

Antenna Gain for WLAN2.4GHz/5GHz and Bluetooth

FCC ID: PY7-53752E

1. Measurement Information

- Measurement: Sony Antenna Lab
- Equipment: Keysight E5071, StarLab
- Calibration Due Date: 2023-03-13

2. VSWR Measurement

The VSWR is measured using network analyzer Keysight E5071 with the antenna integrated into the device (PY7-53752E). The RF inspection connector is removed and the 50 ohm co-axial cable is connected at the point of Antenna side. The device is put on the table (free space) during the measurement.

3. Radiation Pattern Measurement

The antenna radiation pattern is measured by “StarLab” system in the shielded room with the antenna integrated into the device (PY7-53752E). The radiation pattern of the horizontal and vertical polarization in all direction are measured fully automatically.

4. Test Method (Manufacturing)

The signal output from the signal generator is radiated by the transmitting antenna (equipment for the testing) and the received intensity is measured by a device (PY7-53752E) placed at a defined position. The antenna is integrated into the device (PY7-53752E) at this testing.

5. Peak Antenna Gain

The following table shows the peak antenna gain at each frequency of this device.

WLAN Main/Bluetooth#1 Gain		WLAN Sub/Bluetooth#2 Gain	
Frequency [MHz]	Peak[dBi]	Frequency [MHz]	Peak[dBi]
2402 - 2480	-1.3	2402 - 2480	-8.7
5180 - 5320	-0.7	5180 - 5320	-9.6
5500 -5720	-3.8	5500 -5720	-7.7
5725 -5850	-5.5	5725 -5850	-6.1