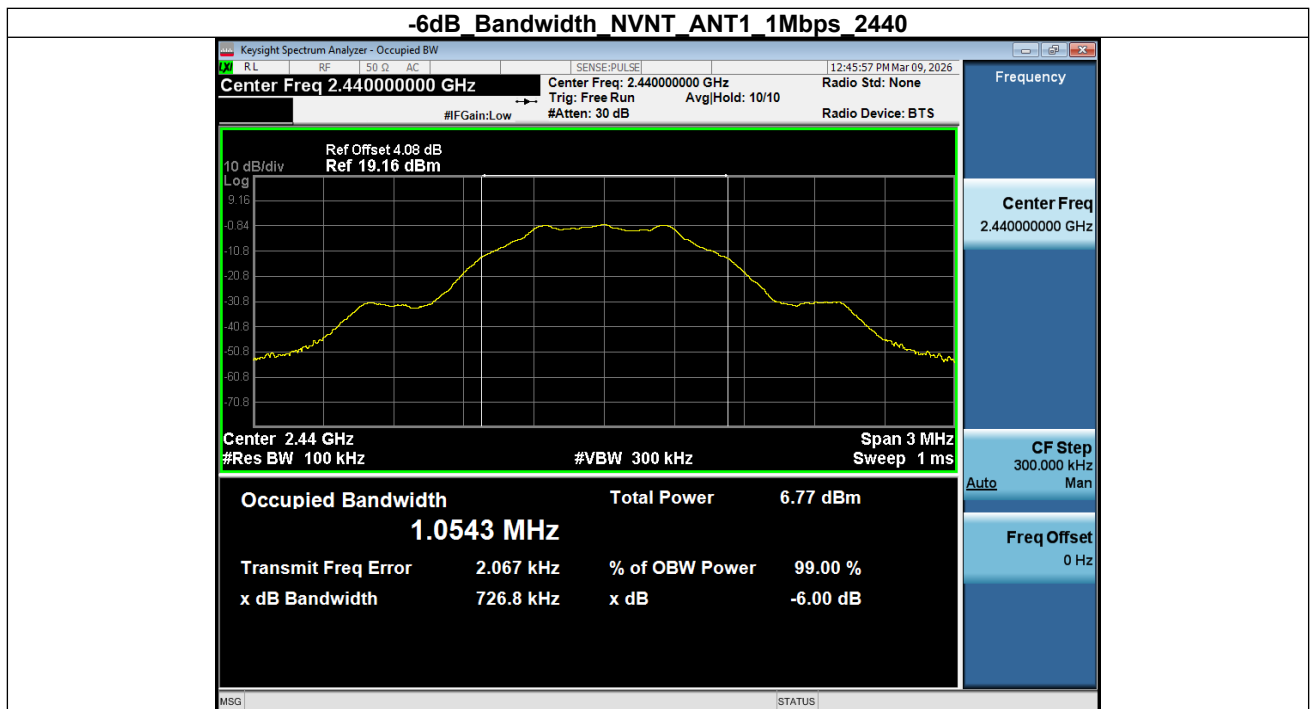
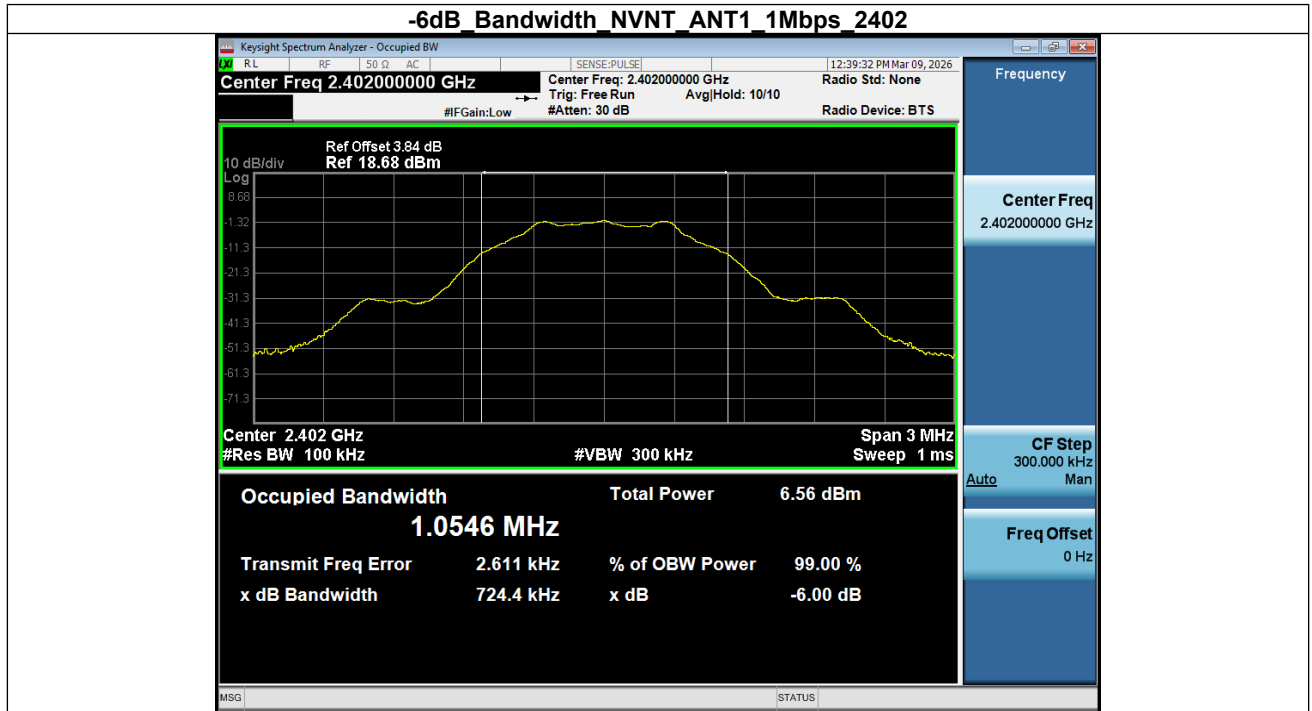


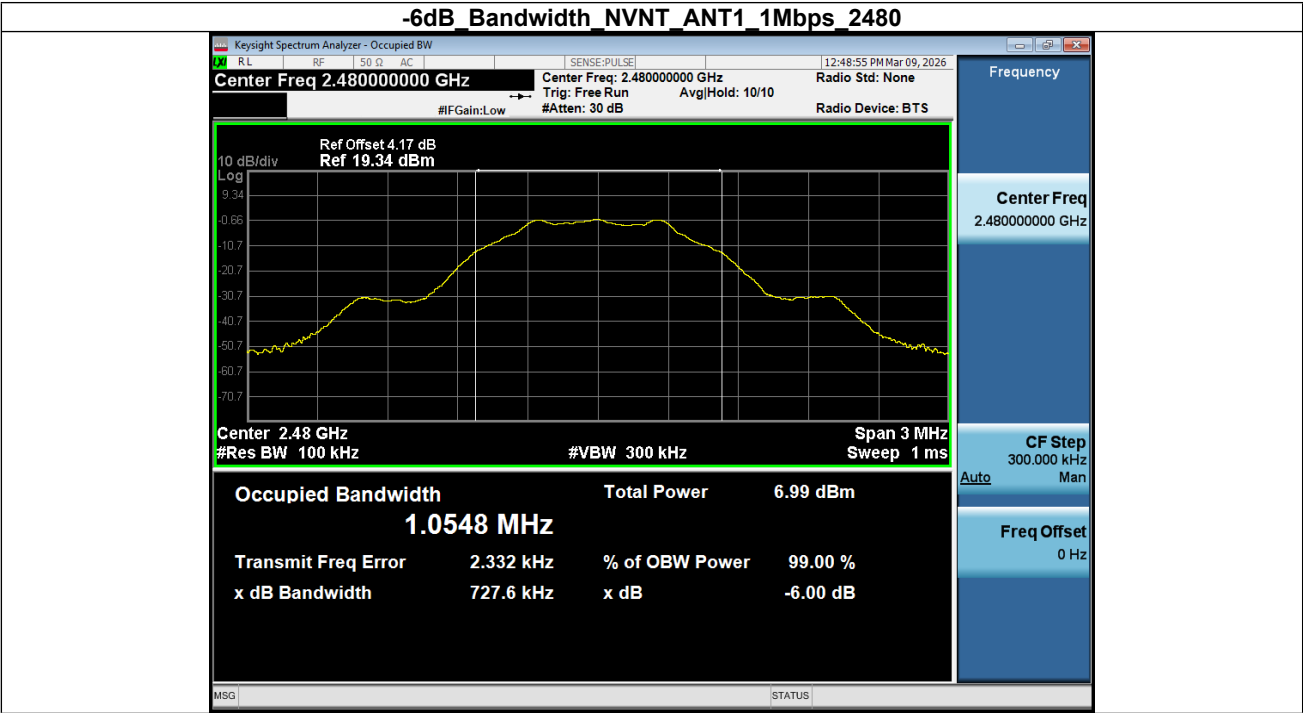
Appendix B: Test Results of Bluetooth LE

