

Appendix B: Test Results of 2.4GHz SRD

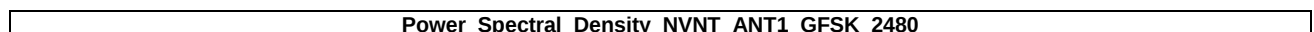
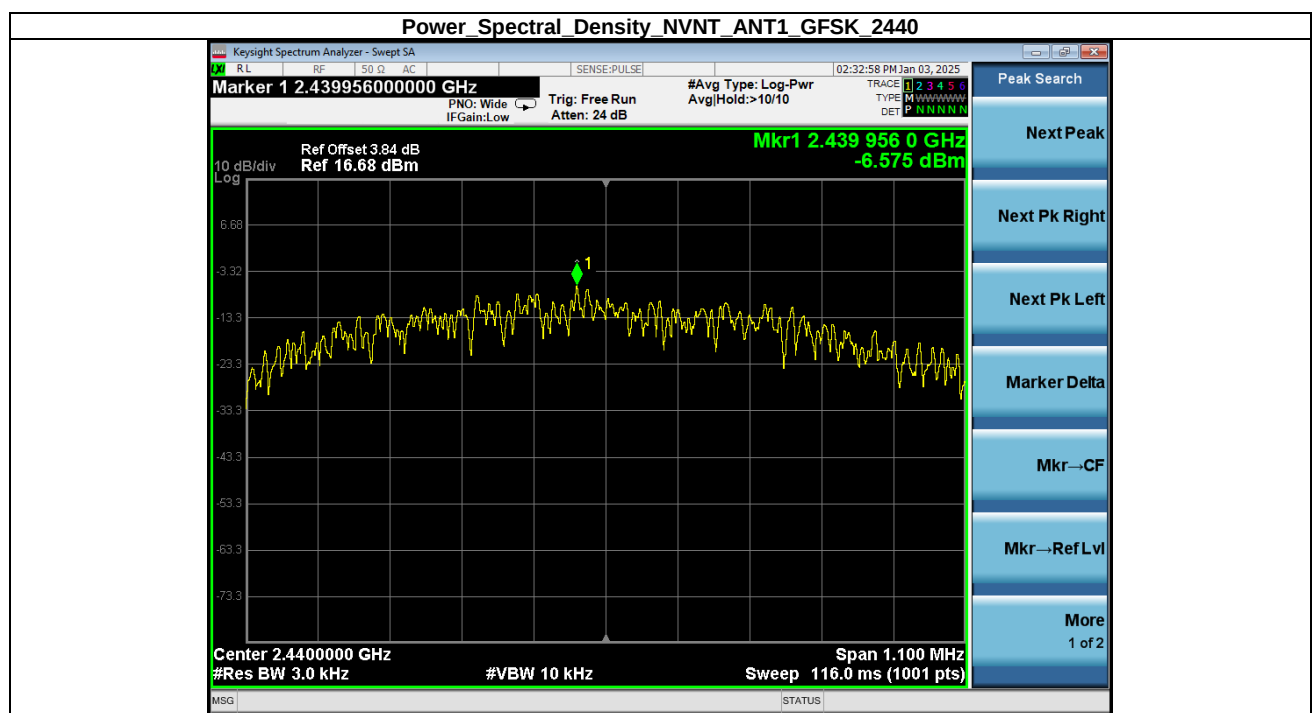
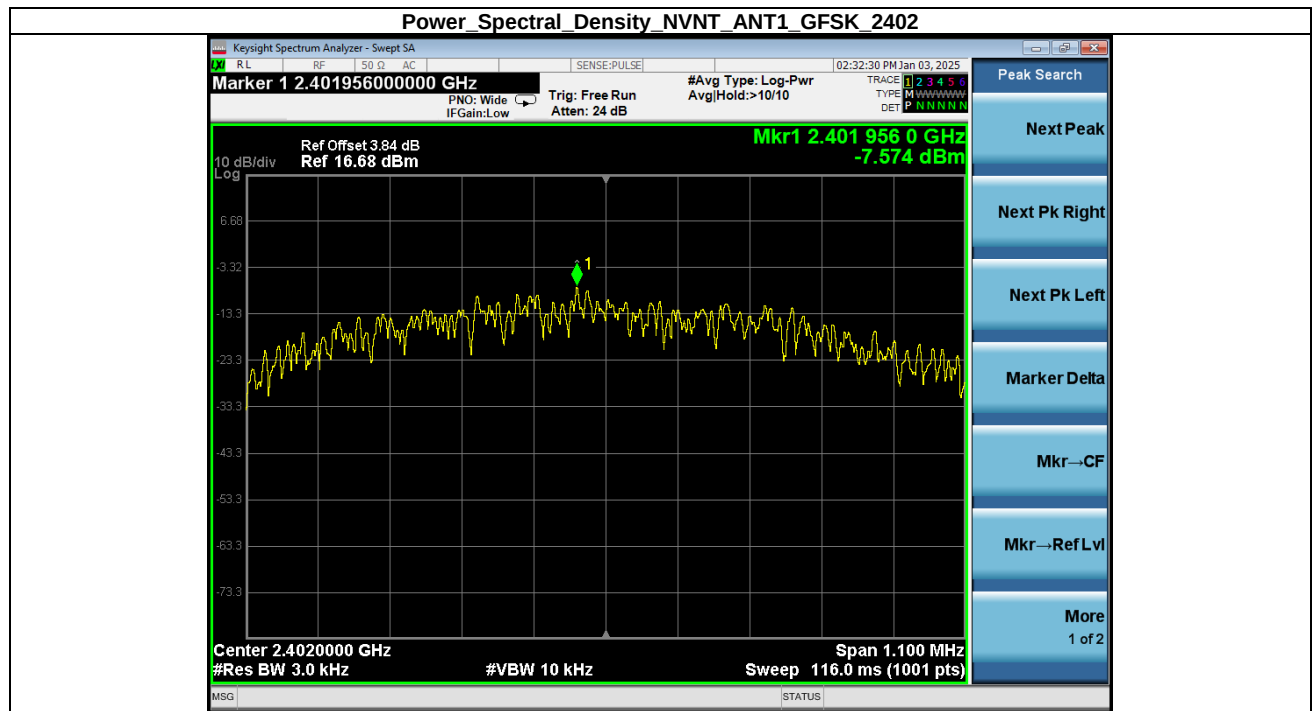
APPENDIX B: TEST RESULTS OF 2.4GHZ SRD	1
APPENDIX B.1: TEST RESULTS OF CONDUCTED PEAK POWER.....	2
APPENDIX B.2: TEST RESULTS OF CONDUCTED POWER SPECTRAL DENSITY	3
APPENDIX B.3: TEST RESULTS OF 6DB BANDWIDTH.....	5
APPENDIX B.4: TEST RESULTS OF 99% BANDWIDTH.....	7
APPENDIX B.5: TEST RESULTS OF CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 kHz BANDWIDTH.....	9
APPENDIX B.6: TEST RESULTS OF RADIATED SPURIOUS EMISSIONS	14
30MHz - 1GHz.....	14
Above 1GHz.....	20
APPENDIX B.7: TEST RESULTS OF CONDUCTED EMISSIONS OF AC MAINS	30

