



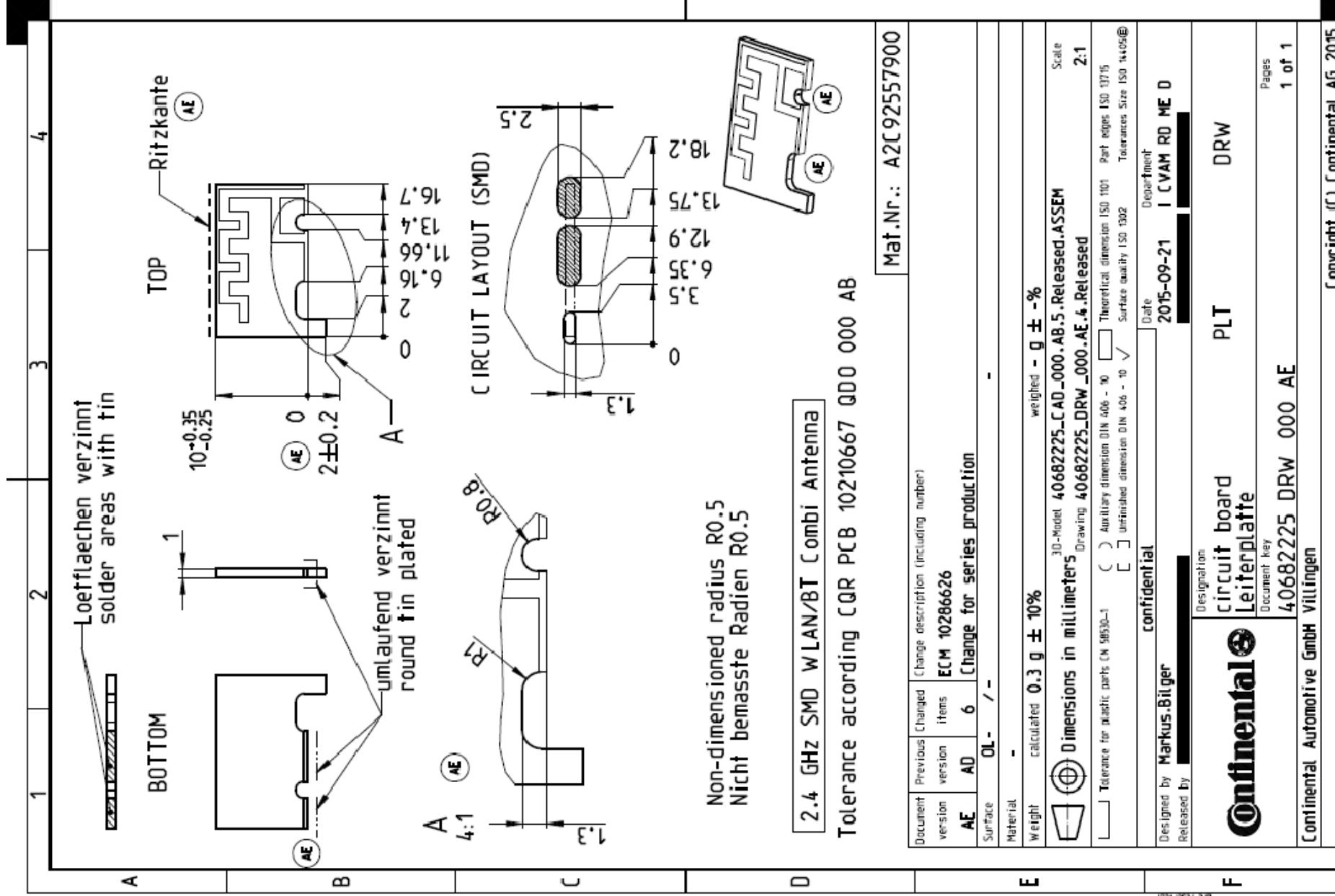
Oshkosh

Internal Bluetooth/WiFi antenna characteristics

June 2023

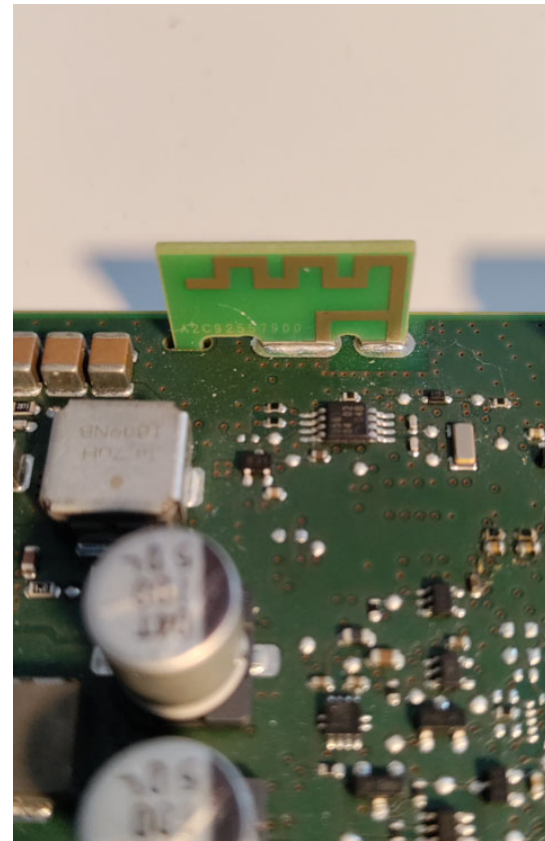
www.continental-corporation.com

Interior Division



Transferring, reproducing, disseminating, distributing and/or selling of this document as well as utilization of its contents and communication thereof