



MEASUREMENTS OF SHURE MXWAPXD2 ANTENNAS FOR REGULATORY APPROVAL

1.9GHZ ANTENNA A

1.9GHZ ANTENNA B

2.4GHZ BLUETOOTH ANTENNA



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1. Overview and Reference Angles

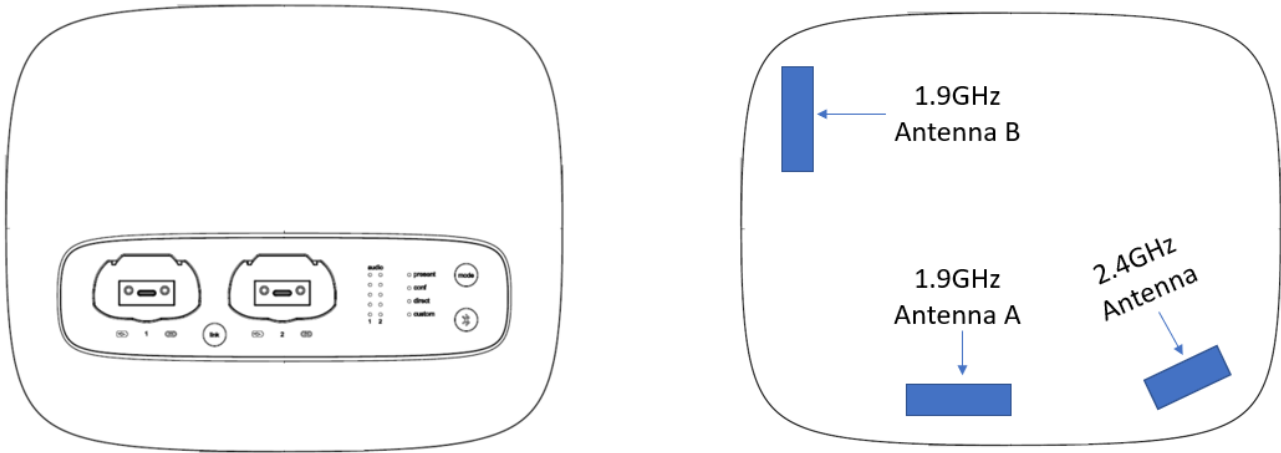


