FCC PART 15, SUBPART C
TEST REPORT

for

TRANSMITTER
Model: RP NAVIGATOR
FCC ID: IE3VP41XX02

Prepared for

INTERLINK ELECTRONICS
546 FLYNN ROAD
CAMARILLO, CA 93012

Prepared by: 

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Approved by: 

RUBY A. HALL

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AGOURA, CALIFORNIA 91301
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DATE: OCTOBER 11, 2002

	REPORT BODY	APPENDICES					TOTAL
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GENERAL REPORT SUMMARY

This electromagnetic emission 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 except in full, without 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: Transmitter
Model: RP NAVIGATOR
S/N: #1

Product Description: This is a Remote Control Transmitter used for PC based computers.

Modifications: The EUT was not modified during the testing.

Manufacturer: Interlink Electronics
546 Flynn Road
Camarillo, CA 93012

Test Date: September 16, 2002

Test Specifications: EMI requirements
FCC CFR Title 47, Part 15 Subpart C
Test Procedure: ANSI C63.4: 2000.

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

SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Radiated RF Emissions, 1.0 MHz to 9165 MHz	Complies with the limits of FCC CFR Title 47, Part 15 Subpart C 15.205 and 15.249.

1. PURPOSE

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on the Transmitter Model: RP NAVIGATOR. The EMI measurements were performed according to the measurement procedure described in ANSI C63.4: 2000. 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 in FCC CFR Title 47, Part 15 Subpart C (15.205 and 15.249).

2. ADMINISTRATIVE DATA

2.1 Location of Testing

The EMI tests described herein were performed at the test facility of Compatible Electronics, 2337 Troutdale Drive, Agoura, California 91301.

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

Interlink Electronics

Ken Johnson	Senior Hardware/Firmware Engineer

Compatible Electronics Inc.

Andre D. Khan	Test Technician
Joey J. Madlangbayan	Test Engineer
Ruby A. Hall	Lab Manager

2.4 Date Test Sample was Received

The test sample was received on September 16, 2002.

2.5 Disposition of the Test Sample

The test sample remains at Compatible Electronics, Inc.

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
FCC CFR Title 47, Part 15 Subpart C.	FCC Rules – Intentional Radiators.
CISPR 16 1993	Specification for radio disturbance and immunity measuring apparatus and methods.
ANSI C63.4 2000	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

The EUT was set-up in a tabletop configuration in all the three Orthogonal Axes. The EUT was continuously transmitting.

The highest emissions were found when the EUT was running in the above configuration. The final radiated data was taken in this mode of operation. All initial investigations were performed with the spectrum analyzer in manual mode scanning the frequency range continuously. The EUT was setup and tested as shown in the photographs in Appendix D.

4.1.1 Cable Construction and Termination

There are no external cables connected to the EUT.

5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT

5.1 EUT and Accessory List

EQUIPMENT TYPE	MANUFACTURER	MODEL	SERIAL NUMBER
TRANSMITTER (EUT)	INTERLINK ELECTRONICS	RP NAVIGATOR	#1

5.2 EMI Test Equipment

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CAL. DATE	CAL. DUE DATE
Spectrum Analyzer	Hewlett Packard	8566A	1904A00188	Jan. 28, 2002	Jan. 28, 2003
Quasi-Peak Adapter	Hewlett Packard	85650A	2043A00276	Jan. 28, 2002	Jan. 28, 2003
Preamplifier	Com Power	CPPA-102	01249	Mar. 25, 2002	Mar. 25, 2003
Biconical Antenna	Com Power	AB-100	01535	Mar. 26, 2002	Mar. 26, 2003
Log Periodic Antenna	Com Power	AL-100	01116	Mar. 06, 2001	Mar. 06, 2002
Horn Antenna	A. R. A.	DRG 118/A	1015	Dec. 18, 2001	Dec. 18, 2000
Microwave Amplifier	Com Power	PA-122	181915	Jun. 12, 2002	Jun. 12, 2003
Antenna Mast	Com Power	AM-400	N/A	N/A	N/A
Turntable	Com Power	TT-106A	N/A	N/A	N/A
Computer	Hewlett Packard	Pavilion 4530	US91912022	N/A	N/A
Printer	Hewlett Packard	C6427B	MY066160TW	N/A	N/A
(Software) Radiated Emissions Transmitter Data Program	Compatible Electronics	DOC No: EMI_PART15TX-B-0-50	Rev. A	N/A	N/A
Loop Antenna	Com Power	AL-130	17067	Mar. 12, 2002	Mar. 12, 2003

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.

