

FCC ID: 2APBOAN950

IC: 23717-AN950

Maximum conducted output power

Test Result Average

Test Mode	Antenna	Frequency [MHz]	Average power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Gain [dBi]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11B	Ant1	2412	13.86	94.90	0.23	14.09	≤30.00	5.21	19.30	≤36.00	PASS
11B	Ant2	2412	11.62	94.95	0.23	11.85	≤30.00	3.94	15.79	≤36.00	PASS
11B	Ant1	2437	13.32	95.92	0.18	13.50	≤30.00	5.21	18.71	≤36.00	PASS
11B	Ant2	2437	12.17	94.90	0.23	12.40	≤30.00	3.94	16.34	≤36.00	PASS
11B	Ant1	2462	12.91	95.92	0.18	13.09	≤30.00	5.21	18.30	≤36.00	PASS
11B	Ant2	2462	11.77	94.90	0.23	12.00	≤30.00	3.94	15.94	≤36.00	PASS
11G	Ant1	2412	13.64	96.53	0.15	13.79	≤30.00	5.21	19.00	≤36.00	PASS
11G	Ant2	2412	11.49	95.86	0.18	11.67	≤30.00	3.94	15.61	≤36.00	PASS
11G	Ant1	2437	11.28	95.86	0.18	11.46	≤30.00	5.21	16.67	≤36.00	PASS
11G	Ant2	2437	11.01	95.86	0.18	11.19	≤30.00	3.94	15.13	≤36.00	PASS
11G	Ant1	2462	12.85	95.83	0.18	13.03	≤30.00	5.21	18.24	≤36.00	PASS
11G	Ant2	2462	11.62	96.53	0.15	11.77	≤30.00	3.94	15.71	≤36.00	PASS
11N20 MIMO	Ant1	2412	14.22	96.30	0.16	14.38	≤30.00	5.21	19.59	≤36.00	PASS
11N20 MIMO	Ant2	2412	12.06	96.30	0.16	12.22	≤30.00	3.94	16.16	≤36.00	PASS
11N20 MIMO	total	2412	---	---	---	16.44	≤30.00	4.62	21.06	≤36.00	PASS
11N20 MIMO	Ant1	2437	11.98	95.59	0.20	12.18	≤30.00	5.21	17.39	≤36.00	PASS
11N20 MIMO	Ant2	2437	9.01	96.32	0.16	9.17	≤30.00	3.94	13.11	≤36.00	PASS
11N20 MIMO	total	2437	---	---	---	13.94	≤30.00	4.62	18.56	≤36.00	PASS
11N20 MIMO	Ant1	2462	13.46	96.32	0.16	13.62	≤30.00	5.21	18.83	≤36.00	PASS
11N20 MIMO	Ant2	2462	11.10	95.59	0.20	11.30	≤30.00	3.94	15.24	≤36.00	PASS
11N20 MIMO	total	2462	---	---	---	15.62	≤30.00	4.62	20.24	≤36.00	PASS
11N40 MIMO	Ant2	2422	10.27	91.43	0.39	10.66	≤30.00	5.21	15.87	≤36.00	PASS
11N40 MIMO	total	2422	---	---	---	16.03	≤30.00	3.94	19.97	≤36.00	PASS
11N40 MIMO	Ant1	2422	13.31	91.55	0.38	13.69	≤30.00	4.62	18.31	≤36.00	PASS
11N40	Ant1	2437	10.88	92.86	0.32	11.20	≤30.00	5.21	16.41	≤36.00	PASS

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MIMO											
11N40 MIMO	Ant2	2437	7.76	91.43	0.39	8.15	≤30.00	3.94	12.09	≤36.00	PASS
11N40 MIMO	total	2437	---	---	---	12.95	≤30.00	4.62	17.57	≤36.00	PASS
11N40 MIMO	Ant1	2452	12.57	91.43	0.39	12.96	≤30.00	5.21	18.17	≤36.00	PASS
11N40 MIMO	Ant2	2452	10.14	91.43	0.39	10.53	≤30.00	3.94	14.47	≤36.00	PASS
11N40 MIMO	total	2452	---	---	---	14.92	≤30.00	4.62	19.54	≤36.00	PASS

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Keysight Spectrum Analyzer - Channel Power

RF | 50 Ω | DC | SENSE:INT | ALIGN: AUTO | 05:12:58 AM Jun 24, 2024

Center Freq 2.411976000 GHz
NFE
#IFGain: Low
Center Freq: 2.411976000 GHz
Trig: Free Run
Avg/Hold: 100/100
Radio Std: None
Radio Device: BTS

Frequency

Center Freq
2.411976000 GHz

Log

10 dB/div
Ref Offset 12.17 dB
Ref 30.00 dBm

Center 2.41198 GHz
#Res BW 430 kHz
#VBW 3 MHz
Span 40.00 MHz
Sweep 1 ms

Channel Power

Power Spectral Density

13.86 dBm / 13.35 MHz
-57.40 dBm /Hz

Auto

CF Step
4.000000 MHz
Man

Freq Offset
0 Hz

MSG | STATUS

Keysight Spectrum Analyzer - Channel Power

RF 150.0 DC SENSE:INT 06:05:28 AM Jun 24, 2024

Center Freq 2.411986600 GHz NFE #IFGain:Low Trig: Free Run AvgHld: 100/100 Radio Std: None

Ref Offset 11.39 dB Ref 30.00 dBm

10 dB/div Log

Center 2.41199 GHz Span 40.00 MHz
#Res BW 430 kHz #VBW 3 MHz Sweep 1 ms

Channel Power Power Spectral Density

11.62 dBm / 13.31 MHz -59.62 dBm /Hz

Auto

CF Step 4.000000 MHz Man

Freq Offset 0 Hz

Keysight Spectrum Analyzer - Channel Power

Center Freq: 2.436986000 GHz

Center Freq: 2.436986000 GHz

Trig: Free Run

Avg/Hold: 100/100

Radio Std: None

Radio Device: BTS

Ref Offset 12.17 dB

Ref 30.00 dBm

10 dB/div

Log

Center 2.43699 GHz

#Res BW 430 kHz

#VBW 3 MHz

Span 40.00 MHz

Sweep 1 ms

Channel Power

Power Spectral Density

13.32 dBm / 13.49 MHz

-57.98 dBm /Hz

Frequency

Center Freq

2.436986000 GHz

CF Step

4.000000 MHz

Man

Auto

Freq Offset

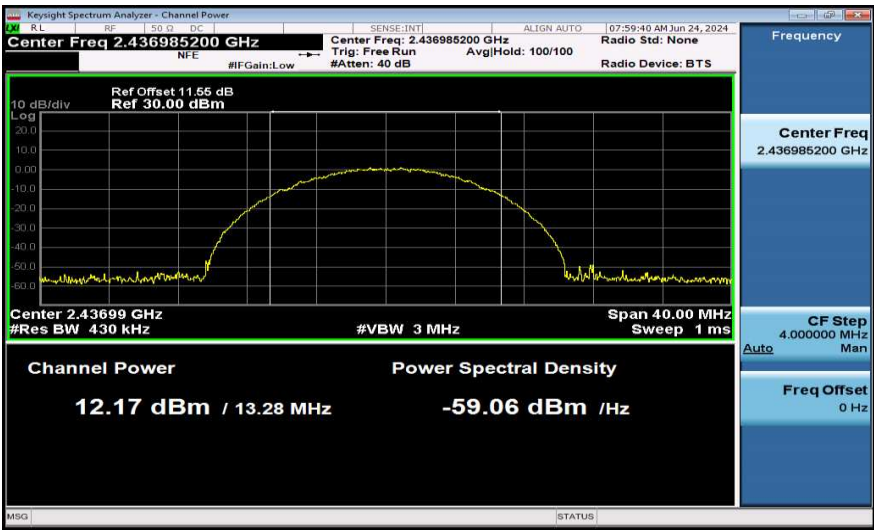
0 Hz

MSO

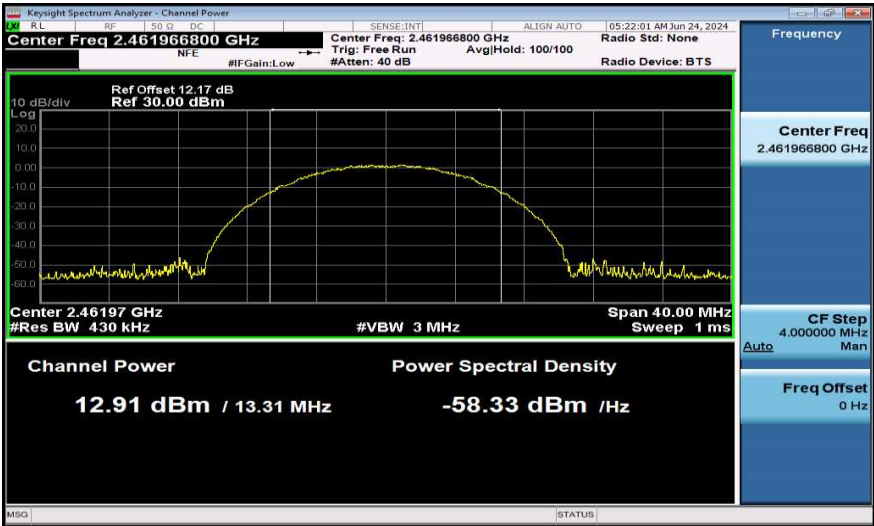
STATUS

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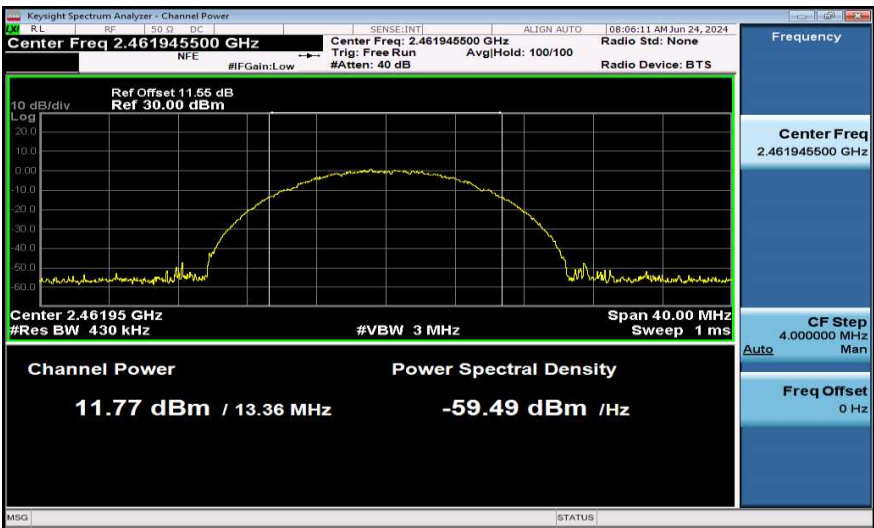
11B-Ant1-2437-PASS



