Appendix Test Data

Report No.:	1812C50297512501	Test Sample No.:	1-2-2
Start Test Date:	2025.6.20	Finish Test Date:	2025.6.24
Test Engineer:	Qiangfei Yang	Auditor:	Justin Feng
Temperature:	22.3℃	Relative Humidity:	50%
Pressure:	101kPa		

Appendix A: -6dB Bandwidth

Condition	Antenna	Rate	Frequency (MHz)	-6dB BW(kHz)	limit(kHz)	Result
NVNT	ANT1	1Mbps	2402.00	669.28	500	Pass
NVNT	ANT1	1Mbps	2440.00	668.36	500	Pass
NVNT	ANT1	1Mbps	2480.00	667.66	500	Pass

-6dB_Bandwidth_NVNT_ANT1_1Mbps_2402

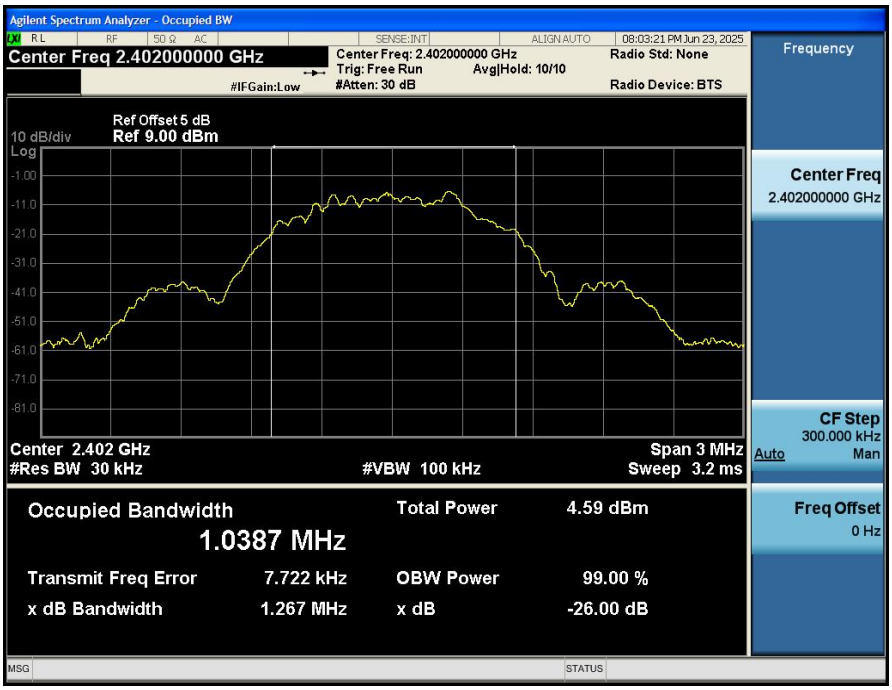
-6dB_Bandwidth_NVNT_ANT1_1Mbps_2440

-6dB_Bandwidth_NVNT_ANT1_1Mbps_2480

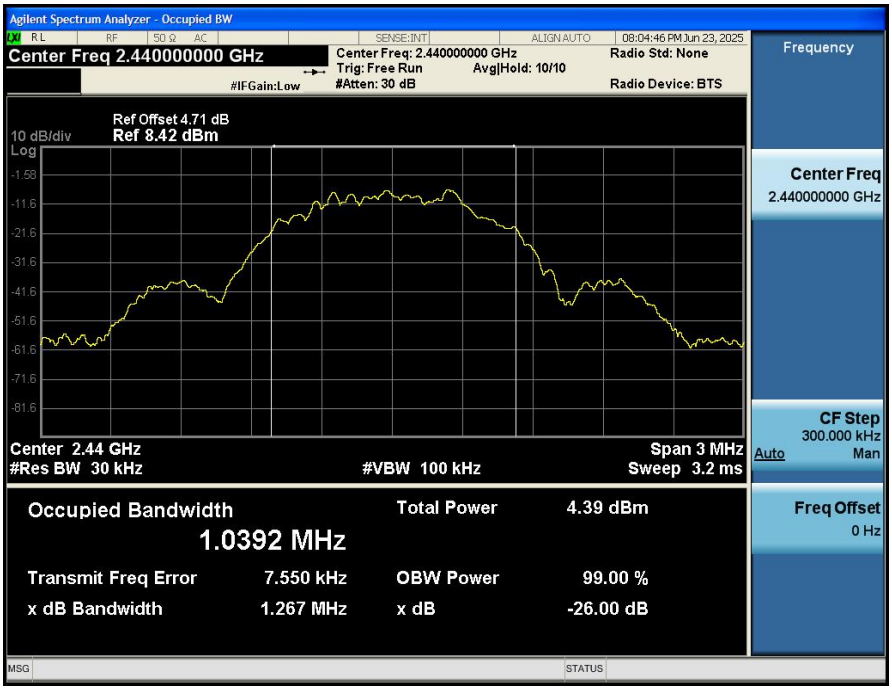
Appendix B: 99% Occupied Bandwidth

Condition	Antenna	Rate	Frequency (MHz)	99%BW(MHz)
NVNT	ANT1	1Mbps	2402.00	1.039
NVNT	ANT1	1Mbps	2440.00	1.039
NVNT	ANT1	1Mbps	2480.00	1.039