APPENDIX B: TEST RESULTS OF BLUETOOTH LE	1
APPENDIX B.1: TEST RESULTS OF 6dB BANDWIDTH	2
APPENDIX B.2: TEST RESULTS OF 99% BANDWIDTH	4
APPENDIX B.3: TEST RESULTS OF MAXIMUM PEAK CONDUCTED OUTPUT POWER	6
APPENDIX B.4: TEST RESULTS OF CONDUCTED POWER SPECTRAL DENSITY.....	7
APPENDIX B.5: TEST RESULTS OF BAND EDGE MEASUREMENTS	9
APPENDIX B.6: TEST RESULTS OF CONDUCTED SPURIOUS EMISSION	11
APPENDIX B.7: TEST RESULTS OF RADIATED SPURIOUS EMISSIONS	14
30 MHz - 1GHz.....	14
1GHz - 18GHz	16
APPENDIX B.8: TEST RESULTS OF RADIATED EMISSIONS IN RESTRICTED BANDS.....	22

Appendix B.1: Test Results of 6dB Bandwidth

Condition	Antenna	Rate	Frequency (MHz)	-6dB BW(kHz)	limit(kHz)	Result
NVNT	ANT1	1Mbps	2402.00	724.42	500	Pass
NVNT	ANT1	1Mbps	2440.00	726.85	500	Pass
NVNT	ANT1	1Mbps	2480.00	727.61	500	Pass

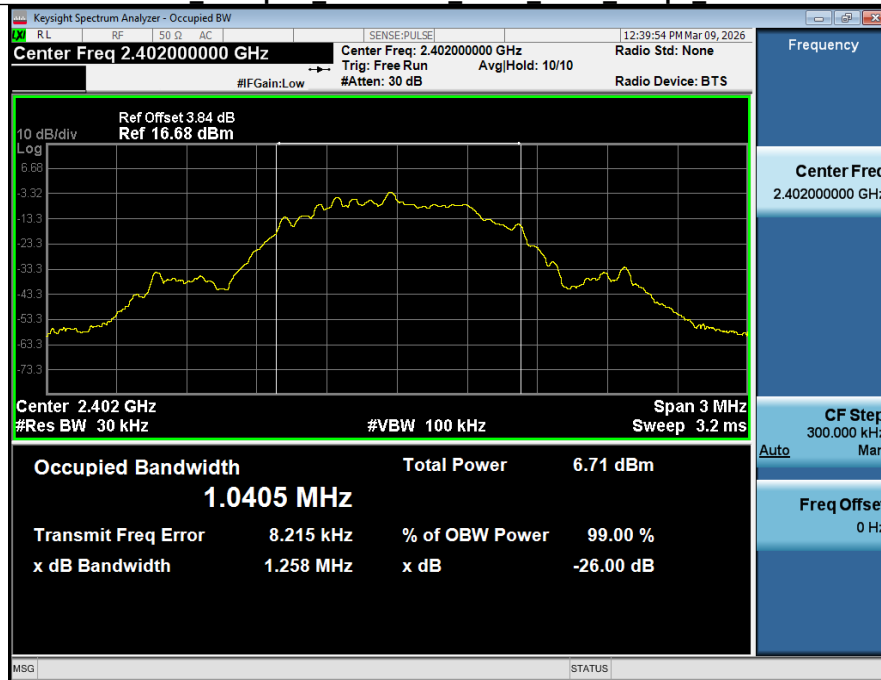




Appendix B.2: Test Results of 99% Bandwidth

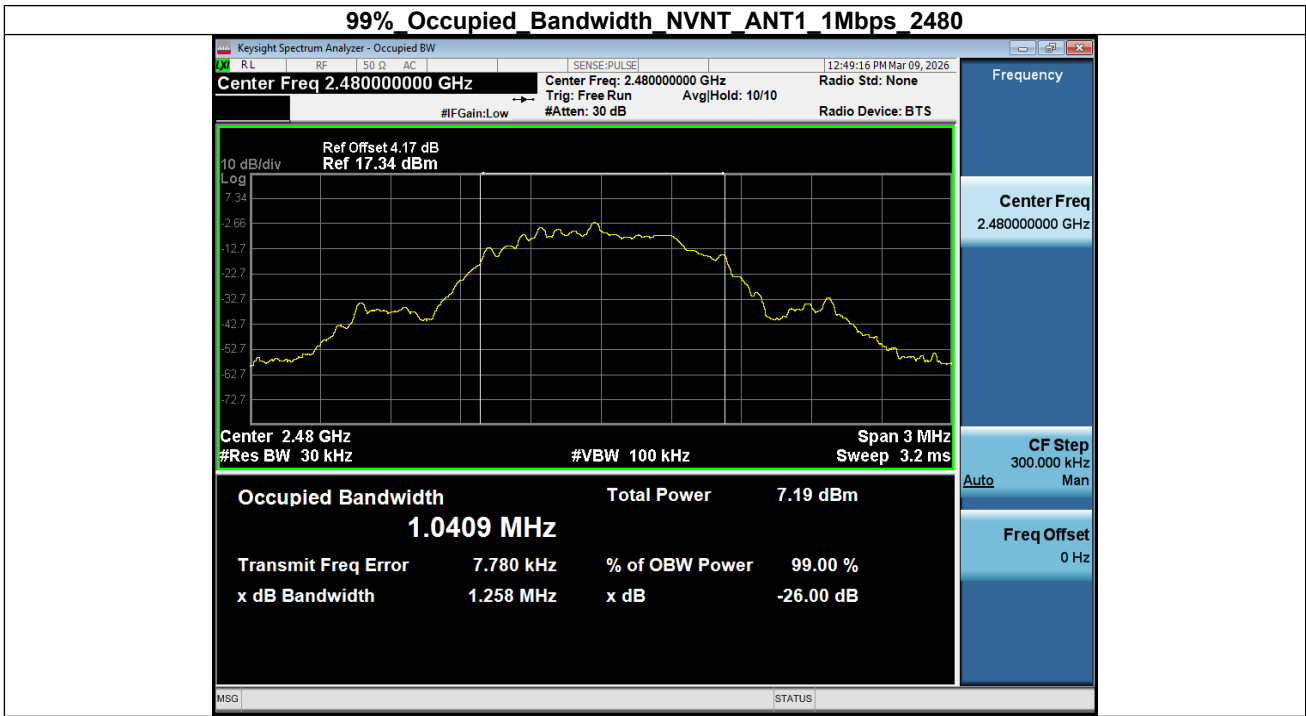
Condition	Antenna	Rate	Frequency (MHz)	99%%BW(MHz)
NVNT	ANT1	1Mbps	2402.00	1.040
NVNT	ANT1	1Mbps	2440.00	1.041
NVNT	ANT1	1Mbps	2480.00	1.041

