

FCC ID:2BDXD-AW69

FCC_BLE (Part15.247) Test Data

Product: Duo Talk Wireless Microphone

Model Name: 7143-69BK

Brand: N/A

Report No.: NCT26028428E1-1

Prepared for

Shenzhen Aiwei Electronics Co., LTD

**6th floor, Jinxing Building, Heping Industrial Park, Heping Road, Yucui Community,
Longhua Street, Longhua District, Shenzhen, China**

Prepared by

Shenzhen NCT Testing Technology Co., Ltd.

**A101&2F B2, Fuqiao 6th Area, Xintian Community, Fuhai Street, Baoan District, Shenzhen,
People's Republic of China**

TEL: 400-8868-419

Table of Contents

1. -6dB Bandwidth	3
2. 99% Occupied Bandwidth	6
3. Duty Cycle	9
4. Peak Output Power	12
5. Power Spectral Density	15
6. Bandedge	18
7. Spurious Emission	22

1. -6dB Bandwidth

Condition	Antenna	Rate	Frequency (MHz)	-6dB BW(kHz)	limit(kHz)	Result
NVNT	ANT1	1Mbps	2402.00	507.78	500	Pass
NVNT	ANT1	1Mbps	2440.00	505.40	500	Pass
NVNT	ANT1	1Mbps	2480.00	508.03	500	Pass
NVNT	ANT1	2Mbps	2402.00	857.51	500	Pass
NVNT	ANT1	2Mbps	2440.00	853.45	500	Pass
NVNT	ANT1	2Mbps	2480.00	856.74	500	Pass



-6dB Bandwidth NVNT_ANT1_1Mbps_2480



-6dB Bandwidth NVNT_ANT1_2Mbps_2402



-6dB Bandwidth NVNT_ANT1_2Mbps_2440



-6dB Bandwidth NVNT_ANT1_2Mbps_2480



2. 99% Occupied Bandwidth

Condition	Antenna	Rate	Frequency (MHz)	99% BW (MHz)
NVNT	ANT1	1Mbps	2402.00	1.024
NVNT	ANT1	1Mbps	2440.00	1.021
NVNT	ANT1	1Mbps	2480.00	1.023
NVNT	ANT1	2Mbps	2402.00	2.029
NVNT	ANT1	2Mbps	2440.00	2.026
NVNT	ANT1	2Mbps	2480.00	2.026



99% Occupied Bandwidth NVNT ANT1 1Mbps 2480



99% Occupied Bandwidth NVNT_ANT1_2Mbps_2402



99% Occupied Bandwidth NVNT_ANT1_2Mbps_2440



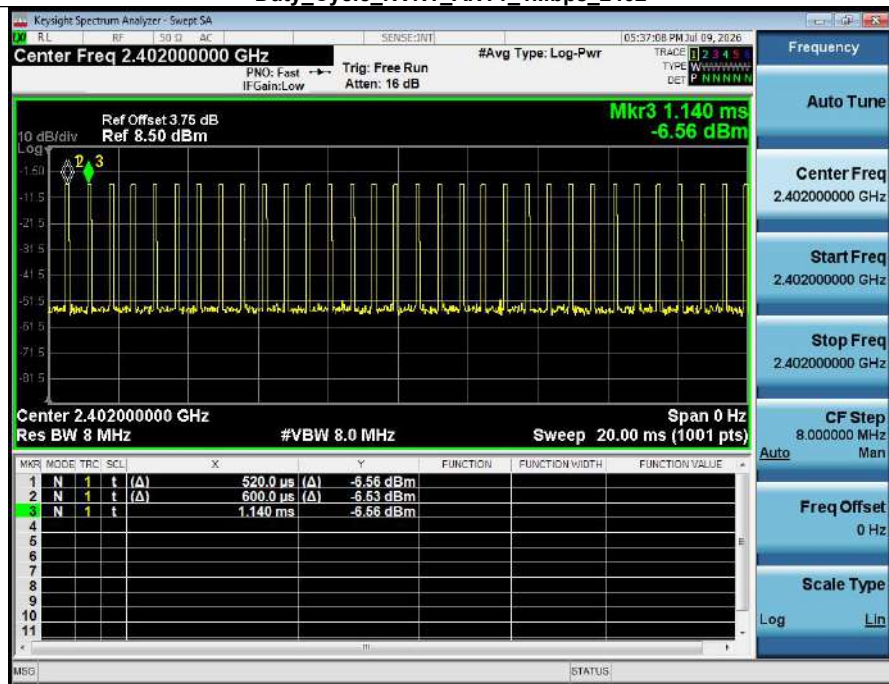
99% Occupied Bandwidth NVNT_ANT1_2Mbps_2480



