

# ANTENNA INFORMATION

|                      |                 |                                                                                      |
|----------------------|-----------------|--------------------------------------------------------------------------------------|
| Antenna manufacturer | Company name    | INPAQ                                                                                |
|                      | Address         | No.5,Chunqiu Road, Panyang Industrial Park Huangdai Town,<br>Xiangcheng Zone, Suzhou |
| Test location        | Company name    | INPAQ                                                                                |
|                      | Address         | 1F., No. 106-1, Ligong St., Beitou Dist., Taipei City 112019, Taiwan<br>(R.O.C.)     |
| Test Personnel       | Name(Full name) | Ivan Chang                                                                           |
|                      | E-mail          | <a href="mailto:ivanchang@inpaq.com.tw">ivanchang@inpaq.com.tw</a>                   |
|                      | Tel/Mobile      | 0917-035903                                                                          |
| Testing date         |                 | 2024/07/30                                                                           |

|                                       |      |                |
|---------------------------------------|------|----------------|
| Antenna Part number                   | Main | WA-P-LE-02-310 |
|                                       | Aux  | WA-P-LE-01-083 |
| Antenna type (ex: PIFA, Dipole...etc) |      | PIFA           |

| Antenna Peak gain w/ cable loss (dBi)* |                           |                        |                        |                        |                        |                        |                        |                        |                        |                         |
|----------------------------------------|---------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|
|                                        | 2.4GHz<br>2400-2483.5 MHz | 5.2GHz<br>5150-5250MHz | 5.3GHz<br>5250-5350MHz | 5.6GHz<br>5470-5725MHz | 5.8GHz<br>5725-5850MHz | 5.9GHz<br>5850-5895MHz | 6.2GHz<br>5925-6425MHz | 6.5GHz<br>6425-6525MHz | 6.7GHz<br>6525-6875MHz | 7.0 GHz<br>6875-7125MHz |
| Main                                   | 1.99                      | 0.92                   | 1.39                   | 2.98                   | 3.09                   | 2.88                   | 1.65                   | 1.22                   | 2.01                   | 2.41                    |
| Aux                                    | 2.01                      | 0.89                   | 1.35                   | 1.24                   | 2.41                   | 1.07                   | 1.17                   | 1.05                   | 1.19                   | 0.99                    |

| Cable Assembly Part Number and Information |              |                  |                    |                |                |
|--------------------------------------------|--------------|------------------|--------------------|----------------|----------------|
|                                            | Cable PN     | Cable length(mm) | Cable diameter(mm) | Impedance(ohm) | Connector type |
| Main                                       | SY113/50-105 | 221              | 1.13               | 50             | I-PEX NGFF     |
| Aux                                        | SY113/50-128 | 446              | 1.13               | 50             | I-PEX NGFF     |

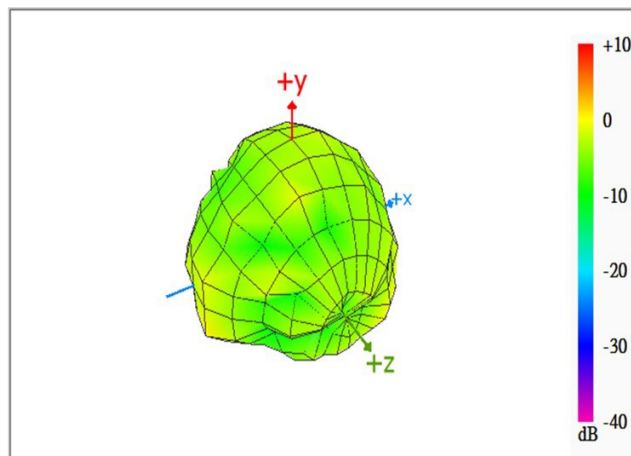
\* 3D Antenna Peak Gain required being test in system basis.

