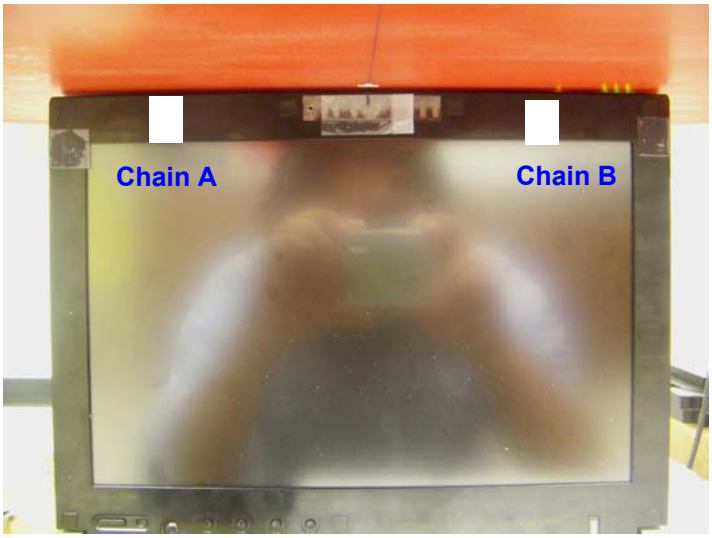
8 SAR MEASURMENT RESULTS

8.1 2.4 GHZ BAND

8.1.1 SECONDARY LANDSCAPE



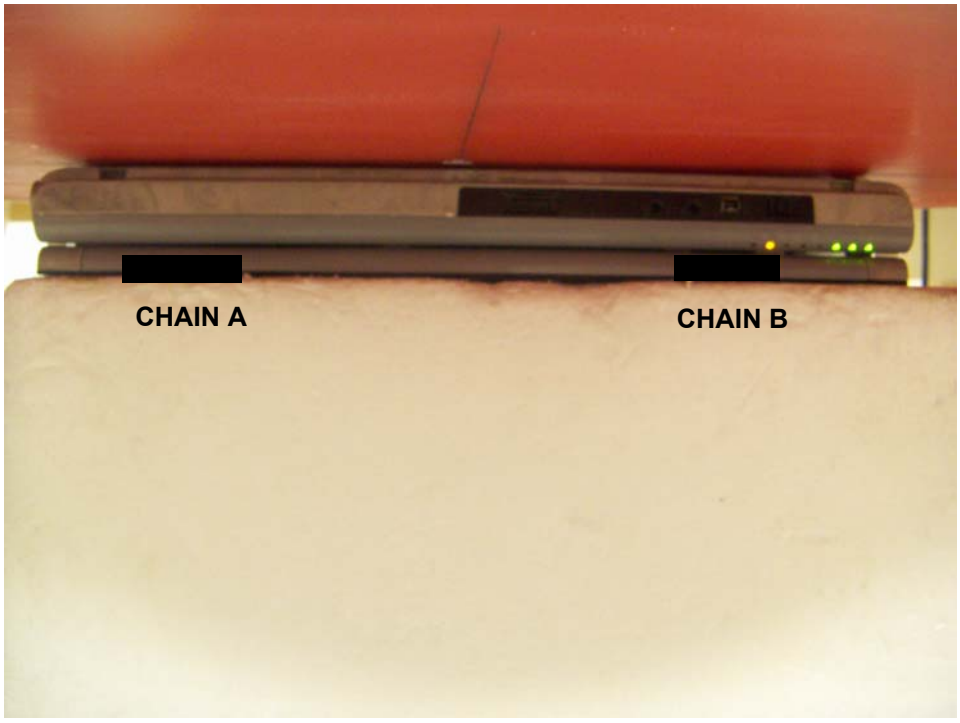
Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated[1] SAR 1g (mW/g)
802.11b 2.4 GHz Chain A (Main)				
6	2437	0.193	0.000	0.193
802.11b 2.4 GHz Chain B (Sub-A)				
6	2437	0.223	0.000	0.223
802.11g 2.4 GHz Chain A (Main)				
6	**2437**	**0.331**	**-0.055**	**0.335**
6[4]	**2437**	**0.323**	**-0.109**	**0.331**
802.11g 2.4 GHz Chain B (Sub-A)				
6	2437	0.319	0.000	0.319
802.11n 2.4 GHz MIMO 20 MHz Bandwidth *MIMO CONFIGURATIONS WAS MEASURED WITH ALL ANTENNAS TRANSMITTING SIMULTANEOUSLY*				
6	2437	0.177	0.000	0.177

Notes:

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

8.1.2 LAP HELD

NOTE: Testing for 802.11b mode and MIMO configuration were skipped due significantly lower output power and low SAR measurement from the 802.11g mode.



