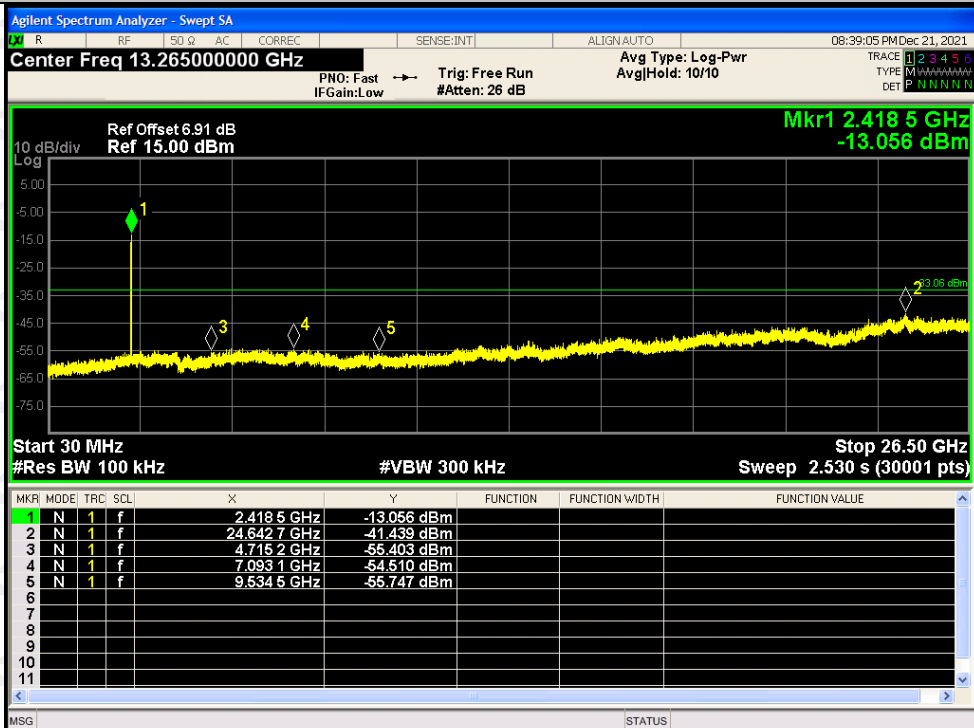
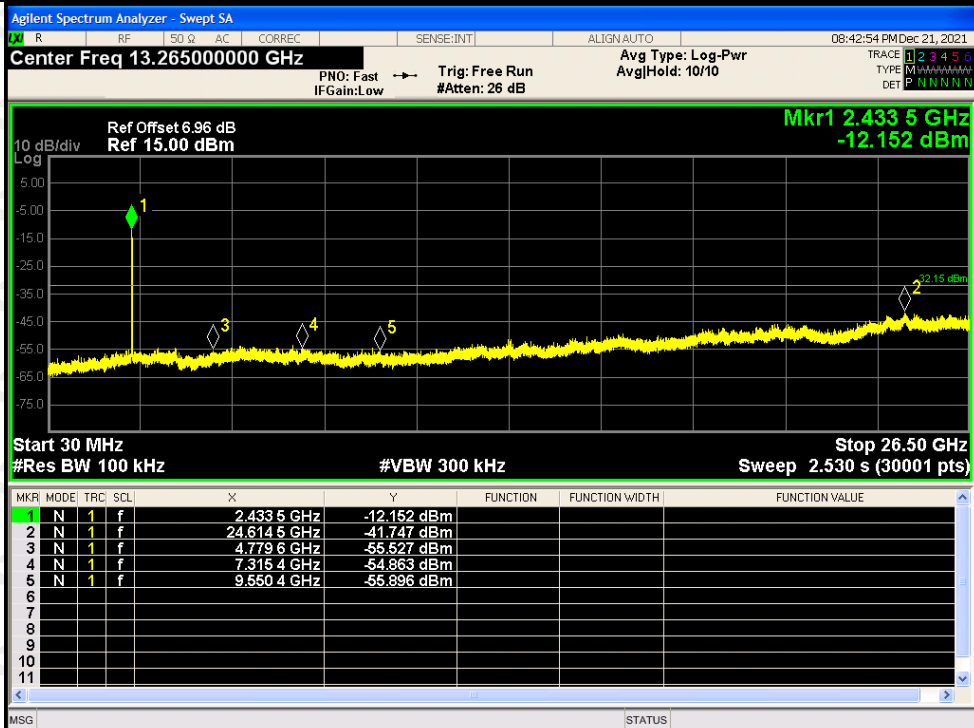
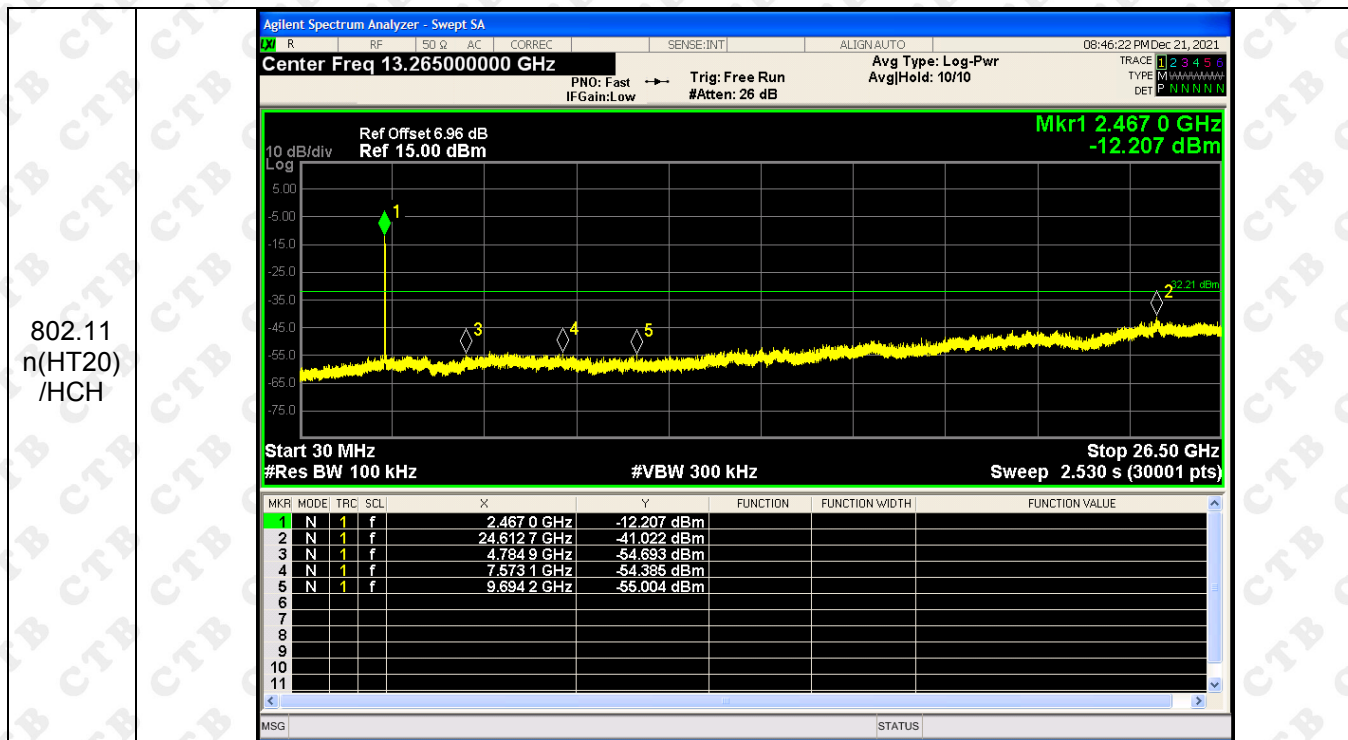
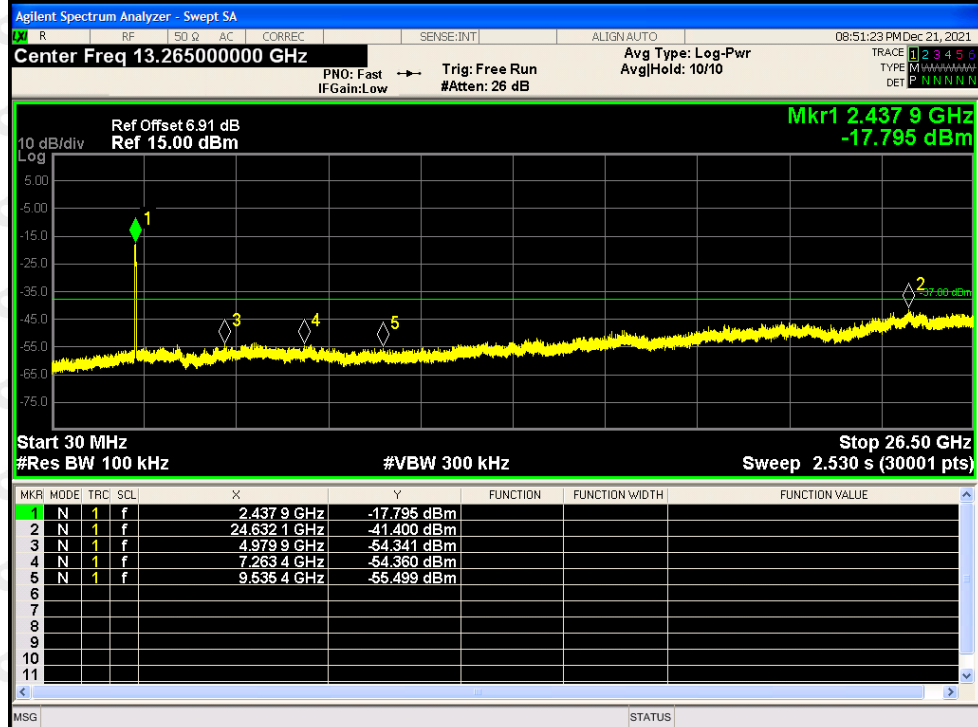
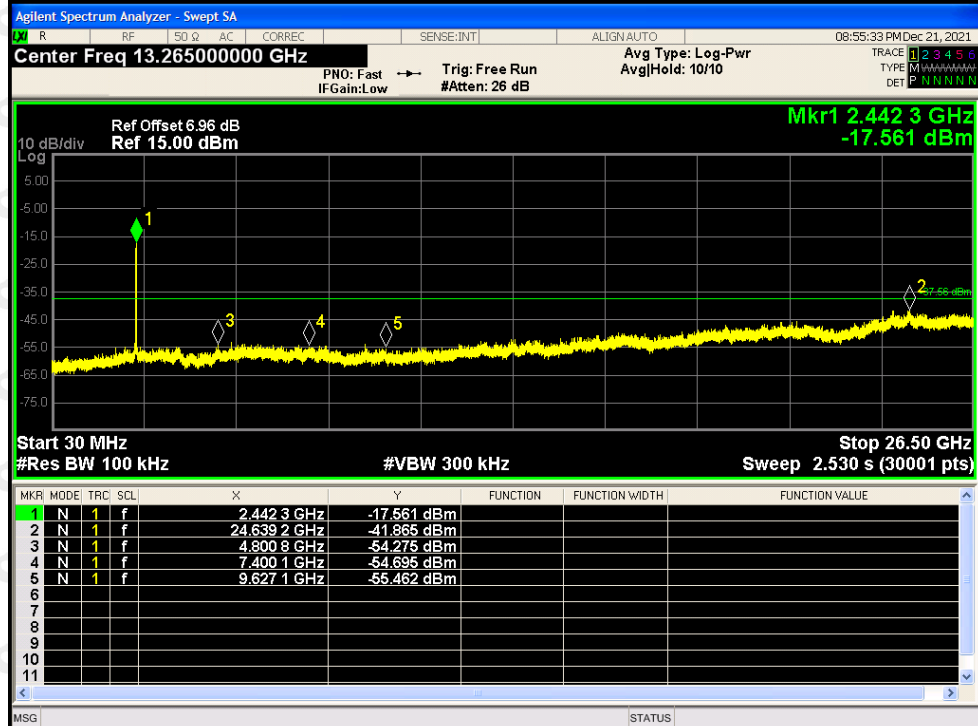


RF Conducted Spurious Emissions Graphs

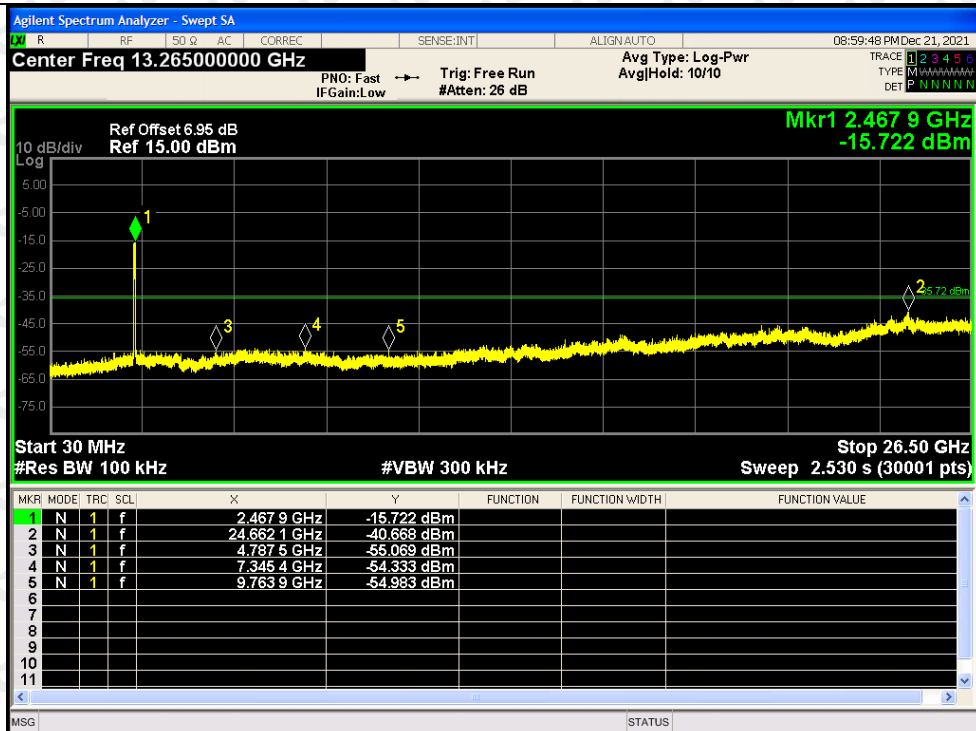
802.11n
(HT20)/
LCH

802.11
n(HT20)
/MCH




RF Conducted Spurious Emissions Graphs

802.11
n(HT40)
/LCH

802.11
n(HT40)
/MCH


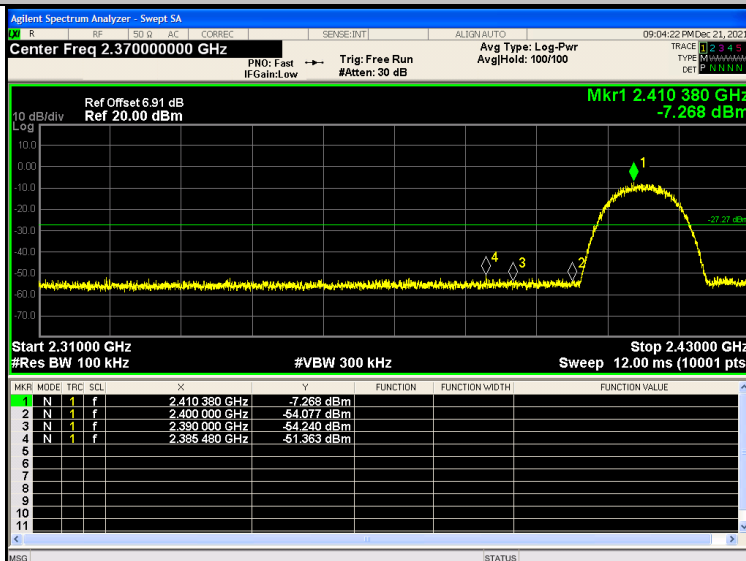
802.11
n(HT40)
/HCH



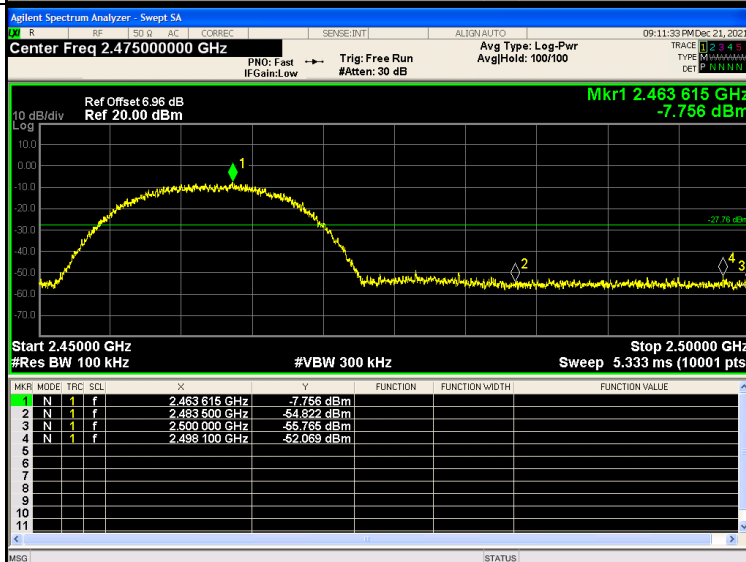
ANT2:

BAND EDGE Graphs

802.11b/LCH

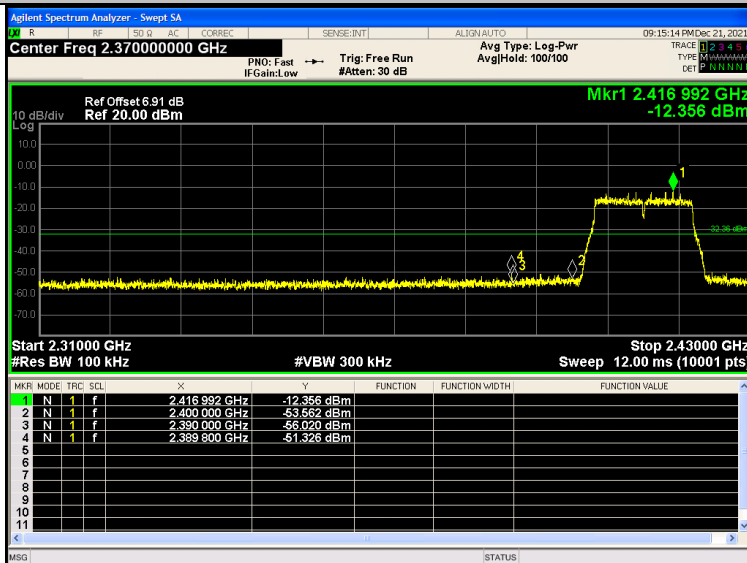


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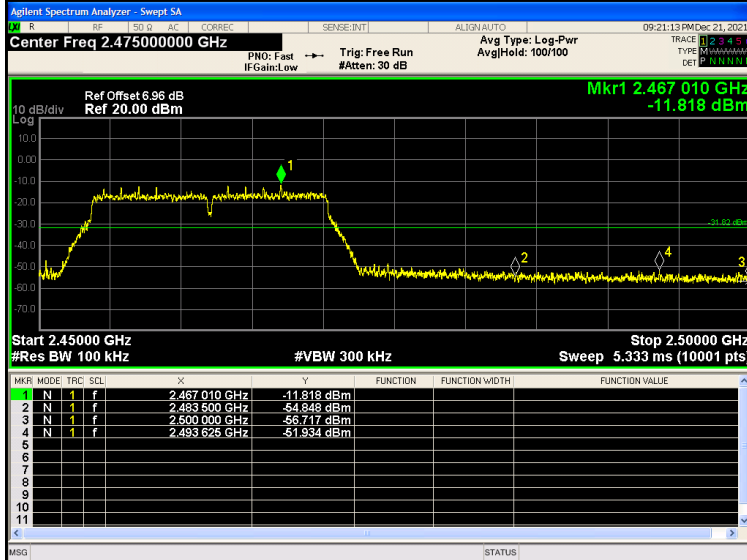


