

FCC PART 95
EMI MEASUREMENT AND TEST REPORT

For

3M Peltor

5457 West 79th Street, Indianapolis, IN 46268, United States

FCC ID: Y9ZMT401050

Report Type: Original Report	Product Type: Programmable 2-way transceiver headset
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Report Number: R1DG120426006-00	
Report Date: 2012-05-23	
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Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. This report **must not** be used by the customer to claim product certification, approval, or endorsement by NVLAP*, or any agency of the Federal Government.

* This report contains data that are not covered by the NVLAP accreditation and are marked with an asterisk "★" (Rev.2)

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GENERAL INFORMATION

Product Description for Equipment Under Test (EUT)

The 3M Peltor's product, model number: *MT7H7P3E4010-NA-50 (FCC ID: Y9ZMT401050)* or the "EUT" as referred to in this report is a *Programmable 2-way transceiver headset*, named as Lite-Com Pro II by applicant. The EUT is measured approximately: 24.2 cm (L) x 17.2 cm (W) x 9.5 cm (H), rated input voltage: DC 3.7V Battery.

**Note: The serial products model MT7H7F4010-NA-50, MT7H7B4010-NA-50, MT7H7P3E4010-NA-50, MT7H7F4010-EU-50, MT7H7B4010-EU-50, MT7H7P3E4010-EU-50, they are electrically identical, only different in model No.. Model MT7H7P3E4010-NA-50 was selected for full testing, which was explained for details in the attached declaration letter.*

** All measurement and test data in this report was gathered from production sample serial number: 1108005 (Assigned by BACL, Shenzhen). The EUT was received on 2011-08-05.*

Objective

This Type approval report is prepared on behalf of 3M Peltor in accordance with Part 2, Subpart J, and Part 95 of the Federal Communication Commissions rules.

Related Submittal(s)/Grant(s)

No related submittal(s).

Test Methodology

All tests and measurements indicated in this document were performed in accordance with Part 95 Subpart A, B and Subpart E of the Federal Communication Commissions rules with TIA-603-D, Land Mobile FM or PM-Communications Equipment-Measurement and Performance Standards.

All emissions measurement was performed and Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located in the 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China.

Test site at Bay Area Compliance Laboratories Corp. (Shenzhen) has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on December 06, 2010. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2009.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 382179. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, Bay Area Compliance Laboratories Corp. (Shenzhen) is an ISO/IEC 17025 accredited laboratory, and is accredited by National Voluntary Laboratory Accredited Program (Lab Code 200707-0).



The current scope of accreditations can be found at <http://ts.nist.gov/Standards/scopes/2007070.htm>

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in a typical fashion (as normally used by a typical user).

Transmit Frequency Ranges:

462.5500 - 462.7250 MHz (GMRS Channels 15-22)

462.5625 - 462.7125 MHz (GMRS/FRS Channels 1-7)

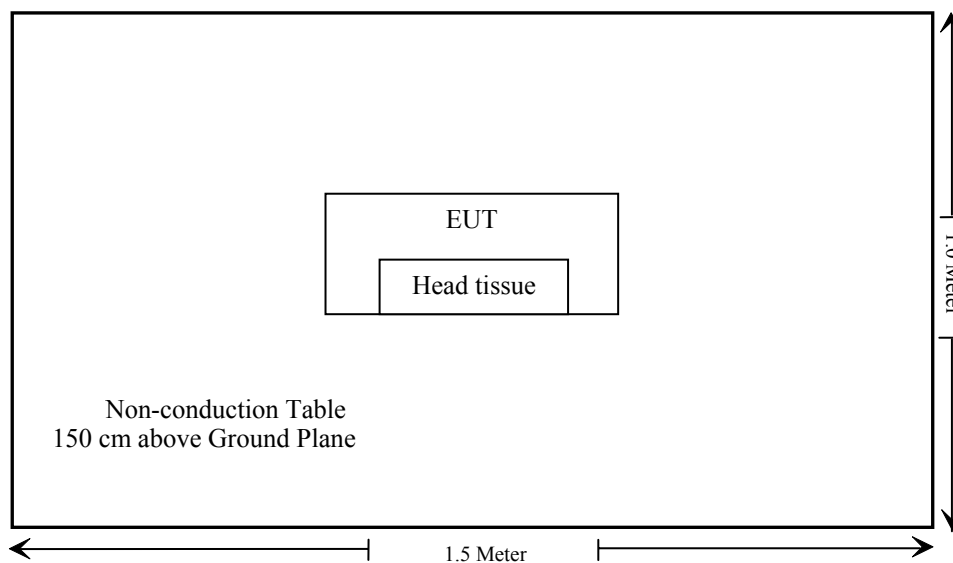
467.5625 - 467.7125 MHz (FRS Channels 8-14)

Selected Channel 11 (FRS 467.6375 MHz), Channel 18 (GMRS 462.6250 MHz) to test.

Equipment Modifications

Bay Area Compliance Laboratories Corp. (Shenzhen) has not done any modification on the EUT.