Appendix B.1: Test Results of Conducted Peak Power

Condition	Antenna	Mode	Frequency (MHz)	Max. Conducted Power(dBm)	Max. Conducted Power(mW)	Limit (mW)	Gain (dBi)	Max.EIRP (dBm)	Limit (dBm)	Result
NVNT	ANT1	GFSK	2402.00	6.38	4.34	1000	-3.00	3.38	36	Pass
NVNT	ANT1	GFSK	2440.00	6.99	5.00	1000	-3.00	3.99	36	Pass
NVNT	ANT1	GFSK	2480.00	6.31	4.28	1000	-3.00	3.31	36	Pass

Appendix B.2: Test Results of Conducted Power Spectral Density

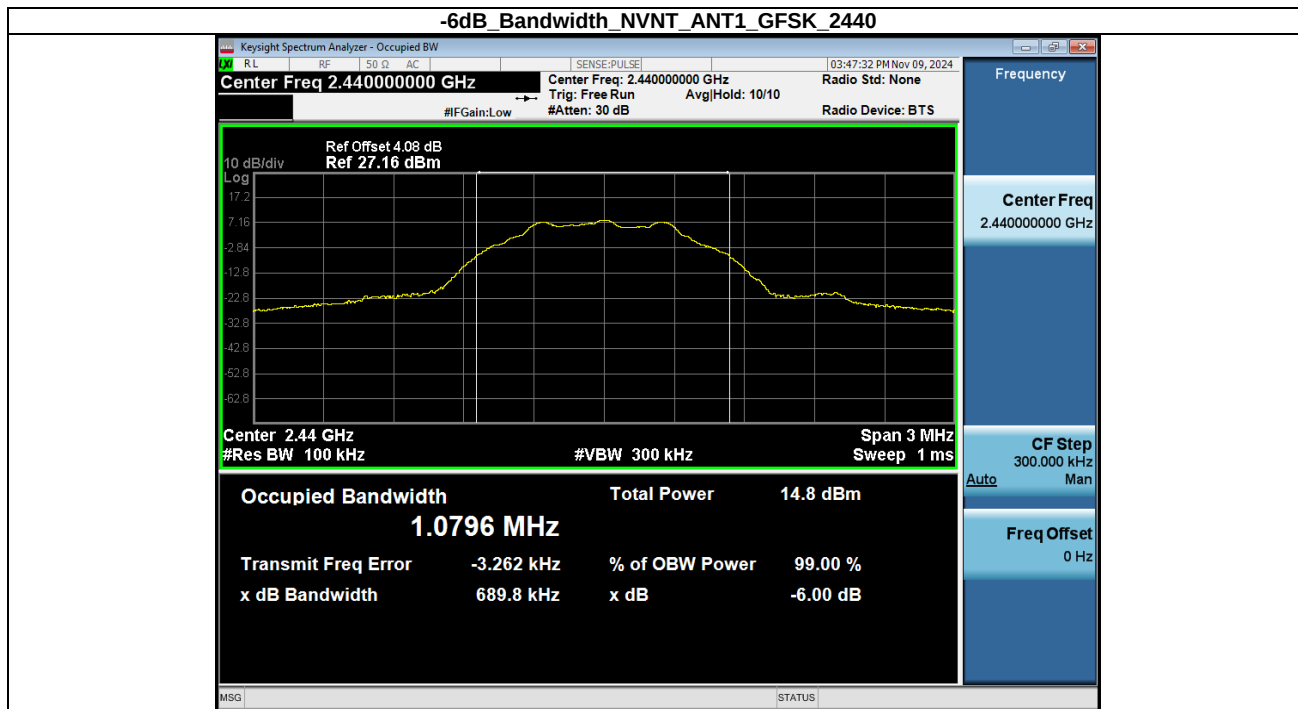
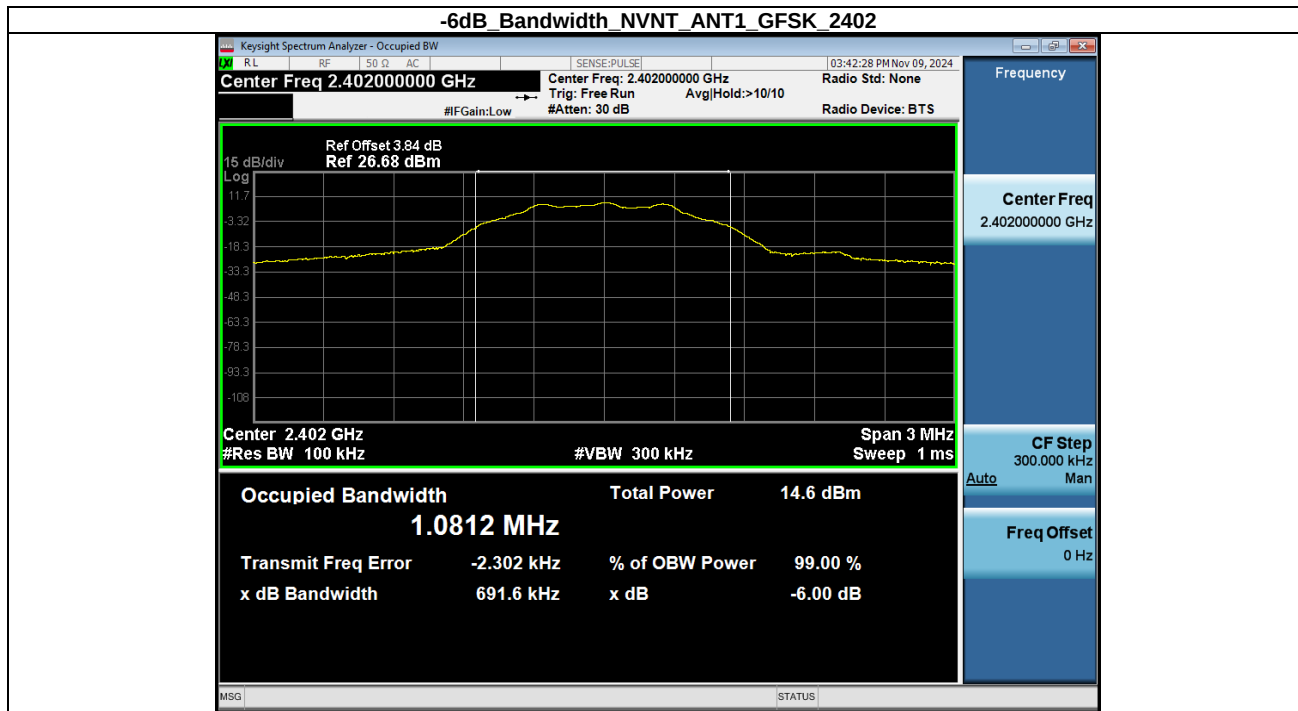
Condition	Antenna	Mode	Frequency (MHz)	Power Spectral Density(dBm)	Limit(dBm/3kHz)	Result
NVNT	ANT1	GFSK	2402.00	-7.89	8	Pass
NVNT	ANT1	GFSK	2440.00	-7.92	8	Pass
NVNT	ANT1	GFSK	2480.00	-7.85	8	Pass



