

Appendix D

RF Test Data for Z-Wave (Conducted Measurement)

Product Name: B.One Hub

Test Model: Edge 2.1

Environmental Conditions

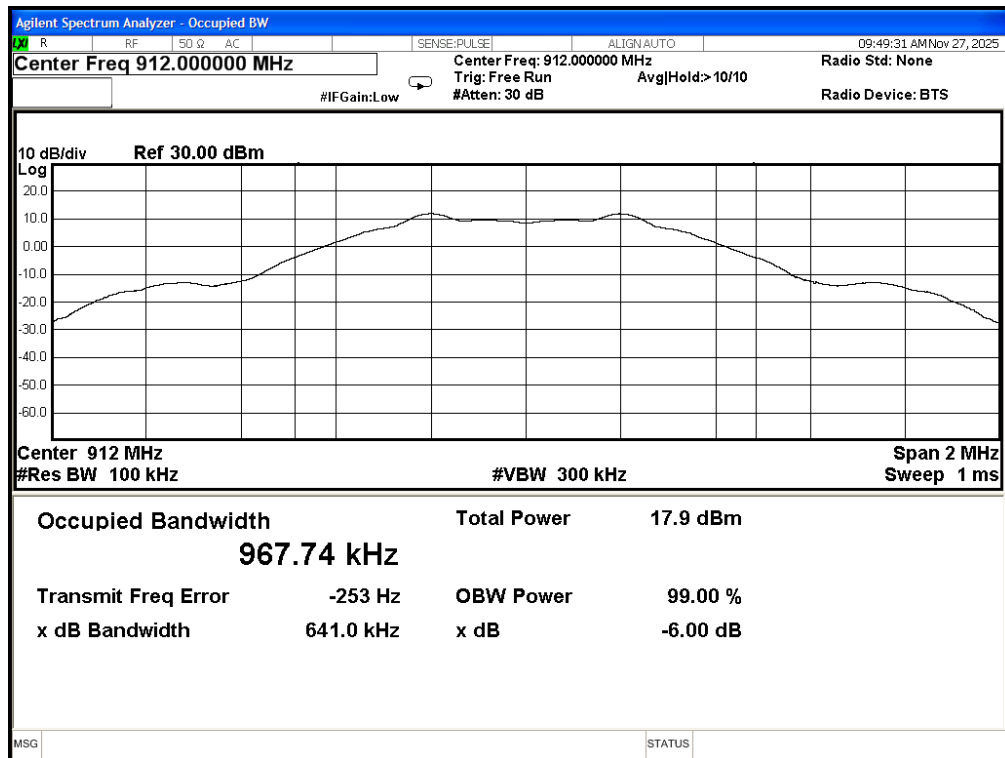
Temperature:	24.9°C
Relative Humidity:	53.8%
ATM Pressure:	100.0 kPa
Test Engineer:	Suichao Lai
Supervised by:	Yan Chen

D.1 6dB Bandwidth

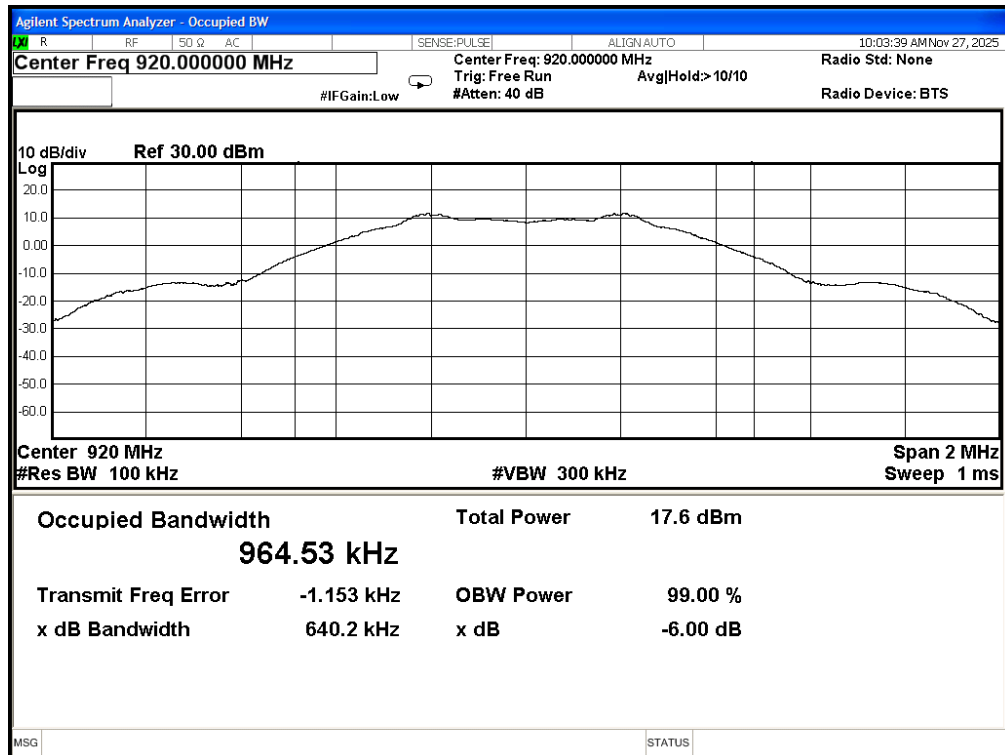
Condition	Mode	Frequency (MHz)	Antenna	6 dB Bandwidth (MHz)	Limit 6 dB Bandwidth (MHz)	Verdict
NVNT	Z-Wave	912	Ant1	0.64	≥ 0.5	Pass
NVNT	Z-Wave	920	Ant1	0.64	≥ 0.5	Pass

