

## Feature

- ※ High gain
- ※ Omni-directional
- ※ Wide bandwidth

## Application

- ※ GSM 850/900/DCS/PCS
  - ※ WCDMA B1/B2/B4/B5/B8
  - ※ LTE B1/B2/B3/B4/B5/B7/B8/B20/B28/B66/B38/B40/B41
  - ※ NR N1/N3/N5/N7/N8/N20/N28/N38/N40/N41/N77/N78 /N79
  - ※ Bluetooth
  - ※ WIFI 802.11b/g/n
  - ※ GPS L1/L5
- communication applications

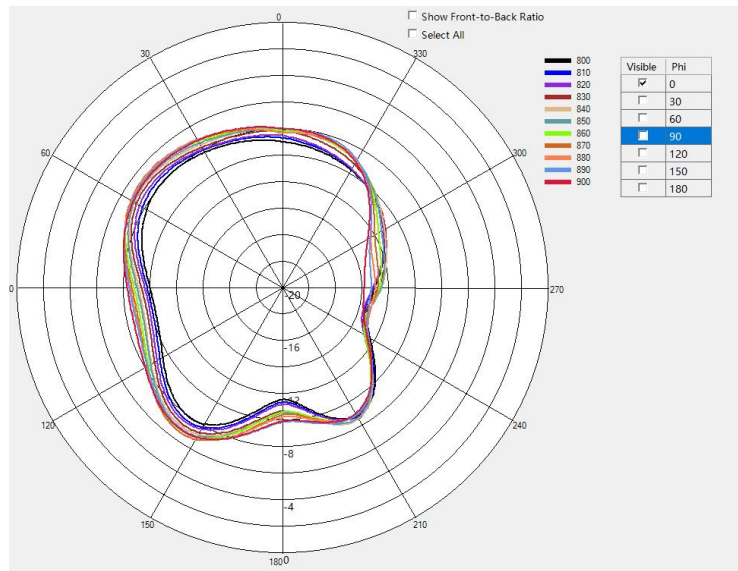
| TYPE                  | Band & Frequency                    |  |
|-----------------------|-------------------------------------|--|
| Transmitter Frequency | GSM 850/WCDMA B5/LTE B5:824-849MHz  |  |
|                       | GSM 900/WCDMA B8/LTE B8:880-915MHz  |  |
|                       | DCS/LTE B3:1710-1785MHz             |  |
|                       | LTE B2/WCDMA B2/PCS:1850-1910MHz    |  |
|                       | WCDMA B1/LTE B1:1920-1980MHz        |  |
|                       | LTE B4/B66 WCDMA B4:1710-1755MHz    |  |
|                       | LTE B7:2496-2565MHz                 |  |
|                       | LTE B20:832-862MHz                  |  |
|                       | LTE B28:710-755MHz                  |  |
|                       | LTE B38:2570-2620MHz                |  |
|                       | LTE B40:2300-2400MHz                |  |
|                       | LTE B41:2565-2645MHz                |  |
|                       | NR N1:1920-1980MHz                  |  |
|                       | NR N3:1710-1785MHz                  |  |
|                       | NR N5:824-849MHz                    |  |
|                       | NR N7:2500-2570 MHz                 |  |
|                       | NR N8:880-915 MHz                   |  |
|                       | NR N20:832-862MHz                   |  |
|                       | NR N28:703-748MHz                   |  |
|                       | NR N38:2570-2620MHz                 |  |
|                       | NR N40:2300-2400 MHz                |  |
|                       | NR N41:2535-2655 MHz                |  |
|                       | NR N77:3300-4200MHz                 |  |
|                       | NR N78:3300-3800MHz                 |  |
|                       | NR N79:4400-5000MHz                 |  |
| Receiver Frequency    | GSM 850/WCDMA B5/LTE B5:869-894 MHz |  |
|                       | GSM 900/WCDMA B8/LTE B8:925-960 MHz |  |
|                       | DCS/LTE B3:1805-1880 MHz            |  |
|                       | LTE B2/WCDMA B2/PCS:1930-1990MHz    |  |
|                       | WCDMA B1/LTE B1:2110-2170MHz        |  |
|                       | LTE B4/66/WCDMA B4:2110-2180MHz     |  |

|                                                                |                                                                       |  |
|----------------------------------------------------------------|-----------------------------------------------------------------------|--|
|                                                                | LTE B7:2620-2690MHz                                                   |  |
|                                                                | LTE B20:791-821MHz                                                    |  |
|                                                                | LTE B28:758-803MHz                                                    |  |
|                                                                | LTE B38:2570-2620MHz                                                  |  |
|                                                                | LTE B40:2300-2400MHz                                                  |  |
|                                                                | LTE B41:2535-2655MHz                                                  |  |
|                                                                | NR N1:2110-2170MHz                                                    |  |
|                                                                | NR N3:1805-1880MHz                                                    |  |
|                                                                | NR N5:869-894MHz                                                      |  |
|                                                                | NR N7:2620-2690 MHz                                                   |  |
|                                                                | NR N8:925-960 MHz                                                     |  |
|                                                                | NR N20:791-821MHz                                                     |  |
|                                                                | NR N28:758-803MHz                                                     |  |
|                                                                | NR N38:2570-2620MHz                                                   |  |
|                                                                | NR N40:2300-2400 MHz                                                  |  |
|                                                                | NR N41:2535-2655 MHz                                                  |  |
|                                                                | NR N77:3300-4200MHz                                                   |  |
|                                                                | NR N78:3300-3800MHz                                                   |  |
|                                                                | NR N79:4400-5000MHz                                                   |  |
| RF-<br>Output<br>Power<br>(E.I.R.P)                            | GSM850/900: 33+/-2dBm                                                 |  |
|                                                                | DCS/PCS: 30+/-2dBm                                                    |  |
|                                                                | LTE B1/B2/B3/B4/B5<br>/B7/B8/B20/B28/B66/B38/B40/B41<br>: 23+/-2.7dBm |  |
|                                                                | WCDMA B1/W2/W4/B5/ B8:<br>24+1/-3dBm                                  |  |
|                                                                | NR: 23+/-2.7dBm                                                       |  |
|                                                                | N41 N77 N78/N79: 26+/-2.7dBm                                          |  |
| GPS<br>L1&WIFI<br>2.4G&5G<br>Antenna<br>Gain<br>(Peak<br>Gain) | GPS: 0.65                                                             |  |
|                                                                | WIFI 2.4G: 1.3                                                        |  |
|                                                                | WIFI 5G: -0.9                                                         |  |
| N40&N41<br>&N77&N<br>78&N79<br>(Peak<br>Gain)                  | N40: 0.2                                                              |  |
|                                                                | N41: 0.9                                                              |  |
|                                                                | N77: 0.3                                                              |  |
|                                                                | N78: 0.3                                                              |  |
|                                                                | N79:0.4                                                               |  |
| WIFI<br>2.4G&WI                                                | WIFI 2.4G: 1.2                                                        |  |
|                                                                | WIFI 5G: -0.8                                                         |  |

