



SR TELECOM TEST REPORT

FOR THE

BASE STATION, 201-530125-001

FCC PART 15 SUBPART B SECTION 15.109 CLASS A AND SUBPART C SECTIONS 15.207 AND 15.247

COMPLIANCE

DATE OF ISSUE: SEPTEMBER 17, 2003

PREPARED FOR: PREPARED BY:

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Redmond, WA 98052
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Mariposa, CA 95338

W.O. No.: 81131 Date of test: August 4-16, 2003

Report No.: FC03-059

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ADMINISTRATIVE INFORMATION

DATE OF TEST:	August 4-16, 2003
DATE OF RECEIPT:	August 4, 2003
PURPOSE OF TEST:	To demonstrate the compliance of the Base Station, 201-530125-001, with the requirements for FCC Part 15 Subpart B Section 15.109 Class A and Subpart C Sections 15.207 and 15.247 devices.
TEST METHOD:	ANSI C63.4 (1992)
MANUFACTURER:	SR Telecom 8150 Trans-Canada Hwy. Montreal QC H4S 1M5 Canada
REPRESENTATIVE:	Keith Peavler
TEST LOCATION:	CKC Laboratories, Inc. 14797 NE 95th Redmond, WA 98052



SUMMARY OF RESULTS

As received, the SR Telecom Base Station, 201-530125-001 was found to be fully compliant with the following standards and specifications:

United States

- > FCC Part 15 Subpart B Section 15.109 Class A
- > FCC Part 15 Subpart C Sections 15.207 and 15.247
- > ANSI C63.4 (1992) method FCC Site No. 933805

Canada

RSS-210 using:

- > FCC Part 15 Subpart B Section 15.109 Class A
- > FCC Part 15 Subpart C Sections and 15.207 15.247
- > ANSI C63.4 (1992) method Industry of Canada File No. IC 4653

CONDITIONS FOR COMPLIANCE

No modifications to the EUT were necessary to comply.

APPROVALS

Steve Behm, Director of Engineering Services

QUALITY ASSURANCE:

TEST PERSONNEL:

Joyce Walker, Quality Assurance Administrative

Manager

Andrew Pace, Lab Manager



EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The EUT tested by CKC Laboratories was a production unit.

FCC 15.31(e) Voltage Variations

The input voltage was varied from 85% - 115% of nominal during the radiated peak output power measurement. No variation in the radiated output power was observed.

FCC 15.31(m) Number Of Channels

This device was tested on three channels.

FCC 15.33(a) Frequency Ranges Tested

The frequency range under investigation is 30 MHz to 25 GHz. This covers the lowest frequency generated in the device up to beyond the tenth harmonics of the fundamental emissions. Spurious emissions data is only shown up to 18 GHz because no signals were observed beyond that frequency.

FCC 15.203 Antenna Requirements

The EUT does not incorporate a unique antenna connector. However, it complies with this requirement because a professional installation is required by the installation manual.

FCC 15.205 Restricted Bands

The fundamental operating frequency lies outside the restricted bands and therefore complies with the requirements of Section 15.205 of the FCC rules. Any spurious emission coming from the EUT was investigated to determine if any portion lies inside the restricted band. If any portion of a spurious emissions signal was found to be within a restricted band, investigation was performed to ensure compliance with Section 15.209.

Eut Operating Frequency

The EUT was operating at 2.4030 GHz to 2.480 GHz.

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EQUIPMENT UNDER TEST

Base Station

Manuf: SR Telecom Model: 201-530125-001

Serial: NA FCC ID: pending

PERIPHERAL DEVICES

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

CPE (Wireless Terminal) (5 each)

Manuf: SR Telecom Model: 201-530075-001

Serial: NA FCC ID: pending

MEASUREMENT UNCERTAINTY

TEST	HIGHEST UNCERTAINTY
Radiated Emissions	+/- 2.94 dB
Conducted Emissions	+/- 1.56 dB

Note: Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k=2. Statements of compliance are based on the nominal values only.

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REPORT OF MEASUREMENTS

The following tables report the six highest worst case levels recorded during the tests performed on the EUT. All readings taken are peak readings unless otherwise noted. The data sheets from which these tables were compiled are contained in Appendix C.

	Table 1: FCC 15.109 Six Highest Radiated Emission Levels								
FREQUENCY MHz	METER READING dBµV	COR Ant dB	RECTION Amp	ON FACT Cable dB	ORS Dist dB	CORRECTED READING dBµV/m	SPEC LIMIT dBµV/m	MARGIN dB	NOTES
41.363	23.6	13.3		0.4	-10.0	27.3	39.1	-11.8	V
65.666	30.4	6.5		0.6	-10.0	27.5	39.1	-11.6	V
74.107	29.0	7.1		0.7	-10.0	26.8	39.1	-12.3	V
80.174	31.5	7.7		0.7	-10.0	29.9	39.1	-9.2	V
84.219	28.7	8.3		0.7	-10.0	27.7	39.1	-11.4	V
107.224	30.1	11.1		0.8	-10.0	32.0	43.5	-11.5	V

Test Method: ANSI C63.4 (1992)

FCC Part 15 Subpart B Section 15.109

Test Distance: 3 Meters

Spec Limit:

COMMENTS: 120V 60Hz. Vertical. Stride system. Base Station. RF link between EUT and 5 CPEs. (No T1 connection). Shortened the power cord, improved the grounding of the conduit running from the power pack to the EUT. Replaced both supplementary grounds. The power pack is now grounded directly to the floor. Ferrites removed.

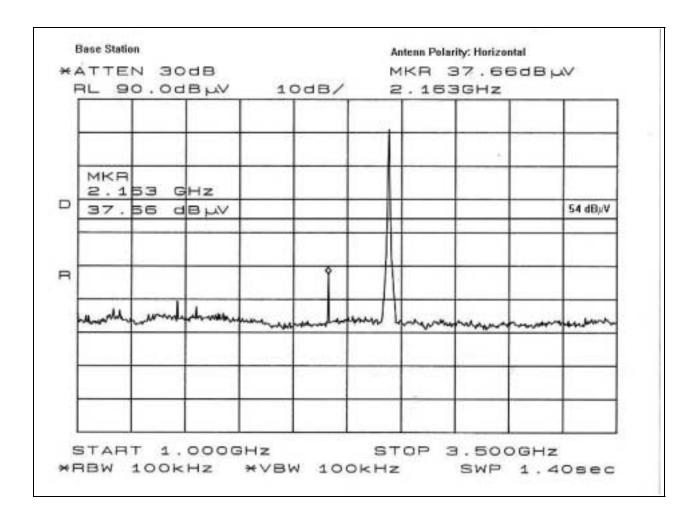
NOTES:

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V = Vertical Polarization



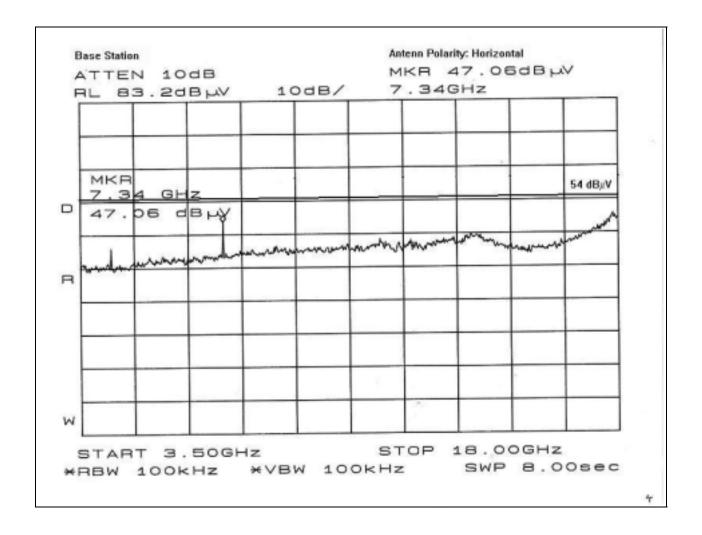
FCC 15.205 RESTRICTED BAND HORIZONTAL 1-3.5 GHz



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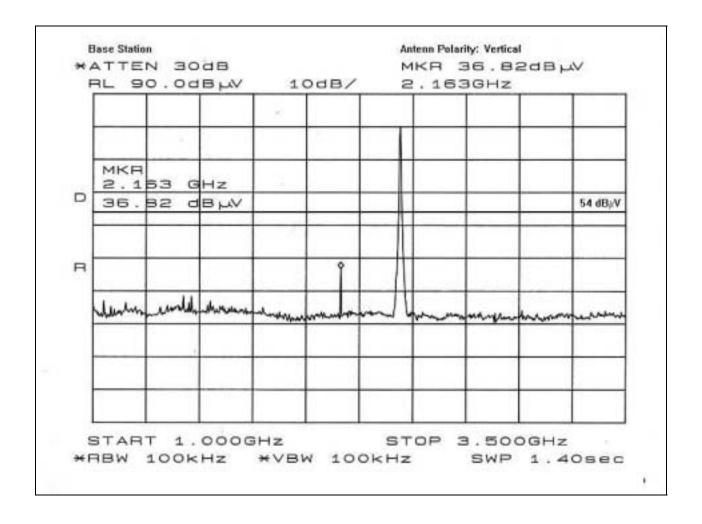
FCC 15.205 RESTRICTED BAND HORIZONTAL 3.5-18 GHz



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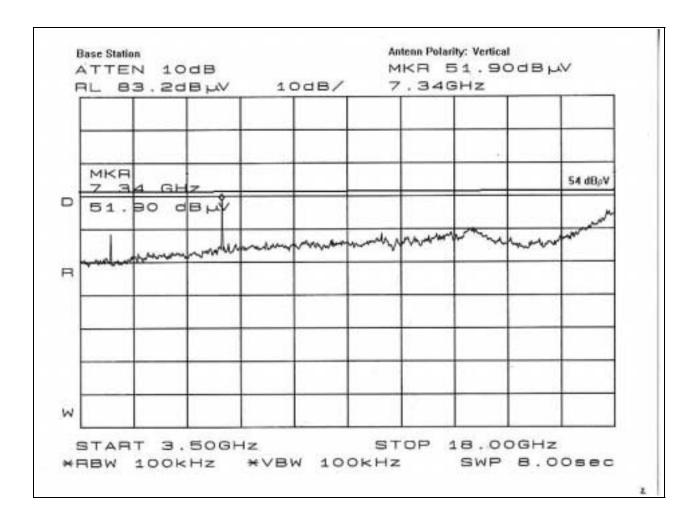
FCC 15.205 RESTRICTED BAND VERTICAL 1-3.5 GHz



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FCC 15.205 RESTRICTED BAND VERTICAL 3.5-18 GHz



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	Table 2: FCC 15.207 Six Highest Conducted Emission Levels								
FREQUENCY MHz	METER READING dBμV	COR Cable dB	RECTION dB	ON FACT	TORS dB	CORRECTED READING dBµV	SPEC LIMIT dBµV	MARGIN dB	NOTES
0.150001	49.9	0.0				49.9	56.0	-6.1	WA
2.907000	37.0	0.0				37.0	46.0	-9.0	BA
2.907268	37.1	0.0				37.1	46.0	-8.9	W
2.970000	40.7	0.0				40.7	46.0	-5.3	BA
2.988471	38.9	0.0				38.9	46.0	-7.1	W
3.060651	37.5	0.0				37.5	46.0	-8.5	В

Test Method: ANSI C63.4 (1992)

Spec Limit: FCC Part 15 Subpart C Section 15.207

NOTES: A = Average Reading

B = Black Lead W = White Lead

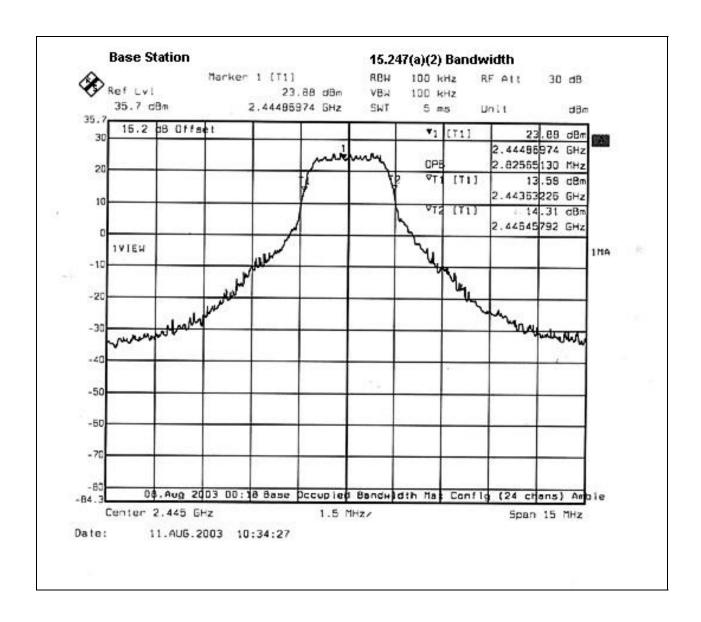
COMMENTS: 120V 60Hz. Line. Stride system. Base Station. RF link between EUT and 5 CPEs. (No T1 connection). Shortened the power cord, improved the grounding of the conduit running from the power pack to the EUT.

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FCC 15.247(a)(2) BANDWIDTH PLOT

The 10dB bandwidth of the fundamental taken in a 100kHz resolution bandwidth with a measurement receiver at 2.92MHz. The required 15.247(d) minimum 6dB bandwidth of the transmitter is 500kHz. The 6dB points are extrapolated from the supplied bandwidth plot between points M1 and M2. The extrapolation of the 6dB bandwidth from the plot yields 3.044 MHz.



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FCC 15.247(b)(4)(i) Radiated and Conducted Field Strength Readings

15.247(b)(4)(i) Systems operating in the 2400-2483.5 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum peak output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

Antenna Gain	dB over 6dBi	Power output reduction
8 dBi	2	1 dB
14 dBi	8	3 dB

15.247(b)(1) limit is 1Watt or 30dBm.

Conducted Data:

Frequency	Conducted Output Power (dBm)	De-Facto Limit (dBm)	Results
Low	25.8	27	Pass
Middle	25.8	27	Pass
High	25.8	27	Pass

Antenna Gain: 8dBi

Frequency	Radiated Power (dBm EIRP)
Low	33.8
Middle	33.8
High	33.8

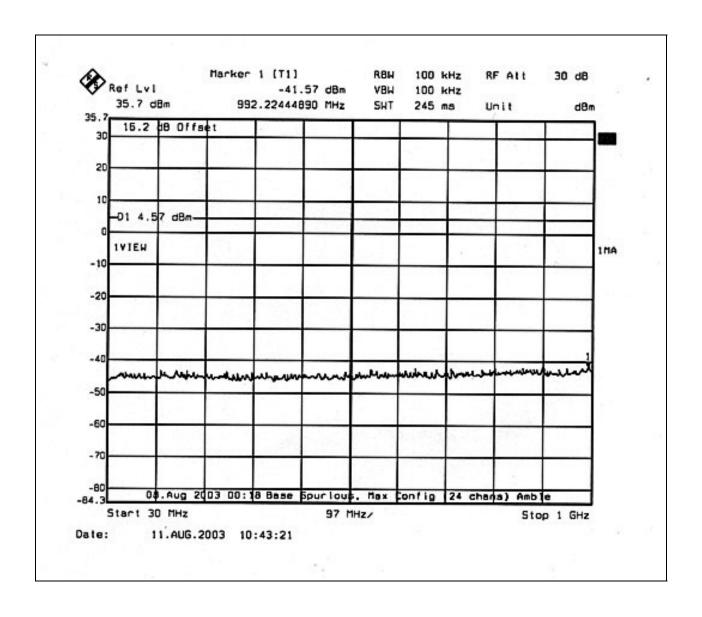
Antenna Gain: 14dBi

Frequency	Radiated Power (dBm EIRP)
Low	39.8
Middle	39.8
High	39.8

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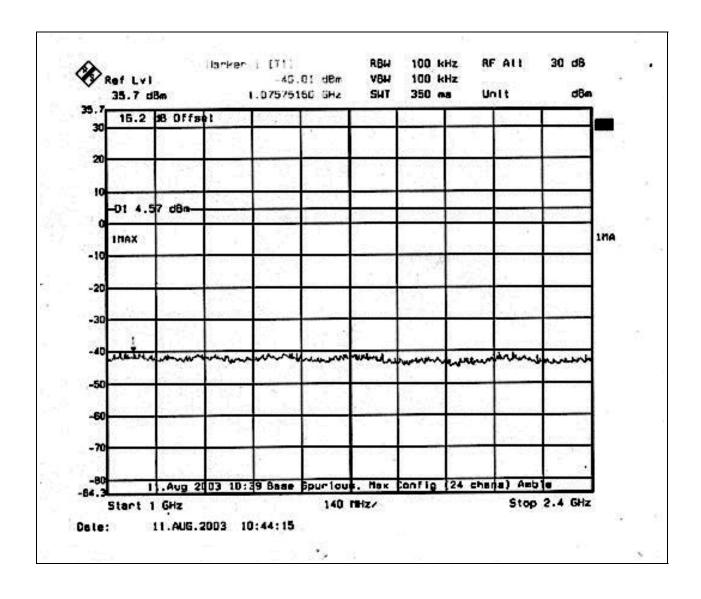
FCC 15.247(c) SPURIOUS CONDUCTED EMISSIONS 30 MHz - 1 GHz



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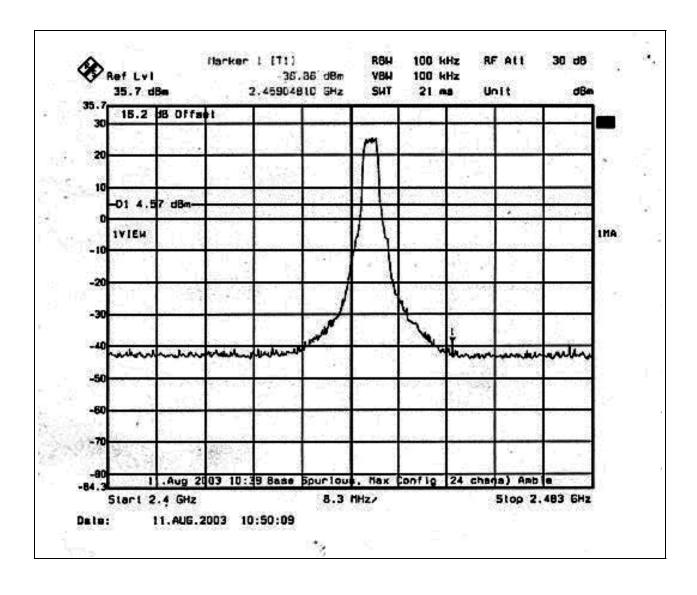
FCC 15.247(c) SPURIOUS CONDUCTED EMISSIONS 1-2.4 GHz



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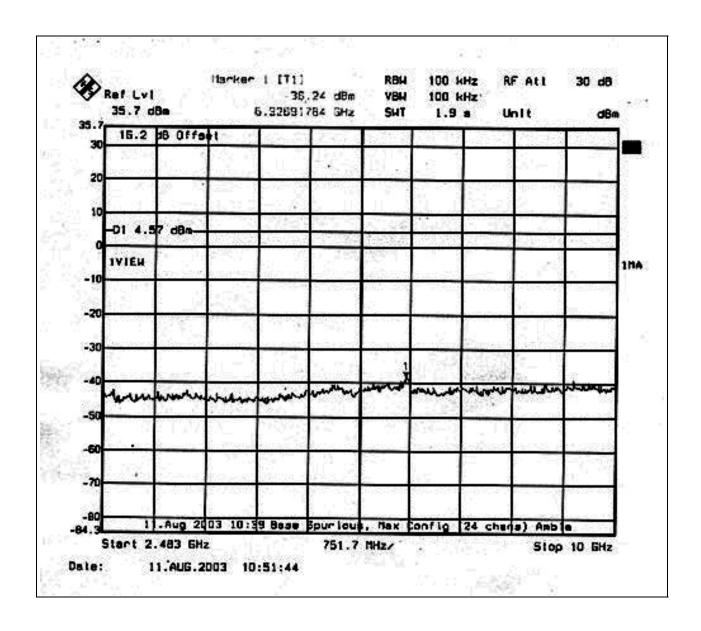
FCC 15.247(c) SPURIOUS CONDUCTED EMISSIONS 2.4-2.483 GHz



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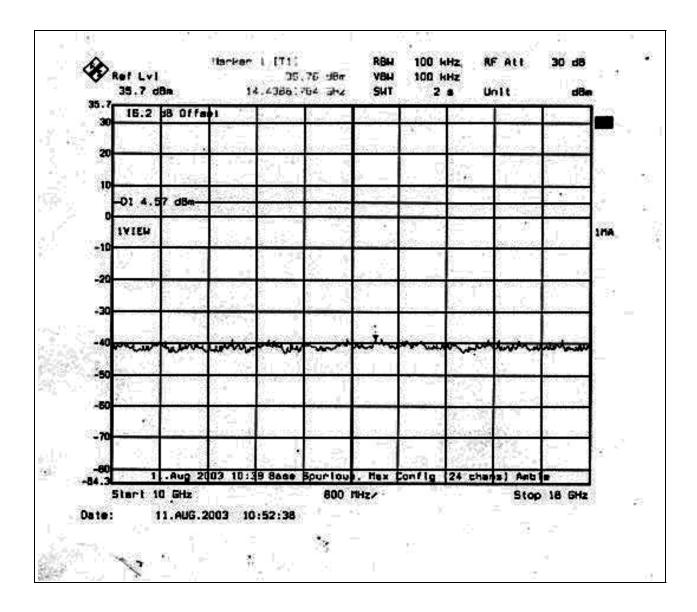
FCC 15.247(c) SPURIOUS CONDUCTED EMISSIONS 2.483-10 GHz



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FCC 15.247(c) SPURIOUS CONDUCTED EMISSIONS 10-18 GHz

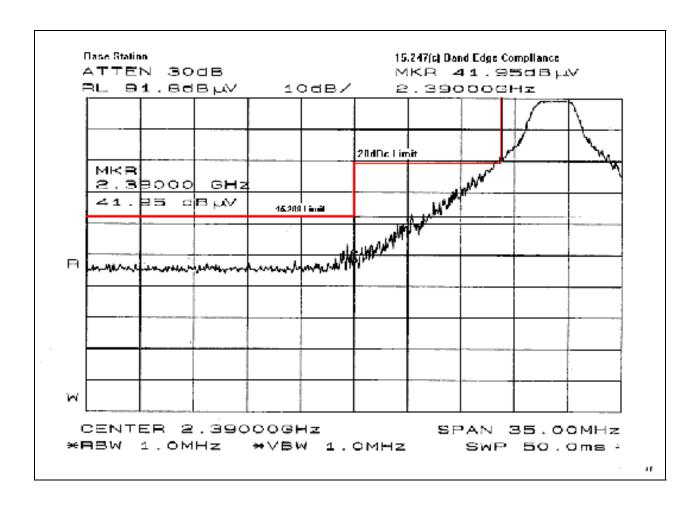


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FCC 15.247(c) BAND EDGE LOW CHANNEL

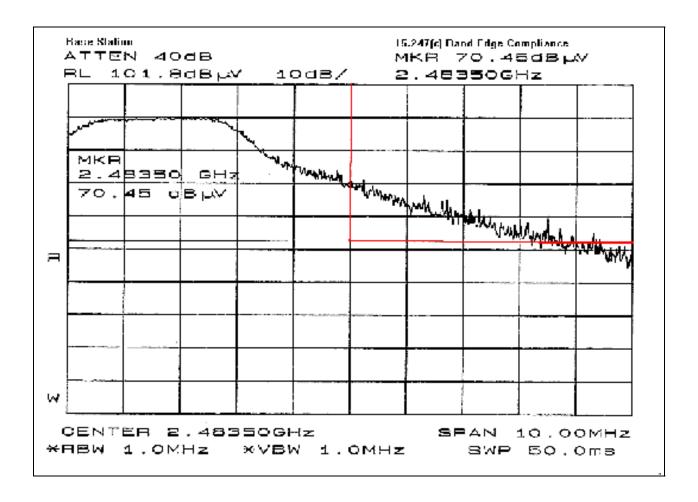
Band edge compliance at the lower and upper band edge demonstrated by the following plots. Compliance is demonstrated at the upper band edge as shown by average readings. The peak data at this frequency is supplied to demonstrate compliance to 15.35(b).



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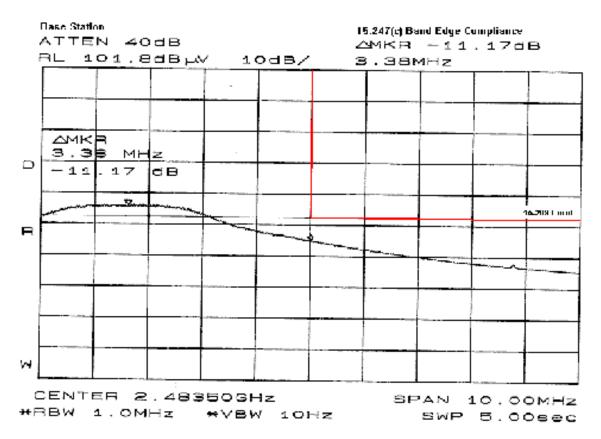
FCC 15.247(c) BAND EDGE HIGH CHANNEL



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FCC 15.247(c) BAND EDGE HIGH CHANNEL AVERAGE

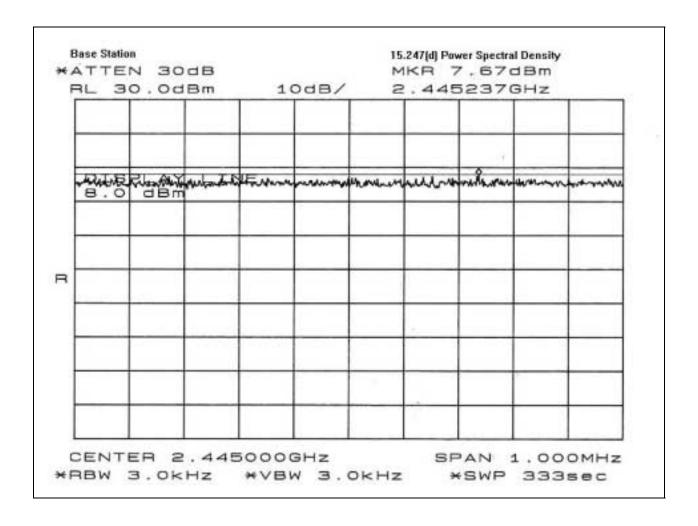


 $t\delta$

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FCC 15.247(d) PEAK POWER SPECTRAL DENSITY PLOT



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Maximum Permissible Exposure Calculations

Calculations prepared for: Calculations prepared by:

Andrew Pace

SR Telecom
9461 Willows Rd.

Redmond, WA 98052

CKC Laboratories, Inc.
5473A Clouds Rest Road
Mariposa, CA 95338

Model Number: 201-530125-001

Fundamental Operating Frequency: 2.445 GHz

Maximum Rated Output Power: 26 dBm

Measured Output Power: 39.8 dBm (EIRP)

MPE Limit in accordance with 1.1310(b): Limits for general population/uncontrolled exposure

MPE Limit = $1.00 \text{ (mW/cm}^2)$

EIRP	Distance	Power Density	Result
(mW)	(cm)	(mW/cm^2)	
9549.93	27.57	1.000	Pass

PowerDensity $(mW/cm^2) = \frac{EIRP}{4\pi d^2}$ Given: **EIRP** in mW and **d** in cm

As can be seen from the MPE results, this device passes the limits specified in 1.1310 at a distance of 27.6cm and at an output power of 25.8dBm with a 14dBi gain antenna.

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TEMPERATURE AND HUMIDITY DURING TESTING

The temperature during testing was within $+15^{\circ}$ C and $+35^{\circ}$ C. The relative humidity was between 20% and 75%.

EUT SETUP

The equipment under test (EUT) was set up in a manner that represented its normal use, as shown in the photographs in Appendix A. Any special conditions required for the EUT to operate normally are identified in the comments that accompany the emissions tables. The corrected data was then compared to the applicable emission limits to determine compliance.

The radiated and conducted emissions data of the EUT was taken with the HP Spectrum Analyzer. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in Table A.

Preliminary and final measurements were taken in order to ensure that all emissions from the EUT were found and maximized.

CORRECTION FACTORS

The basic spectrum analyzer reading was converted using correction factors as shown in the highest emissions readings in the tables. For radiated emissions in $dB\mu V/m$, the spectrum analyzer reading in $dB\mu V$ was corrected by using the following formula in Table A. This reading was then compared to the applicable specification limit to determine compliance.

TAI	TABLE A: SAMPLE CALCULATIONS					
	Meter reading	$(dB\mu V)$				
+	Antenna Factor	(dB)				
+	Cable Loss	(dB)				
-	Distance Correction	(dB)				
-	Preamplifier Gain	(dB)				
=	Corrected Reading	$(dB\mu V/m)$				

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TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed in Table A were used to collect both the radiated and conducted emissions data for the EUT. For frequencies from 300 to 1000 MHz, the biconilog antenna was used. The horn antenna was used for frequencies above 1000 MHz. Conducted emissions tests required the use of the FCC type LISNs.

The HP spectrum analyzer was used for all measurements. Table B shows the analyzer bandwidth settings that were used in designated frequency bands. For conducted emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used. A 10 dB external attenuator was also used during conducted tests, with internal offset correction in the analyzer. During radiated testing, the measurements were made with 0 dB of attenuation, a reference level of 97 dB μ V, and a vertical scale of 10 dB per division.

SPECTRUM ANALYZER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in the Tables indicate the type of detector function used to obtain the given readings. Unless otherwise noted, all readings were made in the "Peak" mode. Whenever a "Quasi-Peak" or "Average" reading is listed as one of the six highest readings, this is indicated as a "Q" or an "A" in the appropriate table. The following paragraphs describe in more detail the detector functions and when they were used to obtain the emissions data.

Peak

In this mode, the Spectrum Analyzer or test engineer recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature of the analyzer called "peak hold," the analyzer had the ability to measure transients or low duty cycle transient emission peak levels. In this mode the analyzer made a slow scan across the frequency band selected and measured the peak emission value found at each frequency across the band.

Quasi-Peak

When the true peak values exceeded or were within 2 dB of the specification limit, quasi-peak measurements were taken using the HP Quasi-Peak Adapter for the HP Spectrum Analyzer. The detailed procedure for making quasi peak measurements contained in the HP Quasi-Peak Adapter manual were followed.

Average

For certain frequencies, average measurements may be made using the spectrum analyzer. To make these measurements, the test engineer reduces the video bandwidth on the analyzer until the modulation of the signal is filtered out. At this point the analyzer is set into the linear mode and the scan time is reduced.

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EUT TESTING

Mains Conducted Emissions

During conducted emissions testing, the EUT was located on a wooden table measuring approximately 80 cm high, 1 meter deep, and 1.5 meters in length. The LISN was grounded to the ground plane. All other objects were kept a minimum of 80 cm away from the EUT during the conducted test.

The LISNs used were $50~\mu\text{H}$ -/+50~ohms. Above 150~kHz, a $0.15~\mu\text{F}$ series capacitor was added in-line prior to connecting the analyzer to restore the proper impedance for the range. A 30~to~50~s second sweep time was used for automated measurements in the frequency bands of 150~kHz to 500~kHz, and 500~kHz to 30~MHz. All readings within 20~dB of the limit were recorded, and those within 6~dB of the limit were examined with additional measurements using a slower sweep time.

Antenna Conducted Emissions

For measuring the signal strength on the RF output port of the EUT, the spectrum analyzer was connected directly to the EUT. The sweep time of the analyzer was adjusted so that the spectrum analyzer readings were always in a calibrated range. All readings within 20 dB of the limit were recorded.

Radiated Emissions

The EUT was mounted on a nonconductive, rotating table 80 cm above the conductive grid. The nonconductive table dimensions were 1 meter by 1.5 meters.

During the preliminary radiated scan, the EUT was powered up and operating in its defined FCC test mode. The frequency range of 30 MHz to 1000 MHz was scanned with the biconilog antenna located about 1.5 meter above the ground plane in the vertical polarity. During this scan, the turntable was rotated and all peaks at or near the limit were recorded. A scan of the FM band from 88 to 110 MHz was then made using a reduced resolution bandwidth and frequency span. The biconilog antenna was changed to the horizontal polarity and the above steps were repeated. For frequencies exceeding 1000 MHz, the horn antenna was used. Care was taken to ensure that no frequencies were missed within the FM and TV bands. An analysis was performed to determine if the signals that were at or near the limit were caused by an ambient transmission. If unable to determine by analysis, the equipment was powered down to make the final determination if the EUT was the source of the emission.

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A thorough scan of all frequencies was made manually using a small frequency span, rotating the turntable as needed. The test engineer maximized the readings with respect to the table rotation and configuration of EUT. Maximizing of the EUT was achieved by monitoring the spectrum analyzer on a closed circuit television monitor.

TRANSMITTER CHARACTERISTICS

FCC 15.247(a)(2) Bandwidth Measurements (Direct Sequence)

The fundamental frequency was kept within the permitted band 2400-2483.5 MHz. The minimum 6dB bandwidth was at least 500 kHz. Refer to the following occupied bandwidth plots.

FCC 15.247(d) Peak Power Spectral Density

The peak power spectral density conducted from the EUT to the antenna was not greater than 8 dm in any 3 kHz band during any time interval of continuous transmission.

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APPENDIX A

TEST SETUP DIAGRAMS AND PHOTOGRAPHS

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PHOTOGRAPH SHOWING MAINS CONDUCTED EMISSIONS

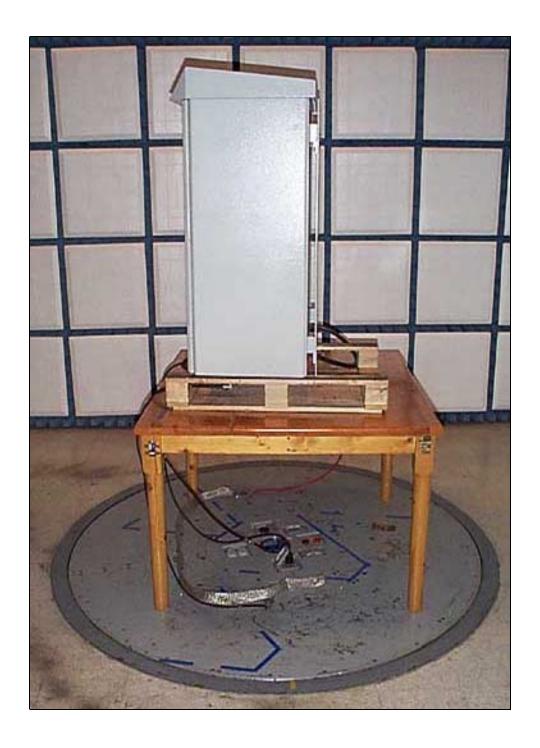


Mains Conducted Emissions

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PHOTOGRAPH SHOWING RADIATED EMISSIONS

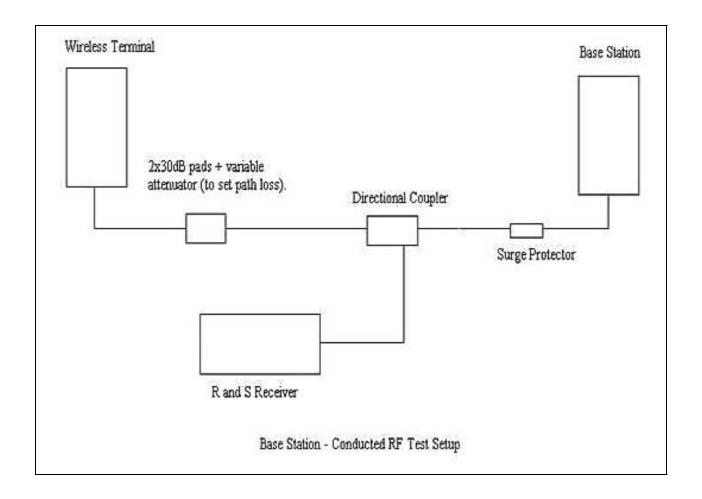


Radiated Emissions

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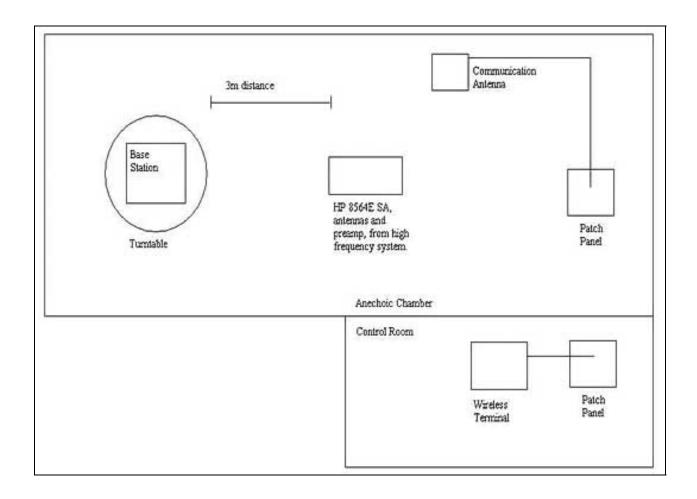
EQUIPMENT TEST SETUP DIAGRAM - DIRECT CONNECT CONDUCTED TESTING



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EQUIPMENT TEST SETUP DIAGRAM - DIRECT CONNECT RADIATED TESTING



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APPENDIX B

TEST EQUIPMENT LIST

15.109

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8546A Spectrum	3520A00260	07/19/2002	07/19/2004	0
Analyzer				
HP 85460A	3448A00229	07/19/2002	07/19/2004	0
Preselector				
Chase CBL6111A	1632	08/27/2002	08/27/2003	0
Biconilog Antenna				
3m Chamber Gore	none	04/02/2003	04/02/2004	0
Cable System				

15.207

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8546A Spectrum	3520A00260	07/19/2002	07/19/2004	0
Analyzer				
HP 85460A	3448A00229	07/19/2002	07/19/2004	0
Preselector				
LISN	9508-2452	10/04/2002	10/04/2003	0
3m Chamber Gore	none	04/02/2003	04/02/2004	0
Cable System				

15.247

Function	S/N	Calibration Date	Cal Due Date	Asset #
Spectrum Analyzer	3520A00260	07/19/2002	07/19/2004	Netro W2669
Preselector	3448A00229	07/19/2002	07/19/2004	Netro W2670
Antenna (Bilog)	1632	08/27/2002	08/27/2003	Netro W2955
Power Meter	3318A26810	08/28/2002	08/28/2003	Netro W3075
Receiver	DE14686	07/29/2003	07/29/2004	Netro W2654
Spectrum Analyzer	3551A00430	09/06/2002	09/06/2003	Netro W2660
Microwave system	3551A00430	09/06/2003	09/06/2003	Netro W2660
preamplifier				
LISN	9508-2452	04/02/2003	04/02/2004	Netro W2997
Spectrum Analyzer	3821A09031	10/25/2002	10/25/2003	Netro W3191
Horn Antenna (1-	3551A00430	09/06/2002	09/06/2003	Netro W2660
18GHz)				
Horn Antenna (18-	3551A00430	09/06/2002	09/06/2003	Netro W2660
26.5GHz)				
Variable AC Power	none	NCR	NCR	Netro W2702
Supply				
DMM	none	10/22/2002	10/22/2003	Netro W0244

NCR = No Calibration Required

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APPENDIX C MEASUREMENT DATA SHEETS

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Test Location: CKC Laboratories, Inc. •14797 NE 95th Street • Redmond, WA 98052 • (425) 883-4757

Customer: SR Telecom

Specification: FCC 15.109 A RADIATED

 Work Order #:
 80801
 Date:
 08/04/2003

 Test Type:
 Maximized Emissions
 Time:
 8:40:02 PM

Equipment: Base Station Sequence#: 55

Manufacturer: SR Telecom Tested By: Andrew Pace

Model: 201-530125-001

S/N: none

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N	
Base Station*	SR Telecom	201-530125-001	none	

Support Devices:

Function	Manufacturer	Model #	S/N
CPE (Wireless Terminal)	SR Telecom	201-530075-001	
CPE (Wireless Terminal)	SR Telecom	201-530075-001	
CPE (Wireless Terminal)	SR Telecom	201-530075-001	
CPE (Wireless Terminal)	SR Telecom	201-530075-001	
CPE (Wireless Terminal)	SR Telecom	201-530075-001	

Test Conditions / Notes:

120V 60Hz. Vertical. Stride system. Base Station. RF link between EUT and 5 CPEs. (No T1 connection). Shortened the power cord, improved the grounding of the conduit running from the power pack to the EUT. Replaced both supplementary grounds. The power pack is now grounded directly to the floor. Ferrites removed.

Transducer Legend:

T1=Netro Gore System Cables	T2=Netro Chase Bilog SN 1632

Measur	rement Data:	Re	eading lis	ted by ma	argin.		Te	est Distance	e: 3 Meters	i	
#	Freq	Rdng	T1	T2			Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	80.174M	31.5	+0.7	+7.7			-10.0	29.9	39.1	-9.2	Vert
2	84.219M	28.7	+0.7	+8.3			-10.0	27.7	39.1	-11.4	Vert
3	107.224M	30.1	+0.8	+11.1			-10.0	32.0	43.5	-11.5	Vert
4	65.666M	30.4	+0.6	+6.5			-10.0	27.5	39.1	-11.6	Vert
5	41.363M	23.6	+0.4	+13.3			-10.0	27.3	39.1	-11.8	Vert
6	74.107M	29.0	+0.7	+7.1			-10.0	26.8	39.1	-12.3	Vert
7	103.685M	28.7	+0.8	+10.7			-10.0	30.2	43.5	-13.3	Vert
8	96.101M	29.5	+0.8	+9.8			-10.0	30.1	43.5	-13.4	Vert
9	112.280M	27.3	+0.9	+11.6			-10.0	29.8	43.5	-13.7	Vert
10	102.168M	27.5	+0.8	+10.5			-10.0	28.8	43.5	-14.7	Vert

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11	30.210M	13.7	+0.3	+19.7	-10.0	23.7	39.1	-15.4	Vert
12	945.861M	13.4	+2.6	+24.9	-10.0	30.9	46.4	-15.5	Vert
13	204.792M	26.4	+1.2	+10.2	-10.0	27.8	43.5	-15.7	Vert
14	134.526M	24.3	+1.0	+12.3	-10.0	27.6	43.5	-15.9	Vert
15	193.858M	26.1	+1.2	+9.8	-10.0	27.1	43.5	-16.4	Vert
16	72.084M	24.9	+0.7	+6.9	-10.0	22.5	39.1	-16.6	Vert
17	99.134M	25.5	+0.8	+10.2	-10.0	26.5	43.5	-17.0	Vert
18	71.453M	24.3	+0.7	+6.9	-10.0	21.9	39.1	-17.2	Vert
19	69.664M	24.4	+0.7	+6.7	-10.0	21.8	39.1	-17.3	Vert
20	129.218M	22.4	+0.9	+12.4	-10.0	25.7	43.5	-17.8	Vert
21	118.347M	22.4	+0.9	+12.1	-10.0	25.4	43.5	-18.1	Vert
22	651.756M	15.2	+2.0	+20.8	-10.0	28.0	46.4	-18.4	Vert
23	90.792M	25.1	+0.8	+9.1	-10.0	25.0	43.5	-18.5	Vert
24	300.766M	21.2	+1.4	+14.7	-10.0	27.3	46.4	-19.1	Vert
25	183.532M	23.6	+1.1	+9.6	-10.0	24.3	43.5	-19.2	Vert
26	172.194M	22.6	+1.1	+10.1	-10.0	23.8	43.5	-19.7	Vert
27	113.038M	21.2	+0.9	+11.6	-10.0	23.7	43.5	-19.8	Vert
28	131.240M	20.3	+1.0	+12.4	-10.0	23.7	43.5	-19.8	Vert
29	356.043M	18.9	+1.5	+15.5	-10.0	25.9	46.4	-20.5	Vert
30	170.172M	21.5	+1.1	+10.2	-10.0	22.8	43.5	-20.7	Vert
31	237.593M	22.0	+1.3	+12.3	-10.0	25.6	46.4	-20.8	Vert
32	295.907M	19.2	+1.4	+14.6	-10.0	25.2	46.4	-21.2	Vert
33	196.895M	21.2	+1.2	+9.8	-10.0	22.2	43.5	-21.3	Vert
34	125.173M	18.8	+0.9	+12.4	-10.0	22.1	43.5	-21.4	Vert
35	377.911M	17.1	+1.6	+16.2	-10.0	24.9	46.4	-21.5	Vert

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36	230.304M	21.4	+1.3	+11.9	-10.0	24.6	46.4	-21.8	Vert
37	210.259M	19.3	+1.2	+10.6	-10.0	21.1	43.5	-22.4	Vert
38	155.762M	18.7	+1.0	+11.3	-10.0	21.0	43.5	-22.5	Vert
39	226.659M	21.0	+1.2	+11.6	-10.0	23.8	46.4	-22.6	Vert
40	345.109M	17.0	+1.5	+15.2	-10.0	23.7	46.4	-22.7	Vert
41	188.391M	20.0	+1.1	+9.7	-10.0	20.8	43.5	-22.7	Vert
42	207.221M	19.2	+1.2	+10.4	-10.0	20.8	43.5	-22.7	Vert
43	200.540M	19.1	+1.2	+9.9	-10.0	20.2	43.5	-23.3	Vert
44	215.726M	18.0	+1.2	+11.0	-10.0	20.2	43.5	-23.3	Vert
45	166.379M	18.1	+1.0	+10.5	-10.0	19.6	43.5	-23.9	Vert
46	150.200M	16.6	+1.0	+11.8	-10.0	19.4	43.5	-24.1	Vert
47	190.821M	18.2	+1.2	+9.7	-10.0	19.1	43.5	-24.4	Vert
48	174.420M	17.7	+1.1	+9.9	-10.0	18.7	43.5	-24.8	Vert
49	180.494M	17.4	+1.1	+9.5	-10.0	18.0	43.5	-25.5	Vert
50	222.407M	17.7	+1.2	+11.4	-10.0	20.3	46.4	-26.1	Vert

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Test Location: CKC Laboratories, Inc. •14797 NE 95th Street • Redmond, WA 98052 • (425) 883-4757

Customer: SR Telecom

Specification: FCC 15.207 - AVE

Work Order #:80801Date:08/04/2003Test Type:Conducted EmissionsTime:16:24:30Equipment:Base StationSequence#:39

Manufacturer: SR Telecom Tested By: Andrew Pace Model: 201-530125-001 120V 60Hz

S/N: none

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N	
Base Station*	SR Telecom	201-530125-001	none	

Support Devices:

Function	Manufacturer	Model #	S/N
CPE (Wireless Terminal)	SR Telecom	201-530075-001	none
CPE (Wireless Terminal)	SR Telecom	201-530075-001	none
CPE (Wireless Terminal)	SR Telecom	201-530075-001	none
CPE (Wireless Terminal)	SR Telecom	201-530075-001	none
CPE (Wireless Terminal)	SR Telecom	201-530075-001	none

Test Conditions / Notes:

120V 60Hz. Line. Stride system. Base Station. RF link between EUT and 5 CPEs. (No T1 connection). Shortened the power cord, improved the grounding of the conduit running from the power pack to the EUT.

Transducer Legend:

T1=Netro Gore System Cables

Measu	rement Data:	Re	eading lis	ted by n	nargin.			Test Lea	d: Black		
#	Freq	Rdng	T1				Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dΒμV	dΒμV	dB	Ant
1	2.970M	40.7	+0.0				+0.0	40.7	46.0	-5.3	Black
	Ave										
^	2.979M	42.9	+0.0				+0.0	42.9	46.0	-3.1	Black
3	3.061M	37.5	+0.0				+0.0	37.5	46.0	-8.5	Black
4	2.907M	37.0	+0.0				+0.0	37.0	46.0	-9.0	Black
^	Ave	10.6	. 0. 0				. 0. 0	10.6	46.0	<u> </u>	D1 1
^	2.907M	40.6	+0.0				+0.0	40.6	46.0	-5.4	Black
6	14.077M	39.5	+0.0				+0.0	39.5	50.0	-10.5	Black
7	2.826M	35.4	+0.0				+0.0	35.4	46.0	-10.6	Black
8	228.175k	41.8	+0.0				+0.0	41.8	52.5	-10.7	Black
	Ave										
٨	228.176k	47.3	+0.0	_			+0.0	47.3	52.5	-5.2	Black
10	457.245k	35.9	+0.0				+0.0	35.9	46.7	-10.8	Black

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11	26.239M	39.0	+0.2	+0.0	39.2	50.0	-10.8	Black
12	13.834M	39.1	+0.0	+0.0	39.1	50.0	-10.9	Black
13	14.447M	38.7	+0.0	+0.0	38.7	50.0	-11.3	Black
14	200.905k	42.2	+0.0	+0.0	42.2	53.6	-11.4	Black
15	14.203M	38.3	+0.0	+0.0	38.3	50.0	-11.7	Black
16	24.579M	37.9	+0.2	+0.0	38.1	50.0	-11.9	Black
17	24.841M	37.9	+0.2	+0.0	38.1	50.0	-11.9	Black
18	13.464M	37.9	+0.0	+0.0	37.9	50.0	-12.1	Black
19	29.352M	37.5	+0.3	+0.0	37.8	50.0	-12.2	Black
20	13.707M	37.1	+0.0	+0.0	37.1	50.0	-12.9	Black
21	2.754M	32.6	+0.0	+0.0	32.6	46.0	-13.4	Black
22	13.085M	36.1	+0.0	+0.0	36.1	50.0	-13.9	Black
23	14.826M	35.9	+0.0	+0.0	35.9	50.0	-14.1	Black
24	380.888k	34.1	+0.0	+0.0	34.1	48.3	-14.2	Black
25	14.591M	35.6	+0.0	+0.0	35.6	50.0	-14.4	Black
26	13.581M	35.3	+0.0	+0.0	35.3	50.0	-14.7	Black
27	3.133M	31.2	+0.0	+0.0	31.2	46.0	-14.8	Black
28	13.211M	34.9	+0.0	+0.0	34.9	50.0	-15.1	Black
29	13.337M	34.6	+0.0	+0.0	34.6	50.0	-15.4	Black
30	13.951M	34.4	+0.0	+0.0	34.4	50.0	-15.6	Black
31		40.3	+0.0	+0.0	40.3	56.0	-15.7	Black
^	Ave 150.001k	57.0	+0.0	+0.0	57.0	56.0	+1.0	Black
33	12.715M	34.3	+0.0	+0.0	34.3	50.0	-15.7	Black
34	2.682M	30.2	+0.0	+0.0	30.2	46.0	-15.8	Black
35	14.330M	33.7	+0.0	+0.0	33.7	50.0	-16.3	Black

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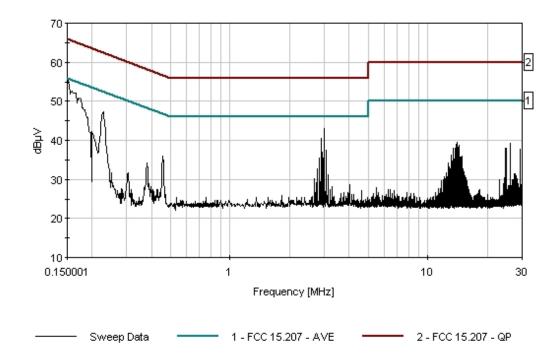
36	14.700M	33.5	+0.0	+0.0	33.5	50.0	-16.5	Black
37	12.841M	33.2	+0.0	+0.0	33.2	50.0	-16.8	Black
38	4.017M	28.7	+0.0	+0.0	28.7	46.0	-17.3	Black
39	15.061M	32.7	+0.0	+0.0	32.7	50.0	-17.3	Black
40	12.967M	32.6	+0.0	+0.0	32.6	50.0	-17.4	Black
41	14.961M	32.6	+0.0	+0.0	32.6	50.0	-17.4	Black
42	3.286M	28.1	+0.0	+0.0	28.1	46.0	-17.9	Black
43	15.205M	31.9	+0.0	+0.0	31.9	50.0	-18.1	Black
44	12.462M	31.8	+0.0	+0.0	31.8	50.0	-18.2	Black
45	304.532k	31.6	+0.0	+0.0	31.6	50.1	-18.5	Black
46	27.521M	31.3	+0.2	+0.0	31.5	50.0	-18.5	Black
47	3.214M	27.4	+0.0	+0.0	27.4	46.0	-18.6	Black
48	27.782M	31.2	+0.2	+0.0	31.4	50.0	-18.6	Black
49	4.622M	27.1	+0.0	+0.0	27.1	46.0	-18.9	Black
50	15.431M	30.9	+0.0	+0.0	30.9	50.0	-19.1	Black
51	28.035M	30.7	+0.2	+0.0	30.9	50.0	-19.1	Black
52	12.083M	30.7	+0.0	+0.0	30.7	50.0	-19.3	Black
53	12.345M	30.7	+0.0	+0.0	30.7	50.0	-19.3	Black
54	12.588M	30.7	+0.0	+0.0	30.7	50.0	-19.3	Black

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CKC Laboratories, Inc. Date: 08/04/2003 Time: 16:24:30 Netro WO#: 80801

FCC 15.207 - AVE Test Lead: Black 120V 60Hz Sequence#: 39 120V 60Hz. Line. Stride system. Base Station. RF link between EUT and 5 CPEs. (No T1 connection). Shortened the power



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Test Location: CKC Laboratories, Inc. •14797 NE 95th Street • Redmond, WA 98052 • (425) 883-4757

Customer: SR Telecom

Specification: FCC 15.207 - AVE

Work Order #:80801Date:08/04/2003Test Type:Conducted EmissionsTime:16:31:08Equipment:Base StationSequence#:40

Manufacturer: SR Telecom Tested By: Andrew Pace Model: 201-530125-001 120V 60Hz

S/N: none

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N	
Base Station*	SR Telecom	201-530125-001	none	

Support Devices:

Function	Manufacturer	Model #	S/N
CPE (Wireless Terminal)	SR Telecom	201-530075-001	none
CPE (Wireless Terminal)	SR Telecom	201-530075-001	none
CPE (Wireless Terminal)	SR Telecom	201-530075-001	none
CPE (Wireless Terminal)	SR Telecom	201-530075-001	none
CPE (Wireless Terminal)	SR Telecom	201-530075-001	none

Test Conditions / Notes:

120V 60Hz. Neutral. Stride system. Base Station. RF link between EUT and 5 CPEs. (No T1 connection). Shortened the power cord, improved the grounding of the conduit running from the power pack to the EUT.

Transducer Legend:

T1=Netro Gore System Cables

Measurement Data: Reading listed by mar					nargin.	Test Lead: White					
#	Freq	Rdng	T1				Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	dΒμV	dΒμV	dB	Ant
1	150.001k	49.9	+0.0				+0.0	49.9	56.0	-6.1	White
	Ave										
^	150.001k	59.5	+0.0				+0.0	59.5	56.0	+3.5	White
3	2.988M	38.9	+0.0				+0.0	38.9	46.0	-7.1	White
4	2.907M	37.1	+0.0				+0.0	37.1	46.0	-8.9	White
5	228.175k Ave	43.5	+0.0				+0.0	43.5	52.5	-9.0	White
٨		47.0	+0.0				+0.0	47.0	52.5	-5.5	White
7	14.203M	39.7	+0.0				+0.0	39.7	50.0	-10.3	White
8	14.077M	39.6	+0.0				+0.0	39.6	50.0	-10.4	White
9	13.834M	39.2	+0.0				+0.0	39.2	50.0	-10.8	White
10	26.239M	39.0	+0.2				+0.0	39.2	50.0	-10.8	White

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11	14.447M	39.1	+0.0	+0.0	39.1	50.0	-10.9	White
12	457.245k	35.2	+0.0	+0.0	35.2	46.7	-11.5	White
13	3.061M	34.2	+0.0	+0.0	34.2	46.0	-11.8	White
14	13.464M	37.9	+0.0	+0.0	37.9	50.0	-12.1	White
15	24.579M	37.7	+0.2	+0.0	37.9	50.0	-12.1	White
16	24.841M	37.6	+0.2	+0.0	37.8	50.0	-12.2	White
17	29.352M	37.5	+0.3	+0.0	37.8	50.0	-12.2	White
18	2.835M	32.8	+0.0	+0.0	32.8	46.0	-13.2	White
19	13.707M	36.8	+0.0	+0.0	36.8	50.0	-13.2	White
20	14.582M	36.7	+0.0	+0.0	36.7	50.0	-13.3	White
21	14.817M	36.6	+0.0	+0.0	36.6	50.0	-13.4	White
22	13.085M	36.2	+0.0	+0.0	36.2	50.0	-13.8	White
23	13.211M	35.3	+0.0	+0.0	35.3	50.0	-14.7	White
24	382.706k	33.4	+0.0	+0.0	33.4	48.2	-14.8	White
25	13.590M	35.1	+0.0	+0.0	35.1	50.0	-14.9	White
26	13.960M	35.1	+0.0	+0.0	35.1	50.0	-14.9	White
27	13.337M	34.8	+0.0	+0.0	34.8	50.0	-15.2	White
28	14.700M	34.7	+0.0	+0.0	34.7	50.0	-15.3	White
29	12.715M	34.4	+0.0	+0.0	34.4	50.0	-15.6	White
30	15.061M	34.3	+0.0	+0.0	34.3	50.0	-15.7	White
31	14.330M	34.1	+0.0	+0.0	34.1	50.0	-15.9	White
32	3.142M	29.6	+0.0	+0.0	29.6	46.0	-16.4	White
33	14.961M	33.6	+0.0	+0.0	33.6	50.0	-16.4	White
34	12.841M	33.5	+0.0	+0.0	33.5	50.0	-16.5	White
35	15.196M	33.4	+0.0	+0.0	33.4	50.0	-16.6	White

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36	12.967M	33.2	+0.0	_	+0.0	33.2	50.0	-16.8	White
37	2.682M	29.1	+0.0	-	+0.0	29.1	46.0	-16.9	White
38	4.622M	29.0	+0.0	-	+0.0	29.0	46.0	-17.0	White
39	15.431M	32.9	+0.0	-	+0.0	32.9	50.0	-17.1	White
40	2.754M	28.1	+0.0	-	+0.0	28.1	46.0	-17.9	White
41	302.714k	32.1	+0.0	-	+0.0	32.1	50.2	-18.1	White
42	4.026M	27.9	+0.0	-	+0.0	27.9	46.0	-18.1	White
43	12.083M	31.9	+0.0	-	+0.0	31.9	50.0	-18.1	White
44	12.462M	31.8	+0.0	-	+0.0	31.8	50.0	-18.2	White
45	12.345M	31.6	+0.0	-	+0.0	31.6	50.0	-18.4	White
46	27.782M	31.3	+0.2	-	+0.0	31.5	50.0	-18.5	White
47	28.035M	31.2	+0.2	-	+0.0	31.4	50.0	-18.6	White
48	12.588M	31.2	+0.0	-	+0.0	31.2	50.0	-18.8	White
49	15.791M	31.2	+0.0	-	+0.0	31.2	50.0	-18.8	White
50	24.327M	30.9	+0.1	-	+0.0	31.0	50.0	-19.0	White
51	15.566M	30.5	+0.0	-	+0.0	30.5	50.0	-19.5	White
52	2.375M	26.4	+0.0	-	+0.0	26.4	46.0	-19.6	White

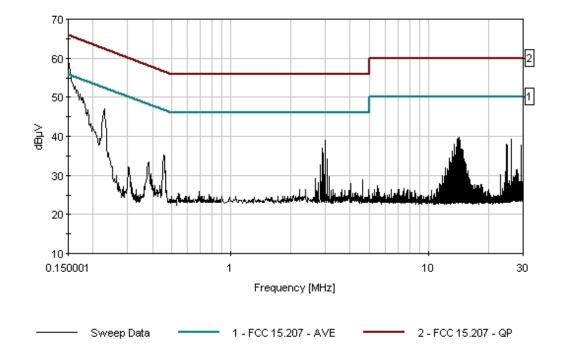
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CKC Laboratories, Inc. Date: 08/04/2003 Time: 16:31:08 Netro WO#: 80801

FCC 15.207 - AVE Test Lead: White 120V 60Hz Sequence#: 40

120V 60Hz. Neutral. Stride system. Base Station. RF link between EUT and 5 CPEs. (No T1 connection). Shortened the po-



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