



SAFE VIEW, INC. TEST REPORT

FOR THE

SECURITY PORTAL, SCOUT 100

FCC PART 15 SUBPART C SECTIONS 15.207 & 15.209

COMPLIANCE

DATE OF ISSUE: DECEMBER 12, 2005

PREPARED FOR:

Safe View, Inc.
469 El Camino Real, Suite 110
Santa Clara, CA 95050

P.O. No.: 3461 P
W.O. No.: 80644

PREPARED BY:

Mary Ellen Clayton
CKC Laboratories, Inc.
5046 Sierra Pines Drive
Mariposa, CA 95338

Date of test: October 5 – December 8, 2005

Report No.: FC05-082

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ADMINISTRATIVE INFORMATION

DATE OF TEST: October 5 – December 8, 2005

DATE OF RECEIPT: October 5, 2005

MANUFACTURER: Safe View, Inc.
469 El Camino Real, Suite 110
Santa Clara, CA 95050

REPRESENTATIVE: Scott Trosper

TEST LOCATION: CKC Laboratories, Inc.
1120 Fulton Place
Fremont, CA 94539

TEST METHOD: ANSI C63.4 (2003), FCC-MP5

PURPOSE OF TEST: To demonstrate the compliance of the Security Portal, Scout 100 with the requirements for FCC Part 15 Subpart C Sections 15.207 & 15.209 devices.

CONDITIONS FOR COMPLIANCE

No modifications to the EUT were necessary to comply.

APPROVALS

QUALITY ASSURANCE:



Steve Behm, Director of Engineering Services
and Quality Assurance



Joyce Walker, Quality Assurance Administrative
Manager

TEST PERSONNEL:



Stephen J. Goulet, EMC Technician



Art Rice, EMC Test Engineer



Randy Clark, EMC Engineer



Christine Nicklas, Project Manager &
Principal Consultant



Chuck Kendall, EMC Test Engineer

FCC 15.31(e) Voltage Variations

FREQUENCY MHz	CORRECTED READING dBμV/m 85%	CORRECTED READING dBμV/m 100%	CORRECTED READING dBμV/m 115%
24.71790	57.99	57.99	57.97

FCC 15.31(m) Number Of Channels

This device was tested on three channels.

FCC 15.33(a) Frequency Ranges Tested

15.207 Conducted Emissions: 150 kHz – 30 MHz

15.209 Radiated Emissions: 9 kHz – 100 GHz

FCC SECTION 15.35: ANALYZER BANDWIDTH SETTINGS PER FREQUENCY RANGE			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
CONDUCTED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	9 kHz	150 kHz	200 Hz
RADIATED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz
RADIATED EMISSIONS	1000 MHz	100 GHz	1 MHz

FCC 15.203 Antenna Requirements

The Safeview Scout 100 system uses an antenna element permanently attached to a subcomponent in the mast switching array and thereby satisfies the requirements of FCC part 15.203.

EUT Operating Frequency

The EUT was operating at 24.25 GHz – 30 GHz.

Temperature And Humidity During Testing

The temperature during testing was within +15°C and + 35°C.

The relative humidity was between 20% and 75%.

EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The customer declares the EUT tested by CKC Laboratories was representative of a production unit.

EQUIPMENT UNDER TEST

Security Portal

Manuf: Safe View, Inc.
Model: Scout 100
Serial: A10051900104
FCC ID: pending

PERIPHERAL DEVICES

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

Desktop PC

Manuf: MPC
Model: Client Pro 414
Serial: 3936233

PC Mouse

Manuf: MPC
Model: X09-88684
Serial: NA

PC Keyboard

Manuf: MPC
Model: SK-1688
Serial: C0501176267

REPORT OF MEASUREMENTS

FCC 15.207 Conducted Emission Levels

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer: **Safe View, Inc.**
 Specification: **FCC Part 15.207 (AVE)**
 Work Order #: **80644** Date: **11/14/2005**
 Test Type: **Conducted Emissions** Time: **21:48:14**
 Equipment: **Security Portal** Sequence#: **62**
 Manufacturer: Safe View Tested By: Art Rice
 Model: Scout 100 120V 60Hz
 S/N: A10051900104

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Security Portal*	Safe View	Scout 100	A10051900104

Support Devices:

Function	Manufacturer	Model #	S/N
Desktop PC	MPC	Client Pro 414	3936233
PC Keyboard	MPC	SK-1688	C0501176267
PC Mouse	MPC	X09-88684	n/a

Test Conditions / Notes:

The Scout 100 Security Portal is operational and running on an auto-cycle pause time of 6 seconds. The Scout 100 is connected to a support PC by an ethernet connection. The support PC triggers the SCU to begin a security scan. The software is set up to repeatedly run scan while the system is under test. Conducted emissions 0.15-30 MHz.

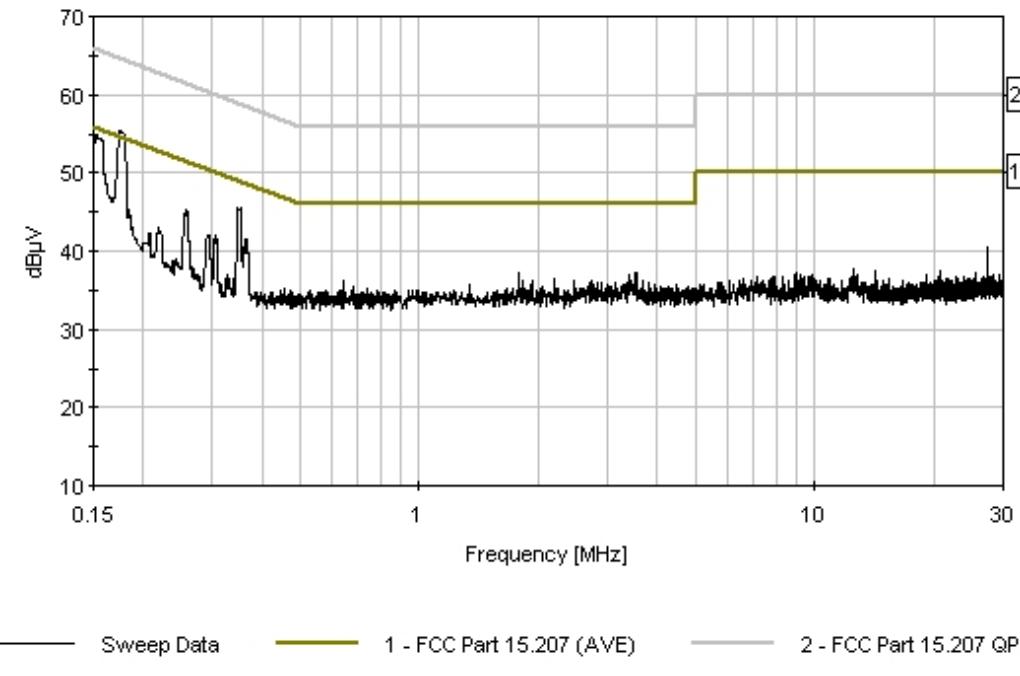
Transducer Legend:

T1=LISN - AN00493 - Black - ELC "OUT"	T2=Cable P05296 25' RG214 N-N
T3=Cable P05300 12' RG214 N-N	T4=TTE HP Filter P05258
T5=10dB attenuator	

Measurement Data:		Reading listed by margin.						Test Lead: Black			
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			dB μ V	dB	dB	dB	Table	dB μ V	dB μ V	dB	Ant
1	175.000k	40.4	+0.4	+0.0	+0.1	+1.9	+0.0	52.8	54.7	-1.9	Black
	Ave		+10.0								
^	175.452k	43.1	+0.4	+0.0	+0.1	+1.9	+0.0	55.5	54.7	+0.8	Black
			+10.0								
3	157.000k	38.8	+0.4	+0.0	+0.1	+3.4	+0.0	52.7	55.6	-2.9	Black
	Ave		+10.0								
^	157.272k	40.5	+0.4	+0.0	+0.1	+3.4	+0.0	54.4	55.6	-1.2	Black
			+10.0								
5	352.000k	32.4	+0.4	+0.0	+0.1	+0.1	+0.0	43.0	48.9	-6.0	Black
	Ave		+10.0								
^	353.616k	35.0	+0.4	+0.0	+0.1	+0.1	+0.0	45.6	48.9	-3.3	Black
			+10.0								

7	256.171k	34.5	+0.4 +10.0	+0.0	+0.1	+0.3	+0.0	45.3	51.6	-6.3	Black
8	366.706k	30.9	+0.4 +10.0	+0.0	+0.1	+0.1	+0.0	41.5	48.6	-7.1	Black
9	304.166k	31.4	+0.3 +10.0	+0.0	+0.1	+0.3	+0.0	42.1	50.1	-8.0	Black
10	294.713k	31.4	+0.3 +10.0	+0.0	+0.1	+0.3	+0.0	42.1	50.4	-8.3	Black
11	3.531M	26.7	+0.3 +10.0	+0.1	+0.1	+0.1	+0.0	37.3	46.0	-8.7	Black
12	1.791M	26.9	+0.3 +10.0	+0.0	+0.0	+0.1	+0.0	37.3	46.0	-8.7	Black
13	2.191M	26.0	+0.3 +10.0	+0.0	+0.0	+0.1	+0.0	36.4	46.0	-9.6	Black
14	27.328M	28.8	+1.0 +10.0	+0.2	+0.1	+0.3	+0.0	40.4	50.0	-9.6	Black
15	2.727M	25.6	+0.4 +10.0	+0.1	+0.1	+0.1	+0.0	36.3	46.0	-9.7	Black
16	219.811k	32.3	+0.4 +10.0	+0.0	+0.1	+0.2	+0.0	43.0	52.8	-9.8	Black
17	2.463M	25.5	+0.4 +10.0	+0.1	+0.1	+0.1	+0.0	36.2	46.0	-9.8	Black
18	3.663M	25.6	+0.3 +10.0	+0.1	+0.1	+0.1	+0.0	36.2	46.0	-9.8	Black
19	1.830M	25.8	+0.3 +10.0	+0.0	+0.0	+0.1	+0.0	36.2	46.0	-9.8	Black
20	642.314k	25.6	+0.3 +10.0	+0.1	+0.1	+0.0	+0.0	36.1	46.0	-9.9	Black
21	1.927M	25.7	+0.3 +10.0	+0.0	+0.0	+0.1	+0.0	36.1	46.0	-9.9	Black
22	2.876M	25.3	+0.4 +10.0	+0.1	+0.1	+0.1	+0.0	36.0	46.0	-10.0	Black
23	3.786M	25.4	+0.3 +10.0	+0.1	+0.1	+0.1	+0.0	36.0	46.0	-10.0	Black
24	2.697M	25.2	+0.4 +10.0	+0.1	+0.1	+0.1	+0.0	35.9	46.0	-10.1	Black
25	2.842M	25.2	+0.4 +10.0	+0.1	+0.1	+0.1	+0.0	35.9	46.0	-10.1	Black
26	3.131M	25.2	+0.4 +10.0	+0.1	+0.1	+0.1	+0.0	35.9	46.0	-10.1	Black
27	3.799M	25.3	+0.3 +10.0	+0.1	+0.1	+0.1	+0.0	35.9	46.0	-10.1	Black
28	1.336M	25.3	+0.3 +10.0	+0.1	+0.1	+0.0	+0.0	35.8	46.0	-10.2	Black
29	2.986M	25.1	+0.4 +10.0	+0.1	+0.1	+0.1	+0.0	35.8	46.0	-10.2	Black
30	3.263M	25.1	+0.4 +10.0	+0.1	+0.1	+0.1	+0.0	35.8	46.0	-10.2	Black

31	3.322M	25.1	+0.4 +10.0	+0.1	+0.1	+0.1	+0.0	35.8	46.0	-10.2	Black
32	3.931M	25.0	+0.3 +10.0	+0.1	+0.1	+0.1	+0.0	35.6	46.0	-10.4	Black
33	4.458M	25.0	+0.3 +10.0	+0.1	+0.1	+0.1	+0.0	35.6	46.0	-10.4	Black

 CKC Laboratories, Inc. Date: 11/14/2005 Time: 21:48:14 Safe View, Inc. WO#: 80644
 FCC Part 15.207 (AVE) Test Lead: Black 120V 60Hz Sequence#: 62
 Scout 100 is connected to LISN.


Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer: **Safe View, Inc.**
 Specification: **FCC Part 15.207 (AVE)**
 Work Order #: **80644** Date: **11/14/2005**
 Test Type: **Conducted Emissions** Time: **22:07:28**
 Equipment: **Security Portal** Sequence#: **63**
 Manufacturer: Safe View Tested By: Art Rice
 Model: Scout 100 120V 60Hz
 S/N: A10051900104

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Security Portal*	Safe View	Scout 100	A10051900104

Support Devices:

Function	Manufacturer	Model #	S/N
Desktop PC	MPC	Client Pro 414	3936233
PC Keyboard	MPC	SK-1688	C0501176267
PC Mouse	MPC	X09-88684	n/a

Test Conditions / Notes:

The Scout 100 Security Portal is operational and running on an auto-cycle pause time of 6 seconds. The Scout 100 is connected to a support PC by an ethernet connection. The support PC triggers the SCU to begin a security scan. The software is set up to repeatedly run scan while the system is under test. Conducted emissions 0.15-30 MHz.

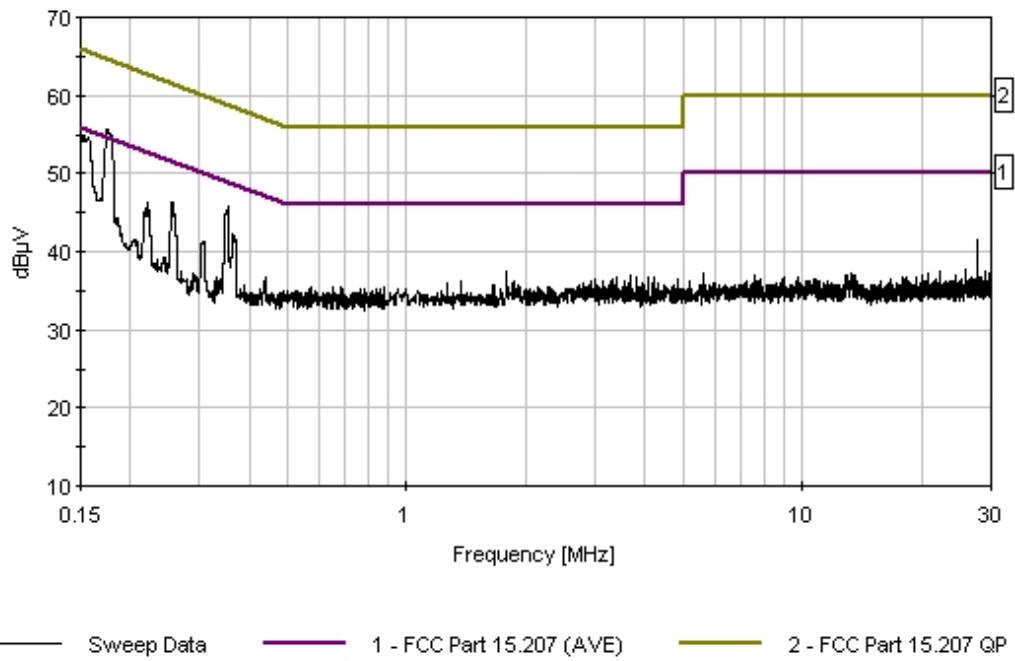
Transducer Legend:

T1=LISN - AN00493 - White - ELC "OUT"	T2=Cable P05296 25' RG214 N-N
T3=Cable P05300 12' RG214 N-N	T4=TTE HP Filter P05258
T5=10dB attenuator	

