EXHIBIT B

TEST REPORT

Includes photos of equipment under test. See test report for details.

FCC COMPLIANCE TEST REPORT

CFR 47, Part 15.247, Subpart C

for

Electromagnetic Emissions

of

MARS 2.4 GHz CORDLESS PHONE

Model Number: 27730GE2-A
Serial Number: BS04/HS04

Test Site FCC ID: 31040/SIT 1300F2

MJO#: SN9G-004

Prepared for:

TELIAN CORPORATION

4th Fl. Namjeun Bldg. 53-3 Haan-Dong
Kwangmyung-Si, Kyunggi-Do
KOREA

Prepared by:

Underwriters Laboratories Inc.
1655 Scott Blvd.
Santa Clara, CA 90505

REPORT DATE: September 29, 1999

FCC COMPLIANCE TEST REPORT

CFR 47, Part 15.247, Subpart C

FOR

MARS 2.4 GHz CORLESS PHONE
MODEL 27730GE2-A

Prepared for:

TELIAN CORP.
Kwangmyung-Si, Kyunggi-Do
KOREA

Prepared by: Underwriters Laboratories Inc.

	Signature	Date
TEST ENGINEER	Tim Lee Senior Project Engineer	9/30/99
REVIEWED BY	Bob Miller Associate Managing Engineer	9/30/99

LIST OF REVISIONS

REVISION NUMBER AND DATE	PAGE CHANGED	PAGE SUBSTITUTED	PAGE ADDED

(Reserved for Future Use)

REPRODUCTION CLAUSE

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VERIFICATION OF COMPLIANCE

Equipment Under Test:	MARS 2.4 GHz Cordless Phone
Model Number:	27730GE2-A
Serial Number:	BS04/HS04
Company:	Telian Corp. 4th Fl. Namjeun Bldg. 53-3 Haan-Dong Kwangmyung-Si, Kyunggi-Do KOREA
Test Standard:	CFR 47, Part 15.247, Subpart C-1998 (ANSI C63.4-1992)
Type of Test:	15.247 (b)(1) RF Output Power 15.247 (c) Out-of-Band Emissions 15.247 Band Edge Measurements 15.247 (a)(1)(ii) Channel Bandwidth Measurements 15.247 (a)(1) Channel Spacing Measurements 15.247 (a)(1)(ii) Minimum Channels 15.247 (a)(1)(ii) Channel Occupancy Time 15.209 (a) Radiated Emissions in Restricted Bands 15.207 (a) AC Conducted Measurements
Date Tested:	July 9, 1999
Test Technician:	Wayne Fisher, San Toor, Dominic Griego and Jose Aguirre

The above equipment was tested by Underwriters Laboratories Inc. and EMC Technology Services, Inc. (A wholly owned subsidiary of Underwriters Laboratories Inc.), for compliance with the requirements set forth in the CFR 47, Part 15.247, Subpart C Rules and Regulations. This said equipment in the configuration described in the report, shows that maximum emission levels emanating from the equipment are within the compliance requirements.

GENERAL INFORMATION

Customer:	Telian Corp. 4th Fl. Namjeun Bldg. 53-3 Haan-Dong Kwangmyung-Si, Kyunggi-Do KOREA
Contact Person:	Bob Miller / UL Santa Clara
Phone Number:	(408) 556-6071 ext. 32382
Equipment Under Test:	MARS 2.4 GHz Cordless Phone
Model Number:	27730GE2-A (May be referred as Model GE27730 in test data)
Serial Number:	BS04/HS04
Test Standard:	CFR 47, Part 15.247, Subpart C-1998 (ANSI C63.4-1992)
Type of Test:	15.247 (b)(1) RF Output Power 15.247 (c) Out-of-Band Emissions 15.247 Band Edge Measurements 15.247 (a)(1)(ii) Channel Bandwidth Measurements 15.247 (a)(1) Channel Spacing Measurements 15.247 (a)(1)(ii) Minimum Channels 15.247 (a)(1)(ii) Channel Occupancy Time 15.209 (a) Radiated Emissions in Restricted Bands 15.207 (a) AC Conducted Measurements

GENERAL INFORMATION (continued)

Performance Criteria:

1. Emission in restricted bands

All frequencies below is given in GHz.

Channel	1 harm	2 harm	3 harm	4 harm	5 harm	6 harm
0	2,400983	**4,801966**	7,202950	9,603933	**12,004916**	14,405900
40	2,442326	**4,884652**	**7,326978**	9,769304	**12,211630**	**14,653956**
78	2,481602	**4,965270**	**7,447906**	9,930541	**12,413176**	**14,895812**
Restricted band		4.5-5.15	7.25-7.75	9.3-9.5	10.6-12.7	13.25-14.4 14.47-14.5

Channel	1 harm	7 harm	8 harm	9 harm	10 harm
0	2,400983	16,806883	**19,207866**	21,608849	24,009833
40	2,402016	17,096282	**19,538609**	21,980935	24,423261
78	2,403050	17,378447	**19,861082**	**22,343718**	24,826353
Restricted band		15.35-16.2	17.7-21.4	22.01-23.12	23.6-24

Inside the restricted band, the emitted power shall be less than 54 dBμV/m measured at a 3-meter distance.

At the fundamental frequency, the limit is 131 dBμV/m measured at a 3-meter distance. This corresponds to 1 W output power with 6 dB of antenna gain (or 36 dBm isotropic radiated power level).

GENERAL INFORMATION (continued)

2. Occupied bandwidth

The measurement is made at lowest, middle, and highest channel. The measurement is performed as a conducted measurement.

The settings on the spectrum analyzer during this measurement is as follows:

Center frequency	Carrier Frequency
Span	2 MHz
Resolution bandwidth (RBW)	30 kHz
Video bandwidth	>RBW
Sweep time	10 sec
Trace	MAX hold+VIEW

First, the reference level is determined. The reference value is the peak level during unmodulated transmission (it may also be the peak level of the modulated signal).

This is done by using the Q-mode (of the DRIVMARS:EXE program) of the MARS equipment. The Q-mode is a bursted mode, where the signal is unmodulated.

Next, a connection is made between the handset and base. The connection is made to ensure that a pseudo-random bit sequence is used for the transmission (as the data are scrambled).

Per the manufacturer, using the H-mode of the DRIVMARS program gives a wrong spectrum. The H-mode is the bursted mode where a fixed pattern is transmitted in each burst. The pattern is the Figure 31 pattern from the DECT specification (01010..101111…1110000..00101010..10.)

When the trace is recorded, the outermost point, which is 20 dB below the reference value on the left side, is found on the trace using the MKR function. A delta marker is started. The outermost point on the right side with the same power level (with 0 dB on the delta level) is found. The delta frequency between the two points is the occupied bandwidth.

The occupied bandwidth should be smaller than 1 MHz.

GENERAL INFORMATION (continued)

3. Power level at band edges
This measurement is only performed on the lowest and the highest channel. The measurement is performed as a conducted measurement.

The spectrum analyzer is set up as shown:

Center frequency	Near Band Edge
Span	1 MHz
Resolution bandwidth (RBW)	100 kHz
Video bandwidth	>RBW
Sweep time	10 sec
Trace	MAX hold+VIEW

The RBW shall be 100 kHz according to the FCC15.

The EUT is set up to transmit with a normal connection or similar.

The measured power at the band edge shall be 20 dB below the carrier frequency peak measured at 2.400 GHz when transmitting at the lowest channel and at 2.4835 GHz when transmitting at the highest channel.

4. Occupancy of channel
The spectrum analyzer was set to zero-span at a carrier frequency. The time of occupancy of a channel was measured as the burst length.

5. Conducted power on power cord
The limit for the power on the power cord is 48 dBuV.

Deviation: None

Test Results: Met all requirements as previously listed in Type of Test.

SYSTEM DESCRIPTION

Equipment Under Test

MARS 2.4 GHz Cordless Phone

Support Equipment

None

EUT Test Program: The MARS 2.4 GHz cordless phone was tested in the "off hook" mode.

PRODUCT INFORMATION

Description of Transmitter and Receiver Architecture: The MARS system is a frequency hopping system.

1. Baseband
The baseband circuit consists primarily of a microcontroller and a DECT baseband processor (two different kinds are used for the base and handset respectively).

The baseband processor handles all audio, signal, and data processing needed in a handset/base. The baseband processor includes CODEC and ADPCM coder/decoder. The baseband processor for the base also includes an echo chancellor and an echo suppressor.

The baseband controller also includes a Burst Mode Controller that performs the generation and decoding of the frames used. The BMC also generates the control signals for the radio part. The bit rate is 1.033570 Mbit/s.

The baseband processor has a gaussian filter to perform the gaussian filtering of the transmitted data. The output signal (TRADAT) is an analog signal.

The base processor has a comparator to transform the analog RECDAT signal to a digital signal. The data and clock recovery circuit extracts the timing information from the received signal.

2. Transmitter
The MARS systems uses the open loop modulation scheme. In the guard band between two slots the synthesizer is programmed with the new data and the PLL obtains phase lock on the desired frequency. Just before the PA is powered up, the synthesizer is powered down and the phase detector output is tri-stated. Thus, the VCO runs freely during the transmission with the frequency determined by the voltage on the loop capacitors.

It is now possible to modulate the VCO with an analog signal (TRADAT) at its modulation input.

The VCO signal is doubled in the RF chip. After the doubler, a driver amplifier is used to obtain the correct power level for the PA. The doubler and driver amplifier is turned on in the guard band during the lock-in time. The PA is only turned on when a burst is transmitted. The power up and power down of the PA is slowed down to reduce the generated switching spectrum.

There is a TX-RX switch to switch the antenna between the PA and the LNA. Between the TX-RX, a BPF (ceramic) is used to perform some filtering.

In the base station, a diversity switch is implemented to switch between two antennas. A circuit is implemented to use the best antenna for receiving the signal. The choice is based on the measured RSSI value from a few bits in the preamble.

In the base station, there are two internal antennas. There is no indented gain in the antennas.

PRODUCT INFORMATION (continued)

In the handset, an internal inverted F antenna is used. This antenna has a gain of omni-directional antenna pattern.

3. Receiver

The front-end consists of the antennas, bandpass filter, and TX-RX switch as described in the transmitter section. There is also a single transistor LNA before the second bandpass filter (ceramic).

The mixer is internal in the RF chip. The LO signal comes from the doubler used in the transmitter. The VCO is band-switched, so a different mode of the VCO is used for RX and TX. The PLL and doubler are common for the TX and RX path. This is possible as the transceiver only operates in either TX or RX mode.

The down-converted signal has a frequency of 110.592 MHz. The IF signal is filtered in a SAW filter with an approximately 1.2 MHz bandwidth. The SAW filter gives most of the channel selectivity. After the filter, a limiter and a discriminator is used. The discriminator has an LC tank centered at the IF. The demodulated signal is lowpass filtered with RC filter to obtain a better channel selectivity and noise reduction. The lowpass filter has a cut-off frequency of approximately 500 kHz.

A sample and hold circuit is used to extract the DC offset of the received data to improve the comparator performance. The received data is sampled in the preamble where the alternating sequence ensures a correct average value.

4. Frequencies in the 2.4 GHz MARS

Channel	Divide ratio TX	TX freq	Divide ratio RX	RX freq	VCO freq TX	VCO freq RX
0	2323	2400.983	2216	2290.391	1200.492	1145.196
1	2324	2402.017	2217	2291.425	1201.008	1145.712
2	2325	2403.060	2218	2292.458	1201.525	1146.229
3	2326	2404.084	2219	2293.492	1202.042	1146.746
4	2327	2405.118	2220	2294.526	1202.559	1147.263
5	2328	2406.151	2221	2295.559	1203.076	1147.780
6	2329	2407.186	2222	2296.593	1203.592	1148.296
7	2330	2408.218	2223	2297.626	1204.109	1148.813
8	2331	2409.252	2224	2298.660	1204.626	1149.330
9	2332	2410.285	2225	2299.693	1205.143	1149.847
10	2333	2411.319	2226	2300.727	1205.660	1150.364
11	2334	2412.353	2227	2301.761	1206.176	1150.880
12	2335	2413.386	2228	2302.794	1206.693	1151.397
13	2336	2414.420	2229	2303.828	1207.210	1151.914
14	2337	2415.453	2230	2304.861	1207.727	1152.431
15	2338	2416.487	2231	2305.895	1208.243	1152.947
16	2339	2417.520	2232	2306.928	1208.760	1153.464
17	2340	2418.554	2233	2307.962	1209.277	1153.981
18	2341	2419.588	2234	2308.995	1209.794	1154.498
19	2342	2420.621	2235	2310.029	1210.311	1155.015
20	2343	2421.655	2236	2311.063	1210.827	1155.531
21	2344	2422.688	2237	2312.096	1211.344	1156.048
22	2345	2423.722	2238	2313.130	1211.861	1156.565
23	2346	2424.755	2239	2314.163	1212.378	1157.082
24	2347	2425.789	2240	2315.197	1212.895	1157.599
25	2348	2426.823	2241	2316.231	1213.411	1158.115
26	2349	2427.856	2242	2317.264	1213.928	1158.632
27	2350	2428.890	2243	2318.298	1214.445	1159.149
28	2351	2429.923	2244	2319.331	1214.962	1159.666
29	2352	2430.957	2245	2320.365	1215.478	1160.182
30	2353	2431.990	2246	2321.398	1215.995	1160.699
31	2354	2433.024	2247	2322.432	1216.512	1161.216
32	2355	2434.058	2248	2323.466	1217.029	1161.733
33	2356	2435.091	2249	2324.499	1217.546	1162.250
34	2357	2436.125	2250	2325.533	1218.062	1162.766

PRODUCT INFORMATION (continued)

Frequencies in the 2.4 GHz MARS (continued)

35	2358	2437,158	2251	2326,566	1218,579	1163,283
36	2359	2438,192	2252	2327,600	1219,096	1163,800
37	2360	2439,225	2253	2328,633	1219,613	1164,317
38	2361	2440,259	2254	2329,667	1220,129	1164,833
39	2362	2441,293	2255	2330,701	1220,646	1165,350
40	2363	2442,326	2256	2331,734	1221,163	1165,867
41	2364	2443,360	2257	2332,768	1221,680	1166,384
42	2365	2444,393	2258	2333,801	1222,197	1166,901
43	2366	2445,427	2259	2334,836	1222,713	1167,417
44	2367	2446,460	2260	2335,868	1223,230	1167,934
45	2368	2447,494	2261	2336,902	1223,747	1168,451
46	2369	2448,528	2262	2337,936	1224,264	1168,968
47	2370	2449,561	2263	2338,969	1224,781	1169,485
48	2371	2450,595	2264	2340,003	1225,297	1170,001
49	2372	2451,628	2265	2341,036	1225,814	1170,518
50	2373	2452,662	2266	2342,070	1226,331	1171,035
51	2374	2453,695	2267	2343,103	1226,848	1171,552
52	2375	2454,729	2268	2344,137	1227,364	1172,068
53	2376	2455,763	2269	2345,171	1227,881	1172,585
54	2377	2456,796	2270	2346,204	1228,398	1173,102
55	2378	2457,830	2271	2347,238	1228,915	1173,619
56	2379	2458,863	2272	2348,271	1229,432	1174,136
57	2380	2459,897	2273	2349,305	1229,948	1174,652
58	2381	2460,930	2274	2350,338	1230,465	1175,169
59	2382	2461,964	2275	2351,372	1230,982	1175,686
60	2383	2462,998	2276	2352,406	1231,499	1176,203
61	2384	2464,031	2277	2353,439	1232,016	1176,720
62	2385	2465,065	2278	2354,473	1232,532	1177,236
63	2386	2466,098	2279	2355,506	1233,049	1177,753
64	2387	2467,132	2280	2356,540	1233,566	1178,270
65	2388	2468,165	2281	2357,573	1234,083	1178,787
66	2389	2469,199	2282	2358,607	1234,599	1179,303
67	2390	2470,233	2283	2359,641	1235,116	1179,820
68	2391	2471,266	2284	2360,674	1235,633	1180,337
69	2392	2472,300	2285	2361,708	1236,150	1180,854
70	2393	2473,333	2286	2362,741	1236,667	1181,371
71	2394	2474,367	2287	2363,775	1237,183	1181,887
72	2395	2475,400	2288	2364,808	1237,700	1182,404
73	2396	2476,434	2289	2365,842	1238,217	1182,921
74	2397	2477,468	2290	2366,876	1238,734	1183,438
75	2398	2478,501	2291	2367,909	1239,251	1183,955
76	2399	2479,535	2292	2368,943	1239,767	1184,471
77	2400	2480,568	2293	2369,976	1240,284	1184,988
78	2401	2481,602	2294	2371,010	1240,801	1185,505

PRODUCT INFORMATION (continued)

The EUT and/or support equipment was received at EMC Technology Services, Inc., in good condition, on July 8, 1999.

Housing Type: Plastic

Power Supply: External Class 2 Transformer

AC Power Requirements: 120 VAC/60 Hz

Power Supply Manufacturer: Thomson

Power Supply Model Number: RGD-4112500

Serial Number: S247980

AC Line Cord from Outlet to Supply: Unshielded

Length: 1 Meter

Gauge: 24 AWG

OSC./Clock Frequency: 2.4 GHz

I/O PORT TYPE	QTY	TESTED WITH
Phone	1	1

PRODUCT CABLING INFORMATION

Equipment Under Test (EUT): MARS 2.4 GHz Cordless Phone

Cable: Phone		**Unshielded**
Used	**From:** Phone	**Port On:** Base Station
	To: Phone	**Port On:** Unterminated
Connector Type: RJ11		**Length:** 1 m (39 inches)

Cable used during test was bundled.

APPENDIX B

TEST FACILITY

TEST FACILITY
(EMC TECHNOLOGY SERVICES, INC.)

Location: 11825 Niles Canyon Road
Sunol, CA 94586

Description: At the Sunol facility, there are four 3/10 m open area test sites, two line conducted labs and two indoor conducted/radiated engineering labs. The OATS and the LC labs are constructed and calibrated to meet the FCC requirements in documents OST-55/MP-4 and ANSI C63.4 1992.

Accreditation: EMC Technology Services, Inc. has been accredited by A2LA to do EMC testing, including FCC DoC testing on personal computers and their peripherals.

FCC has also accepted EMC Technology Services, Inc. facility site for filing applications for certification and notification.

Certification: EMC Technology Services, Inc. has the following test/lab sites certified by VCCI and Industry Canada (IC):

Open Area Test Site #1: VCCI No. R-802 and IC 2816-1

Open Area Test Site #2: VCCI No. R-376 and IC 2816-2

Open Area Test Site #3: VCCI No. R-377 and IC 2816-3

Open Area Test Site #4: VCCI No. R-378 and IC 2816-4

Line Conducted Lab #1: VCCI No. C-392

Line Conducted Lab #2: VCCI No. C-427

TEST FACILITY
(UNDERWRITERS LABORATORIES INC./SANTA CLARA OFFICE)

Location: 1655 Scott Boulevard
Santa Clara, CA 95050

Description:

A. The EMC test facility is located on the northeast corner of the UL property. It consists of 10 meter Semi-Anechoic Chamber, 3 meter Anechoic Chamber, Control Room, RF Shielded Room, Test Lab Area containing one conducting ground plane and Office Area.

B. The 10-meter Semi-Anechoic Chamber, constructed by Lindgren RF Enclosures, is designed for 10 or 3-meter final radiated emission measurements. The chamber consists of a 19 by 13 by 8.5 meter shielded room lined with a hybrid absorber system manufactured by TDK. The walls, floor (conducting ground plane) and ceiling are constructed of double sided galvanized sheet steel supported by 3/4 inch particle board. The interior walls and ceiling are covered with 10 by 10 cm, 6 mm thick ferrite tiles (TDK Type IB-011), and polystrene absorber cones (TDK Type IP-090B).

C. The 10-meter Semi-Anechoic Chamber is provided with 2.4 by 2.4 meter door and a 4 meter diameter embedded turntable. The turntable is provided with metallic brushes to secure continuity of the conducting ground plane and is mounted flush with the ground plane. The turntable is provided with a 30 cm hole in the center for passage of the power and associated cables. The turntable and chamber floor are rated for 13,200 lbs capacity.

D. The antenna mast for the 10-meter chamber is a premanufactured, portable unit capable of remotely adjusting the antenna height from 1 to 4 meter above the conducting ground plane. The antenna mast is constructed of nonmetallic materials with the exception of the drive motor which raises and lowers the antenna.

E. The shielded Control Room, constructed by Lindgren RF enclosures contains test equipment, controllers, and monitors for tests, conducted in both the 10-meter and 3-meter Chambers. Controllers for the turntables and cameras are connected by fiber optic cables. Test equipment is connected by double shielded coaxial cables. All cables are routed under the ground plane of the 10-meter and 3-meter Chambers to the Control Room through shielded trenches or conduits.

TEST FACILITY (continued)
(UNDERWRITERS LABORATORIES INC./SANTA CLARA OFFICE)

F. The test equipment, located in the shielded Control Room and dedicated to 10-meter Chamber testing, includes HP Spectrum Analyzer, Sunol Sciences Controller for turntable, Electro-Metrics Controller for antenna mast, video monitor and computer system. The test equipment, located in the shielded Control Room and dedicated to 3-meter Chamber testing, includes Rohde & Schwarz RF Generator, Sunol Sciences Controller for turntable, video monitor and computer system.

G. The 3-meter Anechoic Chamber, also constructed by Lindgren RF Enclosures, is used primarily for RF immunity testing and preliminary emissions testing. The chamber consists of a 6.5 by 3.5 by 3.1 meter (inside clearance) shielded room lined with TDK absorber material. The walls, floor and ceiling are constructed of double sided galvanized sheet steel supported by 3/4 inch particle board. The interior walls and ceiling are covered with 10 by 10 cm, 4.6 mm thick ferrite tiles and partially covered by polystrene absorber cones (TDK Type IP-045C). There are removable floor tiles used during RF immunity testing.

H. The 3-meter Chamber is provided with 1.2 by 2.1 meter door and a 1.5 meter diameter embedded turntable. The turntable is provided with metallic brushes to secure continuity of the conducting ground plane and is mounted flush with the floor. The turntable is provided with a 20 cm hole in the center for passage of the power and associated cables. The turntable and chamber floor have a rated capacity of 1,100 lbs.

I. The RF Shielded Room is used primarily for immunity (EFT/B, Surge and Conducted Disturbances) testing. The room, also constructed by Lindgren RF Enclosures, consists of a 6.5 by 3.5 by 3.1 meter (inside clearance) shielded room and is provided with 1.2 by 2.1 meter door. The test equipment located in the RF shielded room, includes ECAT system (KeyTek), LISNs (Electro-Metrics) and CDNs (Fischer); double shielded cables connect the HP Spectrum Analyzer in the RF shielded control room and IFI Power Amplifier in the Lab Area to the LISNs and CDNs respectively. The Spectrum Analyzer and Power Amplifier are also connected to the LISNs and CDNs in the shielded room by double-shielded coaxial cables through connector ports on the floor of the RF shielded room.

J. The Lab Area with conducting ground plane is used primarily for ESD, conducted immunity, clicks testing and conducted emission testing. The ground plane is constructed of double sided galvanized sheet steel supported by 3/4 inch particle board and measures 2.2 by 3.0 meters for both the vertical and horizontal plane.

K. The Lab Area, located between the conducting ground plane and Office Area, is used for magnetic and power quality tests.

L. Electrical power to both chambers, RF shielded room and Control Room is EMI filtered.

TEST FACILITY (continued)
(UNDERWRITERS LABORATORIES INC./SANTA CLARA OFFICE)

M. Conducted Voltage Emissions and Radiated Electric Field Emission (30 MHz to 1000 MHz) were performed at Underwriters Laboratories, Inc. This measurement facility is located at 1655 Scott Boulevard, Santa Clara, California 95050. It is listed with the Federal Communications Commission for certification and notification under Parts 15 and 18 of the Commission's Rules (reference 31040/SIT 1300F2, letter dated 9/24/97). Furthermore, the laboratory is accredited by the National Voluntary Laboratory Accreditation Program for the specific scope of accreditation under Lab Code 200252-0. Therefore, the laboratory can perform Declaration of Conformity testing under the FCC Part 15 rules. The specific scope includes AS/NZS 3548 testing. Also, the laboratory is accredited by BSMI of Taiwan and VCCI of Japan (Registration No. C-689 and R-672).

APPENDIX C

TEST EQUIPMENT

MEASURING INSTRUMENT SETTINGS

TEST TYPE	DETECTOR	FREQUENCY RANGE	RESOLUTION BANDWIDTH	VIDEO BANDWIDTH
Conducted	Peak/Avg	10 kHz-150 kHz	300 Hz/3 kHz	100 kHz/3 kHz
Conducted	Peak/QP/Avg	150 kHz-30 MHz	10 kHz/100 kHz	100 kHz
Radiated	Peak/Avg	60 Hz-1 kHz	10 Hz	100 kHz
Radiated	Peak/Avg	1 kHz-10 kHz	100 Hz	100 kHz
Radiated	Peak/Avg	10 kHz-150 kHz	300 Hz	100 kHz/300 Hz
Radiated	Peak/QP/Avg	150 kHz-30 MHz	10 kHz	100 kHz/10 kHz
Radiated	Peak/QP/Avg	30 MHz-1 GHz	100 kHz	100 kHz/10 kHz
Radiated	Peak/Avg	Above 1 GHz	1 MHz	1 MHz/300 kHz

Note: All readings on data pages are taken with the detector in peak mode unless otherwise stated.

TEST EQUIPMENT LIST

EQUIPMENT TYPE	* MFR	MODEL NUMBER	SERIAL NUMBER	LAST ** CAL.	CAL. DUE
Receiver RF Section/Display	Hewlett Packard	85462A	3807A00465	06-14-99	06-14-00
Spectrum Analyzer w/Mass Memory Module	Hewlett Packard	8564E	00199/3810A01214	07-14-98	07-14-99
RF Filter Section	Hewlett Packard	85460A	3704A00422	06-14-99	06-14-00
Spectrum Analyzer	Tektronix	2782	B020370	06-10-99	06-10-00
Log Periodic 200 MHz-1GHz	Electro-Metrics	EM-6950	935	10-10-98	10-10-99
Preamplifier	Sonoma	310N	171202	10-11-98	10-11-99
Biconical 20 MHz-300 MHz	Electo-Metrics	EM-6912A	126	10-20-99	10-20-99
LISN, 50 uH	Electro-Metrics	EM-7820-1	106	11-10-98	11-10-99
LISN, 50 uH	Electro-Metrics	EM-7820-1	107	11-10-98	11-10-99
Spectrum Analyzer	Hewlett Packard	8566B	3638A08593	12-08-98	12-08-99
Transient Limiter	Electro-Metrics	EM-7600	562	07-14-99	07-14-00

* **MFR** = Manufacturer
** **CAL.** = Calibration

APPENDIX D

TEST METHODS

TEST METHODS (LINE CONDUCTED TEST)

1) The equipment will be set up according to the test standard to simulate typical actual usage. When the EUT is a table-top system, a wooden table with a height of 0.8 meters is used which is placed on the ground plane according to the test standard. When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm covering to insulate the EUT from the ground plane.

2) Support equipment, if needed, will be placed according to the test standard.

3) All I/O cables are positioned to simulate typical actual usage according to the test standard.

4) The EUT receives AC power through a Line Impedance Stabilization Network (LISN) which is grounded to the ground plane.

5) Support equipment, if used, will receive AC power through a second LISN.

6) Emissions are measured on each current carrying line of the EUT using a spectrum analyzer connected to the LISN powering the EUT.

7) During the emission measurement, the I/O cable placement position is adjusted in order to maximize the emission measurement level.

8) Emission frequency and amplitude are recorded into a computer in which correction factors are used to calculate the emission level and compare the reading to the applicable limit.

Data Sample:

Freq. MHz	Corr'd dBµV	Site CF	Limit dBµV	Margin dBµV	Line
2.47	46.0	6.0	48.0	-2.0	L1

Freq.	= Emission frequency in MHz
Corr'd dBµV	= RAW reading converted to dBµV and CF added
Site CF	= Correction Factors for pad/cable losses
Limit dBµV	= Limit stated in standard
Margin dBµV	= Reading in reference to limit
Note	= Current carrying line of reading

TEST METHODS (RADIATED TEST)

1) The equipment will be set up according to the test standard to simulate typical actual usage. When the EUT is a table-top system, a wooden table with a height of 0.8 meters is used which is placed on the ground plane according to the test standard. When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm covering to insulate the EUT from the ground plane.

2) Support equipment, if needed, will be placed according to the test standard.

3) All I/O cables are positioned to simulate typical actual usage according to the test standard.

4) The antenna is placed at some given distance away from the EUT as stated in the test standard. The antenna connects to the analyzer via a cable and at times a preamp is used.

5) Emissions are scanned and measured rotating the EUT to 360 degrees, positioning cable placement, and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarizations in order to maximize the emission reading level.

6) Emission frequency, amplitude, antenna position, polarization, and table position are recorded into a computer in which correction factors are used to calculate the emission level and compare the reading to the applicable limit.

Data Sample:

Freq. MHz	Corr'd dBµV	Site CF	Limit dBµV	Margin dBµV	Table Pos.	Ant Pos.
76.57	44.2	-12.8	40.0	-5.3	180	1.5V

Freq.	= Emission frequency in MHz
Corr'd dBµV	= RAW reading converted to dBµV and CF added
Site CF	= Correction Factors for pad/cable losses
Limit dBµV	= Limit stated in standard
Margin dBµV	= Reading in reference to limit
Table Position	= EUT placement in reference to antenna
Antenna Position	= Antenna polarization and height above ground plane

APPENDIX E

CLASS TYPES AND LIMITS

FCC CLASS TYPES AND LIMITS

CLASS A COMPUTING DEVICE

A computing device which is marketed for use in a commercial or business environment; exclusive of a device which is marketed for use by the general public, or which is intended to be used in the home. Reference: Section 15.3 (h).

CLASS B COMPUTING DEVICE

A computing device that is marketed for use in a residential environment notwithstanding use in a commercial, business, or industrial environment. Examples of such devices include, but are not limited to: electronic games, personal computers, calculators, and similar devices that are marketed for the general public. Reference: Section 15.3 (i).

> **NOTE:** A manufacturer may also qualify a device intended to be marketed in a commercial, business, or industrial environment as a Class B computing device, and in fact is encouraged to do so, provided the device complies with the technical standards for a Class B computing device. In the event that a particular type of device has been found to repeatedly cause harmful interference to radio communications, the Commission may classify such a computing device as a Class B computing device, regardless of its intended use.

APPENDIX F

LABELING REQUIREMENTS

FCC CLASS A LABELING REQUIREMENT

Section 15.19 of the Code of Federal Regulation

A) The Class A computing device subject to **verification** by the Commission shall be identified pursuant to par. 2.925 et seq of this Chapter. In addition, the label shall include the following statement:

> THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

B) Where a device is constructed in two or more sections connected by wires and marketed together, the statement specified in this section is required to be affixed only to the main control unit.

C) When the device is so small or for such use that it is not practicable to place the statement specified in this section on it, the information required by these paragraphs shall be placed in a prominent location in the instruction manual or pamphlet supplied to the user or, alternatively, shall be placed on the container in which the device is marketed. However, the FCC identifier or the unique identifier, as appropriate, must be displayed on the device.

D) The label shall not be a stick-on paper label. The label on these products shall be permanently affixed to the product and shall be readily visible to the purchaser at the time of purchase. "Permanently affixed" means that the label is etched, engraved, stamped, silkscreened, indelibly printed, or otherwise permanently marked on a permanently attached part of the equipment or a nameplate of metal, plastic, or other material fastened to the equipment by welding, riveting, or use of a permanent adhesive. The label must be designed to last the expected lifetime of the equipment in the environment in which the equipment may be operated and must not be readily detachable.

FCC CLASS B LABELING REQUIREMENT

Section 15.19 of the Code of Federal Regulation

A) The Class B computing device subject to **certification** by the Commission shall be identified pursuant to par. 2.925 et seq of this Chapter. In addition, the label shall include the following statement:

FCC ID: XXXXXXXXXXXXXXXXX

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

B) Where a device is constructed in two or more sections connected by wires and marketed together, the statement specified in this section is required to be affixed only to the main control unit.

C) When the device is so small or for such use that it is not practicable to place the statement specified in this section on it, the information required by these paragraphs shall be placed in a prominent location in the instruction manual or pamphlet supplied to the user or, alternatively, shall be placed on the container in which the device is marketed. However, the FCC identifier or the unique identifier, as appropriate, must be displayed on the device.

D) The label shall not be a stick-on paper label. The label on these products shall be permanently affixed to the product and shall be readily visible to the purchaser at the time of purchase. "Permanently affixed" means that the label is etched, engraved, stamped, silkscreened, indelibly printed, or otherwise permanently marked on a permanently attached part of the equipment or a nameplate of metal, plastic, or other material fastened to the equipment by welding, riveting, or use of a permanent adhesive. The label must be designed to last the expected lifetime of the equipment in the environment in which the equipment may be operated and must not be readily detachable.