## 1. Radiation characteristics of antenna loaded in Host Platform

### Main Antenna

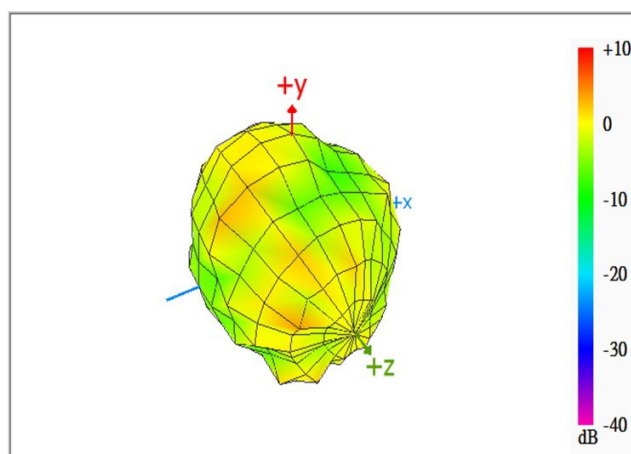
Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 2400-2483.5     | 1.99                          |



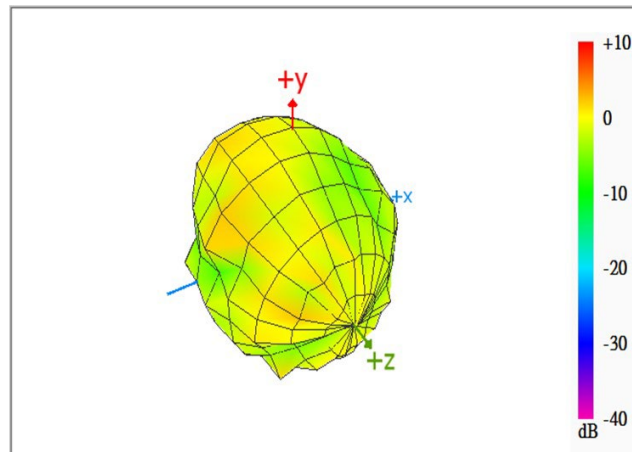
Max Antenna 3D Radiation Pattern 5150-5250 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5150-5250       | 0.92                          |



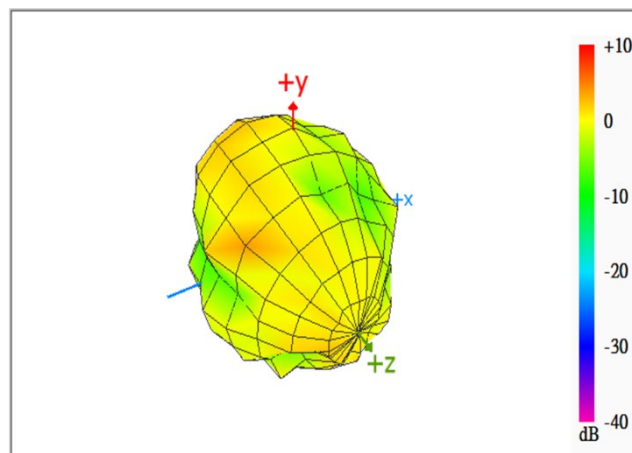
## Max Antenna 3D Radiation Pattern 5250-5350 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5250-5350       | 1.39                          |



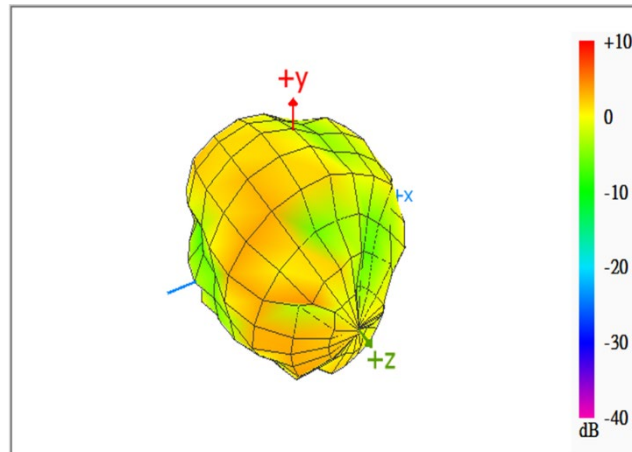
## Max Antenna 3D Radiation Pattern 5470-5725 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5470-5725       | 2.98                          |



