Antenna Specification

1. Product Photographs

Figure 1. Photo of antenna FL24WPT04HK.

2. Antenna Specification Summary

Frequency Range	2400-2500MHz
Peak Realized Gain	1.2dBi@2450MHz
Realized Efficiency	57%@2450MHz
Return Loss	>10dB
Polarization	Linear Polarization
Radiation Pattern	Omni-directional
Feed Impedance	50Ω
Power Handling	30dBm
Antenna Structure	FPC
Feeding Description	Pogo pin-fed
Antenna Dimensions	14.5*20.49*0.3(mm)
Weight	0.77g
Temperature Range	Operating temperature: -40° C to +75° C (-40° F to +167° F) Storage temperature: -40° C to +85° C (-40° F to +185° F)

Table 1. FL24WPT04HK antenna specification summary.

3. Principal Dimensions

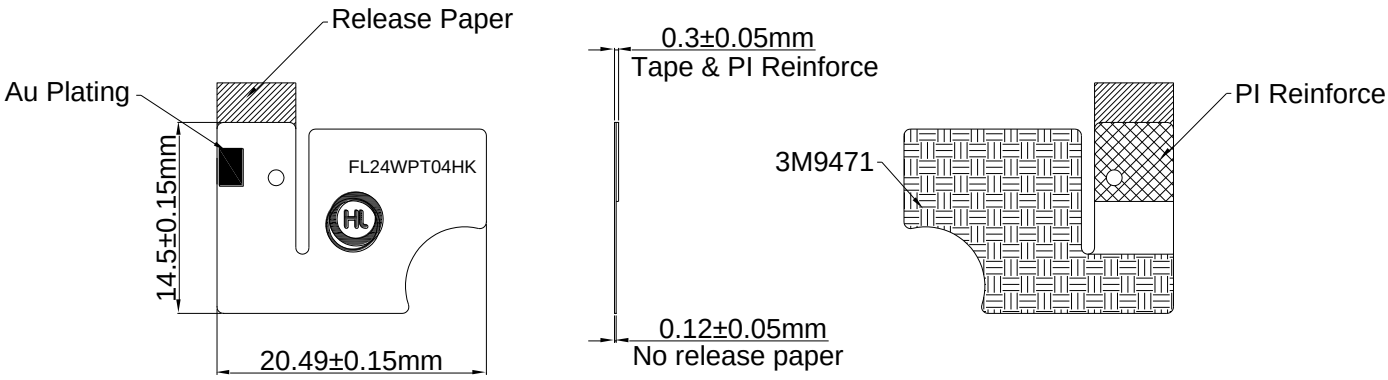
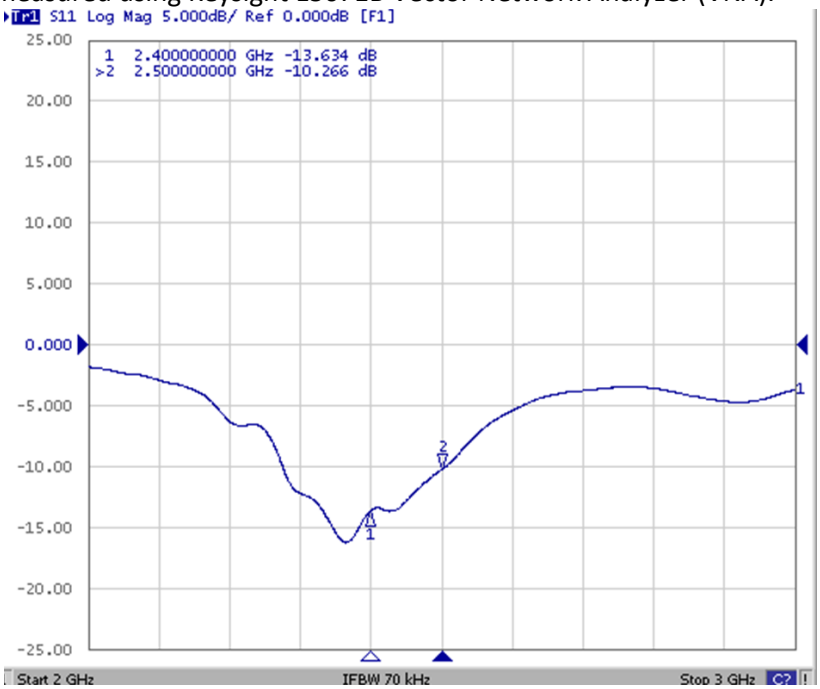


Figure 2. Basic dimensions and tolerances of FL24WPT04HK antenna.

