

## Annex E – FCC 15.209 Band Edges

**Note 1:** Below measurements are in units of dBuV/m at 3meters. These measurements are performed conducted in lieu of radiated as permitted by ANSI C63.10-2020. The following formula was used in making such conversions:

**For measurements above 1GHz:**

$$E[\text{dB}\mu\text{V/m}] = \text{EIRP}[\text{dBm}] - 20 \log(d[\text{m}]) + 104.77$$

where E is field strength and d is measurement distance at which the field strength limit is specified in the applicable requirements.

For d = 3m:

$$E[\text{dB}\mu\text{V/m}] = \text{EIRP}[\text{dBm}] + 95.2$$

Straight conversion factor between E[dBuV] and EIRP[dBm] is 107, thus the offset for dBuV/m at 3meters is

$$\text{Offset [dB]} = 95.2 - 107 + \text{antenna gain} + \text{cable loss}.$$

Antenna Gain: 5.4 dBi (Note that 1dBi gain was provided by customer however, testing was done prior assuming a higher gain consideration to show worst-case compliance)

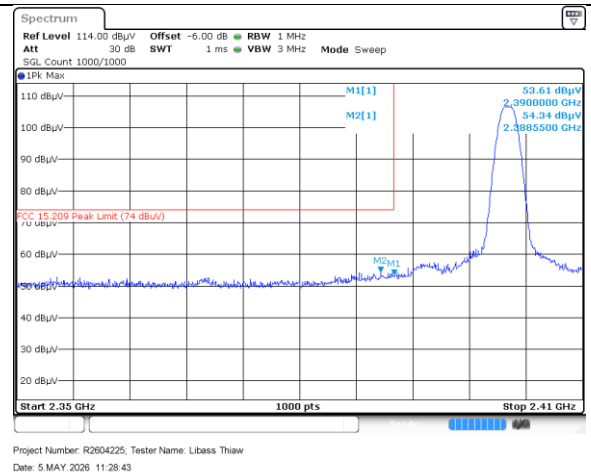
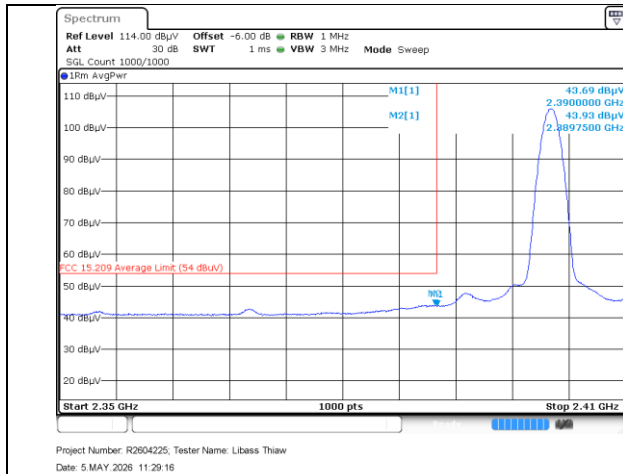
Cable Loss: 0.4 dB

Naming Convention

Radio (BLE)\_Rate (1M, 2M)\_ Frequency (MHz)\_Measurement (-20\_dBc)\_Type (Frequency Range, Lower Band Edge Band Edge, Upper Band Edge Band Edge)

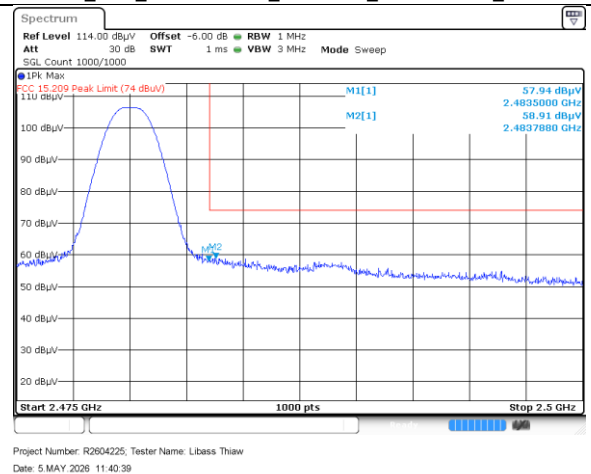
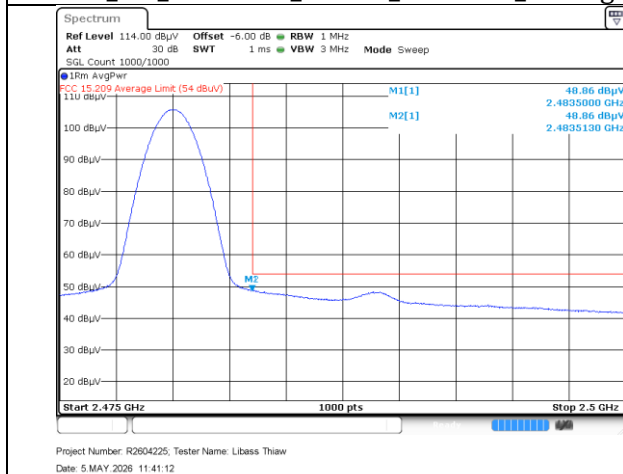
## Naming Convention

