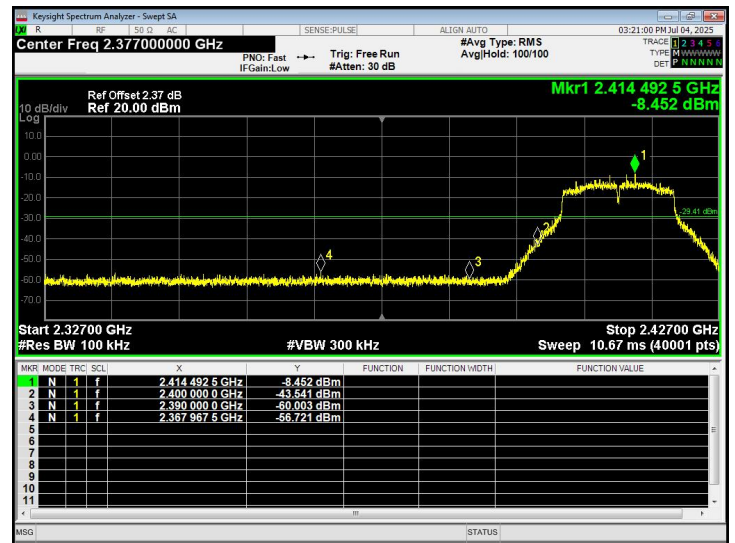
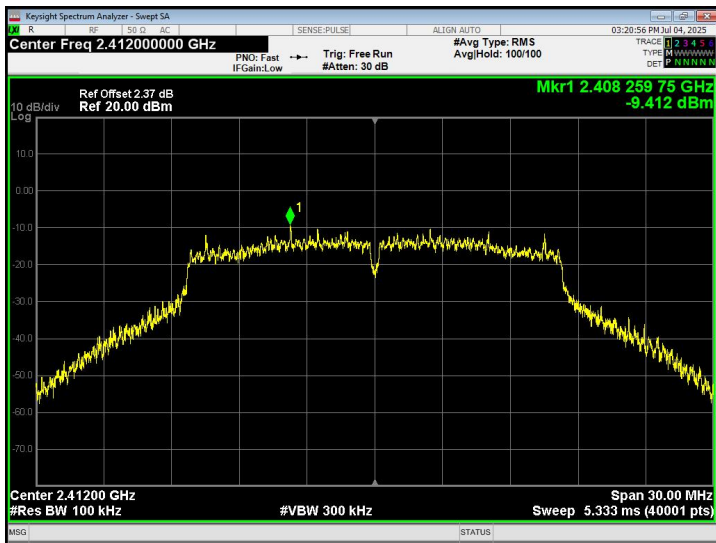
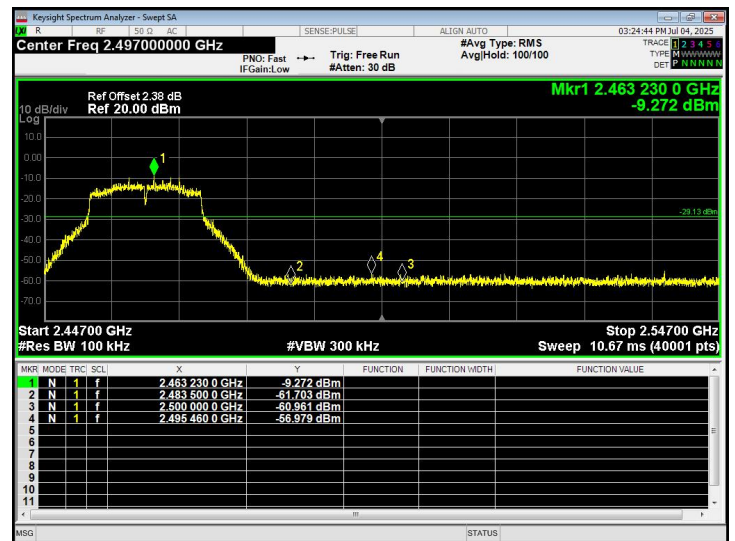
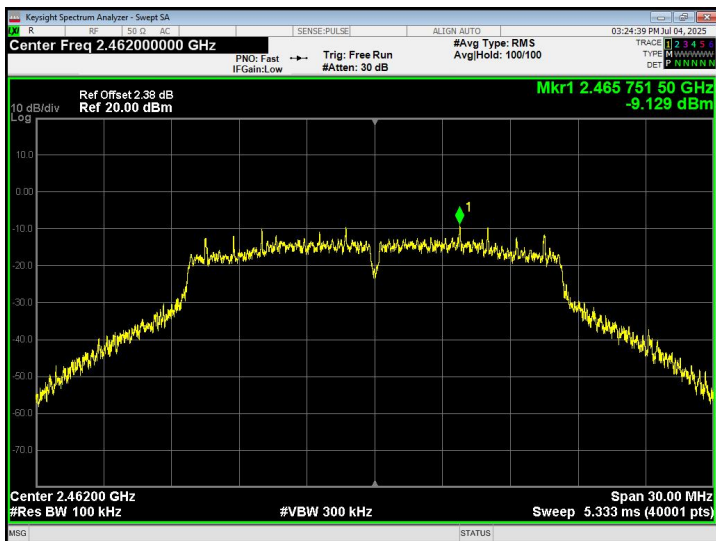


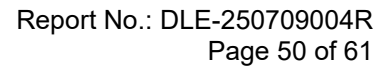


802.11g - Lowest channel



802.11g - Highest channel





Keysight Spectrum Analyzer - Swpt SA

Center Freq 2.412000000 GHz

Ref Offset 2.37 dB
Ref 20.00 dBm

PNO: Fast
IF Gain: Low

Trig: Free Run
#Atten: 30 dB

#Avg Type: RMS
Avg Hold: 100/100

03:27:29 PM Jul 04, 2025

TRACE 1 2.9 4 5 6
TYPE 4 W W W W W W W W
DET 12 N N N N N N N N

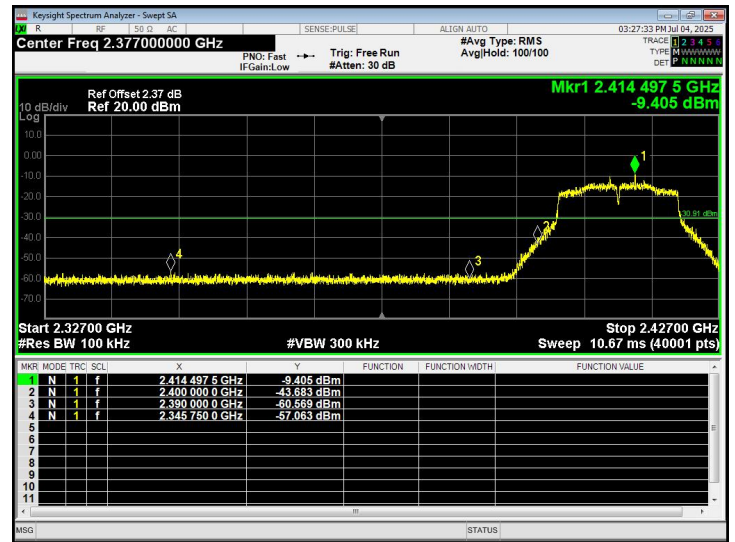
Mkr1 2.414 539 50 GHz
-10.913 dBm

10 dB/div
Log

Center 2.41200 GHz
#Res BW 100 kHz
#VBW 300 kHz

Span 30.00 MHz
Sweep 5.333 ms (40001 pts)

MSG [STATUS]



Keysight Spectrum Analyzer - Sweep SA

03:30:48 PM Jul 04, 2025

Center Freq 2.462000000 GHz

PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB

#Avg Type: RMS AvgHold: 100/100

TRACED 1 2 3 4 5 6
TYPE [M] [W] [V] [W] [W] [W]
DET [P] [N] [N] [N] [N] [N]

Ref Offset 2.38 dB
Ref 20.00 dBm

Mkr1 2.463 224.00 GHz
-10.358 dBm

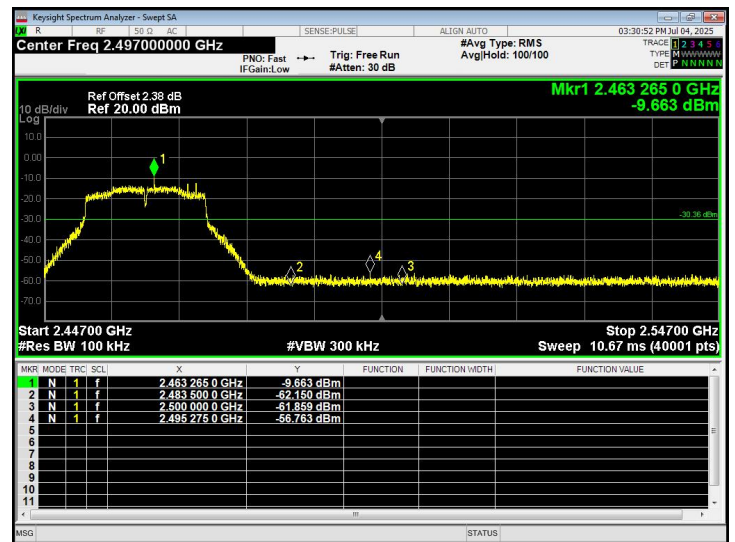
10 dB/div
Log

Center 2.46200 GHz
#Res BW 100 kHz

#VBW 300 kHz

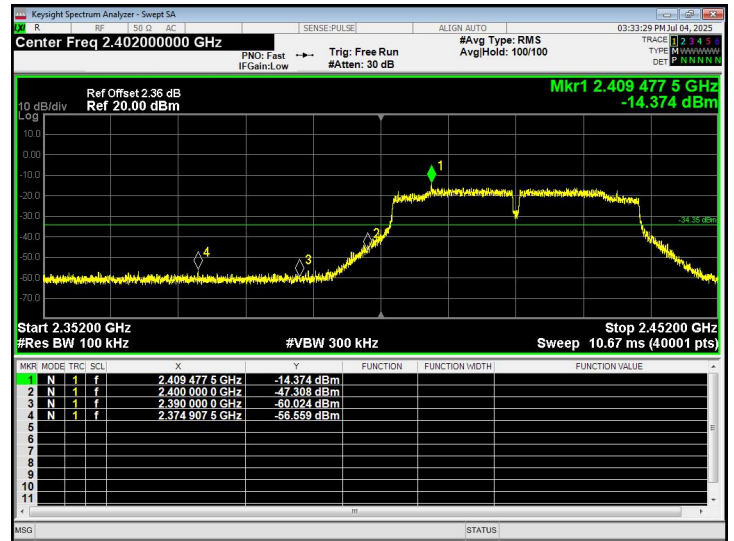
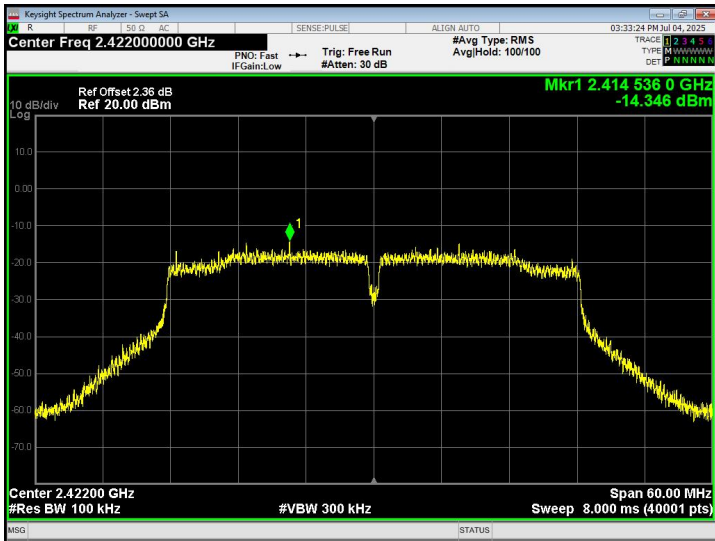
Span 30.00 MHz
Sweep 5.333 ms (40001 pts)

MSG [STATUS]

