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FCC PART 90/ RSS-119 (i11) TEST REPORT

APPLICANT	MOTOROLA MOBILITY LLC
	8000 W. SUNRISE BLVD, SUITE A MAIL STOP 52-5JJ PLANTATION FLORIDA 33322 USA
FCC ID:	IHDP56NB1
IC ID:	1090 – P56NB1
MODEL NUMBER	H3060241031A
PRODUCT DESCRIPTION	i460 FAIRHILL iDEN
DATE SAMPLE RECEIVED	12/14/2012
DATE TESTED	1/2/2013
TESTED BY	JOHN DAY
APPROVED BY	JOHN DAY
TIMCO REPORT NO.	3179AUT12TestReport.doc
TEST RESULTS	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL

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



Certificate # 0955-01

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GENERAL REMARKS

The attached report shall not be reproduced except in full without the written permission of Timco Engineering Inc.

The test results relate only to the items tested.

Summary

The device under test does:

- fulfill the general approval requirements as identified in this test report
- not fulfill the general approval requirements as identified in this test report

Attestations

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

All instrumentation and accessories used to test products for compliance to the indicated standards are calibrated regularly in accordance with ISO 17025: 2005 requirements.



Testing Certificate # 0955-01

I attest that the necessary measurements were made, under my supervision, at:

Timco Engineering Inc.
849 NW State Road 45
Newberry, Fl 32669



Authorized Signatory Name:

John Day
Testing Technician

Date: January/11/2013

Applicant: MOTOROLA MOBILITY LLC
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GENERAL INFORMATION
DUT Specification

DUT Description	i460 FAIRHILL iDEN
FCC ID	IHDP56NB1
Model Number	H3060241031A
Serial Number	364BNW1V37
Test Frequencies	806.0625,813.5625,820.9875,824.9875,896.0625
DUT Power Source	<input type="checkbox"/> 110-120Vac/50- 60Hz
	<input checked="" type="checkbox"/> DC Power
	<input type="checkbox"/> Battery Operated Exclusively
Test Item	<input type="checkbox"/> Prototype
	<input checked="" type="checkbox"/> Pre-Production
	<input type="checkbox"/> Production
Type of Equipment	<input type="checkbox"/> Fixed
	<input type="checkbox"/> Mobile
	<input checked="" type="checkbox"/> Portable
Test Conditions	The temperature was 26°C with a relative humidity of 50%.
Modification to the DUT	None
Test Exercise	The DUT was placed in continuous transmit mode.
Applicable Standards	ANSI/TIA 603-C:2004, FCC CFR 47 Part 90, IC RSS-119 issue 11, RSS-GEN issue 3
Test Facility	Timco Engineering Inc. at 849 NW State Road 45 Newberry, FL 32669 USA.

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TEST PROCEDURES

Power Line Conducted Interference: The procedure used was ANSI/TIA 603-C: 2004 using a 50uH LISN. Both lines were observed with the DUT transmitting. The bandwidth of the spectrum analyzer was 10 kHz with an appropriate sweep speed.

Radiation Interference: The test procedure used was ANSI/TIA 603-C: 2004 using an Agilent spectrum receiver with pre-selector. The bandwidth (RBW) of the spectrum receiver was 100 kHz up to 1 GHz and 1 MHz above 1 GHz with an appropriate sweep speed. The VBW above 1 GHz was 3 MHz. The analyzer was calibrated in dB above a micro volt at the output of the antenna.

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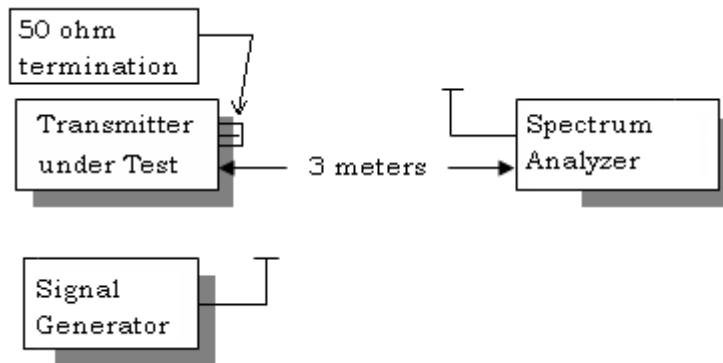
FIELD STRENGTH OF SPURIOUS EMISSIONS

Rule Parts. No.: FCC Part 2.1053, RSS-GEN 4.9

Requirements: The FCC limits for radiated emissions are the same as previously stated for the conducted emissions.

METHOD OF MEASUREMENT: The tabulated data shows the results of the radiated field strength emissions test. The spectrum was scanned from 30 MHz to at least the tenth harmonic of the fundamental. This test was conducted per ANSI/TIA 603-C: 2004 using the substitution method. Measurements were made at the test site of TIMCO ENGINEERING, INC. located at 849 NW State Road 45, Newberry, FL 32669.

Test Setup Diagram:



Test Data:

Emission Frequency MHz	Ant. Polarity	dB Below Carrier (dBc)
806.06	V	0
1612.13	V	46.4
2418.19	H	61.6
3224.25	V	74.9
4030.31	H	77.9
4836.38	H	77.0
5642.44	V	78.6
6448.50	H	78.2
7254.56	V	78.3
8060.63	V	79.2

Emission Frequency MHz	Ant. Polarity	dB Below Carrier (dBc)
813.56	V	0
1627.13	H	46.0
2440.69	V	61.6
3254.25	V	75.6
4067.81	H	76.5
4881.38	H	78.8
5694.94	V	77.8
6508.50	V	79.1
7322.06	V	78.9
8135.63	V	79.2

Emission Frequency MHz	Ant. Polarity	dB Below Carrier (dBc)
820.99	V	0
1641.98	H	44.7
2462.96	V	60.2
3283.95	V	76.2
4104.94	H	77.0
4925.93	V	78.9
5746.91	H	74.3
6567.90	V	78.7
7388.89	V	77.9
8209.88	V	77.1

Emission Frequency MHz	Ant. Polarity	dB Below Carrier (dBc)
824.99	V	0
1649.98	H	45.7
2474.96	V	60.9
3299.95	V	60.3
4124.94	V	63.5
4949.93	V	77.4
5774.91	V	76.8
6599.90	H	78.9
7424.89	H	76.2
8249.88	H	76.9

POWER LINE CONDUCTED INTERFERENCE

Rules Part No.: Part 15.107

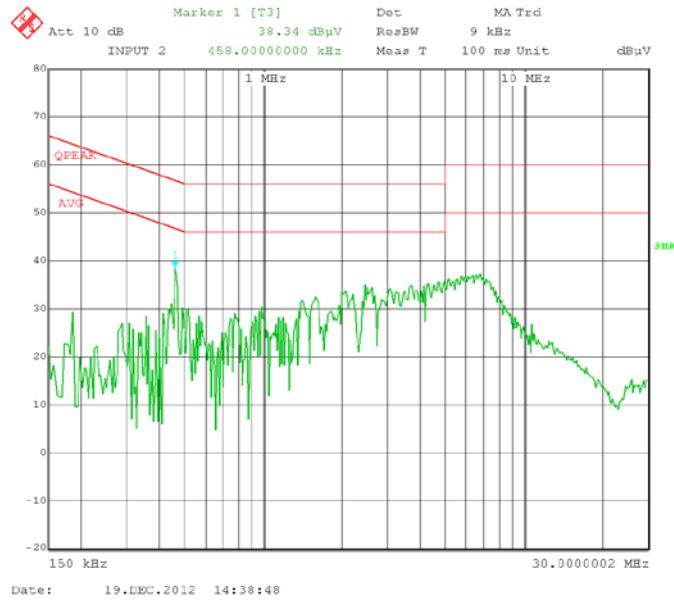
Requirements:

Frequency (MHz)	Quasi Peak Limits (dB μ V)	Average Limits (dB μ V)
0.15 – 0.5	66 – 56 *	56 – 46 *
0.5 – 5.0	56	46
5.0 – 30	60	50
* Decrease with logarithm of frequency		

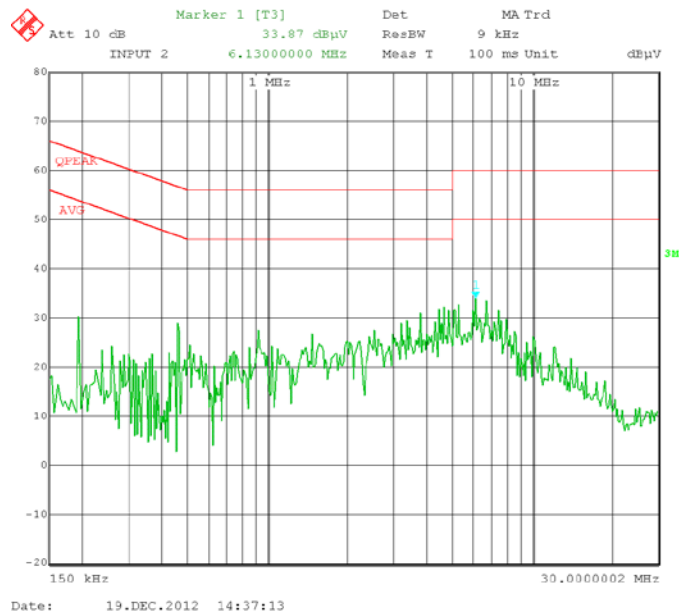
Test Data: The following plots represent the emissions for power line conducted. Both lines were observed.

806.0625 MHz

POWERLINE CONDUCTED EMISSIONS – LINE 1



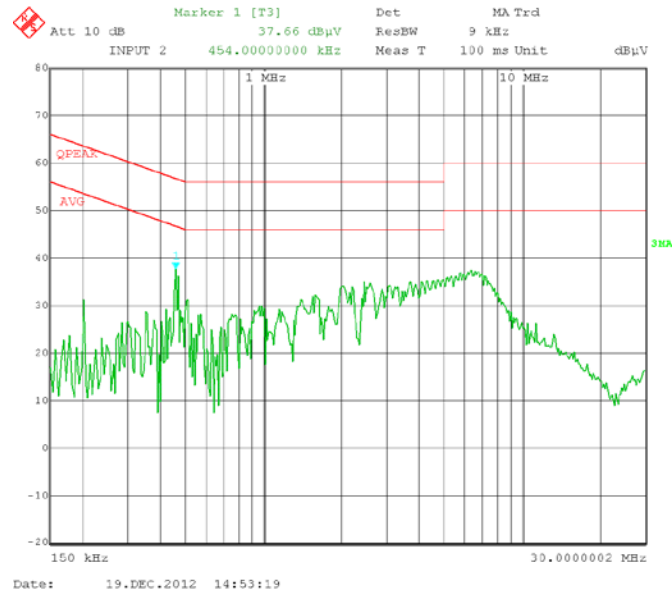
POWERLINE CONDUCTED EMISSIONS – LINE 2



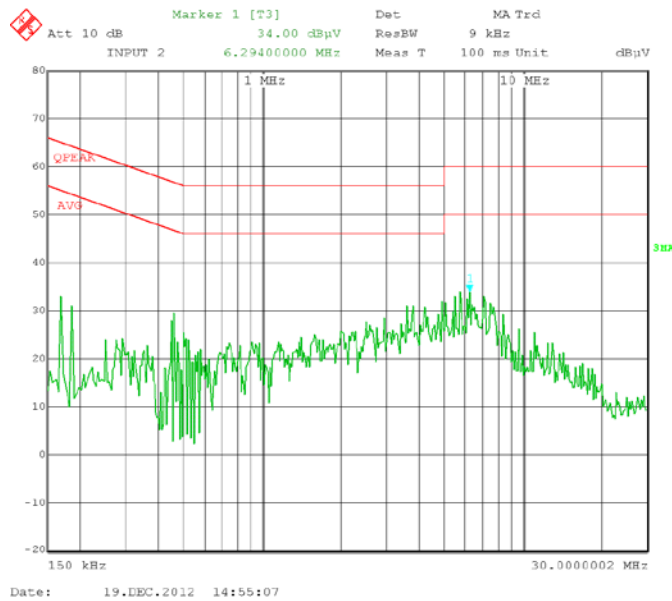
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896.0625 MHz

POWERLINE CONDUCTED EMISSIONS – LINE 1



POWERLINE CONDUCTED EMISSIONS – LINE 2



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EMC EQUIPMENT LIST

Device	Manufacturer	Model	Serial Number	Cal/Char Date	Due Date
Analyzer Tan Tower Spectrum Analyzer	HP	8566B Opt 462	3138A07786 3144A20661	10/28/11	10/28/13
Analyzer Tan Tower Preamplifier	HP	8449B-H02	3008A00372	10/28/11	10/28/13
Antenna: Biconnical	Electro-Metrics	BIA-25	1171	06/13/12	06/13/14
Antenna: Log-Periodic	Electro-Metrics	LPA-25	1122	05/04/11	05/04/13
Frequency Counter	HP	5352B	2632A00165	06/22/11	06/22/13
Frequency Counter	HP	5385A	2730A03025	08/17/11	08/17/13
Signal Generator	HP	8640B	2308A21464	02/23/12	02/23/14
Hygro-Thermometer	Extech	445703	0602	06/15/11	06/15/13
Digital Multimeter	Fluke	77	35053830	09/09/11	09/09/13
Analyzer Tan Tower RF Preselector	HP	85685A	3221A01400	10/28/11	10/28/13
Antenna: Passive Loop	EMC Test Systems	EMCO 6512	9706-1211	06/14/12	06/14/14
Antenna Horn	ETS-Lindgren	3117	35923	12/07/11	12/07/2013
Analyzer Tan Tower Quasi-Peak Adapter	HP	85650A	3303A01690	10/28/11	10/28/13
Temperature Chamber	Tenney Engineering	TTRC	11717-7	07/03/12	07/03/14
Frequency Counter	HP	5385A	3242A07460	06/22/11	06/22/13
3/10-Meter OATS	TEI	N/A	N/A	12/31/11	12/31/13
3-Meter OATS	TEI	N/A	N/A	12/31/11	12/31/13
3-Meter Semi-Anechoic Chamber	Panashield	N/A	N/A	12/31/11	12/31/13