to others without express authorization and permission will be held liable for payment or design infringement. All rights reserved. Drawings will be held liable for payment or design infringement. All rights reserved.

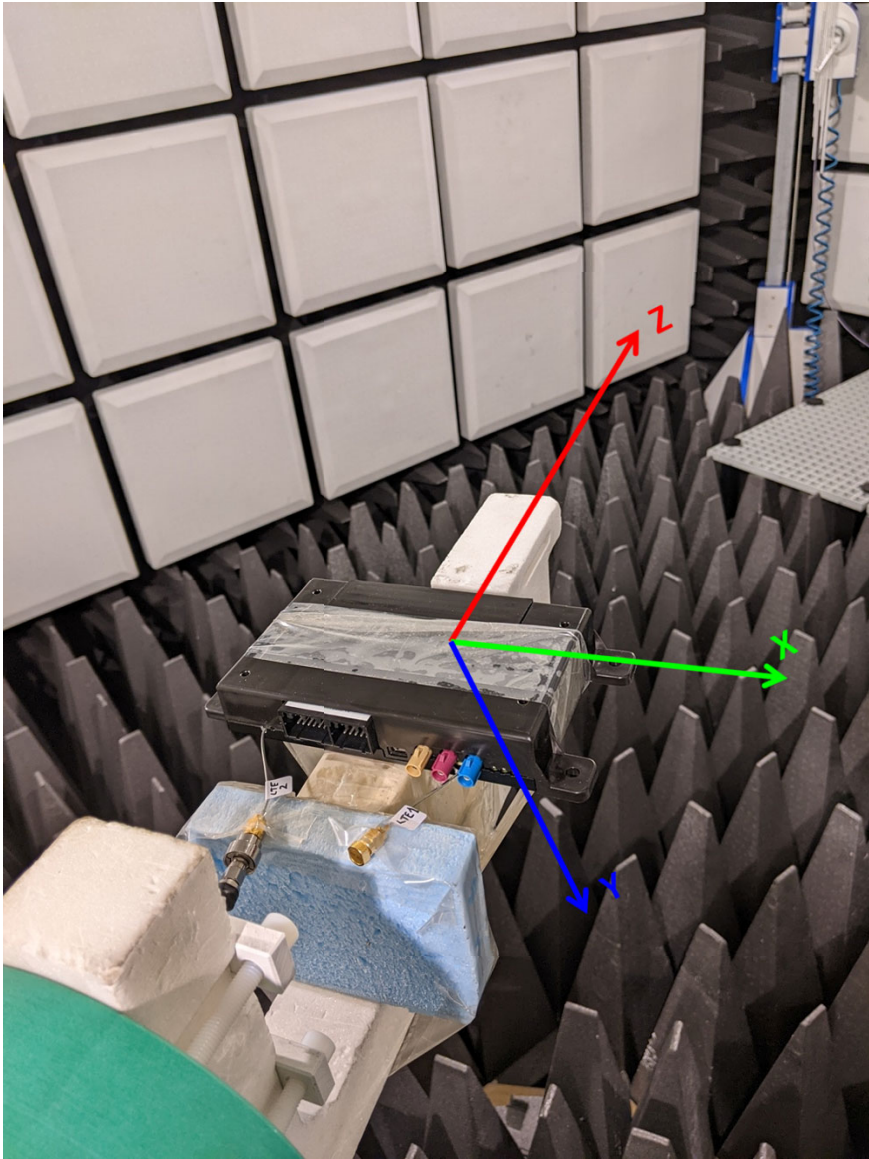
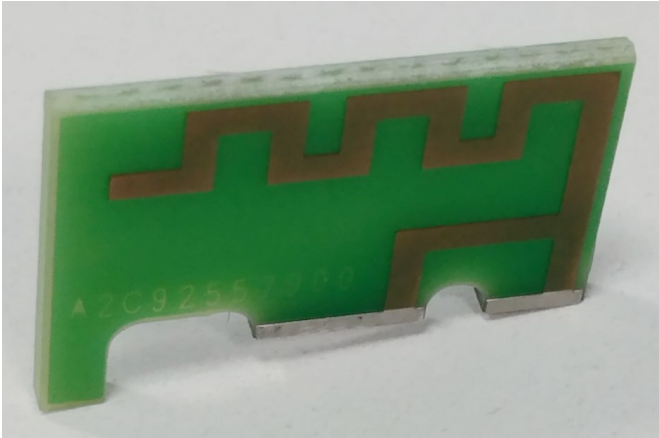
Bluetooth/WiFi Antenna Position of Antenna in the Device