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Results
§1.1307(b) (1)	RF Exposure Info	Compliance
§2.1046, §95.639(a), §95.639(d)	RF Output Power	Compliance
§2.1047, §95.637(a)	Modulation Characteristic	Compliance
§2.1049, §95.633(a) (c)	Occupied Bandwidth & Emission Mask	Compliance
§2.1053, §95.635(b) (7)	Spurious Radiated Emissions	Compliance
§2.1055(d), §95.627(b), §95.621	Frequency Stability	Compliance

FCC §2.1093 - RF EXPOSURE INFORMATION

Applicable Standard

According to FCC §2.1093 and §1.1307(b) (1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to FCC OET KDB447498 D01 section 5, Push-to-talk (PTT) devices:

a) RF exposure is evaluated with a duty factor of 50% when the actual operating duty factor is $\leq 50\%$. Devices supporting higher duty factors shall be evaluated at the maximum duty factor; for example, devices supporting operator-assisted PSTN calls. Contact the FCC Laboratory when unable to test a device at the required duty factor due to hardware limitations or other reasons.

b) Portable PTT devices

i) The power thresholds and operating conditions in Table 1 are used to determine SAR test requirements for PTT radios required to comply with the general population exposure limit. When the occupational exposure limit applies, these power thresholds are increased by a factor of five (5) to determine the test requirements. SAR is required for PTT devices with maximum output power greater than these thresholds.²⁸ SAR evaluation is also required for separation distances smaller than those in Table 1. Contact the FCC Laboratory to determine if SAR evaluation is necessary for other frequencies or when the SAR is very low.

Table 1 - SAR Evaluation Power Thresholds for PTT devices, $f \leq 0.5$ GHz

Exposure Conditions	mW
Held to face ≥ 2.5 cm	250
Body-worn ≥ 1.5 cm	200
Body-worn ≥ 1.0 cm	150

Notes:
 1. The time-averaged output power, corresponding to the required PTT duty factor, is compared with these thresholds.
 2. The closest distance between the user and the device or its antenna is used to determine the power thresholds.

ii) Additional SAR evaluation with a SAM phantom is required for PTT devices with held-to-ear operating mode.²⁹ Contact the FCC Laboratory for device operating and test configurations.

Routine SAR evaluation refers to that specifically required by §2.1093, using measurements or computer simulation. When routine SAR evaluation is not required, portable transmitters with output power greater than the applicable low threshold require SAR evaluation to qualify for TCB approval.

Result

According to FCC KDB447498 generic portable criteria

The distance between antenna and head is 4 cm

The Max output power: 229 mW, Duty factor: 50%

The time-averaged output power is: $229 \times 0.5 = 114.5 \text{ mW} < 250 \text{ mW}$

Stand-alone SAR evaluation for held-face is not required.

Note: The device does not have the body-worn capability.

FCC §2.1046, §95.639(a) & §95.639(d) - RF OUTPUT POWER

Applicable Standard

Per FCC §2.1046, §95.639(a) and §95.639(d), No FRS Unit, under any condition of modulation, shall exceed a 0.5 W effective radiated power (ERP).

Per FCC §95.639 (a) (1), No GMRS transmitter, under any condition of modulation, shall exceed 50 W Carrier power when transmitting emission type A1D, F1D, G1D, A3E, F3E or G3E.

Test Procedure

The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load, which was also placed on the turntable.

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.

Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the emissions were measured by the substitution.

Test Equipment List and Details

Manufacturer	Description	Model NO.	Serial NO.	Calibration Date	Calibration Due Date
HP	Signal Generator	HP8657A	2849U00982	2010-10-21	2011-10-20
Rohde & Schwarz	EMI Test Receiver	ESCI	101122	2010-11-17	2011-11-16
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2011-03-17	2012-03-16
Com Power	Dipole Antenna	AD-100	041000	2010-09-25	2011-09-25

* **Statement of Traceability:** Bay Area Compliance Lab Corp. (ShenZhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Data

Environmental Conditions

Temperature:	25 ° C
Relative Humidity:	50%
ATM Pressure:	100.5kPa

The testing was performed by Jim Huang on 2011-08-28.

Test Mode: Transmitting

Indicated		Table Angle Degree	Test Ant.		Substituted			Absolute Level (dBm)	FCC Part 95	
Frequency (MHz)	S.A. Reading (dBµV)		Height (m)	Polar (H/V)	S.G. Level (dBm)	Ant. Gain (dBd)	Cable Loss (dB)		ERP (W)	Limit (Watt)
FRS Channel 11 High Power										
467.6375	100.42	42	1.5	V	24.4	0	1	23.4	0.219	0.5
467.6375	86.97	17	1.0	H	11.0	0	1	10.0	0.010	0.5
FRS Channel 11 Middle Power										
467.6375	90.50	42	1.5	V	14.5	0	1	13.5	0.022	0.5
467.6375	78.83	17	1.0	H	2.8	0	1	1.8	0.002	0.5
FRS Channel 11 Low Power										
467.6375	87.33	42	1.5	V	11.3	0	1	10.3	0.011	0.5
467.6375	76.33	17	1.0	H	0.3	0	1	-0.7	0.001	0.5
GMRS Channel 18 High Power										
462.6250	100.61	38	1.5	V	24.6	0	1	23.6	0.229	50
462.6250	90.74	18	1.0	H	14.7	0	1	13.7	0.023	50
GMRS Channel 18 Middle Power										
462.6250	90.00	38	1.5	V	14.0	0	1	13.0	0.020	50
462.6250	80.83	18	1.0	H	4.8	0	1	3.8	0.002	50
GMRS Channel 18 Low Power										
462.6250	87.33	38	1.5	V	11.3	0	1	10.3	0.011	50
462.6250	78.17	18	1.0	H	2.2	0	1	1.2	0.001	50

Test Result: Compliance.

FCC §2.1047 & §95.637(a) - MODULATION CHARACTERISTIC

Applicable Standard

FCC §2.1047 & §95.637:

- (a) Equipment which utilizes voice modulated communication shall show the frequency response of the audio modulating circuit over a range of 100 to 5000 Hz. for equipment which is required to have a low pass filter, the frequency response of the filter, or all of the circuitry installed between the modulation limited and the modulated stage shall be supplied.
- (b) Equipment which employs modulation limiting, a curve showing the percentage of modulation versus the modulation input voltage shall be supplied.
- (c) A FRS Unit that transmits emission type F3E must not exceed peak frequency deviation of plus or minus 2.5 kHz.
- (d) A GMRS transmitter that transmits emission type F3E must not exceed a peak frequency deviation of plus or minus 5 kHz.

