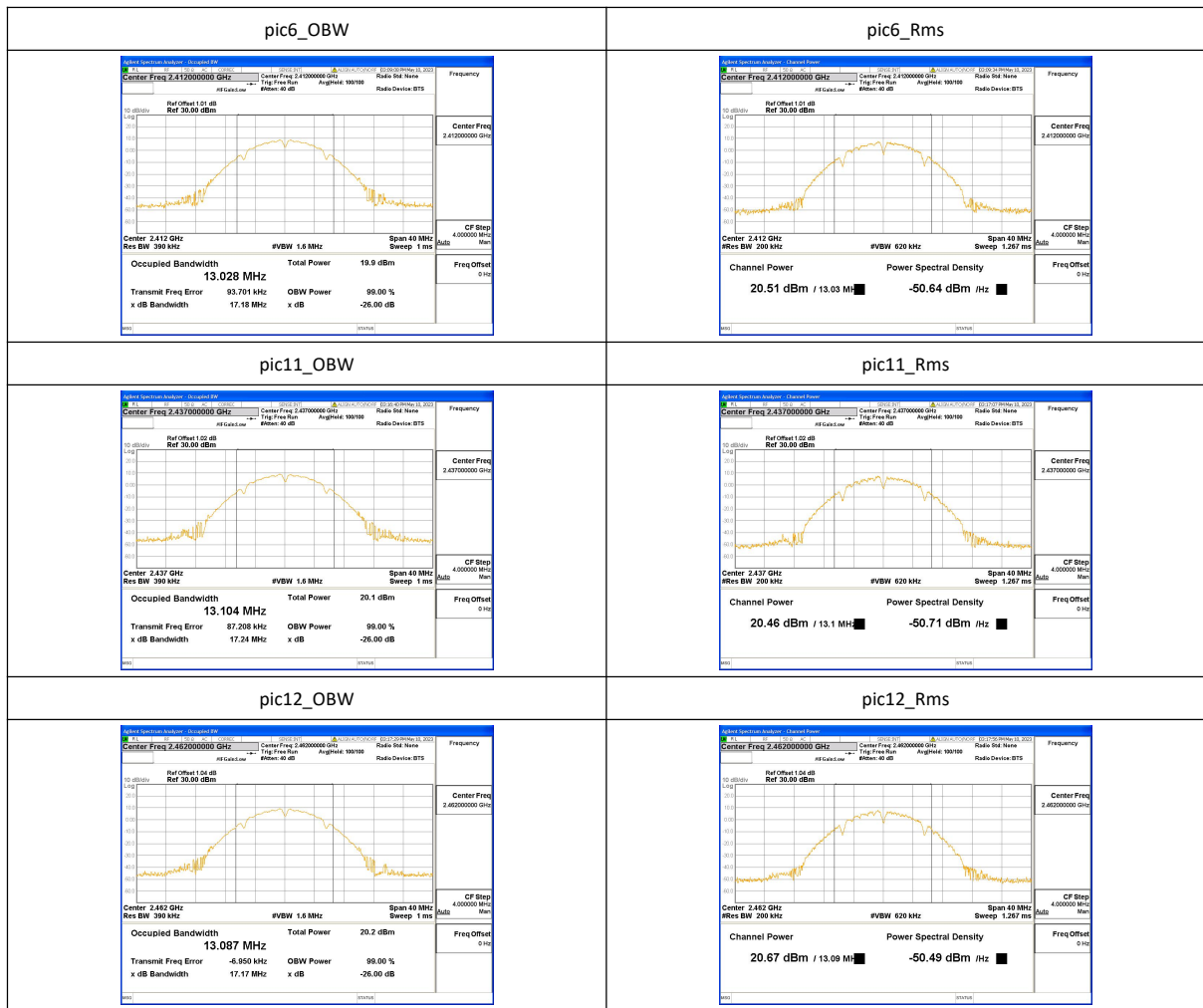
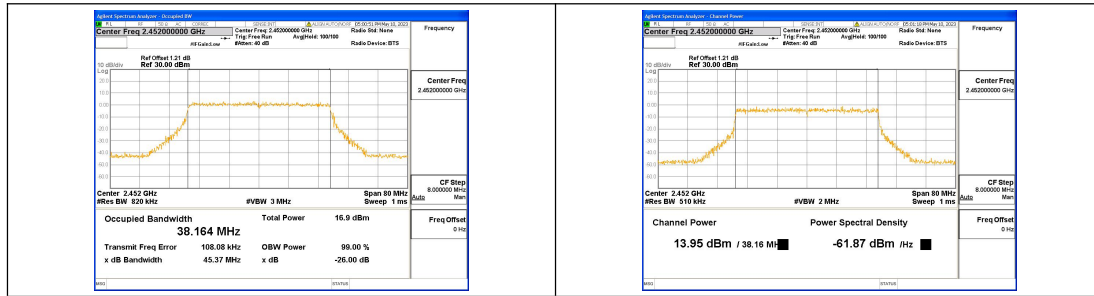
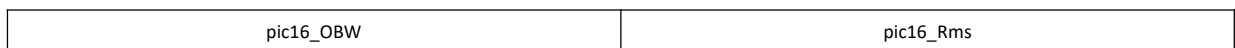