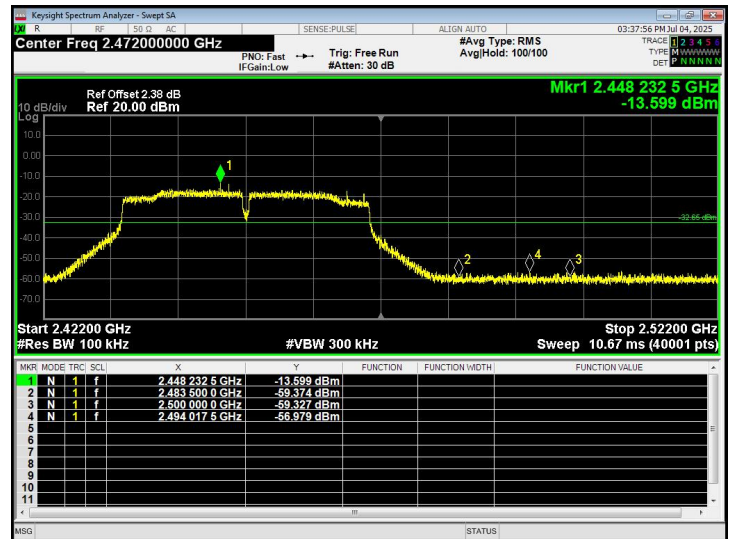
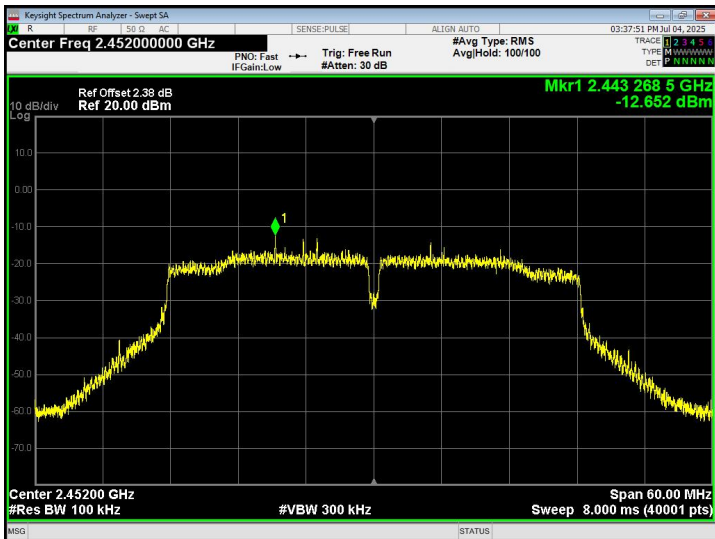




802.11n40 - Lowest channel



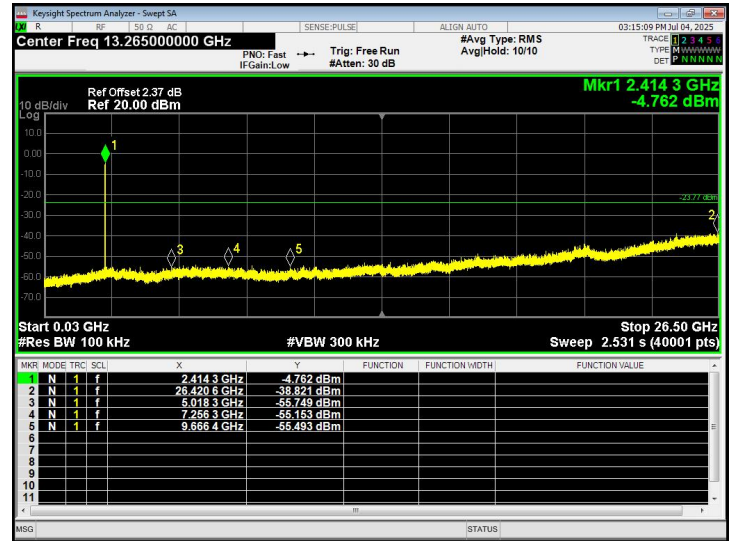
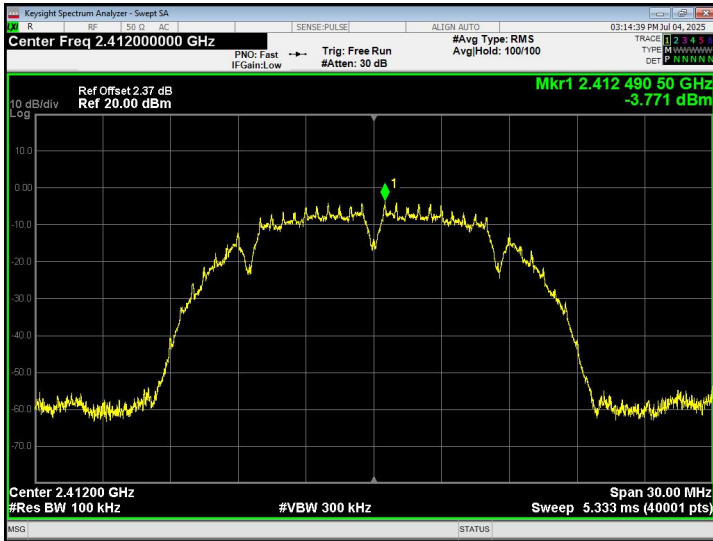
802.11n40 - Highest channel



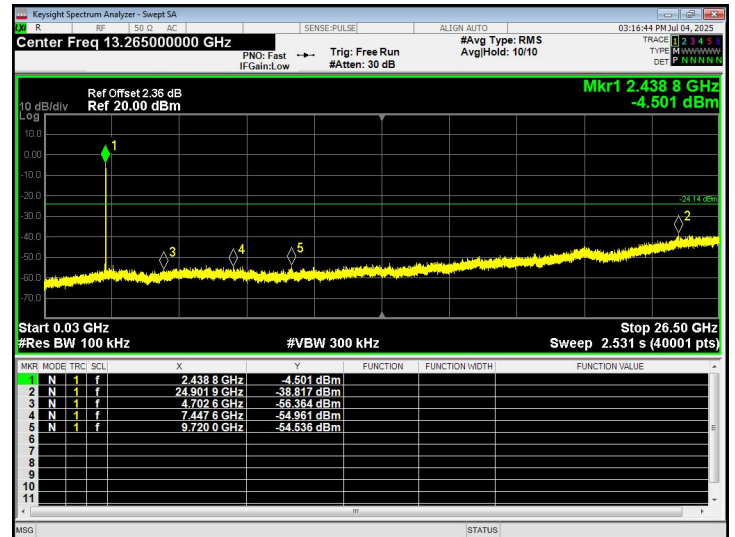
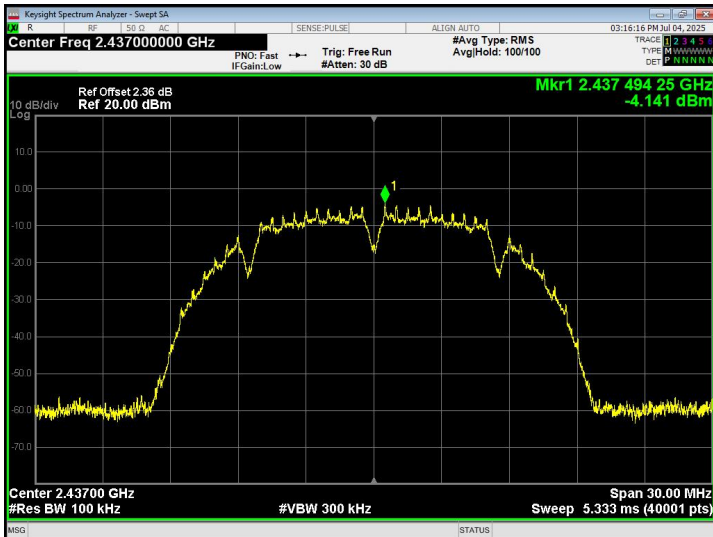


Spurious emission test plot as follows:

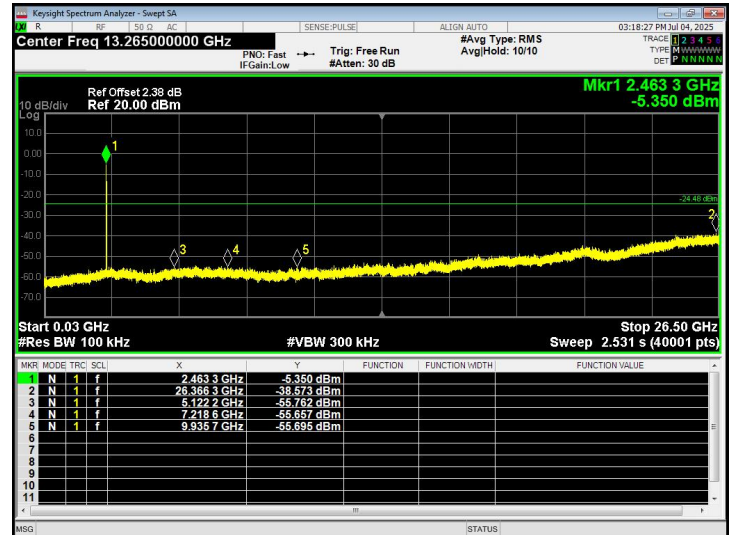
802.11b
Lowest channel



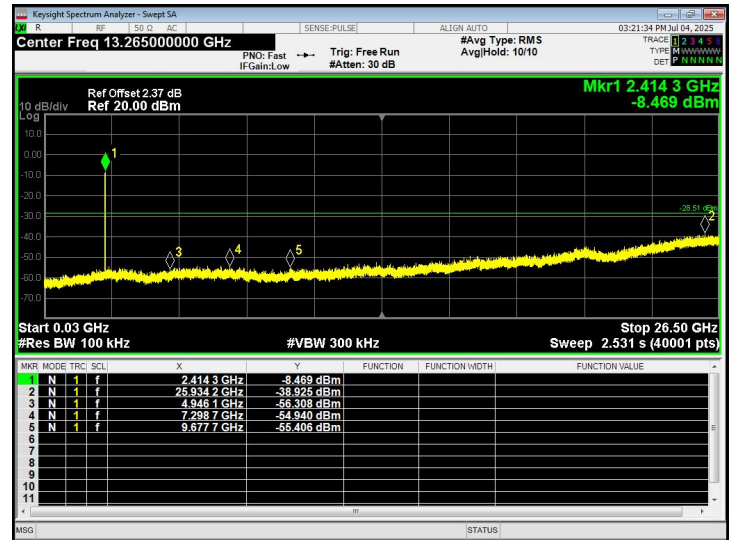
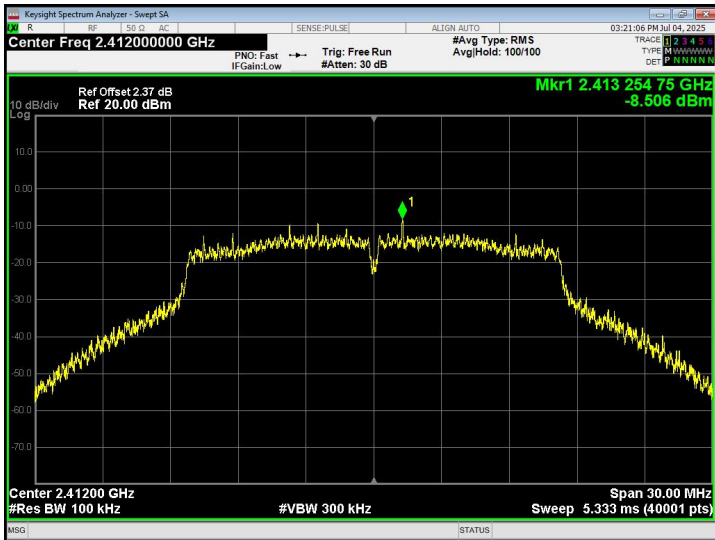
Middle channel



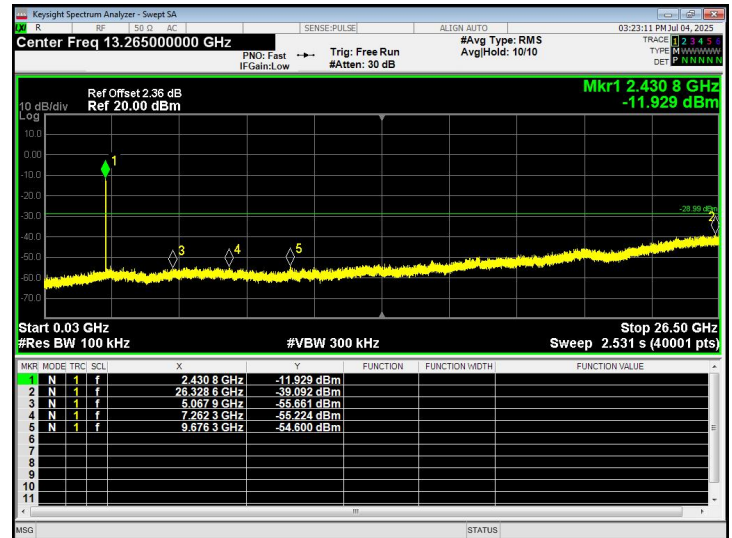
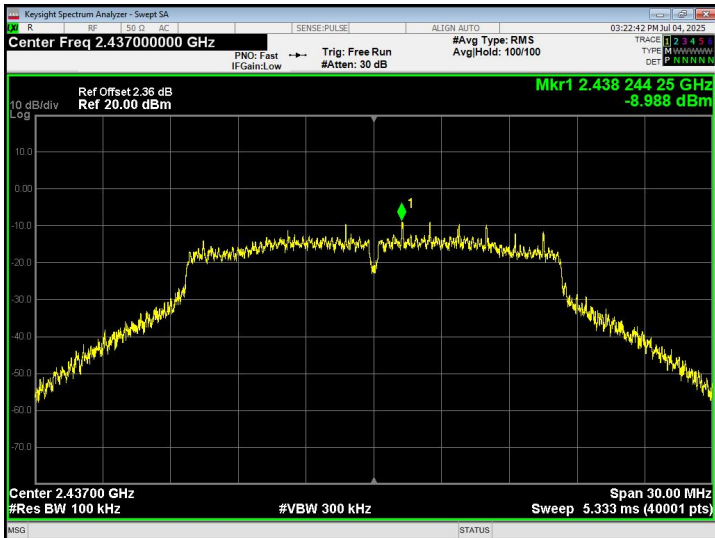
Highest channel



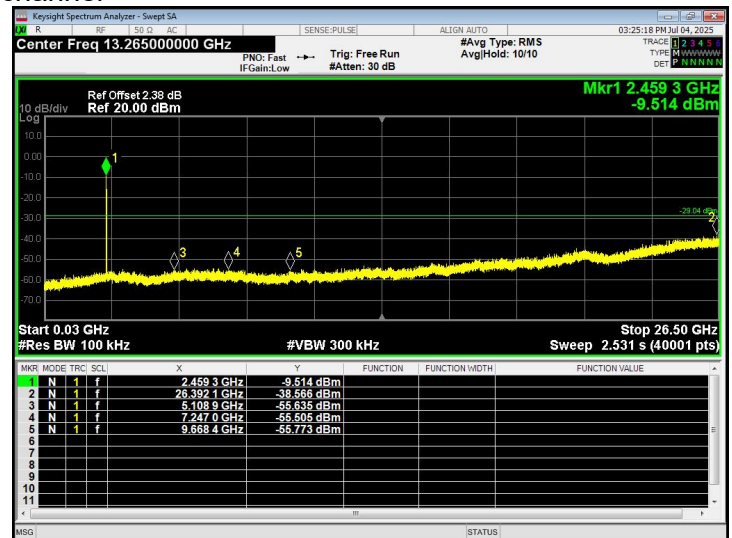
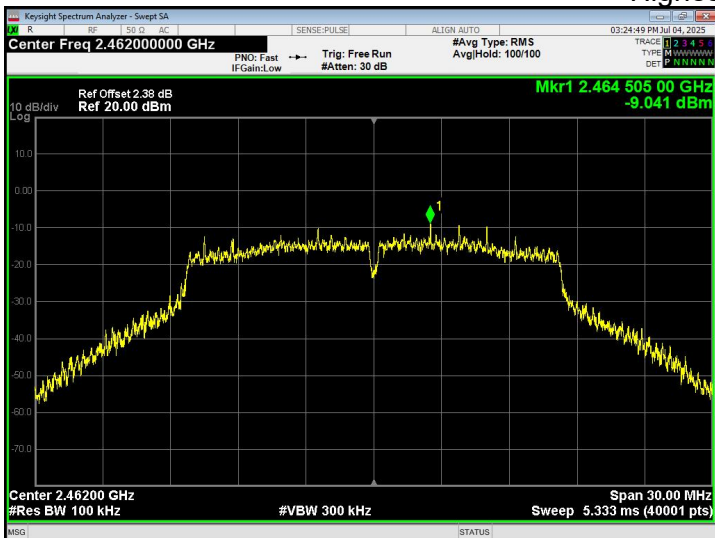
30MHz ~ 26.5GHz

802.11g
Lowest channel

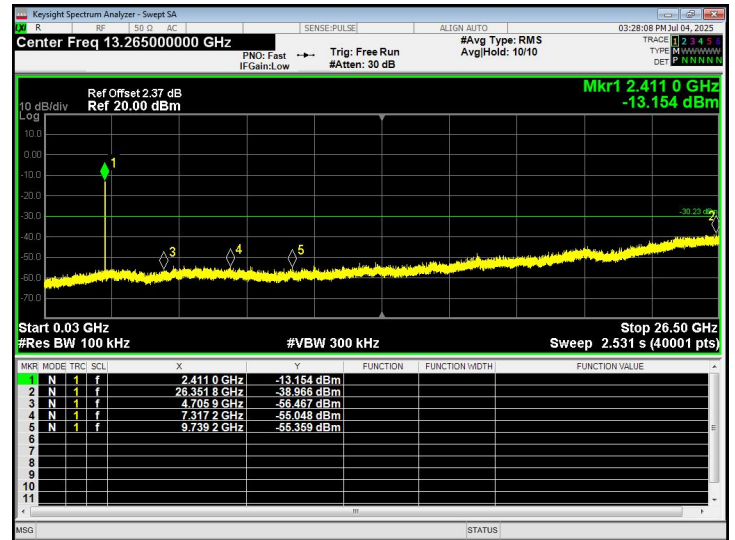
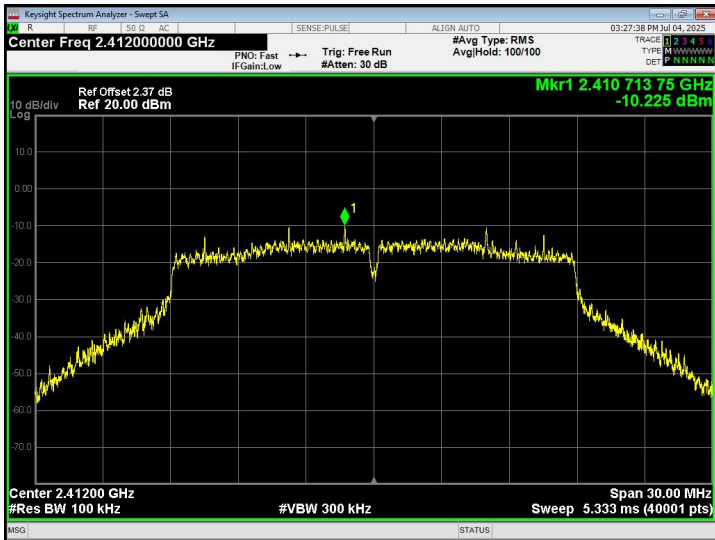
Middle channel



