

## Feature

- ※ High gain
- ※ Omani-directional
- ※ Wide bandwidth

## Application

※GSM850/900/DCS/PCS/WCDMA B1/B2/B4/B5/B8

LTE B1/B2/B3/B4/B5/B7/B8/B12/B17/B20/B28/B38/B41/B66

NR Mode N1/N3/N5/N7/N8/N12/N20/N28/N38/N41/N66/N77/N78

| Name and address of the antenna manufacturer                                                                                                                                                             | Model number of the antenna                                                                                                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Etheta Communication Technology (ShenZhen) Co.Ltd</p> <p>Zone B and Zone D, 3/F, Building 1, Baisha Science and Technology Industrial Park, No. 3011, Shahe West Road, Nanshan District, Shenzhen</p> | <p>X6710-ANT0-RD-XX-XX<br/>X6710-ANT1-RD-XX-XX<br/>X6710-ANT2-RD-XX-XX<br/>X6710-ANT3-RD-XX-XX<br/>X6710-ANT4-RD-XX-XX<br/>X6710-ANT5-RD-XX-XX<br/>X6710-ANT6-RD-XX-XX<br/>X6710-ANT7-RD-XX-XX<br/>X6710-ANT8-RD-XX-XX<br/>(XX:Version-Date)</p> |

| TYPE                  |                                                        |
|-----------------------|--------------------------------------------------------|
| Transmitter Frequency | GSM 850/WCDMA B5/LTE B5 NR n5: 824 – 849 MHz           |
|                       | GSM 900/WCDMA B8/LTE B8 NR n8: 880 – 915 MHz           |
|                       | DCS /WCDMA B4/LTE B3/B4/B66 NR n3/n66: 1710 – 1785 MHz |
|                       | PCS/WCDMA B2/LTE B2:1850-1910MHz                       |
|                       | WCDMA B1/LTE B1 NR n1: 1920 – 1980MHz                  |

|                           |         |                                                                |
|---------------------------|---------|----------------------------------------------------------------|
|                           |         | LTE B7 NR n7:2496-2565MHz                                      |
|                           |         | LTE B13 NR n13:746-787MHz                                      |
|                           |         | LTE B38/B41 NR n38/n41:2565-2645MHz                            |
|                           |         | LTE B20 NR n20:832-862MHz                                      |
|                           |         | LTE B12/B17/B28 NR n12/n28:710-755MHz                          |
|                           |         | NR n77/n78:3300-4200MHz                                        |
| Receiver Frequency        |         | GSM 850/WCDMA B5/LTE B5 NR n5: 869 - 894 MHz                   |
|                           |         | GSM 900/WCDMA B8/LTE B8 NR n8: 925 - 960 MHz                   |
|                           |         | DCS/LTE B3/B66 NR n3/n66: 1805 - 1880 MHz                      |
|                           |         | WCDMA 4/LTE B4 NR n4: 2110-2155 MHz                            |
|                           |         | PCS/WCDMA B2/LTE B2:1930-1990MHz                               |
|                           |         | WCDMA B1/LTE B1 NR n1: 2110 - 2170MHz                          |
|                           |         | LTE B7 NR n7:2620-2690MHz                                      |
|                           |         | LTE B13 NR n13:746-787MHz                                      |
|                           |         | LTE B38/41 NR n38/n41:2565-2645MHz                             |
|                           |         | LTE B20 NR n20:791-821MHz                                      |
|                           |         | LTE B12/B17/B28 NR n12/n28:758-803MHz                          |
|                           |         | NR n77/n78:3300-4200MHz                                        |
| RF-Output Power (E.I.R.P) |         | GSM850/900: 32+/-2dBm                                          |
|                           |         | DCS/PCS: 30+/-2dBm                                             |
|                           |         | LTE B1/B2/B3/ B4/B5 /B7/B8/B17/B20/B28/B38//B41/B66: 23+/-2dBm |
|                           |         | WCDMA B1/B2/B4/B5/ B8: 23+/-2dBm                               |
| Antenna Gain (dbi)        |         | GSM 850/WCDMA B5/LTE B5 NR n5: -8.3dbi                         |
|                           |         | GSM 900/WCDMA B8/LTE B8 NR n8:-6.6dbi                          |
|                           |         | DCS /WCDMA B4/LTE B3/B4/B66 NR n3/n66: -3.97dbi                |
|                           |         | PCS/WCDMA B2/LTE B2: -3.01dbi                                  |
|                           |         | WCDMA B1/LTE B1 NR n1: -4.5dbi                                 |
|                           |         | LTE B7/B38/B41 NR n7/n38/n41: -2.24dbi                         |
|                           |         | LTE B13 NR n13:-8.1dbi                                         |
|                           |         | LTE B20 NR n20:-8.3dbi                                         |
|                           |         | LTE B12/B17/B28 NR n12/n28:-7.9dbi                             |
|                           | N77_PRX | N77/N78:-1.89dbi                                               |
|                           | ENDC    | B1:-7.3dbi                                                     |
|                           |         | B3:-6.8dbi                                                     |

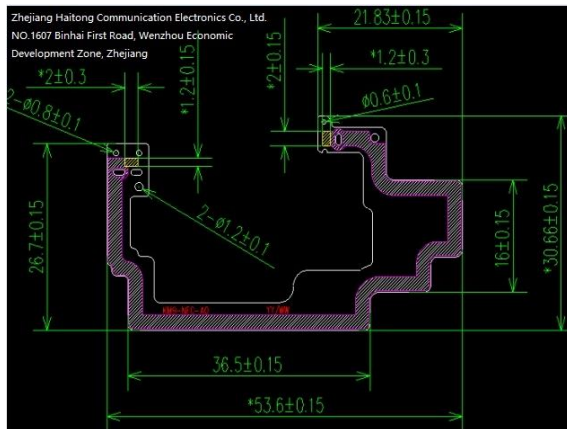
|  |                     |                                                                                             |                   |
|--|---------------------|---------------------------------------------------------------------------------------------|-------------------|
|  |                     | B7/B38/B41:-4.75dbi                                                                         |                   |
|  | GPS+WIFI<br>2.4G/5G | GPS(L1):-2.27dbi                                                                            |                   |
|  |                     | BT/WIFI 2.4G:-3.37dbi<br>WIFI 5.1G : -0.41dBi<br>WIFI 5.2G : -0.17dBi<br>WIFI 5.8G :2.21dbi |                   |
|  |                     | (mimo)                                                                                      | BT/WIFI 2.4G: 5G: |
|  |                     |                                                                                             | GPS(L5):          |
|  | Type of Modulation  |                                                                                             |                   |

Antenna type

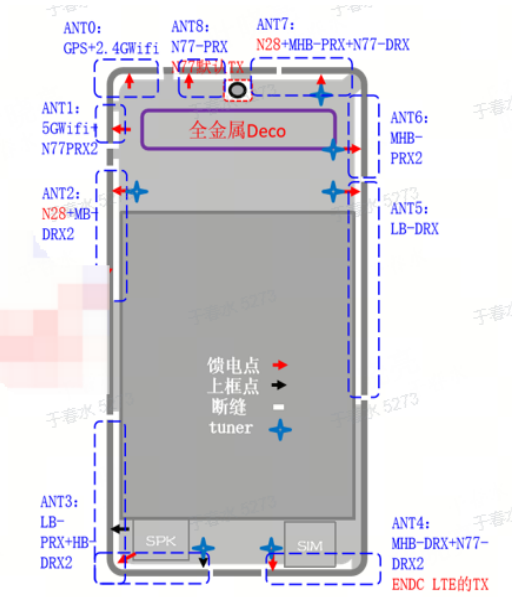
RF Internal Antenna

NFC Internal Antenna

## NFC Dimensions

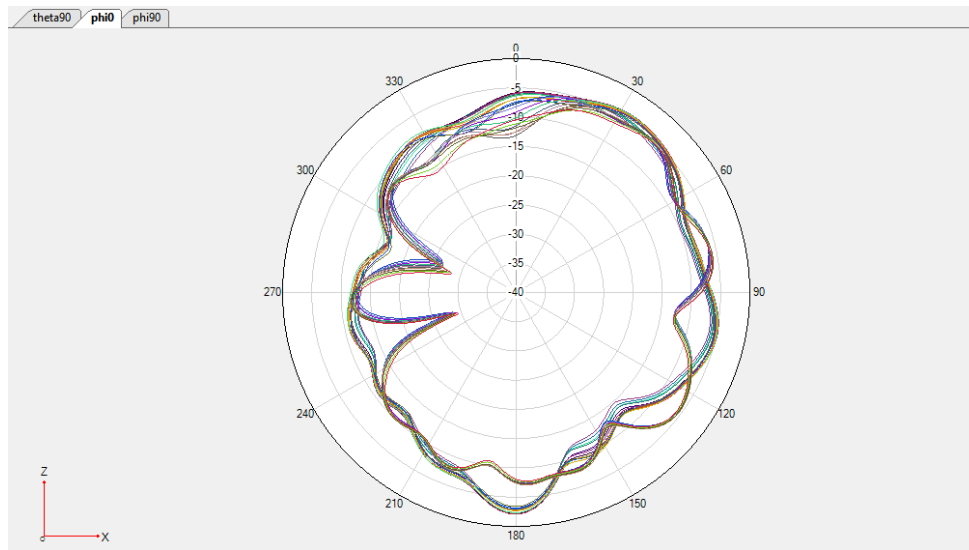


### Antenna location map

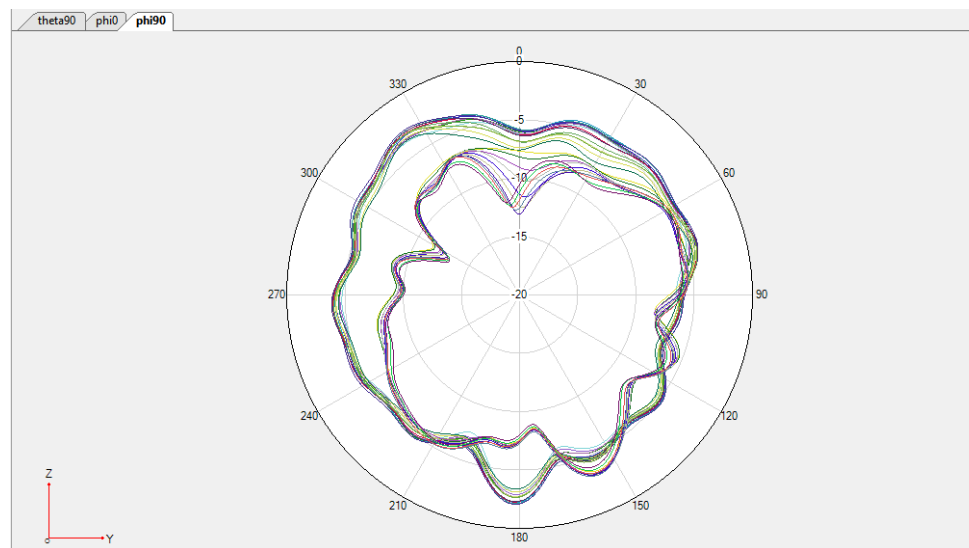


| Antenna | Support Band                                                                                                 |
|---------|--------------------------------------------------------------------------------------------------------------|
| Ant 0   | GPS L1 &BT&WiFi2.4G                                                                                          |
| Ant 1   | LTE B42&NR N77/N78 PRX2&5G WIFI                                                                              |
| Ant 2   | B1/B2/B3/B4/B66DRX2&N28                                                                                      |
| Ant 3   | GSM850/900&WCDMA B5/B8&LTE B5/B8/B12/13/17/B20/B28&NR N5/N8/N12/20/N28 PRX LTE B7/B38/B41&NR N7/N38/N41 DRX2 |
| Ant 4   | GSM1800/1900&WCDMA B1/B2/B4&LTE B1/B2/B3/B4/B7/B38/B41/B66&NR N1/N3/N7/N38/N41/N66 DRX N77DRX2               |
| Ant 5   | GSM850/900&WCDMA B5/B8&LTE B5/B8/B12/13/17/B20/B28&NR N5/N8/N12/20/N28 DRX                                   |
| Ant 6   | ENDC LTE B1/B2/B3/B4/B7/B38/B41/B66&LTE B1/B3/B4/B7/B38/41/B66&NR N1/N3/N7/N38/N41/B66 PRX2                  |
| Ant 7   | GSM1800/1900&WCDMA B1/B2/B4&LTE B1/B2/B3/B4/B7/B38/B41/B66&NR N1/N3/N7/N38/N41/N66 PRX N77 DRX N28MIMO       |
| Ant 8   | LTE B42&NR N77/N78 PRX                                                                                       |

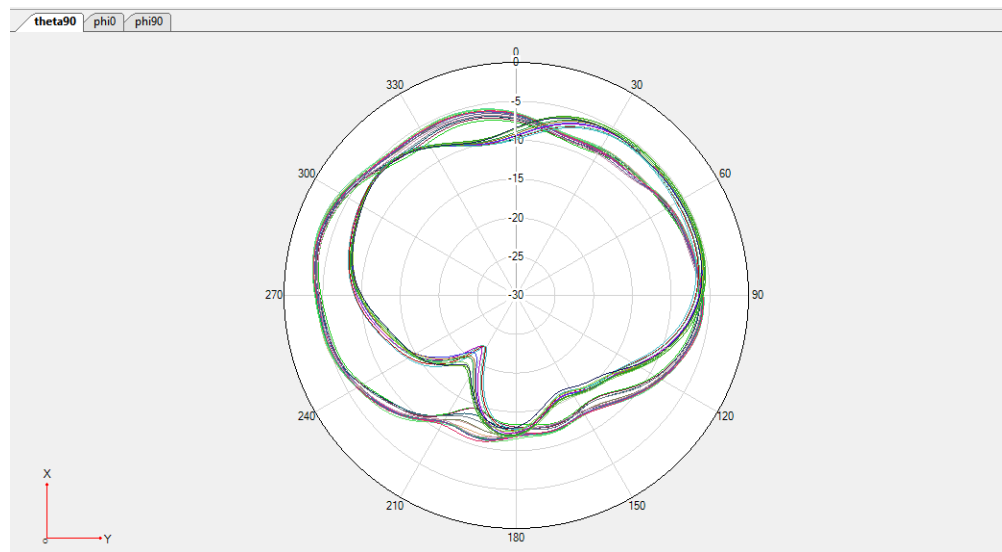
※ Antenna Gain  
ANT0 GPS+WIFI2.4G



ANT0 GPS+WIFI2.4G  $\text{PHI}=0^\circ$



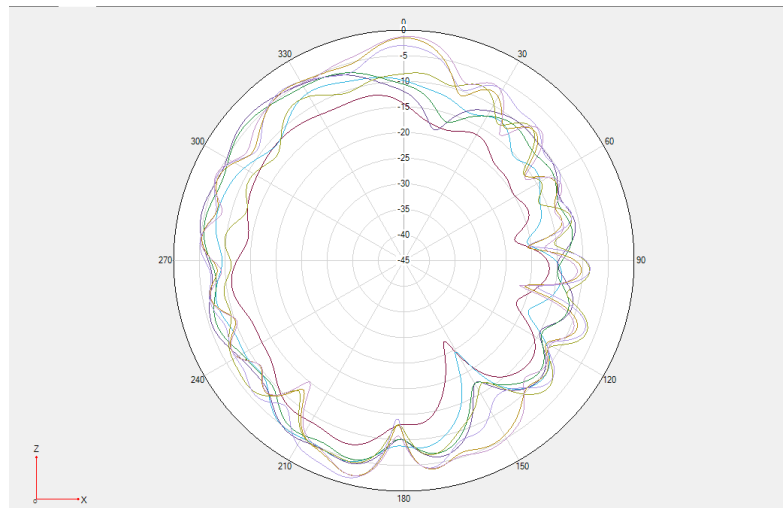
ANT0 GPS+WIFI2.4G  $\text{PHI}=90^\circ$



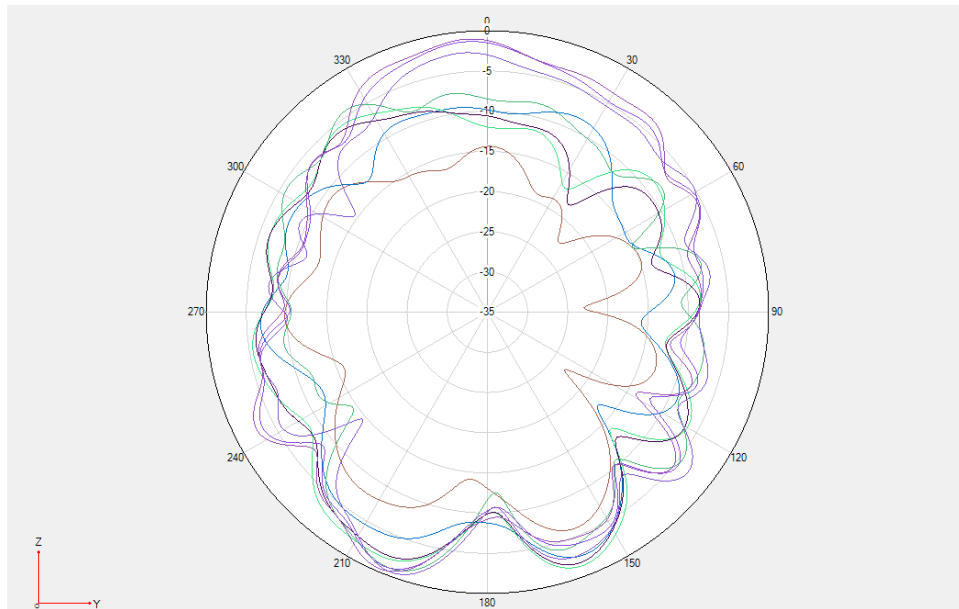
ANT0 GPS+WIFI2.4G  $\theta = 90^\circ$

※ Antenna Gain

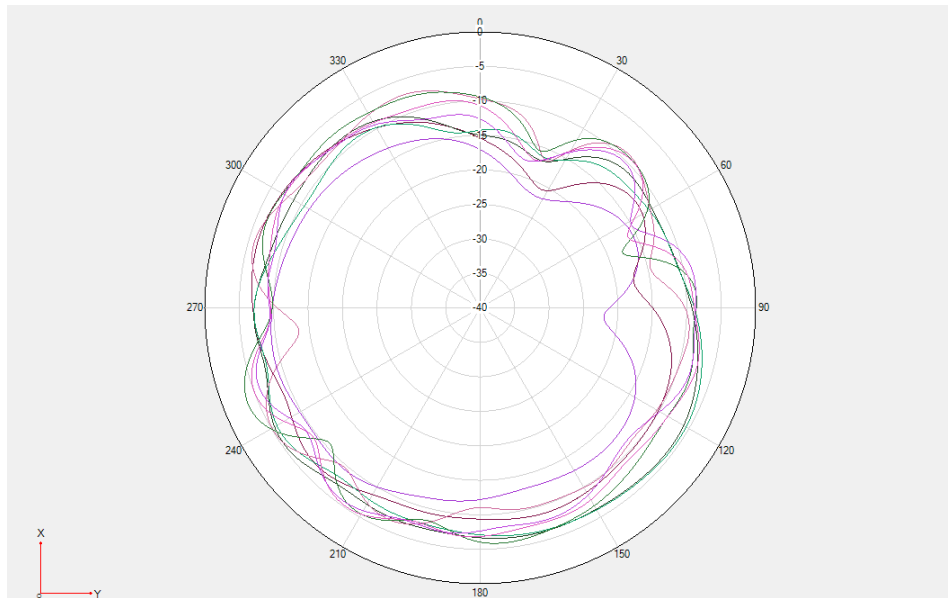
ANT1 N77-PRX2+WIFI5G



ANT1 N77-PRX2+WIFI5G  $\Phi = 0^\circ$



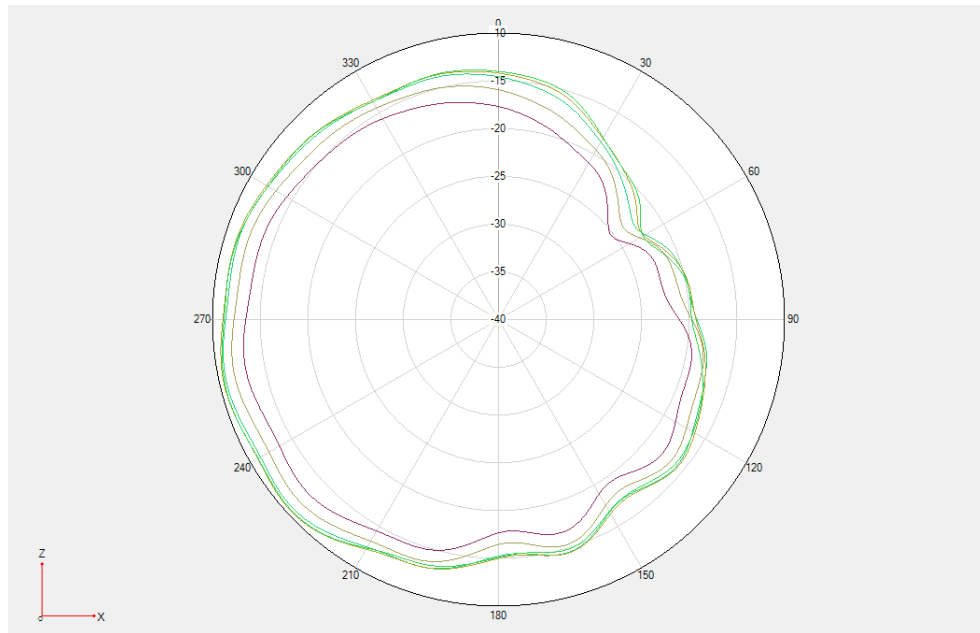
ANT1 N77-PRX2+WIFI5G       $\Phi=90\text{deg}$



