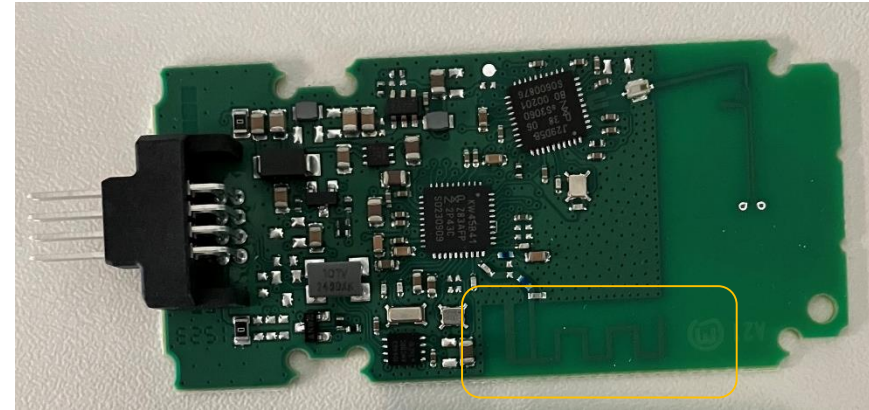
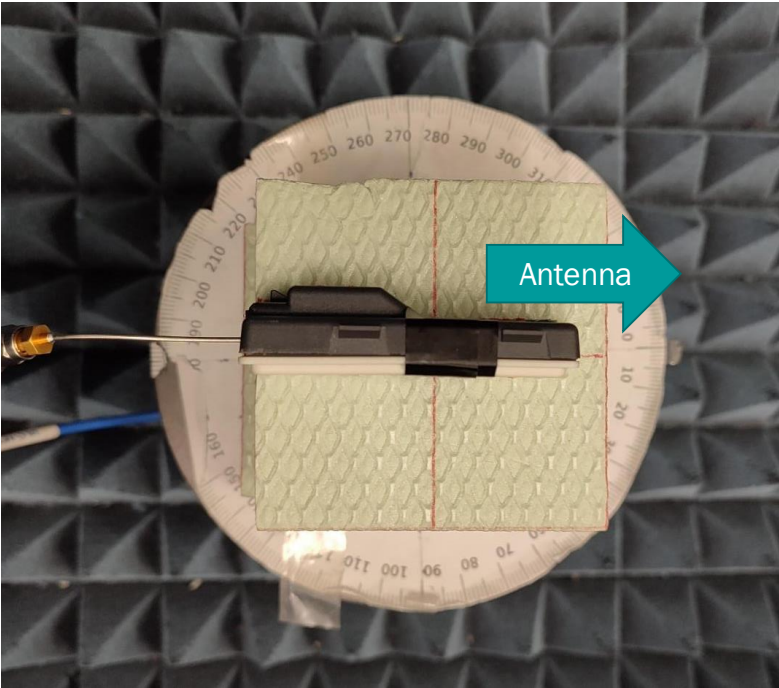


