Report Number: **B60620B1**FCC Part 15 Subpart B and FCC Section 15.249 Test Report

900 MHz RF Module Model: R210

#### FCC PART 15, SUBPART B and C TEST REPORT

for

900 MHz RF MODULE MODEL: R210

Prepared for

RF DIGITAL CORPORATION 2029 VERDUGO BOLUEVARD, SUITE 750 MONTROSE, CALIFORNIA 91020

Prepared by:

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**DATE: MARCH 8, 2007** 

	REPORT		APPENDICES			TOTAL	
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#### GENERAL REPORT SUMMARY

This electromagnetic emission test report is generated by Compatible Electronics Inc., which is an independent testing and consulting firm. The test report is based on testing performed by Compatible Electronics personnel according to the measurement procedures described in the test specifications given below and in the "Test Procedures" section of this report.

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced without the written permission of Compatible Electronics, unless done so in full.

This report must not be used to claim product endorsement by NVLAP, NIST or any other agency of the U.S. Government.

Device Tested: 900 MHz RF Module

Model: R210 S/N: N/A

Product Description: See Expository Statement

Modifications: No modifications were made during the testing.

Manufacturer: RF Digital Corporation

2029 Verdugo Boulevard, Suite 750

Montrose, California 91020

Test Dates: June 15 and 16, 2006

Test Specifications: EMI requirements

CFR Title 47, Part 15 Subpart B; and Subpart C, Sections 15.205, 15.209 and 15.249

Test Procedure: ANSI C63.4

Test Deviations: The test procedure was not deviated from during the testing.

#### SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Conducted RF Emissions, 150 kHz – 30 MHz	Complies with the <b>Class B</b> limits of CFR Title 47, Part 15, Subpart B; and Subpart C, section 15.207  Highest Reading in Relation to Spec Limit: 41.40 dBµV @ 1.577 MHz (*U <sub>c</sub> = 0.66 dB)
2	Radiated RF Emissions, 10 kHz – 9.3 GHz	Complies with the <b>Class B</b> limits of CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.249.  Highest Reading in Relation to Spec Limit: 45.14 dBuV @ 928.00 MHz (*U <sub>r</sub> = 1.91 dB)

Model: R210

#### 1. PURPOSE

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on the 900 MHz RF Module, Model: R210 (EUT). The EMI measurements were performed according to the measurement procedure described in ANSI C63.4. The tests were performed in order to determine whether the electromagnetic emissions from the equipment under test, referred to as EUT hereafter, are within the **Class B** specification limits defined by CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.249.

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#### 2. ADMINISTRATIVE DATA

#### 2.1 Location of Testing

The EMI tests described herein were performed at the test facility of Compatible Electronics, 114 Olinda Drive, Brea, California 92823.

#### 2.2 Traceability Statement

The calibration certificates of all test equipment used during the test are on file at the location of the test. The calibration is traceable to the National Institute of Standards and Technology (NIST).

#### 2.3 Cognizant Personnel

**RF** Digital Corporation

Armen Kazanchlan President

Compatible Electronics, Inc.

James Ross Test Engineer
Benigno Chavez Test Engineer
Falguni Patel Test Engineer
Kyle Fujimoto Test Engineer

#### 2.4 Date Test Sample was Received

The test sample was received prior to the initial test date of June 15, 2006.

### 2.5 Disposition of the Test Sample

The sample was returned to RF Digital Corporation on July 11, 2006.

#### 2.6 Abbreviations and Acronyms

RF

The following abbreviations and acronyms may be used in this document.

111	radio i requency
EMI	Electromagnetic Interference
EUT	Equipment Under Test
P/N	Part Number
S/N	Serial Number
HP	Hewlett Packard
ITE	Information Technology Equipment
CML	Corrected Meter Limit
LISN	Line Impedance Stabilization Network
TX	Transmit
RX	Receive
PCB	Printed Circuit Board
AC	Alternating Current
N/A	Not Applicable

Radio Frequency



**3.** 

APPLICABLE DOCUMENTS

The following documents are referenced or used in the preparation of this EMI Test Report.

SPEC	TITLE
CFR Title 47, Part 15	FCC Rules – Radio frequency devices (including digital devices)
ANSI C63.4 2003	Methods of measurement of radio-noise emissions from low-voltage electrical and electronic equipment in the range of 9 kHz to 40 GHz



#### 4. DESCRIPTION OF TEST CONFIGURATION

# 4.1 Description Of Test Configuration - EMI

Setup and operation of the equipment under test.

Specifics of the EUT and Peripherals Tested

The 900 MHz RF Module, Model: R210 (EUT) was connected to a 1/8 inch power connector via a ribbon cable. The 1/8 power connector was also connected to an AC Adapter. The EUT was tested while it was continuously transmitting and in three orthogonal axis. The EUT has an antenna that is soldered to its PCB.

The final radiated as well as the conducted data was taken in the mode above. Please see Appendix E for the data sheets.

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900 MHz, RF Module

Model: R210

# **4.1.1** Cable Construction and Termination

<u>Cable 1</u> This is a 1-meter unshielded ribbon cable connecting the male 1/8 inch power connector to the EUT. The cable is hard wired at each end.

<u>Cable 2</u>
This is a 2-meter unshielded cable connecting the AC Adapter to the male 1/8 inch power connector. The cable is hard wired into the AC Adapter and has a female 1/8 inch power connector at the other end.

# 5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT

# 5.1 EUT and Accessory List

EQUIPMENT	MANUFACTURER	MODEL	SERIAL NUMBER	FCC ID
2.4 GHz RF MODULE (EUT)	RF DIGITAL CORPORATION	R210	N/A	UYIRFD10
1/8 INCH POWER CONNECTOR	N/A	N/A	N/A	N/A
AC ADAPTER	JAMECO	D6C05F5	N/A	N/A

# 5.2 EMI Test Equipment

EQUIPMENT TYPE	MANU- FACTURER	MODEL NUMBER	SERIAL NUMBER	CAL. DATE	CAL. CYCLE
Radiate Emissions Data Capture Program	Compatible Electronics	2.0	N/A	N/A	N/A
Spectrum Analyzer – Main Section	Hewlett Packard	8566B	3638A08784	May 26, 2006	1 Year
Spectrum Analyzer – Display Section	Hewlett Packard	85662A	3701A22279	May 26, 2006	1 Year
Quasi-Peak Adapter	Hewlett Packard	85650A	2430A00424	May 26, 2006	1 Year
EMI Receiver	Rohde & Schwarz	ESIB40	100172	October 28, 2004	2 Year
Preamplifier	Com-Power	PA-102	1017	January 19, 2006	1 Year
Microwave Preamplifier	Com-Power	PA-122	181917	January 20, 2006	1 Year
Loop Antenna	Com-Power	AL-130	17070	July 28, 2005	1 Year
Biconical Antenna	Com-Power	AB-900	15227	March 9, 2006	1 Year
Log Periodic Antenna	Com-Power	AL-100	16060	August 22, 2005	1 Year
Horn Antenna	Com-Power	AH-118	10067	July 27, 2004	2 Year
Antenna Mast	Com-Power	AM-100	N/A	N/A	N/A
Antenna Mast	EMCO	2090	9609-1176	N/A	N/A
Turntable	Com Power	TT-100	N/A	N/A	N/A
Computer	Hewlett Packard	4530	US91912319	N/A	N/A
Monitor	Hewlett Packard	D5258A	TW74500641	N/A	N/A
LISN	Com Power	LI-215	12078	September 1, 2005	1 Year
LISN	Com Power	LI-215	12082	September 1, 2005	1 Year
Transient Limiter	Seaward	252A910	1	August 17, 2005	1 Year

# 6. TEST SITE DESCRIPTION

# 6.1 Test Facility Description

Please refer to section 2.1 and 7.1 of this report for EMI test location.

# 6.2 EUT Mounting, Bonding and Grounding

The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 0.8 meters above the ground plane.

The EUT was not grounded.

#### 7. TEST PROCEDURES

The following sections describe the test methods and the specifications for the tests. Test results are also included in this section.

#### 7.1 Conducted Emissions Test

The spectrum analyzer was used as a measuring meter. The data was collected with the spectrum analyzer in the peak detect mode with the "Max Hold" feature activated. The quasi-peak was used only where indicated in the data sheets. A transient limiter was used for the protection of the spectrum analyzer input stage, and the offset was adjusted accordingly to read the actual data measured. The LISN output was measured using the spectrum analyzer. The output of the second LISN was terminated by a 50 ohm termination. The effective measurement bandwidth used for this test was 9 kHz.

Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The EUT was powered through the LISN, which was bonded to the ground plane. The LISN power was filtered and the filter was bonded to the ground plane. The EUT was set up with the minimum distances from any conductive surfaces as specified in ANSI C63.4. The excess power cord was wrapped in a figure eight pattern to form a bundle not exceeding 0.4 meters in length.

The conducted emissions from the EUT were maximized for operating mode as well as cable placement. The final data was collected under program control by the Compatible Electronics conducted emissions software in several overlapping sweeps by running the spectrum analyzer at a minimum scan rate of 10 seconds per octave. The final qualification data is located in Appendix E.

#### **Test Results:**

The EUT complies with the **Class B** specification limits defined in CFR Title 47, Part 15, Subpart B and the limits defined in CFR Title 47, Part 15, Subpart C, Section 15.207.

# 7.2 Radiated Emissions (Spurious and Harmonics) Test

The spectrum analyzer and EMI Receiver were used as a measuring meter along with the quasi-peak adapter. Amplifiers were used to increase the sensitivity of the instrument. The Com-Power Active Loop Antenna Model: AL-130 was used for frequencies from 9 kHz to 30 MHz, the Com-Power Preamplifier Model: PA-102 was used for frequencies from 30 MHz to 1 GHz, and the Com-Power Microwave Preamplifier Models: PA-122 and PA-840 were used for frequencies from 1 GHz to 9.3 GHz. The spectrum analyzer and EMI Receiver were used in the peak detect mode with the "Max Hold" feature activated. In this mode, the spectrum analyzer or EMI Receiver records the highest measured reading over all the sweeps.

The quasi-peak adapter was used only for those readings which are marked accordingly on the data sheets.

