# **Antenna Reports**

Main Antenna vendor: Motorola

Test lab: Motorola internal lab (by GTS RayZone2800)

Antenna model name: Midframe

Issue date: 2023/05/06

Signature:\_\_\_\_\_ Venghui

**Antenna Summary Table** 

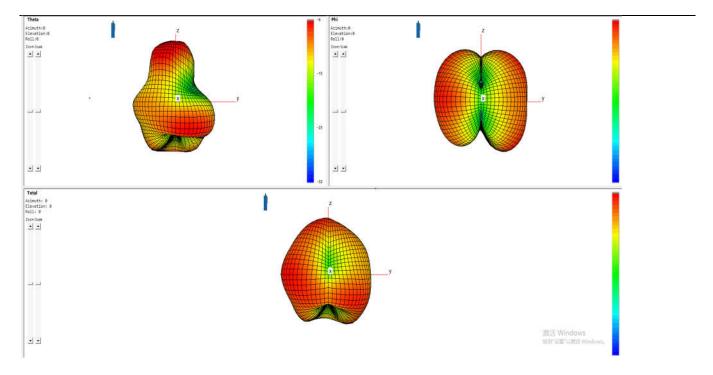
Check items	Information	
Provided by lab	Motorola internal lab (GTS)	
Manufacturer/ Brand name	SPEED	
Test software	MaxSign Libra	
Manufacturer address	222 W,Merchandise Mart Plaza, Chicago IL 60654 USA	
Test environment	Motorola Xiamen RD team Lab with GTS2800 chamber	
Test software	MaxSign Libra	
Antenna detail info.	ANT5: GPS L5+WiFi5G /6E (5.15~7.125GHz),LOOP type antenna. ANT6: GPS L5+WiFi 2.4G/BT (2.4~2.5GHz) , IFA type ANT7: / WiFi 5G / 6E antenna (5.15~7.125GHz), IFA type ANT8: WIFI 2.4G antenna (2.4~2.5GHz, 5.15~7.125GHz) , Loop type NFC Antenna: Differential port to excite LOOP sheet with dimension 25.95 mm * 32.15 mm	
Antenna gain test data	Included antenna frequency, gain pattern	

Note: Antenna gain was measured in the anechoic chamber, 3D scan was exercised, and the highest numbers are reported in this document.

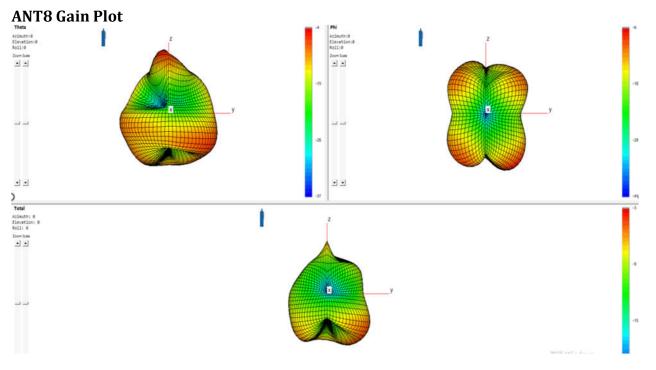
Test Equipment	Calibrate	Due date	Remark
GTS2800	On May 24th,2024	On May 24th,2025	NA
ETS	On May 1th,2024	On May 1th,2025	NA
E5071C	On May 24th,2024	On May 24th,2025	network analyzer