ANTENNA DIAGRAMS FOR MUB1 – BLUETOOTH

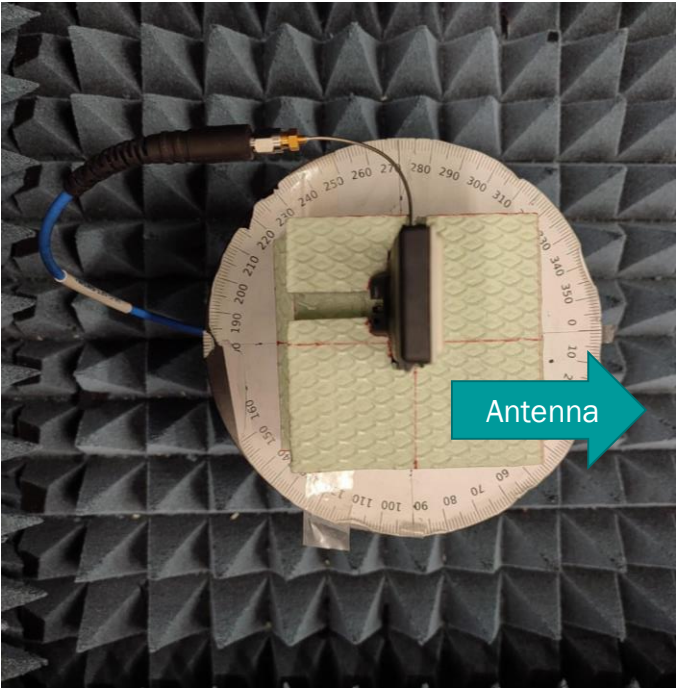
Kind of test item:	UWB/BLE distance measurement module
Model name:	MUB1
Manufacturer:	Marquardt GmbH Schloss-Str. 16 78604 Rietheim-Weilheim GERMANY
Frequency:	ISM 2.4 GHz frequency band
Antenna:	Integrated PCB meandered inverted F antenna
Test mode:	EUT is connected to VNA (vector network analyzer) at BLE antenna feed point with SMA stub. Gain is equal to EIRP, because reference power is 0 dBm.