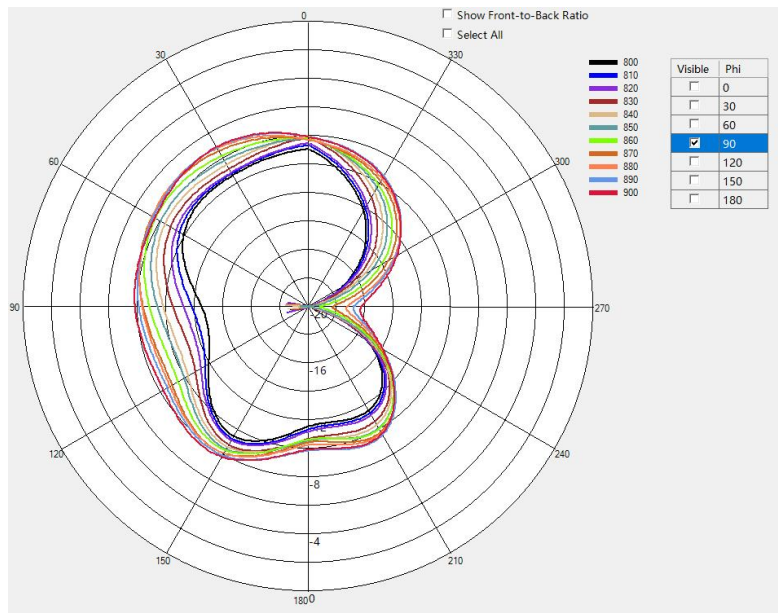
|                                           |                                        |  |
|-------------------------------------------|----------------------------------------|--|
| FI 5G<br>(Peak<br>Gain)                   |                                        |  |
| GPS L5<br>(Peak<br>Gain)                  | GPS L5: -1.0                           |  |
| N40&N41<br>(Peak<br>Gain)                 | N40: 0.2                               |  |
|                                           | N41: 0.3                               |  |
| N77&N78<br>(Peak<br>Gain)                 | N77: 0.2                               |  |
|                                           | N78: 0.2                               |  |
|                                           | N79:0.3                                |  |
| N77&N78<br>(LDS)<br>(Peak<br>Gain)        | N77: 0.5                               |  |
|                                           | N78: 0.5                               |  |
|                                           | N79:0.6                                |  |
| Main<br>Antenna<br>Gain<br>(Peak<br>Gain) | GSM 850/WCDMA B5/LTE B5/NR<br>N5: -1.5 |  |
|                                           | GSM 900/WCDMA B8/LTE B8/NR<br>N8: -1.3 |  |
|                                           | DCS/LTE B3/NR N3: -0.7                 |  |
|                                           | LTE B2/WCDMA B2PCS: -0.5               |  |
|                                           | WCDMA B1/LTE B1/NR N1: -0.5            |  |
|                                           | WCDMA B4/LTE B4/B66:-0.5               |  |
|                                           | LTE B7/B38/B41/NR N7/N38: -0.4         |  |
|                                           | LTE B40: 0.2                           |  |
|                                           | LTE B20/NR N20:-1.5                    |  |
|                                           | LTE B28/NR N28:-1.9                    |  |
| Type of<br>Modulation                     |                                        |  |

