Appendix Test Data

Report No.:	18220WC20028001	Test Sample No.:	1-2-2
Start Test Date:	2022.2.22	Finish Test Date:	2022.2.22
Test Engineer:	Tony.He	Auditor:	Edward.Pan
Temperature:	24.3℃	Relative Humidity:	57 %
Pressure:	1012 hPa		

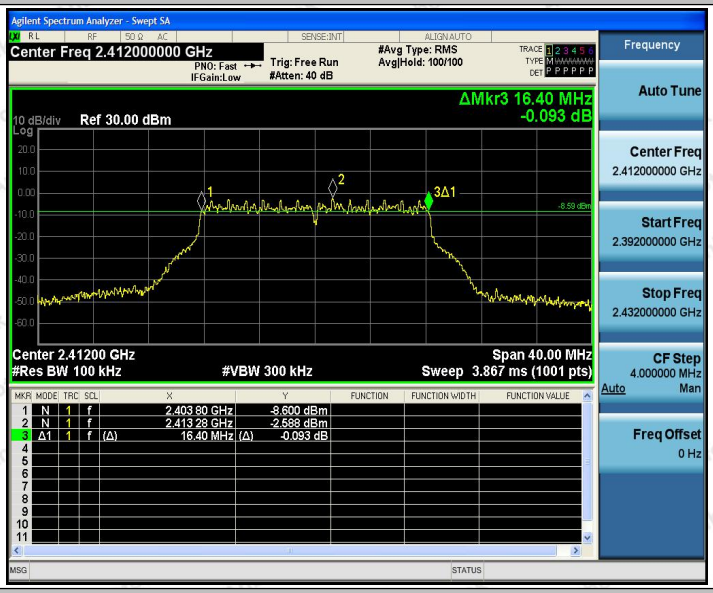
Appendix A: DTS Bandwidth

Test Result

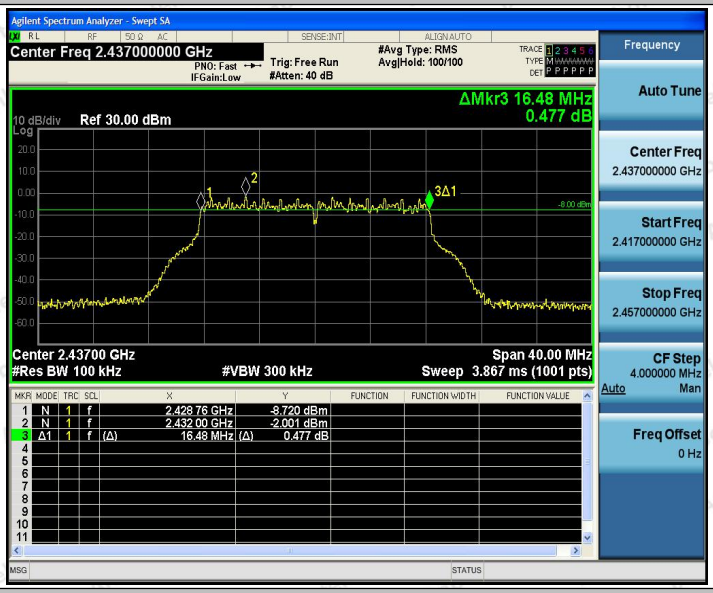
Test Mode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11G	Ant1	2412	16.400	2403.800	2420.200	≥0.5	PASS
		2437	16.480	2428.760	2445.240	≥0.5	PASS
		2462	16.480	2453.800	2470.280	≥0.5	PASS

Test Graphs

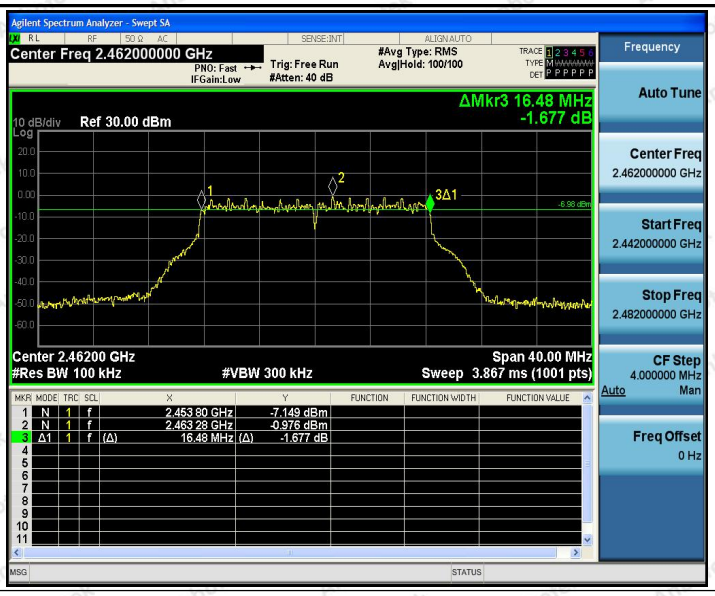
11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.462000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
#Avg Type: RMS
Avg|Hold: 100/100
ΔMkr3 16.48 MHz
-1.677 dB
10 dB/div
Ref 30.00 dBm
Center 2.46200 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 40.00 MHz
Sweep 3.867 ms (1001 pts)
1 N 1 f 2.453 80 GHz -7.149 dBm
2 N 1 f 2.463 28 GHz -0.976 dBm
3 Δ1 1 f (Δ) 16.48 MHz (Δ) -1.677 dB
Frequency
Auto Tune
Center Freq
2.462000000 GHz
Start Freq
2.442000000 GHz
Stop Freq
2.482000000 GHz
CF Step
4.000000 MHz
Auto Man
Freq Offset
0 Hz

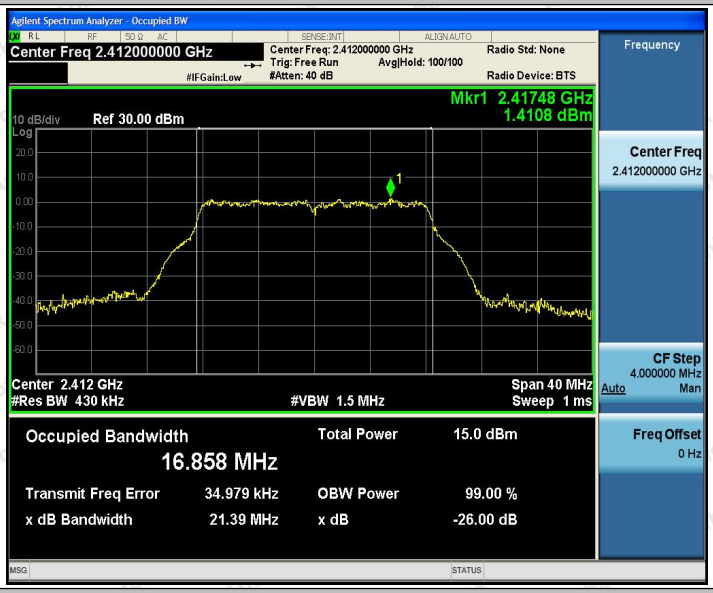
Appendix B: Occupied Channel Bandwidth

Test Result

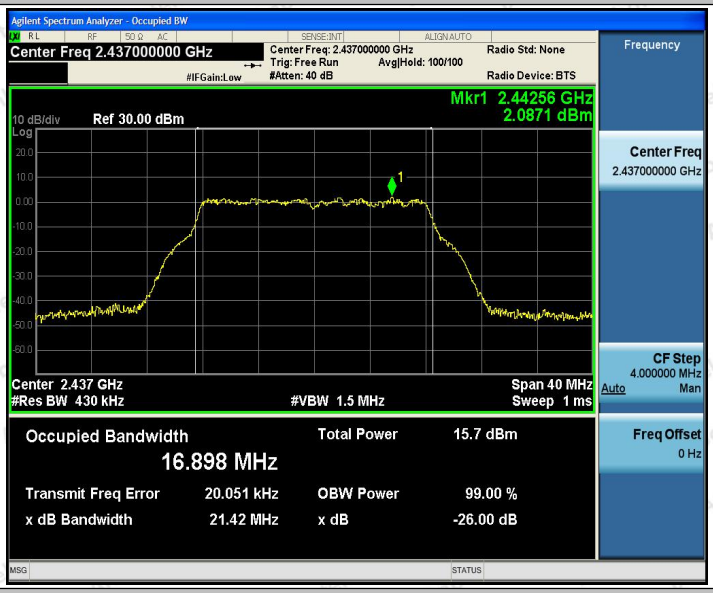
Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11G	Ant1	2412	16.858	2403.606	2420.464	---	PASS
		2437	16.898	2428.571	2445.469	---	PASS
		2462	16.904	2453.622	2470.526	---	PASS