The frequencies above 1 GHz were averaged manually by narrowing the video filter down to 10 Hz and putting the sweep time on AUTO on the EMI Receiver or spectrum analyzer to keep the amplitude reading calibrated.

The measurement bandwidths and transducers used for the radiated emissions test were:

FREQUENCY RANGE	EFFECTIVE MEASUREMENT BANDWIDTH	TRANSDUCER	
9 kHz to 150 kHz	200 Hz	Active Loop Antenna	
150 kHz to 30 MHz	9 kHz	Active Loop Antenna	
30 MHz to 300 MHz	120 kHz	Biconical Antenna	
300 MHz to 1 GHz	120 kHz	Log Periodic Antenna	
1 GHz to 9.3 GHz	1 MHz	Horn Antenna	

The open field test site of Compatible Electronics, Inc. was used for radiated emission testing. This test site is set up according to ANSI C63.4. Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The turntable supporting the EUT is remote controlled using a motor. The turntable permits EUT rotation of 360 degrees in order to maximize emissions. Also, the antenna mast allows height variation of the antenna from 1 meter to 4 meters. Data was collected in the worst case (highest emission) configuration of the EUT. At each reading, the EUT was rotated 360 degrees and the antenna height was varied from 1 to 4 meters (for E field radiated field strength). The gunsight method was used when measuring with the horn antenna in order to ensure accurate results. The loop antenna was also rotated in the horizontal and vertical axis in order to ensure accurate results.

# 7.3 Radiated Emissions (Spurious and Harmonics) Test (continued)

The presence of ambient signals was verified by turning the EUT off. In case an ambient signal was detected, the measurement bandwidth was reduced temporarily and verification was made that an additional adjacent peak did not exist. This ensures that the ambient signal does not hide any emissions from the EUT. The EUT was tested at a 3 meter test distance to obtain final test data. The final qualification data sheets are located in Appendix E.

#### **Test Results:**

The EUT complies with the **Class B** specification limits defined in CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.249.

# 8. CONCLUSIONS

The 900 MHz RF Module, Model: R210 (EUT) meets all of the **Class B** specification limits defined in CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.249.





# **APPENDIX A**

# LABORATORY RECOGNITIONS

# LABORATORY RECOGNITIONS

#### Compatible Electronics has the following agency accreditations:

National Voluntary Laboratory Accreditation Program - Lab Code: 200528-0

Voluntary Control Council for Interference - Registration Numbers: R-983, C-1026, R-984 and C-1027

Bureau of Standards and Metrology Inspection - Reference Number: SL2-IN-E-1031

Conformity Assessment Body for the EMC Directive Under the US/EU MRA Appointed by NIST

#### Compatible Electronics is recognized or on file with the following agencies:

Federal Communications Commission

**Industry Canada** 

Radio-Frequency Technologies (Competent Body)



# APPENDIX B

# **MODIFICATIONS TO THE EUT**

# MODIFICATIONS TO THE EUT

The modifications listed below were made to the EUT to pass FCC 15.249 or FCC Class B specifications.

All the rework described below was implemented during the test in a method that could be reproduced in all the units by the manufacturer.

No modifications were made to the EUT during the testing.





# **APPENDIX C**

# ADDITIONAL MODELS COVERED UNDER THIS REPORT



# ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

900 MHz RF Module Model: R210

Model: R210 S/N: N/A

There are no additional models covered under this report.



Report Number: B60620B1

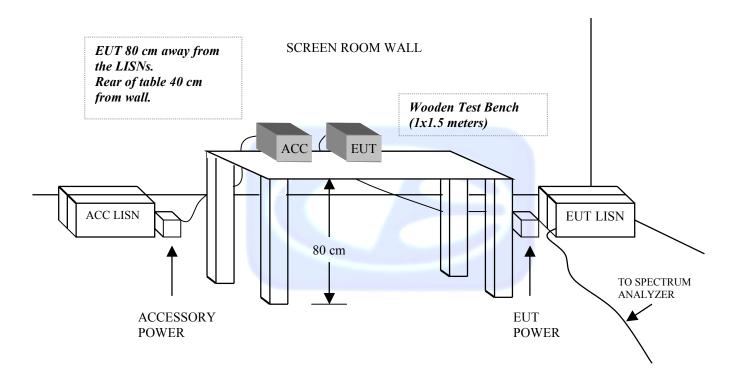
900 MHz RF Module

Model: R210

# APPENDIX D

DIAGRAMS, CHARTS, AND PHOTOS

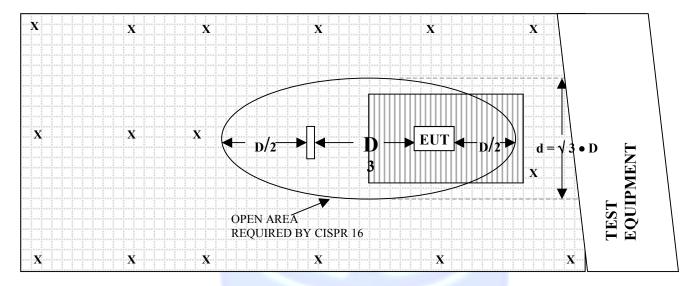
# FIGURE 1: CONDUCTED EMISSIONS TEST SETUP





# FIGURE 2: PLOT MAP AND LAYOUT OF 3 METER RADIATED TEST SITE

# **OPEN LAND > 15 METERS**



# **OPEN LAND > 15 METERS**

X = GROUND RODS

= GROUND SCREEN

D = TEST DISTANCE (meters)



# COM-POWER AL-130

# **LOOP ANTENNA**

S/N: 17070

CALIBRATION DATE: JULY 28, 2005

EDECHENCY	NA CHETYC	EL ECEDIC
FREQUENCY	MAGNETIC	ELECTRIC
(MHz)	(dB/m)	(dB/m)
0.009	-43.3	8.16
0.01	-44.1	7.41
0.02	-44.0	7.54
0.05	-42.7	8.8
0.07	-42.0	9.53
0.1	-41.7	9.84
0.2	-43.6	7.87
0.3	-40.9	10.6
0.5	-41.0	10.7
0.7	-40.5	10.97
1	-40.5	11.04
2	-40.5	11.03
3	-40.6	10.9
4	-42.9	8.63
5	-44.3	7.23
10	-53.7	-2.7
15	-62.6	-11.14
20	-58.9	-7.3
25	-51.5	-11.6
30	-63.1	8.9



# **COM-POWER AB-900**

# **BICONICAL ANTENNA**

S/N: 15227

CALIBRATION DATE: MARCH 9, 2006

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	11.12	120	13.50
35	10.17	125	12.63
40	9.75	140	12.20
45	12.22	150	11.85
50	13.28	160	13.25
60	11.36	175	15.74
70	7.95	180	16.23
80	5.95	200	16.79
90	7.62	250	16.47
100	10.89	300	17.49



# **COM-POWER AL-100**

# LOG PERIODIC ANTENNA

S/N: 16060

CALIBRATION DATE: AUGUST 22, 2005

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
300	12.73	700	19.72
400	13.38	800	20.49
500	15.12	900	21.31
600	16.27	1000	24.25



**COM-POWER PA-102** 

# **PREAMPLIFIER**

S/N: 1017

CALIBRATION DATE: JANUARY 19, 2006

FREQUENCY	FACTOR	FREQUENCY	FACTOR
(MHz)	(dB)	(MHz)	(dB)
30	38.3	300	38.4
40	38.4	350	38.4
50	38.3	400	38.0
60	38.4	450	38.1
70	38.5	500	37.5
80	38.4	550	38.0
90	38.4	600	38.0
100	38.4	650	37.6
125	38.1	700	37.7
150	38.5	750	37.7
175	38.4	800	37.0
200	38.3	850	37.2
225	38.3	900	36.6
250	38.1	950	36.3
275	38.3	1000	36.3

# **COM POWER AH-118**

# HORN ANTENNA

S/N: 10067

CALIBRATION DATE: JULY 27, 2004

FREQUENCY	FACTOR	FREQUENCY	FACTOR
(GHz)	(dB)	(GHz)	(dB)
1.0	25.0	10.0	37.8
1.5	27.9	10.5	39.4
2.0	31.5	11.0	39.4
2.5	31.1	11.5	40.6
3.0	30.6	12.0	40.8
3.5	30.5	12.5	40.5
4.0	30.6	13.0	41.2
4.5	31.4	13.5	42.0
5.0	33.7	14.0	43.1
5.5	33.8	14.5	43.4
6.0	34.7	15.0	39.2
6.5	35.0	15.5	38.8
7.0	35.9	16.0	40.1
7.5	38.1	16.5	40.2
8.0	38.2	17.0	43.4
8.5	37.7	17.5	46.6
9.0	37.7	18.0	45.8
9.5	38.4		



# **COM-POWER PA-122**

# **PREAMPLIFIER**

S/N: 181917

CALIBRATION DATE: JANUARY 20, 2006

FREQUENCY	FACTOR	FREQUENCY	FACTOR
(GHz)	(dB)	(GHz)	(dB)
1.0	34.697	10.0	36.558
1.5	33.817	10.5	35.048
2.0	33.587	11.0	33.258
2.5	33.804	11.5	32.960
3.0	33.850	12.0	33.312
3.5	33.943	12.5	33.836
4.0	34.399	13.0	34.178
4.5	34.847	13.5	34.197
5.0	35.172	14.0	33.769
5.5	35.383	14.5	33.392
6.0	35.539	15.0	33.387
6.5	34.802	15.5	34.038
7.0	33.793	16.0	34.884
7.5	33.511	16.5	35.740
8.0	33.910	17.0	35.341
8.5	34.907	17.5	34.729
9.0	36.036	18.0	33.760
9.5	36.661		