Test Equipment List and Details

Manufacturer	Description	Model NO.	Serial NO.	Calibration Date	Calibration Due Date
HP	RF Communication Test Set	HP8920A	3438A05201	2011-06-14	2012-06-13

* **Statement of Traceability:** Bay Area Compliance Lab Corp. (ShenZhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

Test Method: TIA/EIA-603-D

Test Data

Environmental Conditions

Temperature:	25 ° C
Relative Humidity:	50%
ATM Pressure:	100.5kPa

The testing was performed by Jim Huang on 2011-08-28.

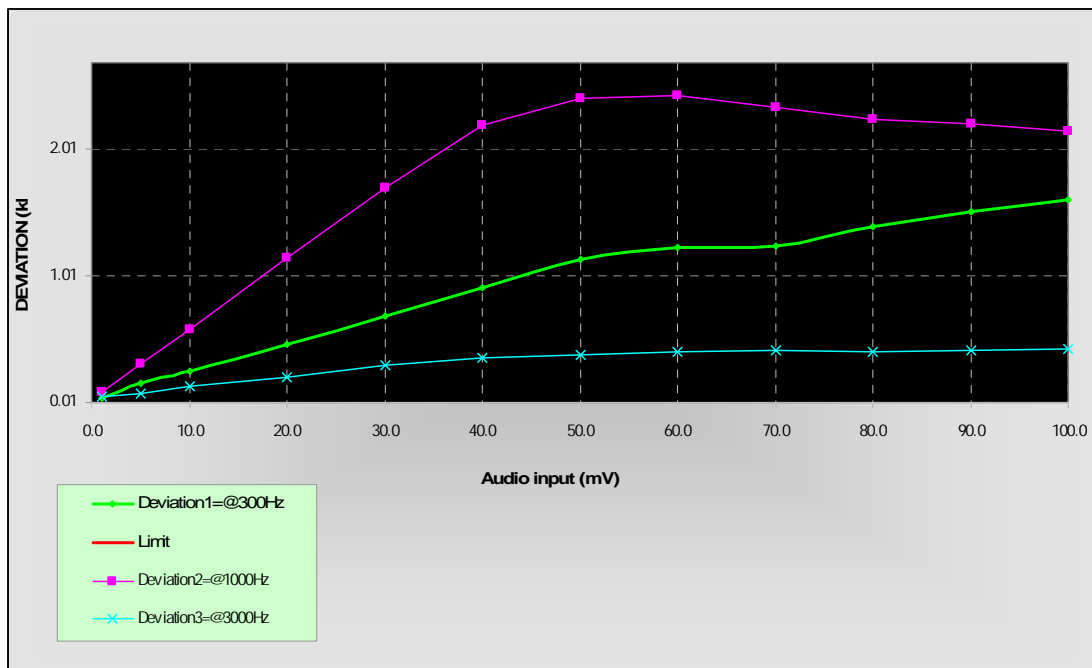
Please refer to the following tables and plots.

Test Mode: Transmitting

TRANSMITTER FREQUENCY DEVIATION

FRS – Channel 11 (467.6375 MHz)

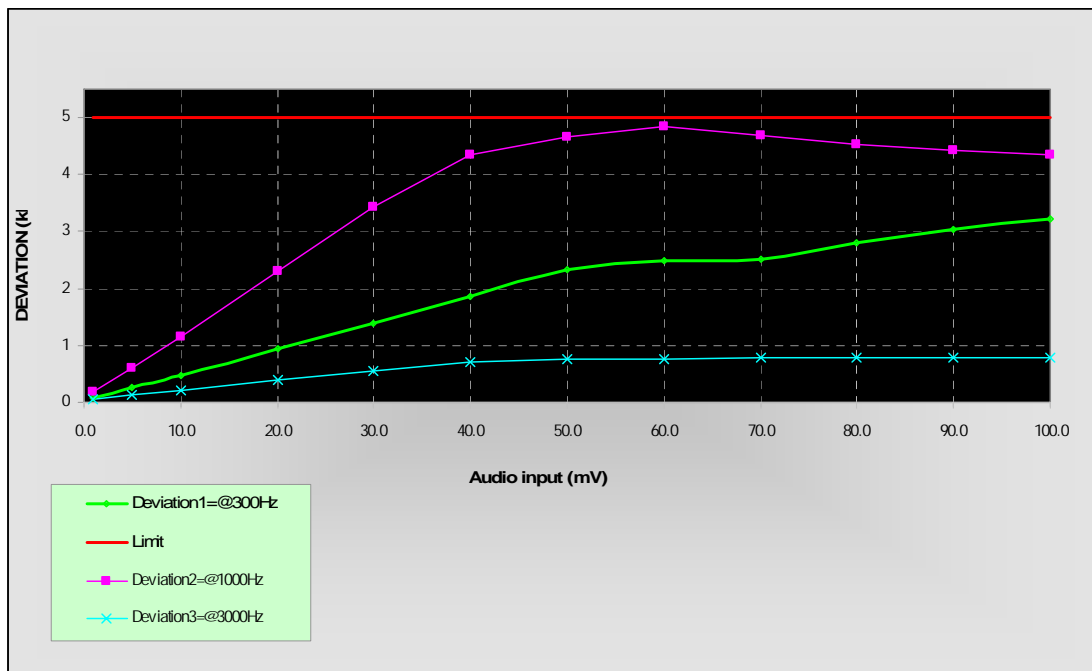
Audio Input Level (mV)	Frequency Deviation (kHz)			FCC Limit (kHz)
	(@ 300 Hz)	(@ 1000 Hz)	(@ 3000 Hz)	
1.0	0.053	0.093	0.048	2.500
5.0	0.142	0.313	0.083	2.500
10.0	0.251	0.595	0.127	2.500
20.0	0.484	1.176	0.192	2.500
30.0	0.702	1.748	0.275	2.500
40.0	0.923	2.257	0.348	2.500
50.0	1.153	2.453	0.369	2.500
60.0	1.247	2.463	0.382	2.500
70.0	1.243	2.376	0.394	2.500
80.0	1.405	2.295	0.392	2.500
90.0	1.523	2.265	0.391	2.500
100.0	1.613	2.203	0.395	2.500