11B-Ant2-2437-PASS



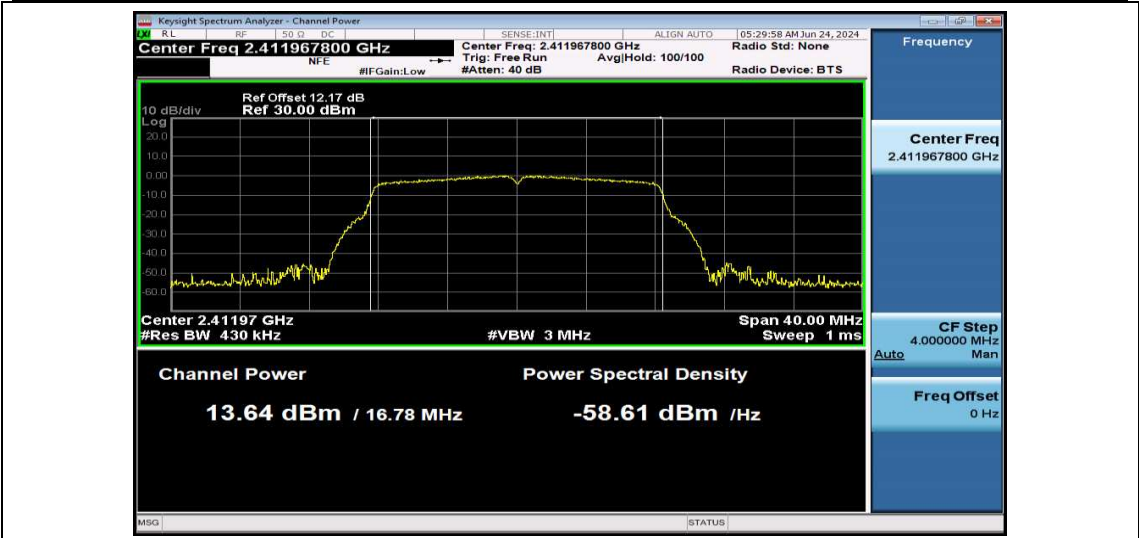
11B-Ant1-2462-PASS



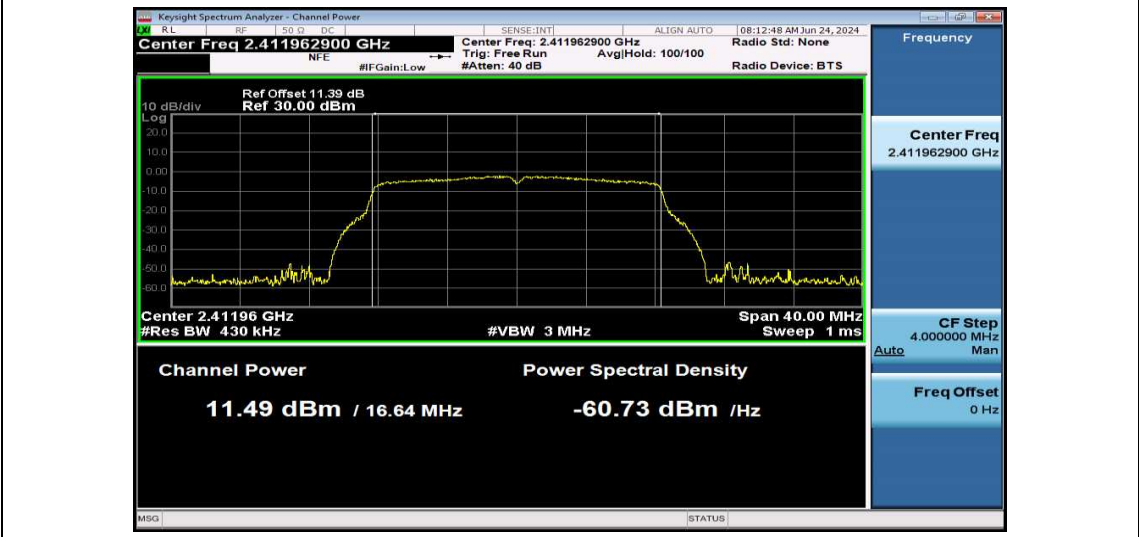
11B-Ant2-2462-PASS

FCC ID:2APBOAN950

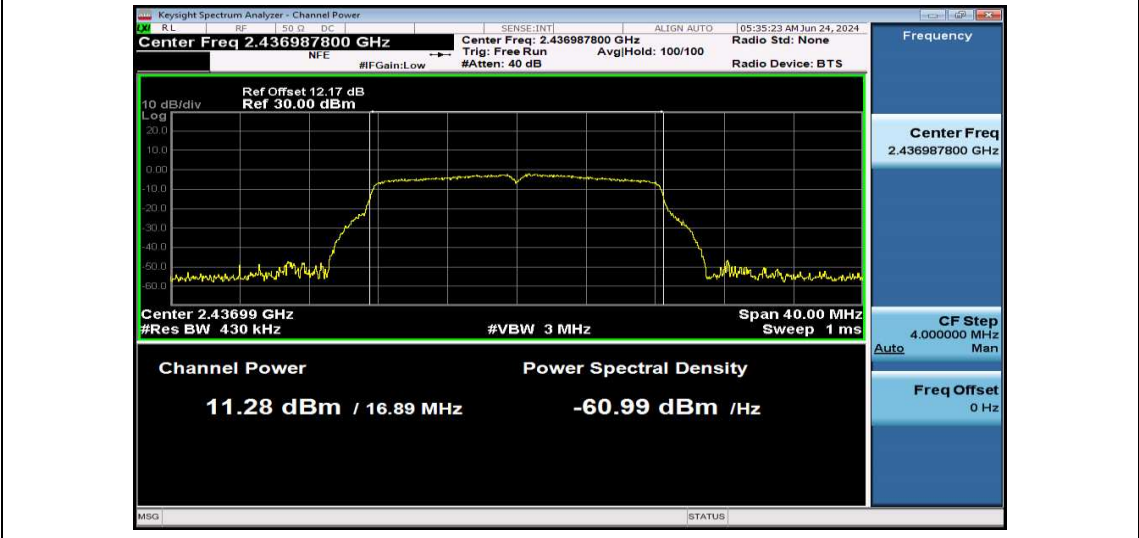
IC:23717-AN950



11G-Ant1-2412-PASS

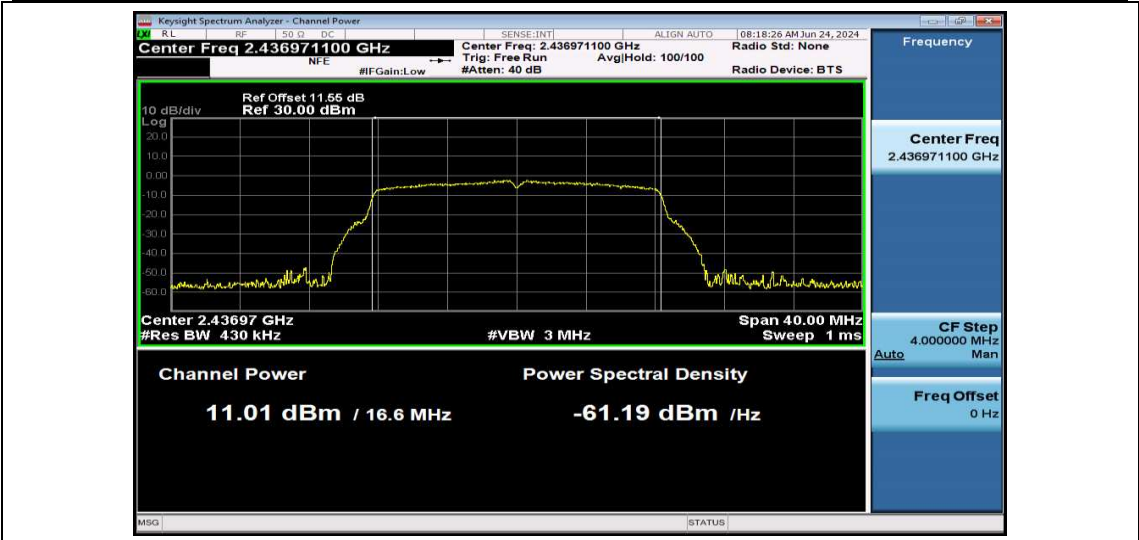


11G-Ant2-2412-PASS

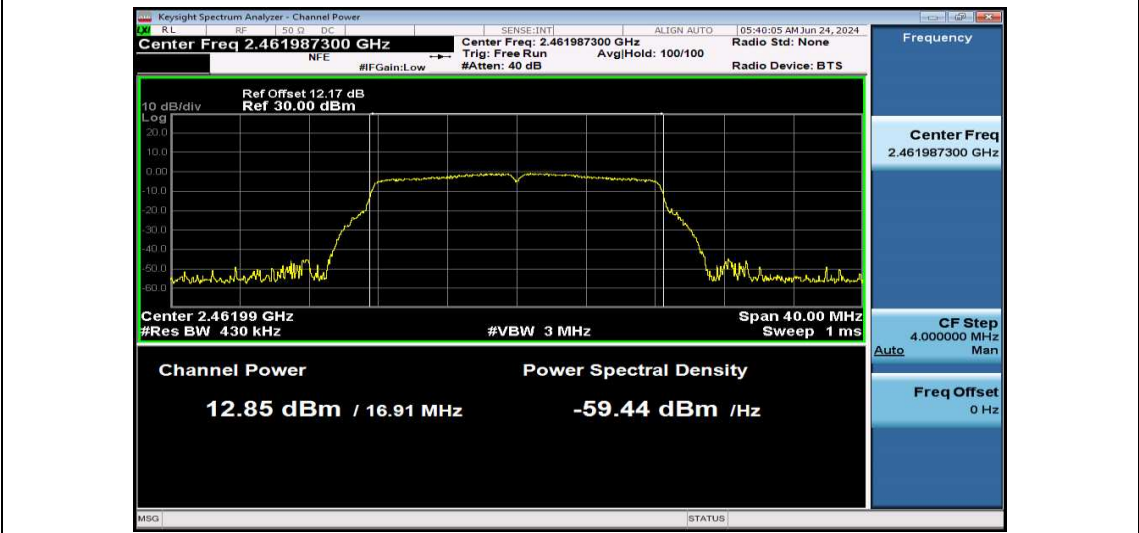


