

Appendix B: Test Results of Bluetooth LE

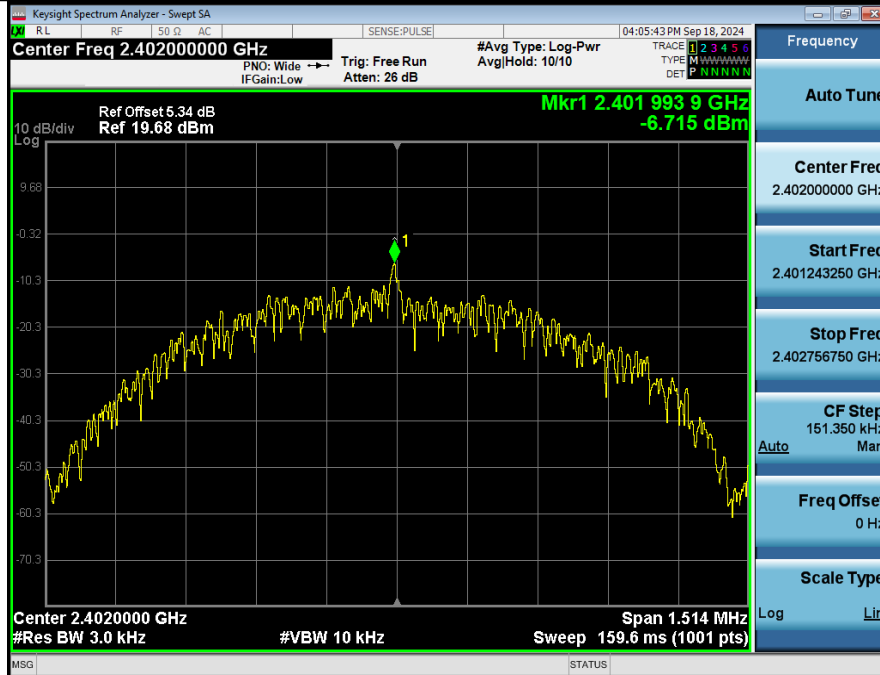
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Appendix B.1: Test Results of Conducted Power Spectral Density

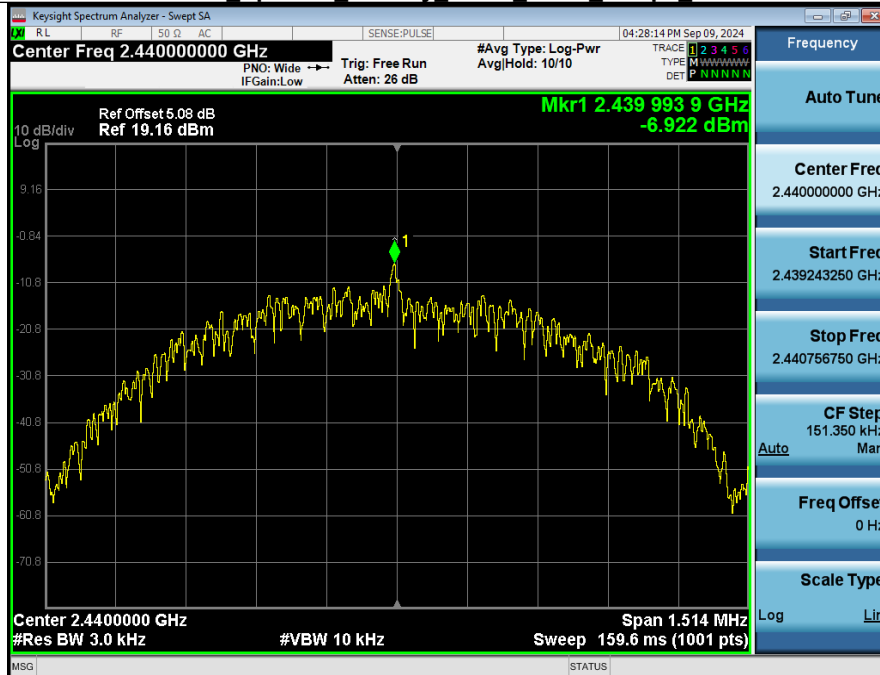
Bluetooth LE, 1Mbps

Condition	Antenna	Rate	Frequency (MHz)	Power Spectral Density (dBm)	Limit (dBm/3kHz)	Result
NVNT	ANT1	1Mbps	2402.00	-6.71	8	Pass
NVNT	ANT1	1Mbps	2440.00	-6.92	8	Pass
NVNT	ANT1	1Mbps	2480.00	-6.69	8	Pass

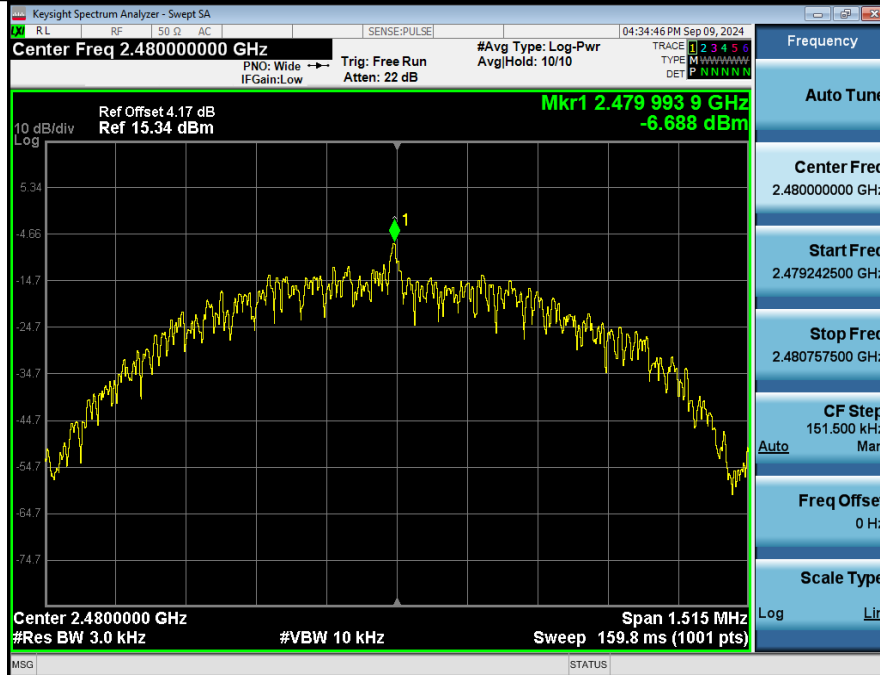
Power Spectral Density NVNT ANT1 1Mbps 2402



Power Spectral Density NVNT ANT1 1Mbps 2440



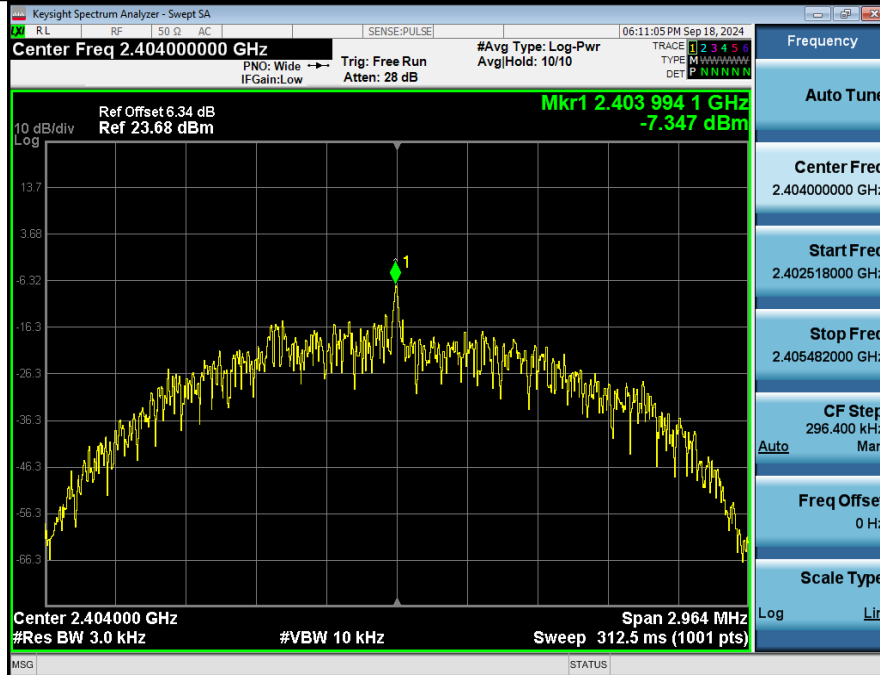
Power Spectral Density NVNT ANT1_1Mbps_2480