DoC LABELING REQUIREMENTS

A) The Class B computing device, subject to authorization under a **Declaration of Conformity (DoC)**, shall be labeled in a conspicuous location on the device and shall contain the following information:

Use the following label if product is authorized based on testing of the product or system:

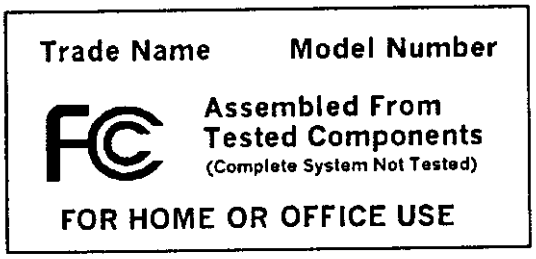
Trade Name Model Number

FC Tested To Comply With FCC Standards

FOR HOME OR OFFICE USE

DoC LABELING REQUIREMENTS (continued)

Use the following label if product is based on assembly using separately authorized components and the resulting product is not separately tested:



B) When a device is so small or for such use that it is not practicable to place the statement specified on it, such as for a CPU board or plug-in circuit board peripheral device, the text associated with the logo may be placed in a prominent location in the instruction manual or pamphlet supplied to the user. However, the unique identification (trade name and model number) and the logo must be displayed on the device.

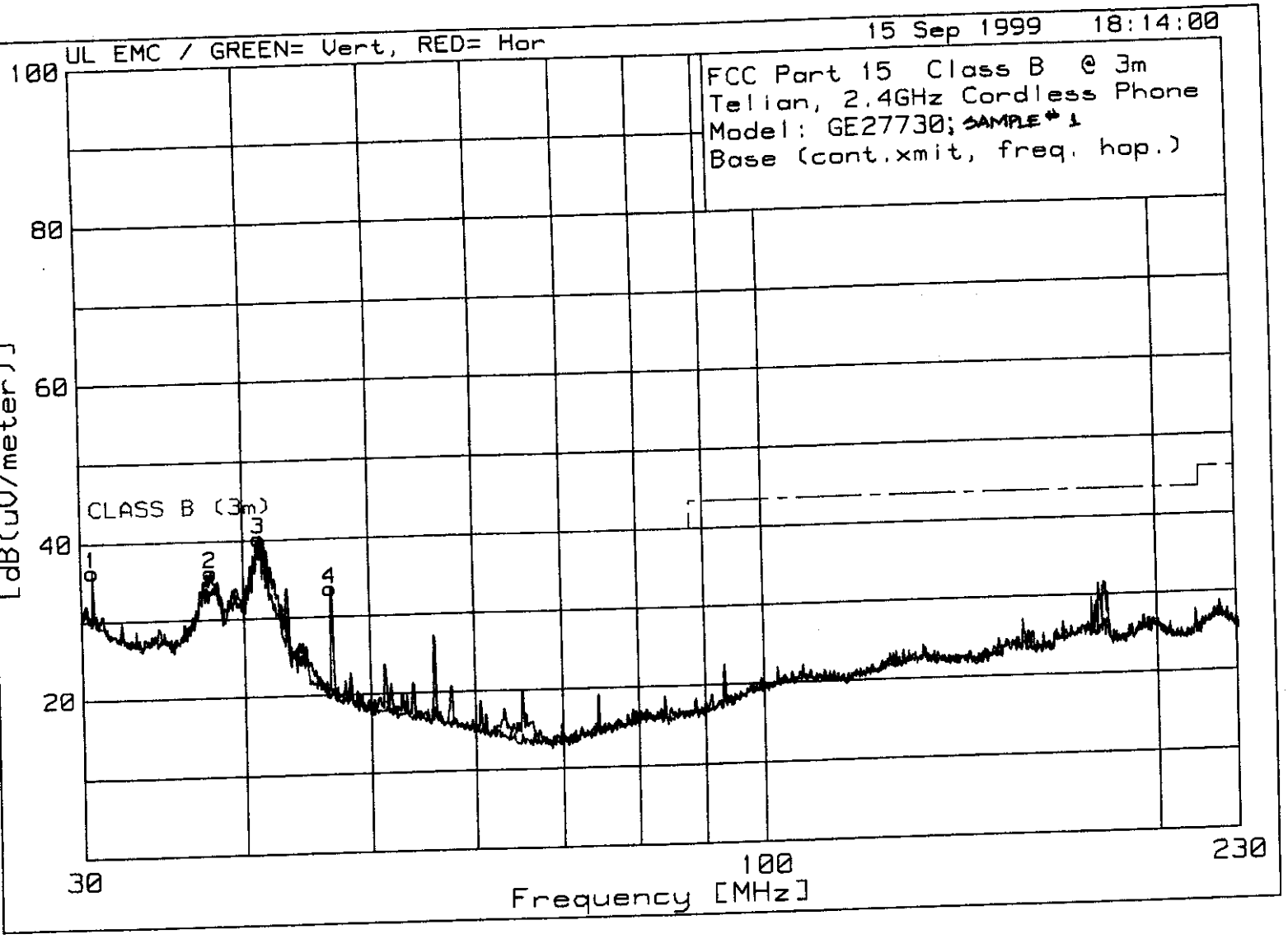
C) The label shall not be a stick-on paper label. The label on these products shall be permanently affixed to the product and shall be readily visible to the purchaser at the time of purchase. "Permanently affixed" means that the label is etched, engraved, stamped, silkscreened, indelibly printed, or otherwise permanently marked on a permanently attached part of the equipment or a nameplate of metal, plastic, or other material fastened to the equipment by welding, riveting, or use of a permanent adhesive. The label must be designed to last the expected lifetime of the equipment in the environment in which the equipment may be operated and must not be readily detachable.

APPENDIX G

DATA READINGS

TYPE OF TEST: 15.209 (a)
Radiated Emissions in Restricted Bands

15.209 (a) Radiated Emissions in Restricted Bands (Base Station/Handset & Handset/Charger)



UL EMC / GREEN= Vert, RED= Hor

Date Tested: 15 Sep 1999
18:14:00

Telian, 2.4GHz Cordless Phone
Model: GE27730; SAMPLE # 1
Base (cont.xmit, freq. hop.)

MARKER NO.	TEST FREQUENCY [MHz]	METER READING [dB(uV)]	GAIN/LOSS FACTOR [dB]	TRANSDUCER FACTOR [dB]	LEVEL	LIMIT:1 [dB(uV/meter)]	2	3	4
1	30.6417	14.9 pk	.7	20.8	36.4	N/A	40	N/A	N/A
2	37.7592	18.6 pk	.8	16.6	36	N/A	40	N/A	N/A
3	41.2013	24.6 pk	.8	14.8	40.2	N/A	40	N/A	N/A
4	46.6853	20.6 pk	.8	12.2	33.6	N/A	40	N/A	N/A

MARK TRACE - MAXIMUM POSITIONS

MARKER NO.	TEST FREQUENCY	LEVEL	LIMIT:1 [dB(uV/meter)]	2	3	4	TABLE AZIMUTH(deg)	TOWER HEIGHT (cm)
1	30.6417	36.4 pk	N/A	40	N/A	N/A	250	100 H
2	37.7592	36 pk	N/A	40	N/A	N/A	206	201 H
3	41.2013	40.2 pk	N/A	40	N/A	N/A	141	301 H
4	46.6853	33.6 pk	N/A	40	N/A	N/A	97	100 V

RADIATED EMISSIONS

DATA POINT	TEST FREQUENCY	METER READING	GAIN/LOSS FACTOR	TRANSDUCER FACTOR	LEVEL	LIMITS:1 [dB(uV/meter)]	2	3	4
1	30.0997 H	3.1 qp	.7	21.1	24.9	N/A	40	N/A	N/A
					Margin [dB]	---	-15.1	---	---
2	37.5107 H	13.6 qp	.8	16.7	31.1	N/A	40	N/A	N/A
					Margin [dB]	---	-8.9	---	---
3	41.1241 H	21.6 qp	.8	14.8	37.2	N/A	40	N/A	N/A
					Margin [dB]	---	-2.8	---	---
4	46.5436 V	19.4 qp	.8	12.3	32.5	N/A	40	N/A	N/A
					Margin [dB]	---	-7.5	---	---

pk - indicates peak detection.
qp - indicates quasi-peak detection.
av - indicates average detection.
H - indicates horizontal antenna polarization.
V - indicates vertical antenna polarization.

LIMIT 1 : NONE
LIMIT 2 : CLASS B (3m)
LIMIT 3 : NONE
LIMIT 4 : NONE

MJO# SN9I-007

FCC CLASS B

RADIATED EMISSION DATA

COMPANY: Telian Corporation
EQUIP. UNDER TEST: GE 27730 Cordless

MODEL NUMBER: GE 27730
TEST PROCEDURE: FCC Class B
SUPPORT EQUIPMENT: None

TESTED BY: Dominic Griego TEST SITE 1
DATE: September 16 1999

TIME: 2:30pm Control RM Temp: 75 Deg.F Humidity: 35 %RH
EUT Room Temp: 81 Deg.F Humidity: 35 %RH

400MHz to 1000MHz Biconical Antenna at 3 meters Vert.

FREQ MHz	RAW dBuV	SITE CF	CORR'D dBuV/m	LIMIT A	LIMIT B	EUT MARGIN A	EUT MARGIN B	POSITION TBL	POSITION ANT
400MHz to 1000MHz Biconical Antenna at 3 meters Vert.									
427.89	+7.4PK	+23.2	30.6	57.0	46.0	-26.4	-15.4	149	2.69
493.01	+7.4PK	+24.8	32.2	57.0	46.0	-24.8	-13.8	304	2.00
502.31	+9.6PK	+25.0	34.6	57.0	46.0	-22.4	-11.4	178	2.25
539.52	+10.7PK	+25.7	36.4	57.0	46.0	-20.6	-9.6	217	2.50
558.12	+7.5PK	+26.1	33.6	57.0	46.0	-23.4	-12.4	223	2.17
613.93	+5.7PK	+27.2	32.8	57.0	46.0	-24.1	-13.1	185	1.80
706.98	+4.6PK	+28.7	33.2	57.0	46.0	-23.8	-12.8	249	1.95
200MHz to 400MHz Biconical Antenna at 3 meters Horz.									
241.85	+8.1PK	+17.6	23.7	57.0	46.0	-33.3	-22.3	239	1.75
260.45	+9.4PK	+18.3	27.7	57.0	46.0	-29.3	-18.3	238	1.25
306.97	+12.2PK	+19.9	32.1	57.0	46.0	-24.9	-13.9	231	1.50
325.97	+13.2PK	+20.4	33.6	57.0	46.0	-23.4	-12.4	230	1.50
362.78	+8.5PK	+21.5	30.0	57.0	46.0	-27.0	-16.0	237	1.48
390.68	+10.1PK	+22.3	32.4	57.0	46.0	-24.6	-13.6	176	2.00
200MHz to 400MHz Biconical Antenna at 3 meters Vert.									
288.36	+5.3PK	+19.3	24.6	57.0	46.0	-32.4	-21.4	169	1.25
325.57	+9.6PK	+20.4	30.0	57.0	46.0	-27.0	-16.0	149	1.75
390.68	+4.9PK	+22.3	27.2	57.0	46.0	-29.8	-18.8	156	2.00

MJO# SN9I-007

FCC CLASS B
RADIATED EMISSION DATA

COMPANY: Telian Corporation
EQUIP. UNDER TEST: GE 27730 Cordless

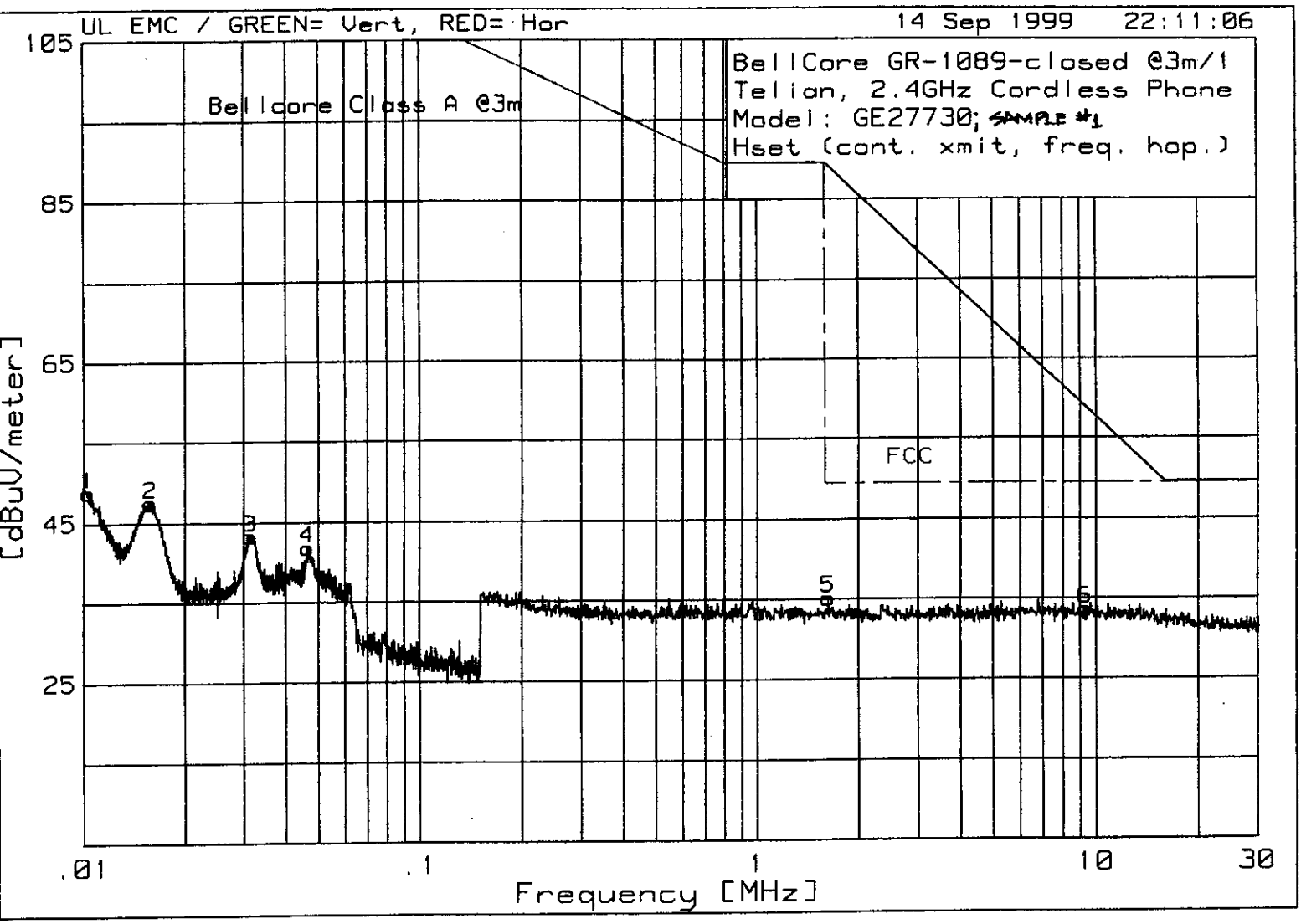
MODEL NUMBER: GE 27730
TEST PROCEDURE: FCC Class B
SUPPORT EQUIPMENT: None

TESTED BY: Dominic Griego TEST SITE 1
DATE: September 16 1999

TIME: 1:00pm Control RM Temp: 75 Deg.F Humidity: 35 %RH
EUT Room Temp: 81 Deg.F Humidity: 35 %RH

400MHz to 1000MHz Biconical Antenna at 3 meters Horz.

FREQ MHz	RAW dBuV	SITE CF	CORR'D dBuV/m	LIMIT A	LIMIT B	EUT MARGIN A	EUT MARGIN B	POSITION TBL	POSITION ANT
409.01	+18.7PK	+22.8	41.4	57.0	46.0	-15.6	-4.6	270	1.65
427.60	+16.5PK	+23.2	39.7	57.0	46.0	-17.3	-6.3	212	3.50
436.91	+16.3PK	+23.4	39.7	57.0	46.0	-17.3	-6.3	145	2.65
483.71	+8.1PK	+24.6	32.6	57.0	46.0	-24.4	-13.4	226	3.20
493.01	+8.2PK	+24.8	33.0	57.0	46.0	-24.0	-13.0	276	2.25
502.31	+11.6PK	+25.0	36.6	57.0	46.0	-20.4	-9.4	224	2.75
511.61	+11.3PK	+25.2	36.5	57.0	46.0	-20.5	-9.5	256	1.95
520.91	+10.7PK	+25.4	36.1	57.0	46.0	-20.9	-9.9	134	1.97
530.22	+8.9PK	+25.6	34.5	57.0	46.0	-22.5	-11.5	112	1.65
539.52	+15.5PK	+25.7	41.2	57.0	46.0	-15.8	-4.8	177	1.63
548.81	+9.3PK	+25.9	35.2	57.0	46.0	-21.8	-10.8	288	2.00
558.12	+11.4PK	+26.1	37.5	57.0	46.0	-19.5	-8.5	93	2.00
595.33	+5.4PK	+26.9	32.2	57.0	46.0	-24.8	-13.8	56	1.59
613.93	+12.0PK	+27.2	39.2	57.0	46.0	-17.8	-6.8	225	1.50
632.53	+9.4PK	+27.5	36.9	57.0	46.0	-20.1	-9.1	232	1.35
706.96	+8.0PK	+28.7	36.8	57.0	46.0	-20.2	-9.2	279	1.25
762.77	+4.1PK	+29.6	33.7	57.0	46.0	-23.3	-12.3	200	1.50
837.18	+3.3PK	+30.7	34.0	57.0	46.0	-23.0	-12.0	191	2.20


UL EMC / GREEN= Vert, RED= Hor
14 Sep 1999 22:11:06
Bellcore Class A @3m
BellCore GR-1089-closed @3m/1
Telian, 2.4GHz Cordless Phone
Model: GE27730; SAMPLE #1
Hset (cont. xmit, freq. hop.)
FCC
105
85
65
45
25
[dBuV/meter]
.01
.1
1
10
30
Frequency [MHz]
1
2
3
4
5
6

UL EMC / GREEN= Vert, RED= Hor

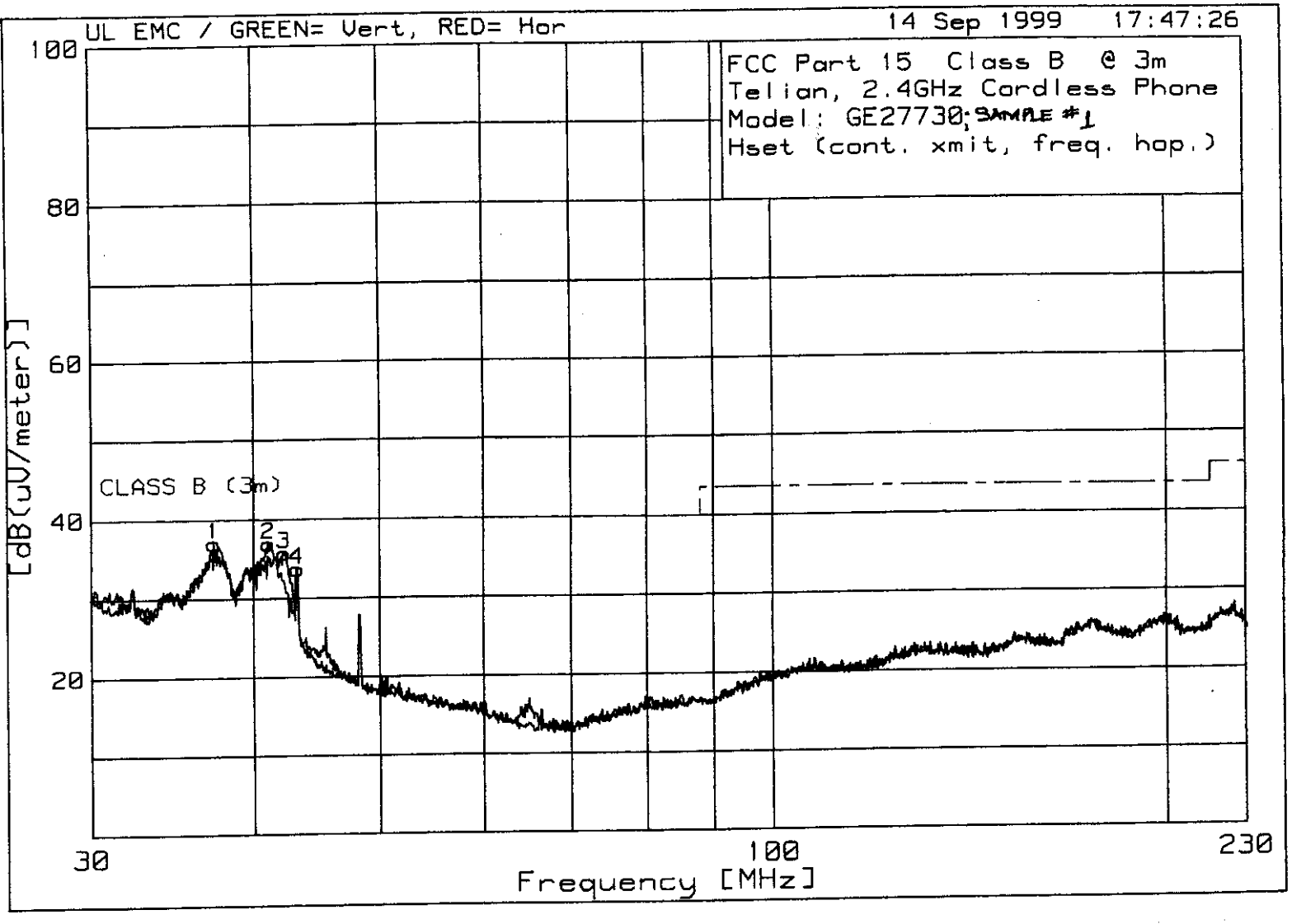
Date Tested: 14 Sep 1999
22:11:06

Telian, 2.4GHz Cordless Phone
Model: GE27730; SAMPLE # 1
Hset (cont. xmit, freq. hop.)

MARKER NO.	TEST FREQUENCY [MHz]	METER READING [dB(uV)]	GAIN/LOSS FACTOR [dB]	TRANSDUCER FACTOR [dB]	LEVEL	LIMIT:1 [dBuV/meter]	2	3	4
1	.010327	30.1 pk	0	18.7	48.8	120	120	N/A	N/A
2	.015778	28.8 pk	0	18.7	47.5	120	120	N/A	N/A
3	.031338	24.8 pk	0	18.5	43.3	117.7	117.7	N/A	N/A
4	.046395	23.4 pk	0	18.4	41.8	114.3	114.3	N/A	N/A
5	1.62615	16.6 pk	.1	18.4	35.1	89.2	49.5	N/A	N/A
6	9.32524	15.2 pk	.1	18.3	33.6	58.9	49.5	N/A	N/A

pk - Peak detector
qp - Quasi-peak detector

LIMIT 1 : Bellcore Class A @3m
LIMIT 2 : FCC
LIMIT 3 : NONE
LIMIT 4 : NONE


UL EMC / GREEN= Vert, RED= Hor
14 Sep 1999 17:47:26
FCC Part 15 Class B @ 3m
Telian, 2.4GHz Cordless Phone
Model: GE27730; SAMPLE #1
Hset (cont. xmit, freq. hop.)
CLASS B (3m)
100
80
60
40
20
dB(uV/meter)
30
100
230
Frequency [MHz]
1
2
3
4

UL EMC / GREEN= Vert, RED= Hor

Date Tested: 14 Sep 1999
17:47:26

Telian, 2.4GHz Cordless Phone
Model: GE27730, SAMPLE #1
Hset (cont. xmit, freq. hop.)

MARKER NO.	TEST FREQUENCY [MHz]	METER READING [dB(uV)]	GAIN/LOSS FACTOR [dB]	TRANSDUCER FACTOR [dB]	LEVEL	LIMIT:1 [dB(uV/meter)]	2	3	4
1	37.2925	19.5 pk	.7	16.8	37	N/A	40	N/A	N/A
2	41.0846	21.3 pk	.8	14.8	36.9	N/A	40	N/A	N/A
3	42.2514	20.6 pk	.8	14.3	35.7	N/A	40	N/A	N/A
4	43.2432	19 pk	.8	13.9	33.7	N/A	40	N/A	N/A

pk - Peak detector
qp - Quasi-peak detector

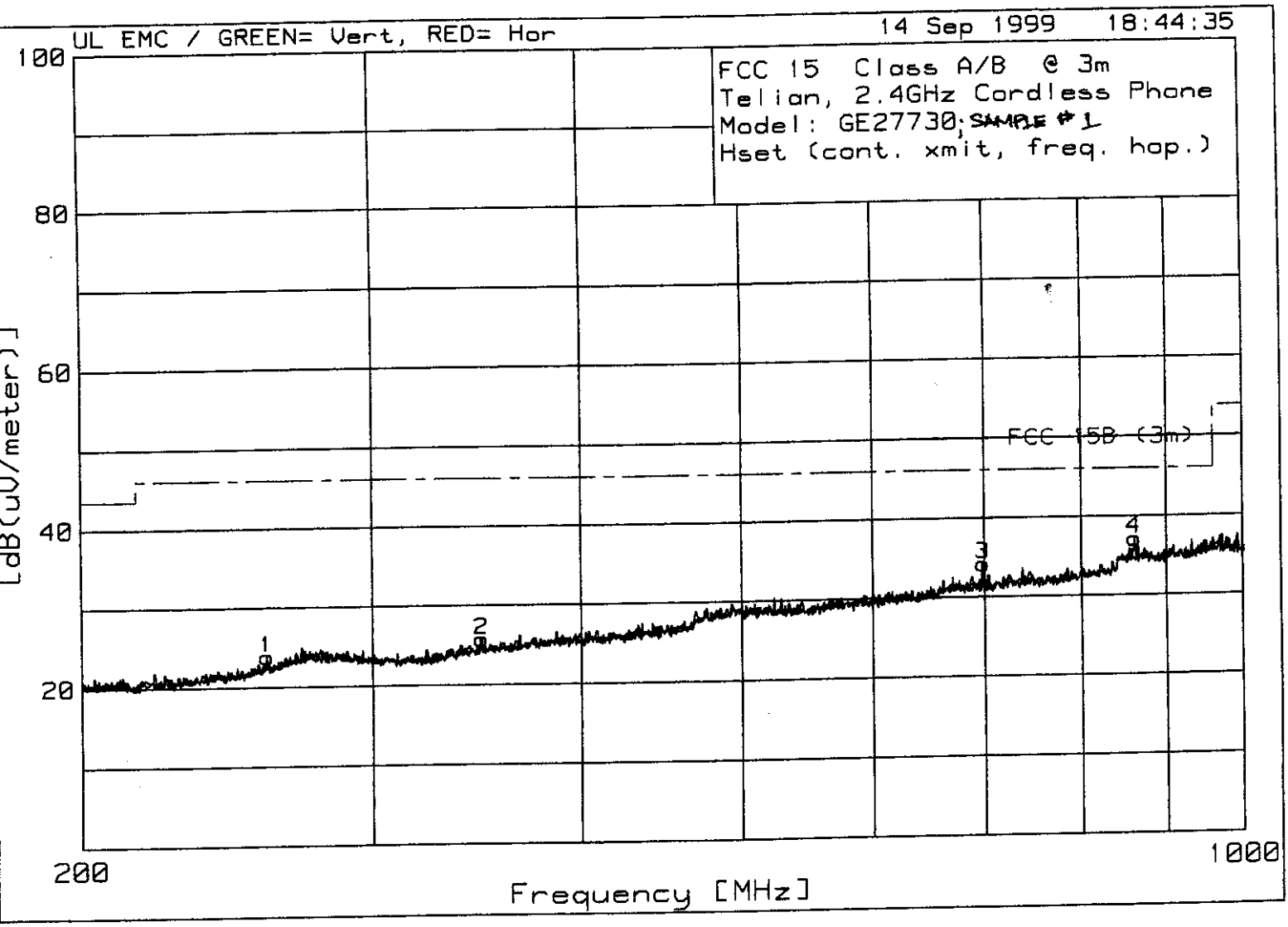
LIMIT 1 : NONE
LIMIT 2 : CLASS B (3m)
LIMIT 3 : NONE
LIMIT 4 : NONE

RADIATED EMISSIONS

DATA POINT	TEST FREQUENCY	METER READING	GAIN/LOSS FACTOR	TRANSDUCER FACTOR	LEVEL	LIMITS:1 [dB(uV/meter)]	2	3	4
1	37.0271 H	14.6 qp	.7	17	32.3	N/A	40	N/A	N/A
					Margin [dB]	---	-7.7	---	---
2	40.9784 H	18.6 qp	.8	14.9	34.3	N/A	40	N/A	N/A
					Margin [dB]	---	-5.7	---	---
3	41.6 V	16.7 qp	.8	14.6	32.1	N/A	40	N/A	N/A
					Margin [dB]	---	-7.9	---	---
4	43.0019 V	17.7 qp	.8	14	32.5	N/A	40	N/A	N/A
					Margin [dB]	---	-7.5	---	---

pk - indicates peak detection.
qp - indicates quasi-peak detection.
av - indicates average detection.
H - indicates horizontal antenna polarization.
V - indicates vertical antenna polarization.

LIMIT 1 : NONE
LIMIT 2 : CLASS B (3m)
LIMIT 3 : NONE
LIMIT 4 : NONE


UL EMC / GREEN= Vert, RED= Hor
14 Sep 1999 18:44:35
FCC 15 Class A/B @ 3m
Telian, 2.4GHz Cordless Phone
Model: GE27730; SAMPLE # 1
Hset (cont. xmit, freq. hop.)
FCC 15B (3m)
100
80
60
40
20
200
1000
dB(uV/meter)
Frequency [MHz]
1
2
3
4

UL EMC / GREEN= Vert, RED= Hor

Date Tested: 14 Sep 1999
18:44:35

Telian, 2.4GHz Cordless Phone
Model: GE27730; SAMPLE #1
Hset (cont. xmit, freq. hop.)

MARKER NO.	TEST FREQUENCY [MHz]	METER READING [dB(uV)]	GAIN/LOSS FACTOR [dB]	TRANSDUCER FACTOR [dB]	LEVEL	LIMIT:1	2 [dB(uV/meter)]	3	4
1	258.965	8.5 pk	1.8	13.5	23.8	N/A	46	N/A	N/A
2	348.5655	8.7 pk	2.1	14.9	25.7	N/A	46	N/A	N/A
3	698.8494	10.1 pk	3.1	21	34.2	N/A	46	N/A	N/A
4	861.5535	10.3 pk	3.6	23.2	37.1	N/A	46	N/A	N/A

pk - Peak detector
qp - Quasi-peak detector

LIMIT 1 : NONE
LIMIT 2 : FCC-15B (3m)
LIMIT 3 : NONE
LIMIT 4 : NONE

MARK TRACE - MAXIMUM POSITIONS

MARKER NO.	TEST FREQUENCY	LEVEL	LIMIT:1	2 [dB(uV/meter)]	3	4	TABLE AZIMUTH(deg)	TOWER HEIGHT (cm)
1	258.965	23.8 pk	N/A	46	N/A	N/A	0	400 V
2	348.5655	25.7 pk	N/A	46	N/A	N/A	166	100 H
3	698.8494	34.2 pk	N/A	46	N/A	N/A	131	100 V
4	861.5535	37.1 pk	N/A	46	N/A	N/A	271	100 H

pk - Peak detector
qp - Quasi-peak detector

LIMIT 1 : NONE
LIMIT 2 : FCC-15B (3m)
LIMIT 3 : NONE
LIMIT 4 : NONE

Telian 2.4GHz Cordless Phone
Model: GE27730
Hset(cont. xmit. Freq. Hop.)

Channel 0					
Attenuation	Frequency in GHz	Level Uncorrected	Ref.	Ant. Factor	Cable gain/loss
30dB	2.401	113.20 dBuV	127 dBuV	28.3	-28.17
10dB	1.791	70.30 dBuV	107dBuV	26.6	-29.1
20dB	4.801	59.4 dBuV	107dBuV	33.5	-26.63
10dB	7.204	49.3 dBuV	107dBuV	37	-25.53

Channel 40					
Attenuation	Frequency in GHz	Level Uncorrected	Ref.	Ant. Factor	Cable gain/loss
40dB	2.442	115.5 dBuV	127 dBuV	28.3	-28.37
10dB	1.852	75.3 dBuV	107dBuV	26.6	-29.1
20dB	4.886	62 dBuV	107dBuV	33.5	-26.63
30dB	4.886	63.6 dBuV	107dBuV	33.5	-26.63
10dB	7.326	52 dBuV	107dBuV	37	-24.89
0	9.767	44.9 dBuV	107dBuV	38	-23.78

Channel 78					
Attenuation	Frequency in GHz	Level Uncorrected	Ref.	Ant. Factor	Cable gain/loss
30dB	2.481	115.5 dBuV	127dBuV	28.3	-28.13
10dB	1.24	49.1 dBuV	107dBuV	25.5	-30.73
10dB	4.962	62.4 dBuV	107dBuV	33.5	-26.63
10dB	7.445	52.8 dBuV	107dBuV	37	-24.89

Company: Telian
Product: MARS 2.4 GHz Cordless Phone
Model: GE27730

MJO #: SN9F-004
Date: 9-Jul-99
Tested by: Wayne Fisher

General - The measurement distance was 1 meters from the 2nd harmonic to the 7th harmonic. The measurement distance changed to 0.5 meter from the 8th harmonic to the 10th harmonic. The limit was extrapolated to 3 meter antenna distance.

Configuration #1A - Lowest channel of operating band (Ch. 0, 2.400983 GHz); Base Unit utilizing helical antenna.