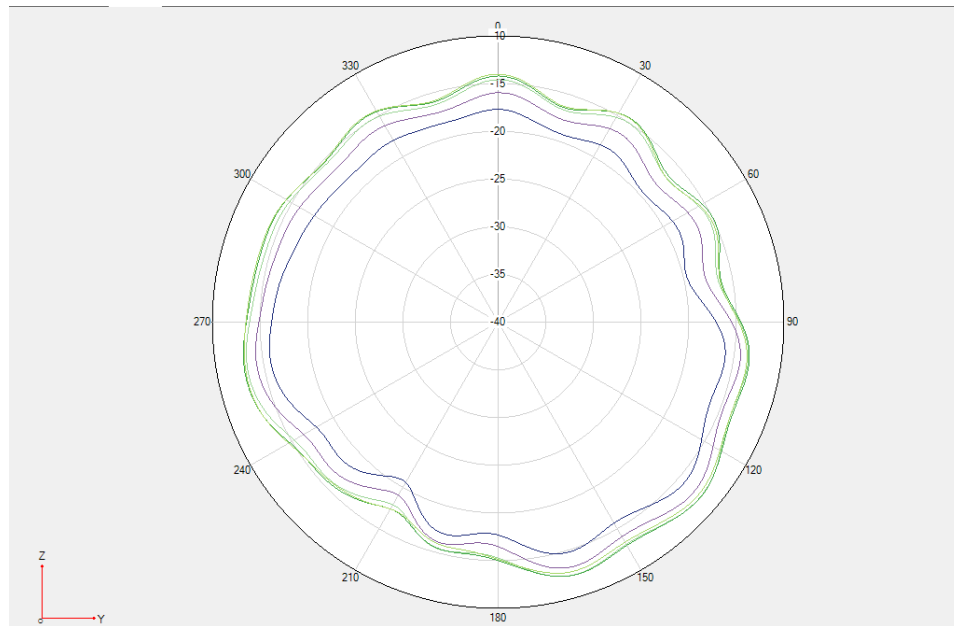
ANT1 N77-PRX2+WIFI5G       $\Theta=90\text{deg}$

※ Antenna Gain

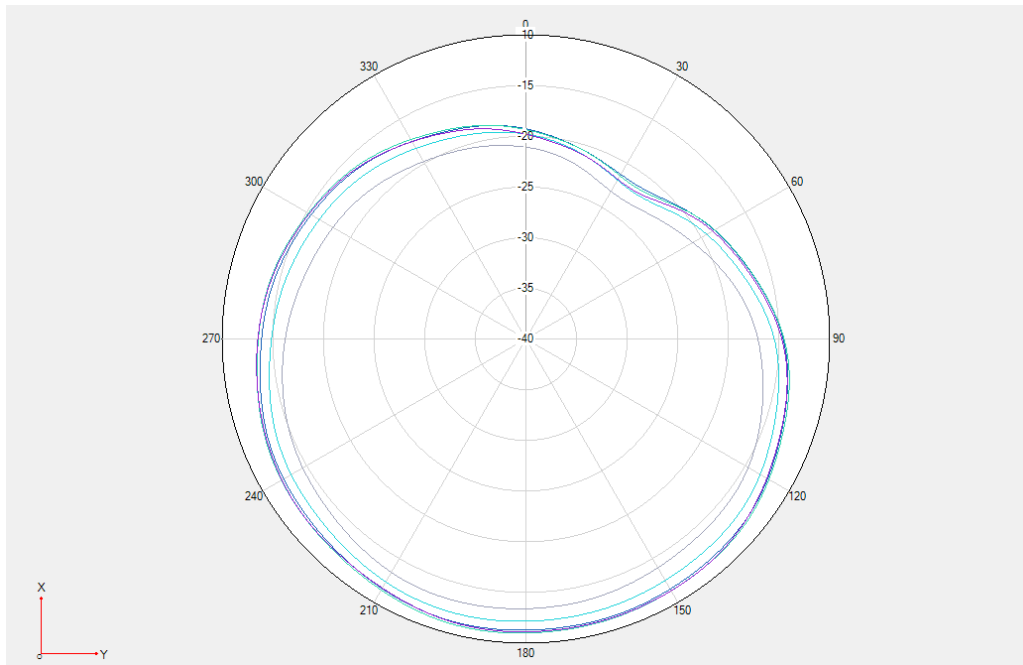
**ANT2 MB-DRX2+N28**



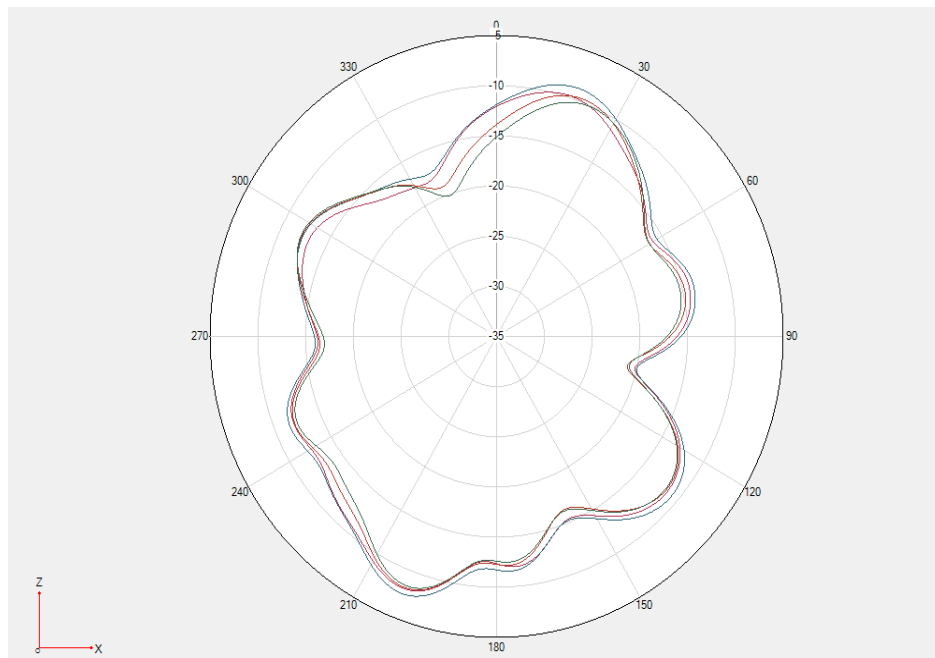
ANT2 MB-DRX2+N28 N28  $\Phi = 0^\circ$



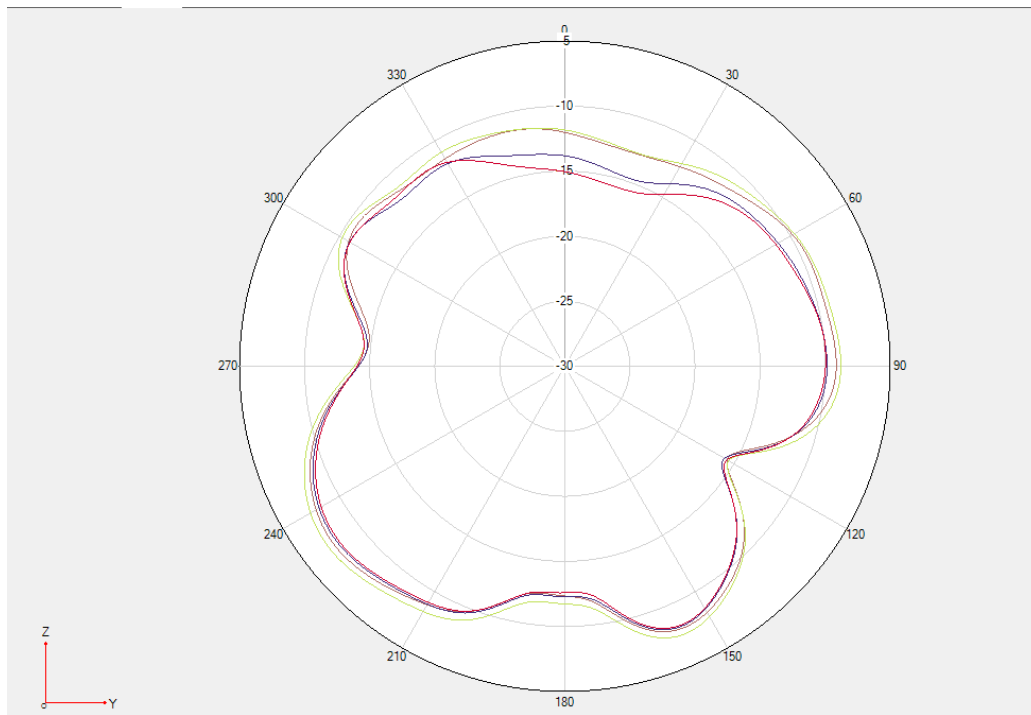
ANT2 MB-DRX2+N28 N28  $\Phi = 90^\circ$



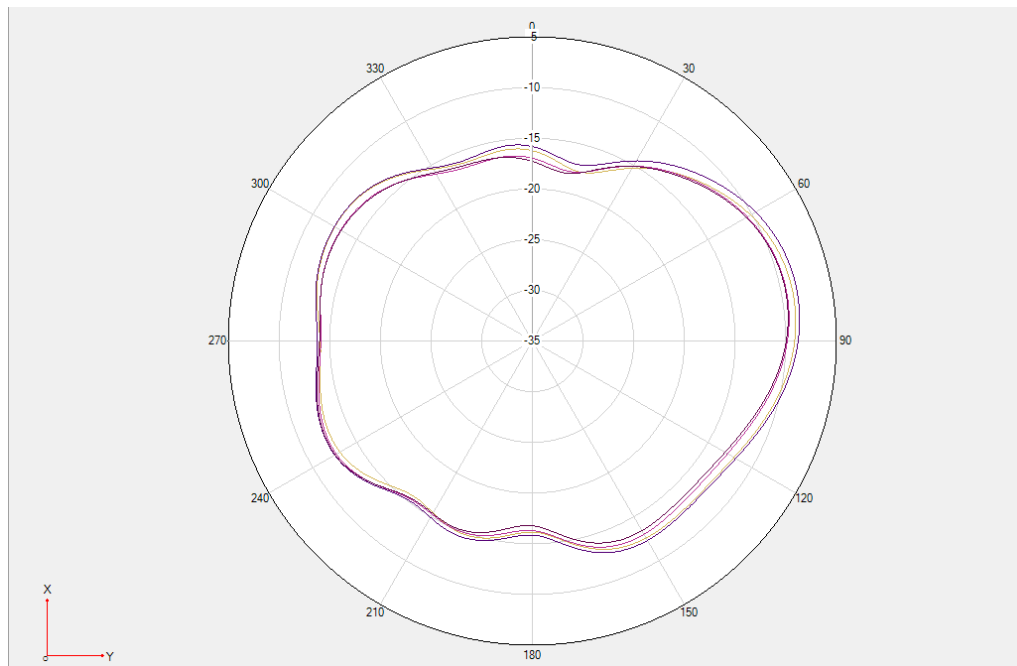
ANT2 MB-DRX2+N28 N28 Theta=90deg



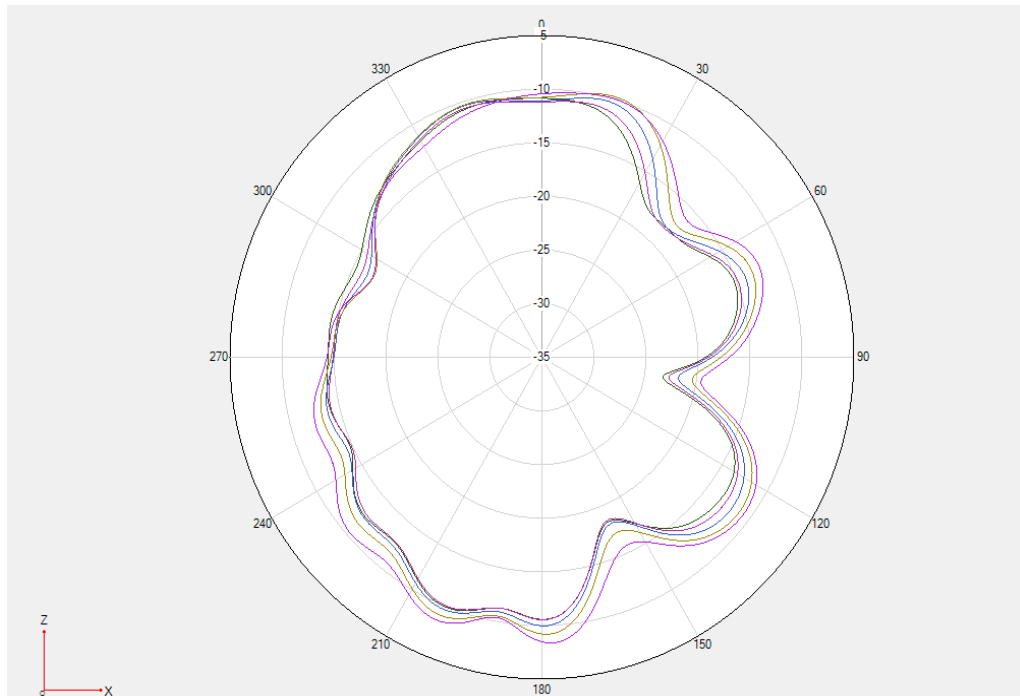
ANT2 MB-DRX2+N28 B1 Phi=0deg



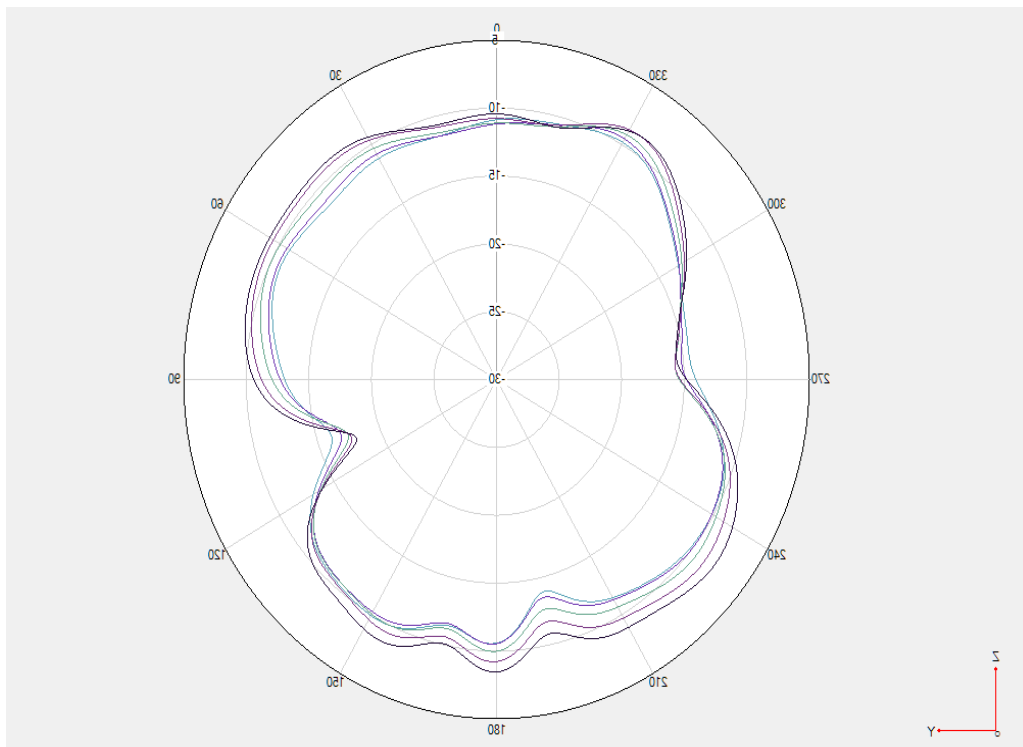
ANT2 MB-DRX2+N28 B1/B2  $\Phi=90^\circ$



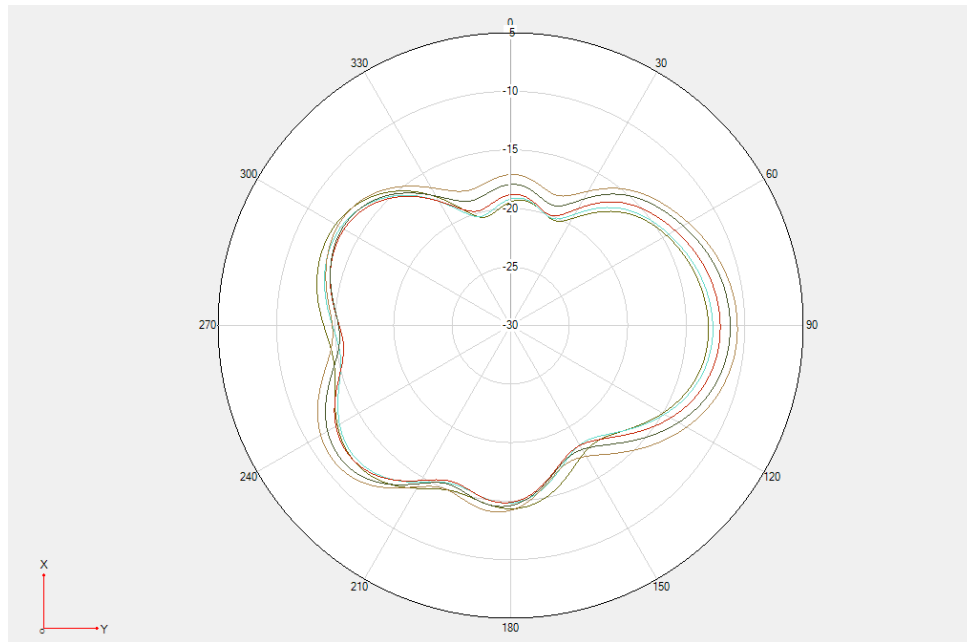
ANT2 MB-DRX2+N28 B1/B2  $\Theta=90^\circ$



