

10.2 Bluetooth/Bluetooth LE conducted transmitter performance

Table 16: Typical Bluetooth/Bluetooth LE Transmitter performance at AVDD33=3.3 VDC and VIO=1.8 V, 25 degrees C, ambient temperature.

Parameter	Conditions	Min	Typ	Max	Unit
Frequency range	--	2400	--	2483.5	MHz
Transmitter Power	Conditions	1-Port			Unit
BDR 1 Mbps	Mask Compliant	5			dBm
EDR 2 Mbps	Mask and EVM Compliant	2			dBm
EDR 3 Mbps	Mask and EVM Compliant	2			dBm
Bluetooth LE 1 Mbps	-	5			dBm
Mask Compliant	-	5			dBm
Bluetooth LR 500 Kbps	-	5			dBm
Bluetooth LR 125 Kbps	-	5			dBm

10.3 Typical antenna radiation patterns

10.3.1 Antenna Measurement Test Set Up

Figure 2 Anechoic Antenna Chamber

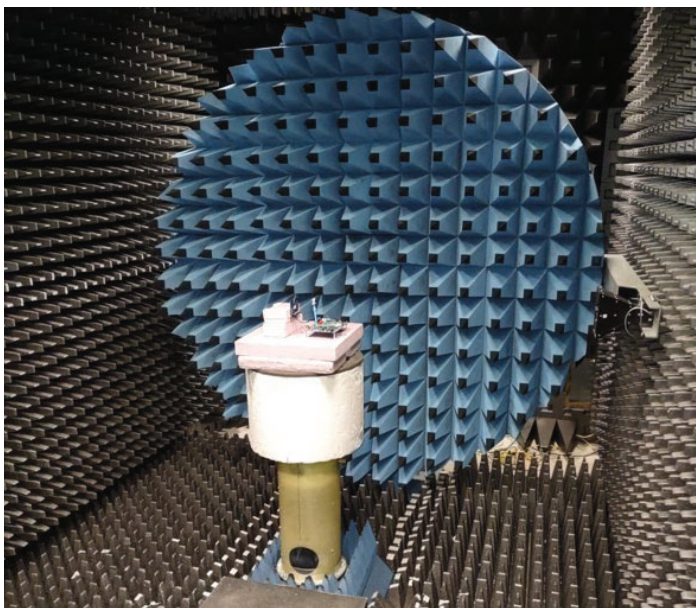
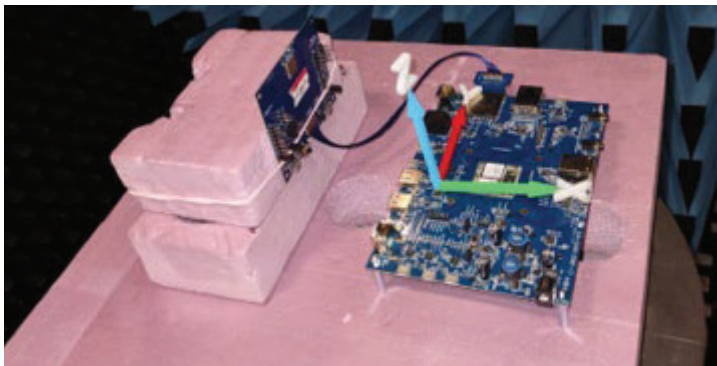
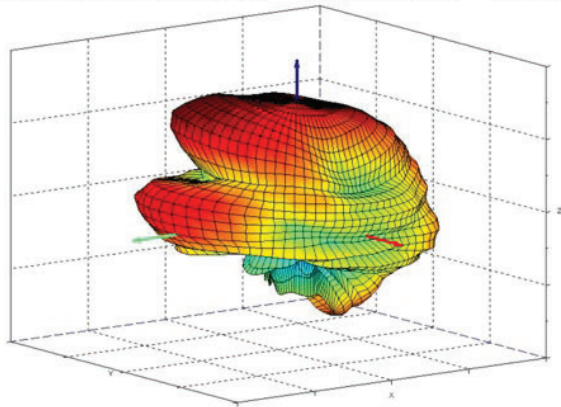