※ Antenna Gain

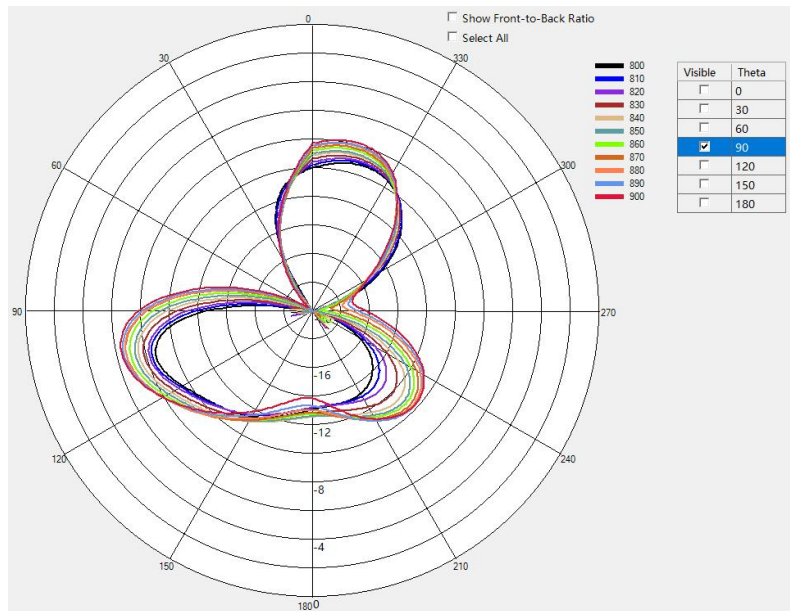
Main Antenna



GSM850 / WCDMA B5 / LTE B5/B20 Phi=0deg



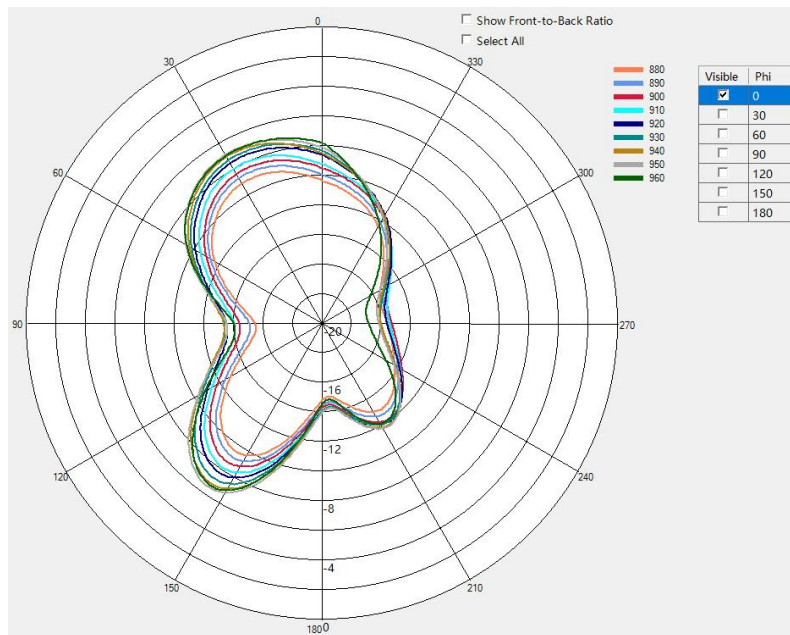
GSM850 / WCDMA B5 / LTE B5/B20 Phi=90deg



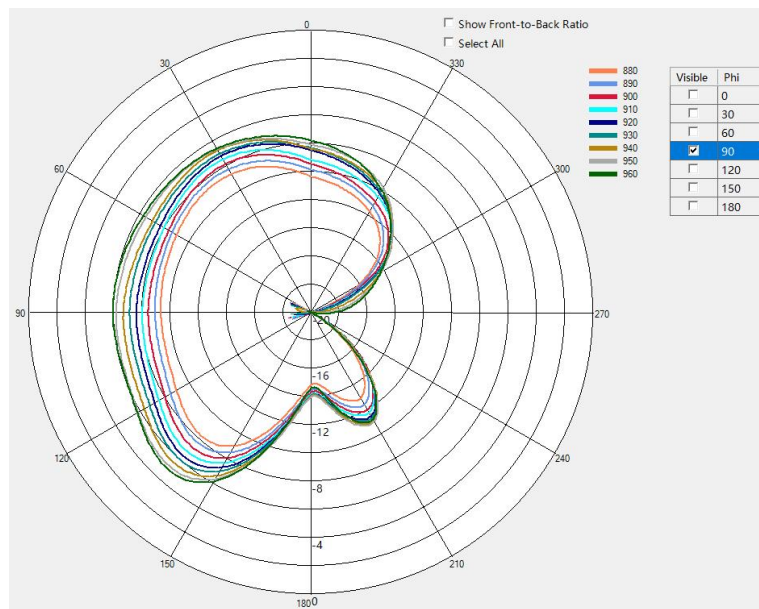
GSM850 / WCDMA B5 / LTE B5/B20 Theta=90deg

