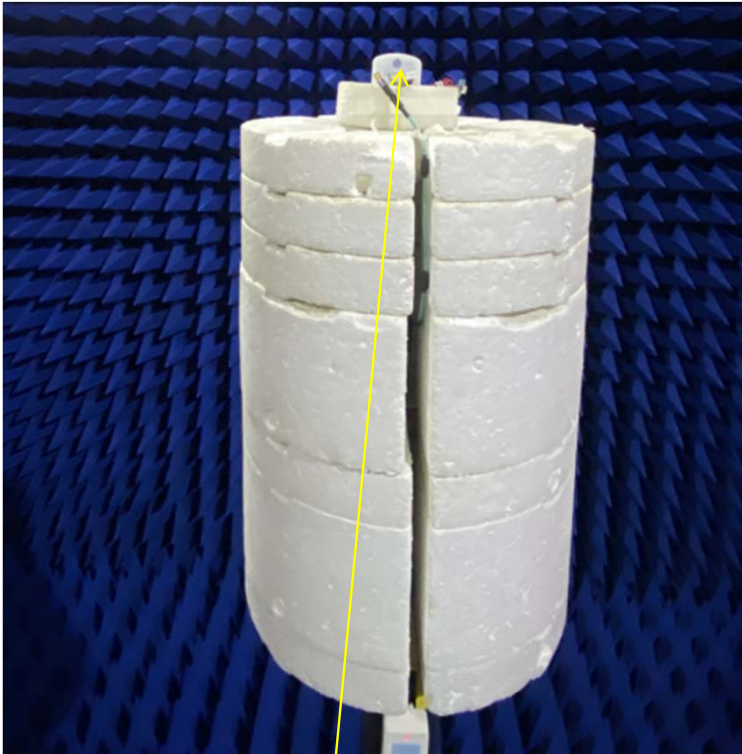
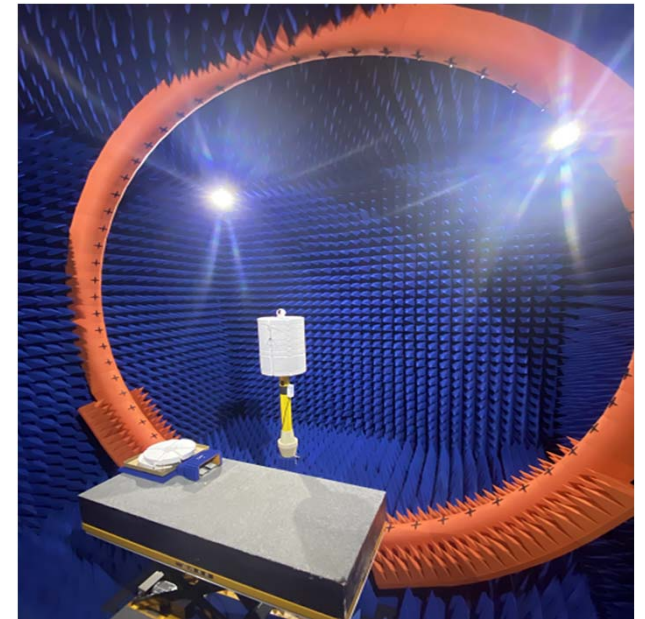


