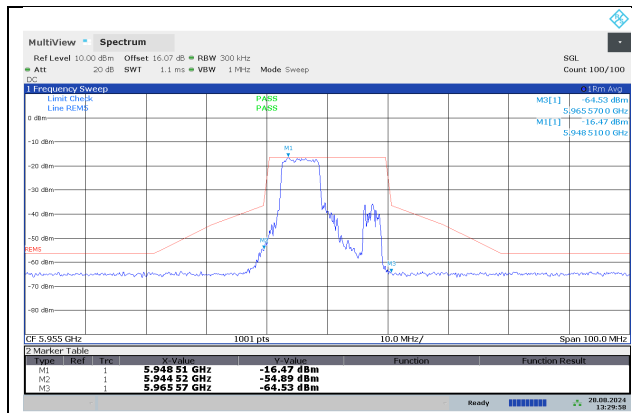
HIGH CHANNEL CHAIN 0



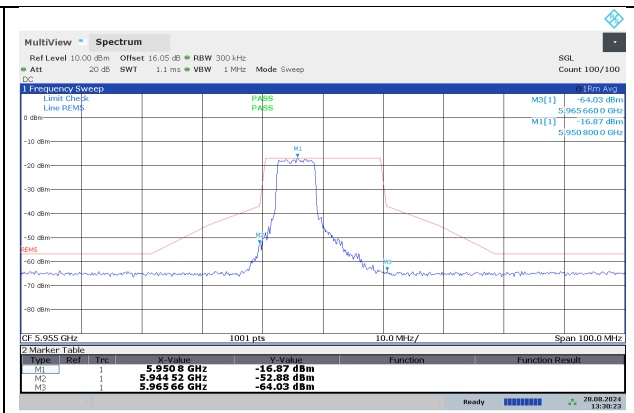
HIGH CHANNEL CHAIN 1



**2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 52T+26T LOW POWER INDOOR**



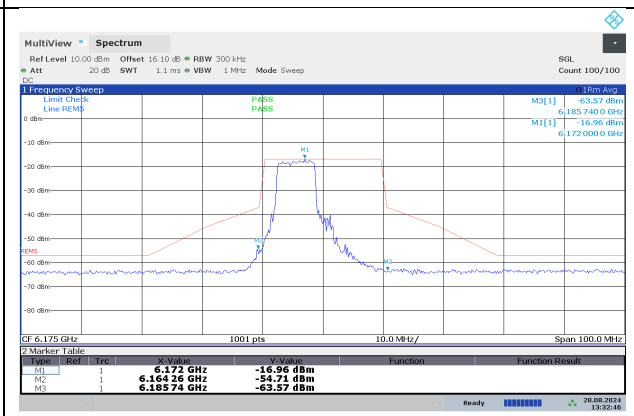
**LOW CHANNEL CHAIN 0**



**LOW CHANNEL CHAIN 1**



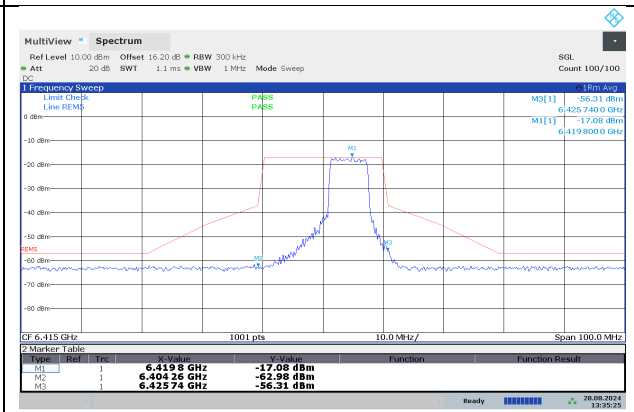
**MID CHANNEL CHAIN 0**



**MID CHANNEL CHAIN 1**

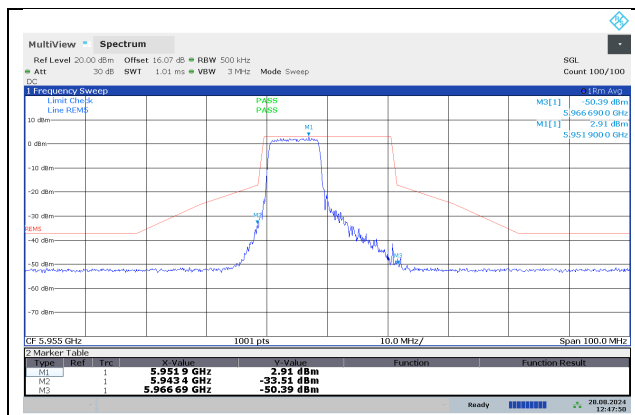


**HIGH CHANNEL CHAIN 0**

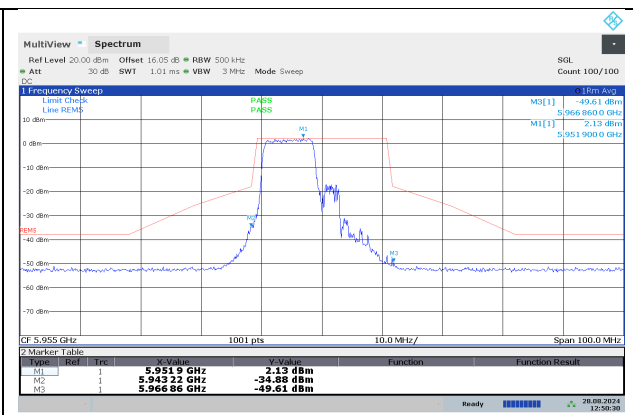


**HIGH CHANNEL CHAIN 1**

## 2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 106T STANDARD POWER



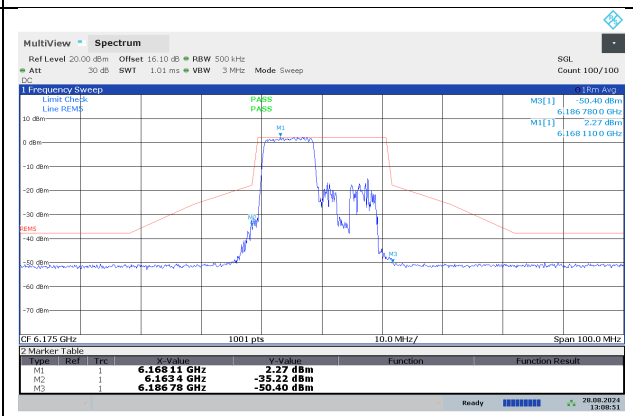
LOW CHANNEL CHAIN 0



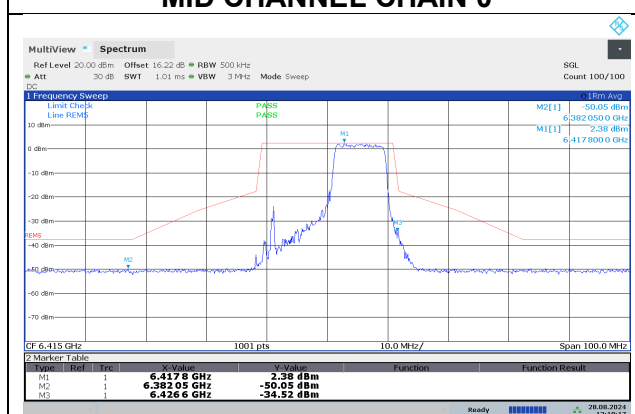
LOW CHANNEL CHAIN 1



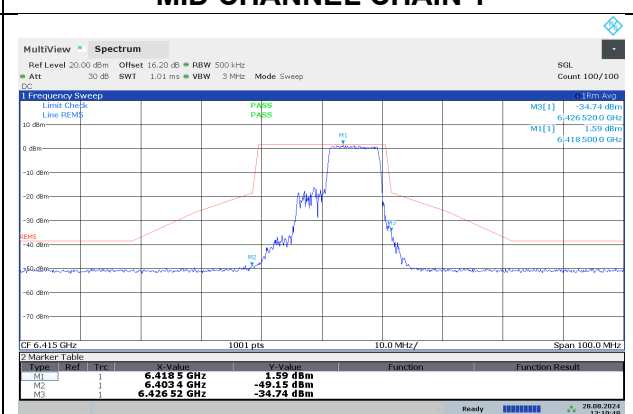
