

PAGE NO.

2 of 42. AMENDED August 3, 1999

LIST OF GENERAL INFORMATION REQUIRED FOR CERTIFICATIONIN ACCORDANCE WITH FCC RULES AND REGULATIONS,
VOLUME II, PART 2 AND TO

22, 74, 80, 90

Sub-part 2.1033

(c) (1): NAME AND ADDRESS OF APPLICANT:Kenwood Communications Corporation
2201 E. Dominguez St
P.O. Box 22745
Long Beach, CA 90801-5745MANUFACTURER:Kenwood Electronics Technologies Pte. Ltd,
1 Ang Mo Kio Street 63
Singapore 569110(c) (2): FCC ID: ALH29463110MODEL NO: TK-270G(c) (3): INSTRUCTION MANUAL(S):

PLEASE SEE ATTACHED EXHIBITS

(c) (4): TYPE OF EMISSION: 16K0F3E, 11K0F3E(c) (5): FREQUENCY RANGE, MHz: 150 to 174(c) (6): POWER RATING, Watts: 0.5 to 5
Switchable x Variable N/A(c) (7): MAXIMUM POWER RATING, Watts: 300

PAGE NO. 7 of 42. AMENDED August 3, 1999
NAME OF TEST: Carrier Output Power (Conducted)
SPECIFICATION: 47 CFR 2.1046(a)
GUIDE: ANSI/TIA/EIA-603-1992, Paragraph 2.2.1
TEST EQUIPMENT: As per attached page

MEASUREMENT PROCEDURE

1. The EUT was connected to a resistive coaxial attenuator of normal load impedance, and the unmodulated output power was measured by means of an R. F. Power Meter.
2. Measurement accuracy is $\pm 3\%$.

MEASUREMENT RESULTS
(Worst case)

FREQUENCY OF CARRIER, MHz = 162.02, 150.02, 173.98

<u>POWER SETTING</u>	<u>R. F. POWER, WATTS</u>
Low	0.5
High	5

SUPERVISED BY:


 Morton Flom, P. Eng.

PAGE NO. 9 of 42. AMENDED August 3, 1999

NAME OF TEST: Unwanted Emissions (Transmitter Conducted)

SPECIFICATION: 47 CFR 2.1051

GUIDE: ANSI/TIA/EIA-603-1992, Paragraph 2.2.13

TEST EQUIPMENT: As per attached page

MEASUREMENT PROCEDURE

1. The emissions were measured for the worst case as follows:
 - (a): within a band of frequencies defined by the carrier frequency plus and minus one channel.
 - (b): 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.
2. The magnitude of spurious emissions that are attenuated more than 20 dB below the permissible value need not be specified.
3. MEASUREMENT RESULTS: ATTACHED FOR WORST CASE

FREQUENCY OF CARRIER, MHz = 162.02, 150.02, 173.98

SPECTRUM SEARCHED, GHz = 0 to 10 x F_c

MAXIMUM RESPONSE, Hz = 3160

ALL OTHER EMISSIONS = ≥ 20 dB BELOW LIMIT

LIMIT(S), dBc

-(50+10xLOG P) = -47 (0.5 Watts)

-(50+10xLOG P) = -57 (5 Watts)

SUPERVISED BY:


Morton Flom, P. Eng.

PAGE NO.

11 of 42. AMENDED August 3, 1999

NAME OF TEST: Unwanted Emissions (Transmitter Conducted)
 g9980009: 1999-Aug-03 Tue 11:15:00
 STATE: 2:Low Power

