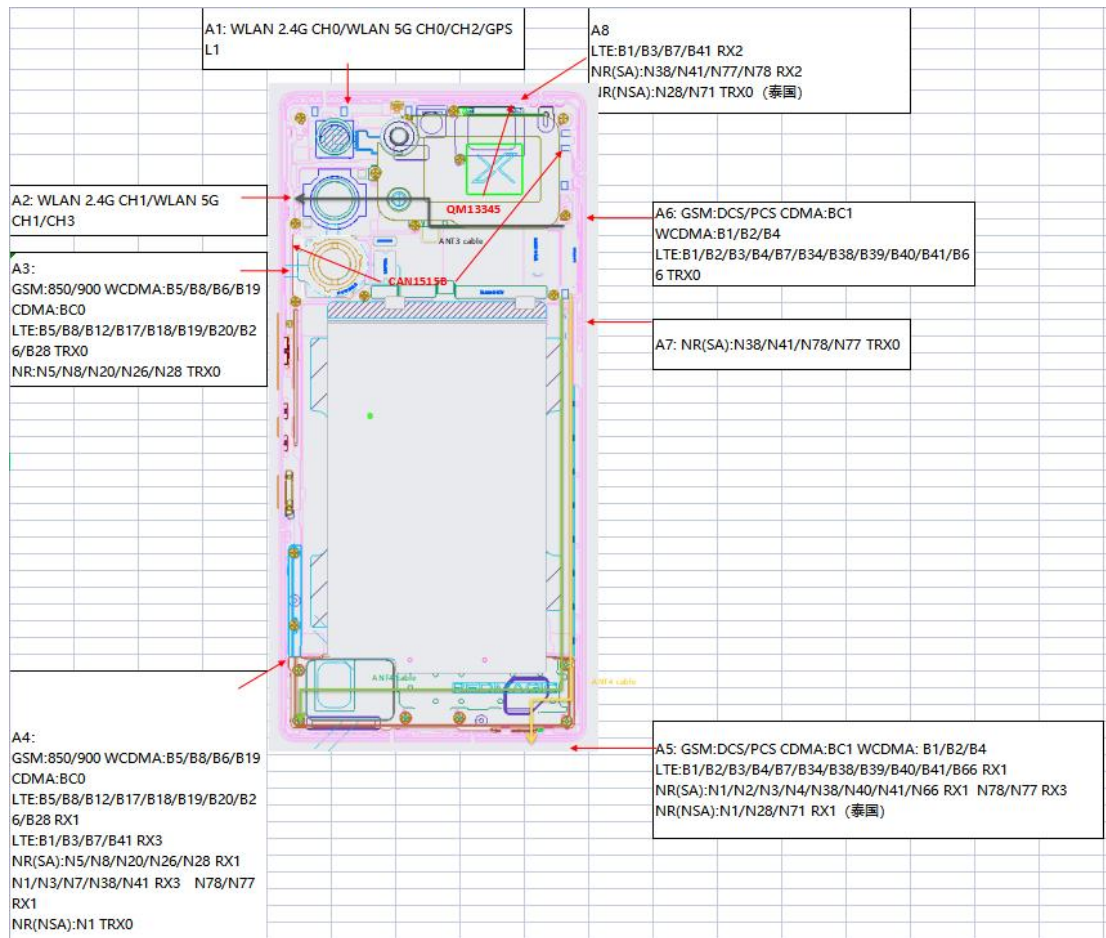


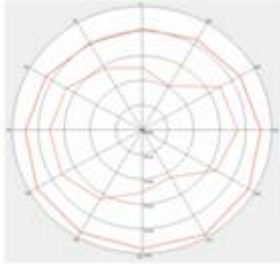
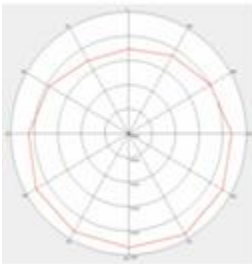
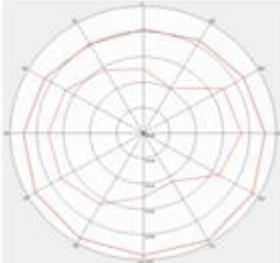
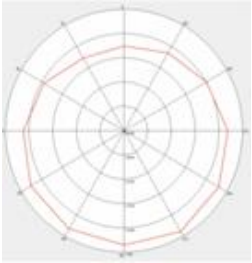
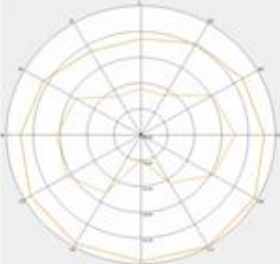
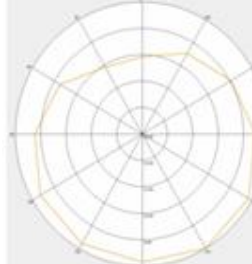
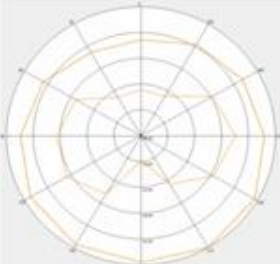
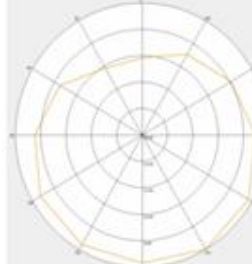
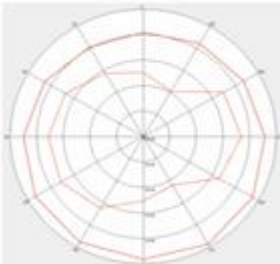
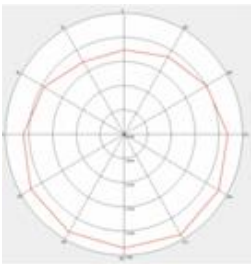
# Nubia Technology Co., Ltd.

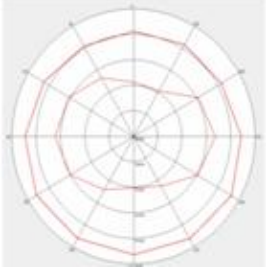
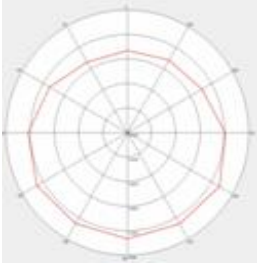
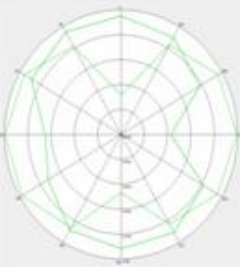
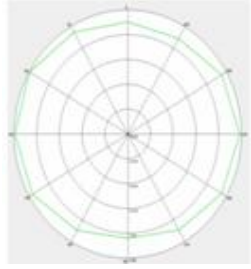
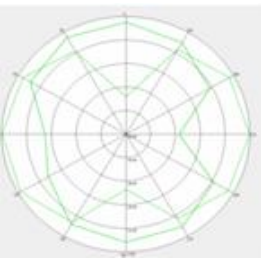
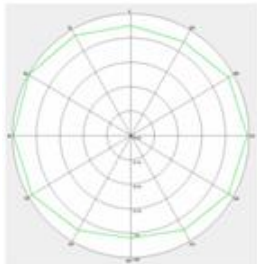
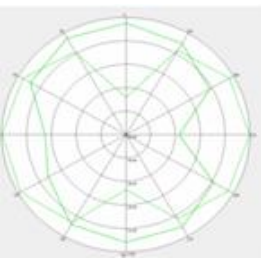
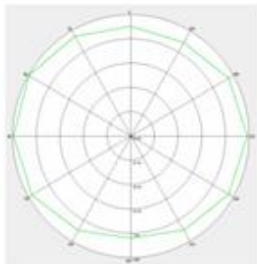
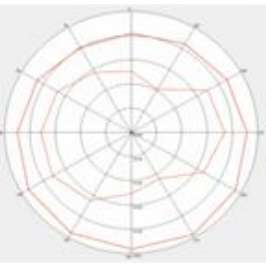
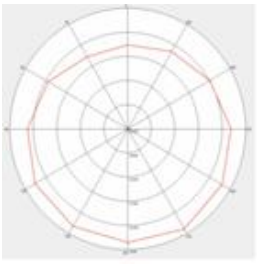
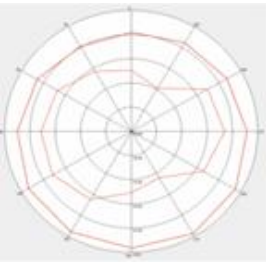
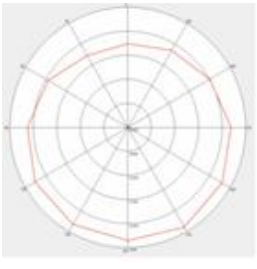
## Antenna parameter sheet for NX789

