



Antenna Part Specification

Project name:	Q910 Dongle
Material category:	BT antenna
Version:	V1.0
Date:	2022.07.05



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Change record			
Compile / change date	Reason for change	Changed content	Version

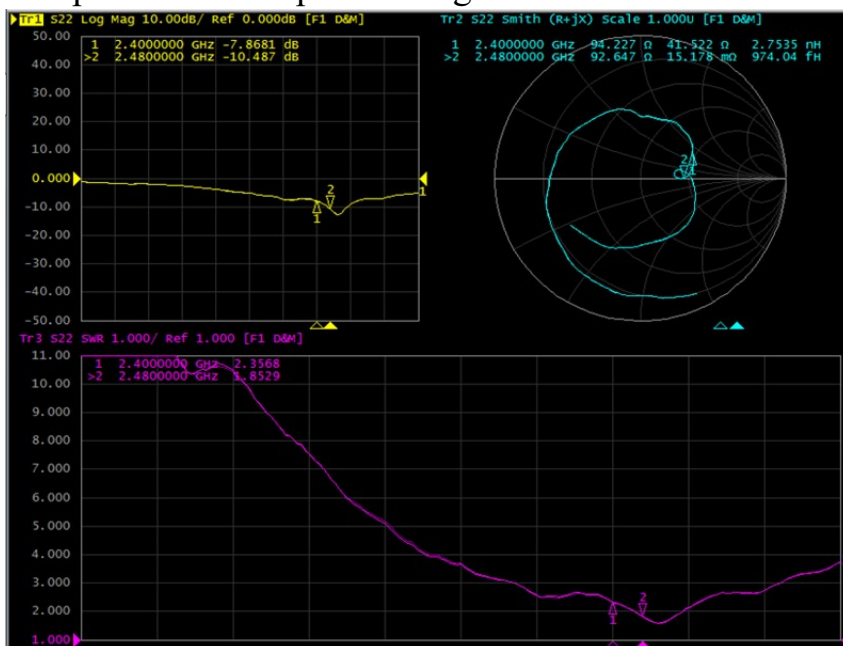


I: The report of passive data

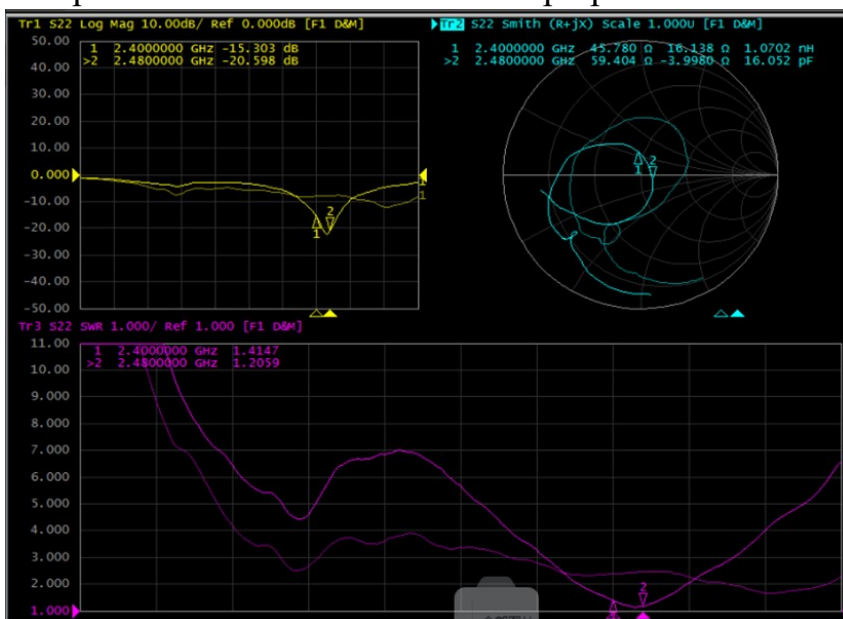


Angilent E5071C

S11 parameter (Separate dongle) :



S11 parameter (Connect Lenovo laptop status) :



