

Figure Channel 01 (RU Config 106/53) (Chain A):



Figure Channel 01 (RU Config 26/0) (Chain B):



Figure Channel 01 (RU Config 52/37) (Chain B):



Figure Channel 01 (RU Config 106/53) (Chain B):



Figure Channel 13 (RU Config 26/8) (Chain A):



Figure Channel 13 (RU Config 52/40) (Chain A):

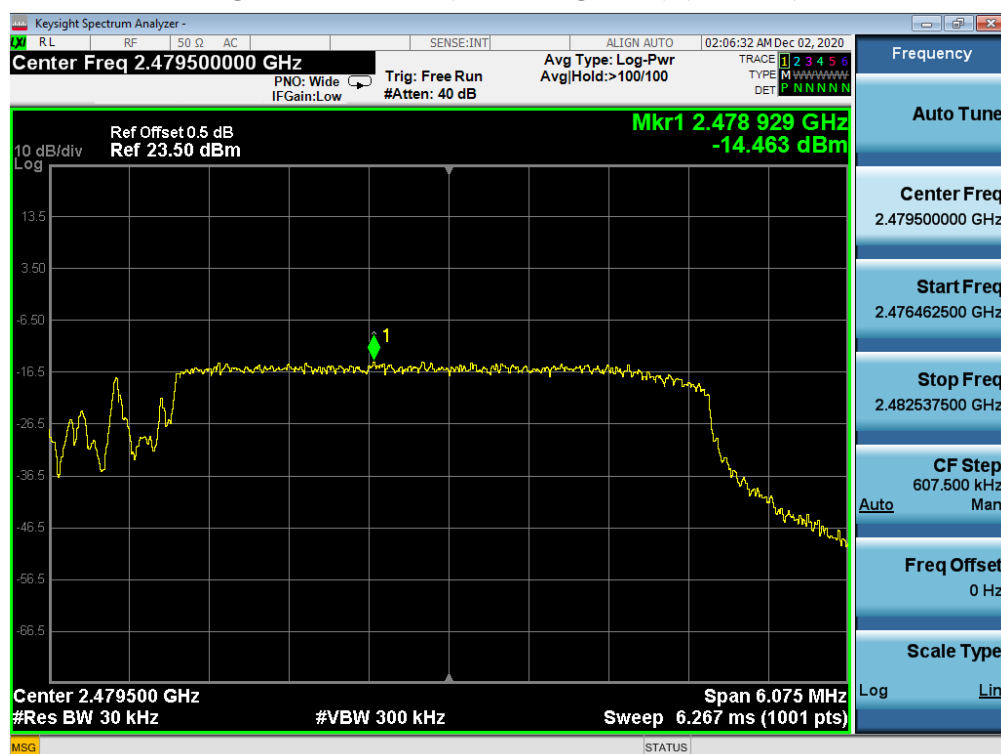


Figure Channel 13 (RU Config 106/54) (Chain A):



Figure Channel 13 (RU Config 26/8) (Chain B):



Figure Channel 13 (RU Config 52/40) (Chain B):

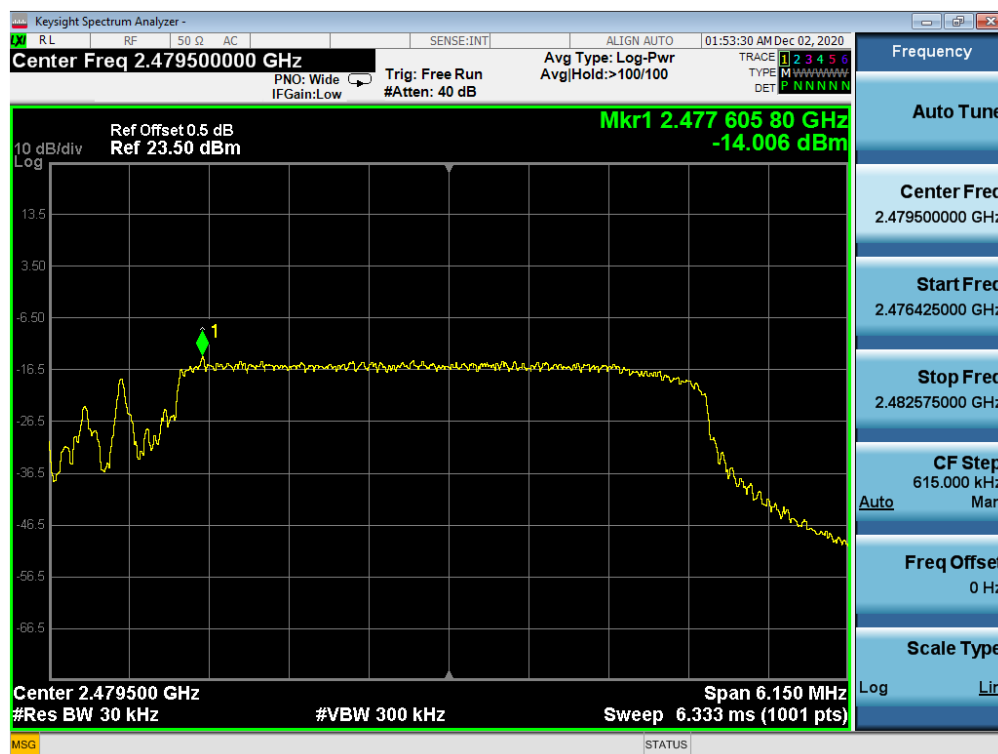
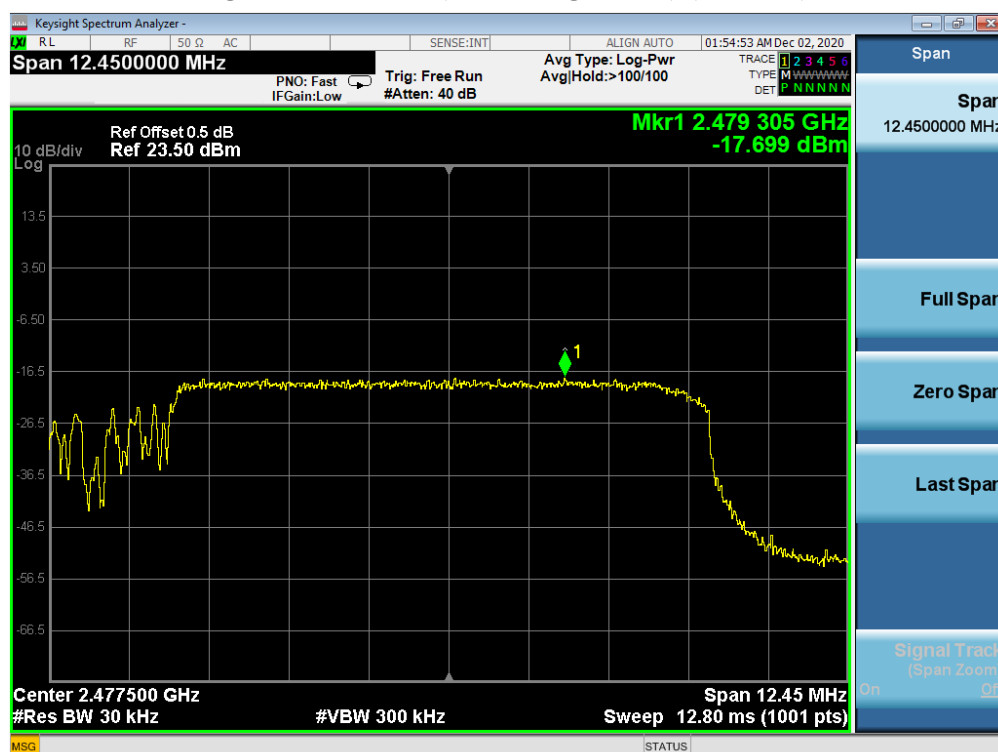


Figure Channel 13 (RU Config 106/54) (Chain B):



Product : Notebook Computers
 Test Item : Power Density Data
 Test Mode : Mode 16 MIMO: Transmit (802.11ax-40BW_34.4Mbps)

RU config: Full

Channel No.	Frequency (MHz)	Chain	PPSD (dBm)	10*log(2) (dB)	Total PPSD (dBm)	Limit (dBm)	Result
03	2422	A	-0.40	3.01	2.61	≤ 8	Pass
		B	-0.15	3.01	2.86	≤ 8	Pass
07	2442	A	-1.18	3.01	1.83	≤ 8	Pass
		B	-0.73	3.01	2.28	≤ 8	Pass
11	2462	A	-15.34	3.01	-12.33	≤ 8	Pass
		B	-13.39	3.01	-10.38	≤ 8	Pass

Note:

The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

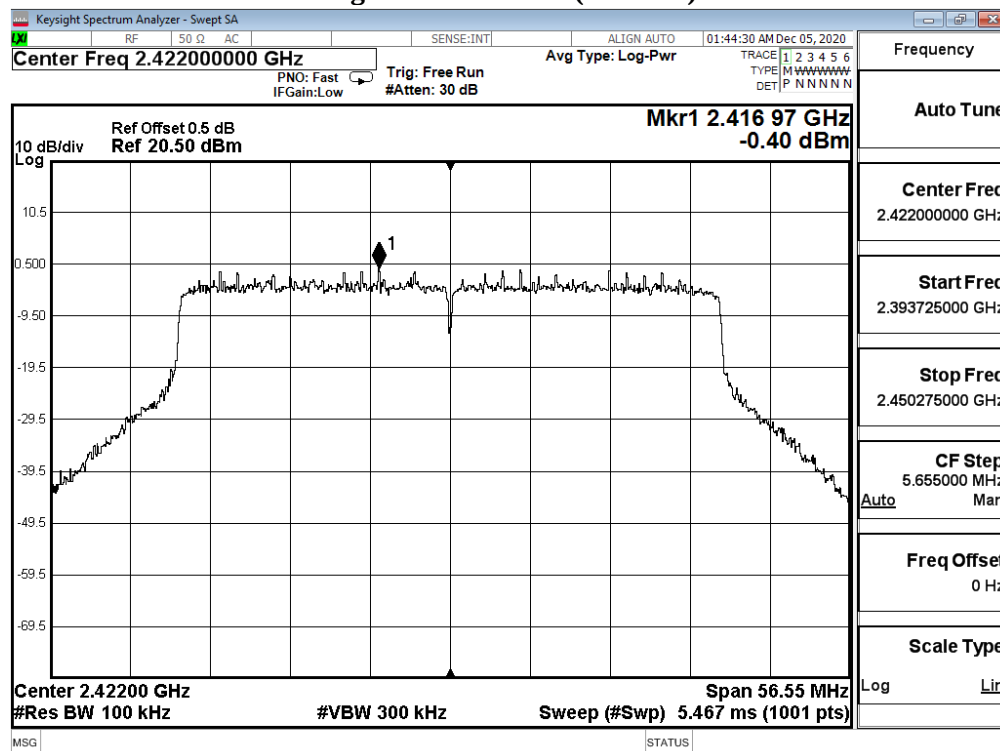
Figure Channel 03: (Chain A)

Figure Channel 07: (Chain A)

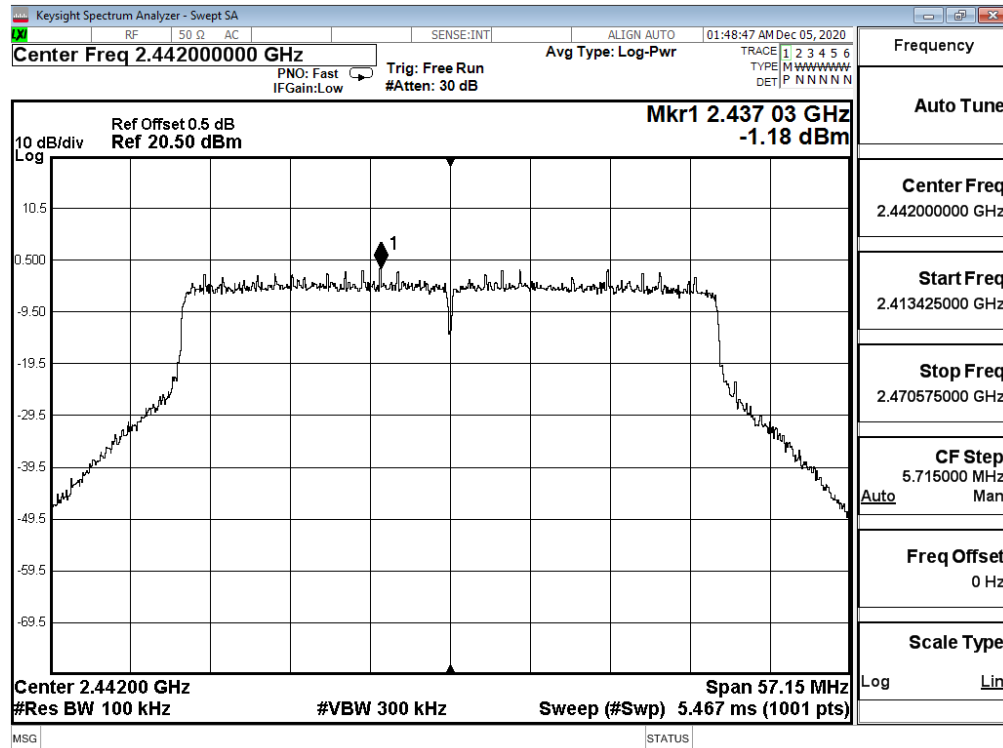


Figure Channel 11: (Chain A)

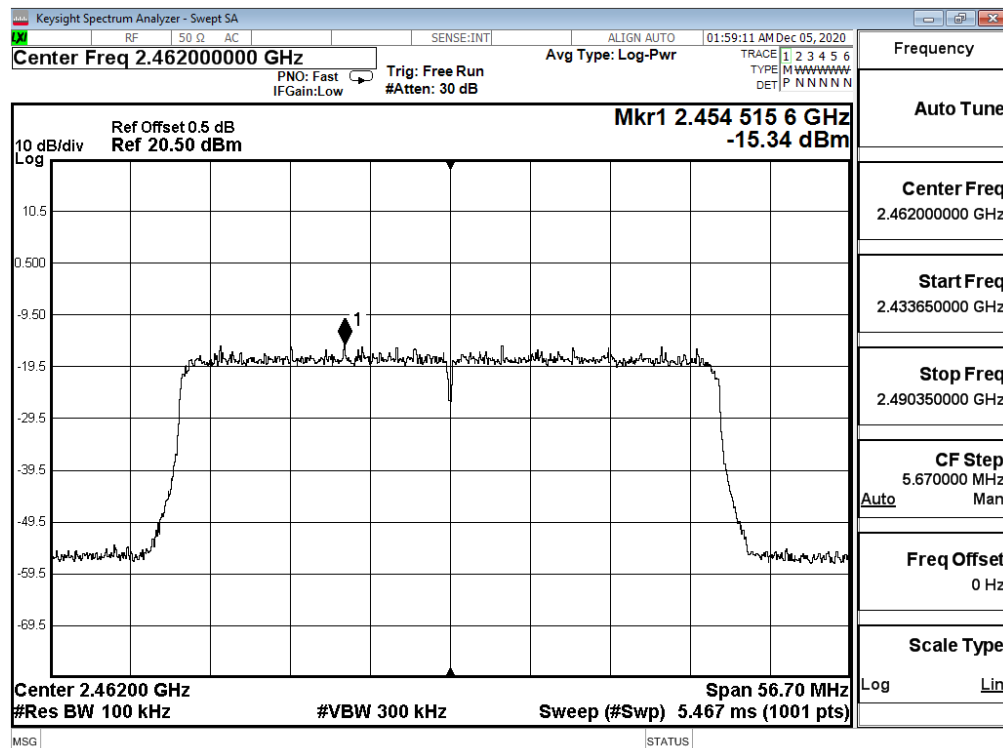


Figure Channel 03: (Chain B)

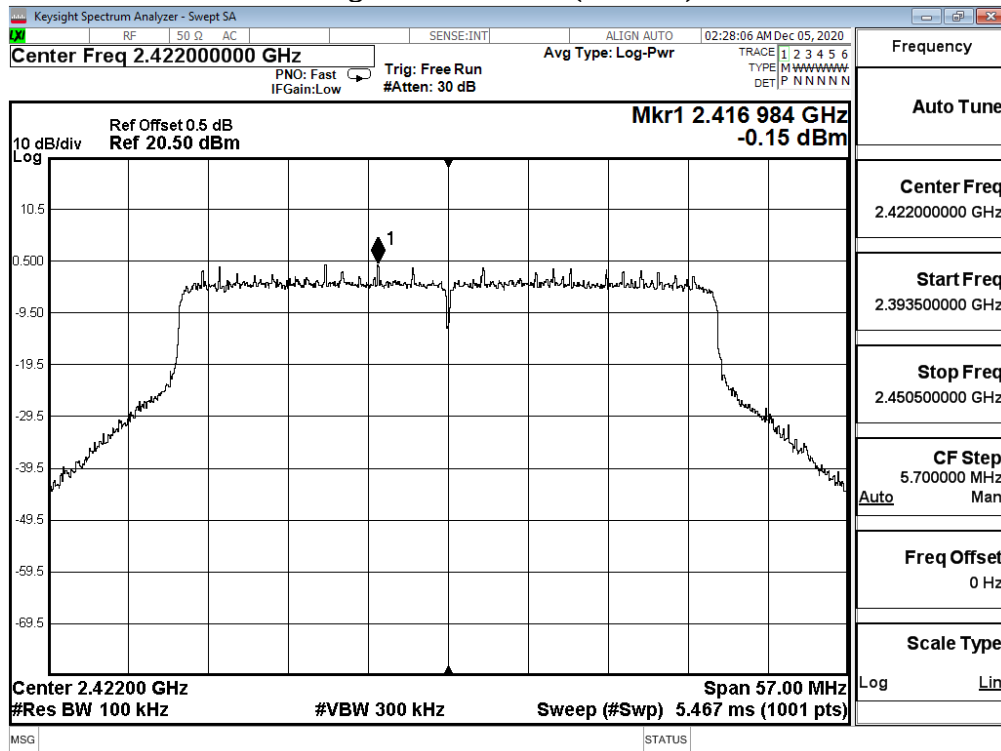


Figure Channel 07: (Chain B)