Test Graphs

6dB Bandwidth NVNT Z-Wave 912MHz Ant1



6dB Bandwidth NVNT Z-Wave 920MHz Ant1

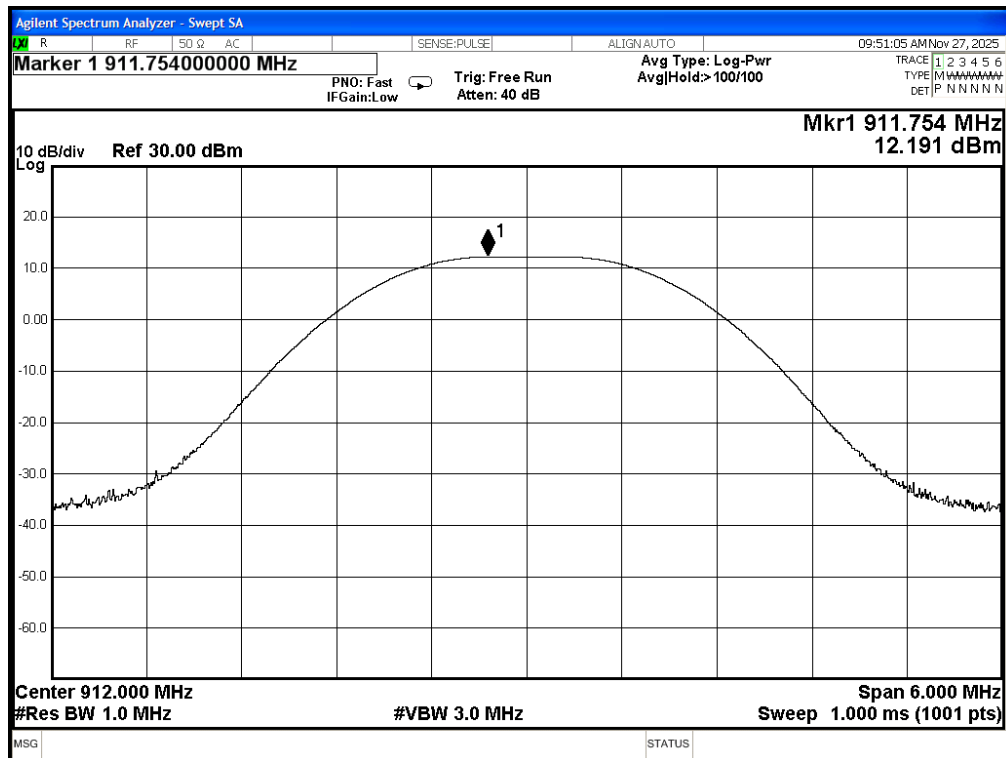


D.2 Maximum Conducted Output Power

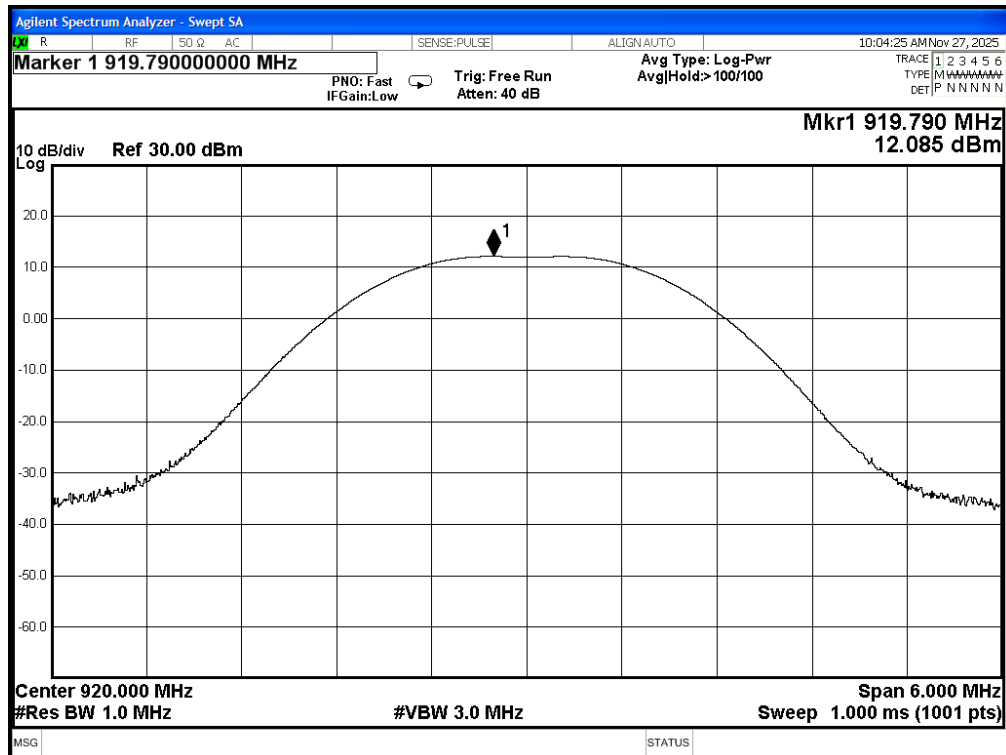
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	Z-Wave	912	Ant1	12.19	30	Pass
NVNT	Z-Wave	920	Ant1	12.09	30	Pass