ANT2 MB-DRX2+N28 B3/B4 Phi=0deg



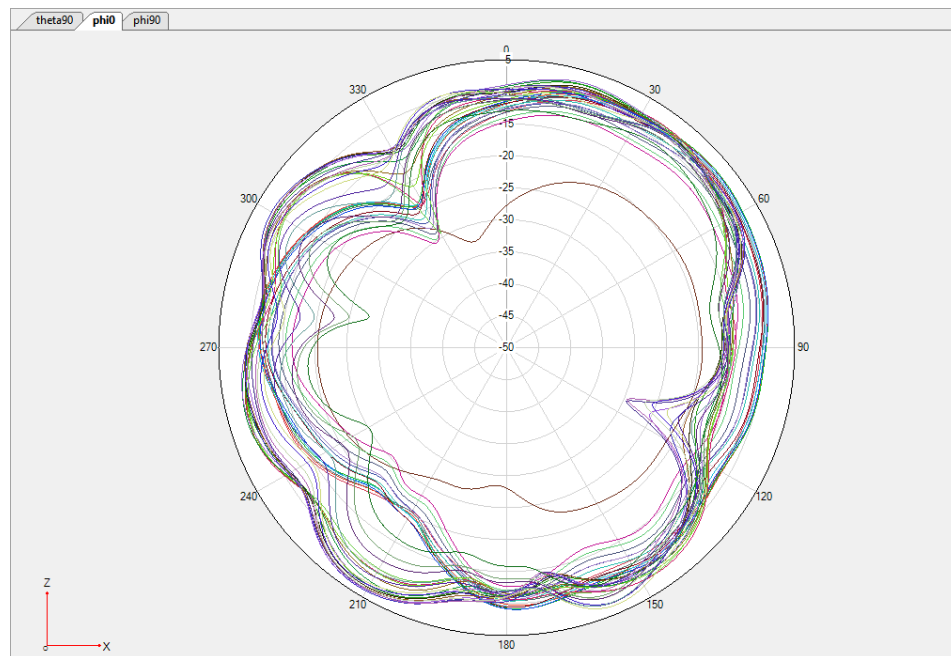
ANT2 MB-DRX2+N28 B3/B4 Phi=90deg



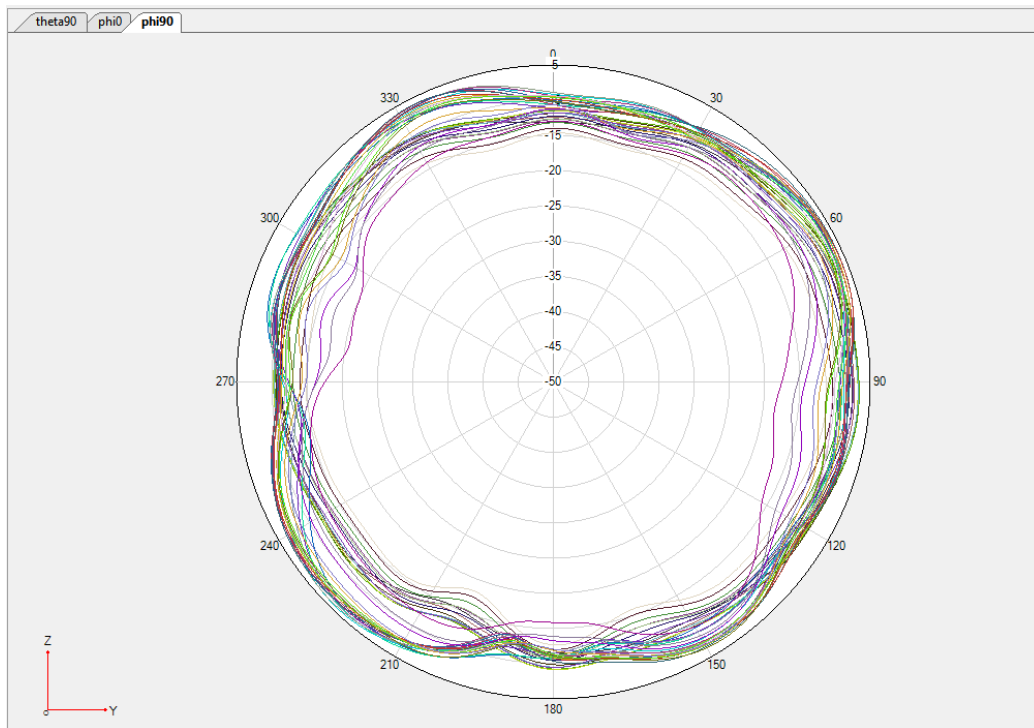
ANT2 MB-DRX2+N28 B3/B4 Theta=90deg

※ Antenna Gain

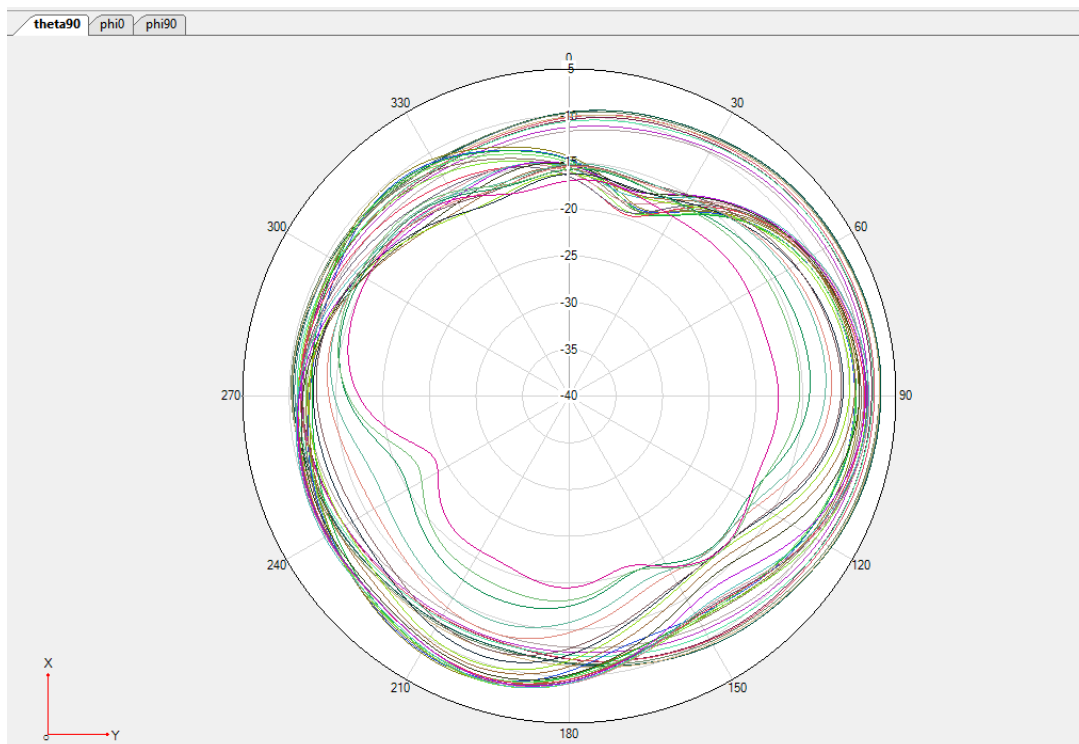
### ANT3 LB-PRX+HB-DRX2



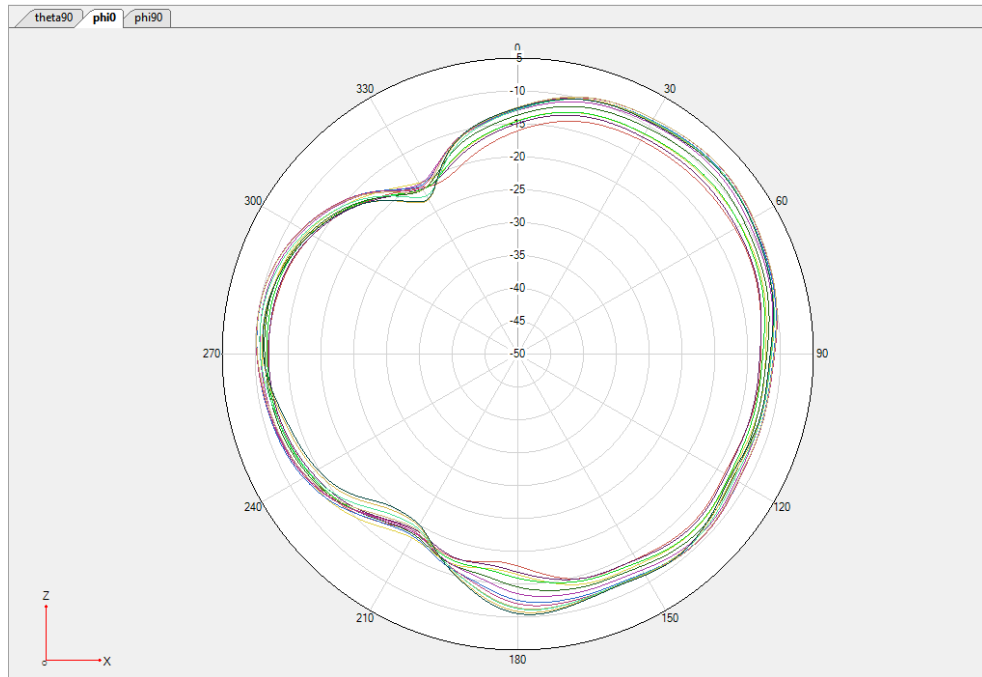
ANT3 LB-PRX+HB-DRX2 GSM 900/WCDMA B8/LTE B8/41/7 /N8 Phi=0deg



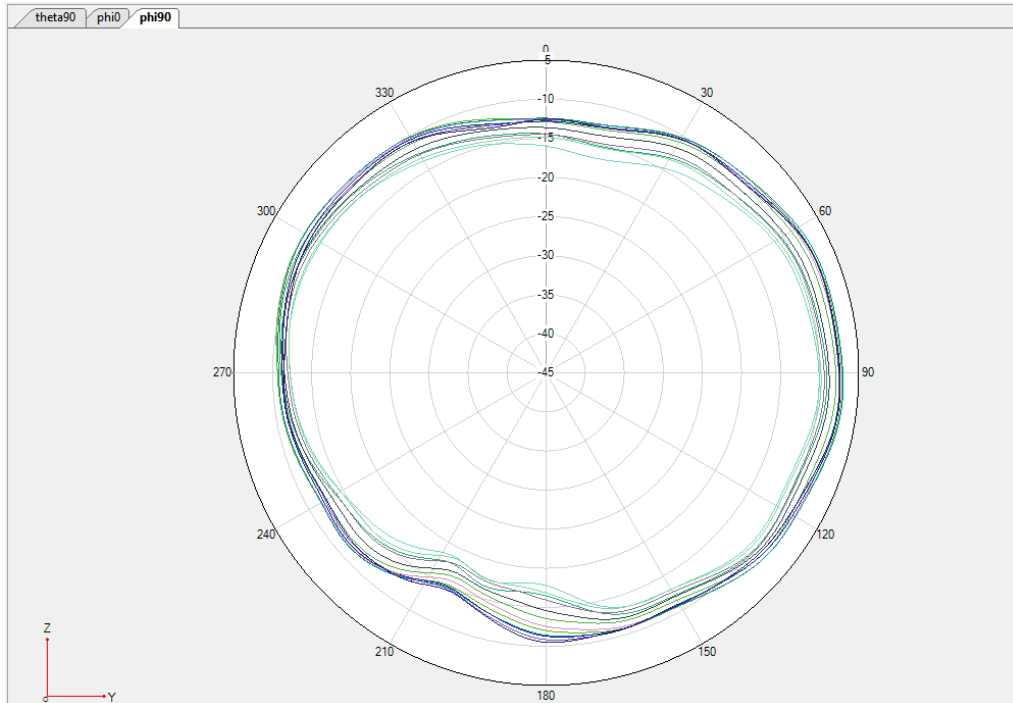
ANT3 LB-PRX+HB-DRX2 GSM 900/WCDMA B8/LTE B8/41/7 /N8 Phi=90deg



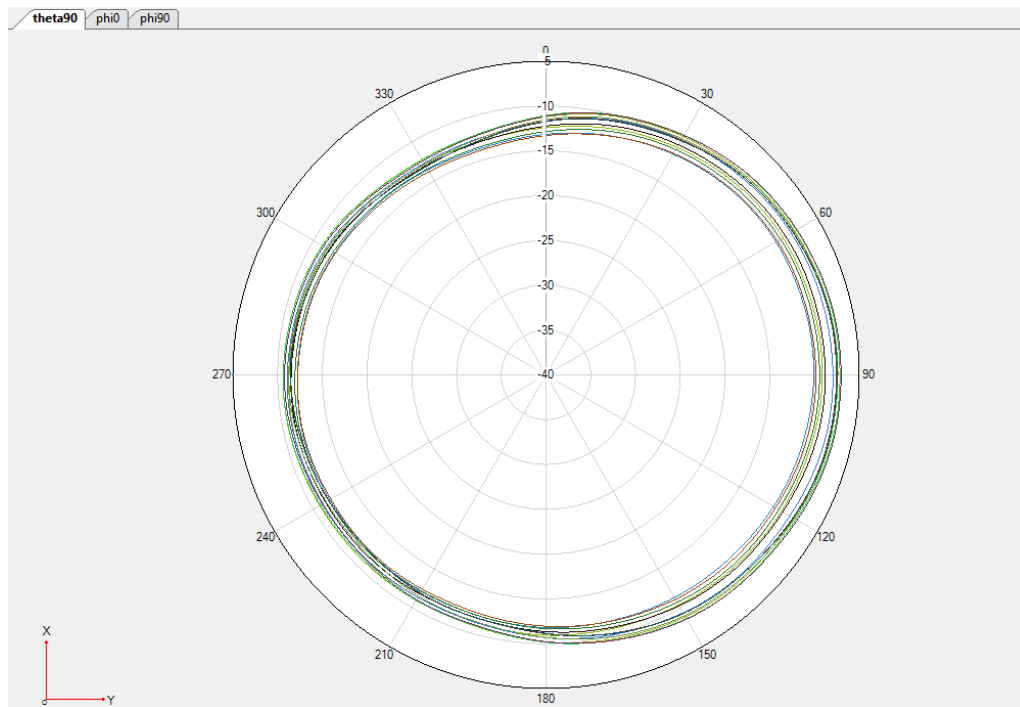
ANT3 LB-PRX+HB-DRX2 GSM 900/WCDMA B8/LTE B8/41/7 /N8 Theta=90deg



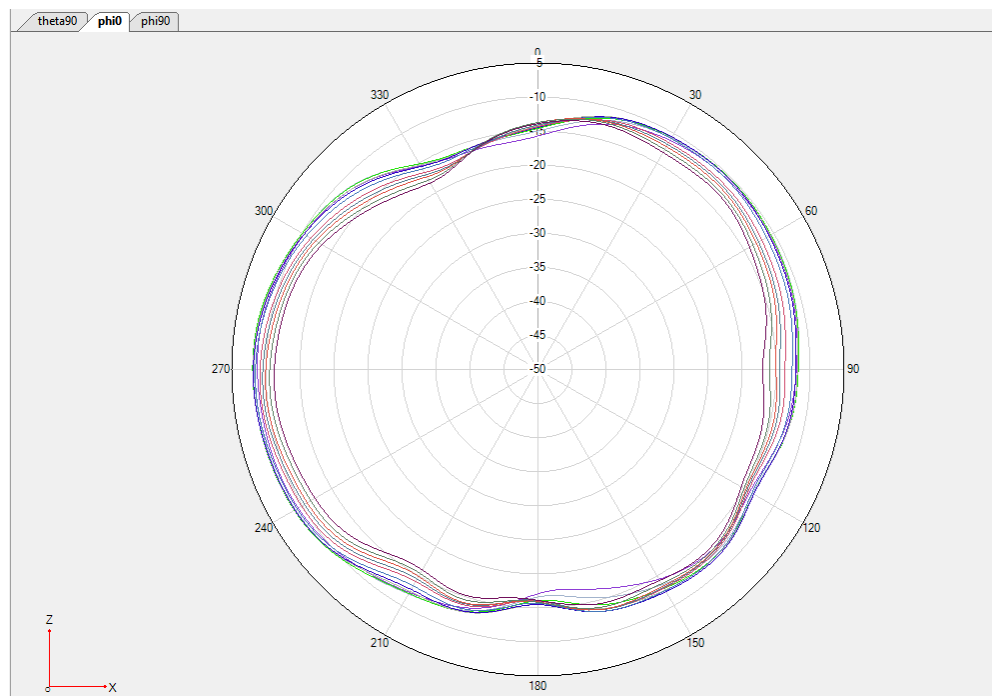
**ANT3 LB-PRX+HB-DRX2** GSM 850/WCDMA B5/LTE B5/ N5 Phi=0deg



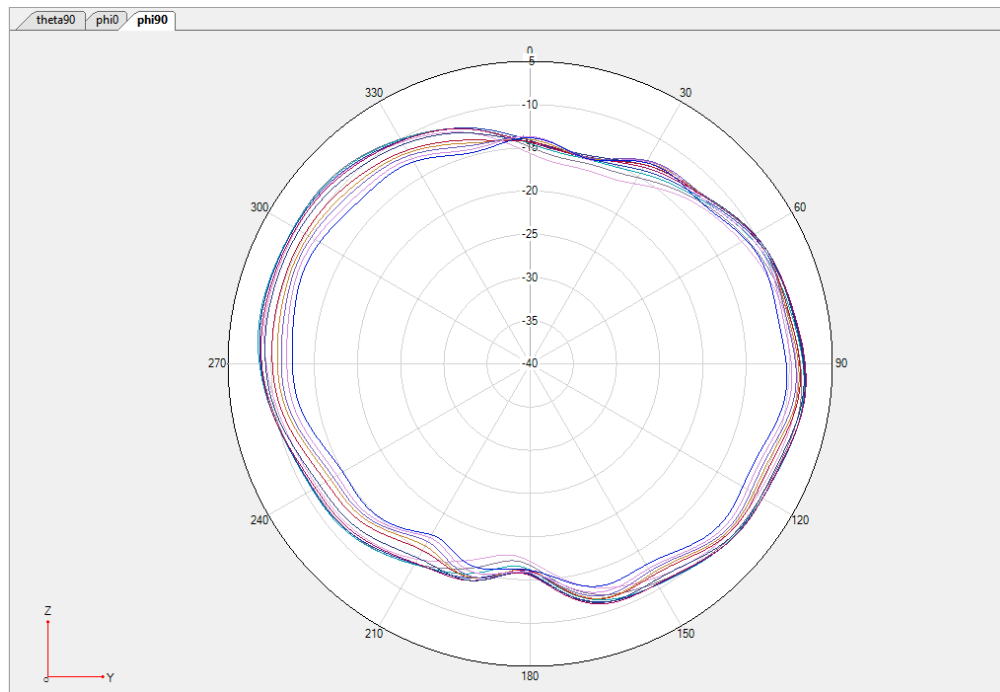
**ANT3 LB-PRX+HB-DRX2** GSM 850/WCDMA B5/LTE B5/ N5 Phi=90deg



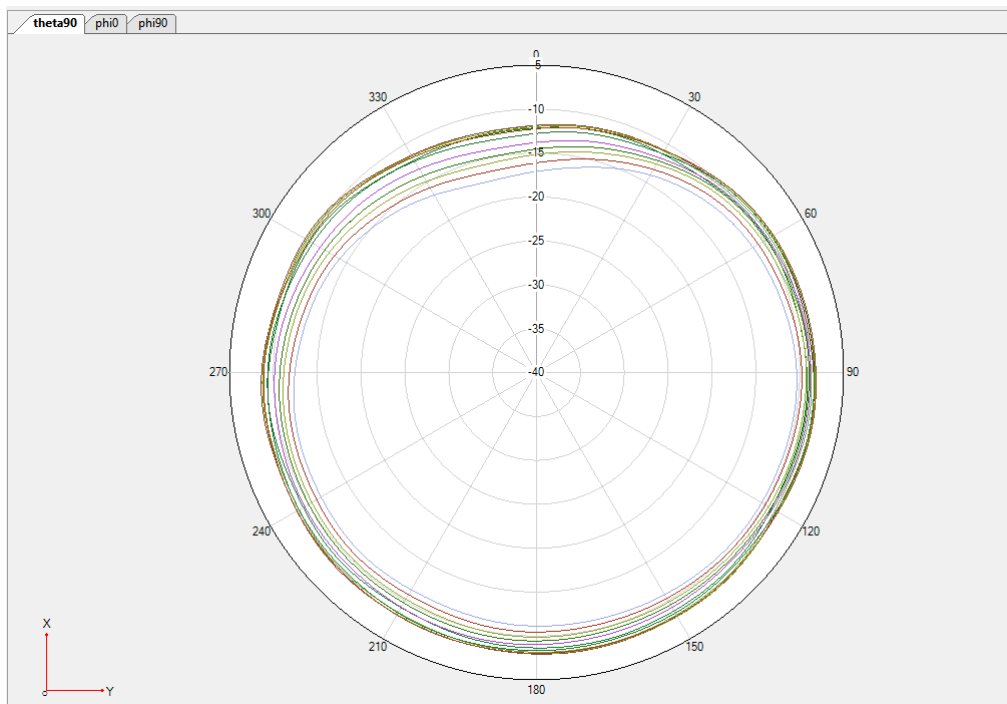
**ANT3 LB-PRX+HB-DRX2** GSM 850/WCDMA B5/LTE B5/ N5 Theta=90deg