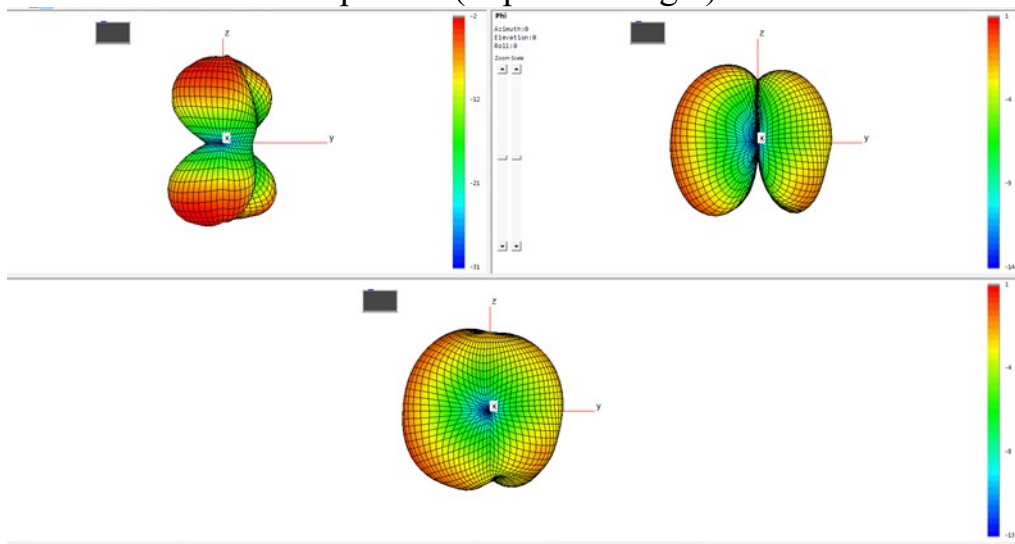


Efficiency:

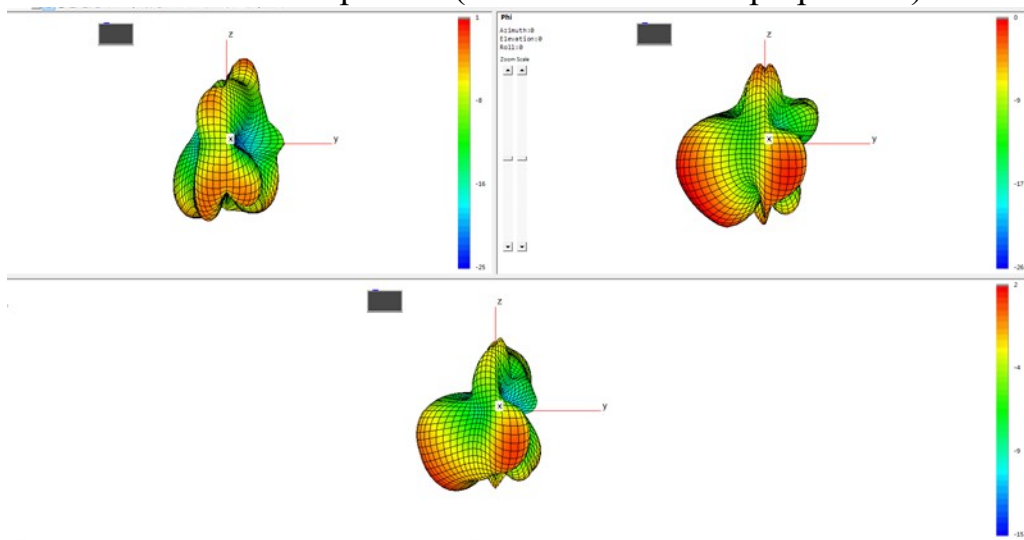
Separate dongle			
Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency
2400	0.0	-3.2	47.5
2410	0.2	-3.1	48.9
2420	-0.1	-3.4	45.9
2430	-0.1	-3.5	44.3
2440	-0.3	-3.7	42.8
2450	-0.4	-3.9	41.2
2460	-0.4	-4.0	40.0
2470	-0.8	-4.3	36.8
2480	-0.8	-4.3	36.8
Average value	-0.28	-3.72	42.70

Connect Lenovo laptop status			
Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency
2400	1.5	-3.9	41.2
2410	1.6	-3.6	44.0
2420	1.4	-3.7	42.5
2430	1.3	-3.7	42.4
2440	1.2	-3.7	42.3
2450	1.1	-3.7	42.7
2460	1.1	-3.6	43.7
2470	0.8	-3.8	41.7
2480	0.9	-3.7	43.0
Average value	1.22	-3.71	42.58

