Dear Mr. Greg Czumak,
The following is in response to Correspondence Reference Number: 10570.

1. The actual tuning range (low channel through hi channel) is 2.4033024 GHz – 2.4800256 GHz.

2. The unit is being authorized under the DoC procedure, please refer to pages 4 and 5 for the DoC provided with the VG 2400 System and a copy of the DoC label.

3. The hopping function was not disabled during the radiated emissions test when the Peak and Average measurements were made. However, when the Peak measurements were made the spectrum analyzer was put on MAX HOLD and the analyzer's bandwidth settings were RBW=VBW=1MHz. Now, to obtain the average level for comparison to the average limit the following mathematical correction will be made to the measured peak value 20log (dwell time per channel/100 ms). Please refer to page 6 for a table containing the results.

4. A. Each active handset will result in two transmit slots per frame (each 10ms frame consists of 24slots). The base station transmit two additional (beacon) slots, during the radiated emissions test, two handsets and one base station were used; therefore, 6/24 possible slots inside of the 10mS frame have been used 10*6/24=2.5mS dwell time for the system. The 2.5mS is the worst-case dwell time per channel for the EUT as it was tested.

   B. There could be a maximum of 10 handsets with one base station. The six of the ten handsets can communicate at the same time with the base station; therefore, 14/24 possible slots in side of the 10mS frame 10*14/24=5.33mS is the dwell time for maximum handsets that can be used with one base station. The 5.33mS is the worst-case dwell time per channel for the EUT with the maximum number of handsets.

5. The 20dB bandwidth was remeasured. Please refer to pages 7 and 8.

6. The base photo with the front enclosure removed did show a SMA connector; however, this connector was on the base station for testing purposes only and does not represent a typical production model. Two other pictures of the base station, PCB Side 1 and PCB Side 2, were submitted showing the antenna which will be on production units. In addition, the antenna in both the base station and the handset is permanently attached and is not accessible to the user.

7. The following is an example of the hopping pattern.

Carrier Index	Actual Carrier Frequency
0	2403302400
14	2417817600
41	2445811200
39	2443737600
72	2477952000
1	2404339200
32	2436480000
60	2465510400
16	2419891200
68	2473804800
33	2437516800
48	2453068800
35	2439590400
24	2428185600
40	2444774400
11	2414707200
67	2472768000
22	2426112000
3	2406412800
64	2469657600
74	2480025600
54	2459289600
12	2415744000
45	2449958400
13	2416780800
57	2462400000
37	2441664000
66	2471731200
36	2440627200
53	2458252800
9	2412633600
19	2423001600
61	2466547200
5	2408486400
25	2429222400
46	2450995200
2	2405376000
62	2467584000
17	2420928000
65	2470694400
8	2411596800
23	2427148800
51	2456179200
15	2418854400
49	2454105600
28	2432332800
71	2476915200
10	2413670400
63	2468620800

43	2447884800
27	2431296000
44	2448921600
34	2438553600
56	2461363200
29	2433369600
69	2474841600
55	2460326400
21	2425075200
7	2410560000
31	2435443200
58	2463436800
6	2409523200
47	2452032000
20	2424038400
70	2475878400
30	2434406400
52	2457216000
42	2446848000
4	2407449600
59	2464473600
73	2478988800
18	2421964800
50	2455142400
26	2430259200
38	2442700800

8 The RX hops at the same rate as the TX. The RX has the same bandwidth as the TX (matched filter) so the 20dB bandwidth is about 900kHz.

9 In the Ericsson's CG 2400 System, there is no coordination of frequency hopping to avoid the simultaneous occupancy of individual hopping by multiple transmitters.

10 Within 75 consecutive hops (750 ms) all 75 channels are used exactly once and thus equal on average if measured over a N * 750ms (30s = 40 * 750ms) period.

FYI – An RF exposure test has been performed on August 31, 1999 at Ericsson, Inc. – Research Triangle Park, North Carolina and a test report is available upon request.