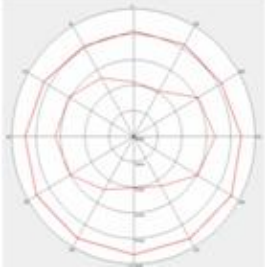
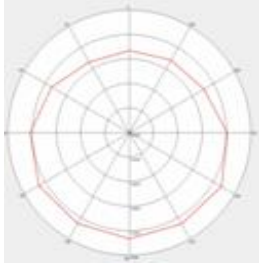
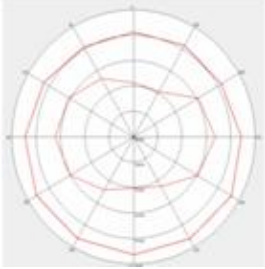
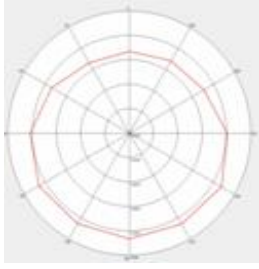
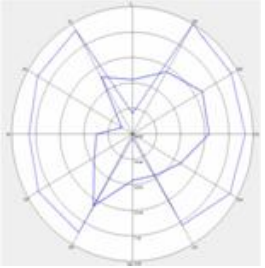
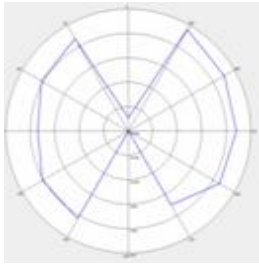
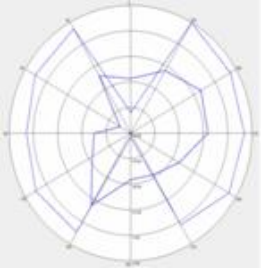
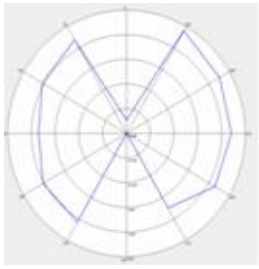
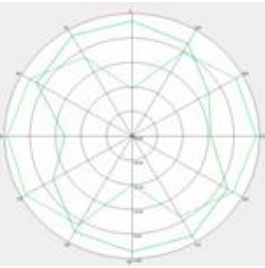
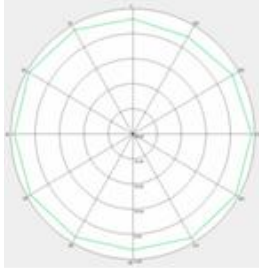
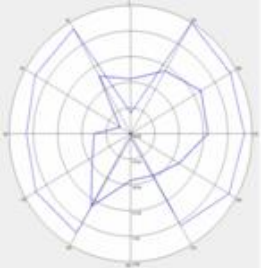
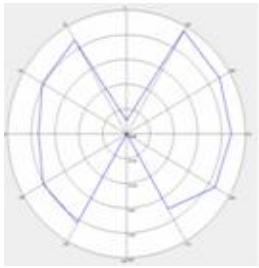
|                      | Main antenna                                                     | Diversity antenna       | GPS/WIFI/BT antenna       | NR antenna       |
|----------------------|------------------------------------------------------------------|-------------------------|---------------------------|------------------|
| Antenna type         | Internal PIFA                                                    | Internal PIFA           | Internal PIFA             | Internal PIFA    |
| Model                | NX789_main antenna                                               | NX789_Diversity antenna | NX789_GPS/WIFI/BT antenna | NX789_NR antenna |
| Antenna manufacturer | Shenzhen Zhongtian Xun Communication Technology Shares Co., Ltd. |                         |                           |                  |
| Antenna position     | Right                                                            | bottom                  | Left                      | Right、left       |

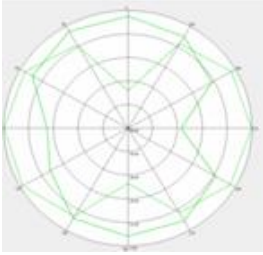
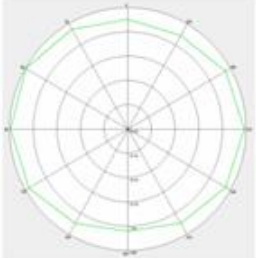
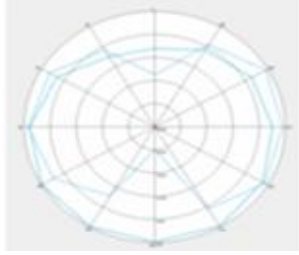
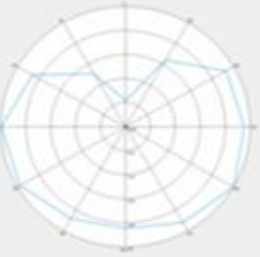
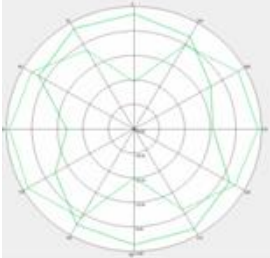
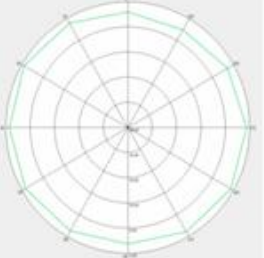
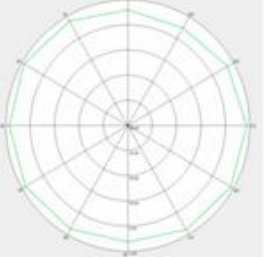


# Radiated pattern diagram

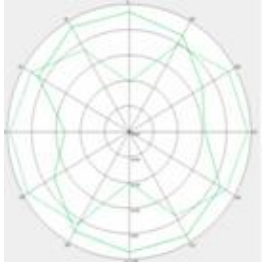
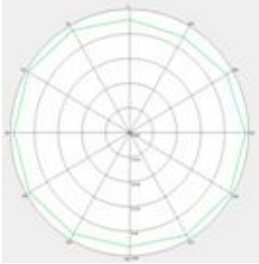
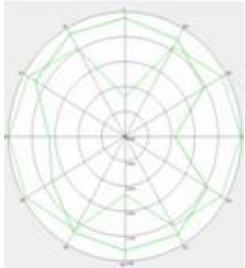
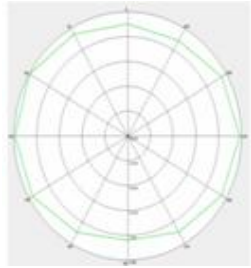
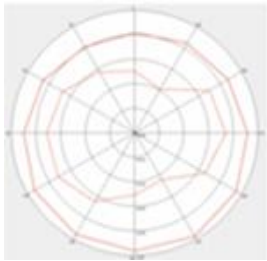
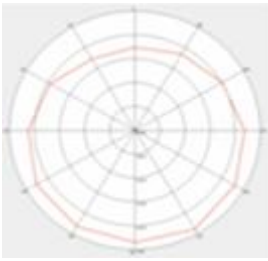
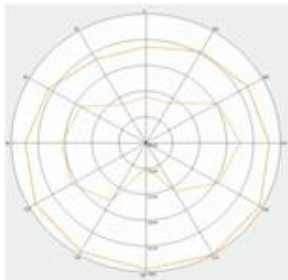
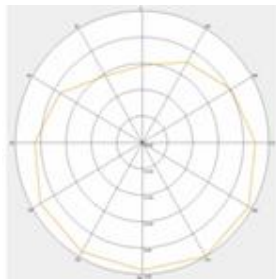
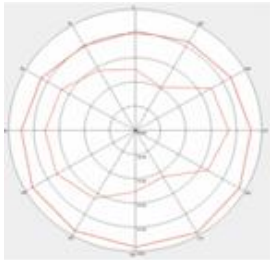
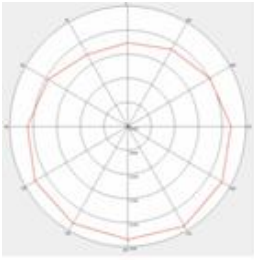
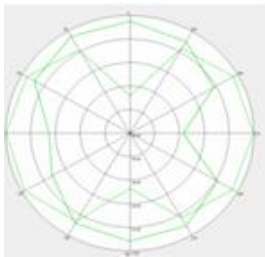
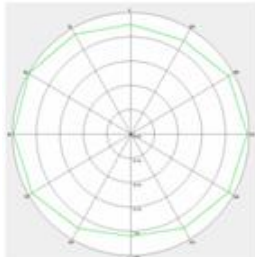
| Antenna                   | PIFA Antenna (Main antenna)                                                         |                                                                                      |                    |
|---------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------|
| Band                      | Radiated pattern diagram                                                            |                                                                                      | Gain data<br>(dBi) |
|                           | H\V                                                                                 | H+V                                                                                  |                    |
| LTE B19<br>(834MHz)<br>A3 |    |    | -3.4               |
| LTE B20<br>(831MHz)<br>A3 |   |   | -3.4               |
| LTE B5<br>(840MHz)<br>A3  |  |  | -3.4               |
| LTE B8<br>(910MHz)<br>A3  |  |  | -2.3               |
| LTE B26<br>(831MHz)<br>A3 |  |  | -3.4               |