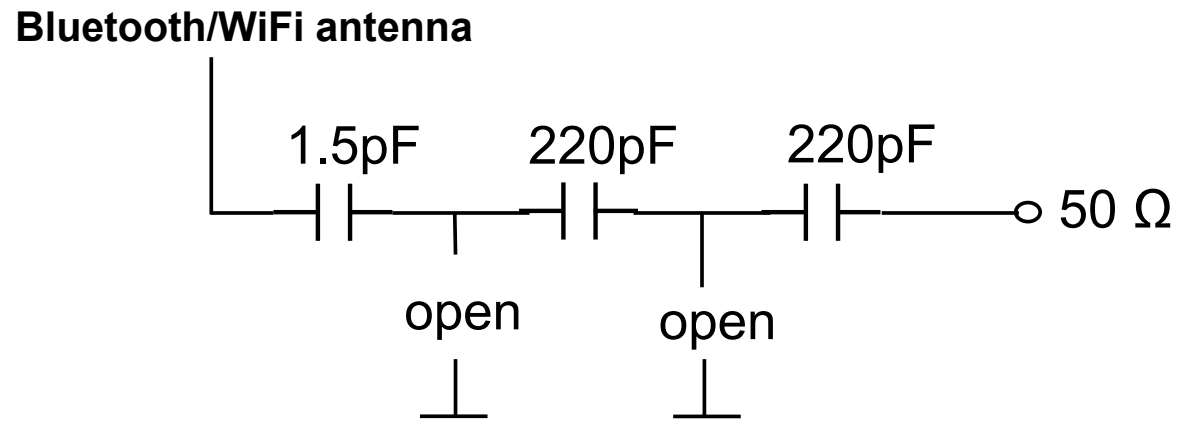
Bluetooth/WiFi antenna Position inside the device (left), Picture of antenna (right)

