FCC PART 15, SUBPART C
TEST METHOD: ANSI C63.4-1992
TEST REPORT

for

RF TRANSMITTER

Model: RFONE

Prepared for

TELDATA SOLUTIONS
8723-A BELLANCA AVENUE
LOS ANGELES, CALIFORNIA 90045

Prepared by: _____

KYLE FUJIMOTO

Approved by: _____

SCOTT McCUTCHAN

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

DATE: NOVEMBER 27, 2000

	REPORT BODY	APPENDICES					TOTAL
		A	***B***	***C***	***D***	***E***	
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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 in any form unless done so in full with the written permission of Compatible Electronics.

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

Device Tested: RF Transmitter
Model: RFONE
S/N: N/A

Product Description: See Expository Statement.

Modifications: The EUT was not modified during the testing.

Manufacturer: Teldata Solutions
8723-A Bellanca Avenue
Los Angeles, California 90045

Test Date: November 20, 2000

Test Specifications: EMI requirements
CFR Title 47, Part 15 Subpart C, Sections 15.205, 15.209, and 15.231

Test Procedure: ANSI C63.4: 1992

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

SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Conducted RF Emissions, 450 kHz - 30 MHz	This test was not performed because the EUT runs off batteries only and cannot be powered by any device that runs off the AC public mains.
2	Radiated RF Emissions, 10 kHz - 3100 MHz	Complies with the limits of CFR Title 47, Part 15, Subpart C, sections 15.205, 15.209, and 15.231

1. PURPOSE

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on the RF Transmitter Model: RFONE. The EMI measurements were performed according to the measurement procedure described in ANSI C63.4: 1992. 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 specification limits defined by CFR Title 47, Part 15, Subpart C, sections 15.205, 15.209, and 15.231.

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

Teldata Solutions

Eric Zhang	Design Engineer
Ron Durra	Manager, Production Planning

Compatible Electronics Inc.

Kyle Fujimoto	Test Engineer
Scott McCutchan	Lab Manager

2.4 Date Test Sample was Received

The test sample was received on November 20, 2000.

2.5 Disposition of the Test Sample

The test sample was returned to Teldata Solutions on November 20, 2000.

2.6 Abbreviations and Acronyms

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

RF	Radio Frequency
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

3. APPLICABLE DOCUMENTS

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

SPEC	TITLE
CFR Title 47, Subpart C	FCC Rules – Radio frequency devices (including digital devices) – Intentional Radiators
ANSI C63.4 1992	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.

The RF Transmitter Model: RFONE (EUT) was connected to 1 meter unterminated cable. The EUT was mounted on an actual water utility cover, which is how the EUT will be mounted in field use. The EUT was continuously transmitting. The final radiated data was taken in the mode above. The antenna is a PCB trace.

The transmitter under normal operation will be on for 600 ms. The time between transmissions is programmable anywhere from 1 minute to several hours.

Please see Appendix D for the data sheets.

4.1.1 Cable Construction and Termination

Cable 1 This is a 1 meter unshielded, unterminated cable connected to the EUT.

5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT

5.1 EUT and Accessory List

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID
RF TRANSMITTER (EUT)	TELDATA SOLUTIONS	RFONE	N/A	PFF-TDSSHORTHOPRF
WATER UTILITY COVER	N/A	N/A	N/A	N/A