TRANSMITTER FREQUENCY DEVIATION

GMRS – Channel 18 (462.625 MHz)

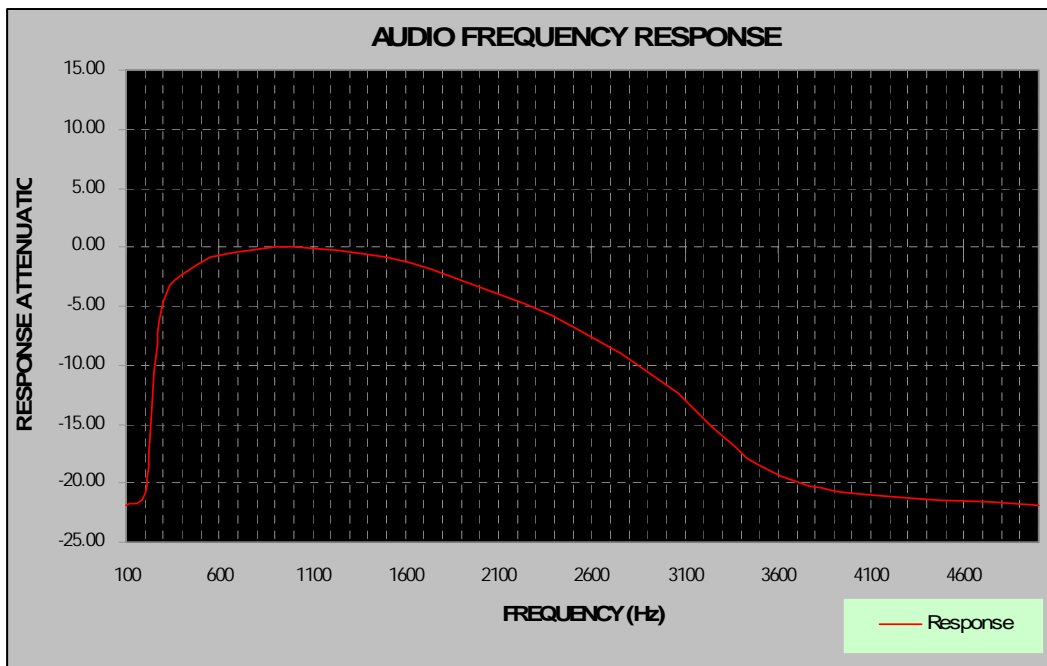
Audio Input Level (mV)	Frequency Deviation (kHz)			FCC Limit (kHz)
	(@ 300 Hz)	(@ 1000 Hz)	(@ 3000 Hz)	
1.0	0.083	0.173	0.058	5.000
5.0	0.262	0.613	0.133	5.000
10.0	0.481	1.155	0.207	5.000
20.0	0.934	2.296	0.382	5.000
30.0	1.392	3.418	0.555	5.000
40.0	1.853	4.357	0.698	5.000
50.0	2.333	4.653	0.769	5.000
60.0	2.497	4.853	0.772	5.000
70.0	2.503	4.696	0.784	5.000
80.0	2.805	4.535	0.792	5.000
90.0	3.033	4.435	0.791	5.000
100.0	3.223	4.353	0.795	5.000



Audio Frequency Response

FRS – Channel 11 (467.6375 MHz)

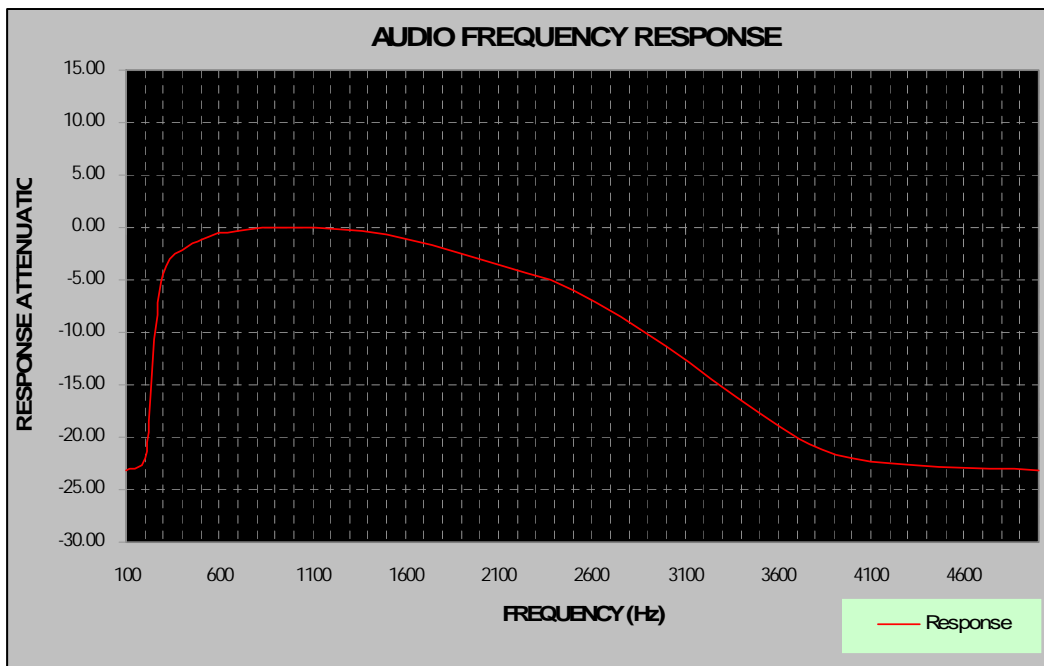
Audio Frequency (Hz)	Response Attenuation (dB)
100	-23.10
200	-21.94
300	-4.88
500	-1.51
700	-0.63
1000	0.00
1500	-1.01
2000	-3.22
2500	-6.38
3000	-11.70
3500	-19.17
4000	-23.10
5000	-23.10



