

FCC PART 15 Subpart C
EMI MEASUREMENT AND TEST REPORT

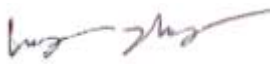

For

Continental Conair Limited

35/F Standard Chartered Tower
Millennium City, 388 Kwun Tong Road
Kwun Tong, Kowloon, HK

FCC ID: LBBGH3100

2004-04-22

| | |
|--|---|
| This Report Concerns: <input checked="" type="checkbox"/> Original Report | Equipment Type: 2.4GHz Cordless Phone |
| Test Engineer: <u>Ling Zhang/</u>  | |
| Report No.: <u>R0403232(Base)</u> | |
| Test Date: <u>2004-04-08</u> | |
| Reviewed By: <u>Hans Mellberg/</u>  | |
| Prepared By: Bay Area Compliance Laboratory Corporation 230 Commercial Street Sunnyvale, CA 94085 Tel (408) 732-9162 Fax (408) 732-9164 | |

Note: This test report is specially limited to the above client company and the product model only. It may not be duplicated without prior written consent of Bay Area Compliance Laboratory Corporation. This report **must not** be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government.

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GENERAL INFORMATION

Product Description for Equipment Under Test (EUT)

The Continental Conair Limited's product, model name: GH3150(XXXXX), GH3110(XXXXX), GH301WCS and GH3100(XXXXX) where 'X' may be some alphabet representing color code and packing information, the "EUT" as referred to in this report are Base, 2.4GHz Cordless Phone. The EUT was composed of two parts, one is a Handset and the other is a Base. This report is for Base only.

GH3150(XXXXX) which measures approximately 180mmL x 55mmW x 40mmH.
GH3110(XXXXX) which measures approximately 122mmL x 122mmW x 110mmH.
GH3100(XXXXX) which measures approximately 122mmL x 122mmW x 110mmH.

GH3150(XXXXX) and GH3110(XXXXX)'s base are identical in construction, dimensions, and electrical circuits. The main modification for GH3110(XXXXX) is the removal of additional answer machine feature, Base Main PCB and Base unit were changed and some components were removed on the base unit.

GH3100(XXXXX) and GH3110(XXXXX)'s base are identical in all design.

** The test data gathered are from production sample, serial number: GH3150OR1/GH3110R1/GH3100R1, provided by the manufacturer.*

Objective

This document is a test report based on the Electromagnetic Interference (EMI) tests performed on the EUT. The EMI measurements were performed according to the measurement procedure described in ANSI C63.4 - 2001.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, section 15.205, 15.207, 15.249, 15.203 and 15.209 rules.

Related Submittal(s)/Grant(s)

No Related Submittals

Test Methodology

All measurements contained in this report were conducted with ANSI C63.4 - 2001, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz. All radiated and conducted emissions measurement was performed at Bay Area Compliance Laboratory, Corp.

Test Facility

The Open Area Test site used by Bay Area Compliance Laboratory Corporation to collect radiated and conducted emission measurement data is located in the back parking lot of the building at 230 Commercial Street, Sunnyvale, California, USA.

Test site at Bay Area Compliance Laboratory Corporation has been fully described in reports submitted to the Federal Communication Commission (FCC) and Voluntary Control Council for Interference (VCCI). The details of these reports has been found to be in compliance with the requirements of Section 2.948 of the FCC Rules and Article 8 of the VCCI regulations. The facility also complies with the test methods and procedures set forth in ANSI C63.4-2001.

The Federal Communications Commission and Voluntary Control Council for Interference has the reports on file and is listed under FCC file 31040/SIT 1300F2 and VCCI Registration No.: C-1298 and R-1234. The test site has been approved by the FCC and VCCI for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, Bay Area Compliance Laboratory Corporation is a National Institute of Standards and Technology (NIST) accredited laboratory, under the National Voluntary Laboratory Accredited Program (NVLAP). The scope of the accreditation covers the FCC Method - 47 CFR Part 15 - Digital Devices, CISPR 22:1997 and AS/NZS 3548: Electromagnetic Interference - Limits and Methods of Measurement of Information Technology Equipment test methods under NVLAP Lab Code 200167-0.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The EUT was configured for testing according to ANSI C63.4-2001.

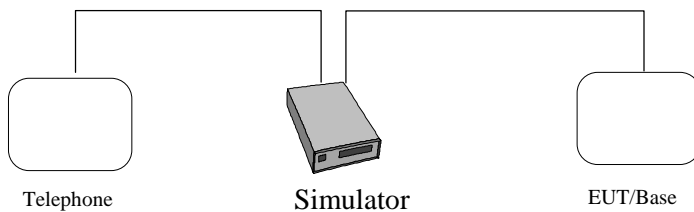
Base being tested: The Base unit was placed on the wooden table. The Low, and high channels were tested. The base was connected to the line simulator and an AC adapter via its Tel Line and power ports, respectively. The base was transmitting and receiving from the Handset. The conducted as well as radiated data was taken in this mode of operation. All initial and final investigations were performed with the EMI receiver in manual mode scanning the frequency range continuously. The cables were bundled and routed as shown in the section of configuration of test system.

Equipment Modifications

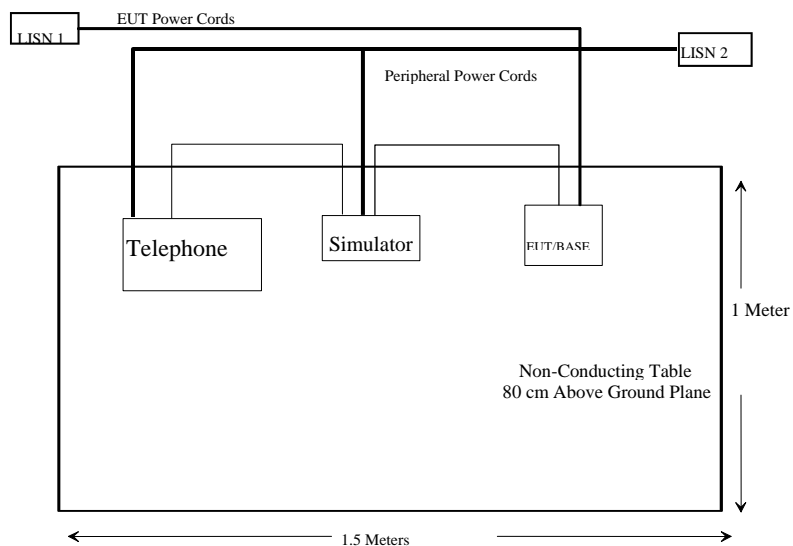
No modifications were made to the EUT.