MID CHANNEL CHAIN 0



MID CHANNEL CHAIN 1



HIGH CHANNEL CHAIN 0

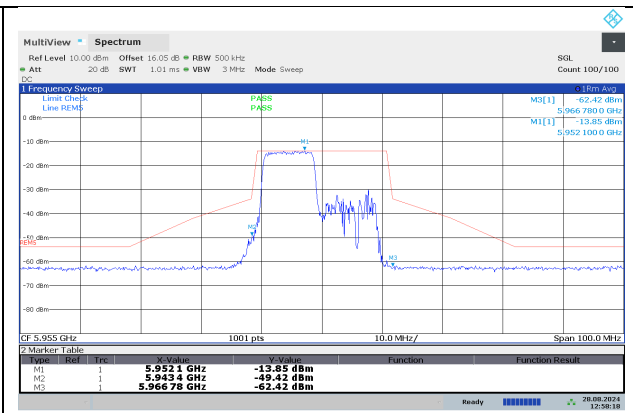


HIGH CHANNEL CHAIN 1

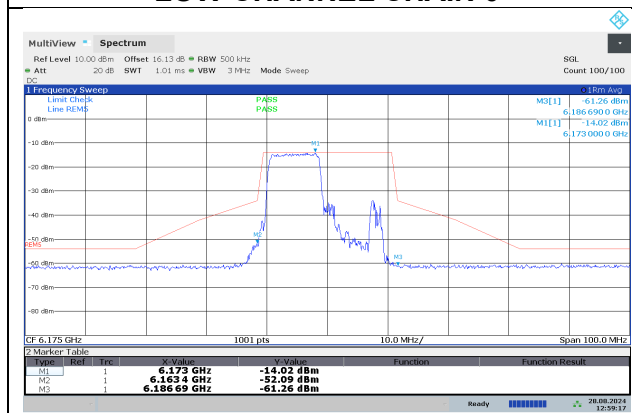
**2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 106T LOW POWER INDOOR**



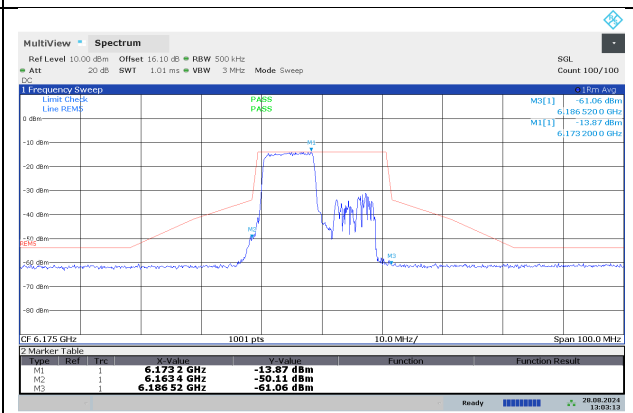
**LOW CHANNEL CHAIN 0**



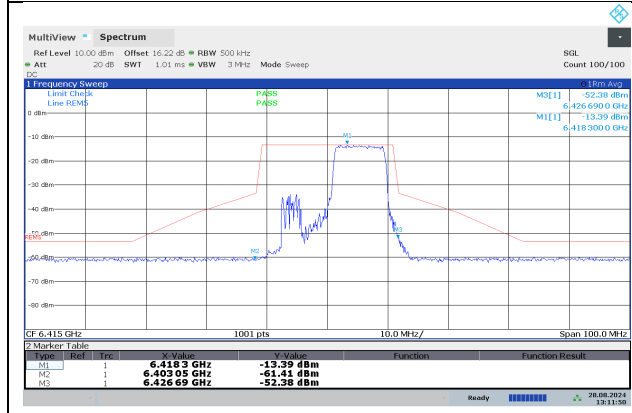
**LOW CHANNEL CHAIN 1**



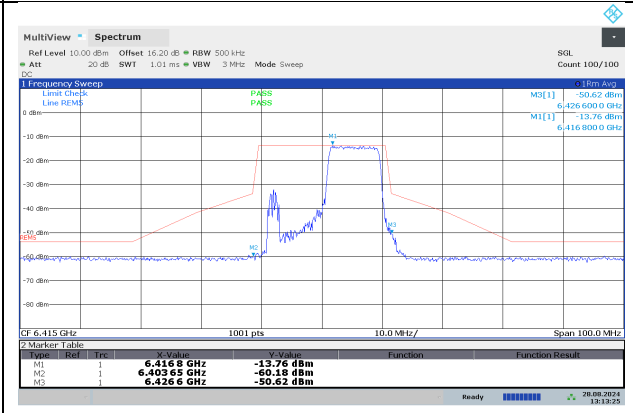
**MID CHANNEL CHAIN 0**



**MID CHANNEL CHAIN 1**



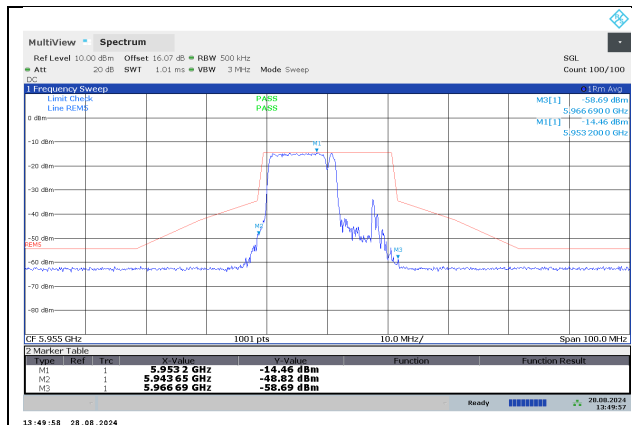
**HIGH CHANNEL CHAIN 0**



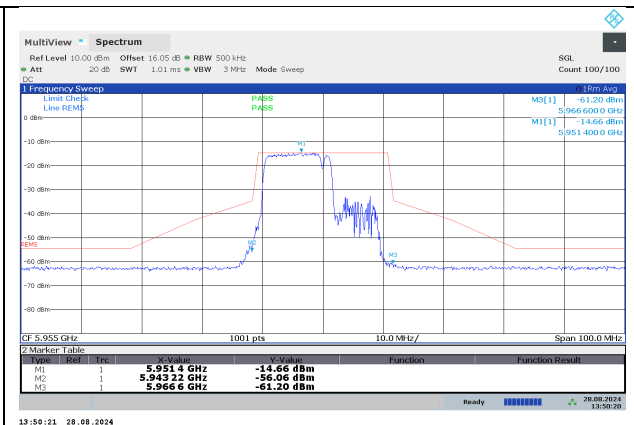
**HIGH CHANNEL CHAIN 1**



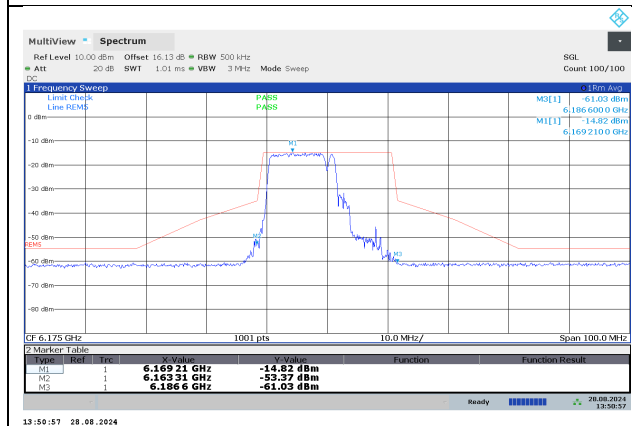
## 2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 106T+26T LOW POWER INDOOR