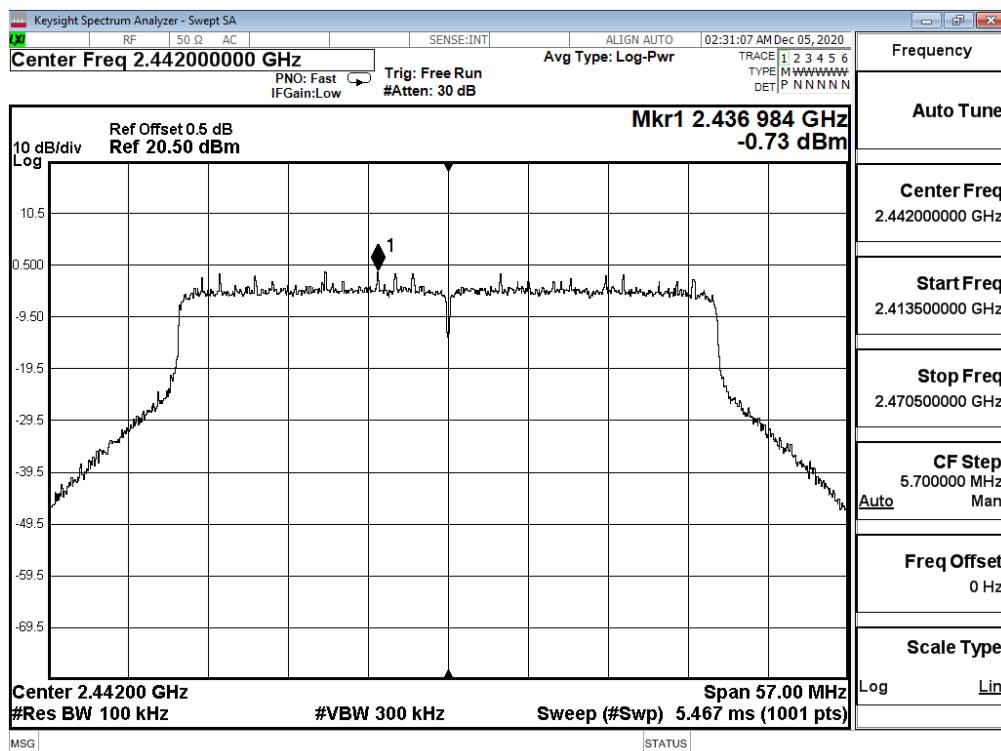
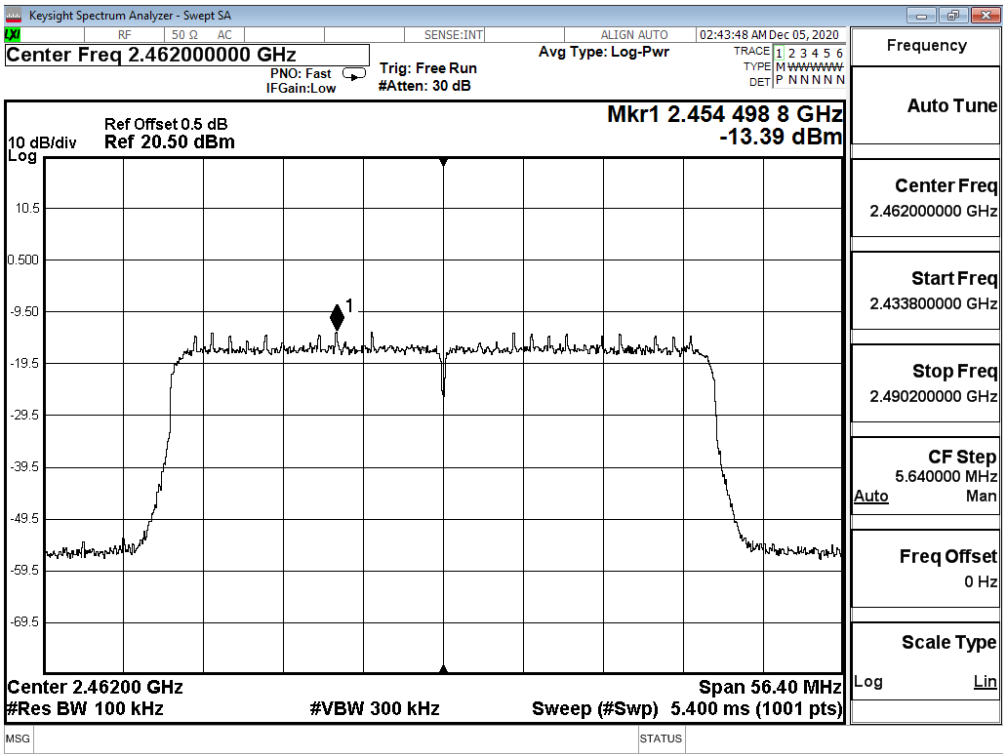


Figure Channel 11: (Chain B)



Product : Notebook Computers
 Test Item : Power Density Data
 Test Mode : Mode 16 MIMO: Transmit (802.11ax-40BW_34.4Mbps)

RU config: Other

Channel No.	Frequency (MHz)	RU Config	Chain (dBm)	PPSD (dBm)	10*log(2) (dB)	Total PSD (dBm)	Limit (dBm)	Result
03	2422	242/61	A	-2.45	3.01	0.56	≤ 8	Pass
			B	-2.13	3.01	0.88		Pass
11	2462	242/62	A	-14.79	3.01	-11.78	≤ 8	Pass
			B	-14.65	3.01	-11.64		Pass

Note:

The quantity $10 \cdot \log 2$ (two antennas) is added to the spectrum peak value according to document 662911 D01.

Figure Channel 03 (RU Config 242/61) (Chain A):



Figure Channel 03 (RU Config 242/61) (Chain B):



Figure Channel 11 (RU Config 242/62) (Chain A):