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 Spectrum Analyzer was used as a measuring meter along with the quasi-peak adapter. 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 10 dB attenuation pad was used for the protection of the Spectrum Analyzer input stage, and the Spectrum Analyzer offset was adjusted accordingly to read the actual data measured. The LISN output was read by the Spectrum Analyzer. The output of the second LISN was terminated by a 50 ohm termination. The effective measurement bandwidth used for the conducted emissions 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: 2000. The excess power cord was wrapped in a figure eight pattern to form a bundle not exceeding 0.4 meters in length.

The initial test data was taken in manual mode while scanning the frequency ranges of 0.15 MHz to 1.6 MHz, 1.6 MHz to 5 MHz and 5 MHz to 30 MHz. The conducted emissions from the EUT were maximized for operating mode as well as cable placement. Once a predominant frequency (within 12 dB of the limit) was found, it was more closely examined with the spectrum analyzer span adjusted to 1 MHz.

The EUT is a battery-powered unit; therefore this test was not performed.

7.1.2 Radiated Emissions Test

The spectrum analyzer was used as a measuring meter along with a quasi-peak adapter. A Preamplifier was used to increase the sensitivity of the instrument. 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. This final reading is then recorded into the a Computer data recording program, which takes into account the cable loss, amplifier gain and antenna factors, so that a true reading is compared to the true limit. The quasi-peak was used only for those readings, which are marked accordingly on the data sheets. The effective measurement bandwidth used for the radiated emissions test was 120 kHz.

Broadband loop, biconical, log periodic and horn antennas were used as transducers during the measurement. The loop antenna was used from 1 MHz to 30 MHz, the biconical antenna was used from 30 MHz to 300 MHz, the log periodic antenna was used from 300 MHz to 1 GHz and the horn antenna was used from 1 GHz to 9.165 GHz. The frequency spans were wide (1 to 30Mhz, 30 MHz to 88 MHz, 88 MHz to 216 MHz, 216 to 300 MHz, 300 MHz to 1 GHz and 1 GHz to 9.165 GHz) during preliminary investigations. The final data was taken with a frequency span of 1 MHz. Furthermore, the frequency span was reduced during the preliminary investigations as deemed necessary.

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: 2000. 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 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 test distance of 3 meters to obtain final test data. The test data is located in Appendix E.

Preliminary Testing and Monitoring:

Preliminary testing was done at a distance of 1 meter instead of 3 meters to determine the predominant harmonics and spurious emission frequencies. An open field test site was used for the preliminary investigations. Broadband antennas were used to scan large frequency bands while manipulating the X, Y and Z azimuth of the unit. If and when any frequency was found to be above 30 microvolts/meter level (at a 1 meter distance), this frequency was recorded as a significant frequency. All significant frequencies were further examined carefully at a frequency span on the spectrum analyzer while changing the antenna height and EUT orientation. The EUT was tested again at a test distance of 3 meters to obtain the final test data. The bandwidth of the spectrum analyzer was varied to ensure that pulse desensitization did not occur.

7.1.3 RF Emissions Test Results

The fundamental and up to the 10th harmonic emissions are within the specifications.

INTERLINK ELECTRONICS
REMOTE CONTROL TRANSMITTER

RADIATED EMISSIONS – SPURIOUS

The following bands were specifically scanned.
Frequency Band 1 MHz – 9.165 GHz

No spurious emissions were found.