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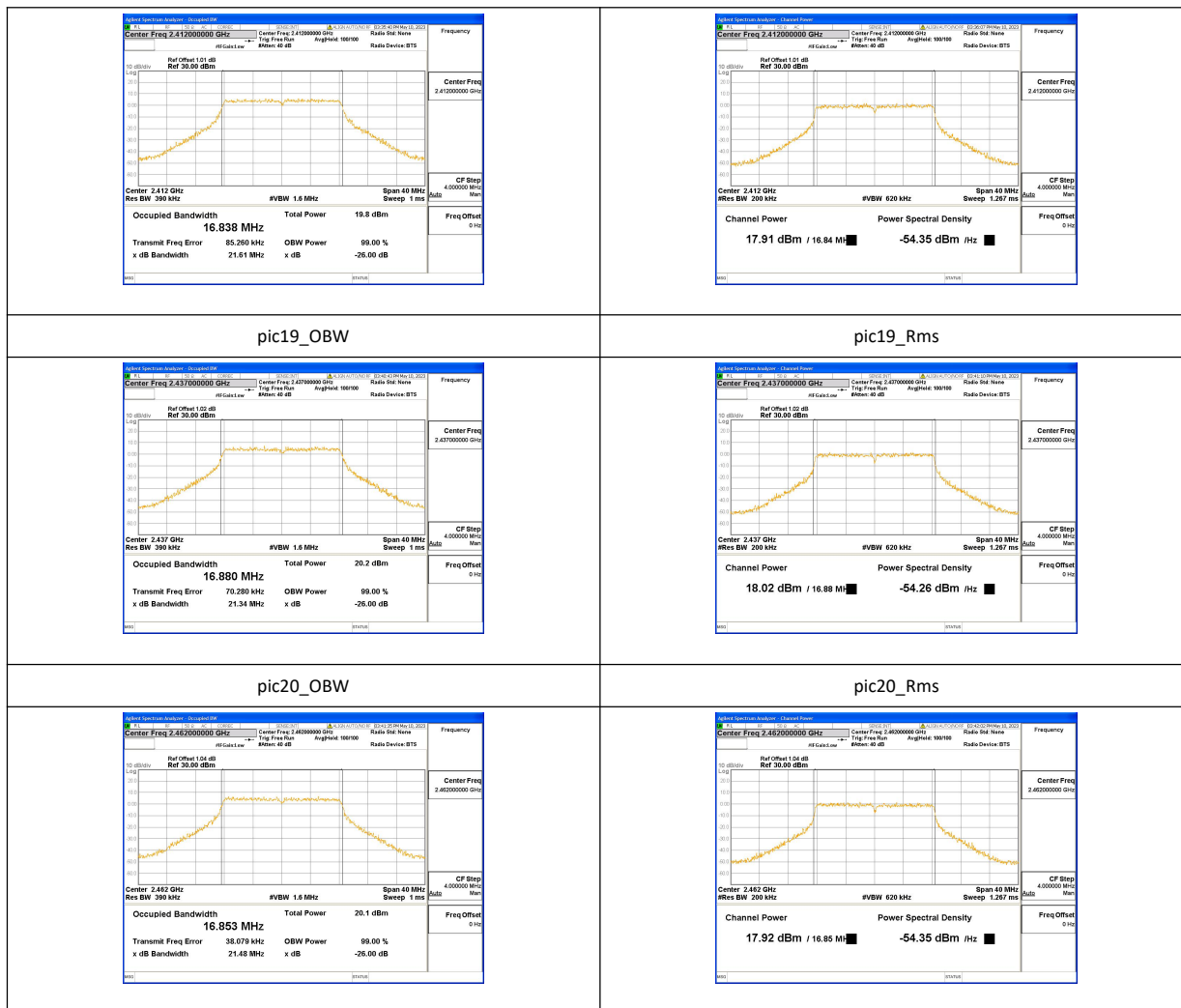
11g:



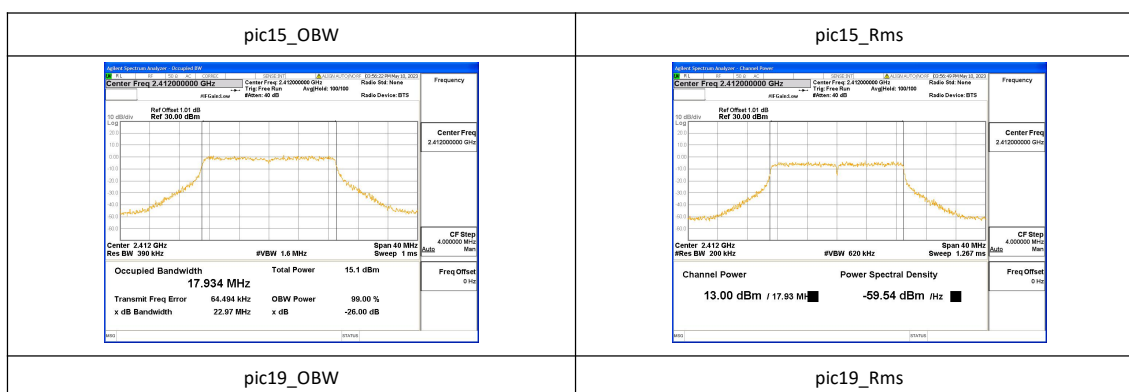
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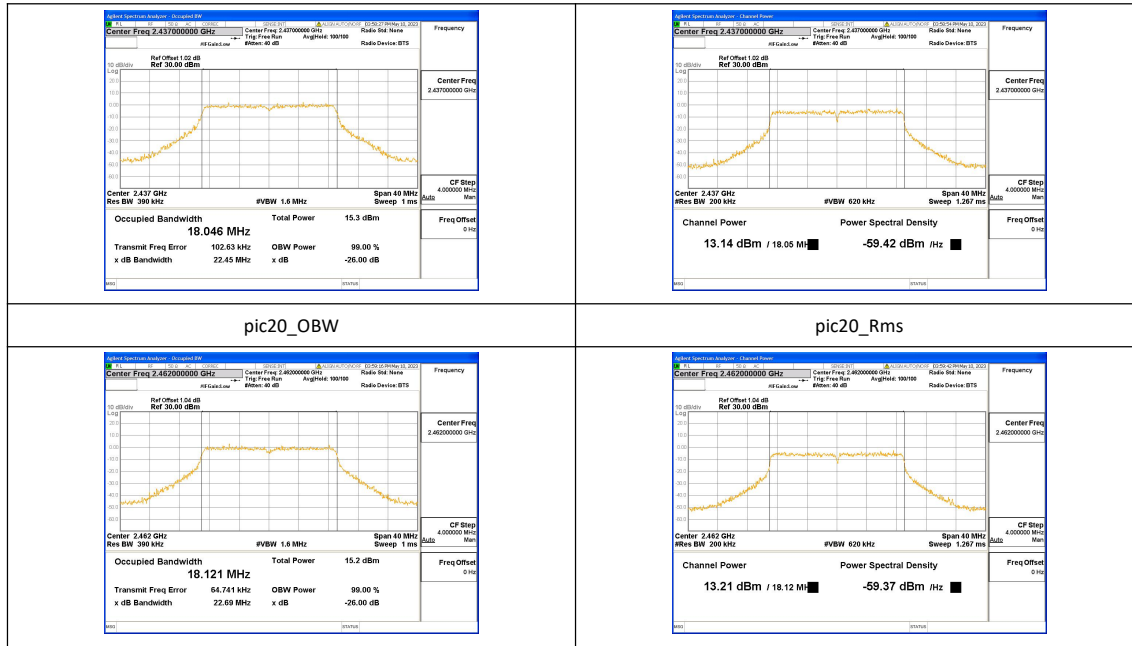
11n-HT20