### **FRONT VIEW**

RF DIGITAL CORPORATION
900 MHz RF MODULE
MODEL: R210
FCC SUBPART B AND C – RADIATED EMISSIONS

# PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



#### **REAR VIEW**

RF DIGITAL CORPORATION
900 MHz RF MODULE
MODEL: R210
FCC SUBPART B AND C – RADIATED EMISSIONS

# PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS





#### **FRONT VIEW**

RF DIGITAL CORPORATION 900 MHz RF MODULE MODEL: R210 FCC SUBPART B AND C - CONDUCTED EMISSIONS

# PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



#### **REAR VIEW**

RF DIGITAL CORPORATION
900 MHz RF MODULE
MODEL: R210
FCC SUBPART B AND C – CONDUCTED EMISSIONS

# PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



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900 MHz RF Module

Model: R210

**APPENDIX E** 

**DATA SHEETS** 



Report Number: **B60620B1 FCC Part 15 Subpart B** and **FCC Section 15.249** Test Report

900 MHz RF Module

Model: R210

## **RADIATED EMISSIONS**

**DATA SHEETS** 

RF Digital Corporation 900 MHz RF Module

Model: R210 Tested By: Benigno Chavez

Freq.	Level				Peak / QP /	Ant. Height	Table	
(MHz)	(dBuV)	Pol (v/h)	Limit	Margin	Avg	(m)	Angle (deg)	Comments
902.8	92.34	V	94	-1.66	QP	1.25	180	X-Axis
902.8	91.56	Н	94	-2.44	QP	1.25	180	X-Axis
902.8	90.00	V	94	-4	QP	1.25	180	Y-Axis
902.8	90.99	Н	94	-3.01	QP	1.25	180	Y-Axis
902.8	91.89	V	94	-2.11	QP	1.25	180	Z-Axis
902.8	88.17	Н	94	-5.83	QP	1.25	180	Z-Axis

Date: 6/15/06

Lab: B

RF Digital Corporation 900 MHz RF Module

Model: R210 **X-Axis** 

Date: 6/15/06 Lab: B

					Peak /	Ant.	Table	
Freq.	Level				QP/	Height	Angle	
(MHz)	(dBuV)	Pol (v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
1805.6	47.43	Н	74	-26.57	Peak	1.06	180	
1805.6	47.43	Н	54	-6.57	Avg	1.06	180	
2708.4	51.55	Н	74	-22.45	Peak	1.27	180	
2708.4	41.49	Н	54	-12.51	Avg	1.27	180	
3611.2		Н	74	-74	Peak			No Emissions
3611.2		Н	54	-54	Avg			Detected
4514		Н	74	-74	Peak			No Emissions
4514		Н	54	-54	Avg			Detected
5416.8		Н	74	-74	Peak			No Emissions
5416.8		Н	54	-54	Avg			Detected
6319.8		Н	74	-74	Peak			No Emissions
6319.8		Н	54	-54	Avg			Detected
7000 4			-,		<u> </u>			
7222.4		Н	74	-74	Peak			No Emissions
7222.4		Н	54	-54	Avg			Detected
0405.0		11	74	74	Deels			No Englacione
8125.2		Н	74	-74	Peak			No Emissions
8125.2		Н	54	-54	Avg			Detected
9028		Н	74	-74	Peak			No Emissions
9028		Н	54	-74 -54				
9020		П	34	-04	Avg			Detected

RF Digital Corporation 900 MHz RF Module

Model: R210 **X-Axis** 

Date: 6/15/06 Lab: B

Freq. (MHz)         Level (dBuV)         Pol (v/h)         Limit         Margin         QP / Avg         Height (m)         Angle (deg)         Comments           1805.6         48.00         V         74         -26         Peak         1.04         180           2708.4         46.92         V         74         -27.08         Peak         1.39         180           2708.4         46.92         V         54         -7.08         Avg         1.39         180           3611.2         V         74         -74         Peak         No Emissions           3611.2         V         54         -54         Avg         Detected           4514         V         74         -74         Peak         No Emissions           5416.8         V         74         -74         Peak         No Emissions           5416.8         V         54         -54         Avg         Detected           6319.8         V         74         -74         Peak         No Emissions           6319.8         V         54         -54         Avg         Detected           7222.4         V         54         -54         Avg         No Emissions						Peak /	Ant.	Table	
1805.6         48.00         V         74         -26         Peak         1.04         180           1805.6         48.00         V         54         -6         Avg         1.04         180           2708.4         46.92         V         74         -27.08         Peak         1.39         180           2708.4         46.92         V         54         -7.08         Avg         1.39         180           3611.2         V         74         -74         Peak         No Emissions           3611.2         V         54         -54         Avg         Detected           4514         V         74         -74         Peak         No Emissions           5416.8         V         74         -74         Peak         No Emissions           5416.8         V         54         -54         Avg         Detected           6319.8         V         74         -74         Peak         No Emissions           6319.8         V         74         -74         Peak         No Emissions           7222.4         V         74         -74         Peak         No Emissions           8125.2         V <th>Freq.</th> <th>Level</th> <th></th> <th></th> <th></th> <th>QP/</th> <th>Height</th> <th>Angle</th> <th></th>	Freq.	Level				QP/	Height	Angle	
1805.6       48.00       V       54       -6       Avg       1.04       180         2708.4       46.92       V       74       -27.08       Peak       1.39       180         3611.2       V       74       -74       Peak       No Emissions         3611.2       V       54       -54       Avg       Detected         4514       V       74       -74       Peak       No Emissions         4514       V       54       -54       Avg       Detected         5416.8       V       74       -74       Peak       No Emissions         5416.8       V       54       -54       Avg       Detected         6319.8       V       74       -74       Peak       No Emissions         6319.8       V       74       -74       Peak       No Emissions         7222.4       V       74       -74       Peak       No Emissions         7222.4       V       74       -74       Peak       No Emissions         8125.2       V       74       -74       Peak       No Emissions	(MHz)	(dBuV)	Pol (v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
2708.4       46.92       V       74       -27.08       Peak       1.39       180         2708.4       46.92       V       54       -7.08       Avg       1.39       180         3611.2       V       74       -74       Peak       No Emissions         3611.2       V       54       -54       Avg       Detected         4514       V       74       -74       Peak       No Emissions         4514       V       54       -54       Avg       Detected         5416.8       V       74       -74       Peak       No Emissions         5416.8       V       54       -54       Avg       Detected         6319.8       V       74       -74       Peak       No Emissions         6319.8       V       54       -54       Avg       Detected         7222.4       V       74       -74       Peak       No Emissions         7222.4       V       54       -54       Avg       Detected         8125.2       V       74       -74       Peak       No Emissions	1805.6	48.00	V	74	-26	Peak	1.04	180	
2708.4         46.92         V         54         -7.08         Avg         1.39         180           3611.2         V         74         -74         Peak         No Emissions           3611.2         V         54         -54         Avg         Detected           4514         V         74         -74         Peak         No Emissions           4514         V         54         -54         Avg         Detected           5416.8         V         74         -74         Peak         No Emissions           5416.8         V         54         -54         Avg         Detected           6319.8         V         74         -74         Peak         No Emissions           6319.8         V         54         -54         Avg         Detected           7222.4         V         74         -74         Peak         No Emissions           8125.2         V         74         -74         Peak         No Emissions	1805.6	48.00	V	54	-6	Avg	1.04	180	
2708.4         46.92         V         54         -7.08         Avg         1.39         180           3611.2         V         74         -74         Peak         No Emissions           3611.2         V         54         -54         Avg         Detected           4514         V         74         -74         Peak         No Emissions           4514         V         54         -54         Avg         Detected           5416.8         V         74         -74         Peak         No Emissions           5416.8         V         54         -54         Avg         Detected           6319.8         V         74         -74         Peak         No Emissions           6319.8         V         54         -54         Avg         Detected           7222.4         V         74         -74         Peak         No Emissions           8125.2         V         74         -74         Peak         No Emissions									
3611.2         V         74         -74         Peak         No Emissions           3611.2         V         54         -54         Avg         Detected           4514         V         74         -74         Peak         No Emissions           4514         V         54         -54         Avg         Detected           5416.8         V         74         -74         Peak         No Emissions           5416.8         V         54         -54         Avg         Detected           6319.8         V         74         -74         Peak         No Emissions           6319.8         V         54         -54         Avg         Detected           7222.4         V         74         -74         Peak         No Emissions           7222.4         V         54         -54         Avg         Detected           8125.2         V         74         -74         Peak         No Emissions	2708.4	46.92	V	74	-27.08	Peak	1.39	180	
3611.2         V         54         -54         Avg         Detected           4514         V         74         -74         Peak         No Emissions           4514         V         54         -54         Avg         Detected           5416.8         V         74         -74         Peak         No Emissions           5416.8         V         54         -54         Avg         Detected           6319.8         V         74         -74         Peak         No Emissions           6319.8         V         54         -54         Avg         Detected           7222.4         V         74         -74         Peak         No Emissions           7222.4         V         54         -54         Avg         Detected           8125.2         V         74         -74         Peak         No Emissions	2708.4	46.92	V	54	-7.08	Avg	1.39	180	
3611.2         V         54         -54         Avg         Detected           4514         V         74         -74         Peak         No Emissions           4514         V         54         -54         Avg         Detected           5416.8         V         74         -74         Peak         No Emissions           5416.8         V         54         -54         Avg         Detected           6319.8         V         74         -74         Peak         No Emissions           6319.8         V         54         -54         Avg         Detected           7222.4         V         74         -74         Peak         No Emissions           7222.4         V         54         -54         Avg         Detected           8125.2         V         74         -74         Peak         No Emissions									
4514       V       74       -74       Peak       No Emissions         4514       V       54       -54       Avg       Detected         5416.8       V       74       -74       Peak       No Emissions         5416.8       V       54       -54       Avg       Detected         6319.8       V       74       -74       Peak       No Emissions         6319.8       V       54       -54       Avg       Detected         7222.4       V       74       -74       Peak       No Emissions         7222.4       V       54       -54       Avg       Detected         8125.2       V       74       -74       Peak       No Emissions	3611.2		V	74	-74	Peak			No Emissions
4514         V         54         -54         Avg         Detected           5416.8         V         74         -74         Peak         No Emissions           5416.8         V         54         -54         Avg         Detected           6319.8         V         74         -74         Peak         No Emissions           6319.8         V         54         -54         Avg         Detected           7222.4         V         74         -74         Peak         No Emissions           7222.4         V         54         -54         Avg         Detected           8125.2         V         74         -74         Peak         No Emissions	3611.2		V	54	-54	Avg			Detected
4514         V         54         -54         Avg         Detected           5416.8         V         74         -74         Peak         No Emissions           5416.8         V         54         -54         Avg         Detected           6319.8         V         74         -74         Peak         No Emissions           6319.8         V         54         -54         Avg         Detected           7222.4         V         74         -74         Peak         No Emissions           7222.4         V         54         -54         Avg         Detected           8125.2         V         74         -74         Peak         No Emissions									
5416.8         V         74         -74         Peak         No Emissions           5416.8         V         54         -54         Avg         Detected           6319.8         V         74         -74         Peak         No Emissions           6319.8         V         54         -54         Avg         Detected           7222.4         V         74         -74         Peak         No Emissions           7222.4         V         54         -54         Avg         Detected           8125.2         V         74         -74         Peak         No Emissions	4514		V	74	-74	Peak			No Emissions
5416.8         V         54         -54         Avg         Detected           6319.8         V         74         -74         Peak         No Emissions           6319.8         V         54         -54         Avg         Detected           7222.4         V         74         -74         Peak         No Emissions           7222.4         V         54         -54         Avg         Detected           8125.2         V         74         -74         Peak         No Emissions	4514		V	54	-54	Avg			Detected
5416.8         V         54         -54         Avg         Detected           6319.8         V         74         -74         Peak         No Emissions           6319.8         V         54         -54         Avg         Detected           7222.4         V         74         -74         Peak         No Emissions           7222.4         V         54         -54         Avg         Detected           8125.2         V         74         -74         Peak         No Emissions									
6319.8         V         74         -74         Peak         No Emissions           6319.8         V         54         -54         Avg         Detected           7222.4         V         74         -74         Peak         No Emissions           7222.4         V         54         -54         Avg         Detected           8125.2         V         74         -74         Peak         No Emissions	5416.8			74	-74	Peak			No Emissions
6319.8         V         54         -54         Avg         Detected           7222.4         V         74         -74         Peak         No Emissions           7222.4         V         54         -54         Avg         Detected           8125.2         V         74         -74         Peak         No Emissions	5416.8		V	54	-54	Avg			Detected
6319.8         V         54         -54         Avg         Detected           7222.4         V         74         -74         Peak         No Emissions           7222.4         V         54         -54         Avg         Detected           8125.2         V         74         -74         Peak         No Emissions									
7222.4         V         74         -74         Peak         No Emissions           7222.4         V         54         -54         Avg         Detected           8125.2         V         74         -74         Peak         No Emissions	6319.8			74	-74	Peak			No Emissions
7222.4         V         54         -54         Avg         Detected           8125.2         V         74         -74         Peak         No Emissions	6319.8		V	54	-54	Avg			Detected
7222.4         V         54         -54         Avg         Detected           8125.2         V         74         -74         Peak         No Emissions									
8125.2 V 74 -74 Peak No Emissions	7222.4		V	74	-74	Peak			No Emissions
	7222.4		V	54	-54	Avg			Detected
8125.2 V 54 -54 Avg Detected			V	74	-74	Peak			No Emissions
	8125.2		V	54	-54	Avg			Detected
9028 V 74 -74 Peak No Emissions						Peak			No Emissions
9028 V 54 -54 Avg Detected	9028		V	54	-54	Avg			Detected

