

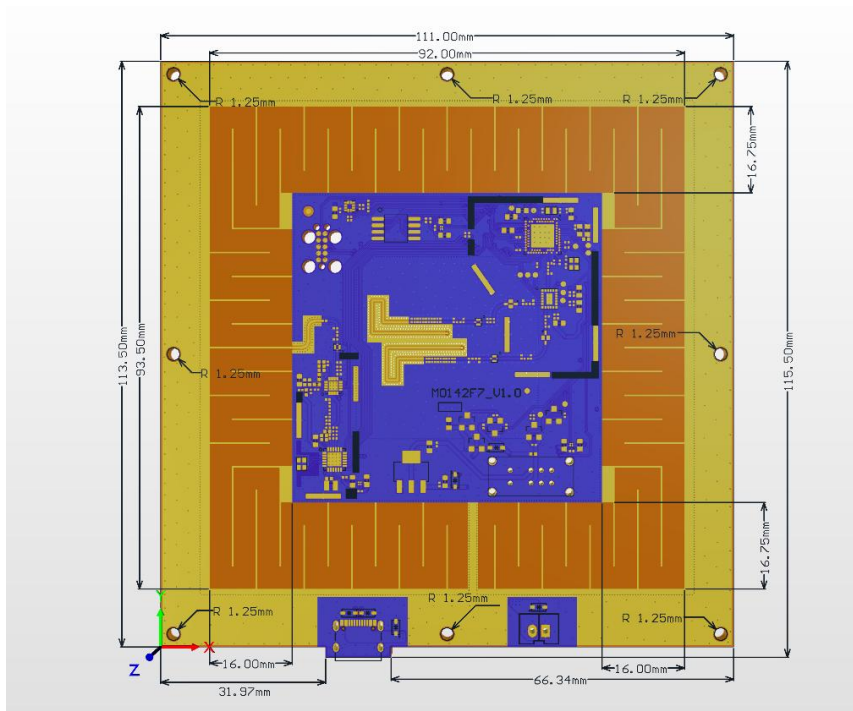


天线型号 (Antenna Version): ANT-LQNCNC23003  
产品型号 (Model of the DUT): MNDB1  
PCB 编号及版本 (PCB number and version): MO142F7\_V1.0  
责任硬件工程师 (Hardware Engineer): Jovan  
测试日期 (Test Data): 20230421

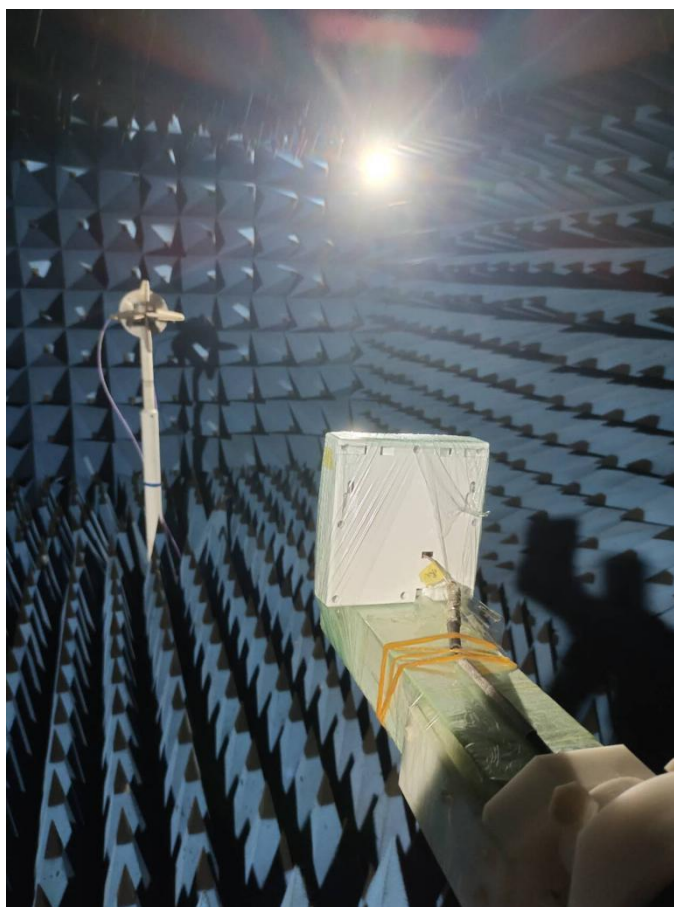
### 1、技术指标 (Technical Specification)