99%_Occupied_Bandwidth_NVNT_ANT1_1Mbps_2402



99%_Occupied_Bandwidth_NVNT_ANT1_1Mbps_2440

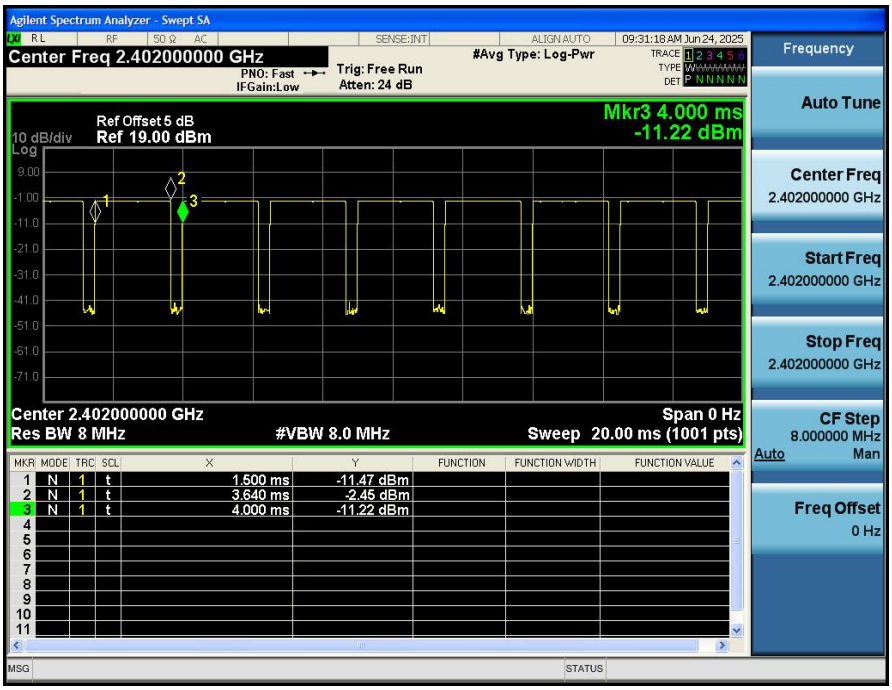


99%_Occupied_Bandwidth_NVNT_ANT1_1Mbps_2480

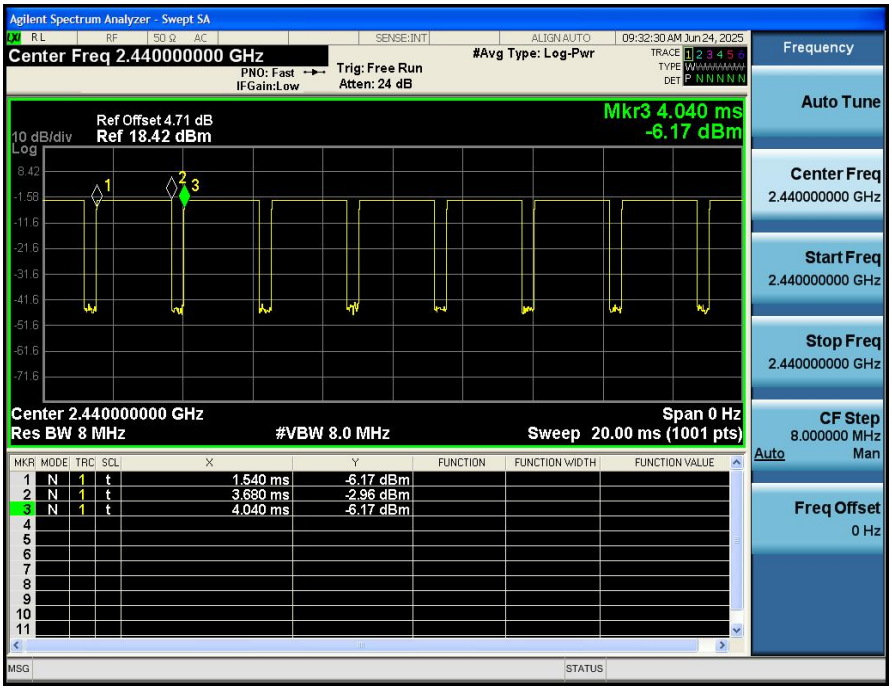
Appendix C: Duty Cycle

Condition	Antenna	Rate	Frequency (MHz)	Dutycycle(%)	Duty_factor
NVNT	ANT1	1Mbps	2402.00	86.40	0.63
NVNT	ANT1	1Mbps	2440.00	86.40	0.63
NVNT	ANT1	1Mbps	2480.00	85.60	0.68

