



Laboratory Test Results for SYB EMF Protection Products

At SYB, we take our product claims very seriously, and we want our customers like you to know that.

Please see the tables, below, for the detailed attenuation values from the tests, presented in decibels (dB) and, in some cases, percentages as well.

A decibel is a unit of measurement, often associated with audio volume, but that is also used to measure EMF attenuation, or shielding. A decibel is a ratio between two values: in this case, the power of the EM radiation before it hits the shield, and after.

However, precisely because decibels are a relatively obscure and confusing unit of measurement for consumers, when possible we have also posted the percentage of radiation that is attenuated, or shielded. The percentage value is quite simply that: the percentage of the wireless radiation that our products deflected during these tests.

Please note the actual amount of shielding provided by any EMF shielding product depends on the specific frequency of the wireless radiation you are trying to block, which is why we post results for different frequencies. As well, these tests were performed at different laboratories around the world at different times, so the way that the data is presented can vary. Learn more about what EMF testing is here.



SYB Boxer Briefs

The SYB Boxer Briefs are made with a very powerful shielding fabric made from **42% silver**, with 53% cotton and 5% nylon, providing shielding effectiveness of between 15 and 51.4 dB tested between 15MHz to 40GHz– *this includes 5G frequencies.*

This test was performed on April 30, 2020 per the GJB 5792-2006 standard for measuring methods for shielding effectiveness of planar electromagnetic shielding materials. The test was performed with an 8563EC Spectrum Analyzer and ZN1180L and ZN1170E Signal Generators.

Frequency	Shielding Effectiveness (dB)	Shielding Effectiveness (%)
15 MHz	26	99.7488%
30 MHz	51.4	99.9993%
100 MHz	43.1	99.9951%
450 MHz	39.1	99.9877%
950 MHz	35.8	99.9737%
1500 MHz	34.9	99.9676%
3 GHz	30.9	99.9187%
6 GHz	27.5	99.8222%
10 GHz	37	99.98%
18 GHz	31	99.9206%
26 GHz	31	99.9206%
40 GHz	28.8	99.8682%