



# M. Flom Associates, Inc.

## International Compliance Testing Laboratory

3356 N. San Marcos Place, Suite 107  
Chandler, AZ 85225

toll-free: (866) 311-3268  
fax: (480) 926-3598

<http://www.mflom.com>  
[info@mflom.com](mailto:info@mflom.com)

Date: September 20, 2005

Federal Communications Commission  
Via: Electronic Filing

Attention: Authorization & Evaluation Division

Applicant: Danphone A/S  
Equipment: DCM 9140 M Transceiver  
FCC ID: NJ4DCB9140  
FCC Rules: 80, Class II Permissive Change

Gentlemen:

In support of a Class II Permissive Change to add an Extension of Frequency, enclosed please find Application Form 731, Engineering Test Report and all pertinent documentation, the whole for approval of the referenced equipment as shown.

1. Application Form 731
2. Copy of previous Grant issued
3. Expository Statement
4. Test Data Report for Extension of Frequency

We trust the same is in order. Should you need any further information, kindly contact the writer who is authorized to act as agent.

Sincerely yours,

Michael Schafer, President

enclosure(s)  
cc: Applicant  
MS/del

**Expository Statement**  
Permissive Change

Applicant: Danphone A/S

FCC ID: NJ4DCB9140

The applicant has made design changes/improvements to the originally FCC approved equipment.

The unit covers the full spectrum allocated to VHF Coast Stations for both simplex and semi-duplex operation (156.025 to 162.025). The initial application only included the simplex frequencies (156.050 to 157.425) and this Class II Permissive for Frequency Extension is to correct that omission, and include the full Part 80 Marine VHF Channel allocation.

There is no change to the hardware, software or operation of the unit. The current manual and exhibits support operation over this frequency range.

A copy of the original grant of equipment approval is included for convenience.

**TCB**

**GRANT OF EQUIPMENT  
AUTHORIZATION**  
Certification  
Issued Under the Authority of the  
Federal Communications Commission  
By:

**TCB**

Timco Engineering, Inc.  
849 NW State Road 45  
P.O. Box 370,  
Newberry, FL 32669

Date of Grant: 09/19/2005  
Application Dated: 09/19/2005

Danphone A/S  
Fabriksvej 4  
DK-9490 Pandrup,  
Denmark

Attention: Ove Jensen , Managing Director

**NOT TRANSFERABLE**

EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE, and  
is VALID ONLY for the equipment identified herein for use under the  
Commission's Rules and Regulations listed below.

**FCC IDENTIFIER:** NJ4DCB9140

**Name of Grantee:** Danphone A/S

**Equipment Class:** Licensed Non-Broadcast Station Transmitter  
**Notes:** Marine Base Station

Grant Notes	FCC Rule Parts	Frequency Range (MHz)	Output Watts	Frequency Tolerance	Emission Designator
	80	156.05 - 157.425	2.0	5.0 PM	16K0F3E
	80	156.05 - 157.425	2.0	5.0 PM	16K0F1D
	80	156.05 - 157.425	10.0	5.0 PM	16K0F3E
	80	156.05 - 157.425	10.0	5.0 PM	16K0F1D
	80	156.05 - 157.425	25.0	5.0 PM	16K0F3E
	80	156.05 - 157.425	25.0	5.0 PM	16K0F1D
	80	156.05 - 157.425	50.0	5.0 PM	16K0F3E
	80	156.05 - 157.425	50.0	5.0 PM	16K0F1D

Power Output listed is Conducted. The antenna used for this transmitter must be installed to provide a separation distance of at least 2.82 meters from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. Users and installers must be provided with antenna installation instructions and transmitting operating conditions for satisfying RF exposure compliance. This device must be restricted to work related operations in an Occupational/Controlled RF exposure Environment.

M. Flom Associates, Inc.  
3356 North San Marcos Place, Suite 107  
Chandler, Arizona 85225-7176  
(480) 926-3100 phone, (480) 926-3598 fax

FCC ID: NJ4DCB9140  
MFA p0570011, d0590059



**M. Flom Associates, Inc.**  
**International Compliance Testing Laboratory**  
3356 N. San Marcos Place, Suite 107  
Chandler, AZ 85225  
toll-free: (866) 311-3268  
fax: (480) 926-3598  
<http://www.mflom.com>  
[info@mflom.com](mailto:info@mflom.com)

## Transmitter Certification

of

**Model:** DCM 9140 M Transceiver  
FCC ID: NJ4DCB9140

to

**Federal Communications Commission**

Rule Part(s) 80, Confidentiality  
Class II Permissive Change

Date of report: September 20, 2005

**On the Behalf of the Applicant:**

Danphone A/S

**At the Request of:**

Danphone A/S  
Fabriksvej 4  
DK-9490 Pandrup, Denmark

**Attention of:**

Ove Jensen, Managing Director  
and/or Olaf Karlsen, M.Sc.E.E.  
+45 98 20 44 11; FAX: +45 98 24 64 85  
E-MAIL: [oj@danphone.com](mailto:oj@danphone.com)