99% Occupied Bandwidth NVNT ANT1 1Mbps 2402



99% Occupied Bandwidth NVNT ANT1 1Mbps 2440

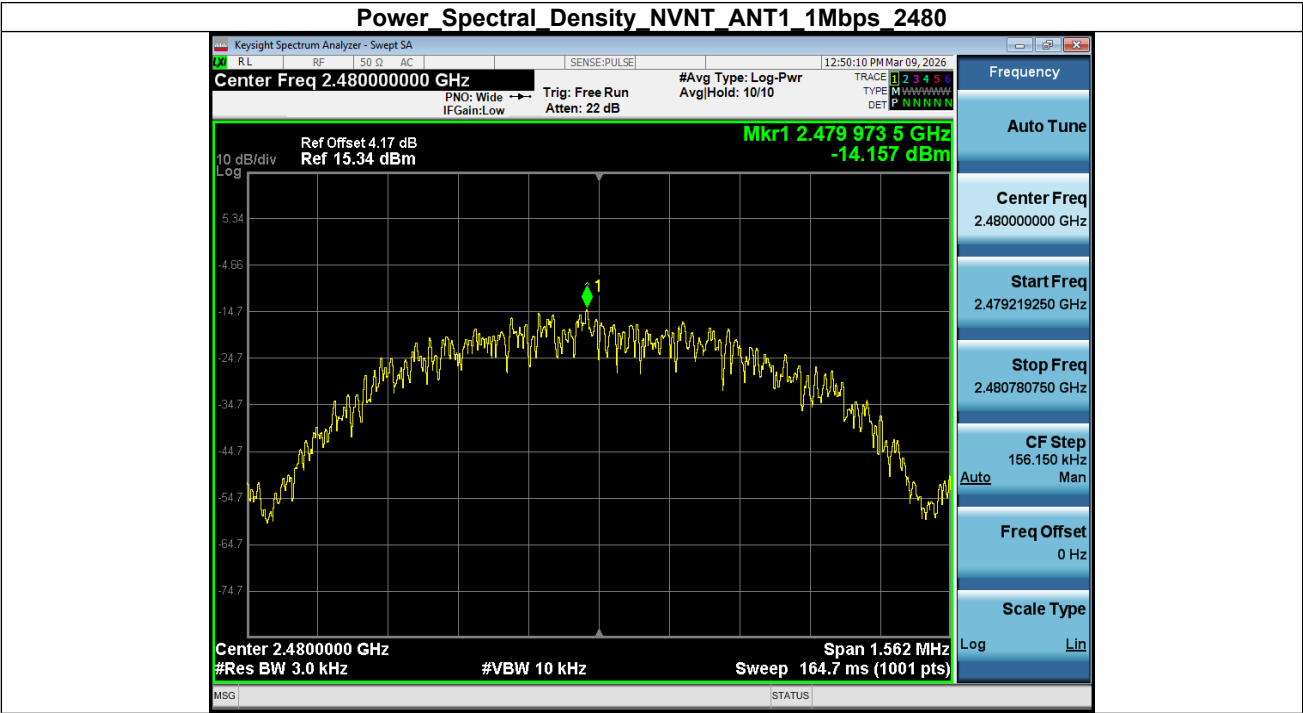




Appendix B.3: Test Results of Maximum Peak Conducted Output Power

Condition	Antenna	Rate	Frequency (MHz)	Max. Conducted Power (dBm)	Max. Conducted Power (mW)	Limit (mW)	Result
NVNT	ANT1	1Mbps	2402.00	0.21	1.05	1000	Pass
NVNT	ANT1	1Mbps	2440.00	0.37	1.09	1000	Pass
NVNT	ANT1	1Mbps	2480.00	0.68	1.17	1000	Pass

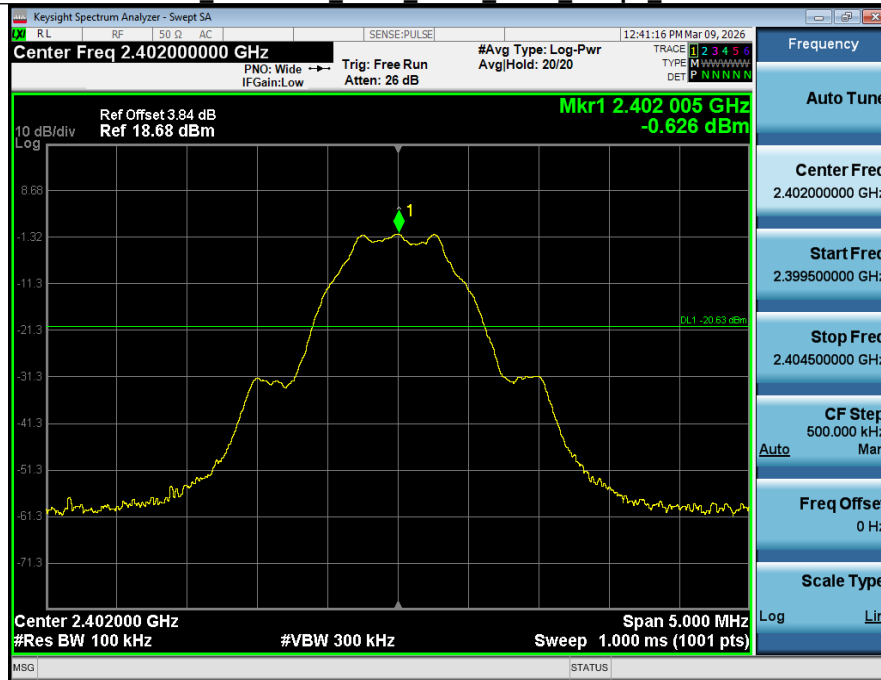
Max. e.i.r.p.=0.68dBm+1.22dBi=1.90dBm, which is less than 36dBm=4W.



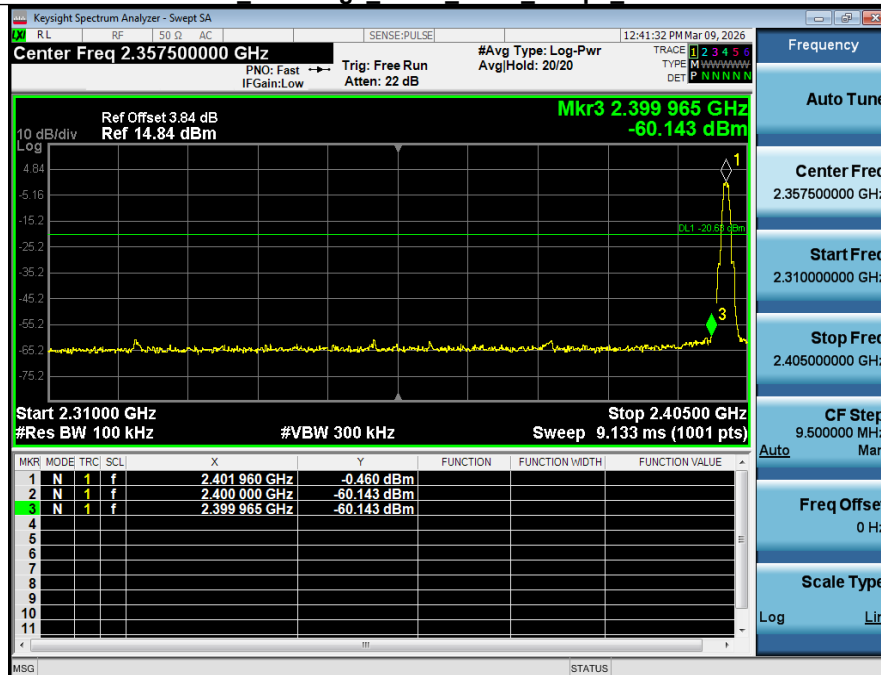
Appendix B.5: Test Results of Band Edge Measurements

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	-0.626	-60.143	-20.626	Pass
NVNT	ANT1	1Mbps	2480.00	2485.100	-0.190	-58.783	-20.190	Pass

