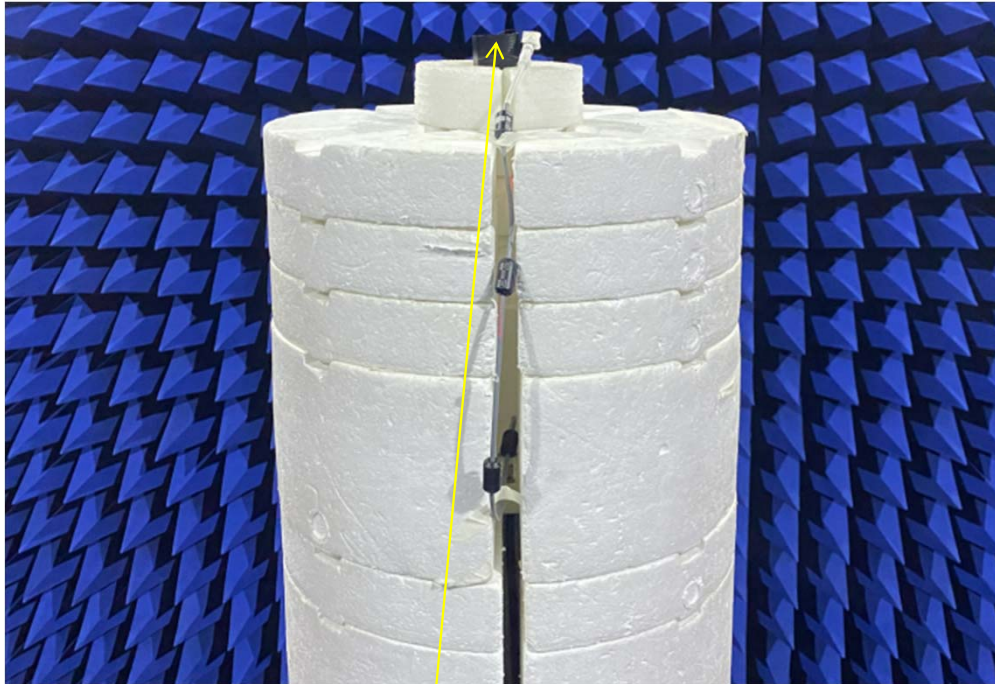


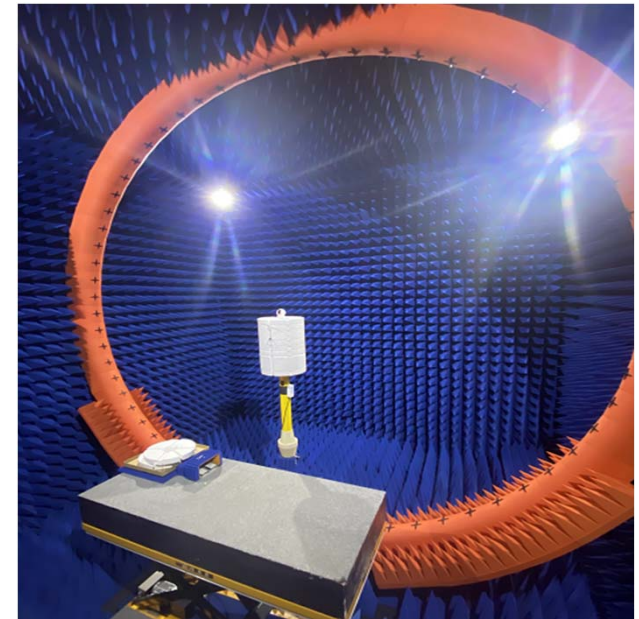
- **Client Name: Voltas IT**
- **Project Name:OBDeleven Gen2**
- **Debugging frequency band: 2400-2500MHz**
- **Valuation date: 2023.02.18**

