

MEASUREMENT AND TECHNICAL REPORT

HM ELECTRONICS
 6675 Mesa Ridge Road
 San Diego, CA 92121-2937

DATE: 4 June 2001

This Report Concerns:	Original Grant: <input checked="" type="checkbox"/>	Class II Change: <input type="checkbox"/>
Equipment Type:	HS-30 Headset, Model K24398	
Deferred grant requested per 47 CFR 0.457(d)(1)(ii)?	Yes: <input type="checkbox"/> Defer until:	No: <input checked="" type="checkbox"/>
Company Name agrees to notify the Commission by:	N/A	
of the intended date of announcement of the product so that the grant can be issued on that date.		
Transition Rules Request per 15.37?	Yes: <input type="checkbox"/>	*No: <input checked="" type="checkbox"/>
<i>(*) FCC Part 15, Paragraphs 15.109(a) and 15.209</i>		
<p>Report Prepared by:</p> <p>TÜV PRODUCT SERVICE 10040 Mesa Rim Road San Diego, CA 92121-2912 Phone: 858 546 3999 Fax: 858 546 0364</p>		

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1 GENERAL INFORMATION

1.1 Product Description

NAME, MODEL, SERIAL # OF EUT:	HS-30 Headset, Model K24398		
DESCRIPTION OF EUT:	HS_30 headset with am RF link to belt pac		
OPERATING MODE(S):	Normal		
POWER INTERFACE			
FREQUENCY/AC/DC VOLTAGE:	3.6 V		
PHASES:	1		
OSCILLATOR FREQUENCIES:	32.768 kHz on Y1 on AM1011H board; reference oscillator 0.48432 MHz on synthesized transmit freq. 455 kHz Intermediate freq. 1.8062 MHz Rx frequency		
POWER SUPPLY			
DESCRIPTION:	U8-DC 3.0 V regulator on AM1011H board		
INTERFACING AND/OR SIMULATORS PERIPHERAL EQUIPMENT:			
Description	Model #	Serial #	FCC ID/Other
RF Generator	HP8656B	3208U11176	--
Interface Ports and Cables: None			

1.2 Related Submittal/Grant

None

1.3 Tested System Details

The FCC IDs for all equipment, plus descriptions of all cables used in the tested system are:

None

1.4 Test Methodology

Purpose of Test: To demonstrate compliance with the ANSI C63.4 setup.

Test Performed:

- 1. Conducted Emissions, FCC Part 15.207
- 2. Radiated Emissions, EN55022: 1992 Class B limit, 30 - 1,000 MHz, 10 meters
- X 3. Radiated Emission per FCC Part 15.109(a) and 15.209
- 4. Engineering evaluations

1.5 Test Facility

The open area test site and conducted measurement data were tested by:

TÜV PRODUCT SERVICE
10040 Mesa Rim Road
San Diego, CA 92121-2912
Phone: 858 546 3999
Fax: 858 546 0364

The Test Site Data and performance comply with ANSI 63.4 and are registered with the FCC, 7435 Oakland Mills Rd, Columbia Maryland 21046. All Measurement Data is acquired according to the content of FCC Measurement Procedure and ANSI C63.4, unless supplemented with additional requirements as noted in the test report.

2. SYSTEM TEST CONFIGURATION

2.1 Justification

The was initially tested for FCC emission in the following configuration:

See Block Diagram.

2.2 EUT Exercise Software

None

2.3 Special Accessories

None

2.4 Modification

None

2.5 Configuration of Tested System

See Block Diagram.

3 CONDUCTED EMISSION DATA
EUT operated on 3.6 V battery power.

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See following page(s).

4 RADIATED MEASUREMENT EQUIPMENT LIST

Emissions Test Conditions: RADIATED EMISSIONS (Electric Field)

The *EQUIVALENT RADIATED EMISSIONS* measurements were performed at the following test location :

- Test not applicable

Test Site:

Canyon Site Parking Lot, Carroll Canyon, San Diego

Test Equipment Used :

Model No.	Property No.	Description	Manufacturer	Serial Number	Cal Date
HP8594E	430	Spectrum Analyzer	Hewlett Packard	3303A00365	05/10/01
HFH2-Z2	208	Loop Antenna	Rohde & Schwarz	880	*
HP8656B	--	Spectrum Analyzer	Hewlett Packard	3208U11176	10/01

Remarks: (*) Verified prior to use.

RADIATED EMISSION DATA

The following data lists the significant emission frequencies, measured levels, correction factor (which includes cable and antenna corrections), the corrected reading, and the limit.

See following page(s).

SC103937
 Part 15. 209
 Site: Canyon 1

1-May-01

EUT: HS30 Headset


Frequency kHz	Meas. Peak		Corr Factor	2400/F(kHz)	LIMIT		MARGIN				
	10 M dBuV	30 M dBuV			10 M	30 M	10 M	30 M			
484.32	18	17	20	5.0	59.1	64.0	-26.0	40.0	45.0	-8.0	
968.64	37	33	20	2.5	61.6	61.6	-4.6	42.5	42.5	10.5	EMISSION NOT EUT*
1937.28	17	42	20	1.2	60.3	60.3	-23.3	41.2	41.2	20.8	EMISSION NOT EUT*
2421.6	18.5	18	20	1.0	60.1	60.1	-21.6	41.0	41.0	-3.0	NOISE FLOOR
2905.92	16.7	16.9	20	0.8	59.9	59.9	-23.2	40.8	40.8	-3.9	NOISE FLOOR
3390.24	16.8	16.2	20	0.7	59.8	59.8	-23.0	40.7	40.7	-4.5	NOISE FLOOR
3874.56	16.9	16.1	20	0.6	59.7	59.7	-22.8	40.6	40.6	-4.5	NOISE FLOOR