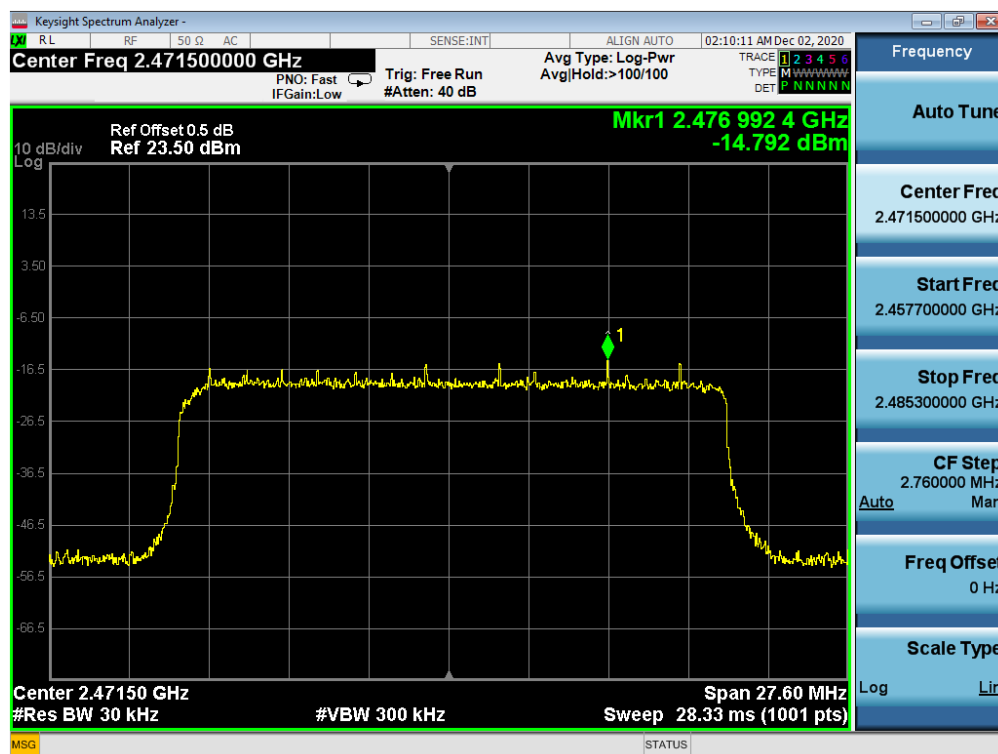
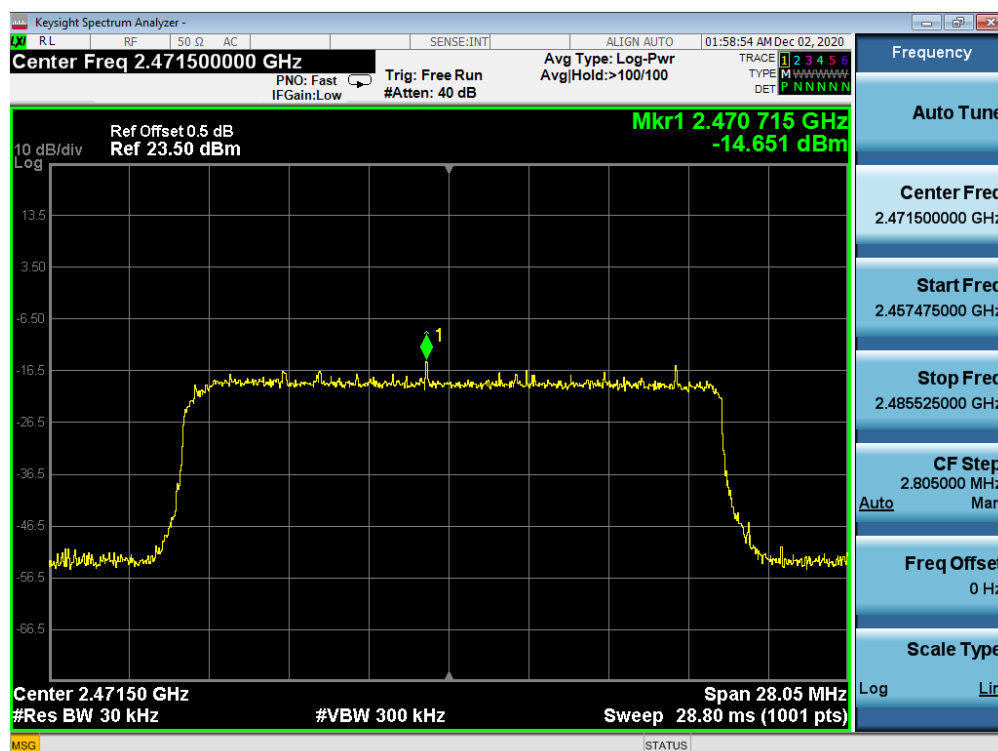
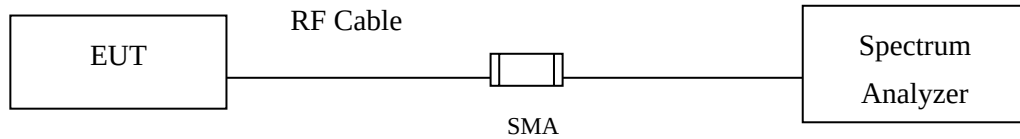


Figure Channel 11 (RU Config 242/62) (Chain B):



9. Duty Cycle

9.1. Test Setup



9.2. Test Procedure

The EUT was setup according to ANSI C63.10 2013; tested according to ANSI C63.10 2013 for compliance to FCC 47CFR 15.247 requirements.

9.3. Test Result of Duty Cycle

Product : Notebook Computers
 Test Item : Duty Cycle
 Test Mode : Transmit

Duty Cycle Formula:

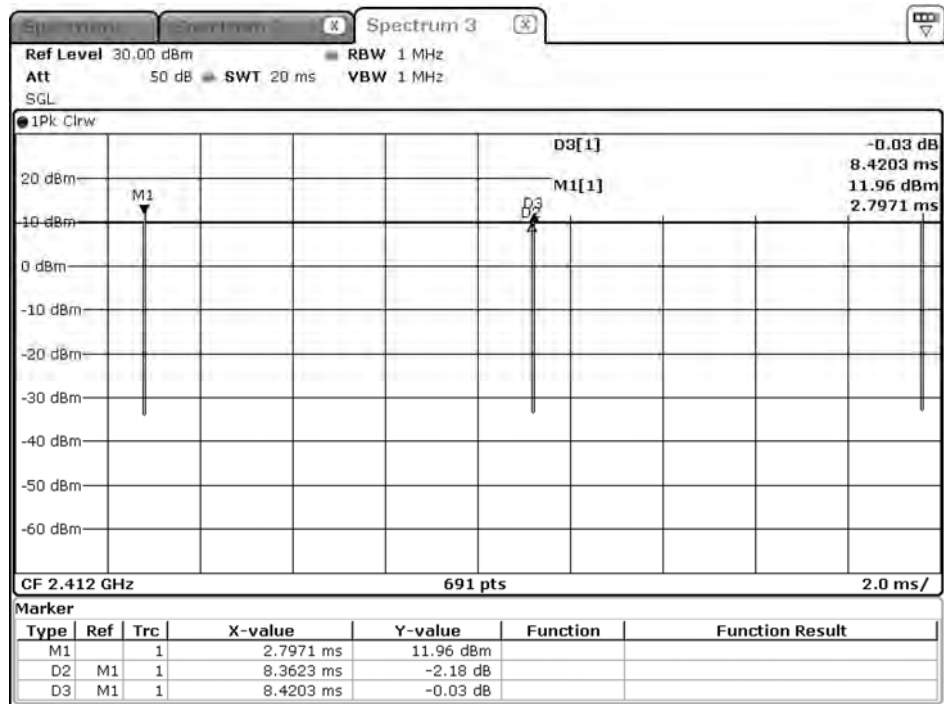
Duty Cycle = $T_{on} / (T_{on} + T_{off})$

Duty Factor = $10 \log (1/\text{Duty Cycle})$

Results: **SISO A**

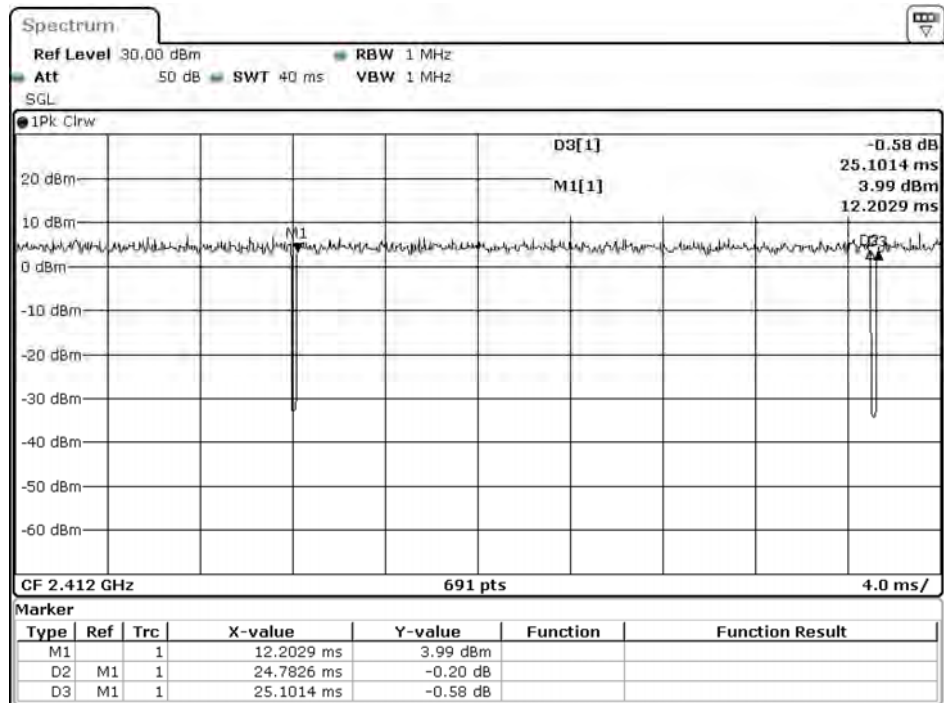
2.4GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11 b	8.3623	8.4203	99.31	0.03
802.11 n20	24.7826	25.1014	98.73	0.06
802.11 n40	17.7681	18.0870	98.24	0.08
802.11ax20	24.6380	25.0000	98.55	0.06
802.11 ax40	18.6230	18.9280	98.39	0.07
802.11 ax20-26/0-RU	5.3739	5.6986	94.30	0.25
802.11 ax20-52/37-RU	5.3942	5.7428	93.93	0.27
802.11 ax20-106/53-RU	5.4239	5.7428	94.45	0.25
802.11 ax40-242/61-RU	5.4203	5.7391	94.45	0.25

