

CERTIFICATE OF COMPLIANCE (SAR EVALUATION)

APPLICANT NAME & ADDRESS:

LG ELECTRONICS, Inc.
Communication Terminal Research Lab
459-9, Kasan-dong, Keumchun-Ku
Seoul, KOREA 153-023
Attn: E.S. Park, Research Engineer

DATE & LOCATION OF TESTING:

Dates of Tests: April 1-3, 2002
Test Report S/N: SAR.220401148.BEJ
Test Site: PCTEST Lab, Columbia, MD USA

FCC ID:	BEJLX5350
APPLICANT:	LG ELECTRONICS, Inc.

EUT Type:	Dual-Band Analog/PCS Phone (AMPS/CDMA)
Tx Frequency:	824.04 – 848.97 MHz (AMPS) / 1851.25 – 1908.75 MHz (PCS CDMA)
Rx Frequency:	869.04 – 893.97 MHz (AMPS) / 1931.25 – 1988.75 MHz (PCS CDMA)
Max. RF Output Power:	0.405 W ERP AMPS (26.073 dBm) / 26.5 dBm Conducted 0.362 W EIRP PCS CDMA (25.581 dBm) / 24.5 dBm Conducted
Max. SAR Measurement:	0.983mW/g AMPS Head SAR; 0.856mW/g AMPS Body Sar; 1.380mW/g PCS CDMA Head SAR; 0.581mW/g PCS CDMA Body SAR
Trade Name/Model(s):	LG-LX5350
FCC Classification:	Licensed Portable Transmitter Held to Ear (PCE)
FCC Rule Part(s):	§2.1093; FCC/OET Bulletin 65 Supplement C [July 2001]
Application Type:	Certification
Test Device Serial No.:	<i>identical</i> prototype

This wireless portable device has been shown to be capable of compliance for localized specific absorption rate (SAR) for uncontrolled environment/general population exposure limits specified in ANSI/IEEE Std. C95.1-1992 and had been tested in accordance with the measurement procedures specified in FCC/OET Bulletin 65 Supplement C (2001) and IEEE Std. 1528-200X (Draft 6.4, July 2001).

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

PCTEST certifies that no party to this application has been denied the FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. 862.


Randy Ortanez
President



220401147.BEJ

PCTEST™ SAR REPORT	PCTEST FCC CERTIFICATION REPORT			Reviewed by: Quality Manager
SAR Filename: SAR-220401148.BEJ	Test Dates: April 1-3, 2002	Phone Type: Dual-Band PCS	FCC ID: BEJLX5350	Page 1 of 14

12. SYSTEM VERIFICATION

Tissue Verification

Table 12.1 Simulated Tissue Verification [5]

MEASURED TISSUE PARAMETERS									
Date(s)	03/25/02	835MHz Brain		835MHz Muscle		1900MHz Brain		1900MHz Muscle	
Liquid Temperature (°C)	22.5	Target	Measured	Target	Measured	Target	Measured	Target	Measured
Dielectric Constant: ϵ		41.50	43.6	55.20	55.0	40.00	40.8	53.30	53.2
Conductivity: σ		0.900	0.87	0.970	0.99	1.400	1.44	1.520	1.53

Test System Validation

Prior to assessment, the system is verified to the $\pm 10\%$ of the specifications at 835MHz and 1900MHz by using the system validation kit(s). (Graphic Plots Attached)

Table 12.2 System Validation [5]

SYSTEM DIPOLE VALIDATION TARGET & MEASURED				
System Validation Kit: D-835V2, S/N: 406	835MHz Brain	Targeted SAR _{1g} (mW/g) 2.375	Measured SAR _{1g} (mW/g) 2.33	Deviation (%) - 3.6
System Validation Kit: D-1900V2, S/N: 502	1900MHz Brain	Targeted SAR _{1g} (mW/g) 9.925	Measured SAR _{1g} (mW/g) 10.2	Deviation (%) + 0.3

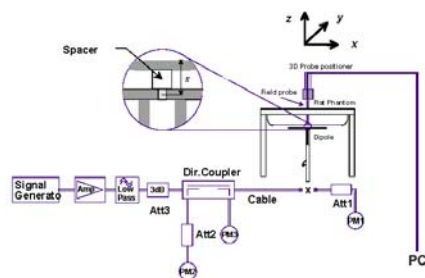


Figure 12.1 Dipole Validation Test Setup

PCTEST™ SAR REPORT	FCC CERTIFICATION REPORT			Reviewed by: Quality Manager
SAR Filename: SAR-220401148.BEJ	Test Dates: April 1-3, 2002	Phone Type: Dual-Band PCS	FCC ID: BEJLX5350	Page 2 of 14

13. SAR TEST DATA SUMMARY

See Measurement Result Data Pages

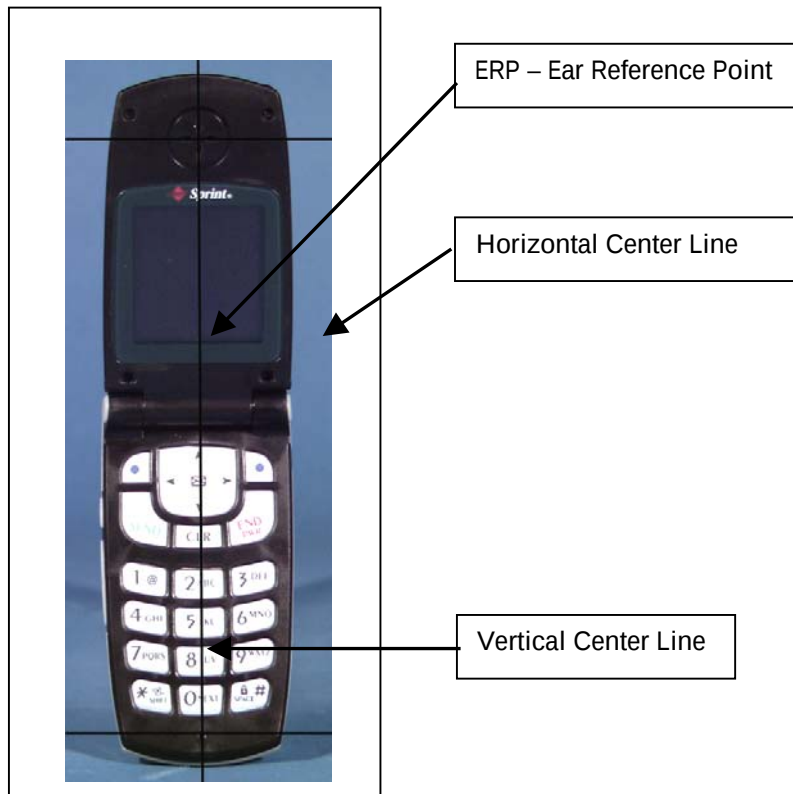
Procedures Used To Establish Test Signal

The handset was placed into simulated call mode (AMPS, Cellular CDMA & PCS CDMA modes) using manufacturers test codes. Such test signals offer a consistent means for testing SAR and are recommended for evaluating SAR [4]. When test modes are not available or inappropriate for testing a handset, the actual transmission is activated through a base station simulator or similar equipment. See data pages for actual procedure used in measurement.

Device Test Conditions

The handset is battery operated. Each SAR measurement was taken with a fully charged battery. In order to verify that the device was tested at full power, conducted output power measurements were performed before and after each SAR measurement to confirm the output power. If a conducted power deviation of more than 5% occurred, the test was repeated.

EUT Handset Reference Points



**Figure 13.1 Handset
Reference Points**

PCTEST™ SAR REPORT	PCTEST FCC CERTIFICATION REPORT			Reviewed by: Quality Manager
SAR Filename: SAR-220401148.BEJ	Test Dates: April 1-3, 2002	Phone Type: Dual-Band PCS	FCC ID: BEJLX5350	Page 3 of 14

SAR DATA SUMMARY

Mixture Type: 835MHz Brain
Dielectric Constant: 43.6
Conductivity: 0.87

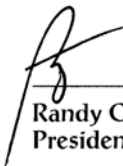
14.1 MEASUREMENT RESULTS (AMPS Right Head SAR – Touch)

FREQUENCY		Modulation	Begin / End POWER [‡]			Device Test Position	Antenna Position	SAR (W/kg)
MHz	Ch.		(dBm)		Battery			
824.04	0991	AMPS	26.5	26.5	Standard	Cheek / Touch	In	0.694
824.04	0991	AMPS	26.5	26.5	Standard	Cheek / Touch	Out	0.779
836.49	0383	AMPS	26.5	26.4	Standard	Cheek / Touch	In	0.961
836.49	0383	AMPS	26.5	26.5	Standard	Cheek / Touch	Out	0.575
848.97	0799	AMPS	26.5	26.3	Standard	Cheek / Touch	In	0.983
848.97	0799	AMPS	26.5	26.5	Standard	Cheek / Touch	Out	0.466
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						Brain 1.6 W/kg (mW/g) averaged over 1 gram		

NOTES:

- The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supp.C [July 2001].
- All modes of operation were investigated, and worst-case results are reported.
- Battery is fully charged for all readings.

- [‡]Power Measured
- | | | |
|---|---|--|
| ☒ Conducted | ☐ ERP | ☐ EIRP |
| ☒ DASY3 | ☐ IDX | ☐ |
| ☐ Phantom Configuration | ☐ Left Head | ☐ Flat Phantom |
| ☒ SAR Configuration | ☒ Head | ☒ Right Head |
| ☐ Test Signal Call Mode | ☐ Body | ☐ Hand |
| ☒ Manu. Test Codes | ☐ Base Station Simulator | |


Randy Ortanez
President

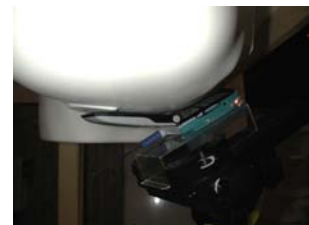


Figure 14.1 Right Head SAR Test Setup
-- Cheek / Touch Position --

PCTEST™ SAR REPORT	PCTEST FCC CERTIFICATION REPORT			Reviewed by: Quality Manager
SAR Filename: SAR-220401148.BEJ	Test Dates: April 1-3, 2002	Phone Type: Dual-Band PCS	FCC ID: BEJLX5350	Page 4 of 14

SAR DATA SUMMARY (Continued)

Mixture Type: 835MHz Brain

Dielectric Constant: 43.6

Conductivity: 0.87

14.2 MEASUREMENT RESULTS (AMPS Right Head SAR – Tilt)								
FREQUENCY		Modulation	Begin / End POWER [‡]			Device Test Position	Antenna Position	SAR (W/kg)
MHz	Ch.		(dBm)	Battery				
848.97	0799	AMPS	26.5	26.5	Standard	Ear / 15° Tilt	In	0.159
848.97	0799	AMPS	26.5	26.5	Standard	Ear / 15° Tilt	Out	0.0822
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						Brain 1.6 W/kg (mW/g) averaged over 1 gram		

NOTES:

- The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supp.C [July 2001].
- All modes of operation were investigated, and worst-case results are reported.
- Battery is fully charged for all readings.

