

PSA

佳邦科技股份有限公司

INPAQ TECHNOLOGY CO., LTD.

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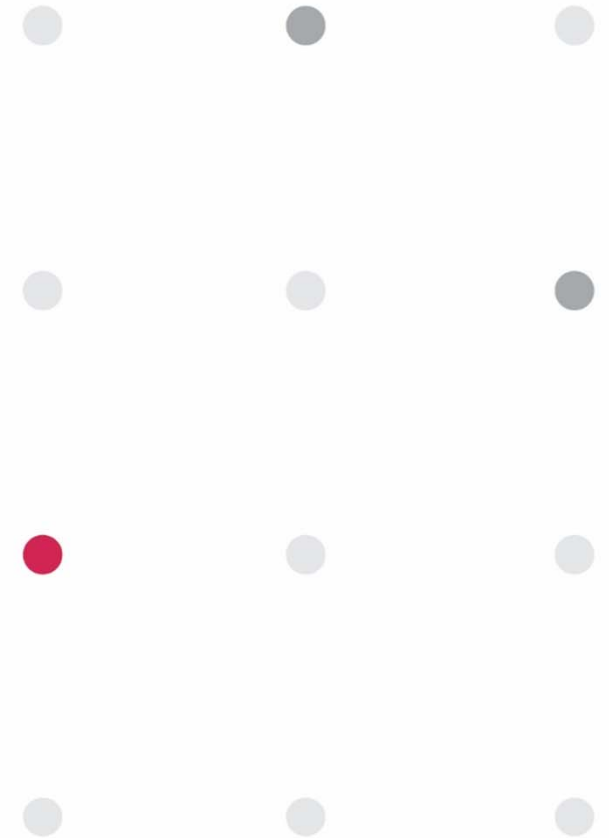
NO.11, KE-YI ST., CHUNAN TOWN, MIAOLI COUNTY 350402, TAIWAN, R.O.C.

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Model Name : VR0041(Kirby)
Antenna Material : PCB on Board
Antenna Type : PCB etched antenna(2 TX/3 RX)

Presented by
Ken Cheng

INPAQ Technology Co., Ltd.

Last updated in 08.22, 2025

Version	Date	Description	Author
V01	2025/01/10	New Release (Simulation)	Ken Cheng
V02	2025/02/05	Sample measurement	Ken Cheng
V03	2025/02/07	BLE new layout simulation	Ken Cheng
V04	2025/02/19	New PCBA Test	Peter
V05	2025/03/13	60GHz Radar Simulation	Ken Cheng
V06	2025/04/09	New DUT measurement	Ken Cheng
V06	2025/04/18	LoRa Ant Experiment	Ken Cheng
V07	2025/06/20	New-LoRa PCB Passive measurement	Ken Cheng
V07	2025/06/26	New-LoRa PCB Passive measurement (change Cable place)	Ken Cheng
V08	2025/08/19	60GHz Radar Simulation	Ken Cheng
V09	2025/08/22	60GHz Radar Simulation	Ken Cheng