Horizontal Antenna Polarity:

Harmonic	Level [dB (uV/m)]	Limit [dB(uV/m)]	Margin [dB]
2nd	27.8	63.5	35.7
3rd	31.2	63.5	32.3
4th	32.6	63.5	30.9
5th	33.1	63.5	30.4
6th	32.3	63.5	31.2
7th	35.6	63.5	27.9
8th	38.1	69.5	31.4
9th	36.3	69.5	33.2
10th	40.0	69.5	29.5

Vertical Antenna Polarity:

Harmonic	Level [dB (uV/m)]	Limit [dB(uV/m)]	Margin [dB]
2nd	33.8	63.5	29.7
3rd	34.2	63.5	29.3
4th	33.5	63.5	30.0
5th	34.9	63.5	28.6
6th	35.8	63.5	27.7
7th	38.1	63.5	25.4
8th	43.0	69.5	26.5
9th	37.1	69.5	32.4
10th	42.0	69.5	27.5

Note - The fundamental frequency is derived from times two frequency multiplication. 1/2 of fundamental frequency was also investigated and emissions were observed to be below the harmonics.

Company: Telian
Product: MARS 2.4GHz Cordless Phone
Model: GE27730

MJO #: SN9F-004
Date: 9-Jul-99
Tested by: Wayne Fisher

General - The measurement distance was 1 meters from the 2nd harmonic to the 7th harmonic. The measurement distance changed to 0.5 meter from the 8th harmonic to the 10th harmonic. The limit was extrapolated to 3 meter antenna distance.

Configuration #1B - Middle channel of operating band (Ch. 40, 2.442 326 GHz); Base Unit utilizing helical antenna.

Horizontal Antenna Polarity:

Harmonic	Level [dB (uV/m)]	Limit [dB(uV/m)]	Margin [dB]
2nd	27.8	63.5	35.7
3rd	32.0	63.5	31.5
4th	32.6	63.5	30.9
5th	33.8	63.5	29.7
6th	33.0	63.5	30.5
7th	38.3	63.5	25.2
8th	45.0	69.5	24.5
9th	38.5	69.5	31.0
10th	37.8	69.5	31.7

Vertical Antenna Polarity:

Harmonic	Level [dB (uV/m)]	Limit [dB(uV/m)]	Margin [dB]
2nd	30.3	63.5	33.2
3rd	34.1	63.5	29.4
4th	33.8	63.5	29.7
5th	35.3	63.5	28.2
6th	33.8	63.5	29.7
7th	40.1	63.5	23.4
8th	50.6	69.5	18.9
9th	46.1	69.5	23.4
10th	42.6	69.5	26.9

Note - The fundamental frequency is derived from times two frequency multiplication. 1/2 of fundamental frequency was also investigated and emissions were observed to be below the harmonics.

Company: Telian
Product: MARS 2.4GHz Cordless Phone
Model: GE27730

MJO #: SN9F-004
Date: 9-Jul-99
Tested by: Wayne Fisher

General - The measurement distance was 1 meters from the 2nd harmonic to the 7th harmonic. The measurement distance changed to 0.5 meter from the 8th harmonic to the 10th harmonic. The limit was extrapolated to 3 meter antenna distance.

Configuration #1C - Middle channel of operating band (Ch. 78, 2.481602 GHz); Base Unit utilizing helical antenna.

Horizontal Antenna Polarity:

Harmonic	Level [dB (uV/m)]	Limit [dB(uV/m)]	Margin [dB]
2nd	28.8	63.5	34.7
3rd	33.0	63.5	30.5
4th	33.1	63.5	30.4
5th	32.8	63.5	30.7
6th	32.3	63.5	31.2
7th	40.5	63.5	23.0
8th	44.8	69.5	24.7
9th	51.3	69.5	18.2
10th	39.8	69.5	29.7

Vertical Antenna Polarity:

Harmonic	Level [dB (uV/m)]	Limit [dB(uV/m)]	Margin [dB]
2nd	29.5	63.5	34.0
3rd	34.1	63.5	29.4
4th	34.5	63.5	29.0
5th	34.5	63.5	29.0
6th	33.3	63.5	30.2
7th	42.0	63.5	21.5
8th	49.3	69.5	20.2
9th	49.1	69.5	20.4
10th	47.1	69.5	22.4

Note - The fundamental frequency is derived from times two frequency multiplication. 1/2 of fundamental frequency was also investigated and emissions were observed to be below the harmonics.

Company: Telian
Product: MARS 2.4GHz Cordless Phone
Model: GE27730

MJO #: SN9F-004
Date: 9-Jul-99
Tested by: Wayne Fisher

General - The measurement distance was 1 meters from the 2nd harmonic to the 7th harmonic. The measurement distance changed to 0.5 meter from the 8th harmonic to the 10th harmonic. The limit was extrapolated to 3 meter antenna distance.

Configuration #2A - Lowest channel of operating band (Ch. 0, 2.400983 GHz); Base Unit utilizing inverse-F antenna.

Horizontal Antenna Polarity:

Harmonic	Level [dB (uV/m)]	Limit [dB(uV/m)]	Margin [dB]
2nd	27.8	63.5	35.7
3rd	31.8	63.5	31.7
4th	32.9	63.5	30.6
5th	34.0	63.5	29.5
6th	33.6	63.5	29.9
7th	36.8	63.5	26.7
8th	36.8	69.5	32.7
9th	38.1	69.5	31.4
10th	40.1	69.5	29.4

Vertical Antenna Polarity:

Harmonic	Level [dB (uV/m)]	Limit [dB(uV/m)]	Margin [dB]
2nd	34.6	63.5	28.9
3rd	33.1	63.5	30.4
4th	34.3	63.5	29.2
5th	35.0	63.5	28.5
6th	36.0	63.5	27.5
7th	38.3	63.5	25.2
8th	44.3	69.5	25.2
9th	38.5	69.5	31.0
10th	40.5	69.5	29.0

Note - The fundamental frequency is derived from times two frequency multiplication. 1/2 of fundamental frequency was also investigated and emissions were observed to be below the harmonics.

Company: Telian
Product: MARS 2.4GHz Cordless Phone
Model: GE27730

MJO #: SN9F-004
Date: 9-Jul-99
Tested by: Wayne Fisher

General - The measurement distance was 1 meters from the 2nd harmonic to the 7th harmonic. The measurement distance changed to 0.5 meter from the 8th harmonic to the 10th harmonic. The limit was extrapolated to 3 meter antenna distance.

Configuration #2B - Middle channel of operating band (Ch. 40, 2.442 326 GHz); Base Unit utilizing inverse-F antenna.

Horizontal Antenna Polarity:

Harmonic	Level [dB (uV/m)]	Limit [dB(uV/m)]	Margin [dB]
2nd	29.1	63.5	34.4
3rd	32.6	63.5	30.9
4th	32.3	63.5	31.2
5th	34.0	63.5	29.5
6th	33.5	63.5	30.0
7th	39.1	63.5	24.4
8th	46.5	69.5	23.0
9th	39.8	69.5	29.7
10th	38.0	69.5	31.5

Vertical Antenna Polarity:

Harmonic	Level [dB (uV/m)]	Limit [dB(uV/m)]	Margin [dB]
2nd	29.5	63.5	34.0
3rd	33.5	63.5	30.0
4th	33.8	63.5	29.7
5th	35.1	63.5	28.4
6th	35.3	63.5	28.2
7th	39.8	63.5	23.7
8th	54.1	69.5	15.4
9th	42.5	69.5	27.0
10th	36.8	69.5	32.7

Note - The fundamental frequency is derived from times two frequency multiplication. 1/2 of fundamental frequency was also investigated and emissions were observed to be below the harmonics.

Company: Telian
Product: MARS 2.4GHz Cordless Phone
Model: GE27730

MJO #: SN9F-004
Date: 9-Jul-99
Tested by: Wayne Fisher

General - The measurement distance was 1 meters from the 2nd harmonic to the 7th harmonic. The measurement distance changed to 0.5 meter from the 8th harmonic to the 10th harmonic. The limit was extrapolated to 3 meter antenna distance.

Configuration #2C - Middle channel of operating band (Ch. 78, 2.481602 GHz); Base Unit utilizing inverse-F antenna.

Horizontal Antenna Polarity:

Harmonic	Level [dB (uV/m)]	Limit [dB(uV/m)]	Margin [dB]
2nd	28.1	63.5	35.4
3rd	32.3	63.5	31.2
4th	33.6	63.5	29.9
5th	32.5	63.5	31.0
6th	32.0	63.5	31.5
7th	40.3	63.5	23.2
8th	44.5	69.5	25.0
9th	53.1	69.5	16.4
10th	39.3	69.5	30.2

Vertical Antenna Polarity:

Harmonic	Level [dB (uV/m)]	Limit [dB(uV/m)]	Margin [dB]
2nd	28.8	63.5	34.7
3rd	33.8	63.5	29.7
4th	34.5	63.5	29.0
5th	34.1	63.5	29.4
6th	33.1	63.5	30.4
7th	41.3	63.5	22.2
8th	46.2	69.5	23.3
9th	54.3	69.5	15.2
10th	45.1	69.5	24.4

Note - The fundamental frequency is derived from times two frequency multiplication. 1/2 of fundamental frequency was also investigated and emissions were observed to be below the harmonics.

Company: Telian
Product: MARS 2.4GHz Cordless Phone
Model: GE27730

MJO #: SN9F-004
Date: 9-Jul-99
Tested by: Wayne Fisher

General - The measurement distance was 1 meters from the 2nd harmonic to the 7th harmonic. The measurement distance changed to 0.5 meter from the 8th harmonic to the 10th harmonic. The limit was extrapolated to 3 meter antenna distance.

Configuration #1A - Lowest channel of operating band (Ch. 0, 2.400983 GHz); Handset.

Horizontal Antenna Polarity:

Harmonic	Level [dB (uV/m)]	Limit [dB(uV/m)]	Margin [dB]
2nd	26.5	63.5	37.0
3rd	32.1	63.5	31.4
4th	33.8	63.5	29.7
5th	34.5	63.5	29.0
6th	34.8	63.5	28.7
7th	36.0	63.5	27.5
8th	40.2	69.5	29.3
9th	53.6	69.5	15.9
10th	51.5	69.5	18.0

Vertical Antenna Polarity:

Harmonic	Level [dB (uV/m)]	Limit [dB(uV/m)]	Margin [dB]
2nd	36.0	63.5	27.5
3rd	33.6	63.5	29.9
4th	34.3	63.5	29.2
5th	35.5	63.5	28.0
6th	36.3	63.5	27.2
7th	38.3	63.5	25.2
8th	46.3	69.5	23.2
9th	58.5	69.5	11.0
10th	51.2	69.5	18.3

Note - The fundamental frequency is derived from times two frequency multiplication. 1/2 of fundamental frequency was also investigated and emissions were observed to be below the harmonics.

Company: Telian
Product: MARS 2.4GHz Cordless Phone
Model: GE27730

MJO #: SN9F-004
Date: 9-Jul-99
Tested by: Wayne Fisher

General - The measurement distance was 1 meters from the 2nd harmonic to the 7th harmonic. The measurement distance changed to 0.5 meter from the 8th harmonic to the 10th harmonic. The limit was extrapolated to 3 meter antenna distance.

Configuration #1B - Middle channel of operating band (Ch. 40, 2.442 326 GHz); Handset.

Horizontal Antenna Polarity:

Harmonic	Level [dB (uV/m)]	Limit [dB(uV/m)]	Margin [dB]
2nd	27.9	63.5	35.6
3rd	34.0	63.5	29.5
4th	32.6	63.5	30.9
5th	34.0	63.5	29.5
6th	33.4	63.5	30.1
7th	39.1	63.5	24.4
8th	44.5	69.5	25.0
9th	55.6	69.5	13.9
10th	49.5	69.5	20.0

Vertical Antenna Polarity:

Harmonic	Level [dB (uV/m)]	Limit [dB(uV/m)]	Margin [dB]
2nd	29.8	63.5	33.7
3rd	34.1	63.5	29.4
4th	34.3	63.5	29.2
5th	35.6	63.5	27.9
6th	35.1	63.5	28.4
7th	34.5	63.5	29.0
8th	48.5	69.5	21.0
9th	56.3	69.5	13.2
10th	49.5	69.5	20.0

Note - The fundamental frequency is derived from times two frequency multiplication. 1/2 of fundamental frequency was also investigated and emissions were observed to be below the harmonics.

Company: Telian
Product: MARS 2.4GHz Cordless Phone
Model: GE27730

MJO #: SN9F-004
Date: 9-Jul-99
Tested by: Wayne Fisher

General - The measurement distance was 1 meters from the 2nd harmonic to the 7th harmonic. The measurement distance changed to 0.5 meter from the 8th harmonic to the 10th harmonic. The limit was extrapolated to 3 meter antenna distance.

Configuration #1C - Middle channel of operating band (Ch. 78, 2.481602 GHz); Handset.

Horizontal Antenna Polarity:

Harmonic	Level [dB (uV/m)]	Limit [dB(uV/m)]	Margin [dB]
2nd	28.5	63.5	35.0
3rd	33.0	63.5	30.5
4th	33.5	63.5	30.0
5th	32.5	63.5	31.0
6th	31.8	63.5	31.7
7th	40.3	63.5	23.2
8th	46.5	69.5	23.0
9th	57.9	69.5	11.6
10th	53.2	69.5	16.3

Vertical Antenna Polarity:

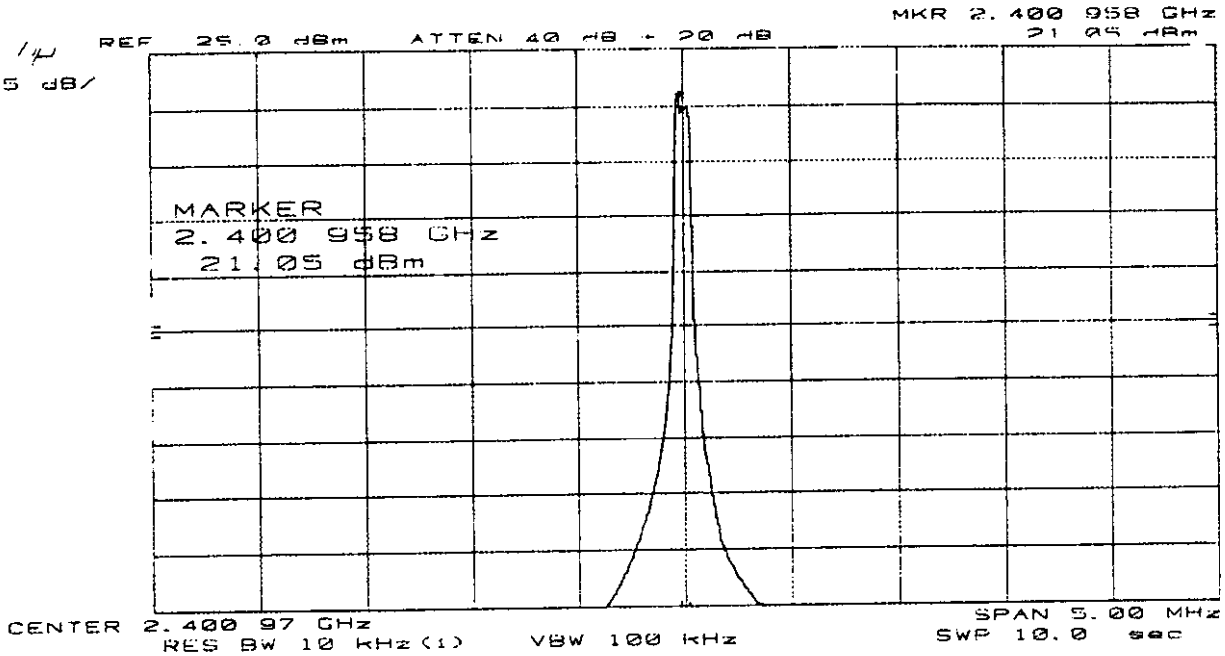
Harmonic	Level [dB (uV/m)]	Limit [dB(uV/m)]	Margin [dB]
2nd	29.5	63.5	34.0
3rd	34.8	63.5	28.7
4th	34.6	63.5	28.9
5th	34.0	63.5	29.5
6th	33.1	63.5	30.4
7th	41.5	63.5	22.0
8th	46.5	63.5	17.0
9th	53.6	63.5	9.9
10th	52.1	63.5	11.4

Note - The fundamental frequency is derived from times two frequency multiplication. 1/2 of fundamental frequency was also investigated and emissions were observed to be below the harmonics.

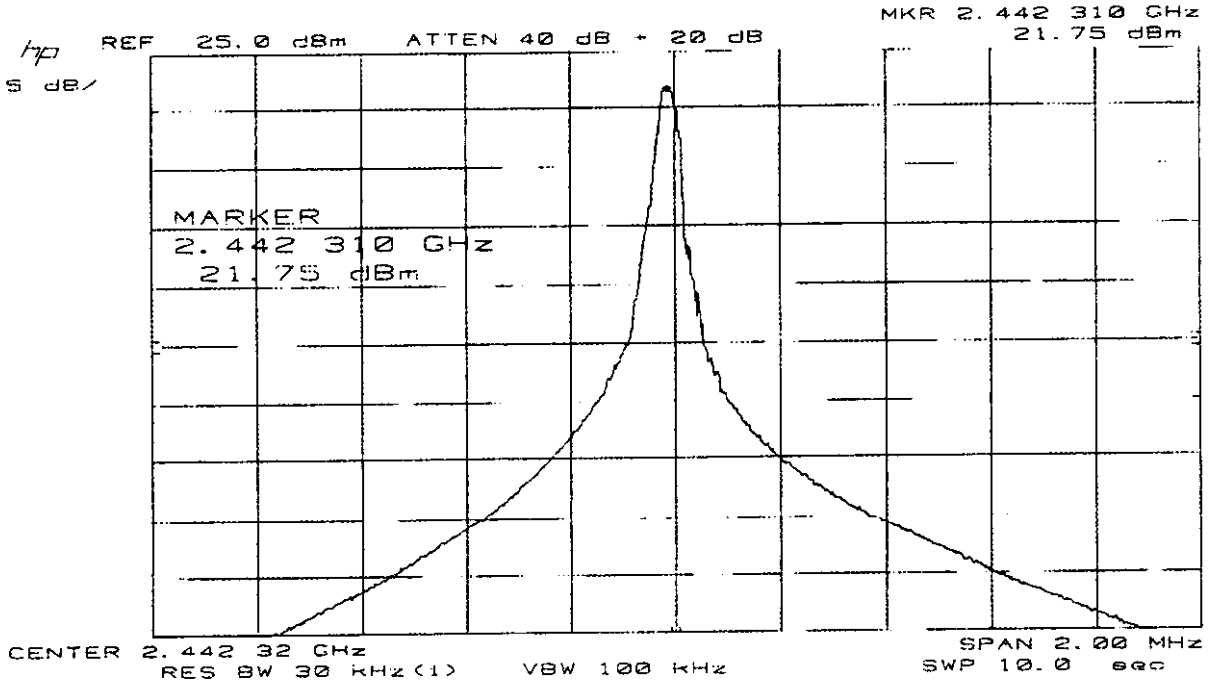
DATA READINGS

TYPE OF TEST: 15.247 (b)(1)
RF Output Power

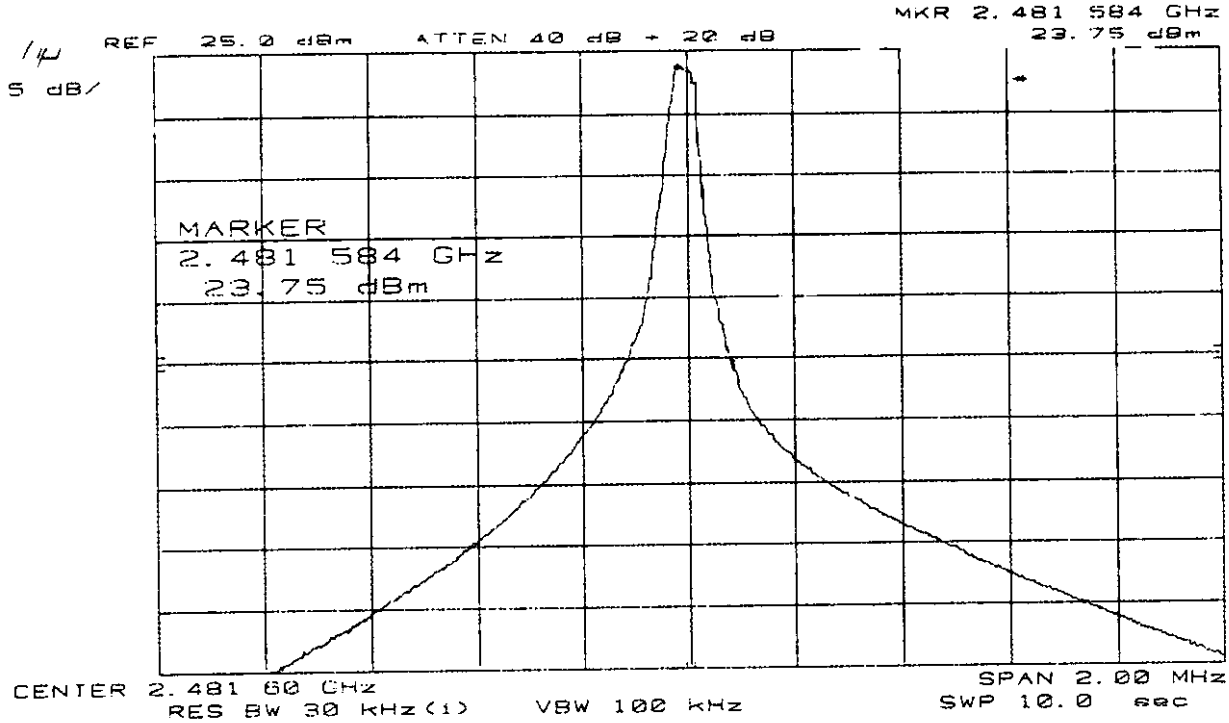
15.247 (b)(1) Conducted Measurements (Handset) RF Output Power
Unmodulated, Channel 0 (2.400983 GHz) Peak Power = 21.05 dBm



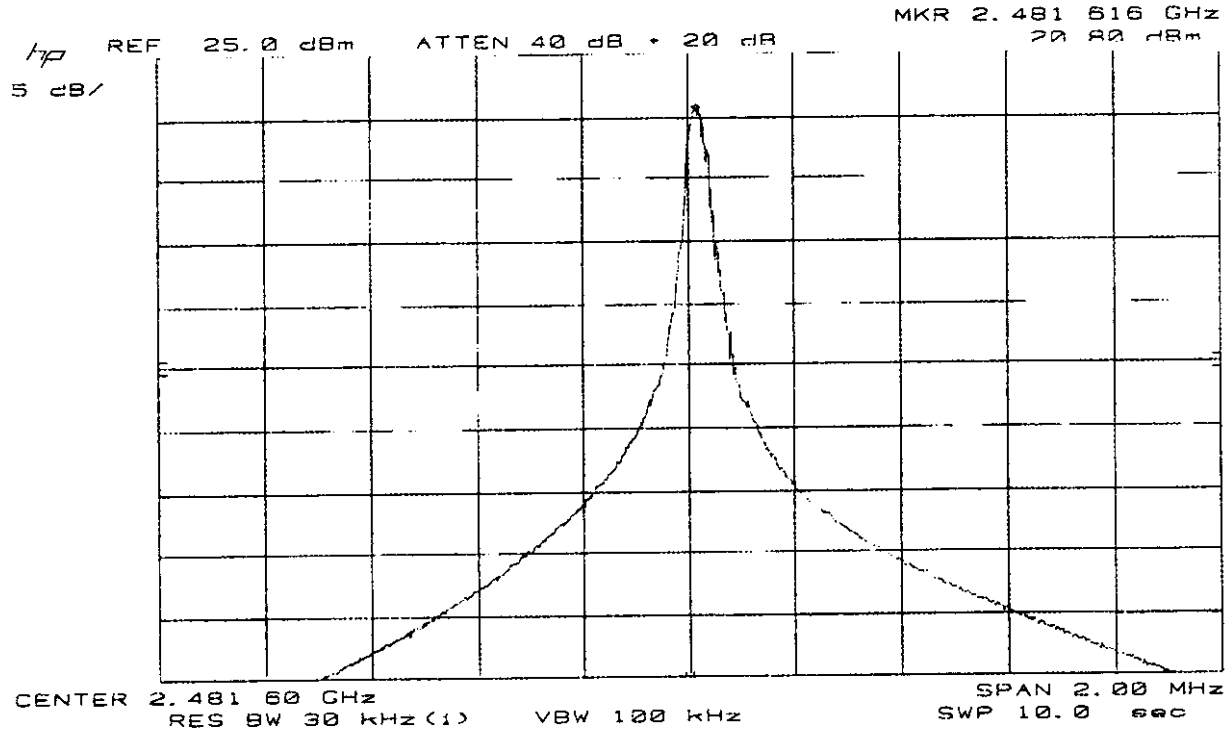
15.247 (b)(1) Conducted Measurements (Handset) RF Output Power
Unmodulated, Channel 40 (2.442326 GHz) Peak Power 21.75 dBm



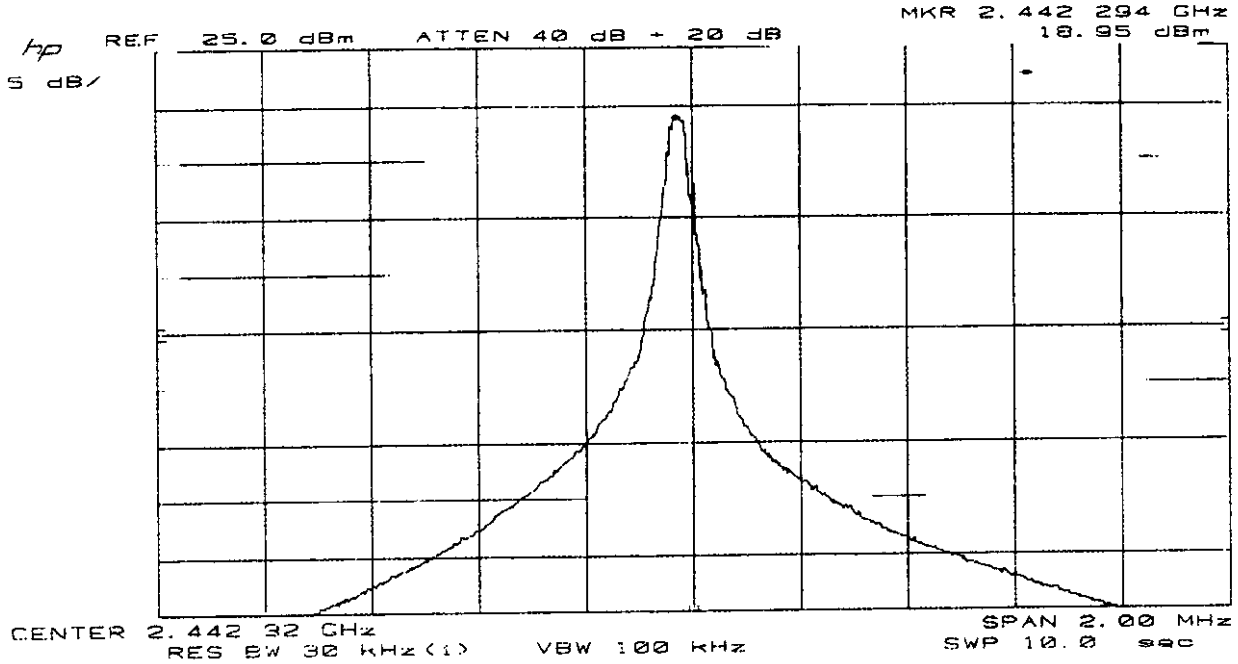
15.247 (b)(1) Conducted Measurements (Handset) RF Output Power
Unmodulated, Channel 78 (2.481584 GHz) Peak Power 23.75 dBm



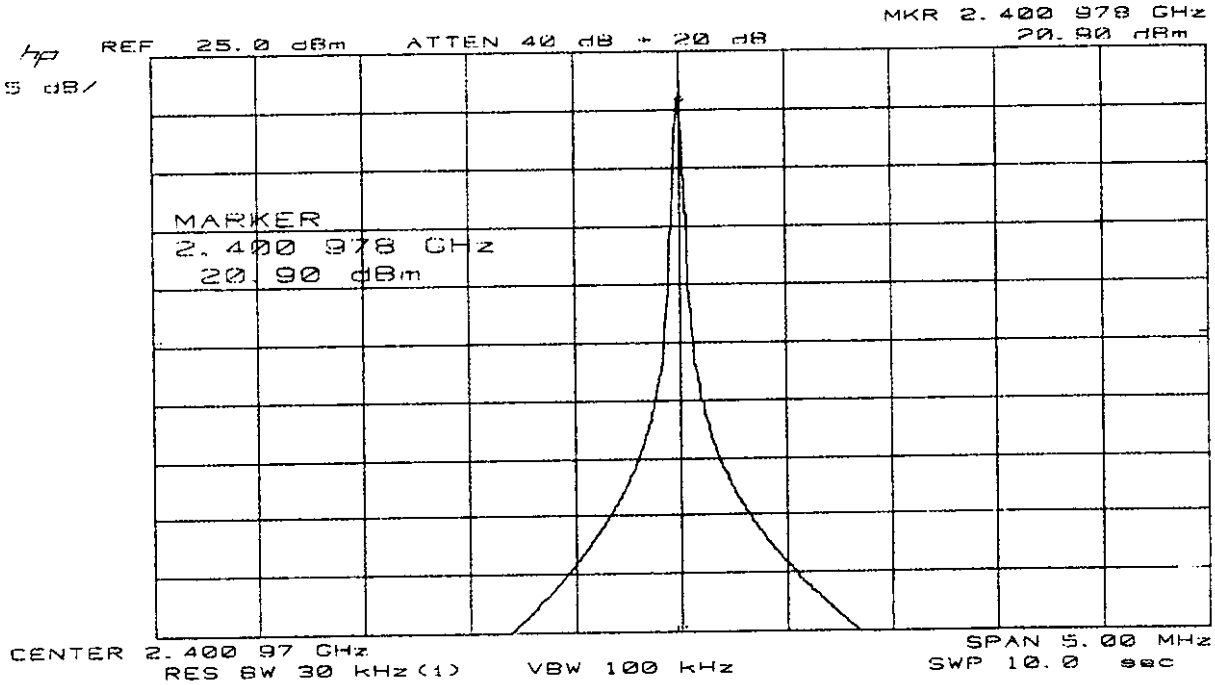
15.247 (b)(1) Conducted Measurements (Base Station) RF Output Power
Unmodulated, Channel 78 (2.481616 GHz) Peak Power 20.8 dBm



15.247 (b)(1) Conducted Measurements (Base Station) RF Output Power
Unmodulated, Channel 40 (2.442326 GHz) Peak Power 18.95 dBm



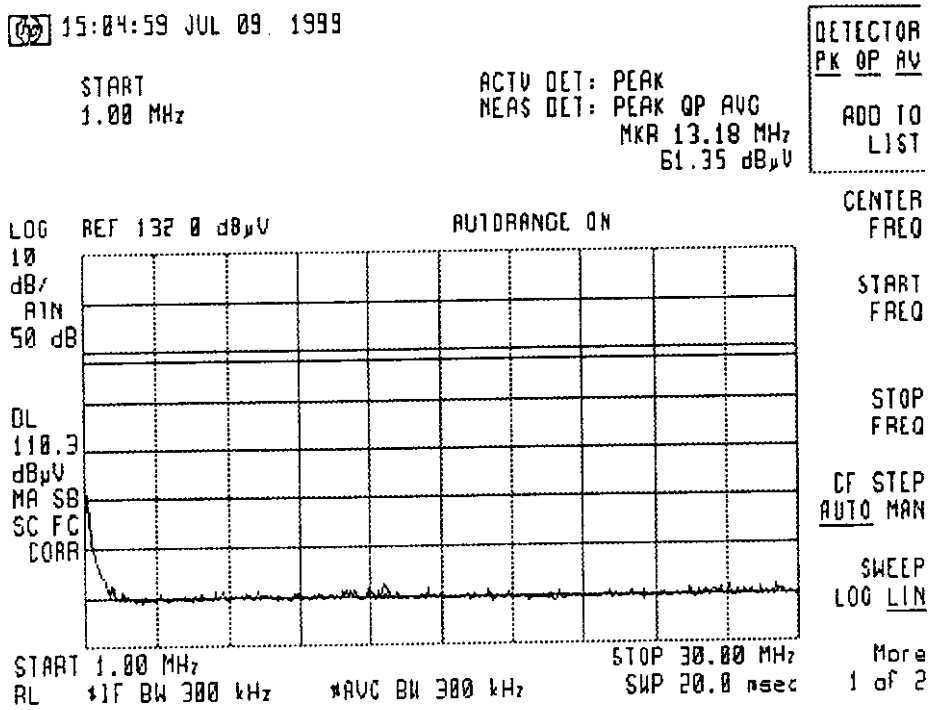
15.247 (b)(1) Conducted Measurements (Base Station) RF Output Power
Unmodulated, Channel 0 (2.400978) Peak 20.9 dBm