Configuration of Test System

Setup for Base



Test Setup Block Diagram



Local Support Equipment List and Details

| Manufacturer | Description | Model | Serial Number | FCC ID |
|---------------------|--------------------|--------------|----------------------|---------------|
| Southern Telecom | Telephone | None | None | None |
| Teltone Corp | Simulator | TLS-3B-01 | 80071 | None |

External I/O Cabling List and Details

| Cable Description | Length (M) | Port/From | To |
|---------------------------|-------------------|-------------------|--------------------|
| None-Shielded RJ-11 Cable | 1.5 | RJ-11 Port/EUT | Simulator RJ11Port |
| None-Shielded RJ-11 Cable | 1.5 | Support telephone | Simulator RJ11Port |

Power Supply

| Manufacturer | Description | Model | Serial Number | FCC ID |
|---------------------|--------------------|--------------|----------------------|---------------|
| Southwestern Bell | AC Adaptor | DU41090045C | None | None |

SUMMARY OF TEST RESULTS

| FCC RULES | DESCRIPTION OF TEST | RESULT |
|-------------|------------------------------|-----------|
| §15.207 (a) | Conducted Emission | Compliant |
| §15.249 (a) | Radiated Emission | Compliant |
| §15.249 (c) | Band Edge Testing | Compliant |
| §15.203 | Antenna Requirement | Compliant |
| §15.205 | Restricted Band of Operation | Compliant |
| §15.214 | Cordless Telephone | Compliant |

§ 15.207 - CONDUCTED EMISSIONS TEST DATA

Measurement Uncertainty

All measurements involve certain levels of uncertainties. These uncertainties are attributed to: Spectrum analyzer, Cable loss, and LISN.

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the estimated uncertainty of any conducted emission measurement at BACL is ± 2.4 dB.

EUT Setup

The measurement was performed in the shielded room, using the same setup per ANSI C63.4-2001 measurement procedure. The specification used was FCC 15 Subpart C limits.

The spacing between the peripherals was 10 centimeters.

External I/O cables were draped along the edge of the test table and bundle as required.

The Power Adapter system was connected with 120Vac/60Hz power source.

Spectrum Analyzer Setup

The spectrum analyzer was set to investigate the spectrum from 150 kHz to 30MHz.

Test Equipment List and Details

| Manufacturer | Description | Model | Serial Number | Cal. Date |
|-----------------|----------------------|---------|---------------|------------|
| Rohde & Schwarz | Artificial LISN | ESH2-Z5 | 871884/039 | 2004-03-28 |
| Rohde & Schwarz | EMI Test Receiver | ESCS30 | 100176 | 2004-05-06 |
| Fluke | Calibrated Voltmeter | 189 | 18485-38 | 2003-07-18 |

* **Statement of Traceability: BACL Corp.** certifies that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

During the conducted emission test, the power cord of the host system was connected to the mains outlet of the LISN-1.

Maximizing procedure were performed on the six (6) highest emissions of the EUT.

All data was recorded in the peak detection mode, quasi-peak and average. Quasi-Peak readings are distinguished with an "QP". Average readings are distinguished with an "Ave".

Environmental Conditions

| | |
|--------------------|-----------|
| Temperature: | 15°C |
| Relative Humidity: | 78% |
| ATM Pressure: | 1016 mbar |

Summary of Test Results

According to the recorded data in following table, the EUT complies with the FCC Conducted limit for a Class B device, with the *worst* margin reading of:

Model: GH3150

-20.9 dB at 17.9 MHz in the **Neutral** mode

Model: GH3110 & GH3100

-34.2 dB at 4.10 MHz in the **Line** mode

Conducted Emissions Test Data (Model: GH3150)

| Frequency MHz | LINE CONDUCTED EMISSIONS | | | FCC CLASS B | |
|------------------|--------------------------|-------------------------|-----------------------|---------------------|--------------|
| | Amplitude dB μ V | Detector Qp/Ave/Peak | Phase Line/Neutral | Limit dB μ V | Margin dB |
| 17.9 | 29.1 | AVG | Neutral | 50 | -20.9 |
| 17.9 | 28.5 | AVG | Line | 50 | -21.5 |
| 4.1 | 16.2 | AVG | Line | 46 | -29.8 |
| 17.9 | 29.6 | QP | Neutral | 60 | -30.4 |
| 4.1 | 14.1 | AVG | Neutral | 46 | -31.9 |
| 17.9 | 27.6 | QP | Line | 60 | -32.4 |
| 0.62 | 16.4 | QP | Neutral | 56 | -39.6 |
| 4.1 | 16.3 | QP | Line | 56 | -39.7 |
| 16.2 | 19.4 | QP | Line | 60 | -40.6 |
| 4.1 | 14.0 | QP | Neutral | 56 | -42.0 |
| 16.2 | 7.9 | AVG | Line | 50 | -42.1 |
| 0.62 | 3.2 | AVG | Neutral | 46 | -42.8 |

Conducted Emissions Test Data (Model: GH3110 & GH3100)

| Frequency MHz | LINE CONDUCTED EMISSIONS | | | FCC CLASS B | |
|------------------|--------------------------|-------------------------|-----------------------|---------------------|--------------|
| | Amplitude dB μ V | Detector Qp/Ave/Peak | Phase Line/Neutral | Limit dB μ V | Margin dB |
| 4.10 | 11.8 | AVG | Line | 46 | -34.2 |
| 1.35 | 11.6 | AVG | Neutral | 46 | -34.4 |
| 8.10 | 18.9 | QP | Neutral | 60 | -41.1 |
| 8.13 | 8.3 | AVG | Line | 50 | -41.7 |
| 1.35 | 14.2 | QP | Neutral | 56 | -41.8 |
| 8.10 | 6.8 | AVG | Neutral | 50 | -43.2 |
| 4.10 | 11.2 | QP | Line | 56 | -44.8 |
| 0.17 | 7.3 | AVG | Line | 55 | -47.7 |
| 0.17 | 6.2 | AVG | Neutral | 55 | -48.8 |
| 0.17 | 15.6 | QP | Line | 65 | -49.4 |
| 8.13 | 8.5 | QP | Line | 60 | -51.5 |
| 0.17 | 9.9 | QP | Neutral | 65 | -55.1 |

Plot of Conducted Emissions Test Data

Plot of Conducted Emissions test data was presented hereinafter as reference.