FREQUENCY TUNED, MHz	FREQUENCY EMISSION, MHz	LEVEL, dBm	LEVEL, dBc	MARGIN, dB
150.020000	300.052000	-42	-69	-22
162.020000	324.041000	-41.4	-68.4	-21.4
173.980000	347.962000	-44.1	-71.1	-24.1
150.020000	450.071000	-43.6	-70.6	-23.6
162.020000	486.065000	-42.9	-69.9	-22.9
173.980000	521.948000	-40.8	-67.8	-20.8
150.020000	600.090000	-53.5	-80.5	-33.5
162.020000	647.619000	-54.1	-81.1	-34.1
173.980000	696.223000	-53.5	-80.5	-33.5
150.020000	750.281000	-54.5	-81.5	-34.5
162.020000	810.320000	-55	-82	-35
173.980000	870.304000	-54.2	-81.2	-34.2
150.020000	900.149000	-53.6	-80.6	-33.6
162.020000	972.420000	-53.2	-80.2	-33.2
173.980000	1044.177000	-53.8	-80.8	-33.8
150.020000	1049.913000	-54.5	-81.5	-34.5
162.020000	1134.192000	-53.5	-80.5	-33.5
150.020000	1199.868000	-54.4	-81.4	-34.4
173.980000	1218.279000	-53.8	-80.8	-33.8
162.020000	1296.234000	-53.8	-80.8	-33.8
150.020000	1349.929000	-54	-81	-34
173.980000	1391.403000	-54.3	-81.3	-34.3
162.020000	1457.992000	-54.1	-81.1	-34.1
150.020000	1499.982000	-54.1	-81.1	-34.1
173.980000	1565.426000	-53.9	-80.9	-33.9
162.020000	1620.320000	-53.9	-80.9	-33.9
150.020000	1650.589000	-54	-81	-34
173.980000	1740.048000	-53.7	-80.7	-33.7
162.020000	1781.896000	-53.4	-80.4	-33.4
150.020000	1800.475000	-53.7	-80.7	-33.7
173.980000	1913.846000	-54.1	-81.1	-34.1
162.020000	1944.607000	-52.3	-79.3	-32.3
150.020000	1950.064000	-52.7	-79.7	-32.7
173.980000	2087.384000	-52.7	-79.7	-32.7
150.020000	2099.860000	-53.3	-80.3	-33.3
162.020000	2106.423000	-53.3	-80.3	-33.3
150.020000	2250.493000	-52.9	-79.9	-32.9
173.980000	2261.393000	-52.3	-79.3	-32.3
162.020000	2268.594000	-54.1	-81.1	-34.1
162.020000	2430.788000	-53.1	-80.1	-33.1
173.980000	2435.574000	-52.6	-79.6	-32.6
173.980000	2609.831000	-55.6	-82.6	-35.6

PAGE NO.

12 of 42. AMENDED August 3, 1999

NAME OF TEST: Unwanted Emissions (Transmitter Conducted)
 g9980005: 1999-Aug-03 Tue 10:48:00
 STATE: 2:High Power

FREQUENCY TUNED, MHz	FREQUENCY EMISSION, MHz	LEVEL, dBm	LEVEL, dBc	MARGIN, dB
150.020000	300.013000	-44.9	-81.8	-24.9
162.020000	324.044000	-34.1	-71	-14.1
173.980000	347.954000	-35.2	-72.1	-15.2
150.020000	450.050000	-41	-77.9	-21
162.020000	486.065000	-37.2	-74.1	-17.2
173.980000	521.935000	-29.1	-66	-9.1
150.020000	600.432000	-43.3	-80.2	-23.3
162.020000	648.521000	-44.1	-81	-24.1
173.980000	695.894000	-44.6	-81.5	-24.6
150.020000	749.982000	-44.3	-81.2	-24.3
162.020000	809.832000	-44	-80.9	-24
173.980000	870.112000	-44.6	-81.5	-24.6
150.020000	900.277000	-44.4	-81.3	-24.4
162.020000	972.094000	-44.2	-81.1	-24.2
173.980000	1043.701000	-43.8	-80.7	-23.8
150.020000	1050.320000	-44.6	-81.5	-24.6
162.020000	1134.584000	-44.5	-81.4	-24.5
150.020000	1200.536000	-43.3	-80.2	-23.3
173.980000	1218.222000	-43.5	-80.4	-23.5
162.020000	1295.697000	-43.9	-80.8	-23.9
150.020000	1350.232000	-43.9	-80.8	-23.9
173.980000	1391.454000	-43.6	-80.5	-23.6
162.020000	1458.567000	-42.3	-79.2	-22.3
150.020000	1499.980000	-43.9	-80.8	-23.9
173.980000	1566.190000	-42.7	-79.6	-22.7
162.020000	1620.447000	-42.8	-79.7	-22.8
150.020000	1650.541000	-43.8	-80.7	-23.8
173.980000	1739.717000	-43.1	-80	-23.1
162.020000	1782.593000	-42.9	-79.8	-22.9
150.020000	1800.657000	-43	-79.9	-23
173.980000	1913.895000	-43	-79.9	-23
162.020000	1944.732000	-43.5	-80.4	-23.5
150.020000	1950.039000	-42.9	-79.8	-22.9
173.980000	2087.382000	-43.5	-80.4	-23.5
150.020000	2100.688000	-43.1	-80	-23.1
162.020000	2106.414000	-42.8	-79.7	-22.8
150.020000	2250.536000	-43	-79.9	-23
173.980000	2261.808000	-42.9	-79.8	-22.9
162.020000	2268.370000	-42.4	-79.3	-22.4
162.020000	2430.544000	-42.7	-79.6	-22.7
173.980000	2435.996000	-42.4	-79.3	-22.4
173.980000	2610.044000	-44.1	-81	-24.1