Anechoic chamber setup

Bluetooth/WiFi Antenna

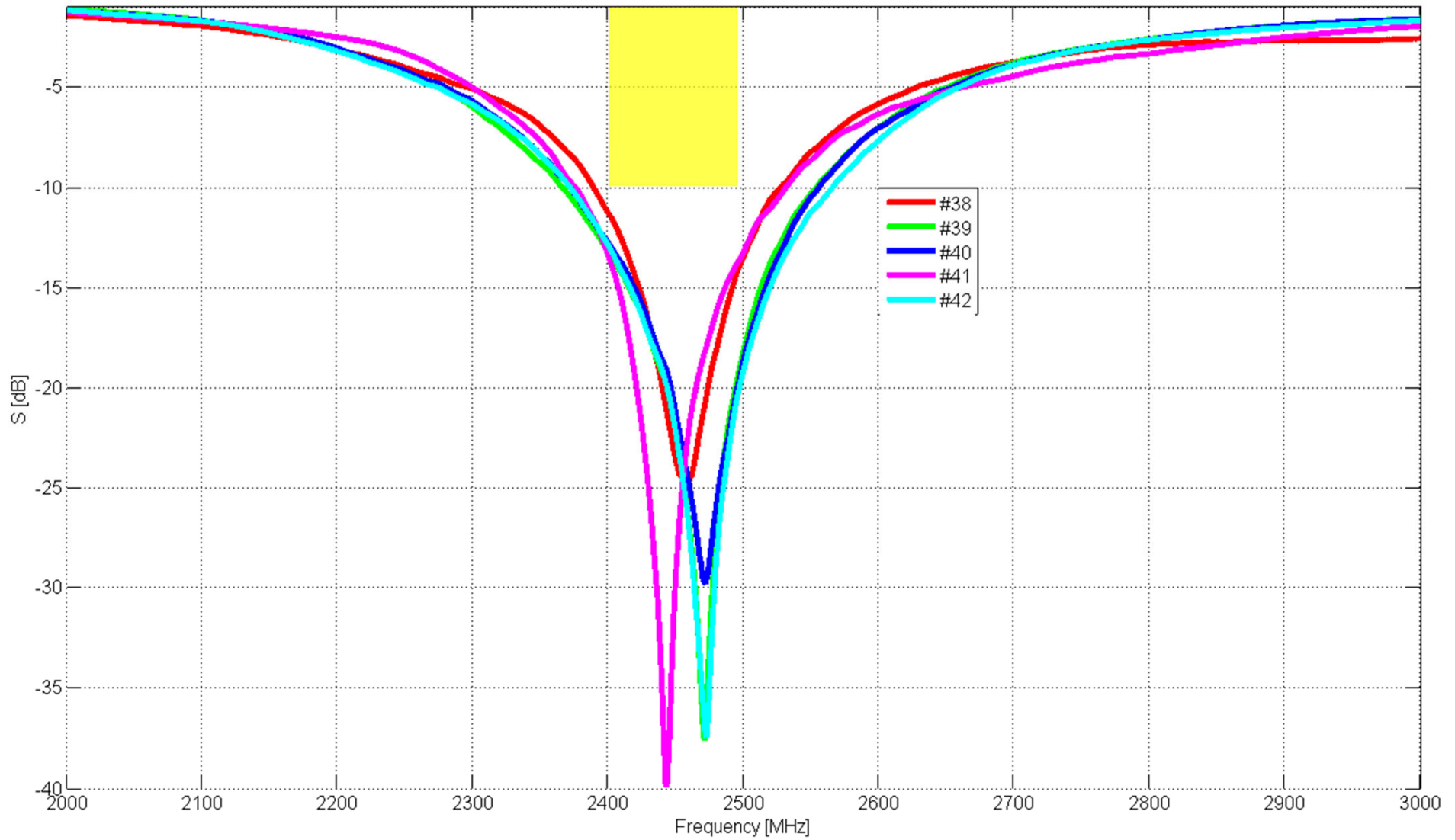


Bluetooth/WiFi – matching circuit topology

