Appendix Test Data

Report No.:	18220WC30271401	Test Sample No.:	1-2-2
Start Test Date:	2023.12.26	Finish Test Date:	2023.12.27
Test Engineer:	Hayman Chen	Auditor:	Rick Luo
Temperature:	25.3℃	Relative Humidity:	47%
Pressure:	101kPa		

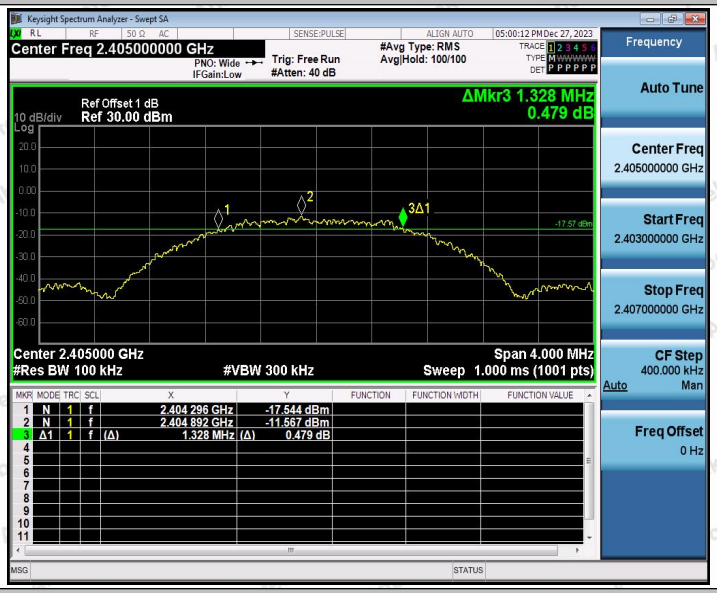
Appendix A: DTS Bandwidth

Test Result

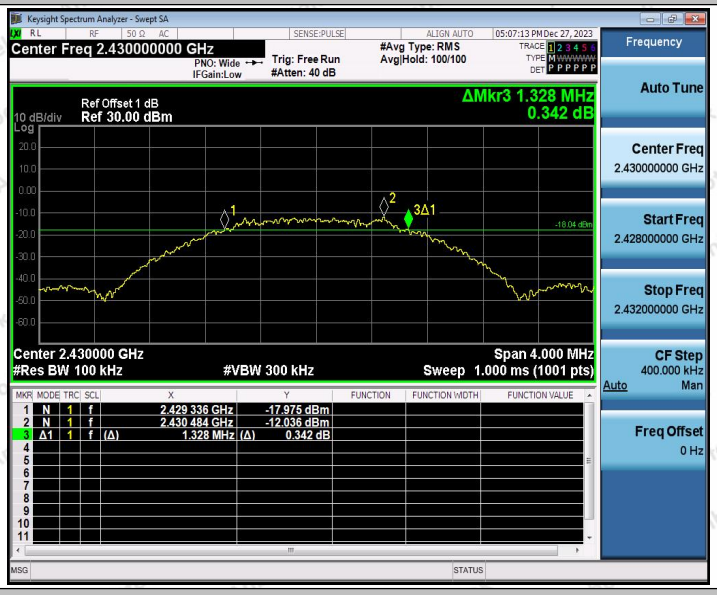
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
2.4G	Ant1	2405	1.328	2404.296	2405.624	0.5	PASS
		2430	1.328	2429.336	2430.664	0.5	PASS
		2470	1.328	2469.328	2470.656	0.5	PASS

