



EMC Emission - TEST REPORT

Test Report File No. : **WC703996** Date of issue: 06 August 2007

Model / Serial No. : **RDMi-25100 / 0092-0300-7180070**

Product Name : **Expedience/WiMax 2.496-2.690 GHz RSU**

Product Type : **BRS/EBS Residential Subscribe Unit (RSU)**

Applicant : **Motorola Incorporated Nextnet Wireless Product Group**

Manufacturer : **Motorola Incorporated Nextnet Wireless Product Group**

License Holder : **Motorola Incorporated Nextnet Wireless Product Group**

Address : **299 Johnson Avenue
Suite 120
Waseca MN 56093**

Test Result : **Positive** **Negative**

Test Project Number Reference(s) : **WC803996**

Total pages including Appendices **80**

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Sign Explanations:
 - not applicable
 - applicable

EMISSIONS TEST REGULATIONS :

The emissions tests were performed according to following regulations:

- | | | |
|---|---|---|
| <input type="checkbox"/> - EN 50081-1 / 1991 | <input type="checkbox"/> - Group 1 | <input type="checkbox"/> - Group 2 |
| <input type="checkbox"/> - EN 55011 / 1991 | <input type="checkbox"/> - Class A | <input type="checkbox"/> - Class B |
| <input type="checkbox"/> - EN 55013 / 1990 | | |
|
 | | |
| <input type="checkbox"/> - EN 55014 / 1987 | <input type="checkbox"/> - Household appliances and similar | |
| | <input type="checkbox"/> - Portable tools | |
| | <input type="checkbox"/> - Semiconductor devices | |
|
 | | |
| <input type="checkbox"/> - EN 55014 / A2:1990 | <input type="checkbox"/> - Household appliances and similar | |
| <input type="checkbox"/> - EN 55014 / 1993 | <input type="checkbox"/> - Portable tools | |
| | <input type="checkbox"/> - Semiconductor devices | |
|
 | | |
| <input type="checkbox"/> - EN 55015 / 1987 | | |
| <input type="checkbox"/> - EN 55015 / A1:1990 | | |
| <input type="checkbox"/> - EN 55015 / 1993 | | |
| <input type="checkbox"/> - EN 55022 / 1987 | <input type="checkbox"/> - Class A | <input type="checkbox"/> - Class B |
| <input type="checkbox"/> - EN 55022 / 1991 | <input type="checkbox"/> - Class A | <input type="checkbox"/> - Class B |
|
 | | |
| <input type="checkbox"/> - BS | <input type="checkbox"/> - Class A | <input type="checkbox"/> - Class B |
| <input type="checkbox"/> - VCCI | <input type="checkbox"/> - Class A | <input type="checkbox"/> - Class B |
|
 | | |
| <input checked="" type="checkbox"/> - FCC Part 15 Subpart B | <input type="checkbox"/> - Class A | <input checked="" type="checkbox"/> - Class B |
| <input type="checkbox"/> - FCC Part 15 Subpart C | | |
| <input checked="" type="checkbox"/> - FCC Part 27 Subpart C | | |
|
 | | |
| <input type="checkbox"/> - CISPR 11 (1990) | <input type="checkbox"/> - Group 1 | <input type="checkbox"/> - Group 2 |
| | <input type="checkbox"/> - Class A | <input type="checkbox"/> - Class B |
|
 | | |
| <input type="checkbox"/> - CISPR 22 (1993) | <input type="checkbox"/> - Class A | <input type="checkbox"/> - Class B |
|
 | | |
| <input checked="" type="checkbox"/> - IC RSS-Gen Issue 1 | | |
| <input checked="" type="checkbox"/> - IC RSS-193 Issue 1 | | |

Radiated emission limits - Transmitter, FCC 27.53, IC RSS-193 6.3

Test summary

The requirements are: - MET - NOT MET

Minimum margin of compliance is 4 dB at 5.374 GHz. Substitution measurements are shown for all signals within 20 dB of the limit.

Test location

- Wild River Lab Large Test Site (Open Area Test Site)
- Wild River Lab Small Test Site (Open Area Test Site)

Test Distance

- 3 meters
- 10 meters

Test equipment

TUV ID	Model Number	Manufacturer	Description	Serial Number	Cal Due
3202	EM-6917B	Electro-Metrics	Biconicalog Periodic	101	10-May-08
3294	8566B	Hewlett-Packard	Spectrum Analyzer	2349A03098	16-May-08
3295	85662A	Hewlett-Packard	Analyzer Display	2349A06144	16-May-08
2681	85650A	Hewlett-Packard	Quasi-Peak Adapter	2430A00562	23 March 08
3847	ZHL-1042J	Mini-Circuits	Preamplifier 10 - 4000 MHz	0607	Code B
2478	AWT-18037	Avantek	Preamplifier 8-18 GHz	1001-9226	Code B
2477	AFT-8434	Avantek	Preamplifier 4-8 GHz	2613A92801	Code B
2075	3115	EMCO	Ridge Guide Ant. 1-18 GHz	9001-3275	12-Jan-08
3935	F548B-1	Acronetics	1 - 2 GHz Bandpass Filter	010	Code B
N/A	L2G010G2	Microwave Circuits	Low Pass Filter	85441	Code B
N/A	H04G1862	Acronetics	High Pass Filter	89099	Code B
3236	UHAP-10dB	Schwarzbeck	Dipole Antenna 300-1000	164	N/A
3056	18N20W-10dB	Inmet	Attenuator	1	Code B
3229	3115	Electro-Mechanics (EMCO)	Ridge Guide Antenna	2483	07-Jun-08
2662	11970K	Hewlett-Packard	Harm Mixer - 18-26.5 GHz	2332A01170	04 Sep 08
2919	11970U	Hewlett-Packard	Harm Mixer - 40-60 GHz	3003A01395	04 Sep 09
6717	3116	EMCO	Ridge Guide Ant 18-40 GHz	2005	05 Oct 07
3010	6769B	Wiltron	Signal Generator	159003	30 Aug 08

Cal Code B = Calibration verification performed internally.

Test limit

-13.0 dBm

Test Data

(Runs 6 & 7 and substitution page)Pages 14 - 40

Radiated emission limits - Receiver, FCC 15.205, FCC 15.209, IC RSS-Gen 6(a)

Test summary

The requirements are: - MET - NOT MET
 Minimum margin of compliance is 1 dB at 94.0 MHz

Test location

- Wild River Lab Large Test Site (Open Area Test Site)
- Wild River Lab Small Test Site (Open Area Test Site)

Test Distance

- 3 meters
- 10 meters

Test equipment

TUV ID	Model Number	Manufacturer	Description	Serial Number	Cal Due
3203	EM-6917B	Electro-Metrics	Biconicalog Periodic	106	23-May-08
8052	8566B	Hewlett-Packard	Spectrum Analyzer	2115A00853	03-Apr-08
8051	85662A	Hewlett-Packard	Analyzer Display	2112A02220	03-Apr-08
2682	85650A	Hewlett-Packard	Quasi-Peak Adapter	2811A01127	29-Nov-07
2665	ZHL-1042J	Mini-Circuits	Preamplifier 30 - 5000 MHz	32296	Code B
3202	EM-6917B	Electro-Metrics	Biconicalog Periodic	101	10-May-08
3294	8566B	Hewlett-Packard	Spectrum Analyzer	2349A03098	16-May-08
3295	85662A	Hewlett-Packard	Analyzer Display	2349A06144	16-May-08
2681	85650A	Hewlett-Packard	Quasi-Peak Adapter	2430A00562	23 Mar 08
3847	ZHL-1042J	Mini-Circuits	Preamplifier 10 - 4000 MHz	0607	Code B
2478	AWT-18037	Avantek	Preamplifier 8-18 GHz	1001-9226	Code B
2477	AFT-8434	Avantek	Preamplifier 4-8 GHz	2613A92801	Code B
2075	3115	EMCO	Ridge Guide Ant. 1-18 GHz	9001-3275	12-Jan-08

Cal Code B = Calibration verification performed internally.

Test limit

Spurious Frequency (MHz)	Field Strength (microvolt/m at 3 metres)
30-88	100
88-216	150
216-960	200
Above 960	500

Test Data

(Runs 10,11,12) Pages 41 – 61

Conducted emissions - AC power lines - Class B limits, FCC 15.107, IC RSS-Gen 7.2.2

Test summary

The requirements are: - MET - NOT MET
 Minimum margin of compliance is 13 dB at 270.0 KHz

Test location

- Wild River Lab Large Test Site (Open Area Test Site)
- Wild River Lab Small Test Site (Open Area Test Site)

Test equipment

TUV ID	Model Number	Manufacturer	Description	Serial Number	Cal Due
2416	3825/2	Electro-Mechanics (EMCO)	50 Ω LISN	8812-1437	Code B
2534	ESHS-20	Rhode & Schwarz	EMI Receiver	837055/003	22-Mar-08

Cal Code B = Calibration verification performed internally.

Test limit

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15–0.5	66 to 56*	56 to 46*
0.5–5	56	46
5–30	60	50

*Decreases with the logarithm of the frequency.

Test Data

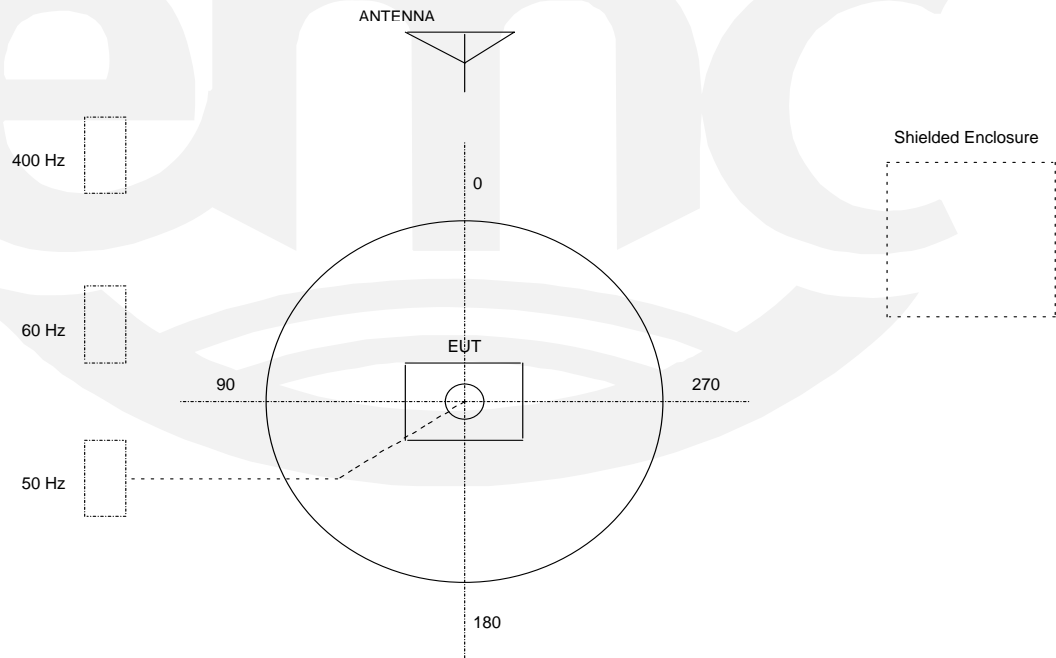
(run 14) Pages 62 – 67

TEST SETUP FOR EMISSIONS TESTING

WILD RIVER LAB Large Test Site

Notes:

1. Items shown in dotted lines are located on the floor below the test area. It is 5 meters vertically from the ground floor to the test area.
2. 50 Hz, 60 Hz, and 400 Hz are power panels for alternating current.
3. The antenna may be positioned horizontally 3, 10 or 30 meters from the center of the turntable.
4. The circle is a 6.7 meter diameter turntable.
5. A ground plane is in the plane of this sheet.
6. The test sample is shown in the azimuthal position representing zero degrees.



Test setup photo, radiated emissions



Test setup photo, radiated emissions



Test setup photo, conducted emissions on AC mains



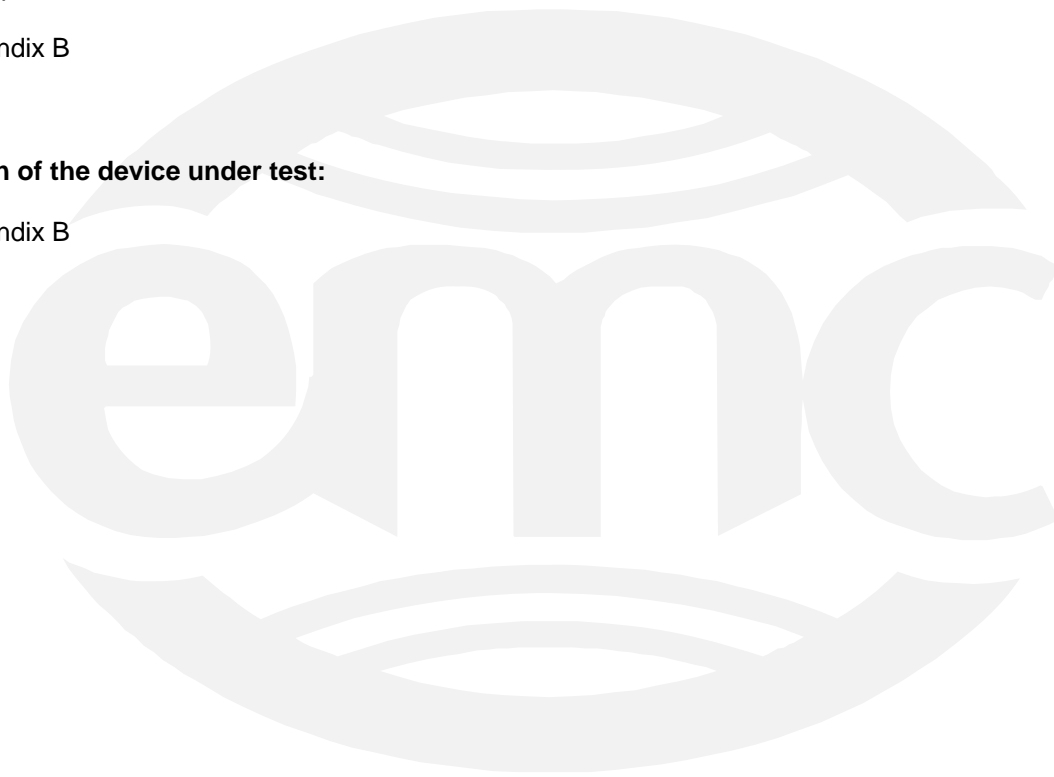
Test Operation Mode:

The device under test was operated under the following conditions during emissions testing:

- Standby
- Test program (H - Pattern)
- Test program (color bar)
- Test program (customer specific)
- Practice operation
- See Appendix B

Configuration of the device under test:

- See Appendix B



DEVIATIONS FROM STANDARD:

None.

GENERAL REMARKS:Modifications required to pass:

None

Test Specification Deviations: Additions to or Exclusions from:

None

As indicated in the Test Plan

SUMMARY:

The requirements according to the technical regulations are

- met

- **not** met.

The device under test does

- fulfill the general approval requirements mentioned on page 3.

- **not** fulfill the general approval requirements mentioned on page 3.


EUT Received Date: 12 June 2007

Condition of EUT: Normal

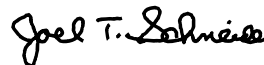
Testing Start Date: 12 June 2007

Testing End Date: 22 June 2007

- TÜV AMERICA INC -



T. K. Swanson
Senior EMC Technician



J. T. Schneider
Senior EMC Engineer

Appendix A

Test Data



RADIATED EMISSIONS



Test Report #: WC703996 Run 6 Test Area: LTS
 EUT Model #: RDMi-25100 Date: 6/14/2007
 EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 23.0 °C
 Test Method: FCC B Air Pressure: 99.0 kPa
 Customer: Motorola Inc. Rel. Humidity: 69.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

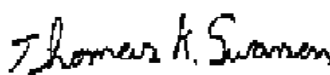
Data File Name: 3996-1.dat Page: 1 of 14

List of measurements for run #: 6

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm GUIDELINE < 1GHz	DELTA2 -13dBm GUIDELINE > 1GHz
WiMax Mode - Configuration 1b, RF Freq = 2499 MHz						
43.824 MHz	45.05 Qp	0.49 / 16.37 / 29.66 / 0.01	32.26	V / 1.00 / 0	-52.12	n/a
56.759 MHz	41.9 Qp	0.7 / 12.54 / 29.53 / 0.01	25.63	V / 1.00 / 0	-58.75	n/a
68.228 MHz	55.75 Qp	0.79 / 10.7 / 29.41 / 0.02	37.85	V / 1.00 / 0	-46.53	n/a
68.474 MHz	56.0 Qp	0.79 / 10.62 / 29.41 / 0.02	38.02	V / 1.00 / 0	-46.36	n/a
68.984 MHz	57.85 Qp	0.8 / 10.45 / 29.4 / 0.02	39.7	V / 1.00 / 0	-44.68	n/a
69.699 MHz	56.05 Qp	0.8 / 10.2 / 29.4 / 0.02	37.67	V / 1.00 / 0	-46.71	n/a
86.055 MHz	61.1 Qp	0.9 / 8.42 / 29.32 / 0.02	41.13	V / 1.00 / 0	-43.25	n/a
86.445 MHz	59.15 Qp	0.9 / 8.45 / 29.33 / 0.02	39.2	V / 1.00 / 0	-45.18	n/a
100.0 MHz	50.6 Qp	0.94 / 9.25 / 29.37 / 0.03	31.45	V / 1.00 / 0	-52.93	n/a
108.808 MHz	48.15 Qp	0.97 / 9.48 / 29.4 / 0.03	29.23	V / 1.00 / 0	-55.15	n/a
120.001 MHz	47.25 Qp	1.0 / 9.7 / 29.44 / 0.04	28.55	V / 1.00 / 0	-55.83	n/a
137.176 MHz	55.6 Qp	1.06 / 9.31 / 29.5 / 0.05	36.52	V / 1.00 / 0	-47.86	n/a
137.782 MHz	54.9 Qp	1.06 / 9.36 / 29.5 / 0.05	35.87	V / 1.00 / 0	-48.51	n/a
172.805 MHz	49.7 Qp	1.25 / 9.5 / 29.42 / 0.06	31.1	V / 1.00 / 0	-53.28	n/a
193.801 MHz	46.5 Qp	1.34 / 10.58 / 29.53 / 0.07	28.96	V / 1.00 / 0	-55.42	n/a
250.0 MHz	46.5 Qp	1.48 / 12.39 / 29.54 / 0.1	30.93	V / 1.00 / 0	-53.45	n/a
300.0 MHz	42.25 Qp	1.71 / 13.83 / 29.87 / 0.11	28.03	V / 1.00 / 0	-56.35	n/a
400.0 MHz	38.7 Qp	2.01 / 15.9 / 29.93 / 0.13	26.81	V / 1.00 / 0	-57.57	n/a
500.0 MHz	45.95 Qp	2.14 / 17.5 / 29.98 / 0.15	35.76	V / 1.00 / 0	-48.62	n/a
600.0 MHz	38.3 Qp	2.5 / 19.1 / 30.02 / 0.17	30.06	V / 1.00 / 0	-54.32	n/a
800.0 MHz	33.75 Qp	2.76 / 21.7 / 29.67 / 0.21	28.74	V / 1.00 / 0	-55.64	n/a
900.0 MHz	34.75 Qp	2.98 / 22.7 / 29.5 / 0.22	31.15	V / 1.00 / 0	-53.23	n/a
1.0 GHz	36.75 Qp	3.07 / 23.3 / 29.46 / 0.24	33.9	V / 1.00 / 0	-50.48	n/a

Tested by: T. K. Swanson

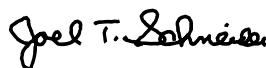
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 Signature

Reviewed by: J. T. Schneider

 Printed



 Signature

RADIATED EMISSIONS



America

Test Report #: WC703996 Run 6 Test Area: LTS

EUT Model #: RDMi-25100 Date: 6/14/2007

EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 23.0 °C

Test Method: FCC B Air Pressure: 99.0 kPa

Customer: Motorola Inc. Rel. Humidity: 69.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996-1.dat Page: 2 of 14

