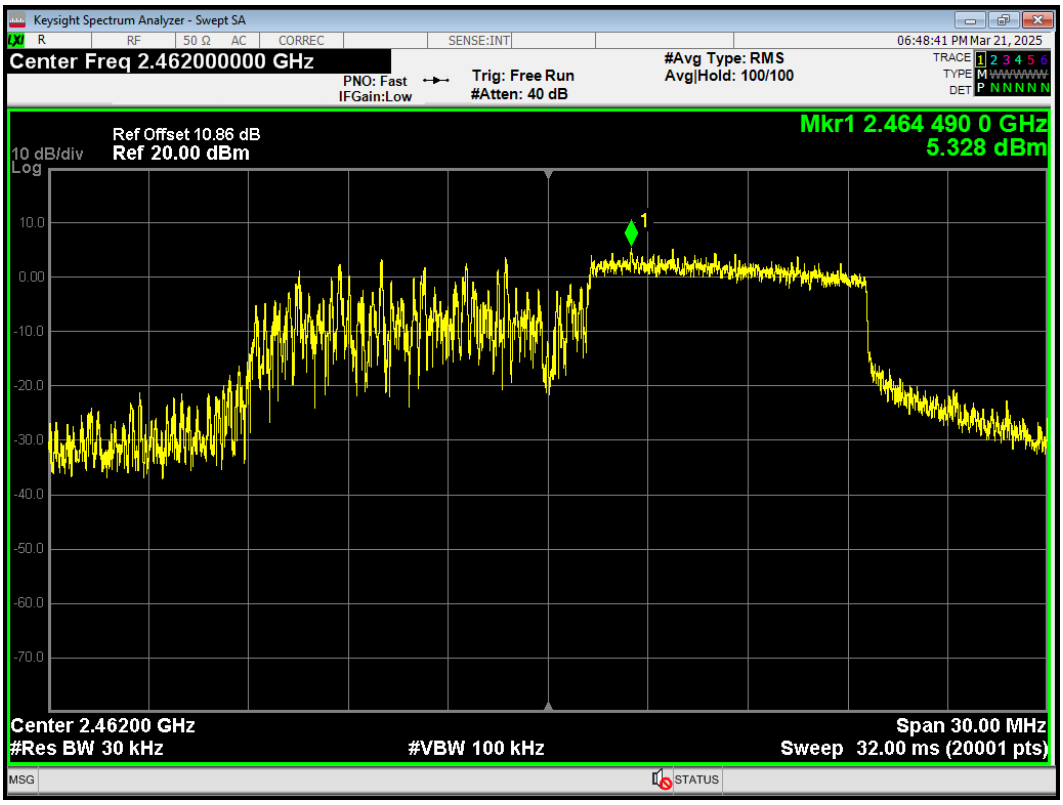
PSD 802.11ax(HE20) 106T 2462MHz



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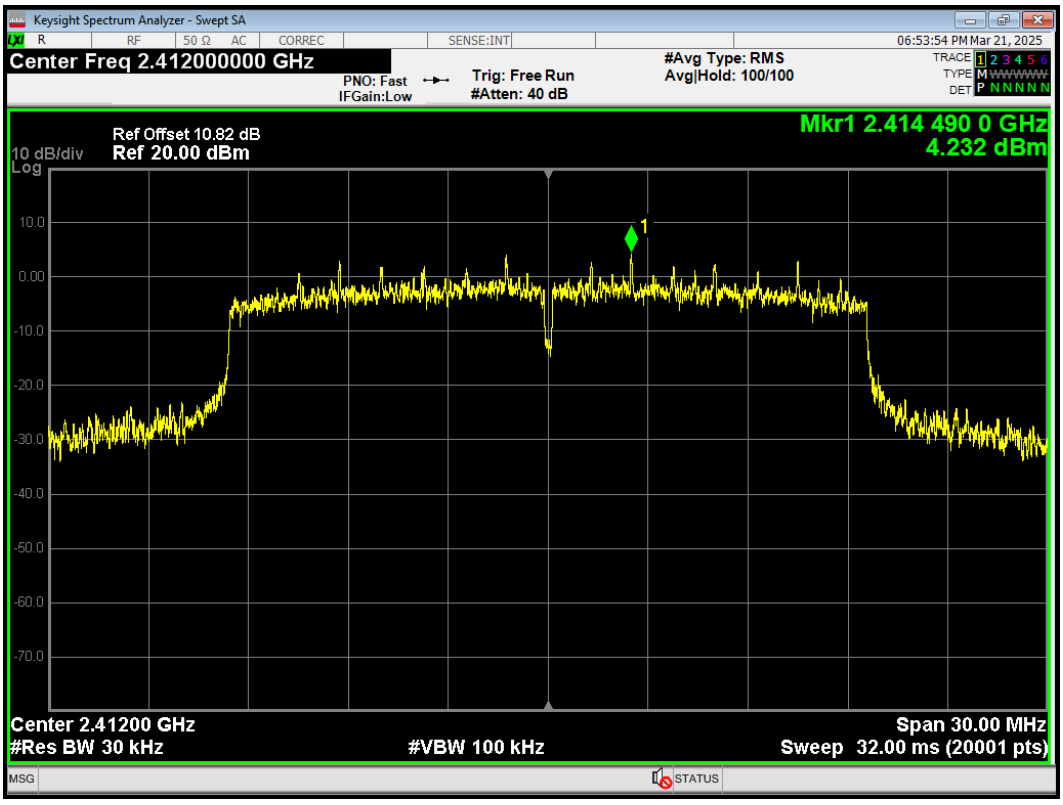

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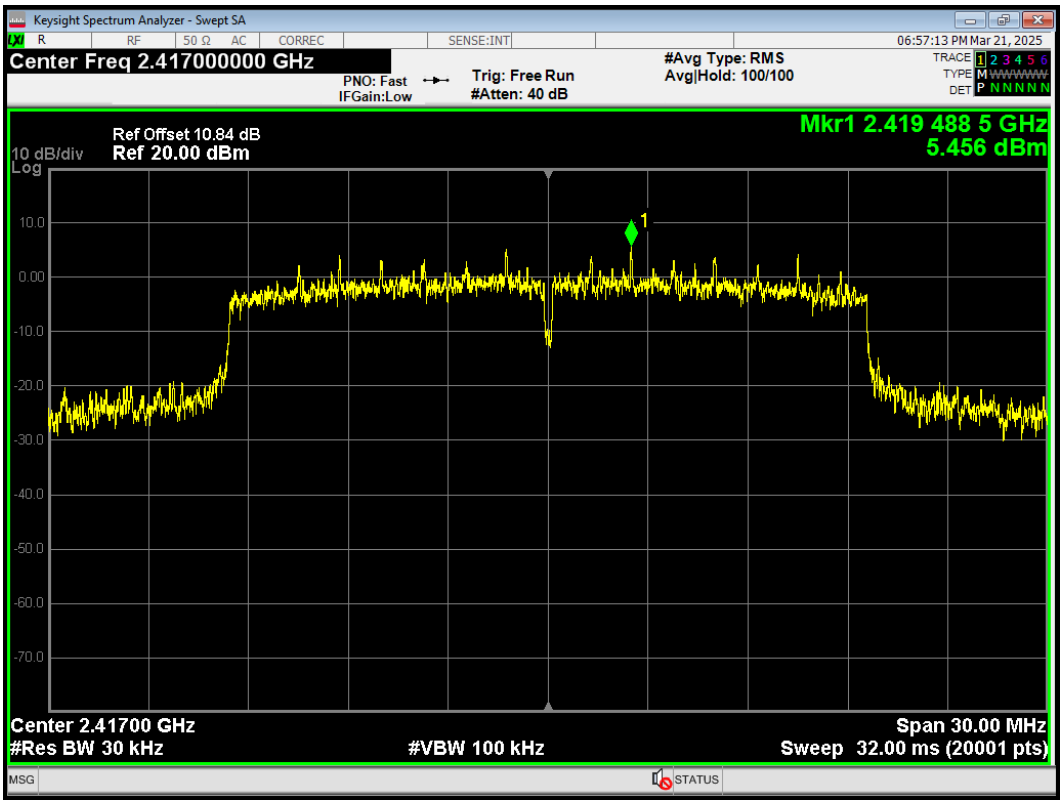

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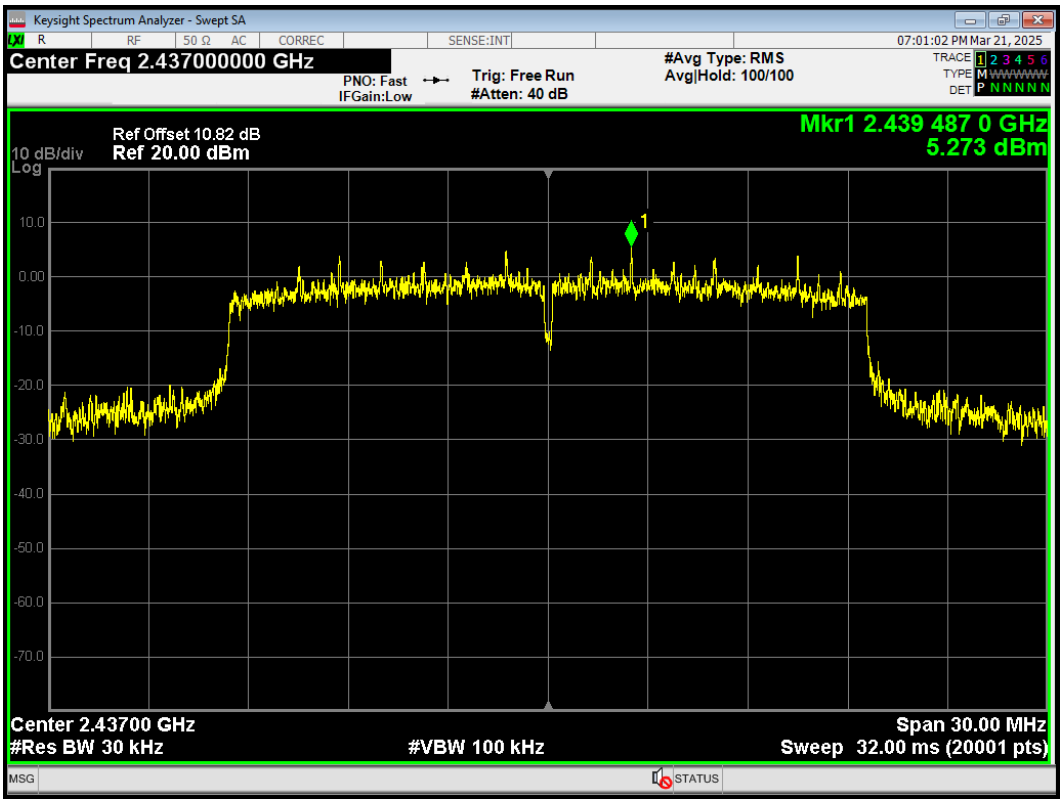
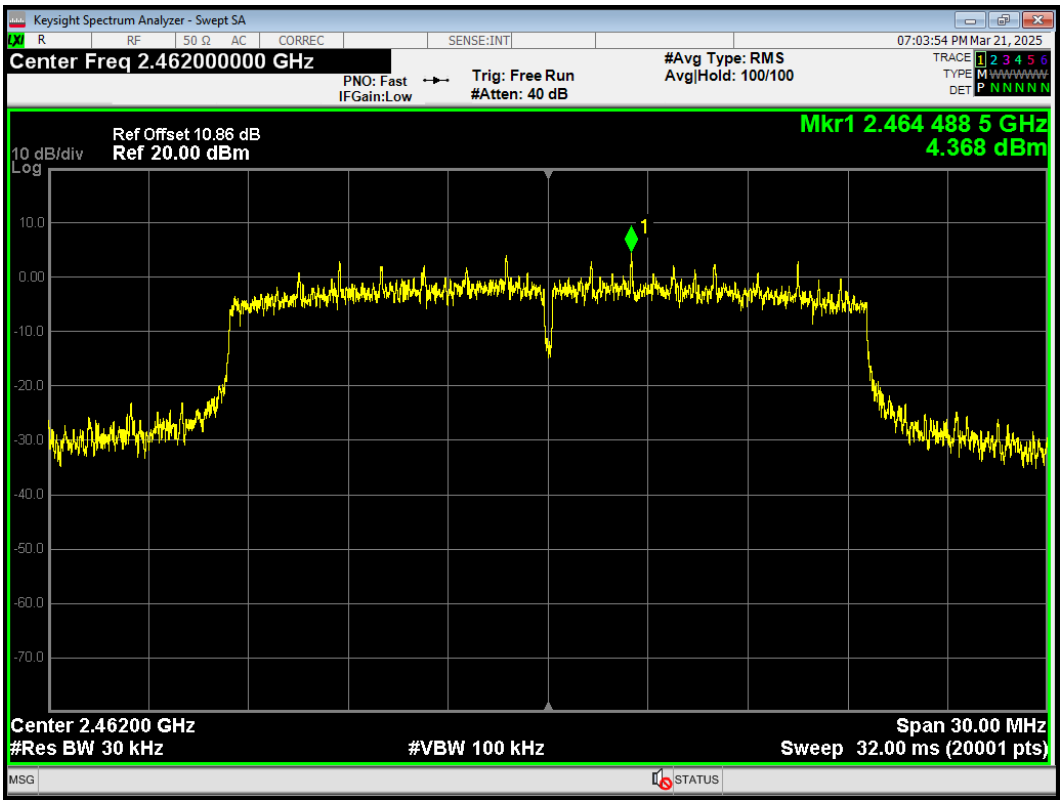
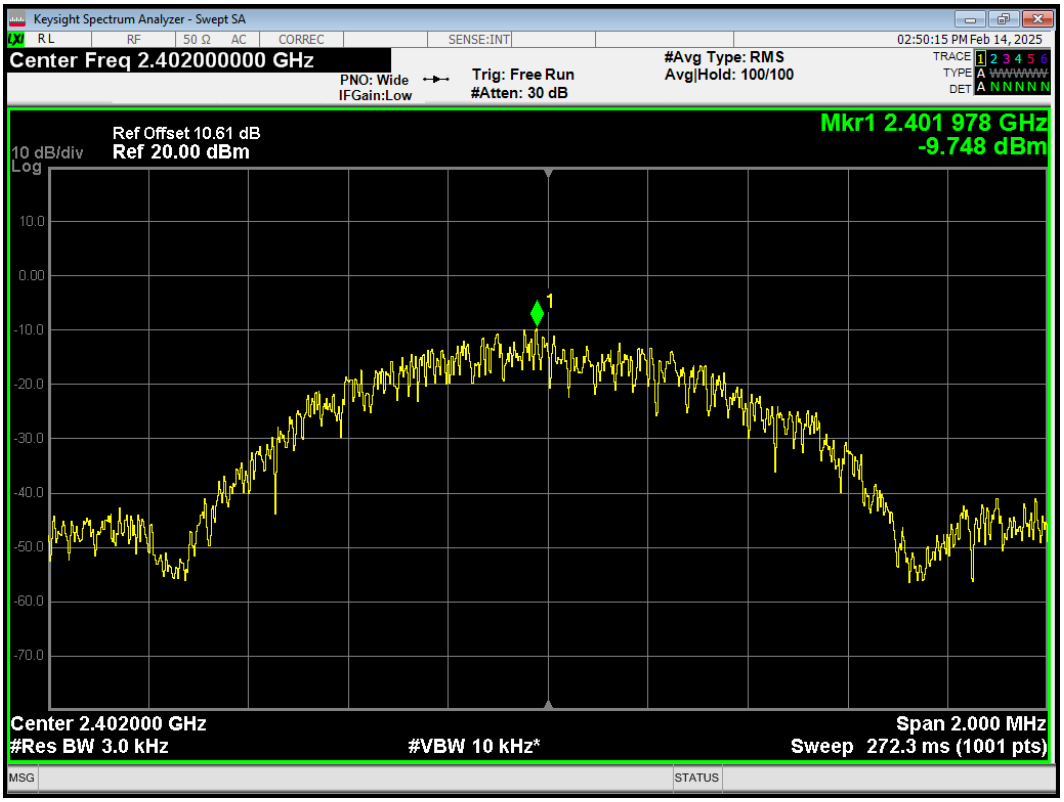