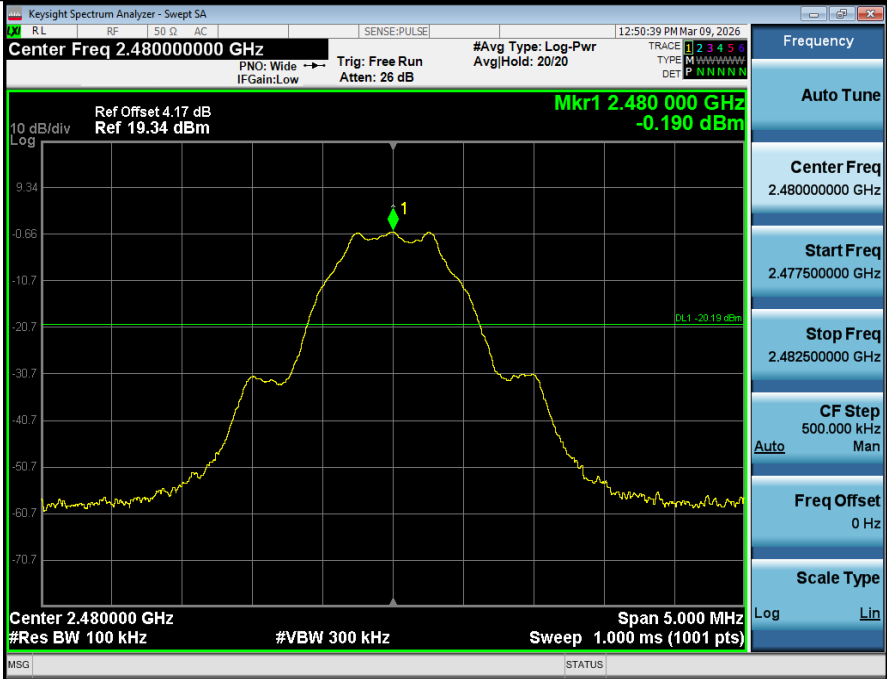
1 Reference Level NVNT ANT1 1Mbps 2402



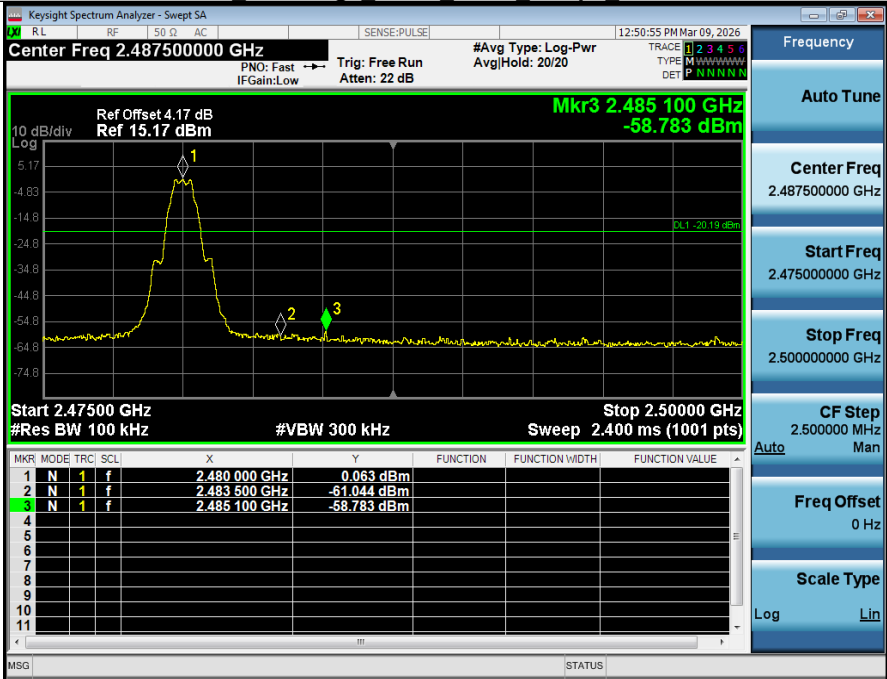
2 Bandedge NVNT ANT1 1Mbps 2402



1 Reference Level NVNT ANT1 1Mbps 2480



2 Bandedge NVNT ANT1 1Mbps 2480



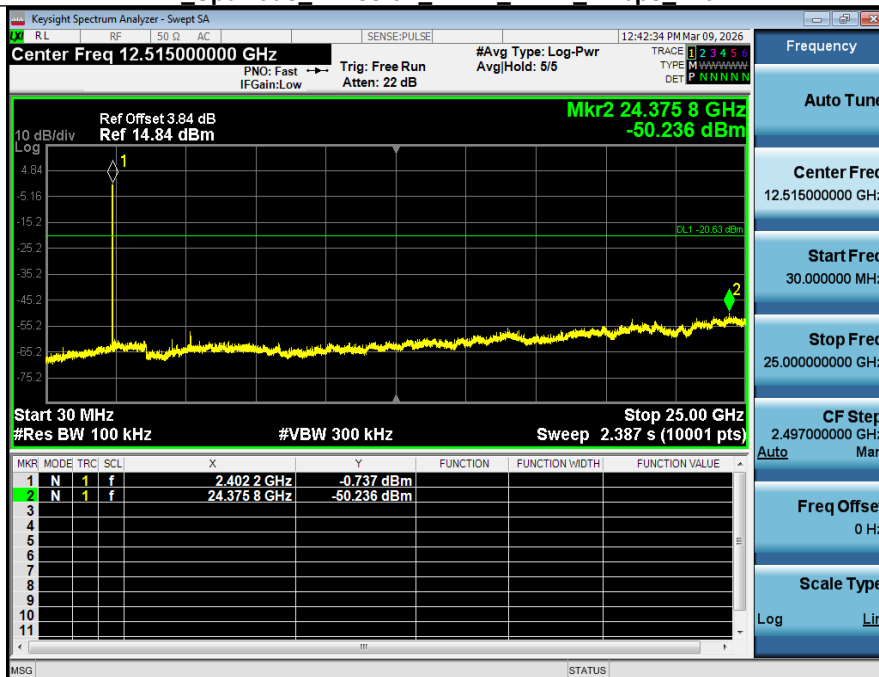
Appendix B.6: Test Results of Conducted Spurious Emission

Condition	Antenna	Modulation	TX_Frequency (MHz)	Ref_level (dBm)	Spurious level (dBm)	limit (dBm)	Result
NVNT	ANT1	1Mbps	2402.00	-0.626	-50.236	-20.626	Pass
NVNT	ANT1	1Mbps	2440.00	-0.482	-50.711	-20.482	Pass
NVNT	ANT1	1Mbps	2480.00	-0.190	-50.610	-20.190	Pass

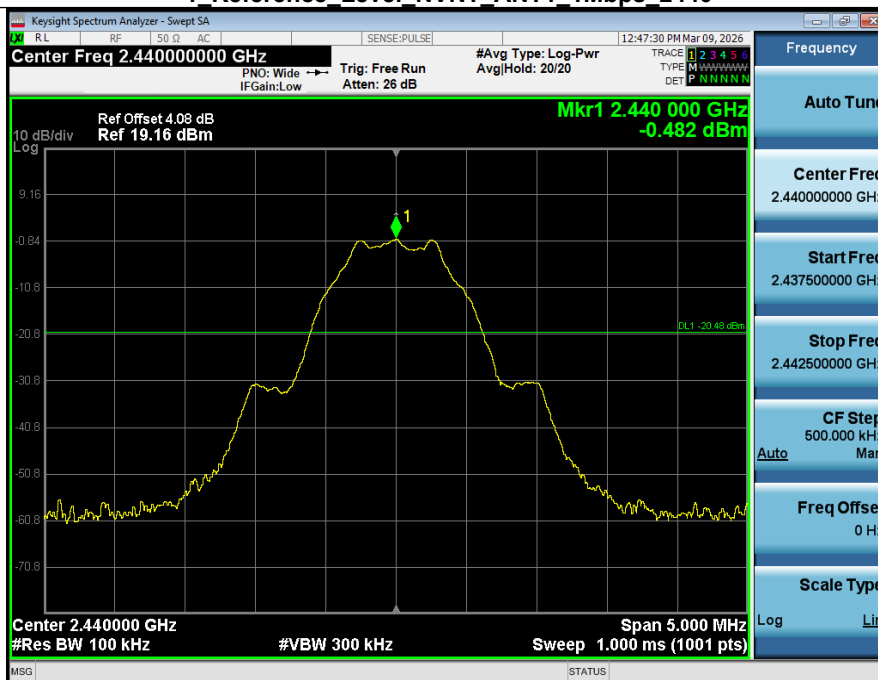
1 Reference Level NVNT ANT1 1Mbps 2402



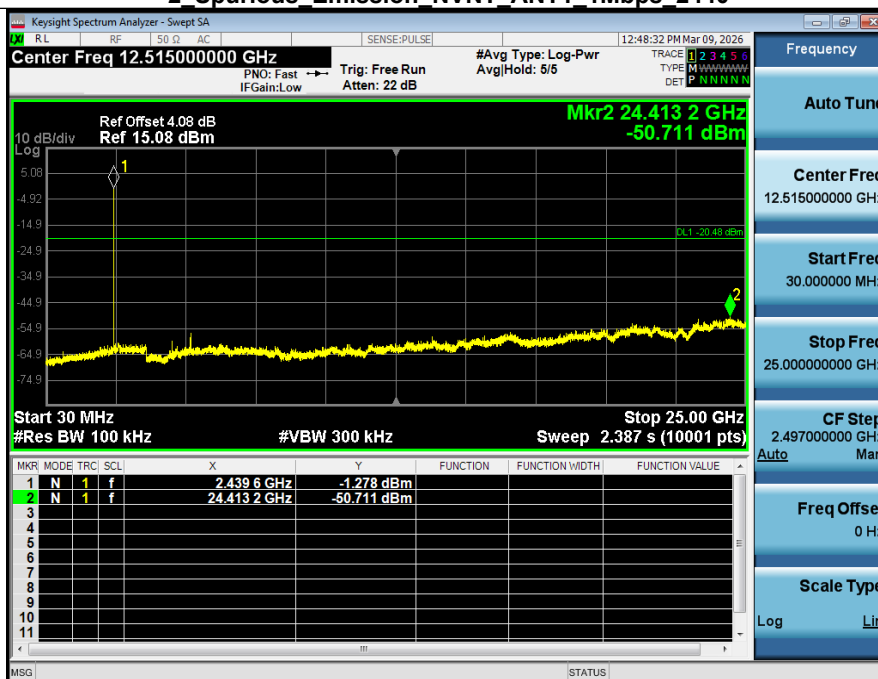
2 Spurious Emission NVNT ANT1 1Mbps 2402