List of measurements for run #: 6

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm GUIDELINE < 1GHz	DELTA2 -13dBm GUIDELINE > 1GHz
750.027 MHz	37.3 Qp	2.71 / 21.5 / 29.76 / 0.2	31.95	V / 1.00 / 0	-52.43	n/a
200.001 MHz	46.7 Qp	1.36 / 10.78 / 29.57 / 0.07	29.35	V / 1.00 / 0	-55.03	n/a
69.699 MHz	58.32 Qp	0.8 / 10.2 / 29.4 / 0.02	39.94	V / 1.00 / 90	-44.44	n/a
137.176 MHz	59.83 Qp	1.06 / 9.31 / 29.5 / 0.05	40.75	V / 1.00 / 90	-43.63	n/a
137.782 MHz	59.22 Qp	1.06 / 9.36 / 29.5 / 0.05	40.19	V / 1.00 / 90	-44.19	n/a
300.0 MHz	43.95 Qp	1.71 / 13.83 / 29.87 / 0.11	29.73	V / 1.00 / 90	-54.65	n/a
400.0 MHz	42.95 Qp	2.01 / 15.9 / 29.93 / 0.13	31.06	V / 1.00 / 90	-53.32	n/a
999.714 MHz	40.5 Qp	3.07 / 23.31 / 29.46 / 0.24	37.66	V / 1.00 / 90	-46.72	n/a
141.202 MHz	60.05 Qp	1.07 / 9.65 / 29.49 / 0.05	41.33	V / 1.00 / 90	-43.05	n/a
138.428 MHz	57.95 Qp	1.06 / 9.42 / 29.5 / 0.05	38.98	V / 1.00 / 90	-45.4	n/a
120.001 MHz	49.3 Qp	1.0 / 9.7 / 29.44 / 0.04	30.6	V / 1.00 / 90	-53.78	n/a
300.0 MHz	50.95 Qp	1.71 / 13.83 / 29.87 / 0.11	36.73	V / 1.00 / 180	-47.65	n/a
400.0 MHz	45.65 Qp	2.01 / 15.9 / 29.93 / 0.13	33.76	V / 1.00 / 180	-50.62	n/a
500.0 MHz	49.45 Qp	2.14 / 17.5 / 29.98 / 0.15	39.26	V / 1.00 / 180	-45.12	n/a
800.0 MHz	40.8 Qp	2.76 / 21.7 / 29.67 / 0.21	35.79	V / 1.00 / 180	-48.59	n/a
400.0 MHz	47.75 Qp	2.01 / 15.9 / 29.93 / 0.13	35.86	V / 1.00 / 270	-48.52	n/a
138.428 MHz	58.79 Qp	1.06 / 9.42 / 29.5 / 0.05	39.82	V / 1.00 / 270	-44.56	n/a
56.759 MHz	45.0 Qp	0.7 / 12.54 / 29.53 / 0.01	28.73	V / 1.00 / 270	-55.65	n/a
86.055 MHz	62.53 Qp	0.9 / 8.42 / 29.32 / 0.02	42.56	V / 1.00 / 225	-41.82	n/a
800.0 MHz	42.1 Qp	2.76 / 21.7 / 29.67 / 0.21	37.09	V / 1.00 / 225	-47.29	n/a
500.0 MHz	49.9 Qp	2.14 / 17.5 / 29.98 / 0.15	39.71	V / 1.00 / 225	-44.67	n/a
141.202 MHz	62.78 Qp	1.07 / 9.65 / 29.49 / 0.05	44.06	V / 1.00 / 225	-40.32	n/a

Tested by: T. K. Swanson

 Printed

Thomas K. Swanson

 Signature

Reviewed by: J. T. Schneider

 Printed

Joel T. Schneider

 Signature

RADIATED EMISSIONS



America

Test Report #: WC703996 Run 6 Test Area: LTS

EUT Model #: RDMi-25100 Date: 6/14/2007

EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 23.0 °C

Test Method: FCC B Air Pressure: 99.0 kPa

Customer: Motorola Inc. Rel. Humidity: 69.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996-1.dat Page: 3 of 14

List of measurements for run #: 6

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm GUIDELINE < 1GHz	DELTA2 -13dBm GUIDELINE > 1GHz
138.428 MHz	60.4 Qp	1.06 / 9.42 / 29.5 / 0.05	41.43	V / 1.00 / 225	-42.95	n/a
900.0 MHz	42.25 Qp	2.98 / 22.7 / 29.5 / 0.22	38.65	V / 1.00 / 135	-45.73	n/a
1.0 GHz	38.7 Qp	3.07 / 23.3 / 29.46 / 0.24	35.85	V / 1.00 / 135	-48.53	n/a
750.027 MHz	40.85 Qp	2.71 / 21.5 / 29.76 / 0.2	35.5	V / 1.00 / 135	-48.88	n/a
141 MHz maxed						
141.202 MHz	63.14 Qp	1.07 / 9.65 / 29.49 / 0.05	44.42	V / 1.00 / 135	-39.96	n/a
500 MHz maxed						
500.0 MHz	52.78 Qp	2.14 / 17.5 / 29.98 / 0.15	42.59	V / 1.00 / 135	-41.79	n/a
68 MHz maxed						
68.984 MHz	59.39 Qp	0.8 / 10.45 / 29.4 / 0.02	41.24	V / 1.00 / 0	-43.14	n/a
250.0 MHz	49.3 Qp	1.48 / 12.39 / 29.54 / 0.1	33.73	H / 1.00 / 90	-50.65	n/a
108.808 MHz	50.2 Qp	0.97 / 9.48 / 29.4 / 0.03	31.28	H / 1.00 / 180	-53.1	n/a
172.805 MHz	53.65 Qp	1.25 / 9.5 / 29.42 / 0.06	35.05	H / 1.00 / 180	-49.33	n/a
300.0 MHz	52.75 Qp	1.71 / 13.83 / 29.87 / 0.11	38.53	H / 1.00 / 180	-45.85	n/a
400.0 MHz	48.35 Qp	2.01 / 15.9 / 29.93 / 0.13	36.46	H / 1.00 / 180	-47.92	n/a
500.0 MHz	47.95 Qp	2.14 / 17.5 / 29.98 / 0.15	37.76	H / 1.00 / 180	-46.62	n/a
600.0 MHz	44.0 Qp	2.5 / 19.1 / 30.02 / 0.17	35.76	H / 1.00 / 180	-48.62	n/a
900.0 MHz	43.05 Qp	2.98 / 22.7 / 29.5 / 0.22	39.45	H / 1.00 / 180	-44.93	n/a
300.0 MHz	54.3 Qp	1.71 / 13.83 / 29.87 / 0.11	40.08	H / 1.00 / 270	-44.3	n/a

Tested by: T. K. Swanson

 Printed

Thomas K. Swanson

 Signature

Reviewed by: J. T. Schneider

 Printed

Joel T. Schneider

 Signature

RADIATED EMISSIONS



America

Test Report #: WC703996 Run 6 Test Area: LTS

EUT Model #: RDMi-25100 Date: 6/14/2007

EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 23.0 °C

Test Method: FCC B Air Pressure: 99.0 kPa

Customer: Motorola Inc. Rel. Humidity: 69.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996-1.dat Page: 4 of 14

List of measurements for run #: 6

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm GUIDELINE < 1GHz	DELTA2 -13dBm GUIDELINE > 1GHz
1.0 GHz	42.75 Qp	3.07 / 23.3 / 29.46 / 0.24	39.9	H / 1.00 / 225	-44.48	n/a
800.0 MHz	42.9 Qp	2.76 / 21.7 / 29.67 / 0.21	37.89	H / 1.00 / 225	-46.49	n/a
250.0 MHz	54.4 Qp	1.48 / 12.39 / 29.54 / 0.1	38.83	H / 1.00 / 135	-45.55	n/a
108.808 MHz	52.8 Qp	0.97 / 9.48 / 29.4 / 0.03	33.88	H / 1.60 / 180	-50.5	n/a
300 MHz maxed						
300.0 MHz	55.14 Qp	1.71 / 13.83 / 29.87 / 0.11	40.92	H / 1.00 / 255	-43.46	n/a
900 MHz maxed						
900.0 MHz	43.38 Qp	2.98 / 22.7 / 29.5 / 0.22	39.78	H / 1.00 / 180	-44.6	n/a
1 GHz maxed						
1.0 GHz	46.29 Qp	3.07 / 23.3 / 29.46 / 0.24	43.44	H / 1.20 / 200	-40.94	n/a
250 MHz maxed						
250.0 MHz	55.22 Qp	1.48 / 12.39 / 29.54 / 0.1	39.65	H / 1.00 / 140	-44.73	n/a
Configuration 2b - RF Freq = 2593						
110.78 MHz	47.0 Qp	0.97 / 9.26 / 29.41 / 0.04	27.86	H / 1.00 / 0	-56.52	n/a
111.605 MHz	47.7 Qp	0.97 / 9.17 / 29.41 / 0.04	28.47	H / 1.00 / 0	-55.91	n/a
191.992 MHz	40.05 Qp	1.33 / 10.53 / 29.52 / 0.07	22.45	H / 1.00 / 0	-61.93	n/a
239.994 MHz	45.55 Qp	1.46 / 12.07 / 29.6 / 0.09	29.57	H / 1.00 / 0	-54.81	n/a

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America

Test Report #: WC703996 Run 6 Test Area: LTS

EUT Model #: RDMi-25100 Date: 6/14/2007

EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 23.0 °C

Test Method: FCC B Air Pressure: 99.0 kPa

Customer: Motorola Inc. Rel. Humidity: 69.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996-1.dat Page: 5 of 14

List of measurements for run #: 6

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm GUIDELINE < 1GHz	DELTA2 -13dBm GUIDELINE > 1GHz
258.023 MHz	44.3 Qp	1.5 / 12.65 / 29.51 / 0.1	29.04	H / 1.00 / 0	-55.34	n/a
259.437 MHz	44.9 Qp	1.5 / 12.7 / 29.52 / 0.1	29.67	H / 1.00 / 0	-54.71	n/a
700.0 MHz	37.6 Qp	2.63 / 20.7 / 29.85 / 0.19	31.27	H / 1.00 / 0	-53.11	n/a
259.437 MHz	45.7 Qp	1.5 / 12.7 / 29.52 / 0.1	30.47	H / 1.00 / 180	-53.91	n/a
111.605 MHz	49.45 Qp	0.97 / 9.17 / 29.41 / 0.04	30.22	H / 1.00 / 180	-54.16	n/a
110.78 MHz	48.65 Qp	0.97 / 9.26 / 29.41 / 0.04	29.51	H / 1.00 / 180	-54.87	n/a
375.007 MHz	49.0 Qp	1.96 / 15.5 / 29.88 / 0.12	36.7	H / 1.00 / 180	-47.68	n/a
300.0 MHz	54.8 Qp	1.71 / 13.83 / 29.87 / 0.11	40.58	H / 1.00 / 270	-43.8	n/a
259.437 MHz	47.45 Qp	1.5 / 12.7 / 29.52 / 0.1	32.22	H / 1.00 / 270	-52.16	n/a
258.023 MHz	47.0 Qp	1.5 / 12.65 / 29.51 / 0.1	31.74	H / 1.00 / 270	-52.64	n/a
110.78 MHz	51.78 Qp	0.97 / 9.26 / 29.41 / 0.04	32.64	H / 2.00 / 180	-51.74	n/a
86.055 MHz	58.45 Qp	0.9 / 8.42 / 29.32 / 0.02	38.48	H / 2.00 / 180	-45.9	n/a
101.866 MHz	54.45 Qp	0.95 / 9.49 / 29.38 / 0.03	35.54	H / 2.00 / 180	-48.84	n/a
300 Maxed						
300.0 MHz	55.26 Qp	1.71 / 13.83 / 29.87 / 0.11	41.04	H / 1.00 / 265	-43.34	n/a
1 GHz maxed						
1.0 GHz	45.84 Qp	3.07 / 23.3 / 29.46 / 0.24	42.99	H / 1.20 / 210	-41.39	n/a
111.605 MHz	51.2 Qp	0.97 / 9.17 / 29.41 / 0.04	31.97	V / 1.00 / 90	-52.41	n/a
141 Mhz maxed						

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Thomas K. Swanson

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Reviewed by: J. T. Schneider

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America

Test Report #: WC703996 Run 6 Test Area: LTS

EUT Model #: RDMi-25100 Date: 6/14/2007

EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 23.0 °C

Test Method: FCC B Air Pressure: 99.0 kPa

Customer: Motorola Inc. Rel. Humidity: 69.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996-1.dat Page: 6 of 14

List of measurements for run #: 6

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm GUIDELINE < 1GHz	DELTA2 -13dBm GUIDELINE > 1GHz
141.202 MHz	62.47 Qp	1.07 / 9.65 / 29.49 / 0.05	43.75	V / 1.00 / 235	-40.63	n/a
Configuration 1b - RF Freq = 2499 MHz						
scan 1 to 27 GHz						
maxed						
4.998 GHz	47.29 Av	7.66 / 33.2 / 46.2 / 0.83	42.78	V / 1.10 / 295	n/a	-41.6
4.998 GHz	75.15 Pk	7.66 / 33.2 / 46.2 / 0.83	70.64	V / 1.10 / 295	n/a	-13.74*
4.998 GHz	47.44 Av	7.66 / 33.2 / 46.2 / 0.83	42.93	H / 1.10 / 0	n/a	-41.45
4.998 GHz	72.1 Pk	7.66 / 33.2 / 46.2 / 0.83	67.59	H / 1.10 / 0	n/a	-16.79*
7.497 GHz	46.6 Av	9.95 / 36.4 / 46.69 / 0.05	46.3	H / 1.20 / 215	n/a	-38.08
7.497 GHz	68.2 Pk	9.95 / 36.4 / 46.69 / 0.05	67.9	H / 1.20 / 215	n/a	-16.48*
7.497 GHz	46.13 Av	9.95 / 36.4 / 46.69 / 0.05	45.83	V / 1.40 / 200	n/a	-38.55
7.497 GHz	67.85 Pk	9.95 / 36.4 / 46.69 / 0.05	67.55	V / 1.40 / 200	n/a	-16.83*
no further significant emissions detected 1 to 27 GHz						
Config 2b - RF Freq = 2593 MHz						
maxed						
5.186 GHz	48.89 Av	7.77 / 33.44 / 46.03 / 0.73	44.81	V / 1.30 / 295	n/a	-39.57
5.186 GHz	67.3 Pk	7.77 / 33.44 / 46.03 / 0.73	63.22	V / 1.30 / 295	n/a	-21.16*
7.779 GHz	42.76 Av	10.22 / 36.57 / 46.61 / 0.06	43.01	V / 1.10 / 220	n/a	-41.37
7.779 GHz	56.55 Pk	10.22 / 36.57 / 46.61 / 0.06	56.8	V / 1.10 / 220	n/a	-27.58*

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Joel T. Schneider

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RADIATED EMISSIONS



Test Report #: WC703996 Run 6 Test Area: LTS
 EUT Model #: RDMi-25100 Date: 6/14/2007
 EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 23.0 °C
 Test Method: FCC B Air Pressure: 99.0 kPa
 Customer: Motorola Inc. Rel. Humidity: 69.0 %
 EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996-1.dat

Page: 8 of 14

List of measurements for run #: 6

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm GUIDELINE < 1GHz	DELTA2 -13dBm GUIDELINE > 1GHz
100.042 MHz	56.86 Qp	0.94 / 9.26 / 29.37 / 0.03	37.72	V / 1.00 / 0	-46.66	n/a
137.128 MHz	58.99 Qp	1.06 / 9.31 / 29.5 / 0.05	39.9	V / 1.00 / 0	-44.48	n/a
138.368 MHz	58.85 Qp	1.06 / 9.41 / 29.5 / 0.05	39.87	V / 1.00 / 0	-44.51	n/a
172.757 MHz	48.33 Qp	1.25 / 9.5 / 29.42 / 0.06	29.73	V / 1.00 / 0	-54.65	n/a
193.801 MHz	47.95 Qp	1.34 / 10.58 / 29.53 / 0.07	30.41	V / 1.00 / 0	-53.97	n/a
249.946 MHz	48.85 Qp	1.48 / 12.39 / 29.54 / 0.1	33.28	V / 1.00 / 0	-51.1	n/a
299.97 MHz	45.5 Qp	1.71 / 13.83 / 29.87 / 0.11	31.28	V / 1.00 / 0	-53.1	n/a
374.971 MHz	41.7 Qp	1.96 / 15.5 / 29.88 / 0.12	29.4	V / 1.00 / 0	-54.98	n/a
399.976 MHz	39.85 Qp	2.01 / 15.9 / 29.93 / 0.13	27.96	V / 1.00 / 0	-56.42	n/a
499.964 MHz	46.45 Qp	2.14 / 17.5 / 29.98 / 0.15	36.26	V / 1.00 / 0	-48.12	n/a
600.0 MHz	37.4 Qp	2.5 / 19.1 / 30.02 / 0.17	29.16	V / 1.00 / 0	-55.22	n/a
700.0 MHz	29.55 Qp	2.63 / 20.7 / 29.85 / 0.19	23.22	V / 1.00 / 0	-61.16	n/a
749.973 MHz	35.6 Qp	2.71 / 21.5 / 29.76 / 0.2	30.25	V / 1.00 / 0	-54.13	n/a
800.0 MHz	31.55 Qp	2.76 / 21.7 / 29.67 / 0.21	26.54	V / 1.00 / 0	-57.84	n/a
899.958 MHz	33.5 Qp	2.98 / 22.7 / 29.5 / 0.22	29.9	V / 1.00 / 0	-54.48	n/a
999.714 MHz	33.0 Qp	3.07 / 23.31 / 29.46 / 0.24	30.16	V / 1.00 / 0	-54.22	n/a
999.958 MHz	36.65 Qp	3.07 / 23.3 / 29.46 / 0.24	33.8	V / 1.00 / 0	-50.58	n/a
43.764 MHz	47.1 Qp	0.49 / 16.39 / 29.66 / 0.01	34.33	V / 1.00 / 90	-50.05	n/a
100.042 MHz	59.88 Qp	0.94 / 9.26 / 29.37 / 0.03	40.74	V / 1.00 / 90	-43.64	n/a
101.83 MHz	61.34 Qp	0.95 / 9.49 / 29.38 / 0.03	42.43	V / 1.00 / 90	-41.95	n/a
111.551 MHz	53.5 Qp	0.97 / 9.18 / 29.41 / 0.04	34.28	V / 1.00 / 90	-50.1	n/a
81.163 MHz	60.95 Qp	0.87 / 8.08 / 29.31 / 0.02	40.62	V / 1.00 / 270	-43.76	n/a
115.569 MHz	51.95 Qp	0.98 / 8.9 / 29.42 / 0.04	32.45	V / 1.00 / 90	-51.93	n/a
148.083 MHz	54.15 Qp	1.1 / 10.24 / 29.47 / 0.05	36.07	V / 1.00 / 90	-48.31	n/a

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America

Test Report #: WC703996 Run 6 Test Area: LTS

EUT Model #: RDMi-25100 Date: 6/14/2007

EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 23.0 °C

Test Method: FCC B Air Pressure: 99.0 kPa

Customer: Motorola Inc. Rel. Humidity: 69.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996-1.dat Page: 9 of 14

List of measurements for run #: 6

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm GUIDELINE < 1GHz	DELTA2 -13dBm GUIDELINE > 1GHz
148.083 MHz	55.29 Qp	1.1 / 10.24 / 29.47 / 0.05	37.21	V / 1.00 / 315	-47.17	n/a
699.958 MHz	39.35 Qp	2.63 / 20.7 / 29.85 / 0.19	33.02	V / 1.00 / 225	-51.36	n/a
148.083 MHz	58.05 Qp	1.1 / 10.24 / 29.47 / 0.05	39.97	V / 1.00 / 225	-44.41	n/a
86 MHz maxed						
86.013 MHz	64.12 Qp	0.9 / 8.42 / 29.32 / 0.02	44.14	V / 1.30 / 0	-40.24	n/a
81.163 MHz	62.39 Qp	0.87 / 8.08 / 29.31 / 0.02	42.06	V / 1.30 / 0	-42.32	n/a
81 maxed above						
137 MHz maxed						
137.716 MHz	60.09 Qp	1.06 / 9.36 / 29.5 / 0.05	41.05	V / 1.00 / 115	-43.33	n/a
138.386 MHz	61.52 Qp	1.06 / 9.41 / 29.5 / 0.05	42.54	V / 1.00 / 115	-41.84	n/a
138 MHz maxed above						
500 MHz maxed						
499.958 MHz	53.59 Qp	2.14 / 17.5 / 29.98 / 0.15	43.4	V / 1.00 / 160	-40.98	n/a
749.991 MHz	41.8 Qp	2.71 / 21.5 / 29.76 / 0.2	36.45	V / 1.00 / 160	-47.93	n/a
900 MHz maxed						
899.964 MHz	42.8 Qp	2.98 / 22.7 / 29.5 / 0.22	39.2	V / 1.00 / 160	-45.18	n/a
101 MHz maxed						
101.83 MHz	62.01 Qp	0.95 / 9.49 / 29.38 / 0.03	43.1	V / 1.00 / 65	-41.28	n/a

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America

Test Report #: WC703996 Run 6 Test Area: LTS

EUT Model #: RDMi-25100 Date: 6/14/2007

EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 23.0 °C

Test Method: FCC B Air Pressure: 99.0 kPa

Customer: Motorola Inc. Rel. Humidity: 69.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996-1.dat Page: 10 of 14

List of measurements for run #: 6

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm GUIDELINE < 1GHz	DELTA2 -13dBm GUIDELINE > 1GHz
69 MHz maxed						
69.651 MHz	58.38 Qp	0.8 / 10.22 / 29.4 / 0.02	40.02	V / 1.00 / 0	-44.36	n/a
239.994 MHz	49.79 Qp	1.46 / 12.07 / 29.6 / 0.09	33.81	H / 1.00 / 135	-50.57	n/a
300 MHz maxed						
299.982 MHz	52.33 Qp	1.71 / 13.83 / 29.87 / 0.11	38.11	H / 1.00 / 280	-46.27	n/a
1 GHz maxed						
999.97 MHz	46.24 Qp	3.07 / 23.3 / 29.46 / 0.24	43.39	H / 1.20 / 215	-40.99	n/a
900 MHz maxed						
899.964 MHz	44.62 Qp	2.98 / 22.7 / 29.5 / 0.22	41.02	H / 1.00 / 200	-43.36	n/a
799.952 MHz	43.35 Qp	2.76 / 21.7 / 29.67 / 0.21	38.34	H / 1.00 / 200	-46.04	n/a
500 MHz maxed						
499.958 MHz	48.73 Qp	2.14 / 17.5 / 29.98 / 0.15	38.54	H / 1.00 / 230	-45.84	n/a
End of scan 30 to 27000 MHz						

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Test Report #: WC703996 Run 6 Test Area: LTS
 EUT Model #: RDMi-25100 Date: 6/14/2007
 EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 23.0 °C
 Test Method: FCC B Air Pressure: 99.0 kPa
 Customer: Motorola Inc. Rel. Humidity: 69.0 %
 EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996-1.dat

Page: 11 of 14

Measurement summary for limit1: -13dBm GUIDELINE < 1GHz (Qp)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm GUIDELINE < 1GHz
141.202 MHz	63.14 Qp	1.07 / 9.65 / 29.49 / 0.05	44.42	V / 1.00 / 135	-39.96
86.013 MHz	64.12 Qp	0.9 / 8.42 / 29.32 / 0.02	44.14	V / 1.30 / 0	-40.24
1.0 GHz	46.29 Qp	3.07 / 23.3 / 29.46 / 0.24	43.44	H / 1.20 / 200	-40.94
499.958 MHz	53.59 Qp	2.14 / 17.5 / 29.98 / 0.15	43.4	V / 1.00 / 160	-40.98
101.83 MHz	62.01 Qp	0.95 / 9.49 / 29.38 / 0.03	43.1	V / 1.00 / 65	-41.28
138.386 MHz	61.52 Qp	1.06 / 9.41 / 29.5 / 0.05	42.54	V / 1.00 / 115	-41.84
81.163 MHz	62.39 Qp	0.87 / 8.08 / 29.31 / 0.02	42.06	V / 1.30 / 0	-42.32
68.984 MHz	59.39 Qp	0.8 / 10.45 / 29.4 / 0.02	41.24	V / 1.00 / 0	-43.14
137.716 MHz	60.09 Qp	1.06 / 9.36 / 29.5 / 0.05	41.05	V / 1.00 / 115	-43.33
300.0 MHz	55.26 Qp	1.71 / 13.83 / 29.87 / 0.11	41.04	H / 1.00 / 265	-43.34
899.964 MHz	44.62 Qp	2.98 / 22.7 / 29.5 / 0.22	41.02	H / 1.00 / 200	-43.36
137.176 MHz	59.83 Qp	1.06 / 9.31 / 29.5 / 0.05	40.75	V / 1.00 / 90	-43.63
100.042 MHz	59.88 Qp	0.94 / 9.26 / 29.37 / 0.03	40.74	V / 1.00 / 90	-43.64
69.651 MHz	58.69 Qp	0.8 / 10.22 / 29.4 / 0.02	40.33	V / 1.00 / 0	-44.05
148.083 MHz	58.05 Qp	1.1 / 10.24 / 29.47 / 0.05	39.97	V / 1.00 / 225	-44.41
250.0 MHz	55.22 Qp	1.48 / 12.39 / 29.54 / 0.1	39.65	H / 1.00 / 140	-44.73
86.445 MHz	59.15 Qp	0.9 / 8.45 / 29.33 / 0.02	39.2	V / 1.00 / 0	-45.18
799.952 MHz	43.35 Qp	2.76 / 21.7 / 29.67 / 0.21	38.34	H / 1.00 / 200	-46.04
68.474 MHz	56.0 Qp	0.79 / 10.62 / 29.41 / 0.02	38.02	V / 1.00 / 0	-46.36
68.228 MHz	55.75 Qp	0.79 / 10.7 / 29.41 / 0.02	37.85	V / 1.00 / 0	-46.53
999.714 MHz	40.5 Qp	3.07 / 23.31 / 29.46 / 0.24	37.66	V / 1.00 / 90	-46.72
375.007 MHz	49.0 Qp	1.96 / 15.5 / 29.88 / 0.12	36.7	H / 1.00 / 180	-47.68
400.0 MHz	48.35 Qp	2.01 / 15.9 / 29.93 / 0.13	36.46	H / 1.00 / 180	-47.92
749.991 MHz	41.8 Qp	2.71 / 21.5 / 29.76 / 0.2	36.45	V / 1.00 / 160	-47.93
600.0 MHz	44.0 Qp	2.5 / 19.1 / 30.02 / 0.17	35.76	H / 1.00 / 180	-48.62

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Test Report #: WC703996 Run 6 Test Area: LTS
 EUT Model #: RDMi-25100 Date: 6/14/2007
 EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 23.0 °C
 Test Method: FCC B Air Pressure: 99.0 kPa
 Customer: Motorola Inc. Rel. Humidity: 69.0 %
 EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996-1.dat

Page: 13 of 14

Measurement summary for limit2: -13dBm GUIDELINE > 1GHz (Av)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA2 -13dBm GUIDELINE > 1GHz
7.497 GHz	46.6 Av	9.95 / 36.4 / 46.69 / 0.05	46.3	H / 1.20 / 215	-38.08
7.779 GHz	45.03 Av	10.22 / 36.57 / 46.61 / 0.06	45.28	H / 1.10 / 210	-39.1
5.186 GHz	48.89 Av	7.77 / 33.44 / 46.03 / 0.73	44.81	V / 1.30 / 295	-39.57
8.061 GHz	42.56 Av	10.52 / 36.75 / 46.53 / 0.08	43.38	H / 1.00 / 205	-41.0
4.998 GHz	47.44 Av	7.66 / 33.2 / 46.2 / 0.83	42.93	H / 1.10 / 0	-41.45
5.374 GHz	41.51 Av	7.98 / 33.68 / 45.86 / 0.64	37.95	H / 1.00 / 120	-46.43
4.998 GHz	75.15 Pk	7.66 / 33.2 / 46.2 / 0.83	70.64	V / 1.10 / 295	-13.74*
7.497 GHz	68.2 Pk	9.95 / 36.4 / 46.69 / 0.05	67.9	H / 1.20 / 215	-16.48*
5.186 GHz	67.3 Pk	7.77 / 33.44 / 46.03 / 0.73	63.22	V / 1.30 / 295	-21.16*
7.779 GHz	62.4 Pk	10.22 / 36.57 / 46.61 / 0.06	62.65	H / 1.10 / 210	-21.73*
5.374 GHz	57.35 Pk	7.98 / 33.68 / 45.86 / 0.64	53.79	V / 1.00 / 205	-30.59*
8.061 GHz	57.7 Pk	10.52 / 36.75 / 46.53 / 0.08	58.52	H / 1.00 / 205	-25.86*

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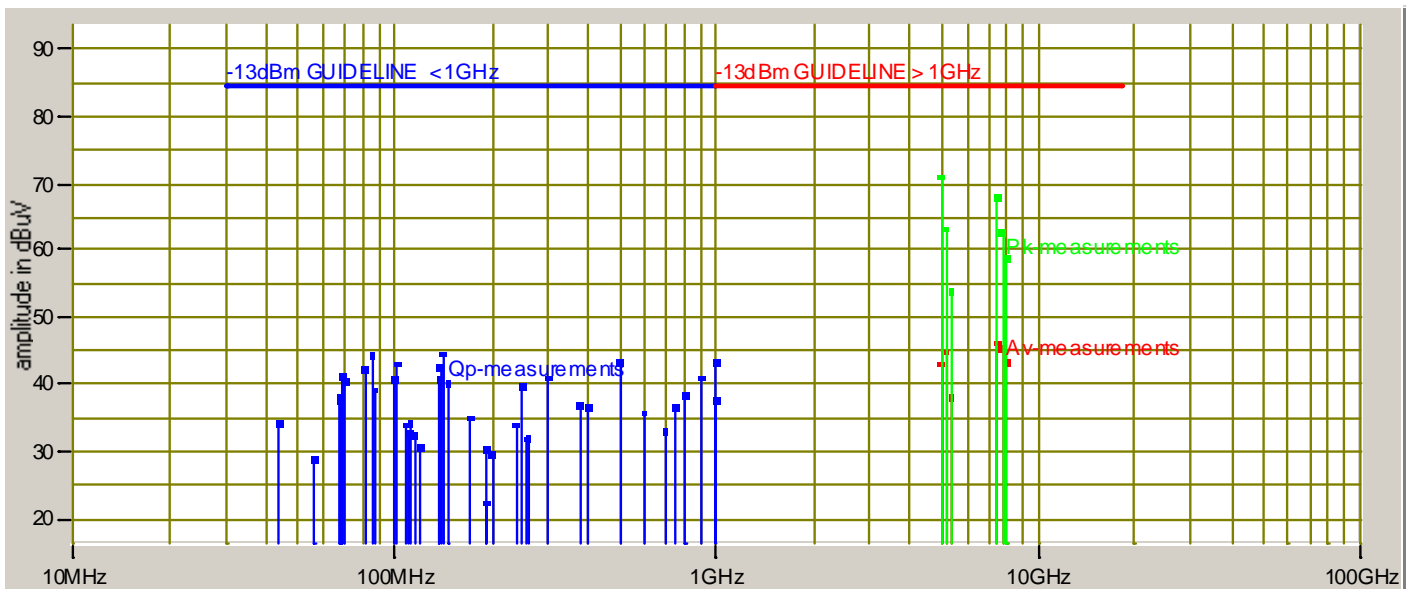
Test Report #: WC703996 Run 6 Test Area: LTS
EUT Model #: RDMi-25100 Date: 6/14/2007
EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 23.0 °C
Test Method: FCC B Air Pressure: 99.0 kPa
Customer: Motorola Inc. Rel. Humidity: 69.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996-1.dat Page: 14 of 14

Graph:



Tested by: T. K. Swanson
Printed

Thomas K. Swanson
Signature

Reviewed by: J. T. Schneider
Printed

Joel T. Schneider
Signature

RADIATED EMISSIONS



America

Test Report #: WC703996 Run 7 Test Area: LTS

EUT Model #: RDMi-25100 Date: 6/14/2007

EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 23.0 °C

Test Method: FCC B Air Pressure: 99.0 kPa

Customer: Motorola Inc. Rel. Humidity: 69.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996-1.dat Page: 1 of 12

List of measurements for run #: 7

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm GUIDELINE < 1GHz	DELTA2 -13dBm GUIDELINE > 1GHz
Expedience Mode - Configuration 1a, RF Freq = 2499						
43.824 MHz	43.7 Qp	0.49 / 16.37 / 29.66 / 0.01	30.91	V / 1.00 / 0	-53.47	n/a
56.759 MHz	44.55 Qp	0.7 / 12.54 / 29.53 / 0.01	28.28	V / 1.00 / 0	-56.1	n/a
68.228 MHz	55.25 Qp	0.79 / 10.7 / 29.41 / 0.02	37.35	V / 1.00 / 0	-47.03	n/a
68.474 MHz	54.3 Qp	0.79 / 10.62 / 29.41 / 0.02	36.32	V / 1.00 / 0	-48.06	n/a
68.984 MHz	56.5 Qp	0.8 / 10.45 / 29.4 / 0.02	38.35	V / 1.00 / 0	-46.03	n/a
69.699 MHz	57.3 Qp	0.8 / 10.2 / 29.4 / 0.02	38.92	V / 1.00 / 0	-45.46	n/a
86.055 MHz	60.45 Qp	0.9 / 8.42 / 29.32 / 0.02	40.48	V / 1.00 / 0	-43.9	n/a
86.445 MHz	58.3 Qp	0.9 / 8.45 / 29.33 / 0.02	38.35	V / 1.00 / 0	-46.03	n/a
101.866 MHz	53.05 Qp	0.95 / 9.49 / 29.38 / 0.03	34.14	V / 1.00 / 0	-50.24	n/a
108.808 MHz	45.3 Qp	0.97 / 9.48 / 29.4 / 0.03	26.38	V / 1.00 / 0	-58.0	n/a
110.78 MHz	43.65 Qp	0.97 / 9.26 / 29.41 / 0.04	24.51	V / 1.00 / 0	-59.87	n/a
111.605 MHz	46.25 Qp	0.97 / 9.17 / 29.41 / 0.04	27.02	V / 1.00 / 0	-57.36	n/a
120.001 MHz	48.2 Qp	1.0 / 9.7 / 29.44 / 0.04	29.5	V / 1.00 / 0	-54.88	n/a
137.176 MHz	61.48 Qp	1.06 / 9.31 / 29.5 / 0.05	42.4	V / 1.00 / 0	-41.98	n/a
137.782 MHz	60.87 Qp	1.06 / 9.36 / 29.5 / 0.05	41.84	V / 1.00 / 0	-42.54	n/a
138.428 MHz	58.95 Qp	1.06 / 9.42 / 29.5 / 0.05	39.98	V / 1.00 / 0	-44.4	n/a
141.202 MHz	60.6 Qp	1.07 / 9.65 / 29.49 / 0.05	41.88	V / 1.00 / 0	-42.5	n/a
172.805 MHz	49.8 Qp	1.25 / 9.5 / 29.42 / 0.06	31.2	V / 1.00 / 0	-53.18	n/a
191.992 MHz	37.15 Qp	1.33 / 10.53 / 29.52 / 0.07	19.55	V / 1.00 / 0	-64.83	n/a
250.0 MHz	42.3 Qp	1.48 / 12.39 / 29.54 / 0.1	26.73	V / 1.00 / 0	-57.65	n/a
300.0 MHz	41.65 Qp	1.71 / 13.83 / 29.87 / 0.11	27.43	V / 1.00 / 0	-56.95	n/a
375.007 MHz	44.5 Qp	1.96 / 15.5 / 29.88 / 0.12	32.2	V / 1.00 / 0	-52.18	n/a
400.0 MHz	41.15 Qp	2.01 / 15.9 / 29.93 / 0.13	29.26	V / 1.00 / 0	-55.12	n/a

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Thomas K. Swanson

 Signature

Reviewed by: J. T. Schneider

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Joel T. Schneider

 Signature

RADIATED EMISSIONS



Test Report #: WC703996 Run 7 Test Area: LTS
 EUT Model #: RDMi-25100 Date: 6/14/2007
 EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 23.0 °C
 Test Method: FCC B Air Pressure: 99.0 kPa
 Customer: Motorola Inc. Rel. Humidity: 69.0 %
 EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996-1.dat

Page: 2 of 12

List of measurements for run #: 7

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm GUIDELINE < 1GHz	DELTA2 -13dBm GUIDELINE > 1GHz
500.0 MHz	41.95 Qp	2.14 / 17.5 / 29.98 / 0.15	31.76	V / 1.00 / 0	-52.62	n/a
750.027 MHz	38.6 Qp	2.71 / 21.5 / 29.76 / 0.2	33.25	V / 1.00 / 0	-51.13	n/a
1.0 GHz	32.5 Qp	3.07 / 23.3 / 29.46 / 0.24	29.65	V / 1.00 / 0	-54.73	n/a
999.714 MHz	35.5 Qp	3.07 / 23.31 / 29.46 / 0.24	32.66	V / 1.00 / 0	-51.72	n/a
900.0 MHz	28.95 Qp	2.98 / 22.7 / 29.5 / 0.22	25.35	V / 1.00 / 0	-59.03	n/a
800.0 MHz	31.0 Qp	2.76 / 21.7 / 29.67 / 0.21	25.99	V / 1.00 / 0	-58.39	n/a
193.663 MHz	44.55 Qp	1.34 / 10.58 / 29.53 / 0.07	27.0	V / 1.00 / 270	-57.38	n/a
375.007 MHz	46.6 Qp	1.96 / 15.5 / 29.88 / 0.12	34.3	V / 1.00 / 270	-50.08	n/a
400.0 MHz	46.7 Qp	2.01 / 15.9 / 29.93 / 0.13	34.81	V / 1.00 / 270	-49.57	n/a
500.0 MHz	46.5 Qp	2.14 / 17.5 / 29.98 / 0.15	36.31	V / 1.00 / 180	-48.07	n/a
300.0 MHz	49.25 Qp	1.71 / 13.83 / 29.87 / 0.11	35.03	V / 1.00 / 180	-49.35	n/a
250.0 MHz	47.95 Qp	1.48 / 12.39 / 29.54 / 0.1	32.38	V / 1.00 / 180	-52.0	n/a
172.805 MHz	52.05 Qp	1.25 / 9.5 / 29.42 / 0.06	33.45	V / 1.00 / 180	-50.93	n/a
141.202 MHz	57.45 Qp	1.07 / 9.65 / 29.49 / 0.05	38.73	V / 1.00 / 180	-45.65	n/a
108.808 MHz	48.25 Qp	0.97 / 9.48 / 29.4 / 0.03	29.33	V / 1.00 / 180	-55.05	n/a
386.593 MHz	45.1 Qp	1.99 / 15.69 / 29.97 / 0.13	32.92	V / 1.00 / 180	-51.46	n/a
111.605 MHz	49.95 Qp	0.97 / 9.17 / 29.41 / 0.04	30.72	V / 1.00 / 90	-53.66	n/a
110.78 MHz	47.35 Qp	0.97 / 9.26 / 29.41 / 0.04	28.21	V / 1.00 / 90	-56.17	n/a
141 MHz maxed						
141.202 MHz	62.6 Qp	1.07 / 9.65 / 29.49 / 0.05	43.88	V / 1.00 / 220	-40.5	n/a
138.428 MHz	60.63 Qp	1.06 / 9.42 / 29.5 / 0.05	41.66	V / 1.00 / 220	-42.72	n/a

Tested by: T. K. Swanson

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Reviewed by: J. T. Schneider

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Joel T. Schneider

Signature

RADIATED EMISSIONS



America

Test Report #: WC703996 Run 7 Test Area: LTS

EUT Model #: RDMi-25100 Date: 6/14/2007

EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 23.0 °C

Test Method: FCC B Air Pressure: 99.0 kPa

Customer: Motorola Inc. Rel. Humidity: 69.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996-1.dat Page: 3 of 12

List of measurements for run #: 7

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm GUIDELINE < 1GHz	DELTA2 -13dBm GUIDELINE > 1GHz
86 MHz maxed						
86.055 MHz	64.25 Qp	0.9 / 8.42 / 29.32 / 0.02	44.28	V / 1.30 / 55	-40.1	n/a
108.808 MHz	50.3 Qp	0.97 / 9.48 / 29.4 / 0.03	31.38	H / 1.30 / 0	-53.0	n/a
258.023 MHz	45.2 Qp	1.5 / 12.65 / 29.51 / 0.1	29.94	H / 1.30 / 0	-54.44	n/a
259.437 MHz	45.3 Qp	1.5 / 12.7 / 29.52 / 0.1	30.07	H / 1.30 / 0	-54.31	n/a
110.78 MHz	48.95 Qp	0.97 / 9.26 / 29.41 / 0.04	29.81	H / 1.30 / 0	-54.57	n/a
300.0 MHz	50.7 Qp	1.71 / 13.83 / 29.87 / 0.11	36.48	H / 1.30 / 180	-47.9	n/a
191.992 MHz	42.75 Qp	1.33 / 10.53 / 29.52 / 0.07	25.15	H / 1.30 / 180	-59.23	n/a
172.805 MHz	54.2 Qp	1.25 / 9.5 / 29.42 / 0.06	35.6	H / 1.30 / 180	-48.78	n/a
111.605 MHz	50.4 Qp	0.97 / 9.17 / 29.41 / 0.04	31.17	H / 1.30 / 180	-53.21	n/a
108.808 MHz	51.8 Qp	0.97 / 9.48 / 29.4 / 0.03	32.88	H / 1.30 / 180	-51.5	n/a
300.0 MHz	52.25 Qp	1.71 / 13.83 / 29.87 / 0.11	38.03	H / 1.30 / 270	-46.35	n/a
200.001 MHz	45.7 Qp	1.36 / 10.78 / 29.57 / 0.07	28.35	H / 1.30 / 270	-56.03	n/a
193.753 MHz	48.85 Qp	1.34 / 10.58 / 29.53 / 0.07	31.31	H / 1.30 / 270	-53.07	n/a
300 MHz maxed						
300.0 MHz	54.98 Qp	1.71 / 13.83 / 29.87 / 0.11	40.76	H / 1.00 / 270	-43.62	n/a
1.0 GHz	35.1 Qp	3.07 / 23.3 / 29.46 / 0.24	32.25	H / 1.00 / 270	-52.13	n/a
86 maxed						
86.055 MHz	61.23 Qp	0.9 / 8.42 / 29.32 / 0.02	41.26	H / 2.30 / 185	-43.12	n/a
101.866 MHz	54.85 Qp	0.95 / 9.49 / 29.38 / 0.03	35.94	H / 2.30 / 185	-48.44	n/a
108.808 MHz	53.15 Qp	0.97 / 9.48 / 29.4 / 0.03	34.23	H / 2.30 / 185	-50.15	n/a

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Reviewed by: J. T. Schneider

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Joel T. Schneider

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RADIATED EMISSIONS



America

Test Report #: WC703996 Run 7 Test Area: LTS
 EUT Model #: RDMi-25100 Date: 6/14/2007
 EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 23.0 °C
 Test Method: FCC B Air Pressure: 99.0 kPa
 Customer: Motorola Inc. Rel. Humidity: 69.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996-1.dat Page: 4 of 12

List of measurements for run #: 7

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm GUIDELINE < 1GHz	DELTA2 -13dBm GUIDELINE > 1GHz
110.78 MHz	50.8 Qp	0.97 / 9.26 / 29.41 / 0.04	31.66	H / 2.30 / 185	-52.72	n/a
1GHz maxed						
1.0 GHz	41.32 Qp	3.07 / 23.3 / 29.46 / 0.24	38.47	H / 2.30 / 220	-45.91	n/a
259.437 MHz	47.65 Qp	1.5 / 12.7 / 29.52 / 0.1	32.42	H / 2.30 / 220	-51.96	n/a
258.023 MHz	47.55 Qp	1.5 / 12.65 / 29.51 / 0.1	32.29	H / 2.30 / 220	-52.09	n/a
193.801 MHz	49.25 Qp	1.34 / 10.58 / 29.53 / 0.07	31.71	H / 2.30 / 220	-52.67	n/a
Config 2a, RF Freq = 2593						
68.228 MHz	57.66 Qp	0.79 / 10.7 / 29.41 / 0.02	39.76	V / 1.00 / 0	-44.62	n/a
68.474 MHz	58.09 Qp	0.79 / 10.62 / 29.41 / 0.02	40.11	V / 1.00 / 0	-44.27	n/a
68.984 MHz	59.85 Qp	0.8 / 10.45 / 29.4 / 0.02	41.7	V / 1.00 / 0	-42.68	n/a
69.699 MHz	56.6 Qp	0.8 / 10.2 / 29.4 / 0.02	38.22	V / 1.00 / 0	-46.16	n/a
86.055 MHz	60.8 Qp	0.9 / 8.42 / 29.32 / 0.02	40.83	V / 1.00 / 0	-43.55	n/a
86.445 MHz	58.7 Qp	0.9 / 8.45 / 29.33 / 0.02	38.75	V / 1.00 / 0	-45.63	n/a
101.866 MHz	52.5 Qp	0.95 / 9.49 / 29.38 / 0.03	33.59	V / 1.00 / 0	-50.79	n/a
137.176 MHz	55.7 Qp	1.06 / 9.31 / 29.5 / 0.05	36.62	V / 1.00 / 0	-47.76	n/a
137.782 MHz	54.85 Qp	1.06 / 9.36 / 29.5 / 0.05	35.82	V / 1.00 / 0	-48.56	n/a
138.428 MHz	54.45 Qp	1.06 / 9.42 / 29.5 / 0.05	35.48	V / 1.00 / 0	-48.9	n/a
999.714 MHz	40.35 Qp	3.07 / 23.31 / 29.46 / 0.24	37.51	V / 1.00 / 90	-46.87	n/a
141.202 MHz	60.2 Qp	1.07 / 9.65 / 29.49 / 0.05	41.48	V / 1.00 / 90	-42.9	n/a
138.428 MHz	60.01 Qp	1.06 / 9.42 / 29.5 / 0.05	41.04	V / 1.00 / 90	-43.34	n/a
86 MHz maxed						

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Thomas K. Swanson

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Reviewed by: J. T. Schneider

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Joel T. Schneider

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RADIATED EMISSIONS



America

Test Report #: WC703996 Run 7 Test Area: LTS

EUT Model #: RDMi-25100 Date: 6/14/2007

EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 23.0 °C

Test Method: FCC B Air Pressure: 99.0 kPa

Customer: Motorola Inc. Rel. Humidity: 69.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996-1.dat

Page: 5 of 12

List of measurements for run #: 7

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm GUIDELINE < 1GHz	DELTA2 -13dBm GUIDELINE > 1GHz
86.055 MHz	63.42 Qp	0.9 / 8.42 / 29.32 / 0.02	43.45	V / 1.00 / 50	-40.93	n/a
141 MHz maxed						
141.202 MHz	62.03 Qp	1.07 / 9.65 / 29.49 / 0.05	43.31	V / 1.00 / 225	-41.07	n/a
500 Mhz maxed						
500.0 MHz	49.66 Qp	2.14 / 17.5 / 29.98 / 0.15	39.47	V / 1.00 / 160	-44.91	n/a
375.007 MHz	47.6 Qp	1.96 / 15.5 / 29.88 / 0.12	35.3	H / 1.00 / 180	-49.08	n/a
172.805 MHz	54.55 Qp	1.25 / 9.5 / 29.42 / 0.06	35.95	H / 1.00 / 180	-48.43	n/a
300 MHz maxed						
300.0 MHz	55.45 Qp	1.71 / 13.83 / 29.87 / 0.11	41.23	H / 1.00 / 270	-43.15	n/a
86 MHz maxed						
86.055 MHz	60.79 Qp	0.9 / 8.42 / 29.32 / 0.02	40.82	H / 2.30 / 165	-43.56	n/a
no higher emissions detected 30 to 1000 MHz						
maxed						
5.185 GHz	43.4 Av	7.77 / 33.44 / 46.03 / 0.73	39.32	H / 1.00 / 0	n/a	-45.06
5.185 GHz	69.25 Pk	7.77 / 33.44 / 46.03 / 0.73	65.17	H / 1.00 / 0	n/a	-19.21*
5.185 GHz	43.23 Av	7.77 / 33.44 / 46.03 / 0.73	39.15	V / 1.00 / 30	n/a	-45.23
7.779 GHz	42.43 Av	10.22 / 36.57 / 46.61 / 0.06	42.68	V / 1.40 / 160	n/a	-41.7
7.779 GHz	44.63 Av	10.22 / 36.57 / 46.61 / 0.06	44.88	H / 1.40 / 220	n/a	-39.5
7.779 GHz	73.85 Pk	10.22 / 36.57 / 46.61 / 0.06	74.1	H / 1.40 / 220	n/a	-10.28*

Tested by: T. K. Swanson

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Thomas K. Swanson

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Reviewed by: J. T. Schneider

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Joel T. Schneider

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RADIATED EMISSIONS



America

Test Report #: WC703996 Run 7 Test Area: LTS

EUT Model #: RDMi-25100 Date: 6/14/2007

EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 23.0 °C

Test Method: FCC B Air Pressure: 99.0 kPa

Customer: Motorola Inc. Rel. Humidity: 69.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996-1.dat Page: 6 of 12

List of measurements for run #: 7

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm GUIDELINE < 1GHz	DELTA2 -13dBm GUIDELINE > 1GHz
no further significant emissions detected 1 to 27 GHz						
Configuration 1a - RF Freq = 2499						
4.998 GHz	42.7 Av	7.66 / 33.2 / 46.2 / 0.83	38.19	V / 1.00 / 150	n/a	-46.19
4.998 GHz	63.2 Pk	7.66 / 33.2 / 46.2 / 0.83	58.69	V / 1.00 / 150	n/a	-25.69*
4.998 GHz	44.5 Av	7.66 / 33.2 / 46.2 / 0.83	39.99	H / 1.00 / 260	n/a	-44.39
4.998 GHz	73.65 Pk	7.66 / 33.2 / 46.2 / 0.83	69.14	H / 1.00 / 260	n/a	-15.24*
7.497 GHz	42.31 Av	9.95 / 36.4 / 46.69 / 0.05	42.01	H / 1.00 / 115	n/a	-42.37
7.497 GHz	58.35 Pk	9.95 / 36.4 / 46.69 / 0.05	58.05	H / 1.00 / 115	n/a	-26.33*
7.497 GHz	41.84 Av	9.95 / 36.4 / 46.69 / 0.05	41.54	V / 1.00 / 215	n/a	-42.84
9.996 GHz	40.47 Av	13.27 / 37.95 / 45.96 / 0.18	45.91	V / 1.00 / 180	n/a	-38.47
9.996 GHz	56.4 Pk	13.27 / 37.95 / 45.96 / 0.18	61.84	V / 1.00 / 180	n/a	-22.54*
9.996 GHz	38.37 Av	13.27 / 37.95 / 45.96 / 0.18	43.81	V / 1.00 / 180	n/a	-40.57
no further significant emissions detected 1 to 27 GHz						
Config 3a - RF Freq = 2687 MHz						
maxed						
5.374 GHz	43.45 Av	7.98 / 33.68 / 45.86 / 0.64	39.89	H / 1.00 / 240	n/a	-44.49
5.374 GHz	82.15 Pk	7.98 / 33.68 / 45.86 / 0.64	78.59	H / 1.00 / 240	n/a	-5.79*
5.374 GHz	42.18 Av	7.98 / 33.68 / 45.86 / 0.64	38.62	V / 1.00 / 165	n/a	-45.76
5.374 GHz	71.25 Pk	7.98 / 33.68 / 45.86 / 0.64	67.69	V / 1.00 / 165	n/a	-16.69*
8.061 GHz	43.66 Av	10.52 / 36.75 / 46.53 / 0.08	44.48	H / 1.40 / 225	n/a	-39.9

Tested by: T. K. Swanson
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Thomas K. Swanson
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Reviewed by: J. T. Schneider
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Joel T. Schneider
Signature

RADIATED EMISSIONS



Test Report #: WC703996 Run 7 Test Area: LTS
 EUT Model #: RDMi-25100 Date: 6/14/2007
 EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 23.0 °C
 Test Method: FCC B Air Pressure: 99.0 kPa
 Customer: Motorola Inc. Rel. Humidity: 69.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

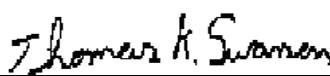
Data File Name: 3996-1.dat Page: 7 of 12

List of measurements for run #: 7

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm GUIDELINE < 1GHz	DELTA2 -13dBm GUIDELINE > 1GHz
8.061 GHz	71.3 Pk	10.52 / 36.75 / 46.53 / 0.08	72.12	H / 1.40 / 225	n/a	-12.26*
8.061 GHz	41.7 Av	10.52 / 36.75 / 46.53 / 0.08	42.52	V / 1.10 / 250	n/a	-41.86
8.061 GHz	57.25 Pk	10.52 / 36.75 / 46.53 / 0.08	58.07	V / 1.10 / 250	n/a	-26.31*
10.748 GHz	41.85 Av	15.08 / 38.42 / 45.83 / 0.22	49.75	V / 1.10 / 200	n/a	-34.63
10.748 GHz	55.8 Pk	15.08 / 38.42 / 45.83 / 0.22	63.7	V / 1.10 / 200	n/a	-20.68*
10.748 GHz	40.68 Av	15.08 / 38.42 / 45.83 / 0.22	48.58	H / 1.00 / 225	n/a	-35.8
10.748 GHz	55.0 Pk	15.08 / 38.42 / 45.83 / 0.22	62.9	H / 1.00 / 225	n/a	-21.48*
no further significant emissions detected 1 to 27 GHz						
scan 30 to 1000 MHz						
101.836 MHz	58.43 Qp	0.95 / 9.49 / 29.38 / 0.03	39.52	V / 1.00 / 0	-44.86	n/a
386.545 MHz	46.3 Qp	1.99 / 15.68 / 29.97 / 0.13	34.12	V / 1.00 / 180	-50.26	n/a
86 MHz maxed						
86.013 MHz	63.52 Qp	0.9 / 8.42 / 29.32 / 0.02	43.54	V / 1.00 / 250	-40.84	n/a
141 MHz maxed						
141.16 MHz	62.84 Qp	1.07 / 9.65 / 29.49 / 0.05	44.12	V / 1.00 / 85	-40.26	n/a
100.048 MHz	54.95 Qp	0.94 / 9.26 / 29.37 / 0.03	35.81	V / 1.00 / 85	-48.57	n/a
101.836 MHz	58.53 Qp	0.95 / 9.49 / 29.38 / 0.03	39.62	V / 1.00 / 85	-44.76	n/a
137.128 MHz	58.9 Qp	1.06 / 9.31 / 29.5 / 0.05	39.81	V / 1.00 / 85	-44.57	n/a
138.404 MHz	60.51 Qp	1.06 / 9.41 / 29.5 / 0.05	41.54	V / 1.00 / 85	-42.84	n/a
68 MHz maxed						

Tested by: T. K. Swanson

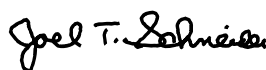
 Printed



 Signature

Reviewed by: J. T. Schneider

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RADIATED EMISSIONS



America

Test Report #: WC703996 Run 7 Test Area: LTS

EUT Model #: RDMi-25100 Date: 6/14/2007

EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 23.0 °C

Test Method: FCC B Air Pressure: 99.0 kPa

Customer: Motorola Inc. Rel. Humidity: 69.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996-1.dat Page: 8 of 12

List of measurements for run #: 7

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm GUIDELINE < 1GHz	DELTA2 -13dBm GUIDELINE > 1GHz
68.984 MHz	56.53 Qp	0.8 / 10.45 / 29.4 / 0.02	38.38	V / 1.00 / 0	-46.0	n/a
500 MHz maxed						
499.958 MHz	48.74 Qp	2.14 / 17.5 / 29.98 / 0.15	38.55	V / 1.00 / 160	-45.83	n/a
749.991 MHz	42.1 Qp	2.71 / 21.5 / 29.76 / 0.2	36.75	V / 1.00 / 160	-47.63	n/a
750 MHz maxed						
749.991 MHz	43.35 Qp	2.71 / 21.5 / 29.76 / 0.2	38.0	V / 1.00 / 160	-46.38	n/a
1 GHz maxed						
999.958 MHz	42.24 Qp	3.07 / 23.3 / 29.46 / 0.24	39.39	H / 1.00 / 225	-44.99	n/a
500 MHz maxed						
499.952 MHz	46.33 Qp	2.14 / 17.5 / 29.98 / 0.15	36.14	H / 1.20 / 160	-48.24	n/a
No further significant emissions detected - end of scan 30 to 27000 MHz						

Tested by: T. K. Swanson

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Thomas K. Swanson

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Reviewed by: J. T. Schneider

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Joel T. Schneider

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RADIATED EMISSIONS



Test Report #: WC703996 Run 7 Test Area: LTS
 EUT Model #: RDMi-25100 Date: 6/14/2007
 EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 23.0 °C
 Test Method: FCC B Air Pressure: 99.0 kPa
 Customer: Motorola Inc. Rel. Humidity: 69.0 %
 EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996-1.dat

Page: 9 of 12

Measurement summary for limit1: -13dBm GUIDELINE < 1GHz (Qp)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm GUIDELINE < 1GHz
86.055 MHz	64.25 Qp	0.9 / 8.42 / 29.32 / 0.02	44.28	V / 1.30 / 55	-40.1
141.16 MHz	62.84 Qp	1.07 / 9.65 / 29.49 / 0.05	44.12	V / 1.00 / 85	-40.26
137.176 MHz	61.48 Qp	1.06 / 9.31 / 29.5 / 0.05	42.4	V / 1.00 / 0	-41.98
137.782 MHz	60.87 Qp	1.06 / 9.36 / 29.5 / 0.05	41.84	V / 1.00 / 0	-42.54
68.984 MHz	59.85 Qp	0.8 / 10.45 / 29.4 / 0.02	41.7	V / 1.00 / 0	-42.68
138.428 MHz	60.63 Qp	1.06 / 9.42 / 29.5 / 0.05	41.66	V / 1.00 / 220	-42.72
300.0 MHz	55.45 Qp	1.71 / 13.83 / 29.87 / 0.11	41.23	H / 1.00 / 270	-43.15
68.474 MHz	58.09 Qp	0.79 / 10.62 / 29.41 / 0.02	40.11	V / 1.00 / 0	-44.27
68.228 MHz	57.66 Qp	0.79 / 10.7 / 29.41 / 0.02	39.76	V / 1.00 / 0	-44.62
101.836 MHz	58.53 Qp	0.95 / 9.49 / 29.38 / 0.03	39.62	V / 1.00 / 85	-44.76
500.0 MHz	49.66 Qp	2.14 / 17.5 / 29.98 / 0.15	39.47	V / 1.00 / 160	-44.91
999.958 MHz	42.24 Qp	3.07 / 23.3 / 29.46 / 0.24	39.39	H / 1.00 / 225	-44.99
69.699 MHz	57.3 Qp	0.8 / 10.2 / 29.4 / 0.02	38.92	V / 1.00 / 0	-45.46
86.445 MHz	58.7 Qp	0.9 / 8.45 / 29.33 / 0.02	38.75	V / 1.00 / 0	-45.63
749.991 MHz	43.35 Qp	2.71 / 21.5 / 29.76 / 0.2	38.0	V / 1.00 / 160	-46.38
999.714 MHz	40.35 Qp	3.07 / 23.31 / 29.46 / 0.24	37.51	V / 1.00 / 90	-46.87
172.805 MHz	54.55 Qp	1.25 / 9.5 / 29.42 / 0.06	35.95	H / 1.00 / 180	-48.43
100.048 MHz	54.95 Qp	0.94 / 9.26 / 29.37 / 0.03	35.81	V / 1.00 / 85	-48.57
375.007 MHz	47.6 Qp	1.96 / 15.5 / 29.88 / 0.12	35.3	H / 1.00 / 180	-49.08
400.0 MHz	46.7 Qp	2.01 / 15.9 / 29.93 / 0.13	34.81	V / 1.00 / 270	-49.57
108.808 MHz	53.15 Qp	0.97 / 9.48 / 29.4 / 0.03	34.23	H / 2.30 / 185	-50.15
386.545 MHz	46.3 Qp	1.99 / 15.68 / 29.97 / 0.13	34.12	V / 1.00 / 180	-50.26
259.437 MHz	47.65 Qp	1.5 / 12.7 / 29.52 / 0.1	32.42	H / 2.30 / 220	-51.96
250.0 MHz	47.95 Qp	1.48 / 12.39 / 29.54 / 0.1	32.38	V / 1.00 / 180	-52.0
258.023 MHz	47.55 Qp	1.5 / 12.65 / 29.51 / 0.1	32.29	H / 2.30 / 220	-52.09

Tested by: T. K. Swanson

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Thomas K. Swanson

Signature

Reviewed by: J. T. Schneider

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Joel T. Schneider

Signature

RADIATED EMISSIONS



America

Test Report #: WC703996 Run 7 Test Area: LTS
 EUT Model #: RDMi-25100 Date: 6/14/2007
 EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 23.0 °C
 Test Method: FCC B Air Pressure: 99.0 kPa
 Customer: Motorola Inc. Rel. Humidity: 69.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996-1.dat Page: 10 of 12

Measurement summary for limit1: -13dBm GUIDELINE < 1GHz (Qp)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm GUIDELINE < 1GHz
193.801 MHz	49.25 Qp	1.34 / 10.58 / 29.53 / 0.07	31.71	H / 2.30 / 220	-52.67
110.78 MHz	50.8 Qp	0.97 / 9.26 / 29.41 / 0.04	31.66	H / 2.30 / 185	-52.72
111.605 MHz	50.4 Qp	0.97 / 9.17 / 29.41 / 0.04	31.17	H / 1.30 / 180	-53.21
43.824 MHz	43.7 Qp	0.49 / 16.37 / 29.66 / 0.01	30.91	V / 1.00 / 0	-53.47
120.001 MHz	48.2 Qp	1.0 / 9.7 / 29.44 / 0.04	29.5	V / 1.00 / 0	-54.88
200.001 MHz	45.7 Qp	1.36 / 10.78 / 29.57 / 0.07	28.35	H / 1.30 / 270	-56.03
56.759 MHz	44.55 Qp	0.7 / 12.54 / 29.53 / 0.01	28.28	V / 1.00 / 0	-56.1
800.0 MHz	31.0 Qp	2.76 / 21.7 / 29.67 / 0.21	25.99	V / 1.00 / 0	-58.39
900.0 MHz	28.95 Qp	2.98 / 22.7 / 29.5 / 0.22	25.35	V / 1.00 / 0	-59.03
191.992 MHz	42.75 Qp	1.33 / 10.53 / 29.52 / 0.07	25.15	H / 1.30 / 180	-59.23

Tested by: T. K. Swanson

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Thomas K. Swanson

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Reviewed by: J. T. Schneider

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Joel T. Schneider

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RADIATED EMISSIONS



America

Test Report #: WC703996 Run 7 Test Area: LTS
 EUT Model #: RDMi-25100 Date: 6/14/2007
 EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 23.0 °C
 Test Method: FCC B Air Pressure: 99.0 kPa
 Customer: Motorola Inc. Rel. Humidity: 69.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996-1.dat Page: 11 of 12

Measurement summary for limit2: -13dBm GUIDELINE > 1GHz (Av)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA2 -13dBm GUIDELINE > 1GHz
10.748 GHz	41.85 Av	15.08 / 38.42 / 45.83 / 0.22	49.75	V / 1.10 / 200	-34.63
9.996 GHz	40.47 Av	13.27 / 37.95 / 45.96 / 0.18	45.91	V / 1.00 / 180	-38.47
7.779 GHz	44.63 Av	10.22 / 36.57 / 46.61 / 0.06	44.88	H / 1.40 / 220	-39.5
8.061 GHz	43.66 Av	10.52 / 36.75 / 46.53 / 0.08	44.48	H / 1.40 / 225	-39.9
7.497 GHz	42.31 Av	9.95 / 36.4 / 46.69 / 0.05	42.01	H / 1.00 / 115	-42.37
4.998 GHz	44.5 Av	7.66 / 33.2 / 46.2 / 0.83	39.99	H / 1.00 / 260	-44.39
5.374 GHz	43.45 Av	7.98 / 33.68 / 45.86 / 0.64	39.89	H / 1.00 / 240	-44.49
5.185 GHz	43.4 Av	7.77 / 33.44 / 46.03 / 0.73	39.32	H / 1.00 / 0	-45.06
5.185 GHz	69.25 Pk	7.77 / 33.44 / 46.03 / 0.73	65.17	H / 1.00 / 0	-19.21*
7.779 GHz	73.85 Pk	10.22 / 36.57 / 46.61 / 0.06	74.1	H / 1.40 / 220	-10.28*
4.998 GHz	73.65 Pk	7.66 / 33.2 / 46.2 / 0.83	69.14	H / 1.00 / 260	-15.24*
7.497 GHz	58.35 Pk	9.95 / 36.4 / 46.69 / 0.05	58.05	H / 1.00 / 115	-26.33*
9.996 GHz	56.4 Pk	13.27 / 37.95 / 45.96 / 0.18	61.84	V / 1.00 / 180	-22.54*
5.374 GHz	82.15 Pk	7.98 / 33.68 / 45.86 / 0.64	78.59	H / 1.00 / 240	-5.79*
8.061 GHz	71.3 Pk	10.52 / 36.75 / 46.53 / 0.08	72.12	H / 1.40 / 225	-12.26*
10.748 GHz	55.8 Pk	15.08 / 38.42 / 45.83 / 0.22	63.7	V / 1.10 / 200	-20.68*

Tested by: T. K. Swanson

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Thomas K. Swanson

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Reviewed by: J. T. Schneider

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Joel T. Schneider

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RADIATED EMISSIONS



America

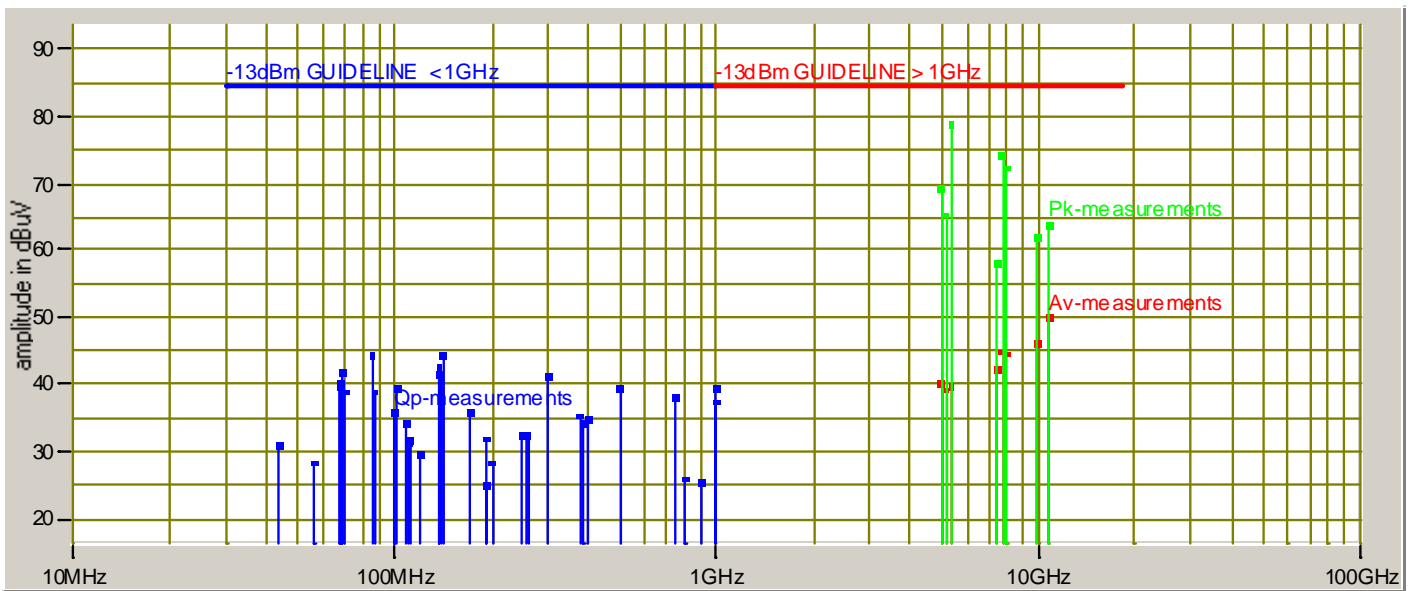
Test Report #: <u>WC703996 Run 7</u>	Test Area: <u>LTS</u>	
EUT Model #: <u>RDMi-25100</u>	Date: <u>6/14/2007</u>	
EUT Serial #: <u>0092-0300-7180070</u>	EUT Power: <u>60 Hz 115 VAC</u>	Temperature: <u>23.0</u> °C
Test Method: <u>FCC B</u>		Air Pressure: <u>99.0</u> kPa
Customer: <u>Motorola Inc.</u>		Rel. Humidity: <u>69.0</u> %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: <u>3996-1.dat</u>	Page: <u>12 of 12</u>
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Graph:



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Thomas K. Swanson

 Signature

Reviewed by: J. T. Schneider

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Joel T. Schneider

 Signature

Equivalent Isotropically Radiated Power (EIRP) Substitution

Company: Motorola - NextNet Wireless

EUT: RDMi-25100

Date: 22 June 2007

Tested By: TKS

		Matches		Antenna	Matches
	Final	Sig Gen Level	Cable Loss	Gain	Final
Freq. (MHz)	(dBuV/m)	(dBm)	(dB)	(dB)	(dBm)
5374	78.59	-25	3.2	10.6	-17.60
5185	65.17	-39.3	3.1	10.6	-31.80
7779	74.1	-29.8	3.8	11.4	-22.20
4998	69.14	-34.7	3.1	10.6	-27.20
8061	72.12	-30.4	3.9	11.4	-22.90
7497	67.9	-35.8	3.7	11.3	-28.20
4998	70.64	-31.1	3.1	10.6	-23.60

RADIATED EMISSIONS



America

Test Report #: WC703996 Run 10 Test Area: LTS
 EUT Model #: RDMi-25100 Date: 6/12/2007
 EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 25.0 °C
 Test Method: FCC B Air Pressure: 98.0 kPa
 Customer: Motorola Inc. Rel. Humidity: 55.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996.dat Page: 1 of 9

List of measurements for run #: 10

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC-B <1GHz 3m	DELTA2 FCC B >1GHz 3m
WiMax Mode						
Configuration 4b - RF Freq = 2499 MHz						
37.656 MHz	40.1 Qp	0.73 / 18.28 / 27.83 / 0.0	31.29	V / 1.00 / 250	-8.71	n/a
40.567 MHz	41.65 Qp	0.75 / 17.1 / 27.75 / 0.0	31.75	V / 1.00 / 250	-8.25	n/a
42.013 MHz	41.1 Qp	0.75 / 16.58 / 27.7 / 0.0	30.72	V / 1.00 / 250	-9.28	n/a
60.829 MHz	37.0 Qp	0.95 / 11.16 / 27.65 / 0.0	21.46	V / 1.00 / 250	-18.54	n/a
74.57 MHz	54.5 Qp	1.1 / 8.86 / 27.83 / 0.0	36.63	V / 1.00 / 250	-3.37	n/a
76.55 MHz	54.33 Qp	1.11 / 8.6 / 27.86 / 0.0	36.18	V / 1.00 / 250	-3.82	n/a
81.198 MHz	53.8 Qp	1.13 / 7.99 / 27.89 / 0.0	35.03	V / 1.00 / 250	-4.97	n/a
86.048 MHz	51.45 Qp	1.15 / 7.59 / 27.84 / 0.0	32.35	V / 1.00 / 250	-7.65	n/a
90.914 MHz	55.64 Qp	1.17 / 8.02 / 27.8 / 0.0	37.03	V / 1.00 / 250	-6.47	n/a
92.96 MHz	53.4 Qp	1.18 / 8.2 / 27.78 / 0.0	35.0	V / 1.00 / 250	-8.5	n/a
94.364 MHz	56.1 Qp	1.18 / 8.32 / 27.77 / 0.0	37.84	V / 1.00 / 250	-5.66	n/a
100.671 MHz	50.85 Qp	1.23 / 8.88 / 27.71 / 0.0	33.25	V / 1.00 / 250	-10.25	n/a
108.801 MHz	43.3 Qp	1.31 / 9.59 / 27.64 / 0.0	26.57	V / 1.00 / 250	-16.93	n/a
120.0 MHz	44.05 Qp	1.36 / 9.05 / 27.68 / 0.0	26.78	V / 1.00 / 250	-16.72	n/a
168.0 MHz	42.15 Qp	1.62 / 9.17 / 27.77 / 0.0	25.17	V / 1.00 / 250	-18.33	n/a
200.0 MHz	39.85 Qp	1.71 / 10.77 / 27.78 / 0.0	24.55	V / 1.00 / 250	-18.95	n/a
250.0 MHz	41.3 Qp	1.94 / 12.33 / 27.69 / 0.0	27.88	V / 1.00 / 250	-18.12	n/a
300.0 MHz	33.9 Qp	2.07 / 13.4 / 27.8 / 0.0	21.57	V / 1.00 / 250	-24.43	n/a
400.0 MHz	38.35 Qp	2.52 / 15.77 / 27.74 / 0.0	28.89	V / 1.00 / 250	-17.11	n/a
500.0 MHz	42.4 Qp	2.97 / 17.9 / 27.77 / 0.0	35.5	V / 1.00 / 250	-10.5	n/a
600.0 MHz	35.55 Qp	3.42 / 19.37 / 27.65 / 0.0	30.68	V / 1.00 / 250	-15.32	n/a
700.0 MHz	35.95 Qp	3.95 / 20.1 / 27.58 / 0.0	32.41	V / 1.00 / 250	-13.59	n/a

Tested by: T. K. Swanson Thomas K. Swanson
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Reviewed by: J. T. Schneider Joel T. Schneider
 Printed Signature

RADIATED EMISSIONS



America

Test Report #: WC703996 Run 10 Test Area: LTS

EUT Model #: RDMi-25100 Date: 6/12/2007

EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 25.0 °C

Test Method: FCC B Air Pressure: 98.0 kPa

Customer: Motorola Inc. Rel. Humidity: 55.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996.dat Page: 2 of 9

List of measurements for run #: 10

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC-B <1GHz 3m	DELTA2 FCC B >1GHz 3m
800.0 MHz	38.5 Qp	4.26 / 21.8 / 27.39 / 0.0	37.18	V / 1.00 / 250	-8.82	n/a
900.0 MHz	31.95 Qp	4.58 / 22.5 / 27.39 / 0.0	31.64	V / 1.00 / 250	-14.36	n/a
1.0 GHz	32.9 Qp	4.92 / 23.19 / 27.35 / 0.0	33.65	V / 1.00 / 250	-20.35	n/a
995.319 MHz	35.6 Qp	4.9 / 23.29 / 27.36 / 0.0	36.44	V / 1.00 / 250	-17.56	n/a
386.585 MHz	38.15 Qp	2.47 / 15.57 / 27.71 / 0.0	28.47	V / 1.00 / 250	-17.53	n/a
375.003 MHz	35.15 Qp	2.42 / 15.8 / 27.68 / 0.0	25.69	V / 1.00 / 250	-20.31	n/a
144.033 MHz	51.66 Qp	1.47 / 9.71 / 27.88 / 0.0	34.96	V / 1.00 / 250	-8.54	n/a
60.829 MHz	40.8 Qp	0.95 / 11.16 / 27.65 / 0.0	25.26	V / 1.00 / 0	-14.74	n/a
74.57 MHz	55.82 Qp	1.1 / 8.86 / 27.83 / 0.0	37.95	V / 1.00 / 0	-2.05	n/a
76.55 MHz	55.17 Qp	1.11 / 8.6 / 27.86 / 0.0	37.02	V / 1.00 / 0	-2.98	n/a
81.198 MHz	55.99 Qp	1.13 / 7.99 / 27.89 / 0.0	37.22	V / 1.00 / 0	-2.78	n/a
86.048 MHz	52.03 Qp	1.15 / 7.59 / 27.84 / 0.0	32.93	V / 1.00 / 0	-7.07	n/a
94.364 MHz	58.39 Qp	1.18 / 8.32 / 27.77 / 0.0	40.13	V / 1.00 / 0	-3.37	n/a
386.585 MHz	42.15 Qp	2.47 / 15.57 / 27.71 / 0.0	32.47	V / 1.00 / 0	-13.53	n/a
144.033 MHz	54.25 Qp	1.47 / 9.71 / 27.88 / 0.0	37.55	V / 1.00 / 90	-5.95	n/a
100.671 MHz	53.24 Qp	1.23 / 8.88 / 27.71 / 0.0	35.64	V / 1.00 / 180	-7.86	n/a
250.0 MHz	46.85 Qp	1.94 / 12.33 / 27.69 / 0.0	33.43	V / 1.00 / 180	-12.57	n/a
300.0 MHz	37.9 Qp	2.07 / 13.4 / 27.8 / 0.0	25.57	V / 1.00 / 180	-20.43	n/a
375.003 MHz	37.55 Qp	2.42 / 15.8 / 27.68 / 0.0	28.09	V / 1.00 / 180	-17.91	n/a
386.585 MHz	44.55 Qp	2.47 / 15.57 / 27.71 / 0.0	34.87	V / 1.00 / 180	-11.13	n/a
400.0 MHz	41.05 Qp	2.52 / 15.77 / 27.74 / 0.0	31.59	V / 1.00 / 180	-14.41	n/a
500.0 MHz	49.05 Qp	2.97 / 17.9 / 27.77 / 0.0	42.15	V / 1.00 / 180	-3.85	n/a
600.0 MHz	36.9 Qp	3.42 / 19.37 / 27.65 / 0.0	32.03	V / 1.00 / 180	-13.97	n/a
900.0 MHz	36.35 Qp	4.58 / 22.5 / 27.39 / 0.0	36.04	V / 1.00 / 180	-9.96	n/a

Tested by: T. K. Swanson
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Thomas K. Swanson
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Reviewed by: J. T. Schneider
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Joel T. Schneider
 Signature

RADIATED EMISSIONS



America

Test Report #: WC703996 Run 10 Test Area: LTS
 EUT Model #: RDMi-25100 Date: 6/12/2007
 EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 25.0 °C
 Test Method: FCC B Air Pressure: 98.0 kPa
 Customer: Motorola Inc. Rel. Humidity: 55.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996.dat Page: 3 of 9

List of measurements for run #: 10

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC-B <1GHz 3m	DELTA2 FCC B >1GHz 3m
1.0 GHz	35.05 Qp	4.92 / 23.19 / 27.35 / 0.0	35.8	V / 1.00 / 180	-18.2	n/a
544.095 MHz	37.65 Qp	3.16 / 18.19 / 27.67 / 0.0	31.33	V / 1.00 / 180	-14.67	n/a
92.96 MHz	55.43 Qp	1.18 / 8.2 / 27.78 / 0.0	37.03	V / 1.00 / 270	-6.47	n/a
94.364 MHz	59.5 Qp	1.18 / 8.32 / 27.77 / 0.0	41.24	V / 1.00 / 270	-2.26	n/a
995.319 MHz	38.05 Qp	4.9 / 23.29 / 27.36 / 0.0	38.89	V / 1.00 / 270	-15.11	n/a
300.0 MHz	40.1 Qp	2.07 / 13.4 / 27.8 / 0.0	27.77	V / 1.00 / 225	-18.23	n/a
800.0 MHz	39.8 Qp	4.26 / 21.8 / 27.39 / 0.0	38.48	V / 1.00 / 225	-7.52	n/a
1.0 GHz	37.75 Qp	4.92 / 23.19 / 27.35 / 0.0	38.5	V / 1.00 / 135	-15.5	n/a
74 MHz maxed						
74.57 MHz	56.15 Qp	1.1 / 8.86 / 27.83 / 0.0	38.28	V / 1.00 / 290	-1.72	n/a
76 MHz maxed						
76.55 MHz	54.75 Qp	1.11 / 8.6 / 27.86 / 0.0	36.6	V / 1.00 / 290	-3.4	n/a
94 Maxed						
94.364 MHz	60.04 Qp	1.18 / 8.32 / 27.77 / 0.0	41.78	V / 1.00 / 300	-1.72	n/a
81 Maxed						
81.198 MHz	55.71 Qp	1.13 / 7.99 / 27.89 / 0.0	36.94	V / 1.00 / 300	-3.06	n/a
500 Maxed						
500.0 MHz	50.59 Qp	2.97 / 17.9 / 27.77 / 0.0	43.69	V / 1.00 / 300	-2.31	n/a