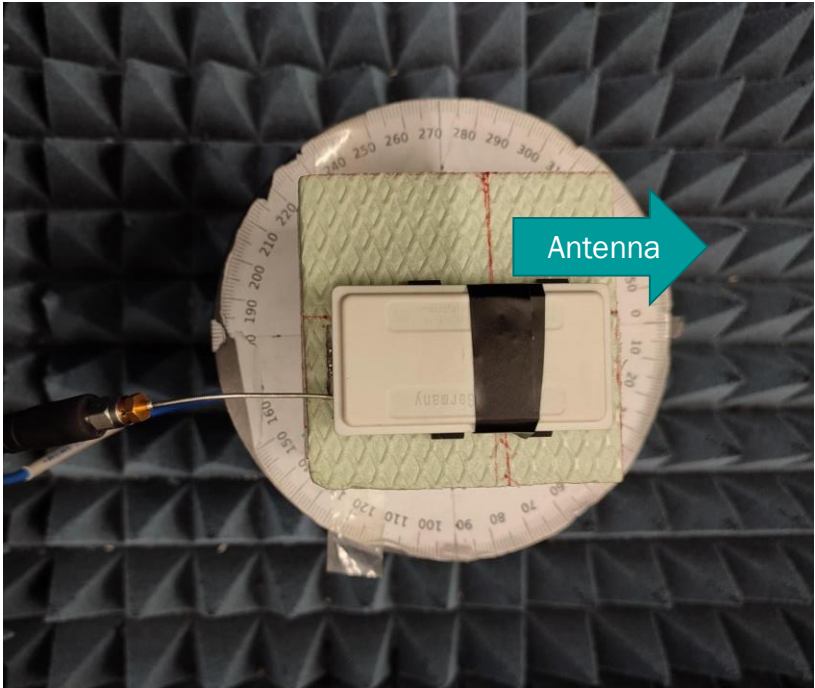
SAMPLE ORIENTATIONS W/ HOUSING



x - axis

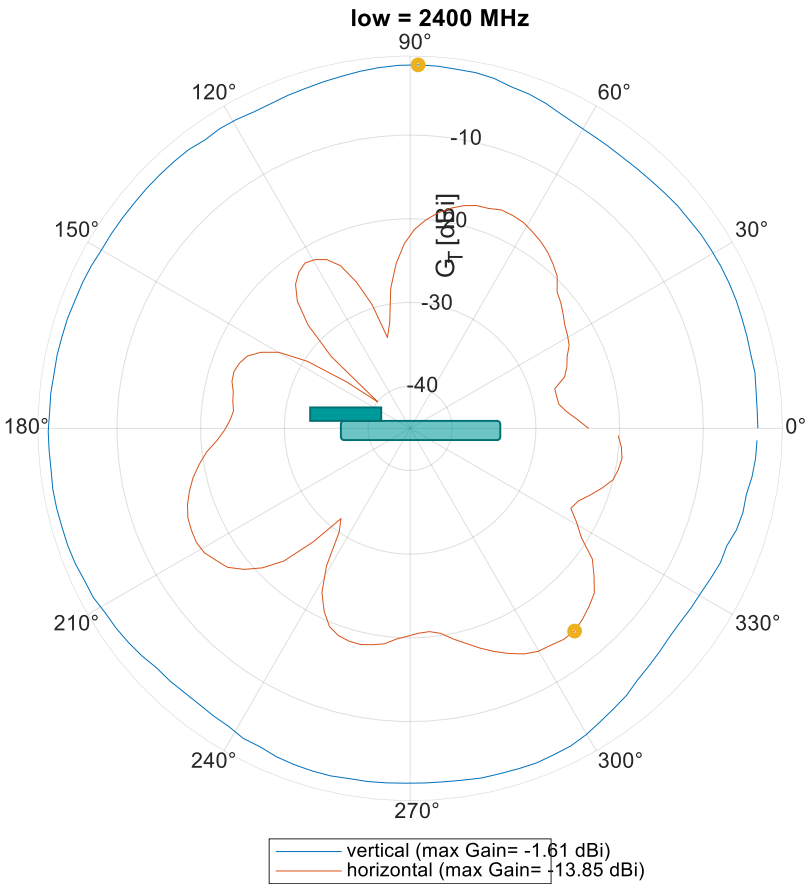


y - axis

