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Date: January 22, 2008

Subject: Request for additional information regarding FCC ID: IHDP56HN1

Reference:

Correspondence Reference Number: IHD7967
Confirmation Number: 711150967-68
Date of Original Email: December 19, 2007

Prepared by:

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Questions and responses follow:

1. Please submit an Operational Description of the Bluetooth transmitter (that which is included in the Operational Description exhibit does not describe the actual RF function of the transmitter).

Response: Please refer to the revised Operational Description, Exhibit 12.

2. Please address the requirements of Section 15.247(a)(1):

- a. Is the hopping sequence is pseudorandom?
- b. Are all channels are used equally on average?
- c. Does the receiver input bandwidth equal the transmit bandwidth?
- d. Does the receiver hop in sequence with the transmit signal?

Response: Please refer to attestation statement, Exhibit 2A.

3. Please address Sections 15.247(g) and (h).

Response: Please refer to attestation statement, Exhibit 2A.



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4. Please provide peak field strength data for the Bluetooth harmonics in restricted bands (only average data was provided).

Response: Please refer to section 3.8 (page 36) of exhibit 6A1.

5. Please provide internal photos of the pcb's with the RF shields removed.

Response: Please refer to the revised Internal Photos, Exhibit 9.

6. Is the EUT capable of being removed from the car, and then connected to a pc? If so, then the peripheral portion of the EUT is subject to authorization- if you choose certification, a Part 15B test report must be submitted. If the EUT cannot be removed from the car, then the digital portion of the device is exempt from authorization requirements.

Response: The EUT is permanently installed in a vehicle (as a theft deterrent).

7. The FCC now requires that separate test reports be submitted for different applications in a composite device. Therefore, please separate the submitted test report into one report for Part 22/24 EMC, and a separate report for Part 15C (and another report for Part 15B, if applicable- see question #6).

Response: Please refer to the following separate revised test reports for this composite device:

Part 22/24 Exhibit 6 (EMC)
Part 15C- Exhibit 6A1 (Bluetooth)
Part 15B- Exhibit 6A3 (unintentional radiation)

8. While Section 24.238(b) does require a RBW of at least 1% of the 26 dBc bandwidth for bandedge measurements, this bandwidth is defined as the "emission bandwidth". For the emission designator, however, the occupied bandwidth (99% power) is to be used, and not the emission bandwidth. Please measure the occupied bandwidth of the various emissions and submit that data, so that the correct emission designators may be determined.

Response: Per discussion with the TCB senior certification engineer, future submissions will provide the occupied bandwidth based on 99% of total power.

9. The MPE report assumes an antenna gain of 3 dBi for both bands, therefore the maximum allowable antenna gains to be listed on the grant will be 3 dBi (for both



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bands). Now, theoretically, higher gains could have been assumed in the calculations, that still result in RFx compliance. If you desire to have the grant of authorization list higher antenna gain limits, please submit a new MPE report that demonstrates compliance with these higher gains (remember that Part 24 has a 2 W EIRP limit).

Response: Please refer to the revised RF exposure (MPE) report, Exhibit 11.

10.FYI: the FCC no longer requires intermod tests for devices with multiple co-transmitters for devices like the EUT (this is the data that was included in the Appendix). Please note that an intermod test is still required for amplifiers/boosters/repeaters.

Response: Noted for future applications.