**Supervised by:**

David E. Lee, Quality Assurance Manager

## Table of Contents

<u>Rule</u>	<u>Description</u>	<u>Page</u>
2.1033(c)(14)	Rule Summary	2
	Standard Test Conditions and Engineering Practices	3
2.1033(c)	General Information Required	4
2.1046(a)	Carrier Output Power (Conducted)	6
2.1051	Unwanted Emissions (Transmitter Conducted)	8
2.1053(a)	Field Strength of Spurious Radiation	10
2.1049(c)(1)	Emission Masks (Occupied Bandwidth)	14

Required information per ISO/IEC Guide 25-1990, paragraph 13.2:

a) **Test Report**

b) Laboratory: M. Flom Associates, Inc.  
(FCC: 31040/SIT) 3356 N. San Marcos Place, Suite 107  
(Canada: IC 2044) Chandler, AZ 85225

c) Report Number: d0570059

d) Client: Danphone A/S  
Fabriksvej 4  
DK-9490 Pandrup, Denmark

e) Identification: DCM 9140 M Transceiver  
FCC ID: NJ4DCB9140  
EUT Description: Marine Coast Station

f) EUT Condition: Not required unless specified in individual tests.

g) Report Date: July 29, 2005 (Updated September 20, 2005)  
EUT Received: July 6, 2005

h, j, k): As indicated in individual tests.

i) Sampling method: No sampling procedure used.

l) Uncertainty: In accordance with MFA internal quality manual.

m) Supervised by:



David E. Lee, Quality Assurance Manager

n) Results: The results presented in this report relate only to the item tested.

o) Reproduction: This report must not be reproduced, except in full, without written permission from this laboratory.

Accessories used during testing:

Type	Quantity	Manufacturer	Model	Serial No.	FCC ID
Interface	1	Danphone	TS-1	nsn	-

Sub-part

2.1033(c)(14):

## Test and Measurement Data

All tests and measurement data shown were performed in accordance with FCC Rules and Regulations, Volume II; Part 2, Sub-part J, Sections 2.947, 2.1033(c), 2.1041, 2.1046, 2.1047, 2.1079, 2.1051, 2.1053, 2.1055, 2.1057 and the following individual Parts:

- ☐ 21 - Domestic Public Fixed Radio Services
- ☐ 22 - Public Mobile Services
- ☐ 22 Subpart H - Cellular Radiotelephone Service
- ☐ 22.901(d) - Alternative technologies and auxiliary services
- ☐ 23 - International Fixed Public Radiocommunication services
- ☐ 24 - Personal Communications Services
- ☐ 74 Subpart H - Low Power Auxiliary Stations
- ☐ 80 - Stations in the Maritime Services
- ☒ 80 Subpart E - General Technical Standards
- ☐ 80 Subpart F - Equipment Authorization for Compulsory Ships
- ☐ 80 Subpart K - Private Coast Stations and Marine Utility Stations
- ☐ 80 Subpart S - Compulsory Radiotelephone Installations for Small Passenger Boats
- ☐ 80 Subpart T - Radiotelephone Installation Required for Vessels on the Great Lakes
- ☐ 80 Subpart U - Radiotelephone Installations Required by the Bridge-to-Bridge Act
- ☐ 80 Subpart V - Emergency Position Indicating Radio Beacons (EPIRB'S)
- ☐ 80 Subpart W - Global Maritime Distress and Safety System (GMDSS)
- ☐ 80 Subpart X - Voluntary Radio Installations
- ☐ 87 - Aviation Services
- ☐ 90 - Private Land Mobile Radio Services
- ☐ 94 - Private Operational-Fixed Microwave Service
- ☐ 95 Subpart A - General Mobile Radio Service (GMRS)
- ☐ 95 Subpart C - Radio Control (R/C) Radio Service
- ☐ 95 Subpart D - Citizens Band (CB) Radio Service
- ☐ 95 Subpart E - Family Radio Service
- ☐ 95 Subpart F - Interactive Video and Data Service (IVDS)
- ☐ 97 - Amateur Radio Service
- ☐ 101 - Fixed Microwave Services

## Standard Test Conditions and Engineering Practices

Except as noted herein, the following conditions and procedures were observed during the testing:

In accordance with ANSI C63.4-1992/2000, section 6.1.9, and unless otherwise indicated in the specific measurement results, the ambient temperature of the actual EUT was maintained within the range of 10° to 40°C (50° to 104 °F) unless the particular equipment requirements specify testing over a different temperature range. Also, unless otherwise indicated, the humidity levels were in the range of 10% to 90% relative humidity.

Prior to testing, the EUT was tuned up in accordance with the manufacturer's alignment procedures. All external gain controls were maintained at the position of maximum and/or optimum gain throughout the testing.

