

From: Christine Vu
Sent: Friday, January 03, 2003 6:49 PM
To: Mike Kuo; Michael Heckrotte; CLIENT ADVOCATES
Cc: Steve Cheng; Mike Kriege (E-mail)
Subject: RE: APPLE COMPUTER, FCC ID:BCGA1044, AN02T2500

Hello Mike Kuo,
Here are the reply to each question below.

1. Question 1: The FCC Test Report has the correct antenna gain. However, the SAR did not have the correct antenna gain. This is a typo error, therefore, the SAR Report has been revised. It is attached below. The Technical Description has been revised as well to state the correct antenna gain. It is attached below. Note: The Dipole Antenna is no longer desired & is retracted from the submittal.

2. Question 2: AC Line Conduction tests have been performed from 150kHz-30MHz. Attached below is the data.

3. Question 3: Attached below is the additinal test data of the Inverted F Antenna.

4. Question 4: Attached below is provided by client to address the module approval requirement per FCC public notice 00-1407.

5. Question 5: Limited Modular Approval with installation refer to Attachement #4 & #5.

6. Question 6: Attached below is the second label that will be placed on the outside of the device that contains FCC ID.

7. Question 7: Page 16 of the SAR Test Report has been revised. Attached below is the Revise Test Report.

-----Original Message-----

From: Mike Kuo
Sent: Thursday, January 02, 2003 5:01 PM
To: Michael Heckrotte; CLIENT ADVOCATES
Cc: Steve Cheng; Mike Kriege (E-mail)
Subject: FW: APPLE COMPUTER, FCC ID:BCGA1044, AN02T2500

-----Original Message-----

From: CERTADM
Sent: Thursday, January 02, 2003 4:59 PM
To: 'mkuo@ccsemc.com'
Subject: APPLE COMPUTER, FCC ID:BCGA1044, AN02T2500

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Question #1: Per the technical description attachment file, it indicates that the max. antenna gain is 2.1dBi. However, in the Bluetooth test report prepared

by CCS, it listed the max. antenna gain is -1.6dBi. In the SAR test report, two antennas are listed, one with 3.45dBi gain (Patch) and the other one with 0.76dBi gain (Inverted F). Please explain the differences in antenna gain through out the submission files.

Question #2: The AC line conducted emission tests performed by Apple Computer were investigated from 400kHz to 30MHz. Per FCC public notice 02-157, for those devices investigated that did not demonstrate new AC line conducted emission limits will have grant conditions which indicate the manufacture and importation of this device must cease on July 10, 2005. If such grant condition is not desirable, please provide new AC line conducted emission tests from 150kHz to 30MHz based upon CISPR 22 Class B requirements. Please confirm or provide additional test data.

Question #3: Two different type of antenna are described in the SAR reports. One is Patch antenna and the other one is Inverted F antenna. In the transmitter emission tests plots (Spurious Radiated emission test plots) only include one set of spurious radiated emission data tested with patch antenna. Please provide additional test data with Inverted F type antenna.

Question #4: Please provide a cover letter to address module approval requirement per FCC public notice 00-1407.

Question #5: There is no installation instruction provided for this module approval. Please confirm that this transmitter module will only be installed in Apple Computer's Laptop or Desktop computer. If this module is to be installed by Apple or Apple's authorized OEM, this will be resulted in limited Module Approval. If full module approval is desired, please provide a clear module installation procedure to be given to system integrator.

Question #6: Per FCC public notice 00-1407 module approval requirements, if the FCC ID label is not visible after the module is installed in the final product, a second label is required to be placed on the outside of device to identify the FCC ID label. This second label shall have the following wording " Contains FCC ID:BCGA1044 ". Please provide a second label format to comply this requirement.

Question #7: Page 16 of SAR test report, EUT configuration Setup #1 indicated that A1041 (A1041 is associated with separate application. The model name for this application is A1044) was used with Patch antenna. Please explain why the different EUT was used during Setup configuration # 1 tests.

Best Regards

Mike Kuo

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 60 days of the original e-mail date may result in application dismissal and forfeiture of the filing fee. Also, please note that partial responses increase processing time and should not be submitted. Any questions about the content of this correspondence should be directed to the e-mail address listed below the name of the sender.