**ANT3 LB-PRX+HB-DRX2** B12/13/17/B28/N12/N28 Phi=0deg



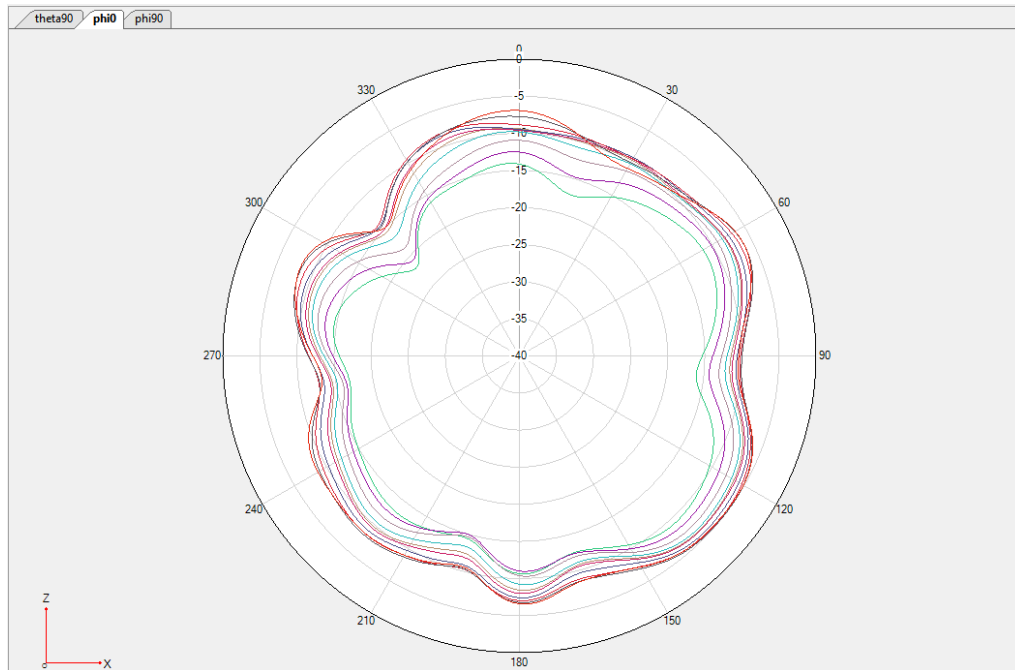
ANT3 LB-PRX+HB-DRX2 B12/13/17/B28/N12/N28 Phi=90deg



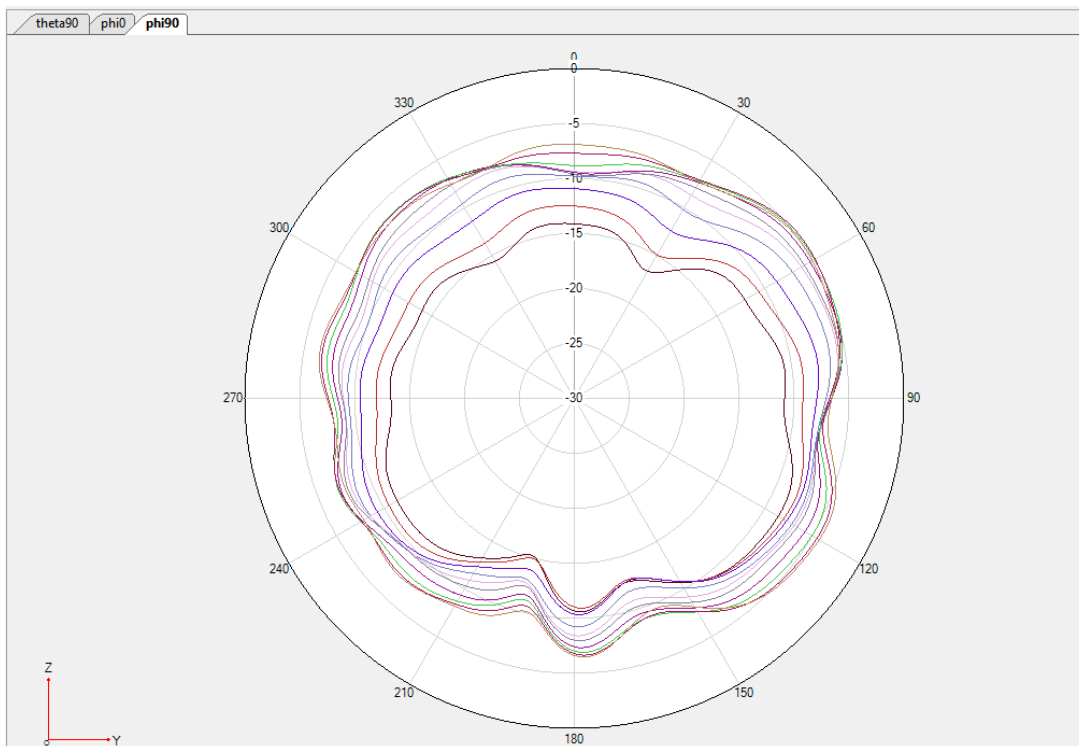
ANT3 LB-PRX+HB-DRX2 B12/13/17/B28/N12/N28 Theta=90deg

※ Antenna Gain

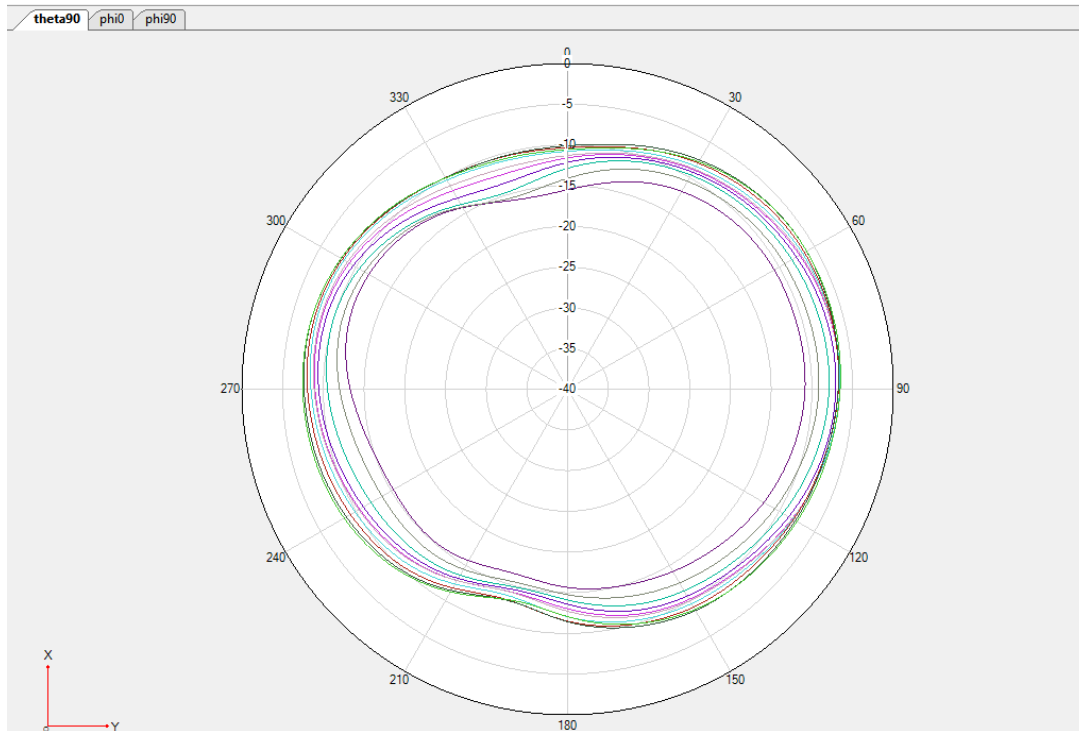
**ANT4 MHB-DRX+N77-DRX2**



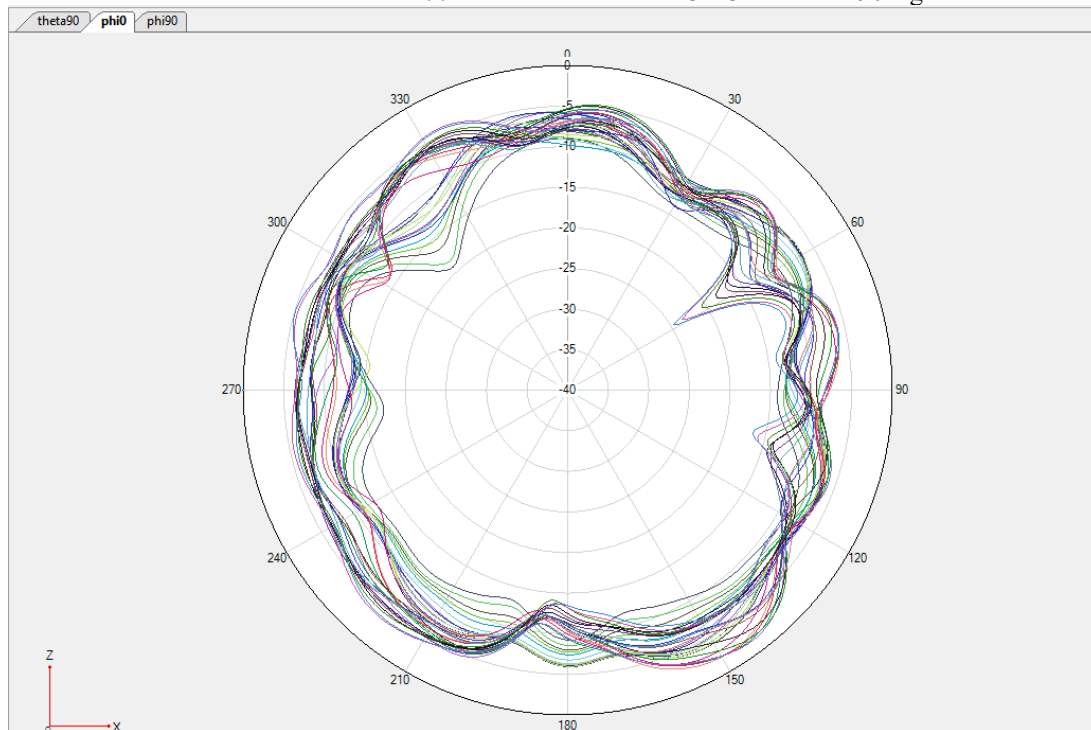
ANT4 MHB-DRX+N77-DRX2 DCS/LTE B3/B4/B66/N3 Phi=0deg



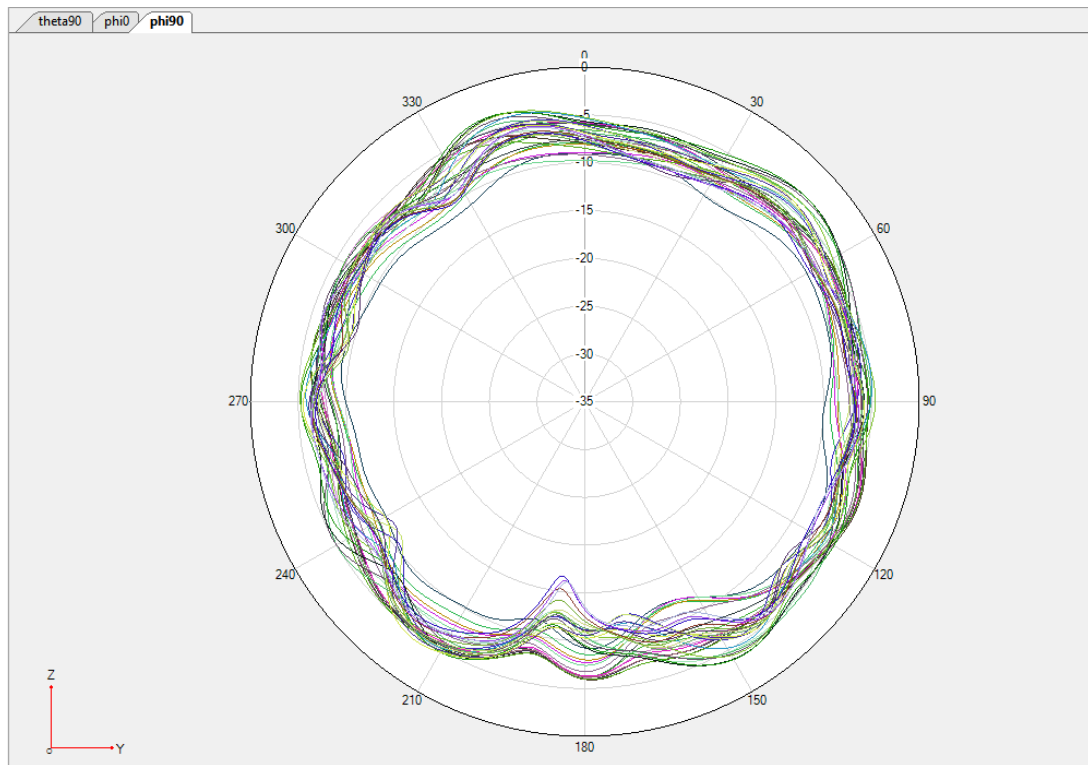
ANT4 MHB-DRX+N77-DRX2 DCS/LTE B3/B4/B66/N3/N66 Phi=90deg



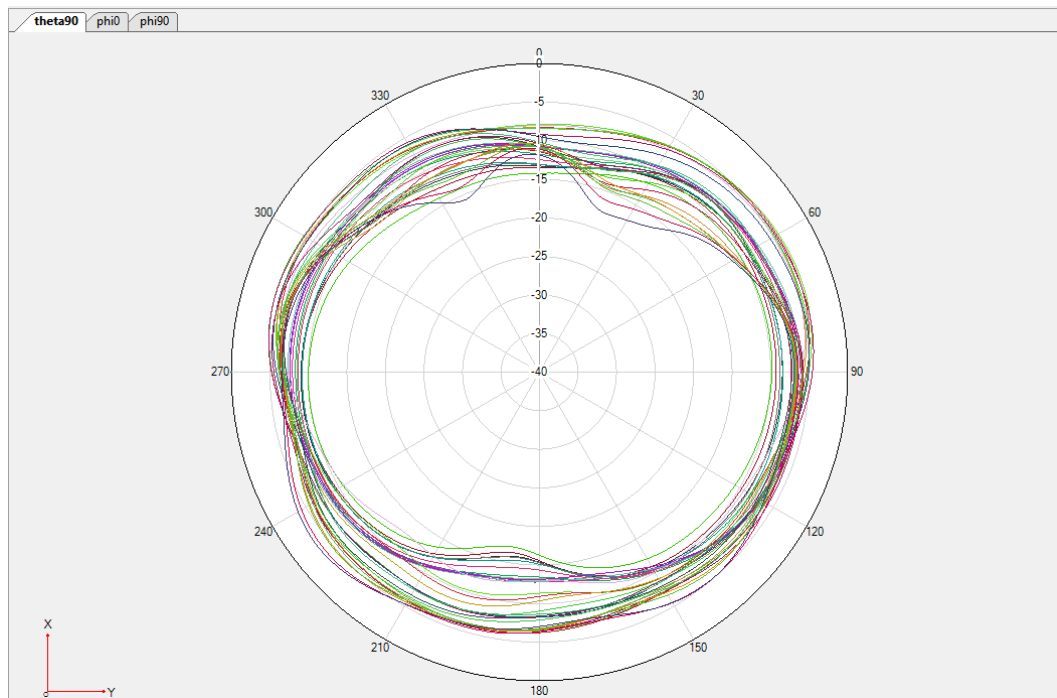
ANT4 MHB-DRX+N77-DRX2 DCS/LTE B3/N3 Theta=90deg



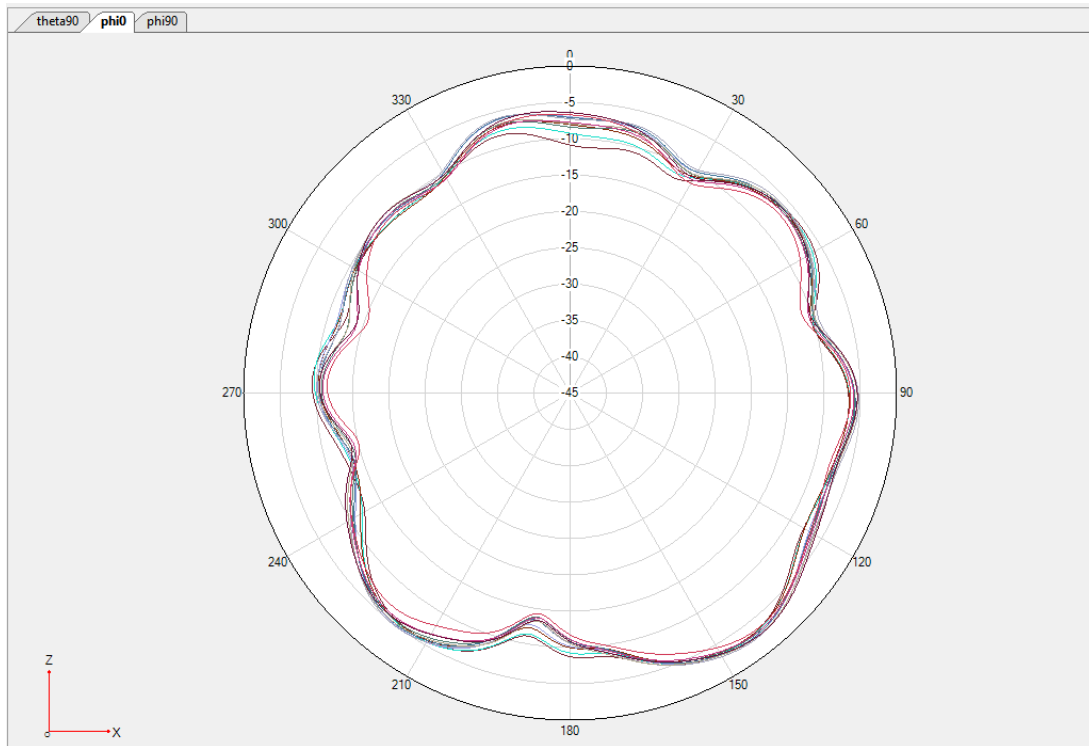
ANT4 MHB-DRX+N77-DRX2 PCS/WCDMA B1/2/LTE B1/2/N1 Phi=0deg



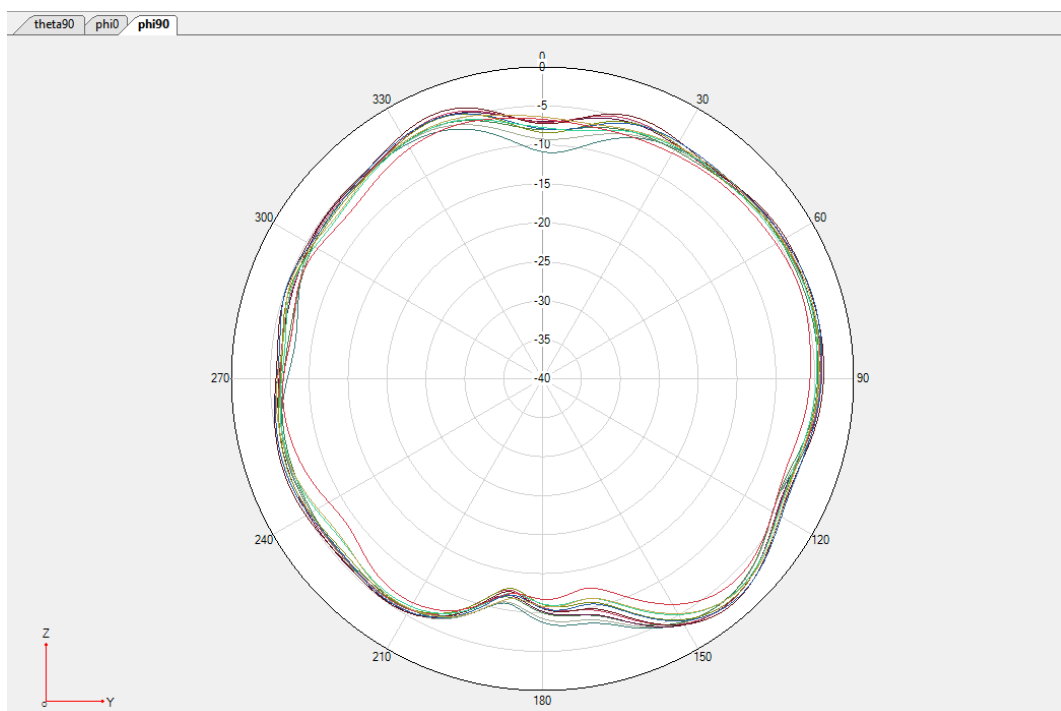
ANT4 MHB-DRX+N77-DRX2 PCS/WCDMA B1/2/LTE B1/2/N1 Phi=90deg