PAGE NO.

15 of 42. AMENDED August 3, 1999

NAME OF TEST:

Field Strength of Spurious Radiation

ALL OTHER EMISSIONS

= $\geq$ 20 dB BELOW LIMIT

EMISSION, MHz/HARMONIC	SPURIOUS LEVEL, dBc	
	Low	High
2nd to 10th	<-65	<-65

SUPERVISED BY:

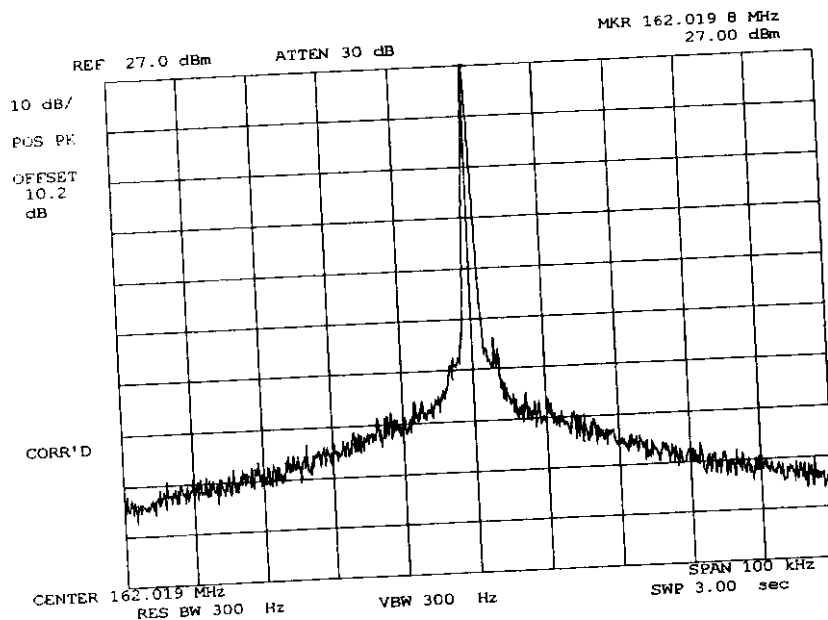


Morton Flom, P. Eng.

PAGE NO.

18 of 42. AMENDED August 3, 1999

NAME OF TEST: Emission Masks (Occupied Bandwidth)
g9980006: 1999-Aug-03 Tue 11:07:00
STATE: 1:Low Power



POWER:
MODULATION:

LOW
NONE

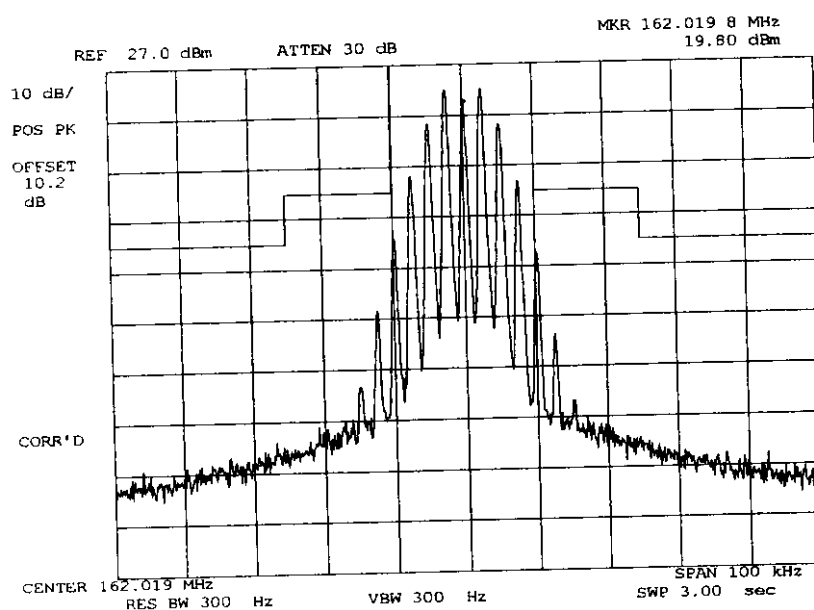
SUPERVISED BY:

Morton Flom, P. Eng.
Morton Flom, P. Eng.

PAGE NO.

19 of 42. AMENDED August 3, 1999

NAME OF TEST: Emission Masks (Occupied Bandwidth)
g9980007: 1999-Aug-03 Tue 11:10:00
STATE: 1:Low Power



POWER:
MODULATION:

LOW
VOICE: 2500 Hz SINE WAVE
MASK: B, VHF/UHF 25kHz,
w/LPF

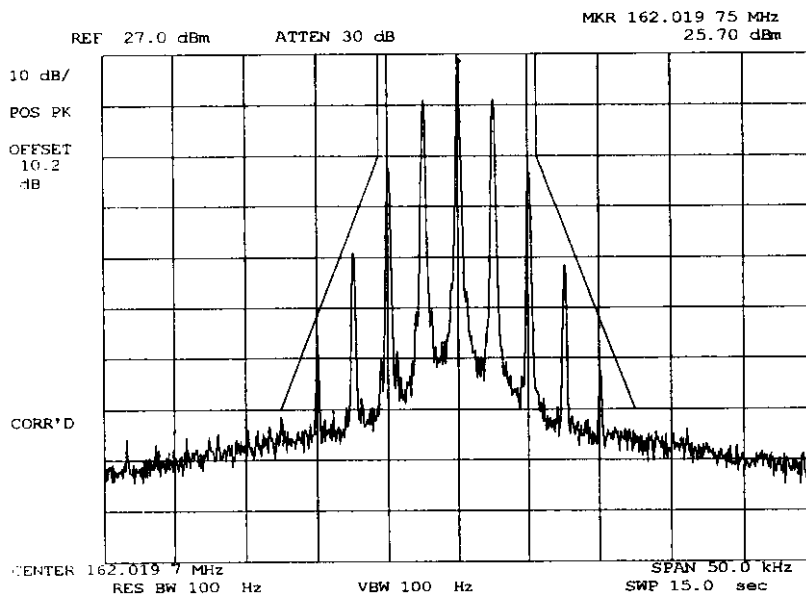
SUPERVISED BY:

M. Flom P. Eng
Morton Flom, P. Eng.

PAGE NO.

20 of 42. AMENDED August 3, 1999

NAME OF TEST: Emission Masks (Occupied Bandwidth)
g9980008: 1999-Aug-03 Tue 11:12:00
STATE: 1:Low Power



POWER:
MODULATION:

LOW
VOICE: 2500 Hz SINE WAVE
MASK: D, VHF/UHF 12.5kHz BW

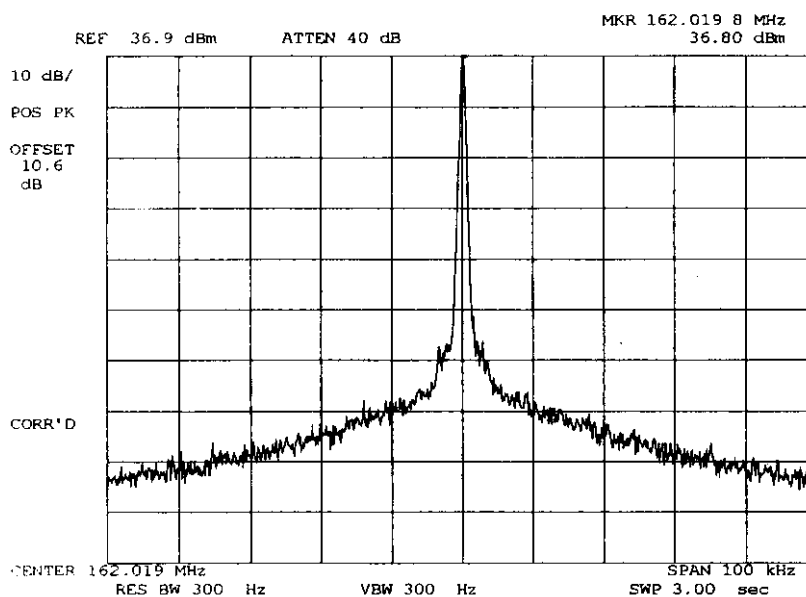
SUPERVISED BY:

M. Flom P. Eng.
Morton Flom, P. Eng.

PAGE NO.

21 of 42. AMENDED August 3, 1999

NAME OF TEST: Emission Masks (Occupied Bandwidth)
g9980002: 1999-Aug-03 Tue 10:28:00
STATE: 2:High Power



POWER:
MODULATION:

HIGH
NONE

SUPERVISED BY:

Morton Flom P. Eng.
Morton Flom, P. Eng.

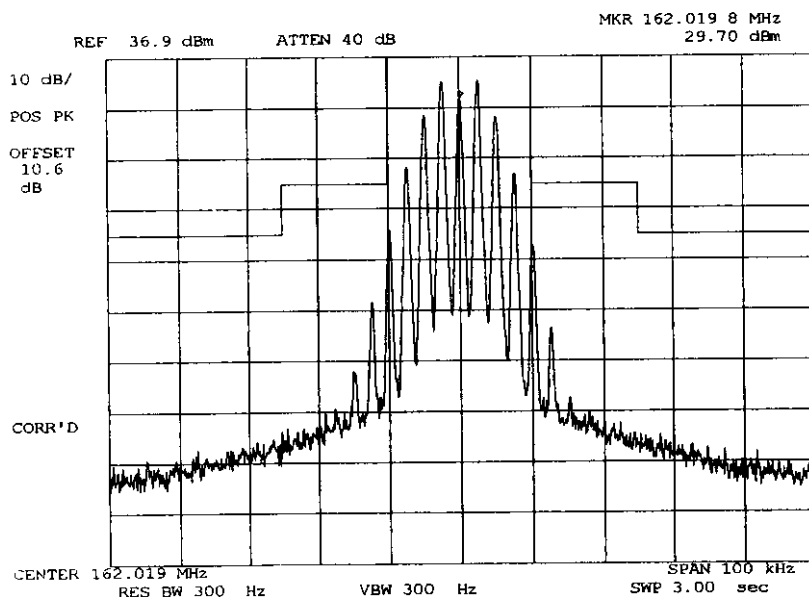
PAGE NO.

22 of 42. AMENDED August 3, 1999

NAME OF TEST: Emission Masks (Occupied Bandwidth)

g9980003: 1999-Aug-03 Tue 10:38:00

STATE: 2:High Power

POWER:
MODULATION:HIGH
VOICE: 2500 Hz SINE WAVE
MASK: B, VHF/UHF 25kHz,
w/LPF

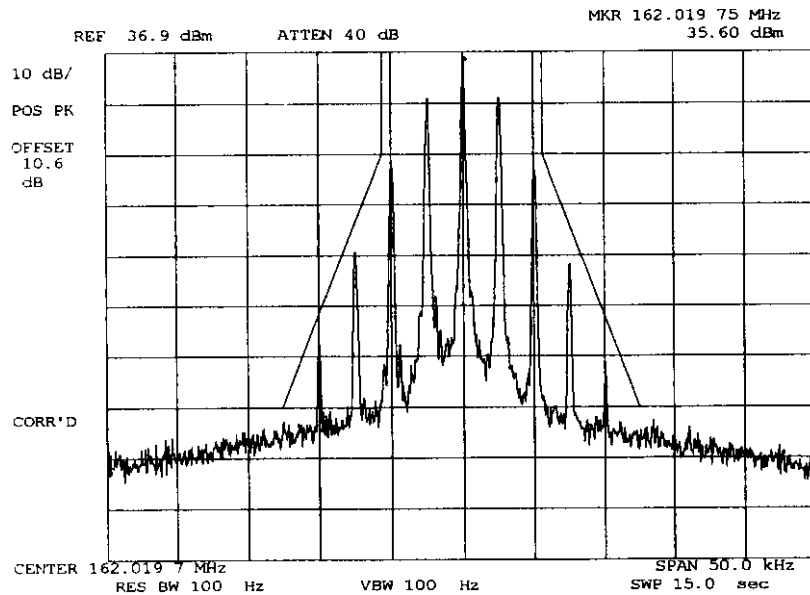
SUPERVISED BY:

Morton Flom, P. Eng.