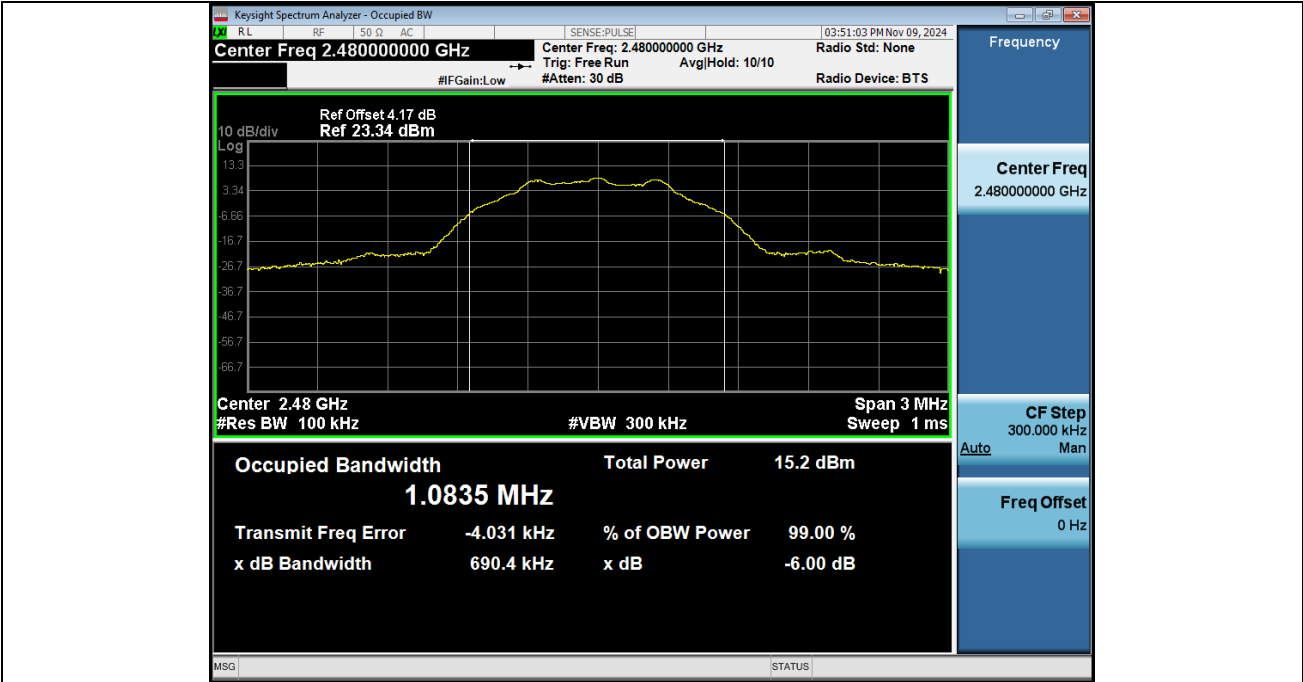


Appendix B.3: Test Results of 6dB Bandwidth

Condition	Antenna	Mode	Frequency (MHz)	-6dB BW(kHz)	limit(kHz)	Result
NVNT	ANT1	GFSK	2402.00	691.64	500	Pass
NVNT	ANT1	GFSK	2440.00	689.81	500	Pass
NVNT	ANT1	GFSK	2480.00	690.41	500	Pass