Test Graphs

Power NVNT Z-Wave 912MHz Ant1



Power NVNT Z-Wave 920MHz Ant1

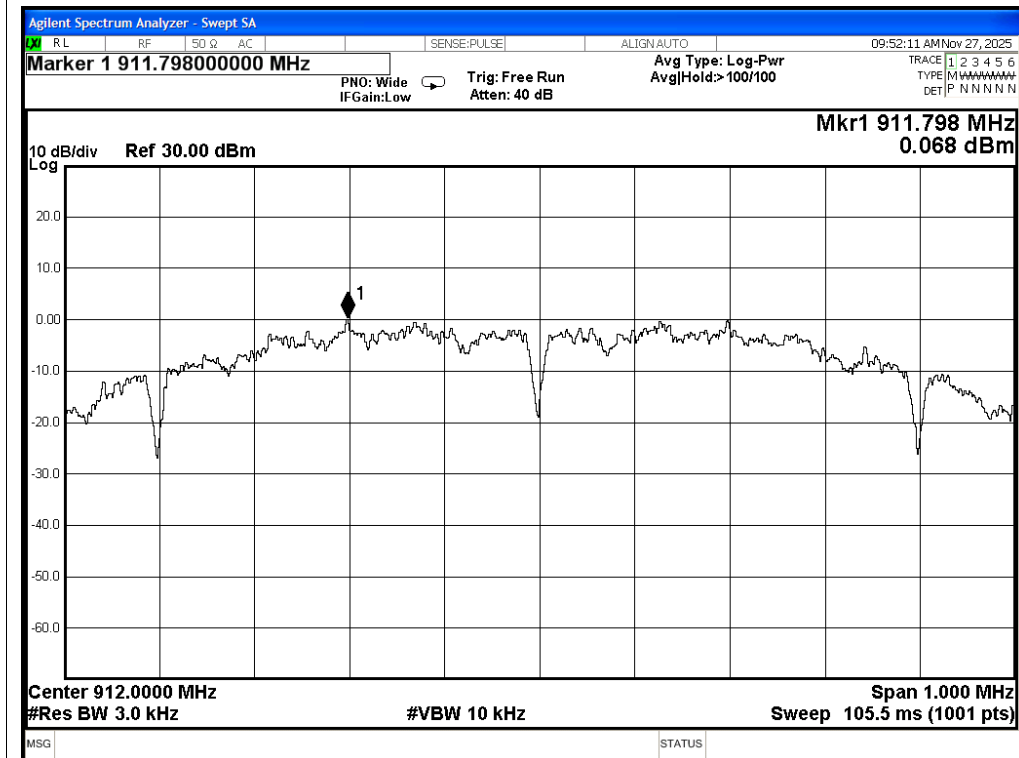


D.3 Maximum Power Spectral Density Level

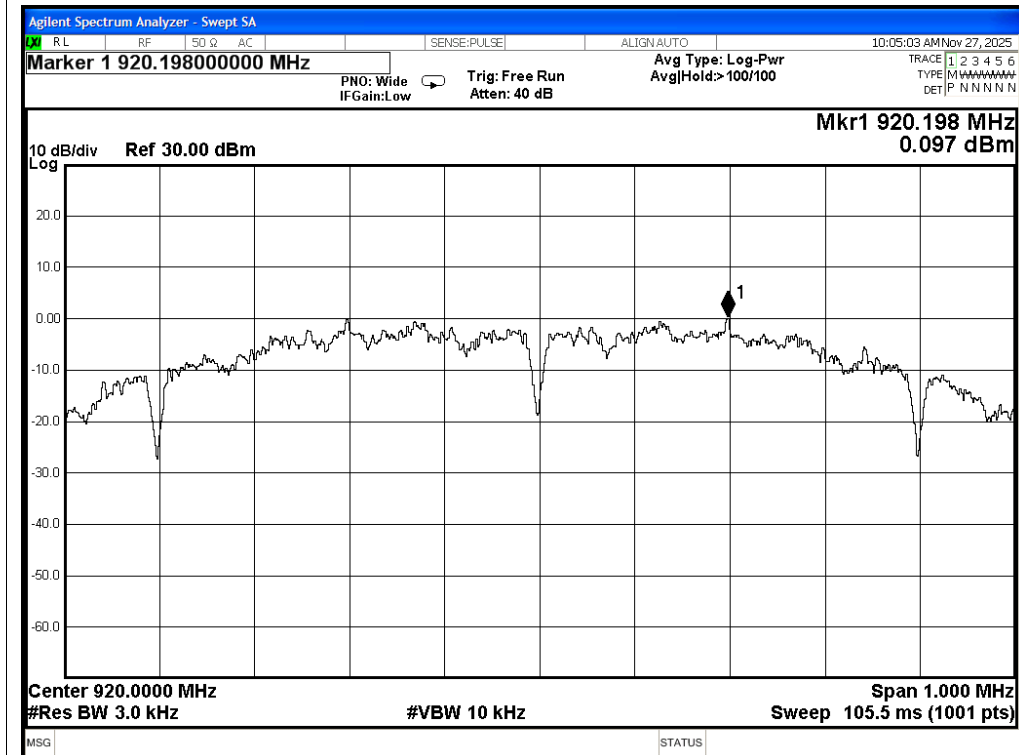
Condition	Mode	Frequency (MHz)	Antenna	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	Z-Wave	912	Ant1	0.068	8	Pass
NVNT	Z-Wave	920	Ant1	0.097	8	Pass

