



Dipole Impedance Measurement

Equipment Location	Equipment Name	Model Name	Date of Verification
UL Verification Services Inc. 47173 Benicia Street Fremont, CA 94538, U.S.A.	Dipole Antenna	D1900V2-5d140	April 14, 2023

Number:	Check List:	Result:
1	Visual Inspection	Pass
2	Return/Loss and Impedance	Pass
3	Dipole Arms	Pass

Equipment List:	
Equipment Name:	Calibration Date:
R&S ZNLE6 Vector Network Analyzer	03/05/2024
ZV-Z135 Calibration Kit	03/27/2024

Dipole Impedance Measurement

1) Photo of Dipole



- The connector of dipole contains no abnormalities.

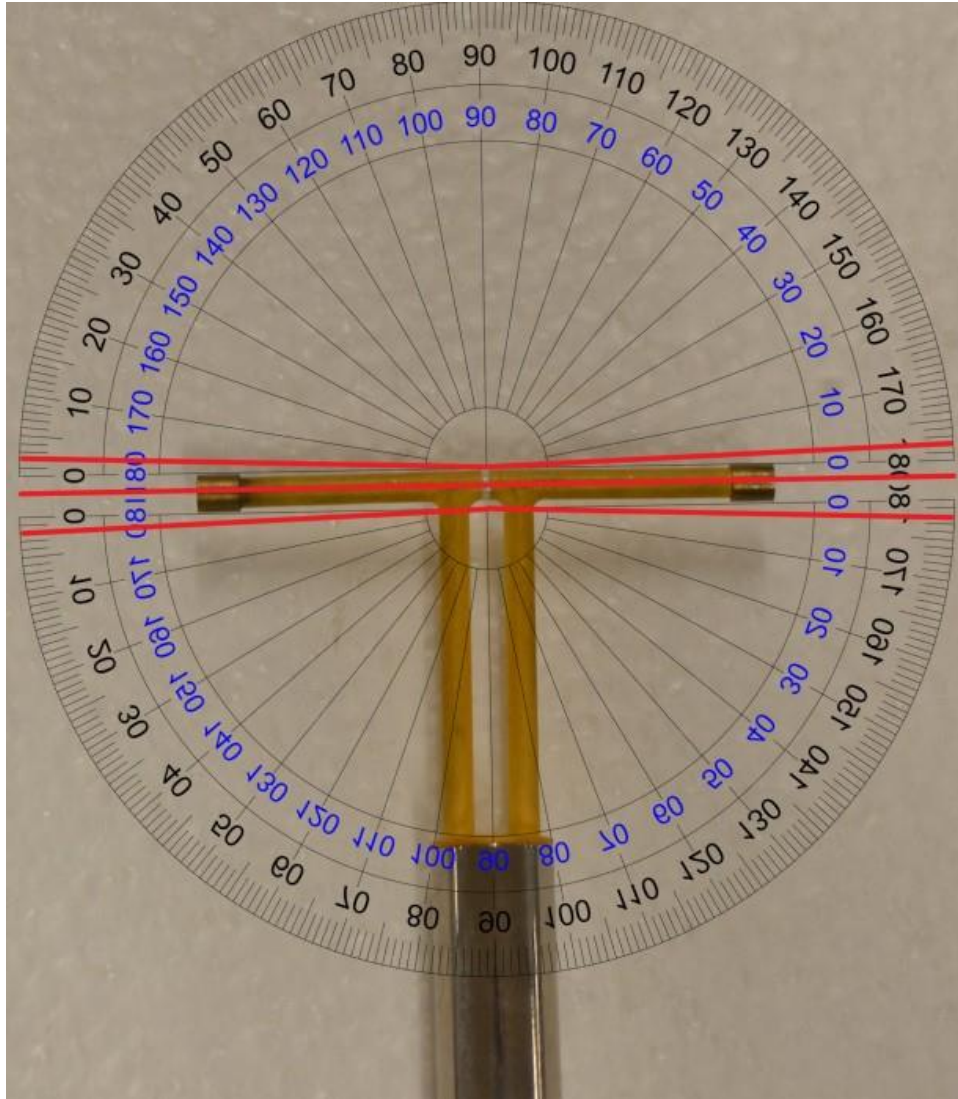
Dipole Impedance Measurement

2) Impedance and Return/Loss

- Return/Loss is greater than the -20 dB cutoff and Impedance is within 5 Ω of previous value.

Dipole Impedance Measurement

3) Dipole Arms



- The center red line indicates that the arms of the dipole fall within $\pm 2^\circ$



Dipole Impedance Measurement

Equipment Location	Equipment Name	Model Name	Date of Verification
UL Verification Services Inc. 47173 Benicia Street Fremont, CA 94538, U.S.A.	Dipole Antenna	CLA13-1008	January 12, 2023

Number:	Check List:	Result:
1	Visual Inspection	Pass
2	Return/Loss and Impedance	Pass
3	Dipole Arms	Pass

Equipment List:	
Equipment Name:	Calibration Date:
R&S ZNLE6 Vector Network Analyzer	03/05/2024
ZV-Z135 Calibration Kit	03/27/2024

