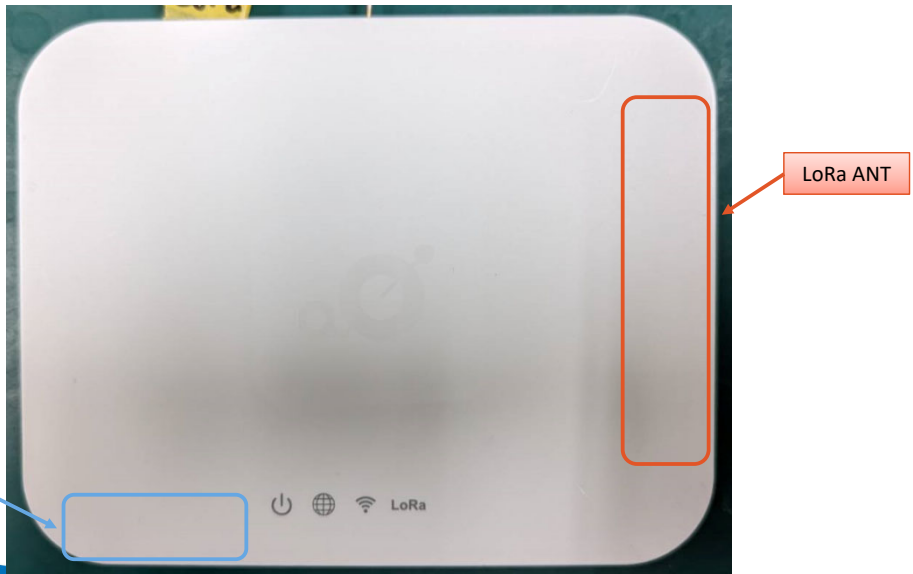


WLRRTES-106 Antenna Test Report Vt01



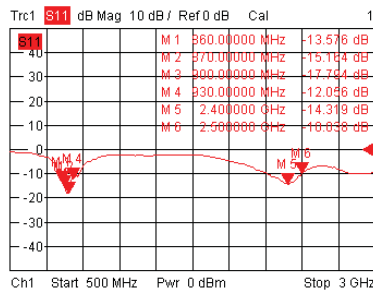
2020/8/25

Antenna Overview

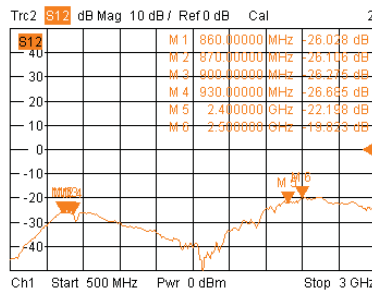


Return Loss & Isolation

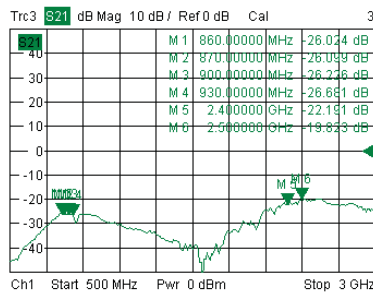
Return Loss
LoRa Ant.



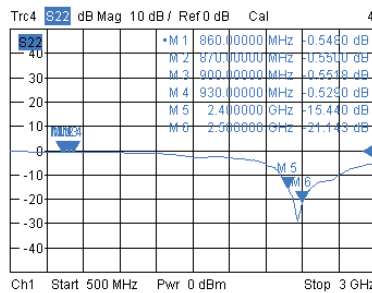
Isolation
LoRa & Wifi Ant.