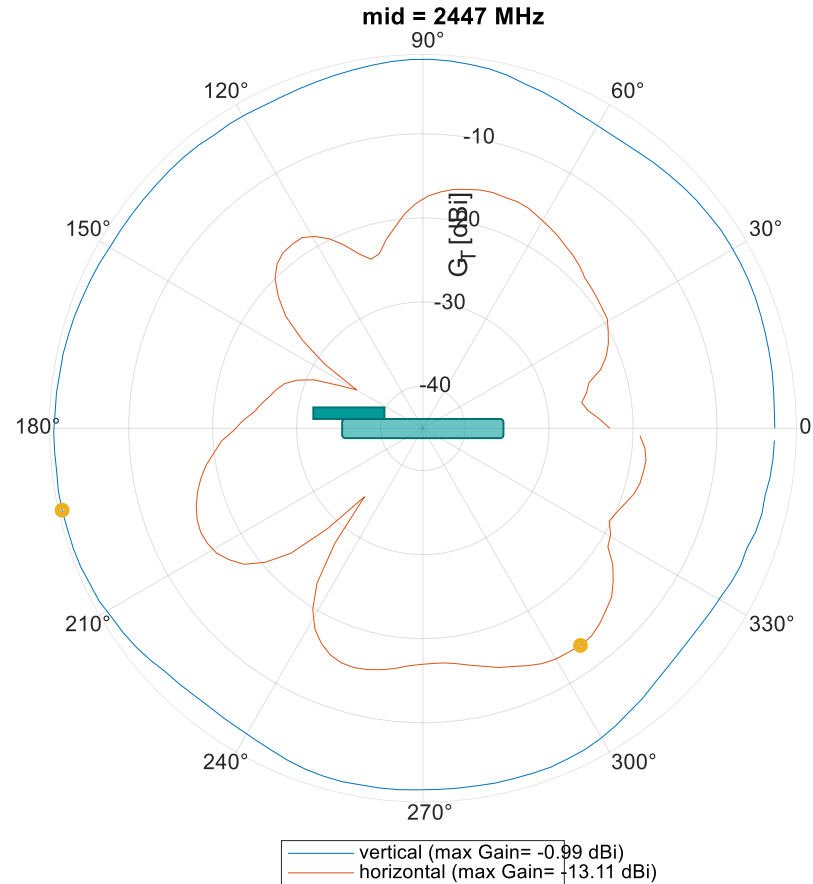


z - axis

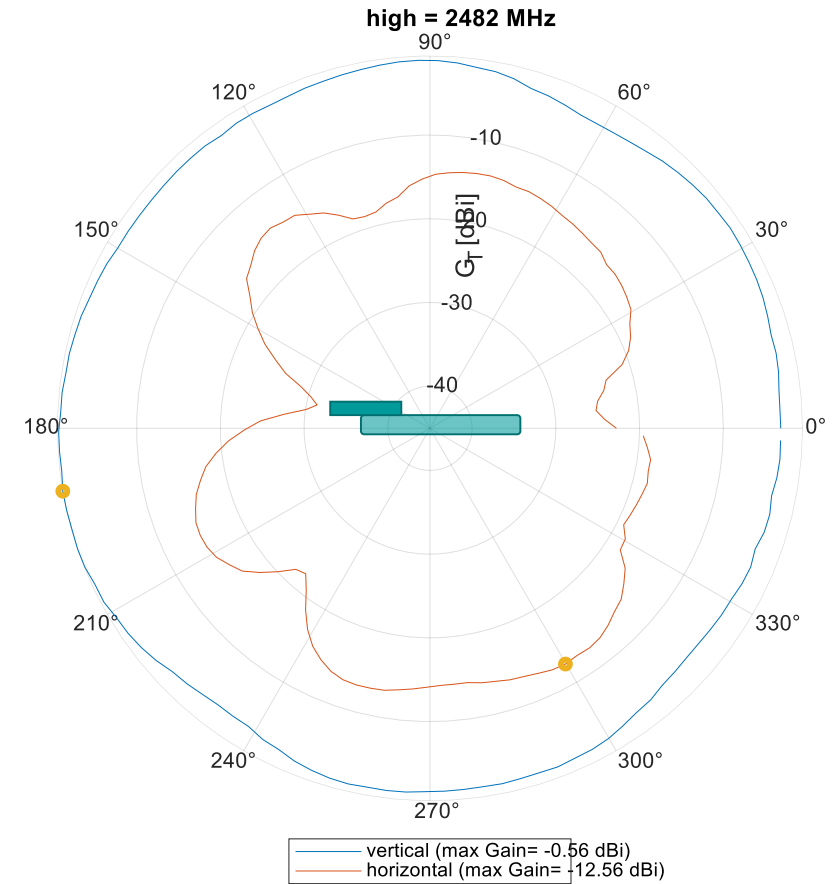
X-AXIS – GAIN/EIRP



x - axis