Bay Area Compliance Laboratory Corp Class B

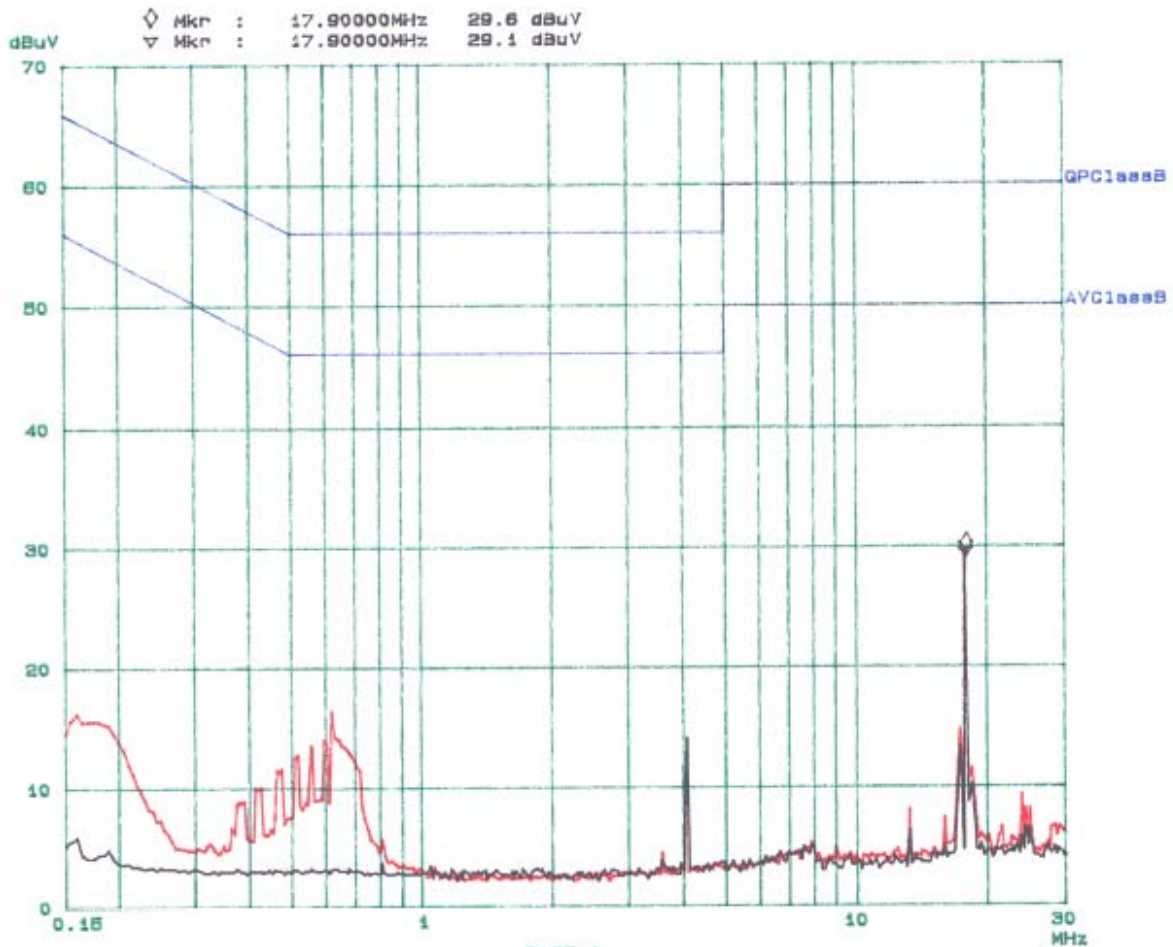
08. Apr 04 12:38

EUT: 9H3150
Manuf: CGT Telecom
Op Cond: Normal
Operator: LING
Comment: N

Scan Settings (3 Ranges)

| Frequencies | | | Receiver Settings | | | | |
|-------------|------|------|-------------------|----------|--------|---------|--------|
| Start | Stop | Step | IF BW | Detector | M-Time | Atten | Preamp |
| 150k | 1M | 5k | 9k | QP+AV | 20ms | 15dB LN | OFF |
| 1M | 5M | 10k | 9k | QP+AV | 1ms | 15dB LN | OFF |
| 5M | 30M | 100k | 9k | QP+AV | 1ms | 15dB LN | OFF |

Final Measurement: x QP / + AV
Meas Time: 1 s
Subranges: 25
Acc Margin: 6dB



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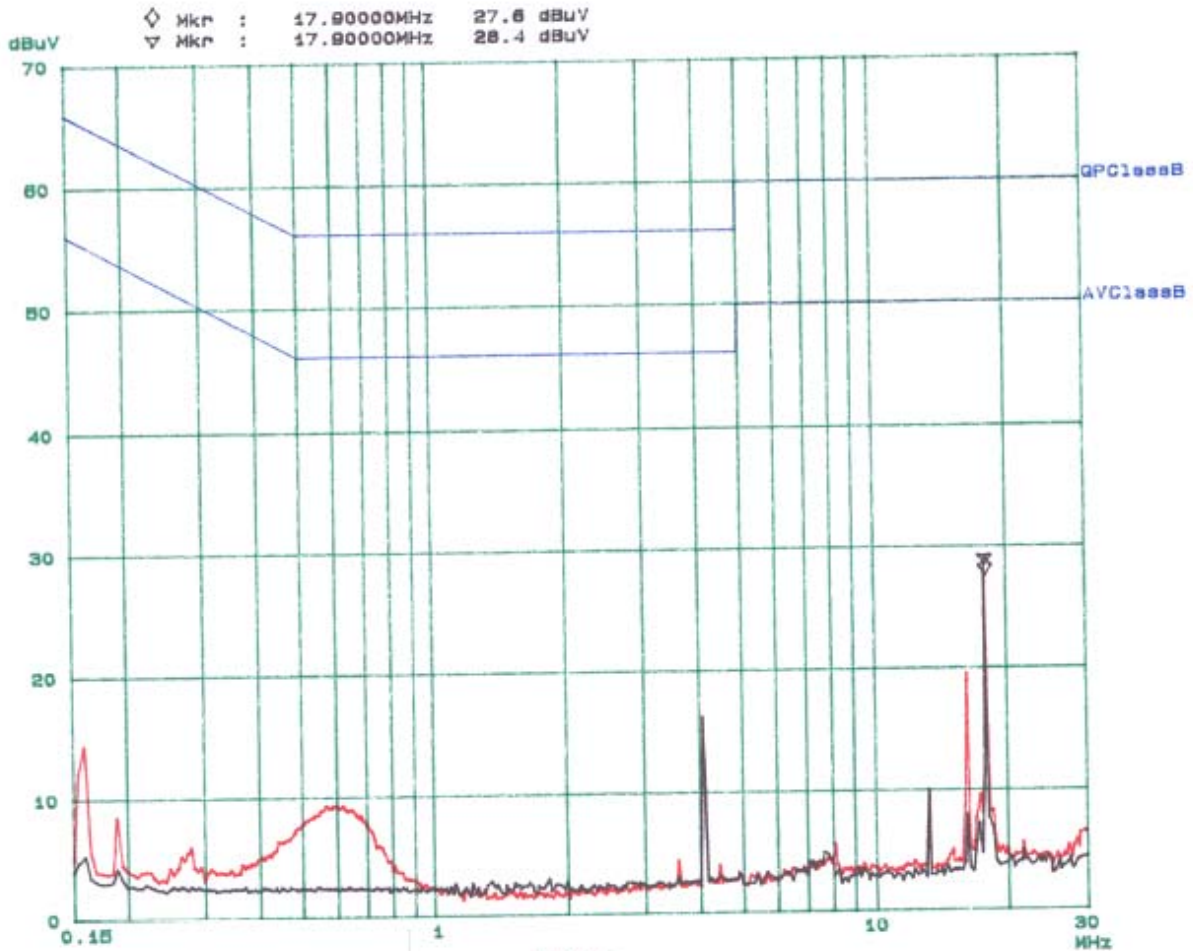
Bay Area Compliance Laboratory Corp Class B

08. Apr 04 09:54

EUT: GH3150
Manuf: CCT Telecom
Op Cond: Normal
Operator: LING
Comment: L

| Scan Settings (3 Ranges) | | | Receiver Settings | | | | | |
|--------------------------|------|------|-------------------|----------|--------|---------|--------|--|
| Start | Stop | Step | IF BW | Detector | M-Time | Atten | Preamp | |
| 150k | 1M | 5k | 9k | QP+AV | 20ms | 15dB LN | OFF | |
| 1M | 5M | 10k | 9k | QP+AV | 1ms | 15dB LN | OFF | |
| 5M | 30M | 100k | 9k | QP+AV | 1ms | 15dB LN | OFF | |

Final Measurement: x QP / + AV
Meas Time: 1 s
Subranges: 25
Acc Margin: 6dB



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Bay Area Compliance Laboratory Corp Class B