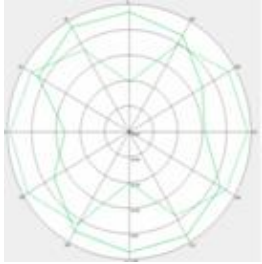
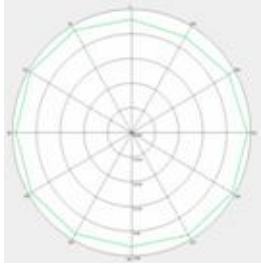
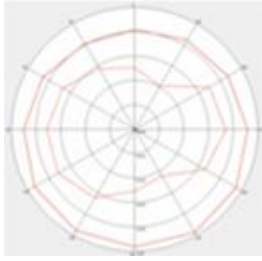
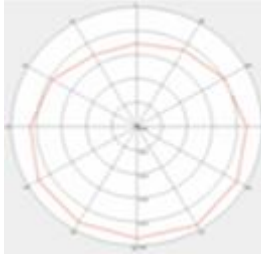
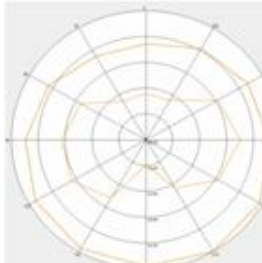
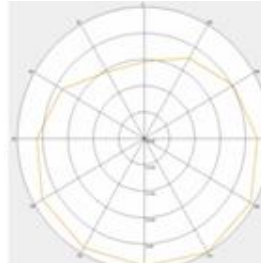
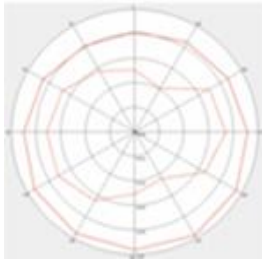
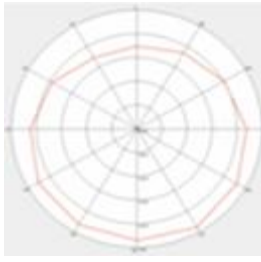
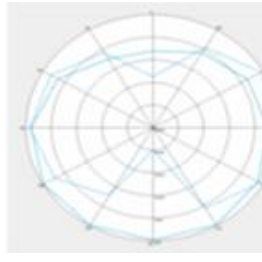
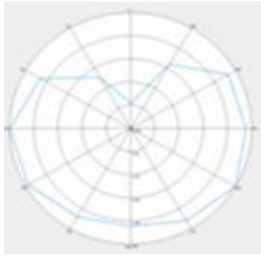
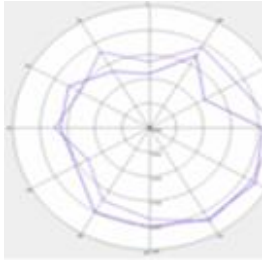
|                           |                                                                                     |                                                                                      |      |
|---------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------|
| LTE B28<br>(720MHz)<br>A3 |    |    | -4.7 |
| LTE B4<br>(1740MHz)<br>A6 |    |    | -1.5 |
| LTE B2<br>(1850MHz)<br>A6 |   |   | -1.5 |
| LTE B3<br>(1715MHz)<br>A6 |  |  | -1.5 |
| LTE B18<br>(830MHz)<br>A3 |  |  | -3.4 |
| LTE B19<br>(830MHz)<br>A3 |  |  | -3.4 |

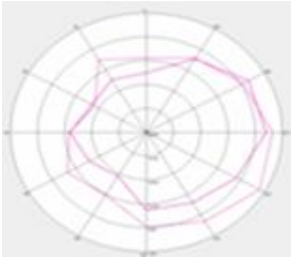
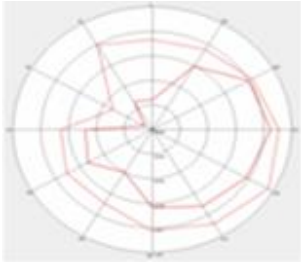
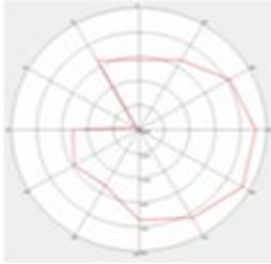
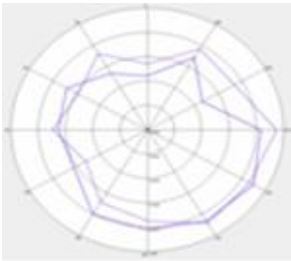
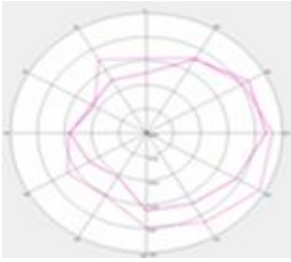
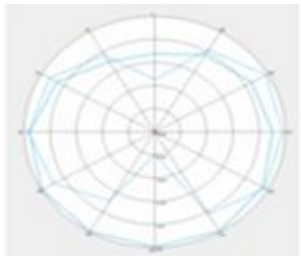
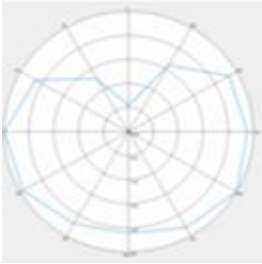
|                            |                                                                                     |                                                                                      |      |
|----------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------|
| LTE B17<br>(710MHz)<br>A3  |    |    | -4.7 |
| LTE B12<br>(710MHz)<br>A3  |    |    | -4.7 |
| LTE B66<br>(1740MHz)<br>A6 |   |   | -1.5 |
| LTE B7<br>(2500MHz)<br>A6  |  |  | -1.5 |
| LTE B1<br>(1930MHz)<br>A6  |  |  | -1.3 |
| LTE B38<br>(2600MHz)<br>A6 |  |  | -1.8 |

|                             |                                                                                     |                                                                                      |      |
|-----------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------|
| LTE B39<br>(1920MHz)<br>A6  |    |    | -1.5 |
| LTE B40(2350MHz)<br>A6      |    |    | -1.6 |
| LTE B41(2600MHz)<br>A6      |   |   | -1.5 |
| LTE B34 (2010MHz)<br>A6     |  |  | -1.5 |
| LTE B42(3500MHz)<br>A7      |  |  | -0.5 |
| WCDMA B1<br>(1930MHz)<br>A6 |  |  | -1.3 |