OUTLINE

1. Measurement Information

1.1 Experimental Setup

1.2 Antenna Solution Detail

2. Antenna Characteristics

2.1 S-Parameter

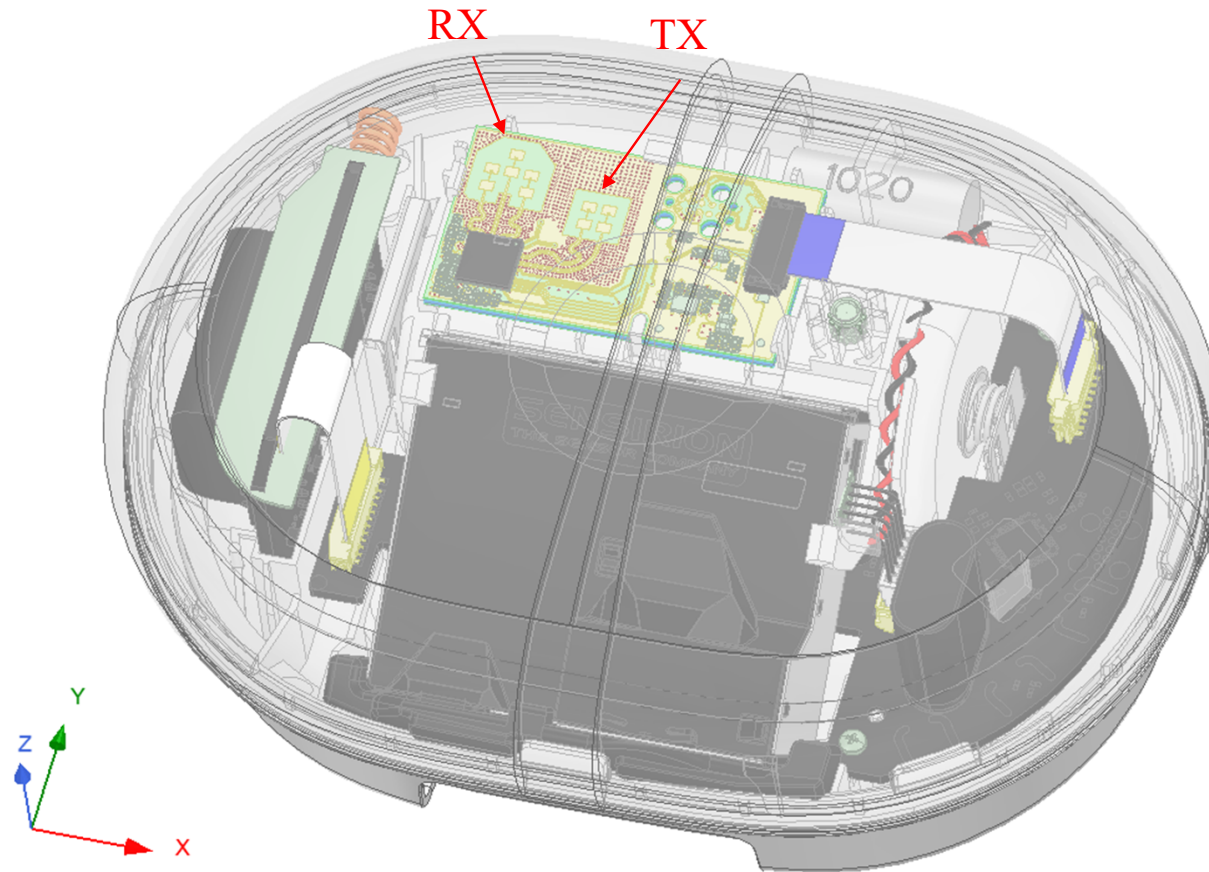
2.2 Antenna Peak Gain

2.3 3 views of antenna & 2D Radiation Patterns

