

# 승인원

제조사: (주) 모카시스템  
모델명: APB  
제품명: APB-BLE ANT

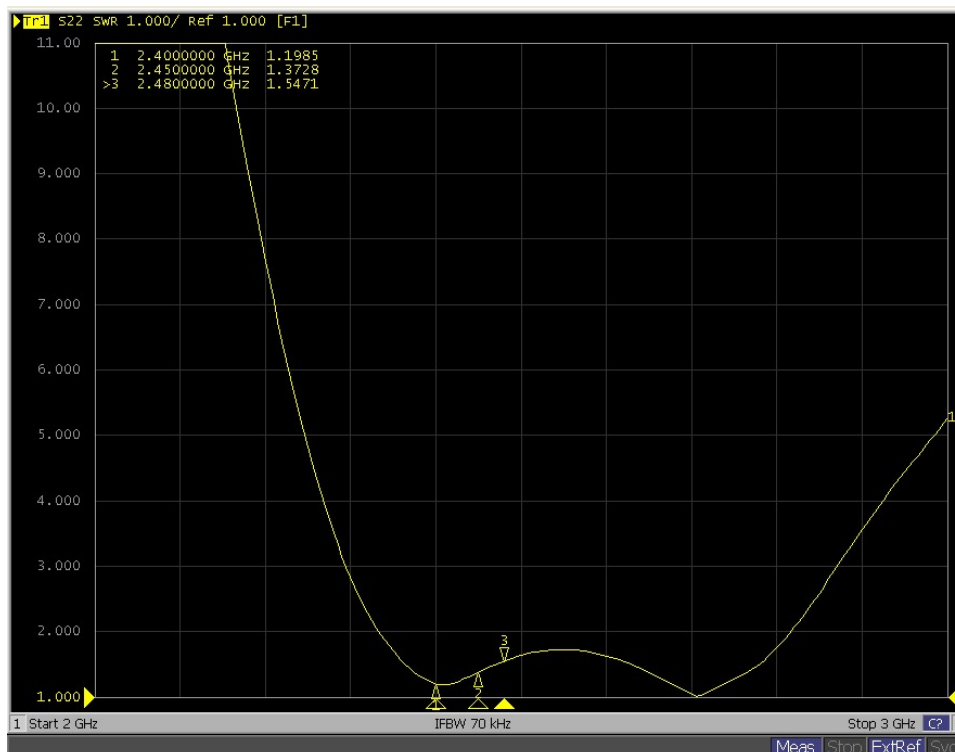
page2 ----- Spec  
page3----- 안테나 특성  
page5 ----- 도면 및 사진

APB  
BLE Antenna

Spec

|              |                     |
|--------------|---------------------|
| Band         | 2.4GHz ISM          |
| Frequency    | 2.4~2.483GHz        |
| VSWR         | $\leq 2.0$          |
| Peak Gain    | -8.77~-13.36 dBi    |
| Avg Gain     | -14.54 ~ -19.61 dBi |
| Directivity  | Directional         |
| Polarization | Linear              |
| Imapedance   | 50 Ohms             |
| TYPE         | PCB(FR4) type PIFA  |