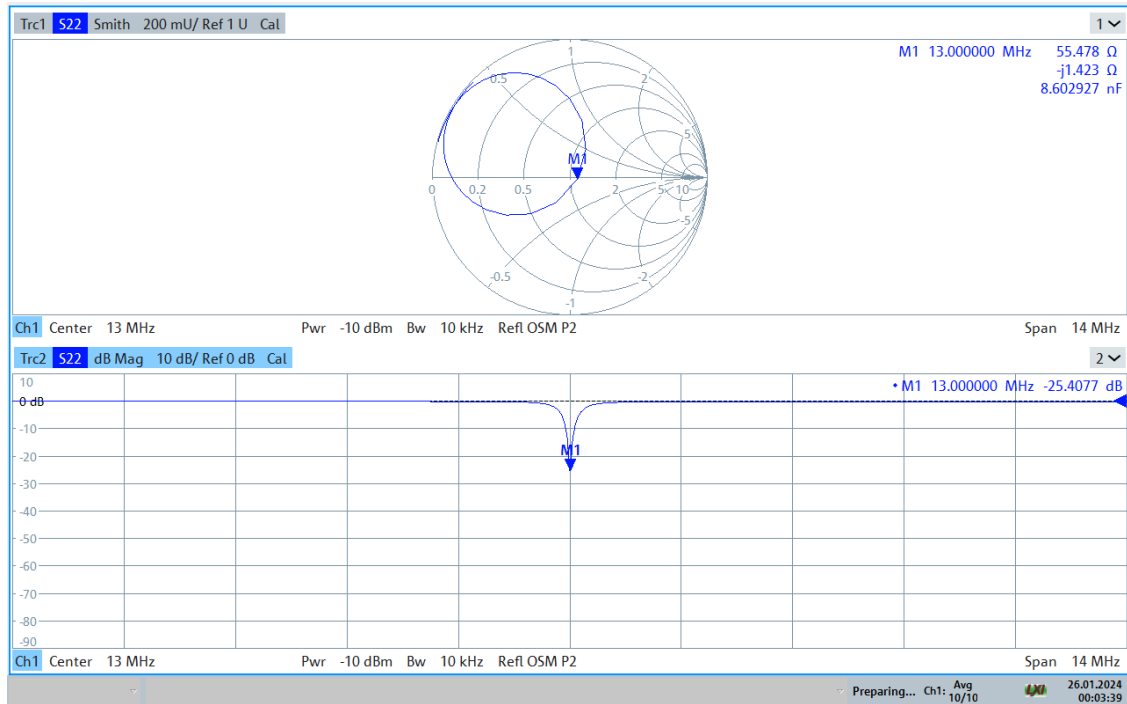
Dipole Impedance Measurement

4) Photo of Dipole

- The connector of dipole contains no abnormalities.

Dipole Impedance Measurement

5) Impedance and Return/Loss



00:03:40 26.01.2024

- Return/Loss is greater than the -20 dB cutoff and Impedance is within 5 Ω of previous value.

Dipole Impedance Measurement

6) Dipole Arms

- The center red line indicates that the arms of the dipole fall within $\pm 2^\circ$

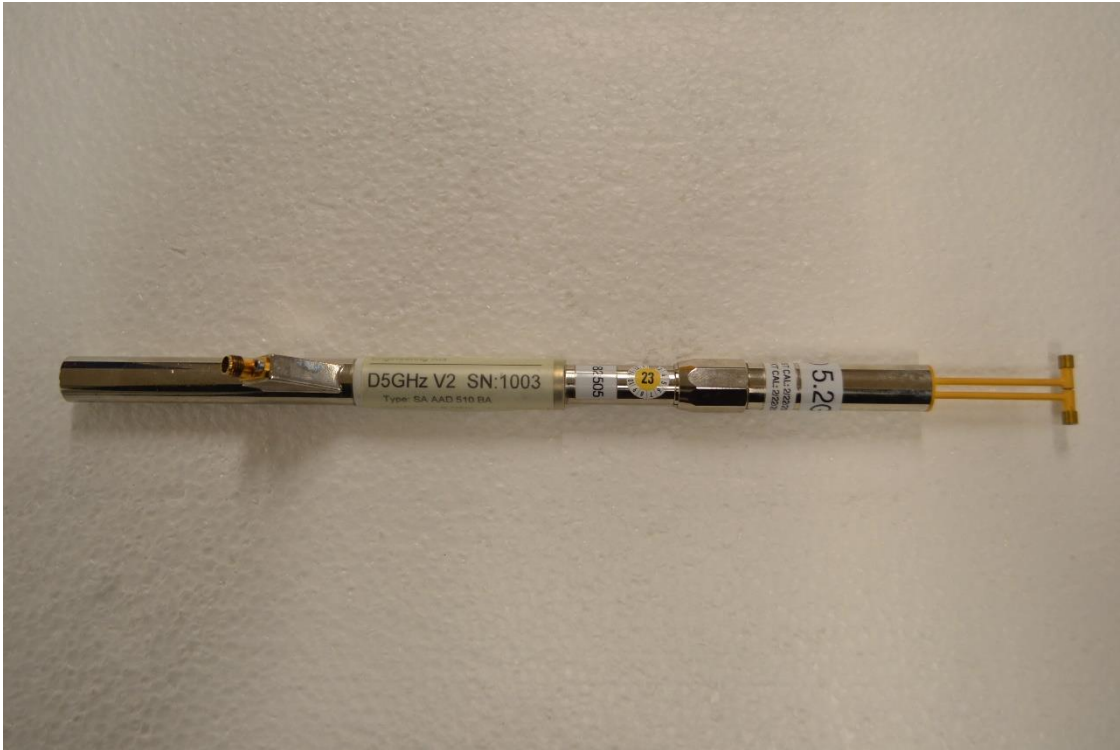
Equipment Location	Equipment Name	Model Name	Date of Verification
UL Verification Services Inc. 47173 Benicia Street Fremont, CA 94538, U.S.A.	Dipole Antenna	D5GHzV2-1003	February 22, 2023

Number:	Check List:	Result:
1	Visual Inspection	Pass
2	Return/Loss and Impedance	Pass
3	Dipole Arms	Pass

Equipment List:	
Equipment Name:	Calibration Date:
R&S ZNLE6 Vector Network Analyzer	03/05/2024
ZV-Z135 Calibration Kit	03/27/2024