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America

Test Report #: WC703996 Run 10 Test Area: LTS

EUT Model #: RDMi-25100 Date: 6/12/2007

EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 25.0 °C

Test Method: FCC B Air Pressure: 98.0 kPa

Customer: Motorola Inc. Rel. Humidity: 55.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996.dat Page: 5 of 9

List of measurements for run #: 10

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC-B <1GHz 3m	DELTA2 FCC B >1GHz 3m
900.0 MHz	40.51 Qp	4.58 / 22.5 / 27.39 / 0.0	40.2	H / 1.00 / 230	-5.8	n/a
1 GHz maxed						
1.0 GHz	42.31 Qp	4.92 / 23.19 / 27.35 / 0.0	43.06	H / 1.00 / 205	-10.94	n/a
Config 5b						
86.048 MHz	53.05 Qp	1.15 / 7.59 / 27.84 / 0.0	33.95	V / 1.00 / 90	-6.05	n/a
94.364 MHz	60.13 Qp	1.18 / 8.32 / 27.77 / 0.0	41.87	V / 1.00 / 270	-1.63	n/a
94 MHz maxed						
94.364 MHz	60.37 Qp	1.18 / 8.32 / 27.77 / 0.0	42.11	V / 1.00 / 270	-1.39	n/a
92.96 MHz	56.33 Qp	1.18 / 8.2 / 27.78 / 0.0	37.93	V / 1.00 / 270	-5.57	n/a
74 MHz maxed						
74.57 MHz	55.27 Qp	1.1 / 8.86 / 27.83 / 0.0	37.4	V / 1.00 / 0	-2.6	n/a
81.198 MHz	55.62 Qp	1.13 / 7.99 / 27.89 / 0.0	36.85	V / 1.00 / 0	-3.15	n/a
81 Maxed						
81.198 MHz	55.63 Qp	1.13 / 7.99 / 27.89 / 0.0	36.86	V / 1.00 / 0	-3.14	n/a
500 MHz maxed						
500.0 MHz	50.62 Qp	2.97 / 17.9 / 27.77 / 0.0	43.72	V / 1.00 / 180	-2.28	n/a
144 MHz maxed						
143.943 MHz	53.64 Qp	1.47 / 9.7 / 27.88 / 0.0	36.94	V / 1.00 / 230	-6.56	n/a

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America

Test Report #: WC703996 Run 10 Test Area: LTS

EUT Model #: RDMi-25100 Date: 6/12/2007

EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 25.0 °C

Test Method: FCC B Air Pressure: 98.0 kPa

Customer: Motorola Inc. Rel. Humidity: 55.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996.dat Page: 6 of 9

List of measurements for run #: 10

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC-B <1GHz 3m	DELTA2 FCC B >1GHz 3m
800 MHz maxed						
800.0 MHz	40.57 Qp	4.26 / 21.8 / 27.39 / 0.0	39.25	V / 1.00 / 240	-6.75	n/a
94 MHz maxed						
94.364 MHz	59.85 Qp	1.18 / 8.32 / 27.77 / 0.0	41.59	H / 2.00 / 225	-1.91	n/a
92.96 MHz	55.76 Qp	1.18 / 8.2 / 27.78 / 0.0	37.36	H / 2.00 / 225	-6.14	n/a
900 MHz maxed						
900.0 MHz	40.84 Qp	4.58 / 22.5 / 27.39 / 0.0	40.53	H / 1.00 / 225	-5.47	n/a

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America

Test Report #: WC703996 Run 10 Test Area: LTS

EUT Model #: RDMi-25100 Date: 6/12/2007

EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 25.0 °C

Test Method: FCC B Air Pressure: 98.0 kPa

Customer: Motorola Inc. Rel. Humidity: 55.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: <u>3996.dat</u>	Page:	8 of 9
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Measurement summary for limit1: FCC-B <1GHz 3m (Qp)					
FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC-B <1GHz 3m
168.0 MHz	45.0 Qp	1.62 / 9.17 / 27.77 / 0.0	28.02	H / 1.50 / 0	-15.48
120.0 MHz	44.05 Qp	1.36 / 9.05 / 27.68 / 0.0	26.78	V / 1.00 / 250	-16.72
375.003 MHz	37.55 Qp	2.42 / 15.8 / 27.68 / 0.0	28.09	V / 1.00 / 180	-17.91
300.0 MHz	40.1 Qp	2.07 / 13.4 / 27.8 / 0.0	27.77	V / 1.00 / 225	-18.23

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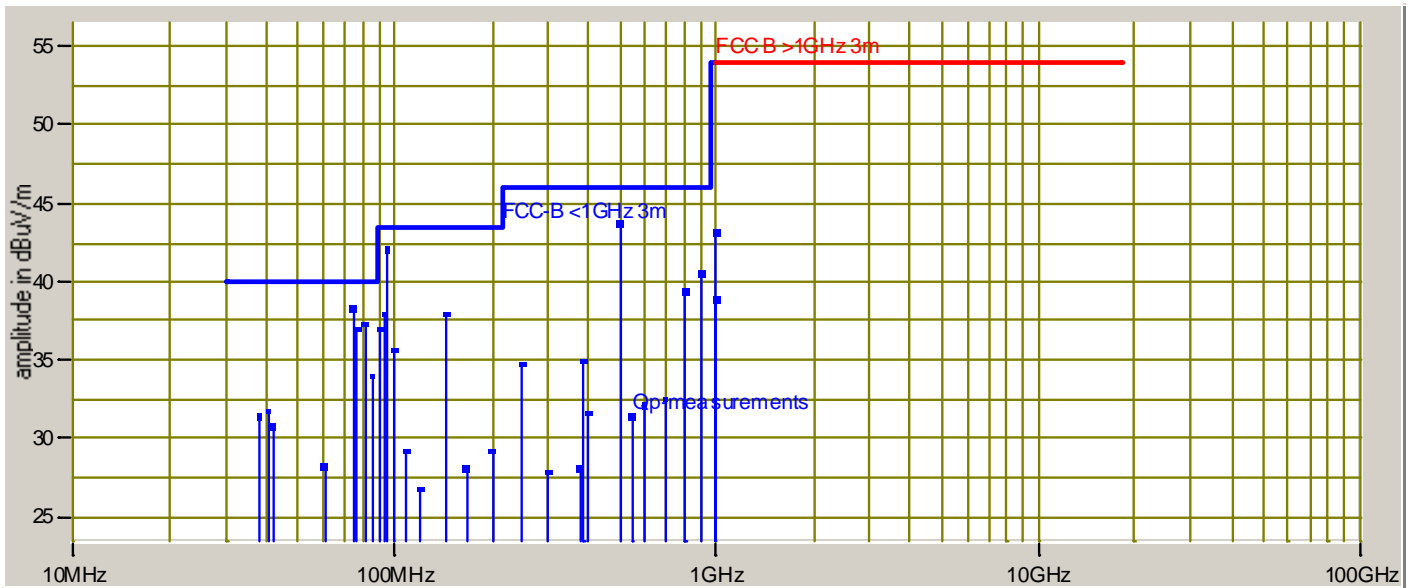
Test Report #: WC703996 Run 10 Test Area: LTS
EUT Model #: RDMi-25100 Date: 6/12/2007
EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 25.0 °C
Test Method: FCC B Air Pressure: 98.0 kPa
Customer: Motorola Inc. Rel. Humidity: 55.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996.dat Page: 9 of 9

Graph:



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America

Test Report #: WC703996 Run 11 Test Area: LTS

EUT Model #: RDMi-25100 Date: 6/12/2007

EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 25.0 °C

Test Method: FCC B Air Pressure: 98.0 kPa

Customer: Motorola Inc. Rel. Humidity: 55.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996.dat Page: 2 of 9

List of measurements for run #: 11

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC-B <1GHz 3m	DELTA2 FCC B >1GHz 3m
386.585 MHz	41.2 Qp	2.47 / 15.57 / 27.71 / 0.0	31.52	V / 1.00 / 0	-14.48	n/a
375.003 MHz	32.3 Qp	2.42 / 15.8 / 27.68 / 0.0	22.84	V / 1.00 / 0	-23.16	n/a
300.0 MHz	31.15 Qp	2.07 / 13.4 / 27.8 / 0.0	18.82	V / 1.00 / 0	-27.18	n/a
250.0 MHz	42.4 Qp	1.94 / 12.33 / 27.69 / 0.0	28.98	V / 1.00 / 0	-17.02	n/a
200.0 MHz	40.5 Qp	1.71 / 10.77 / 27.78 / 0.0	25.2	V / 1.00 / 0	-18.3	n/a
168.0 MHz	38.25 Qp	1.62 / 9.17 / 27.77 / 0.0	21.27	V / 1.00 / 0	-22.23	n/a
143.949 MHz	48.45 Qp	1.47 / 9.7 / 27.88 / 0.0	31.75	V / 1.00 / 0	-11.75	n/a
119.958 MHz	39.6 Qp	1.36 / 9.05 / 27.68 / 0.0	22.33	V / 1.00 / 0	-21.17	n/a
96.331 MHz	56.67 Qp	1.19 / 8.5 / 27.75 / 0.0	38.61	V / 1.00 / 0	-4.89	n/a
60.829 MHz	42.95 Qp	0.95 / 11.16 / 27.65 / 0.0	27.41	V / 1.00 / 90	-12.59	n/a
86.048 MHz	52.94 Qp	1.15 / 7.59 / 27.84 / 0.0	33.84	V / 1.00 / 90	-6.16	n/a
119.958 MHz	41.85 Qp	1.36 / 9.05 / 27.68 / 0.0	24.58	V / 1.00 / 90	-18.92	n/a
143.949 MHz	50.5 Qp	1.47 / 9.7 / 27.88 / 0.0	33.8	V / 1.00 / 90	-9.7	n/a
544.095 MHz	30.65 Qp	3.16 / 18.19 / 27.67 / 0.0	24.33	V / 1.00 / 90	-21.67	n/a
1.0 GHz	30.7 Qp	4.92 / 23.19 / 27.35 / 0.0	31.45	V / 1.00 / 90	-22.55	n/a
544.095 MHz	37.2 Qp	3.16 / 18.19 / 27.67 / 0.0	30.88	V / 1.00 / 180	-15.12	n/a
500.0 MHz	42.9 Qp	2.97 / 17.9 / 27.77 / 0.0	36.0	V / 1.00 / 180	-10.0	n/a
386.585 MHz	44.6 Qp	2.47 / 15.57 / 27.71 / 0.0	34.92	V / 1.00 / 180	-11.08	n/a
375.003 MHz	38.15 Qp	2.42 / 15.8 / 27.68 / 0.0	28.69	V / 1.00 / 180	-17.31	n/a
250.0 MHz	45.45 Qp	1.94 / 12.33 / 27.69 / 0.0	32.03	V / 1.00 / 180	-13.97	n/a
143.949 MHz	50.95 Qp	1.47 / 9.7 / 27.88 / 0.0	34.25	V / 1.00 / 180	-9.25	n/a
119.958 MHz	44.9 Qp	1.36 / 9.05 / 27.68 / 0.0	27.63	V / 1.00 / 180	-15.87	n/a
108.801 MHz	45.1 Qp	1.31 / 9.59 / 27.64 / 0.0	28.37	V / 1.00 / 180	-15.13	n/a
141.187 MHz	52.24 Qp	1.46 / 9.44 / 27.89 / 0.0	35.25	V / 1.00 / 180	-8.25	n/a

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America

Test Report #: WC703996 Run 11 Test Area: LTS

EUT Model #: RDMi-25100 Date: 6/12/2007

EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 25.0 °C

Test Method: FCC B Air Pressure: 98.0 kPa

Customer: Motorola Inc. Rel. Humidity: 55.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996.dat Page: 6 of 9

List of measurements for run #: 11

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC-B <1GHz 3m	DELTA2 FCC B >1GHz 3m
81.198 MHz	55.72 Qp	1.13 / 7.99 / 27.89 / 0.0	36.95	V / 1.30 / 0	-3.05	n/a
500 maxed						
500.0 MHz	43.81 Qp	2.97 / 17.9 / 27.77 / 0.0	36.91	V / 1.30 / 0	-9.09	n/a
144 maxed						
144.009 MHz	54.74 Qp	1.47 / 9.71 / 27.88 / 0.0	38.04	V / 1.00 / 90	-5.46	n/a
94 maxed						
94.364 MHz	59.28 Qp	1.18 / 8.32 / 27.77 / 0.0	41.02	H / 2.00 / 230	-2.48	n/a
96 maxed						
96.331 MHz	57.01 Qp	1.19 / 8.5 / 27.75 / 0.0	38.95	H / 2.00 / 230	-4.55	n/a
144 maxed						
144.009 MHz	53.18 Qp	1.47 / 9.71 / 27.88 / 0.0	36.48	H / 2.20 / 240	-7.02	n/a

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Test Report #: WC703996 Run 11 Test Area: LTS
 EUT Model #: RDMi-25100 Date: 6/12/2007
 EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 25.0 °C
 Test Method: FCC B Air Pressure: 98.0 kPa
 Customer: Motorola Inc. Rel. Humidity: 55.0 %
 EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996.dat

Page: 7 of 9

Measurement summary for limit1: FCC-B <1GHz 3m (Qp)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC-B <1GHz 3m
94.364 MHz	60.68 Qp	1.18 / 8.32 / 27.77 / 0.0	42.42	V / 1.00 / 295	-1.08
74.57 MHz	54.9 Qp	1.1 / 8.86 / 27.83 / 0.0	37.03	V / 1.00 / 0	-2.97
81.198 MHz	55.72 Qp	1.13 / 7.99 / 27.89 / 0.0	36.95	V / 1.30 / 0	-3.05
96.331 MHz	58.13 Qp	1.19 / 8.5 / 27.75 / 0.0	40.07	V / 1.00 / 295	-3.43
76.55 MHz	53.33 Qp	1.11 / 8.6 / 27.86 / 0.0	35.18	V / 1.00 / 0	-4.82
92.96 MHz	56.48 Qp	1.18 / 8.2 / 27.78 / 0.0	38.08	V / 1.00 / 290	-5.42
144.009 MHz	54.74 Qp	1.47 / 9.71 / 27.88 / 0.0	38.04	V / 1.00 / 90	-5.46
86.048 MHz	52.94 Qp	1.15 / 7.59 / 27.84 / 0.0	33.84	V / 1.00 / 90	-6.16
90.914 MHz	55.36 Qp	1.17 / 8.02 / 27.8 / 0.0	36.75	V / 1.00 / 270	-6.75
141.187 MHz	52.24 Qp	1.46 / 9.44 / 27.89 / 0.0	35.25	V / 1.00 / 180	-8.25
37.656 MHz	40.3 Qp	0.73 / 18.28 / 27.83 / 0.0	31.49	V / 1.00 / 0	-8.51
500.0 MHz	43.98 Qp	2.97 / 17.9 / 27.77 / 0.0	37.08	V / 1.00 / 180	-8.92
40.567 MHz	40.7 Qp	0.75 / 17.1 / 27.75 / 0.0	30.8	V / 1.00 / 0	-9.2
100.671 MHz	51.9 Qp	1.23 / 8.88 / 27.71 / 0.0	34.3	V / 1.00 / 195	-9.2
42.013 MHz	40.6 Qp	0.75 / 16.58 / 27.7 / 0.0	30.22	V / 1.00 / 0	-9.78
386.585 MHz	44.6 Qp	2.47 / 15.57 / 27.71 / 0.0	34.92	V / 1.00 / 180	-11.08
357.955 MHz	44.25 Qp	2.36 / 15.25 / 27.64 / 0.0	34.22	V / 1.00 / 0	-11.78
250.0 MHz	47.55 Qp	1.94 / 12.33 / 27.69 / 0.0	34.13	H / 1.00 / 270	-11.87
60.829 MHz	43.65 Qp	0.95 / 11.16 / 27.65 / 0.0	28.11	H / 2.00 / 180	-11.89
172.935 MHz	47.6 Qp	1.64 / 9.33 / 27.75 / 0.0	30.82	V / 1.00 / 0	-12.68
995.319 MHz	39.4 Qp	4.9 / 23.29 / 27.36 / 0.0	40.24	V / 1.00 / 270	-13.76
167.964 MHz	45.95 Qp	1.62 / 9.17 / 27.77 / 0.0	28.97	H / 1.00 / 270	-14.53
544.095 MHz	37.2 Qp	3.16 / 18.19 / 27.67 / 0.0	30.88	V / 1.00 / 180	-15.12
108.801 MHz	45.1 Qp	1.31 / 9.59 / 27.64 / 0.0	28.37	V / 1.00 / 180	-15.13
700.0 MHz	34.2 Qp	3.95 / 20.1 / 27.58 / 0.0	30.66	H / 1.00 / 180	-15.34
119.958 MHz	44.9 Qp	1.36 / 9.05 / 27.68 / 0.0	27.63	V / 1.00 / 180	-15.87

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America

Test Report #: WC703996 Run 11 Test Area: LTS

EUT Model #: RDMi-25100 Date: 6/12/2007

EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 25.0 °C

Test Method: FCC B Air Pressure: 98.0 kPa

Customer: Motorola Inc. Rel. Humidity: 55.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996.dat Page: 8 of 9

Measurement summary for limit1: FCC-B <1GHz 3m (Qp)					
FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC-B <1GHz 3m
200.0 MHz	42.45 Qp	1.71 / 10.77 / 27.78 / 0.0	27.15	H / 1.00 / 270	-16.35
425.009 MHz	38.0 Qp	2.61 / 16.8 / 27.79 / 0.0	29.62	V / 1.00 / 0	-16.38
375.003 MHz	38.15 Qp	2.42 / 15.8 / 27.68 / 0.0	28.69	V / 1.00 / 180	-17.31
800.0 MHz	29.75 Qp	4.26 / 21.8 / 27.39 / 0.0	28.43	V / 1.00 / 0	-17.57
900.0 MHz	27.87 Qp	4.58 / 22.5 / 27.39 / 0.0	27.56	H / 1.00 / 230	-18.44
1.0 GHz	34.7 Qp	4.92 / 23.19 / 27.35 / 0.0	35.45	V / 1.00 / 270	-18.55
600.0 MHz	31.35 Qp	3.42 / 19.37 / 27.65 / 0.0	26.48	V / 1.00 / 0	-19.52
400.0 MHz	29.65 Qp	2.52 / 15.77 / 27.74 / 0.0	20.19	V / 1.00 / 0	-25.81
300.0 MHz	31.15 Qp	2.07 / 13.4 / 27.8 / 0.0	18.82	V / 1.00 / 0	-27.18

