LXE
Regulatory Approvals Group

October 31, 2000

Federal Communications Commission
Equipment Authorization Division,
Application Processing Branch
7435 Oakland Mills Road
Columbia, MD 21046

RE: KDZLXE4400L20
Form 731: EA98174
Correspondence Number: 16857

Dear Mr. Chan:

In response to your inquiry of 10/31/2000, I have prepared the following list that identifies currently approved antennas and those in which we are seeking approval with this application.

Antenna approved with original application
There is only one antenna currently approved for use with the 4400L20 transceiver. It is described in the test report generically as a "**...permanently attached etched-circuit antenna...**". This antenna is 0dBi in gain. I have included the page from the original report that identifies the antenna.

On 7/12/200
I submitted the test report requesting the addition of a single antenna described as:

Maxrad Model MFBZ592 - 0dBi Omni-directional Antenna

In addition to the test report, I submitted photographs and a specification sheet for the antenna

On 7/28/200
While the application was still pending, we saw a possible need for 4 other Omni antennas and I submitted a letter requesting that these 4 antennas also be considered with the one already submitted. They are described as follows:

LXE P/N	Mfg.	Mfg. P/N	Antenna Type	Gain (dBi)
148693-0001	Hytennas	10519	Omni	0
148694-0001	Hytennas	10556	Omni	0
148695-0001	Hytennas	10542	Omni	0
480421-0500	Cushcraft	S8960 B	Omni	0

I submitted photographs and specification sheets for these 4 antennas.

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On 10/13/200

You requested a complete list of all antennas, their type and gain, including previously approved and new ones.

On 10/16/200

Responding to your request of 10/13, I sent you the table that appears below, except this time I added notes as to when the antennas were approved or requested to be approved. **Also in the table of 10/16/00, the gains of some of the antennas were described as 2.5dBi. This is an error. All antennas are 0dBi unity gain as described below**

LXE Antenna List for 4400L20 Transceiver							
LXE P/N	Mfg.	Mfg. P/N	Antenna Type	Gain (dBi)	System EIRP (dBm)	Required MPE Distance(cm)	Notes
None	LXE	None	Etched Trace	0	30	6.91	Approved with original application
None	MaxRad	Z59Z	Omni	0	30	6.91	Filed with the class 2 change on 7/12/200
148693-0001	Hytennas	10519	Omni	0	30	6.91	Added to this class 2 change on 7/28/200
148694-0001	Hytennas	10556	Omni	0	30	6.91	Added to this class 2 change on 7/28/200
148695-0001	Hytennas	10542	Omni	0	30	6.91	Added to this class 2 change on 7/28/200
480421-0500	Cushcraft	S8960 B	Omni	0	30	6.91	Added to this class 2 change on 7/28/200

This is absolutely the complete list of antennas and they are thoroughly described by their specifications sheets and photographs that have been submitted during the course of this filing.

I certainly hope that this time we have addressed your concerns completely.

Sincerely,

R. Sam Wismer
RF Approvals Engineer
LXE, Inc.

A. INTRODUCTION

The following data are submitted in connection with this request for type certification of the 4400L20 transceiver in accordance with Part 15, Subpart C, Paragraph 15.247 of the FCC Rules.

The 4400L20 is a UHF, frequency hopping, spread spectrum, 1 watt transceiver intended for data-link applications in the 902-928 MHz band.

B. GENERAL INFORMATION REQUIRED FOR TYPE CERTIFICATION

Antenna (Paragraph 15.203)

The 4400L20 incorporates a permanently attached etched-circuit antenna unaccessible to the user that incorporates a unique connecting arrangement.

Channel Carrier Bandwidth (Paragraph 15.247(1)(i)

The 4400L20 employs a minimum of 50 frequencies in the 902-928 MHz band. Figure 1 is a plot of multiple-sweep spectrum analyzer display having a 5 MHz/Div horizontal scale, 10 dB/Div vertical scale taken with a 100 kHz resolution bandwidth at a 10 mS/Div sweep rate. Storage time was a nominal 5 minutes.

The plot shows that the emissions remain within the 902-928 MHz band.