11G-Ant1-2437-PASS

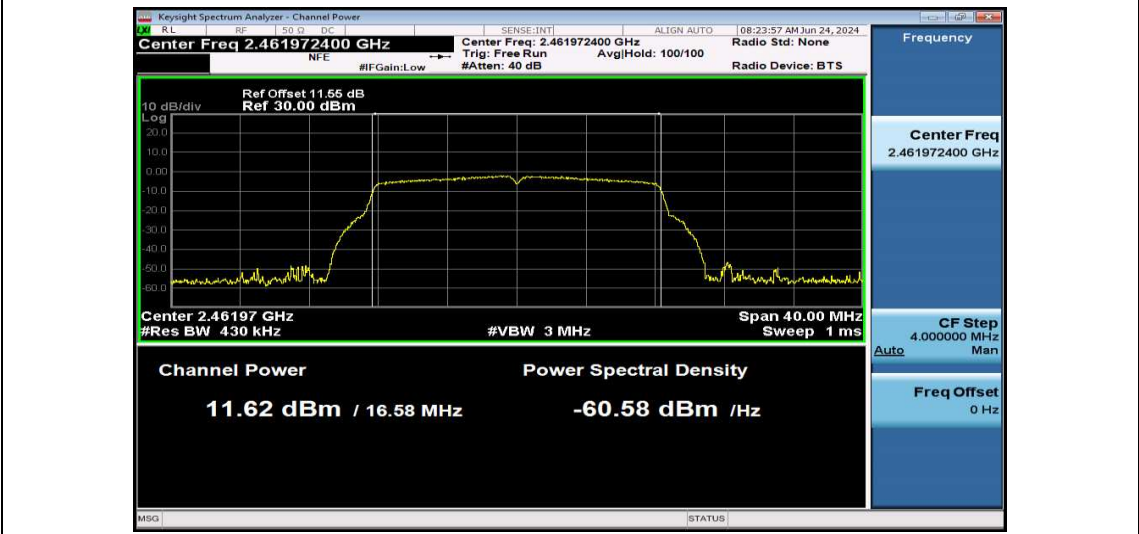
FCC ID: 2APBOAN950
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11G-Ant2-2437-PASS



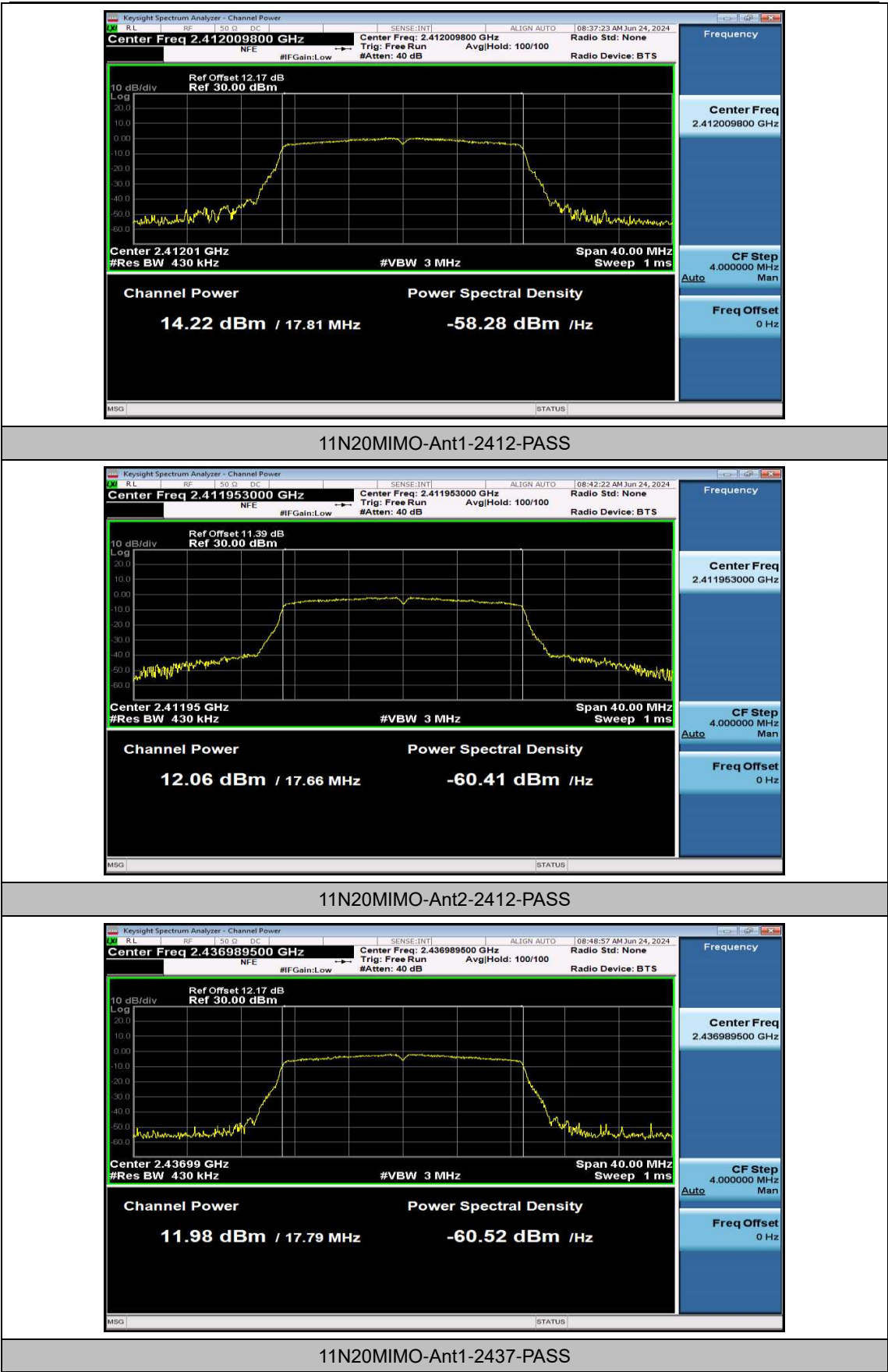
11G-Ant1-2462-PASS



11G-Ant2-2462-PASS

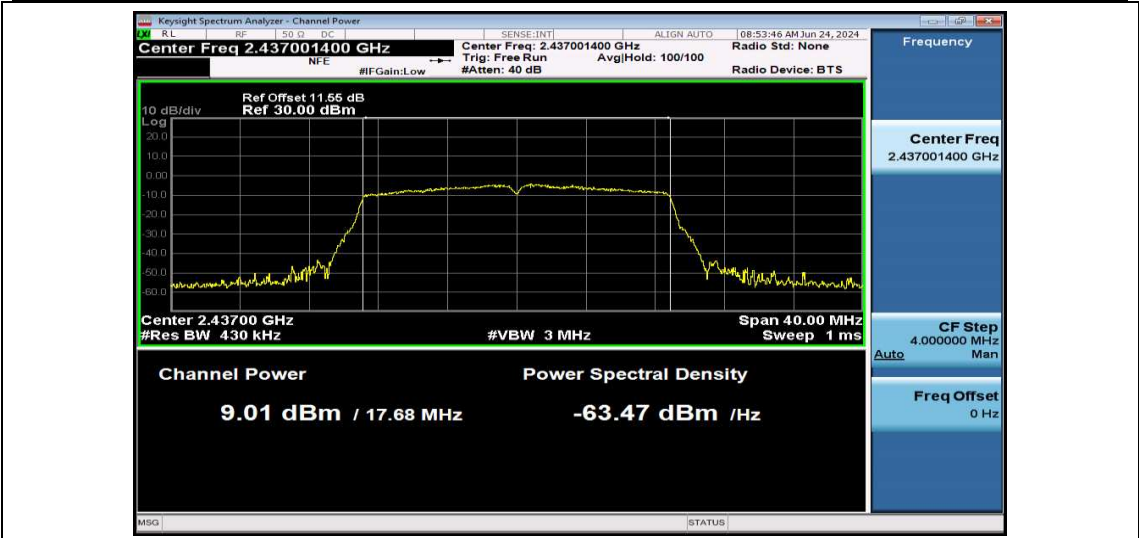
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IC:23717-AN950

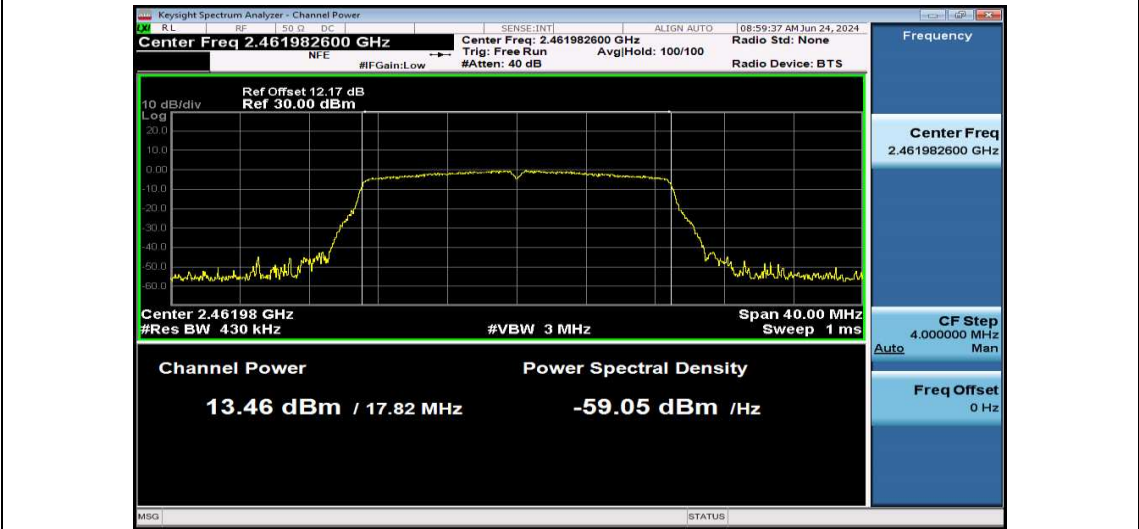


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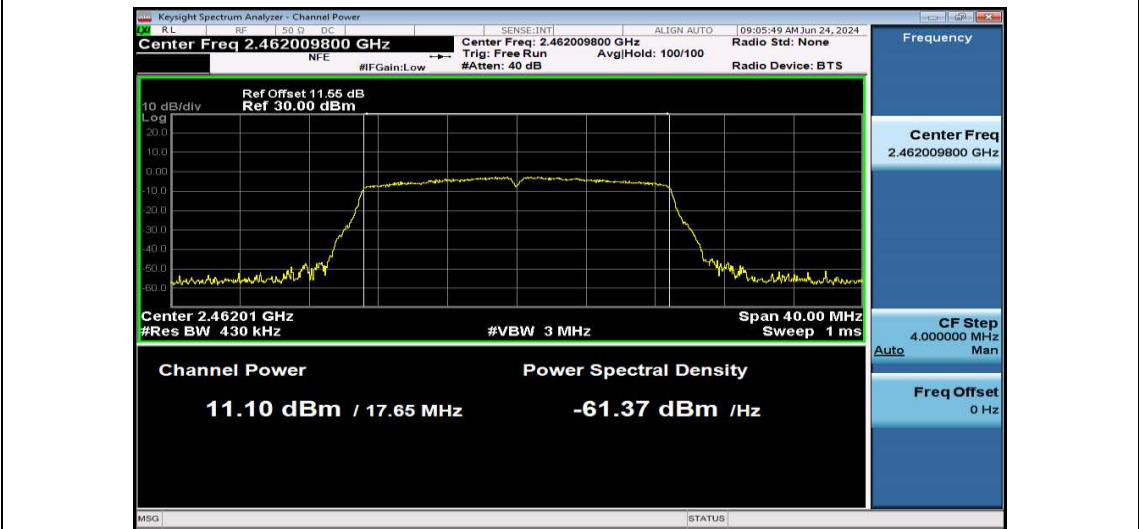
IC:23717-AN950