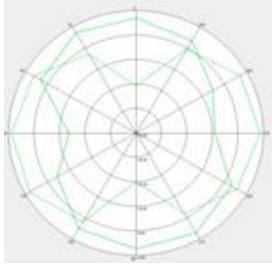
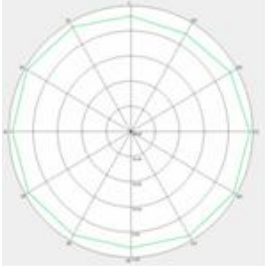
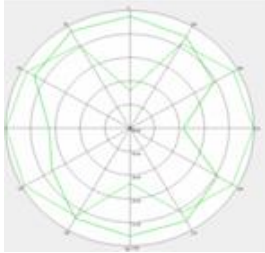
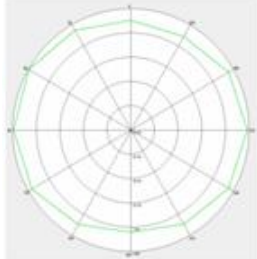
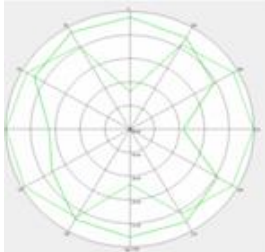
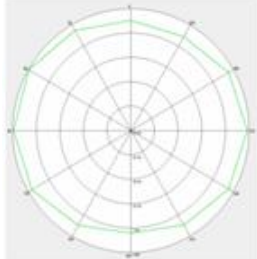
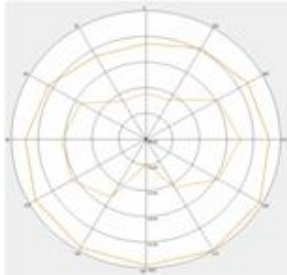
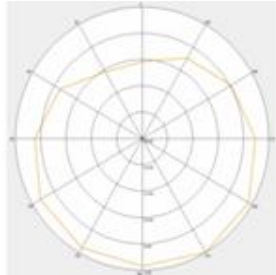
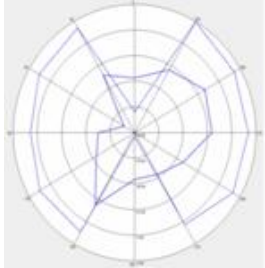
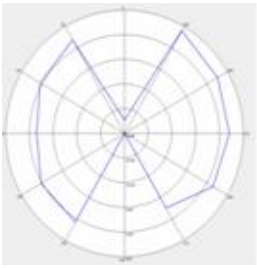
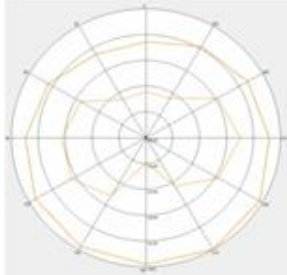
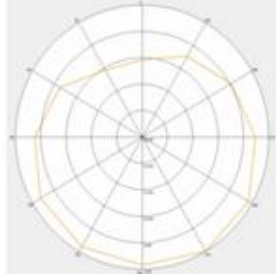


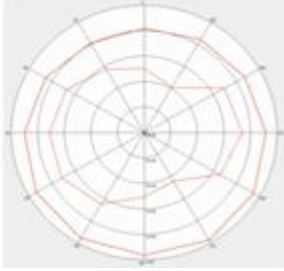
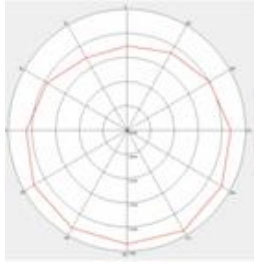
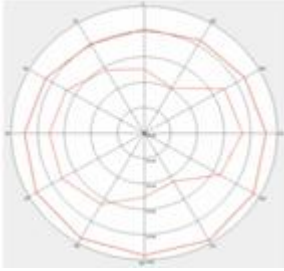
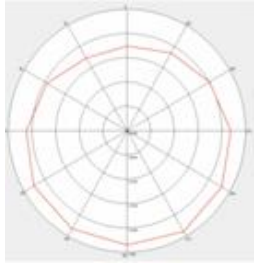
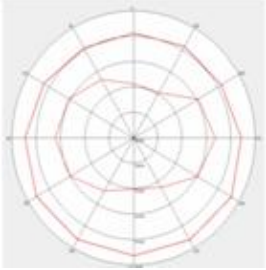
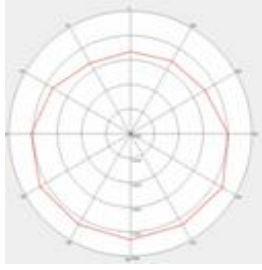
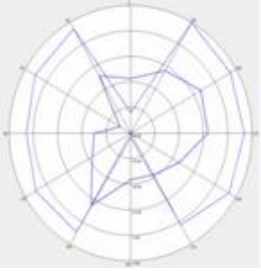
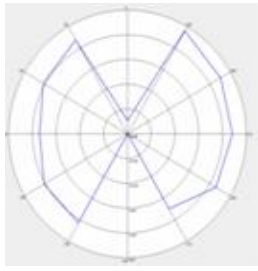
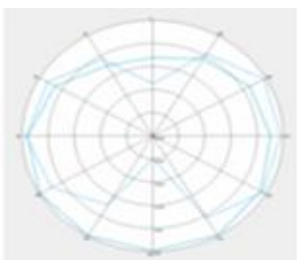
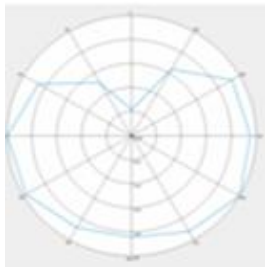
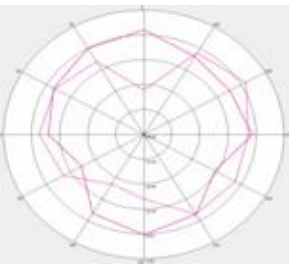
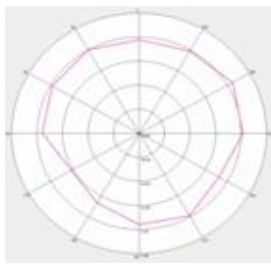
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|-----------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------|
| WCDMA B2<br>(1850MHz)<br>A6 |    |    | -1.5 |
| WCDMA B4<br>(1740MHz)<br>A6 |    |    | -1.5 |
| WCDMA B5<br>(835MHz)<br>A3  |   |   | -3.4 |
| WCDMA B8<br>(910MHz)<br>A3  |  |  | -2.3 |
| WCDMA B6<br>(830MHz)<br>A3  |  |  | -3.4 |
| GSM B3<br>(1715MHz)<br>A6   |  |  | -1.5 |

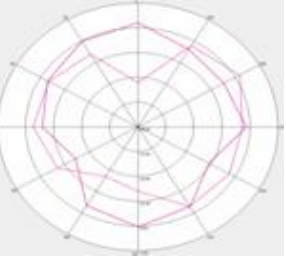
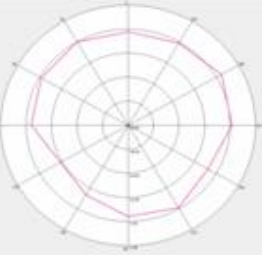
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|----------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------|
| GSM B2<br>(1850MHz)<br>A6              |    |    | -1.5 |
| GSM B5<br>(835MHz)<br>A3               |    |    | -3.4 |
| GSM B8<br>(910MHz)<br>A3               |   |   | -2.3 |
| CDMA BC0<br>(835MHz)<br>A3             |  |  | -3.4 |
| WIFI 2.4G<br>11g ( 2420MHz )<br>CH0 A1 |  |  | -2.2 |
| WIFI 5G<br>11a ( 5150MHz )<br>CH0 A1   |  |  | -0.9 |

