

ORION AMERICA, INC.

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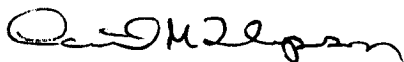
PO-0803

FEBRUARY 24, 1999

MR.. TANNAHILL

IT IS MY UNDERSTANDING THAT THE DATA THAT IS OVER THE LIMIT IN THE SPURIOUS EMISSION MEASUREMENTS SHOULD BE CONSIDERED AS THE ASTERISKS(**) WHICH ARE INDICATED IN THE LOWER PORTION OF THE TEST RESULTS. THE FOLLOWING PAGE IS THE SUPPORT DOCUMENT FOR MY UNDERSTANDING. IF MY UNDERSTANDING IS INCORRECT PLEASE LET ME KNOW AS SOON AS POSSIBLE .

THANK YOU



DAVID M. THOMPSON

99-02-23 15:58
MITSUBI, ELECTRONICS CORP CHICAGO

FEDERAL COMMUNICATIONS COMMISSION

AUTHORIZATION & STANDARDS DIVISION

P.O. BOX 429

COLUMBIA, MD 21046-0429

March 13, 1985

RECEIVED

MAR 14 1985

31010/EQU 4-2-0

Mitsumi Electronics Corporation
1895E Rohlfing Road
Rolling Meadows, Illinois 60008

Attention: Mr. Scott Sawaragi - Engineering

Re: Request stated in your letter of March 11, 1985,
regarding measurement of lower audio sideband

Gentlemen:

For purposes of certification we will accept a measurement report for the
instant equipment in which the resolution bandwidth has been reduced to
30 kHz for measurement of the lower audio sideband only.

In order to more fully investigate the situation we are asking for a
sample of the equipment to be submitted to the Laboratory at the time
application for certification is made.

Sincerely yours,

Phillip I. Inglis

Phillip I. Inglis

Electronics Engineer

Equipment Authorization Branch

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ENGINEERING TEST REPORT

6.5 Test Results

Emission Frequency [MHz]	Corr. Factor [dB]	Meter Reading [dB μ V/50 Ω]	Maximum Signal Level [dB μ V/75 Ω]	Limit [dB μ V/75 Ω]	Maximum EUT Operation (*)
<u>Test Channel #3</u>					
54.28	2.0	17.0	19.0	39.5	③
55.33	2.0	19.5	21.5	39.5	⑤
56.65	2.0	38.6	40.6	39.5	⑤
69.40	2.0	13.5	15.5	39.5	③
122.49	2.1	14.9	17.0	39.5	③④
183.74	2.4	15.2	17.6	39.5	②④⑤
** 56.65	2.0	12.5	14.5	39.5	⑤
<u>Test Channel #4</u>					
60.30	2.0	17.1	19.1	39.5	③
61.34	2.0	19.0	21.0	39.5	③
62.65	2.0	37.4	39.4	39.5	③⑤
75.38	2.0	13.4	15.4	39.5	⑤
76.25	2.0	13.1	15.1	39.5	①
134.50	2.2	13.5	15.7	39.5	⑦
** 62.65	2.0	12.3	14.3	39.5	③

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- Continued -

[Environment]

Temperature : 24 °C Humidity : 42 %

[Note]

- 1) * : ① Playback mode
② Record mode (1V VITS Signal Input)
③ Record mode (5V VITS Signal Input)
④ Record mode (1V VITS Signal Input)
⑤ Record mode (5V VITS Signal Input)
⑥ Record mode (0 dBmV NTSC TV Signal Input)
⑦ Record mode (25 dBmV NTSC TV Signal Input)

→ 2)** : To except the effect of lower sideband of sound sub-carrier frequency component, if set the resolution bandwidth of spectrum analyzer to 30 kHz, these interference become to this value.

3) The correction factor consist of the voltage loss of the impedance matching transformer and the coaxial cable used for the test. And the meter readings described above are corrected by the gain of pre-amplifier.

[Sample calculation]

Frequency : 54.28 [MHz] (Test Channel #3)
Meter Reading : 17.0 [dBμV/50Ω]
Correction Factor : 2.0 [dB]

Then, the emission level is calculated as follows.

Signal Level = 17.0 + 2.0 = 19.0 [dBμV/75Ω]

[Summary of Test Results]

Minimum margin was 18.0 dB at 55.33 MHz, test channel #3.

Tested Date : December 1, 1998

Signature

Y. Kotani
Yoshiko Kotani

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ENGINEERING TEST REPORT

6.5 Test Results

Emission Frequency [MHz]	Corr. Factor [dB]	Meter Reading [dB μ V/50 Ω]	Maximum Signal Level [dB μ V/75 Ω]	Limit [dB μ V/75 Ω]	Maximum EUT Operation (*)
<u>Test Channel #3</u>					
55.48	2.3	30.1	32.4	39.5	⑦
56.03	2.3	27.9	30.2	39.5	⑦
→ 56.65	2.3	38.4	40.7	39.5	⑦
70.26	2.3	21.0	23.3	39.5	⑦
122.51	2.3	18.0	20.3	39.5	③
183.77	2.3	14.9	17.2	39.5	①
→ ** 56.65	2.3	11.8	14.1	39.5	⑦
<u>Test Channel #4</u>					
45.74	2.3	22.4	24.7	39.5	⑦
61.50	2.3	30.3	32.6	39.5	⑦
→ 62.65	2.3	38.6	40.9	39.5	⑦
76.26	2.3	16.1	18.4	39.5	⑦
134.51	2.3	14.0	16.3	39.5	⑥
201.78	2.3	11.6	13.9	39.5	①
→ ** 62.65	2.3	17.9	20.2	39.5	⑦

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ENGINEERING TEST REPORT

- Continued -

[Environment]

Temperature : 20 °C Humidity : 40 %

[Note]

- 1) * : ① Playback mode
② Record mode (1V VITS Signal Input)
③ Record mode (5V VITS Signal Input)
④ Record mode (1V VITS Signal Input)
⑤ Record mode (5V VITS Signal Input)
⑥ Record mode (0 dBmV NTSC TV Signal Input)
⑦ Record mode (25 dBmV NTSC TV Signal Input)

→ 2)** : To except the effect of lower sideband of sound sub-carrier frequency component, if set the resolution bandwidth of spectrum analyzer to 30 kHz, these interference become to this value.

- 3) The correction factor consist of the voltage loss of the impedance matching transformer and the coaxial cable used for the test. And the meter readings described above are corrected by the gain of pre-amplifier.

[Sample calculation]

Frequency : 55.48 [MHz] (Test Channel #3)
Meter Reading : 30.1 [dBμV/50Ω]
Correction Factor : 2.3 [dB]

Then, the emission level is calculated as follows..

Signal Level = 30.1 + 2.3 = 32.4 [dBμV/75Ω]

[Summary of Test Results]

Minimum margin was 6.9 dB at 61.50 MHz, test channel #4.

Tested Date : November 25, 1998

Signature

Y. Kotani
Yoshiko Kotani