RF Energy From Transmitter in MHz at 3 meters (µV/m)

2.1735-2.1905	<50	37.5-38.25	<100
4.125-1.128	<50	73-74.6	<100
4.17725-4.17775	<50	74.8-75.2	<100
4.20725-4.20775	<50	108-121.94	<100
6.215-6.218	<50	123-138	<150
6.26775-6.26825	<50	149.9-150.05	<150
6.31175-6.31225	<50	156.52-156.52	<150
8.291-8.294	<50	162.01-167.17	<150
8.362-8.366	<50	167.72-173.2	<150
8.37625-8.38675	<50	240-285	<200
8.41425-8.41475	<50	322-335.4	<200
12.29-12.293	<50	399.9-410	<200
12.51975-12.52025	<50	608-614	<200
12.57675-12.57725	<50	960-1240	<500
13.36-13.41	<50	1300-1427	<500
16.42-16.423	<50	1435-1626.5	<500
16.69475-16.69525	<50	1645.5-1646.5	<500
16.80425-16.80475	<50	1660-1710	<500
25.5-25.67	<50	1718.8-1722.2	<500

7.1.4 RF Emissions Test Results (Continued)

RF Energy From Transmitter in MHz at 3 meters (µV/m)

2200-2300	<500	4500-5150	<500
2310-2390	<500	5350-5460	<500
2483.5-2500	<500	7250-7750	<500
2655-2900	<500	8025-8500	<500
3260-3267	<500	9000-9200	<500
3332-3339	<500		
3345.8-3358	<500		
3600-4400	<500		

8. CONCLUSIONS

The Transmitter Model: RP NAVIGATOR meets all of the requirements of the FCC CFR, Title 47, Part 15, Subpart C 15.205 and 15.249.

APPENDIX A

LABORATORY ACCREDITATIONS

LABORATORY ACCREDITATIONS

Compatible Electronics has the following agency accreditations:

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

Voluntary Control Council for Interference - Registration Numbers: R-826, C-862, R-653 and C-669

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)

Conformity Assessment Body for the EMC directive under the US/EU MRA appointed by NIST.

APPENDIX B

MODIFICATIONS TO THE EUT

MODIFICATIONS TO THE EUT

There were no modifications made to the EUT during the test.

APPENDIX C

ADDITIONAL MODELS COVERED UNDER THIS REPORT

ADDITIONAL MODELS COVERED UNDER THIS REPORT

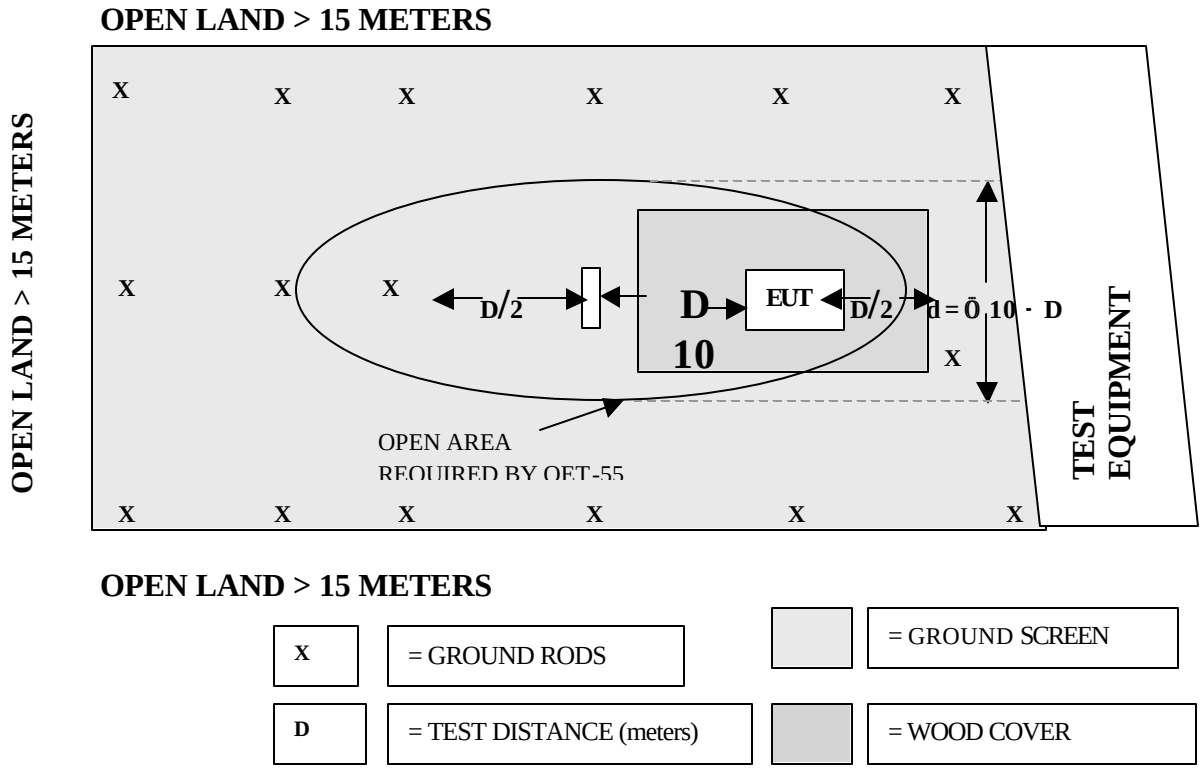
USED FOR THE PRIMARY TEST	TRANSMITTER Model: RP NAVIGATOR