PAGE NO.

23 of 42. AMENDED August 3, 1999

NAME OF TEST: Emission Masks (Occupied Bandwidth)
g9980004: 1999-Aug-03 Tue 10:41:00
STATE: 2:High Power



POWER:
MODULATION:

HIGH
VOICE: 2500 Hz SINE WAVE
MASK: D, VHF/UHF 12.5kHz BW

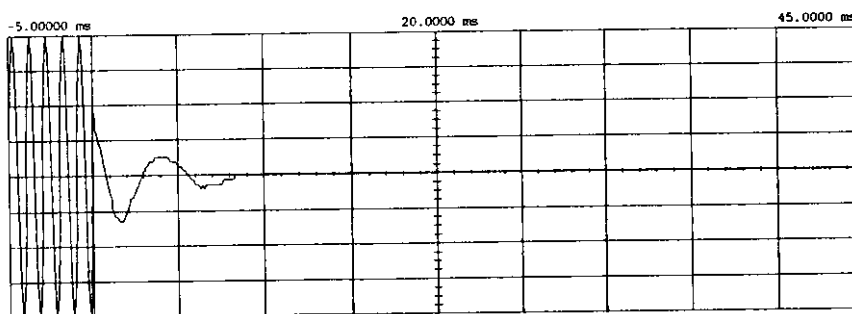
SUPERVISED BY:

Morton Flom, P. Eng.

PAGE NO.

26 of 42. AMENDED August 3, 1999

NAME OF TEST: Transient Frequency Behavior
g9960242: 1999-Jun-24 Thu 09:28:00
STATE: 0:General



Main	Timebase	Delay/Pos	Reference	Mode
	5.00 ms/div	20.0000 ms	Center	Repetitive
Channel 1	Sensitivity	Offset	Probe	Coupling
	600 mV/div	0.00000 V	1.000 :1	dc (1M ohm)

Trigger mode : Edge
On Negative Edge Of Chan2
Trigger Level
Chan2 = -3.500 mV (noise reject ON)
Holdoff = 40.000 ns

POWER:
MODULATION:
DESCRIPTION:

5W
Ref Gen=25 kHz Deviation
CARRIER ON TIME

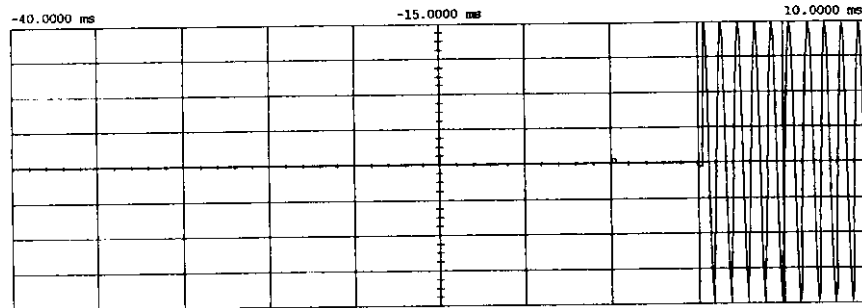
SUPERVISED BY:

M. Flom P. Eng.
Morton Flom, P. Eng.

PAGE NO.