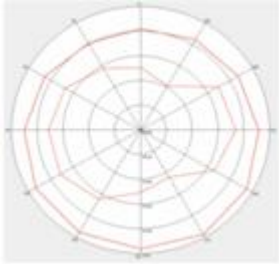
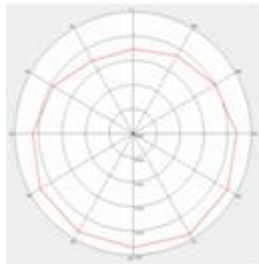
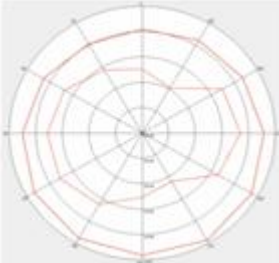
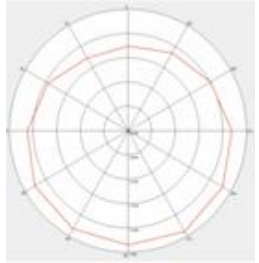
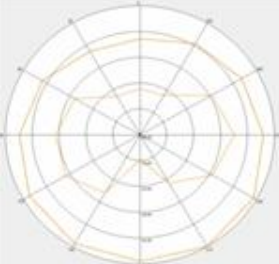
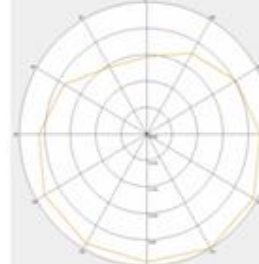
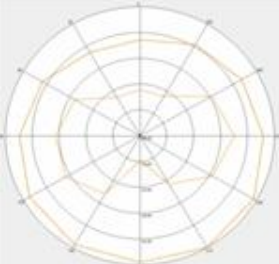
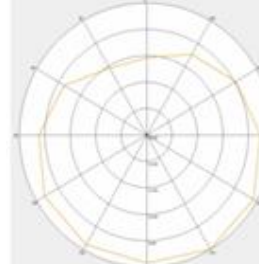
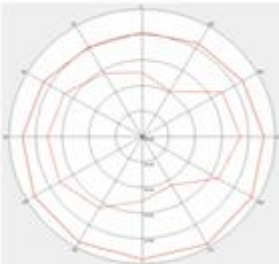
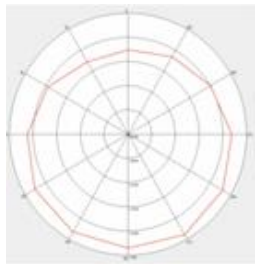
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|--------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------|
| WIFI 5G<br>11a ( 5500MHz )<br>CH0 A1 |    |    | -0.5  |
| WIFI 5G<br>11a ( 5850MHz )<br>CH0 A1 |    |    | -0.29 |
| WIFI 6G<br>( 5935MHz ) CH0<br>A1     |   |   | -2.2  |
| WIFI 6G<br>( 6435MHz ) CH0<br>A1     |                                                                                     |                                                                                      | -3.5  |
| WIFI 6G<br>( 6535MHz ) CH0<br>A1     |  |  | -3.5  |
| BT(2425MHz)<br>A1                    |  |  | -2.2  |

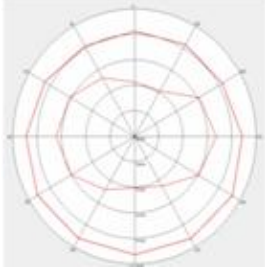
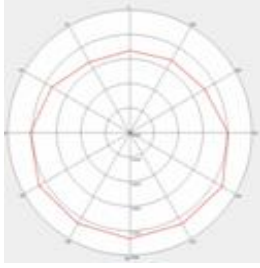
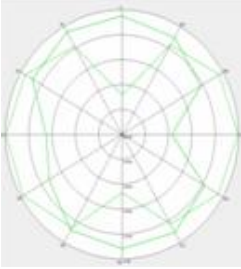
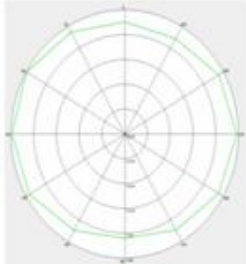
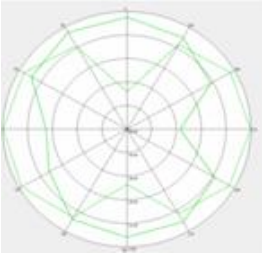
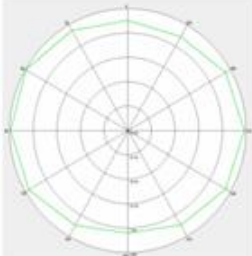
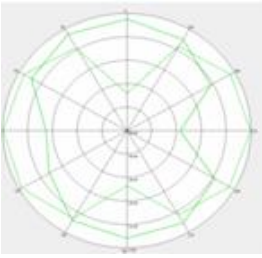
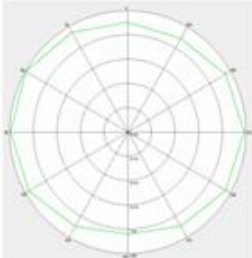
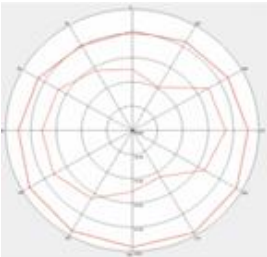
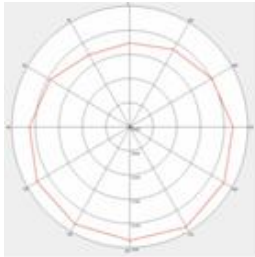
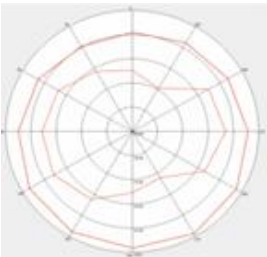
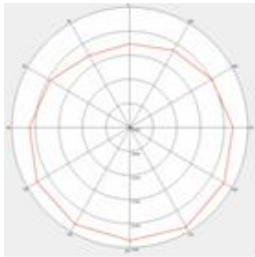


|                       |                                                                                     |                                                                                      |      |
|-----------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------|
| N1(1930MHz)<br>A6     |    |    | -1.3 |
| N2<br>(1850MHz)<br>A6 |    |    | -1.5 |
| N3(1715MHz)<br>A6     |   |   | -1.5 |
| N5<br>(840MHz)<br>A3  |  |  | -3.4 |
| N7(2500MHz)<br>A6     |  |  | -1.5 |
| N8<br>(910MHz)<br>A3  |  |  | -2.3 |

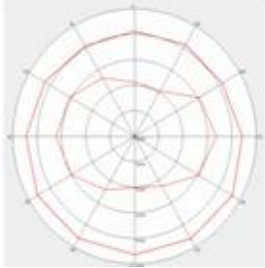
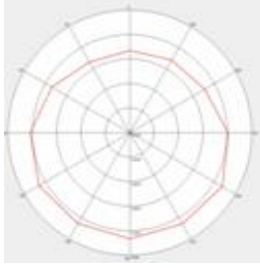
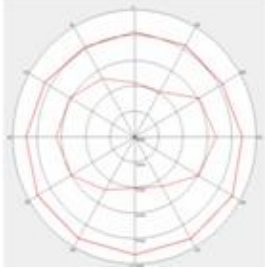
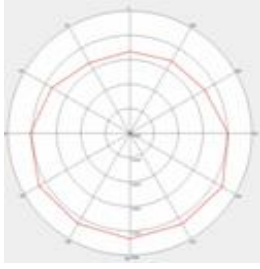
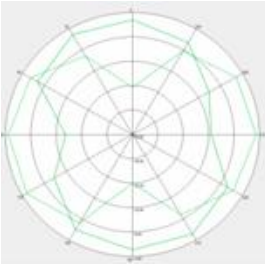
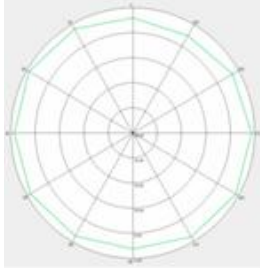
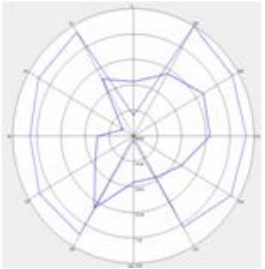
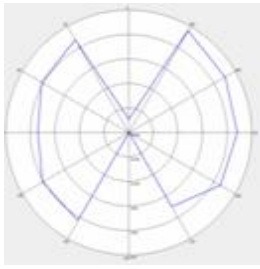
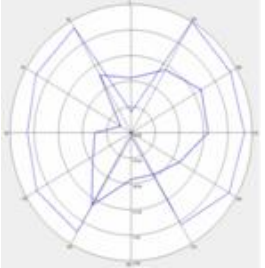
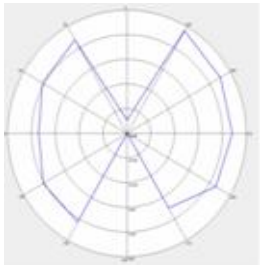
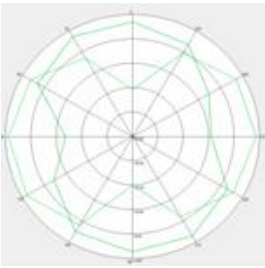
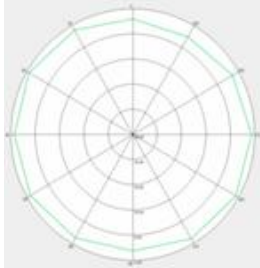
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|------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------|
| N20<br>(831MHz)<br>A3  |    |    | -3.4 |
| N26<br>(814MHz)<br>A3  |    |    | -3.4 |
| N28(720MHz)<br>A3      |   |   | -4.7 |
| N38<br>(2600MHz)<br>A6 |  |  | -1.8 |
| N40(2350MHz)<br>A6     |  |  | -1.6 |
| N66(1750MHz)<br>A6     |  |  | -1.5 |