11N20MIMO-Ant2-2437-PASS



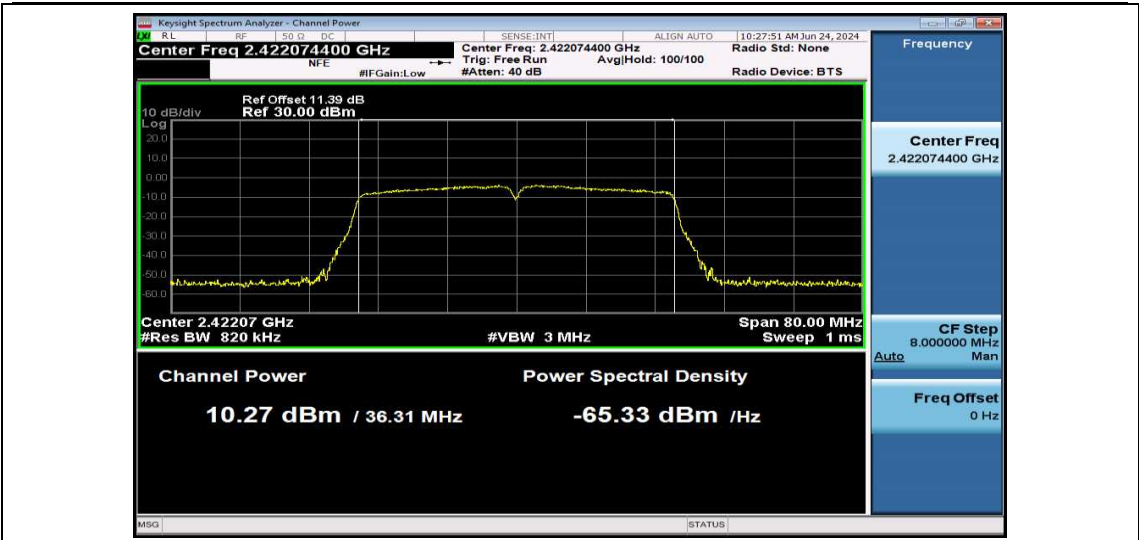
11N20MIMO-Ant1-2462-PASS



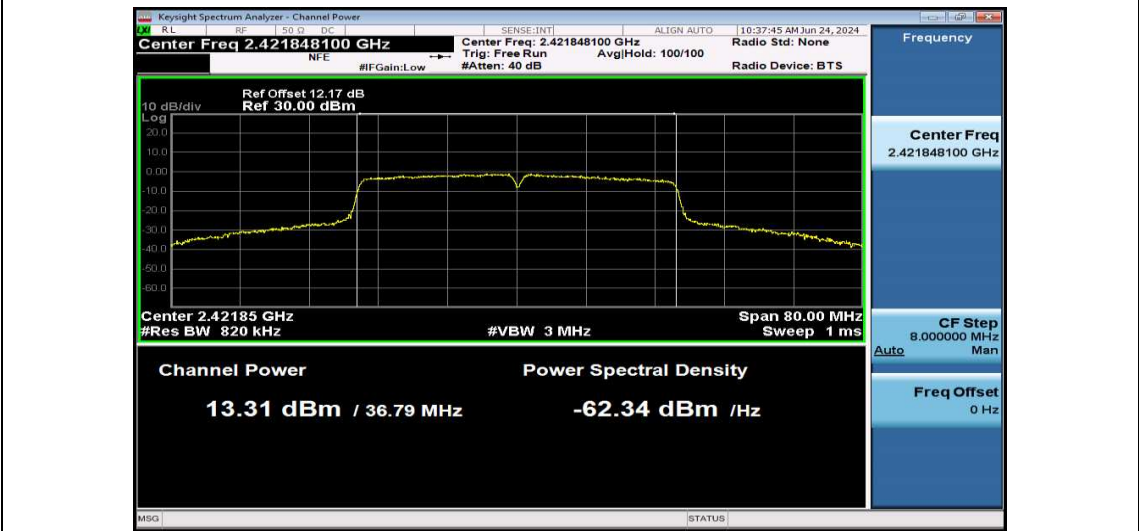
11N20MIMO-Ant2-2462-PASS

FCC ID:2APBOAN950

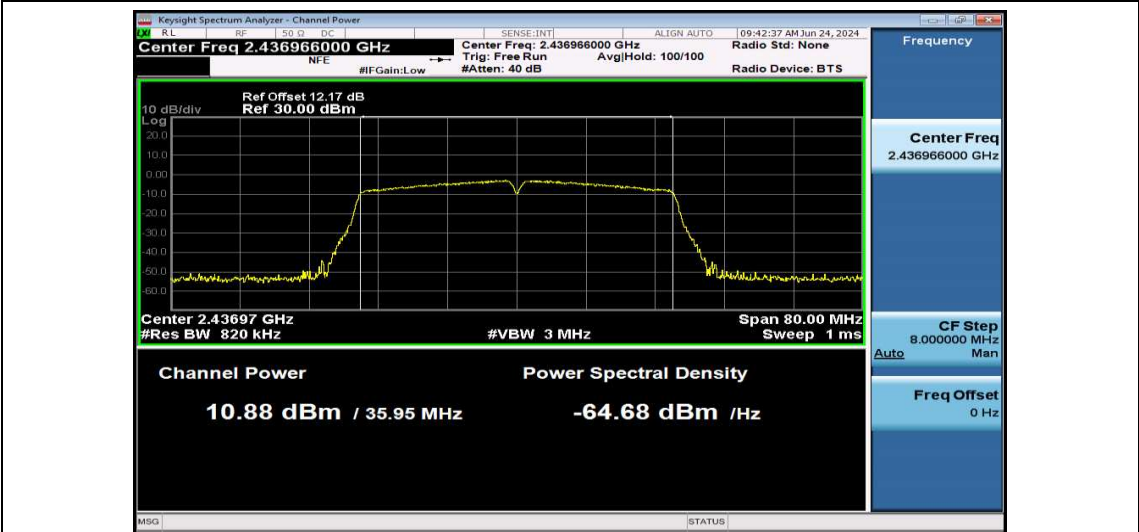
IC:23717-AN950



11N40MIMO-Ant2-2422-PASS



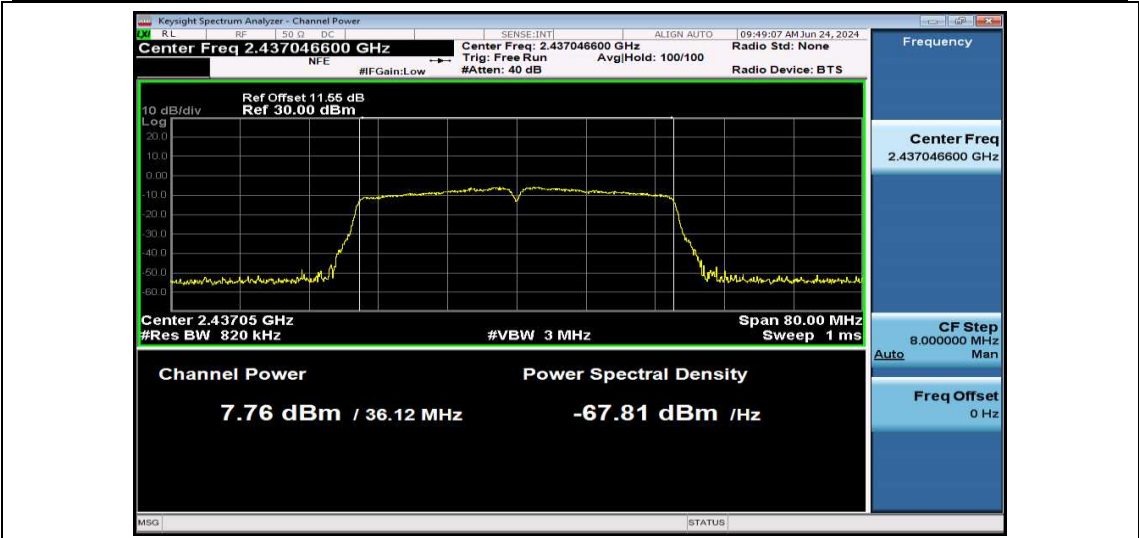
11N40MIMO-Ant1-2422-PASS



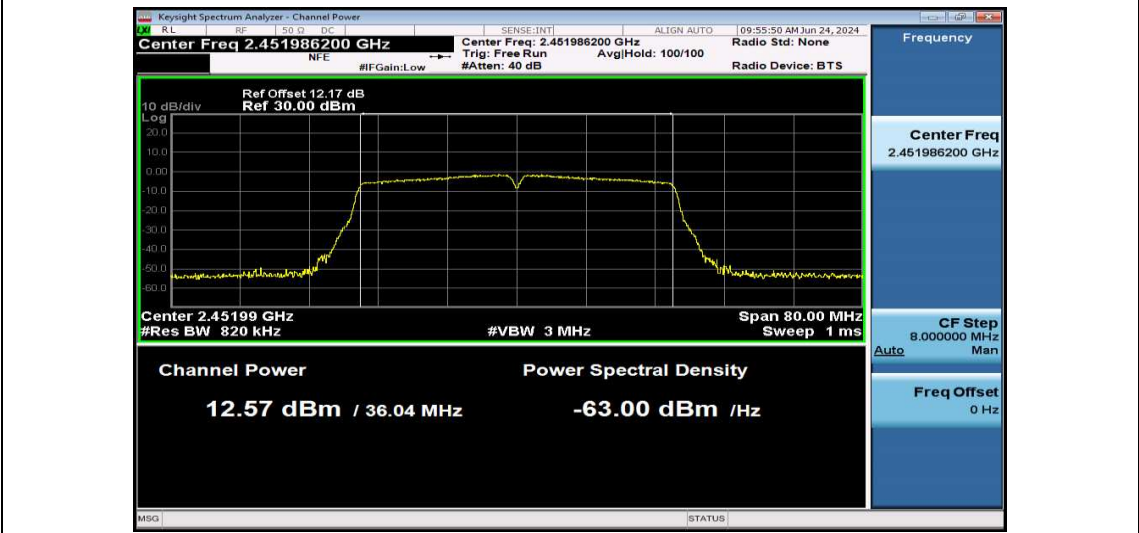
11N40MIMO-Ant1-2437-PASS

FCC ID:2APBOAN950

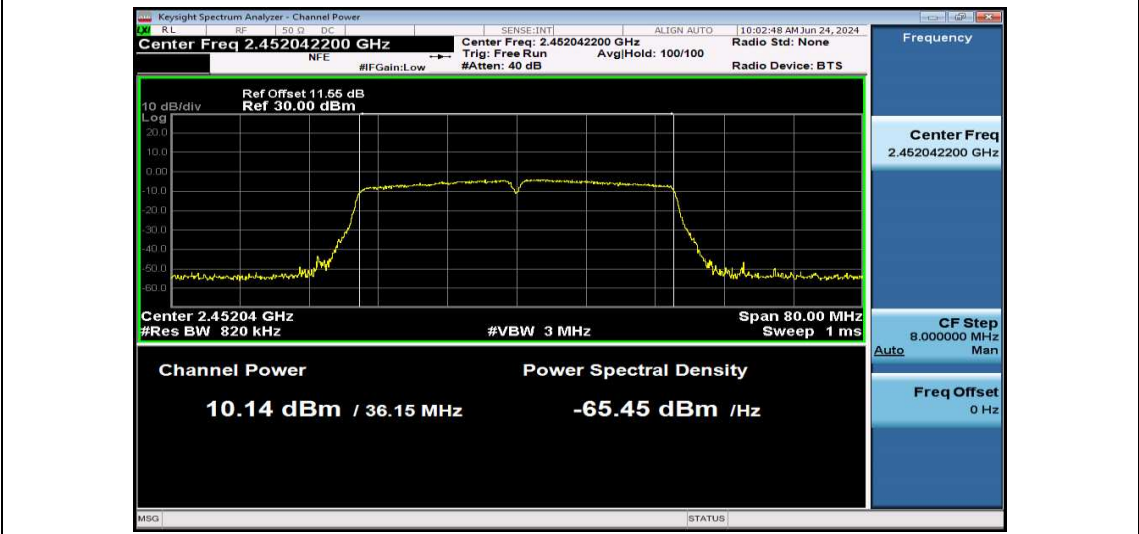
IC:23717-AN950



11N40MIMO-Ant2-2437-PASS



11N40MIMO-Ant1-2452-PASS



11N40MIMO-Ant2-2452-PASS

FCC ID: 2APBOAN950

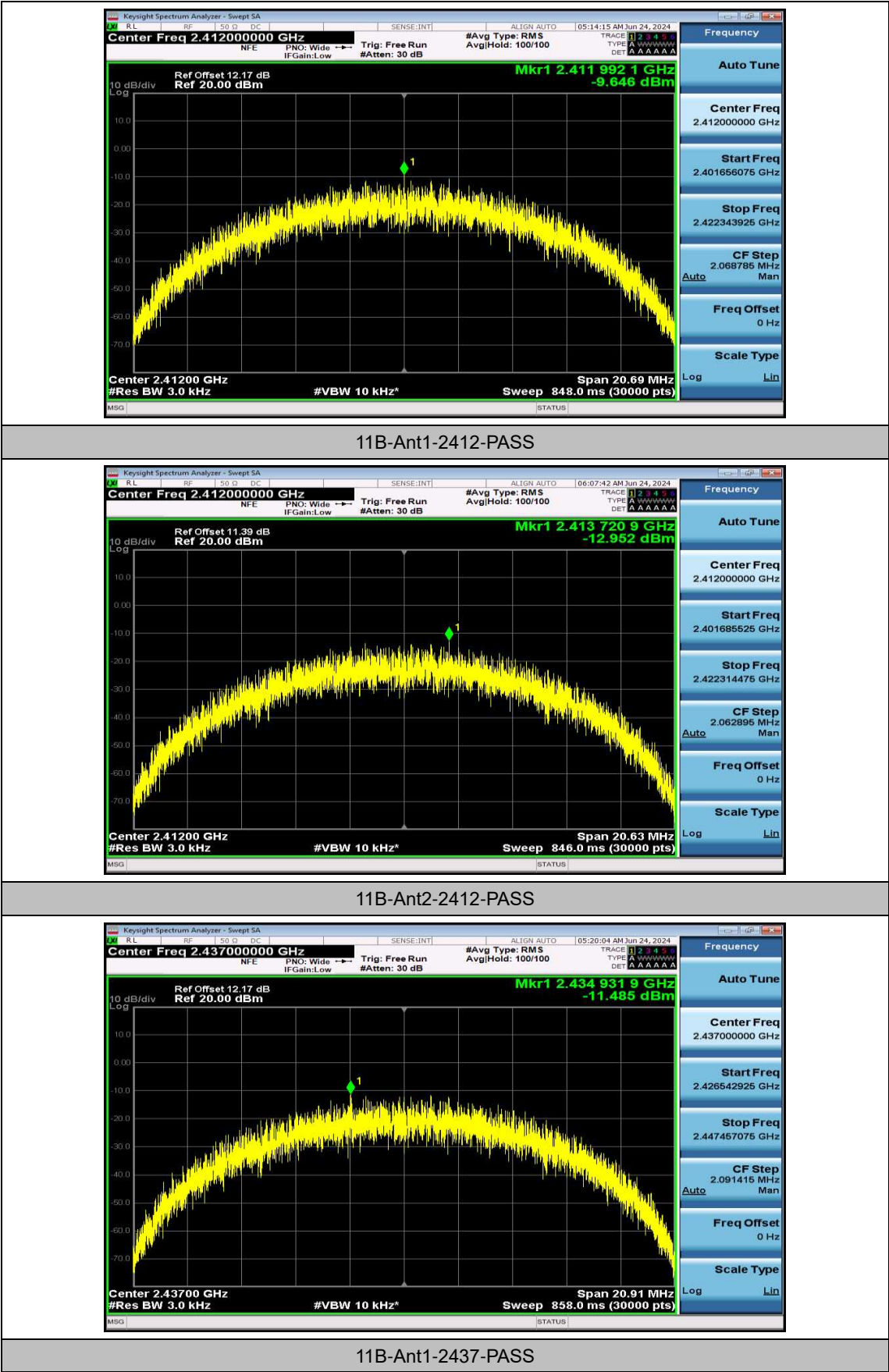
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Maximum power spectral density