27 of 42. AMENDED August 3, 1999

NAME OF TEST: Transient Frequency Behavior
 99960243: 1999-Jun-24 Thu 09:33:00
 STATE: 0:General



Main	Timebase	Delay/Pos	Reference	Mode
	5.00 ms/div	-15.0000 ms	Center	Repetitive
Channel 1	Sensitivity	Offset	Probe	Coupling
	600 mV/div	0.00000 V	1.000 :1	dc (1M ohm)

Trigger mode : Edge
 On Positive Edge Of Chan2
 Trigger Level
 Chan2 = -1.80000 V (noise reject ON)
 Holdoff = 40.000 ns

POWER:
 MODULATION:
 DESCRIPTION:

5W
 Ref Gen=25 kHz Deviation
 CARRIER OFF TIME

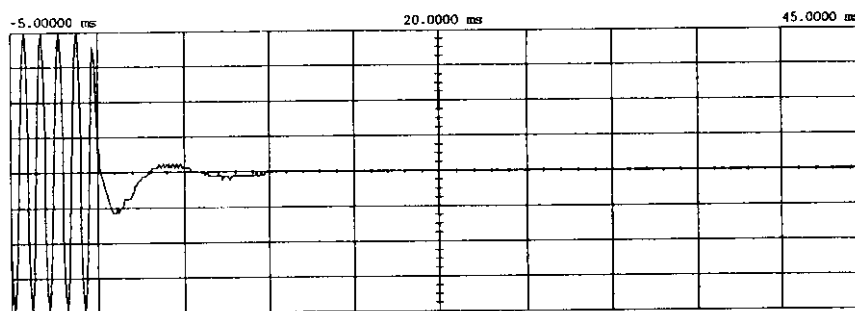
SUPERVISED BY:

Morton Flom P. Eng.
 Morton Flom, P. Eng.

PAGE NO.

28 of 42. AMENDED August 3, 1999

NAME OF TEST: Transient Frequency Behavior
 g9960244: 1999-Jun-24 Thu 09:49:00
 STATE: 0:General



	Timebase	Delay/Pos	Reference	Mode
Main	5.00 ms/div	20.0000 ms	Center	Repetitive
Channel 1	Sensitivity 300 mV/div	Offset 0.00000 V	Probe 1.000 :1	Coupling dc (1M ohm)

Trigger mode : Edge
 On Negative Edge Of Chan2
 Trigger Level
 Chan2 = -3.000 mV (noise reject ON)
 Holdoff = 40.000 ns

POWER:
 MODULATION:
 DESCRIPTION:

5W
 Ref Gen=12.5 kHz Deviation
 CARRIER ON TIME

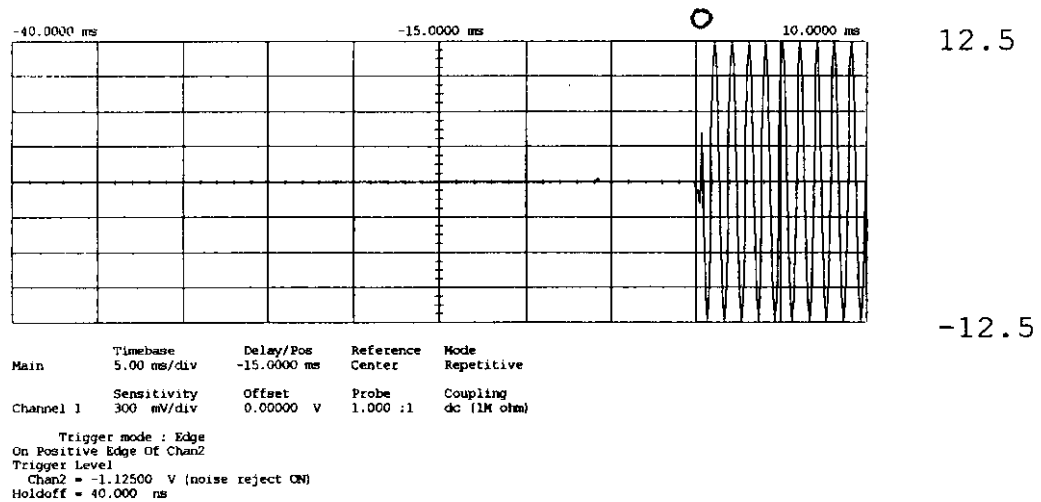
SUPERVISED BY:

Morton Flom, P. Eng.

PAGE NO.

29 of 42. AMENDED August 3, 1999

NAME OF TEST: Transient Frequency Behavior
 g9960245: 1999-Jun-24 Thu 09:52:00
 STATE: 0:General



POWER:
 MODULATION:
 DESCRIPTION:

5W
 Ref Gen=12.5 kHz Deviation
 CARRIER OFF TIME

SUPERVISED BY:

Morton Flom P. Eng.
 Morton Flom, P. Eng.