3. Summary

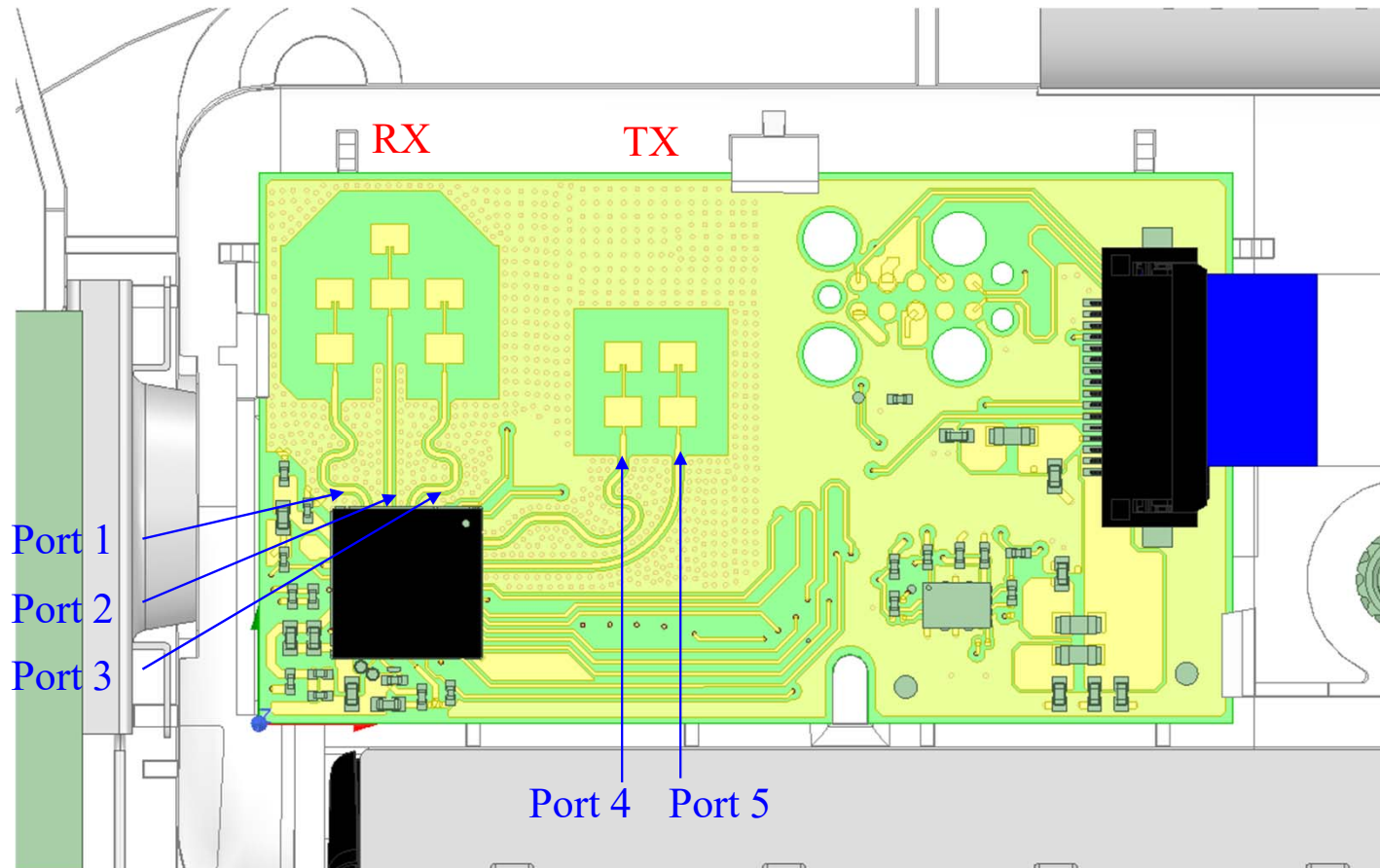
1. Measurement Information

1.1 Experimental Setup



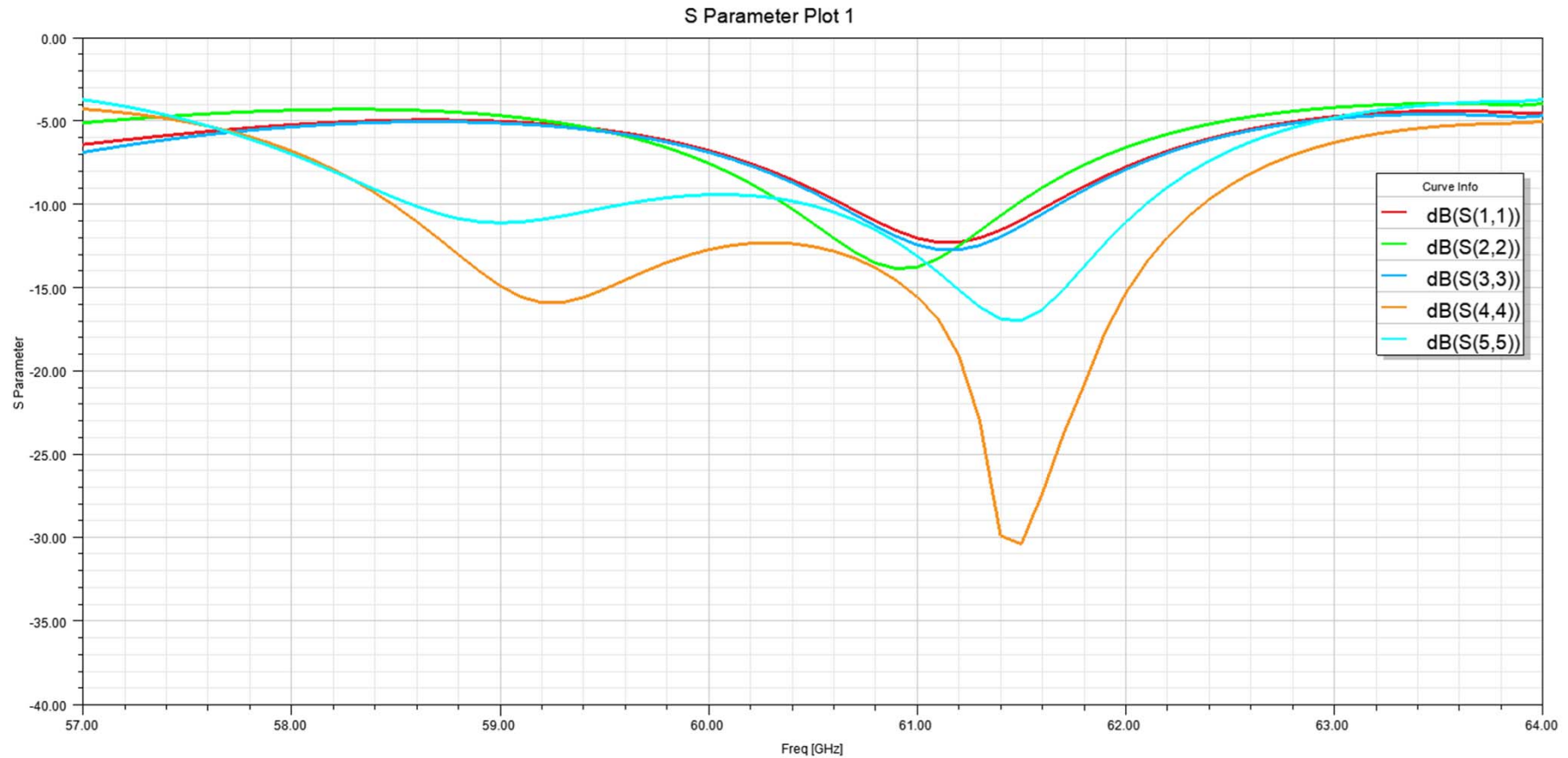
1. Measurement Information

1.2 Antenna Solution Detail



2. Antenna Characteristics