Measurement Data:		Reading listed by margin.						Test Lead: White			
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			dB μ V	dB	dB	dB	Table	dB μ V	dB μ V	dB	Ant
1	175.000k	40.5	+0.4	+0.0	+0.1	+1.9	+0.0	52.9	54.7	-1.8	White
	Ave		+10.0								
^	174.725k	43.2	+0.4	+0.0	+0.1	+1.9	+0.0	55.6	54.7	+0.9	White
			+10.0								
3	152.000k	37.6	+0.4	+0.0	+0.1	+3.8	+0.0	51.9	55.9	-4.0	White
	Ave		+10.0								
^	152.182k	40.6	+0.4	+0.0	+0.1	+3.8	+0.0	54.9	55.9	-1.0	White
			+10.0								
5	352.000k	32.2	+0.3	+0.0	+0.1	+0.1	+0.0	42.7	48.9	-6.2	White
	Ave		+10.0								
^	353.616k	35.4	+0.3	+0.0	+0.1	+0.1	+0.0	45.9	48.9	-3.0	White
			+10.0								
7	363.797k	31.7	+0.3	+0.0	+0.1	+0.1	+0.0	42.2	48.6	-6.4	White
			+10.0								
8	221.266k	35.5	+0.4	+0.0	+0.1	+0.2	+0.0	46.2	52.8	-6.6	White
			+10.0								
9	27.759M	29.9	+1.1	+0.2	+0.1	+0.3	+0.0	41.6	50.0	-8.4	White
			+10.0								

10	1.796M	27.1	+0.3 +10.0	+0.0	+0.0	+0.1	+0.0	37.5	46.0	-8.5	White
11	304.894k	30.6	+0.3 +10.0	+0.0	+0.1	+0.3	+0.0	41.3	50.1	-8.8	White
12	3.663M	26.2	+0.4 +10.0	+0.1	+0.1	+0.1	+0.0	36.9	46.0	-9.1	White
13	3.395M	25.9	+0.4 +10.0	+0.1	+0.1	+0.1	+0.0	36.6	46.0	-9.4	White
14	3.799M	25.9	+0.4 +10.0	+0.1	+0.1	+0.1	+0.0	36.6	46.0	-9.4	White
15	4.062M	25.9	+0.4 +10.0	+0.1	+0.1	+0.1	+0.0	36.6	46.0	-9.4	White
16	4.199M	25.9	+0.4 +10.0	+0.1	+0.1	+0.1	+0.0	36.6	46.0	-9.4	White
17	4.866M	25.7	+0.4 +10.0	+0.2	+0.1	+0.1	+0.0	36.5	46.0	-9.5	White
18	2.991M	25.7	+0.4 +10.0	+0.1	+0.1	+0.1	+0.0	36.4	46.0	-9.6	White
19	3.301M	25.7	+0.4 +10.0	+0.1	+0.1	+0.1	+0.0	36.4	46.0	-9.6	White
20	1.859M	25.9	+0.3 +10.0	+0.0	+0.0	+0.1	+0.0	36.3	46.0	-9.7	White
21	3.131M	25.6	+0.4 +10.0	+0.1	+0.1	+0.1	+0.0	36.3	46.0	-9.7	White
22	2.910M	25.5	+0.4 +10.0	+0.1	+0.1	+0.1	+0.0	36.2	46.0	-9.8	White
23	1.370M	25.6	+0.3 +10.0	+0.1	+0.1	+0.0	+0.0	36.1	46.0	-9.9	White
24	3.931M	25.3	+0.4 +10.0	+0.1	+0.1	+0.1	+0.0	36.0	46.0	-10.0	White
25	1.268M	25.4	+0.3 +10.0	+0.1	+0.1	+0.0	+0.0	35.9	46.0	-10.1	White
26	2.787M	25.2	+0.4 +10.0	+0.1	+0.1	+0.1	+0.0	35.9	46.0	-10.1	White
27	3.620M	25.2	+0.4 +10.0	+0.1	+0.1	+0.1	+0.0	35.9	46.0	-10.1	White
28	4.335M	25.2	+0.4 +10.0	+0.1	+0.1	+0.1	+0.0	35.9	46.0	-10.1	White
29	1.655M	25.4	+0.3 +10.0	+0.0	+0.0	+0.1	+0.0	35.8	46.0	-10.2	White
30	1.923M	25.4	+0.3 +10.0	+0.0	+0.0	+0.1	+0.0	35.8	46.0	-10.2	White
31	4.445M	25.1	+0.4 +10.0	+0.1	+0.1	+0.1	+0.0	35.8	46.0	-10.2	White
32	4.730M	24.8	+0.4 +10.0	+0.2	+0.1	+0.1	+0.0	35.6	46.0	-10.4	White
33	255.000k Ave	27.9	+0.4 +10.0	+0.0	+0.1	+0.3	+0.0	38.7	51.6	-12.9	White
^	255.444k	35.4	+0.4 +10.0	+0.0	+0.1	+0.3	+0.0	46.2	51.6	-5.4	White

CKC Laboratories, Inc. Date: 11/14/2005 Time: 22:07:28 Safe View, Inc. WO#: 80644
FCC Part 15.207 (AVE) Test Lead: White 120V 60Hz Sequence#: 63
Scout 100 is connected to LISN.



FCC 15.209 Carrier Emission Levels

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer: **Safe View, Inc.**
 Specification: **FCC 15.209 Radiated**
 Work Order #: **80644** Date: 10/8/2005
 Test Type: **Carrier Emissions** Time: 10:51:00
 Equipment: **Security Portal** Sequence#: 37
 Manufacturer: Safe View Tested By: S. Goulet/ A. Rice
 Model: Scout 100
 S/N: A10051900104

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
E4446A Spectrum Analyzer	US44300408	01/13/2005	01/13/2007	02668
Cable, HF 48"	n/a	02/08/2005	02/08/2007	P05201
Cable, HF 72"	n/a	07/12/2005	07/12/2007	P05315
Preamp Miteq 18-26 GHz		04/30/2005	04/30/2007	02694
Horn 18-26 GHz HP 84125-80008		04/30/2005	04/30/2007	01413
Horn 26.5-40 GHz HP 84125-80001		11/05/2004	11/05/2006	01414
Preamp Miteq 26-40 GHz		09/30/2005	09/30/2007	02695
E4446A Spectrum Analyzer	US44300408	01/13/2005	01/13/2007	02668
Cable, HF 48"	n/a	02/08/2005	02/08/2007	P05201
Cable, HF 72"	n/a	07/12/2005	07/12/2007	P05315
Preamp Miteq 18-26 GHz		04/30/2005	04/30/2007	02694
Horn 18-26 GHz HP 84125-80008		04/30/2005	04/30/2007	01413
Horn 26.5-40 GHz HP 84125-80001		11/05/2004	11/05/2006	01414
Preamp Miteq 26-40 GHz		09/30/2005	09/30/2007	02695

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Security Portal*	Safe View	Scout 100	A10051900104
Security Portal*	Safe View	Scout 100	A10051900104

Support Devices:

Function	Manufacturer	Model #	S/N
Desktop PC	MPC	Client Pro 414	3936233
PC Keyboard	MPC	SK-1688	C0501176267
PC Mouse	MPC	X09-88684	n/a
Desktop PC	MPC	Client Pro 414	3936233
PC Keyboard	MPC	SK-1688	C0501176267
PC Mouse	MPC	X09-88684	n/a

Test Conditions / Notes:

The Scout 100 Security Portal is operational. The Scout 100 is connected to a support PC by an ethernet connection. The support PC triggers the SCU to begin a security scan. The software is set up in CW transmit with sweep off. NOTE 1) The EUT is transmitting at LO, MID, or HI frequency. NOTE 2) Measured transmit fundamental amplitude of bottom, middle and top antenna locations. Bottom is antenna 320. Middle is antenna 192. Top is antenna 1. NOTE 3) Carrier Emissions preformed with SA RBW=VBW=1MHz for Peak readings. NOTE 4) Average readings are DCCF average readings are based on the Duty Cycle Correction factor from the SafeView Proposed Waiver to the FCC. The DCCF average is only applied to carrier related signals. See page 44 for the formula the DCCF is based on. $DCCF = 10^* \log ((\text{Measurement Bandwidth} / \text{Occupied Bandwidth}) * (\text{Pulse Duration} / \text{PRF}))$.

Transducer Legend:

T1=AMP AN00941A 50GHz	T2=CAB HF 72" ANP05315 Pasternack
T3=ANP5201 1-40GHz	T4=ANT 18-26GHz Active Horn
T5=ANT 26-40GHz Active Horn	T6=Semiflex ANP01403
T7=DCCF	

Measurement Data: Reading listed by margin. Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	Reading listed by margin.				Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
			T1 dB	T2 dB	T3 dB	T4 dB					
1	27009.420M	101.8	-31.0	+7.4	+0.0	+0.0	-10.0	50.2	54.0	-3.8	Vert
	Ave		+13.3	+8.0	-39.3		238				MID Channel Top Position. DCCF Average
^	27009.420M	101.8	-31.0	+7.4	+0.0	+0.0	-10.0	89.5	54.0	+35.5	Vert
			+13.3	+8.0			238				MID Channel Top Position
3	27009.730M	100.4	-31.0	+7.4	+0.0	+0.0	-10.0	48.8	54.0	-5.2	Vert
	Ave		+13.3	+8.0	-39.3		238				Mid Channel, Bottom Position. DCCF Average
^	27009.730M	100.4	-31.0	+7.4	+0.0	+0.0	-10.0	88.1	54.0	+34.1	Vert
			+13.3	+8.0			238				Mid Channel, Bottom Position.
5	27007.750M	98.9	-31.0	+7.4	+0.0	+0.0	-10.0	47.3	54.0	-6.7	Vert
	Ave		+13.3	+8.0	-39.3		238				Mid Channel, middle position. DCCF Average
^	27007.750M	98.9	-31.0	+7.4	+0.0	+0.0	-10.0	86.6	54.0	+32.6	Vert
			+13.3	+8.0			238				Mid Channel, middle position.
7	29788.920M	98.3	-29.6	+7.9	+0.0	+0.0	-10.0	46.8	54.0	-7.2	Vert
	Ave		+11.5	+8.0	-39.3		238				Hi Channel, middle position. DCCF Average
8	29789.080M	97.9	-29.6	+7.9	+0.0	+0.0	-10.0	46.4	54.0	-7.6	Vert
	Ave		+11.5	+8.0	-39.3		238				Hi Channel, Bottom Position. DCCF Average
^	29789.080M	97.9	-29.6	+7.9	+0.0	+0.0	-10.0	85.7	54.0	+31.7	Vert
			+11.5	+8.0			238				Hi Channel, Bottom Position
10	24643.230M	92.6	+0.0	+7.2	+4.7	-9.1	-10.0	46.1	54.0	-7.9	Vert
	Ave		+0.0	+0.0	-39.3		205				LO channel, top position. DCCF Average
^	24643.230M	92.6	+0.0	+7.2	+4.7	-9.1	-10.0	85.4	54.0	+31.4	Vert
			+0.0	+0.0			205				LO channel, top position

12	27010.580M	93.9	-31.0	+7.4	+0.0	+0.0	-10.0	42.3	54.0	-11.7	Horiz
	Ave		+13.3	+8.0	-39.3		199		Mid Channel,		103
									Bottom Position.		
									DCCF Average		
^	27010.580M	93.9	-31.0	+7.4	+0.0	+0.0	-10.0	81.6	54.0	+27.6	Horiz
		+13.3	+8.0				199		Mid Channel,		103
									Bottom Position		
14	24641.950M	88.7	+0.0	+7.2	+4.7	-9.1	-10.0	42.2	54.0	-11.8	Vert
	Ave		+0.0	+0.0	-39.3		200		LO channel, middle		128
									position. DCCF		
									Average		
15	29788.910M	93.6	-29.6	+7.9	+0.0	+0.0	-10.0	42.1	54.0	-11.9	Vert
	Ave		+11.5	+8.0	-39.3		238		Hi Channel, Top		158
									Position. DCCF		
									Average		
^	29788.920M	98.3	-29.6	+7.9	+0.0	+0.0	-10.0	86.1	54.0	+32.1	Vert
		+11.5	+8.0				238		Hi Channel, middle		158
									position.		
^	29788.910M	93.6	-29.6	+7.9	+0.0	+0.0	-10.0	81.4	54.0	+27.4	Vert
		+11.5	+8.0				238		Hi Channel, Top		158
									Position		
18	29788.910M	92.8	-29.6	+7.9	+0.0	+0.0	-10.0	41.3	54.0	-12.7	Horiz
	Ave		+11.5	+8.0	-39.3		238		Hi Cannel, Top		196
									Position. DCCF		
									Average		
19	24641.980M	85.6	+0.0	+7.2	+4.7	-9.1	-10.0	39.1	54.0	-14.9	Vert
	Ave		+0.0	+0.0	-39.3		200		LO channel, bottom		99
									position. DCCF		
									Average		
^	24641.950M	88.7	+0.0	+7.2	+4.7	-9.1	-10.0	81.5	54.0	+27.5	Vert
		+0.0	+0.0				200		LO channel, middle		128
									position		
^	24641.980M	85.6	+0.0	+7.2	+4.7	-9.1	-10.0	78.4	54.0	+24.4	Vert
		+0.0	+0.0				200		LO channel, bottom		99
									position		
22	27007.940M	89.0	-31.0	+7.4	+0.0	+0.0	-10.0	37.4	54.0	-16.6	Horiz
	Ave		+13.3	+8.0	-39.3		192		Mid Channel, Top		101
									Position. DCCF		
									Average		
^	27007.940M	89.0	-31.0	+7.4	+0.0	+0.0	-10.0	76.7	54.0	+22.7	Horiz
		+13.3	+8.0				192		Mid Channel, Top		101
									Position		
24	27008.230M	87.5	-31.0	+7.4	+0.0	+0.0	-10.0	35.9	54.0	-18.1	Horiz
	Ave		+13.3	+8.0	-39.3		89		Mid Channel,		103
									Middle Position.		
									DCCF Average		
^	27008.230M	87.5	-31.0	+7.4	+0.0	+0.0	-10.0	75.2	54.0	+21.2	Horiz
		+13.3	+8.0				89		Mid Channel,		103
									Middle Position		

26	29788.910M	87.2	-29.6	+7.9	+0.0	+0.0	-10.0	35.7	54.0	-18.3	Horiz
	Ave		+11.5	+8.0	-39.3		238		Hi Channel, Middle		164
									Position. DCCF		
									Average		
^	29788.910M	92.8	-29.6	+7.9	+0.0	+0.0	-10.0	80.6	54.0	+26.6	Horiz
		+11.5	+8.0				238		Hi Cannel, Top		196
									Position		
^	29788.910M	87.2	-29.6	+7.9	+0.0	+0.0	-10.0	75.0	54.0	+21.0	Horiz
		+11.5	+8.0				238		Hi Channel, Middle		164
									Position		
29	29789.040M	87.1	-29.6	+7.9	+0.0	+0.0	-10.0	35.6	54.0	-18.4	Horiz
	Ave		+11.5	+8.0	-39.3		238		Hi Channel, Bottom		103
									Position. DCCF		
									Average		
^	29789.040M	87.1	-29.6	+7.9	+0.0	+0.0	-10.0	74.9	54.0	+20.9	Horiz
		+11.5	+8.0				238		Hi Channel, Bottom		103
									Position		
31	24643.520M	81.5	+0.0	+7.2	+4.7	-9.1	-10.0	35.0	54.0	-19.0	Horiz
	Ave		+0.0	+0.0	-39.3		87		LO channel, top		237
									position. DCCF		
									Average		
^	24643.520M	81.5	+0.0	+7.2	+4.7	-9.1	-10.0	74.3	54.0	+20.3	Horiz
		+0.0	+0.0				87		LO channel, top		237
									position		
33	24643.860M	77.1	+0.0	+7.2	+4.7	-9.1	-10.0	30.6	54.0	-23.4	Horiz
	Ave		+0.0	+0.0	-39.3		87		LO channel, middle		152
									position. DCCF		
									Average		
^	24643.860M	77.1	+0.0	+7.2	+4.7	-9.1	-10.0	69.9	54.0	+15.9	Horiz
		+0.0	+0.0				87		LO channel, middle		152
									position		
35	24644.800M	75.6	+0.0	+7.2	+4.7	-9.1	-10.0	29.1	54.0	-24.9	Horiz
	Ave		+0.0	+0.0	-39.3		87		LO channel, bottom		106
									position. DCCF		
									Average		
^	24644.800M	75.6	+0.0	+7.2	+4.7	-9.1	-10.0	68.4	54.0	+14.4	Horiz
		+0.0	+0.0				87		LO channel, bottom		106
									position		

FCC 15.209 Radiated Emission Levels: 9 kHz - 30 MHz

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer: **Safe View, Inc.**
 Specification: **FCC 15.209 9kHz-30MHz**
 Work Order #: **80644** Date: **10/5/2005**
 Test Type: **Maximized Emissions** Time: **19:54:03**
 Equipment: **Security Portal** Sequence#: **10**
 Manufacturer: Safe View Tested By: Art Rice
 Model: Scout 100
 S/N: A10051900104

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Security Portal*	Safe View	Scout 100	A10051900104

Support Devices:

Function	Manufacturer	Model #	S/N
Desktop PC	MPC	Client Pro 414	3936233
PC Keyboard	MPC	SK-1688	C0501176267
PC Mouse	MPC	X09-88684	n/a

Test Conditions / Notes:

The Scout 100 Security Portal is operational and running on an auto-cycle pause time of 6 seconds. The Scout 100 is connected to a support PC by an ethernet connection. The support PC triggers the SCU to begin a security scan. The software is set up to repeatedly run scan while the system is under test. Parallel means loop is parallel to a line drawn between the antenna and the EUT. Perpendicular means loop is perpendicular to a line drawn between the antenna and the EUT. Radiated emissions 9 kHz-30 MHz.