Test Graphs

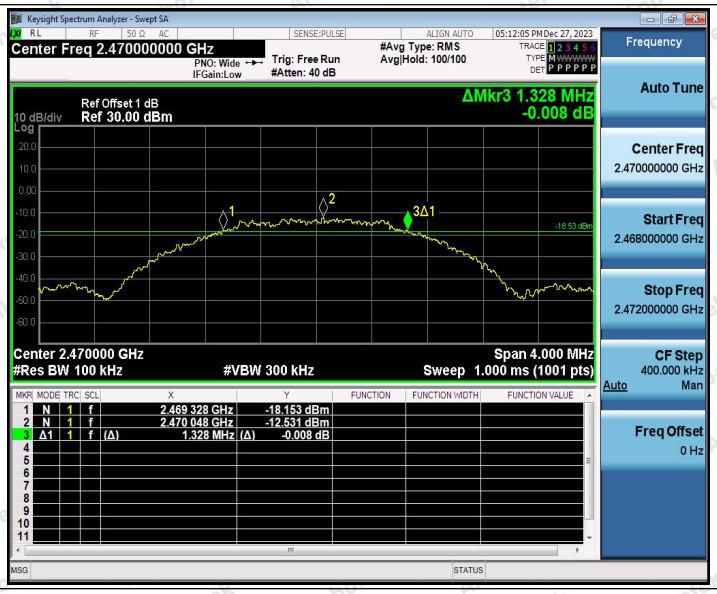
2.4G_Ant1_2405



2.4G_Ant1_2430



2.4G_Ant1_2470


Keysight Spectrum Analyzer - Swept SA
Center Freq 2.470000000 GHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 40 dB
#Avg Type: RMS
Avg|Hold: 100/100
05:12:05 PM Dec 27, 2023
Ref Offset 1 dB
10 dB/div
Ref 30.00 dBm
ΔMkr3 1.328 MHz
-0.008 dB
Center 2.470000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 4.000 MHz
Sweep 1.000 ms (1001 pts)
1 N 1 f 2.469 328 GHz -18.153 dBm
2 N 1 f 2.470 048 GHz -12.531 dBm
3 Δ1 1 f (Δ) 1.328 MHz (Δ) -0.008 dB
Frequency
Auto Tune
Center Freq
2.470000000 GHz
Start Freq
2.468000000 GHz
Stop Freq
2.472000000 GHz
CF Step
400.000 kHz
Auto
Man
Freq Offset
0 Hz

Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]
2.4G	Ant1	2405	2.0229	2403.9753	2405.9982
		2430	2.0369	2428.9618	2430.9987
		2470	2.0205	2468.9771	2470.9976

Test Graphs

2.4G_Ant1_2405

2.4G_Ant1_2430

2.4G_Ant1_2470

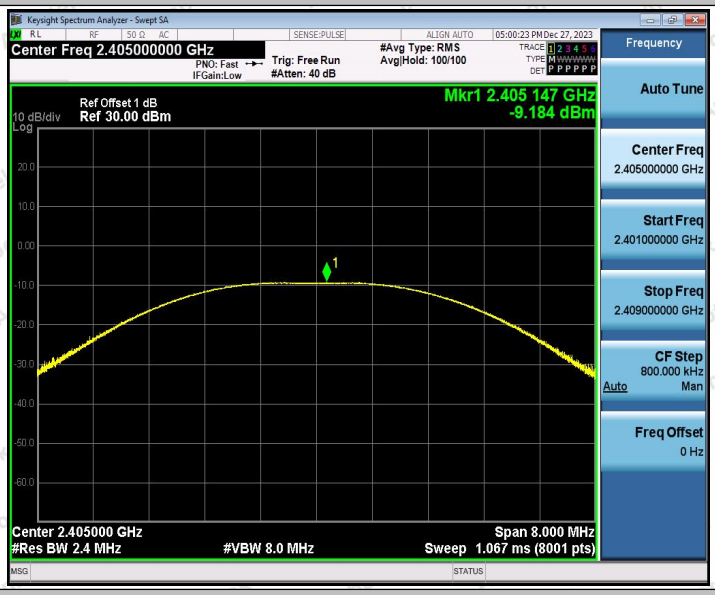
Appendix C: Maximum conducted output power

Test Result Peak

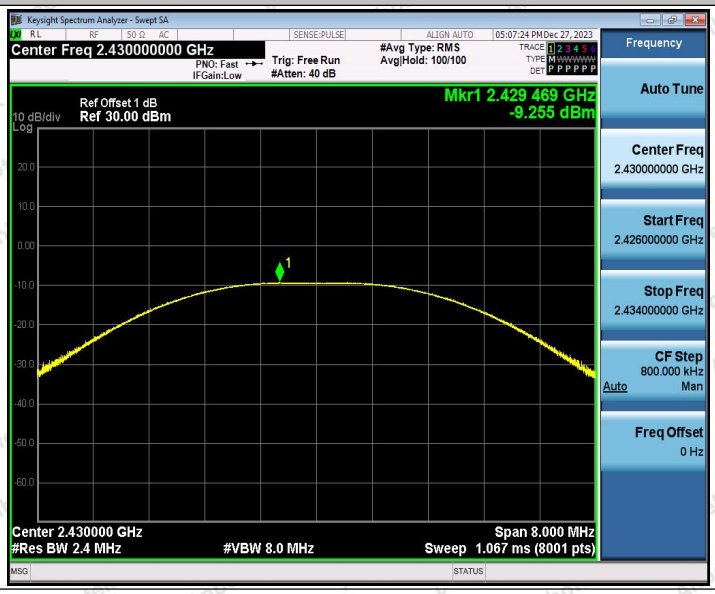
TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
2.4G	Ant1	2405	-9.18	≤30	PASS
		2430	-9.26	≤30	PASS
		2470	-9.55	≤30	PASS