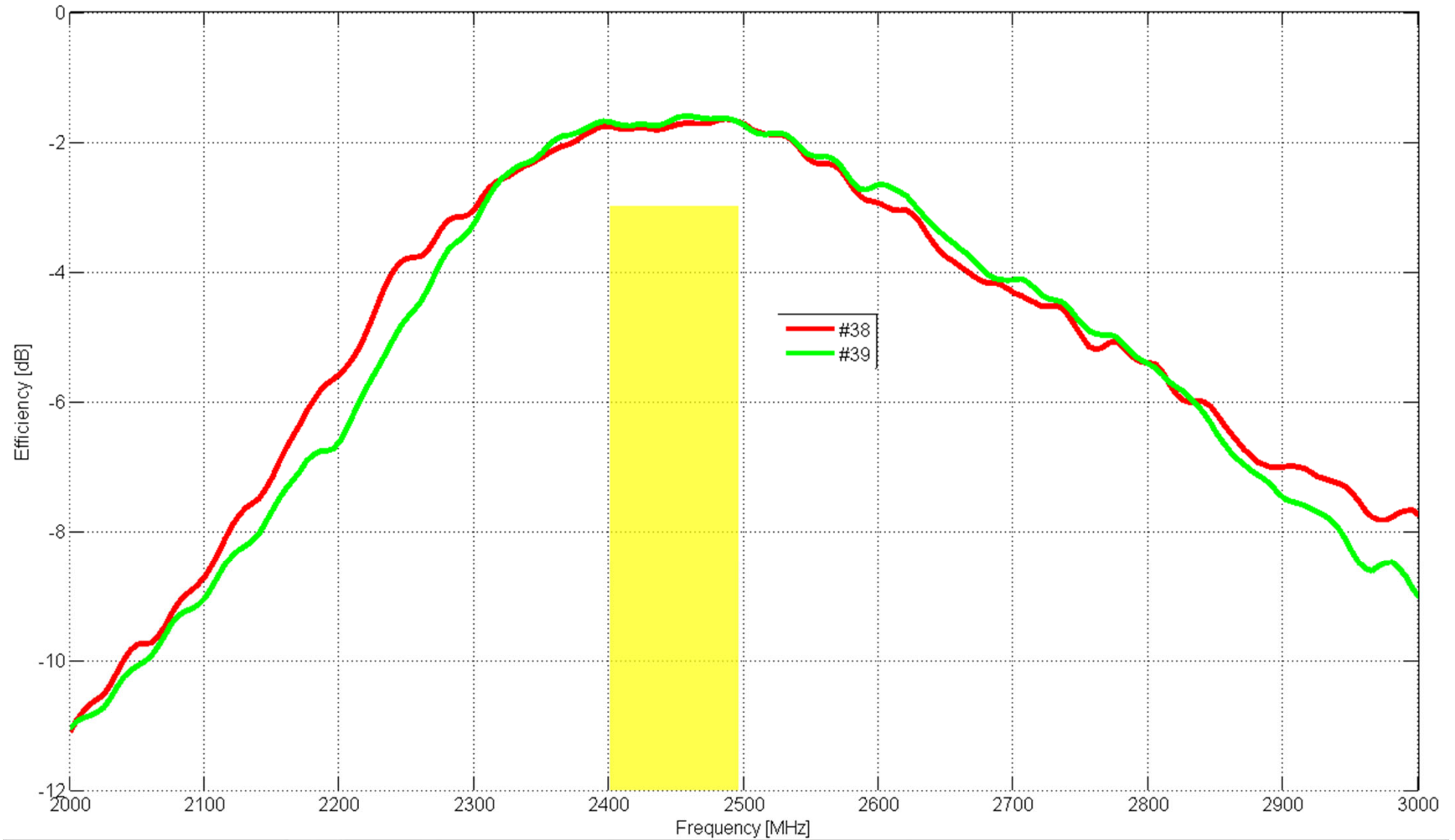


1.5 pF: A2C01779900
220pF: A2C02373300

Bluetooth/WiFi – Input reflection coefficient

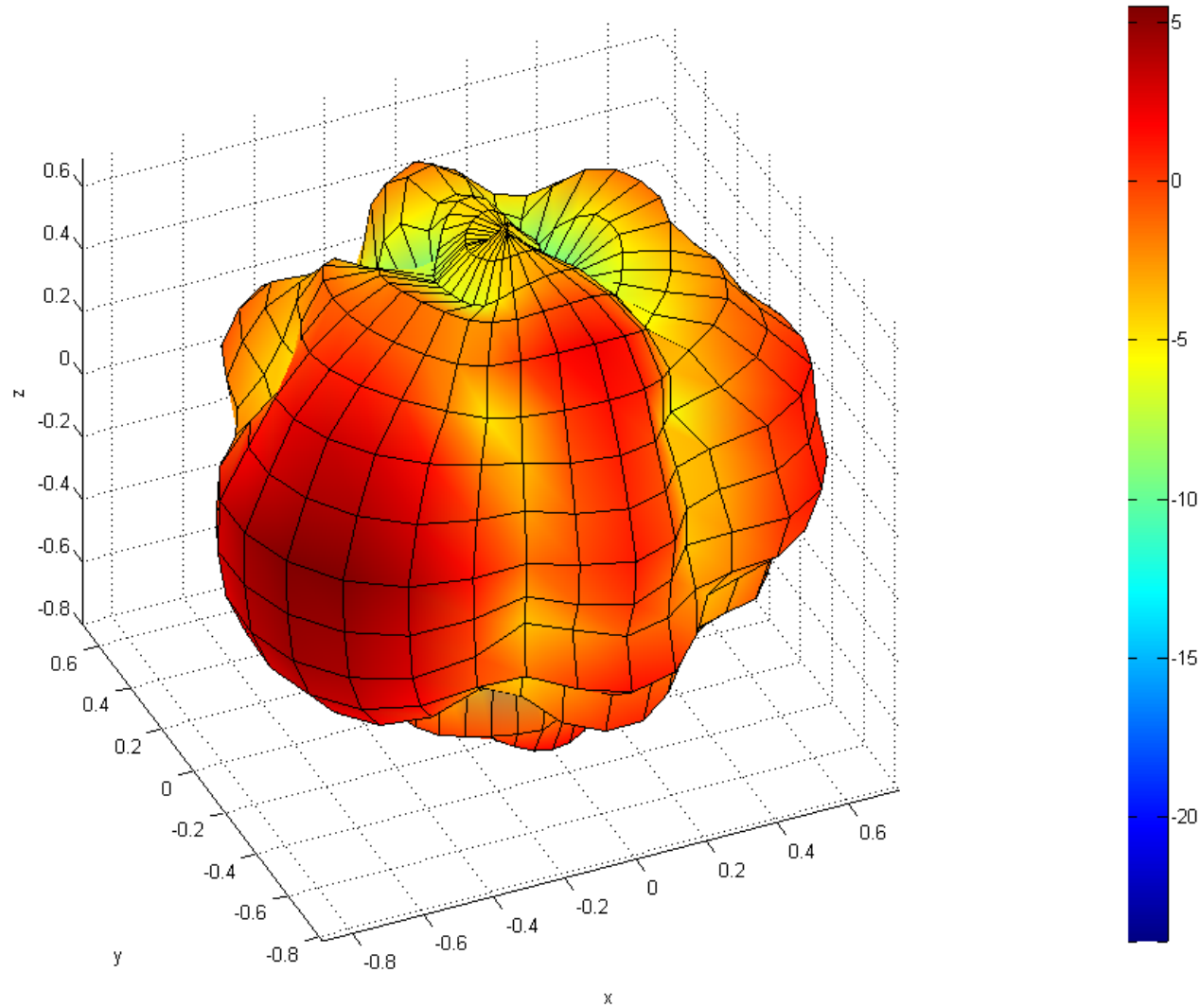