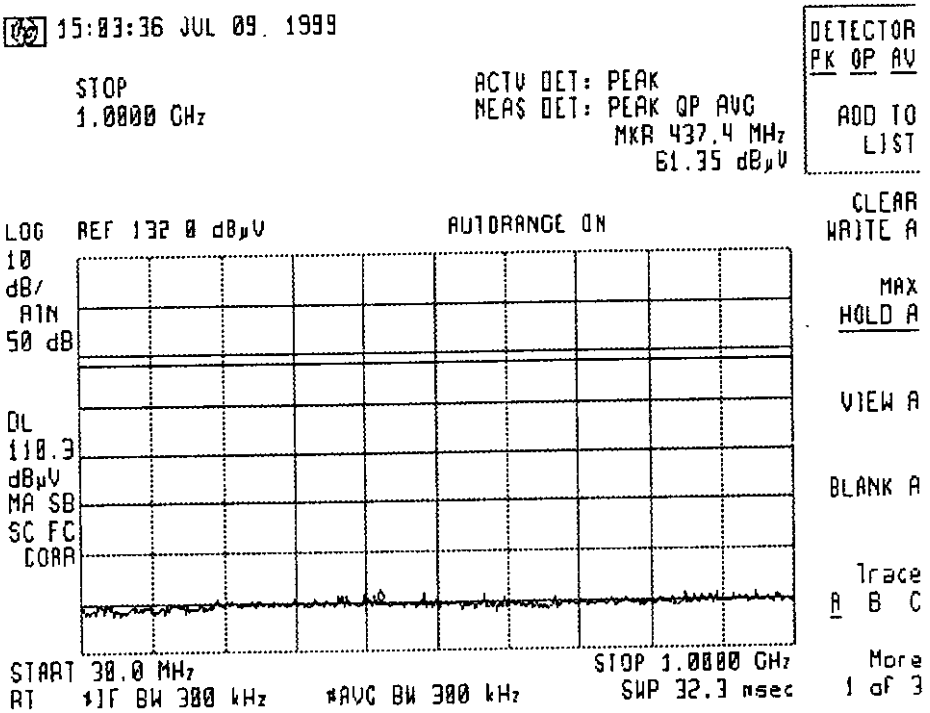


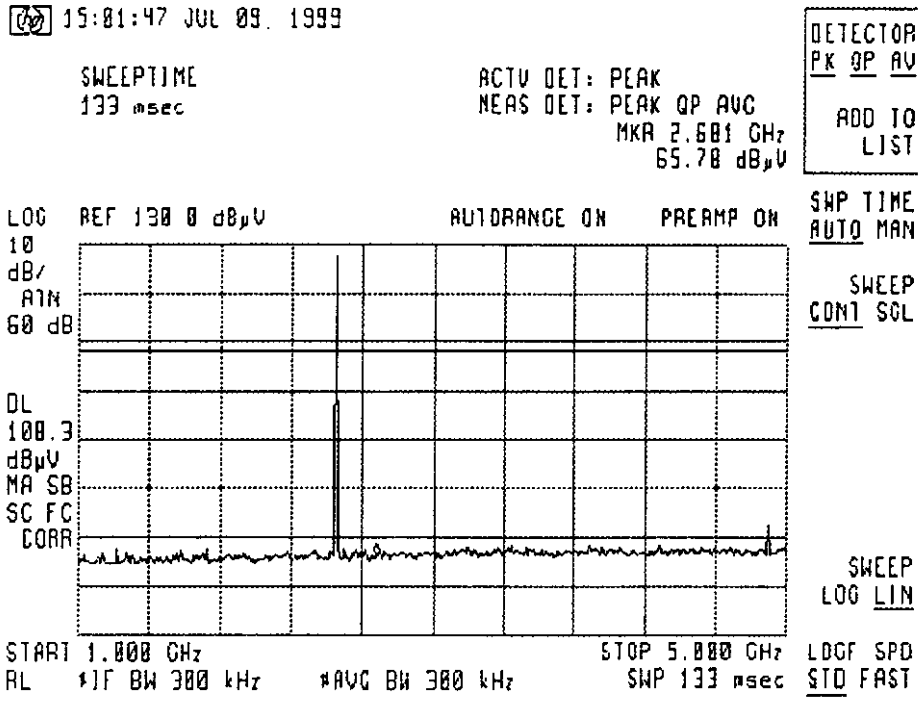
DATA READINGS

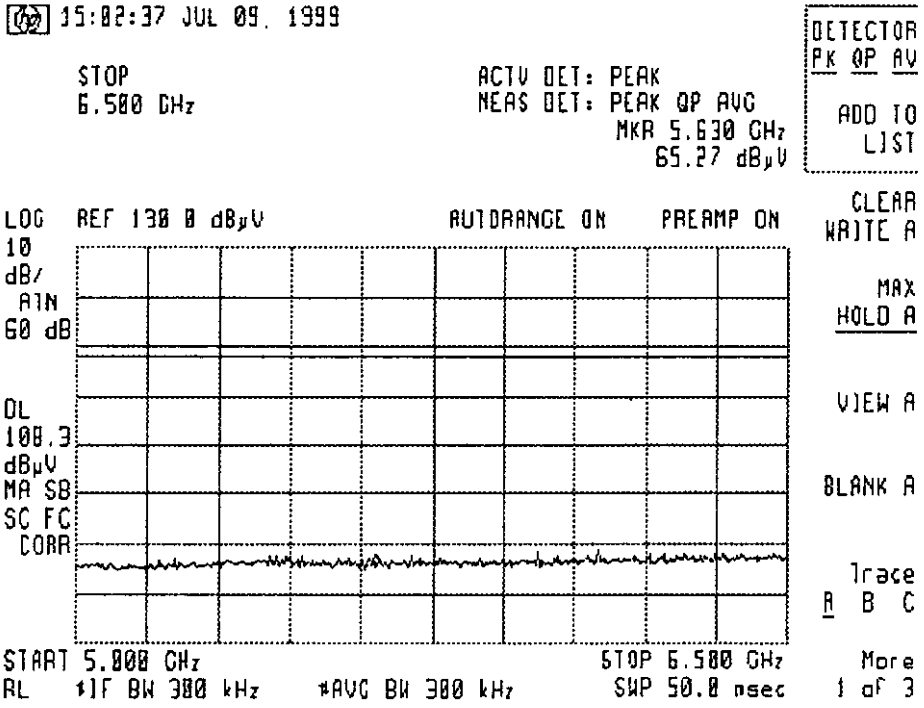
TYPE OF TEST: 15.247 (c)
Out-of-Band Emissions

15.247 (c) Out of Band Emissions Band Edge Measurements (Base Station Channel 40)

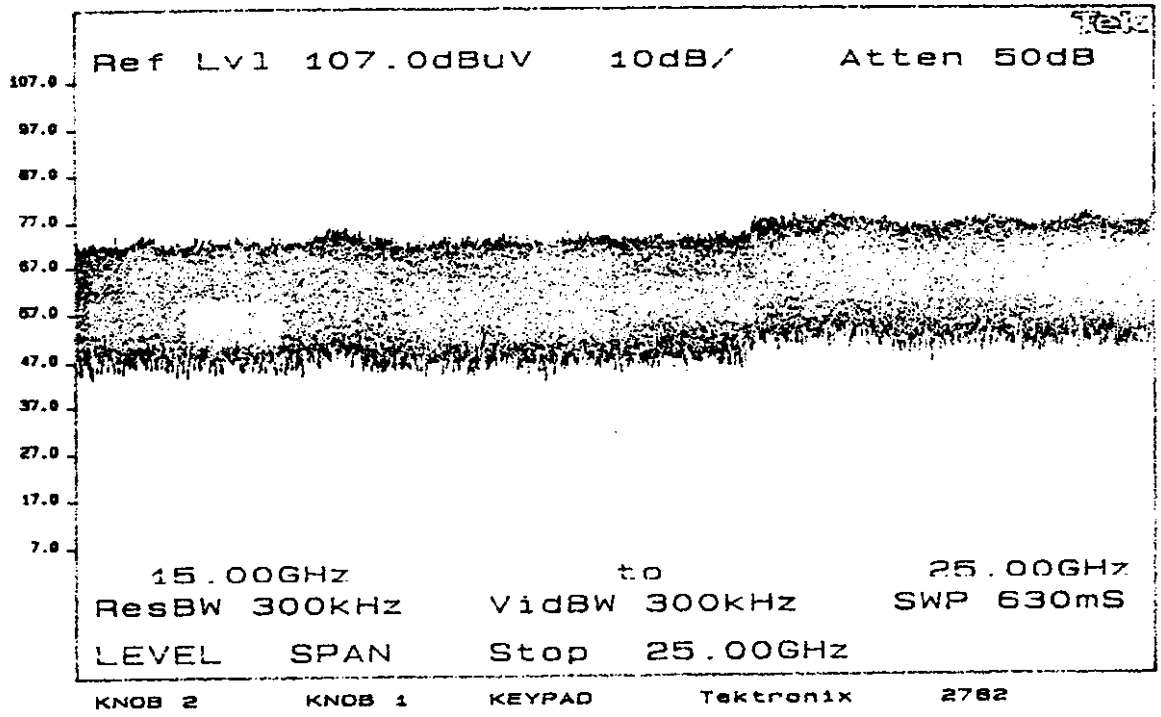


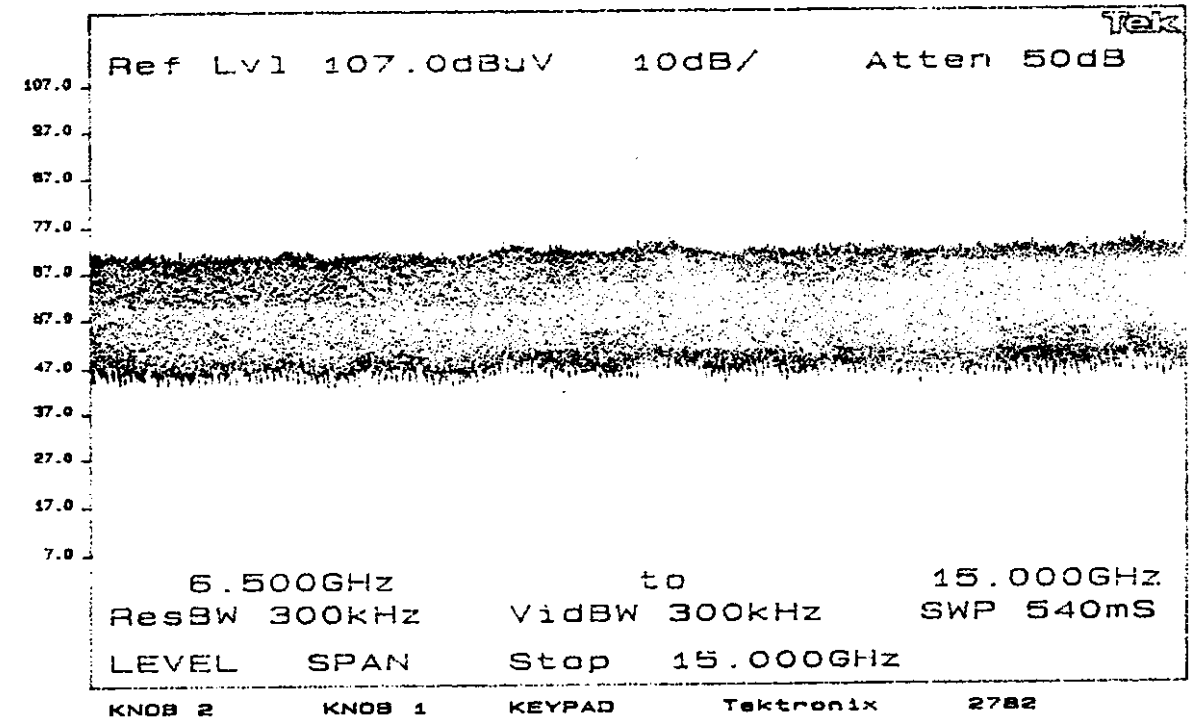



15:01:47 JUL 09, 1999
SWEEPTIME
133 msec
ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 2.681 GHz
65.78 dBµV
DETECTOR
PK QP AV
ADD TO LIST
LOG REF 130 0 dBµV
AUTORANGE ON
PREAMP ON
10 dB/ ATN 60 dB
DL 100.3 dBµV
MA SB SC FC CORR
SWP TIME AUTO MAN
SWEEP CONT SGL
SWEEP LOG LIN
START 1.000 GHz
STOP 5.000 GHz
LOGF SPD STD FAST
RL #IF BW 300 kHz
#AVG BW 300 kHz
SWP 133 msec

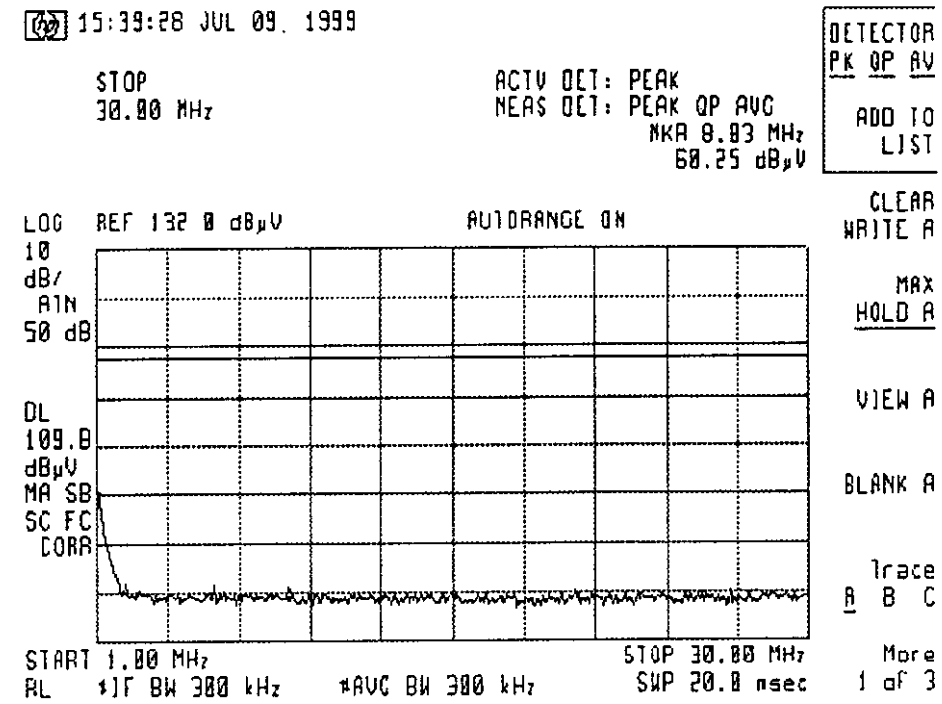

15:02:37 JUL 09, 1999
STOP
6.500 GHz
ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 5.630 GHz
65.27 dBµV
DETECTOR
PK QP AV
ADD TO LIST
CLEAR WRITE A
MAX HOLD A
VIEW A
BLANK A
Trace A B C
More 1 of 3
LOG REF 130 0 dBµV
AUTORANGE ON
PREAMP ON
10 dB/ ATN 60 dB
DL 100.3 dBµV
MA SB SC FC CORR
START 5.000 GHz
STOP 6.500 GHz
RL #IF BW 300 kHz
#AVG BW 300 kHz
SWP 50.0 msec

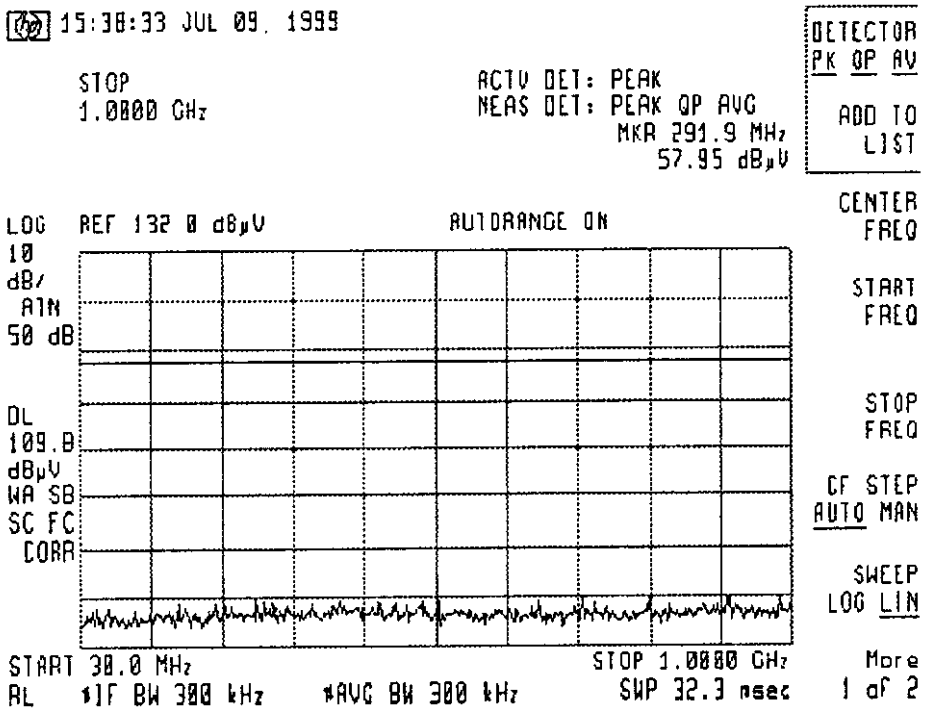
Base Station (Channel 40)

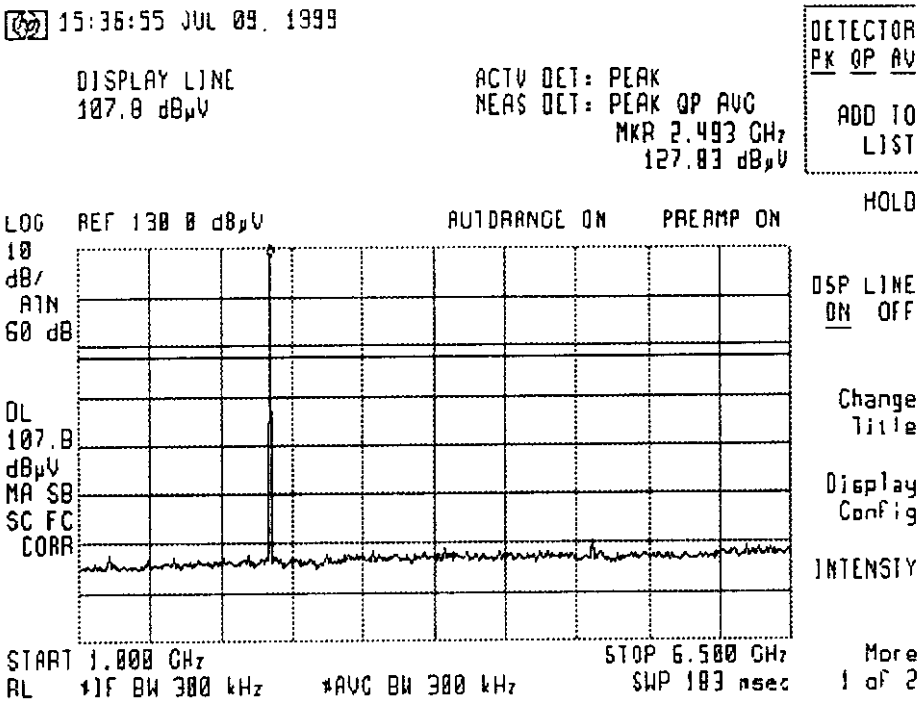




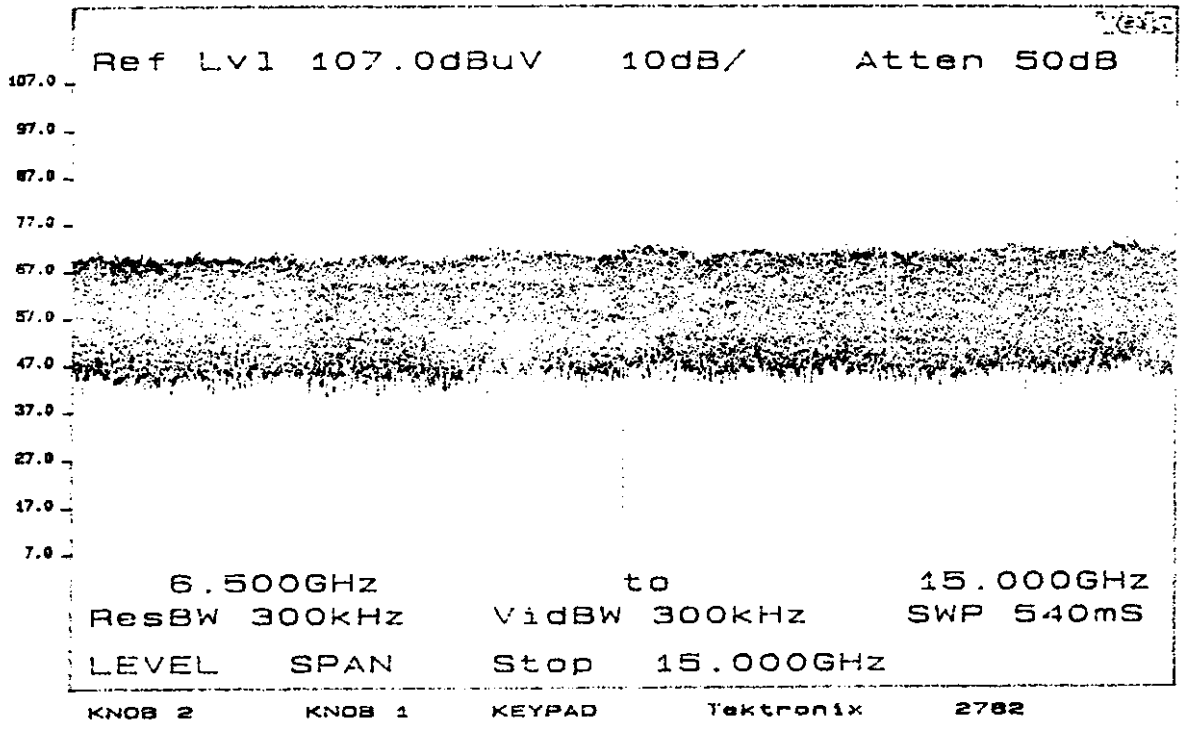
15.247 (c) Out of Band Emissions (Base Station Channel 78)

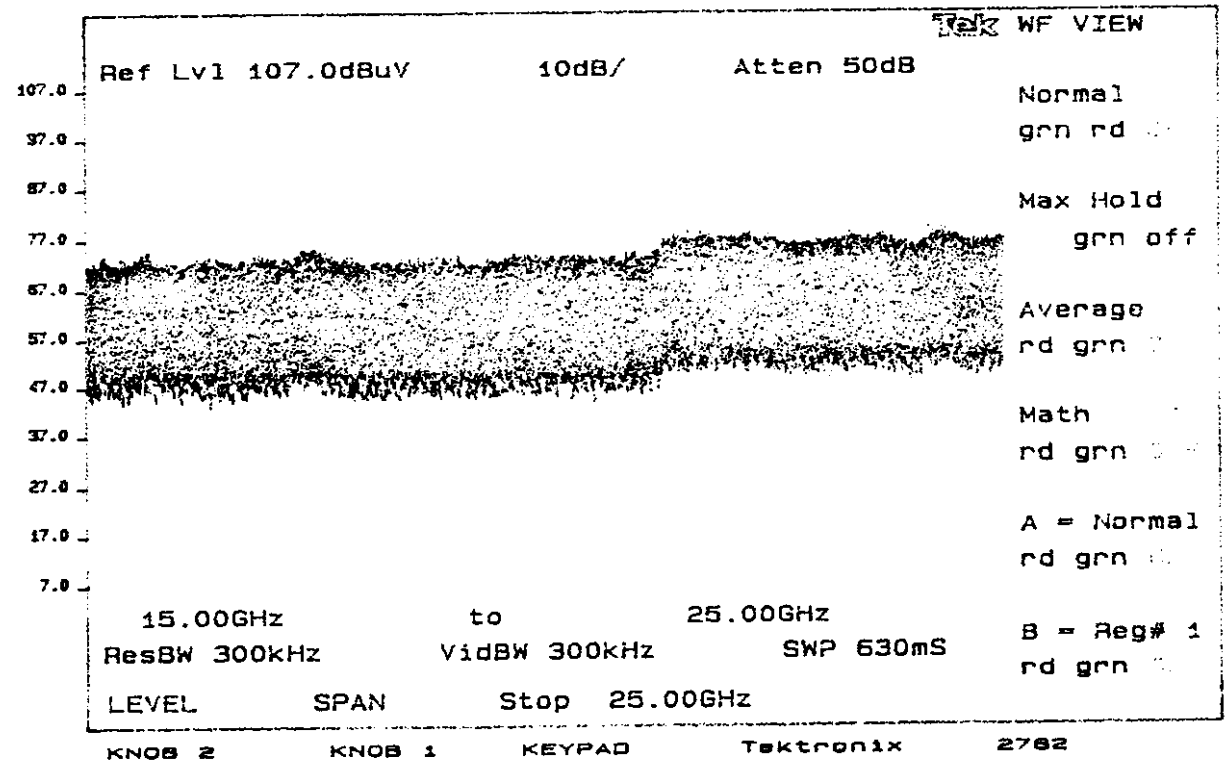




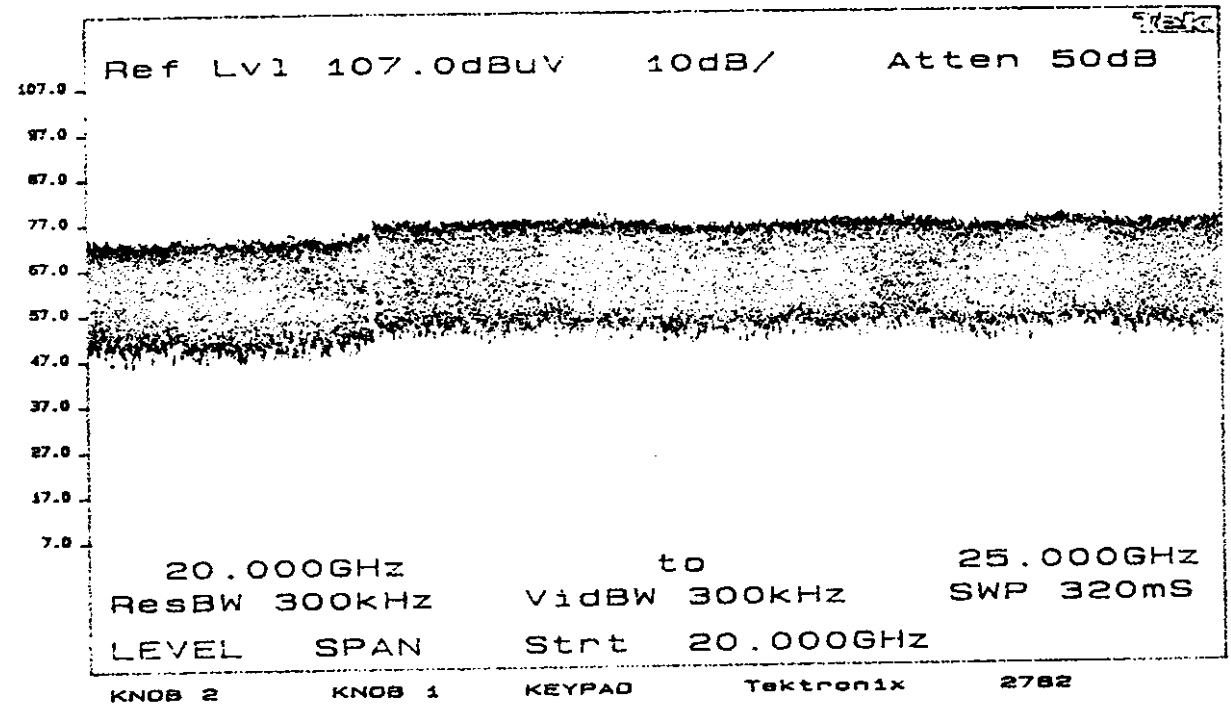

15:36:55 JUL 09, 1999
DISPLAY LINE
107.0 dBµV
ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 2.493 GHz
127.83 dBµV
DETECTOR
PK QP AV
ADD TO LIST
HOLD
LOG REF 130 0 dBµV
AUTORANGE ON
PREAMP ON
10 dB/
ATN 60 dB
DL 107.0 dBµV
MA SB SC FC CORR
DSP LINE ON OFF
Change Title
Display Config
INTENSITY
START 1.000 GHz
STOP 6.500 GHz
RL
#IF BW 300 kHz
#AVG BW 300 kHz
SWP 183 msec
More 1 of 2

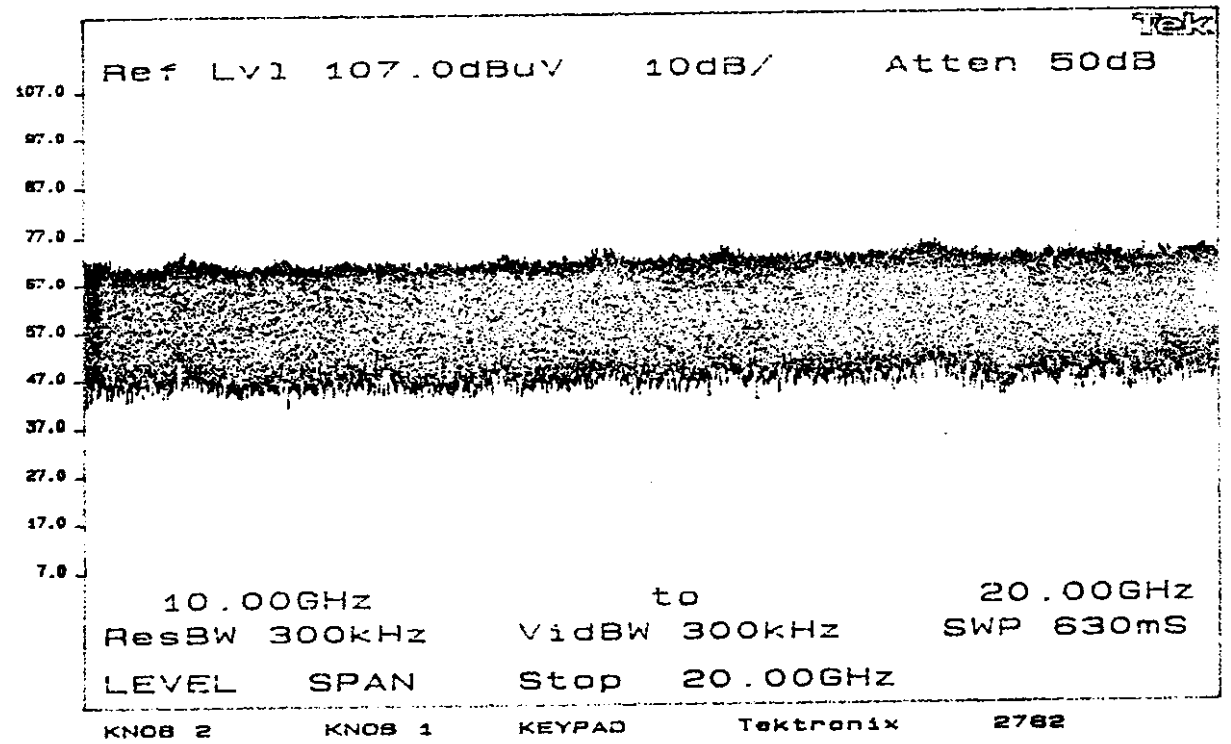
Base Station (Channel 78)

