1) **Confidentiality Request**: A letter is provided.

- Schematics
- Block diagram
- Manual
- Datasheet
- Bill of Materials

The block diagram and datasheet provided is part of the user installation manual, a document which is provided to the installer under a non-discloser agreement only. Although in a normal application a install manual is not allowed to be held confidential, in previous applications this applicant has shown that, since this document is controlled within the Andrew Corporation and is only provided to outside entities under a non-disclosure agreement, this document is eligible for confidentiality.

2) **RF Exposure Classification**: Fixed.

RF Exposure is addressed at the time of licensing since the antenna is not defined until that point.

a. The device is installed either on a pole or on the wall of a building. The device is always installed outdoors. In cases where the device is used to improve coverage inside a building, a separately approved in-building antenna distribution system is connected to the coverage side of the device. The rf exposure is addressed at the time of licensing. A warning in the manual informs the installer to observe rf exposure requirements as specified in the construction permit and operating license.

3) **Explanation of model differences**:

There are two models for which approval is sought under the FCC ID. Number BCR-RPT-NCM843
Node C843
Node M843

These two models are electrically identical. The difference is that the Node C843 allows more filter options in the firmware to support the 1.23 MHz channels associated with IS-95 CDMA, whereas Node M843 supports only 5 MHz channel filter settings (up to two 5 MHz channels) to accommodate W-CDMA.

4) Classification of the device per FCC Amplifier Interpretation document

The device fits the definition of a “Booster” since it does not translate the frequency and is not used to extend the coverage of a Base Station.

Booster is a device that automatically reradiates signals from base transmitters without channel translation, for the purpose of improving the reliability of existing service by increasing the signal strength in dead spots. An "in-building radiation system" is a signal booster. These devices are not intended to extend the size of coverage from the originating base station. A booster can be either single or multiple channels***.***

The device **does not** operate as an "in-building radiation system" as defined by the interpretation document but can be connected to such a system that is separately approved.

The device is in one enclosure and operates in the 800 MHz (non PCS) band thus it should be assigned the equipment class **TNB**.

5) **Booster Rules**: An exhibit entitled 22.383 Notification is included. This is correspondence sent to the applicant notifying them that the equipment must meet all of the requirements of 22.383.
6) **Output Power**: Power output listed on Form 731 is **composite** power. The device can operate either as a single carrier or multi-carrier device. Peak rf output power is +43 dBm(20watts) for a single carrier in the downlink direction and +23 dBm(200 mW) for a single carrier in the uplink direction. Each time a carrier is added, the rf power output is automatically reduced. If the number of carriers is doubled, the power per carrier is reduced by 3 dB.

There are two modes of ALC (Automatic Level Control).

- Maximum rf power
- Fixed gain

In the maximum rf power mode, the installer sets the desired maximum rf power output via password protected software. The maximum rf power levels above cannot be exceeded. The device monitors the rf output level and automatically increases or decreases rf gain to maintain the rf power level set by the installer.

In the fixed gain mode the installer sets the desired gain using the same software as described above. The gain is maintained until the peak rf output power levels are reached (20 W Downlink, 200 mW Uplink). If these maximum output power levels are reached, the gain is automatically reduced to ensure that the peak authorized rf output levels are not exceeded.

7) Protection against saturation

The device automatically disables the rf amplifier when a condition of saturation is detected. This was verified by experimentation.