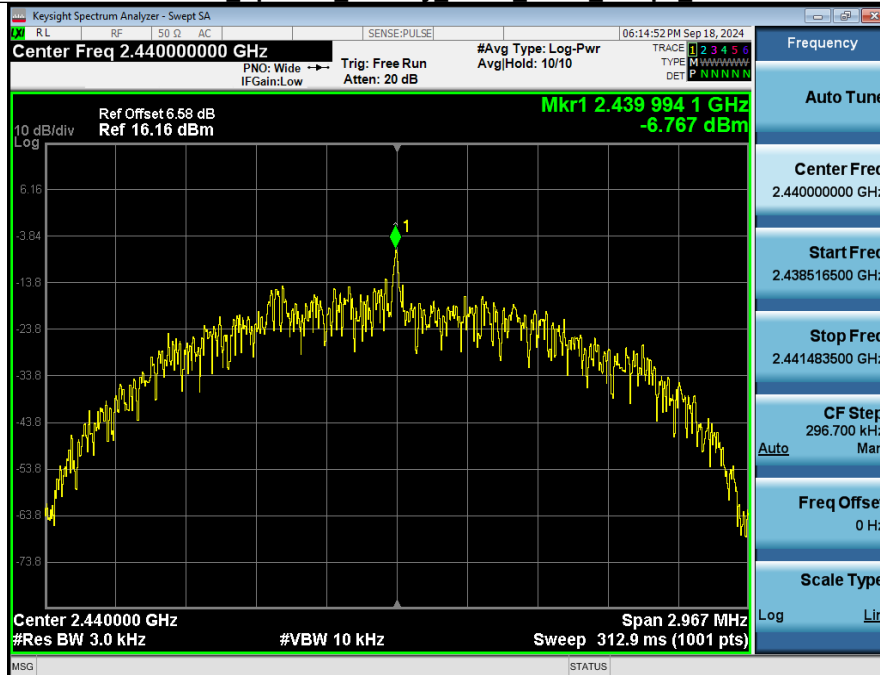
Bluetooth LE, 2Mbps

Condition	Antenna	Rate	Frequency (MHz)	Power Spectral Density (dBm)	Limit (dBm/3kHz)	Result
NVNT	ANT1	2Mbps	2404.00	-7.35	8	Pass
NVNT	ANT1	2Mbps	2440.00	-6.77	8	Pass
NVNT	ANT1	2Mbps	2478.00	-7.80	8	Pass

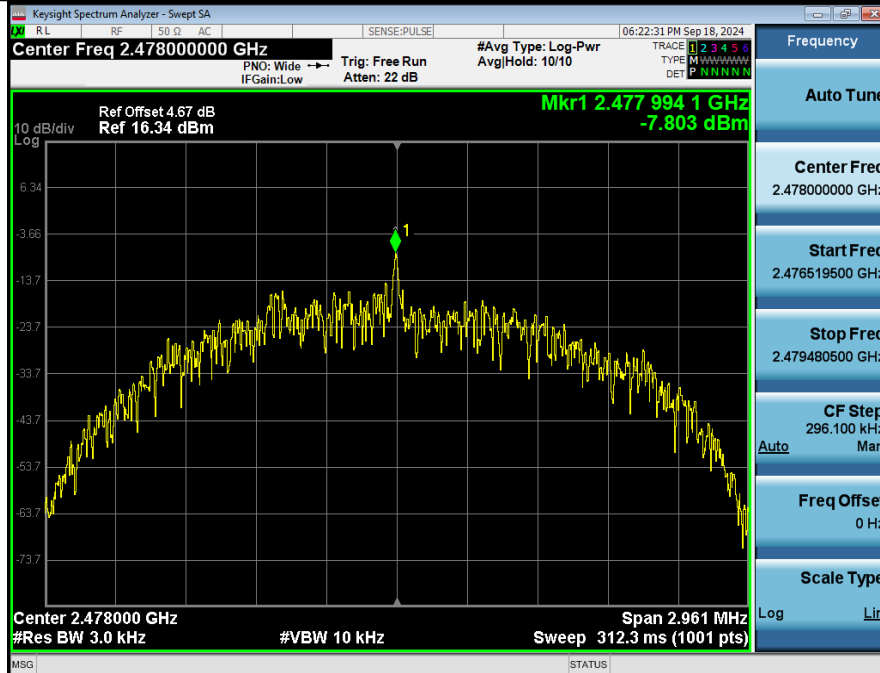
Power Spectral Density NVNT ANT1 2Mbps 2404



Power Spectral Density NVNT ANT1 2Mbps 2440



Power Spectral Density NVNT ANT1_2Mbps_2478



Appendix B.2: Test Results of 6dB Bandwidth

Bluetooth LE, 1Mbps

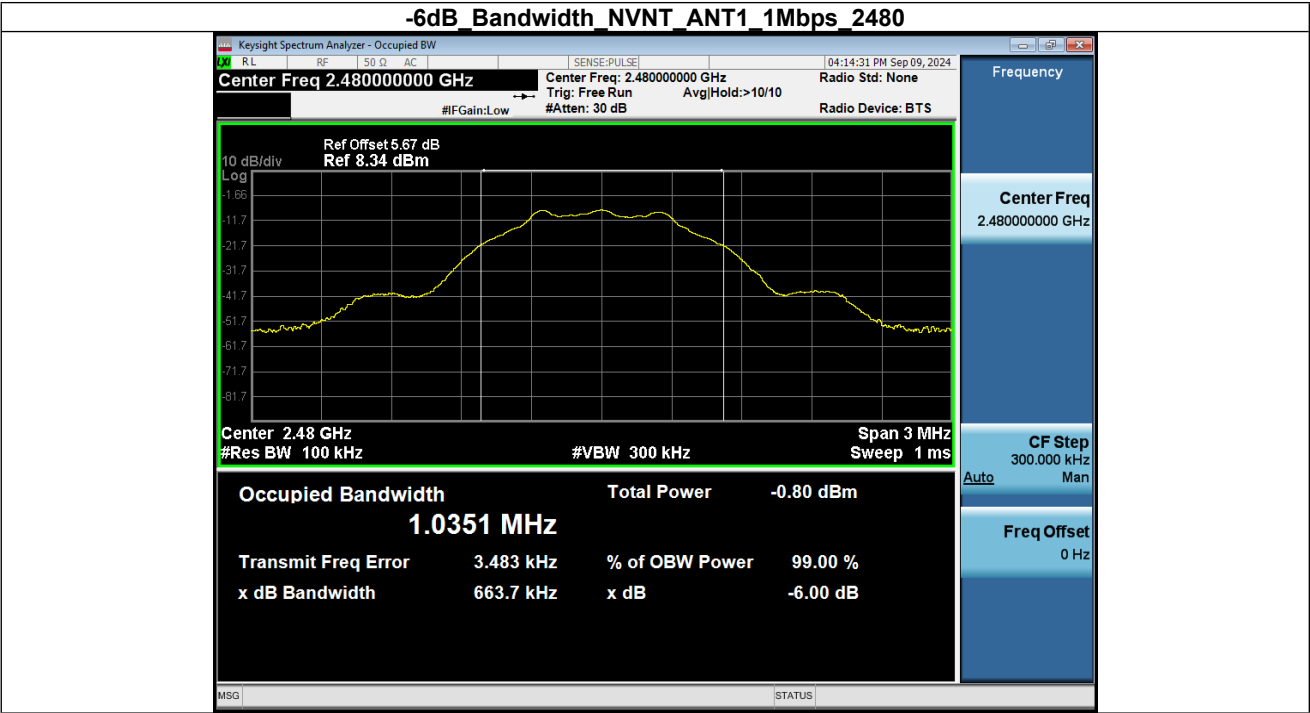
Condition	Antenna	Rate	Frequency (MHz)	-6dB BW (kHz)	Limit (kHz)	Result
NVNT	ANT1	1Mbps	2402.00	664.76	500	Pass
NVNT	ANT1	1Mbps	2440.00	664.82	500	Pass
NVNT	ANT1	1Mbps	2480.00	663.71	500	Pass