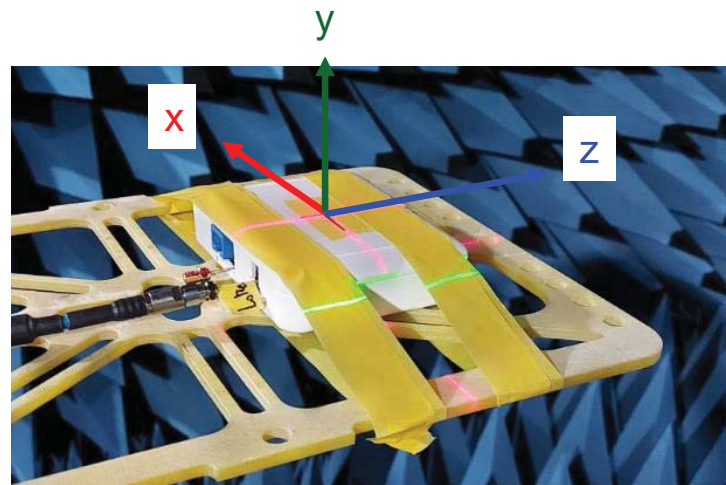
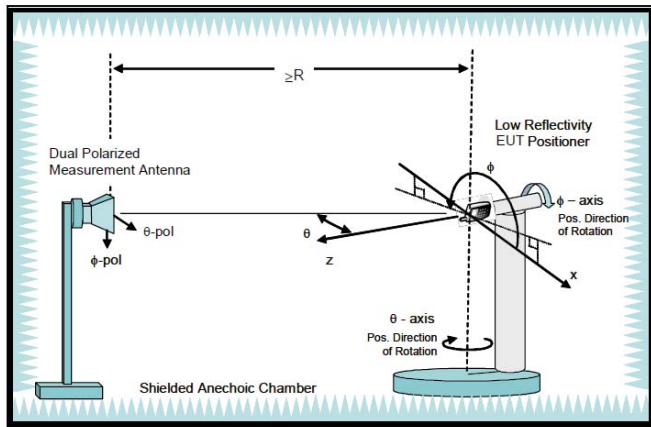
Isolation
LoRa & Wifi Ant.



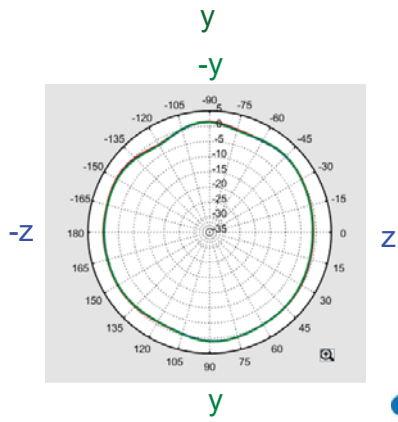
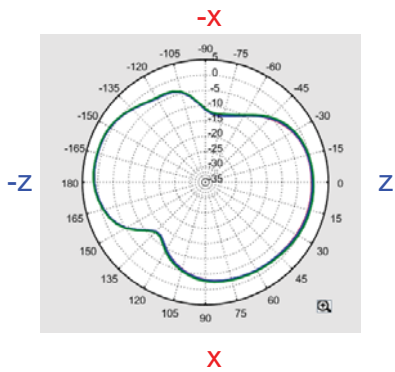
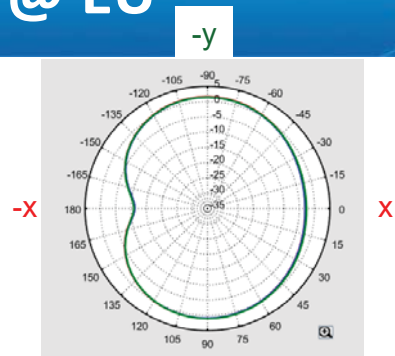
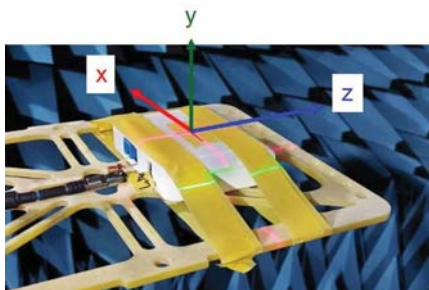
Return Loss
Wifi Ant.