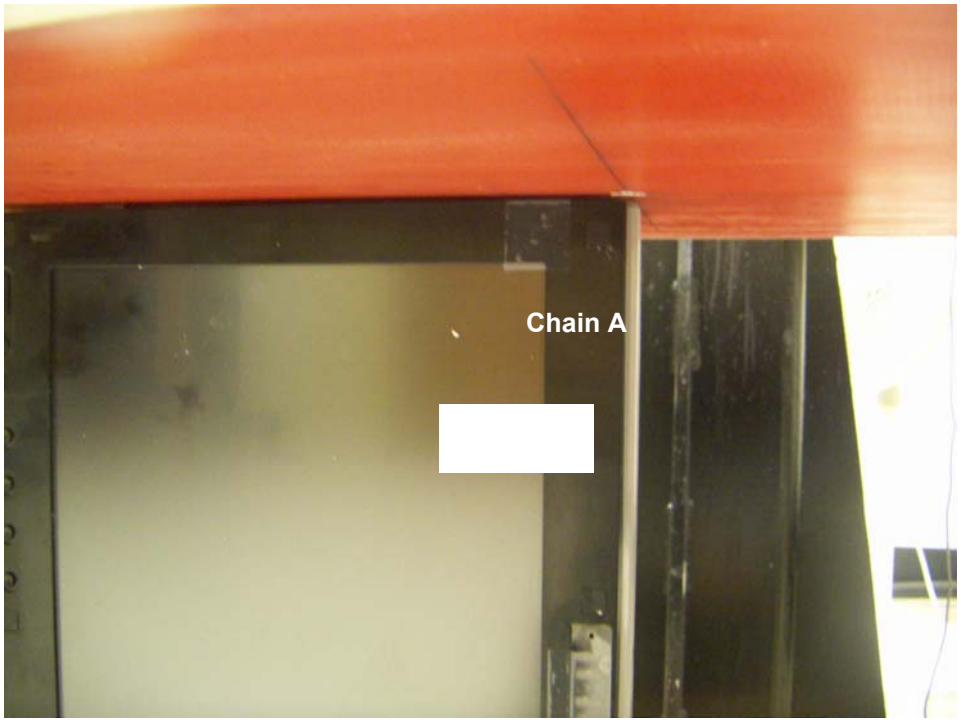
802.11g 2.4 GHz Chain A (Main)				
Channel	**f (MHz)**	**Measured SAR 1g (mW/g)**	**Power Drift (dB)**	**Extrapolated[1] SAR 1g (mW/g)**
1 6 11	2412 2437 2462	0.097	0.000	0.097
802.11g 2.4 GHz Chain B (Sub-A)				
1 6 11	2412 2437 2462	0.102	-0.030	0.103

Notes:

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

NOTE: Testing for 802.11b mode and MIMO configuration were skipped due significantly lower output power and low SAR measurement from the 802.11g mode.



802.11g 2.4 GHz Chain A (Main)

Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated[1)] SAR 1g (mW/g)
1 6 11	2412 2437 2462	0.084	0.000	0.084

Notes:

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.

8.1.4 SECONDARY PORTRAIT

NOTE: Testing for 802.11b mode and MIMO configuration were skipped due significantly lower output power and low SAR measurement from the 802.11g mode.

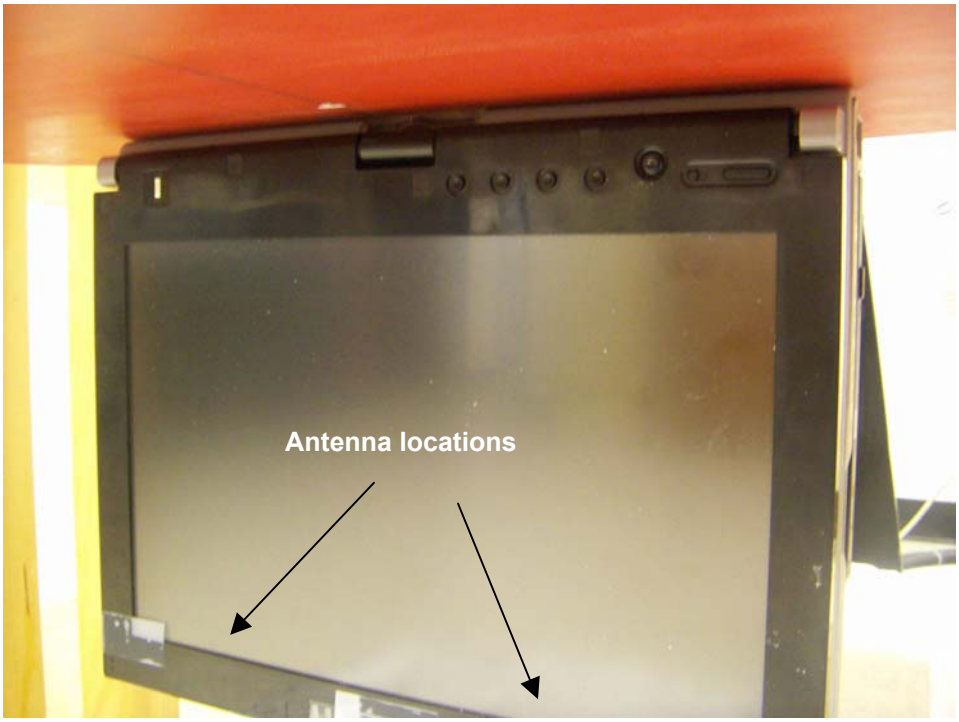
802.11g 2.4 GHz Chain B (Sub-A)				
Channel	**f (MHz)**	**Measured SAR 1g (mW/g)**	**Power Drift (dB)**	**Extrapolated[1)] SAR 1g (mW/g)**
1 6 11	2412 2437 2462	0.069	-0.090	0.070

Notes:

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.

