Report of

Shielding Effectiveness
for

RadiaShield Technologies Corp.
RadiaShield® Fabric 3

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I certify that I am authorized to sign for the test facility and that all of the statements in this report and in the Exhibits attached hereto are true and correct to the best of my knowledge and belief:

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1 General Information

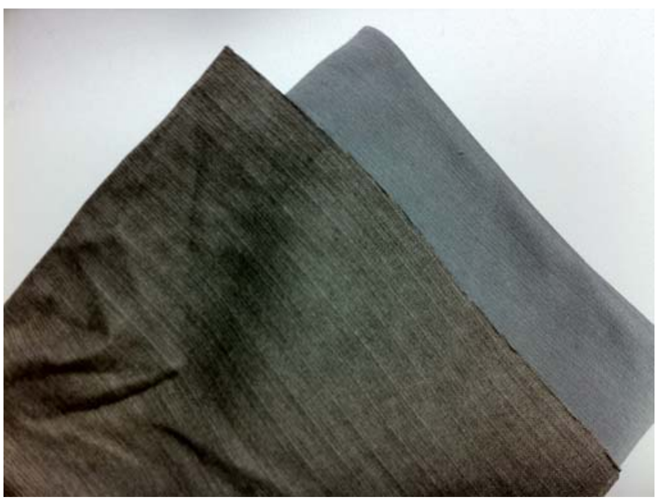
1.1 Characterization of Test Sample

The test samples used were received by US Tech on May 9th, 2011 in good physical condition.

1.2 Product Description

The Sample Under Test (SUT) is the RadiaShield Technologies Corp. RadiaShield® Fabric 3. The SUT is a textile which is used as a protective shield against RF radiation in consumer and professional applications.

Photograph of RadiaShield® Fabric 3:



2 Test Facility

Testing was performed at US Tech's test facility located in Alpharetta, Georgia. This test facility consists of a 24' L X 10' W X 10.5' H Lindgren Modular Shielded room lined with FT-100 ferrite panels, FAA-400 and EHP-18PCL Pyramid Absorbers. EUT power is run through steel conduit beneath the ground plane and is filtered by screen room quality filters located at the shielded enclosure power input panel. Available power is 120/220 VAC 50/60 Hz. The anechoic chamber has been verified to comply with the –0, +6 dB field uniformity requirement of IEC 61000-4-3.

US Tech is an FCC Recognized (Designation Number US5117) and NVLAP Accredited laboratory (Lab Code 200162-0).

2.1 Test Equipment

A list of test equipment used for these measurements is found in Table 1, following.

Table 1. Test Instruments and Accessories used

INSTRUMENT	MODEL NUMBER	MANUFACTURER	SERIAL NUMBER	DATE OF LAST CALIBRATION
Spectrum Analyzer	8593E	Hewlett Packard	3205A00124	10/18/10
Spectrum Analyzer	8566B	Hewlett Packard	2747A05665	10/29/10
PRE-AMPLIFIER	8449B	Hewlett Packard	3008A00480	10/21/10
PRE-AMPLIFIER	8447D	Hewlett Packard	2944A07436	9/7/10
Signal generator	8664A	Hewlett Packard	2333A00259	1/17/11
Network Analyzer	E5071C	Agilent Technologies	MY46110788	3/6/11
Power Amplifier	250LC-CE	Kalmus	8906-1	Not required
Wideband RF Am	7100CC	Kalmus	7571-1	N/A
Bilog Antenna	CBL6112	Chase	2023	N/A
HORN ANTENNA	3115	EMCO	9107-3723	N/A
HORN ANTENNA	SAS-571	AH System	2455-605	02/09/10 2yr.
LOG PERIODIC ANTENNA	3146	EMCO	9110-3236	9/18/09 2 yr.
BICONICAL ANTENNA	3110B	EMCO	9307-1431	4/29/11

Note: The calibration interval of the above test instruments is 12 months unless stated otherwise and all calibrations are traceable to NIST/USA.

3 Theory of Measurement

Shielding effectiveness is measured by transmitting a CW signal and measuring the level of the transmitted signal by a receiving antenna (or probe) with and without the shield, provided:

1. Nothing changes in the setup except for placing the shield.
2. The isolation between the two sides of the shield is larger than the anticipated shielding effectiveness (signals that could bypass the shield should be sufficiently minimized).

Then, shielding effectiveness is determined by:

SE (in dB) = 20 log (E1/E2)

Where E1 and E2 are the signals measured by the receiving antenna with and without the shield, using the same physical test setup for both measurements.

Since spectrum analyzers read power, shielding effectiveness is determined by the dB difference between the two shielded and unshielded power levels, read in dBm.

4 Test Configuration and Procedure

The objective is to measure shielding effectiveness of the SUT at different frequencies. Section 4.1 of this report outlines the procedures used to measure low frequency (10 MHz), and Section 4.2 of this report outlines the procedures used to measure higher frequencies.