5.2 EMI Test Equipment

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CAL. DATE	CAL. DUE DATE
Spectrum Analyzer – Main Section	Hewlett Packard	8566B	3638A08768	June 24, 2000	June 24, 2001
Spectrum Analyzer – Display Section	Hewlett Packard	85662A	3701A22262	June 24, 2000	June 24, 2001
Preamplifier	Com Power	PA-102	1017	Jan. 11, 2000	Jan. 11, 2001
Quasi-Peak Adapter	Hewlett Packard	85650A	2811A01363	June 24, 2000	June 24, 2001
Biconical Antenna	Com Power	AB-100	1548	Oct. 16, 2000	Oct. 16, 2001
Log Periodic Antenna	Com Power	AL-100	16101	Oct. 16, 2000	Oct. 16, 2001
Antenna Mast	Com Power	AM-100	N/A	N/A	N/A
Turntable	Com Power	TT-100	N/A	N/A	N/A
Computer	Hewlett Packard	HP98561A	2522A05178	N/A	N/A
Printer	Hewlett Packard	2225A	2925S33268	N/A	N/A
Plotter	Hewlett Packard	7440A	8726K38417	N/A	N/A
Microwave Preamplifier	Com-Power	PA-122	25195	Jan. 13, 2000	Jan. 13, 2001
Horn Antenna	Antenna Research	DRG-118/A	1053	Dec. 8, 1995	N/A
Loop Antenna	Com-Power	AL-130	25309	May 25, 2000	May 25, 2001

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 Radiated Emissions (Spurious and Harmonics) Test

The spectrum analyzer was 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, and the Com-Power Model: PA-122 was used for frequencies above 1 GHz. The spectrum analyzer was 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 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 3.1 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: 1992. 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 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.

7.2 Bandwidth of the Fundamental

The -20 dB bandwidth was checked to see that it was within 0.25% of the fundamental frequency for the RF Transmitter. A plot of the -20 dB bandwidth is in Appendix D.

8. CONCLUSIONS

The RF Transmitter Model: RFONE meets all of the specification limits defined in CFR Title 47, Part 15, Subpart C, sections 15.205, 15.209, and 15.231.

APPENDIX A

MODIFICATIONS TO THE EUT

MODIFICATIONS TO THE EUT

The modifications listed below were made to the EUT to pass FCC 15.231 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.

Modifications:

No modifications were made to the EUT.