Dipole Impedance Measurement

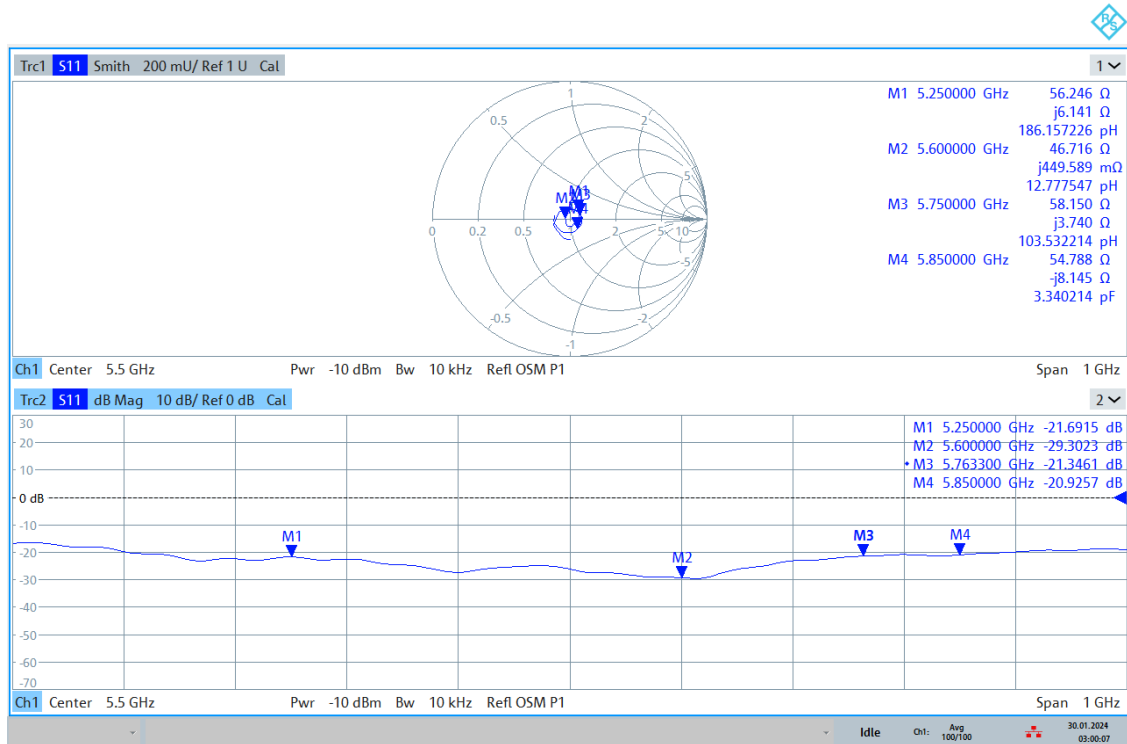
7) Photo of Dipole



- The connector of dipole contains no abnormalities.

Dipole Impedance Measurement

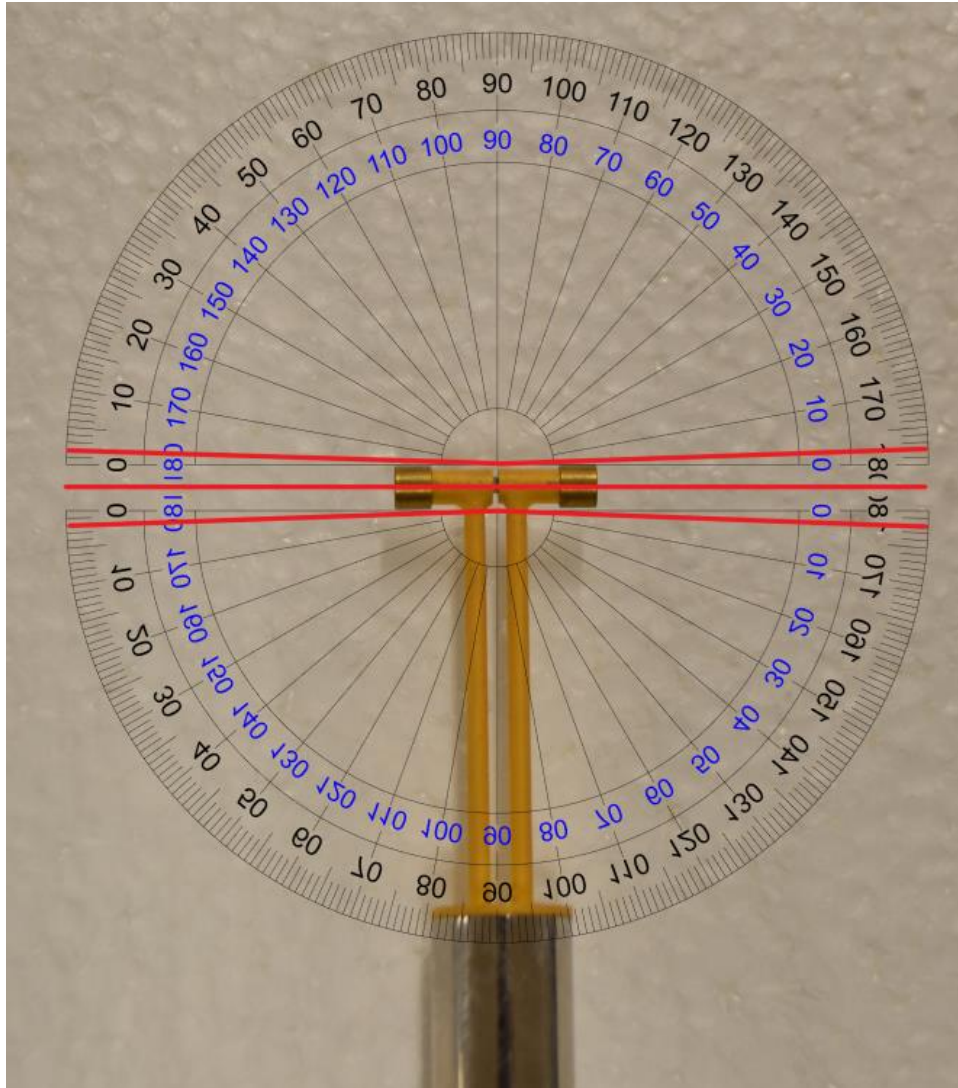
8) Impedance and Return/Loss



- Return/Loss is greater than the -20 dB cutoff and Impedance is within 5 Ω of previous value.

