

Date:

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

FCC ID: PY7-76056F

### 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 (PY7-76056F). 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 (PY7-76056F). 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 (PY7-76056F) placed at a defined position. The antenna is integrated into the device (PY7-76056F) at this testing.

### 5. Peak Antenna Gain

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

Chain 0 Antenna Gain		Chain 1 Antenna Gain	
Frequency [MHz]	Peak[dBi]	Frequency [MHz]	Peak[dBi]
2402	-1.6	2402	-10.8
2441	-1.3	2441	-9.4
2480	-1.9	2480	-8.7
5240	-0.7	5240	-10.8
5600	-4.1	5600	-8.7
5800	-5.9	5800	-6.8
6175	-3.9	6175	-5.8
6475	-6.4	6475	-5.4
6760	-2.3	6760	-7.0
7000	-3.6	7000	-6.0