

TIMCO ENGINEERING INC.

849 NW State Road 45
Newberry, Florida 32669
<http://www.timcoengr.com>
888.472.2424 F 352.472.2030 email: sid@timcoengr.com

June 8, 2004

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

SUBJECT: FCC ID: BBOMRF75

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's information is provided below:

COBRA ELECTRONICS CORPORATION
6500 WEST CORTLAND STREET
CHICAGO, IL 60707

The enclosed report is to change the emission designator from a 11K2 (12.5kHz) channel bandwidth to a 16K0 (20kHz) channel bandwidth.

Attached, please find the test data to reflect these changes.

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

Sincerely,



Sharon A. Hoffman

APPLICANT: COBRA ELECTRONICS CORPORATION
FCC ID: BBOMRF75
REPORT #: C\COBRA\659UT4\659UT4TestReport.doc

COVER SHEET

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GENERAL INFORMATION

2.1033(c) COBRA ELECTRONICS CORPORATION will sell the FCC ID: BBOMRF75 VHF Marine transmitter in quantity, for use under FCC RULES PART 80.

2.1033(c) TECHNICAL DESCRIPTION

(4) Type of Emission: 16K0G3E/16K0F3E For 20kHz

$$B_n = 2M + 2DK$$

$$M = 3000$$

$$D = 4.6\text{kHz (Peak Deviation)}$$

$$K = 1$$

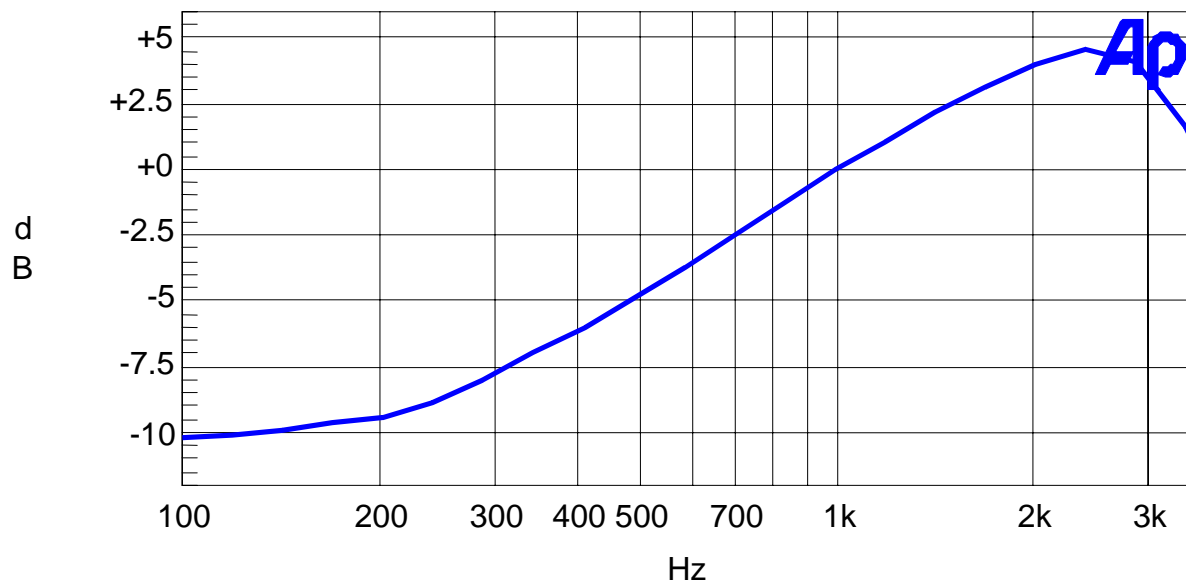
$$B_n = 2(3.0K) + 2(4.6K)(1) = 6.0K + 9.2 = 15.2K$$

80.205 (a) ALLOWED AUTHORIZED BANDWIDTH = 20.00kHz.

2.1047(a) Voice Modulation Characteristics:

(b) AUDIO FREQUENCY RESPONSE See the following plot.