RF Digital Corporation 900 MHz RF Module

Model: R210

Y-Axis

Date: 6/15/06 Lab: B

_					Peak /	Ant.	Table	
Freq.	Level				QP /	Height	Angle	_
(MHz)		Pol (v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
1805.6	46.12	Н	74	-27.88	Peak	2.2	180	
1805.6	46.12	Н	54	-7.88	Avg	2.2	180	
2708.4	50.82	Н	74	-23.18	Peak	1.57	180	
2708.4	40.42	Н	54	-13.58	Avg	1.57	180	
3611.2		Н	74	-74	Peak			No Emissions
3611.2		Н	54	-54	Avg			Detected
4514		Н	74	-74	Peak			No Emissions
4514		Н	54	-54	Avg			Detected
5416.8		Н	74	-74	Peak			No Emissions
5416.8		Н	54	-54	Avg			Detected
6319.8		Н	74	-74	Peak			No Emissions
6319.8		Н	54	-54	Avg			Detected
7222.4		Н	74	-74	Peak			No Emissions
7222.4		Н	54	-54	Avg			Detected
8125.2		Н	74	-74	Peak			No Emissions
8125.2		Н	54	-54	Avg			Detected
9028		Н	74	-74	Peak			No Emissions
9028		Н	54	-54	Avg			Detected

RF Digital Corporation 900 MHz RF Module

Model: R210

Y-Axis

Date: 6/15/06 Lab: B

					Peak /	Ant.	Table	
Freq.	Level				QP/	Height	Angle	
(MHz)	(dBuV)	Pol (v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
1805.6	48.89	V	74	-25.11	Peak	1.03	180	
1805.6	38.53	V	54	-15.47	Avg	1.03	180	
2708.4	38.88	V	74	-35.12	Peak	1.56	180	
2708.4	38.88	V	54	-15.12	Avg	1.56	180	
3611.2		V	74	-74	Peak			No Emissions
3611.2		V	54	-54	Avg			Detected
4514		V	74	-74	Peak			No Emissions
4514		V	54	-54	Avg			Detected
5416.8		V	74	-74	Peak			No Emissions
5416.8		V	54	-54	Avg			Detected
0040.0		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	7.4	7.4	Darata			
6319.8		V	74	-74	Peak			No Emissions
6319.8		V	54	-54	Avg			Detected
7222.4		V	74	-74	Peak			No Emissions
7222.4		V		-74 -54				
1222.4		V	54	-04	Avg			Detected
8125.2		V	74	-74	Peak			No Emissions
8125.2		V	54	-54	Avg			Detected
0120.2		V	J-T	- <del></del>	7,19			Detected
9028		V	74	-74	Peak			No Emissions
9028		V	54	-54	Avg			Detected
		<u> </u>	<u> </u>	<u> </u>	9			2 3,33,33

RF Digital Corporation 900 MHz RF Module

Model: R210

Date: 6/15/06 Lab: B

					Peak /	Ant.	Table	
Freq.	Level				QP/	Height	Angle	
(MHz)	(dBuV)	Pol (v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
1805.6	47.41	Н	74	-26.59	Peak	1.85	180	
1805.6	47.41	Н	54	-6.59	Avg	1.85	180	
2708.4	50.38	Н	74	-23.62	Peak	1.97	225	
2708.4	50.38	Н	54	-3.62	Avg	1.97	225	
3611.2		Н	74	-74	Peak			No Emissions
3611.2		Н	54	-54	Avg			Detected
4514		Н	74	-74	Peak			No Emissions
4514		Н	54	-54	Avg			Detected
5416.8		Н	74	-74	Peak			No Emissions
5416.8		Н	54	-54	Avg			Detected
6319.8		Н	74	-74	Peak			No Emissions
6319.8		Н	54	-54	Avg			Detected
7222.4		Н	74	-74	Peak			No Emissions
7222.4		Н	54	-54	Avg			Detected
8125.2		Н	74	-74	Peak			No Emissions
8125.2		Н	54	-54	Avg			Detected
9028		Н	74	-74	Peak			No Emissions
9028		Н	54	-54	Avg			Detected

RF Digital Corporation 900 MHz RF Module Model: R210

Z-Axis

Date: 6/15/06 Lab: B

					Peak /	Ant.	Table	
Freq.	Level				QP/	Height	Angle	
(MHz)	(dBuV)	Pol (v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
1805.6	47.78	V	74	-26.22	Peak	1.27	180	
1805.6	47.78	V	54	-6.22	Avg	1.27	180	
2708.4	50.09	V	74	-23.91	Peak	2.67	180	
2708.4	50.09	V	54	-3.91	Avg	2.67	180	
3611.2		V	74	-74	Peak			No Emissions
3611.2		V	54	-54	Avg			Detected
4514		V	74	-74	Peak			No Emissions
4514		V	54	-54	Avg			Detected
5416.8		V	74	-74	Peak			No Emissions
5416.8		V	54	-54	Avg			Detected
6319.8		V	74	-74	Peak			No Emissions
6319.8		V	54	-54	Avg			Detected
7222.4		V	74	-74	Peak			No Emissions
7222.4		V	54	-54	Avg			Detected
8125.2		V	74	-74	Peak			No Emissions
8125.2		V	54	-54	Avg			Detected
9028		V	74	-74	Peak			No Emissions
9028		V	54	-54	Avg			Detected

RF Digital Date: 6/15/06 900 MHz RF Module Lab: B

Model: R210 Tested By: Benigno Chavez

Freq.	Level				Peak / QP /	Ant. Height	Table Angle	
(MHz)	(dBuV)	Pol (v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
914.2	91.80	V	94	-2.2	QP	1.25	180	X-Axis
914.2	86.39	Н	94	-7.61	QP	1.25	180	X-Axis
914.2	89.29	V	94	-4.71	QP	1.25	180	Y-Axis
914.2	86.26	Н	94	-7.74	QP	1.25	180	Y-Axis
914.2	90.38	V	94	-3.62	QP	1.25	180	Z-Axis
914.2	84.67	Н	94	-9.33	QP	1.25	180	Z-Axis

RF Digital 900 MHz RF Module

Lab: B Tested By: Benigno Chavez Model: R210

X-Axis

					Peak /	Ant.	Table	
Freq.	Level				QP/	Height	Angle	
(MHz)	(dBuV)	Pol (v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
1828.4	46.88	Н	74	-27.12	Peak	1.5	180	
1828.4	46.88	Н	54	-7.12	Avg	1.5	180	
2742.6	50.57	Н	74	-23.43	Peak	1.17	180	
2742.6	50.57	Н	54	-3.43	Avg	1.17	180	
3656.8		Н	74	-74	Peak			No Emissions
3656.8		Н	54	-54	Avg			Detected
4571		Н	74	-74	Peak			No Emissions
4571		Н	54	-54	Avg			Detected
5485.2		Н	74	-74	Peak			No Emissions
5485.2		Н	54	-54	Avg			Detected
6399.4		Н	74	-74	Peak			No Emissions
6399.4		Н	54	-54	Avg			Detected
7313.6		Н	74	-74	Peak			No Emissions
7313.6		Н	54	-54	Avg			Detected
8227.8		Н	74	-74	Peak			No Emissions
8227.8		Н	54	-54	Avg			Detected
0440			7.4	7.4	DI			
9142		Н	74	-74	Peak			No Emissions
9142		Н	54	-54	Avg			Detected