4.1 Low Frequency (10 MHz)

Figures 1 and 2 following show the test configuration was used to measure shielding effectiveness of the SUT at 10 MHz.

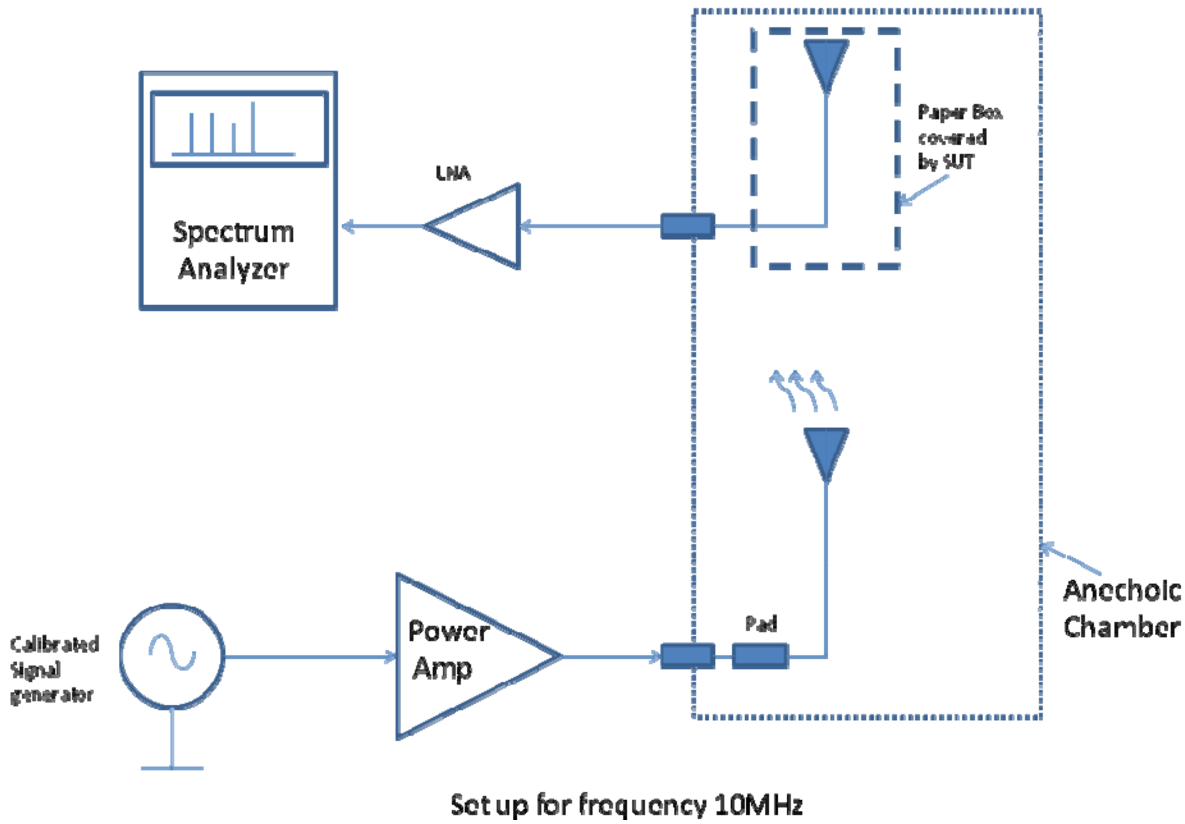


Figure 1. Low Frequency (10 MHz) Test Configuration Diagram

A calibrated signal generator was set to generate a 10 MHz CW signal which was then amplified for power to drive the transmitting rod antenna. The receiving antenna, placed inside a cardboard box, was set at 0.5 meter from the transmitting antenna polarized in the same polarization. The signal picked up from the receiving antenna then was amplified using a low noise amplifier and input to the spectrum analyzer. This level was recorded as L1 (dBm).

Next, the receiving antenna was shielded using the SUT, and placed at its exact original position as previously measured before shielding. The procedure outlined above was repeated and the shielded level read from the spectrum analyzer was recorded as L2 (dBm).

Shielding effectiveness was calculated as follows:

SE (dB) = L1 - L2 + any signal -generated level adjustment to increase level above the noise floor (making certain that the power amplifier did not enter compression).

The spectrum analyzer setting was as follows: Resolution Bandwidth = 300 Hz, Video Bandwidth = 1KHz, Span =20 KHz, dynamic range near 90 dB.

Figure 2. Low Frequency (10 MHz) Test Configuration Photographs

4.2 High Frequencies

The procedure used for the high frequency measurements required a high level of isolation between the transmitting and the receiving antennas. A sheet of aluminum with a thickness of 0.25 inches and an opening in its center to fit the SUT was placed at the entrance of the shielded room. The opening was covered with another sheet of aluminum with the same thickness. Both sheets of aluminum were tightly sealed (see Figure 4) to achieve about 60 dB of isolation, which proved to be adequate for this test. The following diagram shows the test configuration for high frequencies.