Antenna Coordinate System Definition

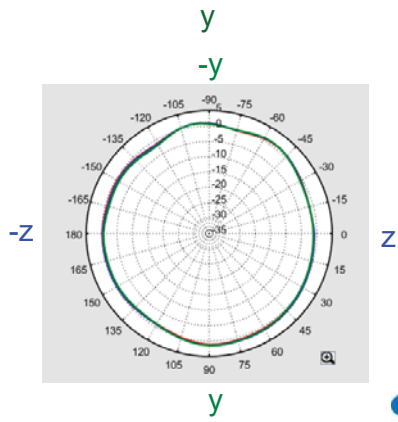
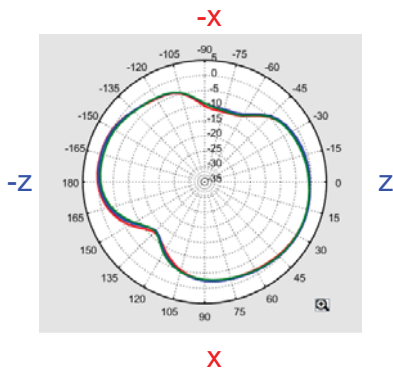
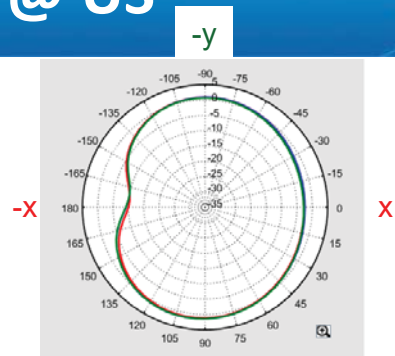
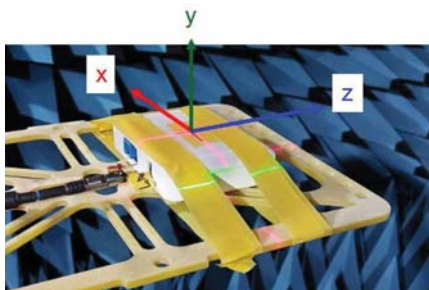


LoRa Ant. GainTotal (dBi) Pattern @ EU



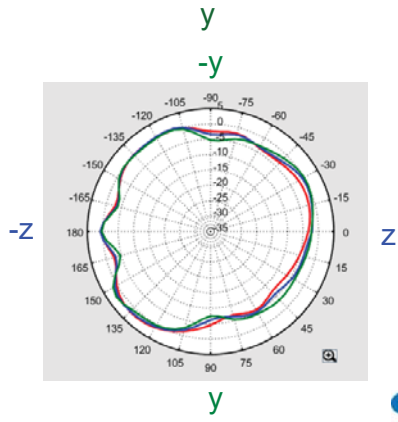
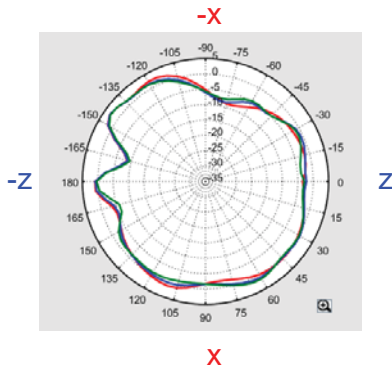
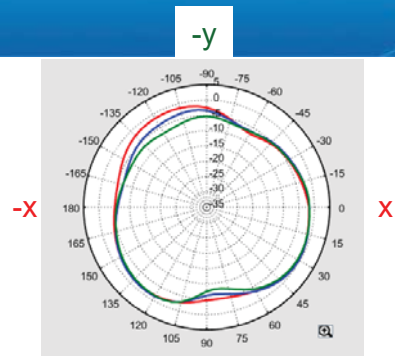
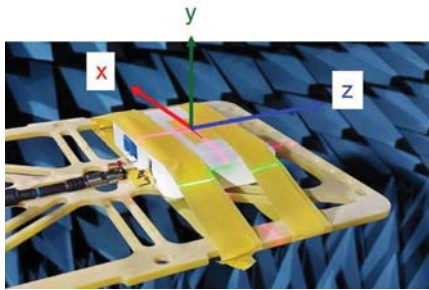
860MHz —
 865MHz —
 870MHz —

LoRa Ant. GainTotal (dBi) Pattern @ US



900MHz —
 915MHz —
 930MHz —

Wifi Ant. GainTotal (dBi) Pattern



2400MHz — (red line)
 2450MHz — (blue line)
 2500MHz — (green line)

Antenna Efficiency & Peak Gain

LoRa Antenna						
Frequency (MHz)	860	865	870	900	915	930
Efficiency (%)	72.28	70.79	73.11	72.44	74.99	71.94
3D Peak Gain (dBi)	1.58	1.42	1.53	1.2	1.47	1.46

Wifi Antenna			
Frequency (MHz)	2400	2450	2500
Efficiency (%)	74.64	74.99	71.78
3D Peak Gain (dBi)	3.01	2.99	2.48