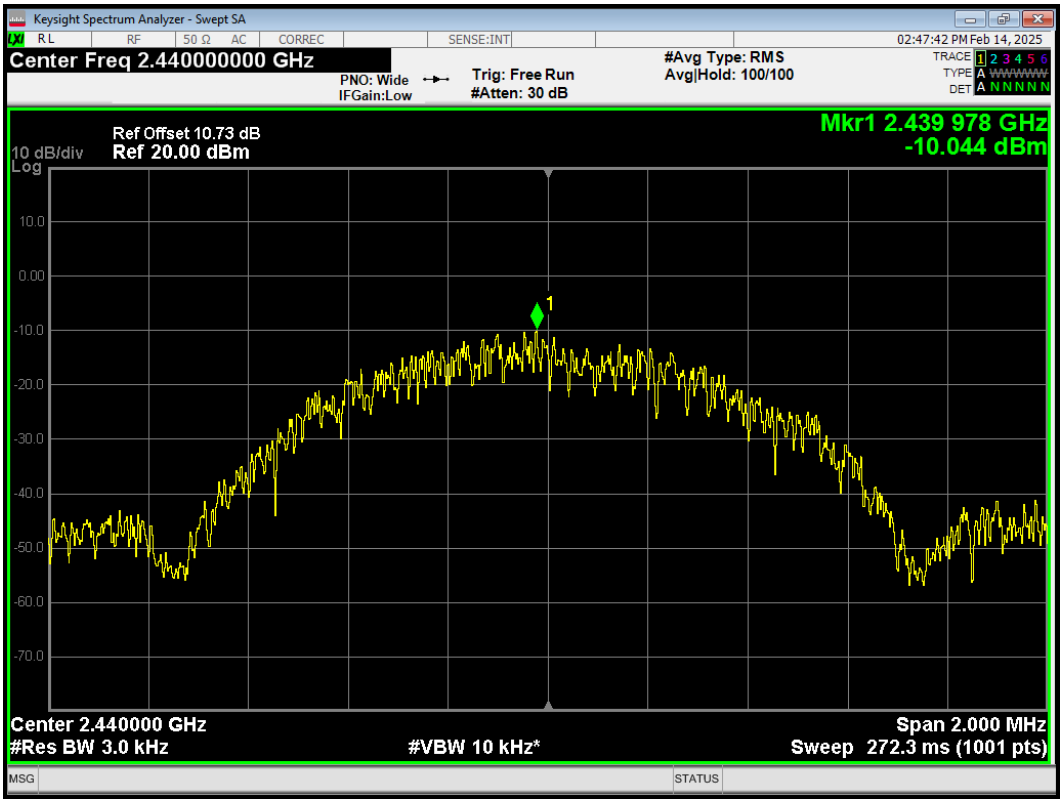
PSD 802.11ax(HE20) 242T 2462MHz



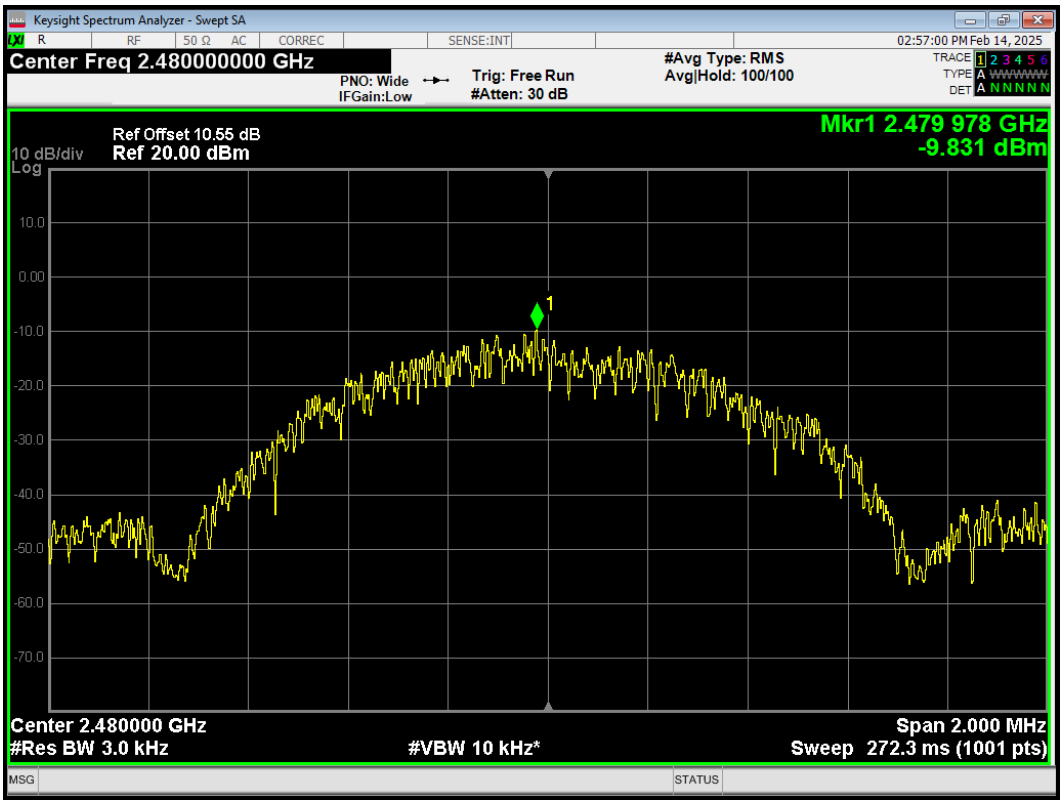
PSD Bluetooth LE (1M) 2402MHz



PSD Bluetooth LE (1M) 2440MHz



PSD Bluetooth LE (1M) 2480MHz



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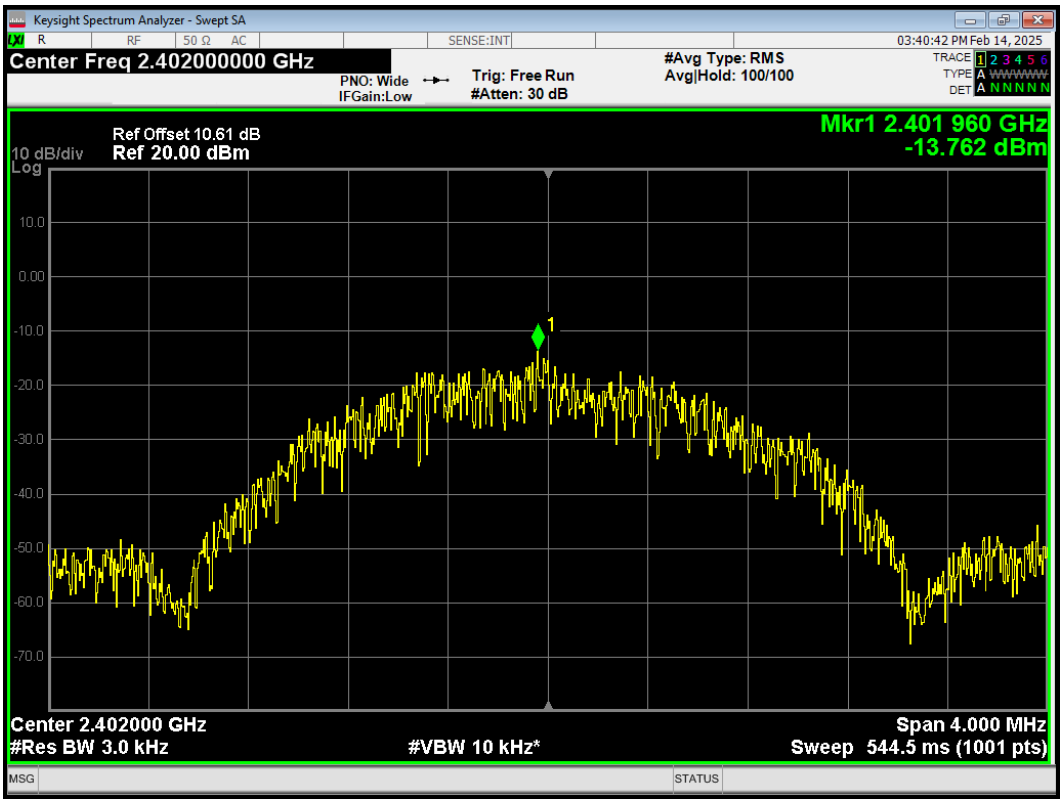
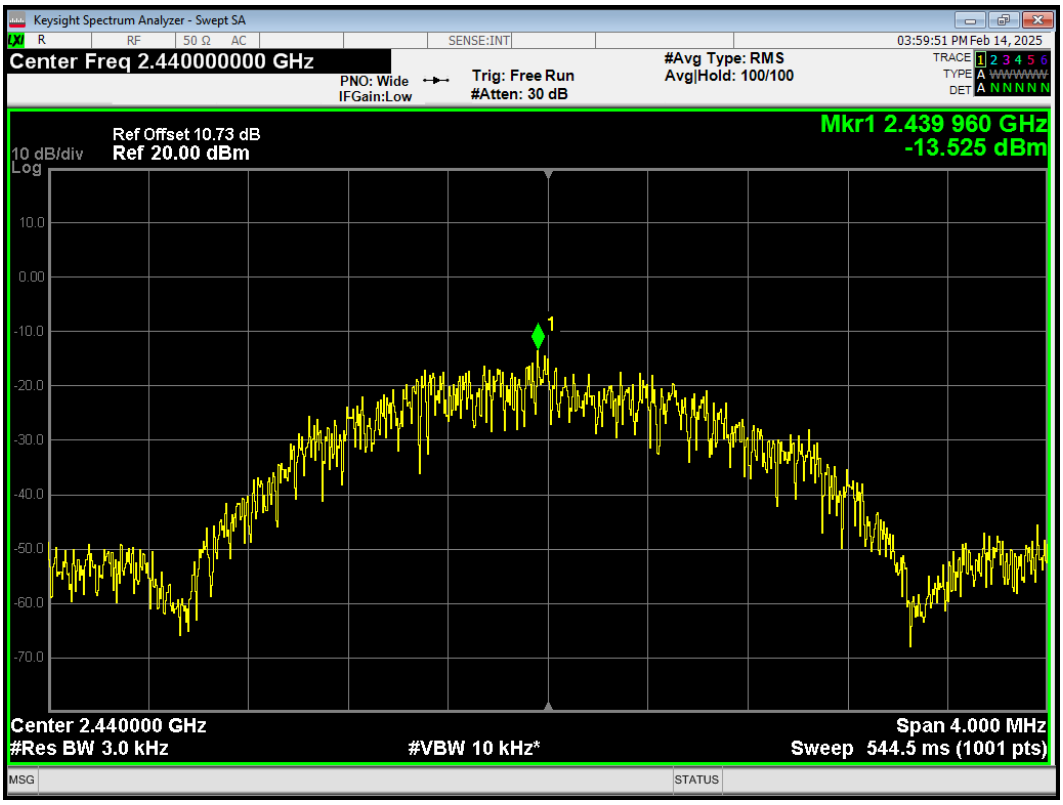


PSD Bluetooth LE (2M) 2440MHz



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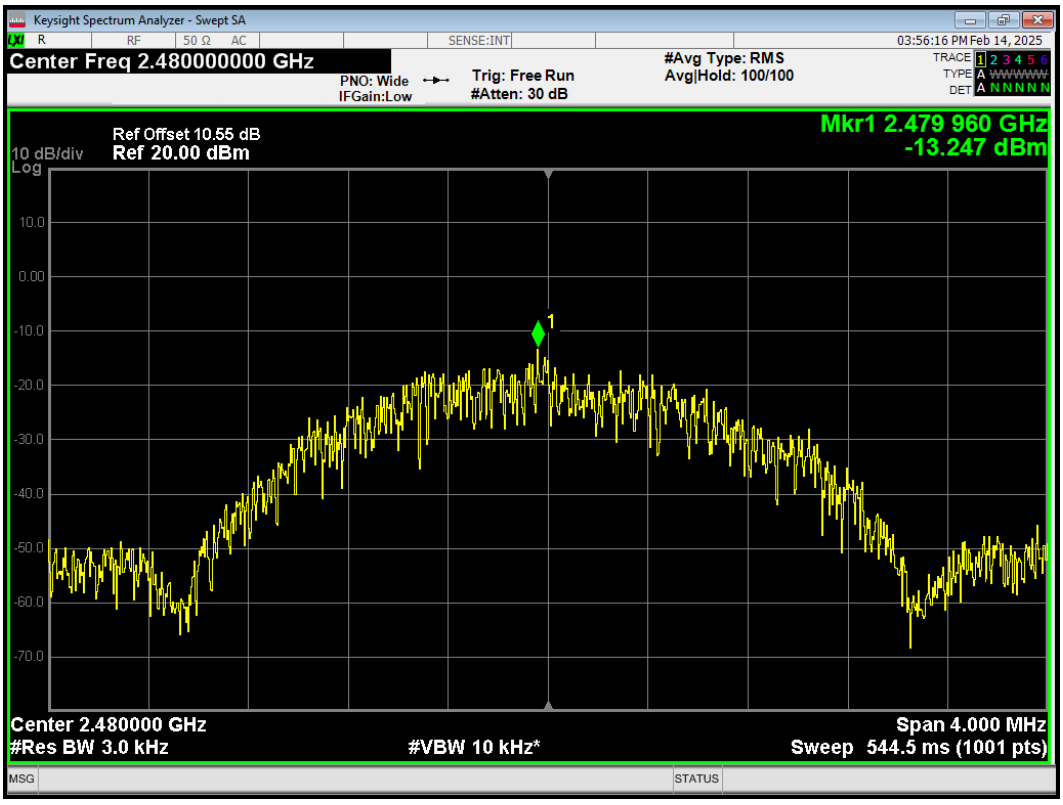
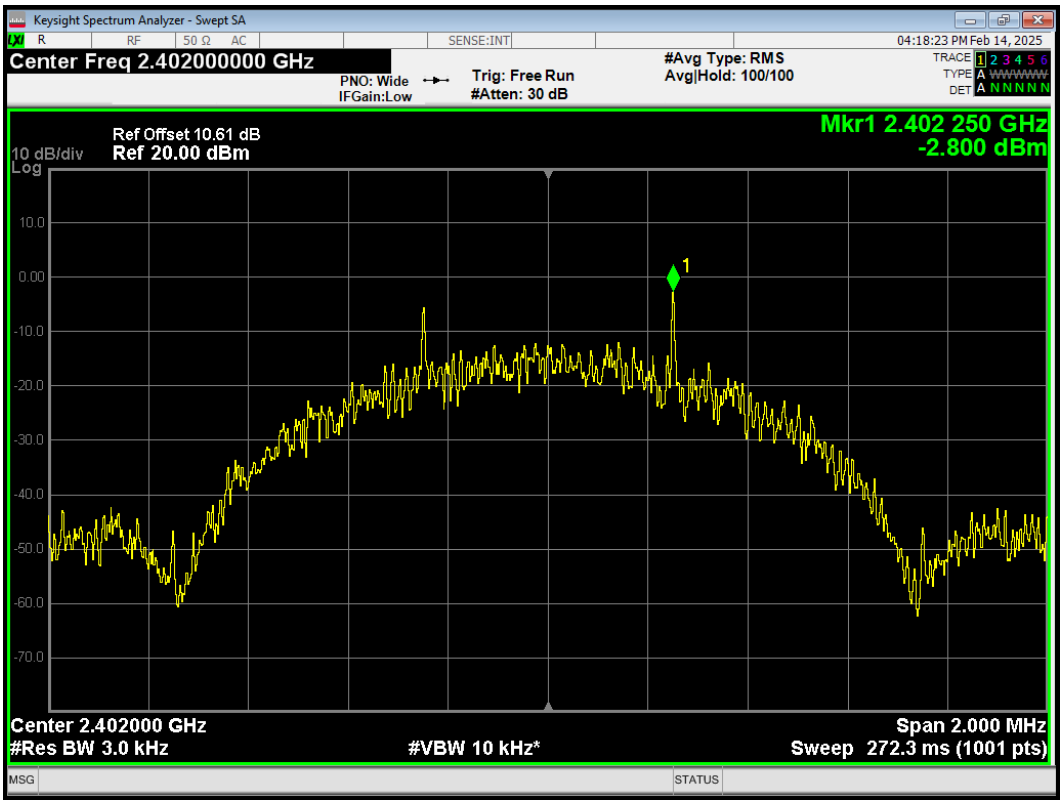
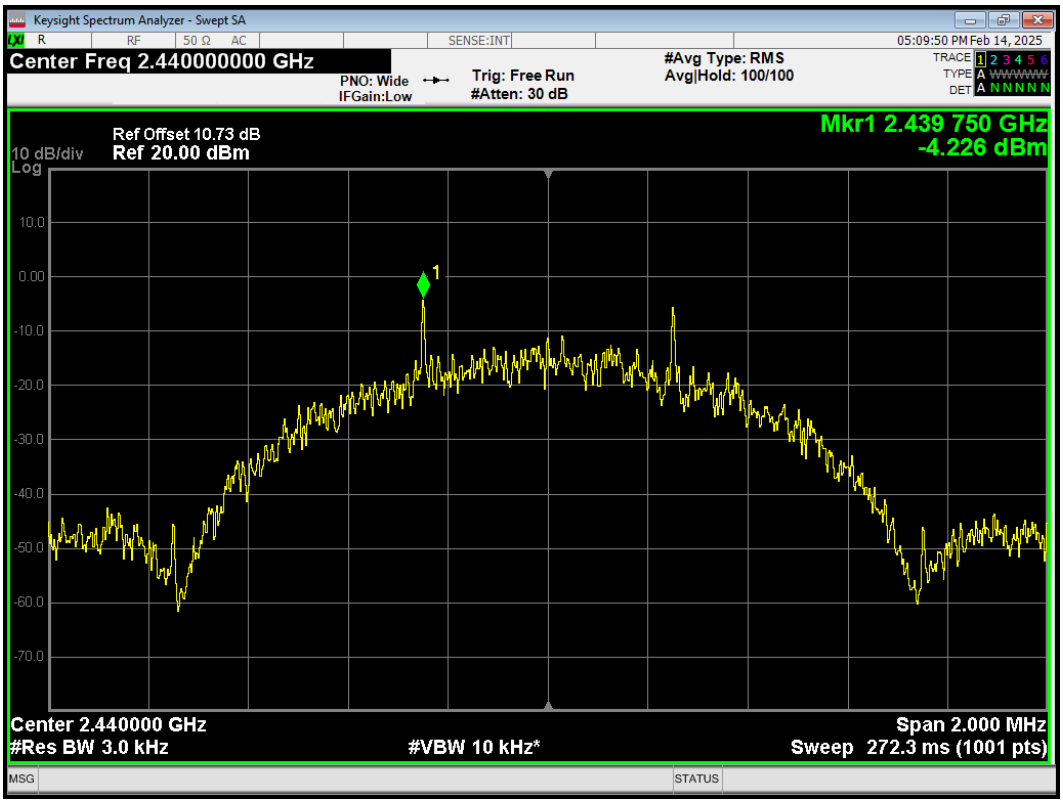


PSD Bluetooth LE (S=2) 2402MHz



PSD Bluetooth LE (S=2) 2440MHz



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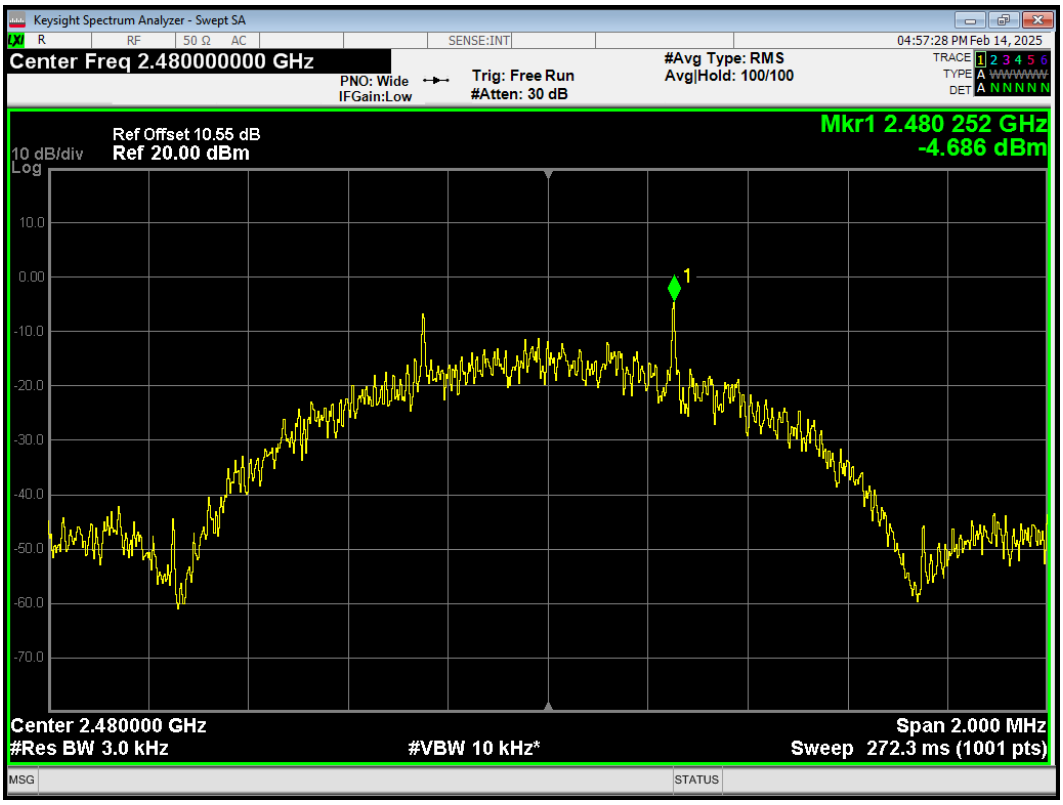
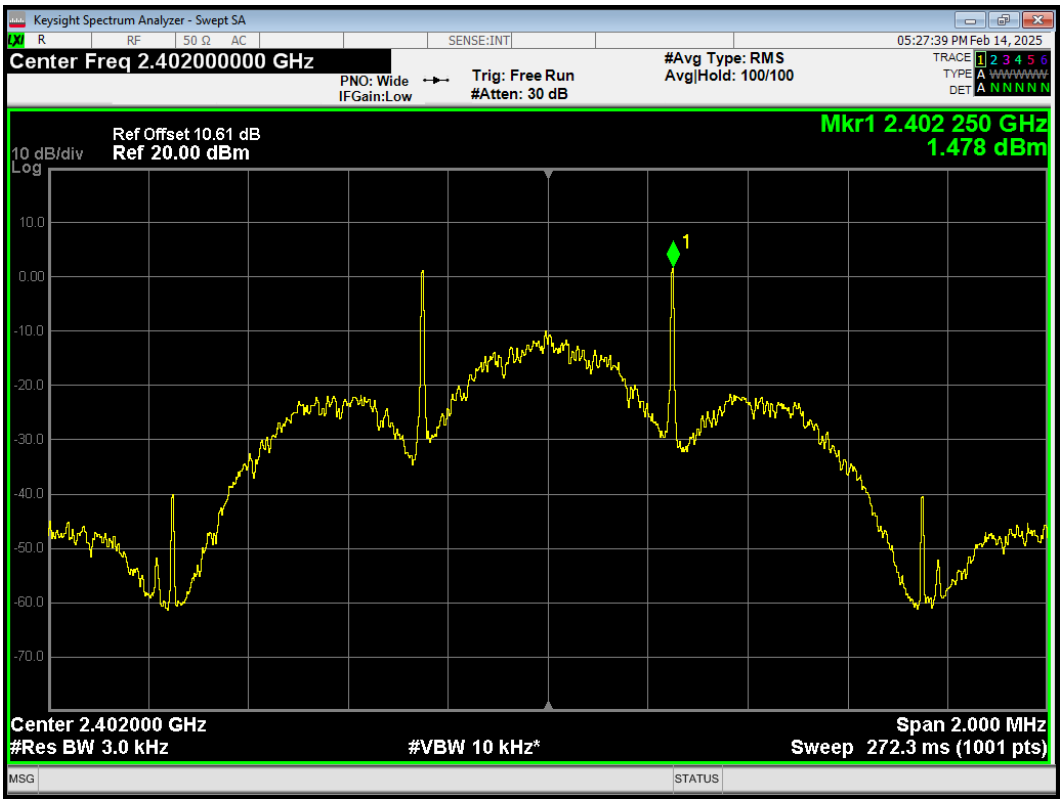
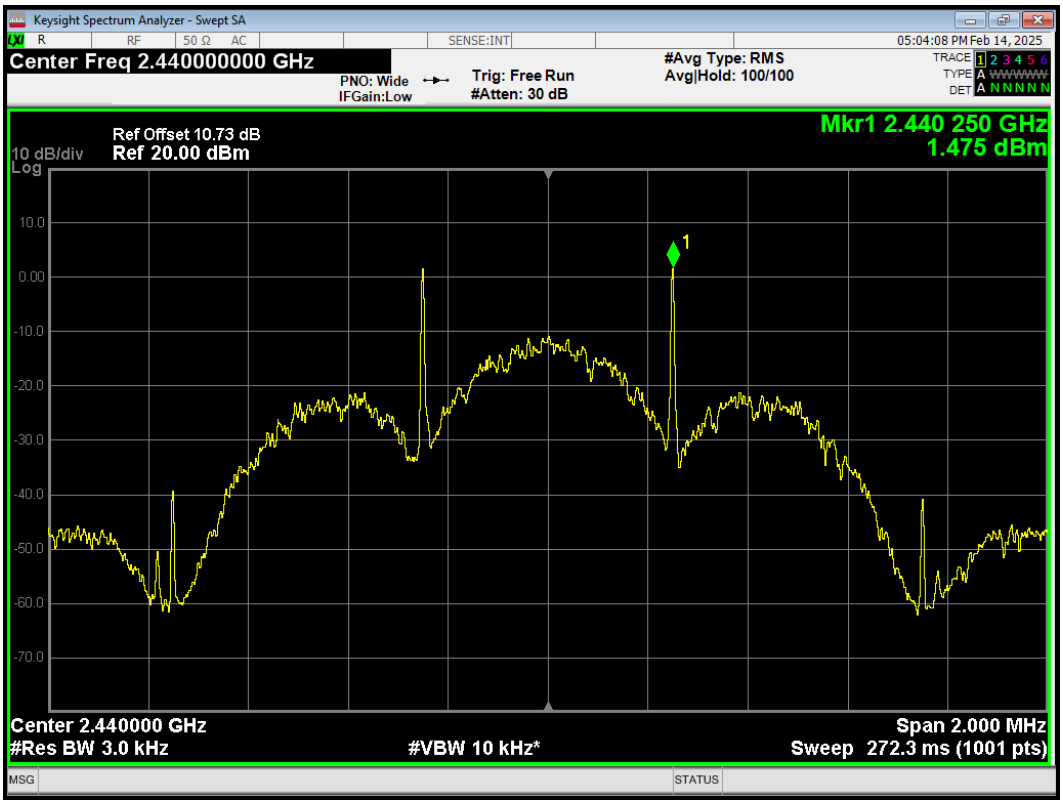


