

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

FCC ID: PY7-93060R

### 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 (PY7-93060R). 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 (PY7-93060R). 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 (PY7-93060R) placed at a defined position. The antenna is integrated into the device (PY7-93060R) 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