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 C63.10-2013. The following formula was used in making such conversions:

For measurements above 1GHz:

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

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:

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

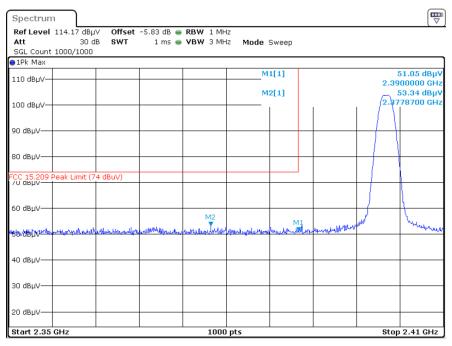
Straight conversion factor between E[dBuV/m] and EIRP[dBm] is 107, thus the offset for dBuV/m at 3meters is

Offset
$$[dB] = 95.2 - 107 + antenna gain + cable loss.$$

Antenna Gain: 5.4 dBi (provided by customer)

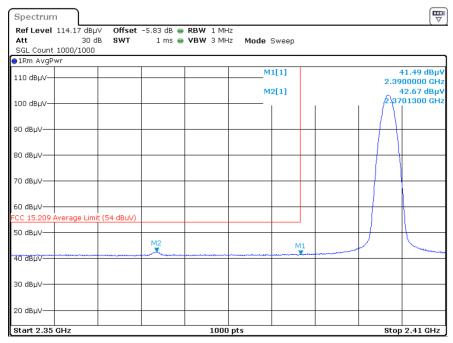
Cable Loss: 0.57 dB

BLE, 1M PHY, 2402 MHz, Lower Band Edge, Peak



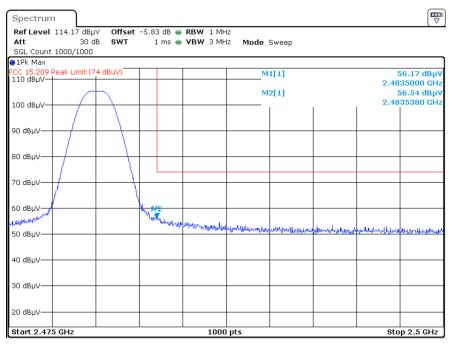
Date: 28.MAY.2025 16:44:47

BLE, 1M PHY, 2402 MHz, Lower Band Edge, Average



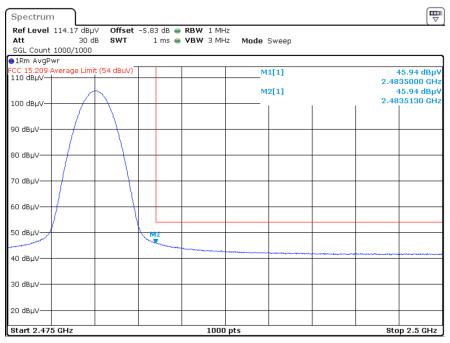
Date: 28.MAY.2025 16:45:00

BLE, 1M PHY, 2480 MHz, Upper Band Edge, Peak



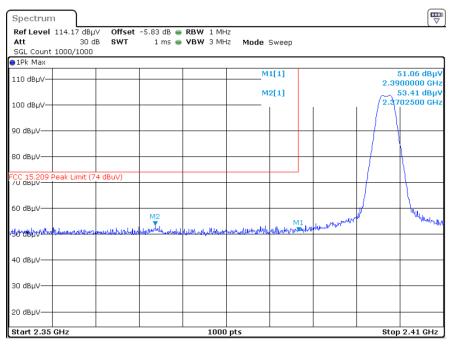
Date: 28.MAY.2025 16:46:30

BLE, 1M PHY, 2480 MHz, Upper Band Edge, Average



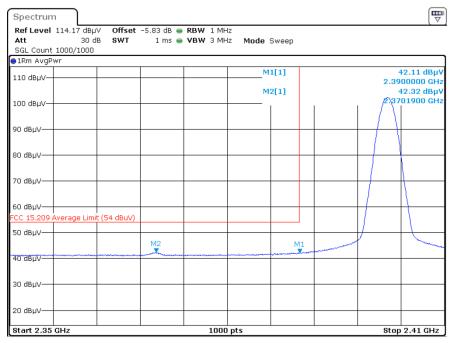
Date: 28.MAY.2025 16:46:44

BLE, 2M PHY, 2402 MHz, Lower Band Edge, Peak



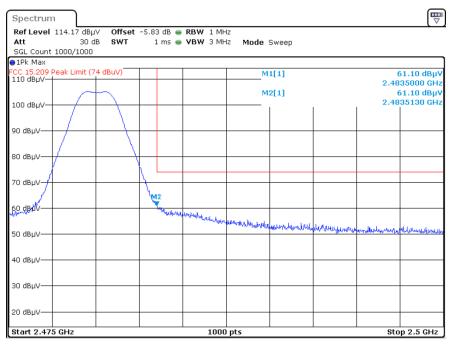
Date: 28.MAY.2025 16:42:42

BLE, 2M PHY, 2402 MHz, Lower Band Edge, Average



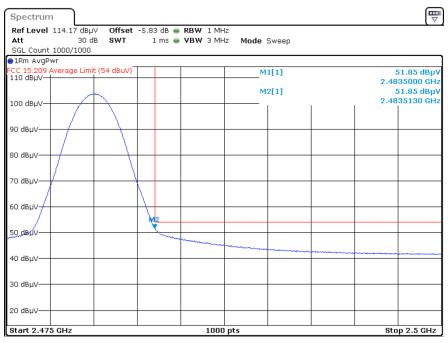
Date: 28.MAY.2025 16:42:56

BLE, 2M PHY, 2480 MHz, Upper Band Edge, Peak



Date: 28.MAY.2025 16:35:47

BLE, 2M PHY, 2480 MHz, Upper Band Edge, Average



Date: 28.MAY.2025 16:36:00