### **Antenna Test data:**

Antenna Type /Gain 2.4G	<2400MHz~2483.5MHz> <ant6>: IFA Antenna with gain: -5.5 dBi <ant8>: LOOP Antenna with gain: -5.5 dBi</ant8></ant6>
Antenna Type /Gain 5G	<5150MHz~5250MHz> <ant5>: LOOP Antenna with gain:-5.3 dBi <ant7>: IFA Antenna with gain: -5.24dBi &lt;5250MHz~5350MHz&gt; <ant5>: LOOP Antenna with gain: -5.3dBi <ant7>: IFA Antenna with gain: -5.5dBi &lt;5470MHz~5725MHz&gt; <ant5>: LOOP Antenna with gain:-5.5dBi &lt;5470MHz~5725MHz&gt; <ant5>: LOOP Antenna with gain:-5.5dBi <ant7>: IFA Antenna with gain:-5.52dBi &lt;5725MHz~5850MHz&gt; <ant5>: LOOP Antenna with gain: -7dBi <ant7>: IFA Antenna with gain: -7dBi</ant7></ant5></ant7></ant5></ant5></ant7></ant5></ant7></ant5>
Antenna Type /Gain 6E	<pre>&lt;5925MHz~6425MHz&gt; <ant5>: LOOP Antenna with gain:-7 dBi <ant7>: IFA Antenna with gain: -7dBi &lt;6425MHz~6525MHz&gt; <ant5>: LOOP Antenna with gain: -7 dBi <ant7>: IFA Antenna with gain: -7dBi &lt;6525MHz~6875MHz&gt; <ant5>: LOOP Antenna with gain: -7 dBi <ant7>: IFA Antenna with gain: -7 dBi <ant7>: IFA Antenna with gain: -7 dBi &lt;6875MHz~7125MHz&gt; <ant5>: LOOP Antenna with gain: -7 dBi &lt;6875MHz~7125MHz&gt; <ant5>: LOOP Antenna with gain: -7 dBi</ant5></ant5></ant7></ant7></ant5></ant7></ant5></ant7></ant5></pre>



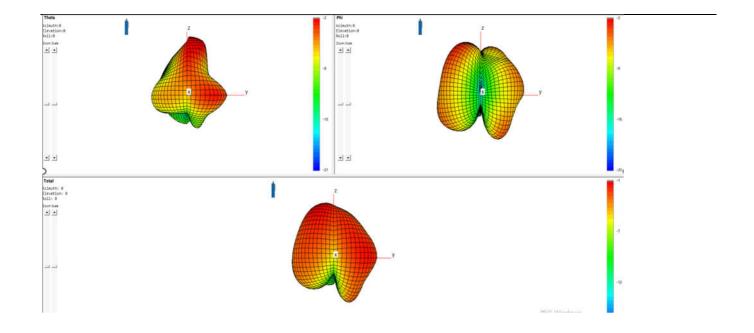
WIFI /BT 2.4G (2450 MHz)



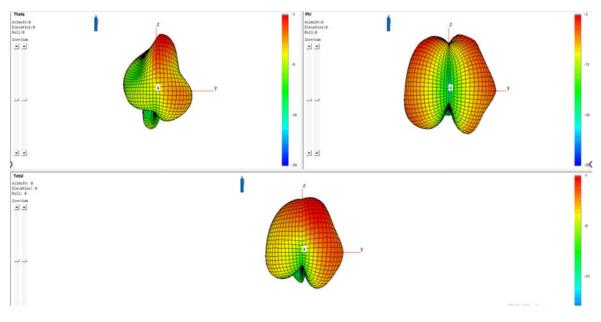
WIFI 2.4G (2450 MHz)

**ANT5 Gain Plot** 

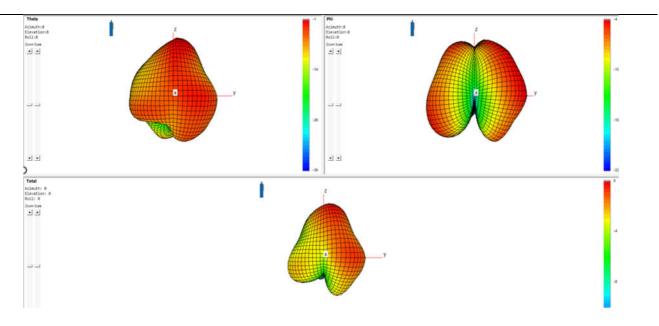
(Rear view- Front view)