Date: 6/15/06

RF Digital 900 MHz RF Module

900 MHz RF Module Model: R210

X-Axis

Date: 6/15/06

Lab: B

F	11				Peak /	Ant.	Table	
Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	QP / Avg	Height (m)	Angle (deg)	Comments
1828.4	47.49	V	74	-26.51	Peak	1.74	180	
1828.4	47.49	V	54	-6.51	Avg	1.74	180	
2742.6	53.62	V	74	-20.38	Peak	2.47	180	
2742.6	45.17	V	54	-8.83	Avg	2.47	180	
					_			
3656.8		V	74	-74	Peak			No Emissions
3656.8		V	54	-54	Avg			Detected
4571		V	74	-74	Peak			No Emissions
4571		V	54	-54	Avg			Detected
5485.2		V	74	-74	Peak			No Emissions
5485.2		V	54	-54	Avg			Detected
6399.4		V	74	-74	Peak			No Emissions
6399.4		V	54	-54	Avg			Detected
7313.6		V	74	-74	Peak			No Emissions
7313.6		V	54	-54	Avg			Detected
0007.0			7.4	7.	Б			
8227.8		V	74	-74	Peak			No Emissions
8227.8		V	54	-54	Avg			Detected
0440		\/	74	7.4	Daali			No Englacione
9142		V	74	-74 -74	Peak			No Emissions
9142		V	54	-54	Avg			Detected

RF Digital 900 MHz RF Module

Lab: B Tested By: Benigno Chavez Model: R210

Y-Axis

Comments   Comments		Lavial				Peak /	Ant.	Table	
1828.4         46.78         H         74         -27.22         Peak         1.58         180           1828.4         46.78         H         54         -7.22         Avg         1.58         180           2742.6         53.23         H         74         -20.77         Peak         1.49         180           2742.6         44.41         H         54         -9.59         Avg         1.49         180           3656.8         H         74         -74         Peak         No Emissions           3656.8         H         54         -54         Avg         Detected           4571         H         74         -74         Peak         No Emissions           4571         H         54         -54         Avg         Detected           5485.2         H         74         -74         Peak         No Emissions           5485.2         H         74         -74         Peak         No Emissions           6399.4         H         74         -74         Peak         No Emissions           7313.6         H         74         -74         Peak         No Emissions           7313.6         H	Freq.	Level	Del (v/b)	Limeia	Marain	QP /	Height	Angle	Comments
1828.4         46.78         H         54         -7.22         Avg         1.58         180           2742.6         53.23         H         74         -20.77         Peak         1.49         180           2742.6         44.41         H         54         -9.59         Avg         1.49         180           3656.8         H         74         -74         Peak         No Emissions           3656.8         H         54         -54         Avg         Detected           4571         H         74         -74         Peak         No Emissions           4571         H         54         -54         Avg         Detected           5485.2         H         74         -74         Peak         No Emissions           5485.2         H         54         -54         Avg         Detected           6399.4         H         74         -74         Peak         No Emissions           6399.4         H         54         -54         Avg         Detected           7313.6         H         74         -74         Peak         No Emissions           7313.6         H         54         -54						•	, ,		Comments
2742.6         53.23         H         74         -20.77         Peak         1.49         180           2742.6         44.41         H         54         -9.59         Avg         1.49         180           3656.8         H         74         -74         Peak         No Emissions           3656.8         H         54         -54         Avg         Detected           4571         H         74         -74         Peak         No Emissions           4571         H         54         -54         Avg         Detected           5485.2         H         74         -74         Peak         No Emissions           5485.2         H         54         -54         Avg         Detected           6399.4         H         74         -74         Peak         No Emissions           6399.4         H         54         -54         Avg         Detected           7313.6         H         74         -74         Peak         No Emissions           7313.6         H         74         -74         Peak         No Emissions           8227.8         H         74         -74         Peak         No Em									
2742.6         44.41         H         54         -9.59         Avg         1.49         180           3656.8         H         74         -74         Peak         No Emissions           3656.8         H         54         -54         Avg         Detected           4571         H         74         -74         Peak         No Emissions           4571         H         54         -54         Avg         Detected           5485.2         H         74         -74         Peak         No Emissions           5485.2         H         54         -54         Avg         Detected           6399.4         H         74         -74         Peak         No Emissions           6399.4         H         54         -54         Avg         Detected           7313.6         H         74         -74         Peak         No Emissions           7313.6         H         54         -54         Avg         Detected           8227.8         H         74         -74         Peak         No Emissions           9142         H         74         -74         Peak         No Emissions	1828.4	46.78	Н	54	-7.22	Avg	1.58	180	
2742.6         44.41         H         54         -9.59         Avg         1.49         180           3656.8         H         74         -74         Peak         No Emissions           3656.8         H         54         -54         Avg         Detected           4571         H         74         -74         Peak         No Emissions           4571         H         54         -54         Avg         Detected           5485.2         H         74         -74         Peak         No Emissions           5485.2         H         54         -54         Avg         Detected           6399.4         H         74         -74         Peak         No Emissions           6399.4         H         54         -54         Avg         Detected           7313.6         H         74         -74         Peak         No Emissions           7313.6         H         54         -54         Avg         Detected           8227.8         H         74         -74         Peak         No Emissions           9142         H         74         -74         Peak         No Emissions									
3656.8         H         74         -74         Peak         No Emissions           3656.8         H         54         -54         Avg         Detected           4571         H         74         -74         Peak         No Emissions           4571         H         54         -54         Avg         Detected           5485.2         H         74         -74         Peak         No Emissions           5485.2         H         54         -54         Avg         Detected           6399.4         H         74         -74         Peak         No Emissions           6399.4         H         54         -54         Avg         Detected           7313.6         H         74         -74         Peak         No Emissions           7313.6         H         54         -54         Avg         Detected           8227.8         H         74         -74         Peak         No Emissions           8227.8         H         54         -54         Avg         Detected           9142         H         74         -74         Peak         No Emissions									
3656.8         H         54         -54         Avg         Detected           4571         H         74         -74         Peak         No Emissions           4571         H         54         -54         Avg         Detected           5485.2         H         74         -74         Peak         No Emissions           5485.2         H         54         -54         Avg         Detected           6399.4         H         74         -74         Peak         No Emissions           6399.4         H         54         -54         Avg         Detected           7313.6         H         74         -74         Peak         No Emissions           7313.6         H         54         -54         Avg         Detected           8227.8         H         74         -74         Peak         No Emissions           9142         H         74         -74         Peak         No Emissions	2742.6	44.41	Н	54	-9.59	Avg	1.49	180	
3656.8         H         54         -54         Avg         Detected           4571         H         74         -74         Peak         No Emissions           4571         H         54         -54         Avg         Detected           5485.2         H         74         -74         Peak         No Emissions           5485.2         H         54         -54         Avg         Detected           6399.4         H         74         -74         Peak         No Emissions           6399.4         H         54         -54         Avg         Detected           7313.6         H         74         -74         Peak         No Emissions           7313.6         H         54         -54         Avg         Detected           8227.8         H         74         -74         Peak         No Emissions           9142         H         74         -74         Peak         No Emissions									
4571       H       74       -74       Peak       No Emissions         4571       H       54       -54       Avg       Detected         5485.2       H       74       -74       Peak       No Emissions         5485.2       H       54       -54       Avg       Detected         6399.4       H       74       -74       Peak       No Emissions         6399.4       H       54       -54       Avg       Detected         7313.6       H       74       -74       Peak       No Emissions         7313.6       H       54       -54       Avg       Detected         8227.8       H       74       -74       Peak       No Emissions         9142       H       74       -74       Peak       No Emissions									No Emissions
4571         H         54         -54         Avg         Detected           5485.2         H         74         -74         Peak         No Emissions           5485.2         H         54         -54         Avg         Detected           6399.4         H         74         -74         Peak         No Emissions           6399.4         H         54         -54         Avg         Detected           7313.6         H         74         -74         Peak         No Emissions           7313.6         H         54         -54         Avg         Detected           8227.8         H         74         -74         Peak         No Emissions           8227.8         H         54         -54         Avg         Detected           9142         H         74         -74         Peak         No Emissions	3656.8		Н	54	-54	Avg			Detected
4571         H         54         -54         Avg         Detected           5485.2         H         74         -74         Peak         No Emissions           5485.2         H         54         -54         Avg         Detected           6399.4         H         74         -74         Peak         No Emissions           6399.4         H         54         -54         Avg         Detected           7313.6         H         74         -74         Peak         No Emissions           7313.6         H         54         -54         Avg         Detected           8227.8         H         74         -74         Peak         No Emissions           8227.8         H         54         -54         Avg         Detected           9142         H         74         -74         Peak         No Emissions									
5485.2         H         74         -74         Peak         No Emissions           5485.2         H         54         -54         Avg         Detected           6399.4         H         74         -74         Peak         No Emissions           6399.4         H         54         -54         Avg         Detected           7313.6         H         74         -74         Peak         No Emissions           7313.6         H         54         -54         Avg         Detected           8227.8         H         74         -74         Peak         No Emissions           9142         H         74         -74         Peak         No Emissions									No Emissions
5485.2         H         54         -54         Avg         Detected           6399.4         H         74         -74         Peak         No Emissions           6399.4         H         54         -54         Avg         Detected           7313.6         H         74         -74         Peak         No Emissions           7313.6         H         54         -54         Avg         Detected           8227.8         H         74         -74         Peak         No Emissions           8227.8         H         54         -54         Avg         Detected           9142         H         74         -74         Peak         No Emissions	4571		Н	54	-54	Avg			Detected
5485.2         H         54         -54         Avg         Detected           6399.4         H         74         -74         Peak         No Emissions           6399.4         H         54         -54         Avg         Detected           7313.6         H         74         -74         Peak         No Emissions           7313.6         H         54         -54         Avg         Detected           8227.8         H         74         -74         Peak         No Emissions           8227.8         H         54         -54         Avg         Detected           9142         H         74         -74         Peak         No Emissions									
6399.4         H         74         -74         Peak         No Emissions           6399.4         H         54         -54         Avg         Detected           7313.6         H         74         -74         Peak         No Emissions           7313.6         H         54         -54         Avg         Detected           8227.8         H         74         -74         Peak         No Emissions           8227.8         H         54         -54         Avg         Detected           9142         H         74         -74         Peak         No Emissions				74		Peak			No Emissions
6399.4         H         54         -54         Avg         Detected           7313.6         H         74         -74         Peak         No Emissions           7313.6         H         54         -54         Avg         Detected           8227.8         H         74         -74         Peak         No Emissions           8227.8         H         54         -54         Avg         Detected           9142         H         74         -74         Peak         No Emissions	5485.2		Н	54	-54	Avg			Detected
6399.4         H         54         -54         Avg         Detected           7313.6         H         74         -74         Peak         No Emissions           7313.6         H         54         -54         Avg         Detected           8227.8         H         74         -74         Peak         No Emissions           8227.8         H         54         -54         Avg         Detected           9142         H         74         -74         Peak         No Emissions									
7313.6         H         74         -74         Peak         No Emissions           7313.6         H         54         -54         Avg         Detected           8227.8         H         74         -74         Peak         No Emissions           8227.8         H         54         -54         Avg         Detected           9142         H         74         -74         Peak         No Emissions				74	-74	Peak			No Emissions
7313.6         H         54         -54         Avg         Detected           8227.8         H         74         -74         Peak         No Emissions           8227.8         H         54         -54         Avg         Detected           9142         H         74         -74         Peak         No Emissions	6399.4		Н	54	-54	Avg			Detected
7313.6         H         54         -54         Avg         Detected           8227.8         H         74         -74         Peak         No Emissions           8227.8         H         54         -54         Avg         Detected           9142         H         74         -74         Peak         No Emissions									
8227.8       H       74       -74       Peak       No Emissions         8227.8       H       54       -54       Avg       Detected         9142       H       74       -74       Peak       No Emissions			Н	74	-74	Peak			No Emissions
8227.8         H         54         -54         Avg         Detected           9142         H         74         -74         Peak         No Emissions	7313.6		Н	54	-54	Avg			Detected
8227.8         H         54         -54         Avg         Detected           9142         H         74         -74         Peak         No Emissions									
9142 H 74 -74 Peak No Emissions	8227.8		Н	74	-74	Peak			No Emissions
	8227.8		Н	54	-54	Avg			Detected
9142 H 54 -54 Avg Detected	9142		Н	74	-74	Peak			No Emissions
	9142		Н	54	-54	Avg			Detected

