

ATIS AISP.4 Hearing Aid Compatibility Status of Working Group 4

Round Robin Progress / C63.19 Standard

February 16, 2005

AISP.4-HAC



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Agenda

- Round Robin Test Progress
 - Planar Dipole
 - Lab Correlation
- C63.19 Version 3.3
 - Stability with editorial comments
- Incubator Consensus
 - Probe Sensor
 - Calibrated reference / offset
 - Gauge blocks
- Future Inputs
 - AWF
 - New Technologies
 - T-coil Coupling Mode
- Conclusions and Summary

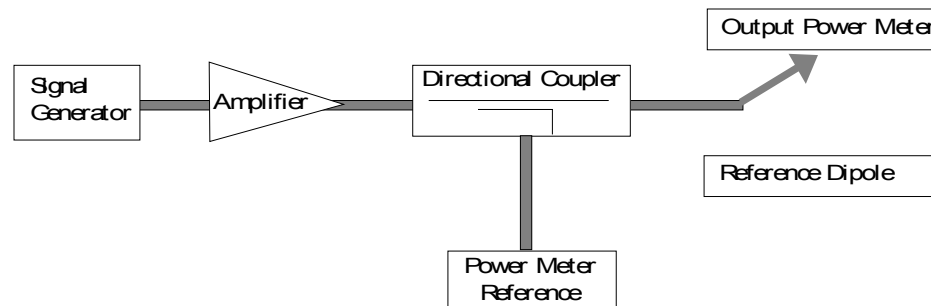
Round Robin Test Efforts

- Inconsistent Results
 - Mobiles were not the only variable
 - Standard interpretation
- Initiated Planar Dipole Test
 - Start with known entities
 - Identify anomalies
 - Retest
 - Validate

4.2.2.1.4 Procedure Using Planar Dipole (Compensation for RF Mismatch)

In order to establish a uniform inter-laboratory comparison, it is critical that the output power to the reference dipole is consistently characterized. As a result, signal level adjustment is required to compensate for inherent impedance mismatches between the test cable and the reference dipole

The following diagram is recommended:



Planar Results E-Field

	813.5 MHz	835 MHz	898.5 MHz	1880 MHz
Reference	224.8* 236.4**V/m	214.9* 232.3**V/m	213.2* 220.9**V/m	153.6* 149.3** V/m
Lab 1	194.2	188.0		144.9
%Ref.	-13.57% - - 17.85%	-12.5% -19.07		-5.7% -1.7%
Lab 2	209.2	197.3		142.0
%Ref.	-6.89% -11.57%	-8.2% -15.07		-7.5% -4.9%
Lab 3	216.9	188.3	188.9	129.5
%Ref.	-3.47% -8.25%	12.4% -18.96	-11.4% -14.49%	-18.3% -16.0%
Lab 4	216.1	196.2	193.6	142.2
%Ref.	-3.82% -8.59%	-8.7% -15.54%	-9.1% -12.36%	-7.4% -4.76%
Standard Deviation	10.5	5.0	3.3	6.9

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Planar Results H-Field

	813.5 MHz	835 MHz	898.5 MHz	1880 MHz
Reference	513.9* 522.6** mA/m	495.4* 516.4**mA/m	503.2* 500.5** mA/m	447.8* 403.5** mA/m
Lab 1	464.6	458.1		467.8
Ref %	-9.6% -11.1%	-7.5% -11.3%		+4.5% +15.9%
Lab 2	500	471.0		437.0
Ref %	-2.7% -4.3%	-4.9% -8.8%		-2.4% +8.3%
Lab 3	525	476	487	429
Ref %	+2.2% +0.5%	-3.9% -7.8%	-3.2% -2.7%	-4.2% +6.3%
Lab 4	559	491	513	457
Ref %	+8.8% +7.0%**	-0.9% - +4.9%**	+1.9% +2.5%**	+2.1% +13.3%**
Standard Deviation	39.9	13.6	18.4	17.8

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Round Robin Next Steps

- Complete C63.19
 - Planar dipole tests
 - Wireless device from each air interface
- Initiate C63.19
 - Start special T-coil testing using a Telephone Magnetic Field Simulator (TMFS)
 - Wireless device from each air interface

AISP.4-HAC's View of C63.19rd 3.3

- Stability with Editorial Comments
 - A lot has been accomplished, but remainder can be accomplished through editorial comments
- T-Coil Review Just Getting Underway
- Recommend FCC Approve rd 3.3 in Balloting

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Incubator Consensus

- Probe Sensor
- Calibrated Reference / Offset
- Gauge Blocks

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Future Inputs

- AWF
- New Technologies
- T-coil Coupling Mode
- Data modes
 - VoIP

Conclusions & Summary

- Complete Round Robin Test Efforts
 - Planar Dipole
 - Wireless Devices
 - FCC Participation
- Correlate Test Data
- Incubator Supports C63.19 Version 3.3 with Comments
- C63.19 Needs to Remain OPEN
 - Future changes
 - New Technologies
 - AWF
 - T- Coil test section