Figure 3 DUT Orientation

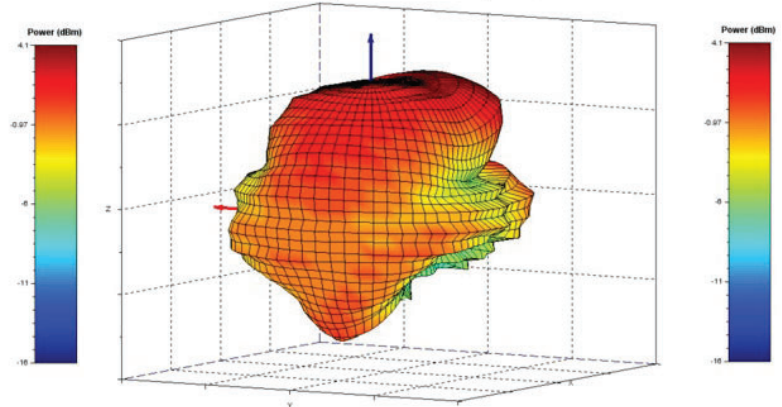


10.3.2 2.4GHz

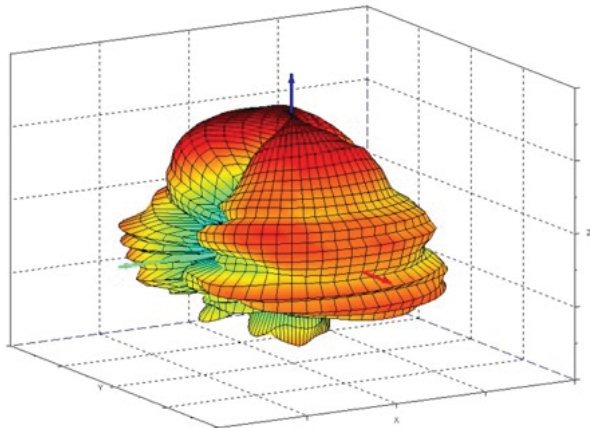
Radiated Power at 2442 MHz, TRP = -1.99 dBm, Max EIRP = 4.07 dBm



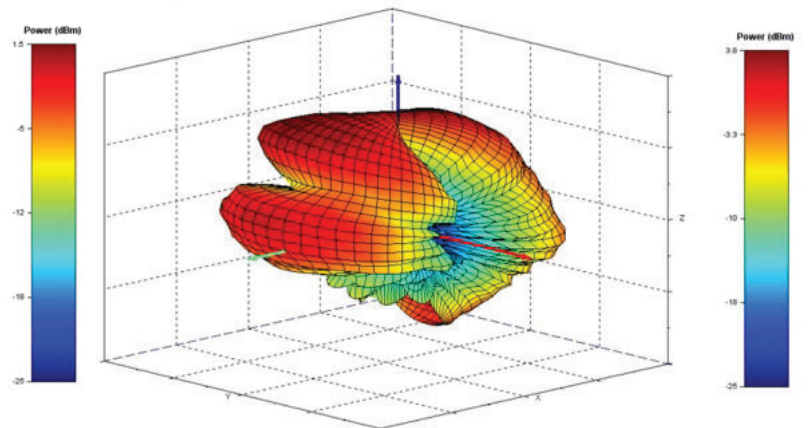
Radiated Power at 2442 MHz, TRP = -1.99 dBm, Max EIRP = 4.07 dBm