Audio Frequency Response Plot



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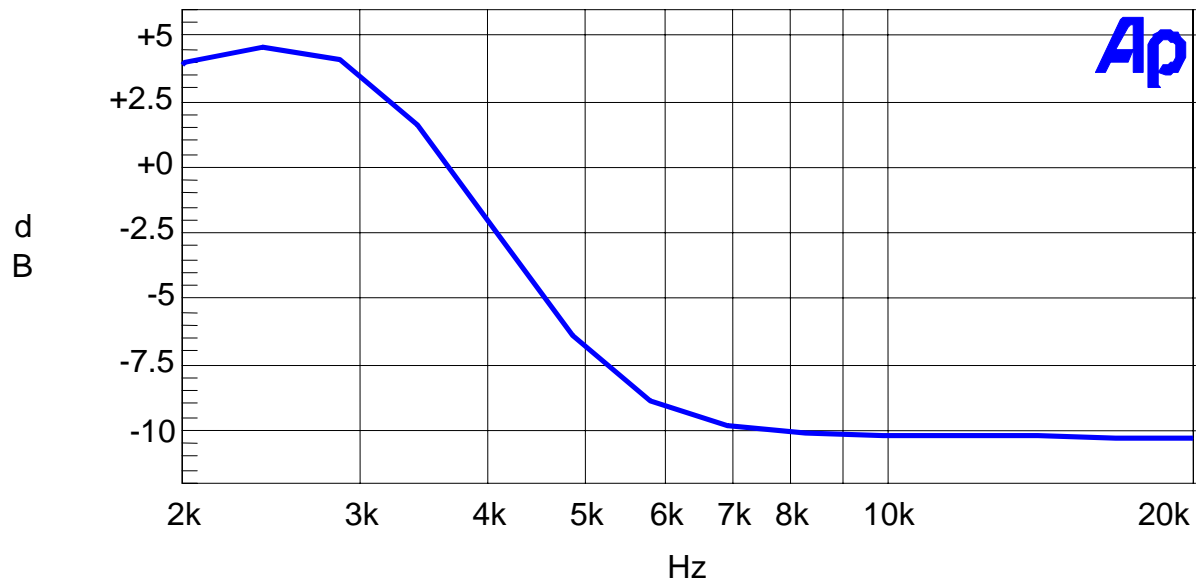
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2.1047(a)

AUDIO LOW PASS FILTER

The audio low pass filter shown in the following plot.

Audio Low Pass Filter Plot



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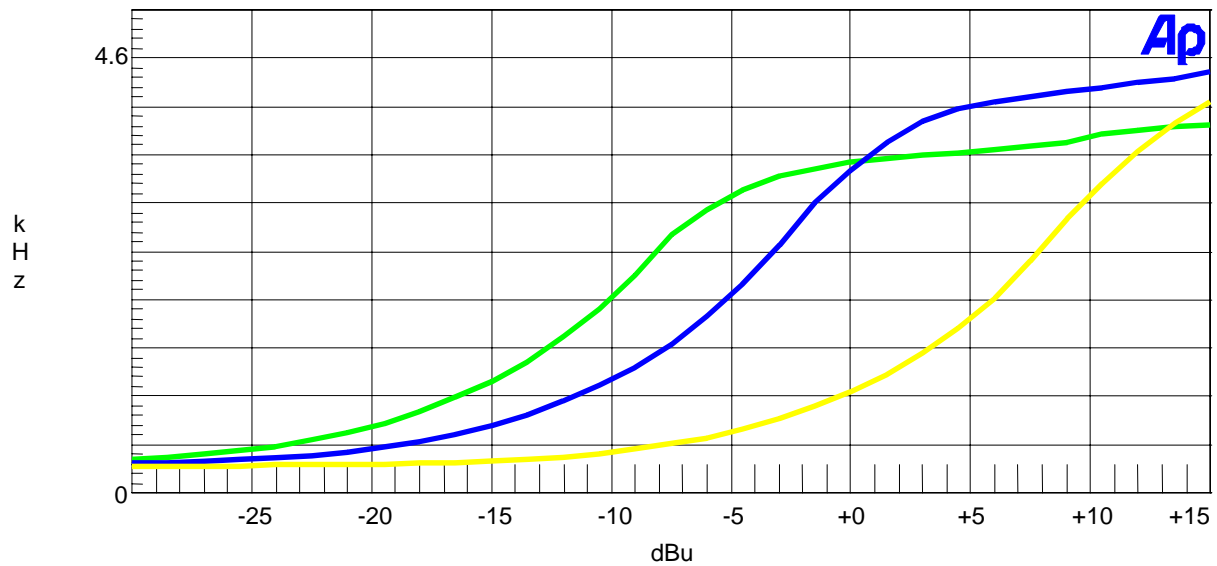
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2.1047(b)
80.213 (d)

Audio input versus modulation

A plot of the audio input versus deviation is shown in the following plot.