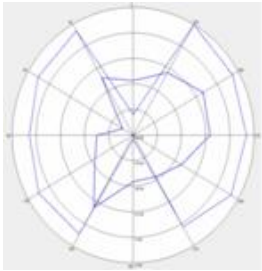
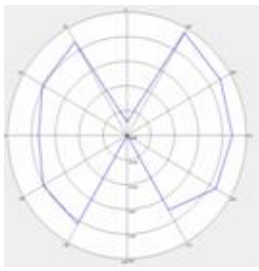
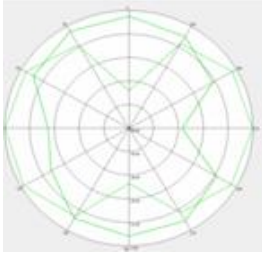
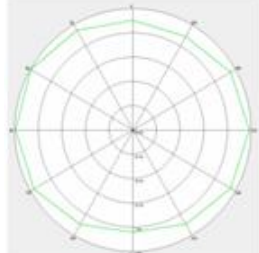
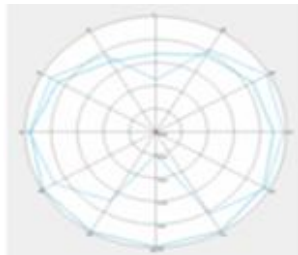
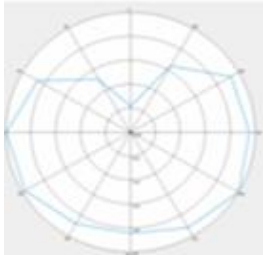
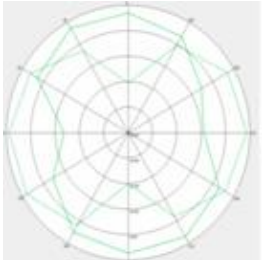
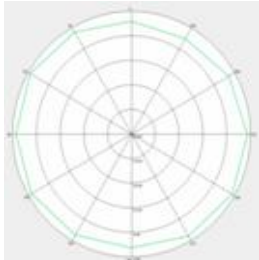
|                    |                                                                                    |                                                                                     |      |
|--------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|
| N41(2600MHz)<br>A7 |   |   | -1   |
| N77(4100MHz)<br>A7 |   |   | -0.5 |
| N78(3800MHz)<br>A7 |  |  | -0.5 |

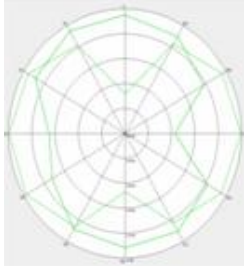
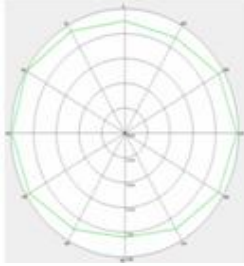
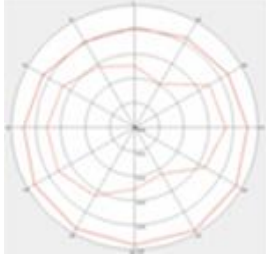
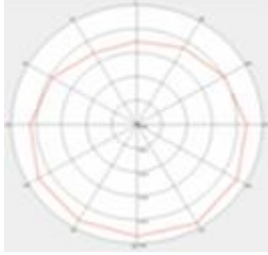
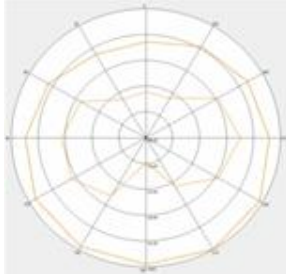
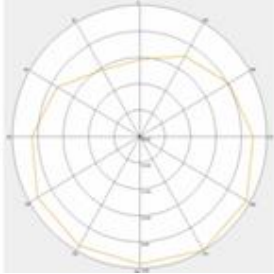
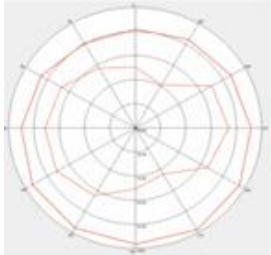
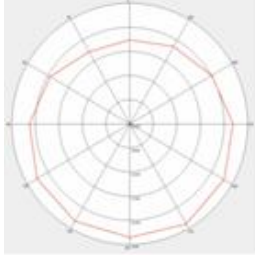
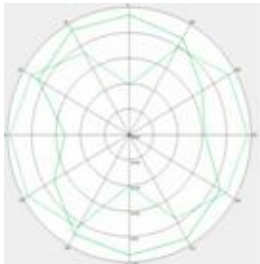
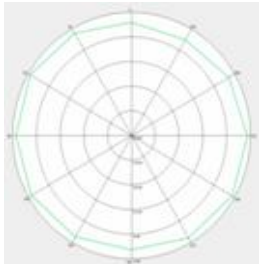
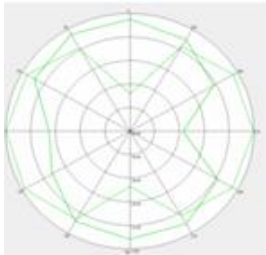
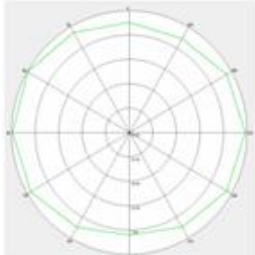
| Antenna                   | PIFA Antenna (Diversity antenna)                                                    |                                                                                      |                    |
|---------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------|
| Band                      | Radiated pattern diagram                                                            |                                                                                      | Gain data<br>(dBi) |
|                           | H\V                                                                                 | H+V                                                                                  |                    |
| LTE B19<br>(834MHz)<br>A4 |    |    | -4.5               |
| LTE B20<br>(831MHz)<br>A4 |   |   | -4.5               |
| LTE B5<br>(840MHz)<br>A4  |  |  | -4.5               |
| LTE B8<br>(910MHz)<br>A4  |  |  | -5                 |
| LTE B26<br>(831MHz)<br>A4 |  |  | -4.5               |

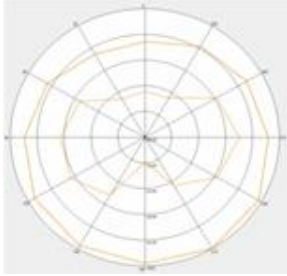
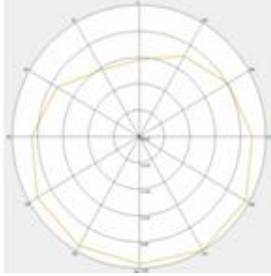
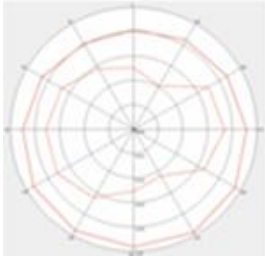
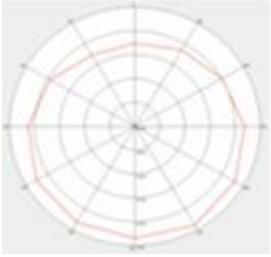
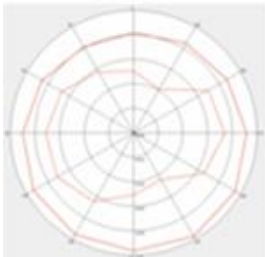
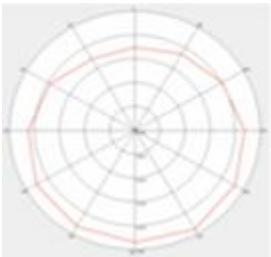
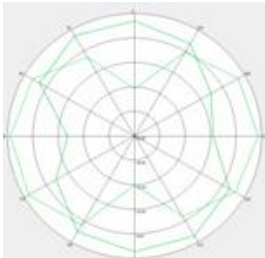
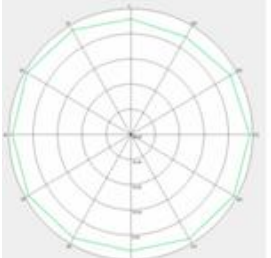
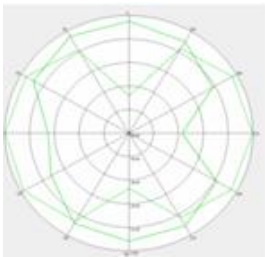
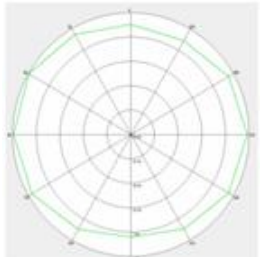
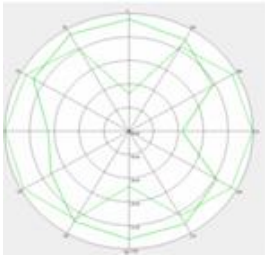
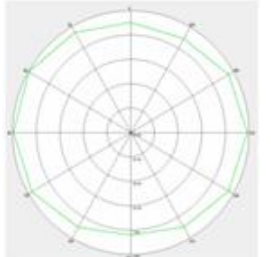
|                           |                                                                                     |                                                                                      |      |
|---------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------|
| LTE B28<br>(720MHz)<br>A4 |    |    | -4.9 |
| LTE B4<br>(1740MHz)<br>A5 |    |    | -3   |
| LTE B2<br>(1850MHz)<br>A5 |   |   | -3   |
| LTE B3<br>(1715MHz)<br>A5 |  |  | -3   |
| LTE B18<br>(830MHz)<br>A4 |  |  | -4.5 |
| LTE B19<br>(830MHz)<br>A4 |  |  | -4.5 |