Temp: 28C
 Humidity: 45
 Atm. Press.: 101.1 kPa

* ambient signal evident

Equipment:

Antenna: Rohde & Schwarz 9kHz -30MHz Loop #208 sn 88.458/26
 Spectrum Analyzer #430 hp8568B sn 3303A00365

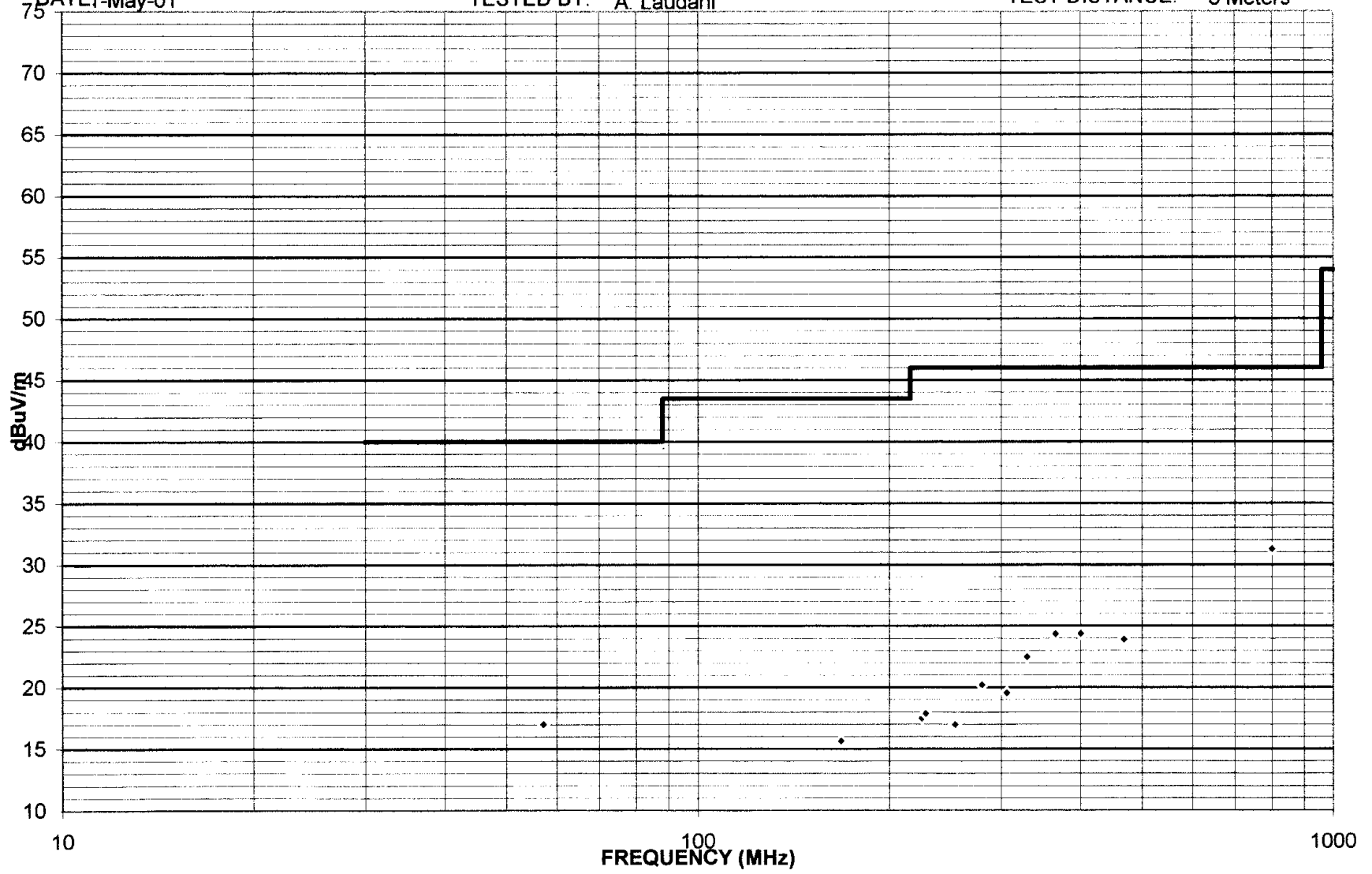

 A. Laudani

REPORT NO: SC03937
COMPANY: HME
EUTHS30 Headset
EUT MODE: Normal
DATE: 1-May-01

SPEC: FCC Part 15 para 15.109(a)

TESTED BY: A. Laudani *AAJ*

TEST DISTANCE: 3 Meters



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5 SUMMARY:

All tests according to *CFR 47, Part 15, Paragraphs 15.207 and 15.209* were

■ - Performed

The Equipment Under Test

■ - **Fulfills** the general requirements of *CFR 47, Part 15, Paragraphs 15.207 and 15.209*.

- TÜV PRODUCT SERVICE, INC. -

Responsible Engineer:



Jim Owen
(EMC Engineer)