



Shure ULXD

Measurements of Shure ULXD1&ULXD1LEMO3 UHF Antennas for Regulatory Approval

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1. Shure ULXD1&ULXD1LEMO3 – Body Pack Transmitter

1.1 Design Block Diagram and Reference Angles

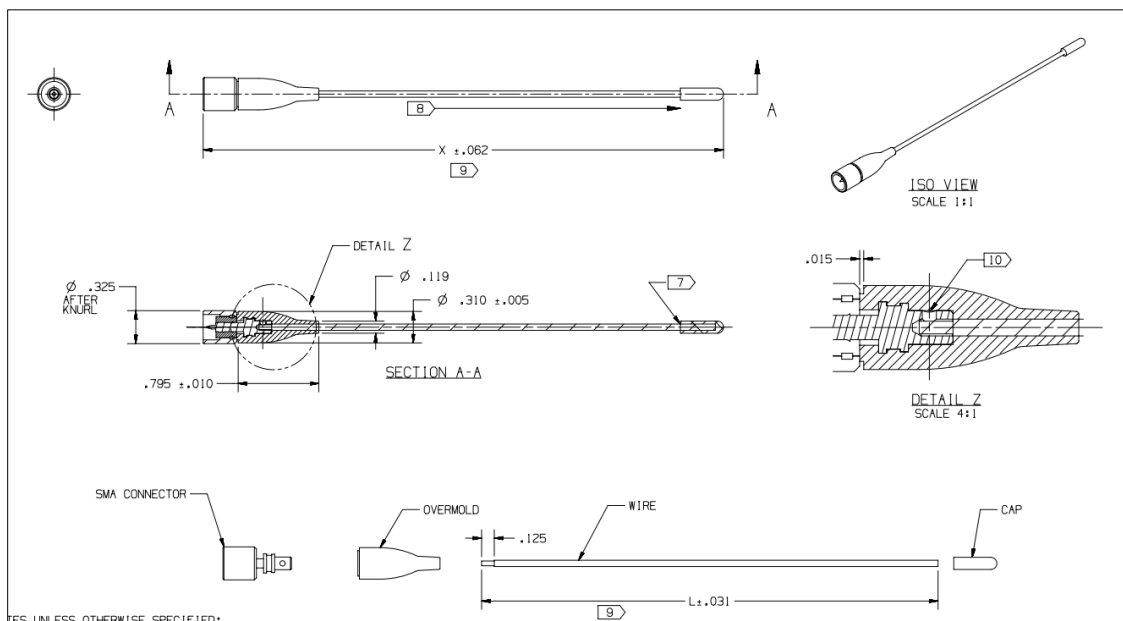
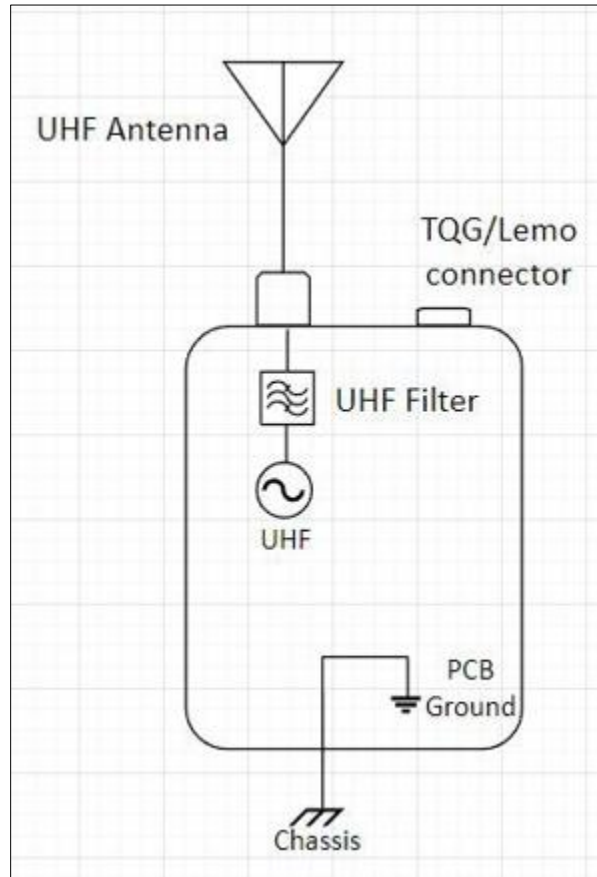