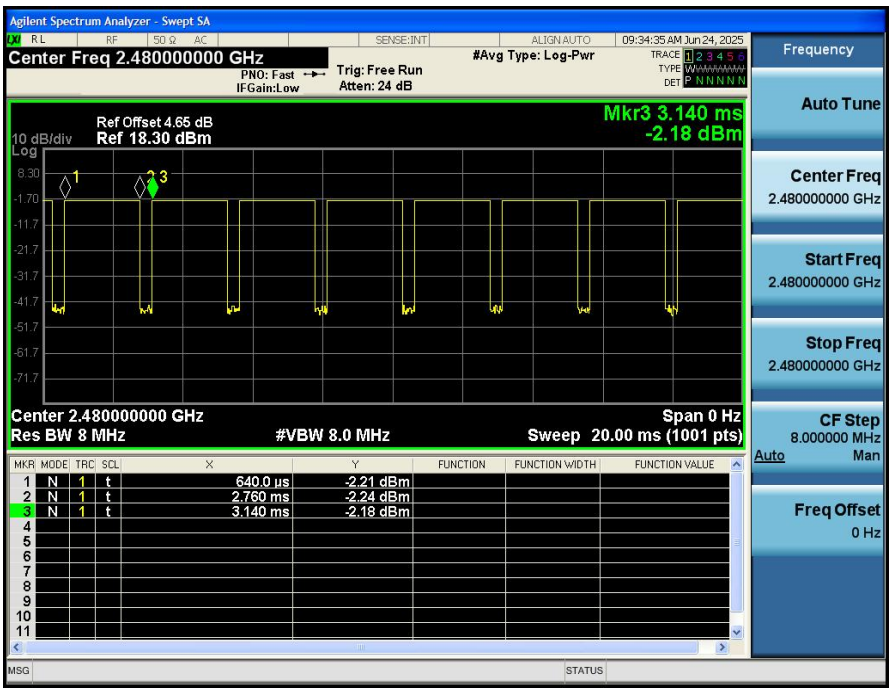
Duty_Cycle_NVNT_ANT1_1Mbps_2402



Duty_Cycle_NVNT_ANT1_1Mbps_2440



Duty_Cycle_NVNT_ANT1_1Mbps_2480



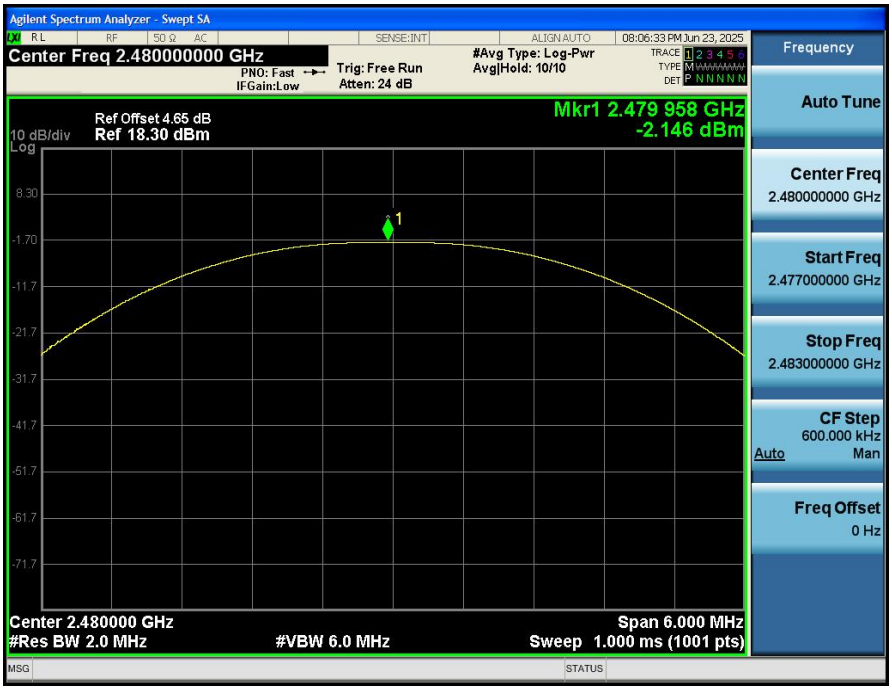
Appendix D: Peak Output Power

Condition	Antenna	Rate	Frequency (MHz)	Max. Conducted Power(dBm)	Max. Conducted Power(mW)	Limit(mW)	Result
NVNT	ANT1	1Mbps	2402.00	-2.32	0.59	1000	Pass
NVNT	ANT1	1Mbps	2440.00	-2.73	0.53	1000	Pass
NVNT	ANT1	1Mbps	2480.00	**-2.15**	0.61	1000	Pass

Peak_Output_Power_NVNT_ANT1_1Mbps_2402

Peak_Output_Power_NVNT_ANT1_1Mbps_2440

Peak_Output_Power_NVNT_ANT1_1Mbps_2480



Appendix E: Power Spectral Density

Condition	Antenna	Rate	Frequency (MHz)	Power Spectral Density(dBm/3kHz)	Limit(dBm/3kHz)	Result
NVNT	ANT1	1Mbps	2402.00	-18.68	8	Pass
NVNT	ANT1	1Mbps	2440.00	-19.09	8	Pass
NVNT	ANT1	1Mbps	2480.00	-18.46	8	Pass