DoC statement provide with the EUT

Compliance Information Statement

This device, trades name PC Cordless Phone System Model No. CG 2400 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.

The responsible party for this device compliance is:

Ericsson, Inc.
40 Pointe Drive
Brea, CA 92821
USA
714-672-5564

Note: This is to accompany the product either as a loose sheet in the box or in the instruction manual supplied with the product.

The following is a copy of the DoC label

(i) If the product is authorized under a Declaration of Conformity based on testing of the product or system:

PC Cordless Phone System Model No. CG 2400

Tested To Comply
With FCC Standards

FOR HOME OR OFFICE USE

The following table contains the radiated emission test results.
A mathematical correction was applied to the measured peak value in order to obtain an average level for comparison to the average limit. The mathematical correction was derived from 20 log (dwell time per channel/100ms). The dwell time per channel during the test was 2.5 ms; however, the worst case dwell time per channel is 5.33 ms. The worst case dwell time will be used in the mathematical correction: 20 log (5.33ms/100ms) = -25.5dB. The measured peak value will be corrected by 25.5 dB to obtain the average level.

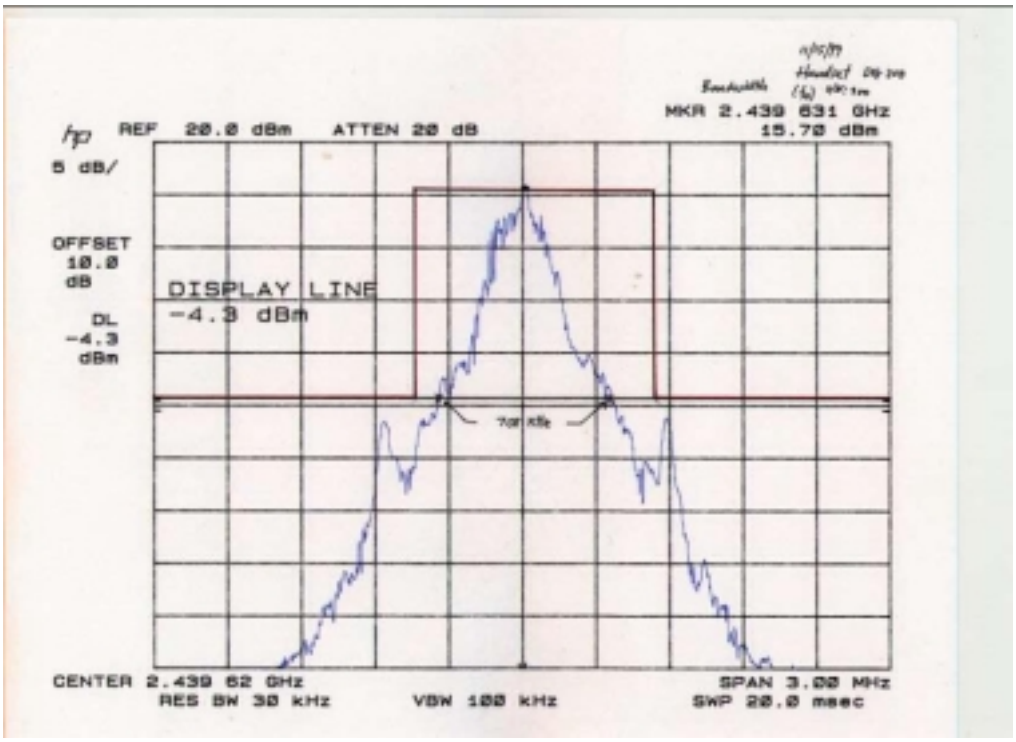
Test Results:

EUT: PC Cordless Phone System, Model No. CG2400
Test Requirement: Field Strength of Spurious Emissions from Intentional Radiators
(Reference: FCC PT.15, Subpart C, §15.247 (c))
Fundamental Frequency tuned at: 2400 – 2480 MHz
Measurement Test Distance: 3 meters
FCC Limit: (1)For harmonics/spurs that fall in the restricted bands as listed in §15.205(a) the limit is 54dBµV/m.
(2) All other harmonics/spurs must be at least 20 dB down from the highest emission level within the authorized band.

