

### SUPPLEMENTARY TEST REPORT FROM RADIO FREQUENCY INVESTIGATION LTD.

Test Of: Danger Inc.
Turner GSM-1900 Mobile Phone with Colour PDA

To: FCC Part 24: 2002

Test Report Serial No: RFI/MPTB1/SUP44198JD01A

This Test Report Is Issued Under The Authority Of Richard Jacklin, Operations Director:	Checked By:
Tested By:	Release Version No: PDF01
pp Andrews a	
Issue Date: 29 April 2003	Test Dates: 24 April 2003

This supplementary report, supplements RFI Test Report Serial No: RFI/MPTB1/RP44198JD01A.

This supplementary report has been issued to cover additional Conducted Antenna Port measurements.

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This report may be copied in full. The results in this report apply only to the sample(s) tested.



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### 1. Measurements, Examinations And Derived Results

#### 1.1. Conducted Antenna Port Measurements: FCC Part 24.238

- 1.1.1. Spurious measurements at the Antenna port were performed from the top frequency of the allocated frequency block to 10 times the highest EUT generated frequency.
- 1.1.2. A measuring receiver was connected to the antenna port of the EUT via a suitable cable and RF Attenuator. The total loss of both the cable and the attenuator were measured and entered as a reference level offset into the measuring receiver to correct for the losses.
- 1.1.3. The specified frequency band was investigated with the transmitter operating at full power on the middle channel. Any spurious noted was then measured with the transmitter set to top, bottom and middle channels.
- 1.1.4. The EUT was then replaced with a signal generator whose frequency was set to the indicated spurious frequency and who's level was adjusted to equal that recorded in section from the EUT. The level final recorded level was that reported by the signal generated.
- 1.1.5. The resolution bandwidth used for measurements in the 1 MHz blocks immediately adjacent to the declared operating frequency block was set to 3 kHz (1% of the emission bandwidth).
- 1.1.6. The measurements in the  $2^{nd}$  and  $3^{rd}$  1MHz blocks away from the adjacent 1 MHz block from 1.911 MHz to 1.913 MHz were carried out using an analyser Span of 100 kHz and a 100 kHz receiver bandwidth. The results were then integrated over ten strips at a time to give the emission level in an equivalent 1 MHz bandwidth. See attached plots in appendix 4.

First Band: 1.911 to 1.912 MHz

100kHz Band	Peak Power (nW/100kHz)	100kHz Band	Peak Power (nW/100kHz)
1	49.219	6	23.060
2	57.766	7	15.981
3	36.048	8	16.086
4	29.806	9	9.593
5	27.078	10	9.521
Total Peak Power:		274.157 nW/MHz	
		-35.62 dBn	n/MHz

Note:- Limit: -13 dBm EUT passes

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#### **Conducted Antenna Port Measurements: FCC Part 24.238 (Continued)**

**Second Band: 1.912 to 1.913 MHz** 

100kHz Band	Peak Power (nW/100kHz)	100kHz Band	Peak Power (nW/100kHz)
1	9.047	6	3.849
2	6.571	7	4.002
3	5.845	8	3.847
4	5.233	9	3.808
5	4.998	10	2.430
Total Peak Power:		49.63 nW/MHz	
		-43.04 dBm/MHz	

Note:- Limit: -13 dBm EUT passes

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#### 1.2. Conducted Antenna Port Measurements: (Block Edges)

1.2.1. Block edge measurements were carried out in addition to the original band edge measurements at the following block edges: See attached plots in appendix 2 of this report.

Block	Lower Block Edge (MHz)	Upper Block Edge (MHz)
1	1850.2	1865.0
2	1865.0	1870.0
3	1870.0	1885.0
4	1885.0	1890.0
5	1890.0	1895.0
6	1895.0	1909.8

<sup>\*</sup>Note:- the original band edge measurements for 1850.2MHz and 1909.08 MHz are contained within the original RFI report. RFI/MPTB1/RP44198JD01A.