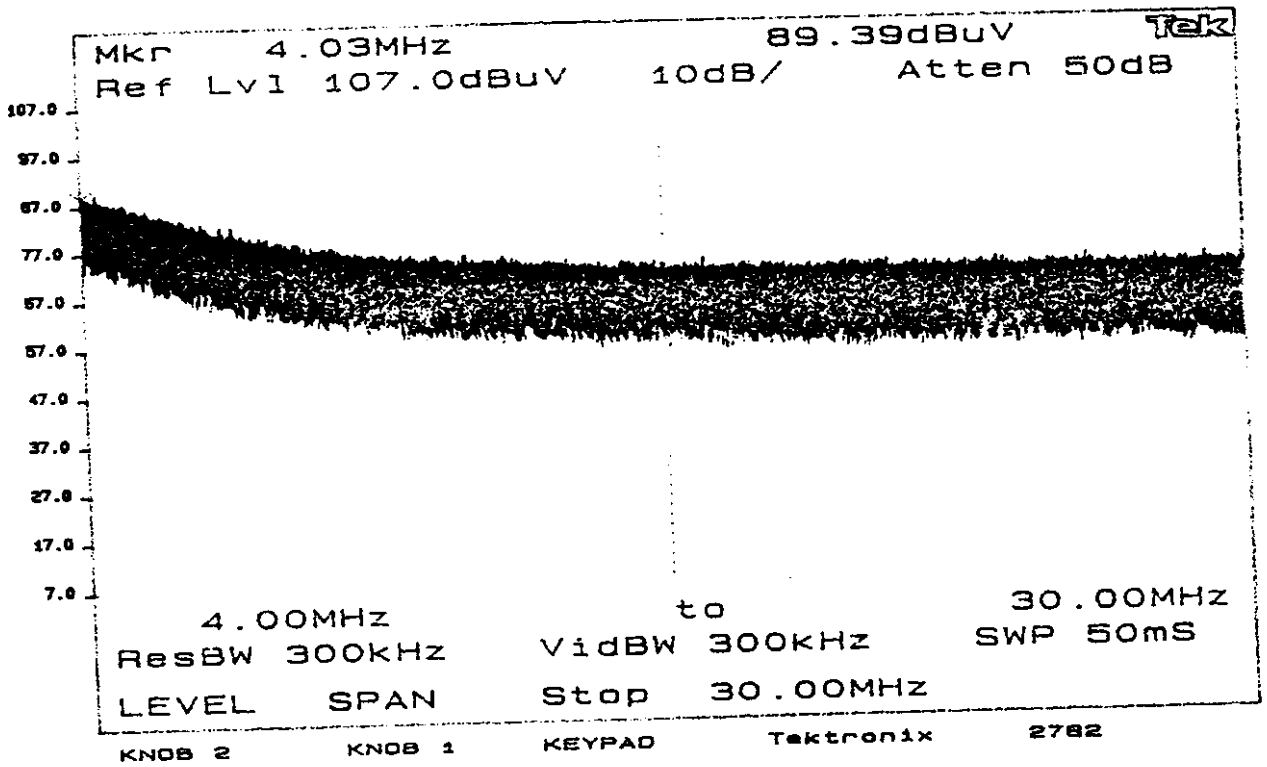


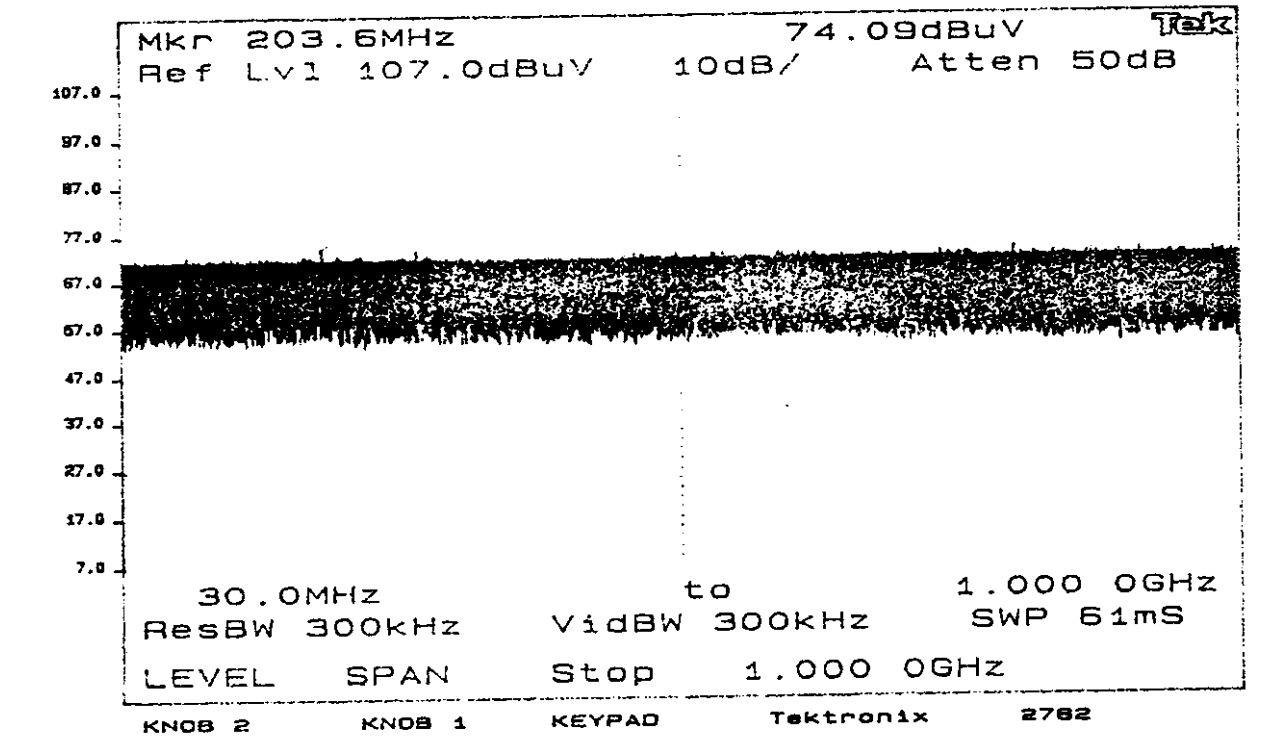


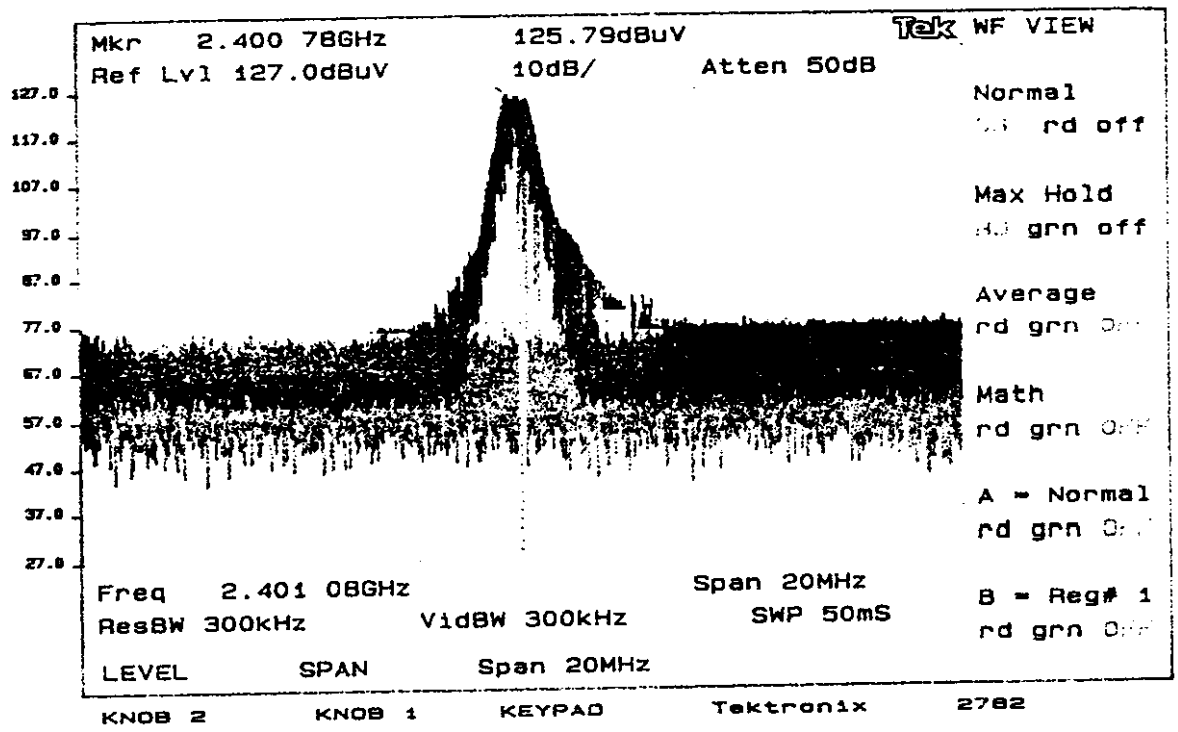
Base Station (Channel 0)

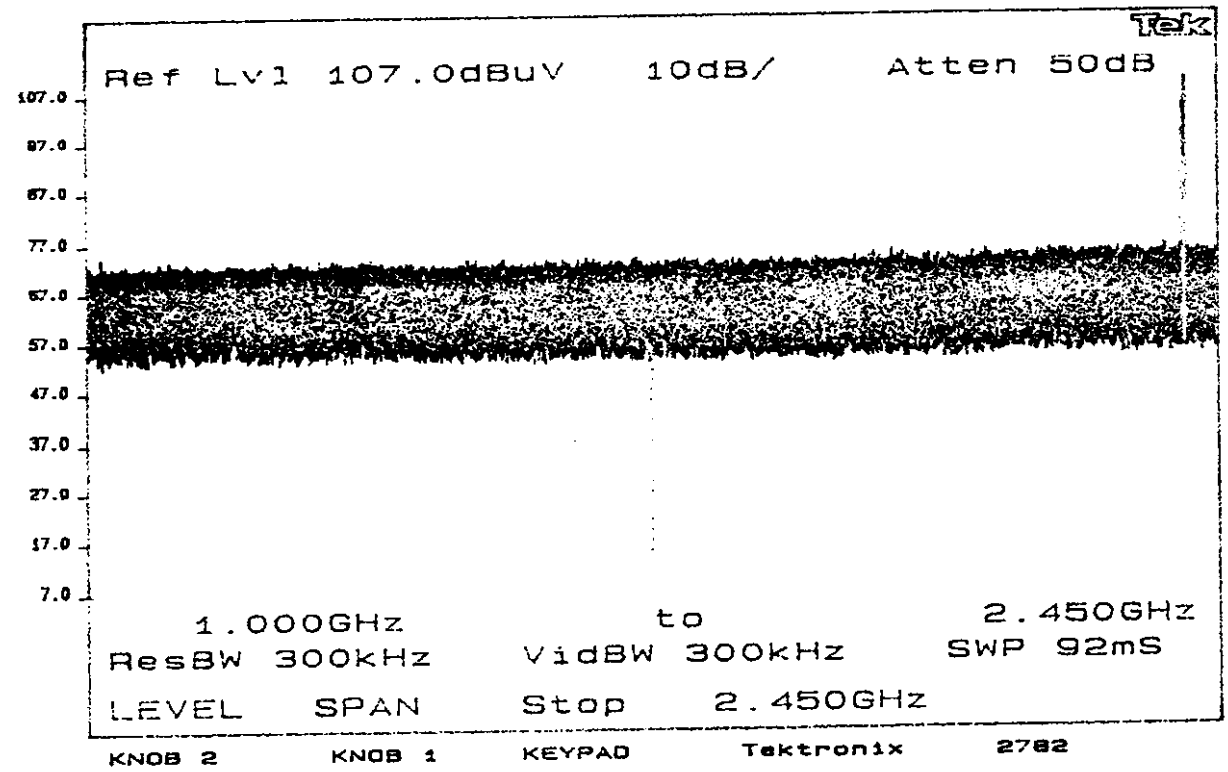


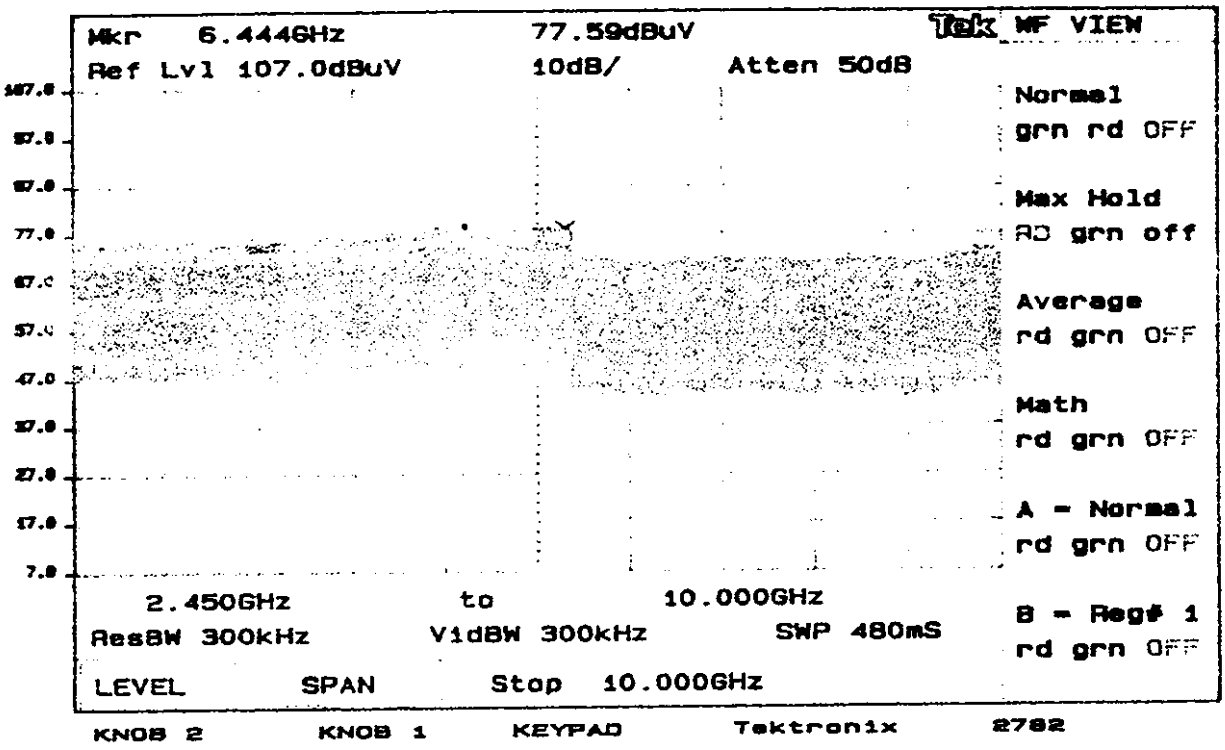



Mkr 4.03MHz
89.39dBuV
Tek
Ref Lvl 107.0dBuV
10dB/
Atten 50dB
107.0
97.0
87.0
77.0
67.0
57.0
47.0
37.0
27.0
17.0
7.0
4.00MHz
to
30.00MHz
ResBW 300kHz
VidBW 300kHz
SWP 50mS
LEVEL
SPAN
Stop 30.00MHz
KNOB 2
KNOB 1
KEYPAD
Tektronix
2782

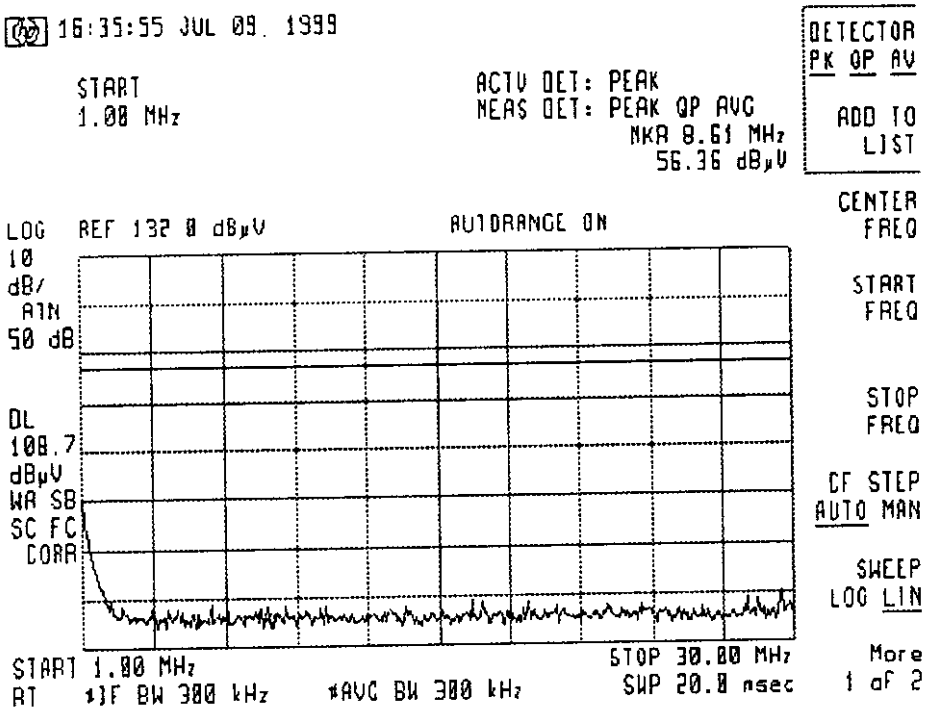

Mkr 203.6MHz
74.09dBuV
Tek
Ref Lvl 107.0dBuV
10dB/
Atten 50dB
107.0
97.0
87.0
77.0
67.0
57.0
47.0
37.0
27.0
17.0
7.0
30.0MHz
to
1.000 0GHz
ResBW 300kHz
VidBW 300kHz
SWP 61mS
LEVEL
SPAN
Stop 1.000 0GHz
KNOB 2
KNOB 1
KEYPAD
Tektronix
2782

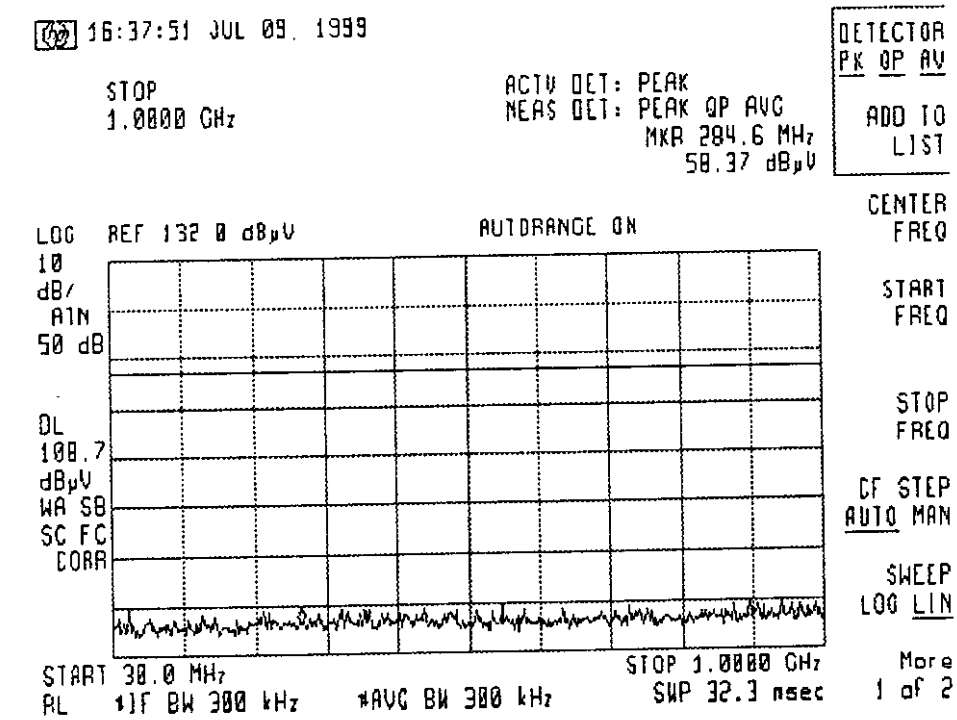

Mkr 2.400 78GHz
125.79dBuV
Tek WF VIEW
Ref Lvl 127.0dBuV
10dB/
Atten 50dB
Normal
rd off
Max Hold
grn off
Average
rd grn
Math
rd grn
A = Normal
rd grn
B = Reg# 1
rd grn
127.0
117.0
107.0
97.0
87.0
77.0
67.0
57.0
47.0
37.0
27.0
Freq 2.401 08GHz
Span 20MHz
ResBW 300kHz
VidBW 300kHz
SWP 50mS
LEVEL
SPAN
Span 20MHz
KNOB 2
KNOB 1
KEYPAD
Tektronix
2782

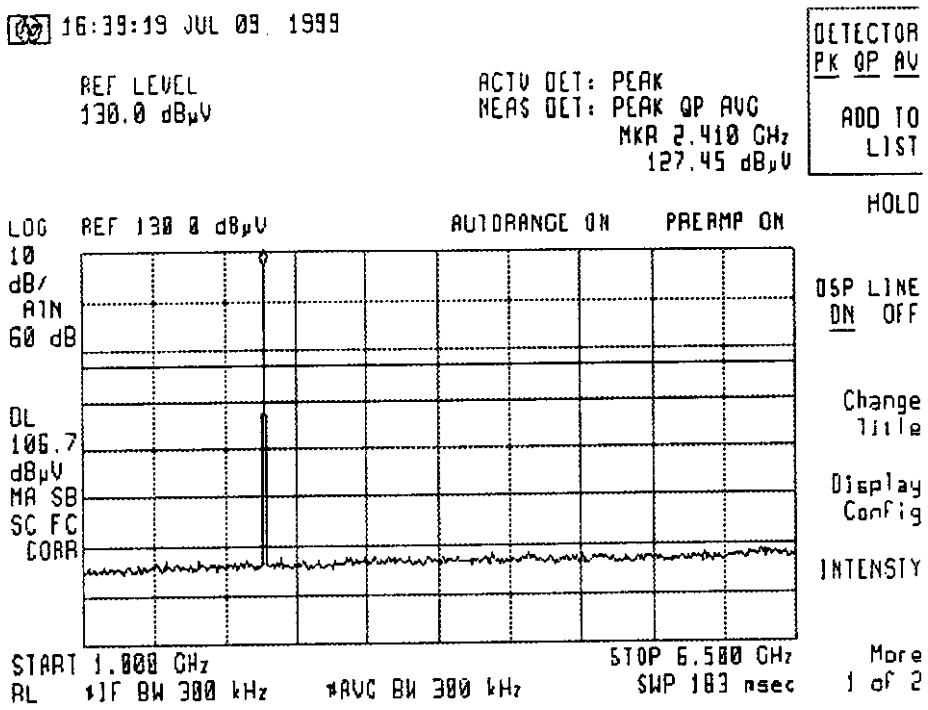

Tek
Ref Lvl 107.0dBuV
10dB/
Atten 50dB
107.0
97.0
87.0
77.0
67.0
57.0
47.0
37.0
27.0
17.0
7.0
1.000GHz
to
2.450GHz
ResBW 300kHz
VidBW 300kHz
SWP 92mS
LEVEL
SPAN
Stop 2.450GHz
KNOB 2
KNOB 1
KEYPAD
Tektronix
2782


Mkr 6.444GHz
77.59dBuV
Tek MF VIEW
Ref Lvl 107.0dBuV
10dB/
Atten 50dB
Normal
grn rd OFF
Max Hold
RD grn off
Average
rd grn OFF
Math
rd grn OFF
A = Normal
rd grn OFF
2.450GHz
to
10.000GHz
ResBW 300kHz
VidBW 300kHz
SWP 480mS
B = Reg# 1
rd grn OFF
LEVEL
SPAN
Stop 10.000GHz
KNOB 2
KNOB 1
KEYPAD
Tektronix
2782

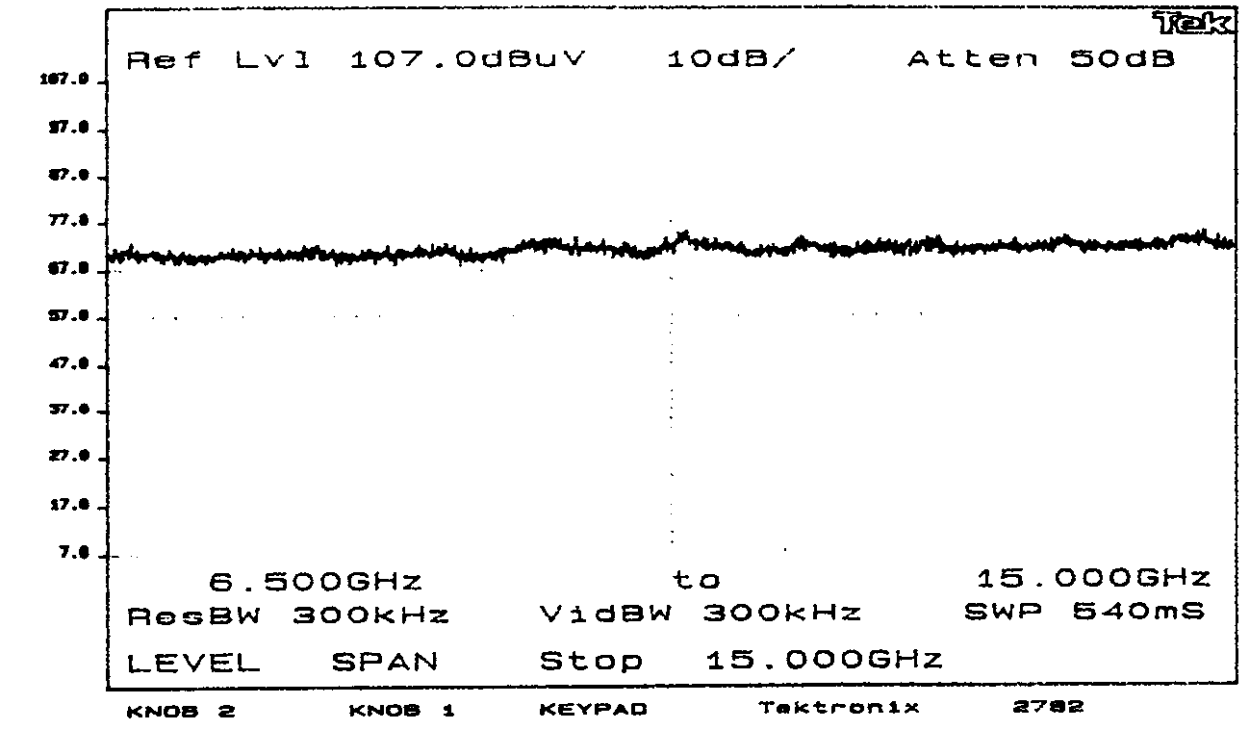
15.247 (c) Out of Band Emissions (Handset Channel 0)

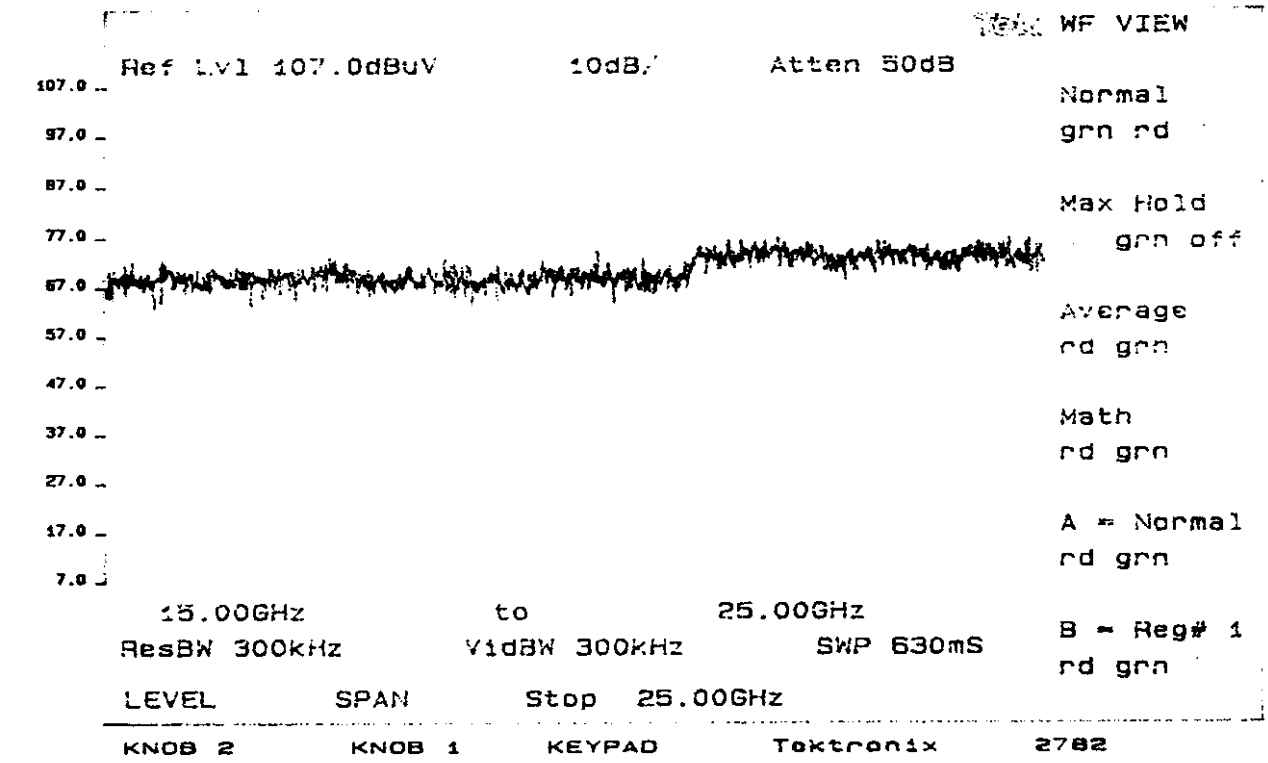


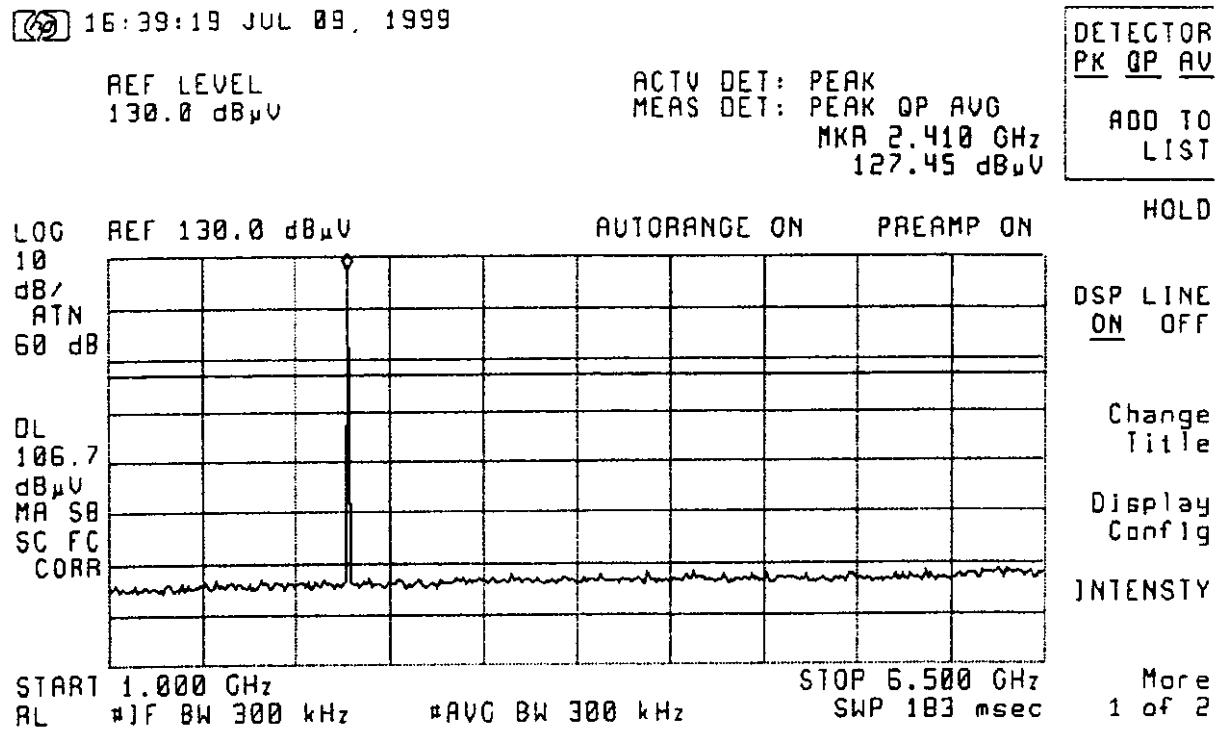


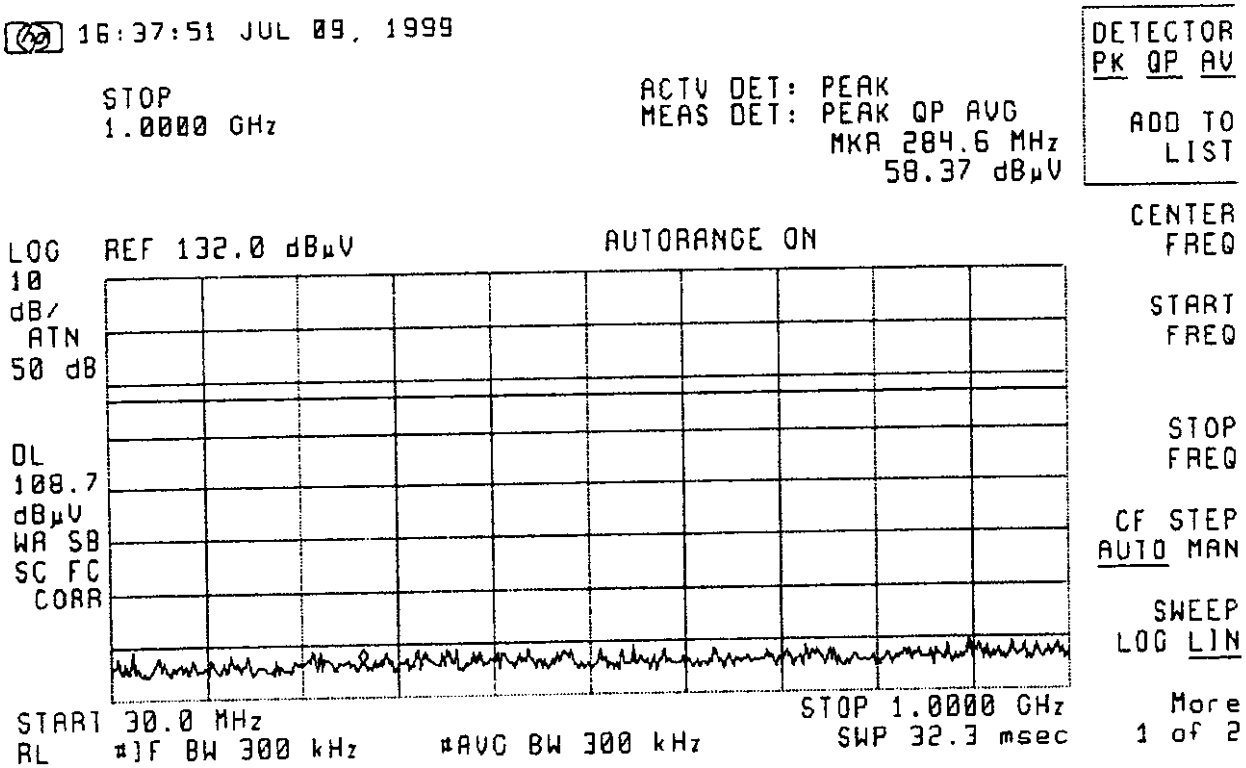

16:39:19 JUL 09, 1999
REF LEVEL
130.0 dBµV
ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 2.410 GHz
127.45 dBµV
DETECTOR
PK QP AV
ADD TO LIST
HOLD
LOG REF 130.0 dBµV
AUTORANGE ON
PREAMP ON
10 dB/ ATN 60 dB
DL 106.7 dBµV
MA SB
SC FC
CORR
DSP LINE
ON OFF
Change Title
Display Config
INTENSITY
START 1.000 GHz
RL
#IF BW 300 kHz
#AVG BW 300 kHz
STOP 6.500 GHz
SWP 183 msec
More 1 of 2

