FCC PART 15 SUBPART B and C TEST REPORT

for

RF ANTENNA MODULE

Model: RFDANT

Prepared for

RF DIGITAL CORPORATION 13715 ALTON PARKWAY IRVINE, CALIFORNIA 92618

KYLE FUJIMOTO

Approved by: James Rom

JAMES ROSS

COMPATIBLE ELECTRONICS INC. 114 OLINDA DRIVE BREA, CALIFORNIA 92823 (714) 579-0500

DATE: SEPTEMBER 2, 2010

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GENERAL REPORT SUMMARY

Compatible Electronics Inc. generates this electromagnetic emission test report, 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: RF Antenna Module

Model: RFDANT

S/N: N/A

Product Description: See Expository Statement

Modifications: The EUT was not modified in order to meet the specifications.

Customer: **RF** Digital Corporation

> 13715 Alton Parkway Irvine, California 92618

Test Date(s): August 31, 2010

Test Specifications: EMI requirements

CFR Title 47, Part 15, Subpart B

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 to 30 MHz	Complies with the Class B limits of CFR Title 47, Part 15, Subpart B; and CFR Title 47, Part 15, Subpart C, section 15.207 Highest reading in relation to spec limit: 41.60 dBuV @ 0.995 MHz (*U = 1.00 dB)
2	Radiated RF Emissions 10 kHz – 25000 MHz (Transmitter Portion)	Complies with the limits of CFR Title 47, Part 15, Subpart C, sections 15.205, 15.209, and 15.249. Highest reading in relation to spec limit: 52.73 dBuV @ 4812 MHz (*U = 5.34 dB)
3	Radiated RF Emissions 10 kHz – 25000 MHz (Digital Portion)	Complies with the Class B limits of CFR Title 47, Part 15, Subpart B.

^{*}U = Expanded Uncertainty with a coverage factor of k=2





PURPOSE

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on the RF Antenna Module, Model: RFDANT. 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 for the digital portion; and the limits defined in Subpart C, sections 15.205, 15.207, 15.209, and 15.249 for the transmitter portion.

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RF Antenna Module

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.

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 Kazanchian President / C.E.O.

Compatible Electronics Inc.

Kyle Fujimoto Test Engineer James Ross Test Engineer

2.4 Date Test Sample was Received

The test sample was received prior to the date of testing.

2.5 Disposition of the Test Sample

The test sample has not yet been returned as of the date of this report.

2.6 Abbreviations and Acronyms

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

FCC Federal Communications Commission

RF Radio Frequency

EMI Electromagnetic Interference EUT Equipment Under Test

P/N Part Number S/N Serial Number

ITE Information Technology Equipment
LISN Line Impedance Stabilization Network

NVLAP National Voluntary Laboratory Accreditation Program

CFR Code of Federal Regulations

N/A Not Applicable

Ltd. Limited
Inc. Incorporated
IR Infrared



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	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz

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RF Antenna Module

Model: RFDANT

4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description of Test Configuration – EMI

The RF Antenna Module, Model: RFDANT (EUT) was connected to a black interface board via a 10-centimeter cable. The black interface board was directly connected to the green interface board.

The green interface board is a bread board that allows interface of the external AC/DC power supply to provide power to the black interface board (which then allows the EUT to be powered) and to also provide a host breadboard so that the channel of the EUT could be changed for the testing. An AC Adapter was connected to the green interface board. The EUT was continuously transmitting and gets its power from the AC Adapter that was connected to the green interface board.

Note: For Conducted Emissions the setup was connected as above with the AC Adapter connected to the LISN to take measurements.

The EUT uses GFSK Modulation Pulse.

It was determined that the emissions were at their highest level when the EUT was operating in the above configuration. The final emissions data was taken in this mode of operation and any cables were maximized. All initial investigations were performed with the measurement receiver in manual mode scanning the frequency range continuously. Photographs of the test setup are in Appendix D of this report.

4.1.1 **Cable Construction and Termination**

This is a 10-centimeter unshielded cable connecting the EUT to the black interface board. The cable Cable 1 has a 16-pin connector at the black interface board end and is hard wired into the EUT.

This is a 2-meter unshielded cable connecting the AC Adapter to the green interface board. The Cable 2 cable has a 1/8 inch power connector at the green interface board end and is hard wired into the AC Adapter.

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RF Antenna Module

5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT

5.1 EUT and Accessory List

EQUIPMENT	MANUFACTURER	MODEL NUMBER:	SERIAL NUMBER	FCC ID
RF ANTENNA MODULE (EUT)	RF DIGITAL CORPORATION	RFDANT	N/A	UYI-RFDANT
AC ADAPTER	SCEPTRE	U090030D12	N/A	N/A
BLACK INTERFACE BOARD	RF DIGITAL CORPORATION	N/A	N/A	N/A
GREEN INTERFACE BOARD	RF DIGITAL CORPORAITON	N/A	N/A	N/A



5.2 EMI Test Equipment

EQUIPMENT TYPE	MANU- FACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CALIBRATION DUE DATE	
GENERAL TEST EQUIPMENT USED FOR ALL RF EMISSIONS TESTS						
Computer	Hewlett Packard	4530	US91912319	N/A	N/A	
EMI Receiver	Rohde & Schwarz	ESIB40	100194	September 17, 2008	Sept. 17, 2010	
Spectrum Analyzer – Main Section	Hewlett Packard	8566B	3638A08784	June 10, 2010	June 10, 2011	
Spectrum Analyzer – Display Section	Hewlett Packard	85662A	2648A14530	June 10, 2010	June 10, 2011	
Quasi-Peak Adapter	Hewlett Packard	85650A	2430A00424	June 10, 2010	June 10, 2011	
Monitor	Hewlett Packard	D5258A	TW74500641	N/A	N/A	
	RF RA	DIATED EMIS	SIONS TEST EQ	UIPMENT		
Biconical Antenna	Com Power	AB-900	15250	February 16, 2010	February 16, 2011	
Log Periodic Antenna	Com Power	AL-100	16060	June 9, 2010	June 9, 2011	
Preamplifier	Com-Power	PA-102	1017	January 6, 2010	Jan. 6, 2011	
Loop Antenna	Com-Power	AL-130	17089	September 29, 2008	Sept. 29, 2010	
Horn Antenna	Com-Power	AH-118	071175	March 18, 2010	March 18, 2012	
Microwave Preamplifier	Com-Power	PA-840	711013	March 11, 2010	March 11, 2011	
Horn Antenna	Com-Power	AH826	71957	N/A	N/A	
Microwave Preamplifier	Com-Power	PA-122	181921	March 10, 2010	March 10, 2011	
Antenna Mast	Com Power	AM-100	N/A	N/A	N/A	
	RF CON	DUCTED EMI	SSIONS TEST E	QUIPMENT		
Emissions Program	Compatible Electronics	2.3 (SR19)	N/A	N/A	N/A	
LISN	Com Power	LI-215	12078	June 14, 2010	June 14, 2011	
LISN	Com Power	LI-215	12082	June 14, 2010	June 14, 2011	
Transient Limiter	Com Power	252A910	1	September 28, 2009	Sept. 28, 2010	

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RF Antenna Module

6. TEST SITE DESCRIPTION

6.1 Test Facility Description

Please refer to section 2.1 and 7.1.2 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.

6.3 Facility Environmental Characteristics

When applicable refer to the data sheets in Appendix E for the relative humidity, air temperature, and barometric pressure.

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RF Antenna Module

Model: RFDANT

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 RF Emissions

7.1.1 Conducted Emissions Test

The measurement receiver was used as a measuring meter. The data was collected with the measurement receiver in the peak detect mode with the "Max Hold" feature activated. The quasipeak was used only where indicated in the data sheets. A transient limiter was used for the protection of the measurement receiver's input stage, and the offset was adjusted accordingly to read the actual data measured. The LISN output was measured using the measurement receiver. 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:

Complies with the **Class B** limits of CFR Title 47, Part 15, Subpart B; and CFR Title 47, Part 15, Subpart C, section 15.207.

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RF Antenna Module

7.1.2 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 Preamplifier Model: PA-102 was used for frequencies from 30 MHz to 1 GHz. The Com Power Microwave Preamplifier Model: PA-122 was used for frequencies from 1 GHz to 18 GHz. The Com Power Microwave Preamplifier Model: PA-840 was used for frequencies above 18 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 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 readings were averaged by a "duty cycle correction factor," derived from 20 log (dwell time / one pulse train with blanking interval).

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

FREQUENCY RANGE	EFFECTIVE MEASUREMENT BANDWIDTH	TRANSDUCER
10 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 25 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 by the Radiated Emission Manual Test software. 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.

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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 the final test data.

Test Results:

The EUT complies with the Class B limits of CFR Title 47, Part 15, Subpart B; and the limits of CFR Title 47, Part 15, Subpart C, Sections 15.209 and 15.249.

7.2

FCC Part 15 Subpart B and FCC Section 15.249 Test Report

RF Antenna Module

RF Band Edges

The RF band edges were taken at the start of the band edges (2400 MHz and 2483.5 MHz). The readings taken were also averaged by the EMI Receiver. Data sheets are included in Appendix E, which compares the reading from the EMI Receiver to the spec limit.

The band edges were taken with a 100 kHz RBW so that the band edges were properly measured. The band edges on the plot were corrected by using a factor of 10log (1000 kHz/100 kHz) to compensate for the RBW being lowered to 100 kHz from the specified RBW required by ANSI C63.4 of 1 MHz.

Please note the 100 kHz RBW was only used for the actual band edge measurements and that all fundamentals in the data sheet were measured with a 1 MHz RBW.

Test Results:

The spurious emissions for the EUT at the band edges at 2400 MHz and 2483.5 MHz meet the limits of section 15.249. Please see the data sheets located in Appendix E.

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RF Antenna Module

Model: RFDANT

8. CONCLUSIONS

The RF Antenna Module, Model: RFDANT, as tested, meets all of the <u>Class B</u> specification limits <u>defined in CFR Title 47</u>, Part 15, Subpart B for the digital portion; and the limits defined in Subpart C, sections 15.205, 15.207, 15.209, and 15.249 for the transmitter portion.



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

APPENDIX B

MODIFICATIONS TO THE EUT

MODIFICATIONS TO THE EUT

The modifications listed below were made to the EUT to pass FCC 15.249 and/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 modification 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

RF Antenna Module Model: RFDANT

ALSO APPROVED UNDER THIS REPORT:

There were no additional models covered under this report.



