

DLRx (Curve) Main antenna 902 – 928 MHz Measurement report

Summary

The main antenna is attached to the P2 PCBA for measurement

The main PCB was fixtured for antenna measurement

“L”- matching network was used to match the antenna for good S11

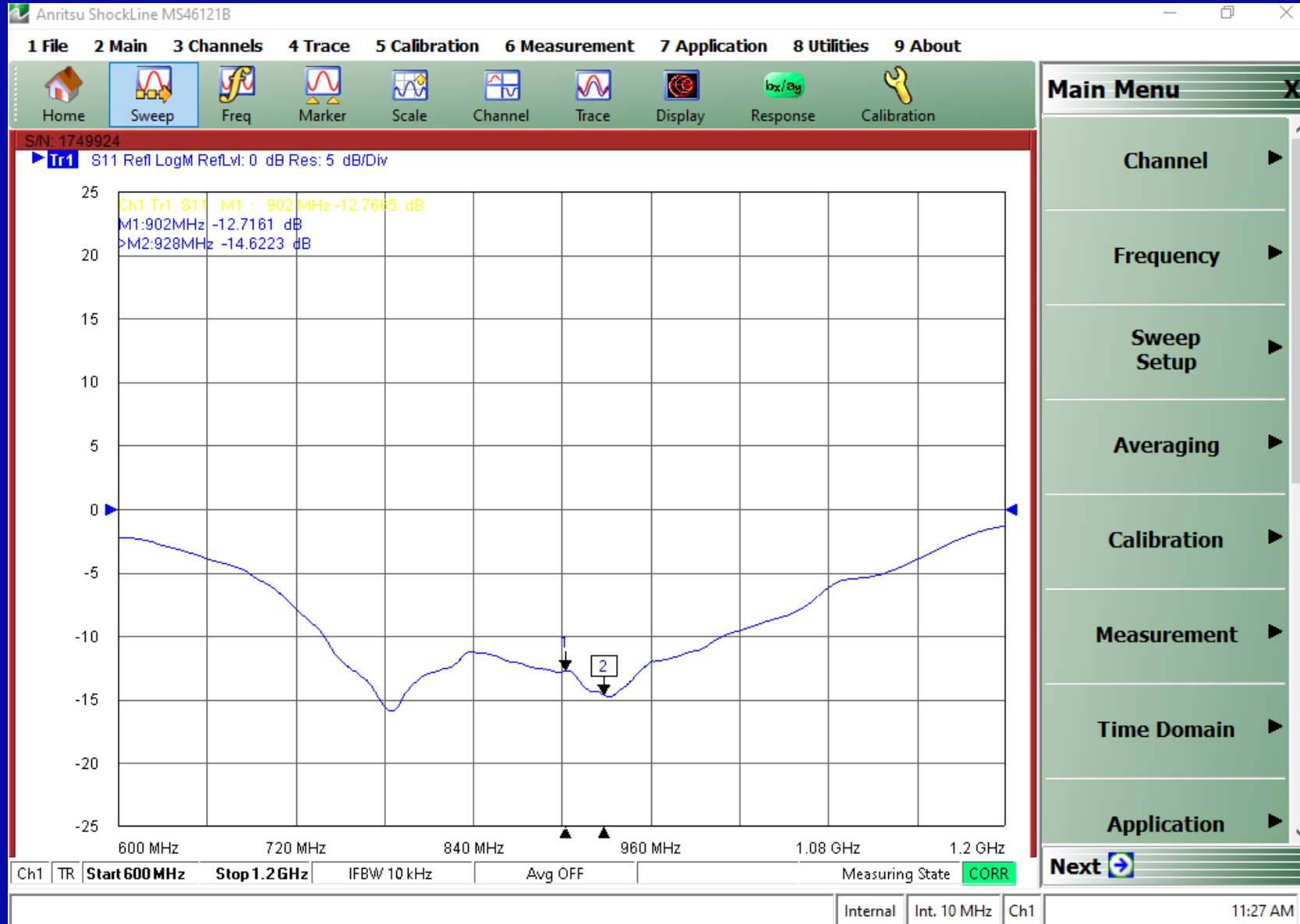
Matching components are 56pF series capacitor with 100nH shunt inductor