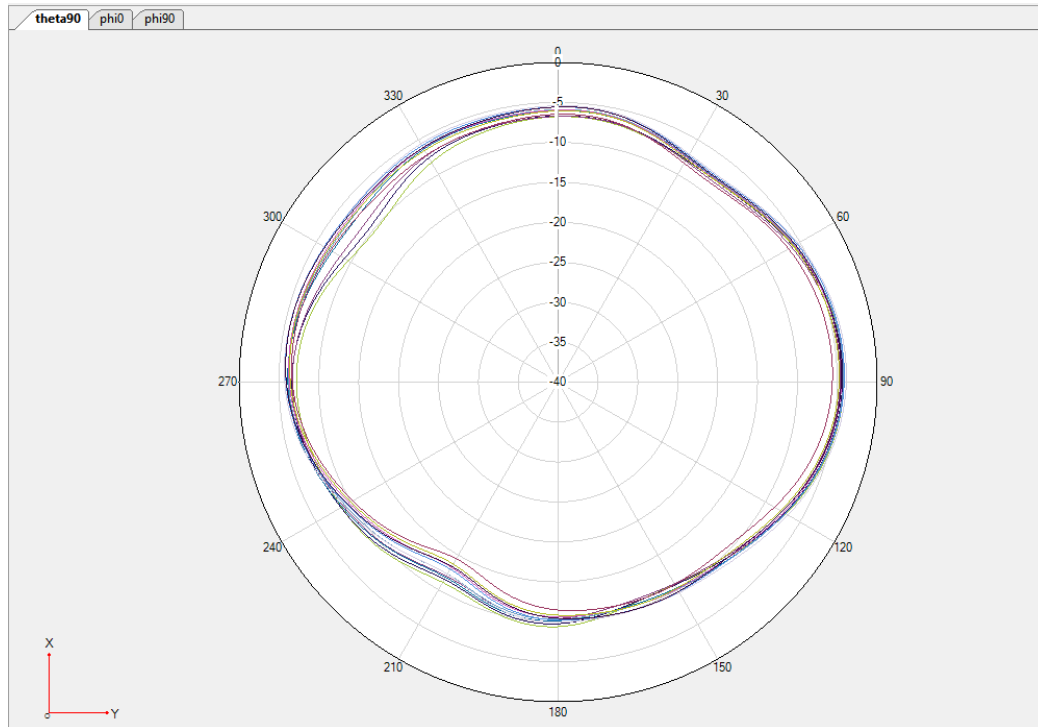
ANT4 MHB-DRX+N77-DRX2 PCS/WCDMA B1/2/LTE B1/2/N1 Theta=90deg



ANT4 MHB-DRX+N77-DRX2 LTE B7/B38/B41 NR N7/N38/N41 Phi=0deg

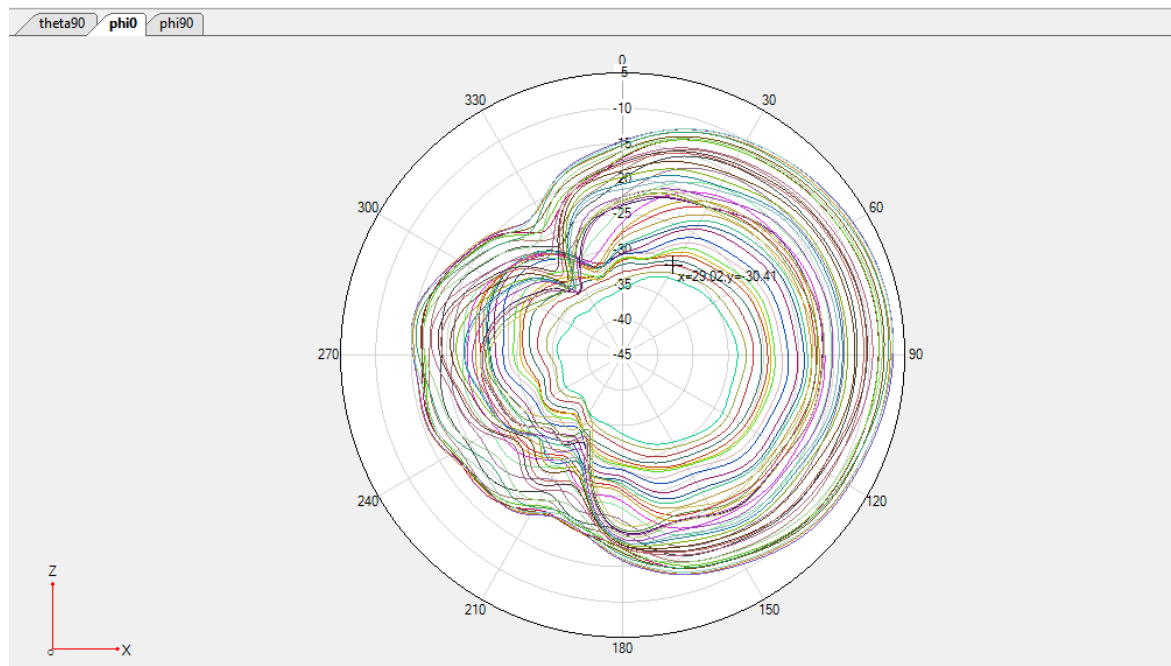


ANT4 MHB-DRX+N77-DRX2 LTE B7/B38/B41 NR N7/N38/N41 Phi=90deg

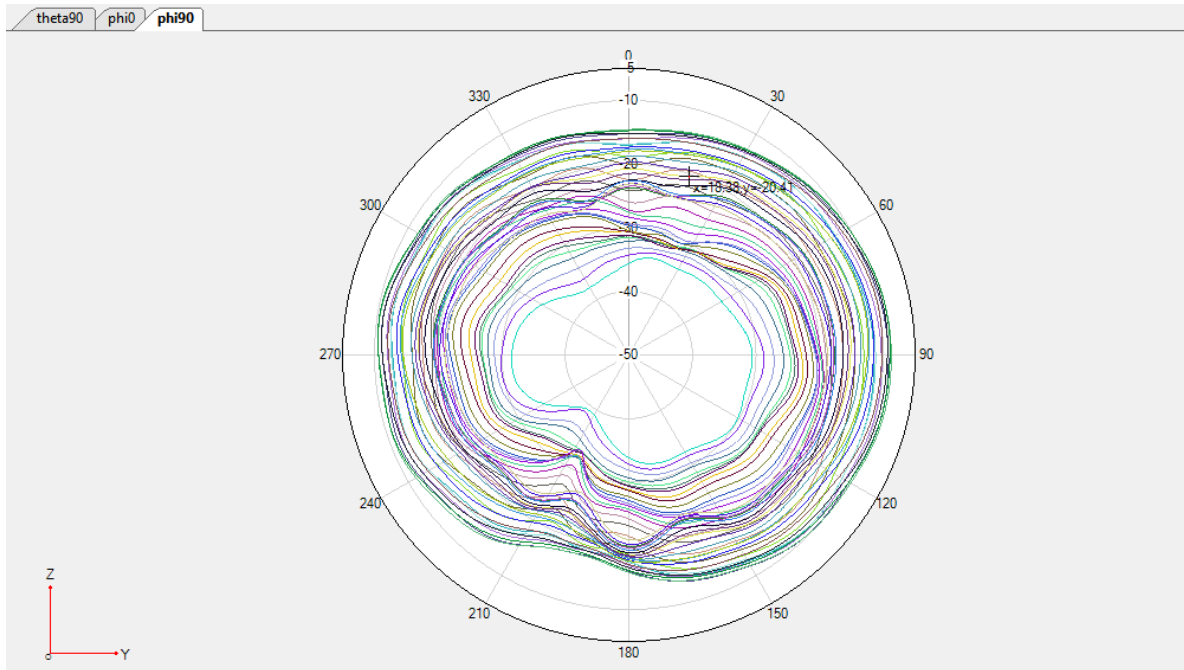


ANT4 MHB-DRX+N77-DRX2 LTE B7/B38/B41 NR N7/N38/N41 Theta=90deg

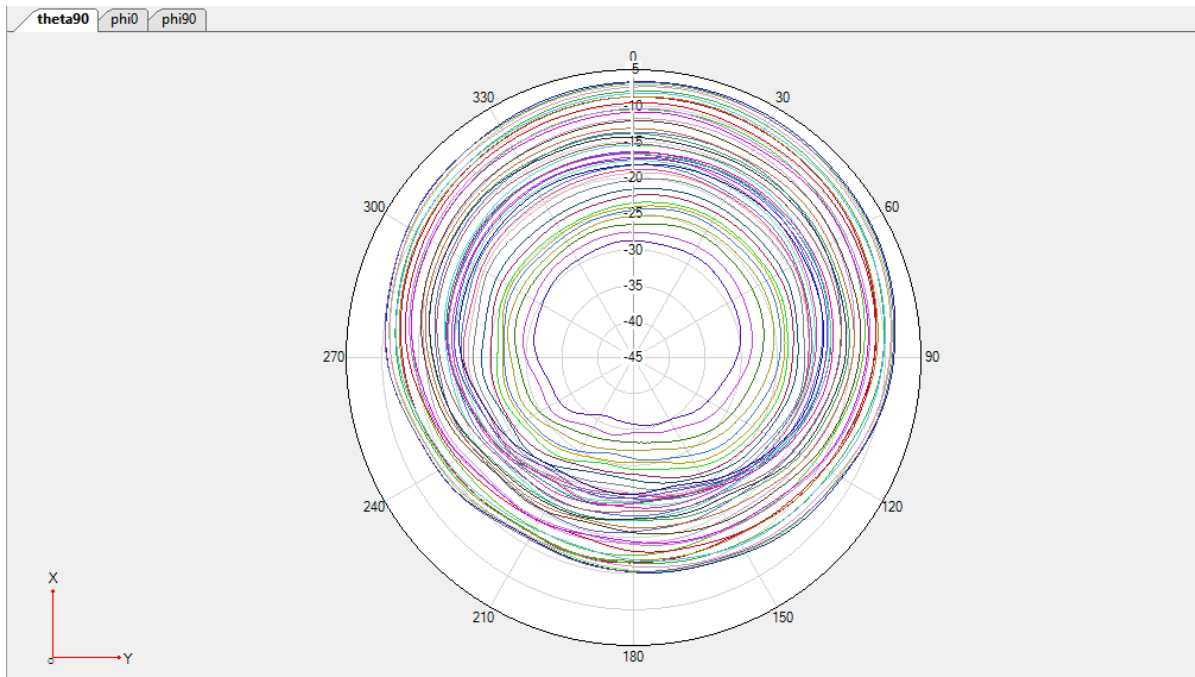
※ Antenna Gain



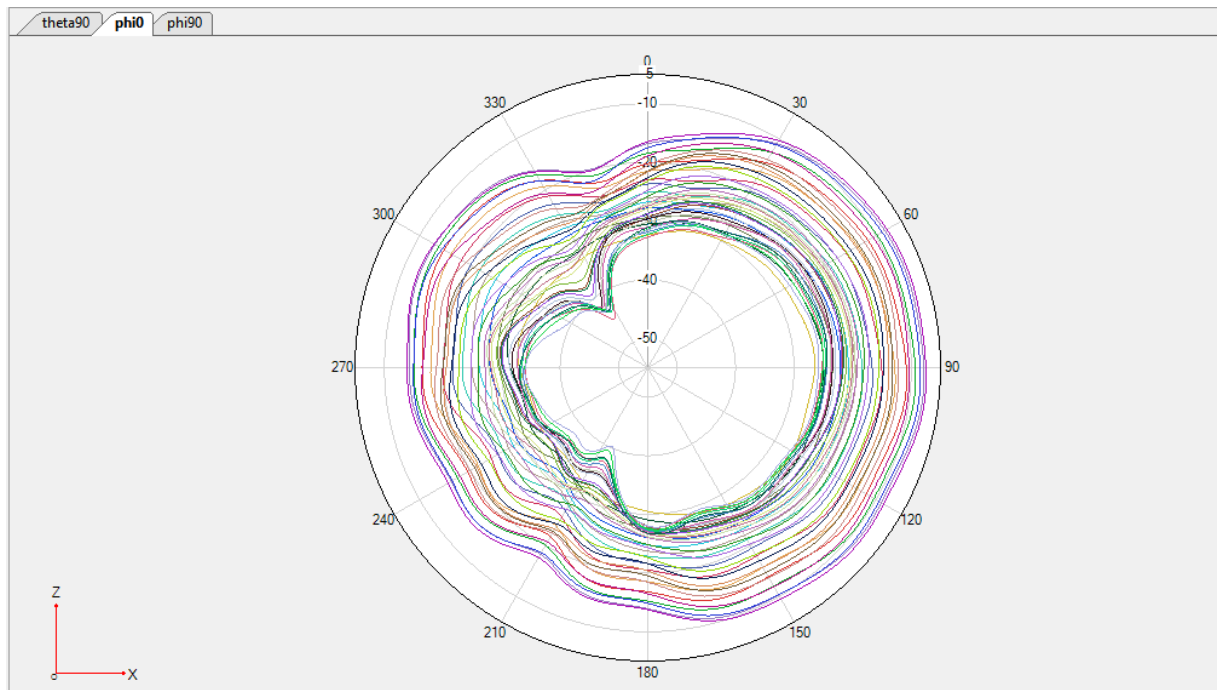
ANT5 LB-DRX GSM 850/WCDMA B5/LTE B5/B20/N5/N20 Phi=0deg



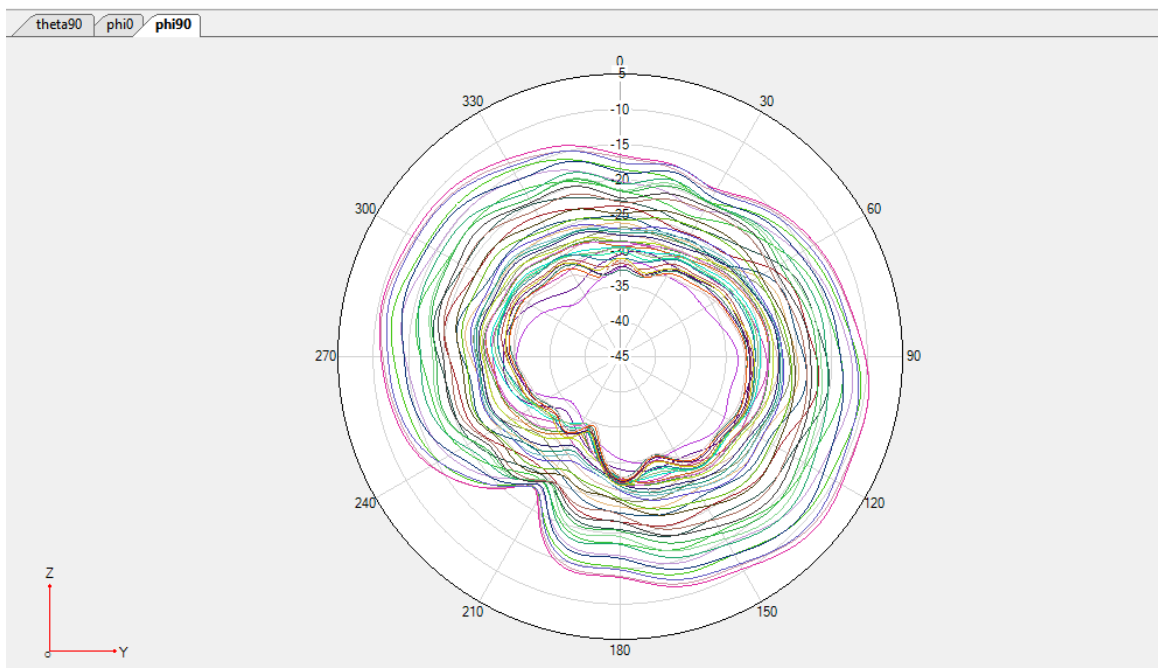
ANT5 LB-DRX GSM 850/WCDMA B5/LTE B5/B20/N5/N20 Phi=90deg



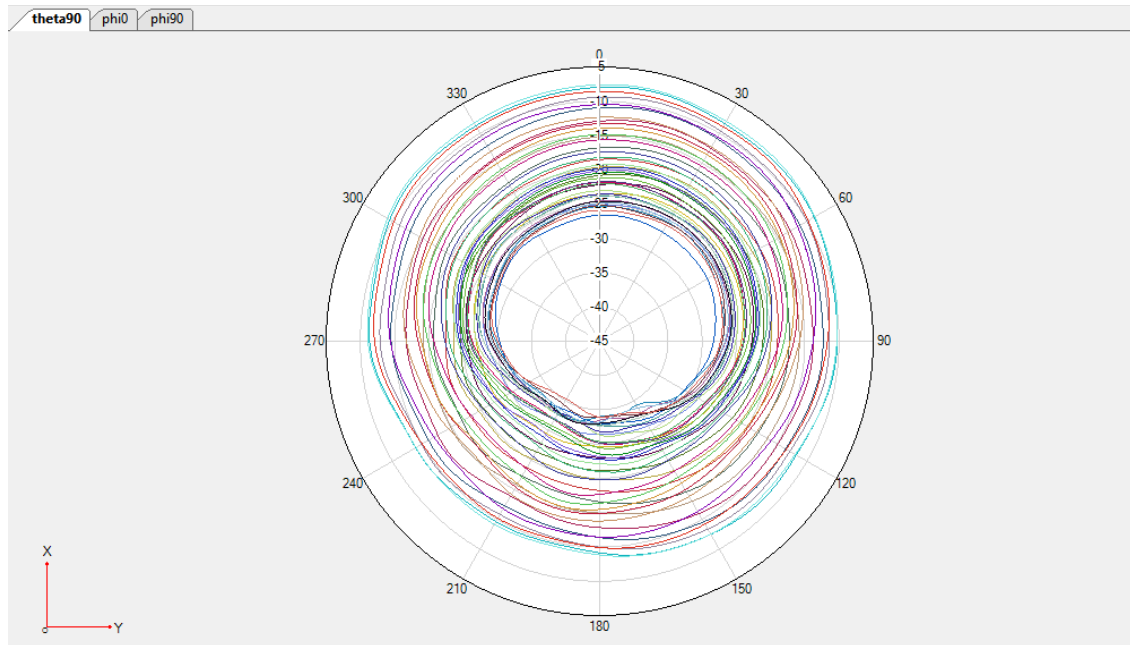
ANT5 LB-DRX GSM 850/WCDMA B5/LTE B5/B20/N5/N20 Theta=90deg