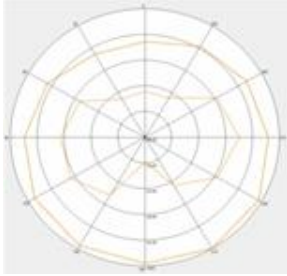
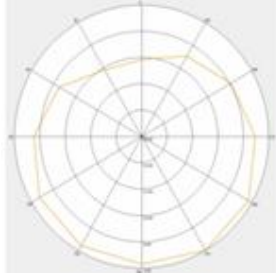
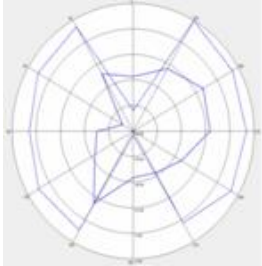
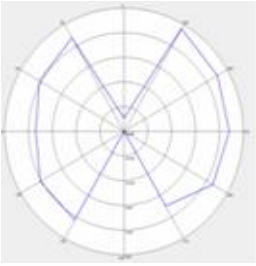
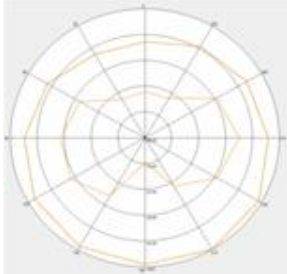
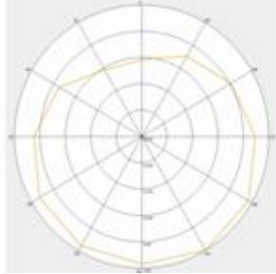
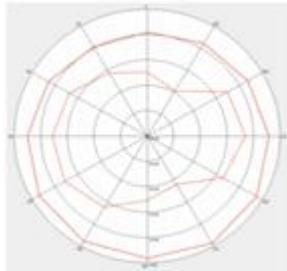
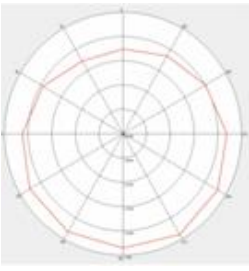
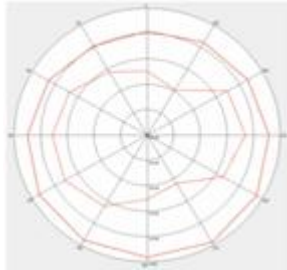
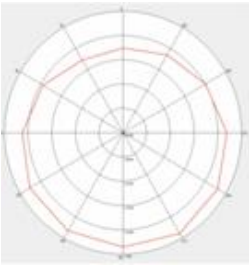
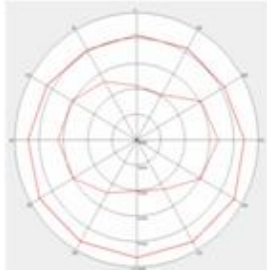
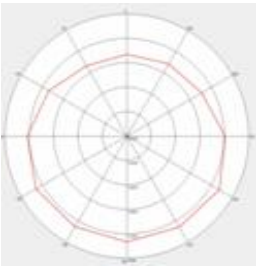


|                            |                                                                                     |                                                                                      |      |
|----------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------|
| LTE B17<br>(710MHz)<br>A4  |    |    | -4.9 |
| LTE B12<br>(710MHz)<br>A4  |    |    | -4.9 |
| LTE B34<br>(2000MHz)<br>A5 |   |   | -2.1 |
| LTE B66<br>(1740MHz)<br>A5 |  |  | -3   |
| LTE B7<br>(2500MHz)<br>A5  |  |  | -2.2 |
| LTE B1<br>(1930MHz)<br>A5  |  |  | -2.1 |

|                                      |                                                                                     |                                                                                      |      |
|--------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------|
| <p>LTE B38<br/>(2600MHz)<br/>A5</p>  |    |    | -2.2 |
| <p>LTE B39<br/>(1920MHz)<br/>A5</p>  |    |    | -2.1 |
| <p>LTE B40(2350MHz)<br/>A5</p>       |   |   | -2.2 |
| <p>LTE B41(2600MHz)<br/>A5</p>       |  |  | -2.2 |
| <p>LTE B42(3500MHz)<br/>A4</p>       |  |  | -1   |
| <p>WCDMA B2<br/>(1850MHz)<br/>A5</p> |  |  | -2.1 |

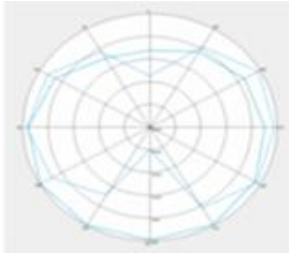
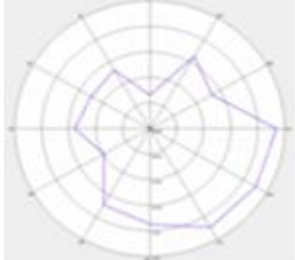
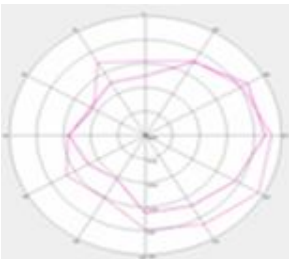
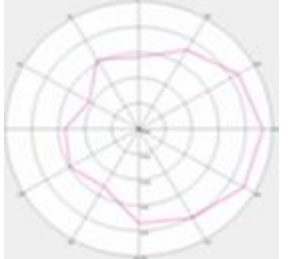
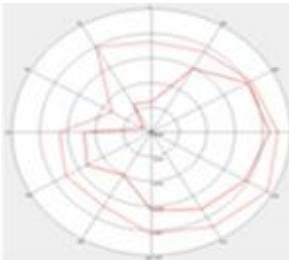
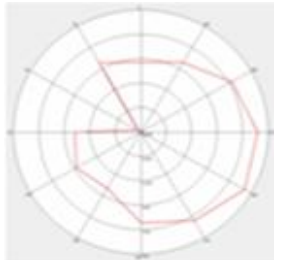
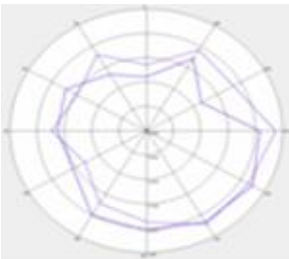
|                             |                                                                                     |                                                                                      |      |
|-----------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------|
| WCDMA B4<br>(1740MHz)<br>A5 |    |    | -3   |
| WCDMA B5<br>(835MHz)<br>A4  |    |    | -4.5 |
| WCDMA B8<br>(910MHz)<br>A4  |   |   | -5   |
| WCDMA B6<br>(830MHz)<br>A4  |  |  | -4.5 |
| GSM B2<br>(1850MHz)<br>A5   |  |  | -2.1 |
| GSM B3<br>(1715MHz)<br>A5   |  |  | -3   |