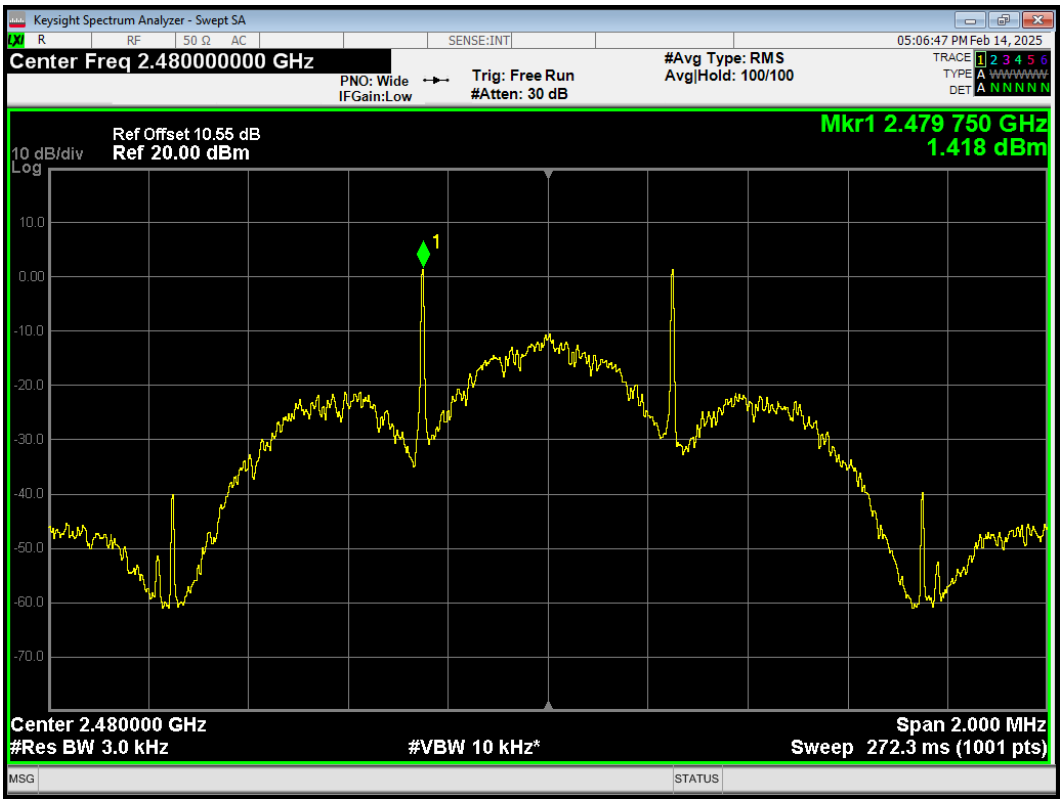
PSD Bluetooth LE (S=8) 2402MHz



PSD Bluetooth LE (S=8) 2440MHz



PSD Bluetooth LE (S=8) 2480MHz



5.5. Spurious RF Conducted Emissions

Ambient Condition

Temperature	Relative humidity
15°C ~ 35°C	20% ~ 80%

Method of Measurement

The EUT was connected to the spectrum analyzer with a known loss. The spectrum analyzer scans from 30MHz to the 10th harmonic of the carrier. The peak detector is used. Set RBW to 100 kHz and VBW to 300 kHz, Sweep is set to AUTO.
The test is in transmitting mode.

Test Setup

Limits

Rule Part 15.247(d) pacifies that “In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. ”

Test Mode	Carrier frequency (MHz)	Reference value (dBm)	Limit
802.11b	2412	10.27	-9.73
	2417	11.33	-8.67
	2437	11.66	-8.34
	2457	11.83	-8.17
	2462	10.92	-9.08
802.11g	2412	7.73	-12.27
	2417	10.18	-9.82
	2437	9.82	-10.18
	2457	10.16	-9.84
	2462	7.33	-12.67
802.11n HT20	2412	9.52	-10.48
	2417	11.89	-8.11

	2437	11.70	-8.30
	2457	12.46	-7.54
	2462	10.18	-9.82
802.11ax HE20	2412	6.90	-13.10
	2417	10.53	-9.47
	2437	10.17	-9.83
	2457	9.91	-10.09
	2462	6.56	-13.44

RU Mode

Test Mode	Carrier frequency (MHz)	Reference value (dBm)	Limit
802.11ax HE20 26Tone	2412	9.93	-10.07
	2417	14.48	-5.52
	2437	15.78	-4.22
	2457	13.39	-6.61
	2462	12.02	-7.98
802.11ax HE20 52Tone	2412	10.95	-9.05
	2417	13.10	-6.9
	2437	13.69	-6.31
	2462	12.67	-7.33
802.11ax HE20 106Tone	2412	9.76	-10.24
	2437	10.13	-9.87
	2462	9.98	-10.02
802.11ax HE20 242Tone	2412	8.47	-11.53
	2417	9.57	-10.43
	2437	9.44	-10.56
	2462	8.41	-11.59

Test Mode	Carrier frequency (MHz)	Reference value (dBm)	Limit
Bluetooth (Low Energy) (1M)	2402	9.38	-20.62
	2440	9.11	-20.89
	2480	9.04	-20.96
Bluetooth (Low Energy) (2M)	2402	9.07	-20.93
	2440	8.91	-21.09
	2480	9.00	-21.00
Bluetooth (Low Energy) (S=2)	2402	10.00	-20.00
	2440	9.59	-20.41
	2480	10.13	-19.87
Bluetooth (Low Energy) (S=8)	2402	8.62	-21.38
	2440	7.90	-22.10
	2480	8.47	-21.53

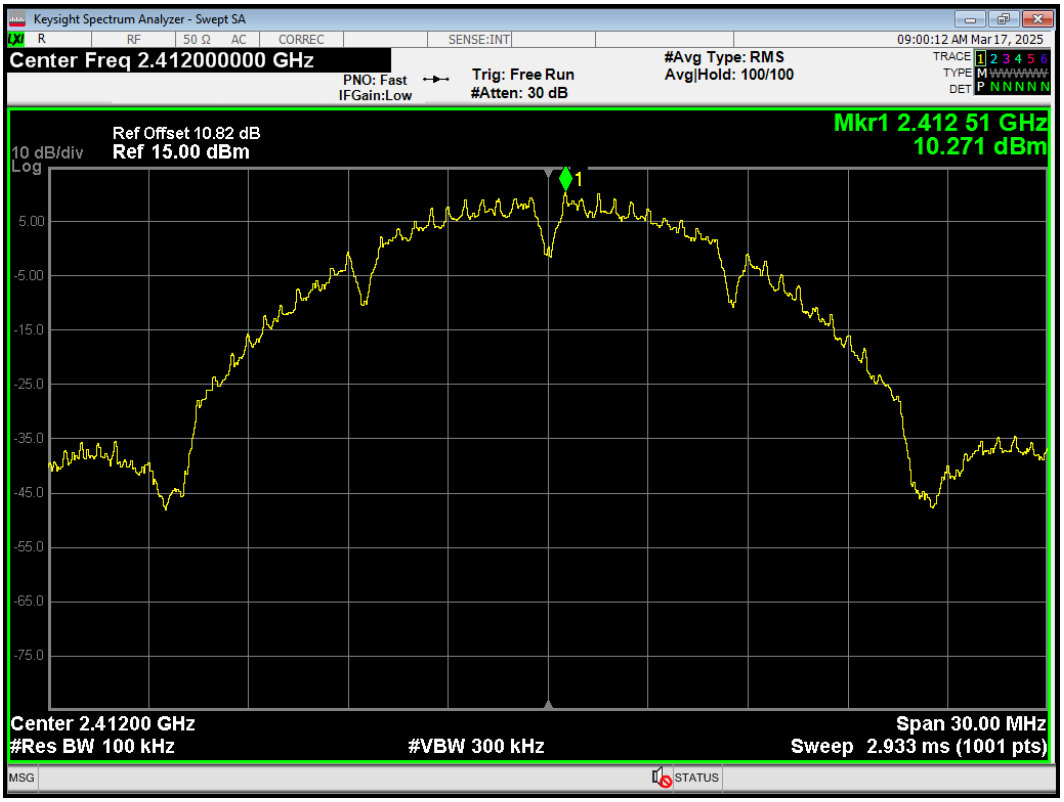
Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor *k* = 1.96.

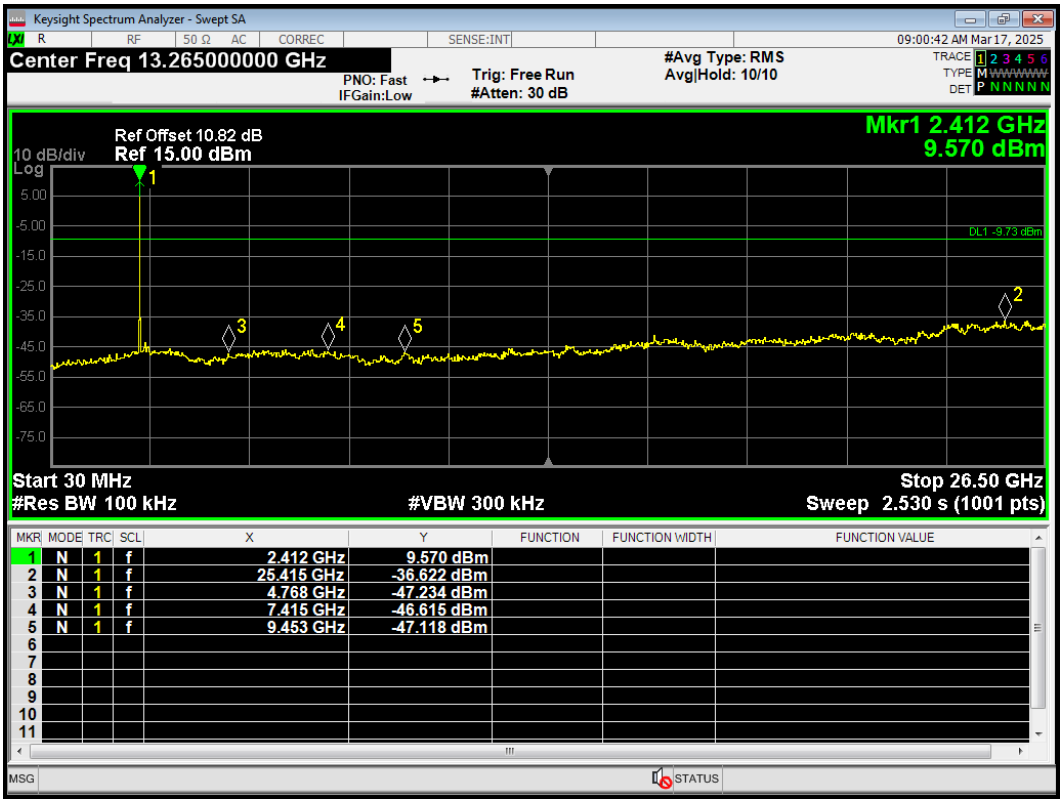
Frequency	Uncertainty
100kHz-2GHz	0.684 dB
2GHz-26GHz	1.407 dB

Test Results:

Tx. Spurious 802.11b 2412MHz Ref



Tx. Spurious 802.11b 2412MHz Emission



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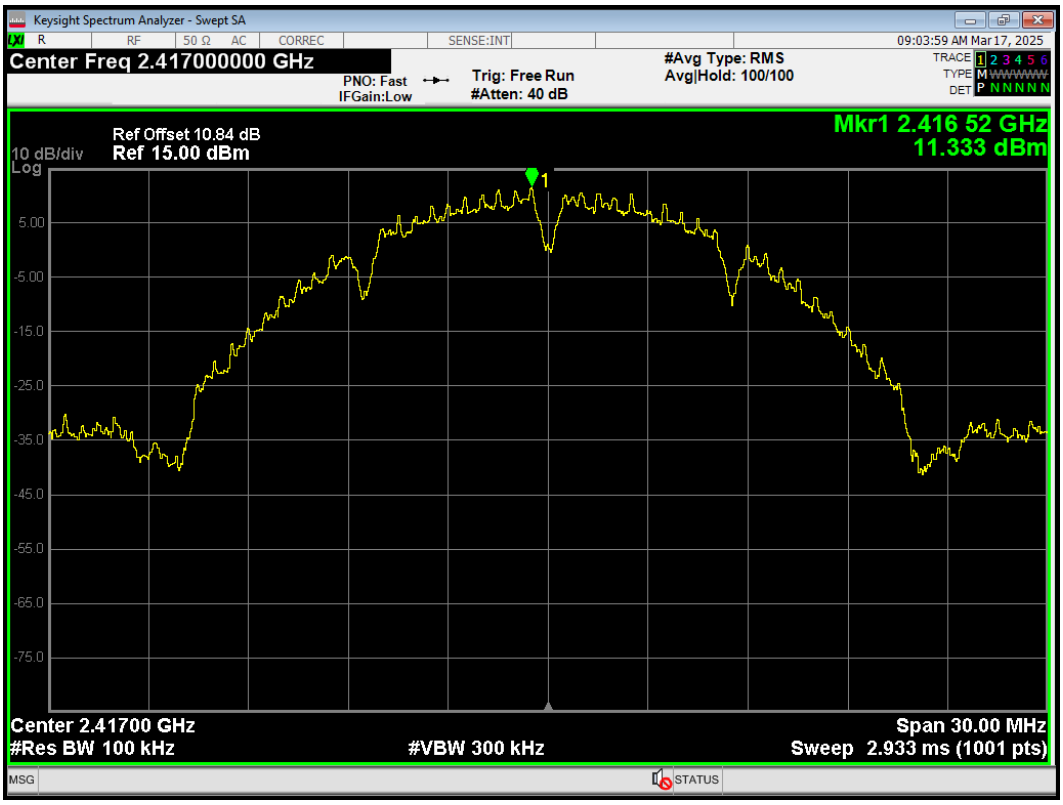

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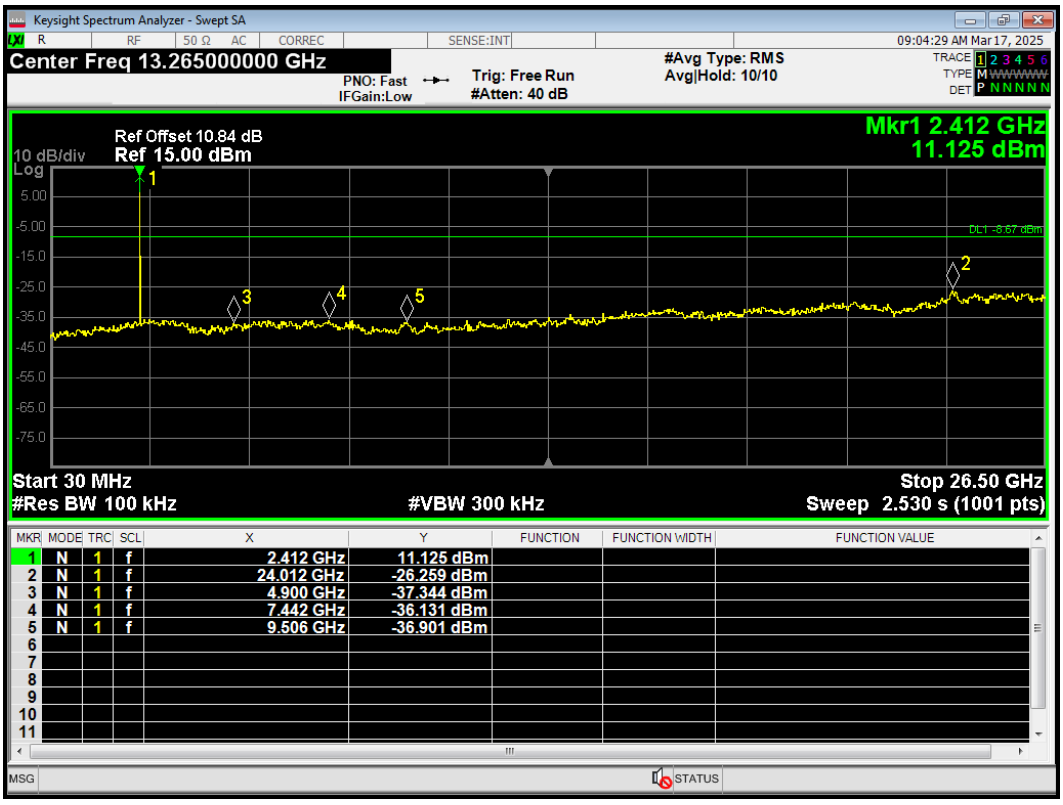