Test Graphs

11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462

Agilent Spectrum Analyzer - Occupied BW
Center Freq 2.462000000 GHz
Center Freq: 2.462000000 GHz
Trig: Free Run
Avg|Hold: 100/100
#Atten: 40 dB
Radio Std: None
Radio Device: BTS
Mkr1 2.46748 GHz
3.2693 dBm
10 dB/div
Ref 30.00 dBm
Center 2.462 GHz
#Res BW 430 kHz
#VBW 1.5 MHz
Span 40 MHz
Sweep 1 ms
Occupied Bandwidth
16.904 MHz
Total Power 16.5 dBm
Transmit Freq Error 73.974 kHz
OBW Power 99.00 %
x dB Bandwidth 21.28 MHz
x dB -26.00 dB
Frequency
Center Freq
2.462000000 GHz
CF Step
4.000000 MHz
Auto Man
Freq Offset
0 Hz

Appendix C: Maximum conducted output power

Test Result

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11G	Ant1	2412	15.93	≤30	PASS
		2437	16.69	≤30	PASS
		2462	17.45	≤30	PASS

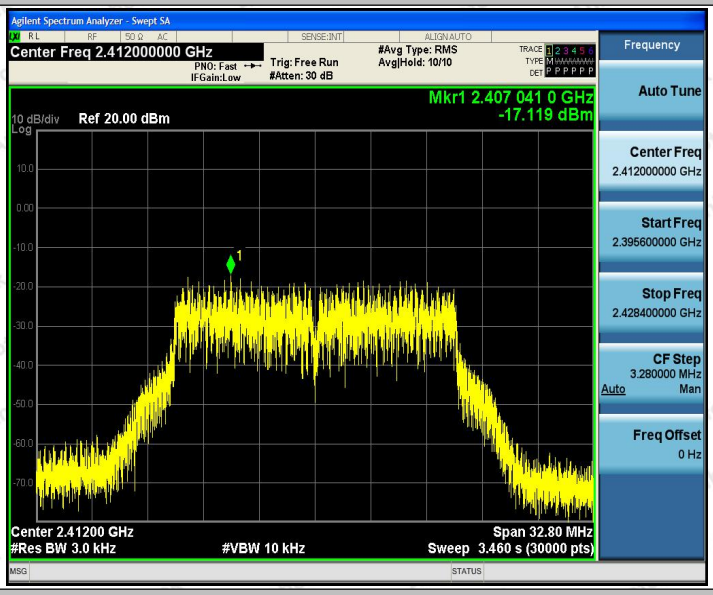
Appendix D: Maximum power spectral density

Test Result

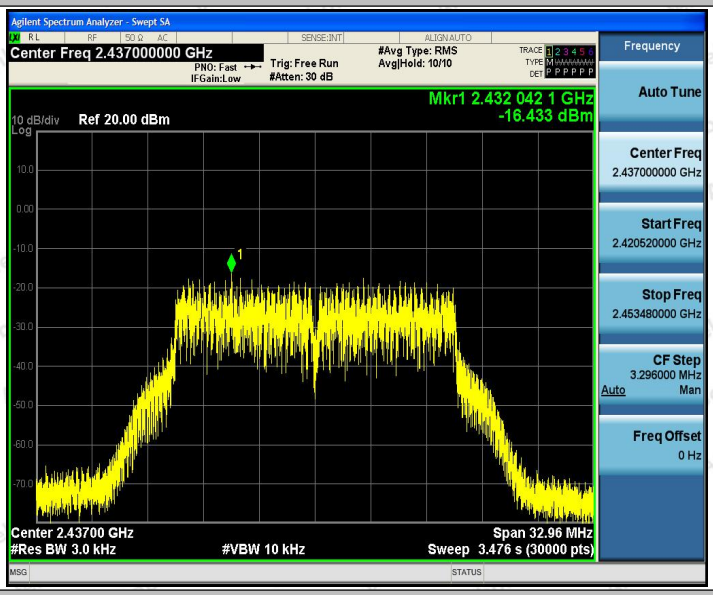
Test Mode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11G	Ant1	2412	-17.12	≤8	PASS
		2437	-16.43	≤8	PASS
		2462	-16.05	≤8	PASS