Measurement results, unless otherwise noted, are worst-case measurements.



### A2LA

"A2LA has accredited M. Flom Associates, Inc. Chandler, AZ for technical competence in the field of Electrical Testing. The accreditation covers the specific tests and types of tests listed on the agreed scope of accreditation. This laboratory meets the requirements of ISO/IEC 17025 - 1999 'General Requirements for the Competence of Testing and Calibration Laboratories' and any additional program requirements in the identified field of testing."

Certificate Number: **2152-01**

## List of General Information Required for Certification

In Accordance with FCC Rules and Regulations,  
Volume II, Part 2, 80 and Confidentiality

### Sub-part 2.1033

#### (c)(1): **Name and Address of Applicant:**

Danphone A/S  
Fabriksvej 4  
DK-9490 Pandrup, Denmark

#### **Manufacturer:**

Danphone A/S  
Fabriksvej 4  
DK-9490 Pandrup, Denmark

#### (c)(2): **FCC ID:**

NJ4DCB9140

#### **Model Number:**

DCM 9140 M Transceiver

#### (c)(3): **Instruction Manual(s):**

Please see attached exhibits

#### (c)(4): **Type of Emission:**

16K0F3E, 16K0F1D

#### (c)(5): **Frequency Range, MHz:**

156.025 to 162.025

#### (c)(6): **Power Rating, Watts:**

  X   Switchable

       Variable

50, 25, 10, 2  
       N/A

#### (c)(7): **Maximum Power Rating, Watts:**

100

#### **DUT Results:**

Passes       X       Fails



Subpart 2.1033 (continued)

(c)(8): Voltages & currents in all elements in final RF stage, including final transistor or solid-state device:

Collector Current, A	=	8
Collector Voltage, Vdc	=	12
Supply Voltage, Vdc	=	13.2

(c)(14): **Test and Measurement Data:**

Follows

**Name of Test:** Carrier Output Power (Conducted)

**Specification:** 47 CFR 2.1046(a)

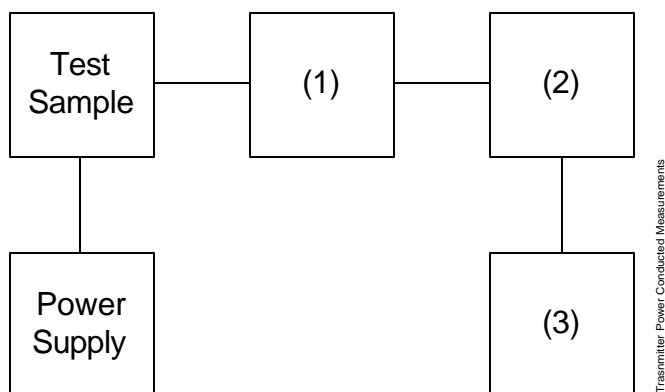
**Guide:** ANSI/TIA/EIA-603-1992, Paragraph 2.2.1

### Measurement Procedure

A) The EUT was connected to a resistive coaxial attenuator of normal load impedance, and the unmodulated output power was measured by means of an RF Power Meter.

B) Measurement accuracy is  $\pm 3\%$ .

### Transmitter Test Set-Up: RF Power Output



	Asset	Description	s/n	Cycle	Last Cal
(1)	<b>Coaxial Attenuator</b>				
X	i00231/2	PASTERNAK PE7021-30 (30 dB)	231 or 232	NCR	
	i00122/3	NARDA 766 (10 dB)	7802 or 7802A	NCR	
(2)	<b>Power Meters</b>				
X	i00020	HP 8901A Power Mode	2105A01087	12 mo.	Apr-05
(3)	<b>Frequency Counter</b>				
X	i00020	HP 8901A Frequency Mode	2105A01087	12 mo.	Apr-05