APPENDIX D

DIAGRAMS, CHARTS, AND PHOTOS

FIGURE 1: CONDUCTED EMISSIONS TEST SETUP

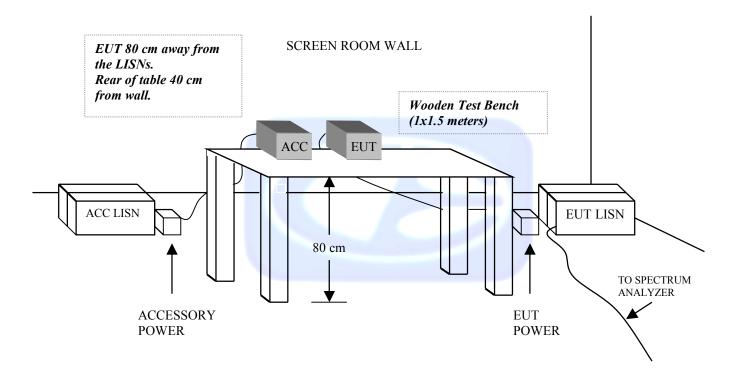
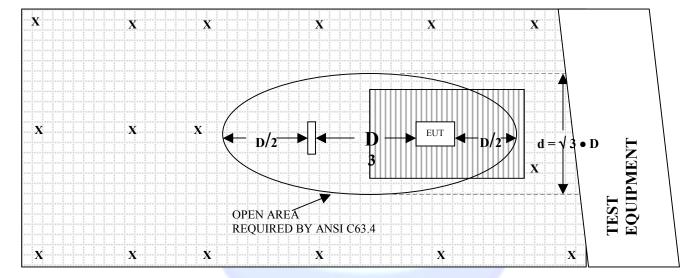




FIGURE 2: PLOT MAP AND LAYOUT OF RADIATED SITE – 3 METERS

OPEN LAND > 15 METERS



OPEN LAND > 15 METERS

X = GROUND RODS = GROUND SCREEN

D = TEST DISTANCE (meters) = WOOD COVER



COM-POWER AB-900

BICONICAL ANTENNA

S/N: 15250

CALIBRATION DATE: FEBRUARY 16, 2010

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	13.5	100	11.1
35	10.4	120	13.1
40	10.3	140	12.2
45	9.8	160	13.6
50	10.6	180	15.9
60	9.5	200	16.4
70	8.4	250	15.1
80	5.5	275	17.7
90	7.3	300	19.5



COM-POWER AL-100

LOG PERIODIC ANTENNA

S/N: 16060

CALIBRATION DATE: JUNE 9, 2010

FREQUENCY	FACTOR	FREQUENCY	FACTOR
(MHz)	(dB)	(MHz)	(dB)
300	15.5	700	20.4
400	17.9	800	21.5
500	18.5	900	21.7
600	20.3	1000	23.0

COM POWER AH-118

HORN ANTENNA

S/N: 071175

CALIBRATION DATE: MARCH 18, 2010

FREQUENCY	FACTOR	FREQUENCY	FACTOR
(GHz)	(dB)	(GHz)	(dB)
		\ /	`
1.0	22.2	10.0	39.8
1.5	24.2	10.5	40.2
2.0	27.2	11.0	39.7
2.5	27.8	11.5	39.9
3.0	30.5	12.0	41.7
3.5	30.9	12.5	42.7
4.0	31.9	13.0	42.3
4.5	33.2	13.5	40.3
5.0	33.6	14.0	42.6
5.5	36.2	14.5	43.4
6.0	35.8	15.0	41.9
6.5	36.1	15.5	40.8
7.0	37.9	16.0	41.0
7.5	37.4	16.5	41.5
8.0	38.0	17.0	44.5
8.5	38.8	17.5	47.6
9.0	38.0	18.0	50.8
9.5	39.2		

COM-POWER PA-102

PREAMPLIFIER

S/N: 1017

CALIBRATION DATE: JANUARY 6, 2010

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
20	38.0	300	38.2
30	38.3	350	38.1
40	38.4	400	38.5
50	38.2	450	38.0
60	38.2	500	37.9
70	38.3	550	38.2
80	38.1	600	38.2
90	38.2	650	37.7
100	38.3	700	38.3
125	38.2	750	38.3
150	38.3	800	37.4
175	38.3	850	37.5
200	38.1	900	37.6
225	38.2	950	37.4
250	38.3	1000	37.3
275	38.2		



COM-POWER PA-122

PREAMPLIFIER

S/N: 181921

CALIBRATION DATE: MARCH 10, 2010

FREQUENCY	FACTOR	FREQUENCY	FACTOR
(GHz) 1.0	(dB)	(GHz)	(dB)
	35.53	10.0	34.78
1.5	34.92	10.5	34.36
2.0	34.63	11.0	33.14
2.5	34.42	11.5	34.42
3.0	34.40	12.0	34.24
3.5	34.36	12.5	34.95
4.0	34.11	13.0	34.62
4.5	33.61	13.5	35.24
5.0	33.83	14.0	35.40
5.5	34.53	14.5	36.66
6.0	35.09	15.0	35.98
6.5	35.58	15.5	35.94
7.0	36.50	16.0	35.80
7.5	34.83	16.5	34.98
8.0	34.08	17.0	35.00
8.5	33.57	17.5	34.25
9.0	34.68	18.0	33.51
9.5	35.84	18.5	32.88

COM-POWER PA-840

PREAMPLIFIER

S/N: 711013

CALIBRATION DATE: MARCH 11, 2010

FREQUENCY	FACTOR	EDECHENCY	FACTOR
(GHz)	(dB)	FREQUENCY (GHz)	(dB)
18.0	24.36	29.0	24.83
18.5	24.54	29.5	
			23.52
19.0	24.06	30.0	21.73
19.5	23.71	30.5	22.34
20.0	23.42	31.0	20.06
20.5	22.87	31.5	20.02
21.0	22.60	32.0	18.11
21.5	21.08	32.5	19.35
22.0	22.13	33.0	17.50
22.5	22.42	33.5	17.49
23.0	22.85	34.0	17.48
23.5	22.85	34.5	18.57
24.0	23.82	35.0	18.64
24.5	22.33	35.5	18.82
25.0	24.09	36.0	19.14
25.5	23.20	36.5	18.58
26.0	23.18	37.0	15.07
26.5	23.50	37.5	17.29
27.0	24.25	38.0	20.82
27.5	23.58	38.5	19.96
28.0	23.81	39.0	20.06
28.5	23.76	39.5	21.41



COM-POWER AH826

HORN ANTENNA

S/N: 71957

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
18.0	33.5	22.5	35.5
18.5	33.5	23.0	35.9
19.0	34.0	23.5	35.7
19.5	34.0	24.0	35.6
20.0	34.3	24.5	36.0
20.5	34.9	25.0	36.2
21.0	34.7	25.5	36.1
21.5	35.0	26.0	36.2
22.0	35.0	26.5	35.7



COM-POWER AL-130

LOOP ANTENNA

S/N: 17089

CALIBRATION DATE: SEPTEMBER 29, 2008

FREQUENCY	MAGNETIC	ELECTRIC
(MHz)	(dB/m)	(dB/m)
0.009	-41.57	9.93
0.01	-42.06	9.44
0.02	-42.43	9.07
0.05	-42.50	9.00
0.07	-42.10	9.40
0.1	-42.03	9.47
0.2	-44.50	7.00
0.3	-41.93	9.57
0.5	-41.90	9.60
0.7	-41.73	9.77
1	-41.23	10.27
2	-40.90	10.60
3	-41.20	10.30
4	-41.30	10.20
5	-40.70	10.80
10	-41.10	10.40
15	-42.17	9.33
20	-42.00	9.50
25	-42.20	9.30
30	-43.10	8.40



FRONT VIEW

RF DIGITAL CORPORATION
RF ANTENNA MODULE
MODEL: RFDANT
FCC SUBPART B AND C – RADIATED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



REAR VIEW

RF DIGITAL CORPORATION
RF ANTENNA MODULE
MODEL: RFDANT
FCC SUBPART B AND C – RADIATED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



FRONT VIEW

RF DIGITAL CORPORATION
RF ANTENNA MODULE
MODEL: RFDANT
FCC SUBPART B AND C – CONDUCTED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



REAR VIEW

RF DIGITAL CORPORATION
RF ANTENNA MODULE
MODEL: RFDANT
FCC SUBPART B AND C – CONDUCTED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

APPENDIX E

DATA SHEETS

Model: RFDANT

RADIATED EMISSIONS

DATA SHEETS

RF Digital Corporation Date: 08/31/2010
RF Antenna Module Lab: B

Model: RFDANT Tested By: Kyle Fujimoto

X-Axis - Low Channel

					Peak /	Ant.	Table	
Freq.	Level				QP /	Height	Angle	
		D = 1 (+ //b)	1 !!4	Manain		_	_	C
(MHz)	(dBuV)	` '		Margin	Avg	(m)	(deg)	Comments
2406	87.11	V	114	-26.89	Peak	1	90	
2406	79.13	V	94	-14.87	Avg	1	90	
4812	54.11	V	74	-19.89	Peak	1.25	135	
4812	46.13	V	54	-7.87	Avg	1.25	135	
7218	50.12	V	74	-23.88	Peak	1.25	135	
7218	42.14	V	54	-11.86	Avg	1.25	135	
9624	44.73	V	74	-29.27	Peak	1.25	135	
9624	36.75	V	54	-17.25	Avg	1.25	135	
12030								No Emission
12030								Detected
14436								No Emission
14436								Detected
16842								No Emission
16842								Detected
19248								No Emission
19248								Detected
21654								No Emission
21654								Detected
24060								No Emission
24060								Detected
								200000



RF Digital Corporation Date: 08/31/2010
RF Antenna Module Lab: B

Model: RFDANT Tested By: Kyle Fujimoto

X-Axis - Low Channel

Freq. (MHz) Level (dBuV) Pol (v/h) Limit Margin Avg Height (m) Angle (deg) Comments 2406 93.41 H 114 -20.59 Peak 1 180 2406 85.43 H 94 -8.57 Avg 1 180 4812 59.77 H 74 -14.23 Peak 1.25 315 4812 51.79 H 54 -2.21 Avg 1.25 315 7218 51.15 H 74 -22.85 Peak 1.25 315 7218 43.17 H 54 -10.83 Avg 1.25 315 9624 47.14 H 74 -26.86 Peak 1.25 135 12030 H 54 -14.84 Avg 1.25 135 12030 H 54 -14.84 Avg 1.25 135 14436 H No Emission Detected						Peak /	Ant.	Table	
(MHz) (dBuV) Pol (v/h) Limit Margin Avg (m) (deg) Comments 2406 93.41 H 114 -20.59 Peak 1 180 2406 85.43 H 94 -8.57 Avg 1 180 4812 59.77 H 74 -14.23 Peak 1.25 315 4812 51.79 H 54 -2.21 Avg 1.25 315 7218 51.15 H 74 -22.85 Peak 1.25 315 7218 43.17 H 54 -10.83 Avg 1.25 315 9624 47.14 H 74 -26.86 Peak 1.25 135 12030 H 54 -14.84 Avg 1.25 135 12030 H 54 -14.84 Avg 1.25 135 12030 H No Emission Detected 1443	Frog	Lovol					_		
2406 93.41 H 114 -20.59 Peak 1 180 2406 85.43 H 94 -8.57 Avg 1 180 4812 59.77 H 74 -14.23 Peak 1.25 315 4812 51.79 H 54 -2.21 Avg 1.25 315 7218 51.15 H 74 -22.85 Peak 1.25 315 7218 43.17 H 54 -10.83 Avg 1.25 315 9624 47.14 H 74 -26.86 Peak 1.25 135 9624 39.16 H 54 -14.84 Avg 1.25 135 12030 Image: Application of the company of the c			Pol (v/h)	Limit	Margin	-	_	_	Comments
2406 85.43 H 94 -8.57 Avg 1 180 4812 59.77 H 74 -14.23 Peak 1.25 315 4812 51.79 H 54 -2.21 Avg 1.25 315 7218 51.15 H 74 -22.85 Peak 1.25 315 7218 43.17 H 54 -10.83 Avg 1.25 315 9624 47.14 H 74 -26.86 Peak 1.25 135 9624 39.16 H 54 -14.84 Avg 1.25 135 12030 No Emission 12030 No Emission 14436 No Emission 16842 No Emission 16842 No Emission 16842 Detected		` ,	, ,		_	_		, ,,	Comments
4812 59.77 H 74 -14.23 Peak 1.25 315 4812 51.79 H 54 -2.21 Avg 1.25 315 7218 51.15 H 74 -22.85 Peak 1.25 315 7218 43.17 H 54 -10.83 Avg 1.25 315 9624 47.14 H 74 -26.86 Peak 1.25 135 9624 39.16 H 54 -14.84 Avg 1.25 135 12030 Image: Arrow of the content									
4812 51.79 H 54 -2.21 Avg 1.25 315 7218 51.15 H 74 -22.85 Peak 1.25 315 7218 43.17 H 54 -10.83 Avg 1.25 315 9624 47.14 H 74 -26.86 Peak 1.25 135 9624 39.16 H 54 -14.84 Avg 1.25 135 12030 Detected No Emission 14436 No Emission Detected 16842 No Emission Detected	2406	85.43	Н	94	-8.57	Avg	1	180	
4812 51.79 H 54 -2.21 Avg 1.25 315 7218 51.15 H 74 -22.85 Peak 1.25 315 7218 43.17 H 54 -10.83 Avg 1.25 315 9624 47.14 H 74 -26.86 Peak 1.25 135 9624 39.16 H 54 -14.84 Avg 1.25 135 12030 Image: Control of the co	1010				4 4 00		4.05	0.45	
7218 51.15 H 74 -22.85 Peak 1.25 315 7218 43.17 H 54 -10.83 Avg 1.25 315 9624 47.14 H 74 -26.86 Peak 1.25 135 9624 39.16 H 54 -14.84 Avg 1.25 135 12030 No Emission Detected 14436 No Emission Detected 16842 No Emission Detected									
7218 43.17 H 54 -10.83 Avg 1.25 315 9624 47.14 H 74 -26.86 Peak 1.25 135 9624 39.16 H 54 -14.84 Avg 1.25 135 12030 No Emission Detected 14436 No Emission Detected 16842 No Emission Detected	4812	51.79	Н	54	-2.21	Avg	1.25	315	
7218 43.17 H 54 -10.83 Avg 1.25 315 9624 47.14 H 74 -26.86 Peak 1.25 135 9624 39.16 H 54 -14.84 Avg 1.25 135 12030 No Emission Detected 14436 No Emission Detected 16842 No Emission Detected									
9624 47.14 H 74 -26.86 Peak 1.25 135 9624 39.16 H 54 -14.84 Avg 1.25 135 12030 No Emission 12030 Detected 14436 Detected 16842 No Emission 16842 Detected									
9624 39.16 H 54 -14.84 Avg 1.25 135 12030 No Emission Detected 14436 No Emission Detected 16842 No Emission Detected	7218	43.17	Н	54	-10.83	Avg	1.25	315	
9624 39.16 H 54 -14.84 Avg 1.25 135 12030 No Emission Detected 14436 No Emission Detected 16842 No Emission Detected									
12030 No Emission 12030 Detected 14436 No Emission 14436 Detected 16842 No Emission 16842 Detected									
12030 Detected 14436 No Emission 14436 Detected 16842 No Emission 16842 Detected	9624	39.16	Н	54	-14.84	Avg	1.25	135	
12030 Detected 14436 No Emission 14436 Detected 16842 No Emission 16842 Detected									
14436 No Emission 14436 Detected 16842 No Emission 16842 Detected									No Emission
14436 Detected 16842 No Emission 16842 Detected	12030								Detected
14436 Detected 16842 No Emission 16842 Detected									
16842 No Emission 16842 Detected	14436								No Emission
16842 Detected	14436								Detected
16842 Detected									
	16842								No Emission
19248 No Emission	16842								Detected
19248 No Emission									
NO Emission	19248								No Emission
19248 Detected	19248								Detected
21654 No Emission	21654								No Emission
21654 Detected	21654								Detected
24060 No Emission	24060								No Emission
24060 Detected	24060								Detected