Figure 1-1. Shure APXD2 Internal Antennas Overview

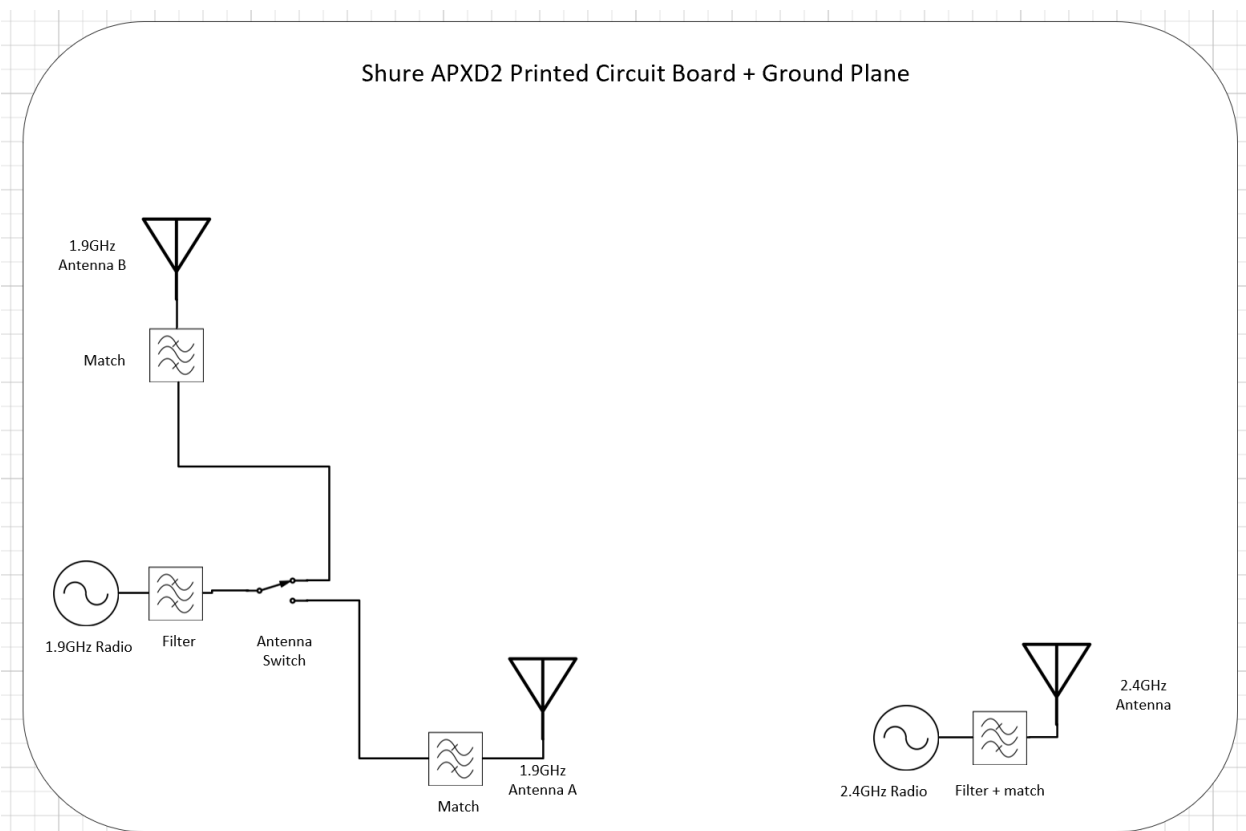


Figure 1-2. Shure APXD2 Antennas Block Diagram

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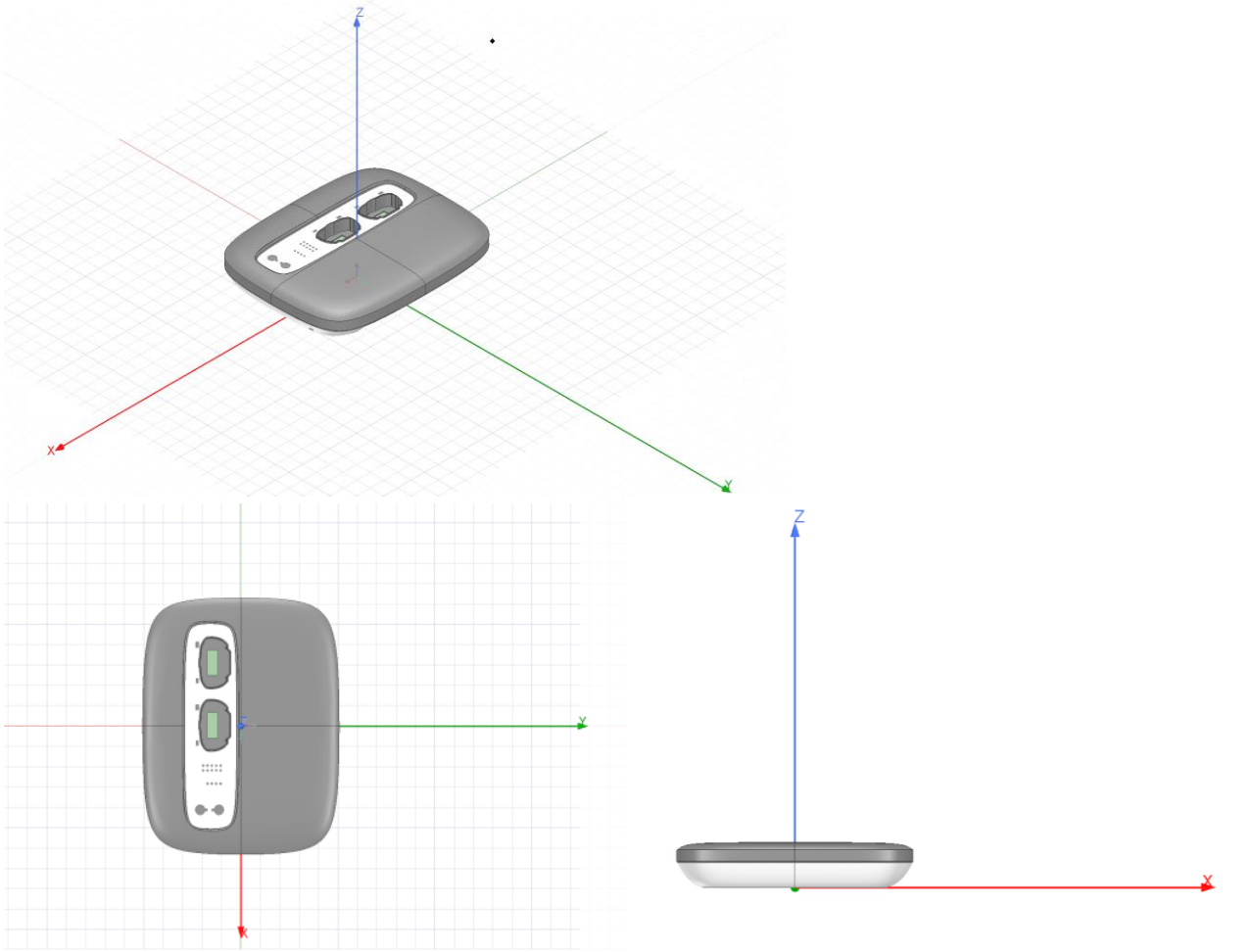