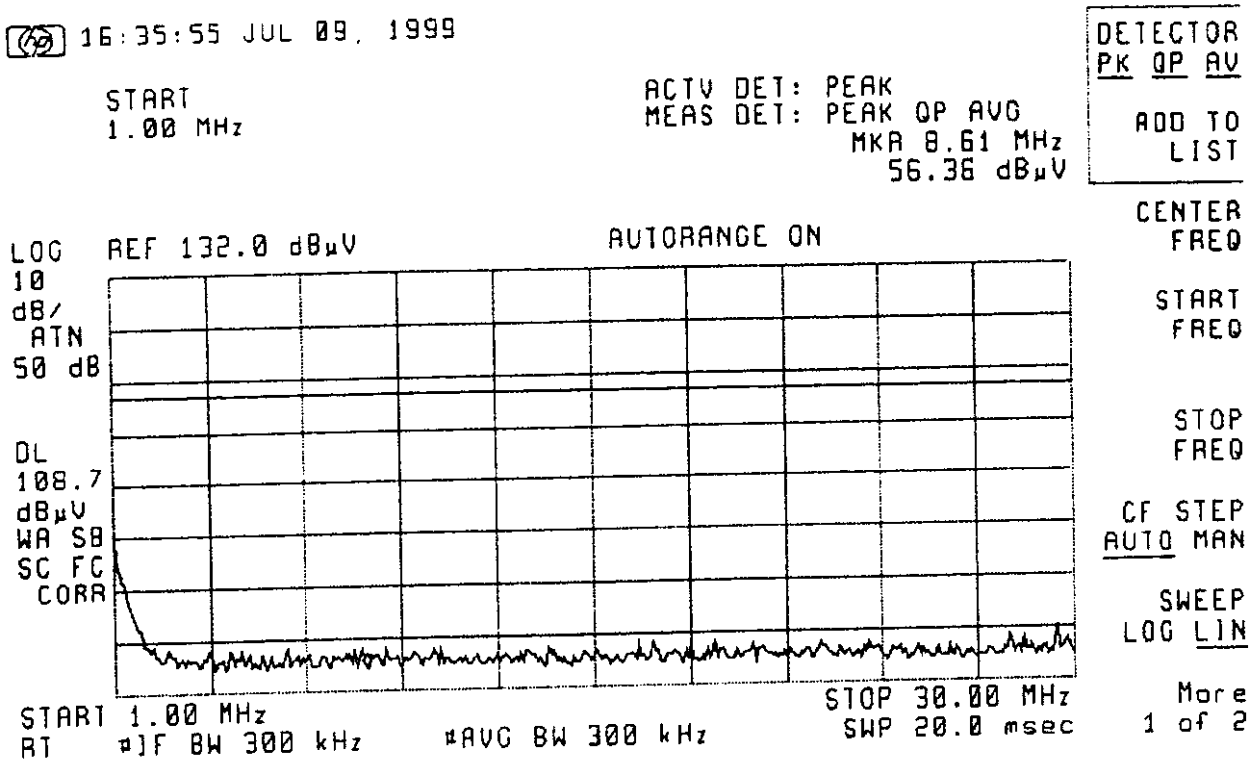
Handset (Channel 0)



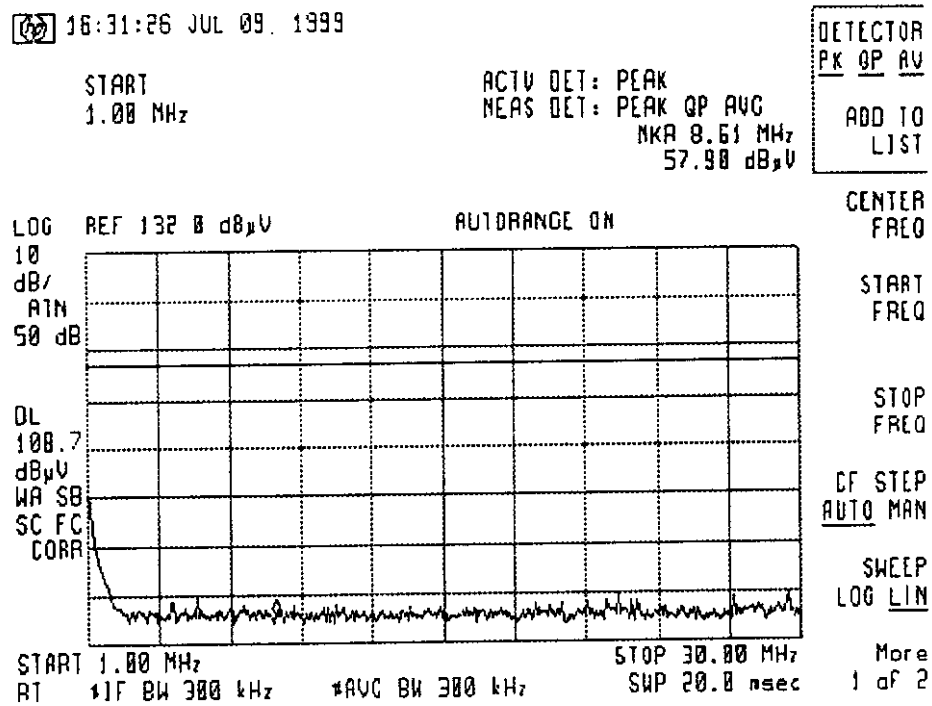


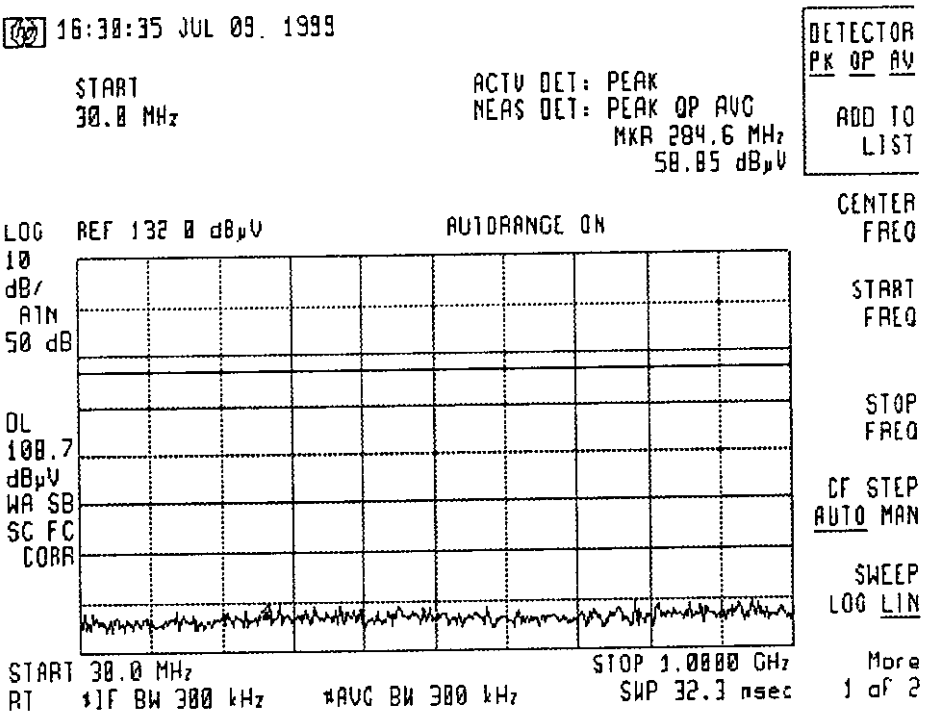

16:39:19 JUL 09, 1999
REF LEVEL
130.0 dBµV
ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 2.410 GHz
127.45 dBµV
DETECTOR
PK QP AV
ADD TO LIST
HOLD
LOG REF 130.0 dBµV
AUTORANGE ON
PREAMP ON
10 dB/
ATN 60 dB
DL 106.7 dBµV
MA SB
SC FC
CORR
DSP LINE
ON OFF
Change Title
Display Config
INTENSTY
START 1.000 GHz
STOP 6.500 GHz
More 1 of 2
RL
#IF BW 300 kHz
#AVG BW 300 kHz
SWP 183 msec

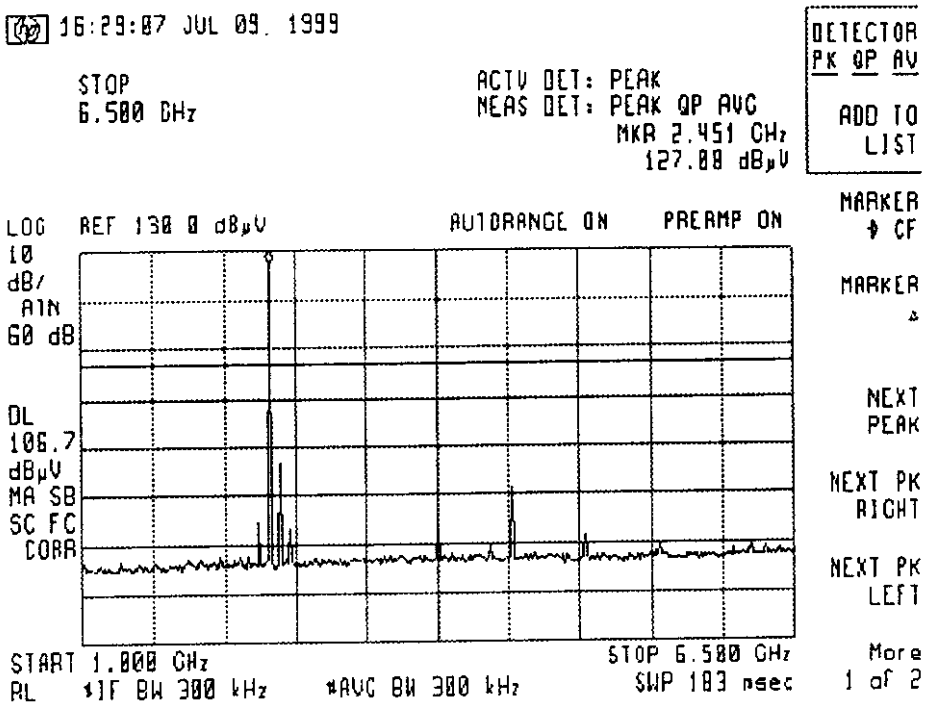

16:37:51 JUL 09, 1999
STOP
1.0000 GHz
ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 284.6 MHz
58.37 dBµV
DETECTOR
PK QP AV
ADD TO LIST
CENTER FREQ
START FREQ
STOP FREQ
CF STEP
AUTO MAN
SWEEP
LOG LIN
LOG REF 132.0 dBµV
AUTORANGE ON
10 dB/
ATN 50 dB
DL 108.7 dBµV
WA SB
SC FC
CORR
START 30.0 MHz
STOP 1.0000 GHz
More 1 of 2
RL
#IF BW 300 kHz
#AVG BW 300 kHz
SWP 32.3 msec


16:35:55 JUL 09, 1999
START
1.00 MHz
ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 8.61 MHz
56.36 dBµV
DETECTOR
PK QP AV
ADD TO
LIST
LOG REF 132.0 dBµV
AUTORANGE ON
10
dB/
ATN
50 dB
DL
108.7
dBµV
WA SB
SC FC
CORR
CENTER
FREQ
START
FREQ
STOP
FREQ
CF STEP
AUTO MAN
SWEEP
LOG LIN
START 1.00 MHz
#IF BW 300 kHz
#AVG BW 300 kHz
STOP 30.00 MHz
SWP 20.0 msec
More
1 of 2
RT

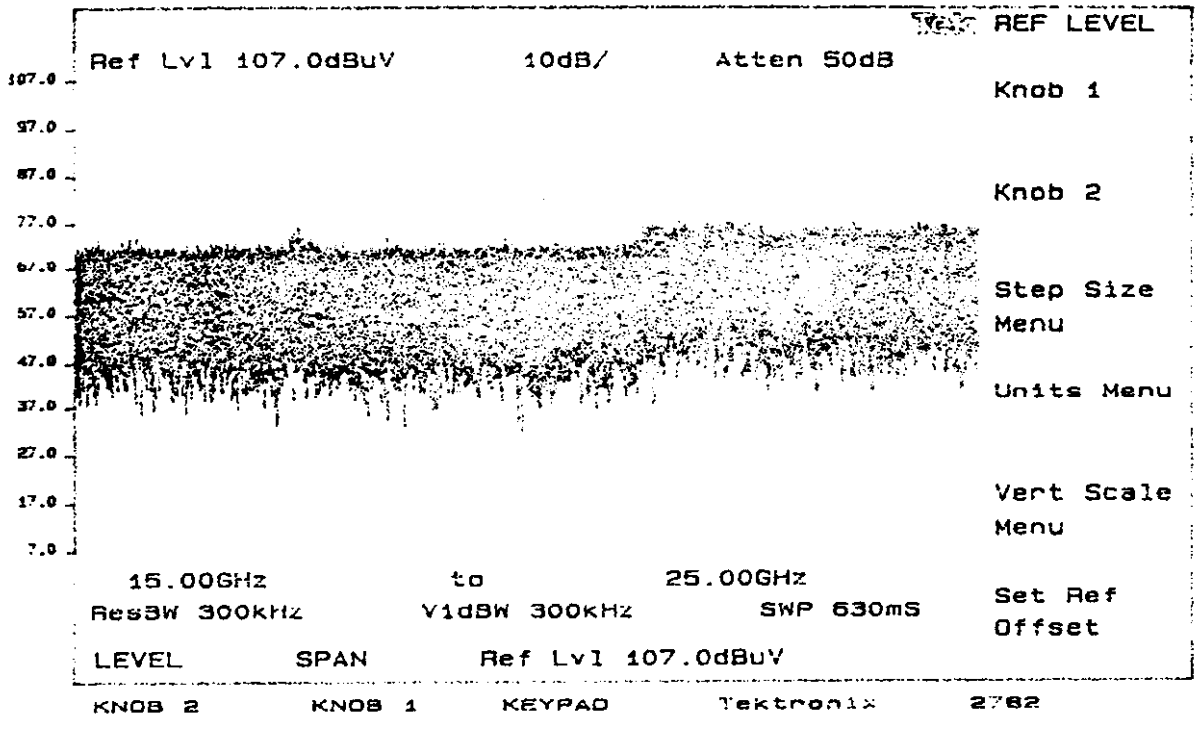
15.247 (c) Out of Band Emissions (Handset Channel 40)

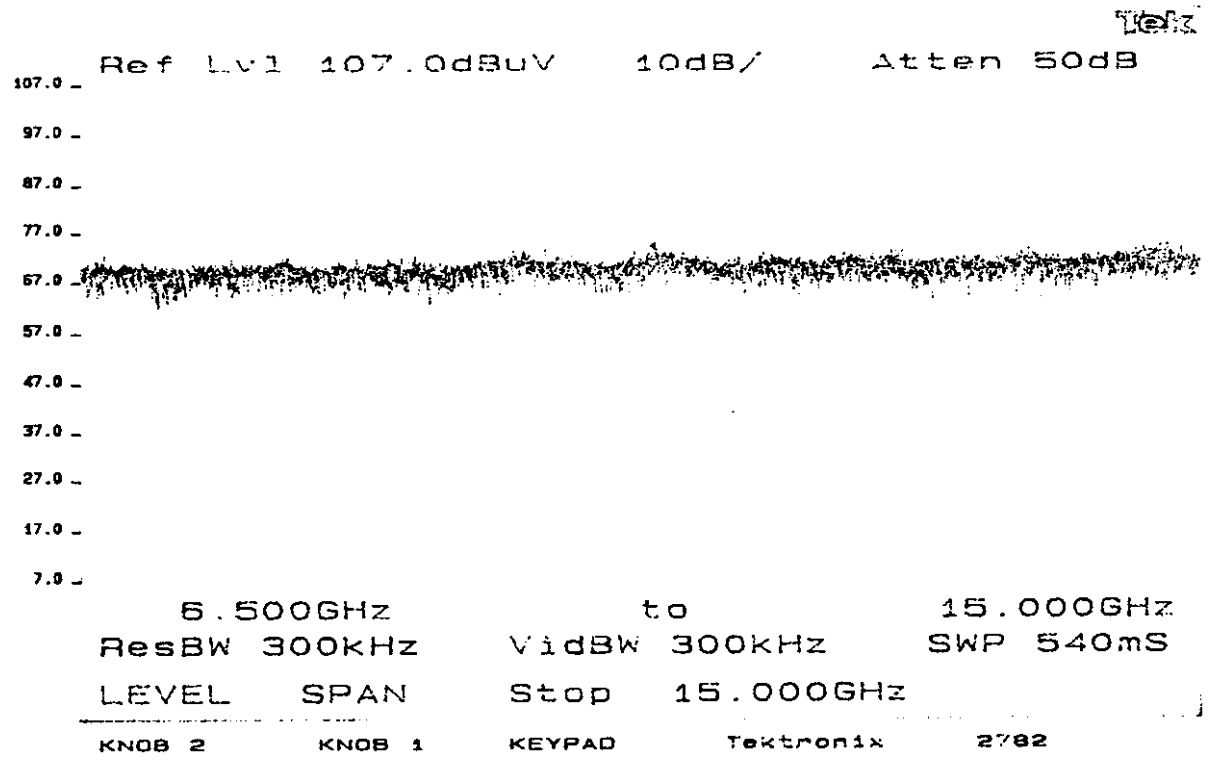


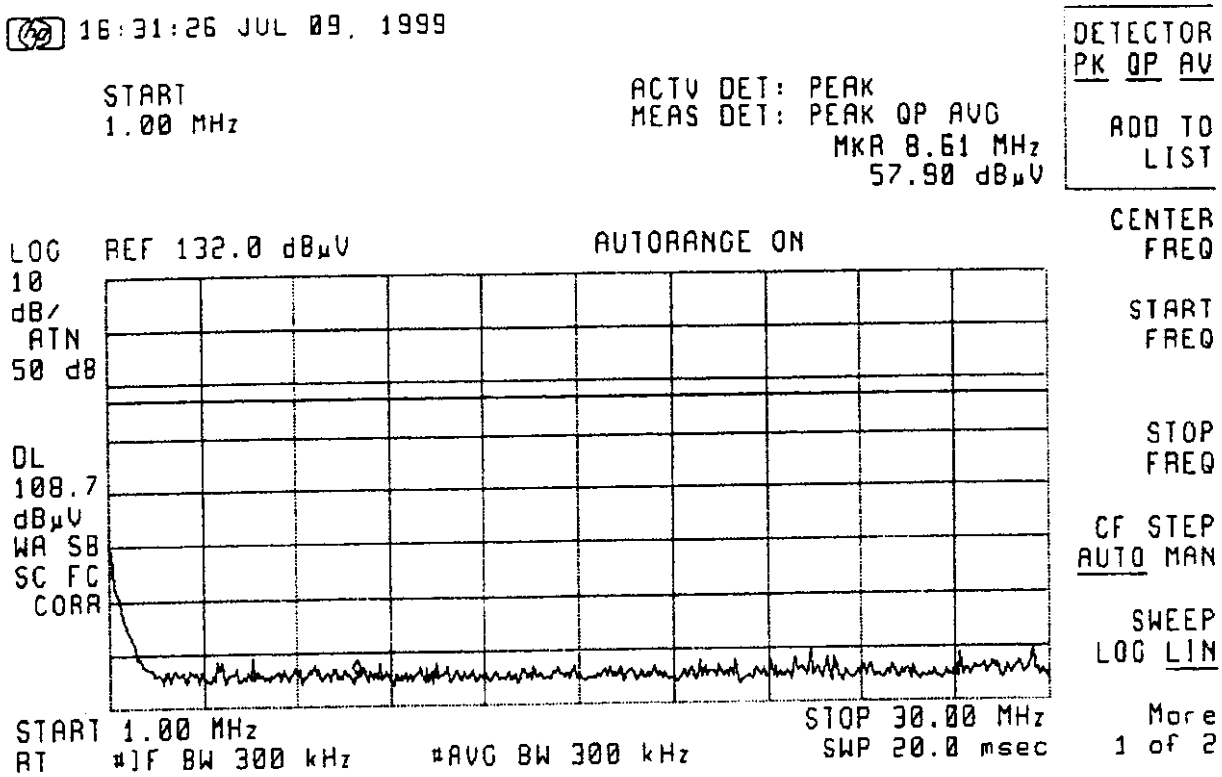



16:29:07 JUL 09, 1999
STOP
6.500 GHz
ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 2.451 GHz
127.08 dBµV
DETECTOR
PK QP AV
ADD TO
LIST
LOG
10
dB/
ATN
60 dB
REF 130 0 dBµV
AUTORANGE ON
PREAMP ON
MARKER
→ CF
MARKER
Δ
NEXT
PEAK
NEXT PK
RIGHT
NEXT PK
LEFT
More
1 of 2
DL
106.7
dBµV
MA SB
SC FC
CORR
START 1.000 GHz
RL
#IF BW 300 kHz
#AVG BW 300 kHz
STOP 6.500 GHz
SWP 183 msec

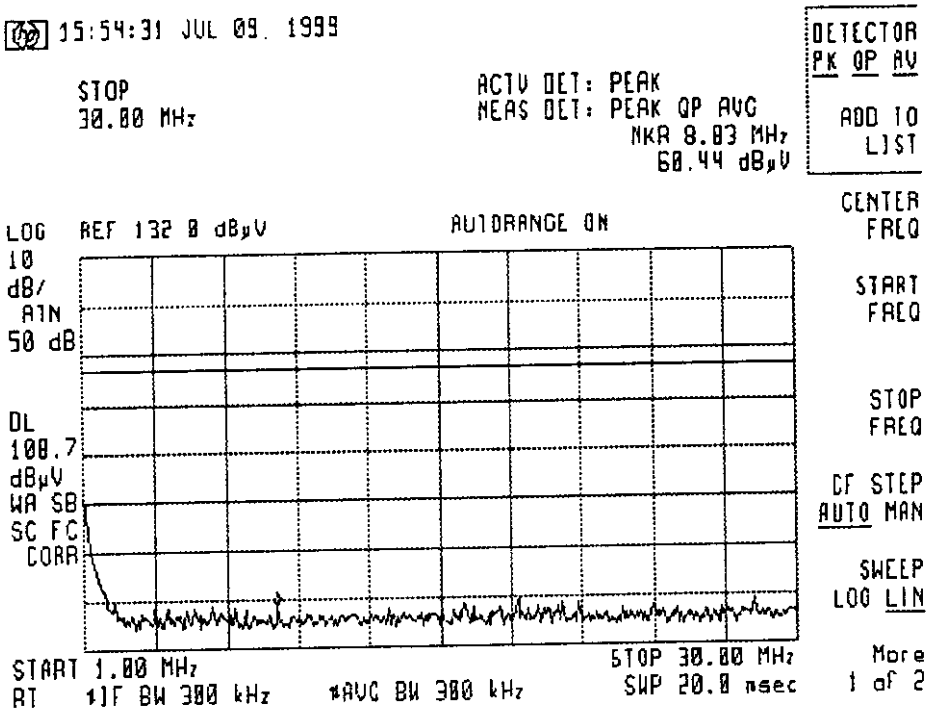
Handset (Channel 0)

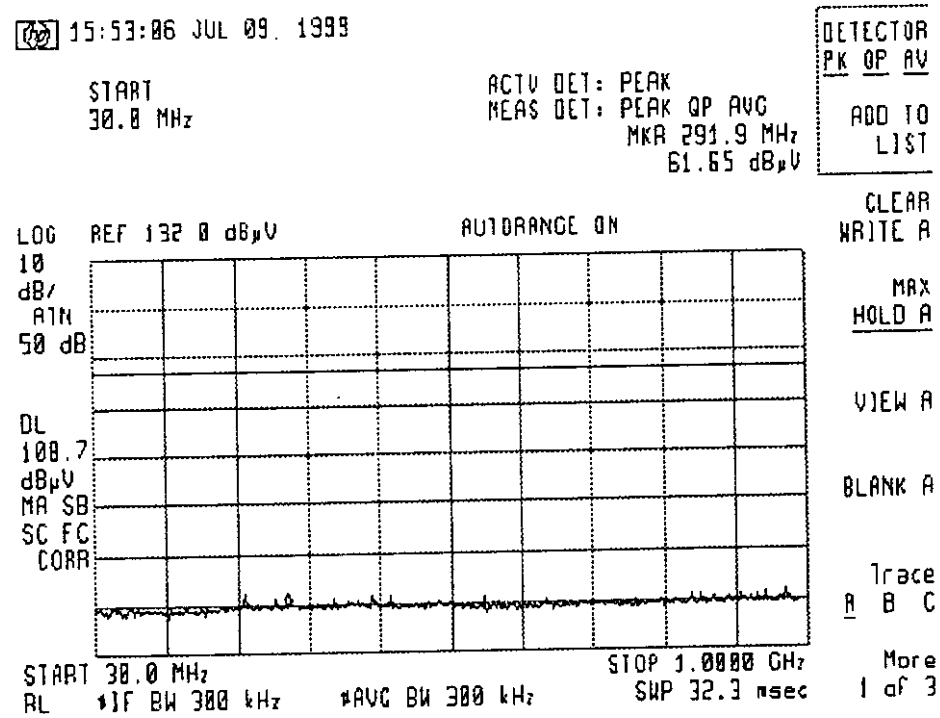


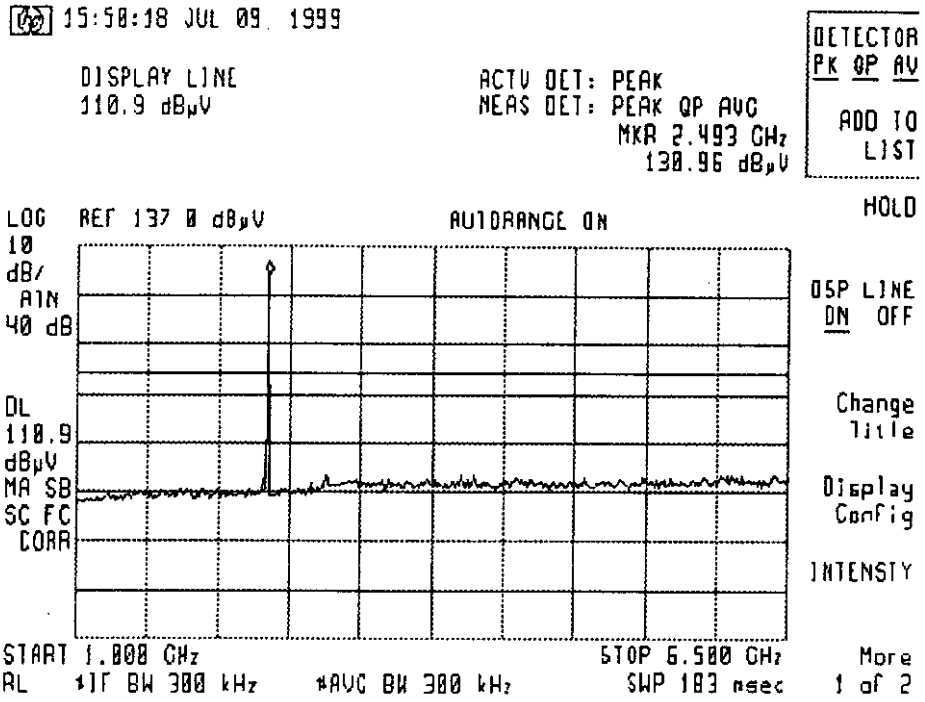



16:31:26 JUL 09, 1999
START
1.00 MHz
ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 8.61 MHz
57.90 dBµV
DETECTOR
PK QP AV
ADD TO
LIST
LOG REF 132.0 dBµV
AUTORANGE ON
10
dB/
ATN
50 dB
DL
108.7
dBµV
WA SB
SC FC
CORR
CENTER
FREQ
START
FREQ
STOP
FREQ
CF STEP
AUTO MAN
SWEEP
LOG LIN
START 1.00 MHz
RT
#IF BW 300 kHz
#AVG BW 300 kHz
STOP 30.00 MHz
SWP 20.0 msec
More
1 of 2

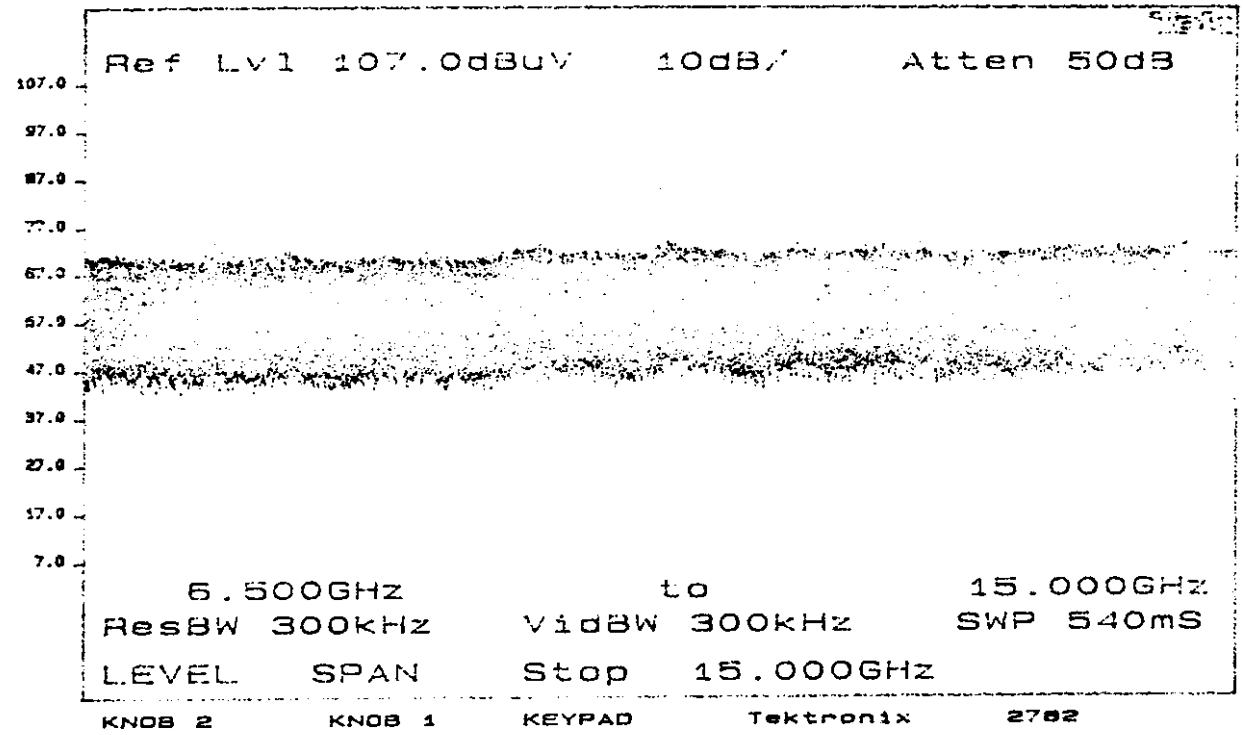
15.247 (c) Out of Band Emissions (Handset Channel 78)