Date: 6/15/06

RF Digital 900 MHz RF Module

Lab: B Tested By: Benigno Chavez Model: R210

Y-Axis

					Peak /	Ant.	Table	
Freq.	Level				QP /	Height	Angle	_
(MHz)		Pol (v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
1828.4	47.37	V	74	-26.63	Peak	1.38	180	
1828.4	47.37	V	54	-6.63	Avg	1.38	180	
2742.6	55.97	V	74	-18.03	Peak	1.36	180	
2742.6	48.95	V	54	-5.05	Avg	1.36	180	
3656.8		V	74	-74	Peak			No Emissions
3656.8		V	54	-54	Avg			Detected
4571		V	74	-74	Peak			No Emissions
4571		V	54	-54	Avg			Detected
<b>5405.0</b>			-,					
5485.2		V	74	-74	Peak			No Emissions
5485.2		V	54	-54	Avg			Detected
0000 4		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	7.4	7.4	D1-			
6399.4		V	74	-74	Peak			No Emissions
6399.4		V	54	-54	Avg			Detected
7313.6		V	74	-74	Peak			No Emissions
7313.6		V	54	-74 -54	Avg			Detected
7313.0		V	J <del>T</del>	-J <del>-</del>	∆vy			Detected
8227.8		V	74	-74	Peak			No Emissions
8227.8		V	54	-54	Avg			Detected
		-						2 333332
9142		V	74	-74	Peak			No Emissions
9142		V	54	-54	Avg			Detected

Date: 6/15/06

RF Digital 900 MHz RF Module

Model: R210

Z-Axis

Date: 6/15/06

Lab: B

_					Peak /	Ant.	Table	
Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	QP / Avg	Height (m)	Angle (deg)	Comments
1828.4	47.74	H	74	-26.26	Peak	1.66	180	Commonts
1828.4	47.74	Н	54	-6.26		1.66	180	
1020.4	47.74	П	54	-0.20	Avg	1.00	100	
2742.6	52.00	Н	74	-22	Peak	1.05	180	
2742.6	42.41	Н	54	-11.59	Avg	1.05	180	
								_
3656.8		Н	74	-74	Peak			No Emissions
3656.8		Н	54	-54	Avg			Detected
4571		Н	74	-74	Peak			No Emissions
4571		Н	54	-54	Avg			Detected
5485.2		Н	74	-74	Peak			No Emissions
5485.2		Н	54	-54	Avg			Detected
6399.4		Н	74	-74	Peak			No Emissions
6399.4		Н	54	-54	Avg			Detected
7313.6		Н	74	-74	Peak			No Emissions
7313.6		Н	54	-54	Avg			Detected
8227.8		Н	74	-74	Peak			No Emissions
8227.8		Н	54	-54	Avg			Detected
9142		Н	74	-74	Peak			No Emissions
9142		Н	54	-54	Avg			Detected

RF Digital 900 MHz RF Module

Model: R210

Z-Axis

Date: 6/15/06

Lab: B

					Peak /	Ant.	Table	
Freq.	Level				QP/	Height	Angle	
(MHz)	(dBuV)	Pol (v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
1828.4	48.08	V	74	-25.92	Peak	1.06	180	
1828.4	48.08	V	54	-5.92	Avg	1.06	180	
2742.6	50.53	V	74	-23.47	Peak	1.76	180	
2742.6	50.53	V	54	-3.47	Avg	1.76	180	
3656.8		V	74	-74	Peak			No Emissions
3656.8		V	54	-54	Avg			Detected
4571		V	74	-74	Peak			No Emissions
4571		V	54	-54	Avg			Detected
5485.2		V	74	-74	Peak			No Emissions
5485.2		V	54	-54	Avg			Detected
6399.4		V	74	-74	Peak			No Emissions
6399.4		V	54	-54	Avg			Detected
7313.6		V	74	-74	Peak			No Emissions
7313.6		V	54	-54	Avg			Detected
8227.8		V	74	-74	Peak			No Emissions
8227.8		V	54	-54	Avg			Detected
0440			7.4	7.	Б			
9142		V	74	-74	Peak			No Emissions
9142		V	54	-54	Avg			Detected

RF Digital Corporation 900 MHz RF Module

Model: R210 Tested By: Benigno Chavez

Eron	Lovel				Peak /	Ant.	Table	
Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	QP / Avg	Height (m)	Angle (deg)	Comments
927.2	91.35	V	94	-2.65	QP	1.25	180	X-Axis
927.2	90.17	Н	94	-3.83	QP	1.25	180	X-Axis
927.2	88.69	V	94	-5.31	QP	1.25	180	Y-Axis
927.2	89.40	Н	94	-4.6	QP	1.25	180	Y-Axis
927.2	86.22	V	94	-7.78	QP	1.25	180	Z-Axis
927.2	85.29	Н	94	-8.71	QP	1.25	180	Z-Axis

Date: 6/15/06

Lab: B

RF Digital Corporation 900 MHz RF Module

Model: R210 **X-Axis** 

Date: 6/15/06 Lab: B

					Peak /	Ant.	Table	
Freq.	Level				QP/	Height	Angle	
(MHz)	(dBuV)	Pol (v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
1854.4	47.79	Н	74	-26.21	Peak	1.38	180	
1854.4	47.79	Н	54	-6.21	Avg	1.38	180	
2781.6	52.27	Н	74	-21.73	Peak	1.87	180	
2781.6	43.73	Н	54	-10.27	Avg	1.87	180	
3708.8		Н	74	-74	Peak			No Emissions
3708.8		Н	54	-54	Avg			Detected
4636		Н	74	-74	Peak			No Emissions
4636		Н	54	-54	Avg			Detected
5563.2		Н	74	-74	Peak			No Emissions
5563.2		Н	54	-54	Avg			Detected
6490.4		Н	74	-74	Peak			No Emissions
6490.4		Н	54	-54	Avg			Detected
7417.6		Н	74	-74	Peak			No Emissions
7417.6		Н	54	-54	Avg			Detected
8344.8		Н	74	-74	Peak			No Emissions
8344.8		Н	54	-54	Avg			Detected
9272		Н	74	-74	Peak			No Emissions
9272		Н	54	-54	Avg			Detected

RF Digital Corporation 900 MHz RF Module

Model: R210 **X-Axis** 

Date: 6/15/06 Lab: B

					Peak /	Ant.	Table	
Freq.	Level				QP/	Height	Angle	
(MHz)	(dBuV)	Pol (v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
1854.4	47.06	V	74	-26.94	Peak	1.16	180	
1854.4	47.06	V	54	-6.94	Avg	1.16	180	
2781.6	55.90	V	74	-18.1	Peak	2.4	180	
2781.6	48.66	V	54	-5.34	Avg	2.4	180	
3708.8		V	74	-74	Peak			No Emissions
3708.8		V	54	-54	Avg			Detected
4636		V	74	-74	Peak			No Emissions
4636		V	54	-54	Avg			Detected
5563.2		V	74	-74	Peak			No Emissions
5563.2		V	54	-54	Avg			Detected
6490.4		V	74	-74	Peak			No Emissions
6490.4		V	54	-54	Avg			Detected
7417.6		V	74	-74	Peak			No Emissions
7417.6		V	54	-54	Avg			Detected
8344.8		V	74	-74	Peak			No Emissions
8344.8		V	54	-54	Avg			Detected
9272		V	74	-74	Peak			No Emissions
9272		V	54	-54	Avg			Detected