The measurement was conducted in free space

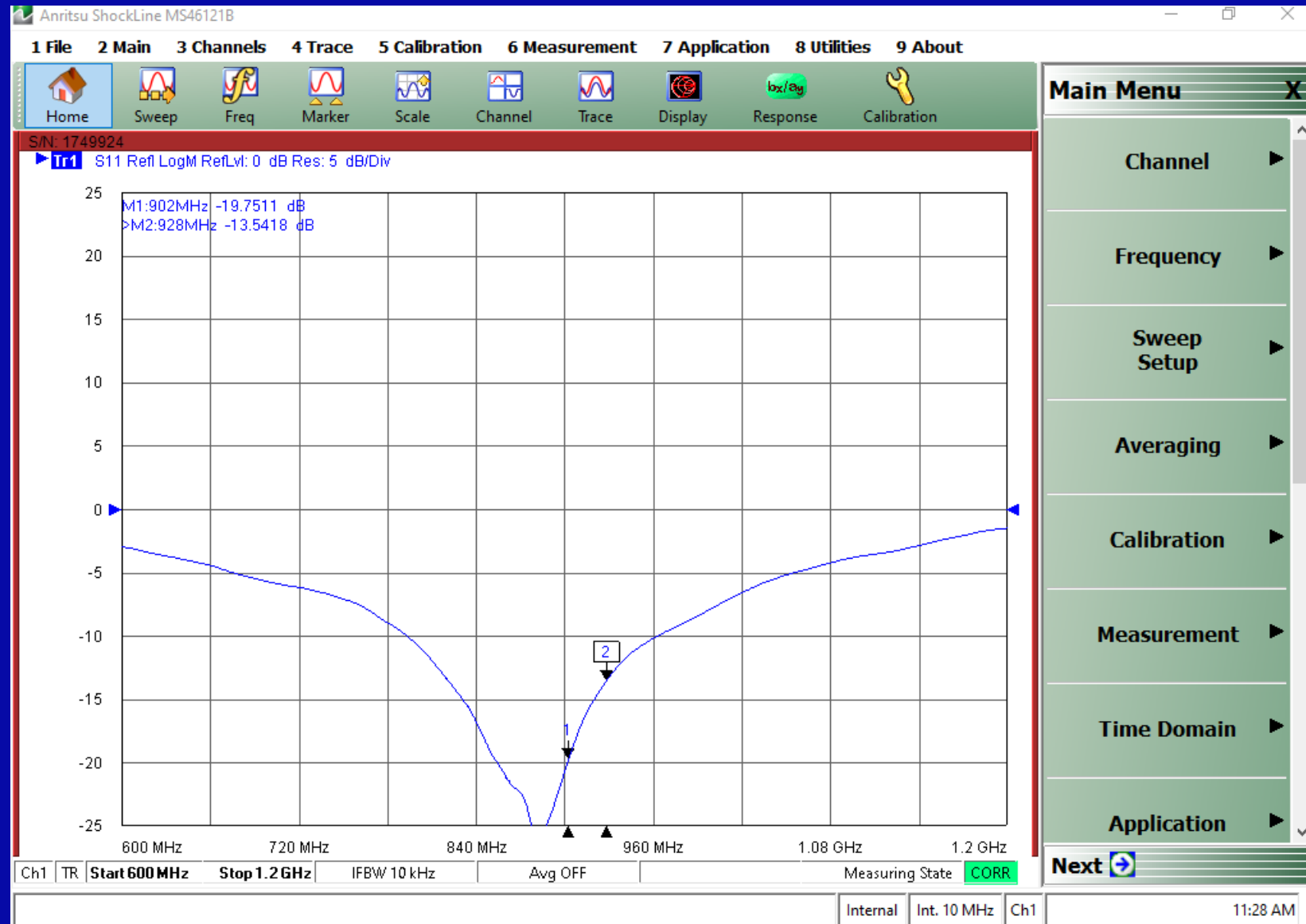
Photo of fixture



Return-loss plot (free space)