-6dB Bandwidth NVNT ANT1 1Mbps 2402



-6dB Bandwidth NVNT ANT1 1Mbps 2440

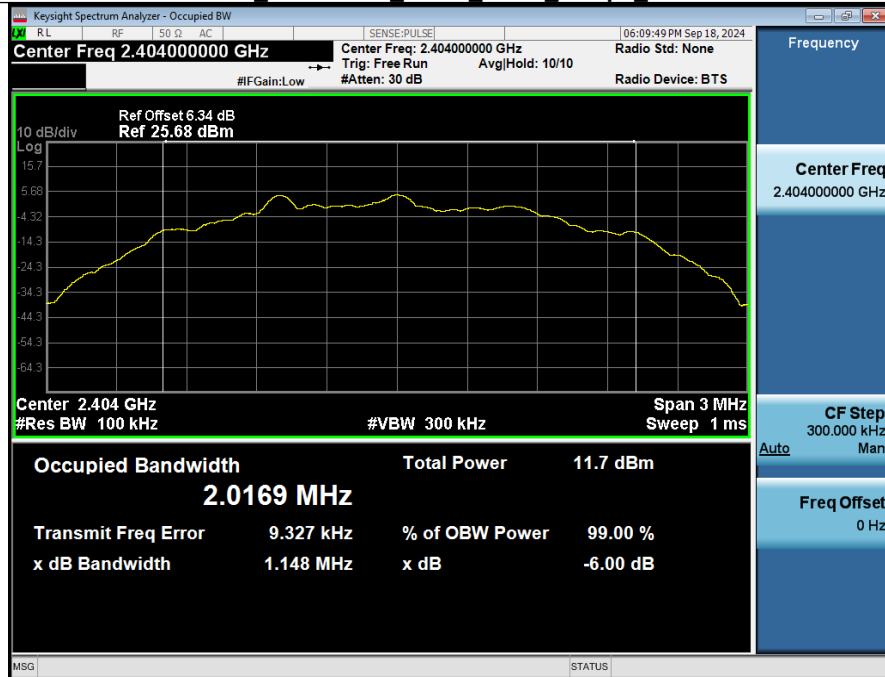




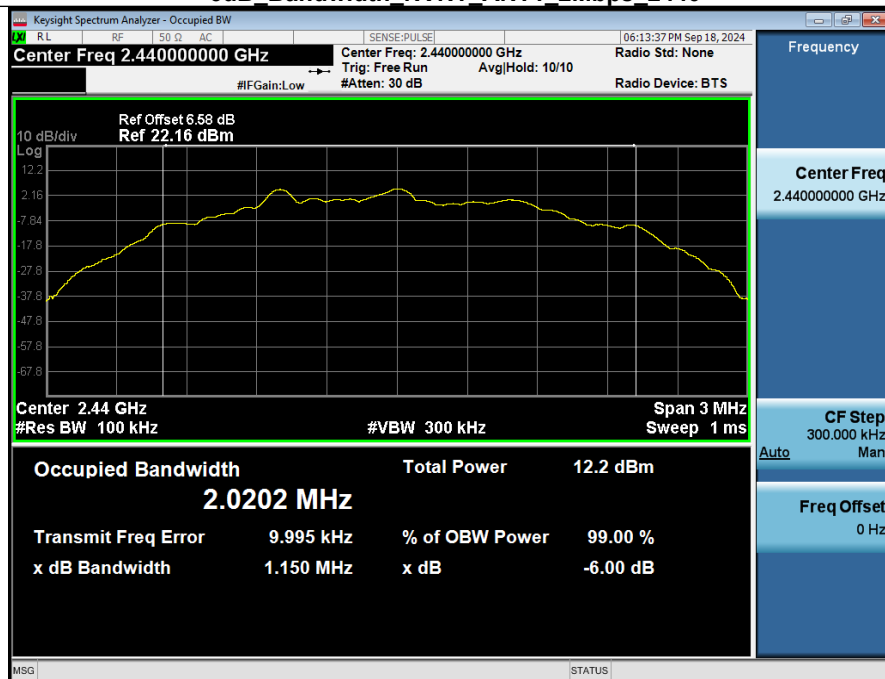
Bluetooth LE, 2Mbps

Condition	Antenna	Rate	Frequency (MHz)	-6dB BW (kHz)	Limit (kHz)	Result
NVNT	ANT1	2Mbps	2404.00	1148.23	500	Pass
NVNT	ANT1	2Mbps	2440.00	1149.71	500	Pass
NVNT	ANT1	2Mbps	2478.00	1147.68	500	Pass

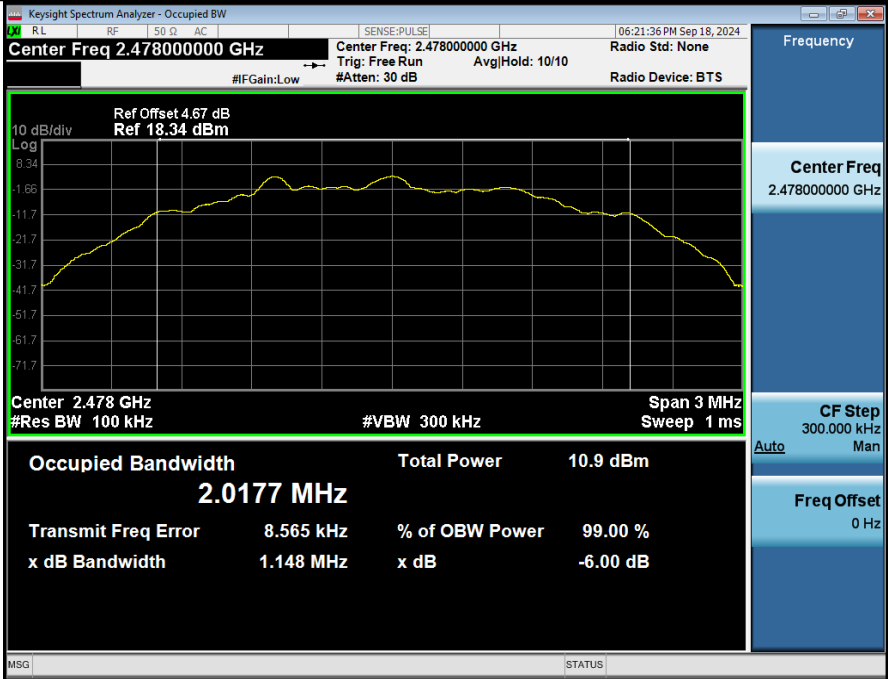
-6dB Bandwidth NVNT ANT1 2Mbps 2404



-6dB Bandwidth NVNT ANT1 2Mbps 2440



-6dB Bandwidth NVNT ANT1 2Mbps 2478



Appendix B.3: Test Results of 99% Bandwidth

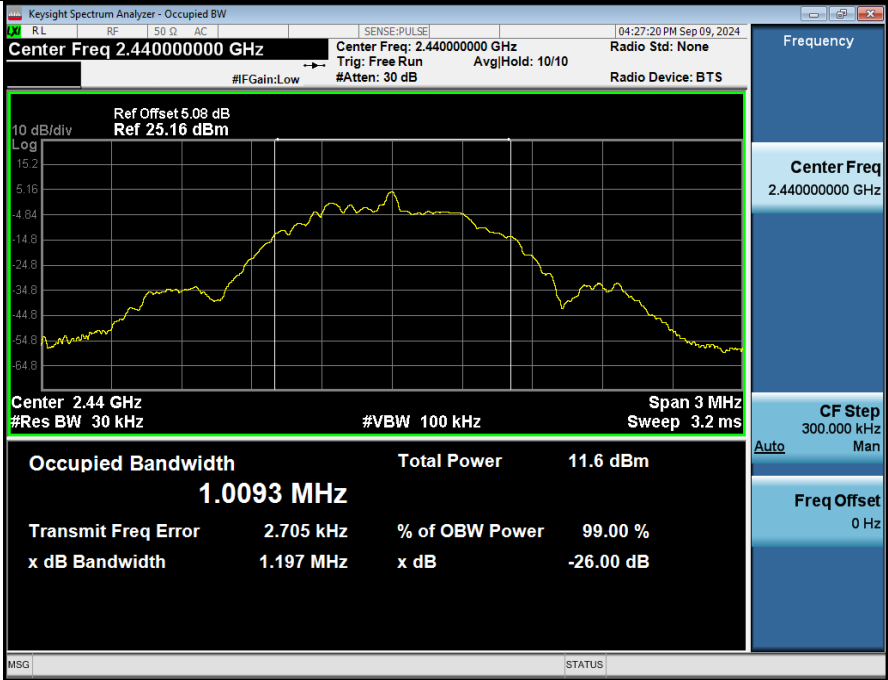
Bluetooth LE, 1Mbps

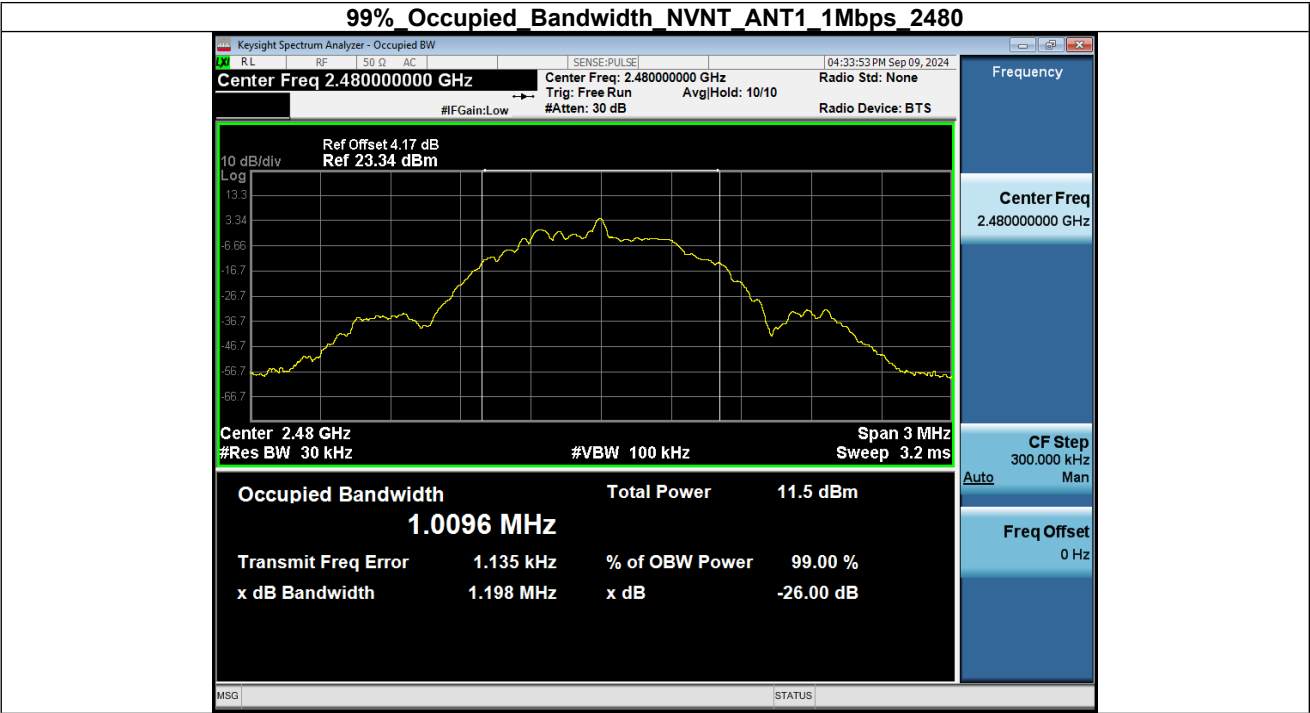
Condition	Antenna	Rate	Frequency (MHz)	99%%BW (MHz)
NVNT	ANT1	1Mbps	2402.00	1.009
NVNT	ANT1	1Mbps	2440.00	1.009
NVNT	ANT1	1Mbps	2480.00	1.010