BAND EDGE Graphs

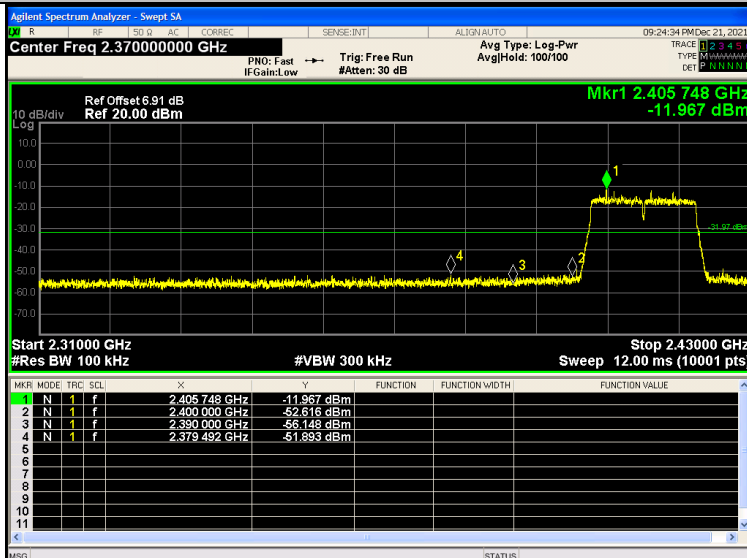
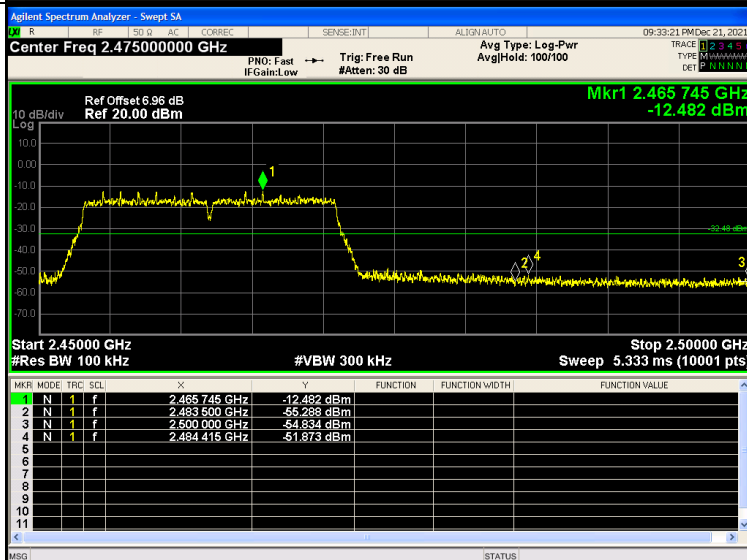
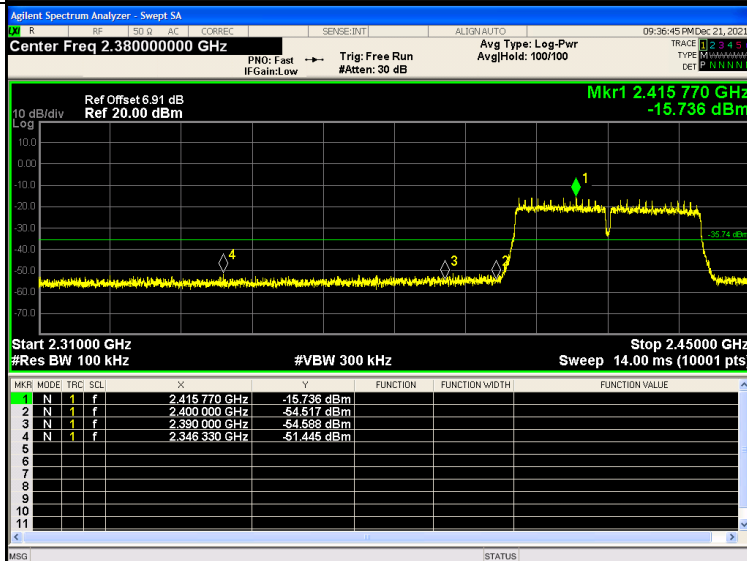
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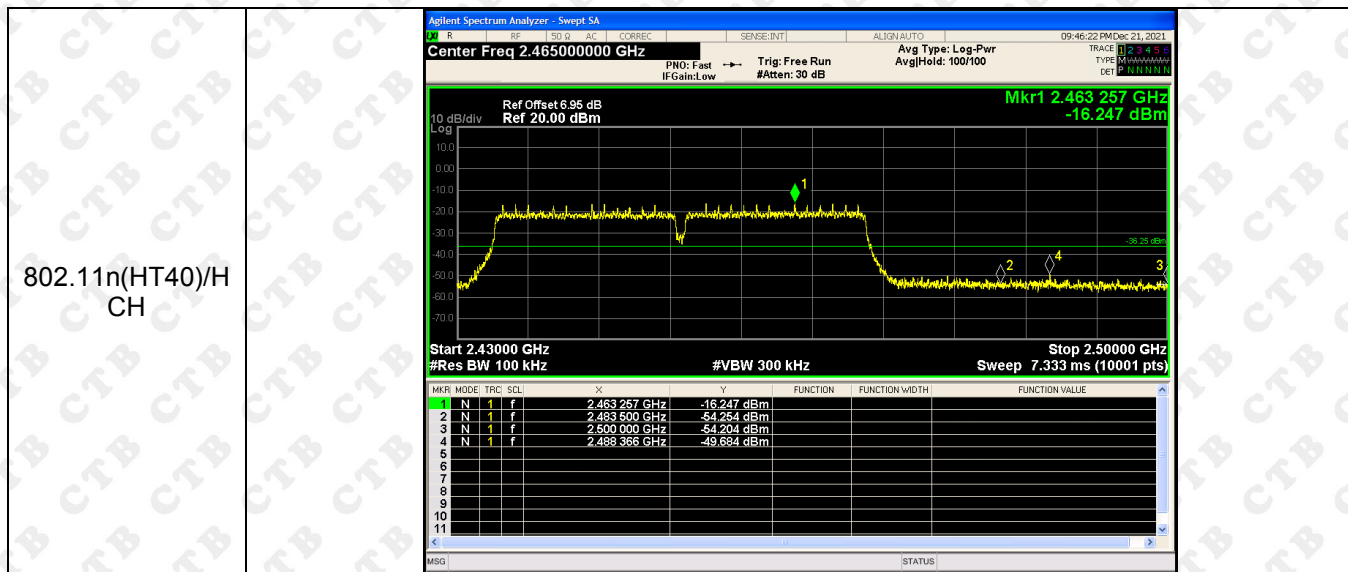


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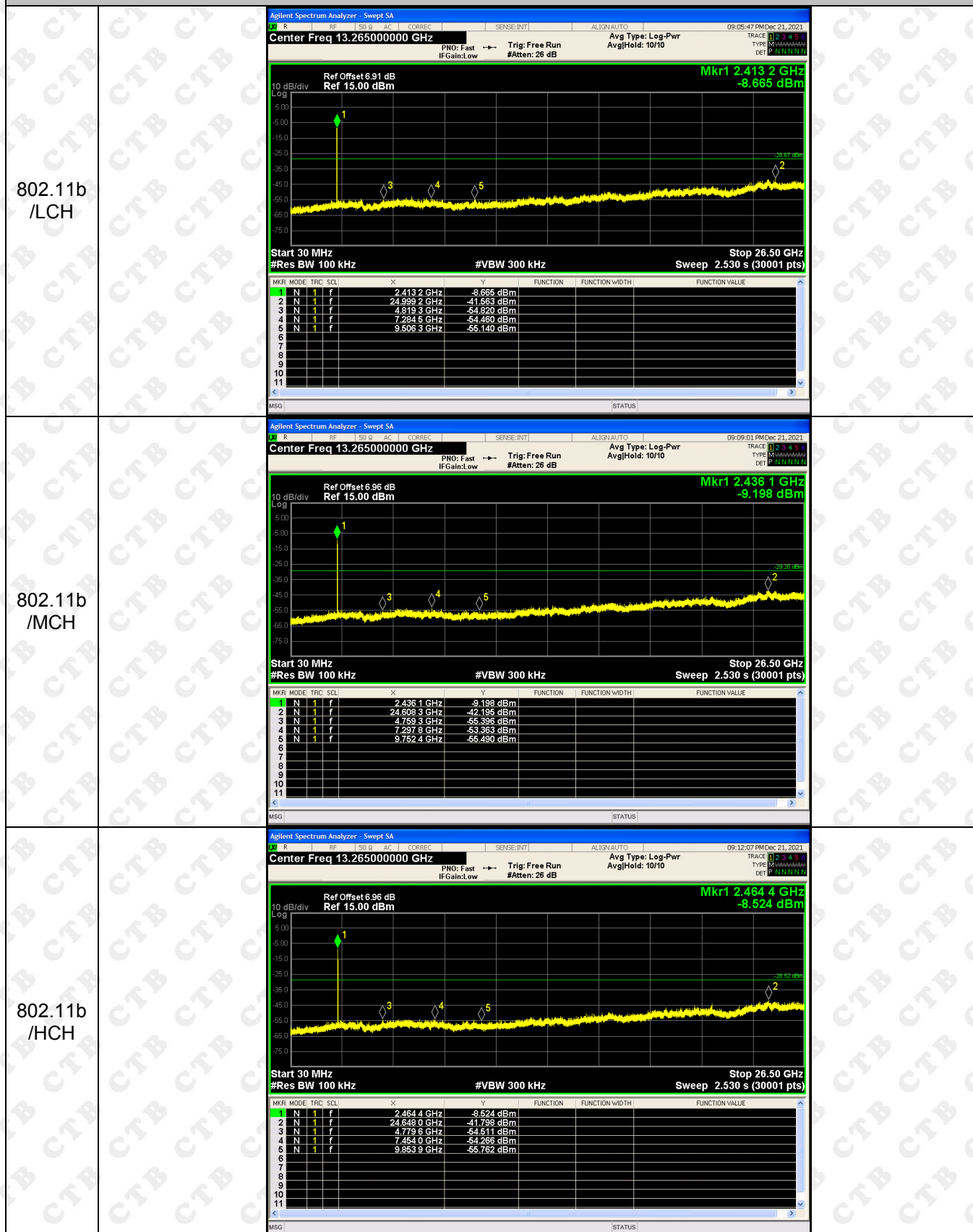


BAND EDGE Graphs

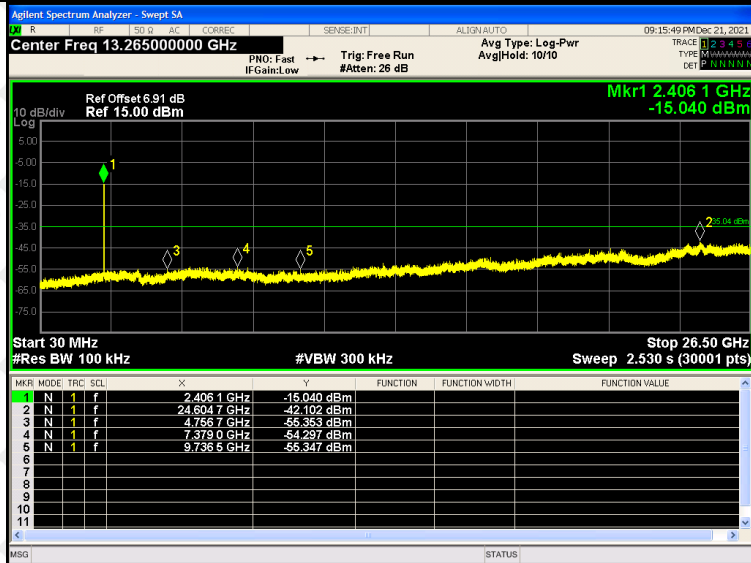
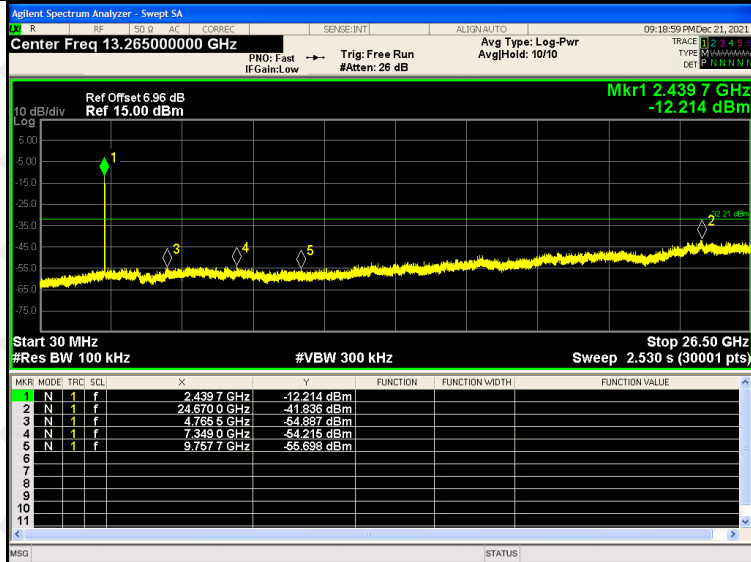
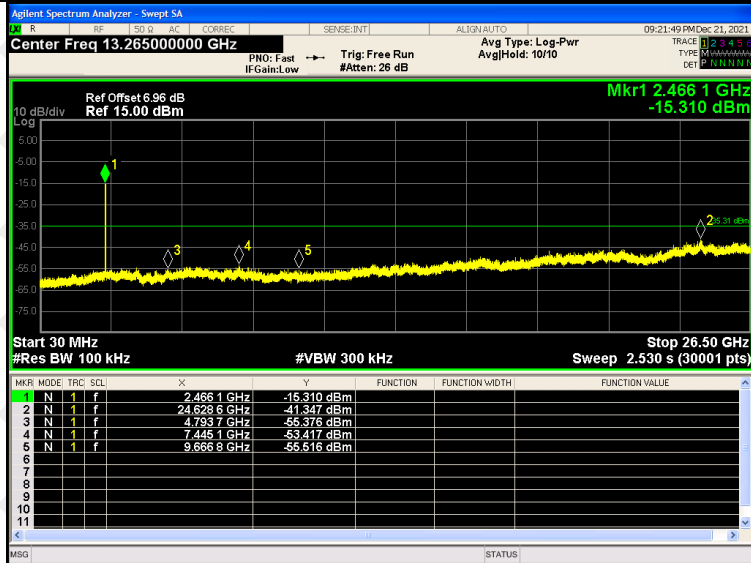
802.11n(HT20)/L
CH

802.11n(HT20)/H
CH

802.11n(HT40)/L
CH




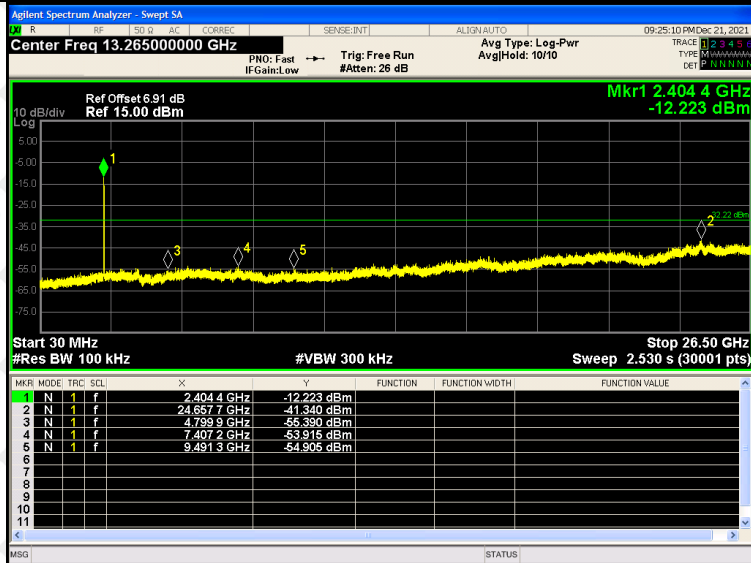
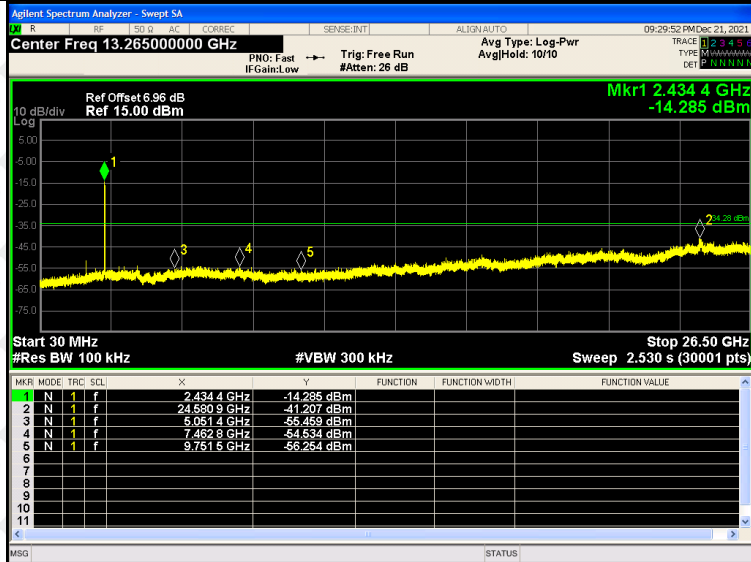
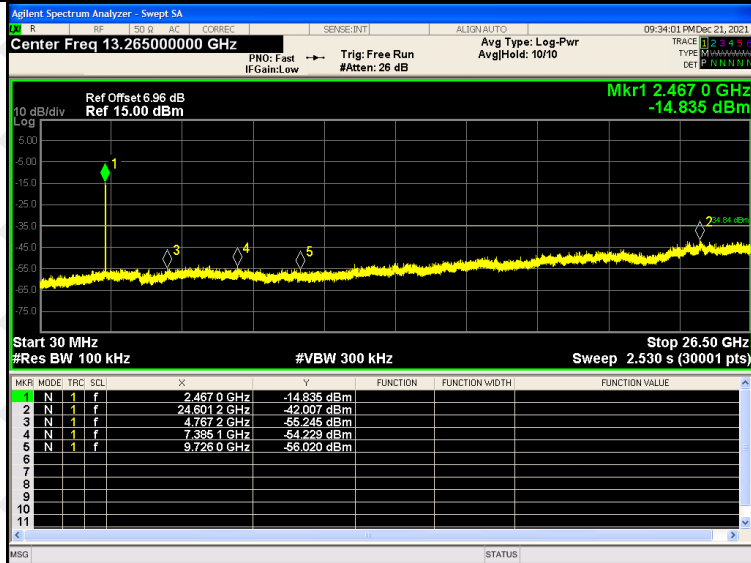
RF Conducted Spurious Emissions Graphs



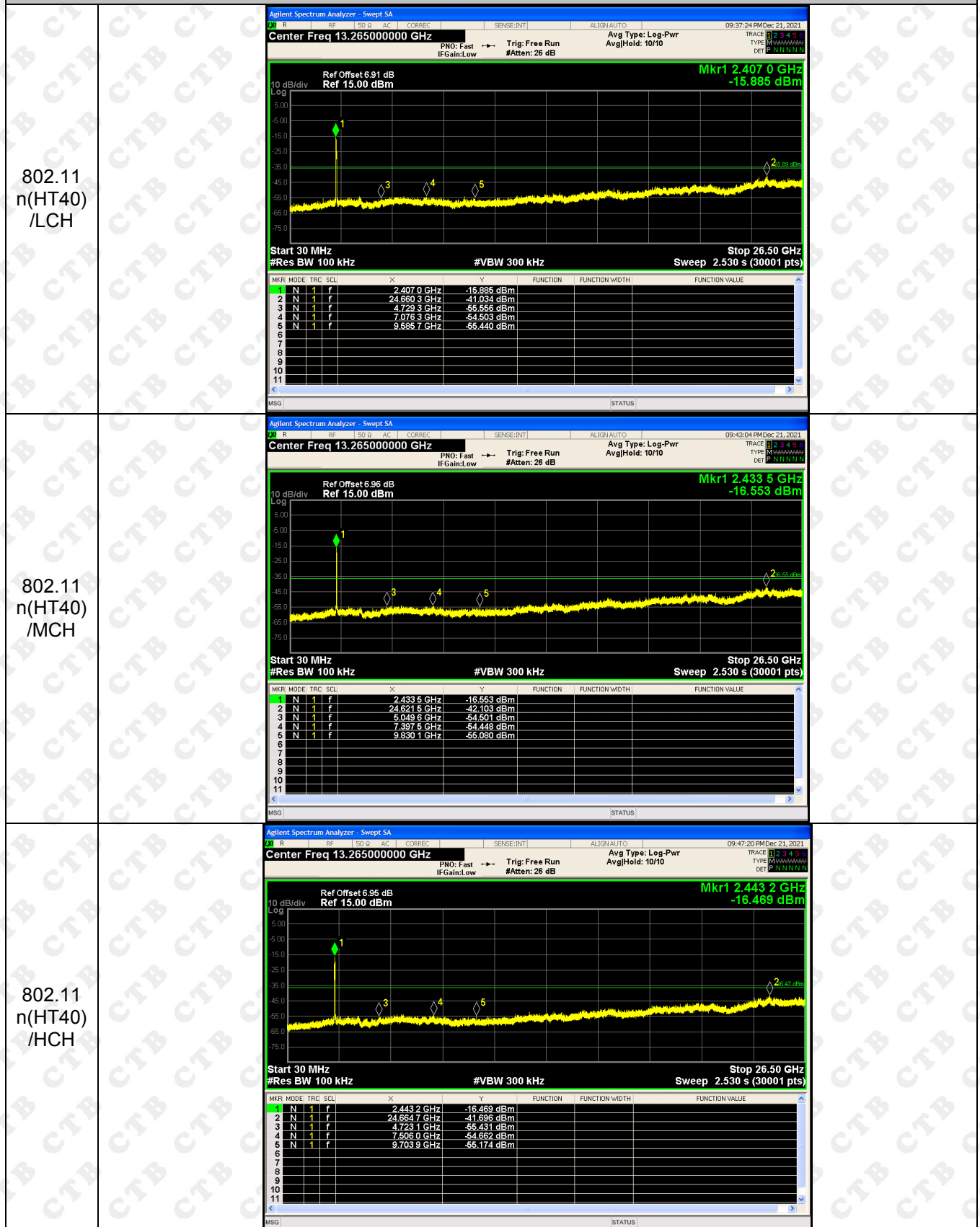
RF Conducted Spurious Emissions Graphs

802.11g
/LCH

802.11g
/MCH

802.11g
/HCH


RF Conducted Spurious Emissions Graphs

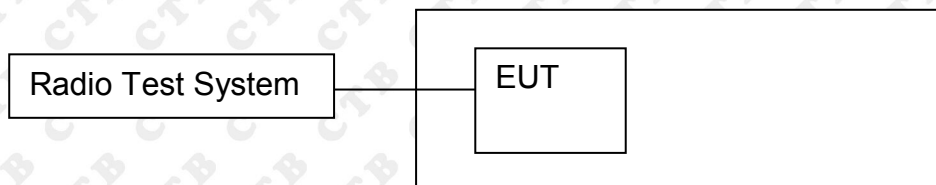
802.11n
(HT20)/
LCH

802.11
n(HT20)
/MCH

802.11
n(HT20)
/HCH


RF Conducted Spurious Emissions Graphs



9. COUDUCTED OUTPUT POWER

9.1 Block Diagram Of Test Setup



9.2 Limit

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Peak Output Power	1 watt or 30dBm	2400-2483.5	PASS