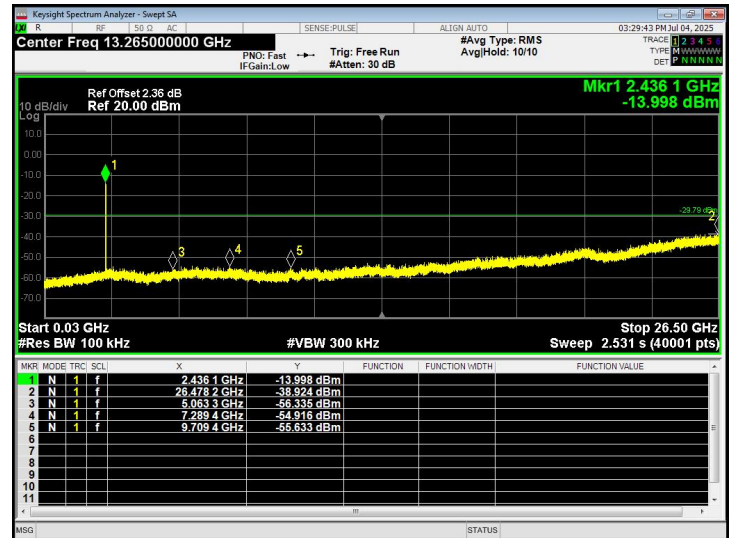
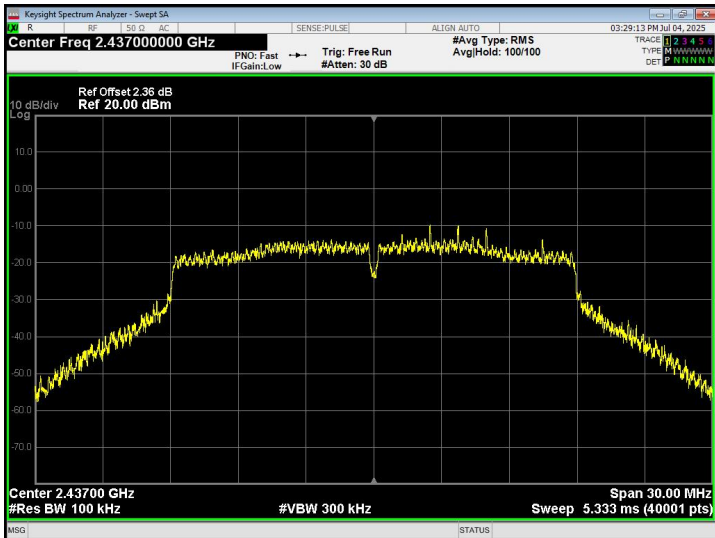
Highest channel



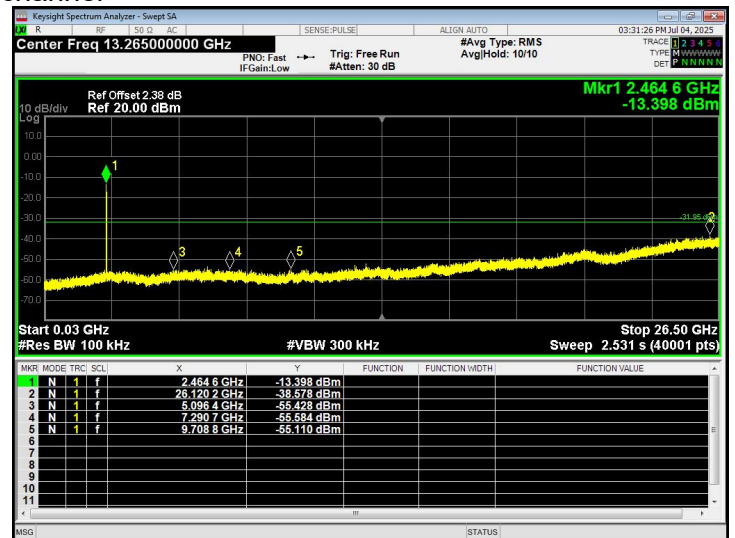
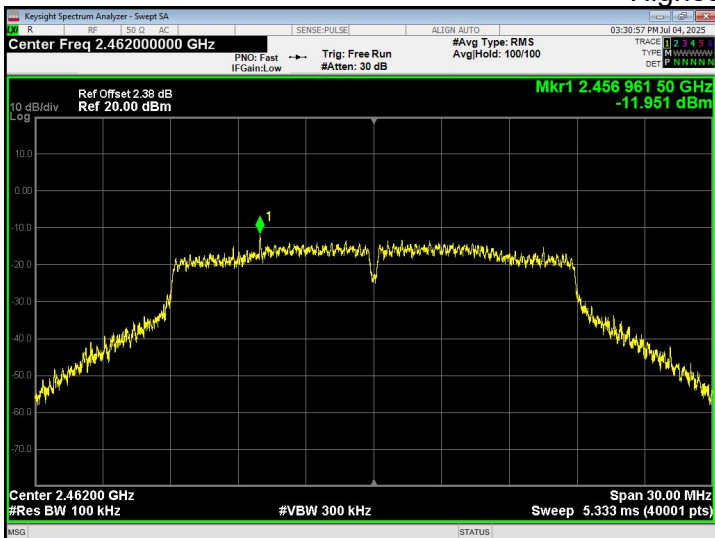
30MHz ~ 26.5GHz

802.11n20
Lowest channel

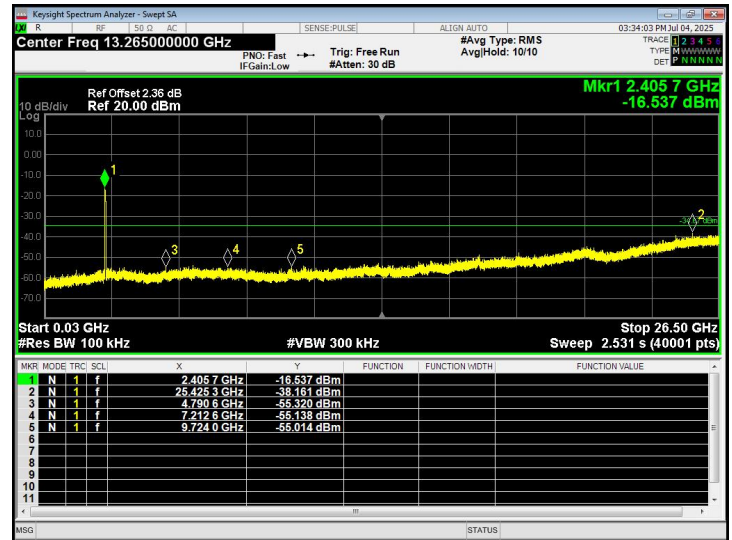
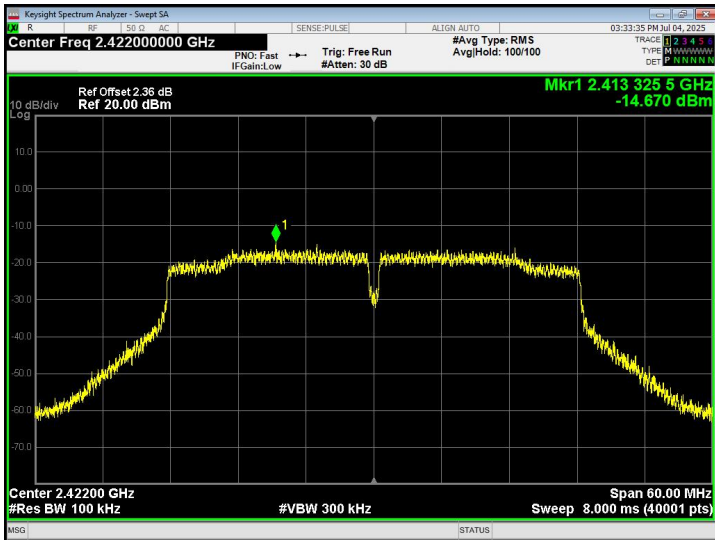
Middle channel