Antenna Study

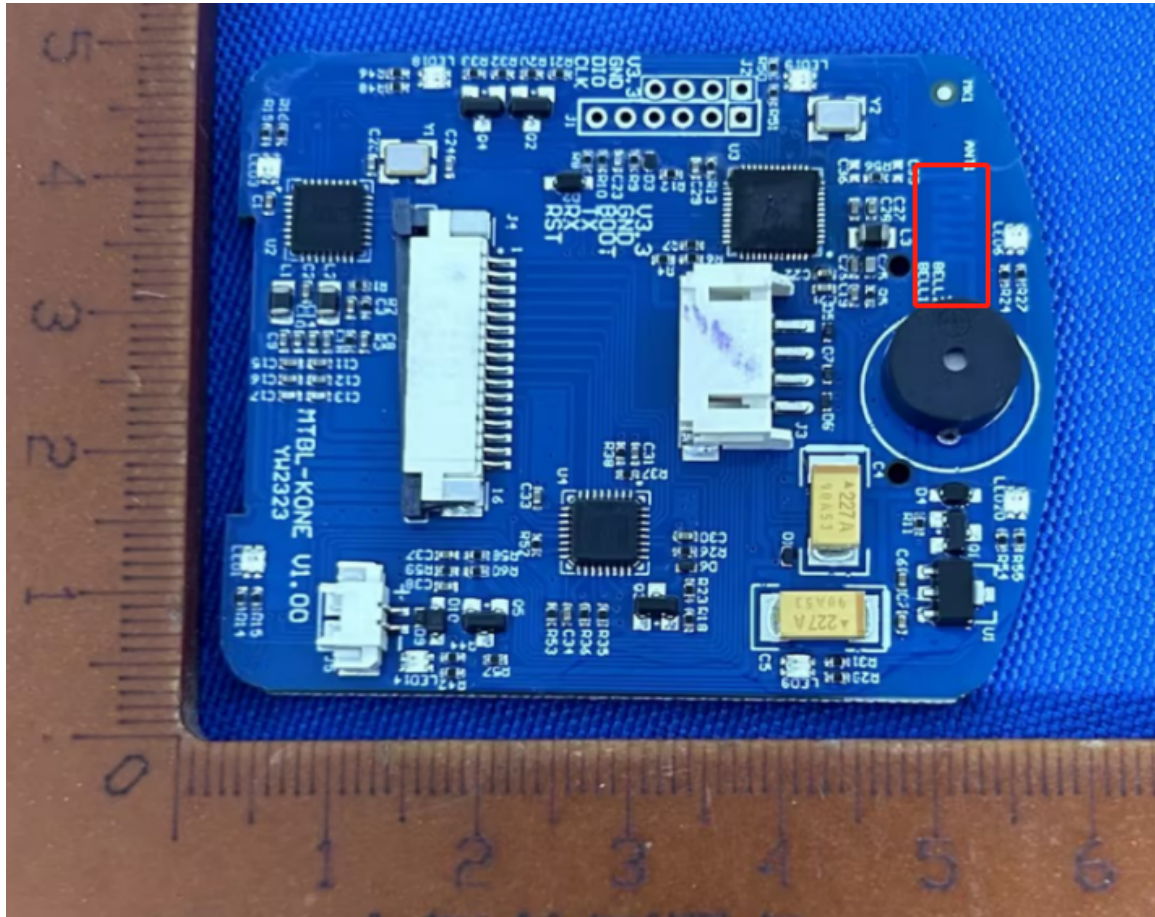
- **Client Name:TOWNSTEEL INC.**
- **Project Name : NET DOOR LOCK**
- **Debugging frequency band: 900/930/2400/2500HMz**
- **Valuation date: 2024.05.15**
- **Linkman contacts: gao shang 18925546490**



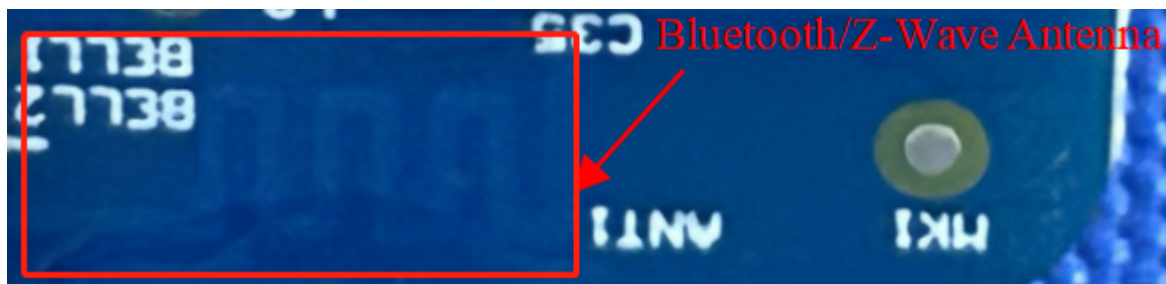
Testing environment



Testing 3D microwave darkroom(6m*6m*6m)