There were no additional models covered under this report.

APPENDIX D

DIAGRAMS, CHARTS AND PHOTOS

FIGURE 1: PLOT MAP AND LAYOUT OF RADIATED SITE



COM-POWER AL-130

ACTIVE LOOP ANTENNA

S/N: 17067

CALIBRATION DATE: MARCH 12, 2002

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
0.009	11.3	1	10.8
0.01	11.3	2	11.2
0.02	10.5	3	10.9
0.03	12.1	4	10.8
0.04	11.6	5	11.4
0.05	10.2	6	11.4
0.06	10.6	7	11.1
0.07	10.3	8	10.9
0.08	10.0	9	11.5
0.09	9.9	10	11.0
0.1	9.9	12	10.3
0.2	7.5	14	10.2
0.3	10.0	15	10.1
0.4	10.0	16	10.1
0.5	10.0	18	10.2
0.6	10.1	20	10.3
0.7	10.1	25	9.7
0.8	10.1	30	8.5
0.9	10.3		

COM-POWER AB-100

BICONICAL ANTENNA

S/N: 1535

CALIBRATION DATE: MARCH 26, 2002

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	13.8	120	9.3
35	12.9	125	11.0
40	12.5	140	12.2
45	12.2	150	12.4
50	12.5	160	13.0
60	10.5	175	14.5
70	8.5	180	14.9
80	8.0	200	15.0
90	7.9	250	16.2
100	8.5	300	19.0

COM-POWER AL-100

LOG PERIODIC ANTENNA

S/N: 01116

CALIBRATION DATE: MARCH 6, 2002

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
300	11.70	700	19.80
400	11.80	800	22.40
500	15.90	900	22.20
600	17.30	1000	23.60

COM-POWER PA-102

PREAMPLIFIER

S/N: 1249

CALIBRATION DATE: MARCH 25, 2002

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	36.7	300	36.0
40	36.8	350	35.9
50	36.7	400	36.0
60	36.6	450	35.5
70	36.5	500	35.7
80	36.7	550	36.2
90	36.6	600	35.4
100	36.6	650	35.7
125	36.4	700	36.3
150	36.4	750	35.0
175	36.2	800	35.1
200	36.2	850	35.1
225	36.2	900	33.5
250	36.1	950	32.7
275	36.0	1000	32.3

COM-POWER PA-122

PREAMPLIFIER

S/N: 181915

CALIBRATION DATE: JUNE 12, 2002

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
1000	32.8	7000	32.8
1100	32.8	7500	32.7
1200	32.7	8000	32.2
1300	32.6	8500	31.4
1400	32.7	9000	32.3
1500	32.8	9500	31.4
1600	32.5	10000	31.4
1700	32.2	11000	33.2
1800	27.0	12000	33.6
1900	29.2	13000	32.2
2000	29.7	14000	32.8
2500	33.0	15000	32.0
3000	33.3	16000	33.0
3500	33.6	17000	33.5
4000	33.3	18000	33.4
4500	33.3		
5000	33.1		
5500	33.0		
6000	33.1		
6500	32.8		

