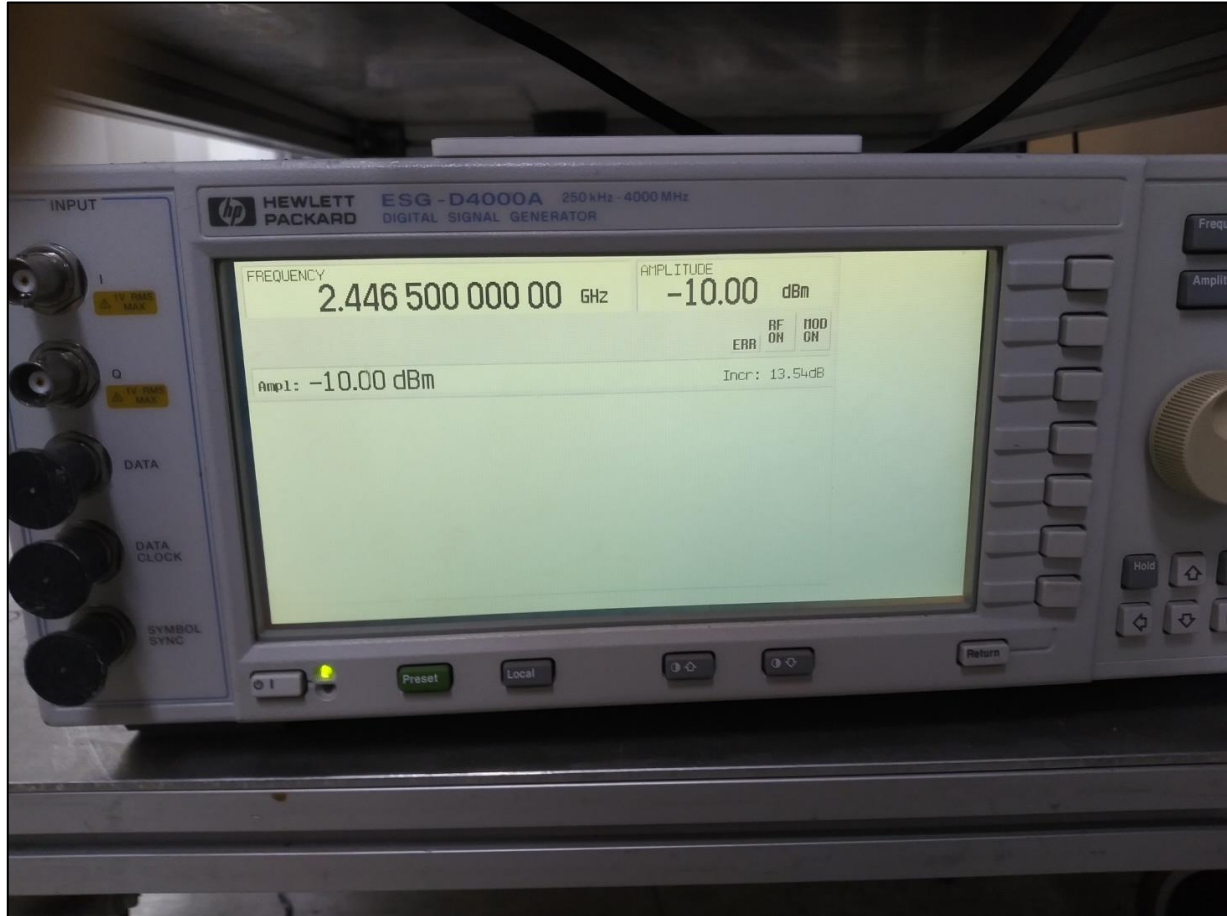


# RF connectors

2023.06.30 kimheeseo

# 측정법 : local oscillator & Spectrum Analyzer



초기 설정값 :

-10dBm / 2.4465 GHz(center Frequency)

1. Local Oscillator와 Spectrum analyzer 연결

2. Insertion loss 값 측정

참고 영상 :