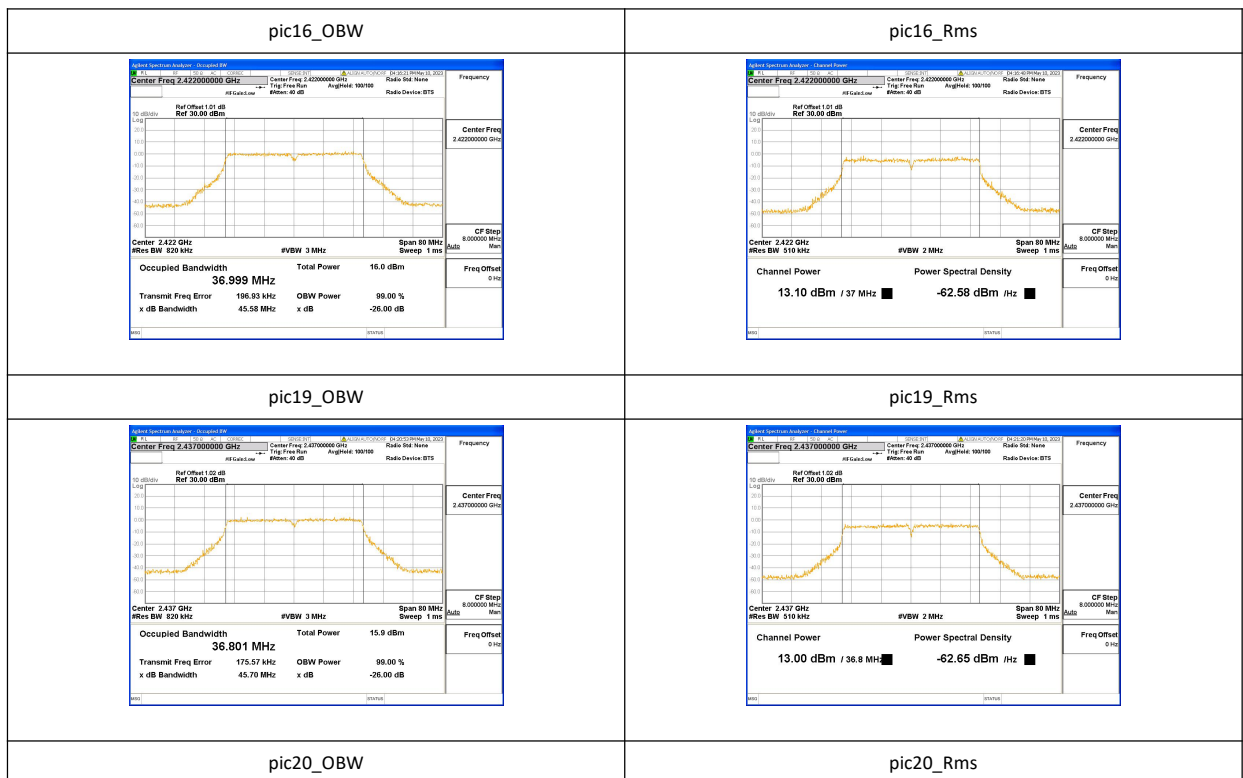
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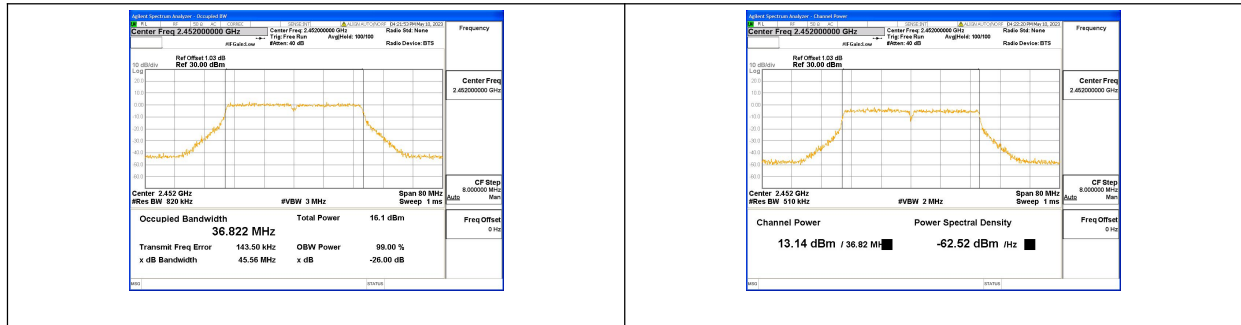
11n-HT40:



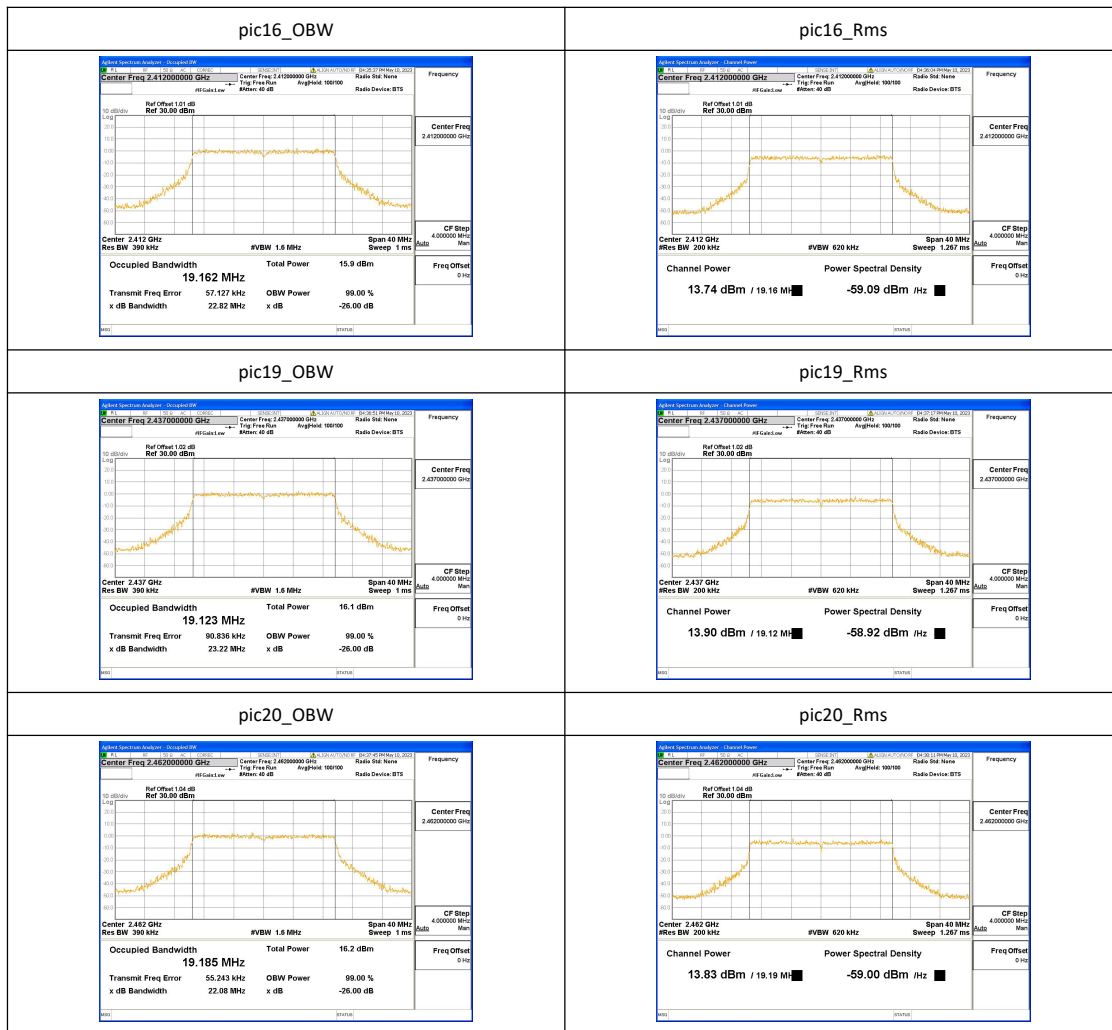
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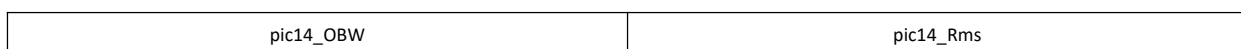
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11ax-HE20:



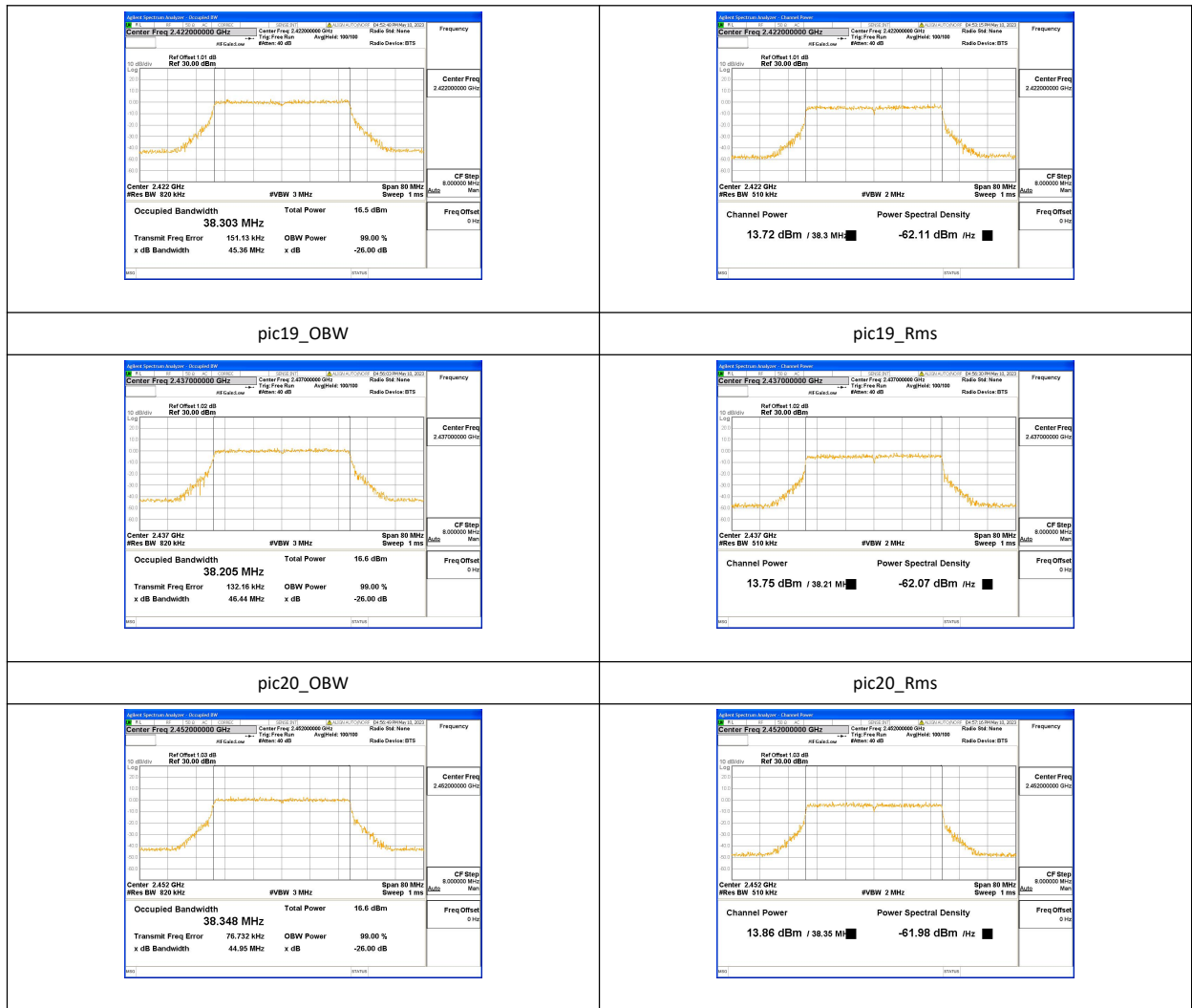
11ax-HE40:



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6.3. Peak Power Spectral Density

SpeciPications:	FCC CFR Part 15.247(e)
DUT Serial Number:	S1
Test conditions:	Ambient Temperature: 15°C-35°C Relative Humidity: 30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

Standard	Limit
FCC CFR Part 15.247(e)	For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density

Note: Directional gain according to section 3.2 of this report

Band	802.11b/g Directional gain (dBi)	802.11n/ax Directional gain (dBi)
2.4G	2.97	5.98

Measurement Uncertainty:

Measurement Uncertainty	±0.98dBm/3KHz
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Test procedure:

The measurement is according to ANSI C63.10 clause 11.10.2

The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.

Enable EUT transmitter maximum power continuously.

1.Set analyzer center frequency to DTS channel center frequency.

2.Set the span to 1.5 times the DTS bandwidth.

3.Set the RBW to $3\text{ kHz} \leq \text{RBW} \leq 100\text{ kHz}$.

4.Set the VBW $\geq [3 \times \text{RBW}]$.

5.Detector = peak.

6.Sweep time = auto couple.

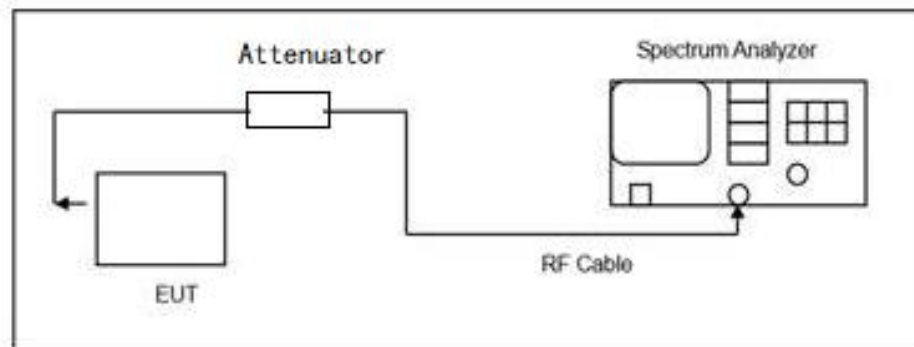
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- 7.Trace mode = max hold.
- 8.Allow trace to fully stabilize.
- 9.Use the peak marker function to determine the maximum amplitude level within the RBW.
- 10.If measured value exceeds requirement, then reduce RBW (but no less than 3 kHz) and repeat.