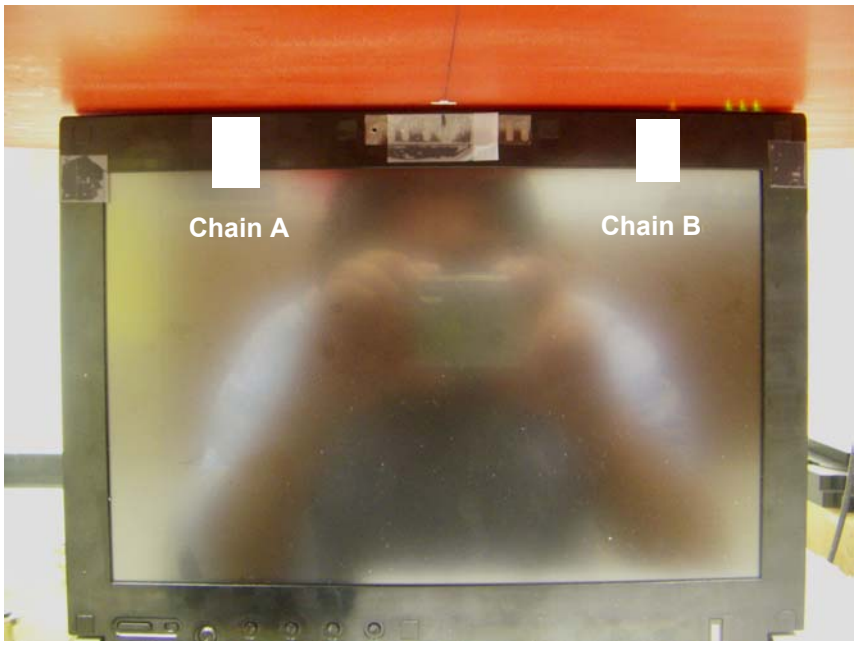
8.1.5 PRIMARY LANDSCAPE

NOTE: This position was not tested due to the large distance between the antennas and the phantom.



8.2 5.2 GHZ BAND

8.2.1 SECONDARY LANDSCAPE



802.11a 5.2 GHz Chain A (Main)

Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated[1)] SAR 1g (mW/g)
52	5260	0.741	0.000	0.741
[4)]	5260	0.753	0.000	0.753

802.11a 5.2 GHz Chain B (Sub-A)

Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated[1)] SAR 1g (mW/g)
36	5180	0.852	-0.096	0.871
52	**5260**	**1.010**	**0.000**	**1.010**
64	5320	0.744	0.000	0.744
52[4)]	**5260**	**1.010**	**0.000**	**1.010**

802.11n 5.2 GHz MIMO 20 MHz Bandwidth

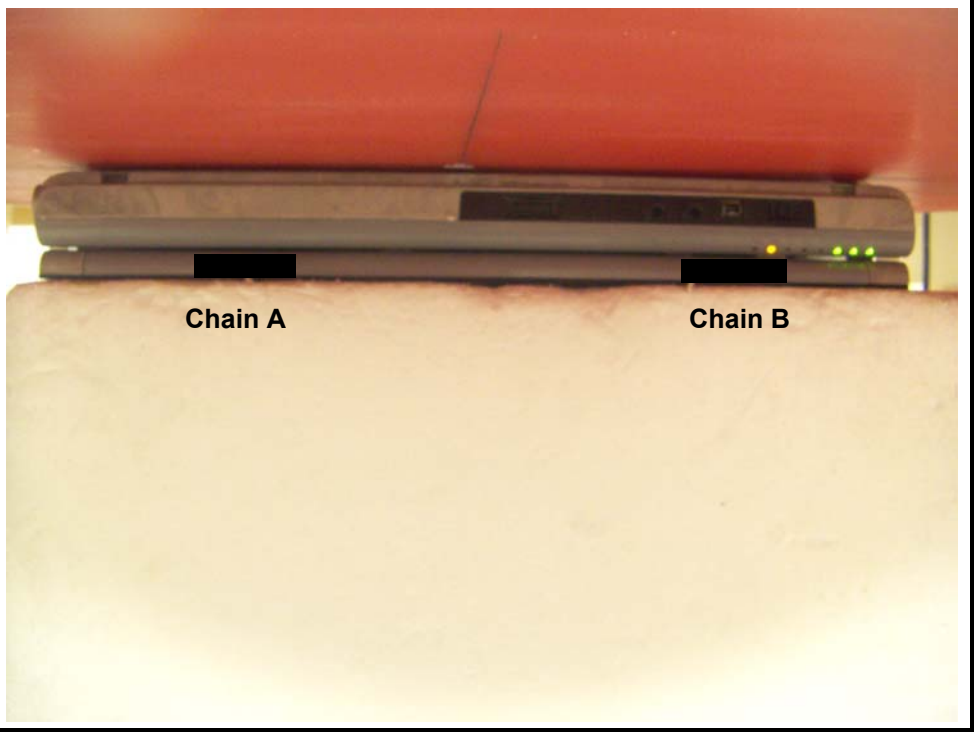
MIMO CONFIGURATIONS WAS MEASURED WITH ALL ANTENNAS TRANSMITTING SIMULTANEOUSLY

Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated[1)] SAR 1g (mW/g)
52	5260	0.618	0.000	0.618

Notes:

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.