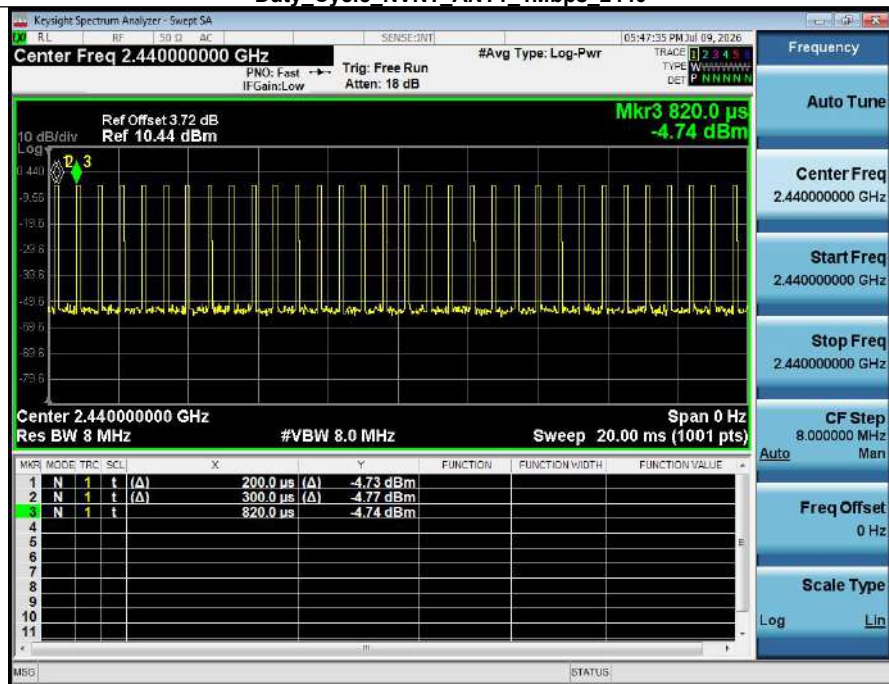
3. Duty Cycle

Condition	Antenna	Rate	Frequency (MHz)	Dutycycle(%)	Duty_factor
NVNT	ANT1	1Mbps	2402.00	12.90	8.89
NVNT	ANT1	1Mbps	2440.00	16.13	7.92
NVNT	ANT1	1Mbps	2480.00	16.13	7.92
NVNT	ANT1	2Mbps	2402.00	9.68	10.14
NVNT	ANT1	2Mbps	2440.00	9.68	10.14
NVNT	ANT1	2Mbps	2480.00	12.90	8.89

