Chris Harvey

From:	September Radecki [september.radecki@ccsemc.com]
Sent:	Friday, June 22, 2007 8:32 PM
То:	Chris Harvey
Cc:	September Radecki
Subject:	RE: Hospira, Inc., FCC ID: STJ80411396001, Assessment NO.: AN07T6917 & AN07T6918, Notice#1

Attachments: 07U11022-4B FCC IC SAR REPORT.pdf; Antenna photos.pdf





07U11022-4B FCC Antenna IC SAR REPORT....photos.pdf (212 KB) hi Chris,

Below are the answers to your questions on the above referenced application.

1. Hospira has included a Confidentiality letter to request that the Block Diagrams and Schematic Diagrams be held as confidential. These 2 exhibits were not required for this Class II Permissive Change application nor were they submitted. Therefore, the Confidentiality Letter is not needed for this application filing. Please confirm that this Confidentiality Request Letter exhibit should be removed from this filing. <CCS Answer:> Please disregard the confidentiality request and remove it from the filing. Sorry for the extra paper.

2. The previous approval was for a use of a Surface Mount PIFA antenna with maximum 4.5dBi gain. This application uses the same design antenna with 1.73dBi gain. Please provide photographs and technical specifications of the new antenna. <CCS Answer:> The application uses the same Surface Mount PIFA antenna. The previous maximum gain of 4.5dBi occurs in the elevation plane of the antenna pattern. Due to an oversight, the antenna gain in the new application was only measured in the Azimuth plane and reported as 1.73dBi. Based on the reviewer's question, we have measured the elevation plane maximum gain with the new application to be 4.38dBi.

Hence the antenna specs for the new application is as follows:

Antenna Type: Surface Mount PIFA antenna Antenna maximum gain: 4.38dBi.

This is very close to the previous approval.

The antenna pictures are attached.

3. The DTS test report has spurious Restricted Bandedge emissions documented for the 2.4 GHz band in 802.11(b) and 802.11(g) modes of operation. Please provide the Restricted Bandedge emissions measurement data for the 802.11(a) 5.725 - 5.825 GHz band. <CCS Answer:> Normally, we don't do a restricted bandedge at 5.725 - 5.850 GHz DTS band due to far away from the edge. The restricted low bandedge is 5.25 - 5.46 GHz and the higher bandedge is 7.25 - 7.75 GHz.

4. Page 3 of 29 of the SAR measurement report documents testing in the following bands: FCC 15.247 DTS, 2412-2462 MHz, 5745 - 5825 MHz (AN07T6917) FCC 15.407 NII, 5260 - 5320 MHz, 5500 - 5700 MHz (AN07T6918) The Original approval for this device documents testing in the following bands: FCC 15.247 DTS, 2412 - 2462 MHz, 5745 - 5825 MHz, FCC 15.407 NII, 5180 - 5240 MHz, 5260 -5320 MHz, 5500 - 5700 MHz,

The testing appears to have been tested in all available bands, but page 3 of the report does not include all available bands. The following channels (in MHz) were tested per the data tables in the SAR report:

2412, 2437, 2462 in b and g modes 5180, 5280, 5360 (2 bands of 5180 - 5240 and 5260 - 5320 included here) 5500, 5600, 5700 5745, 5785, 5825 Please submit SAR plots for each of these measurements (SAR plots have only been submitted for some of the channels). Please update the SAR compliance documentation (including page 3 summary) to include all available bands for this device in the new host Infusion Pump. <CCS Answer:> The frequency range for FCC 15.407 has been changed to the correct range of 5180 - 5320 MHz. Please see attached revision B report.

And for the 5.2 GHz band, the entire band ranges from 5180 MHz to 5320 MHz, therefore we chose the frequency of 5260MHz as our middle channel and no additional measurements were needed. According to FCC regulations, we are allowed to measure only the middle channel if the middle channel measurements are at least 3dB (0.8mW/g) lower than the limit for SAR (1.6mW/g). Therefore, we skipped the low and high channels of the 5.2 GHz band because the middle channel is less than 0.8mW/g.

Best regards, September September Radecki Compliance Certification Services 47173 Benicia Street Fremont, CA 94538 phone: 1-510-771-1090 fax: 1-510-661-0888 September.Radecki@CCSEMC.com <mailto:September.Radecki@CCSEMC.com>

-----Original Message-----From: Chris Harvey Sent: Monday, June 18, 2007 9:20 AM To: Thu Chan Cc: Chris Harvey; September Radecki Subject: Hospira, Inc., FCC ID: STJ80411396001, Assessment NO.: AN07T6917 & AN07T6918, Notice#1

Dear Thu,

You are listed as the Technical Contact for the above referenced Class II Permissive Change applications. The following items must be addressed before the review can be continued:

1. Hospira has included a Confidentiality letter to request that the Block Diagrams and Schematic Diagrams be held as confidential. These 2 exhibits were not required for this Class II Permissive Change application nor were they submitted. Therefore, the Confidentiality Letter is not needed for this application filing. Please confirm that this Confidentiality Request Letter exhibit should be removed from this filing.

2. The previous approval was for a use of a Surface Mount PIFA antenna with maximum 4.5dBi gain. This application uses the same design antenna with 1.73dBi gain. Please provide photographs and technical specifications of the new antenna.

3. The DTS test report has spurious Restricted Bandedge emissions documented for the 2.4 GHz band in 802.11(b) and 802.11(g) modes of operation. Please provide the Restricted Bandedge emissions measurement data for the 802.11(a) 5.725 - 5.825 GHz band.

4. Page 3 of 29 of the SAR measurement report documents testing in the following bands: FCC 15.247 DTS, 2412-2462 MHz, 5745 - 5825 MHz (AN07T6917) FCC 15.407 NII, 5260 - 5320 MHz, 5500 - 5700 MHz (AN07T6918) The Original approval for this device documents testing in the following bands: FCC 15.247 DTS, 2412 - 2462 MHz, 5745 - 5825 MHz, FCC 15.407 NII, 5180 - 5240 MHz, 5260 - 5320 MHz, 5500 - 5700 MHz,

The testing appears to have been tested in all available bands, but page 3 of the report does not include all available bands. The following channels (in MHz) were tested per the

data tables in the SAR report: 2412, 2437, 2462 in b and g modes 5180, 5280, 5360 (2 bands of 5180 - 5240 and 5260 - 5320 included here) 5500, 5600, 5700 5745, 5785, 5825 Please submit SAR plots for each of these measurements (SAR plots have only been submitted for some of the channels). Please update the SAR compliance documentation (including page 3 summary) to include all available bands for this device in the new host Infusion Pump.

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 30 days of the original e-mail date may result in application dismissal and forfeiture of the filing fee. Also, please note that partial responses increase processing time and should not be submitted. Any questions about the content of this correspondence should be directed to the e-mail address listed below the name of the sender.

Best regards,

Chris Harvey charvey-tcb@ccsemc.com