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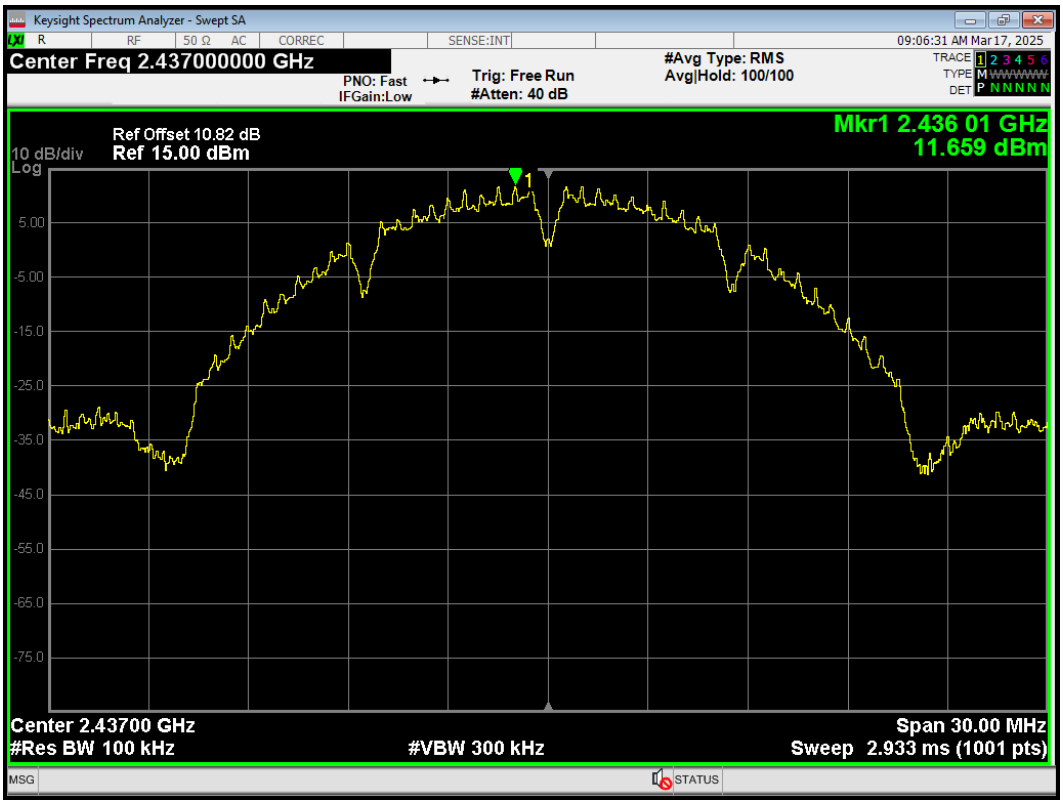

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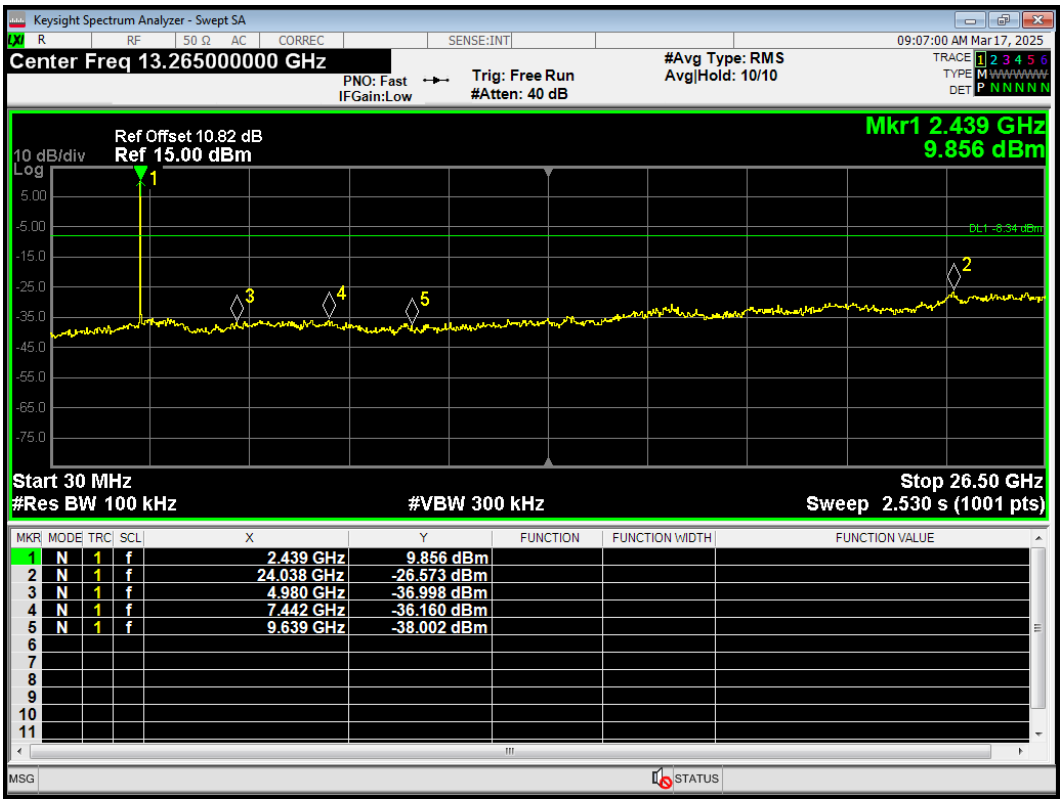
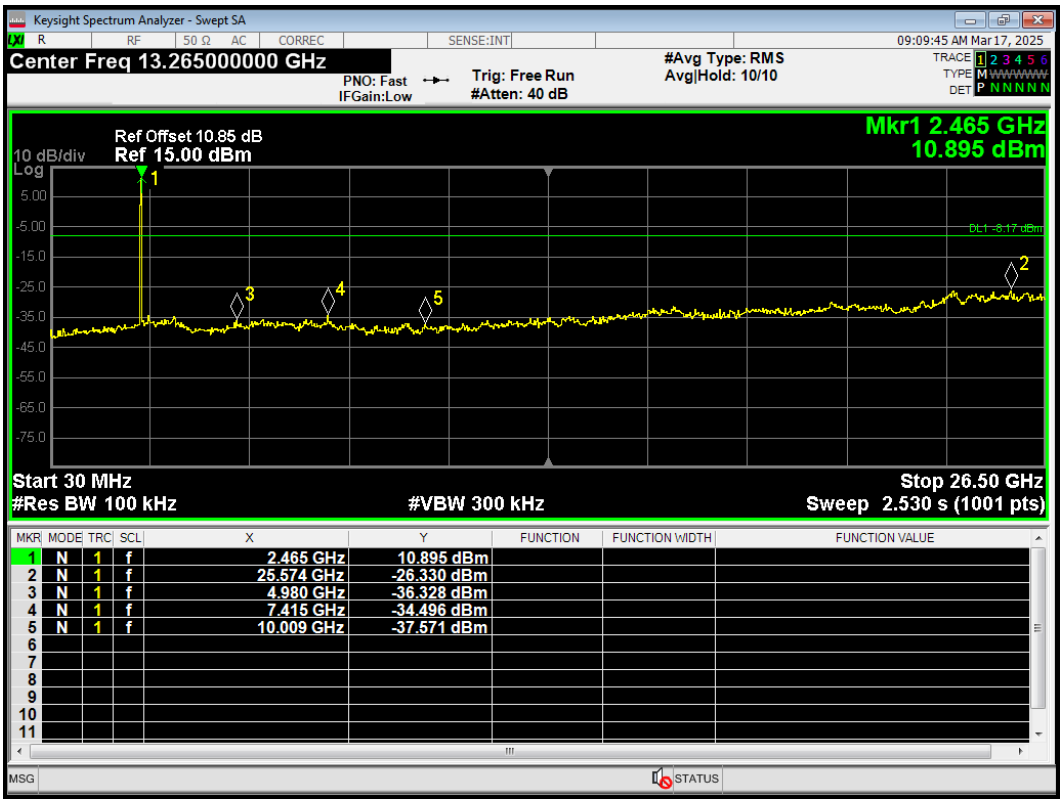


Tx. Spurious 802.11b 2457MHz Ref

Tx. Spurious 802.11b 2457MHz Emission



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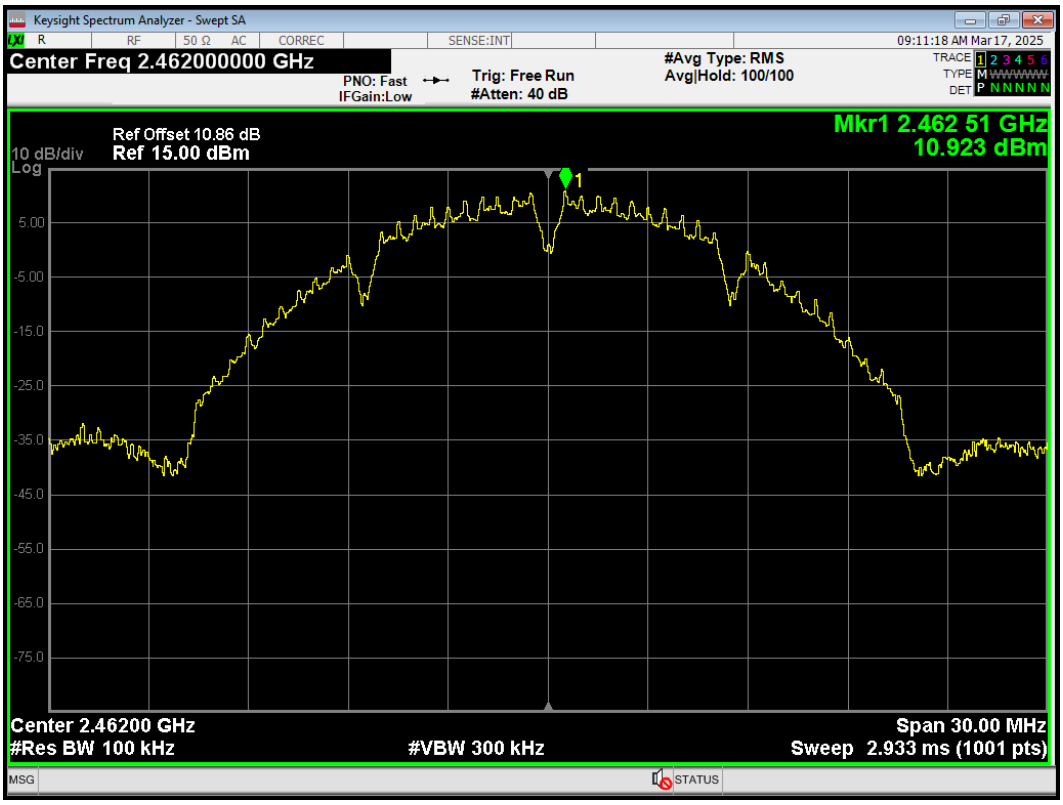

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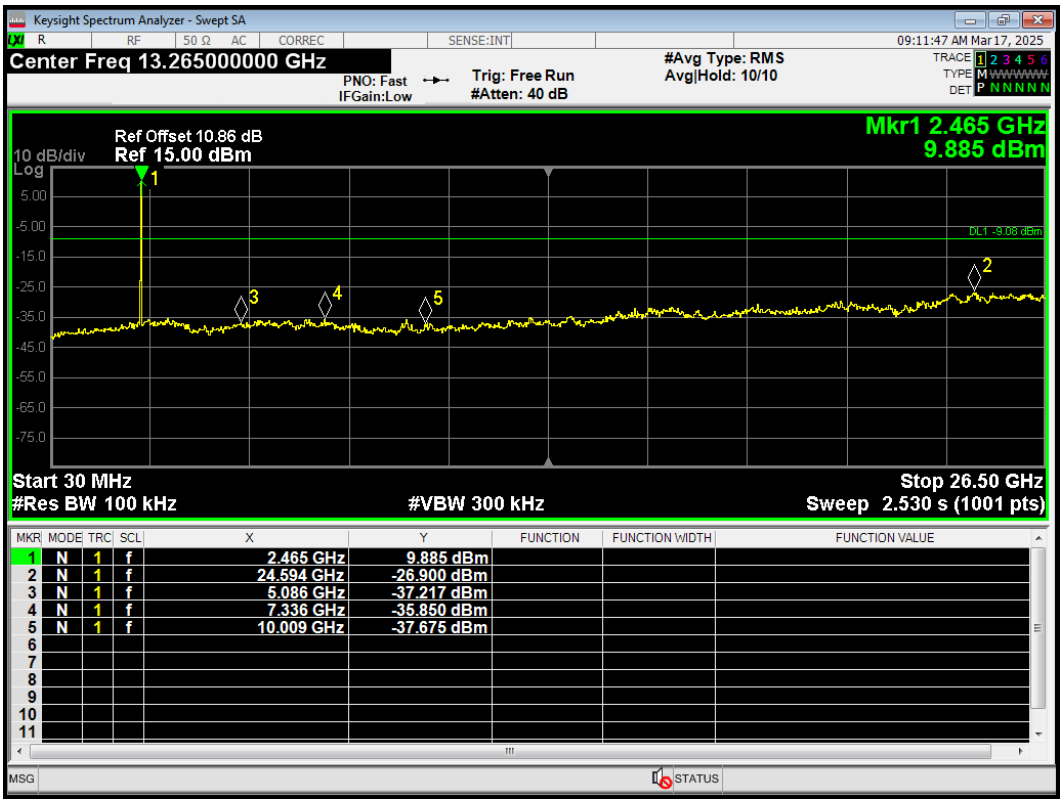

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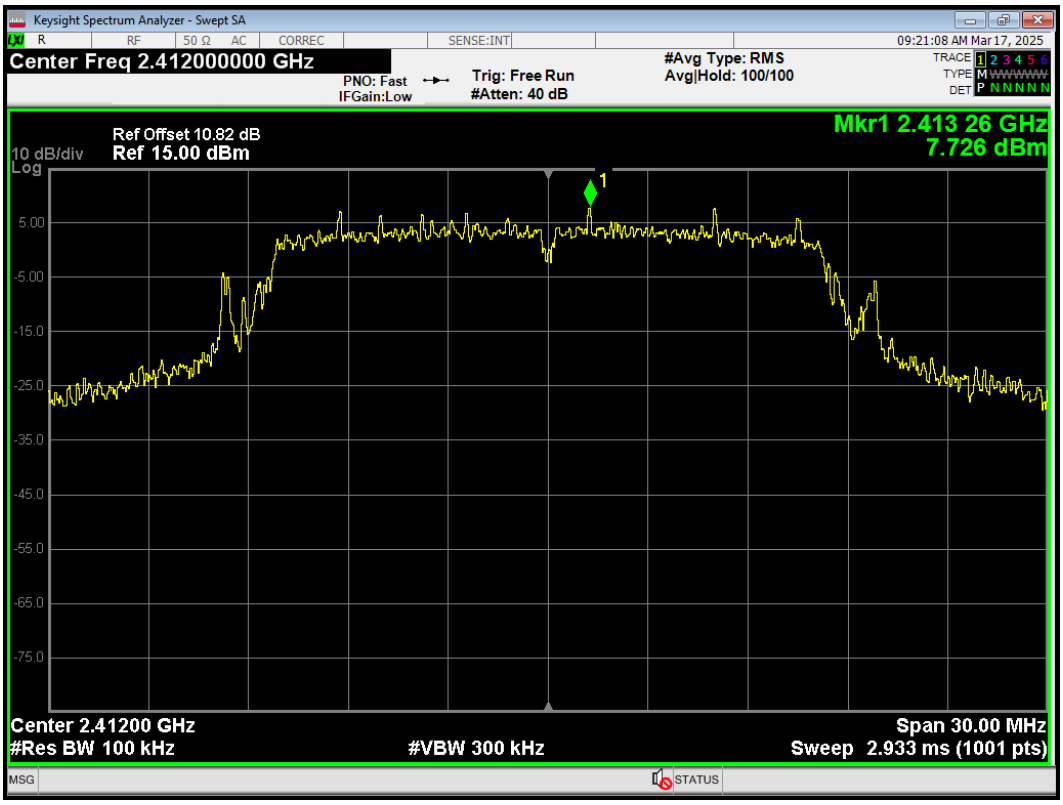

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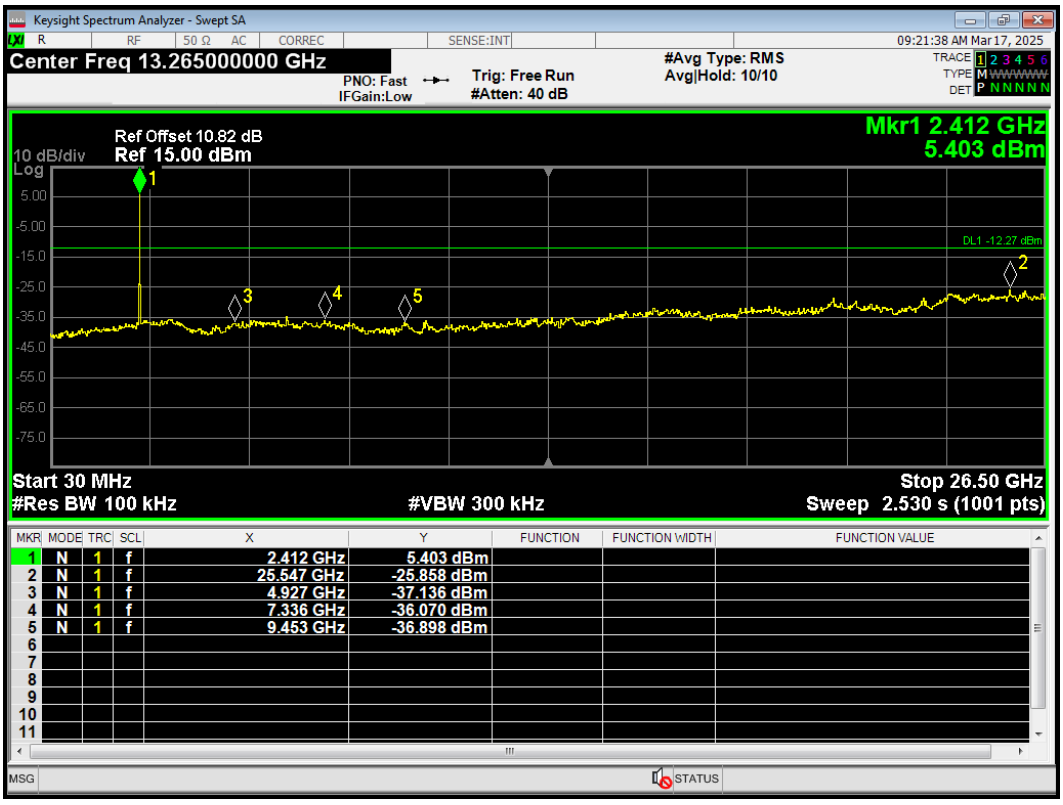

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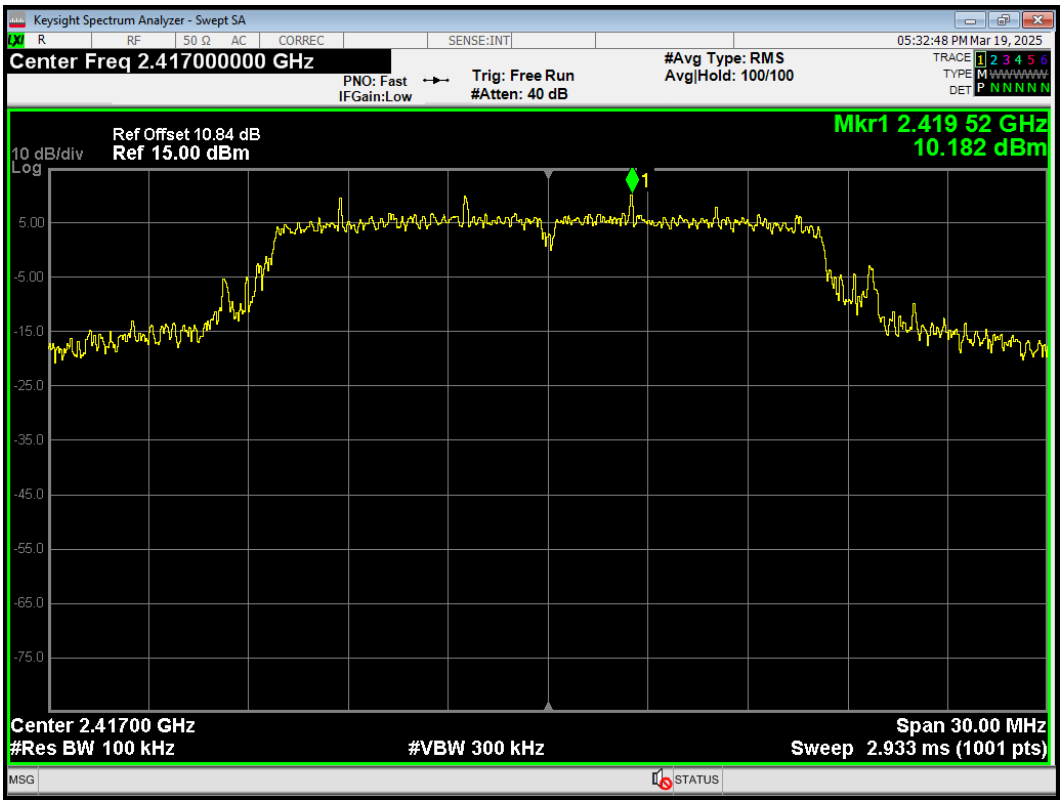

