125 Technology Parkway
Norcross, Georgia, US 30092

Direct Sequence Spread Spectrum Transmitter

Addendum to LXE Project Number 00-073

Testing Performed by: LXE Inc.

Model: 480628-4096 Transceiver

FCC ID: KDZ480628-4096

Issue Date: October 10, 2000

1.0 Purpose

The purpose of this addendum is to add another antenna to the class 2 permissive change filing currently pending for the LXE model 480628-4096 Transceiver that bears FCC ID: KDZ480628-4096. The class 2 permissive change application was submitted on August 30, 200 under 731 confirmation number EA98603 and is currently in technical review.

2.0 Specifications

Photographs and a specification sheet are included separately in this filing. The specifications of the antenna are:

Manufacturer:	Cushcraft
Model:	S2307AMP
Type:	Patch
Gain:	7.5dBi
Connector:	RTNC(See section 3.0)

3.0 Antenna Requirement - Section 15.203

The antennas employ either a Reverse TNC or standard N-Type connectors. Use of these connectors is justified since all LXE systems are professionally installed by LXE personnel or qualified subcontractors.

4.0 RF Safety - Section 15.247(b)(4)

Antenna is used on Mobile or Fixed devices only. All installation manuals of terminals that use this antenna include the following statement:

"This device is intended to transmit RF energy. For protection against excessive RF exposure to humans and in accordance with FCC rules, this equipment should be installed such that a minimum separation distance of at least 20cm is maintained between the radiating element and the user"

5.0 Test Results

The radiated spurious emissions were evaluated to section 15.247 of the rules. The table below and the accompanying plots show the results of the test.

TEST DATA SHEET

Test Type: Radiated Spurious Emissions
Test Date: October 10, 2000
Tested By: Sam Wismer
FCC Rule: 15.247(c)

Frequency (MHz)	Antenna Distance (m)	Level (dBm)	Detector Function (P/A)	Correction Factors (dB)	Corrected Level (dBm)	Corrected Level (uV/m)	Limit (uV/m)	Margin (dB)	Final Result (Pass/Fail)
Data Rate = 1Mb/s									
Low Channel(2412 MHz)									
4824	1	-63.5	p	7.51	-55.99	355.40	500	4644.60	**PASS**
7236	1	-68.5	p	12.20	-56.30	342.74	500	4657.26	**PASS**
9648*	1	-71.67	p	15.38	-56.29	343.21	500	4656.79	**PASS**
Mid Channel(2442 MHz)									
4884	1	-66.17	p	7.70	-58.47	267.01	500	4732.99	**PASS**
7324	1	-68.33	p	12.49	-55.84	361.25	500	4638.75	**PASS**
9768*	1	-70.33	p	15.61	-54.72	411.11	500	4588.89	**PASS**
High Channels(2462 MHz)									
4924	1	-66.5	p	7.82	-58.68	260.75	500	4739.25	**PASS**
7385	1	-69	p	12.69	-56.31	342.18	500	4657.82	**PASS**
9847*	1	-70.5	p	15.76	-54.74	410.17	500	4589.83	**PASS**
Data Rate = 11Mb/s									
Low Channel(2412 MHz)									
4824	1	-67.67	p	7.51	-60.16	219.90	500	4780.10	**PASS**
7236	1	-70.5	p	12.20	-58.30	272.25	500	4727.75	**PASS**
9648*	1	-71	p	15.38	-55.62	370.73	500	4629.27	**PASS**
Mid Channel(2442 MHz)									
4884	1	-65.67	p	7.70	-57.97	282.83	500	4717.17	**PASS**
7326*	1	-71.17	p	12.49	-58.68	260.70	500	4739.30	**PASS**
High Channels(2462 MHz)									
4924	1	-67.67	p	7.82	-59.85	227.89	500	4772.11	**PASS**
7385*	1	-68.83	p	12.69	-56.14	348.94	500	4651.06	**PASS**

* Signal not detected and recorded level is of the noise floor. No plot was taken of this measurement.

Correction Factors

Correction Factors = Cable Loss + Antenna Factor - Amp Gain - Range Correction
Range Correction = 20Log(D1/D2) Where D1 is the specified distance used and D2 is the distance used make measurements = [20Log(3/1)] = 9.54 dB

Sample Calculations

Corrected Level(dBm) = Receiver Level + Correction Factors - Range Correction
Conversion from dBm to uV/m = Antilog(dBm + 107)/20)