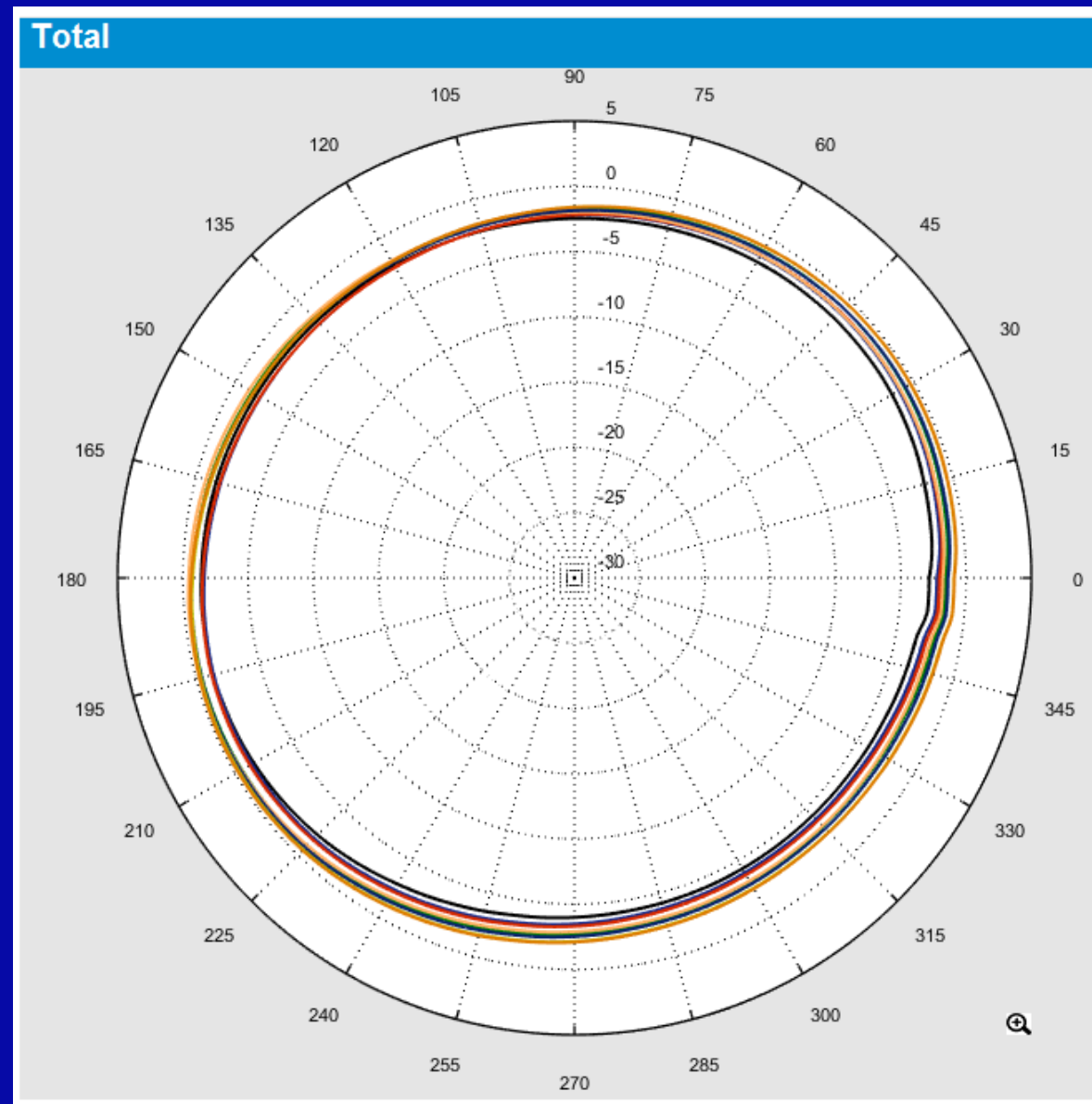
Return-loss plot (hand-held)