802.11b- SISO A



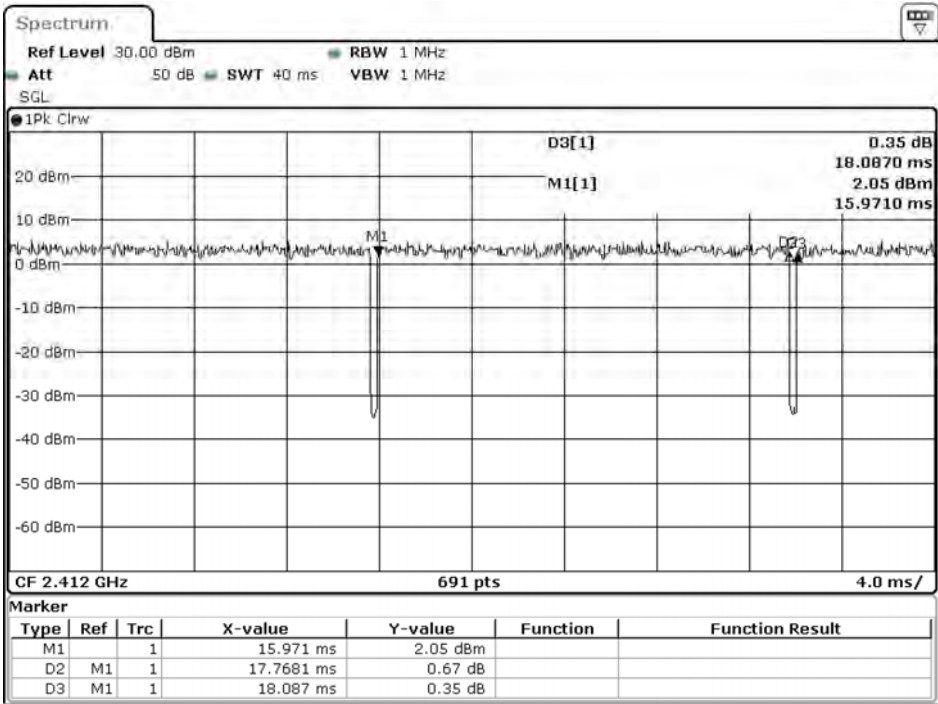
Date: 13.NOV.2020 02:34:00

802.11n20-SISO A



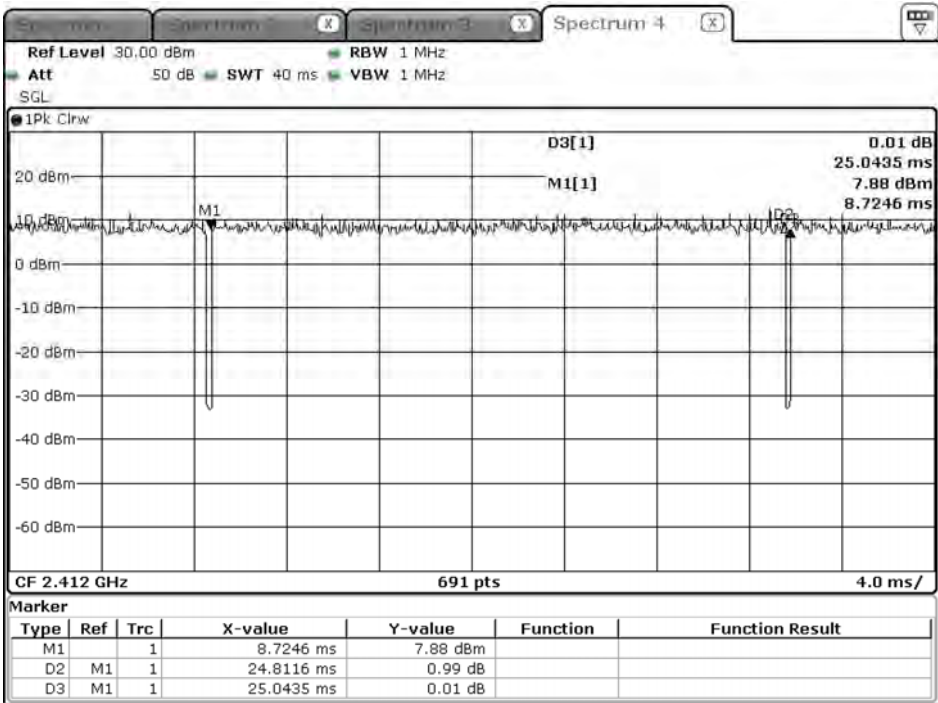
Date: 8.DEC.2020 17:36:13

802.11n40-SISO A



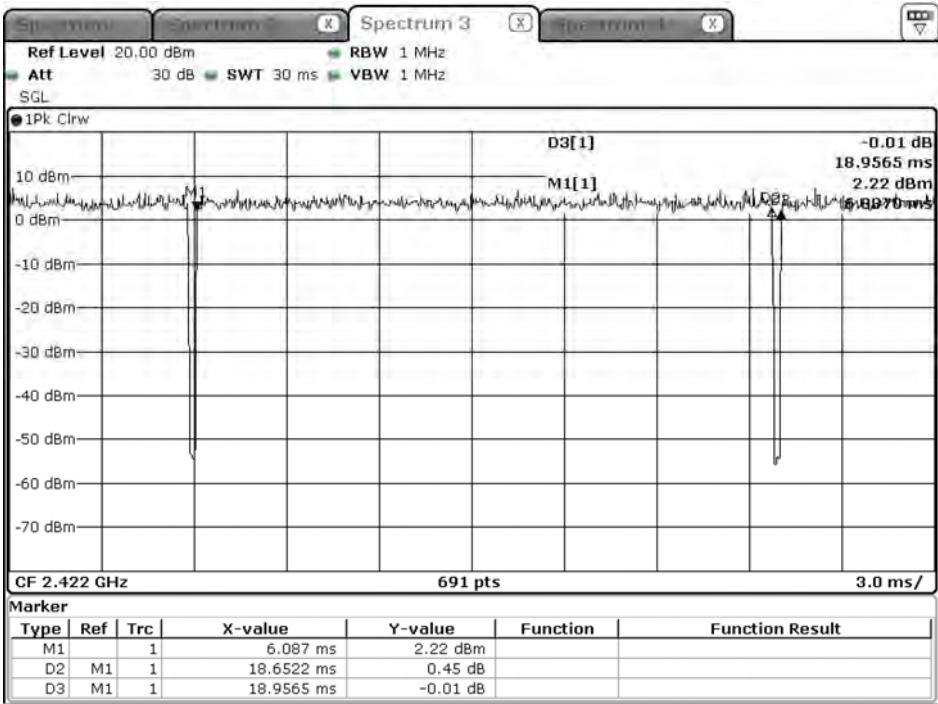
Date: 8.DEC.2020 17:37:10

802.11ax20-SISO A



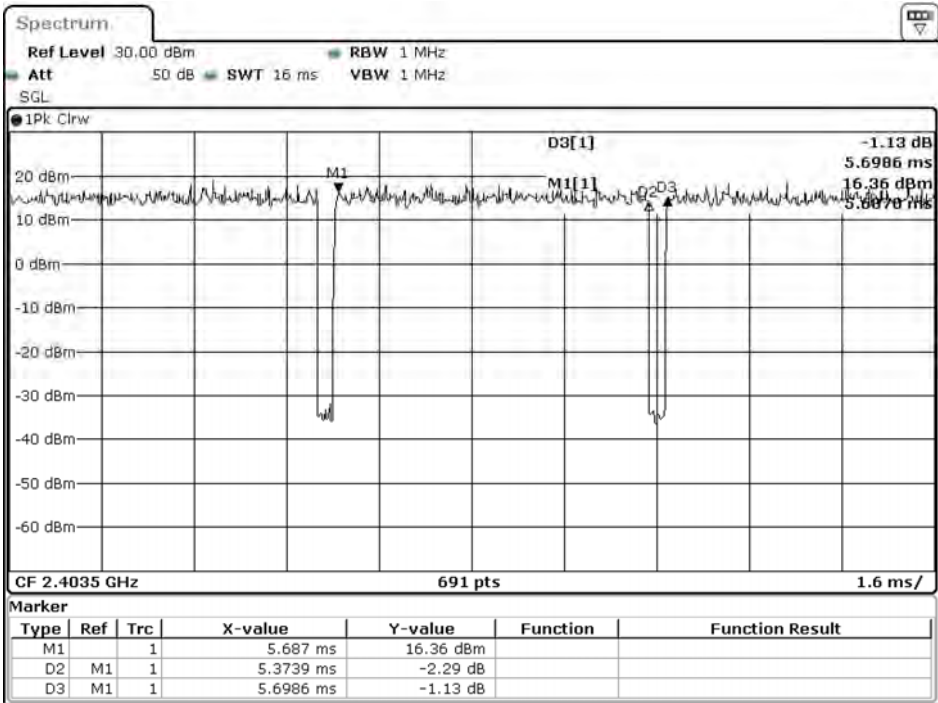
Date: 13.NOV.2020 05:32:35

802.11ax40-SISOA



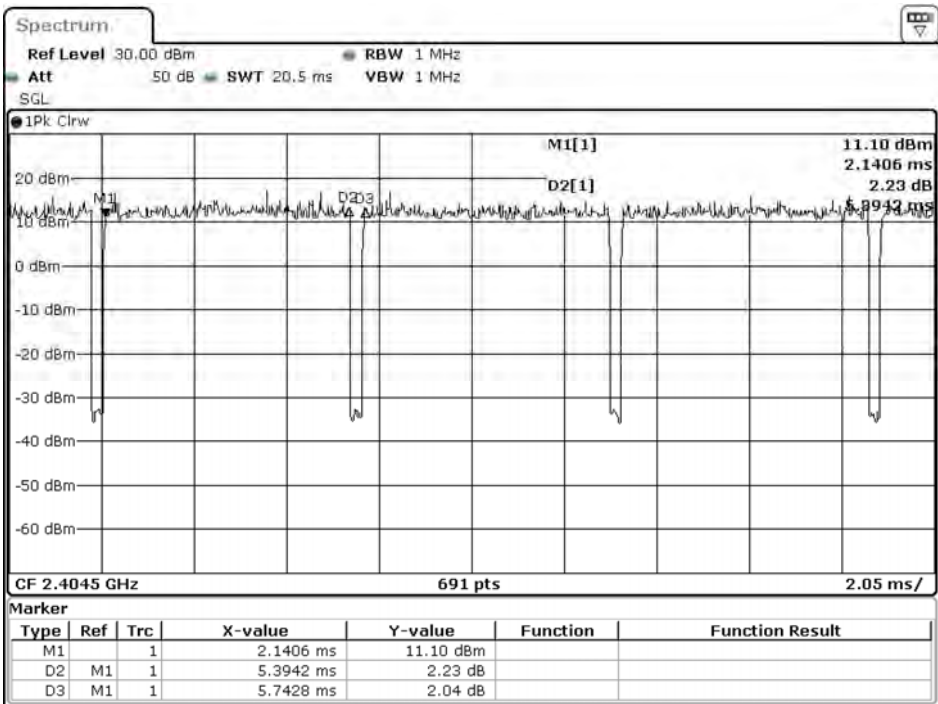
Date: 13.NOV.2020 06:47:04

802.11 ax20-26/0-RU -SISOA