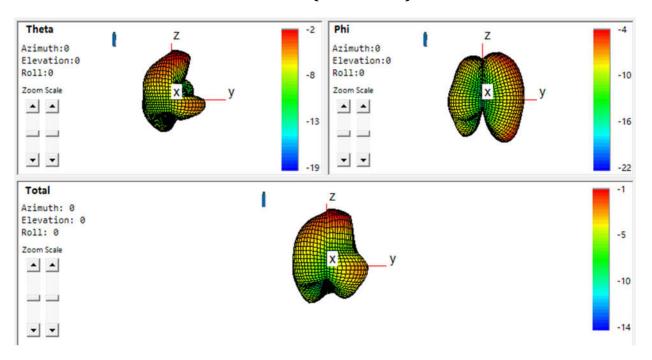
## WIFI 5G (5200 MHz)



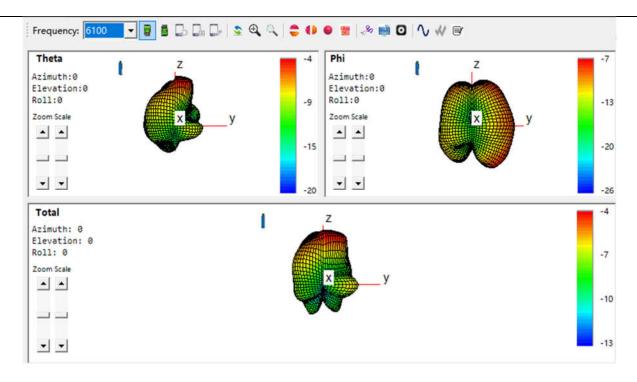
WIFI 5G (5300 MHz)



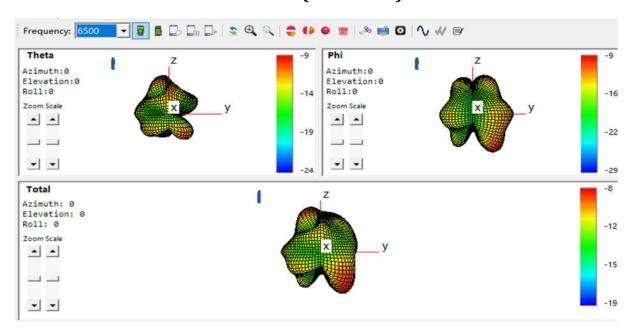
#### WIFI 5G (5500 MHz)



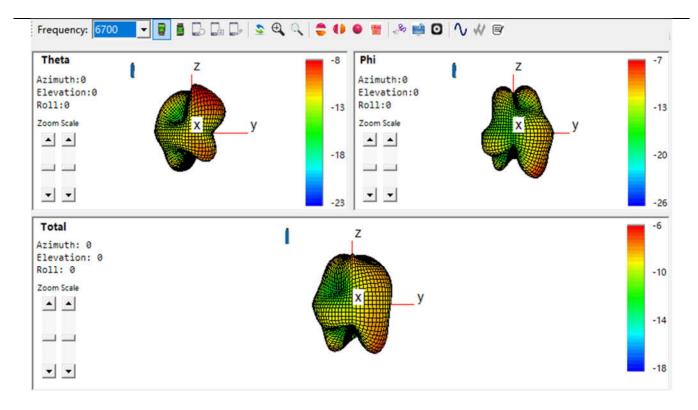
WIFI 5G (5800 MHz)