Note: --

Test block diagram:



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Measurement Results:

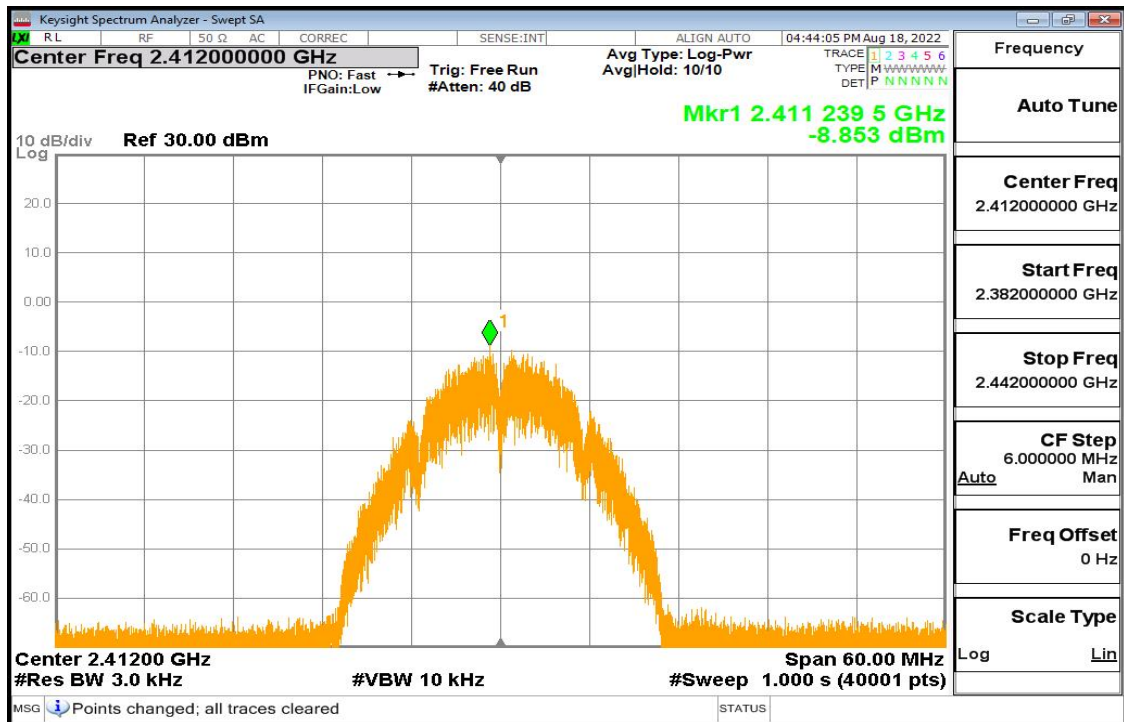
Mode		Power Spectral Density(dBm/3kHz)			Conclusion
		Ch1	Ch6	Ch11	
802.11b	Chain0	-8.85	-8.63	-9.26	PASS
	Chain1	-8.28	-8.14	-9.29	PASS
802.11g	Chain0	-12.61	-13.38	-12.49	PASS
	Chain1	-12.59	-12.46	-11.81	PASS
802.11n-HT20	Chain0	-15.98	-16.45	-16.86	PASS
	Chain1	-15.84	-15.97	-16.12	PASS
802.11ax-HE20	Chain0	-18.48	-17.02	-18.40	PASS
	Chain1	-16.78	-14.22	-17.42	PASS
802.11n-HT20(MIMO)	/	-12.90	-13.19	-13.46	PASS
802.11ax-HE20(MIMO)	/	-14.54	-12.39	-14.87	PASS

Mode		Power Spectral Density(dBm/3kHz)			Conclusion
		Ch3	Ch6	Ch9	
802.11n-HT40	Chain0	-20.78	-20.30	-20.44	PASS
	Chain1	-20.98	-21.26	-20.93	PASS
802.11ax-HE40	Chain0	-22.17	-21.42	-21.58	PASS
	Chain1	-21.34	-21.37	-21.43	PASS
802.11n-HT40(MIMO)	/	-17.87	-17.74	-17.67	PASS
802.11ax-HE40(MIMO)	/	-18.73	-18.38	-18.49	PASS

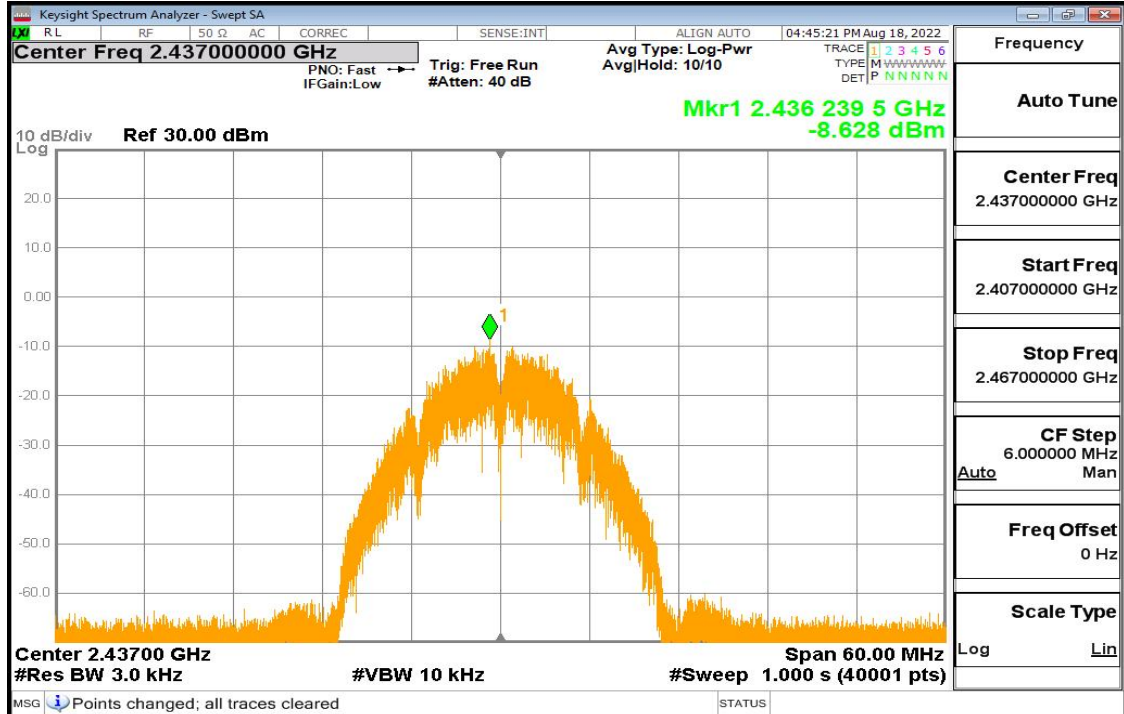
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Test Picture as below:



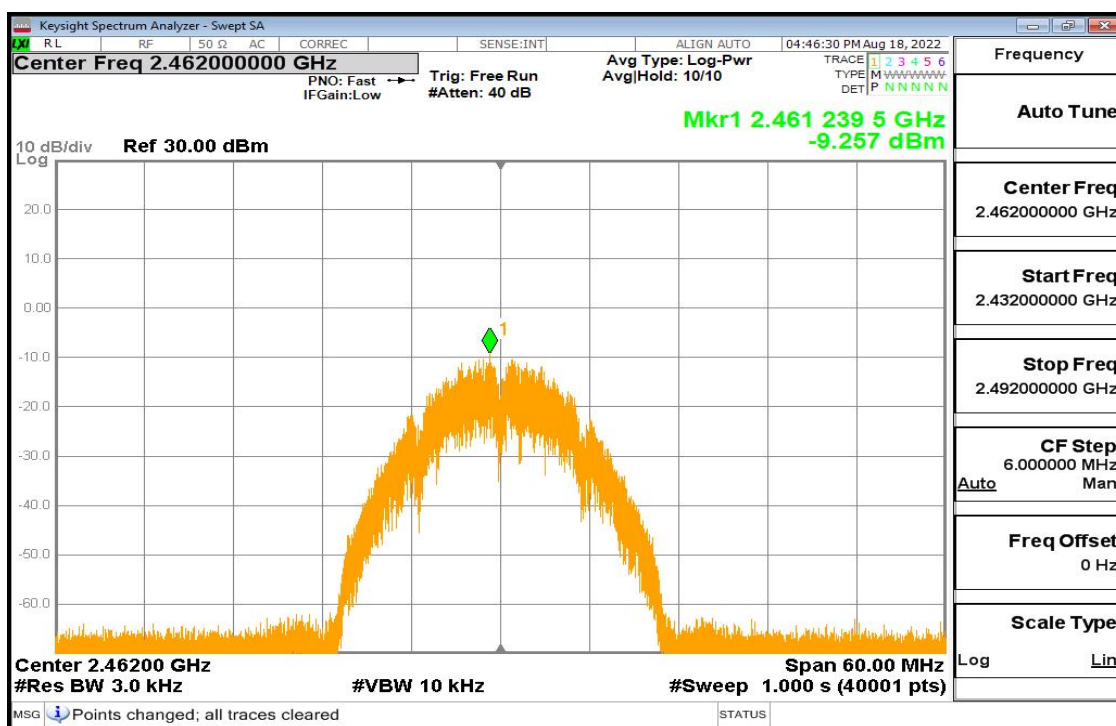
11b_Antenna0_Channel_1_Freq_2412.00MHz



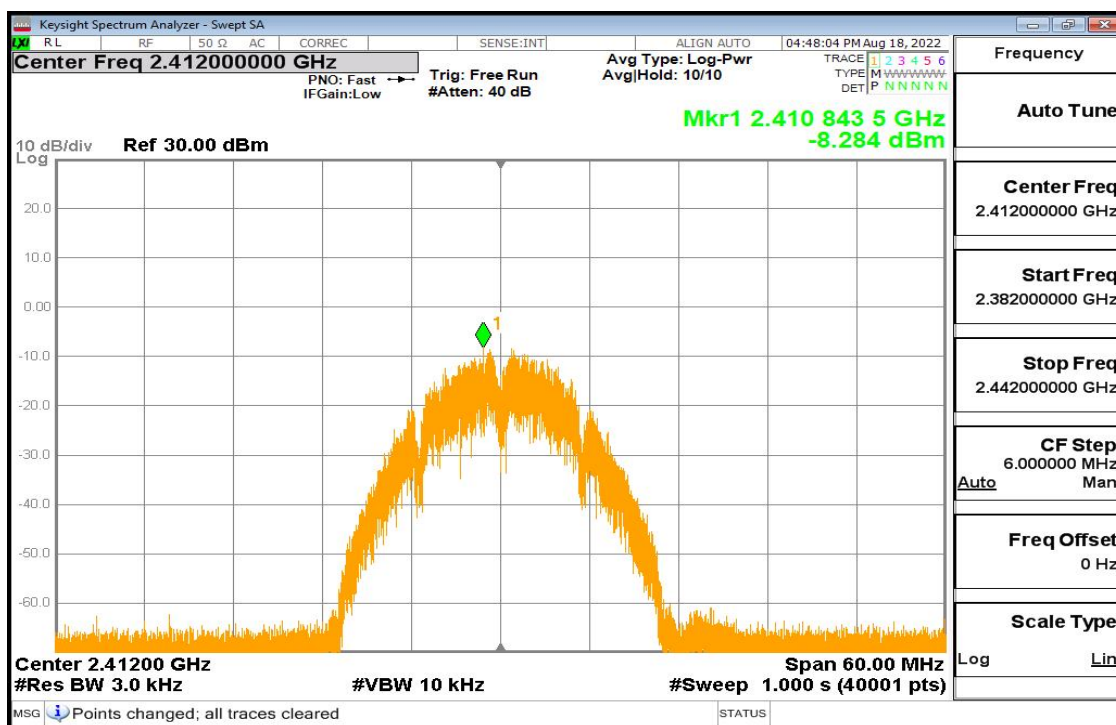
11b_Antenna0_Channel_6_Freq_2437.00MHz

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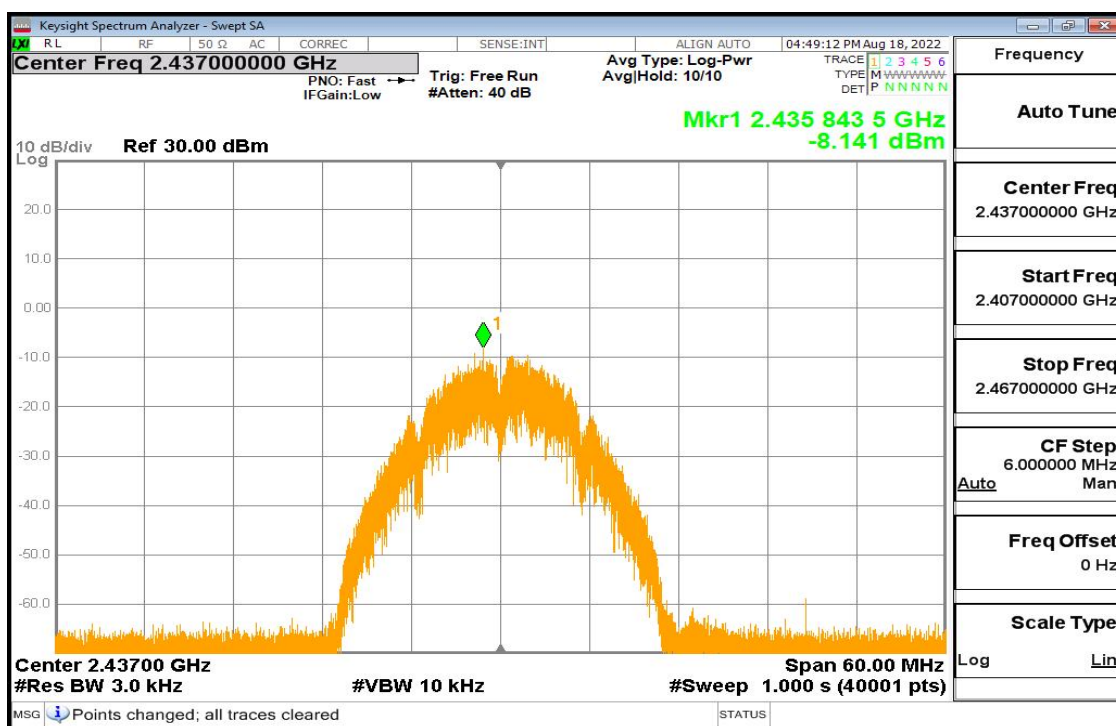
11b_Antenna0_Channel_11_Freq_2462.00MHz