2.1 S-Parameter



2. Antenna Characteristics

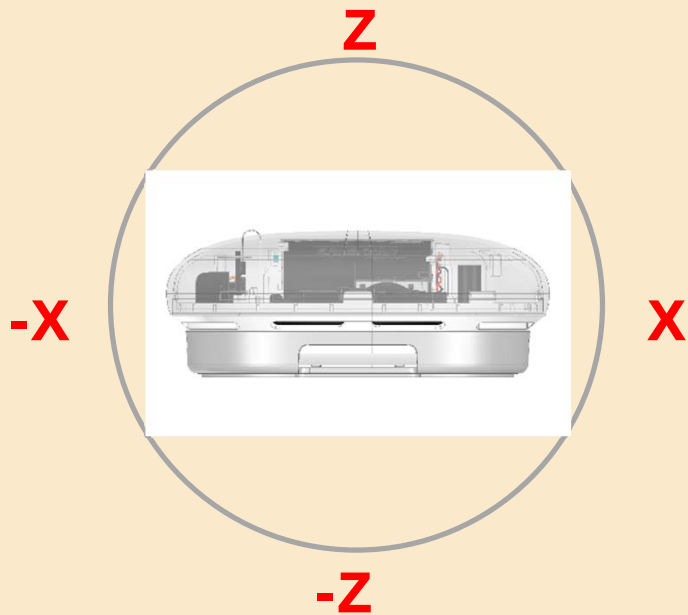
2.2 Antenna Peak Gain

	Peak Gain (dBi)	
Frequency (GHz)	RX	TX
59.25	9.46	7.63
59.50	9.88	7.85
60.00	10.73	8.22
60.50	11.47	8.65
61.00	11.85	8.91
61.50	11.74	8.98

