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Information about the Applicant

Company Name	Sagem Morpho, Inc.
Address	1145 Broadway Plaza, Suite 200
City, State, Zip	Tacoma, WA 98402
Requested By	Eric L. Vogel
Job Number	PLEX0348
Model	MA220E
FCC ID	M9H-MA220E
Agent	Northwest EMC, Inc.
Approval Type	Original
Equipment Class	DXT Part 15, Low Power Transceiver, Rx Verified
Rule Part	15.225

Overview

The radio is an ISO/IEC 14443 type Mifare remote RFID card reader. It is a seeking certification under FCC 15.225. The device uses a single antenna, integral to the circuit board.

Recommendation

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

Qant in Tolma	9/26/03	
Name, Title	Date	_

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Findings

Finding	15.21 The user warning against modifications to the product was not found in the user manual.
Resolution	The client provided a new installation guide as a part of the user manual, which contains the required warning.

Requirements and Opinion

Specification Requirements	Description
47 CFR 2.1033(b)(3)	Installation, operating instructions, user information
Opinion	The device complies with the requirements.
Discussion	The client has submitted the required information.
Reference	Operational User Manual.pdf

Specification Requirements	Description
47 CFR 2.1033(b)(4)	Operational description
Opinion	The device complies with the requirements.
Discussion	The client has submitted the required information.
Reference	Operational description.pdf

Specification Requirements	Description
47 CFR 2.1033(b)(5)	Block diagram showing frequency of oscillators. Signal path and frequency at each block.
Opinion	The device complies with the requirements.
Discussion	The client has submitted the required information.
Reference	Block Diagram.pdf

Specification Requirements	Description
47 CFR 2.1033(b)(5)	Schematic diagram
Opinion	The device complies with the requirements.
Discussion	The client has submitted the required information.
Reference	Schematics.pdf,

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Specification Requirements	Description
47 CFR 2.1033(b)(7)	Internal and external photos
Opinion	The device complies with the requirements.
Discussion	The client has submitted the required information.
Reference	User Manual.pdf, Schematics.pdf, Operational description.pdf

Specification Requirements	Description
47 CFR 15.19	Label requirements
Opinion	The device complies with the requirements.
Discussion	The client has submitted the required information.
Reference	User Manual.pdf

Specification Requirements	Description
47 CFR 15.21	User Information
Opinion	The device complies with the requirements.
Discussion	The client has submitted the required information.
Reference	User Manual.pdf

Specification Requirements	Description
47 CFR 15.27	Special Accessories (Shielded cables, etc.)
Opinion	The device complies with the requirements
Discussion	The manufacturer supplies required ferrite beads
Reference	User Manual.pdf.

Specification Requirements	Description
47 CFR 15.33	Frequency range
Opinion	The data complies with the requirements.
Discussion	The client has submitted a test report.
Reference	Report-PLEX0348.pdf

Specification Requirements	Description
47 CFR 15.35	Measurement Detectors
Opinion	The data complies with the requirements.
Discussion	The client has submitted a test report.
Reference	Report-PLEX0348.pdf

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Specification Requirements	Description
47 CFR 15.205	Restricted band(s) requirements
Opinion	The data complies with the requirements.
Discussion	The client has submitted a test report.
Reference	Report-PLEX0348.pdf

Specification Requirements	Description
47 CFR 15.207	Powerline Conducted Emissions
Opinion	The device complies with the requirements.
Discussion	The client has submitted a test report.
Reference	Report-PLEX0348.pdf

Specification Requirements	Description
47 CFR 15.209	Spurious Emissions
Opinion	The device complies with the requirements.
Discussion	The client has submitted a test report.
Reference	Report-PLEX0348.pdf

Specification Requirements	Description
47 CFR 15.225(a)	Field Strength of Fundamental
Opinion	The device complies with the requirements.
Discussion	The client has submitted a test report.
Reference	Report-PLEX0348.pdf

Specification Requirements	Description
47 CFR 15.225(b)	Field Strength of Spurious Emissions
Opinion	The device complies with the requirements.
Discussion	The client has submitted a test report.
Reference	Report-PLEX0348.pdf

Specification Requirements	Description
47 CFR 15.225(c)	Frequency Stability
Opinion	The device complies with the requirements.
Discussion	The client has submitted a test report.
Reference	Report-PLEX0348.pdf