

## Aegis Testing

Radiation Shield tests were conducted by three independent laboratories who measured actual radiation emissions in decibels (dB) for multiple products, with and without AegisGuard™ Radiation Shields installed. dB is the standard unit of measurement used to determine the absolute ratio, or comparison, of two voltage, power, gain, loss, or frequency signal levels.

In 1998, globally accepted test procedures developed by the American Society of Test and Measurement (ASTM D4935-99) were used, and custom shields were also made for radio modems to test the shielding effectiveness frequencies up to 2.6 GHz, which was higher than any wireless phone available at the time. The same procedures were used to test AegisGuard™ Wired Headset, (Life) Series and XP Radiation Shields at frequencies up to 2.6 GHz.

Identical tests were conducted by three independent laboratories with and without AegisGuard™ Radiation Shields installed. The following table chronologically presents the products tested using ASTM D4935-99 procedures. Beginning in 2002, each product was tested for not less than a continuous 8-hour period. The test period for AegisGuard™ LP Radiation Shields mixed with primer and applied to homes was one continuous year.

The following table chronologically presents the AegisGuard™ shielding products tested and the duration of each individual test.

Year	AegisGuard Product	Details
1998	AegisGuard™ Phone Radiation Shields	<i>Each product was tested for 8 hours</i> 31 analog and digital cell phones 2 cordless phones 4 radio modems
2000	AegisGuard™ Phone Radiation Shields <b>NOTE: Superseded by AegisGuard™ LS Radiation Shields in 2005</b> <i>1. Improved display and keypad shielded plastic transparency</i> <i>2. Highest emitting phone tested for 8 hours</i>	<i>Each product was tested for 8 hours</i> 31 analog and digital cell phones (1 tested for 8 hours) 2 cordless phones 4 radio modems
2001	AegisGuard™ Headset Radiation Shields	<i>Each headset was tested for 8 hours</i> 7 headsets with 15 cell phones
2002	AegisGuard™ XP Radiation Shields	<i>Each product was tested for 8 hours</i> 5 digital cell phones with and without headsets; with and without other AegisGuard shields 4 radio modems 1 handheld communicator, 1 portable computer
2004&2005	AegisGuard™ LS Radiation Shields (Spray) 3-month field test - 450 participants No skin or allergic reactions reported	<i>Each product was tested for 8 hours</i> <b>Wireless Products</b> 2 analog and 11 digital cell phones 4 cordless phones 1 satellite phone 2 handheld communicators

		<p>2 pagers  2 mobile radios  4 wireless headsets, including 2 Bluetooth  2 body wear communicators  2 GPS monitors  1 radio modem  1 automated toll collection transponder  2 Wi-Fi computer peripherals</p> <p><b>Wired Products</b>  1 office copy machine  1 commercial color copy machine  1 desktop computer  1 portable computer  3 hospital medical equipment  1 broadband router  1 data, fax and voice gateway  1 LAN, WAN, and MAN switch</p> <p><b>Other</b>  1 commercial &amp; 1 military aircraft cockpit and cabin  1 hospital patient bed fabric screen  1 welding apron  1 cap  1 - 8 x 10 ft. (2.44 x 3.05 m) room adjacent to power lines (4 walls, ceiling, door and window)  1 - 10 x 10 ft. (3.05 x 3.05 m) room adjacent to cell mast (4 walls, ceiling, door and 2 windows)</p>
2006	<p>AegisGuard™ LL Radiation Shields (Laundry Additive)  6-month field test - 100 participants  No skin or allergic reactions reported</p>	<p><i>Each washable fabric garment was tested for 24 hours. Garments tested were 100% cotton, polyester, wool, linen, silk, nylon, spandex, or combinations thereof. Total 40 garments:</i></p> <p>4 each: male, female, child and infant undergarments  4 each: shirts, blouses, pants, skirts and sweaters.  2 each: laboratory aprons and smocks  1 hospital patient bed fabric screen  1 cap</p>
2006	<p>AegisGuard™ LP Radiation Shield (Paint Primer)  12-month field test - 6 participants</p>	<p><i>6 homes were tested for a continuous 1-year period from September, 2005 through August, 2006. AegisGuard™ LS was used to shield windows.</i></p> <p>2 homes in Germany  2 homes in Japan  2 homes in United States</p>

<b>AegisGuard™ LL Radiation Shields Specifications</b>		
<b>Operating Frequency</b>	<b>Maximum Radiated Output Power Level Tested</b>	<b>Shielding Effectiveness</b>
5 Hz. to 100 Hz.	25.0 Watts	Up to 99.998%*
Up to 2.6 GHz.	25.0 Watts	Up to 99.996%*
Up To 7.2 GHz.	25.0 Watts	Up to 99.993%**
Up to 15 GHz.	25.0 Watts	Up to 99.992%**
Up to 30 GHz.	25.0 Watts	Up to 99.990%**
Storage Temperature	35° to 90° F. (2° to 32° C.)	
<p>* As per ASTM-4935-99.</p> <p>** Exceeds MIL-STD 285 and IEEE-STD-299.</p> <p>Exceeds Human RF exposure limit requirements as set forth in FCC OET Bulletin 65.</p>		