Test Graphs Peak

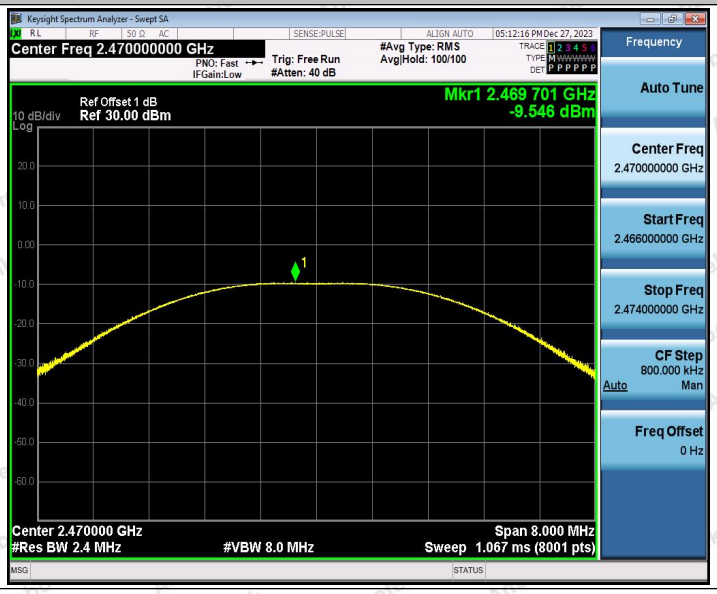
2.4G_Ant1_2405



2.4G_Ant1_2430



2.4G_Ant1_2470



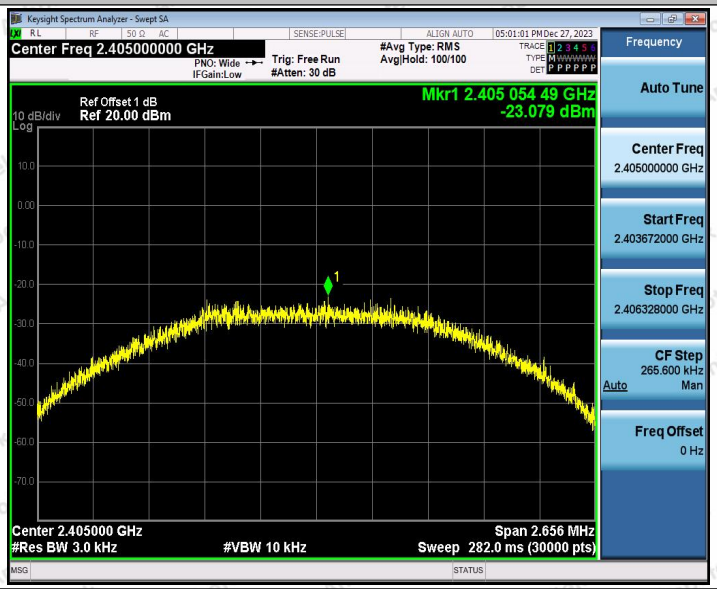
Appendix D: Maximum power spectral density

