



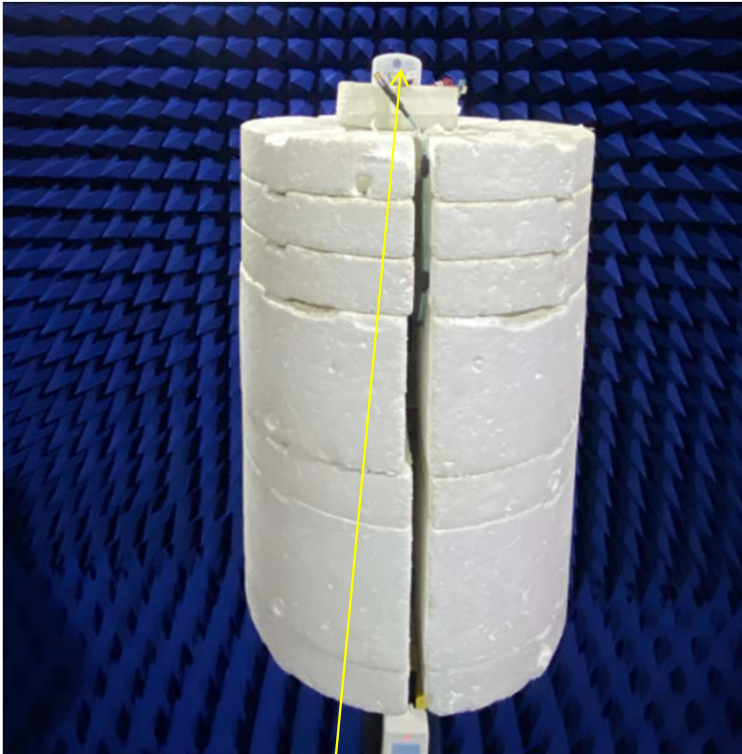
好天线 · 优比造

东莞市优比电子有限公司

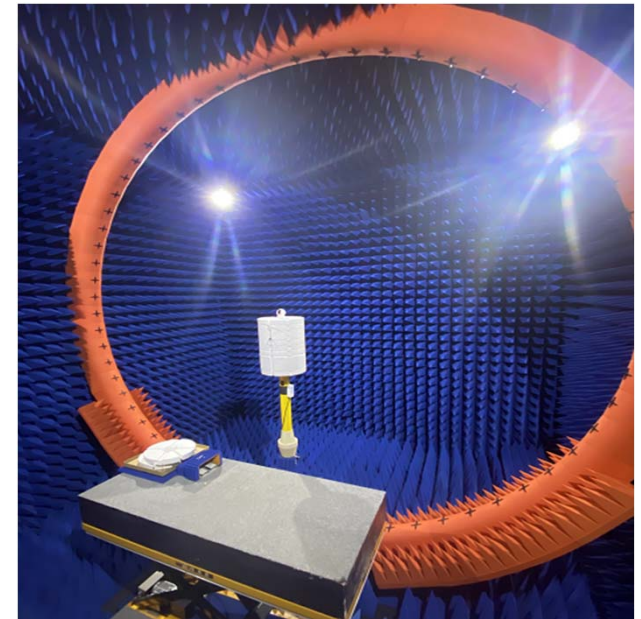
Dongguan UB Electronics Co., Ltd

Antenna Study

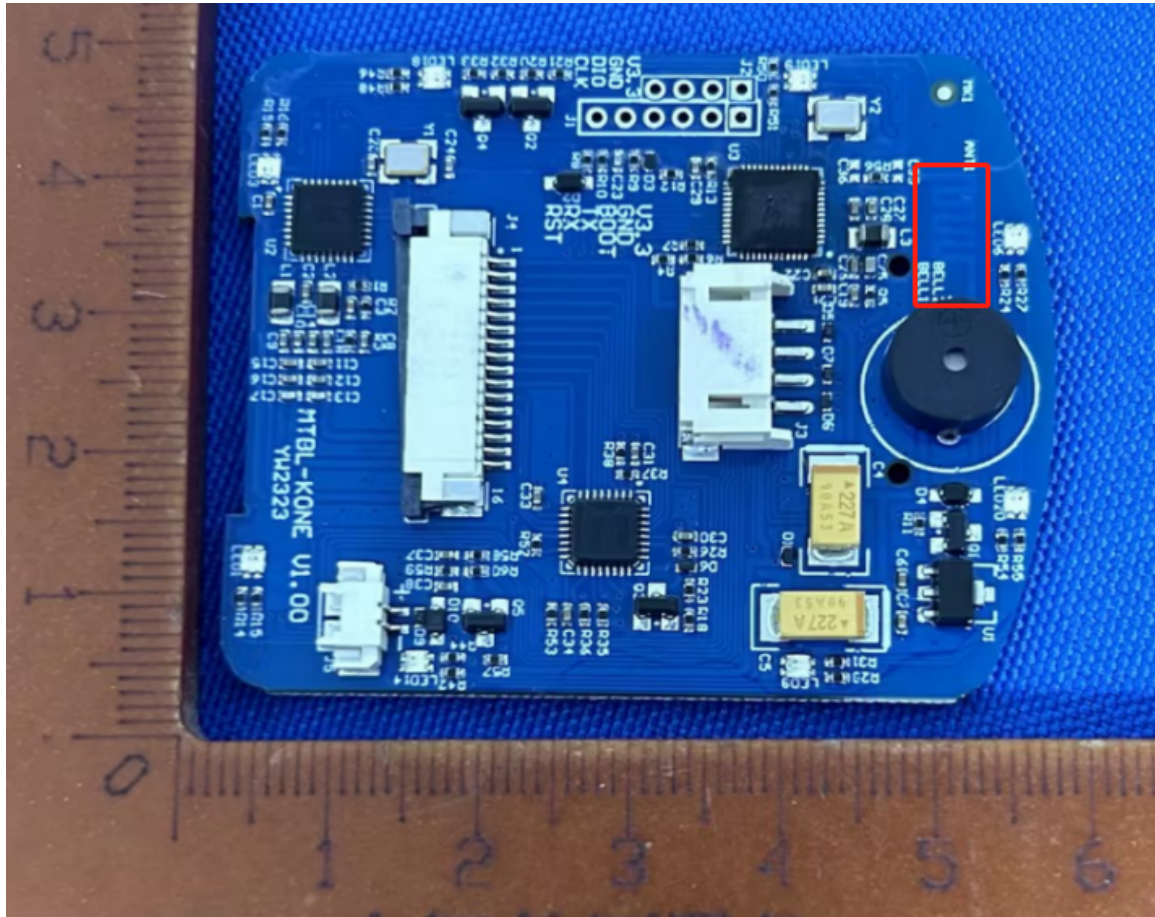
- **Client Name:TOWNSTEEL INC.**
- **Project Name : NET DOOR LOCK**
- **Debugging frequency band: 900/930/2400/2500HMz**
- **Valuation date: 2024.05.15**
- **Linkman contacts: gao shang 18925546490**