Power_Spectral_Density_NVNT_ANT1_1Mbps_2402

Power_Spectral_Density_NVNT_ANT1_1Mbps_2440

Power_Spectral_Density_NVNT_ANT1_1Mbps_2480

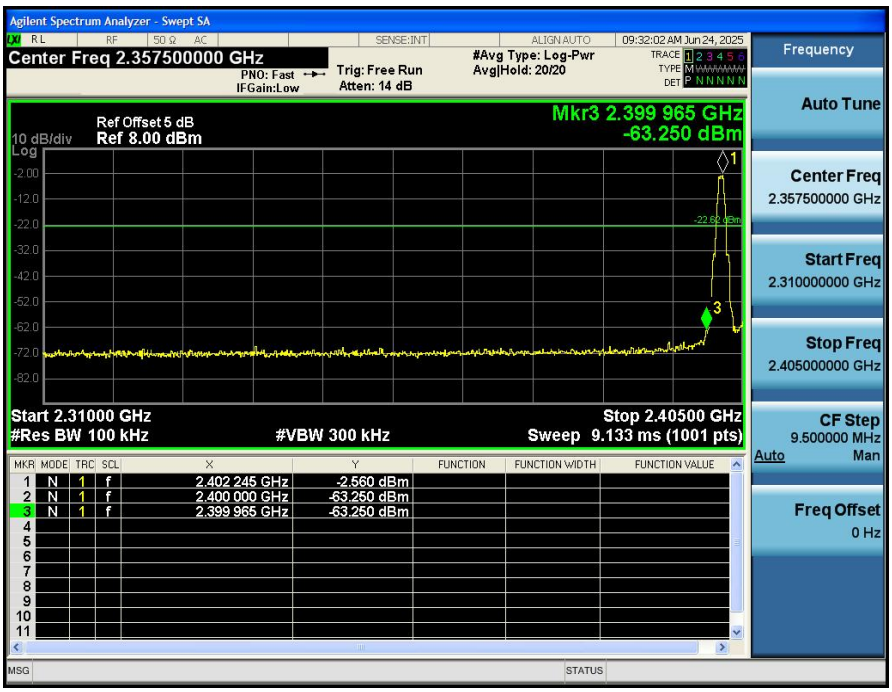
Appendix F: Bandedge

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_freq(MHz)	Ref_level(dBm)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	1Mbps	2402.00	2399.965	-2.617	-63.250	-22.617	Pass
NVNT	ANT1	1Mbps	2480.00	2483.525	-2.496	-67.552	-22.496	Pass

Remark:1. Regarding the spurious emissions from 30MHz to 26.5GHz, the cable lose have been set in the 'offset' of the Spectrum Analyzer during the test.

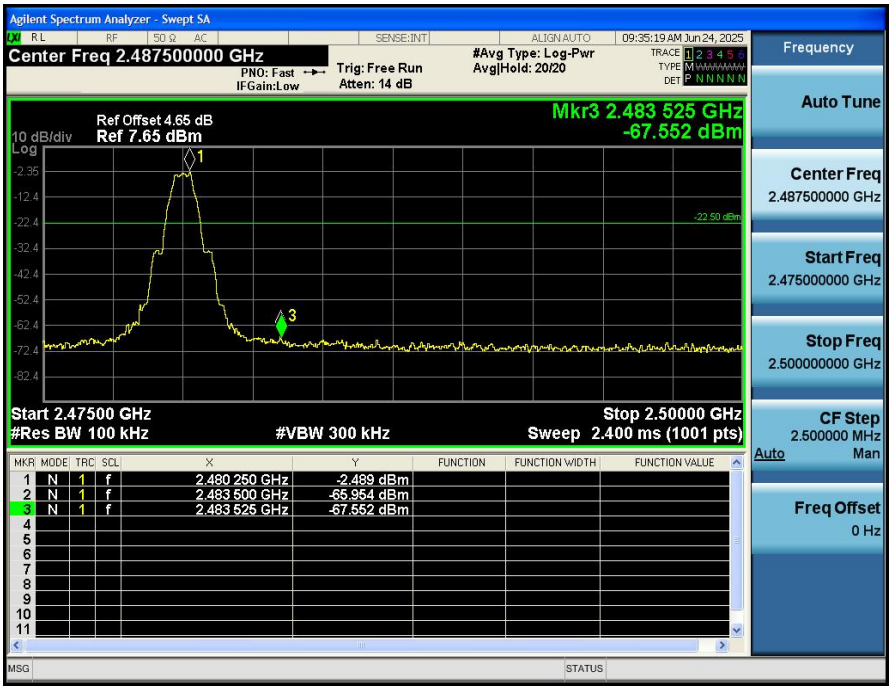
1_Reference_Level_NVNT_ANT1_1Mbps_2402

2_Bandedge_NVNT_ANT1_1Mbps_2402



1_Reference_Level_NVNT_ANT1_1Mbps_2480

2_Bandedge_NVNT_ANT1_1Mbps_2480


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.487500000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 14 dB
#Avg Type: Log-Pwr
Avg|Hold: 20/20
09:35:19 AM Jun 24, 2025
Ref Offset 4.65 dB
10 dB/div
Ref 7.65 dBm
Log
Mkr3 2.483 525 GHz
-67.552 dBm
-22.50 dBm
Start 2.47500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.50000 GHz
Sweep 2.400 ms (1001 pts)
1 N 1 f 2.480 250 GHz -2.489 dBm
2 N 1 f 2.483 500 GHz -65.954 dBm
3 N 1 f 2.483 525 GHz -67.552 dBm
Frequency
Auto Tune
Center Freq
2.487500000 GHz
Start Freq
2.475000000 GHz
Stop Freq
2.500000000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz

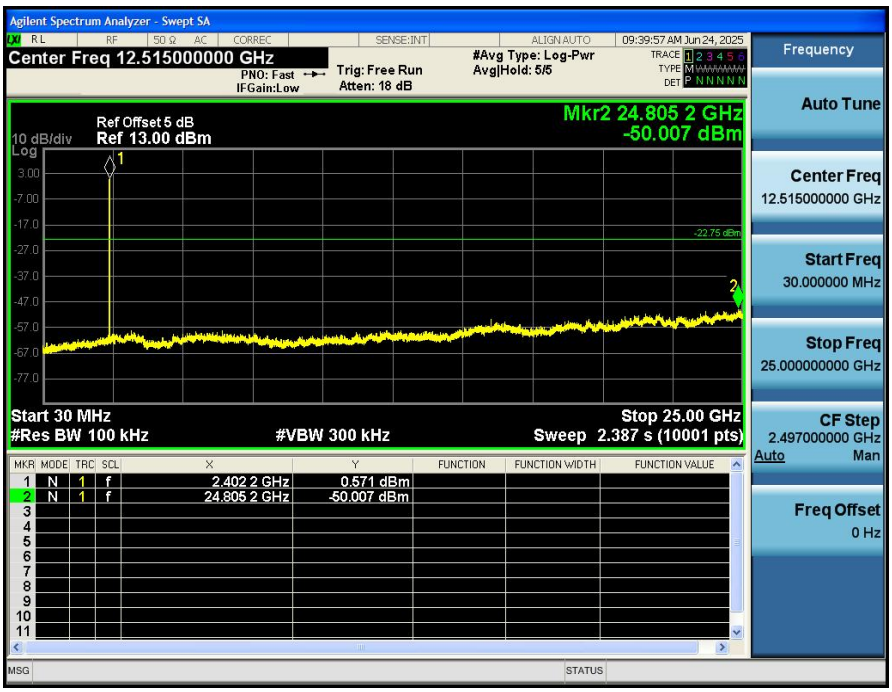
Appendix G: Spurious Emission

Condition	Antenna	Modulation	TX_Frequency (MHz)	Ref_level(dBm)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	1Mbps	2402.00	-2.754	-50.007	-22.754	Pass
NVNT	ANT1	1Mbps	2440.00	-2.972	-50.834	-22.972	Pass
NVNT	ANT1	1Mbps	2480.00	-2.337	-44.975	-22.337	Pass

Note:Regarding the spurious emissions from 30MHz to 26.5GHz, the cable lose have been set in the 'Input Correction' of the Spectrum Analyzer during the test.

