

Information about the Applicant	
Company Name	Logitech, Inc.
Grantee	Mitchell Phillipi
Address	1499 SE Tech Center Place Suite 350
City, State, Zip	Vancouver, WA 98683
Job Number	LABT0140
Model	Z-5450 MN: S-0181A; 5.1 Surround Sound Speaker System – Rear Speaker Module
FCC ID	DZLA-0181AS
Agent	Northwest EMC, Inc.
Approval Type	Original
Equipment Class	DSS Part 15, Spread Spectrum Transmitter
Rule Part	15.247DSSS

Overview

The Logitech 5.1 Surround Sound Speaker System with wireless rear speakers, contains a radio module in the wireless rear speakers, FCC ID: DZLA-0181AS, and a radio module in the control pod, FCC ID: DZLA-0181ACP. Each radio transmits through its own antenna. The radio will be considered a mobile device per FCC 2.1091.

The Logitech 5.1 Surround Sound Speaker system with wireless rear speakers will operate under FCC Part 15.247 and consists of a control pod, amplifier/subwoofer assembly, three passive speaker systems, and a pair of wireless rear speakers. The Surround Sound Speaker system is to be used in a home or office environment, and connected to information technology equipment for audio entertainment purposes. Logitech's Surround Sound Speaker system with wireless rear speakers will be utilizing the frequency range of 2403MHz – 2480MHz and employing a GFSK/FHSS modulation scheme.

Recommendation

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

Signature

10/17/2005

Dean Ghizzone, TCB Committee

Findings	
Specification	Finding
47 Cfr 2.1033(b)(3)	Installation guide, operating instructions, user manual
Finding	The necessary information was not found. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.
Resolution	New information added to the manual

Opinions

Specification Requirements	Description
47 Cfr 2.1033(b)(4)	Operational description
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Operational Description.pdf

Specification Requirements	Description
47 Cfr 2.1033(b)(5)	Frequency block diagram and Schematic diagram
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Block Diagram.pdf, Schematics.pdf

Specification Requirements	Description
47 cfr 2.1033(b)(6)	Test Report
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-LABT0140.pdf

Specification Requirements	Description
47 Cfr 2.1033(b)(6)	Conversions showing how the test results were achieved
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-LABT0140.pdf

Specification Requirements	Description
47 Cfr 2.1033(b)(7)	Internal and external photos
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Internal Photos.pdf, External Photos.pdf

Specification Requirements	Description
Required Exhibit	Test Setup Photo Exhibit
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-LABT0140.pdf

Specification Requirements	Description
47 Cfr 1.1307(b),2.1091,2.1093	RF Exposure Hazzard
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	RF Exposure.pdf

Specification Requirements	Description
47 Cfr 15.19	Labeling
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Label.pdf

Specification Requirements	Description
47 Cfr 15.21	Information for user
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Z-5450_manual_AMR.pdf

Specification Requirements	Description
47 Cfr 15.33	Frequency range of tests
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-LABT0140.pdf

Specification Requirements	Description
47 Cfr 15.35	Measurement detectors
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-LABT0140.pdf

Specification Requirements	Description
ANSI C63.4 EUT Ports	All EUT ports populated,emissions maximized,Antenna height adjusted
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-LABT0140.pdf

Specification Requirements	Description
47 Cfr 15.203	Antenna Requirements
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Antenna Info.pdf

Specification Requirements	Description
47 Cfr 15.205	Restricted bands
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-LABT0140.pdf

Specification Requirements	Description
47 Cfr 15.207	Power line Conducted emissions
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-LABT0140.pdf

Specification Requirements	Description
47 Cfr 15.209	Spurious Emissions
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-LABT0140.pdf

Specification Requirements	Description
47 cfr 15.247	Operation within specified bands
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-LABT0140.pdf

Specification Requirements	Description
47 Cfr 15.247(a)	Occupied Bandwidth
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-LABT0140.pdf

Specification Requirements	Description
47 Cfr 15.247(b)	Output Power
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-LABT0140.pdf

Specification Requirements	Description
47 Cfr 15.247(d)	Band Edge Compliance
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-LABT0140.pdf

Specification Requirements	Description
47 Cfr 15.247(d)	Spurious Conducted Emissions
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-LABT0140.pdf

Specification Requirements	Description
47 Cfr 15.247(d)	Spurious Radiated Emissions
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-LABT0140.pdf