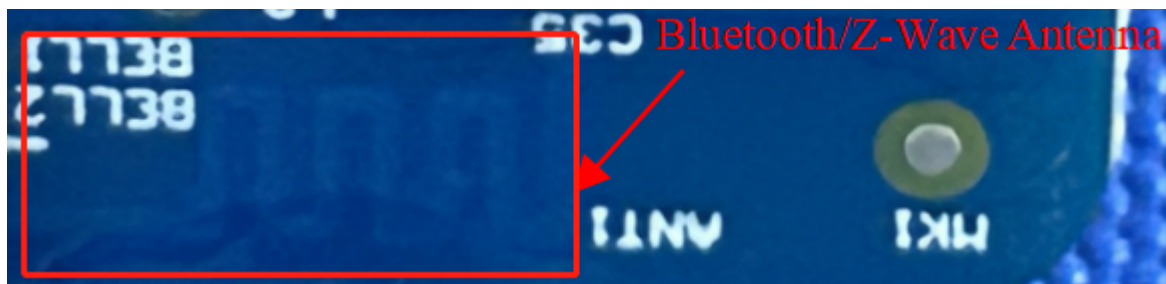
Testing environment



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

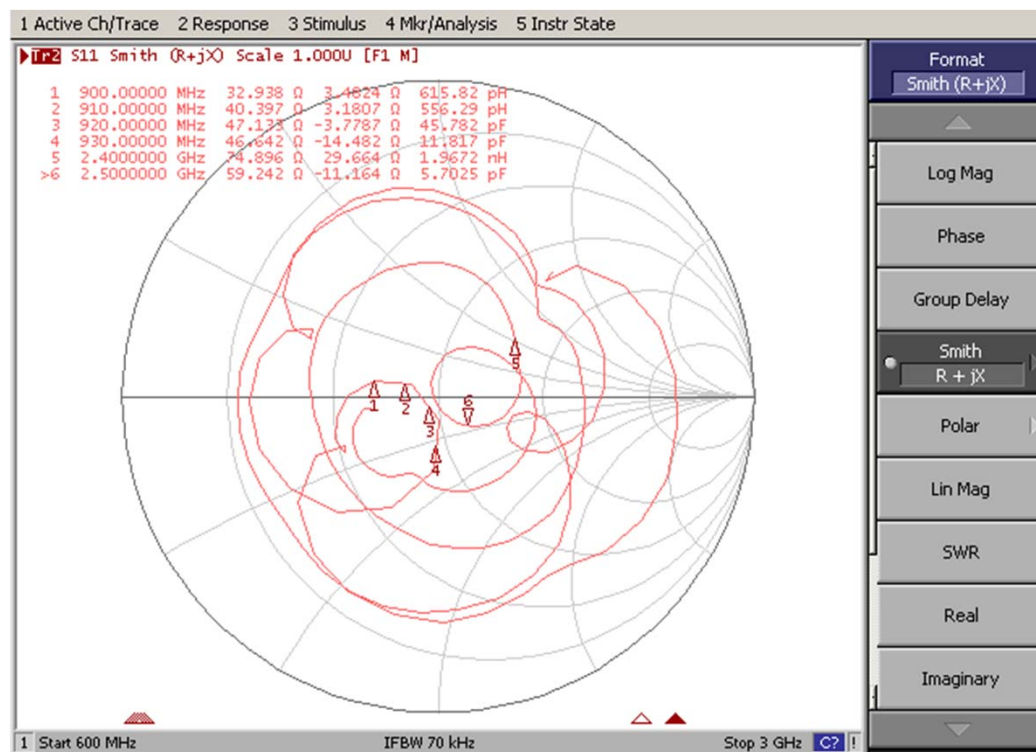
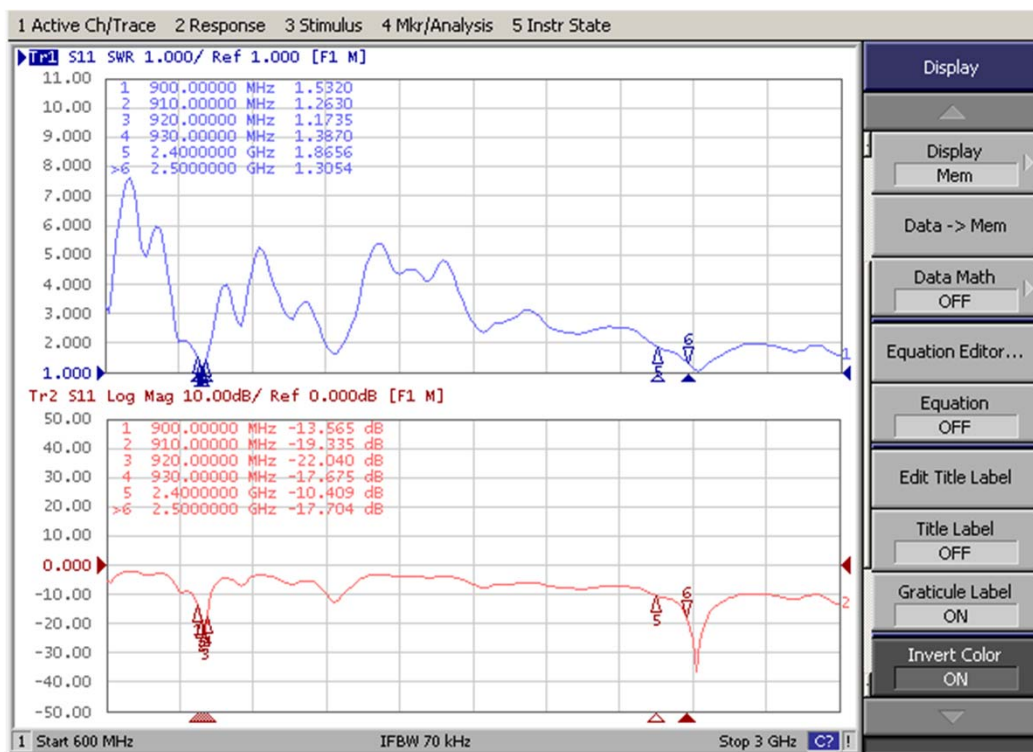


