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The Hong Kong Association of Certification
Laboratories

The Hong Kong Standards and Testing Centre Ltd

TEST REPORT

1998-03-31

No.: WM1192/504

APPLICANT: (CODE : 018382)
SUPREME TOYS (HONG KONG) LTD.
RM 1016-17 OCEAN CENTRE, HARBOUR CITY,
5 CANTON RD., TST.,
HONG KONG.

DATE OF SAMPLES RECEIVED: 1998-02-18

DATE OF TESTING: 1998.03.27

DESCRIPTION OF SAMPLE(S):

A sample of product said to be:

Product: Headset Mic
Manufacturer: Million Industrial Ltd.
Model Number: 0025
Brand Name: SUPREME
Rating: DC 4.5V ("Button Cell X 3")
Origin: Made in China

INVESTIGATIONS REQUESTED:

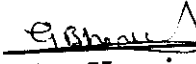
Measurement to the relevant clauses of F.C.C. Rules and Regulations Part B - "Unintentional Radiators."

RESULT/ REMARK: Please see attached sheet(s).

CONCLUSION:

From the measurement data obtained, the tested sample was considered to have COMPLIED after modifications performed by the customer with the clause 15.239 of Federal Communications Commission Rules and Regulations Part 15.

TEST EQUIPMENT AUDIT: Please see Appendix A


Gulam Hussein Bharuchi
for Managing Director

Note:

Attention is drawn to the conditions printed overleaf under which this report is issued.
The test results of this report refer only to the sample tested and do not apply to the bulk, unless the sampling has been carried out by The Hong Kong Standards and Testing Centre Ltd and is stated as such in the report.
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TEST SUMMARY

*** INTENTIONAL RADIATOR *** :

- | | | |
|-----|---|----------------|
| (1) | <u>Measurement of Emission of RF energy on the carrier frequency.....</u> | Satisfactory |
| | <u>Measurement of the out-of band emissions including harmonics.....</u> | Satisfactory |
| (2) | <u>Measurement of Emission Within Band Edges.....</u> | Satisfactory |
| (3) | <u>Measurement of Line-Conducted Voltage onto AC Power Line.....</u> | Not applicable |

TEST DATA

Please refer to the attached result sheets.



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*** INTENTIONAL RADIATOR ***

(1) Measurement of Radiated Interference . . Continued . .

TEST REFERENCE: FCC Rules Part 15 Section 15.239

TEST CONDITION : Normal

TEST DATE : 1998.03.27

The out-of-band emissions, including harmonics (25-1000MHz)
(CISPR VALUE)

Emission Frequency	Meter Reading	Polarization	Antenna Factor	Field Strength (at 3m)		FCC Limit
MHz	dB(μ V)	H-V	dB	dB(μ V/m)	μ V/m	μ V/m
201.0	8.8	V +	11.5	20.3	10.4	200
302.0	5.8	V +	17.1	22.9	14.0	200
403.0	6.7	V +	18.8	25.5	18.8	200
503.0	8.8	V +	20.7	29.5	29.9	200
604.0	8.3	V +	23.5	31.8	38.9	200
704.0	11.2	H +	25.1	36.3	65.3	200
805.0	14.1	V +	27.2	41.3	116.1	200
906.0	16.6	V +	27.3	42.8	138.0	200

SUMMARY

data is within limits

Broad-band Antennas were used and both polarizations of emissions were measured.
polarizations at highest reading indicated as:

H -- Horizontal

V -- Vertical



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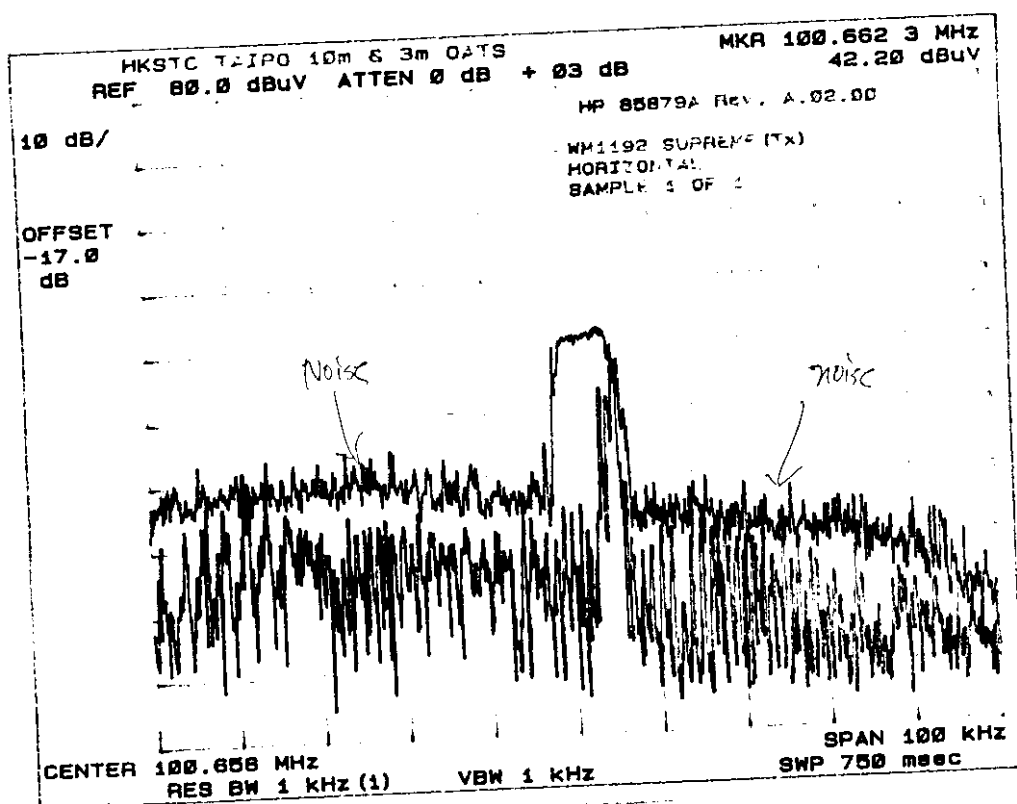
*** INTENTIONAL RADIATOR ***