Test Graphs

PSD NVNT Z-Wave 912MHz Ant1



PSD NVNT Z-Wave 920MHz Ant1

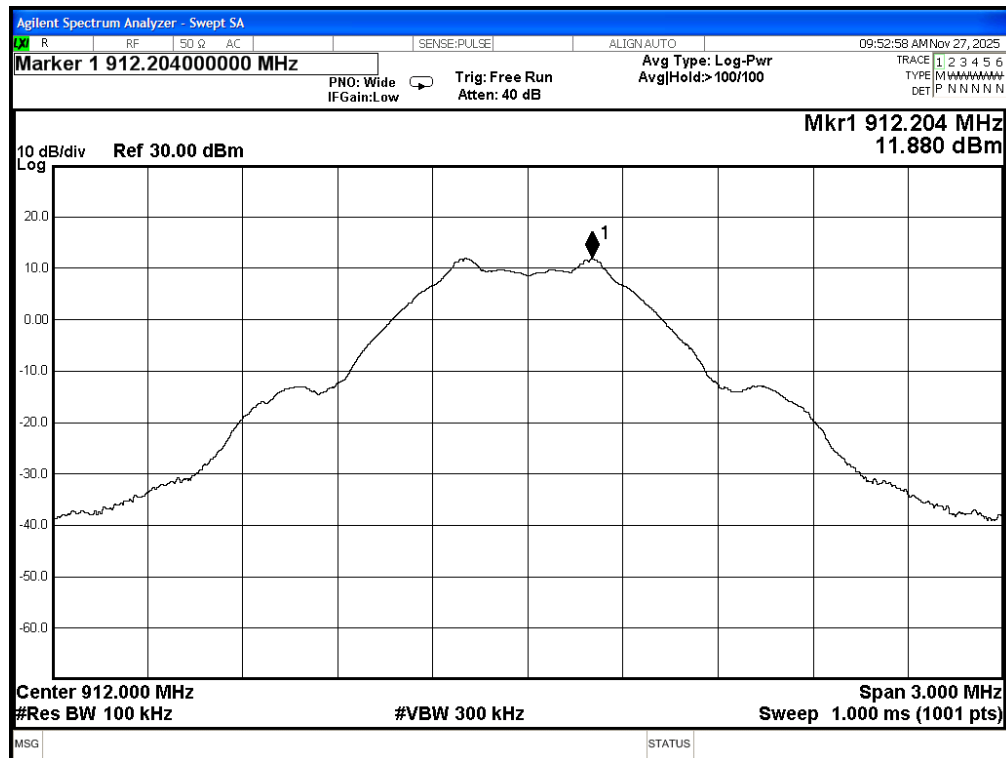


D.4 Band Edge

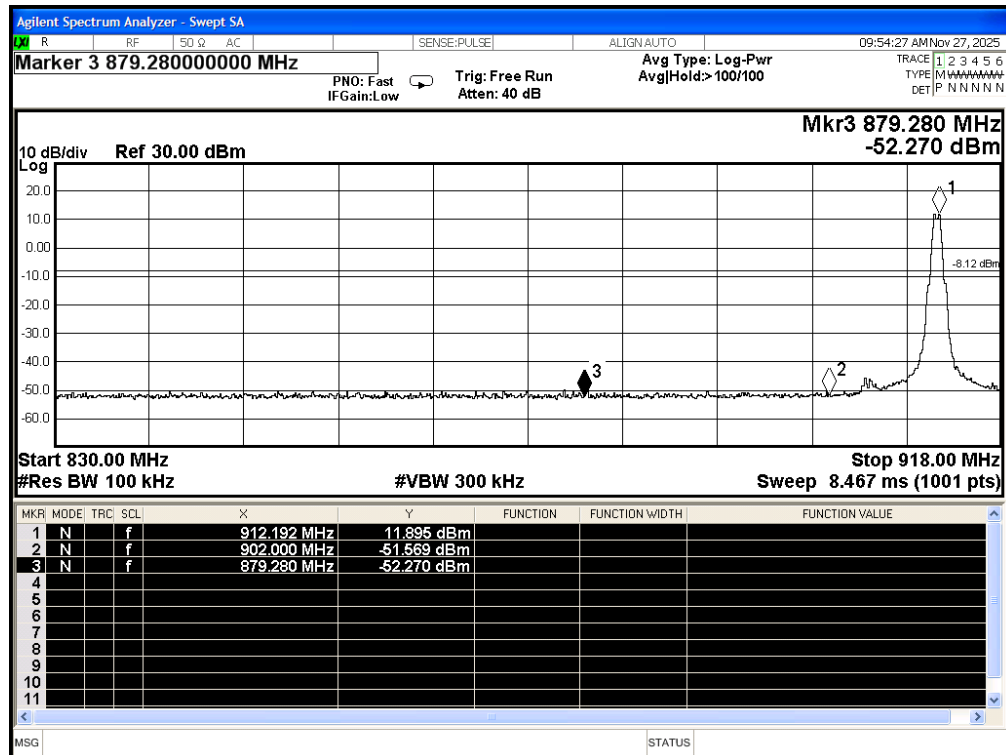
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	Z-Wave	912	Ant1	-64.17	-20	Pass
NVNT	Z-Wave	927.4	Ant1	-63.46	-20	Pass