- Antenna name: NDL-ANT
- Antenna Type: PCB Antenna
- Covers : 900/930/2400/2500MHz



S Parameter_Return Loss&VSWR-Smith

Dongguan UB Electronics Co., Ltd

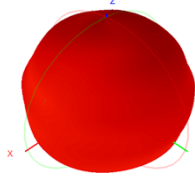


Efficiency and Gain

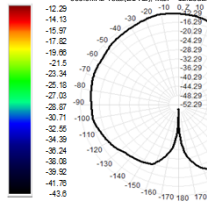
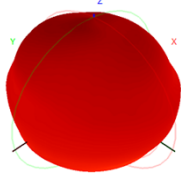
Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Frequency (MHz)	900.0	902.0	904.0	906.0	908.0	910.0	912.0	914.0	916.0	918.0	920.0	922.0	924.0	926.0	928.0	930.0
Gain (dBi)	1.91	2.01	2.02	2.05	2.09	2.14	2.17	2.10	2.14	2.16	2.15	2.15	2.17	2.19	2.23	2.23

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

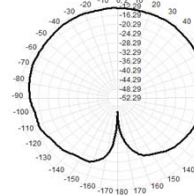
900.0MHz Total, Eff: 2.1%



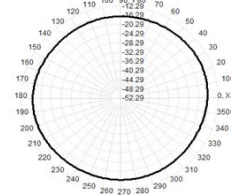
Back View



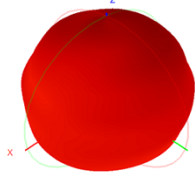
900.0MHz Total(E1-YZ), Max=-12.29dB



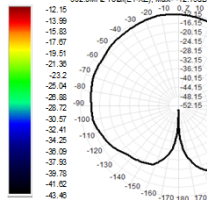
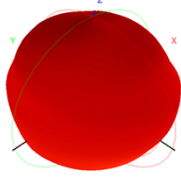
Total(H-XY), Max=-16.43dB, Crd=1.45



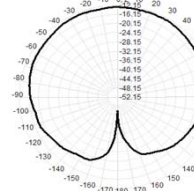
902.0MHz Total, Eff: 2.2%



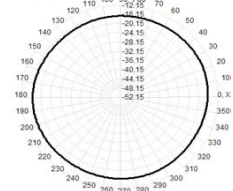
Back View



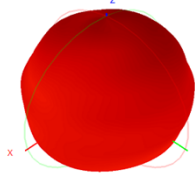
902.0MHz Total(E1-YZ), Max=-12.99dB



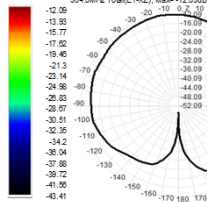
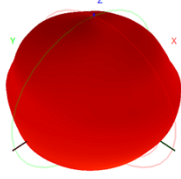
Total(H-XY), Max=-16.23dB, Crd=1.53



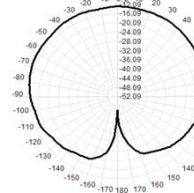
904.0MHz Total, Eff: 2.2%



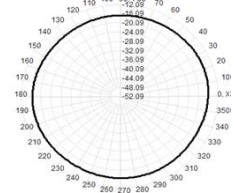
Back View



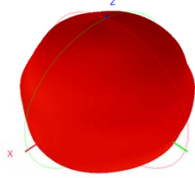
904.0MHz Total(E1-YZ), Max=-12.91dB



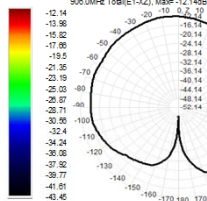
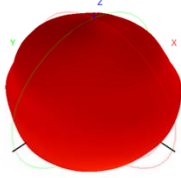
Total(H-XY), Max=-16.04dB, Crd=1.63