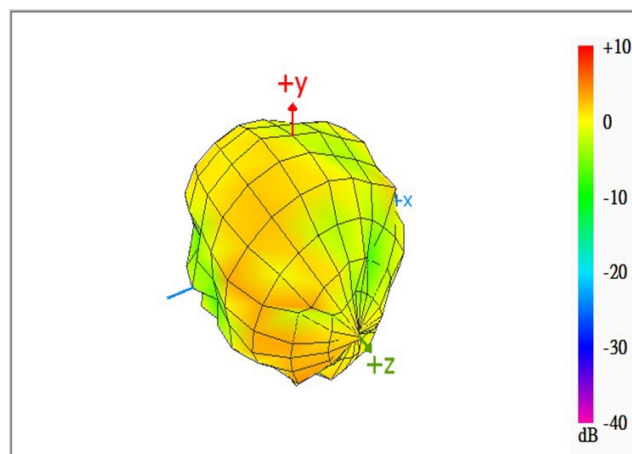
## Max Antenna 3D Radiation Pattern 5725-5850 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5725-5850       | 3.09                          |



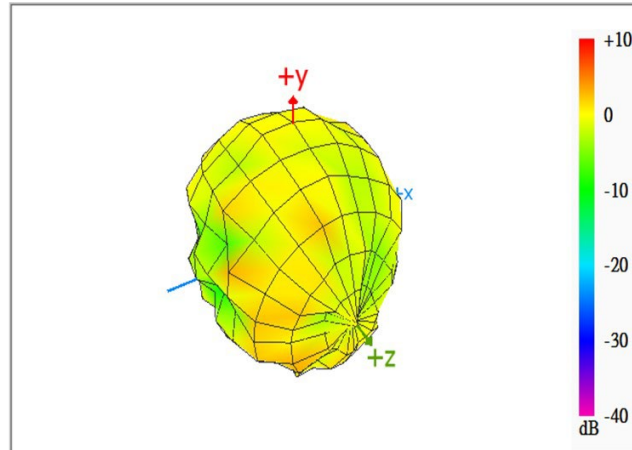
## Max Antenna 3D Radiation Pattern 5850-5895 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5850-5895       | 2.88                          |



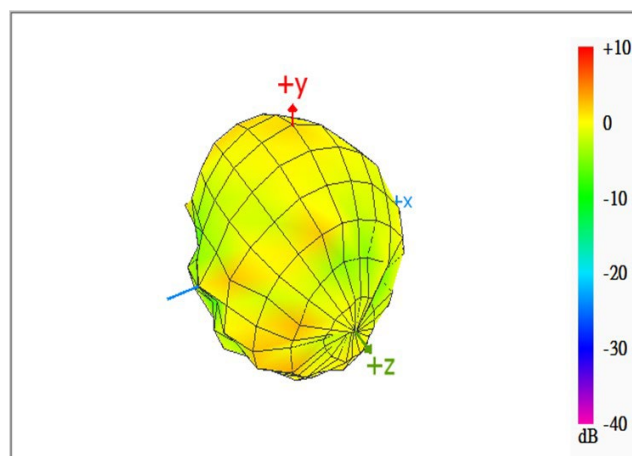
## Max Antenna 3D Radiation Pattern 5925-6425 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5925-6425       | 1.65                          |