99% Occupied Bandwidth NVNT ANT1 1Mbps 2402



99% Occupied Bandwidth NVNT ANT1 1Mbps 2440

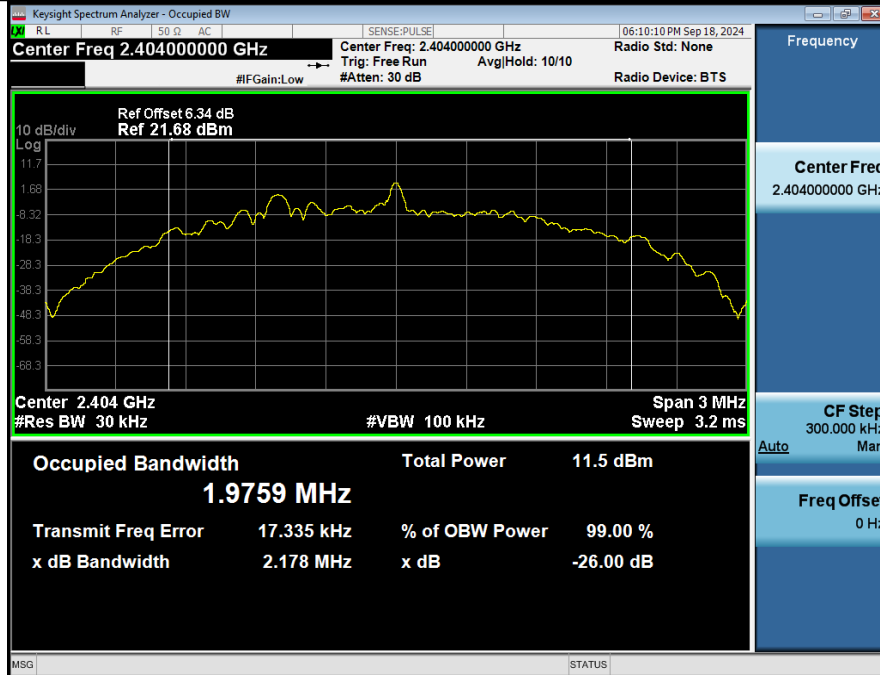




Bluetooth LE, 2Mbps

Condition	Antenna	Rate	Frequency (MHz)	99%%BW (MHz)
NVNT	ANT1	2Mbps	2404.00	1.976
NVNT	ANT1	2Mbps	2440.00	1.978
NVNT	ANT1	2Mbps	2478.00	1.974

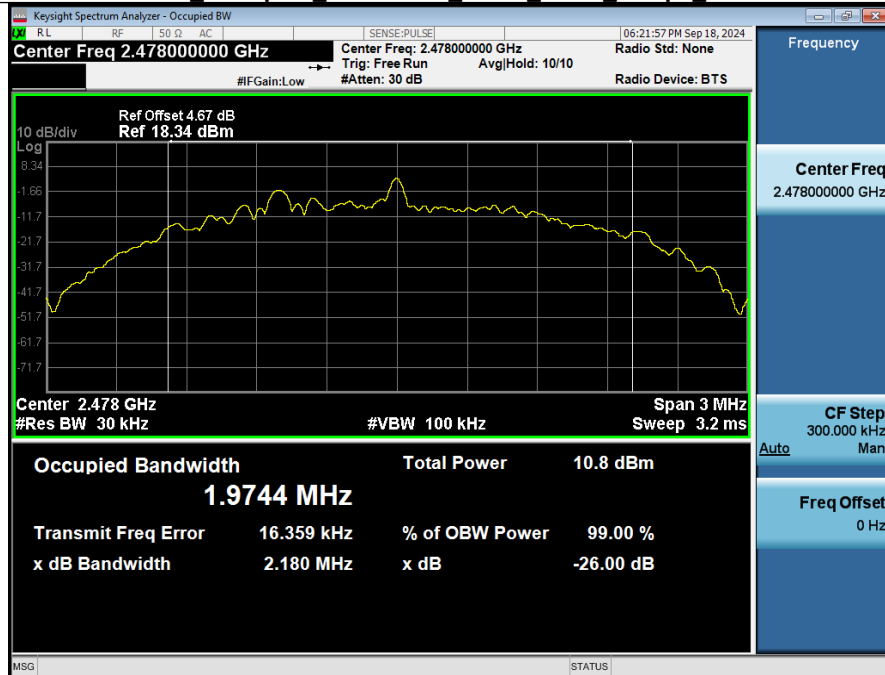
99% Occupied Bandwidth NVNT ANT1 2Mbps 2404



99% Occupied Bandwidth NVNT ANT1 2Mbps 2440



99% Occupied Bandwidth NVNT ANT1 2Mbps 2478



Appendix B.4: Test Results of Conducted Spurious Emissions Measured in 100 kHz Bandwidth

Bluetooth LE, 1Mbps

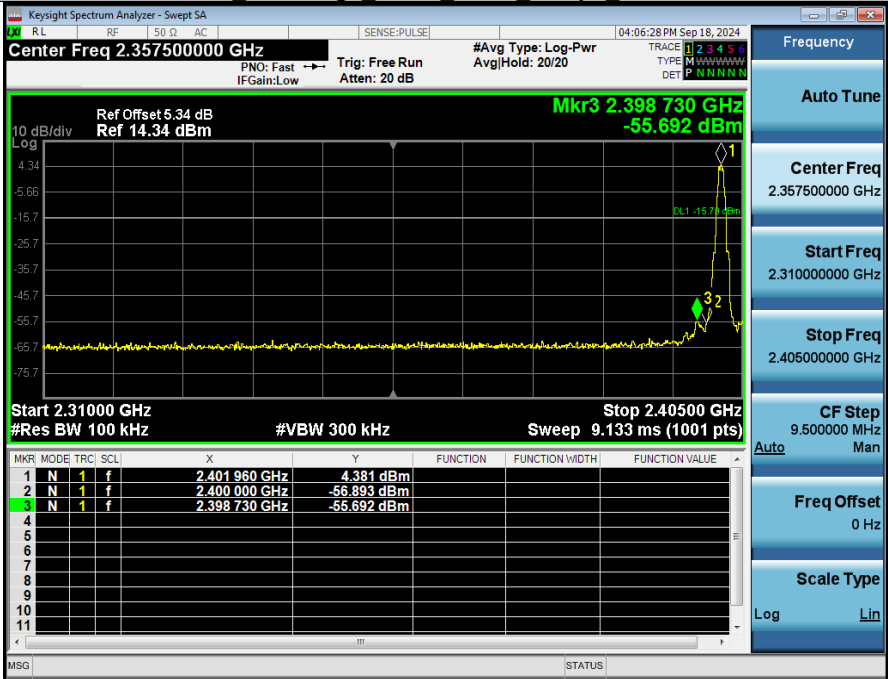
Band Edge

Condition	Antenna	Rate	TX_Frequency (MHz)	Max. Mark Frequency (MHz)	Spurious level (dBm)	Limit (dBm)	Result
NVNT	ANT1	1Mbps	2402.00	2398.730	-55.692	-15.789	Pass
NVNT	ANT1	1Mbps	2480.00	2483.525	-56.632	-15.869	Pass

