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Supplementary Information: Direct-Write Spray Coating of a Full-Duplex Antenna for E-Textile Applications

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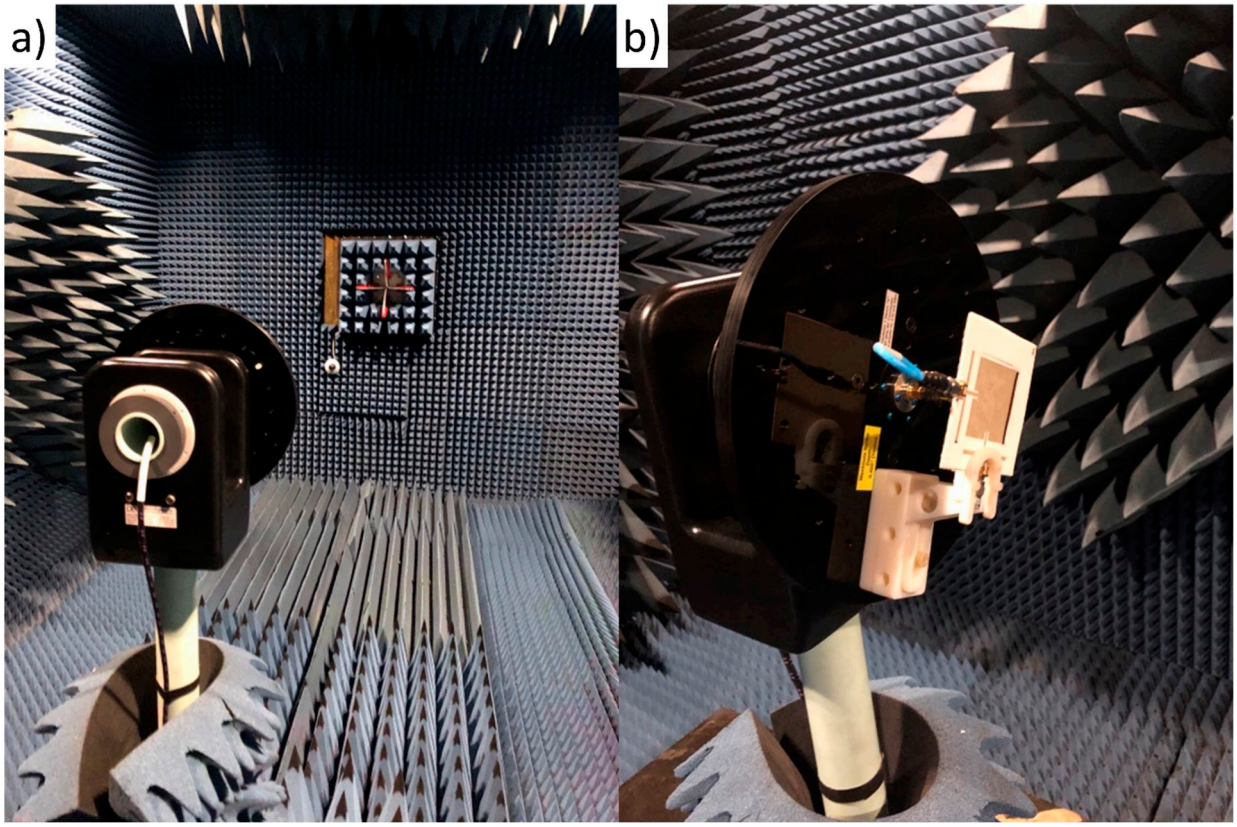

Figure S1. Images of radiation measurements in an anechoic chamber: (**a**) front view and (**b**) side view.

Figure S2 shows the schematic diagram of the setup for the antenna radiation test. A Diamond engineering D6050 positioner was used to take measurements, controlled using a Desktop Antenna Measurement System (DAMS) software. An ETS_Lindgren_3164-10 Horn antenna was employed as a reference antenna with known characteristics (gain, pattern, etc.). The distance between the transmitter and receiver antennas inside the anechoic chamber was set to 3.72 m. A four-port Keysight Agilent N5227B Performance Network Analyzer (PNA) was used for injecting energy into the antenna under test (AUT) with port 1 as an RF power transmitter and ports 2 and 4 as a receiver system. The D6050 positioner was also used to rotate the test antenna relative to the source antenna so as to measure the radiation pattern as a function of the angle.

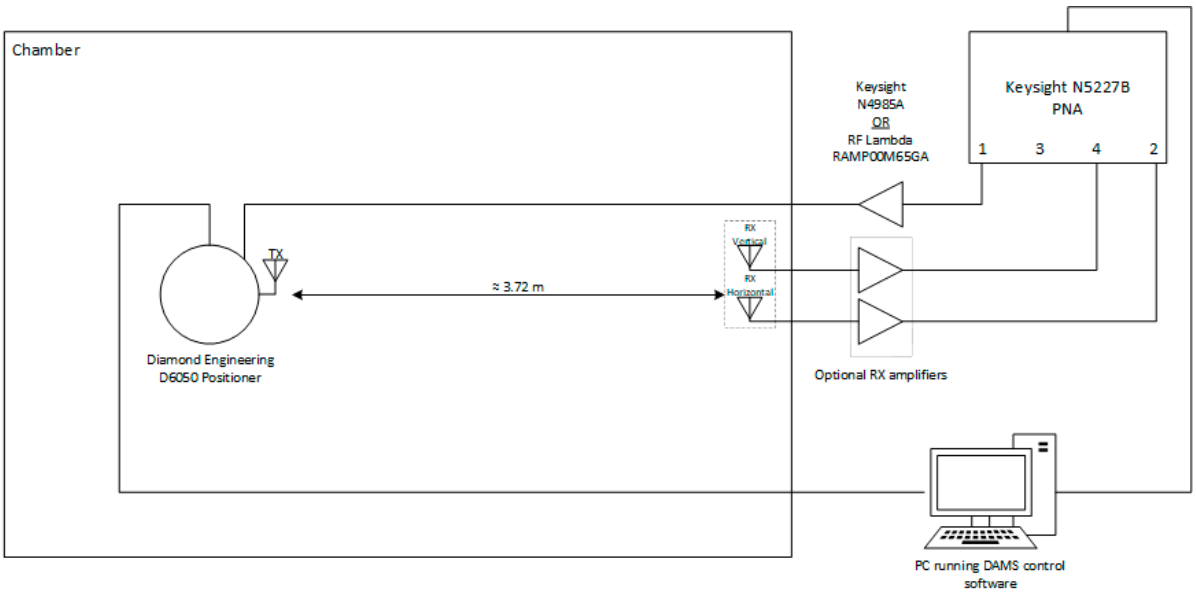

Figure S2. Schematic diagram of the experimental setup for the antenna radiation test.