- *Power Measured
4. SAR Measurement System
- Phantom Configuration
5. SAR Configuration
6. Test Signal Call Mode
- ☒ Conducted ☐ ERP ☐ EIRP
- ☒ DASY3 ☐ IDX ☐
- ☐ Left Head ☐ Flat Phantom ☒ Right Head
- ☒ Head ☐ Body ☐ Hand
- ☒ Manu. Test Codes ☐ Base Station Simulator

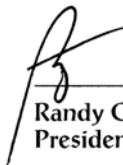

Randy Ortanez
President



Figure 14.2 Right Head SAR Test Setup
-- Ear / 15° Tilt Position --

PCTEST™ SAR REPORT	PCTEST FCC CERTIFICATION REPORT			Reviewed by: Quality Manager
SAR Filename: SAR-220401148.BEJ	Test Dates: April 1-3, 2002	Phone Type: Dual-Band PCS	FCC ID: BEJLX5350	Page 5 of 14

SAR DATA SUMMARY (Continued)

Mixture Type: 835MHz Brain

Dielectric Constant: 43.6

Conductivity: 0.87

14.3 MEASUREMENT RESULTS (AMPS Left Head SAR - Touch)								
FREQUENCY		Modulation	Begin / End POWER [‡]			Device Test Position	Antenna Position	SAR (W/kg)
MHz	Ch.		(dBm)		Battery			
824.04	0991	AMPS	26.5	26.5	Standard	Cheek / Touch	In	0.716
824.04	0991	AMPS	26.5	26.5	Standard	Cheek / Touch	Out	0.838
836.49	0383	AMPS	26.5	26.5	Standard	Cheek / Touch	In	0.965
836.49	0383	AMPS	26.5	26.5	Standard	Cheek / Touch	Out	0.562
848.97	0799	AMPS	26.5	26.5	Standard	Cheek / Touch	In	0.935
848.97	0799	AMPS	26.5	26.5	Standard	Cheek / Touch	Out	0.479
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						Brain 1.6 W/kg (mW/g) averaged over 1 gram		

NOTES:

- The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supp.C [July 2001].
- All modes of operation were investigated, and worst-case results are reported.
- Battery is fully charged for all readings.

- [‡]Power Measured
4. SAR Measurement System
- Phantom Configuration
5. SAR Configuration
6. Test Signal Call Mode
- ☒ Conducted ☐ ERP ☐ EIRP
- ☒ DASY3 ☐ IDX ☐
- ☒ Left Head ☐ Flat Phantom ☐ Right Head
- ☒ Head ☐ Body ☐ Hand
- ☒ Manu. Test Codes ☐ Base Station Simulator


Randy Ortanez
President



Figure 14.3 Left Head SAR Test Setup
-- Cheek / Touch Position --

PCTEST™ SAR REPORT	PCTEST FCC CERTIFICATION REPORT			Reviewed by: Quality Manager
SAR Filename: SAR-220401148.BEJ	Test Dates: April 1-3, 2002	Phone Type: Dual-Band PCS	FCC ID: BEJLX5350	Page 6 of 14

SAR DATA SUMMARY (Continued)

Mixture Type: 835MHz Brain

Dielectric Constant: 43.6

Conductivity: 0.87

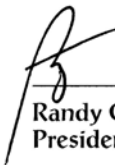
14.4 MEASUREMENT RESULTS (AMPS Left Head SAR – Tilt)

FREQUENCY		Modulation	Begin / End POWER [‡]			Device Test Position	Antenna Position	SAR (W/kg)
MHz	Ch.		(dBm)		Battery			
836.49	0383	AMPS	26.5	26.5	Standard	Ear / 15° Tilt	In	0.201
836.49	0383	AMPS	26.5	26.5	Standard	Ear / 15° Tilt	Out	0.112
ANSI / IEEE C95.1 1992 - SAFETY LIMIT						Brain		
Spatial Peak						1.6 W/kg (mW/g)		
Uncontrolled Exposure/General Population						averaged over 1 gram		

NOTES:

- The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supp.C [July 2001].
- All modes of operation were investigated, and worst-case results are reported.
- Battery is fully charged for all readings.

- | | | | |
|---------------------------|--|---|-------------------------------------|
| *Power Measured | ☒ Conducted | ☐ ERP | ☐ EIRP |
| 4. SAR Measurement System | ☒ DASY3 | ☐ IDX | ☐ |
| Phantom Configuration | ☒ Left Head | ☐ Flat Phantom | ☐ Right Head |
| 5. SAR Configuration | ☒ Head | ☐ Body | ☐ Hand |
| 6. Test Signal Call Mode | ☒ Manu. Test Codes | ☐ Base Station Simulator | |


Randy Ortanez
President

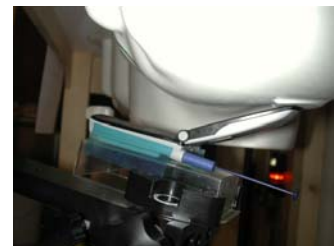


Figure 14.4 Left Head SAR Test Setup
-- Ear / 15° Tilt Position --

PCTEST™ SAR REPORT	PCTEST FCC CERTIFICATION REPORT		Reviewed by: Quality Manager	
SAR Filename: SAR-220401148.BEJ	Test Dates: April 1-3, 2002	Phone Type: Dual-Band PCS	FCC ID: BEJLX5350	Page 7 of 14

SAR DATA SUMMARY (Continued)

Mixture Type: 1900MHz Brain
Dielectric Constant: 40.8
Conductivity: 1.44

14.6 MEASUREMENT RESULTS (PCS CDMA Right Head SAR – Touch)

FREQUENCY		Modulation	Begin / End POWER [‡]			Device Test Position	Antenna Position	SAR (W/kg)
MHz	Ch.		(dBm)		Battery			
1851.25	0025	CDMA	24.5	24.5	Standard	Cheek / Touch	In	1.19
1851.25	0025	CDMA	24.5	24.5	Standard	Cheek / Touch	Out	0.394
1880.00	0600	CDMA	24.5	24.5	Standard	Cheek / Touch	In	0.945
1880.00	0600	CDMA	24.5	24.5	Standard	Cheek / Touch	Out	0.311
1908.75	1175	CDMA	24.5	24.5	Standard	Cheek / Touch	In	0.707
1908.75	1175	CDMA	24.5	24.5	Standard	Cheek / Touch	Out	0.314
ANSI / IEEE C95.1 1992 - SAFETY LIMIT						Brain 1.6 W/kg (mW/g) averaged over 1 gram		
Spatial Peak								
Uncontrolled Exposure/General Population								

NOTES:

- The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supp.C [July 2001].
- All modes of operation were investigated, and worst-case results are reported.
- Battery is fully charged for all readings.

- [‡]Power Measured
- | | | |
|--|---|--|
| ☒ Conducted | ☐ ERP | ☐ EIRP |
| ☒ DASY3 | ☐ IDX | ☐ |
| ☐ Left Head | ☐ Flat Phantom | ☒ Right Head |
| ☒ Head | ☐ Body | ☐ Hand |
| ☒ Manu. Test Codes | ☐ Base Station Simulator | |
4. SAR Measurement System Phantom Configuration
5. SAR Configuration
6. Test Signal Call Mode


Randy Ortanez
President



Figure 14.6 Right Head SAR Test Setup
-- Cheek / Touch Position --

PCTEST™ SAR REPORT	FCC CERTIFICATION REPORT		Reviewed by: Quality Manager	
SAR Filename: SAR-220401148.BEJ	Test Dates: April 1-3, 2002	Phone Type: Dual-Band PCS	FCC ID: BEJLX5350	Page 8 of 14

SAR DATA SUMMARY (Continued)

Mixture Type: 1900MHz Brain

Dielectric Constant: 40.8

Conductivity: 1.44

14.7 MEASUREMENT RESULTS (PCS CDMA Right Head SAR – Tilt)								
FREQUENCY		Modulation	Begin / End POWER [‡]			Device Test Position	Antenna Position	SAR (W/kg)
MHz	Ch.		(dBm)	Battery				
1851.25	0025	CDMA	24.5	24.5	Standard	Ear / 15° Tilt	In	0.371
1851.25	0025	CDMA	24.5	24.5	Standard	Ear / 15° Tilt	Out	0.196
ANSI / IEEE C95.1 1992 - SAFETY LIMIT						Brain		
Spatial Peak						1.6 W/kg (mW/g)		
Uncontrolled Exposure/General Population						averaged over 1 gram		

NOTES:

- The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supp.C [July 2001].
- All modes of operation were investigated, and worst-case results are reported.
- Battery is fully charged for all readings.

- *Power Measured ☒ Conducted ☐ ERP ☐ EIRP
4. SAR Measurement System ☒ DASY3 ☐ IDX ☐
- Phantom Configuration ☐ Left Head ☐ Flat Phantom ☒ Right Head
5. SAR Configuration ☒ Head ☐ Body ☐ Hand
6. Test Signal Call Mode ☒ Manu. Test Codes ☐ Base Station Simulator

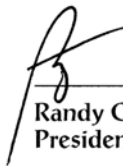

Randy Ortanez
President



Figure 14.7 Right Head SAR Test Setup -- Ear / Tilt Position --

PCTEST™ SAR REPORT	PCTEST FCC CERTIFICATION REPORT			Reviewed by: Quality Manager
SAR Filename: SAR-220401148.BEJ	Test Dates: April 1-3, 2002	Phone Type: Dual-Band PCS	FCC ID: BEJLX5350	Page 9 of 14

SAR DATA SUMMARY (Continued)

Mixture Type: 1900MHz Brain
Dielectric Constant: 40.8
Conductivity: 1.44

14.8 MEASUREMENT RESULTS (PCS CDMA Left Head SAR – Touch)

FREQUENCY		Modulation	Begin / End POWER [†]			Device Test Position	Antenna Position	SAR (W/kg)
MHz	Ch.		(dBm)		Battery			
1851.25	0025	CDMA	24.5	24.5	Standard	Cheek / Touch	In	1.27
1851.25	0025	CDMA	24.5	24.5	Standard	Cheek / Touch	Out	0.481
1880.00	0600	CDMA	24.5	24.5	Standard	Cheek / Touch	In	1.38
1880.00	0600	CDMA	24.5	24.5	Standard	Cheek / Touch	Out	0.456
1908.75	1175	CDMA	24.5	24.5	Standard	Cheek / Touch	In	1.01
1908.75	1175	CDMA	24.5	24.5	Standard	Cheek / Touch	Out	0.448
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						Brain 1.6 W/kg (mW/g) averaged over 1 gram		

NOTES:

- The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supp.C [July 2001].
- All modes of operation were investigated, and worst-case results are reported.
- Battery is fully charged for all readings.