21. Apr 04 07:42

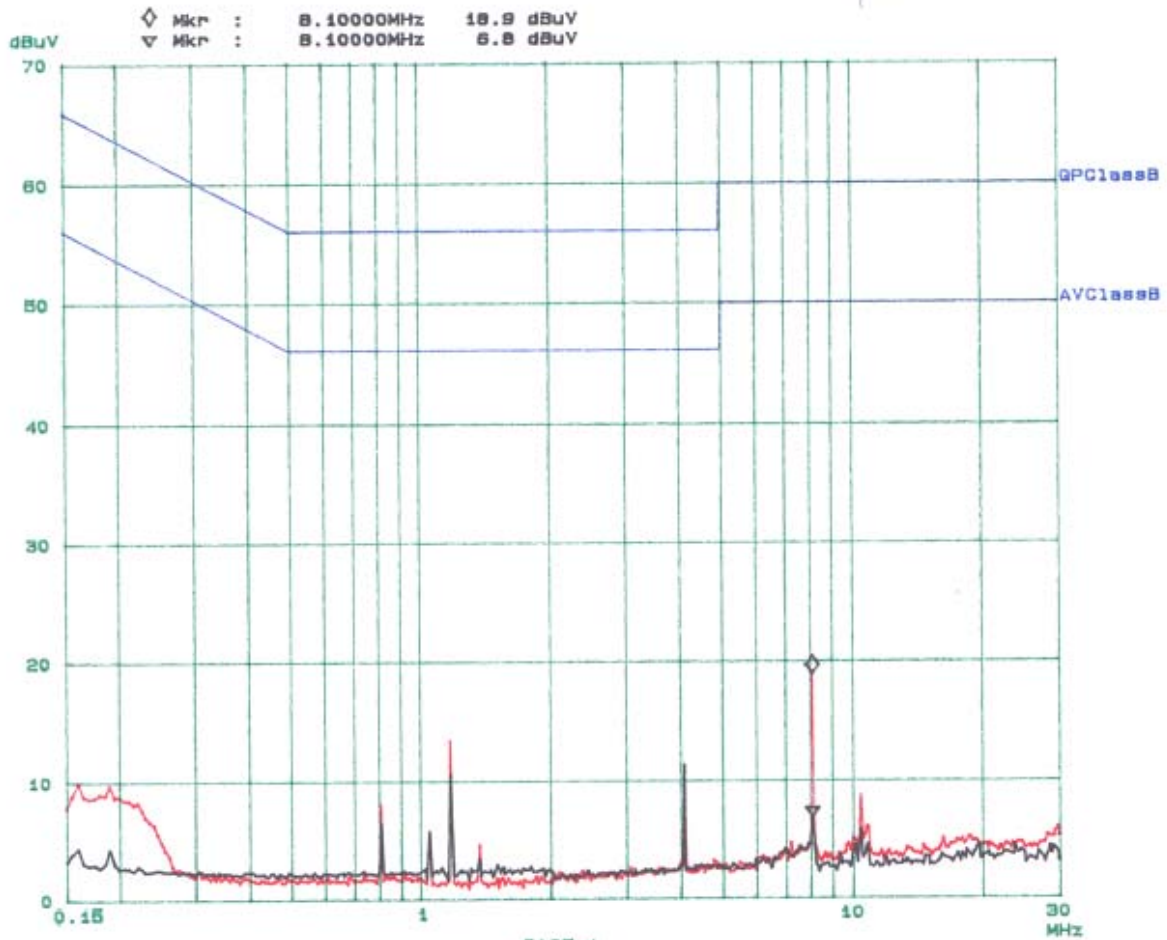
EUT: GH3110
Manuf: CCT
Op Cond: Normal
Operator: Ming
Comment: N

Scan Settings (3 Ranges)

| Frequencies | | | Receiver Settings | | | | | |
|-------------|------|------|-------------------|----------|--------|---------|--------|--|
| Start | Stop | Step | IF BW | Detector | M-Time | Atten | Preamp | |
| 150k | 1M | 5k | 9k | QP+AV | 20ms | 15dB LN | OFF | |
| 1M | 5M | 10k | 9k | QP+AV | 1ms | 15dB LN | OFF | |
| 5M | 30M | 100k | 9k | QP+AV | 1ms | 15dB LN | OFF | |

Final Measurement: x GP / + AV
Meas Time: 1 s
Subranges: 25
Acc Margin: 6dB

2004-4-20



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Bay Area Compliance Laboratory Corp Class B

21. Apr 04 08:02

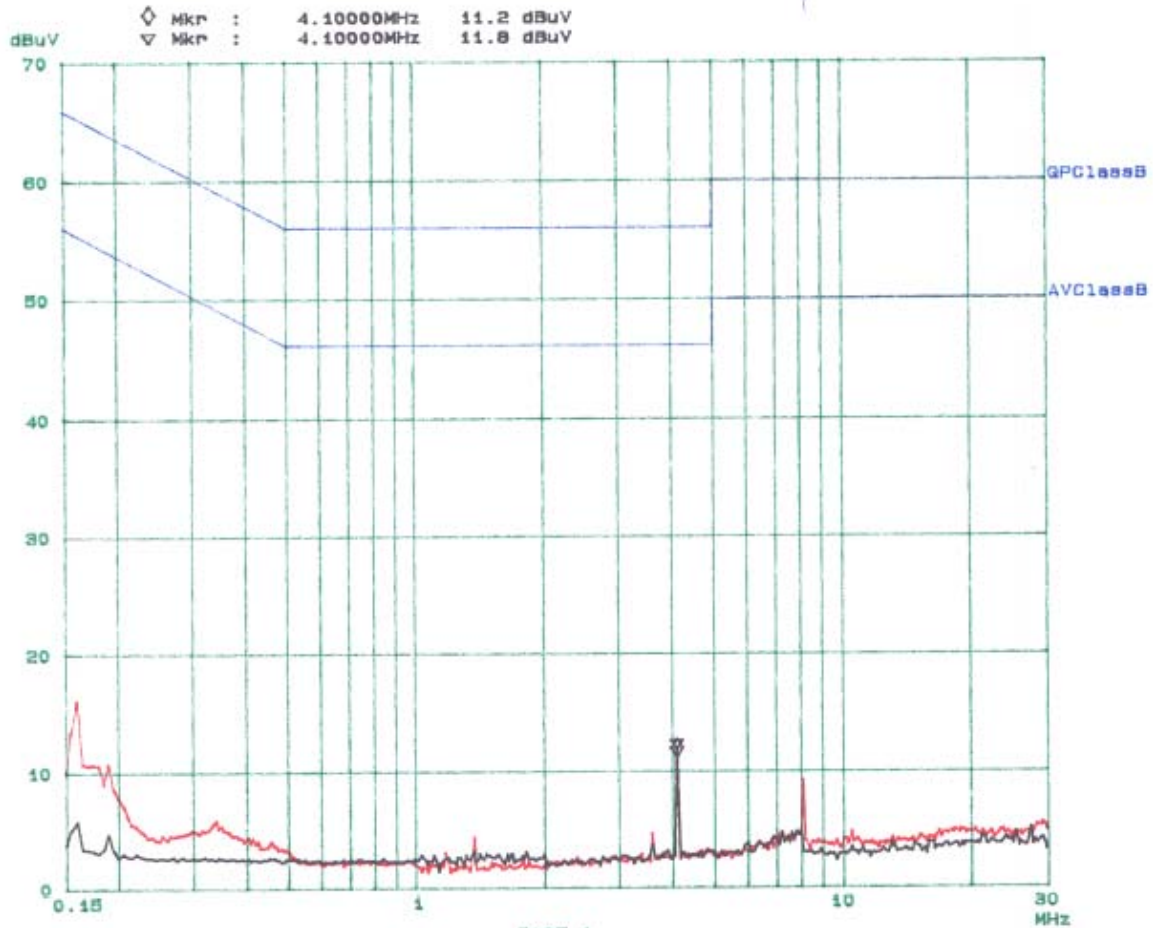
EUT: SH3110
Manuf: CCT
Op Cond: Normal
Operator: Ming
Comment: L