Test Graphs

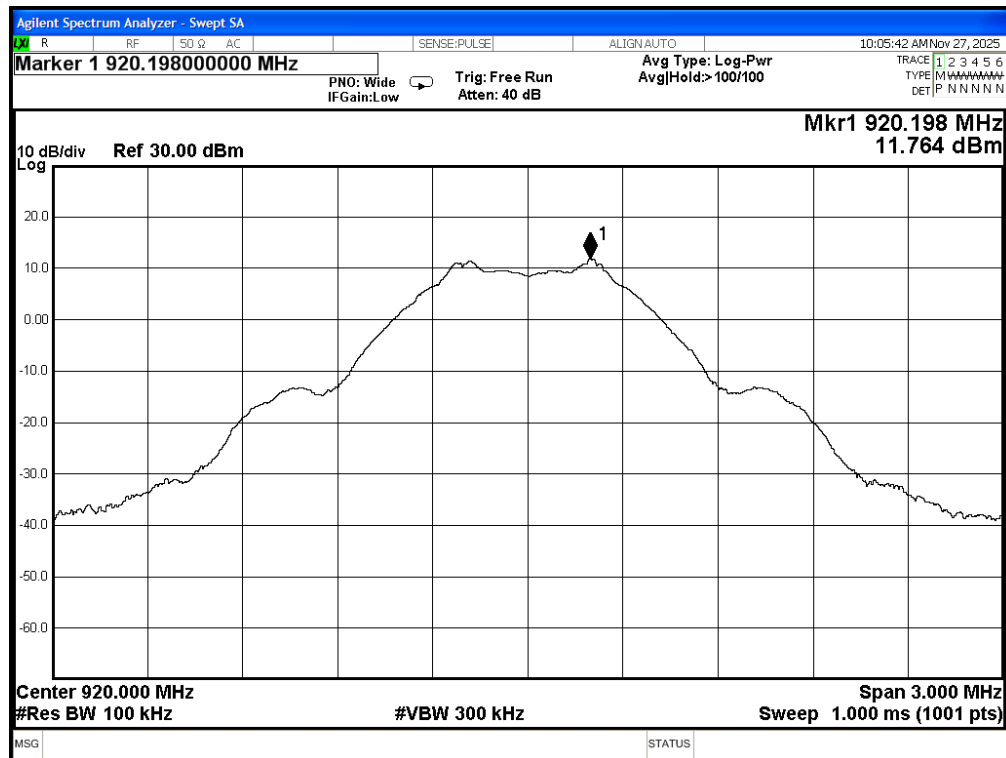
Band Edge NVNT Z-Wave 912MHz Ant1 Ref



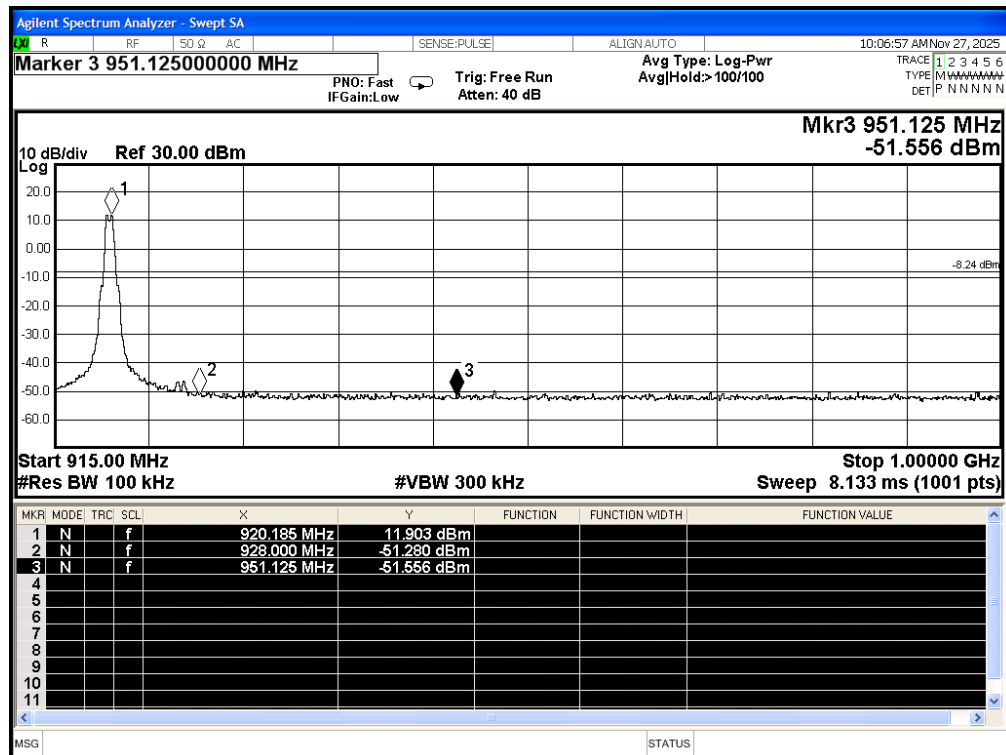
Band Edge NVNT Z-Wave 912MHz Ant1 Emission