APPENDIX B

ADDITIONAL MODELS COVERED UNDER THIS REPORT

ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

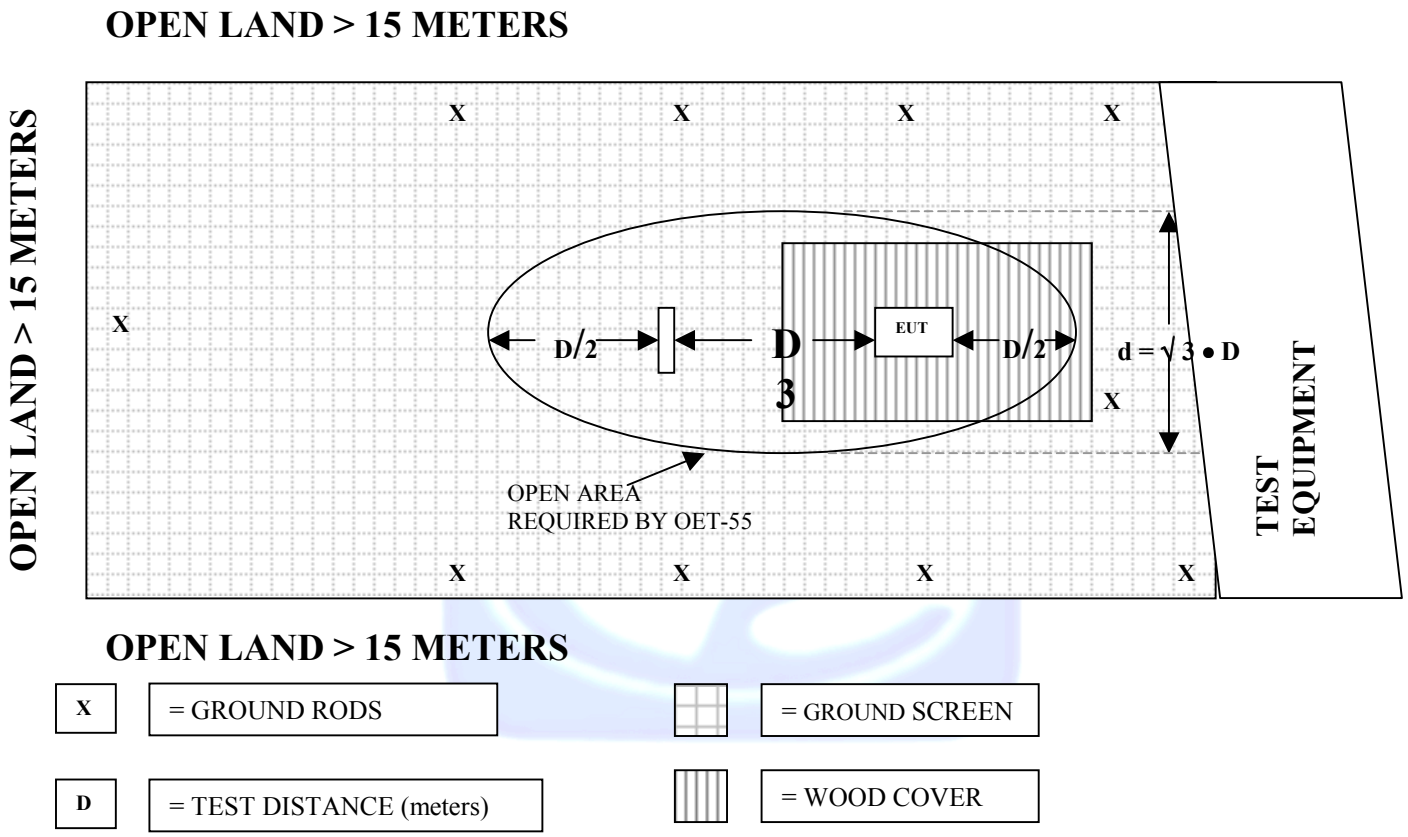
RF Transmitter
Model: RFONE
S/N: N/A

There were no additional models covered under this report.

APPENDIX C

DIAGRAMS, CHARTS AND PHOTOS

FIGURE 1: PLOT MAP AND LAYOUT OF RADIATED SITE



FRONT VIEW

TELDATA SOLUTIONS
RF TRANSMITTER
MODEL: RFONE
FCC SUBPART C - RADIATED EMISSIONS – 11-20-00

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

REAR VIEW

TELDATA SOLUTIONS
RF TRANSMITTER
MODEL: RFONE
FCC SUBPART C - RADIATED EMISSIONS – 11-20-00

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

COM-POWER AB-100

BICONICAL ANTENNA

S/N: 01548

CALIBRATION DATE: OCTOBER 16, 2000

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	14.01	120	10.33
35	13.63	125	11.61
40	13.26	140	12.70
45	11.62	150	12.95
50	11.03	160	13.58
60	8.52	175	14.82
70	8.94	180	14.84
80	8.17	200	14.80
90	8.08	250	16.42
100	8.64	300	20.26

COM-POWER AL-100

LOG PERIODIC ANTENNA

S/N: 16101

CALIBRATION DATE: OCTOBER 16, 2000

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
300	12.96	700	19.24
400	16.92	800	21.37
500	16.73	900	22.13
600	16.32	1000	22.19

COM-POWER PA-102

PREAMPLIFIER

S/N: 1017

CALIBRATION DATE: JANUARY 11, 2000

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	38.3	300	38.6
40	38.6	350	38.6
50	38.7	400	38.6
60	38.8	450	38.1
70	38.9	500	37.9
80	38.8	550	39.2
90	38.6	600	38.3
100	38.6	650	38.4
125	38.8	700	38.3
150	38.8	750	38.2
175	38.7	800	37.7
200	38.8	850	37.5
225	38.6	900	37.5
250	38.6	950	37.7
275	38.5	1000	37.3