Measurement Summary

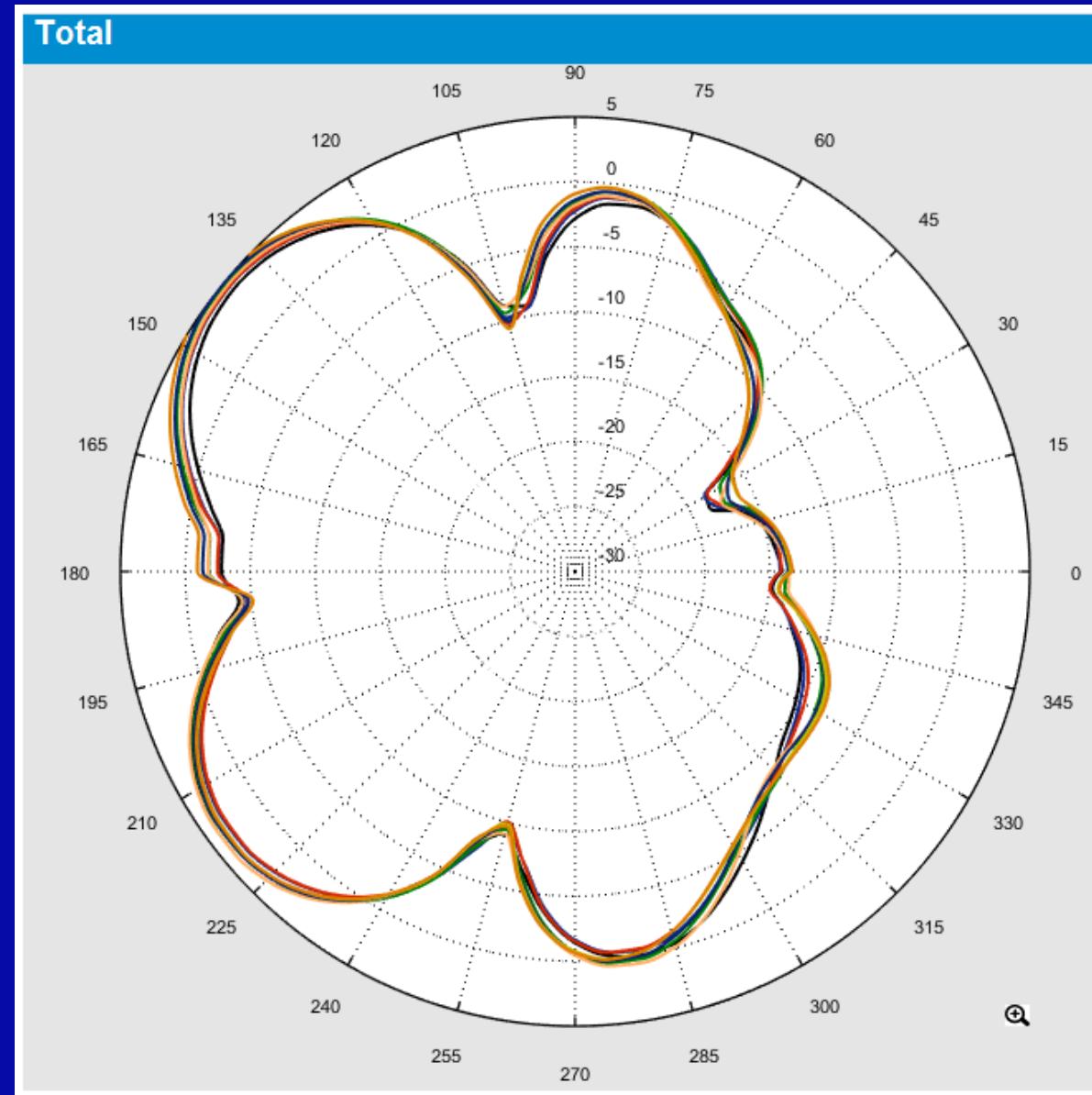
Frequency	898MHz	900MHz	902MHz	904MHz	906MHz	908MHz	910MHz	912MHz	914MHz	916MHz	918MHz	920MHz	922MHz	924MHz	926MHz	928MHz	930MHz	932MHz
Efficiency (dB)	-1.91	-1.91	-1.87	-1.87	-1.9	-1.94	-1.95	-1.58	-1.44	-1.42	-1.46	-1.49	-1.52	-1.49	-1.47	-1.47	-1.49	-1.56
Efficiency (%)	64.42	64.42	65.01	65.01	64.57	63.97	63.83	69.5	71.78	72.11	71.45	70.96	70.47	70.96	71.29	71.29	70.96	69.82
Gain (dBi)	4.24	4.1	4.11	4.31	4.47	4.51	4.5	4.82	4.89	4.8	4.66	4.75	4.97	5.16	5.24	5.25	5.2	5.09