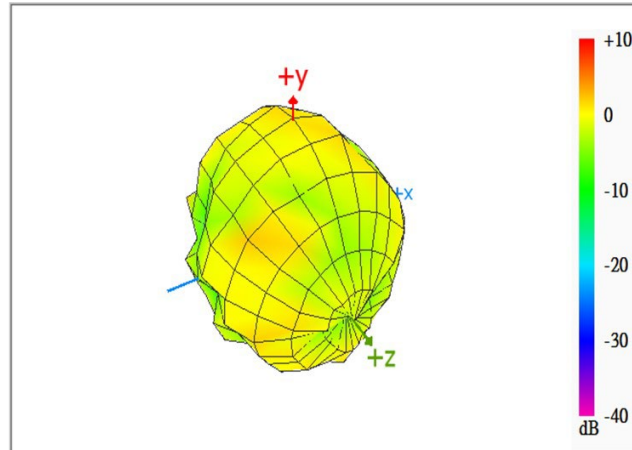
## Max Antenna 3D Radiation Pattern 6425-6525 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 6425-6525       | 1.22                          |



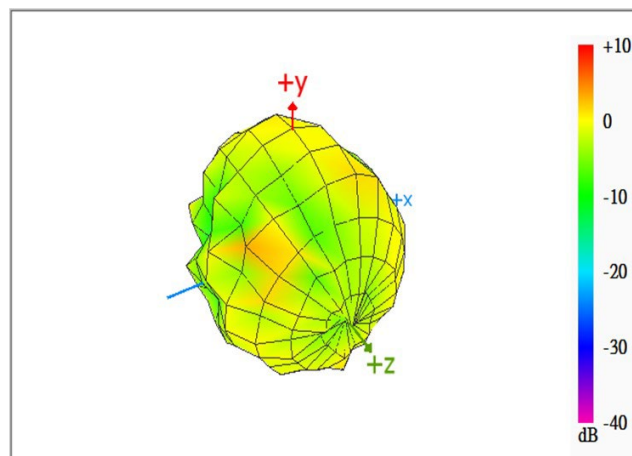
## Max Antenna 3D Radiation Pattern 6525-6875 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 6525-6875       | 2.01                          |



## Max Antenna 3D Radiation Pattern 6875-7125 MHz

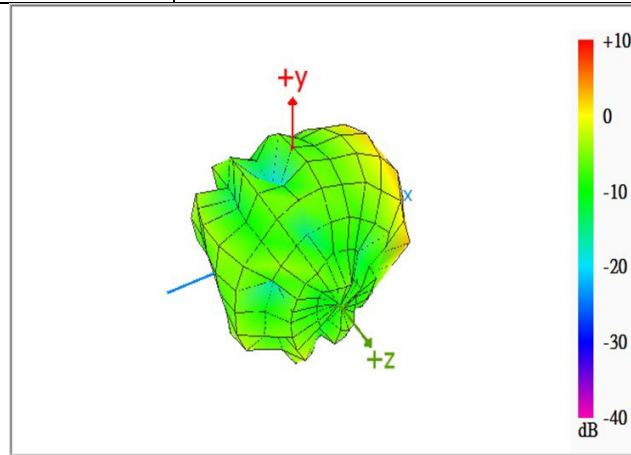
| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 6875-7125       | 2.41                          |



## Auxiliary Antenna

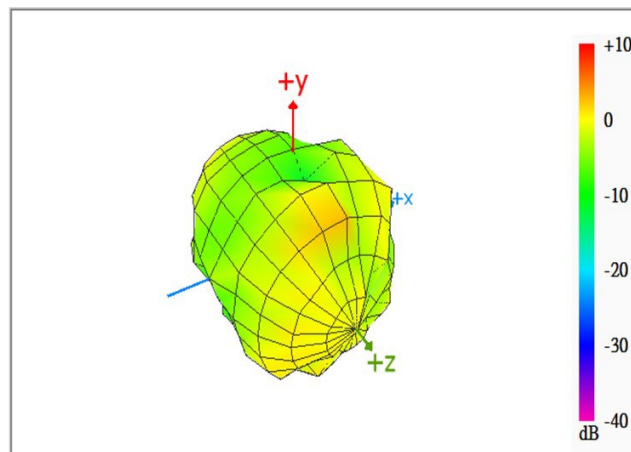
### Max Antenna 3D Radiation Pattern 2400 – 2483.5 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 2400-2483.5     | 2.01                          |