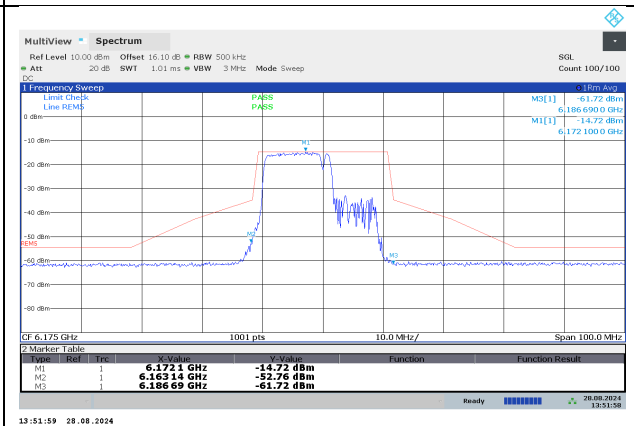
LOW CHANNEL CHAIN 0



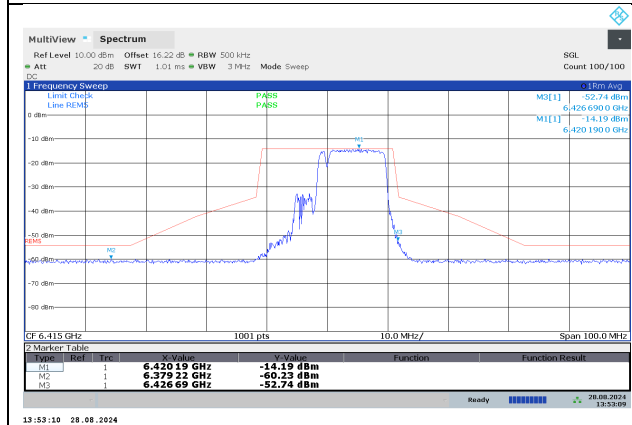
LOW CHANNEL CHAIN 1



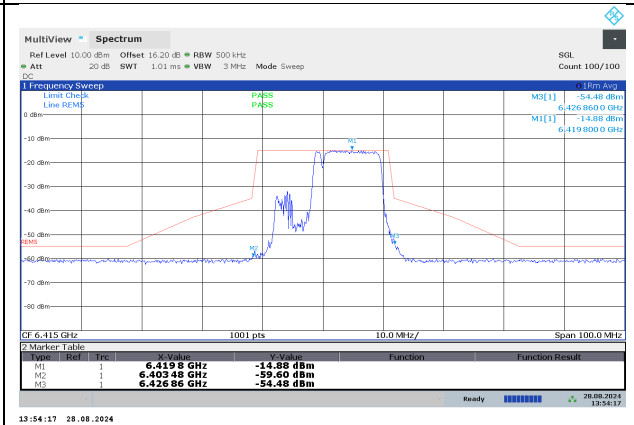
MID CHANNEL CHAIN 0



MID CHANNEL CHAIN 1

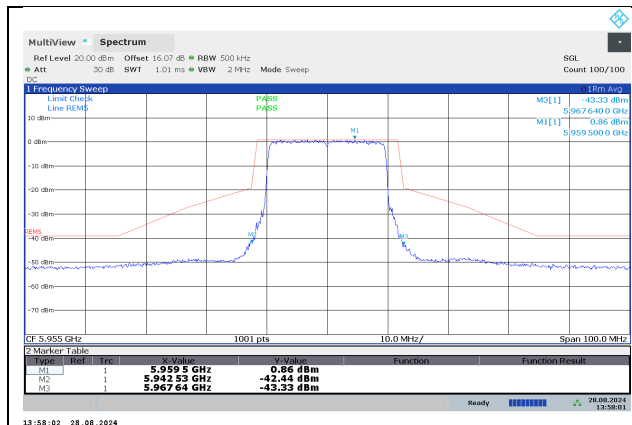


HIGH CHANNEL CHAIN 0

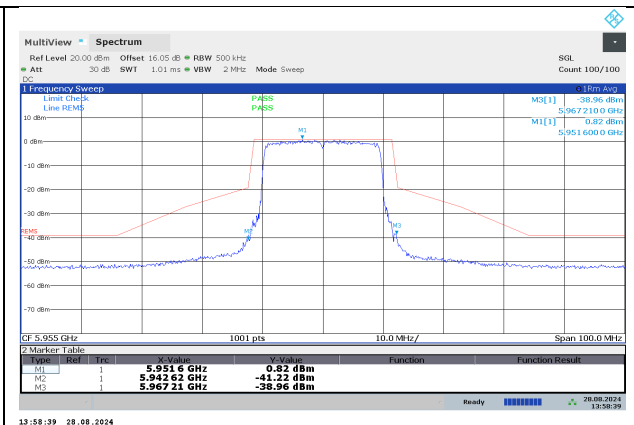


HIGH CHANNEL CHAIN 1

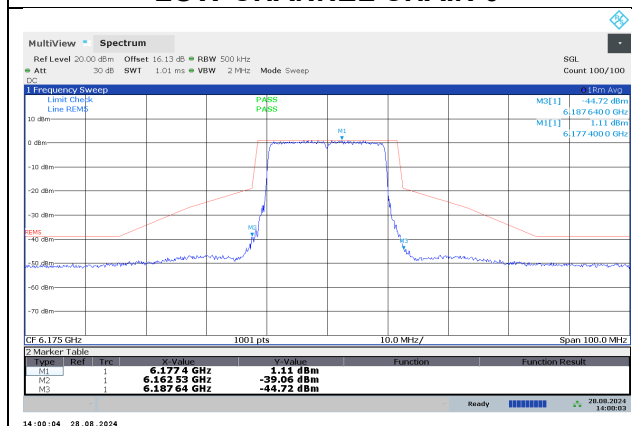
## 2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 242T STANDARD POWER