Audio Frequency Response

GMRS – Channel 18 (462.625 MHz)

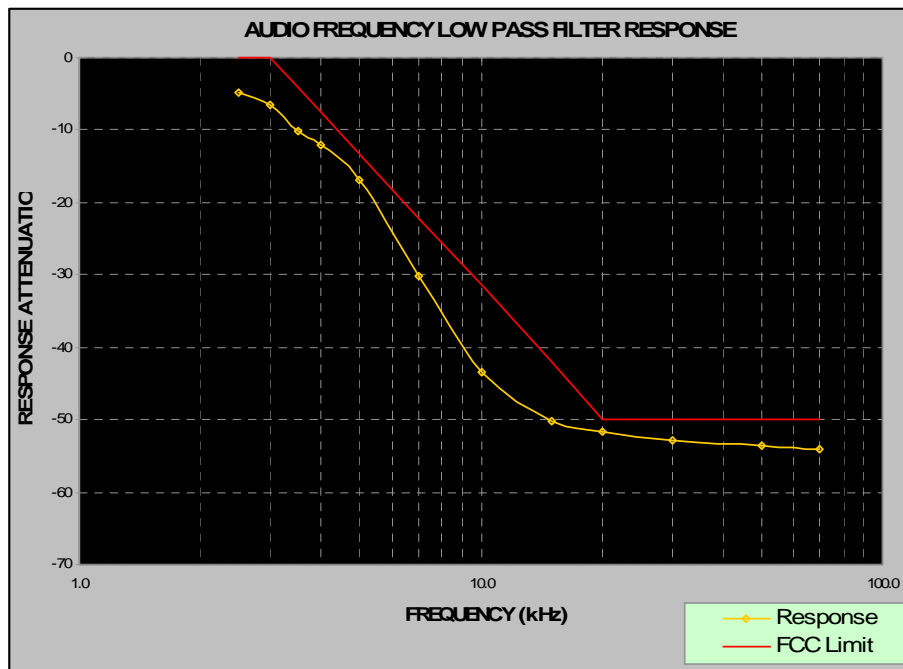
Audio Frequency (Hz)	Response Attenuation (dB)
100	-23.10
200	-21.94
300	-4.44
500	-1.21
700	-0.35
1000	0.00
1500	-0.72
2000	-2.97
2500	-6.02
3000	-11.37
3500	-17.72
4000	-21.94
5000	-23.10



Audio frequency Low Pass Filter Response

FRS – Channel 11 (467.6375 MHz)

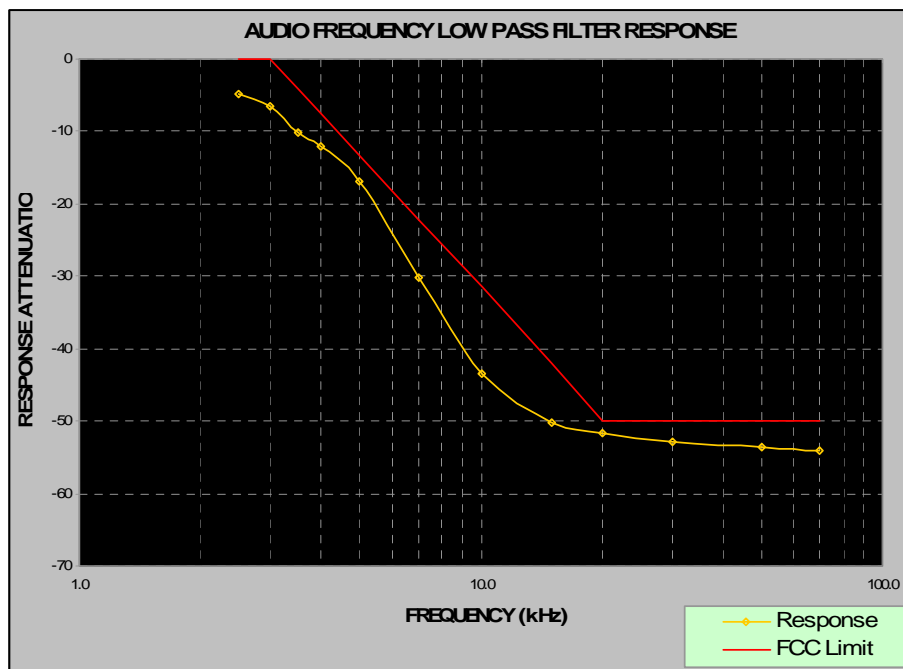
Audio Frequency (kHz)	Response Attenuation (dB)	FCC Limit (dB)
2.5	-4.85	0.0
3.0	-6.42	0.0
3.5	-10.12	-4.0
4.0	-11.98	-7.5
5.0	-16.87	-13.3
7.0	-30.1	-22.1
10.0	-43.46	-31.4
15.0	-50.15	-42.0
20.0	-51.67	-50.0
30.0	-52.97	-50.0
50.0	-53.67	-50.0
70.0	-53.97	-50.0