RF Digital Corporation Date: 08/31/2010
RF Antenna Module Lab: B

Model: RFDANT Tested By: Kyle Fujimoto

Y-Axis - Low Channel

Freq. Level (dBuV) Pol (v/h) Limit Margin Avg (m) (deg) Comments						Peak /	Ant.	Table	
(MHz) (dBuV) Pol (v/h) Limit Margin Avg (m) (deg) Comments 2406 95.13 V 114 -18.87 Peak 1 315 2406 87.15 V 94 -6.85 Avg 1 315 4812 60.71 V 74 -13.29 Peak 1.25 45 4812 52.73 V 54 -1.27 Avg 1.25 45 7218 52.19 V 74 -21.81 Peak 1.25 135 7218 44.21 V 54 -9.79 Avg 1.25 135 9624 48.24 V 74 -25.76 Peak 1.25 135 12030 Image: Application of the complex	Eroa	Lovol					_		
2406 95.13 V 114 -18.87 Peak 1 315 2406 87.15 V 94 -6.85 Avg 1 315 4812 60.71 V 74 -13.29 Peak 1.25 45 4812 52.73 V 54 -1.27 Avg 1.25 45 7218 52.19 V 74 -21.81 Peak 1.25 135 7218 44.21 V 54 -9.79 Avg 1.25 135 9624 48.24 V 74 -25.76 Peak 1.25 135 9624 40.26 V 54 -13.74 Avg 1.25 135 12030 Image: Peak of the contraction of the con			Pol (v/h)	Limit	Margin		_	_	Comments
2406 87.15 V 94 -6.85 Avg 1 315 4812 60.71 V 74 -13.29 Peak 1.25 45 4812 52.73 V 54 -1.27 Avg 1.25 45 7218 52.19 V 74 -21.81 Peak 1.25 135 7218 44.21 V 54 -9.79 Avg 1.25 135 9624 48.24 V 74 -25.76 Peak 1.25 135 12030 Image: Peak of the control of the			, ,		_	_			Comments
4812 60.71 V 74 -13.29 Peak 1.25 45 4812 52.73 V 54 -1.27 Avg 1.25 45 7218 52.19 V 74 -21.81 Peak 1.25 135 7218 44.21 V 54 -9.79 Avg 1.25 135 9624 48.24 V 74 -25.76 Peak 1.25 135 9624 40.26 V 54 -13.74 Avg 1.25 135 12030 Image: Control of the control			_						
4812 52.73 V 54 -1.27 Avg 1.25 45 7218 52.19 V 74 -21.81 Peak 1.25 135 7218 44.21 V 54 -9.79 Avg 1.25 135 9624 48.24 V 74 -25.76 Peak 1.25 135 9624 40.26 V 54 -13.74 Avg 1.25 135 12030 Image: Control of the cont	2406	87.15	V	94	-6.85	Avg	1	315	
4812 52.73 V 54 -1.27 Avg 1.25 45 7218 52.19 V 74 -21.81 Peak 1.25 135 7218 44.21 V 54 -9.79 Avg 1.25 135 9624 48.24 V 74 -25.76 Peak 1.25 135 9624 40.26 V 54 -13.74 Avg 1.25 135 12030 Image: Control of the cont	1010	00 74			40.00	.	4.05	4=	
7218 52.19 V 74 -21.81 Peak 1.25 135 7218 44.21 V 54 -9.79 Avg 1.25 135 9624 48.24 V 74 -25.76 Peak 1.25 135 9624 40.26 V 54 -13.74 Avg 1.25 135 12030 Image: Control of the control of th									
7218 44.21 V 54 -9.79 Avg 1.25 135 9624 48.24 V 74 -25.76 Peak 1.25 135 9624 40.26 V 54 -13.74 Avg 1.25 135 12030 Image: Control of the control of	4812	52.73	V	54	-1.27	Avg	1.25	45	
7218 44.21 V 54 -9.79 Avg 1.25 135 9624 48.24 V 74 -25.76 Peak 1.25 135 9624 40.26 V 54 -13.74 Avg 1.25 135 12030 Image: Control of the control of									
9624 48.24 V 74 -25.76 Peak 1.25 135 9624 40.26 V 54 -13.74 Avg 1.25 135 12030 No Emission 12030 Detected 14436 No Emission 14436 No Emission 16842 Detected 19248 No Emission 19248 Detected 21654 No Emission									
9624 40.26 V 54 -13.74 Avg 1.25 135 12030 No Emission Detected 14436 No Emission Detected 16842 No Emission Detected 19248 No Emission Detected 21654 No Emission No Emission	7218	44.21	V	54	-9.79	Avg	1.25	135	
9624 40.26 V 54 -13.74 Avg 1.25 135 12030 No Emission Detected 14436 No Emission Detected 16842 No Emission Detected 19248 No Emission Detected 21654 No Emission No Emission									
12030 No Emission 12030 Detected 14436 No Emission 14436 Detected 16842 No Emission 16842 Detected 19248 Detected									
12030 Detected 14436 No Emission 14436 Detected 16842 No Emission 16842 Detected 19248 No Emission 19248 Detected 21654 No Emission	9624	40.26	V	54	-13.74	Avg	1.25	135	
12030 Detected 14436 No Emission 14436 Detected 16842 No Emission 16842 Detected 19248 No Emission 19248 Detected 21654 No Emission									
14436 No Emission 14436 Detected 16842 No Emission 16842 Detected 19248 No Emission 19248 Detected 21654 No Emission									No Emission
14436 Detected 16842 No Emission 16842 Detected 19248 No Emission 19248 Detected 21654 No Emission	12030								Detected
14436 Detected 16842 No Emission 16842 Detected 19248 No Emission 19248 Detected 21654 No Emission									
16842 No Emission 16842 Detected 19248 No Emission 19248 Detected 21654 No Emission	14436								No Emission
16842 Detected 19248 No Emission 19248 Detected 21654 No Emission	14436								Detected
16842 Detected 19248 No Emission 19248 Detected 21654 No Emission									
19248 No Emission 19248 Detected 21654 No Emission	16842								No Emission
19248 Detected 21654 No Emission	16842								Detected
19248 Detected 21654 No Emission									
21654 No Emission	19248								No Emission
	19248								Detected
	21654								No Emission
21654 Detected	21654								Detected
24060 No Emission	24060								No Emission
24060 Detected	24060								Detected

RF Digital Corporation Date: 08/31/2010
RF Antenna Module Lab: B

Model: RFDANT Tested By: Kyle Fujimoto

Y-Axis - Low Channel

					Dook /	Ant.	Toblo	
F	Level				Peak / QP /	_	Table	
Freq.		D - 1 (//-)	1 ! !4	N4		Height	Angle	0
(MHz)	(dBuV)	` '		Margin	Avg	(m)	(deg)	Comments
2406	82.81	Н	114	-31.19	Peak	2	315	
2406	74.83	Н	94	-19.17	Avg	2	315	
4812	51.92	Н	74	-22.08	Peak	2.25	180	
4812	43.94	Н	54	-10.06	Avg	2.25	180	
7218	48.12	Н	74	-25.88	Peak	1.25	135	
7218	40.14	Н	54	-13.86	Avg	1.25	135	
9624	43.96	Н	74	-30.04	Peak	1.35	155	
9624	35.98	Н	54	-18.02	Avg	1.35	155	
12030								No Emission
12030								Detected
14436								No Emission
14436								Detected
16842								No Emission
16842								Detected
19248								No Emission
19248								Detected
21654								No Emission
21654								Detected
24060								No Emission
24060								Detected
								20100100

RF Digital Corporation Date: 08/31/2010
RF Antenna Module Lab: B

Model: RFDANT Tested By: Kyle Fujimoto

Z-Axis - Low Channel

<u> </u>					Peak /	Ant.	Table	
Freq.	Level				QP /	Height	Angle	
(MHz)	(dBuV)	Pol (v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
2406	86.91	V	114	-27.09	Peak	1.25	135	
2406	78.93	V	94	-15.07	Avg	1.25	135	
4812	53.64	V	74	-20.36	Peak	1.25	135	
4812	45.66	V	54	-8.34	Avg	1.25	135	
7218	51.15	V	74	-22.85	Peak	1.25	135	
7218	43.17	V	54	-10.83	Avg	1.25	135	
0004	44.00		74	20.04	Daak	4.05	405	
9624 9624	44.39 36.41	V	74 54	-29.61 -17.59	Peak	1.35 1.35	125 125	
9624	30.41	V	54	-17.59	Avg	1.35	125	
12030								No Emission
12030								Detected
12000								Detected
14436								No Emission
14436								Detected
								_
16842								No Emission
16842								Detected
19248								No Emission
19248								Detected
21654								No Emission
21654								Detected
0.4000								
24060								No Emission
24060								Detected