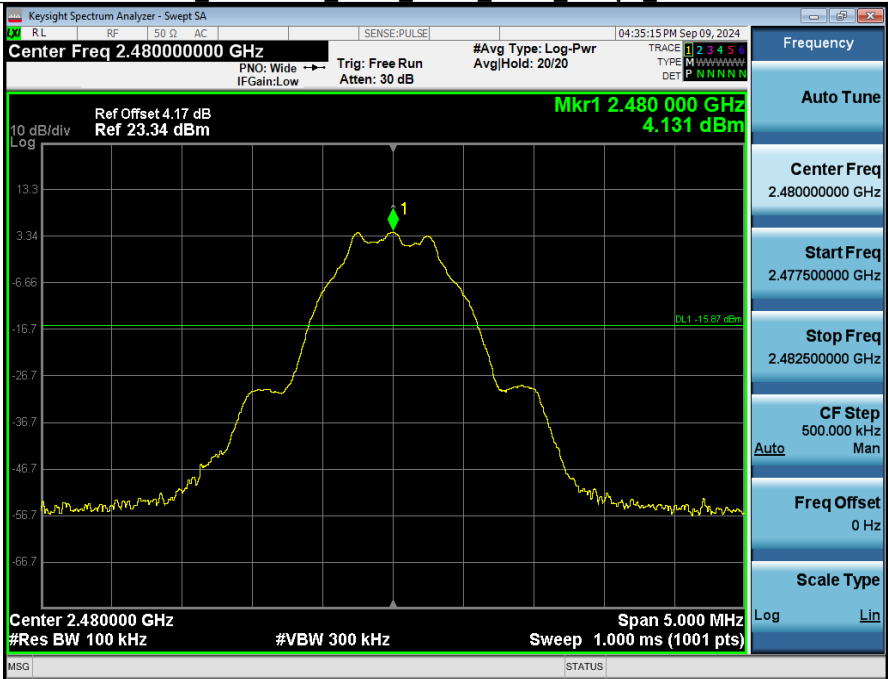
1 Reference Level NVNT ANT1 1Mbps 2402



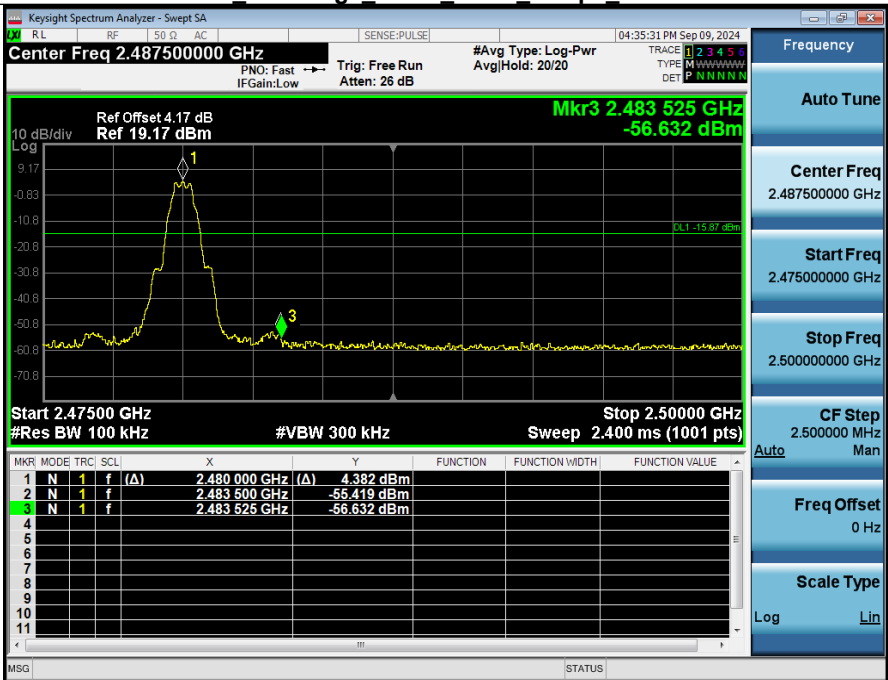
2 Bandedge NVNT ANT1 1Mbps 2402



1 Reference Level NVNT ANT1 1Mbps 2480



2 Bandedge NVNT ANT1 1Mbps 2480



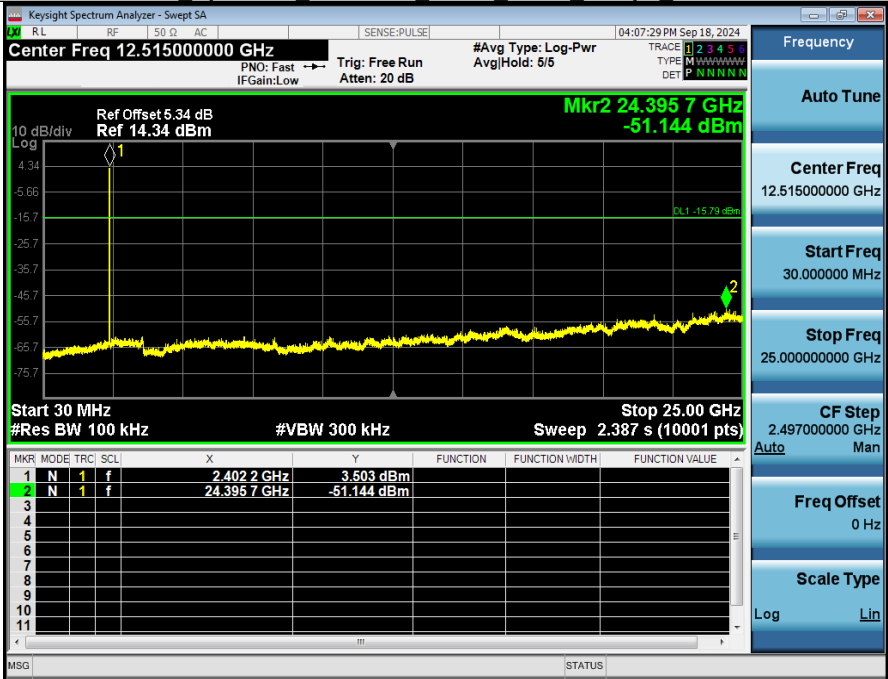
Conducted Spurious Emission

Condition	Antenna	Rate	TX_Frequency (MHz)	Spurious MAX.Value (dBm)	Limit	Result
NVNT	ANT1	1Mbps	2402.00	-51.144	-15.789	Pass
NVNT	ANT1	1Mbps	2440.00	-40.683	-15.937	Pass
NVNT	ANT1	1Mbps	2480.00	-46.142	-15.869	Pass

1 Reference Level NVNT ANT1 1Mbps 2402



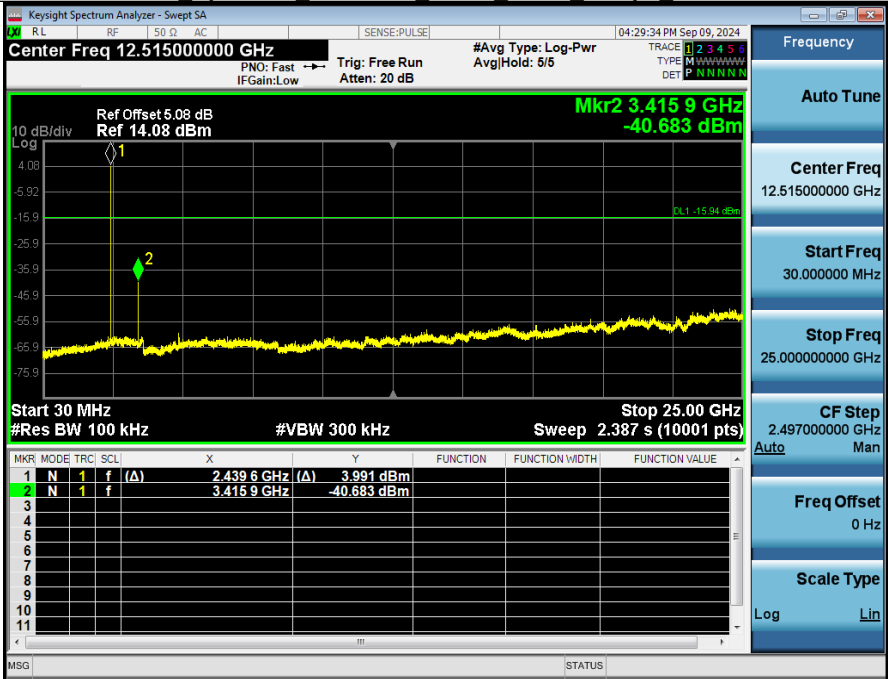
2 Spurious Emission NVNT ANT1 1Mbps 2402