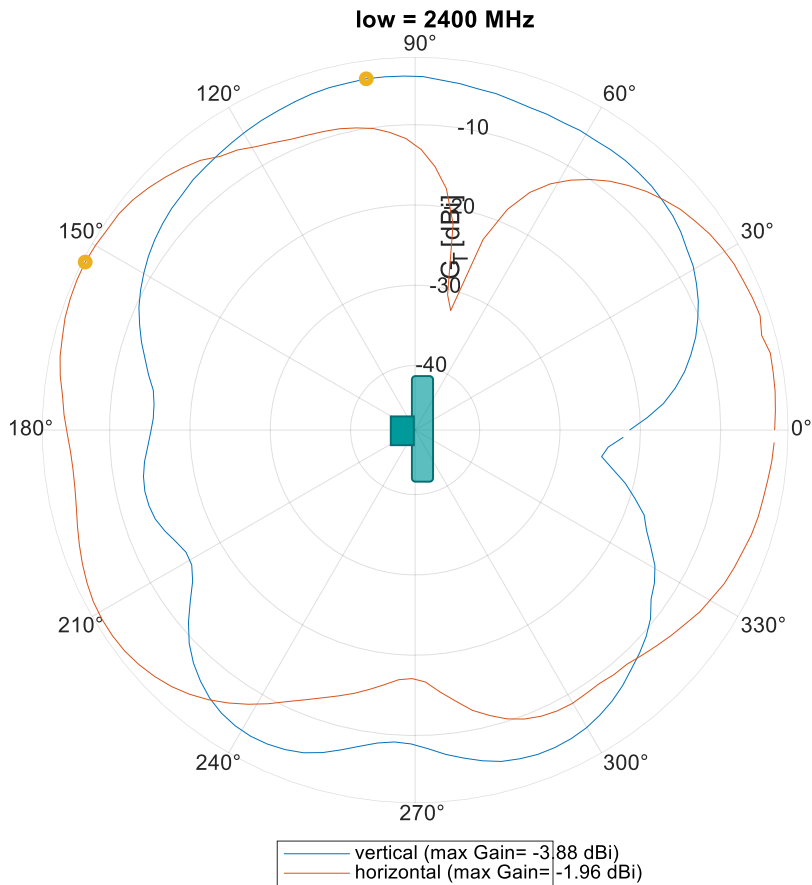


y - axis

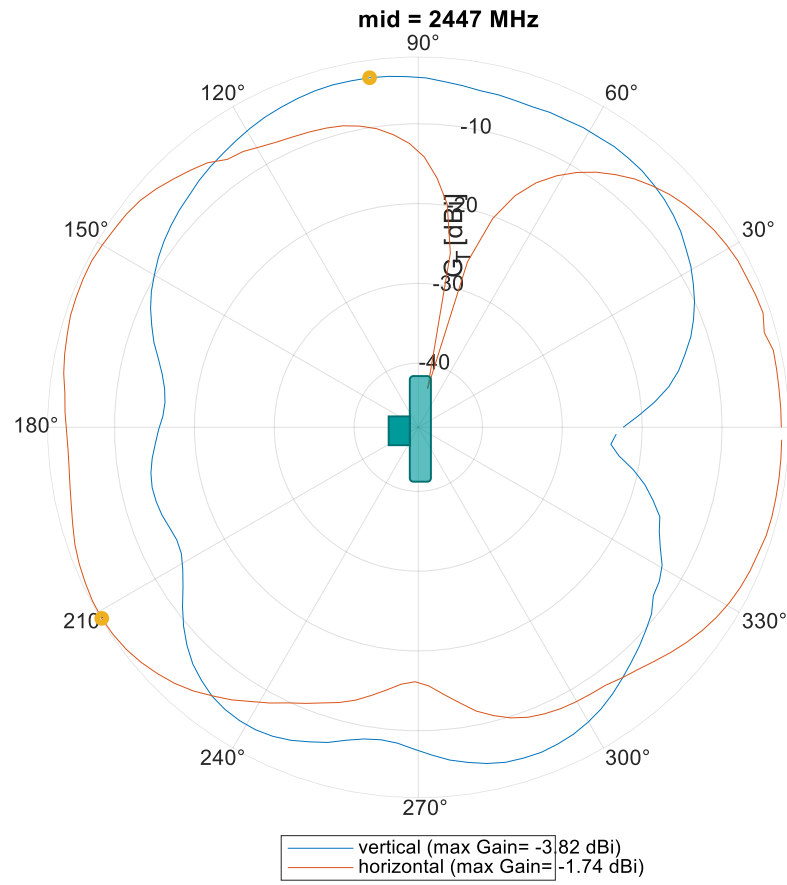


z - axis

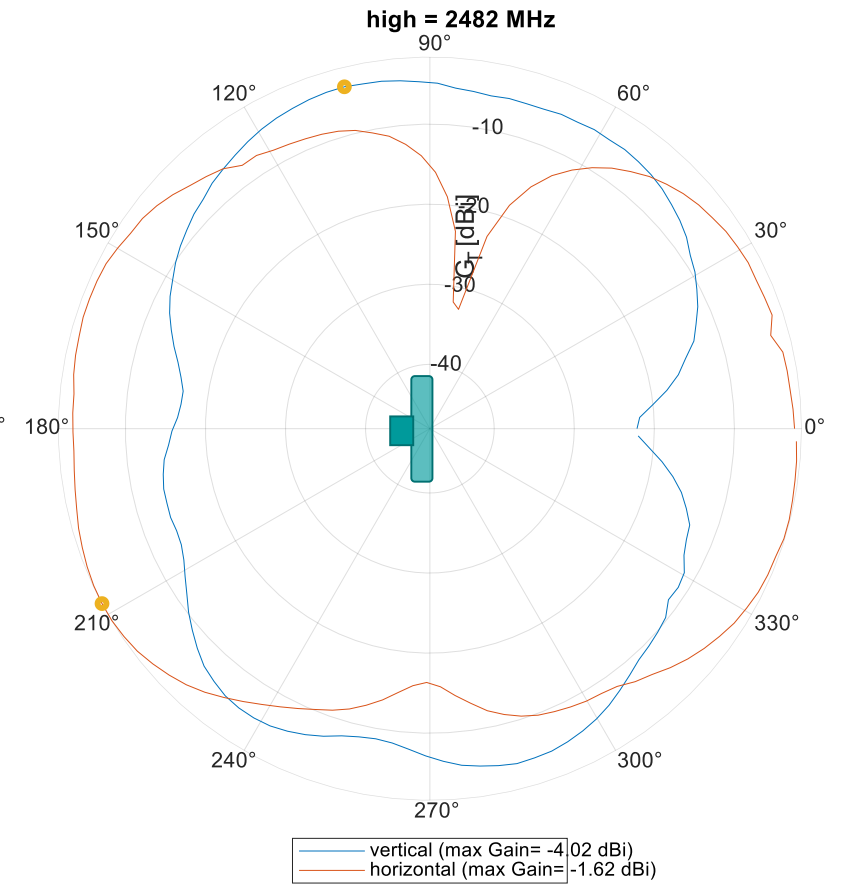
Y-AXIS – GAIN/EIRP



