849 NW State Road 45
Newberry, Fl 32669 USA
Phone: 888.472.2424 or 352.472.5500
Fax: 352.472.2030
Email: info@timcoengr.com
Website: www.timcoengr.com

FCC PART 15 SUB PART B

Applicant	MOTOROLA, INC.
Address	8000 WEST SUNRISE BLVD
	FT. LAUDERDALE FL 33322-9947
FCC ID:	AZ489FT3814
Serial Number	TK1FI0E4
Product Description	2 WAY PORTABLE RADIO - RECEIVER
Date Sample Received	9/29/2006
Date Tested	10/10/2006
Tested By	RICHARD BLOCK
Approved By	FRANK DENUZZO
Report Number	2773BUT6TestReport.doc
Total Pages	10
Test Results	☒ PASS ☐ FAIL

THE ATTACHED REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN APPROVAL OF TIMCO ENGINEERING, INC.

ACCREDITED
Certificate # 0955-01

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STATEMENT OF COMPLIANCE

This equipment has been tested in accordance with the standards identified in the referenced test report. To the best of my knowledge and belief, these tests were performed using the measurement procedures described in this report and demonstrate that the equipment complies with the appropriate standards.

I attest that the necessary measurements were made by me or under my supervision, at TIMCO ENGINEERING, INC. located at 849 N.W. State Road 45, Newberry, Florida 32669 USA.

Authorized by: Frank DeNuzzo

Function: Engineer

Date: 10/12/2006

GENERAL INFORMATION

The test results relate only to the items tested.	
DUT Description	2 WAY PORTABLE RADIO - RECEIVER
FCC ID	AZ489FT3814
Serial Number	TK1FI0E4
Trade Name	MOTOROLA
DUT Power Source	☐ 110–120Vac/50– 60Hz
	☐ DC Power
	☒ Battery Operated Exclusively
Test Item	☐ Prototype
	☒ Pre-Production
	☐ Production

Modifications to DUT: No modifications were made to the equipment during testing in order to demonstrate compliance with these standards.

Test Standards: FCC Part 15, Subpart B & ANSI C63.4 - 2003

TEST EQUIPMENT LIST

Device	Manufacturer	Model	Serial Number	Cal/Char Date	Due Date
3/10-Meter OATS	TEI	N/A	N/A	Listed 3/27/04	3/26/07
3-Meter OATS	TEI	N/A	N/A	Listed 1/11/06	1/10/09
Antenna: Biconnical	Eaton	94455-1	1057	CAL 12/12/05	12/12/07
Antenna: Biconnical	Eaton	94455-1	1096		Out for Cal
Antenna: Biconnical	Electro-Metrics	BIA-25	1171	CAL 4/29/05	4/29/07
Analyzer Blue Tower Quasi-Peak Adapter	HP	85650A	2811A01279	CAL 4/13/05	4/13/07
Analyzer Blue Tower RF Preselector	HP	85685A	2926A00983	CAL 9/5/05	9/5/07
Analyzer Blue Tower Spectrum Analyzer	HP	8568B	2928A04729 2848A18049	CAL 4/13/05	4/13/07
LISN	Electro-Metrics	ANS-25/2	2604		Out for cal
LISN	Electro-Metrics	EM-7820	2682	CAL 4/28/05	4/28/07
Antenna: Log-Periodic	Eaton	96005	1243	CAL 12/14/05	12/14/07

TEST PROCEDURE

General: This report shall NOT be reproduced except in full without the written approval of TIMCO ENGINEERING, INC.

Radiation Interference: The test procedure used was ANSI STANDARD C63.4-2003 using a HEWLETT PACKARD spectrum analyzer with a pre-selector. The bandwidth of the spectrum analyzer was 100 kHz with an appropriate sweep speed. The analyzer was calibrated in dB above a microvolt at the output of the antenna. The video bandwidth was always greater than or equal to the RBW.

Formula Of Conversion Factors: The Field Strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of dBuV) to the antenna correction factor supplied by the antenna manufacturer. The antenna correction factors are stated in terms of dB. The gain of the Preselector was accounted for in the Spectrum Analyzer Meter Reading.