## ※ Antenna Gain

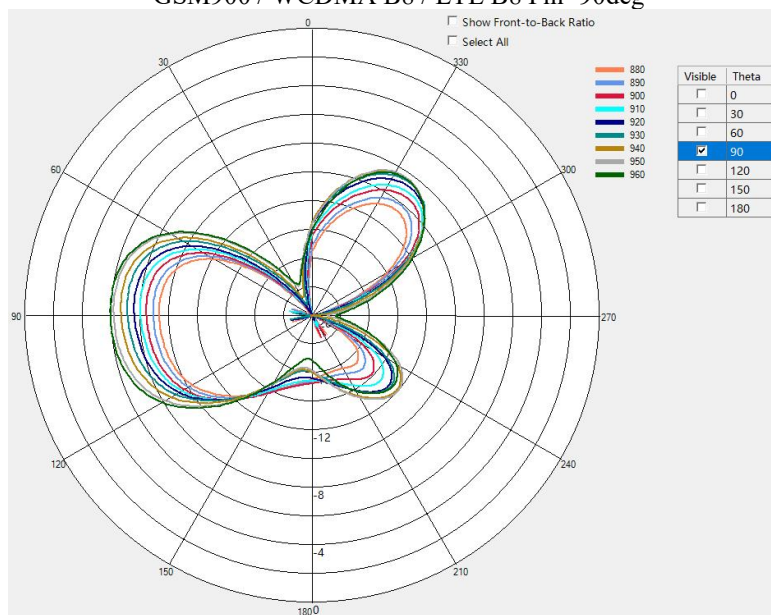
### Main Antenna



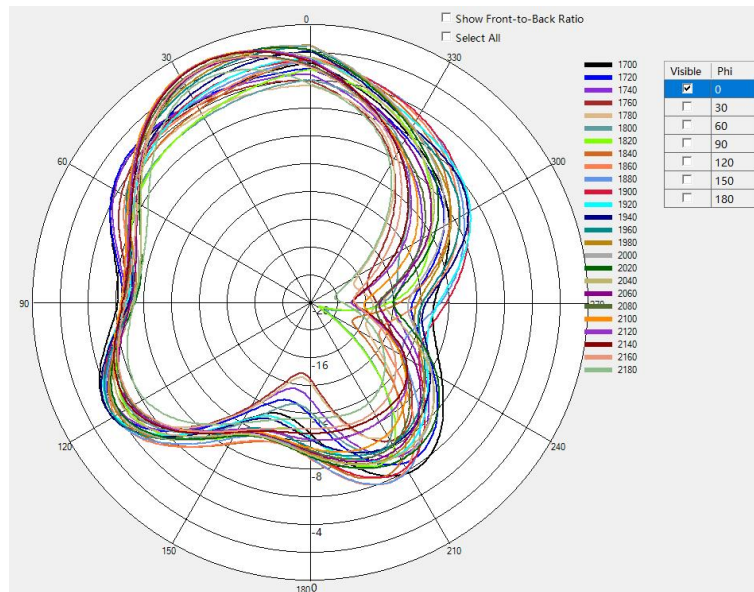
GSM900 / WCDMA B8 / LTE B8 Phi=0deg



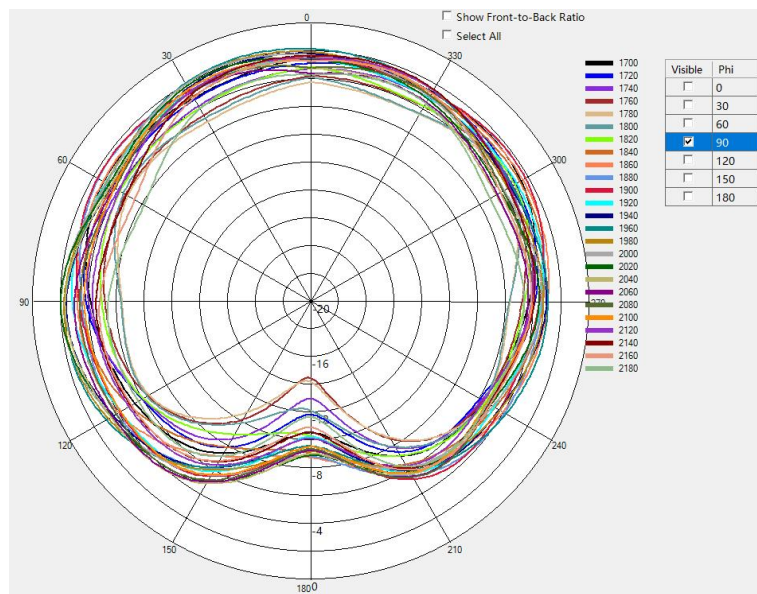
GSM900 / WCDMA B8 / LTE B8 Phi=90deg



GSM900 / WCDMA B8 / LTE B8 Theta=90deg

