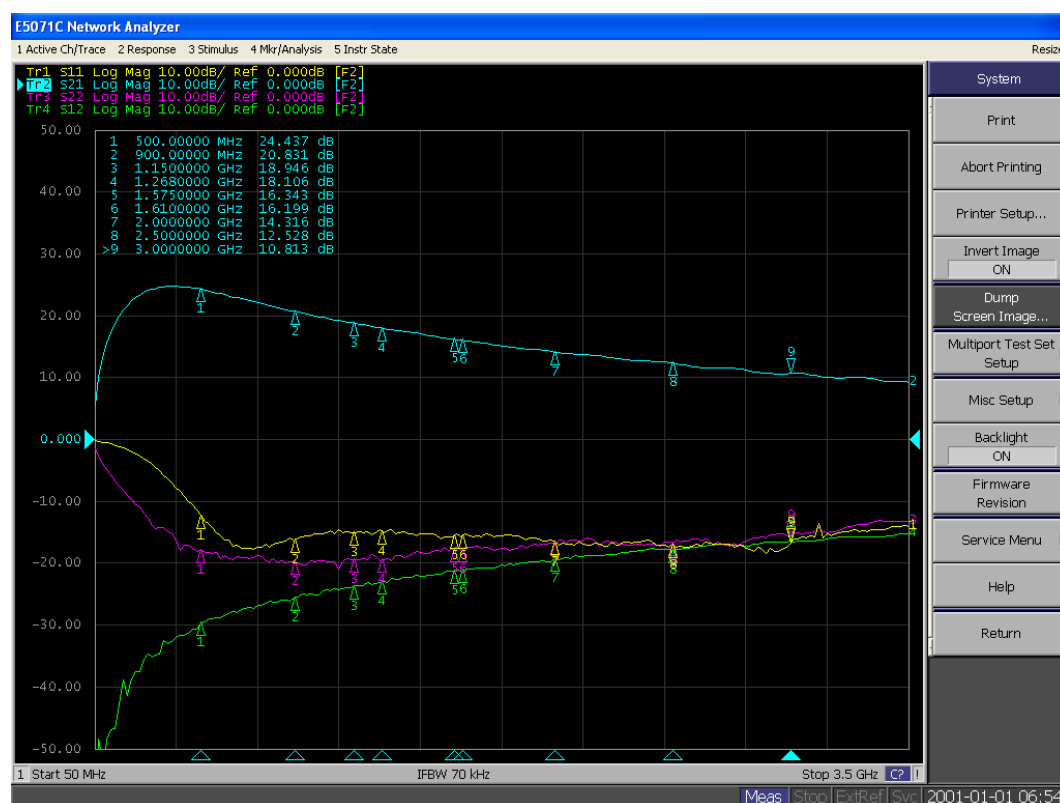


ZDH9157 500M-3GHz-5V 应用笔记

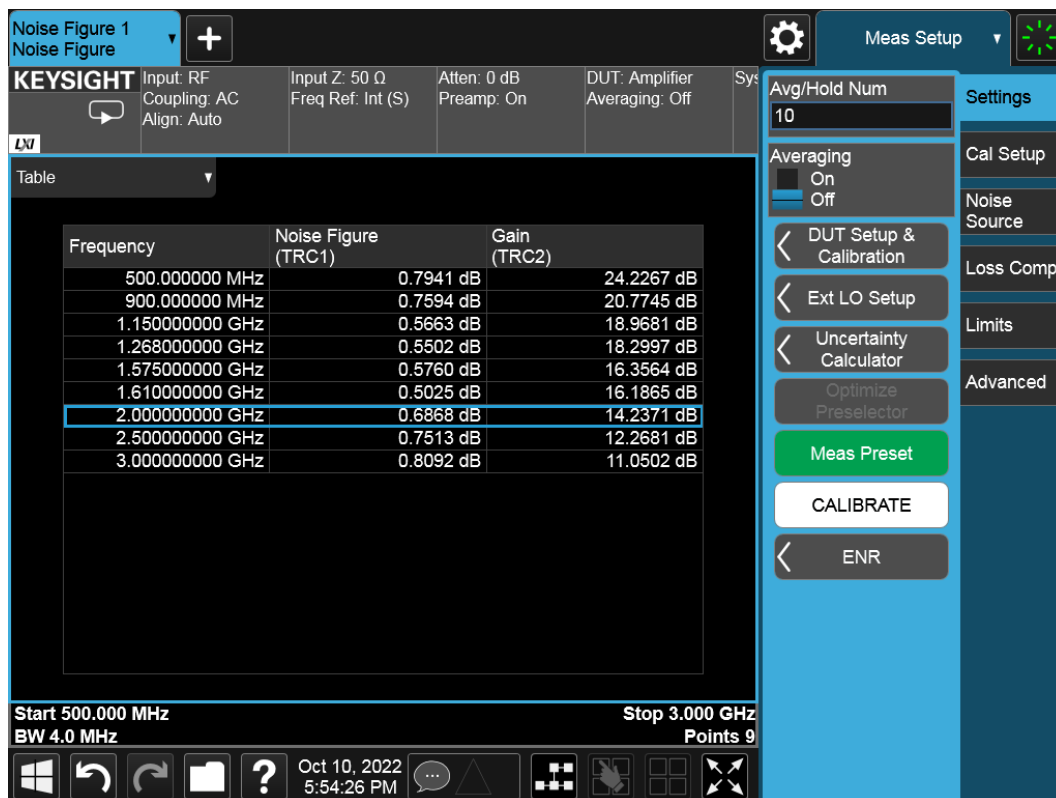
一、射频指标

| 工作频率 (Frq) | MHz | 500 | 900 | 1150 | 1268 | 1575 | 1610 | 2000 | 2500 | 3000 |