Dipole Impedance Measurement

9) Dipole Arms



- The center red line indicates that the arms of the dipole fall within $\pm 2^\circ$



Dipole Impedance Measurement

Equipment Location	Equipment Name	Model Name	Date of Verification
UL Verification Services Inc. 47173 Benicia Street Fremont, CA 94538, U.S.A.	Dipole Antenna	D6.5GHzV2-1033	March 15, 2023

Number:	Check List:	Result:
1	Visual Inspection	Pass
2	Return/Loss and Impedance	Pass
3	Dipole Arms	Pass

Equipment List:	
Equipment Name:	Calibration Date:
R&S ZNLE6 Vector Network Analyzer	03/05/2024
ZV-Z135 Calibration Kit	03/27/2024

Dipole Impedance Measurement

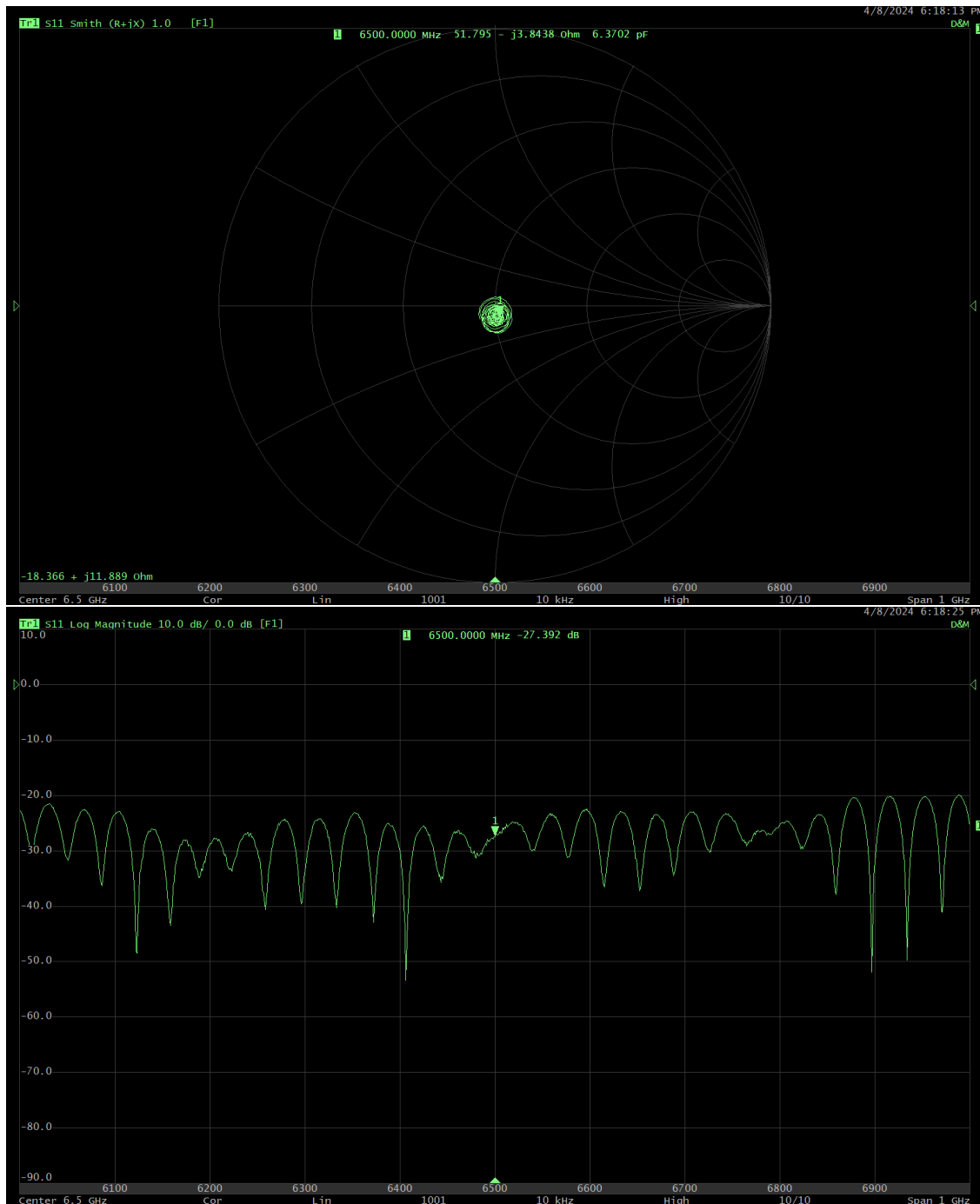
10) Photo of Dipole



- The connector of dipole contains no abnormalities.