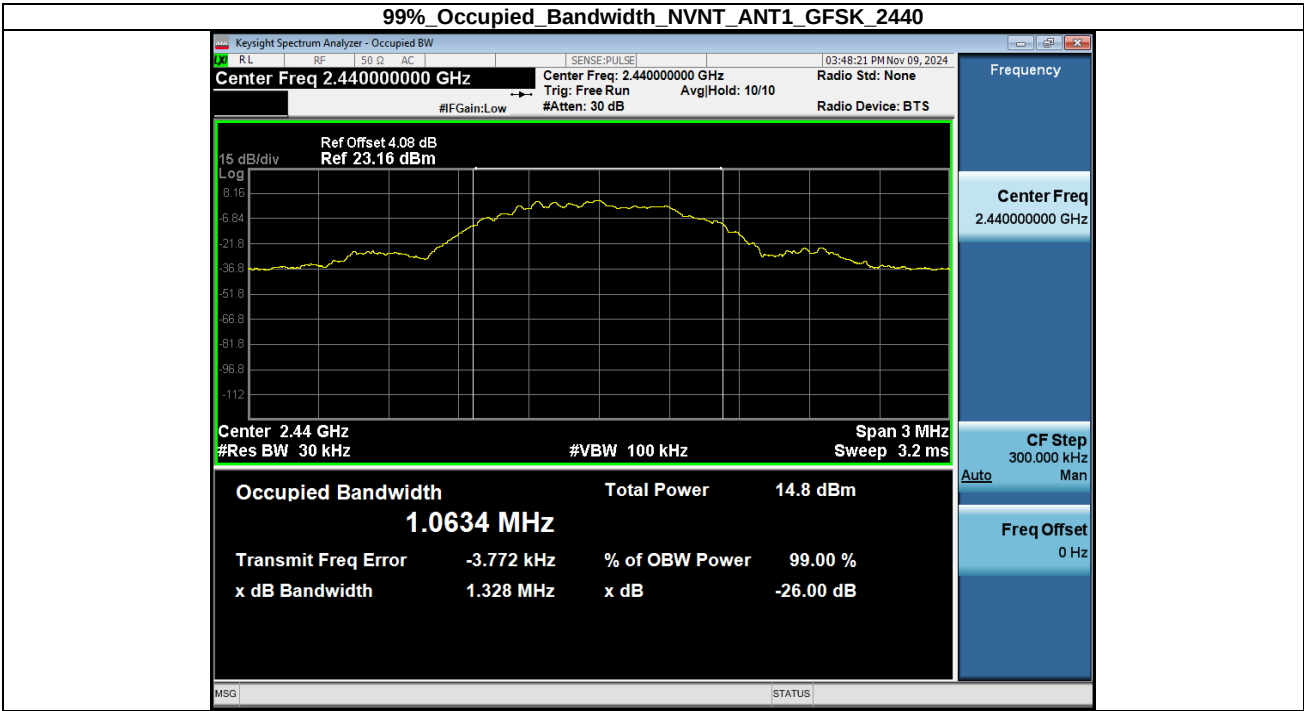


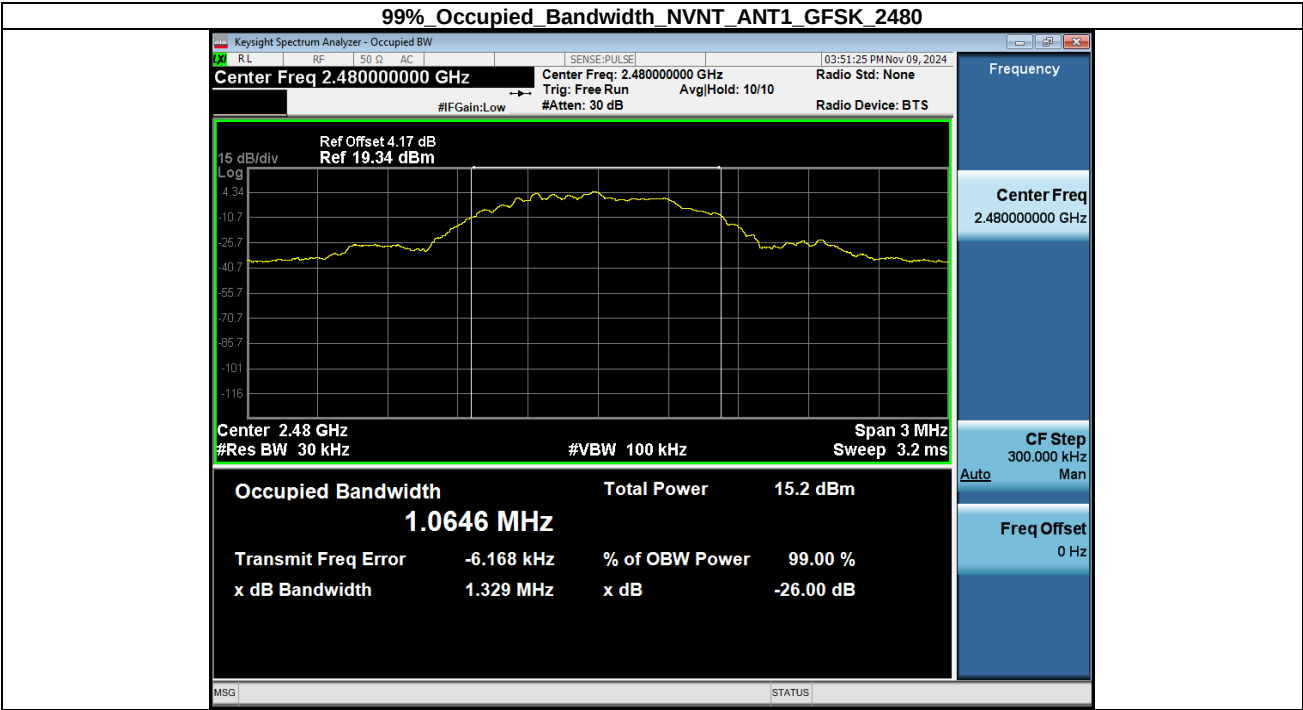
-6dB_Bandwidth_NVNT_ANT1_GFSK_2480



Appendix B.4: Test Results of 99% Bandwidth

Condition	Antenna	Mode	Frequency (MHz)	99%BW(MHz)
NVNT	ANT1	GFSK	2402.00	1.061
NVNT	ANT1	GFSK	2440.00	1.063
NVNT	ANT1	GFSK	2480.00	1.065