Test Result

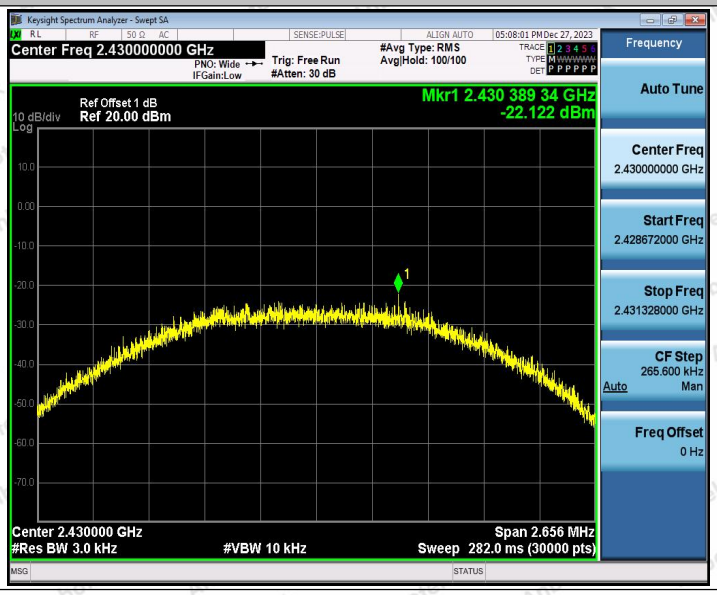
TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
2.4G	Ant1	2405	-23.08	≤8.00	PASS
		2430	-22.12	≤8.00	PASS
		2470	-23.49	≤8.00	PASS