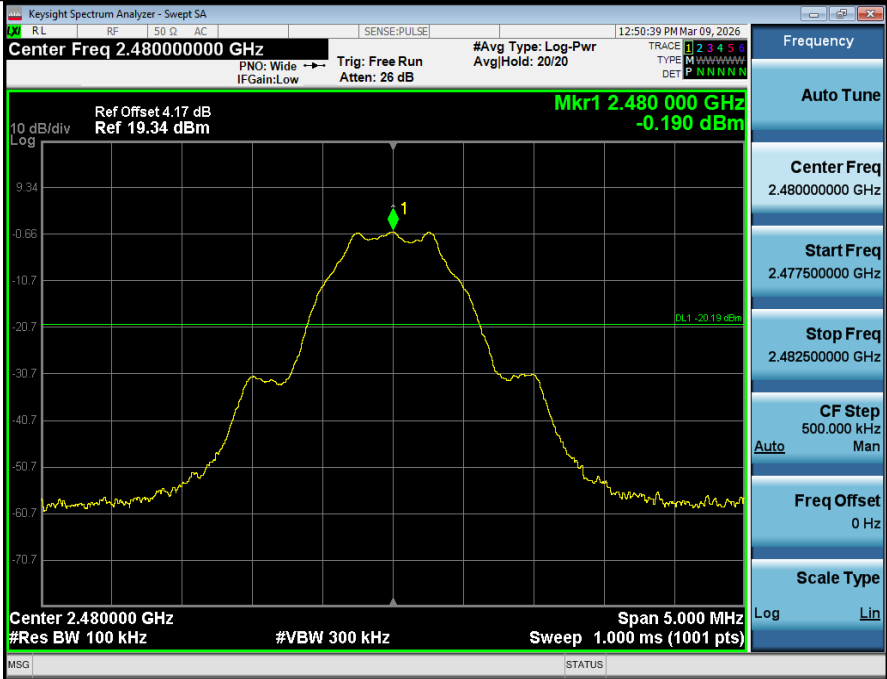
1_Reference_Level_NVNT_ANT1_1Mbps_2440



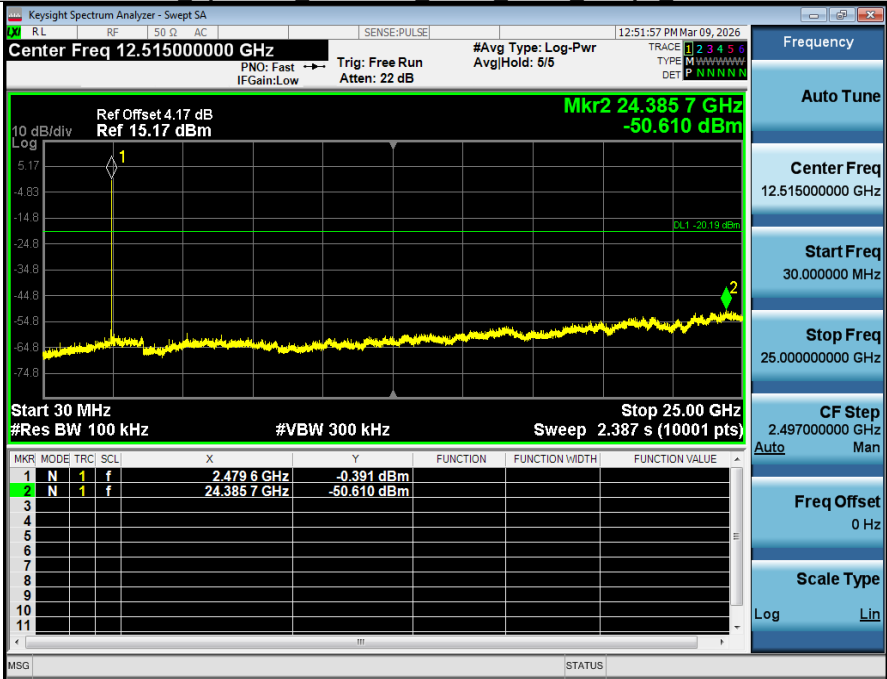
2 Spurious Emission NVNT ANT1 1Mbps 2440



1 Reference Level NVNT ANT1 1Mbps 2480



2 Spurious Emission NVNT ANT1 1Mbps 2480



Appendix B.7: 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

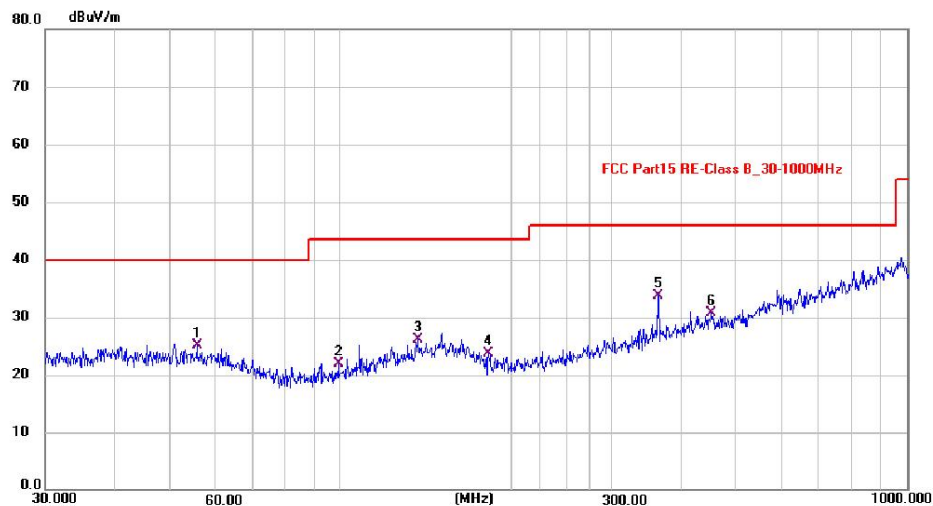


Shenzhen PSI Testing Co., Ltd.
1-2F, Building 5, Yudafu Industrial Park, No. 10, Xingye West Road,
Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104

Test Site: PSI EMC Lab-3m Chamber	Polarization: Horizontal	Temperature: 26 °C
EUT: Robotic Vacuum	Distance: 3m	Humidity: 54 %RH
M/N: AVA111E2US	Test Engineer: Felix	
Test Mode: BLE 2402MHz		
Test Voltage: DC 14.4V		
Note:		

Radiated Emission Measurement

Test Date: 2026/3/11 9:19:32



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	55.7313	11.73	13.47	25.20	40.00	-14.80	QP	200	103	P	
2	98.9192	10.97	10.89	21.86	43.50	-21.64	QP	200	158	P	
3	136.6993	11.94	14.25	26.19	43.50	-17.31	QP	200	248	P	
4	182.3193	11.06	12.63	23.69	43.50	-19.81	QP	200	324	P	
5 *	364.1000	16.91	16.85	33.76	46.00	-12.24	QP	200	155	P	
6	451.9266	11.52	19.16	30.68	46.00	-15.32	QP	200	354	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