Figure 1-3. APXD2 Reference Angles



2. 1.9GHz Antenna A

Antenna Type – Internal Shure Custom PIFA

Peak Gain					
Parameter	Type	Pattern	1880 MHz	1905 MHz	1930 MHz
Antenna A	Internal Shure Custom	Hemisphere	2.11 dBi	2.73 dBi	2.54 dBi

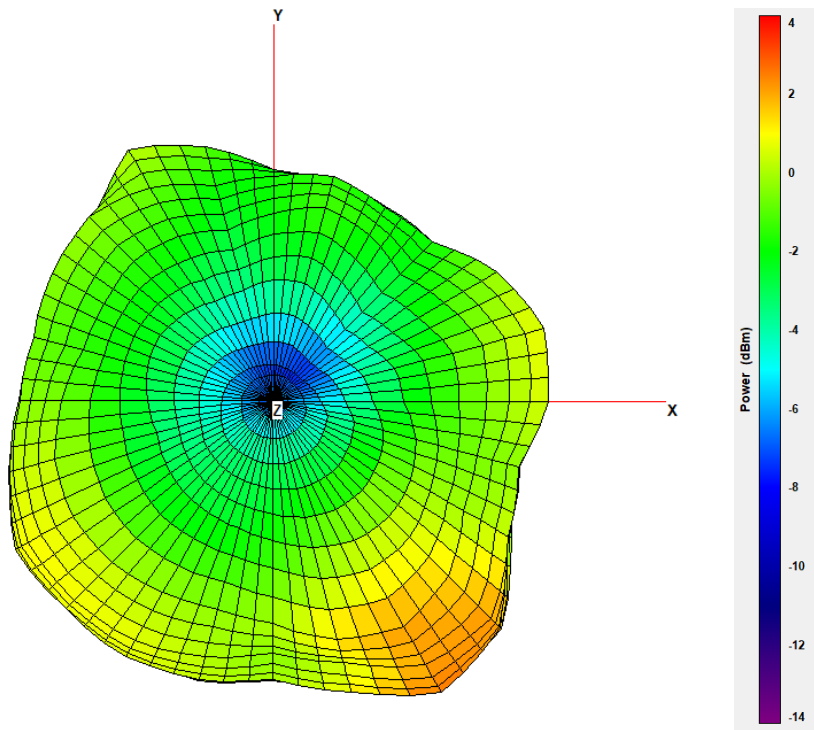


Figure 2-1. 1.9gHz Antenna A X-Z Plane.