Bluetooth/WiFi – Radiation Efficiency

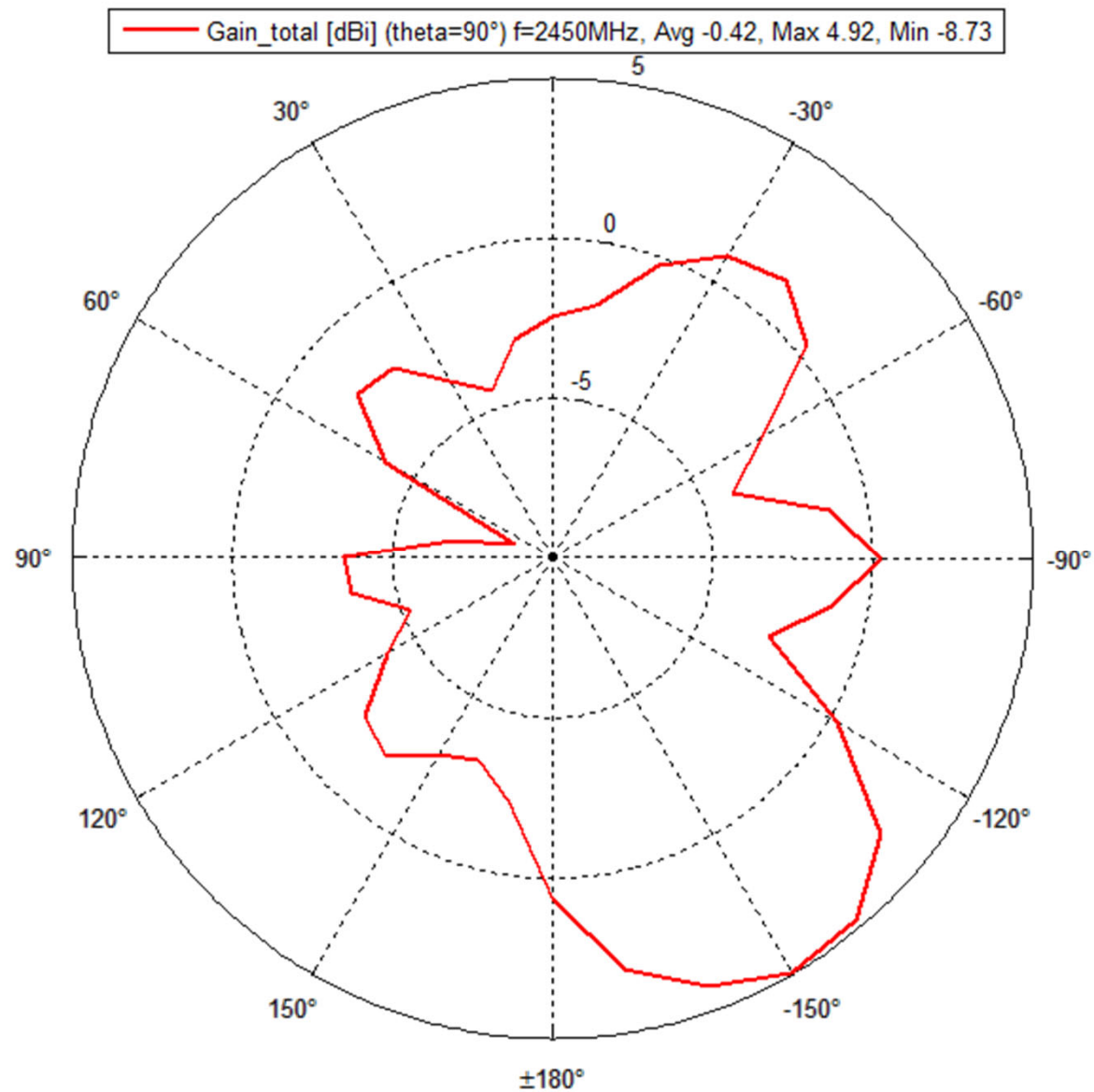


Bluetooth/WiFi – 3D Total Gain plot

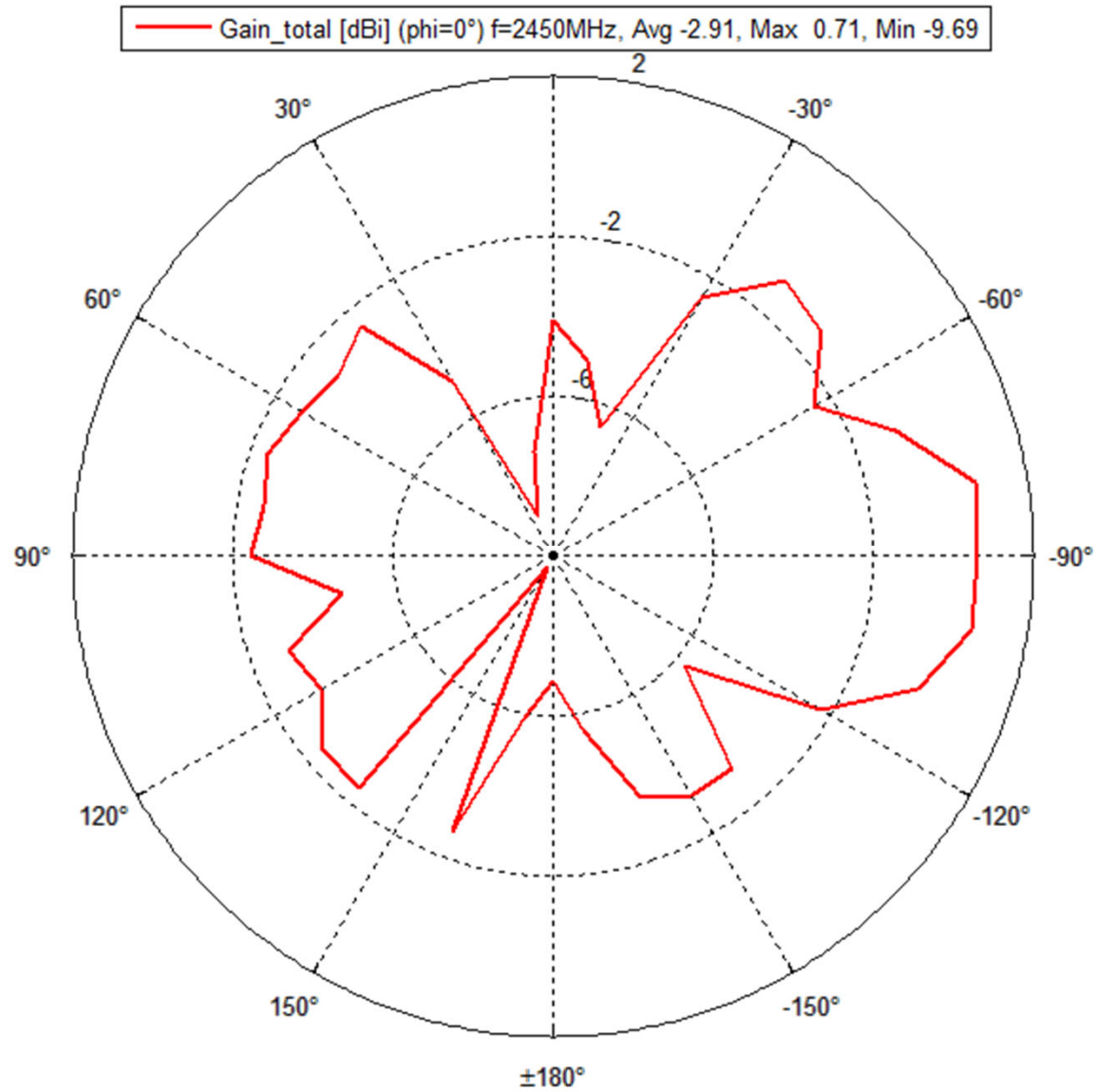
FordOT_C3_s#38_wifi_2023_04_21_13_30_28_a3Ds21data
f=2450MHz Gain_total [dBi] Max: 5.48dBi Min: -23.92dBi Efficiency: 68.10% (-1.7dB) corr: 0.00dB