COM-POWER PA-122

MICROWAVE PREAMPLIFIER

S/N: 25195

CALIBRATION DATE: JANUARY 13, 2000

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	34.4	9.0	30.7
1.1	34.1	9.5	31.5
1.2	34.2	10.0	31.0
1.3	34.1	10.5	31.4
1.4	33.9	11.0	30.7
1.5	33.8	11.5	29.5
1.6	33.0	12.0	27.8
1.7	33.3	12.5	31.4
1.8	33.3	13.0	31.0
1.9	31.9	13.5	31.0
2.0	32.7	14.0	31.5
2.5	31.8	14.5	30.2
3.0	31.7	15.0	29.2
3.5	31.9	15.5	30.1
4.0	31.0	16.0	29.0
4.5	31.4	16.5	27.8
5.0	31.1	17.0	30.8
5.5	31.0	17.5	31.5
6.0	32.0	18.0	30.8
6.5	31.6		
7.0	32.3		
7.5	32.9		
8.0	32.1		
8.5	31.6		

ANTENNA RESEARCH ASSOCIATES, INC.
11317 Frederick Avenue, Beltsville, MD 20705

E-FIELD ANTENNA FACTOR CALIBRATION

E(dB V/m) = Vo(dB V) + AFE(dB/m)

Model number : DRG-118/A

Frequency GHz	AFE dB/m	Gain dBi
1	22.3	8.0
2	26.7	9.5
3	29.7	10.1
4	29.5	12.8
5	32.3	12.0
6	32.4	13.4
7	36.1	11.0
8	37.4	10.9
9	36.8	12.5
10	39.5	10.7
11	39.6	11.5
12	39.8	12.0
13	39.7	12.8
14	41.8	11.3
15	41.9	11.9
16	38.1	16.3
17	41.0	13.9
18	46.5	8.9

Serial number : 1053
Job number : 96-092
Remarks : 3 meter calibration
Standards : LPD-118/A, TE-1000

Temperature : 72° F
Humidity : 56 %
Traceability : A01887
Date : December 08, 1995

Calibrated By

Com-Power Corporation

(949) 587-9800

Antenna Calibration

Antenna Type:	Loop Antenna
Model:	AL-130
Serial Number:	25309
Calibration Date:	05/25/00

Frequency MHz	Magnetic (dB/m)	Electric dB/m
0.009	-41.0	10.5
0.01	-41.0	10.5
0.02	-41.9	9.6
0.05	-41.9	9.6
0.075	-41.8	9.7
0.1	-42.2	9.3
0.15	-42.2	9.3
0.25	-40.7	10.8
0.5	-42.1	9.4
0.75	-40.9	10.6
1	-41.3	10.2
2	-40.8	10.7
3	-41.1	10.4
4	-41.2	10.3
5	-40.7	10.8
10	-40.6	10.9
15	-42.0	9.5
20	-42.0	9.5
25	-42.9	8.6
30	-42.3	9.2

Trans. Antenna Height	2 meter
Receiving Antenna Height	2 meter

APPENDIX D

DATA SHEETS

RADIATED EMISSIONS

DATA SHEETS

RADIATED EMISSIONS (FCC SECTION 15.205 AND 15.231)

COMPANY	**TELDATA SOLUTIONS**	**DATE**	**11/20/00**
EUT	**RF TRANSMITTER**	**DUTY CYCLE**	**10.00 %**
MODEL	**RFONE**	**PEAK TO AVG**	**-20.00 dB**
S/N	**PROTOTYPE**	**TEST DIST.**	**3 METERS**
TEST ENGINEER	**KYLE FUJIMOTO**	**LAB**	**D**

Frequency MHz	Peak Reading (dBuV)	Average (A) or Quasi-Peak (QP)	Antenna Polar. (V or H)	Antenna Height (meters)	EUT Azimuth (degrees)	EUT Axis (X,Y,Z)	EUT Tx Channel	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Gain (dB)	*Corrected Reading (dBuV/m)	Delta ** (dB)	Spec Limit (dBuV/m)	Comments
303.8750	69.8	49.8 A	H	1.0	90			13.1	2.3	0.0	**65.2**	**-1.7**	**66.9**	
303.8750	63.8	43.8 A	V	1.0	90			13.1	2.3	0.0	**59.2**	**-7.7**	**66.9**	