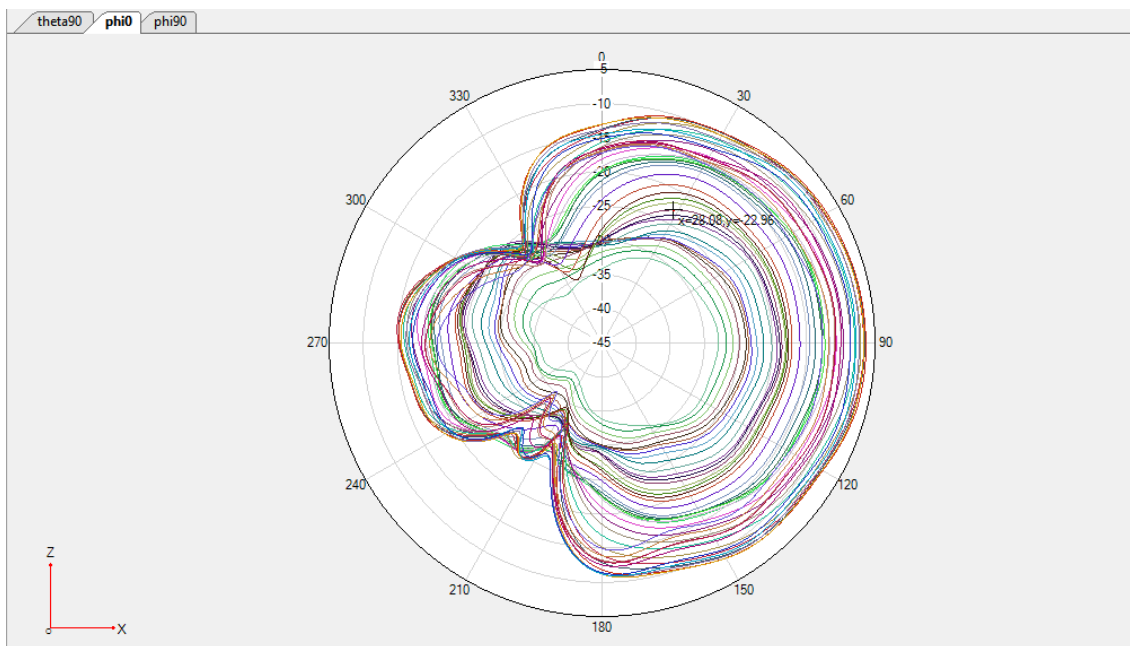
ANT5 LB-DRX B12/13/17B28/N12/N28  $\Phi = 0^\circ$



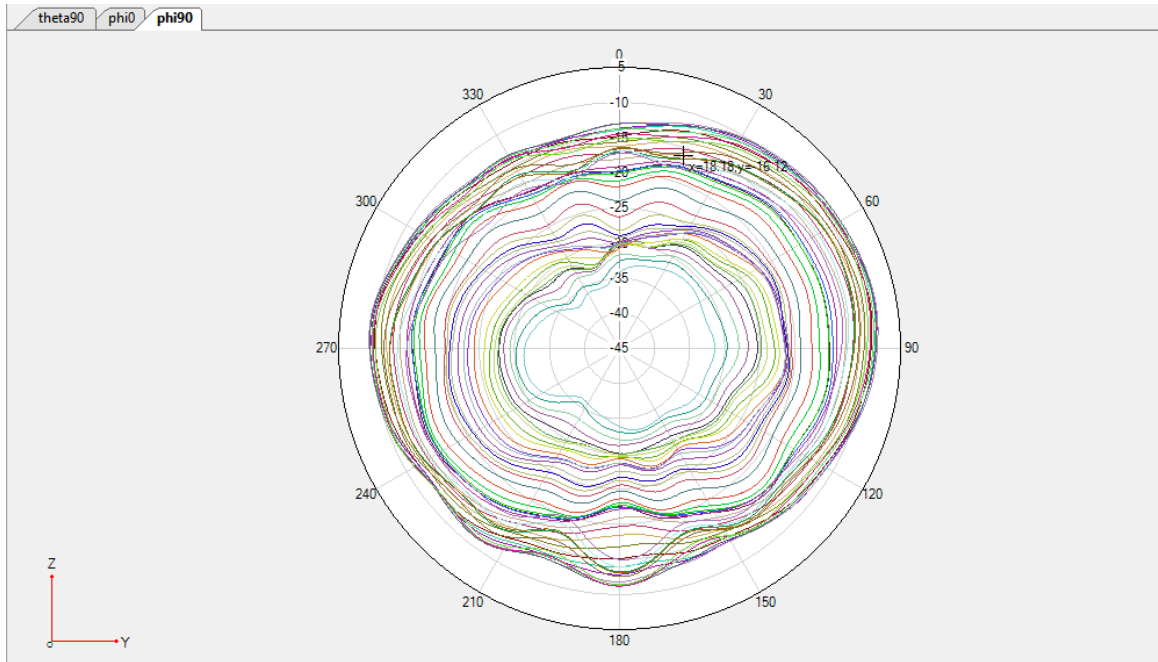
ANT5 LB-DRX B12/13/17B28/N12/N28 Phi=90deg



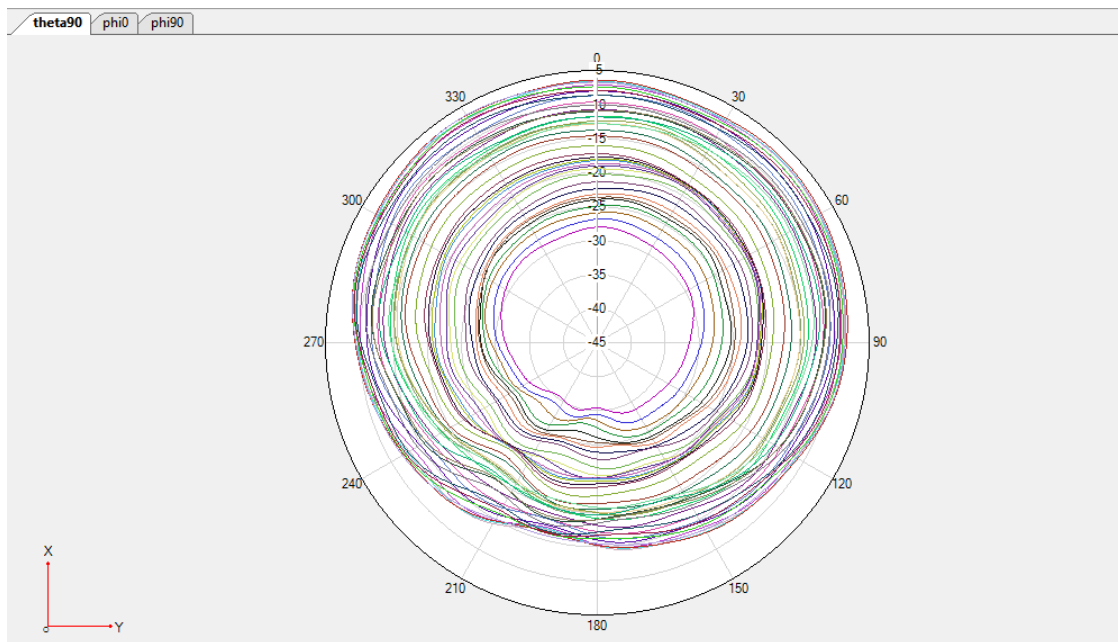
ANT5 LB-DRX B12/13/17B28/N12/N28 Theta=90deg



ANT5 LB-DRX GSM 900/WCDMA B8/LTE B8 /N8 Phi=0deg



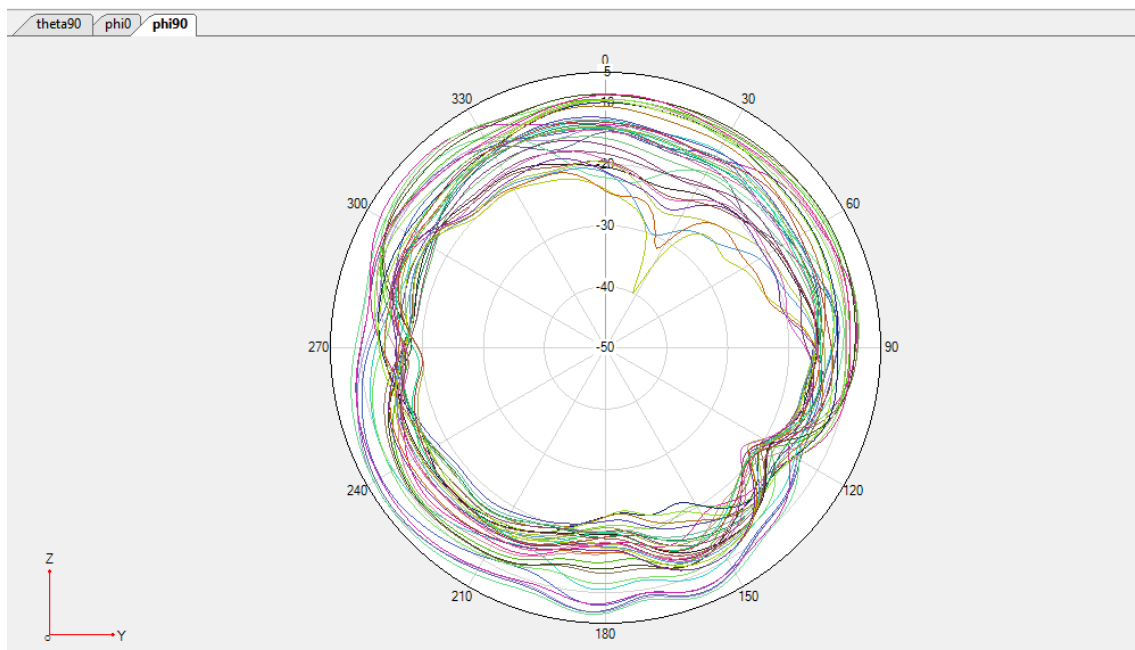
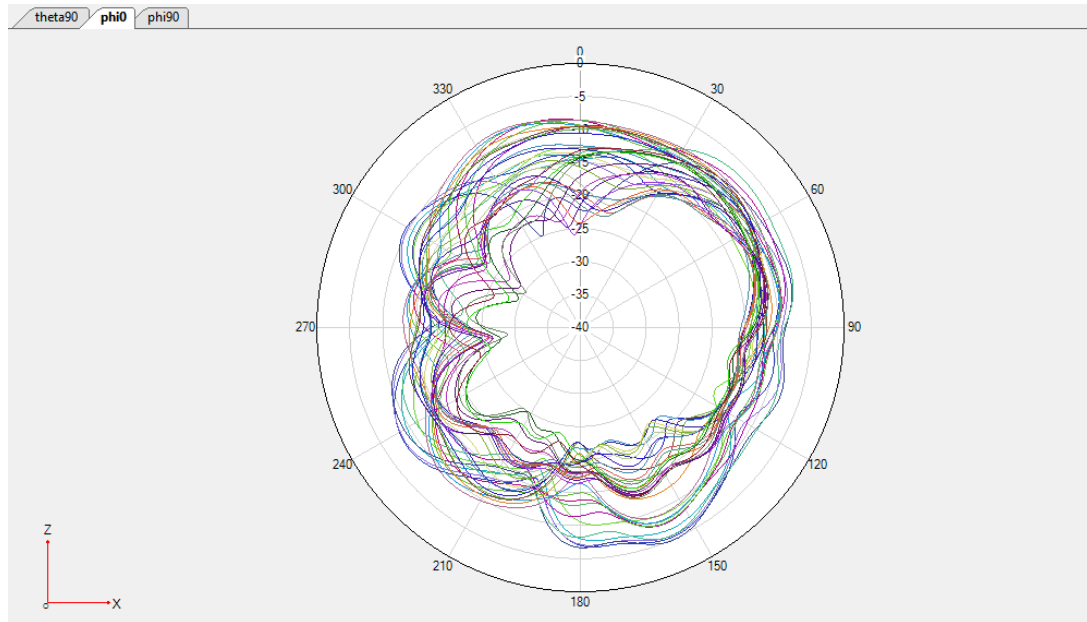
ANT5 LB-DRX B8/N8 Phi=90deg

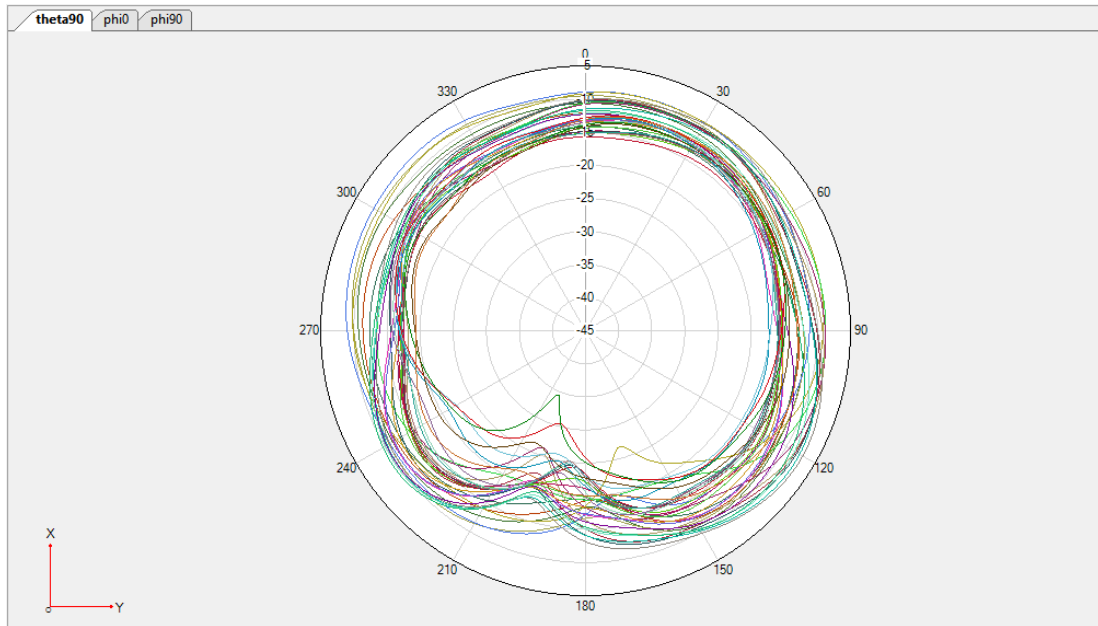


ANT5 LB-DRX B8/N8 Theta=90deg

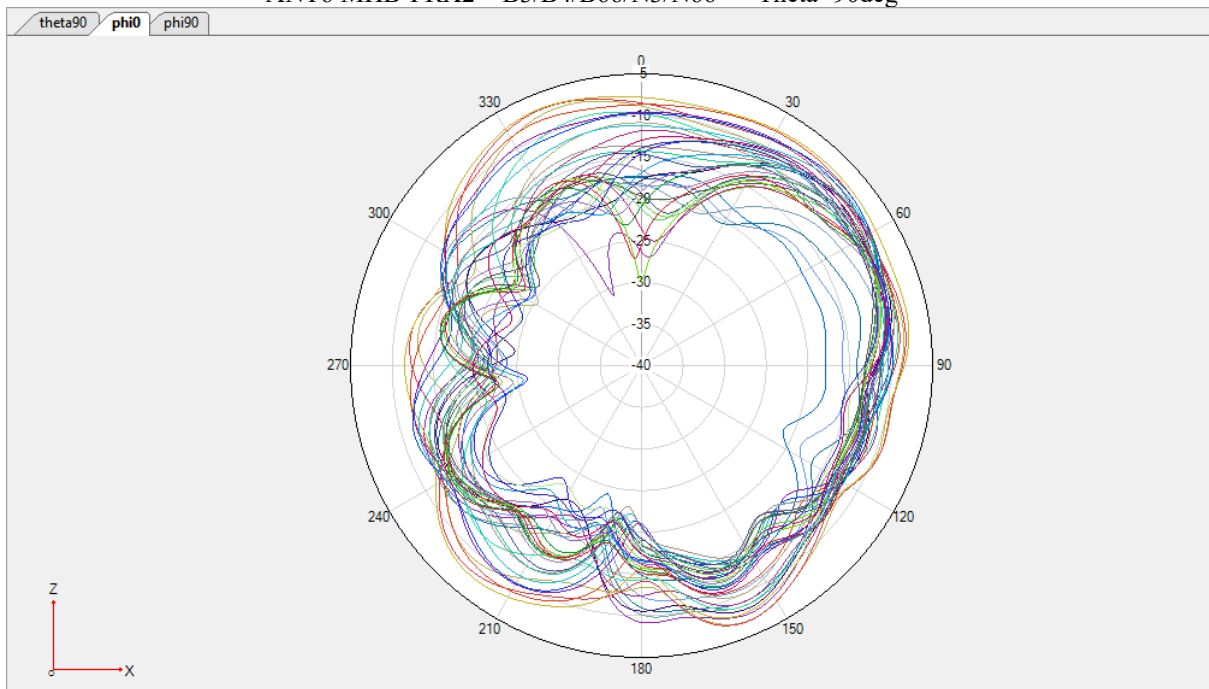
※ Antenna Gain

**ANT6 MHB-PRX2**

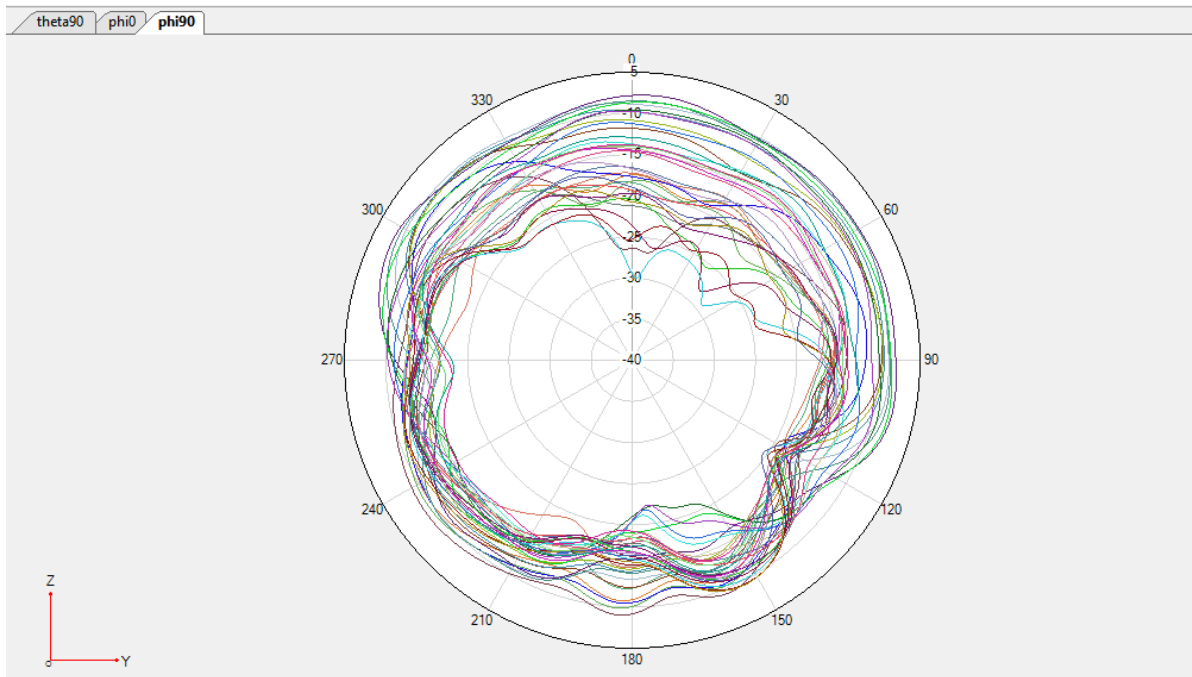




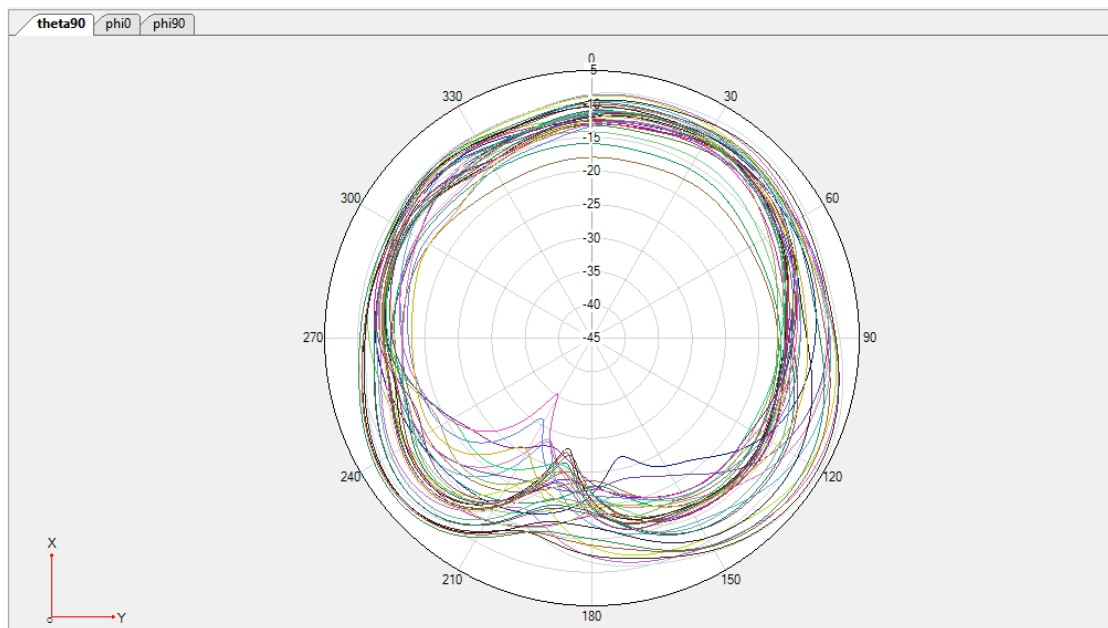
ANT6 MHB-PRX2 B3/B4/B66/N3/N66 Theta=90deg