<https://www.youtube.com/watch?v=twu80vMIQ2I>

<https://www.youtube.com/watch?v=Liwta7vwJLU>

# HP Agilent Keysight, ESG-D4000A E4433A



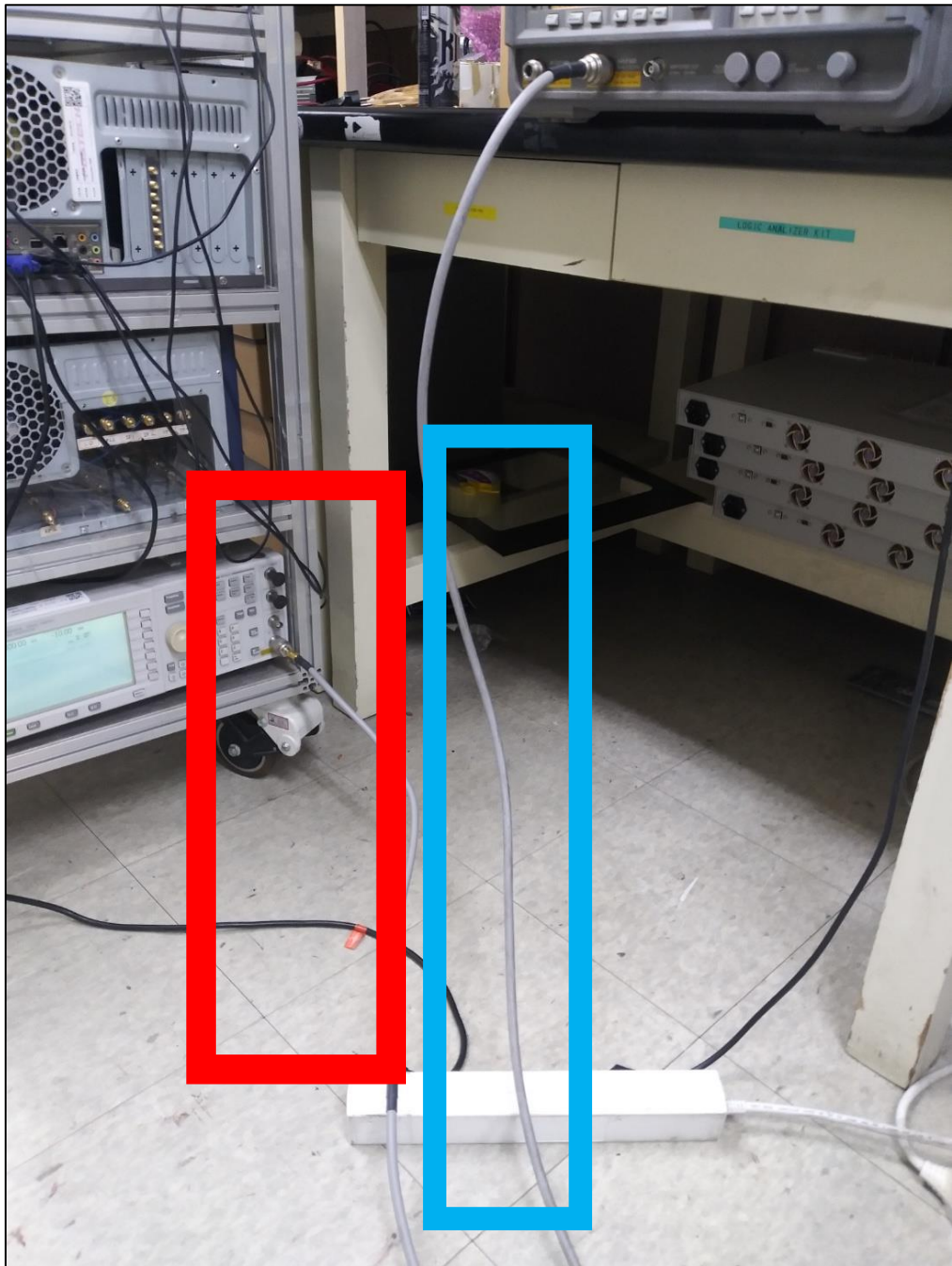
- **Max frequency:** 4 GHz
- **Minimum Frequency:** 250 kHz
- **Modulation:** AM-FM-Phase-Pulse-Wideband AM-IQ
- **Max. Output level:** +13dBm
- **Min. output level:** -136dBm
- **Resolution:** 0.01 Hz

## Features

- 250 kHz up to 4 GHz
- Flexible, expandable architecture with upgrade path for options
- 4 GHz electronic attenuator, built-in function generator, superior level accuracy, and step sweep (frequency, power and list)
- Built-in digital modulation formats for DECT, GSM, NADC, PDC, PHS and TETRA (Option UN3/UN4)
- External analog I and Q inputs
- Versatile data generation with burst capabilities
- Wideband AM