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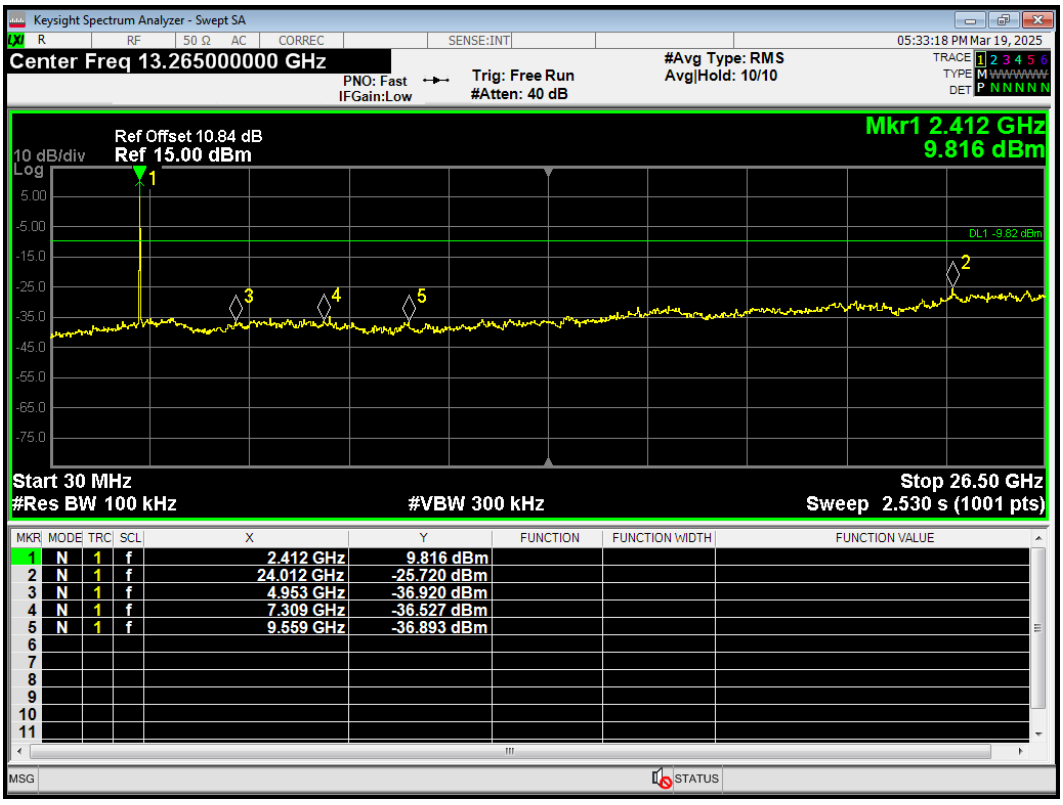

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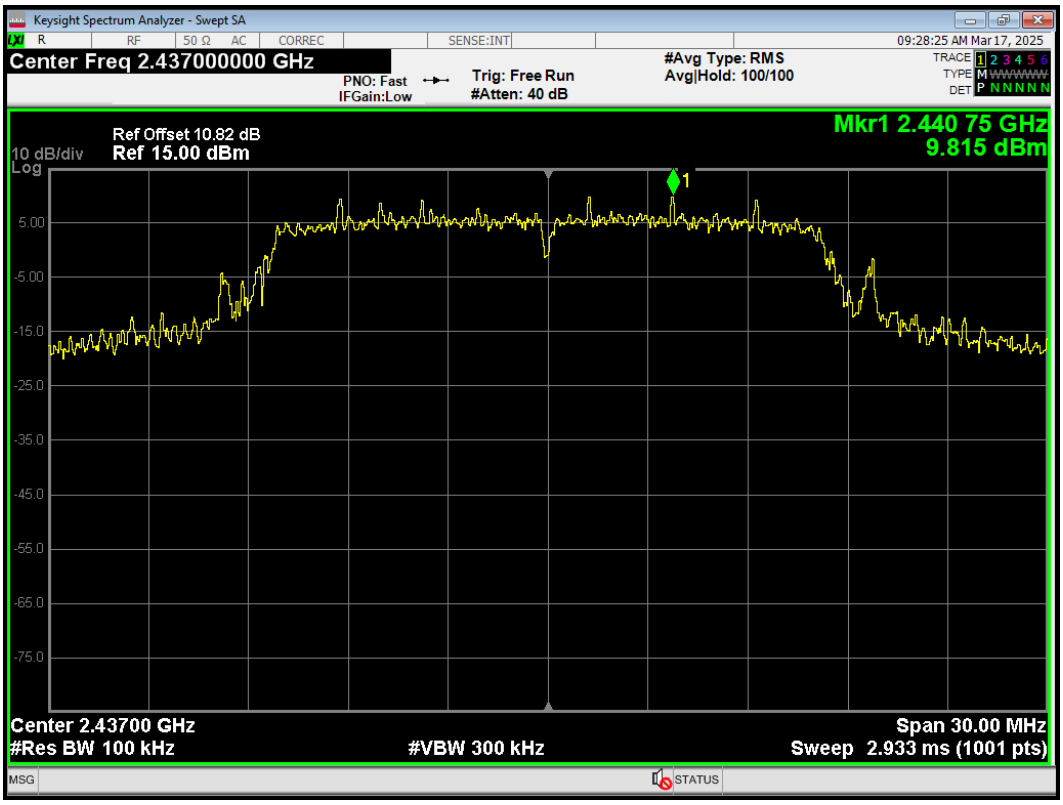

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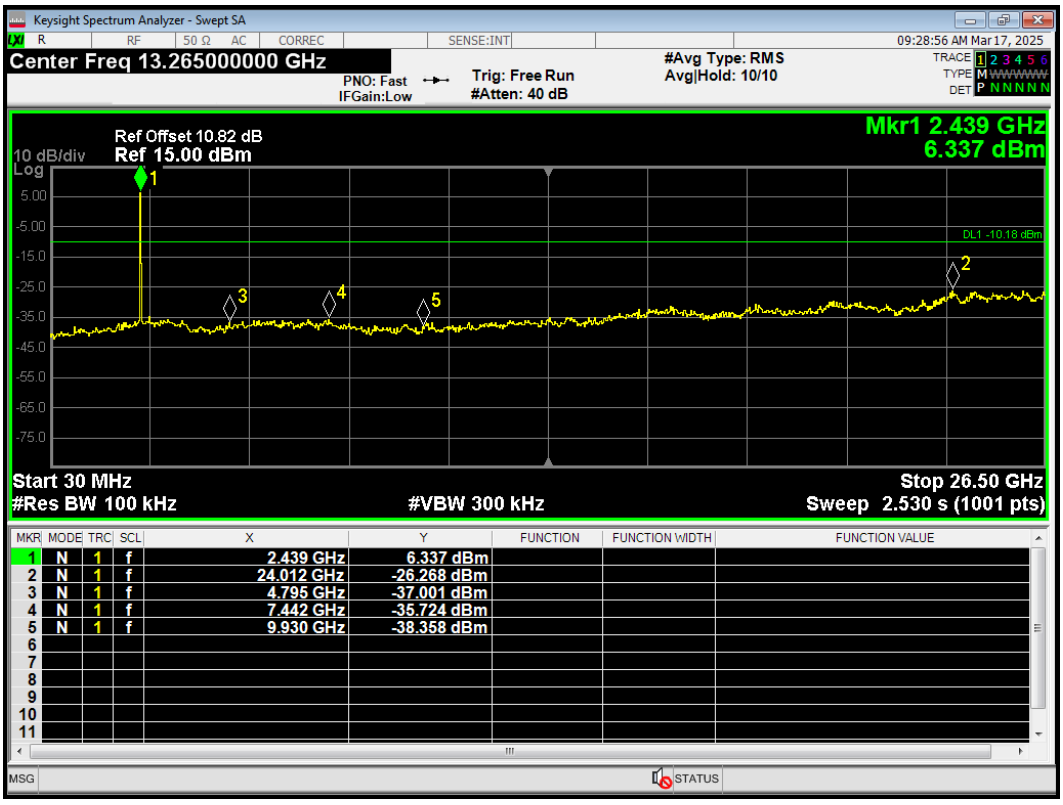
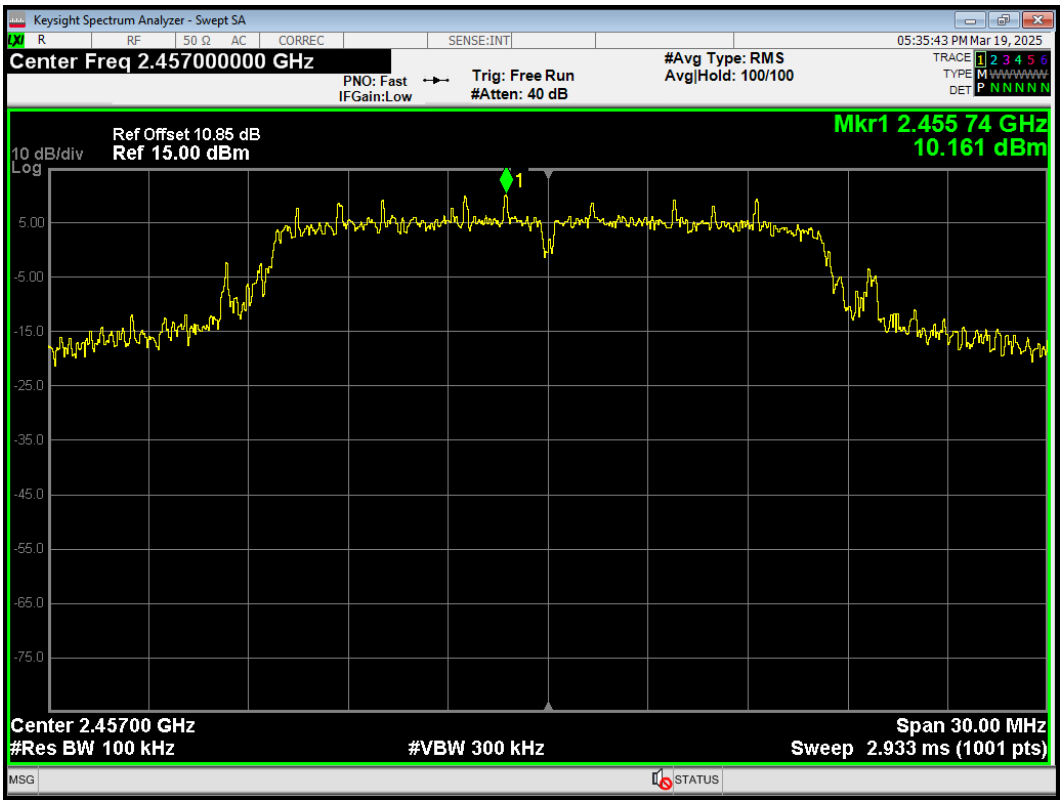


Tx. Spurious 802.11g 2457MHz Ref



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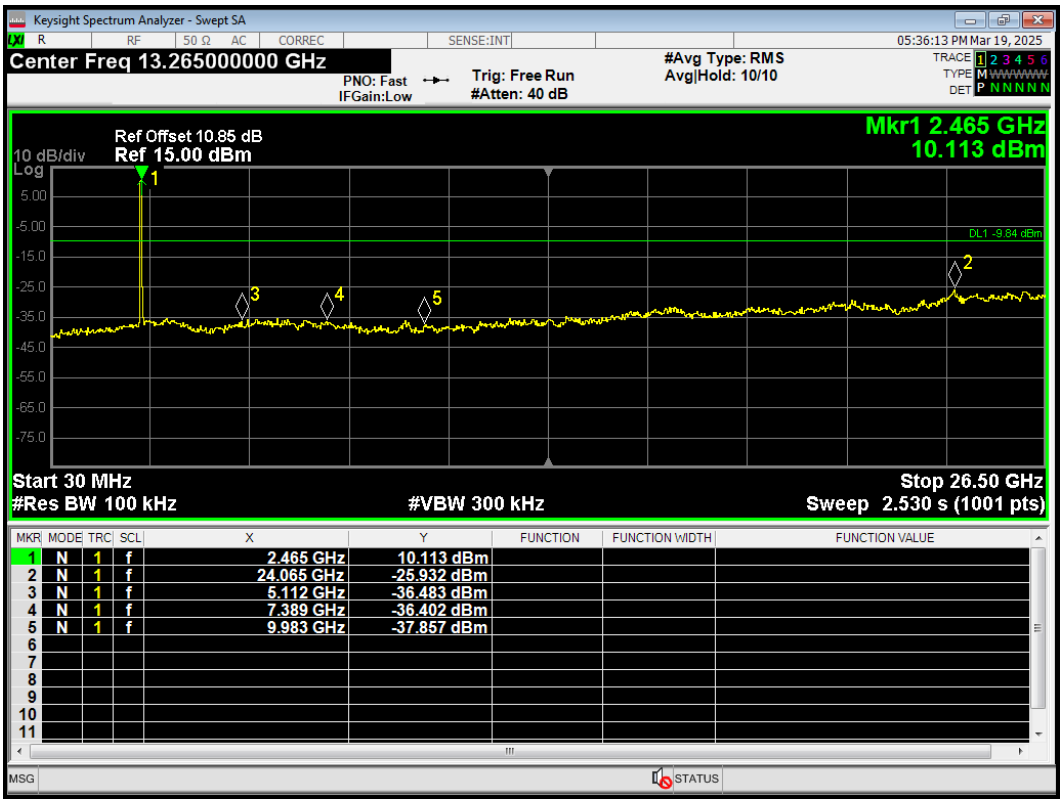

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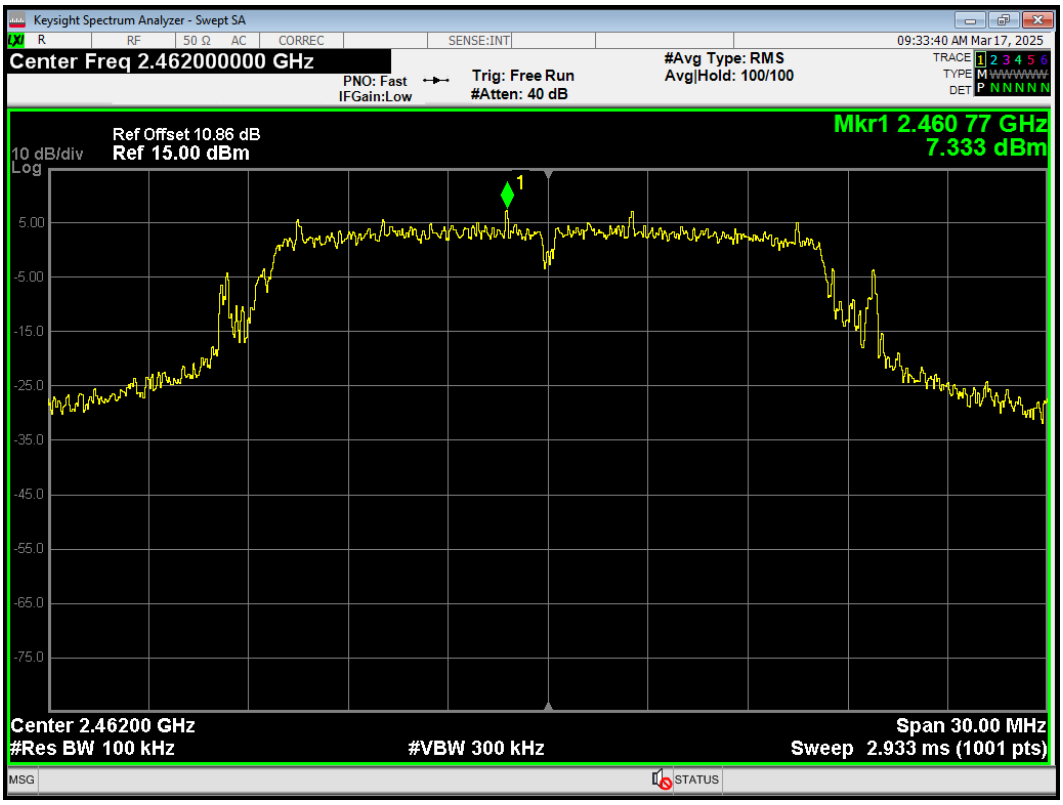

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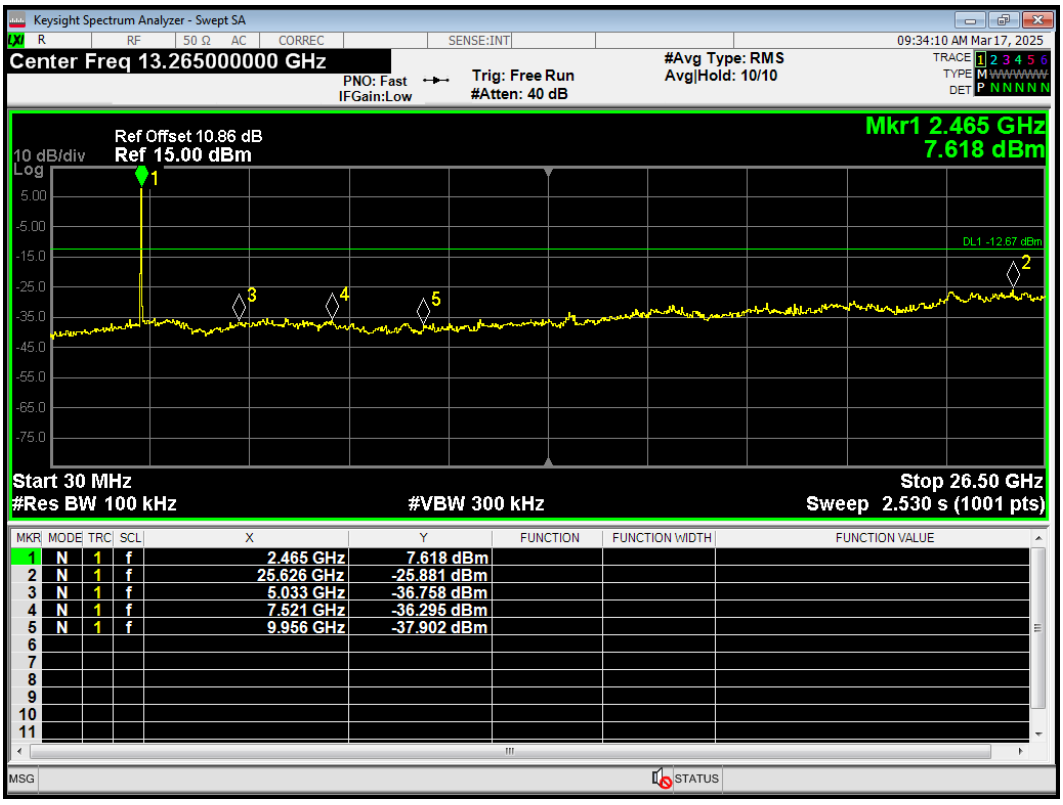
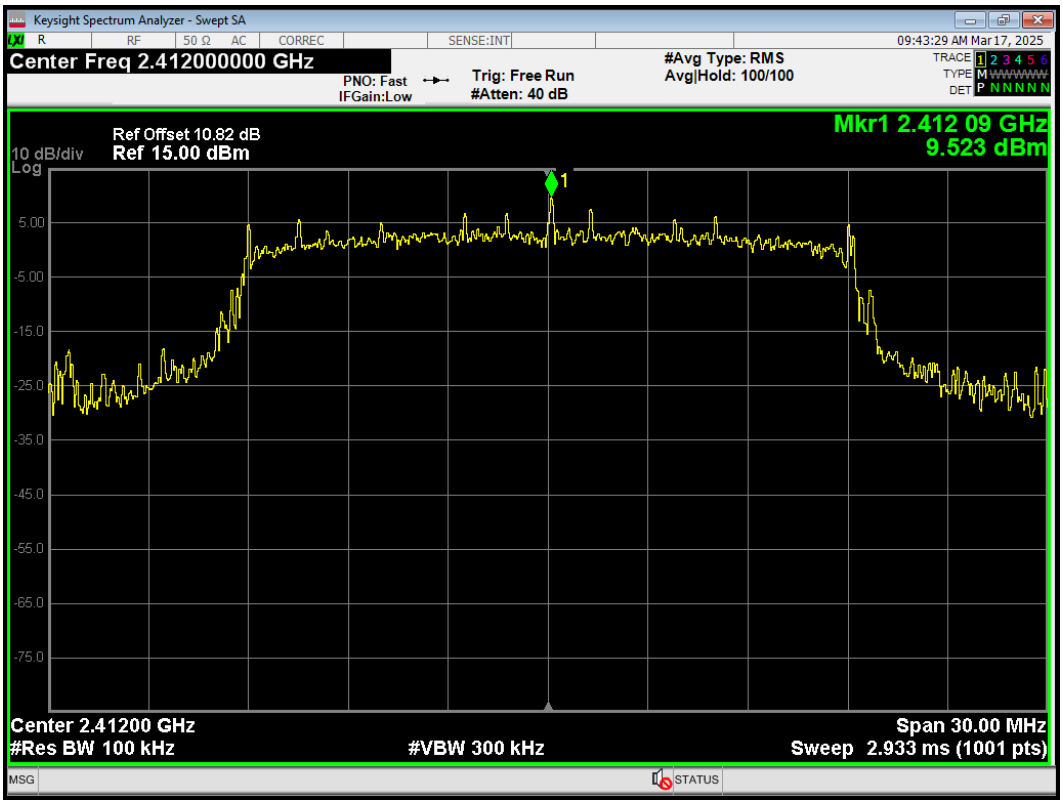