4. Return Loss

Return Loss (RL) were measured using Keysight E5071B Vector Network Analyzer (VNA).



Return loss（dB）	A3-Wifi
2400MHz	13.6
2500MHz	10.2

Figure 3. Measured Return Loss of FL24WPT04HK.

5. Radiation Pattern Characteristics

Radiation characteristics for FL24WPT04HK were measured in Satimo SG24L anechoic chamber.

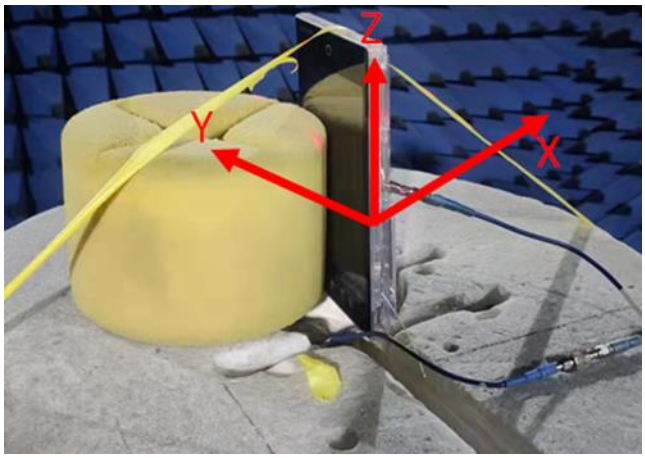


Figure 4.FL24WPT04HK antenna for radiation pattern measurements. Coordinate system used for radiation pattern visualization.

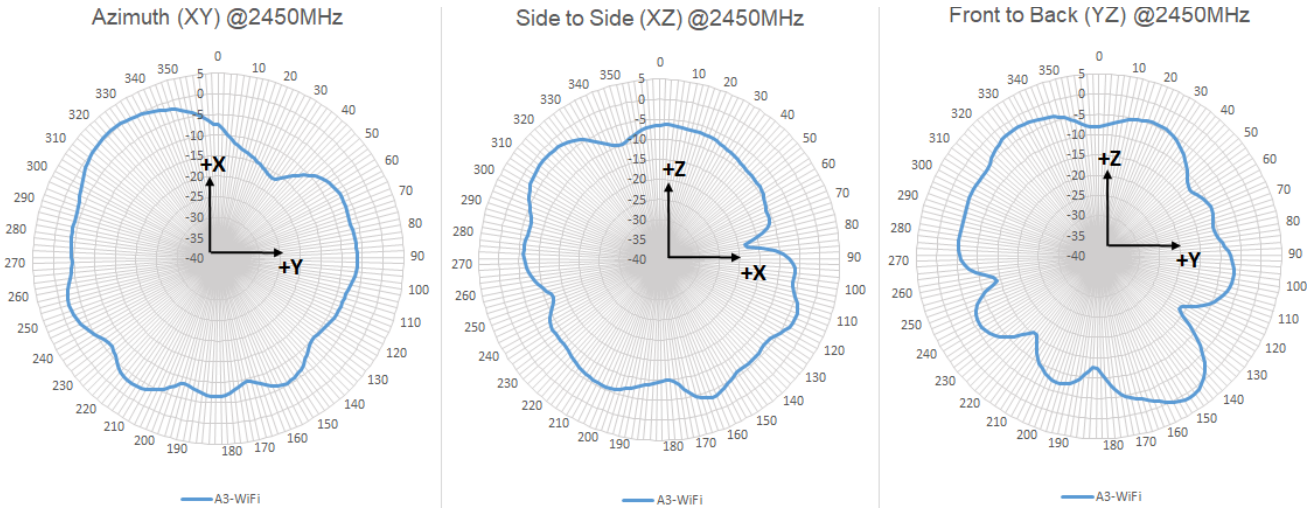


Figure 5. Measured radiation pattern characteristics in principal planes at 2450MHz.