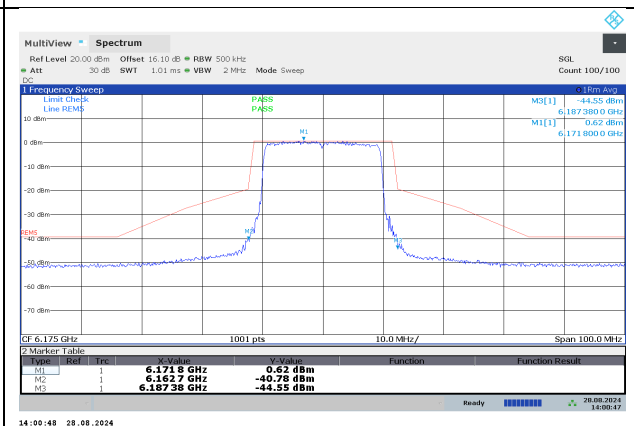
LOW CHANNEL CHAIN 0



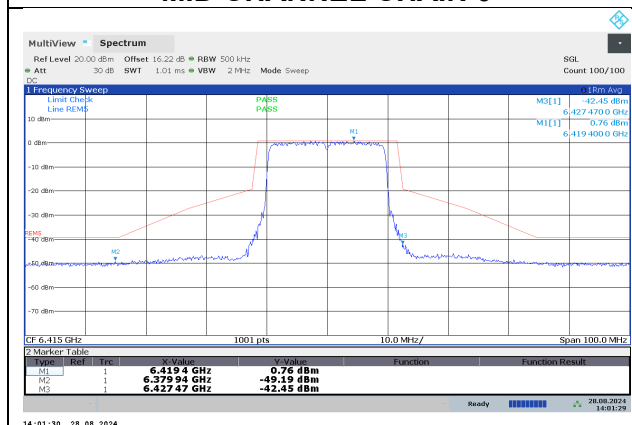
LOW CHANNEL CHAIN 1



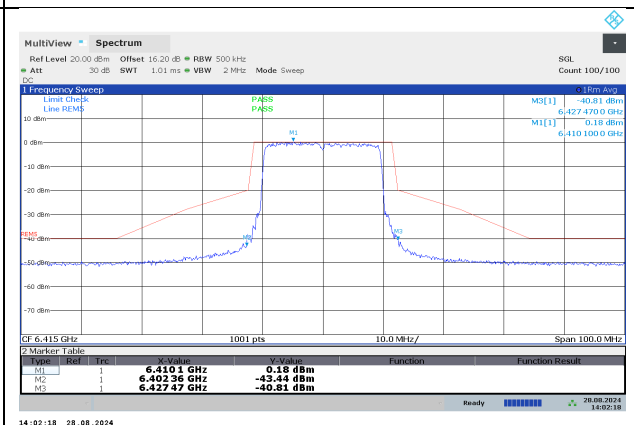
MID CHANNEL CHAIN 0



MID CHANNEL CHAIN 1

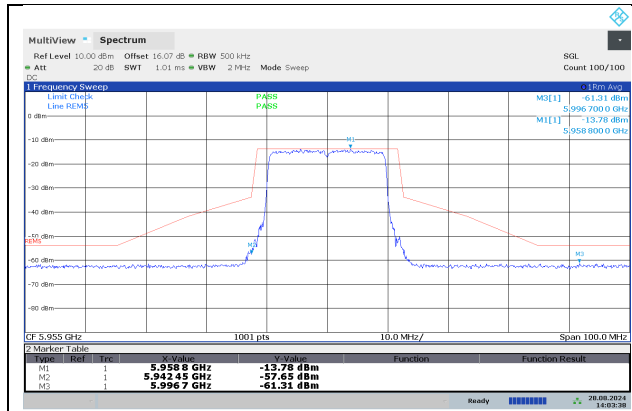


HIGH CHANNEL CHAIN 0

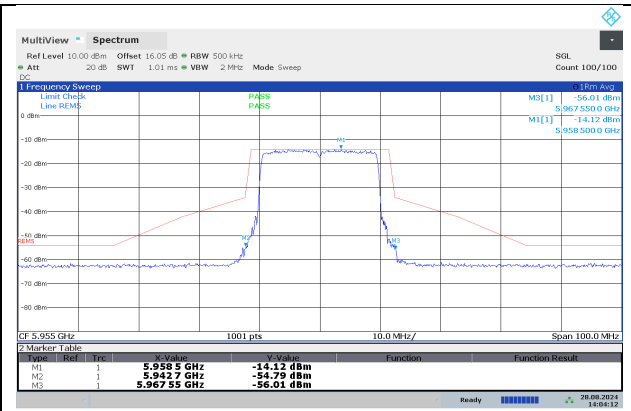


HIGH CHANNEL CHAIN 1

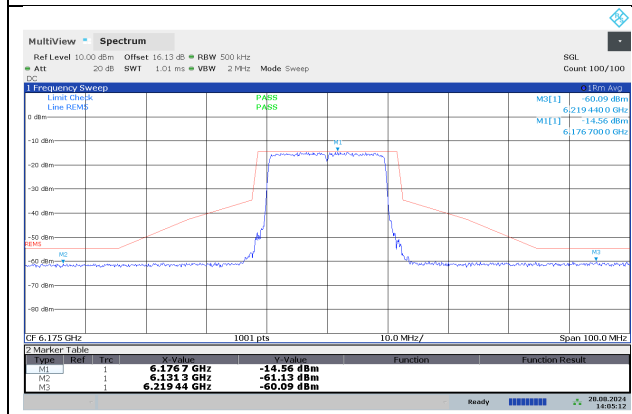
**2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 242T LOW POWER INDOOR**



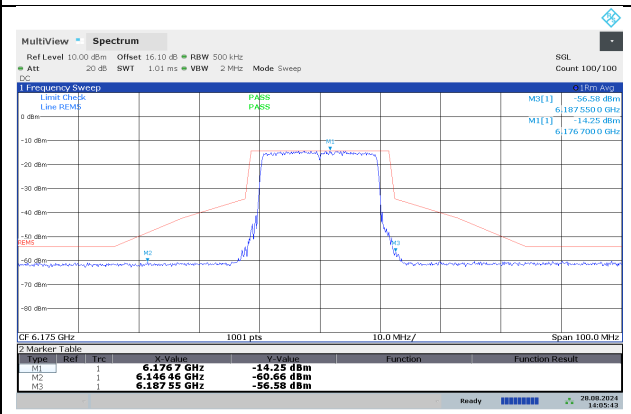
**LOW CHANNEL CHAIN 0**



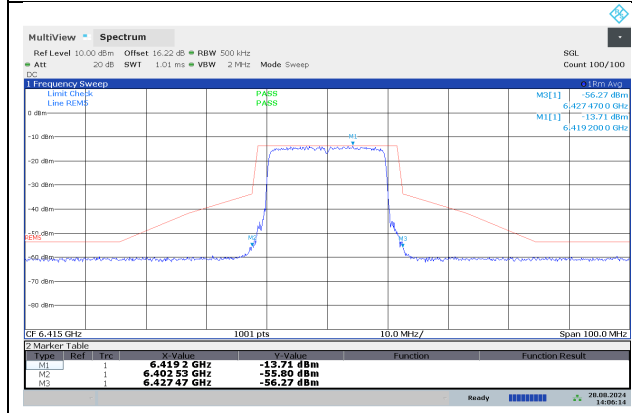
**LOW CHANNEL CHAIN 1**



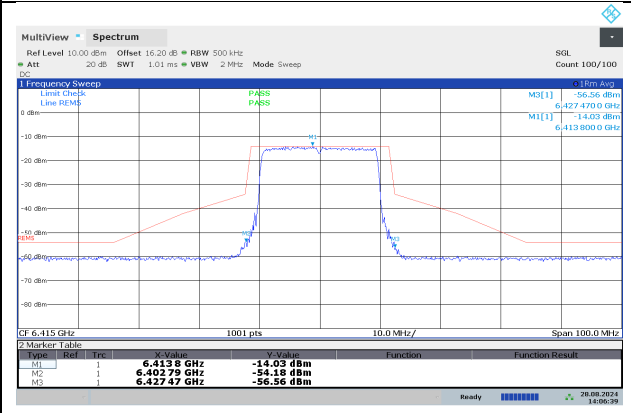
**MID CHANNEL CHAIN 0**



**MID CHANNEL CHAIN 1**



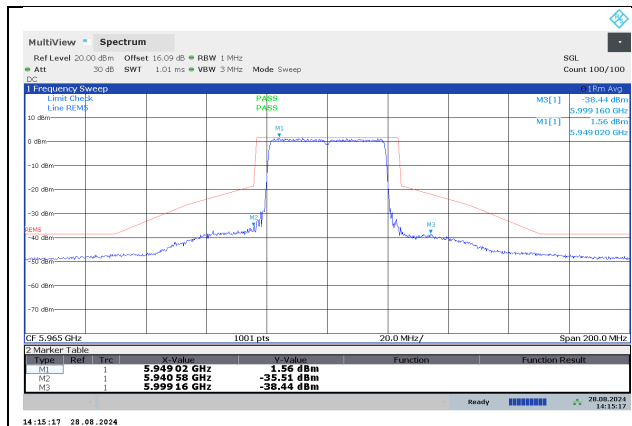
**HIGH CHANNEL CHAIN 0**



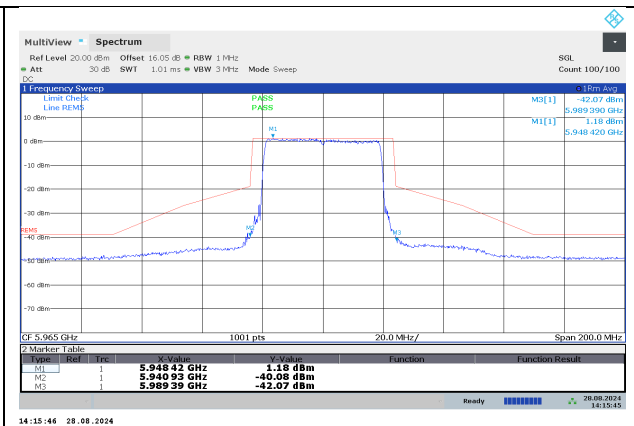
**HIGH CHANNEL CHAIN 1**

### 9.5.3. 802.11be EHT40 MODE 2TX IN THE UNII-5 BAND (LOW GAIN)

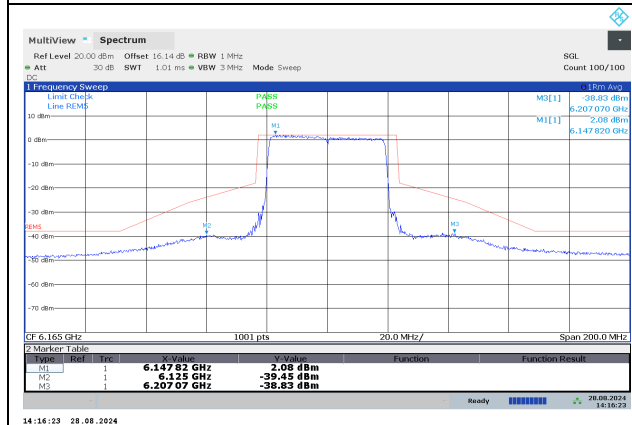
#### 2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 484T STANDARD POWER



