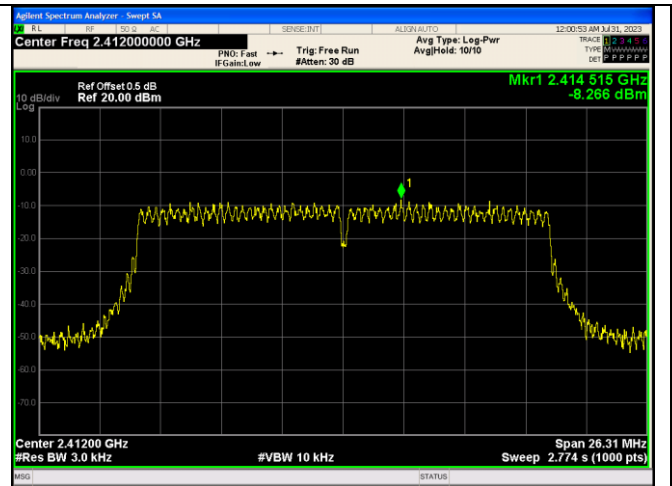
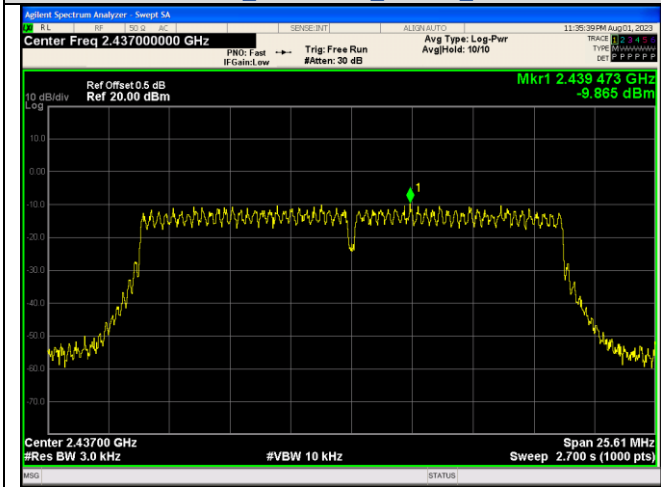