3D Antenna radiation pattern (Separate dongle):



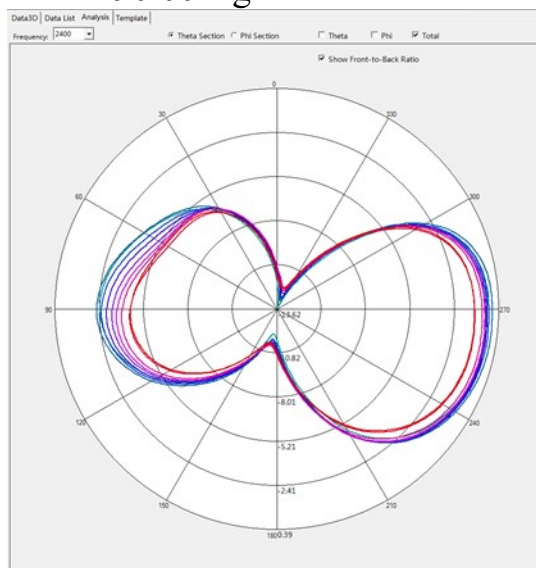
3D Antenna radiation pattern (Connect Lenovo laptop status):



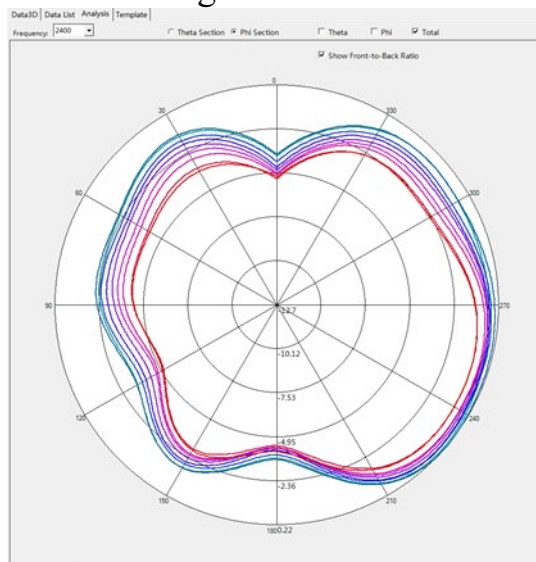


Antenna radiation pattern (Separate dongle):