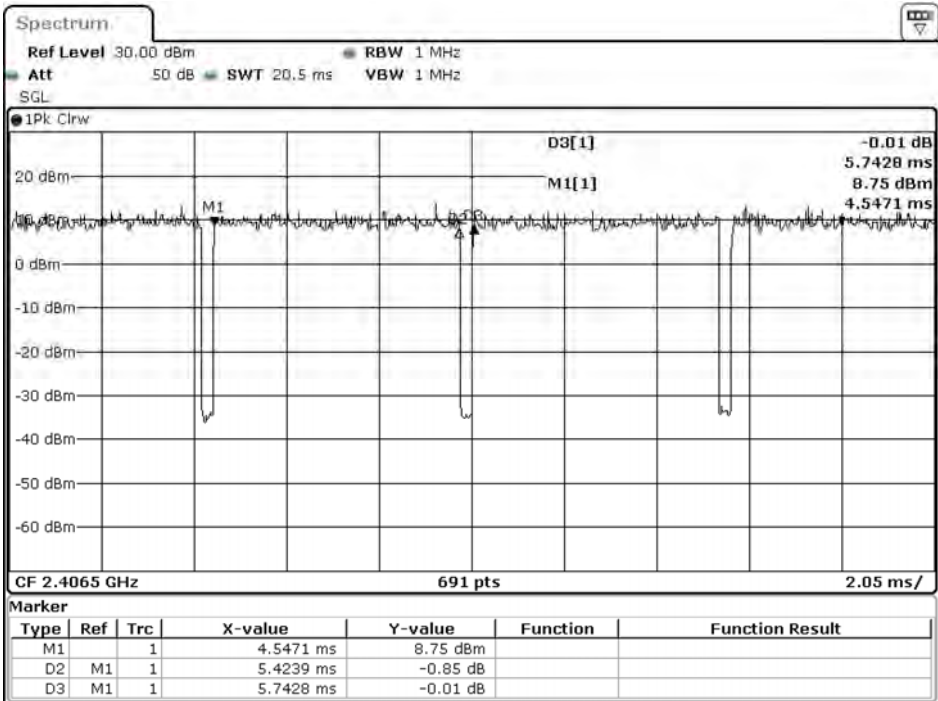
Date: 8.DEC.2020 17:50:13

802.11 ax20-52/37-RU -SISOA



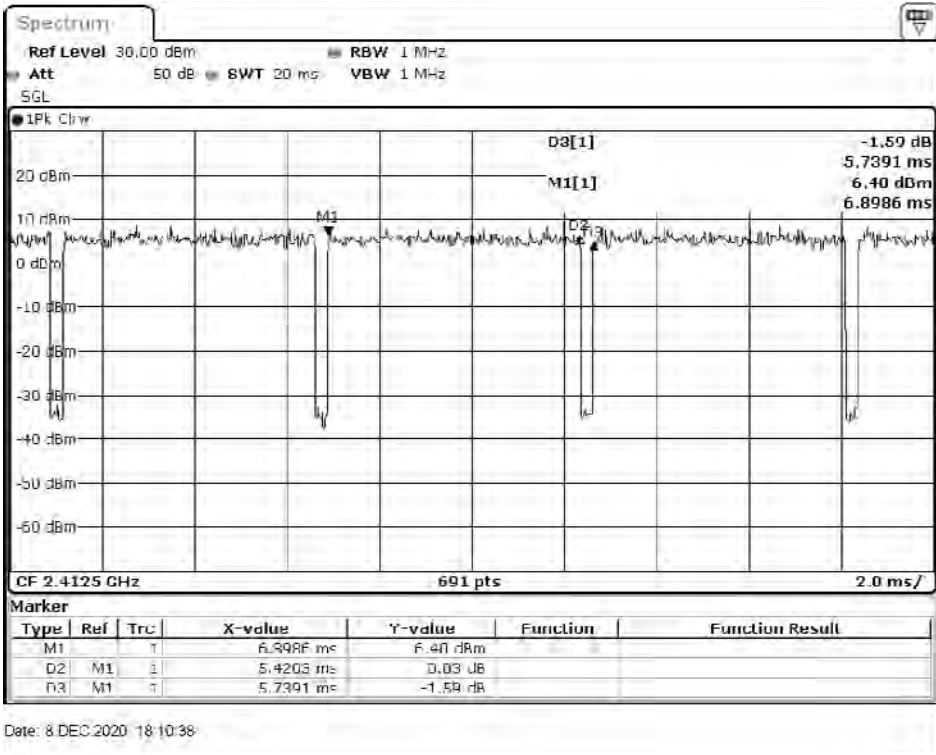
Date: 8.DEC.2020 18:33:09

802.11 ax20-106/53-RU -SISOA



Date: 8.DEC.2020 18:34:45

802.11 ax40-242/61-RU -SISOA



Product : Notebook Computers
Test Item : Duty Cycle
Test Mode : Transmit

Duty Cycle Formula:

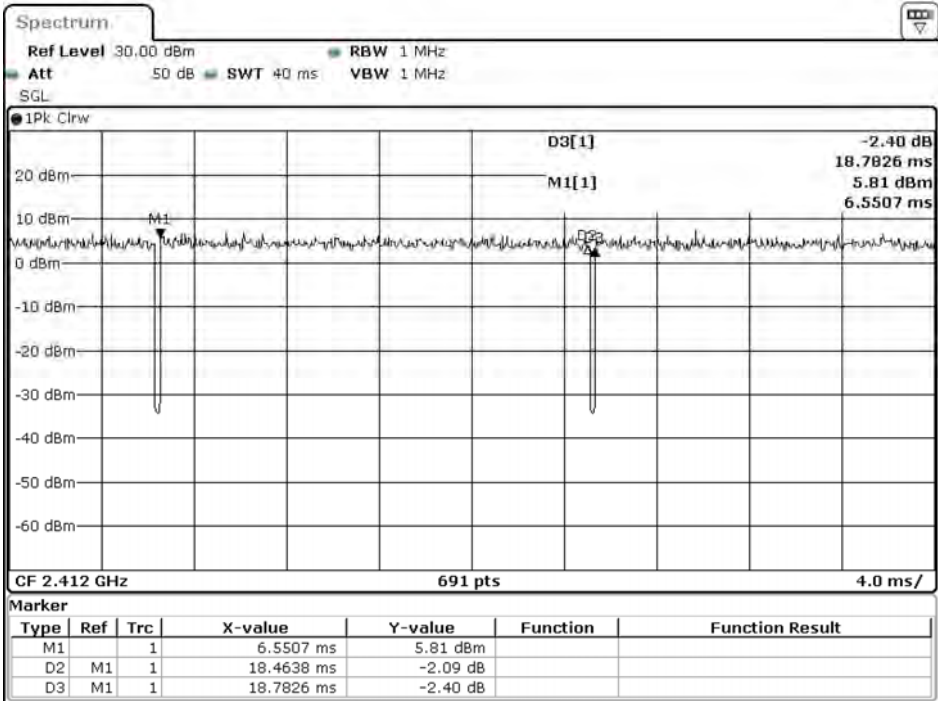
$\text{Duty Cycle} = \text{Ton} / (\text{Ton} + \text{Toff})$