9.3 Test procedure

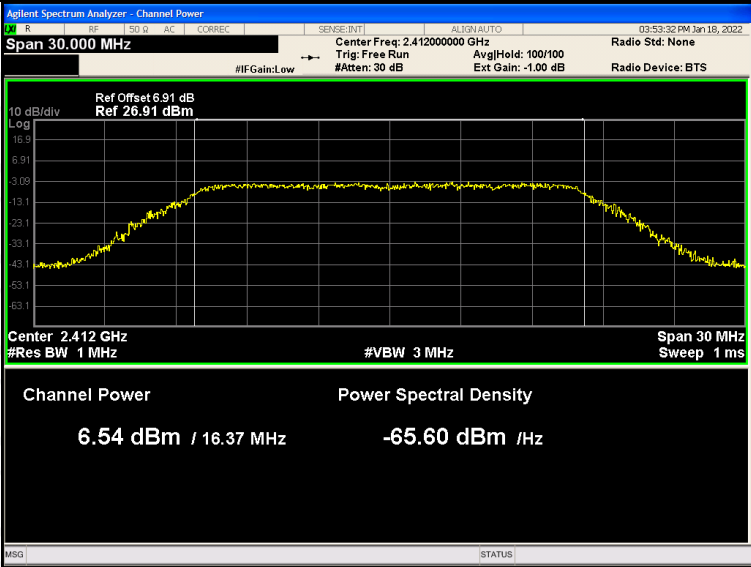
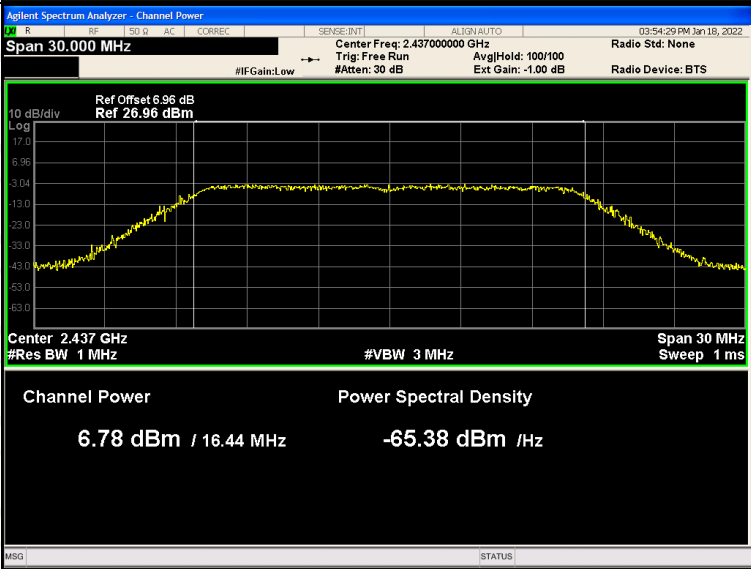
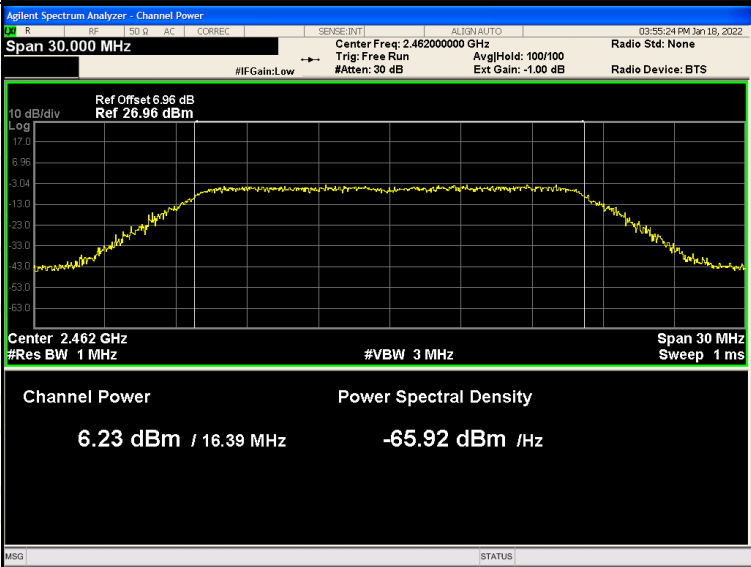
1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum.
2. Set the spectrum analyzer: RBW = 1MHz. VBW = 3MHz. Sweep = auto; Detector Function = Peak. Channel power function is used
3. Keep the EUT in transmitting at lowest, middle and highest channel individually. Record the max value.

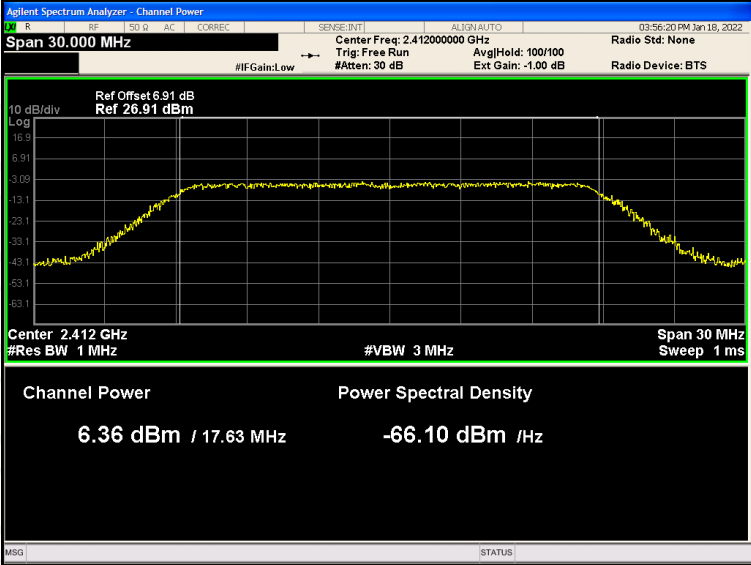
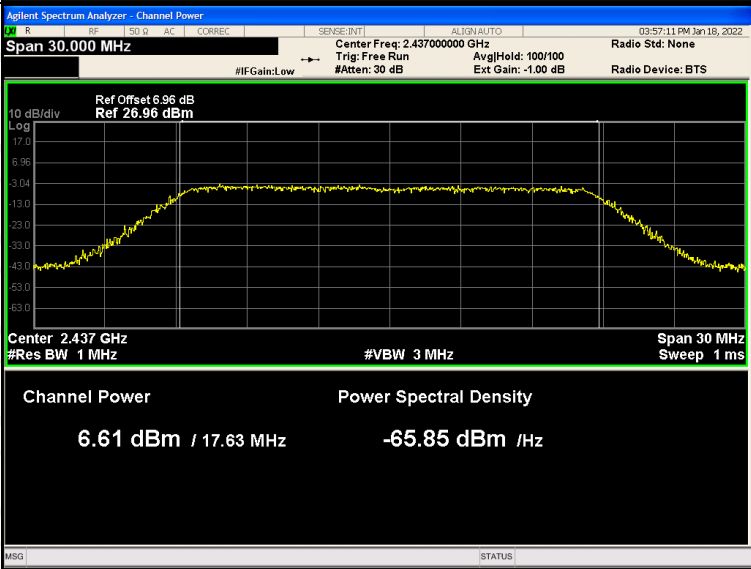
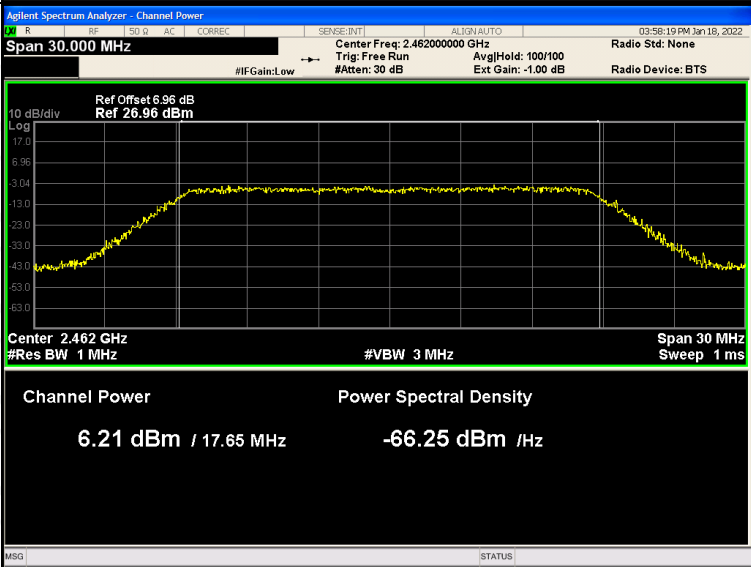
9.4 Test Result

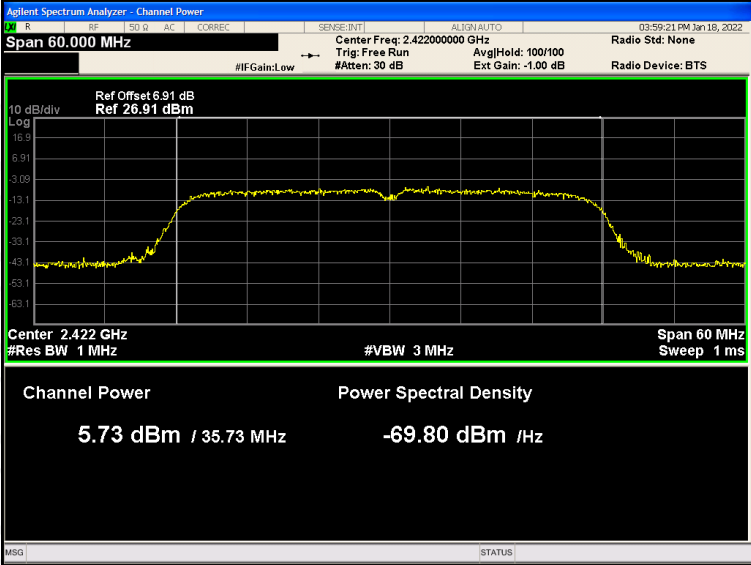
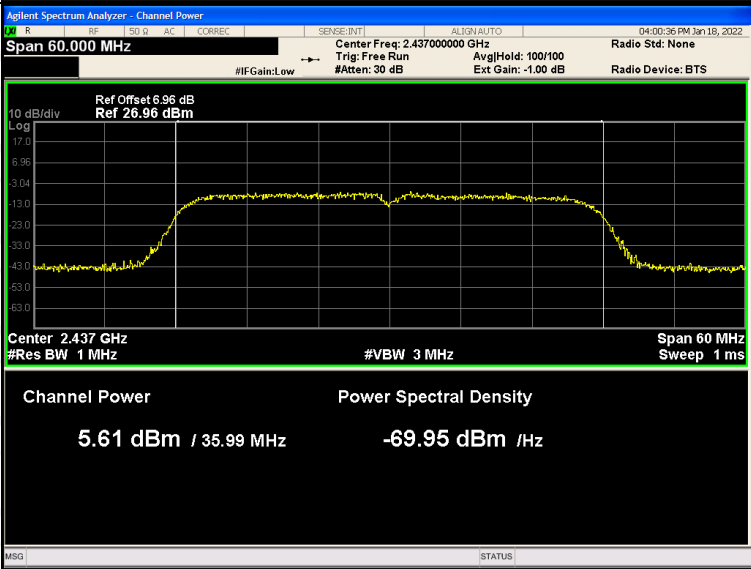
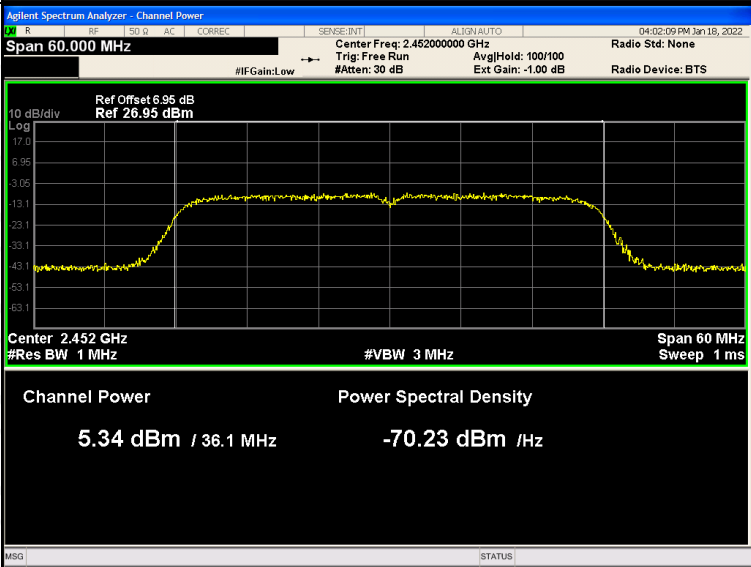
Mode	Channel.	Maximum Output Power [dBm] ant 1	Maximum Output Power [dBm] ant 2	Total Power Conducted Output Power(PK)	Limit[dBm]
802.11b	LCH	7.10	7.28	/	30
	MCH	7.07	7.39	/	30
	HCH	7.22	7.33	/	30
802.11g	LCH	6.54	6.53	/	30
	MCH	6.78	6.30	/	30
	HCH	6.23	6.37	/	30
802.11n(HT20)	LCH	6.36	6.50	9.391	30
	MCH	6.61	6.29	9.463	30
	HCH	6.21	6.42	9.327	30
802.11n(HT40)	LCH	5.73	5.65	8.700	30
	MCH	5.61	5.57	8.600	30
	HCH	5.34	5.37	8.365	30

ANT1:

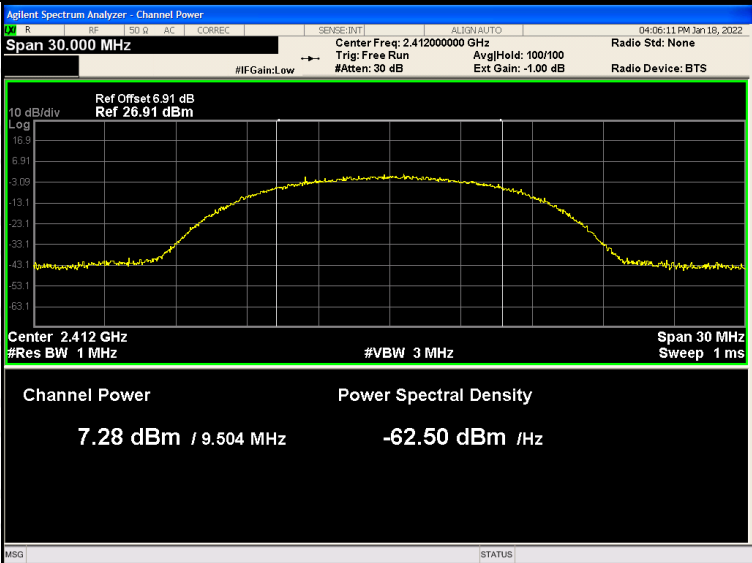
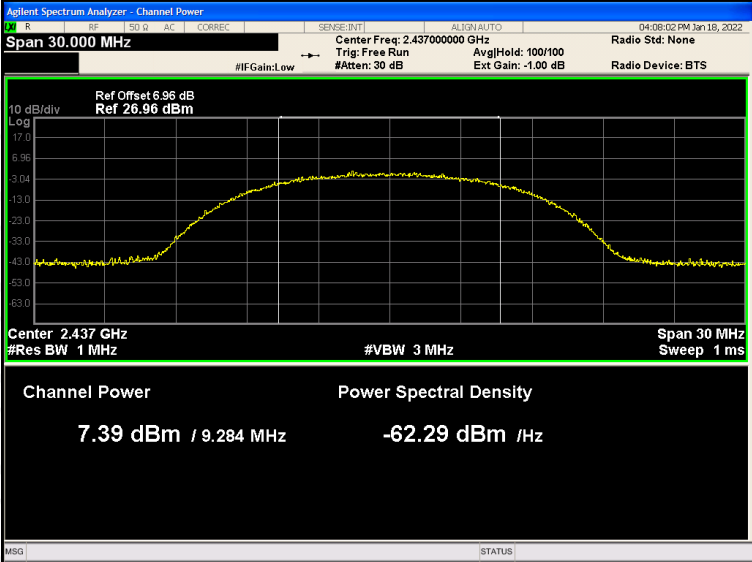
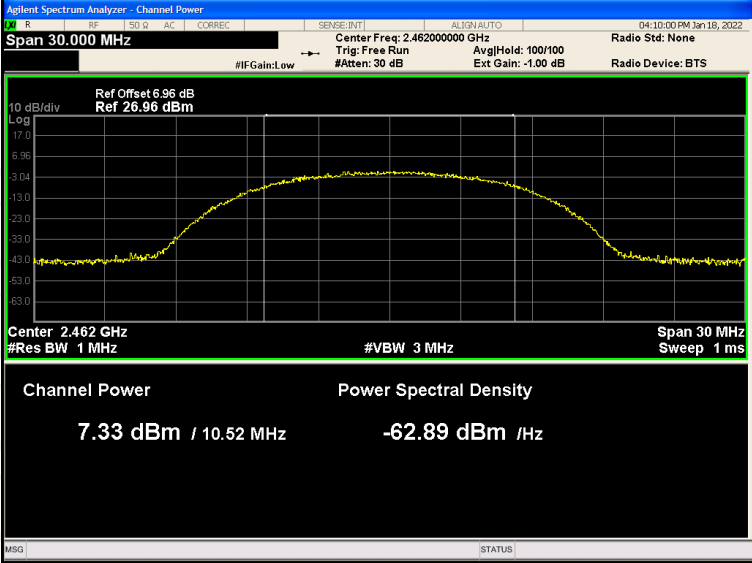
Mode	Channel.	Maximum Output Power [dBm]
802.11b	LCH	Agilent Spectrum Analyzer - Channel Power Span 30.000 MHz Center Freq: 2.412000000 GHz Trig: Free Run Avg/Hold: 100/100 #Attenu: 30 dB Ext Gain: -1.00 dB Radio Std: None Radio Device: BTS Ref Offset 6.91 dB Ref 26.91 dBm 10 dB/div Log Center 2.412 GHz #Res BW 1 MHz #VBW 3 MHz Span 30 MHz Sweep 1 ms Channel Power Power Spectral Density 7.10 dBm / 9.452 MHz -62.66 dBm / Hz
	MCH	Agilent Spectrum Analyzer - Channel Power Span 30.000 MHz Center Freq: 2.437000000 GHz Trig: Free Run Avg/Hold: 100/100 #Attenu: 30 dB Ext Gain: -1.00 dB Radio Std: None Radio Device: BTS Ref Offset 6.96 dB Ref 26.96 dBm 10 dB/div Log Center 2.437 GHz #Res BW 1 MHz #VBW 3 MHz Span 30 MHz Sweep 1 ms Channel Power Power Spectral Density 7.07 dBm / 9.17 MHz -62.55 dBm / Hz
	HCH	Agilent Spectrum Analyzer - Channel Power Span 30.000 MHz Center Freq: 2.462000000 GHz Trig: Free Run Avg/Hold: 100/100 #Attenu: 30 dB Ext Gain: -1.00 dB Radio Std: None Radio Device: BTS Ref Offset 6.96 dB Ref 26.96 dBm 10 dB/div Log Center 2.462 GHz #Res BW 1 MHz #VBW 3 MHz Span 30 MHz Sweep 1 ms Channel Power Power Spectral Density 7.22 dBm / 11.12 MHz -63.24 dBm / Hz