(2) Measurement of Emissions Within Band Edges.

TEST REFERENCE: FCC Rules Part 15 section 15.239

TEST CONDITION: Normal

TEST DATE : 1998.03.27



RESULTS AND NOTES

L: FCC Lower Band Edge.....-> 88.000MHz
H: FCC Higher Band Edge.....-> 100.662MHz
C: Unmodulated carrier at frequency.....-> 99.572MHz
D: No. of dB from unmodulated carrier.....-> 42.2dB

SPECTRUM ANALYZER SETTINGS

Resolution bandwidth : 1.0KHz
Frequency span : 10.0KHz/div
No. of dB/div : 10.0dB/div

Result

Frequency (Mhz) : 100.662MHz
Measured bandwidth (Khz) : 30
Bandwidth Limit (Khz) : 200

SUMMARY

All data is within limits



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NOTES FOR THE RADIATION MEASUREMENT

(1) Test site facility:

Open field test site located at Taipo (Hong Kong) with a metal ground plane on filed with the FCC pursuant to section 2.948 of the FCC rules.

(2) Distance between the EUT and measuring antenna:

3 meters.

(3) Measuring instrumentations:

CISPR Quasi-peak type field strength meter (25MHz - 1000MHz). 6dB bandwidth set at 120KHz. Also, peak level of the fundamental emissions was measured in order to determine compliance with the 20dB peak to average limit specified in Section 15.35(b) of the FCC new Rules.

(4) Measuring antenna:

Broad band antenna for the frequency range 25-1000MHz, connected with 10 meters coaxial cable. Cable loss of the coaxial cable. included in the Antenna Factor for measurement data. The antenna are capable of measuring both horizontal and vertical polarizations.

(5) Frequency range scanned:

The frequency range from 25MHz to 1000MHz had been searched. Readings of the highest emissions relating to the limit were reported as above.

(6) Arrangement of EUT:

During the test, the sample was operated at rated supply voltage and arranged for maximum emissions.

(7) Measuring Procedure:

In accordance with the relevant clauses of the FCC Rules Part 15 section 15.239.

(8) Measuring Uncertainty:

The calculated uncertainty for measurement performed at 3M test distance are:-
30MHz to 200MHz = $\pm 3.7\text{dB}$, 200MHz to 1000MHz = $+ 3.0\text{dB}/-2.7\text{dB}$.

Remark: Purpose of this test is to provide the Applicant with the necessary test data of their device for the submission to FCC with application for Equipment Authorization under FCC's Equipment Authorization Program. This test itself is not an Approval Test.

*****End of Document*****



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Appendix A

TEST EQUIPMENT AUDIT

Radiated Emission

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	LAST CAL
EMD07	SPECTRUM ANALYZER	H P	HP85660B	3144A21192	02/05/97
EMD08	SPECTRUM ANALYZER DISPLAY	H P	HP85662A	3144A20514	02/05/97
EMD09	QUASI PEAK ADAPTOR	H P	HP85650A	3303A01702	02/05/97
EMD10	RF PRESELECTOR	H P	HP85685A	3221A01410	02/05/97
EMD11	ATTENUATOR/SWITCH	H P	HP11713A	2508A10595	02/05/97
EMD12	PRE-AMPLIFIER	H P	HP8449B	3008A00262	02/05/97
EMD13	CONTROLLER (COMPUTER), COLOR MONITOR, KEYBOARD & MOUSE FLOPPY DRIVE	H P H P H P	HP9000 HP A1097C HP9133L	6226A60314 3151J39517 2623A02468	CM
EMD17	ANTENNA	ARA INC.	LPB-2513/A	1069	31/12/97
EMD72	SIGNAL GENERATOR	HP	8640B	1948A11892	25/03/97
EMD83	HKSTC OPEN AREA TEST SITE	HKSTC	N/A	N/A	16/02/98

ABBREVIATIONS:

CM = Corrective Maintenance
N/A= Not Applicable