$\text{Duty Factor} = 10 \text{ Log } (1/\text{Duty Cycle})$

Results: **MIMO**

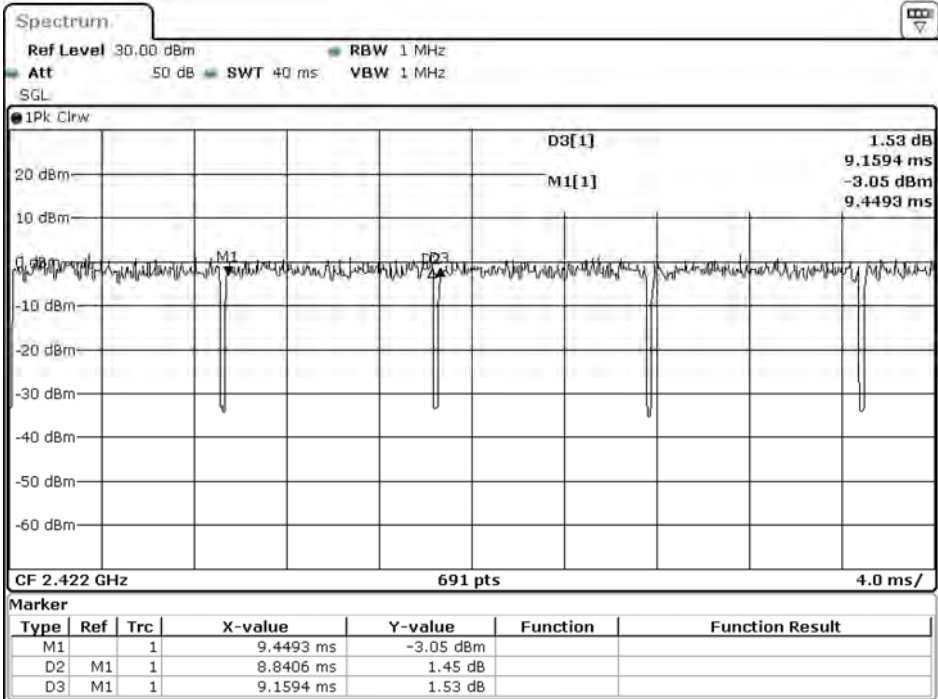
2.4GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11 n20	18.4638	18.7826	98.30	0.07
802.11 n40	8.8406	9.1594	96.52	0.15
802.11ax20	18.6377	18.9565	98.32	0.07
802.11 ax40	9.3043	9.6232	96.69	0.15
802.11 ax20-26/0-RU	5.3942	5.7428	93.93	0.27
802.11 ax20-52/37-RU	5.3942	5.7428	93.93	0.27
802.11 ax20-106/53-RU	5.3942	5.7428	93.93	0.27
802.11 ax40-242/61-RU	5.3942	5.7428	93.93	0.27