电性能指标 Electrical Specifications	
频率范围 Frequency Range (MHz)	902-928
频带宽度 Bandwidth (-10dB) (MHz)	138
输入阻抗 Input Impedance ( $\Omega$ )	50
回波损耗 Return Loss (dB)	<-11.289
电压驻波比 VSWR	<1.74
增益 Gain (@916MHz) (dBi)	2.03 -0.12(horizontal polarization) -2.05(vertical polarization)
峰值增益 Peak Gain (dBi)	2.43 0.77(horizontal polarization) -2.54(vertical polarization)
极化形式 Polarization Type	圆极化 (Circular polarization)
雷电保护 Lightning Protection	直流接地 (DC grounding)
功率容量 Power Capacity (mW)	1000
机械指标 Mechanical Specifications	
天线尺寸 Antenna Size (mm)	92*93.5
辐射体 Radiator	铜 Cuprum
连接器型号 Connect Type	无
工作温度 Working Temperature ( $^{\circ}\text{C}$ )	-40~85
存储温度 Storage Temperature ( $^{\circ}\text{C}$ )	-40~85

2、天线外形和尺寸 (The shape and size of the antenna)



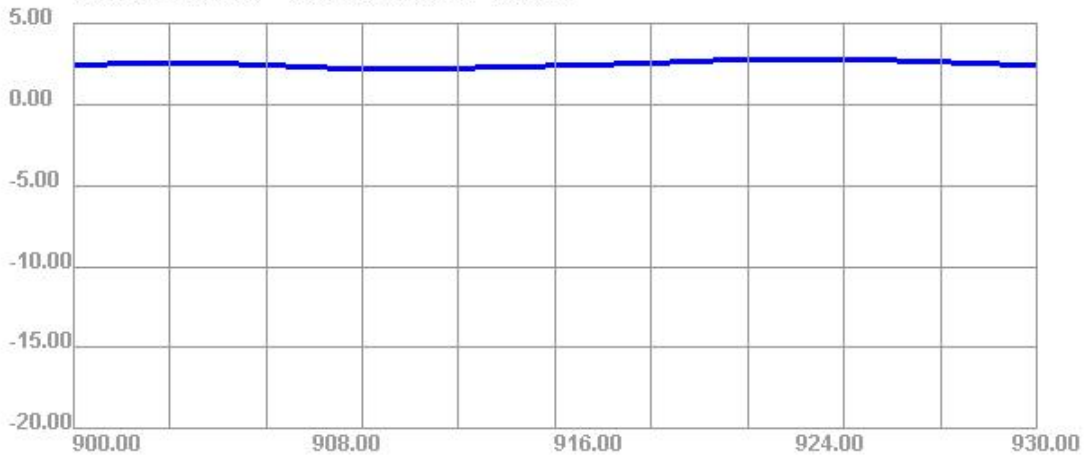
3、测试结果 (The result of the test)



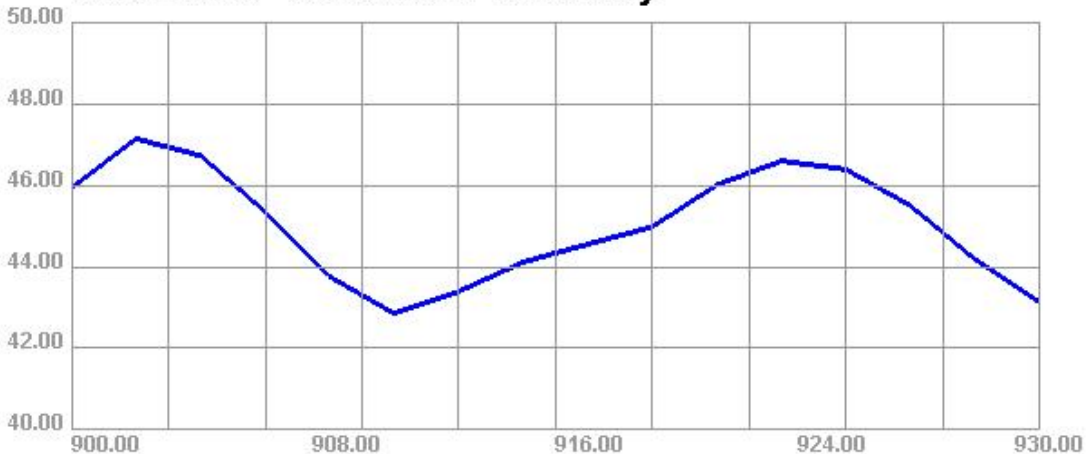
3.1 增益和效率 (Gain and Efficiency)