RF Digital Corporation Date: 08/31/2010
RF Antenna Module Lab: B

Model: RFDANT Tested By: Kyle Fujimoto

Z-Axis - Low Channel

					Peak /	Ant.	Table	
Freq.	Level				QP /	Height	Angle	
(MHz)	(dBuV)	Pol (v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
2406	92	Н	114	-22	Peak	1.5	135	
2406	84.02	Н	94	-9.98	Avg	1.5	135	
4812	59.46	Н	74	-14.54	Peak	1.25	135	
4812	51.48	Н	54	-2.52	Avg	1.25	135	
7218	51.76	Н	74	-22.24	Peak	1.25	225	
7218	43.78	Н	54	-10.22	Avg	1.25	225	
0004	44.00	11	74	20.00	Daak	4.05	405	
9624 9624	44.98 37	H	74 54	-29.02 -17	Peak	1.25 1.25	135 135	
9024	31	П	54	-17	Avg	1.25	133	
12030								No Emission
12030								Detected
12000								Detected
14436								No Emission
14436								Detected
16842								No Emission
16842								Detected
19248								No Emission
19248								Detected
21654								No Emission
21654								Detected
0.4000								
24060								No Emission
24060								Detected

RF Digital Corporation Date: 08/31/10 RF Antenna Module Lab: B

Model: RFDANT Tested By: Kyle Fujimoto

X-Axis - Middle Channel

					Peak /	Ant.	Table	
Freq.	Level				QP /	Height	Angle	
(MHz)	(dBuV)	Pol (v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
	` ,	, ,		_	_		, ,,	Comments
2442	88.01	V	114	-25.99	Peak	1	180	
2442	80.03	V	94	-13.97	Avg	1	180	
4884	49.32	V	74	-24.68	Peak	2.25	225	
4884	41.34	V	54	-12.66	Avg	2.25	225	
7326	48.71	V	74	-25.29	Peak	1.25	135	
7326	40.73	V	54	-13.27	Avg	1.25	135	
9768	50.41	V	74	-23.59	Peak	1.55	225	
9768	42.43	V	54	-11.57	Avg	1.55	225	
12210								No Emission
12210								Detected
14652								No Emission
14652								Detected
17094								No Emission
17094								Detected
19536								No Emission
19536								Detected
21978								No Emission
21978								Detected
24420								No Emission
24420								Detected
								_ = = = = = = = = = = = = = = = = = = =

RF Digital Corporation Date: 08/31/10 RF Antenna Module Lab: B

Model: RFDANT Tested By: Kyle Fujimoto

X-Axis - Middle Channel

		1		<u> </u>	Peak /	Ant.	Table	
Freq.	Level				QP /	Height	Angle	
(MHz)	(dBuV)	Pol (v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
	` ,	, ,		_	_		,	Comments
2442	93.39	Н	114	-20.61	Peak	1.25	180	
2442	85.41	Н	94	-8.59	Avg	1.25	180	
4884	57.73	Н	74	-16.27	Peak	1.35	155	
4884	49.75	Н	54	-4.25	Avg	1.35	155	
7326	49.58	Н	74	-24.42	Peak	1.25	135	
7326	41.6	Н	54	-12.4	Avg	1.25	135	
9768	50.81	Н	74	-23.19	Peak	1.35	165	
9768	42.83	Н	54	-11.17	Avg	1.35	165	
12210								No Emission
12210								Detected
14652								No Emission
14652								Detected
17094								No Emission
17094								Detected
19536								No Emission
19536								Detected
21978								No Emission
21978								Detected
24420								No Emission
24420								Detected
								200000



RF Digital Corporation Date: 08/31/10 RF Antenna Module Lab: B

Model: RFDANT Tested By: Kyle Fujimoto

Y-Axis - Middle Channel

					Peak /	Ant.	Table	
Freq.	Level				QP /	Height	Angle	
-		D = 1 (+ //b)	1 ! !4	Manain		_	_	C =
(MHz)		Pol (v/h)		Margin	Avg	(m)	(deg)	Comments
2442	95.2	V	114	-18.8	Peak	1.25	135	
2442	87.22	V	94	-6.78	Avg	1.25	135	
4884	58.06	V	74	-15.94	Peak	1.25	180	
4884	50.08	V	54	-3.92	Avg	1.25	180	
7326	49.19	V	74	-24.81	Peak	1.25	135	
7326	41.21	V	54	-12.79	Avg	1.25	135	
9768	51.07	V	74	-22.93	Peak	1.25	135	
9768	43.09	V	54	-10.91	Avg	1.25	135	
12210								No Emission
12210								Detected
14652								No Emission
14652								Detected
17094								No Emission
17094								Detected
19536								No Emission
19536								Detected
21978								No Emission
21978								Detected
24420								No Emission
24420								Detected
								20100100



RF Digital Corporation Date: 08/31/10 RF Antenna Module Lab: B

Model: RFDANT Tested By: Kyle Fujimoto

Y-Axis - Middle Channel

					Peak /	Ant.	Table	
Freq.	Level				QP /	Height	Angle	
(MHz)		Pol (v/h)	Limit	Margin	Avg	_	(deg)	Comments
		, ,		_	_	(m)		Comments
2442	86.02	Н	114	-27.98	Peak	2	0	
2442	78.04	Н	94	-15.96	Avg	2	0	
4884	49.15	Н	74	-24.85	Peak	1	225	
4884	41.17	Н	54	-12.83	Avg	1	225	
7326	48.46	Н	74	-25.54	Peak	1.25	135	
7326	40.48	Н	54	-13.52	Avg	1.25	135	
9768	49.73	Н	74	-24.27	Peak	1.35	165	
9768	41.75	Н	54	-12.25	Avg	1.35	165	
12210								No Emission
12210								Detected
14652								No Emission
14652								Detected
17094								No Emission
17094								Detected
19536								No Emission
19536								Detected
21978								No Emission
21978								Detected
24420								No Emission
24420								Detected
•								_ = = = = = = = = = = = = = = = = = = =

RF Digital Corporation Date: 08/31/10 RF Antenna Module Lab: B

Model: RFDANT Tested By: Kyle Fujimoto

Z-Axis - Middle Channel

Comments						Dook /	Ant	Toblo	
(MHz) (dBuV) Pol (v/h) Limit Margin Avg (m) (deg) Comments 2442 87.63 V 114 -26.37 Peak 2 90 4884 51.77 V 74 -22.23 Peak 2.25 135 4884 43.79 V 54 -10.21 Avg 2.25 135 7326 48.43 V 74 -25.57 Peak 1.25 165 7326 40.45 V 54 -13.55 Avg 1.25 165 9768 50.25 V 74 -23.75 Peak 1.35 175 9768 42.27 V 54 -11.73 Avg 1.35 175 12210 No Emission 12210 No Emission 14652 No Emission 17094 </th <th>F</th> <th>11</th> <th></th> <th></th> <th></th> <th>Peak /</th> <th>Ant.</th> <th>Table</th> <th></th>	F	11				Peak /	Ant.	Table	
2442 87.63 V 114 -26.37 Peak 2 90 2442 79.65 V 94 -14.35 Avg 2 90 4884 51.77 V 74 -22.23 Peak 2.25 135 4884 43.79 V 54 -10.21 Avg 2.25 135 7326 48.43 V 74 -25.57 Peak 1.25 165 7326 40.45 V 54 -13.55 Avg 1.25 165 9768 50.25 V 74 -23.75 Peak 1.35 175 9768 42.27 V 54 -11.73 Avg 1.35 175 12210 Image: strain of the color of the	-		-	,	l		_	_	
2442 79.65 V 94 -14.35 Avg 2 90 4884 51.77 V 74 -22.23 Peak 2.25 135 4884 43.79 V 54 -10.21 Avg 2.25 135 7326 48.43 V 74 -25.57 Peak 1.25 165 7326 40.45 V 54 -13.55 Avg 1.25 165 9768 50.25 V 74 -23.75 Peak 1.35 175 9768 42.27 V 54 -11.73 Avg 1.35 175 12210 Image: Control of the control of t		,	Pol (v/n)		_	_			Comments
4884 51.77 V 74 -22.23 Peak 2.25 135 4884 43.79 V 54 -10.21 Avg 2.25 135 7326 48.43 V 74 -25.57 Peak 1.25 165 7326 40.45 V 54 -13.55 Avg 1.25 165 9768 50.25 V 74 -23.75 Peak 1.35 175 9768 42.27 V 54 -11.73 Avg 1.35 175 12210			_						
4884 43.79 V 54 -10.21 Avg 2.25 135 7326 48.43 V 74 -25.57 Peak 1.25 165 7326 40.45 V 54 -13.55 Avg 1.25 165 9768 50.25 V 74 -23.75 Peak 1.35 175 9768 42.27 V 54 -11.73 Avg 1.35 175 12210 Image: square of the control of the c	2442	79.65	V	94	-14.35	Avg	2	90	
4884 43.79 V 54 -10.21 Avg 2.25 135 7326 48.43 V 74 -25.57 Peak 1.25 165 7326 40.45 V 54 -13.55 Avg 1.25 165 9768 50.25 V 74 -23.75 Peak 1.35 175 9768 42.27 V 54 -11.73 Avg 1.35 175 12210 Image: square of the control of the c									
7326 48.43 V 74 -25.57 Peak 1.25 165 7326 40.45 V 54 -13.55 Avg 1.25 165 9768 50.25 V 74 -23.75 Peak 1.35 175 9768 42.27 V 54 -11.73 Avg 1.35 175 12210 Detected No Emission 14652 Detected 17094 No Emission 17094 Detected 19536 No Emission 19536 Detected 21978 No Emission 21978 Detected 24420 No Emission				74		Peak			
7326 40.45 V 54 -13.55 Avg 1.25 165 9768 50.25 V 74 -23.75 Peak 1.35 175 9768 42.27 V 54 -11.73 Avg 1.35 175 12210 Image: Control of the control o	4884	43.79	V	54	-10.21	Avg	2.25	135	
7326 40.45 V 54 -13.55 Avg 1.25 165 9768 50.25 V 74 -23.75 Peak 1.35 175 9768 42.27 V 54 -11.73 Avg 1.35 175 12210 Image: Control of the control o									
9768 50.25 V 74 -23.75 Peak 1.35 175 9768 42.27 V 54 -11.73 Avg 1.35 175 12210						Peak			
9768 42.27 V 54 -11.73 Avg 1.35 175 12210	7326	40.45	V	54	-13.55	Avg	1.25	165	
9768 42.27 V 54 -11.73 Avg 1.35 175 12210									
12210	9768	50.25		74	-23.75	Peak	1.35	175	
12210 Detected	9768	42.27	V	54	-11.73	Avg	1.35	175	
12210 Detected									
14652 No Emission 14652 Detected 17094 No Emission 17094 Detected 19536 No Emission 19536 Detected 21978 No Emission 21978 Detected 24420 No Emission	12210								No Emission
14652 Detected 17094 No Emission 17094 Detected 19536 No Emission 19536 Detected 21978 No Emission 21978 Detected 24420 No Emission	12210								Detected
14652 Detected 17094 No Emission 17094 Detected 19536 No Emission 19536 Detected 21978 No Emission 21978 Detected 24420 No Emission									
17094 No Emission 17094 Detected 19536 No Emission 19536 Detected 21978 No Emission 21978 Detected No Emission No Emission No Emission Detected	14652								No Emission
17094 Detected 19536 No Emission 19536 Detected 21978 No Emission 21978 Detected 24420 No Emission	14652								Detected
17094 Detected 19536 No Emission 19536 Detected 21978 No Emission 21978 Detected 24420 No Emission									
19536 No Emission 19536 Detected 21978 No Emission 21978 Detected 24420 No Emission	17094								No Emission
19536 Detected 21978 No Emission 21978 Detected 24420 No Emission	17094								Detected
19536 Detected 21978 No Emission 21978 Detected 24420 No Emission									
21978 No Emission 21978 Detected 24420 No Emission	19536								No Emission
21978 Detected 24420 No Emission	19536								Detected
21978 Detected 24420 No Emission									
21978 Detected 24420 No Emission	21978								No Emission
24420 No Emission									Detected
	24420								No Emission

