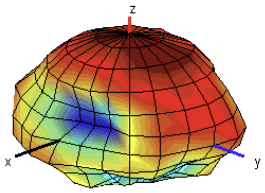
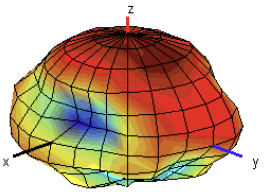
SAMSUNG

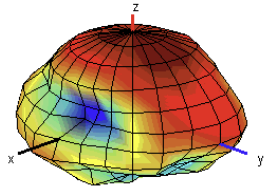
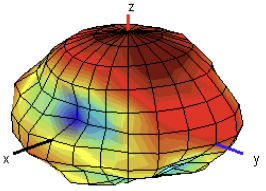
Unlicensed Band Antenna Gain

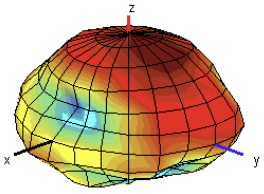
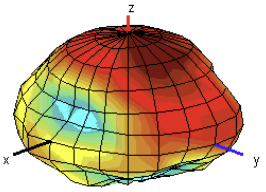
Model: SM-L505U, SM-L505F

FCC ID: A3LSML505

BT/WIFI _2.4GHz (Front Metal Antenna, PIFA)

Frequency	2400MHz	2412MHz
3D Radiation Pattern		
Peak Gain [dBi]	-12.2	-11.9

Frequency	2437MHz	2451MHz
3D Radiation Pattern		
Peak Gain [dBi]	-11.2	-11.8

Frequency	2472MHz	2485MHz
3D Radiation Pattern		
Peak Gain [dBi]	-11.4	-11.9

Radiation Pattern Test

Antennas tested for Gain and Efficiency must be assembled into the enclosure and tested in the fully assembled and operating SM-L505U Smart watch.The antenna is tested in free space in the anechoic chamber in the H, E1 and, E2 planes. The radiation patterns are measured at the center of transmit and receive bands.

A picture showing the geometry for this device is included in the test setup photos.

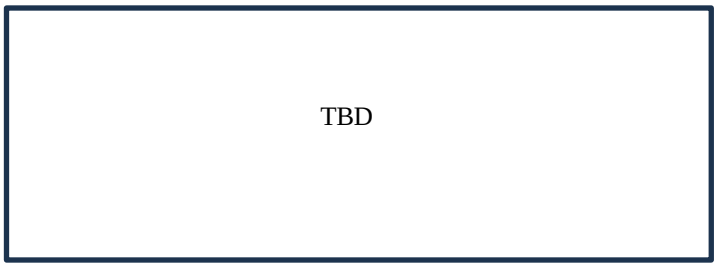


Figure 1: OTA Test chamber

Figure 2: Test Set (SM-L505U)

Figure 3: Radiation Patterns

Detail antenna description

TBD

Chamber Information : .

- ✓ Location : Samsung R&D Center R5 bld.
- ✓ Size : 6m x 3 x 3m (L x W x H)
- ✓ Frequency : 450 MHz -6GHz
- ✓ TX Antenna : 0.3GHz –6GHz Dual Polarization
- ✓ Quiet zone : 30cm @ 1.8GHz (Far-Field Length 3m)
- ✓ 2-axis DUT positioner -360°continuous rotation

Test dates

2025.01.14

Names of test personnel

Young-Jun Cho, JungHo Ahn, Myeongkoo Kang

Names of commercial test software being used

MTG Visual Wave-Mobile (Ver.2.1)