Transducer Legend:

T1=Cable P05296 25' RG214 N-N	T2=Cable P05299 2' RG214 N-N
T3=Cable P05300 12' RG214 N-N	T4=Mag Loop - AN 00432- 9kHz-30M

Measurement Data: Reading listed by margin. Test Distance: 3 Meters											
#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	970.000k Ave	38.2	+0.1	+0.1	+0.1	+9.6	+0.0 256	48.1 Scanning	51.4	-3.3	Perpe 100
^	968.590k	40.8	+0.1	+0.1	+0.1	+9.6	+0.0 256	50.7 Scanning	51.5	-0.8	Perpe 100
3	781.000k Ave	37.9	+0.1	+0.1	+0.1	+9.6	+0.0 254	47.8 Scanning	52.2	-4.4	Perpe 100
^	777.490k	41.7	+0.1	+0.1	+0.1	+9.6	+0.0 253	51.6 Scanning	52.2	-0.6	Perpe 100
5	1.081M Ave	36.6	+0.1	+0.1	+0.1	+9.6	+0.0 270	46.5 Scanning	51.1	-4.6	Perpe 100
^	1.083M	40.2	+0.1	+0.1	+0.1	+9.6	+0.0 270	50.1 Scanning	51.1	-1.0	Perpe 100

7	828.000k	37.1	+0.1	+0.1	+0.1	+9.6	+0.0	46.9	52.0	-5.1	Perpe
	Ave						271				100
^	825.000k	41.5	+0.1	+0.1	+0.1	+9.6	+0.0	51.4	52.0	-0.6	Perpe
							271				100
9	716.000k	37.5	+0.1	+0.1	+0.1	+9.5	+0.0	47.3	52.5	-5.2	Perpe
	Ave						249				100
^	716.500k	42.5	+0.1	+0.1	+0.1	+9.5	+0.0	52.3	52.5	-0.2	Perpe
							249				100
11	1.197M	35.4	+0.1	+0.1	+0.1	+9.6	+0.0	45.3	50.7	-5.4	Perpe
	Ave						265				100
^	1.196M	38.7	+0.1	+0.1	+0.1	+9.6	+0.0	48.6	50.7	-2.1	Perpe
							265				100
13	1.165M	35.1	+0.1	+0.1	+0.1	+9.6	+0.0	45.0	50.8	-5.8	Perpe
	Ave						267				100
^	1.166M	39.2	+0.1	+0.1	+0.1	+9.6	+0.0	49.1	50.8	-1.7	Perpe
							266				100
15	744.000k	36.2	+0.1	+0.1	+0.1	+9.5	+0.0	46.0	52.4	-6.4	Perpe
	Ave						285				100
^	745.000k	41.3	+0.1	+0.1	+0.1	+9.6	+0.0	51.2	52.3	-1.1	Perpe
							285				100
17	970.000k	33.7	+0.1	+0.1	+0.1	+9.6	+0.0	43.6	51.4	-7.8	Perpe
	Ave						273				100
											Not scanning
18	494.000k	33.9	+0.0	+0.1	+0.1	+9.3	+0.0	43.4	53.8	-10.4	Perpe
	Ave						241				100
^	492.900k	42.7	+0.0	+0.1	+0.1	+9.3	+0.0	52.2	53.8	-1.6	Perpe
							241				100
20	1.006M	28.3	+0.1	+0.1	+0.1	+9.6	+0.0	38.2	51.3	-13.1	Paral
	Ave						302				100
^	1.004M	35.8	+0.1	+0.1	+0.1	+9.6	+0.0	45.7	51.3	-5.6	Paral
							302				100
22	567.000k	30.3	+0.1	+0.1	+0.1	+9.3	+0.0	39.9	53.3	-13.4	Paral
	Ave						317				100
^	570.000k	39.1	+0.1	+0.1	+0.1	+9.3	+0.0	48.7	53.3	-4.6	Paral
							317				100
24	925.000k	28.2	+0.1	+0.1	+0.1	+9.6	+0.0	38.0	51.6	-13.6	Paral
	Ave						305				100
^	922.500k	36.6	+0.1	+0.1	+0.1	+9.6	+0.0	46.5	51.6	-5.1	Paral
							305				100

FCC 15.209 Radiated Emission Levels: 30-1000 MHz

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer: **Safe View, Inc.**
 Specification: **FCC 15.209 30MHz-1000MHz**
 Work Order #: **80644** Date: 11/14/2005
 Test Type: **Maximized Emissions** Time: 19:30:09
 Equipment: **Security Portal** Sequence#: 61
 Manufacturer: Safe View Tested By: S. Goulet
 Model: Scout 100
 S/N: A10051900104

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Security Portal*	Safe View	Scout 100	A10051900104

Support Devices:

Function	Manufacturer	Model #	S/N
Desktop PC	MPC	Client Pro 414	3936233
PC Keyboard	MPC	SK-1688	C0501176267
PC Mouse	MPC	X09-88684	n/a

Test Conditions / Notes:

The Scout 100 Security Portal is operational and running on an auto-cycle pause time of 6 seconds. The Scout 100 is connected to a support PC by an ethernet connection. The support PC triggers the SCU to begin a security scan. The software is set up to repeatedly run scan while the system is under test. 30MHz-1000MHz.

Transducer Legend:

T1=0852-Bi-Log Antenna	T2=Cable P05296 25' RG214 N-N
T3=Cable P05299 2' RG214 N-N	T4=Cable P05300 12' RG214 N-N
T5=Amp Cal.HP-8447F OPT H64- AN 00501	

Measurement Data:		Reading listed by margin.										Test Distance: 3 Meters		
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar			
	MHz	dB μ V	T5				Table	dB μ V/m	dB μ V/m					
1	53.481M	57.5	+7.3	+0.4	+0.1	+0.2	+0.0	39.4	40.0	-0.6	Horiz			
	QP		-26.1				290				207			
^	53.477M	62.7	+7.4	+0.4	+0.1	+0.2	+0.0	44.7	40.0	+4.7	Horiz			
			-26.1				290				207			
3	54.096M	57.0	+7.2	+0.4	+0.1	+0.2	+0.0	38.8	40.0	-1.2	Horiz			
	QP		-26.1				290				207			
^	54.056M	61.0	+7.2	+0.4	+0.1	+0.2	+0.0	42.8	40.0	+2.8	Horiz			
			-26.1				290				207			
5	500.046M	51.5	+17.5	+1.3	+0.2	+0.7	+0.0	44.5	46.0	-1.5	Horiz			
	QP		-26.7				123				267			
^	500.014M	53.4	+17.5	+1.3	+0.2	+0.7	+0.0	46.4	46.0	+0.4	Horiz			
			-26.7				123				267			

7	30.414M	46.1	+17.8	+0.2	+0.0	+0.1	+0.0	38.2	40.0	-1.8	Vert
	QP		-26.0				288				118
^	30.404M	51.1	+17.7	+0.2	+0.0	+0.1	+0.0	43.1	40.0	+3.1	Vert
			-26.0				288				118
9	400.024M	52.4	+15.5	+1.1	+0.2	+0.7	+0.0	44.0	46.0	-2.0	Horiz
	QP		-25.9				297				100
10	500.020M	50.9	+17.5	+1.3	+0.2	+0.7	+0.0	43.9	46.0	-2.1	Vert
	QP		-26.7				86				400
^	500.021M	54.1	+17.5	+1.3	+0.2	+0.7	+0.0	47.1	46.0	+1.1	Vert
			-26.7				86				400
12	400.009M	51.7	+15.5	+1.1	+0.2	+0.7	+0.0	43.3	46.0	-2.8	Vert
	QP		-25.9				348				99
^	400.002M	53.5	+15.5	+1.1	+0.2	+0.7	+0.0	45.1	46.0	-0.9	Vert
			-25.9				348				99
14	31.469M	45.4	+17.3	+0.2	+0.0	+0.1	+0.0	37.0	40.0	-3.0	Vert
	QP		-26.0				288				100
^	31.539M	49.3	+17.3	+0.2	+0.0	+0.1	+0.0	40.9	40.0	+0.9	Vert
			-26.0				288				100
16	30.159M	44.4	+17.8	+0.2	+0.0	+0.1	+0.0	36.5	40.0	-3.5	Horiz
	QP		-26.0				242				329
^	30.065M	50.5	+17.9	+0.2	+0.0	+0.1	+0.0	42.7	40.0	+2.7	Horiz
			-26.0				242				329
18	79.998M	53.9	+7.1	+0.5	+0.1	+0.3	+0.0	36.1	40.0	-3.9	Horiz
	QP		-25.8				228				258
^	79.932M	63.0	+7.1	+0.5	+0.1	+0.3	+0.0	45.2	40.0	+5.2	Horiz
			-25.8				228				258
20	34.623M	45.3	+16.0	+0.3	+0.1	+0.2	+0.0	35.8	40.0	-4.2	Horiz
			-26.1				272				100
21	700.024M	46.3	+19.9	+1.5	+0.2	+0.8	+0.0	41.7	46.0	-4.3	Horiz
	QP		-27.0				46				395
^	700.009M	48.9	+19.9	+1.5	+0.2	+0.8	+0.0	44.3	46.0	-1.7	Horiz
			-27.0				46				395
23	400.039M	49.7	+15.5	+1.1	+0.2	+0.7	+0.0	41.3	46.0	-4.7	Horiz
	QP		-25.9				259				116
^	399.999M	55.9	+15.5	+1.1	+0.2	+0.7	+0.0	47.5	46.0	+1.5	Horiz
			-25.9				297				100
^	399.995M	54.0	+15.5	+1.1	+0.2	+0.7	+0.0	45.6	46.0	-0.4	Horiz
			-25.9				259				116
26	800.087M	44.1	+21.3	+1.6	+0.2	+0.8	+0.0	41.1	46.0	-4.9	Vert
	QP		-26.9				66				292
^	800.002M	46.8	+21.3	+1.6	+0.2	+0.8	+0.0	43.8	46.0	-2.2	Vert
			-26.9				67				292
28	31.980M	43.7	+17.1	+0.2	+0.0	+0.1	+0.0	35.1	40.0	-4.9	Vert
	QP		-26.0				281				100
^	31.989M	49.3	+17.0	+0.2	+0.0	+0.1	+0.0	40.6	40.0	+0.6	Vert
			-26.0				281				100
30	30.293M	42.7	+17.8	+0.2	+0.0	+0.1	+0.0	34.8	40.0	-5.2	Horiz
	QP		-26.0				106				217
^	30.272M	48.7	+17.8	+0.2	+0.0	+0.1	+0.0	40.8	40.0	+0.8	Horiz
			-26.0				106				217

32	60.034M	54.4	+5.4	+0.5	+0.1	+0.3	+0.0	34.6	40.0	-5.4	Vert
	QP		-26.1				226				151
^	60.119M	62.8	+5.4	+0.5	+0.1	+0.3	+0.0	43.0	40.0	+3.0	Vert
			-26.1				226				151
34	199.999M	53.5	+8.6	+0.8	+0.1	+0.5	+0.0	37.9	43.5	-5.6	Vert
			-25.6				266				137
35	59.992M	54.1	+5.4	+0.5	+0.1	+0.3	+0.0	34.3	40.0	-5.7	Horiz
	QP		-26.1				264				299
^	59.988M	59.7	+5.4	+0.5	+0.1	+0.3	+0.0	39.9	40.0	-0.1	Horiz
			-26.1				264				299
37	57.613M	53.2	+6.1	+0.5	+0.1	+0.3	+0.0	34.1	40.0	-5.9	Horiz
	QP		-26.1				35				180
^	57.620M	56.6	+6.1	+0.5	+0.1	+0.3	+0.0	37.5	40.0	-2.5	Horiz
			-26.1				35				180
39	734.931M	43.5	+21.2	+1.5	+0.2	+0.7	+0.0	40.0	46.0	-6.0	Vert
			-27.1				94				130
40	54.490M	52.4	+7.0	+0.4	+0.1	+0.2	+0.0	34.0	40.0	-6.0	Vert
			-26.1				61				400
41	625.028M	45.3	+19.5	+1.4	+0.2	+0.8	+0.0	39.9	46.0	-6.1	Horiz
			-27.3				97				99
42	625.022M	45.3	+19.5	+1.4	+0.2	+0.8	+0.0	39.9	46.0	-6.1	Vert
			-27.3				168				310
43	750.033M	42.8	+21.7	+1.5	+0.3	+0.8	+0.0	39.8	46.0	-6.2	Horiz
			-27.3				240				174
44	700.031M	44.2	+19.9	+1.5	+0.2	+0.8	+0.0	39.6	46.0	-6.4	Vert
	QP		-27.0				88				399
^	700.050M	48.6	+19.9	+1.5	+0.2	+0.8	+0.0	44.0	46.0	-2.0	Vert
			-27.0				88				399
46	65.742M	52.4	+5.8	+0.4	+0.1	+0.2	+0.0	33.0	40.0	-7.0	Vert
			-25.9				133				322
47	58.606M	52.3	+5.8	+0.5	+0.1	+0.3	+0.0	32.9	40.0	-7.1	Horiz
	QP		-26.1				310				200
^	58.606M	55.7	+5.8	+0.5	+0.1	+0.3	+0.0	36.3	40.0	-3.7	Horiz
			-26.1				310				200
49	733.167M	42.5	+21.1	+1.5	+0.2	+0.7	+0.0	38.9	46.0	-7.1	Horiz
			-27.1				80				119
50	732.940M	42.2	+21.1	+1.5	+0.2	+0.7	+0.0	38.6	46.0	-7.4	Horiz
			-27.1				81				119
51	750.027M	41.4	+21.7	+1.5	+0.3	+0.8	+0.0	38.4	46.0	-7.6	Vert
			-27.3				236				99
52	375.030M	47.7	+14.8	+1.2	+0.2	+0.6	+0.0	38.3	46.0	-7.7	Horiz
			-26.2				97				113
53	47.982M	48.0	+9.6	+0.4	+0.1	+0.2	+0.0	32.3	40.0	-7.7	Horiz
			-26.0				137				309
54	732.103M	41.9	+21.1	+1.5	+0.2	+0.7	+0.0	38.2	46.0	-7.8	Horiz
			-27.2				80				119
55	756.919M	40.7	+21.6	+1.5	+0.3	+0.8	+0.0	37.8	46.0	-8.2	Vert
			-27.1				179				180
56	732.413M	41.3	+21.1	+1.5	+0.2	+0.7	+0.0	37.6	46.0	-8.4	Horiz
			-27.2				81				119