- 0.4dB의 전체 진폭 정확도
- +16dBm TOI
- -167dBm DANL, 전치 증폭기(preamp) 포함
- 1Hz 협대역 분해능 대역폭(옵션)

- 빠른 배송과 저렴한 가격
- 한 스윙프에서 최대 32개의 불연속 스패를 위한 세그먼트 스윙프
- 실험실용 성능 제공. 견고하고 휴대 가능하여 현장에서도 사용가능
- 5분 예열로 측정 정확도 보장

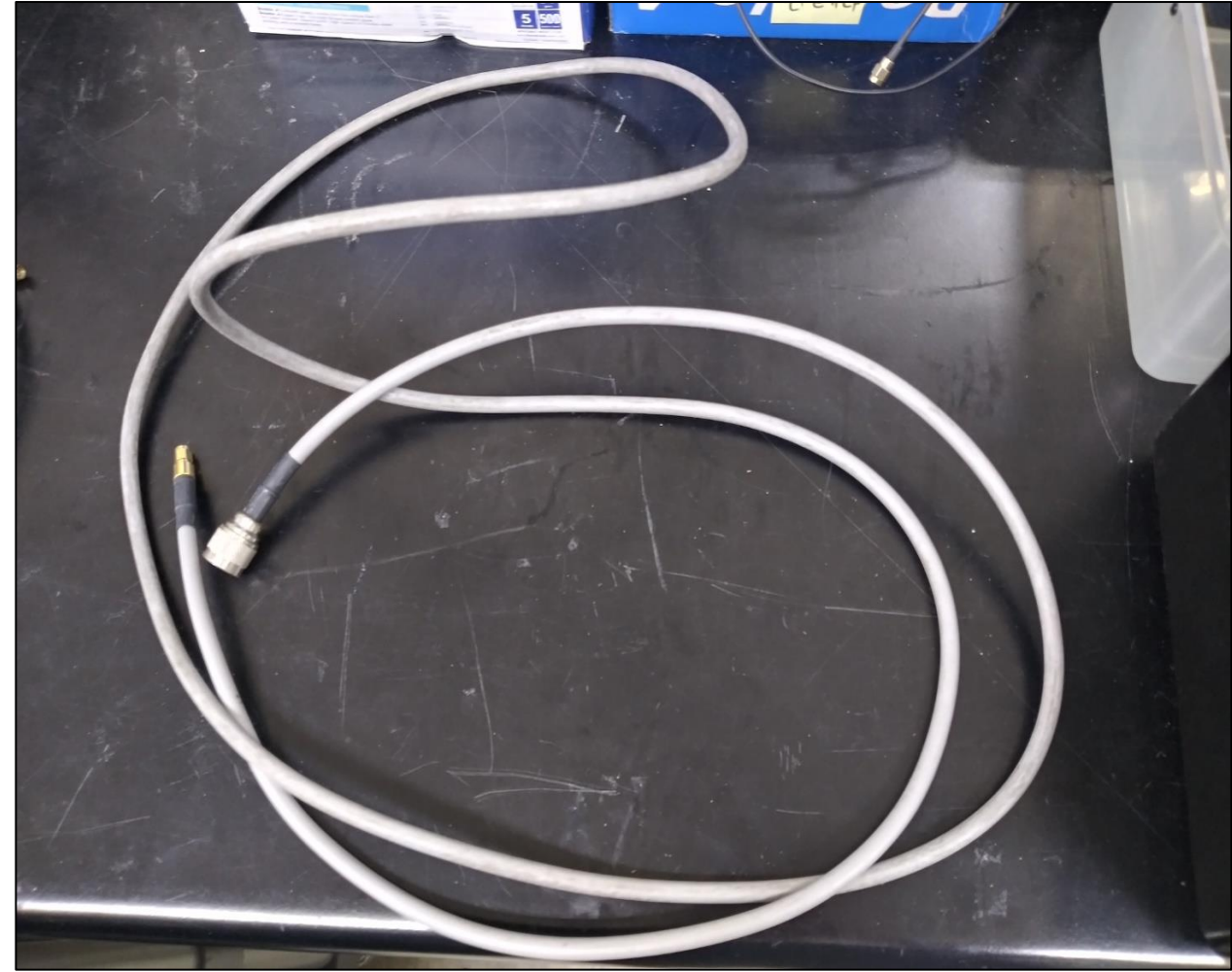
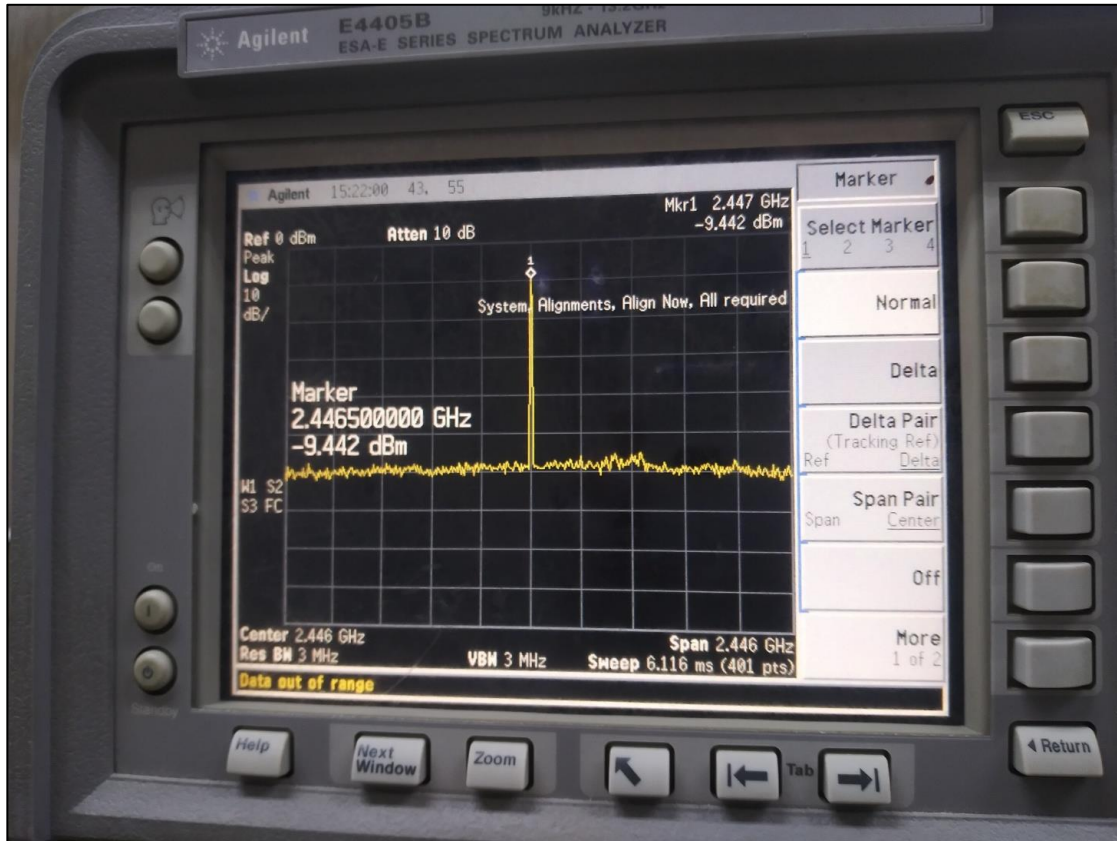


