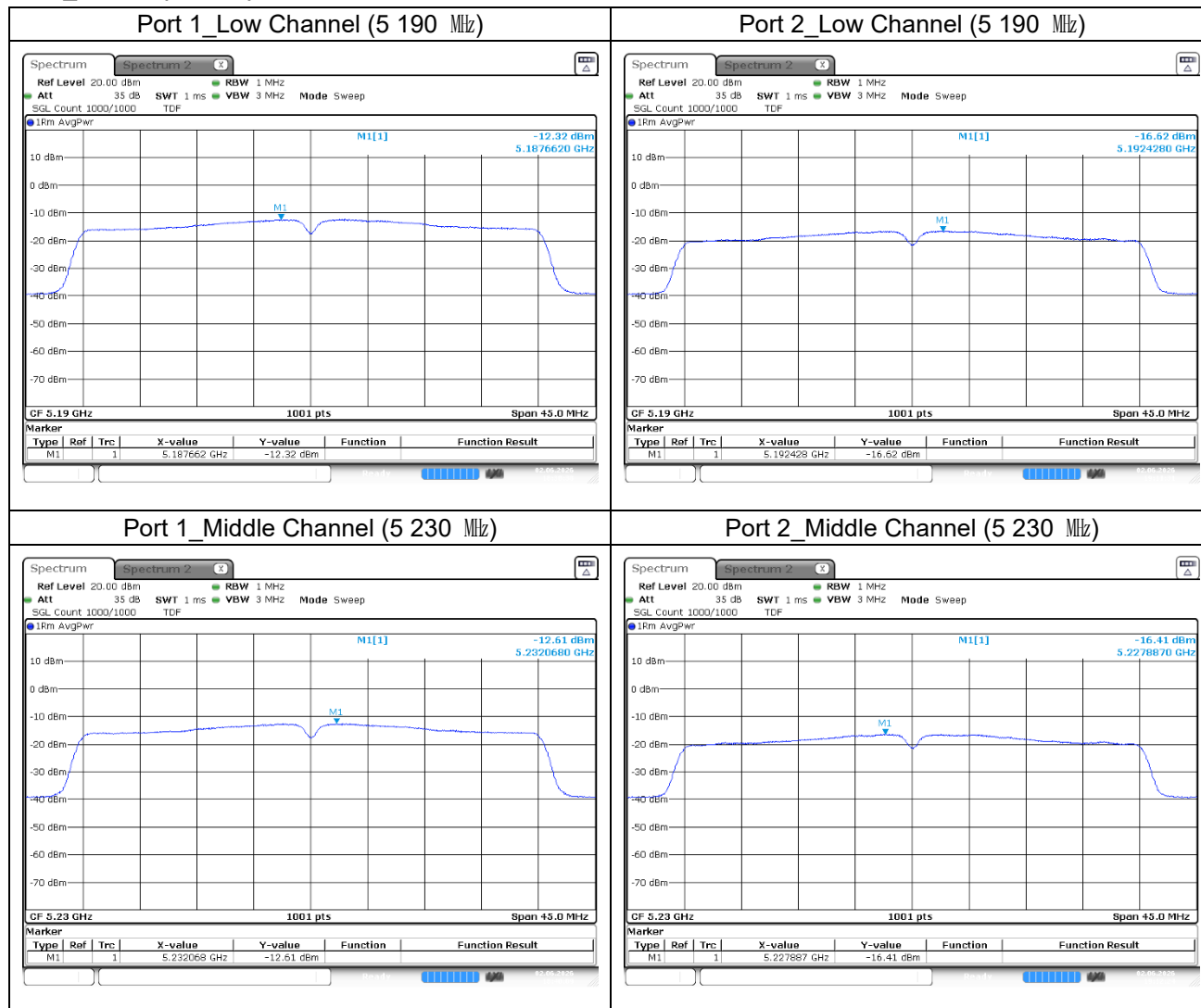
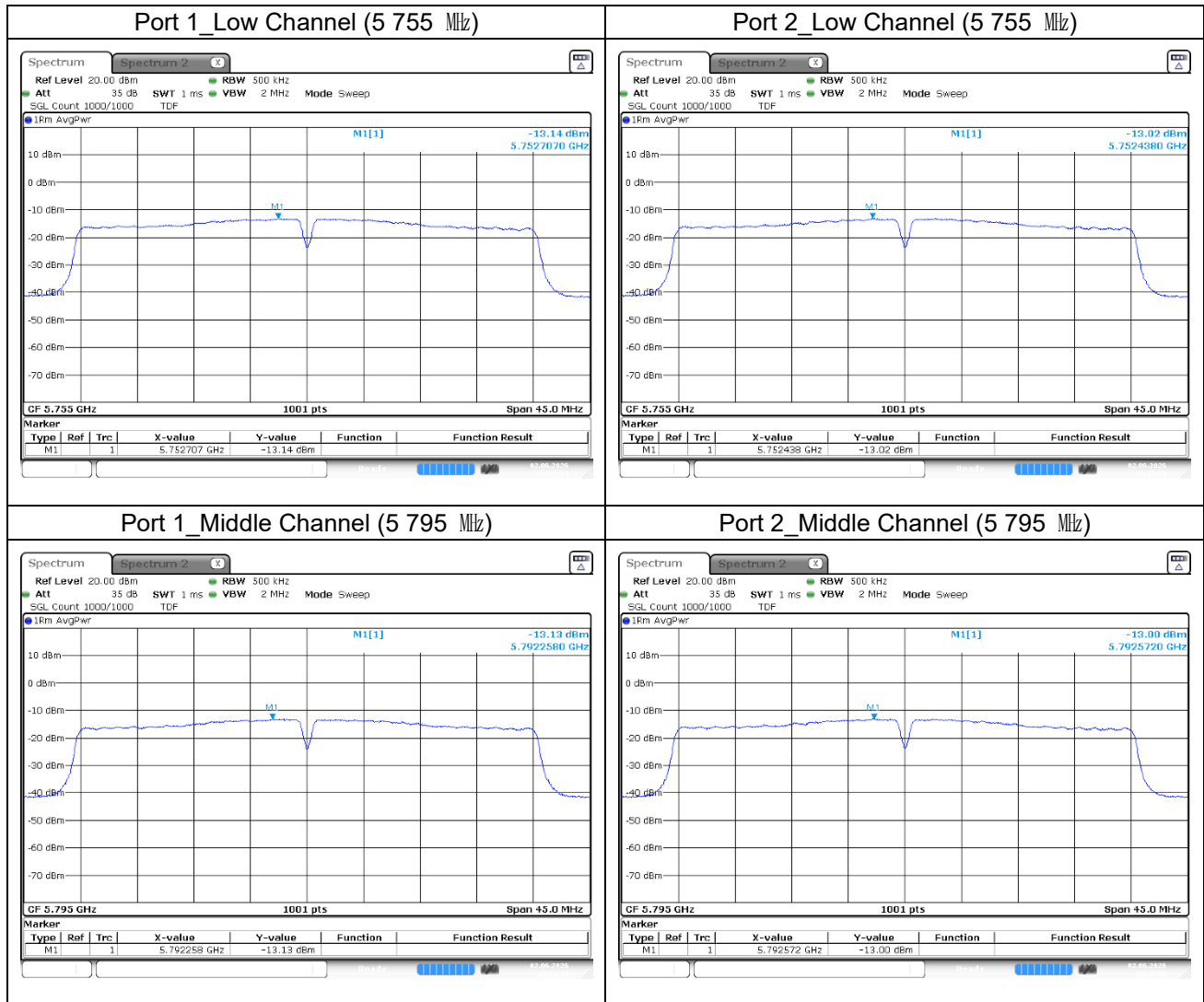