A.R.A DRG-118/A

HORN ANTENNA

S/N: 1015

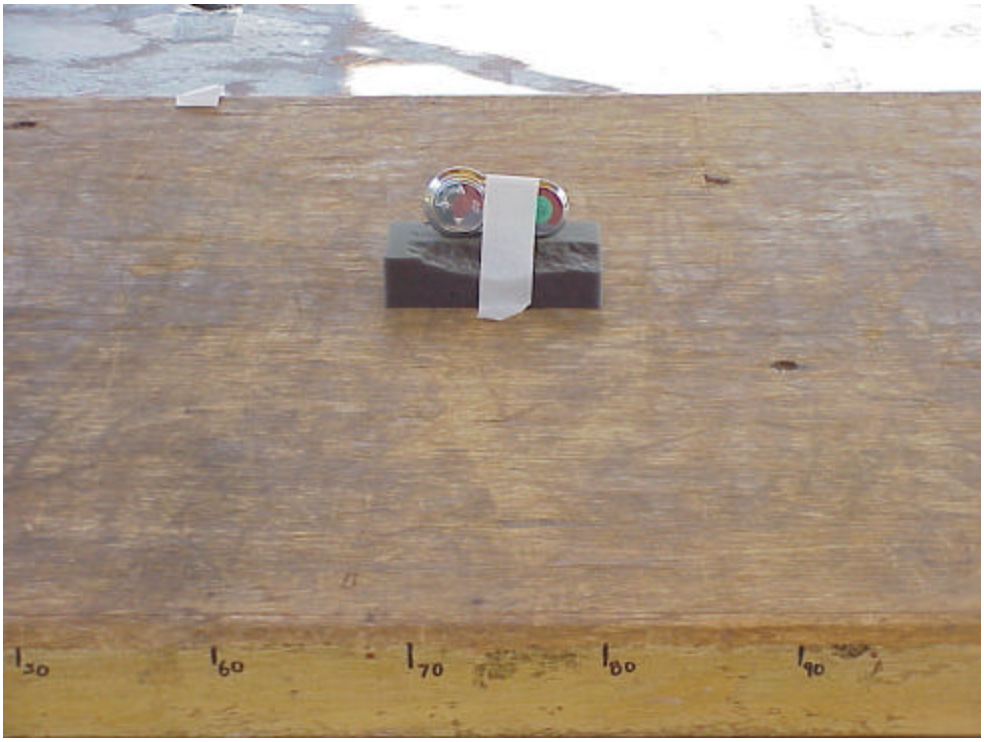
CALIBRATION DATE: DECEMBER 18, 2001

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
1000	25.8	10000	41.3
1500	26.9	10500	42.1
2000	30.9	11000	42.2
2500	30.2	11500	43.6
3000	31.8	12000	44.0
3500	32.4	12500	42.2
4000	31.9	13000	40.7
4500	31.6	13500	40.9
5000	33.3	14000	39.7
5500	31.8	14500	44.7
6000	38.2	15000	42.4
6500	38.2	15500	45.1
7000	38.3	16000	42.8
7500	38.4	16500	42.6
8000	39.5	17000	45.9
8500	38.8	17500	49.2
9000	40.9	18000	42.4
9500	40.2		

X-AXIS

INTERLINK ELECTRONICS
TRANSMITTER
Model: RP NAVIGATOR
FCC PART 15 SUBPART C - RADIATED EMISSIONS – 9-16-02

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



Y-AXIS

INTERLINK ELECTRONICS
TRANSMITTER
Model: RP NAVIGATOR
FCC PART 15 SUBPART C - RADIATED EMISSIONS – 9-16-02

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

Z-AXIS

INTERLINK ELECTRONICS
TRANSMITTER
Model: RP NAVIGATOR
FCC PART 15 SUBPART C - RADIATED EMISSIONS – 9-16-02

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

APPENDIX E

DATA SHEETS

RADIATED EMISSIONS (FCC SECTION 15.249 & 15.205)