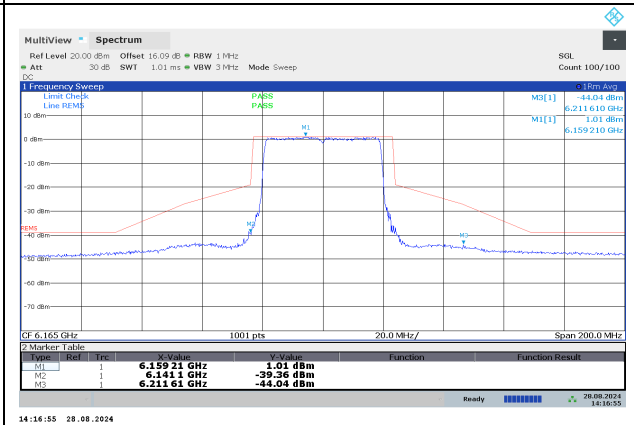
LOW CHANNEL CHAIN 0



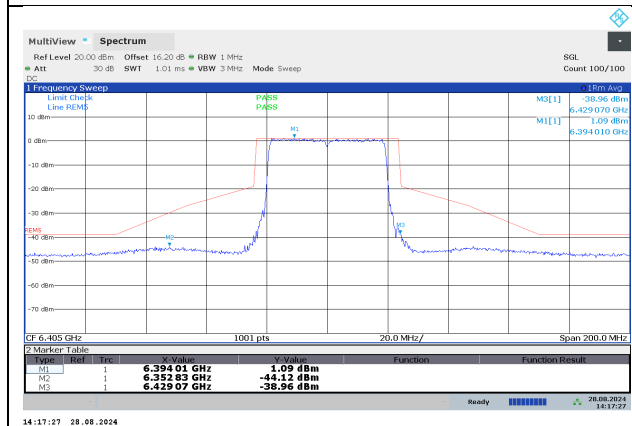
LOW CHANNEL CHAIN 1



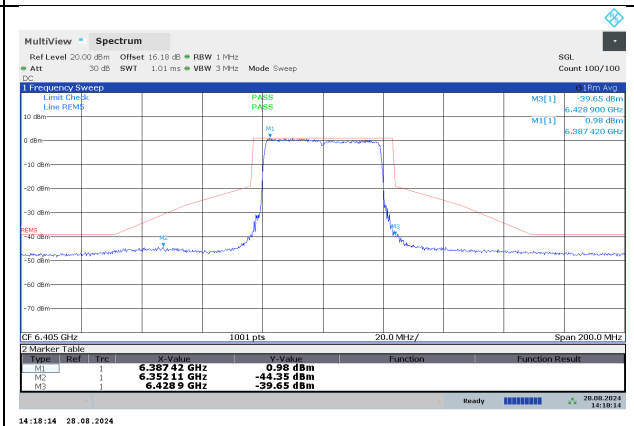
MID CHANNEL CHAIN 0



MID CHANNEL CHAIN 1



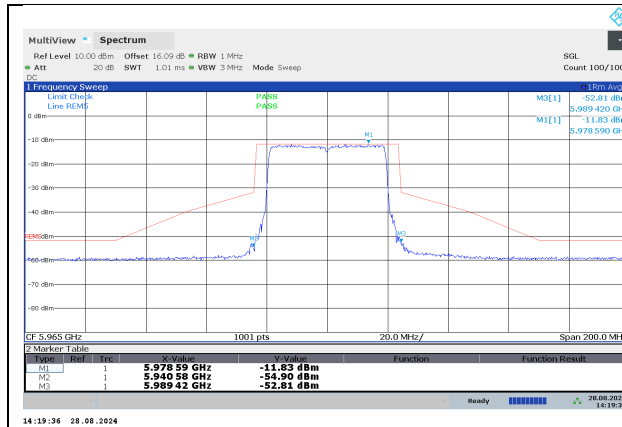
HIGH CHANNEL CHAIN 0



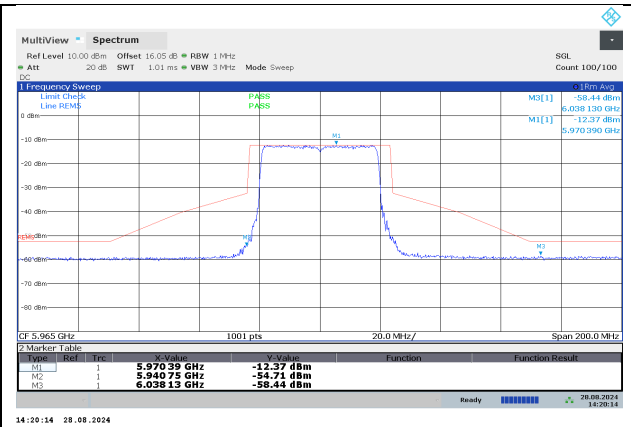
HIGH CHANNEL CHAIN 1



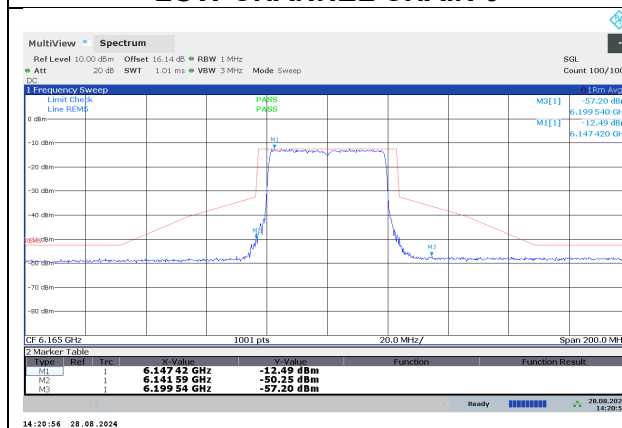
**2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 484T LOW POWER INDOOR**