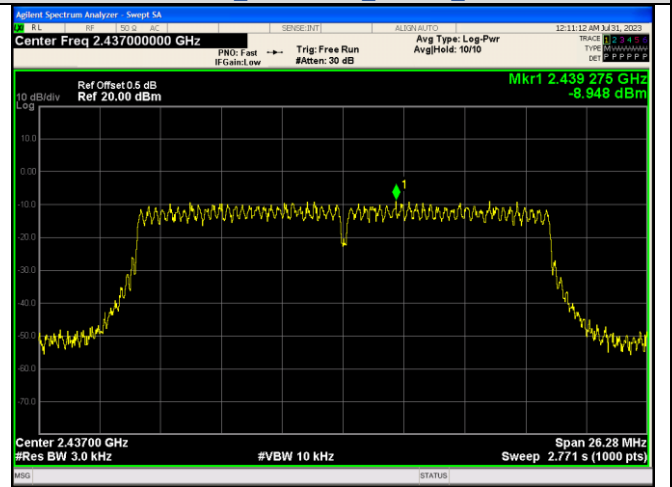
IEEE 802.11n Channel 1 20MHz Antenna 1



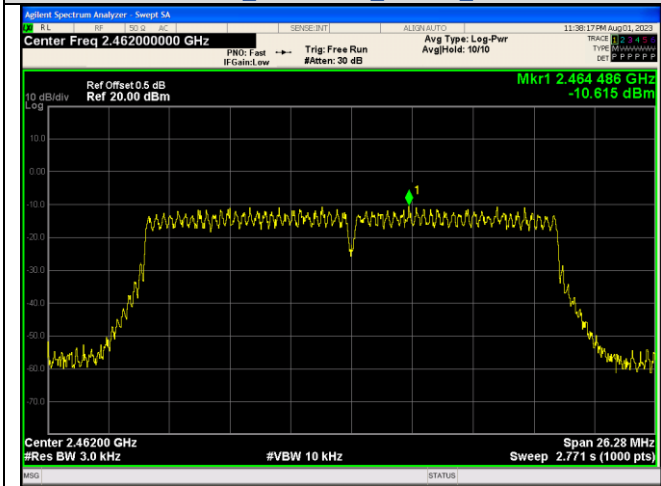
IEEE 802.11n Channel 1 20MHz Antenna 2



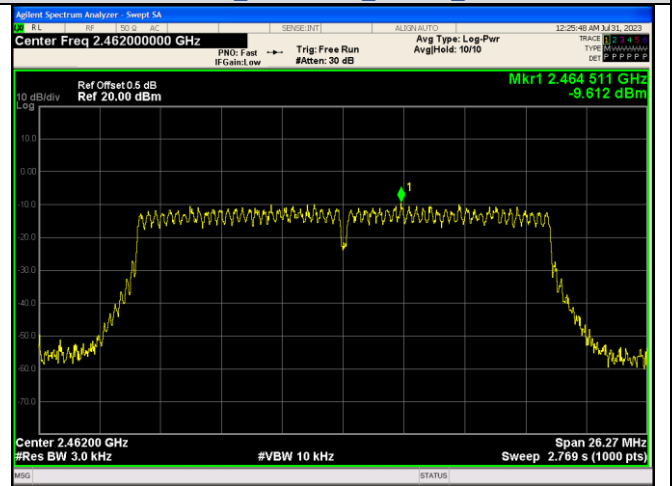
IEEE 802.11n Channel 6 20MHz Antenna 1



IEEE 802.11n Channel 6 20MHz Antenna 2

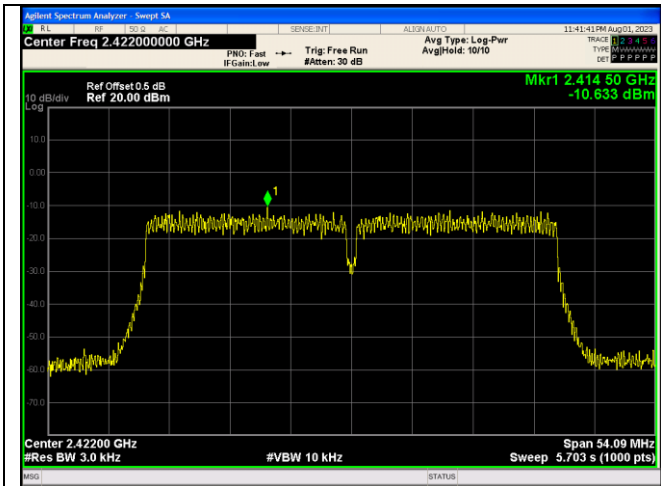


IEEE 802.11n Channel 11 20MHz Antenna 1

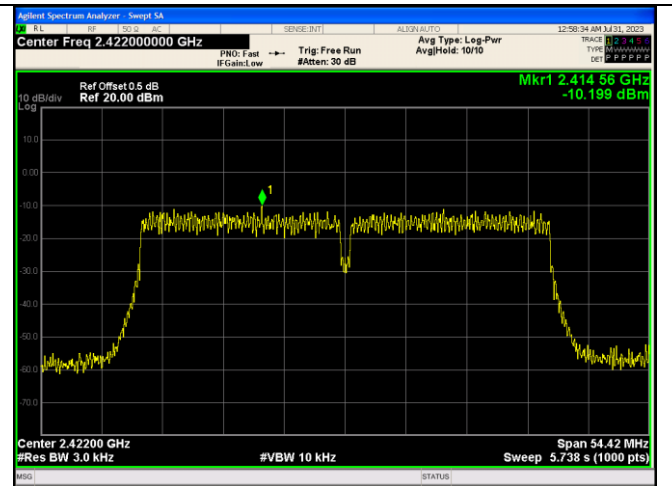


IEEE 802.11n Channel 11 20MHz Antenna 2

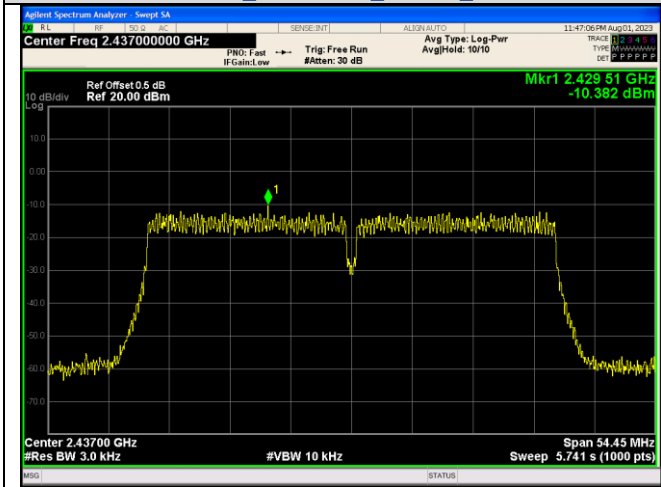




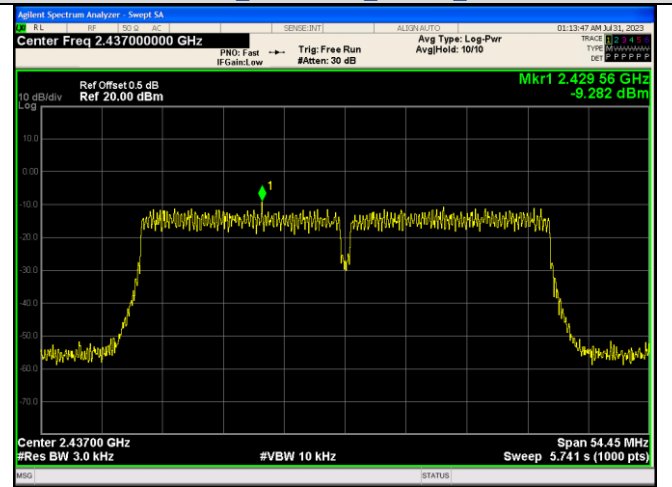
IEEE 802.11n Channel 3 40MHz Antenna 1



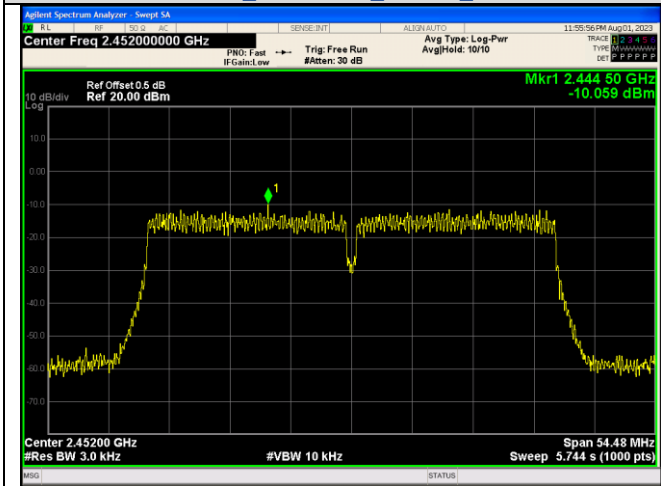
IEEE 802.11n Channel 3 40MHz Antenna 2



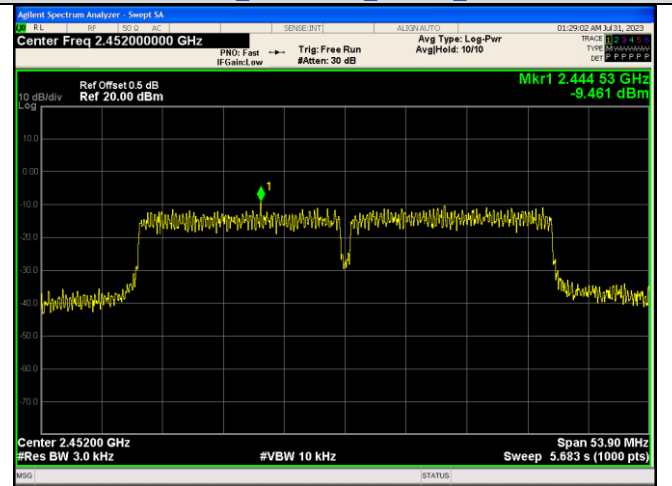
IEEE 802.11n Channel 6 40MHz Antenna 1



IEEE 802.11n Channel 6 40MHz Antenna 2



IEEE 802.11n Channel 9 40MHz Antenna 1



IEEE 802.11n Channel 9 40MHz Antenna 2

CTC Laboratories, Inc.

2/F., Building 1 and 1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Longhua District, Shenzhen, Guangdong, China  
 Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn



For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China : <http://yz.cnca.cn>

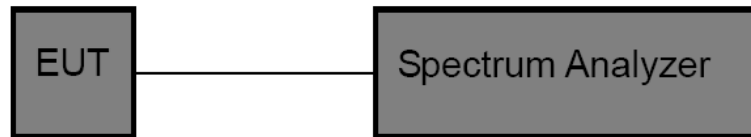


### 3.8. Duty Cycle

#### Limit

None, for report purposes only.

#### Test Configuration



#### Test Procedure

1. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
2. The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement according to section 10.2 of KDB 558074 D01 DTS Meas Guidance v05r02.
3. Spectrum Setting:  
Set analyzer center frequency to test channel center frequency.  
Set the span to 0Hz.  
Set the RBW to 10MHz.  
Set the VBW to 10MHz.  
Detector: Peak.  
Sweep time: Auto.  
Allow trace to fully stabilize. Then use the peak marker function to determine the maximum amplitude level.

#### Test Mode

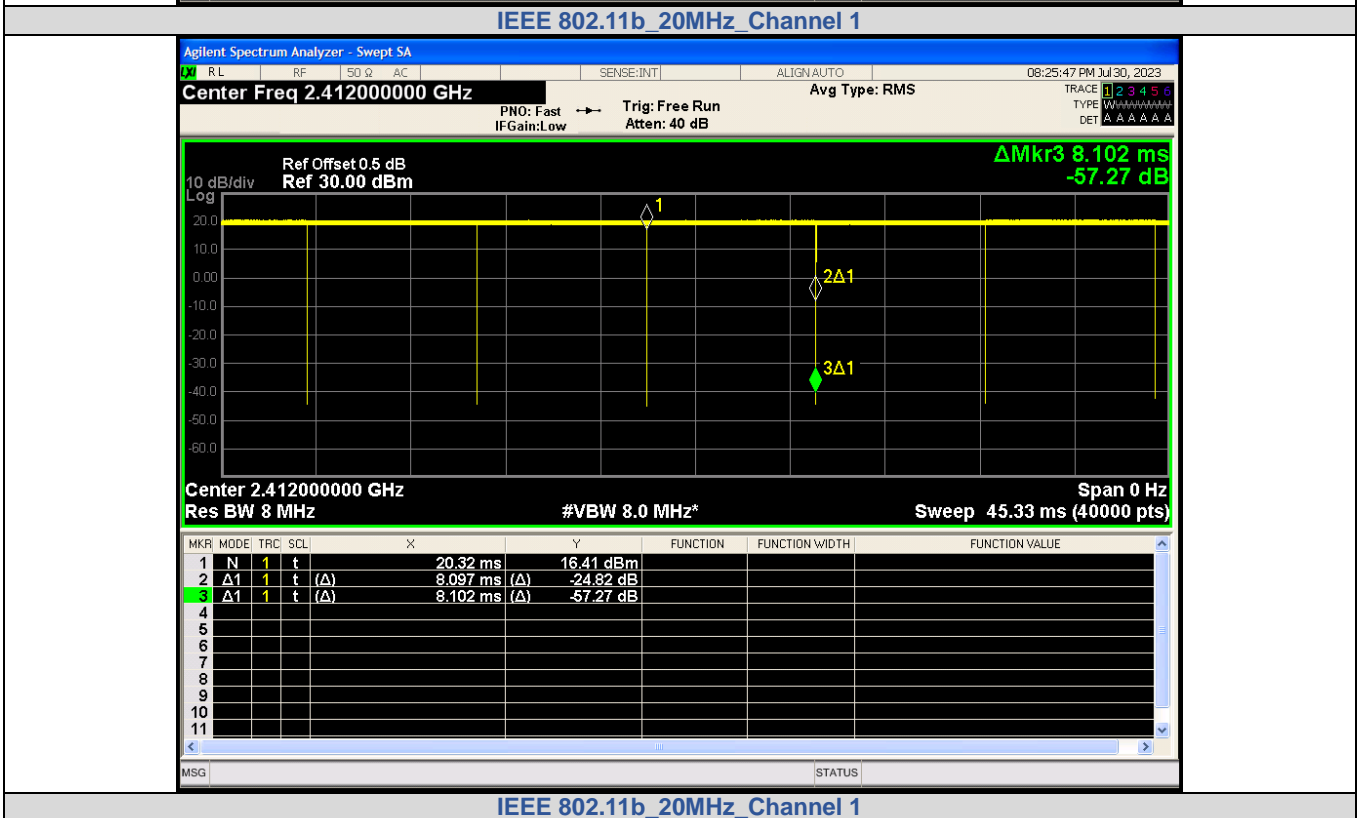
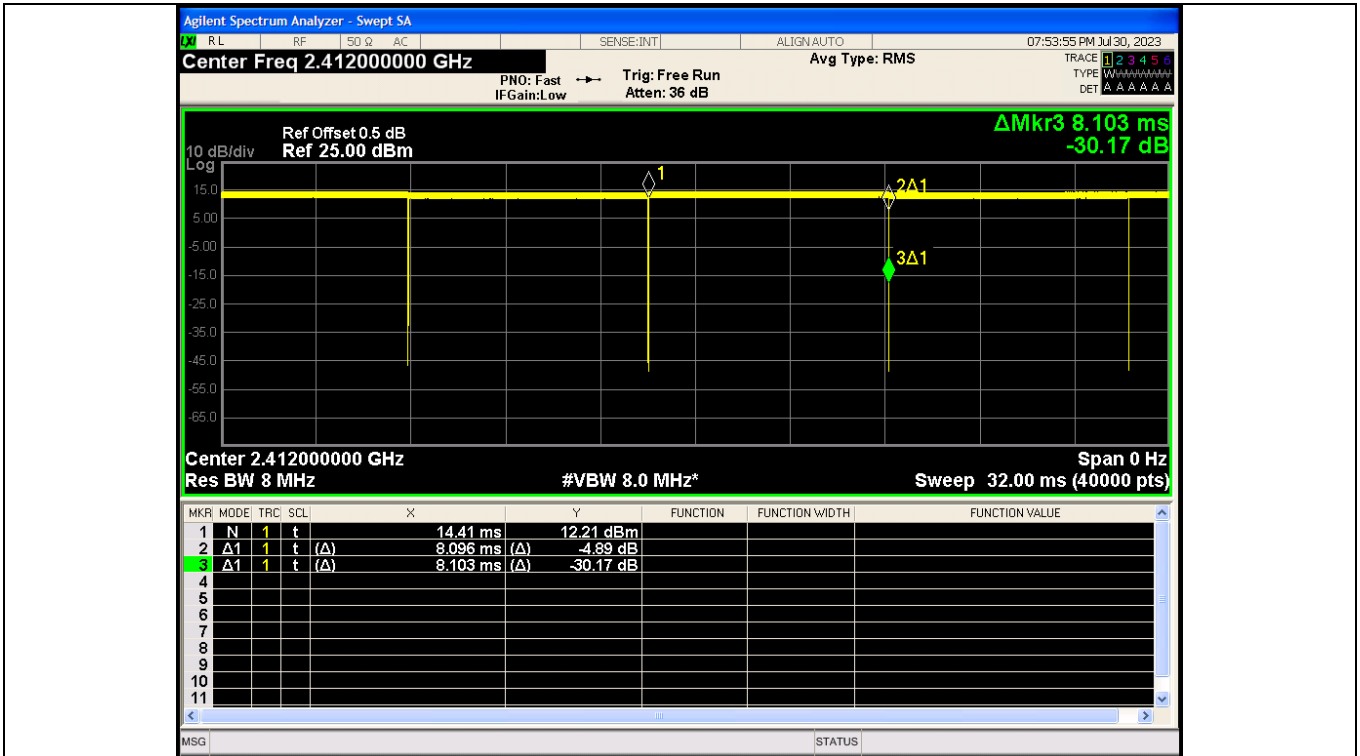
Please refer to the clause 2.4.