Figure 1 Shure ULXD1&ULXD1LEMO3 UHF Antenna Block Diagram

1.2 Test Setup

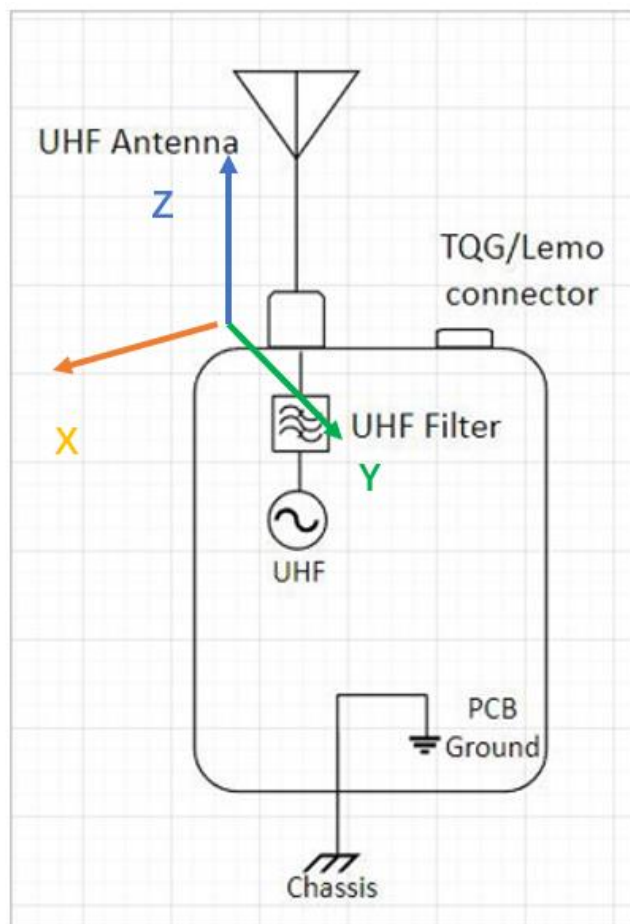


Figure 2 Shure ULXD1&ULXD1LEMO3 Reference Angles

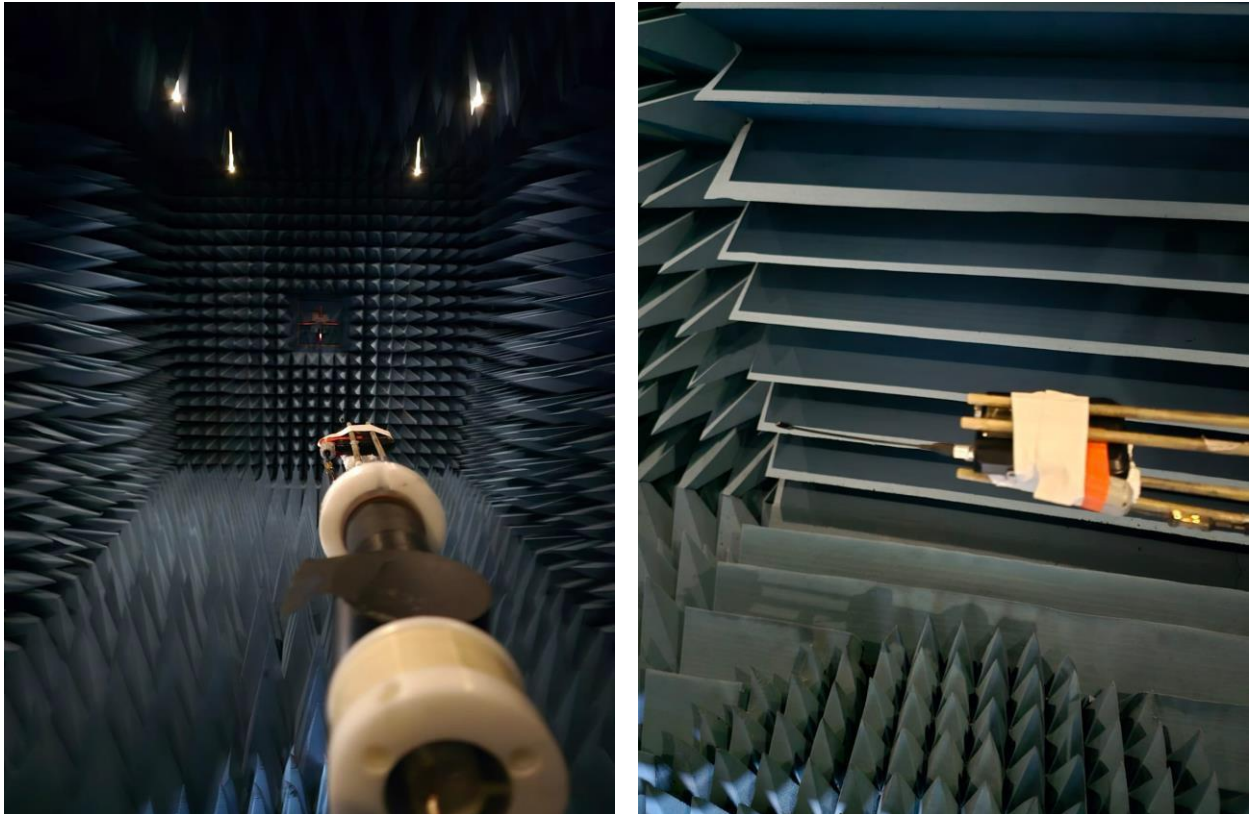


Figure 3 Photo of Shure ULXD1&ULXD1LEMO3 in Antenna Chamber

Supporting Test Equipment List and Software:

- E5071C ENA series Vector Network Analyzer 100kHz-8.5GHz
- ETS Model 2090 Multi Device Controller
- ETS Lindgren Model 3164-10 3164-10 Open Boundary Quad-Ridged Horn 400MHz-10GHz
- ETS Lindgren Model 3126-2450 Precision Sleeve Dipole
- ETS Lindgren Model 3122D-DB4 Tuned Dipole Antenna
- EMQuest Data Acquisition and Analysis Software

2. Test Results

2.1 ULXD1&ULXD1LEMO3 UHF Antenna (Dipole/Monopole Type)

2.1.1 ULXD1&ULXD1LEMO3 – Whip Antenna 95D9043

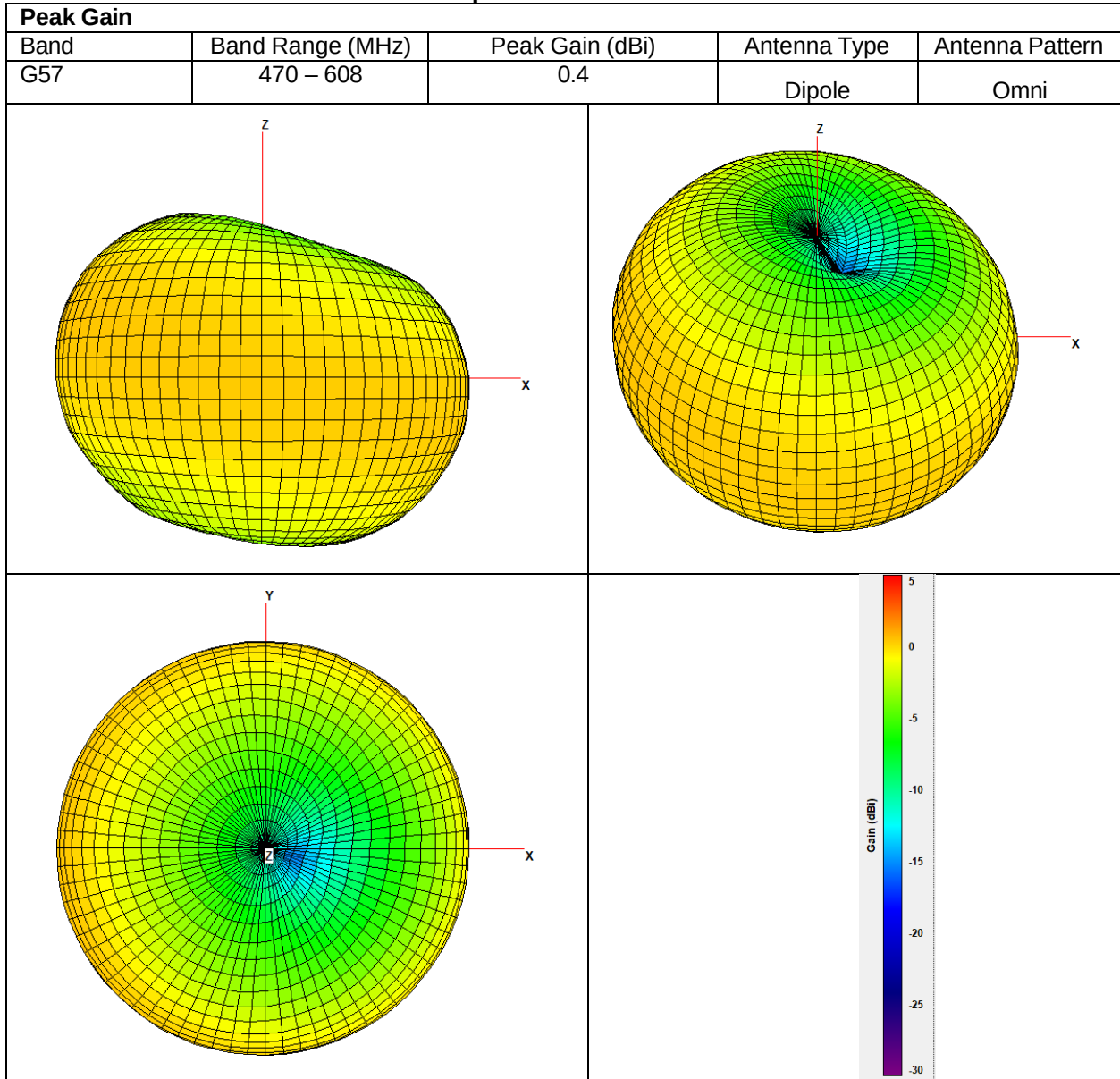


Figure 4 – ULXD1&ULXD1LEMO31&ULXD1&ULXD1LEMO31LEMO3 (95D9043) 3D radiation patterns and scale at max peak gain