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

** DELTA = SPEC LIMIT - CORRECTED READING

RADIATED EMISSIONS (FCC SECTION 15.205 AND 15.231)

COMPANY	**TELDATA SOLUTIONS**	**DATE**	**11/20/00**
EUT	**RF TRANSMITTER**	**DUTY CYCLE**	**10.00 %**
MODEL	**RFONE**	**PEAK TO AVG**	**-20.00 dB**
S/N	**PROTOTYPE**	**TEST DIST.**	**3 METERS**
TEST ENGINEER	**KYLE FUJIMOTO**	**LAB**	**D**

Frequency MHz	Peak Reading (dBuV)	Average (A) or Quasi-Peak (QP)	Antenna Polar. (V or H)	Antenna Height (meters)	EUT Azimuth (degrees)	EUT Axis (X,Y,Z)	EUT Tx Channel	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Gain (dB)	*Corrected Reading (dBuV/m)	Delta ** (dB)	Spec Limit (dBuV/m)	Comments
607.7500	70.7	50.7 A	H	1.0	180			16.6	3.5	38.3	**32.4**	**-14.5**	**46.9**	
607.7500	58.4	38.4 A	V	1.5	180			16.6	3.5	38.3	**20.1**	**-26.8**	**46.9**	

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RADIATED EMISSIONS (FCC SECTION 15.205 AND 15.231)

COMPANY	**TELDATA SOLUTIONS**	**DATE**	**11/20/00**
EUT	**RF TRANSMITTER**	**DUTY CYCLE**	**10.00 %**
MODEL	**RFONE**	**PEAK TO AVG**	**-20.00 dB**
S/N	**PROTOTYPE**	**TEST DIST.**	**3 METERS**
TEST ENGINEER	**KYLE FUJIMOTO**	**LAB**	**D**

Frequency MHz	Peak Reading (dBuV)	Average (A) or Quasi-Peak (QP)	Antenna Polar. (V or H)	Antenna Height (meters)	EUT Azimuth (degrees)	EUT Axis (X,Y,Z)	EUT Tx Channel	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Gain (dB)	*Corrected Reading (dBuV/m)	Delta ** (dB)	Spec Limit (dBuV/m)	Comments
911.6250	69.8	49.8 A	H	1.0	90			22.1	4.6	37.6	**39.0**	**-7.9**	**46.9**	
911.6250	50.6	30.6 A	V	1.0	90			22.1	4.6	37.6	**19.8**	**-27.1**	**46.9**	

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RADIATED EMISSIONS (FCC SECTION 15.205 AND 15.231)

COMPANY	**TELDATA SOLUTIONS**	**DATE**	**11/20/00**
EUT	**RF TRANSMITTER**	**DUTY CYCLE**	**10.00 %**
MODEL	**RFONE**	**PEAK TO AVG**	**-20.00 dB**
S/N	**PROTOTYPE**	**TEST DIST.**	**3 METERS**
TEST ENGINEER	**KYLE FUJIMOTO**	**LAB**	**D**

Frequency MHz	Peak Reading (dBuV)	Average (A) or Quasi-Peak (QP)	Antenna Polar. (V or H)	Antenna Height (meters)	EUT Azimuth (degrees)	EUT Axis (X,Y,Z)	EUT Tx Channel	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Gain (dB)	*Corrected Reading (dBuV/m)	Delta ** (dB)	Spec Limit (dBuV/m)	Comments
1215.5000	41.3	21.3 A	H	1.0	90			22.3	2.8	34.2	**12.2**	**-41.8**	**54.0**	
1215.5000	47.2	27.2 A	V	1.0	90			22.3	2.8	34.2	**18.1**	**-35.9**	**54.0**	

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RADIATED EMISSIONS (FCC SECTION 15.205 AND 15.231)