Test Result

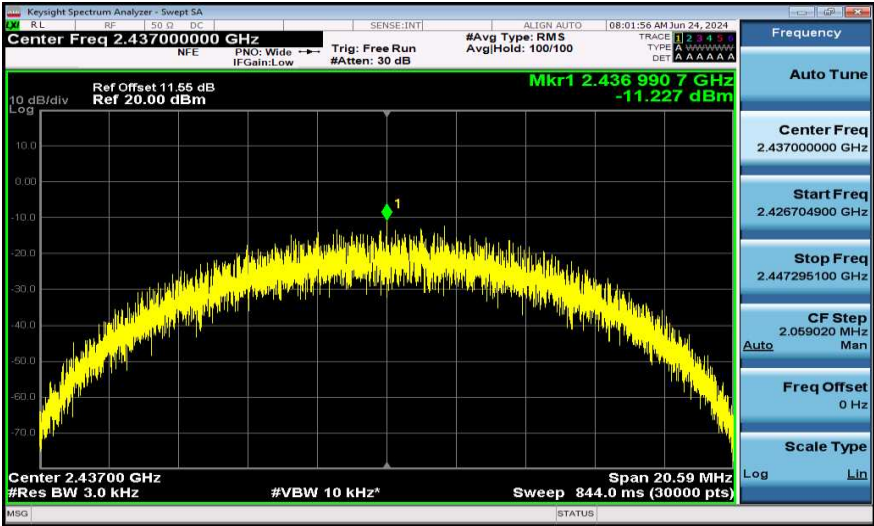
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-9.42	≤8.00	PASS
11B	Ant2	2412	-12.72	≤8.00	PASS
11B	Ant1	2437	-11.31	≤8.00	PASS
11B	Ant2	2437	-11.00	≤8.00	PASS
11B	Ant1	2462	-11.69	≤8.00	PASS
11B	Ant2	2462	-11.87	≤8.00	PASS
11G	Ant1	2412	-17.13	≤8.00	PASS
11G	Ant2	2412	-19.69	≤8.00	PASS
11G	Ant1	2437	-19.56	≤8.00	PASS
11G	Ant2	2437	-19.90	≤8.00	PASS
11G	Ant1	2462	-18.45	≤8.00	PASS
11G	Ant2	2462	-19.42	≤8.00	PASS
11N20MIMO	Ant1	2412	-17.52	≤8.00	PASS
11N20MIMO	Ant2	2412	-19.86	≤8.00	PASS
11N20MIMO	total	2412	-15.52	≤8.00	PASS
11N20MIMO	Ant1	2437	-18.97	≤8.00	PASS
11N20MIMO	Ant2	2437	-22.15	≤8.00	PASS
11N20MIMO	total	2437	-17.26	≤8.00	PASS
11N20MIMO	Ant1	2462	-18.49	≤8.00	PASS
11N20MIMO	Ant2	2462	-20.57	≤8.00	PASS
11N20MIMO	total	2462	-16.40	≤8.00	PASS
11N40MIMO	Ant2	2422	-23.91	≤8.00	PASS
11N40MIMO	total	2422	-18.16	≤8.00	PASS
11N40MIMO	Ant1	2422	-20.58	≤8.00	PASS
11N40MIMO	Ant1	2437	-22.27	≤8.00	PASS
11N40MIMO	Ant2	2437	-26.03	≤8.00	PASS
11N40MIMO	total	2437	-20.74	≤8.00	PASS
11N40MIMO	Ant1	2452	-21.03	≤8.00	PASS
11N40MIMO	Ant2	2452	-24.22	≤8.00	PASS
11N40MIMO	total	2452	-19.33	≤8.00	PASS

Test Graphs

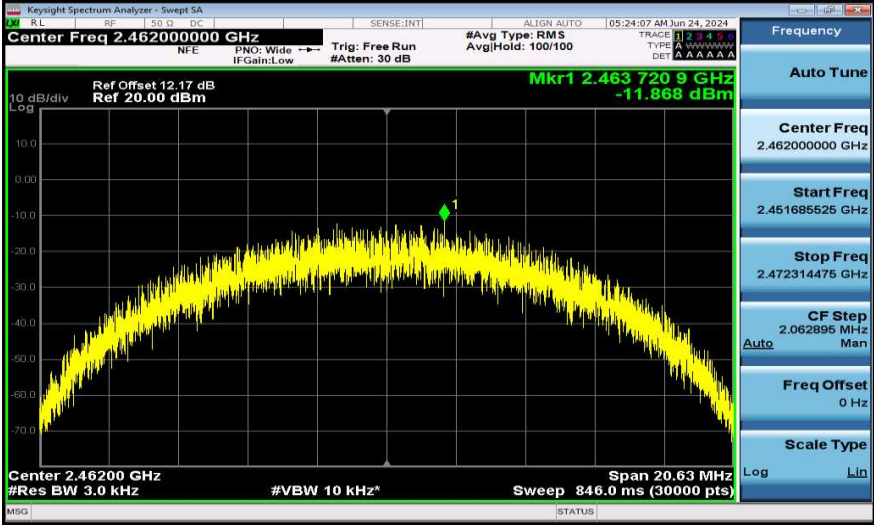


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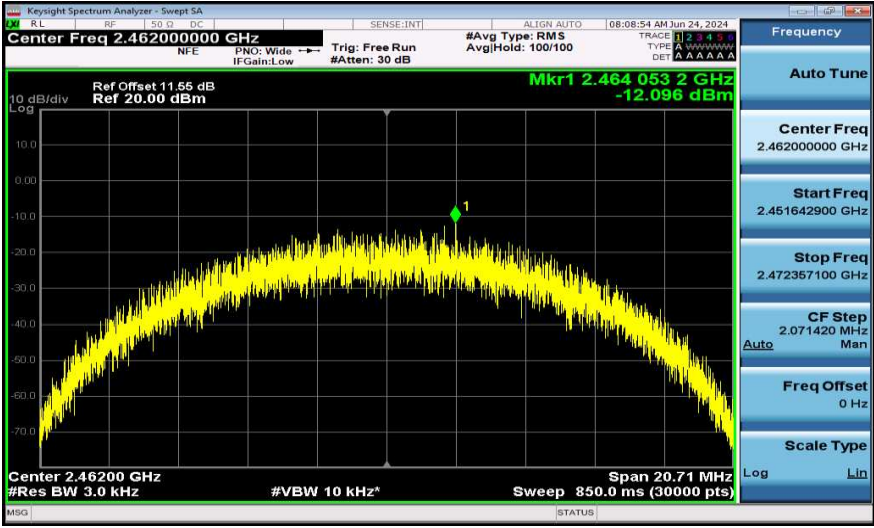
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11B-Ant2-2437-PASS