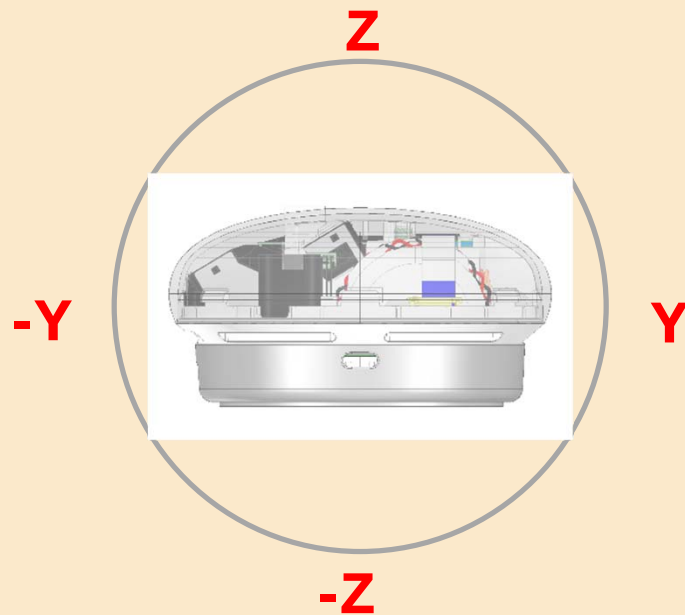
2. Antenna Characteristics

2.3 3 views of antenna

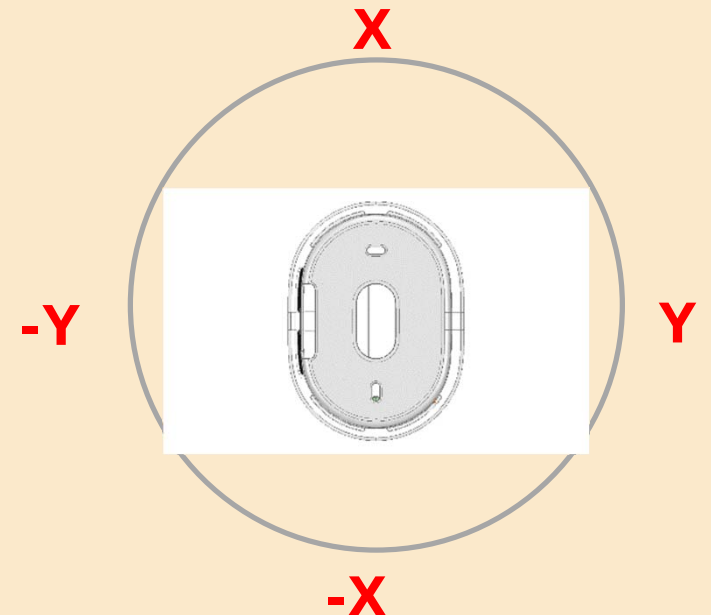
X-Z plane



Y-Z plane



X-Y plane

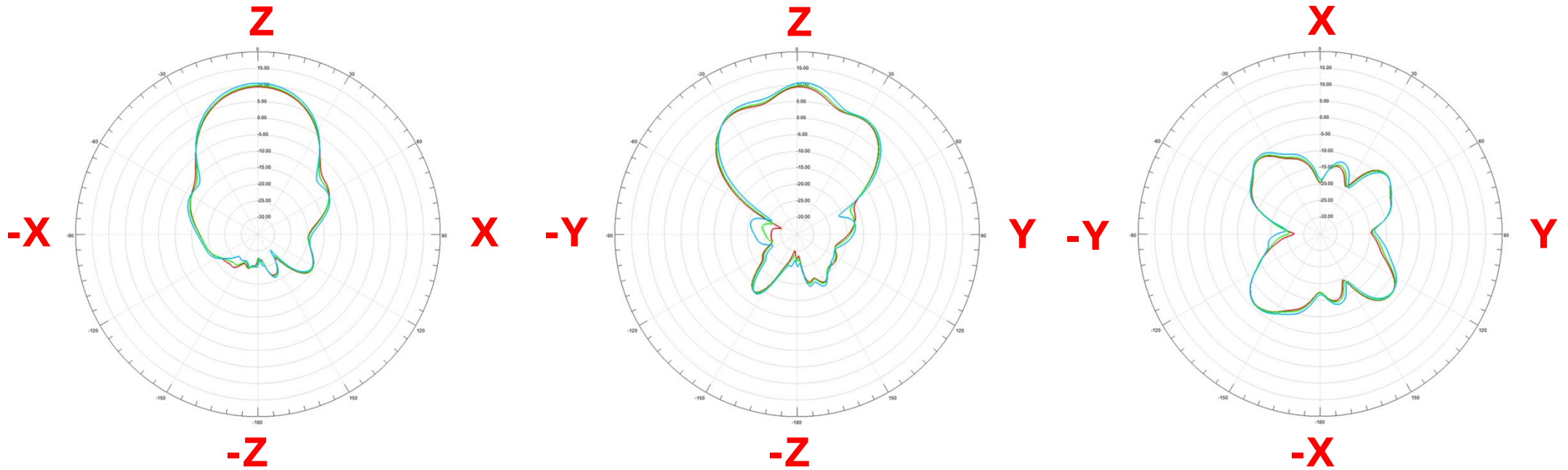


2. Antenna Characteristics

RX

2.3 2D Radiation Patterns

Curve Info	
—	dB(RealizedGainTotal) Freq='59.25GHz'