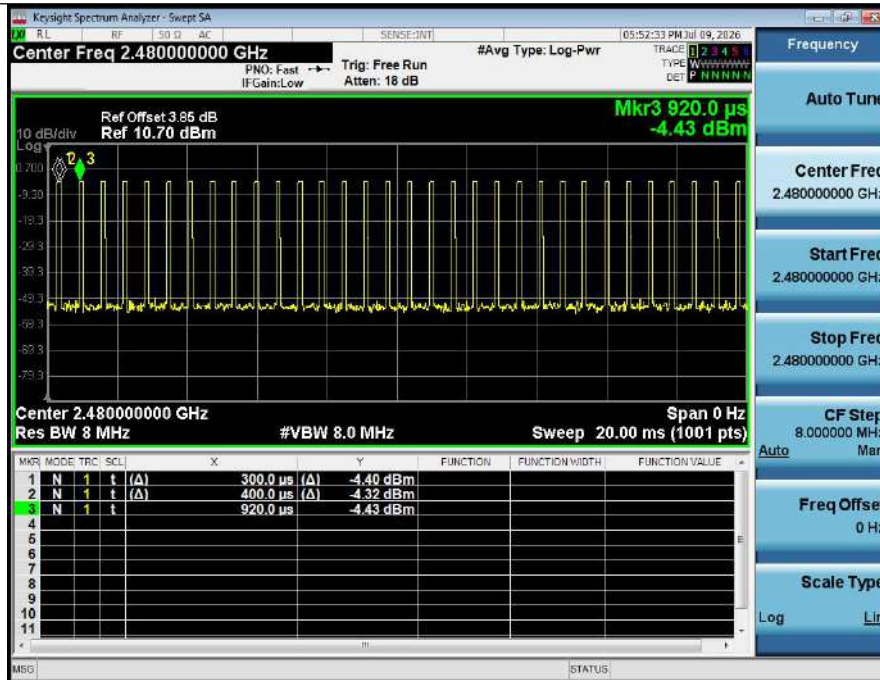
Duty_Cycle_NVNT_ANT1_1Mbps_2402



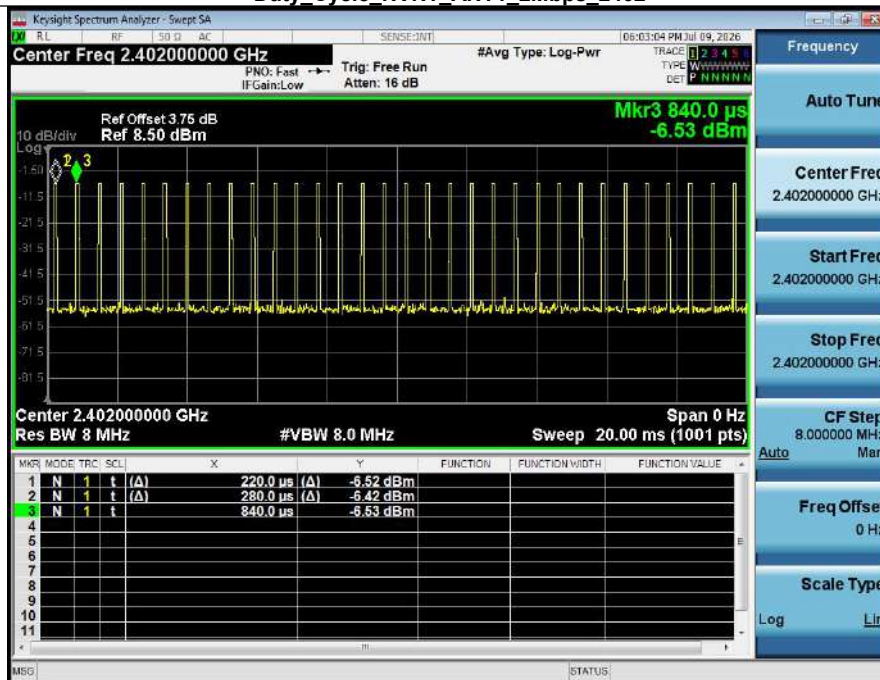
Duty_Cycle_NVNT_ANT1_1Mbps_2440



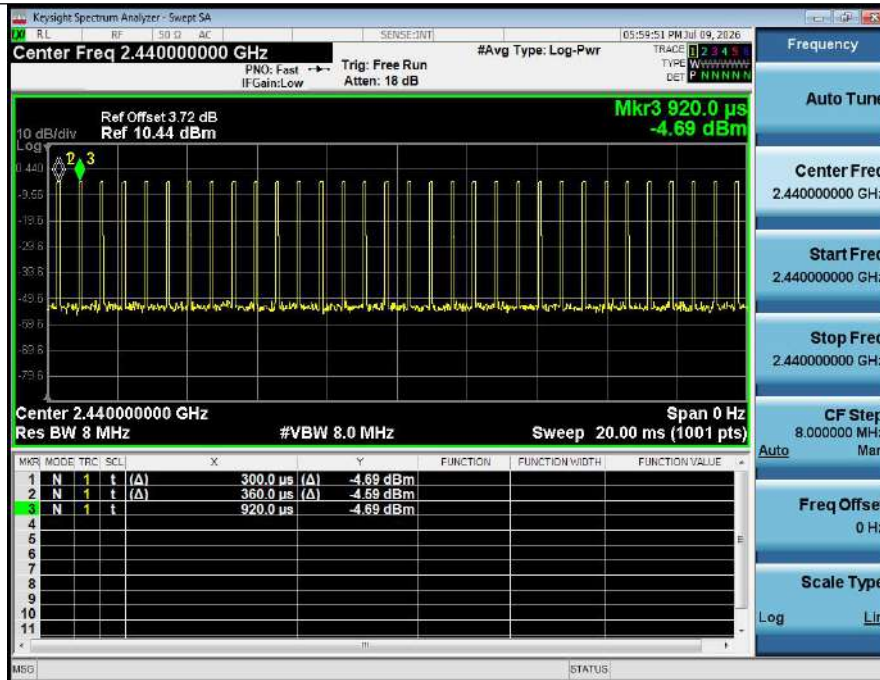
Duty_Cycle_NVNT_ANT1_1Mbps_2480



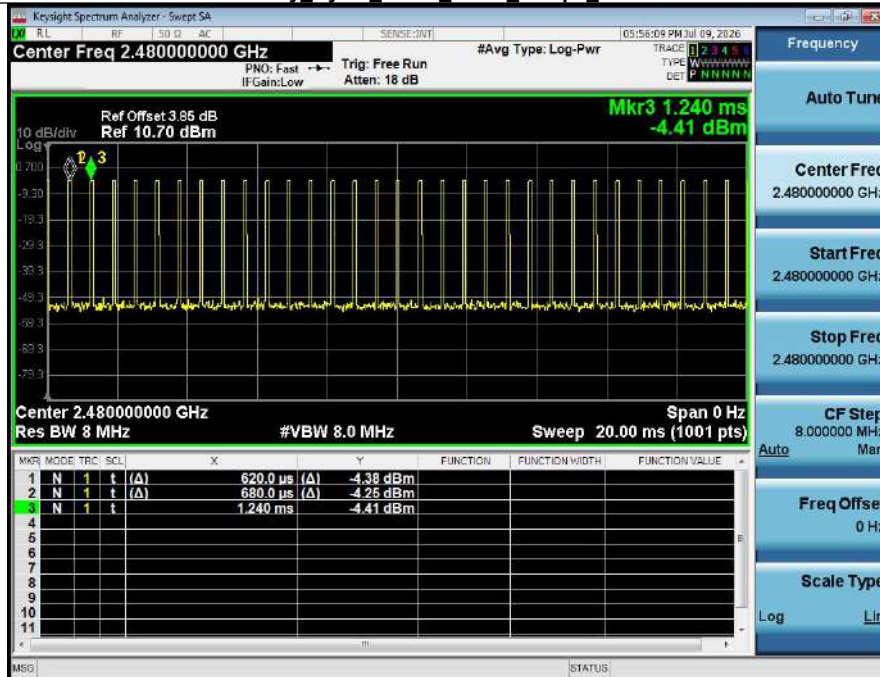
Duty Cycle_NVNT_ANT1_2Mbps_2402



Duty Cycle_NVNT_ANT1_2Mbps_2440



Duty Cycle_NVNT_ANT1_2Mbps_2480



4. Peak Output Power

Condition	Antenna	Rate	Frequency (MHz)	Max. Conducted Power(dBm)	Max. Conducted Power(mW)	Limit(mW)	Result
NVNT	ANT1	1Mbps	2402.00	-6.53	0.22	1000	Pass
NVNT	ANT1	1Mbps	2440.00	-4.61	0.35	1000	Pass
NVNT	ANT1	1Mbps	2480.00	-4.35	0.37	1000	Pass
NVNT	ANT1	2Mbps	2402.00	-6.39	0.23	1000	Pass
NVNT	ANT1	2Mbps	2440.00	-4.50	0.35	1000	Pass
NVNT	ANT1	2Mbps	2480.00	-4.24	0.38	1000	Pass



Peak_Output_Power_NVNT_ANT1_1Mbps_2480



Peak Output Power_NVNT_ANT1_2Mbps_2402



Peak Output Power_NVNT_ANT1_2Mbps_2440



Peak Output Power_NVNT_ANT1_2Mbps_2480



5. Power Spectral Density

Condition	Antenna	Rate	Frequency (MHz)	Power Spectral Density(dBm/3kHz)	Limit(dBm/3kHz)	Result
NVNT	ANT1	1Mbps	2402.00	-24.73	8	Pass
NVNT	ANT1	1Mbps	2440.00	-22.91	8	Pass
NVNT	ANT1	1Mbps	2480.00	-22.62	8	Pass
NVNT	ANT1	2Mbps	2402.00	-27.48	8	Pass
NVNT	ANT1	2Mbps	2440.00	-25.69	8	Pass
NVNT	ANT1	2Mbps	2480.00	-25.38	8	Pass