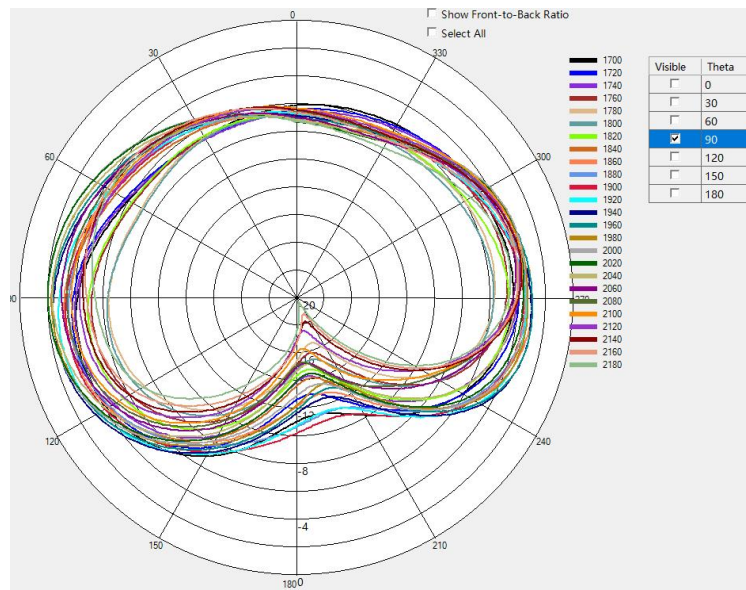


DCS1800/PCS1900/WCDMA B1 LTE B1/B3 Phi=0deg



DCS1800/PCS1900/WCDMA B1 LTE B1/B3 Phi=90deg

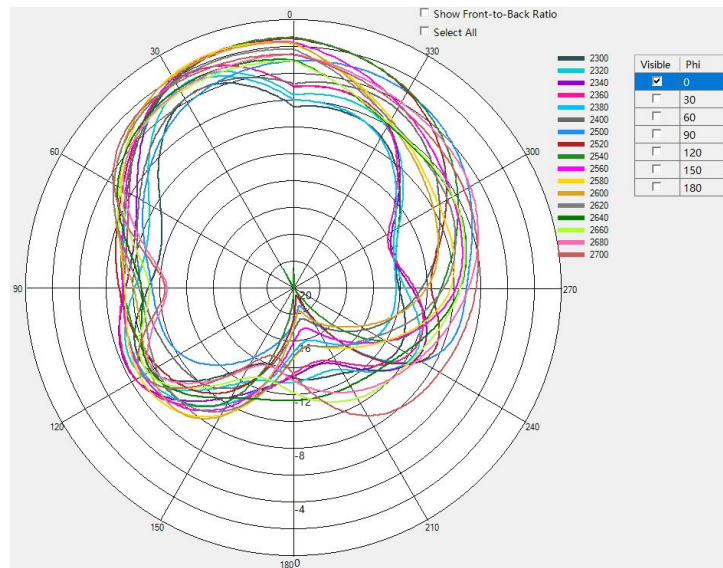




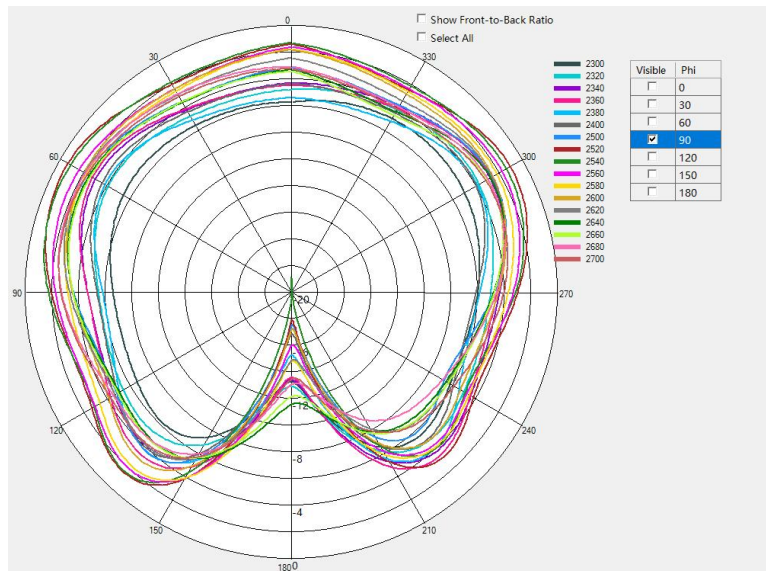
DCS1800/PCS1900/WCDMA B1 LTE B1/B3 Theta=90deg