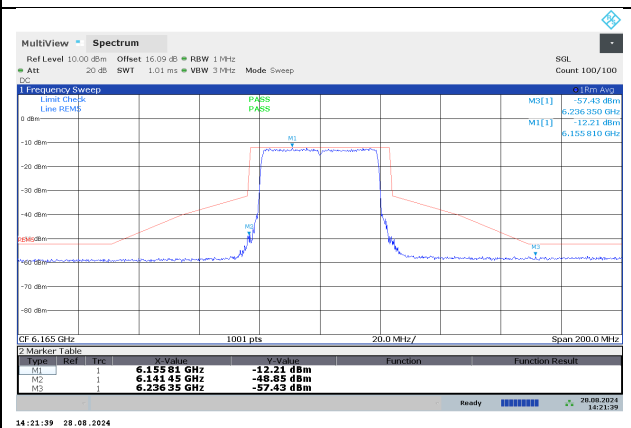
**LOW CHANNEL CHAIN 0**



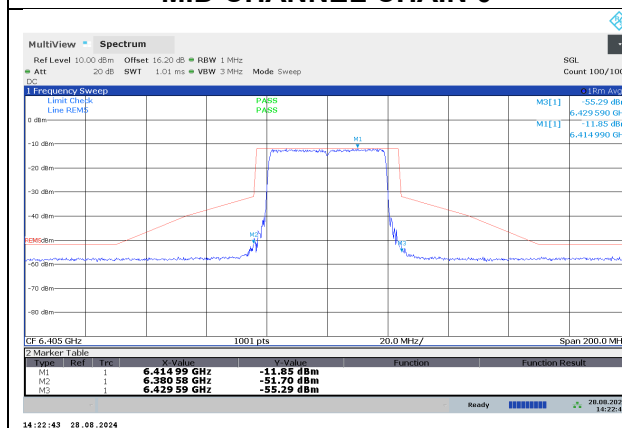
**LOW CHANNEL CHAIN 1**



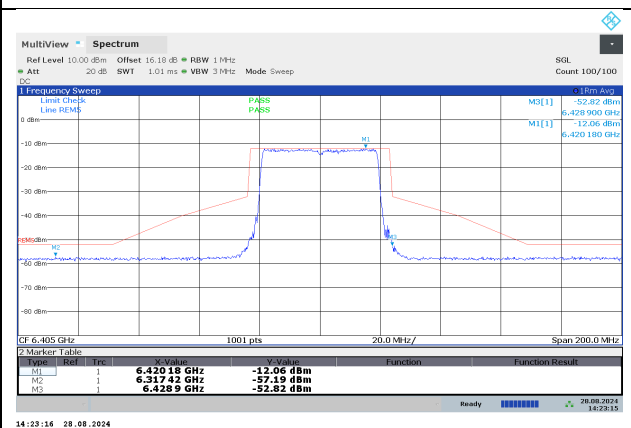
**MID CHANNEL CHAIN 0**



**MID CHANNEL CHAIN 1**



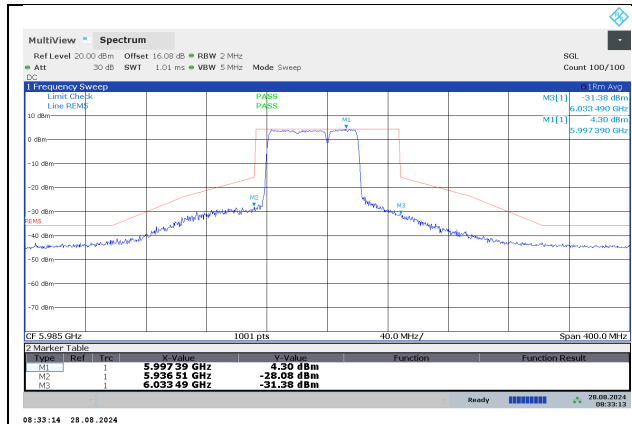
**HIGH CHANNEL CHAIN 0**



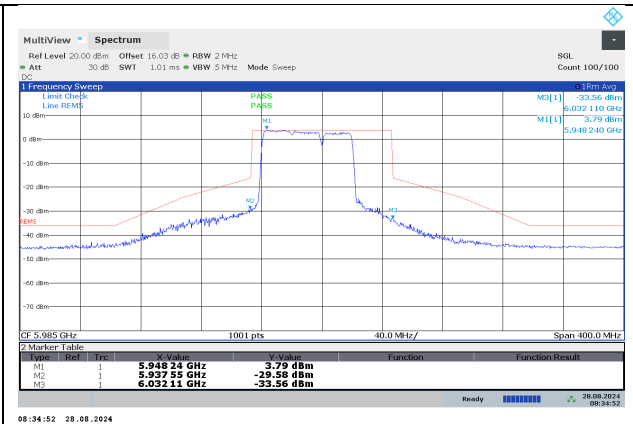
**HIGH CHANNEL CHAIN 1**

## 9.5.4. 802.11be EHT80 MODE 2TX IN THE UNII-5 BAND (LOW GAIN)

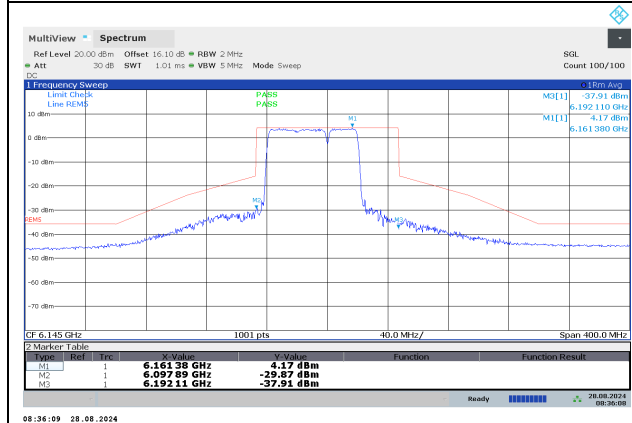
### 2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 484T+242T (CONTIGUOUS) STANDARD POWER



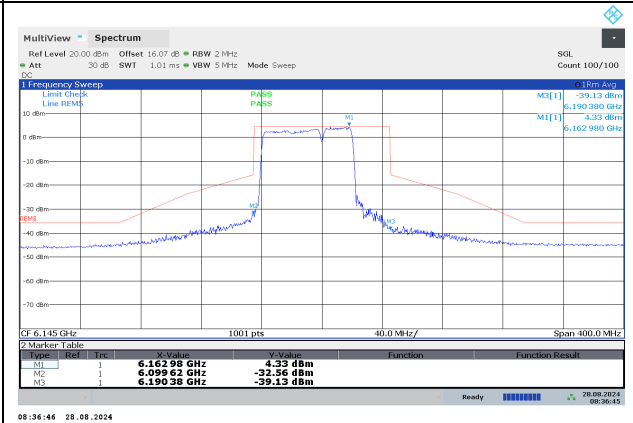
LOW CHANNEL CHAIN 0



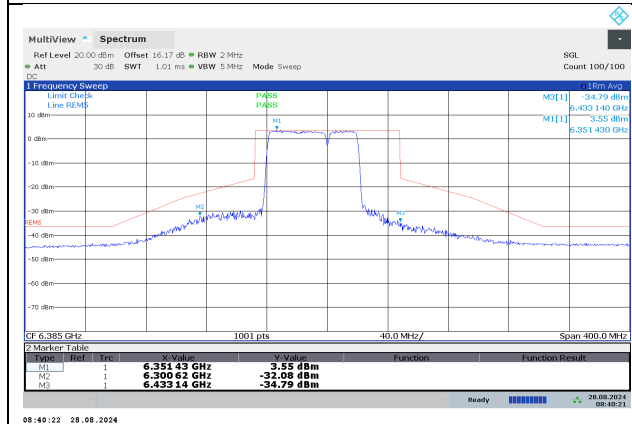
LOW CHANNEL CHAIN 1



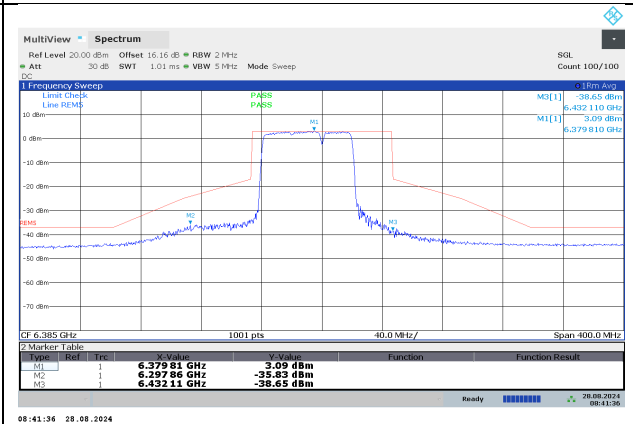
MID CHANNEL CHAIN 0



MID CHANNEL CHAIN 1

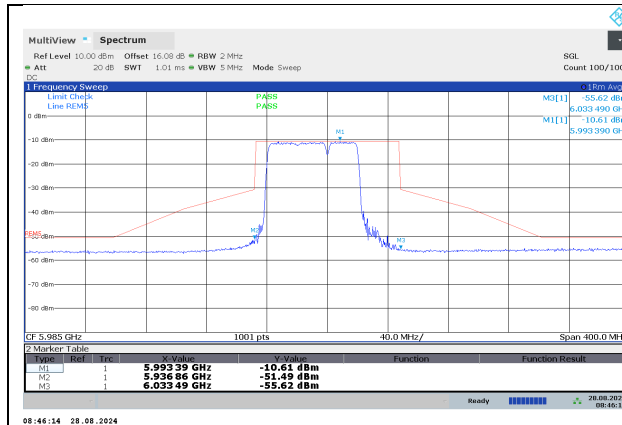


HIGH CHANNEL CHAIN 0

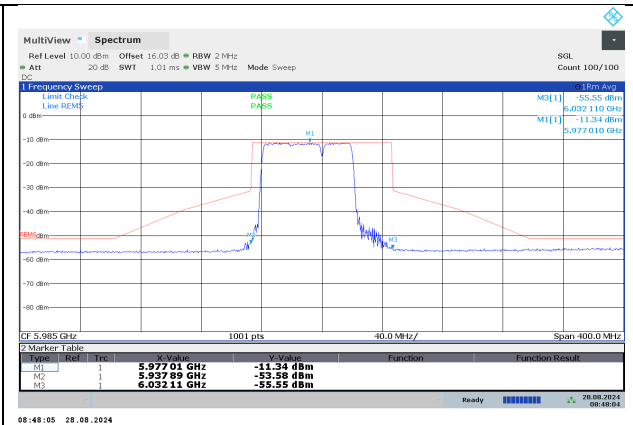


HIGH CHANNEL CHAIN 1

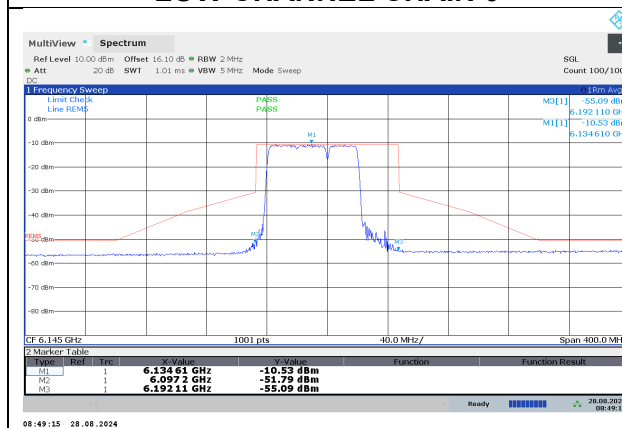
**2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 484T+242T (CONTIGUOUS) LOW POWER INDOOR**