Dipole Impedance Measurement

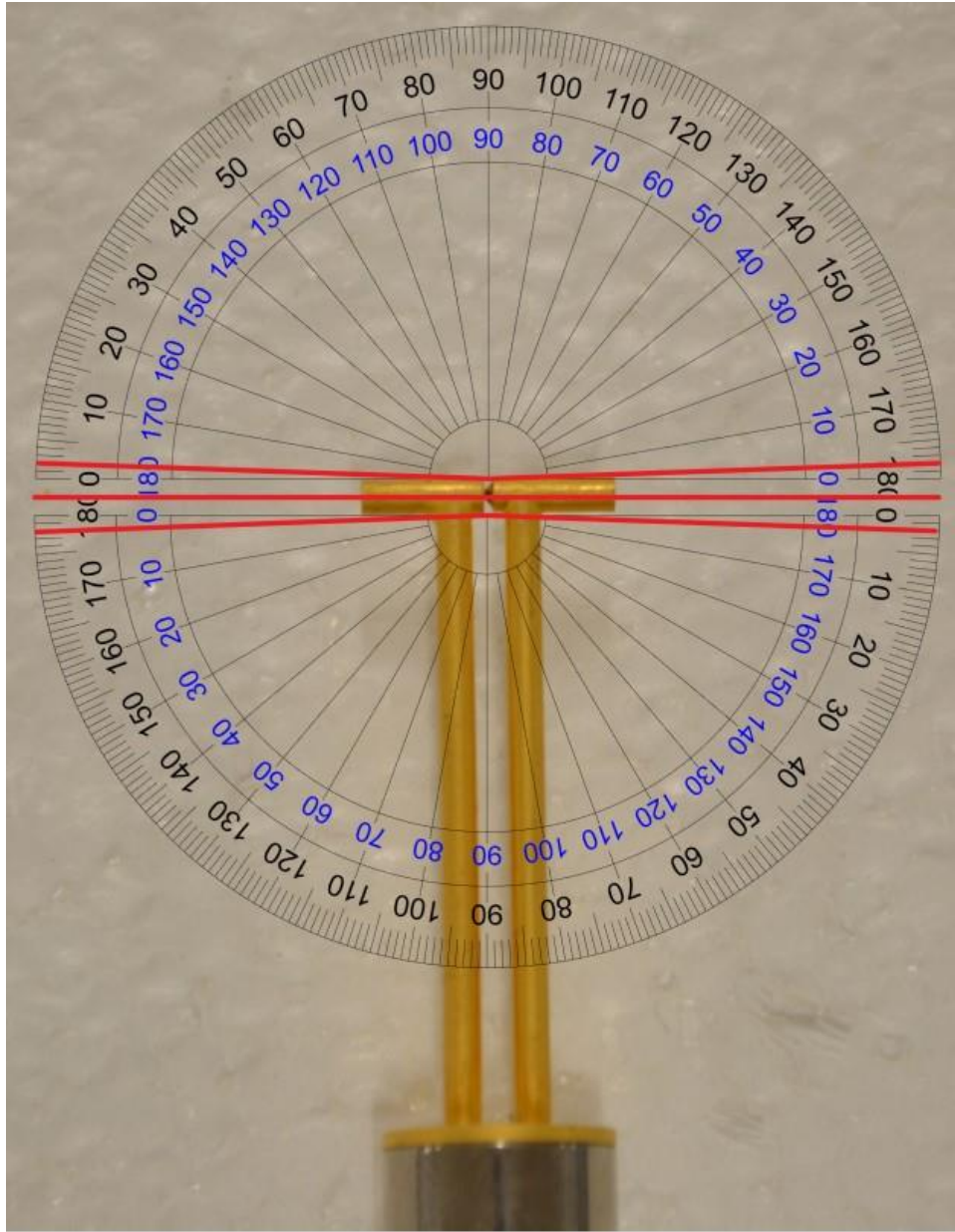
11) Impedance and Return/Loss



- Return/Loss is greater than the -20 dB cutoff and Impedance is within 5 Ω of previous value.

Dipole Impedance Measurement

12) Dipole Arms



- The center red line indicates that the arms of the dipole fall within $\pm 2^\circ$



Dipole Impedance Measurement

Equipment Location	Equipment Name	Model Name	Date of Verification
UL Verification Services Inc. 47173 Benicia Street Fremont, CA 94538, U.S.A.	Dipole Antenna	D1950V2-1136	April 14, 2023

Number:	Check List:	Result:
1	Visual Inspection	Pass
2	Return/Loss and Impedance	Pass
3	Dipole Arms	Pass

Equipment List:	
Equipment Name:	Calibration Date:
R&S ZNLE6 Vector Network Analyzer	03/05/2024
ZV-Z135 Calibration Kit	03/27/2024

Dipole Impedance Measurement

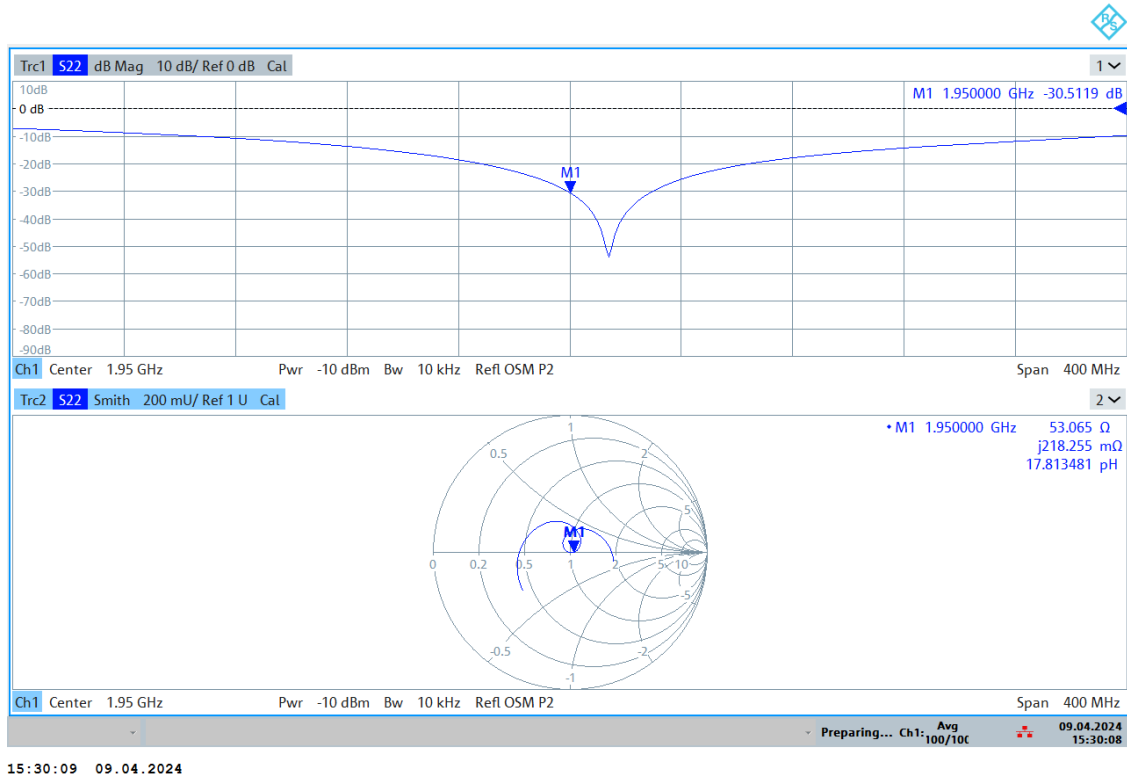
13) Photo of Dipole



- The connector of dipole contains no abnormalities.