- [‡]Power Measured
- | | | |
|--|---|-------------------------------------|
| ☒ Conducted | ☐ ERP | ☐ EIRP |
| ☒ DASY3 | ☐ IDX | ☐ |
| ☒ Left Head | ☐ Flat Phantom | ☐ Right Head |
| ☒ Head | ☐ Body | ☐ Hand |
| ☒ Manu. Test Codes | ☐ Base Station Simulator | |
4. SAR Measurement System Phantom Configuration
5. SAR Configuration
6. Test Signal Call Mode


Randy Ortanez
President



Figure 14.8 Left Head SAR Test Setup
-- Cheek / Touch Position --

PCTEST™ SAR REPORT	PCTEST FCC CERTIFICATION REPORT			Reviewed by: Quality Manager
SAR Filename: SAR-220401148.BEJ	Test Dates: April 1-3, 2002	Phone Type: Dual-Band PCS	FCC ID: BEJLX5350	Page 10 of 14

SAR DATA SUMMARY (Continued)

Mixture Type: 1900MHz Brain

Dielectric Constant: 40.8

Conductivity: 1.44

14.9 MEASUREMENT RESULTS (PCS CDMA Left Head SAR – Tilt)

FREQUENCY		Modulation	Begin / End POWER [‡]			Device Test Position	Antenna Position	SAR (W/kg)
MHz	Ch.		(dBm)		Battery			
1880.00	0600	CDMA	24.5	24.5	Standard	Ear / 15° Tilt	In	0.337
1880.00	0600	CDMA	24.5	24.5	Standard	Ear / 15° Tilt	Out	0.248
ANSI / IEEE C95.1 1992 - SAFETY LIMIT						Brain		
Spatial Peak						1.6 W/kg (mW/g)		
Uncontrolled Exposure/General Population						averaged over 1 gram		

NOTES:

- The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supp.C [July 2001].
- All modes of operation were investigated, and worst-case results are reported.
- Battery is fully charged for all readings.

- *Power Measured ☒ Conducted ☐ ERP ☐ EIRP
4. SAR Measurement System ☒ DASY3 ☐ IDX ☐
- Phantom Configuration ☒ Left Head ☐ Flat Phantom ☐ Right Head
5. SAR Configuration ☒ Head ☐ Body ☐ Hand
6. Test Signal Call Mode ☒ Manu. Test Codes ☐ Base Station Simulator


Randy Ortanez
President

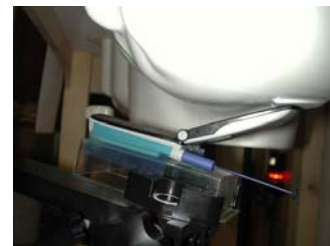


Figure 14.9 Left Head SAR Test Setup
-- Ear / Tilt Position --

PCTEST™ SAR REPORT	PCTEST FCC CERTIFICATION REPORT			Reviewed by: Quality Manager
SAR Filename: SAR-220401148.BEJ	Test Dates: April 1-3, 2002	Phone Type: Dual-Band PCS	FCC ID: BEJLX5350	Page 11 of 14

SAR DATA SUMMARY (Continued)

Mixture Type: 835MHz Muscle

Dielectric Constant: 55.2

Conductivity: 0.99

14.10 MEASUREMENT RESULTS (AMPS Body SAR w/o Holster)

FREQUENCY		Modulation	Begin / End POWER [†]			Separation Distance (cm) ^{††}	Antenna Position	SAR (W/kg)
MHz	Ch.		(dBm)		Battery			
824.04	0991	AMPS	26.5	26.5	Standard	1.5 [w/o Holster]	In	0.495
824.04	0991	AMPS	26.5	26.5	Standard	1.5 [w/o Holster]	Out	0.578
836.49	0383	AMPS	26.5	26.5	Standard	1.5 [w/o Holster]	In	0.449
836.49	0383	AMPS	26.5	26.5	Standard	1.5 [w/o Holster]	Out	0.832
848.97	0799	AMPS	26.5	26.5	Standard	1.5 [w/o Holster]	In	0.856
848.97	0799	AMPS	26.5	26.5	Standard	1.5 [w/o Holster]	Out	0.403
ANSI / IEEE C95.1 1992 - SAFETY LIMIT						Muscle 1.6 W/kg (mW/g) averaged over 1 gram		
Spatial Peak								
Uncontrolled Exposure/General Population								

NOTES:

- The test data reported are the worst-case SAR value with the antenna-head position set in atypical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supp.C [July 2001].
 - All modes of operation were investigated, and worst-case results are reported.
 - Battery is fully charged for all readings.
- *Power Measured ☒ Conducted ☐ ERP ☐ EIRP
4. SAR Measurement System ☒ DASY3 ☐ IDX ☐
- Phantom Configuration ☐ Left Head ☒ Flat Phantom ☐ Right Head
5. SAR Configuration ☐ Head ☒ Body ☐ Hand
6. Test Signal Call Mode ☒ Manu. Test Codes ☐ Base Station Simulator
7. **Test Configuration ☐ With Holster ☒ Without Holster
8. Both sides of the phone were tested and the worst-case side is reported.


Randy Ortañez
President



Figure 14.10 Body SAR Test Setup
-- w/o Holster --

PCTEST™ SAR REPORT	PCTEST FCC CERTIFICATION REPORT			Reviewed by: Quality Manager
SAR Filename: SAR-220401148.BEJ	Test Dates: April 1-3, 2002	Phone Type: Dual-Band PCS	FCC ID: BEJLX5350	Page 12 of 14

SAR DATA SUMMARY (Continued)

Mixture Type: 1900MHz Muscle

Dielectric Constant: 53.3

Conductivity: 1.53

14.12 MEASUREMENT RESULTS (PCS CDMA Body SAR w/o Holster)

FREQUENCY		Modulation	Begin / End POWER [‡]			Separation Distance (cm) ^{††}	Antenna Position	SAR (W/kg)
MHz	Ch.		(dBm)		Battery			
1851.25	0025	PCS CDMA	24.5	24.5	Standard	1.5 [w/o Holster]	In	0.278
1851.25	0025	PCS CDMA	24.5	24.5	Standard	1.5 [w/o Holster]	Out	0.444
1880.00	0600	PCS CDMA	24.5	24.5	Standard	1.5 [w/o Holster]	In	0.322
1880.00	0600	PCS CDMA	24.5	24.5	Standard	1.5 [w/o Holster]	Out	0.328
1908.75	1175	PCS CDMA	24.5	24.5	Standard	1.5 [w/o Holster]	In	0.250
1908.75	1175	PCS CDMA	24.5	24.5	Standard	1.5 [w/o Holster]	Out	0.581
ANSI / IEEE C95.1 1992 - SAFETY LIMIT						Muscle 1.6 W/kg (mW/g) averaged over 1 gram		
Spatial Peak								
Uncontrolled Exposure/General Population								

NOTES:

- The test data reported are the worst-case SAR value with the antenna-head position set in atypical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supp.C [July 2001].
 - All modes of operation were investigated, and worst-case results are reported.
 - Battery is fully charged for all readings.
- *Power Measured ☒ Conducted ☐ ERP ☐ EIRP
4. SAR Measurement System ☒ DASY3 ☐ IDX ☐
- Phantom Configuration ☐ Left Head ☒ Flat Phantom ☐ Right Head
5. SAR Configuration ☐ Head ☒ Body ☐ Hand
6. Test Signal Call Mode ☒ Manu. Test Codes ☐ Base Station Simulator
7. **Test Configuration ☐ With Holster ☒ Without Holster
8. Both sides of the phone were tested and the worst-case side is reported.


Randy Ortanez
President



Figure 14.12 Body SAR Test Setup
-- w/o Holster --

PCTEST® SAR REPORT	PCTEST FCC CERTIFICATION REPORT		Reviewed by: Quality Manager	
SAR Filename: SAR-220401148.BEJ	Test Dates: April 1-3, 2002	Phone Type: Dual-Band PCS	FCC ID: BEJLX5350	Page 27 of 30

15. SAR TEST EQUIPMENT

Equipment Calibration

Table 15.1 Test Equipment Calibration

EQUIPMENT SPECIFICATIONS		
Type	Calibration Date	Serial Number
Stäubli Robot RX60L	February 2002	599131-01
Stäubli Robot Controller	February 2002	PCT592
Stäubli Teach Pendant (Joystick)	February 2002	3323-00161
Micron Computer, 450 MHz Pentium III, Windows NT	February 2002	PCT577
SPEAG EDC3	February 2002	321
SPEAG DAE3	February 2002	330
SPEAG E-Field Probe ET3DV6	February 2002	1560
SPEAG Dummy Probe	February 2002	PCT583
SPEAG SAM Twin Phantom V4.0	February 2002	PCT666
SPEAG Light Alignment Sensor	February 2002	205
SPEAG Validation Dipole D1900V2	February 2002	PCT613
Brain Equivalent Matter (835MHz)	April 2002	PCTBEM101
Brain Equivalent Matter (1900MHz)	April 2002	PCTBEM301
Muscle Equivalent Matter (835MHz)	April 2002	PCTMEM201
Muscle Equivalent Matter (1900MHz)	April 2002	PCTMEM401
Microwave Amp. Model: 5S1G4, (800MHz - 4.2GHz)	January 2002	22332
Gigatronics 8651A Power Meter	January 2002	1835299
HP-8648D (9kHz ~ 4GHz) Signal Generator	January 2002	PCT530
Amplifier Research 5S1G4 Power Amp	January 2002	PCT540
HP-8753E (30kHz ~ 3GHz) Network Analyzer	January 2002	PCT552
HP85070B Dielectric Probe Kit	January 2002	PCT501
Ambient Noise/Reflection, etc.	<12mW/kg/<3%of SAR	January 2002
		Anechoic Room PCT01

NOTE:

The E-field probe was calibrated by SPEAG, by temperature measurement procedure. Dipole Validation measurement is performed by PCTEST Lab. before each test. The brain simulating material is calibrated by PCTEST using the dielectric probe system and network analyzer to determine the conductivity and permittivity (dielectric constant) of the brain-equivalent material.

