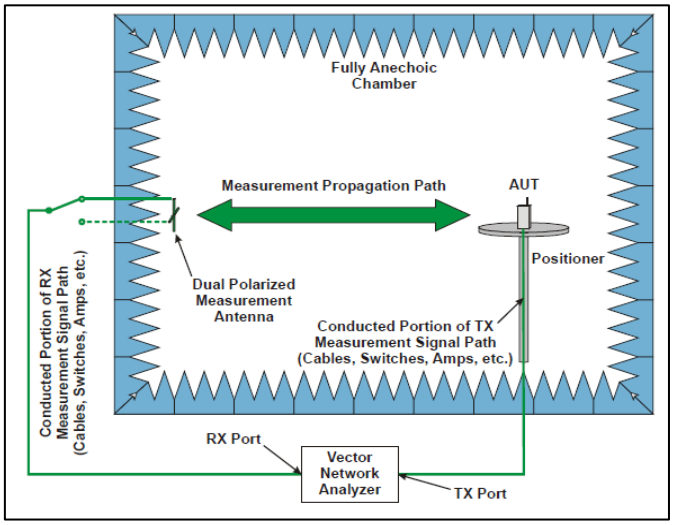
Antenna Report for CU Antennas

1. **Test Date and Test Person**
   Test date: 02-Apr-2025
   Test person: Abnen Ong

2. **Test setup and Equipment**

Equipment	Manufacturer	Model
ENA Series Network Analyzer	Keysight	E5063A
PCI antenna measurement system	ETS-Lindgren	AMS8500
EMQuest test software	ETS-Lindgren	V1.13

Setup Overview of Antenna Measurement System (AMS 8500) for Gain, Total Efficiency, and Radiation Pattern



Setup Description:

1. Fix the DUT on the bracket of the anechoic chamber.

2. The antenna of interest is connected to the coaxial line at the transmitter end of the anechoic chamber.
3. Close the anechoic chamber door to avoid external signal interference.
4. Open EM-Quest test software and power on network analyser, select frequency range to test.
5. Total efficiency, gain and radiation pattern can be seen in EM-Quest test software.
6. Repeat steps 1-5 for all the antenna and record the results obtained.

3. Antenna Specifications

3.1. LoRa Antenna

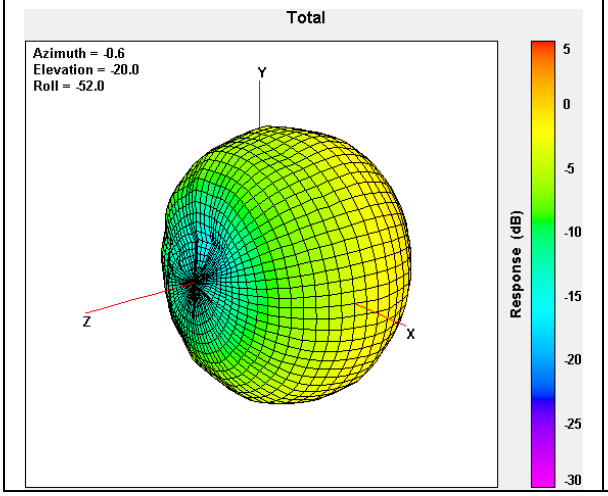
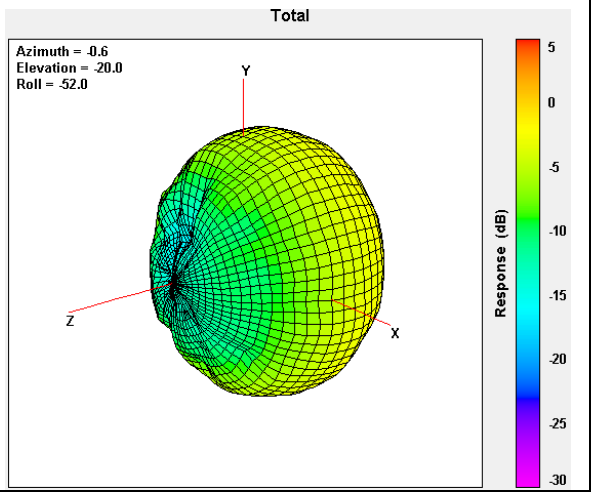
Antenna manufacturer name & address:

PT. HESHENG INDUSTRY ELECTRONIC
Kawasan Industri Tunas Kabil
Type 8A-8C, Keluruhan Kabil,
Kecamatan Nongsa, Kota Batam, 29467

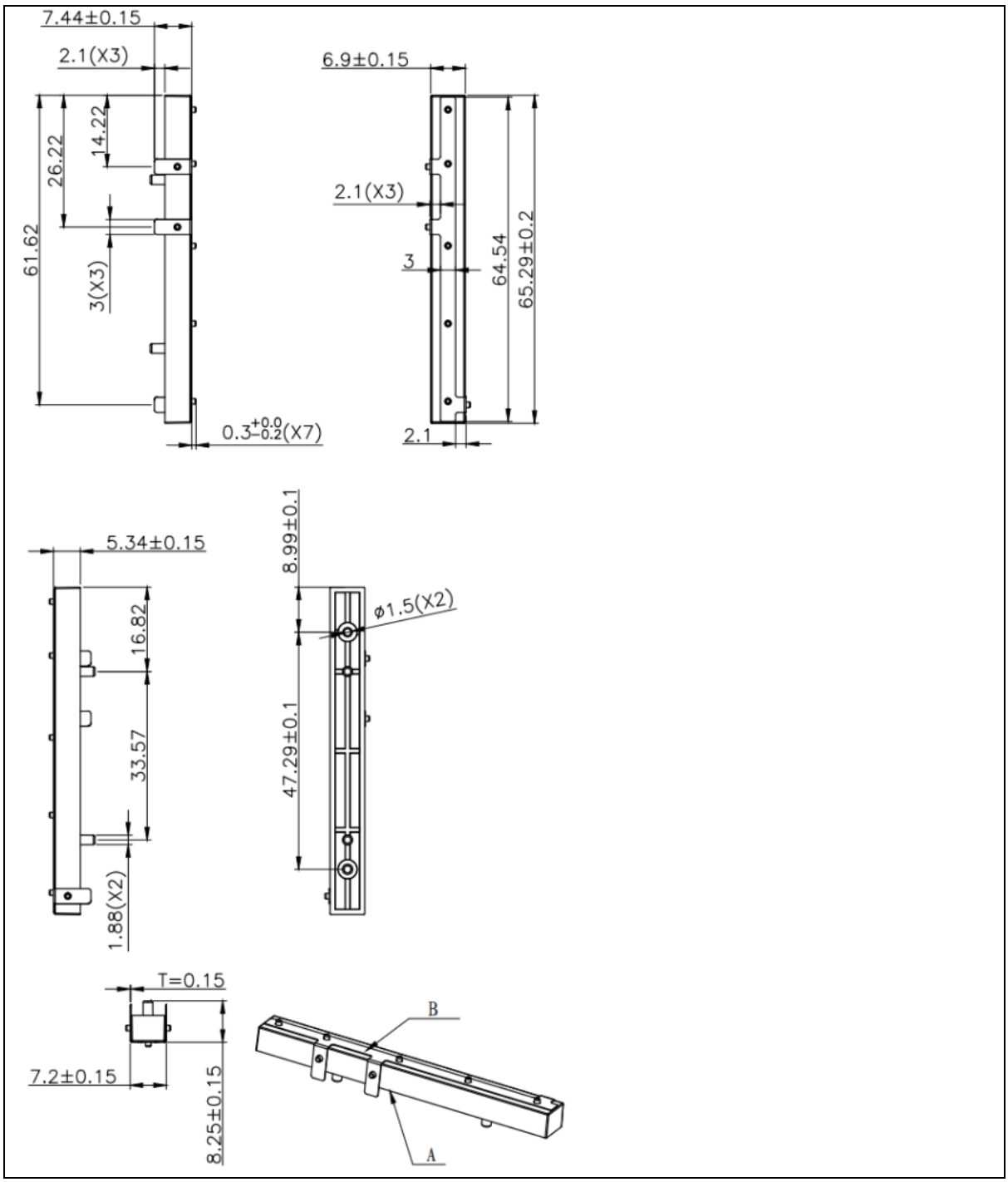
Antenna Specifications:

Antenna Model	BTEE000300
Antenna Type	Metal Stamp Antenna
Frequency	[EU] 863 - 870 MHz; [US] 902 – 928 MHz
S11	< -10dB; <-7dB
Peak Gain	[EU] -0.21dBi; [US] -1.7dBi

Radiation Pattern:

870MHz	920MHz
	

Antenna Dimension:



3.2. Cellular Antenna

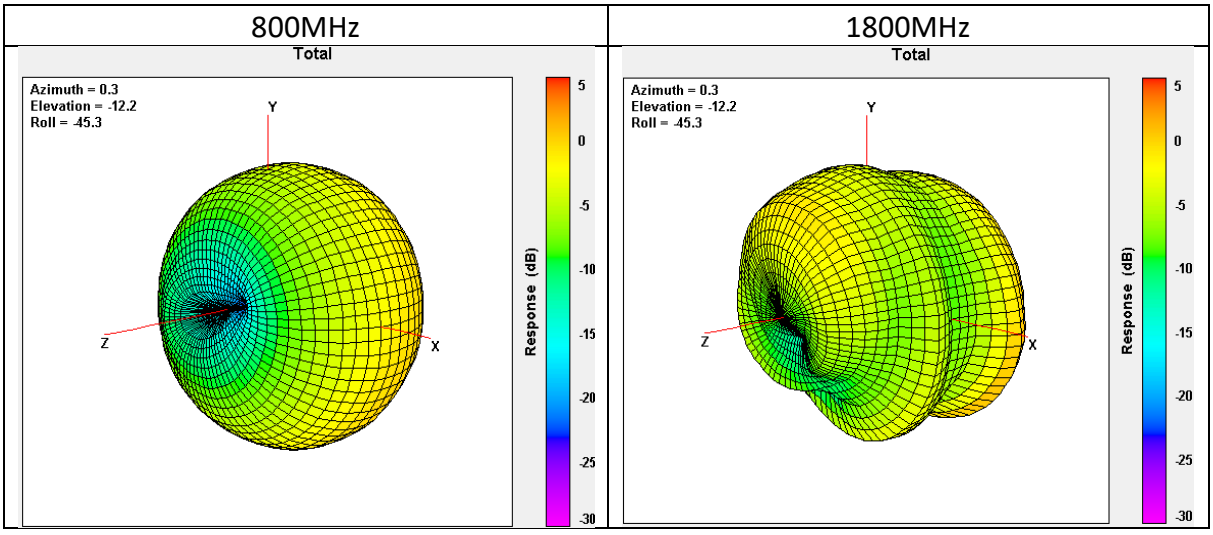
Antenna manufacturer name & address:

PT. HESHENG INDUSTRY ELECTRONIC
Kawasan Industri Tunas Kabil
Type 8A-8C, Keluruhan Kabil,
Kecamatan Nongsa, Kota Batam, 29467

Antenna Specifications:

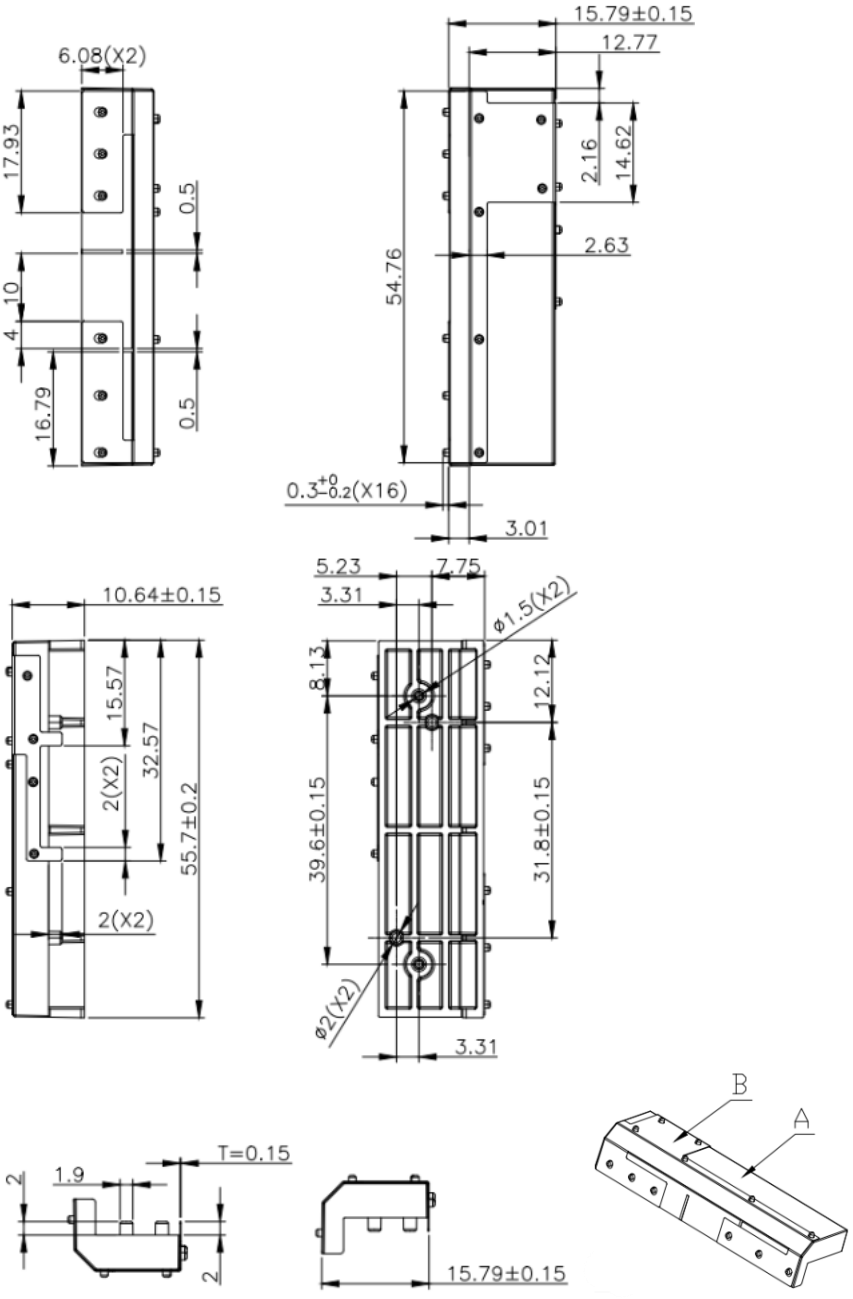
Antenna Model	BTEE000200
Antenna Type	Metal Stamp Antenna
Frequency	[Low Band] 0.617 - 0.96GHz; [High Band] 1.71 - 2.2GHz
S11	[Low Band] <-4dB; [High Band] <-8dB
Peak Gain	[Low Band] 0.81dBi; [High Band] 5.48dBi

Radiation Pattern:

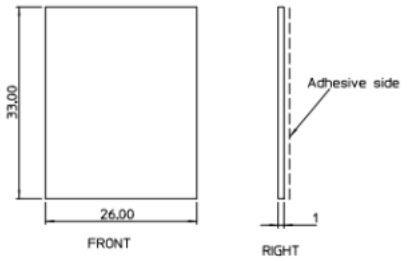


Antenna Dimensions:

Cellular Antenna:



Poron Pad:



Exploded View: