



# Antenna Report

| Ver. | Date      | Author       |
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## 1) Antenna direction diagram

### 1.1) RX antenna direction diagram

The antenna pattern results are as follows:

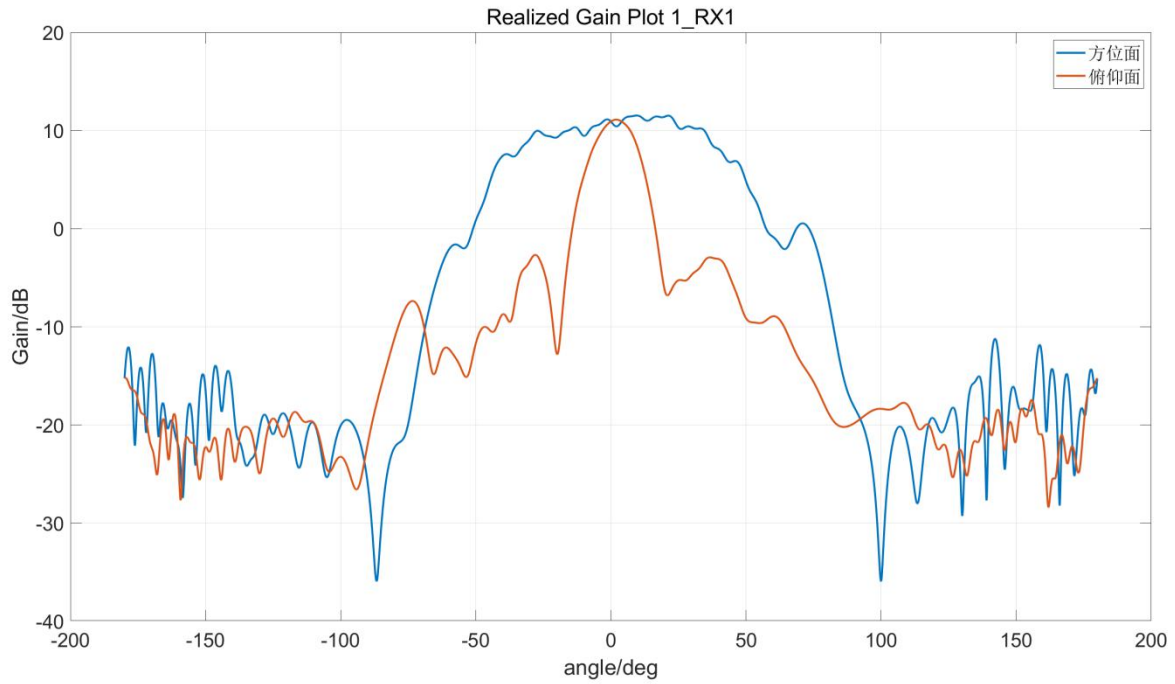


Figure 1.1 RX1 directional diagram

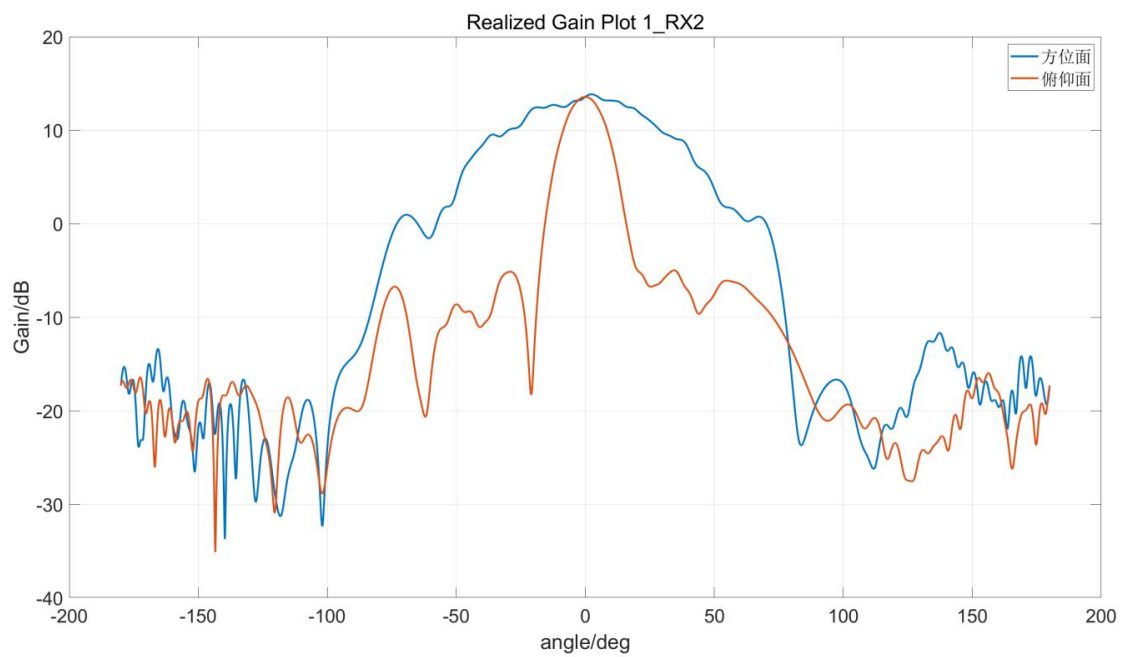


Figure 1.2 RX2directional diagram

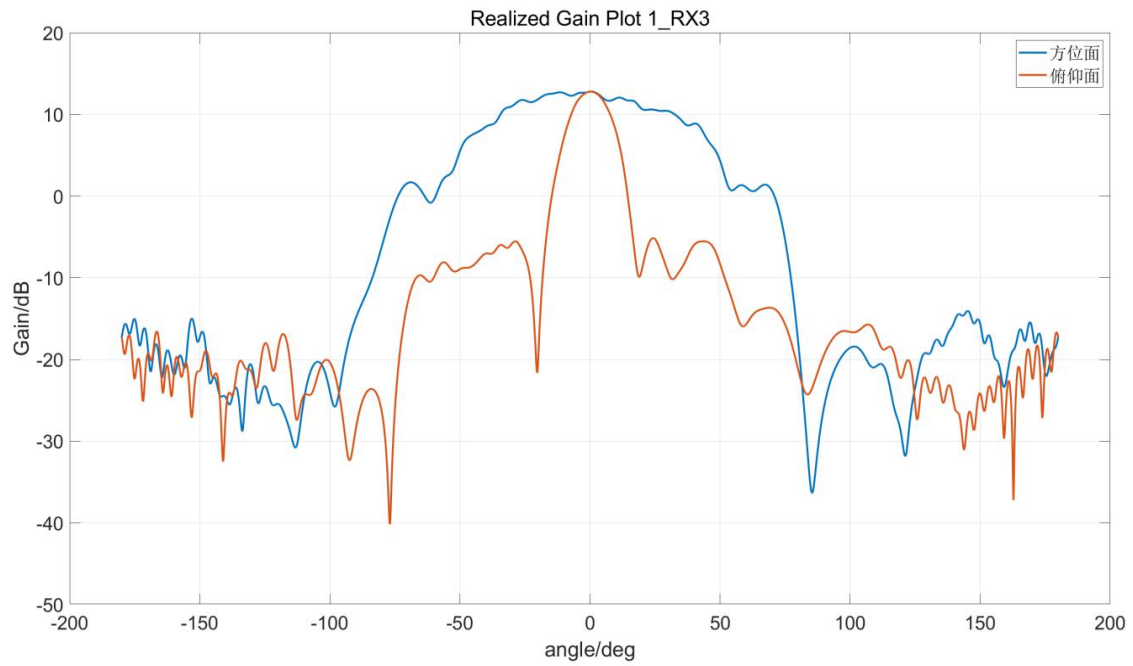


Figure1.3 RX3 directional diagram

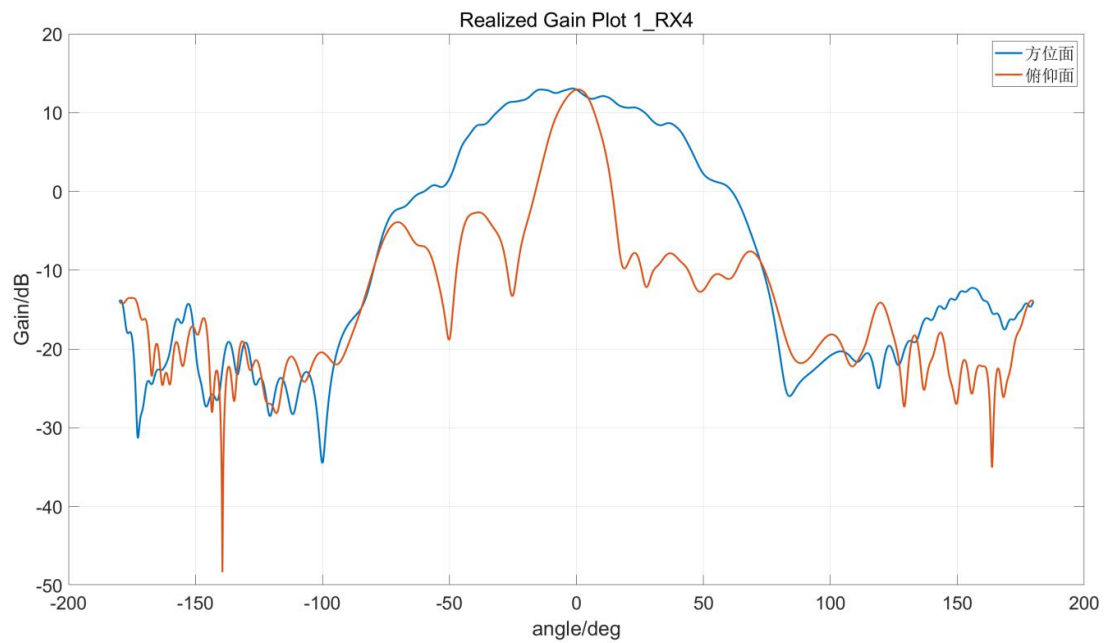


Figure1.4 RX4 directional diagram

|     | Maximum gain of pitch surface | Pitch surface 6dB wave width | Pitch side lobe level | Azimuth plane 6dB wave width |
|-----|-------------------------------|------------------------------|-----------------------|------------------------------|
| RX1 | 11.1dB                        | 23.2°                        | -13.7dB               | 94°                          |
| RX2 | 13.5dB                        | 21.9°                        | -18.7dB               | 83.6°                        |
| RX3 | 12.8dB                        | 21.4°                        | -18.2dB               | 93.7°                        |
| RX4 | 13dB                          | 20.7°                        | -15.6dB               | 85.2°                        |

## 1.2) TX antenna direction diagram

The antenna pattern results are as follows:

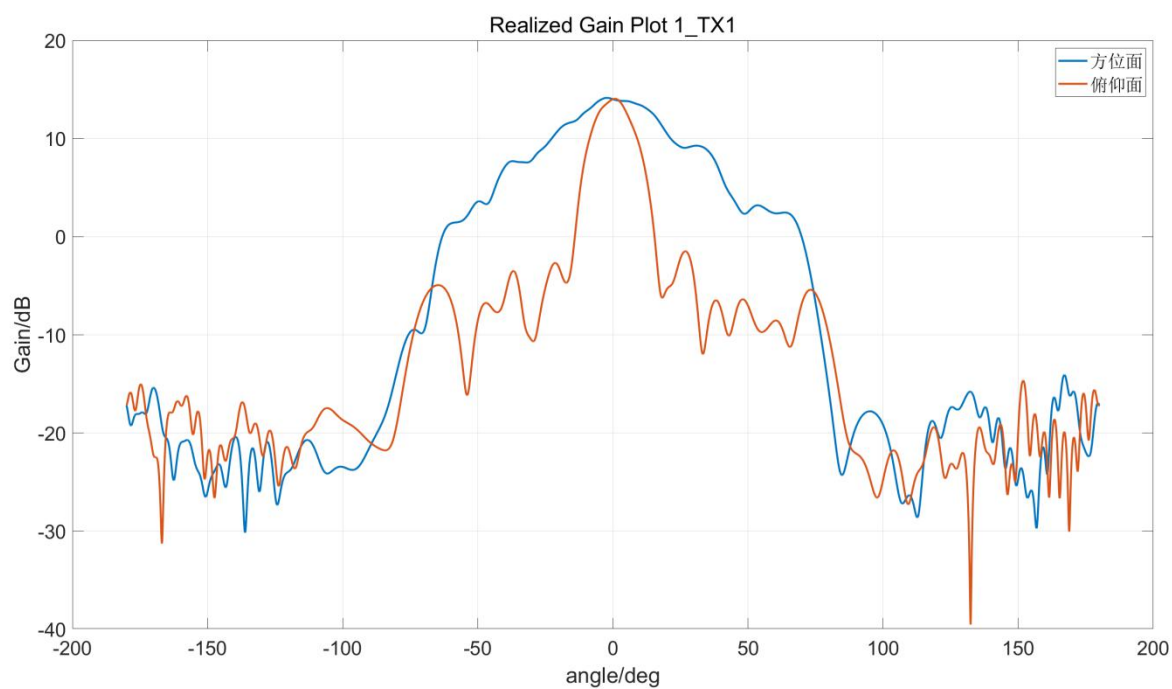


Figure1.5 TX1 directional diagram

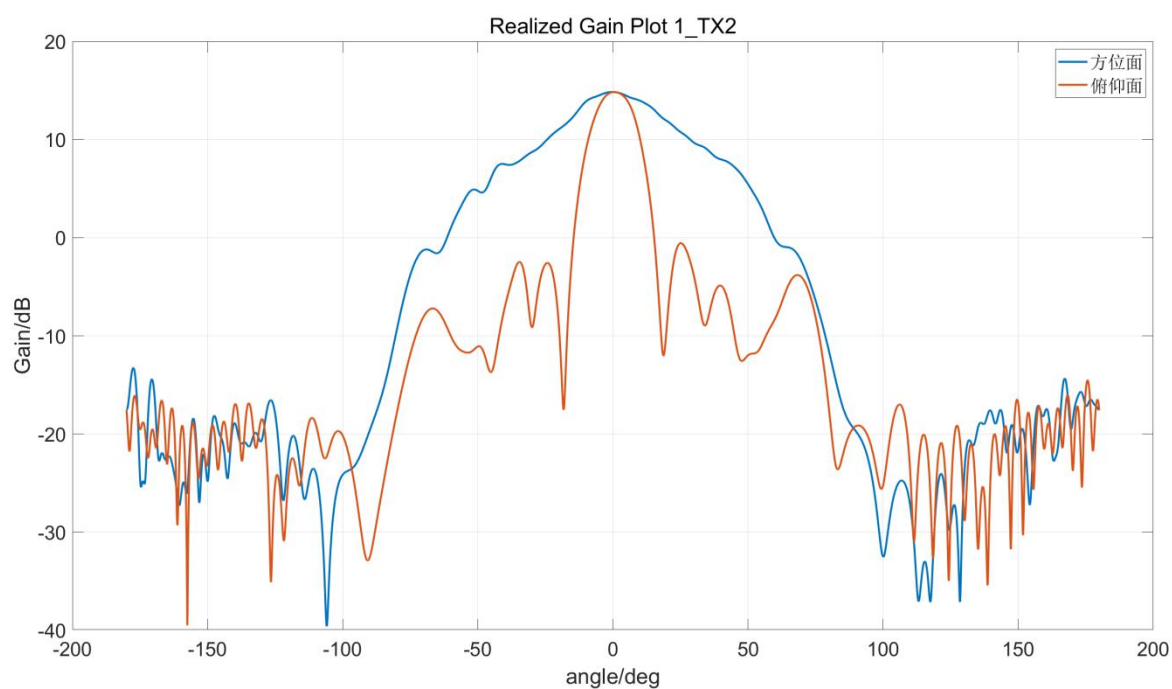


Figure1.6 TX2 directional diagram

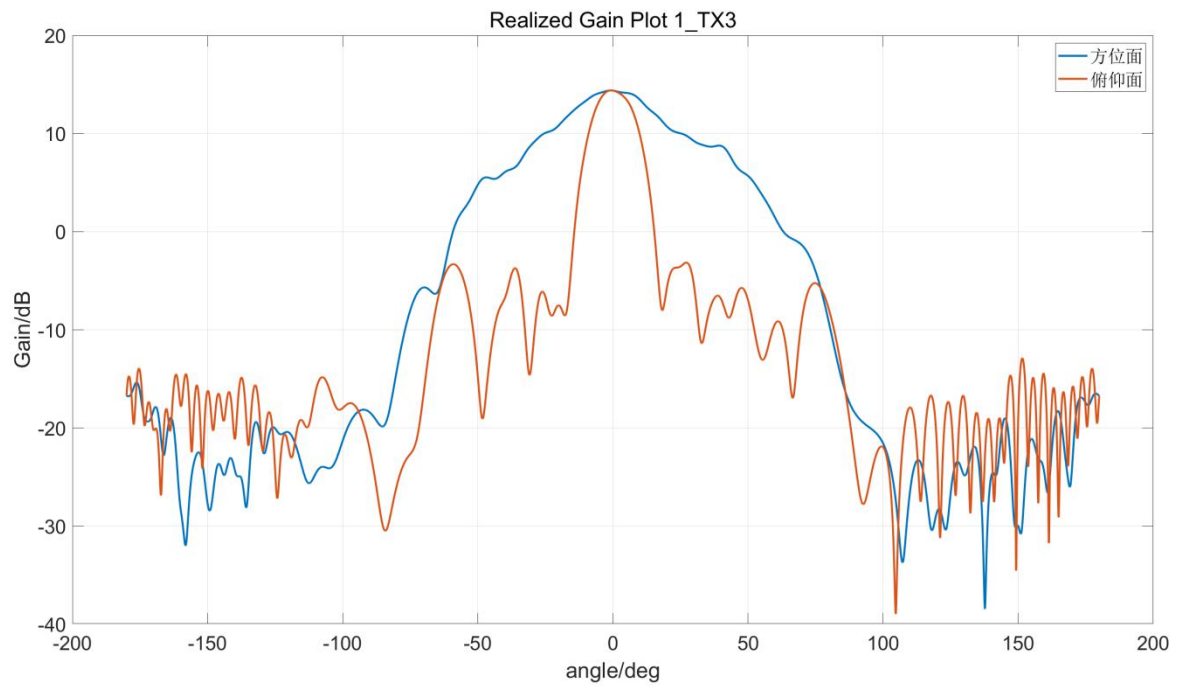


Figure1.7 TX3 directional diagram

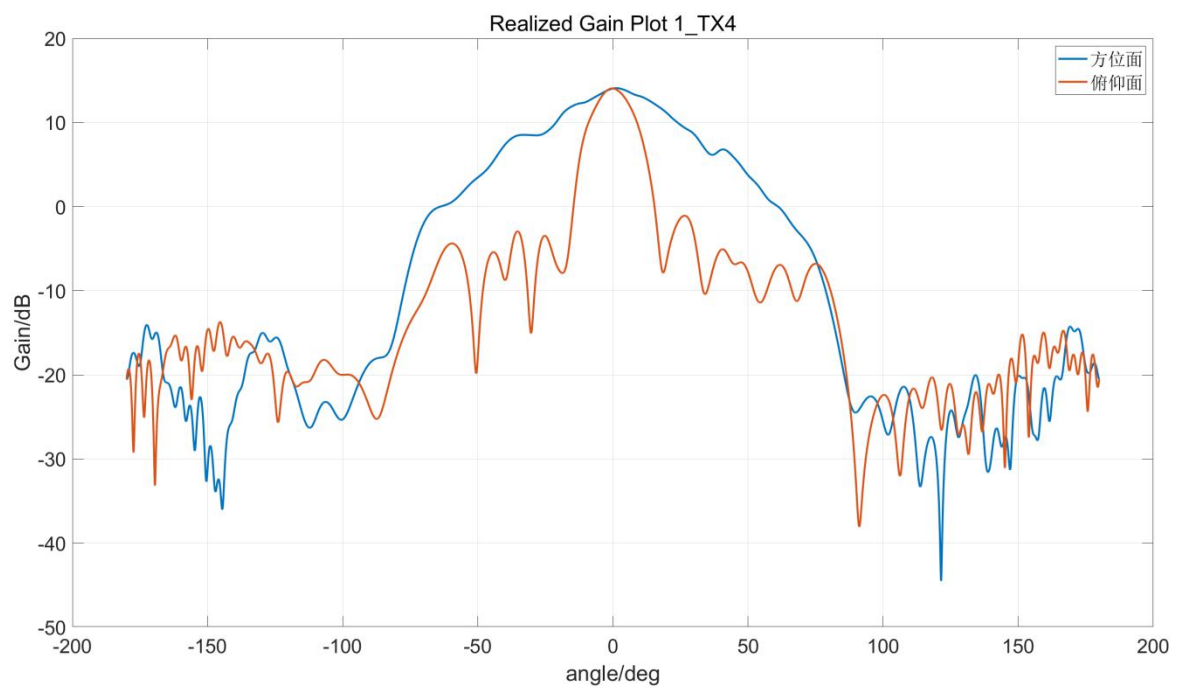


Figure1.8 TX4 directional diagram

|  |                               |                              |                       |                              |
|--|-------------------------------|------------------------------|-----------------------|------------------------------|
|  | Maximum gain of pitch surface | Pitch surface 6dB wave width | Pitch side lobe level | Azimuth plane 6dB wave width |
|--|-------------------------------|------------------------------|-----------------------|------------------------------|



|     |        |       |         |       |
|-----|--------|-------|---------|-------|
| TX1 | 14dB   | 21.3° | -15.5dB | 66.6° |
| TX2 | 14.8dB | 21°   | -15.4dB | 65°   |
| TX3 | 14.4dB | 21.5° | -17.5dB | 73°   |
| TX4 | 14dB   | 21.7° | -15.1dB | 69.5° |