COMPANY	Interlink Electronics	DATE	9/16/02
EUT	916.5 MHz TX	DUTY CYCLE	0.00 %
MODEL	RP NAVIGATOR	PEAK TO AVG	0 dB
S/N	1	TEST DIST.	3 METERS
TEST ENGINEER	Andre D. Khan	LAB	F

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
916.5000	91.6	QP	H	1.5	170	X	LOW	22.4	8.3	33.2	**89.1**	**-4.9**	**94.0**	
916.5000	92.0	QP	H	1.5	170	Y	LOW	22.4	8.3	33.2	**89.5**	**-4.5**	**94.0**	
916.5000	82.3	QP	H	1.5	180	Z	LOW	22.4	8.3	33.2	**79.8**	**-14.2**	**94.0**	
916.5000	86.2	QP	V	1.0	180	X	LOW	22.4	8.3	33.2	**83.7**	**-10.3**	**94.0**	
916.5000	80.9	QP	V	1.0	165	Y	LOW	22.4	8.3	33.2	**78.4**	**-15.6**	**94.0**	
916.5000	88.2	QP	V	1.0	170	Z	LOW	22.4	8.3	33.2	**85.7**	**-8.3**	**94.0**	

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

** DELTA = SPEC LIMIT - CORRECTED READING

RADIATED EMISSIONS (FCC SECTION 15.249 & 15.205)

COMPANY	Interlink Electronics	DATE	9/16/02
EUT	916.5 MHz TX	DUTY CYCLE	0.00 %
MODEL	RP NAVIGATOR	PEAK TO AVG	0 dB
S/N	1	TEST DIST.	3 METERS
TEST ENGINEER	Andre D. Khan	LAB	F

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
1833.0000	47.5	34.5 A	H	2.0	270	X	LOW	29.6	5.7	27.7	**42.0**	**-12.0**	**54.0**	
1833.0000	50.2	35.7 A	H	2.5	200	Y	LOW	29.6	5.7	27.7	**43.3**	**-10.7**	**54.0**	
1833.0000	43.9	33.2 A	H	2.0	180	Z	LOW	29.6	5.7	27.7	**40.8**	**-13.2**	**54.0**	
1833.0000	50.6	35.3 A	V	1.0	160	X	LOW	29.6	5.7	27.7	**42.9**	**-11.1**	**54.0**	
1833.0000	45.2	32.7 A	V	1.0	160	Y	LOW	29.6	5.7	27.7	**40.3**	**-13.7**	**54.0**	
1833.0000	48.7	34.2 A	V	1.5	200	Z	LOW	29.6	5.7	27.7	**41.8**	**-12.2**	**54.0**	

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

** DELTA = SPEC LIMIT - CORRECTED READING

RADIATED EMISSIONS (FCC SECTION 15.249 & 15.205)

COMPANY	Interlink Electronics	DATE	9/16/02
EUT	916.5 MHz TX	DUTY CYCLE	0.00 %
MODEL	RP NAVIGATOR	PEAK TO AVG	0 dB
S/N	1	TEST DIST.	3 METERS
TEST ENGINEER	Andre D. Khan	LAB	F

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
2749.5000		A	H			X	LOW	31.0	6.3	33.2			54.0	No Reading Found
2749.5000		A	H			Y	LOW	31.0	6.3	33.2			54.0	No Reading Found
2749.5000		A	H			Z	LOW	31.0	6.3	33.2			54.0	No Reading Found
2749.5000		A	V			X	LOW	31.0	6.3	33.2			54.0	No Reading Found
2749.5000		A	V			Y	LOW	31.0	6.3	33.2			54.0	No Reading Found
2749.5000		A	V			Z	LOW	31.0	6.3	33.2			54.0	No Reading Found

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

** DELTA = SPEC LIMIT - CORRECTED READING

RADIATED EMISSIONS (FCC SECTION 15.249 & 15.205)

COMPANY	Interlink Electronics	DATE	9/16/02
EUT	916.5 MHz TX	DUTY CYCLE	0.00 %
MODEL	RP NAVIGATOR	PEAK TO AVG	0 dB
S/N	1	TEST DIST.	3 METERS
TEST ENGINEER	Andre D. Khan	LAB	F