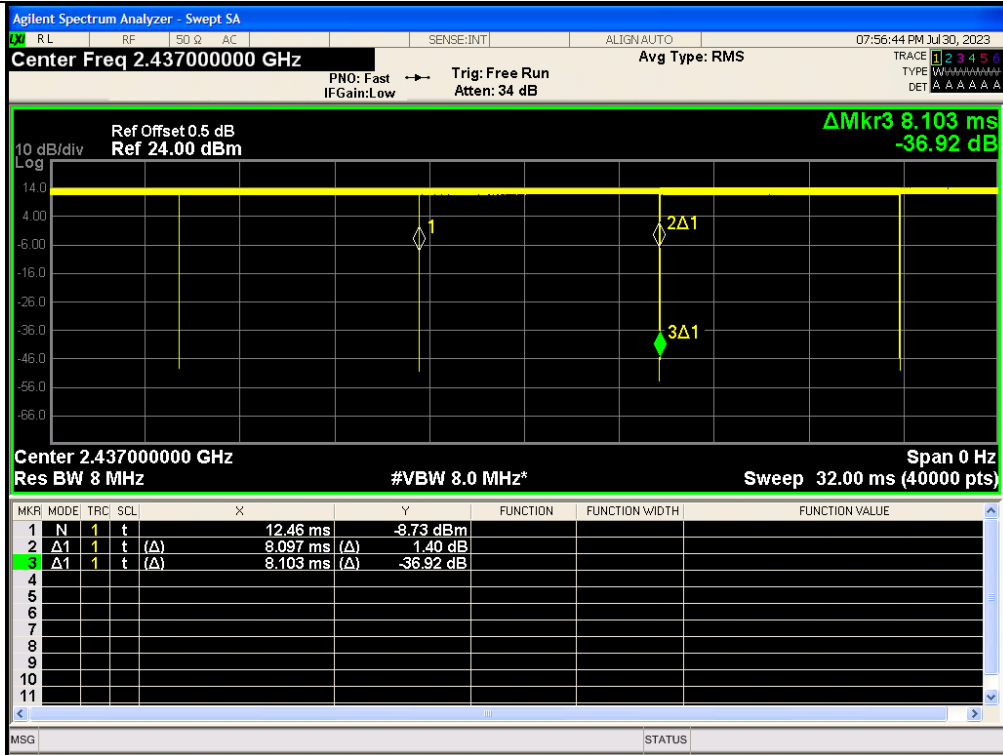
**Test Result**

Mode	Channel	Antenna	On Time (ms)	Period (ms)	Duty Cycle (%)	1/T Minimum VBW (kHz)	Final Setting for VBW (kHz)
IEEE 802.11b	1	1	8.096	8.103	99.91	0.12	1
		2	8.097	8.102	99.93	0.12	1
	6	1	8.097	8.103	99.92	0.12	1
		2	8.096	8.103	99.91	0.12	1
	11	1	8.096	8.103	99.91	0.12	1
		2	8.097	8.103	99.92	0.12	1
IEEE 802.11g	1	1	1.361	1.368	99.52	0.73	1
		2	1.361	1.368	99.52	0.73	1
	6	1	1.361	1.368	99.50	0.73	1
		2	1.361	1.368	99.52	0.73	1
	11	1	1.361	1.368	99.52	0.73	1
		2	1.361	1.368	99.51	0.73	1
IEEE 802.11n_20	1	1	1.273	1.280	99.49	0.79	1
		2	1.273	1.280	99.47	0.79	1
	6	1	1.273	1.280	99.47	0.79	1
		2	1.273	1.280	99.49	0.79	1
	11	1	1.273	1.280	99.45	0.79	1
		2	1.273	1.280	99.47	0.79	1
IEEE 802.11n_40	3	1	0.633	0.640	98.92	1.58	3
		2	0.633	0.640	98.92	1.58	3
	6	1	0.633	0.640	98.92	1.58	3
		2	0.633	0.640	98.92	1.58	3
	9	1	0.633	0.640	98.91	1.58	3
		2	0.633	0.640	98.92	1.58	3

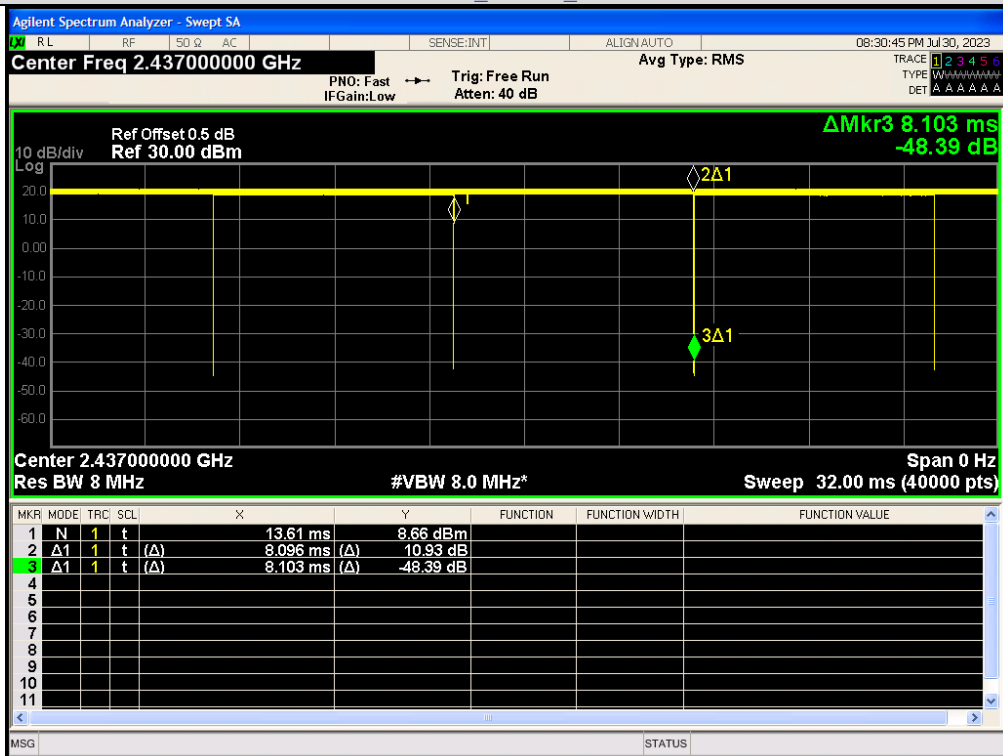


Test plot as follows:

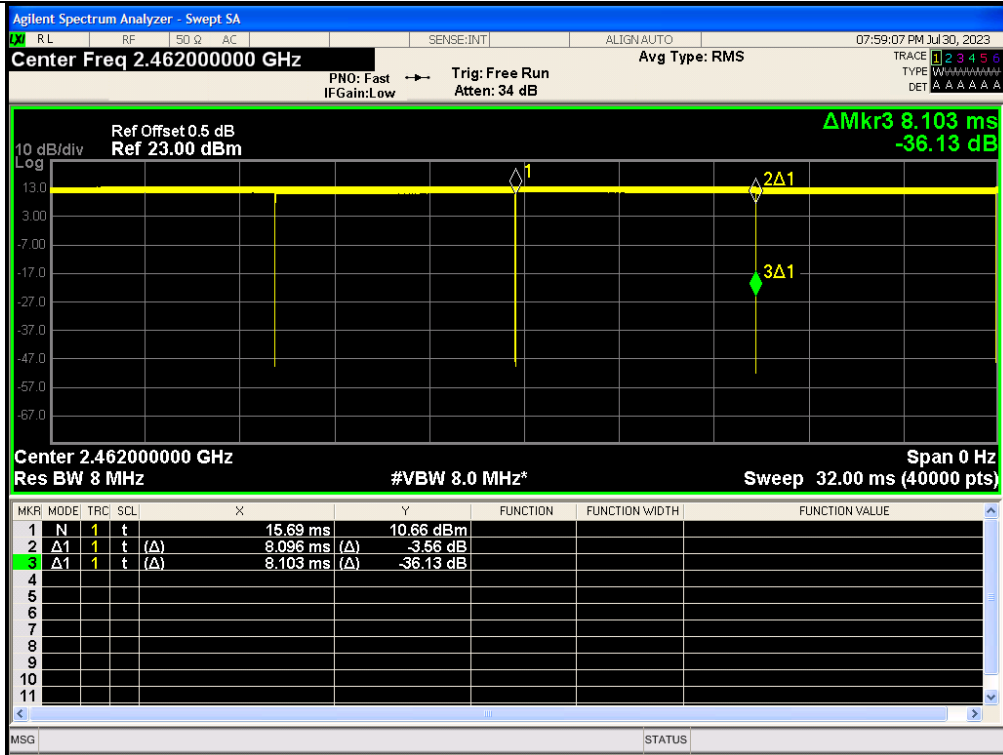




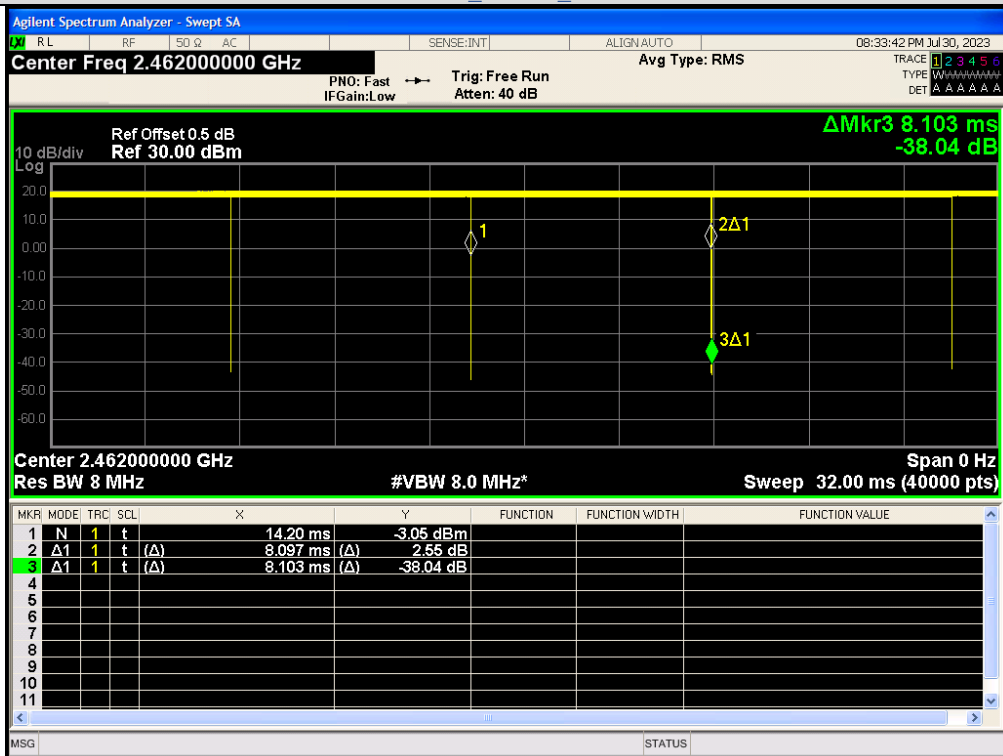
IEEE 802.11b\_20MHz\_Channel 6



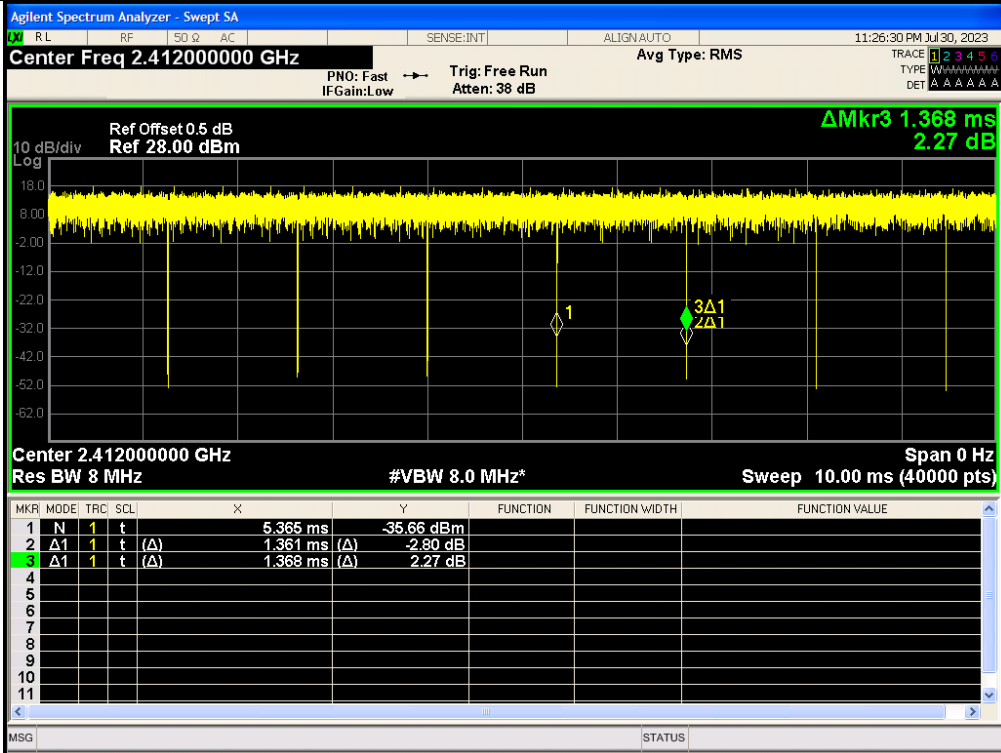
IEEE 802.11b\_20MHz\_Channel 6



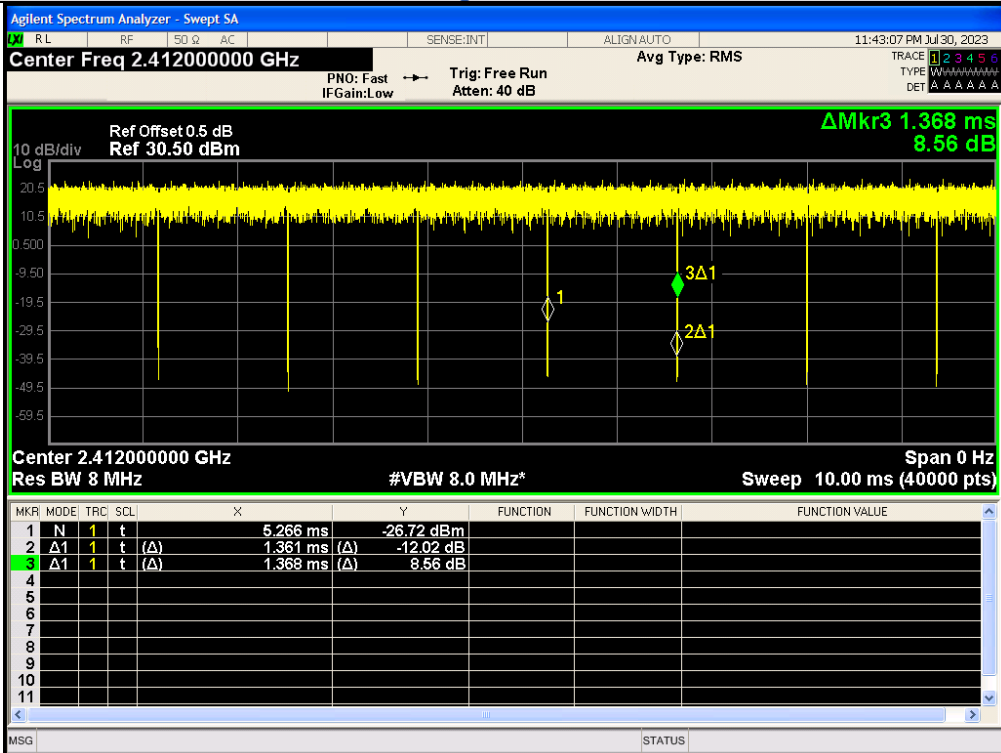
IEEE 802.11b\_20MHz\_Channel 11



IEEE 802.11b\_20MHz\_Channel 11

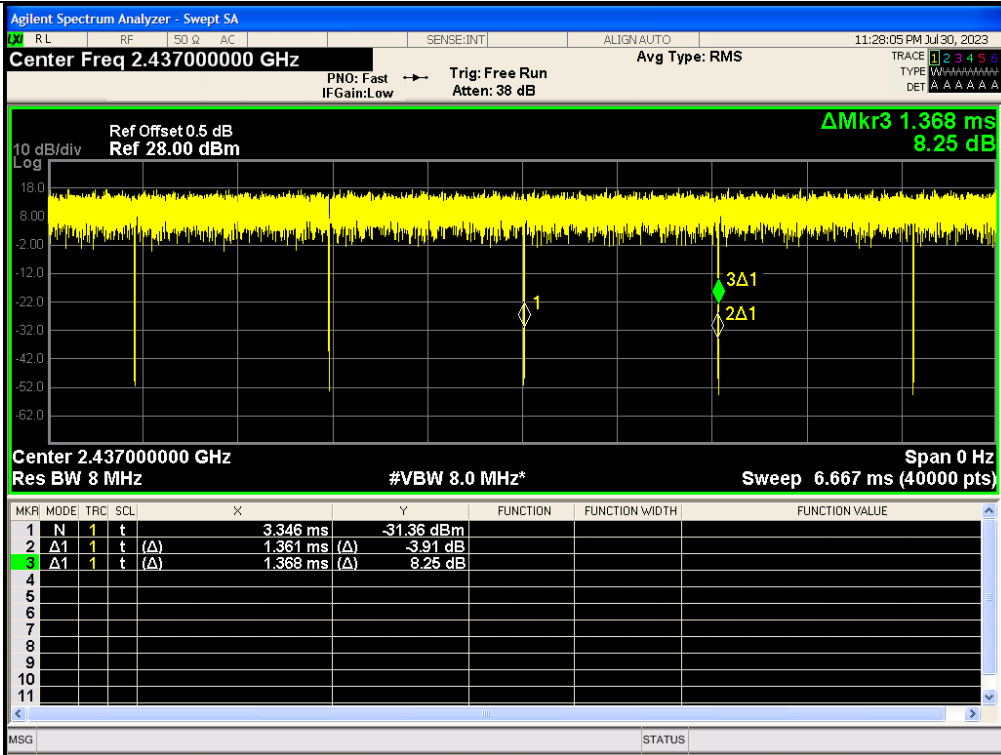


IEEE 802.11g 20MHz\_Channel 1

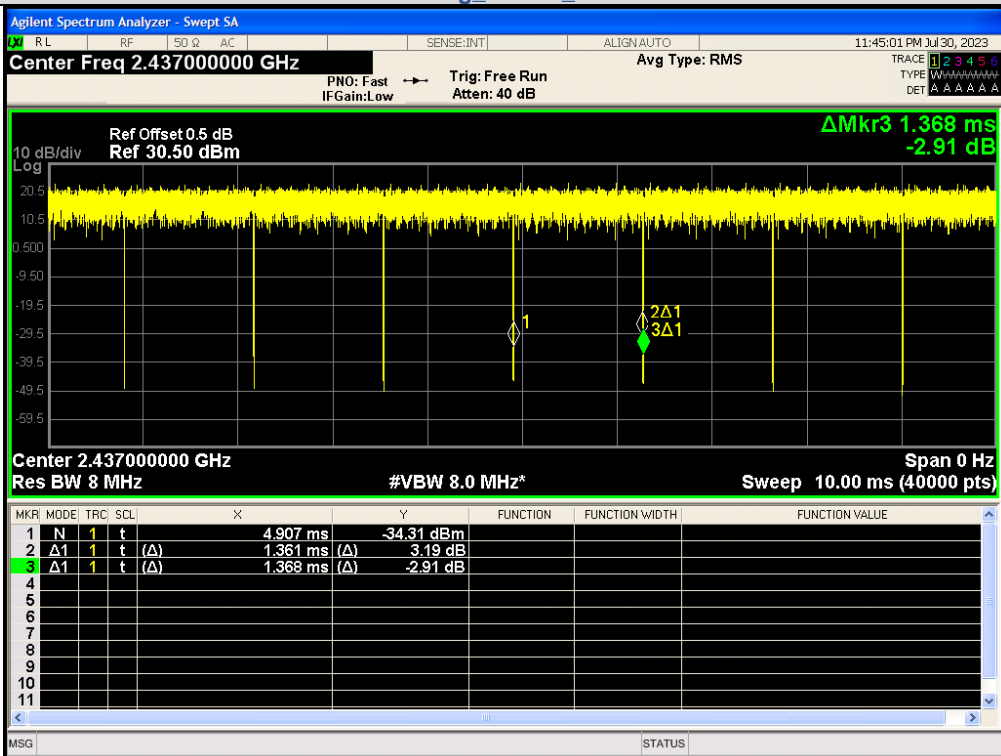