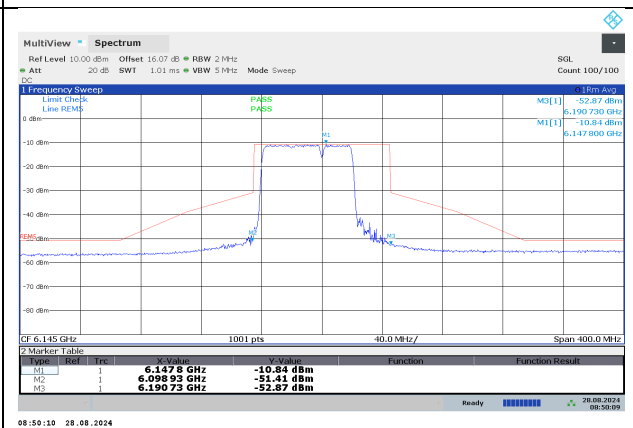
**LOW CHANNEL CHAIN 0**



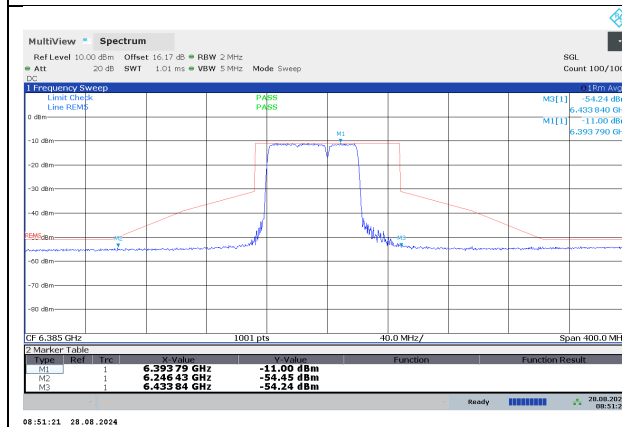
**LOW CHANNEL CHAIN 1**



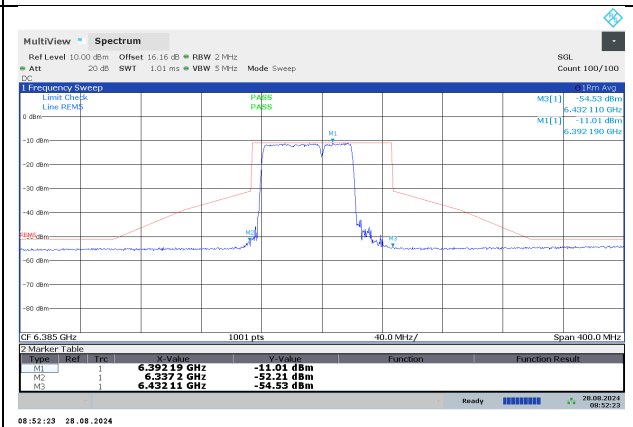
**MID CHANNEL CHAIN 0**



**MID CHANNEL CHAIN 1**

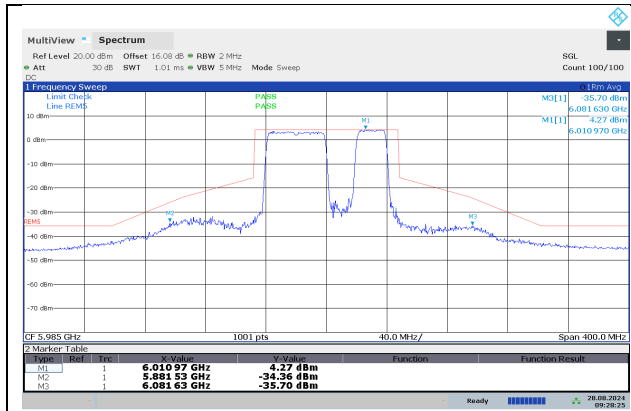


**HIGH CHANNEL CHAIN 0**

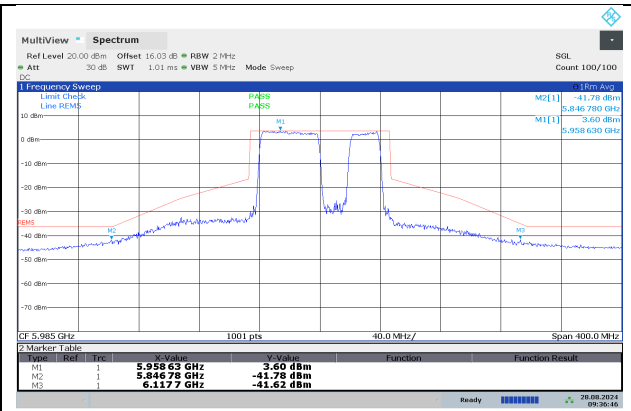


**HIGH CHANNEL CHAIN 1**

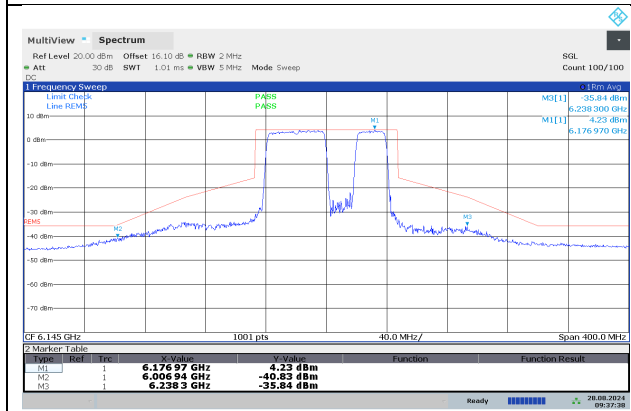
**2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 484T+242T (NON-CONTIGUOUS) STANDARD  
POWER**