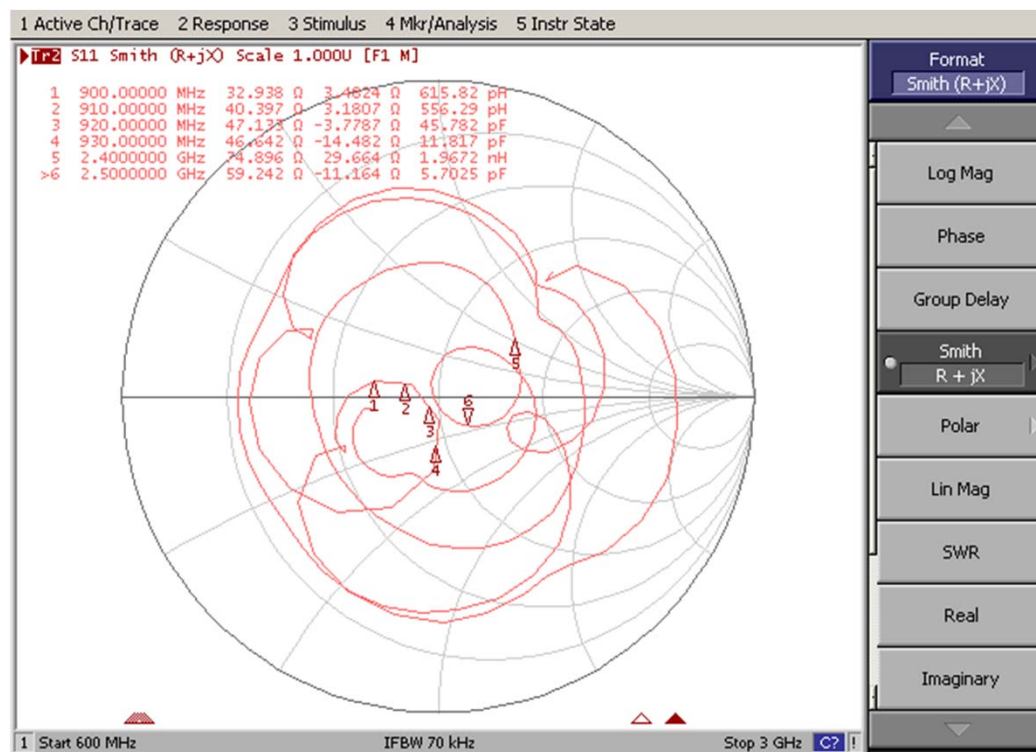
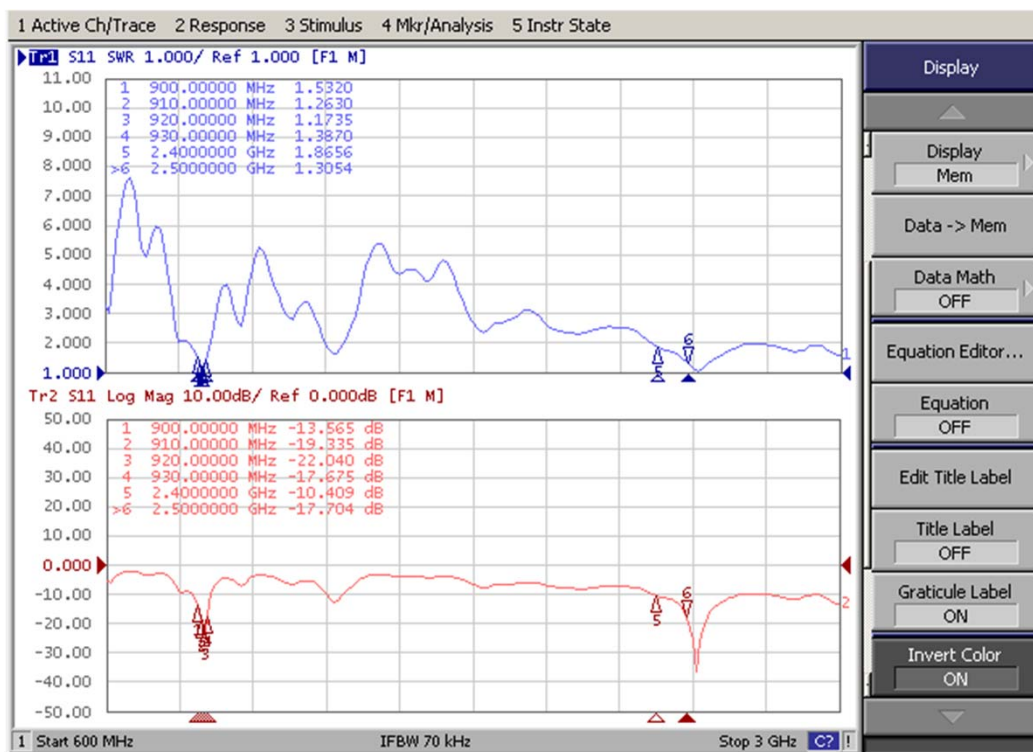


