



September 2, 1999

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

RE: KDZ480628-3700

Dear Sir:

We currently have a Class 2 permissive change in process under 731 confirmation number EA95106, submitted on August 10, 1999. We would like to take this opportunity to add antenna data for 2 antennas to be included with the current file. Attached to this letter is a data sheet containing the test results and plots of the data. The plots are in sequential order with the reported data.

Photographs of the antennas will be submitted separately.

The reason for this amendment is as follows:

- 1) Add Maxrad 2.4 GHz Antenna P/N: MFB24004 as a second source to the current LXE P/N: 153599-0001 which is already approved for use on this radio. LXE P/N: 153599-0001 will now consist of 2 antennas, Cushcraft Model S2403 and now the Maxrad MFB24004.
- 2) Re-Submit LXE Model Spire 3 & 6 dB Omnis - LXE P/N's: 155846-0001 and 155845-0001 respectively. These antennas have already been approved in their general application. LXE has developed a new application for these antennas that is now considered the worst case application. As such, it is necessary to re-test in this configuration and document the results.

These antennas were tested in the same configuration as the antenna in the current file. The descriptions of the test site, equipment, support equipment etc... are applicable to these new antennas. Please include this new data for your evaluation.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. Sam Wismer'.

R. Sam Wismer
RF Approvals Engineer
LXE, Inc.

enc(s).

TEST DATA SHEET

Test Type: Radiated Spurious Emissions
Test Date: August 16-18, 1999
Tested By: Sam Wismer/Tony Raymon
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)
LXE Model: Spire 3 & 6dB Omni's - P/N's: 155846-0001 and 155845-0001 Respectively									
Low Channel									
4824	1	-69.83	p	4.06	-65.77	115.17	5000	4884.83	PASS
7236*	1	-73.75	p	9.11	-64.64	131.24	5000	4868.76	PASS
Mid Channel									
4884	1	-71.75	p	4.25	-67.50	94.39	5000	4905.61	PASS
7326*	1	-72.67	p	9.23	-63.44	150.67	5000	4849.33	PASS
High Channel									
4924	1	-68.33	p	4.38	-63.95	142.02	5000	4857.98	PASS
7387*	1	-73.42	p	9.31	-64.11	139.49	5000	4860.51	PASS
Maxrad 2.4 GHz Antenna P/N: MFB24004 - (LXE P/N: 153599-0001)									
Low Channel									
4824	1	-68.83	p	4.06	-64.77	129.22	5000	4870.78	PASS
7237*	1	-71.83	p	9.11	-62.72	163.74	5000	4836.26	PASS
Mid Channel									
4884	1	-65.67	p	4.25	-61.42	190.08	5000	4809.92	PASS
7326*	1	-71.17	p	9.23	-61.94	179.07	5000	4820.93	PASS
High Channel									
4924	1	-60.5	p	4.38	-56.12	349.82	5000	4650.18	PASS
7386*	1	-71.67	p	9.31	-62.36	170.60	5000	4829.40	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 = $20\log(D1/D2)$ Where D1 is the specified distance used and D2 is the distance used make measurements = $[20\log(3/1)] = 9.54$ dB

Sample Calculations

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

Notes

Of the Spire antennas described above, only the 6dB Omni Spire, LXE P/N: 155845-0001 was tested as it was assumed to worst case. The 3dB Omni Spire, LXE P/N: 155846-0001 is assumed to be compliant as a result.