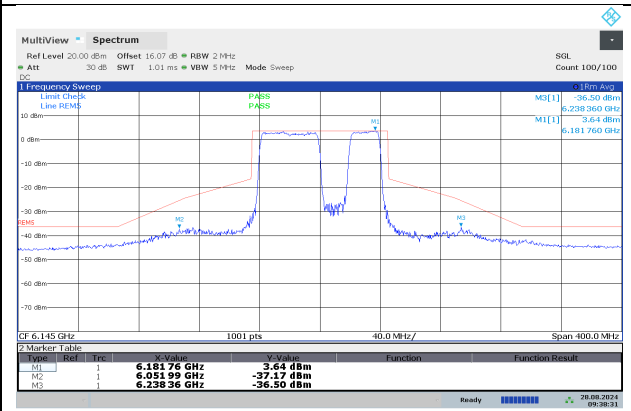
**LOW CHANNEL CHAIN 0**



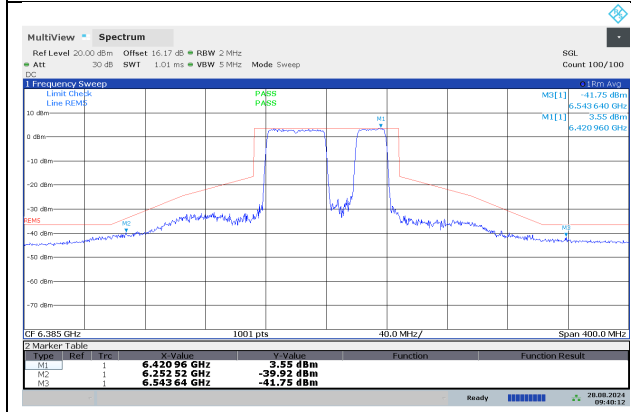
**LOW CHANNEL CHAIN 1**



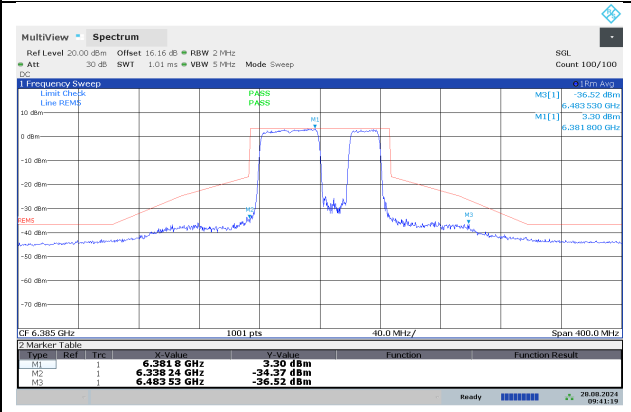
**MID CHANNEL CHAIN 0**



**MID CHANNEL CHAIN 1**

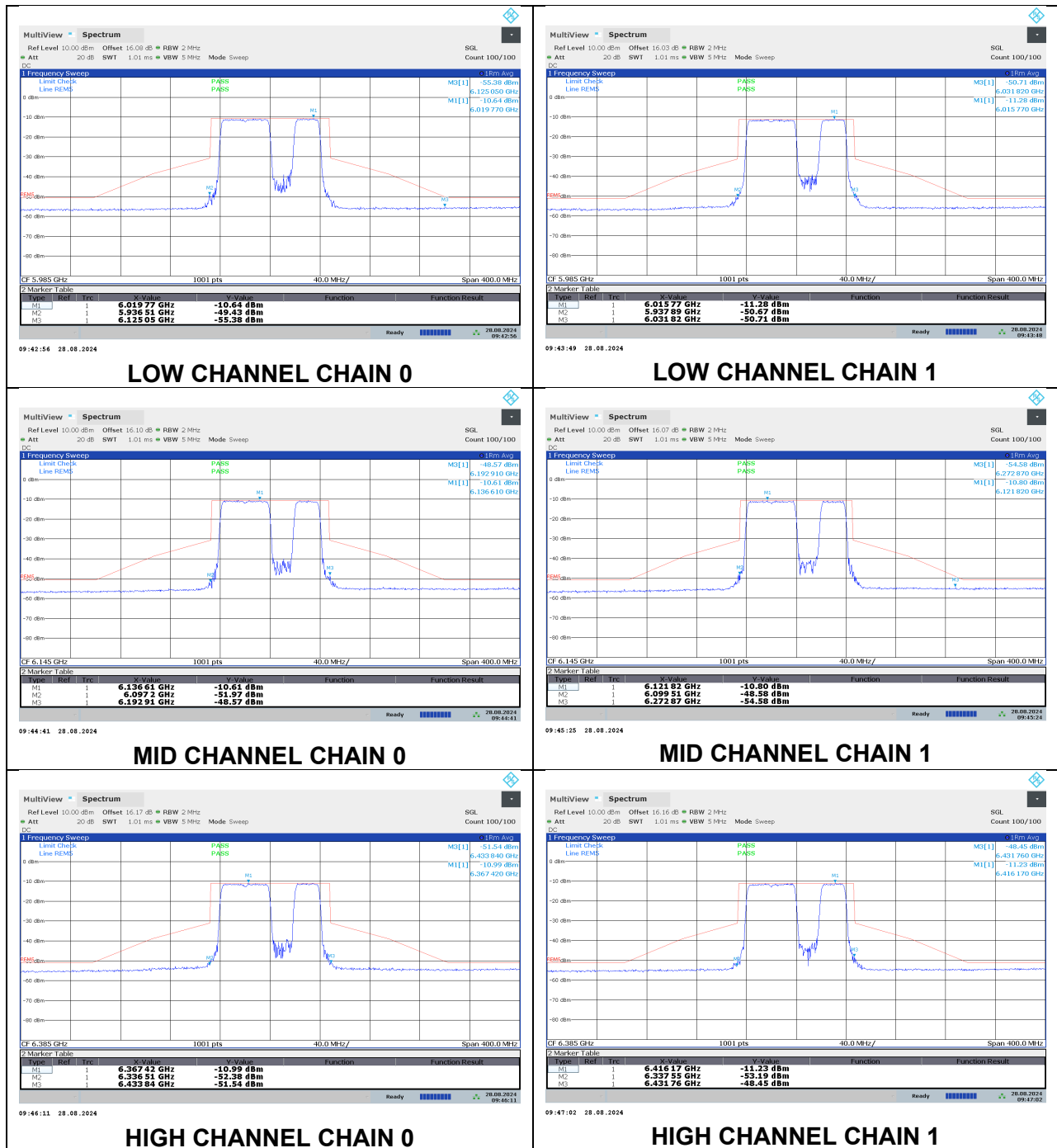


**HIGH CHANNEL CHAIN 0**

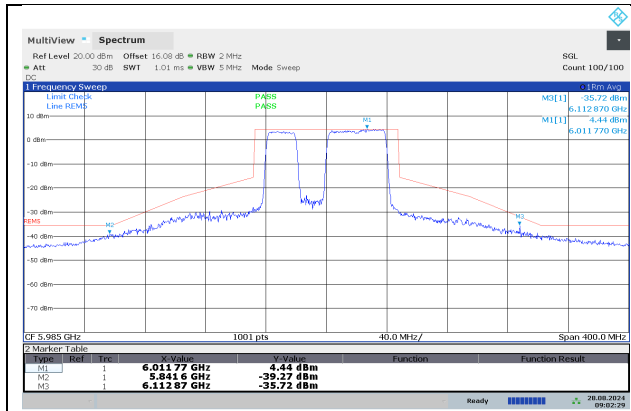


**HIGH CHANNEL CHAIN 1**

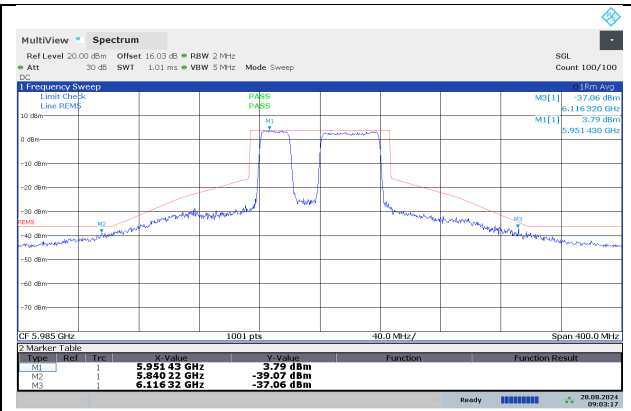
**2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 484T+242T (NON-CONTIGUOUS) LOW POWER INDOOR**



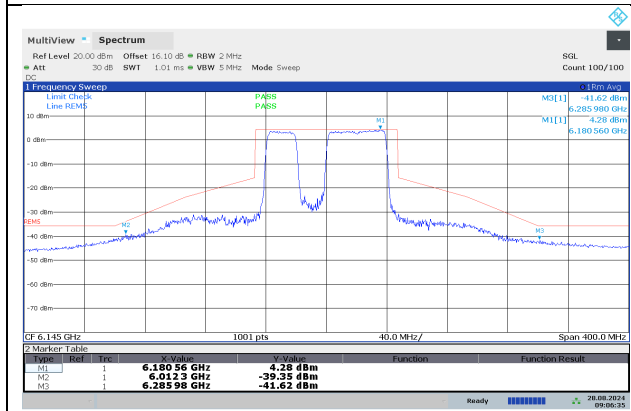
**2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 242T+484T (NON-CONTIGUOUS) STANDARD  
POWER**



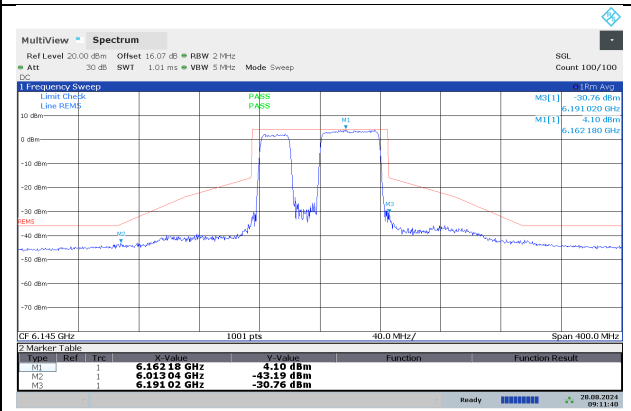
**LOW CHANNEL CHAIN 0**



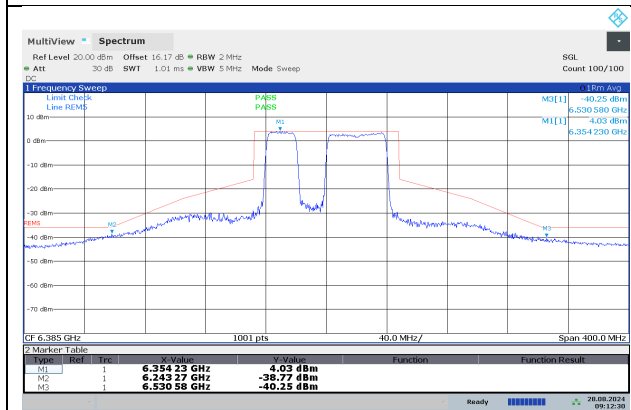
**LOW CHANNEL CHAIN 1**



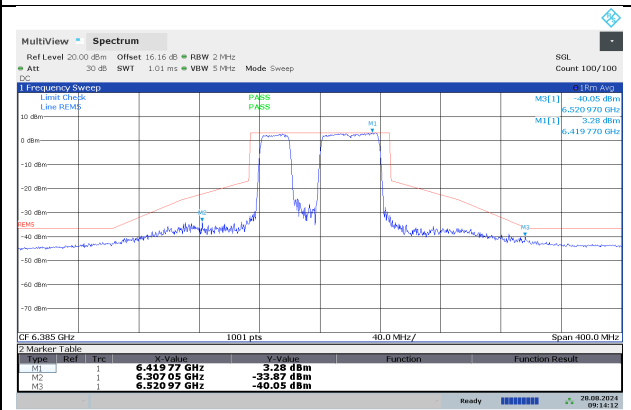
**MID CHANNEL CHAIN 0**



**MID CHANNEL CHAIN 1**



**HIGH CHANNEL CHAIN 0**



**HIGH CHANNEL CHAIN 1**