## ✂ Antenna Gain

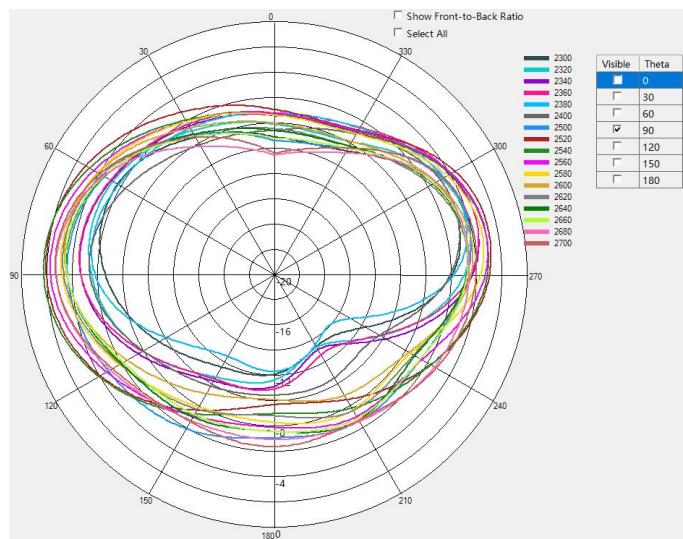
### Main Antenna



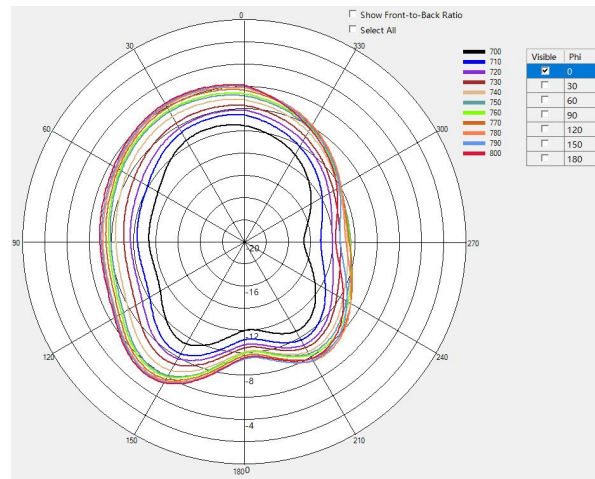
LTE B7/B40/B38/41 Phi=0deg



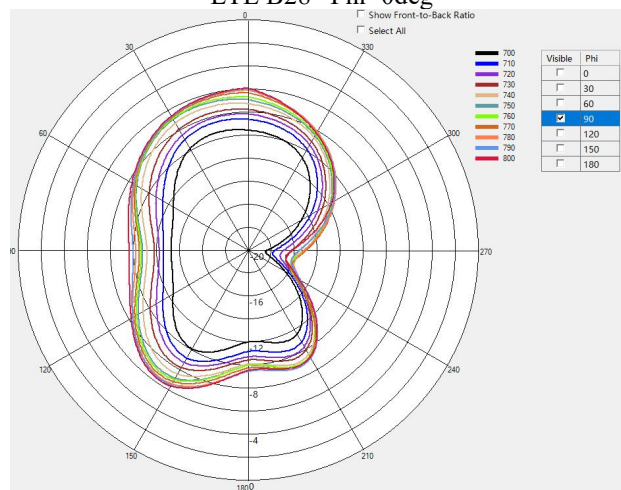
LTE B7/B40/B38/41 Phi=90deg



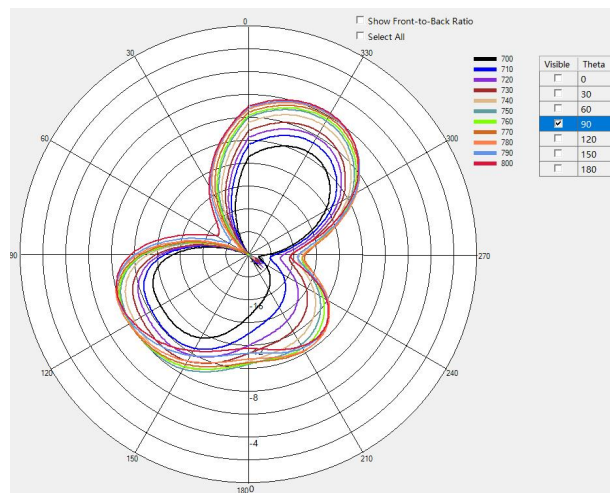
LTE B7/B40/B38/41 Theta=90deg



LTE B28    Phi=0deg



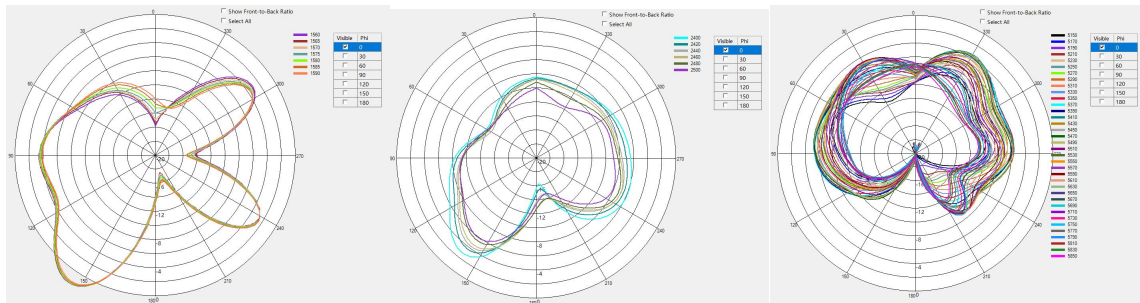
LTE B28    Phi=90deg



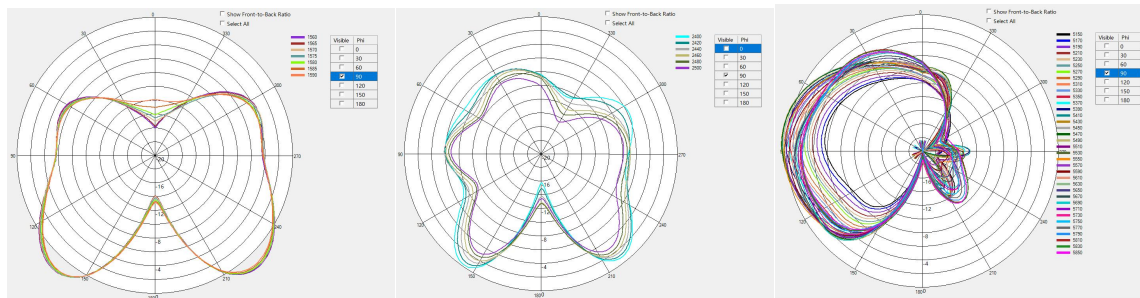
LTE B28    Theta=90deg

## ※ Antenna Gain

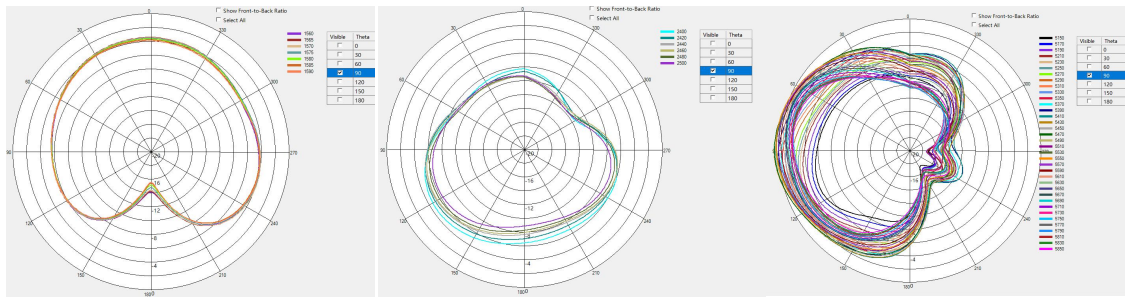
### 4 in 1 Antenna



GPS/BT/2.4G WIFI/5G WIFI  $\Phi=0^\circ$



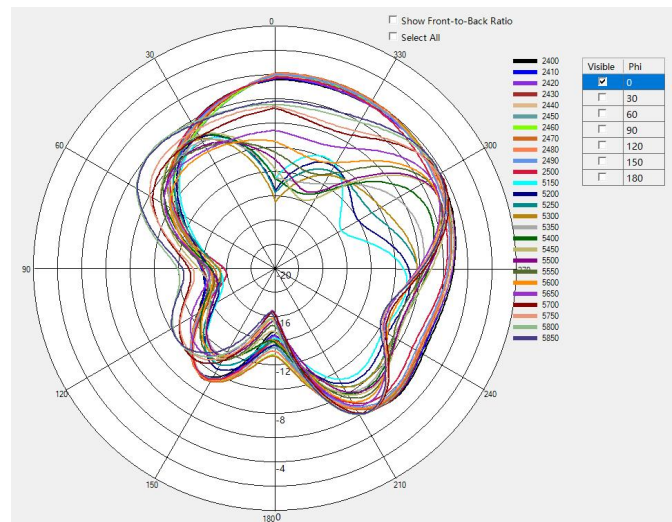
GPS/BT/2.4G WIFI/5G WIFI  $\Phi=90^\circ$



