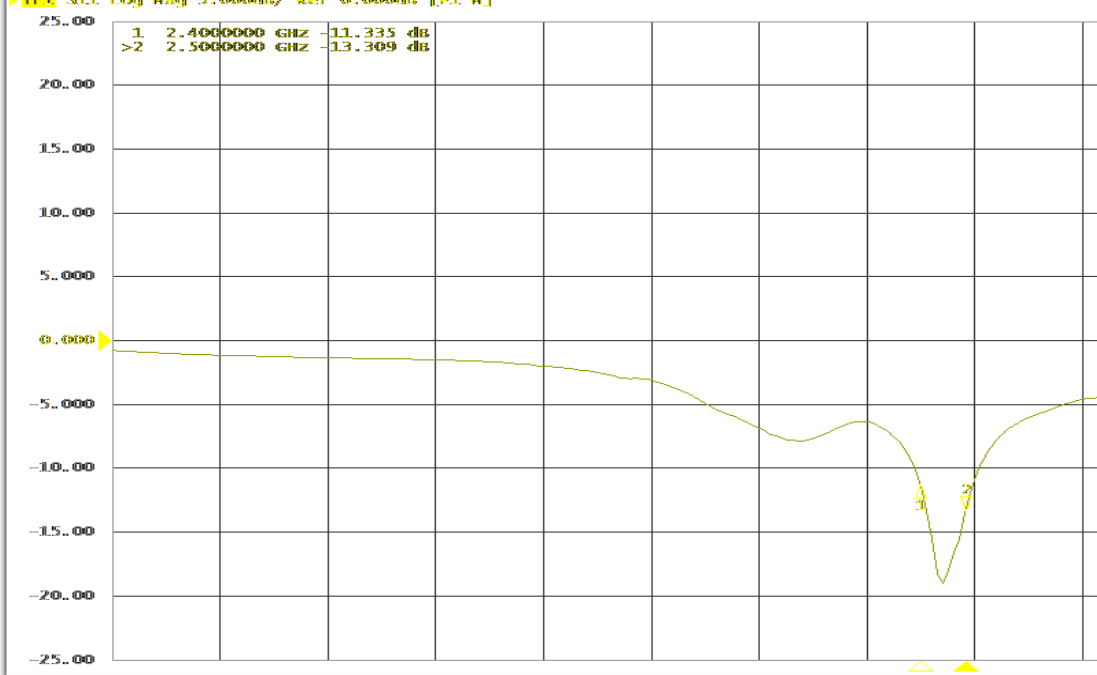


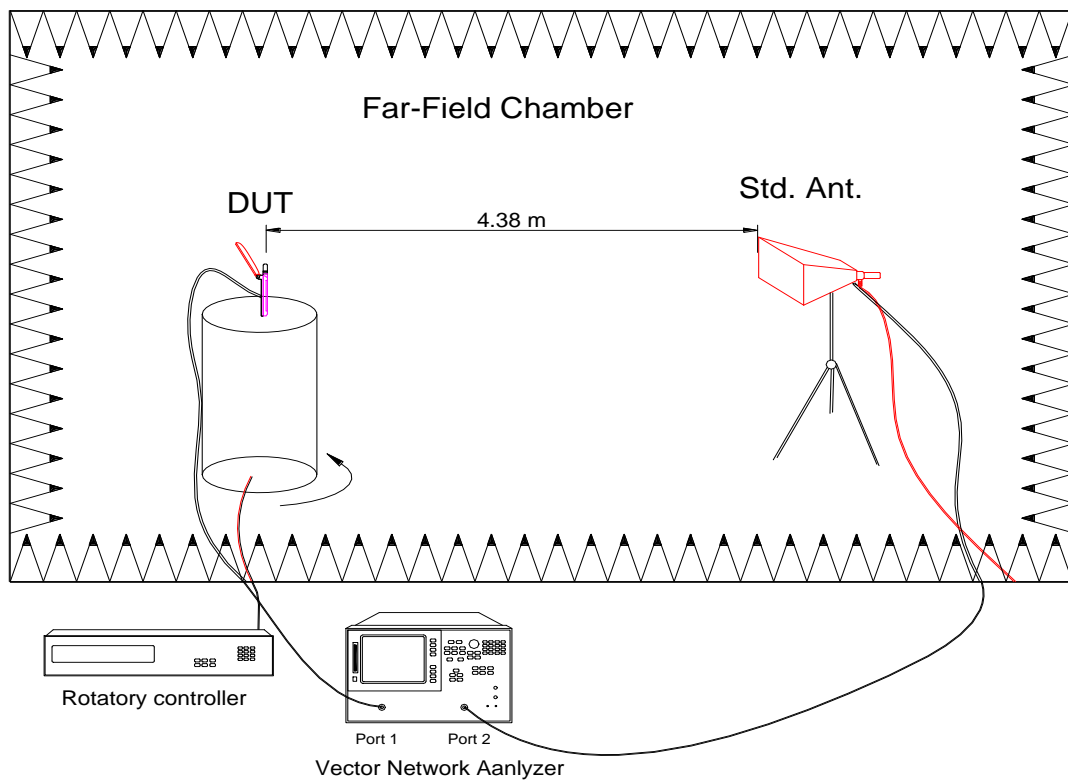
| | | | | | | |
|------------------------|--|-------|--|--|--|--|
| 2-3-1. Typical Value: | -11.3 | -13.3 | | | | |
| 2-3-2 Measuring Method | <ol style="list-style-type: none"> 1. A 50 Ω coaxial cable is connected to the fpcb antenna. Then this cable is connected to a network analyzer to measure the VSWR. 2. Keeping this jig away from metal at least 20 cm. | | | | | |
| 2-3-3 Picture |  | | | | | |

2-4. Measure and Chamber

2-4-1 Measure method

1. Using a low loss coaxial cable to link a standard handset jig
2. Fixed this handset jig on chamber's rotator plane
3. Linking jig into network analyzer port and using a probing horn antenna to collect data.
4. Using another standard gain horn antenna to calibrated those data

2-4-2 Chamber definition



1. An anechoic chamber (8mx4mx3.5m) which satisfied far-field condition was applied to avoid multi-path effect
2. The quiet room region is 40cmx40cmx40cm at the center of rotator
