

To: Federal Communications Commission

From: Shaikhe Raz

Att: Reviewing Engineer

Reference No: L8833.00

Date: 02 March 2009



Subject: Testing of WLAN Module With WCE (WiFi Coverage Extender) For DAS,
FCC ID: OJFMA860WCE-AU, M/N 860M-AU With WCE-AU



To Whom it May Concern,

1. The subject product was originally authorized under FCC ID: OJFMA860WCE.
2. Due to the following changes in the original product a new certification application is being submitted:



2.1. For the 860M (New M/N 860M-AU):

Modification of the triplexer frequency inputs from:

Licensed: 400-1990 MHz

WiFi b/g: 2.4-2.485 GHz

WiFi a: 51.15-5.85 GHz

to:

Licensed: 400-2170 MHz

WiFi b/g: no change

WiFi a: no change



2.2. For the WCE (New M/N WCE-AU):

Widening of the low pass filter in the part of the licensed services from 1995 MHz to 2170 MHz supporting also UMTS and AWS services.

Moving the power amplifier driver from SH4 to SH3 (e.g. SH=Shielded Box), total gain unchanged.

Some 802.11a layout modifications to improve the yield.



2.3. Changing DC/DC power supply.

DC voltage to WCE will be 7.7 VDC instead of 7VDC.



3. Testing was performed based on correspondence between Mr. Steve Blum of Mobile Access Networks and Mr. Joe Dichoso of the FCC dated 30 May 2008 as follows:



“From: Joe Dichoso

Sent: Friday, May 30, 2008 3:08 PM

To: 'Steve Blum'

Cc: Rashid Doshi; John Reed; Joe Dichoso

Subject: FW: FCC Guidance

Hello Steve,

Please see bold reply below.

Thanks,

Joe



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Email: standard@itl.co.il, Web Site: <http://www.itl.co.il>

From: Steve Blum [mailto:sblum@mobileaccess.com]

Sent: Thursday, May 29, 2008 3:06 PM

To: Joe Dichoso

Subject: RE: FCC Guidance

Yes, we have two issues: summary of test data attached. Let me know if you need more details.

1. MobileAccess is requesting updated guidance on the part 15 testing for the model 860. The 860 is essentially a part 15 subpart C amplifier for 802.11 b/g/a WLAN services.

a. Main difference is the 860 couples licensed services (via certificated transmitters) onto the coax with the 802.11b/g and a services.

1. Licensed services are passively coupled and all services are filtered to prevent interference.

b. Previous guidance from FCC from March 2006, requires 3 sets of tests, b/g only, b/g and a, b/g with a and cell/pcs.

c. Test data from all submissions to date (summary attached) shows that “b/g and a” is worse case while passing all b/g and a tests.

d. Request that guidance be modified to require only “b/g and a” test for future submissions

1. MobileAccess agrees that the 860 is professionally installed and must be tested and sold with labels on transmitter for the specific transmitter approved.

Reply: As before, the amplifier must be certified with a specific transmitter FCC ID XXXXXX it was tested with. Please note marketing requirements per 15.204(d). The amplifier must be marketed with the transmitter or designed in such a fashion that it can be used only with that transmitter.

You can submit full tests with all “b/g and a” and cell/pcs active. Prescan tests can be made in all other modes.

Steve Blum

Product Manager

MobileAccess

Office 541 758-2880

Mobile 541 990-3470”

4. Based on the above correspondence the E.U.T. was tested with b/g, a, WMTS, and AWS services active.
5. The subject product was tested with 4 access points (all access points have FCC ID from the original manufacturers) in the operating frequency bands 2.412-2.462, 5.18-5.24, and 5.745-5.805 GHz.
6. Separate test reports for DTS and NII bands for each access point were issued.
7. Mobile Access Networks requests that the notes on the grants appear as on the original grants except for replacing “typical Cellular 800 and PCS 1900” to “typical WMTS...AWS...”



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8. Please contact me if you need any additional information.
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Regards



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