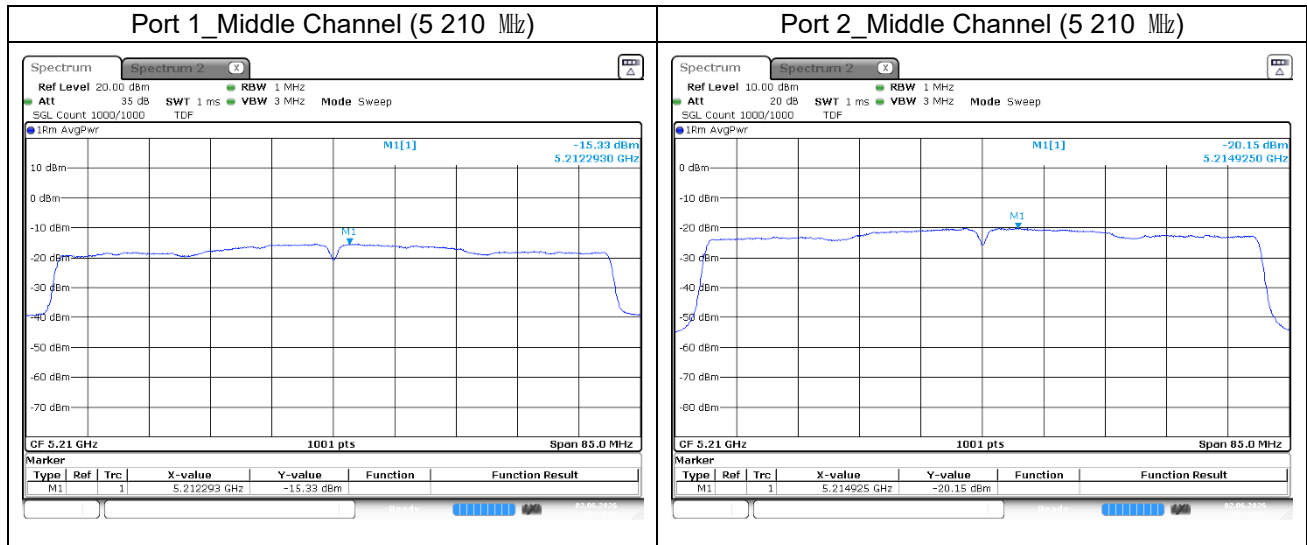
11av_VHT40 (U-NII 1)