IEEE 802.11g 20MHz\_Channel 1



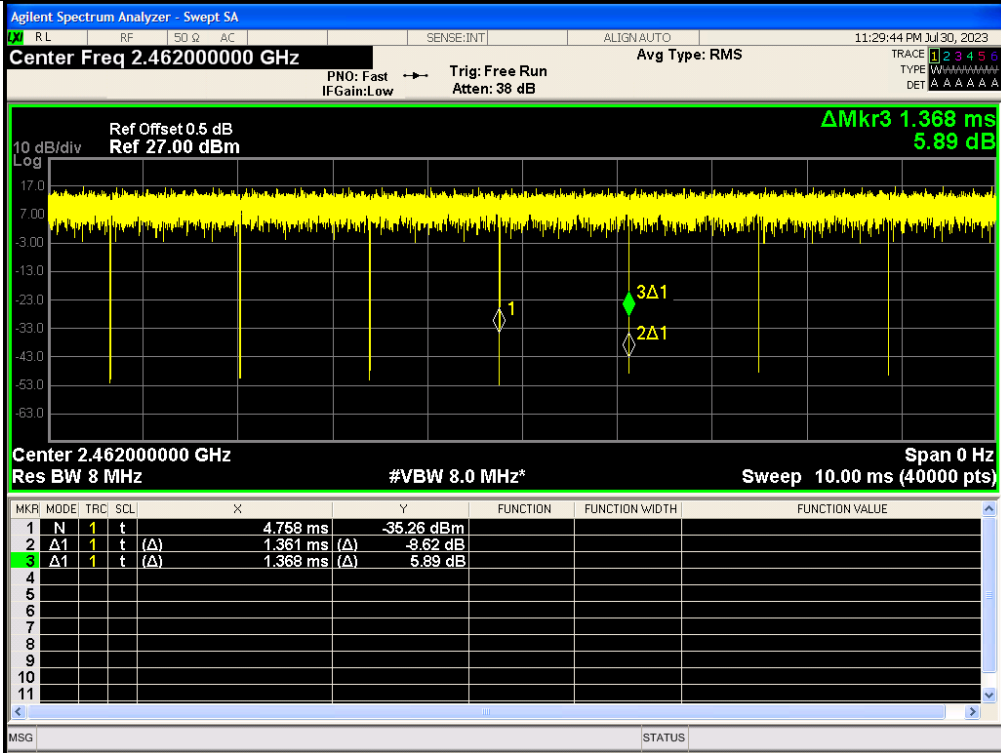


IEEE 802.11g\_20MHz\_Channel 6

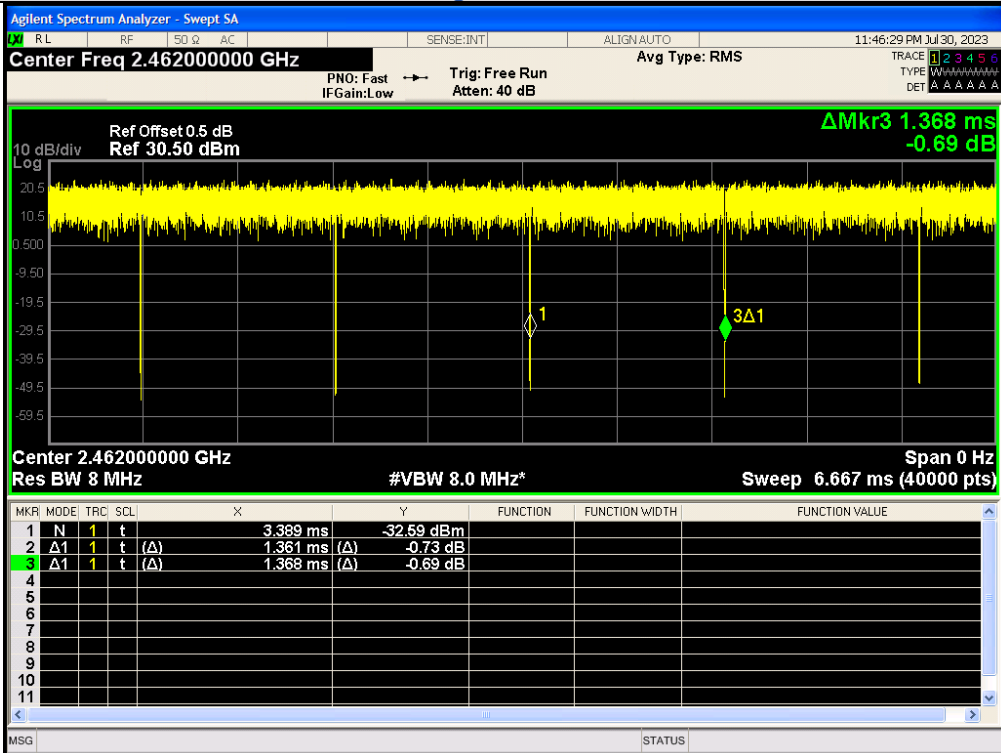


IEEE 802.11g\_20MHz\_Channel 6

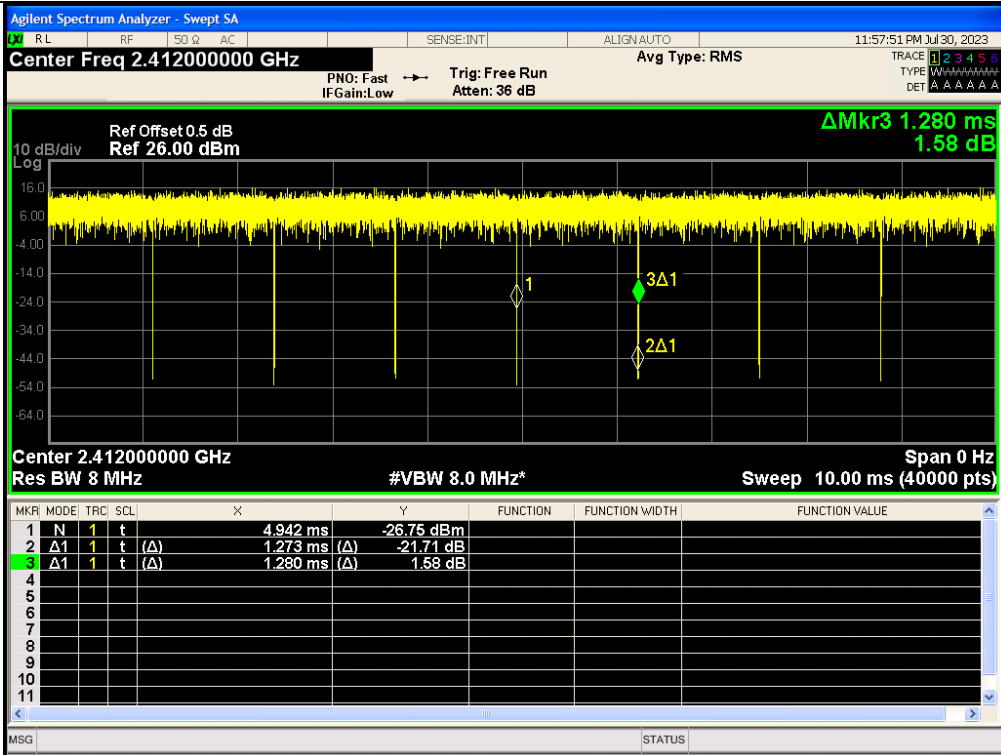




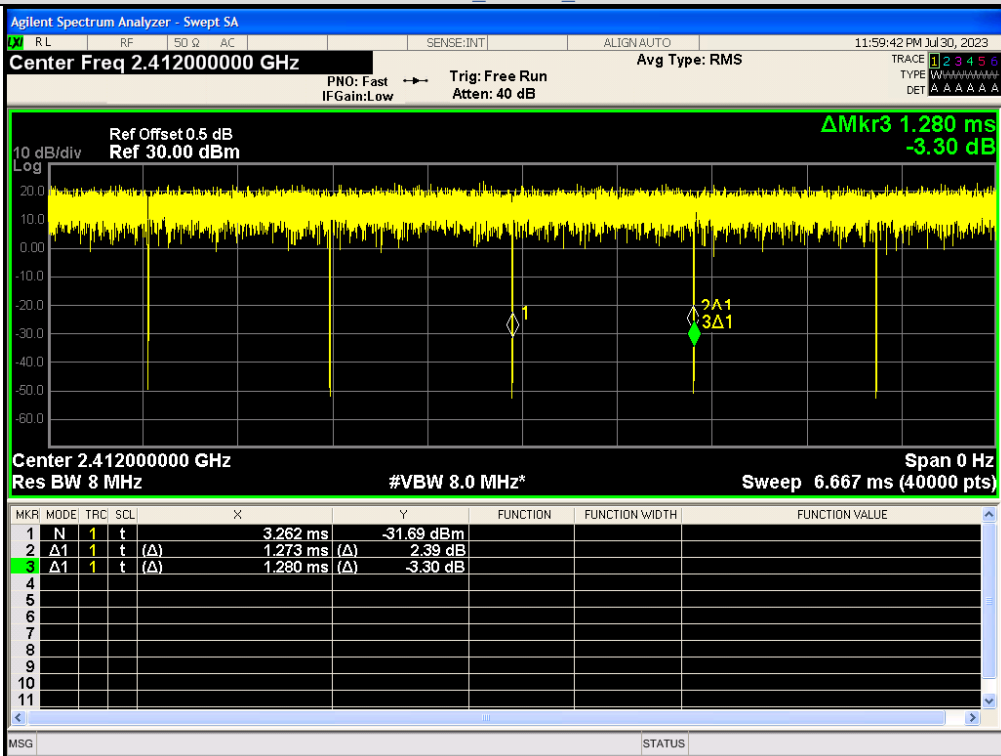
IEEE 802.11g\_20MHz\_Channel 11



IEEE 802.11g\_20MHz\_Channel 11

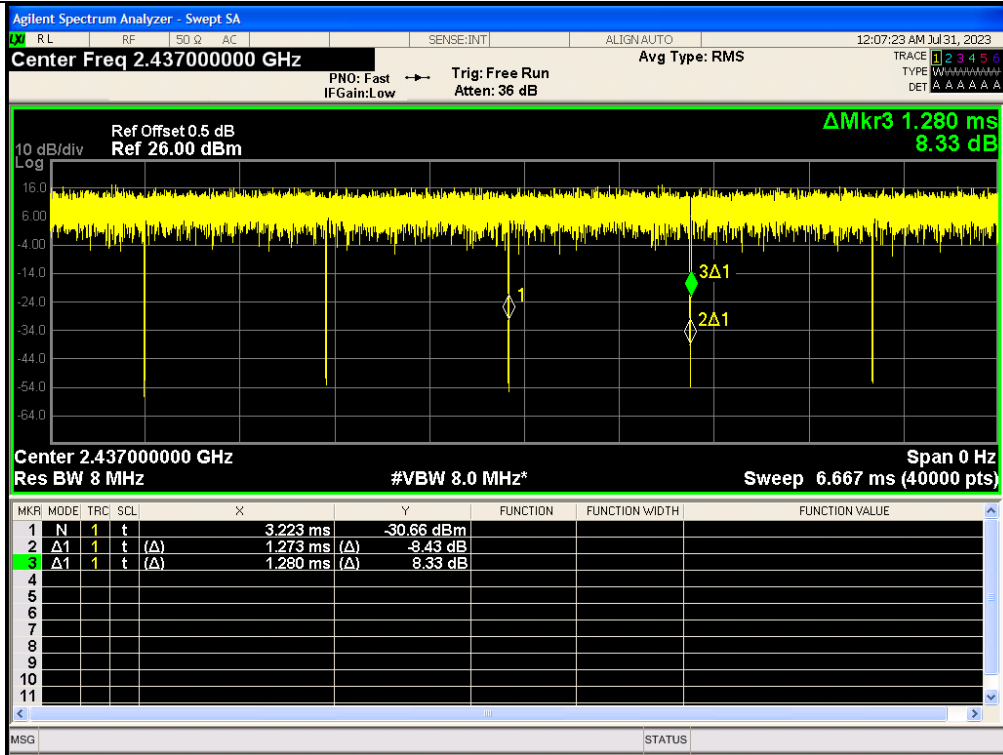


IEEE 802.11n\_20MHz\_Channel 1