57	65.026M	51.1	+5.7 -25.9	+0.4	+0.1	+0.2	+0.0	31.6	40.0	-8.4	Horiz 99
58	734.924M	41.0	+21.2 -27.1	+1.5	+0.2	+0.7	+0.0	37.5	46.0	-8.5	Horiz 193
59	60.124M	51.2	+5.4 QP -26.1	+0.5	+0.1	+0.3	+0.0	31.4	40.0	-8.6	Horiz 294
^	60.169M	63.0	+5.4 -26.1	+0.5	+0.1	+0.3	+0.0	43.2	40.0	+3.2	Horiz 294
61	34.679M	40.8	+16.0 -26.1	+0.3	+0.1	+0.2	+0.0	31.3	40.0	-8.7	Vert 100
62	800.065M	40.3	+21.3 QP -26.9	+1.6	+0.2	+0.8	+0.0	37.3	46.0	-8.7	Horiz 100
^	800.028M	45.0	+21.3 -26.9	+1.6	+0.2	+0.8	+0.0	42.0	46.0	-4.0	Horiz 100
64	79.999M	49.0	+7.1 QP -25.8	+0.5	+0.1	+0.3	+0.0	31.2	40.0	-8.8	Vert 319
^	80.003M	52.7	+7.1 -25.8	+0.5	+0.1	+0.3	+0.0	34.9	40.0	-5.1	Vert 319
^	80.000M	51.5	+7.1 -25.8	+0.5	+0.1	+0.3	+0.0	33.7	40.0	-6.3	Vert 105
67	757.776M	39.8	+21.6 -27.1	+1.5	+0.3	+0.8	+0.0	36.9	46.0	-9.1	Vert 147
68	900.047M	38.2	+22.3 -26.6	+1.6	+0.3	+1.0	+0.0	36.8	46.0	-9.2	Horiz 400
69	882.009M	37.1	+22.3 -26.8	+1.7	+0.2	+0.9	+0.0	35.4	46.0	-10.6	Vert 100
70	74.998M	47.9	+6.6 -26.1	+0.5	+0.1	+0.3	+0.0	29.3	40.0	-10.7	Vert 247
71	74.924M	47.3	+6.6 -26.1	+0.5	+0.1	+0.3	+0.0	28.7	40.0	-11.3	Horiz 119
72	72.628M	46.3	+6.3 -26.0	+0.4	+0.1	+0.2	+0.0	27.3	40.0	-12.7	Vert 289
73	120.005M	42.5	+11.2 -25.8	+0.6	+0.1	+0.4	+0.0	29.0	43.5	-14.5	Vert 99
74	65.517M	44.2	+5.7 QP -25.9	+0.4	+0.1	+0.2	+0.0	24.7	40.0	-15.3	Horiz 267
^	65.569M	67.0	+5.7 -25.9	+0.4	+0.1	+0.2	+0.0	47.5	40.0	+7.5	Horiz 267
76	34.814M	33.3	+16.0 QP -26.1	+0.3	+0.1	+0.2	+0.0	23.8	40.0	-16.2	Horiz 270
^	34.830M	45.7	+16.0 -26.1	+0.3	+0.1	+0.2	+0.0	36.2	40.0	-3.8	Horiz 270
78	34.472M	31.4	+16.1 QP -26.1	+0.3	+0.1	+0.2	+0.0	22.0	40.0	-18.0	Horiz 100
^	34.472M	42.9	+16.1 -26.1	+0.3	+0.1	+0.2	+0.0	33.5	40.0	-6.5	Horiz 238
80	125.036M	37.8	+11.2 -25.7	+0.6	+0.1	+0.4	+0.0	24.4	43.5	-19.1	Vert 219

81	38.890M	23.4	+14.2	+0.4	+0.1	+0.2	+0.0	12.2	40.0	-27.8	Horiz
	QP		-26.1				298				195
^	38.893M	46.8	+14.2	+0.4	+0.1	+0.2	+0.0	35.6	40.0	-4.4	Horiz
			-26.1				298				195
83	39.640M	22.9	+13.9	+0.4	+0.1	+0.2	+0.0	11.3	40.0	-28.7	Horiz
	QP		-26.2				298				195
^	39.638M	48.1	+13.9	+0.4	+0.1	+0.2	+0.0	36.5	40.0	-3.5	Horiz
			-26.2				298				195
85	40.483M	23.2	+13.5	+0.4	+0.1	+0.2	+0.0	11.2	40.0	-28.8	Horiz
	QP		-26.2				298				195
^	40.483M	51.2	+13.5	+0.4	+0.1	+0.2	+0.0	39.2	40.0	-0.8	Horiz
			-26.2				298				195

FCC 15.209 Radiated Emission Levels: 1-100 GHz

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer: **Safe View, Inc.**
 Specification: **FCC 15.209 1-100 GHz**
 Work Order #: **84413** Date: 12/8/2005
 Test Type: **Maximized Emissions** Time: 10:14:05
 Equipment: **Security Portal** Sequence#: 66
 Manufacturer: Safe View Tested By: S. Goulet/A. Rice
 Model: Scout 100
 S/N: A10051900104

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Security Portal*	Safe View	Scout 100	A10051900104

Support Devices:

Function	Manufacturer	Model #	S/N
Desktop PC	MPC	Client Pro 414	3936233
PC Keyboard	MPC	SK-1688	C0501176267
PC Mouse	MPC	X09-88684	n/a

Test Conditions / Notes:

The Scout 100 Security Portal is operational and running on an auto-cycle pause time of 6 seconds. The Scout 100 is connected to a support PC by an ethernet connection. The support PC triggers the SCU to begin a security scan. The software is set up in CW transmit with sweep off. NOTE 1) Measured transmit fundamental spurious emissions at the middle antenna location only. Middle is antenna 192. NOTE 2) The EUT is transmitting at LO frequency of 24.65 GHz from 1-12GHz. NOTE 3) The EUT is transmitting at LO frequency of 24.3 GHz from 12-18GHz. NOTE 4) The EUT transmitter LO Frequency has been changed to 24.47GHz (24.65 at VCO Control setting) from 18-26GHz. NOTE 5) Maximized Carrier and then looked for Spurs from 30 to 40GHz. No spurs were recorded within 20 dB of the limit while transmitting at 29.065GHz HI Frequency setting of the EUT. NOTE 6) No spurs observed from 40-60GHz while EUT was transmitting from the LO carrier frequency of 24.659GHz. NOTE 7) No spurs observed from 60-90GHz while EUT was transmitting from the LO carrier frequency of 24.659GHz. NOTE 8) No spurs observed from 90-100GHz while EUT was transmitting from the LO carrier frequency of 24.659GHz. NOTE 9) Testing above 1GHz preformed with SA RBW=VBW=1MHz for Peak readings. NOTE 10) All average readings and their associated peak readings were maximized. Average readings are one of two types. STANDARD Average readings are the standard average reading with SA RBW=1MHz and VBW=1kHz.

Transducer Legend:

T1=CAB HF 72" ANP05315 Pasternack	T2=P04240
T3=Horn Antenna AN02157 SN5655 (Hollister)	T4=ANT 12-18GHz Active Horn
T5=HP-83017A A/N 00785	T6=ANP5201 1-40GHz
T7=ANT 18-26GHz Active Horn	T8=AMP AN00941A 50GHz
T9=ANT 26-40GHz Active Horn	T10=Semiflex ANP01403
T11=Cable 40-120GHz P5315	T12=Mixer 40-60GHz 02347
T13=Mixer 90-110GHz 02349	T14=Mixer 60-90GHz 02348

Measurement Data:

#	Freq	Rdng	Reading listed by margin.				Test Distance: .1 Meters				
			T1	T2	T3	T4	Dist	Corr	Spec	Margin	
			T5	T6	T7	T8					
			T9	T10	T11	T12					
			T13	T14	T15						
			MHz	dB μ V	dB	dB	dB	Table	dB μ V/m	dB μ V/m	
									dB	Ant	
1	30069.800M	62.6	+7.9	+0.0	+0.0	+0.0	-10.0	51.3	54.0	-2.7	Horiz
			+0.0	+0.0	+0.0	-29.3	238				164
			+12.1	+8.0	+0.0	+0.0					
			+0.0								
2	3088.578M	50.3	+2.3	+3.3	+30.1	+0.0	+0.0	48.4	54.0	-5.6	Horiz
			-37.6	+0.0	+0.0	+0.0	224		CARRIER		216
			+0.0	+0.0	+0.0	+0.0			RELATED.		
			+0.0	+0.0	+0.0				STANDARD		
											Average
^	3088.566M	52.7	+2.3	+3.3	+30.1	+0.0	+0.0	50.8	54.0	-3.2	Horiz
			-37.6	+0.0	+0.0	+0.0	224		CARRIER		216
			+0.0	+0.0	+0.0	+0.0			RELATED.		
			+0.0	+0.0	+0.0				STANDARD		
											Average
4	6177.329M	42.8	+3.2	+4.7	+34.3	+0.0	+0.0	47.8	54.0	-6.2	Horiz
			-37.2	+0.0	+0.0	+0.0	200		CARRIER		128
			+0.0	+0.0	+0.0	+0.0			RELATED.		
			+0.0	+0.0	+0.0				STANDARD		
											Average
^	6177.288M	46.9	+3.2	+4.7	+34.3	+0.0	+0.0	51.9	54.0	-2.1	Horiz
			-37.2	+0.0	+0.0	+0.0	200		CARRIER		128
			+0.0	+0.0	+0.0	+0.0			RELATED.		
			+0.0	+0.0	+0.0				STANDARD		
											Average
6	12176.150M	49.9	+4.8	+6.8	+0.0	-14.1	+0.0	47.4	54.0	-6.6	Vert
			+0.0	+0.0	+0.0	+0.0	276		STANDARD		105
			+0.0	+0.0	+0.0	+0.0			Average		
			+0.0								
7	1603.000M	54.1	+1.6	+2.3	+26.1	+0.0	+0.0	45.6	54.0	-8.4	Horiz
			-38.5	+0.0	+0.0	+0.0	-12				99
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+0.0						
8	12174.520M	47.0	+4.8	+6.8	+0.0	-14.1	+0.0	44.5	54.0	-9.5	Horiz
			+0.0	+0.0	+0.0	+0.0	291		Maximized Reading		173
			+0.0	+0.0	+0.0	+0.0					
			+0.0								

9	17222.000M	44.5	+5.8	+8.6	+0.0	-14.9	+0.0	44.0	54.0	-10.0	Vert
	Ave		+0.0	+0.0	+0.0	+0.0	-9		STANDARD		105
			+0.0	+0.0	+0.0	+0.0			Average		
			+0.0								
10	1600.009M	52.2	+1.6	+2.3	+26.1	+0.0	+0.0	43.7	54.0	-10.3	Vert
	Ave		-38.5	+0.0	+0.0	+0.0	70		STANDARD		208
			+0.0	+0.0	+0.0	+0.0			Average		
			+0.0	+0.0	+0.0						
^	1600.053M	56.7	+1.6	+2.3	+26.1	+0.0	+0.0	48.2	54.0	-5.8	Vert
			-38.5	+0.0	+0.0	+0.0	70				208
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+0.0						
12	15547.000M	44.3	+5.4	+8.2	+0.0	-16.1	+0.0	41.8	54.0	-12.2	Vert
	Ave		+0.0	+0.0	+0.0	+0.0	-9		STANDARD		105
			+0.0	+0.0	+0.0	+0.0			Average		
			+0.0								
13	14451.000M	43.1	+5.3	+7.7	+0.0	-14.6	+0.0	41.5	54.0	-12.5	Vert
	Ave		+0.0	+0.0	+0.0	+0.0	-11		STANDARD		100
			+0.0	+0.0	+0.0	+0.0			Average		
			+0.0								
14	18530.060M	49.7	+6.1	+0.0	+0.0	+0.0	-10.0	41.2	54.0	-12.8	Horiz
			+0.0	+4.2	-8.8	+0.0	107		Max'd		106
			+0.0	+0.0	+0.0	+0.0					
			+0.0								
15	12176.000M	43.7	+4.8	+6.8	+0.0	-14.1	+0.0	41.2	54.0	-12.8	Horiz
			+0.0	+0.0	+0.0	+0.0					99
			+0.0	+0.0	+0.0	+0.0					
			+0.0								
16	14549.000M	42.5	+5.3	+7.7	+0.0	-14.5	+0.0	41.0	54.0	-13.0	Vert
	Ave		+0.0	+0.0	+0.0	+0.0	-11		STANDARD		100
			+0.0	+0.0	+0.0	+0.0			Average		
			+0.0								
17	18531.170M	48.3	+6.1	+0.0	+0.0	+0.0	-10.0	39.8	54.0	-14.2	Horiz
			+0.0	+4.2	-8.8	+0.0	107		Max'd		106
			+0.0	+0.0	+0.0	+0.0					
			+0.0								
18	16342.000M	42.7	+5.5	+8.3	+0.0	-16.7	+0.0	39.8	54.0	-14.2	Vert
	Ave		+0.0	+0.0	+0.0	+0.0	-9		STANDARD		105
			+0.0	+0.0	+0.0	+0.0			Average		
			+0.0								
19	13877.000M	43.5	+5.2	+7.3	+0.0	-16.4	+0.0	39.6	54.0	-14.4	Vert
	Ave		+0.0	+0.0	+0.0	+0.0	-11		STANDARD		100
			+0.0	+0.0	+0.0	+0.0			Average		
			+0.0								

20	12336.320M	24.2	+4.8	+6.8	+38.7	+0.0	+0.0	38.0	54.0	-16.0	Vert
	Ave		-36.5	+0.0	+0.0	+0.0	109		CARRIER		106
			+0.0	+0.0	+0.0	+0.0			RELATED.		
			+0.0	+0.0	+0.0				STANDARD		
									Average		
^	12336.300M	41.1	+4.8	+6.8	+38.7	+0.0	+0.0	54.9	54.0	+0.9	Vert
			-36.5	+0.0	+0.0	+0.0	-11		CARRIER		101
			+0.0	+0.0	+0.0	+0.0			RELATED.		
			+0.0	+0.0	+0.0						
22	13579.000M	41.5	+5.0	+7.5	+0.0	-16.3	+0.0	37.7	54.0	-16.3	Vert
	Ave		+0.0	+0.0	+0.0	+0.0	-11		STANDARD		100
			+0.0	+0.0	+0.0	+0.0			Average		
23	12175.000M	39.8	+4.8	+6.8	+0.0	-14.1	+0.0	37.3	54.0	-16.7	Vert
	Ave		+0.0	+0.0	+0.0	+0.0	-11		STANDARD		100
			+0.0	+0.0	+0.0	+0.0			Average		
24	18530.730M	45.4	+6.1	+0.0	+0.0	+0.0	-10.0	36.9	54.0	-17.1	Horiz
	Ave		+0.0	+4.2	-8.8	+0.0	107		STANDARD		106
			+0.0	+0.0	+0.0	+0.0			Average		
25	1500.000M	45.9	+1.6	+2.3	+25.5	+0.0	+0.0	36.7	54.0	-17.3	Vert
	Ave		-38.6	+0.0	+0.0	+0.0	153		STANDARD		241
			+0.0	+0.0	+0.0	+0.0			Average		
^	1500.000M	53.9	+1.6	+2.3	+25.5	+0.0	+0.0	44.7	54.0	-9.3	Vert
			-38.6	+0.0	+0.0	+0.0	-9				250
			+0.0	+0.0	+0.0	+0.0					
27	18529.930M	43.6	+6.1	+0.0	+0.0	+0.0	-10.0	35.1	54.0	-18.9	Horiz
	Ave		+0.0	+4.2	-8.8	+0.0	107		STANDARD		106
			+0.0	+0.0	+0.0	+0.0			Average		
28	17197.000M	35.0	+5.8	+8.6	+0.0	-14.9	+0.0	34.5	54.0	-19.5	Horiz
	Ave		+0.0	+0.0	+0.0	+0.0			STANDARD		100
			+0.0	+0.0	+0.0	+0.0			Average		
29	14914.000M	35.9	+5.4	+7.8	+0.0	-14.8	+0.0	34.3	54.0	-19.7	Horiz
			+0.0	+0.0	+0.0	+0.0					99
			+0.0	+0.0	+0.0	+0.0					
30	12338.300M	20.4	+4.8	+6.8	+38.7	+0.0	+0.0	34.2	54.0	-19.8	Vert
	Ave		-36.5	+0.0	+0.0	+0.0	298		CARRIER		116
			+0.0	+0.0	+0.0	+0.0			RELATED.		
			+0.0	+0.0	+0.0				STANDARD		
									Average		
^	12338.380M	42.2	+4.8	+6.8	+38.7	+0.0	+0.0	56.0	54.0	+2.0	Vert
			-36.5	+0.0	+0.0	+0.0	298		CARRIER		116
			+0.0	+0.0	+0.0	+0.0			RELATED.		
			+0.0	+0.0	+0.0						