RF Digital Corporation 900 MHz RF Module

Model: R210 Y-Axis

Tested By: Benigno Chavez

Date: 6/15/06

Lab: B

_					Peak /	Ant.	Table	
Freq.	Level				QP /	Height	Angle	_
(MHz)		Pol (v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
1854.4	47.57	Н	74	-26.43	Peak	1.14	180	
1854.4	47.57	Н	54	-6.43	Avg	1.14	180	
2781.6	52.51	Н	74	-21.49	Peak	1.55	180	
2781.6	44.61	Н	54	-9.39	Avg	1.55	180	
3708.8		Н	74	-74	Peak			No Emissions
3708.8		Н	54	-54	Avg			Detected
4636		Н	74	-74	Peak			No Emissions
4636		Н	54	-54	Avg			Detected
5563.2		Н	74	-74	Peak			No Emissions
5563.2		Н	54	-54	Avg			Detected
6490.4		Н	74	-74	Peak			No Emissions
6490.4		Н	54	-54	Avg			Detected
7417.6		Н	74	-74	Peak			No Emissions
7417.6		Н	54	-54	Avg			Detected
00440			-,					
8344.8		Н	74	-74	Peak			No Emissions
8344.8		Н	54	-54	Avg			Detected
0070			7.4	7.4	D 1			
9272		Н	74	-74	Peak			No Emissions
9272		Н	54	-54	Avg			Detected

RF Digital Corporation 900 MHz RF Module

Model: R210

Y-Axis

Date: 6/15/06 Lab: B

					Peak /	Ant.	Table	
Freq.	Level				QP /	Height	Angle	
(MHz)	(dBuV)	Pol (v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
1854.4	47.80	V	74	-26.2	Peak	1.46	180	
1854.4	47.80	V	54	-6.2	Avg	1.46	180	
2781.6	58.21	V	74	-15.79	Peak	1.62	180	
2781.6	51.45	V	54	-2.55	Avg	1.62	180	
3708.8		V	74	-74	Peak			No Emissions
3708.8		V	54	-54	Avg			Detected
4636		V	74	-74	Peak			No Emissions
4636		V	54	-54	Avg			Detected
5500.0			-,					
5563.2		V	74	-74	Peak			No Emissions
5563.2		V	54	-54	Avg			Detected
0400.4		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	7.4	7.4	DI-			
6490.4		V	74	-74	Peak			No Emissions
6490.4		V	54	-54	Avg			Detected
7417.6		V	74	-74	Peak			No Emissions
7417.6		V	54	-74 -54				Detected
7417.0		V	54	-5 <del>4</del>	Avg			Detected
8344.8		V	74	-74	Peak			No Emissions
8344.8		V	54	-54	Avg			Detected
3044.0		v	07	0-7	, , , ,			Detected
9272		V	74	-74	Peak			No Emissions
9272		V	54	-54	Avg			Detected

RF Digital Corporation 900 MHz RF Module

Model: R210

Tested By: Benigno Chavez

Date: 6/15/06

Lab: B

Z-Axis

					Peak /	Ant.	Table	
Freq.	Level				QP /	Height	Angle	_
(MHz)		Pol (v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
1854.4	48.01	Н	74	-25.99	Peak	1.38	180	
1854.4	48.01	Н	54	-5.99	Avg	1.38	180	
2781.6	53.06	Н	74	-20.94	Peak	2.26	180	
2781.6	45.58	Н	54	-8.42	Avg	2.26	180	
3708.8		Н	74	-74	Peak			No Emissions
3708.8		Н	54	-54	Avg			Detected
4636		Н	74	-74	Peak			No Emissions
4636		Н	54	-54	Avg			Detected
5563.2		Н	74	-74	Peak			No Emissions
5563.2		Н	54	-54	Avg			Detected
6490.4		Н	74	-74	Peak			No Emissions
6490.4		Н	54	-54	Avg			Detected
7417.6		Н	74	-74	Peak			No Emissions
7417.6		Н	54	-54	Avg			Detected
8344.8		Н	74	-74	Peak			No Emissions
8344.8		Н	54	-54	Avg			Detected
0070			7.4	7.4	D 1			
9272		Н	74	-74	Peak			No Emissions
9272		Н	54	-54	Avg			Detected

RF Digital Corporation 900 MHz RF Module

Model: R210

Z-Axis

Date: 6/15/06 Lab: B

_					Peak /	Ant.	Table	
Freq.	Level				QP /	Height	Angle	
(MHz)		Pol (v/h)		Margin	Avg	(m)	(deg)	Comments
1854.4	48.03	V	74	-25.97	Peak	1	180	
1854.4	48.03	V	54	-5.97	Avg	1	180	
2781.6	54.12	V	74	-19.88	Peak	2.3	180	
2781.6	46.40	V	54	-7.6	Avg	2.3	180	
3708.8		V	74	-74	Peak			No Emissions
3708.8		V	54	-54	Avg			Detected
4636		V	74	-74	Peak			No Emissions
4636		V	54	-54	Avg			Detected
5563.2		V	74	-74	Peak			No Emissions
5563.2		V	54	-54	Avg			Detected
6490.4		V	74	-74	Peak			No Emissions
6490.4		V	54	-54	Avg			Detected
7417.6		V	74	-74	Peak			No Emissions
7417.6		V	54	-54	Avg			Detected
8344.8		V	74	-74	Peak			No Emissions
8344.8		V	54	-54	Avg			Detected
9272		V	74	-74	Peak			No Emissions
9272		V	54	-54	Avg			Detected

RF Digital Corporation Date: 6/15/06 900 MHz RF Module Lab: B

Model: R210 Tested By: Benigno Chavez

X-Axis (Worst Case)

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
								No Emissions
								Found from the Digital
								Portion
								from 1 GHz to 9.3 GHz
								for both Vertical and
								Horizontal Polarizations

RF Digital Corporation 900 MHz RF Module

Model: R210

X-Axis (Worst Case) Receive Mode Date: 6/20/06 Labs: B and D

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
								No Emissions
								Found in Receiver Mode
								from 10 kHz to 9.3 GHz
								for both Vertical and
								Horizontal Polarizations
								Tested at the Low, Middle
								and High Channels

RF Digital Corporation Date: 6/20/06 900 MHz RF Module Lab: B

Model: R210 Tested By: Benigno Chavez

X-Axis (Worst Case)

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
								No Emissions
								Found from the Digital
								Portion
								from 1 GHz to 9.3 GHz
								for both Vertical and
								Horizontal Polarizations

**FCC B**RF Digital Corporation

Model: R210 Tested By: Benigno Chavez

Date: 6/20/06

Configuration: Continuous Transmit Mode

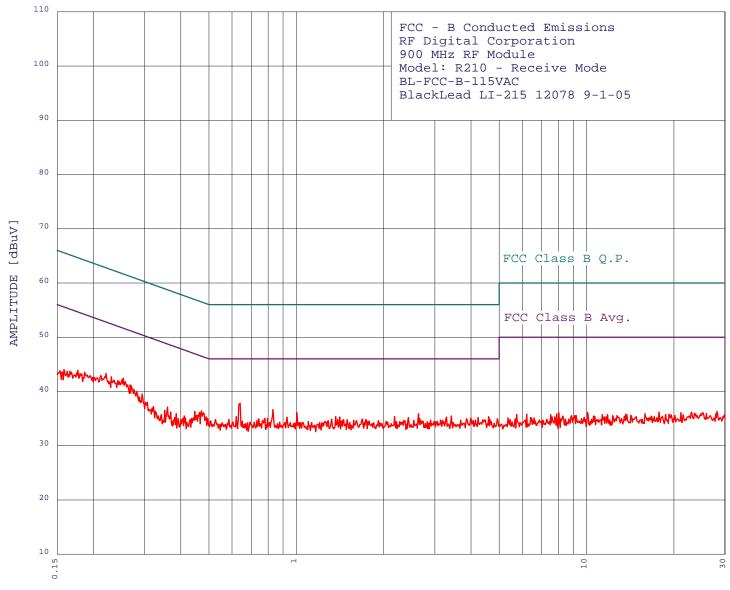
					Peak /	
From	Level		Limit	Morain	QP/	
Freq.		D - 1 ( - // - )		Margin	· ·	2
(MHz)	(dBuV/m)	` '	(dBuV/m)	, ,	Avg	Comments
359.37	15.74	V	46.02	-30.28	Peak	
432.24	15.82	V	46.02	-30.20	Peak	
375.35	15.84	Н	46.02	-30.18	Peak	
391.31	15.43	Н	46.02	-30.59	Peak	
399.29	17.80	Н	46.02	-28.22	Peak	
115.78	16.70	Н	43.52	-26.82	Peak	
151.73	16.66	Н	43.52	-26.86	Peak	
167.68	17.02	Н	43.52	-26.50	Peak	
111.79	26.29	V	43.52	-17.23	Peak	
143.75	14.82	V	43.52	-28.70	Peak	
151.70	19.39	V	43.52	-24.13	Peak	
167.69	21.64	V	43.52	-21.88	Peak	
183.69	21.68	V	43.52	-21.84	Peak	
199.65	26.95	V	43.52	-16.57	Peak	
207.64	25.80	V	43.52	-17.72	Peak	
271.52	19.88	V	46.02	-26.14	Peak	



## **CONDUCTED EMISSIONS**

**DATA SHEETS** 





FREQUENCY [MHz]



