

FCC Response: Date 06/09/2010

1. Please provide the original pba number to this application that confirms pre-test review and clarifies if permissive change is for a specific host or a group/category of hosts and depending on the display screen size, which SAR procedures are applicable, KDB 616217, 447498.
2. In page 20, include one derivative equation explaining how any of the traffic power was derived in scaling factor determination.
3. In page 29 of the test report, please provide a test set up photo or /and description of the distance of the antenna to the flat phantom when the edge of the device was placed 0mm against the flat phantom for SAR linearity plot and contrast that with a test set up photo/description for normal SAR measurement that gave low SAR data. Specifically provide antenna distance(s) to the flat phantom for each of the test consideration to justify difference in SAR value.

Answers to FCC questions:

1. Please provide the original pba number to this application that confirms pre-test review and clarifies if permissive change is for a specific host or a group/category of hosts and depending on the display screen size, which SAR procedures are applicable, KDB 616217, 447498.

<Answer>:

The original tracking number for this application is 286072. See "Original lab PbA tracking number 286072".

"Class 2 Permissive Change PBA is requested for the Intel WiMAX/Wi-Fi Link 6250 combo module installed in a Lenovo laptop computer for a MODEL CARAMEL-3/ set of antennas. In addition this class 2 Permissive Change is to add WWAN and Bluetooth co-location data and for an amendment to allow for a portable condition due to the distance factor and allow for human exposure SAR data to be added to the original mobile Grant of Authorization using KDB 616217 and 615223."

2. In page 20, include one derivative equation explaining how any of the traffic power was derived in scaling factor determination.

<Answer>:

SAR is scaled by (Pls see SAR report page 19 through 21)
[control symbol max. power * 3 + traffic symbol max. power *
max. UL traffic symbols] / [measured max. traffic symbol power
* traffic symbols] (See Traffic Power Below)

With highest DL:UL = 29:18

SAR is measured using DL:UL = 32:15 with inactive control symbols.

$$\begin{aligned} - 10\text{MHz } 16\text{QAM} &= (229.09 * 5/35 * 3 + 229.09 * 15) / \\ (229.09 * 12) &= 1.29 \end{aligned}$$

SAR is measured using DL:UL = 23:24 with inactive control symbols.

$$\begin{aligned} - 10\text{MHz QPSK} &= (229.10 * 5/35 * 3 + 229.10 * 15) / \\ (209.41 * 21) &= 0.8 \end{aligned}$$

SAR is measured using DL:UL = 26:21 with inactive control symbols.

$$\begin{aligned} - 5\text{MHz } 16\text{QAM} &= (269.2 * 5/17 * 3 + 269.2 * 15) / (247.17 \\ * 18) &= 0.96 \end{aligned}$$

SAR is measured using DL:UL = 26:21 with inactive control symbols.

$$\begin{aligned} - 5\text{MHz QPSK} &= (269.2 * 5/17 * 3 + 269.2 * 15) / (244.91 * 18) \\ &= 0.97 \end{aligned}$$

Traffic Power

Calculation example:

Traffic Symbols Pwr = Measured power * No. of Traffic Symbol

$$10\text{M } 16\text{QAM} = 229.09 * 12 = 2749.08$$

$$10\text{M QPSK} = 209.41 * 21 = 4397.61$$

3. In page 29 of the test report, please provide a test set up photo or /and description of the distance of the antenna to the flat phantom when the edge of the device was placed 0mm against the flat phantom for SAR linearity plot and contrast that with a test set up photo/description for normal SAR measurement that gave low SAR data. Specifically provide antenna distance(s) to the flat phantom for each of the test consideration to justify difference in SAR value.

<Answer>:

You can find the test setup photo and the distance of the antenna to the flat phantom for SAR linearity plot in page 29 of SAR report.

The Primary landscape landscape (ACON antenna) has the lowest SAR value, which is 0.032 mW/g before corrected. After corrected is 0.041 mW/g.

2) Tablet edge - Primary Landscape (14 cm from Tx main antenna-to-user)

Bandwidth	Mode	Test vector file name	f (MHz)	1g_SAR (mW/g)	Scale Up Factor to DL:UL Symbol ratio of 29:18	Corrected 1g_SAR (mW/g)
10MHz	16QAM	DQ4_12_UQ16_12_10M	2593	0.032	1.29	0.041

Note: This table found on page 27 of the SAR report

Please note that the Tx is disabled by software in this orientation (secondary portrait, see page 29), therefore the test configuration on page 29 (secondary portrait) is for the purpose of SAR linearity plot evaluation only. Disable info is found in Antenna description PDF. **See Photos next page.**

Figure-5:
Tablet SL (Secondary Landscape)

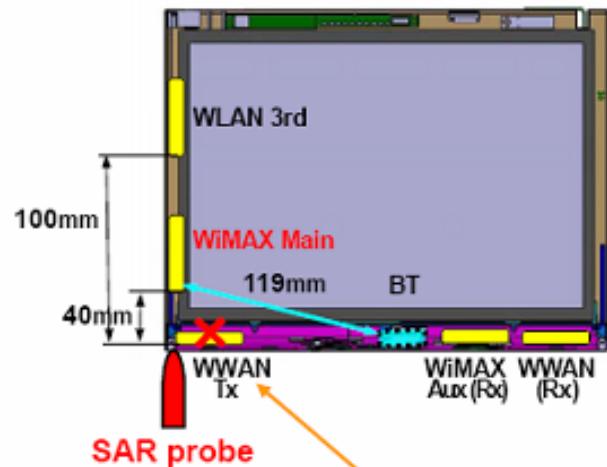
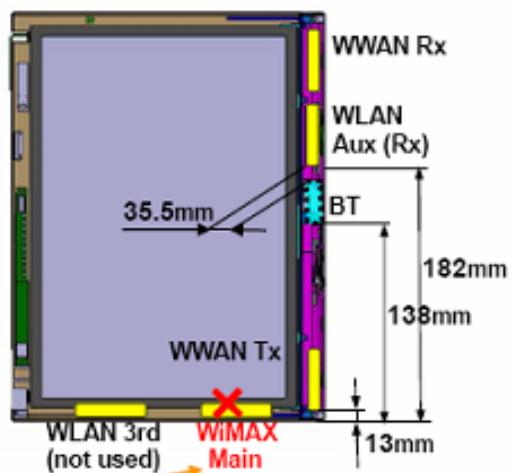


Figure-6:
Tablet SP (Secondary Portrait)



✖ Tx antennas in these rotary screen
positions do not transmit RF.
See separate exhibit "Tablet Tx control logic" in
more details.