Dipole Impedance Measurement

14) Impedance and Return/Loss

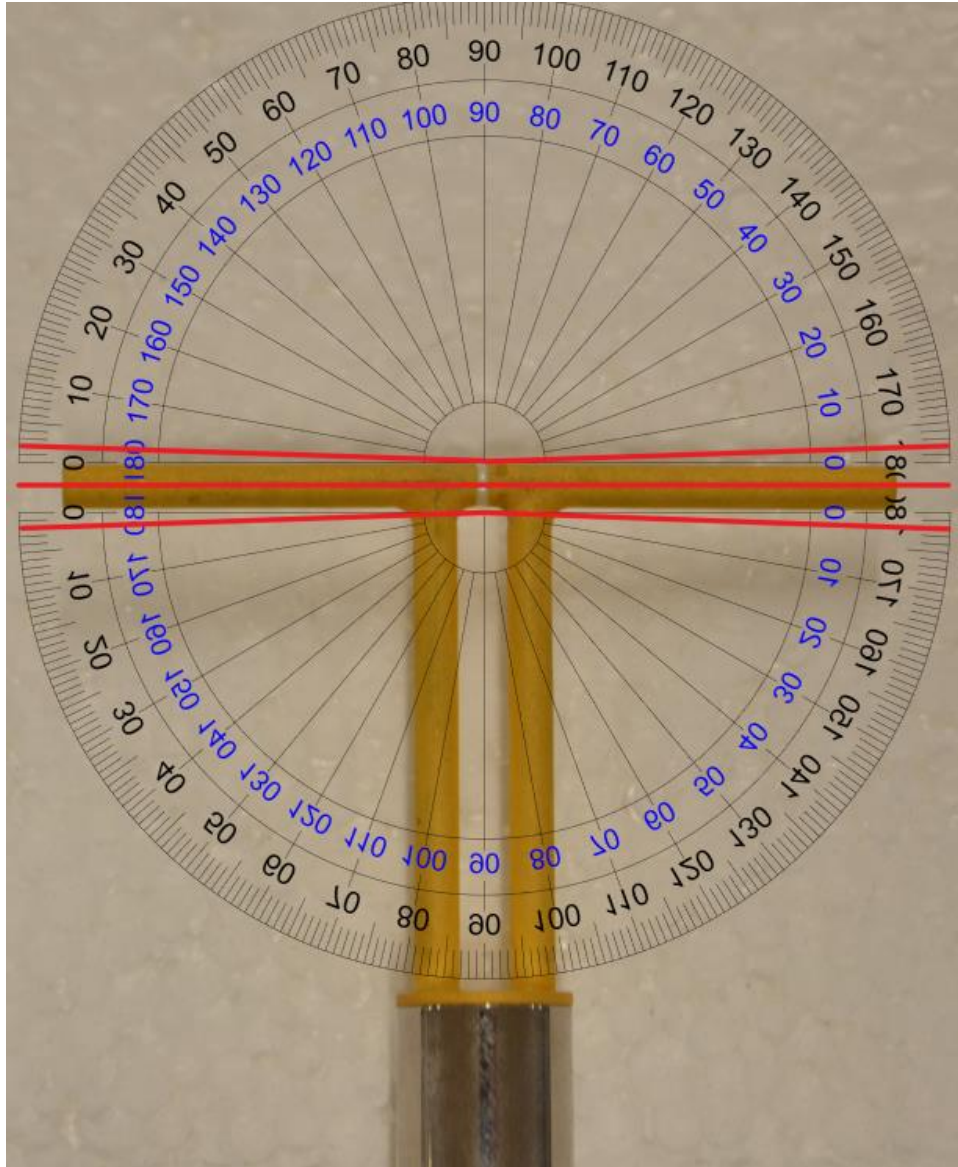


15:30:09 09.04.2024

- Return/Loss is greater than the -20 dB cutoff and Impedance is within 5 Ω of previous value.

Dipole Impedance Measurement

15) Dipole Arms



- The center red line indicates that the arms of the dipole fall within $\pm 2^\circ$



Dipole Impedance Measurement

Equipment Location	Equipment Name	Model Name	Date of Verification
UL Verification Services Inc. 47173 Benicia Street Fremont, CA 94538, U.S.A.	Dipole Antenna	D2450V2-748	February 08, 2023

Number:	Check List:	Result:
1	Visual Inspection	Pass
2	Return/Loss and Impedance	Pass
3	Dipole Arms	Pass

Equipment List:	
Equipment Name:	Calibration Date:
R&S ZNLE6 Vector Network Analyzer	03/05/2024
ZV-Z135 Calibration Kit	03/27/2024

