Test Report:	3W07491
Applicant:	VTech Engineering Canada Ltd. Suite 200 – 7671 Alderbridge Way Richmond, B.C., Canada V6X 1Z9
Equipment Under Test: (EUT)	5825 & 5850
In Accordance With:	**FCC Part 15, Subpart C** Frequency Hopping Transmitters
Tested By:	Nemko Canada Inc. 303 River Road, R.R. 5 Ottawa, Ontario K1V 1H2
Authorized By:	Glen Westwell, Wireless Technologist
Date:	29 October 2003
Total Number of Pages:	47

Table of Contents

Section 1. Summary of Test Results

General

All measurements are traceable to national standards.

These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15, Subpart C, Paragraph 15.247 for Frequency Hopping Spread Spectrum devices. Radiated tests were conducted is accordance with ANSI C63.4-1992. Radiated emissions are made on an open area test site. A description of the test facility is on file with the FCC.

THIS TEST REPORT RELATES ONLY TO THE ITEM(S) TESTED.

THE FOLLOWING DEVIATIONS FROM, ADDITIONS TO, OR EXCLUSIONS FROM THE TEST SPECIFICATIONS HAVE BEEN MADE.
See " Summary of Test Data".

TESTED BY: _____ DATE: 23 October 2003
Kevin Carr, EMC/EMI/Wireless Specialist

Summary Of Test Data

Name Of Test	Para. No.	Result
Powerline Conducted Emissions	15.207(a)	Complies
Channel Separation	15.247(a)(1)	Complies
Time of Occupancy	15.247(a)(1)(iii)	Complies
20 dB Occupied Bandwidth	15.247(a)(1)	Complies
Number of Hopping Channels	15.247(a)(1)(iii)	Complies
Peak Power Output	15.247(b)(1)	Complies
Spurious Emissions (Antenna Conducted)	15.247(c)	N/A
Spurious Emissions (Radiated)	15.247(c)	Complies

Footnotes For N/A's: No Access Port

Test Conditions:

Indoor Temperature: 24°C
Humidity: 54%

Outdoor Temperature: 12°C
Humidity: 65%

Section 2. General Equipment Specification

Manufacturer:		VTech (Dongguan) Electronics and Communications Ltd. Xia Ling Bei Management Zone, Liaobu, Dongguan, guangdong, China 523411
Model No.:		5825 And 5850
Serial No.:		H.S.: None, Base: PA 08/03 469
Date Received In Laboratory:		7 Oct 2003
Nemko Identification No.:		1, 2, 3
Frequency Range:		BS TX 5744.736 - 5825.952 MHz HS TX 2401.056 - 2482.272 MHz HS RX 5744.736 - 5825.952 MHz BS RX 2401.056 - 2482.272 MHz
Tunable Bands:		1
Number of Channels:		2.4GHz Link (HS - BS) is a 17 channel system 5.8GHz Link (BS - HS) is a 85 channel system
Min. Channel Spacing:	**Handset**	875kHz
	Base Station	840kHz
Emissions Designator:	**Handset**	625KF1D
	Base Station	667KF1D
User Frequency Adjustment:		None
Rated Output Power:	**Handset**	19.0dBm, 0.0787W
	Base Station	29.1dBm, 0.8061W

Section 3. Powerline Conducted Emissions

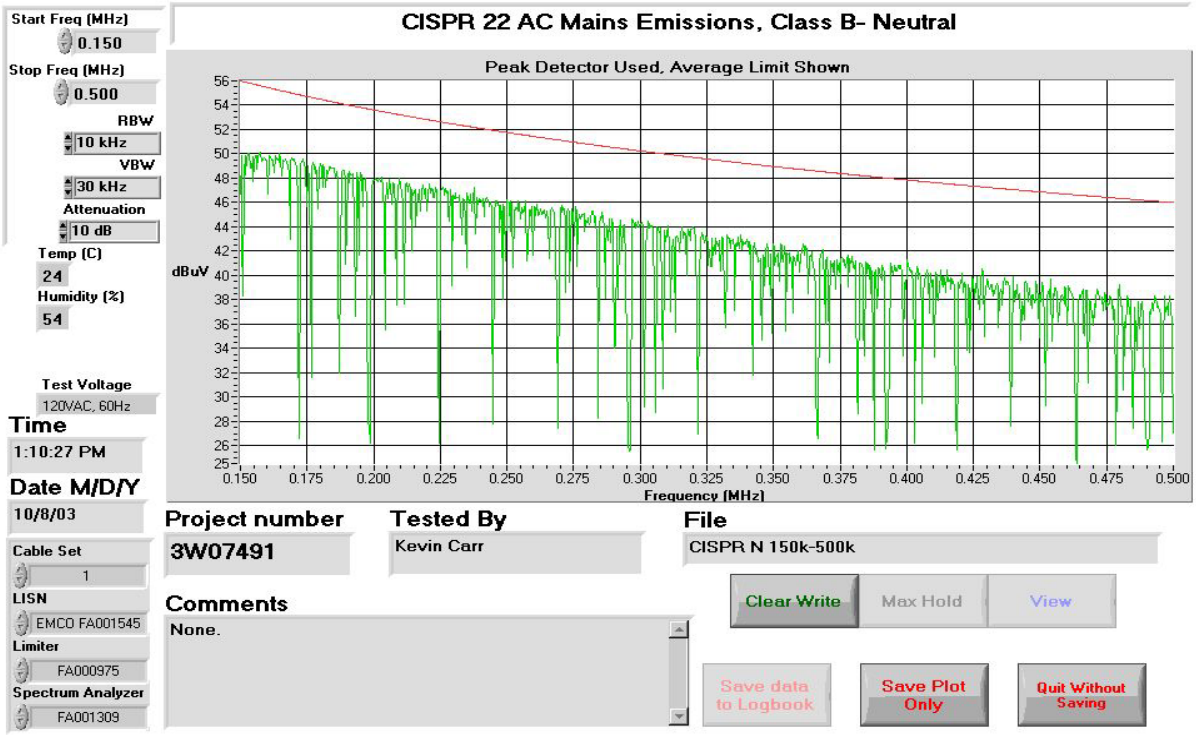
Para. No.: 15.207 (a)

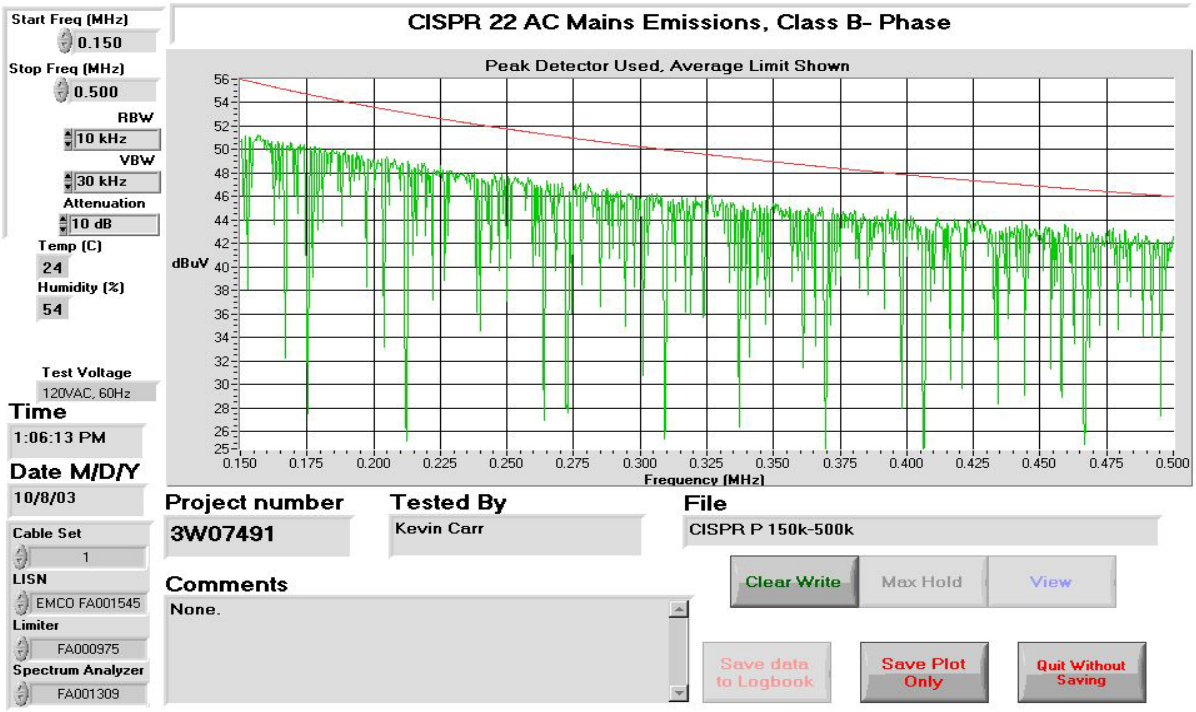
Test Performed By: Kevin Carr	**Date of Test: 8 Oct. 2003**

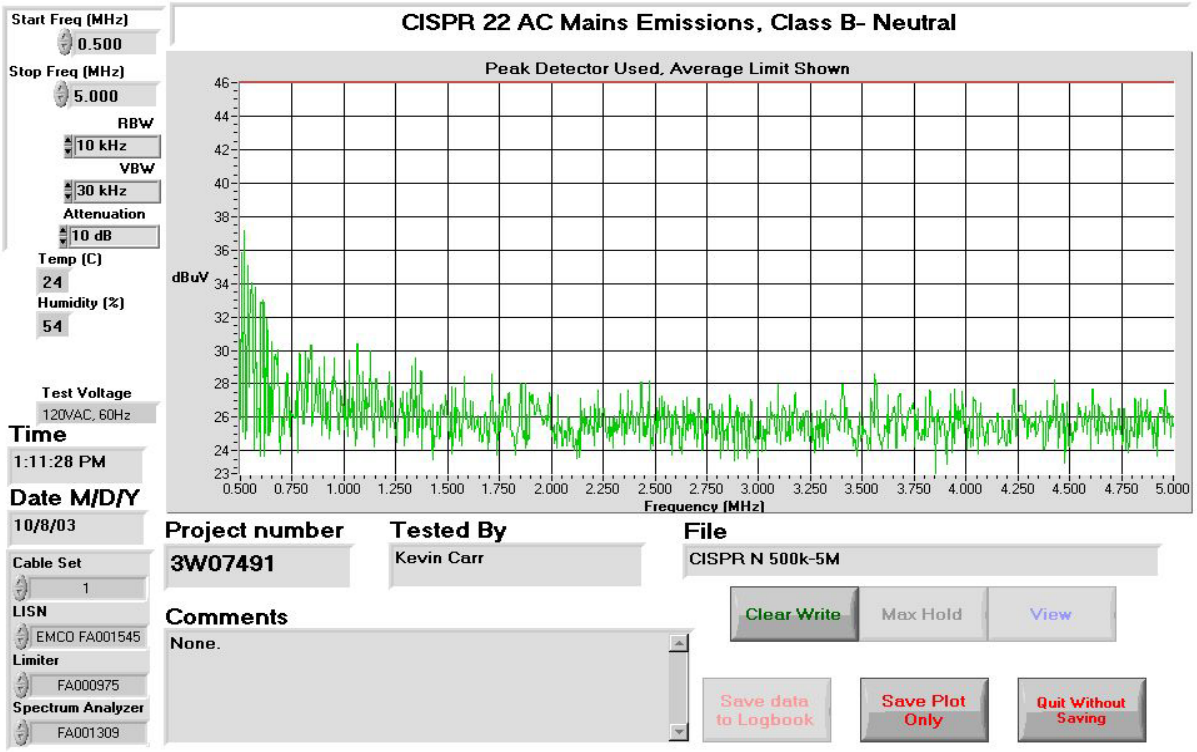
Test Results: Complies

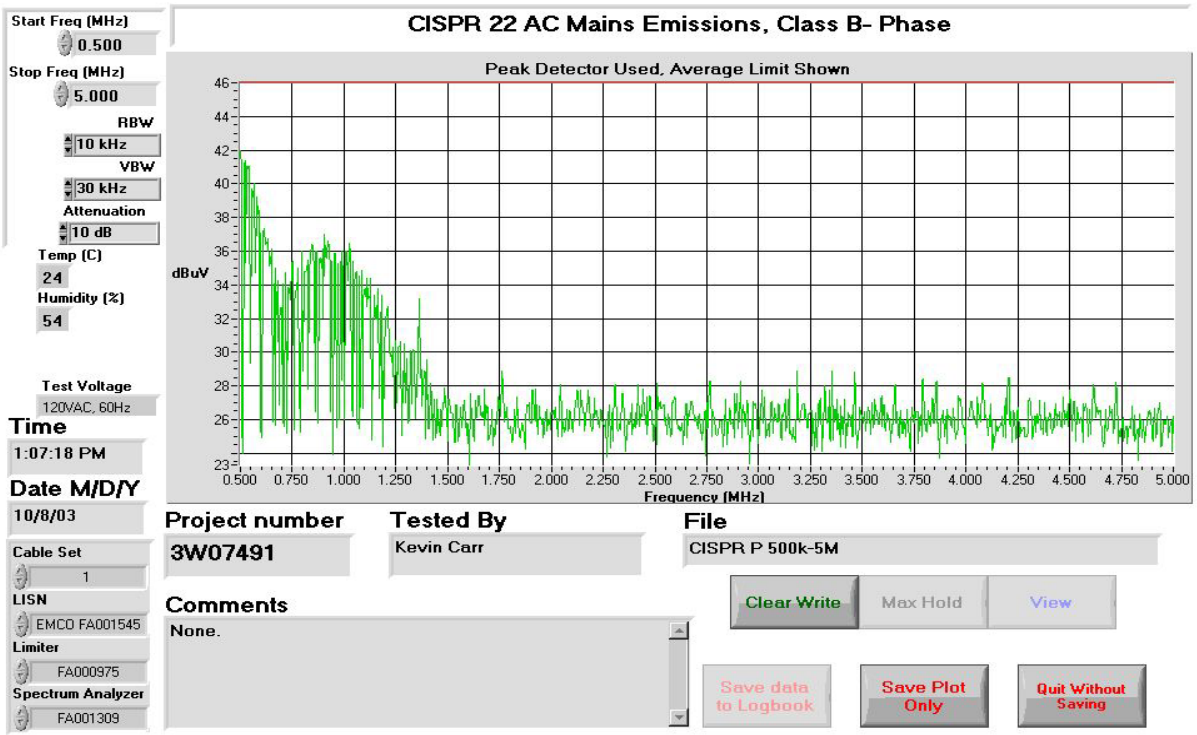
Measurement Data: See attached graphs. No peak emission within 6 dB of the average limit.

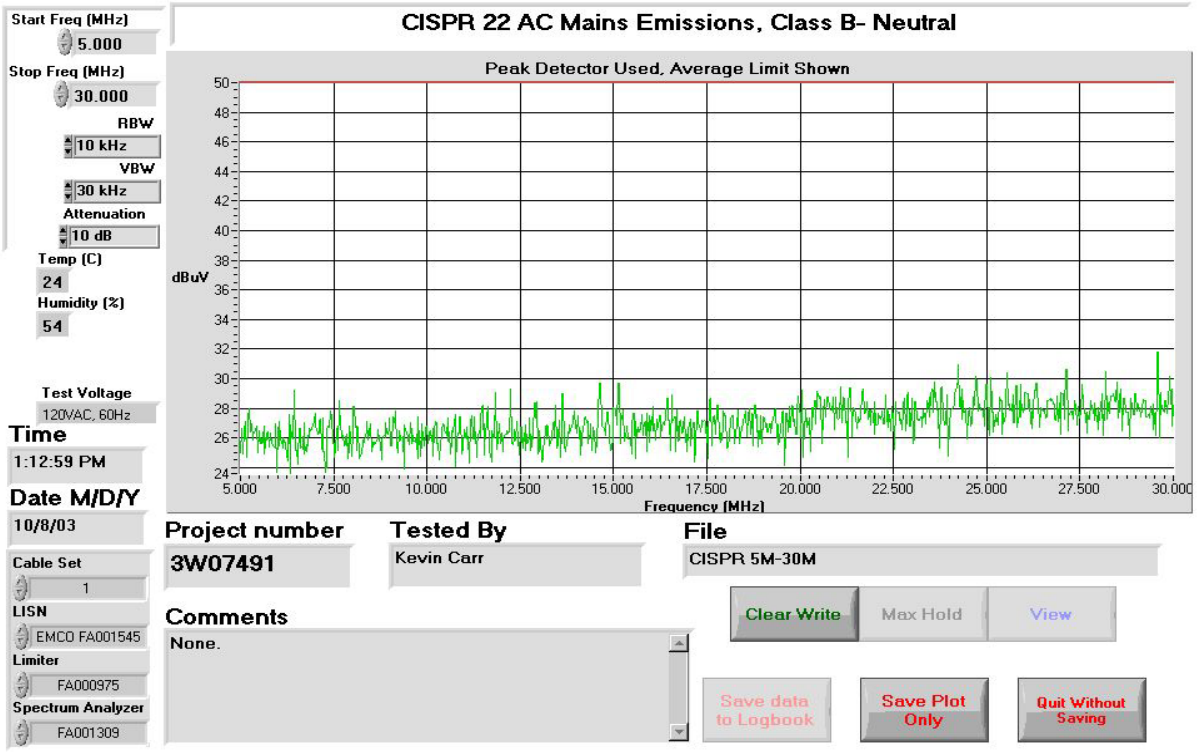
Powerline Conducted Emission Plots

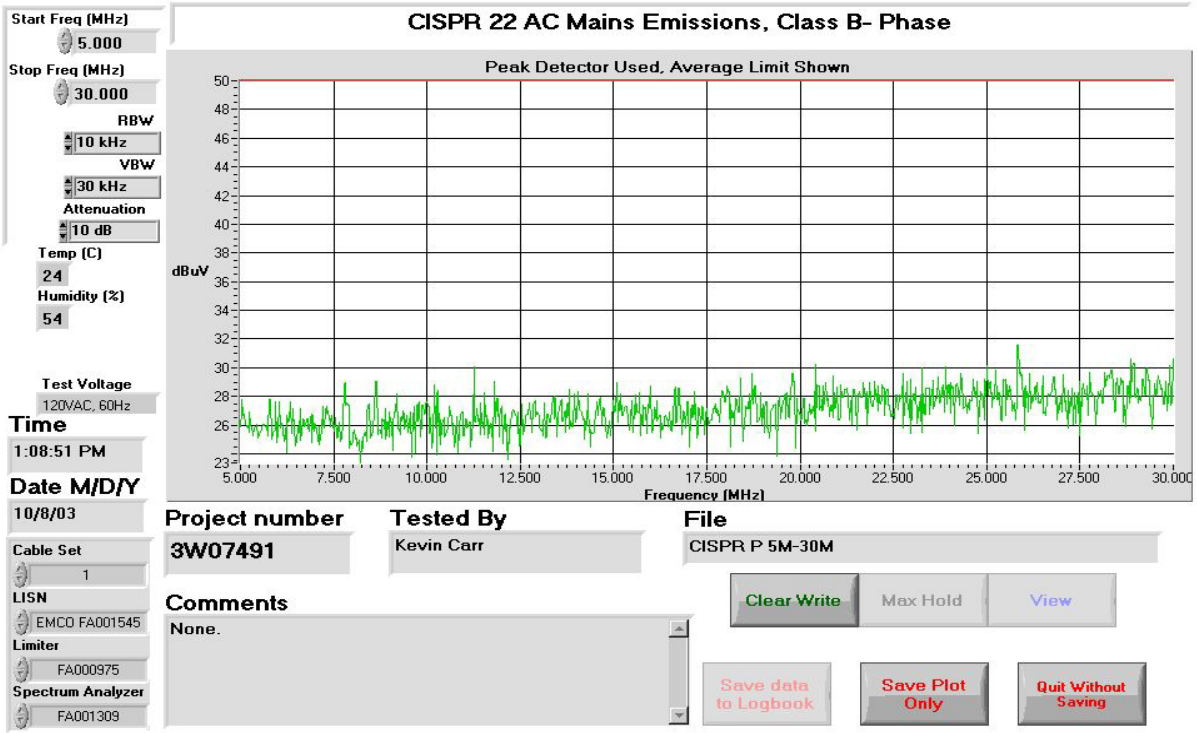





Start Freq (MHz)
0.500
Stop Freq (MHz)
5.000
RBW
10 kHz
VBW
30 kHz
Attenuation
10 dB
Temp (C)
24
Humidity (%)
54
Test Voltage
120VAC, 60Hz
Time
1:11:28 PM
Date M/D/Y
10/8/03
Cable Set
1
LISN
EMCO FA001545
Limiter
FA000975
Spectrum Analyzer
FA001309
CISPR 22 AC Mains Emissions, Class B- Neutral
Peak Detector Used, Average Limit Shown
dBuV
Frequency (MHz)
Project number
3W07491
Tested By
Kevin Carr
File
CISPR N 500k-5M
Comments
None.
Clear Write
Max Hold
View
Save data to Logbook
Save Plot Only
Quit Without Saving


Start Freq (MHz)
0.500
Stop Freq (MHz)
5.000
RBW
10 kHz
VBW
30 kHz
Attenuation
10 dB
Temp (C)
24
Humidity (%)
54
Test Voltage
120VAC, 60Hz
Time
1:07:18 PM
Date M/D/Y
10/8/03
Cable Set
1
LISN
EMCO FA001545
Limiter
FA000975
Spectrum Analyzer
FA001309
CISPR 22 AC Mains Emissions, Class B- Phase
Peak Detector Used, Average Limit Shown
dBuV
Frequency (MHz)
Project number
3W07491
Tested By
Kevin Carr
File
CISPR P 500k-5M
Comments
None.
Clear Write
Max Hold
View
Save data to Logbook
Save Plot Only
Quit Without Saving


Start Freq (MHz)
5.000
Stop Freq (MHz)
30.000
RBW
10 kHz
VBW
30 kHz
Attenuation
10 dB
Temp (C)
24
Humidity (%)
54
Test Voltage
120VAC, 60Hz
Time
1:12:59 PM
Date M/D/Y
10/8/03
Cable Set
1
LISN
EMCO FA001545
Limiter
FA000975
Spectrum Analyzer
FA001309
CISPR 22 AC Mains Emissions, Class B- Neutral
Peak Detector Used, Average Limit Shown
dBuV
Frequency (MHz)
Project number
3W07491
Tested By
Kevin Carr
File
CISPR 5M-30M
Comments
None.
Clear Write
Max Hold
View
Save data to Logbook
Save Plot Only
Quit Without Saving


Start Freq (MHz)
5.000
Stop Freq (MHz)
30.000
RBW
10 kHz
VBW
30 kHz
Attenuation
10 dB
Temp (C)
24
Humidity (%)
54
Test Voltage
120VAC, 60Hz
Time
1:08:51 PM
Date M/D/Y
10/8/03
Cable Set
1
LISN
EMCO FA001545
Limiter
FA000975
Spectrum Analyzer
FA001309
CISPR 22 AC Mains Emissions, Class B- Phase
Peak Detector Used, Average Limit Shown
dBuV
Frequency (MHz)
Project number
3W07491
Tested By
Kevin Carr
File
CISPR P 5M-30M
Comments
None.
Clear Write
Max Hold
View
Save data to Logbook
Save Plot Only
Quit Without Saving

Set-up Photo:

Section 4. Channel Separation

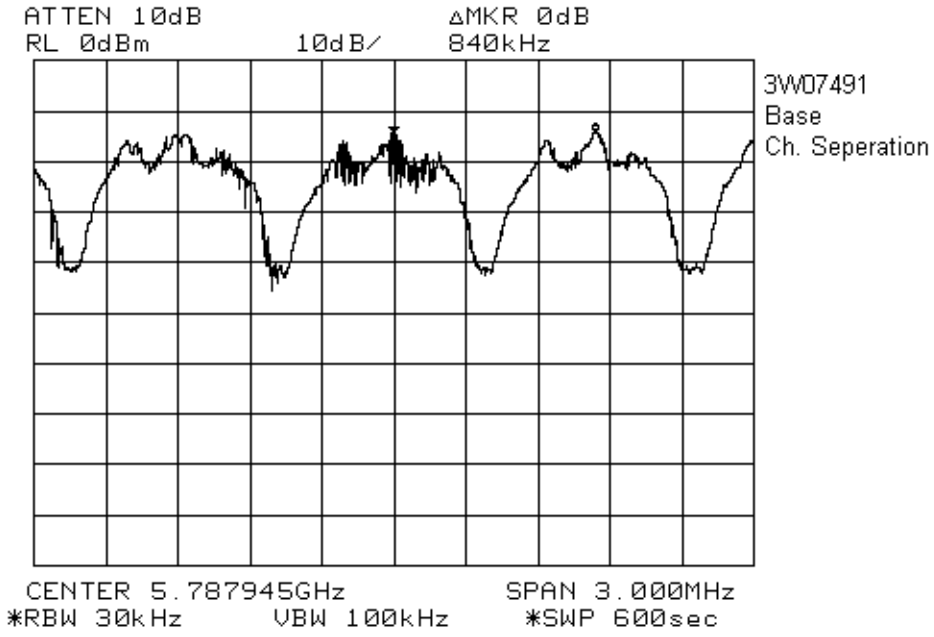
Para. No.: 15.247 (a)(1)

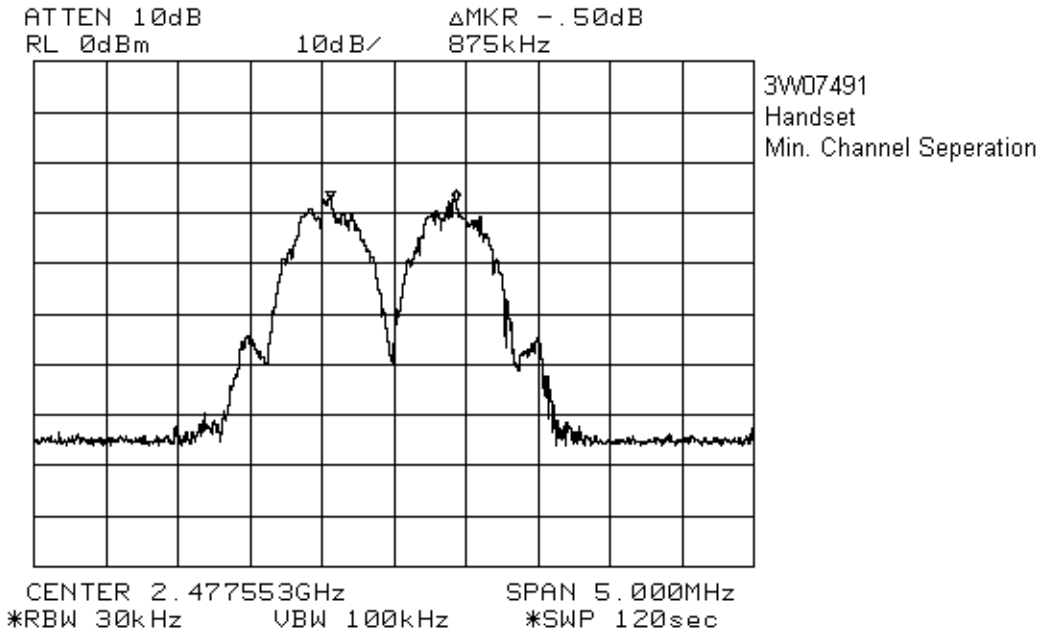
Test Performed By: Kevin Carr	**Date of Test: 7 Oct. 2003**

Test Results: Complies

Measurement Data: Base: 840kHz
Handset: 875 kHz

Channel Separation Plots:





Section 5. Number of Hopping Channels

Para. No.: 15.247(a)(1)(iii)

Test Performed By: Kevin Carr	**Date of Test: 7 Oct. 2003**

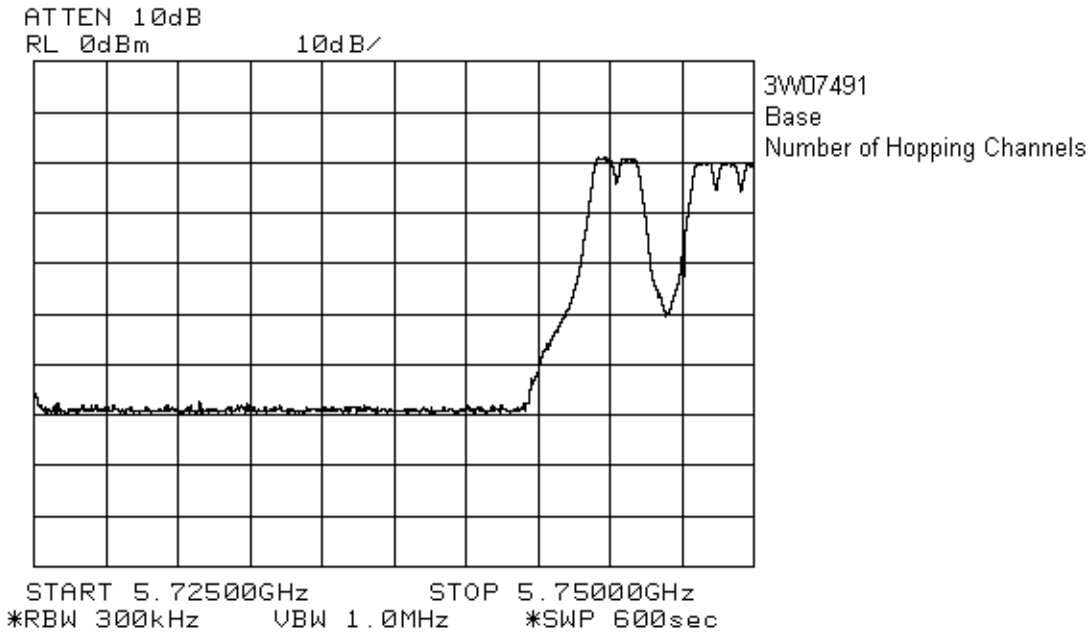
Test Results: Complies

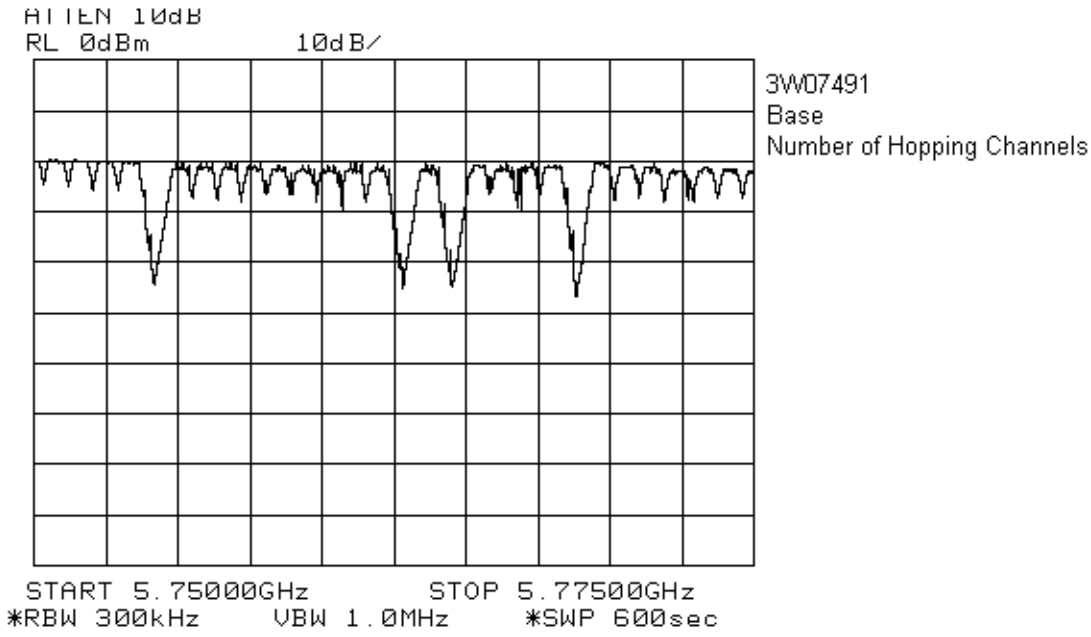
Measurement Data:

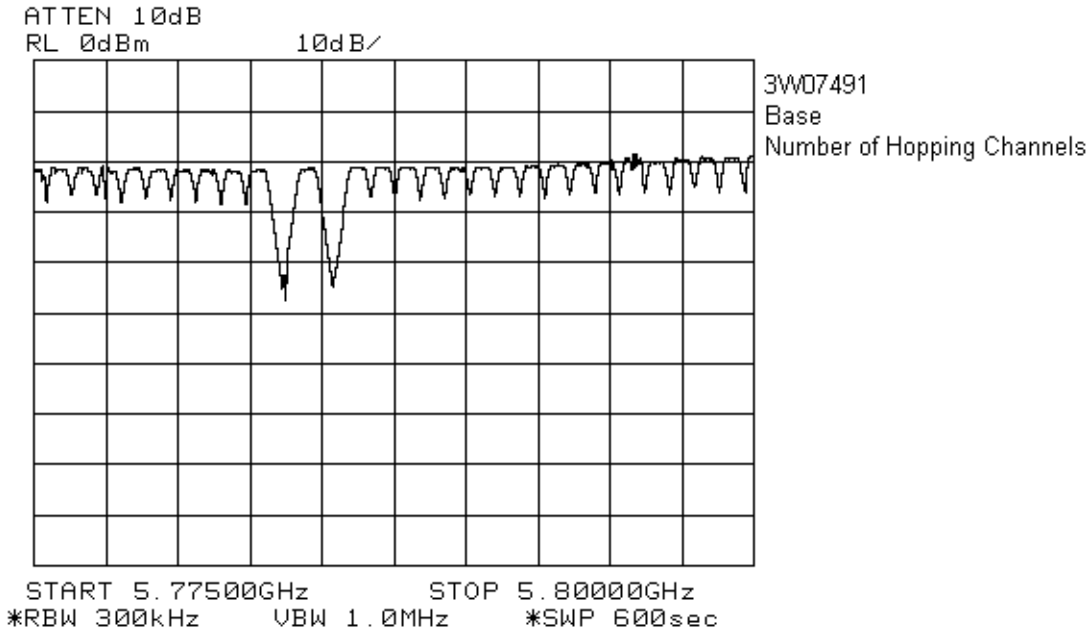
Base
Number of Hopping Frequencies: 85

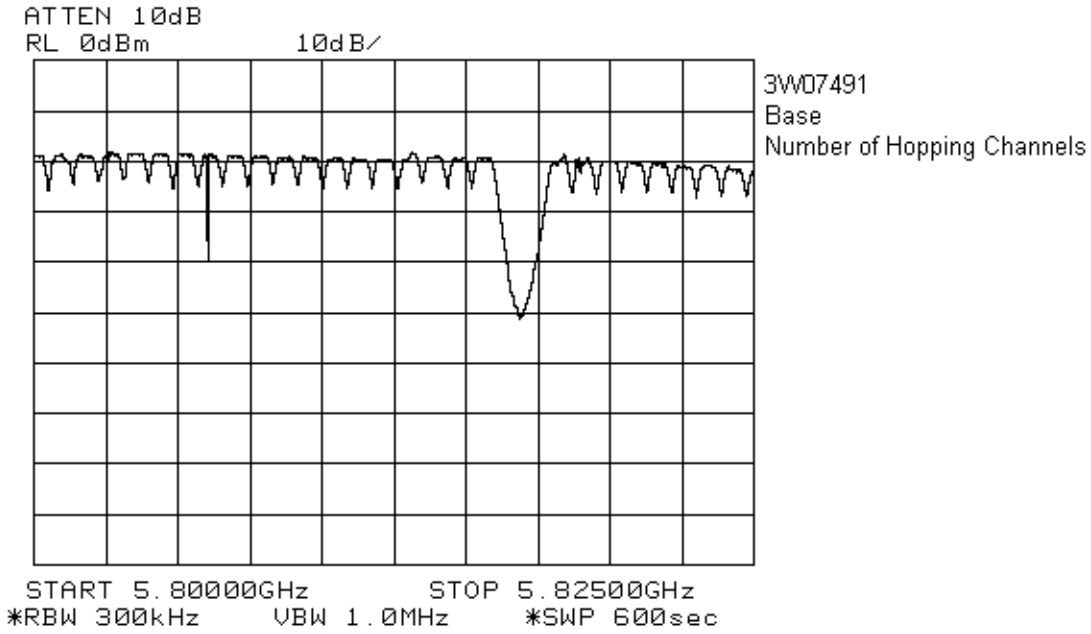
Handset
Number of Hopping Frequencies: 17

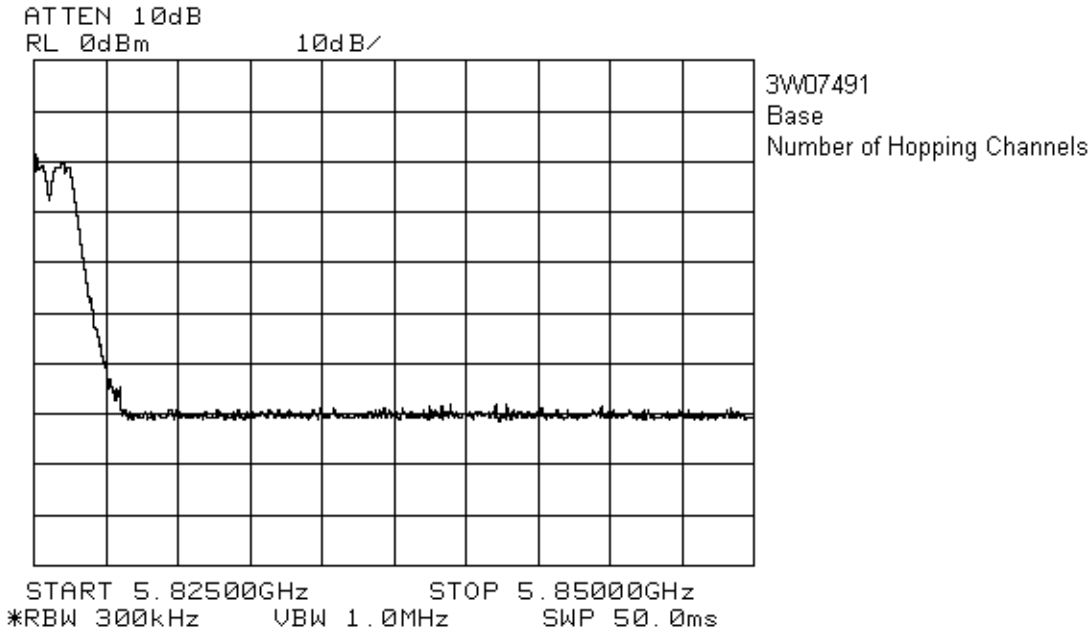
Number of Hopping Channel Plots:
Base:



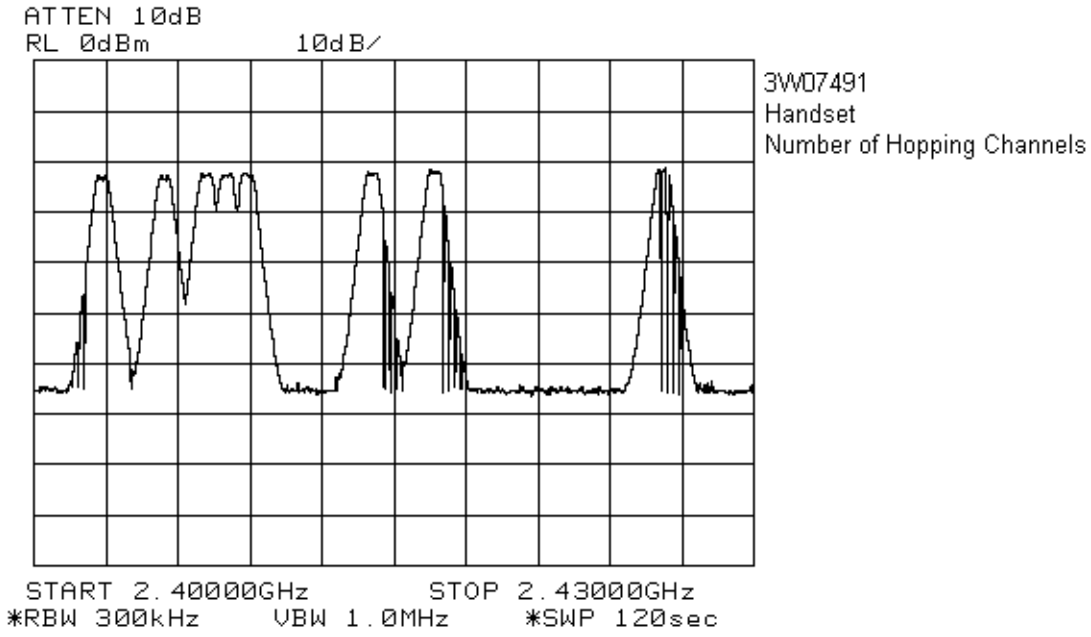


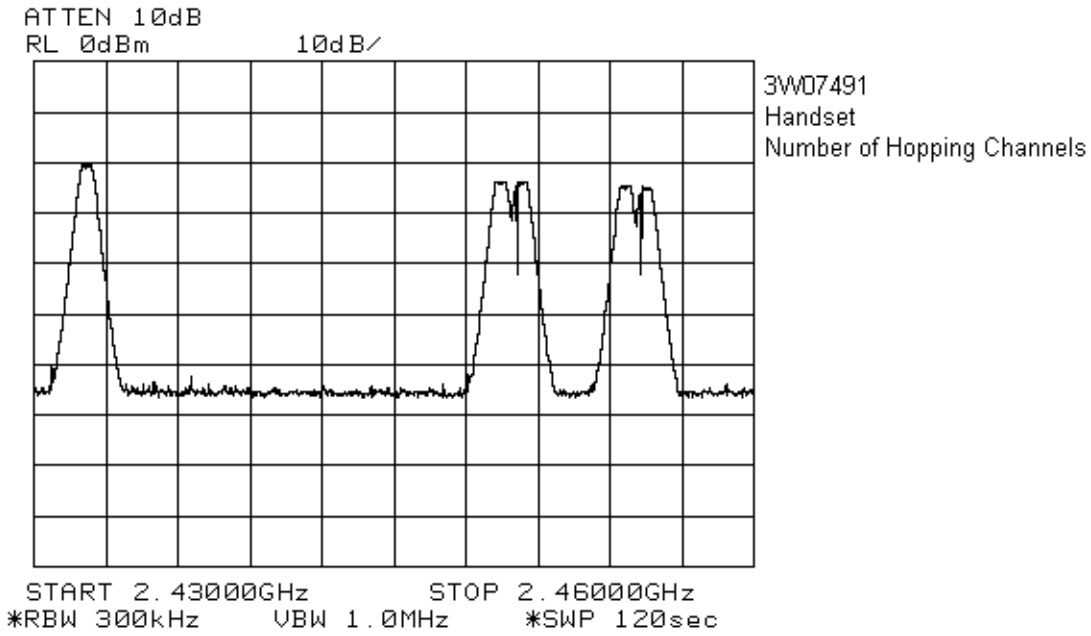

ATTEN 10dB
RL 0dBm
10dB/
3W07491
Base
Number of Hopping Channels
START 5.77500GHz
STOP 5.80000GHz
*RBW 300kHz
VBW 1.0MHz
*SWP 600sec

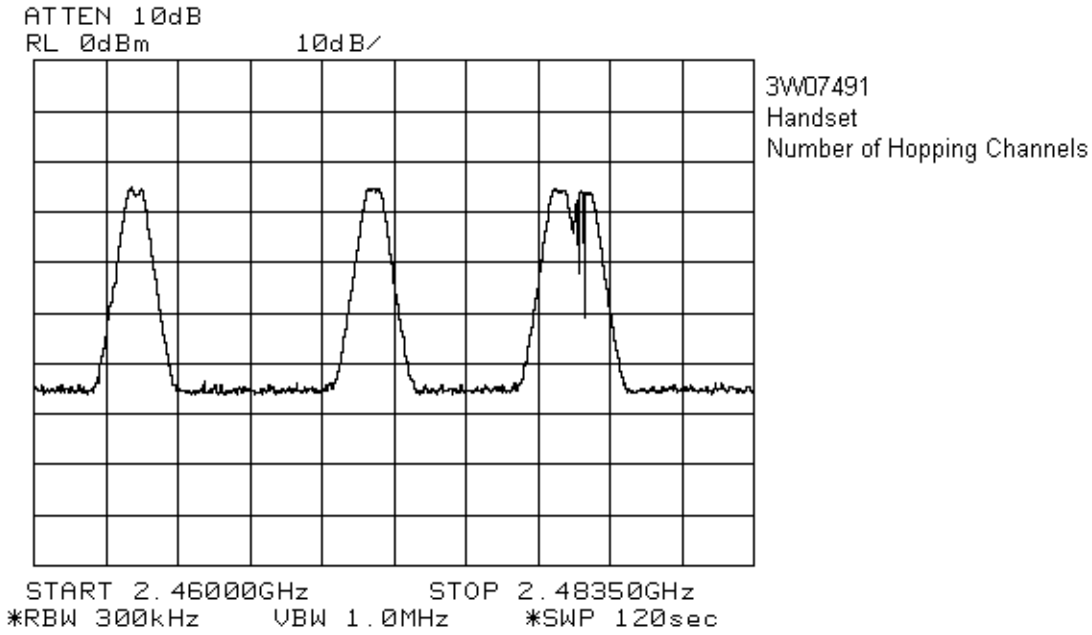

ATTEN 10dB
RL 0dBm
10dB/
3W07491
Base
Number of Hopping Channels
START 5.80000GHz
STOP 5.82500GHz
*RBW 300kHz
VBW 1.0MHz
*SWP 600sec


ATTEN 10dB
RL 0dBm
10dB/
3W07491
Base
Number of Hopping Channels
START 5.82500GHz
STOP 5.85000GHz
*RBW 300kHz
VBW 1.0MHz
SWP 50.0ms

Handset:


ATTEN 10dB
RL 0dBm
10dB/
3W07491
Handset
Number of Hopping Channels
START 2.40000GHz
STOP 2.43000GHz
*RBW 300kHz
VBW 1.0MHz
*SWP 120sec


ATTEN 10dB
RL 0dBm
10dB/
3W07491
Handset
Number of Hopping Channels
START 2.43000GHz
STOP 2.46000GHz
*RBW 300kHz
VBW 1.0MHz
*SWP 120sec


ATTEN 10dB
RL 0dBm
10dB/
3W07491
Handset
Number of Hopping Channels
START 2.46000GHz
STOP 2.48350GHz
*RBW 300kHz
VBW 1.0MHz
*SWP 120sec

Section 6. Time of Occupancy

Para. No.: 15.247 (a)(1)(iii)

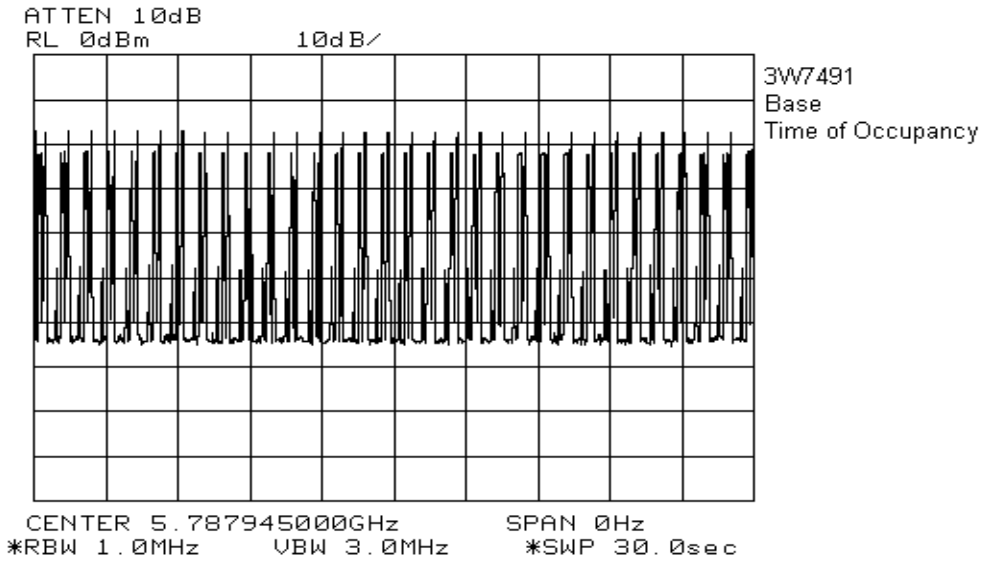
Test Performed By: Kevin Carr	**Date of Test: 9 Oct.2003**

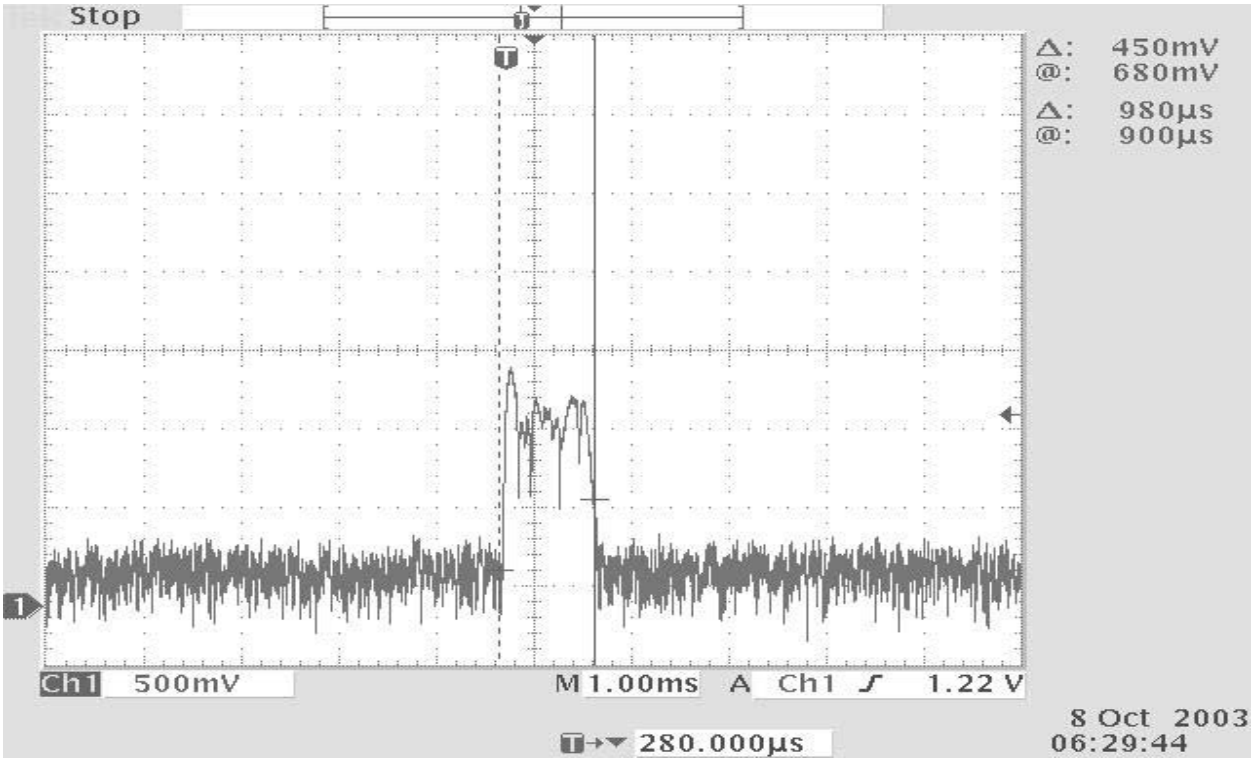
Test Results: Complied

Measurement Data: Maximum Dwell Time On Any Channel:
See Plots.

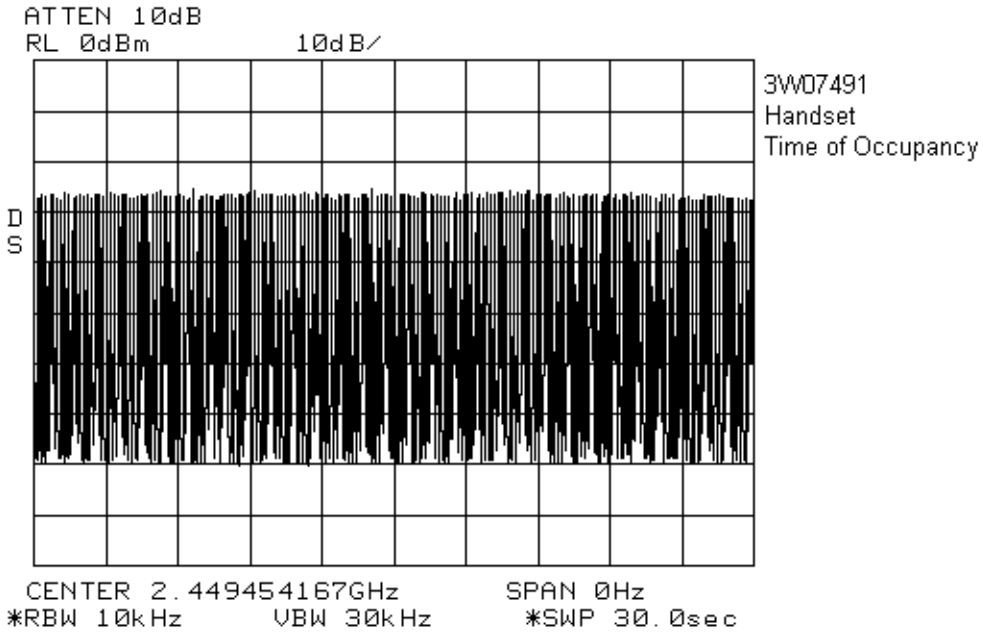
Base: 31.4mS
Handset: 182.3mS

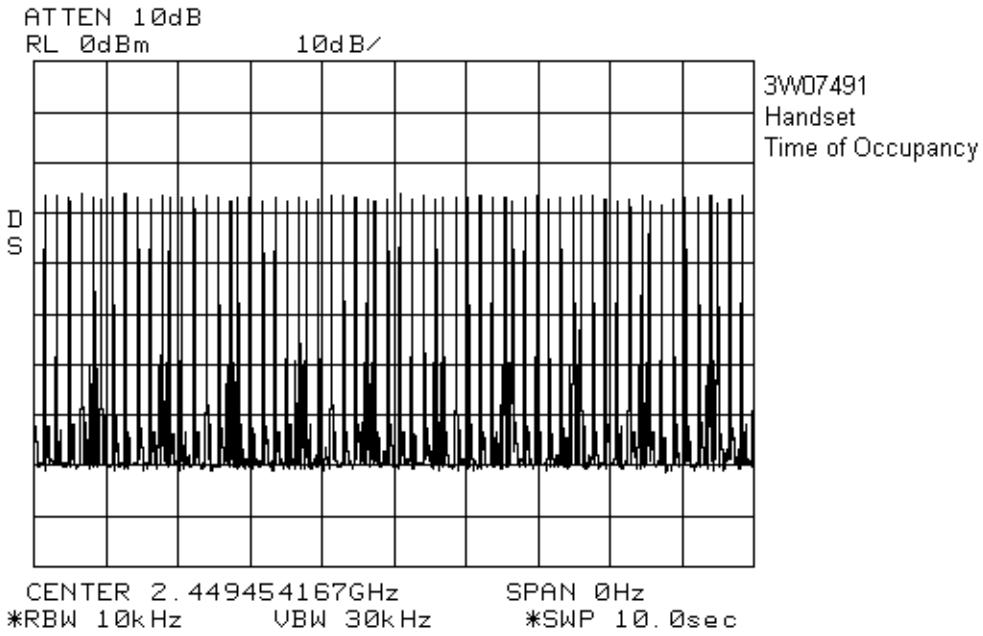
Time Of Occupancy Plots.
Base

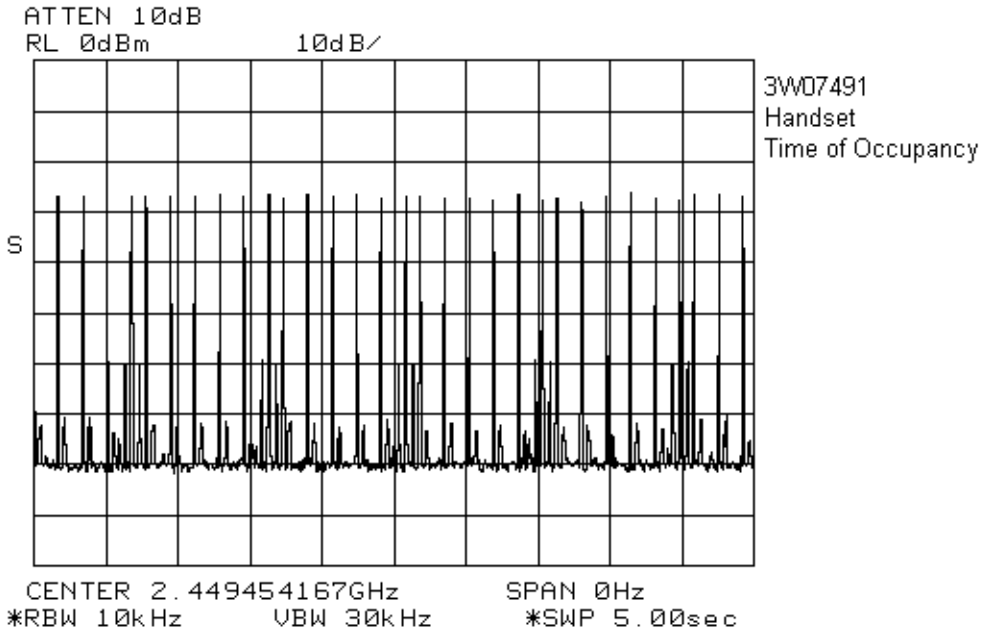


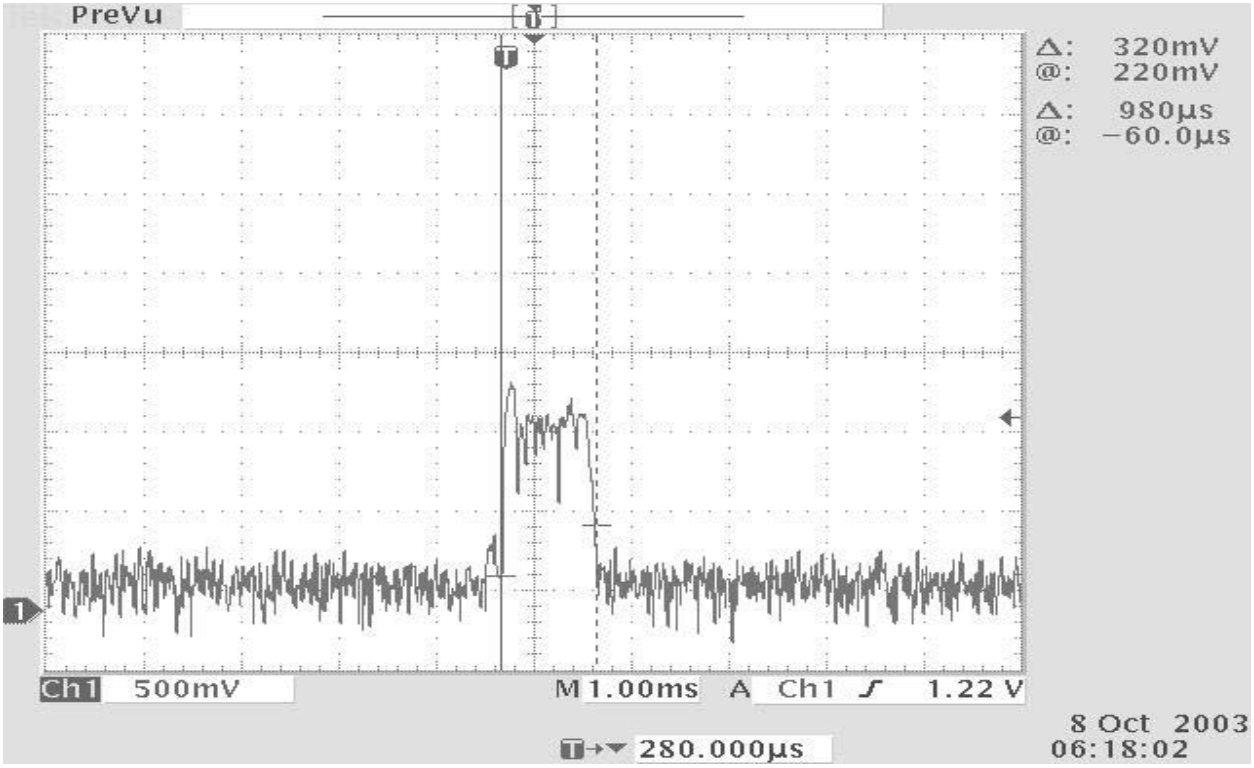


Handset


ATTEN 10dB
RL 0dBm
10dB/
3W07491
Handset
Time of Occupancy
D
S
CENTER 2.449454167GHz
SPAN 0Hz
*RBW 10kHz
VBW 30kHz
*SWP 30.0sec


ATTEN 10dB
RL 0dBm
10dB/
3W07491
Handset
Time of Occupancy
D
S
CENTER 2.449454167GHz
SPAN 0Hz
*RBW 10kHz
VBW 30kHz
*SWP 10.0sec


ATTEN 10dB
RL 0dBm
10dB/
3W07491
Handset
Time of Occupancy
S
CENTER 2.449454167GHz
SPAN 0Hz
*RBW 10kHz
VBW 30kHz
*SWP 5.00sec


PreVu
Δ: 320mV
@: 220mV
Δ: 980µs
@: −60.0µs
Ch1 500mV
M1.00ms A Ch1 ƒ 1.22 V
280.000µs
8 Oct 2003
06:18:02

Section 7. Occupied Bandwidth

Para. No.: 15.247 (a)(1))

Test Performed By: Kevin Carr	**Date of Test: 7 Oct. 2003**

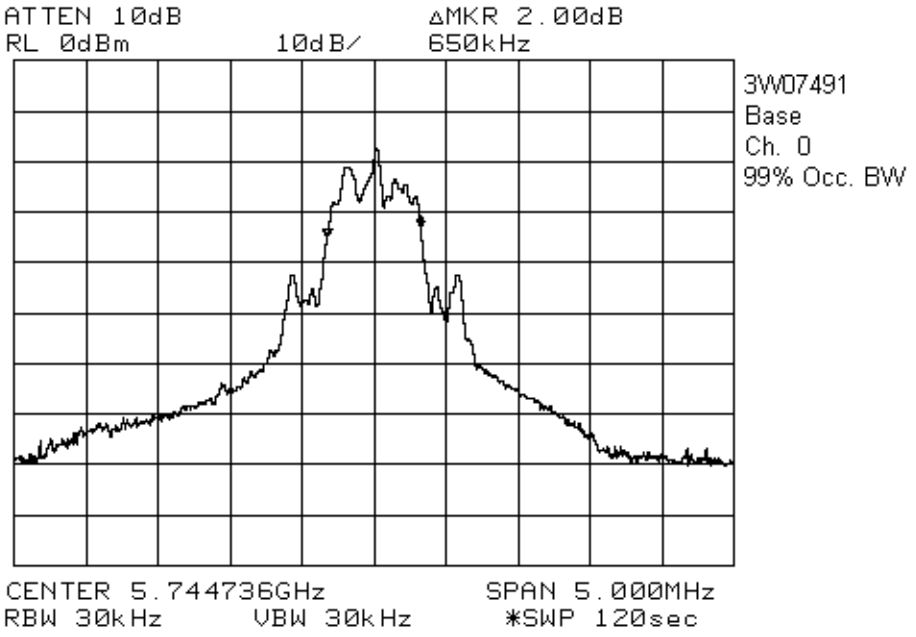
Test Results: Complied

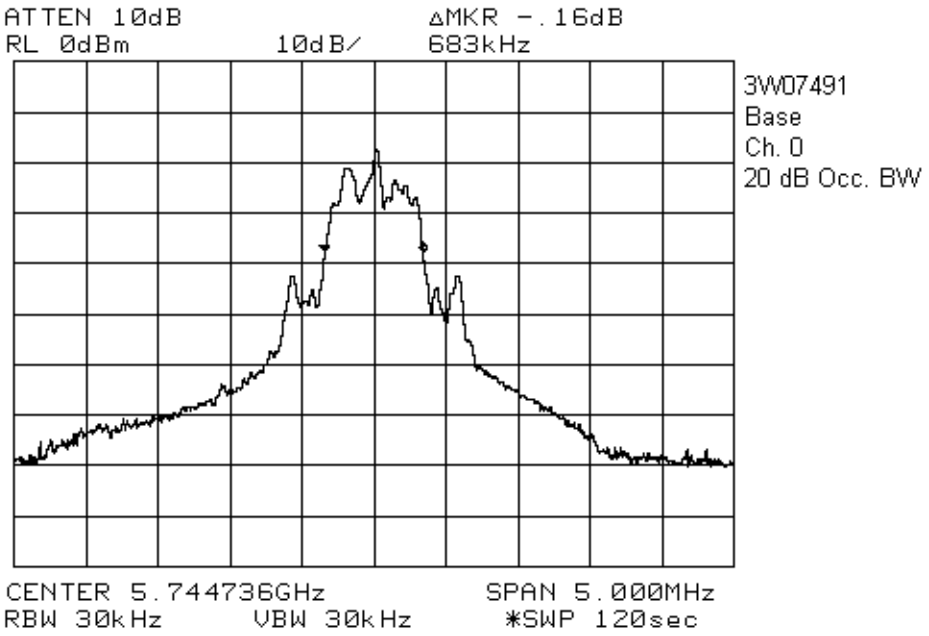
Measurement Data: See Plots

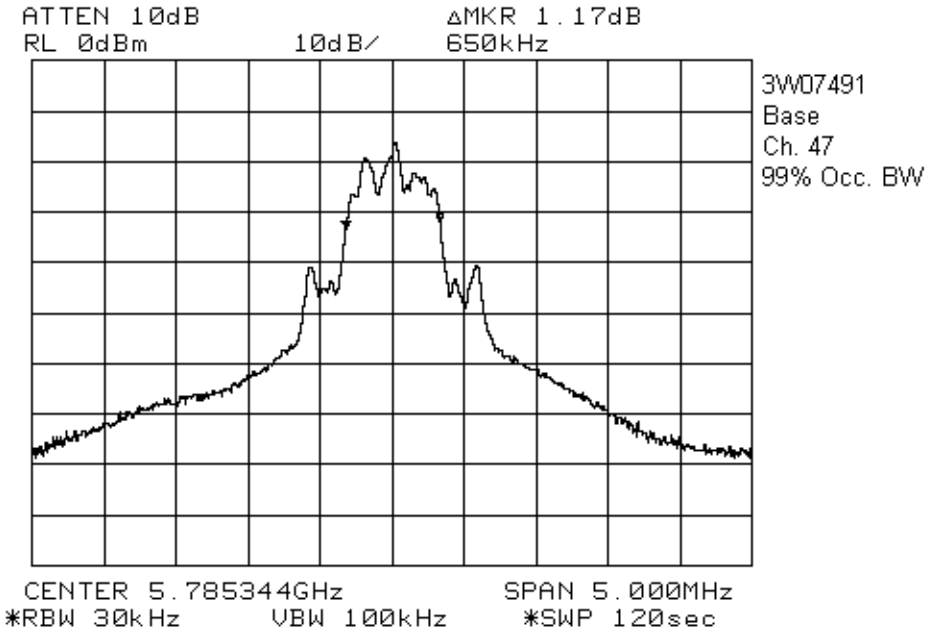
Base:
99%: 667kHz
20 dB: 683kHz

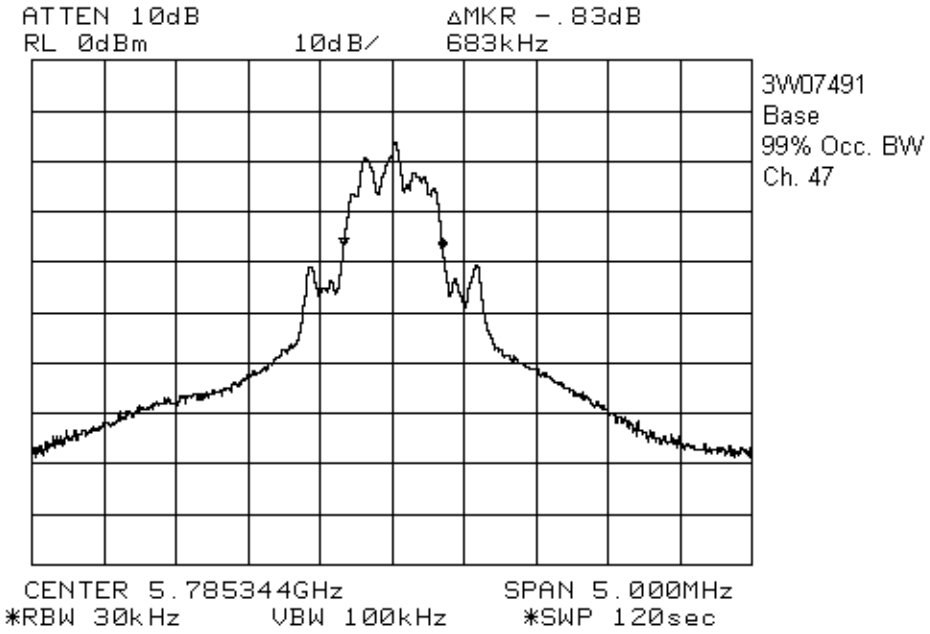
Handset
99%: 625kHz
20 dB: 675kHz

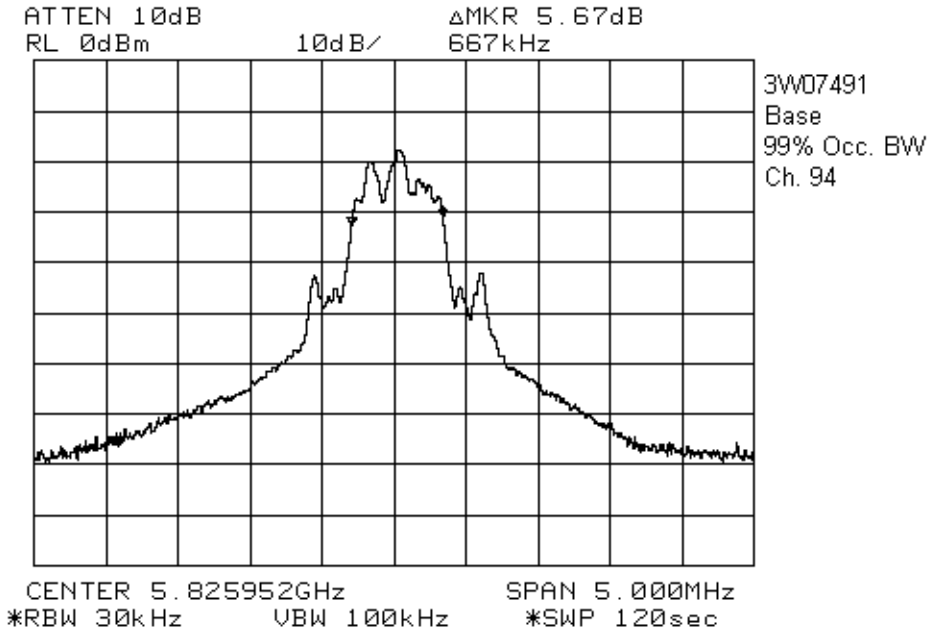
Occupied Bandwidth Plots:

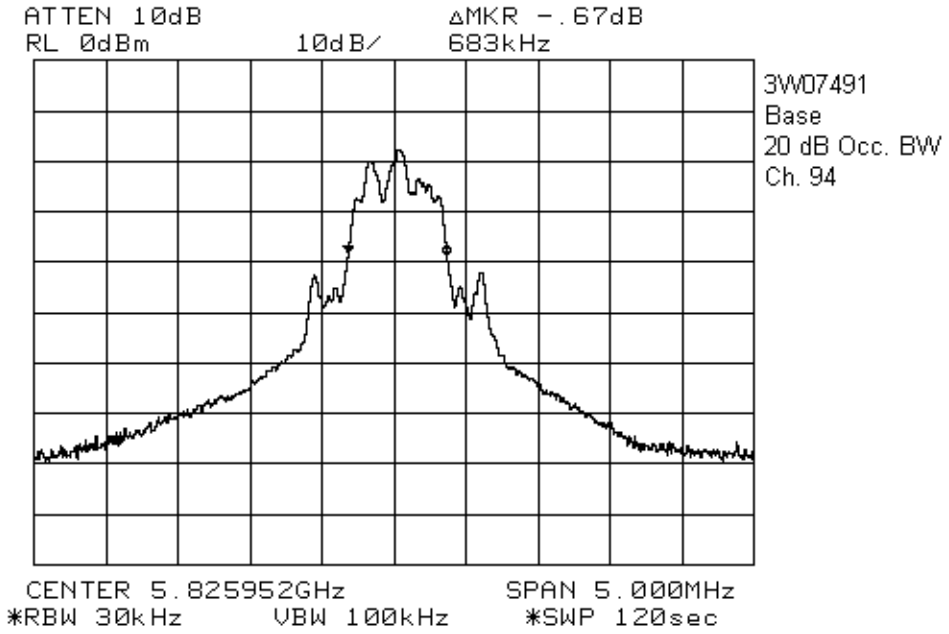


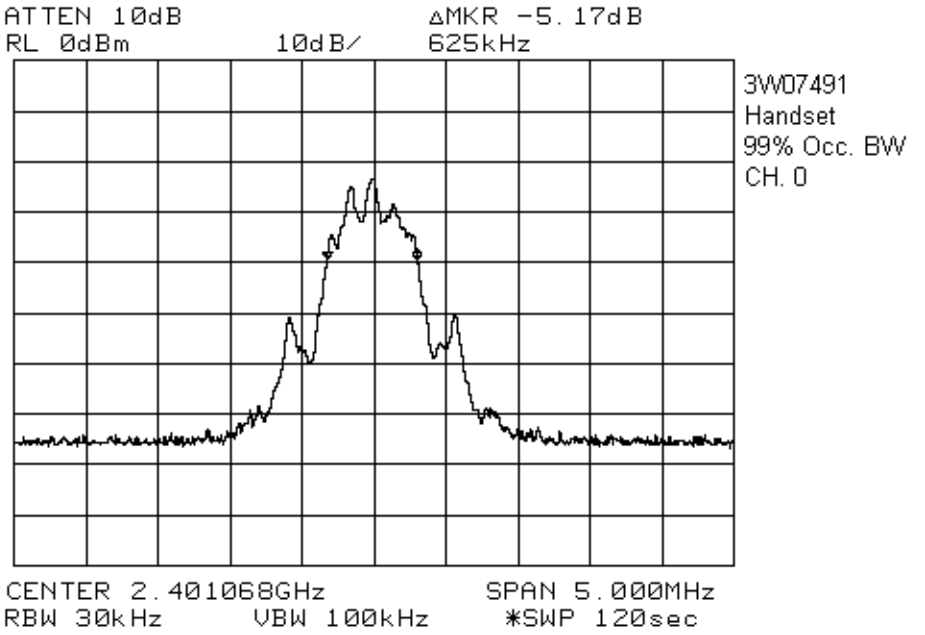


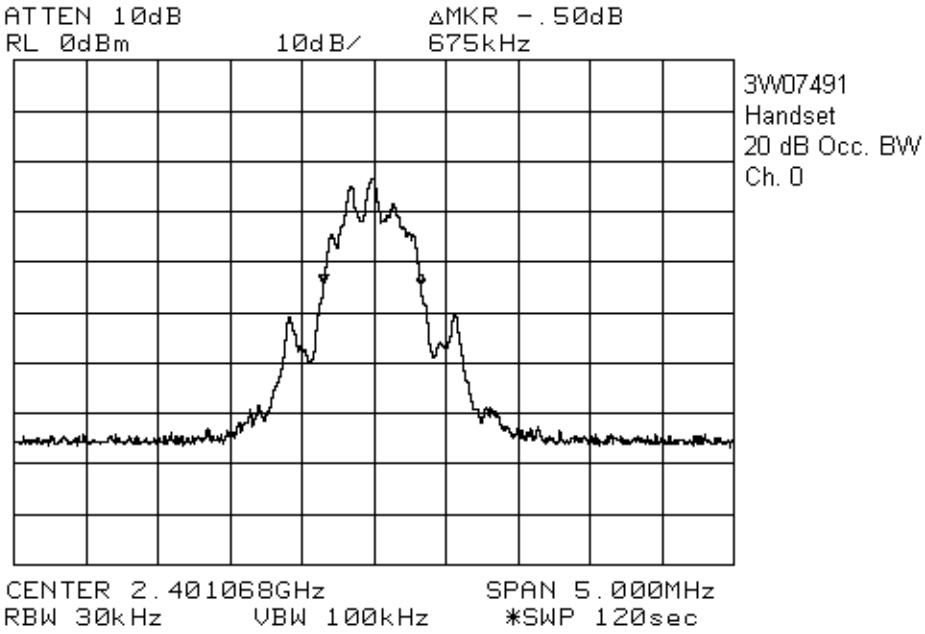

ATTEN 10dB
RL 0dBm
10dB/
ΔMKR 1.17dB
650kHz
3W07491
Base
Ch. 47
99% Occ. BW
CENTER 5.785344GHz
SPAN 5.000MHz
*RBW 30kHz
VBW 100kHz
*SWP 120sec

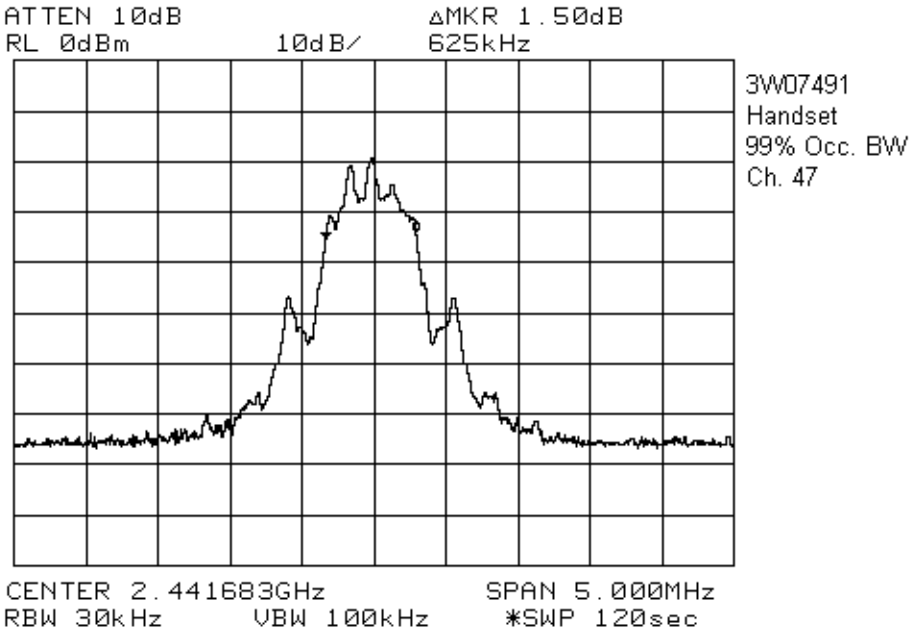

ATTEN 10dB
RL 0dBm
10dB/
ΔMKR -.83dB
683kHz
3W07491
Base
99% Occ. BW
Ch. 47
CENTER 5.785344GHz
SPAN 5.000MHz
*RBW 30kHz
VBW 100kHz
*SWP 120sec

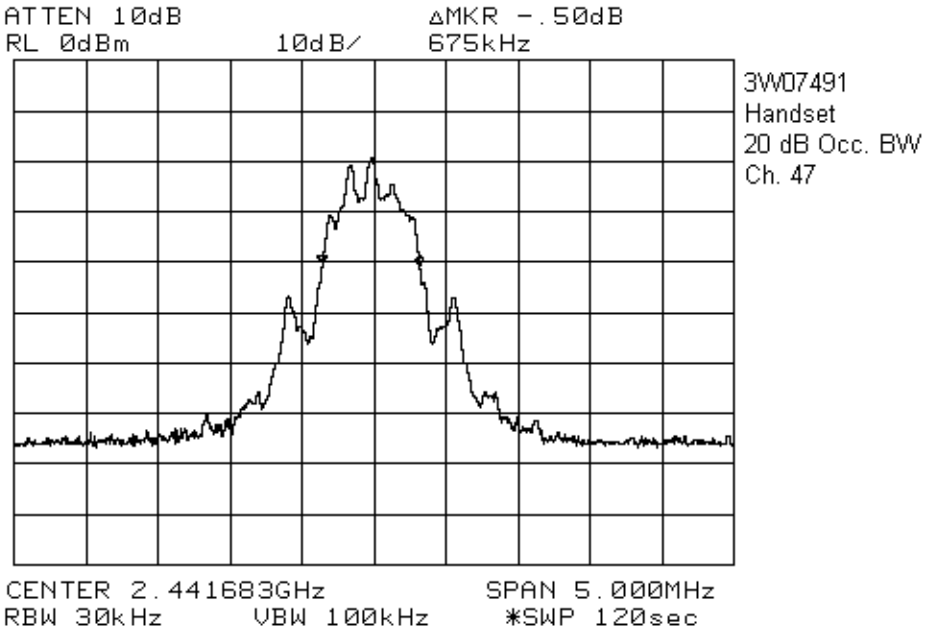

ATTEN 10dB
RL 0dBm
10dB/
ΔMKR 5.67dB
667kHz
3W07491
Base
99% Occ. BW
Ch. 94
CENTER 5.825952GHz
SPAN 5.000MHz
*RBW 30kHz
VBW 100kHz
*SWP 120sec

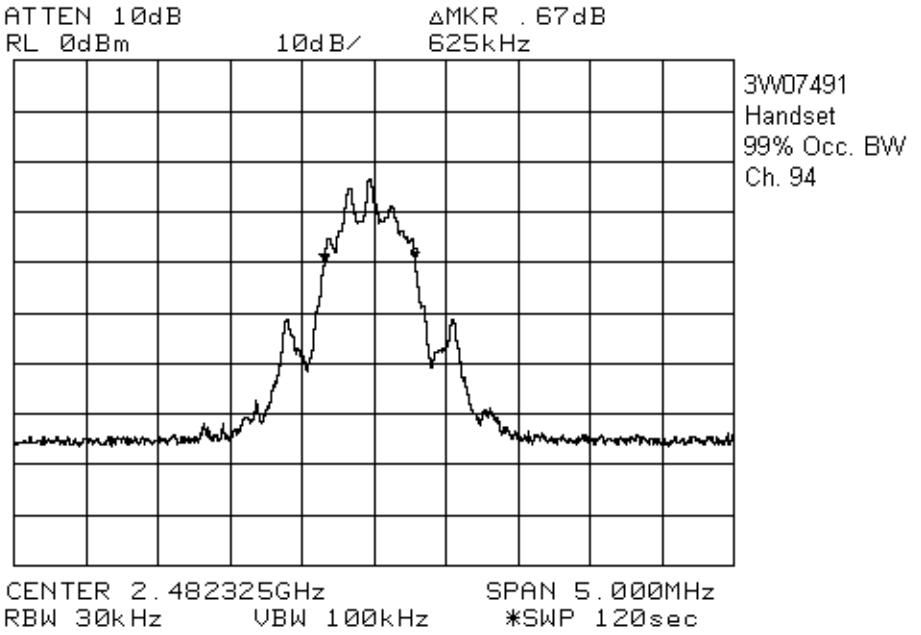

ATTEN 10dB
RL 0dBm
10dB/
ΔMKR -.67dB
683kHz
3W07491
Base
20 dB Occ. BW
Ch. 94
CENTER 5.825952GHz
SPAN 5.000MHz
*RBW 30kHz
VBW 100kHz
*SWP 120sec

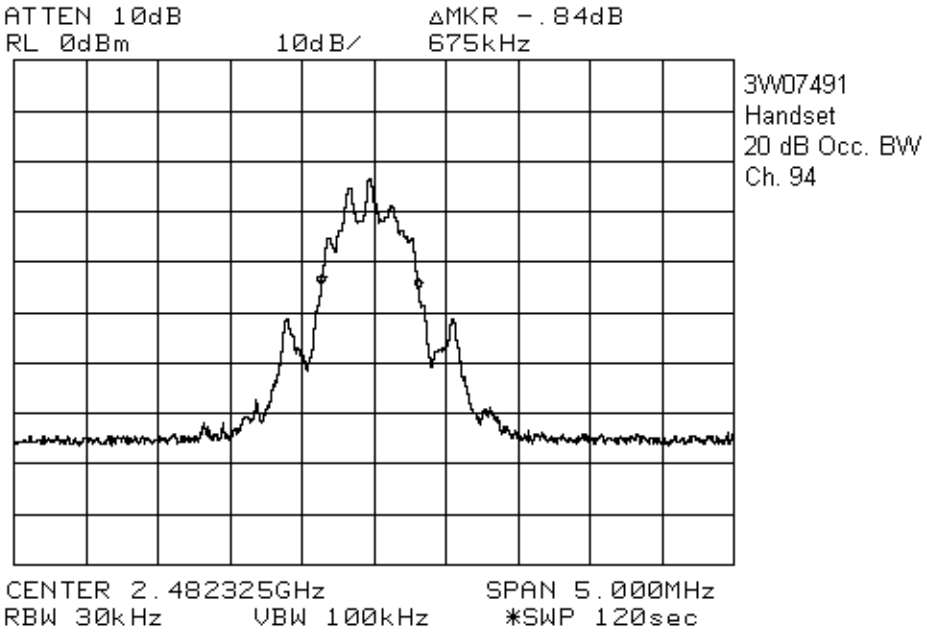

ATTEN 10dB
RL 0dBm
10dB/
ΔMKR -5.17dB
625kHz
3W07491
Handset
99% Occ. BW
CH. 0
CENTER 2.401068GHz
SPAN 5.000MHz
RBW 30kHz
VBW 100kHz
*SWP 120sec


ATTEN 10dB
RL 0dBm
10dB/
ΔMKR -.50dB
675kHz
3W07491
Handset
20 dB Occ. BW
Ch. 0
CENTER 2.401068GHz
SPAN 5.000MHz
RBW 30kHz
VBW 100kHz
*SWP 120sec


ATTEN 10dB
RL 0dBm
10dB/
ΔMKR 1.50dB
625kHz
3W07491
Handset
99% Occ. BW
Ch. 47
CENTER 2.441683GHz
SPAN 5.000MHz
RBW 30kHz
VBW 100kHz
*SWP 120sec


ATTEN 10dB
RL 0dBm
10dB/
ΔMKR -.50dB
675kHz
3W07491
Handset
20 dB Occ. BW
Ch. 47
CENTER 2.441683GHz
SPAN 5.000MHz
RBW 30kHz
VBW 100kHz
*SWP 120sec


ATTEN 10dB
RL 0dBm
10dB/
ΔMKR .67dB
625kHz
3W07491
Handset
99% Occ. BW
Ch. 94
CENTER 2.482325GHz
SPAN 5.000MHz
RBW 30kHz
VBW 100kHz
*SWP 120sec


ATTEN 10dB
RL 0dBm
10dB/
ΔMKR -.84dB
675kHz
3W07491
Handset
20 dB Occ. BW
Ch. 94
CENTER 2.482325GHz
SPAN 5.000MHz
RBW 30kHz
VBW 100kHz
*SWP 120sec

Section 8. Peak Power Output

Para. No.: 15.247 (b)(1)

Test Performed By: Kevin Carr	**Date of Test: 9 Oct 2003**

Test Results: Complies. The maximum peak power output of the transmitter is

Base = 0.8061W, 29.1dBm
Handset = 0.0787W, 19.0dBm

The Base Station was tested at +/- 15% of AC line voltage. The received level did not change
The Handset was tested with fresh batteries.

This EUT was searched in 3 orthogonal axis to determine worst case emissions.

Measurement Data: Detachable antenna? ☐ Yes ☒ No

Directional Gain of Antenna:
Base and Handset: 1.0 dBi or 1.26 Numeric.

Base (worst Case)
Field Strength: 125.3dBuV/m@3m or 1.84V/m@3m

Handset (worst Case)
Field Strength: 115.2dBuV/m@3m or 0.575V/m@3m

Radiated Disturbance Test Data

Test Date:

Engineer's Name: Kevin Carr

Base Station

Tested as per: Table Top

Test Distance (meters): 3 | Range: 1

Freq. (MHz)	Ant.	Pol. V/H	RCVD Signal (dBµV)	Ant. Factor (dB)	Amp. Gain (dB)	Cable Loss (dB)	Field Strength (dBµV/m)
5744.8000	Horn2	V	81.1	34.5	N/A	9.7	125.3
5745.2000	Horn2	H	75.5	34.7	N/A	9.7	119.9
5785.3000	Horn2	V	79.1	34.5	N/A	9.8	123.4
5785.2000	Horn2	H	76.3	34.7	N/A	9.8	120.8
5825.9000	Horn2	V	80.1	34.5	N/A	10.2	124.8
5825.9000	Horn2	H	78.5	34.7	N/A	10.2	123.4

Note 1: Antenna Legend: BC = Biconical, BL = Bilog, LP = Log-Periodic, Horn = Horn, ED = EMCO Dipole
Note 2: Detector Legend: Q-Peak = 120 kHz RBW, Average = 1.0 MHz RBW

Notes: Measurement Receiver = H.P.8565E, RBW = 1MHz

Test Date: 23 Oct 2003

Engineer's Name: Kevin Carr

Handset

Tested as per: Table Top

Test Distance (meters): 3 | Range: 1

Freq. (MHz)	Ant.	Pol. V/H	RCVD Signal (dBµV)	Ant. Factor (dB)	Amp. Gain (dB)	Cable Loss (dB)	Field Strength (dBµV/m)
2441.5000	Horn2	V	74.9	28.9	N/A	5.3	109.1
2441.8000	Horn2	H	81.0	28.9	N/A	5.3	115.2
2401.0000	Horn2	V	73.2	28.9	N/A	4.8	106.9
2401.2000	Horn2	H	79.8	28.9	N/A	4.8	113.5
2482.2000	Horn2	V	73.0	28.9	N/A	5.9	107.8
2482.5000	Horn2	H	79.8	28.9	N/A	5.9	114.6

Note 1: Antenna Legend: BC = Biconical, BL = Bilog, LP = Log-Periodic, Horn = Horn, ED = EMCO Dipole
Note 2: Detector Legend: Q-Peak = 120 kHz RBW, Average = 1.0 MHz RBW

Notes: Measurement Receiver = H.P.8565E, RBW = 1MHz

Section 9. Spurious Emissions (Radiated)

Para. No.: 15.247 (c)

Test Performed By: Kevin Carr	**Date of Test: 8 Oct. 2003**

Test Results:

The worst case emissions level is 69.8dBµV/m@ 3m@22978.9MHz. This is 4.2 dB below the specification limit.

Measurement Data: See attached table.

This EUT was searched in 3 orthogonal axis to determine worst case emissions. The handset was tested with a fresh set of Batteries.

Duty Cycle Calculation:

Base: 20Log{(10 X 0.917mS)/100} = 20.8dB, max. allowed 20.0dB
Handset: 20Log{(10 X 0.917mS)/100} = 20.8dB, max. allowed 20.0dB

Radiated Disturbance Test Data: Handset Harmonics, Avg.

Test Date: 9 Oct. 2003

Engineer's Name: Kevin Carr

Tested as per: Table Top

Test Distance (meters): 3 | Range: 1

Freq. (MHz)	Ant.	Pol. V/H	RCVD Signal (dBµV)	Ant. Factor (dB)	Amp. Gain (-dB)	Duty Cycle Corr. Factor (-dB)	Cable Loss (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Amp.
Ch. 00											
4802.4000	Horn2	V	66.3	34.1	53.2	-20.0	8.1	35.3	54.0	18.7	4-8GHz
4801.8000	Horn2	H	67.2	34.3	53.2	-20.0	8.0	36.4	54.0	17.6	4-8GHz
7203.5000	Horn2	V	58.2	36.8	53.7	-20.0	11.3	32.6	54.0	21.4	4-8GHz
7203.7000	Horn2	H	61.8	37.0	53.7	-20.0	11.3	36.4	54.0	17.6	4-8GHz
Ch. 47											
4883.7100	Horn2	V	66.7	34.2	52.6	-20.0	8.9	37.1	54.0	16.9	4-8GHz
4883.8000	Horn2	H	74.5	34.4	52.6	-20.0	8.9	45.1	54.0	8.9	4-8GHz
7325.7000	Horn2	V	62.0	36.8	53.6	-20.0	10.1	35.3	54.0	18.7	4-8GHz
7325.0000	Horn2	H	63.1	37.0	53.7	-20.0	10.1	36.6	54.0	17.4	4-8GHz
Ch. 94											
4964.3000	Horn2	V	73.8	34.2	52.3	-20.0	9.5	45.1	54.0	8.9	4-8GHz
4964.1700	Horn2	H	73.3	34.4	52.3	-20.0	9.5	44.8	54.0	9.2	4-8GHz
7446.4000	Horn2	V	67.2	36.8	53.2	-20.0	11.1	42.0	54.0	12.0	4-8GHz
7446.2500	Horn2	H	66.3	37.0	53.2	-20.0	11.1	41.3	54.0	12.7	4-8GHz

Note 1: Antenna Legend: BC = Biconical, BL = Bilog, LP = Log-Periodic, Horn = Horn, ED = EMCO Dipole
Note 2: Detector Legend: Q-Peak = 120 kHz RBW, Average = 1.0 MHz RBW

Notes: Measurement Receiver = H.P.8565E, RBW = 1MHz

Radiated Disturbance Test Data: Base Station, Harmonics, Peak

Test Date: 21 Oct. 2003

Engineer's Name: Kevin Carr

Tested as per: Table Top

Test Distance (meters): 3 | Test Distance (meters): 3

Freq. (MHz)	Ant.	Pol. V/H	RCVD Signal (dBµV)	Ant. Factor (dB)	Amp. Gain (-dB)	Passband filter Loss (dB)	Duty Cycle Corr. (-dB)	Dist Corr. (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)
Low Ch.											
11489.2	H2	V	59.6	40.9	38.8	2.7	0	0	64.4	74	9.6
11489.9	H2	H	58.8	40.9	38.8	2.7	0	0	63.6	74	10.4
17234.2	H2	V	71.8	43.5	38.5	2.2	0	0	79	105.3	26.3
17234.2	H2	H	68.1	43.5	38.5	2.2	0	0	75.3	105.3	30
22978.7	FA001847	V	63.1	45.7	39.3	0	0	0	69.5	74	4.5
22978.9	FA001847	H	63.4	45.7	39.3	0	0	0	69.8	74	4.2
Mid Ch.											
11571.1	H2	V	59.6	40.9	38.8	2.7	0	0	64.4	74	9.6
11571.3	H2	H	58.2	40.9	38.8	2.7	0	0	63	74	11
17356.1	H2	V	70.7	43.5	38.5	2.2	0	0	77.9	105.3	27.4
17356.1	H2	H	69.3	43.5	38.5	2.2	0	0	76.5	105.3	28.8
23140.6	FA001847	V	63.4	45.7	39.3	0	0	0	69.8	105.3	35.5
23141.4	FA001847	H	65.2	45.7	39.3	0	0	0	71.6	105.3	33.7

Note 1: Antenna Legend: BC = Biconical, BL = Bilog, LP = Log-Periodic, Horn = Horn, ED = EMCO Dipole
Note 2: Detector Legend: Q-Peak = 120 kHz RBW, Average = 1.0 MHz RBW

Notes: Measurement Receiver = H.P.8565E, RBW = 1MHz

Radiated Disturbance Test Data: Base Station, Harmonics, Peak, Cont.

Test Date: 21 April 2003	
Engineer's Name: Kevin Carr	
Tested as per: Table Top	
Test Distance (meters):	Range: 1

Freq. (MHz)	Ant.	Pol. V/H	RCVD Signal (dBµV)	Ant. Factor (dB)	Amp. Gain (-dB)	Passband filter Loss (dB)	Duty Cycle Corr. (-dB)	Dist Corr. (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)
High Ch.											
11652.3	H2	V	60.7	40.9	38.8	2.7	0	0	65.5	74	8.5
11652.3	H2	H	59.8	40.9	38.8	2.7	0	0	64.6	74	9.4
17477.2	H2	V	69	43.5	38.5	2.2	0	0	76.2	105.3	29.1
17477.9	H2	H	69.8	43.5	38.5	2.2	0	0	77	105.3	28.3
23304	FA001847	V	64.5	45.7	39.3	0	0	0	70.9	105.3	34.4
23303.8	FA001847	H	64.8	45.7	39.3	0	0	0	71.2	105.3	34.1

Note 1: Antenna Legend: BC = Biconical, BL = Bilog, LP = Log-Periodic, Horn = Horn, ED = EMCO Dipole
Note 2: Detector Legend: Q-Peak = 120 kHz RBW, Average = 1.0 MHz RBW

Notes:	Measurement Receiver = H.P.8565E, RBW = 1MHz

Radiated Disturbance Test Data: Base Station, Harmonics, Average

Test Date: 21 Oct. 2003

Engineer's Name: Kevin Carr

Tested as per: Table Top

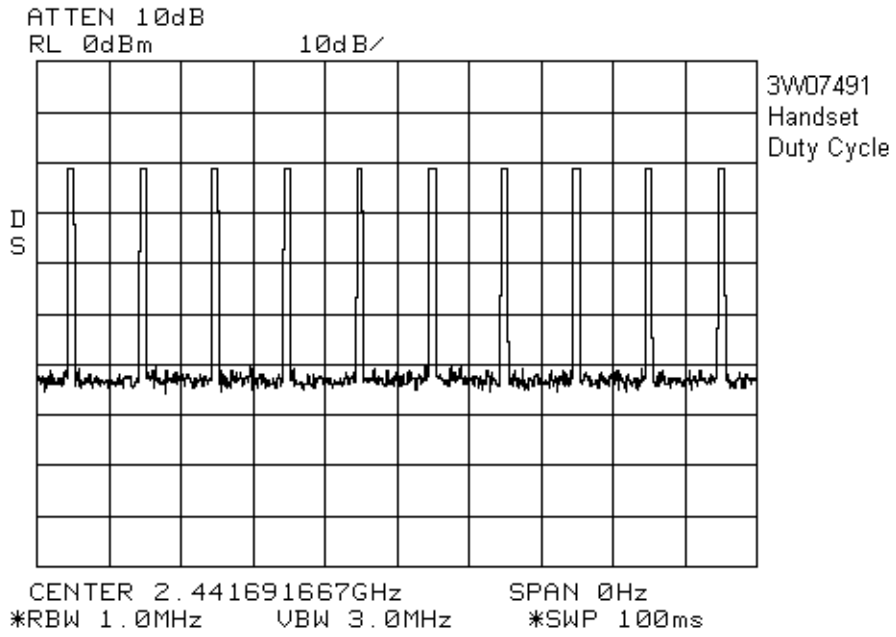
Test Distance (meters): 3 | Test Distance (meters): 3

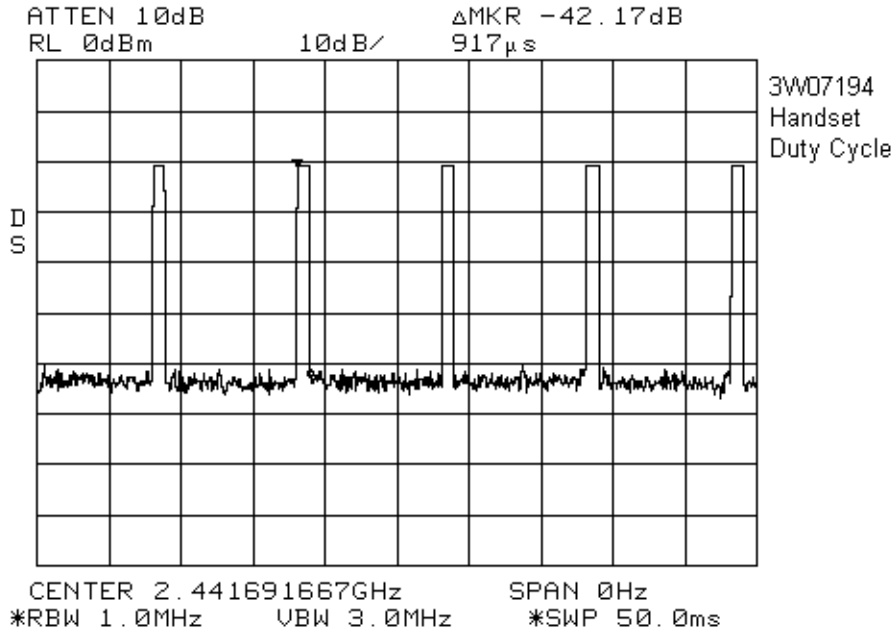
Freq. (MHz)	Ant.	Pol. V/H	RCVD Signal (dBμV)	Ant. Factor (dB)	Amp. Gain (-dB)	Passband filter Loss (dB)	Duty Cycle Corr. (-dB)	Dist Corr. (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)
Low Ch.											
11489.2	H2	V	59.6	40.9	38.8	2.7	-20	0	44.4	54	9.6
11489.9	H2	H	58.8	40.9	38.8	2.7	-20	0	43.6	54	10.4
22978.7	FA001847	V	63.1	45.7	39.3	0	-20	0	49.5	54	4.5
22978.9	FA001847	H	63.4	45.7	39.3	0	-20	0	49.8	54	4.2
Mid Ch.											
11571.1	H2	V	59.6	40.9	38.8	2.7	20	0	44.4	54	9.6
11571.3	H2	H	58.2	40.9	38.8	2.7	20	0	43	54	11
High Ch.											
11652.3	H2	V	60.7	40.9	38.8	2.7	20	0	45.5	54	8.5
11652.3	H2	H	59.8	40.9	38.8	2.7	20	0	44.6	54	9.4

Note 1: Antenna Legend: BC = Biconical, BL = Bilog, LP = Log-Periodic, Horn = Horn, ED = EMCO Dipole
Note 2: Detector Legend: Q-Peak = 120 kHz RBW, Average = 1.0 MHz RBW

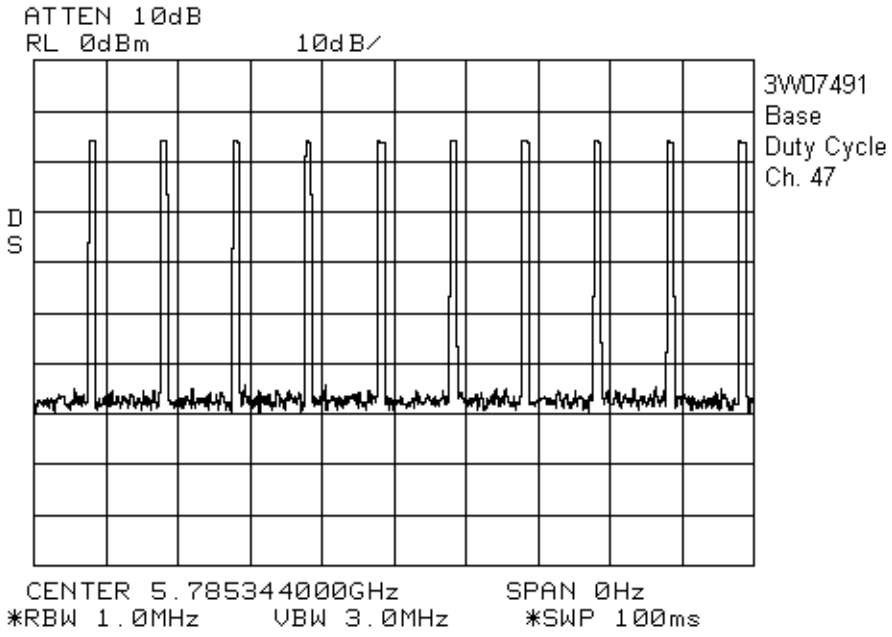
Notes: Measurement Receiver = H.P.8565E, RBW = 1MHz

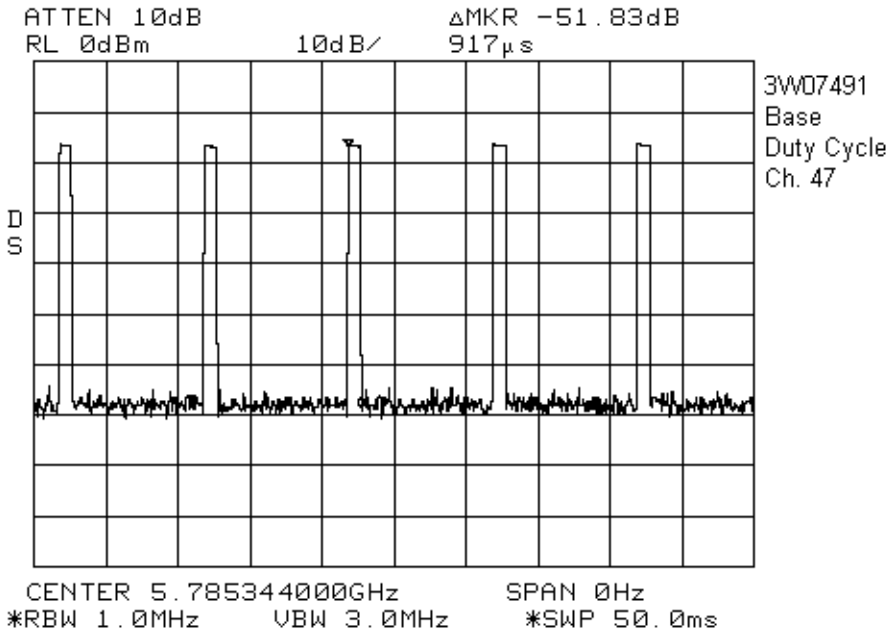
Duty Cycle Plots
Handset



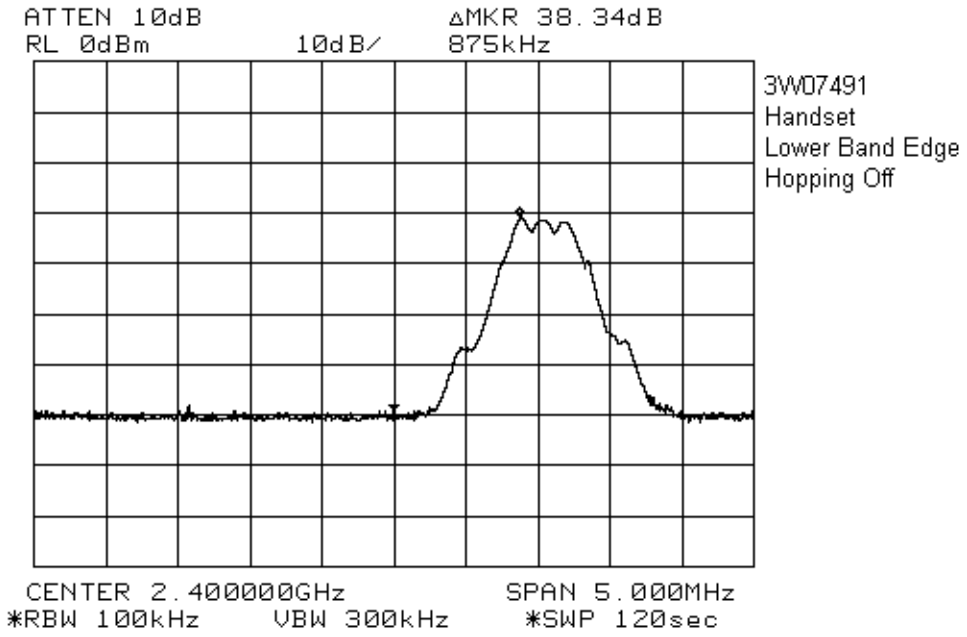


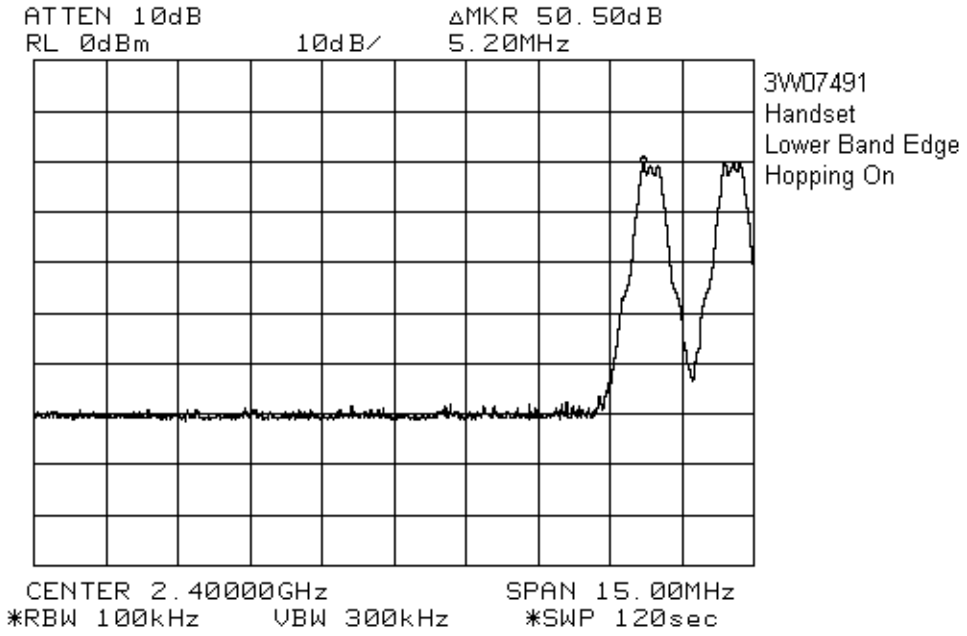
Base

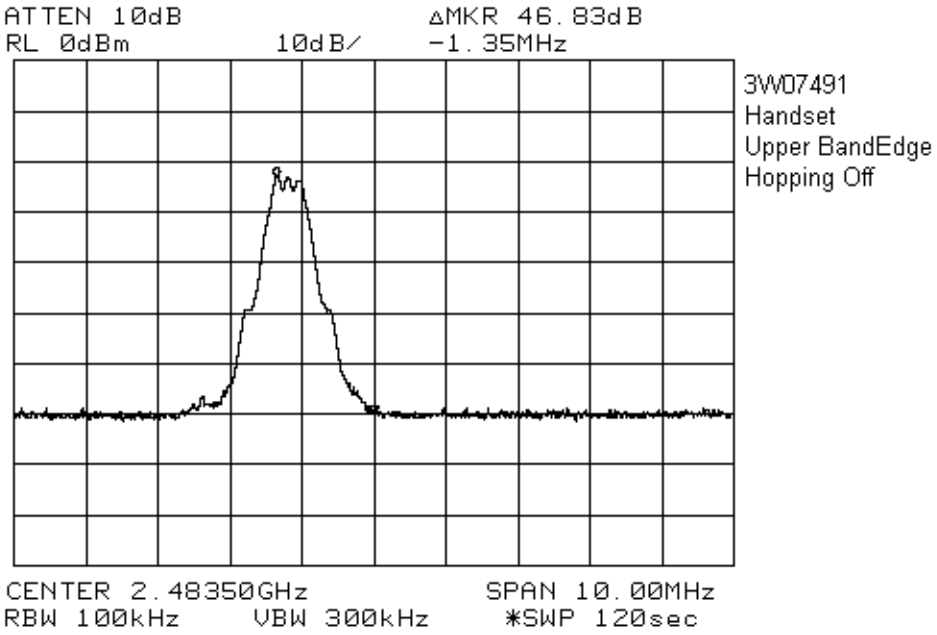

ATTEN 10dB
RL 0dBm
10dB/
3W07491
Base
Duty Cycle
Ch. 47
D
S
CENTER 5.785344000GHz
SPAN 0Hz
*RBW 1.0MHz
VBW 3.0MHz
*SWP 100ms

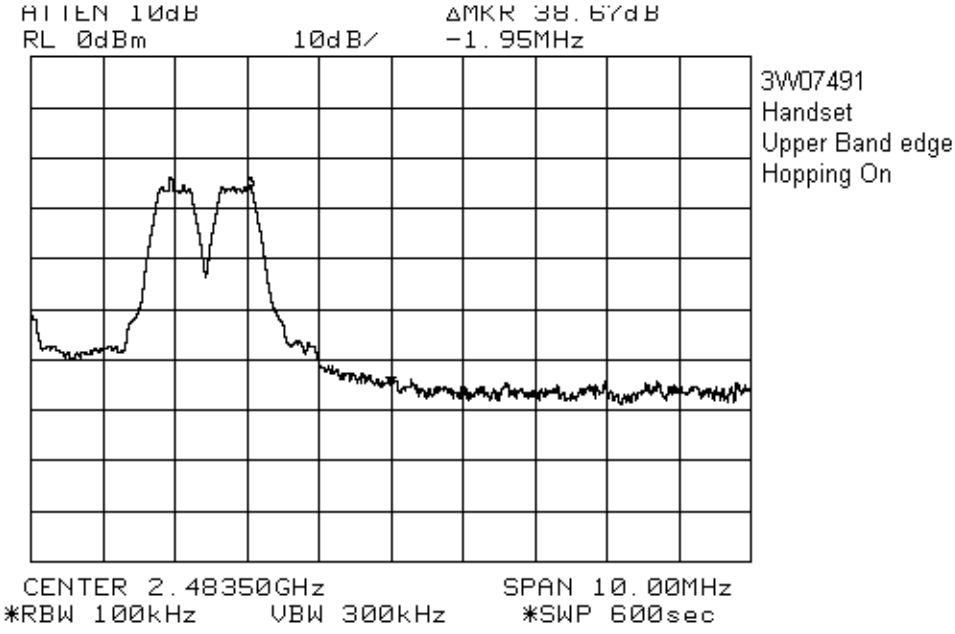

ATTEN 10dB
RL 0dBm
10dB/
ΔMKR -51.83dB
917µs
3W07491
Base
Duty Cycle
Ch. 47
D
S
CENTER 5.785344000GHz
SPAN 0Hz
*RBW 1.0MHz
VBW 3.0MHz
*SWP 50.0ms

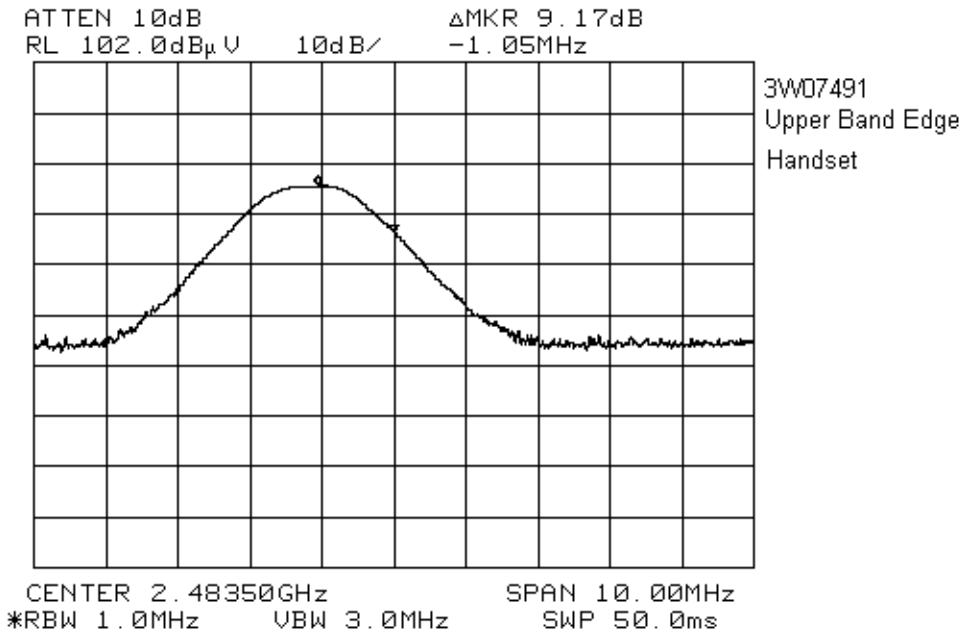
20 dB Band Edge
Handset






ATTEN 10dB
RL 0dBm
10dB/
ΔMKR 46.83dB
-1.35MHz
3W07491
Handset
Upper BandEdge
Hopping Off
CENTER 2.48350GHz
SPAN 10.00MHz
RBW 100kHz
VBW 300kHz
*SWP 120sec

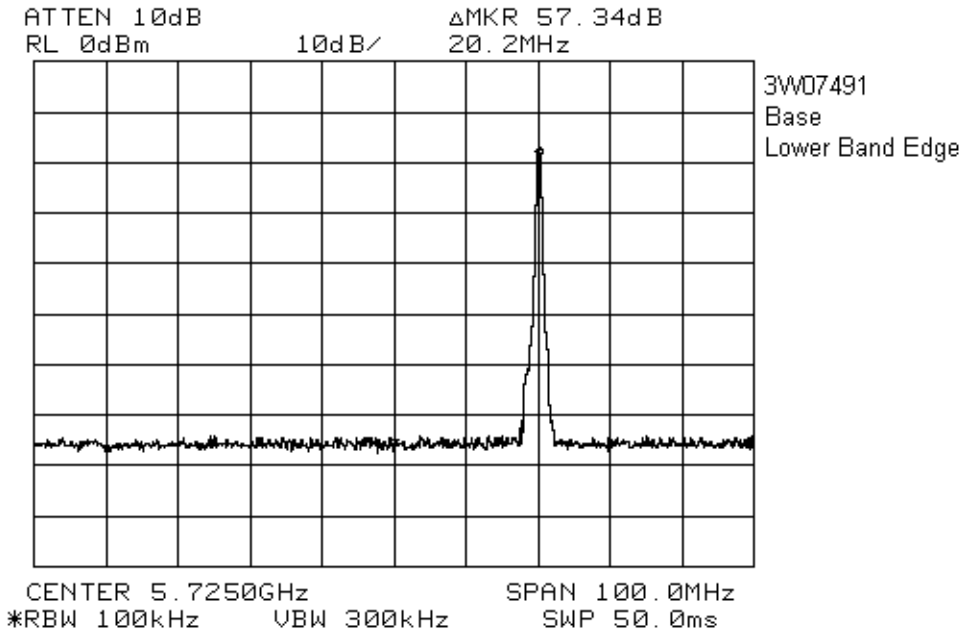

ATTEN 10dB
RL 0dBm
10dB/
ΔMKR 38.67dB
-1.95MHz
3W07491
Handset
Upper Band edge
Hopping On
CENTER 2.48350GHz
SPAN 10.00MHz
*RBW 100kHz
VBW 300kHz
*SWP 600sec

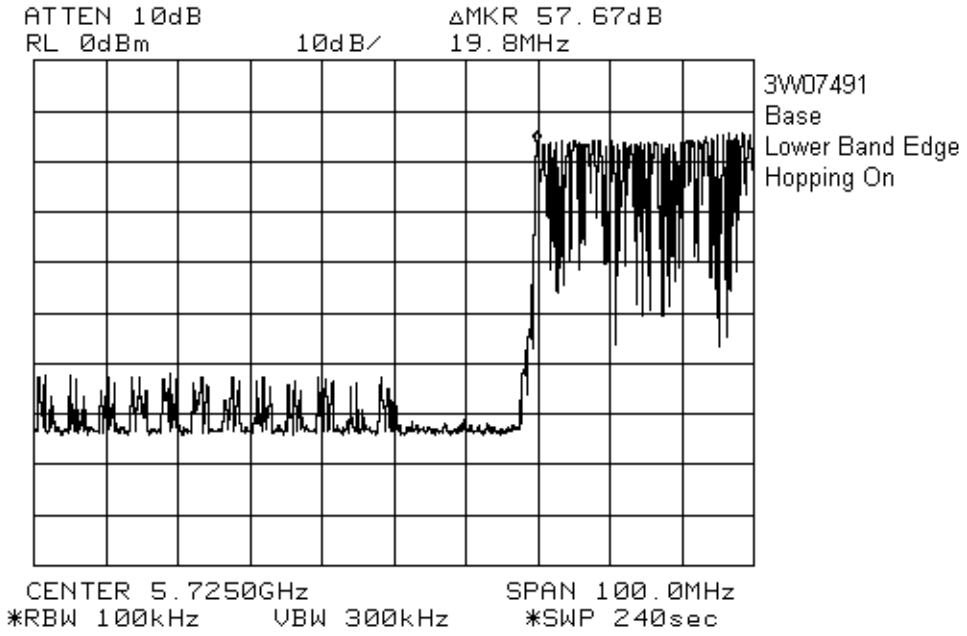


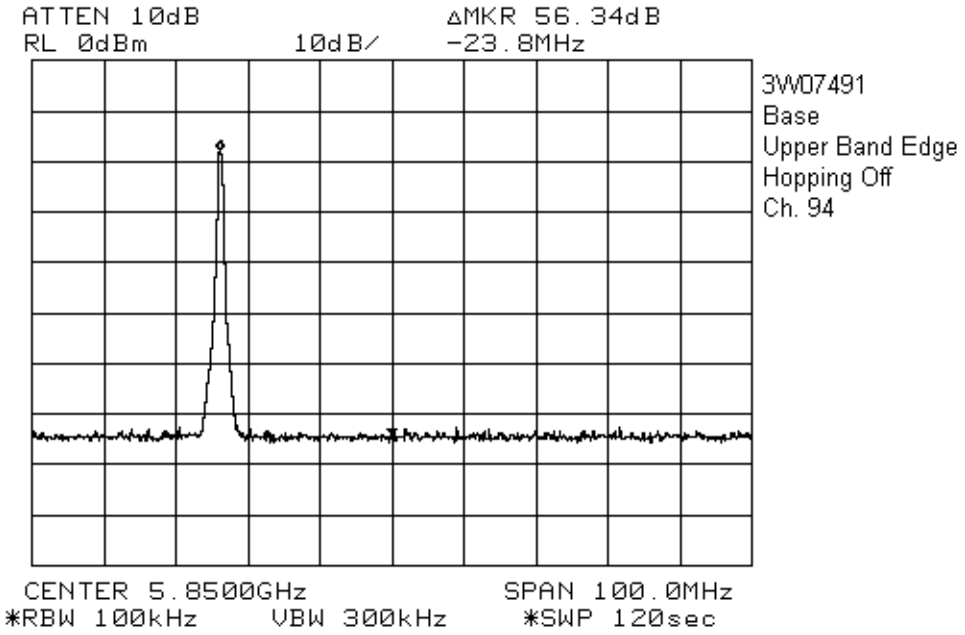
Peak Level Band Edge: 79.8dBuv + 34.8dB - 9.2dB = 105.4dBuV/m@3m
Peak Band Edge Level (Marker Delta): 105.4dBuv/m – 46.8dB = 58.6dBuV/m@3m
Average: 58.6dBuV/m – 20.0 =38.6dBuV/m@3m

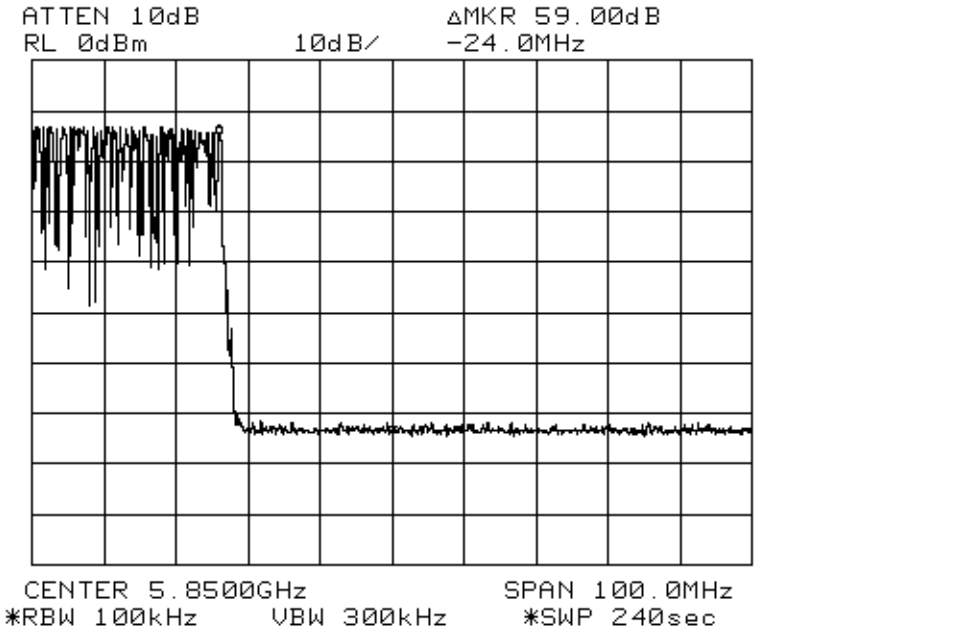
20 dB Band Edge

Base

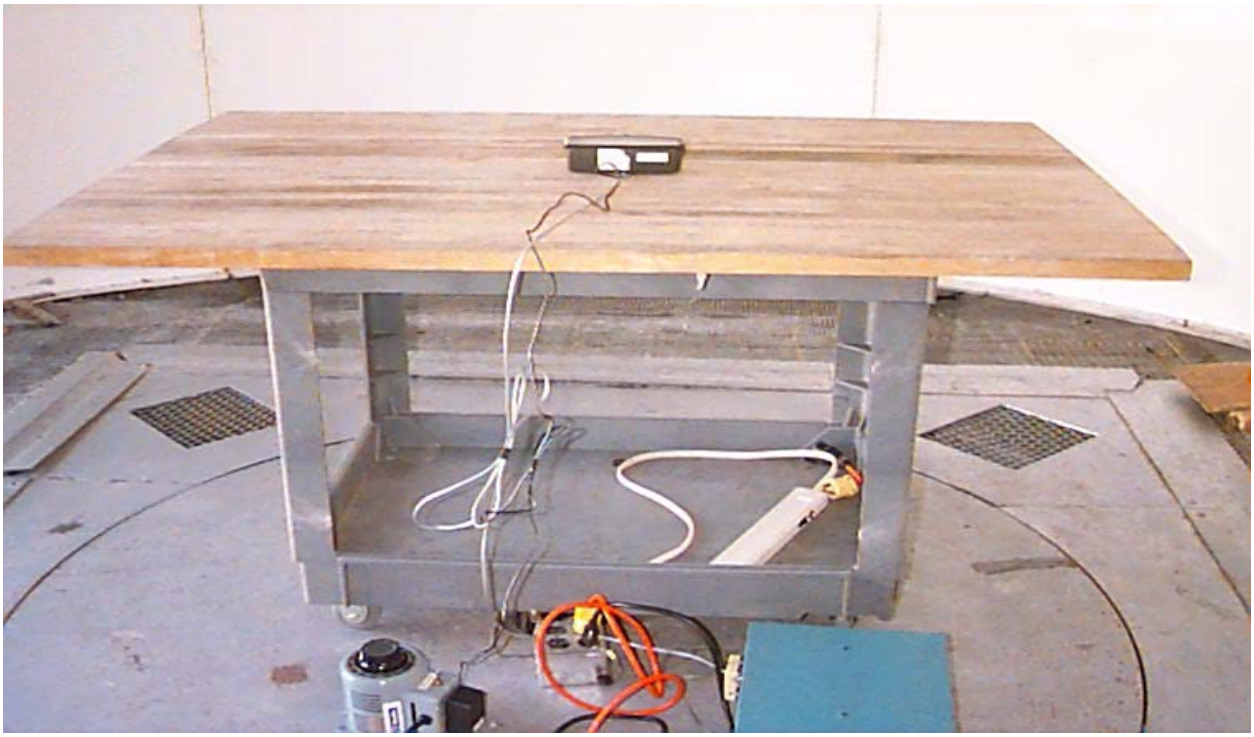


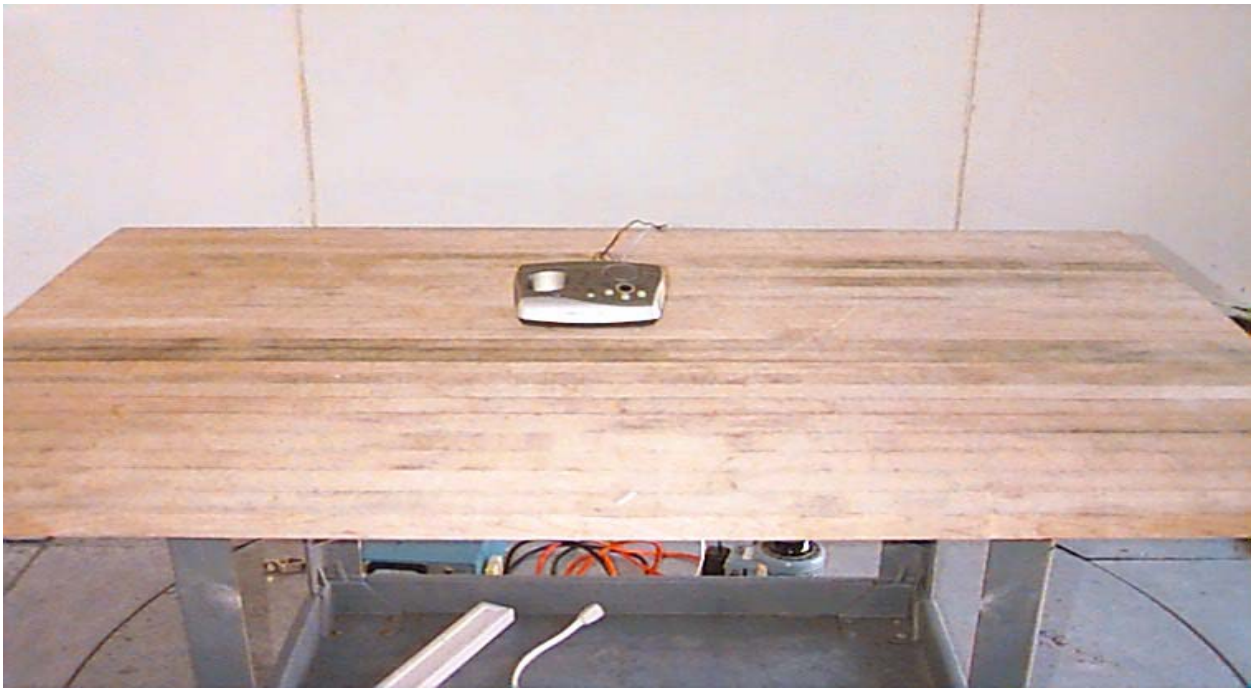



ATTEN 10dB
RL 0dBm
10dB/
ΔMKR 56.34dB
-23.8MHz
3W07491
Base
Upper Band Edge
Hopping Off
Ch. 94
CENTER 5.8500GHz
SPAN 100.0MHz
*RBW 100kHz
VBW 300kHz
*SWP 120sec


ATTEN 10dB
RL 0dBm
10dB/
ΔMKR 59.00dB
-24.0MHz
CENTER 5.8500GHz
SPAN 100.0MHz
*RBW 100kHz
VBW 300kHz
*SWP 240sec

Setup Photos:
Base

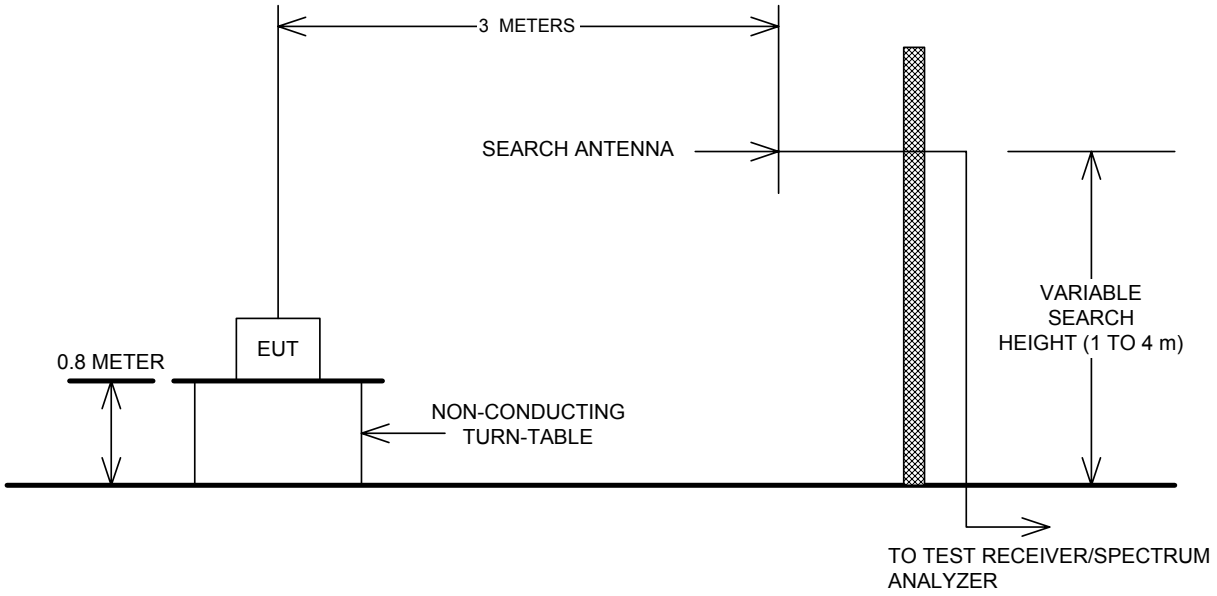




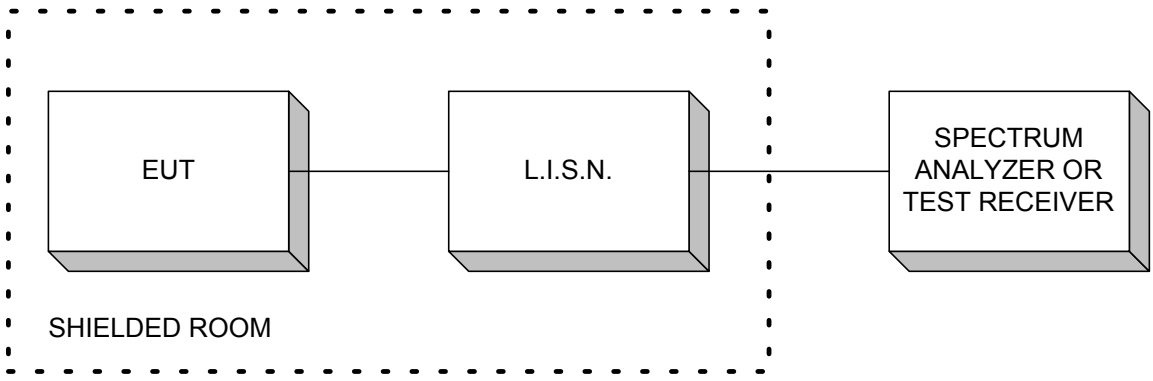
Handset

Section 10. Block Diagrams

Test Site For Radiated Emissions



Conducted Emissions



Section 11. Test Equipment List

Equipment List – Conducted Emissions

CAL Cycle	Equipment	Manufacturer	Model No.	Asset/Serial No.	Last Cal.	Next Cal.
1 Year	LISN	EMCO	4825/2	FA001545	Oct. 25/02	Oct. 25/03
1 Year	Spectrum Analyzer	Hewlett-Packard	8566B	FA001309	June. 05/03	June. 05/04
1 Year	Spectrum Analyzer Display	Hewlett-Packard	85662A	FA001309	June. 05/03	June. 05/04
1 Year	Transient Limiter	Hewlett-Packard	1194 7A	FA001855	May. 06/03	May. 06/04

Note: N/A = Not Applicable, NCR = No Cal Required, COU = CAL On Use, OUT = Out For CAL/Repair

Equipment List - Radiated Emissions

CAL Cycle	Equipment	Manufacturer	Model No.	Asset/Serial No.	Last Cal.	Next Cal.
1 Year	Receiver	Rohde & Schwarz	ESVS-30	FA001437	July. 24/03	July. 24/04
1 Year	Receiver	Rohde & Schwarz	ESVP	FA000871	Nov. 15/02	Nov. 15/03
1 Year	Spectrum Analyzer	Hewlett-Packard	8565E	FA000981	July. 03/03	July. 03/04
1 Year	Horn Antenna #2	EMCO	3115	FA000825	Dec. 09/02	Dec. 09/03
COU	Horn 18 – 26.5 GHz	Electro-Metrics	SH-50/60-1	FA000479	COU	COU
COU	Horn 26 .5 – 40 GHz	Electro-Metrics	SH-50/60-2	FA000485	COU	COU
1 Year	2.0 – 4.0 GHz Amplifier	JCA	24-600	FA001496	June. 18/03	June. 18/04
1 Year	4.0 – 8.0 GHz Amplifier	JCA	48-600	FA001497	June. 18/03	June. 18/04
COU	5.0 – 18.0 GHz Amplifier	NARDA	DWT-186N23U40	FA001409	COU	COU
COU	18.0 – 26.0 GHz Amplifier	NARDA	BBS-1826N612	FA001550	COU	COU
COU	26 – 40.0 GHz Amplifier	NARDA	DBL-2640N610	FA001556	COU	COU

Note: N/A = Not Applicable, NCR = No Cal Required, COU = CAL On Use, OUT = Out For CAL/Repair