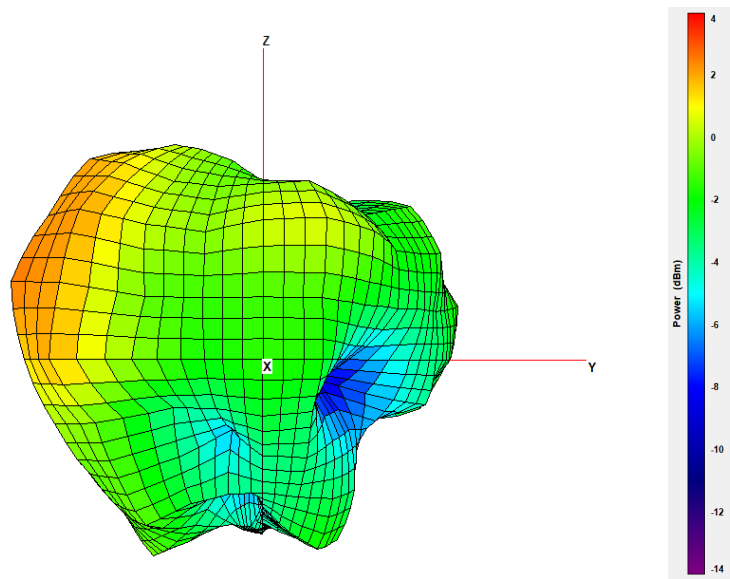


Figure 2-2. 1.9GHz Antenna A Y-Z Plane

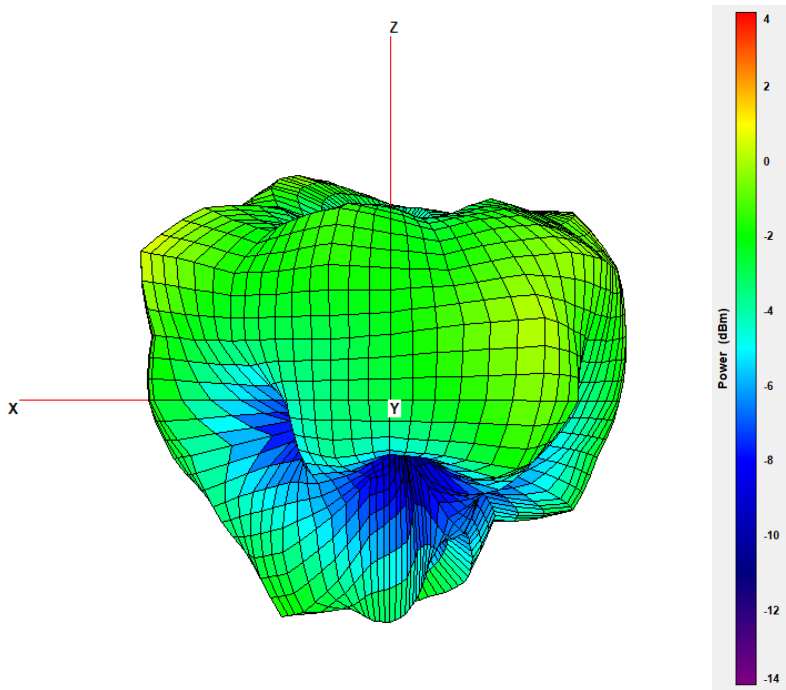


Figure 2-3. 1.9GHz Antenna A X-Z plane

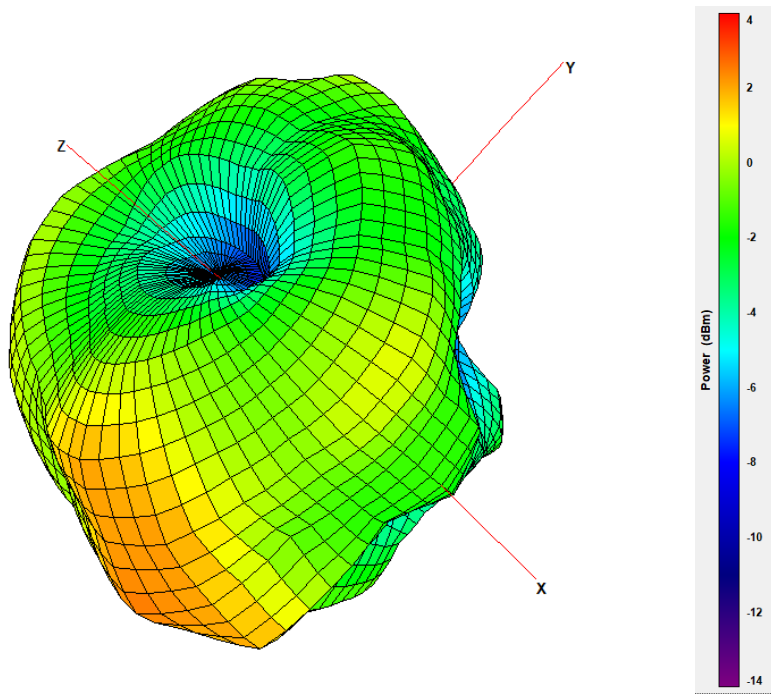


Figure 2-4. 1.9GHz Antenna A 3D



3. 1.9GHz Antenna B

Antenna Type – Internal Shure Custom PIFA