32	9361.944M	22.0	+4.2	+6.2	+37.7	+0.0	+0.0	33.6	54.0	-20.4	Vert
	Ave		-36.5	+0.0	+0.0	+0.0	94		STANDARD		164
			+0.0	+0.0	+0.0	+0.0			Average		
			+0.0	+0.0	+0.0						
^	9362.000M	34.6	+4.2	+6.2	+37.7	+0.0	+0.0	46.2	54.0	-7.8	Vert
			-36.5	+0.0	+0.0	+0.0	-11				249
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+0.0						
34	12611.000M	37.4	+4.8	+7.1	+0.0	-16.6	+0.0	32.7	54.0	-21.3	Horiz
			+0.0	+0.0	+0.0	+0.0					99
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+0.0						
35	13318.000M	36.6	+5.0	+7.3	+0.0	-16.4	+0.0	32.5	54.0	-21.5	Horiz
			+0.0	+0.0	+0.0	+0.0					99
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+0.0						
36	15759.000M	34.6	+5.5	+8.4	+0.0	-16.1	+0.0	32.4	54.0	-21.6	Horiz
	Ave		+0.0	+0.0	+0.0	+0.0		STANDARD			100
			+0.0	+0.0	+0.0	+0.0		Average			
			+0.0	+0.0	+0.0						
37	9427.024M	20.5	+4.2	+6.4	+37.7	+0.0	+0.0	32.4	54.0	-21.6	Vert
	Ave		-36.4	+0.0	+0.0	+0.0	115	STANDARD			154
			+0.0	+0.0	+0.0	+0.0		Average			
			+0.0	+0.0	+0.0						
^	9427.000M	34.6	+4.2	+6.4	+37.7	+0.0	+0.0	46.5	54.0	-7.5	Vert
			-36.4	+0.0	+0.0	+0.0					101
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+0.0						
39	71850.000M	11.7	+0.0	+0.0	+0.0	+0.0	-30.0	32.1	54.0	-21.9	Vert
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+2.8	+0.0					
			+0.0	+47.6	+0.0						
40	8582.000M	22.1	+4.0	+5.8	+36.8	+0.0	+0.0	32.0	54.0	-22.0	Vert
	Ave		-36.7	+0.0	+0.0	+0.0	101	STANDARD			137
			+0.0	+0.0	+0.0	+0.0		Average			
			+0.0	+0.0	+0.0						
^	8582.000M	36.0	+4.0	+5.8	+36.8	+0.0	+0.0	45.9	54.0	-8.1	Vert
			-36.7	+0.0	+0.0	+0.0	-11				101
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+0.0						
42	72200.000M	11.5	+0.0	+0.0	+0.0	+0.0	-30.0	31.7	54.0	-22.3	Vert
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+2.8	+0.0					
			+0.0	+47.4	+0.0						

43	8619.960M	21.6	+4.0	+5.7	+36.9	+0.0	+0.0	31.5	54.0	-22.5	Vert
	Ave		-36.7	+0.0	+0.0	+0.0	111			STANDARD	137
			+0.0	+0.0	+0.0	+0.0				Average	
			+0.0	+0.0	+0.0						
^	8620.000M	36.6	+4.0	+5.7	+36.9	+0.0	+0.0	46.5	54.0	-7.5	Vert
			-36.7	+0.0	+0.0	+0.0					250
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+0.0						
45	13204.000M	35.7	+5.0	+7.3	+0.0	-16.7	+0.0	31.3	54.0	-22.7	Horiz
			+0.0	+0.0	+0.0	+0.0					99
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+0.0						
46	12885.000M	35.9	+4.9	+7.4	+0.0	-17.1	+0.0	31.1	54.0	-22.9	Horiz
			+0.0	+0.0	+0.0	+0.0					99
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+0.0						
47	62600.000M	12.0	+0.0	+0.0	+0.0	+0.0	-30.0	29.8	54.0	-24.2	Vert
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+2.6	+0.0					
			+0.0	+45.2	+0.0						
48	64200.000M	11.8	+0.0	+0.0	+0.0	+0.0	-30.0	29.2	54.0	-24.8	Horiz
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+2.6	+0.0					
			+0.0	+44.8	+0.0						
49	73900.000M	10.7	+0.0	+0.0	+0.0	+0.0	-30.0	28.9	54.0	-25.1	Horiz
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+2.9	+0.0					
			+0.0	+45.3	+0.0						
50	3085.044M	25.7	+2.3	+3.3	+30.1	+0.0	+0.0	23.8	54.0	-30.2	Vert
	Ave		-37.6	+0.0	+0.0	+0.0	114			CARRIER	147
			+0.0	+0.0	+0.0	+0.0				RELATED.	
			+0.0	+0.0	+0.0					STANDARD	
			+0.0	+0.0	+0.0					Average	
^	3085.000M	47.1	+2.3	+3.3	+30.1	+0.0	+0.0	45.2	54.0	-8.8	Vert
			-37.6	+0.0	+0.0	+0.0	-11			CARRIER	101
			+0.0	+0.0	+0.0	+0.0				RELATED.	
			+0.0	+0.0	+0.0						
52	93766.660M	4.0	+0.0	+0.0	+0.0	+0.0	-30.0	21.8	54.0	-32.2	Vert
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+2.6	+0.0					
			+45.2	+0.0	+0.0						
53	93751.660M	4.0	+0.0	+0.0	+0.0	+0.0	-30.0	21.8	54.0	-32.2	Vert
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+2.6	+0.0					
			+45.2	+0.0	+0.0						
54	93398.340M	3.7	+0.0	+0.0	+0.0	+0.0	-30.0	21.1	54.0	-32.9	Horiz
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+2.6	+0.0					
			+44.8	+0.0	+0.0						

55	93349.340M	3.5	+0.0	+0.0	+0.0	+0.0	-30.0	20.9	54.0	-33.1	Horiz
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+2.6	+0.0					
			+44.8	+0.0	+0.0						
56	52433.330M	14.7	+0.0	+0.0	+0.0	+0.0	-30.0	19.9	54.0	-34.1	Vert
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+3.0	+32.2					
			+0.0	+0.0	+0.0						
57	40066.670M	13.0	+0.0	+0.0	+0.0	+0.0	-30.0	15.9	54.0	-38.1	Vert
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+2.6	+30.3					
			+0.0	+0.0	+0.0						
58	52374.000M	10.5	+0.0	+0.0	+0.0	+0.0	-30.0	15.7	54.0	-38.3	Vert
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+3.0	+32.2					
			+0.0	+0.0	+0.0						
59	41813.000M	7.8	+0.0	+0.0	+0.0	+0.0	-30.0	10.8	54.0	-43.2	Horiz
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+2.7	+30.3					
			+0.0	+0.0	+0.0						
60	42674.000M	7.0	+0.0	+0.0	+0.0	+0.0	-30.0	10.0	54.0	-44.0	Horiz
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+2.8	+30.2					
			+0.0	+0.0	+0.0						
61	49769.670M	5.3	+0.0	+0.0	+0.0	+0.0	-30.0	8.4	54.0	-45.6	Horiz
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+3.0	+30.1					
			+0.0								
62	41755.250M	5.3	+0.0	+0.0	+0.0	+0.0	-30.0	8.3	54.0	-45.7	Horiz
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+2.7	+30.3					
			+0.0	+0.0	+0.0						

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer: **Safe View, Inc.**
 Specification: **FCC 15.209 30Mhz to 100 GHz**
 Work Order #: **80644** Date: **12/8/2005**
 Test Type: **Maximized Emissions** Time: **09:57:33**
 Equipment: **Security Portal** Sequence#: **33**
 Manufacturer: Safe View Tested By: Art Rice/S. Goulet
 Model: Scout 100
 S/N: A10051900104

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Security Portal	Safe View	Scout 100	A10051900104
Security Portal*	Safe View	Scout 100	A10051900104

Support Devices:

Function	Manufacturer	Model #	S/N
Desktop PC	MPC	Client Pro 414	3936233
PC Keyboard	MPC	SK-1688	C0501176267
PC Mouse	MPC	X09-88684	n/a
Desktop PC	MPC	Client Pro 414	3936233
PC Keyboard	MPC	SK-1688	C0501176267
PC Mouse	MPC	X09-88684	n/a

Test Conditions / Notes:

The Scout 100 Security Portal is operational. The Scout 100 is connected to a support PC by an ethernet connection. The support PC triggers the SCU to begin a security scan. The software is set up in CW transmit with sweep off. NOTE 1) Measured transmit fundamental spurious emissions at the middle antenna location only. Middle is antenna 192. NOTE 2) The EUT is transmitting at MID frequency of 27.0 GHz from 1-12GHz and 18-26GHz. NOTE 3) The EUT is transmitting at MID frequency of 27.0815 GHz from 12-18GHz. NOTE 4) Maximized Carrier and then looked for Spurs from 30 to 40GHz. No spurs were recorded while EUT was transmitting from the MID carrier frequency of 27.258GHz. NOTE 5) No spurs observed from 40-60Ghz while EUT was transmitting from the MID carrier frequency of 27.258GHz. NOTE 6) No spurs observed from 60-90Ghz while EUT was transmitting from the MID carrier frequency of 27.258GHz. NOTE 7) No spurs observed from 90-100GHz while EUT was transmitting from the MID carrier frequency of 27.258GHz. NOTE 8) Testing above 1GHz preformed with SA RBW=VBW=1MHz for Peak readings. NOTE 9) All average readings and their associated peak readings were maximized. Average readings are one of two types. STANDARD Average readings are the standard average reading with SA RBW=1MHz and VBW=1kHz.

Transducer Legend:

T1=CAB HF 72" ANP05315 Pasternack	T2=ANT 18-26GHz Active Horn
T3=P04240	T4=Horn Antenna AN02157 SN5655 (Hollister)
T5=ANT 12-18GHz Active Horn	T6=HP-83017A A/N 00785
T7=AMP AN00941A 50GHz	T8=ANP5201 1-40GHz
T9=Cable 40-120GHz P5315	T10=Mixer 40-60GHz 02347
T11=Mixer 60-90GHz 02347	T12=Mixer 90-110GHz 02349

Measurement Data:

#	Freq	Rdng	Reading listed by margin.				Test Distance: 3 Meters				
			T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5	T6	T7	T8					
			T9	T10	T11	T12					
			T13								
	MHz	dB μ V	dB	dB	dB	dB	Table	dB μ V/m	dB μ V/m	dB	Ant
1	1401.000M	57.5	+1.5	+0.0	+2.2	+25.2	+0.0	47.5	54.0	-6.5	Vert
			+0.0	-38.9	+0.0	+0.0	-11				99
			+0.0	+0.0	+0.0	+0.0					
2	13538.840M	49.4	+5.0	+0.0	+7.4	+0.0	+0.0	45.6	54.0	-8.4	Vert
Ave			-16.2	+0.0	+0.0	+0.0	348		Maximized		159
			+0.0	+0.0	+0.0	+0.0			Reading.		
			+0.0						STANDARD		
									Average		
3	17346.800M	44.3	+5.8	+0.0	+8.5	+0.0	+0.0	44.2	54.0	-9.8	Vert
Ave			-14.4	+0.0	+0.0	+0.0	-10		STANDARD		99
			+0.0	+0.0	+0.0	+0.0			Average		
4	17297.000M	44.4	+5.8	+0.0	+8.5	+0.0	+0.0	44.1	54.0	-9.9	Vert
Ave			-14.6	+0.0	+0.0	+0.0			STANDARD		99
			+0.0	+0.0	+0.0	+0.0			Average		
5	1600.000M	52.1	+1.6	+0.0	+2.3	+26.1	+0.0	43.6	54.0	-10.4	Vert
Ave			+0.0	-38.5	+0.0	+0.0	78		STANDARD		204
			+0.0	+0.0	+0.0	+0.0			Average		
^	1600.050M	56.6	+1.6	+0.0	+2.3	+26.1	+0.0	48.1	54.0	-5.9	Vert
			+0.0	-38.5	+0.0	+0.0	78				204
			+0.0	+0.0	+0.0	+0.0					
7	13539.000M	46.3	+5.0	+0.0	+7.4	+0.0	+0.0	42.5	54.0	-11.5	Vert
Ave			-16.2	+0.0	+0.0	+0.0	-9		STANDARD		113
			+0.0	+0.0	+0.0	+0.0			Average		
8	12134.010M	34.2	+4.8	+0.0	+6.8	+38.9	+0.0	42.0	54.0	-12.0	Vert
Ave			-13.9	+0.0	-28.8	+0.0			Carrier Related.		
			+0.0	+0.0	+0.0	+0.0			STANDARD		
			+0.0						Average		
^	12134.010M	34.2	+4.8	+0.0	+6.8	+0.0	+0.0	31.9	54.0	-22.1	Vert
			-13.9	+0.0	+0.0	+0.0			CARRIER		101
			+0.0	+0.0	+0.0	+0.0			RELATED.		
			+0.0								

10	17300.000M	41.9	+5.8	+0.0	+8.5	+0.0	+0.0	41.6	54.0	-12.4	Horiz
	Ave		-14.6	+0.0	+0.0	+0.0	-9				100
			+0.0	+0.0	+0.0	+0.0					Average
			+0.0								
11	1500.006M	49.0	+1.6	+0.0	+2.3	+25.5	+0.0	39.8	54.0	-14.2	Vert
	Ave		+0.0	-38.6	+0.0	+0.0	145				259
			+0.0	+0.0	+0.0	+0.0					Average
			+0.0								
^	1500.032M	55.5	+1.6	+0.0	+2.3	+25.5	+0.0	46.3	54.0	-7.7	Vert
			+0.0	-38.6	+0.0	+0.0	145				259
			+0.0	+0.0	+0.0	+0.0					
13	13946.000M	42.7	+5.2	+0.0	+7.5	+0.0	+0.0	39.3	54.0	-14.7	Horiz
	Ave		-16.1	+0.0	+0.0	+0.0					100
			+0.0	+0.0	+0.0	+0.0					Average
			+0.0								
14	20307.420M	46.9	+6.4	-8.7	+0.0	+0.0	-10.0	38.9	54.0	-15.1	Vert
	Ave		+0.0	+0.0	+0.0	+4.3	33				145
			+0.0	+0.0	+0.0	+0.0					Average
			+0.0								
^	20307.390M	52.7	+6.4	-8.7	+0.0	+0.0	-10.0	44.7	54.0	-9.3	Vert
			+0.0	+0.0	+0.0	+4.3	33				145
			+0.0	+0.0	+0.0	+0.0					Average
			+0.0								
16	12725.000M	41.8	+4.9	+0.0	+7.3	+0.0	+0.0	37.1	54.0	-16.9	Vert
	Ave		-16.9	+0.0	+0.0	+0.0	-9				113
			+0.0	+0.0	+0.0	+0.0					Average
			+0.0								
17	12699.000M	41.1	+4.9	+0.0	+7.2	+0.0	+0.0	36.4	54.0	-17.6	Horiz
	Ave		-16.8	+0.0	+0.0	+0.0					100
			+0.0	+0.0	+0.0	+0.0					Average
			+0.0								
18	9378.000M	21.7	+4.2	+0.0	+6.2	+37.7	+0.0	33.4	54.0	-20.6	Vert
	Ave		+0.0	-36.4	+0.0	+0.0					101
			+0.0	+0.0	+0.0	+0.0					Average
			+0.0								
^	9378.000M	36.1	+4.2	+0.0	+6.2	+37.7	+0.0	47.8	54.0	-6.2	Vert
			+0.0	-36.4	+0.0	+0.0	-11				101
			+0.0	+0.0	+0.0	+0.0					Average
			+0.0								
20	20311.930M	39.7	+6.4	-8.7	+0.0	+0.0	-10.0	31.7	54.0	-22.3	Horiz
	Ave		+0.0	+0.0	+0.0	+4.3	59				145
			+0.0	+0.0	+0.0	+0.0					Average
			+0.0								
^	20311.930M	51.3	+6.4	-8.7	+0.0	+0.0	-10.0	43.3	54.0	-10.7	Horiz
			+0.0	+0.0	+0.0	+4.3	59				145
			+0.0	+0.0	+0.0	+0.0					Average
			+0.0								