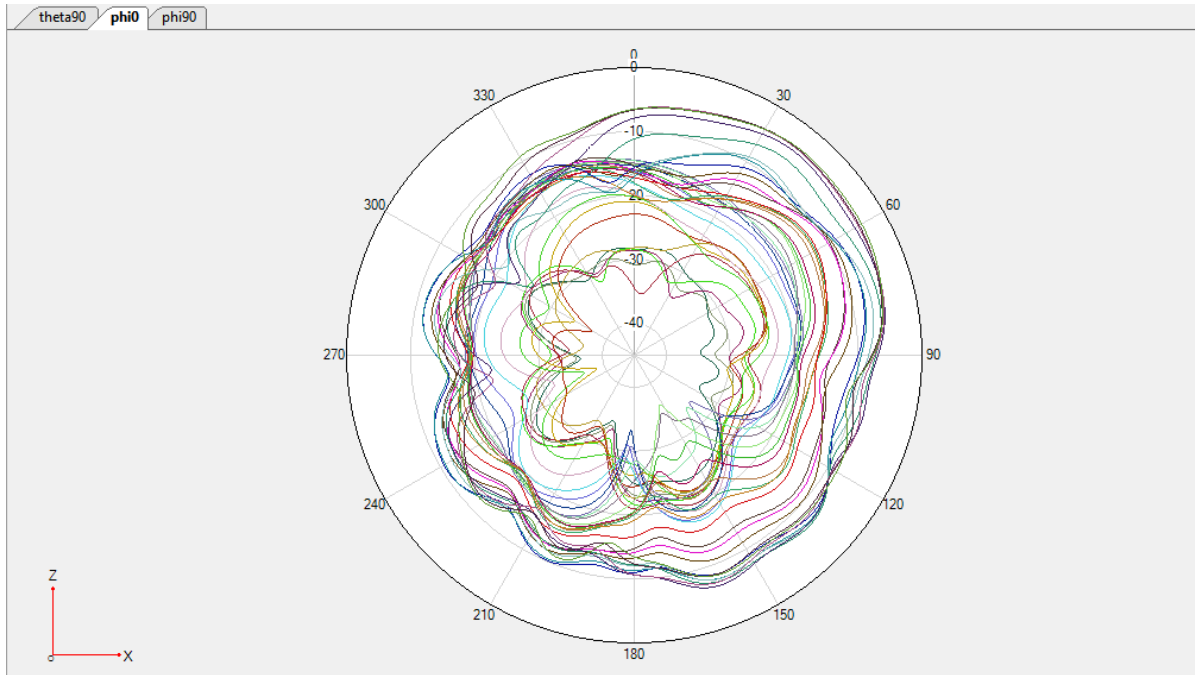
ANT6 MHB-PRX2 B1/B2/N1 Phi=0deg



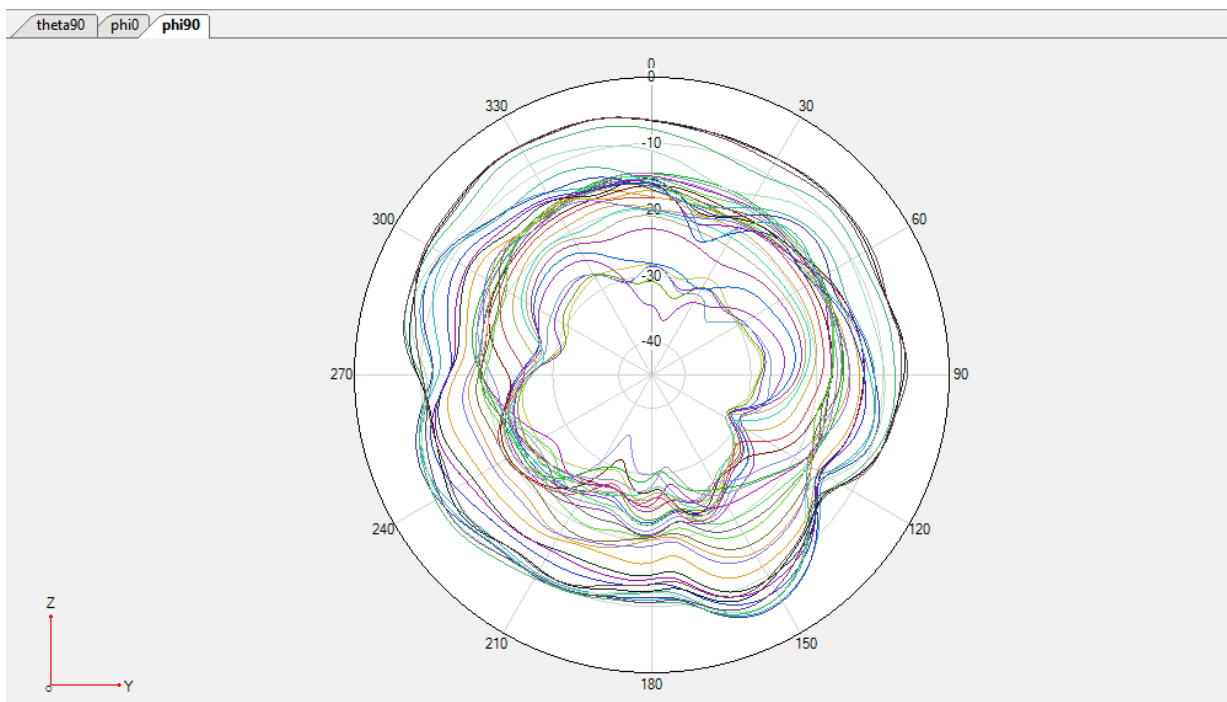
ANT6 MHB-PRX2 B1/B2/N1 Phi=90deg



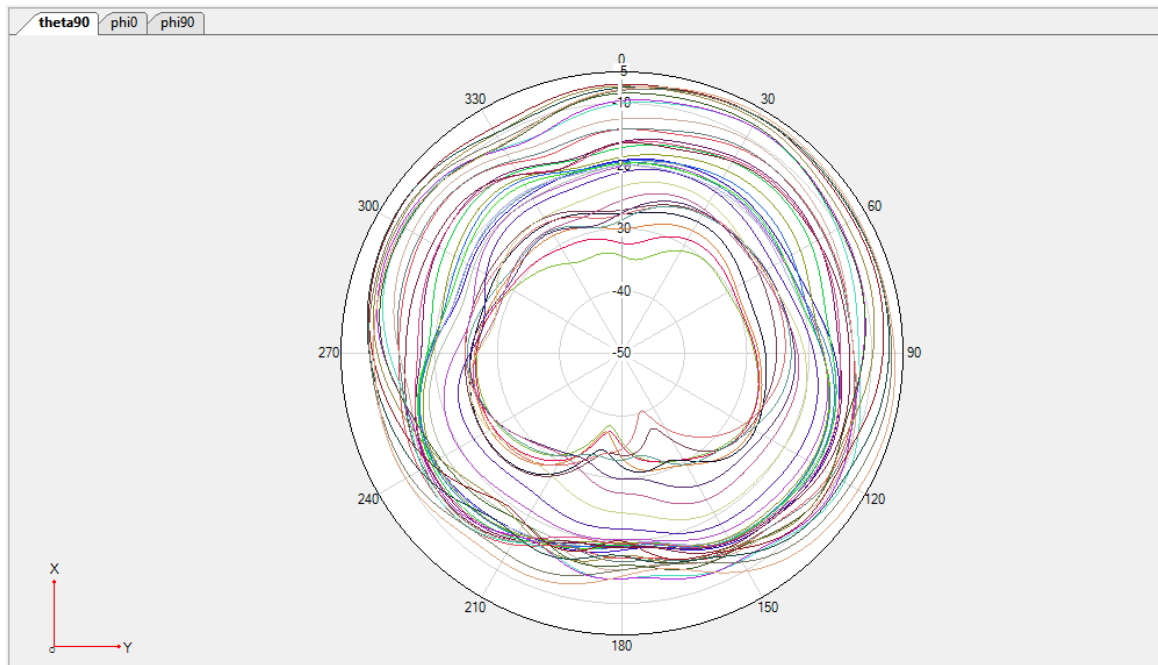
ANT6 MHB-PRX2 B1/B2/N1 Theta=90deg



ANT6 MHB-PRX2 B41/N41 Phi=0deg



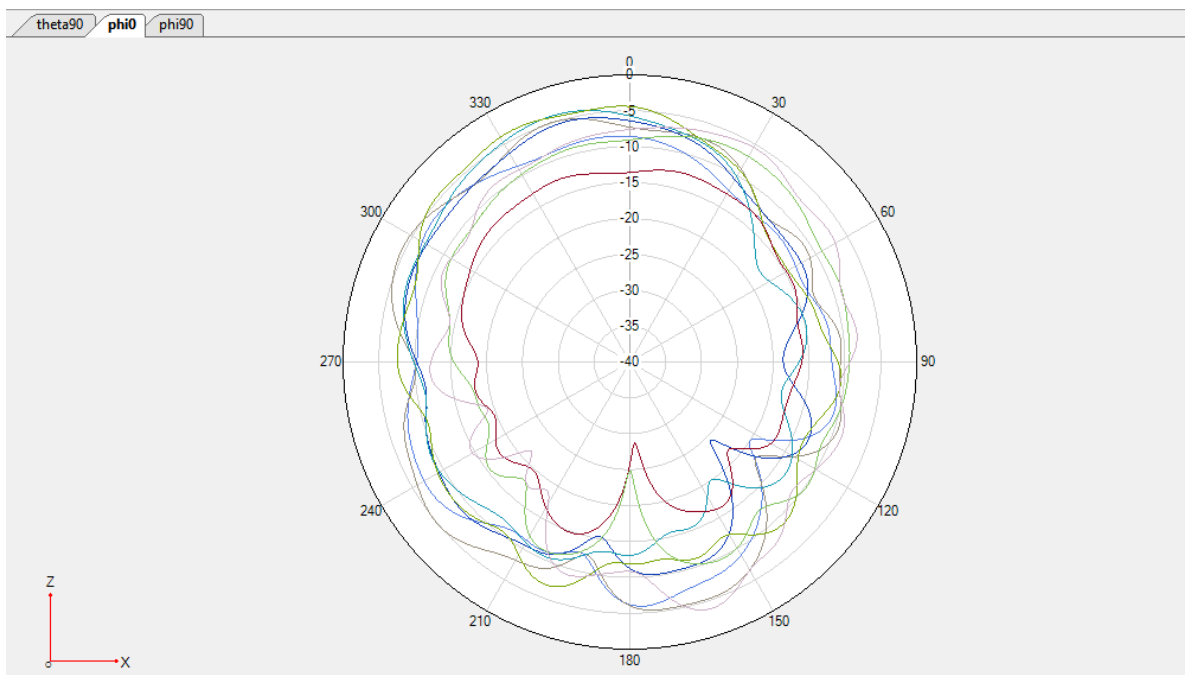
ANT6 MHB-PRX2 B41/N41 Phi=90deg



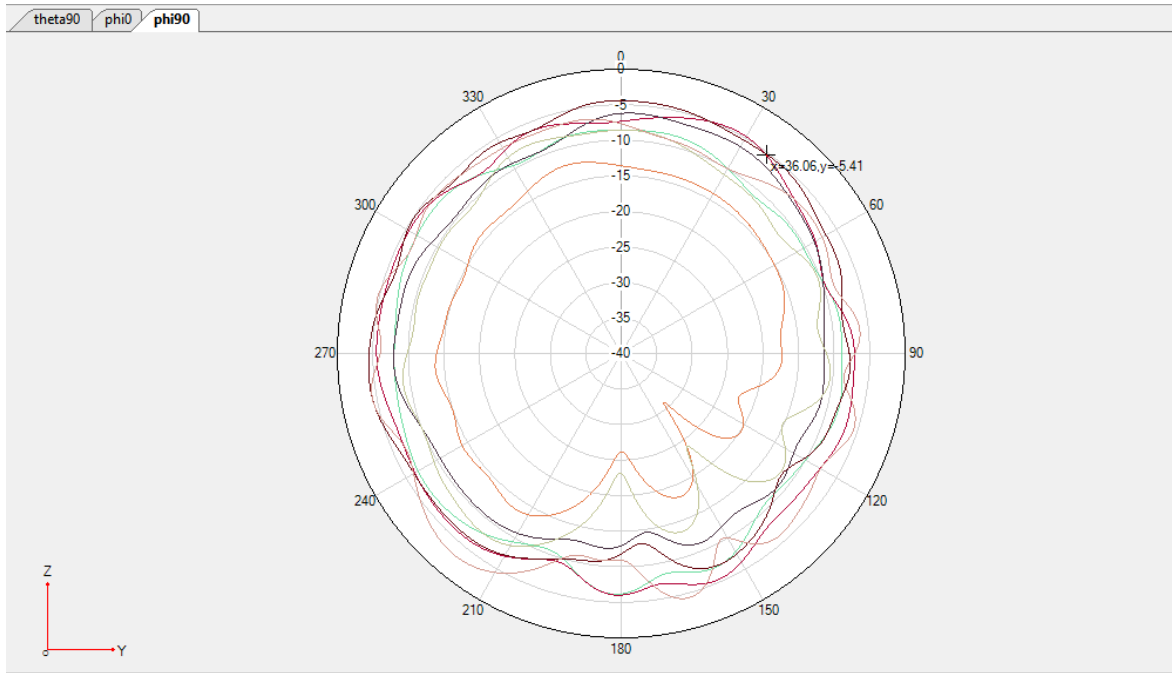
ANT6 MHB-PRX2 B41/N41 Theta=90deg

※ Antenna Gain

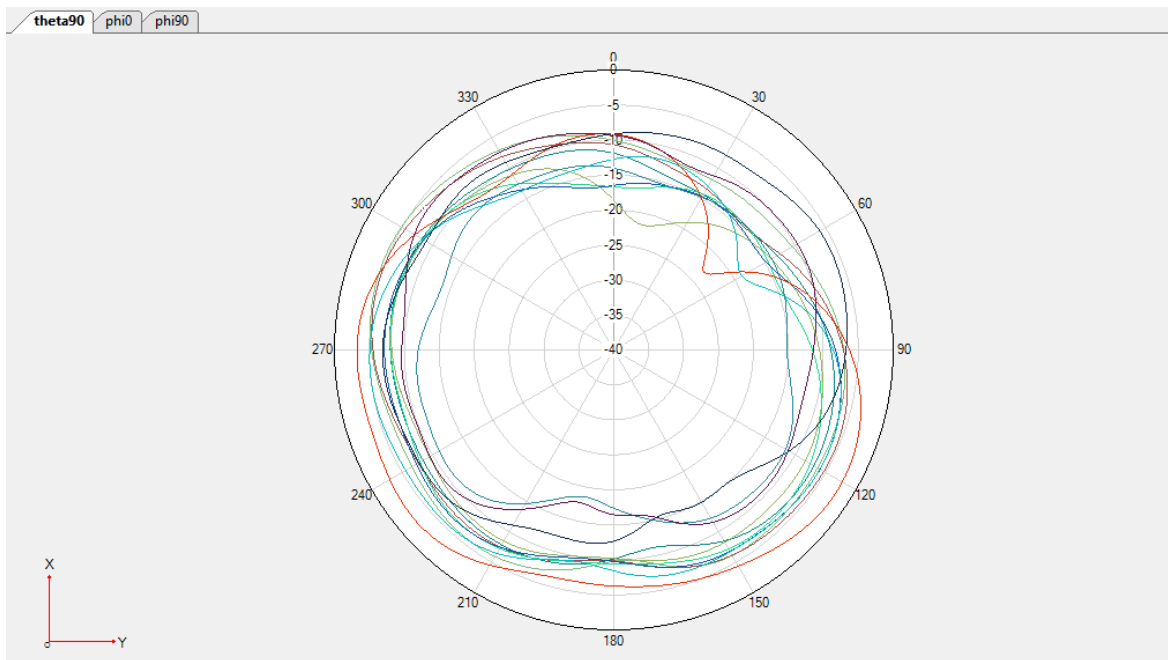
**ANT7 HMB-PRX+N77-DRX+N28**



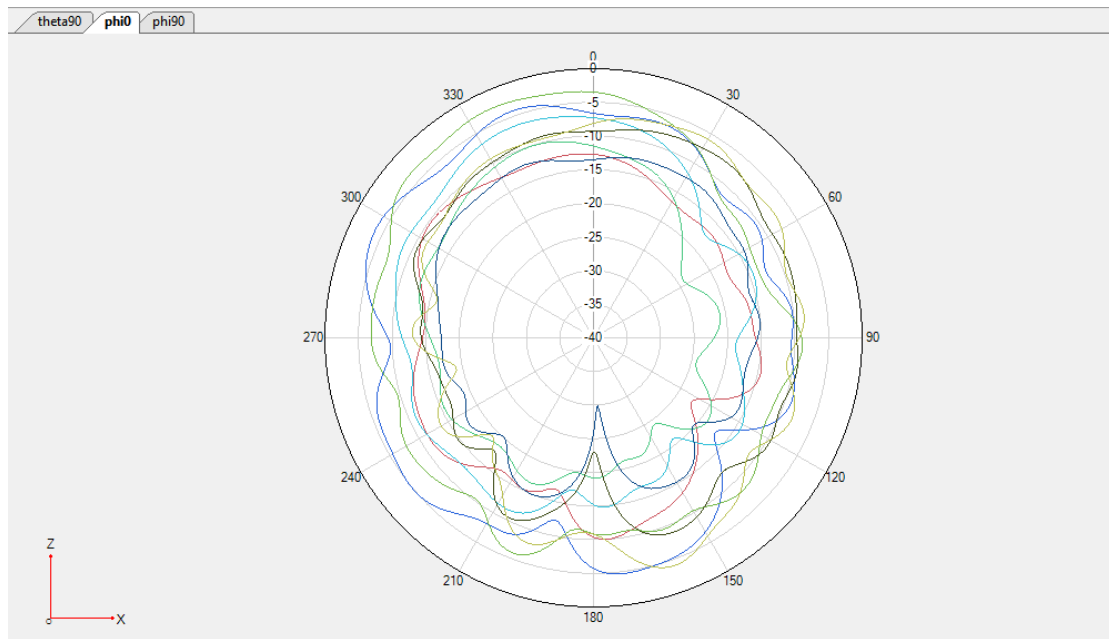
ANT7 HMB-PRX+N77-DRX+N28 DCS /LTE B3/B4/ N3 Phi=0deg



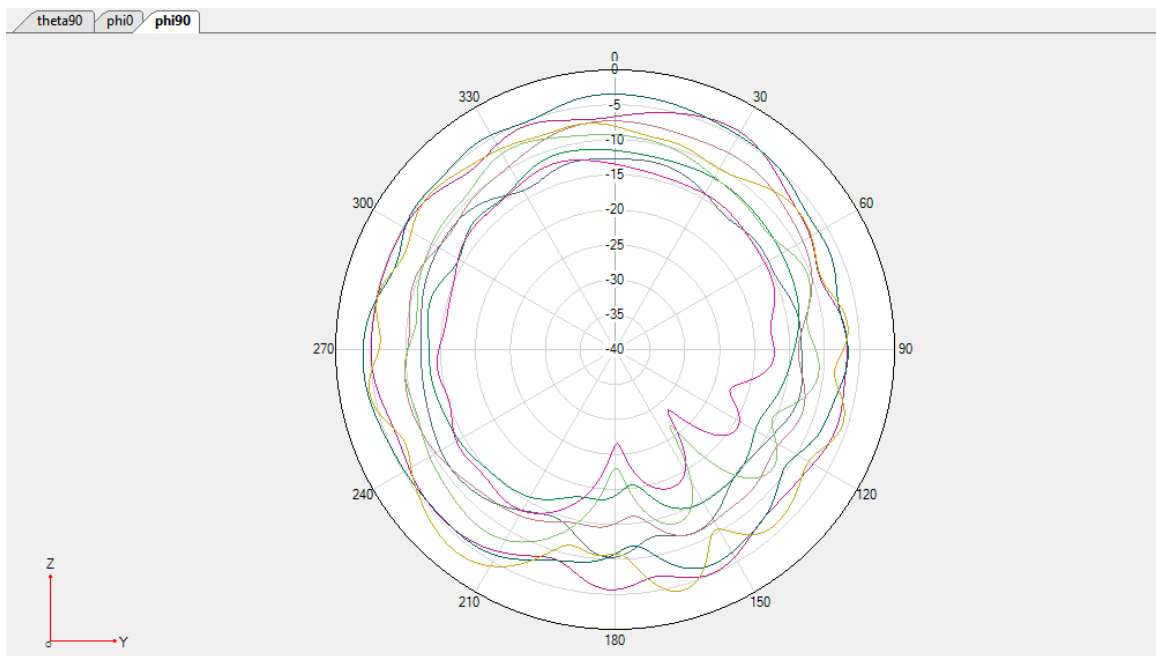
ANT7 HMB-PRX+N77-DRX+N28 DCS /LTE B3/B4/ N3 Phi=90deg