**Red** : 기본 설정 setting (cable)

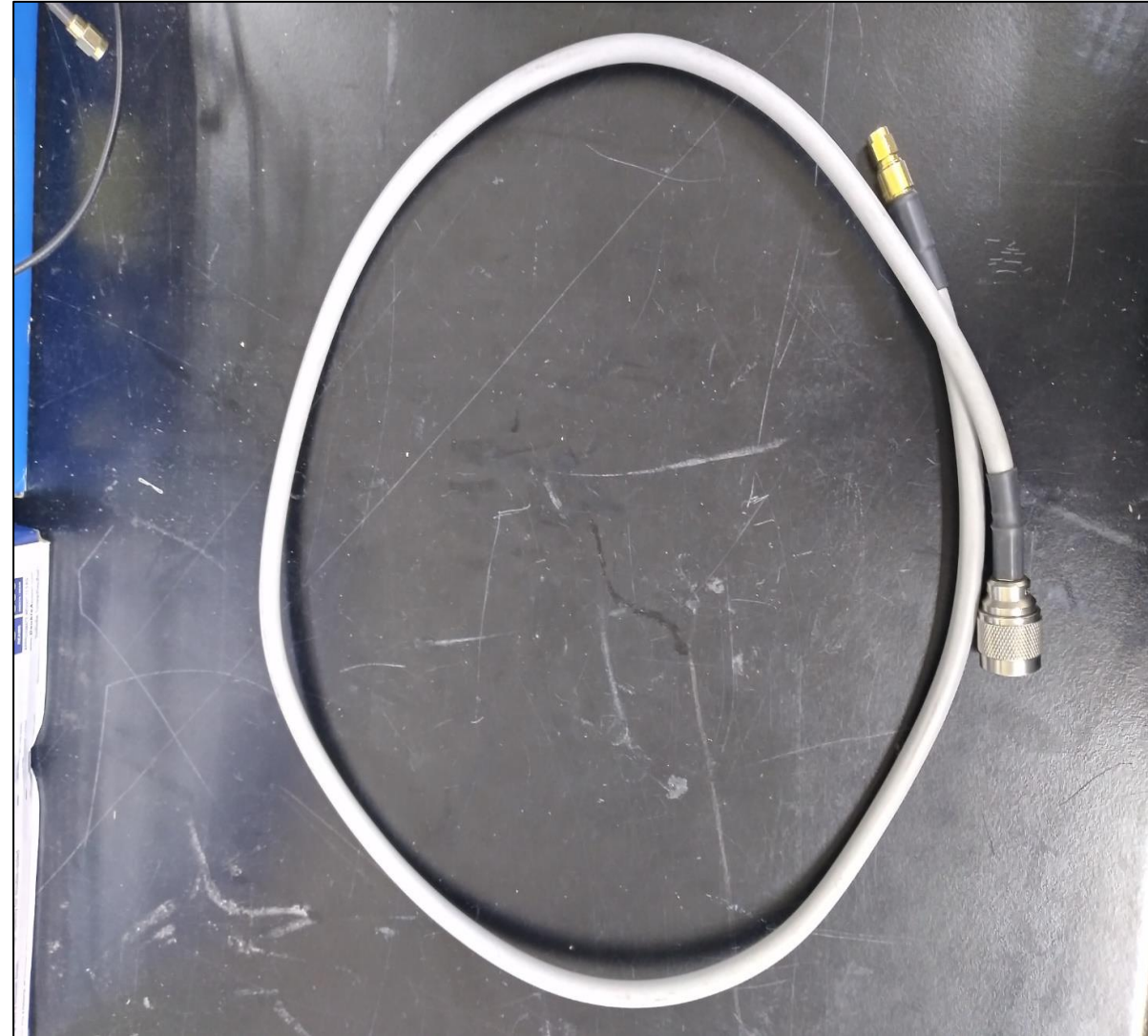