Internal Antenna

Dongguan UB Electronics Co., Ltd



Testing environment

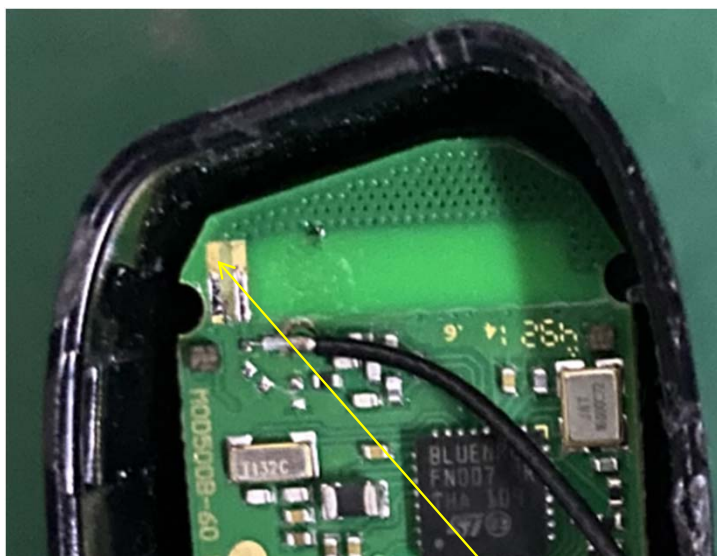


Testing 3D microwave darkroom(6m*6m*6m)