- Antenna name: NDL-ANT
- Antenna Type: PCB Antenna
- Covers : 900/930/2400/2500MHz



S Parameter_Return Loss&VSWR-Smith

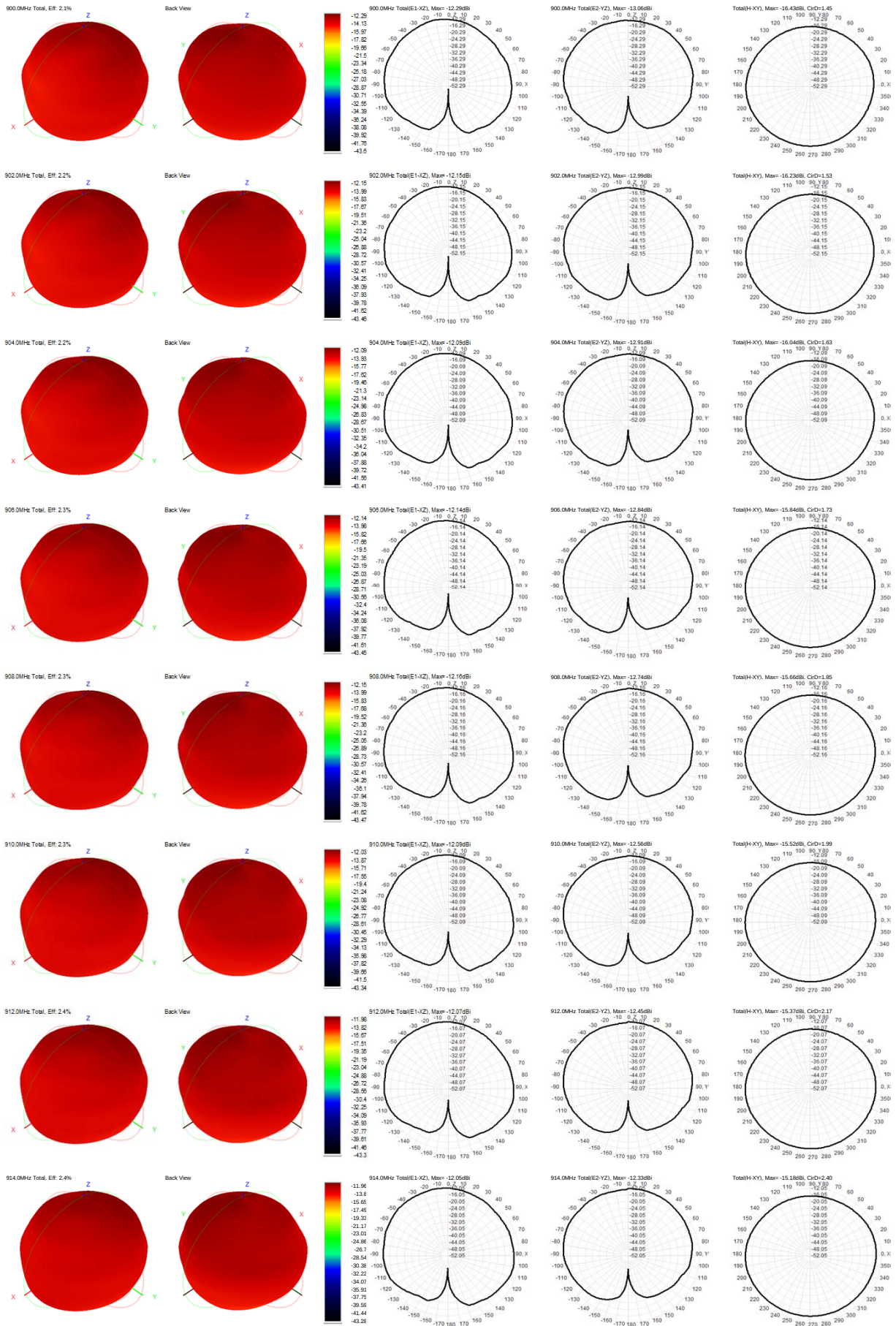
Dongguan UB Electronics Co., Ltd

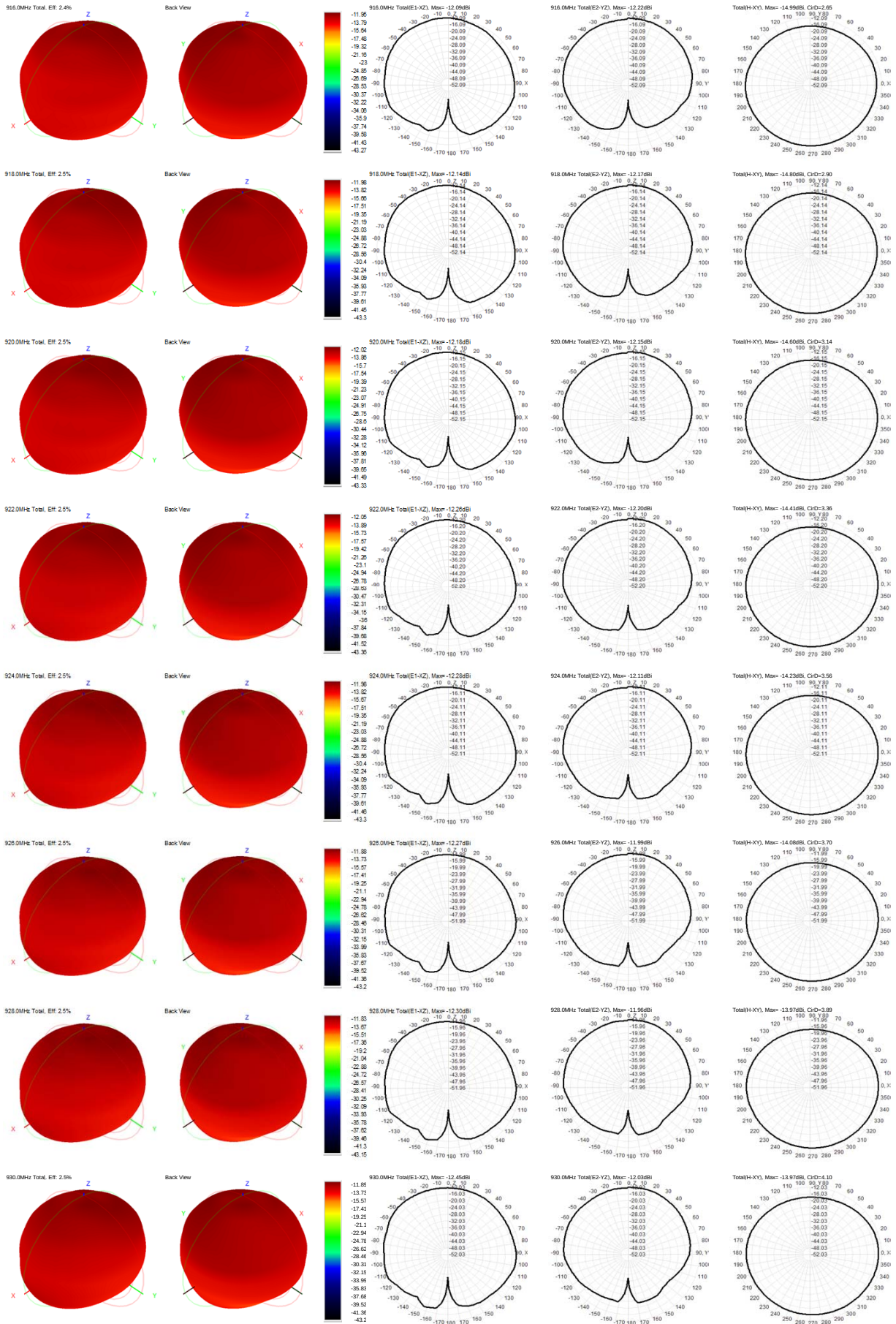


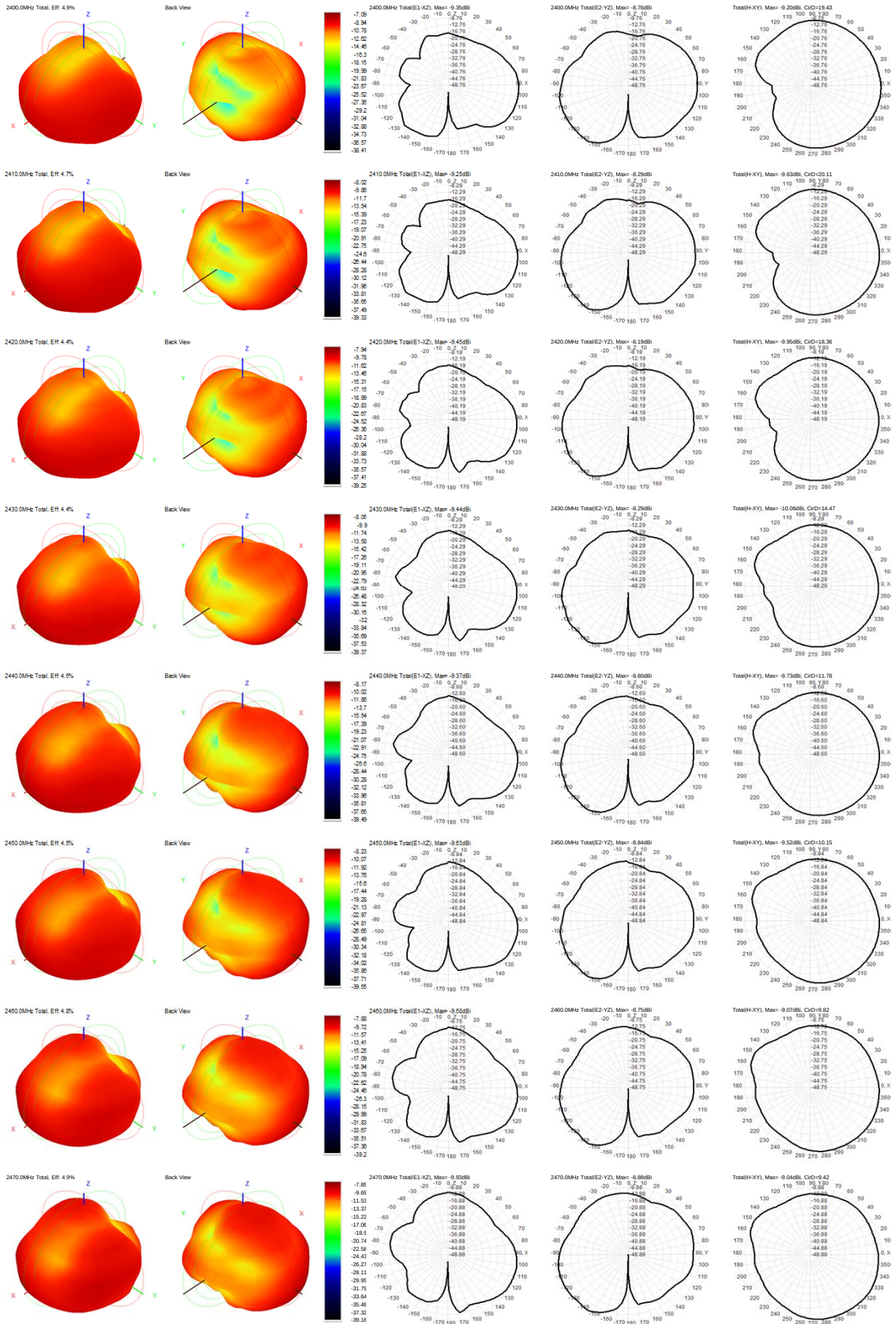
Efficiency and Gain

Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Frequency (MHz)	900.0	902.0	904.0	906.0	908.0	910.0	912.0	914.0	916.0	918.0	920.0	922.0	924.0	926.0	928.0	930.0
