



POWERWAVE TECHNOLOGIES, INC. TEST REPORT

FOR THE

RF AMPLIFIER, EHP 19

FCC PART 24, FCC SUBPART B SECTION 15.109 CLASS B AND RSS-133

COMPLIANCE

DATE OF ISSUE: SEPTEMBER 15, 2005

PREPARED FOR:

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P.O. No.: 103479

W.O. No.: 84198

PREPARED BY:

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Date of test: August 31 - September 13, 2005

Report No.: FC05-066

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ADMINISTRATIVE INFORMATION

DATE OF TEST: August 31 - September 13, 2005

DATE OF RECEIPT: August 31, 2005

FREQUENCY RANGE TESTED: 9 kHz-20 GHz

MANUFACTURER: Powerwave Technologies, Inc.
1801 E. St. Andrew Place
Santa Ana CA 92705

REPRESENTATIVE: Greg Butler

TEST LOCATION: CKC Laboratories, Inc.
110 Olinda Place
Brea, CA 92621

TEST METHOD: FCC Part 24, ANSI/TIA/EIA-603-B (2002),
RSS-133 and RSS-Gen

PURPOSE OF TEST: To demonstrate the compliance of the RF
Amplifier, EHP 19 with the requirements for FCC
Part 24 and RSS-133 devices.

FCC TO CANADA STANDARD CORRELATION MATRIX

Canadian Standard	Canadian Section	FCC Standard	FCC Section	Test Description
RSS 133	5.5	N/A	N/A	Types of modulation
RSS 133	6.2	47 CFR	24.232	Power Output
RSS 133	6.3	47 CFR	24.238	Emissions Limitations
N/A	N/A	47 CFR	24.236	Field Strength Limitations
RSS 133	7	47 CFR	24.235	Frequency Stability
RSS 133	8	47 CFR	1.1307	RF Exposure
RSS 133	9	47 CFR	15.109	Receiver Spurious Emissions
	IC 3172-A		90473	Site File No.

CONDITIONS FOR COMPLIANCE

Ferrite Steward 28A3851_0A2 added to DC power cable. FCC 15.107 testing was not required because the EUT is DC powered.

APPROVALS

Steve Behm, Director of Engineering Services

QUALITY ASSURANCE:



Joyce Walker, Quality Assurance Administrative Manager

TEST PERSONNEL:



Eddie Wong, EMC Engineer



EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The customer declares the EUT, which is a PCS transmitter, tested by CKC Laboratories was representative of a production unit.

EQUIPMENT UNDER TEST

RF Amplifier

Manuf: Powerwave Technologies
Model: EHP 19
Serial: NA
FCC ID: pending

PERIPHERAL DEVICES

The EUT was tested with the following peripheral device(s):

Power Supply

Manuf: Agilent
Model: 6674A
Serial: US36371847

ESG

Manuf: Agilent
Model: E4433B
Serial: US40052298

Power Meter

Manuf: Agilent
Model: E4419A
Serial: US38260914

Monitor

Manuf: HP
Model: D8904
Serial: CN20831504

Computer

Manuf: Microsoft
Model: Intelli Mouse
Serial: 7143124-00000

Keyboard

Manuf: HP
Model: L3754A
Serial: E03633LXUS

Ethernet Hub

Manuf: Linksys
Model: NH10005
Serial: R87203A017895



TEMPERATURE AND HUMIDITY DURING TESTING

The temperature during testing was within +15°C and + 35°C.
The relative humidity was between 20% and 75%.

FCC 2.1033(c)(3) USER’S MANUAL

The necessary information is contained in a separate document.

**FCC 2.1033 (c)(4) TYPE OF EMISSIONS
WCDMA (UMTS)**

FCC 2.1033 (c)(5) FREQUENCY RANGE

1930 MHz – 1990 MHz

FCC 2.1033 (c)(6) OPERATING POWER

60 Watts per channel

FCC 2.1033 (c)(7) MAXIMUM POWER RATING

100 Watts

FCC 2.1033 (c)(8) DC VOLTAGES

27 VDC, 3A into the output devices.

FCC 2.1033 (c)(9) TUNE-UP PROCEDURE

The necessary information is contained in a separate document.

FCC 2.1033(c)(10) SCHEMATICS AND CIRCUITRY DESCRIPTION

The necessary information is contained in a separate document.

FCC 2.1033(c)(11) LABEL AND PLACEMENT

The necessary information is contained in a separate document.

FCC 2.1033(c)(12) SUBMITTAL PHOTOS

The necessary information is contained in a separate document.

FCC 2.1033 (c)(13) MODULATION INFORMATION

Not Applicable.



FCC 15.109 – RADIATED EMISSIONS

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Powerwave Technologies, Inc.**
 Specification: **FCC 15.109 Class B**
 Work Order #: **84198** Date: 9/9/2005
 Test Type: **Radiated Scan** Time: 13:34:33
 Equipment: **RF Amplifier** Sequence#: 1
 Manufacturer: Powerwave Technologies Tested By: E. Wong
 Model: EHP 19
 S/N: NA

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
RF Amplifier*	Powerwave Technologies	EHP 19	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Agilent	6674A	US36371847
ESG	Agilent	E4433B	US40052298
Power Meter	Agilent	E4419A	US38260914
Monitor	HP	D8904	CN20831504
Computer	Microsoft	Intelli Mouse	7143124-00000
Keyboard	HP	L3754A	E03633LXUS
Ethernet Hub	Linksys	NH10005	R87203A017895

Test Conditions / Notes:

The EUT is placed on the wooden table. DRIC0 and DRIC1 are connected to remote computer via Firewire cable. TX out is connected to remote load string. Ethernet, RX0 and RX1 left blank. The remote computer generates waveform from received 10 MHz reference signal and send the wave form to he EUT via fire wire. The Power level is adjusted to maintain the rated output power. Power = Idle. Frequency = Idle 48VDC. Frequency range of measurement = 30MHz - 1000MHz. 30 MHz - 1000 MHz; RBW=120 kHz, VBW=120 kHz. Modification: Ferrite Steward 28A3851_0A2 added to DC power cable.

Transducer Legend:

T1=Bilog 2451 080107	T2=Cable #10 051606
T3=Cable #15, Site A, 010306	T4=Preamp 8447D 071406

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	276.484M	64.9	+12.6	+0.3	+3.1	-27.7	-10.0	43.2	46.4	-3.2	Horiz
	QP										
^	276.484M	66.1	+12.6	+0.3	+3.1	-27.7	-10.0	44.4	46.4	-2.0	Horiz
^	276.480M	62.2	+12.6	+0.3	+3.1	-27.7	-10.0	40.5	46.4	-5.9	Horiz
^	276.413M	43.6	+12.6	+0.3	+3.1	-27.7	+0.0	31.9	46.0	-14.1	Horiz
5	276.484M	63.1	+12.6	+0.3	+3.1	-27.7	-10.0	41.4	46.4	-5.0	Vert

6	460.785M	57.1	+17.1	+0.3	+4.1	-27.8	-10.0	40.8	46.4	-5.6	Horiz
	QP										
^	460.785M	58.9	+17.1	+0.3	+4.1	-27.8	-10.0	42.6	46.4	-3.8	Horiz
8	460.785M	57.1	+17.1	+0.3	+4.1	-27.8	-10.0	40.8	46.4	-5.6	Horiz
	QP										
9	230.396M	64.9	+10.4	+0.2	+2.8	-27.6	-10.0	40.7	46.4	-5.7	Horiz
10	230.386M	63.6	+10.4	+0.2	+2.8	-27.6	-10.0	39.4	46.4	-7.0	Vert
11	368.635M	56.8	+15.1	+0.3	+3.6	-27.5	-10.0	38.3	46.4	-8.1	Horiz
	QP										
^	368.635M	58.9	+15.1	+0.3	+3.6	-27.5	-10.0	40.4	46.4	-6.0	Horiz
13	322.567M	58.3	+13.7	+0.3	+3.4	-27.5	-10.0	38.2	46.4	-8.2	Vert
14	320.000M	58.4	+13.6	+0.3	+3.4	-27.5	-10.0	38.2	46.4	-8.2	Vert
15	430.080M	54.9	+16.5	+0.3	+3.9	-27.6	-10.0	38.0	46.4	-8.4	Vert
16	430.085M	54.4	+16.5	+0.3	+3.9	-27.6	-10.0	37.5	46.4	-8.9	Horiz
	QP										
^	430.085M	55.0	+16.5	+0.3	+3.9	-27.6	-10.0	38.1	46.4	-8.3	Horiz
18	50.004M	58.7	+7.7	+0.1	+1.2	-27.7	-10.0	30.0	39.1	-9.1	Vert
19	239.993M	59.4	+11.2	+0.2	+2.9	-27.5	-10.0	36.2	46.4	-10.2	Vert
20	45.777M	55.3	+9.9	+0.1	+1.2	-27.7	-10.0	28.8	39.1	-10.3	Vert
21	983.001M	43.4	+25.5	+0.6	+6.3	-27.0	-10.0	38.8	49.5	-10.7	Horiz
	QP										
^	983.001M	46.0	+25.5	+0.6	+6.3	-27.0	-10.0	41.4	49.5	-8.1	Horiz
23	307.190M	56.3	+13.2	+0.3	+3.3	-27.5	-10.0	35.6	46.4	-10.8	Vert
24	296.425M	56.6	+12.9	+0.3	+3.2	-27.5	-10.0	35.5	46.4	-10.9	Horiz
	QP										
^	296.425M	60.5	+12.9	+0.3	+3.2	-27.5	-10.0	39.4	46.4	-7.0	Horiz
26	491.522M	50.6	+17.8	+0.4	+4.3	-27.6	-10.0	35.5	46.4	-10.9	Horiz
27	506.875M	49.9	+18.4	+0.4	+4.3	-27.6	-10.0	35.4	46.4	-11.0	Horiz
	QP										
^	506.875M	51.0	+18.4	+0.4	+4.3	-27.6	-10.0	36.5	46.4	-9.9	Horiz
29	250.020M	57.4	+12.0	+0.2	+3.0	-27.5	-10.0	35.1	46.4	-11.3	Horiz
30	196.346M	59.1	+7.9	+0.2	+2.6	-27.6	-10.0	32.2	43.5	-11.3	Vert

31	440.635M	51.6	+16.7	+0.3	+3.9	-27.7	-10.0	34.8	46.4	-11.6	Horiz
	QP										
^	440.635M	56.0	+16.7	+0.3	+3.9	-27.7	-10.0	39.2	46.4	-7.2	Horiz
33	602.306M	47.0	+19.6	+0.5	+4.8	-27.1	-10.0	34.8	46.4	-11.6	Horiz
	QP										
^	602.306M	50.0	+19.6	+0.5	+4.8	-27.1	-10.0	37.8	46.4	-8.6	Horiz
35	201.200M	58.9	+7.8	+0.2	+2.6	-27.6	-10.0	31.9	43.5	-11.6	Horiz
36	368.643M	53.1	+15.1	+0.3	+3.6	-27.5	-10.0	34.6	46.4	-11.8	Vert
37	46.600M	53.9	+9.5	+0.1	+1.2	-27.7	-10.0	27.0	39.1	-12.1	Horiz
38	250.016M	56.4	+12.0	+0.2	+3.0	-27.5	-10.0	34.1	46.4	-12.3	Horiz
39	322.575M	54.0	+13.7	+0.3	+3.4	-27.5	-10.0	33.9	46.4	-12.5	Horiz
	QP										
^	322.575M	58.2	+13.7	+0.3	+3.4	-27.5	-10.0	38.1	46.4	-8.3	Horiz
41	203.665M	57.6	+8.0	+0.2	+2.6	-27.6	-10.0	30.8	43.5	-12.7	Vert
42	56.053M	56.8	+5.8	+0.1	+1.3	-27.7	-10.0	26.3	39.1	-12.8	Vert
43	596.336M	45.6	+19.7	+0.5	+4.8	-27.1	-10.0	33.5	46.4	-12.9	Horiz
	QP										
^	596.336M	48.3	+19.7	+0.5	+4.8	-27.1	-10.0	36.2	46.4	-10.2	Horiz
45	176.100M	56.2	+9.0	+0.2	+2.5	-27.6	-10.0	30.3	43.5	-13.2	Horiz
46	245.763M	55.6	+11.7	+0.2	+3.0	-27.5	-10.0	33.0	46.4	-13.4	Horiz
47	361.361M	51.9	+14.8	+0.3	+3.6	-27.6	-10.0	33.0	46.4	-13.4	Horiz
48	71.437M	56.0	+5.7	+0.1	+1.5	-27.7	-10.0	25.6	39.1	-13.5	Vert
49	189.061M	56.3	+8.3	+0.2	+2.6	-27.6	-10.0	29.8	43.5	-13.7	Vert
50	85.500M	53.3	+8.0	+0.1	+1.6	-27.7	-10.0	25.3	39.1	-13.8	Vert
51	400.035M	49.8	+16.1	+0.3	+3.7	-27.4	-10.0	32.5	46.4	-13.9	Horiz
	QP										
^	400.047M	52.8	+16.1	+0.3	+3.7	-27.4	-10.0	35.5	46.4	-10.9	Horiz
53	230.393M	56.6	+10.4	+0.2	+2.8	-27.6	-10.0	32.4	46.4	-14.0	Horiz
54	186.694M	55.6	+8.5	+0.2	+2.5	-27.6	-10.0	29.2	43.5	-14.3	Vert
55	239.992M	55.3	+11.2	+0.2	+2.9	-27.5	-10.0	32.1	46.4	-14.3	Horiz

56	829.451M	39.5	+23.2	+0.6	+5.7	-26.9	-10.0	32.1	46.4	-14.3	Horiz
	QP										
^	829.432M	41.7	+23.2	+0.6	+5.7	-26.9	-10.0	34.3	46.4	-12.1	Horiz
58	76.529M	54.1	+6.5	+0.1	+1.6	-27.7	-10.0	24.6	39.1	-14.5	Vert
59	360.009M	50.6	+14.8	+0.3	+3.6	-27.6	-10.0	31.7	46.4	-14.7	Horiz
60	280.013M	53.0	+12.6	+0.3	+3.1	-27.7	-10.0	31.3	46.4	-15.1	Vert
61	180.827M	54.5	+8.8	+0.2	+2.5	-27.6	-10.0	28.4	43.5	-15.1	Vert
62	75.015M	53.5	+6.3	+0.1	+1.6	-27.7	-10.0	23.8	39.1	-15.3	Vert
63	280.033M	52.7	+12.6	+0.3	+3.1	-27.7	-10.0	31.0	46.4	-15.4	Horiz
64	478.450M	46.5	+17.5	+0.4	+4.2	-27.7	-10.0	30.9	46.4	-15.5	Vert
65	194.436M	54.7	+8.0	+0.2	+2.6	-27.6	-10.0	27.9	43.5	-15.6	Vert
66	559.151M	42.9	+20.5	+0.5	+4.6	-27.7	-10.0	30.8	46.4	-15.6	Horiz
67	120.005M	52.0	+11.1	+0.1	+2.0	-27.6	-10.0	27.6	43.5	-15.9	Vert
68	534.557M	43.2	+19.9	+0.5	+4.4	-27.7	-10.0	30.3	46.4	-16.1	Horiz
69	311.725M	50.9	+13.3	+0.3	+3.3	-27.5	-10.0	30.3	46.4	-16.1	Horiz
	QP										
^	311.725M	54.8	+13.3	+0.3	+3.3	-27.5	-10.0	34.2	46.4	-12.2	Horiz
71	318.507M	50.5	+13.5	+0.3	+3.4	-27.5	-10.0	30.2	46.4	-16.2	Vert
72	522.269M	43.8	+19.2	+0.4	+4.4	-27.7	-10.0	30.1	46.4	-16.3	Horiz
73	172.584M	52.7	+9.2	+0.2	+2.5	-27.6	-10.0	27.0	43.5	-16.5	Vert
74	243.418M	52.8	+11.5	+0.2	+2.9	-27.5	-10.0	29.9	46.4	-16.5	Horiz
75	244.415M	52.4	+11.6	+0.2	+2.9	-27.5	-10.0	29.6	46.4	-16.8	Horiz
76	178.916M	52.7	+8.9	+0.2	+2.5	-27.6	-10.0	26.7	43.5	-16.8	Vert
77	229.665M	53.8	+10.4	+0.2	+2.8	-27.6	-10.0	29.6	46.4	-16.8	Vert
78	192.478M	53.4	+8.1	+0.2	+2.6	-27.6	-10.0	26.7	43.5	-16.8	Vert
79	333.260M	49.2	+14.0	+0.3	+3.5	-27.6	-10.0	29.4	46.4	-17.0	Vert
80	281.622M	50.9	+12.7	+0.3	+3.1	-27.6	-10.0	29.4	46.4	-17.0	Vert

81	238.075M	52.7	+11.1	+0.2	+2.9	-27.5	-10.0	29.4	46.4	-17.0	Vert
82	287.749M	50.7	+12.8	+0.3	+3.2	-27.6	-10.0	29.4	46.4	-17.0	Vert
83	65.900M	53.1	+5.1	+0.1	+1.4	-27.7	-10.0	22.0	39.1	-17.1	Horiz
84	479.996M	44.6	+17.5	+0.4	+4.2	-27.7	-10.0	29.0	46.4	-17.4	Horiz
85	139.400M	50.0	+11.2	+0.2	+2.1	-27.6	-10.0	25.9	43.5	-17.6	Horiz
86	200.729M	52.8	+7.8	+0.2	+2.6	-27.6	-10.0	25.8	43.5	-17.7	Vert
87	237.515M	51.9	+11.0	+0.2	+2.9	-27.5	-10.0	28.5	46.4	-17.9	Horiz
88	183.277M	51.7	+8.7	+0.2	+2.5	-27.6	-10.0	25.5	43.5	-18.0	Vert
89	230.053M	52.6	+10.4	+0.2	+2.8	-27.6	-10.0	28.4	46.4	-18.0	Horiz
90	246.082M	50.9	+11.7	+0.2	+3.0	-27.5	-10.0	28.3	46.4	-18.1	Vert
91	848.039M	34.9	+23.8	+0.6	+5.8	-26.9	-10.0	28.2	46.4	-18.2	Horiz
92	570.001M	40.3	+20.2	+0.5	+4.6	-27.5	-10.0	28.1	46.4	-18.3	Horiz
93	112.218M	50.1	+10.7	+0.1	+1.9	-27.6	-10.0	25.2	43.5	-18.3	Vert
94	244.441M	50.8	+11.6	+0.2	+2.9	-27.5	-10.0	28.0	46.4	-18.4	Vert
95	174.093M	50.7	+9.1	+0.2	+2.5	-27.6	-10.0	24.9	43.5	-18.6	Vert
96	135.991M	49.1	+11.2	+0.1	+2.1	-27.6	-10.0	24.9	43.5	-18.6	Vert
97	349.997M	47.1	+14.4	+0.3	+3.6	-27.6	-10.0	27.8	46.4	-18.6	Horiz
98	281.980M	49.1	+12.7	+0.3	+3.1	-27.6	-10.0	27.6	46.4	-18.8	Horiz
	QP										
^	281.980M	53.8	+12.7	+0.3	+3.1	-27.6	-10.0	32.3	46.4	-14.1	Horiz
100	300.803M	48.6	+13.0	+0.3	+3.2	-27.5	-10.0	27.6	46.4	-18.8	Horiz
101	983.017M	35.3	+25.5	+0.6	+6.3	-27.0	-10.0	30.7	49.5	-18.8	Vert
102	326.667M	47.6	+13.8	+0.3	+3.4	-27.6	-10.0	27.5	46.4	-18.9	Vert
103	328.640M	47.6	+13.8	+0.3	+3.4	-27.6	-10.0	27.5	46.4	-18.9	Vert
104	912.050M	33.3	+24.4	+0.6	+6.0	-27.2	-10.0	27.1	46.4	-19.3	Vert
105	248.825M	49.4	+11.9	+0.2	+3.0	-27.5	-10.0	27.0	46.4	-19.4	Horiz

106	251.074M	49.3	+12.0	+0.2	+3.0	-27.5	-10.0	27.0	46.4	-19.4	Horiz
107	384.009M	44.8	+15.6	+0.3	+3.7	-27.5	-10.0	26.9	46.4	-19.5	Horiz
108	142.598M	48.2	+11.0	+0.2	+2.1	-27.6	-10.0	23.9	43.5	-19.6	Vert
109	235.533M	50.4	+10.9	+0.2	+2.8	-27.6	-10.0	26.7	46.4	-19.7	Horiz
110	284.912M	48.1	+12.7	+0.3	+3.1	-27.6	-10.0	26.6	46.4	-19.8	Vert
111	233.495M	50.3	+10.7	+0.2	+2.8	-27.6	-10.0	26.4	46.4	-20.0	Vert
112	110.270M	48.2	+10.5	+0.1	+1.9	-27.6	-10.0	23.1	43.5	-20.4	Horiz
113	270.059M	47.9	+12.4	+0.3	+3.1	-27.7	-10.0	26.0	46.4	-20.4	Vert
114	272.420M	47.6	+12.5	+0.3	+3.1	-27.7	-10.0	25.8	46.4	-20.6	Vert
115	130.797M	46.9	+11.2	+0.1	+2.0	-27.6	-10.0	22.6	43.5	-20.9	Vert
116	414.702M	42.5	+16.3	+0.3	+3.8	-27.5	-10.0	25.4	46.4	-21.0	Horiz
117	497.657M	40.2	+17.9	+0.4	+4.3	-27.6	-10.0	25.2	46.4	-21.2	Horiz
118	332.560M	44.9	+13.9	+0.3	+3.5	-27.6	-10.0	25.0	46.4	-21.4	Vert
119	254.656M	47.0	+12.1	+0.2	+3.0	-27.5	-10.0	24.8	46.4	-21.6	Vert
120	420.016M	41.6	+16.4	+0.3	+3.8	-27.6	-10.0	24.5	46.4	-21.9	Horiz
121	166.957M	46.8	+9.6	+0.2	+2.4	-27.6	-10.0	21.4	43.5	-22.1	Vert
122	825.380M	31.1	+23.0	+0.6	+5.7	-26.9	-10.0	23.5	46.4	-22.9	Vert
123	724.220M	32.9	+21.7	+0.5	+5.3	-26.9	-10.0	23.5	46.4	-22.9	Vert
124	546.851M	35.5	+20.5	+0.5	+4.5	-27.8	-10.0	23.2	46.4	-23.2	Horiz
125	225.841M	47.6	+10.0	+0.2	+2.7	-27.6	-10.0	22.9	46.4	-23.5	Vert
126	828.930M	30.3	+23.2	+0.6	+5.7	-26.9	-10.0	22.9	46.4	-23.5	Vert
127	548.250M	32.5	+20.6	+0.5	+4.5	-27.8	-10.0	20.3	46.4	-26.1	Vert

Test Equipment

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02672	Agilent	E4446A	US44300438	011405	011407
Biconilog Antenna	01995	Chase	CBL6111C	2451	080105	080107
Pre-amp	00309	HP	8447D	1937A02548	071404	071406
Antenna cable	NA	NA	RG214	Cable#15	010305	010306
Pre-amp to SA cable	NA	Pasternack	RG223/U	Cable#10	051605	051606

PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - Front View

PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - Back View

FCC 15.111 – RECEIVER ANTENNA POWER

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112
 Customer: **Powerwave Technologies, Inc.**
 Specification: **FCC 15.111**
 Work Order #: **84198** Date: 9/6/2005
 Test Type: **Conducted Emissions** Time: 10:23:38
 Equipment: **RF Amplifier** Sequence#: 10
 Manufacturer: Powerwave Technologies Tested By: E. Wong
 Model: EHP 19 48V Dc
 S/N: NA

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
RF Amplifier*	Powerwave Technologies	EHP 19	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Agilent	6674A	US36371847
ESG	Agilent	E4433B	US40052298
Power Meter	Agilent	E4419A	US38260914
Monitor	HP	D8904	CN20831504
Computer	Microsoft	Intelli Mouse	7143124-00000
Keyboard	HP	L3754A	E03633LXUS
Ethernet Hub	Linksys	NH10005	R87203A017895

Test Conditions / Notes:

The EUT is placed on the wooden table. DRIC0 and DRIC1 are connected to remote computer via Firewire cable. TX out is connected to remote load string. Ethernet, RX1 left blank. The remote computer generates waveform from received 10 MHz reference signal and sends the waveform to the EUT via fire wire. The Power level is adjusted to maintain the rated output power. Modulation: UMTS (WCDMA). Power = 60 watts. TX Frequency of the amplifier = 1960 MHz. RX antenna power measurement at RX0 port. 48VDC. Frequency range of measurement = 9 kHz - 20 GHz. 9 kHz - 150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz - 1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz - 20,000 MHz; RBW=1 MHz, VBW=1 MHz.

Transducer Legend:

T1=SMA Cable 1-40GHz AN2604 012306

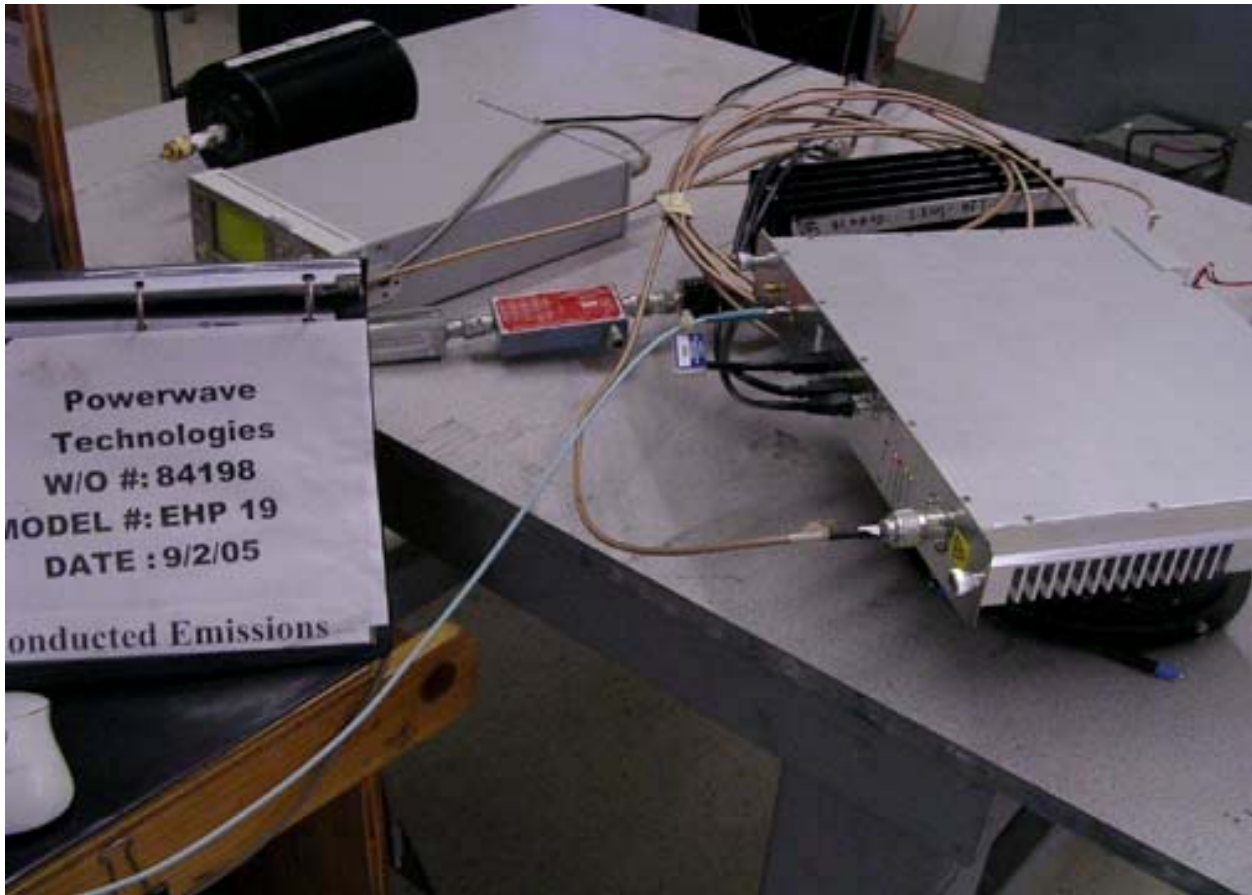
Measurement Data: Reading listed by margin. Test Lead: Antenna Terminal

#	Freq MHz	Rdng dBµV	T1 dB	dB	dB	dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	3421.900M	39.9	+0.6				+0.0	40.5	50.0	-9.5	Anten
2	1960.700M	37.2	+0.5				+0.0	37.7	50.0	-12.3	Anten
3	5133.000M	36.2	+0.8				+0.0	37.0	50.0	-13.0	Anten
4	6844.000M	35.6	+0.9				+0.0	36.5	50.0	-13.5	Anten
5	10265.800M	32.5	+1.2				+0.0	33.7	50.0	-16.3	Anten
6	8555.200M	31.0	+1.0				+0.0	32.0	50.0	-18.0	Anten

Test Equipment

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02672	Agilent	E4446A	US44300438	011405	011407

FCC 15.111 RECEIVER ANTENNA POWER



FCC 2.1033(c)(14)/2.1046/24.232(b) - RF POWER OUTPUT

(a) Base stations are limited to 1640 watts peak equivalent isotropically radiated power (e.i.r.p.) with an antenna height up to 300 meters HAAT. See 24.53 for HAAT calculation method. Base station antenna heights may exceed 300 meters with a corresponding reduction in power; see Table 1 of this section. **In no case may the peak output power of a base station transmitter exceed 100 watts.** The service area boundary limit and microwave protection criteria specified in §24.236 and §24.237 apply.

Table 1: Reduced Power for Base Station Antenna Heights Over 300 Meters

HAAT in meters	Maximum E.I.R.P. (watts)
6300	1640
6500	1070
61000	490
61500	270
62000	160

The EUT is a RF amplifier. The manufacture does not provide an antenna for sale with the product, hence EIRP is not measured nor calculated. The end user of this product is to exercise proper engineering judgement to select the appropriate antenna to comply with the EIRP limitation set forth by FCC24.23a (a).

The RF power of the EUT was measured at the antenna port. The measurement satisfies the above requirement by demonstrating the measured power is below 100 watts.

Test setup: The EUT is placed on the wooden table. DRIC0 and DRIC1 are connected to remote computer via Firewire cable. TX out is connected to remote load string. Ethernet, RX0 and RX1 are left blank.

The remote computer generates waveform from received 10 MHz reference signal and sends the waveform to the EUT via fire wire. The Power level is adjust to maintain the rated output power.

Modulation: UMTS (WCDMA)

Power = 60 watts

1930 MHz = 60 watts

1960 MHz = 60 watts

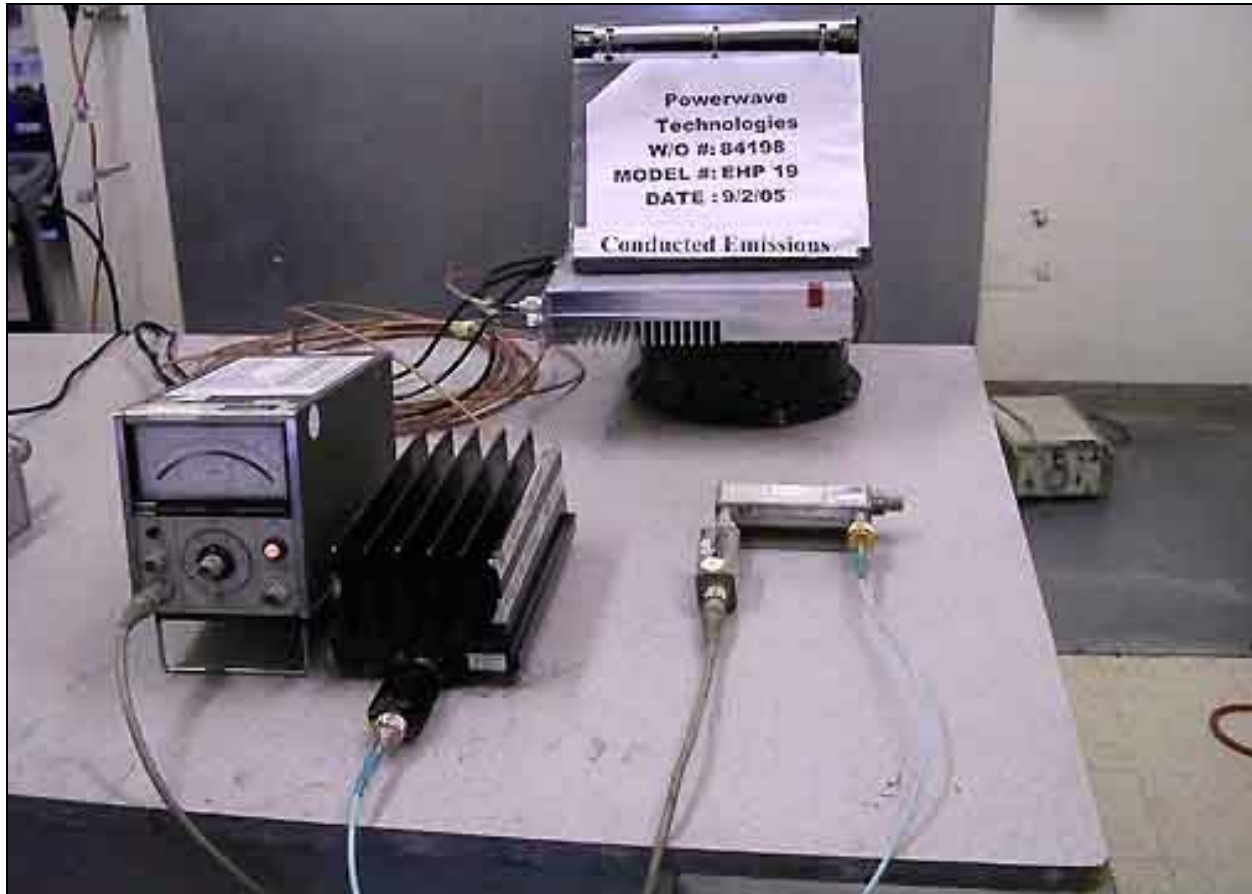
1990 MHz = 60 watts

Conclusion: As indicated below, each single channel does not exceed the 100 Watt peak power limit.

Test Equipment

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
RF Power meter	02082	HP	435B	2445A11881	061704	061706
Power Sensor	02036	HP	8482A	1551A01004	061806	061806

PHOTOGRAPH SHOWING RF POWER OUTPUT



FCC 2.1033(c)(14)/2.1047(a) - MODULATION CHARACTERISTICS - AUDIO FREQUENCY RESPONSE

Not applicable to this unit.

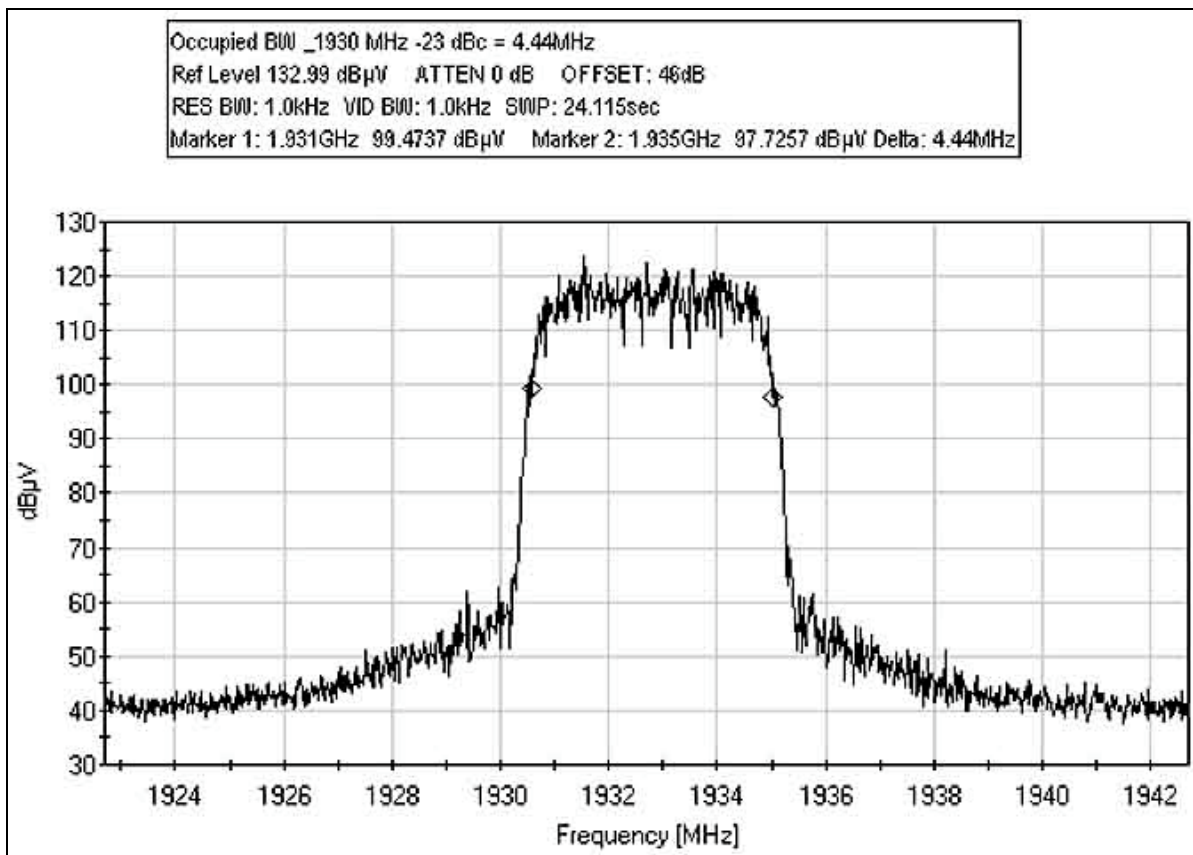
FCC 2.1033(c)(14)/2.1047(b) MODULATION CHARACTERISTICS- Modulation Limiting Response

Not applicable to this unit.

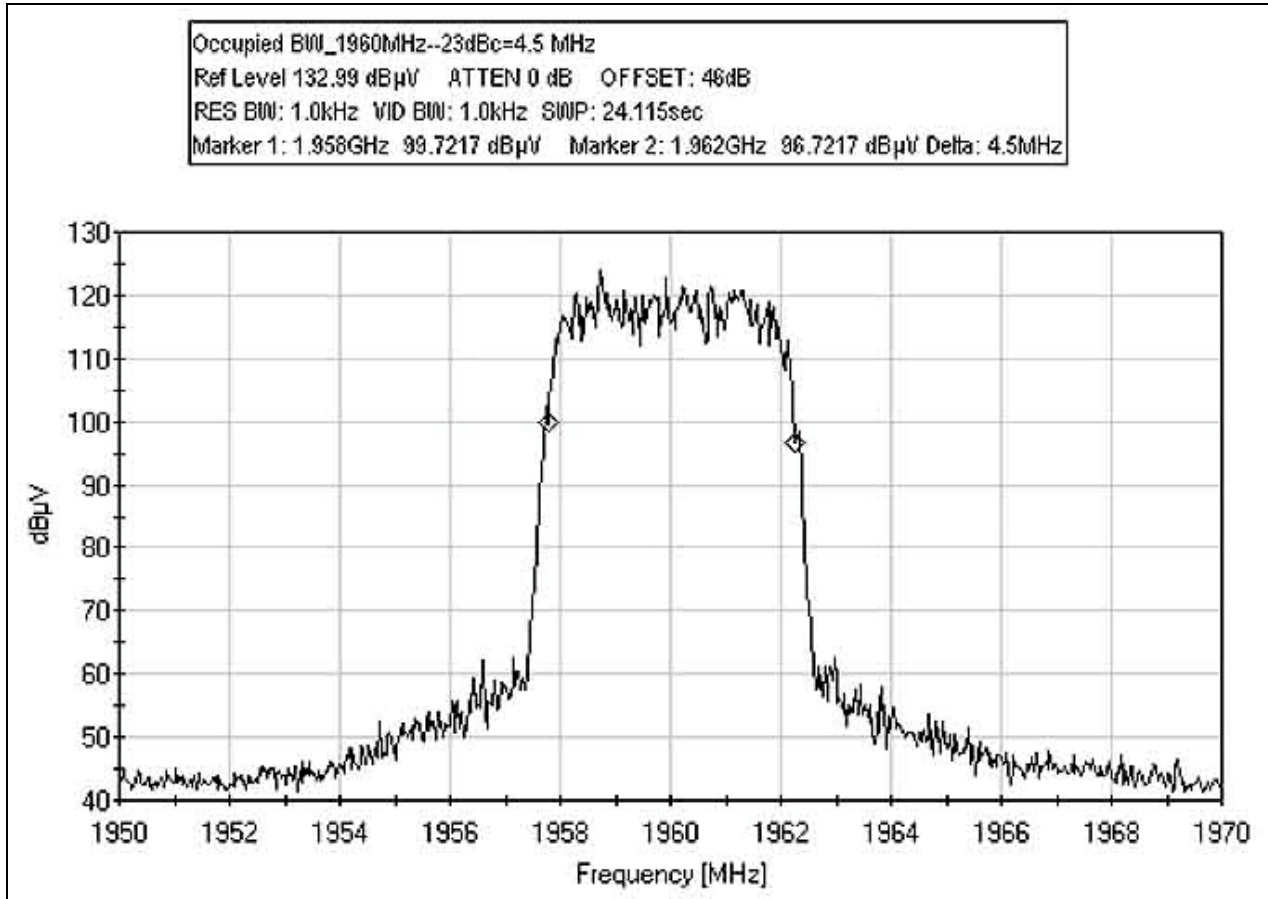
FCC 2.1033(c)(14)/2.1049(i)- OCCUPIED BANDWIDTH

Test Conditions: The EUT is placed on the wooden table. DRIC0 and DRIC1 are connected to remote computer via Firewire cable. TX out is connected to remote load string. Ethernet, RX0 and RX1 are left blank. The remote computer generates waveform from received 10 MHz reference signal and sends the waveform to the EUT via fire wire. The Power level is adjust to maintain the rated output power. Modulation: UMTS (WCDMA). Power = 60 watts.

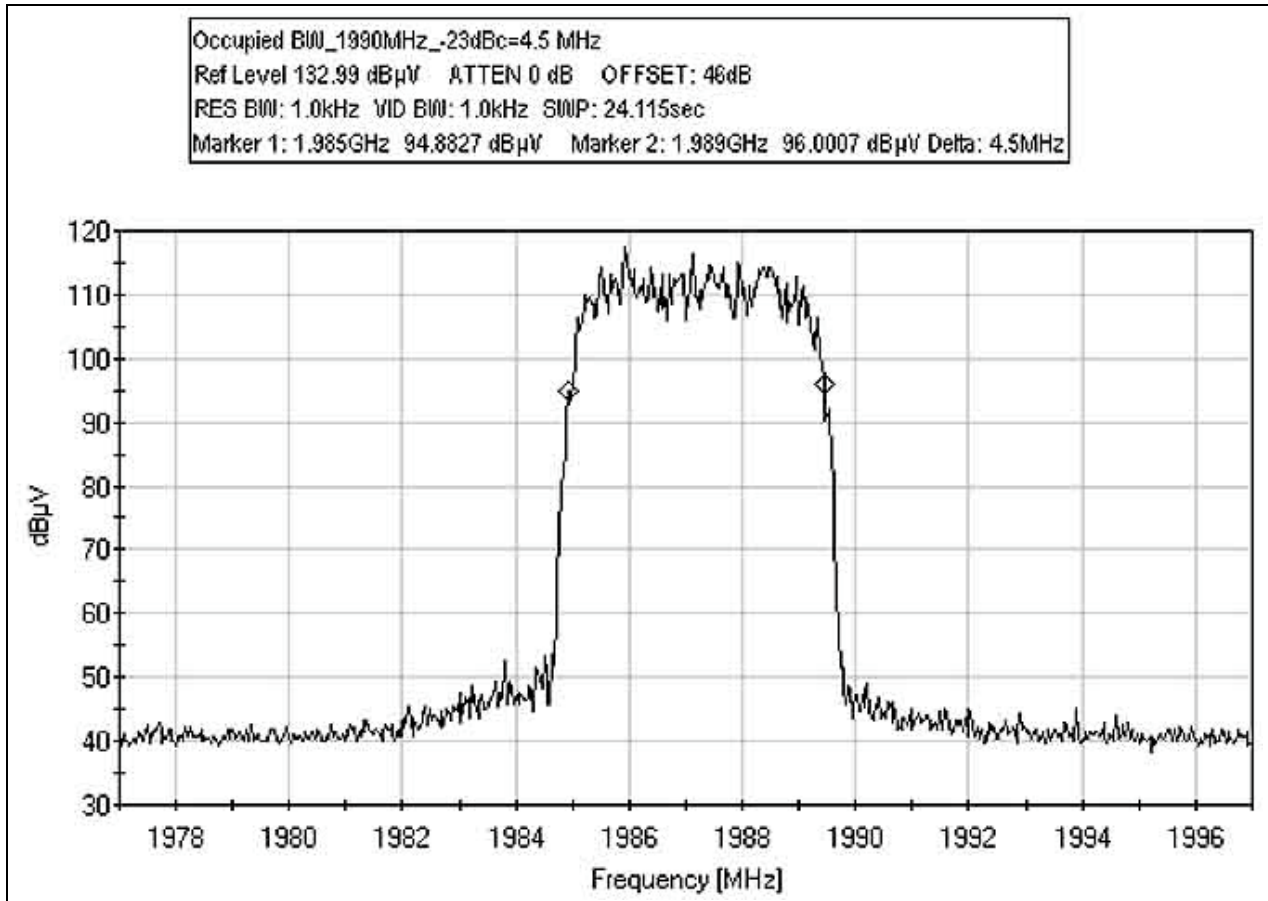
OCCUPIED BANDWIDTH 1930 MHz



OCCUPIED BANDWIDTH 1960 MHz



OCCUPIED BANDWIDTH 1990 MHz



Test Equipment

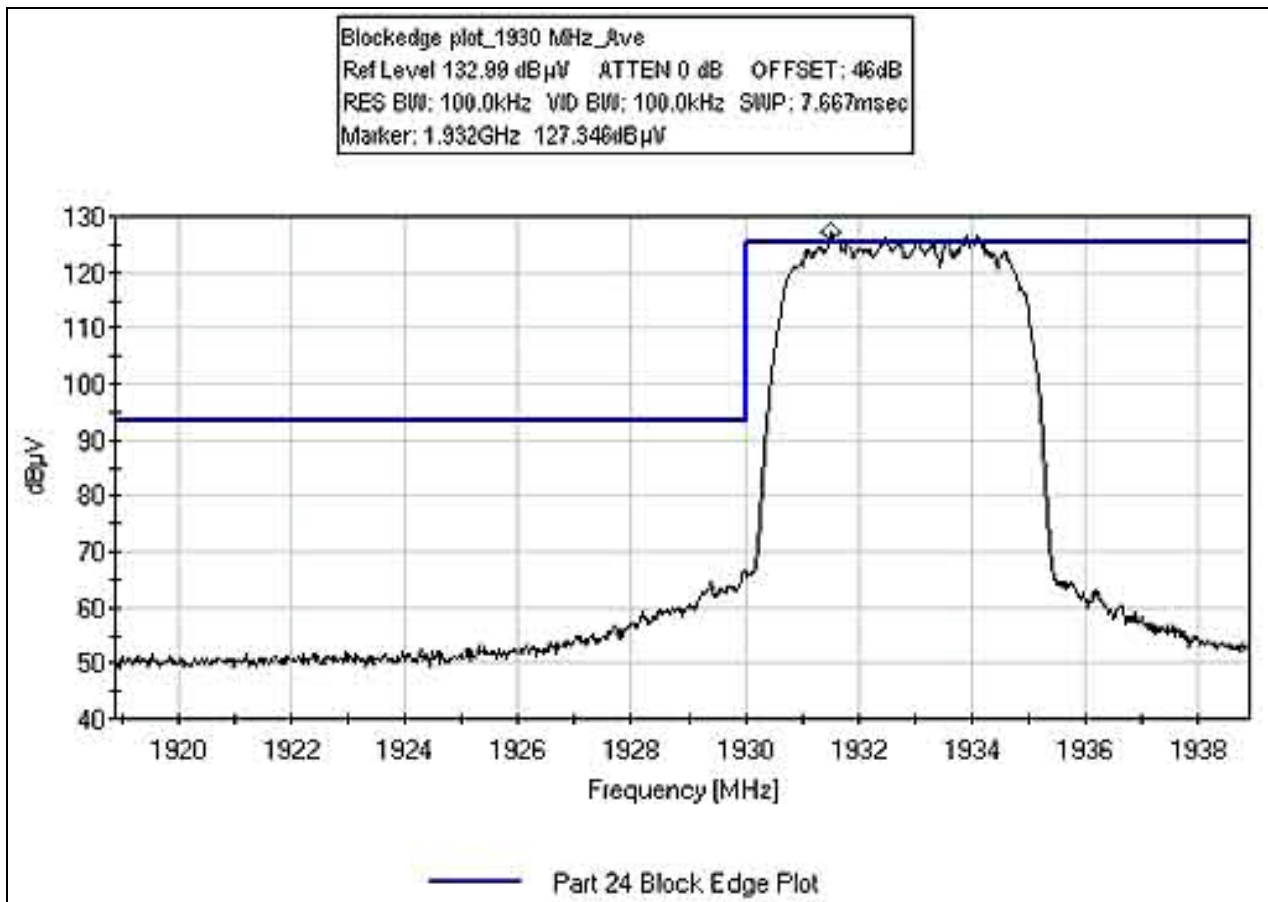
Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02672	Agilent	E4446A	US44300438	011405	011407

PHOTOGRAPH SHOWING DIRECT CONNECT TEST SETUP

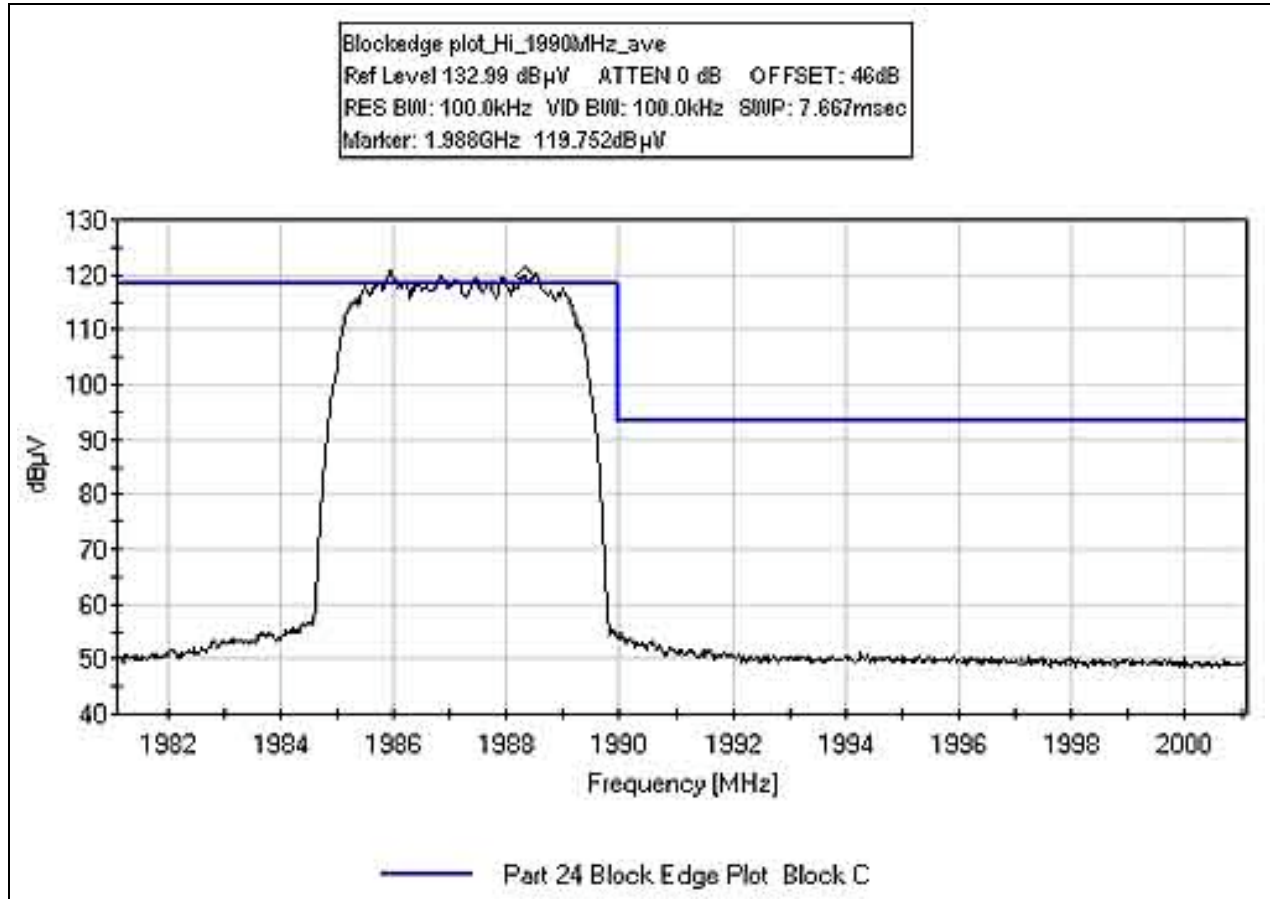


BLOCKEDGE 1930 MHz

Test Conditions: The EUT is placed on the wooden table. DRIC0 and DRIC1 are connected to remote computer via Firewire cable. TX out is connected to remote load string. Ethernet, RX0 and RX1 are left blank. The remote computer generates waveform from received 10 MHz reference signal and sends the waveform to the EUT via fire wire. The Power level is adjust to maintain the rated output power. Modulation: UMTS (WCDMA). Power = 60 watts.



BLOCKEDGE 1990 MHz



Test Equipment

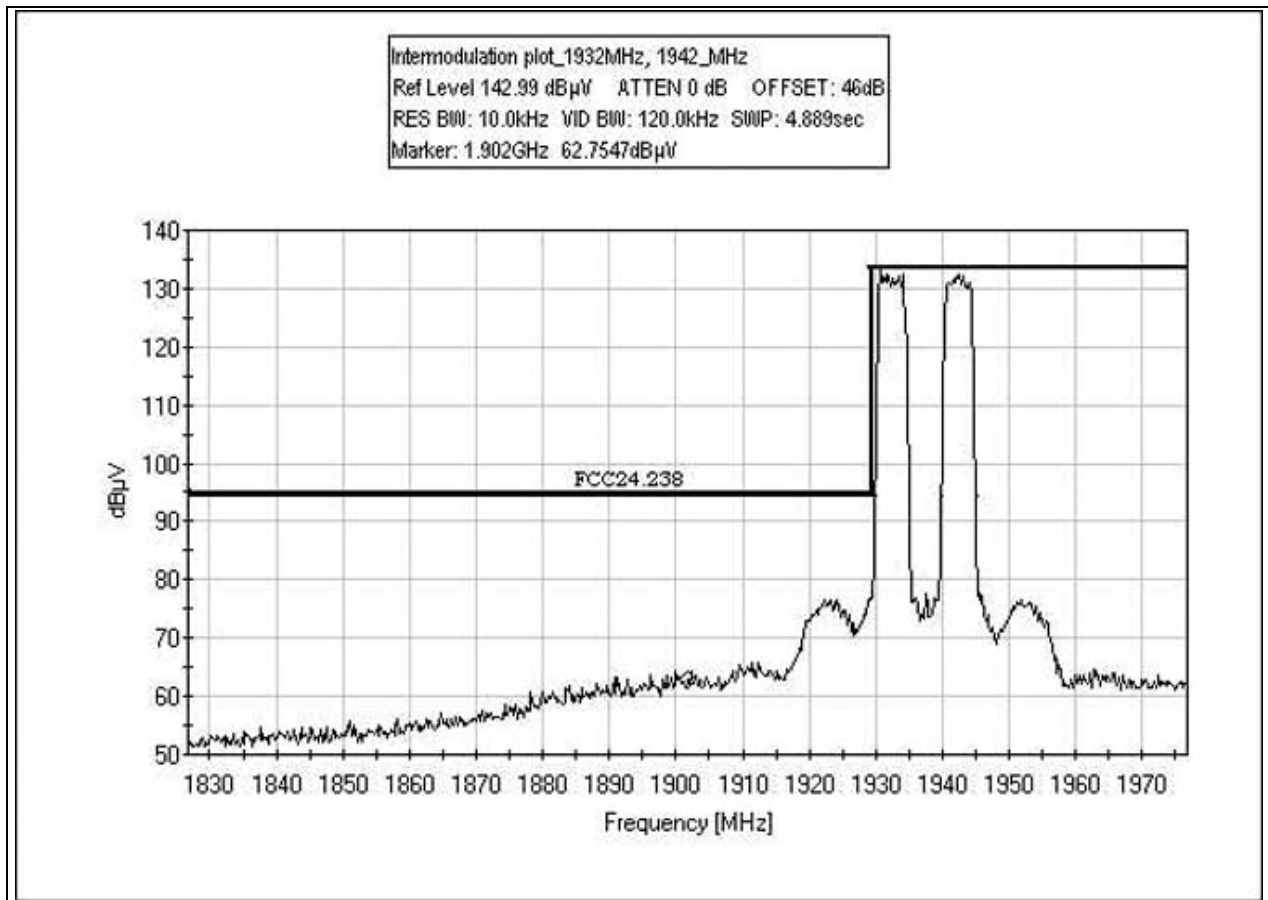
Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02672	Agilent	E4446A	US44300438	011405	011407

PHOTOGRAPH SHOWING DIRECT CONNECT TEST SETUP

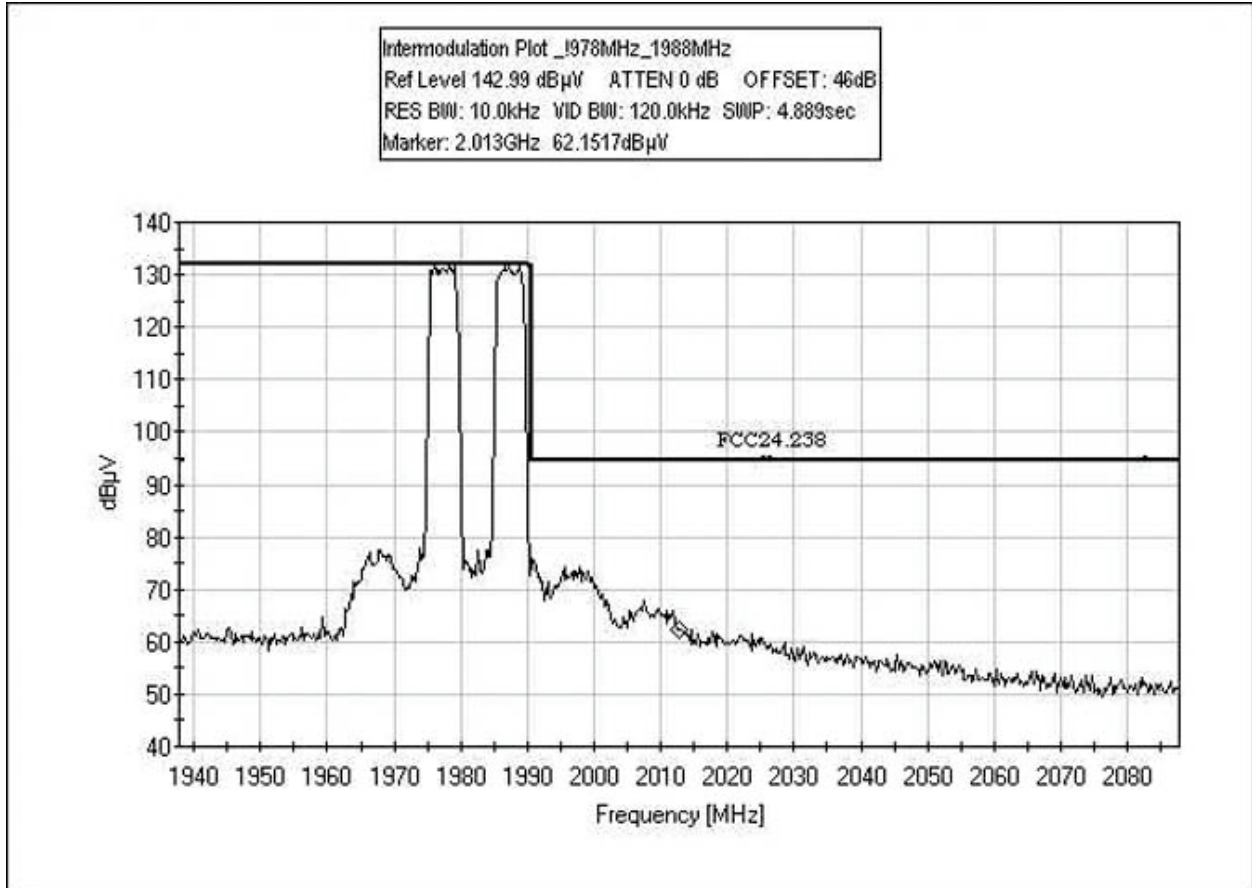


INTERMODULATION LOW CHANNEL

Test Conditions: The EUT is placed on the wooden table. DRIC0 and DRIC1 are connected to remote computer via Firewire cable. TX out is connected to remote load string. Ethernet, RX0 and RX1 are left blank. The remote computer generates waveform from received 10 MHz reference signal and sends the waveform to the EUT via fire wire. The Power level is adjust to maintain the rated output power. Modulation: UMTS (WCDMA). Power = 60 watts. 2 channel signal method used.



INTERMODULATION HIGH CHANNEL



Test Equipment

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02672	Agilent	E4446A	US44300438	011405	011407

PHOTOGRAPH SHOWING DIRECT CONNECT TEST SETUP



FCC 2.1055(a)/24.235 – FREQUENCY STABILITY

Test Conditions: The EUT is placed in the temperature chamber. RF signal is monitored from the antenna port. A spectrum analyzer is employed to measure the frequency stability of the EUT. Result: The emissions bandwidth, measured at attenuation of 43 +10log P (94 dBuV) stayed within the assigned band of 1930 -1990 MHz.

Customer: Powerwave
WO#: 84198
Test Engineer: E. Wong

Device Model #: EHP 19
Operating Voltage: 48 VDC
Frequency Limit: 1 ppm

Temperature Variations

Channel Frequency:	Channel 1 (MHz)	Dev. (MHz)
	1930.43000	
Temp (C) Voltage		
-30 48	1930.43000	0.00000
-20 48	1930.43000	0.00000
-10 48	1930.43000	0.00000
0 48	1930.43000	0.00000
10 48	1930.43000	0.00000
20 48	1930.43000	0.00000
30 48	1930.43000	0.00000
40 48	1930.43000	0.00000
50 48	1930.43000	0.00000

Channel 3 (MHz)	Dev. (MHz)
1989.63000	
1989.63000	0.00000
1989.63000	0.00000
1989.63000	0.00000
1989.63000	0.00000
1989.63000	0.00000
1989.63000	0.00000
1989.63000	0.00000
1989.63000	0.00000
1989.63000	0.00000
1989.63000	0.00000

Voltage Variations (±15%)

Temp (C) Voltage	Channel 1 (MHz)	Dev. (MHz)
20 40.8	1930.43000	0.00000
20 48.0	1930.43000	0.00000
20 55.2	1930.43000	0.00000

Channel 3 (MHz)	Dev. (MHz)
1989.63000	0.00000
1989.63000	0.00000
1989.63000	0.00000

Max Deviation (MHz)	0.00000
Max Deviation (%)	0.00000
	PASS

	0.00000
	0.00000
	PASS

Test Equipment

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Chamber	Pwav	Thermotron	SE-600-55	30964	NCR	NCR
Spectrum Analyzer	Pwav	Agilent	8562E	4109A00496	072004	072006
Data logger	02549	Agilent	3497A	US37031892	050104	050106

NCR = No Calibration Required

PHOTOGRAPH SHOWING TEMPERATURE TESTING



FCC 2.1033(c)(14)/2.1051/24.238(a) - SPURIOUS EMISSIONS AT ANTENNA TERMINAL

Limit line for Spurious Conducted Emission

$$\text{Required Attenuation} = 43 + 10 \text{ Log } P \text{ dB}$$

$$\text{Limit line (dBuV)} = V_{\text{dBuV}} - \text{Attenuation}$$

$$\begin{aligned} V_{\text{dBuV}} &= 20 \text{ Log } \frac{V}{1 \times 10^{-6}} \\ &= 20 (\text{Log } V - \text{Log } 1 \times 10^{-6}) \\ &= 20 \text{ Log } V - 20 \text{ Log } 1 \times 10^{-6} \\ &= 20 \text{ Log } V - 20 (-6) \\ &= 20 \text{ Log } V + 120 \end{aligned}$$

$$\begin{aligned} \text{Attenuation} &= 43 + 10 \text{ Log } P \\ &= 43 + 10 \text{ Log } \frac{V^2}{R} \\ &= 43 + 10 (\text{Log } V^2 - \text{Log } R) \\ &= 43 + 10 (2 \text{ Log } V - \text{Log } R) \\ &= 43 + 20 \text{ Log } V - 10 \text{ Log } R \end{aligned}$$

$$\begin{aligned} \text{Limit line} &= V_{\text{dBuV}} - \text{Attenuation} \\ &= 20 \text{ Log } V + 120 - (43 + 20 \text{ Log } V - 10 \text{ Log } R) \\ &= 20 \text{ Log } V + 120 - 43 - 20 \text{ Log } V + 10 \text{ Log } R \\ &= 20 \text{ Log } V + 120 - 43 - 20 \text{ Log } V + 10 \text{ Log } R \\ &= 120 - 43 + 10 \text{ Log } 50 \quad \text{Note : } R = 50 \Omega \\ &= 120 - 43 + 16.897 \\ &= 94 \text{ dBuV at any power level} \end{aligned}$$



Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Powerwave Technologies, Inc.**
 Specification: **Part 24 Block Edge Plot**
 Work Order #: **84198** Date: 9/2/2005
 Test Type: **Conducted Emissions** Time: 13:55:04
 Equipment: **RF Amplifier** Sequence#: 7
 Manufacturer: Powerwave Technologies Tested By: E. Wong
 Model: EHP 19 48V Dc
 S/N: NA

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
RF Amplifier*	Powerwave Technologies	EHP 19	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Agilent	6674A	US36371847
ESG	Agilent	E4433B	US40052298
Power Meter	Agilent	E4419A	US38260914
Monitor	HP	D8904	CN20831504
Computer	Microsoft	Intelli Mouse	7143124-00000
Keyboard	HP	L3754A	E03633LXUS
Ethernet Hub	Linksys	NH10005	R87203A017895

Test Conditions / Notes:

The EUT is placed on the wooden table. DRIC0 and DRIC1 are connected to remote computer via Firewire cable. TX out is connected to remote load string. Ethernet, RX0 and RX1 are left blank. The remote computer generates waveform from received 10 MHz reference signal and sends the waveform to the EUT via fire wire. The Power level is adjust to maintain the rated output power. Modulation: UMTS (WCDMA). Power = 60 watts. Frequency = 1930 MHz. 48VDC. Frequency range of measurement = 9 kHz - 20 GHz. 9 kHz - 150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz - 30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz - 1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz - 20,000 MHz; RBW=1 MHz, VBW=1 MHz.

Transducer Legend:

T1=SMA Cable 1-40GHz AN2604 012306	T2=HPF 2.4 GHz High Pass Filter 042507
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Measurement Data: Reading listed by margin. Test Lead: Antenna Terminal

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	dB	dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Anten
1	3865.500M	74.8	+0.7	+0.6			+0.0	76.1	94.0	-17.9	Anten
	Ave										
^	3865.500M	88.1	+0.7	+0.6			+0.0	89.4	94.0	-4.6	Anten



Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Powerwave Technologies, Inc.**
 Specification: **Part 24 Block Edge Plot**
 Work Order #: **84198** Date: 9/2/2005
 Test Type: **Conducted Emissions** Time: 14:38:49
 Equipment: **RF Amplifier** Sequence#: 8
 Manufacturer: Powerwave Technologies Tested By: E. Wong
 Model: EHP 19 48V Dc
 S/N: NA

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
RF Amplifier*	Powerwave Technologies	EHP 19	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Agilent	6674A	US36371847
ESG	Agilent	E4433B	US40052298
Power Meter	Agilent	E4419A	US38260914
Monitor	HP	D8904	CN20831504
Computer	Microsoft	Intelli Mouse	7143124-00000
Keyboard	HP	L3754A	E03633LXUS
Ethernet Hub	Linksys	NH10005	R87203A017895

Test Conditions / Notes:

The EUT is placed on the wooden table. DRIC0 and DRIC1 are connected to remote computer via Firewire cable. TX out is connected to remote load string. Ethernet, RX0 and RX1 are left blank. The remote computer generates waveform from received 10 MHz reference signal and sends the waveform to the EUT via fire wire. The Power level is adjust to maintain the rated output power. Modulation: UMTS (WCDMA). Power = 60 watts. Frequency = 1960 MHz. 48VDC. Frequency range of measurement = 9 kHz - 20 GHz. 9 kHz - 150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz - 30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz - 1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz - 20,000 MHz; RBW=1 MHz, VBW=1 MHz.

Transducer Legend:

T1=SMA Cable 1-40GHz AN2604 012306	T2=HPF 2.4 GHz High Pass Filter 042507
------------------------------------	--

Measurement Data: Reading listed by margin. Test Lead: Antenna Terminal

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	dB	dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Anten
1	3919.996M	76.6	+0.7	+0.6			+0.0	77.9	94.0	-16.1	Anten
	Ave										
^	3919.996M	89.6	+0.7	+0.6			+0.0	90.9	94.0	-3.1	Anten



Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Powerwave Technologies, Inc.**
 Specification: **Part 24 Block Edge Plot Block C**
 Work Order #: **84198** Date: 9/2/2005
 Test Type: **Conducted Emissions** Time: 14:39:14
 Equipment: **RF Amplifier** Sequence#: 9
 Manufacturer: Powerwave Technologies Tested By: E. Wong
 Model: EHP 19 48V Dc
 S/N: NA

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
RF Amplifier*	Powerwave Technologies	EHP 19	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Agilent	6674A	US36371847
ESG	Agilent	E4433B	US40052298
Power Meter	Agilent	E4419A	US38260914
Monitor	HP	D8904	CN20831504
Computer	Microsoft	Intelli Mouse	7143124-00000
Keyboard	HP	L3754A	E03633LXUS
Ethernet Hub	Linksys	NH10005	R87203A017895

Test Conditions / Notes:

The EUT is placed on the wooden table. DRIC0 and DRIC1 are connected to remote computer via Firewire cable. TX out is connected to remote load string. Ethernet, RX0 and RX1 are left blank. The remote computer generates waveform from received 10 MHz reference signal and sends the waveform to the EUT via fire wire. The Power level is adjust to maintain the rated output power. Modulation: UMTS (WCDMA). Power = 60 watts. Frequency = 1990 MHz. 48VDC. Frequency range of measurement = 9 kHz - 20 GHz. 9 kHz - 150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz - 30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz - 1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz - 20,000 MHz; RBW=1 MHz, VBW=1 MHz.

Transducer Legend:

T1=SMA Cable 1-40GHz AN2604 012306	T2=HPF 2.4 GHz High Pass Filter 042507
------------------------------------	--

Measurement Data: Reading listed by margin. Test Lead: Antenna Terminal

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	dB	dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	3974.500M	79.1	+0.7	+0.6			+0.0	80.4	94.0	-13.6	Anten

Test Equipment

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02672	Agilent	E4446A	US44300438	011405	011407

PHOTOGRAPH SHOWING DIRECT CONNECT TEST SETUP





FCC 2.1033(c)(14)/2.1053/24.238(a) - FIELD STRENGTH OF SPURIOUS RADIATION

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Powerwave Technologies, Inc.**
 Specification: **FCC 24.238 Radiated Spurious Emission**
 Work Order #: **84198** Date: 9/2/2005
 Test Type: **Radiated Scan** Time: 10:07:21
 Equipment: **RF Amplifier** Sequence#: 2
 Manufacturer: Powerwave Technologies Tested By: E. Wong
 Model: EHP 19
 S/N: NA

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
RF Amplifier*	Powerwave Technologies	EHP 19	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Agilent	6674A	US36371847
ESG	Agilent	E4433B	US40052298
Power Meter	Agilent	E4419A	US38260914
Monitor	HP	D8904	CN20831504
Computer	Microsoft	Intelli Mouse	7143124-00000
Keyboard	HP	L3754A	E03633LXUS
Ethernet Hub	Linksys	NH10005	R87203A017895

Test Conditions / Notes:

The EUT is placed on the wooden table. DRIC0 and DRIC1 are connected to remote computer via Firewire cable. TX out is connected to remote load string. Ethernet, RX0 and RX1 are left blank. The remote computer generates waveform from received 10 MHz reference signal and sends the wave form to he EUT via fire wire. The Power level is adjust to maintain the rated output power. Modulation: UMTS (WCDMA). Power = 60 watts. Frequency = 1932.8 MHz, 1960 MHz and 1987.2 MHz. 48VDC. Frequency range of measurement = 9 kHz - 20 GHz. 9 kHz - 150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz - 30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz - 1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz - 20,000 MHz; RBW=1 MHz, VBW=1 MHz.

Operating Frequency: 1930 MHz - 1990 MHz
 Channels: Low, Mid and High
 Highest Measured Output Power: 47.78 ERP(dBm)= 60 ERP(Watts)
 Distance: 3 meters
 Limit: $43+10\text{Log}(P)$ 60.78 dBc

Freq. (MHz)	Reference Level (dBm)	Antenna Polarity (H/V)	dBc
3,866.44	-22.4	Vert	70.18
3,865.00	-22.9	Horiz	70.68
3,921.00	-19.9	Vert	67.68
3,920.90	-22.4	Horiz	70.18
3,920.16	-33.2	Vert	80.98
3,975.28	-26	Horiz	73.78
3,974.90	-27.3	Vert	75.08

Test Equipment

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02672	Agilent	E4446A	US44300438	011405	011407
09kHz-30 MHz						
Loop Antenna	00314	EMCO	6502	2014	062804	062806
30 – 1000 MHz						
Biconilog Antenna	01995	Chase	CBL6111C	2451	080105	080107
Pre-amp	00309	HP	8447D	1937A02548	071404	071406
Antenna cable	NA	NA	RG214	Cable#15	010305	010306
Pre-amp to SA cable	NA	Pasternack	RG223/U	Cable#10	051605	051606
1-18GHz						
Horn Antenna	0849	EMCO	3115	6246	072204	072206
Microwave Pre-amp	00786	HP	83017A	3123A00281	081204	081206
Helix Antenna cable	NA	Andrew	LDF1-50	Cable#20	091604	091606
24" SMA Cable	2604	Argosy	UFA147A	0-0360-200200	012304	012306
2.4 GHz HPF	01440	K&L	91H31-3000	001	042505	042507
18-20 GHz						
18-26.5 GHz Horn Antenna	02112	HP	84125-8008	3643A00027	110504	110506

PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - Front View

PHOTOGRAPH SHOWING RADIATED EMISSIONS



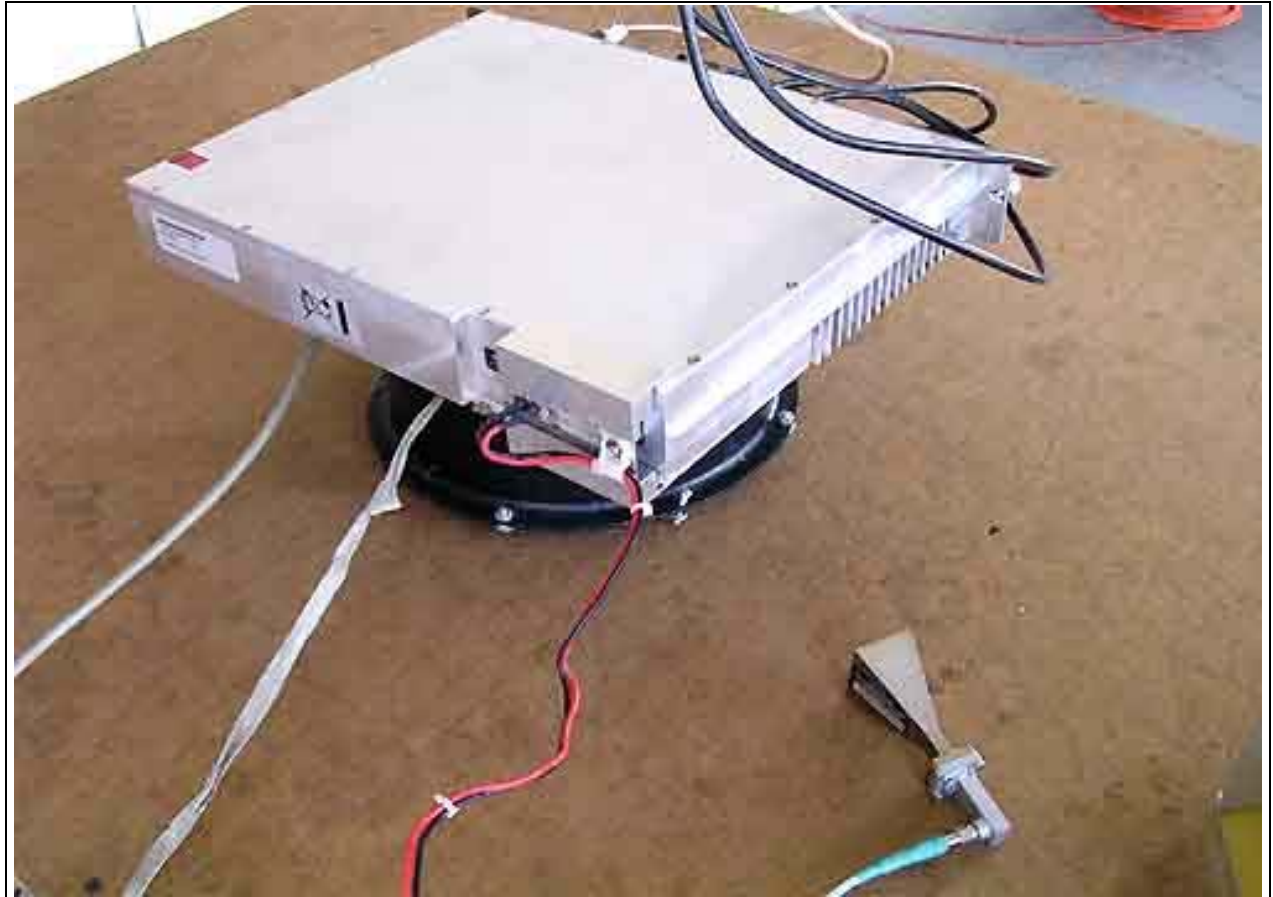
Radiated Emissions - Back View

PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - Loop Antenna

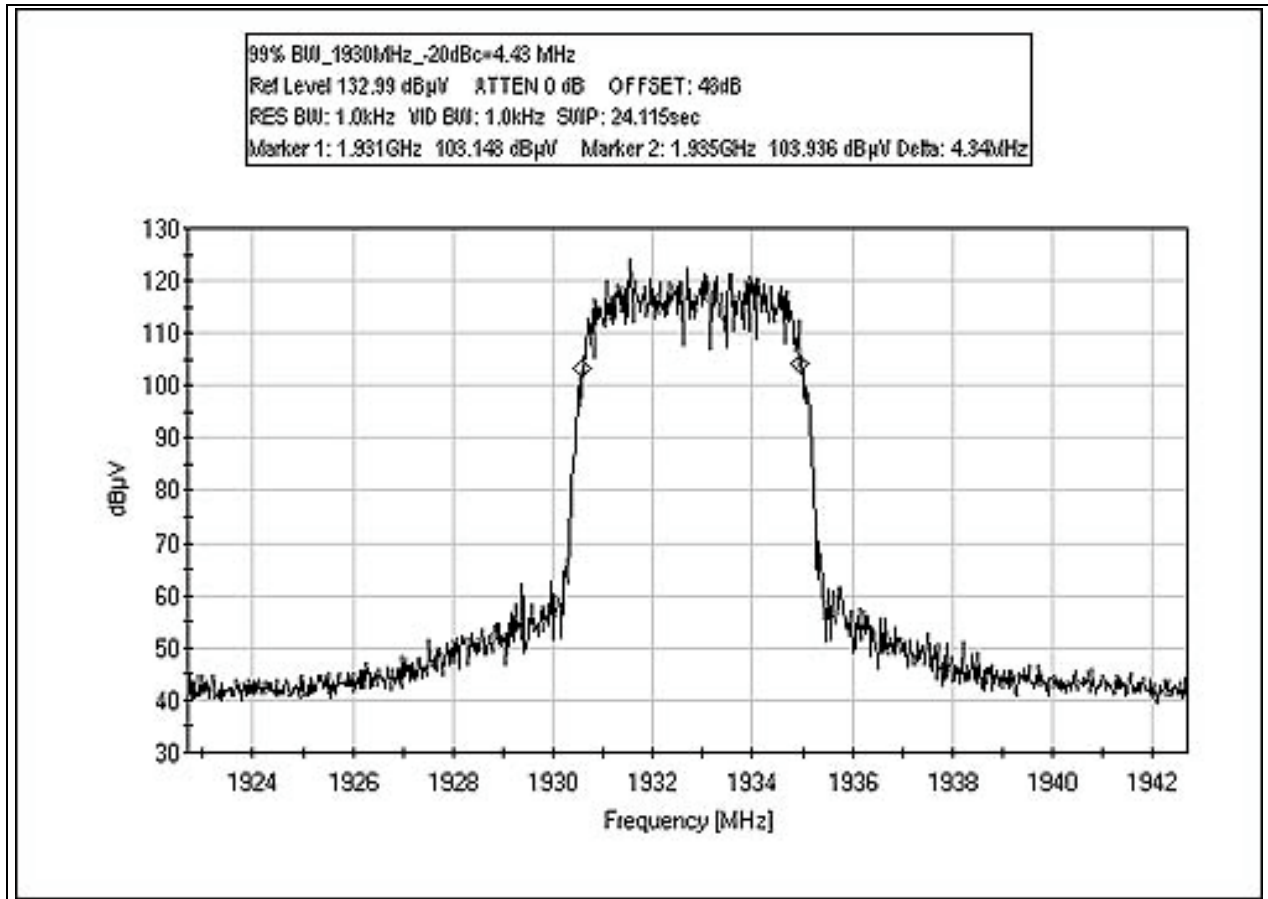
PHOTOGRAPH SHOWING RADIATED EMISSIONS



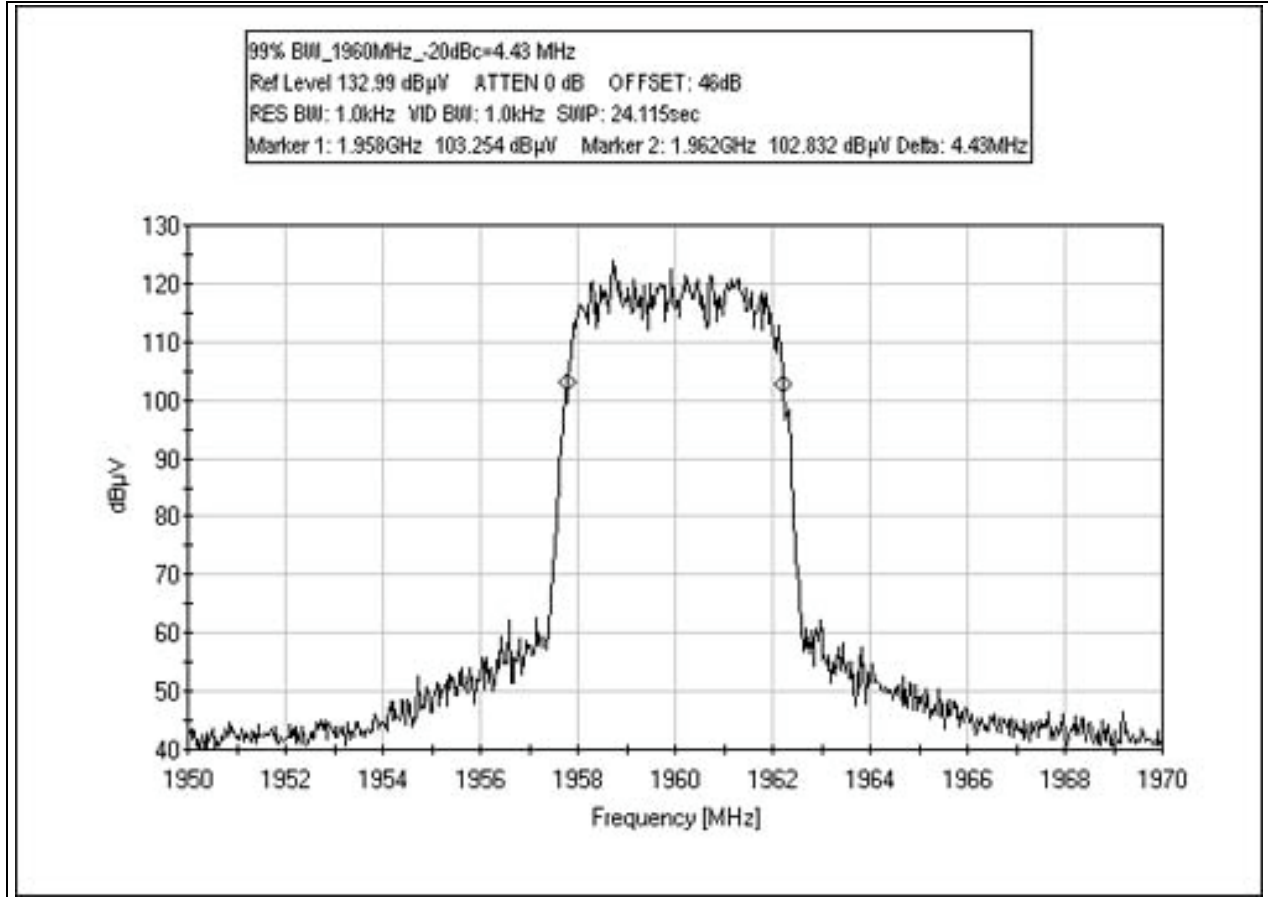
Radiated Emissions - Horn Antenna

RSS-133 99% BANDWIDTH 1930MHz

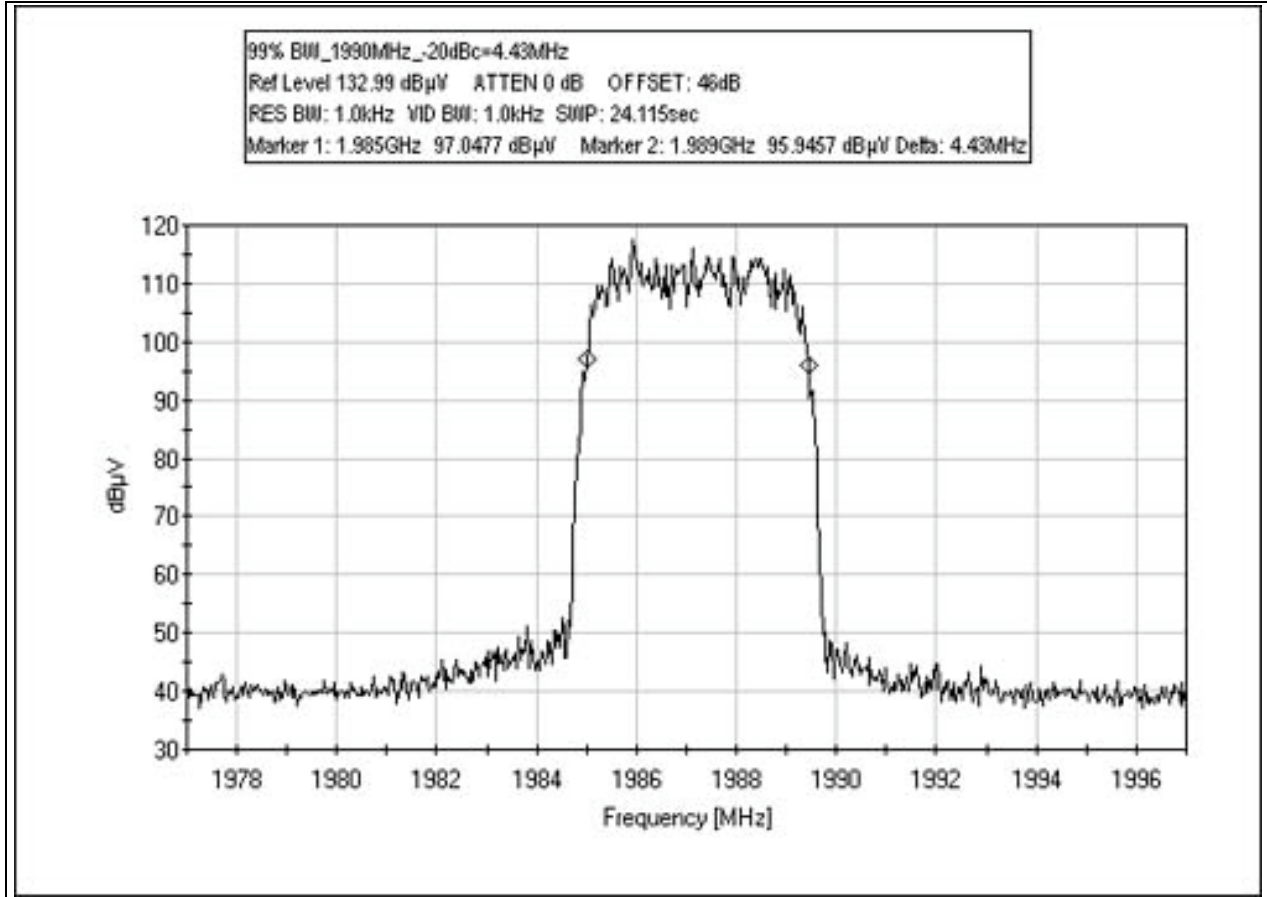
Test Conditions: The EUT is placed on the wooden table. DRIC0 and DRIC1 are connected to remote computer via Firewire cable. TX out is connected to remote load string. Ethernet, RX0 and RX1 are left blank. The remote computer generates waveform from received 10 MHz reference signal and sends the waveform to the EUT via fire wire. The Power level is adjust to maintain the rated output power. Modulation: UMTS (WCDMA). Power = 60 watts.



RSS-133 99% BANDWIDTH 1960MHz



RSS-133 99% BANDWIDTH 1990MHz



Test Equipment

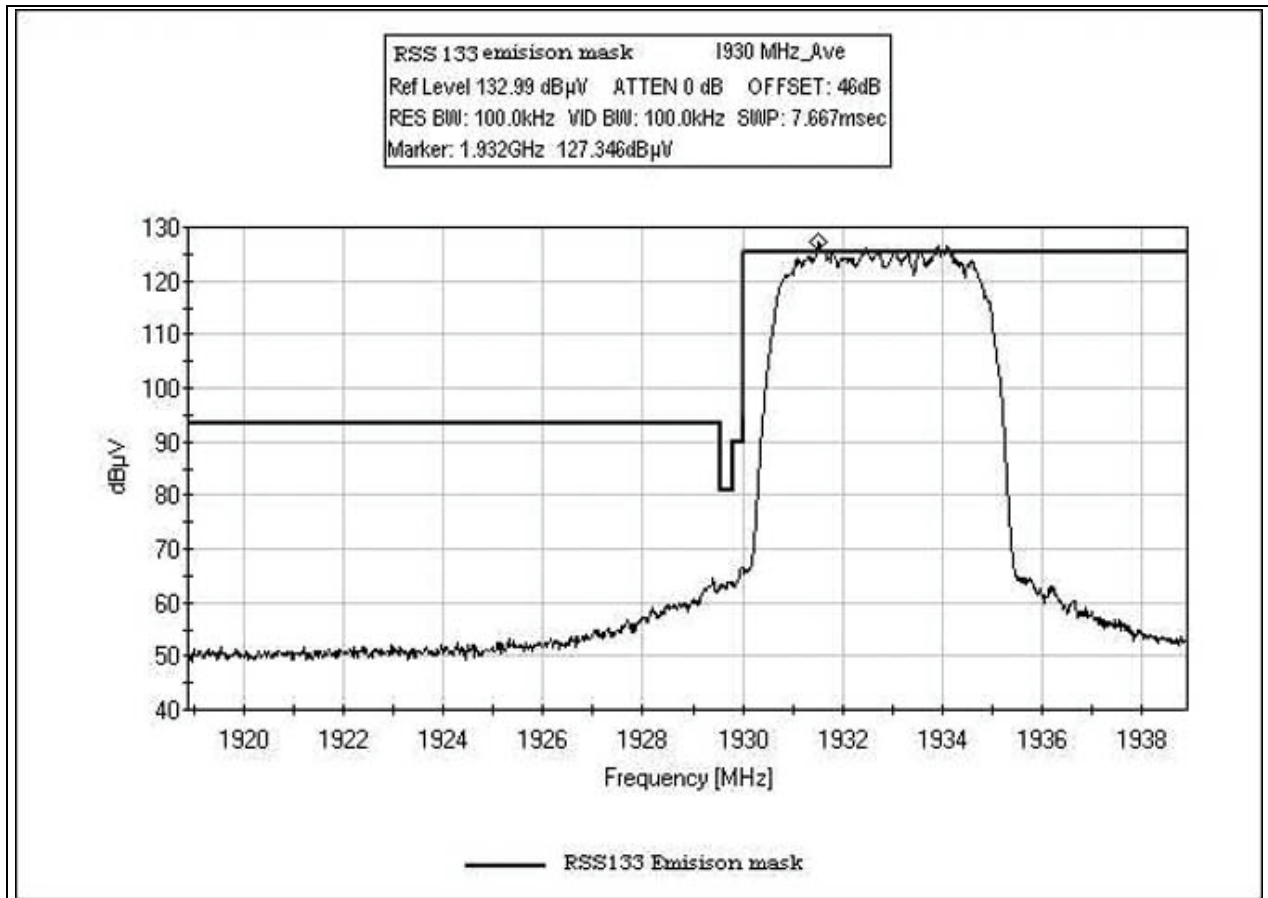
Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02672	Agilent	E4446A	US44300438	011405	011407

PHOTOGRAPH SHOWING DIRECT CONNECT TEST SETUP

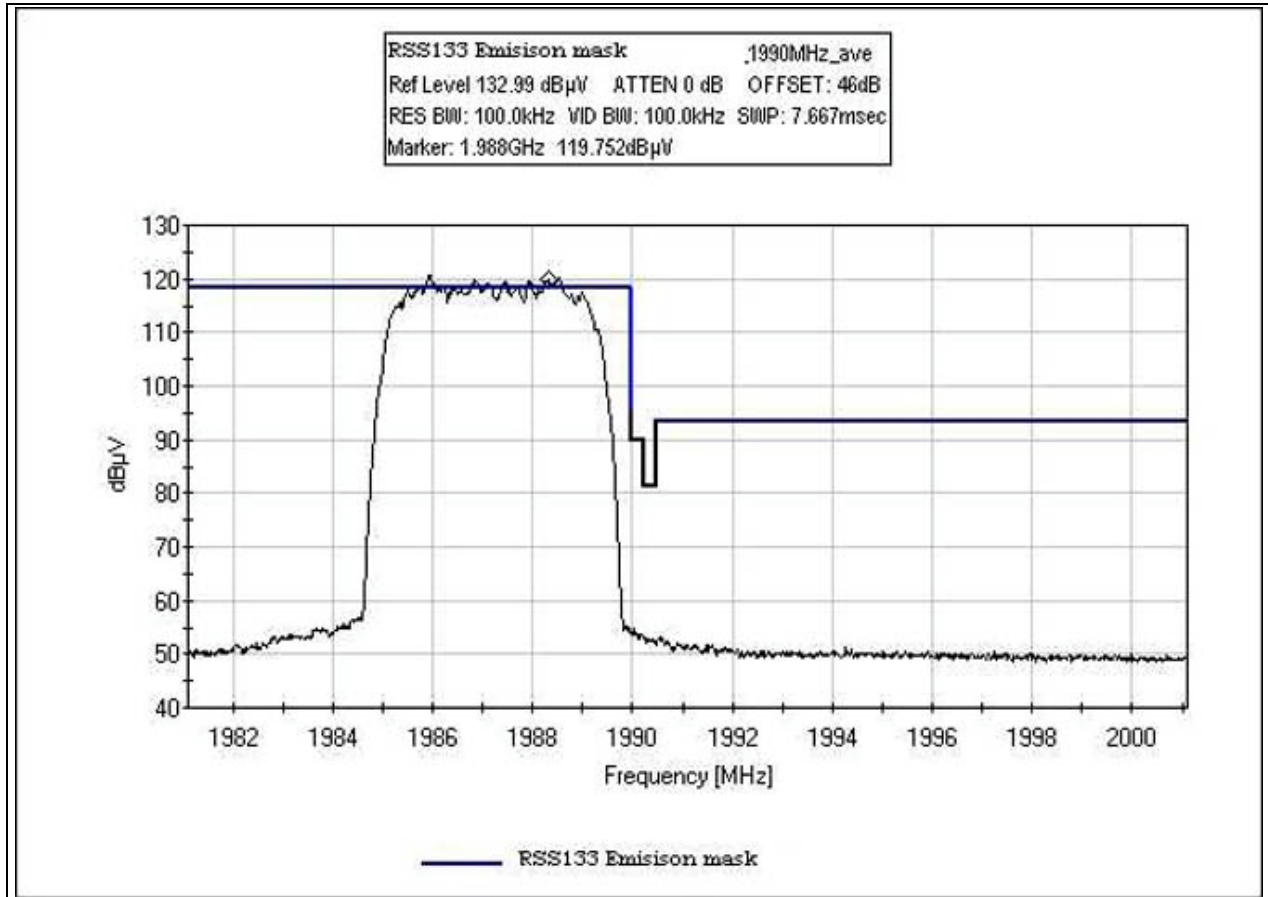


RSS-133 EMISSIONS MASK 1930MHz

Test Conditions: The EUT is placed on the wooden table. DRIC0 and DRIC1 are connected to remote computer via Firewire cable. TX out is connected to remote load string. Ethernet, RX0 and RX1 are left blank. The remote computer generates waveform from received 10 MHz reference signal and sends the waveform to the EUT via fire wire. The Power level is adjust to maintain the rated output power. Modulation: UMTS (WCDMA). Power = 60 watts.



RSS-133 EMISSIONS MASK 1990MHz



Test Equipment

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02672	Agilent	E4446A	US44300438	011405	011407

PHOTOGRAPH SHOWING DIRECT CONNECT TEST SETUP