8.2.2 LAP-HELD



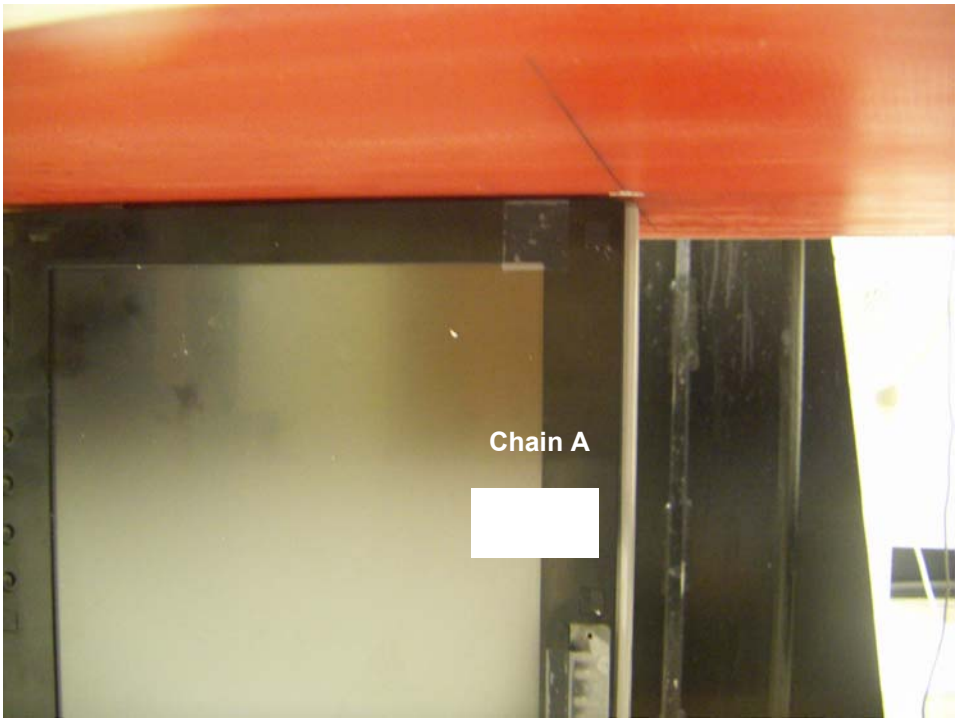
802.11a 5.2 GHz Chain A (Main)				
Channel	**f (MHz)**	**Measured SAR 1g (mW/g)**	**Power Drift (dB)**	**Extrapolated[1] SAR 1g (mW/g)**
36 52 64	5180 5260 5320	0.263	0.000	0.263
802.11a 5.2 GHz Chain B (Sub-A)				
Channel	**f (MHz)**	**Measured SAR 1g (mW/g)**	**Power Drift (dB)**	**Extrapolated[1] SAR 1g (mW/g)**
36 52 64	5180 5260 5320	0.248	0.000	0.248
802.11a 5.2 GHz MIMO 20 MHz Bandwidth				
Channel	**f (MHz)**	**Measured SAR 1g (mW/g)**	**Power Drift (dB)**	**Extrapolated[1] SAR 1g (mW/g)**
36 52 64	5180 5260 5320	0.302	0.000	0.302

Notes:

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.

8.2.3 PRIMARY PORTRAIT

NOTE: The Chain B (Sub-A) antenna is skipped due to the large distance between the antenna and the phantom. (Please see the photo section)



802.11a 5.2 GHz Chain A (Main)				
Channel	**f (MHz)**	**Measured SAR 1g (mW/g)**	**Power Drift (dB)**	**Extrapolated[1] SAR 1g (mW/g)**
36 52 64	5180 5260 5320	0.116	-0.151	0.120
802.11a 5.2 GHz MIMO 20 MHz Bandwidth				
Channel	**f (MHz)**	**Measured SAR 1g (mW/g)**	**Power Drift (dB)**	**Extrapolated[1] SAR 1g (mW/g)**
36 52 64	5180 5260 5320	0.144	-0.185	0.150

Notes:

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.

8.2.4 SECONDARY PORTRAIT

NOTE: The Chain A (Main) antenna is skipped due to the large distance between the antenna and the phantom. (Please see the photo section)

802.11a 5.2 GHz Chain B (Sub -A)				
Channel	**f (MHz)**	**Measured SAR 1g (mW/g)**	**Power Drift (dB)**	**Extrapolated[1] SAR 1g (mW/g)**
36 52 64	5180 5260 5320	0.156	0.000	0.156
802.11a 5.2 GHz MIMO 20 MHz Bandwidth				
Channel	**f (MHz)**	**Measured SAR 1g (mW/g)**	**Power Drift (dB)**	**Extrapolated[1] SAR 1g (mW/g)**
36 52 64	5180 5260 5320	0.164	0.000	0.164

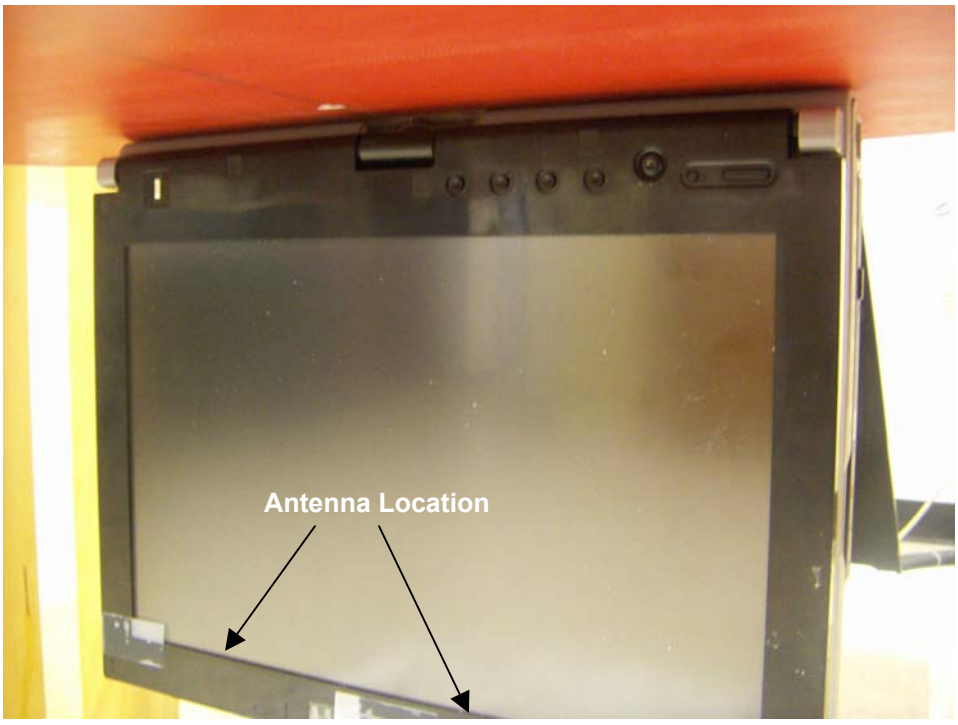
Notes:

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.