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### **Appendix 1. Graphical Test Results**

This appendix contains the following graphs:

Graph Reference Number	Title
GPH\44198\001	Conducted Antenna Port Band Edge Top Channel (1.9098 GHz to 1.9111 GHz)
GPH\44198\002	Conducted Antenna Port Band Edge Top Channel (1.911 GHz to 1.912 GHz)
GPH\44198\003	Conducted Antenna Port Band Edge Top Channel (1.912 GHz to 1.913 GHz)
GPH\44198\004	Conducted Antenna Port Band Edge Top Channel (1.913 GHz to 2.0 GHz)
GPH\44198\005	Conducted Antenna Port Block Edge (1.8648 GHz to 1.8658 GHz)
GPH\44198\006	Conducted Antenna Port Block Edge (1.8642 GHz to 1.8652 GHz)
GPH\44198\007	Conducted Antenna Port Block Edge (1.8698 GHz to 1.8708 GHz)
GPH\44198\008	Conducted Antenna Port Block Edge (1.8692 GHz to 1.8702 GHz)
GPH\44198\009	Conducted Antenna Port Block Edge (1.8848 GHz to 1.8858 GHz)
GPH\44198\010	Conducted Antenna Port Block Edge (1.8842 GHz to 1.8852 GHz)
GPH\44198\011	Conducted Antenna Port Block Edge (1.8898 GHz to 1.8908 GHz)
GPH\44198\012	Conducted Antenna Port Block Edge (1.8892 GHz to 1.8902 GHz)
GPH\44198\013	Conducted Antenna Port Block Edge (1.8948 GHz to 1.8958 GHz)
GPH\44198\014	Conducted Antenna Port Block Edge (1.8942 GHz to 1.8952 GHz)

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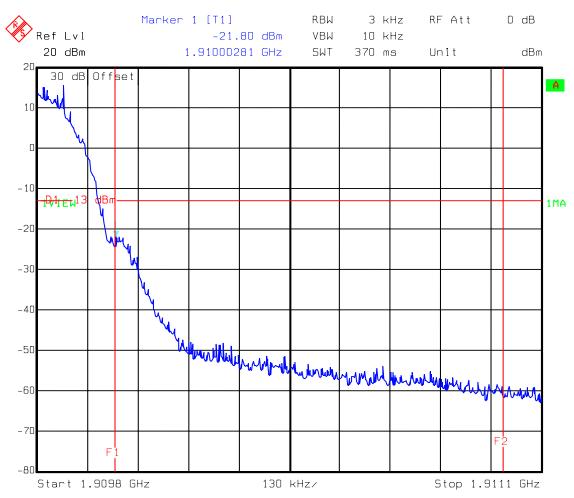
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### GPH\44198\001 Conducted Antenna Port Band Edge Top Channel



Title: Testing for Danger Inc. EUT:Turner PDA/Mobile Station.

Comment A: IMEI No. 001028000035000. FCC Part 24. Conducted Spurious Em

issions. Band Edge Plot. Top Channel. 44198JD01.

Date: 24.APR.2003 15:36:25

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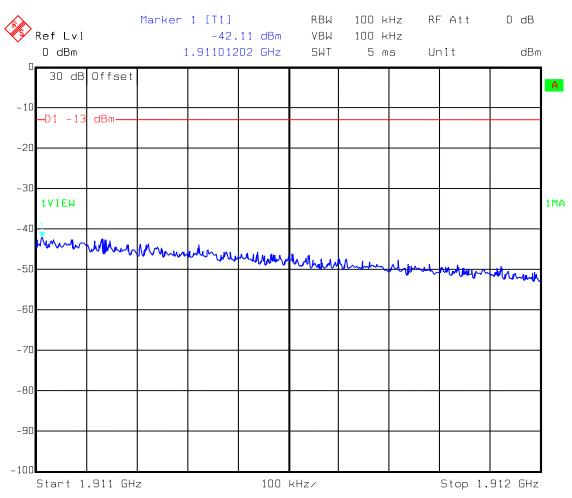
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### GPH\44198\002 Conducted Antenna Port Band Edge Top Channel



Title: Testing for Danger Inc. EUT:Turner PDA/Mobile Station.