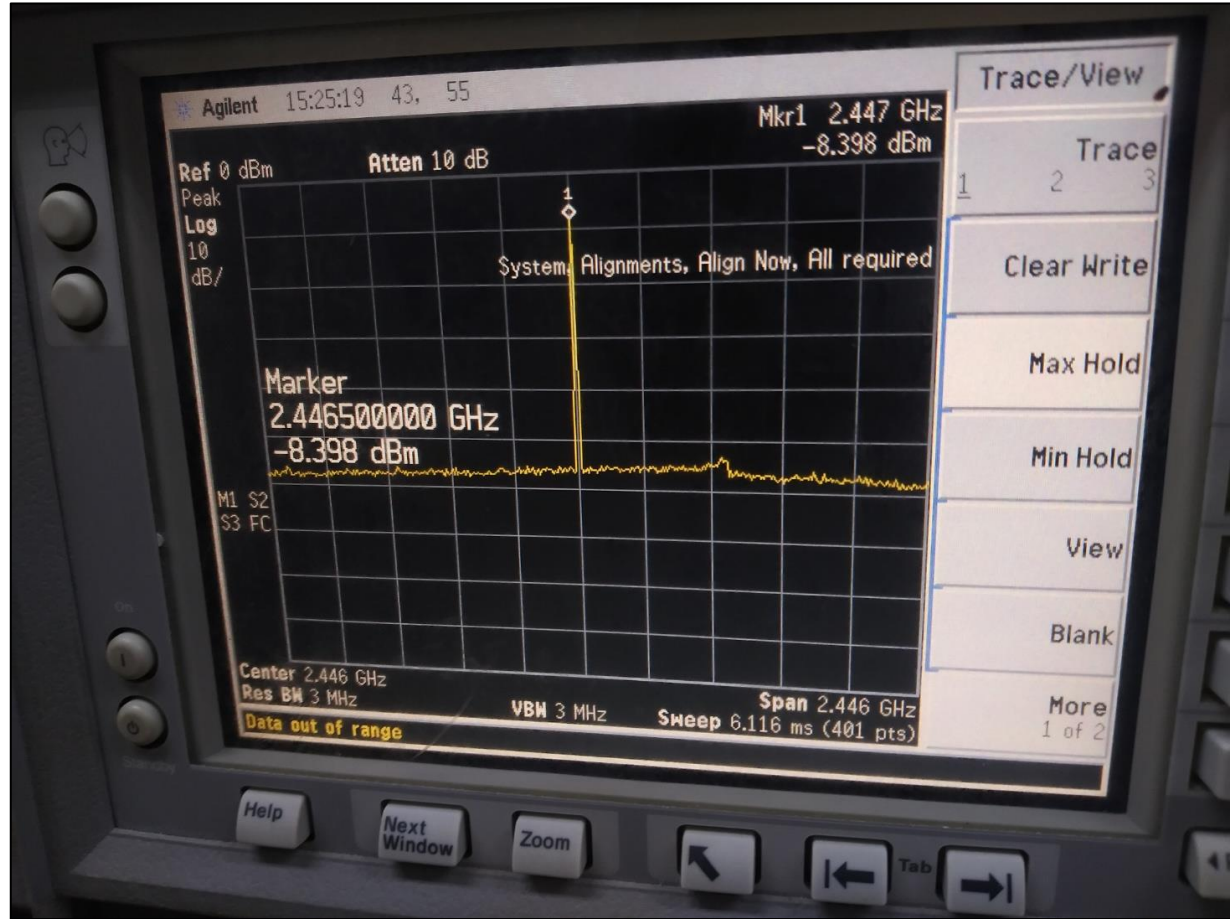
**Blue** : 측정하려는 것