x - axis



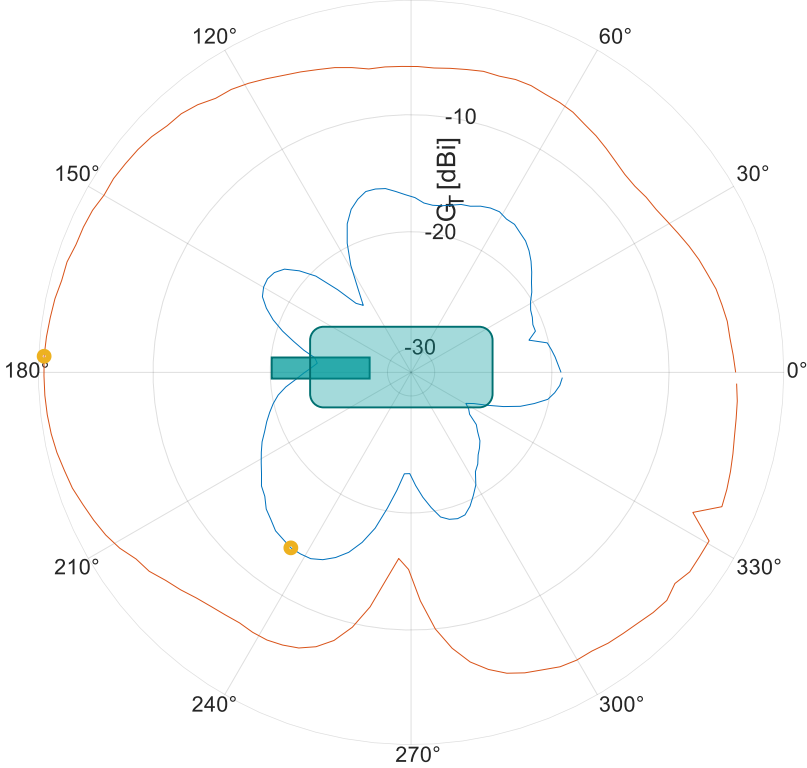
y - axis



z - axis

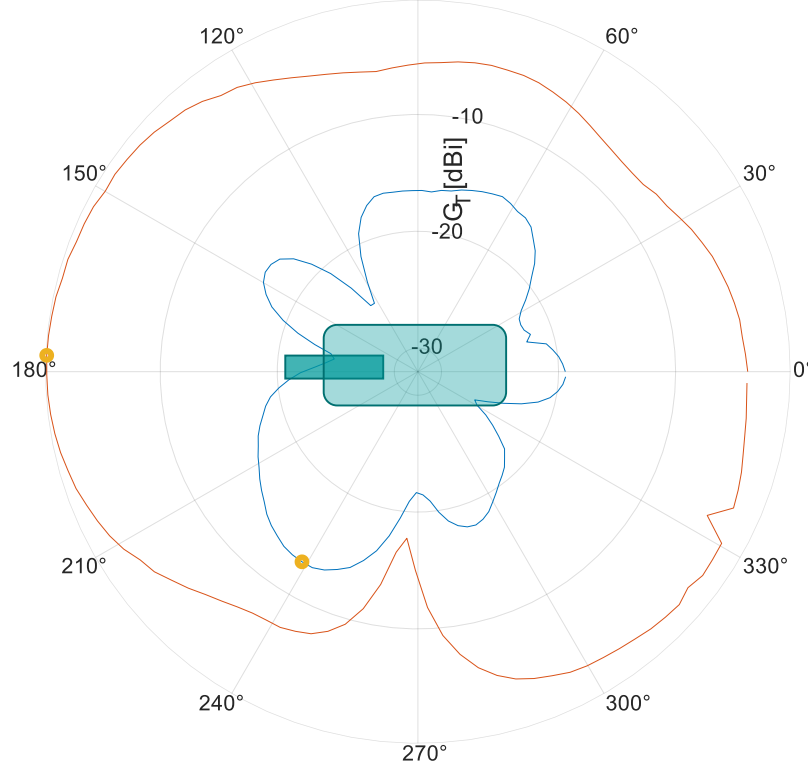
Z-AXIS – GAIN/EIRP