Scan Settings (3 Ranges)

| Frequencies | | | Receiver Settings | | | | |
|-------------|------|------|-------------------|----------|--------|---------|--------|
| Start | Stop | Step | IF BW | Detector | M-Time | Atten | Preamp |
| 150k | 1M | 5k | 9k | QP+AV | 20ms | 15dB LN | OFF |
| 1M | 5M | 10k | 9k | QP+AV | 1ms | 15dB LN | OFF |
| 5M | 30M | 100k | 9k | QP+AV | 1ms | 15dB LN | OFF |

Final Measurement: x QP / + AV
Meas Time: 1 s
Subranges: 25
Acc Margin: 6dB

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Bay Area Compliance Laboratory Corp Class B

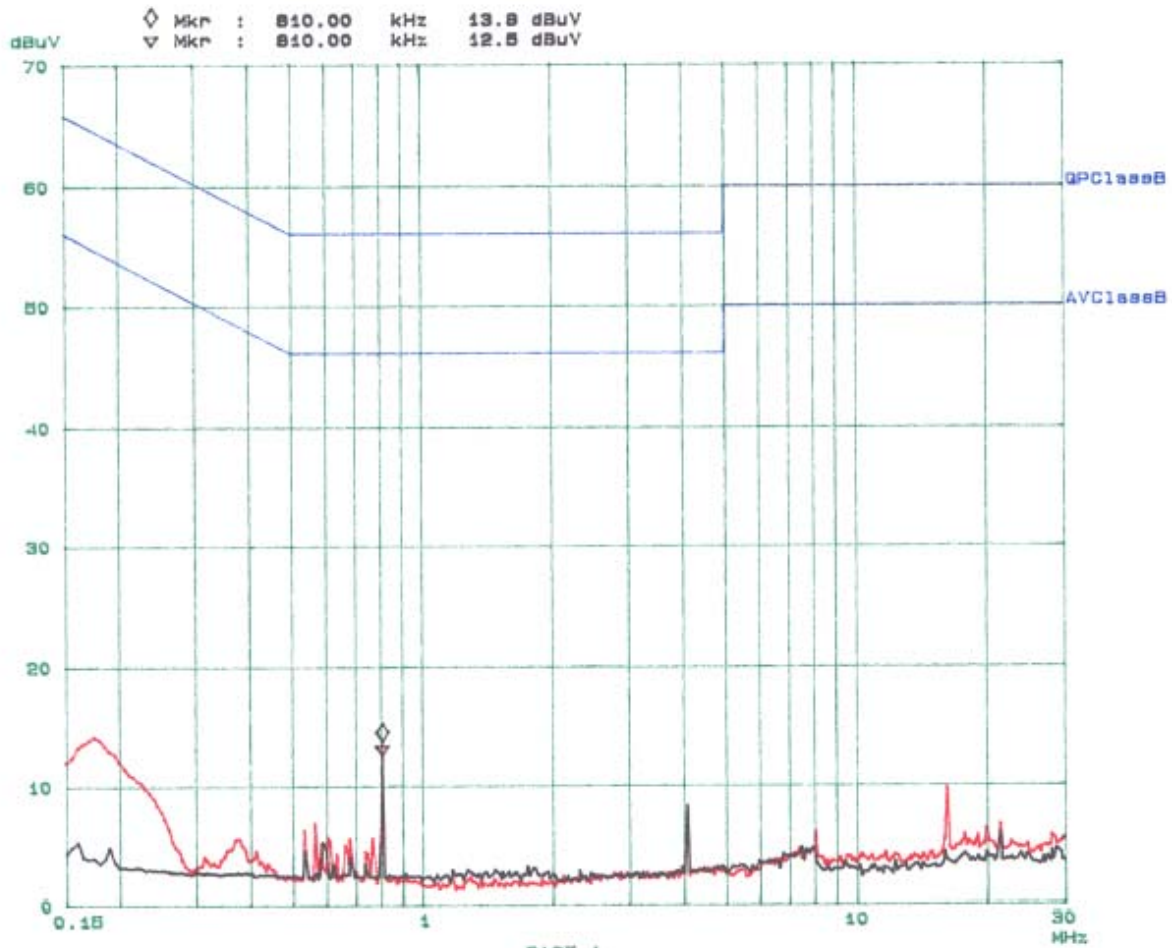
19. Apr 04 12:58

EUT: 0H3100
Manuf: CCT
Op Cond: Normal
Operator: Daniel
Comment: N

Scan Settings (3 Ranges)

| Frequencies | | | Receiver Settings | | | | |
|-------------|------|------|-------------------|----------|--------|---------|--------|
| Start | Stop | Step | IF BW | Detector | M-Time | Atten | Preamp |
| 150k | 1M | 5k | 9k | QP+AV | 20ms | 15dB LN | OFF |
| 1M | 5M | 10k | 9k | QP+AV | 1ms | 15dB LN | OFF |
| 5M | 30M | 100k | 9k | QP+AV | 1ms | 15dB LN | OFF |