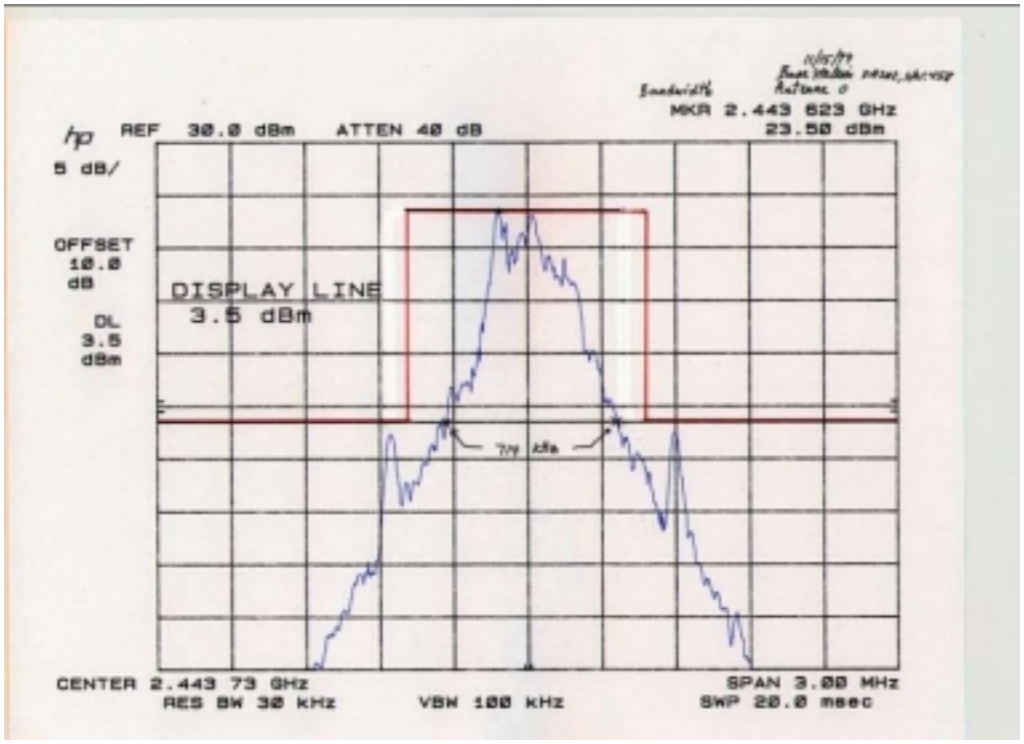
Antenna Polarity (V or H)	Frequency (GHz)	S.A. Reading (dBµV) Peak	Avg	Correction Factor (dB)	Corrected Peak Reading (dBµV/m)	Mathematical Correction Average (dBµV/m)	Peak Reading (dBc)	Average Delta to Limit (1)
V	2.4 - 2.48	89.3	-	30.9	120.2*	-	0	-
H	2.4 – 2.48	87.2	-	30.9	118.1	-	-	-
V	4.8 – 4.96	66.7	35.7	4.08	70.78	45.28	-49.42	-8.72
H	4.8 – 4.96	65.6	35.3	4.08	69.68	44.18	-50.52	-9.82
V	7.2 – 7.44	59.0	37.5	8.81	67.81	42.31	-52.39	-11.69
H	7.2 – 7.44	60.2	36.9	8.81	69.01	43.51	-51.19	-10.49
V	9.6 – 9.92	51.4	36.1	11.49	62.89	37.39	-57.31	-16.61
H	9.6 – 9.92	51.2	36.0	11.49	62.69	37.19	-57.51	-16.81
V	12.0 – 12.40	48.3	34.3	13.73	62.03	36.53	-58.17	-17.47
H	12.0 – 12.40	48.1	34.2	13.73	61.83	36.33	-58.37	-17.67
V	14.40 – 14.88	NDS	NDS	-	NDS	NDS	-	-
H	14.40 – 14.88	NDS	NDS	-	NDS	NDS	-	-
V	16.80 – 17.36	NDS	NDS	-	NDS	NDS	-	-
H	16.80 – 17.36	NDS	NDS	-	NDS	NDS	-	-
V	19.20 – 19.84	NDS	NDS	-	NDS	NDS	-	-
H	19.20 – 19.84	NDS	NDS	-	NDS	NDS	-	-
V	21.60 – 22.32	NDS	NDS	-	NDS	NDS	-	-
H	21.60 – 22.32	NDS	NDS	-	NDS	NDS	-	-
V	24.00 – 24.80	NDS	NDS	-	NDS	NDS	-	-
H	24.00 – 24.80	NDS	NDS	-	NDS	NDS	-	-