low = 2400 MHz
90°



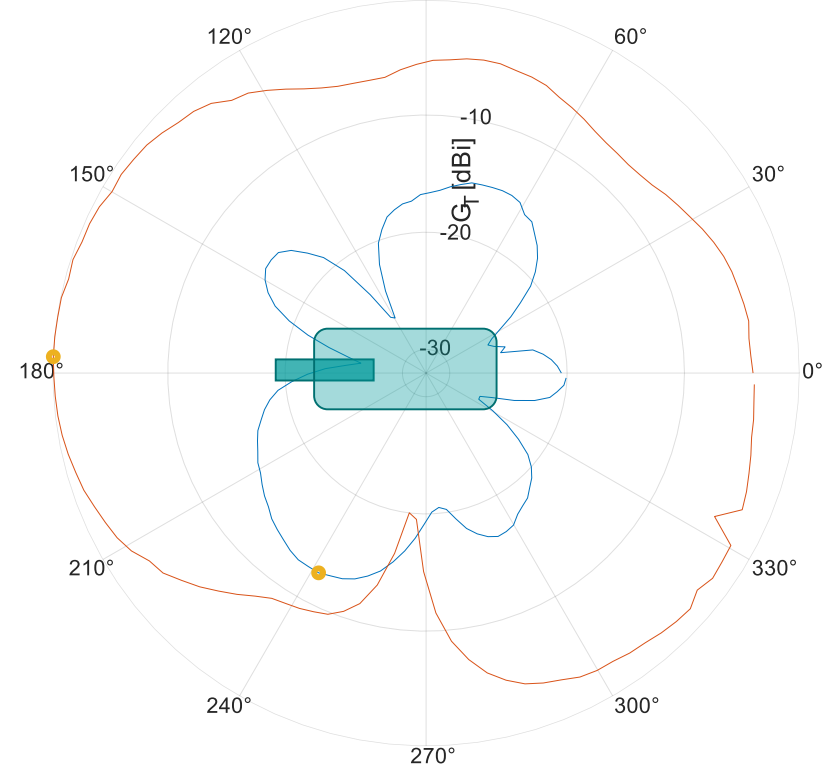
x - axis

mid = 2447 MHz
90°



y - axis

high = 2482 MHz
90°



z - axis