22	61750.000M	12.2	+0.0	+0.0	+0.0	+0.0	-30.0	30.2	54.0	-23.8	Vert
			+0.0	+0.0	+0.0	+0.0					
			+2.6	+0.0	+45.4	+0.0					
23	73000.000M	10.8	+0.0	+0.0	+0.0	+0.0	-30.0	30.1	54.0	-23.9	Horiz
			+0.0	+0.0	+0.0	+0.0					
			+2.9	+0.0	+46.4	+0.0					
24	60250.000M	11.8	+0.0	+0.0	+0.0	+0.0	-30.0	30.1	54.0	-23.9	Horiz
			+0.0	+0.0	+0.0	+0.0					
			+2.5	+0.0	+45.8	+0.0					
25	61450.000M	12.0	+0.0	+0.0	+0.0	+0.0	-30.0	30.0	54.0	-24.0	Vert
			+0.0	+0.0	+0.0	+0.0					
			+2.5	+0.0	+45.5	+0.0					
26	1596.326M	33.5	+1.6	+0.0	+2.3	+26.1	+0.0	25.0	54.0	-29.0	Vert
Ave			+0.0	-38.5	+0.0	+0.0	236		STANDARD		150
			+0.0	+0.0	+0.0	+0.0			Average		
			+0.0								
^	1596.357M	57.3	+1.6	+0.0	+2.3	+26.1	+0.0	48.8	54.0	-5.2	Vert
			+0.0	-38.5	+0.0	+0.0	-11				99
			+0.0	+0.0	+0.0	+0.0					
28	77600.000M	11.0	+0.0	+0.0	+0.0	+0.0	-30.0	24.8	54.0	-29.2	Horiz
			+0.0	+0.0	+0.0	+0.0					
			+2.9	+0.0	+40.9	+0.0					
29	56800.000M	15.8	+0.0	+0.0	+0.0	+0.0	-30.0	24.7	54.0	-29.3	Horiz
			+0.0	+0.0	+0.0	+0.0					
			+3.1	+35.8	+0.0	+0.0					
30	57900.000M	14.3	+0.0	+0.0	+0.0	+0.0	-30.0	24.1	54.0	-29.9	Vert
			+0.0	+0.0	+0.0	+0.0					
			+3.1	+36.7	+0.0	+0.0					
31	93766.660M	4.0	+0.0	+0.0	+0.0	+0.0	-30.0	21.8	54.0	-32.2	Vert
			+0.0	+0.0	+0.0	+0.0					
			+2.6	+0.0	+0.0	+45.2					
32	93751.660M	4.0	+0.0	+0.0	+0.0	+0.0	-30.0	21.8	54.0	-32.2	Vert
			+0.0	+0.0	+0.0	+0.0					
			+2.6	+0.0	+0.0	+45.2					

33	1396.745M	31.7	+1.5	+0.0	+2.2	+25.2	+0.0	21.6	54.0	-32.4	Vert
	Ave		+0.0	-39.0	+0.0	+0.0	221		STANDARD		104
			+0.0	+0.0	+0.0	+0.0			Average		
			+0.0								
^	1396.748M	62.2	+1.5	+0.0	+2.2	+25.2	+0.0	52.1	54.0	-1.9	Vert
			+0.0	-39.0	+0.0	+0.0	221				104
			+0.0	+0.0	+0.0	+0.0					
35	93398.340M	3.7	+0.0	+0.0	+0.0	+0.0	-30.0	21.1	54.0	-32.9	Horiz
			+0.0	+0.0	+0.0	+0.0					
			+2.6	+0.0	+0.0	+44.8					
36	93349.340M	3.5	+0.0	+0.0	+0.0	+0.0	-30.0	20.9	54.0	-33.1	Horiz
			+0.0	+0.0	+0.0	+0.0					
			+2.6	+0.0	+0.0	+44.8					
37	12133.930M	20.7	+4.8	+0.0	+6.8	+0.0	+0.0	18.4	54.0	-35.6	Vert
	Ave		-13.9	+0.0	+0.0	+0.0	336		CARRIER		203
			+0.0	+0.0	+0.0	+0.0			RELATED.		
			+0.0						STANDARD		
									Average		
38	40280.000M	13.7	+0.0	+0.0	+0.0	+0.0	-30.0	16.6	54.0	-37.4	Horiz
			+0.0	+0.0	+0.0	+0.0					
			+2.6	+30.3	+0.0	+0.0					
39	40100.000M	13.5	+0.0	+0.0	+0.0	+0.0	-30.0	16.4	54.0	-37.6	Horiz
			+0.0	+0.0	+0.0	+0.0					
			+2.6	+30.3	+0.0	+0.0					
40	40300.000M	13.5	+0.0	+0.0	+0.0	+0.0	-30.0	16.4	54.0	-37.6	Vert
			+0.0	+0.0	+0.0	+0.0					
			+2.6	+30.3	+0.0	+0.0					
41	43800.000M	11.0	+0.0	+0.0	+0.0	+0.0	-30.0	14.0	54.0	-40.0	Horiz
			+0.0	+0.0	+0.0	+0.0					
			+2.8	+30.2	+0.0	+0.0					

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer: **Safe View, Inc.**
 Specification: **FCC 15.209 1-100 GHz**
 Work Order #: **84413** Date: **11/15/2005**
 Test Type: **Maximized Emissions** Time: **14:20:03**
 Equipment: **Security Portal** Sequence#: **68**
 Manufacturer: Safe View Tested By: **S. Goulet/A. Rice**
 Model: Scout 100
 S/N: **A10051900104**

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Security Portal*	Safe View	Scout 100	A10051900104
Security Portal*	Safe View	Scout 100	A10051900104

Support Devices:

Function	Manufacturer	Model #	S/N
Desktop PC	MPC	Client Pro 414	3936233
PC Keyboard	MPC	SK-1688	C0501176267
PC Mouse	MPC	X09-88684	n/a
Desktop PC	MPC	Client Pro 414	3936233
PC Keyboard	MPC	SK-1688	C0501176267
PC Mouse	MPC	X09-88684	n/a

Test Conditions / Notes:

The Scout 100 Security Portal is operational and running on an auto-cycle pause time of 6 seconds. The Scout 100 is connected to a support PC by an ethernet connection. The support PC triggers the SCU to begin a security scan. The software is set up in CW transmit with sweep off. NOTE 1) Measured transmit fundamental spurious emissions at the middle antenna location only. Middle is antenna 192. NOTE 2) The EUT is transmitting at HI frequency of 29.8 GHz from 1-12GHz and 18-26GHz. NOTE 3) The EUT is transmitting at HI frequency of 29.8624 GHz from 12-18GHz. NOTE 4) Maximized Carrier and then looked for Spurs from 30 to 40GHz. No spurs were recorded within 20 dB of the limit while transmitting at 29.065GHz HI Frequency setting of the EUT. NOTE 5) No spurs observed from 40-60GHz while EUT was transmitting from the HI carrier frequency of 29.798GHz. NOTE 6) No spurs observed from 60-90Ghz while EUT was transmitting from the HI carrier frequency of 29.798GHz. NOTE 7) No spurs observed from 90-100GHz while EUT was transmitting from the HI carrier frequency of 29.798GHz. NOTE 8) Testing above 1GHz preformed with SA RBW=VBW=1MHz for Peak readings. NOTE 9) All average readings and their associated peak readings were maximized. Average readings are one of two types. STANDARD Average readings are the standard average reading with SA RBW=1MHz and VBW=1kHz.

Transducer Legend:

T1=CAB HF 72" ANP05315 Pasternack	T2=P04240
T3=Horn Antenna AN02157 SN5655 (Hollister)	T4=ANT 12-18GHz Active Horn
T5=HP-83017A A/N 00785	T6=ANT 18-26GHz Active Horn
T7=ANP5201 1-40GHz	T8=Cable 40-120GHz P5315
T9=Mixer 40-60GHz 02347	T10=Mixer 90-110GHz 02349
T11=Mixer 60-90GHz 02348	

Measurement Data:

Reading listed by margin.

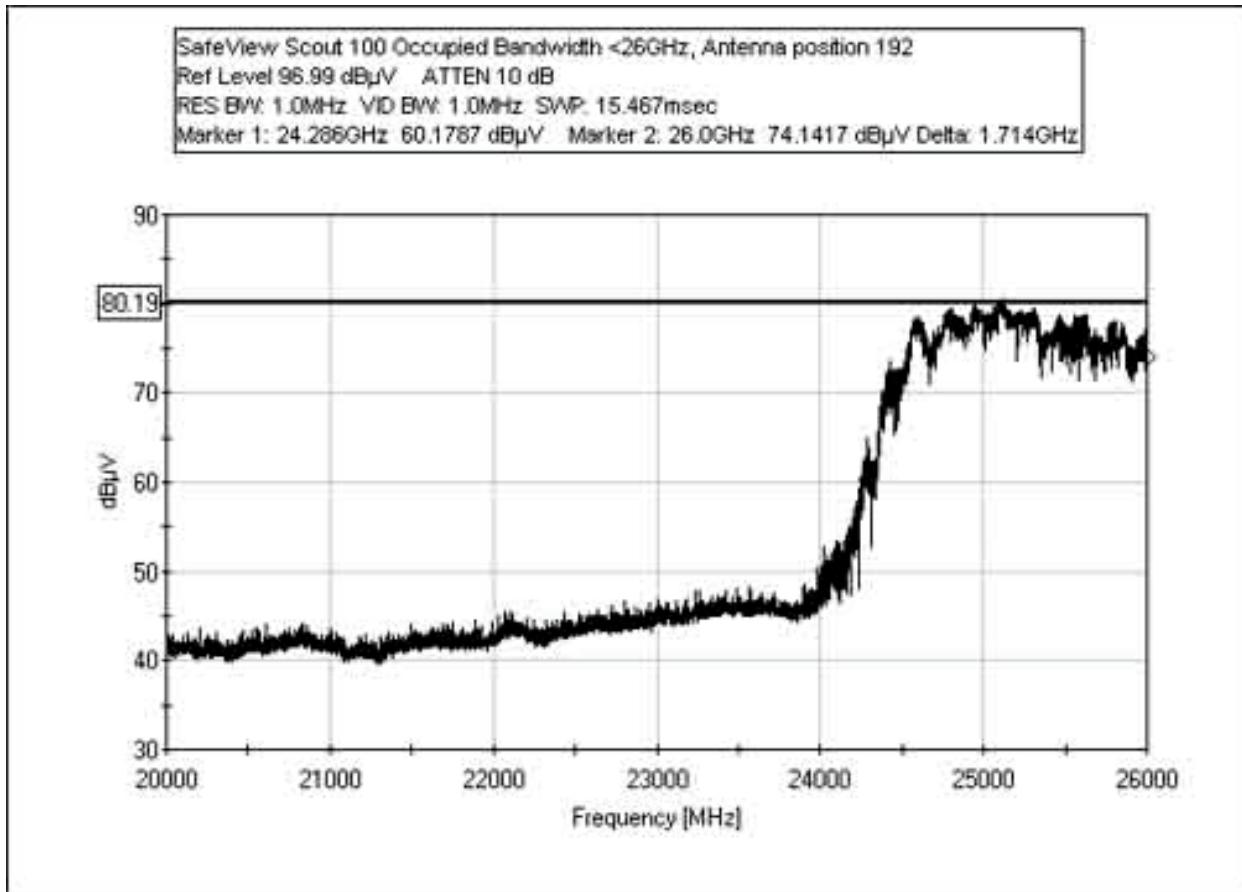
Test Distance: 3 Meters

#	Freq	Rdng	T1 T5 T9 MHz	T2 T6 T10	T3 T7 T11	T4 T8	Dist	Corr	Spec	Margin	Polar
#			dB μ V	dB	dB	dB	Table	dB μ V/m	dB μ V/m	dB	Ant
1	22393.570M	50.3	+6.7 +0.0 +0.0	+0.0 -8.1 +0.0	+0.0 +4.4 +0.0	+0.0 +0.0 +0.0	+0.0 198	53.3 STANDARD Average	54.0 54.0	-0.7 154	Vert
^	22393.570M	55.9	+6.7 +0.0 +0.0	+0.0 -8.1 +0.0	+0.0 +4.4 +0.0	+0.0 +0.0 +0.0	+0.0 198	58.9	54.0	+4.9	Vert 154
3	22393.030M	50.0	+6.7 +0.0 +0.0	+0.0 -8.1 +0.0	+0.0 +4.4 +0.0	+0.0 +0.0 +0.0	+0.0 -8	53.0 STANDARD Average	54.0 54.0	-1.0 155	Horiz
^	22393.100M	54.4	+6.7 +0.0 +0.0	+0.0 -8.1 +0.0	+0.0 +4.4 +0.0	+0.0 +0.0 +0.0	+0.0 -7	57.4 Max'd	54.0 54.0	+3.4 154	Horiz
5	9222.000M	36.5	+4.1 -36.6 +0.0	+6.0 +0.0 +0.0	+37.6 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 371	47.6	54.0	-6.4	Vert 248
6	6133.000M	42.3	+3.2 -37.2 +0.0	+4.8 +0.0 +0.0	+34.3 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 -11	47.4	54.0	-6.6	Vert 250
7	8546.000M	37.4	+4.0 -36.7 +0.0	+5.8 +0.0 +0.0	+36.8 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 371	47.3	54.0	-6.7	Vert 100
8	9085.000M	36.7	+4.1 -36.8 +0.0	+5.8 +0.0 +0.0	+37.5 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 -11	47.3	54.0	-6.7	Vert 99
9	1600.000M	53.7	+1.6 -38.5 +0.0	+2.3 +0.0 +0.0	+26.1 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 83	45.2 STANDARD Average	54.0 54.0	-8.8 258	Vert
^	1600.000M	56.9	+1.6 -38.5 +0.0	+2.3 +0.0 +0.0	+26.1 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 83	48.4	54.0	-5.6	Vert 258
11	17213.000M	45.3	+5.8 +0.0 +0.0	+8.6 +0.0 +0.0	+0.0 +0.0 +0.0	-14.9 +0.0 +0.0	+0.0 -9	44.8 STANDARD Average	54.0 54.0	-9.2 100	Horiz
12	7460.256M	35.5	+3.7 -37.0 +0.0	+5.6 +0.0 +0.0	+36.2 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 188	44.0 STANDARD Average	54.0 54.0	-10.0 119	Vert
^	7460.226M	39.6	+3.7 -37.0 +0.0	+5.6 +0.0 +0.0	+36.2 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 188	48.1	54.0	-5.9	Vert 119