**Name of Test:** Carrier Output Power (Conducted)

**Measurement Results**  
(Worst case)

Frequency of Carrier, MHz = 162.025  
Ambient Temperature = 23°C ± 3°C

Power Setting	RF Power, Watts
High	50.0
Medium High	25.0
Medium Low	10.0
Low	2.0



Performed by: Fred Chastain, Test Technician

**Name of Test:** Unwanted Emissions (Transmitter Conducted)

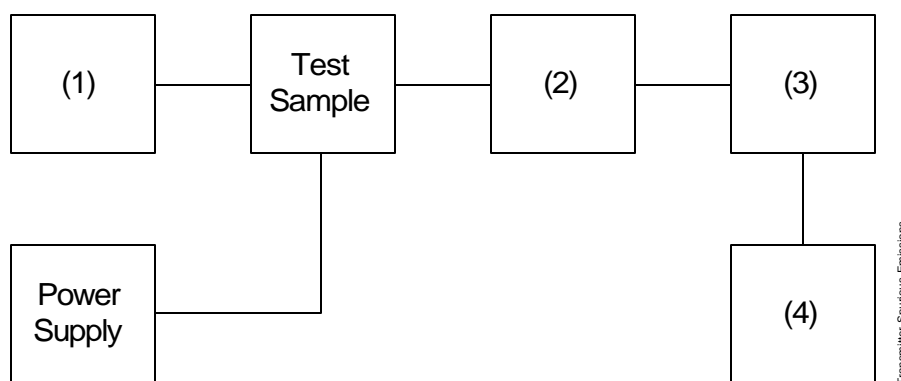
**Specification:** 47 CFR 2.1051

**Guide:** ANSI/TIA/EIA-603-1992, Paragraph 2.2.13

### Measurement Procedure

- A) The emissions were measured for the worst case as follows:
- 1). within a band of frequencies defined by the carrier frequency plus and minus one channel.
  - 2). from the lowest frequency generated in the EUT and to at least the 10th harmonic of the carrier frequency, or 40 GHz, whichever is lower.
- B) The magnitude of spurious emissions that are attenuated more than 20 dB below the permissible value need not be specified.

### Transmitter Test Set-Up: Spurious Emission



Asset	Description	s/n			
(1) <b>Audio Oscillator/Generator</b>					
X	i00017	HP 8903A Audio Analyzer	2216A01753	12 mo.	Apr-05
	i00002	HP 3336B Synthesizer / Level Gen.	1931A01465	12 mo.	Apr-05
(2) <b>Coaxial Attenuator</b>					
X	i00231/2	PASTERNAK PE7021-30 (30 dB)	231 or 232	NCR	
	i0012/3	NARDA 766 (10 dB)	7802 or 7802A	NCR	
(3) <b>Filters; Notch, HP, LP, BP</b>					
	None required				
(4) <b>Spectrum Analyzer</b>					
X	i00048	HP 8566B Spectrum Analyzer	2511A01467	12 mo.	Oct-04
	i00029	HP 8563E Spectrum Analyzer	3213A00104	12 mo.	May-05

**Name of Test:** Unwanted Emissions (Transmitter Conducted)

**Measurement Results**  
(Worst Case)

Summary:

Frequency of carrier, MHz	=	160.425, 162.025
Spectrum Searched, GHz	=	0 to 10 x F <sub>C</sub>
Maximum Response, Hz	=	2820
All Other Emissions	=	= 20 dB Below Limit
Limit, dBc (dBm)		-46 (-13)

Tabulated Results follow:

**Measurement Results**

g0590085: 2005-Sep-20 Tue 11:57:00  
State: 2:High Power

Frequency Tuned, MHz	Frequency Emission, MHz	Level, dBm	Level, dBc	Margin, dB
----------------------	-------------------------	------------	------------	------------

Emissions program run at 160.425 MHz and 162.025. No emissions greater than 20dB under the limit (-33dBm)



Performed by:

Fred Chastain, Test Technician

**Name of Test:** Field Strength of Spurious Radiation

**Specification:** 47 CFR 2.1053(a)

**Guide:** ANSI/TIA/EIA-603-1992/2001, Paragraph 1.2.12 and Table 16, 47 CFR 22.917

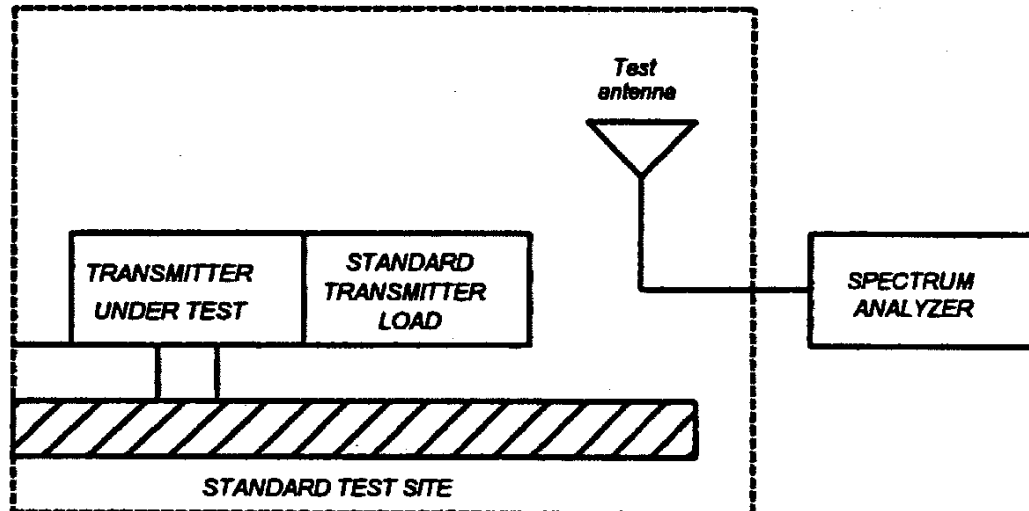
### Measurement Procedure

#### Definition:

Radiated spurious emissions are emissions from the equipment when transmitting into a non-radiating load on a frequency or frequencies which are outside an occupied band sufficient to ensure transmission of information of required quality for the class of communications desired.

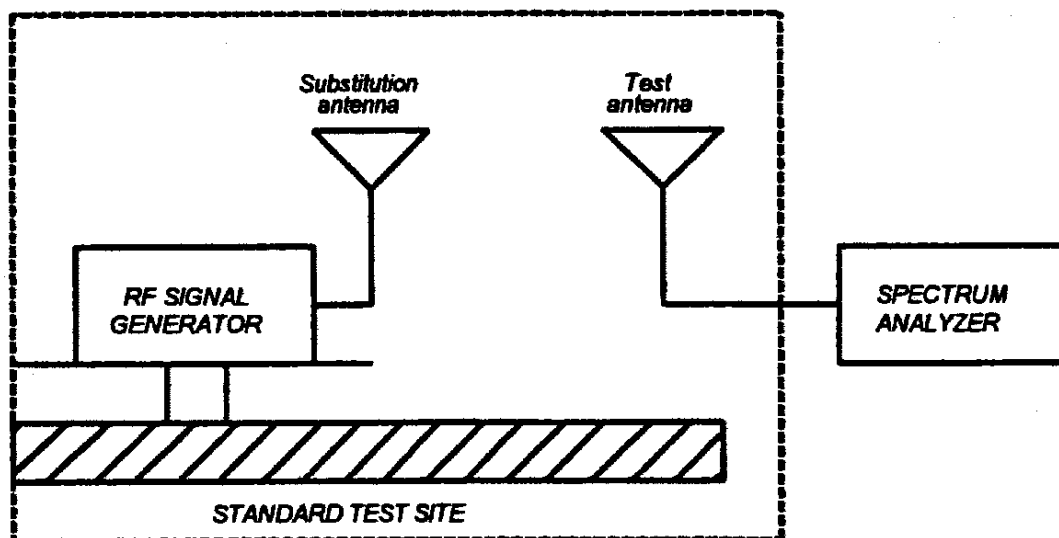
#### Method of Measurement:

- A) Connect the equipment as illustrated
- B) Adjust the spectrum analyzer for the following settings:
  - 1) Resolution Bandwidth 100 kHz (<1 GHz), 1 MHz (> 1GHz).
  - 2) Video Bandwidth = 3 times Resolution Bandwidth, or 30 kHz (22.917)
  - 3) Sweep Speed  $\leq 2000$  Hz/second
  - 4) Detector Mode = Mean or Average Power
- C) Place the transmitter to be tested on the turntable in the standard test site. The transmitter is transmitting into a non-radiating load that is placed on the turntable. The RF cable to this load should be of minimum length.



**Name of Test:** Field Strength of Spurious Radiation (Cont.)

- D) For each spurious measurement the test antenna should be adjusted to the correct length for the frequency involved. This length may be determined from a calibration ruler supplied with the equipment. Measurements shall be made from the lowest radio frequency generated in the equipment to the tenth harmonic of the carrier, except for the region close to the carrier equal to  $\pm$  the test bandwidth (see section 1.3.4.4).
- E) For each spurious frequency, raise and lower the test antenna from 1 m to 4 m to obtain a maximum reading on the spectrum analyzer with the test antenna at horizontal polarity. Repeat this procedure to obtain the highest possible reading. Record this maximum reading.
- F) Repeat step E) for each spurious frequency with the test antenna polarized vertically.



- G) Reconnect the equipment as illustrated.
- H) Keep the spectrum analyzer adjusted as in step B).
- I) Remove the transmitter and replace it with a substitution antenna (the antenna should be half-wavelength for each frequency involved). The center of the substitution antenna should be approximately at the same location as the center of the transmitter. At lower frequencies, where the substitution antenna is very long, this will be impossible to achieve when the antenna is polarized vertically. In such case the lower end of the antenna should be 0.3 m above the ground.

**Name of Test:** Field Strength of Spurious Radiation (Cont.)

- J) Feed the substitution antenna at the transmitter end with a signal generator connected to the antenna by means of a non-radiating cable. With the antennas at both ends horizontally polarized and with the signal generator tuned to a particular spurious frequency, raise and lower the test antenna to obtain a maximum reading at the spectrum analyzer. Adjust the level of the signal generator output until the previously recorded maximum reading for this set of conditions is obtained. This should be done carefully repeating the adjustment of the test antenna and generator output.
- K) Repeat step J) with both antennas vertically polarized for each spurious frequency.
- L) Calculate power in dBm into a reference ideal half-wave dipole antenna by reducing the readings obtained in steps J) and K) by the power loss in the cable between the generator and the antenna and further corrected for the gain of the substitution antenna used relative to an ideal half-wave dipole antenna.
- M) The levels recorded in step L) are absolute levels of radiated spurious emissions in dBm. The radiated spurious emissions in dB can be calculated by the following:

Radiated spurious emissions dB =

$$10\log_{10}(\text{TX power in watts}/0.001) - \text{the levels in step I)}$$

*NOTE: It is permissible that other antennas provided can be referenced to a dipole.*

**Test Equipment**

Asset	Description	s/n	Cycle	Last Cal	
Transducer					
	i00088	EMCO 3109-B 25MHz-300MHz	2336	24 mo.	Sep-03
X	i00089	Apriel 2001 200MHz-1GHz	001500	24 mo.	Sep-03
X	i00103	EMCO 3115 1GHz-18GHz	9208-3925	24 mo.	Jan-04
Amplifier					
X	i00028	HP 8449A	2749A00121	12 mo.	May-05
Spectrum Analyzer					
X	i00029	HP 8563E	3213A00104	12 mo.	May-05
X	i00033	HP 85462A	3625A00357	12 mo.	Oct-04
Substitution Generator					
X	i00067	HP 8920A Communication TS	3345U01242	12 mo.	May-05
	i00207	HP 8753D Network Analyzer	3410A08514	12 mo.	May-05

**Microphone, Antenna Port, and Cabling**

Microphone	<u>No</u>	Cable Length	<u>-</u>	Meters
Antenna Port Terminated	<u>Yes</u>	Load	<u>Yes</u>	Antenna Gain
All Ports Terminated by Load	<u>Yes</u>	Peripheral	<u>No</u>	<u>N/A</u>



Name of Test: Field Strength of Spurious Radiation

**Measurement Results (Additional Frequencies added September 20, 2005)**

Tuned, MHz	Emission, MHz	dBmV/m	CF Factor	dBm	Margin, dB
156.300000	312.603800	20.04	29.57	-47.80	-27.80
156.800000	313.603800	20.71	29.59	-47.10	-27.10
157.425000	314.851300	24.16	15.62	-57.60	-37.60
160.425000	320.855000	9.13	35.75	-52.50	-32.50
162.025000	324.055000	10.30	25.82	-61.30	-41.30
156.300000	468.903800	13.32	32.58	-51.50	-31.50
156.800000	470.403800	14.06	32.60	-50.70	-30.70
157.425000	472.276300	19.09	18.63	-59.70	-39.70
160.425000	481.280000	11.46	38.74	-47.20	-27.20
162.025000	486.080000	14.21	28.80	-54.40	-34.40
156.300000	625.203800	28.11	39.19	-30.10	-10.10
156.800000	627.203800	27.38	39.22	-30.80	-10.80
157.425000	629.701300	16.53	25.26	-55.60	-35.60
160.425000	641.705000	8.26	45.43	-43.70	-23.70
162.025000	648.105000	9.01	35.52	-52.80	-32.90
156.300000	781.503800	23.07	39.35	-35.00	-15.00
156.800000	784.003800	18.77	39.31	-39.30	-19.30
157.425000	787.123800	15.74	25.27	-56.40	-36.40
160.425000	802.130000	8.39	45.12	-43.90	-23.90
162.025000	810.130000	11.48	35.21	-50.70	-30.70
156.300000	937.803800	15.98	41.53	-39.90	-19.90
156.800000	940.803800	16.04	41.63	-39.70	-19.70
157.425000	944.548800	16.63	27.77	-53.00	-33.00
160.425000	962.555000	8.87	48.39	-40.10	-20.10
162.025000	972.155000	8.66	35.35	-53.40	-33.40
156.300000	1094.103800	13.76	40.14	-43.50	-23.50
156.800000	1097.603800	12.99	40.15	-44.20	-24.30
157.425000	1101.973800	20.34	25.80	-51.20	-31.30
160.425000	1122.980000	8.45	45.88	-43.00	-23.10
162.025000	1134.180000	13.17	35.92	-48.30	-28.30
156.300000	1250.403800	12.45	41.02	-43.90	-23.90
156.800000	1254.403800	8.83	41.03	-47.50	-27.50
157.425000	1259.398800	12.72	26.44	-58.20	-38.20
160.425000	1283.405000	12.40	41.62	-43.40	-23.40
162.025000	1296.205000	12.81	36.72	-47.80	-27.90
156.300000	1406.703800	17.20	41.34	-38.80	-18.90
156.800000	1411.203800	10.83	41.34	-45.20	-25.20
157.425000	1416.823800	13.12	27.60	-56.70	-36.70
160.425000	1443.830000	11.22	37.79	-48.40	-28.40
162.025000	1458.230000	12.32	37.89	-47.20	-27.20
156.300000	1563.003800	16.28	41.58	-39.50	-19.50
156.800000	1568.003800	16.35	41.58	-39.40	-19.50
157.425000	1574.248800	10.52	29.09	-57.80	-37.80
160.425000	1604.255000	8.35	39.44	-49.60	-29.60
162.025000	1620.255000	8.73	39.64	-49.00	-29.00