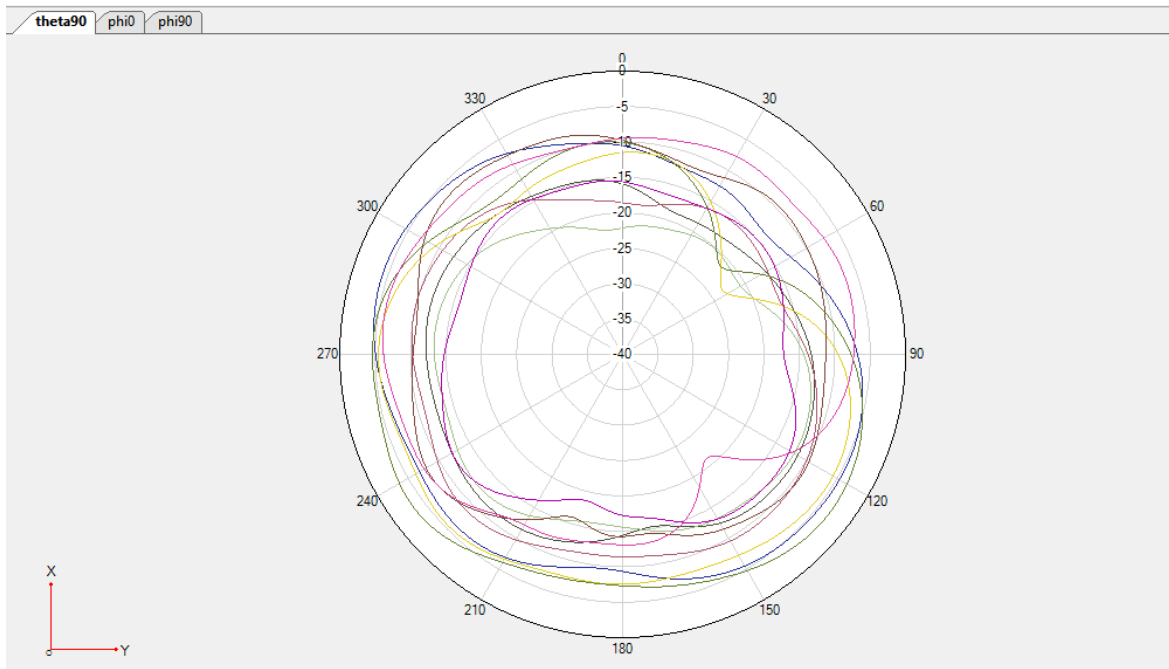
ANT7 HMB-PRX+N77-DRX+N28 DCS /LTE B3/B4/ N3 Theta=90deg



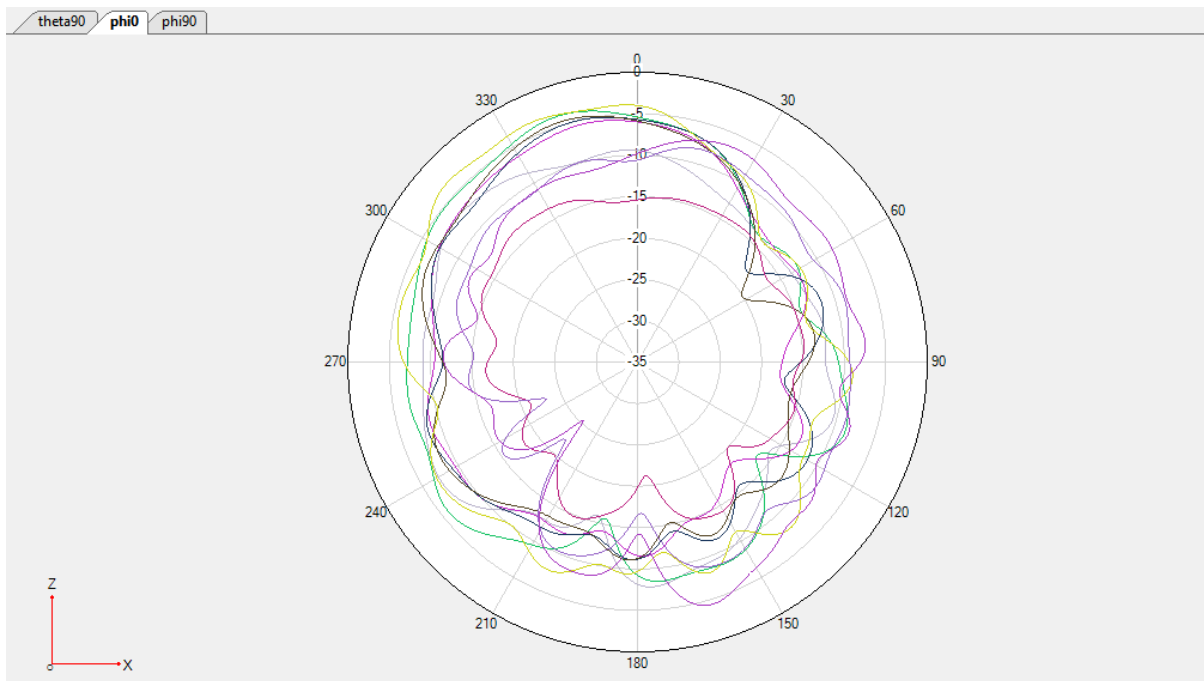
ANT7 HMB-PRX+N77-DRX+N28 PCS/WCDMA B1/LTE B1/B2 /N1  $\Phi = 0^\circ$



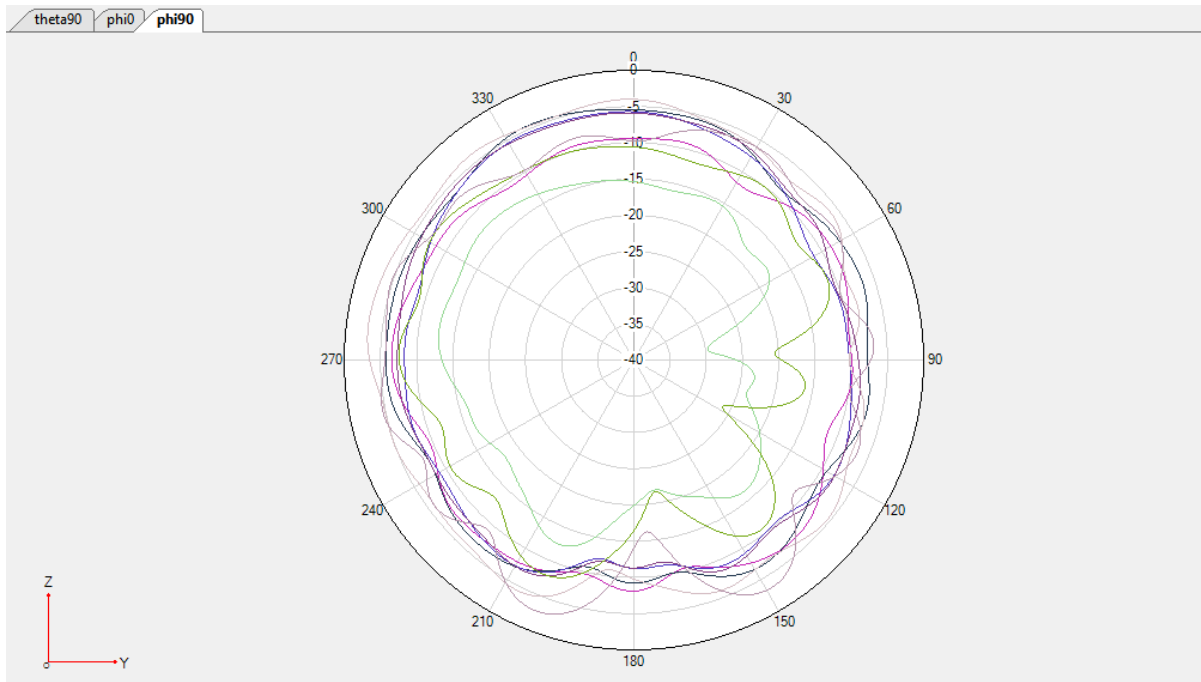
ANT7 HMB-PRX+N77-DRX+N28 PCS/WCDMA B1/LTE B1/B2 /N1  $\Phi = 90^\circ$



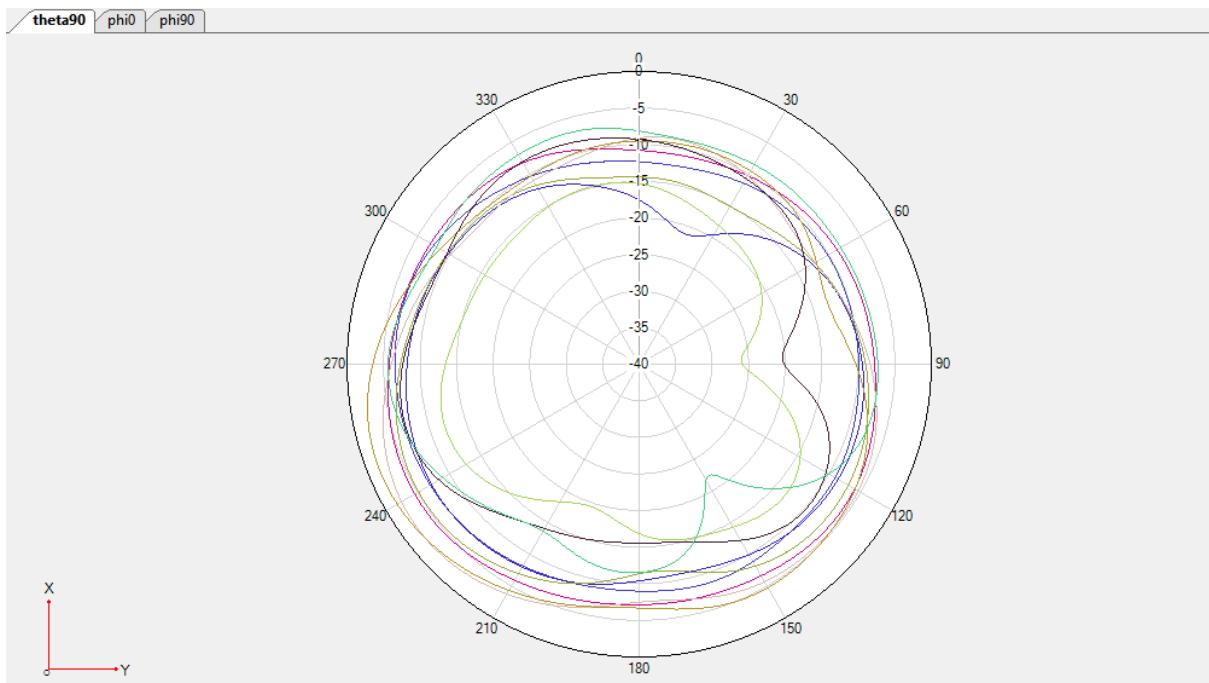
ANT7 HMB-PRX+N77-DRX+N28 PCS/WCDMA B1/LTE B1 /B2 /N1 Theta=90deg



ANT7 HMB-PRX+N77-DRX+N28 Phi=0deg



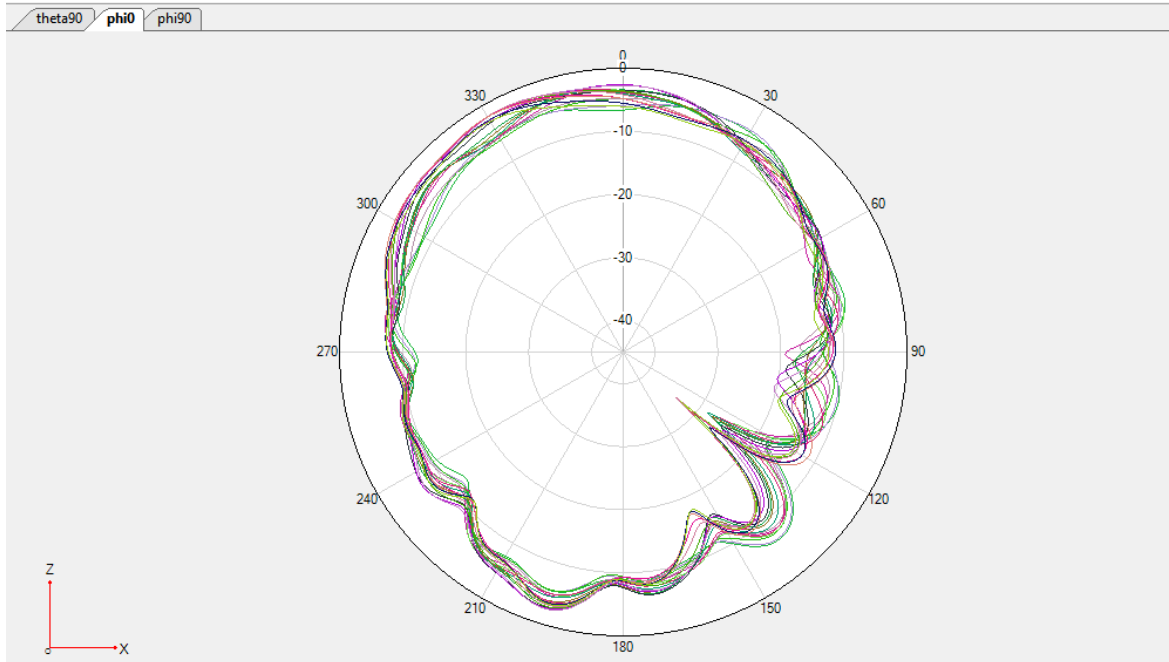
ANT7 HMB-PRX+N77-DRX+N28    Phi=90deg



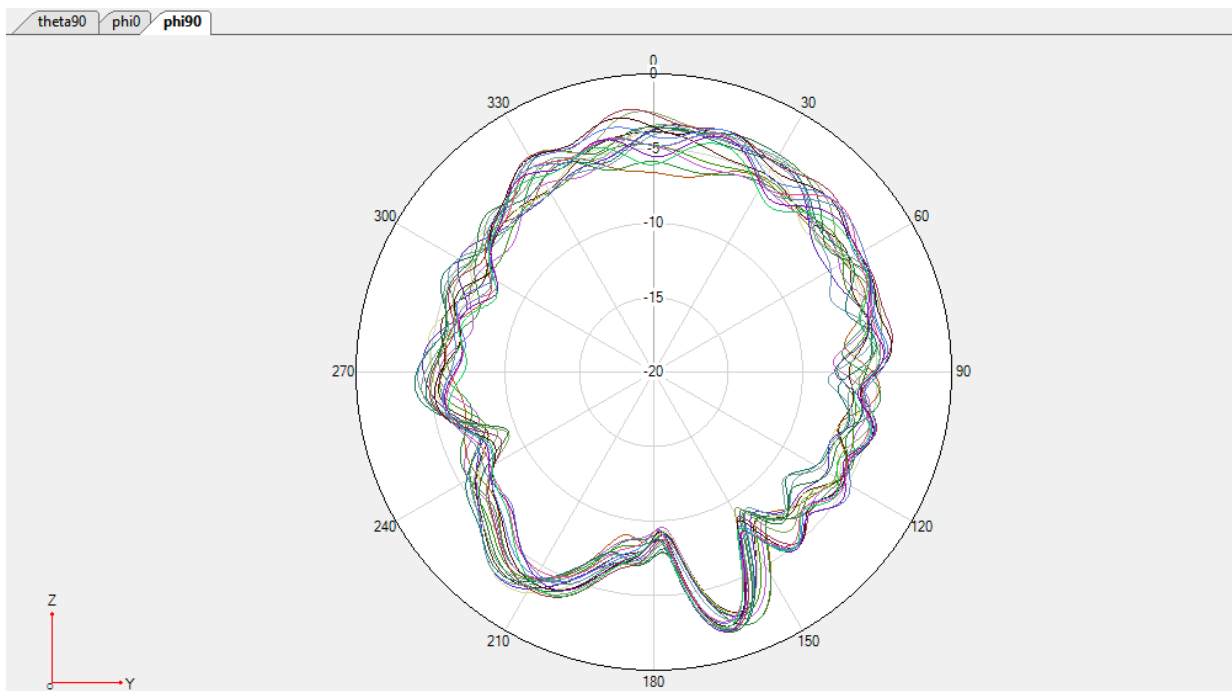
ANT7 HMB-PRX+N77-DRX+N28    Theta=90deg

※ Antenna Gain

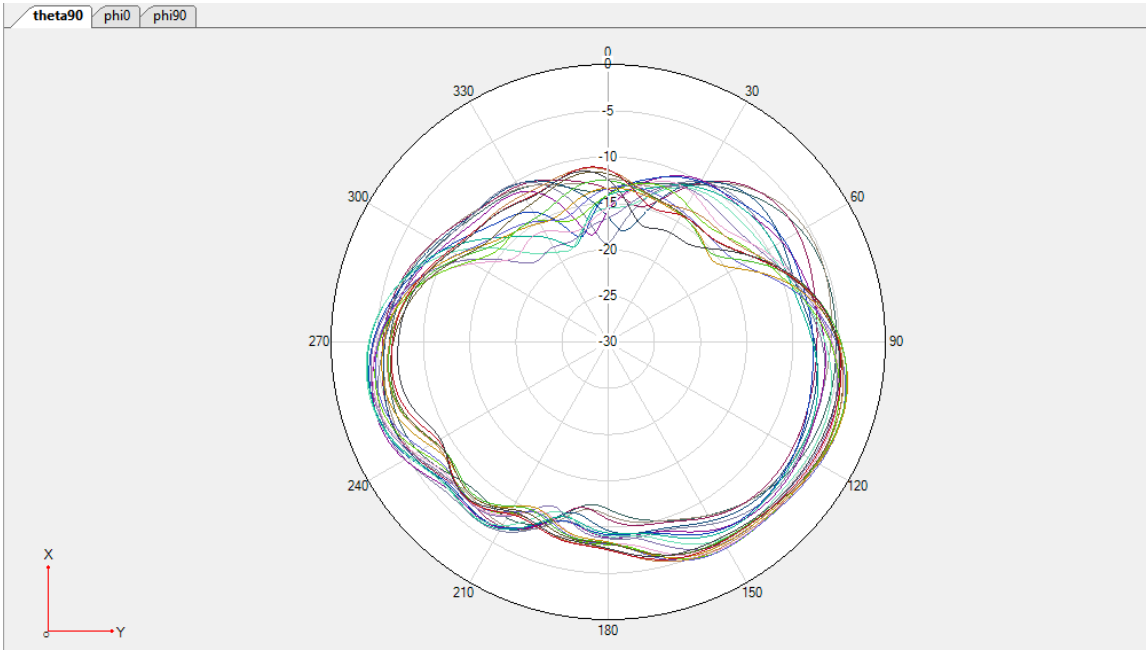
ANT8N77-PRX



ANT8N77-PRX LTE B42/NR N77/78 Phi=0deg



ANT8N77-PRX LTE B42/NR N77/78 Phi=90deg



ANT8N77-PRX    LTE B42/NR N77/78    Theta=90deg

|             |           |             |        |            |
|-------------|-----------|-------------|--------|------------|
| PREPARED BY | CHECKEDBY | APPROVAL BY | S.R.NO |            |
|             |           |             | DATE:  | 2023/02/05 |