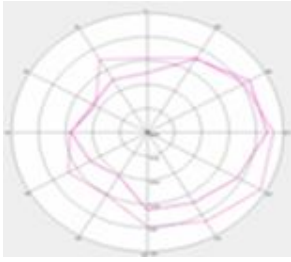
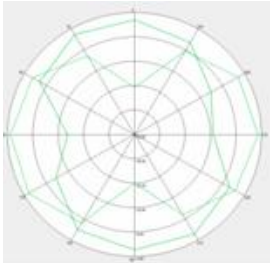
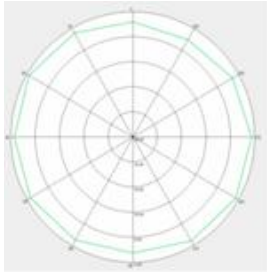
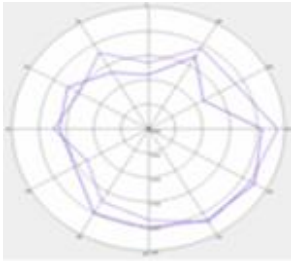
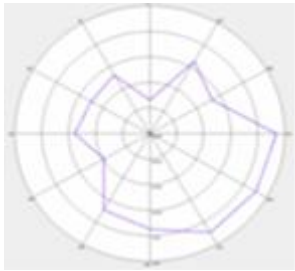
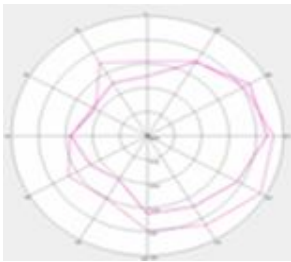
|                            |                                                                                     |                                                                                      |      |
|----------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------|
| GSM B8<br>(910MHz)<br>A4   |    |    | -5   |
| GSM B5<br>(835MHz)<br>A4   |    |    | -4.5 |
| CDMA BC0<br>(835MHz)<br>A4 |   |   | -4.5 |
| N1<br>(1930MHz)<br>A5      |  |  | -2.1 |
| N2<br>(1850MHz)<br>A5      |  |  | -3   |
| N3<br>(1715MHz)<br>A5      |  |  | -3   |

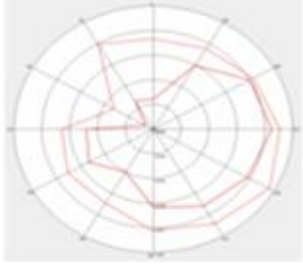
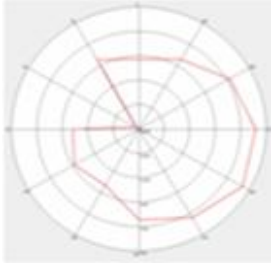
|                       |                                                                                     |                                                                                      |      |
|-----------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------|
| N5<br>(840MHz)<br>A4  |    |    | -4.5 |
| N7<br>(2500MHz)<br>A5 |    |    | -2.2 |
| N8<br>(910MHz)<br>A4  |   |   | -5   |
| N20<br>(831MHz)<br>A4 |  |  | -4.5 |
| N26<br>(831MHz)<br>A4 |  |  | -4.5 |
| N28<br>(720MHz)<br>A4 |  |  | -4.9 |



|                                 |  |  |      |
|---------------------------------|--|--|------|
| <p>N38<br/>(2600MHz)<br/>A5</p> |  |  | -2.2 |
| <p>N40<br/>(2350MHz)<br/>A5</p> |  |  | -2.2 |
| <p>N66<br/>(1740MHz)<br/>A5</p> |  |  | -3   |
| <p>N41(2600MHz)<br/>A5</p>      |  |  | -1.3 |
| <p>N78(3800MHz)<br/>A4</p>      |  |  | -1.0 |
| <p>N77(4100MHz)<br/>A4</p>      |  |  | -1.8 |

|                                        |                                                                                     |                                                                                      |       |
|----------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------|
| WIFI 2.4G<br>11g ( 2420MHz )<br>CH1 A2 |    |    | -1.15 |
| WIFI 5G<br>11a ( 5150MHz )<br>CH1 A2   |    |    | -2.2  |
| WIFI 5G<br>11a ( 5500MHz )<br>CH1 A2   |   |   | -1    |
| WIFI 5G<br>11a ( 5850MHz )<br>CH1 A2   |  |  | 0.4   |
| WIFI 6G<br>( 5935MHz ) CH1<br>A2       |  |  | -2.3  |
| WIFI 6G<br>( 6435MHz ) CH1<br>A2       |                                                                                     |                                                                                      | -4.7  |

|                                  |                                                                                     |                                                                                      |      |
|----------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------|
| WIFI 6G<br>( 6535MHz ) CH1<br>A2 |    |    | -4.7 |
| N41(2600MHz)<br>PRX MIMO<br>A8   |    |    | -0.8 |
| N77(4100MHz)<br>PRX MIMO<br>A8   |   |   | -2.2 |
| N78(3800MHz)<br>PRX MIMO<br>A8   |  |  | -1.9 |
| N41(2600MHz)<br>DRX MIMO<br>A4   |  |  | -2.7 |
| N77(4100MHz)<br>DRX MIMO<br>A5   |  |  | -2.8 |

|                                |                                                                                   |                                                                                    |    |
|--------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----|
| N78(3800MHz)<br>DRX MIMO<br>A5 |  |  | -3 |
|--------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----|

## VSWR&Gain

| Main antenna        |           |      |      |      |           |      |      |           |      |
|---------------------|-----------|------|------|------|-----------|------|------|-----------|------|
| Freq(MHz)           | 703       | 824  | 960  | 1710 | 1990      | 2170 | 2500 | 2690      | 3500 |
| VSWR                | 3.5       | 3    | 3.2  | 1.5  | 1.2       | 2.4  | 1.8  | 2.3       | 2    |
| Gain(dBi)           | -4.7      | -3.4 | -3.6 | -1.5 | -1.3      | -2   | -1.5 | -2.0<br>7 | -0.5 |
| Diversity antenna   |           |      |      |      |           |      |      |           |      |
| Freq(MHz)           | 703       | 824  | 960  | 1710 | 1990      | 2170 | 2500 | 2690      | 3500 |
| VSWR                | 6         | 3.4  | 3.8  | 2.1  | 1.8       | 2    | 1.5  | 1.9       | 3    |
| Gain(dBi)           | -4.9      | -4.5 | -5   | -3   | -2.1      | -2.1 | -2.2 | -2.2      | -1   |
| WIFI CH0/BT antenna |           |      |      |      |           |      |      |           |      |
| Freq(MHz)           | 2400      | 2500 | 5200 | 5500 | 5800      | 5935 | 6435 | 6535      |      |
| VSWR (MHz)          | 2.1       | 2.1  | 3    | 2.1  | 4         | 4.3  | 4.5  | 4.6       |      |
| Gain(dBi)           | -2.2      | -2.1 | -0.9 | -0.5 | -0.2<br>9 | -2.2 | -3.5 | -3.5      |      |
| WIFI CH1 antenna    |           |      |      |      |           |      |      |           |      |
| Freq(MHz)           | 2400      | 2500 | 5200 | 5500 | 5800      | 5935 | 6435 | 6535      |      |
| VSWR (MHz)          | 2.6       | 2.6  | 2.8  | 3    | 2.5       | 4.6  | 4.6  | 4.5       |      |
| Gain(dBi)           | -1.1<br>5 | -1   | -2.2 | -1   | 0.4       | -2.3 | -4.7 | -4.8      |      |

|                            |      |      |      |      |
|----------------------------|------|------|------|------|
| <b>NR antenna PRX</b>      |      |      |      |      |
| Freq(MHz)                  | 2500 | 2700 | 3500 | 4200 |
| VSWR (MHz)                 | 2.4  | 2.6  | 2    | 2.8  |
| Gain(dBi)                  | -0.5 | -1   | -0.5 | -1.1 |
| <b>NR antenna DRX</b>      |      |      |      |      |
| Freq(MHz)                  | 2500 | 2700 | 3500 | 4200 |
| VSWR (MHz)                 | 2.5  | 2.7  | 2.7  | -3.2 |
| Gain(dBi)                  | -0.9 | -1.3 | -1.0 | -1.8 |
| <b>NR antenna PRX MIMO</b> |      |      |      |      |
| Freq(MHz)                  | 2500 | 2700 | 3500 | 4200 |
| VSWR (MHz)                 | 2.0  | 2.2  | 2.8  | 2.9  |
| Gain(dBi)                  | -0.6 | -0.8 | -1.9 | -2.2 |
| <b>NR antenna DRX MIMO</b> |      |      |      |      |
| Freq(MHz)                  | 2500 | 2700 | 3500 | 4200 |
| VSWR (MHz)                 | 3.2  | 2.9  | 3    | 3.3  |
| Gain(dBi)                  | -2.4 | -2.7 | -3   | -2.8 |