Tx. Spurious 802.11n(HT20) 2412MHz Ref



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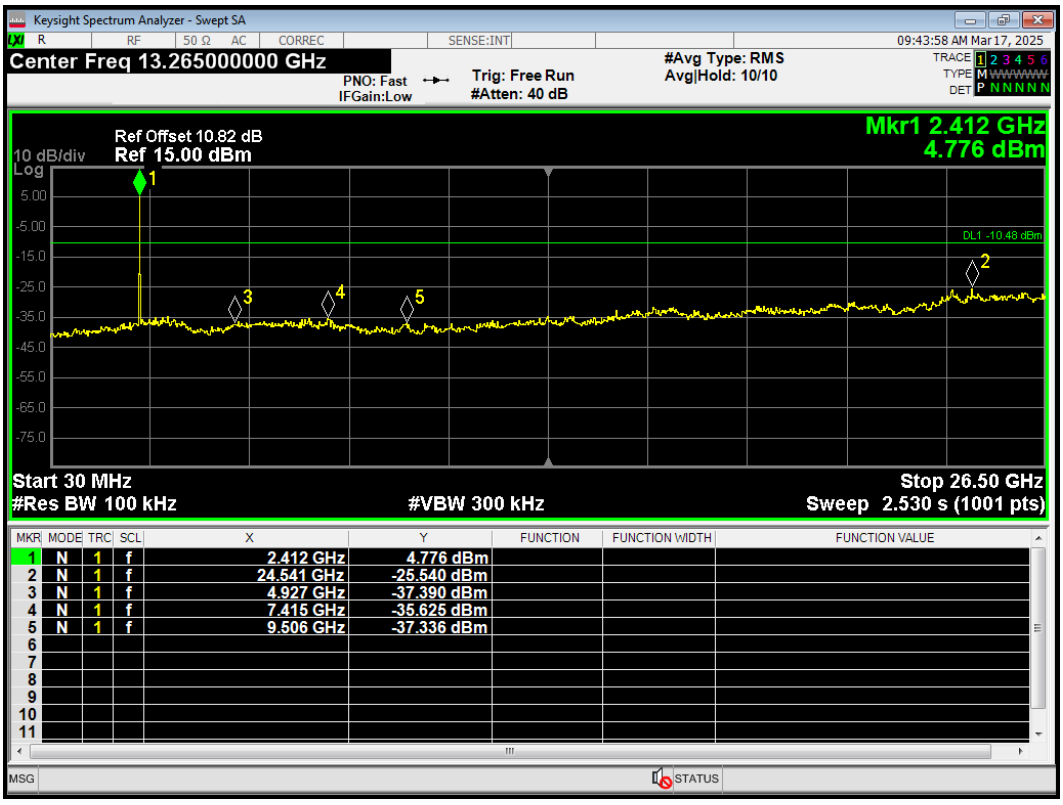

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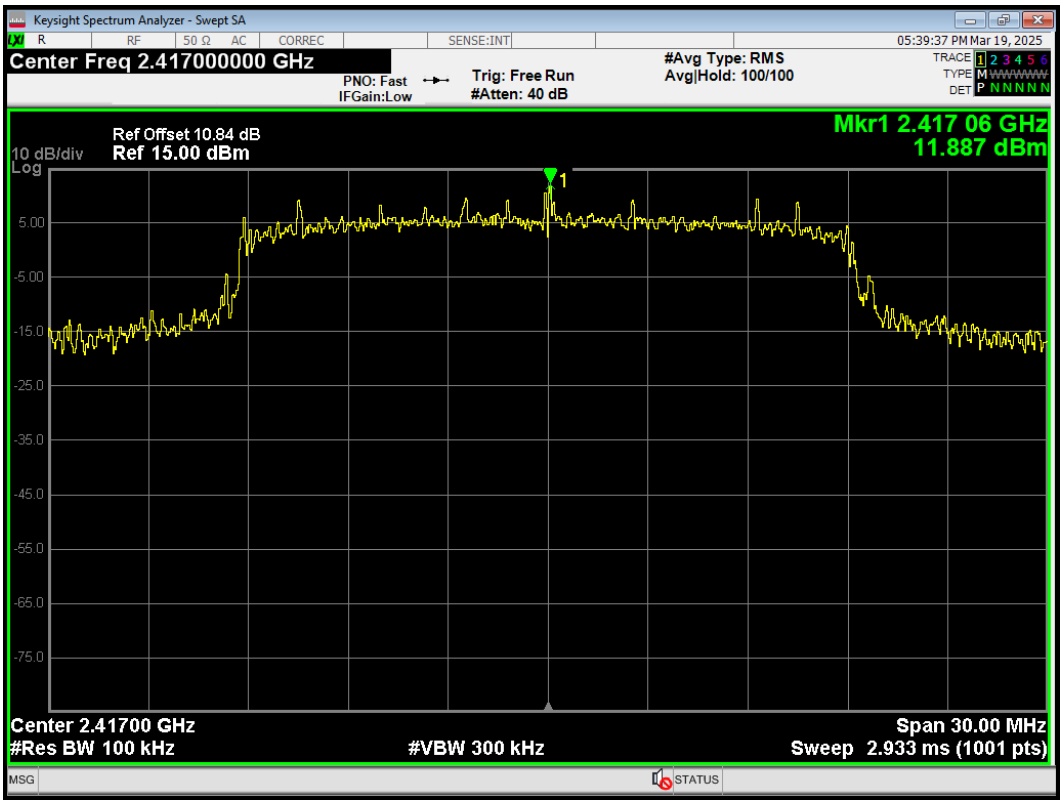

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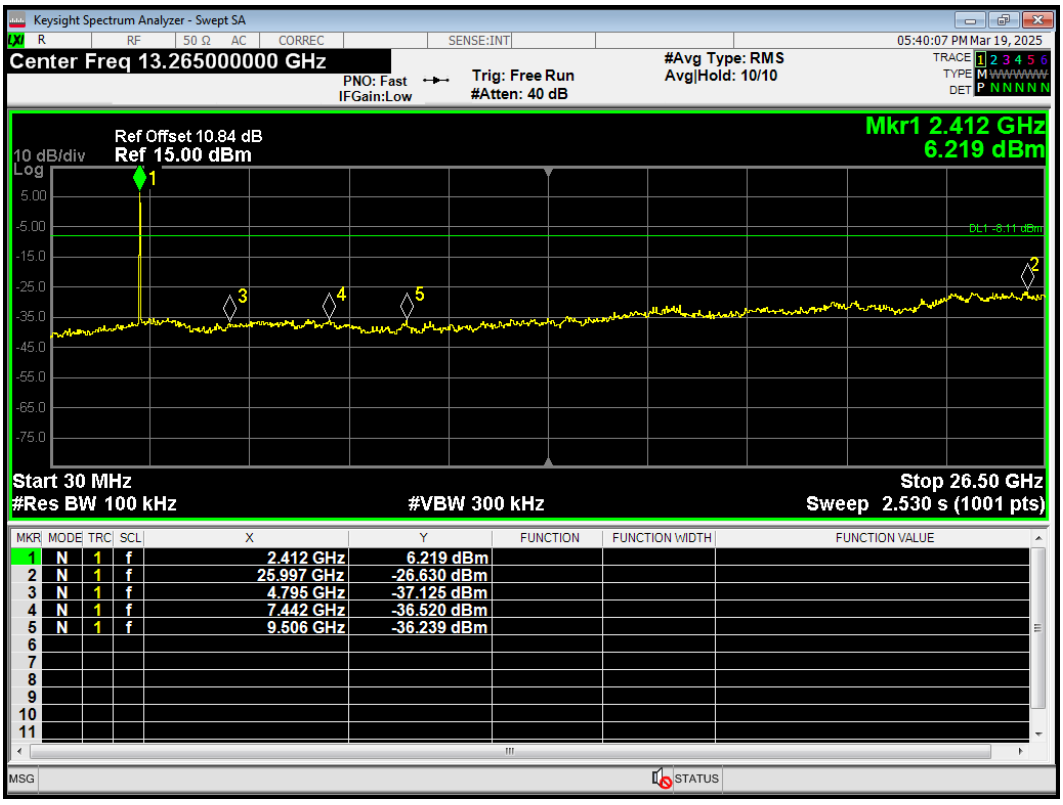
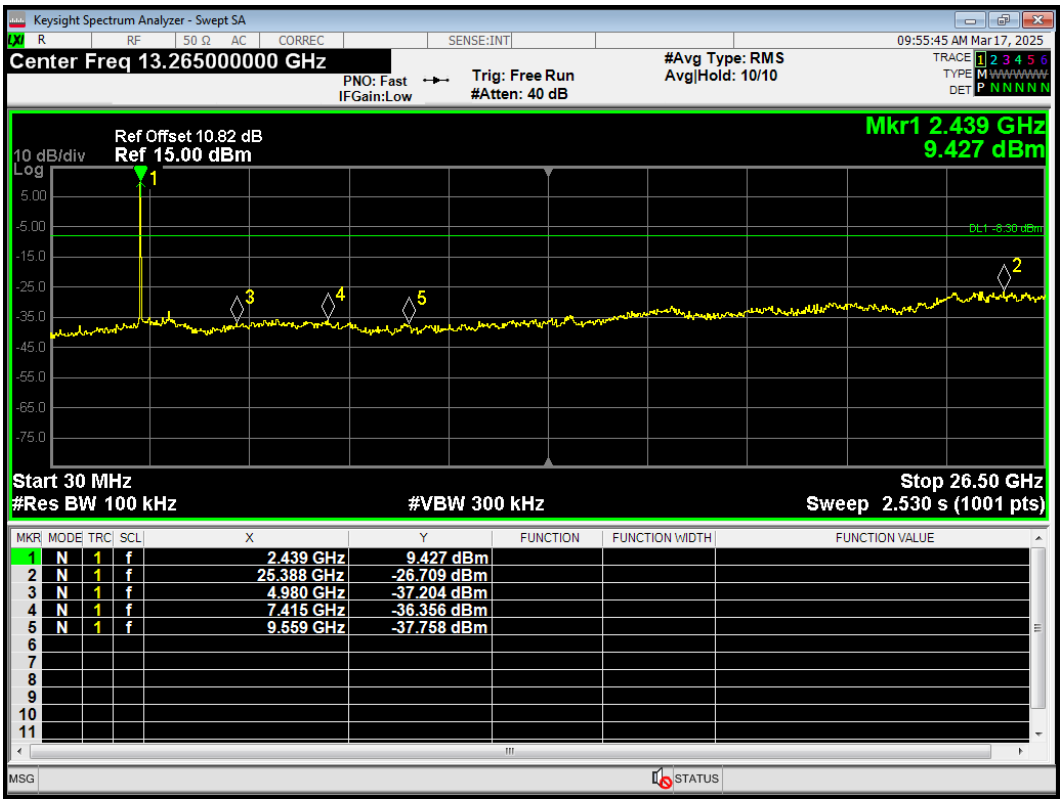


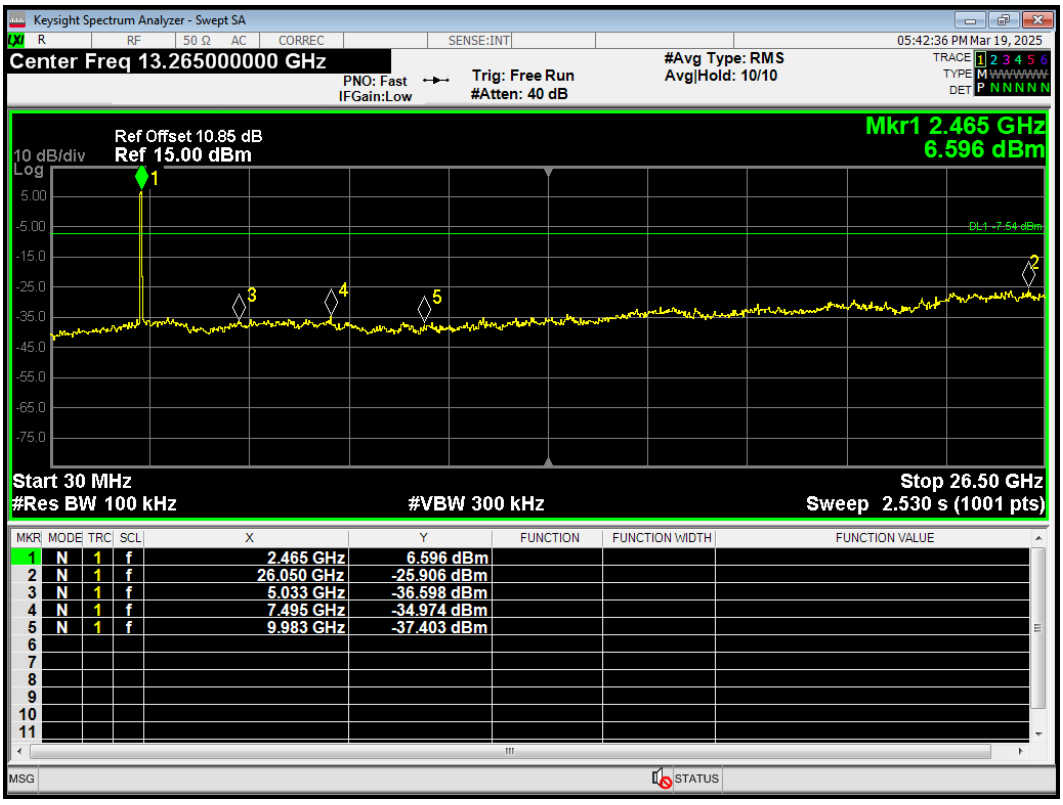
Tx. Spurious 802.11n(HT20) 2437MHz Ref

Tx. Spurious 802.11n(HT20) 2437MHz Emission



Tx. Spurious 802.11n(HT20) 2457MHz Ref

Tx. Spurious 802.11n(HT20) 2457MHz Emission



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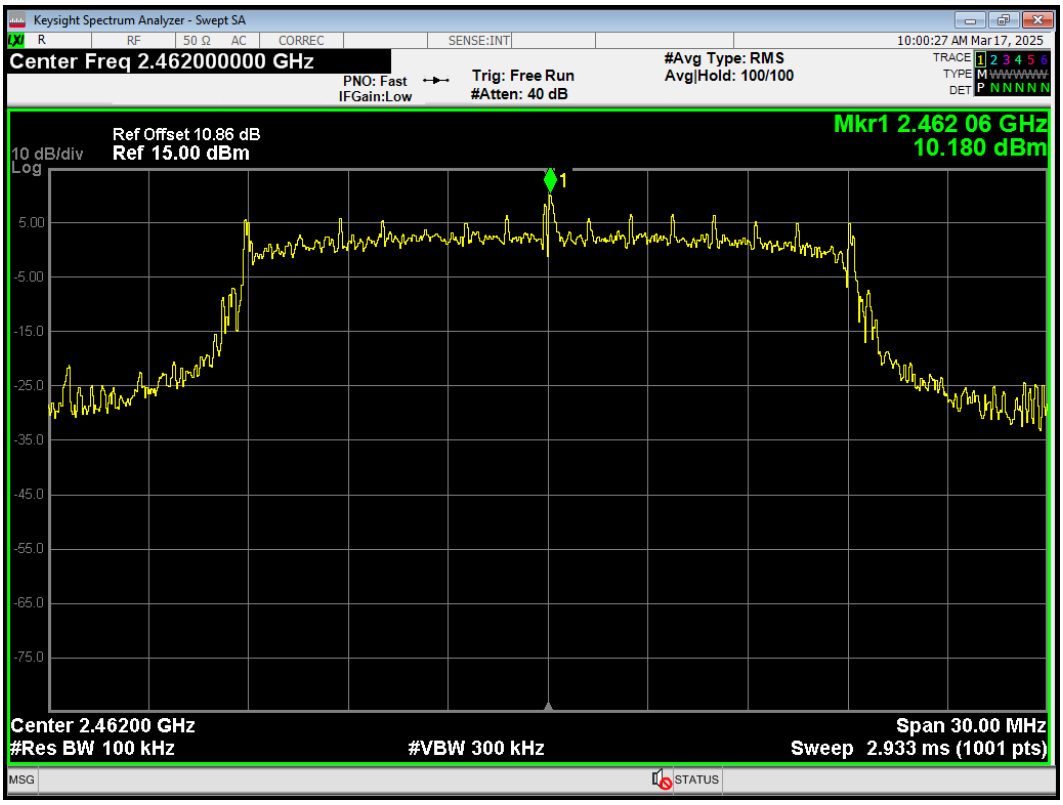

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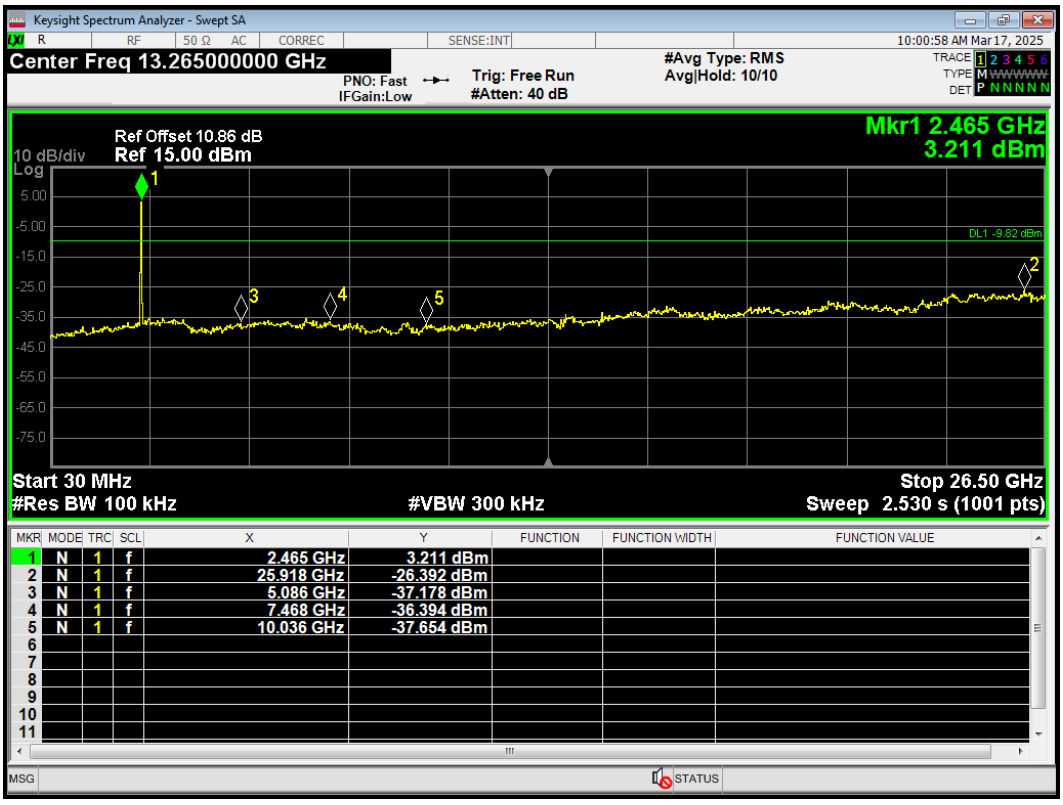