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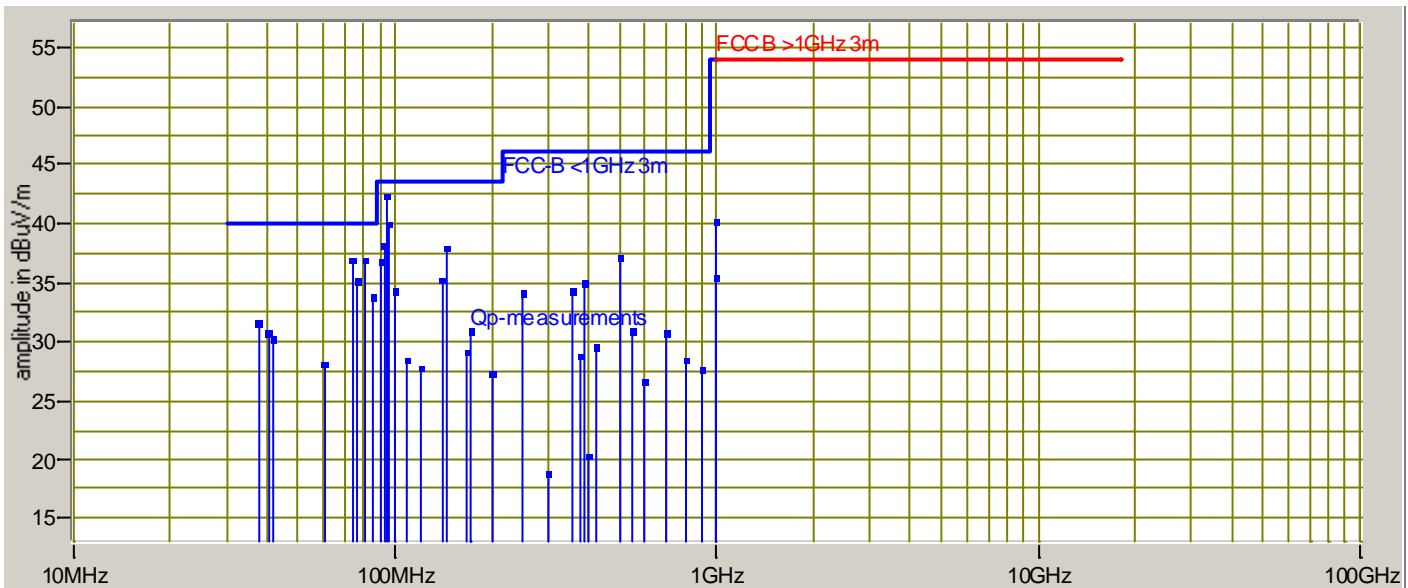
Test Report #: <u>WC703996 Run 11</u>	Test Area: <u>LTS</u>	
EUT Model #: <u>RDMi-25100</u>	Date: <u>6/12/2007</u>	
EUT Serial #: <u>0092-0300-7180070</u>	EUT Power: <u>60 Hz 115 VAC</u>	Temperature: <u>25.0</u> °C
Test Method: <u>FCC B</u>		Air Pressure: <u>98.0</u> kPa
Customer: <u>Motorola Inc.</u>		Rel. Humidity: <u>55.0</u> %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: <u>3996.dat</u>	Page: <u>9 of 9</u>
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Graph:



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Test Report #: WC703996 Run 12 Test Area: LTS

EUT Model #: RDMi-25100 Date: 6/12/2007

EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 25.0 °C

Test Method: FCC B Air Pressure: 98.0 kPa

Customer: Motorola Inc. Rel. Humidity: 62.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996.dat Page: 1 of 3

List of measurements for run #: 12

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC B >1GHz 3m	DELTA2
Expedience Mode						
Config 4a						
maxed						
3.332 GHz	45.73 Av	6.04 / 30.9 / 48.15 / 0.0	34.52	H / 1.10 / 210	-19.48	n/a
3.332 GHz	42.21 Av	6.04 / 30.9 / 48.15 / 0.0	31.0	V / 1.40 / 175	-23.0	n/a
Config 5a						
maxed						
3.457 GHz	48.24 Av	6.2 / 31.16 / 47.94 / 0.0	37.66	V / 1.30 / 215	-16.34	n/a
3.457 GHz	45.44 Av	6.2 / 31.16 / 47.94 / 0.0	34.86	V / 1.20 / 215	-19.14	n/a
Config 6a						
Maxed						
3.583 GHz	45.63 Av	6.35 / 31.42 / 47.98 / 0.0	35.43	H / 1.30 / 210	-18.57	n/a
3.583 GHz	44.05 Av	6.35 / 31.42 / 47.98 / 0.0	33.85	V / 1.20 / 210	-20.15	n/a
End of scan 1 to 14 GHz						

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RADIATED EMISSIONS



America

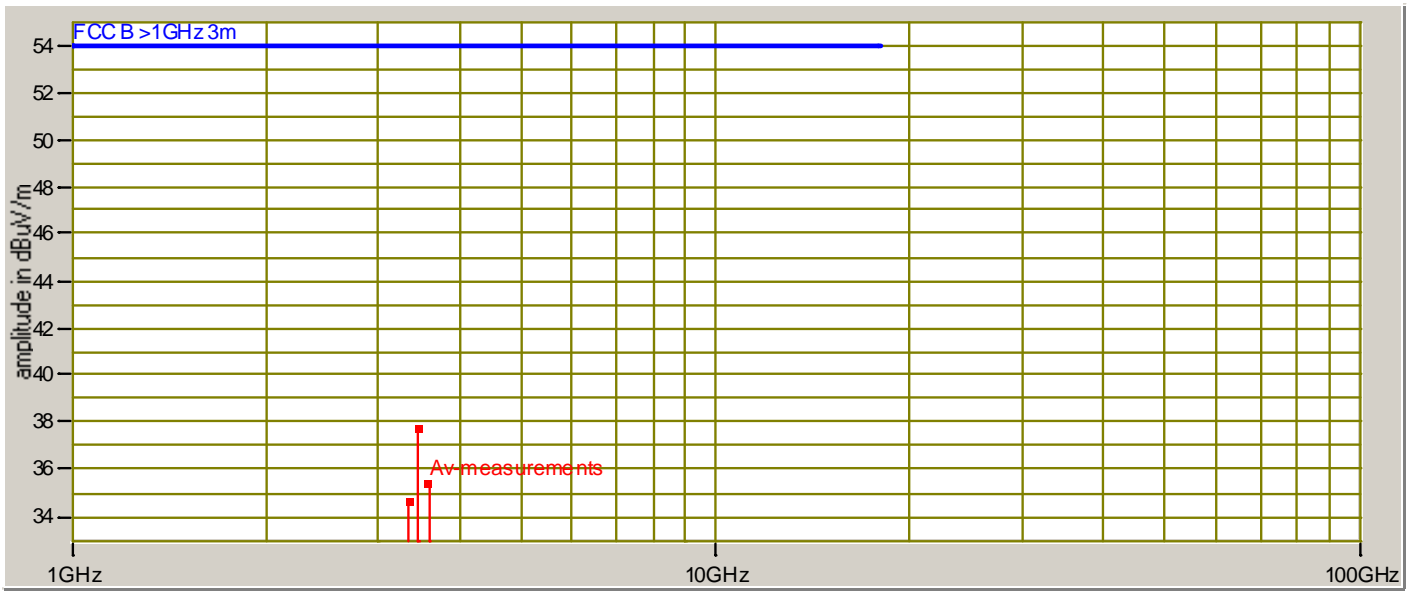
Test Report #: WC703996 Run 12 Test Area: LTS
EUT Model #: RDMi-25100 Date: 6/12/2007
EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 25.0 °C
Test Method: FCC B Air Pressure: 98.0 kPa
Customer: Motorola Inc. Rel. Humidity: 62.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996.dat Page: 3 of 3

Graph:



Tested by: T. K. Swanson
Printed

Thomas K. Swanson
Signature

Reviewed by: J. T. Schneider
Printed

Joel T. Schneider
Signature

CONDUCTED EMISSIONS



America

Test Report #: WC703996 Run 14 Test Area: LTS
 EUT Model #: RDMi-25100 Date: 6/22/2007
 EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 25.0 °C
 Test Method: FCC B Air Pressure: 98.0 kPa
 Customer: Motorola Inc. Rel. Humidity: 62.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996.dat Page: 1 of 6

List of measurements for run #: 14

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	EUT Lead	DELTA1 EN55022 B Qp	DELTA2 EN55022 B Avg
Config 7b						
160.0 kHz	44.68 Qp	0.12 / 0.1 / 0.0 / 0.0	44.9	L1	-20.57	n/a
160.0 kHz	35.72 Av	0.12 / 0.1 / 0.0 / 0.0	35.94	L1	n/a	-19.53
270.0 kHz	44.9 Qp	0.14 / 0.04 / 0.0 / 0.0	45.08	L1	-16.04	n/a
270.0 kHz	33.51 Av	0.14 / 0.04 / 0.0 / 0.0	33.69	L1	n/a	-17.43
445.0 kHz	37.86 Qp	0.17 / 0.19 / 0.0 / 0.0	38.22	L1	-18.74	n/a
445.0 kHz	17.91 Av	0.17 / 0.19 / 0.0 / 0.0	18.27	L1	n/a	-28.69
810.0 kHz	40.48 Qp	0.22 / 0.07 / 0.0 / 0.0	40.77	L1	-15.23	n/a
810.0 kHz	30.74 Av	0.22 / 0.07 / 0.0 / 0.0	31.03	L1	n/a	-14.97
1.62 MHz	35.92 Qp	0.3 / 0.07 / 0.0 / 0.0	36.29	L1	-19.71	n/a
1.62 MHz	25.34 Av	0.3 / 0.07 / 0.0 / 0.0	25.71	L1	n/a	-20.29
23.13 MHz	29.44 Qp	1.16 / 0.19 / 0.0 / 0.0	30.79	L1	-29.21	n/a
23.13 MHz	22.5 Av	1.16 / 0.19 / 0.0 / 0.0	23.85	L1	n/a	-26.15
6.935 MHz	19.96 Qp	0.64 / 0.18 / 0.0 / 0.0	20.78	L1	-39.22	n/a
6.935 MHz	6.48 Av	0.64 / 0.18 / 0.0 / 0.0	7.3	L1	n/a	-42.7
160.0 kHz	42.36 Qp	0.12 / 0.1 / 0.0 / 0.0	42.58	N	-22.89	n/a
160.0 kHz	23.22 Av	0.12 / 0.1 / 0.0 / 0.0	23.44	N	n/a	-32.03
270.0 kHz	39.08 Qp	0.14 / 0.04 / 0.0 / 0.0	39.26	N	-21.86	n/a
270.0 kHz	27.74 Av	0.14 / 0.04 / 0.0 / 0.0	27.92	N	n/a	-23.2
445.0 kHz	28.32 Qp	0.17 / 0.19 / 0.0 / 0.0	28.68	N	-28.28	n/a
445.0 kHz	11.61 Av	0.17 / 0.19 / 0.0 / 0.0	11.97	N	n/a	-34.99
810.0 kHz	33.46 Qp	0.22 / 0.07 / 0.0 / 0.0	33.75	N	-22.25	n/a
810.0 kHz	24.52 Av	0.22 / 0.07 / 0.0 / 0.0	24.81	N	n/a	-21.19
1.62 MHz	31.94 Qp	0.3 / 0.07 / 0.0 / 0.0	32.31	N	-23.69	n/a

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Thomas K. Swanson
 Signature

Reviewed by: J. T. Schneider
 Printed

Joel T. Schneider
 Signature

CONDUCTED EMISSIONS



Test Report #: WC703996 Run 14 Test Area: LTS
 EUT Model #: RDMi-25100 Date: 6/22/2007
 EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 25.0 °C
 Test Method: FCC B Air Pressure: 98.0 kPa
 Customer: Motorola Inc. Rel. Humidity: 62.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996.dat Page: 2 of 6

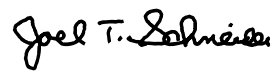
List of measurements for run #: 14

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	EUT Lead	DELTA1 EN55022 B Qp	DELTA2 EN55022 B Avg
1.62 MHz	20.98 Av	0.3 / 0.07 / 0.0 / 0.0	21.35	N	n/a	-24.65
6.935 MHz	19.26 Qp	0.64 / 0.18 / 0.0 / 0.0	20.08	N	-39.92	n/a
6.935 MHz	5.4 Av	0.64 / 0.18 / 0.0 / 0.0	6.22	N	n/a	-43.78
23.13 MHz	32.66 Qp	1.16 / 0.19 / 0.0 / 0.0	34.01	N	-25.99	n/a
23.13 MHz	28.77 Av	1.16 / 0.19 / 0.0 / 0.0	30.12	N	n/a	-19.88
Config 7a						
160.0 kHz	45.4 Qp	0.12 / 0.1 / 0.0 / 0.0	45.62	L1	-19.85	n/a
160.0 kHz	37.51 Av	0.12 / 0.1 / 0.0 / 0.0	37.73	L1	n/a	-17.74
270.0 kHz	45.76 Qp	0.14 / 0.04 / 0.0 / 0.0	45.94	L1	-15.18	n/a
270.0 kHz	37.26 Av	0.14 / 0.04 / 0.0 / 0.0	37.44	L1	n/a	-13.68
430.0 kHz	41.08 Qp	0.17 / 0.17 / 0.0 / 0.0	41.42	L1	-15.83	n/a
430.0 kHz	31.84 Av	0.17 / 0.17 / 0.0 / 0.0	32.18	L1	n/a	-15.07
810.0 kHz	41.3 Qp	0.22 / 0.07 / 0.0 / 0.0	41.59	L1	-14.41	n/a
810.0 kHz	0.0 Av	0.22 / 0.07 / 0.0 / 0.0	0.29	L1	n/a	-45.71
810.0 kHz	32.01 Av	0.22 / 0.07 / 0.0 / 0.0	32.3	L1	n/a	-13.7
1.35 MHz	39.28 Qp	0.28 / 0.03 / 0.0 / 0.0	39.58	L1	-16.42	n/a
1.35 MHz	28.63 Av	0.28 / 0.03 / 0.0 / 0.0	28.93	L1	n/a	-17.07
9.1 MHz	19.52 Qp	0.73 / 0.14 / 0.0 / 0.0	20.39	L1	-39.61	n/a
9.1 MHz	4.01 Av	0.73 / 0.14 / 0.0 / 0.0	4.88	L1	n/a	-45.12
23.125 MHz	28.76 Qp	1.16 / 0.19 / 0.0 / 0.0	30.11	L1	-29.89	n/a
23.125 MHz	24.7 Av	1.16 / 0.19 / 0.0 / 0.0	26.05	L1	n/a	-23.95
160.0 kHz	42.88 Qp	0.12 / 0.1 / 0.0 / 0.0	43.1	N	-22.37	n/a
160.0 kHz	22.75 Av	0.12 / 0.1 / 0.0 / 0.0	22.97	N	n/a	-32.5
270.0 kHz	39.9 Qp	0.14 / 0.04 / 0.0 / 0.0	40.08	N	-21.04	n/a

Tested by: T. K. Swanson
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Reviewed by: J. T. Schneider
 Printed


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CONDUCTED EMISSIONS



America

Test Report #: WC703996 Run 14 Test Area: LTS

EUT Model #: RDMi-25100 Date: 6/22/2007

EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 25.0 °C

Test Method: FCC B Air Pressure: 98.0 kPa

Customer: Motorola Inc. Rel. Humidity: 62.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: <u>3996.dat</u>	Page:	3 of 6
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List of measurements for run #: 14

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	EUT Lead	DELTA1 EN55022 B Qp	DELTA2 EN55022 B Avg
270.0 kHz	28.26 Av	0.14 / 0.04 / 0.0 / 0.0	28.44	N	n/a	-22.68
430.0 kHz	33.76 Qp	0.17 / 0.17 / 0.0 / 0.0	34.1	N	-23.15	n/a
430.0 kHz	23.3 Av	0.17 / 0.17 / 0.0 / 0.0	23.64	N	n/a	-23.61
810.0 kHz	33.82 Qp	0.22 / 0.07 / 0.0 / 0.0	34.11	N	-21.89	n/a
810.0 kHz	24.95 Av	0.22 / 0.07 / 0.0 / 0.0	25.24	N	n/a	-20.76
1.35 MHz	31.18 Qp	0.28 / 0.03 / 0.0 / 0.0	31.48	N	-24.52	n/a
1.35 MHz	20.78 Av	0.28 / 0.03 / 0.0 / 0.0	21.08	N	n/a	-24.92
9.1 MHz	21.48 Qp	0.73 / 0.14 / 0.0 / 0.0	22.35	N	-37.65	n/a
9.1 MHz	6.89 Av	0.73 / 0.14 / 0.0 / 0.0	7.76	N	n/a	-42.24
23.13 MHz	32.02 Qp	1.16 / 0.19 / 0.0 / 0.0	33.37	N	-26.63	n/a
23.13 MHz	28.09 Av	1.16 / 0.19 / 0.0 / 0.0	29.44	N	n/a	-20.56

End of scan

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Thomas K. Swanson
Signature

Reviewed by: J. T. Schneider
Printed

Joel T. Schneider
Signature

CONDUCTED EMISSIONS



America

Test Report #: WC703996 Run 14 Test Area: LTS
 EUT Model #: RDMi-25100 Date: 6/22/2007
 EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 25.0 °C
 Test Method: FCC B Air Pressure: 98.0 kPa
 Customer: Motorola Inc. Rel. Humidity: 62.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996.dat Page: 4 of 6

Measurement summary for limit1: EN55022 B Qp (Qp)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	EUT Lead	DELTA1 EN55022 B Qp
810.0 kHz	41.3 Qp	0.22 / 0.07 / 0.0 / 0.0	41.59	L1	-14.41
270.0 kHz	45.76 Qp	0.14 / 0.04 / 0.0 / 0.0	45.94	L1	-15.18
430.0 kHz	41.08 Qp	0.17 / 0.17 / 0.0 / 0.0	41.42	L1	-15.83
1.35 MHz	39.28 Qp	0.28 / 0.03 / 0.0 / 0.0	39.58	L1	-16.42
445.0 kHz	37.86 Qp	0.17 / 0.19 / 0.0 / 0.0	38.22	L1	-18.74
1.62 MHz	35.92 Qp	0.3 / 0.07 / 0.0 / 0.0	36.29	L1	-19.71
160.0 kHz	45.4 Qp	0.12 / 0.1 / 0.0 / 0.0	45.62	L1	-19.85
23.13 MHz	32.66 Qp	1.16 / 0.19 / 0.0 / 0.0	34.01	N	-25.99
9.1 MHz	21.48 Qp	0.73 / 0.14 / 0.0 / 0.0	22.35	N	-37.65
6.935 MHz	19.96 Qp	0.64 / 0.18 / 0.0 / 0.0	20.78	L1	-39.22

Tested by: T. K. Swanson
 Printed

Thomas K. Swanson
 Signature

Reviewed by: J. T. Schneider
 Printed

Joel T. Schneider
 Signature

CONDUCTED EMISSIONS



America

Test Report #: WC703996 Run 14 Test Area: LTS

EUT Model #: RDMi-25100 Date: 6/22/2007

EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 25.0 °C

Test Method: FCC B Air Pressure: 98.0 kPa

Customer: Motorola Inc. Rel. Humidity: 62.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: <u>3996.dat</u>	Page:	5 of 6
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Measurement summary for limit2: EN55022 B Avg (Av)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	EUT Lead	DELTA2 EN55022 B Avg
270.0 kHz	37.26 Av	0.14 / 0.04 / 0.0 / 0.0	37.44	L1	-13.68
810.0 kHz	32.01 Av	0.22 / 0.07 / 0.0 / 0.0	32.3	L1	-13.7
430.0 kHz	31.84 Av	0.17 / 0.17 / 0.0 / 0.0	32.18	L1	-15.07
1.35 MHz	28.63 Av	0.28 / 0.03 / 0.0 / 0.0	28.93	L1	-17.07
160.0 kHz	37.51 Av	0.12 / 0.1 / 0.0 / 0.0	37.73	L1	-17.74
23.13 MHz	28.77 Av	1.16 / 0.19 / 0.0 / 0.0	30.12	N	-19.88
1.62 MHz	25.34 Av	0.3 / 0.07 / 0.0 / 0.0	25.71	L1	-20.29
445.0 kHz	17.91 Av	0.17 / 0.19 / 0.0 / 0.0	18.27	L1	-28.69
9.1 MHz	6.89 Av	0.73 / 0.14 / 0.0 / 0.0	7.76	N	-42.24
6.935 MHz	6.48 Av	0.64 / 0.18 / 0.0 / 0.0	7.3	L1	-42.7

Tested by: T. K. Swanson
Printed

Thomas K. Swanson
Signature

Reviewed by: J. T. Schneider
Printed

Joel T. Schneider
Signature

CONDUCTED EMISSIONS



America

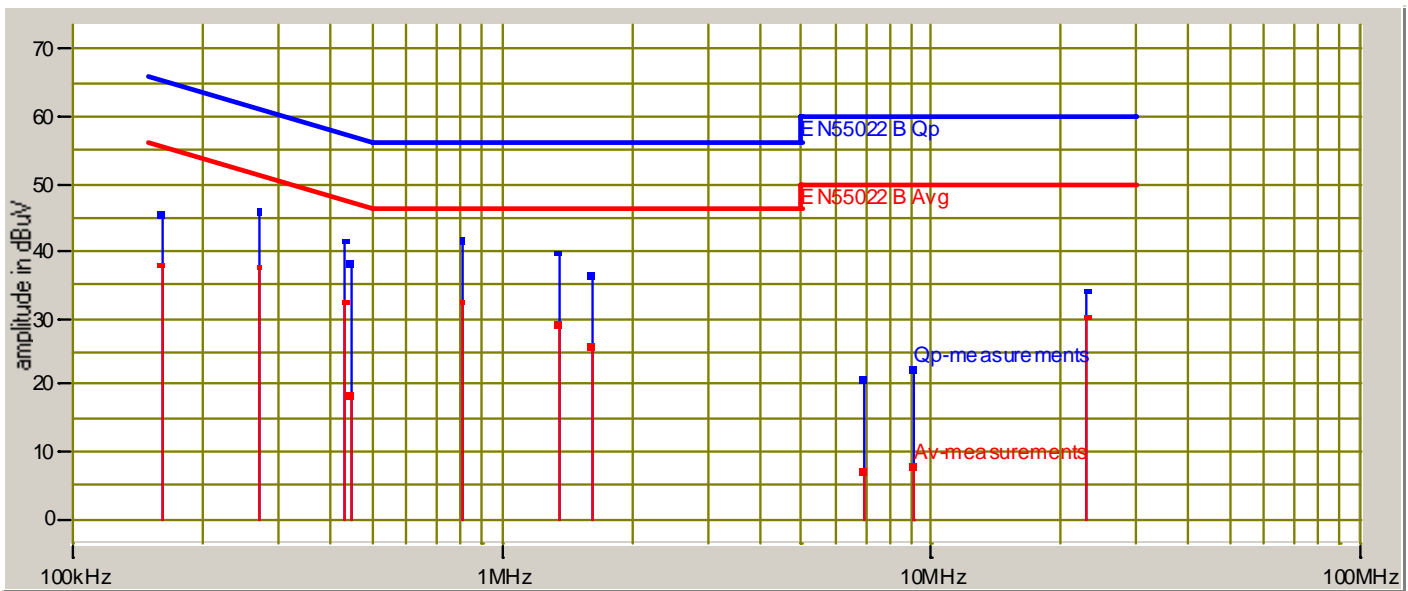
Test Report #: WC703996 Run 14 Test Area: LTS
 EUT Model #: RDMi-25100 Date: 6/22/2007
 EUT Serial #: 0092-0300-7180070 EUT Power: 60 Hz 115 VAC Temperature: 25.0 °C
 Test Method: FCC B Air Pressure: 98.0 kPa
 Customer: Motorola Inc. Rel. Humidity: 62.0 %

EUT Description: BRS/EBS Residential Subscribe Unit (RSU)

Notes: _____

Data File Name: 3996.dat Page: 6 of 6

Graph:



Tested by: T. K. Swanson
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Thomas K. Swanson
 Signature

Reviewed by: J. T. Schneider
 Printed

Joel T. Schneider
 Signature

Appendix B

Constructional Data Form

and

Block Diagram





EMC Test Plan and Constructional Data Form

America

PLEASE COMPLETE THIS DOCUMENT IN FULL, ENTERING N/A IF THE FIELD IS NOT APPLICABLE. IF TESTING RESULTS IN MODIFICATIONS TO THE EQUIPMENT, PLEASE SUBMIT A REVISED TP/CDF INDICATING THOSE MODIFICATIONS.
NOTE: This information will be input into your test report as shown below. Press the F1 key at any time to get HELP for the current field selected.

Company: Motorola Inc., NextNet Wireless Product Group
 Address: 299 Johnson Ave.
Suite 120
Waseca, MN 56093
 Contact: Tim Blom Position: Engineering Section Manager
 Phone: 507-837-3672 Fax: 507-837-1059
 E-mail Address: Tim.Blom@motorola.com

General Equipment Description -- NOTE: This information will be input into your test report as shown below.

EUT Description BRS/EBS Residential Subscribe Unit (RSU)
 EUT Name Expedience/WiMax 2.496-2.690 GHz RSU
 Model No.: RDMi-25100 Serial No.: S/N: 0092-0300-7180070
 Product Options: none
 Configurations to be tested: standard

Equipment Modification (If applicable, indicate modifications since EUT was last tested. If modifications are made during this testing, submit revised TP/CDF after testing is complete.)

Modifications since last test: N/A
 Modifications made during test: _____

Test Objective(s): Please indicate the tests to be performed, entering the applicable standard(s) where noted.

- | | |
|---|--|
| <input type="checkbox"/> EMC Directive 89/336/EEC (EMC)
Std: _____ | <input checked="" type="checkbox"/> FCC: Class <input type="checkbox"/> A <input checked="" type="checkbox"/> B Part <u>27</u> |
| <input type="checkbox"/> Machinery Directive 89/392/EEC (EMC)
Std: _____ | <input type="checkbox"/> VCCI: Class <input type="checkbox"/> A <input type="checkbox"/> B |
| <input type="checkbox"/> Medical Device Directive 93/42/EEC (EMC)
Std: _____ | <input type="checkbox"/> BSMI: Class <input type="checkbox"/> A <input type="checkbox"/> B |
| <input type="checkbox"/> Vehicle Directive 72/245/EEC (EMC)
Std: _____ | <input checked="" type="checkbox"/> Canada: Class <input type="checkbox"/> A <input checked="" type="checkbox"/> B |
| <input type="checkbox"/> FDA Reviewers Guidance for Premarket
Notification Submissions (EMC) | <input type="checkbox"/> Australia: Class <input type="checkbox"/> A <input type="checkbox"/> B |
| | <input checked="" type="checkbox"/> Other: <u>FCC 2, 15, 27, IC RSS-193</u> |

Third Party Certification, if applicable (*Signature on Page 6 Required)

- | | |
|---|---|
| <input type="checkbox"/> Attestation of Conformity (AoC)* | <input type="checkbox"/> EMC Certification (used with Octagon Mark)* |
| <input type="checkbox"/> Certificate of Conformity (CoC)* | <input type="checkbox"/> Compliance Document* |
| Protection Class (N/A for vehicles) | <input type="checkbox"/> Class I <input type="checkbox"/> Class II <input type="checkbox"/> Class III |
| (Press F1 when field is selected to show additional information on Protection Class.) | |
| <input type="checkbox"/> FCC / TCB Certification | <input type="checkbox"/> Industry Canada / FCB Certification |
| <input type="checkbox"/> E-Mark Certification | <input type="checkbox"/> Taiwan Certification |



EMC Test Plan and Constructional Data Form

America

Attendance

Test will be: Attended by the customer Unattended by the customer

Failure - Complete this section if testing will not be attended by the customer.

If a failure occurs, TÜV America should:

- Call contact listed above, if not available then stop testing. (After hrs phone): _____
- Continue testing to complete test series.
- Continue testing to define corrective action.
- Stop testing.

EUT Specifications and Requirements

Length: 12.75 " Width: 7.75" Height: 1.5 " Weight: 1.8 Lb

Power Requirements

Regulations require testing to be performed at typical power ratings in the countries of intended use. (i.e., European power is typically 230 VAC 50 Hz or 400 VAC 50 Hz, single and three phase, respectively)

Voltage: 13 VDC (If battery powered, make sure battery life is sufficient to complete testing.)

of Phases: 1

Current (Amps/phase(max)): 1.3 Current (Amps/phase(nominal)): .36

Other: ---

Other Special Requirements

Transmitter radiated emissions to be measured per EIA/TIA 603-C procedure for licensed transmitters. Receiver radiated emissions testing to be performed on ANSI C63.4-2003 clause 5.4 compliant site. Receiver radiated emissions measured with a quasi peak detector compliant to CISPR Publication 16.

Typical Installation and/or Operating Environment

(ie. Hospital, Small Business, Industrial/Factory, etc.)
Residential indoor

EUT Power Cable

Permanent OR Removable Length (in meters): 2

Shielded OR Unshielded

Not Applicable



EMC Test Plan and Constructional Data Form

America

EUT Interface Ports and Cables																
Type	Analog		Digital		During Test		Qty	Shielding		Termination	Connector Type	Port Termination	Length tested (in meters)	Removable	Permanent	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Active	Passive		Yes	No							Type
EXAMPLE: RS232	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Foil over braid	Coaxial	Metallized 9-pin D-Sub	Characteristic Impedance	6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13 VDC cable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	twin pair	---	Circular	DC	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ethernet cable	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	CAT-5	differential 100 ohm	RJ-45	100 ohm	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>



EMC Test Plan and Constructional Data Form

EUT Software.

Revision Level: Expedience Mode
NextNet Diagnostics Test N Tune s/w: 5.1
Loader s/w: 5.01
NextNet Tool/Diagnostics s/w: 8.02d
RF ASIC Configuration file: rev2_122006

WiMax Mode "2"
NextNet Tool/Diagnostics s/w: 0.9.2.0/1.0.0

Description: Test software for RDM product that enables test modes for compliance testing.



EMC Test Plan and Constructional Data Form

America

Equipment Under Test (EUT) Operating Modes to be Tested -- list the operating modes to be used during test. It is recommended the equipment be tested while operating in a typical operation mode. FCC testing of personal computers and/or peripherals requires that a simple program generate a complete line of upper case H's. Provide a general description of all software, firmware, and PLD algorithms used in the equipment. List all code modules as described above, with the revision level used during testing. Consult with your TÜV Product Service Representative if additional assistance is required.

1. Radiated emissions - transmitter - 3 RF channels, 5 channel bandwidths

Requirements per TIA/EIA 603-C-2004 and Industry Canada RSS-193 procedures [absolute power level of -13 dBm and verified using antenna-generator substitution method]

Expedience mode, 14.29% transmitter duty cycle, 16 QAM

Configuration 1a :: 6.0 MHz channel bandwidth: RF freq = 2499 MHz

Configuration 2a :: 5.5 MHz channel bandwidth: RF freq = 2593 MHz

Configuration 3a :: 5.0 MHz channel bandwidth: RF freq = 2687 MHz

WiMax mode, 49.37% transmitter duty cycle, 16 QAM 3/4 rate coding

Configuration 1b :: 5.0 MHz channel bandwidth: RF Freq = 2499 MHz

Configuration 2b :: 10 MHz channel bandwidth: RF freq = 2593 MHz

Configuration 3b :: 10 MHz channel bandwidth: RF freq = 2687 MHz

Radiated emissions to be measured from 30 MHz to 27 GHz for each configuration.

2. Radiated emissions - receiver - 3 RF channels, 5 channel bandwidths

Requirements per FCC part 15B and Industry Canada RSS-Gen Issue 1, September, 2005 section 6 Table 1

Expedience mode

Configuration 4a :: 6.0 MHz channel bandwidth: RF freq = 2499 MHz

Configuration 5a :: 5.5 MHz channel bandwidth: RF freq = 2593 MHz

Configuration 6a :: 5.0 MHz channel bandwidth: RF freq = 2687 MHz

WiMax mode

Configuration 4b :: 5.0 MHz channel bandwidth: RF freq = 2499 MHz

Configuration 5b :: 10 MHz channel bandwidth: RF freq = 2593 MHz

Configuration 6b :: 10 MHz channel bandwidth: RF freq = 2687 MHz

Radiated emissions to be measured from 30 MHz to 14 GHz for each configuration.

3. Transmitter and Receiver AC Power Lines Conducted Emissions Limits.

Requirements per FCC part 15B and Industry Canada RSS-Gen Issue 1, September, 2005 section 7.2.2

Expedience mode

Configuration 7a :: 6.0 MHz channel bandwidth: RF freq = 2499 MHz, transmit 14.29% duty cycle

WiMax mode

Configuration 7b :: 5.0 MHz channel bandwidth: RF freq = 2499 MHz, transmit 49.37% duty cycle



EMC Test Plan and Constructional Data Form

America

Equipment Under Test (EUT) System Components -- List and describe all components which are part of the EUT. For FCC & Taiwan testing a minimum configuration is required. (ie. Mouse, Printer, Monitor, External Disk Drive, Motherboard, etc)

Description	Model #	Serial #	FCC ID #
Residential Subscribe Unit (RSU)	RDMi-25100	0092-0300-7180070	FCC: PHX-RDM25100 IC: 109AM-RDM25100
RDU Power Supply NN# 420-0060-0010	OTE-17-13	1207HB	N/A
Ethernet Cable NN# 597-6010-0001	N/A	N/A	N/A



EMC Test Plan and Constructional Data Form

America

Support Equipment -- List and describe all support equipment which is not part of the EUT. (i.e. peripherals, simulators, etc)
This information is required for FCC & Taiwan testing.

<i>Description</i>	<i>Model #</i>	<i>Serial #</i>	<i>FCC ID #</i>
Dell laptop computer	Precision M65	CRFK3B1	N/A
D-link Switch	DSS-5+	DR8615B009993	N/A
Belkin Mouse	F8E814-OPT	057002030	N/A
Lexar Media USB memory stick reader	Part # : RW012 Rev. B	N/A	N/A

Oscillator Frequencies

<i>Frequency</i>	<i>Derived Frequency</i>	<i>Component # / Location</i>	<i>Description of Use</i>
Expedience 40 MHz 20 MHz 2.5 MHz 86.25 MHz 3.332 - 3.58666 GHz	N Y Y Y N	Y501 U500 U221 / Logic U210 / Logic U500 / Synthesizer	TCXO for main stability main clock data clocks uP core clock Main RF frequency source (VCO)
Expedience 5.8333333 / 23.3333333 / 35 / 140 MHz	Y	U210 / Logic	NN Custom ASIC processing clocks (5.0 MHz channel)
Expedience 6.333333 / 25.3333333 / 38 / 152 MHz	Y	U210 / Logic	NN Custom ASIC processing clocks (5.5 MHz channel)
Expedience 7 / 28 / 42 / 168 MHz	Y	U210 / Logic	NN Custom ASIC processing clocks (6 MHz channel)
WiMax 1.99 MHz 40 MHz 100 MHz 200 MHz	N Y Y Y	U105 Y901 U601 U601	1.2V switcher TCXO for main stability Core clock Data clock
Shared 1.45 MHz 3.25 MHz 25 MHz	N N N	U5 / 4.2 Vdc Power Supply U1 / 7 Vdc Power Supply Y802/U804	Switcher Switcher Ethernet clock



America

EMC Test Plan and Constructional Data Form

Power Supply			
<i>Manufacturer</i>	<i>Model #</i>	<i>Serial #</i>	<i>Type</i>
Operating Tech	OTE-17-13	1207HB	<input checked="" type="checkbox"/> Switched-mode: (Frequency) <u>53.9 kHz</u> <input type="checkbox"/> Linear <input type="checkbox"/> Other: _____
			<input type="checkbox"/> Switched-mode: (Frequency) _____ <input type="checkbox"/> Linear <input type="checkbox"/> Other: _____

Power Line Filters		
<i>Manufacturer</i>	<i>Model #</i>	<i>Location in EUT</i>
N/A		



EMC Test Plan and Constructional Data Form

Critical EMI Components (Capacitors, ferrites, etc.)				
<i>Description</i>	<i>Manufacturer</i>	<i>Part # or Value</i>	<i>Qty</i>	<i>Component # / Location</i>
N/A				

EMC Critical Detail -- Describe other EMC Design details used to reduce high frequency noise.

N/A

(PLEASE INSERT "ELECTRONIC SIGNATURE" BELOW IF POSSIBLE)

Authorization Signatures (Signature Required for Certifications checked on pg 1)

/s/ Tim Blom

06/07/2007

Customer authorization to perform tests according to this test plan.

Date

Test Plan/CDF Prepared By (please print)

Date



EMC Block Diagram Form

System Configuration Block Diagram -- Provide a line drawing identifying the EUT, simulators, support equipment, I/O cables, power cables, and any other pertinent components to be used during testing. Use a dashed line to separate the equipment in the testing field versus equipment outside testing field.

** Part 15 test setup for radiated emissions compliance (DoC). **
Test setup per ANSI C63.4-2003

** Parts 2 and 27 test setup for BRS and EBS service rules **
Test setup per TIA-603-C (2004)

Authorization Signatures

/s/ Tim Blom

06/07/2007

Customer authorization to perform tests
according to this test plan.

Date

Test Plan/CDF Prepared By (please print)

Date

Appendix C

Measurement Protocol





MEASUREMENT PROTOCOL

Environmental conditions in the lab, (TUV)

Temperature: 23 - 25° C
Relative Humidity: 55 - 69 %
Atmospheric pressure: 98.0 - 99.0 kPa

Test Methodology

Emission testing is performed according to the procedures in ANSI C63.4-2003.

Measurement Uncertainty

The test system for conducted emissions is defined as the LISN, tuned receiver or spectrum analyzer, and coaxial cable. The test system has a measurement uncertainty of ± 1.8 dB. The test system for radiated emissions is defined as the antenna, the pre-amplifier, the spectrum analyzer and the coaxial cable. The test system has a measurement uncertainty of ± 4.8 dB. The equipment comprising the test systems is calibrated on an annual basis.

Justification

The Equipment Under Test (EUT) is configured in a typical user arrangement in accordance with the manufacturer's instructions. A cable is connected to each available port and either terminated with a peripheral into its characteristic impedance or left unterminated. When appropriate, the cables are manually manipulated with respect to each other to obtain maximum emissions from the unit.

Radiated Emissions

The final level, in dB μ V/m, equals the reading from the spectrum analyzer (Level dB μ V), adding the antenna correction factor and cable loss factor (Factor dB) to it, and subtracting the preamp gain (and duty cycle correction factor, if applicable). This result then has the limit subtracted from it to provide the Delta, which gives the tabular data as shown in the data sheets in Attachment A.

Example:

FREQ (MHz)	LEVEL (dB μ V)	CABLE/ANT/PREAMP (dB)	FINAL (dB)	FINAL (dB μ V/m)	POL/HGT/AZ (m) (deg)	DELTA1
60.80	42.5Qp +	1.2 + 10.9 - 25.5 =	29.1		V 1.0 0.0	-10.9

Substitution Method

Per TIA/EIA 603-C-2004, a radiated emission scan was also made, at TUV America's Wild River Lab Large Test Site, with the EUT's antenna replaced with a termination to demonstrate case radiation compliance to the -13 dBm requirement. Radiated emissions from the EUT are measured in the frequency range of 30 to 14000 MHz using a spectrum analyzer and appropriate broadband linearly polarized antennas. Table top equipment is placed on a 1.0 X 1.5 meter non-conducting table 80 centimeters above the ground plane. Floor standing equipment is placed directly on the turntable/ground plane. Interface cables that are closer than 40 centimeters to the ground plane are bundled in the center in a serpentine fashion so they are at least 40 centimeters from the ground plane. Cables to simulators/testers (if used in this test) are routed through the center of the table and to a screen room located outside the test area. The antenna is positioned 3 meters horizontally from the EUT. To locate maximum emissions from the test sample the antenna is varied in height from 1 to 4 meters, measurement scans are made with both horizontal and vertical antenna polarizations and the EUT are rotated 360 degrees. The field strength levels were measured per ANSI C63.4. The EUT is then replaced with a tuned dipole antenna (below 1 GHz) or horn antenna (above 1 GHz). The substitute antenna was placed in the same polarization as the test antenna. A signal generator was used to generate a signal level that matched the highest level measured from the EUT. The signal generator level minus the cable loss from the signal generator to the substitute antenna plus the substitute antenna gain equals the spurious power level.

Test Equipment

All measurement instrumentation is traceable to the National Institute of Standards and Technology and is calibrated according to internal procedure.