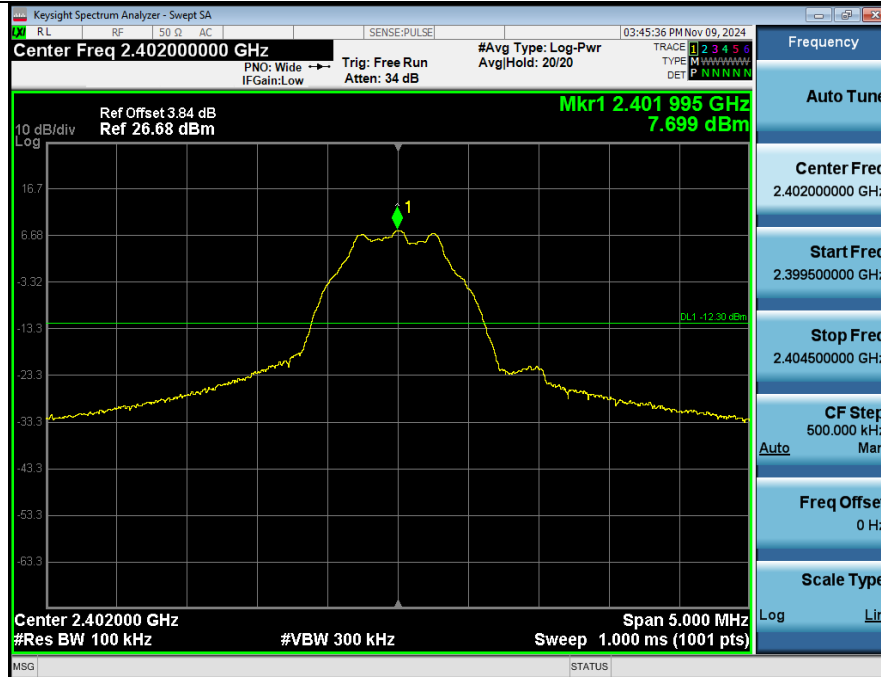




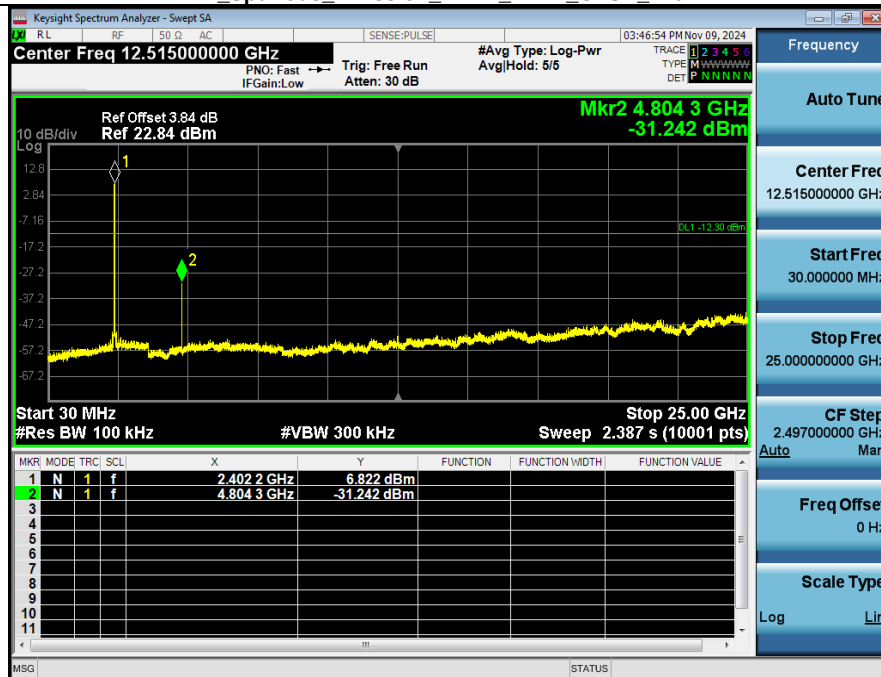
Appendix B.5: Test Results of Conducted Spurious Emissions Measured in 100 kHz Bandwidth

Condition	Antenna	Mode	TX_Frequency(MHz)	Spurious MAX.Value(dBm)	Limit	Result
NVNT	ANT1	GFSK	2402.00	-31.242	-12.301	Pass
NVNT	ANT1	GFSK	2440.00	-31.882	-12.018	Pass
NVNT	ANT1	GFSK	2480.00	-34.885	-11.573	Pass

