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FCC ID: DDESTL-15-950

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Telephone: (352) 472-5500
(888) 472-2424
Fax: (352) 472-2030
E-mail: info@timcoengr.com

JUNE 16, 1998

Federal Communication Commission
Authorization and Evaluation Division
7435 Oakland Mills Road
Columbia, MD 21046

SUBJECT: FCC ID: DDESTL-15-950
BROADCAST ELECTRONICS

REFERENCE: REQUEST FOR CLASS II PERMISSIVE CHANGE

TO WHOM IT MAY CONCERN:

This letter is a request for a Class II Permissive change. The applicant has changed the oscillator in their device.

Attached please find the test data to reflect these changes.

Should you require any further information, please contact me at 1-888-472-2424.

Sincerely,

S. S. Sanders

SSS/sh
Encl.

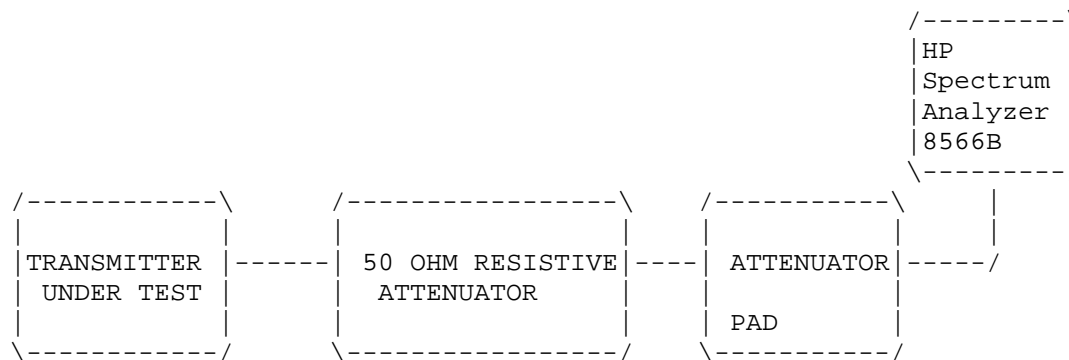
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2.991

Spurious emissions at antenna terminals(conducted):

Data on the following page shows the level of conducted spurious responses. The carrier was modulated 100% using a 2500Hz tone. The spectrum was scanned from 30 to at least the tenth harmonic. The measurements were made in accordance with TIA/EIA standard 603.

Method of Measuring Conducted Spurious Emissions



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2.991 Continued

NAME OF TEST: SPURIOUS EMISSIONS AT ANTENNA TERMINALS

REQUIREMENTS: Emissions must be $43 + 10\log(P_o)$ dB below the mean power output of the transmitter.

$$43 + 10 \log(35) = 43.0 + 10.0 = 53.0\text{dB}$$

EMISSION FREQUENCY MHz	dB BELOW CARRIER
950.50	00.0
1901.00	-61.3
2851.50	-86.5
3802.00	-87.5
4752.50	-83.5
5703.00	-86.5
6653.50	-90.9
7604.00	-87.5

METHOD OF MEASUREMENT: The procedure used was TIA/EIA Standard 603 paragraph 2.2.13. Measurements were made to at least the tenth(10) harmonic of the fundamental using a HP model 8566B spectrum analyzer. The measurements were made using the shielded room located at TIMCO ENGINEERING INC. 25355 West Newberry Road, Newberry, Florida 32626.

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2.995(a)(b)(d) Frequency stability:

74.561

Temperature and voltage tests were performed to verify that the frequency remains within the .005%, (50.0 ppm) (74.561) specification limit.

The test was conducted as follows: The transmitter was placed in the temperature chamber at 25 degrees C and allowed to stabilize for one hour. The transmitter was keyed ON for one minute during which four frequency readings were recorded at 15 second intervals. The worse case number was taken for temperature plotting. The assigned channel frequency was considered to be the reference frequency. The temperature was then reduced to -30 degrees C after which the transmitter was again allowed to stabilize for one hour. The transmitter was keyed ON for one minute, and again frequency readings were noted at 15 second intervals. The worst case number was recorded for temperature plotting. This procedure was repeated in 10 degree increments up to + 50 degrees C.

MEASUREMENT DATA:

Assigned Frequency (Ref. Frequency): 950.500 000

TEMPERATURE_C	FREQUENCY_MHz	PPM
-30	950.500 900	+00.95
-20	950.500 520	+00.55
-10	950.500 340	+00.36
0	950.500 190	+00.20
10	950.500 050	+ 0.05
20	950.500 010	+ 0.00
30	950.500 010	+ 0.01
40	950.500 030	+ 0.03
50	950.500 100	+ 0.10

25c 15% Volt(120)= 102.0VAC	950.500 010	+ 0.00
25c 15% Volt(120)= 138VAC	950.500 010	+ 0.00

RESULTS OF MEASUREMENTS: The maximum frequency variation over the temperature range was +00.95 ppm. There was no measurable variation over the voltage range.

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