RF Digital Corporation Date: 08/31/10 RF Antenna Module Lab: B

Model: RFDANT Tested By: Kyle Fujimoto

Z-Axis - Middle Channel

Comments	l		_		1	Peak /	Ant.	Table	
(MHz) (dBuV) Pol (v/h) Limit Margin Avg (m) (deg) Comments 2442 93.06 H 114 -20.94 Peak 1.25 135 2442 85.08 H 94 -8.92 Avg 1.25 135 4884 56.18 H 74 -17.82 Peak 1.25 135 4884 48.2 H 54 -5.8 Avg 1.25 135 7326 51.78 H 74 -22.22 Peak 1.25 135 9768 50.02 H 74 -22.22 Peak 1.35 165 9768 42.04 H 54 -11.96 Avg 1.35 165 12210 Image: square squa	Eroa	Lovol					_		
2442 93.06 H 114 -20.94 Peak 1.25 135 2442 85.08 H 94 -8.92 Avg 1.25 135 4884 56.18 H 74 -17.82 Peak 1.25 135 4884 48.2 H 54 -5.8 Avg 1.25 135 7326 51.78 H 74 -22.22 Peak 1.25 135 7326 43.8 H 54 -10.2 Avg 1.25 135 9768 50.02 H 74 -23.98 Peak 1.35 165 9768 42.04 H 54 -11.96 Avg 1.35 165 12210 Image: Contract of the co	-		Pol (v/h)	Limit	Margin		_	_	Commonts
2442 85.08 H 94 -8.92 Avg 1.25 135 4884 56.18 H 74 -17.82 Peak 1.25 135 4884 48.2 H 54 -5.8 Avg 1.25 135 7326 51.78 H 74 -22.22 Peak 1.25 135 7326 43.8 H 54 -10.2 Avg 1.25 135 9768 50.02 H 74 -23.98 Peak 1.35 165 9768 42.04 H 54 -11.96 Avg 1.35 165 12210 Image: Control of the		,	, ,		_	_		, ,,	Comments
4884 56.18 H 74 -17.82 Peak 1.25 135 4884 48.2 H 54 -5.8 Avg 1.25 135 7326 51.78 H 74 -22.22 Peak 1.25 135 7326 43.8 H 54 -10.2 Avg 1.25 135 9768 50.02 H 74 -23.98 Peak 1.35 165 9768 42.04 H 54 -11.96 Avg 1.35 165 12210 Image: Avg of the control of th									
4884 48.2 H 54 -5.8 Avg 1.25 135 7326 51.78 H 74 -22.22 Peak 1.25 135 7326 43.8 H 54 -10.2 Avg 1.25 135 9768 50.02 H 74 -23.98 Peak 1.35 165 9768 42.04 H 54 -11.96 Avg 1.35 165 12210 No Emission 12210 No Emission 14652 No Emission 17094 No Emission 17094 No Emission 19536 No Emission 21978 No Emission 21978 No Emission 24420 No Emission	2442	85.08	Н	94	-8.92	Avg	1.25	135	
4884 48.2 H 54 -5.8 Avg 1.25 135 7326 51.78 H 74 -22.22 Peak 1.25 135 7326 43.8 H 54 -10.2 Avg 1.25 135 9768 50.02 H 74 -23.98 Peak 1.35 165 9768 42.04 H 54 -11.96 Avg 1.35 165 12210 No Emission 12210 No Emission 14652 No Emission 17094 No Emission 17094 No Emission 19536 No Emission 21978 No Emission 21978 No Emission 24420 No Emission									
7326 51.78 H 74 -22.22 Peak 1.25 135 7326 43.8 H 54 -10.2 Avg 1.25 135 9768 50.02 H 74 -23.98 Peak 1.35 165 9768 42.04 H 54 -11.96 Avg 1.35 165 12210 Detected No Emission Detected 14652 Detected No Emission 17094 Detected No Emission 19536 No Emission 21978 No Emission 21978 Detected 24420 No Emission									
7326 43.8 H 54 -10.2 Avg 1.25 135 9768 50.02 H 74 -23.98 Peak 1.35 165 9768 42.04 H 54 -11.96 Avg 1.35 165 12210 Image: Control of the control of	4884	48.2	Н	54	-5.8	Avg	1.25	135	
7326 43.8 H 54 -10.2 Avg 1.25 135 9768 50.02 H 74 -23.98 Peak 1.35 165 9768 42.04 H 54 -11.96 Avg 1.35 165 12210 Image: Control of the control of									
9768 50.02 H 74 -23.98 Peak 1.35 165 9768 42.04 H 54 -11.96 Avg 1.35 165 12210									
9768 42.04 H 54 -11.96 Avg 1.35 165 12210	7326	43.8	Н	54	-10.2	Avg	1.25	135	
9768 42.04 H 54 -11.96 Avg 1.35 165 12210									
12210									
12210 Detected	9768	42.04	Н	54	-11.96	Avg	1.35	165	
12210 Detected									
14652 No Emission 14652 Detected 17094 No Emission 17094 Detected 19536 No Emission 19536 Detected 21978 No Emission 21978 Detected 24420 No Emission									No Emission
14652 Detected 17094 No Emission 17094 Detected 19536 No Emission 19536 Detected 21978 No Emission 21978 Detected 24420 No Emission	12210								Detected
14652 Detected 17094 No Emission 17094 Detected 19536 No Emission 19536 Detected 21978 No Emission 21978 Detected 24420 No Emission									
17094 No Emission 17094 Detected 19536 No Emission 19536 Detected 21978 No Emission 21978 Detected No Emission No Emission No Emission Detected	14652								No Emission
17094 Detected 19536 No Emission 19536 Detected 21978 No Emission 21978 Detected 24420 No Emission	14652								Detected
17094 Detected 19536 No Emission 19536 Detected 21978 No Emission 21978 Detected 24420 No Emission									
19536 No Emission 19536 Detected 21978 No Emission 21978 Detected 24420 No Emission	17094								No Emission
19536 Detected 21978 No Emission 21978 Detected 24420 No Emission	17094								Detected
19536 Detected 21978 No Emission 21978 Detected 24420 No Emission									
21978 No Emission 21978 Detected 24420 No Emission	19536								No Emission
21978 Detected 24420 No Emission	19536								Detected
21978 Detected 24420 No Emission									
21978 Detected 24420 No Emission	21978								No Emission
24420 No Emission	21978								Detected
	24420								No Emission

RF Digital Corporation Date: 08/31/2010
RF Antenna Module Lab: B

Model: RFDANT Tested By: Kyle Fujimoto

X-Axis - High Channel

					Peak /	Ant.	Table	
Freq.	Level				QP /	Height	Angle	
		Dal (v/b)	Limit	Marain		_	_	Comments
(MHz)		Pol (v/h)		Margin	Avg	(m)	(deg)	Comments
2479	88.78	V	114	-25.22	Peak	1.25	90	
2479	80.8	V	94	-13.2	Avg	1.25	90	
4958	49.39	V	74	-24.61	Peak	1.25	135	
4958	41.41	V	54	-12.59	Avg	1.25	135	
7437	48.12	V	74	-25.88	Peak	1.35	165	
7437	40.14	V	54	-13.86	Avg	1.35	165	
9916	51.28	V	74	-22.72	Peak	1.35	165	
9916	43.3	V	54	-10.7	Avg	1.35	165	
12395								No Emission
12395								Detected
14874								No Emission
14874								Detected
17353								No Emission
17353								Detected
19832								No Emission
19832								Detected
22311								No Emission
22311								Detected
24790								No Emission
24790								



RF Digital Corporation Date: 08/31/2010
RF Antenna Module Lab: B

Model: RFDANT Tested By: Kyle Fujimoto

X-Axis - High Channel

					Peak /	Ant.	Table	
Freq.	Level				QP /	Height	Angle	
-		D = 1 (+ //b)	1 !!4	Manain	-	_	_	C
(MHz)		Pol (v/h)		Margin	Avg	(m)	(deg)	Comments
2479	91.26	Н	114	-22.74	Peak	2.25	135	
2479	83.28	Н	94	-10.72	Avg	2.25	135	
4958	52.91	Н	74	-21.09	Peak	1.25	225	
4958	44.93	Н	54	-9.07	Avg	1.25	225	
7437	50.02	Н	74	-23.98	Peak	1.25	135	
7437	42.04	Н	54	-11.96	Avg	1.25	135	
9916	50.94	Н	74	-23.06	Peak	1.35	125	
9916	42.96	Н	54	-11.04	Avg	1.35	125	
12395								No Emission
12395								Detected
14874								No Emission
14874								Detected
17353								No Emission
17353								Detected
19832								No Emission
19832								Detected
22311								No Emission
22311								Detected
24790								No Emission
24790								Detected
								20.00.00