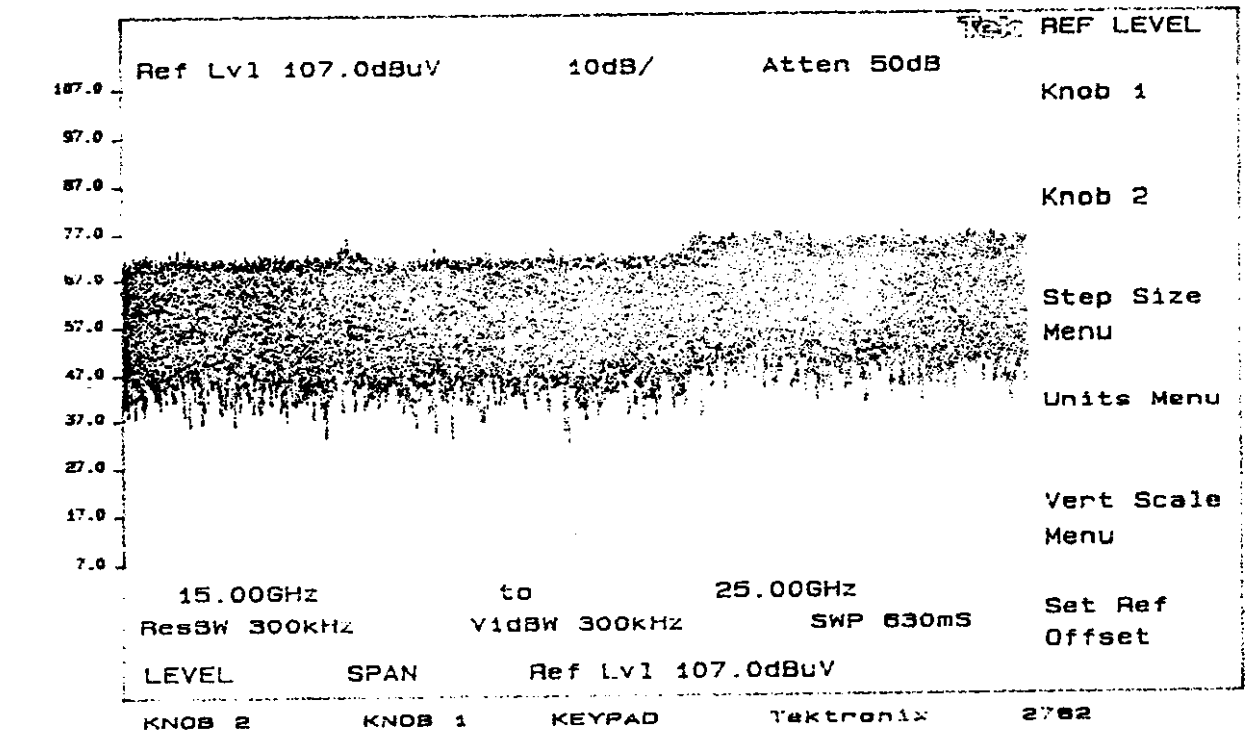





15:50:18 JUL 09 1999
DISPLAY LINE
110.9 dBµV
ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 2.493 GHz
130.96 dBµV
DETECTOR
PK QP AV
ADD TO LIST
HOLD
LOG
10
dB/
ATN
40 dB
REF 137 0 dBµV
AUTORANGE ON
DL
110.9
dBµV
MA SB
SC FC
CORR
DSP LINE
ON OFF
Change Title
Display Config
INTENSITY
START 1.000 GHz
STOP 6.500 GHz
RL
#IF BW 300 kHz
#AVG BW 300 kHz
SWP 183 msec
More
1 of 2

Handset (Channel 78)



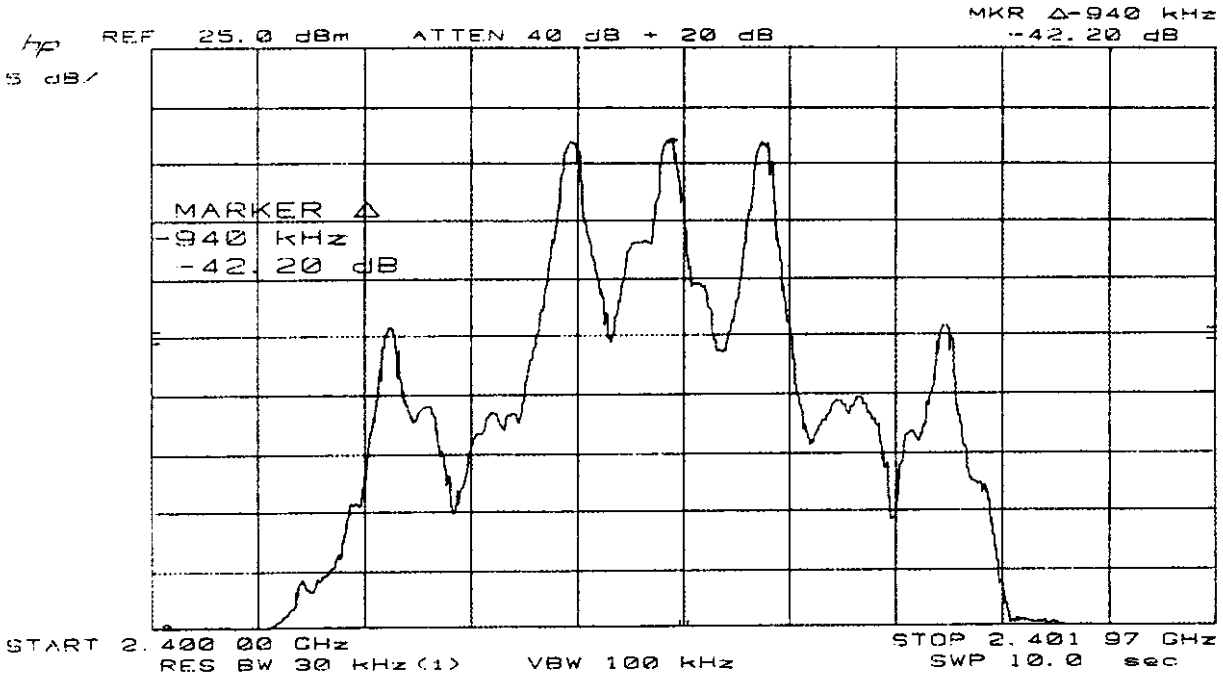


DATA READINGS

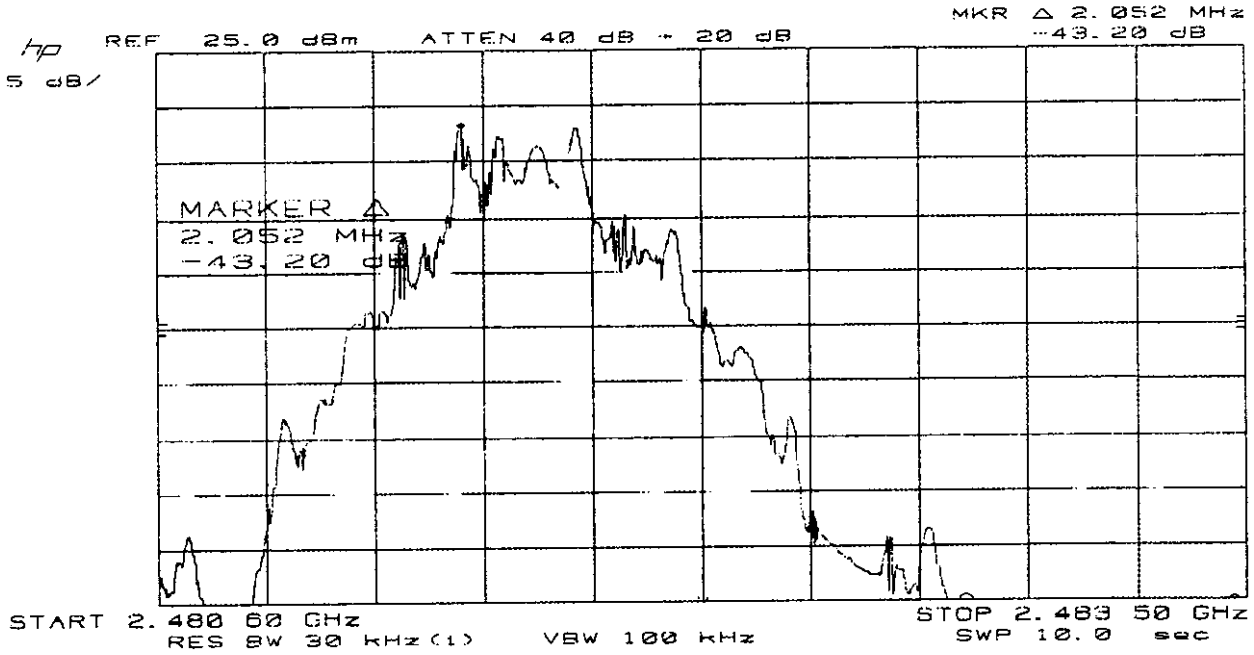
TYPE OF TEST: 15.247
Band Edge Measurements

Note: The frequency scale on the following graphs is approximately 200-300 kHz per division. Based on the spectrum, 30 kHz resolution bandwidth used during the measurement was considered acceptable.

15.247 Band Edge Measurements (Base Station)



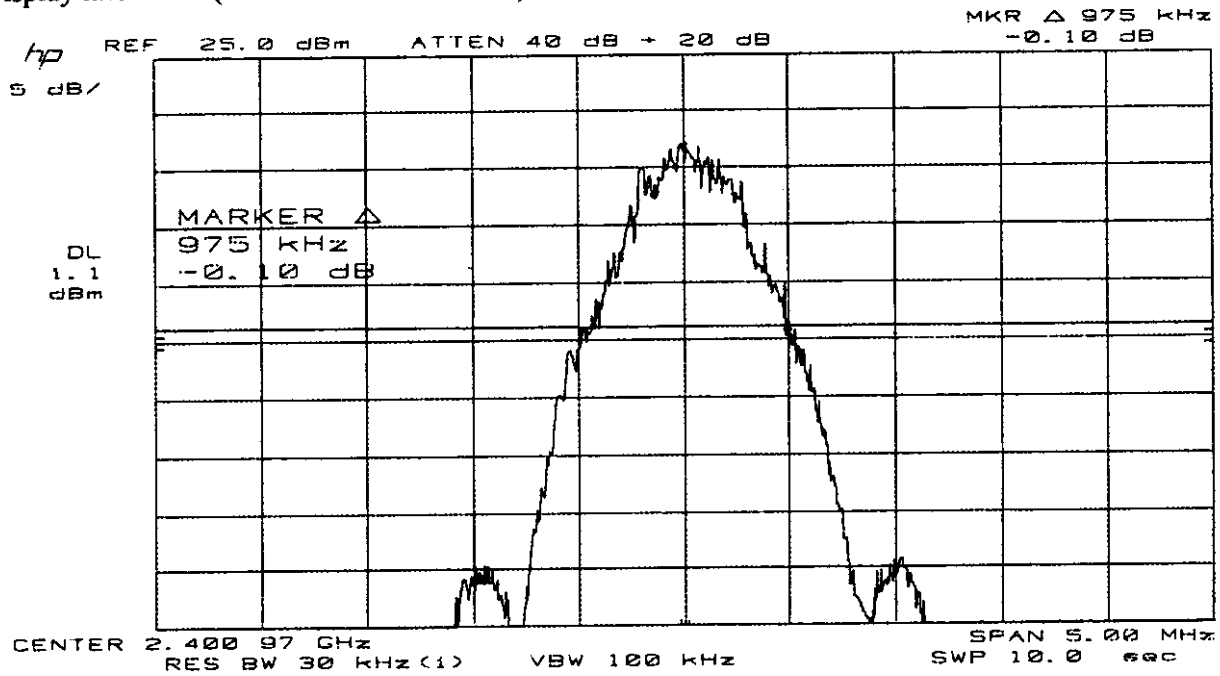
15.247 Band Edge Measurements (Base Station)



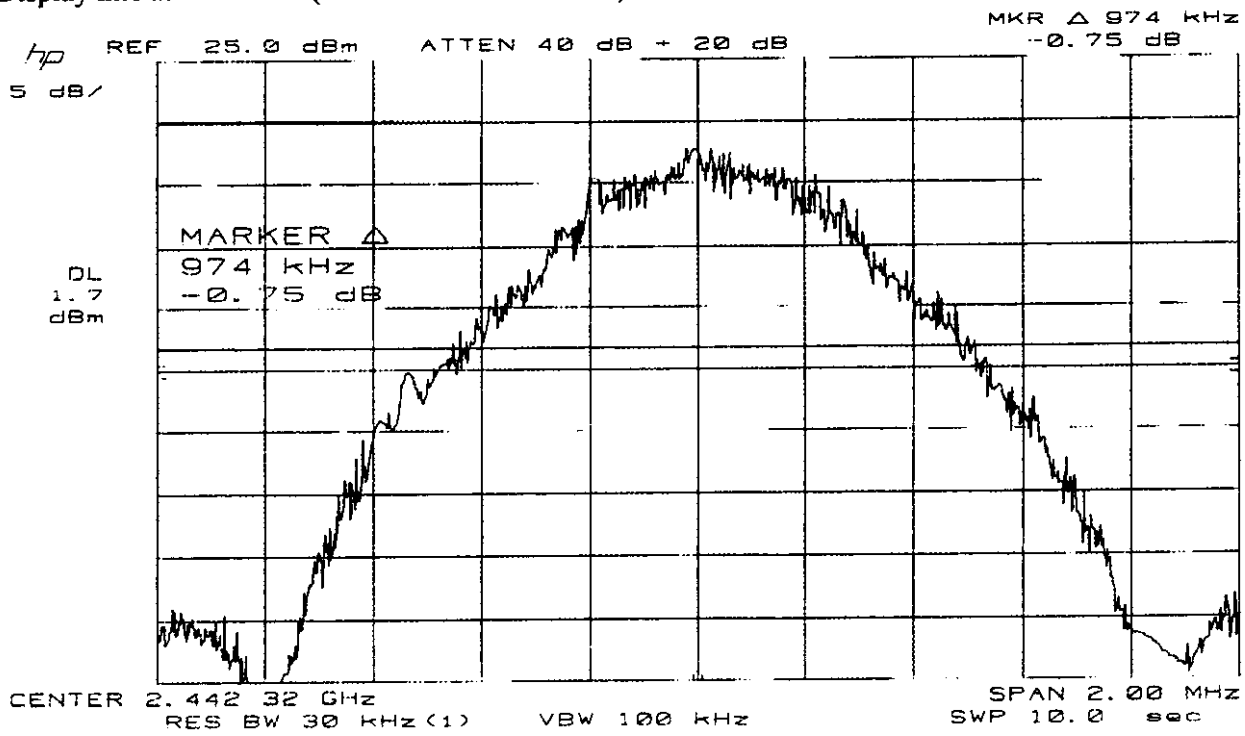
DATA READINGS

TYPE OF TEST: 15.247 (a)(1)(ii)
Channel Bandwidth Measurements

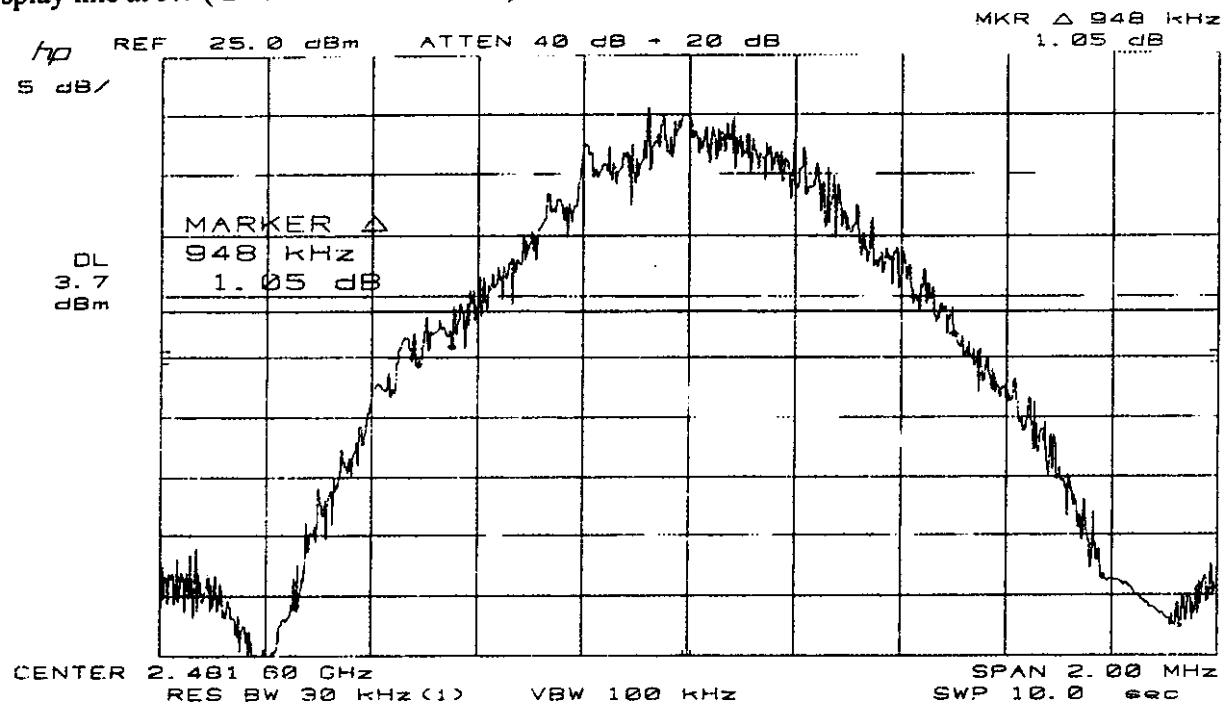
15.247 (a)(1)(ii) Conducted Measurements (Handset) Channel Bandwidth Measurements
Display line at 1.1 (-20 dB from 21.05 dBm) Channel 0



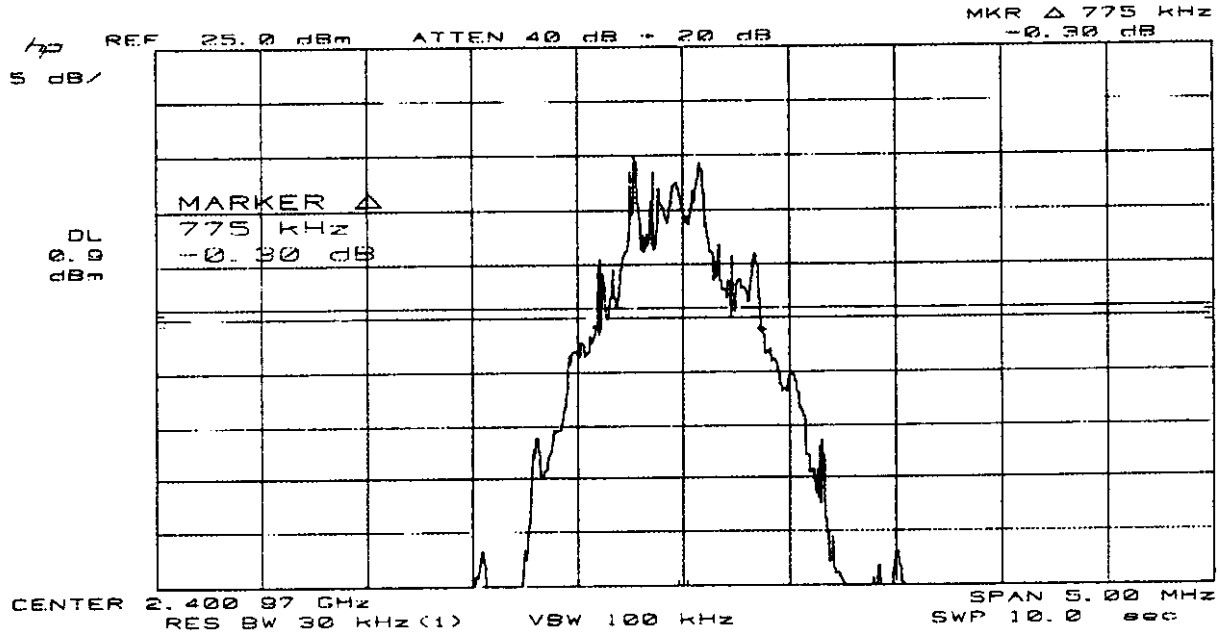
15.247 (a)(1)(ii) Conducted Measurements (Handset) Channel Bandwidth Measurements
Display line at +1.7 dBm (-20 dB from 21.75 dBm) Channel 40



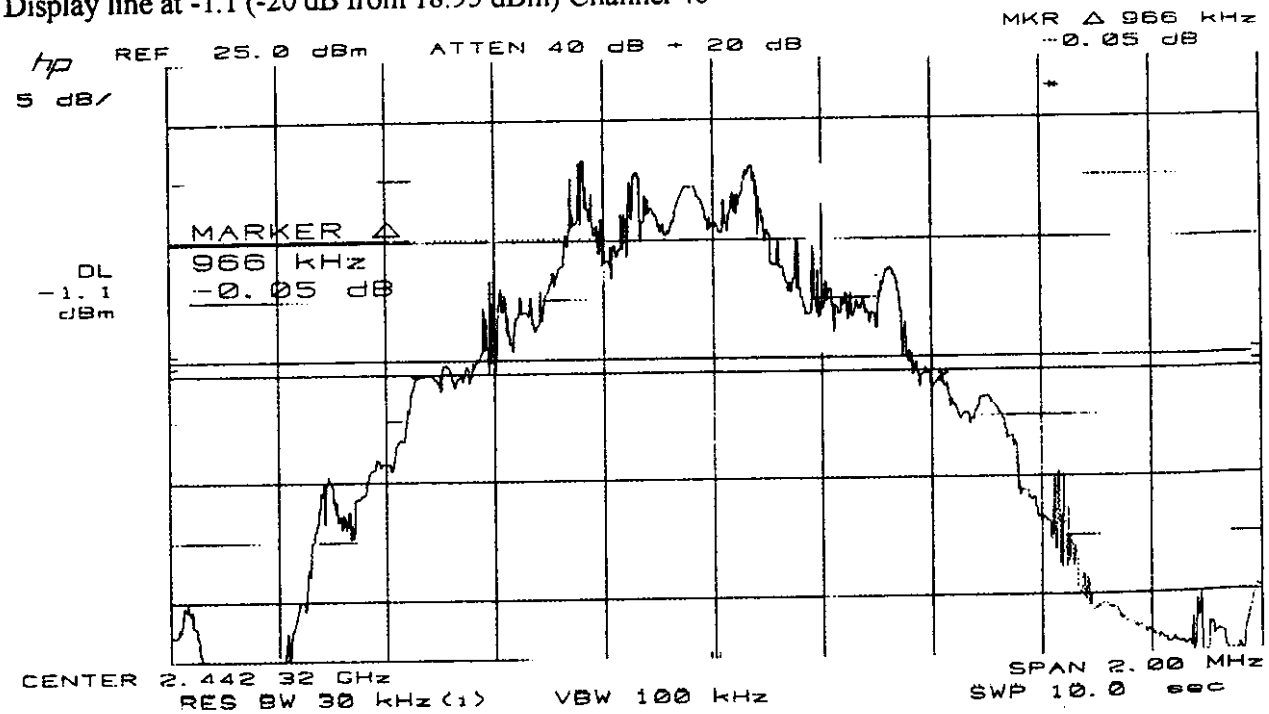
15.247 (a)(1)(ii) Conducted Measurements (Handset) Channel Bandwidth Measurements
Display line at 3.7 (-20 dB from 23.75 dBm) Channel 78



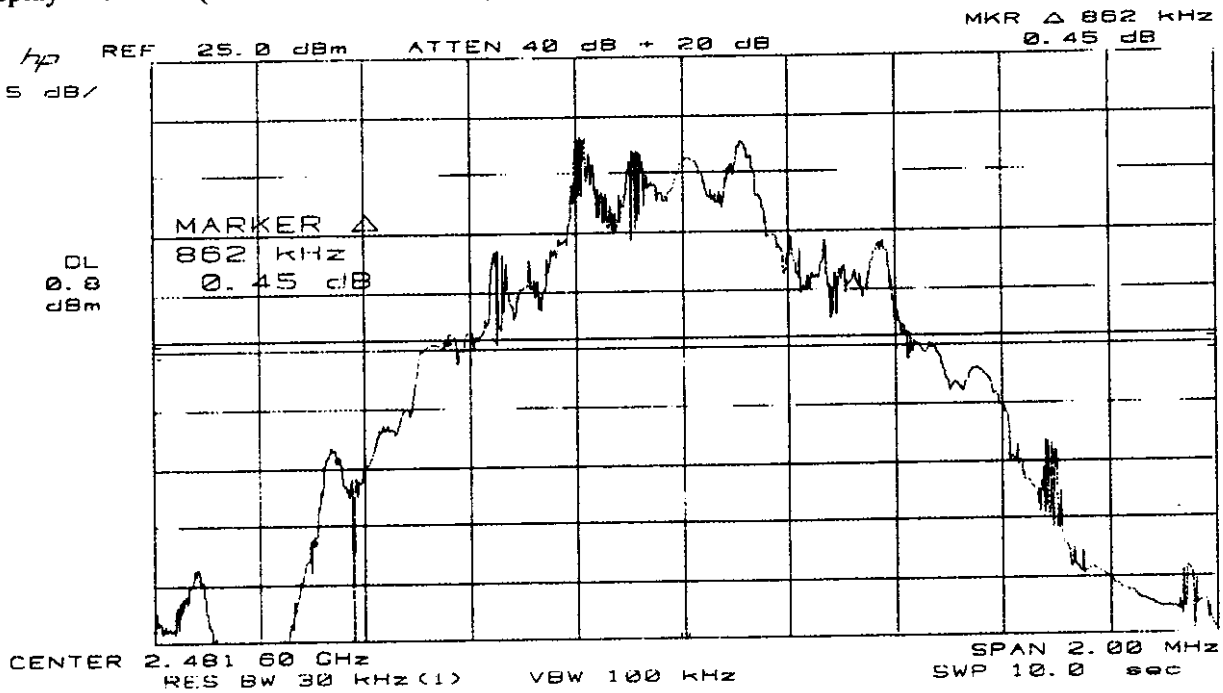
15.247 (a)(1)(ii) Conducted Measurements (Base Station) Channel Bandwidth Measurements
Display line at 0.9 (-20 dB from 20.9 dBm) Channel 0



15.247 (a)(1)(ii) Conducted Measurements (Base Station) Channel Bandwidth Measurements
Display line at -1.1 (-20 dB from 18.95 dBm) Channel 40



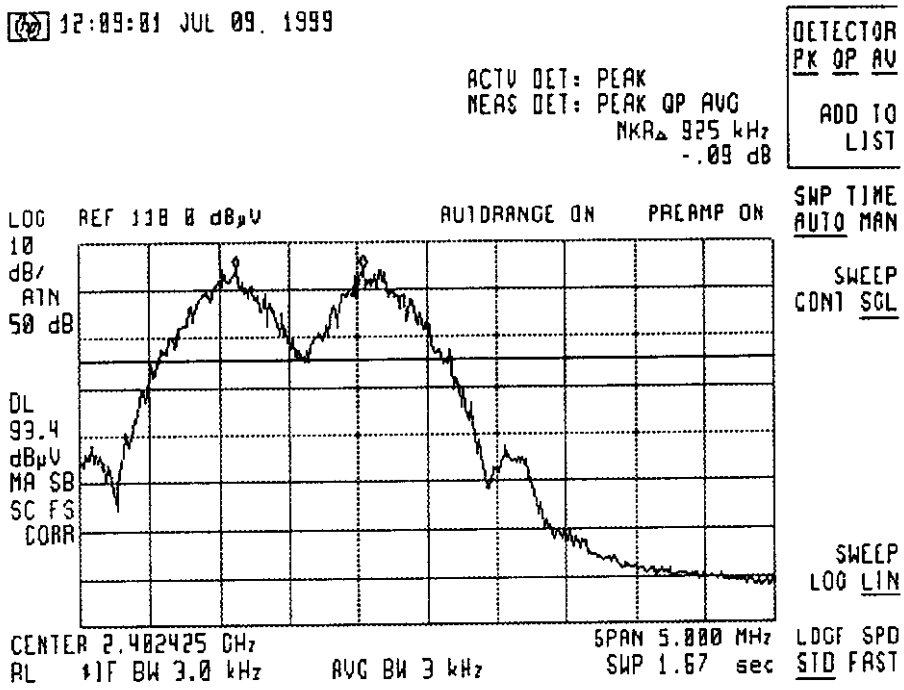
15.247 (a)(1)(ii) Conducted Measurements (Base Station) Channel Bandwidth Measurements
Display line at 0.8 (-20 dB from 20.8 dBm) Channel 78



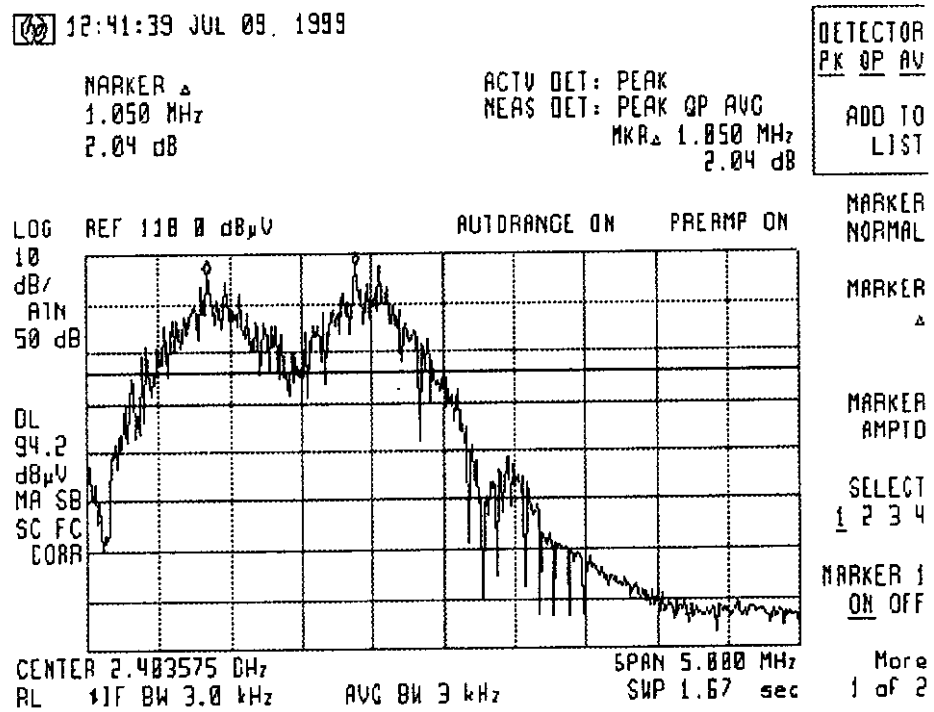
DATA READINGS

TYPE OF TEST: 15.247 (a)(1)
Channel Spacing Measurements

15.247 (a)(1) Channel Spacing Measurement (Handset)



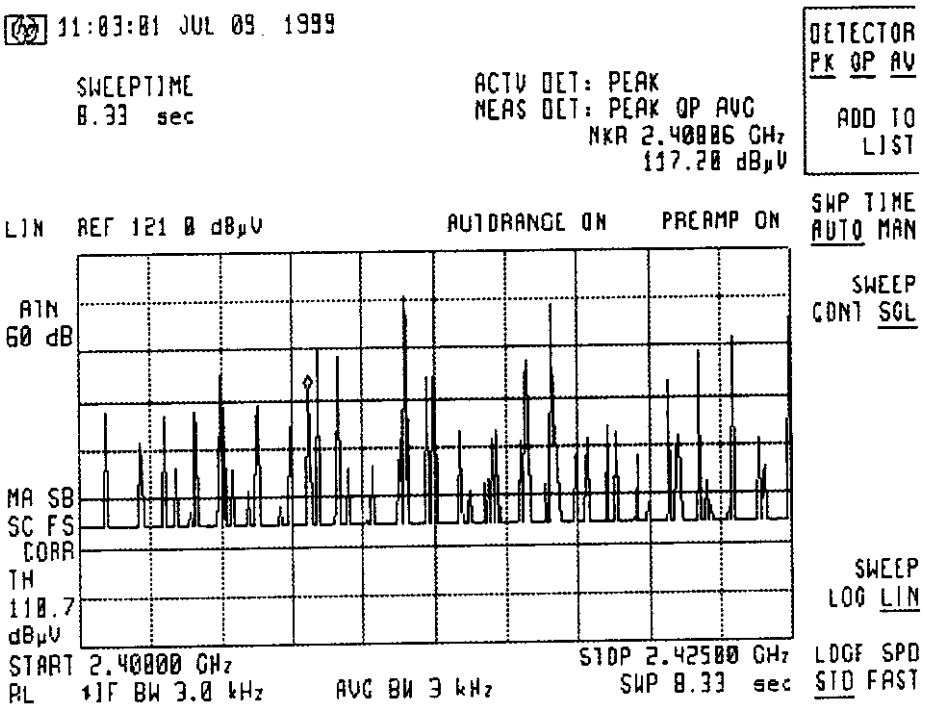
15.247 (a)(1) Channel Spacing Measurement (Base Station)