Final Measurement: x QP / + AV
Meas Time: 1 s
Subranges: 25
Acc Margin: 6dB



Bay Area Compliance Laboratory Corp Class B

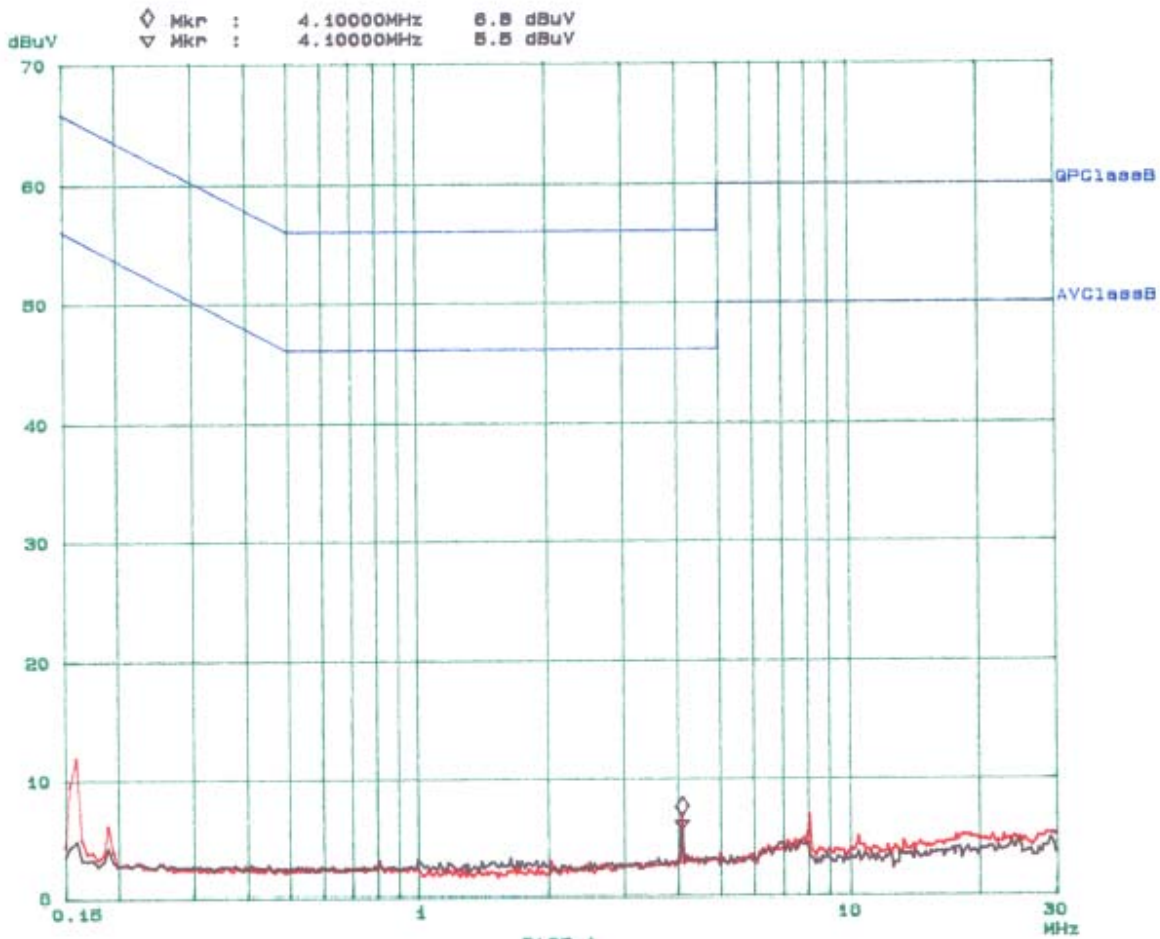
19. Apr 04 13:27

EUT: 0H2100
Manuf: CCT
Op Cond: Normal
Operator: Daniel
Comment: L

Scan Settings (3 Ranges)

| Frequencies | | | Receiver Settings | | | | |
|-------------|------|------|-------------------|----------|--------|---------|--------|
| Start | Stop | Step | IF BW | Detector | M-Time | Atten | Preamp |
| 150k | 1M | 5k | 9k | QP+AV | 20ms | 15dB LN | OFF |
| 1M | 5M | 10k | 9k | QP+AV | 1ms | 15dB LN | OFF |
| 5M | 30M | 100k | 9k | QP+AV | 1ms | 15dB LN | OFF |

Final Measurement: x QP / + AV
Meas Time: 1 s
Subranges: 25
Acc Margin: 8dB



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§15.209(a), §15.205 & §15.249 - RADIATED EMISSION DATA

Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of a radiation emissions measurement at BAEL is ± 4.0 dB.

EUT Setup

The radiated emission tests were performed in the open area 3-meter test site, using the setup in accordance with ANSI C63.4-2001. The specification used was the FCC 15 Subpart C limits.

The spacing between the peripherals was 10 centimeters.

External I/O cables were draped along the edge of the test table and bundle as required.

The host PC system was connected with 120Vac/60Hz power source.

Spectrum Analyzer Setup

According to FCC Rules, 47 CFR 15.33 (a) (1), the system was tested to 10GHz.

During the radiated emission test, the spectrum analyzer was set with the following configurations:

| <i>Frequency Range</i> | <i>RBW</i> | <i>Video B/W</i> |
|-------------------------------|-------------------|-------------------------|
| Below 30MHz | 10kHz | 10kHz |
| 30 – 1000MHz | 100kHz | 100kHz |
| Above 1000MHz | 1MHz | 1MHz |

Test Equipment List and Details

| Manufacturer | Description | Model | Serial Number | Cal. Date |
|---------------------|------------------------------|--------------|----------------------|------------------|
| HP | Spectrum Analyzer | 8568B | 2601A02165 | 2003-07-07 |
| HP | Spectrum Analyzer Display | 85662A | 3026A20081 | 2003-06-13 |
| HP | Quasi-Peak Adapter | 85650A | 3019A05393 | 2003-06-13 |
| Agilent | Amplifier | 8447D | 2944A10187 | 2003-09-23 |
| Electro-Metrics | Biconical Antenna | EM-6912 | 585 | 2004-04-17 |
| Electro-Metrics | Logperiodic Antenna | EM-6950 | 788 | 2004-04-15 |
| HP | Spectrum Analyzer | 8565EC | 3946A00131 | 2003-06-30 |

*** Statement of Traceability: BACL Corp.** certifies that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Environmental Conditions

| | |
|--------------------|-----------|
| Temperature: | 15 ° C |
| Relative Humidity: | 78% |
| ATM Pressure: | 1016 mbar |

Test Procedure

For the radiated emissions test, the power cord of the host system and all support equipment were connected to the AC floor outlet.

Maximizing procedure was performed on the six (6) highest emissions to ensure EUT is compliant with all installation combinations.

All data was recorded in the peak detection mode. Quasi-peak readings was performed only when an emission was found to be marginal (within -4 dB of specification limits), and are distinguished with a "Qp" in the data table.

Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

$$\text{Corr. Ampl.} = \text{Indicated Reading} + \text{Antenna Factor} + \text{Cable Factor} - \text{Amplifier Gain}$$

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB means the emission is 7dB below the maximum limit for applicable limits. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Corr. Ampl.} - \text{Applicable Limit}$$

Summary of Test Results

According to the recorded data in following table, the EUT complied with the FCC Title 47, Part 15, Subpart C, section 15.205, 15.209, and 15.249 after tested to 10th harmonics as required by FCC and had the worst margin of:

Model: GH3150

Base, 1GHz - 10GHz, 3 Meters

- 3.22 dB at 924.045 MHz in the Vertical polarization at Low Frequency
- 4.39 dB at 926.219 MHz in the Vertical polarization at High Frequency
- 5.69 dB at 266.680 MHz in the Horizontal polarization at Unintentional Emission

Model: GH3110 & GH3100

Base, 1GHz - 10GHz, 3 Meters

- 1.7 dB at 924.045 MHz in the Vertical polarization at Low Frequency
- 1.8 dB at 926.219 MHz in the Vertical polarization at High Frequency
- 8.2 dB at 261.990 MHz in the Horizontal polarization at Unintentional Emission