2D radiation pattern (Az plane)



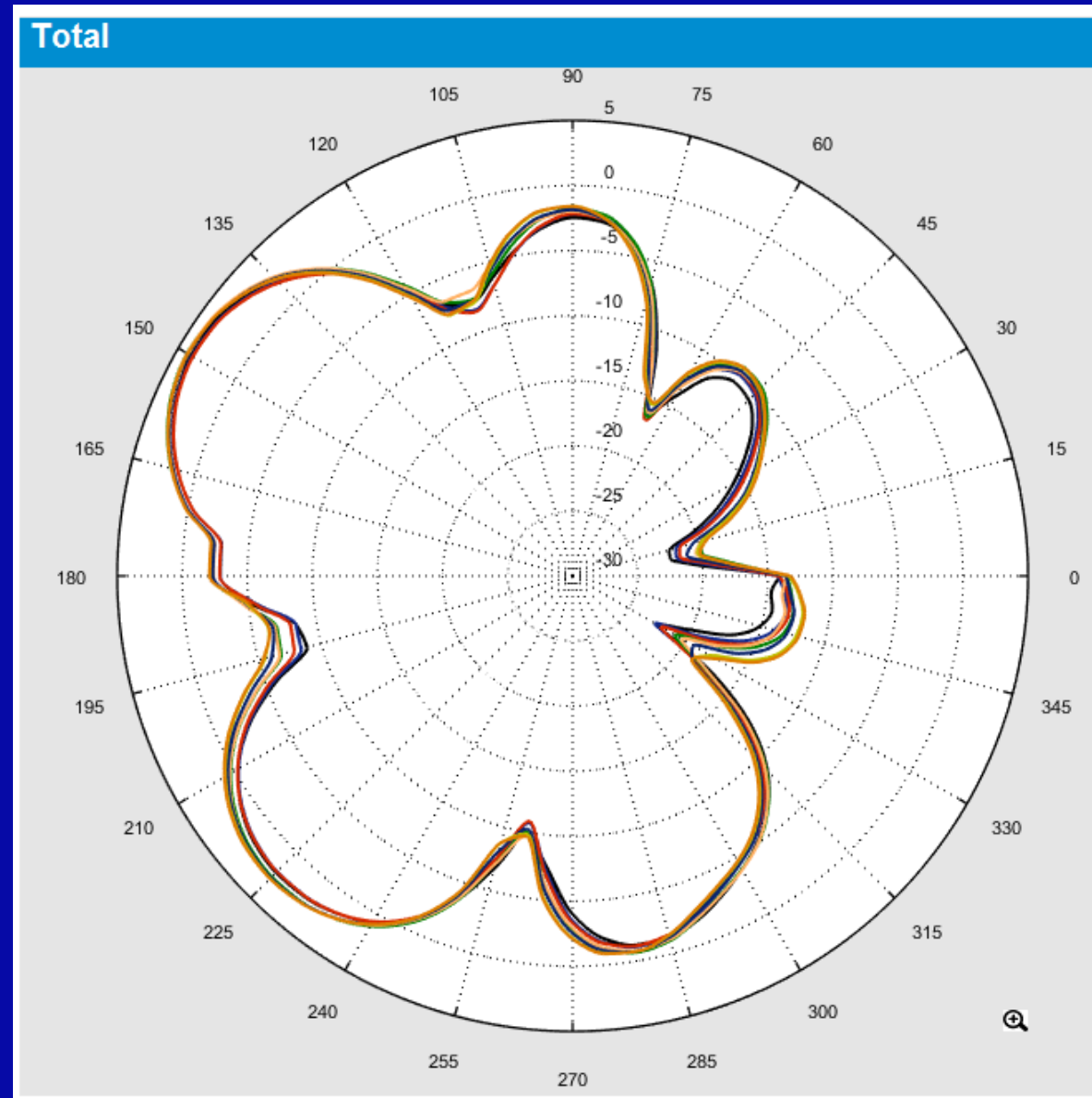
<input checked="" type="checkbox"/>	902MHz	
<input type="checkbox"/>	904MHz	
<input checked="" type="checkbox"/>	906MHz	
<input type="checkbox"/>	908MHz	
<input checked="" type="checkbox"/>	910MHz	
<input type="checkbox"/>	912MHz	
<input checked="" type="checkbox"/>	914MHz	
<input type="checkbox"/>	916MHz	
<input checked="" type="checkbox"/>	918MHz	
<input type="checkbox"/>	920MHz	
<input checked="" type="checkbox"/>	922MHz	
<input type="checkbox"/>	924MHz	
<input checked="" type="checkbox"/>	926MHz	
<input checked="" type="checkbox"/>	928MHz	

2D radiation pattern (ELO plane)



<input checked="" type="checkbox"/>	902MHz	
<input type="checkbox"/>	904MHz	
<input checked="" type="checkbox"/>	906MHz	
<input type="checkbox"/>	908MHz	
<input checked="" type="checkbox"/>	910MHz	
<input type="checkbox"/>	912MHz	
<input checked="" type="checkbox"/>	914MHz	
<input type="checkbox"/>	916MHz	
<input checked="" type="checkbox"/>	918MHz	
<input type="checkbox"/>	920MHz	
<input checked="" type="checkbox"/>	922MHz	
<input type="checkbox"/>	924MHz	
<input checked="" type="checkbox"/>	926MHz	
<input checked="" type="checkbox"/>	928MHz	

2D radiation pattern (EL90 plane)



<input checked="" type="checkbox"/>	902MHz	
<input type="checkbox"/>	904MHz	
<input checked="" type="checkbox"/>	906MHz	
<input type="checkbox"/>	908MHz	
<input checked="" type="checkbox"/>	910MHz	
<input type="checkbox"/>	912MHz	
<input checked="" type="checkbox"/>	914MHz	
<input type="checkbox"/>	916MHz	
<input checked="" type="checkbox"/>	918MHz	
<input type="checkbox"/>	920MHz	
<input checked="" type="checkbox"/>	922MHz	
<input type="checkbox"/>	924MHz	
<input checked="" type="checkbox"/>	926MHz	
<input checked="" type="checkbox"/>	928MHz	