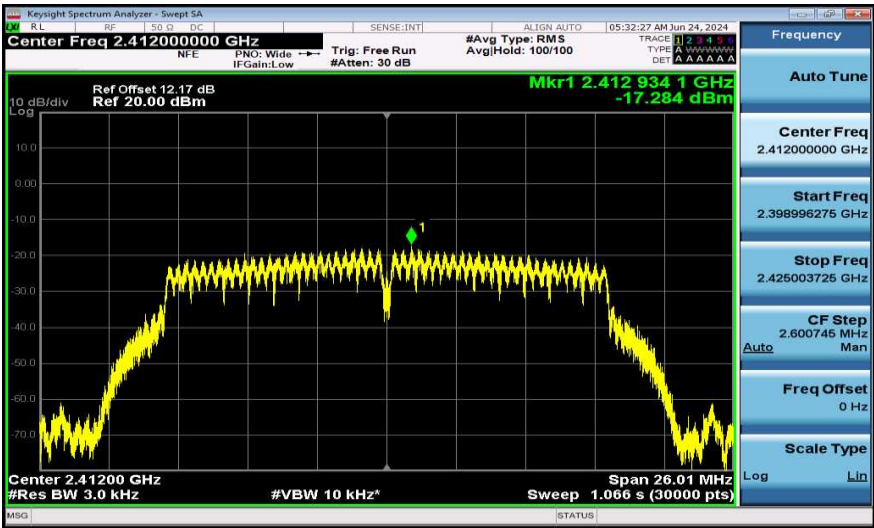
11B-Ant1-2462-PASS



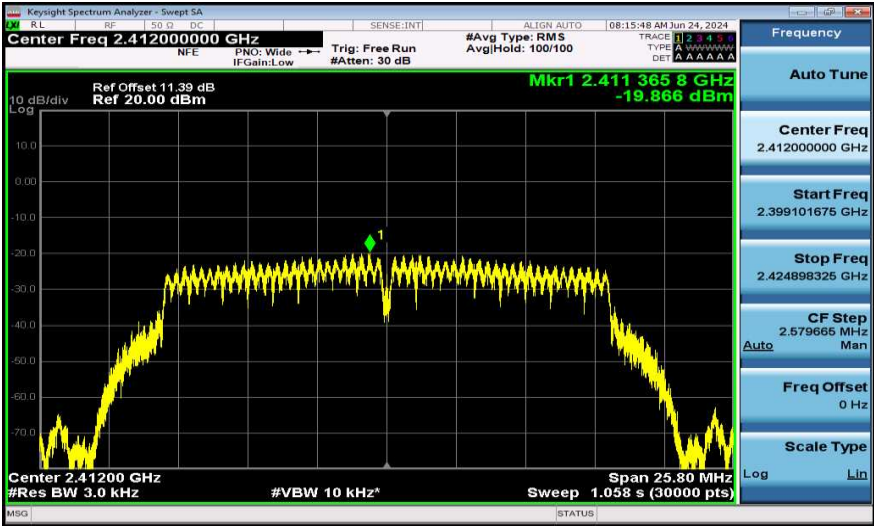
11B-Ant2-2462-PASS

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11G-Ant1-2412-PASS

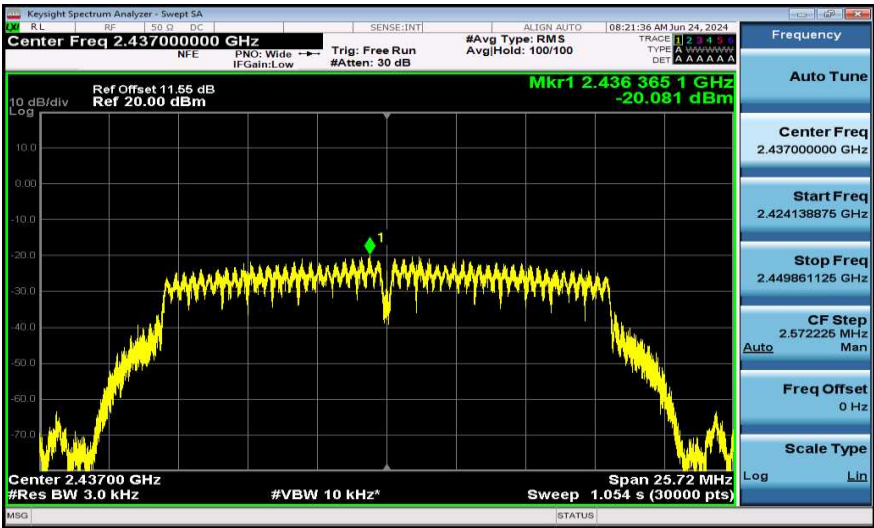


11G-Ant2-2412-PASS



11G-Ant1-2437-PASS

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11G-Ant2-2437-PASS

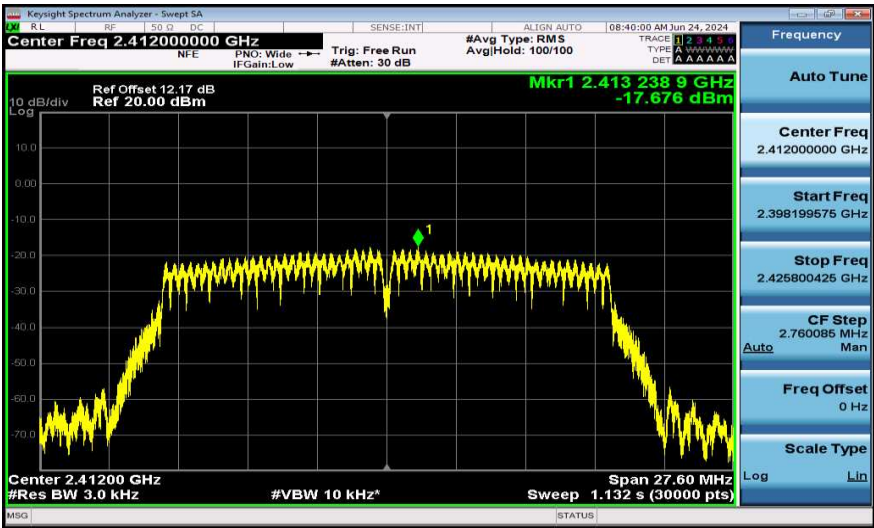


11G-Ant1-2462-PASS

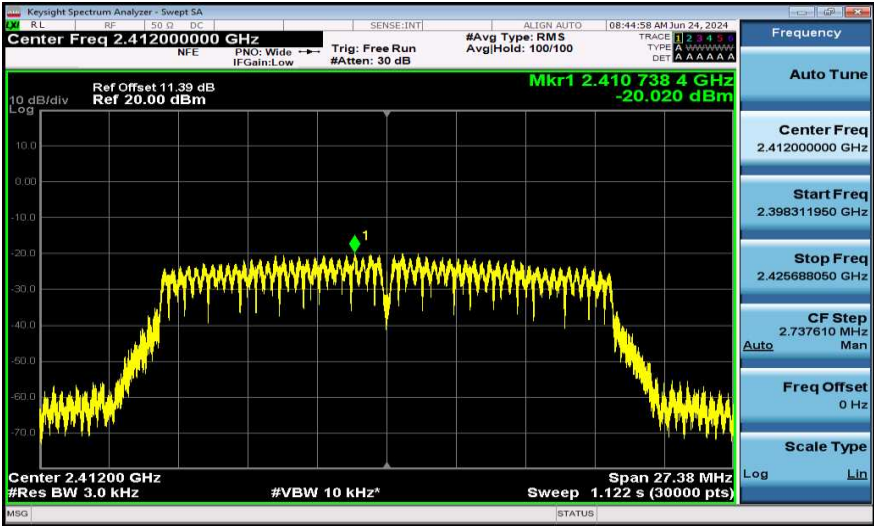


11G-Ant2-2462-PASS

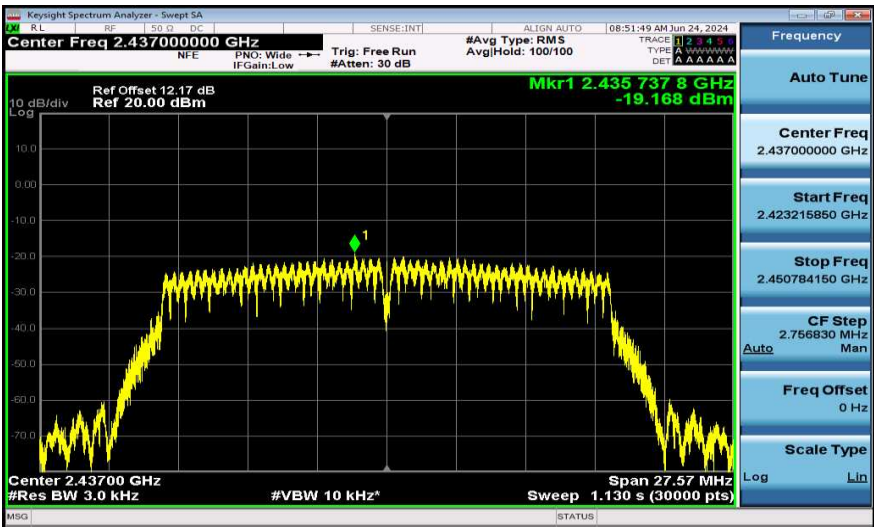
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11N20MIMO-Ant1-2412-PASS

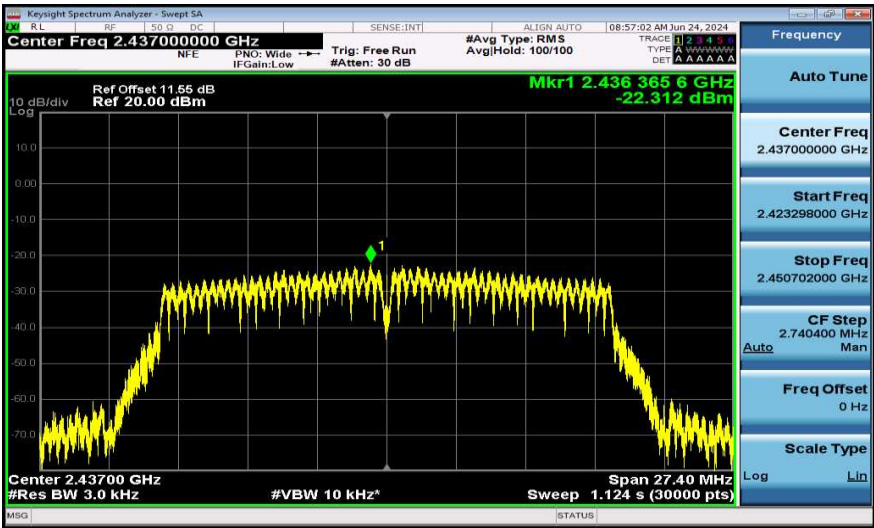


11N20MIMO-Ant2-2412-PASS

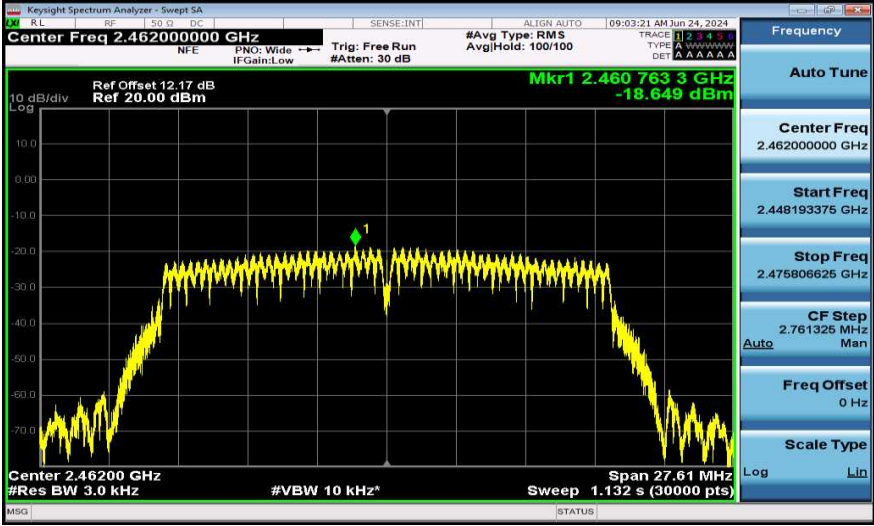


11N20MIMO-Ant1-2437-PASS

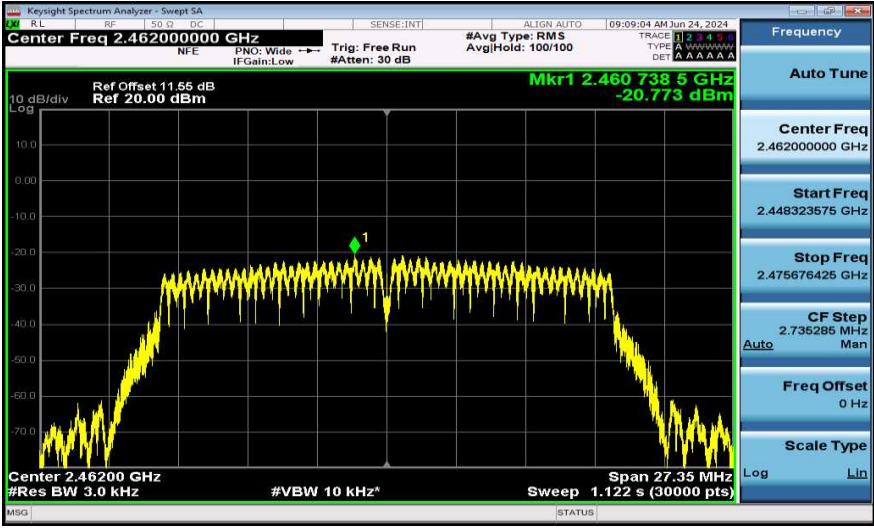
FCC ID: 2APBOAN950
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11N20MIMO-Ant2-2437-PASS