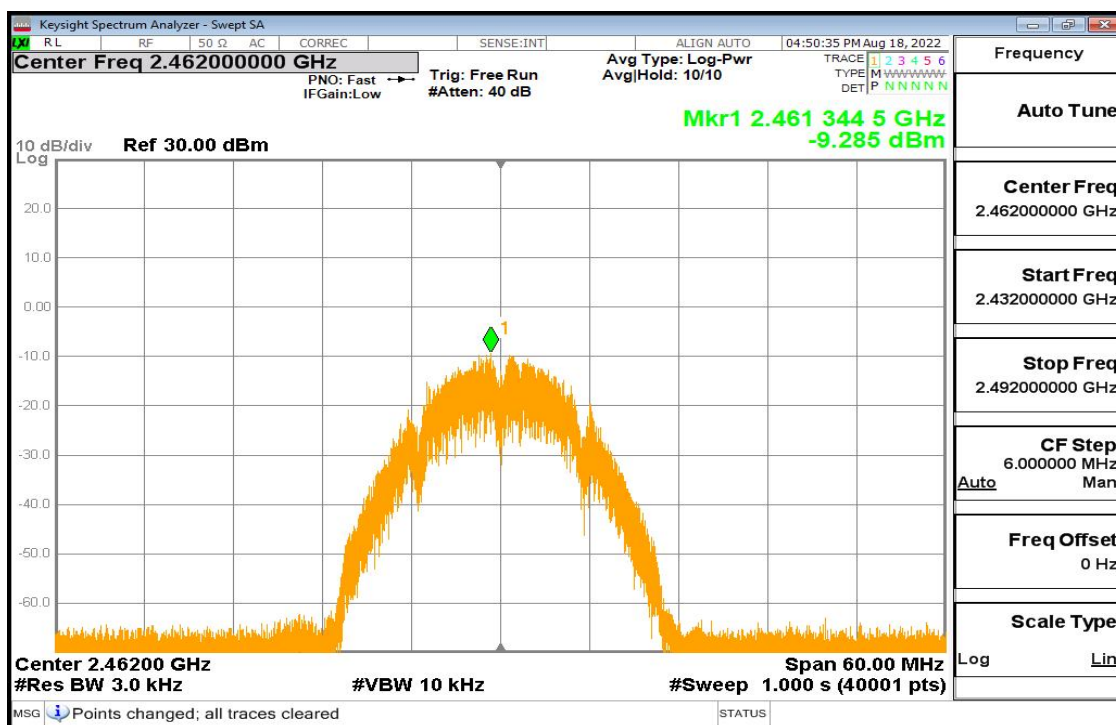
11b_Antenna1_Channel_1_Freq_2412.00MHz

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11b_Antenna1_Channel_6_Freq_2437.00MHz



11b_Antenna1_Channel_11_Freq_2462.00MHz

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