Antenna

Dongguan UB Electronics Co., Ltd

- Antenna name: 2.4G
- Antenna Type: PIFA
- Covers : 2400-2500MHz

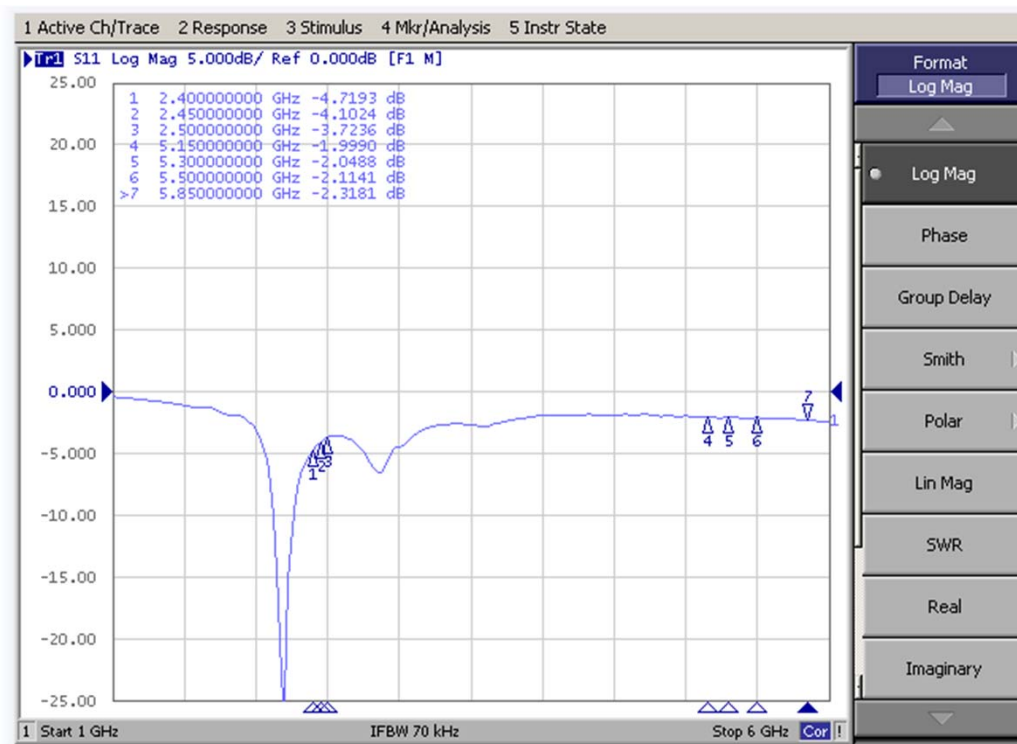
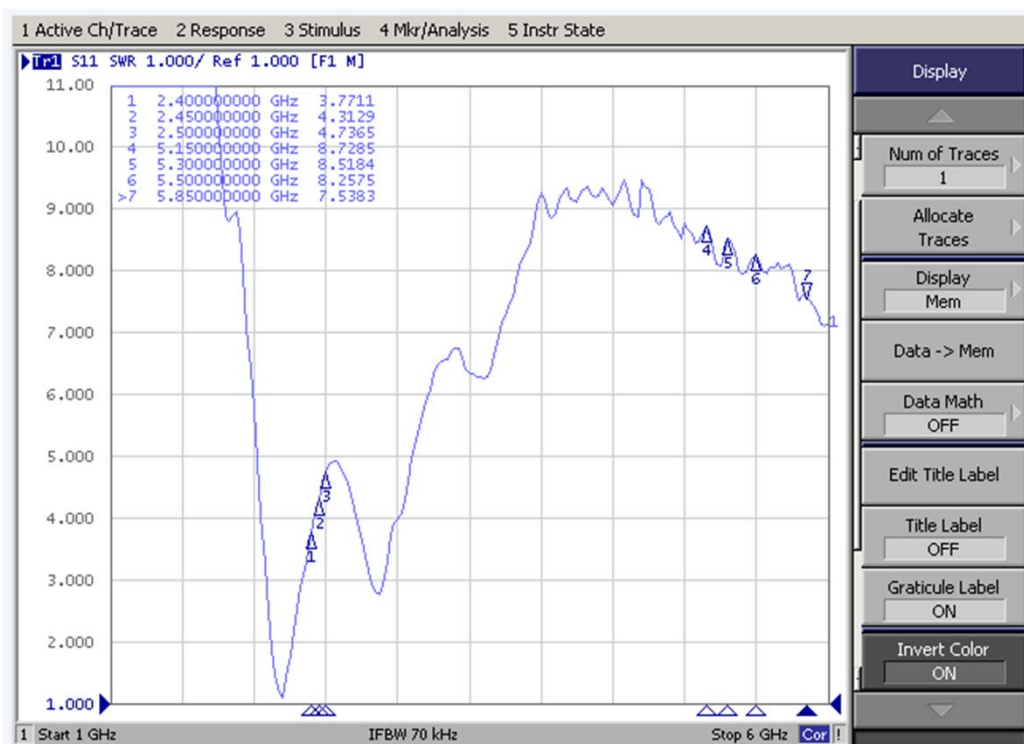