- All peak readings are with the specified bandwidth (RBW=VBW=1MHz) unless otherwise stated.

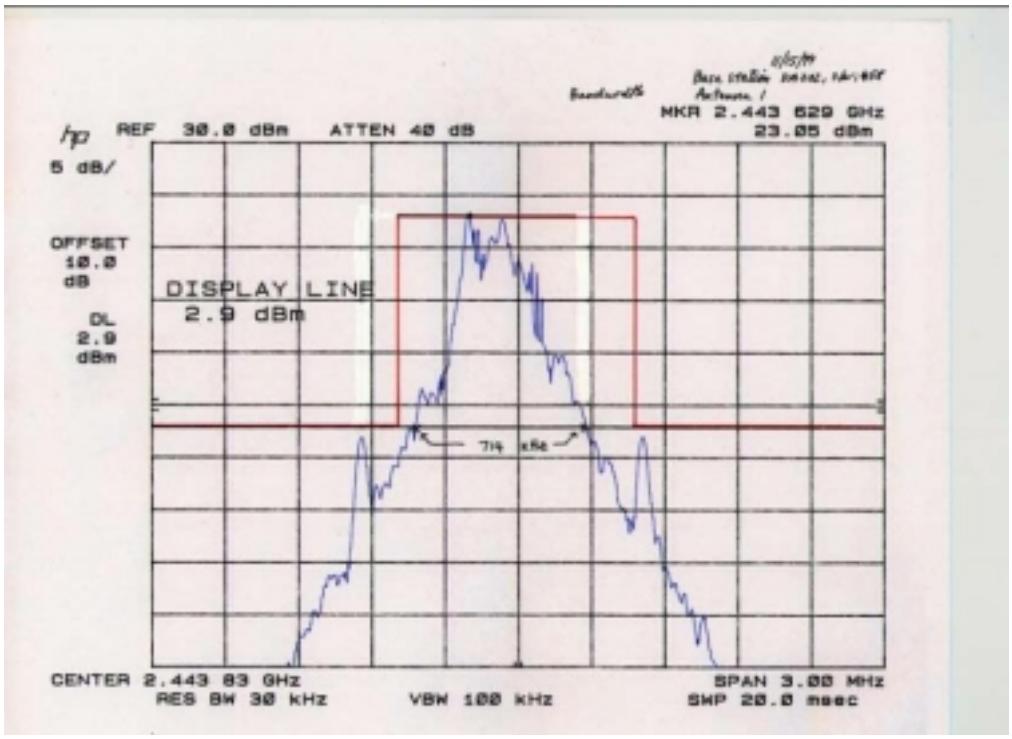
The 20dB bandwidth was remeasured. Several frequencies were investigated and the worst case plots were submitted. Measurements were made for the Handset, and Base Station Antenna ports 0 and 1. The following spectrum analyzer settings were used. RBW=30kHz, VBW>RBW, span = 3MHz.



Plot for the Handset frequency 2.43962GHz



Plot for the Base Station Antenna port 0 frequency 2.44373GHz



Plot for the Base Station Antenna port 1 frequency 2.44383GHz