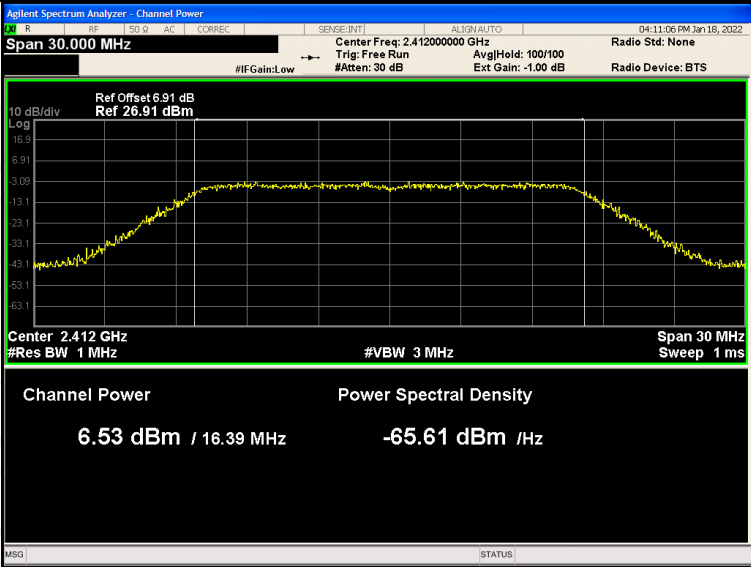
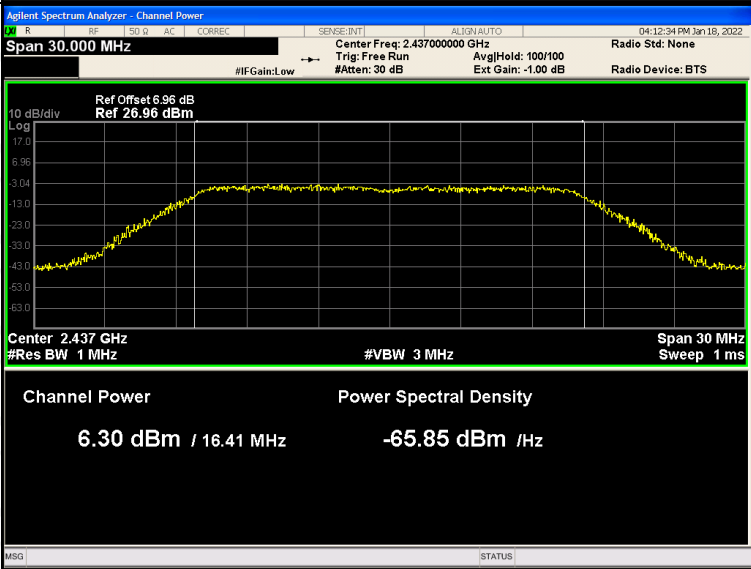
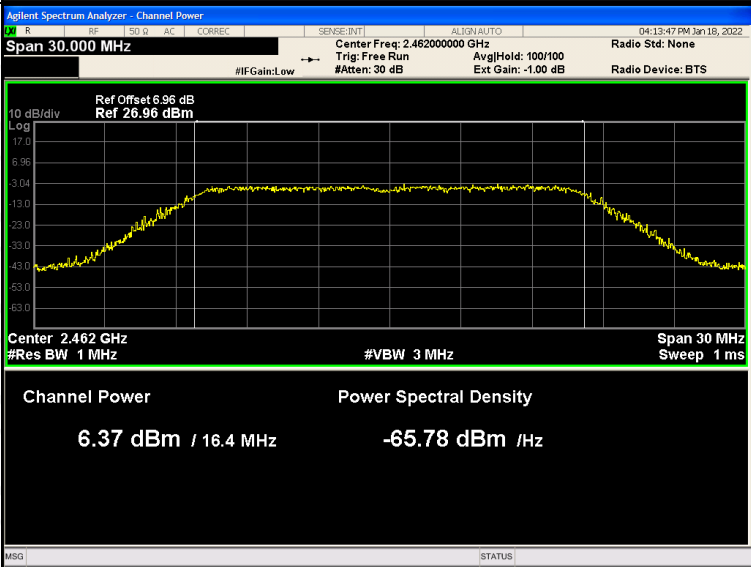
	LCH	 Agilent Spectrum Analyzer - Channel Power Span 30.000 MHz Center Freq: 2.412000000 GHz Trig: Free Run Avg/Hold: 100/100 Ext Gain: -1.00 dB Radio Std: None Radio Device: BTS Ref Offset 6.91 dB Ref 26.91 dBm Center 2.412 GHz #Res BW 1 MHz #VBW 3 MHz Span 30 MHz Sweep 1 ms Channel Power Power Spectral Density 6.54 dBm / 16.37 MHz -65.60 dBm / Hz
802.11g	MCH	 Agilent Spectrum Analyzer - Channel Power Span 30.000 MHz Center Freq: 2.437000000 GHz Trig: Free Run Avg/Hold: 100/100 Ext Gain: -1.00 dB Radio Std: None Radio Device: BTS Ref Offset 6.96 dB Ref 26.96 dBm Center 2.437 GHz #Res BW 1 MHz #VBW 3 MHz Span 30 MHz Sweep 1 ms Channel Power Power Spectral Density 6.78 dBm / 16.44 MHz -65.38 dBm / Hz
	HCH	 Agilent Spectrum Analyzer - Channel Power Span 30.000 MHz Center Freq: 2.462000000 GHz Trig: Free Run Avg/Hold: 100/100 Ext Gain: -1.00 dB Radio Std: None Radio Device: BTS Ref Offset 6.96 dB Ref 26.96 dBm Center 2.462 GHz #Res BW 1 MHz #VBW 3 MHz Span 30 MHz Sweep 1 ms Channel Power Power Spectral Density 6.23 dBm / 16.39 MHz -65.92 dBm / Hz

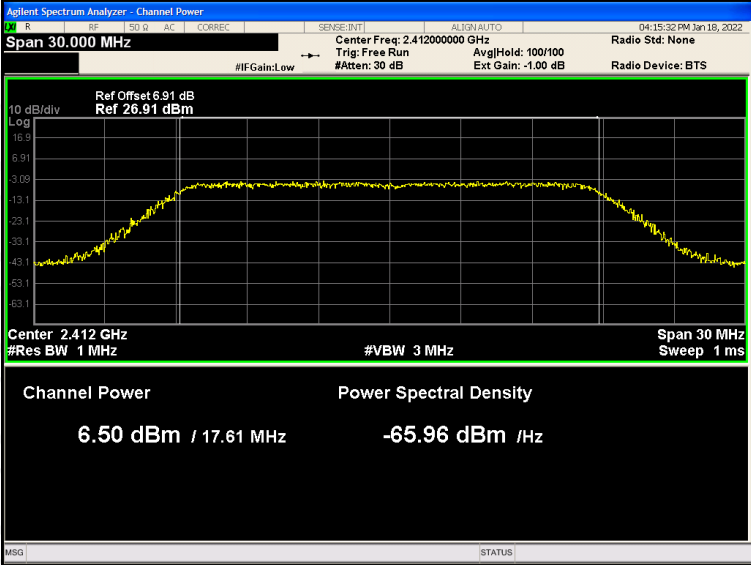
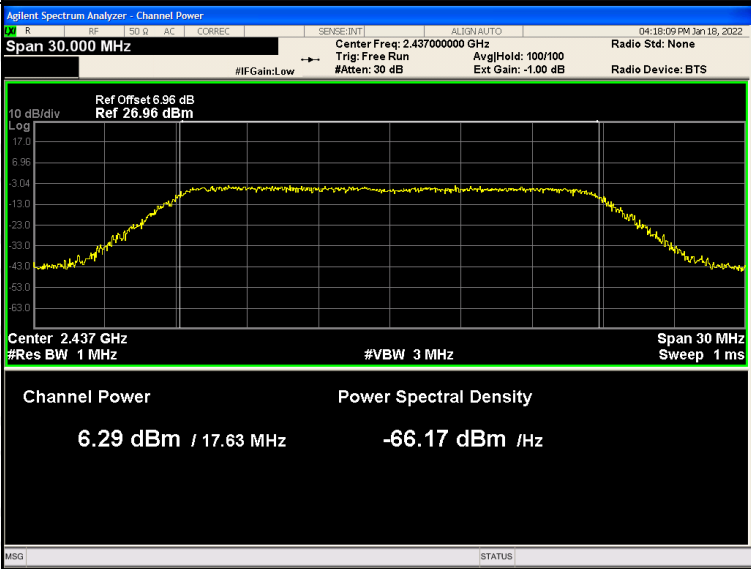
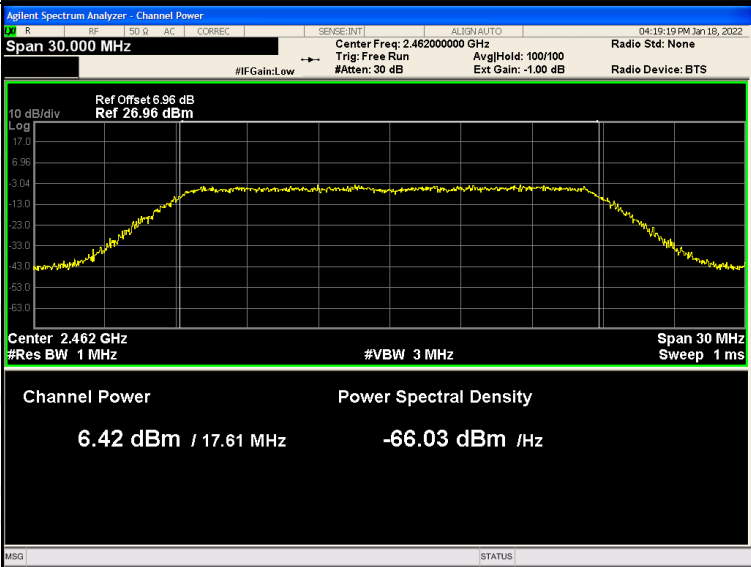
	LCH	 Agilent Spectrum Analyzer - Channel Power Span 30.000 MHz Center Freq: 2.412000000 GHz Trig: Free Run Avg/Hold: 100/100 Ext Gain: -1.00 dB Radio Std: None Radio Device: BTS Ref Offset 6.91 dB Ref 26.91 dBm Center 2.412 GHz #Res BW 1 MHz #VBW 3 MHz Span 30 MHz Sweep 1 ms Channel Power Power Spectral Density 6.36 dBm / 17.63 MHz -66.10 dBm / Hz
802.11n(HT20)	MCH	 Agilent Spectrum Analyzer - Channel Power Span 30.000 MHz Center Freq: 2.437000000 GHz Trig: Free Run Avg/Hold: 100/100 Ext Gain: -1.00 dB Radio Std: None Radio Device: BTS Ref Offset 6.96 dB Ref 26.96 dBm Center 2.437 GHz #Res BW 1 MHz #VBW 3 MHz Span 30 MHz Sweep 1 ms Channel Power Power Spectral Density 6.61 dBm / 17.63 MHz -65.85 dBm / Hz
	HCH	 Agilent Spectrum Analyzer - Channel Power Span 30.000 MHz Center Freq: 2.462000000 GHz Trig: Free Run Avg/Hold: 100/100 Ext Gain: -1.00 dB Radio Std: None Radio Device: BTS Ref Offset 6.96 dB Ref 26.96 dBm Center 2.462 GHz #Res BW 1 MHz #VBW 3 MHz Span 30 MHz Sweep 1 ms Channel Power Power Spectral Density 6.21 dBm / 17.65 MHz -66.25 dBm / Hz

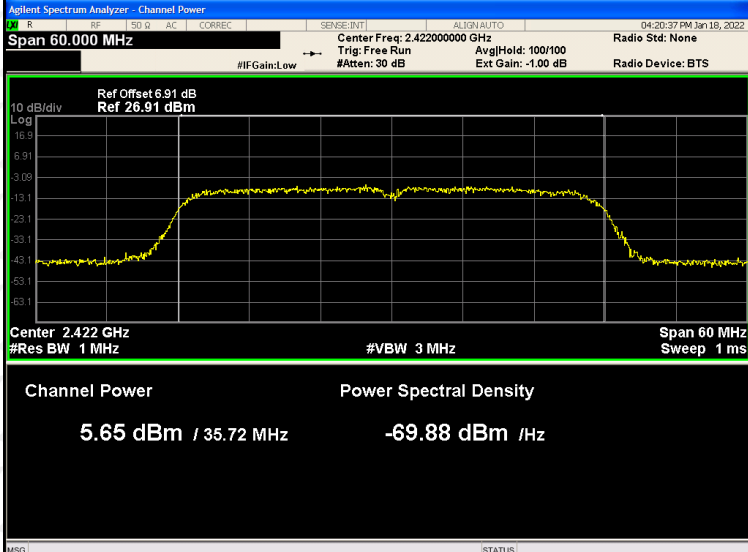
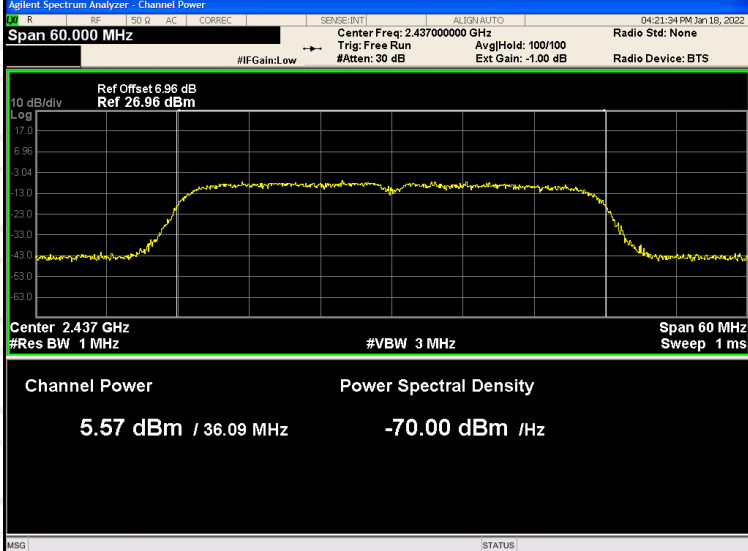
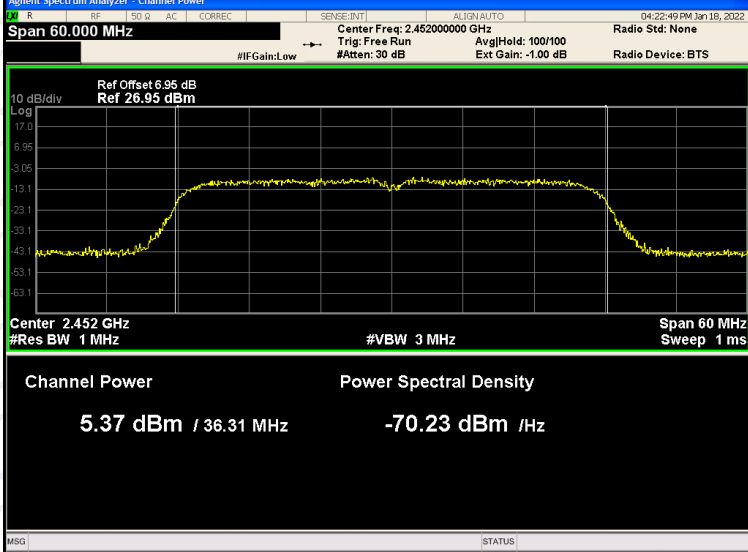
	LCH	 Agilent Spectrum Analyzer - Channel Power Span 60.000 MHz Center Freq: 2.422000000 GHz Trig: Free Run Avg/Hold: 100/100 Ext Gain: -1.00 dB Radio Std: None Radio Device: BTS Ref Offset 6.91 dB Ref 26.91 dBm Center 2.422 GHz #Res BW 1 MHz #VBW 3 MHz Span 60 MHz Sweep 1 ms Channel Power Power Spectral Density 5.73 dBm / 35.73 MHz -69.80 dBm / Hz
802.11n(HT40)	MCH	 Agilent Spectrum Analyzer - Channel Power Span 60.000 MHz Center Freq: 2.437000000 GHz Trig: Free Run Avg/Hold: 100/100 Ext Gain: -1.00 dB Radio Std: None Radio Device: BTS Ref Offset 6.96 dB Ref 26.96 dBm Center 2.437 GHz #Res BW 1 MHz #VBW 3 MHz Span 60 MHz Sweep 1 ms Channel Power Power Spectral Density 5.61 dBm / 35.99 MHz -69.95 dBm / Hz
	HCH	 Agilent Spectrum Analyzer - Channel Power Span 60.000 MHz Center Freq: 2.452000000 GHz Trig: Free Run Avg/Hold: 100/100 Ext Gain: -1.00 dB Radio Std: None Radio Device: BTS Ref Offset 6.95 dB Ref 26.95 dBm Center 2.452 GHz #Res BW 1 MHz #VBW 3 MHz Span 60 MHz Sweep 1 ms Channel Power Power Spectral Density 5.34 dBm / 36.1 MHz -70.23 dBm / Hz

ANT2:

Mode	Channel.	Maximum Output Power [dBm]
802.11b	LCH	 Channel Power: 7.28 dBm / 9.504 MHz Power Spectral Density: -62.50 dBm /Hz
	MCH	 Channel Power: 7.39 dBm / 9.284 MHz Power Spectral Density: -62.29 dBm /Hz
	HCH	 Channel Power: 7.33 dBm / 10.52 MHz Power Spectral Density: -62.89 dBm /Hz

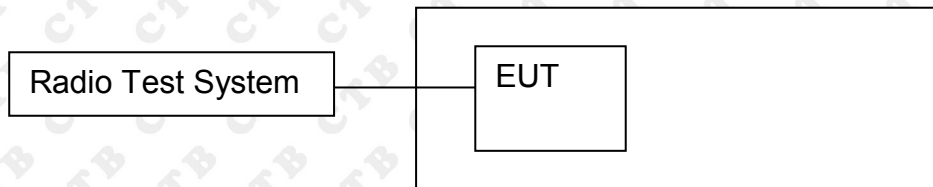
	LCH	 Agilent Spectrum Analyzer - Channel Power Span 30.000 MHz Center Freq: 2.412000000 GHz Trig: Free Run Avg/Hold: 100/100 Ext Gain: -1.00 dB Radio Std: None Radio Device: BTS Ref Offset 6.91 dB Ref 26.91 dBm Center 2.412 GHz #Res BW 1 MHz #VBW 3 MHz Span 30 MHz Sweep 1 ms Channel Power Power Spectral Density 6.53 dBm / 16.39 MHz -65.61 dBm / Hz
802.11g	MCH	 Agilent Spectrum Analyzer - Channel Power Span 30.000 MHz Center Freq: 2.437000000 GHz Trig: Free Run Avg/Hold: 100/100 Ext Gain: -1.00 dB Radio Std: None Radio Device: BTS Ref Offset 6.96 dB Ref 26.96 dBm Center 2.437 GHz #Res BW 1 MHz #VBW 3 MHz Span 30 MHz Sweep 1 ms Channel Power Power Spectral Density 6.30 dBm / 16.41 MHz -65.85 dBm / Hz
	HCH	 Agilent Spectrum Analyzer - Channel Power Span 30.000 MHz Center Freq: 2.462000000 GHz Trig: Free Run Avg/Hold: 100/100 Ext Gain: -1.00 dB Radio Std: None Radio Device: BTS Ref Offset 6.96 dB Ref 26.96 dBm Center 2.462 GHz #Res BW 1 MHz #VBW 3 MHz Span 30 MHz Sweep 1 ms Channel Power Power Spectral Density 6.37 dBm / 16.4 MHz -65.78 dBm / Hz

	LCH	 Agilent Spectrum Analyzer - Channel Power Span 30.000 MHz Center Freq: 2.412000000 GHz Trig: Free Run Avg/Hold: 100/100 Ext Gain: -1.00 dB Radio Std: None Radio Device: BTS Ref Offset 6.91 dB Ref 26.91 dBm Center 2.412 GHz #Res BW 1 MHz #VBW 3 MHz Span 30 MHz Sweep 1 ms Channel Power Power Spectral Density 6.50 dBm / 17.61 MHz -65.96 dBm / Hz
802.11n(HT20)	MCH	 Agilent Spectrum Analyzer - Channel Power Span 30.000 MHz Center Freq: 2.437000000 GHz Trig: Free Run Avg/Hold: 100/100 Ext Gain: -1.00 dB Radio Std: None Radio Device: BTS Ref Offset 6.96 dB Ref 26.96 dBm Center 2.437 GHz #Res BW 1 MHz #VBW 3 MHz Span 30 MHz Sweep 1 ms Channel Power Power Spectral Density 6.29 dBm / 17.63 MHz -66.17 dBm / Hz
	HCH	 Agilent Spectrum Analyzer - Channel Power Span 30.000 MHz Center Freq: 2.462000000 GHz Trig: Free Run Avg/Hold: 100/100 Ext Gain: -1.00 dB Radio Std: None Radio Device: BTS Ref Offset 6.96 dB Ref 26.96 dBm Center 2.462 GHz #Res BW 1 MHz #VBW 3 MHz Span 30 MHz Sweep 1 ms Channel Power Power Spectral Density 6.42 dBm / 17.61 MHz -66.03 dBm / Hz