Power_Spectral_Density_NVNT_ANT1_1Mbps_2480



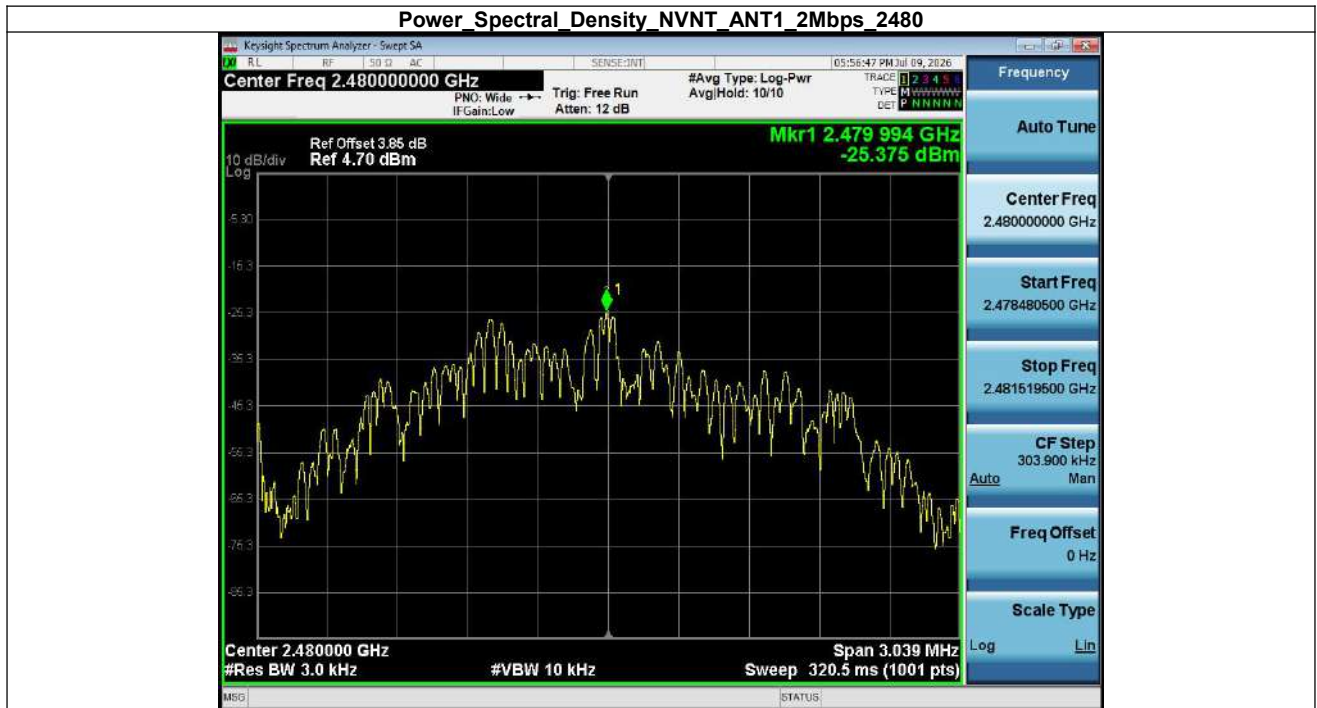
Power_Spectral_Density_NVNT_ANT1_2Mbps_2402



Power_Spectral_Density_NVNT_ANT1_2Mbps_2440



Power Spectral Density_NVNT_ANT1_2Mbps_2480



6. 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	2399.300	-6.688	-49.227	-26.688	Pass
NVNT	ANT1	1Mbps	2480.00	2483.600	-4.555	-52.322	-24.555	Pass
NVNT	ANT1	2Mbps	2402.00	2399.965	-6.925	-39.575	-26.925	Pass
NVNT	ANT1	2Mbps	2480.00	2483.975	-4.812	-55.214	-24.812	Pass