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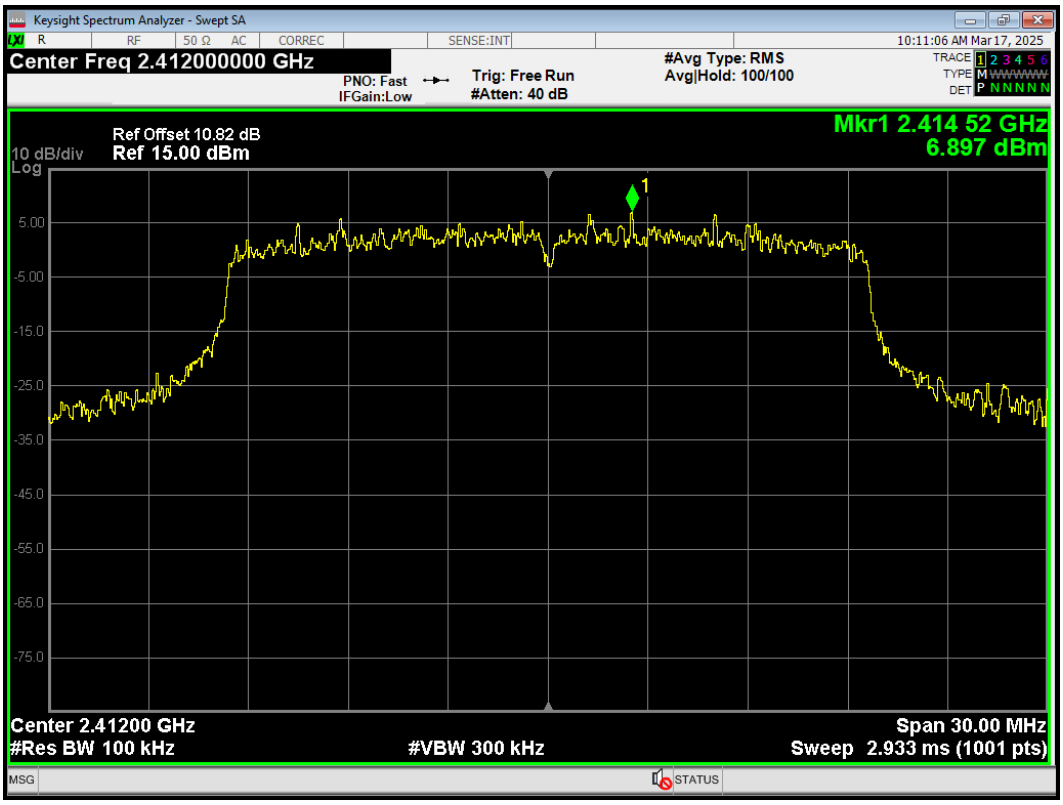
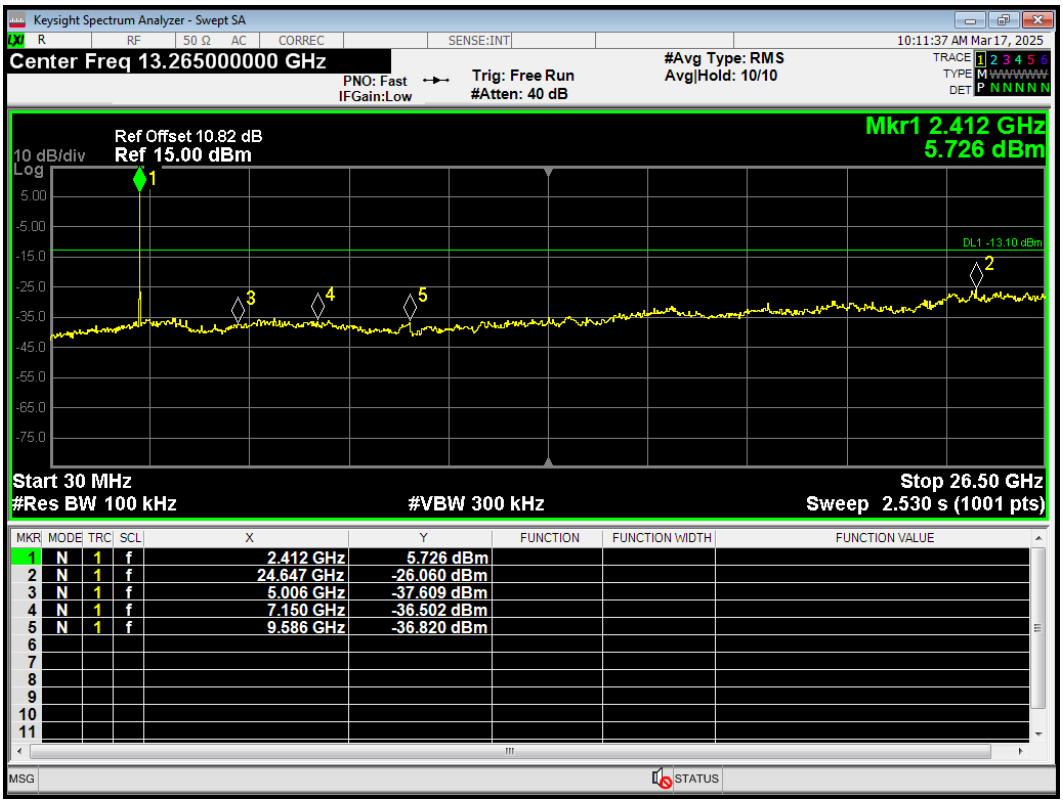
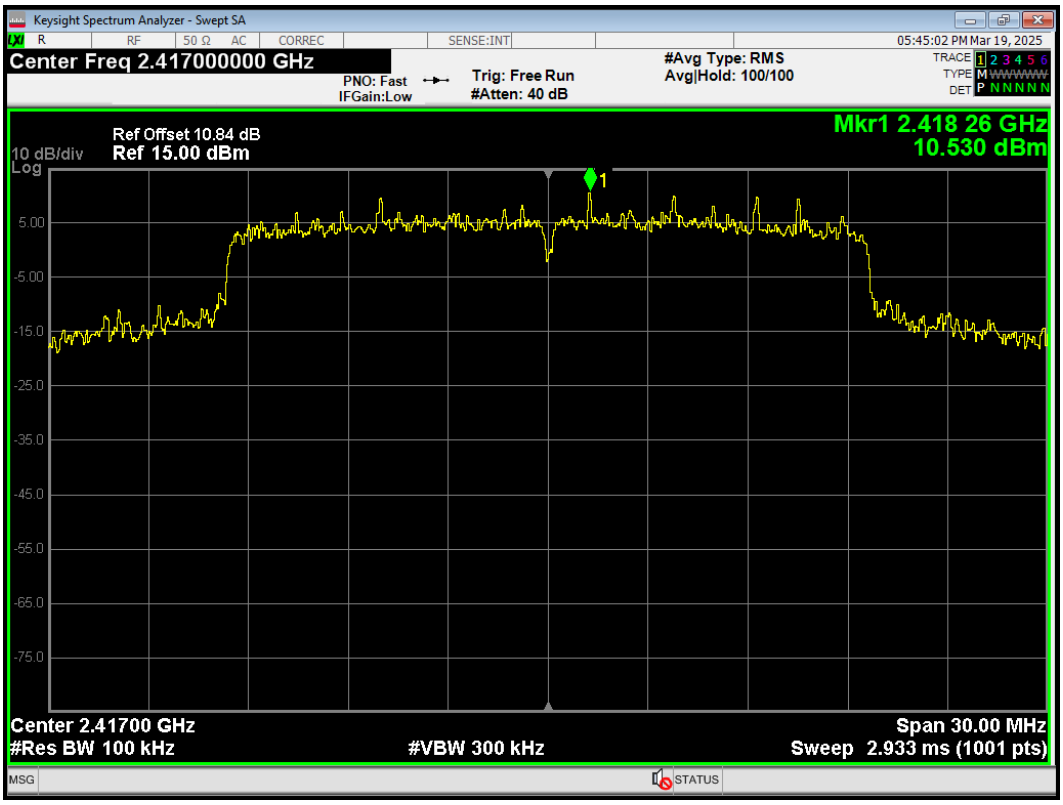


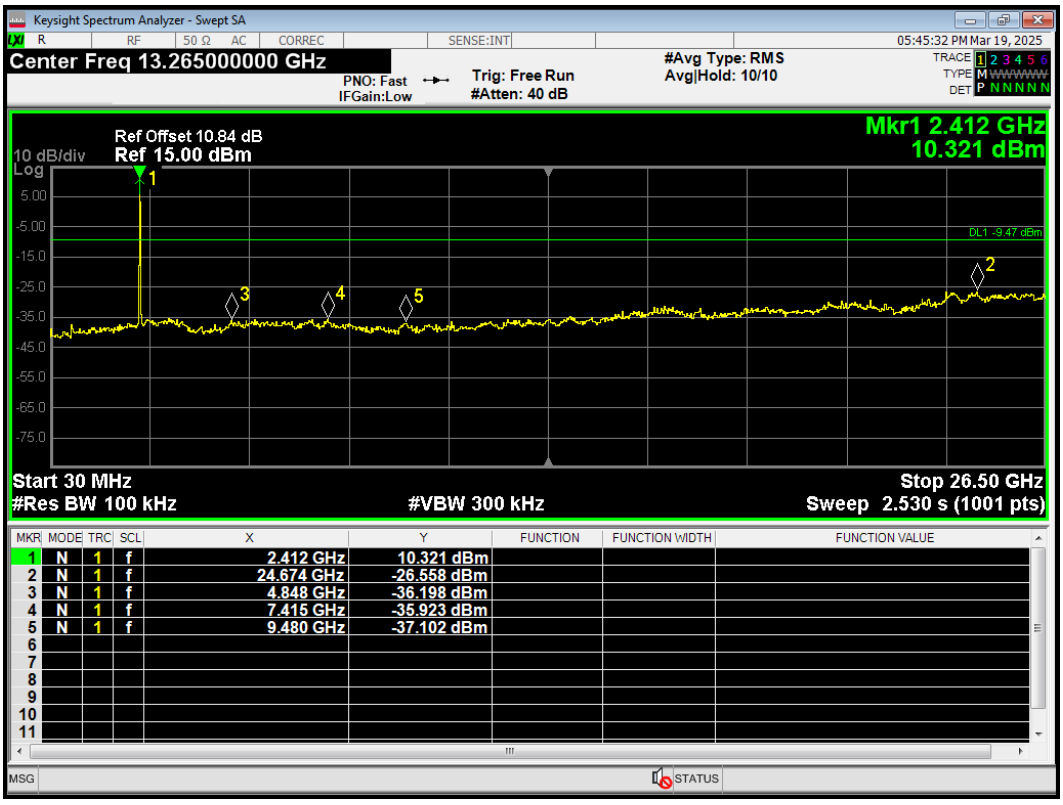
Tx. Spurious 802.11ax(HE20) 2412MHz Emission



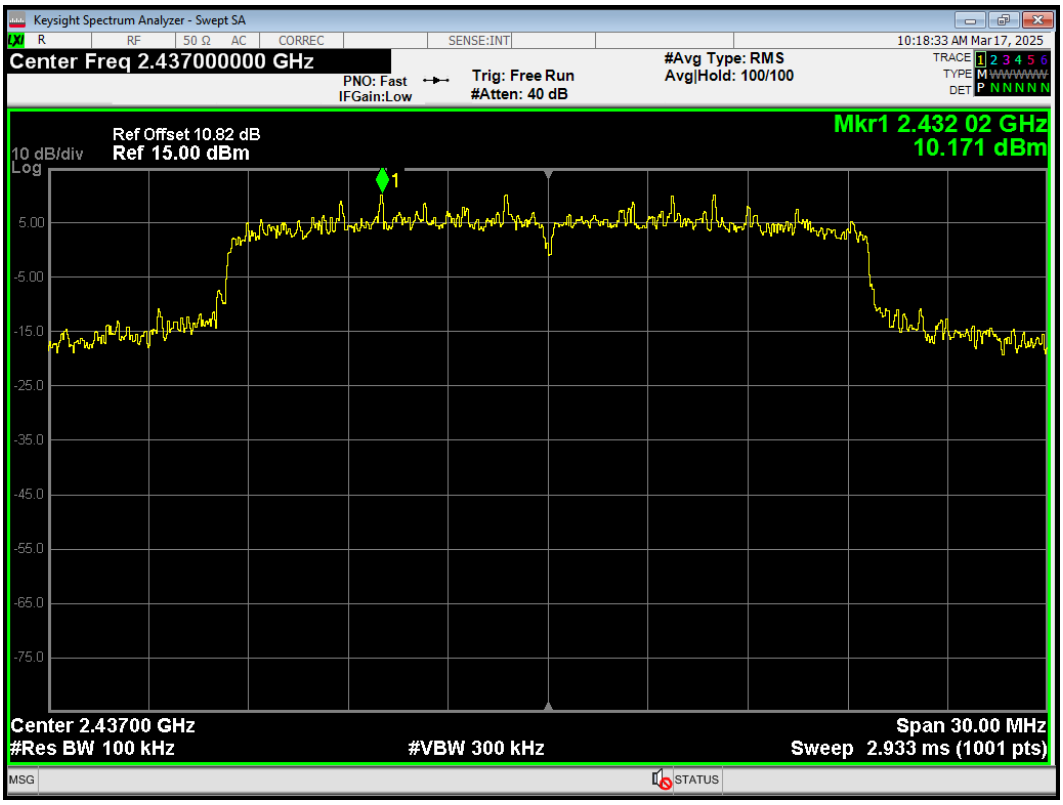
Tx. Spurious 802.11ax(HE20) 2417MHz Ref



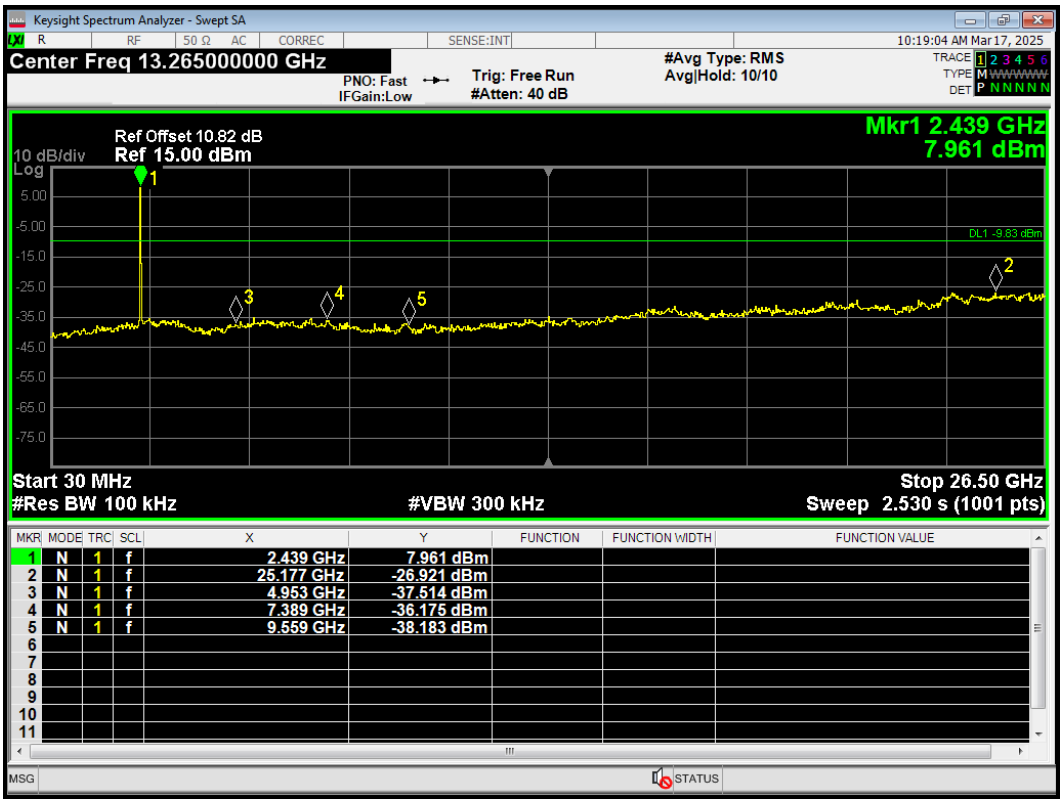
Tx. Spurious 802.11ax(HE20) 2417MHz Emission