Audio frequency Low Pass Filter Response

GMRS – Channel 18 (462.6250 MHz)

Audio Frequency (kHz)	Response Attenuation (dB)	FCC Limit (dB)
2.5	-4.85	0.0
3.0	-6.42	0.0
3.5	-10.12	-4.0
4.0	-11.98	-7.5
5.0	-16.87	-13.3
7.0	-30.1	-22.1
10.0	-43.46	-31.4
15.0	-50.15	-42.0
20.0	-51.67	-50.0
30.0	-52.97	-50.0
50.0	-53.67	-50.0
70.0	-53.97	-50.0



Test result: Compliance.

FCC §2.1049 & §95.633(a) (c) - OCCUPIED BANDWIDTH AND EMISSION MASK

Applicable Standard

Per FCC §2.1049 and FCC §95.633(a) (c), the authorized bandwidth for emission type F3E or F2D transmitted by an FRS Unit is 12.5 kHz. and The authorized bandwidth for emission type F1D, G1D, F3E or G3E transmitted by an GMRS Unit is 20 kHz.

Test Procedure

TIA-603-D, section 2.2.11

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
NANYAN	Audio Generator	NY2201	019596	2011-05-05	2012-05-05
Rohde&Schwarz	EMI Test Receiver	ESCI	101122	2010-11-17	2011-11-16

* **Statement of Traceability:** Bay Area Compliance Lab Corp. (ShenZhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Data

Environmental Conditions

Temperature:	25 ° C
Relative Humidity:	50%
ATM Pressure:	100.5kPa

The testing was performed by Tim Huang on 2011-08-22.

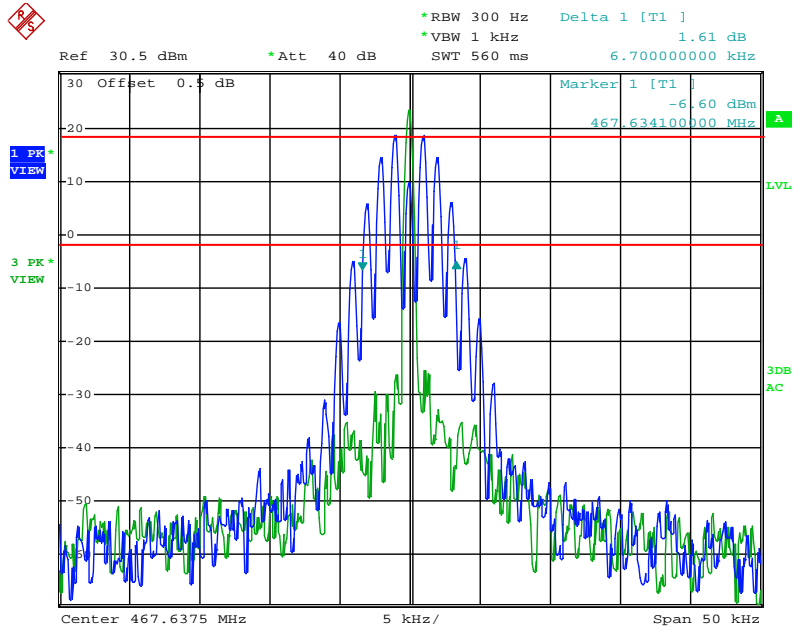
Test Mode: Transmitting

	Emission Bandwidth (kHz)	Modulation Type	Authorized Bandwidth (kHz)	Emission Designator
FRS	6.70	F3E	12.5	6K70F3E
GMRS	12.4	F3E	20	12K4F3E

Please refer to the following plots

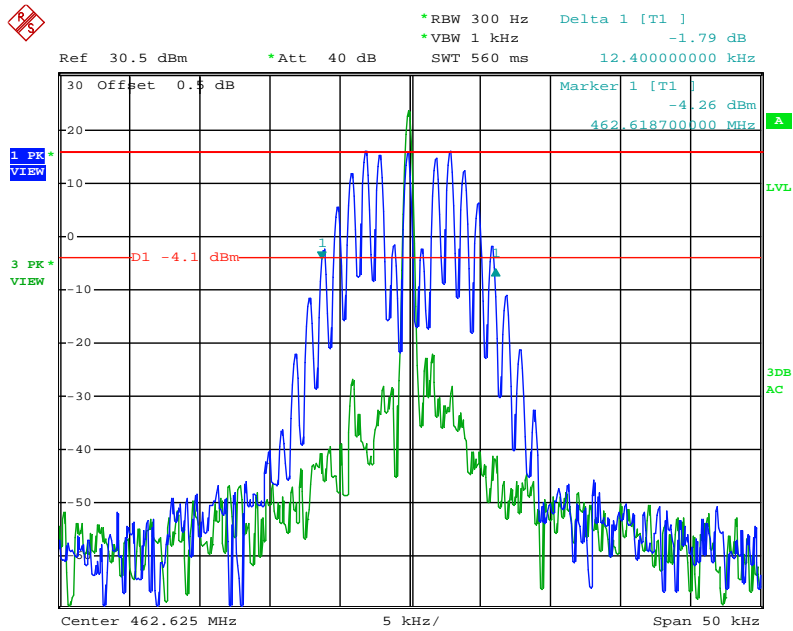
Occupied Bandwith

FRS – Channel 11 (467.6375 MHz)