PCTEST™ SAR REPORT	FCC CERTIFICATION REPORT			Reviewed by: Quality Manager
SAR Filename: SAR-220401148.BEJ	Test Dates: April 1-3, 2002	Phone Type: Dual-Band PCS	FCC ID: BEJLX5350	Page 14 of 14

LGE FCC ID: BEJLX5350 -- FM Head SAR

SAM Phantom; Right Hand Section; Probe:ET3DV6 - SN1560; ConvF(6.78,6.78,6.78)

Med. Parameters 835 MHz Brain: $\sigma = 0.87$ mho/m $\epsilon_r = 43.6$ $\rho = 1.00$ g/cm³; Antenna Position -- In; Crest Factor 1.0

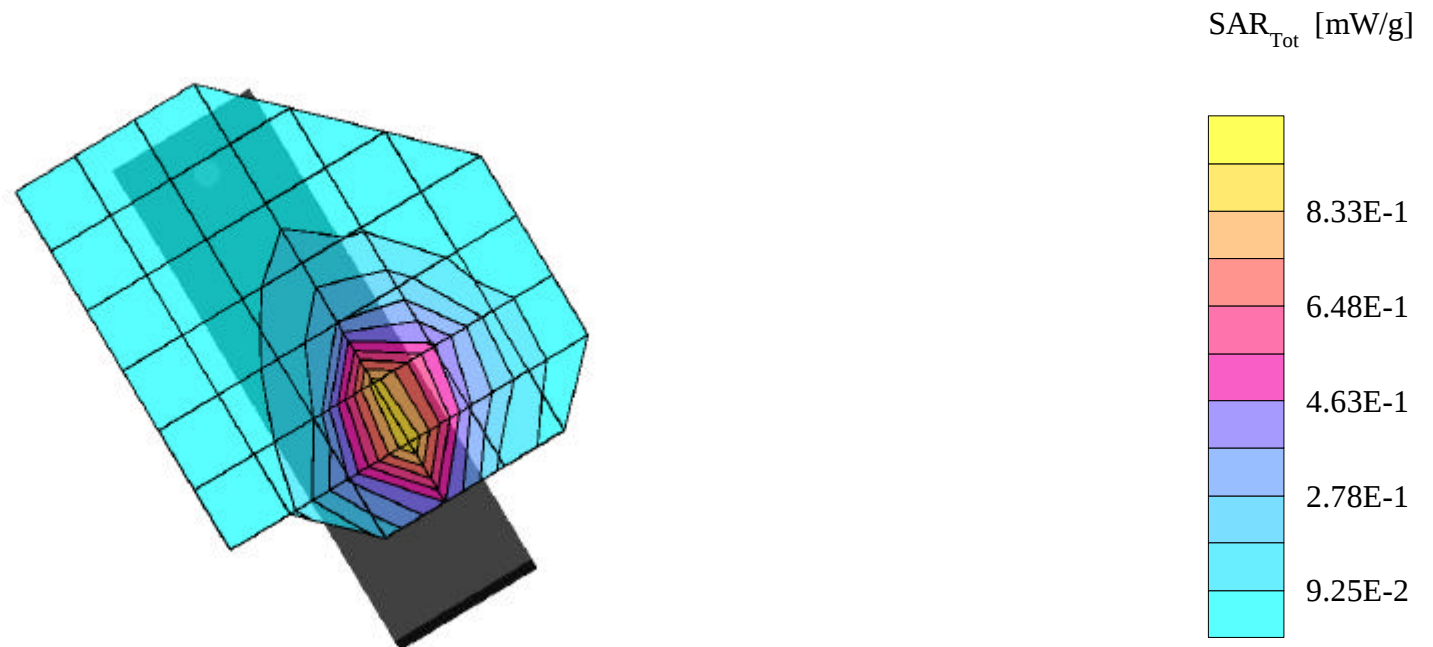
SAR (1g): 0.983 mW/g, SAR (10g): 0.633 mW/g

LGE DualBand Model: LG-LX5350

AMPS Mode, Ch.799 [848.97MHz]; Standard Battery; Flip = open; Ambient Temp. = 22.2°C / Meas. Tissue = 22.0°C

Conducted Power = 26.5dBm; Right Head SAR, Cheek/Touch position

Test Date -- 04/01/2002 [FCC/OET Bulletin 65 - Supplement C, July 2001]



LGE FCC ID: BEJLX5350 -- FM Head SAR

SAM Phantom; Right Hand Section; Probe:ET3DV6 - SN1560; ConvF(6.78,6.78,6.78)

Med. Parameters 835 MHz Brain: $\sigma = 0.87$ mho/m $\epsilon_r = 43.6$ $\rho = 1.00$ g/cm³; Antenna Position -- In; Crest Factor 1.0

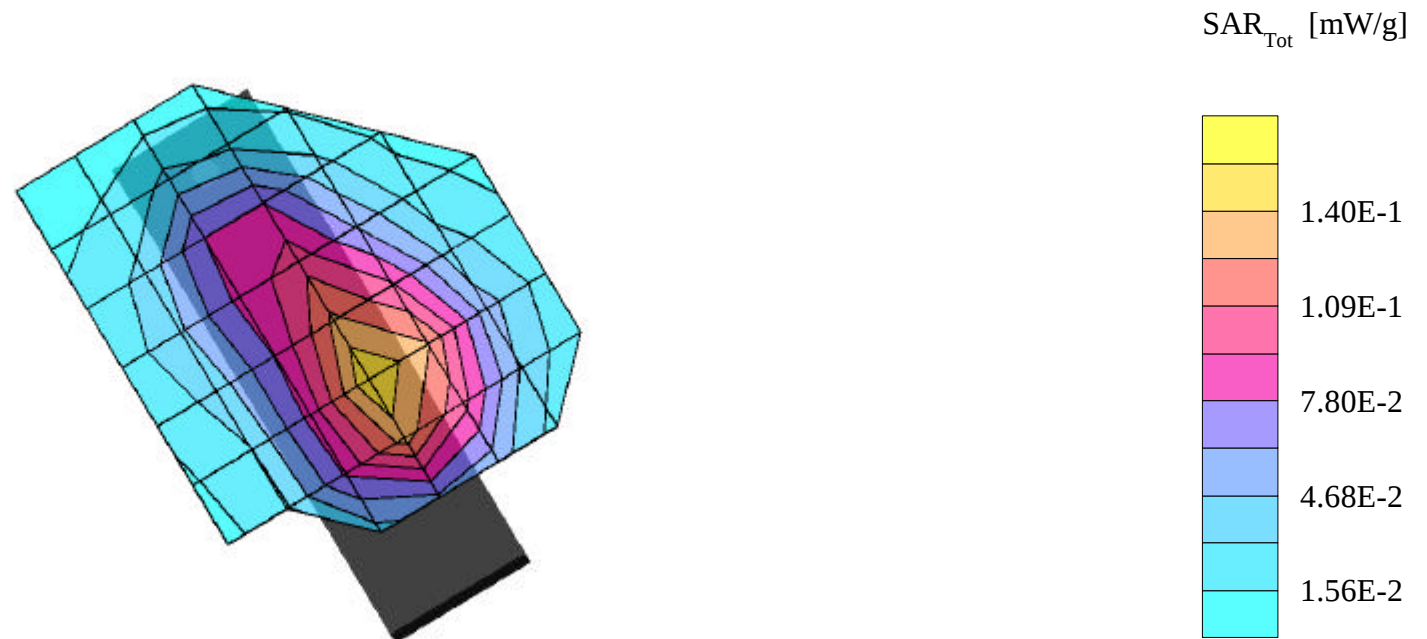
SAR (1g): 0.159 mW/g, SAR (10g): 0.114 mW/g

LGE DualBand Model: LG-LX5350

AMPS Mode, Ch.799 [848.97MHz]; Standard Battery; Flip = open; Ambient; Temp. = 22.2°C / Meas. Tissue = 22.0°C

Conducted Power = 26.5dBm; Right Head SAR, Ear/15 degree Tilt position

Test Date -- 04/01/2002 [FCC/OET Bulletin 65 - Supplement C, July 2001]



LGE FCC ID: BEJLX5350 -- FM Head SAR

SAM Phantom; Left Hand Section; Probe:ET3DV6 - SN1560; ConvF(6.78,6.78,6.78)

Med. Parameters 835 MHz Brain: $\sigma = 0.87$ mho/m $\epsilon_r = 43.6$ $\rho = 1.00$ g/cm³; Antenna Position -- In; Crest Factor 1.0