Modulation Limiting Plots:
2.5 KHz (Green), 1.0 KHz (Blue), and 300 Hz (Yellow)



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2.1049(c) **Occupied bandwidth:**

80.213 (b)

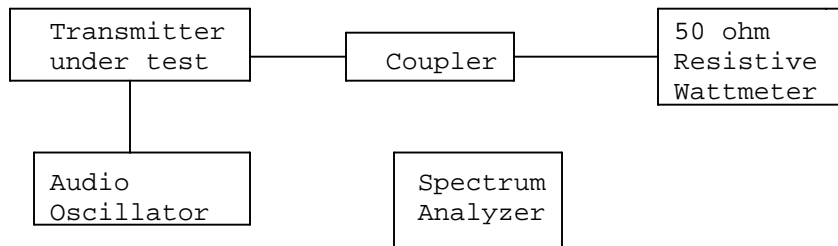
Data in the plots shows that on any frequency removed from the assigned frequency by more than 50%, but not more than 100%: At least 25dB. On any frequency removed from the assigned frequency by more than 100%, but not more than 250%: At least 35dB. On any frequency removed from the assigned frequency by more than 250%, of the authorized bandwidth:
At least $43 + \log(P)$ dB.

Radiotelephone transmitter with modulation limiter.

Test procedure: TIA/EIA-603 para 2.2.11, with the exception that various tones were used.

Test procedure diagram

OCCUPIED BANDWIDTH MEASUREMENT



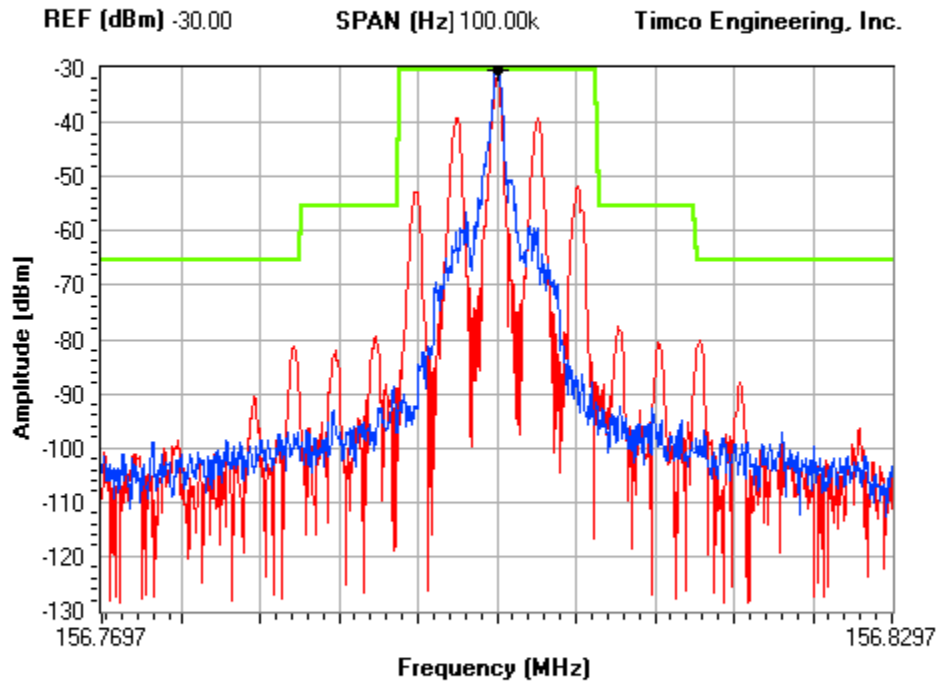
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OCCUPIED BANDWIDTH PLOT

NOTES:

COBRA ELECTRONICS CORPORATION - FCC ID: BB0MRF75
OCCUPIED BANDWIDTH PLOT



RBW	VBW	ST (sec)
300 Hz	100 kHz	1

Center Frequency (Hz) 156.800M

Marker Delta (Hz) 0.00

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