VSWR



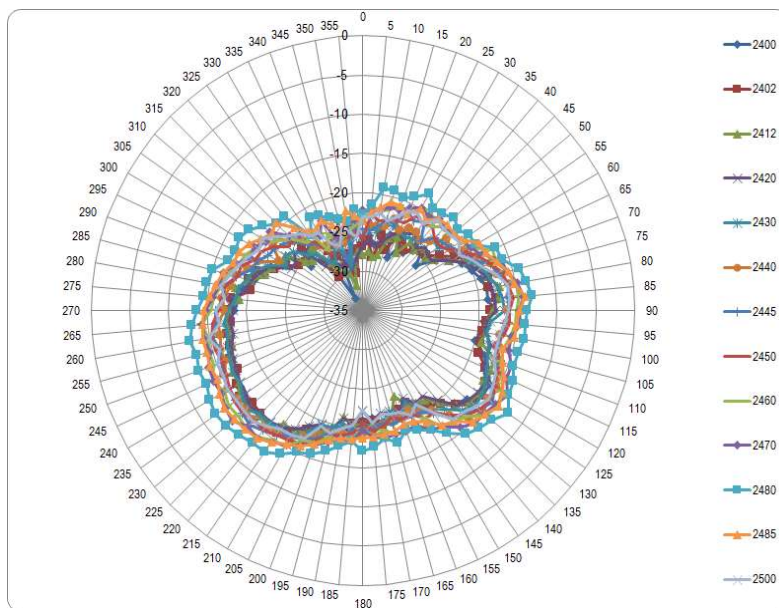
# APB BLE Antenna

## Radiation

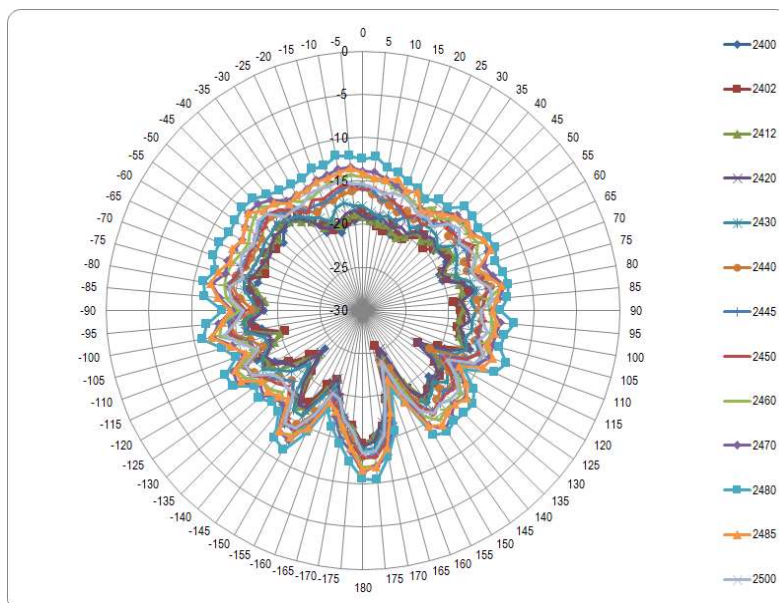
| No | Frequency | Peak Value |           | Minimum Value |           | Avg. Gain | Efficiency |
|----|-----------|------------|-----------|---------------|-----------|-----------|------------|
|    | [GHz]     | Value[dBi] | Degree    | Value[dBi]    | Degree    | [dBi]     | [%]        |
| 1  | 2.402     | -13.04     | 180 / 10  | -38.56        | 165 / 0   | -19.41    | 1.15       |
| 2  | 2.450     | -11.25     | 145 / 235 | -33.94        | 120 / 335 | -17.39    | 1.83       |
| 3  | 2.480     | -8.77      | 145 / 240 | -33.16        | 120 / 340 | -14.54    | 3.51       |
| 4  | 2.500     | -11.79     | 145 / 245 | -34.00        | 120 / 330 | -17.17    | 1.92       |
| 5  |           |            |           |               |           |           |            |

## Pattern

### H-Plane

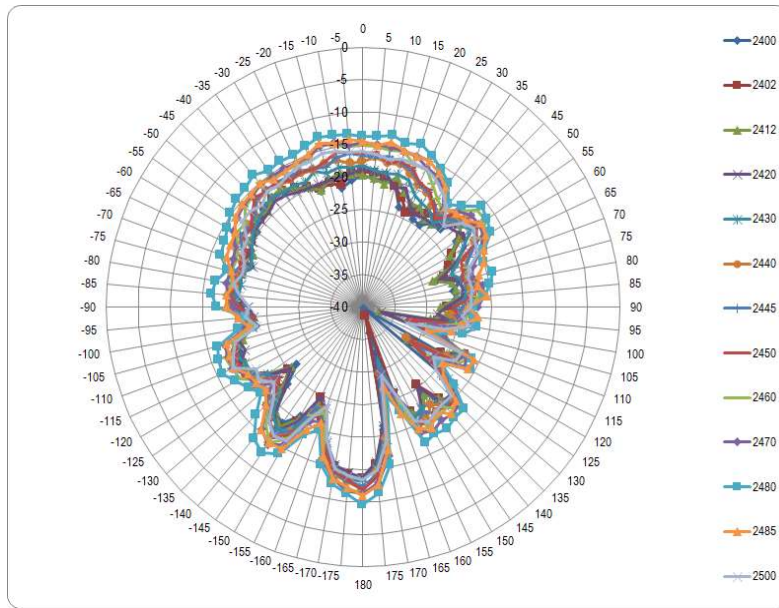


### E1 Plane



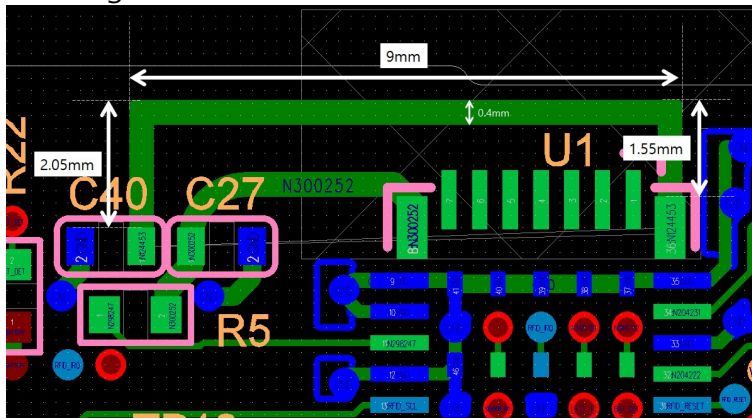
# APB BLE Antenna

E2 Plane



# APB BLE Antenna

Drawing



Pictures