Frequency (MHz)	Effi (%)	horizontal polarization Gain (dBi)	vertical polarization Gain (dBi)	Combine Gain (dBi)
900	45.94	0.99	-3.18	2.39
902	47.14	0.77	-2.54	2.43
904	46.73	0.56	-2.44	2.32
906	45.35	0.36	-2.48	2.18
908	43.76	0.13	-2.51	2.02
910	42.86	-0.06	-2.52	1.9
912	43.4	-0.06	-2.39	1.94
914	44.12	-0.06	-2.24	2
916	44.56	-0.12	-2.05	2.03
918	44.98	-0.23	-1.81	2.06
920	46.01	-0.31	-1.48	2.15
922	46.6	-0.43	-1.25	2.19
924	46.39	-0.55	-1.22	2.14
926	45.5	-0.76	-1.31	1.99
928	44.18	-1.07	-1.41	1.77
930	43.14	-1.32	-1.52	1.59

900.00MHz - 930.00MHz Gain



900.00MHz - 930.00MHz Efficiency



3.2 辐射方向图 (Radiation Pattern)

表 1 902MHz 方向图

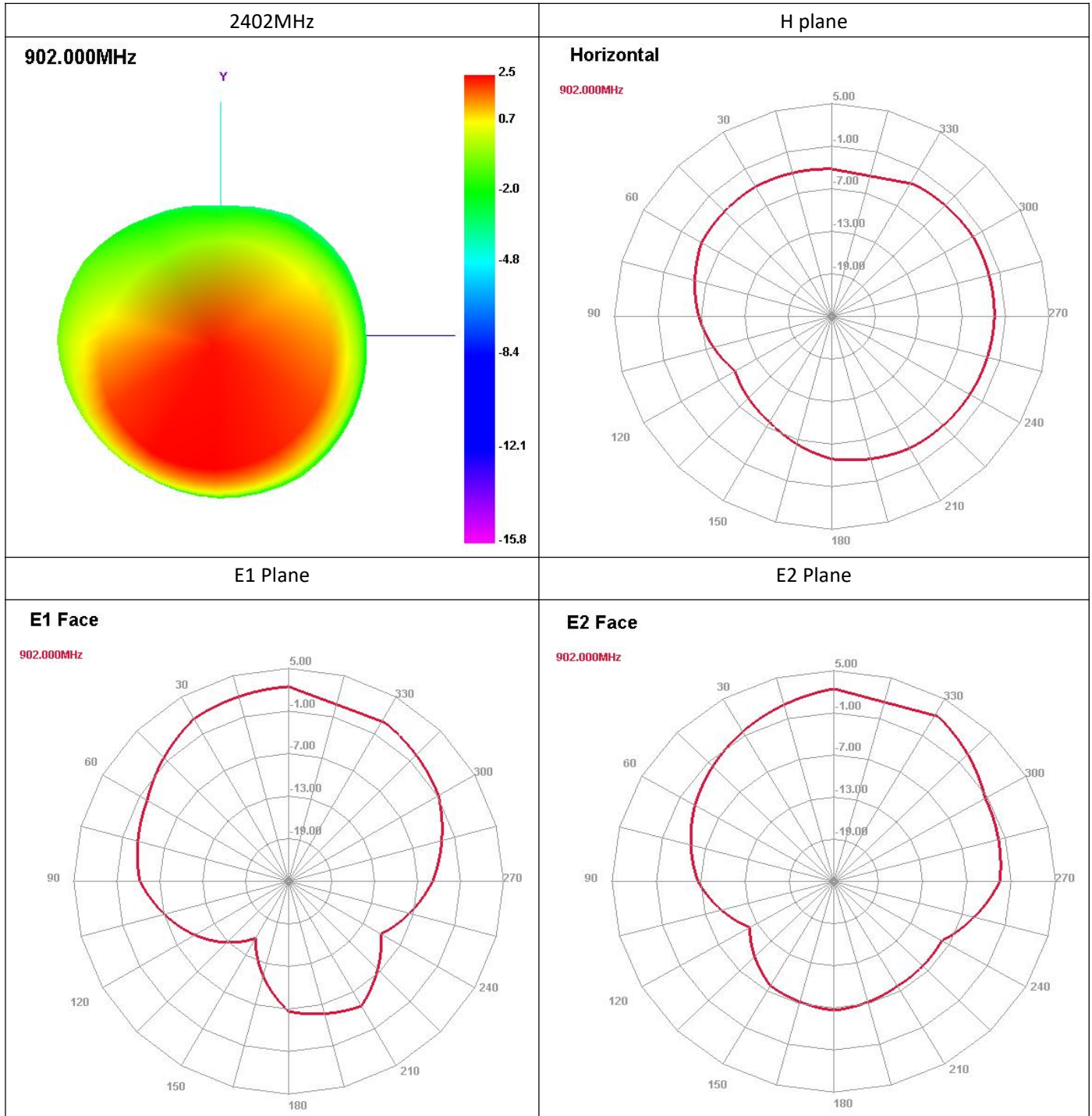


表 2 916Mhz 方向图

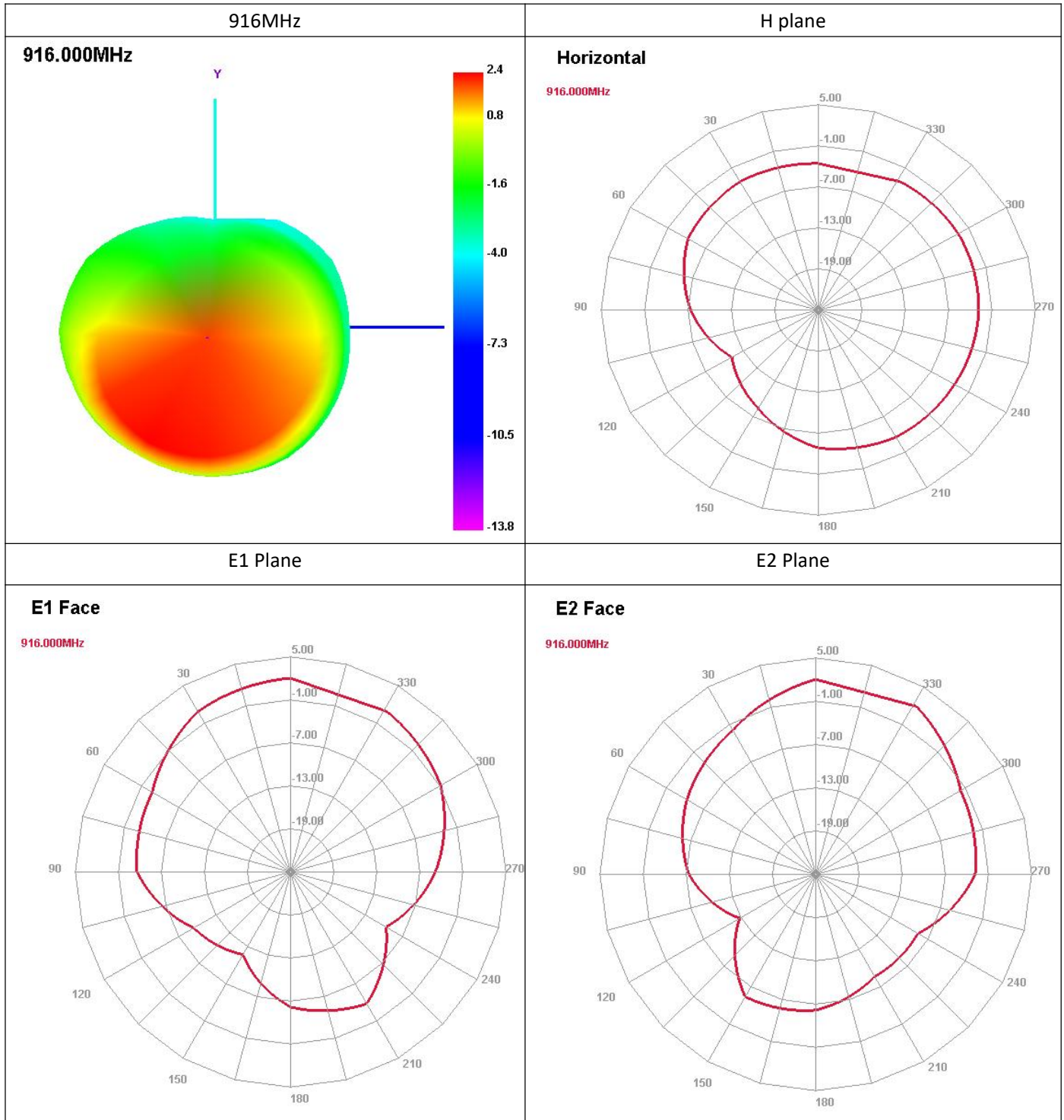


表 3 928Mhz 方向图