|---------------|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 增益 (S21) | dB | 24.43 | 20.83 | 18.94 | 18.10 | 16.34 | 16.20 | 14.31 | 12.52 | 10.81 |
| 噪声系数 (NF) | dB | 0.79 | 0.76 | 0.56 | 0.55 | 0.57 | 0.5 | 0.68 | 0.75 | 0.81 |
| 输入回损 (S11) | dB | -12.19 | -15.87 | -14.86 | -14.74 | -15.42 | -15.72 | -16.50 | -16.65 | -16.40 |
| 输出回损 (S22) | dB | -18.14 | -19.46 | -19.19 | -19.24 | -17.59 | -17.67 | -16.50 | -16.41 | -15.37 |
| P1 功率 (Pout) | dBm | 22.54 | 22.77 | 22.93 | 23.10 | 23.34 | 23.23 | 23.61 | 23.90 | 23.99 |
| 输入功率(Pin) | dBm | -1 | 3 | 5 | 6 | 8 | 8 | 10 | 13 | 14 |
| 工作电压 (VCC) | V | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 静态电流 (Icq) | mA | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 |
| P1 工作电流 (Icc) | mA | 77 | 79 | 83 | 86 | 90 | 89 | 90 | 96 | 99 |
| OIP3 | dBm | 36 | 37 | 37 | 37 | 37 | 38 | 38 | 38 | 38 |

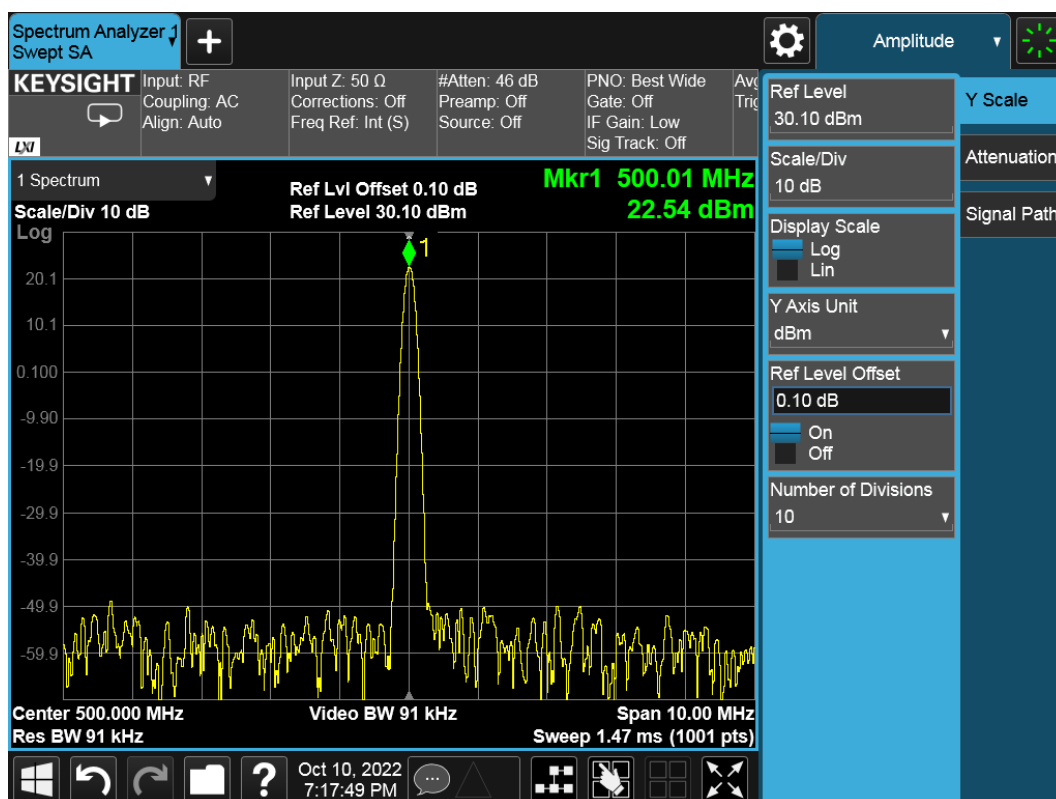
二、实测 S 参数图

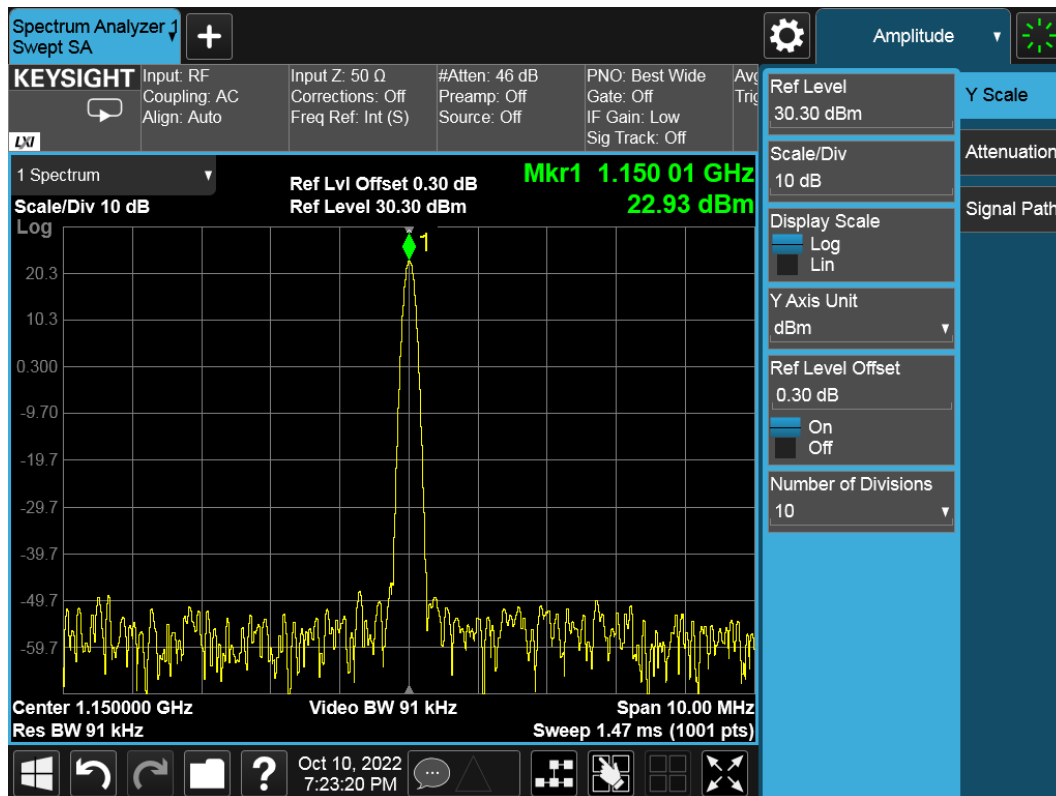
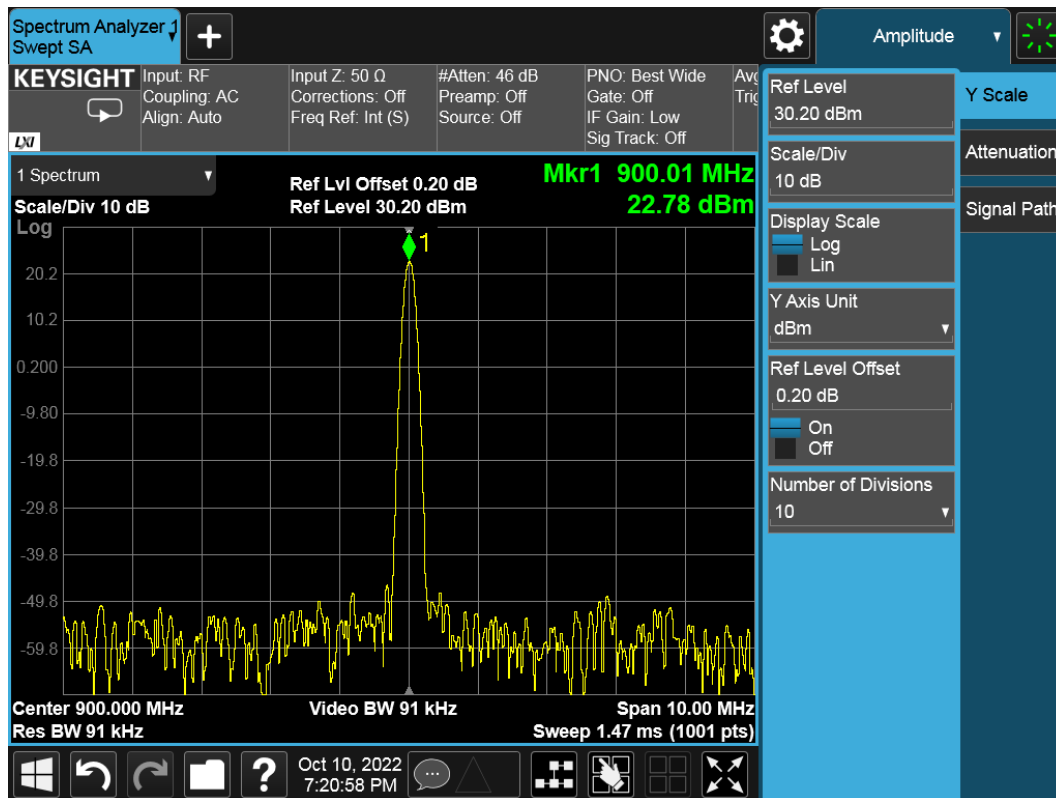


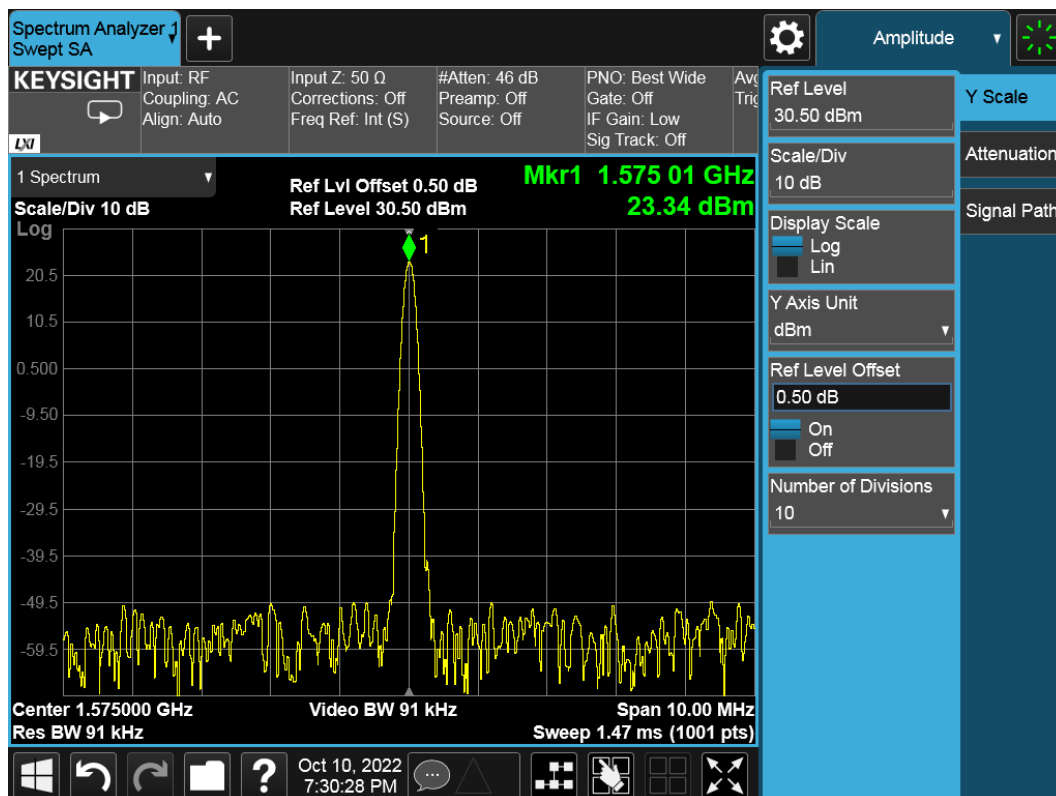
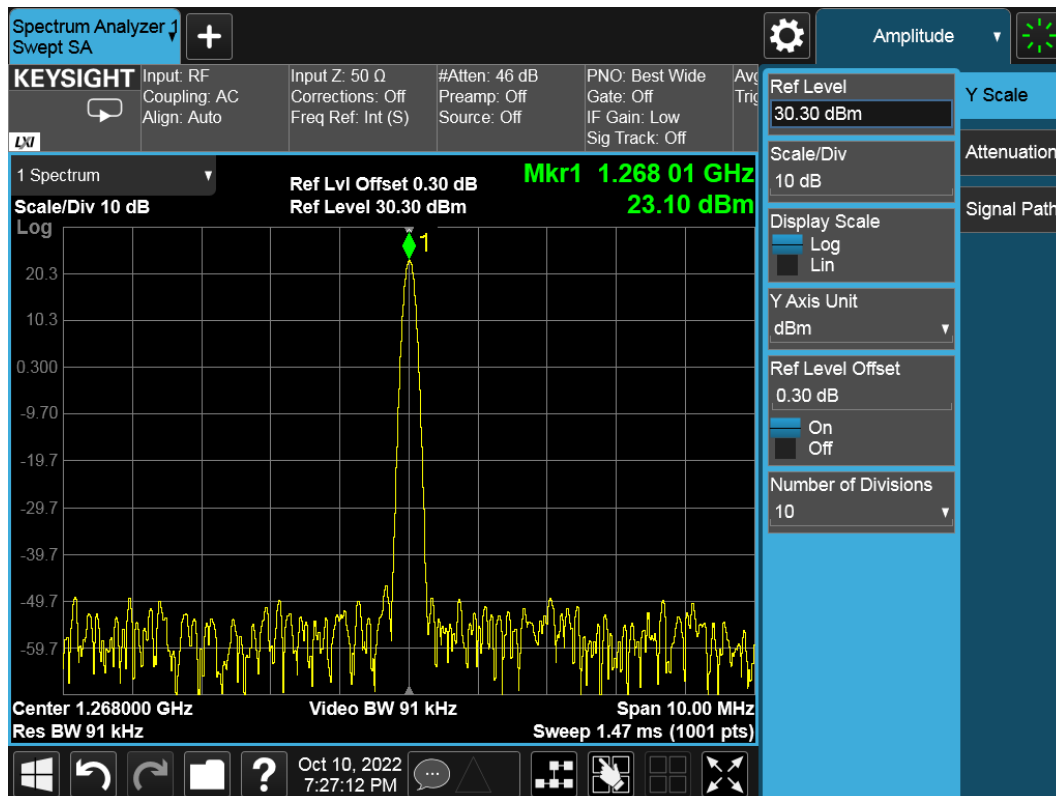


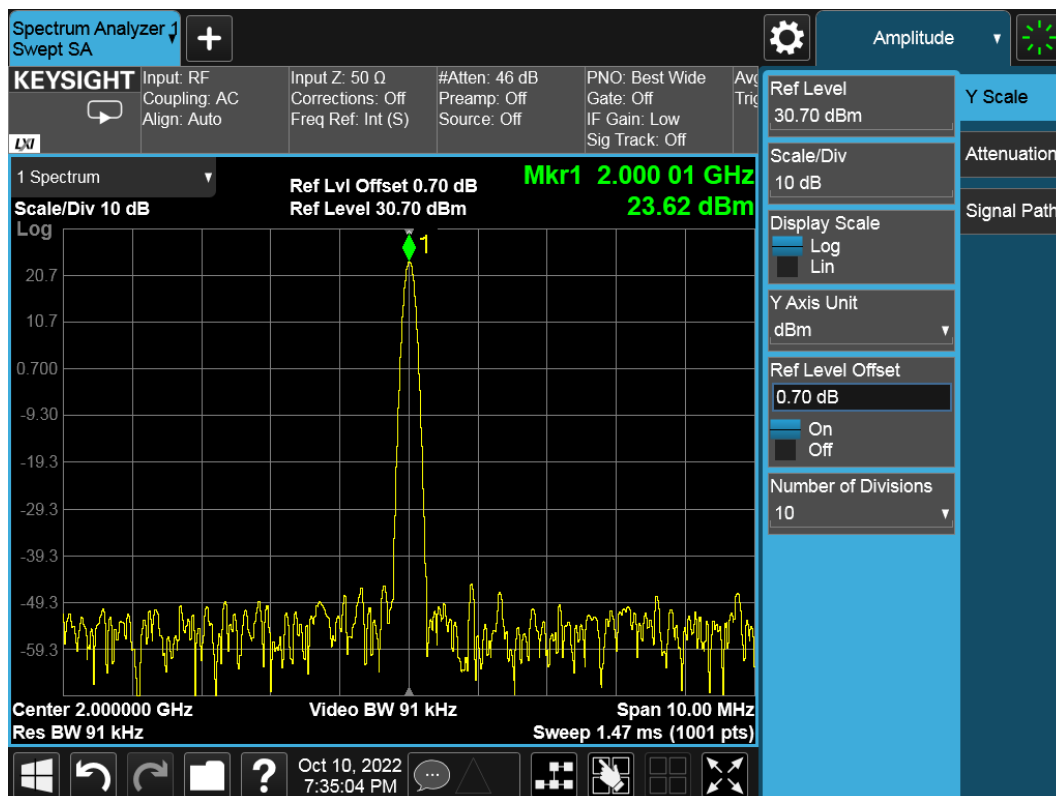
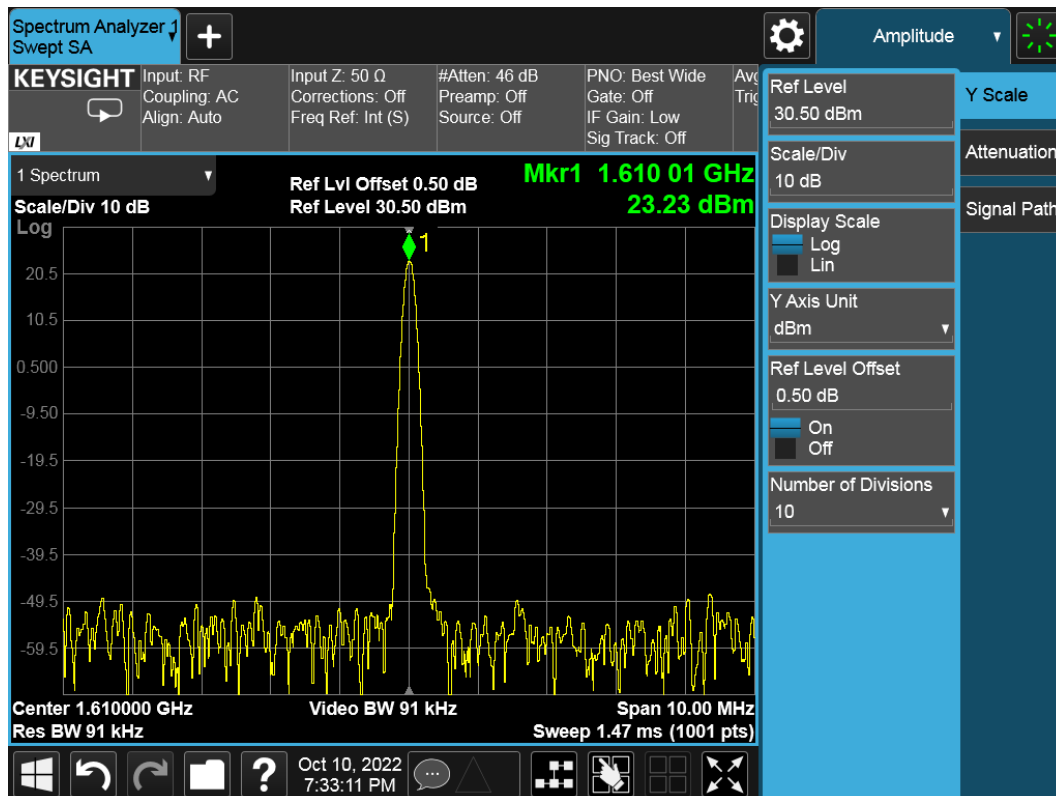


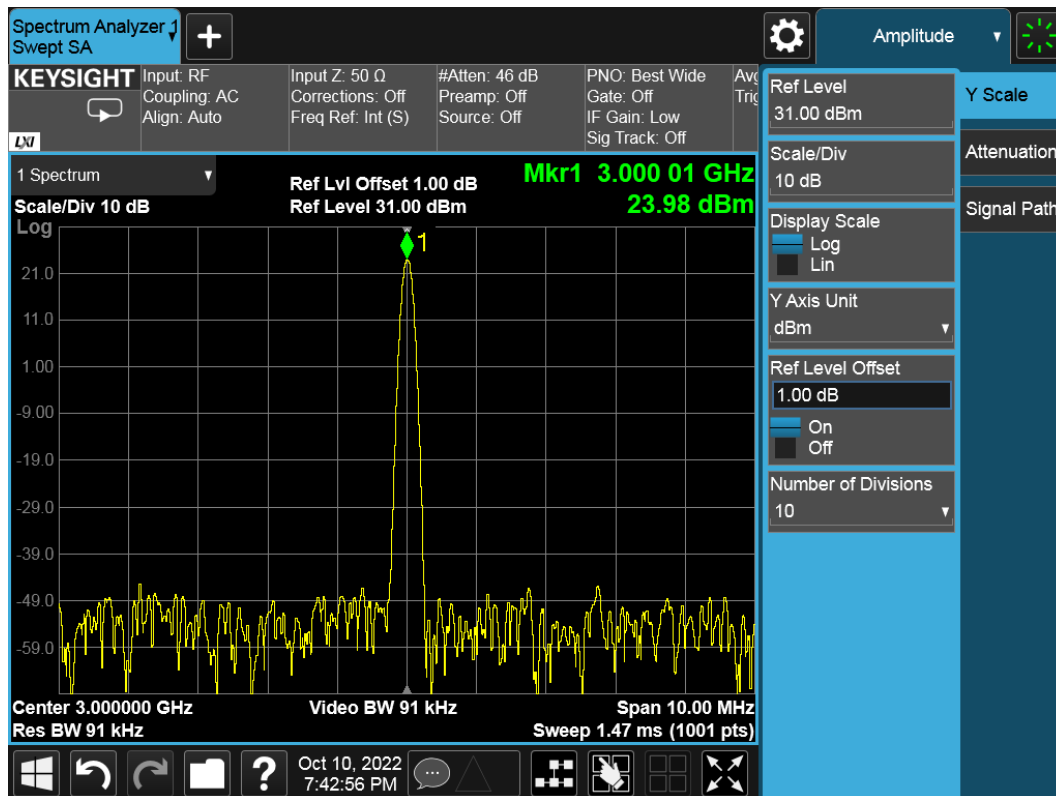