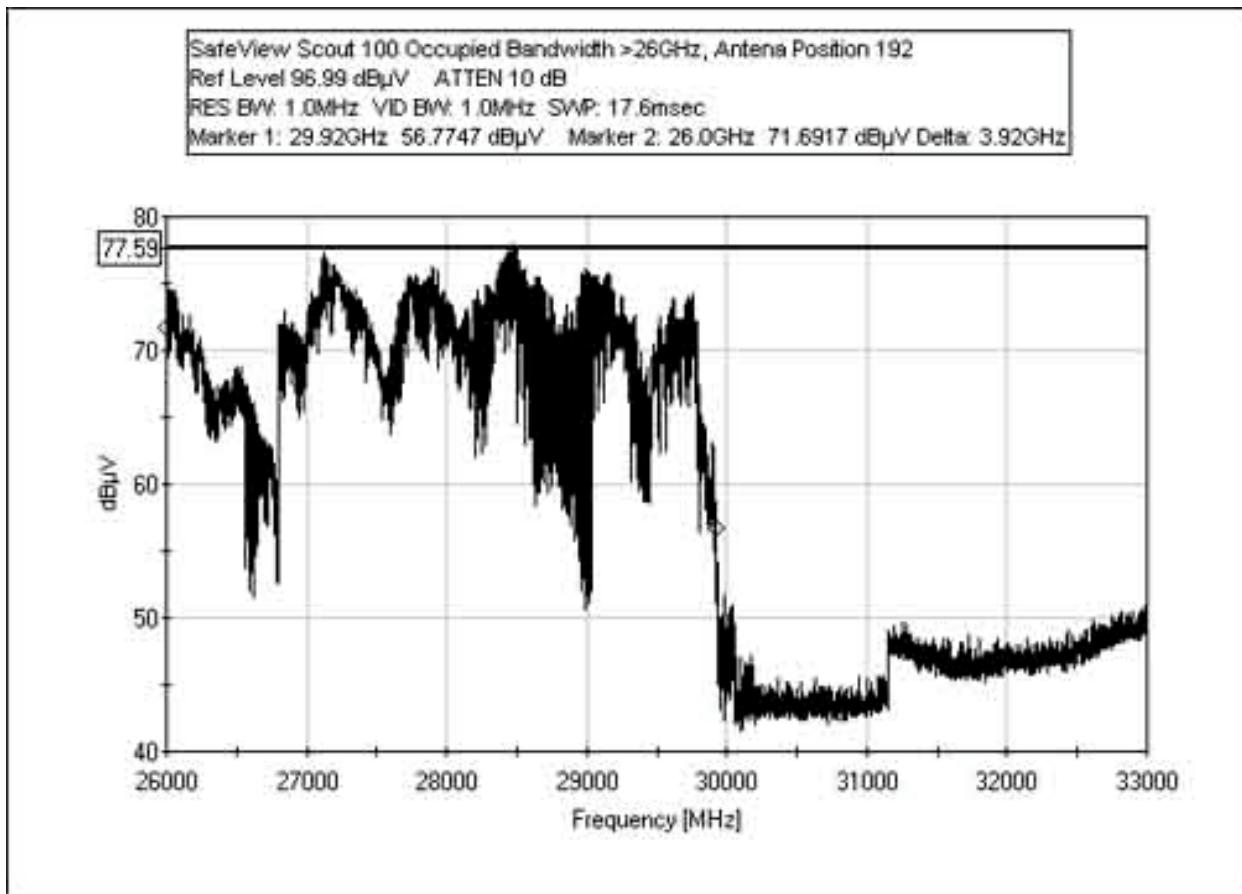
14	14012.000M	46.9	+5.2	+7.7	+0.0	-15.8	+0.0	44.0	54.0	-10.0	Horiz
	Ave		+0.0	+0.0	+0.0	+0.0	-9		STANDARD		100
			+0.0	+0.0					Average		
15	17210.000M	44.1	+5.8	+8.6	+0.0	-14.9	+0.0	43.6	54.0	-10.4	Horiz
	Ave		+0.0	+0.0	+0.0	+0.0	-9		STANDARD		100
			+0.0	+0.0					Average		
16	13955.000M	43.7	+5.2	+7.6	+0.0	-16.0	+0.0	40.5	54.0	-13.5	Horiz
	Ave		+0.0	+0.0	+0.0	+0.0	-9		STANDARD		100
			+0.0	+0.0					Average		
17	12017.650M	21.0	+4.7	+6.7	+39.0	+0.0	+0.0	35.0	54.0	-19.0	Vert
	Ave		-36.4	+0.0	+0.0	+0.0	116		STANDARD		116
			+0.0	+0.0					Average		
^	12017.650M	34.8	+4.7	+6.7	+39.0	+0.0	+0.0	48.8	54.0	-5.2	Vert
			-36.4	+0.0	+0.0	+0.0	116				116
			+0.0	+0.0							
19	12051.360M	20.8	+4.7	+6.7	+39.0	+0.0	+0.0	34.8	54.0	-19.2	Vert
	Ave		-36.4	+0.0	+0.0	+0.0	283		STANDARD		207
			+0.0	+0.0					Average		
^	12051.370M	35.6	+4.7	+6.7	+39.0	+0.0	+0.0	49.6	54.0	-4.4	Vert
			-36.4	+0.0	+0.0	+0.0	283				207
			+0.0	+0.0							
21	9139.000M	21.3	+4.1	+5.9	+37.5	+0.0	+0.0	32.1	54.0	-21.9	Vert
	Ave		-36.7	+0.0	+0.0	+0.0	285		STANDARD		203
			+0.0	+0.0					Average		
^	9139.000M	34.7	+4.1	+5.9	+37.5	+0.0	+0.0	45.5	54.0	-8.5	Vert
			-36.7	+0.0	+0.0	+0.0	369				99
			+0.0	+0.0							
23	71450.000M	11.5	+0.0	+0.0	+0.0	+0.0	-30.0	31.7	54.0	-22.3	Horiz
			+0.0	+0.0	+0.0	+2.8					
			+0.0	+0.0	+47.4						
24	62150.000M	12.5	+0.0	+0.0	+0.0	+0.0	-30.0	30.4	54.0	-23.6	Vert
			+0.0	+0.0	+0.0	+2.6					
			+0.0	+0.0	+45.3						
25	68750.000M	11.7	+0.0	+0.0	+0.0	+0.0	-30.0	30.4	54.0	-23.6	Horiz
			+0.0	+0.0	+0.0	+2.8					
			+0.0	+0.0	+45.9						
26	63200.000M	12.0	+0.0	+0.0	+0.0	+0.0	-30.0	29.7	54.0	-24.3	Horiz
			+0.0	+0.0	+0.0	+2.6					
			+0.0	+0.0	+45.1						
27	61603.330M	8.3	+0.0	+0.0	+0.0	+0.0	-30.0	26.4	54.0	-27.6	Vert
			+0.0	+0.0	+0.0	+2.6					
			+0.0	+0.0	+45.5						
28	77700.000M	12.0	+0.0	+0.0	+0.0	+0.0	-30.0	25.7	54.0	-28.3	Vert
			+0.0	+0.0	+0.0	+2.9					
			+0.0	+0.0	+40.8						
29	93766.660M	4.0	+0.0	+0.0	+0.0	+0.0	-30.0	21.8	54.0	-32.2	Vert
			+0.0	+0.0	+0.0	+2.6					
			+0.0	+0.0	+45.2						
30	93751.660M	4.0	+0.0	+0.0	+0.0	+0.0	-30.0	21.8	54.0	-32.2	Vert
			+0.0	+0.0	+0.0	+2.6					
			+0.0	+0.0	+45.2						

31	93398.340M	3.7	+0.0	+0.0	+0.0	+0.0	-30.0	21.1	54.0	-32.9	Horiz
			+0.0	+0.0	+0.0		+2.6				
			+0.0	+44.8							
32	53433.330M	14.8	+0.0	+0.0	+0.0	+0.0	-30.0	21.0	54.0	-33.0	Vert
			+0.0	+0.0	+0.0		+3.1				
			+33.1	+0.0							
33	53433.330M	14.8	+0.0	+0.0	+0.0	+0.0	-30.0	21.0	54.0	-33.0	Horiz
			+0.0	+0.0	+0.0		+3.1				
			+33.1	+0.0							
34	93349.340M	3.5	+0.0	+0.0	+0.0	+0.0	-30.0	20.9	54.0	-33.1	Horiz
			+0.0	+0.0	+0.0		+2.6				
			+0.0	+44.8							
35	40300.000M	13.7	+0.0	+0.0	+0.0	+0.0	-30.0	16.6	54.0	-37.4	Vert
			+0.0	+0.0	+0.0		+2.6				
			+30.3	+0.0							
36	40066.670M	13.2	+0.0	+0.0	+0.0	+0.0	-30.0	16.1	54.0	-37.9	Horiz
			+0.0	+0.0	+0.0		+2.6				
			+30.3	+0.0							
37	40126.670M	10.2	+0.0	+0.0	+0.0	+0.0	-30.0	13.1	54.0	-40.9	Vert
			+0.0	+0.0	+0.0		+2.6				
			+30.3	+0.0							

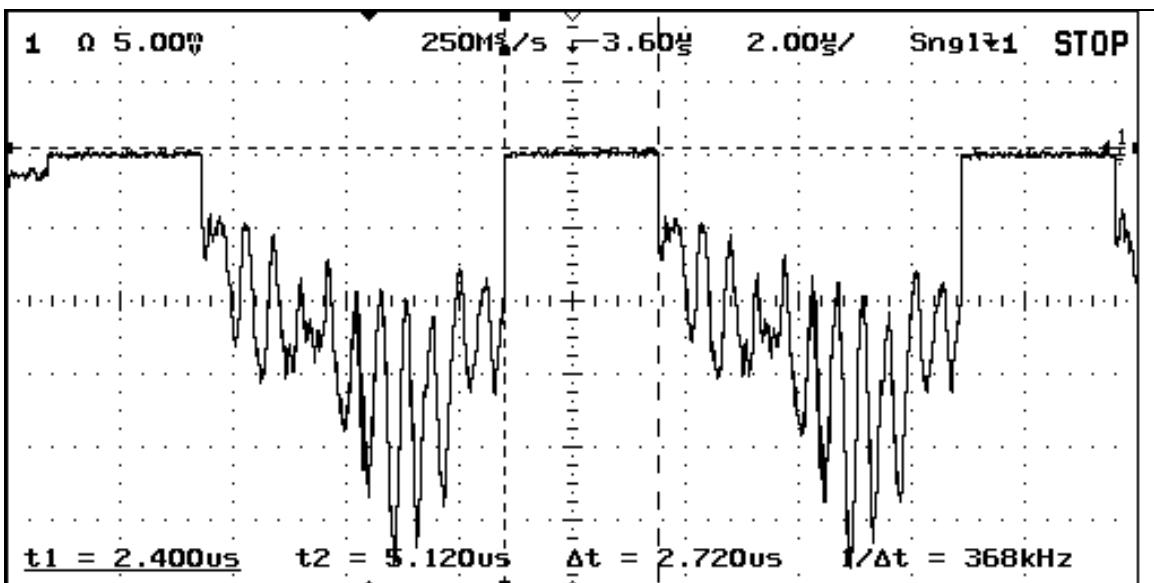
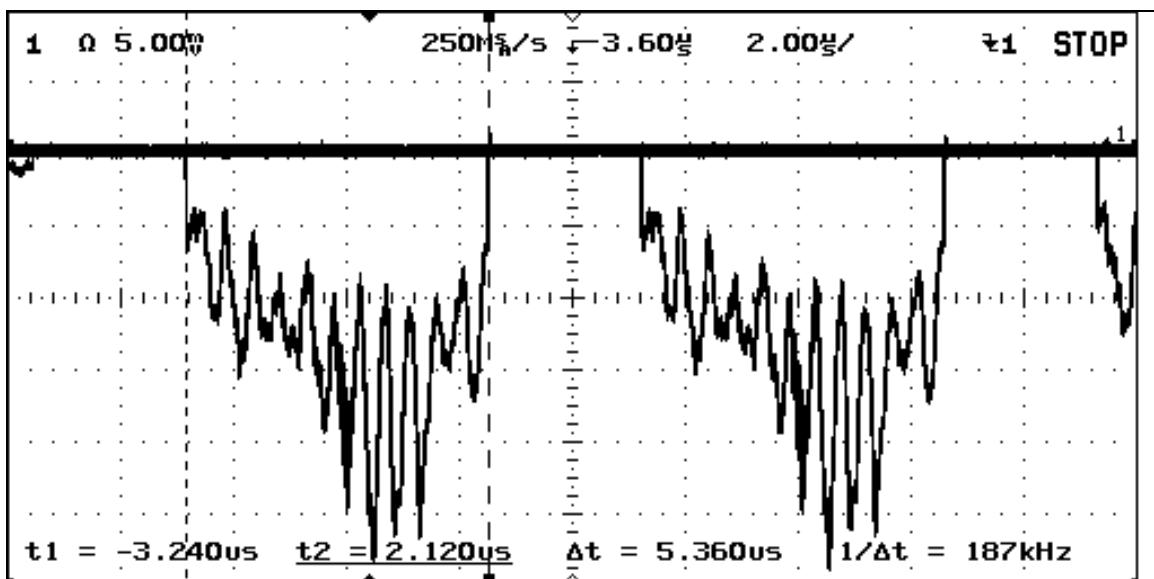
OCCUPIED BANDWIDTH PLOT <26 GHz



OCCUPIED BANDWIDTH PLOT >26 GHz



CARRIER MEASUREMENTS – PULSE TIMING



Duty Cycle Correction Factor

The Duty Cycle Correction Factor (DCCF) is calculated as follows:

$$DCCF = 10 \cdot \log \left(\frac{\text{Measurement Bandwidth}}{\text{Occupied Bandwidth}} \cdot \frac{\text{Pulse Duration(Sweeping)}}{\text{PRF}} \right)$$

The measurement of occupied bandwidth was measured as the 20dB bandwidth. The low end 20dB point is at 24.286GHz. The high end 20dB point is 29.92GHz. This gives an Occupied Bandwidth of 5.634GHz or 5634MHz. The Measurement Bandwidth is 1MHz.

The pulse duration of the Duty Cycle is 5.36 us. The off time of the pulse is 2.72 us. This gives a PRF of 8.08 us (pulse duration plus off time).

Substituting the above values into the formula listed above yields:

$$DCCF = 10 \cdot \log \left(\frac{1}{5634} \cdot \frac{5.36}{8.08} \right)$$

$$DCCF = 10 \cdot \log(1.1774 \times 10^{-4})$$

$$DCCF = -39.29 \text{ dB}$$

This correction factor will be applied to the carrier emissions within the band 24.25 GHz to 30 GHz only.

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 cables were routed consistent with the typical application by varying the configuration of the test sample. Interface cables were connected to the available I/O ports of the test unit. The effect of varying the position of the cables was investigated to find the configuration that produced maximum emissions. I/O cables were of the type and length specified in the individual requirements. The length of cable that produced maximum emissions was selected.

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 μ V/m, the spectrum analyzer reading in dB μ V was corrected by using the following formula in Table A. This reading was then compared to the applicable specification limit to determine compliance.

TABLE A: SAMPLE CALCULATIONS

Meter reading	(dB μ V)
+ Antenna Factor	(dB)
+ Cable Loss	(dB)
- Distance Correction	(dB)
- Preamplifier Gain	(dB)
= Corrected Reading	(dB μ V/m)

TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed in Appendix B were used to collect both the radiated and conducted emissions data. For radiated measurements from 9 kHz to 30 MHz, the magnetic loop antenna was used. For frequencies from 30 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 indicate the type of detector function used to obtain the given readings. Unless otherwise noted, all readings were made in the "Peak" mode. 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.

Standard 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.

Duty Cycle Correction Factor

DCCF average readings are based on the Duty Cycle Correction factor from the SafeView Proposed Waiver to the FCC. The DCCF average is only applied to carrier related signals.

EUT TESTING

Mains Conducted Emissions

During conducted emissions testing, the EUT, as a floor standing unit, was located on top of insulating tile that was laid over the ground plane.

The vertical metal plane used for conducted emissions was grounded to the earth. Power to the EUT was provided through a LISN. 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 μ H/-+50 ohms. A 30 to 50 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.