802.11n20- MIMO



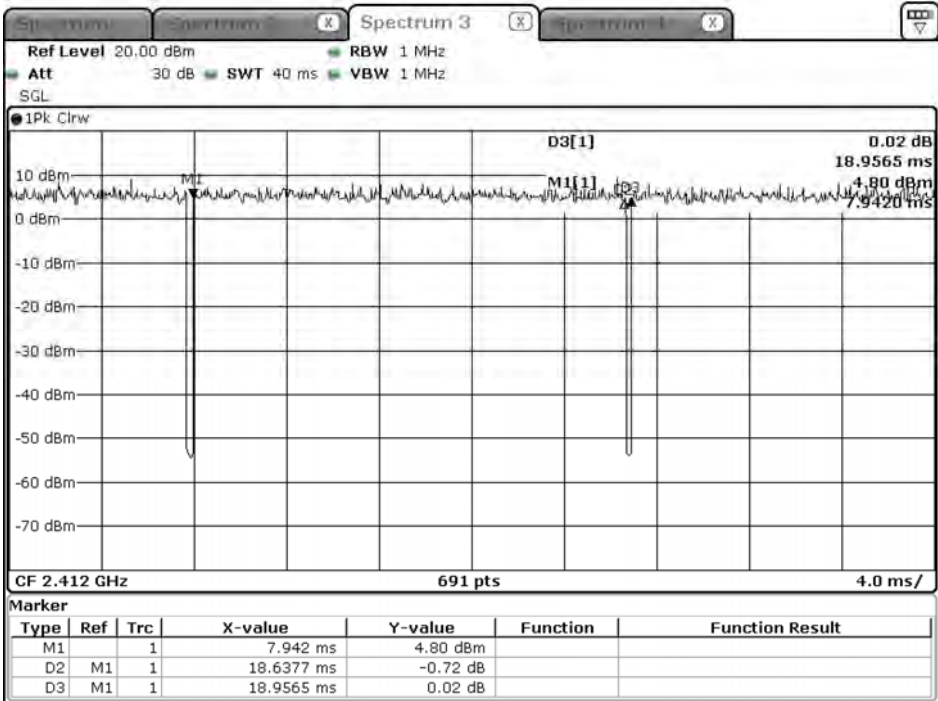
Date: 8.DEC.2020 18:15:55

802.11n40- MIMO



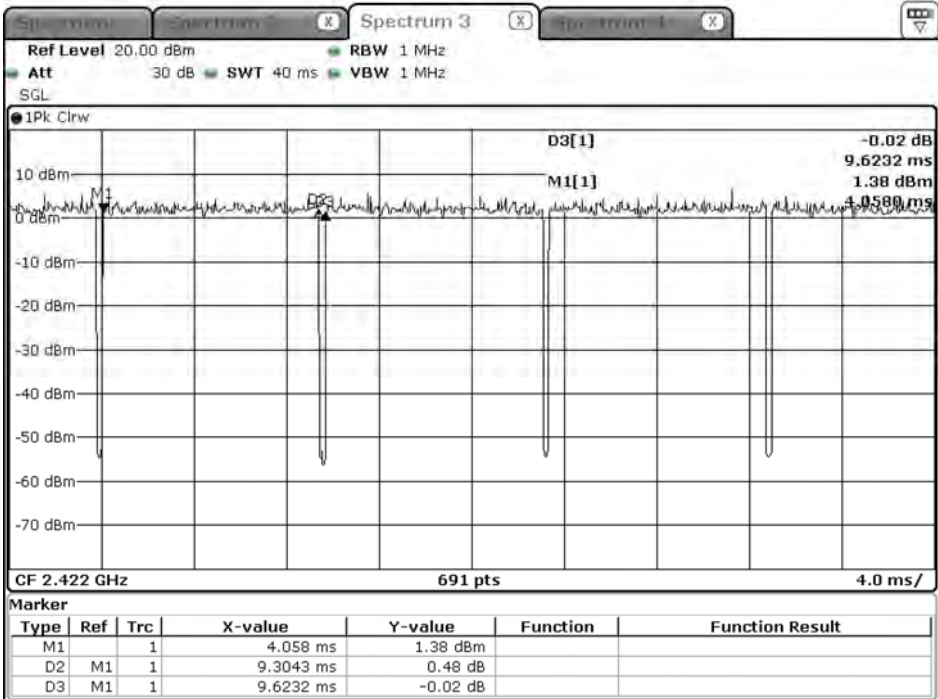
Date: 8.DEC.2020 18:18:35

802.11ax20- MIMO



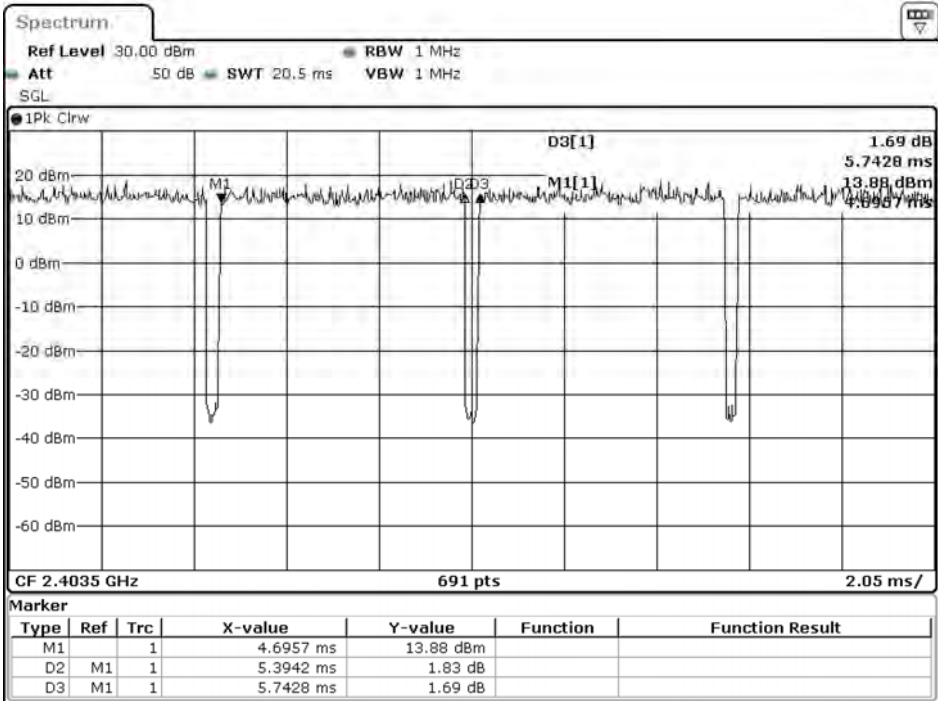
Date: 14.NOV.2020 01:49:20

802.11ax40- MIMO



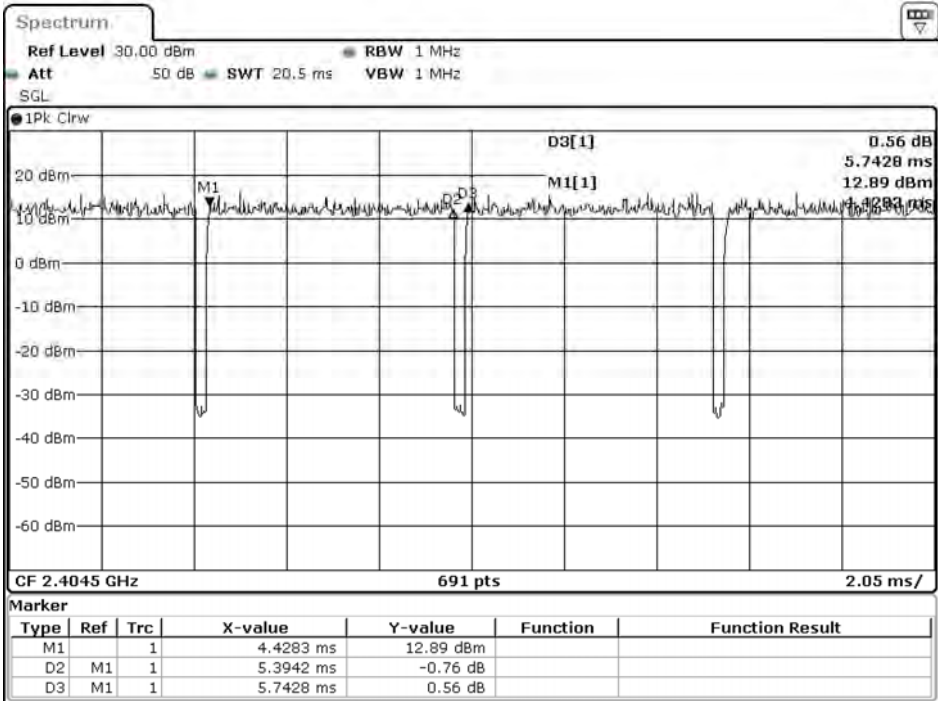
Date: 14.NOV.2020 02:54:24

802.11 ax20-26/0-RU - MIMO



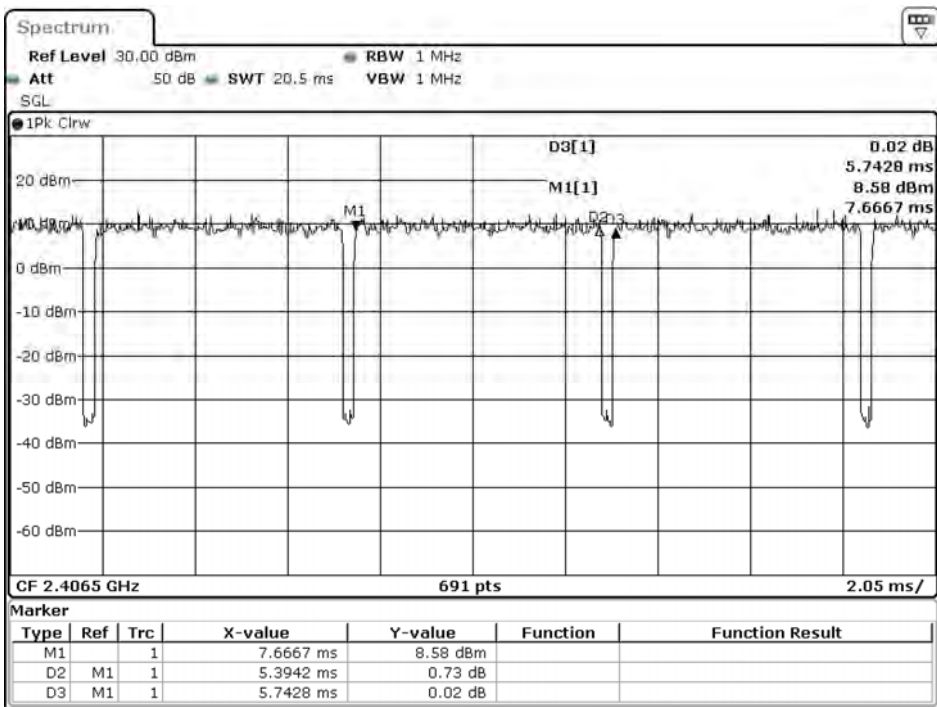
Date: 8.DEC.2020 18:24:37

802.11 ax20-52/37-RU - MIMO



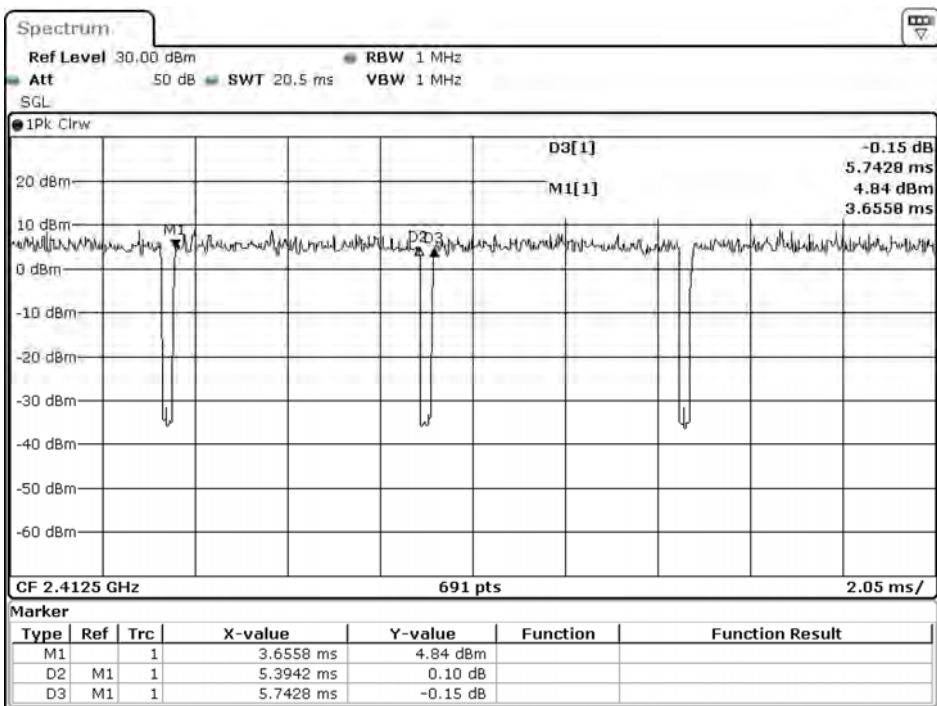
Date: 8.DEC.2020 18:26:03

802.11 ax20-106/53-RU - MIMO



Date: 8.DEC.2020 18:28:02

802.11 ax40-242/61-RU - MIMO



Date: 8.DEC.2020 18:29:53

10. EMI Reduction Method During Compliance Testing

No modification was made during testing.