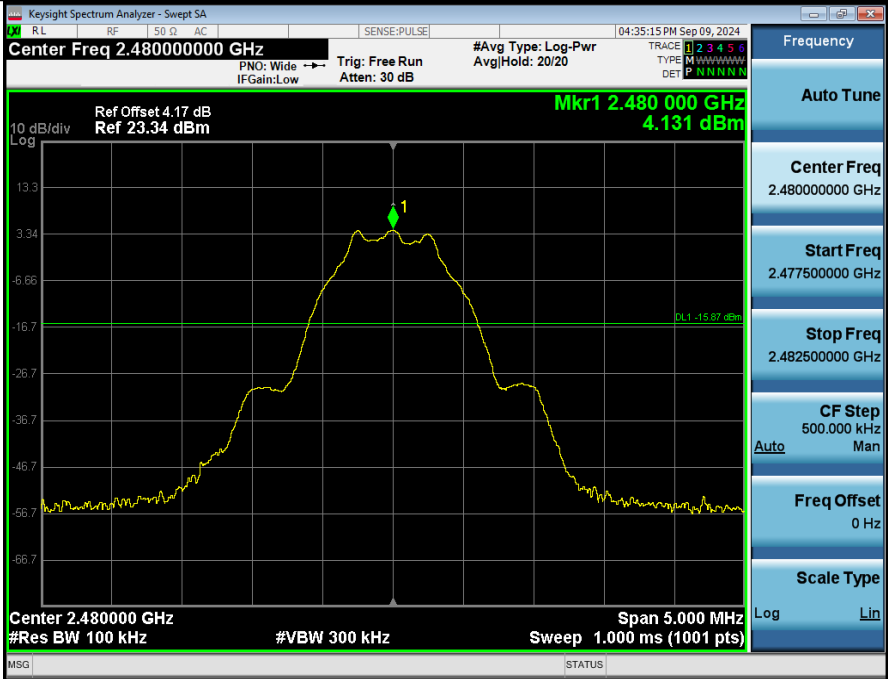
1 Reference Level NVNT ANT1 1Mbps 2440



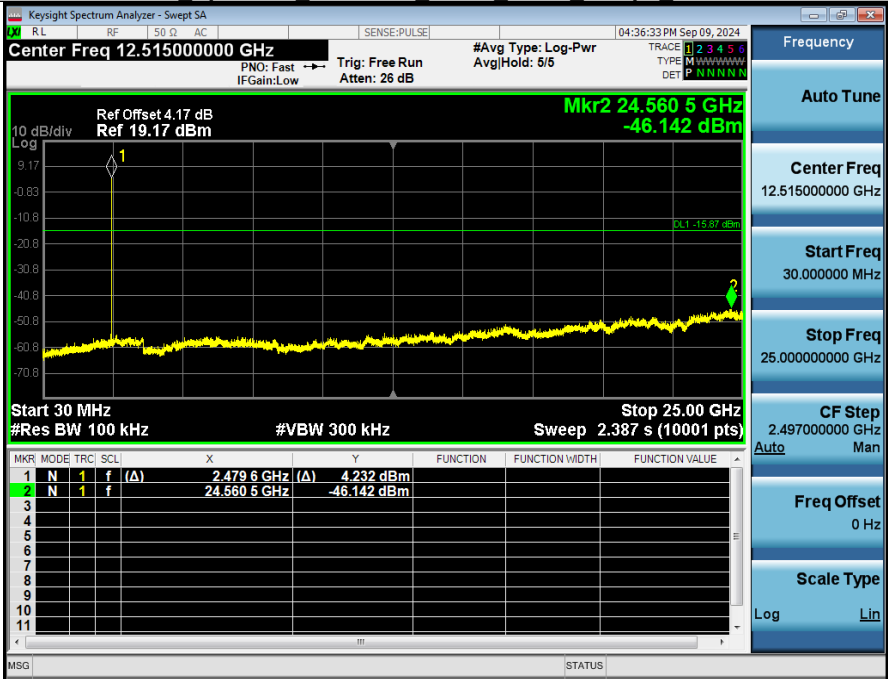
2 Spurious Emission NVNT ANT1 1Mbps 2440



1 Reference Level NVNT ANT1 1Mbps 2480



2 Spurious Emission NVNT ANT1 1Mbps 2480



Bluetooth LE, 2Mbps

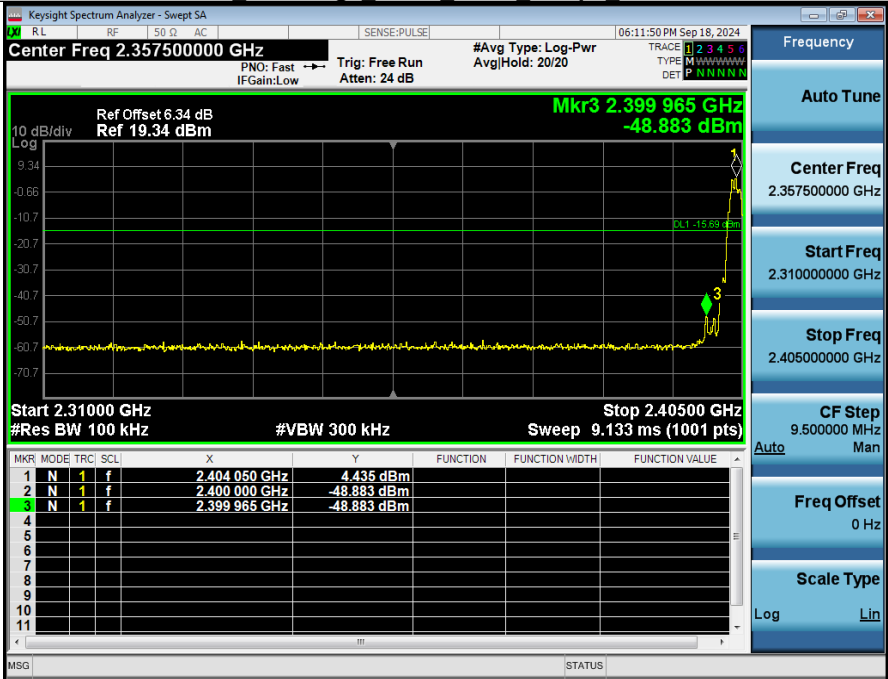
Band Edge

Condition	Antenna	Rate	TX_Frequency (MHz)	Max. Mark Frequency (MHz)	Spurious level (dBm)	Limit (dBm)	Result
NVNT	ANT1	2Mbps	2404.00	2399.965	-48.883	-15.694	Pass
NVNT	ANT1	2Mbps	2478.00	2483.700	-62.216	-16.374	Pass

1 Reference Level NVNT ANT1 2Mbps 2404



2 Bandedge NVNT ANT1 2Mbps 2404



1 Reference Level NVNT ANT1_2Mbps_2478



2 Bandedge NVNT ANT1_2Mbps_2478



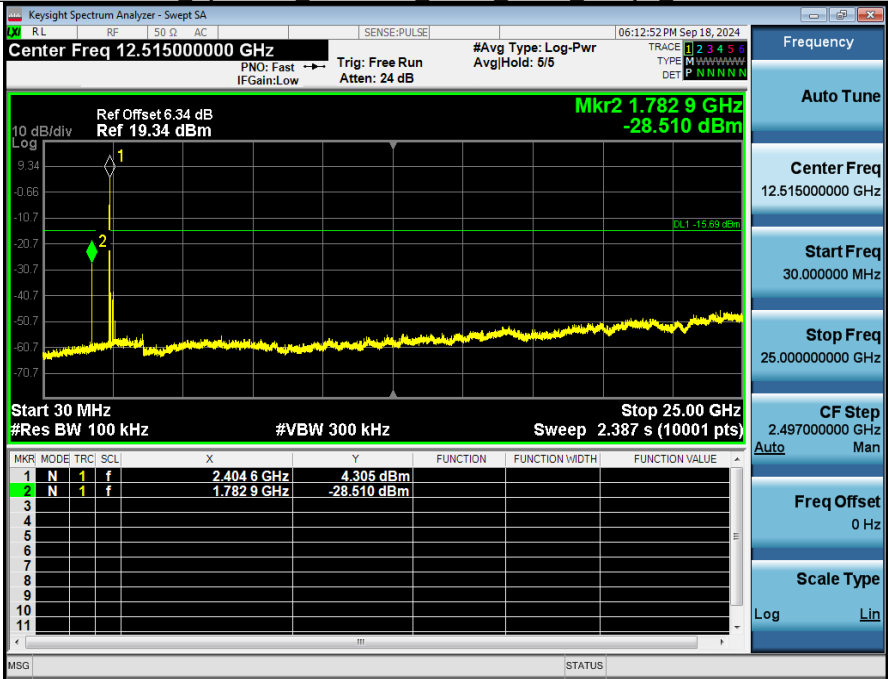
Conducted Spurious Emission

Condition	Antenna	Rate	TX_Frequency (MHz)	Spurious MAX.Value (dBm)	Limit	Result
NVNT	ANT1	2Mbps	2404.00	-28.510	-15.694	Pass
NVNT	ANT1	2Mbps	2440.00	-50.388	-15.174	Pass
NVNT	ANT1	2Mbps	2478.00	-51.510	-16.374	Pass