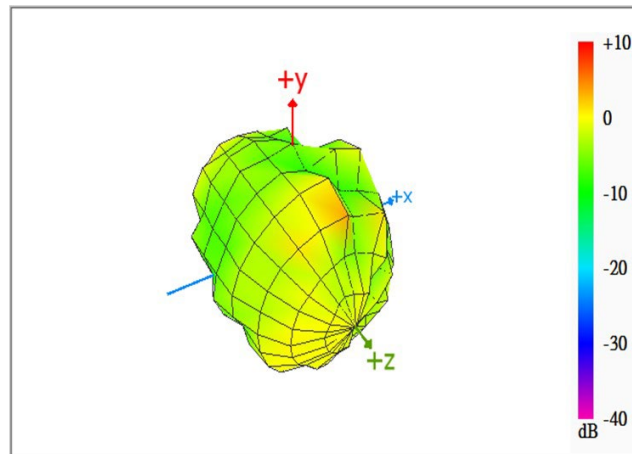
### Max Antenna 3D Radiation Pattern 5150-5250 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5150-5250       | 0.89                          |



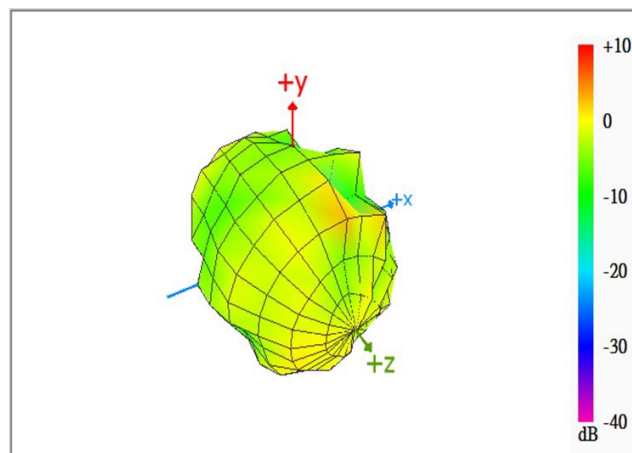
## Max Antenna 3D Radiation Pattern 5250-5350 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5250-5350       | 1.35                          |



## Max Antenna 3D Radiation Pattern 5470-5725 MHz

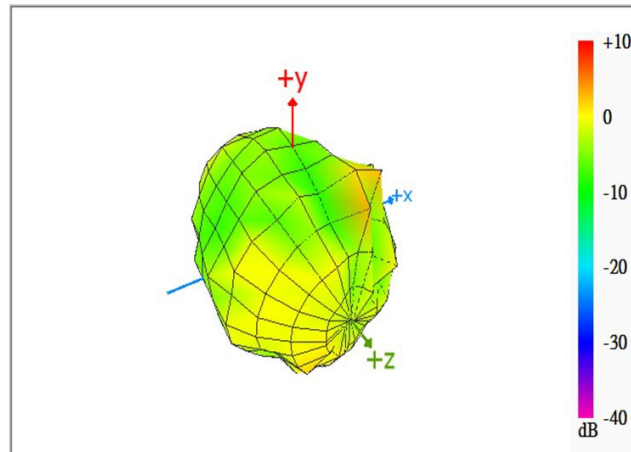
| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5470-5725       | 1.24                          |





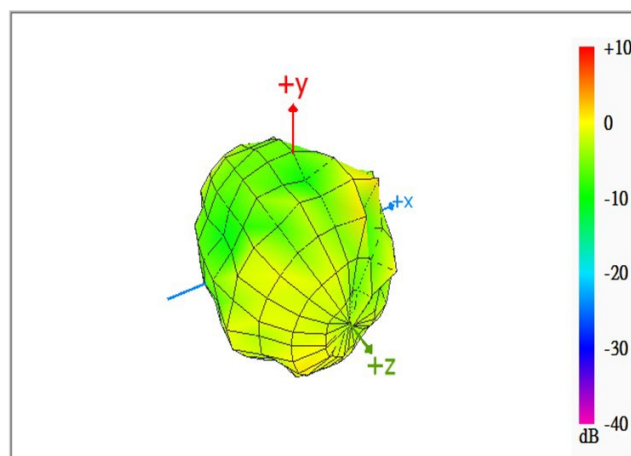
## Max Antenna 3D Radiation Pattern 5725-5850 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5725-5850       | 2.41                          |