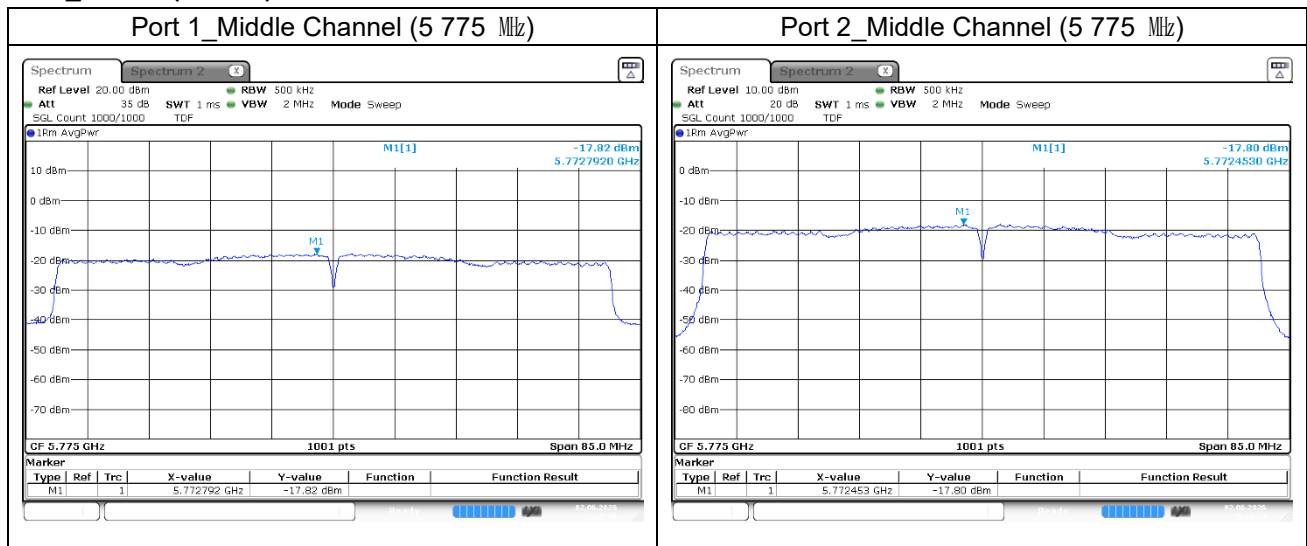
11ac_VHT40 (U-NII 3)



11ac_VHT80 (U-NII 1)



11ac_VHT80 (U-NII 3)



7. Antenna Requirement

7.1. Standard Applicable

For intentional device, according to FCC 47 CFR Section §15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. And according to FCC 47 CFR Section §15.407(a) If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

7.2. Antenna Connected Construction

Antenna used in this product is Pattern antenna and peak max gain of antenna as below.

Band		5 150 MHz ~ 5 250 MHz	5 725 MHz ~ 5 850 MHz
Mode		11a/n_HT20, HT40, 11ac_VHT20, VHT40, VHT80	
Ant. 1 Gain (dB i)		3.10	3.10
Ant. 2 Gain (dB i)		3.10	3.10
Directional Gain (dB i)	Ant. 1 + Ant. 2	6.11	6.11

According to ANSI C63.10-2020 (for FCC) and ANSI C63.10-2020 + Cor.1-2023 + C63.10a-2024 + Errata to C63.10a-2024 (for ISED), unequal antenna gains with equal transmit powers.

a) If transmit signals are correlated, then

$$\text{Directional gain} = 10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{\text{ANT}}] \text{ dB i}$$

Note that the purpose of the factor 20 in the denominator of each exponent and the square of the sum of terms is to combine the signal levels coherently.