Test Graphs

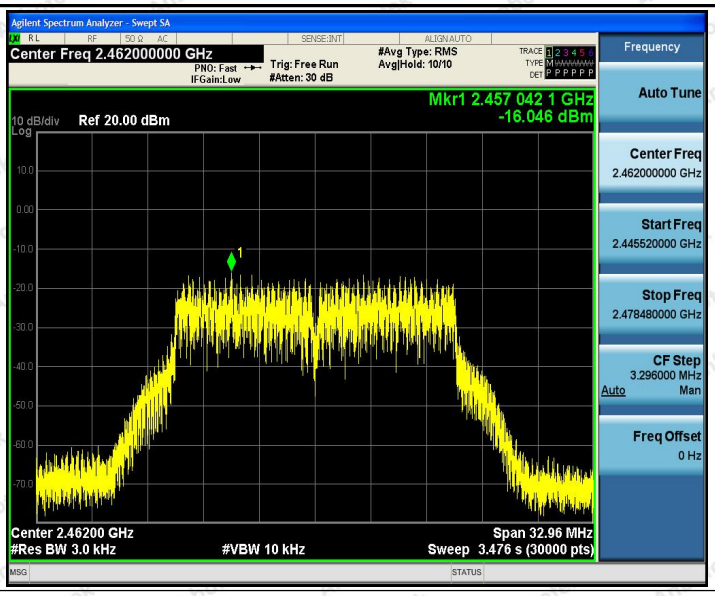
11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.462000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 10/10
Mkr1 2.457 042 1 GHz
-16.046 dBm
10 dB/div
Log
Ref 20.00 dBm
Center 2.46200 GHz
#Res BW 3.0 kHz
#VBW 10 kHz
Span 32.96 MHz
Sweep 3.476 s (30000 pts)
Frequency
Auto Tune
Center Freq
2.462000000 GHz
Start Freq
2.445520000 GHz
Stop Freq
2.478480000 GHz
CF Step
3.296000 MHz
Auto
Man
Freq Offset
0 Hz

Appendix E: Band edge measurements

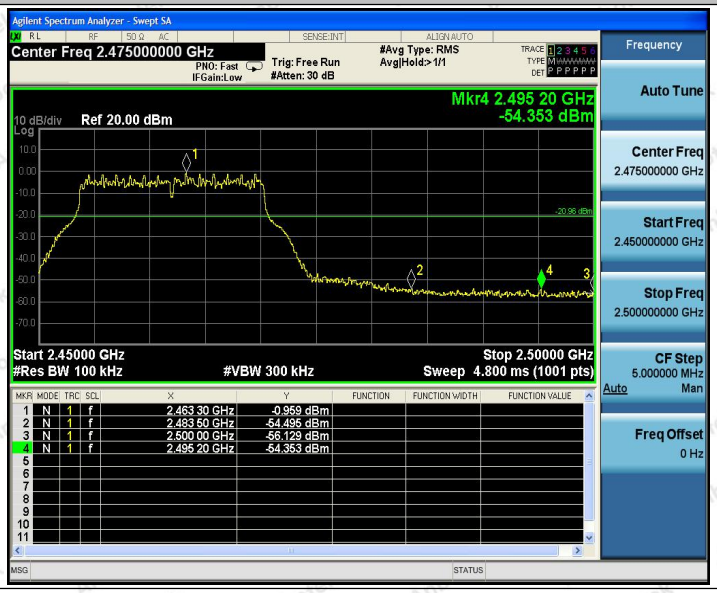
Test Result

Test Mode	Antenna	Ch Name	Channel	Ref Level[dBm]	Result[dBm]	Limit[dBm]	Verdict
11G	Ant1	Low	2412	-2.56	-41.89	≤-22.56	PASS
		High	2462	-0.96	-54.35	≤-20.96	PASS