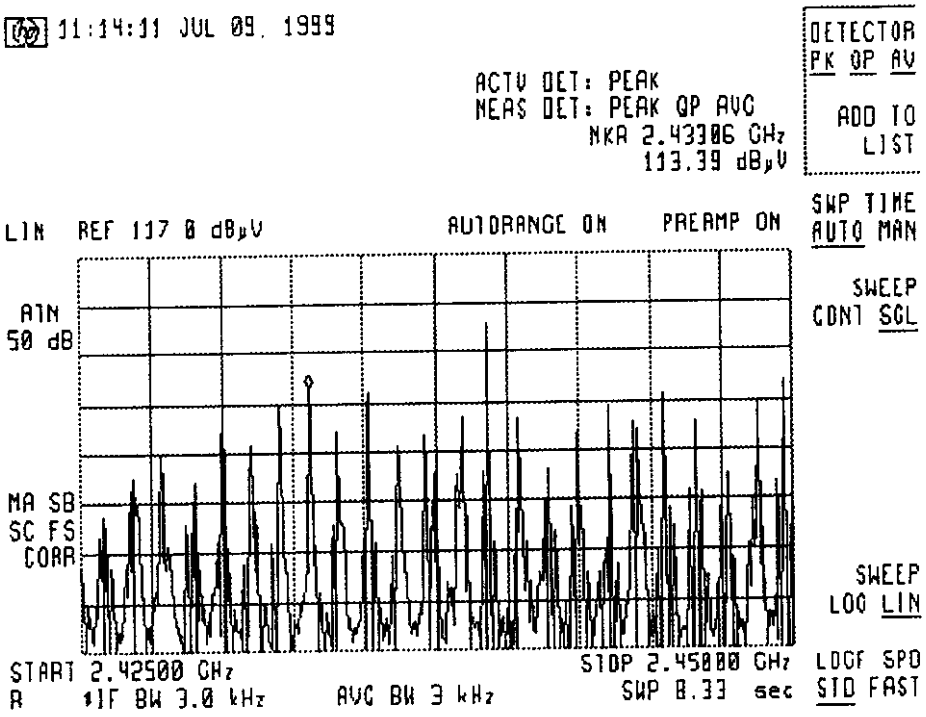


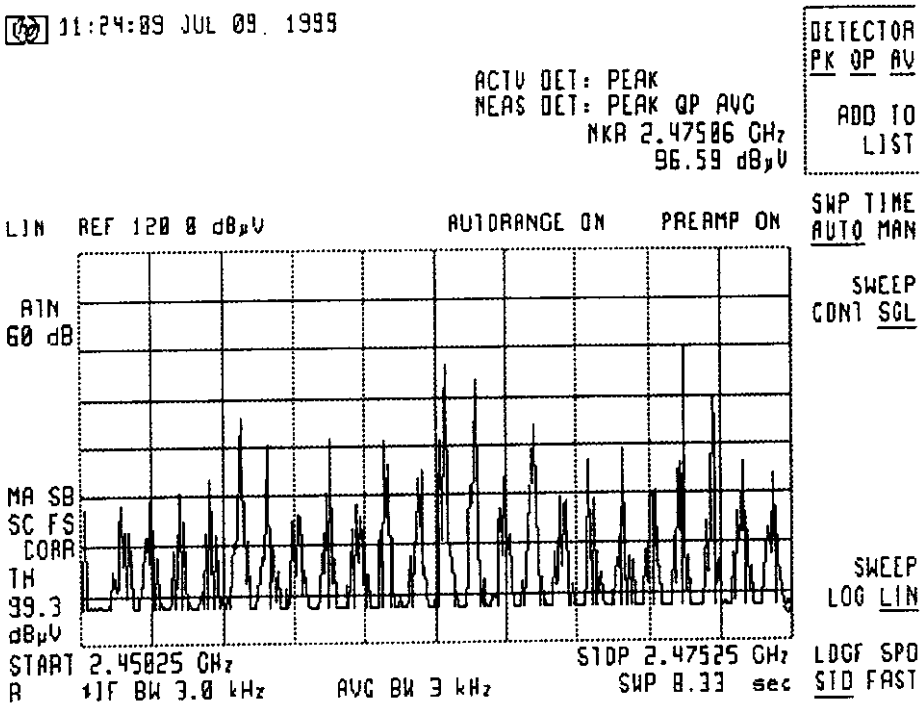
DATA READINGS

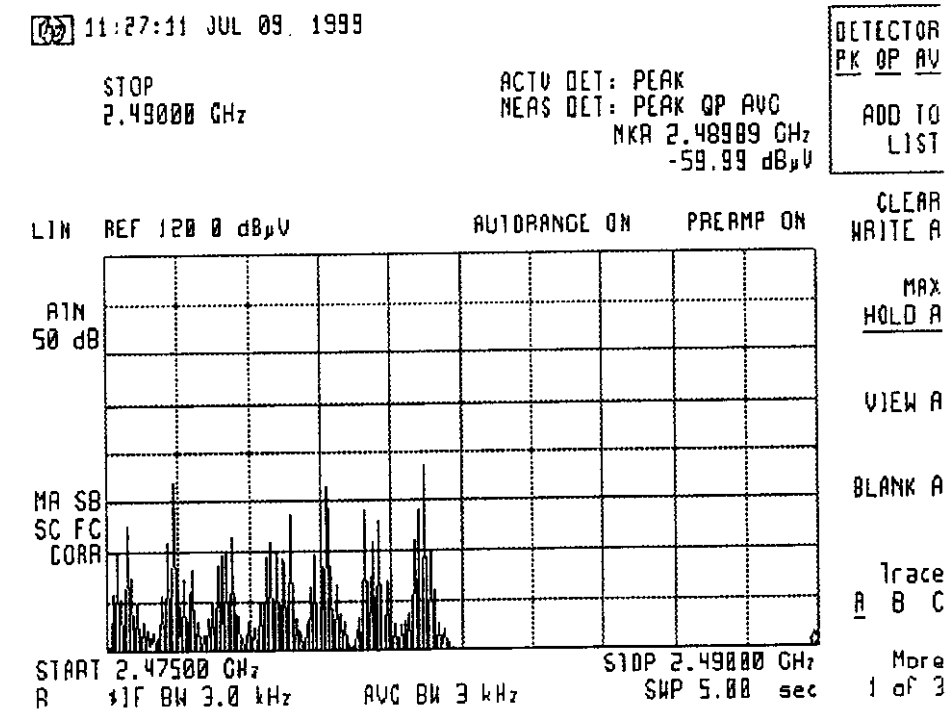
TYPE OF TEST: 15.247 (a)(1)(ii)
Minimum Channels

15.247 (a)(1)(ii) Minimum Channels (Handset)

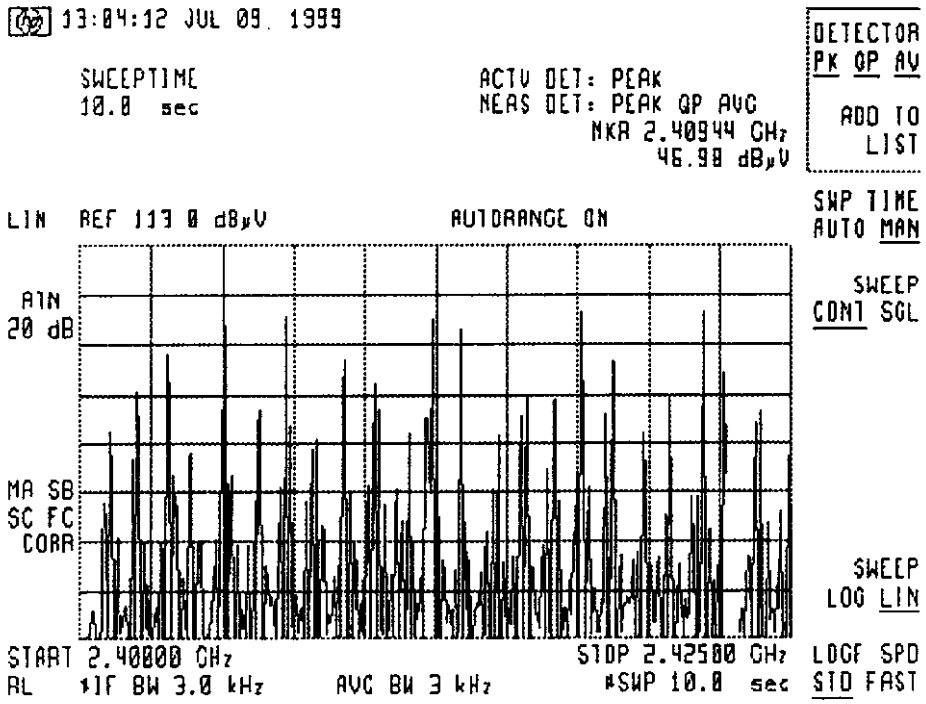


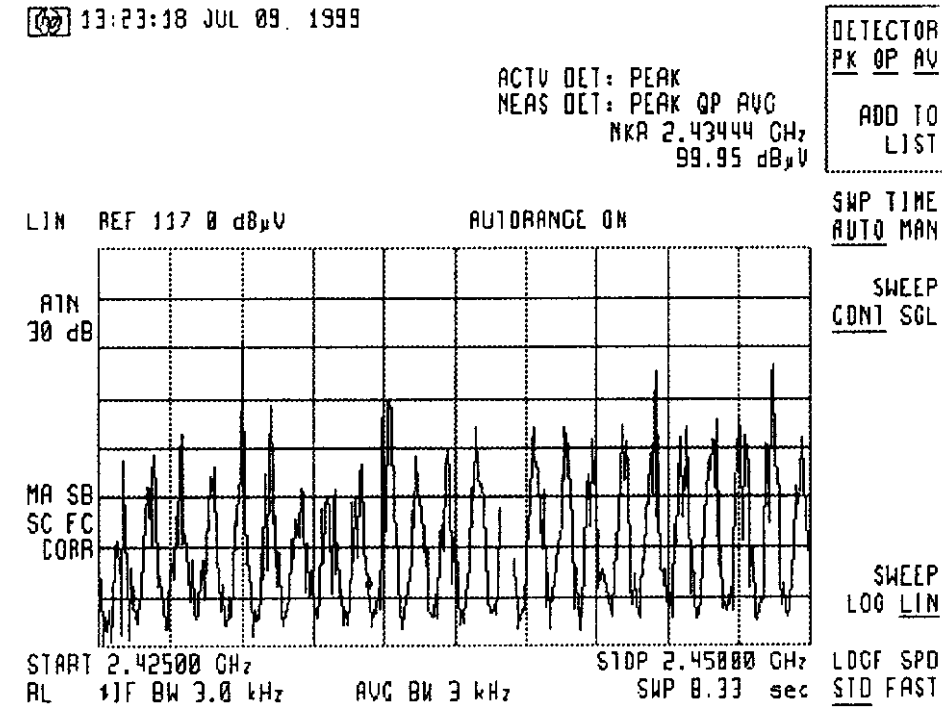



11:24:89 JUL 09, 1999
ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 2.47506 GHz
96.59 dBµV
DETECTOR
PK QP AV
ADD TO
LIST
LIN REF 120 0 dBµV
AUTORANGE ON
PREAMP ON
SWP TIME
AUTO MAN
ATN
60 dB
SWEEP
CONT SGL
MA SB
SC FS
CORR
TH
99.3
dBµV
SWEEP
LOG LIN
START 2.45825 GHz
STOP 2.47525 GHz
LOGF SPD
STD FAST
RBW 1.0 kHz
AVG BW 3 kHz
SWP 8.33 sec


11:27:11 JUL 09, 1999
STOP
2.49000 GHz
ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 2.48989 GHz
-59.99 dBµV
DETECTOR
PK QP AV
ADD TO
LIST
CLEAR
WRITE A
LIN REF 120 0 dBµV
AUTORANGE ON
PREAMP ON
MAX
HOLD A
ATN
50 dB
VIEW A
BLANK A
MA SB
SC FC
CORR
Trace
A B C
START 2.47500 GHz
STOP 2.49000 GHz
More
1 of 3
RBW 1.0 kHz
AVG BW 3 kHz
SWP 5.00 sec

15.247 (a)(1)(ii) Minimum Channels (Base Station)

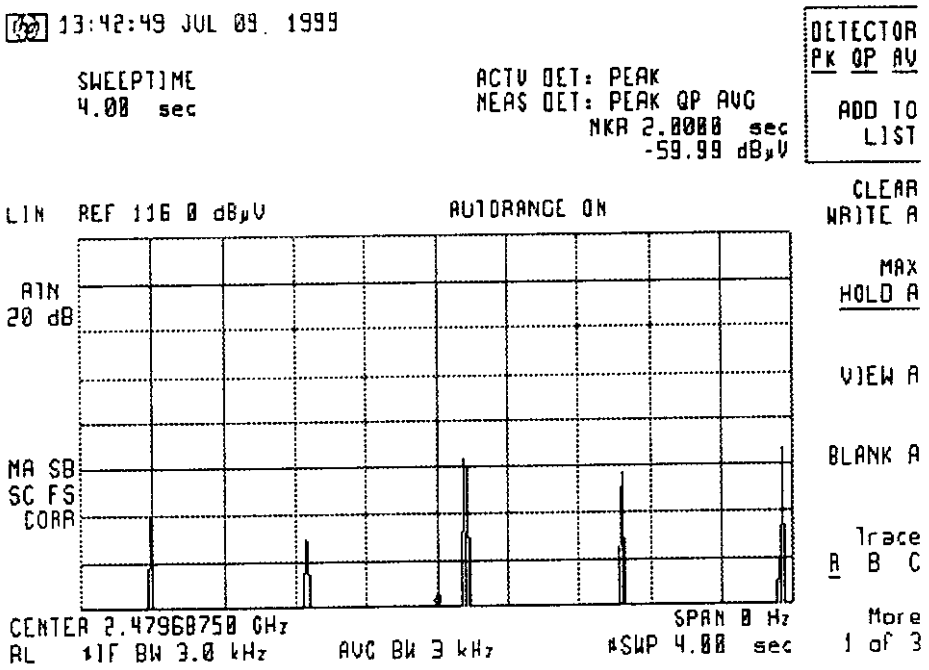




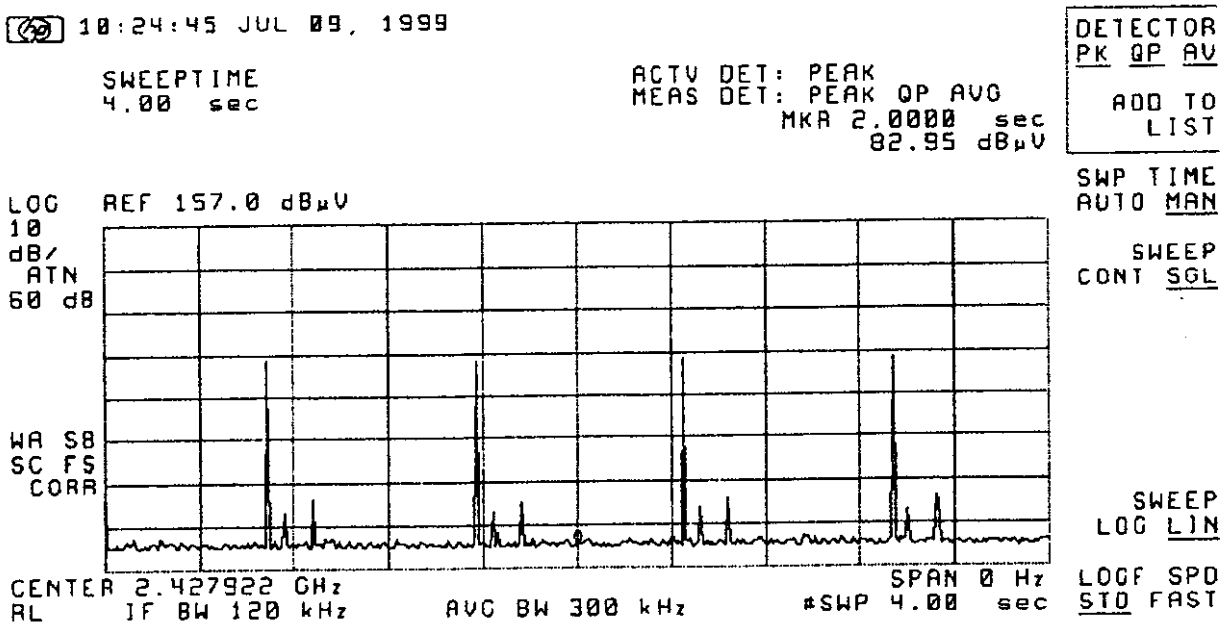
DATA READINGS

TYPE OF TEST: 15.247 (a)(1)(ii)
Channel Occupancy Time

15.247 (a)(1)(ii) Channel Occupancy Time (Handset)

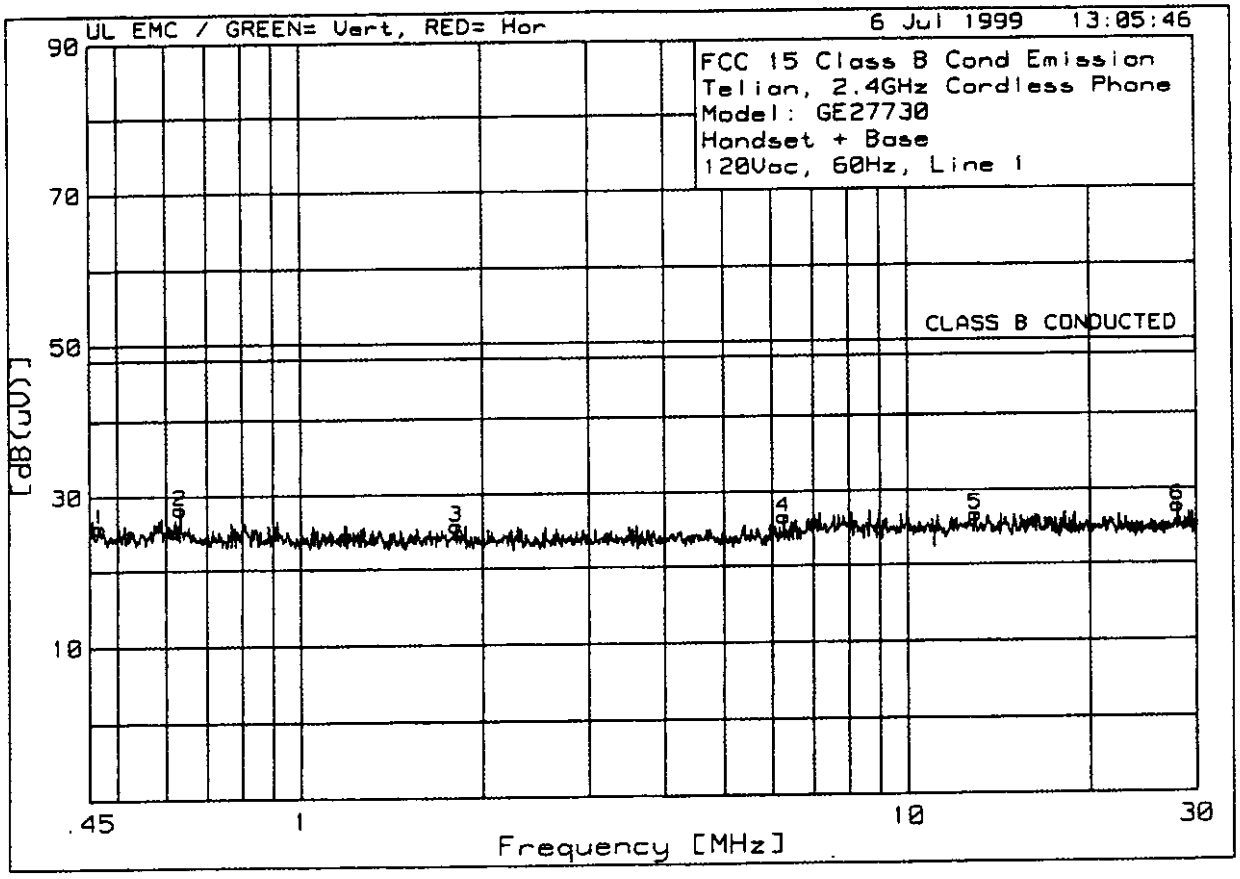


Screen Capture - captured on 7/9/99 10:24:43 AM



DATA READINGS

TYPE OF TEST: 15.207 (a)
AC Conducted Measurements


UL EMC / GREEN= Vert, RED= Hor
6 Jul 1999 13:05:46
FCC 15 Class B Cond Emission
Telian, 2.4GHz Cordless Phone
Model: GE27730
Handset + Base
120Vac, 60Hz, Line 1
CLASS B CONDUCTED
90
70
50
30
10
[dB(uV)]
.45
1
10
30
Frequency [MHz]

UL EMC / GREEN= Vert, RED= Hor

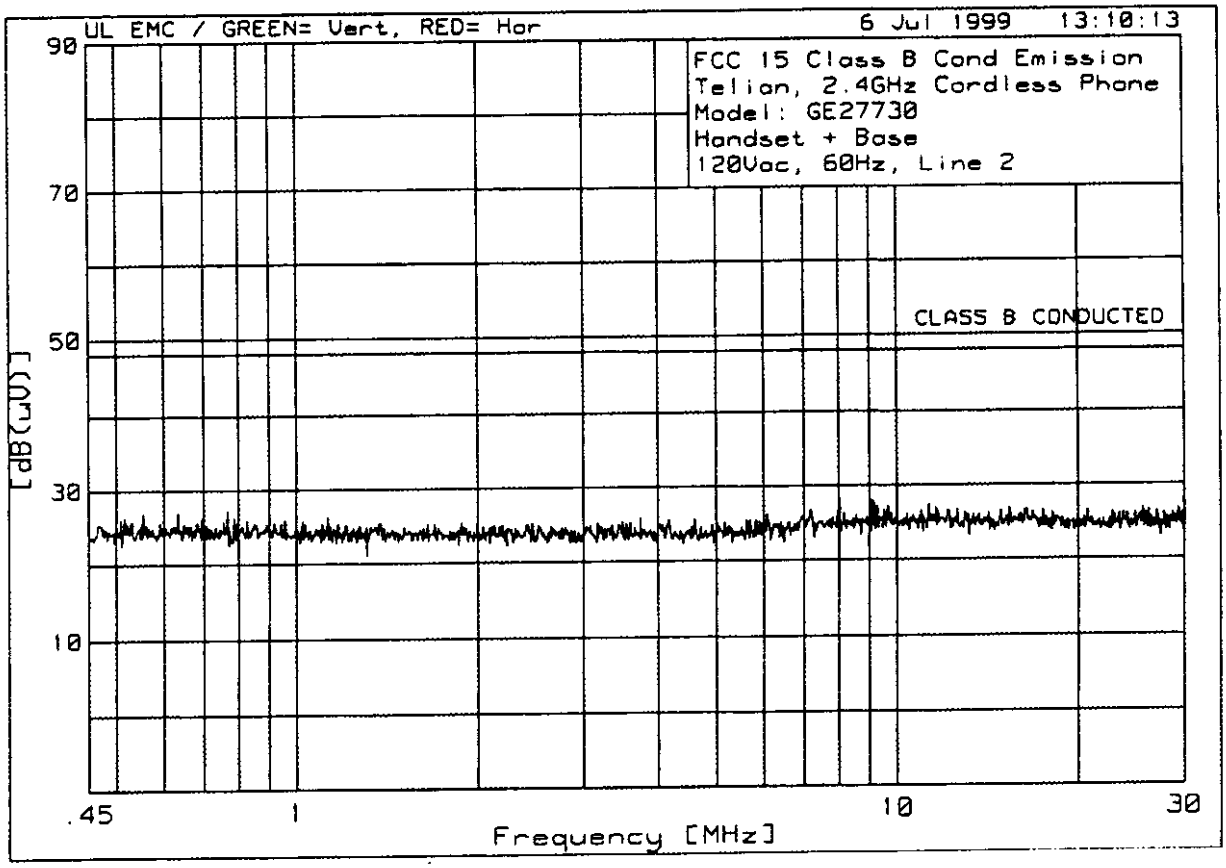
Date Tested: 6 Jul 1999
13:05:46

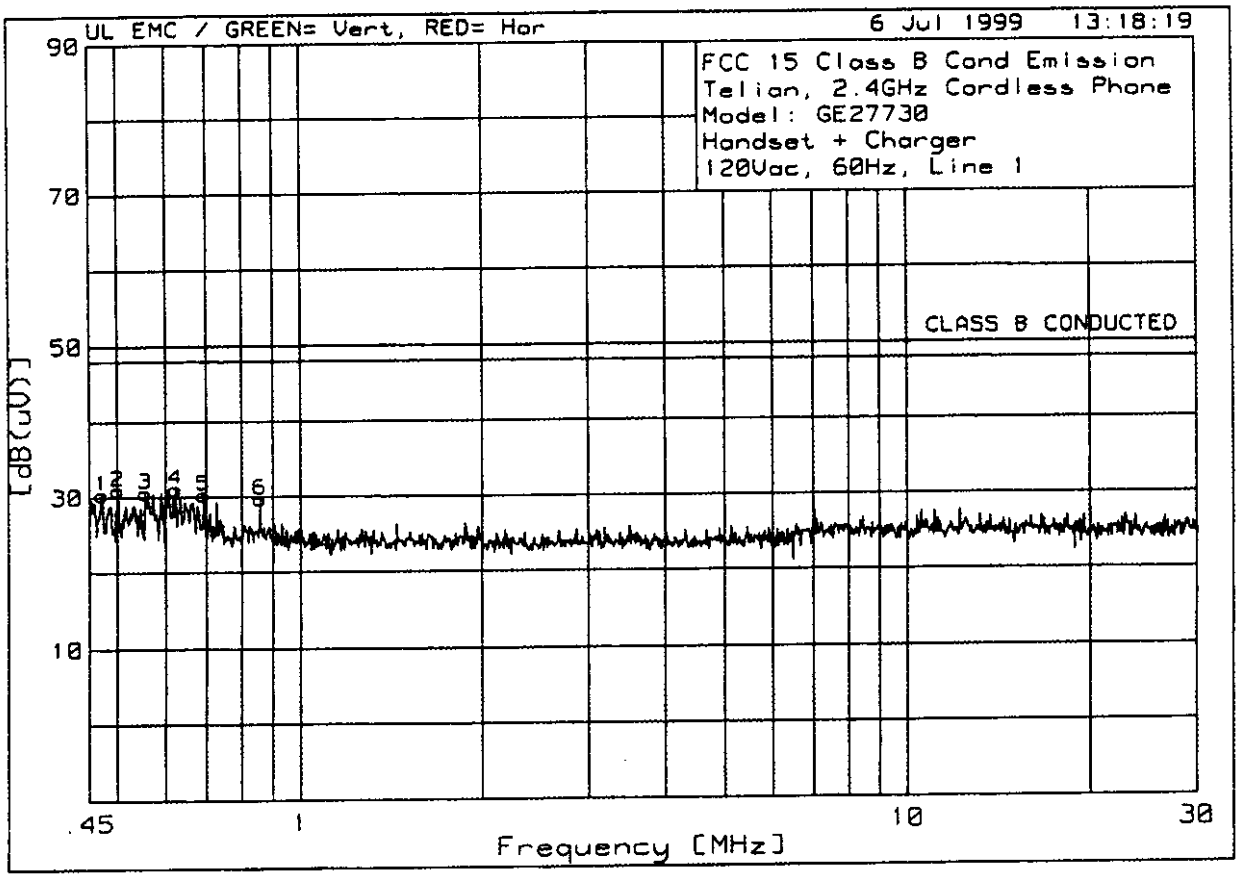
Telian, 2.4GHz Cordless Phone
Model: GE27730
Handset + Base
120Vac, 60Hz, Line 1

MARKER NO.	TEST FREQUENCY [MHz]	METER READING [dB(uV)]	GAIN/LOSS FACTOR [dB]	TRANSDUCER FACTOR [dB]	LEVEL [dB(uV)]	LIMIT:1	2	3	4
1	.46827	15.6 pk	.2	10	25.8	48	N/A	N/A	N/A
2	.63269	18 pk	.2	10	28.2	48	N/A	N/A	N/A
3	1.80674	15.4 pk	.3	10	25.7	48	N/A	N/A	N/A
4	6.26602	15.9 pk	.5	10.1	26.5	48	N/A	N/A	N/A
5	12.93995	15.7 pk	.8	10.1	26.6	48	N/A	N/A	N/A
6	27.92299	16.3 pk	1.2	10.1	27.6	48	N/A	N/A	N/A

pk - Peak detector
qp - Quasi-peak detector

LIMIT 1 : CLASS B CONDUCTED
LIMIT 2 : NONE
LIMIT 3 : NONE
LIMIT 4 : NONE


UL EMC / GREEN= Vert, RED= Hor
6 Jul 1999 13:10:13
FCC 15 Class B Cond Emission
Telian, 2.4GHz Cordless Phone
Model: GE27730
Handset + Base
120Vac, 60Hz, Line 2
CLASS B CONDUCTED
90
70
50
30
10
[dB(uV)]
.45
1
10
30
Frequency [MHz]


UL EMC / GREEN= Vert, RED= Hor
6 Jul 1999 13:18:19
FCC 15 Class B Cond Emission
Telian, 2.4GHz Cordless Phone
Model: GE27730
Handset + Charger
120Vac, 60Hz, Line 1
CLASS B CONDUCTED
90
70
50
30
10
[dB(uV)]
1
2
3
4
5
6
.45
1
10
30
Frequency [MHz]

UL EMC / GREEN= Vert, RED= Hor

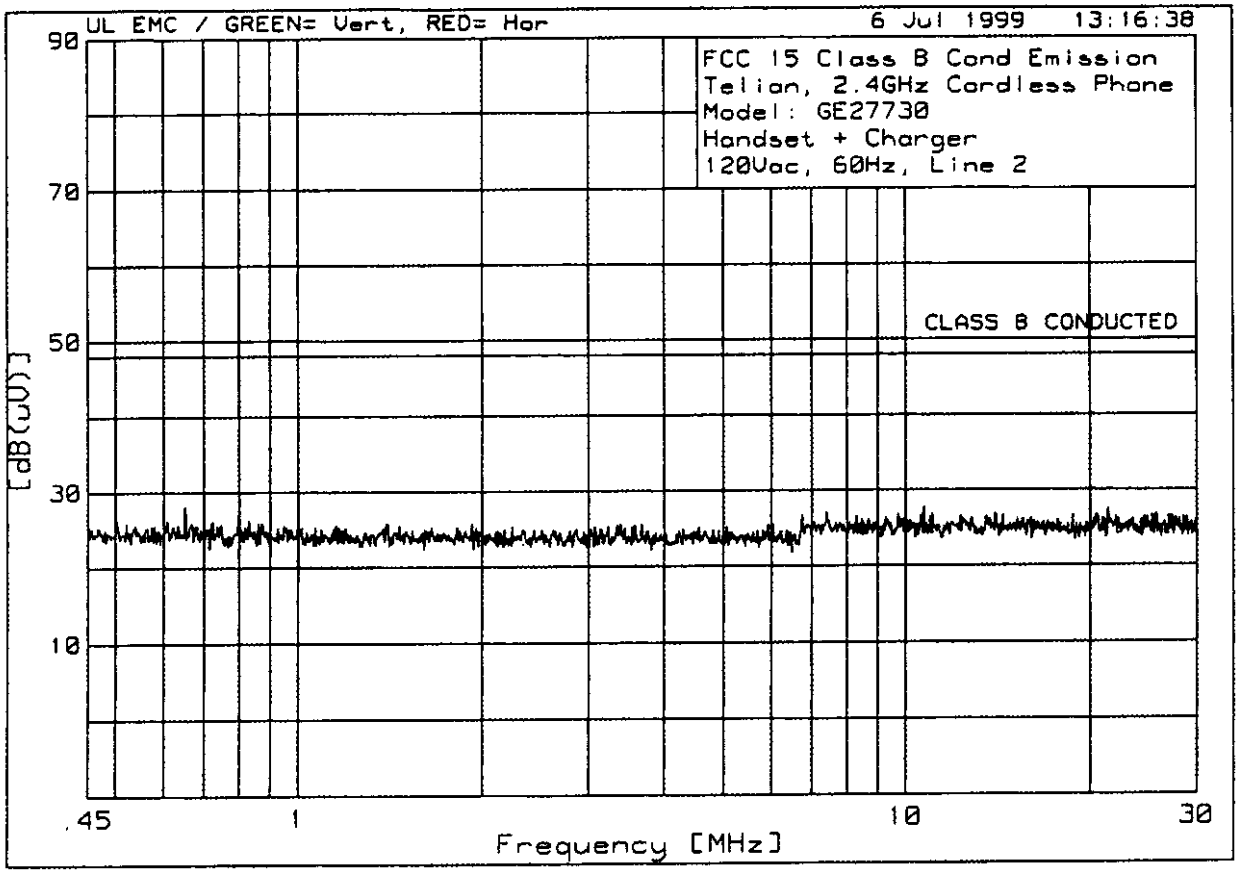
Date Tested: 6 Jul 1999
13:18:19

Telian, 2.4GHz Cordless Phone
Model: GE27730
Handset + Charger
120Vac, 60Hz, Line 1

MARKER NO.	TEST FREQUENCY [MHz]	METER READING [dB(uV)]	GAIN/LOSS FACTOR [dB]	TRANSDUCER FACTOR [dB]	LEVEL [dB(uV)]	LIMIT:1	2	3	4
1	.47192	20.2 pk	.2	10	30.4	48	N/A	N/A	N/A
2	.50115	20.8 pk	.2	10	31	48	N/A	N/A	N/A
3	.55596	20.4 pk	.2	10	30.6	48	N/A	N/A	N/A
4	.62356	20.9 pk	.2	10	31.1	48	N/A	N/A	N/A
5	.69298	20.1 pk	.2	10	30.3	48	N/A	N/A	N/A
6	.85811	19.5 pk	.2	10	29.7	48	N/A	N/A	N/A

pk - Peak detector
qp - Quasi-peak detector

LIMIT 1 : CLASS B CONDUCTED
LIMIT 2 : NONE
LIMIT 3 : NONE
LIMIT 4 : NONE


UL EMC / GREEN= Vert, RED= Hor
6 Jul 1999 13:16:38
FCC 15 Class B Cond Emission
Telian, 2.4GHz Cordless Phone
Model: GE27730
Handset + Charger
120Vac, 60Hz, Line 2
CLASS B CONDUCTED
90
70
50
30
10
dB(uV)
.45
1
10
30
Frequency [MHz]

APPENDIX H

TEST PROCEDURES

For a Copy, Contact:

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Fremont, CA 94538

or

UNDERWRITERS LABORATORIES INC.
Santa Clara Office
1655 Scott Boulevard
Santa Clara, CA 95050