

# **RS6130 AIP ANTENNA TEST REPORT**

2025/02/25

V1.3

**Company:** Possumic Technology Co.,Ltd

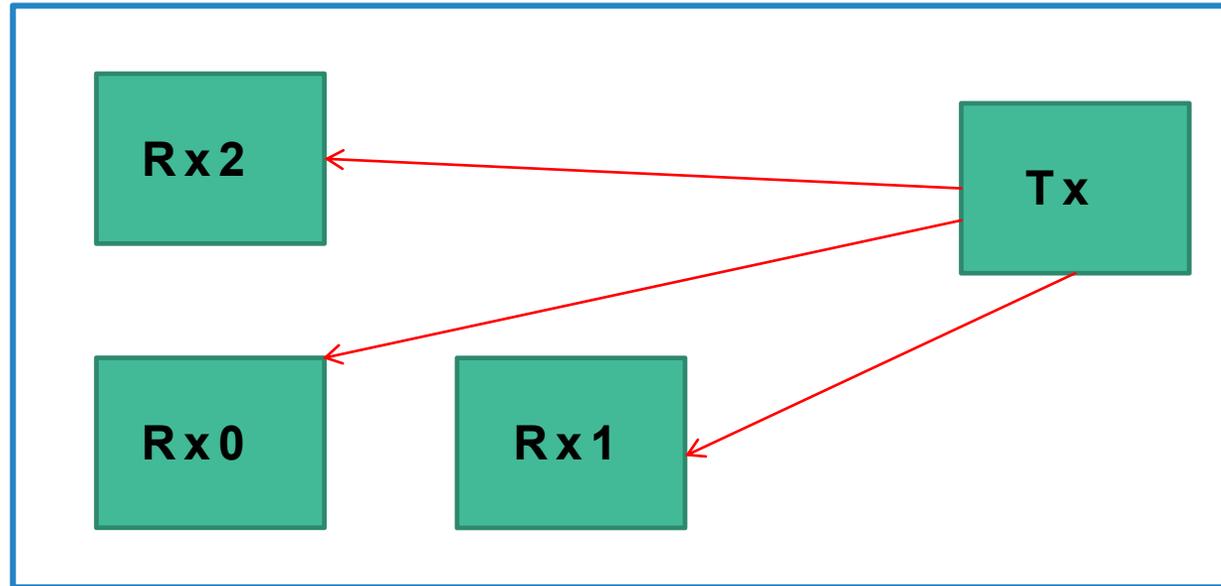
**Addr:** Room 603, Building B, Creative Cloud, No. 1 Gangwan, Tangjiawan