FCC - B Conducted Emissions RF Digital Corporation

900 MHz RF Module

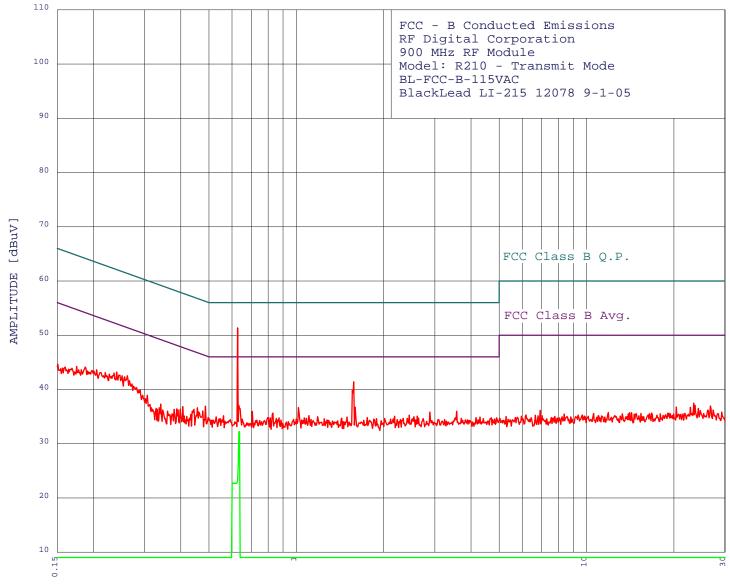
Model: R210 - Receive Mode

BL-FCC-B-115VAC

BlackLead LI-215 12078 9-1-05 TEST ENGINEER : Falguni Patel

					_	
_	_			Class B Avg.	limit	line
Peak c	riteria :	1.00 dB, Cu	ırve : Peak			
Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)		
1	0.641	37.84	46.00	-8.16		
2	0.254	42.41	51.64	-9.22		
3	0.831	36.65	46.00	-9.35		
4	0.221	43.31	52.78	-9.47		
5	0.230	42.71	52.43	-9.72		
6	1.006	36.07	46.00	-9.93		
7	0.267	41.21	51.20	-9.98		
8	0.471	36.42	46.49	-10.07		
9	0.270	41.01	51.11	-10.10		
10	2.637	35.89	46.00	-10.11		
11	0.464	36.12	46.62	-10.50		
12	3.419	35.46	46.00	-10.54		
13	1.367	35.39	46.00	-10.61		
14	0.447		46.93	-10.62		
15	2.179	35.35	46.00	-10.65		
16	4.600	35.34	46.00	-10.66		
17	0.621	35.34	46.00	-10.66		
18	0.186	43.52	54.19	-10.68		
19	1.412	35.29	46.00	-10.71		
20	0.177	43.92	54.63	-10.71		
21	0.929	35.26	46.00	-10.74		
22	3.294	35.26	46.00	-10.74		
23	4.227	35.22	46.00	-10.78		
24	2.436	35.17	46.00	-10.83		
25	0.294	39.51	50.41	-10.89		
26	3.987	35.10	46.00	-10.90		
27	0.796	35.05	46.00	-10.95		
28	0.779	35.05	46.00	-10.95		
29	2.665		46.00	-11.00		
30	3.862	34.99	46.00	-11.01		





FREQUENCY [MHz]



FCC - B Conducted Emissions RF Digital Corporation

900 MHz RF Module

Model: R210 - Transmit Mode

BL-FCC-B-115VAC

BlackLead LI-215 12078 9-1-05 TEST ENGINEER: Falguni Patel

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_	-	above -50.00		Class B Avg.	limit line
Peak#		Amp(dBuV)	Limit(dB)	Delta(dB)	
1	0.627	51.34	46.00	5.34**	
2	1.577	41.40	46.00	-4.60	
3	0.262	42.51	51.38	-8.86	
4	0.240	43.21	52.08	-8.87	
5	0.634	37.04	46.00	-8.96**	
6	0.235	43.01	52.25	-9.24	
7	1.594	36.70	46.00	-9.30	
8	0.486	36.93	46.23	-9.30	
9	1.016	36.67	46.00	-9.33	
10	0.220	43.11	52.83	-9.71	
11	0.205	43.61	53.40	-9.79	
12	3.565	35.97	46.00	-10.03	
13	0.187	44.12	54.15	-10.03	
14	0.705	35.95	46.00	-10.05	
15	0.457	36.62	46.76	-10.14	
16	2.885	35.82	46.00	-10.18	
17	0.831	35.65	46.00	-10.35	
18	0.476	36.02	46.40	-10.38	
19	0.175	44.22	54.72	-10.50	
20	0.445	36.32	46.98	-10.66	
21	2.449	35.27	46.00	-10.73	
22	1.106	35.17	46.00	-10.83	
23	0.561	35.14	46.00	-10.86	
24	0.406	36.82	47.72	-10.91	
25	2.610	35.09	46.00	-10.91	
26	2.179	35.05	46.00	-10.95	
27	2.540	34.98	46.00	-11.02	
28	1.184	34.98	46.00	-11.02	
29	0.530	34.93	46.00	-11.07	
30	4.294	34.92	46.00	-11.08	

17:05:56

6/16/2006



FCC - B Conducted Emissions RF Digital Corporation

900 MHz RF Module

Model: R210 - Transmit Mode

BL-FCC-B-115VAC

BlackLead LI-215 12078 9-1-05 TEST ENGINEER : Falguni Patel

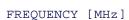
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1 highest peaks above -50.00 dB of FCC Class B Avg. limit line

Peak criteria: 1.00 dB, Curve: Average
Peak# Freq(MHz) Amp(dBuV) Limit(dB) Delta(dB)
1 0.634 32.23 46.00 -13.77 \_\_\_\_\_ EMISSION LEVEL [dBuV] PEAK

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20







FCC - B Conducted Emissions RF Digital Corporation

900 MHz RF Module

Model: R210 - Receive Mode

WL-FCC-B-115VAC

WhiteLead LI-215 12078 9-1-05 TEST ENGINEER: Falguni Patel

				Class B Avg.	limit line
Peak c		1.00 dB, Cu			
Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)	
1	0.641	37.14	46.00	-8.86	
2	0.223	43.22	52.70	-9.48	
3	0.252	42.12	51.68	-9.56	
4	0.243	42.32	52.00	-9.67	
5	0.220	43.12	52.83	-9.71	
6	0.259	41.72	51.47	-9.74	
7	0.449	37.04	46.89	-9.85	
8	0.269	40.92	51.15	-10.23	
9	0.277	40.62	50.89	-10.27	
10	3.511	35.67	46.00	-10.33	
11	0.273	40.62	51.02	-10.40	
12	0.454	36.34	46.80	-10.46	
13	0.194	43.32	53.88	-10.56	
14	1.488	35.39	46.00	-10.61	
15	2.322	35.36	46.00	-10.64	
16	0.481	35.64	46.32	-10.68	
17	0.204	42.72	53.44	-10.72	
18	0.178	43.83	54.59	-10.76	
19	0.564	35.13	46.00	-10.87	
20	1.981	35.12	46.00	-10.88	
21	3.987	35.12	46.00	-10.88	
22	0.474	35.54	46.45	-10.91	
23	1.172	35.07	46.00	-10.93	
24	1.130	35.07	46.00	-10.93	
25	1.043	35.06	46.00	-10.94	
26	0.621	35.04	46.00	-10.96	
27	0.521	35.03	46.00	-10.97	
28	1.456	34.99	46.00	-11.01	
29	1.077	34.96	46.00	-11.04	
30	0.924	34.95	46.00	-11.05	

EMISSION LEVEL [dBuV] PEAK

30

20









FCC - B Conducted Emissions RF Digital Corporation

900 MHz RF Module

Model: R210 - Transmit Mode

WL-FCC-B-115VAC

WhiteLead LI-215 12078 9-1-05 TEST ENGINEER: Falguni Patel

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				Class B Avg.	limit line
Peak c		1.00 dB, Cu			
Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)	
1	0.641	37.14	46.00	-8.86	
2	0.223	43.22	52.70	-9.48	
3	0.252	42.12	51.68	-9.56	
4	0.243	42.32	52.00	-9.67	
5	0.220	43.12	52.83	-9.71	
6	0.259	41.72	51.47	-9.74	
7	0.449	37.04	46.89	-9.85	
8	0.269	40.92	51.15	-10.23	
9	0.277	40.62	50.89	-10.27	
10	3.511	35.67	46.00	-10.33	
11	0.273	40.62	51.02	-10.40	
12	0.454	36.34	46.80	-10.46	
13	0.194	43.32	53.88	-10.56	
14	1.488	35.39	46.00	-10.61	
15	2.322	35.36	46.00	-10.64	
16	0.481	35.64	46.32	-10.68	
17	0.204	42.72	53.44	-10.72	
18	0.178	43.83	54.59	-10.76	
19	0.564	35.13	46.00	-10.87	
20	1.981	35.12	46.00	-10.88	
21	3.987	35.12	46.00	-10.88	
22	0.474	35.54	46.45	-10.91	
23	1.172	35.07	46.00	-10.93	
24	1.130	35.07	46.00	-10.93	
25	1.043	35.06	46.00	-10.94	
26	0.621	35.04	46.00	-10.96	
27	0.521	35.03	46.00	-10.97	
28	1.456	34.99	46.00	-11.01	
29	1.077	34.96	46.00	-11.04	
30	0.924	34.95	46.00	-11.05	



Report Number: **B60620B1 FCC Part 15 Subpart B** and **FCC Section 15.249** Test Report

900 MHz RF Module

Model: R210

**BAND EDGES** 

**DATA SHEET** 



Test Location : Compatible Electronics Page : 1/1

Customer: RF Digital CorporationDate: 6/15/2006Manufacturer: RF Digital CorporationTime: 11:20:04

Eut name : 900 MHz RF Module Lab : D

Model : R210 Test Distance : 3.0 Meters

Serial # :

Specification : FCC Class B

Distance correction factor (20 \* log(test/spec)) : 0.00

Test Mode : Qualification Scan - Band Edges

Vertical and Horizontal Polarizations

Modular Approval

Pol	Freq MHz	Rdng dBuV	Cable loss dB	Ant factor dB	Amp gain dB	Cor'd rdg = R dBuV	Limit = L dBuV/m	Delta R-L dB
1H 2H 3V 4V 5V	928.000 928.000Qp 928.000 928.000Qp 902.000	67.90 51.22 69.70 55.09 72.40	4.31 4.31 4.31 4.31 4.21	22.16 22.16 22.16 22.16 21.37	36.43 36.43 36.43 36.43 36.59	57.95 41.27 59.75 45.14 61.39	46.00 46.00 46.00 46.00	11.95 -4.73 13.75 -0.86 15.39
6V 7н 8н	902.005Qp 902.000 902.003Qp	55.75 66.80 52.68	4.21 4.21 4.21	21.37 21.37 21.37	36.59 36.59 36.59	44.74 55.79 41.67	46.00 46.00 46.00	-1.26 9.79 -4.33