8.2.5 PRIMARY LANDSCAPE

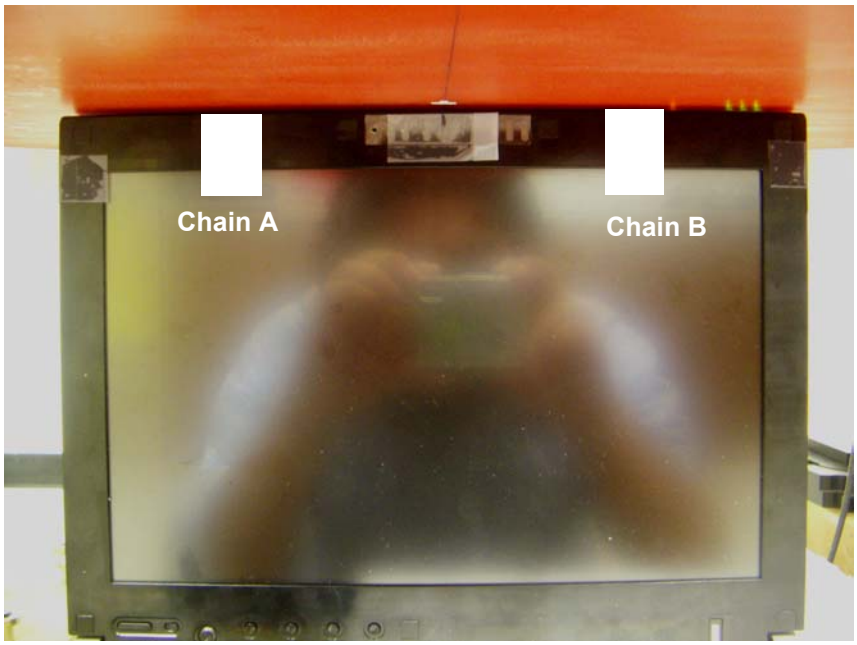
NOTE:

This position was not tested due to the large distance between the antennas and the phantom.



8.3 5.8 GHZ BAND

8.3.1 SECONDARY LANDSCAPE



802.11a 5.8 GHz Chain A (Main)

Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated[1)] SAR 1g (mW/g)
149	5745	1.010	-0.058	1.024
157	5785	1.070	0.000	1.070
165	5825	1.110	0.000	1.110
165[4)]	5825	1.130	0.000	1.130

802.11a 5.8 GHz Chain B (Sub-A)

Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated[1)] SAR 1g (mW/g)
149	5745	1.410	-0.046	1.425
157	5785	1.450	-0.050	1.467
165	**5825**	**1.420**	**-0.183**	**1.481**
165[4)]	**5825**	**1.430**	**-0.184**	**1.492**

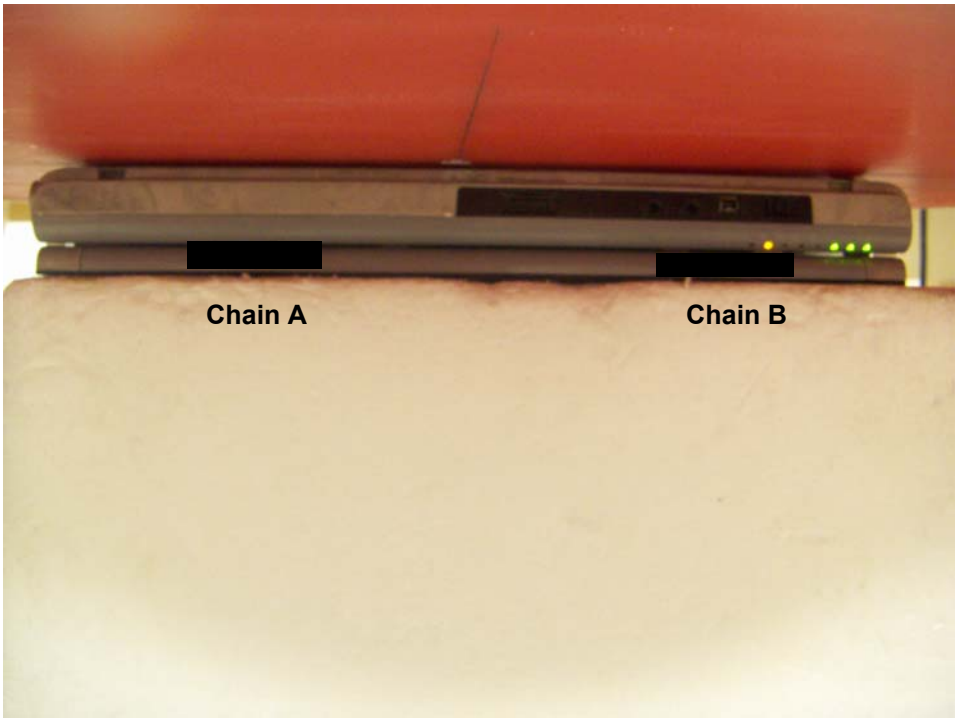
802.11n 5.8 GHz MIMO 20 MHz Bandwidth
MIMO CONFIGURATIONS WAS MEASURED WITH ALL ANTENNAS TRANSMITTING SIMULTANEOUSLY