Comment A: IMEI No. 001028000035000. FCC Part 24. Conducted Spurious Em

issions. Band Edge Plot. Top Channel. 44198JD01.

Date: 24.APR.2003 15:05:28

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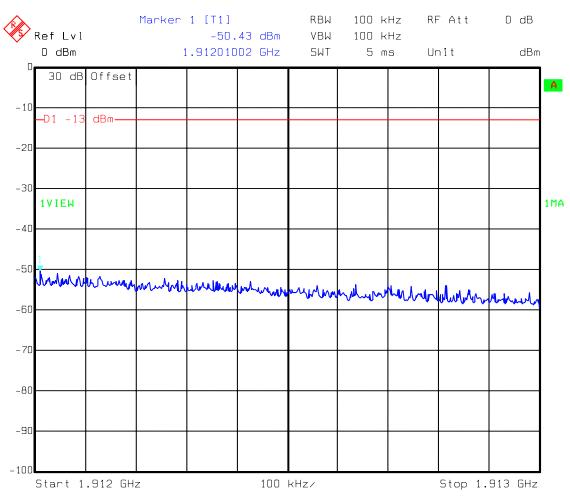
Test Of: Danger Inc.

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### GPH\44198\003 Conducted Antenna Port Band Edge Top Channel



Title: Testing for Danger Inc. EUT:Turner PDA/Mobile Station.

Comment A: IMEI No. 001028000035000. FCC Part 24. Conducted Spurious Em

issions. Band Edge Plot. Top Channel. 44198JD01.

Date: 24.APR.2003 15:07:42

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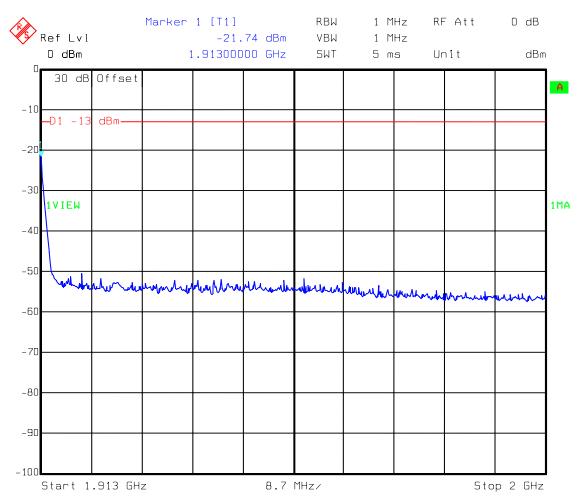
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# GPH\44198\004 Conducted Antenna Port Band Edge Top Channel



Title: Testing for Danger Inc. EUT:Turner PDA/Mobile Station.

Comment A: IMEI No. 001028000035000. FCC Part 24. Conducted Spurious Em

issions. Top Channel. 44198JD01.

Date: 24.APR.2003 15:39:00

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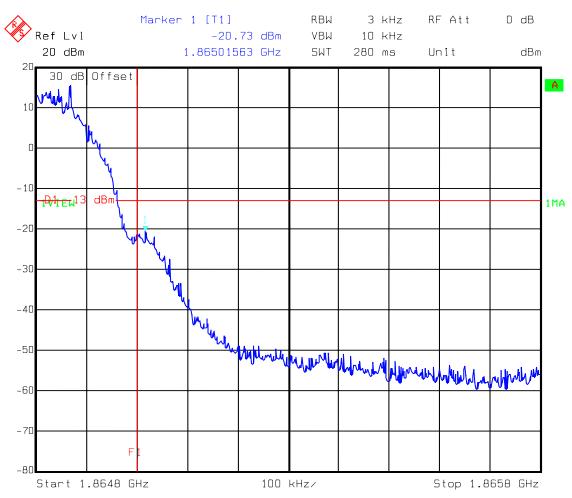
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#### GPH\44198\005 Conducted Antenna Port Block Edge



Title: Testing for Danger Inc. EUT:Turner PDA/Mobile Station.