6. Realized Efficiency and Peak Realized Gain

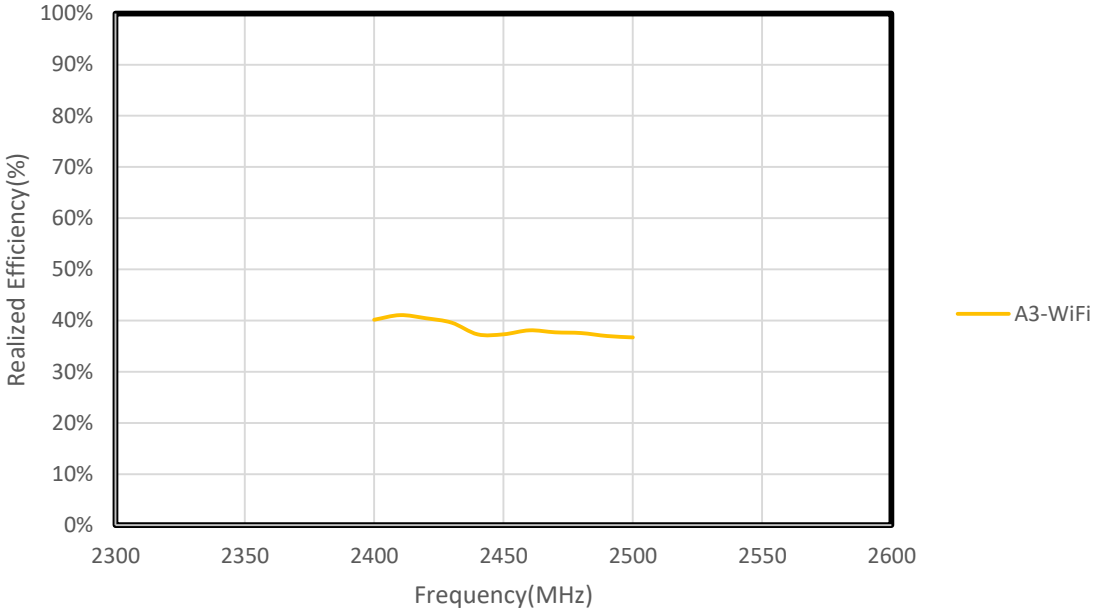


Figure 6. Measured Realized Efficiency over frequency.

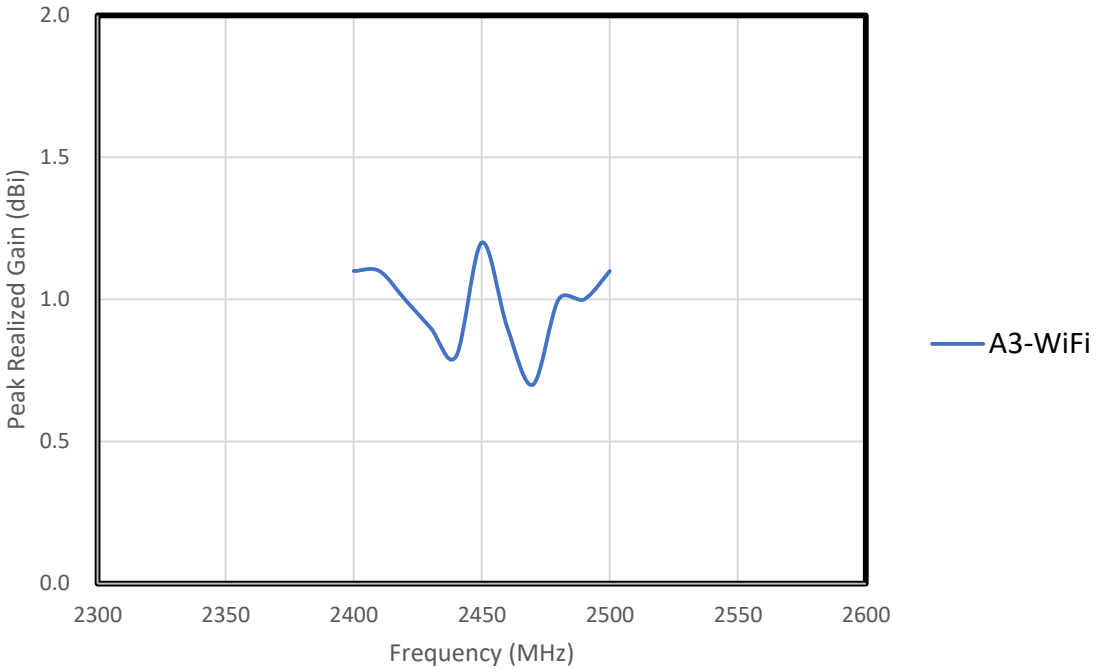


Figure 7. Measured Peak Realized gain over frequency.