Channel	f (MHz)	Measured SAR 1g (mW/g)	Power Drift (dB)	Extrapolated[1)] SAR 1g (mW/g)
149	5745	0.840	-0.106	0.861
157	5785	0.847	0.000	0.847
165	5825	0.870	0.000	0.870

Notes:

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

8.3.2 LAP-HELD



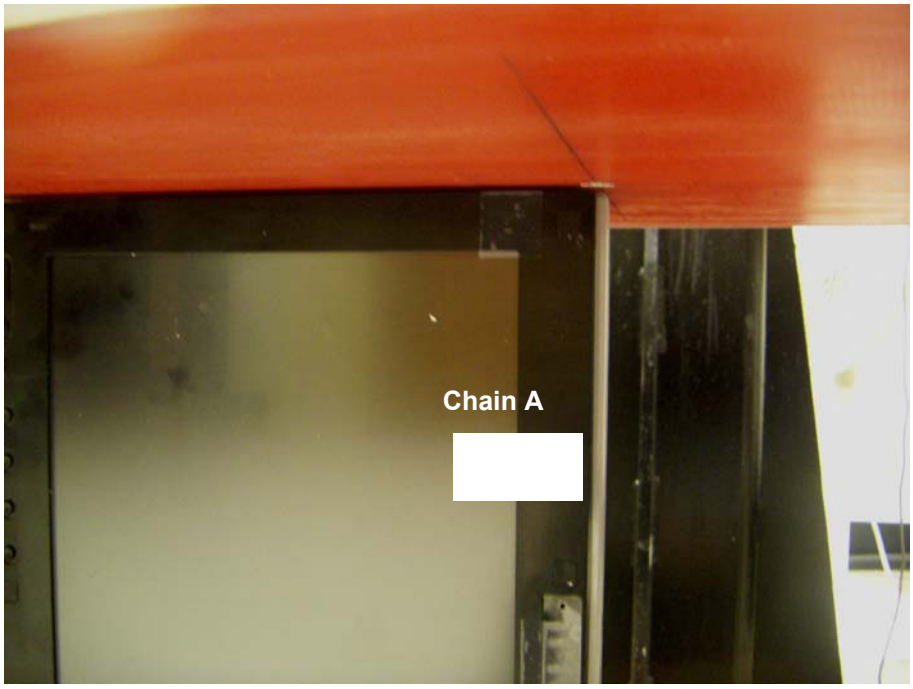
802.11a 5.8 GHz Chain A (Main)				
Channel	**f (MHz)**	**Measured SAR 1g (mW/g)**	**Power Drift (dB)**	**Extrapolated[1] SAR 1g (mW/g)**
149 157 165	5745 5785 5825	0.684	0.000	0.684
802.11a 5.8 GHz Chain B (Sub-A)				
Channel	**f (MHz)**	**Measured SAR 1g (mW/g)**	**Power Drift (dB)**	**Extrapolated[1] SAR 1g (mW/g)**
149 157 165	5745 5785 5825	0.790	0.000	0.790
802.11a 5.8 GHz MIMO 20 MHz Bandwidth				
Channel	**f (MHz)**	**Measured SAR 1g (mW/g)**	**Power Drift (dB)**	**Extrapolated[1] SAR 1g (mW/g)**
149 157 165	5745 5785 5825	0.769	-0.039	0.776

Notes:

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.

8.3.3 PRIMARY PORTRAIT

TESTING FOR THE CHAIN B (SUB-A) ANTENNA IS SKIPPED DUE TO THE LARGE DISTANCE BETWEEN THE ANTENNA AND THE PHANTOM. (PLEASE SEE THE PHOTO SECTION)



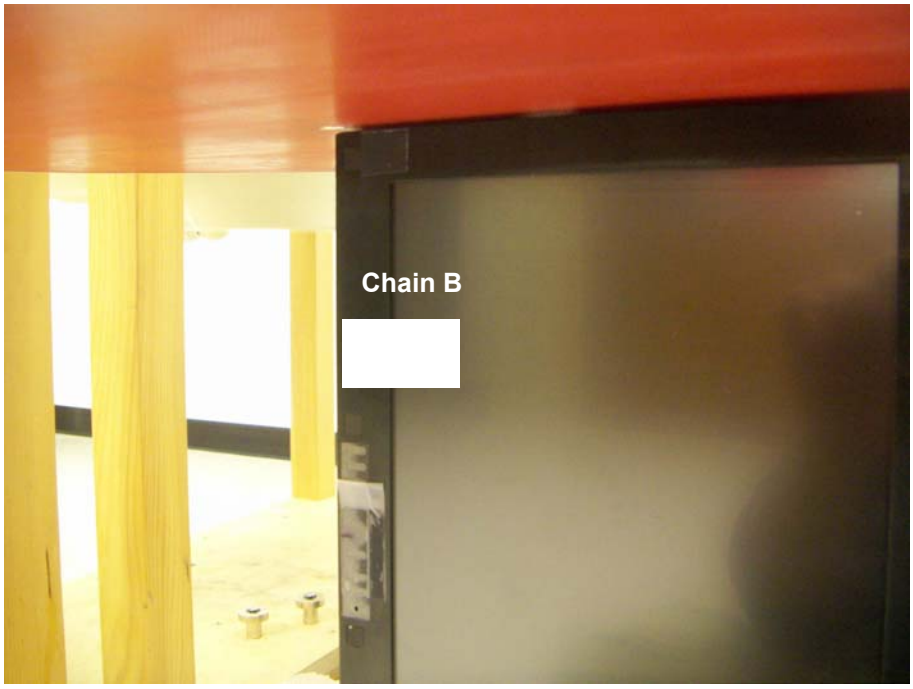
802.11a 5.8 GHz Chain A (Main)				
Channel	**f (MHz)**	**Measured SAR 1g (mW/g)**	**Power Drift (dB)**	**Extrapolated[1] SAR 1g (mW/g)**
149 157 165	5745 5785 5825	0.365	0.000	0.365
802.11a 5.8 GHz MIMO 20 MHz Bandwidth				
Channel	**f (MHz)**	**Measured SAR 1g (mW/g)**	**Power Drift (dB)**	**Extrapolated[1] SAR 1g (mW/g)**
149 157 165	5745 5785 5825	0.378	-0.012	0.379