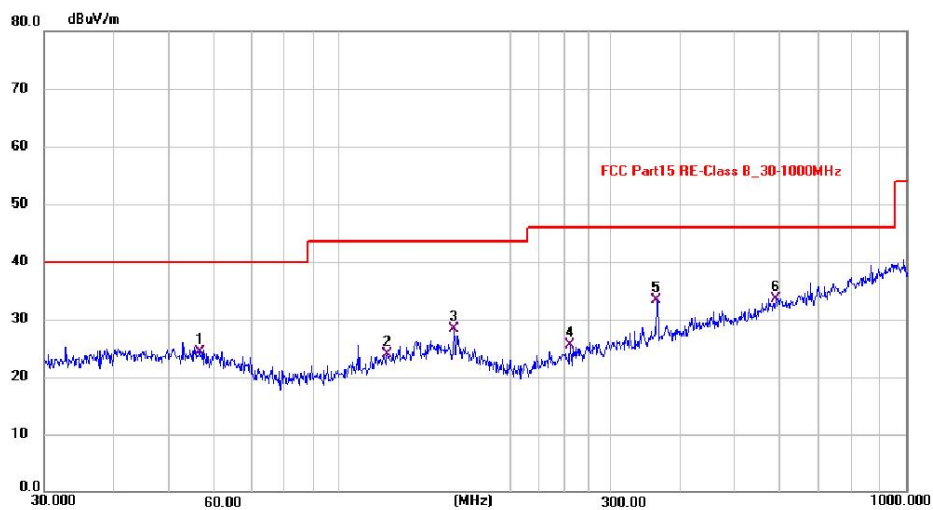
Test Site: PSI EMC Lab-3m Chamber
EUT: Robotic Vacuum
M/N: AVA111E2US
Test Mode: BLE 2402MHz
Test Voltage: DC 14.4V
Note:

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

Temperature: 26 °C
Humidity: 54 %RH

Radiated Emission Measurement

Test Date: 2026/3/11 9:23:43



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	56.4938	10.96	13.42	24.38	40.00	-15.62	QP	100	136	P	
2	121.2293	10.65	13.24	23.89	43.50	-19.61	QP	100	225	P	
3	159.0159	13.05	15.18	28.23	43.50	-15.27	QP	100	101	P	
4	255.3992	11.89	13.63	25.52	46.00	-20.48	QP	100	185	P	
5	364.0999	16.39	16.85	33.24	46.00	-12.76	QP	100	123	P	
6 *	587.3584	11.78	21.80	33.58	46.00	-12.42	QP	100	258	P	

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

1GHz - 18GHz

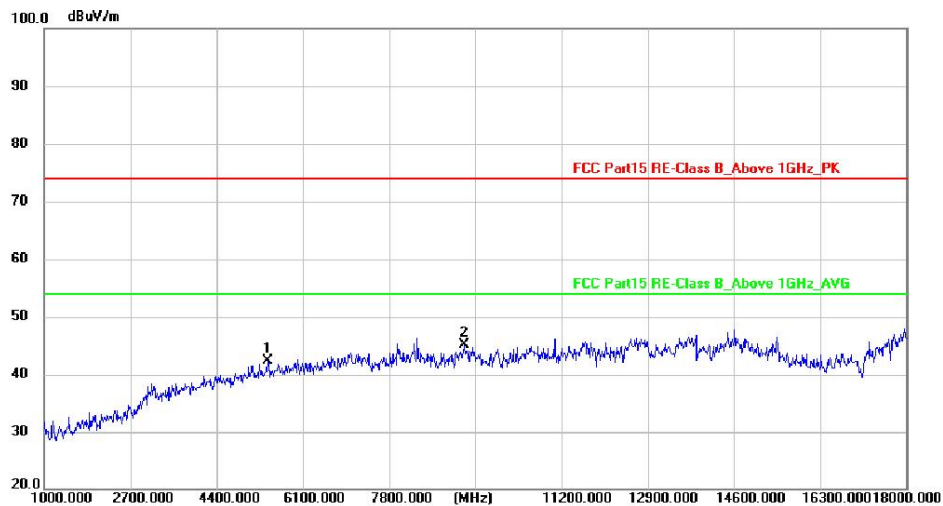


Shenzhen PSI Testing Co., Ltd.
1-2F, Building 5, Yudafu Industrial Park, No. 10, Xingye West Road,
Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104

Test Site: PSI EMC Lab-3m Chamber	Polarization: Vertical	Temperature: 26 °C
EUT: Robotic Vacuum	Distance: 3m	Humidity: 54 %RH
M/N: AVA111E2US	Test Engineer: Felix	
Test Mode: LE 2402MHz		
Test Voltage: DC 14.4V		
Note:		

Radiated Emission Measurement

Test Date: 2026/3/11 11:01:04



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	5415.750	57.23	-14.92	42.31	74.00	-31.69	peak	150	125	P	
2 *	9291.750	55.30	-10.27	45.03	74.00	-28.97	peak	150	219	P	

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

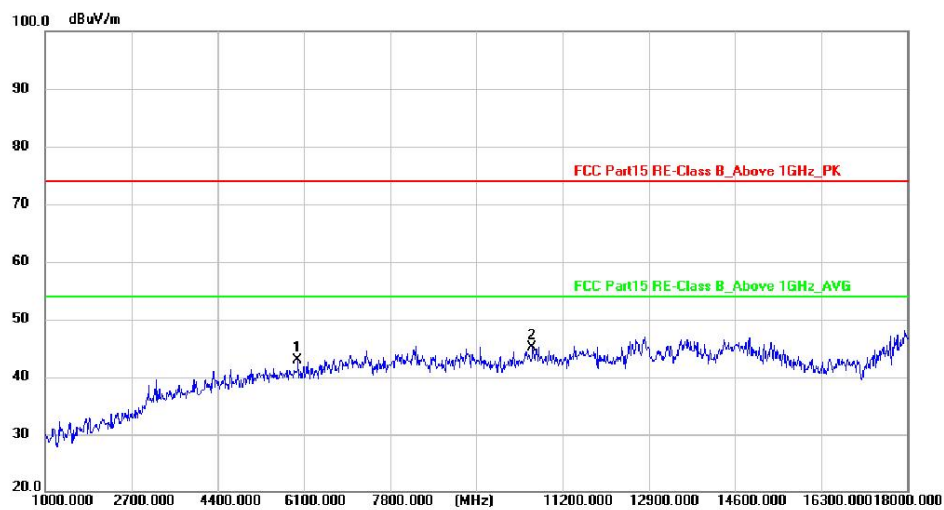


Shenzhen PSI Testing Co., Ltd.
1-2F, Building 5, Yudafu Industrial Park, No. 10, Xingye West Road,
Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104

Test Site: PSI EMC Lab-3m Chamber	Polarization: Horizontal	Temperature: 26 °C
EUT: Robotic Vacuum	Distance: 3m	Humidity: 54 %RH
M/N: AVA111E2US	Test Engineer: Felix	
Test Mode: LE 2402MHz		
Test Voltage: DC 14.4V		
Note:		

Radiated Emission Measurement

Test Date: 2026/3/11 11:05:05



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	5987.375	56.64	-13.72	42.92	74.00	-31.08	peak	150	215	P	
2 *	10607.125	54.53	-9.35	45.18	74.00	-28.82	peak	150	350	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

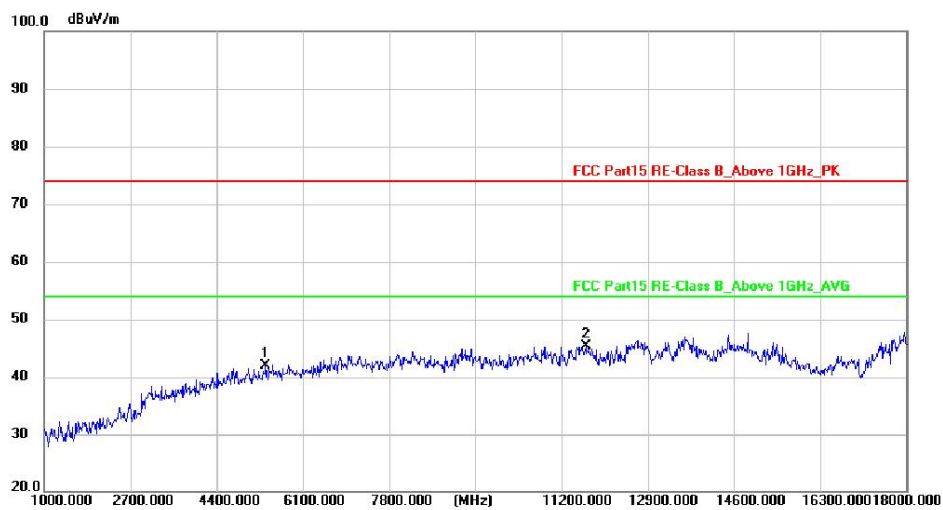
Test Site: PSI EMC Lab-3m Chamber
EUT: Robotic Vacuum
M/N: AVA111E2US
Test Mode: LE 2440MHz
Test Voltage: DC 14.4V
Note:

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

Temperature: 26 °C
Humidity: 54 %RH

Radiated Emission Measurement

Test Date: 2026/3/11 11:10:13



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	5375.375	56.84	-15.01	41.83	74.00	-32.17	peak	150	56	P	
2 *	11680.250	54.04	-8.73	45.31	74.00	-28.69	peak	150	182	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

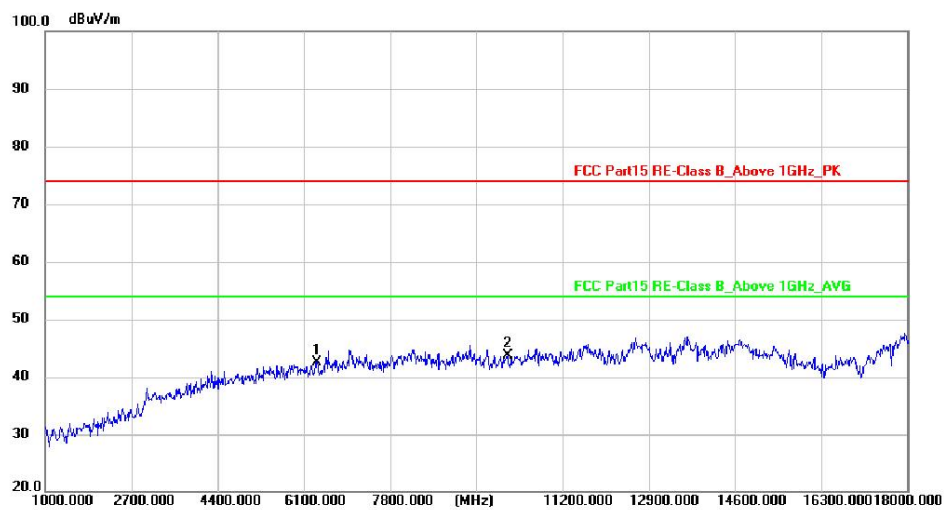
Test Site: PSI EMC Lab-3m Chamber
EUT: Robotic Vacuum
M/N: AVA111E2US
Test Mode: LE 2440MHz
Test Voltage: DC 14.4V
Note:

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

Temperature: 26 °C
Humidity: 54 %RH

Radiated Emission Measurement

Test Date: 2026/3/11 11:14:21



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	6361.375	55.36	-12.85	42.51	74.00	-31.49	peak	150	182	P	
2 *	10114.125	53.51	-9.84	43.67	74.00	-30.33	peak	150	158	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

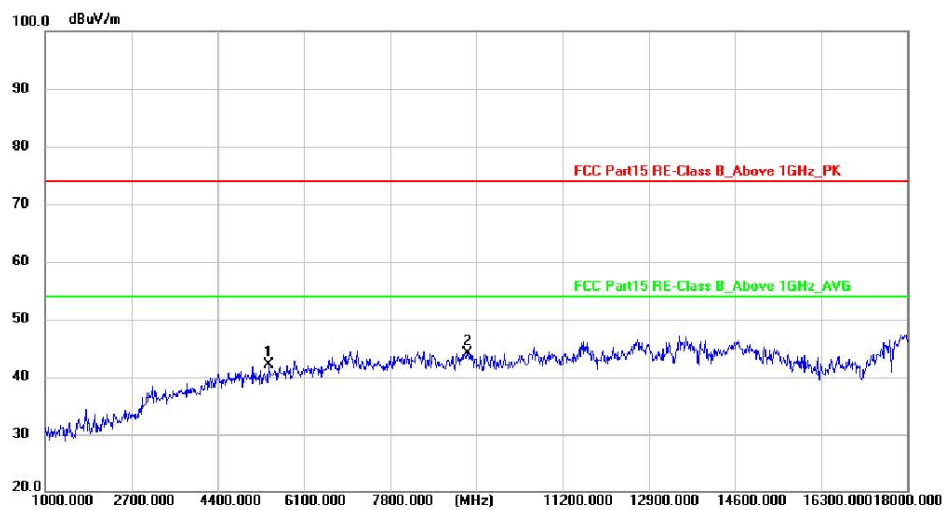
Test Site: PSI EMC Lab-3m Chamber
EUT: Robotic Vacuum
M/N: AVA111E2US
Test Mode: LE 2480MHz
Test Voltage: DC 14.4V
Note:

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

Temperature: 26 °C
Humidity: 54 %RH

Radiated Emission Measurement

Test Date: 2026/3/11 11:20:27



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	5405.125	57.08	-14.95	42.13	74.00	-31.87	peak	150	315	P	
2 *	9336.375	54.33	-10.24	44.09	74.00	-29.91	peak	150	154	P	

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

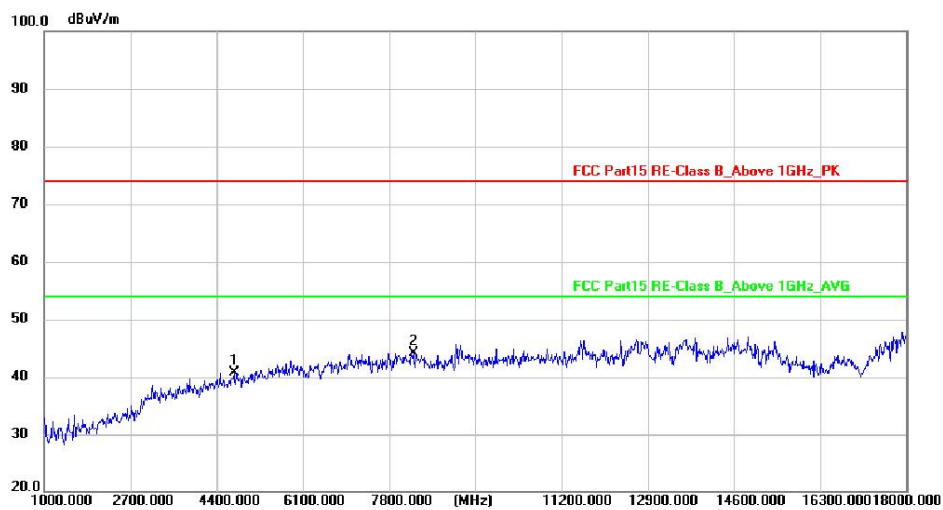


Shenzhen PSI Testing Co., Ltd.
1-2F, Building 5, Yudafu Industrial Park, No. 10, Xingye West Road,
Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104

Test Site: PSI EMC Lab-3m Chamber Polarization: **Horizontal** Temperature: 26 °C
EUT: Robotic Vacuum Distance: 3m Humidity: 54 %RH
M/N: AVA111E2US Test Engineer: Felix
Test Mode: LE 2480MHz
Test Voltage: DC 14.4V
Note:

Radiated Emission Measurement

Test Date: 2026/3/11 11:25:34



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	4754.875	57.34	-16.59	40.75	74.00	-33.25	peak	150	152	P	
2 *	8280.250	54.69	-10.59	44.10	74.00	-29.90	peak	150	155	P	