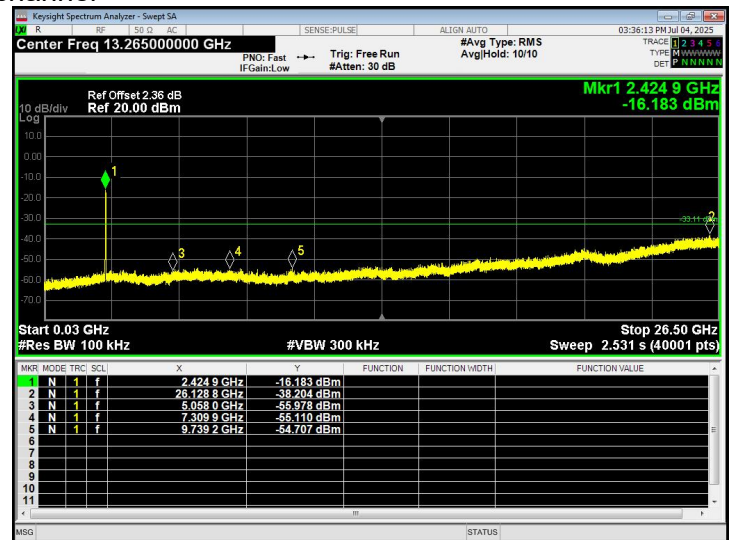
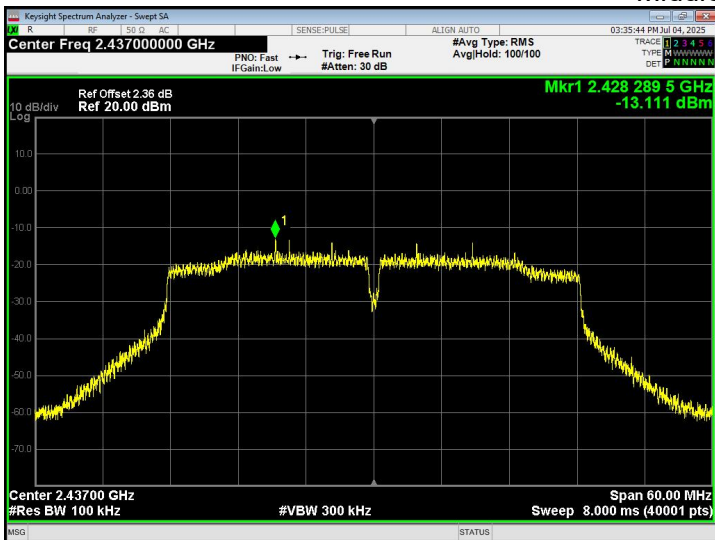
Highest channel



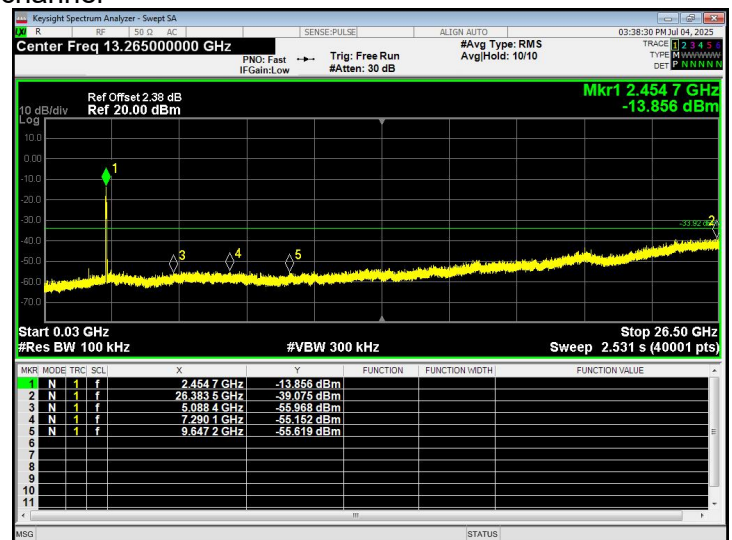
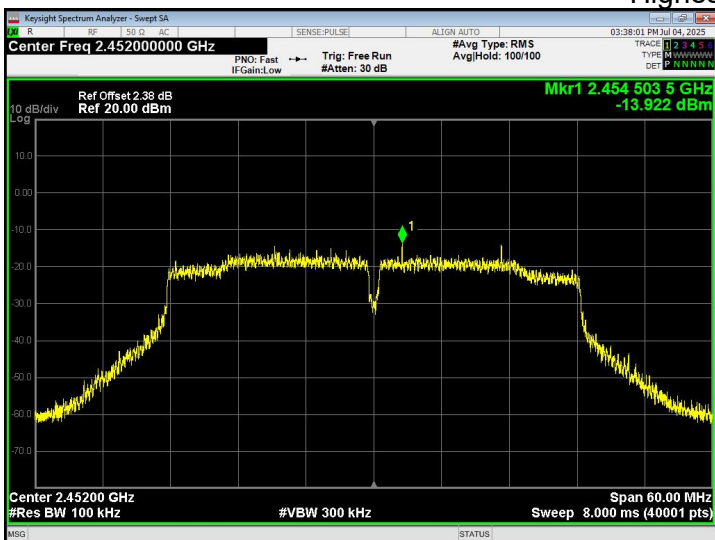
30MHz ~ 26.5GHz

802.11n40
Lowest channel

Middle channel



Highest channel



30MHz ~ 26.5GHz



10. DUTY CYCLE

Test Method:	ANSI C63.10:2013
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10.1 APPLIED PROCEDURES / LIMIT

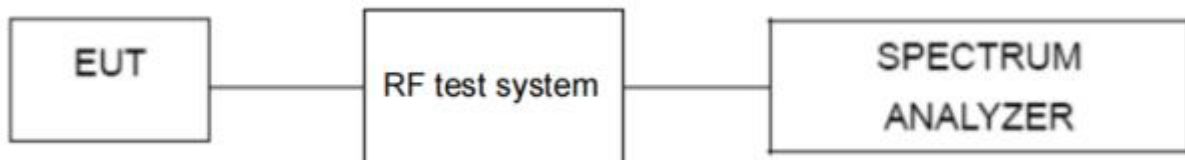
Measurements of duty cycle and transmission duration shall be performed using one of the following techniques:

- a) A diode detector and an oscilloscope that together have a sufficiently short response time to permit accurate measurements of the ON and OFF times of the transmitted signal.
- b) The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the ON and OFF times of the transmitted signal:
 - 1) Set the center frequency of the instrument to the center frequency of the transmission.
 - 2) Set $RBW \geq OBW$ if possible; otherwise, set RBW to the largest available value.
 - 3) Set $VBW \geq RBW$. Set detector = peak or average.
 - 4) The zero-span measurement method shall not be used unless both RBW and VBW are $> 50/T$ and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring the duty cycle shall not be used if $T \leq 16.7 \mu s$.)

