

Reply to Correspondence Reference Number: 12808

731 Confirmation Number: EA96729

Applicant: Spike Technologies, Inc

FCC Item 1.

1.) Because of the different power output ratings / capability of the "HUB" and "SUB" units, they must be Certified under separate FCC ID's. (Please see FCC R&R Section 2.1043 which sets the guidelines for equipment of the same "Type".) Please respond by indicating which unit should be considered under the current pending filing. A new and separate application for Certification should be filed for the other unit.

Spike Reply to Item 1:

The HUB and SUB transceivers work in tandem as part of the HighPoint BDS System. The HUB and SUB are electrically similar with the exception that the frequency plan is reversed. In other words the HUB transmits on the same frequency the SUB receives. And the SUB transmits on the frequency that the HUB receives. Therefore they are mirror images. We will drop the HUB power level to meet the SUB power level. FCC Certification was granted on our previous version (MXM-PRIZM100) pair of HUB and SUB radios under one file and FCC ID number. Spike is hopeful we can do the same here.

FCC Item 2.

2.) Please note the RF exposure labeling requirements for subscriber units as specified under FCC R&R Section 1.1307, Table 1. Please indicate how this requirement will be satisfied.

Spike Reply to Item 2:

This Item was later changed to a separate FCC Correspondence Reference Number: 13075. Spike will submit a separate reply to that correspondence addressing this item.

3.) The modulated spectrum plots included as Pages 15 and 18 show non-compliance with the emissions emissions when adjusted for the average (or "flat top") signal level of the emission(s). Please indicate how the units will be modified to show compliance.

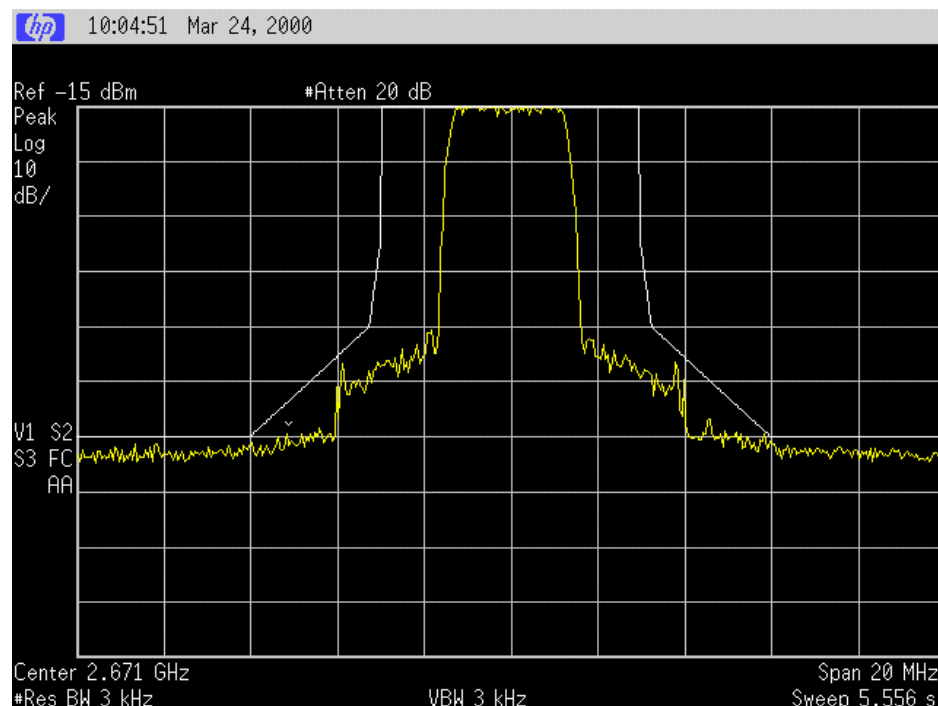
Spike Reply to Item 3:

The modulated spectrum plot shown in figure 15 used the method described in Paragraph 21.909 (e) (1). This was an "absolute power measurement (below channel power)." The average channel power was measured with a power meter, then the spectral attenuation was measured with the spectrum analyzer.

+19.78 dBm	Hub Transceiver Average Power called out on page 14 of the report.
-17.8 dB	Bandwidth Correction from Average channel power. $10\log(6\text{MHz}/100\text{kHz})$ CBW = 6 MHz, Spectrum Analyzer RBW = 100 kHz
-22 dB	Test Setup external attenuation (-20 dB external pad to limit overdriving of spectrum analyzer, - 2 dB of cable loss at 2.527 GHz)

-20.02 dBm level at which the reference level should be placed on the spectrum analyzer taking in to account the average channel power, the BW correction, and external attenuation

The modulated spectrum plot shown in Figure 18 used the "relative power measurement (below flat top)" specified in 21.909 (e) (2). We could not apply the absolute measurement due to the burst nature of the upstream modulated signal. In this method, the "flat top" is adjusted to the reference level of the analyzer. Because the modulated spectrum is a burst signal, if the analyzer were placed in max hold over enough samples, the peaks would fill in to make the signal more flat topped and the position of the plot would be correct as is. Another plot was taken in max hold and is submitted below:



FCC Item 4.

4.) Use of a spectrum analyzer RBW of 3 kHz for the "Sub" plot would not be permitted without adjustment of the emission attenuation requirement by the ratio to the average or "flat top" reading.

Spike Reply to Item 4:

A second "Sub" plot is submitted above in our reply to Item 3. This plot was taken with a RBW of 3 kHz. It is our understanding that item 4 is addressed by demonstrating that the position of the "flat top" is placed correctly.

FCC Item 5.

5.) Your Confidentiality request letter dated February 11, 2000 references several Exhibits that are not normally available for Confidential status. Exhibit F - Internal photos - are not normally Confidential since the unit is available for inspection after sale and installation. Similarly, for Exhibit M - Manual. We allow for such material to be placed in a Confidential status when a non-disclosure agreement exists with the owner / user of the unit(s). Please indicate if such an arrangement will be made.

Spike Reply to Item 5:

Spike has no arrangement in place, nor have current plans for a non-disclosure agreement with the owner. Spike understands if these cannot be made confidential.