	LCH	 Agilent Spectrum Analyzer - Channel Power Span 60.000 MHz Center Freq: 2.422000000 GHz Trig: Free Run Avg/Hold: 100/100 Ext Gain: -1.00 dB Radio Std: None Radio Device: BTS Ref Offset 6.91 dB Ref 26.91 dBm Center 2.422 GHz #Res BW 1 MHz #VBW 3 MHz Span 60 MHz Sweep 1 ms Channel Power Power Spectral Density 5.65 dBm / 35.72 MHz -69.88 dBm / Hz
802.11n(HT40)	MCH	 Agilent Spectrum Analyzer - Channel Power Span 60.000 MHz Center Freq: 2.437000000 GHz Trig: Free Run Avg/Hold: 100/100 Ext Gain: -1.00 dB Radio Std: None Radio Device: BTS Ref Offset 6.96 dB Ref 26.96 dBm Center 2.437 GHz #Res BW 1 MHz #VBW 3 MHz Span 60 MHz Sweep 1 ms Channel Power Power Spectral Density 5.57 dBm / 36.09 MHz -70.00 dBm / Hz
	HCH	 Agilent Spectrum Analyzer - Channel Power Span 60.000 MHz Center Freq: 2.452000000 GHz Trig: Free Run Avg/Hold: 100/100 Ext Gain: -1.00 dB Radio Std: None Radio Device: BTS Ref Offset 6.95 dB Ref 26.95 dBm Center 2.452 GHz #Res BW 1 MHz #VBW 3 MHz Span 60 MHz Sweep 1 ms Channel Power Power Spectral Density 5.37 dBm / 36.31 MHz -70.23 dBm / Hz

10. 6DB OCCUPIED BANDWIDTH

10.1 Block Diagram Of Test Setup



10.2 Limit

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	$\geq 500\text{KHz}$ (6dB bandwidth)	2400-2483.5	PASS

10.3 Test procedure

1. Rem1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) $\geq 3 \times \text{RBW}$.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

10.4 Test Result

ANT 1:

Test Mode	Frequency	6dB Bandwidth (MHz)	Limit(kHz)	Result
802.11b	LCH	9.452	500	PASS
	MCH	9.17	500	PASS
	HCH	11.119	500	PASS
802.11g	LCH	16.366	500	PASS
	MCH	16.444	500	PASS
	HCH	16.388	500	PASS
802.11n(HT20)	LCH	17.63	500	PASS
	MCH	17.628	500	PASS
	HCH	17.654	500	PASS
802.11n(HT40)	LCH	35.728	500	PASS
	MCH	35.991	500	PASS
	HCH	36.101	500	PASS

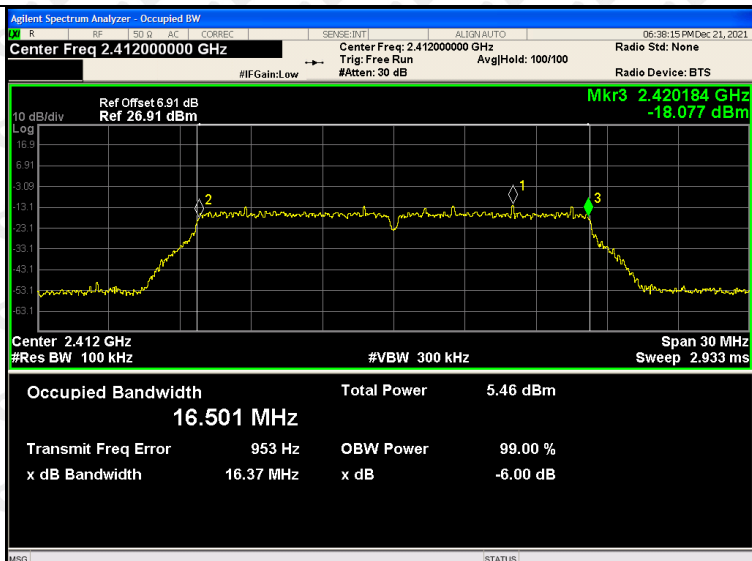
ANT 2:

Test Mode	Frequency	6dB Bandwidth (MHz)	Limit(kHz)	Result
802.11b	LCH	9.504	500	PASS
	MCH	9.284	500	PASS
	HCH	10.521	500	PASS
802.11g	LCH	16.386	500	PASS
	MCH	16.41	500	PASS
	HCH	16.4	500	PASS
802.11n(HT20)	LCH	17.612	500	PASS
	MCH	17.631	500	PASS
	HCH	17.608	500	PASS
802.11n(HT40)	LCH	35.723	500	PASS
	MCH	36.091	500	PASS
	HCH	36.31	500	PASS

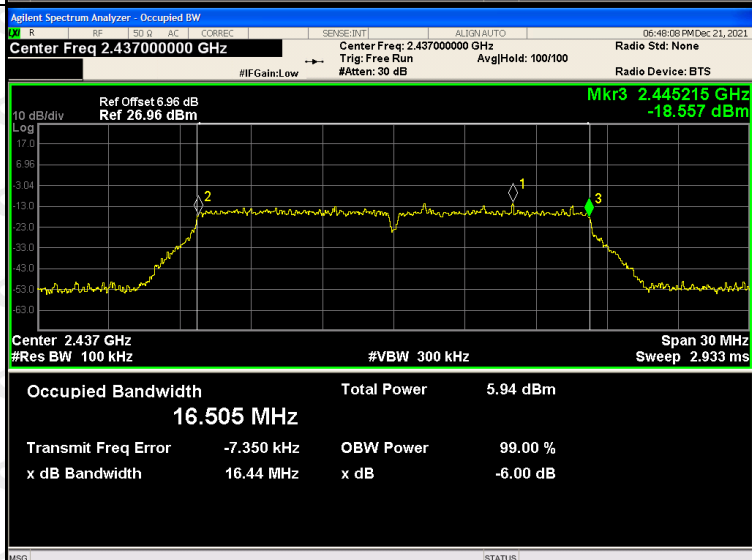
Test Graph: ANT 1:



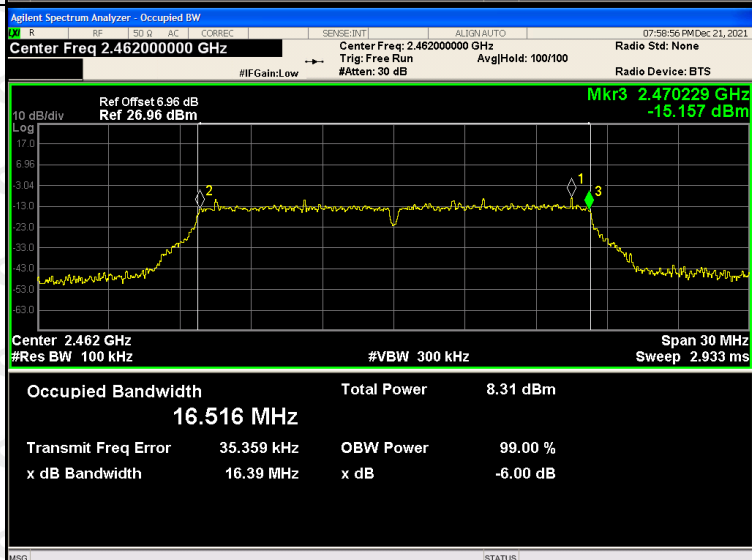
802.11g/LCH

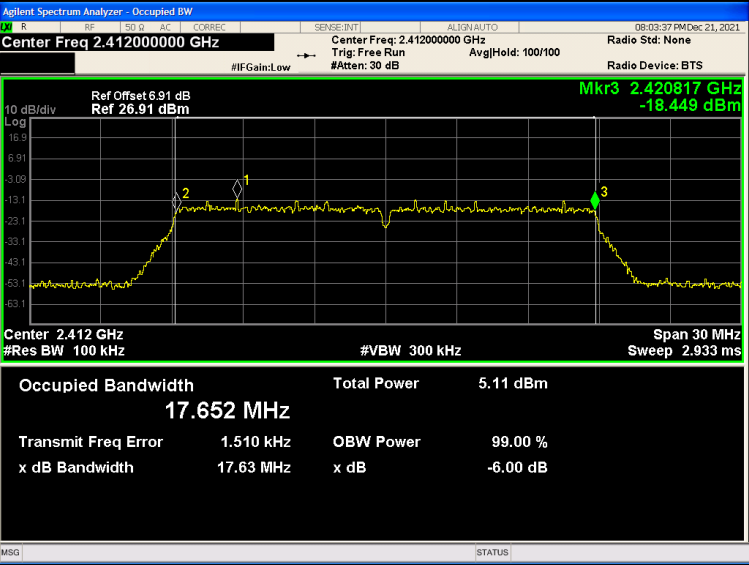
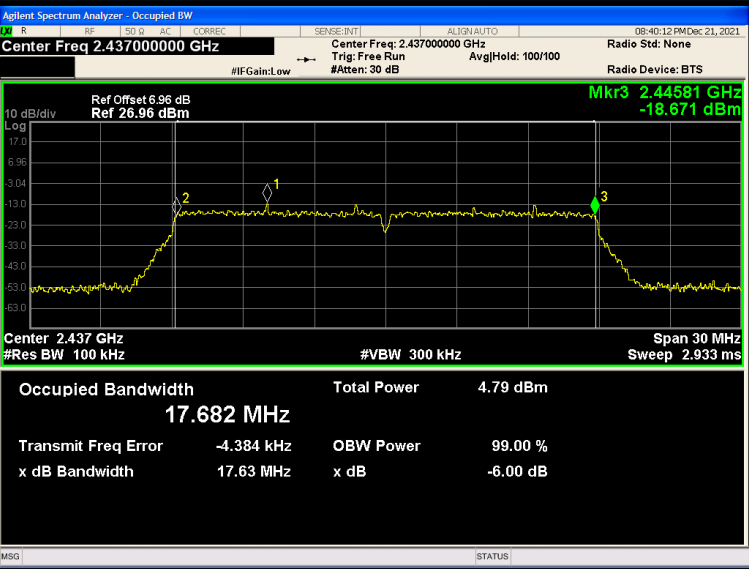
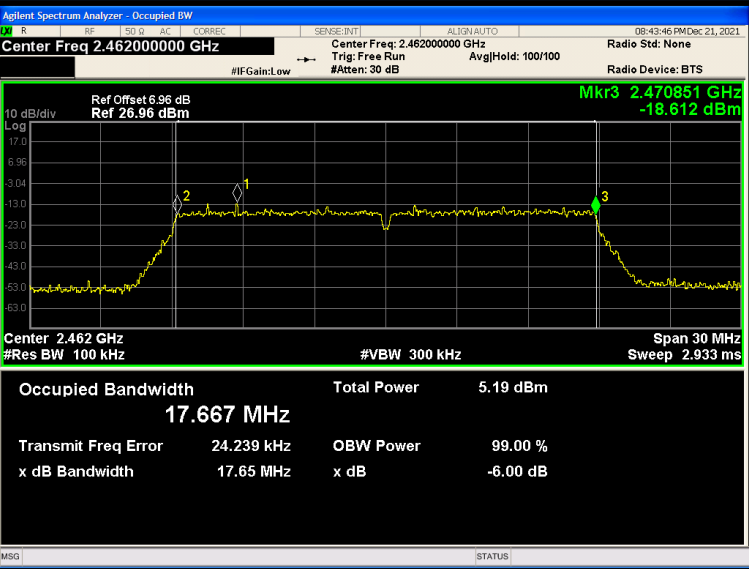


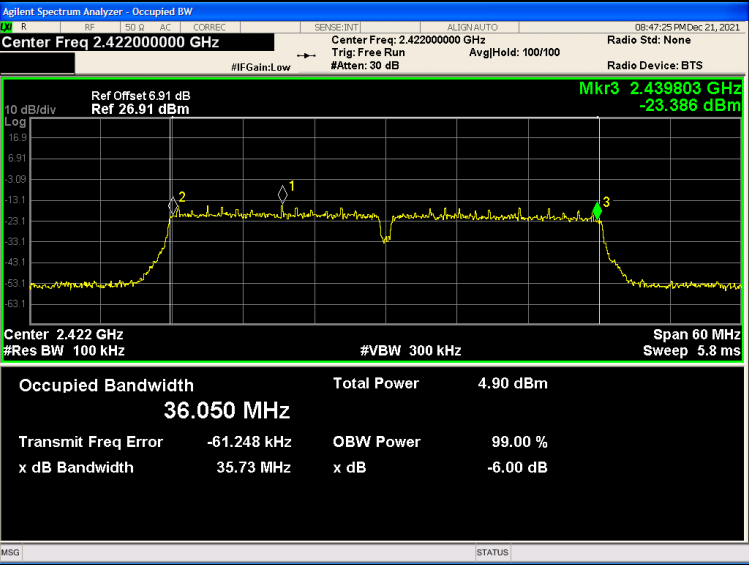
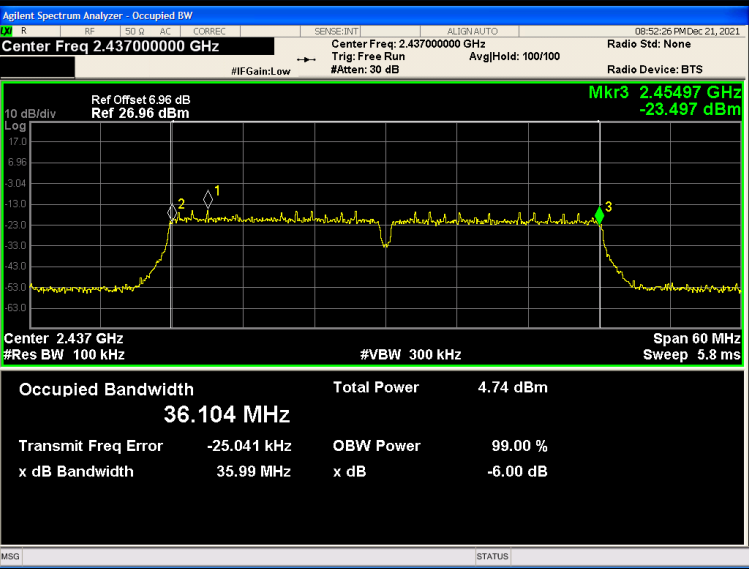
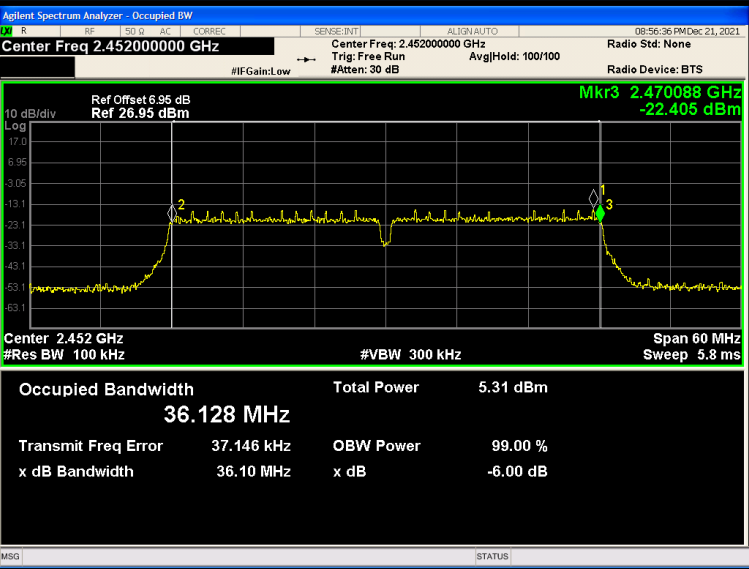
802.11g/MCH



802.11g/HCH



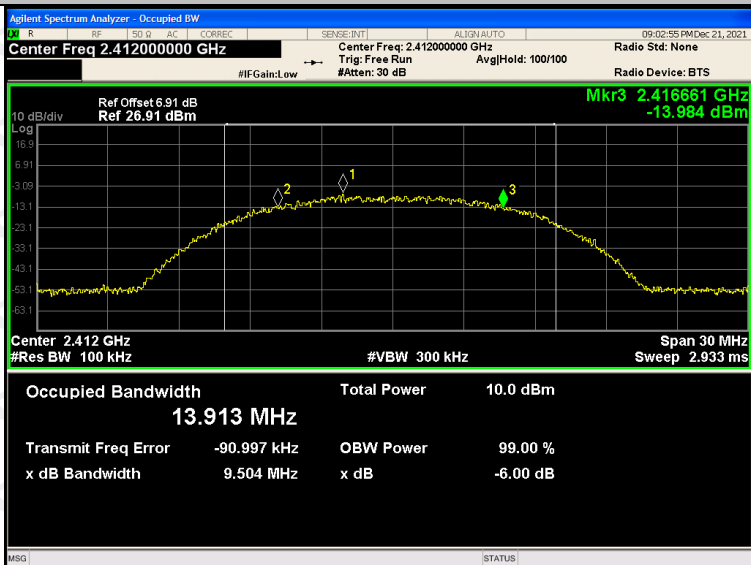
802.11n(HT20)/LC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 2.41200000 GHz Ref Offset: 6.91 dB Ref: 26.91 dBm Occupied Bandwidth: 17.652 MHz Total Power: 5.11 dBm Transmit Freq Error: 1.510 kHz OBW Power: 99.00 % x dB Bandwidth: 17.63 MHz x dB: -6.00 dB
802.11n(HT20)/MC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 2.43700000 GHz Ref Offset: 6.96 dB Ref: 26.96 dBm Occupied Bandwidth: 17.682 MHz Total Power: 4.79 dBm Transmit Freq Error: -4.384 kHz OBW Power: 99.00 % x dB Bandwidth: 17.63 MHz x dB: -6.00 dB
802.11n(HT20)/HC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 2.46200000 GHz Ref Offset: 6.96 dB Ref: 26.96 dBm Occupied Bandwidth: 17.667 MHz Total Power: 5.19 dBm Transmit Freq Error: 24.239 kHz OBW Power: 99.00 % x dB Bandwidth: 17.65 MHz x dB: -6.00 dB

802.11n(HT40)/LC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 2.422000000 GHz Ref Offset: 6.91 dB Ref: 26.91 dBm Mkr3: 2.439803 GHz -23.386 dBm Center: 2.422 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 60 MHz Sweep: 5.8 ms Occupied Bandwidth: 36.050 MHz Total Power: 4.90 dBm Transmit Freq Error: -61.248 kHz OBW Power: 99.00 % x dB Bandwidth: 35.73 MHz x dB: -6.00 dB
802.11n(HT40)/MC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 2.437000000 GHz Ref Offset: 6.96 dB Ref: 26.96 dBm Mkr3: 2.45497 GHz -23.497 dBm Center: 2.437 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 60 MHz Sweep: 5.8 ms Occupied Bandwidth: 36.104 MHz Total Power: 4.74 dBm Transmit Freq Error: -25.041 kHz OBW Power: 99.00 % x dB Bandwidth: 35.99 MHz x dB: -6.00 dB
802.11n(HT40)/HC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 2.452000000 GHz Ref Offset: 6.95 dB Ref: 26.95 dBm Mkr3: 2.470088 GHz -22.405 dBm Center: 2.452 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 60 MHz Sweep: 5.8 ms Occupied Bandwidth: 36.128 MHz Total Power: 5.31 dBm Transmit Freq Error: 37.146 kHz OBW Power: 99.00 % x dB Bandwidth: 36.10 MHz x dB: -6.00 dB

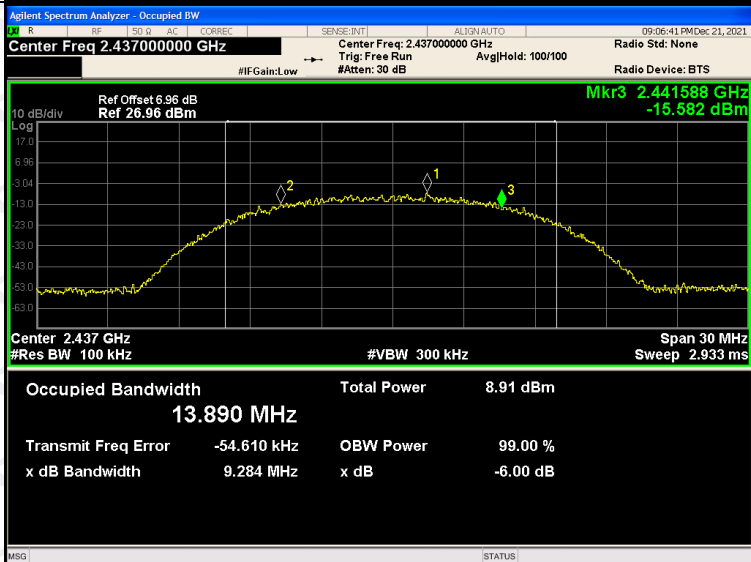
ANT 2:

Graphs

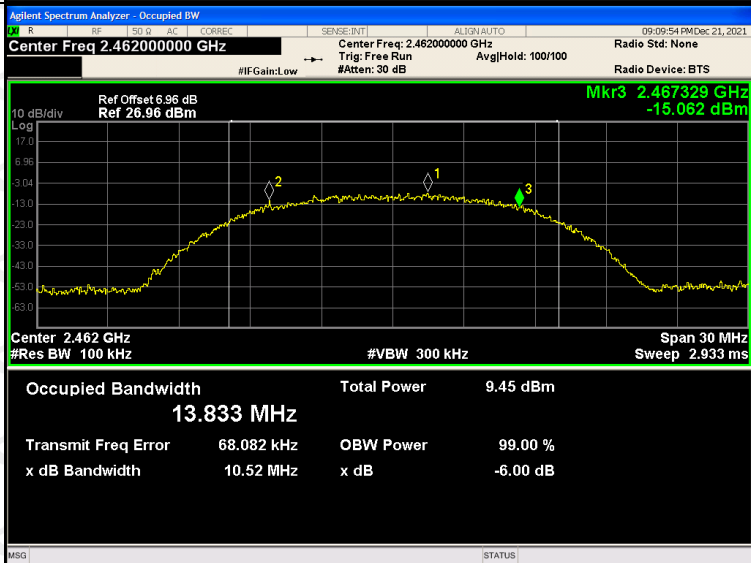
802.11b /LCH



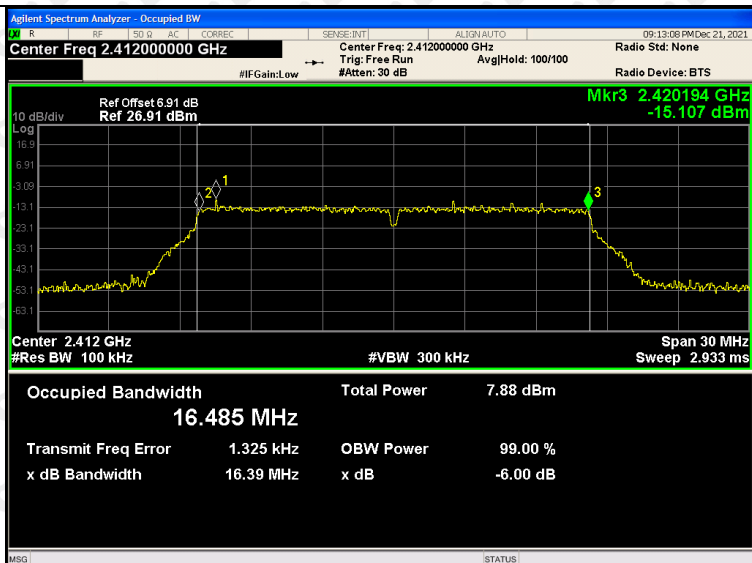
802.11b /MCH



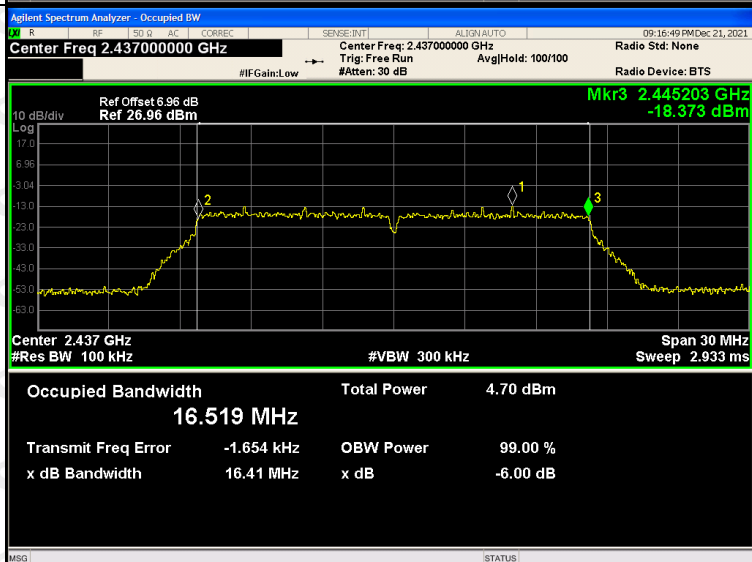
802.11b/HCH



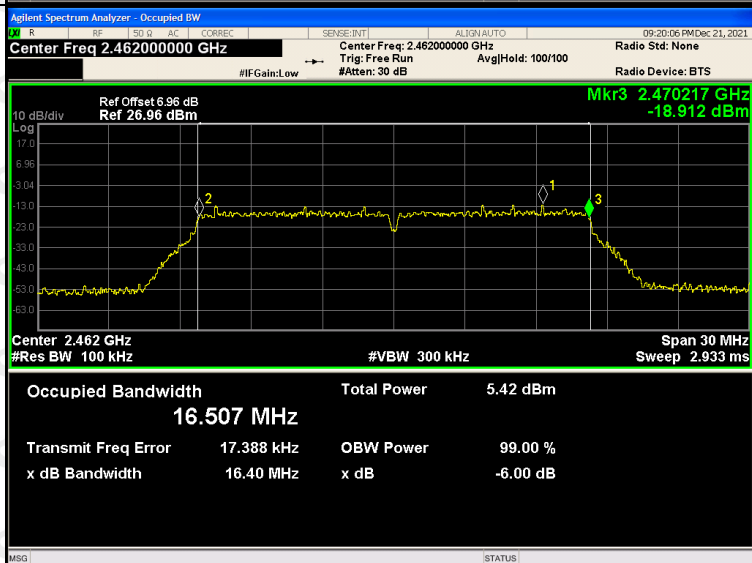
802.11g/LCH

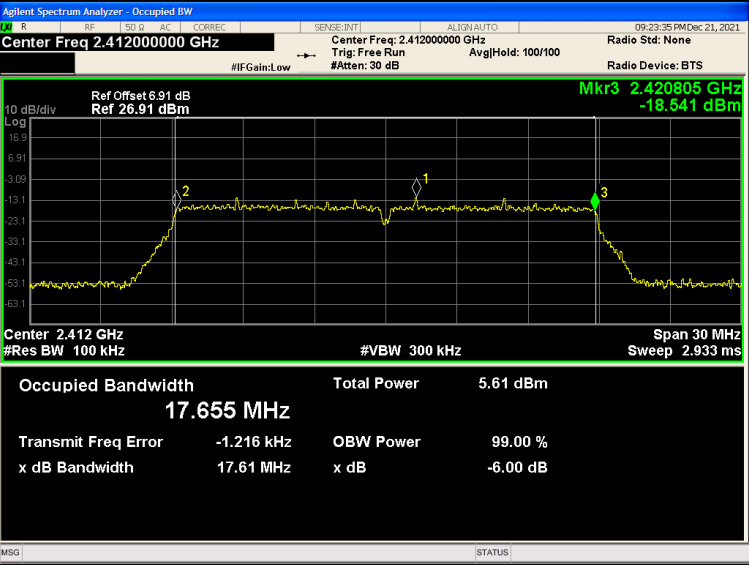
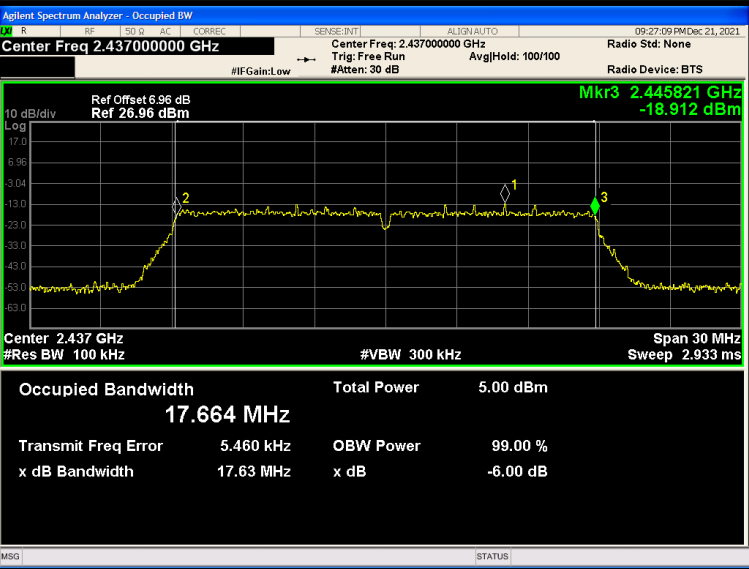
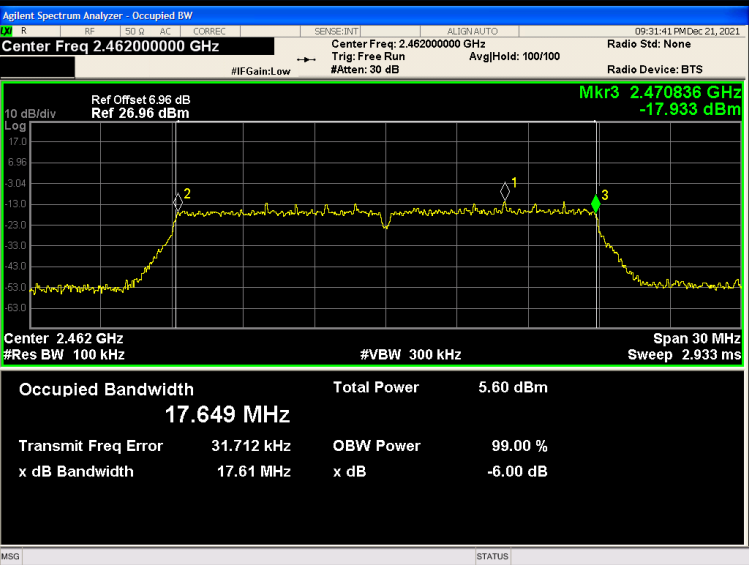


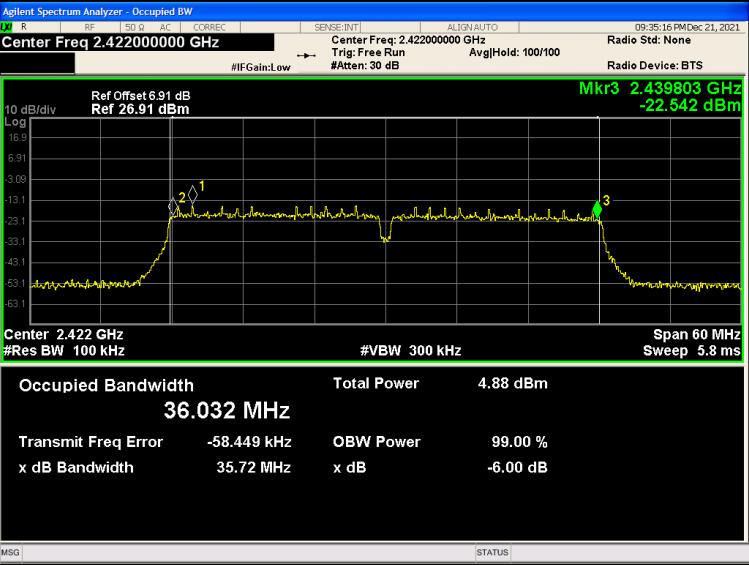
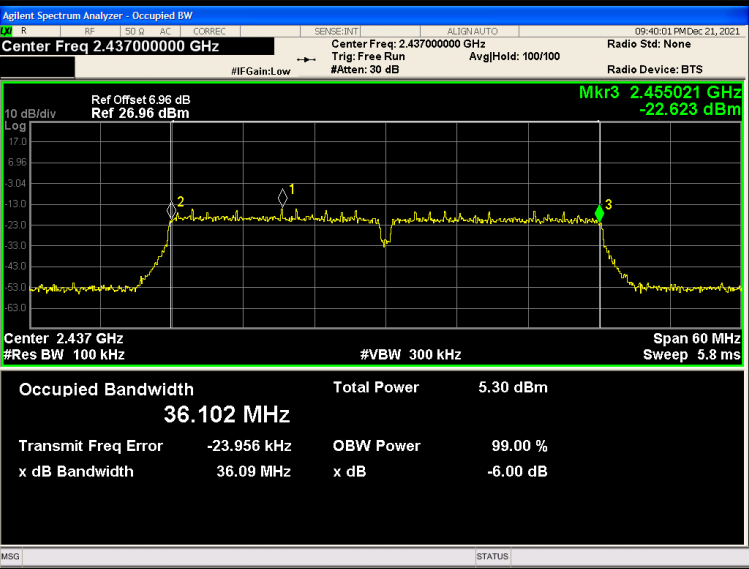
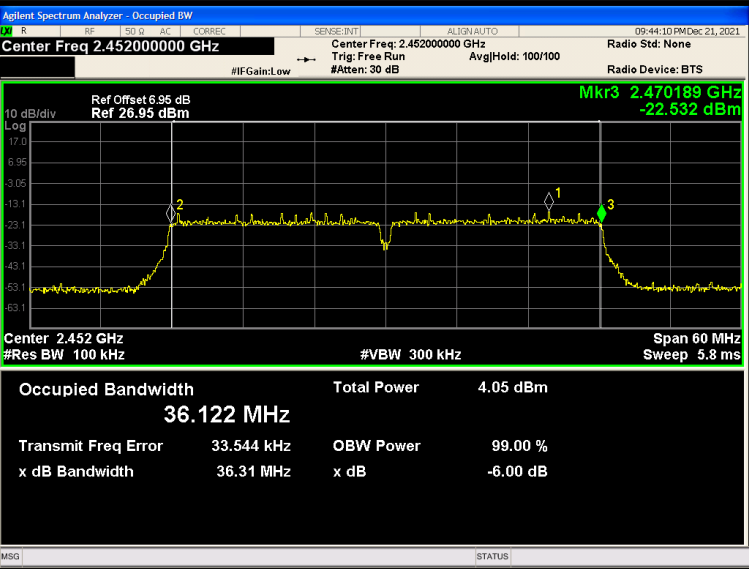
802.11g/MCH



802.11g/HCH

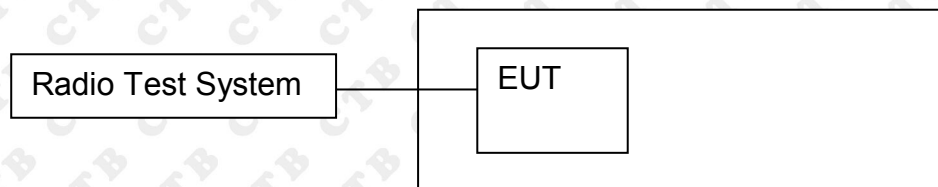


802.11n(HT20)/LC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 2.41200000 GHz Ref Offset 6.91 dB Ref 26.91 dBm Mkr3 2.420805 GHz -18.541 dBm Center 2.412 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 17.655 MHz Total Power 5.61 dBm Transmit Freq Error -1.216 kHz OBW Power 99.00 % x dB Bandwidth 17.61 MHz x dB -6.00 dB
802.11n(HT20)/MC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 2.437000000 GHz Ref Offset 6.96 dB Ref 26.96 dBm Mkr3 2.445821 GHz -18.912 dBm Center 2.437 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 17.664 MHz Total Power 5.00 dBm Transmit Freq Error 5.460 kHz OBW Power 99.00 % x dB Bandwidth 17.63 MHz x dB -6.00 dB
802.11n(HT20)/HC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 2.462000000 GHz Ref Offset 6.96 dB Ref 26.96 dBm Mkr3 2.470836 GHz -17.933 dBm Center 2.462 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 17.649 MHz Total Power 5.60 dBm Transmit Freq Error 31.712 kHz OBW Power 99.00 % x dB Bandwidth 17.61 MHz x dB -6.00 dB

802.11n(HT40)/LC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 2.422000000 GHz Ref Offset: 6.91 dB Ref: 26.91 dBm Mkr3: 2.439803 GHz -22.542 dBm Center: 2.422 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 60 MHz Sweep: 5.8 ms Occupied Bandwidth: 36.032 MHz Total Power: 4.88 dBm Transmit Freq Error: -58.449 kHz OBW Power: 99.00 % x dB Bandwidth: 35.72 MHz x dB: -6.00 dB
802.11n(HT40)/MC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 2.437000000 GHz Ref Offset: 6.96 dB Ref: 26.96 dBm Mkr3: 2.455021 GHz -22.623 dBm Center: 2.437 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 60 MHz Sweep: 5.8 ms Occupied Bandwidth: 36.102 MHz Total Power: 5.30 dBm Transmit Freq Error: -23.956 kHz OBW Power: 99.00 % x dB Bandwidth: 36.09 MHz x dB: -6.00 dB
802.11n(HT40)/HC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 2.452000000 GHz Ref Offset: 6.95 dB Ref: 26.95 dBm Mkr3: 2.470189 GHz -22.532 dBm Center: 2.452 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 60 MHz Sweep: 5.8 ms Occupied Bandwidth: 36.122 MHz Total Power: 4.05 dBm Transmit Freq Error: 33.544 kHz OBW Power: 99.00 % x dB Bandwidth: 36.31 MHz x dB: -6.00 dB

11. POWER SPECTRAL DENSITY

11.1 Block Diagram Of Test Setup



11.2 Limit

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS

11.3 Test procedure

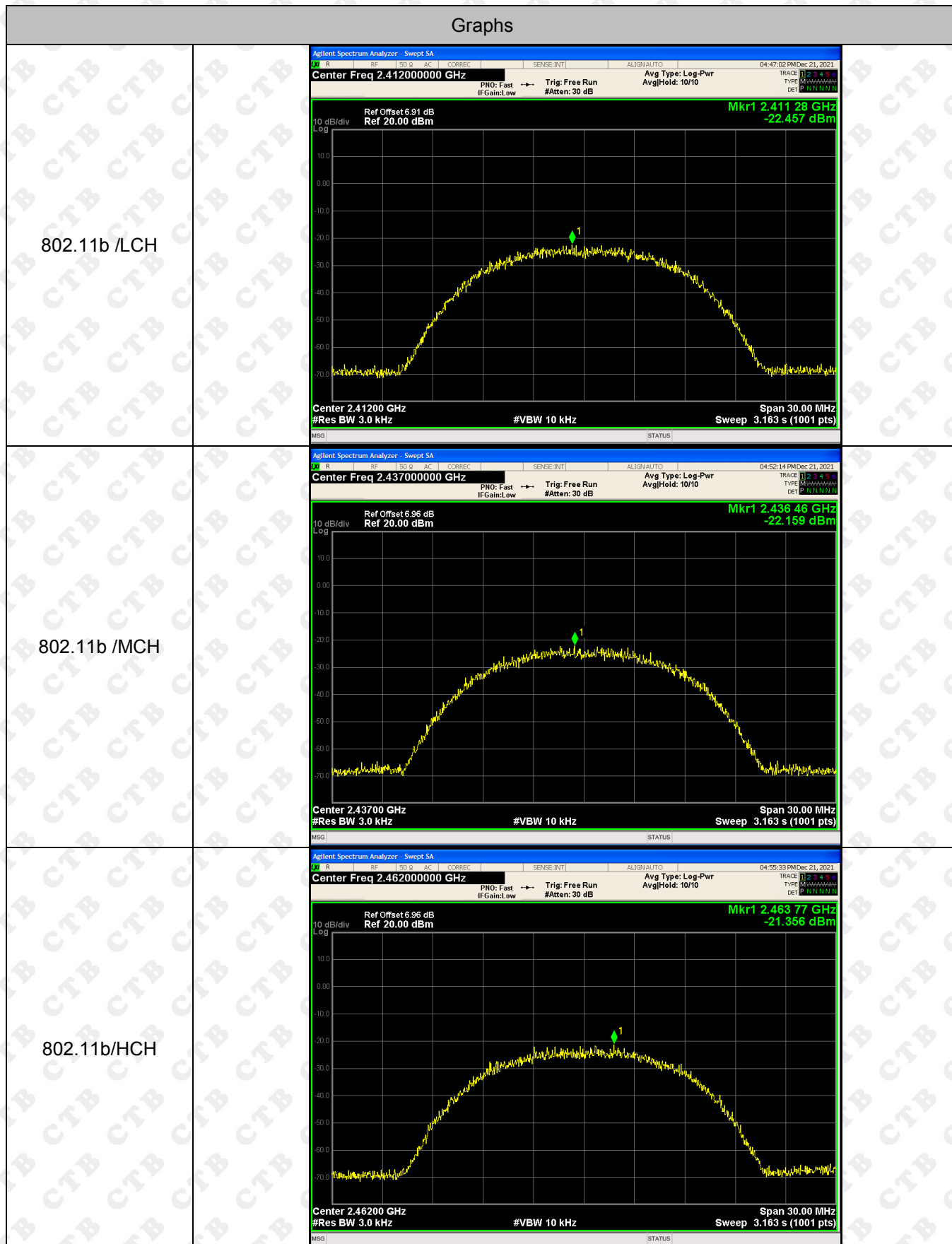
1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
4. Set the VBW $\geq 3 \times \text{RBW}$.
5. Detector = PEAK.
6. Sweep time = auto couple.
7. Trace mode = max hold.
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 limit, reduce RBW (no less than 3 kHz) and repeat.