—	dB(RealizedGainTotal) Freq='59.5GHz'
—	dB(RealizedGainTotal) Freq='60GHz'

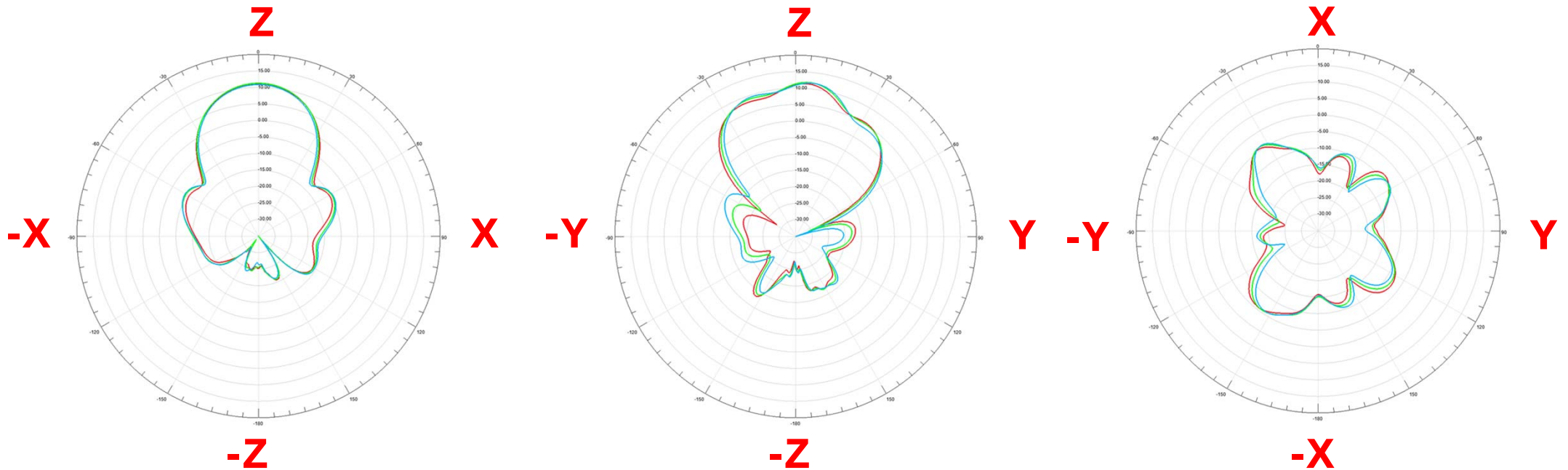


2. Antenna Characteristics

RX

2.3 2D Radiation Patterns

Curve Info	
—	dB(RealizedGainTotal) Freq='60.5GHz'
—	dB(RealizedGainTotal) Freq='61GHz'
—	dB(RealizedGainTotal) Freq='61.5GHz'