Band Edge NVNT Z-Wave 920MHz Ant1 Ref

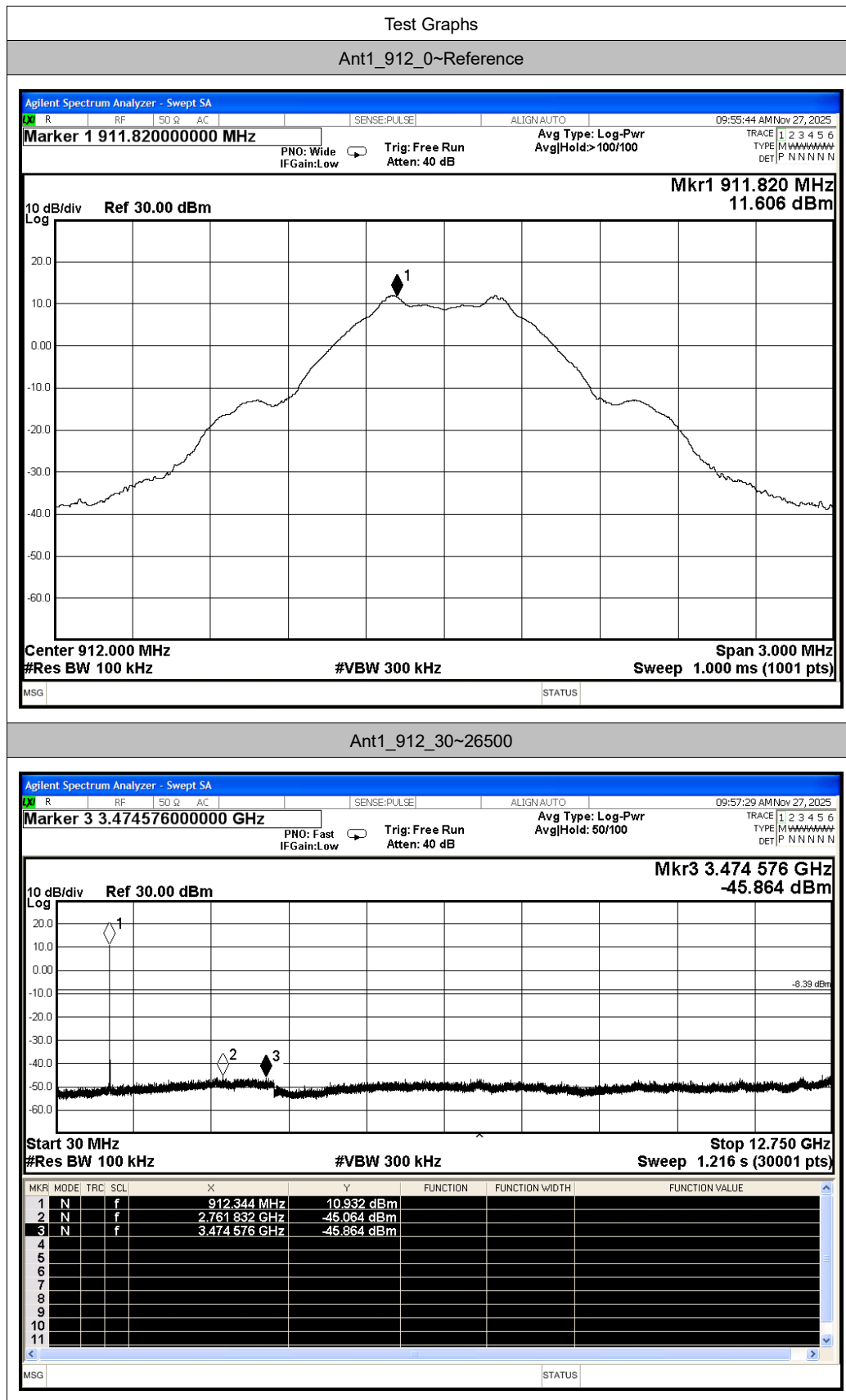