Gain (dBi)	1.91	2.01	2.02	2.05	2.09	2.14	2.17	2.10	2.14	2.16	2.15	2.15	2.17	2.19	2.23	2.23

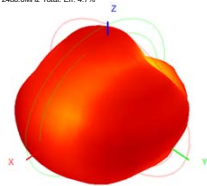
17	18	19	20	21	22	23	24	25	26	27
2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
2.07	2.02	2.03	2.05	2.04	2.03	2.02	2.23	2.10	2.17	2.11



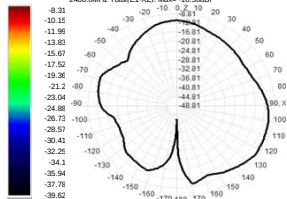
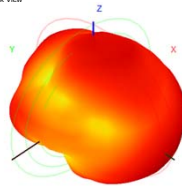




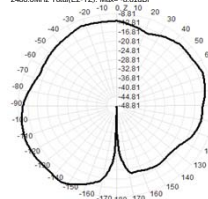
2480.0MHz Total, Eff: 4.7%



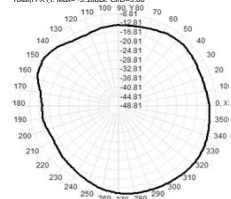
Back View



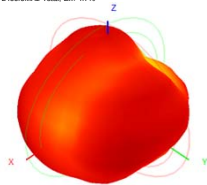
2480.0MHz Total(E2-YZ), Max:-8.81dB



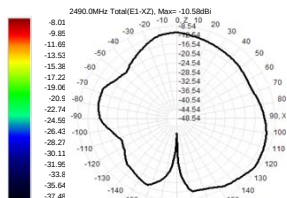
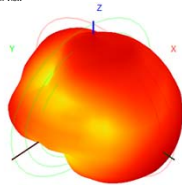
Total(H-XY), Max:-9.16dB, Crd=9.60



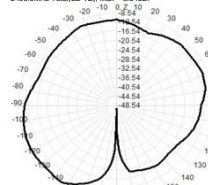
2490.0MHz Total, Eff: 4.7%



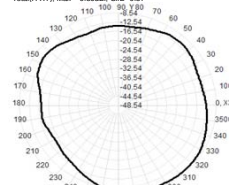
Back View



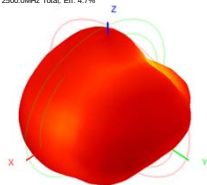
2490.0MHz Total(E2-YZ), Max:-8.54dB



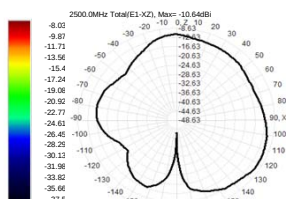
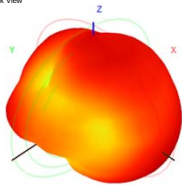
Total(H-XY), Max:-9.50dB, Crd=9.57



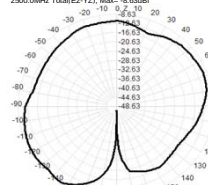
2500.0MHz Total, Eff: 4.7%



Back View



2500.0MHz Total(E2-YZ), Max:-8.63dB



Total(H-XY), Max:-9.95dB, Crd=8.90