10.2 DEVIATION FROM STANDARD

No deviation.

10.3 TEST SETUP





10.4 TEST RESULTS

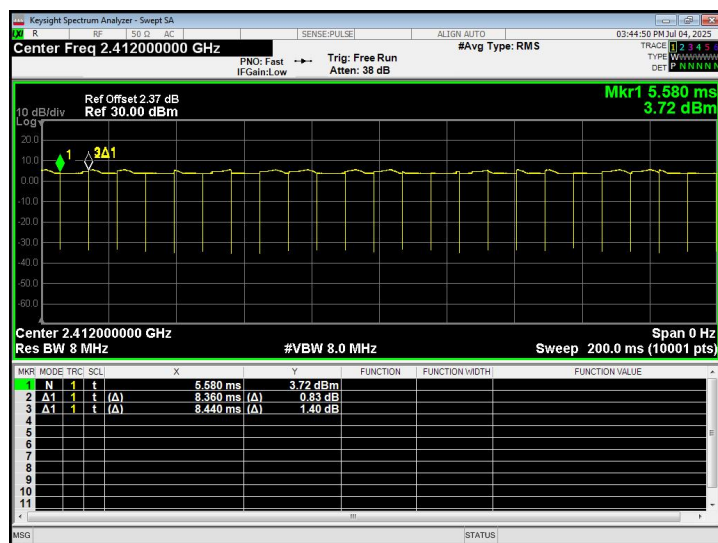
Temperature :	26°C	Relative Humidity :	54%
Pressure :	101kPa	Test Voltage :	AC 120V

Test Mode	Test Frequency (MHz)	Duty Cycle (%)	Factor (dB)	Result
802.11b	2412	99.05	0	Pass
802.11g	2412	95.87	0.18	Pass
802.11n20	2412	98.88	0	Pass
802.11n40	2422	98.88	0	Pass

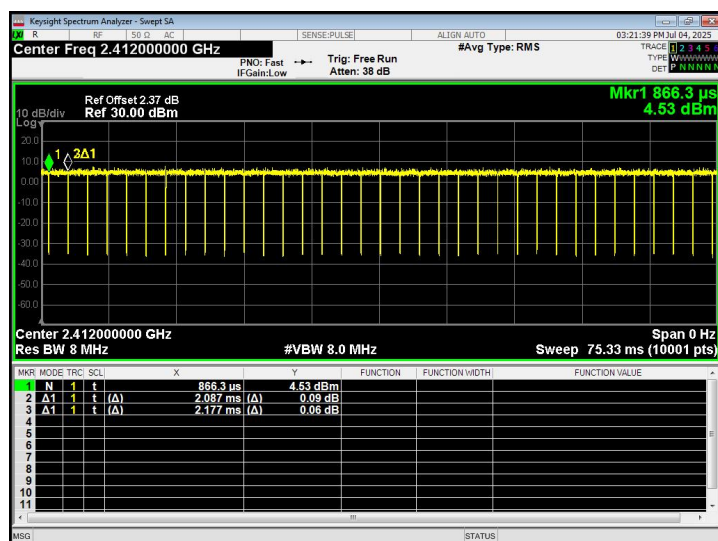
Note: Duty Cycle = Ton / Total * 100%;
Duty Cycle Correction Factor = 10log (1/Duty Cycle).



2412MHz



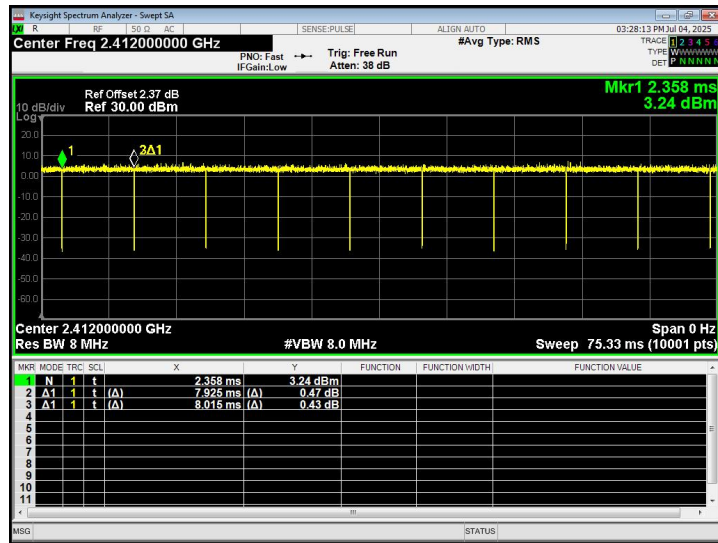
2412MHz





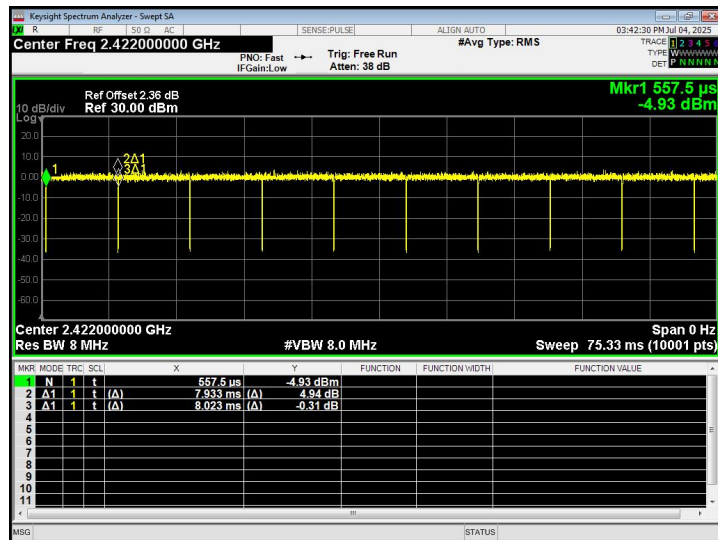
802.11n20

2412MHz



802.11n40

2422MHz



Note: All channel have been tested, and the report only reflects the worst case data.



11. ANTENNA REQUIREMENT

Standard requirement:	FCC Part15 C Section 15.203 /247(c)
15.203 requirement: 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 an 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. 15.247(c) (1)(i) requirement: (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.	
EUT Antenna:	
The antenna is FPC antenna, the best case gain of the antenna is 1.35dBi, reference to the appendix II for details.	



12. TEST SETUP PHOTO

Reference to the appendix I for details.

13. EUT CONSTRUCTIONAL DETAILS

Reference to the appendix II for details.

***** END OF REPORT *****