**Model Name:** RS6130

**Model Size:** 8.8mm(Length)X5.8mm(Width)X0.68mm(Thickness)

RS6130 1T3R(Tx→Rx0, Tx→Rx1, Tx→Rx2) Gain and Radiation Pattern of three channels

RS6130



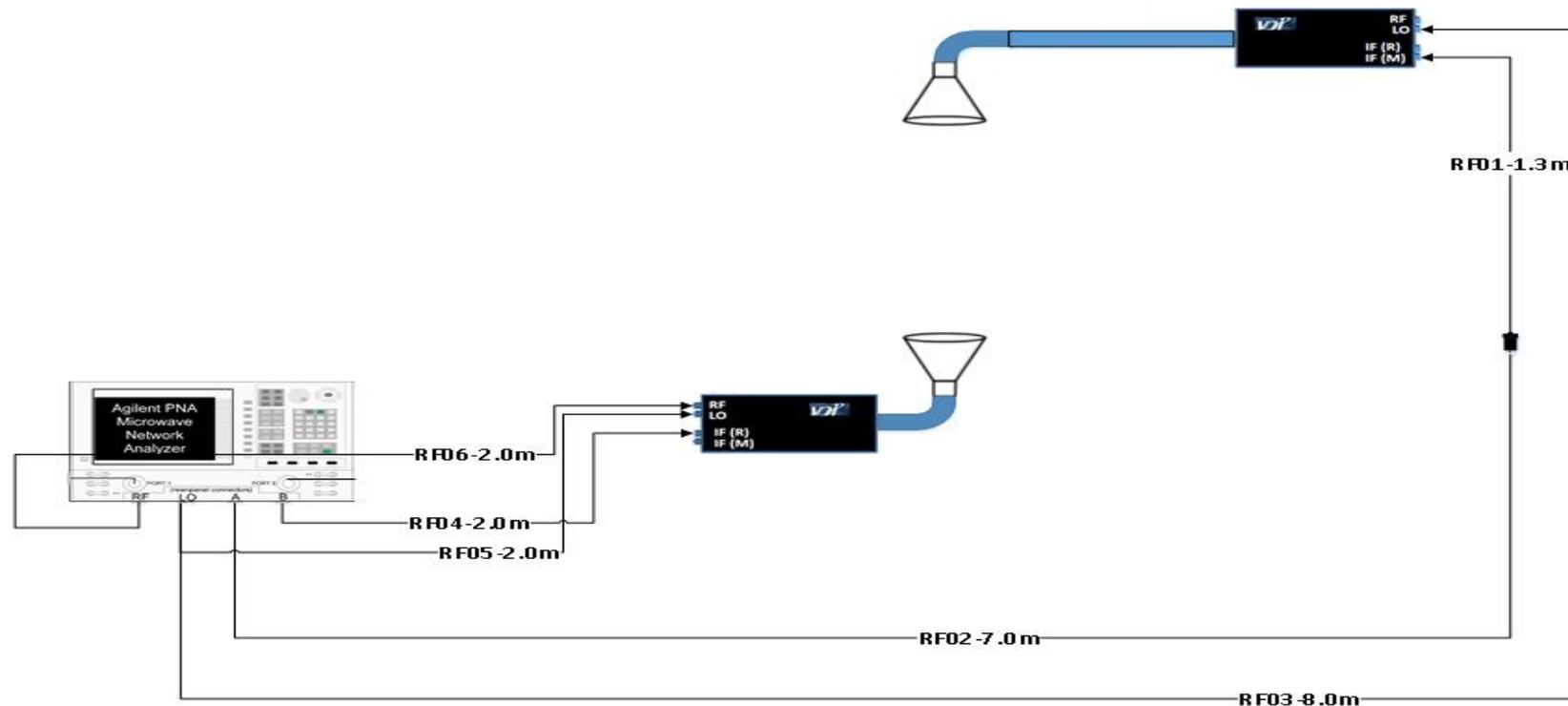


# AIP ANTENNA TEST PRINCIPLE AND METHOD

**Principle:** Conservation, that is, the signal power received by Rx is equal to the power lost in the energy space when the Tx transmit power is lost.

**Gain test method:** Comparison method, using the equal power loss in space, replacing the Rx antenna with a horn antenna for reception to obtain the Rx antenna gain.

**Directional pattern test method:** Use angular reflection to collect level values in different directions, and then obtain a normalized pattern.



# ANTENNA GAIN RESULTS

ANT Gain=EIRP-Tx Output Power

Average Gain of AiP antenna about **7dBi**

Frequency (GHz)	EIRP (dBm)	Chip Tx Output Power (dBm)	ANT Gain (dBi)
58	17.67	10.5	<b>7.17</b>
59	17.62	10.7	<b>6.92</b>
60	17.39	10.5	<b>6.89</b>
61	17.93	10.5	<b>7.43</b>
62	16.81	9.7	<b>7.11</b>
63	15.65	9.0	<b>6.65</b>
64	15.00	8.2	<b>6.80</b>