3. The distance between DUT and standard antenna is 4.38 m
4. Probing antenna (9120D horn antenna) and standard gain horn antenna (BBHA9120 LPF 700MHz ~6GHz)

2-4-3 Antenna OTA

2-4- Antenna Efficiency

| Frequency | Gain . dB | Effic (dB) | Effi (%) |
|-----------|--------------|------------|-------------|
| 2350 | 0.99 | -5.13 | 31% |
| 2360 | 0.57 | -5.45 | 28% |
| 2370 | 0.35 | -5.36 | 29% |
| 2380 | 0.73 | -5.28 | 30% |
| 2390 | 1.05 | -5.20 | 30% |
| 2400 | 0.52 | -5.36 | 29% |
| 2410 | 0.46 | -5.42 | 29% |
| 2420 | 0.66 | -5.41 | 29% |
| 2430 | -0.22 | -5.77 | 26% |
| 2440 | -0.26 | -5.57 | 28% |
| 2450 | 0.05 | -5.51 | 28% |
| 2460 | -0.52 | -5.80 | 26% |
| 2470 | -0.96 | -5.86 | 26% |
| 2480 | -0.75 | -5.79 | 26% |
| 2490 | -1.21 | -6.14 | 24% |
| 2500 | -1.33 | -6.00 | 25% |
| 2510 | -0.95 | -5.77 | 27% |
| 2520 | -1.09 | -5.94 | 25% |
| 2530 | -1.58 | -6.10 | 25% |
| 2540 | -1.30 | -5.91 | 26% |
| 2550 | -1.34 | -6.16 | 24% |

3. Antenna Dimensions (mm) :