Radiated Emissions Test Result Data**Base Unit, 1GHz to 10GHz, 3 meters (For Model: GH3150)**

| INDICATED | | | TABLE Angle Degree | ANTENNA | | CORRECTION FACTOR | | | CORRECTED AMPLITUDE Corr. Ampl. dBμV/m | FCC 15 Subpart C | |
|---|-----------------|-----------|--------------------------|-----------------|--------------|-------------------|-------------|------------|---|---------------------|--------------|
| Frequency MHz | Ampl. dBμV/m | Comments | | Height Meter | Polar H/V | Antenna dBμV/m | Cable DB | Amp. dB | | Limit dBμV/m | Margin dB |
| Low Channel | | | | | | | | | | | |
| 924.045 | 91.67 | Fund/Peak | 270 | 1.8 | V | 23.4 | 4.03 | 28.32 | 90.78 | 94 | -3.22 |
| 924.045 | 88.67 | Fund/Peak | 0 | 1 | H | 23.4 | 4.03 | 28.32 | 87.78 | 94 | -6.22 |
| 1848.090 | 44.67 | Ave | 45 | 1.5 | V | 25.3 | 2.60 | 37 | 35.57 | 54 | -18.43 |
| 2772.135 | 36.83 | Ave | 60 | 1 | V | 29 | 3.68 | 35.64 | 33.87 | 54 | -20.13 |
| 2772.135 | 34.50 | Ave | 100 | 1.4 | H | 29 | 3.68 | 35.64 | 31.54 | 54 | -22.46 |
| 1848.090 | 39.17 | Ave | 100 | 1 | H | 25.3 | 2.60 | 37 | 30.07 | 54 | -23.93 |
| 2772.135 | 47.50 | Peak | 60 | 1 | V | 29 | 3.68 | 35.64 | 44.54 | 74 | -29.46 |
| 2772.135 | 46.17 | Peak | 100 | 1.4 | H | 29 | 3.68 | 35.64 | 43.21 | 74 | -30.79 |
| 1848.090 | 50.67 | Peak | 45 | 1.5 | V | 25.3 | 2.60 | 37 | 41.57 | 74 | -32.43 |
| 1848.090 | 48.33 | Peak | 100 | 1 | H | 25.3 | 2.60 | 37 | 39.23 | 74 | -34.77 |
| High Channel | | | | | | | | | | | |
| 926.219 | 90.5 | Fund/Peak | 270 | 2 | V | 23.4 | 4.03 | 28.32 | 89.61 | 94 | -4.39 |
| 926.219 | 90.5 | Fund/Peak | 270 | 2 | V | 23.4 | 4.03 | 28.32 | 89.61 | 94 | -4.39 |
| 926.219 | 87.83 | Fund/Peak | 0 | 1.1 | H | 23.4 | 4.03 | 28.32 | 86.94 | 94 | -7.06 |
| 926.219 | 87.83 | Fund/Peak | 0 | 1.1 | H | 23.4 | 4.03 | 28.32 | 86.94 | 94 | -7.06 |
| 1852.437 | 43.83 | Ave | 30 | 1.4 | V | 25.3 | 2.60 | 37 | 34.73 | 54 | -19.27 |
| 2778.656 | 37.33 | Ave | 60 | 1 | V | 29 | 3.68 | 35.64 | 34.37 | 54 | -19.63 |
| 2778.656 | 37 | Ave | 90 | 1.8 | H | 29 | 3.68 | 35.64 | 34.04 | 54 | -19.96 |
| 1852.437 | 38.2 | Ave | 100 | 1 | H | 25.3 | 2.60 | 37 | 29.10 | 54 | -24.90 |
| 2778.656 | 47.5 | Peak | 60 | 1 | V | 29 | 3.68 | 35.64 | 44.54 | 74 | -29.46 |
| 2778.656 | 47.5 | Peak | 90 | 1.8 | H | 29 | 3.68 | 35.64 | 44.54 | 74 | -29.46 |
| 1852.437 | 50.17 | Peak | 30 | 1.4 | V | 25.3 | 2.60 | 37 | 41.07 | 74 | -32.93 |
| 1852.437 | 46.5 | Peak | 100 | 1 | H | 25.3 | 2.60 | 37 | 37.40 | 74 | -36.60 |
| Unintentional Emission, 30MHz to 1000MHz | | | | | | | | | | | |
| 266.680 | 52.67 | / | 80 | 1.4 | H | 13.4 | 2.2 | 27.96 | 40.31 | 46 | -5.69 |
| 262.142 | 51.17 | / | 330 | 1.5 | H | 13.4 | 2.2 | 27.96 | 38.81 | 46 | -7.19 |
| 262.112 | 50.50 | / | 100 | 2 | V | 13.4 | 2.2 | 27.96 | 38.14 | 46 | -7.86 |
| 266.657 | 49.50 | / | 200 | 2.2 | V | 13.4 | 2.2 | 27.96 | 37.14 | 46 | -8.86 |
| 460.680 | 38.33 | / | 30 | 1 | V | 17.5 | 3 | 28.66 | 30.17 | 46 | -15.83 |
| 460.313 | 35.50 | / | 0 | 1.6 | H | 17.5 | 3 | 28.66 | 27.34 | 46 | -18.66 |

Ave.: Average
Fund: Fundamental

Note: This test was performed by placing the handset on 3 orthogonal axis.

Base Unit, 1GHz to 10GHz, 3 meters (For Model: GH3110 & GH3100)

| INDICATED | | | TABLE | ANTENNA | | CORRECTION FACTOR | | | CORRECTED AMPLITUDE | FCC 15 Subpart C | |
|---|--------------------|----------|--------------|--------------|------------|----------------------|----------|---------|--------------------------|--------------------|-----------|
| Frequency MHz | Ampl. dB μ V/m | Comments | Angle Degree | Height Meter | Polar H/ V | Antenna dB μ V/m | Cable DB | Amp. dB | Corr. Ampl. dB μ V/m | Limit dB μ V/m | Margin dB |
| Low Channel | | | | | | | | | | | |
| 924.045 | 93.2 | Fund/QP | 30 | 1.5 | V | 23.4 | 4.0 | 28.3 | 92.3 | 94 | -1.7 |
| 924.045 | 89.9 | Fund/QP | 0 | 1.2 | H | 23.4 | 4.0 | 28.3 | 89.0 | 94 | -5.0 |
| 1848.090 | 50.3 | Peak | 45 | 1.5 | V | 25.3 | 2.6 | 37.1 | 41.1 | 74 | -32.9 |
| 1848.090 | 48.3 | Peak | 100 | 1.6 | H | 25.3 | 2.6 | 37.1 | 39.1 | 74 | -34.9 |
| 1848.090 | 44.5 | Ave | 45 | 1.5 | V | 25.3 | 2.6 | 37.1 | 35.3 | 54 | -18.7 |
| 1848.090 | 39.1 | Ave | 100 | 1.6 | H | 25.3 | 2.6 | 37.1 | 29.9 | 54 | -24.1 |
| 2772.135 | 47.3 | Peak | 30 | 1.5 | V | 29.0 | 3.7 | 35.6 | 44.4 | 74 | -29.6 |
| 2772.135 | 44.7 | Peak | 90 | 1.4 | H | 29.0 | 3.7 | 35.6 | 41.8 | 74 | -32.2 |
| 2772.135 | 37.4 | Ave | 30 | 1.5 | V | 29.0 | 3.7 | 35.6 | 34.5 | 54 | -19.5 |
| 2772.135 | 35.5 | Ave | 90 | 1.4 | H | 29.0 | 3.7 | 35.6 | 32.6 | 54 | -21.4 |
| High Channel | | | | | | | | | | | |
| 926.219 | 93.1 | Fund/QP | 270 | 1.2 | V | 23.4 | 4.0 | 28.3 | 92.2 | 94 | -1.8 |
| 926.219 | 89.7 | Fund/QP | 0 | 1.1 | H | 23.4 | 4.0 | 28.3 | 88.8 | 94 | -5.2 |
| 1852.437 | 50.4 | Peak | 310 | 1.5 | V | 25.3 | 2.6 | 37.1 | 41.2 | 74 | -32.8 |
| 1852.437 | 48.1 | Peak | 120 | 1.0 | H | 25.3 | 2.6 | 37.1 | 38.9 | 74 | -35.1 |
| 1852.437 | 43.2 | Ave | 310 | 1.5 | V | 25.3 | 2.6 | 37.1 | 34.0 | 54 | -20.0 |
| 1852.437 | 39.3 | Ave | 120 | 1.0 | H | 25.3 | 2.6 | 37.1 | 30.1 | 54 | -23.9 |
| 2778.656 | 47.4 | Peak | 0 | 1.2 | V | 29.0 | 3.7 | 35.6 | 44.5 | 74 | -29.5 |
| 2778.656 | 44.9 | Peak | 60 | 1.5 | H | 29.0 | 3.7 | 35.6 | 42.0 | 74 | -32.0 |
| 2778.656 | 37.3 | Ave | 0 | 1.2 | V | 29.0 | 3.7 | 35.6 | 34.4 | 54 | -19.6 |
| 2778.656 | 35.2 | Ave | 60 | 1.5 | H | 29.0 | 3.7 | 35.6 | 32.3 | 54 | -21.7 |
| Unintentional Emission, 30MHz to 1000MHz | | | | | | | | | | | |
| 261.990 | 50.2 | / | 60 | 1.8 | V | 13.4 | 2.2 | 28.0 | 37.8 | 46 | -8.2 |
| 266.730 | 49.1 | / | 270 | 2.0 | V | 13.4 | 2.2 | 28.0 | 36.7 | 46 | -9.3 |
| 460.520 | 38.7 | / | 120 | 1.5 | V | 17.5 | 3.0 | 28.7 | 30.5 | 46 | -15.5 |
| 261.840 | 50.9 | / | 310 | 1.6 | H | 13.4 | 2.2 | 28.0 | 38.5 | 46 | -7.5 |
| 266.730 | 52.7 | / | 90 | 1.5 | H | 13.4 | 2.2 | 28.0 | 40.3 | 46 | -5.7 |
| 459.920 | 35.5 | / | 45 | 1.2 | H | 17.1 | 3.0 | 28.6 | 27.0 | 46 | -19.0 |