Notes:

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.

8.3.4 SECONDARY PORTRAIT

THE CHAIN A (MAIN) ANTENNA IS SKIPPED DUE TO THE LARGE DISTANCE BETWEEN THE ANTENNA AND THE PHANTOM. (PLEASE SEE THE PHOTO SECTION)



802.11a 5.8 GHz Chain B (Sub -A)				
Channel	**f (MHz)**	**Measured SAR 1g (mW/g)**	**Power Drift (dB)**	**Extrapolated[1)] SAR 1g (mW/g)**
149 157 165	5745 5785 5825	0.373	0.000	0.373
802.11a 5.8 GHz MIMO 20 MHz Bandwidth				
Channel	**f (MHz)**	**Measured SAR 1g (mW/g)**	**Power Drift (dB)**	**Extrapolated[1)] SAR 1g (mW/g)**
149 157 165	5745 5785 5825	0.339	0.000	0.339

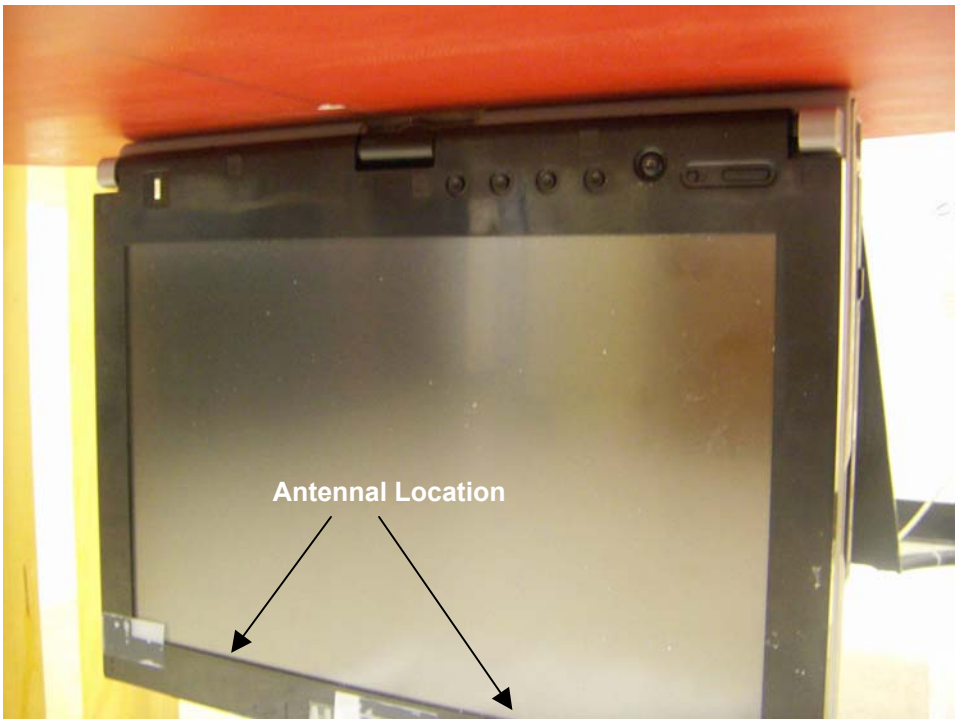
Notes:

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.

8.3.5 PRIMARY LANDSCAPE

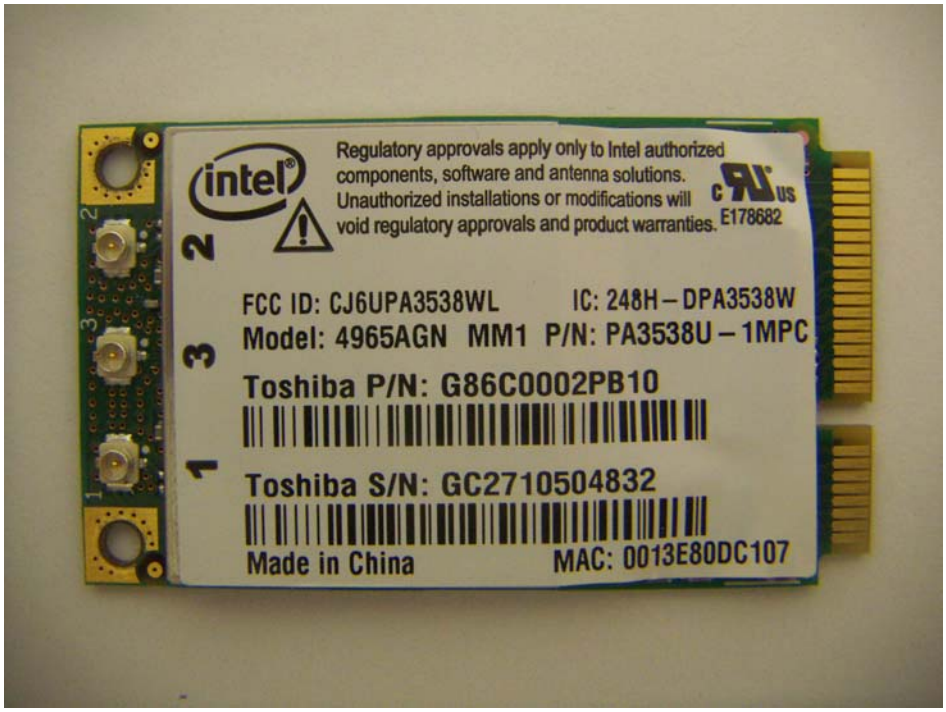
NOTE:

THIS POSITION WAS NOT TESTED DUE TO THE LARGE DISTANCE BETWEEN THE ANTENNAS AND THE PHANTOM.



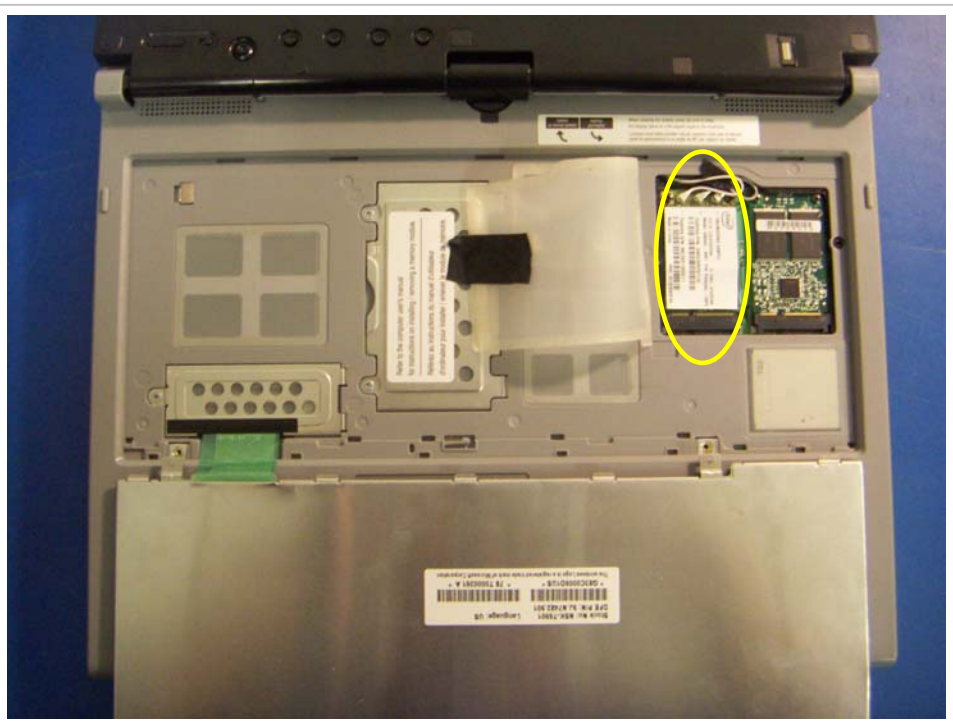
11 PHOTOS

EUT

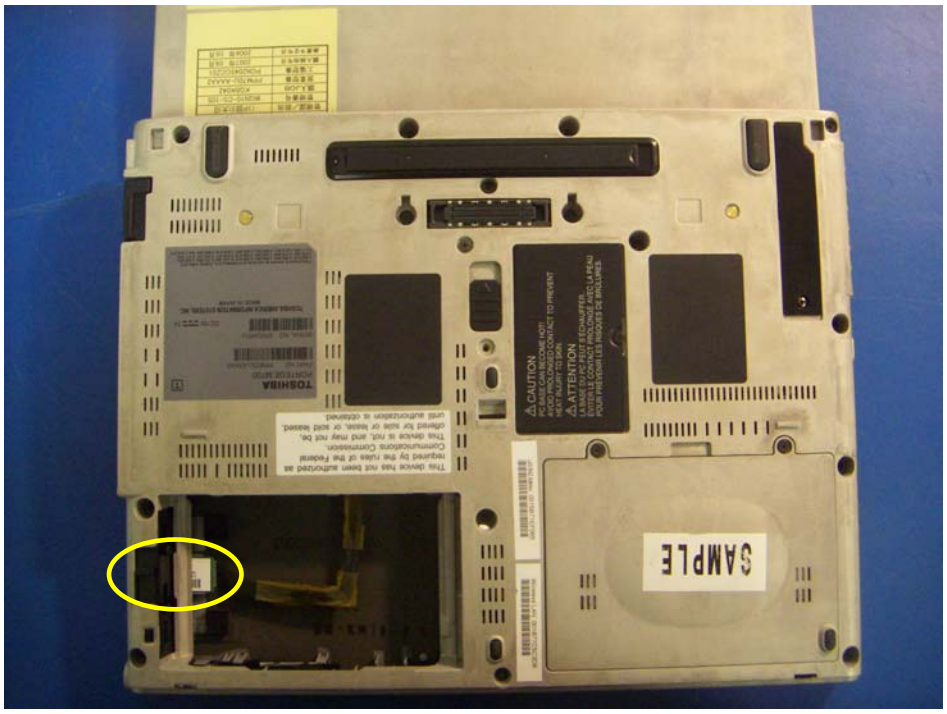


Tablet Mode

EUT Location



Bluetooth Module Location



Antenna Location