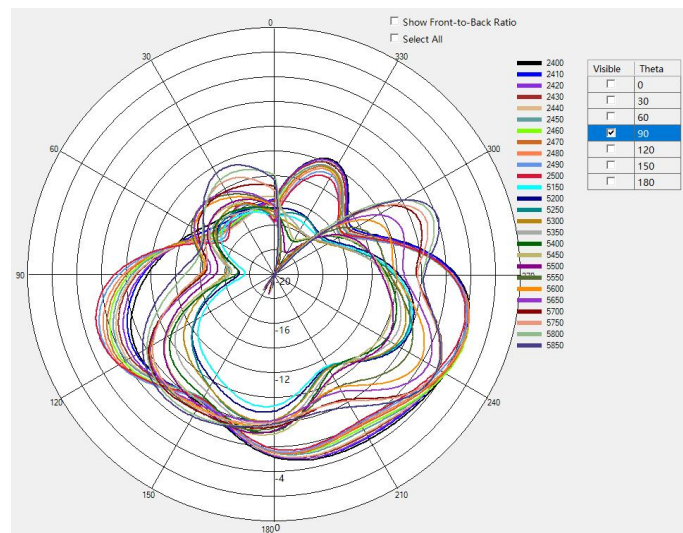
GPS/BT/2.4G WIFI/5G WIFI Theta=90deg

## ※ Antenna Gain

### WIFI MIMO Antenna

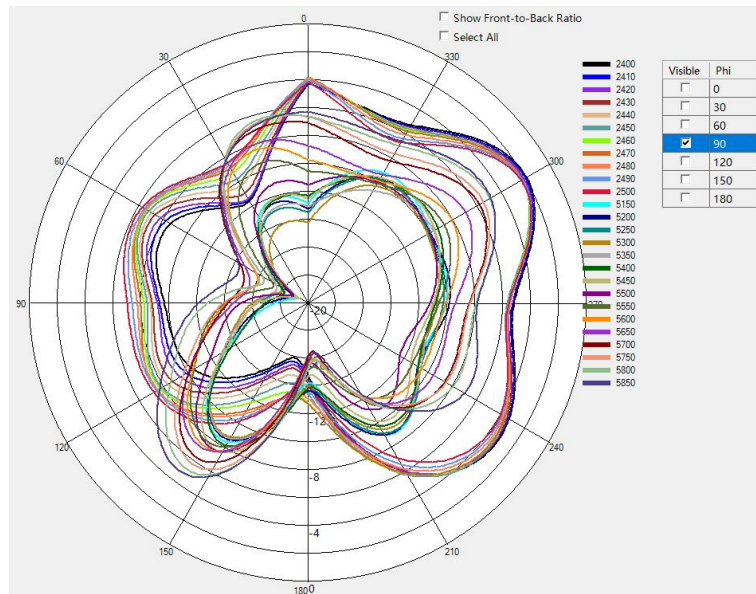


2.4G WIFI&5G WIFI Phi=0deg



2.4G WIFI&5G WIFI Phi=90deg

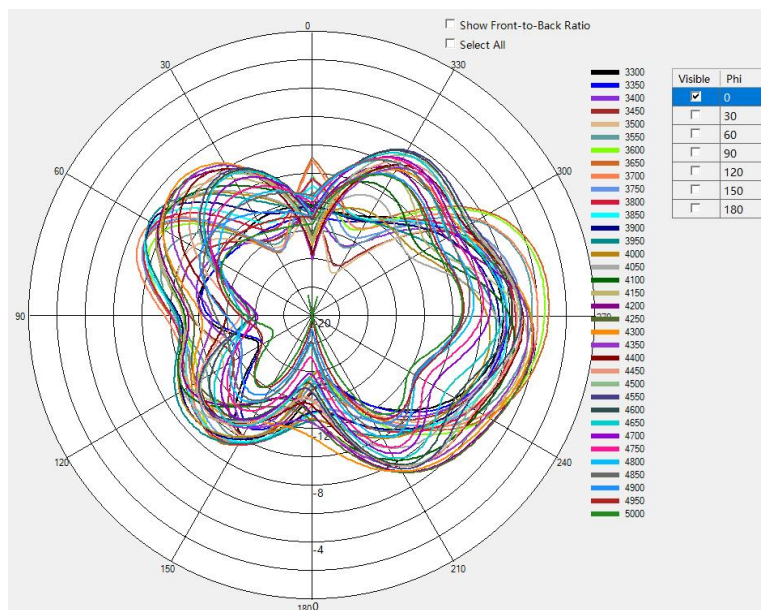




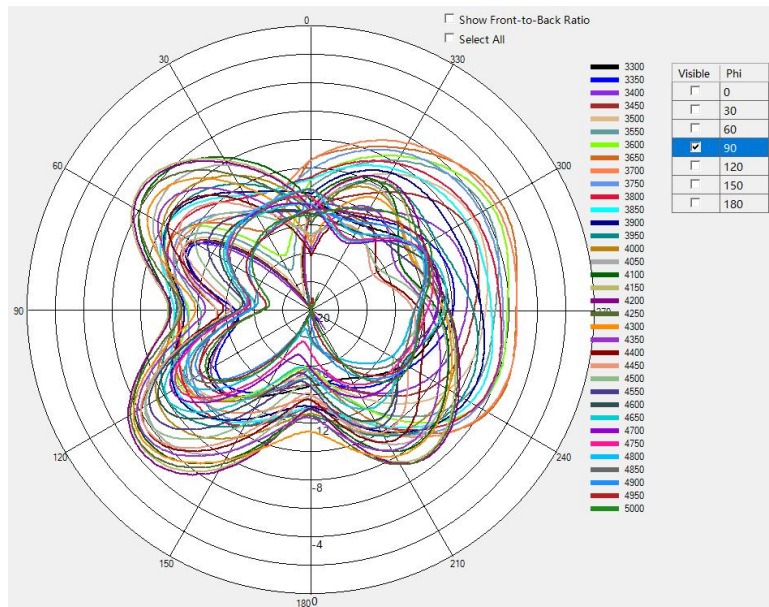
2.4G WIFI&5G WIFI Theta=90deg

※ Antenna Gain

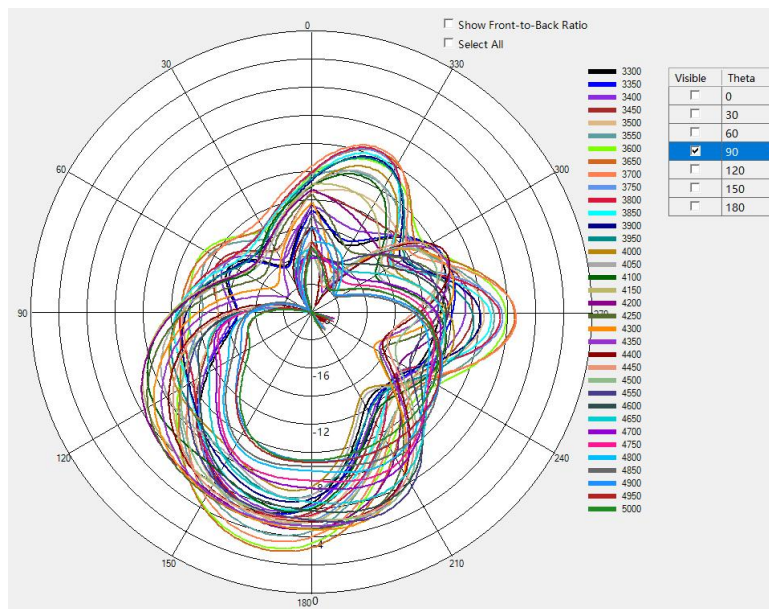
SUB 6G PRX Antenna



N77/N78/N79 Phi=0deg