Date: 22.AUG.2011 11:50:56

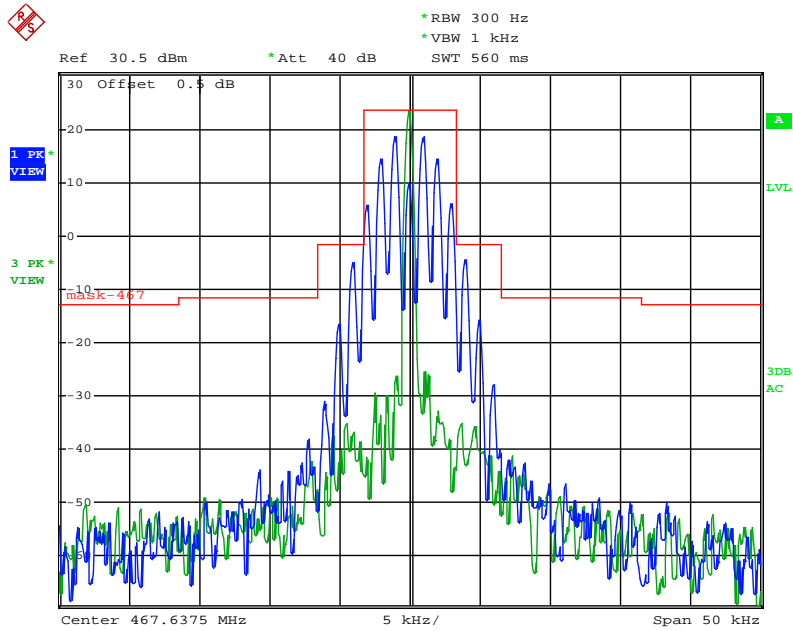
GMRS – Channel 18 (462.6250 MHz)



Date: 22.AUG.2011 12:13:34

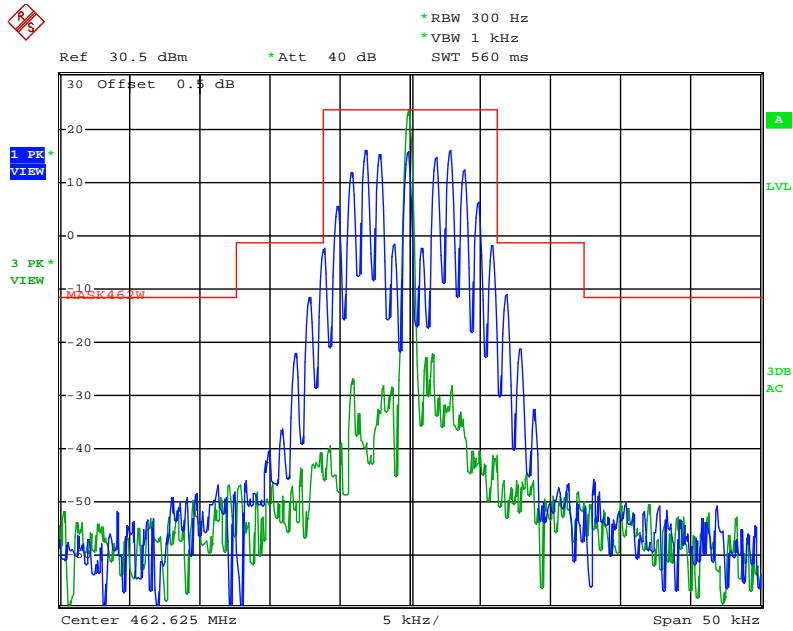
Emission Mask

FRS – Channel 11 (467.6375 MHz)



Date: 22.AUG.2011 11:53:06

GMRS – Channel 18 (462.6250 MHz)



Date: 22.AUG.2011 12:14:48

FCC §2.1053 & §95.635(b) (7) - RADIATED SPURIOUS EMISSION

Applicable Standard

FCC §2.1053 and §95.635

Test Procedure

The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load, which was also placed on the turntable.

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.

The frequency range up to tenth harmonic of the fundamental frequency was investigated.

Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.

Spurious emissions in dB = 10 lg (TXpwr in Watts/0.001)-the absolute level

Spurious attenuation limit in dB = 43+10 Log₁₀ (power out in Watts)

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sunol Sciences	Horn Antenna	DRH-118	A052304	2010-12-01	2011-11-30
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2011-03-17	2012-03-16
HP	Spectrum Analyzer	8593A	2919A00242	2011-03-09	2012-03-08
Mini-circuits	Amplifier	ZVA-213+	T-E27H	2011-03-08	2012-03-07
HP	Signal Generator	HP8657A	2849U00982	2010-10-21	2011-10-20
HP	Amplifier	HP8447D	2944A09795	2010-11-24	2011-11-23
HP	Synthesized Sweeper	8341B	2624A00116	2011-04-11	2012-04-10
COM POWER	Dipole Antenna	AD-100	041000	2010-09-25	2011-09-25
A.H. System	Horn Antenna	SAS-200/571	135	2011-02-11	2012-02-10

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Data**Environmental Conditions**

Temperature:	25 ° C
Relative Humidity:	50%
ATM Pressure:	100.5kPa

The testing was performed by Jim Huang on 2011-08-31.