Radio (BLE)\_Rate (1M, 2M)\_ Frequency (MHz)\_Measurement (15.209)\_Measurement (LowerBE, Upper BE)\_Type (Peak, Average)



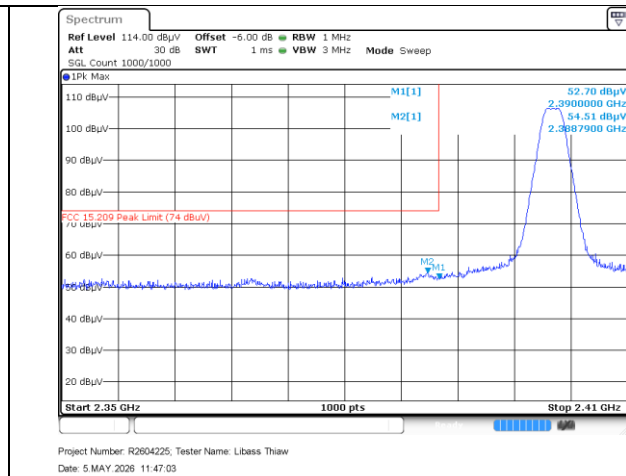
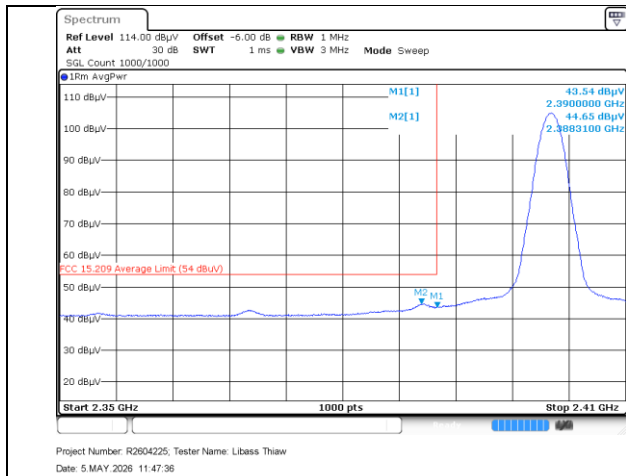
BLE\_1M\_2402MHz\_15.209\_LowerBE\_Average

BLE\_1M\_2402MHz\_15.209\_LowerBE\_Peak



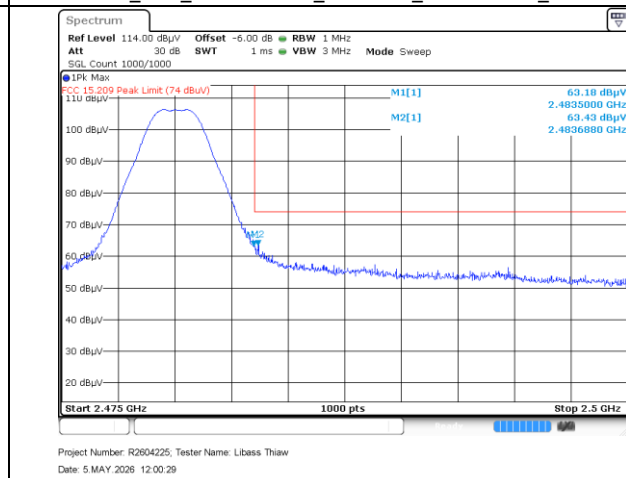
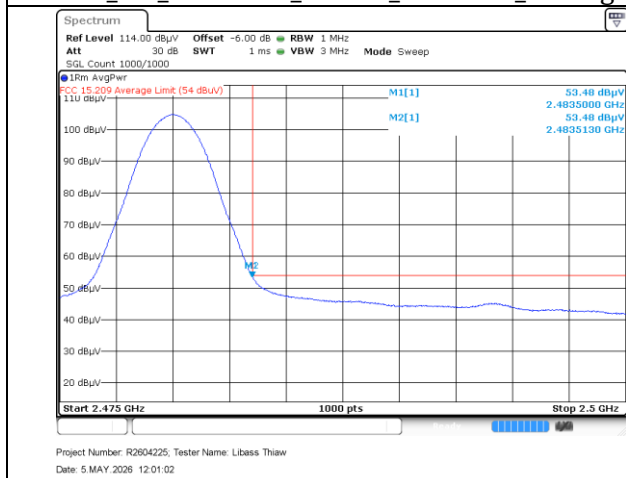
BLE\_1M\_2480MHz\_15.209\_UpperBE\_Average

BLE\_1M\_2480MHz\_15.209\_UpperBE\_Peak



BLE\_2M\_2402MHz\_15.209\_LowerBE\_Average

BLE\_2M\_2402MHz\_15.209\_LowerBE\_Peak



BLE\_2M\_2480MHz\_15.209\_UpperBE\_Average

BLE\_2M\_2480MHz\_15.209\_UpperBE\_Peak