# 60GHZ RADIATION PATTERN

## TX-RX loop gain

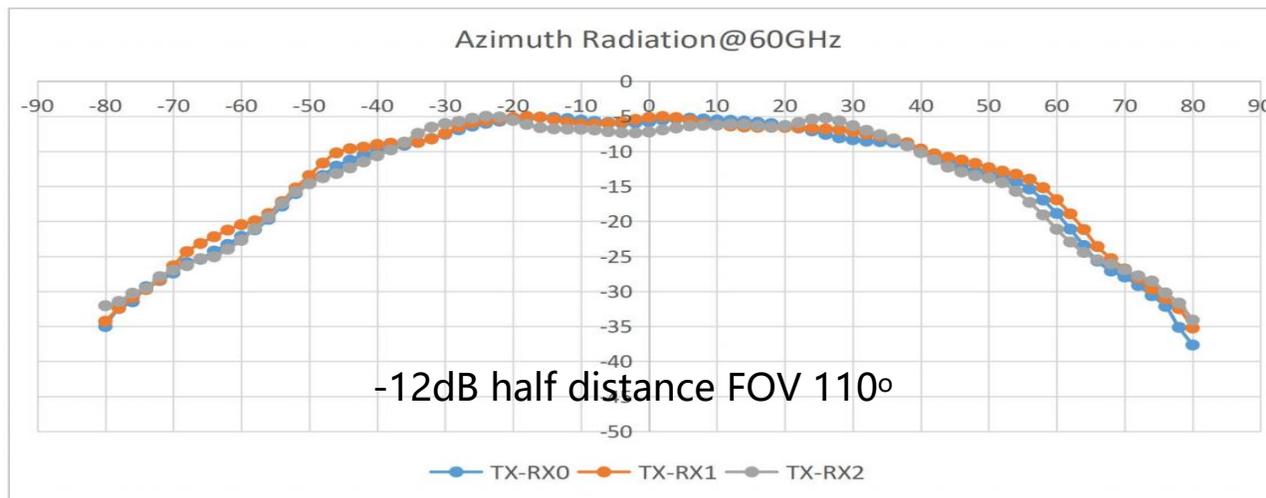


Figure 5-2 Antenna Azimuth(XOZ) Radiation Pattern<sup>1,2</sup>

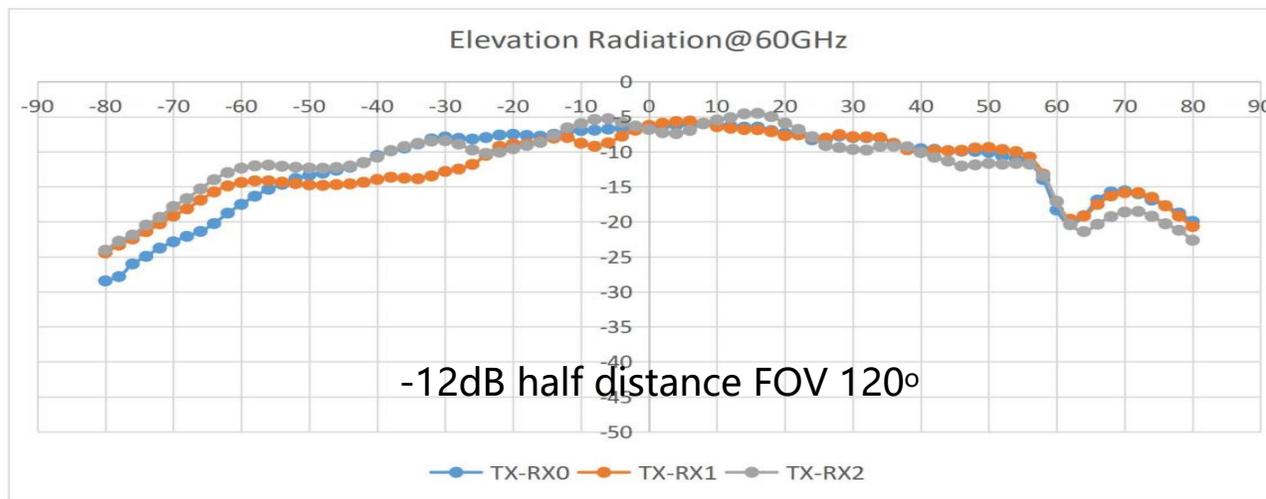


Figure 5-3 Antenna Elevation(YOZ) Radiation Pattern<sup>1,2</sup>