Test Graphs

11G_Ant1_Low_2412

11G_Ant1_High_2462



Appendix F: Conducted Spurious Emission

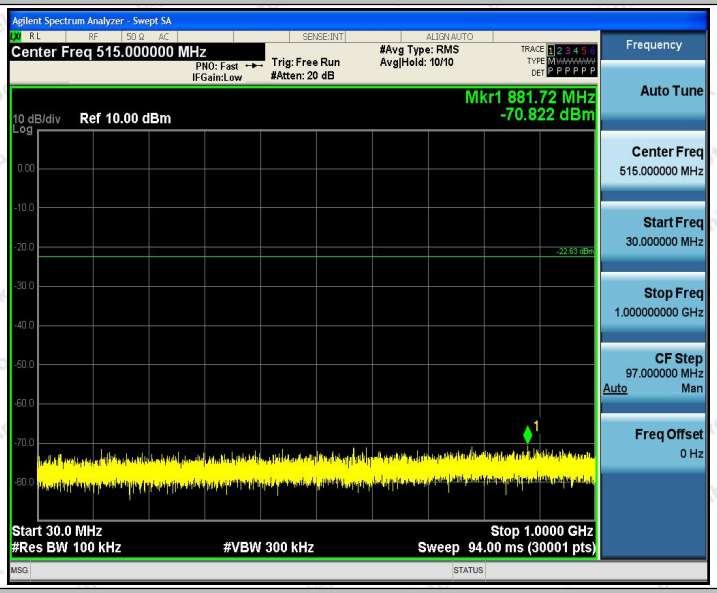
Test Result

Test Mode	Antenna	Channel	Freq Range [Mhz]	Ref Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
11G	Ant1	2412	Reference	-2.63	-2.63	---	PASS
			30~1000	-2.63	-70.82	≤-22.63	PASS
			1000~26500	-2.63	-55.38	≤-22.63	PASS
		2437	Reference	-1.89	-1.89	---	PASS
			30~1000	-1.89	-70.36	≤-21.89	PASS
			1000~26500	-1.89	-54.91	≤-21.89	PASS
		2462	Reference	-0.97	-0.97	---	PASS
			30~1000	-0.97	-70.29	≤-20.97	PASS
			1000~26500	-0.97	-55.66	≤-20.97	PASS