Test Graphs

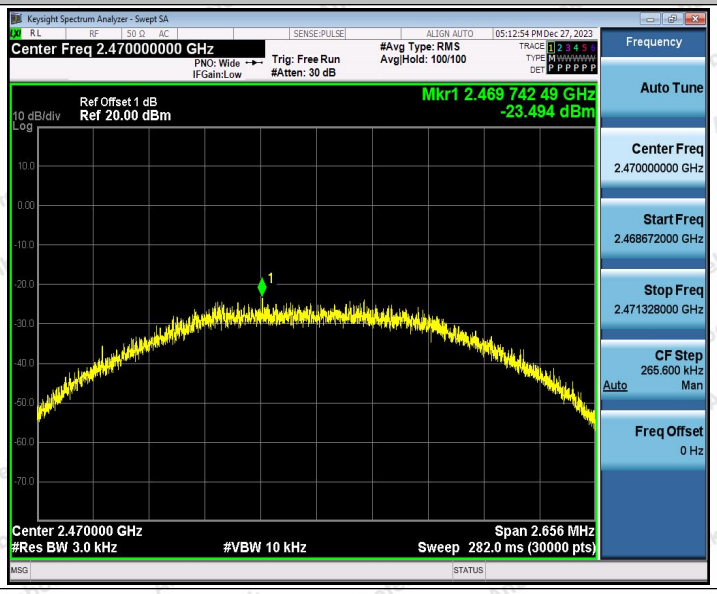
2.4G_Ant1_2405



2.4G_Ant1_2430



2.4G_Ant1_2470



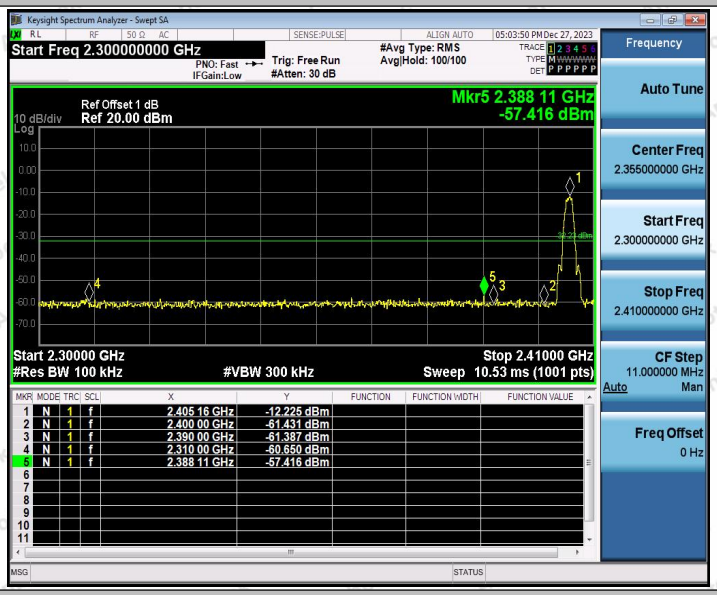
Appendix E: Band edge measurements

Test Result

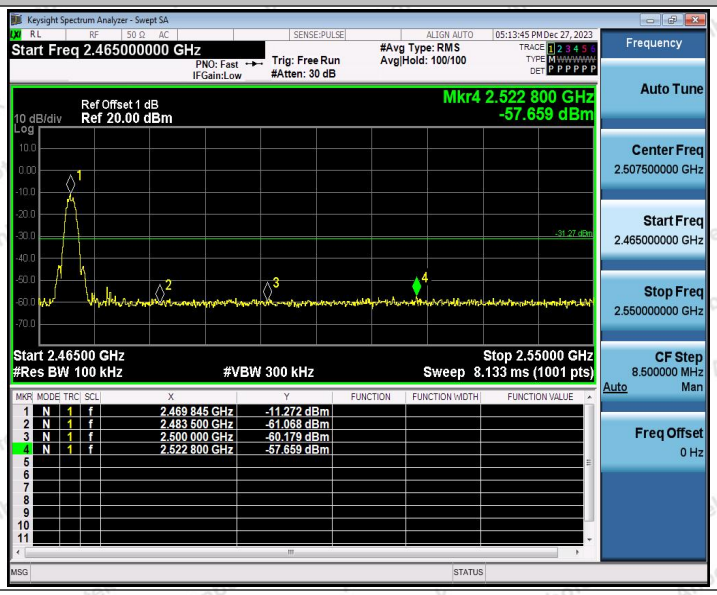
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
2.4G	Ant1	Low	2405	-12.23	-57.42	≤-32.23	PASS
		High	2470	-11.27	-57.66	≤-31.27	PASS

Test Graphs

2.4G_Ant1_Low_2405



2.4G_Ant1_High_2470



Appendix F: Conducted Spurious Emission

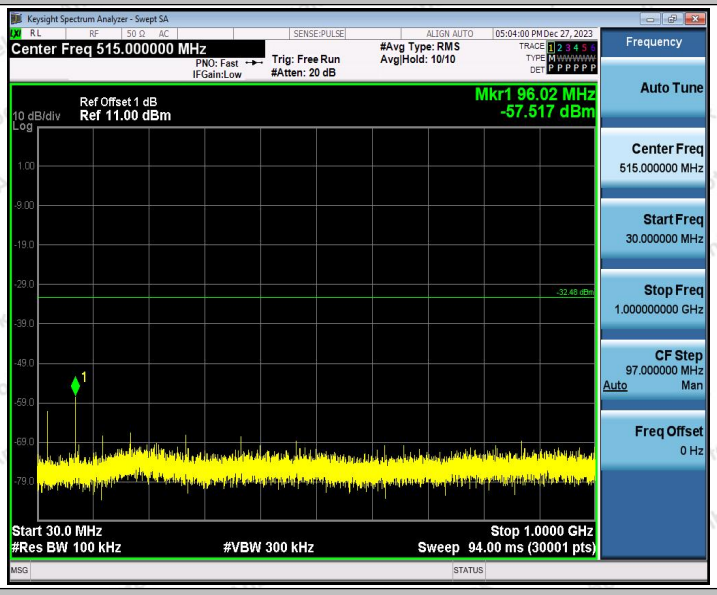
Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
2.4G	Ant1	2405	Reference	-12.48	-12.48	---	PASS
			30~1000	-12.48	-57.52	≤-32.48	PASS
			1000~26500	-12.48	-49.75	≤-32.48	PASS
		2430	Reference	-12.64	-12.64	---	PASS
			30~1000	-12.64	-57.41	≤-32.64	PASS
			1000~26500	-12.64	-50.49	≤-32.64	PASS
		2470	Reference	-13.56	-13.56	---	PASS
			30~1000	-13.56	-57.21	≤-33.56	PASS
			1000~26500	-13.56	-49.65	≤-33.56	PASS