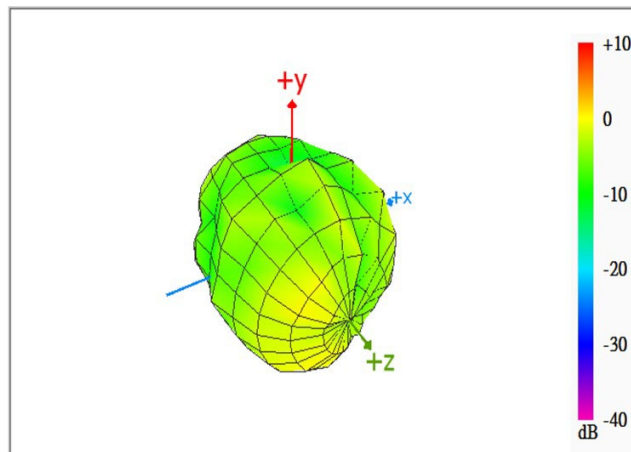
## Max Antenna 3D Radiation Pattern 5850-5895 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5850-5895       | 1.07                          |



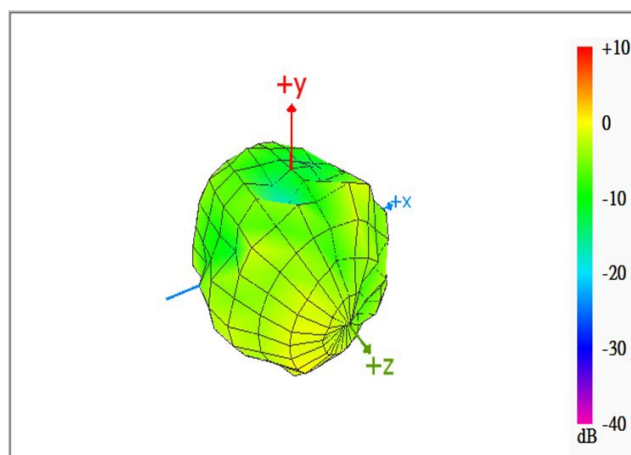
## Max Antenna 3D Radiation Pattern 5925-6425 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 5925-6425       | 1.17                          |



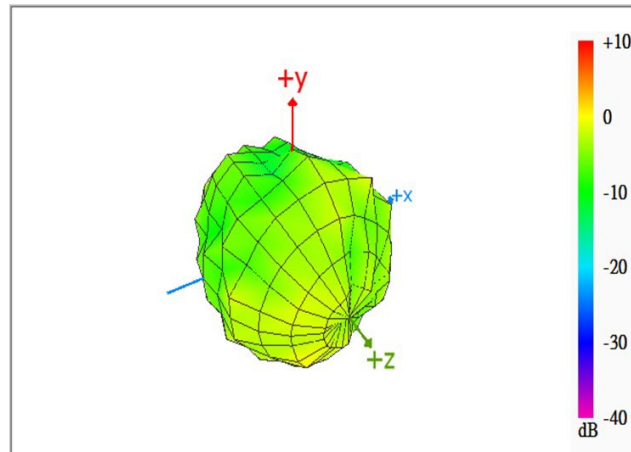
## Max Antenna 3D Radiation Pattern 6425-6525 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 6425-6525       | 1.05                          |



## Max Antenna 3D Radiation Pattern 6525-6875 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 6525-6875       | 1.19                          |



## Max Antenna 3D Radiation Pattern 6875-7125 MHz

| Frequency (MHz) | Peak Gain w/ Cable Loss (dBi) |
|-----------------|-------------------------------|
| 6875-7125       | 0.99                          |