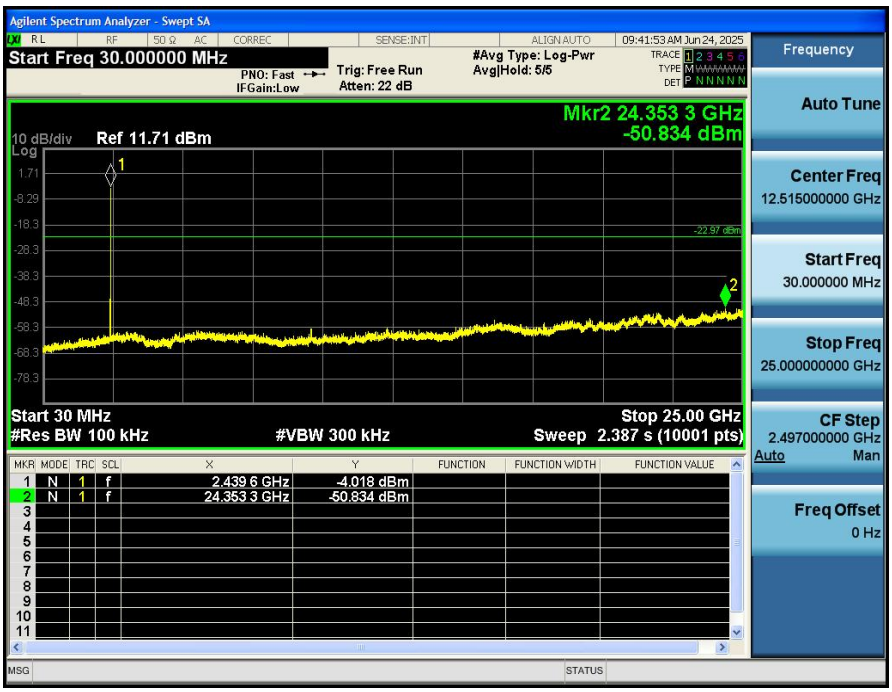
1_Reference_Level_NVNT_ANT1_1Mbps_2402

2_Spurious_Emission_NVNT_ANT1_1Mbps_2402



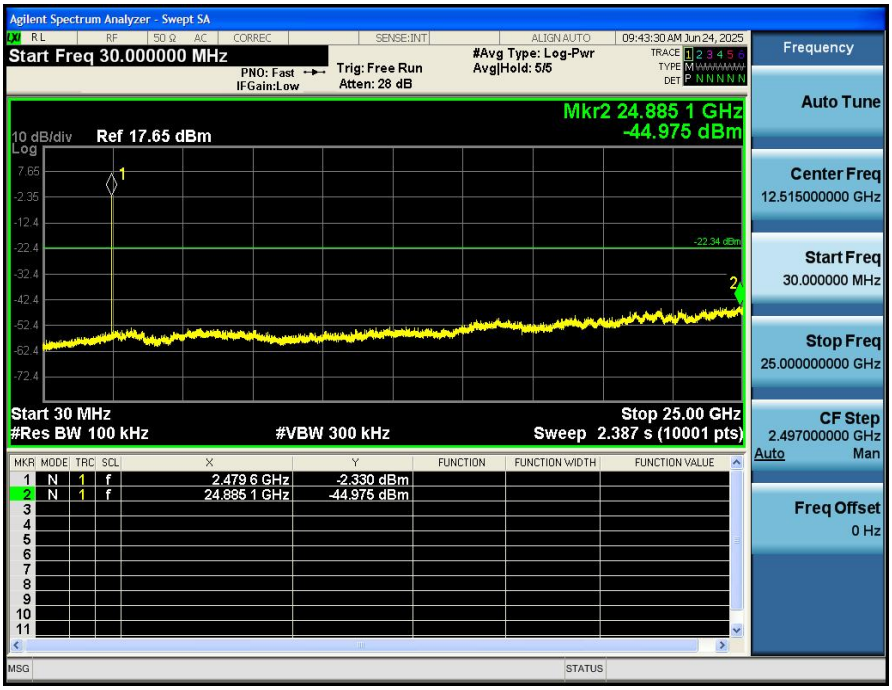
1_Reference_Level_NVNT_ANT1_1Mbps_2440

2_Spurious_Emission_NVNT_ANT1_1Mbps_2440



1_Reference_Level_NVNT_ANT1_1Mbps_2480

2_Spurious_Emission_NVNT_ANT1_1Mbps_2480


Agilent Spectrum Analyzer - Swept SA
Start Freq 30.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 28 dB
#Avg Type: Log-Pwr
Avg|Hold: 5/5
09:43:30 AM Jun 24, 2025
Mkr2 24.885 1 GHz
-44.975 dBm
10 dB/div
Ref 17.65 dBm
Log
-22.34 dBm
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.00 GHz
Sweep 2.387 s (10001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.479 6 GHz -2.330 dBm
2 N 1 f 24.885 1 GHz -44.975 dBm
Frequency
Auto Tune
Center Freq
12.515000000 GHz
Start Freq
30.000000 MHz
Stop Freq
25.000000000 GHz
CF Step
2.497000000 GHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

---END---