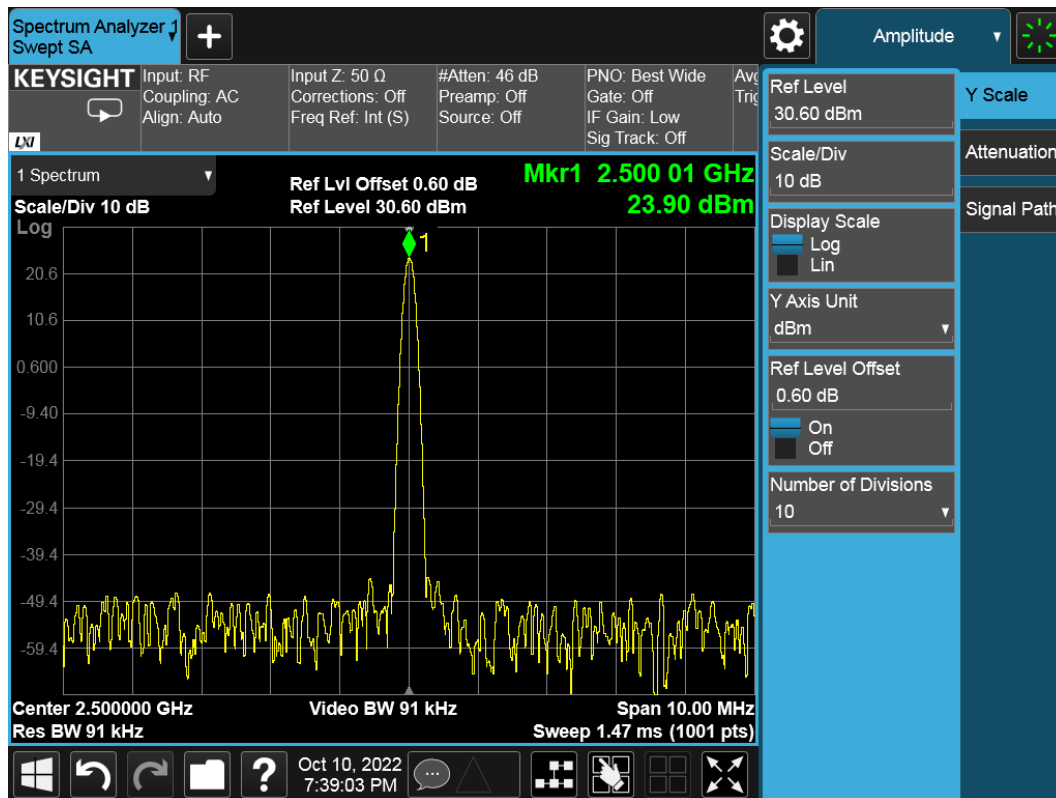
三、实测输出功率图



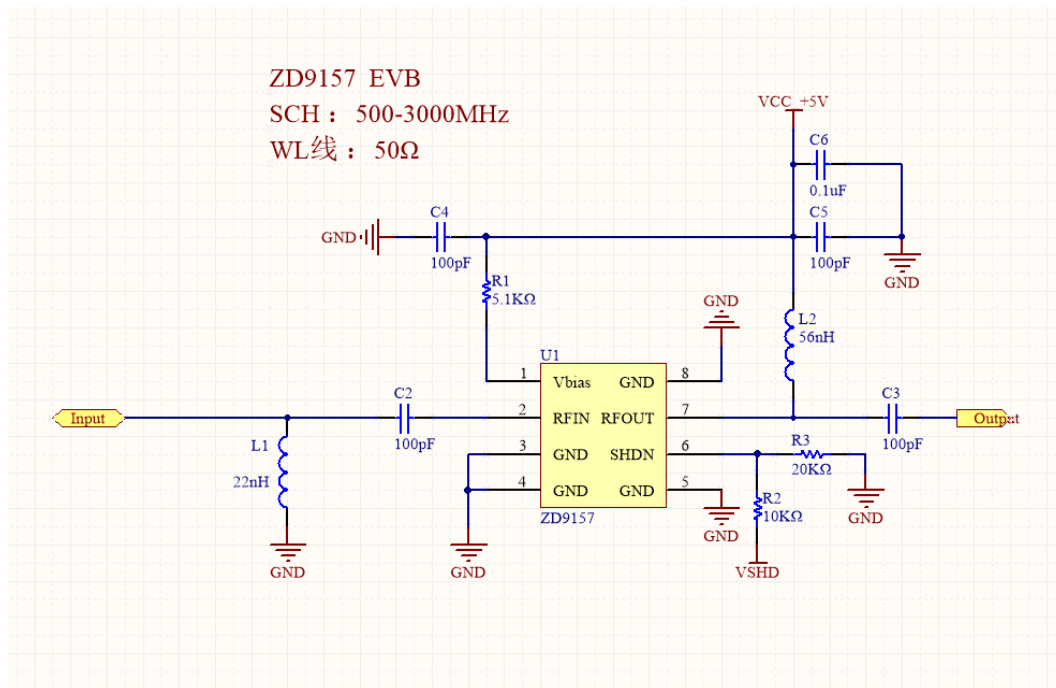




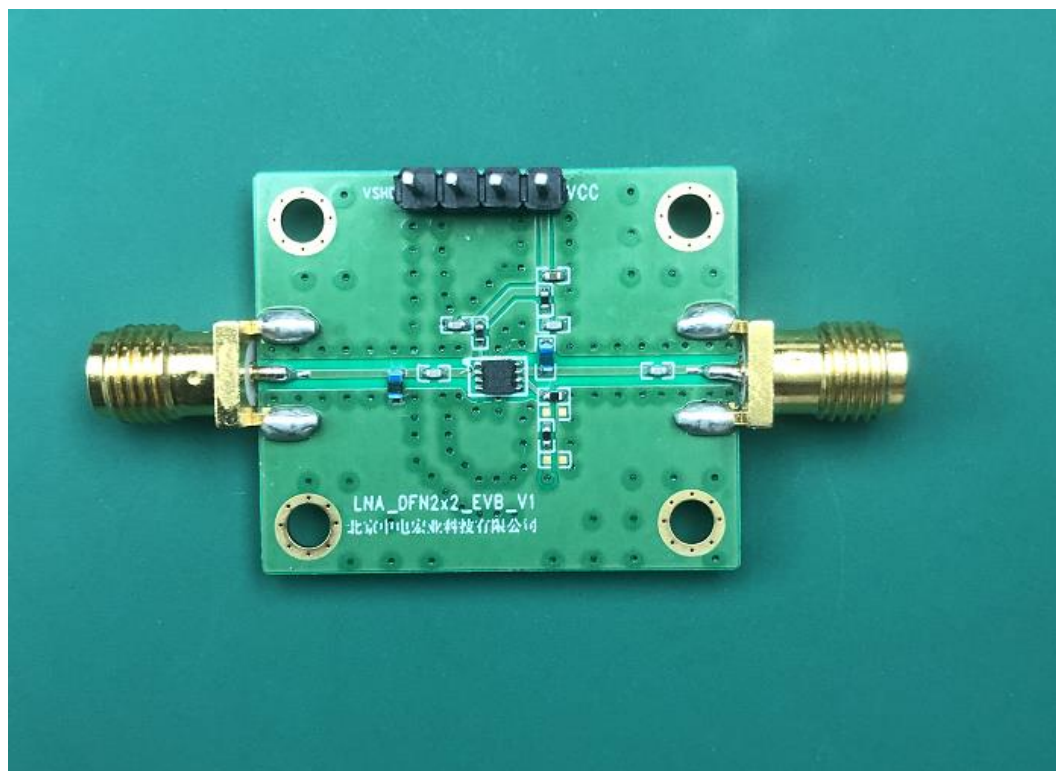




四、评估板原理图



五、评估板实物图



北京中电宏业科技有限公司
技术部
2022.10.10