COMPANY	**TELDATA SOLUTIONS**	**DATE**	**11/20/00**
EUT	**RF TRANSMITTER**	**DUTY CYCLE**	**10.00 %**
MODEL	**RFONE**	**PEAK TO AVG**	**-20.00 dB**
S/N	**PROTOTYPE**	**TEST DIST.**	**3 METERS**
TEST ENGINEER	**KYLE FUJIMOTO**	**LAB**	**D**

Frequency MHz	Peak Reading (dBuV)	Average (A) or Quasi-Peak (QP)	Antenna Polar. (V or H)	Antenna Height (meters)	EUT Azimuth (degrees)	EUT Axis (X,Y,Z)	EUT Tx Channel	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Gain (dB)	*Corrected Reading (dBuV/m)	Delta ** (dB)	Spec Limit (dBuV/m)	Comments
1519.3750	36.8	16.8 A	H	1.0	180			24.5	3.1	33.8	**10.6**	**-43.4**	**54.0**	
1519.3750	42.7	22.7 A	V	1.0	180			24.5	3.1	33.8	**16.5**	**-37.5**	**54.0**	

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

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RADIATED EMISSIONS (FCC SECTION 15.205 AND 15.231)

COMPANY	**TELDATA SOLUTIONS**	**DATE**	**11/20/00**
EUT	**RF TRANSMITTER**	**DUTY CYCLE**	**10.00 %**
MODEL	**RFONE**	**PEAK TO AVG**	**-20.00 dB**
S/N	**PROTOTYPE**	**TEST DIST.**	**3 METERS**
TEST ENGINEER	**KYLE FUJIMOTO**	**LAB**	**D**

Frequency MHz	Peak Reading (dBuV)	Average (A) or Quasi-Peak (QP)	Antenna Polar. (V or H)	Antenna Height (meters)	EUT Azimuth (degrees)	EUT Axis (X,Y,Z)	EUT Tx Channel	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Gain (dB)	*Corrected Reading (dBuV/m)	Delta ** (dB)	Spec Limit (dBuV/m)	Comments
1823.2500	45.7	25.7 A	H	1.0	180			24.5	3.5	33.3	**20.4**	**-26.5**	**46.9**	
1823.2500	50.2	30.2 A	V	1.0	180			24.5	3.5	33.3	**24.9**	**-22.0**	**46.9**	

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

** DELTA = SPEC LIMIT - CORRECTED READING

RADIATED EMISSIONS (FCC SECTION 15.205 AND 15.231)

COMPANY	**TELDATA SOLUTIONS**	**DATE**	**11/20/00**
EUT	**RF TRANSMITTER**	**DUTY CYCLE**	**10.00 %**
MODEL	**RFONE**	**PEAK TO AVG**	**-20.00 dB**
S/N	**PROTOTYPE**	**TEST DIST.**	**3 METERS**
TEST ENGINEER	**KYLE FUJIMOTO**	**LAB**	**D**

Frequency MHz	Peak Reading (dBuV)	Average (A) or Quasi-Peak (QP)	Antenna Polar. (V or H)	Antenna Height (meters)	EUT Azimuth (degrees)	EUT Axis (X,Y,Z)	EUT Tx Channel	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Gain (dB)	*Corrected Reading (dBuV/m)	Delta ** (dB)	Spec Limit (dBuV/m)	Comments
2127.1250	37.6	17.6 A	H	1.0	270			26.7	3.5	32.7	**15.1**	**-31.8**	**46.9**	
2127.1250	39.9	19.9 A	V	1.0	90			26.7	3.5	32.7	**17.4**	**-29.5**	**46.9**	

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RADIATED EMISSIONS (FCC SECTION 15.205 AND 15.231)

COMPANY	**TELDATA SOLUTIONS**	**DATE**	**11/20/00**
EUT	**RF TRANSMITTER**	**DUTY CYCLE**	**10.00 %**
MODEL	**RFONE**	**PEAK TO AVG**	**-20.00 dB**
S/N	**PROTOTYPE**	**TEST DIST.**	**3 METERS**
TEST ENGINEER	**KYLE FUJIMOTO**	**LAB**	**D**