Comment A: IMEI No. 00102000035000. FCC Part 24. Conducted Spurious Emi

ssions. Block A/D Edge Plot. ARFCN 585. 44198JD01.

Date: 24.APR.2003 9:19:32

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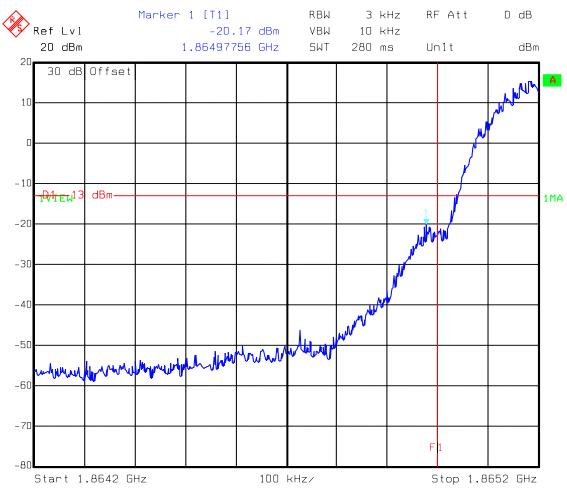
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# GPH\44198\006 Conducted Antenna Port Block Edge



Title: Testing for Danger Inc. EUT:Turner PDA/Mobile Station.

Comment A: IMEI No. 00102000035000. FCC Part 24. Conducted Spurious Emi

ssions. Block A/D Edge Plot. ARFCN 587. 44198JD01.

Date: 24.APR.2003 9:18:07

**TEST REPORT** 

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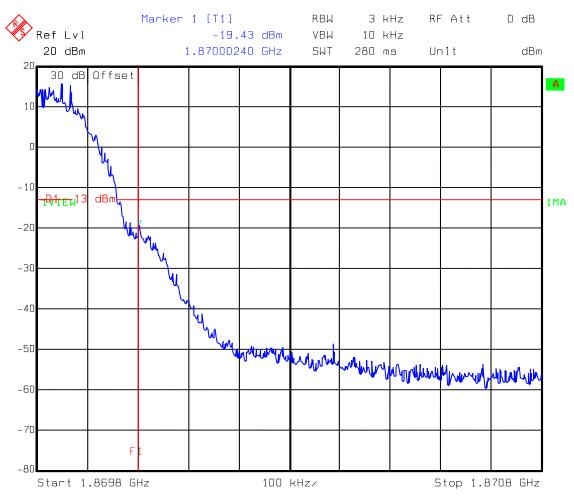
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# GPH\44198\007 Conducted Antenna Port Block Edge



Title: Testing for Danger Inc. EUT:Turner PDA/Mobile Station.

Comment A: IMEI No. 00102000035000. FCC Part 24. Conducted Spurious Emi

ssions. Block D/B Edge Plot. ARFCN 610. 44198JD01.

Date: 24.APR.2003 9:21:29

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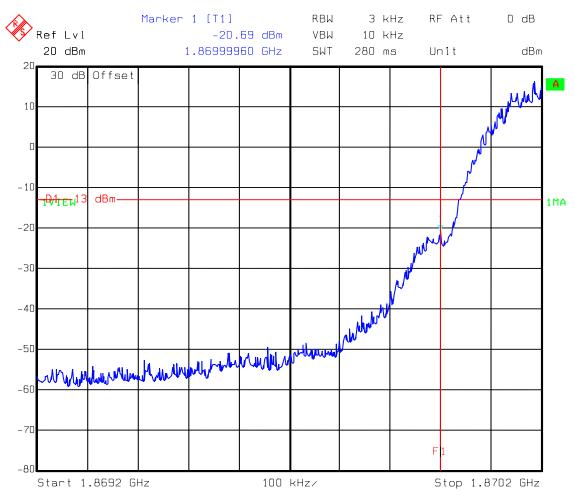
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# GPH\44198\008 Conducted Antenna Port Block Edge



Title: Testing for Danger Inc. EUT:Turner PDA/Mobile Station.