Peak Gain					
Parameter	Type	Pattern	1880 MHz	1905 MHz	1930 MHz
Antenna B	Internal Shure Custom	Hemisphere	2.84 dBi	3.56 dBi	3.96 dBi

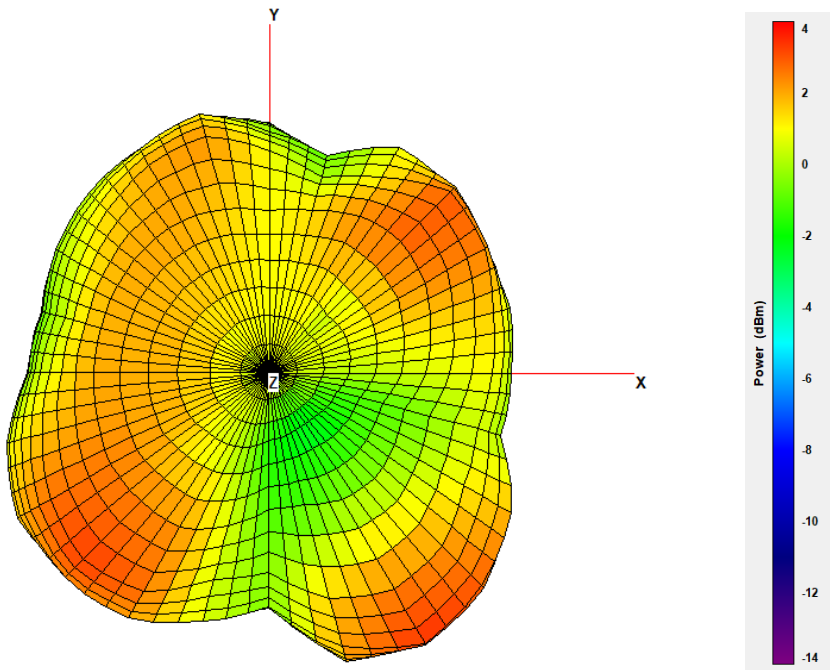


Figure 3-1. 1.9GHz Antenna B X-Y Plane.

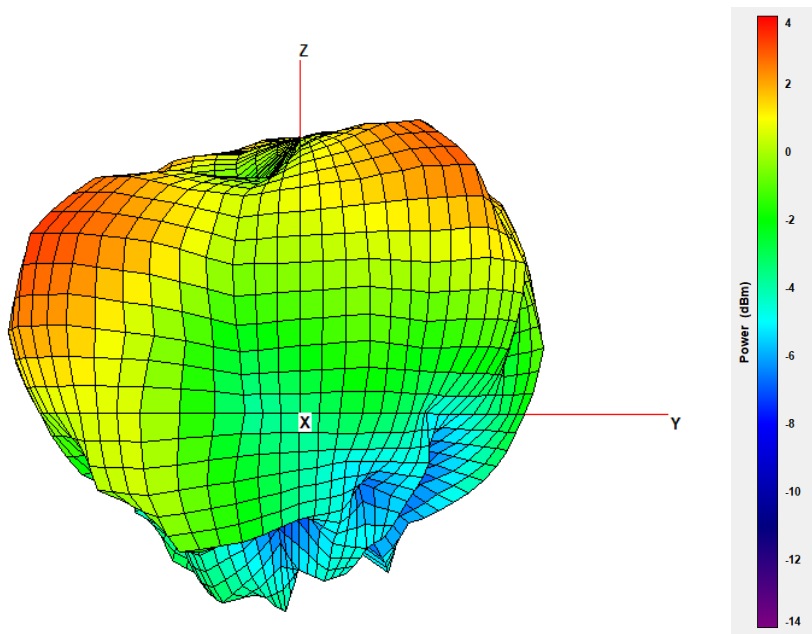


Figure 3-2. 1.9GHz Antenna B Y-Z Plane.