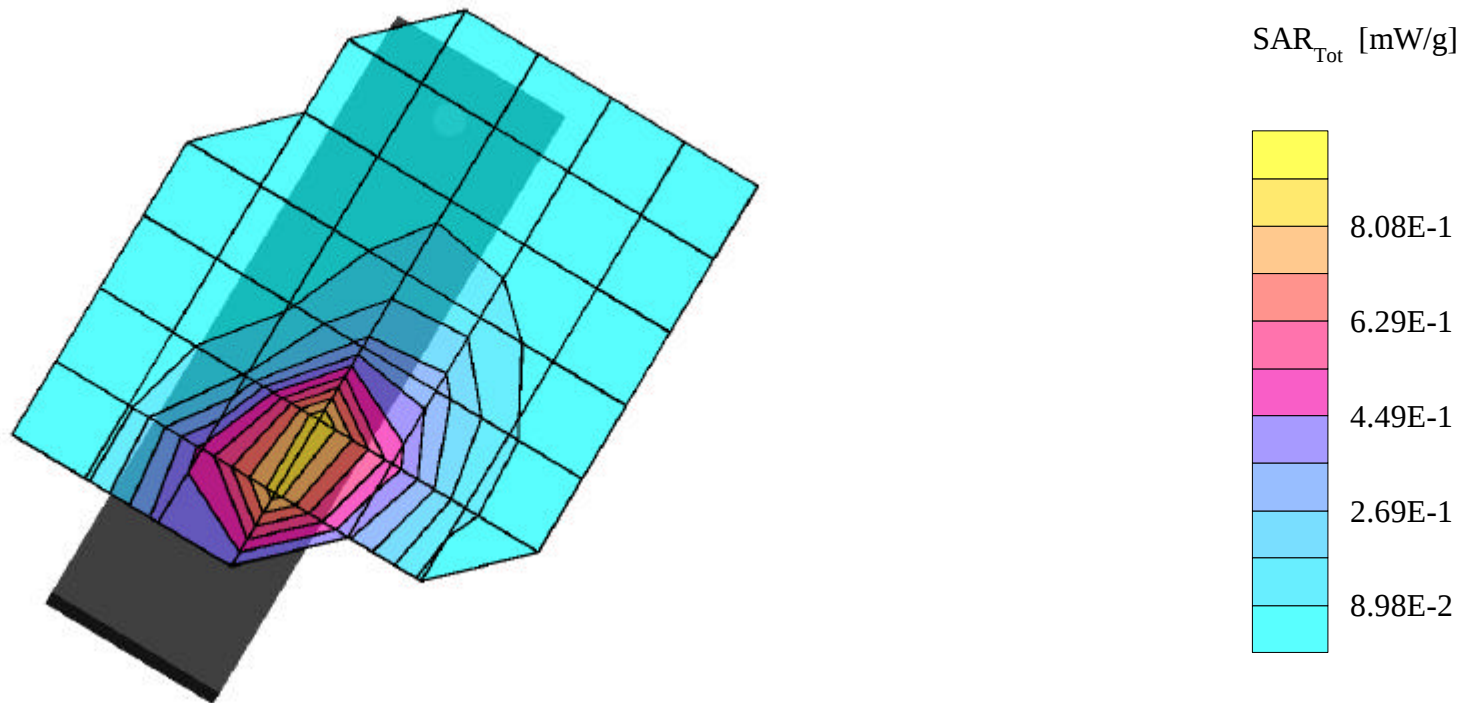
SAR (1g): 0.965 mW/g, SAR (10g): 0.625 mW/g

LGE DualBand Model: LG-LX5350

AMPS Mode, Ch.383 [836.49MHz]; Standard Battery; Flip = open; Ambient Temp. = 22.2°C / Meas. Tissue = 22.0°C

Conducted Power = 26.5dBm; Left Head SAR, Cheek/Touch position

Test Date -- 04/01/2002 [FCC/OET Bulletin 65 - Supplement C, July 2001]



LGE FCC ID: BEJLX5350 -- FM Head SAR

SAM Phantom; Left Hand Section; Probe:ET3DV6 - SN1560; ConvF(6.78,6.78,6.78)

Med. Parameters 835 MHz Brain: $\sigma = 0.87$ mho/m $\epsilon_r = 43.6$ $\rho = 1.00$ g/cm³; Antenna Position -- In; Crest Factor 1.0

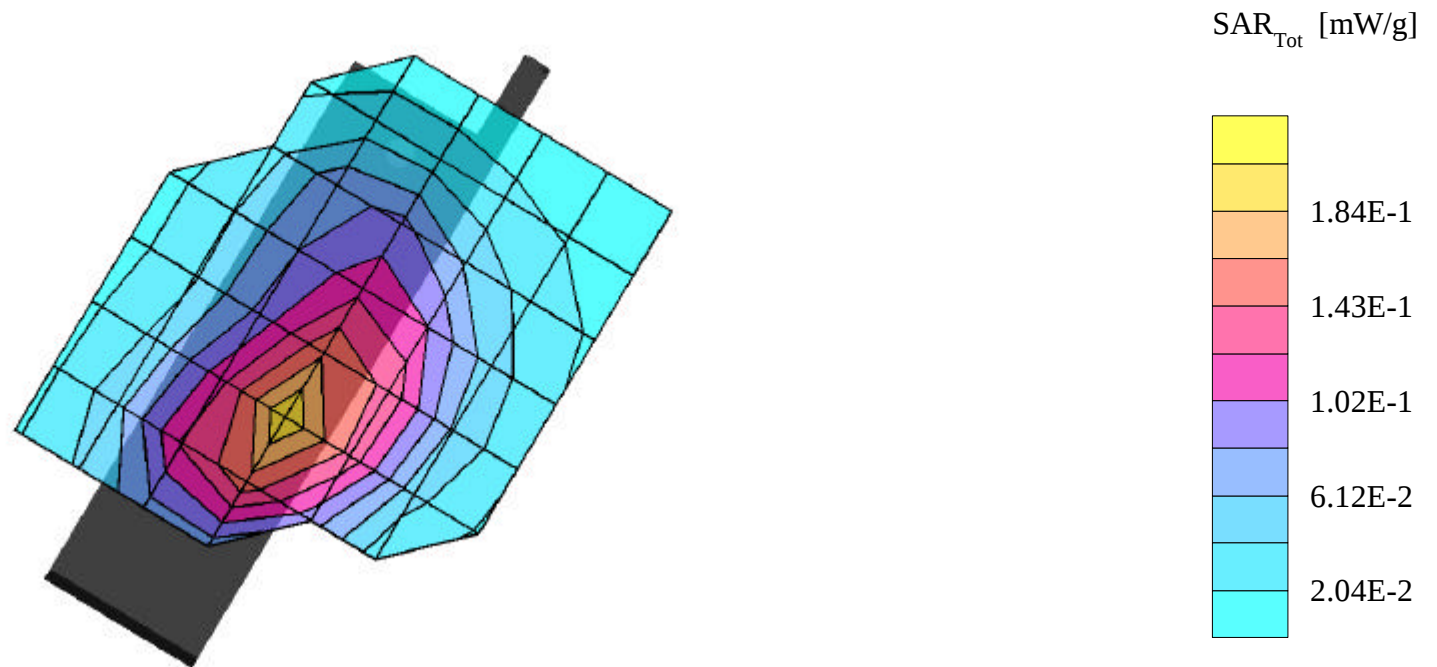
SAR (1g): 0.201 mW/g, SAR (10g): 0.142 mW/g

LGE DualBand Model: LG-LX5350

AMPS Mode, Ch.383 [836.49MHz]; Standard Battery; Flip = open; Ambient Temp. = 22.2°C / Meas. Tissue = 22.0°C

Conducted Power = 26.5dBm; Left Head SAR, Ear/15 degree Tilt position

Test Date -- 04/01/2002 [FCC/OET Bulletin 65 - Supplement C, July 2001]



LGE FCC ID: BEJLX5350 -- PCS CDMA Head SAR

SAM Phantom; Right Hand Section; Probe:ET3DV6 - SN1560; ConvF(5.16,5.16,5.16)

Med. Parameters 1900 MHz Brain: $\sigma = 1.44$ mho/m $\epsilon_r = 40.8$ $\rho = 1.00$ g/cm³; Antenna Position -- In; Crest Factor 1.0

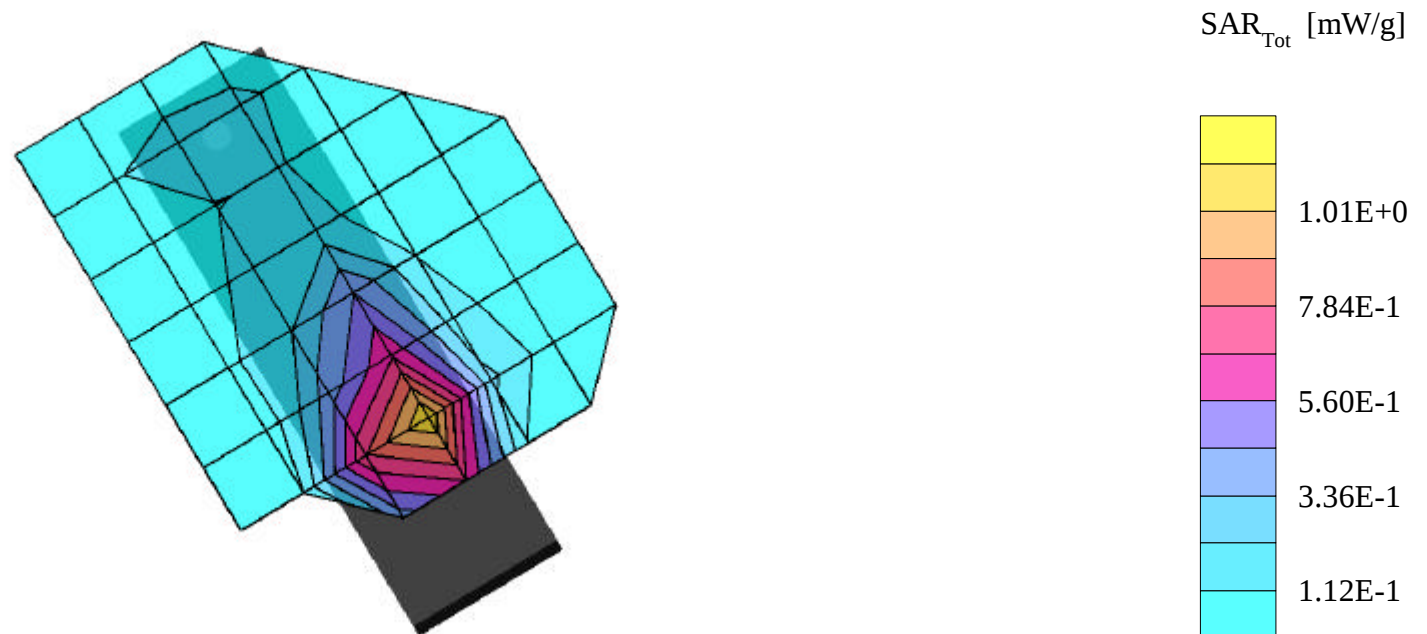
SAR (1g): 1.19 mW/g, SAR (10g): 0.765 mW/g

LGE Dual Band; Model: LG-LX5350

PCS CDMA Mode, Ch.0025 [1851.25MHz]; Standard Battery; Flip = open; Ambient Temp. = 22.1°C / Meas. Tissue = 21.9°C

Conducted Power = 24.5dBm; Right Head SAR, Cheek/Touch position

Test Date -- 04/02/2002 [FCC/OET Bulletin 65 - Supplement C, July 2001]



LGE FCC ID: BEJLX5350 -- PCS CDMA Head SAR

SAM Phantom; Right Hand Section; Probe:ET3DV6 - SN1560; ConvF(5.16,5.16,5.16)

Med. Parameters 1900 MHz Brain: $\sigma = 1.44$ mho/m $\epsilon_r = 40.8$ $\rho = 1.00$ g/cm³; Antenna Position -- In; Crest Factor 1.0