# (1) -9.442 dBm



# (2) -8.398 dBm

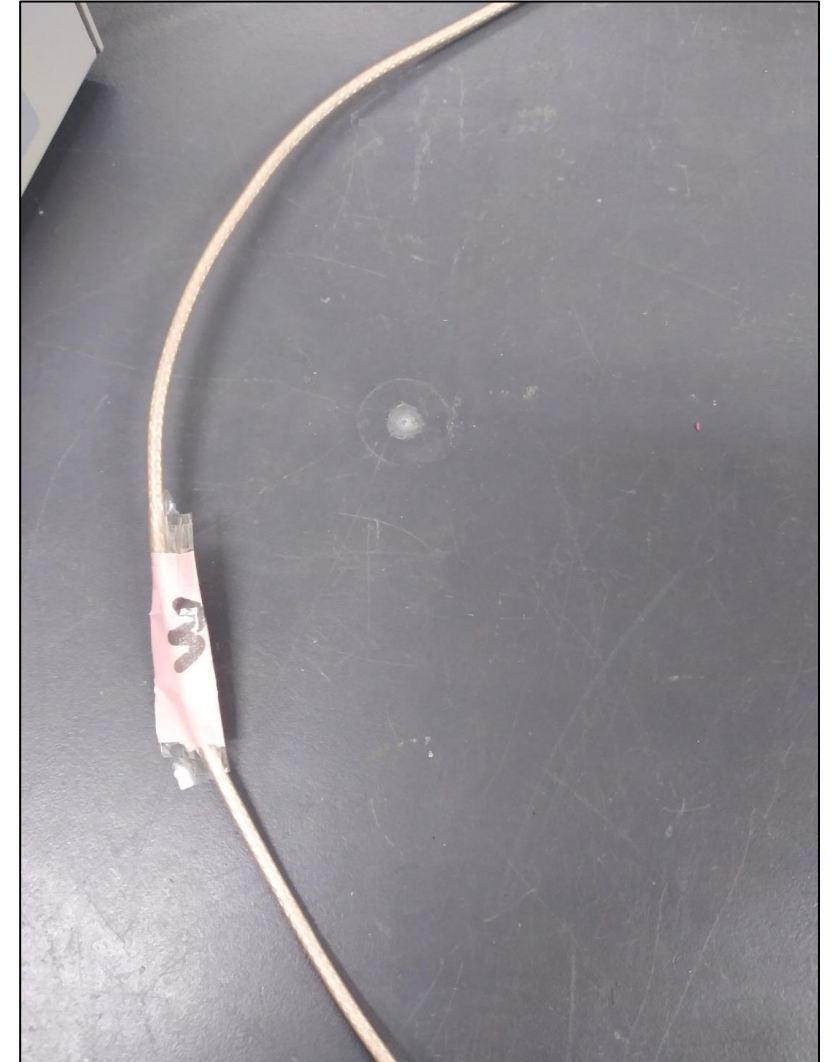
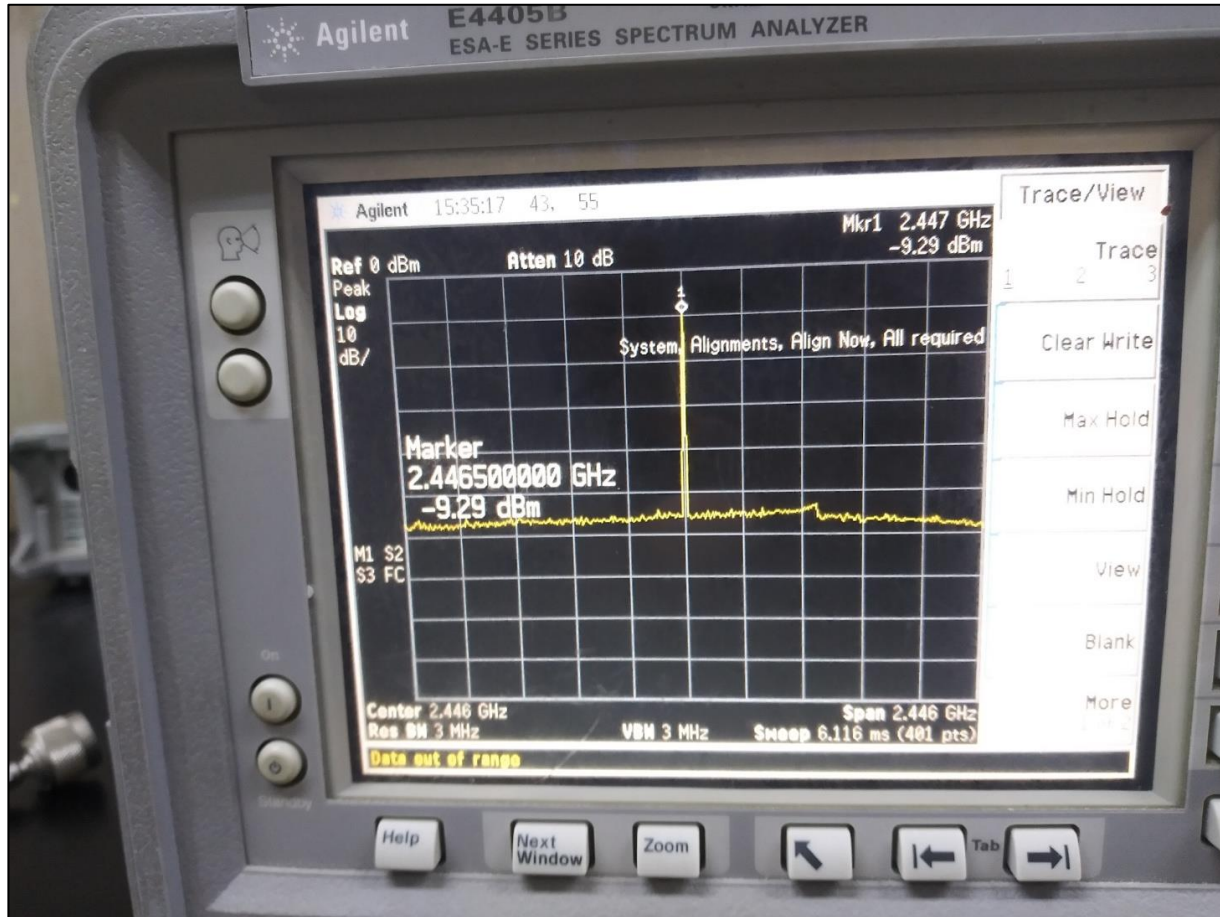