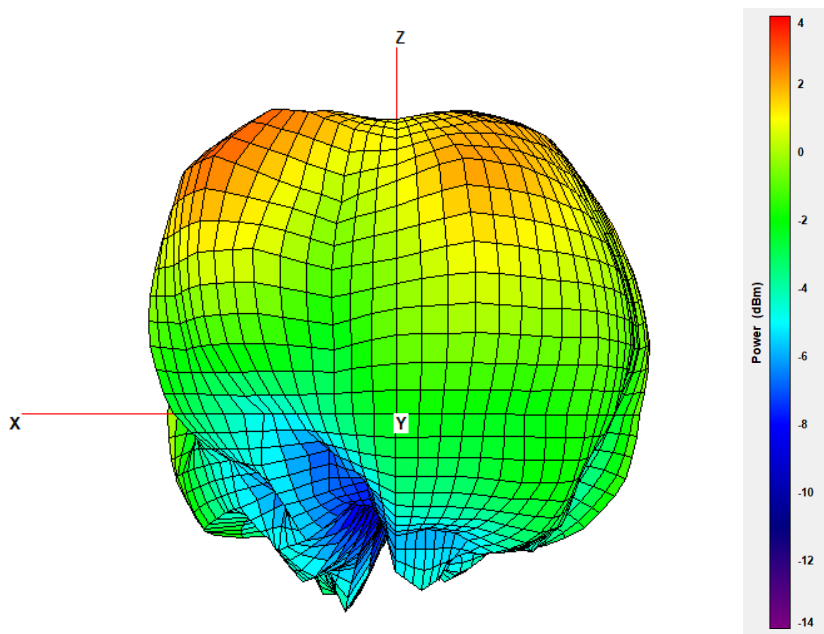


Figure 3-3. 1.9GHz Antenna B X-Z Plane.

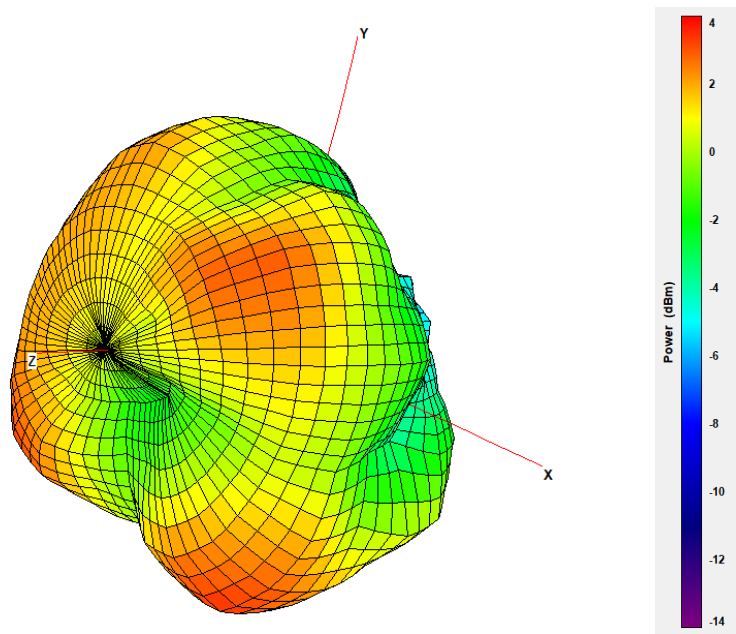


Figure 3-4. 1.9GHz Antenna B 3D



4. 2.4GHz Bluetooth Antenna

Antenna Type – Internal Shure Custom PIFA

Peak Gain					
Parameter	Type	Pattern	2412 MHz	2450 MHz	2472 MHz
2.4GHz Antenna	Internal Shure Custom	Hemisphere	2.51 dBi	3.02 dBi	3.41 dBi

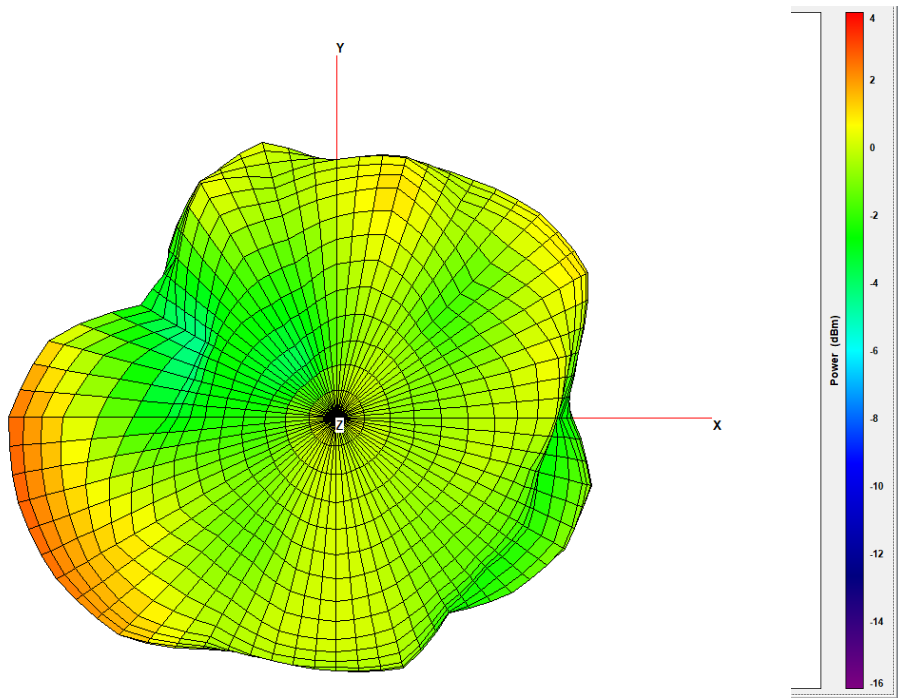


Figure 4-1. 2.4GHz Antenna X-Y plane

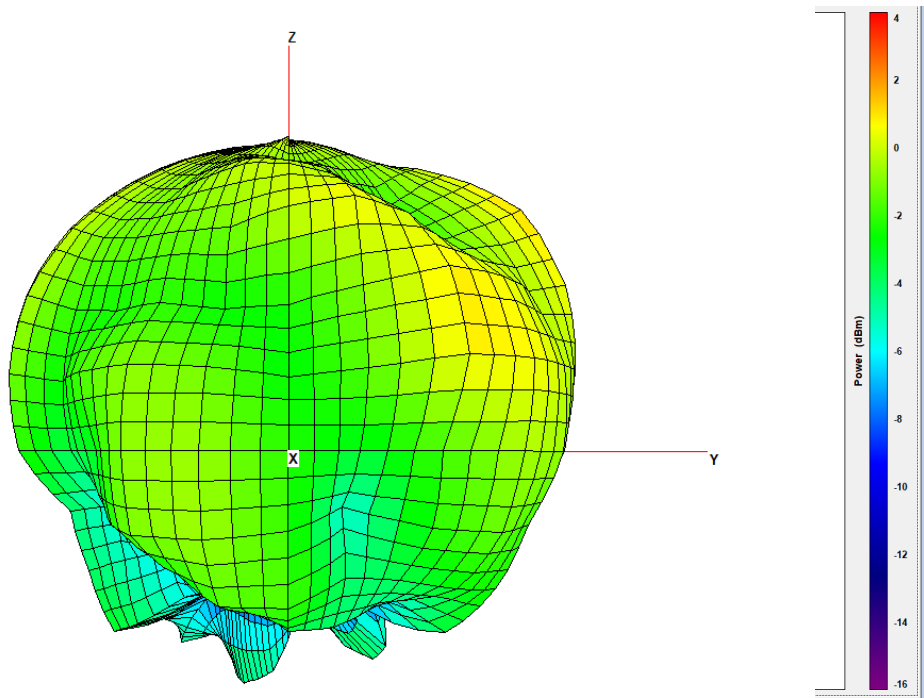


Figure 4-2. 2.4GHz Antenna Y-Z plane