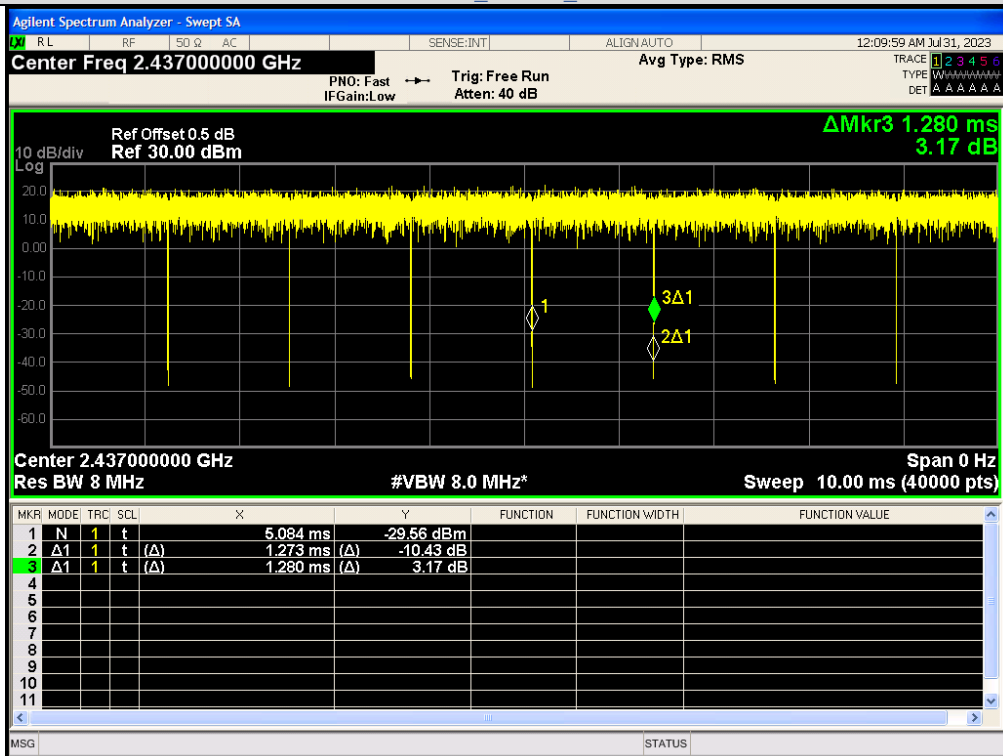


IEEE 802.11n\_20MHz\_Channel 1

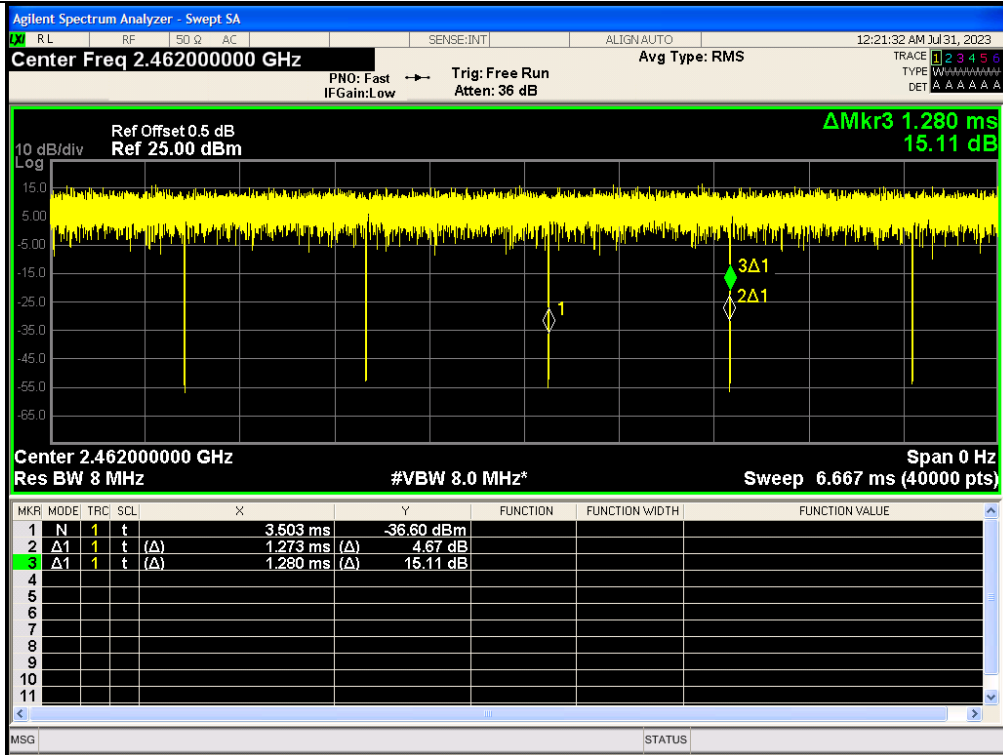




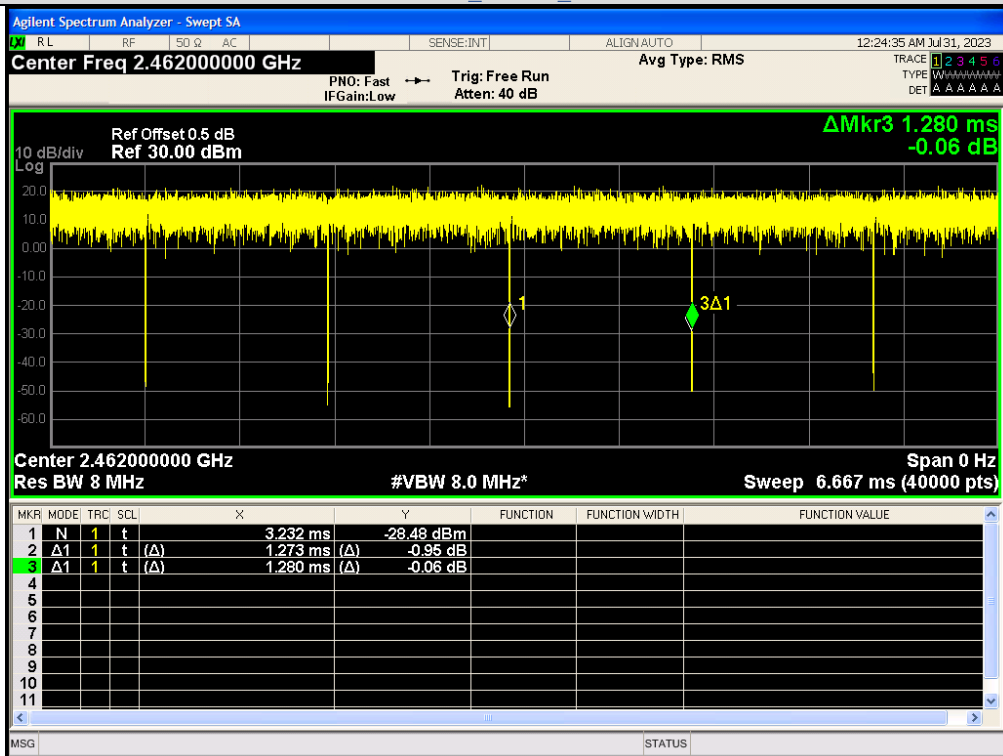
IEEE 802.11n\_20MHz\_Channel 6



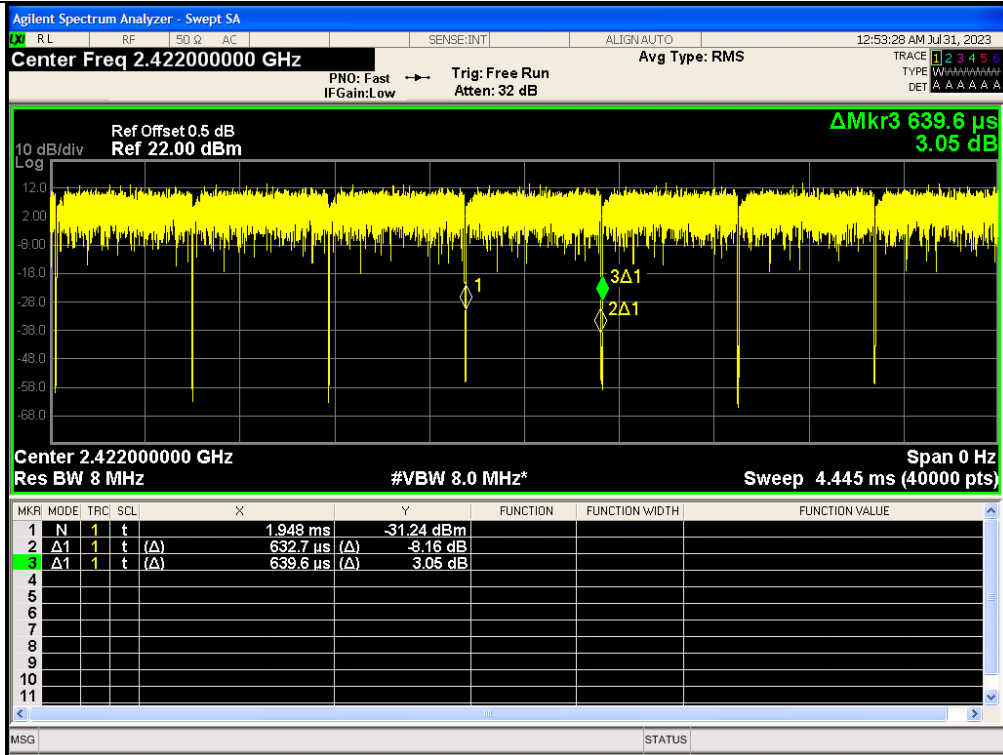
IEEE 802.11n\_20MHz\_Channel 6



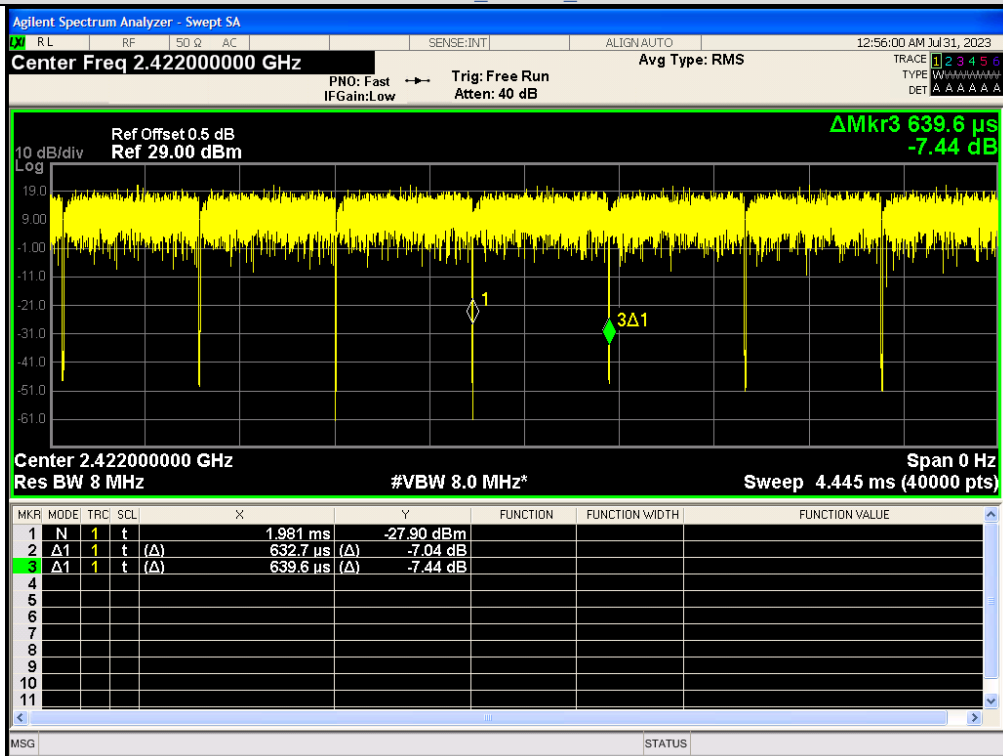
IEEE 802.11n\_20MHz\_Channel 11



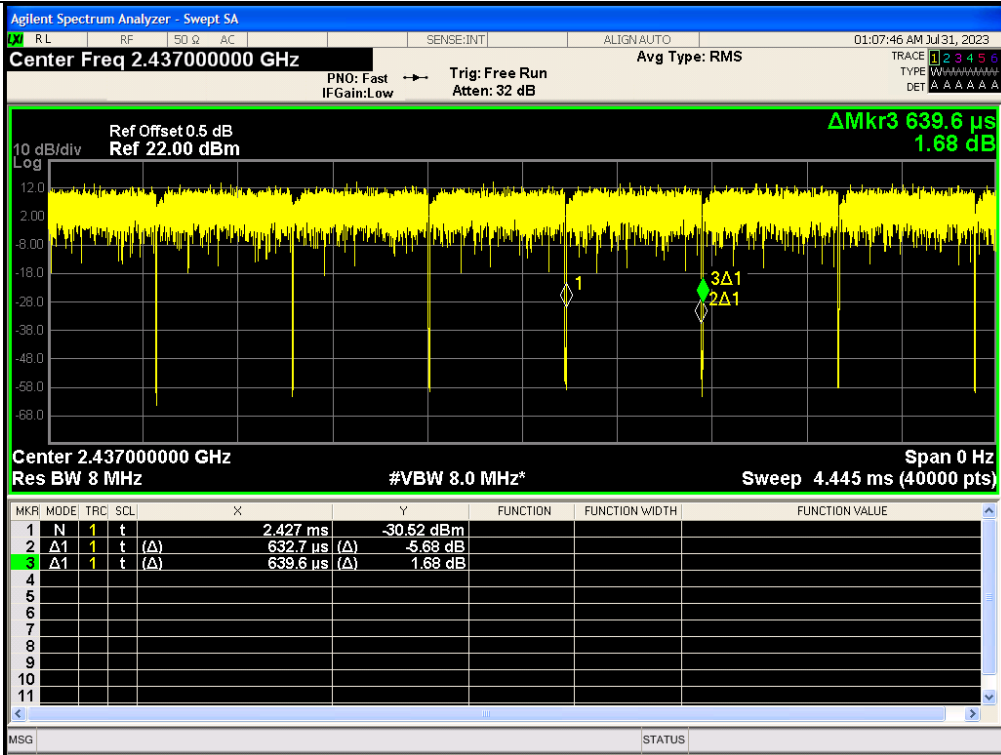