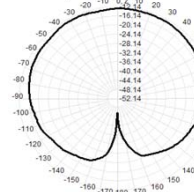
906.0MHz Total, Eff: 2.3%



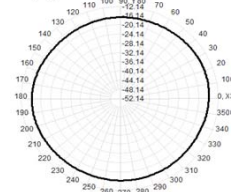
Back View



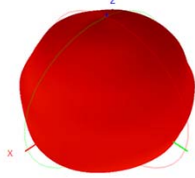
906.0MHz Total(E1-YZ), Max=-12.84dB



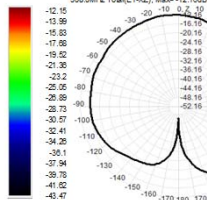
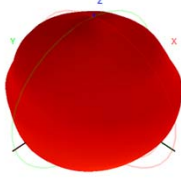
Total(H-XY), Max=-15.84dB, Crd=1.73



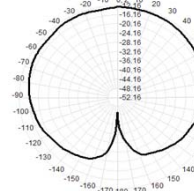
908.0MHz Total, Eff: 2.3%



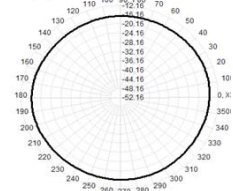
Back View



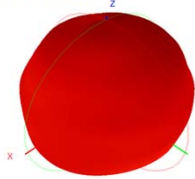
908.0MHz Total(E1-YZ), Max=-12.74dB



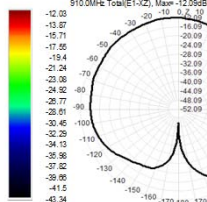
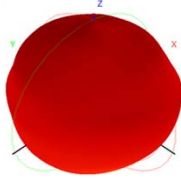
Total(H-XY), Max=-15.66dB, Crd=1.85



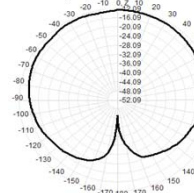
910.0MHz Total, Eff: 2.3%



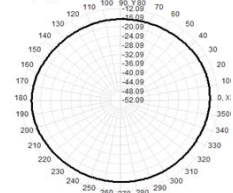
Back View



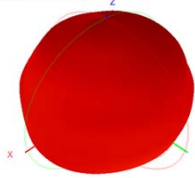
910.0MHz Total(E1-YZ), Max=-12.56dB



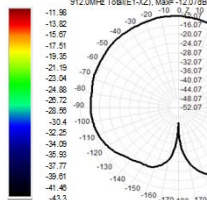
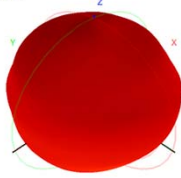
Total(H-XY), Max=-15.52dB, Crd=1.99



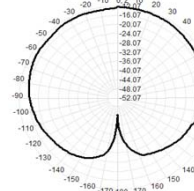
912.0MHz Total, Eff: 2.4%



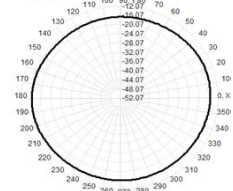
Back View



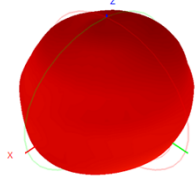
912.0MHz Total(E1-YZ), Max=-12.45dB



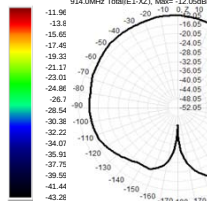
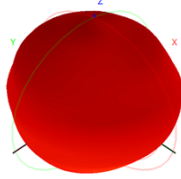
Total(H-XY), Max=-15.37dB, Crd=2.17



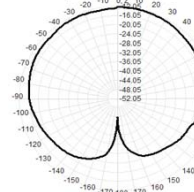
914.0MHz Total, Eff: 2.4%



Back View



914.0MHz Total(E1-YZ), Max=-12.23dB



Total(H-XY), Max=-15.18dB, Crd=2.40