**Name of Test:** Emission Masks (Occupied Bandwidth)

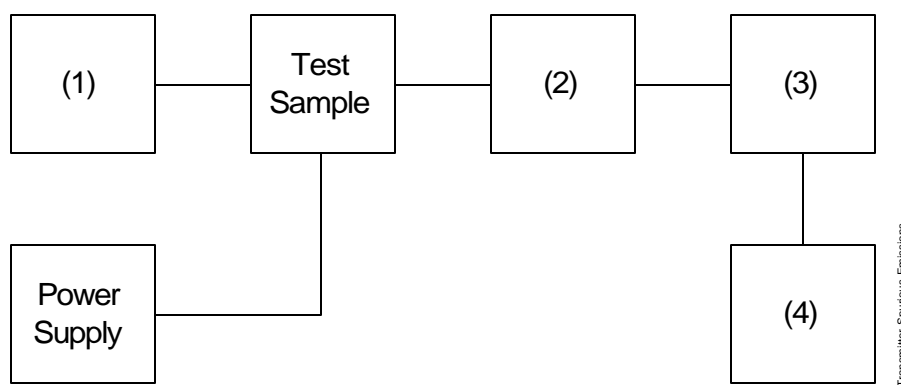
**Specification:** 47 CFR 2.1049(c)(1)

**Guide:** ANSI/TIA/EIA-603-1992, Paragraph 2.2.11

### Measurement Procedure

- A) The EUT and test equipment were set up as shown below
- B) For EUTs supporting audio modulation, the audio signal generator was adjusted to the frequency of maximum response and with output level set for  $\pm 2.5/\pm 1.25$  kHz deviation (or 50% modulation). With level constant, the signal level was increased 16 dB.
- C) For EUTs supporting digital modulation, the digital modulation mode was operated to its maximum extent.
- D) The Occupied Bandwidth was measured with the Spectrum Analyzer controls set as shown on the test results.

### Transmitter Test Set-Up: Occupied Bandwidth



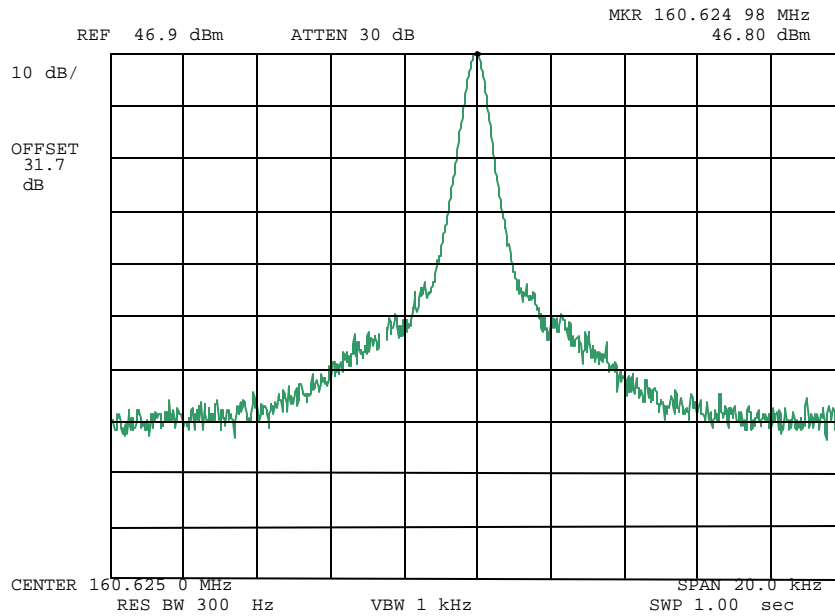
Asset	Description	s/n	Cycle	Last Cal
<b>(1) Audio Oscillator/Generator</b>				
X i00017	HP 8903A Modulation Meter	2216A01753	12 mo.	Apr-05
<b>(2) Coaxial Attenuator</b>				
X i00231/2	PASTERNAK PE7021-30 (30 dB)	231 or 232	NCR	
i00123	NARDA 766 (10 dB)	7802A	NCR	
<b>(3) Interface</b>				
X i00021	HP 8954A Transceiver Interface	2146A00159	NCR	
<b>(4) Spectrum Analyzer</b>				
X i00048	HP 8566B Spectrum Analyzer	2511A01467	12 mo.	Oct-05
i00029	HP 8563E Spectrum Analyzer	3213A00104	12 mo.	May-05

Name of Test: Emission Masks (Occupied Bandwidth)

### Measurement Results

g0590095: 2005-Sep-20 Tue 14:55:00  
State: 2:High Power

Ambient Temperature: 23°C ± 3°C



Power:  
Modulation:

HIGH (50W)  
NONE  
160.625MHz (Channel 60)

*Fred Chastain*

Performed by:

Fred Chastain, Test Technician

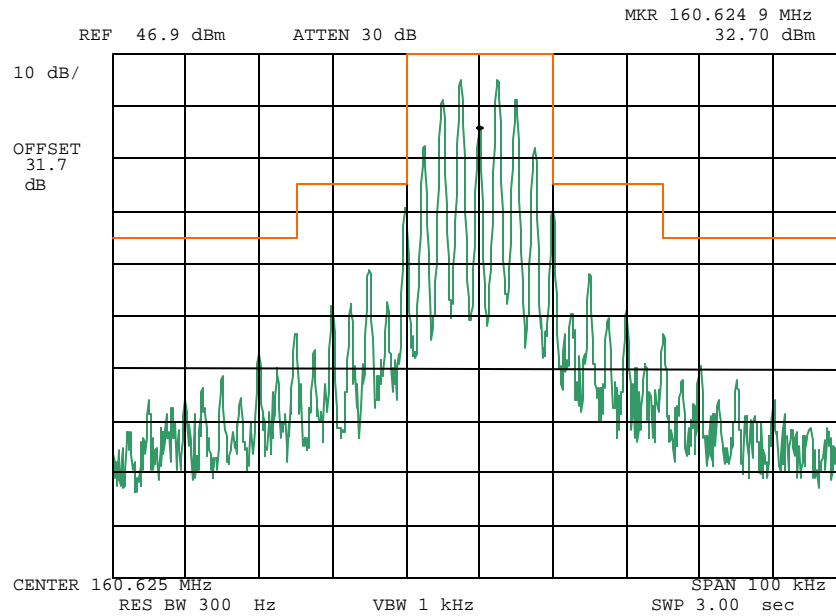
Name of Test: Emission Masks (Occupied Bandwidth)

### Measurement Results

g0590096: 2005-Sep-20 Tue 15:05:00

State: 2:High Power

Ambient Temperature: 23°C ± 3°C



Power:

Modulation:

HIGH

VOICE: 2500 Hz SINE WAVE

MASK: B, VHF/UHF 25kHz, w/LPF  
(Channel 60)



Performed by:

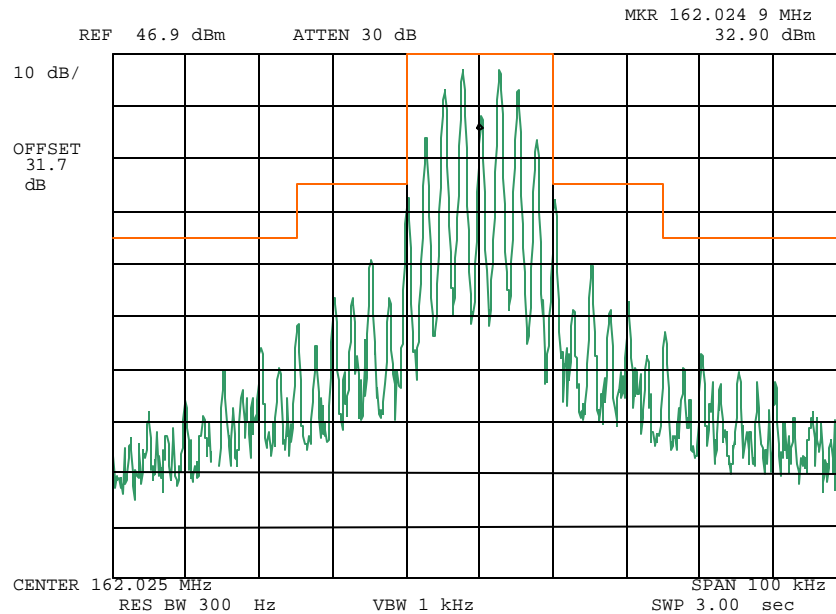
Fred Chastain, Test Technician

Name of Test: Emission Masks (Occupied Bandwidth)

### Measurement Results

g0590097: 2005-Sep-20 Tue 15:15:00  
State: 2:High Power

Ambient Temperature: 23°C ± 3°C



Power:

Modulation:

HIGH

VOICE: 2500 Hz SINE WAVE

MASK: B, VHF/UHF 25kHz, w/LPF  
(Channel 88)



Performed by:

Fred Chastain, Test Technician

END OF TEST REPORT

**Testimonial  
and  
Statement of Certification**

**This is to Certify:**

1. **That** the application was prepared either by, or under the direct supervision of, the undersigned.
2. **That** the technical data supplied with the application was taken under my direction and supervision.
3. **That** the data was obtained on representative units, randomly selected.
4. **That**, to the best of my knowledge and belief, the facts set forth in the application and accompanying technical data are true and correct.



Certifying Engineer:

David E. Lee, Quality Assurance Manager