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
3666.0000		A	H			X	LOW	32.2	7.7	33.5			54.0	No Reading Found
3666.0000		A	H			Y	LOW	32.2	7.7	33.5			54.0	No Reading Found
3666.0000		A	H			Z	LOW	32.2	7.7	33.5			54.0	No Reading Found
3666.0000		A	V			X	LOW	32.2	7.7	33.5			54.0	No Reading Found
3666.0000		A	V			Y	LOW	32.2	7.7	33.5			54.0	No Reading Found
3666.0000		A	V			Z	LOW	32.2	7.7	33.5			54.0	No Reading Found

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

** DELTA = SPEC LIMIT - CORRECTED READING

RADIATED EMISSIONS (FCC SECTION 15.249 & 15.205)

COMPANY	Interlink Electronics	DATE	9/16/02
EUT	916.5 MHz TX	DUTY CYCLE	0.00 %
MODEL	RP NAVIGATOR	PEAK TO AVG	0 dB
S/N	1	TEST DIST.	3 METERS
TEST ENGINEER	Andre D. Khan	LAB	F

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
4582.5000		A	H			X	LOW	31.9	8.1	33.3			54.0	No Reading Found
4582.5000		A	H			Y	LOW	31.9	8.1	33.3			54.0	No Reading Found
4582.5000		A	H			Z	LOW	31.9	8.1	33.3			54.0	No Reading Found
4582.5000		A	V			X	LOW	31.9	8.1	33.3			54.0	No Reading Found
4582.5000		A	V			Y	LOW	31.9	8.1	33.3			54.0	No Reading Found
4582.5000		A	V			Z	LOW	31.9	8.1	33.3			54.0	No Reading Found

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

** DELTA = SPEC LIMIT - CORRECTED READING

RADIATED EMISSIONS (FCC SECTION 15.249 & 15.205)

COMPANY	Interlink Electronics	DATE	9/16/02
EUT	916.5 MHz TX	DUTY CYCLE	0.00 %
MODEL	RP NAVIGATOR	PEAK TO AVG	0 dB
S/N	1	TEST DIST.	3 METERS
TEST ENGINEER	Andre D. Khan	LAB	F

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
5499.0000		A	H			X	LOW	31.8	10.4	33.0			54.0	No Reading Found
5499.0000		A	H			Y	LOW	31.8	10.4	33.0			54.0	No Reading Found
5499.0000		A	H			Z	LOW	31.8	10.4	33.0			54.0	No Reading Found
5499.0000		A	V			X	LOW	31.8	10.4	33.0			54.0	No Reading Found
5499.0000		A	V			Y	LOW	31.8	10.4	33.0			54.0	No Reading Found
5499.0000		A	V			Z	LOW	31.8	10.4	33.0			54.0	No Reading Found

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

** DELTA = SPEC LIMIT - CORRECTED READING

RADIATED EMISSIONS (FCC SECTION 15.249 & 15.205)

COMPANY	Interlink Electronics	DATE	9/16/02
EUT	916.5 MHz TX	DUTY CYCLE	0.00 %
MODEL	RP NAVIGATOR	PEAK TO AVG	0 dB
S/N	1	TEST DIST.	3 METERS
TEST ENGINEER	Andre D. Khan	LAB	F

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
6415.5000		A	H			X	LOW	38.2	11.5	32.9			54.0	No Reading Found
6415.5000		A	H			Y	LOW	38.2	11.5	32.9			54.0	No Reading Found
6415.5000		A	H			Z	LOW	38.2	11.5	32.9			54.0	No Reading Found
6415.5000		A	V			X	LOW	38.2	11.5	32.9			54.0	No Reading Found
6415.5000		A	V			Y	LOW	38.2	11.5	32.9			54.0	No Reading Found
6415.5000		A	V			Z	LOW	38.2	11.5	32.9			54.0	No Reading Found

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

** DELTA = SPEC LIMIT - CORRECTED READING

RADIATED EMISSIONS (FCC SECTION 15.249 & 15.205)

COMPANY	Interlink Electronics	DATE	9/16/02
EUT	916.5 MHz TX	DUTY CYCLE	0.00 %
MODEL	RP NAVIGATOR	PEAK TO AVG	0 dB
S/N	1	TEST DIST.	3 METERS
TEST ENGINEER	Andre D. Khan	LAB	F