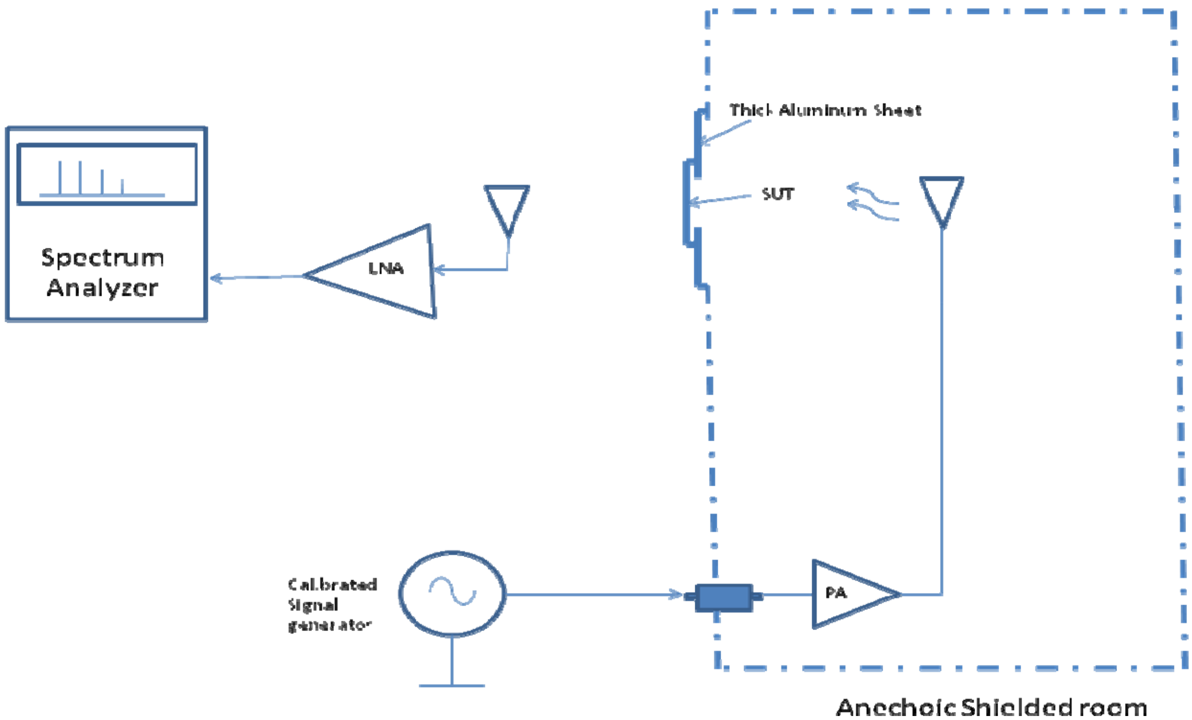


Figure 3. High Frequencies Test Configuration Diagram

Calibrated signal generators were used to provide the signals at different frequencies. Inside the anechoic chamber, power amplifiers were used to drive the antennas (positioned facing the opening or the SUT) to produce the field. The signals picked up from the receiving antenna, located outside the chamber and facing the opening or the SUT, were amplified and fed to the spectrum analyzer. The difference in the two measurements (one with the SUT and one with the opening) recorded by the spectrum analyzer was used to determine shielding effectiveness as calculated below:

SE (dB) = L1- L2 + any adjustment for increasing the signal generator output level to exceed the noise floor by at least 3 dB.

The spectrum analyzer setting was as follows: Resolution Bandwidth = 300 Hz, Video Bandwidth = 1KHz, Span =20 KHz, dynamic range near 90 dB.
Note: If ambient signals were present at the test frequencies, the test frequencies were shifted slightly (less than 10 KHz) to avoid overlapping.

Figure 5 is a photo of the shielded entrance and Figures 5 and 6 are photos showing the test setup at higher frequencies.

Figure 4. Shielded Entrance Photograph

Figure 5. High Frequencies (100 - 200 MHz) Test Configuration Photograph

Figure 6. High Frequencies (above 1 GHz) Test Configuration Photograph

5 Test Results

Table 2 below lists the shielding effectiveness results for the RadiaShield Technologies Corp. RadiaShield® Fabric 3. In our opinion, the SUT performs well in shielding Electromagnetic waves. The measurement uncertainty (with a 95% confidence level) for this test is ± 1 dB.

Table 2. Test Results

Frequency in MHz	Shielding effectiveness in dB	Shielding Effectiveness in percent
10	40	99.990000
100	40	99.999369
150	42	99.999369
200	51	99.999206
250	60	99.999900
400	59	99.999874
500	76	99.999997
600	53	99.999499
800	62	99.999937
900	57	99.999800
1000	59	99.999874
2000	41	99.992057
3000	49	99.998741
4000	49	99.998741
5000	43	99.994988
6000	41	99.992057
7000	44	99.996019
8000	40	99.990000