

Date:  
8/26/2022

## Antenna Gain for WLAN2.4GHz/5GHz/6GHz and Bluetooth

FCC ID: PY7-57325M

### 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 (PY7-57325M). 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 (PY7-57325M). 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 (PY7-57325M) placed at a defined position. The antenna is integrated into the device (PY7-57325M) 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	-2.3	2402 - 2480	-8.6
5180 - 5320	2.0	5180 - 5320	-6.4
5500 -5720	-1.0	5500 -5720	-7.6
5725 -5850	-3.8	5725 -5850	-9.0
5925 -6425	-4.4	5925 -6425	-7.0
6425 -6525	-4.4	6425 -6525	-11.7
6525 -6875	-4.0	6525 -6875	-11.7
6875 -7125	-7.1	6875 -7125	-11.3