1 Reference Level NVNT_ANT1_GFSK_2402



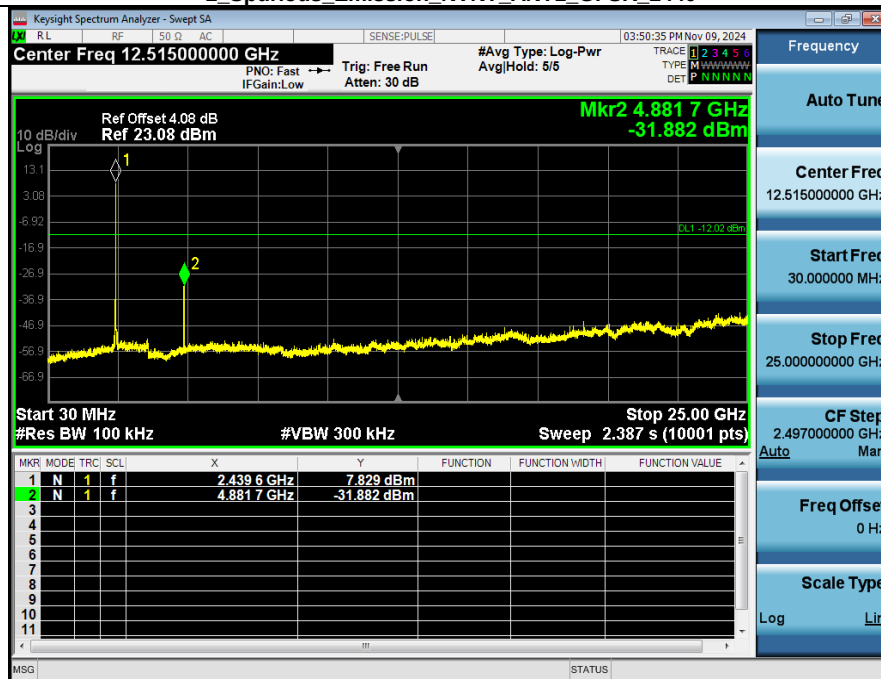
2 Spurious Emission NVNT_ANT1_GFSK_2402



1 Reference Level NVNT_ANT1_GFSK_2440



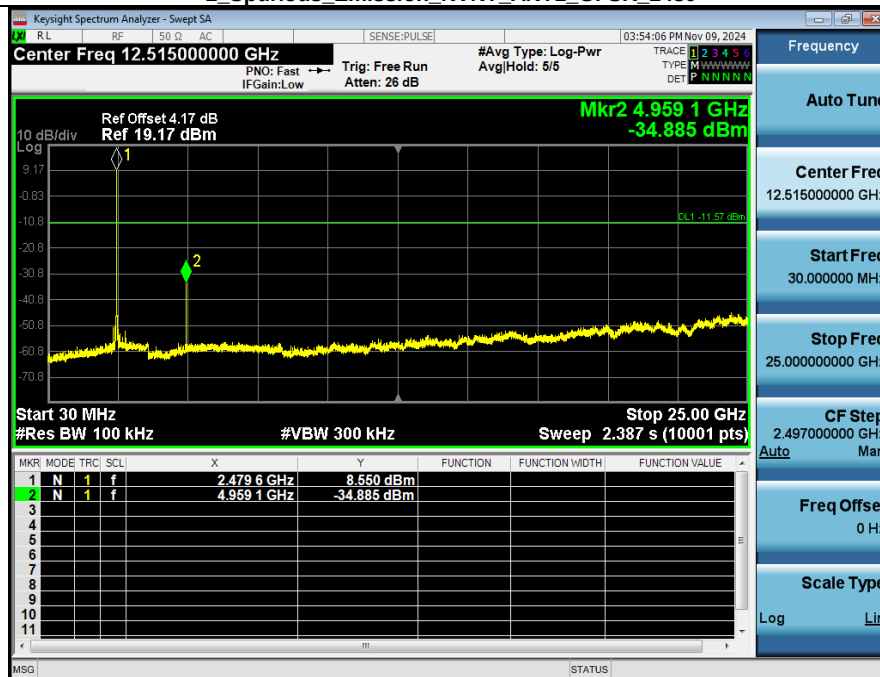