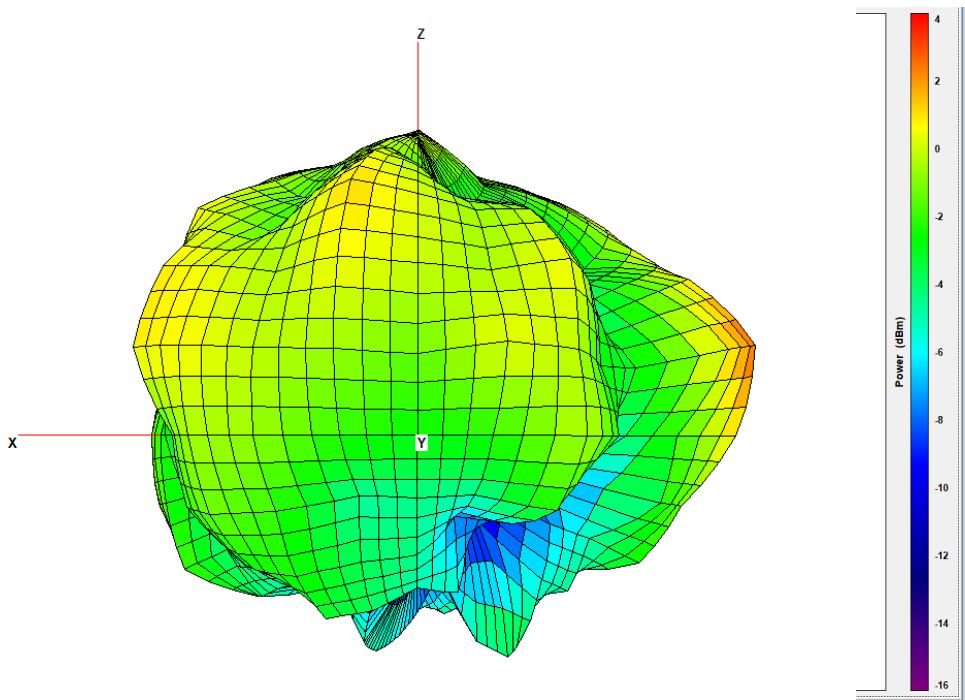


Figure 4-3. 2.4GHz Antenna X-Z plane

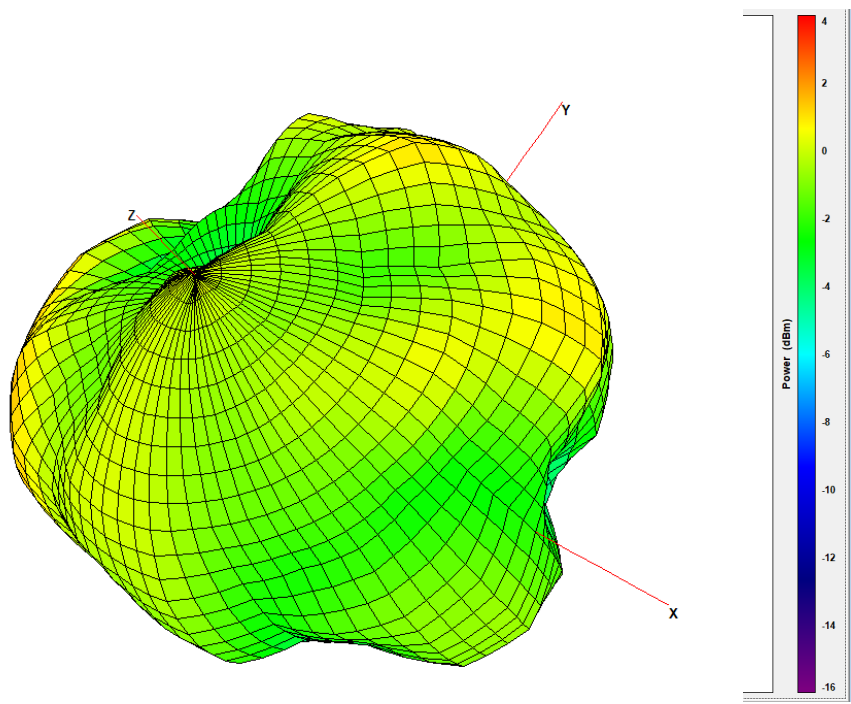


Figure 4-4. 2.4GHz Antenna 3D