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

Appendix B.8: Test Results of Radiated Emissions in Restricted Bands

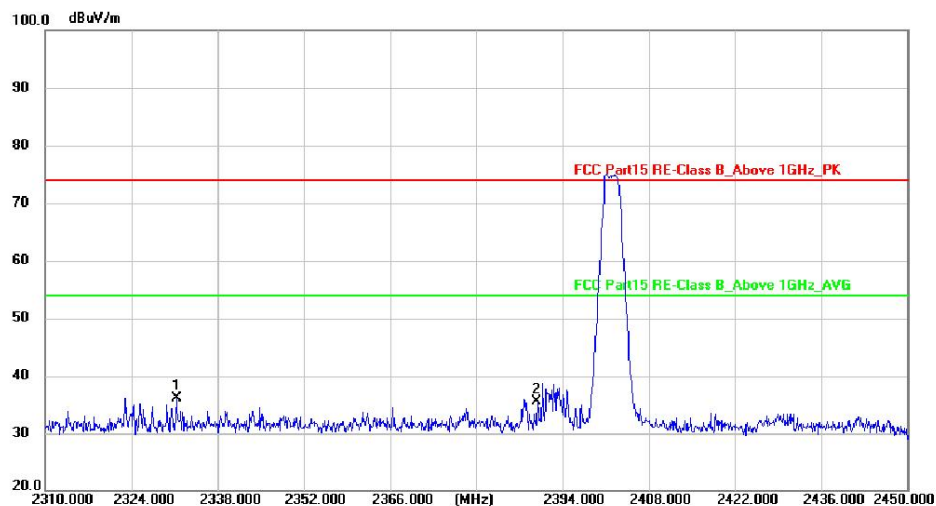


Shenzhen PSI Testing Co., Ltd.
1-2F, Building 5, Yudafu Industrial Park, No. 10, Xingye West Road,
Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104

Test Site: PSI EMC Lab-3m Chamber	Polarization: Vertical	Temperature: 26 °C
EUT: Robotic Vacuum	Distance: 3m	Humidity: 54 %RH
M/N: AVA111E2US	Test Engineer: Felix	
Test Mode: LE 2402MHz		
Test Voltage: DC 14.4V		
Note:		

Radiated Emission Measurement

Test Date: 2026/3/10 17:24:21



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 *	2331.350	60.20	-24.08	36.12	74.00	-37.88	peak	150	41	P	
2	2390.000	59.46	-23.89	35.57	74.00	-38.43	peak	150	356	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

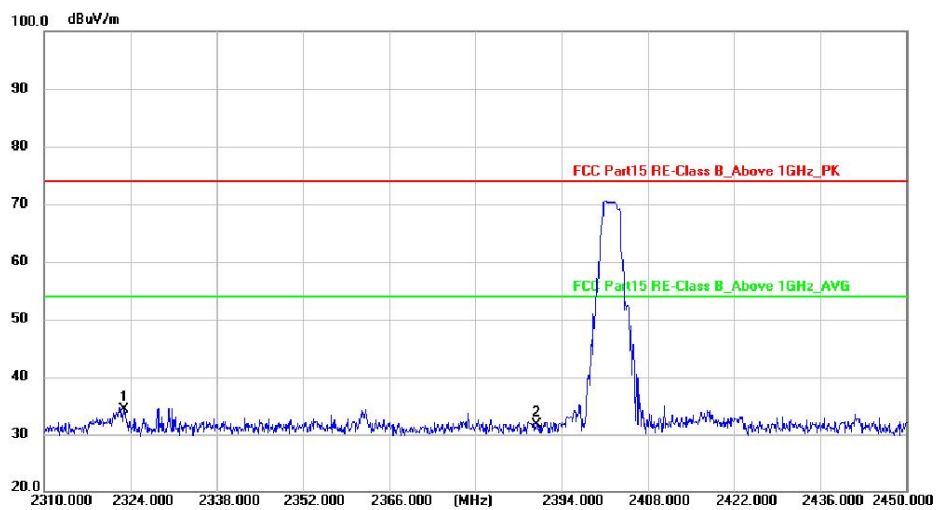
Test Site: PSI EMC Lab-3m Chamber
EUT: Robotic Vacuum
M/N: AVA111E2US
Test Mode: LE 2402MHz
Test Voltage: DC 14.4V
Note:

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

Temperature: 26 °C
Humidity: 54 %RH

Radiated Emission Measurement

Test Date: 2026/3/10 17:32:42



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 *	2323.073	58.47	-24.11	34.36	74.00	-39.64	peak	150	155	P	
2	2390.000	55.60	-23.89	31.71	74.00	-42.29	peak	150	202	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

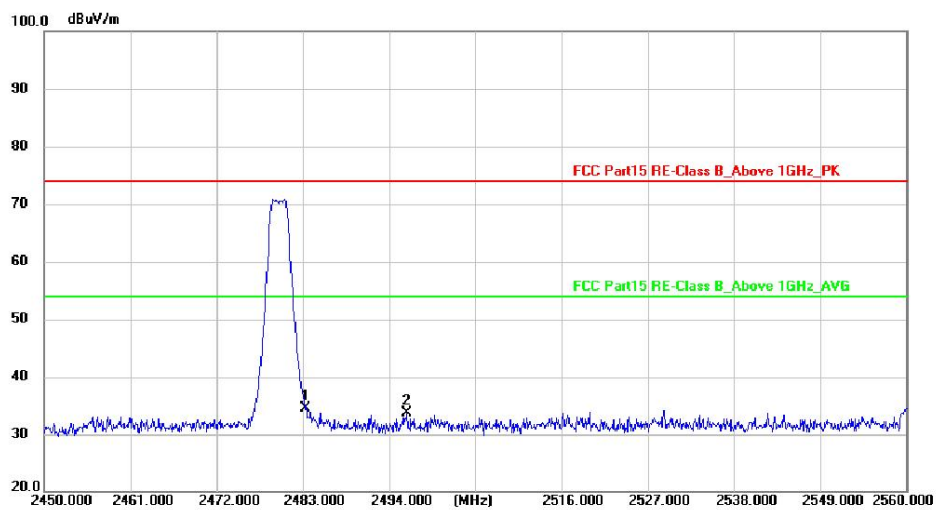
Test Site: PSI EMC Lab-3m Chamber
EUT: Robotic Vacuum
M/N: AVA111E2US
Test Mode: LE 2480MHz
Test Voltage: DC 14.4V
Note:

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

Temperature: 26 °C
Humidity: 54 %RH

Radiated Emission Measurement

Test Date: 2026/3/10 17:40:08



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 *	2483.500	58.03	-23.58	34.45	74.00	-39.55	peak	150	316	P	
2	2496.392	57.29	-23.54	33.75	74.00	-40.25	peak	150	255	P	

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

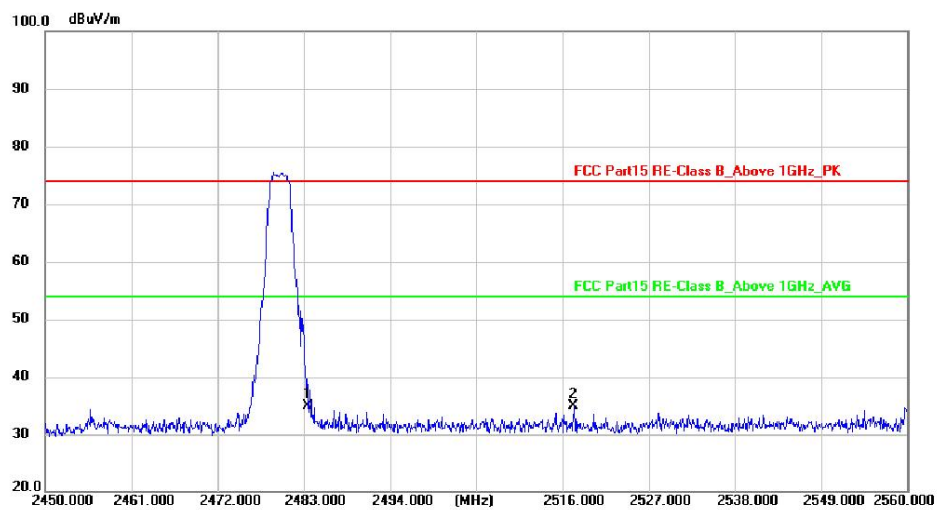


Shenzhen PSI Testing Co., Ltd.
1-2F, Building 5, Yudafu Industrial Park, No. 10, Xingye West Road,
Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104

Test Site: PSI EMC Lab-3m Chamber	Polarization: Vertical	Temperature: 26 °C
EUT: Robotic Vacuum	Distance: 3m	Humidity: 54 %RH
M/N: AVA111E2US	Test Engineer: Felix	
Test Mode: LE 2480MHz		
Test Voltage: DC 14.4V		
Note:		

Radiated Emission Measurement

Test Date: 2026/3/10 17:46:45



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	2483.500	58.42	-23.58	34.84	74.00	-39.16	peak	150	163	P	
2 *	2517.636	58.42	-23.48	34.94	74.00	-39.06	peak	150	125	P	

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