11.4 Test Result

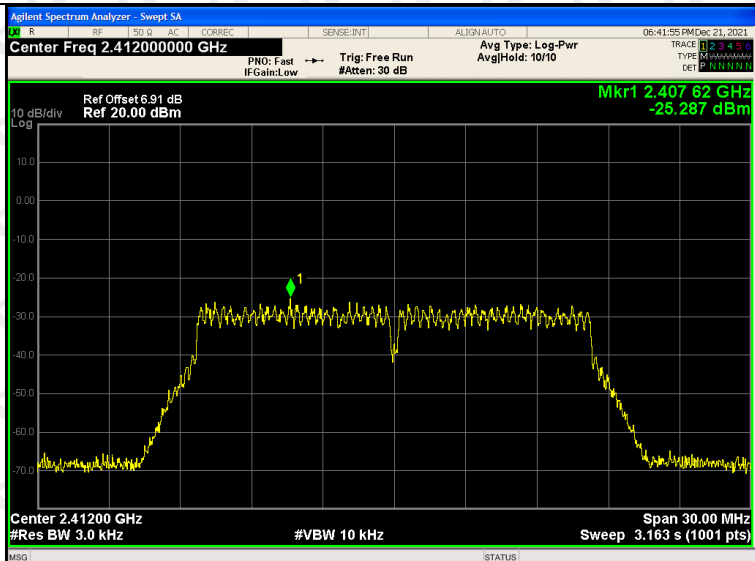
Mode	Channel.	Power Spectral Density [dBm /3KHz] ANT 1	Power Spectral Density [dBm /3KHz] ANT 2	Power Spectral Density [dBm /3KHz] Total	Limit(dBm)
802.11b	LCH	-22.457	-21.43	/	8
	MCH	-22.159	-21.945	/	8
	HCH	-21.356	-22.261	/	8
802.11g	LCH	-25.287	-26.251	/	8
	MCH	-25.76	-24.885	/	8
	HCH	-25.477	-25.674	/	8
802.11n(H T20)	LCH	-26.218	-25.918	-23.055	8
	MCH	-24.993	-25.372	-22.168	8
	HCH	-25.574	-25.544	-22.549	8
802.11n(H T40)	LCH	-29.54	-29.601	-26.560	8
	MCH	-30.281	-29.466	-26.844	8
	HCH	-28.909	-30.146	-26.473	8

Test Graph

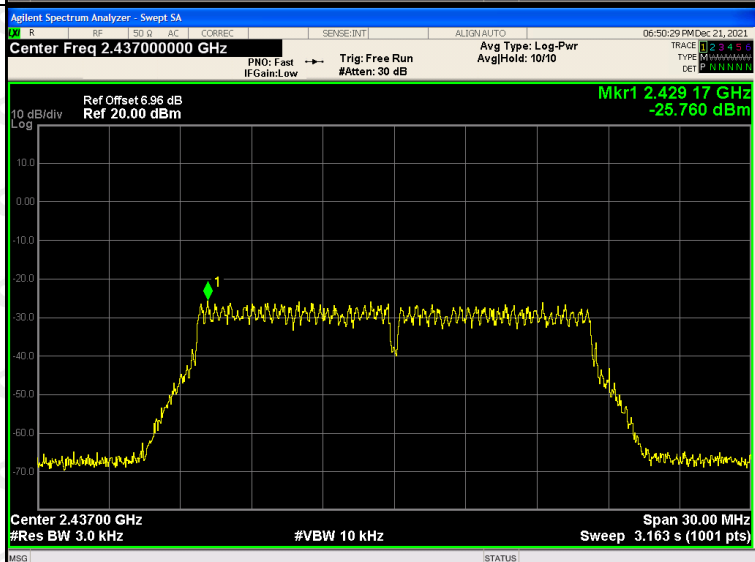
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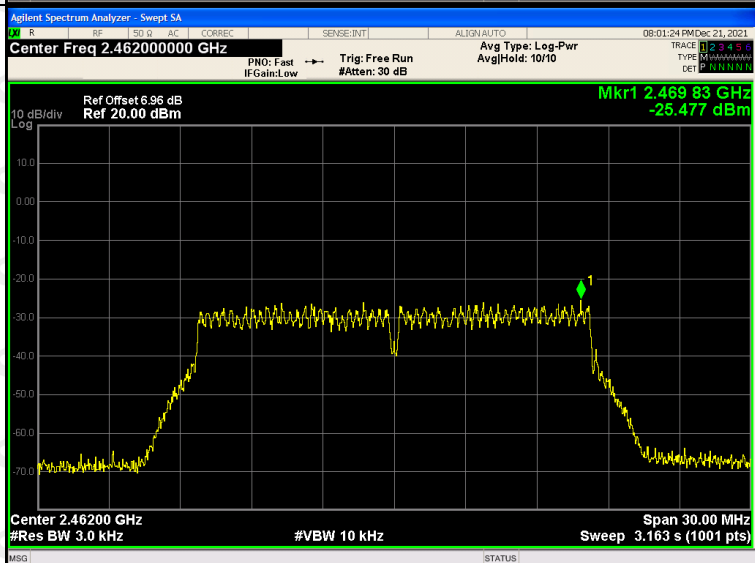
802.11g/LCH

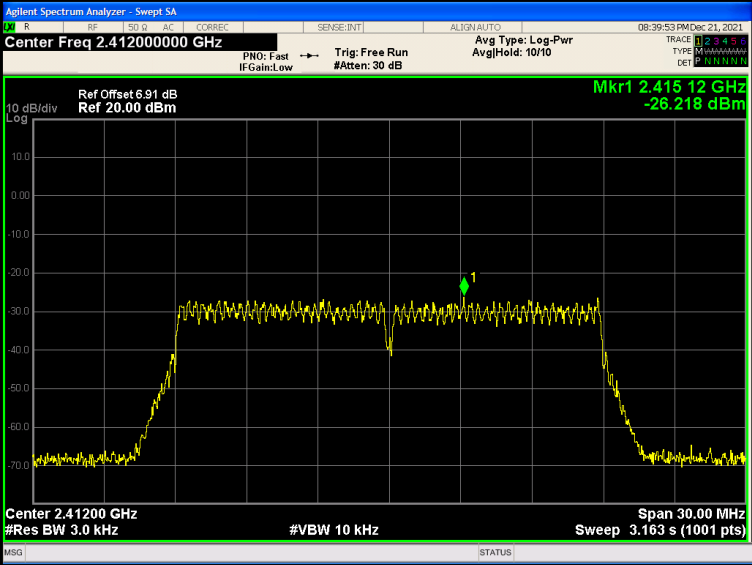
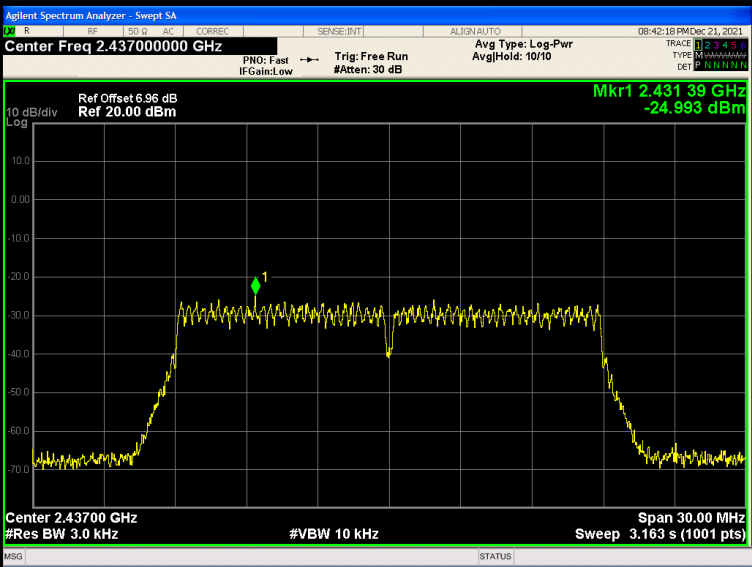
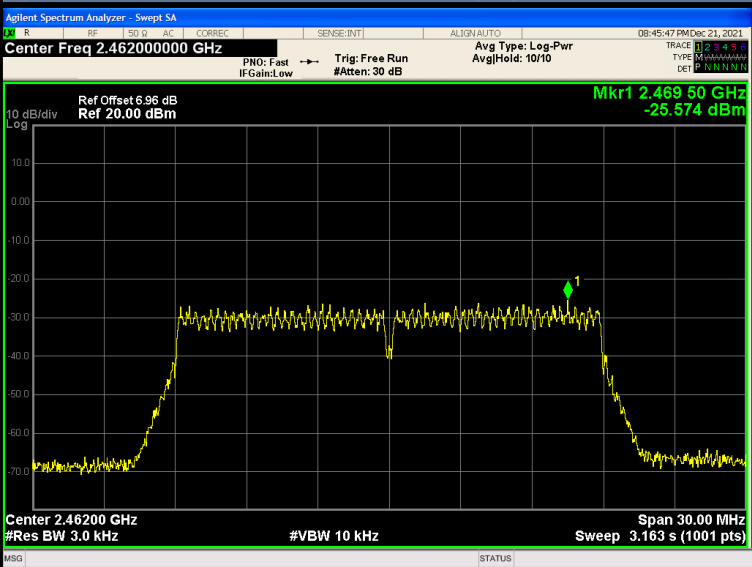


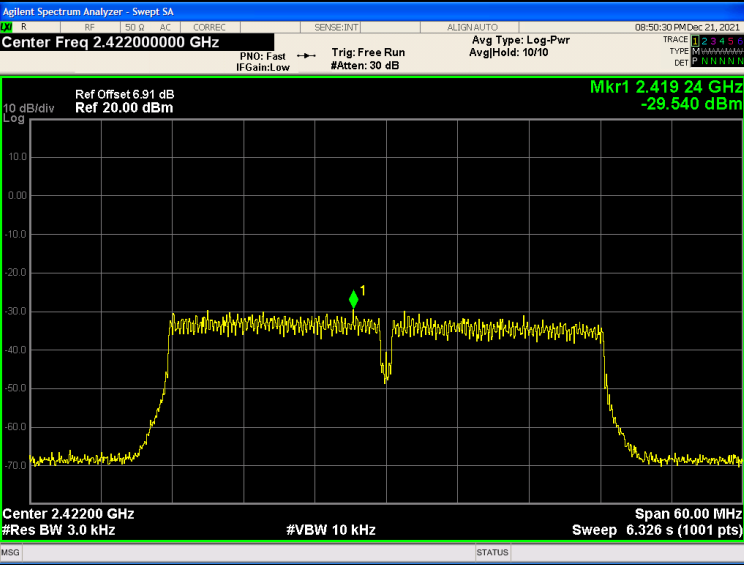
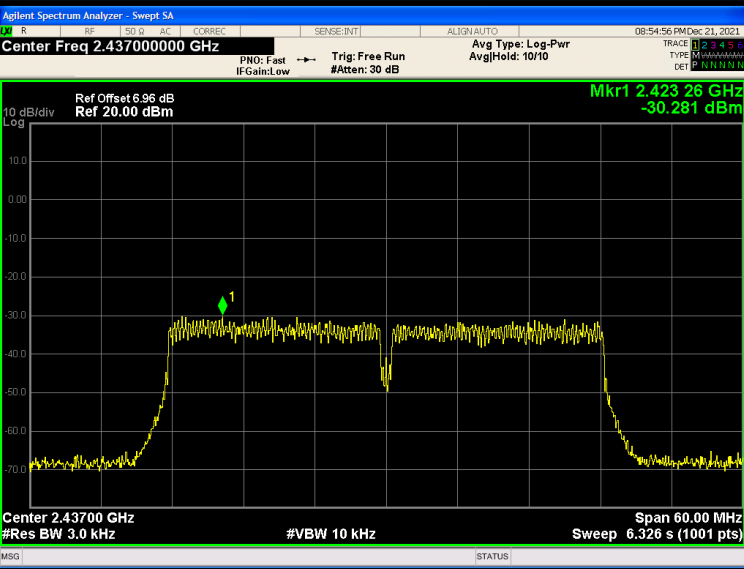
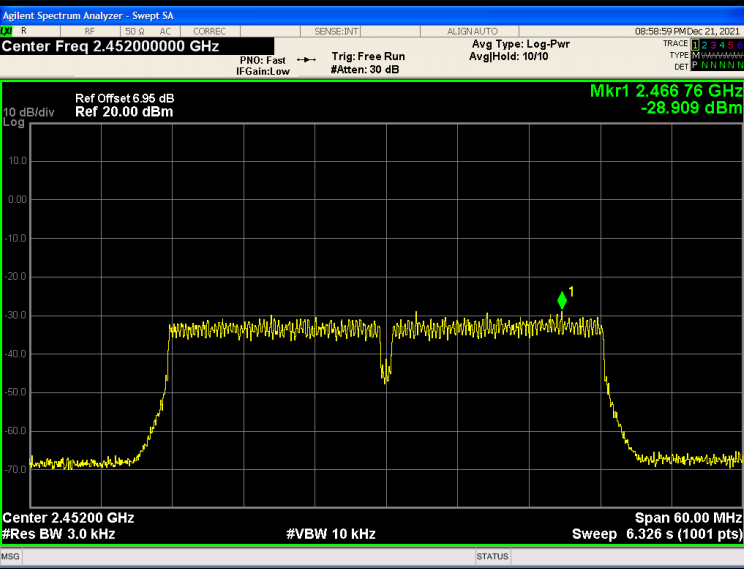
802.11g/MCH



802.11g/HCH



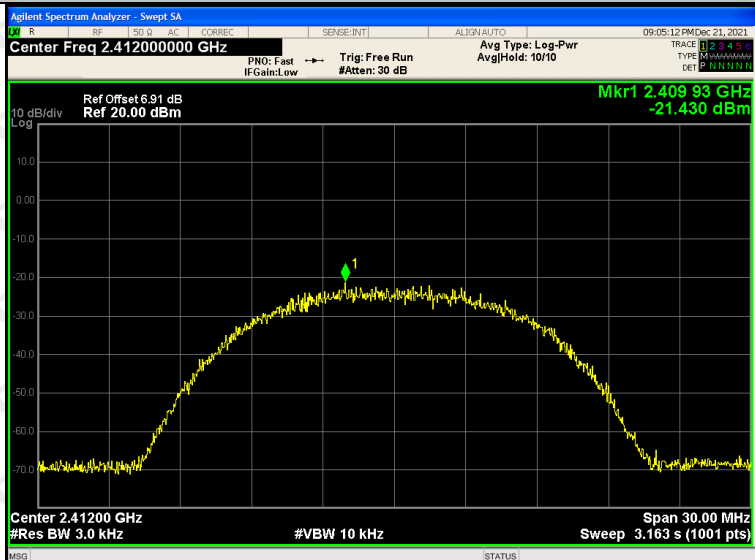
802.11n(HT20)/LC H	 Agilent Spectrum Analyzer - Swept SA Center Freq 2.41200000 GHz Ref Offset 6.91 dB Ref 20.00 dBm Mkr1 2.415 12 GHz -26.218 dBm Center 2.41200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts)
802.11n(HT20)/MC H	 Agilent Spectrum Analyzer - Swept SA Center Freq 2.43700000 GHz Ref Offset 6.96 dB Ref 20.00 dBm Mkr1 2.431 39 GHz -24.993 dBm Center 2.43700 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts)
802.11n(HT20)/HC H	 Agilent Spectrum Analyzer - Swept SA Center Freq 2.46200000 GHz Ref Offset 6.96 dB Ref 20.00 dBm Mkr1 2.469 50 GHz -25.574 dBm Center 2.46200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts)

802.11n(HT40)/LC H		
802.11n(HT40)/MC H		
802.11n(HT40)/HC H		

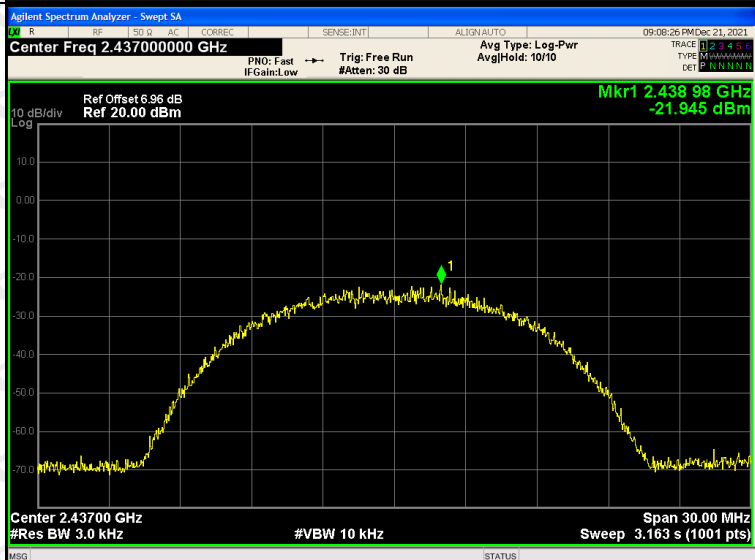
ANT 2:

Graphs

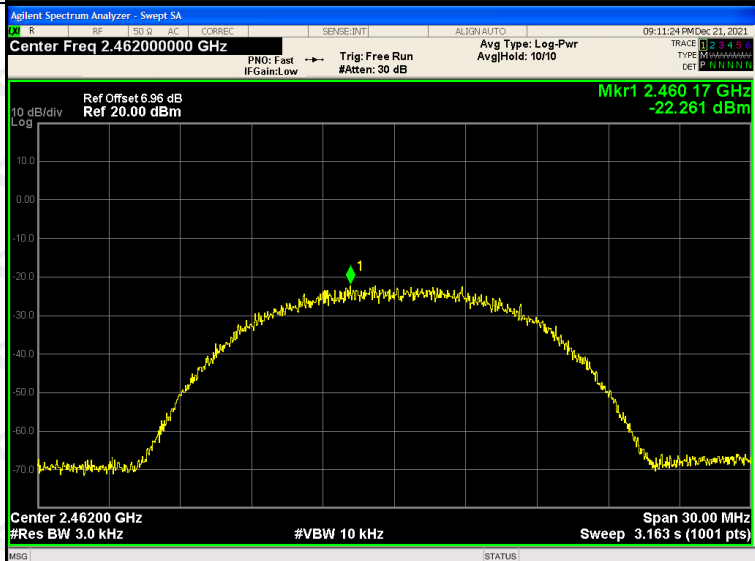
802.11b /LCH



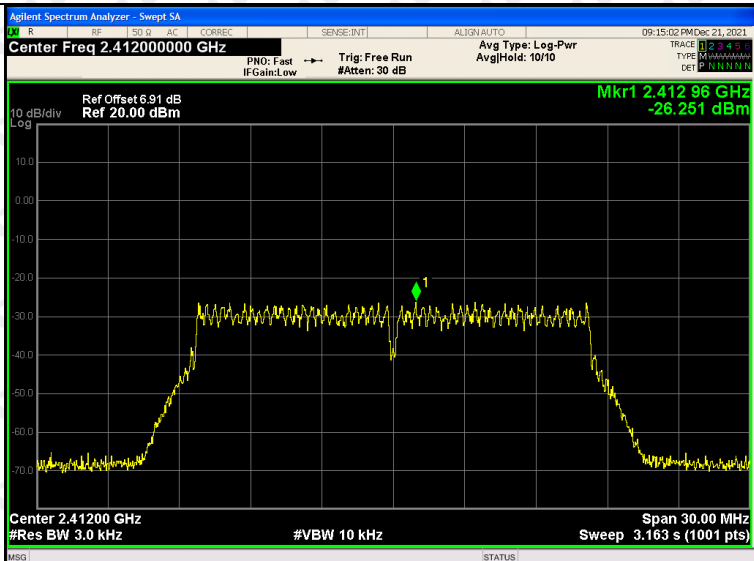
802.11b /MCH



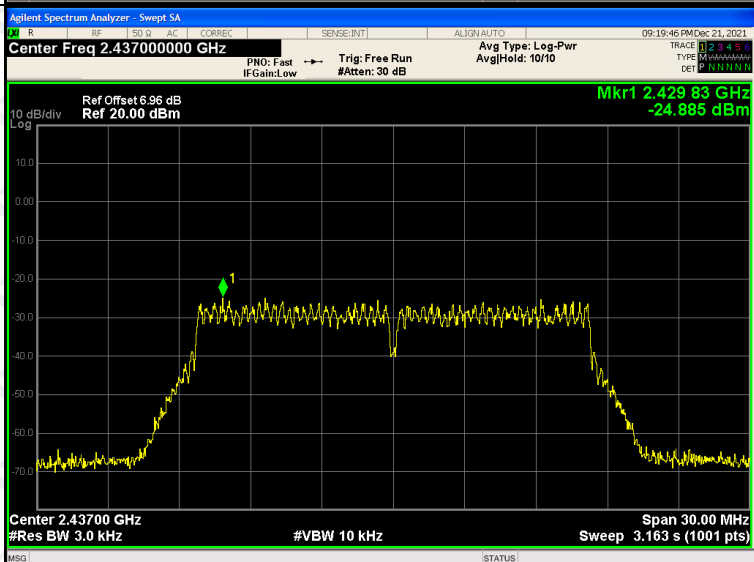
802.11b/HCH



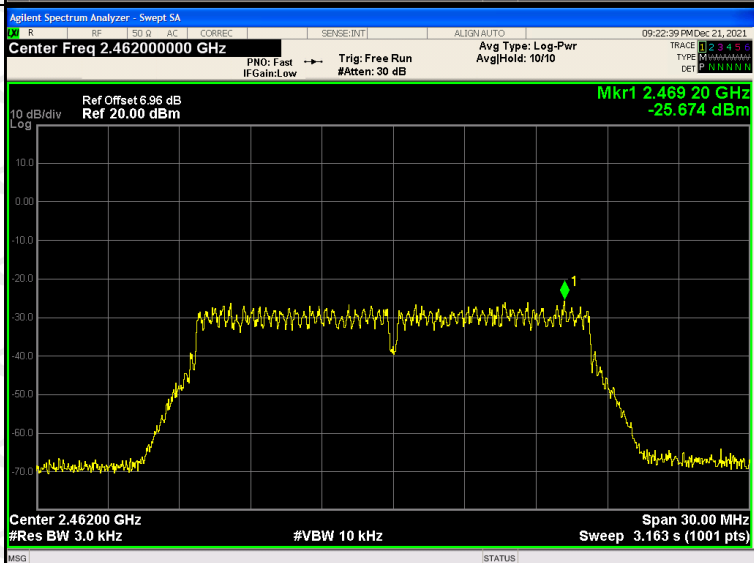
802.11g/LCH

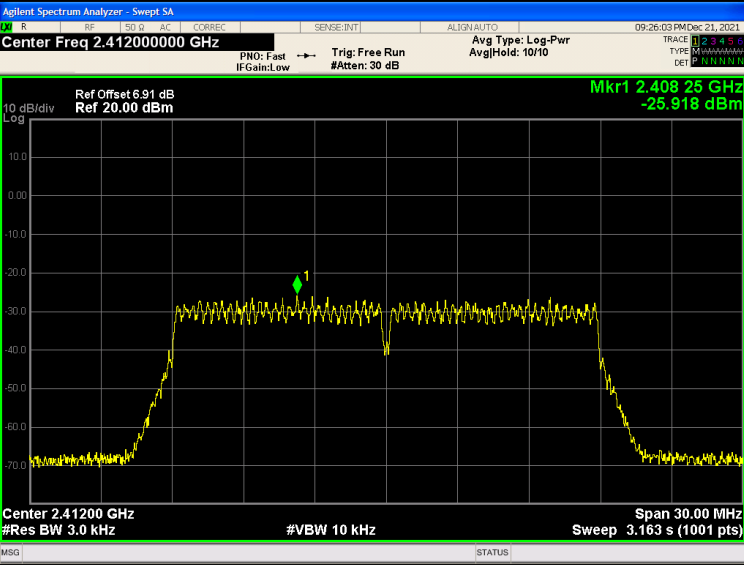
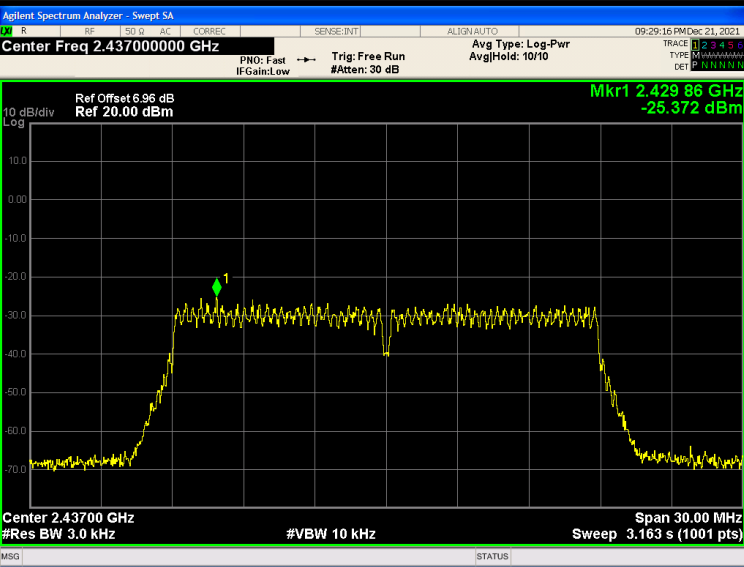
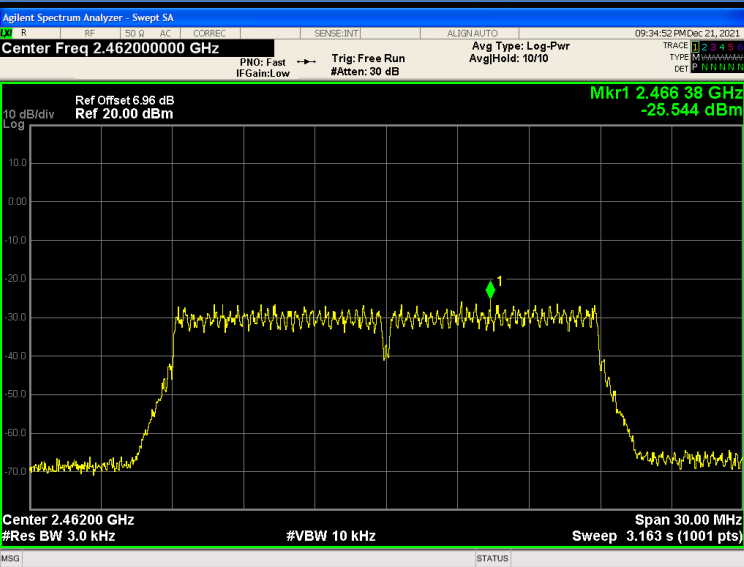


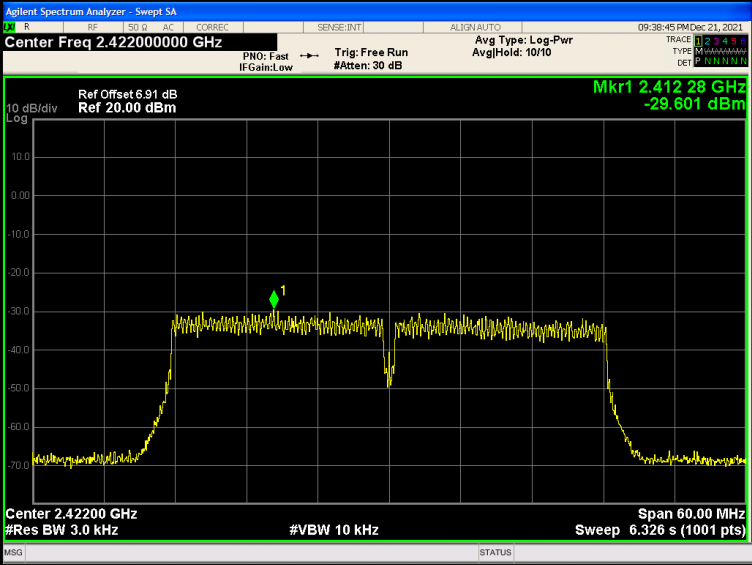
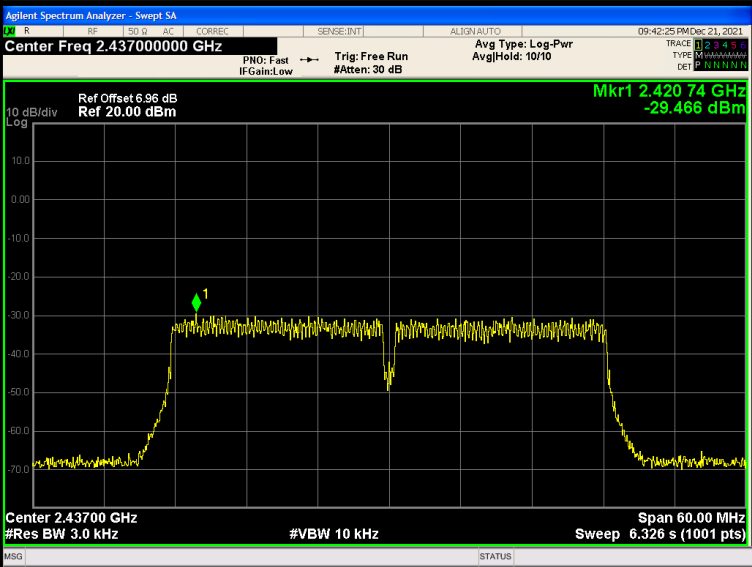
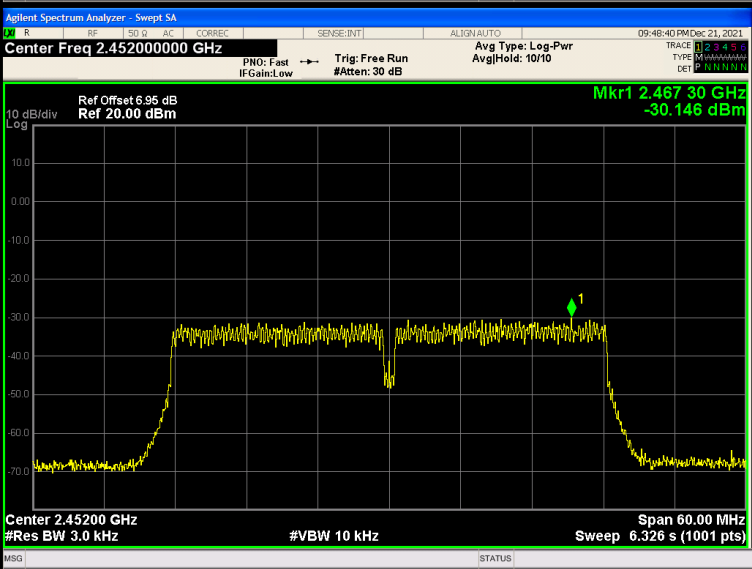
802.11g/MCH



802.11g/HCH



802.11n(HT20)/LC H	 Agilent Spectrum Analyzer - Swept SA Center Freq 2.41200000 GHz Ref Offset 6.91 dB Ref 20.00 dBm Mkr1 2.408 25 GHz -25.918 dBm Center 2.41200 GHz #Res BW 3.0 kHz #VBW 10 kHz Sweep 3.163 s (1001 pts)	
802.11n(HT20)/MC H	 Agilent Spectrum Analyzer - Swept SA Center Freq 2.43700000 GHz Ref Offset 6.96 dB Ref 20.00 dBm Mkr1 2.429 86 GHz -25.372 dBm Center 2.43700 GHz #Res BW 3.0 kHz #VBW 10 kHz Sweep 3.163 s (1001 pts)	
802.11n(HT20)/HC H	 Agilent Spectrum Analyzer - Swept SA Center Freq 2.46200000 GHz Ref Offset 6.96 dB Ref 20.00 dBm Mkr1 2.466 38 GHz -25.544 dBm Center 2.46200 GHz #Res BW 3.0 kHz #VBW 10 kHz Sweep 3.163 s (1001 pts)	

802.11n(HT40)/LC H		
802.11n(HT40)/MC H		
802.11n(HT40)/HC H		

12. ANTENNA REQUIREMENT

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(b) (4) requirement:

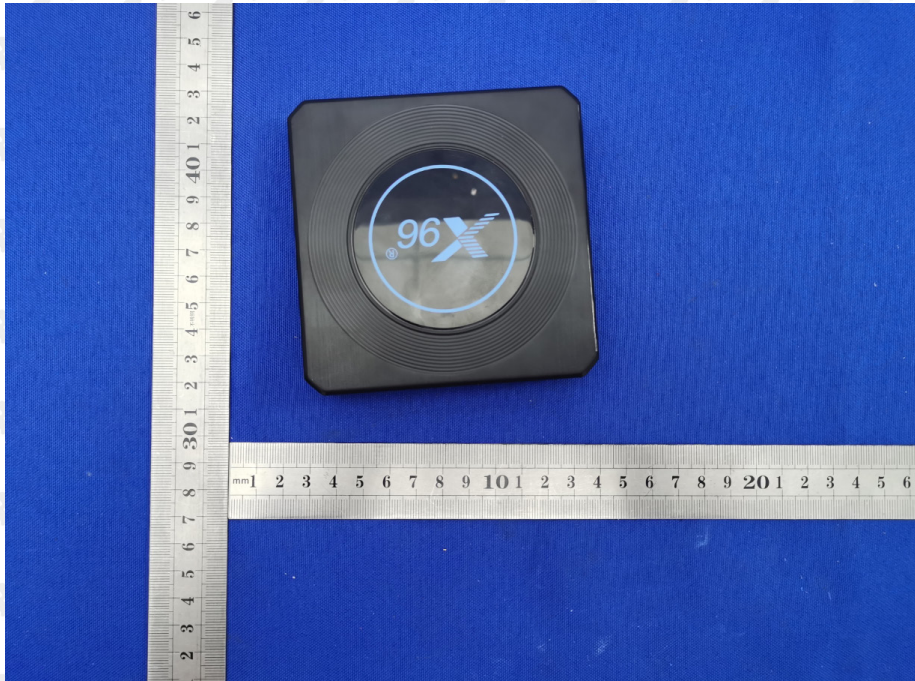
The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

EUT Antenna:

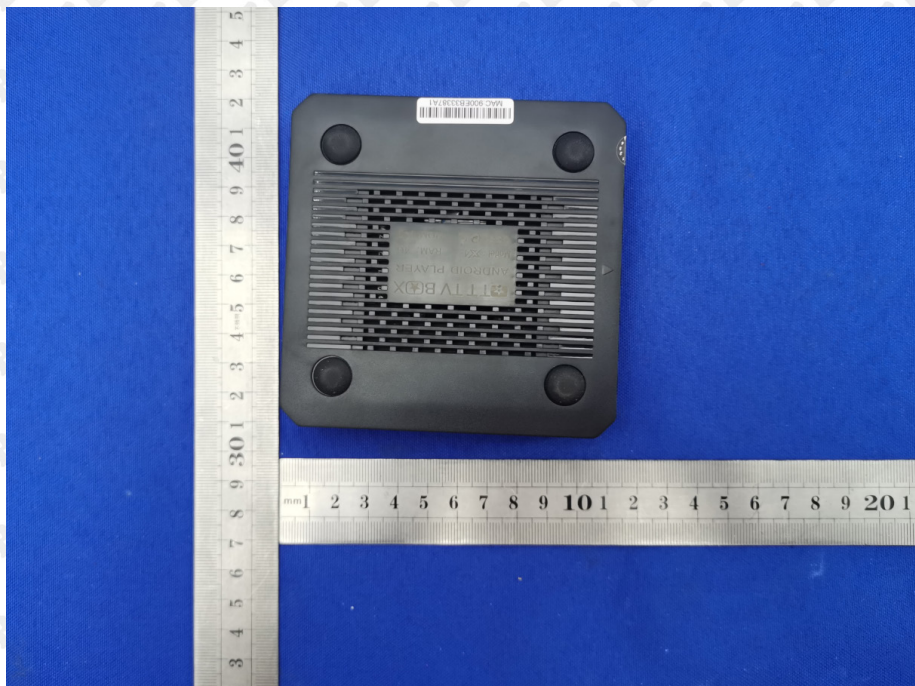
The antenna is Internal antenna and no consideration of replacement. The best case gain of the antenna is 1.0dBi.

13. EUT PHOTOGRAPHS

EUT Photo 1



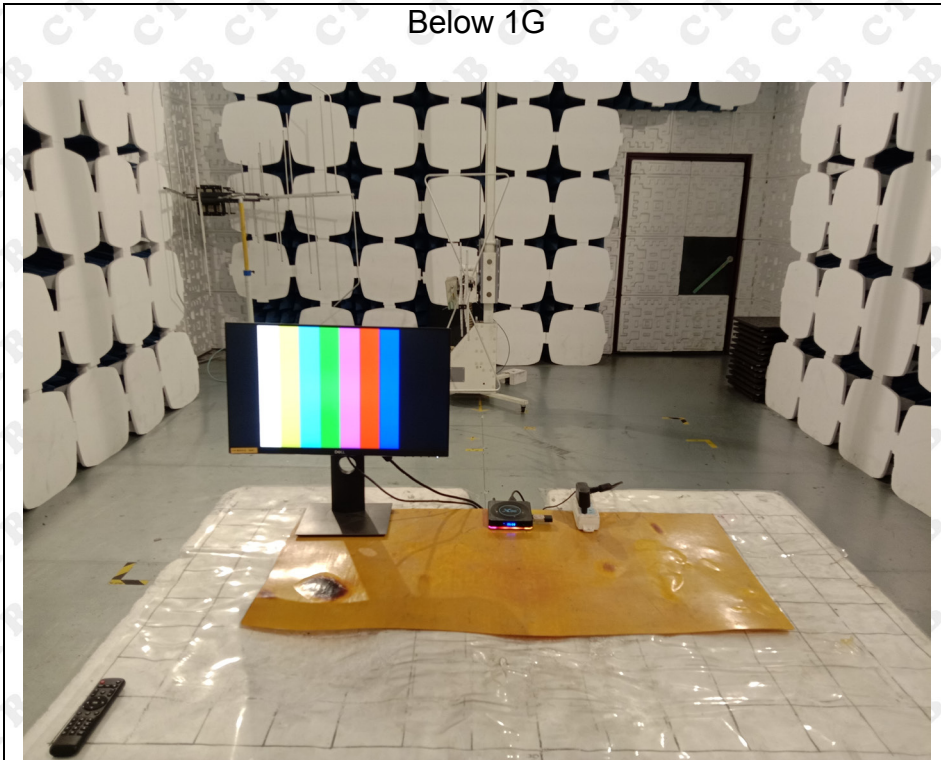
EUT Photo 2



14. EUT TEST SETUP PHOTOGRAPHS

Radiated Emission

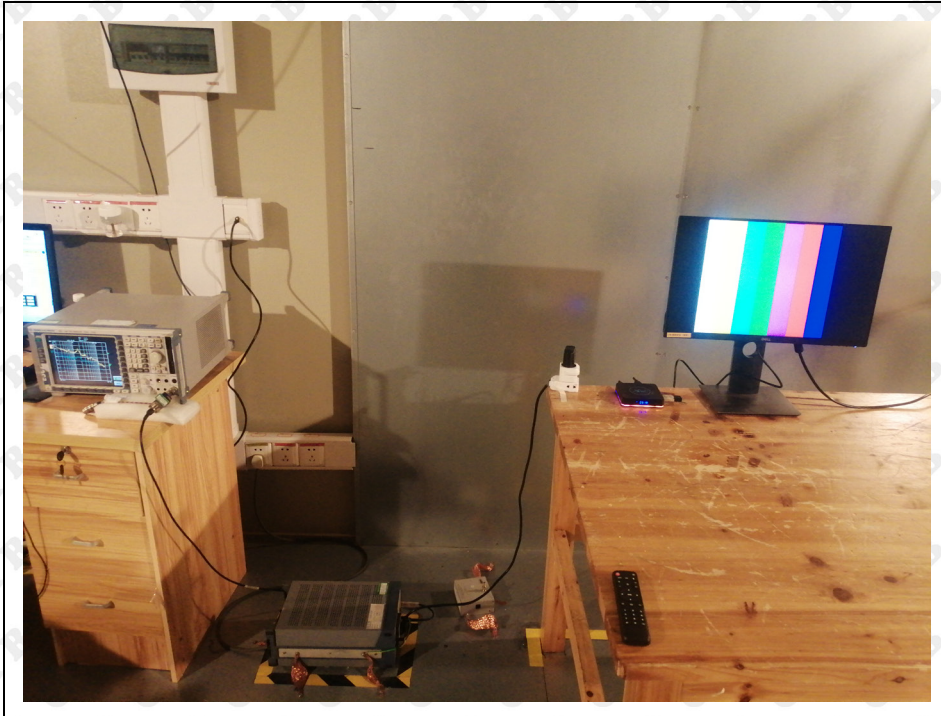
Below 1G



Above 1G



Conducted Emission



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