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
7332.0000		A	H			X	LOW	38.4	11.7	32.7			54.0	No Reading Found
7332.0000		A	H			Y	LOW	38.4	11.7	32.7			54.0	No Reading Found
7332.0000		A	H			Z	LOW	38.4	11.7	32.7			54.0	No Reading Found
7332.0000		A	V			X	LOW	38.4	11.7	32.7			54.0	No Reading Found
7332.0000		A	V			Y	LOW	38.4	11.7	32.7			54.0	No Reading Found
7332.0000		A	V			Z	LOW	38.4	11.7	32.7			54.0	No Reading Found

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

** DELTA = SPEC LIMIT - CORRECTED READING

RADIATED EMISSIONS (FCC SECTION 15.249 & 15.205)

COMPANY	Interlink Electronics	DATE	9/16/02
EUT	916.5 MHz TX	DUTY CYCLE	0.00 %
MODEL	RP NAVIGATOR	PEAK TO AVG	0 dB
S/N	1	TEST DIST.	3 METERS
TEST ENGINEER	Andre D. Khan	LAB	F

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
8248.5000		A	H			X	LOW	39.2	12.4	31.8			54.0	No Reading Found
8248.5000		A	H			Y	LOW	39.2	12.4	31.8			54.0	No Reading Found
8248.5000		A	H			Z	LOW	39.2	12.4	31.8			54.0	No Reading Found
8248.5000		A	V			X	LOW	39.2	12.4	31.8			54.0	No Reading Found
8248.5000		A	V			Y	LOW	39.2	12.4	31.8			54.0	No Reading Found
8248.5000		A	V			Z	LOW	39.2	12.4	31.8			54.0	No Reading Found

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

** DELTA = SPEC LIMIT - CORRECTED READING

RADIATED EMISSIONS (FCC SECTION 15.249 & 15.205)

COMPANY	Interlink Electronics	DATE	9/16/02
EUT	916.5 MHz TX	DUTY CYCLE	0.00 %
MODEL	RP NAVIGATOR	PEAK TO AVG	0 dB
S/N	1	TEST DIST.	3 METERS
TEST ENGINEER	Andre D. Khan	LAB	F

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
9165.0000		A	H			X	LOW	40.7	13.4	32.0			54.0	No Reading Found
9165.0000		A	H			Y	LOW	40.7	13.4	32.0			54.0	No Reading Found
9165.0000		A	H			Z	LOW	40.7	13.4	32.0			54.0	No Reading Found
9165.0000		A	V			X	LOW	40.7	13.4	32.0			54.0	No Reading Found
9165.0000		A	V			Y	LOW	40.7	13.4	32.0			54.0	No Reading Found
9165.0000		A	V			Z	LOW	40.7	13.4	32.0			54.0	No Reading Found

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

** DELTA = SPEC LIMIT - CORRECTED READING

COMPATIBLE ELECTRONICS

RADIATED EMISSIONS

COMPANY NAME: InterLink Electronics **DATE:** 9-16-02

EUT: Transmitter **EUT S/N:**

EUT MODEL: RP Navigator **LOCATION:** ☐ BREA ☐ SILVERADO ☑ AGOURA

SPECIFICATION: **CLASS:** **TEST DISTANCE:** 3M **LAB:** F

ANTENNA: ☑ LOOP ☑ BICONICAL ☑ LOG ☑ HORN **POLARIZATION:** ☑ VERT ☑ HORIZ

☑ QUALIFICATION ☐ ENGINEERING ☐ MFG. AUDIT **ENGINEER:** A. Khan

NOTES: 1 MHz Clock

Frequency (MHz)	Peak Reading (dBuV/m)	Quasi-Peak (dBuV/m)	Antenna Height (meters)	Azimuth (degrees)	Delta * (dB)	Corrected Limit (dBuV/m)	Comments
1MHz	to 9.165 GHz	No Readings	Found				
	Spirious	Emissions					

* DELTA = METER READING - CORRECTED LIMIT