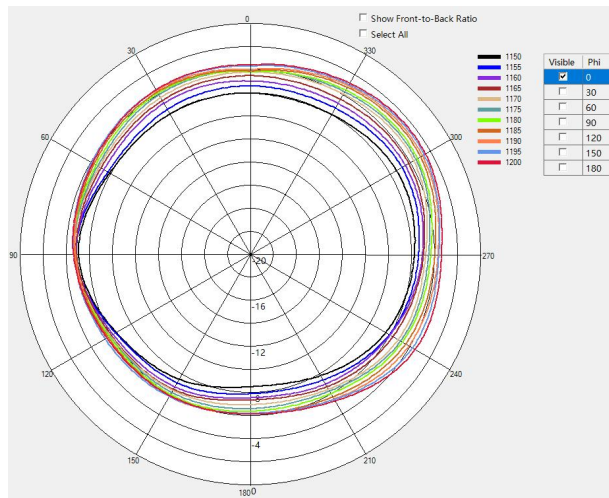
N77/N78/N79 Phi=90deg



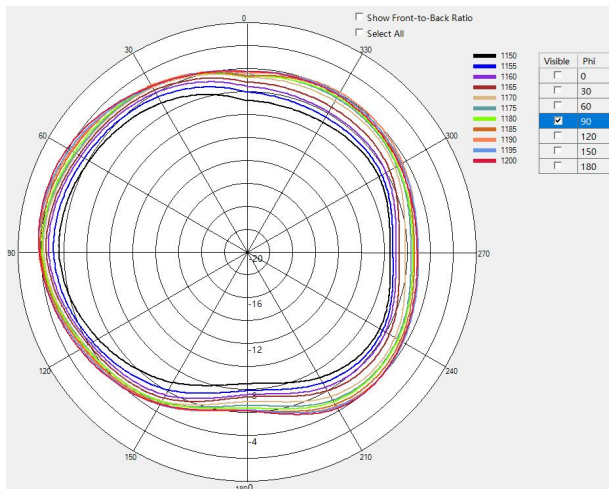
N77/N78/N79 Theta=90deg

※ Antenna Gain

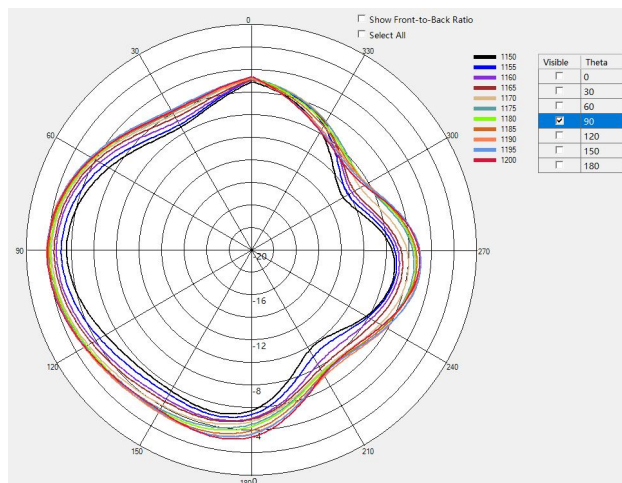
GPS L5 Antenna



GPS L5 Phi=0deg



GPS L5 Phi=90deg



GPS L5 Theta=90deg



※ Antenna Gain

| PREPARED BY | CHECKEDBY | APPROVAL BY | S.R.NO |  |
|-------------|-----------|-------------|--------|--|
|             |           |             | DATE:  |  |