

## **Marianne Bosley**

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**From:** alice\_wong [alice\_wong@hkstc.com]  
**Sent:** Thursday, January 09, 2003 10:17 PM  
**To:** mbosley@metlabs.com  
**Cc:** EED - Choy, Kitty; tcbinfo@metlabs.com  
**Subject:** Request for Technical Info on FCC ID:QQ7EGUARDEAS02 and QQ7EGUARDEAS01

> Answer:  
> 1.EUT is Digital sweep. It would send different code to receiver.  
>  
> 2.For the radiated Emission frequency range from 1.705MHz to 1000MHz(  
S15.223  
> and S15.209)  
>  
> 3.The sample was placed 0.8m above the ground plane on the OATS \*.  
> Measurements in both horizontal and vertical polarities were performed.  
> During the test, each emission was maximized by: having the EUT  
continuously  
> working, investigate all operating modes, rotated about all 3 axis (X, Y &  
> Z) to obtain worst position, manipulating interconnecting cables, rotating  
> turntable, varying antenna height from 1m to 4m in both horizontal and  
> vertical polarizations. For the Loop antenna, Antenna height is 1m and it  
> would be rotated per 45 degree . The emissions worst-case are shown in  
Test  
> Results .  
>  
> 4.We would attach Loop Antenna correction factor to you. Model :6502,  
> S/N:2424  
>  
> 5.EUT center frequency is 8.58MHz upper band edge is 9.0775MHz and lower  
> band edge is 8.0825MHz (QQ7EGUARDEAS01)  
> EUT center frequency is 8.2MHz upper band edge is 8.725MHz and Lower  
band  
> edge is 7.67MHz (QQ7EGUARDEAS02)  
>  
> 6. Renew test report for duty cycle.  
>  
> ----- Original Message -----  
> From: "alice\_wong" <alice\_wong@hkstc.com>  
> To: "M K Law" <mankit\_law@hkstc.com>  
> Cc: "EED - Choy, Kitty" <kitty\_choy@hkstc.com>  
> Sent: Friday, January 03, 2003 9:01 AM  
> Subject: Fw: Request for Technical Info on FCC ID:QQ7EGUARDEAS02  
>  
>  
> >  
> > ----- Original Message -----  
> > From: <MBosley@metlabs.com>  
> > To: <alice\_wong@hkstc.com>  
> > Sent: Friday, January 03, 2003 12:35 AM  
> > Subject: Request for Technical Info on FCC ID:QQ7EGUARDEAS02  
> >  
> >  
> > > Hi Alice,  
> > >  
> > > Same technical questions for this one as for the other one:  
> > >  
> > > RT questions:  
> > >

> > > Was the frequency sweep stopped while radiated measurements were made?  
 > > > What is the frequency range of the sweep?  
 > > > Does the EUT employ an analog sweep (continuous, sliding over all  
 > > > frequencies in the band) or a digital sweep (discrete frequencies  
 hopped  
 > > to  
 > > > very rapidly)? If it is a digital sweep (as most modern systems are),  
 > > then  
 > > > none of the discrete frequencies on which it lands may be in a  
 > restricted  
 > > > band, as defined in Section 15.205. What discrete frequencies are  
 used?  
 > > > Please address.  
 > > > Was a loop antenna used for radiated measurements? If not, please  
 > > remeasure  
 > > > with a loop antenna- a rod antenna may not be used. If so, was it  
 both  
 > > > rotated on its vertical axis AND placed in the horizontal plane as  
 well,  
 > > per  
 > > > ANSI C63.4 Section 8.2.1?  
 > > > The "correction factors" listed in the radiated emissions data table  
 > seem  
 > > > quite low for the antenna, compared to those used for many loop  
 > antennas.  
 > > > Please address.  
 > > > When calculating the duty cycle correction factor, please note the  
 > > > following: a duty cycle correction factor is NOT applied to an analog  
 > > > system For digital systems, the averaging factor described in Section  
 > > 15.35  
 > > > may be applied, based upon how much time the signal actually spends on  
 > > each  
 > > > discrete channel during a 100 ms interval. If the EUT goes through  
 its  
 > > > hopset and returns to the same frequency during the 100 ms interval,  
 > then  
 > > > the total occupancy time on that frequency during the 100 ms interval  
 > > should  
 > > > be used in calculating the duty cycle correction. Note that if the  
 > > hopping  
 > > > frequency channels are so close that more than one of them falls  
 within  
 > > the  
 > > > 9 kHz bandwidth required for measurements, then the duty cycle  
 > correction  
 > > > must include the total time spent on all of the channels within that 9  
 > kHz  
 > > > band during the 100 ms measurement interval. Please address.  
 > > >  
 > > > Marianne  
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