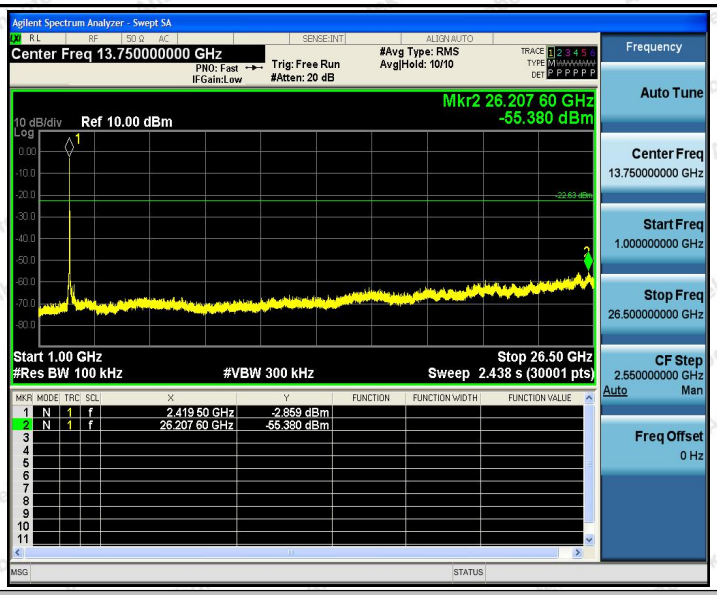
Test Graphs

11G_Ant1_2412_0~Reference

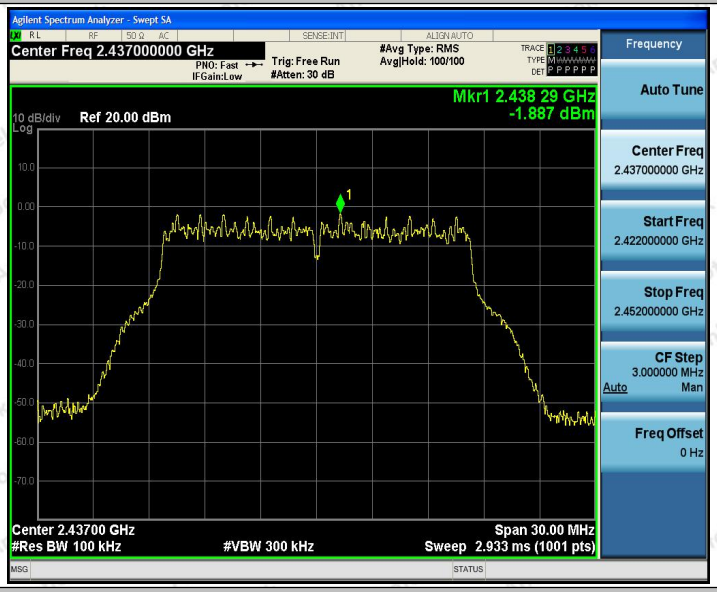
11G_Ant1_2412_30~1000



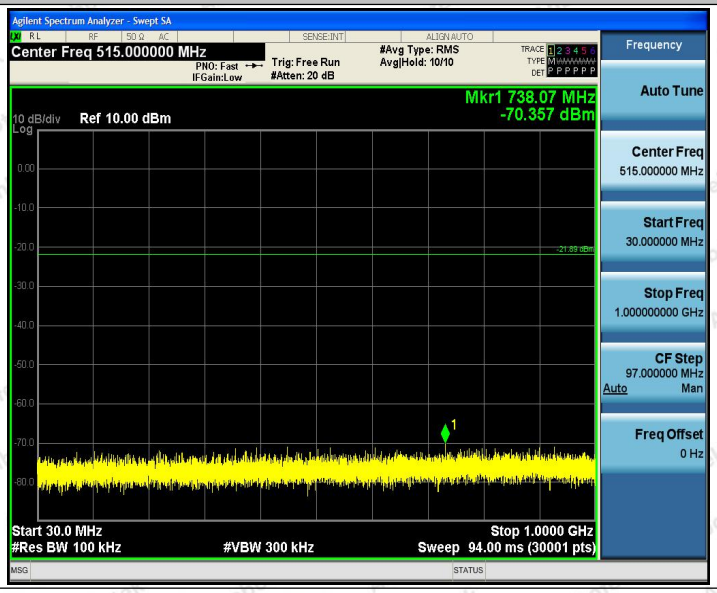
11G_Ant1_2412_1000~26500



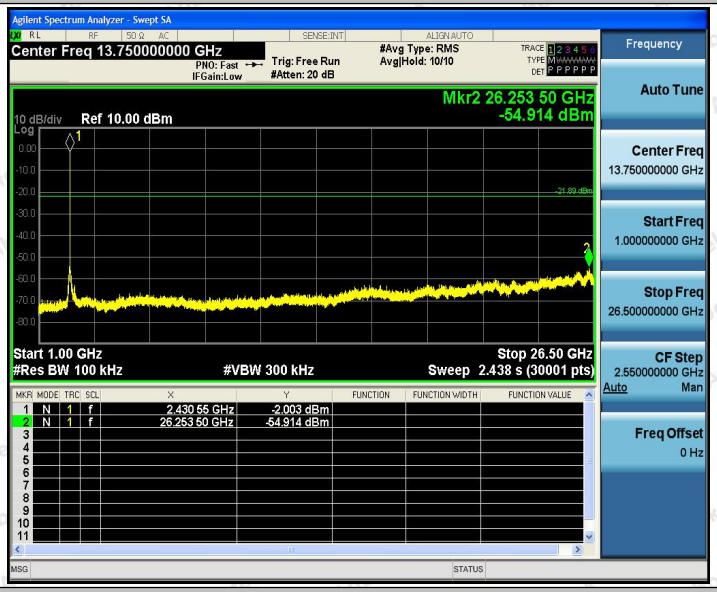
11G_Ant1_2437_0~Reference



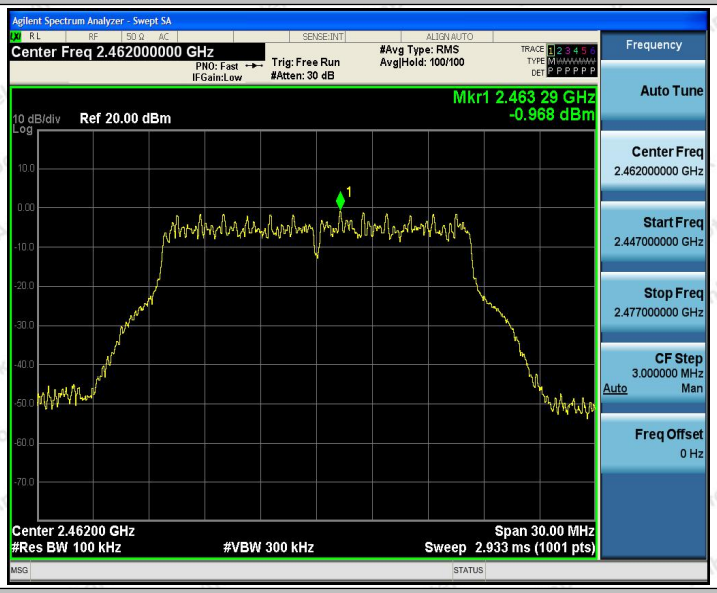
11G_Ant1_2437_30~1000



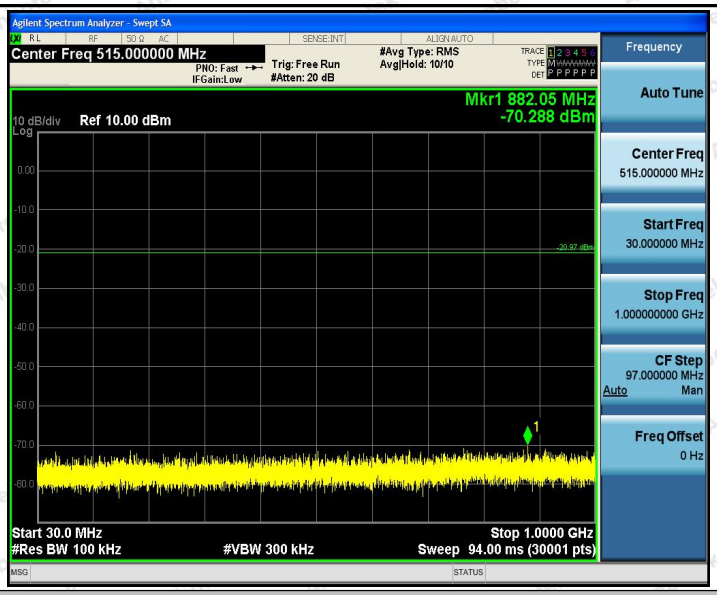
11G_Ant1_2437_1000~26500



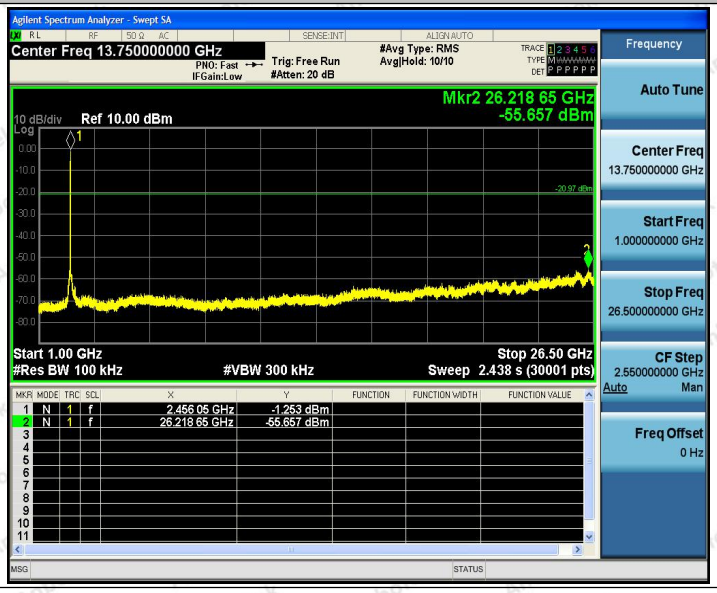
11G_Ant1_2462_0~Reference