Test Mode: Transmitting

FRS: Channel 11 (467.6375 MHz)

30MHz -5GHz:

Indicated		Table Angle Degree	Test Antenna		Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
Frequency (MHz)	Receiver Reading (dBuV)		Height (m)	Polar (H/V)	Level (dBm)	Antenna Gain Correction	Cable Loss (dB)			
935.23	59.38	330	1	V	-35.6	0	0.72	-36.32	-13	23.32
935.23	48.53	155	1.2	H	-46.5	0	0.72	-47.22	-13	34.22
1403	39.66	203	1	V	-58.3	6.4	0.88	-52.78	-13	39.78
1403	38.04	56	1.9	H	-59.9	6.4	0.88	-54.38	-13	41.38

GMRS: Channel 18 (462.625 MHz)

30MHz -5GHz:

Indicated		Table Angle Degree	Test Antenna		Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
Frequency (MHz)	Receiver Reading (dBuV)		Height (m)	Polar (H/V)	Level (dBm)	Antenna Gain Correction	Cable Loss (dB)			
925.12	58.62	340	1	V	-36.4	0	0.71	-37.11	-13	24.11
925.12	46.7	160	1.2	H	-48.3	0	0.71	-49.01	-13	36.01
1388	40.34	179	1.4	V	-57.7	6.4	0.87	-52.17	-13	39.17
1388	37.67	214	2.1	H	-60.3	6.4	0.87	-54.77	-13	41.77

FCC§2.1055 (d), §95.627(b) & §95.621 - FREQUENCY STABILITY

Applicable Standard

According to FCC §2.1055(a) (1), the frequency stability shall be measured with variation of ambient temperature from -30 °C to +50 °C, and according to FCC 2.1055(d) (2), the frequency stability shall be measured with reducing primary supply voltage to the battery operating end point which is specified by the manufacturer.

According to FCC §95.627(b), Each FRS Unit must be maintained within a frequency tolerance of 0.00025%.

According to FCC §95.621, Each GMRS transmitter for mobile station, small base station and control station operation must be maintained within a frequency tolerance of 0.0005%.

Test Procedure

Frequency Stability vs. Temperature: The equipment under test was connected to an external DC power supply and the RF output was connected to a Frequency Counter via feed-through attenuators. The EUT was placed inside the temperature chamber. The DC leads and RF output cable exited the chamber through an opening made for the purpose.

After the temperature stabilized for approximately 20 minutes, the frequency output was recorded from the Frequency Counter.

Frequency Stability vs. Voltage:

1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment.

(2) For hand carried, battery powered equipment, reduce primary supply voltage to the battery operating end point which shall be specified by the manufacturer.

The output frequency was recorded for each voltage.

Test Equipment List and Details

Manufacturer	Description	Model NO.	Serial NO.	Calibration Date	Calibration Due Date
Hewlett-Packard	Frequency Counter	5342A	2317A08289	2011-04-15	2012-04-14
ESPEC	Temperature & Humidity Chamber	EL-10KA	09107726	2010-11-24	2011-11-23

* **Statement of Traceability:** Bay Area Compliance Lab Corp. (ShenZhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Data**Environmental Conditions**

Temperature:	25 ° C
Relative Humidity:	50%
ATM Pressure:	100.5kPa

The testing was performed by Tim Huang on 2011-08-31.

Test Mode: Transmitting

FRS: Channel 11 (467.6375 MHz)

Reference Frequency: 467.6375 MHz, Limit: ± 2.5 ppm			
Environment Temperature (°C)	Power Supplied (V _{DC})	Measurement Frequency (MHz)	Frequency Error (ppm)
Frequency Stability Ver. Temperature			
50	3.7	467.63788	0.812595
40	3.7	467.63784	0.727059
30	3.7	467.63777	0.577370
20	3.7	467.63772	0.470450
10	3.7	467.63770	0.427682
0	3.7	467.63768	0.384914
-10	3.7	467.63779	0.620138
-20	3.7	467.63781	0.662907
-30	3.7	467.63783	0.705675
Frequency Stability Ver. Input Voltage			
20	3.5	467.63774	0.513218

GMRS: Channel 18 (462.625 MHz)

Reference Frequency: 462.625 MHz, Limit: ± 5 ppm			
Environment Temperature (°C)	Power Supplied (V _{DC})	Measurement Frequency (MHz)	Frequency Error (ppm)
Frequency Stability Ver. Temperature			
50	3.7	462.62525	0.540394
40	3.7	462.62523	0.497163
30	3.7	462.62518	0.389084
20	3.7	462.62520	0.432316
10	3.7	462.62516	0.345852
0	3.7	462.62519	0.410700
-10	3.7	462.62521	0.453931
-20	3.7	462.62522	0.475547
-30	3.7	462.62524	0.518779
Frequency Stability Ver. Input Voltage			
20	3.5	462.62531	0.670089

PRODUCT SIMILARITY DECLARATION LETTER



3M Peltor
Add: 5457 West 76th Street, Indianapolis, IN 46268, United States
Tel: (317)692 3163 Fax: (317)692 6604

Product Similarity Declaration

Date: 2012-04-27

To Whom It May Concern,

We, 3M Peltor, hereby declare that our product Lite-Com Pro II, Model Name: MT7H7F4010-NA-50, MT7H7B4010-NA-50, MT7H7F4010-EU-50, MT7H7B4010-EU-50, MT7H7P3E4010-EU-50 is electrically identical with the Model Number: MT7H7P3E4010-NA-50 that was certified by BACL. Their only difference is the model name.

The rest are the same.

Please contact me if you have any question.

Signature:

A handwritten signature in black ink, appearing to read 'T. Allen', is written over a light blue horizontal line.

Timothy N.Allen
Product Portfolio Manager North America

******* END OF REPORT *******