Tx. Spurious 802.11ax(HE20) 2437MHz Ref

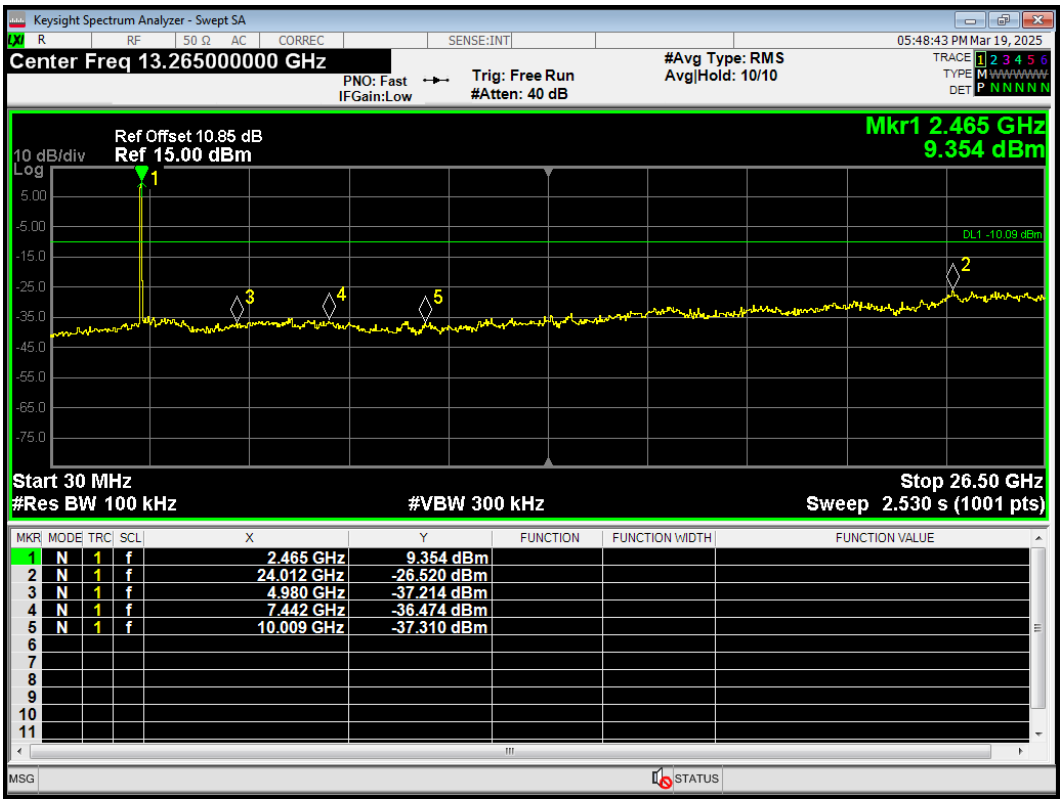


Tx. Spurious 802.11ax(HE20) 2437MHz Emission

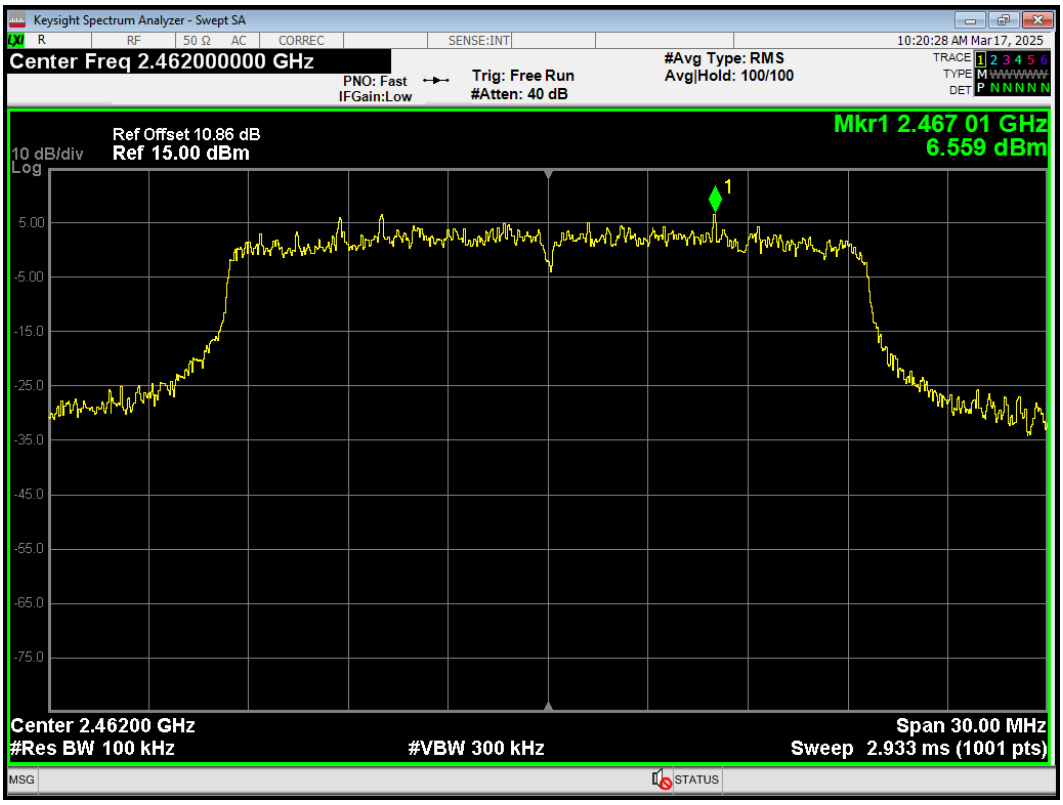


Tx. Spurious 802.11ax(HE20) 2457MHz Ref

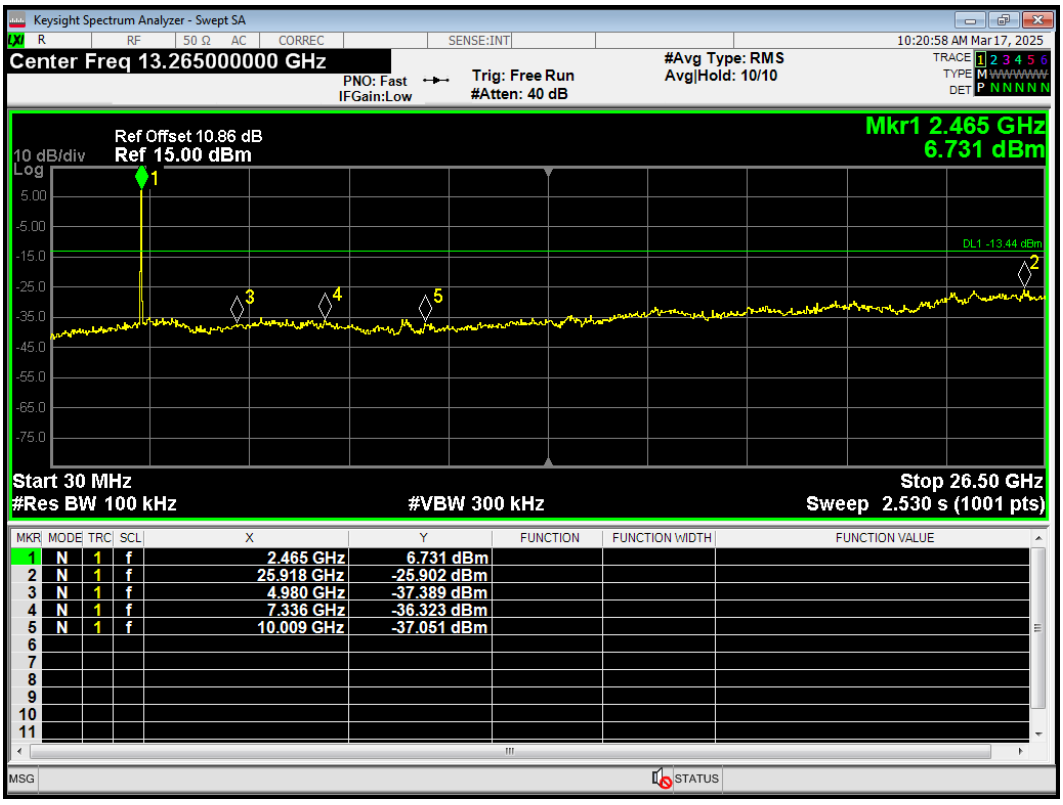
Tx. Spurious 802.11ax(HE20) 2457MHz Emission



Tx. Spurious 802.11ax(HE20) 2462MHz Ref

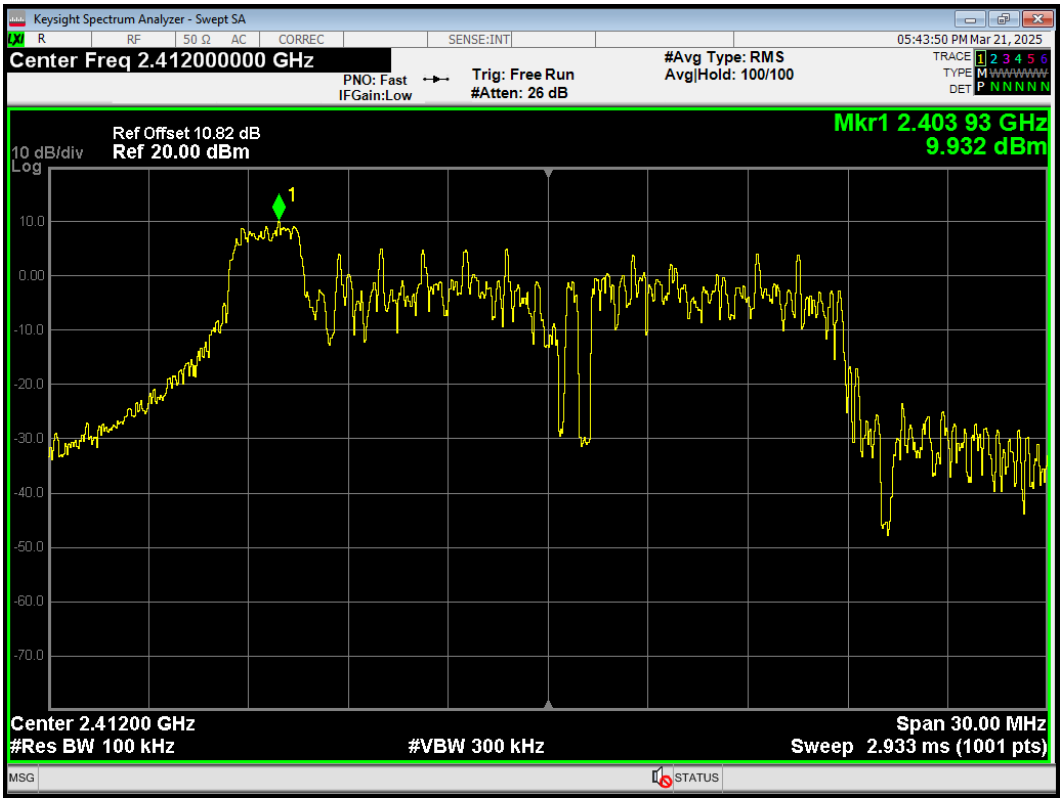


Tx. Spurious 802.11ax(HE20) 2462MHz Emission

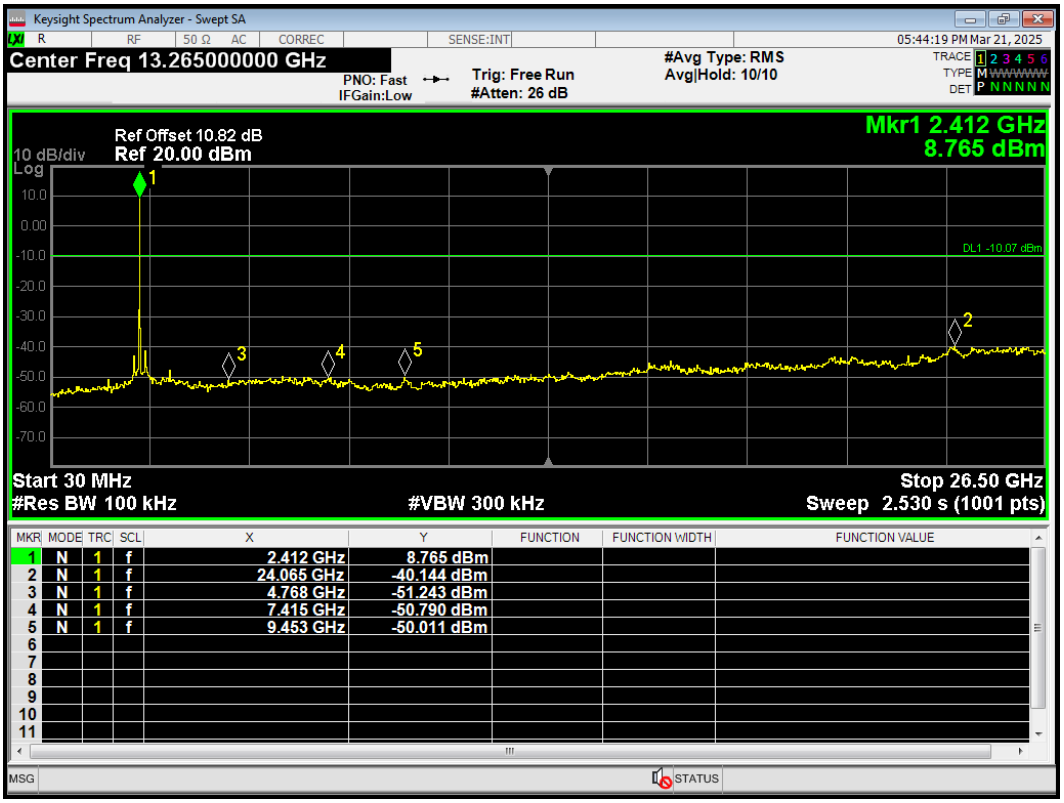


RU Mode

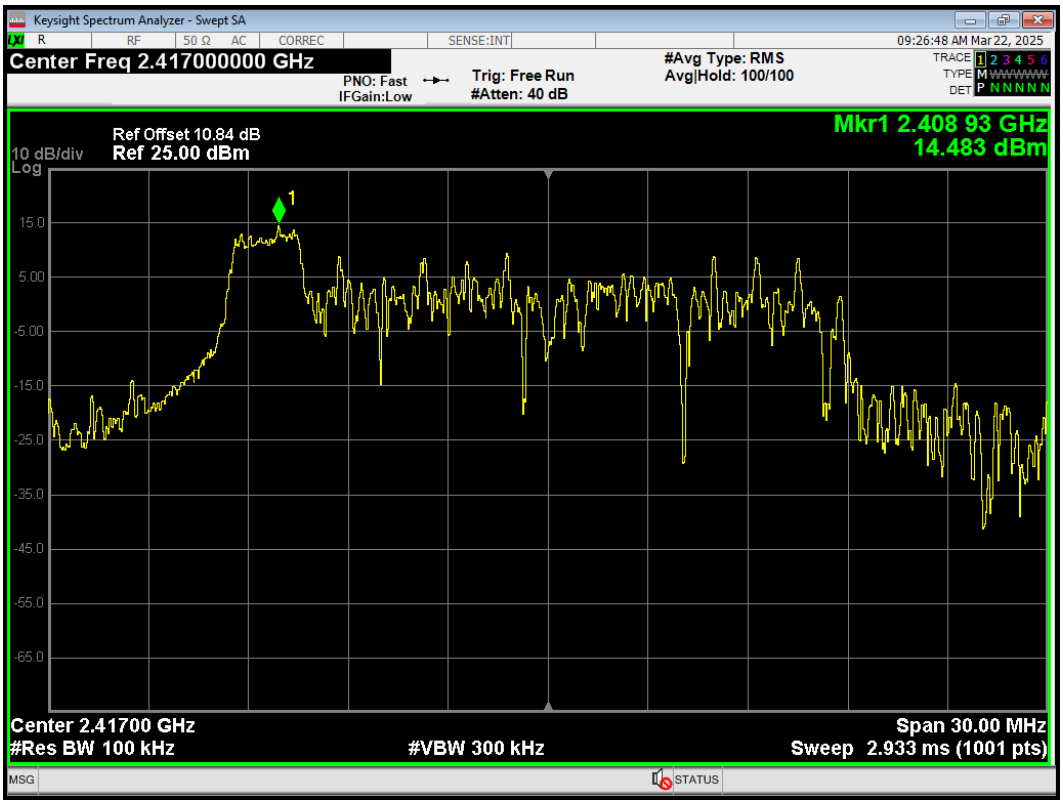
Tx. Spurious 802.11ax(HE20) 26T 2412MHz Ref



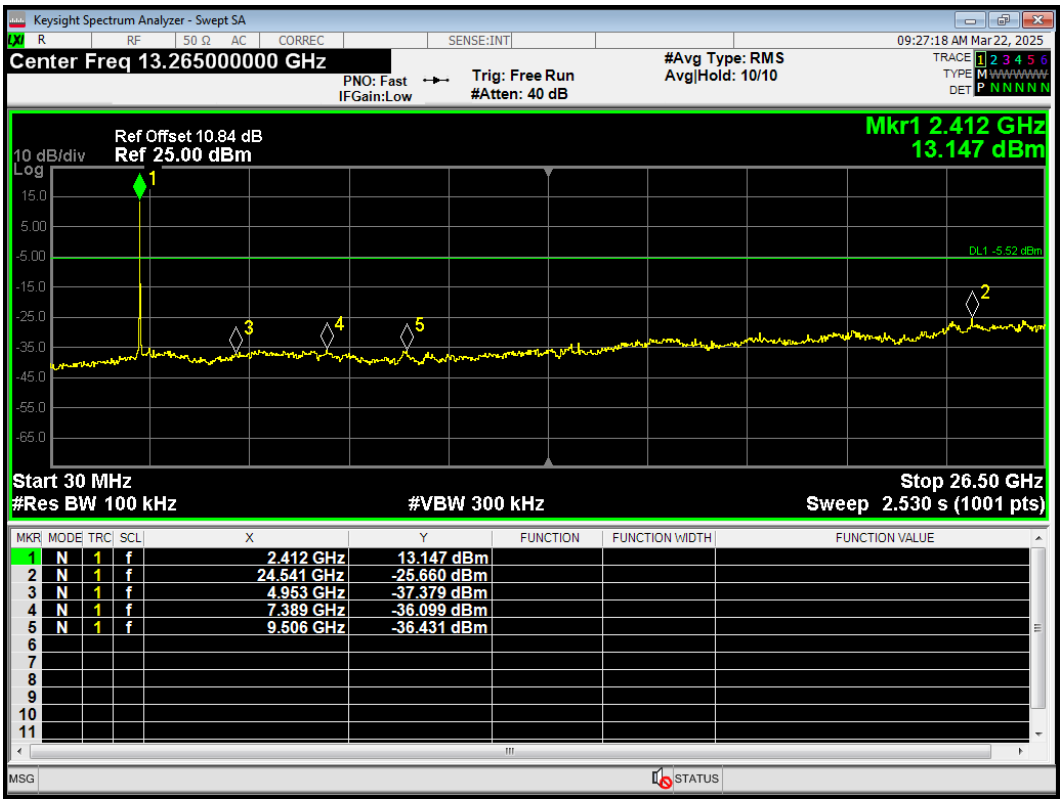
Tx. Spurious 802.11ax(HE20) 26T 2412MHz Emission



Tx. Spurious 802.11ax(HE20) 26T 2417MHz Ref

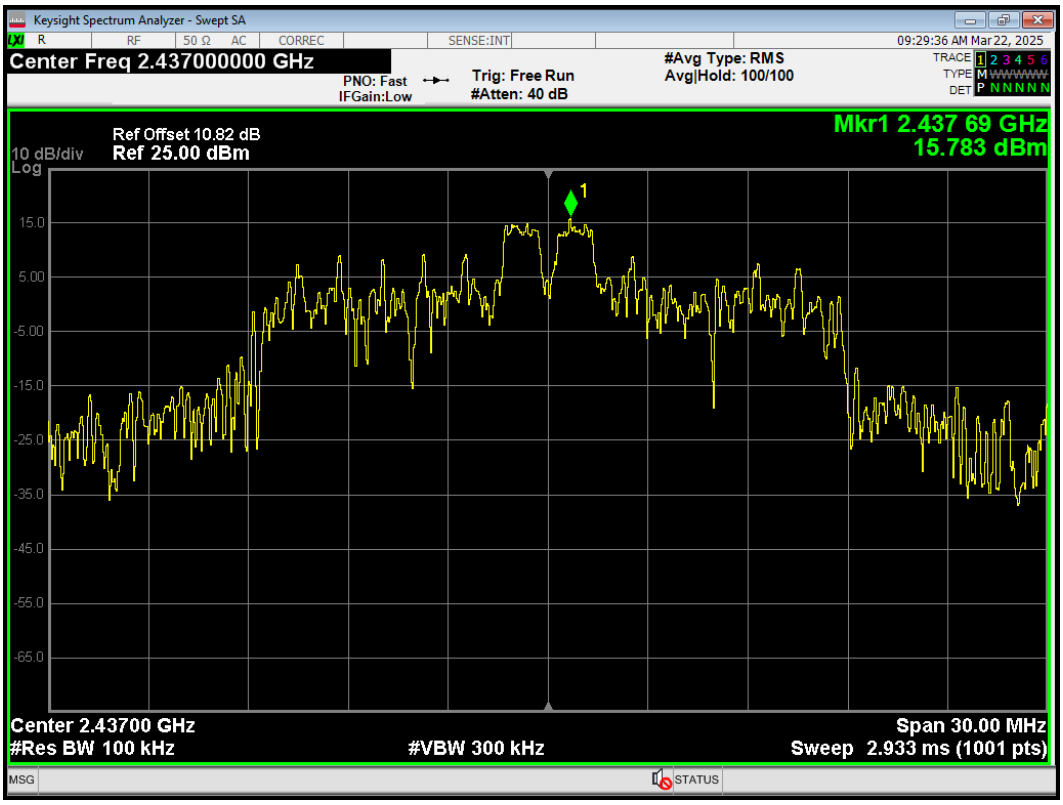


Tx. Spurious 802.11ax(HE20) 26T 2417MHz Emission



MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.412 GHz	13.147 dBm			
2	N	1	f	24.541 GHz	-25.660 dBm			
3	N	1	f	4.953 GHz	-37.379 dBm			
4	N	1	f	7.389 GHz	-36.099 dBm			
5	N	1	f	9.506 GHz	-36.431 dBm			

Tx. Spurious 802.11ax(HE20) 26T 2437MHz Ref



Tx. Spurious 802.11ax(HE20) 26T 2437MHz Emission