11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



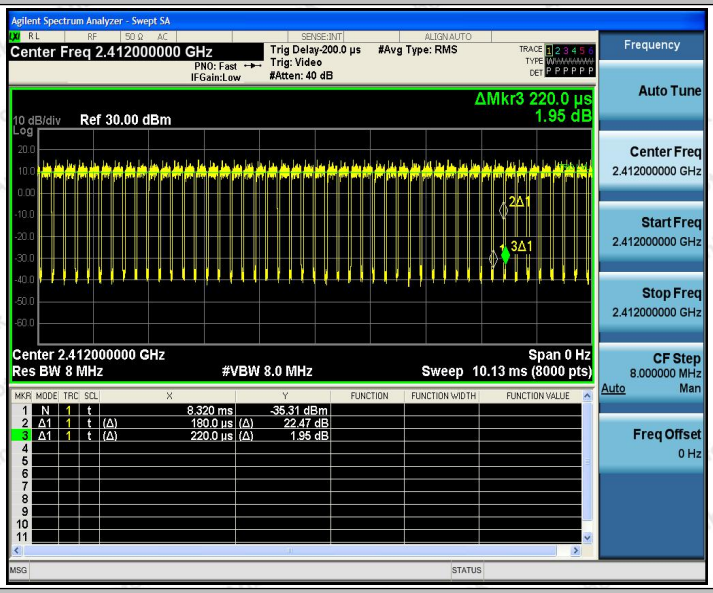
Appendix G: Duty Cycle

Test Result

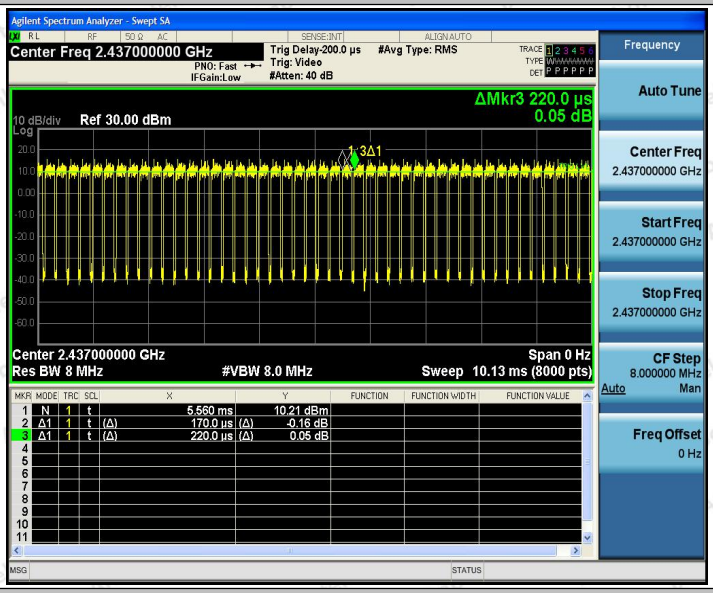
Test Mode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11G	Ant1	2412	0.18	0.22	81.82	---	PASS
		2437	0.17	0.22	77.27	---	PASS
		2462	0.17	0.21	80.95	---	PASS

Test Graphs

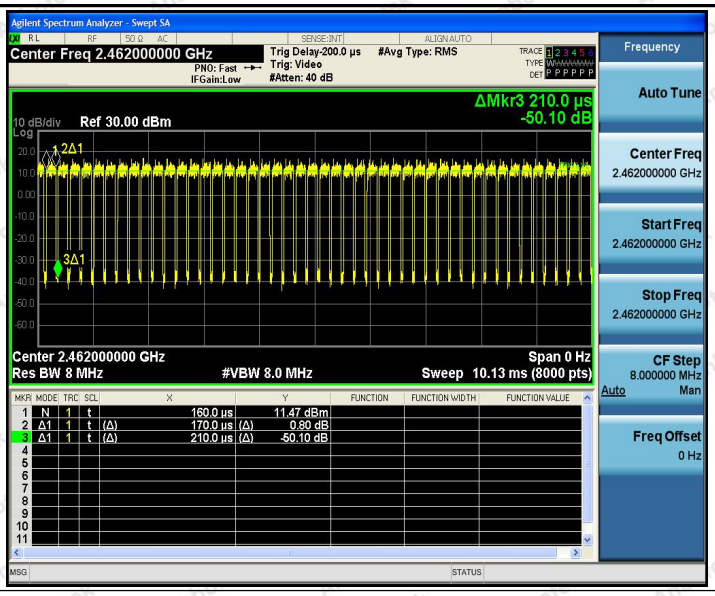
11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.462000000 GHz
PNO: Fast
IFGain:Low
Trig Delay-200.0 µs
Trig: Video
#Atten: 40 dB
#Avg Type: RMS
ΔMkr3 210.0 µs
-50.10 dB
10 dB/div
Ref 30.00 dBm
Log
2Δ1
3Δ1
Center 2.462000000 GHz
Span 0 Hz
Res BW 8 MHz
#VBW 8.0 MHz
Sweep 10.13 ms (8000 pts)
1 N 1 t 160.0 µs 11.47 dBm
2 Δ1 1 t (Δ) 170.0 µs (Δ) 0.80 dB
3 Δ1 1 t (Δ) 210.0 µs (Δ) -50.10 dB
Frequency
Auto Tune
Center Freq
2.462000000 GHz
Start Freq
2.462000000 GHz
Stop Freq
2.462000000 GHz
CF Step
8.000000 MHz
Auto
Man
Freq Offset
0 Hz

---End---