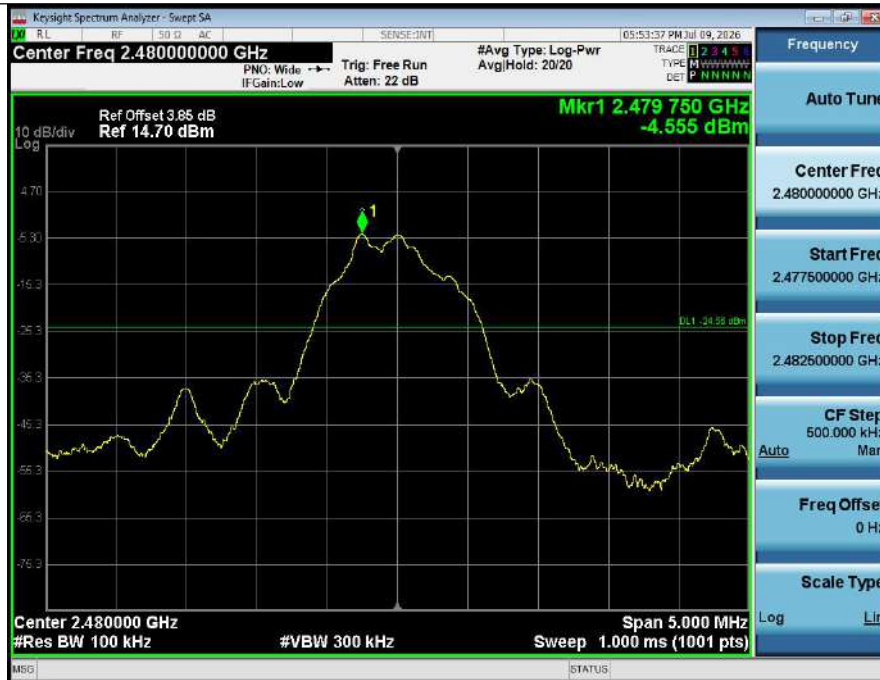
1_Reference_Level_NVNT_ANT1_1Mbps_2402



2_Bandedge_NVNT_ANT1_1Mbps_2402



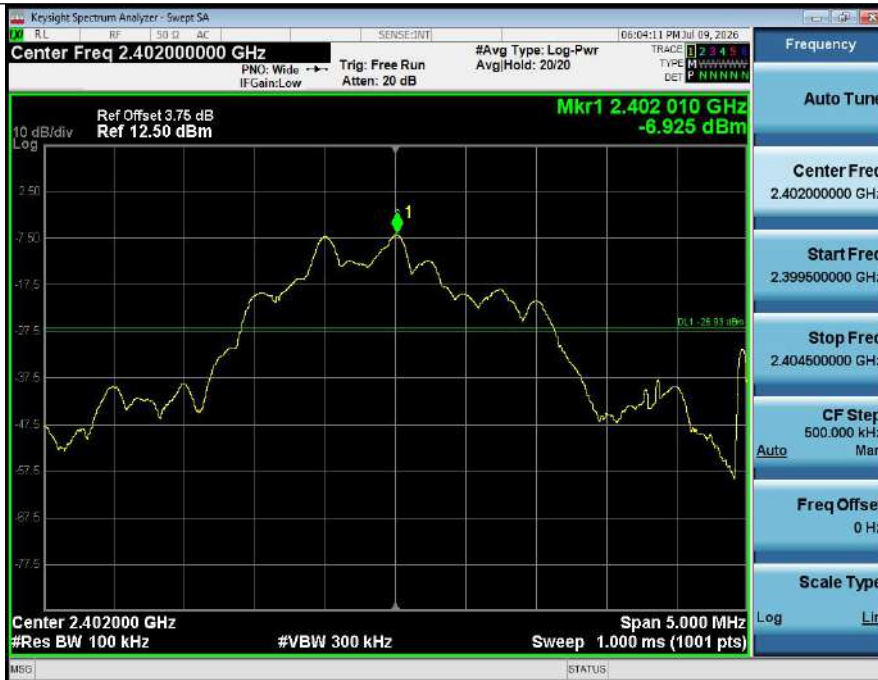
1_Reference_Level_NVNT_ANT1_1Mbps_2480



2_Bandedge_NVNT_ANT1_1Mbps_2480



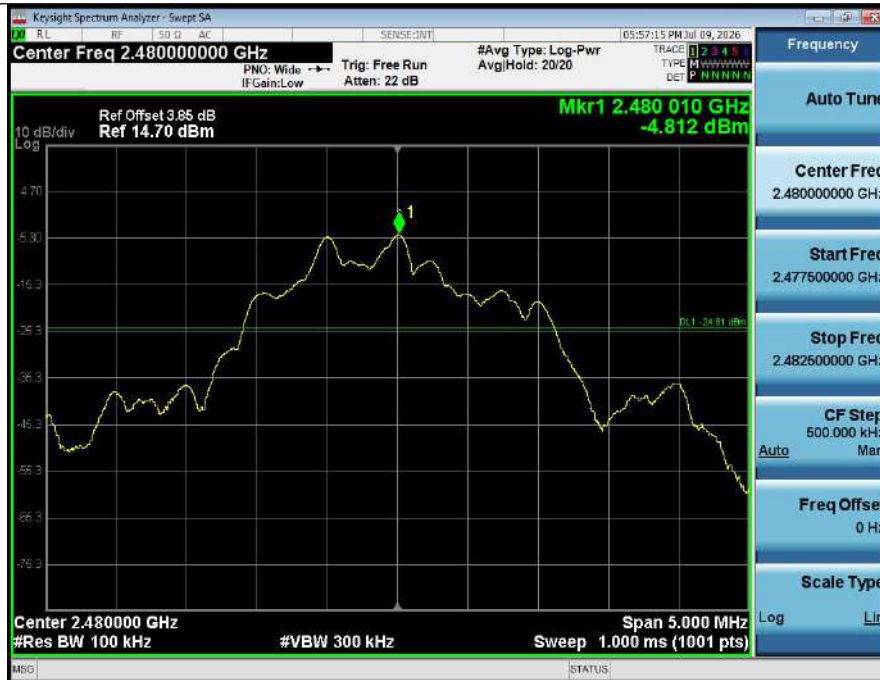
1_Reference_Level_NVNT_ANT1_2Mbps_2402



2_Bandedge_NVNT_ANT1_2Mbps_2402



1_Reference_Level_NVNT_ANT1_2Mbps_2480



2_Bandedge_NVNT_ANT1_2Mbps_2480



7. Spurious Emission

Condition	Antenna	Modulation	TX_Frequency (MHz)	Ref_level(dBm)	Spurious level(dBm)	Spurious level(dBm) final Result	limit(dBm)	Result
NVNT	ANT1	1Mbps	2402.00	-6.688	-55.232	-46.222	-26.688	Pass
NVNT	ANT1	1Mbps	2440.00	-4.873	-53.705	-44.665	-24.873	Pass
NVNT	ANT1	1Mbps	2480.00	-4.555	-52.544	-43.634	-24.555	Pass
NVNT	ANT1	2Mbps	2402.00	-6.925	-54.740	-45.73	-26.925	Pass
NVNT	ANT1	2Mbps	2440.00	-5.137	-51.343	-42.303	-25.137	Pass
NVNT	ANT1	2Mbps	2480.00	-4.812	-51.043	-42.133	-24.812	Pass

Note: This test diagram has included the maximum cable loss value of 12.76 dB in the "offset setting". The cable loss has been compensated in the test data.

TX_Frequency (MHz)	SA offset (dB)	Additional compensation value (dB)
2402(1Mbps)	3.75	9.01
2440(1Mbps)	3.72	9.04
2480(1Mbps)	3.85	8.91
2402(2Mbps)	3.75	9.01
2440(2Mbps)	3.72	9.04
2480(2Mbps)	3.85	8.91

Additional compensation value (dB) = maximum cable loss(dB) - SA offset (dB)

Spurious level(dBm) final Result = Spurious level(dBm) + Additional compensation value (dB)

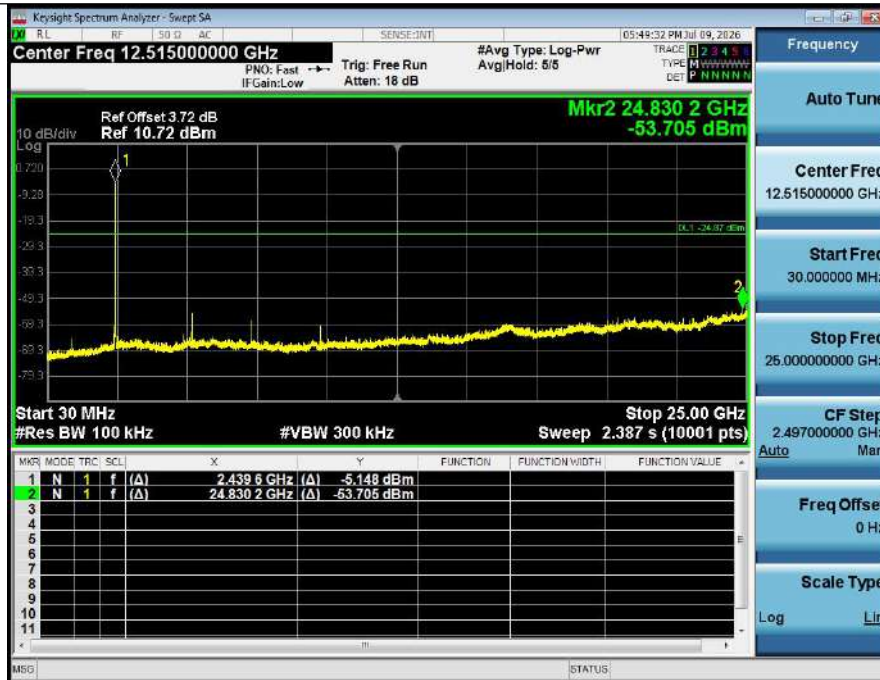




1 Reference_Level_NVNT_ANT1_1Mbps_2440



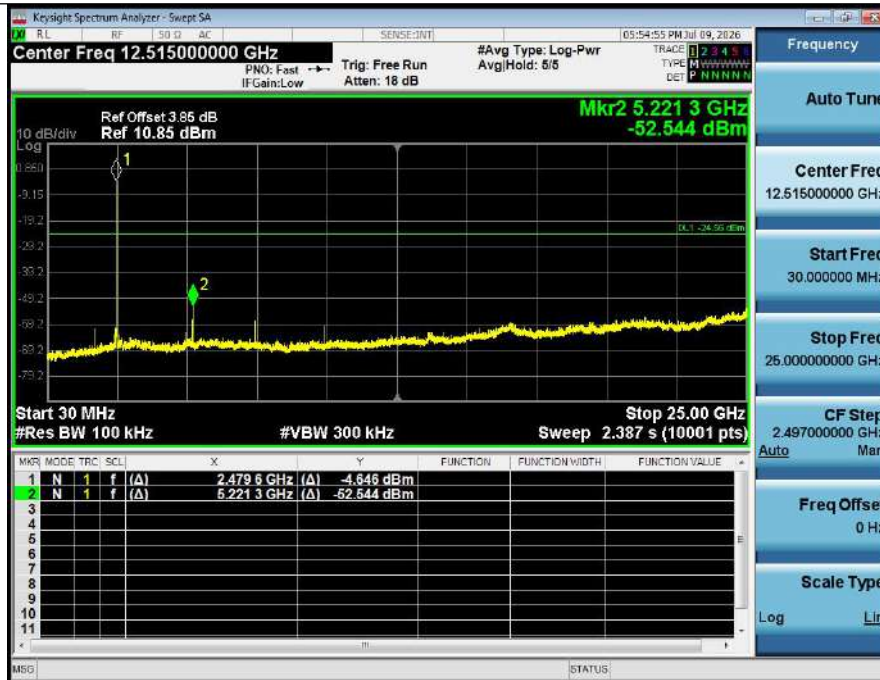
2 Spurious Emission_NVNT_ANT1_1Mbps_2440



1 Reference_Level_NVNT_ANT1_1Mbps_2480



2 Spurious Emission_NVNT_ANT1_1Mbps_2480



1 Reference_Level_NVNT_ANT1_2Mbps_2402



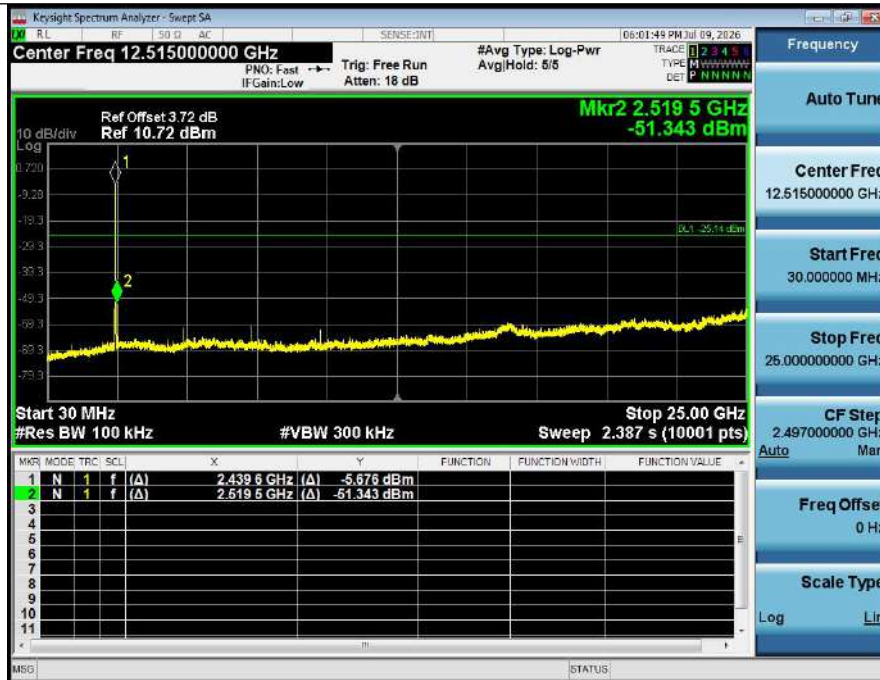
2 Spurious Emission_NVNT_ANT1_2Mbps_2402



1 Reference_Level_NVNT_ANT1_2Mbps_2440



2 Spurious Emission_NVNT_ANT1_2Mbps_2440



1 Reference_Level_NVNT_ANT1_2Mbps_2480



2 Spurious Emission_NVNT_ANT1_2Mbps_2480