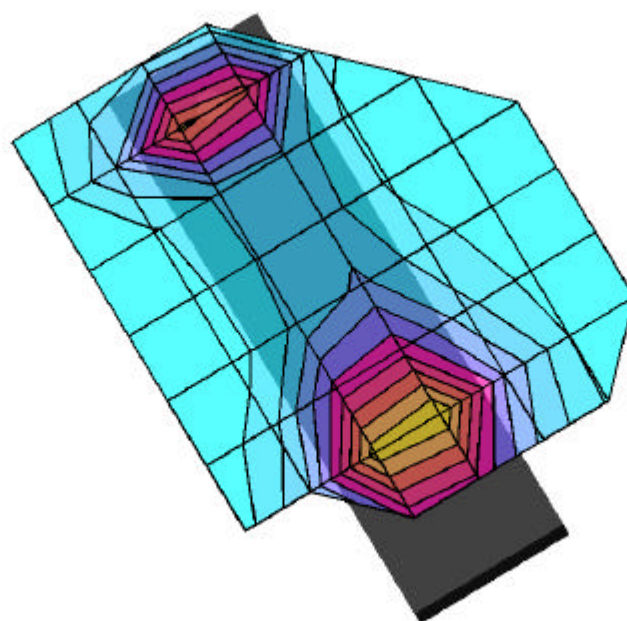
SAR (1g): 0.371 mW/g, SAR (10g): 0.238 mW/g

LGE Dual Band; Model: LG-LX5350

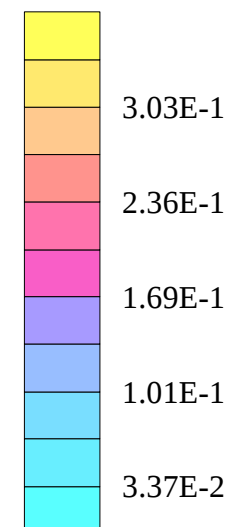
PCS CDMA Mode, Ch.0025 [1851.25MHz]; Standard Battery; Flip = open; Ambient Temp. = 22.1°C / Meas. Tissue = 21.9°C

Conducted Power = 24.5dBm; Right Head SAR, Ear/15 degree Tilt position

Test Date -- 04/02/2002 [FCC/OET Bulletin 65 - Supplement C, July 2001]



SAR_{Tot} [mW/g]



LGE FCC ID: BEJLX5350 -- PCS CDMA Head SAR

SAM Phantom; Left Hand Section; Probe:ET3DV6 - SN1560; ConvF(5.16,5.16,5.16)

Med. Parameters 1900 MHz Brain: $\sigma = 1.44$ mho/m $\epsilon_r = 40.8$ $\rho = 1.00$ g/cm³; Antenna Position -- In; Crest Factor 1.0

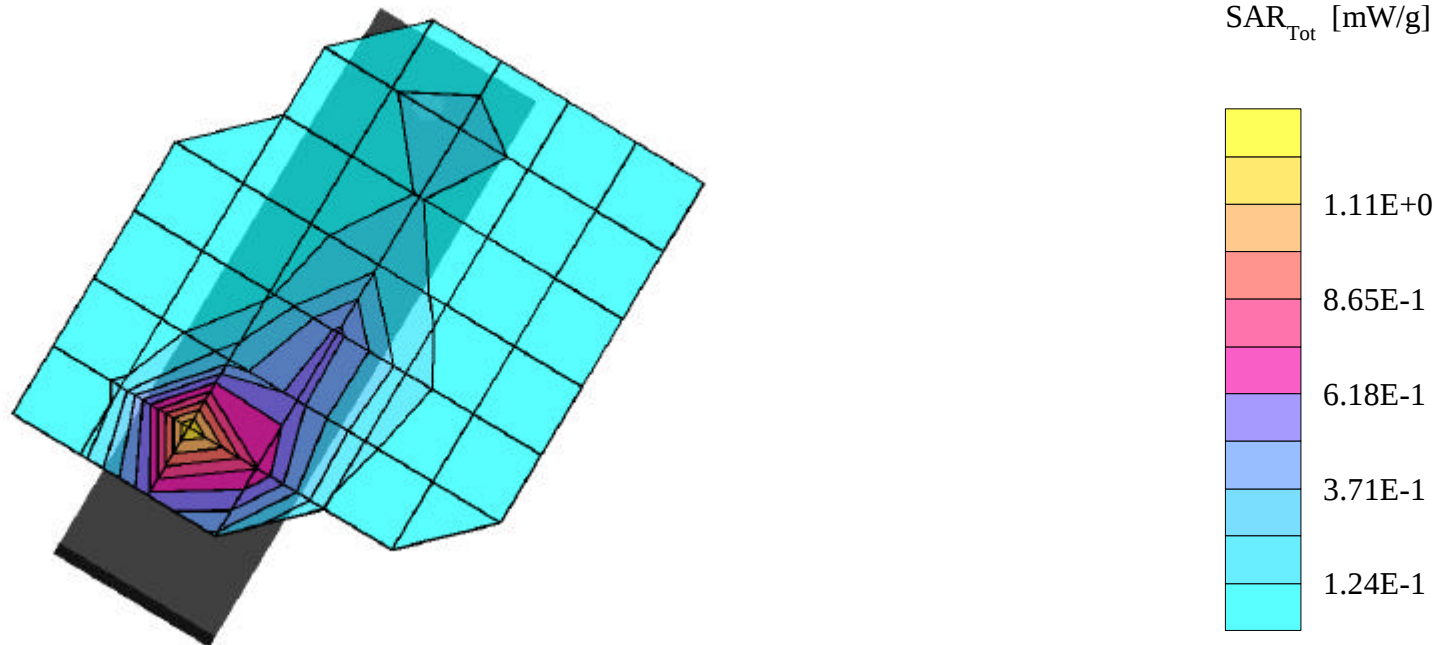
SAR (1g): 1.38 mW/g, SAR (10g): 0.804 mW/g

LGE DualBand Model: LG-LX5350

PCS CDMA Mode, Ch.0600 [1880.00MHz]; Standard Battery; Flip = open; Ambient Temp. = 22.1°C / Meas. Tissue = 21.9°C

Conducted Power = 24.5dBm; Left Head SAR, Cheek/Touch position

Test Date -- 04/02/2002 [FCC/OET Bulletin 65 - Supplement C, July 2001]



LGE FCC ID: BEJLX5350 -- PCS CDMA Head SAR

SAM Phantom; Left Hand Section; Probe:ET3DV6 - SN1560; ConvF(5.16,5.16,5.16)

Med. Parameters 1900 MHz Brain: $\sigma = 1.44$ mho/m $\epsilon_r = 40.8$ $\rho = 1.00$ g/cm³; Antenna Position -- In; Crest Factor 1.0

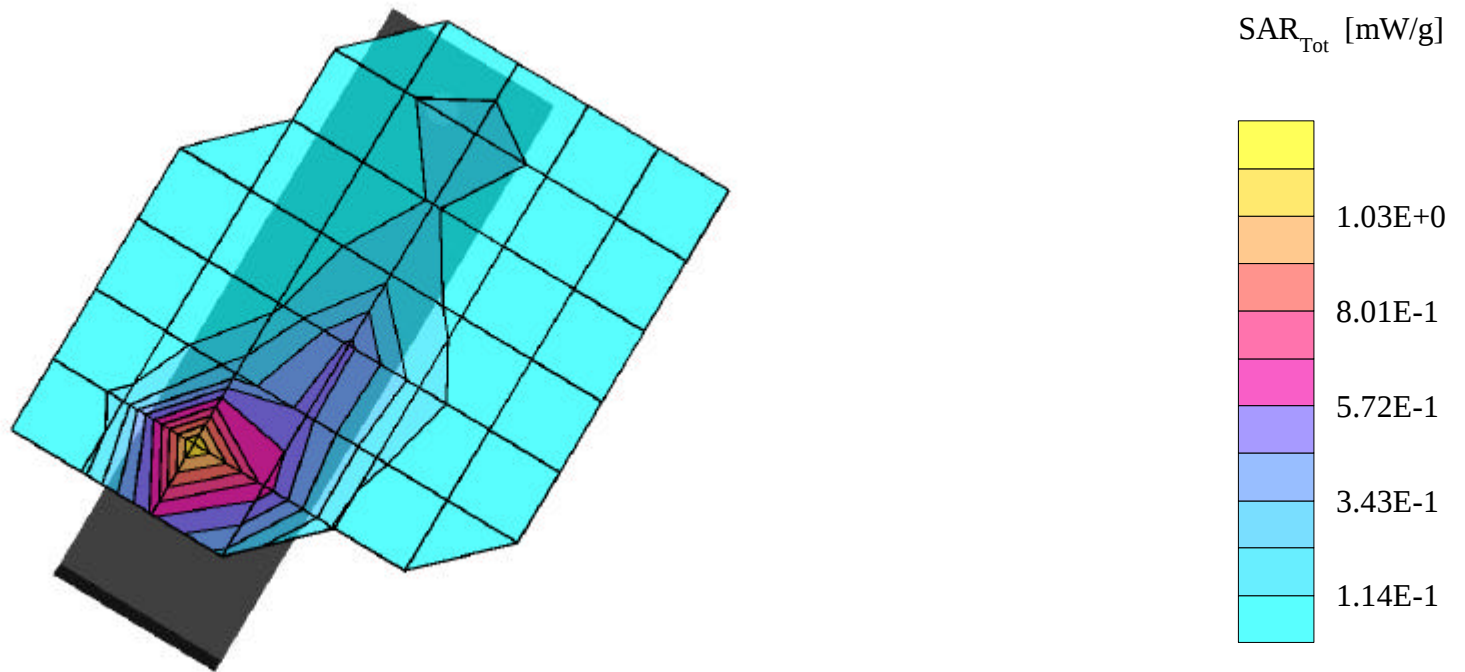
SAR (1g): 1.24 mW/g, SAR (10g): 0.337 mW/g

LGE Dual Band; Model: LG-LX5350

PCS CDMA Mode, Ch.0600 [1880.00MHz]; Standard Battery; Flip = open; Ambient Temp. = 22.1°C / Meas. Tissue = 21.9°C

Conducted Power = 24.5dBm; Left Head SAR, Cheek/Touch position

Test Date -- 04/02/2002 [FCC/OET Bulletin 65 - Supplement C, July 2001]



LGE FCC ID: BEJLX5350 -- FM Body SAR

SAM Phantom; Flat Section; Probe:ET3DV6 - SN1560; ConvF(6.52,6.52,6.52)

Med. Parameters 835 MHz Muscle: $\sigma = 0.99$ mho/m $\epsilon_r = 55.0$ $\rho = 1.00$ g/cm³; Antenna Position -- In; Crest Factor 1.0

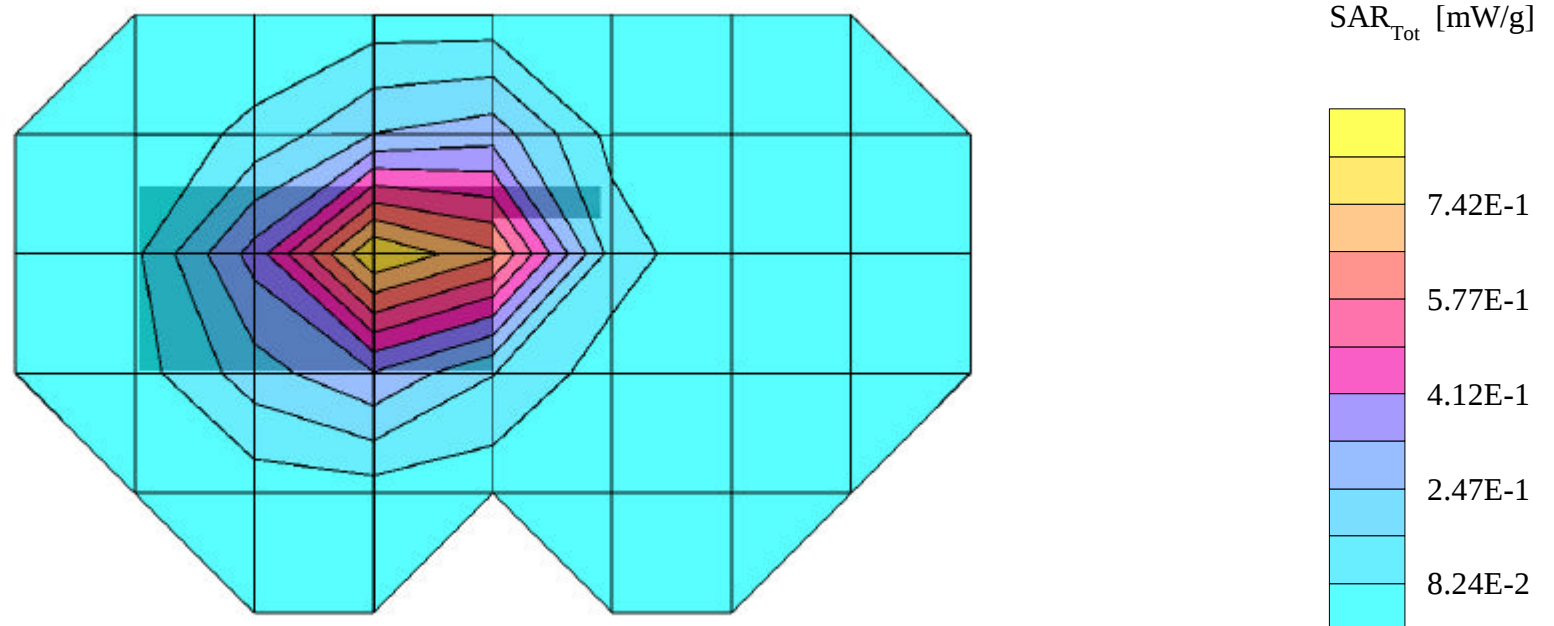
SAR (1g): 0.856 mW/g, SAR (10g): 0.592 mW/g

LGE DualBand Model: LG-LX5350

PCS CDMA Mode, Ch.799 [848.97MHz]; Standard Battery; Flip = closed; Ambient Temp. = 22.0°C / Meas. Tissue = 21.9°C

Conducted Power = 26.5dBm; Flat Phantom; Spacing = 1.5cm from flat phantom to back of EUT, No BeltClip/No Holster

Test Date -- 04/02/2002 [FCC/OET Bulletin 65 - Supplement C, July 2001]



LGE FCC ID: BEJLX5350 -- PCS CDMA Body SAR

SAM Phantom; Flat Section; Probe:ET3DV6 - SN1560; ConvF(4.70,4.70,4.70)

Med. Parameters 1900 MHz Muscle: $\sigma = 1.53$ mho/m $\epsilon_r = 53.2$ $\rho = 1.00$ g/cm³; Antenna Position -- Out; Crest Factor 1.0

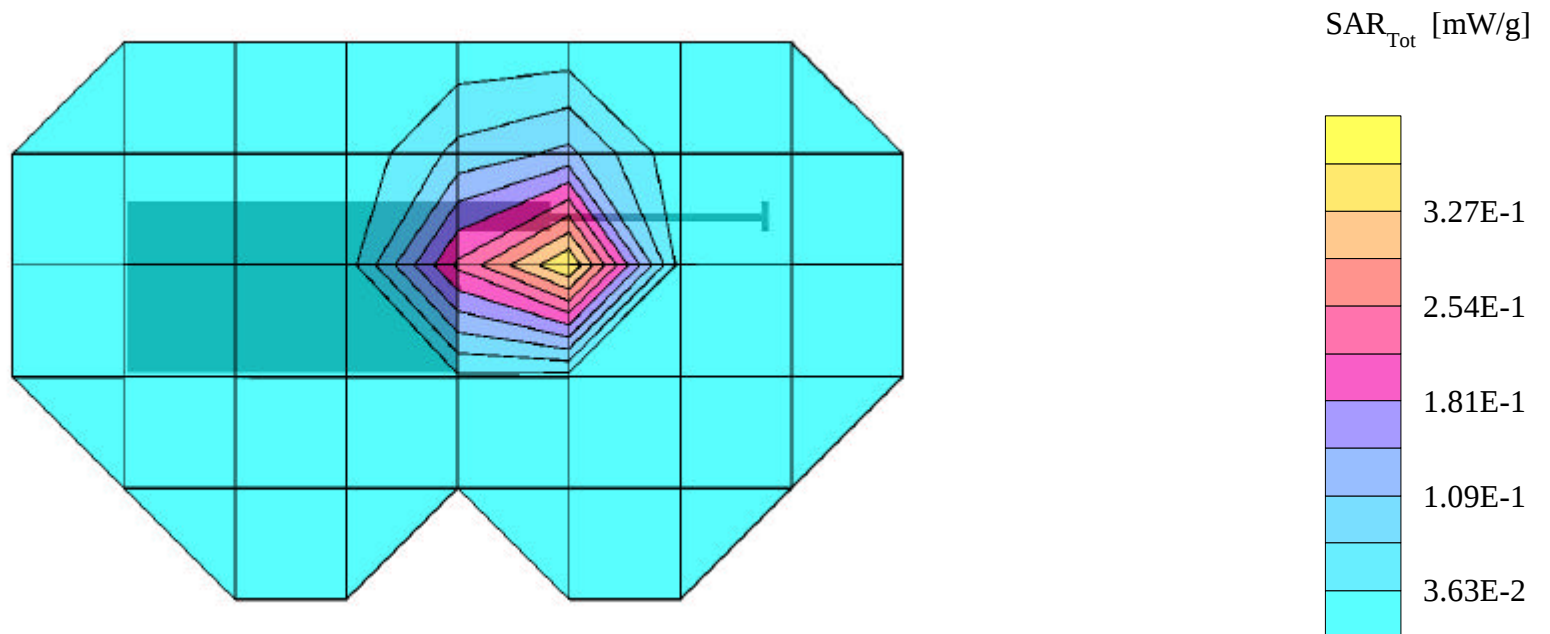
SAR (1g): 0.581 mW/g, SAR (10g): 0.317 mW/g

LGE DualBand Model: LG-LX5350

PCS CDMA Mode, Ch.1175 [1908.75MHz]; Standard Battery; Flip = closed; Ambient Temp. = 22.3°C / Meas. Tissue = 22.2°C

Conducted Power = 24.5dBm; Flat Phantom; Spacing = 1.5cm from flat phantom to back of EUT, No BeltClip/No Holster

Test Date -- 04/02/2002 [FCC/OET Bulletin 65 - Supplement C, July 2001]



LGE FCC ID: BEJLX5350 -- FM Head SAR

SAM Phantom; Right Hand Section; Probe: ET3DV6 - SN1560; ConvF(6.78,6.78,6.78)

Med. Parameters 835 MHz Brain: $\sigma = 0.87$ mho/m $\epsilon_r = 43.6$ $\rho = 1.00$ g/cm³; Antenna Position -- In; Crest Factor 1.0

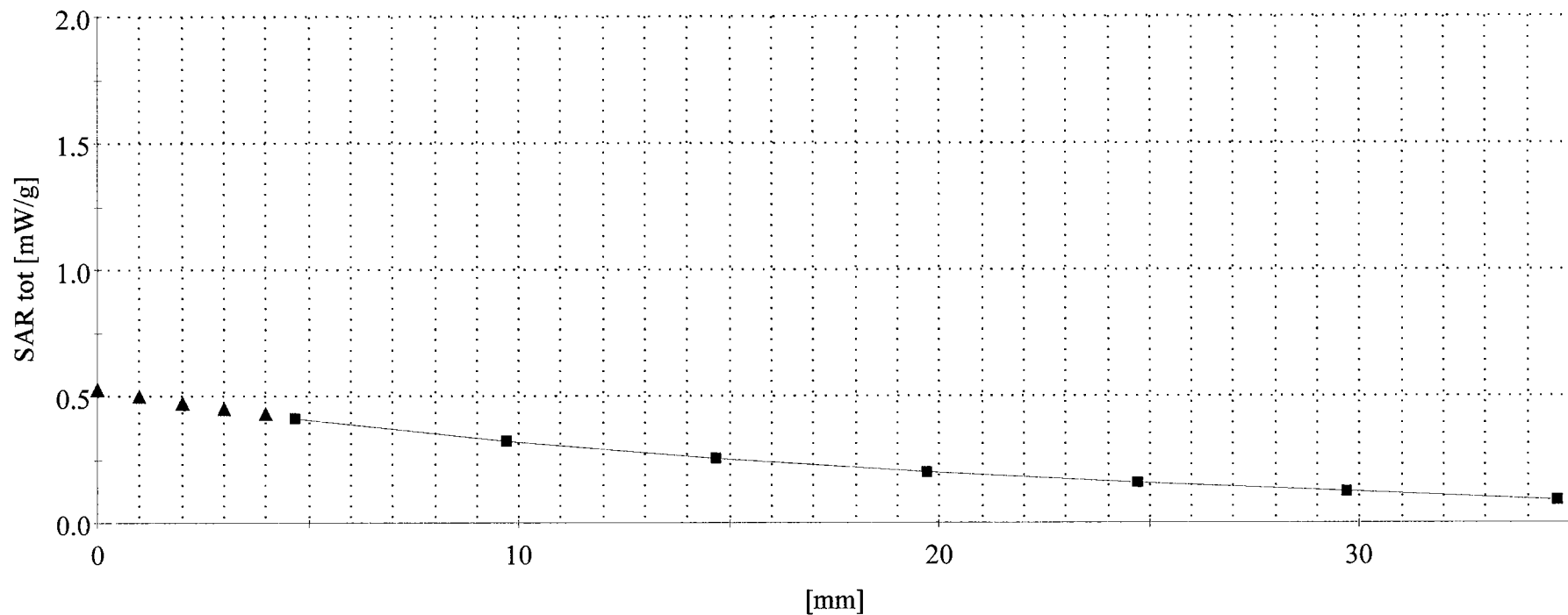
SAR (1g): 0.983 mW/g, SAR (10g): 0.633 mW/g

LGE DualBand Model: LG-LX5350

AMPS Mode, Ch.799 [848.97MHz]; Standard Battery; Flip = open; Ambient Temp. = 22.2°C / Meas. Tissue = 22.0°C

Conducted Power = 26.5dBm; Right Head SAR, Cheek/Touch position

Test Date -- 04/01/2002 [FCC/OET Bulletin 65 - Supplement C, July 2001]



LGE FCC ID: BEJLX5350 -- PCS CDMA Head SAR

SAM Phantom; Left Hand Section; Probe: ET3DV6 - SN1560; ConvF(5.16,5.16,5.16)

Med. Parameters 1900 MHz Brain: $\sigma = 1.44$ mho/m $\epsilon_r = 40.8$ $\rho = 1.00$ g/cm³; Antenna Position -- In; Crest Factor 1.0

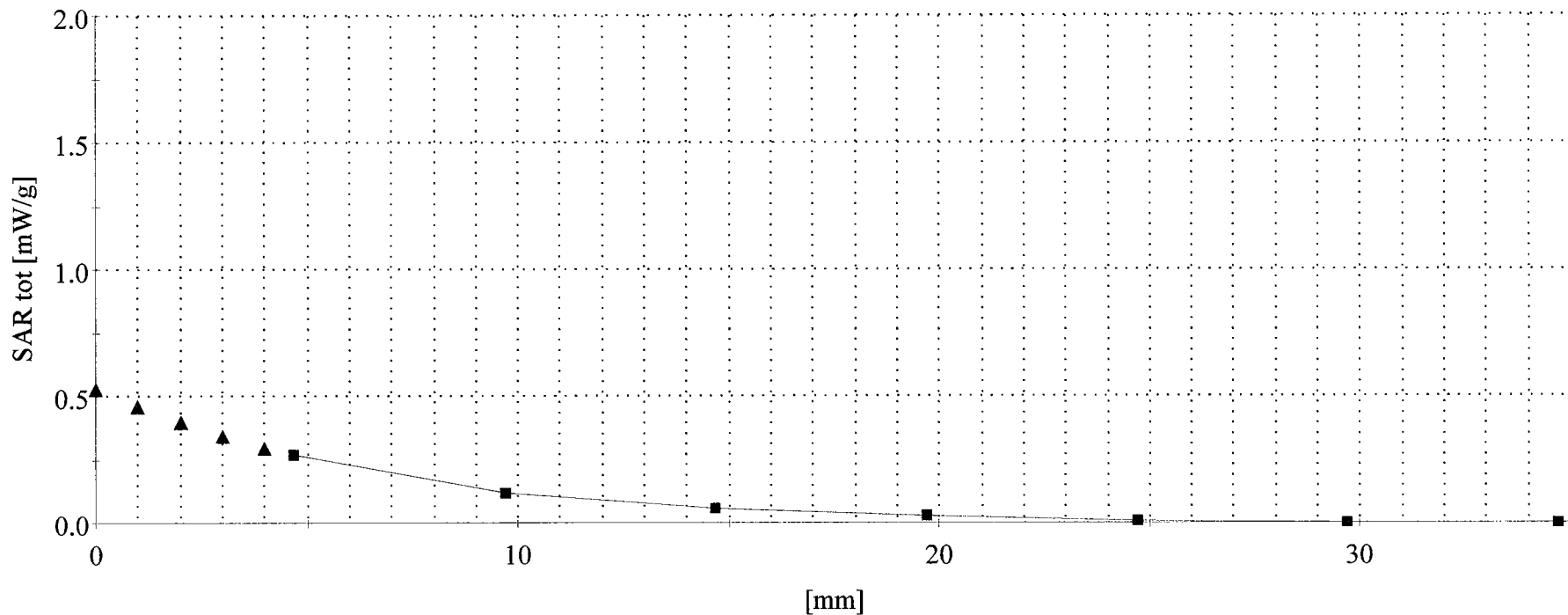
SAR (1g): 1.38 mW/g, SAR (10g): 0.804 mW/g

LGE DualBand Model: LG-LX5350

PCS CDMA Mode, Ch.0600 [1880.00MHz]; Standard Battery; Flip = open; Ambient Temp. = 22.1°C / Meas. Tissue = 21.9°C

Conducted Power = 24.5dBm; Left Head SAR, Cheek/Touch position

Test Date -- 04/02/2002 [FCC/OET Bulletin 65 - Supplement C, July 2001]



LGE FCC ID: BEJLX5350 -- FM Body SAR

SAM Phantom; Flat Section; Probe: ET3DV6 - SN1560; ConvF(6.52,6.52,6.52)

Med. Parameters 835 MHz Muscle: $\sigma = 0.99$ mho/m $\epsilon_r = 55.0$ $\rho = 1.00$ g/cm³; Antenna Position -- In; Crest Factor 1.0

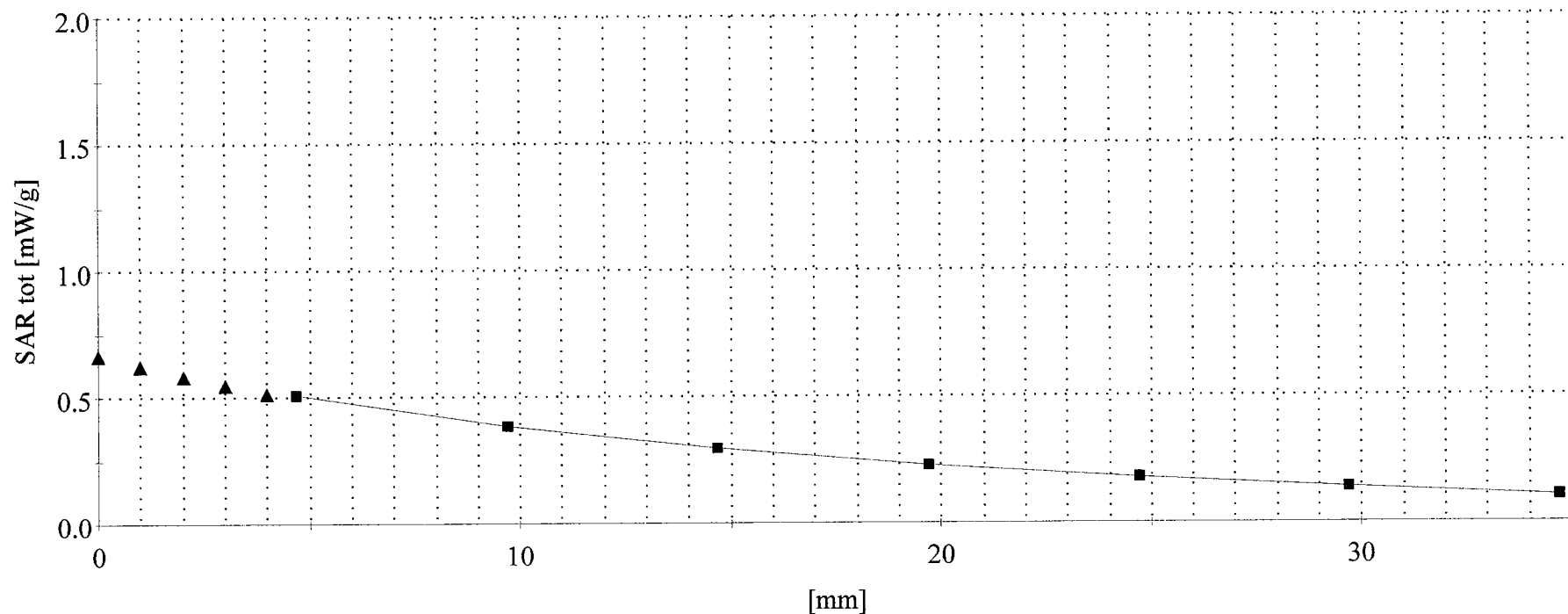
SAR (1g): 0.856 mW/g, SAR (10g): 0.592 mW/g

LGE DualBand Model: LG-LX5350

PCS CDMA Mode, Ch.799 [848.97MHz]; Standard Battery; Flip = open; Ambient Temp. = 22.0°C / Meas. Tissue = 21.9°C

Conducted Power = 26..5dBm; Flat Phantom; Spacing = 1.5cm from flat phantom to back of EUT, No BeltClip/No Holster

Test Date -- 04/02/2002 [FCC/OET Bulletin 65 - Supplement C, July 2001]



LGE FCC ID: BEJLX5350 -- PCS CDMA Body SAR

SAM Phantom; Flat Section; Probe: ET3DV6 - SN1560; ConvF(4.70,4.70,4.70)

Med. Parameters 1900 MHz Muscle: $\sigma = 1.53$ mho/m $\epsilon_r = 53.2$ $\rho = 1.00$ g/cm³; Antenna Position -- Out; Crest Factor 1.0

SAR (1g): 0.581 mW/g, SAR (10g): 0.317 mW/g * Max outside

LGE DualBand Model: LG-LX5350

PCS CDMA Mode, Ch.1175 [1908.75MHz]; Standard Battery; Flip = open; Ambient Temp. = 22.3°C / Meas. Tissue = 22.2°C

Conducted Power = 24.5dBm; Flat Phantom; Spacing = 1.5cm from flat phantom to back of EUT, No BeltClip/No Holster

Test Date -- 04/02/2002 [FCC/OET Bulletin 65 - Supplement C, July 2001]