Comment A: IMEI No. 00102000035000. FCC Part 24. Conducted Spurious Emi

ssions. Block D/B Edge Plot. ARFCN 612. 44198JD01.

Date: 24.APR.2003 9:16:25

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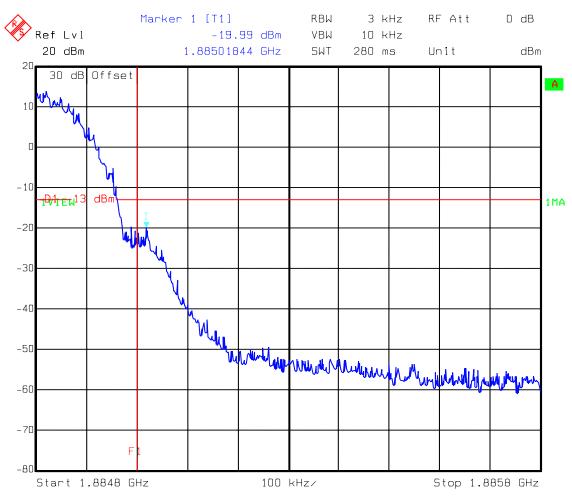
Test Of: Danger Inc.

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#### GPH\44198\009 Conducted Antenna Port Block Edge



Title: Testing for Danger Inc. EUT:Turner PDA/Mobile Station.

Comment A: IMEI No. 00102000035000. FCC Part 24. Conducted Spurious Emi

ssions. Block B/E Edge Plot. ARFCN 685. 44198JD01.

Date: 24.APR.2003 9:23:12

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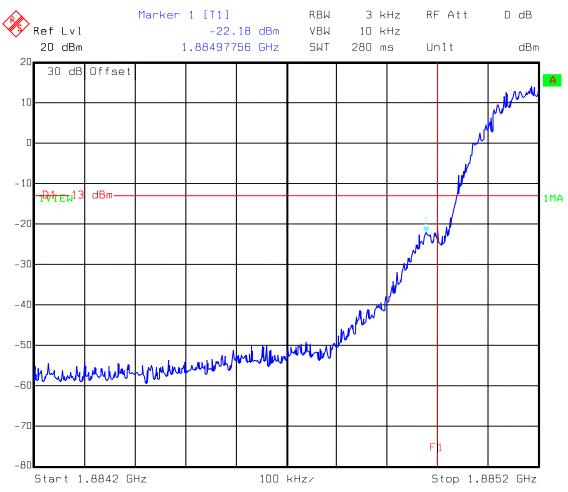
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# GPH\44198\010 Conducted Antenna Port Block Edge



Title: Testing for Danger Inc. EUT:Turner PDA/Mobile Station.

Comment A: IMEI No. 00102000035000. FCC Part 24. Conducted Spurious Emi

ssions. Block B/E Edge Plot. ARFCN 687. 44198JD01.

Date: 24.APR.2003 9:14:37

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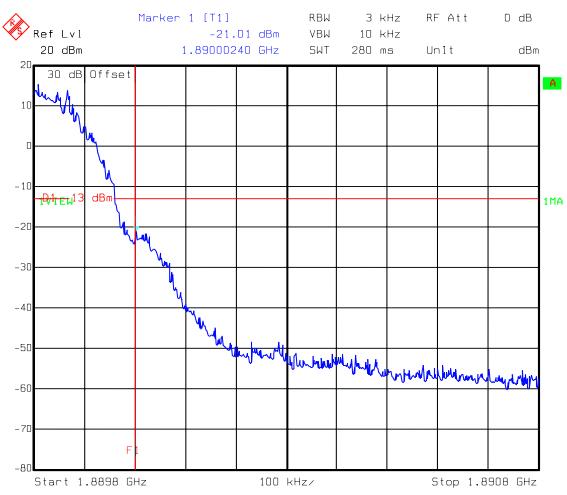
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### GPH\44198\011 Conducted Antenna Port Block Edge



Title: Testing for Danger Inc. EUT:Turner PDA/Mobile Station.

Comment A: IMEI No. 00102000035000. FCC Part 24. Conducted Spurious Emi

ssions. Block E/F Edge Plot. ARFCN 710. 44198JD01.

Date: 24.APR.2003 9:28:13

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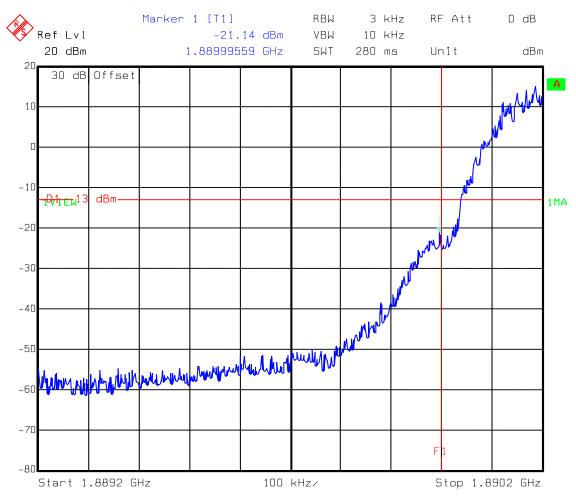
Test Of: Danger Inc.

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# GPH\44198\012 Conducted Antenna Port Block Edge



Title: Testing for Danger Inc. EUT:Turner PDA/Mobile Station.

Comment A: IMEI No. 00102000035000. FCC Part 24. Conducted Spurious Emi

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Date: 24.APR.2003 9:11:04

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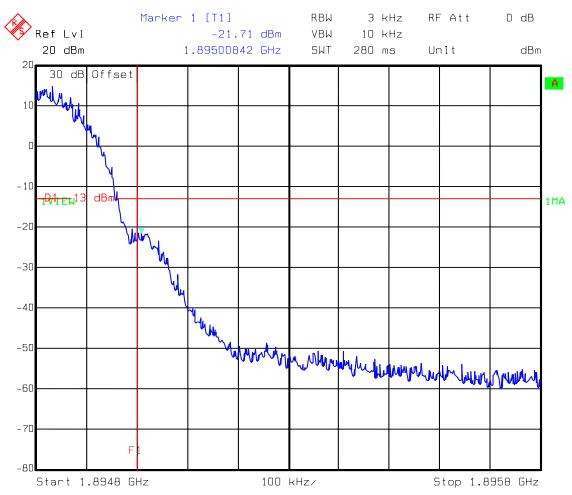
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# GPH\44198\013 Conducted Antenna Port Block Edge



Title: Testing for Danger Inc. EUT:Turner PDA/Mobile Station.

Comment A: IMEI No. 00102000035000. FCC Part 24. Conducted Spurious Emi

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Date: 24.APR.2003 9:31:26

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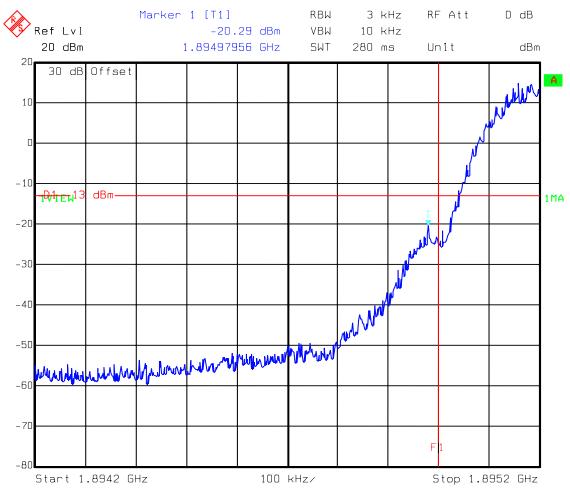
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# GPH\44198\014 Conducted Antenna Port Block Edge



Title: Testing for Danger Inc. EUT:Turner PDA/Mobile Station.

Comment A: IMEI No. 00102000035000. FCC Part 24. Conducted Spurious Emi

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Date: 24.APR.2003 9:12:45