Frequency(MHz)	Realized Efficiency	Peak Realized Gain(dBi)
2400	54%	1.1
2410	55%	1.1
2420	56%	1.0
2430	56%	0.9
2440	53%	0.8
2450	57%	1.2
2460	57%	0.9
2470	59%	0.7
2480	60%	1.0
2490	60%	1.0
2500	60%	1.1

Table 2. Summary of peak realized gain and realized efficiency results.

7. Assembly Drawing

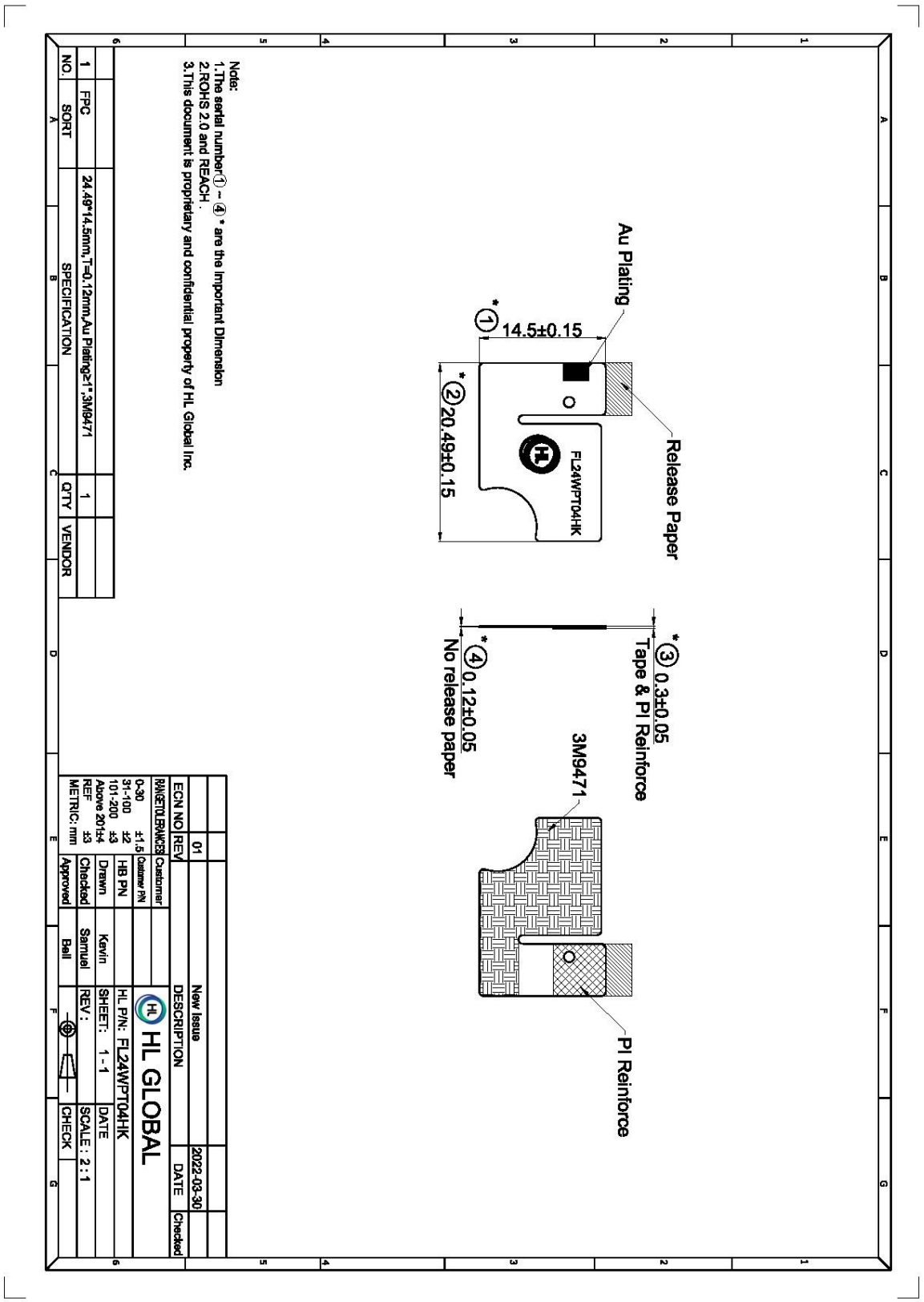


Figure 8. Assembly Drawing.