Antenna



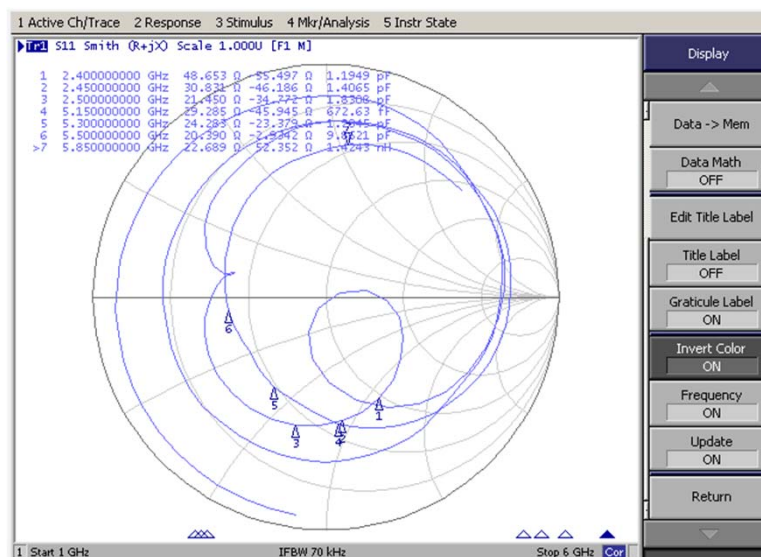
S Parameter_Return Loss&VSWR

Dongguan UB Electronics Co., Ltd



Efficiency and Gain-Smith

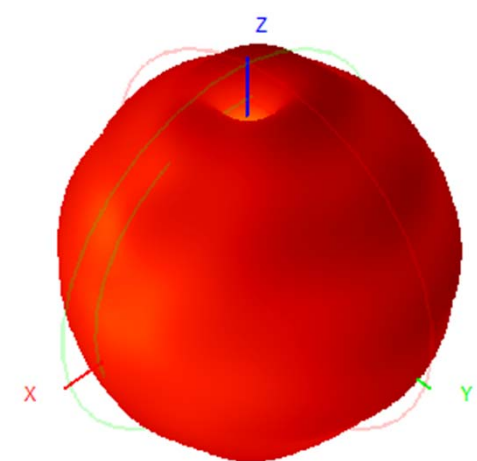
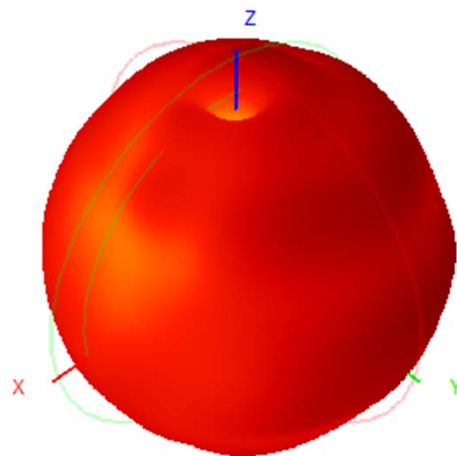
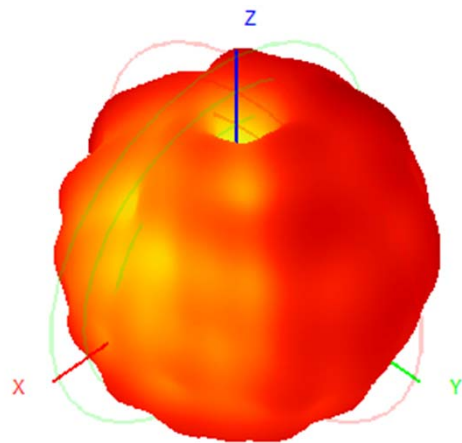
Dongguan UB Electronics Co., Ltd