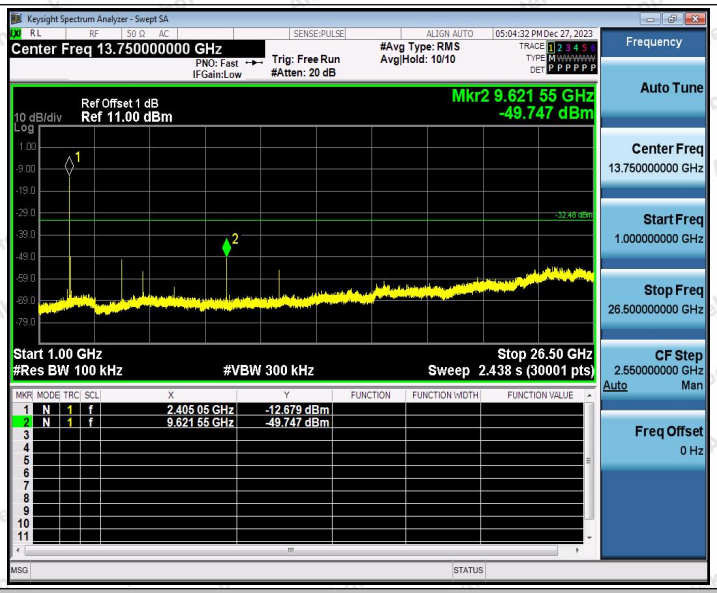
Test Graphs

2.4G_Ant1_2405_0~Reference

2.4G_Ant1_2405_30~1000

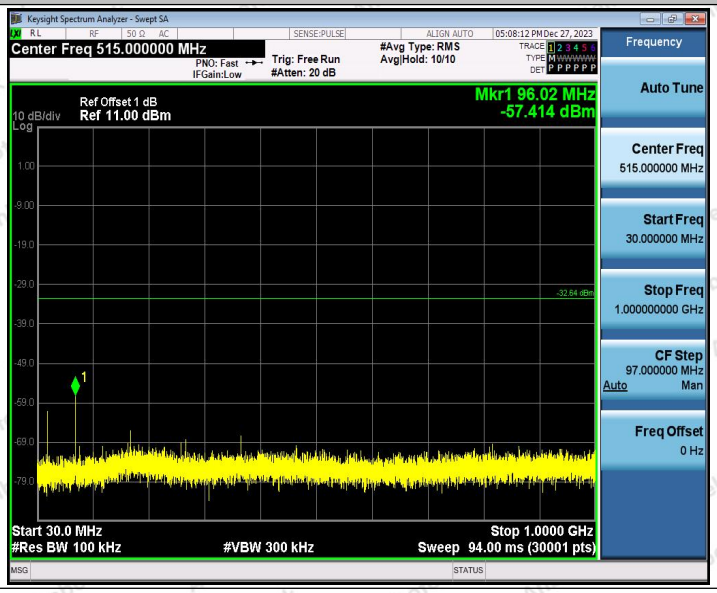


2.4G_Ant1_2405_1000~26500

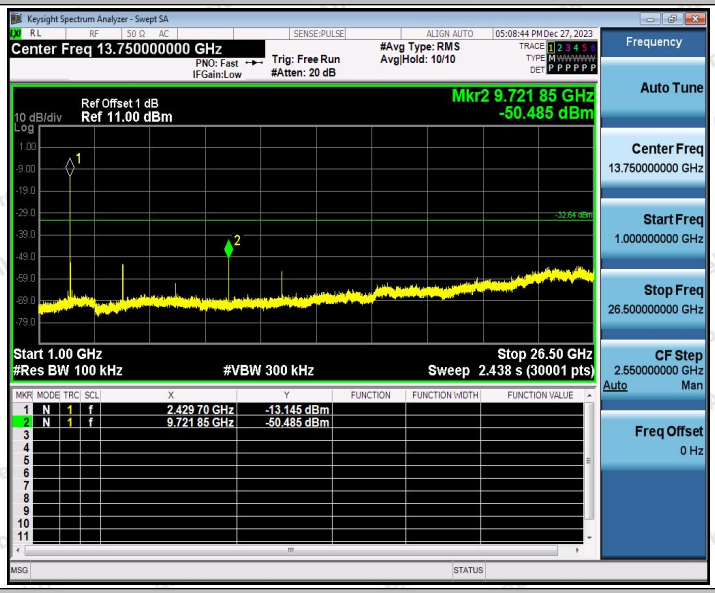


2.4G_Ant1_2430_0~Reference

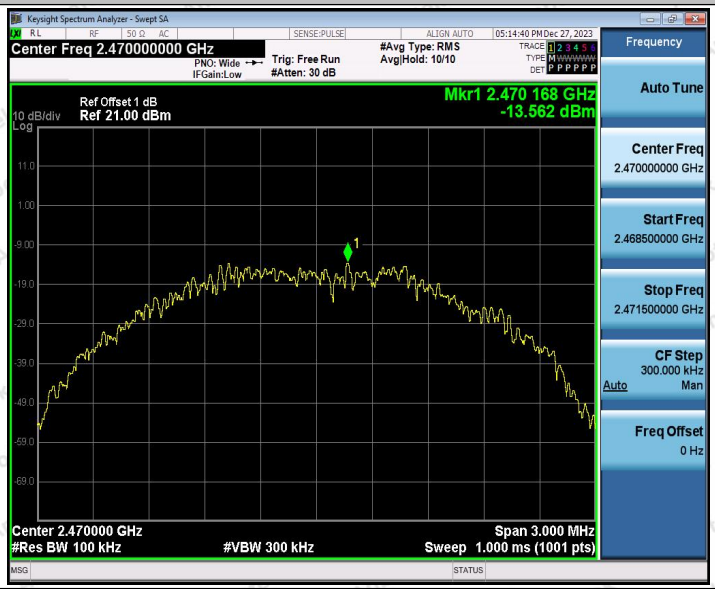
2.4G_Ant1_2430_30~1000