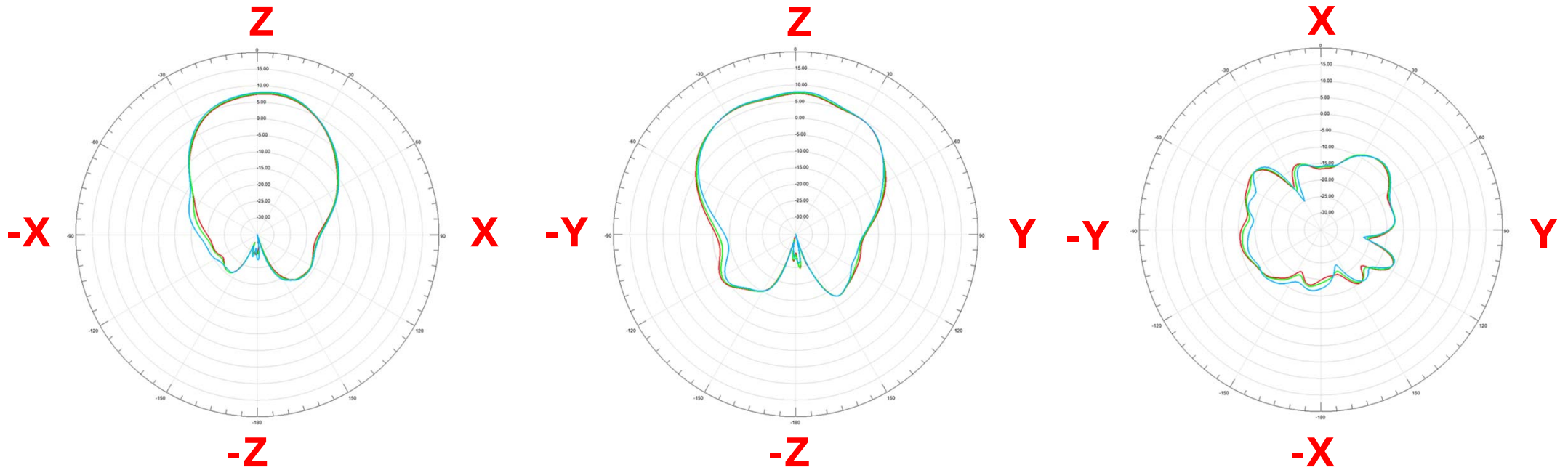


2. Antenna Characteristics

TX

2.3 2D Radiation Patterns

Curve Info	
—	dB(RealizedGainTotal) Freq='59.25GHz'
—	dB(RealizedGainTotal) Freq='59.5GHz'
—	dB(RealizedGainTotal) Freq='60GHz'