Frequency MHz	Peak Reading (dBuV)	Average (A) or Quasi-Peak (QP)	Antenna Polar. (V or H)	Antenna Height (meters)	EUT Azimuth (degrees)	EUT Axis (X,Y,Z)	EUT Tx Channel	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Gain (dB)	*Corrected Reading (dBuV/m)	Delta ** (dB)	Spec Limit (dBuV/m)	Comments
2431.0000	36.3	16.3 A	H	1.0	180			28.2	4.5	31.8	**17.2**	**-29.7**	**46.9**	
2431.0000	39.6	19.6 A	V	1.0	90			28.2	4.5	31.8	**20.5**	**-26.4**	**46.9**	
														NOTE: NO HARMONICS
														NOR EMISSIONS FOUND
														AFTER THE 8TH
														HARMONIC FOR THE
														EUT

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

** DELTA = SPEC LIMIT - CORRECTED READING

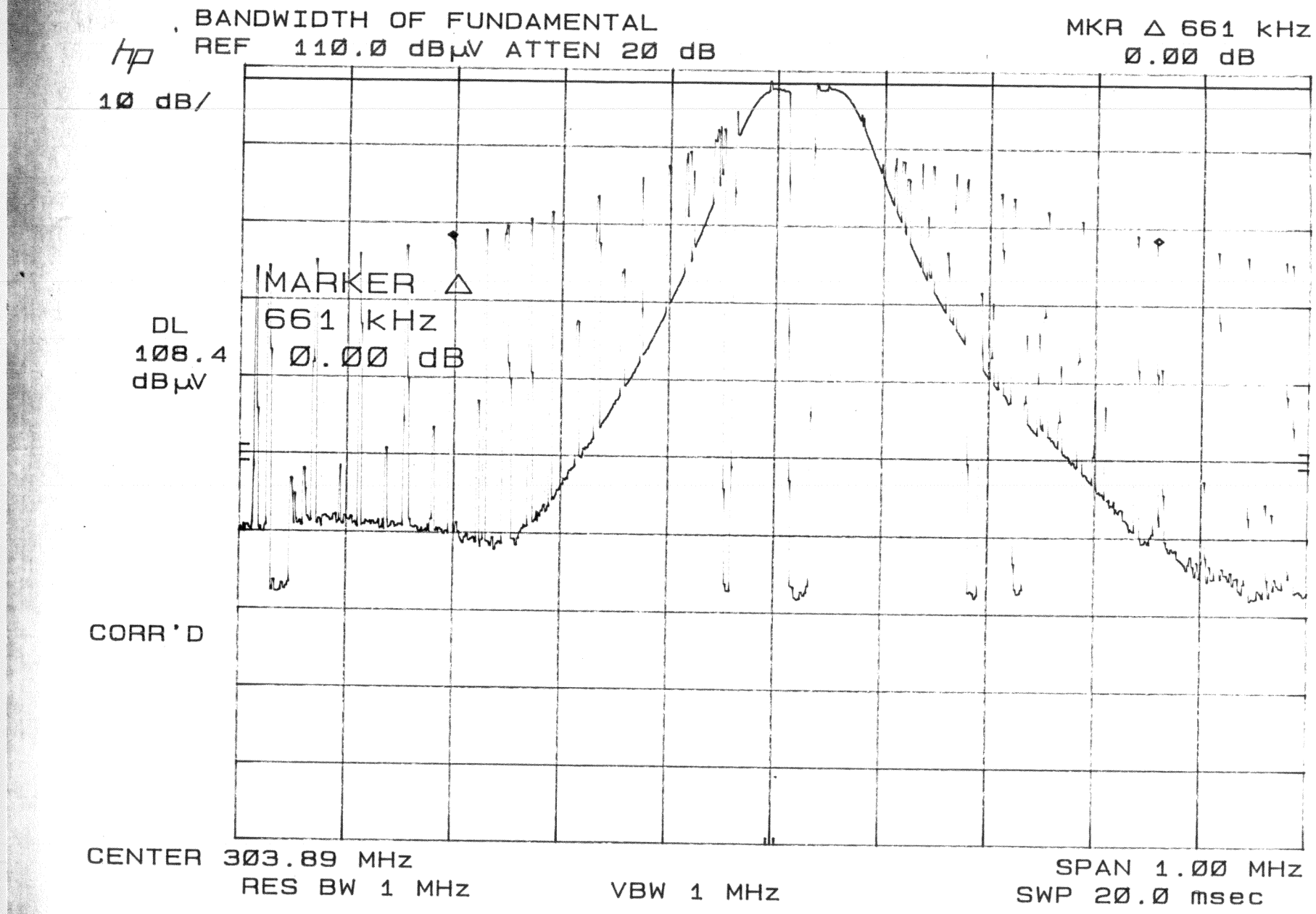
Test location: Compatible Electronics
Customer : TELDATA SOULTIONS Date : 11/20/2000
Manufacturer : TELDATA SOLUTIONS Time : 9.06
EUT name : RF TRANSMITTER Model: RFONE
Specification: Fcc_B Test distance: 3.0 mtrs Lab: D
Distance correction factor(20*log(test/spec)) : 0.00
Test Mode : SPURIOUS EMISSIONS OF THE EUT
VERTICAL AND HORIZONTAL POLAR. 10 kHz TO 1000 MHz
TEMPERATURE 75 DEGREES F.
RELATIVE HUMIDITY 17%
TESTED BY: KYLE FUJIMOTO