1 Reference Level NVNT ANT1 2Mbps 2404



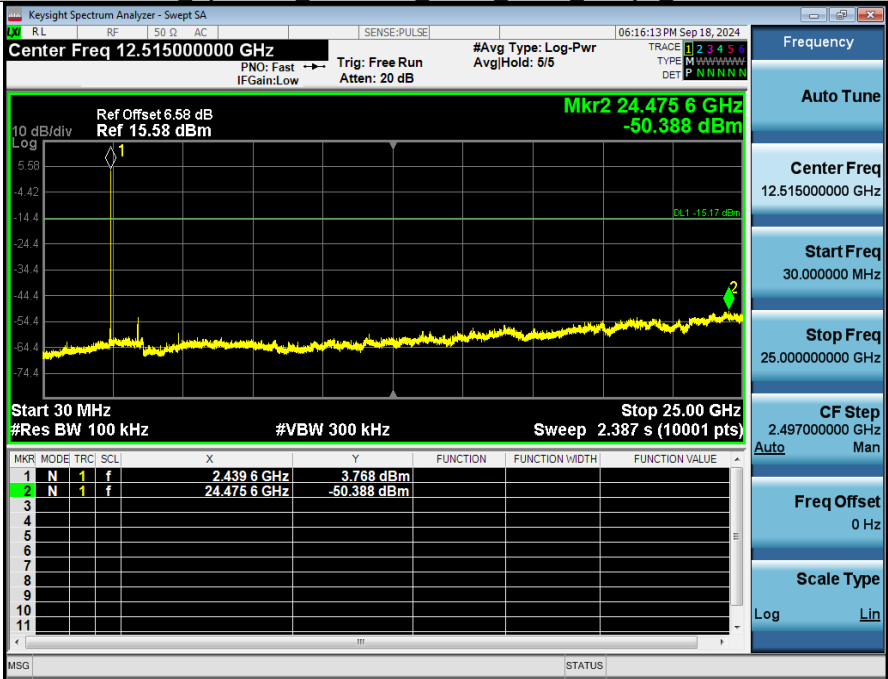
2 Spurious Emission NVNT ANT1 2Mbps 2404



1 Reference Level NVNT ANT1 2Mbps 2440



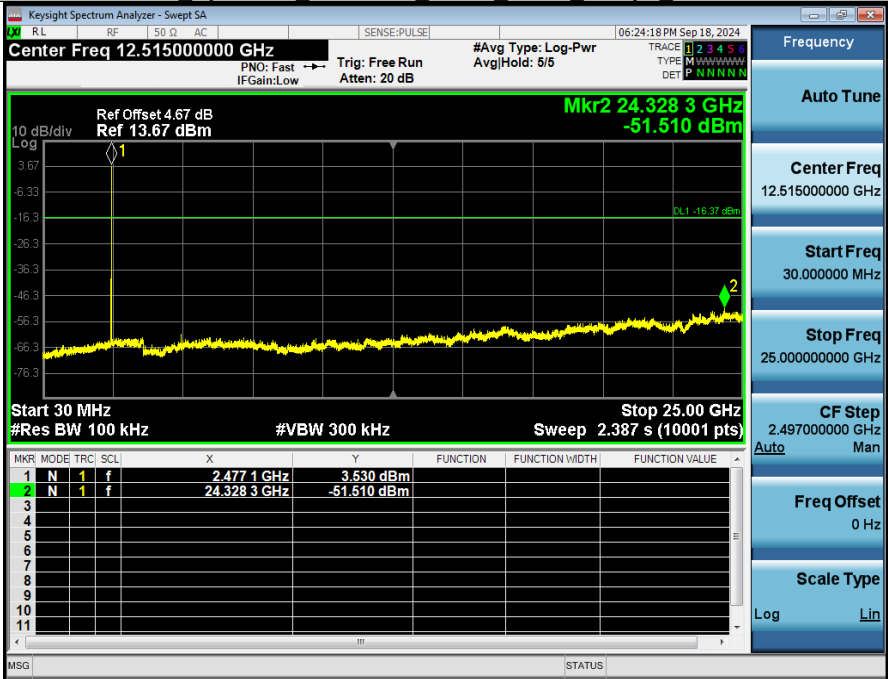
2 Spurious Emission NVNT ANT1 2Mbps 2440



1 Reference Level NVNT ANT1 2Mbps 2478



2 Spurious Emission NVNT ANT1 2Mbps 2478



Appendix B.5: Test Results of Radiated Spurious Emissions

Note:

- 1) This testing was carried out on different modulations, but only the worst case was presented in this report.
- 2) 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.

30 MHz - 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: Horizontal	Temperature: 26 °C
EUT: RIC Behind-the-ear Hearing Aids	Distance: 3m	Humidity: 54 %RH
M/N: ZTQ01ZT	Test Engineer: Felix Pang	
Test Mode: 1M 2402MHz		
Test Voltage: DC 3.7V		
Note:		

Radiated Emission Measurement

Test Date: 2024/10/10 11:50:29



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 *	44.1202	9.48	14.39	23.87	40.00	-16.13	peak	200	213	P	
2	145.8611	8.70	14.03	22.73	43.50	-20.77	peak	200	177	P	

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

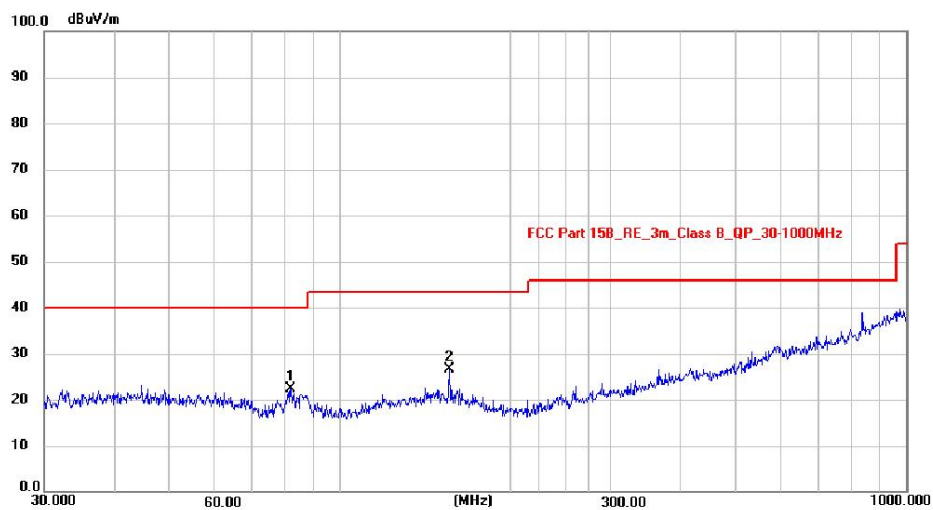


Shenzhen PSI Testing Co., Ltd.
1-2F, Building 5, Yudafu Industrial Park, No. 10, Xingye West Road,
Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104

Test Site: PSI EMC Lab-3m Chamber	Polarization: Vertical	Temperature: 26 °C
EUT: RIC Behind-the-ear Hearing Aids	Distance: 3m	Humidity: 54 %RH
M/N: ZTQ01ZT	Test Engineer: Felix Pang	
Test Mode: 1M 2402MHz		
Test Voltage: DC 3.7V		
Note:		

Radiated Emission Measurement

Test Date: 2024/10/10 11:54:06



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	81.7833	12.99	9.51	22.50	40.00	-17.50	peak	100	150	P	
2 *	155.9101	12.37	14.26	26.63	43.50	-16.87	peak	100	235	P	

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

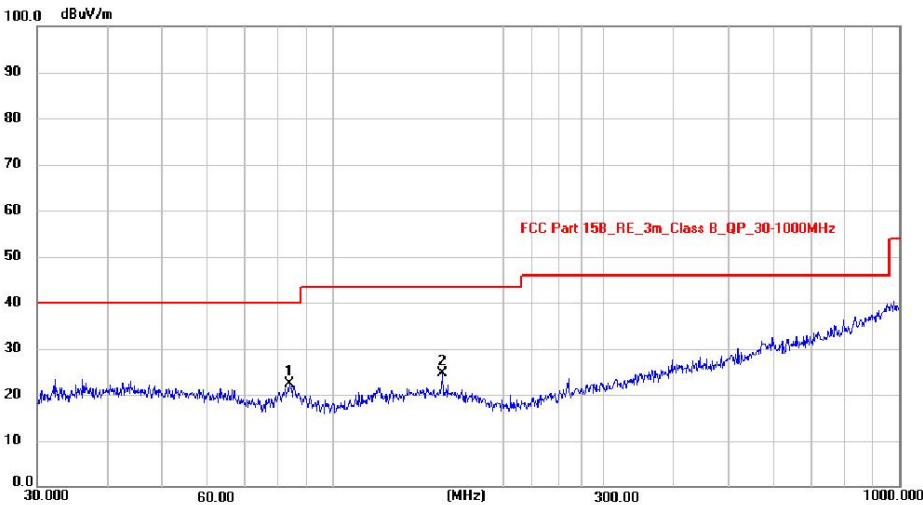


Shenzhen PSI Testing Co., Ltd.
 1-2F, Building 5, Yudafu Industrial Park, No. 10, Xingye West Road,
 Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104

Test Site: PSI EMC Lab-3m Chamber Polarization: **Vertical** Temperature: 26 °C
 EUT: RIC Behind-the-ear Hearing Aids Distance: 3m Humidity: 54 %RH
 M/N: ZTQ01ZT Test Engineer: Felix Pang
 Test Mode: 1M 2440MHz
 Test Voltage: DC 3.7V
 Note:

Radiated Emission Measurement

Test Date: 2024/10/10 12:02:52



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 *	83.5222	12.88	9.55	22.43	40.00	-17.57	peak	100	154	P	
2	155.9101	10.33	14.26	24.59	43.50	-18.91	peak	100	237	P	

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



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1-2F, Building 5, Yudafu Industrial Park, No. 10, Xingye West Road,
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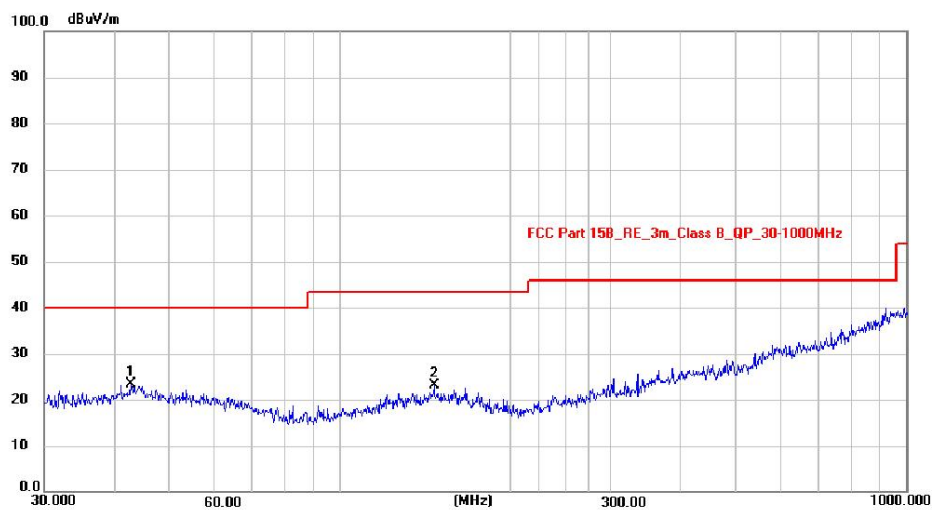
Test Site: PSI EMC Lab-3m Chamber
EUT: RIC Behind-the-ear Hearing Aids
M/N: ZTQ01ZT
Test Mode: 1M 2440MHz
Test Voltage: DC 3.7V
Note:

Polarization: **Horizontal**
Distance: 3m
Test Engineer: Felix Pang

Temperature: 26 °C
Humidity: 54 %RH

Radiated Emission Measurement

Test Date: 2024/10/10 12:06:32



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 *	42.6000	8.98	14.46	23.44	40.00	-16.56	peak	200	156	P	
2	146.3735	9.08	14.05	23.13	43.50	-20.37	peak	200	237	P	

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

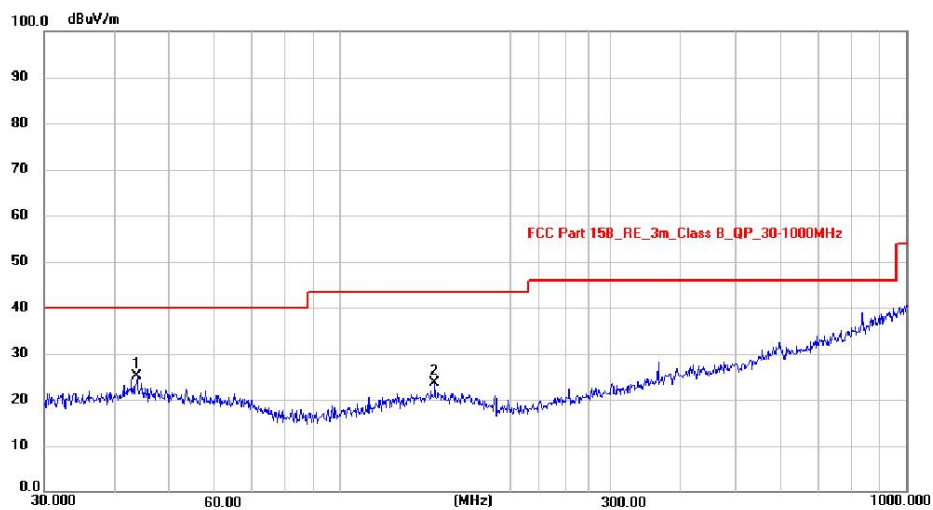


Shenzhen PSI Testing Co., Ltd.
1-2F, Building 5, Yudafu Industrial Park, No. 10, Xingye West Road,
Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104

Test Site: PSI EMC Lab-3m Chamber	Polarization: Horizontal	Temperature: 26 °C
EUT: RIC Behind-the-ear Hearing Aids	Distance: 3m	Humidity: 54 %RH
M/N: ZTQ01ZT	Test Engineer: Felix Pang	
Test Mode: 1M 2480MHz		
Test Voltage: DC 3.7V		
Note:		

Radiated Emission Measurement

Test Date: 2024/10/10 12:10:18



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 *	43.8119	10.77	14.41	25.18	40.00	-14.82	peak	200	282	P	
2	146.8877	9.69	14.06	23.75	43.50	-19.75	peak	200	197	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

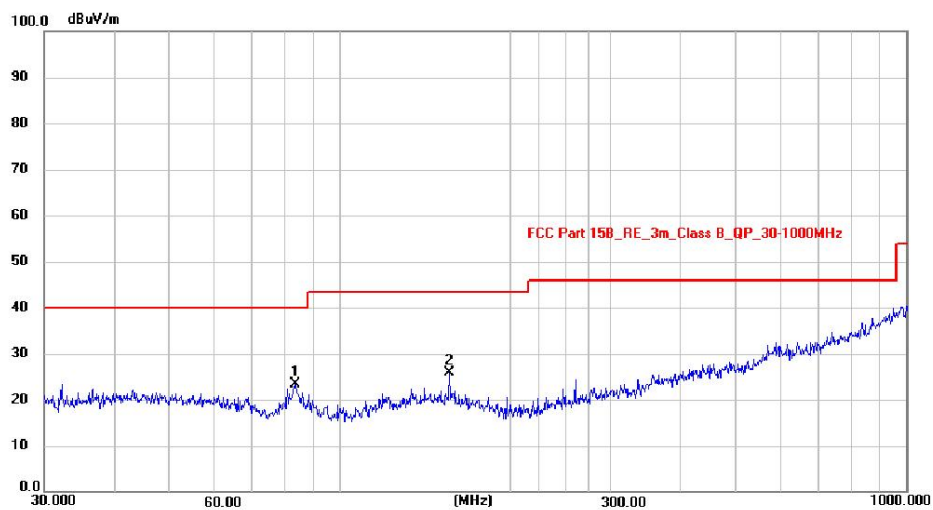
Test Site: PSI EMC Lab-3m Chamber
EUT: RIC Behind-the-ear Hearing Aids
M/N: ZTQ01ZT
Test Mode: 1M 2480MHz
Test Voltage: DC 3.7V
Note:

Polarization: **Vertical**
Distance: 3m
Test Engineer: Felix Pang

Temperature: 26 °C
Humidity: 54 %RH

Radiated Emission Measurement

Test Date: 2024/10/10 12:14:57



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 *	83.2298	13.82	9.54	23.36	40.00	-16.64	peak	100	254	P	
2	155.9101	11.56	14.26	25.82	43.50	-17.68	peak	100	172	P	

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

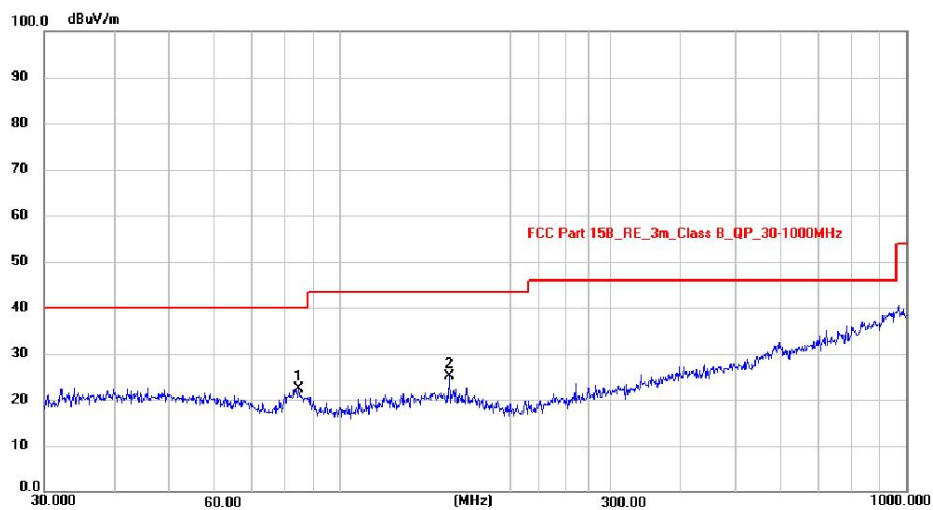


Shenzhen PSI Testing Co., Ltd.
1-2F, Building 5, Yudafu Industrial Park, No. 10, Xingye West Road,
Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104

Test Site: PSI EMC Lab-3m Chamber	Polarization: Vertical	Temperature: 26 °C
EUT: RIC Behind-the-ear Hearing Aids	Distance: 3m	Humidity: 54 %RH
M/N: ZTQ01ZT	Test Engineer: Felix Pang	
Test Mode: 2M 2404MHz		
Test Voltage: DC 3.7V		
Note:		

Radiated Emission Measurement

Test Date: 2024/10/10 12:18:42



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 *	84.4054	12.82	9.58	22.40	40.00	-17.60	peak	100	267	P	
2	155.9101	10.93	14.26	25.19	43.50	-18.31	peak	100	231	P	

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