Example:

Freq (MHz)	Meter Reading	+ ACF	+CL	= FS
33	20 dBuV	+ 10.36 dB/m	+0.40 dB	=30.36 dBuV/m @ 3m

ANSI C63.4-2003 Section 10.1.7 Measurement Procedures: The unit under test was placed on a table 80 cm high and with dimensions of 1mby 1.5m. The table used for radiated measurements is capable of continuous rotation. When an emission was found, the table was rotated to produce the maximum signal strength. At this point, the antenna was raised and lowered from 1m to 4m. The antenna was placed in both the horizontal and verticals planes.

RADIATED SPURIOUS EMISSIONS

Rules Part No.: 15.109

Requirements:

Frequency	Limits
30 – 88	40.0 dBµV/m measured @ 3 meters
80 – 216	43.5 dBµV/m measured @ 3 meters
216 – 960	46.0 dBµV/m measured @ 3 meters
Above 960	54.0 dBµV/m measured @ 3 meters

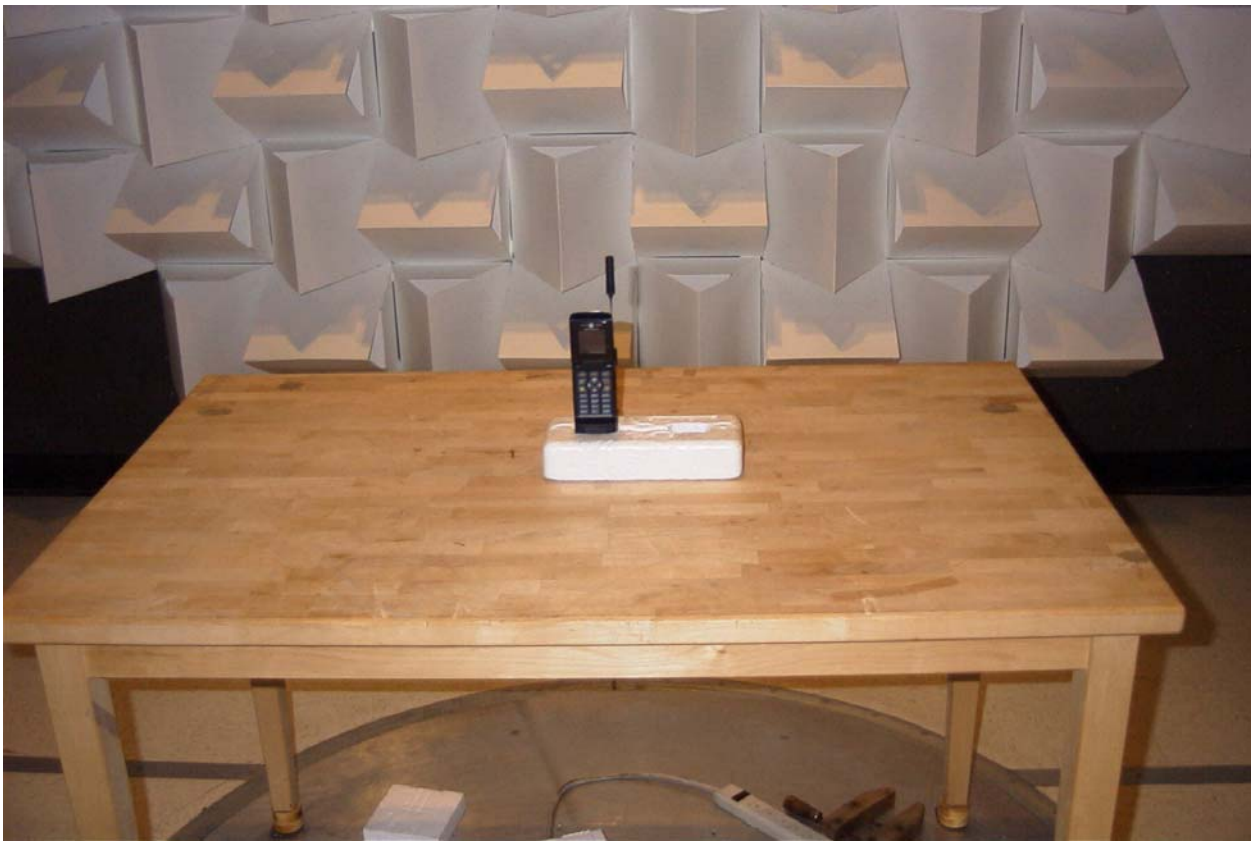
Test Procedure: The procedure used was ANSI C63.4-2003. The frequency was scanned from 30 MHz to 1.0 GHz. When an emission was found, the table was rotated to produce the maximum signal strength. The DUT was measured in three (3) orthogonal planes.

Test Data:

Tuned Frequency MHz	Emission Frequency MHz	Meter Reading dBuV	Ant Pol	Coax Loss dB	Correction Factor dB	Field Strength dBuV/m	Margin dB
136.3	136.28	1.3	H	0.69	13.10	15.09	28.41
136.3	136.28	3.1	V	0.69	12.95	16.74	26.76
136.3	362.25	2.3	V	1.16	14.87	18.33	27.67
136.3	362.25	2.9	H	1.16	15.05	19.11	26.89
136.3	543.38	1.6	V	1.43	18.10	21.13	24.87
136.3	543.38	1.9	H	1.43	18.40	21.73	24.27
136.3	724.50	2.7	H	1.75	21.30	25.75	20.25
136.3	724.50	3.3	V	1.75	20.65	25.70	20.30
136.3	905.63	2.5	H	1.96	23.36	27.82	18.18
136.3	905.63	2.7	V	1.96	22.64	27.30	18.70
156.7	201.53	0.9	V	0.90	11.70	13.50	30.00
156.7	201.53	2.6	H	0.90	12.07	15.57	27.93
156.7	403.05	2.9	H	1.20	16.13	20.23	25.77
156.7	403.05	4.0	V	1.20	15.76	20.96	25.04
156.7	604.58	3.1	V	1.60	18.78	23.48	22.52
156.7	604.58	3.7	H	1.60	19.28	24.58	21.42
156.7	806.10	2.4	H	1.90	21.66	25.96	20.04
156.7	806.10	3.5	V	1.90	21.06	26.46	19.54
156.7	1,007.63	12.4	V	2.11	28.00	42.51	11.49
156.7	1,007.63	12.8	H	2.11	28.00	42.91	11.09
174.0	218.81	2.7	V	0.94	11.42	15.06	30.94
174.0	218.81	3.3	H	0.94	11.54	15.78	30.22
174.0	437.61	2.6	H	1.24	16.90	20.74	25.26
174.0	437.61	2.7	V	1.24	16.58	20.52	25.48
174.0	656.42	2.9	V	1.66	20.69	25.25	20.75
174.0	656.42	3.0	H	1.66	20.41	25.07	20.93

Tuned Frequency MHz	Emission Frequency MHz	Meter Reading dBuV	Ant Pol	Coax Loss dB	Correction Factor dB	Field Strength dBuV/m	Margin dB
174.0	875.22	1.9	V	1.94	22.60	26.44	19.56
174.0	875.22	2.0	H	1.94	23.00	26.94	19.06
174.0	1,094.03	12.0	V	2.18	28.00	42.18	11.82
174.0	1,094.03	13.3	H	2.18	28.00	43.48	10.52

RADIATED EMISSIONS TEST SETUP PHOTO



CERTIFICATE OF COMPLIANCE

The responsible party declares that this device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Responsible Party:	MOTOROLA INC.
Address:	8000 WEST SUNRISE BLVD. MD: 1309 MOTOROLA, FL 33322-9947
Tel:	
Fax:	
Printed Name/Title:	
Signature:	
Product Description:	2 WAY PORTABLE RADIO – RECEIVER
Model Name:	FCC ID: AZ489FT3814 S/NO. TK1FI0E4
Trade/Brand Name:	MOTOROLA
Applicant:	MOTOROLA, INC.
Address:	8000 WEST SUNRISE BLVD, MD: 1309 FT. LAUDERDALE FL 33322-9947 USA
Report Number:	2773BUT6TestReport.doc
Date:	OCTOBER 12, 2006