Pol	Freq	Rdng	Cable loss	Ant factor	Amp gain	Cor'd rdg = R	limit = L	Delta R-L
	MHz	dBuV	dB	dB	dB	dBuV	dBuV/m	dB
1V	32.01	41.90	0.72	13.86	38.36	18.12	40.00	-21.88
2V	36.01	49.60	0.76	13.55	38.48	25.43	40.00	-14.57
3V	80.01	46.10	1.00	8.17	38.80	16.47	40.00	-23.53
4V	112.01	44.00	1.35	9.66	38.70	16.31	43.50	-27.19
5V	172.01	37.80	1.60	14.57	38.79	15.19	43.50	-28.31
6V	264.01	35.10	2.16	17.50	38.54	16.21	46.00	-29.79
7H	332.03	40.20	2.49	14.23	38.60	18.32	46.00	-27.68
8H	392.03	37.60	2.68	16.60	38.60	18.28	46.00	-27.72
9H	420.03	38.10	2.74	16.87	38.40	19.31	46.00	-26.69
10H	472.03	35.50	2.93	16.78	38.01	17.20	46.00	-28.80
11H	500.03	36.90	3.10	16.73	37.90	18.83	46.00	-27.17
12H	720.01	35.10	3.82	19.67	38.26	20.33	46.00	-25.67

NOTE: THERE WERE NO EMISSIONS FOUND FROM 10 kHz TO 30 MHz
FOR THE EUT IN EITHER POLARIZATION

BANDWIDTH

DATA SHEETS


BANDWIDTH OF FUNDAMENTAL
hp
REF 110.0 dBμV ATTEN 20 dB
MKR Δ 661 kHz
0.00 dB
10 dB/
MARKER Δ
661 kHz
0.00 dB
DL
108.4
dBμV
CORR'D
CENTER 303.89 MHz
RES BW 1 MHz
VBW 1 MHz
SPAN 1.00 MHz
SWP 20.0 msec

APPENDIX E

LABORATORY RECOGNITIONS

LABORATORY RECOGNITIONS

Compatible Electronics has the following agency accreditations:

National Voluntary Laboratory Accreditation Program - Lab Code: 200063-0

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

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

Federal Communications Commission

Industry Canada

Radio-Frequency Technologies (Competent Body)

Technology International (Europe) Ltd.