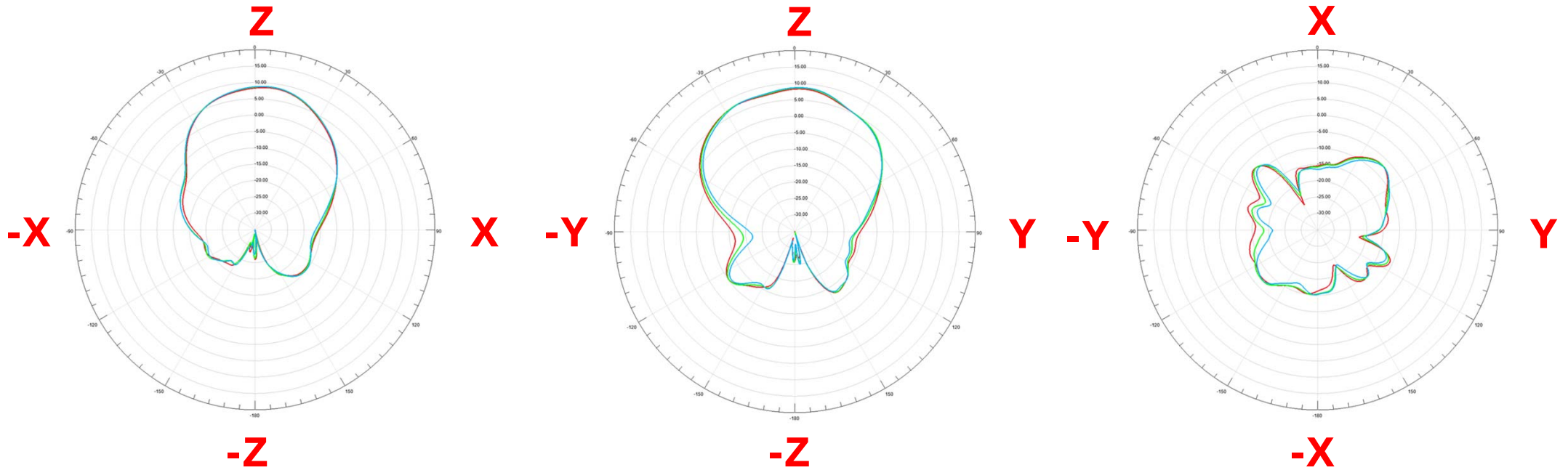


2. Antenna Characteristics

TX

2.3 2D Radiation Patterns

Curve Info	
—	dB(RealizedGainTotal) Freq='60.5GHz'
—	dB(RealizedGainTotal) Freq='61GHz'
—	dB(RealizedGainTotal) Freq='61.5GHz'

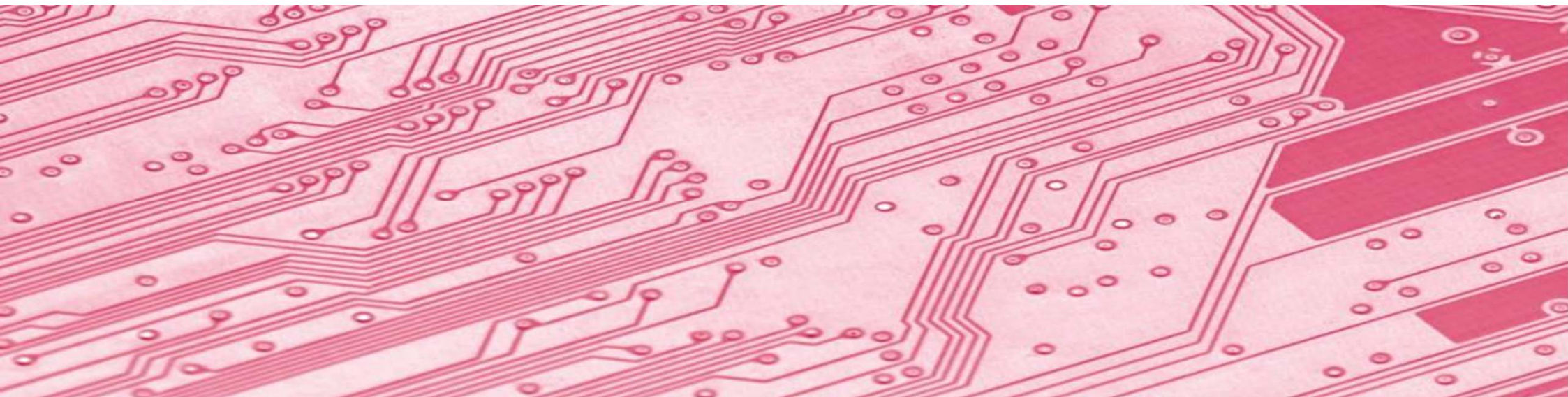


3. Summary

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- The antenna characteristics are primarily based on actual prototype measurements.

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Title for Image (above image could be replaced)

Content Details

Thank you