Ave.: Average
Fund: Fundamental
QP: Quasi-Peak

Note: This test was performed by placing the handset on 3 orthogonal axis.

§15.249(c) – BAND-EDGE TESTING

Standard Applicable

Requirements: FCC 15.249 (c), the emission power at the START and STOP frequencies shall be at least 50 dB below the level of the fundamental or to the general radiated emission limits in FCC 15.209, whichever is the lesser attenuation.

Test Procedure

With the EUT's antenna attached, the EUT's radiated emission power was received by the test antenna which was connected to the spectrum analyzer with the START and STOP frequencies set to the EUT's operation band.

Test Equipment List and Details

| Manufacturer | Description | Model | Serial Number | Cal. Date |
|--------------|-------------------|--------|---------------|------------|
| HP | Spectrum Analyzer | 8565EC | 3946A00131 | 2003-06-30 |

* **Statement of Traceability: BACL Corp.** certifies that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

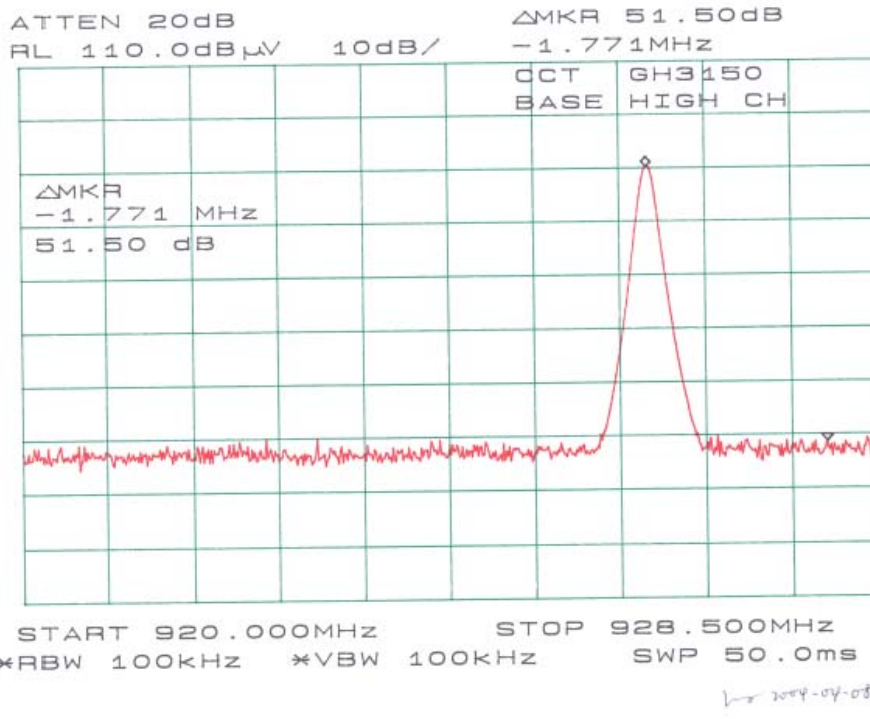
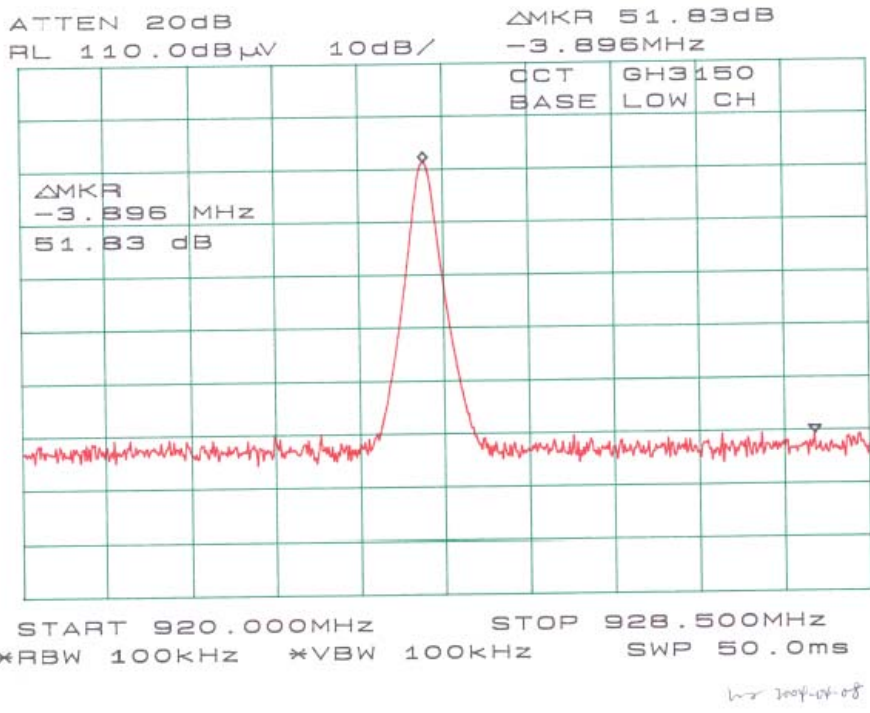
Environmental Conditions

| | |
|--------------------|-----------|
| Temperature: | 15 ° C |
| Relative Humidity: | 78% |
| ATM Pressure: | 1016 mbar |

Test Results

Refer to the attached plots.

Model: GH3150



Model: GH3110 & GH3100