Dipole Impedance Measurement

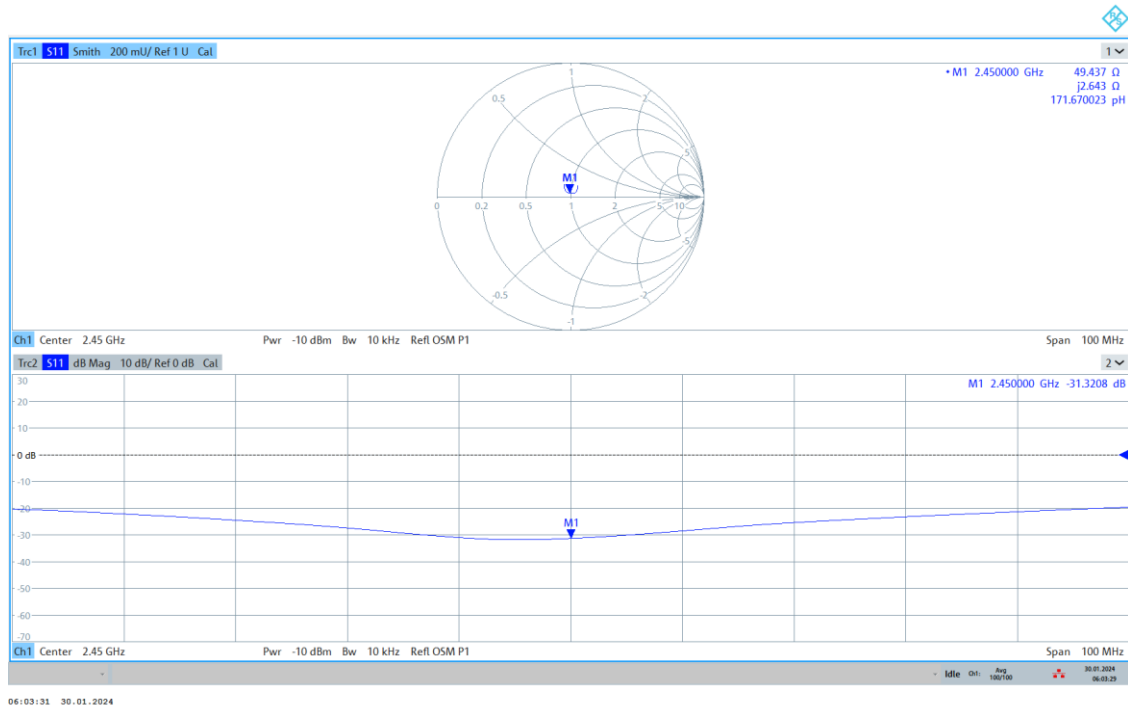
16) Photo of Dipole



- The connector of dipole contains no abnormalities.

Dipole Impedance Measurement

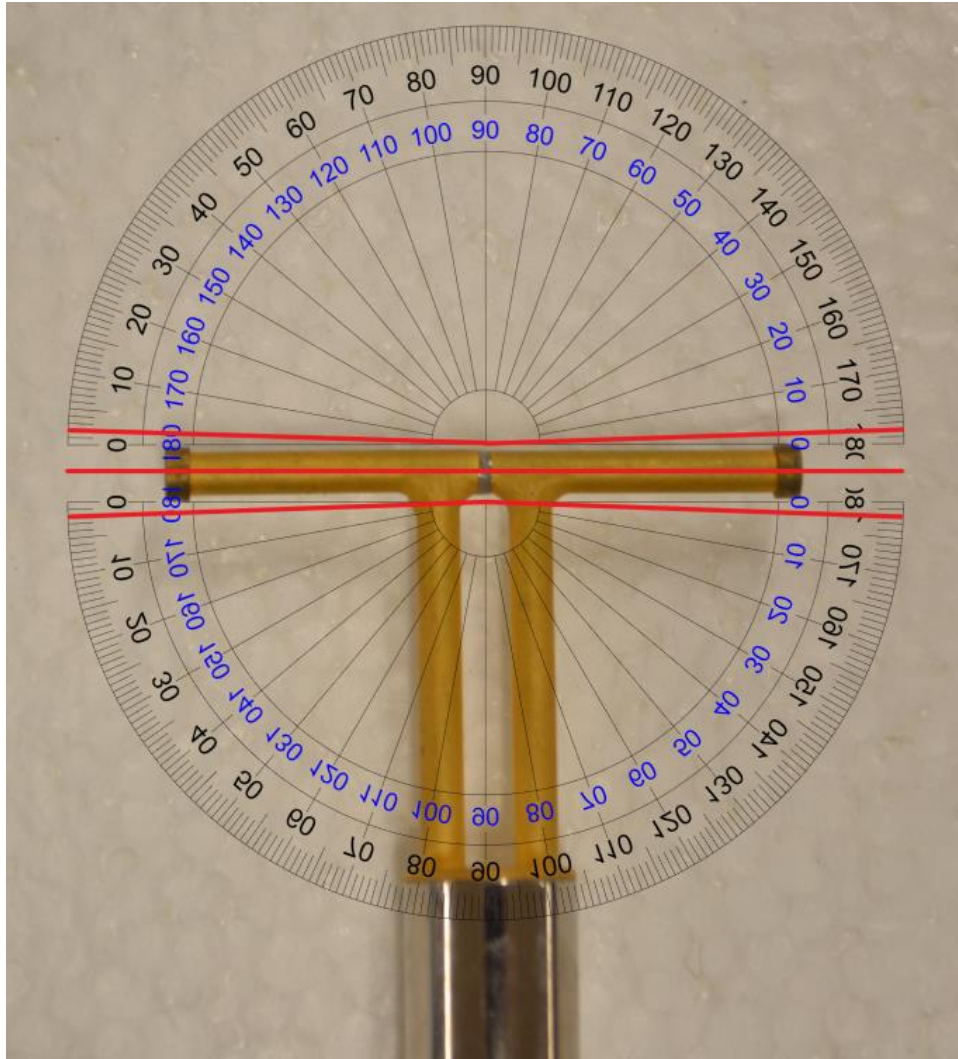
17) Impedance and Return/Loss



- Return/Loss is greater than the -20 dB cutoff and Impedance is within 5 Ω of previous value.