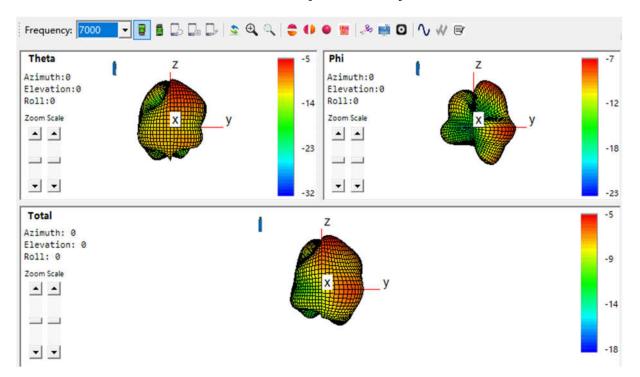
WIFI 6E (6100 MHz)



WIFI 6E (6500 MHz)



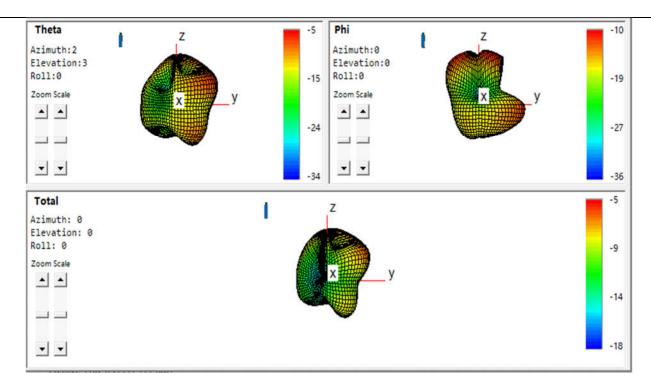
WIFI 6E (6700 MHz)



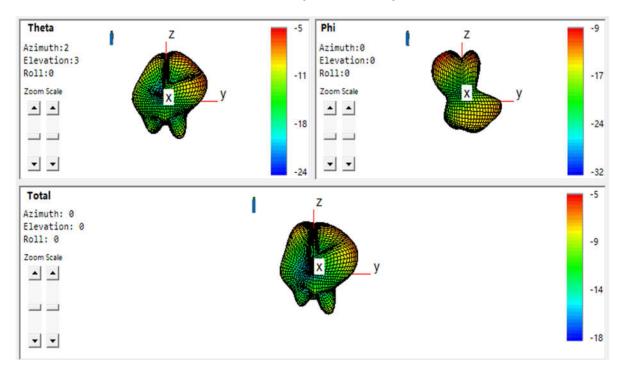
WIFI 6E (7000 MHz)

**ANT7 Gain Plot** 

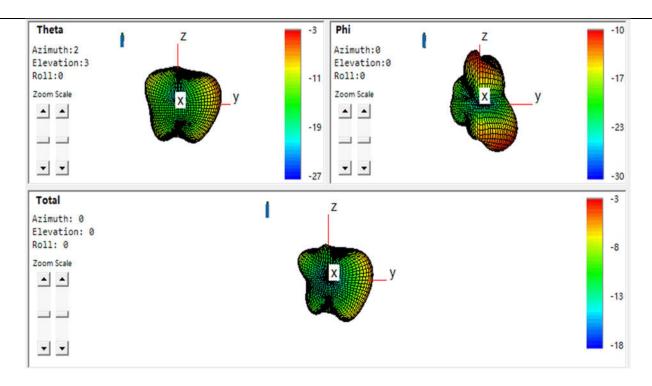
(Rear view- Front view)



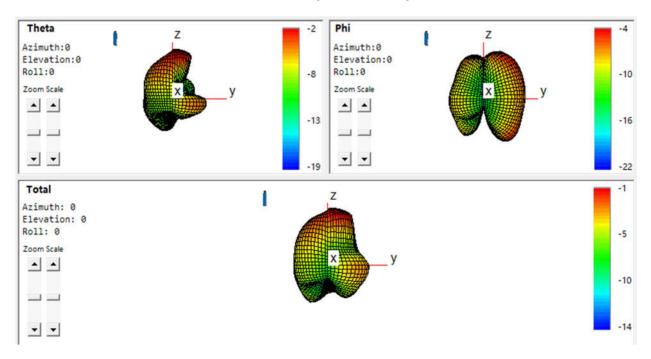
WIFI 5G (5200 MHz)