RF Digital Corporation Date: 08/31/2010
RF Antenna Module Lab: B

Model: RFDANT Tested By: Kyle Fujimoto

Y-Axis - High Channel

Freq. Level (dBuV) Pol (v/h) Limit Margin Avg (m) Height Angle (deg) Comments						Peak /	Ant.	Table	
(MHz) (dBuV) Pol (v/h) Limit Margin Avg (m) (deg) Comments 2479 95.71 V 114 -18.29 Peak 1.5 0 4979 87.73 V 94 -6.27 Avg 1.5 0 4958 53.14 V 74 -20.86 Peak 1.25 135 4958 45.16 V 54 -8.84 Avg 1.25 135 7437 49.07 V 74 -24.93 Peak 1.35 155 7437 41.09 V 54 -12.91 Avg 1.35 155 9916 55.68 V 74 -18.32 Peak 1.25 135 12395 Image: Peak of the color of the	Fred	Lovel					_		
2479 95.71 V 114 -18.29 Peak 1.5 0 2479 87.73 V 94 -6.27 Avg 1.5 0 4958 53.14 V 74 -20.86 Peak 1.25 135 4958 45.16 V 54 -8.84 Avg 1.25 135 7437 49.07 V 74 -24.93 Peak 1.35 155 7437 41.09 V 54 -12.91 Avg 1.35 155 9916 55.68 V 74 -18.32 Peak 1.25 135 9916 47.7 V 54 -6.3 Avg 1.25 135 12395 Image: Peak of the color of the colo	-		Pol (v/h)	Limit	Margin	-	_	_	Comments
2479 87.73 V 94 -6.27 Avg 1.5 0 4958 53.14 V 74 -20.86 Peak 1.25 135 4958 45.16 V 54 -8.84 Avg 1.25 135 7437 49.07 V 74 -24.93 Peak 1.35 155 7437 41.09 V 54 -12.91 Avg 1.35 155 9916 55.68 V 74 -18.32 Peak 1.25 135 9916 47.7 V 54 -6.3 Avg 1.25 135 12395 Image: Control of the co						_		, ,,	Comments
4958 53.14 V 74 -20.86 Peak 1.25 135 4958 45.16 V 54 -8.84 Avg 1.25 135 7437 49.07 V 74 -24.93 Peak 1.35 155 7437 41.09 V 54 -12.91 Avg 1.35 155 9916 55.68 V 74 -18.32 Peak 1.25 135 9916 47.7 V 54 -6.3 Avg 1.25 135 12395 Image: Application of the control of the cont	_		-						
4958 45.16 V 54 -8.84 Avg 1.25 135 7437 49.07 V 74 -24.93 Peak 1.35 155 7437 41.09 V 54 -12.91 Avg 1.35 155 9916 55.68 V 74 -18.32 Peak 1.25 135 9916 47.7 V 54 -6.3 Avg 1.25 135 12395 Image: Control of the cont	2479	87.73	V	94	-6.27	Avg	1.5	0	
4958 45.16 V 54 -8.84 Avg 1.25 135 7437 49.07 V 74 -24.93 Peak 1.35 155 7437 41.09 V 54 -12.91 Avg 1.35 155 9916 55.68 V 74 -18.32 Peak 1.25 135 9916 47.7 V 54 -6.3 Avg 1.25 135 12395 Image: Control of the cont									
7437 49.07 V 74 -24.93 Peak 1.35 155 7437 41.09 V 54 -12.91 Avg 1.35 155 9916 55.68 V 74 -18.32 Peak 1.25 135 9916 47.7 V 54 -6.3 Avg 1.25 135 12395 Image: Control of the			-						
7437 41.09 V 54 -12.91 Avg 1.35 155 9916 55.68 V 74 -18.32 Peak 1.25 135 9916 47.7 V 54 -6.3 Avg 1.25 135 12395 Image: Control of the control of t	4958	45.16	V	54	-8.84	Avg	1.25	135	
7437 41.09 V 54 -12.91 Avg 1.35 155 9916 55.68 V 74 -18.32 Peak 1.25 135 9916 47.7 V 54 -6.3 Avg 1.25 135 12395 Image: Control of the control of t									
9916 55.68 V 74 -18.32 Peak 1.25 135 9916 47.7 V 54 -6.3 Avg 1.25 135 12395									
9916 47.7 V 54 -6.3 Avg 1.25 135 12395	7437	41.09	V	54	-12.91	Avg	1.35	155	
9916 47.7 V 54 -6.3 Avg 1.25 135 12395									
12395									
12395 Detected	9916	47.7	V	54	-6.3	Avg	1.25	135	
12395 Detected									
14874 No Emission 14874 Detected 17353 No Emission 17353 Detected 19832 No Emission 19832 Detected 22311 No Emission 22311 Detected 24790 No Emission									No Emission
14874 Detected 17353 No Emission 17832 Detected 19832 No Emission 19832 Detected 22311 No Emission 22311 Detected No Emission No Emission No Emission No Emission	12395								Detected
14874 Detected 17353 No Emission 17832 Detected 19832 No Emission 19832 Detected 22311 No Emission 22311 Detected No Emission No Emission No Emission No Emission									
17353 No Emission 17353 Detected 19832 No Emission 19832 Detected 22311 No Emission 22311 Detected No Emission No Emission No Emission No Emission	14874								No Emission
17353 Detected 19832 No Emission 19832 Detected 22311 No Emission 22311 Detected 24790 No Emission	14874								Detected
17353 Detected 19832 No Emission 19832 Detected 22311 No Emission 22311 Detected 24790 No Emission									
19832 No Emission 19832 Detected 22311 No Emission 22311 Detected 24790 No Emission	17353								No Emission
19832 Detected 22311 No Emission 22311 Detected 24790 No Emission	17353								Detected
19832 Detected 22311 No Emission 22311 Detected 24790 No Emission									
22311 No Emission 22311 Detected 24790 No Emission	19832								No Emission
22311 Detected 24790 No Emission	19832								Detected
22311 Detected 24790 No Emission									
24790 No Emission	22311								No Emission
	22311								Detected
	24790								No Emission

Model: RFDANT

FCC 15.249

RF Digital Corporation Date: 08/31/2010
RF Antenna Module Lab: B

Model: RFDANT Tested By: Kyle Fujimoto

Y-Axis - High Channel

Freq. Level (dBuV) Pol (v/h) Limit Margin Avg (m) (deg) (deg) Comments						Peak /	Ant.	Table	
(MHz) (dBuV) Pol (v/h) Limit Margin Avg (m) (deg) Comments 2479 84.25 H 114 -29.75 Peak 1.25 135 4958 46.15 H 74 -27.85 Peak 1.25 135 4958 38.17 H 54 -15.83 Avg 1.25 135 7437 47.91 H 74 -26.09 Peak 1.25 155 7437 39.93 H 54 -14.07 Avg 1.25 155 9916 52.29 H 74 -21.71 Peak 1.25 225 9916 44.31 H 54 -9.69 Avg 1.25 225 12395 Image: Application of the company of t	Frod	Lovel					_		
2479 84.25 H 114 -29.75 Peak 1.25 135 2479 76.27 H 94 -17.73 Avg 1.25 135 4958 46.15 H 74 -27.85 Peak 1.25 135 4958 38.17 H 54 -15.83 Avg 1.25 135 7437 47.91 H 74 -26.09 Peak 1.25 155 7437 39.93 H 54 -14.07 Avg 1.25 155 9916 52.29 H 74 -21.71 Peak 1.25 225 9916 44.31 H 54 -9.69 Avg 1.25 225 12395 Image: April 1.25 225 Image: April 1.25 225 Image: April 1.25 Image: April 1.25 1.25 1.25 Image: April 1.25 <	-		Pol (v/h)	Limit	Margin		_	_	Commonts
2479 76.27 H 94 -17.73 Avg 1.25 135 4958 46.15 H 74 -27.85 Peak 1.25 135 4958 38.17 H 54 -15.83 Avg 1.25 135 7437 47.91 H 74 -26.09 Peak 1.25 155 7437 39.93 H 54 -14.07 Avg 1.25 155 9916 52.29 H 74 -21.71 Peak 1.25 225 9916 44.31 H 54 -9.69 Avg 1.25 225 12395 Image: Avg of the content of the			, ,			_		, ,,	Comments
4958 46.15 H 74 -27.85 Peak 1.25 135 4958 38.17 H 54 -15.83 Avg 1.25 135 7437 47.91 H 74 -26.09 Peak 1.25 155 7437 39.93 H 54 -14.07 Avg 1.25 155 9916 52.29 H 74 -21.71 Peak 1.25 225 9916 44.31 H 54 -9.69 Avg 1.25 225 12395 Image: Application of the control of the c									
4958 38.17 H 54 -15.83 Avg 1.25 135 7437 47.91 H 74 -26.09 Peak 1.25 155 7437 39.93 H 54 -14.07 Avg 1.25 155 9916 52.29 H 74 -21.71 Peak 1.25 225 9916 44.31 H 54 -9.69 Avg 1.25 225 12395 Image: Company of the comp	2479	76.27	Н	94	-17.73	Avg	1.25	135	
4958 38.17 H 54 -15.83 Avg 1.25 135 7437 47.91 H 74 -26.09 Peak 1.25 155 7437 39.93 H 54 -14.07 Avg 1.25 155 9916 52.29 H 74 -21.71 Peak 1.25 225 9916 44.31 H 54 -9.69 Avg 1.25 225 12395 Image: Company of the comp									
7437 47.91 H 74 -26.09 Peak 1.25 155 7437 39.93 H 54 -14.07 Avg 1.25 155 9916 52.29 H 74 -21.71 Peak 1.25 225 9916 44.31 H 54 -9.69 Avg 1.25 225 12395 Image: Control of the control of th									
7437 39.93 H 54 -14.07 Avg 1.25 155 9916 52.29 H 74 -21.71 Peak 1.25 225 9916 44.31 H 54 -9.69 Avg 1.25 225 12395 Image: Control of the control of	4958	38.17	Н	54	-15.83	Avg	1.25	135	
7437 39.93 H 54 -14.07 Avg 1.25 155 9916 52.29 H 74 -21.71 Peak 1.25 225 9916 44.31 H 54 -9.69 Avg 1.25 225 12395 Image: Control of the control of									
9916 52.29 H 74 -21.71 Peak 1.25 225 9916 44.31 H 54 -9.69 Avg 1.25 225 12395									
9916	7437	39.93	Н	54	-14.07	Avg	1.25	155	
9916									
12395									
12395 Detected	9916	44.31	Н	54	-9.69	Avg	1.25	225	
12395 Detected									
14874 No Emission 14874 Detected 17353 No Emission 17353 Detected 19832 No Emission 19832 Detected 22311 No Emission 22311 Detected 24790 No Emission	12395								No Emission
14874 Detected 17353 No Emission 17832 Detected 19832 No Emission 19832 Detected 22311 No Emission 22311 Detected No Emission No Emission 24790 No Emission	12395								Detected
14874 Detected 17353 No Emission 17832 Detected 19832 No Emission 19832 Detected 22311 No Emission 22311 Detected No Emission No Emission 24790 No Emission									
17353 No Emission 17353 Detected 19832 No Emission 19832 Detected 22311 No Emission 22311 Detected No Emission No Emission No Emission No Emission	14874								No Emission
17353 Detected 19832 No Emission 19832 Detected 22311 No Emission 22311 Detected 24790 No Emission	14874								Detected
17353 Detected 19832 No Emission 19832 Detected 22311 No Emission 22311 Detected 24790 No Emission									
19832 No Emission 19832 Detected 22311 No Emission 22311 Detected 24790 No Emission	17353								No Emission
19832 Detected 22311 No Emission 22311 Detected 24790 No Emission	17353								Detected
19832 Detected 22311 No Emission 22311 Detected 24790 No Emission									
22311 No Emission 22311 Detected 24790 No Emission	19832								No Emission
22311 Detected 24790 No Emission	19832								Detected
22311 Detected 24790 No Emission									
22311 Detected 24790 No Emission	22311								No Emission
24790 No Emission									
	24790								No Emission



RF Digital Corporation Date: 08/31/2010
RF Antenna Module Lab: B

Model: RFDANT Tested By: Kyle Fujimoto

Z-Axis - High Channel

		_		<u> </u>	Peak /	Ant.	Table	
Freq.	Level				QP /	Height	Angle	
(MHz)		Pol (v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
		, ,		_	_		, ,,	Comments
2479	89.44	V	114	-24.56	Peak	1.25	135	
2479	81.46	V	94	-12.54	Avg	1.25	135	
4958	48.33	V	74	-25.67	Peak	1.35	165	
4958	40.35	V	54	-13.65	Avg	1.35	165	
7437	48.43	V	74	-25.57	Peak	1.35	315	
7437	40.45	V	54	-13.55	Avg	1.35	315	
9916	51.21	V	74	-22.79	Peak	1.25	90	
9916	43.23	V	54	-10.77	Avg	1.25	90	
12395								No Emission
12395								Detected
14874								No Emission
14874								Detected
17353								No Emission
17353								Detected
19832								No Emission
19832								Detected
22311								No Emission
22311								Detected
24790								No Emission
24790								Detected

RF Digital Corporation Date: 08/31/2010
RF Antenna Module Lab: B

Model: RFDANT Tested By: Kyle Fujimoto

Z-Axis - High Channel

(MHz) (dl 2479 9	.evel IBuV)				Peak /	Ant.	Table	
(MHz) (dl 2479 9					QP/	Height	Angle	
2479 9 ⁻	Buv)	Dal (y/h)	Limit	Margin	Avg	(m)	(deg)	Comments
	4.00			_				Comments
	1.93	H	114	-22.07	Peak	2.25	135	
2479 83	3.95	Н	94	-10.05	Avg	2.25	135	
1050 51				00.00		0.05	0.45	
	3.98	H	74	-20.02	Peak	2.25	315	
4958	46	Н	54	-8	Avg	2.25	315	
	7.86	Н	74	-26.14	Peak	1.25	315	
7437 39	9.88	Н	54	-14.12	Avg	1.25	315	
	2.57	Н	74	-21.43	Peak	1.25	155	
9916 44	4.59	Н	54	-9.41	Avg	1.25	155	
12395								No Emission
12395								Detected
14874								No Emission
14874								Detected
17353								No Emission
17353								Detected
19832								No Emission
19832								Detected
22311								No Emission
22311								Detected
24790								No Emission
24790								Detected