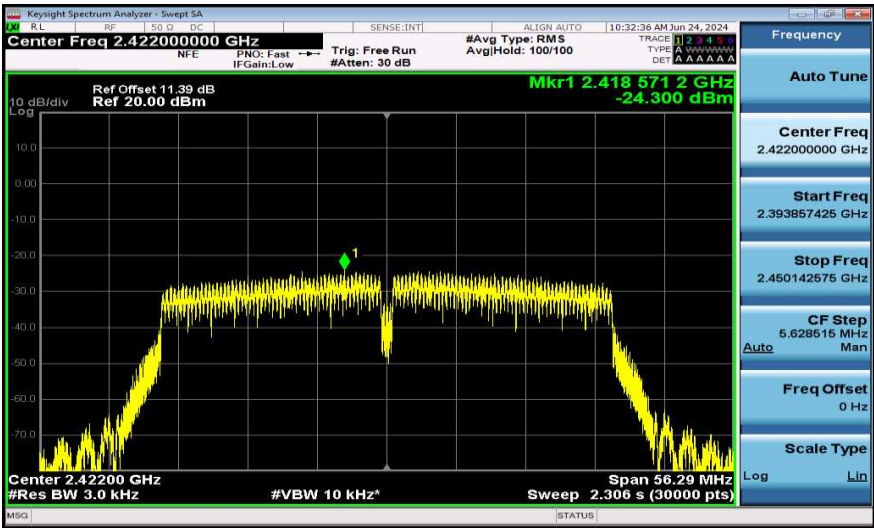


11N20MIMO-Ant1-2462-PASS

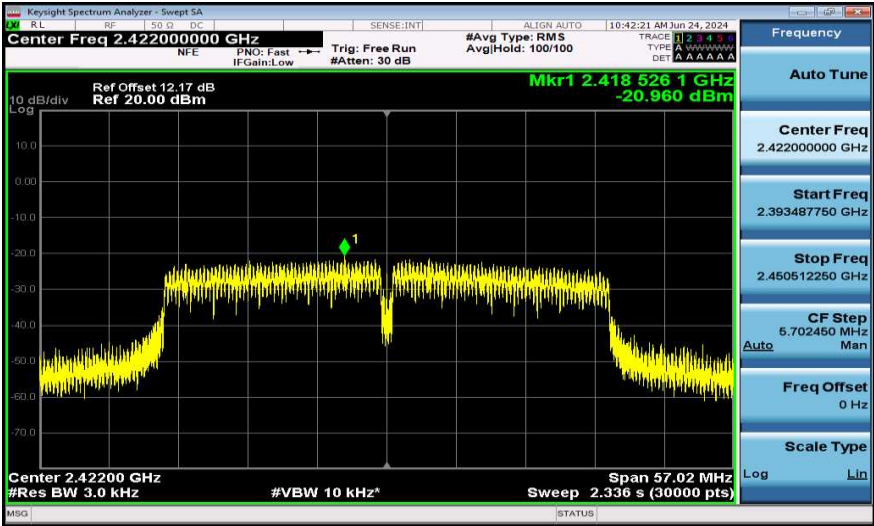


11N20MIMO-Ant2-2462-PASS

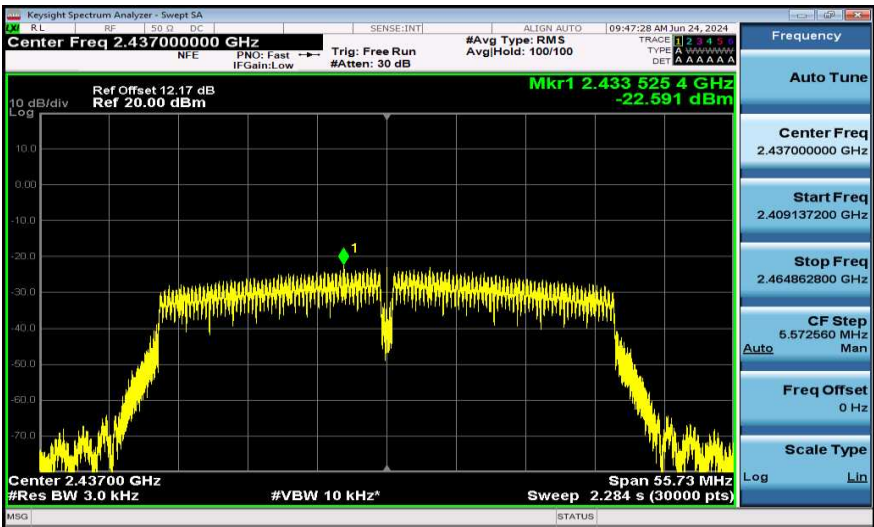
FCC ID: 2APBOAN950
IC: 23717-AN950



11N40MIMO-Ant2-2422-PASS



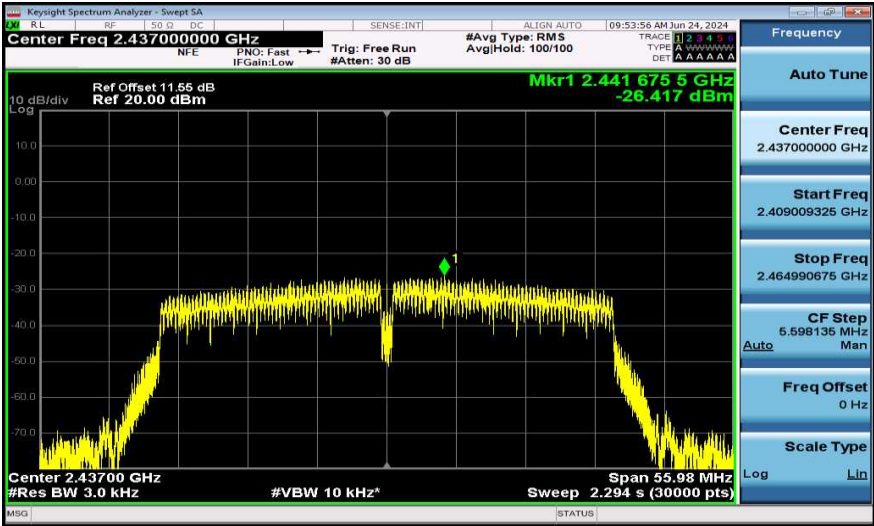
11N40MIMO-Ant1-2422-PASS



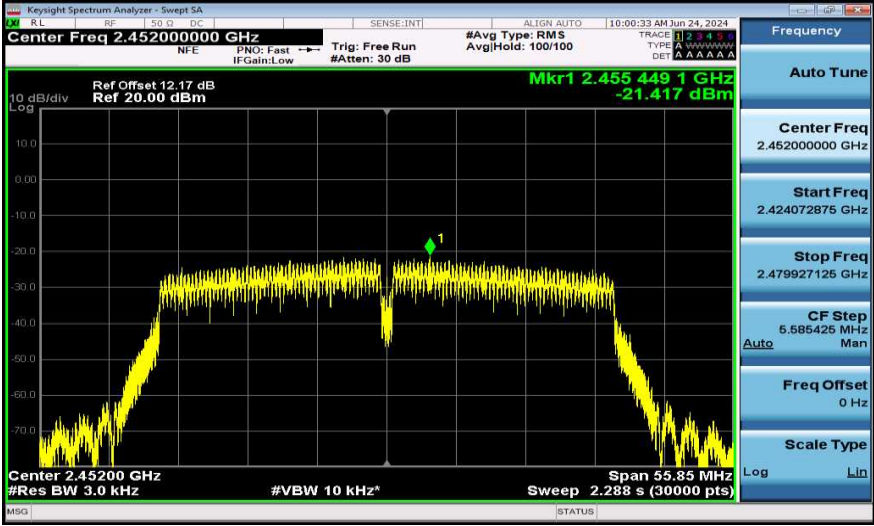
11N40MIMO-Ant1-2437-PASS

FCC ID:2APBOAN950

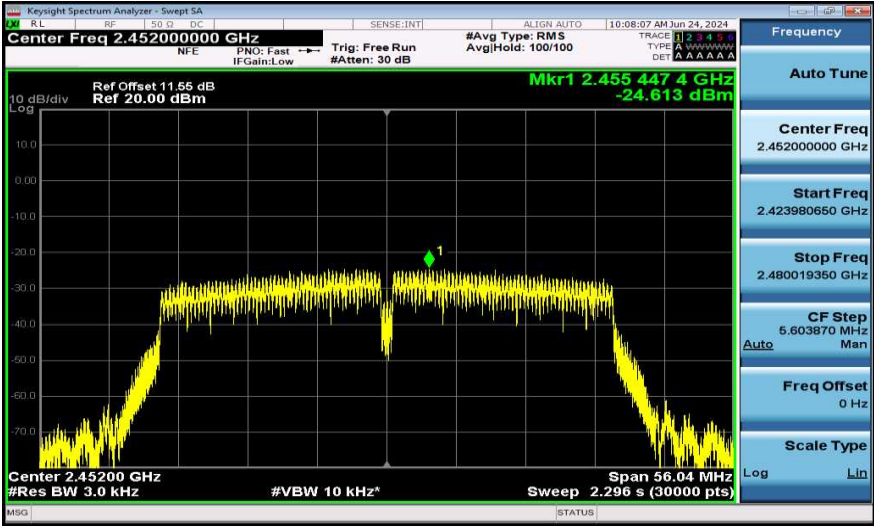
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11N40MIMO-Ant2-2437-PASS



11N40MIMO-Ant1-2452-PASS



11N40MIMO-Ant2-2452-PASS

FCC ID: 2APBOAN950
IC: 23717-AN950

Band edge measurements

Test Result

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	4.78	-42.22	≤-25.22	PASS
11B	Ant2	Low	2412	2.41	-47.06	≤-27.59	PASS
11B	Ant1	High	2462	3.43	-46.23	≤-26.57	PASS
11B	Ant2	High	2462	2.74	-48.02	≤-27.26	PASS
11G	Ant1	Low	2412	3.34	-41.73	≤-26.66	PASS
11G	Ant2	Low	2412	1.00	-43.72	≤-29	PASS
11G	Ant1	High	2462	2.62	-46.69	≤-27.39	PASS
11G	Ant2	High	2462	0.99	-47.7	≤-29.01	PASS
11N20MIMO	Ant1	Low	2412	4.08	-40.33	≤-25.93	PASS
11N20MIMO	Ant2	Low	2412	0.97	-36.22	≤-29.03	PASS
11N20MIMO	Ant1	High	2462	3.32	-45.5	≤-26.68	PASS
11N20MIMO	Ant2	High	2462	0.64	-47.94	≤-29.36	PASS
11N40MIMO	Ant2	Low	2422	-2.42	-43.83	≤-32.42	PASS
11N40MIMO	Ant1	Low	2422	0.53	-35.29	≤-29.47	PASS
11N40MIMO	Ant1	High	2452	-0.30	-47.42	≤-30.3	PASS
11N40MIMO	Ant2	High	2452	-2.52	-46.43	≤-32.52	PASS

Test Graphs

