Mike Kuo

From: Shay Simchon [ShaiS@mobileaccess.com]

Sent: November02   2004   Tuesday 7:51 AM

To: Mike Kuo

Subject: MA2000 product-answers to questions given by TCB

Hi
here are some answers to the questions given by the TCB

Q1)
attached the datasheet and user's manual for the MA2000 product

indeed, the remote units inside the cabinet are type of the RHU's of the system called MA1000 (as mentioned they were granted in Nov. 2003)
due to a change in passive (filters, mainly) these unit are no longer MA1000 Remote Hub Units and we catalog them as new products MA2000 RHU's.
therefore the units were tested again inside the MA2000 cabinet.

indication for the system's components:

RHU (remote hub unit) :
indicated as remote unit:

BU (base unit) :
indicated as host unit (mainly sends base-station downlink via fiber-optic and receives handset uplink via fiber-optic from remote)

RIU (radio interface unit) :
indicated as host unit
it sends base station downlink via coax to the BU
it transmits the uplink (that came from the BU) to the base station
the RIU is an active inteface unit but for the BTS (no antenna connection) combined with passive interface unit unit as well

remote cabinet :
indicated as active interface unit but as follows:
the cabinet is passive interface unit for RF
but has monitoring circuit (digital logic) for monitoring

except the the cabinet and the units inside it all other component are identical to the the units of the MA1000 system that was already granted (shared componets for both the MA1000 and MA2000 systems)

Q2)
indeed Uplink was not fully tested and that is due to the mentioned fact that the received signals from the handset (antenna) that pass through the system (as a link and without any down/up frequency conversions) goes straight to the Base Station through a cable from the output of our system

in radiated emission the system were tested as well in receive mode

in the Uplink the system receive the signals transmitted by the handset through the antennas and amplifies them with a fixed gain.from the RHU the signals pass through the fiber-optics to the Base unit which amplifies the signal again (fix gain) and pass it to the base station through a cable or to the optional RIU which first can gather uplink signals from up to 8 base units then pass it through the BTS conditioner (the active part in the RIU).each BTS conditioner can handle a specific frequency bad of operation (the difference is only the different filters inside the conditioners)

Q3)
the output power specification for each service/modulation can be found inside the attached datasheet

11/16/2004

Q5)
regarding the the failure in some of the iDEN800 masks plot:
the plot indicates failure only because the test lab upload the mask they had which apparently doesnt match the FCC mask for iDEN
due to that fact, and as you can see in the plot themselves we did those plot for both the input signal from the generator (the blue lines in the plots) and the output from our system (the red lines in the plots).
as you can see beacuse the wrong mask also the input indicated as failure(the iDEN generator itself)
and you can see no degradation in the mask between the blue line (generator) and the red line (the output of our system) but only the difference of gain.

Q6)
the RHU product that we call SMR is limited to the DL frequencies of 928~941MHz and to the UL frequencies of 896~902MHz and we did the tesst for the lower frequency, the upper frequency and in the middle
and in any case the system is "transparent" to all the range of the frequencies of DL 928~941MHz and UL 896~902MHz.
also as you can see fro the plots, as well as the plot of intermodulations it is beyond any doubt that we keep the limit of -13dbm.

Q7)
part 22.917 no longer contain the paragraph (f)
i know it exist in 2002 edition but it isnt exist from 10-1-2003 edition
we couldnt locate it as well in the FCC site

thank you for you help

shai simhon

MobileAccess networks Ltd.

Tel: 972-8-9183867

Fax: 972-8-9183844

shais@mobileaccess.com

11/16/2004