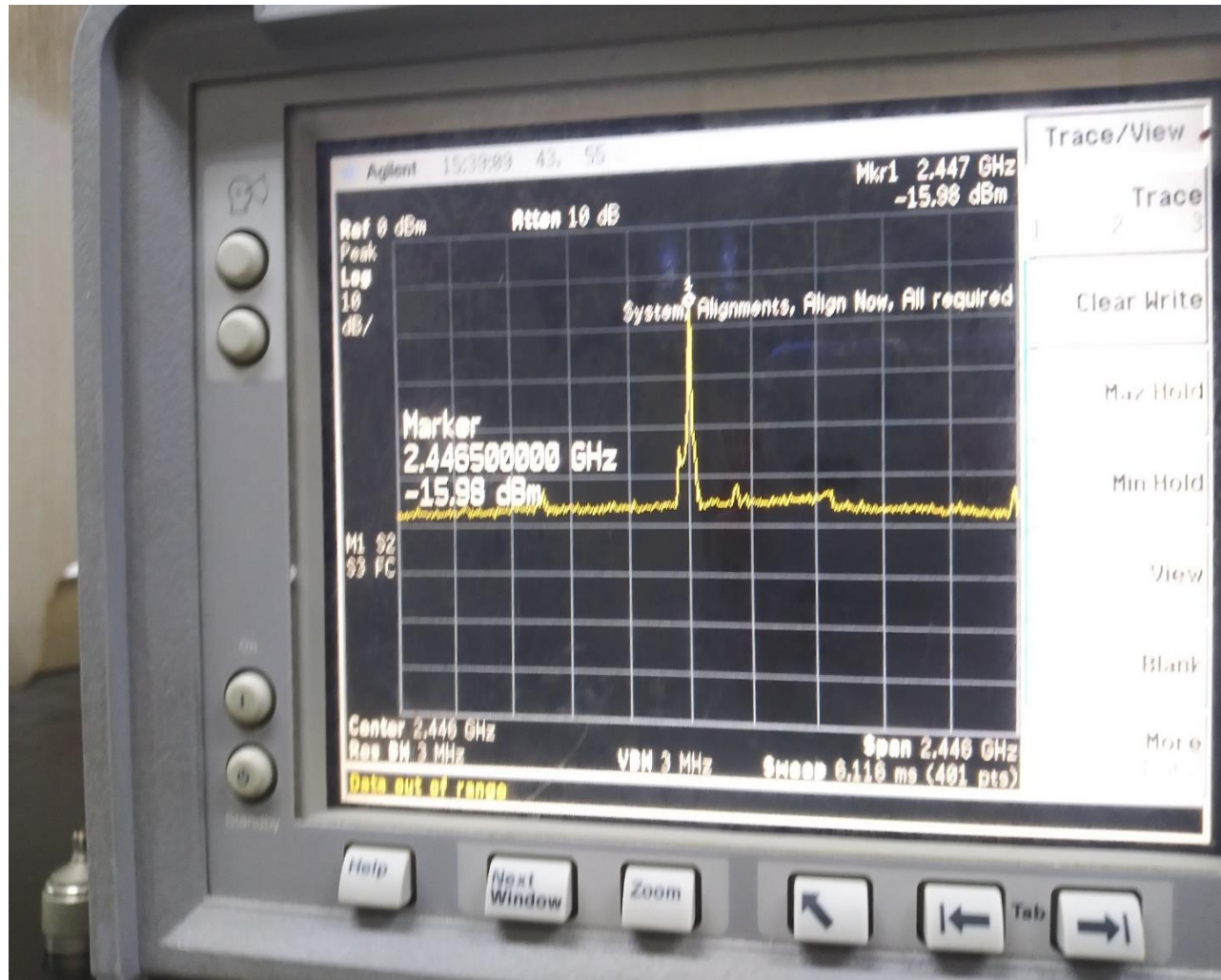




# (3) -9.29 dBm : with (2)



# -15.98 dBm : with (2)



**Attenuator : 10, 1dB 연결하는 것으로 수리 필요?**