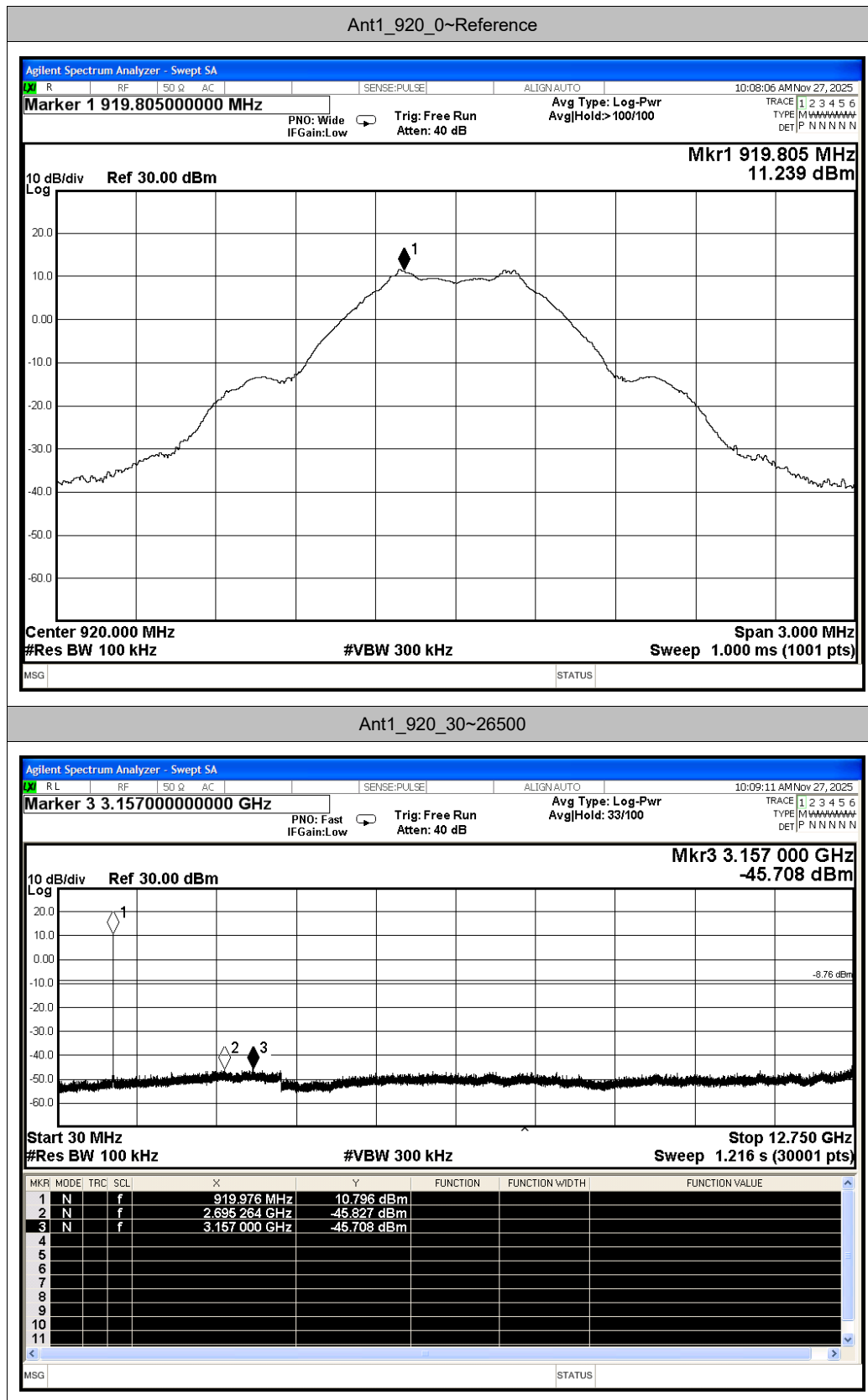
Band Edge NVNT Z-Wave 920MHz Ant1 Emission