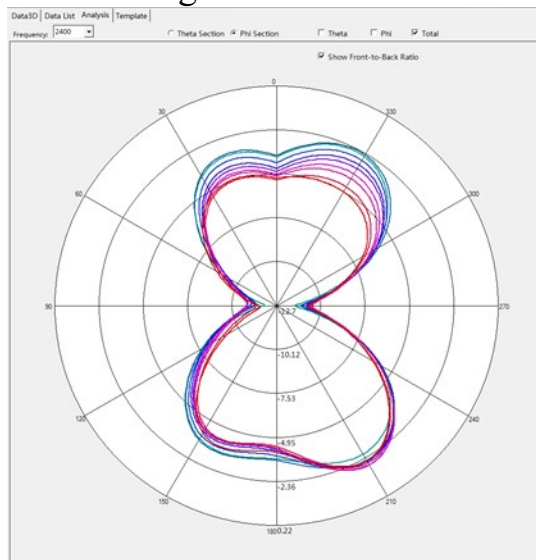
Theta=90.00deg



Phi=90.00deg



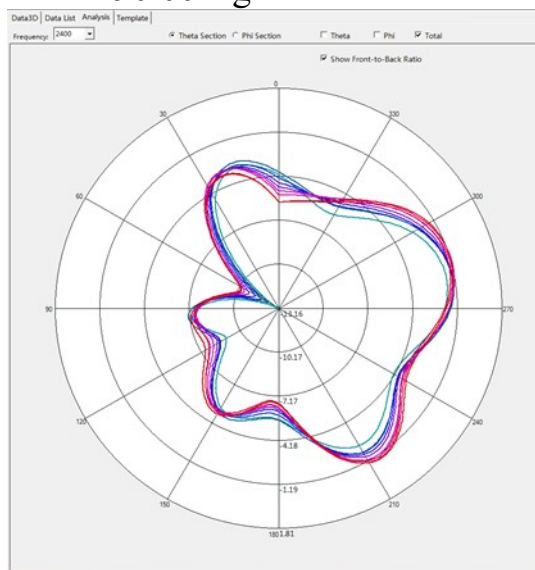
Phi=0.00deg



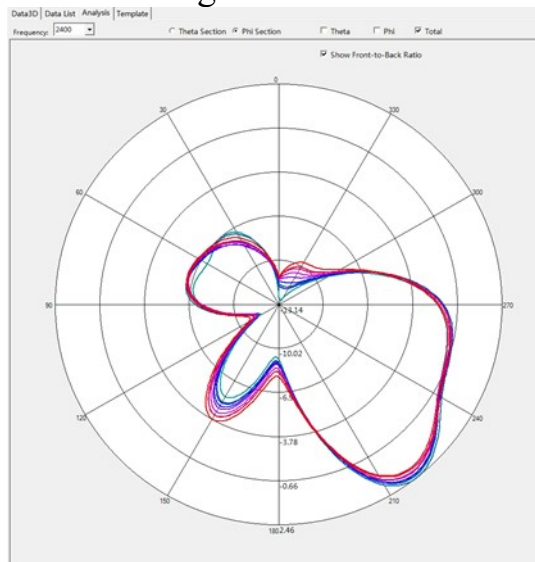


Antenna radiation pattern (Connect Lenovo laptop status):

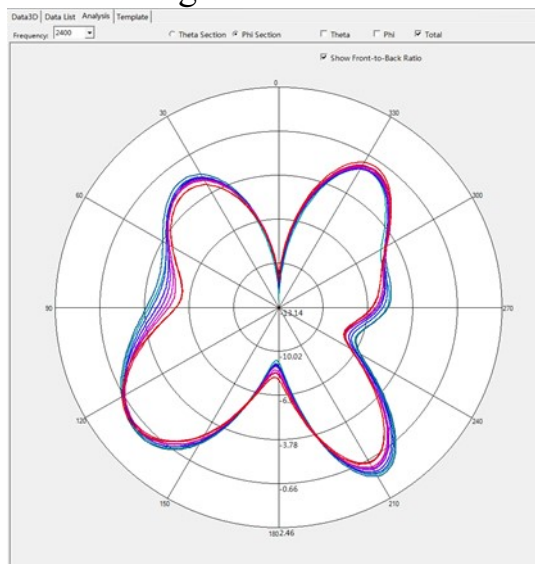
Theta=90.00deg



Phi=90.00deg



Phi=0.00deg





II: 3D Active test report of antenna

	Channel	TRP (dBm)	TIS (dBm)
BT	CH 0	6.8	-92.4
	CH 39	6.8	-92.4
	CH 78	7.1	-92.5

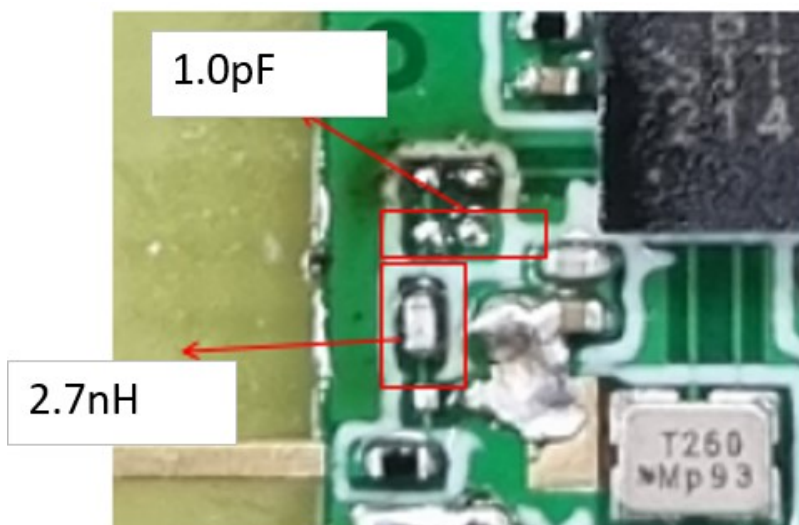


USB is connected to the right side of the computer



OTA Standard Chamber

III: Schematic diagram of antenna matching



Pay attention to the change of antenna matching



IV: Structure file:

