## **8 SAR MEASURMENT RESULTS**

## 8.1 2.4GHZ BAND

# 8.1.1 PRIMARY LANDSCAPE - MAIN ANTENNA TX

Main antenna transmits for this position.

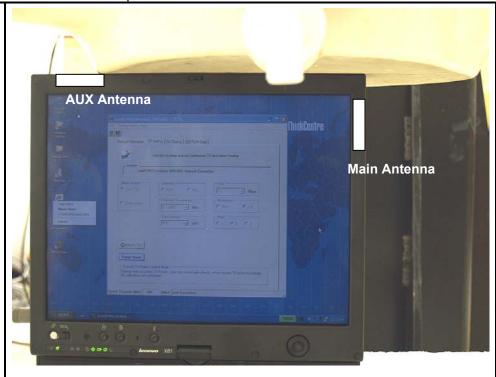


802.11b (1Mbps)					
OUZ. I ID ( IIVID	<u> </u>				
		Measured SAR	<b>Power Drift</b>	Extrapolated <sup>1)</sup> SAR	
Channel	f (MHz)	1g (mW/g)	(dB)	1g (mW/g)	
1	2412				
6	2437	0.013	0.000	0.013	
11	2462				
802.11g (6 Mb	ps)				
_		Measured SAR	Power Drift	Extrapolated <sup>1)</sup> SAR	
Channel	f (MHz)	1g (mW/g)	(dB)	1g (mW/g)	
1	2412				
6	2437	0.013	0.000	0.013	
11	2462				

- 1) The exact method of extrapolation is Measured SAR x 10^(-drift/10). The SAR reported at the end of the measurement process by the DASY4 system can be scaled up by the Power drift to determine the SAR at the beginning of the measurement process.
- The SAR measured at the middle channel for this configuration is at least 3 dB lower (0.8 mW/g) than SAR limit (1.6 mW/g), thus testing at low & high channel is optional.
- 3) Please see attachments for the detailed measurement data and plots showing the maximum SAR location of the EUT.

### 8.1.2 SECONDARY LANDSCAPE - MAIN ANTENNA TX

AUX Antenna is disabled at this position.

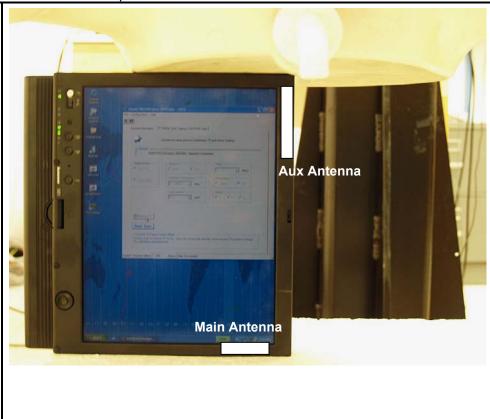


802.11b (1Mb)	802.11b (1Mbps)					
Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated <sup>1)</sup> SAR 1g (mW/g)		
1 6 11	2412 2437 2462	0.061	-0.131	0.063		
802.11g (6 Mb	ps)					
Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated <sup>1)</sup> SAR 1g (mW/g)		
1 6 11	2412 2437 2462	0.058	-0.156	0.060		

- 1) The exact method of extrapolation is Measured SAR x 10^(-drift/10). The SAR reported at the end of the measurement process by the DASY4 system can be scaled up by the Power drift to determine the SAR at the beginning of the measurement process.
- 2) The SAR measured at the middle channel for this configuration is at least 3 dB lower (0.8 mW/g) than SAR limit (1.6 mW/g), thus testing at low & high channel is optional.
- 3) Please see attachments for the detailed measurement data and plots showing the maximum SAR location of the EUT.

### 8.1.3 PRIMARY PORTRAIT - AUX ANTENNA TX

AUX Antenna transmits for this position.

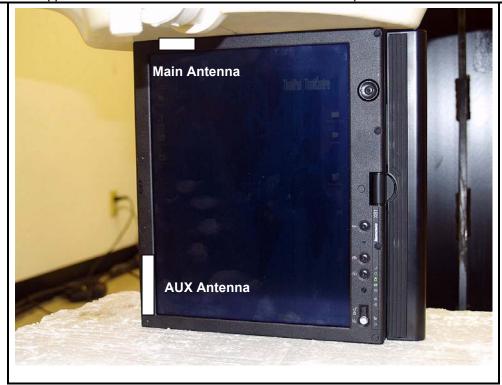


802.11b (1Mb)	802.11b (1Mbps)					
Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated <sup>1)</sup> SAR 1g (mW/g)		
1	2412	0.093	-0.016	0.093		
6	2437	0.149	-0.134	0.154		
11	2462	0.106	0.000	0.106		
6 <sup>4)</sup>	2437	0.148	-0.170	0.154		
802.11g (6 Mb	ps)					
Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated <sup>1)</sup> SAR 1g (mW/g)		
1 6	2412 2437 2462	0.134	0.000	0.134		

- 1) The exact method of extrapolation is Measured SAR x 10^(-drift/10). The SAR reported at the end of the measurement process by the DASY4 system can be scaled up by the Power drift to determine the SAR at the beginning of the measurement process.
- The SAR measured at the middle channel for this configuration is at least 3 dB lower (0.8 mW/g) than SAR limit (1.6 mW/g), thus testing at low & high channel is optional.
- 3) Please see attachments for the detailed measurement data and plots showing the maximum SAR location of the EUT.
- 4) Collocation with Bluetooth Module.

### 8.1.4 SECONDARY PORTRAIT

This position is skipped since WLAN main antenna is disabled for this position.



- 1) The exact method of extrapolation is Measured SAR x 10^(-drift/10). The SAR reported at the end of the measurement process by the DASY4 system can be scaled up by the Power drift to determine the SAR at the beginning of the measurement process.
- 2) The SAR measured at the middle channel for this configuration is at least 3 dB lower (0.8 mW/g) than SAR limit (1.6 mW/g), thus testing at low & high channel is optional.
- 3) Please see attachments for the detailed measurement data and plots showing the maximum SAR location of the EUT.

### 8.1.5 LAP HELD - MAIN ANTENNA

Main antenna transmits for this position.

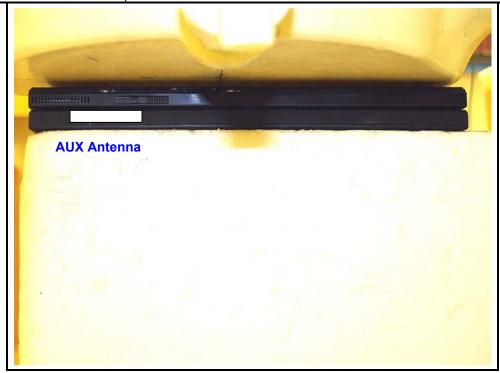


802.11b (1Mbps)					
Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated <sup>1)</sup> SAR 1g (mW/g)	
1 6 11	2412 2437 2462	0.019	0.000	0.019	
802.11g (6 Mb	ps)				
Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated <sup>1)</sup> SAR 1g (mW/g)	
1 6 11	2412 2437 2462	0.017	-0.049	0.017	

- 1) The exact method of extrapolation is Measured SAR x 10^(-drift/10). The SAR reported at the end of the measurement process by the DASY4 system can be scaled up by the Power drift to determine the SAR at the beginning of the measurement process.
- 2) The SAR measured at the middle channel for this configuration is at least 3 dB lower (0.8 mW/g) than SAR limit (1.6 mW/g), thus testing at low & high channel is optional.
- 3) Please see attachments for the detailed measurement data and plots showing the maximum SAR location of the EUT.

## 8.1.6 LAP HELD - AUX ANTENNA

AUX Antenna transmits for this position.



DATE: March 20, 2007

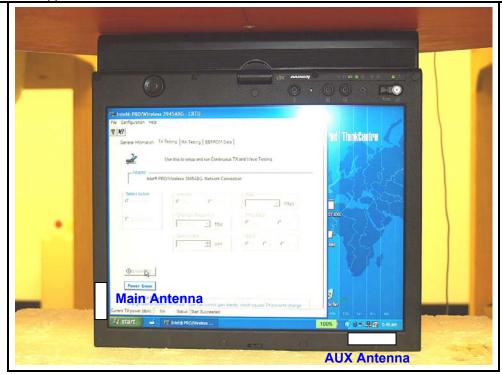
802.11b (1Mbps)					
Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated <sup>1)</sup> SAR 1g (mW/g)	
1 6 11	2412 2437 2462	0.024	-0.120	0.025	
802.11g (6 Mb	ps)				
802.11g (6 Mb Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated <sup>1)</sup> SAR 1g (mW/g)	

- 1) The exact method of extrapolation is Measured SAR x 10^(-drift/10). The SAR reported at the end of the measurement process by the DASY4 system can be scaled up by the Power drift to determine the SAR at the beginning of the measurement process.
- The SAR measured at the middle channel for this configuration is at least 3 dB lower (0.8 mW/g) than SAR limit (1.6 mW/g), thus testing at low & high channel is optional.
- 3) Please see attachments for the detailed measurement data and plots showing the maximum SAR location of the EUT.

## 8.2 5GHZ BAND

## 8.2.1 PRIMARY LANDSCAPE - MAIN ANTENNA TX

This position is skipped since SAR values are too low.



- 1) The exact method of extrapolation is Measured SAR x 10^(-drift/10). The SAR reported at the end of the measurement process by the DASY4 system can be scaled up by the Power drift to determine the SAR at the beginning of the measurement process.
- The SAR measured at the middle channel for this configuration is at least 3 dB lower (0.8 mW/g) than SAR limit (1.6 mW/g), thus testing at low & high channel is optional.
- 3) Please see attachments for the detailed measurement data and plots showing the maximum SAR location of the EUT.

### 8.2.2 SECONDARY LANDSCAPE - MAIN ANTENNA TX

AUX Antenna is disabled at this position.



DATE: March 20, 2007

802.11a 5.2 G	802.11a 5.2 GHz (6 Mbps)					
Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated <sup>1)</sup> SAR 1g (mW/g)		
36 52	5180 5260	0.043	0.000	0.043		
64	5320	0.040	0.000	0.040		
802.11a 5.8 G	Hz (6 Mbps)					
Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated <sup>1)</sup> SAR 1g (mW/g)		
149	5745					
157	5785	0.055	0.000	0.055		

- 1) The exact method of extrapolation is Measured SAR x 10^(-drift/10). The SAR reported at the end of the measurement process by the DASY4 system can be scaled up by the Power drift to determine the SAR at the beginning of the measurement process.
- The SAR measured at the middle channel for this configuration is at least 3 dB lower (0.8 mW/g) than SAR limit (1.6 mW/g), thus testing at low & high channel is optional.
- 3) Please see attachments for the detailed measurement data and plots showing the maximum SAR location of the EUT.

### 8.2.3 PRIMARY PORTRAIT - AUX ANTENNA TX

AUX Antenna transmits for this position.



802.11a 5.2 GHz (6 Mbps)					
Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated <sup>1)</sup> SAR 1g (mW/g)	
36	5180	0.050	2.222	2.252	
52	5260	0.056	0.000	0.056	
64	5320				

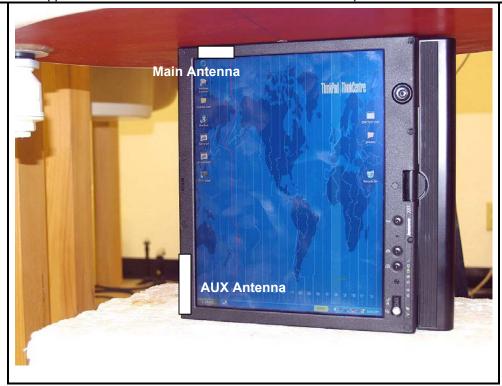
802.11a 5.8 GHz (6 Mbps)

Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated <sup>1)</sup> SAR 1g (mW/g)
149	5745			
157	5785	0.088	0.000	0.088
165	5825			
157 <sup>4)</sup>	5785	0.113	-0.165	0.117

- 1) The exact method of extrapolation is Measured SAR x 10^(-drift/10). The SAR reported at the end of the measurement process by the DASY4 system can be scaled up by the Power drift to determine the SAR at the beginning of the measurement process.
- 2) The SAR measured at the middle channel for this configuration is at least 3 dB lower (0.8 mW/g) than SAR limit (1.6 mW/g), thus testing at low & high channel is optional.
- 3) Please see attachments for the detailed measurement data and plots showing the maximum SAR location of the EUT.
- 4) Collocation with Bluetooth Module.

### 8.2.4 SECONDARY PORTRAIT

This position is skipped since WLAN main antenna is disabled for this position.



- The exact method of extrapolation is Measured SAR x 10<sup>^</sup>(-drift/10). The SAR reported at the end of the measurement process by the DASY4 system can be scaled up by the Power drift to determine the SAR at the beginning of the measurement process.
- 2) The SAR measured at the middle channel for this configuration is at least 3 dB lower (0.8 mW/g) than SAR limit (1.6 mW/g), thus testing at low & high channel is optional.
- 3) Please see attachments for the detailed measurement data and plots showing the maximum SAR location of the EUT.

### 8.2.5 LAP HELD - MAIN ANTENNA

Main antenna transmits for this position.



802.11a 5.2 GHz (6 Mbps)					
Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated <sup>1)</sup> SAR 1g (mW/g)	
36	5180				
52	5260	0.076	-0.120	0.078	
64	5320				
52 <sup>4)</sup>	5260	0.079	0.000	0.079	

802.11a 5.8 GHz (6 Mbps)

Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated <sup>1)</sup> SAR 1g (mW/g)
149	5745			
157	5785	0.073	-0.114	0.075
165	5825			

- 1) The exact method of extrapolation is Measured SAR x 10^(-drift/10). The SAR reported at the end of the measurement process by the DASY4 system can be scaled up by the Power drift to determine the SAR at the beginning of the measurement process.
- The SAR measured at the middle channel for this configuration is at least 3 dB lower (0.8 mW/g) than SAR limit (1.6 mW/g), thus testing at low & high channel is optional.
- 3) Please see attachments for the detailed measurement data and plots showing the maximum SAR location of the EUT.
- 4) Collocation with Bluetooth Module.

## 8.2.6 LAP HELD - AUX ANTENNA

AUX antenna transmits for this position.



802.11a 5.2 GHz (6 Mbps)					
Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated <sup>1)</sup> SAR 1g (mW/g)	
36	5180				
52	5260	0.051	0.000	0.051	
64	5320				

802.11a 5.8 GHz (6 Mbps)

Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated <sup>1)</sup> SAR 1g (mW/g)
149	5745			
157	5785	0.073	-0.119	0.075
165	5825			

- 1) The exact method of extrapolation is Measured SAR x 10^(-drift/10). The SAR reported at the end of the measurement process by the DASY4 system can be scaled up by the Power drift to determine the SAR at the beginning of the measurement process.
- 2) The SAR measured at the middle channel for this configuration is at least 3 dB lower (0.8 mW/g) than SAR limit (1.6 mW/g), thus testing at low & high channel is optional.
- 3) Please see attachments for the detailed measurement data and plots showing the maximum SAR location of the EUT.

# 11 PHOTOS

WLAN





Host Laptop - ThinkPad X61 series





# Antenna Location





# **DUT** Location