D.5 Conducted RF Spurious Emission

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
Z-Wave	Ant1	912	Reference	11.61	11.61	---	PASS
			30~26500	11.61	-45.864	≤-8.15	PASS
		920	Reference	11.24	11.24	---	PASS
			30~26500	11.24	-45.708	≤-7.89	PASS



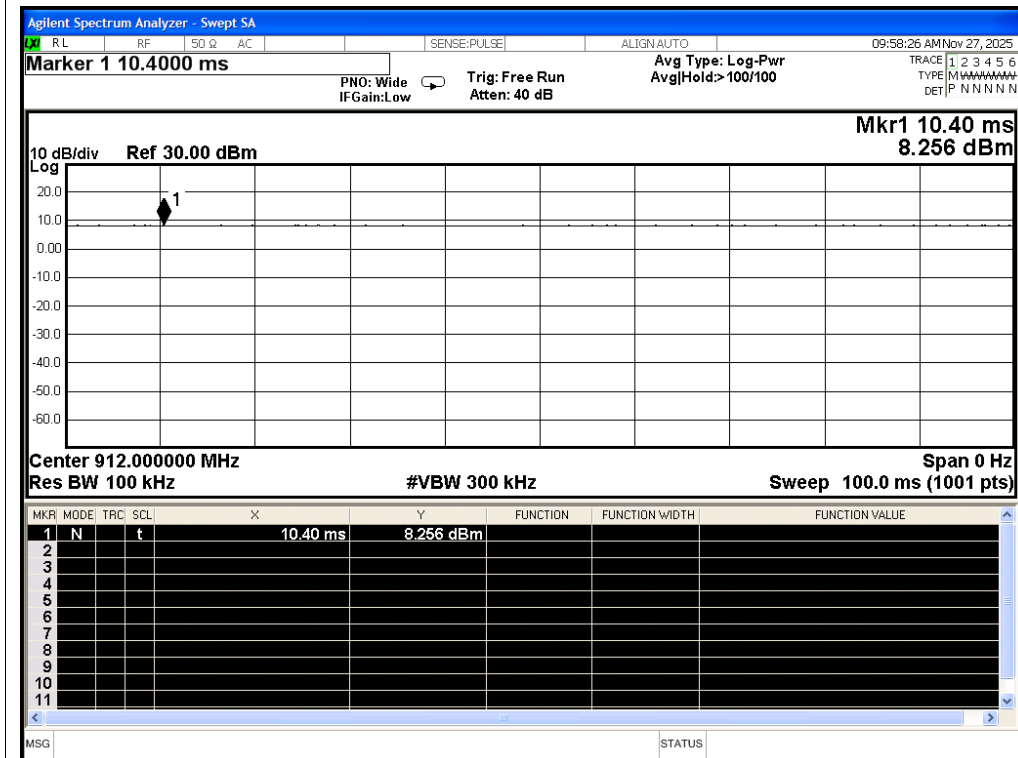


D.6 Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	Z-Wave	912	Ant1	100	0	0.01
NVNT	Z-Wave	920	Ant1	100	0	0.01

Test Graphs

Duty Cycle NVNT Z-Wave 912MHz Ant1



Duty Cycle NVNT Z-Wave 920MHz Ant1