Theta Polarization: Radiated Power at 2442 MHz, TRP = -6.37 dBm

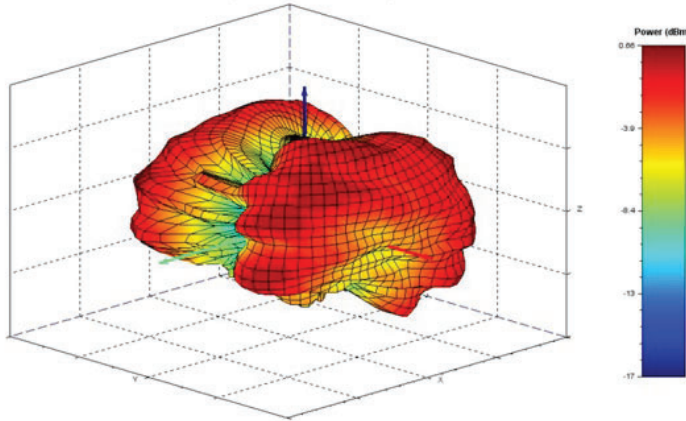


Phi Polarization: Radiated Power at 2442 MHz, TRP = -3.96 dBm

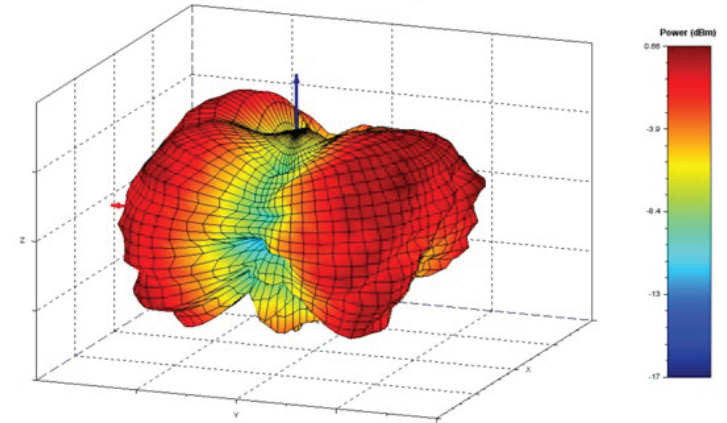


10.3.3 5GHz

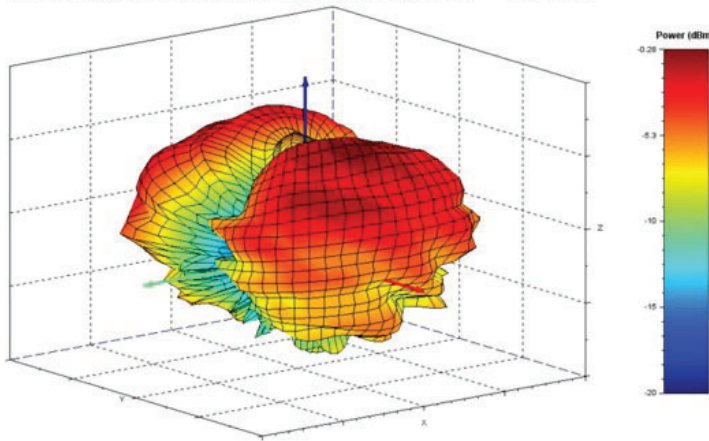
Radiated Power at 5180 MHz, TRP = -3.35 dBm, Max EIRP = 0.66 dBm



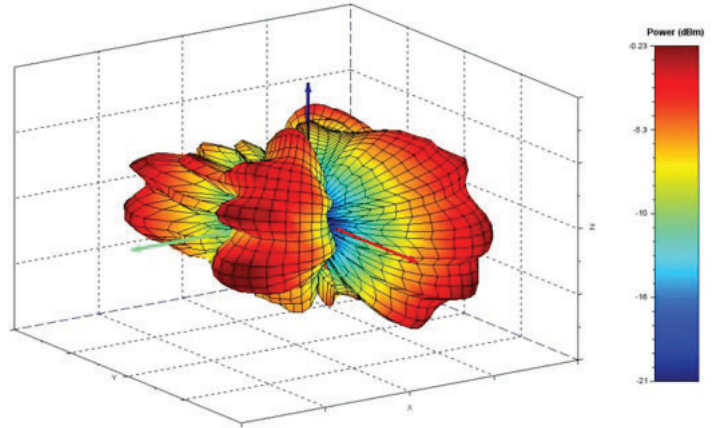
Radiated Power at 5180 MHz, TRP = -3.35 dBm, Max EIRP = 0.66 dBm



Theta Polarization: Radiated Power at 5180 MHz, TRP = -6.75 dBm



Phi Polarization: Radiated Power at 5180 MHz, TRP = -6.00 dBm



Example TRP based on conducted output powers of 0 dBm and -1 dBm at each frequency of 2442 MHz and 5180 MHz.

10.4 Antenna radiation performance summary

Table 17- Antenna Characteristics

Frequency	Peak Gain (dBi)
2.412 GHz	2.5
2.442 GHz	3.3
2.472 GHz	2.8
5.180 GHz	1.6
5.510 GHz	4.1
5.835 GHz	4.2