From: Estrella Gil-P19838 [Gil.Estrella@gdds.com]
Sent: Monday, May 12, 2003 4:21 PM
To: Roland Gubisch ITS/ES-Box
Cc: TCB_Admin ITS/ES-Crt
Subject: RE: Grant notes FCC ID: MIJAD510

Roland,

Yes, your understanding of the power/gain for this antenna are correct. Reception is required from 0 (overhead) to roughly 82.5 degrees (i.e. 7.5 degrees
above the horizon). The 8dBi is actually the best case scenario (max) for a 0 (overhead) to 20 degrees elevation and starts dropping off thereafter. The gain
from 60 deg to 82.5 degrees is actually 3dBi (typ) or less and similar to the integral
handset antenna.

Regards,
Gil Estrella
GENERAL DYNAMICS
Decision Systems
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-----Original Message-----
From: Roland Gubisch ITS/ES-Box [mailto:RWG@ETLSemko.com]
Sent: Monday, May 12, 2003 8:55 AM
To: Estrella Gil-P19838
Cc: TCB_Admin ITS/ES-Crt
Subject: Grant notes FCC ID: MIJAD510

Good morning, Gil:

Please confirm my understanding of the power/gain issues below.

As output power above 1 GHz is usually specified in EIRP, I intend to generate the grant with a listing of EIRP as well as conducted power.

a) the conducted power to the antenna is 0.63W, based on the 9.2% duty cycle and your measured data.
b) antenna gain is 8 dBi, so the EIRP will be 4 W .
c) this is higher EIRP than the phone by itself, owing to the higher antenna gain (compared to 0.5 - 1.5 dBi) at the same conducted power.

Thank you,
Roland Gubisch
Intertek