



FCC PART 95 MEASUREMENT AND TEST REPORT

For

3M Company

Personal Safety Division 3M Center, St. Paul Minnesota, United States

FCC ID: Y9ZMT4610B

Report Type: Original Report	Product Type: Litecom Plus Headset
Report Number: RSZ200427009-00	
Report Date: 2021-01-21	
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GENERAL INFORMATION

Product Description for Equipment Under Test (EUT)

Product	Litecom Plus Headset
Tested Model	MT73H7A46106NA
Multiple Models	MT73H7*4610NA (*means A, B or P3E)
Model Difference	Refer to the DoS letter
Frequency Range	FRS: 462.5500-462.7250MHz, 467.5625-467.7125 MHz
Transmit Power	19.10 dBm
Testing Bandwidth	9.936kHz
Modulation Technique	FM
Antenna Specification	Internal Antenna
Voltage Range	DC 3.7 V from battery or DC 5.0V from adapter
Sample/EUT Status	Good condition
Adapter information	Model: DSA-5PFU1-05-FCA 050100 Input: AC 100-240V, 50/60Hz, 0.2A Output: DC 5V, 1A

Objective

This test report is in accordance with Part 2 and Part 95, Subpart A & Subpart B of the Federal Communication Commissions rules.

Test Methodology

All tests and measurements indicated in this document were performed in accordance with Part 95 Subpart A, Subpart B of the Federal Communication Commissions rules with ANSI C63.26-2015, American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services.

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

Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		±5%
RF Output Power with Power meter		±0.73dB
RF conducted test with spectrum		±1.6dB
Emissions, Radiated	Below 1GHz	±4.75dB
	Above 1GHz	±4.88dB
Temperature		±1 °C
Humidity		±6%
Supply voltages		±0.4%

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 6/F., West Wing, Third Phase of Wanli Industrial Building, Shihua Road, Futian Free Trade Zone, Shenzhen, Guangdong, China.

The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 342867, the FCC Designation No. : CN1221.

The test site has been registered with ISED Canada under ISED Canada Registration Number 3062B.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

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

Description of Channel List

FRS:

Channel No.	Channel Frequency (MHz)	Channel No.	Channel Frequency (MHz)
1	462.5625	12	467.6625
2	462.5875	13	467.6875
3	462.6125	14	467.7125
4	462.6375	15	462.5500
5	462.6625	16	462.5750
6	462.6875	17	462.6000
7	462.7125	18	462.6250
8	467.5625	19	462.6500
9	467.5875	20	462.6750
10	467.6125	21	462.7000
11	467.6375	22	462.7250

SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Results
§1.1307 (b) (1) & §2.1093	RF Exposure	Compliance
§95.587(b)(1)	Antenna Requirement	Compliance*
§2.1046, §95.567	RF Output Power	Compliance*
§2.1047, §95.575	Modulation Characteristic	Compliance*
§2.1049, §95.573	Authorized Bandwidth & Emission Mask	Compliance*
§2.1053, §95.579	Spurious Radiated Emissions	Compliance*
§2.1055(d), §95.565	Frequency Stability	Compliance*

Note:

Compliance*: Model MT73H7A4610WS6NA (FCC ID: Y9ZMT4610W6) and this EUT are the same product, the difference of them is the EUT remove the bluetooth module. All the test data are referred to the report RSZ190505001-00C with model number MT73H7A4610WS6NA (FCC ID: Y9ZMT4610W6), issued on 2019-07-10 by Bay Area Compliance Laboratories Corp. (Shenzhen).

FCC §1.1307 (b) (1) & §2.1093 – RF EXPOSURE

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 KDB 447498 D01 General RF Exposure Guidance

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

1. $f(\text{GHz})$ is the RF channel transmit frequency in GHz.
2. Power and distance are rounded to the nearest mW and mm before calculation.
3. The result is rounded to one decimal place for comparison.
4. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test Exclusion.

For worst case:

Frequency (MHz)	Maximum Tune-up power		Calculated Distance (mm)	Calculated Value	Threshold (1-g SAR)	SAR Test Exclusion
	(dBm)	(mW)				
467.6375	20	100	40	1.7	3.0	Yes

Result: Compliance

Calculated Distance: 40mm



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