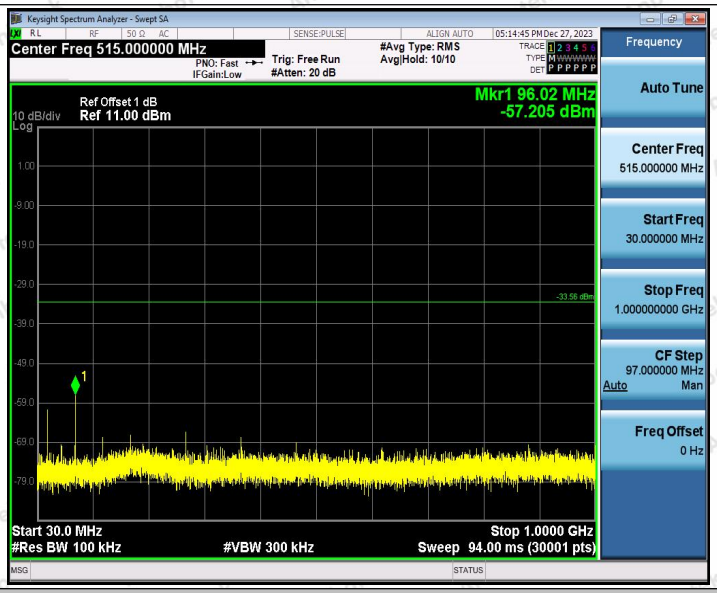
2.4G_Ant1_2430_1000~26500



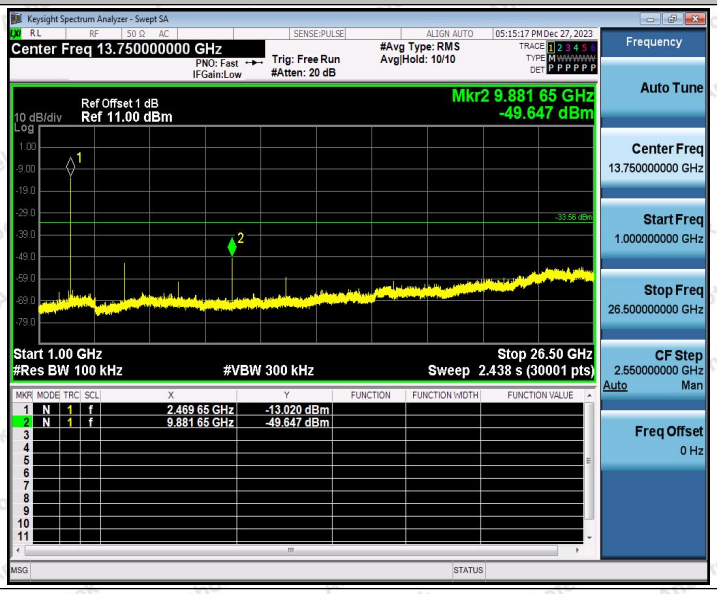
2.4G_Ant1_2470_0~Reference



2.4G_Ant1_2470_30~1000



2.4G_Ant1_2470_1000~26500



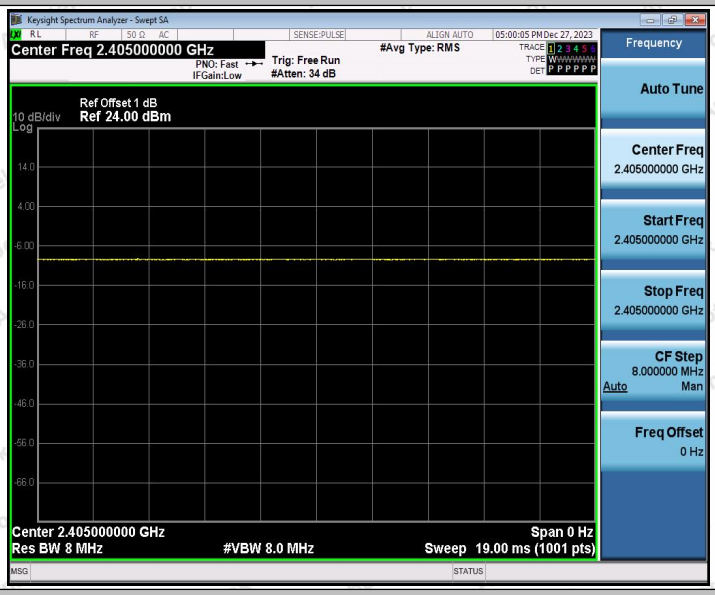
Appendix G: Duty Cycle

Test Result

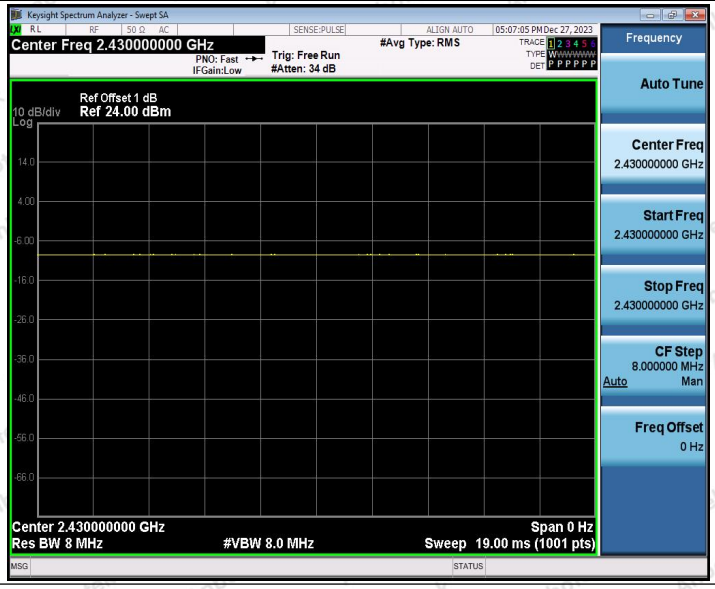
TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
2.4G	Ant1	2405	19.00	19.00	100	0.00
		2430	19.00	19.00	100	0.00
		2470	19.00	19.00	100	0.00

Test Graphs

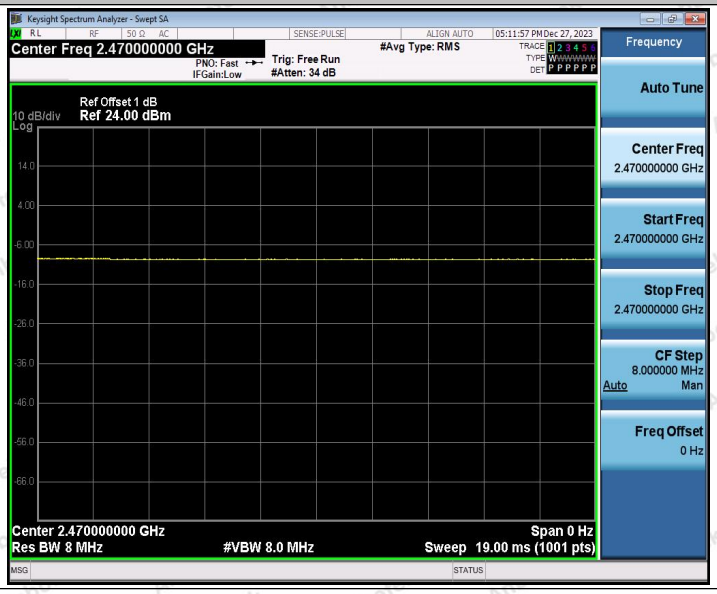
2.4G_Ant1_2405



2.4G_Ant1_2430



2.4G_Ant1_2470



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