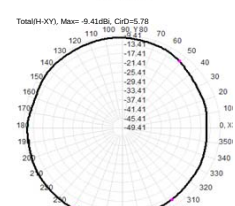
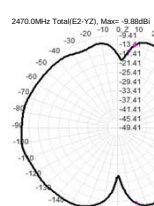
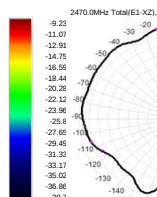
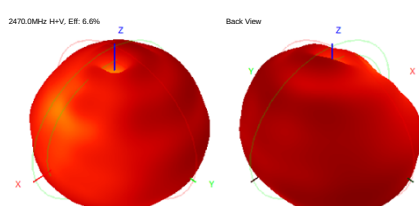
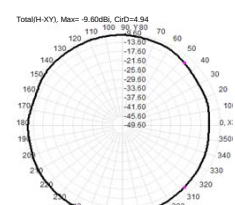
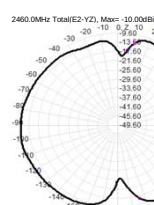
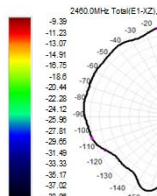
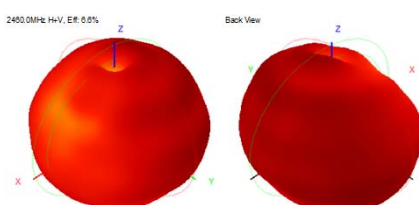
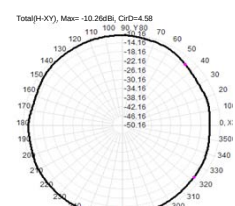
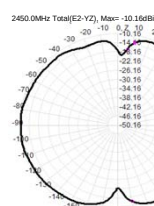
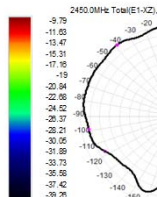
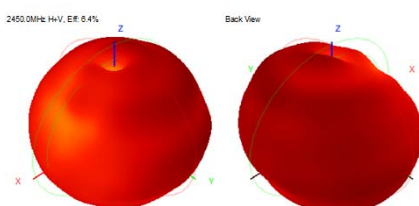
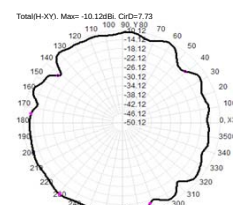
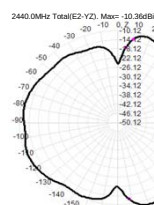
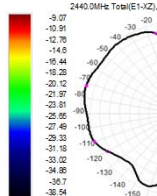
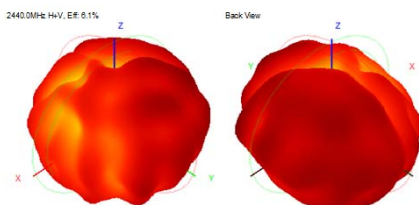
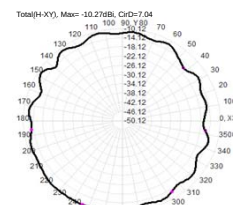
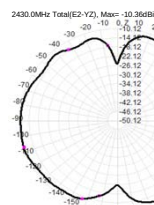
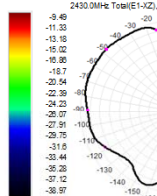
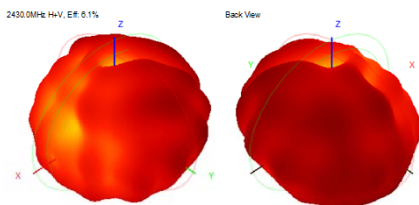
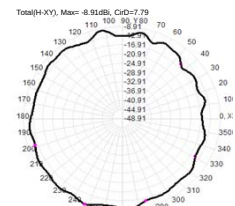
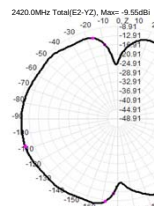
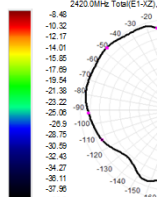
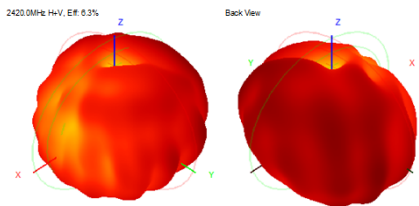
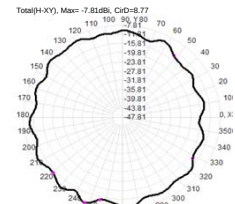
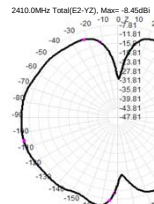
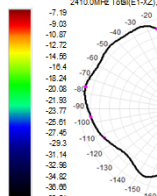
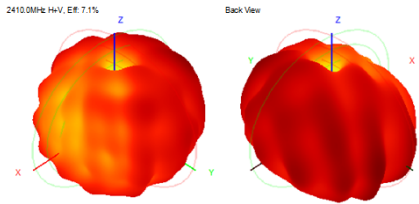
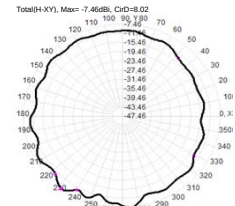
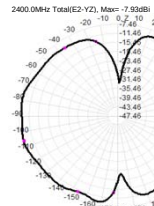
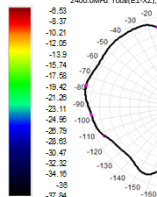
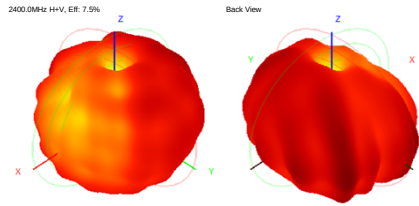


Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	-6.53	-7.19	-8.48	-9.49	-9.07	-9.79	-9.39	-9.23	-6.94	-10.28	-10.17
Efficiency (%)	7.53	7.07	6.33	6.06	6.11	6.38	6.56	6.57	6.22	5.56	5.57

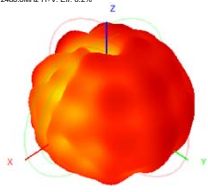
Freespace Environment Performance –

Dongguan UB Electronics Co., Ltd

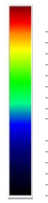
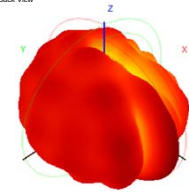




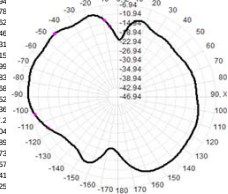
2480.0MHz H+V, Eff: 6.2%



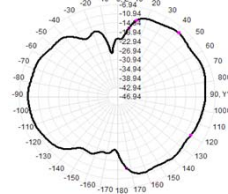
Back View



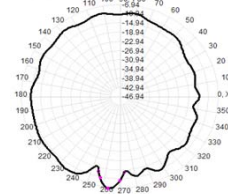
2480.0MHz Total(E1-XZ), Max=-9.70dB



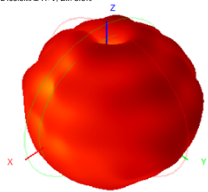
2480.0MHz Total(E2-YZ), Max=-9.72dB



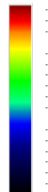
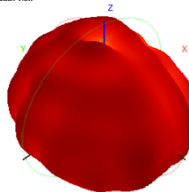
Total(H+V), Max=-6.94dB, CrD=10.09



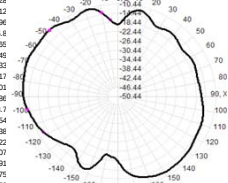
2490.0MHz H+V, Eff: 5.6%



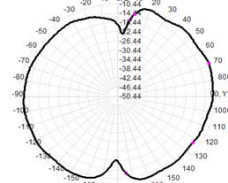
Back View



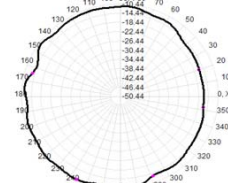
2490.0MHz Total(E1-XZ), Max=-10.69dB



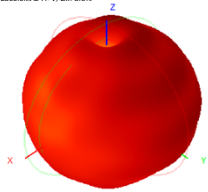
2490.0MHz Total(E2-YZ), Max=-10.71dB



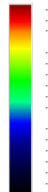
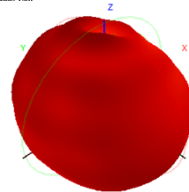
Total(H+V), Max=-10.44dB, CrD=6.21



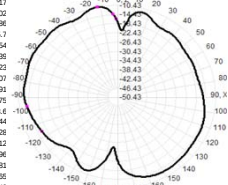
2500.0MHz H+V, Eff: 5.6%



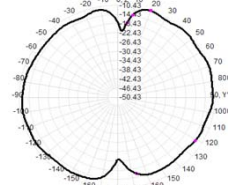
Back View



2500.0MHz Total(E1-XZ), Max=-10.43dB



2500.0MHz Total(E2-YZ), Max=-10.48dB



Total(H+V), Max=-10.73dB, CrD=5.12