Model: RFDANT

FCC 15.249

RF Digital Corporation Date: 08/31/2010 RF Antenna Module Labs: B and D

Model: RFDANT Tested By: Kyle Fujimoto

Non Harmonic Emissions from the Tx and Digital Portion 10 kHz to 25 GHz

Freq. (MHz)	Level	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
(111112)	(abat)	. 01 (1/11)		ina giii	7.19	(,	(aog)	
								No Emissions Found for the
								Digital Portion
								from 10 kHz to 25 GHz
								for both Vertical and Horizontal
								Polarizations
								No Non Harmonic
								Emissions Found
								for the Tx Mode
								from 10 kHz to 25 GHz
								for both Vertical and Horizontal
								Polarizations
								Investigated in the
								X, Y, and Z-Axis



BAND EDGES

DATA SHEETS

RF Digital Corporation Date: 08/31/2010
RF Antenna Module Lab: B

Model: RFDANT Tested By: Kyle Fujimoto

Band Edges - Low Channel

					Peak /	Ant.	Table	
Freq.	Level				QP /	Height	Angle	
(MHz)		Pol (v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
		, ,					, ,,	
2406	95.13	V	114	-18.87	Peak	1	315	Fundamental
2406	87.15	V	94	-6.85	Avg	1	315	Y-Axis (Worst Case)
2400	53.61	V	74	-20.39	Peak	1	315	Band Edge
2400	45.63	V	54	-8.37	Avg	1	315	Y-Axis (Worst Case)
2406	93.41	Н	114	-20.59	Peak	1.5	135	Fundamental
2406	85.43	Н	94	-8.57	Avg	1.5	135	X-Axis (Worst Case)
2400	51.56	Н	74	-22.44	Peak	1.5	135	Band Edge
2400	43.58	Н	54	-10.42	Avg	1.5	135	X-Axis (Worst Case)
								,

The Band Edge Readings Reflect a 10 dB Increase from the Plots to compensate for the 100 kHz RBW used instead of a 1 MHz RBW

The Funamentals were measured with a 1 MHz RBW and no correction factor was used from the Plots.

RF Digital Corporation Date: 08/31/2010
RF Antenna Module Lab: B

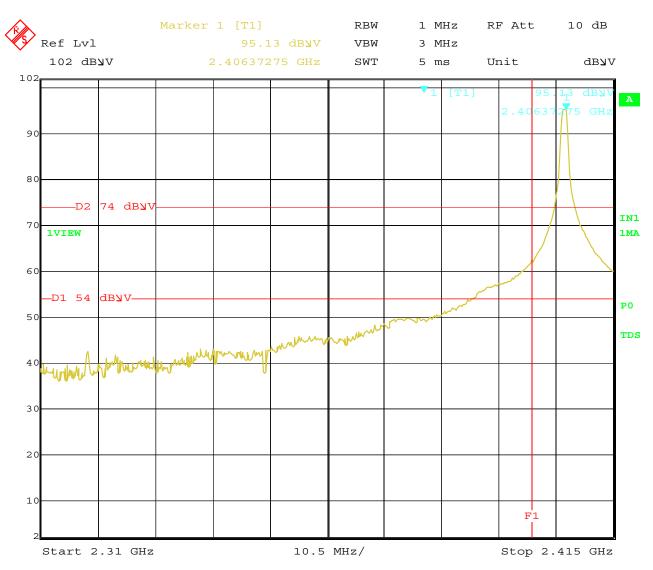
Model: RFDANT Tested By: Kyle Fujimoto

Band Edges - High Channel

					Peak /	Ant.	Table	
Freq.	Level				QP /	Height	Angle	
-		D = 1 (+ //b)	1 ! !4	Manain	-	_	_	C
(MHz)		Pol (v/h)		Margin	Avg	(m)	(deg)	Comments
2479	95.71	V	114	-18.29	Peak	1.5	0	Fundamental
2479	87.73	V	94	-6.27	Avg	1.5	0	Y-Axis (Worst Case)
2483.5	56.75	V	74	-17.25	Peak	1.5	0	Band Edge
2483.5	48.77	V	54	-5.23	Avg	1.5	0	Y-Axis (Worst Case)
2479	91.93	Н	114	-22.07	Peak	2.25	135	Fundamental
2479	83.95	Н	94	-10.05	Avg	2.25	135	Z-Axis (Worst Case)
								,
2483.5	53.26	Н	74	-20.74	Peak	2.25	135	Band Edge
2483.5	45.28	Н	54	-8.72	Avg	2.25	135	Z-Axis (Worst Case)

The Band Edge Readings Reflect a 10 dB Increase from the Plots to compensate for the 100 kHz RBW used instead of a 1 MHz RBW

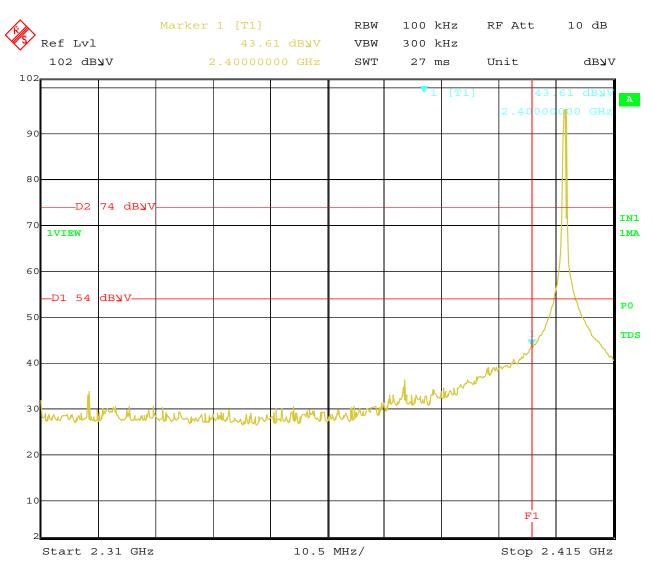
The Funamentals were measured with a 1 MHz RBW and no correction factor was used from the Plots.



31.AUG.2010 09:27:19 Date:

Fundamental – Low Channel – Vertical Polarization – 1 MHz RBW – Y-Axis (Worst Case)

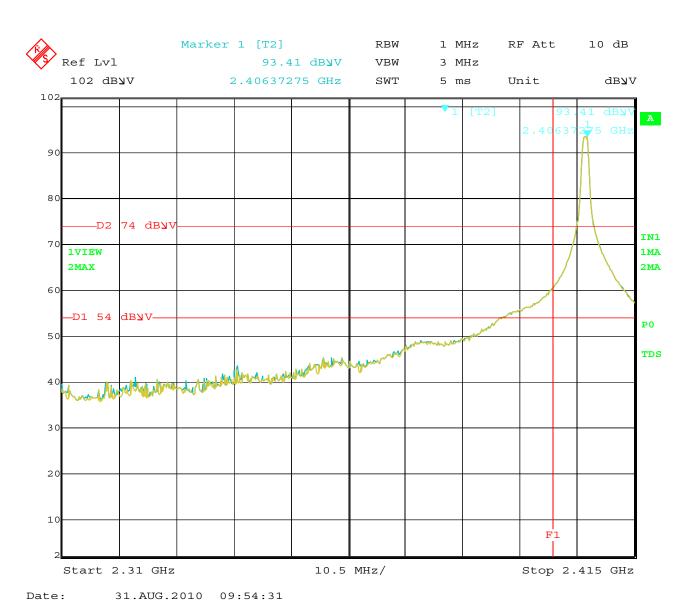
RF Antenna Module Model: RFDANT



Date: 31.AUG.2010 09:28:05

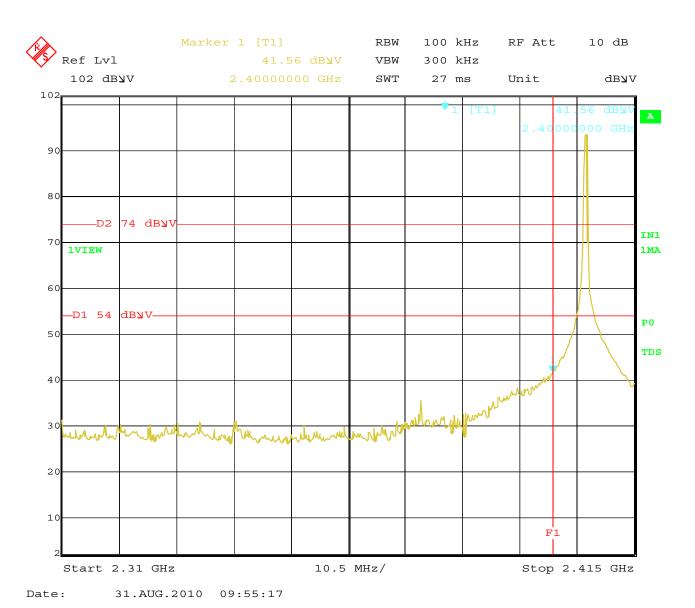
Band Edge – Low Channel – Vertical Polarization – 100 kHz RBW – Y-Axis (Worst Case)

RF Antenna Module Model: RFDANT

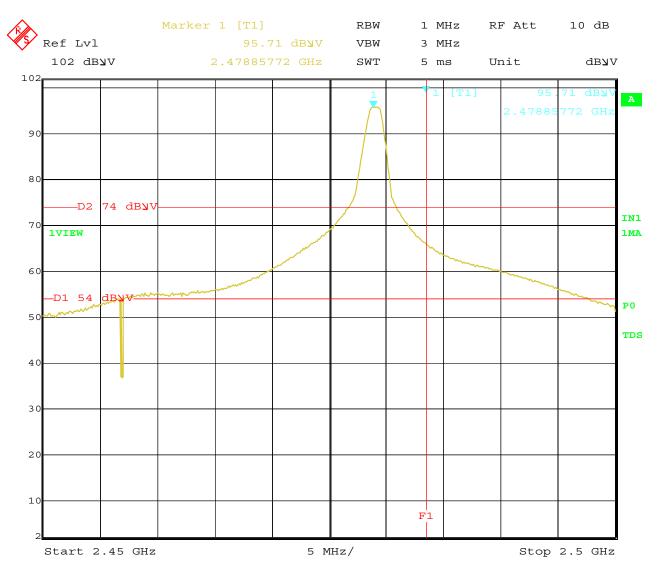


Fundamental – Low Channel – Horizontal Polarization – 1 MHz RBW – X-Axis (Worst Case)

RF Antenna Module Model: RFDANT



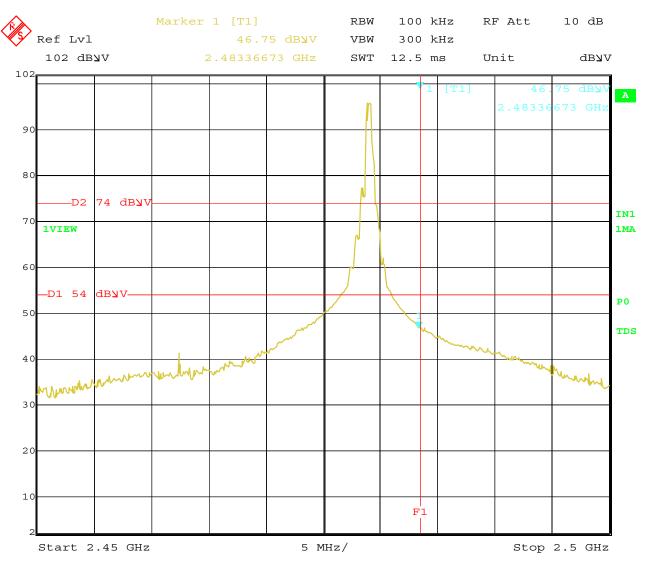
Band Edge – Low Channel – Horizontal Polarization – 100 kHz RBW – X-Axis (Worst Case)