2_Spurious_Emission_NVNT_ANT1_GFSK_2440



1_Reference_Level_NVNT_ANT1_GFSK_2480



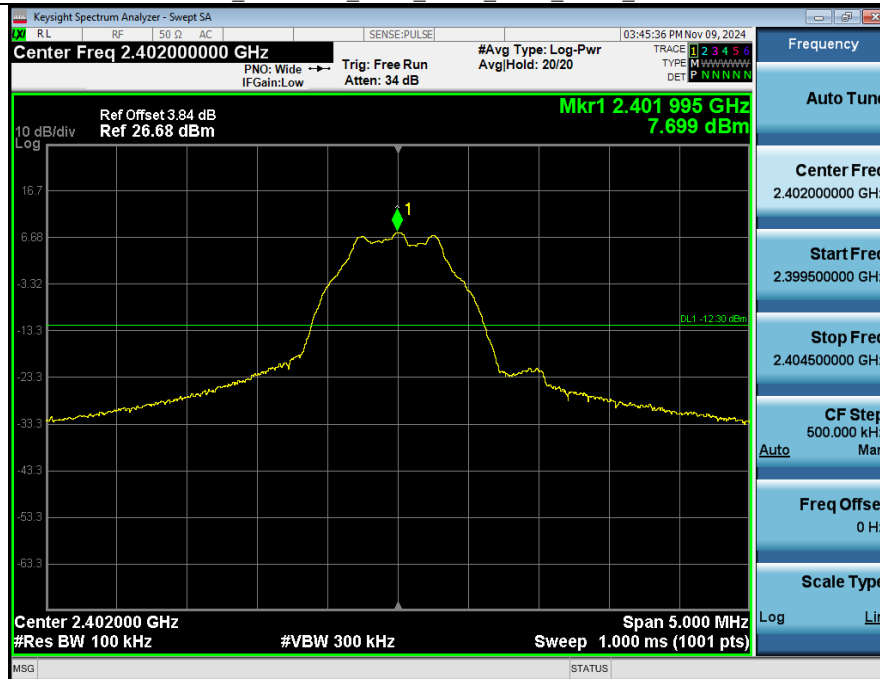
2 Spurious Emission NVNT_ANT1_GFSK_2480



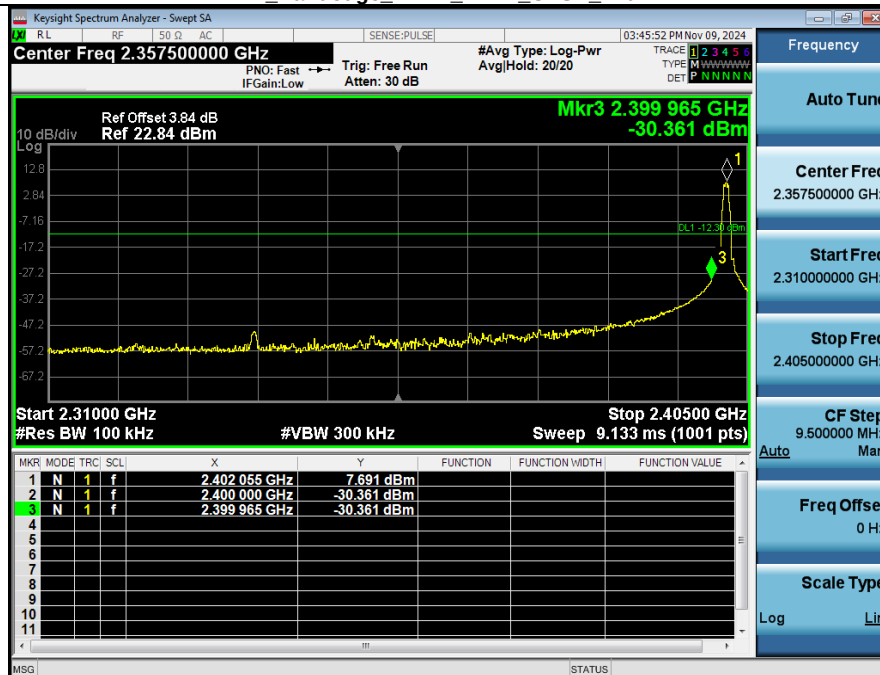
Band edge:

Condition	Antenna	Mode	TX_Frequency (MHz)	Max. Mark Frequency (MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	GFSK	2402.00	2399.965	-30.361	-12.301	Pass
NVNT	ANT1	GFSK	2480.00	2483.525	-34.530	-11.573	Pass

1 Reference Level NVNT_ANT1_GFSK_2402



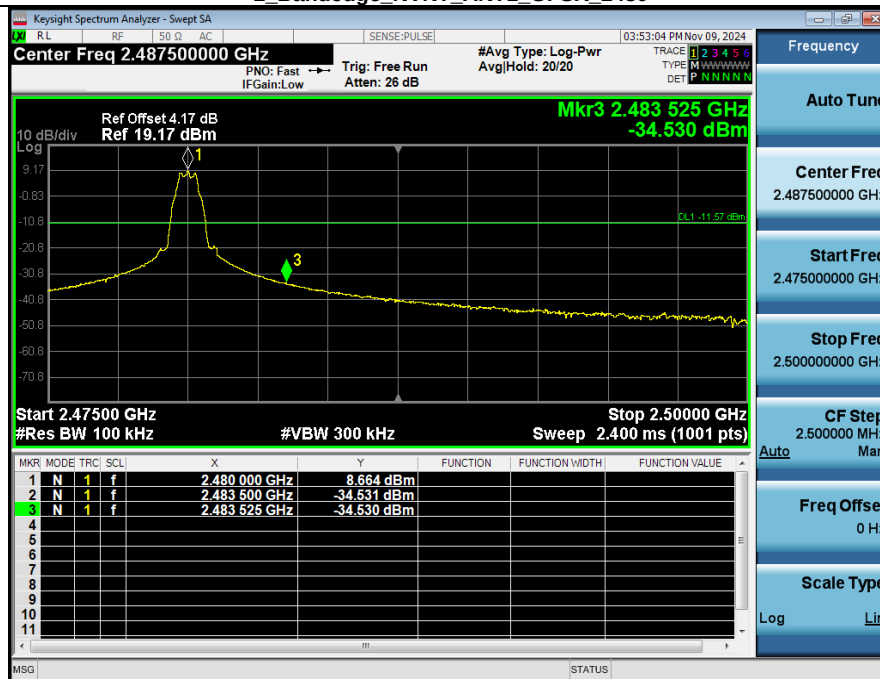
2 Bandedge NVNT_ANT1_GFSK_2402



1 Reference Level NVNT_ANT1_GFSK_2480



2_Bandedge_NVNT_ANT1_GFSK_2480



Appendix B.6: Test Results of Radiated Spurious Emissions

Note 1: Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

Note 2: The highest emissions are the fundamental waves.

30MHz - 1GHz



Shenzhen PSI Testing Co., Ltd.
1-2F, Building 5, Yudafu Industrial Park, No. 10, Xingye West Road,
Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104

Test Site: PSI EMC Lab-3m Chamber Polarization: **Vertical** Temperature: 26 °C
EUT: See note Distance: 3m Humidity: 54 %RH
M/N: See note Test Engineer: Felix Pang
Test Mode: 2402MHz
Test Voltage: DC 24V
Note: Optical 3D Measuring and Dynamic Tracking System
FreeScan Trak ProW(FreeTrakW)

Radiated Emission Measurement

Test Date: 2024/11/30 08:02:09



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	57.5939	16.60	13.36	29.96	40.00	-10.04	QP	100	67	P	
2	86.8068	21.92	9.65	31.57	40.00	-8.43	QP	100	135	P	
3	96.4362	25.83	10.28	36.11	43.50	-7.39	QP	100	58	P	
4 *	116.5401	26.18	12.21	38.39	43.50	-5.11	QP	100	247	P	
5	123.6985	24.04	12.80	36.84	43.50	-6.66	QP	100	125	P	
6	172.5988	20.62	13.12	33.74	43.50	-9.76	QP	100	92	P	

Note: *:Maximum data x:Over limit !:over margin Level = Reading + Factor Margin = Level - Limit



Shenzhen PSI Testing Co., Ltd.
1-2F, Building 5, Yudafu Industrial Park, No. 10, Xingye West Road,
Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104

Test Site: PSI EMC Lab-3m Chamber	Polarization: Horizontal	Temperature: 26 °C
EUT: See note	Distance: 3m	Humidity: 54 %RH
M/N: See note	Test Engineer: Felix Pang	
Test Mode: 2402MHz		
Test Voltage: DC 24V		
Note: Optical 3D Measuring and Dynamic Tracking System		
FreeScan Trak ProW(FreeTrakW)		

Radiated Emission Measurement

Test Date: 2024/11/30 08:06:58



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	43.5057	11.89	14.42	26.31	40.00	-13.69	QP	200	165	P	
2	114.1137	19.05	11.98	31.03	43.50	-12.47	QP	200	321	P	
3	129.4677	17.58	13.19	30.77	43.50	-12.73	QP	200	54	P	
4 *	172.5987	21.46	13.12	34.58	43.50	-8.92	QP	200	98	P	
5	206.3975	20.37	11.39	31.76	43.50	-11.74	QP	200	207	P	
6	243.3771	18.68	13.23	31.91	46.00	-14.09	QP	200	114	P	

Note: *:Maximum data x:Over limit !:over margin Level = Reading + Factor Margin = Level - Limit