Dipole Impedance Measurement

18) Dipole Arms



- The center red line indicates that the arms of the dipole fall within $\pm 2^\circ$



Dipole Impedance Measurement

Equipment Location	Equipment Name	Model Name	Date of Verification
UL Verification Services Inc. 47173 Benicia Street Fremont, CA 94538, U.S.A.	Dipole Antenna	D3500V2-1060	February 07, 2023

Number:	Check List:	Result:
1	Visual Inspection	Pass
2	Return/Loss and Impedance	Pass
3	Dipole Arms	Pass

Equipment List:	
Equipment Name:	Calibration Date:
R&S ZNLE6 Vector Network Analyzer	03/05/2024
ZV-Z135 Calibration Kit	03/27/2024

Dipole Impedance Measurement

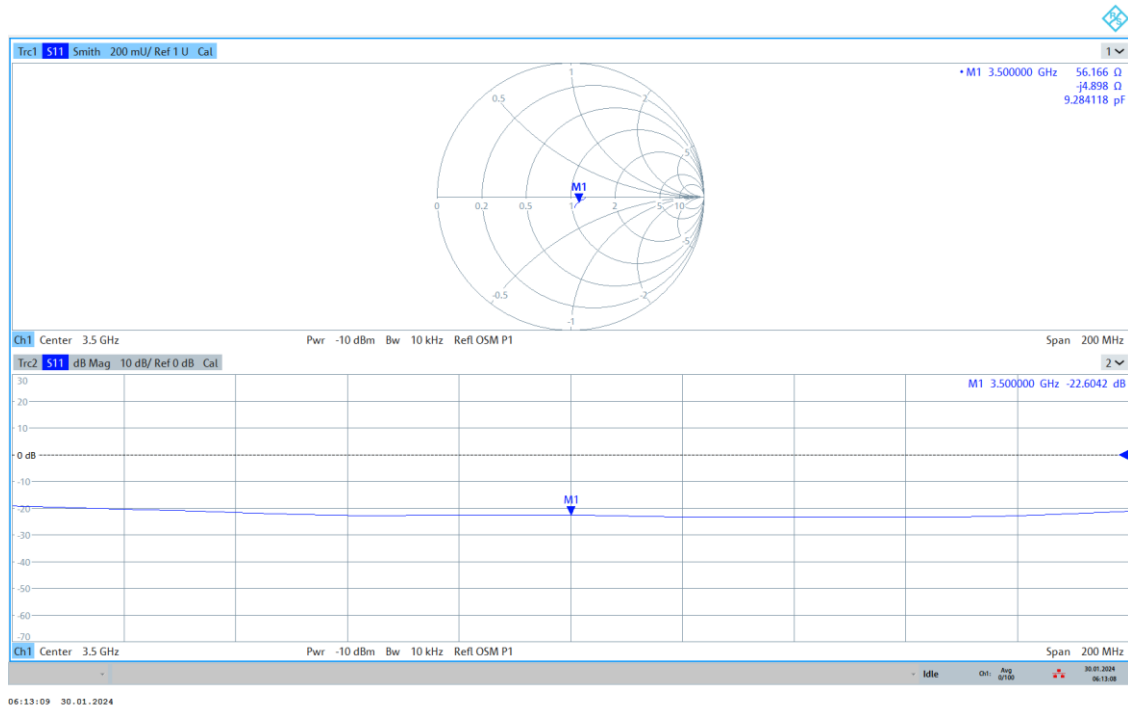
19) Photo of Dipole



- The connector of dipole contains no abnormalities.

Dipole Impedance Measurement

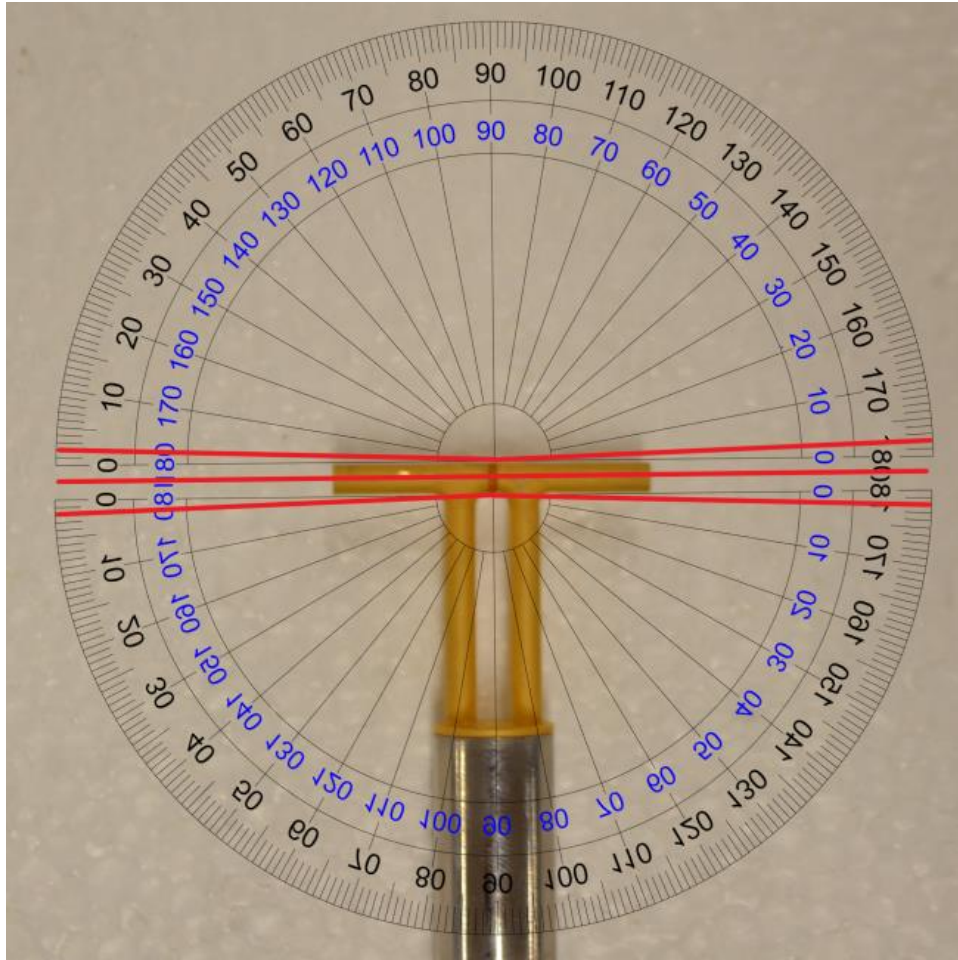
20) Impedance and Return/Loss



- Return/Loss is greater than the -20 dB cutoff and Impedance is within 5 Ω of previous value.

Dipole Impedance Measurement

21) Dipole Arms



- The center red line indicates that the arms of the dipole fall within $\pm 2^\circ$