31.AUG.2010 08:40:22 Date:

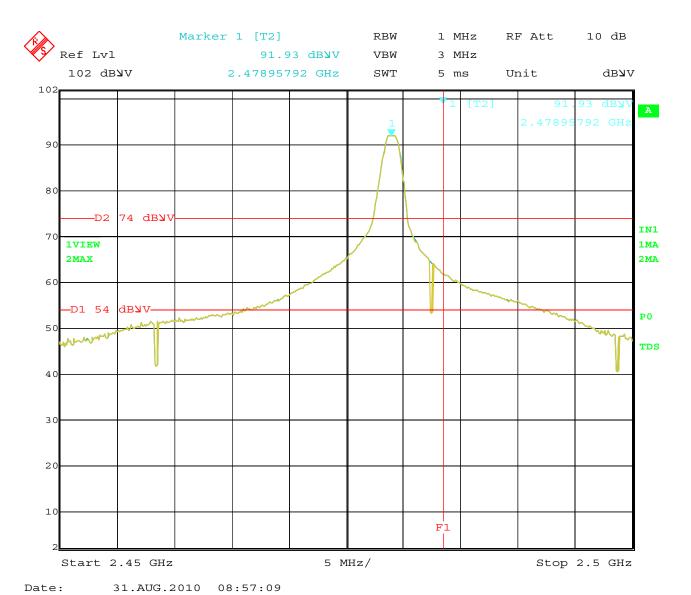
Fundamental – High Channel – Vertical Polarization – 1 MHz RBW – Y-Axis (Worst Case)



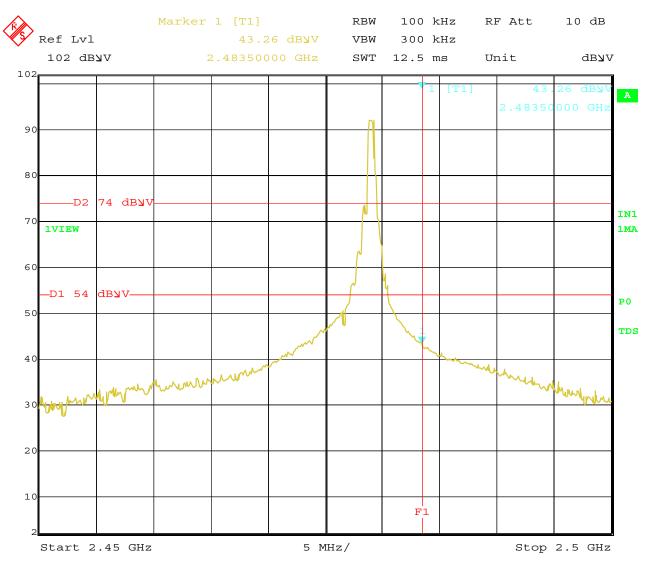


31.AUG.2010 08:43:16 Date:

Band Edge – High Channel – Vertical Polarization – 100 kHz RBW – Y-Axis (Worst Case)



Fundamental – High Channel – Horizontal Polarization – 1 MHz RBW – Z-Axis (Worst Case)



31.AUG.2010 08:58:45 Date:

Band Edge – High Channel – Horizontal Polarization – 100 kHz RBW – Z-Axis (Worst Case)

Model: RFDANT

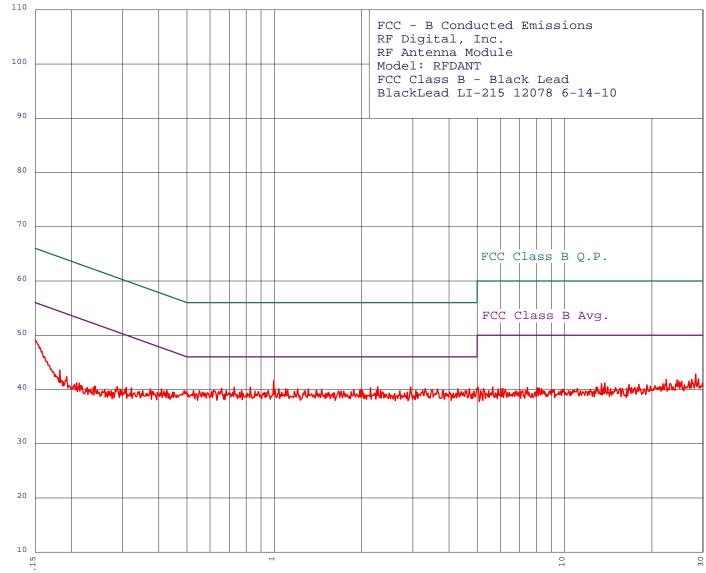
CONDUCTED EMISSIONS

DATA SHEETS

[dBuV]

AMPLITUDE

Silverado Division



Report Number: B00831D1

FCC Part 15 Subpart B and FCC Section 15.249 Test Report

RF Antenna Module

Model: RFDANT



FCC - B Conducted Emissions

RF Digital, Inc. RF Antenna Module Model: RFDANT

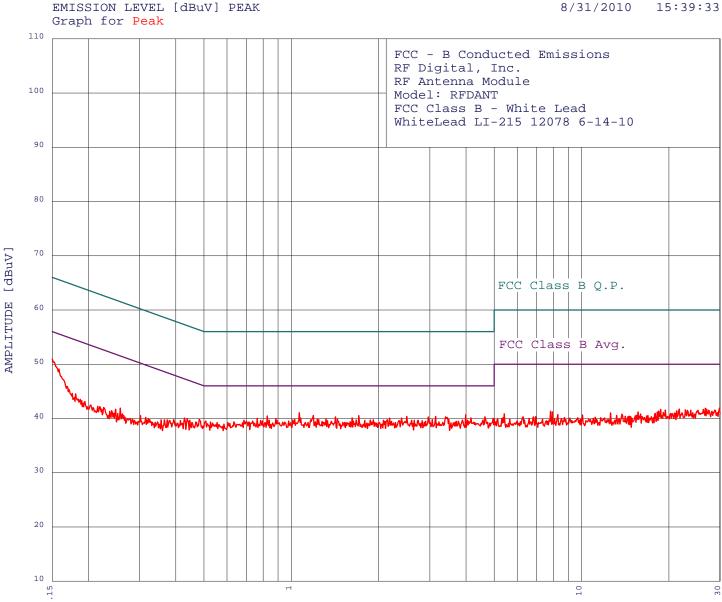
FCC Class B - Black Lead

BlackLead LI-215 12078 6-14-10 TEST ENGINEER: Kyle Fujimoto

					_	
			.00 dB of FCC	Class B Avg.	limit	line
	riteria :		Curve : Peak			
Peak#	Freq(MHz)	Amp(dBuV		Delta(dB)		
1	0.995	41.60	46.00	-4.40		
2	2.274	40.49	46.00	-5.51		
3	2.948	40.43	46.00	-5.57		
4	0.826	40.39	46.00	-5.61		
5	0.728	40.39	46.00	-5.61		
6 7	2.145 0.658	40.29	46.00	-5.71 5.01		
8	3.311	40.19 40.15	46.00 46.00	-5.81 -5.85		
9	4.696	40.13	46.00	-5.89		
10	1.038	40.10	46.00	-5.90		
11	1.094	40.10	46.00	-5.90		
12	1.204	40.09	46.00	-5.91		
13	4.294	40.09	46.00	-5.91		
14	1.311	40.09	46.00	-5.91		
15	1.992	40.08	46.00	-5.92		
16	3.644	40.06	46.00	-5.94		
17	1.112	40.00	46.00	-6.00		
18	1.456	39.99	46.00	-6.01		
19	1.879	39.98	46.00	-6.02		
20	3.492	39.95	46.00	-6.05		
21	2.250	39.89	46.00	-6.11		
22	1.397	39.89	46.00	-6.11		
23	0.618	39.89	46.00	-6.11		
24	1.971	39.88	46.00	-6.12		
25	3.820	39.87	46.00	-6.13		
26	3.075	39.83	46.00	-6.17		
27	4.552	39.81	46.00	-6.19		
28	0.953	39.80	46.00	-6.20		
29	2.322	39.80	46.00	-6.20		
30	1.276 0.771	39.79	46.00	-6.21		
31 32	0.683	39.79 39.79	46.00 46.00	-6.21 -6.21		
33	0.552	39.79	46.00	-6.21		
34	0.527	39.79	46.00	-6.21		
35	4.877	39.72	46.00	-6.28		
36	2.707	39.72	46.00	-6.28		
37	0.858	39.69	46.00	-6.31		
38	1.663	39.69	46.00	-6.31		
39	1.699	39.69	46.00	-6.31		
40	1.735	39.69	46.00	-6.31		
41	0.489	39.79	46.18	-6.40		
42	1.172	39.60	46.00	-6.40		
43	0.608	39.59	46.00	-6.41		
44	4.008	39.58	46.00	-6.42		
45	2.870	39.52	46.00	-6.48		
46	2.371	39.50	46.00	-6.50		
47	1.536	39.49	46.00	-6.51		
48	1.603	39.39	46.00	-6.61		

Silverado Division

8/31/2010 15:39:33





FCC - B Conducted Emissions

RF Digital, Inc. RF Antenna Module Model: RFDANT

FCC Class B - White Lead

WhiteLead LI-215 12078 6-14-10 TEST ENGINEER: Kyle Fujimoto

				Class B Avg.	limit	line
	riteria :		urve : Peak			
Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)		
1	1.066	41.03	46.00	-4.97		
2	3.987	40.70	46.00	-5.30		
3	1.191	40.55	46.00	-5.45		
4	1.708	40.51	46.00	-5.49		
5	0.826	40.45	46.00	-5.55		
6	3.141	40.38	46.00	-5.62		
7	2.501	40.36	46.00	-5.64		
8	4.648	40.31	46.00	-5.69		
9	3.401	40.28	46.00	-5.72		
10	1.419	40.28	46.00	-5.72		
11	2.963	40.27	46.00	-5.73		
12	1.620	40.10	46.00	-5.90		
13	4.159	40.10	46.00	-5.90		
14	2.397	40.06	46.00	-5.94		
15	2.179	40.05	46.00	-5.95		
16	0.763	40.03	46.00	-5.97		
17	4.954	40.02	46.00	-5.98		
18	0.885	39.98	46.00	-6.02		
19	1.318	39.97	46.00	-6.03		
20	1.441	39.88	46.00	-6.12		
21	1.230	39.85	46.00	-6.15		
22	1.027	39.83	46.00	-6.17		
23	3.059	39.78	46.00	-6.22		
24	2.145	39.75	46.00	-6.25		
25	1.918	39.74	46.00	-6.26		
26	1.671	39.71	46.00	-6.29		
27	3.882	39.69	46.00	-6.31		
28	0.686	39.69	46.00	-6.31		
29	2.736	39.67	46.00	-6.33		
30	2.651	39.67	46.00	-6.33		
31	2.596	39.66	46.00	-6.34		
32	0.839	39.66	46.00	-6.34		
33	2.077	39.65	46.00	-6.35		
34	0.783	39.63	46.00	-6.37		
35	1.790	39.62	46.00	-6.38		
36	2.826	39.57	46.00	-6.43		
37	1.331	39.57	46.00	-6.43		
38	2.358	39.56	46.00	-6.44		
39	0.508	39.52	46.00	-6.48		
40	0.979	39.52	46.00	-6.48		
41	0.481	39.83	46.32	-6.48		
42	0.735	39.51	46.00	-6.49		
43	3.761	39.49	46.00	-6.51		
44	0.634	39.37	46.00	-6.63		
45	0.527	39.33	46.00	-6.67		
46	0.438	39.98	47.11	-7.13		
47	0.428	40.08	47.28	-7.20		
48	0.447	39.67	46.93	-7.27		