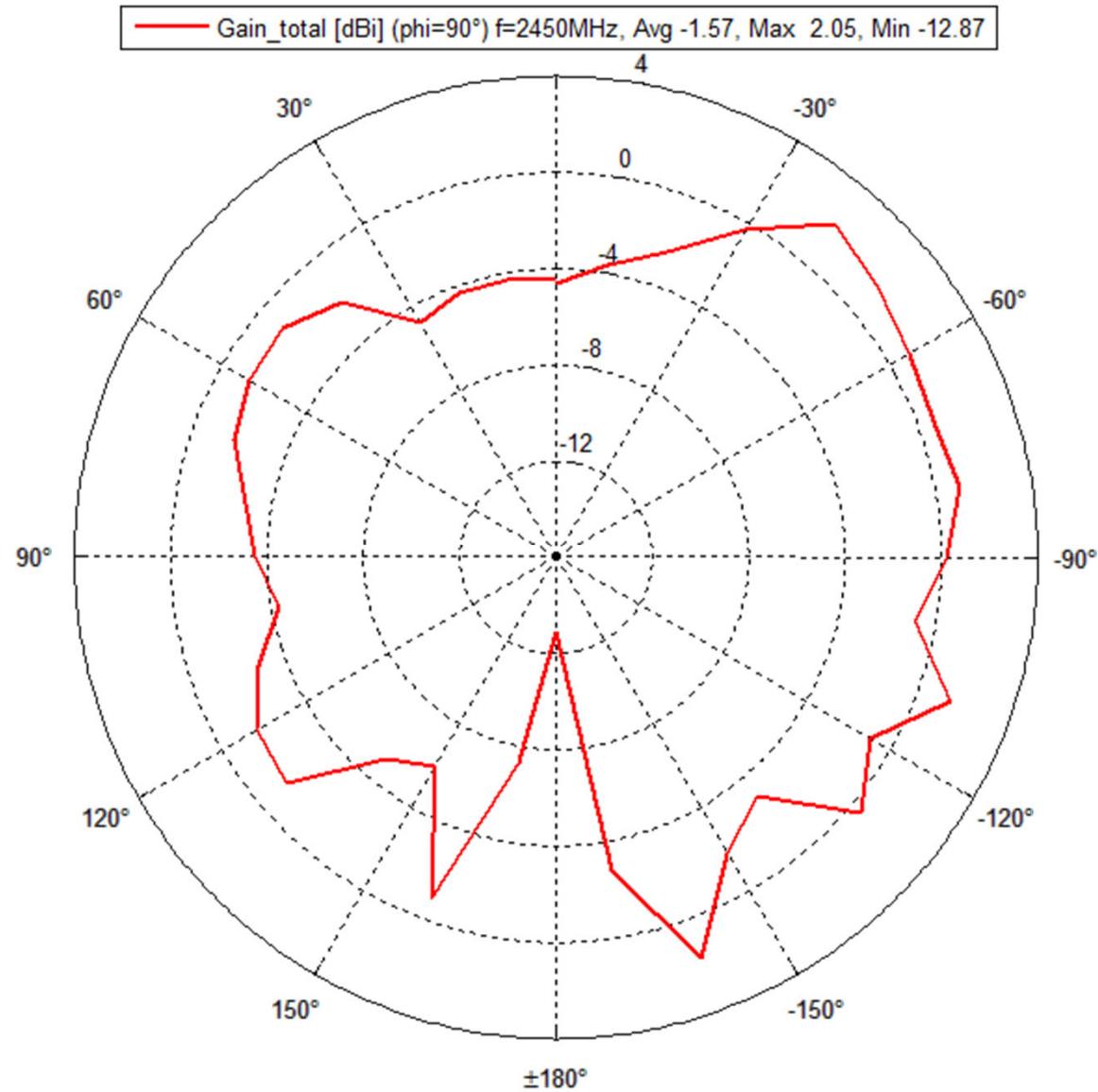
Bluetooth/WiFi – 2D Total Gain XY plane



Bluetooth/WiFi – 2D Total Gain XZ plane



Bluetooth/WiFi – 2D Total Gain YZ plane



Bluetooth/WiFi – Max & Average gain

Freq [MHz]	Max Gain [dBi]	Avg Gain [dBi]
2400	+5.29	-1.77
2410	+5.39	-1.81
2420	+2.48	-1.79
2430	+5.53	-1.8
2440	+5.49	-1.81
2450	+5.48	-1.74
2460	+5.36	-1.72
2470	+5.35	-1.73
2480	+5.52	-1.68
2490	+5.61	-1.66
2500	+5.65	-1.74