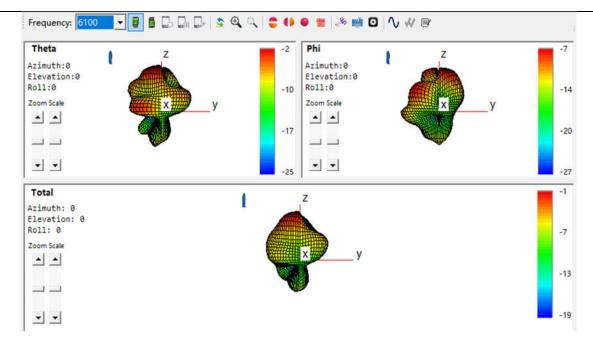
WIFI 5G (5300 MHz)



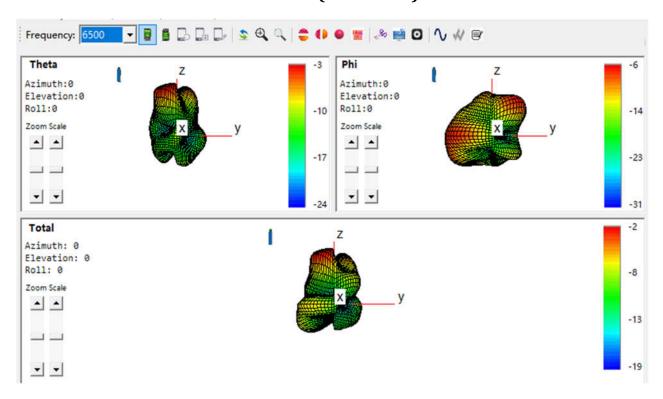
#### WIFI 5G (5500 MHz)



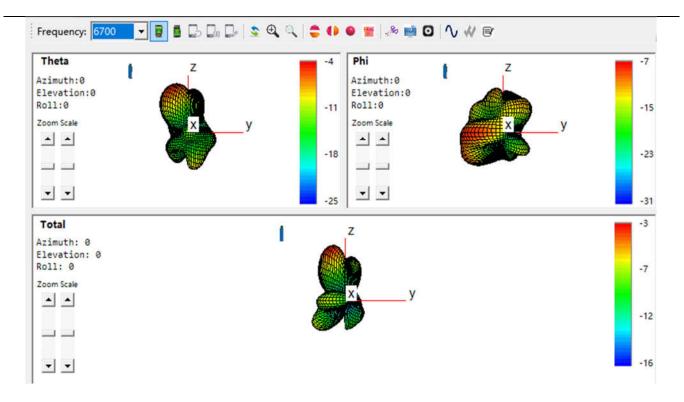
WIFI 5G (5800 MHz)



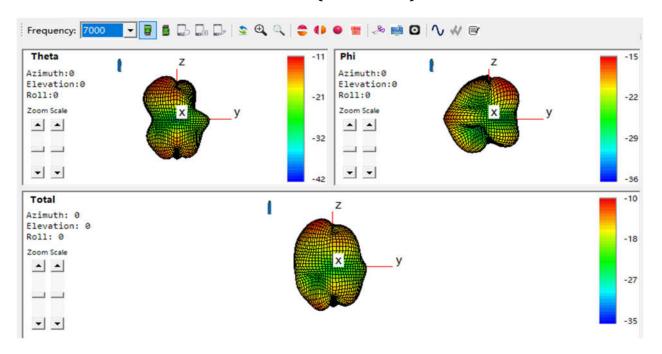
WIFI 6E (6100 MHz)



WIFI 6E (6500 MHz)



WIFI 6E (6700 MHz)



WIFI 6E (7000 MHz)

#### NFC Antenna information:

NFC Antenna: Differential port to excite LOOP sheet

Dimension: 25.95 mm \* 32.15 mm

Antenna pattern: LOOP