From: Brian Holman

To: Doug Young
Date: January 19, 2017

Subject: Request for Info - STA File #1697-EX-ST-2016

Message:

Reference # is 35315
File # 1697-ex-st-2016

Doug,

In response to your questions regarding our application please see the attachments added to the application (since the PDFs cannot be copied into this text file). I have also emailed this information to you directly.

For the horizontal antenna pattern, 0° on the plot corresponds to 128°N.
For the vertical antenna pattern, 0° on the plot corresponds to the horizon with the 30° peak pattern gain being 30° below the horizon.

The application contains the worst-case ERP value using the signal generator maximum output and the peak antenna gain. After refining our link budget, the signal generator will be operated at a much lower peak output power of 1mW. The geometry of our test setup will also position the antenna to be pointing 30 degrees down from the horizon. Our peak ERP value on the horizon will be 0.575mW, given our antenna geometry and loss budget between transmitter and antenna.

Your duty cycle calculations of 50% are correct. If the average power will be too high considering the local FSS received earth stations nearby, please let us know and we’ll try to revise our test plan to accommodate accordingly.

Thanks,
Brian

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