

Information about the Applicant

Company Name	Motorola, Inc.
Address	8000 West Sunrise Blvd
City, State, Zip	Ft. Lauderdale, FL 33322
Requested By	Mike Ramnath
Job Number	MOTI0001
Model	FLN 3134A and FLN 3135A
FCC ID	AZ489FT7006
Agent	Mike Ramnath - Motorola
Approval Type	Certification
Equipment Type	FHSS (Bluetooth radio)
Rule Part	47CFR15.247

Overview

Certification is sought for Motorola's MW800 Display model: FLN 3134A and identical Model FLN 3135A. Both models contain the same radio; they simply have different display options. Both are ruggedized LCD display (XGA and SVGA) unit which contain a Bluetooth™ Intentional Radiator, not previously approved under 47 CFR 15.247. The Bluetooth™ radio is intended for short distance communication with peripheral devices. Both units contain a Bluetooth intentional radiator previously approved under Part 15.247 with FCC ID: AZ489FT7005.

Recommendation

All items have been resolved and completed to my satisfaction; therefore I recommend this application for approval.



Dean Ghizzone, President

April 3, 2003

Date

Findings and Resolution

Item #1	The list of measurement equipment did not show test equipment capable of radiated emissions scans up to the 10 th harmonic of the radio's transmit frequency. There is no pre-amp included in the equipment list to cover the 18 GHz – 26 GHz frequency range. There is also no data that would allow confirmation of adequate sensitivity at that frequency range without use of a preamp. Further, while it is a low power device, it is usually required in order to prevent overload use a of high pass filter for the spurious radiated emissions measurements.
Resolution 4-3-03	Applicant provided updated equipment list and specified a test procedure to ensure overload protection.
Item #2	Applicant had not submitted completed Form 410
Resolution 4-3-03	Applicant provided signed and completed form.
Item #3	Applicant had not submitted completed Form 415 Schedule A&B
Resolution 4-3-03	Applicant provided signed and completed forms.
Item #4	No power spectral density data.
Resolution 4-7-03	The test report exhibit was updated to delete the power spectral density test data. The applicant requested that the subject device be filed as a FHSS. The applicant conferred with Joe Dichoso of the FCC who confirmed this was acceptable.

Opinion

Specification Requirements	Description
47 CFR 15.247(b)(5) and 2.1093	RF Exposure

Opinion: The Equipment meets the intent specified by the requirements listed above.

Discussion: The Applicant has demonstrated compliance in the form of an Exhibit.

Reference: Exhibit 11

Specification Requirements	Description
47 CFR 15.247	Occupied Bandwidth

Opinion: The Equipment meets the intent specified by the requirements listed above.

Discussion: The Applicant has submitted test results in the form of a test report. According to the FCC's Interpretations Database, "Frequency hoppers in the 2.4 GHz band are required to use a minimum of 15 non-overlapping channels. The hopping channel bandwidth can be wider than 1 MHz as long as the channels do not overlap and all emissions stay within the 2400-2483.5 MHz band. (ref. email sent to tcb@tcbCouncil.org 10/08/2002)" The subject radio uses more than 15 hopping channels, none of which overlap. The maximum 20 dB occupied bandwidth is less than 1 MHz.

Reference: Exhibit 6

Specification Requirements	Description
47 CFR 15.247(b)(1)	Power Output

Opinion: The Equipment meets the intent specified by the requirements listed above.

Discussion: The Applicant has submitted test results in the form of a test report.

Reference: Exhibit 6

Specification Requirements	Description
47 CFR 15.247(c)	Spurious Emissions, Antenna Conducted

Opinion: The Equipment meets the intent specified by the requirements listed above.

Discussion: The Applicant has submitted test results in the form of a test report.

Reference: Exhibit 6

Specification Requirements	Description
47 CFR 15.247(c), 15.205, & 15.209	Spurious Emissions, Radiated Emissions

Opinion: The Equipment meets the intent specified by the requirements listed above.

Discussion: Problem see list above.

Reference: Exhibit 6

Specification Requirements	Description
47 CFR 15.207	AC Powerline Conducted Emissions

Opinion: The Equipment meets the intent specified by the requirements listed above.

Discussion: The radio is mounted into a vehicle and acquires its' DC power from the vehicle electrical system. Therefore, the Applicant submitted no AC Powerline Conducted data.

Reference: N/A

Specification Requirements	Description
47 CFR 15.203	Antenna Requirement

Opinion: The Equipment meets the intent specified by the requirements listed above.

Discussion: The Applicant has demonstrated compliance in the form of exhibits.

Reference: Exhibits 12

Specification Requirements	Description
47 CFR 2.925	FCC ID Label and Location

Opinion: The Equipment meets the intent specified by the requirements listed above.

Discussion: The Applicant has demonstrated compliance in the form of exhibits.

Reference: Exhibit 1

Specification Requirements	Description
47 CFR 2.1033(b)	Application for Certification

Opinion: The Equipment meets the intent specified by the requirements listed above.

Discussion: The Applicant has submitted all the required exhibits to sufficiently demonstrate compliance of his product to the relevant FCC rules.

Reference: Exhibits 1 through 13