IEEE 802.11n\_20MHz\_Channel 11



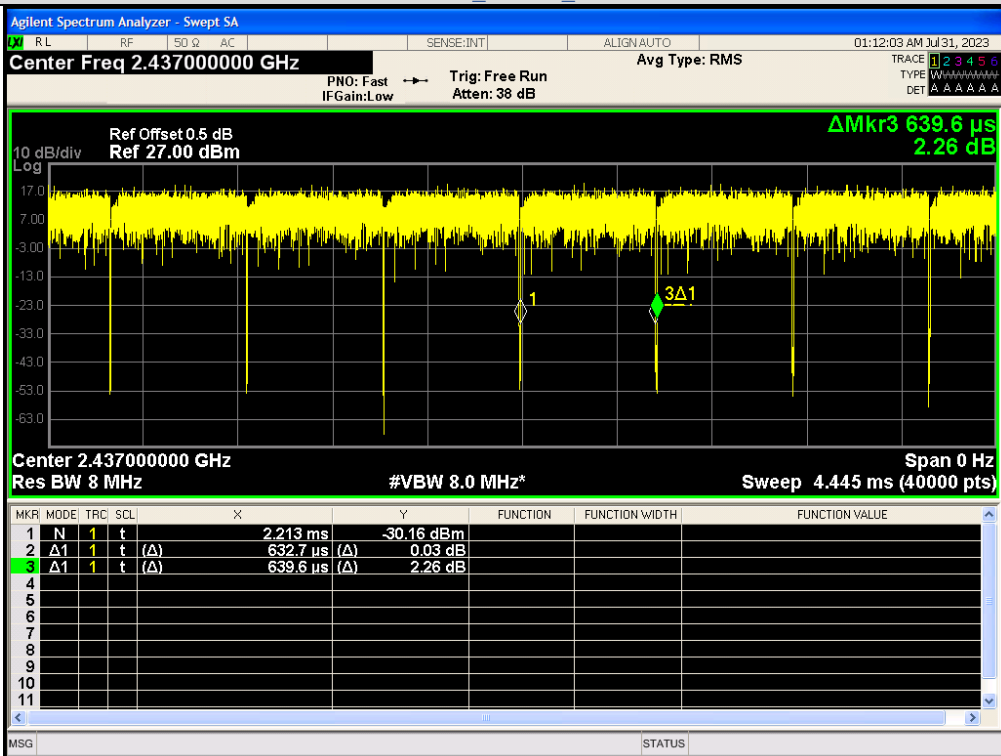
IEEE 802.11n\_40MHz\_Channel 3



IEEE 802.11n\_40MHz\_Channel 3

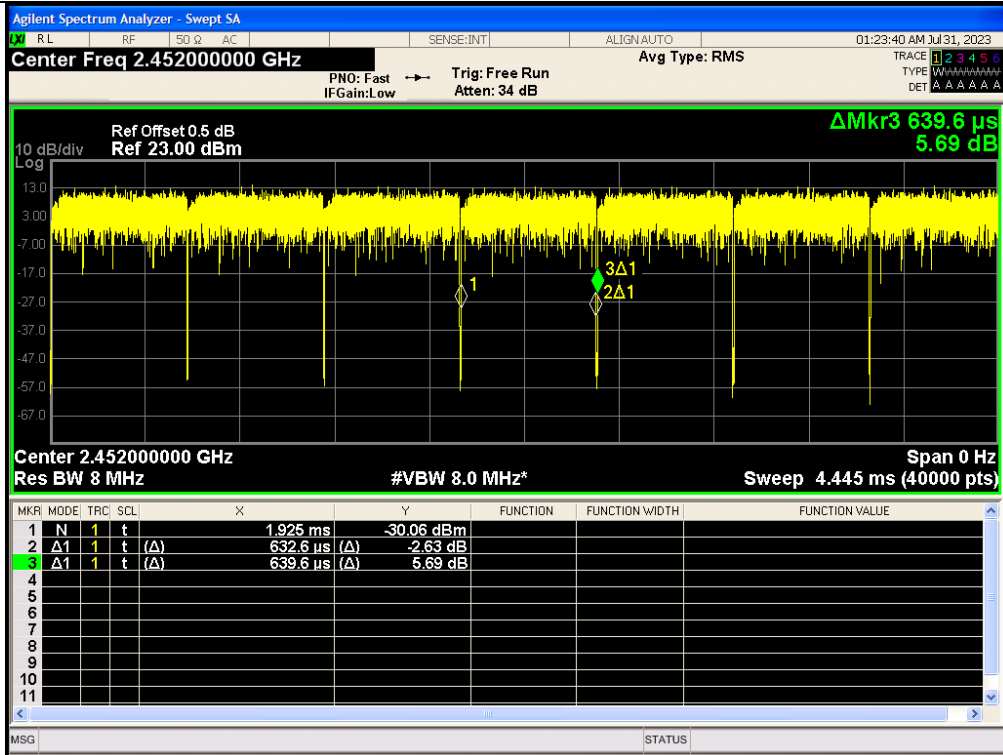


IEEE 802.11n\_40MHz\_Channel 6

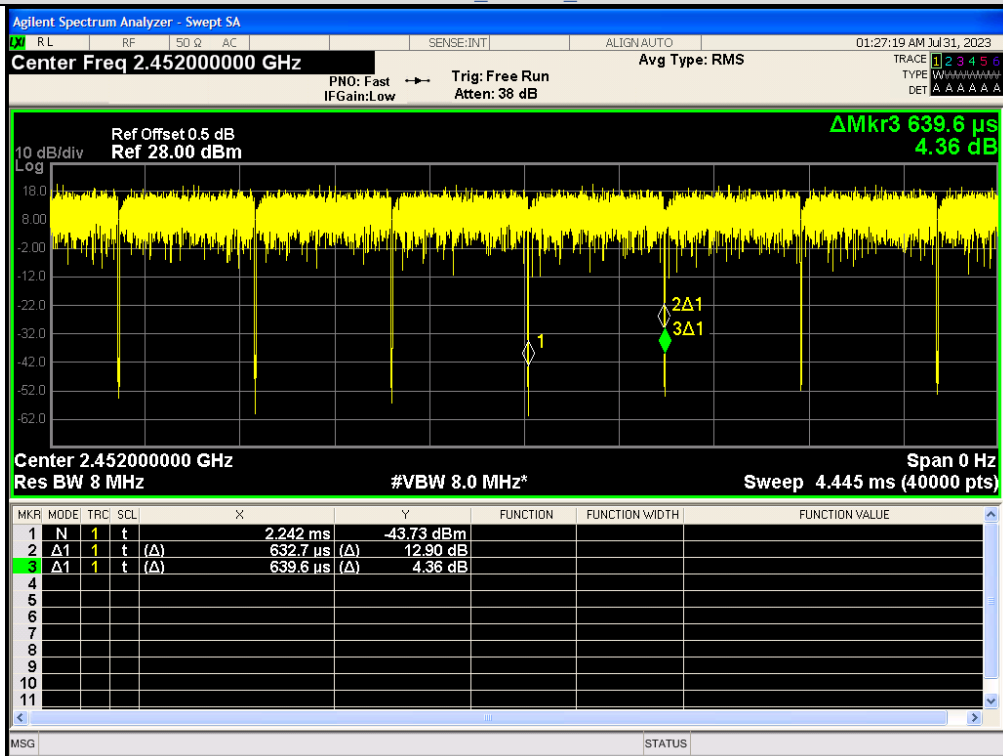


IEEE 802.11n\_40MHz\_Channel 6





IEEE 802.11n\_40MHz\_Channel 9



IEEE 802.11n\_40MHz\_Channel 9





### 3.9. Antenna Requirement

#### Requirement

##### **FCC CFR Title 47 Part 15 Subpart C Section 15.203**

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

##### **FCC CFR Title 47 Part 15 Subpart C Section 15.247(c) (1)(i)**

(i) Systems operating in the 2400~2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

#### Test Result

The directional gain of the antenna is 6.85dBi, please refer to the EUT external photos.

\*\*\*\*\*THE END\*\*\*\*\*