Radiated Emissions

The EUT as a floor standing unit, was rolled out on a conducting, flush mounted turntable which was continuous with the ground plane.

During the preliminary radiated scan, the EUT was powered up and operating in its defined FCC test mode. For radiated measurements from 9 kHz to 30 MHz, the magnetic loop antenna was used. 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.

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

APPENDIX A
TEST SETUP PHOTOGRAPHS

PHOTOGRAPH SHOWING VOLTAGE VARIATION

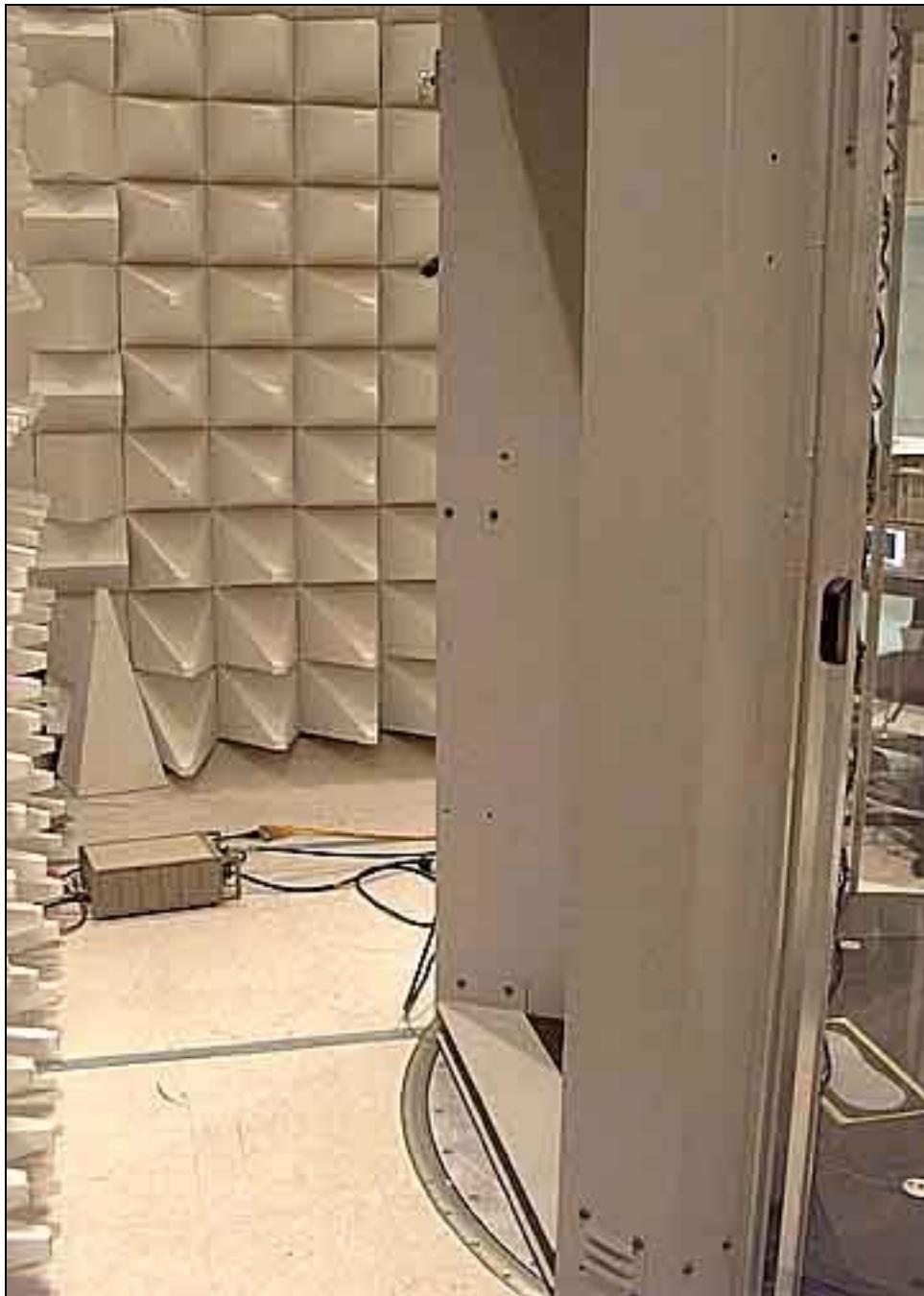


PHOTOGRAPH SHOWING MAINS CONDUCTED EMISSIONS



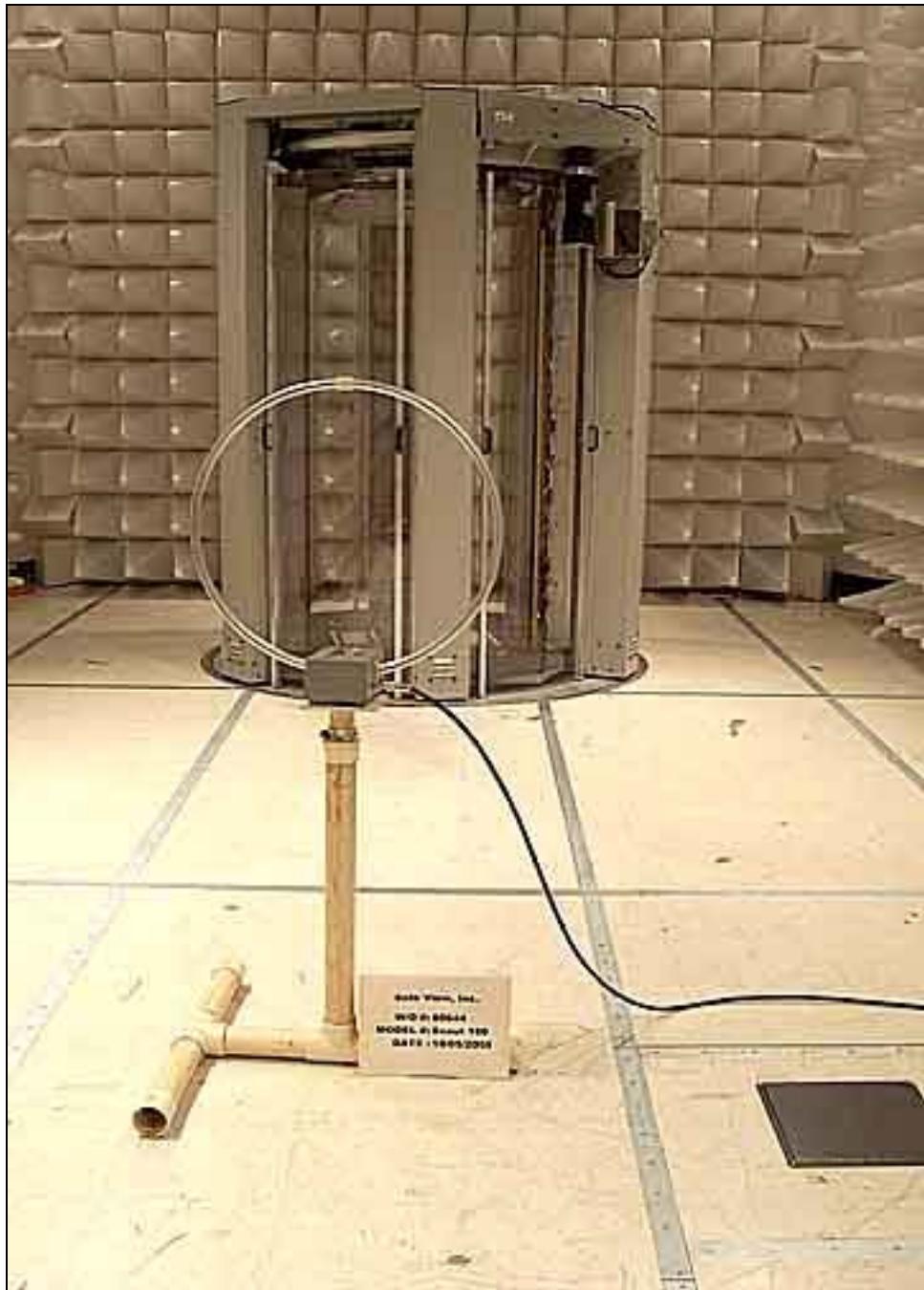
Mains Conducted Emissions

PHOTOGRAPH SHOWING MAINS CONDUCTED EMISSIONS



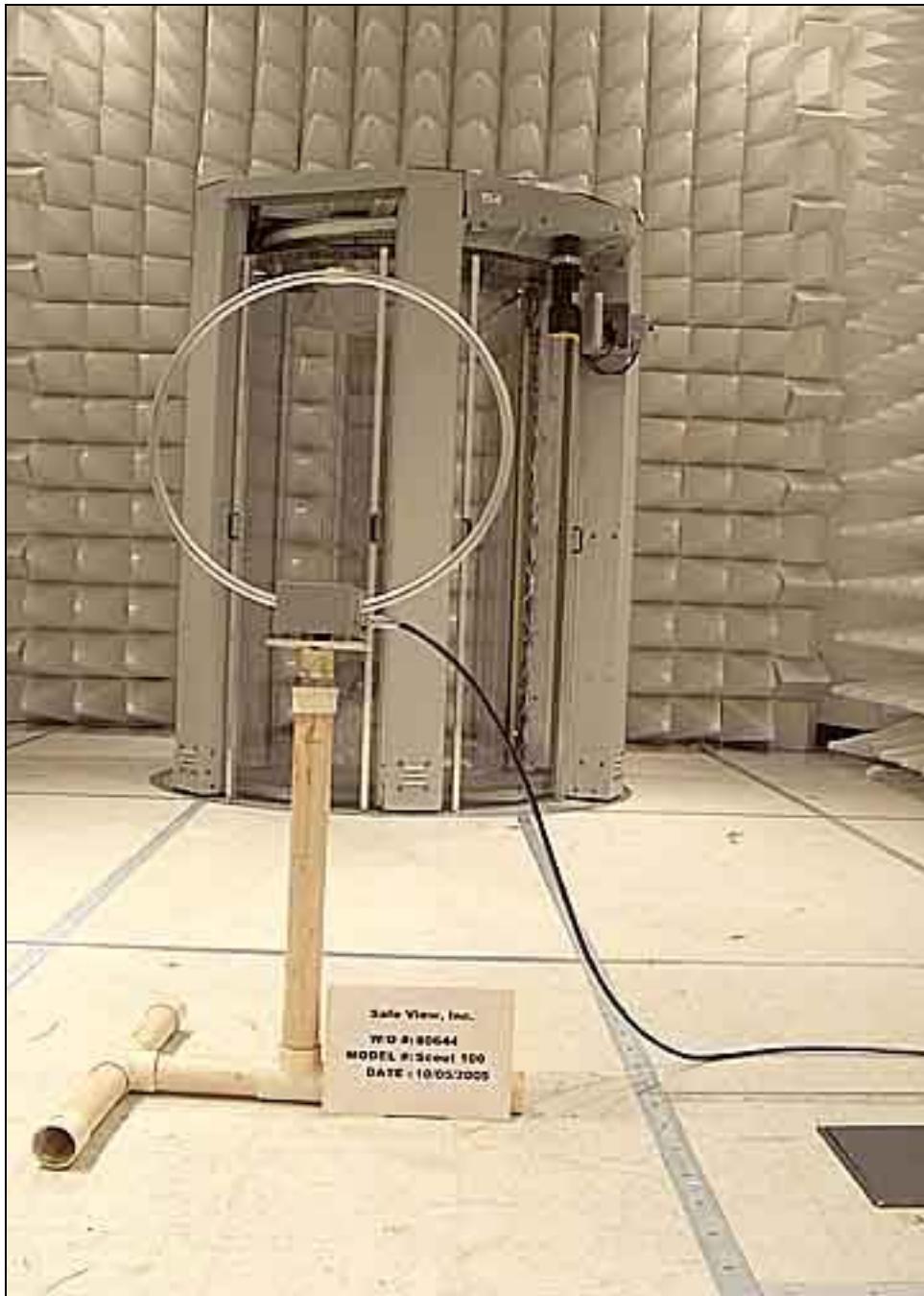
Mains Conducted Emissions

PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - Front View - 9 kHz - 30 MHz

PHOTOGRAPH SHOWING RADIATED EMISSIONS



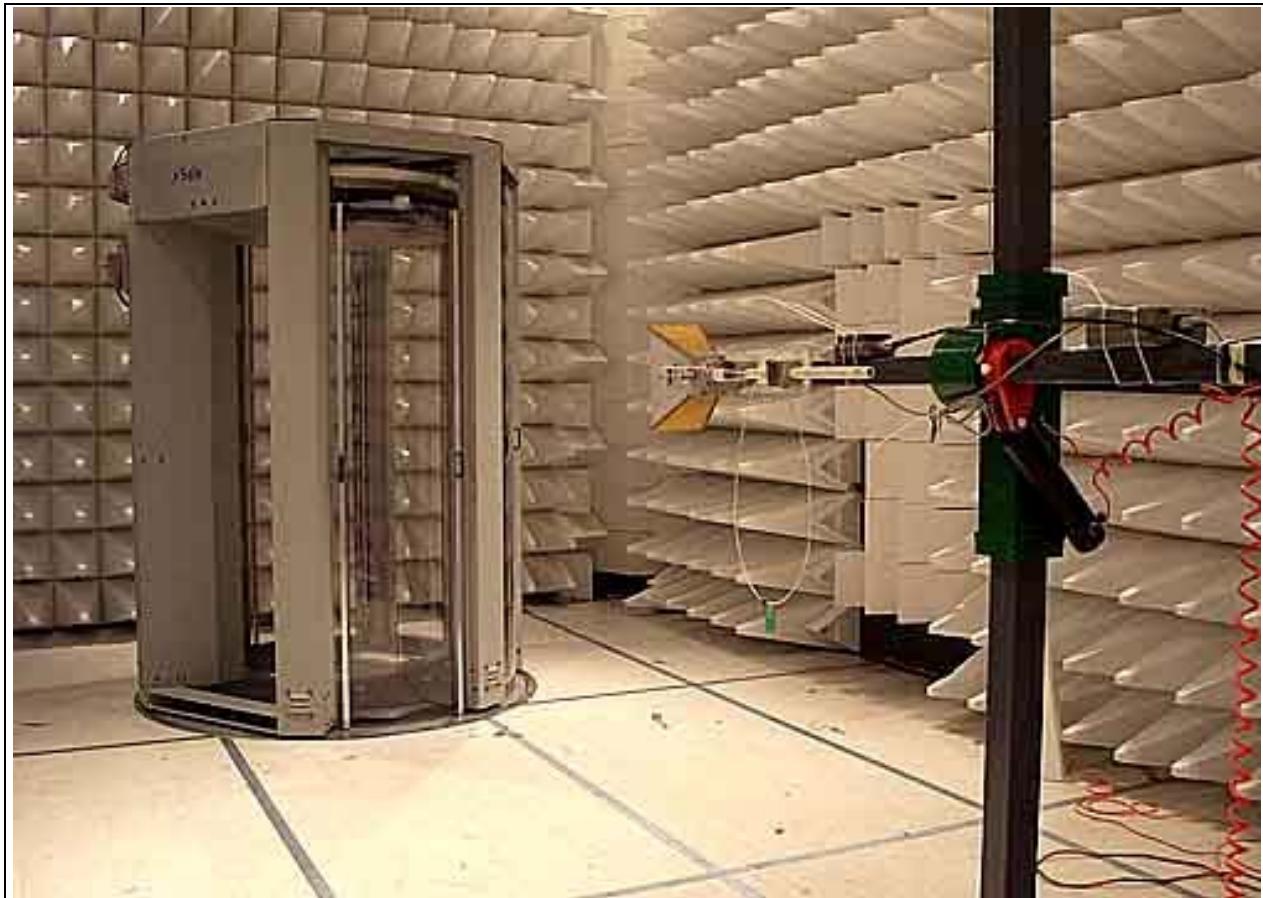
Radiated Emissions - Front View - 9 kHz - 30 MHz

PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - Front View - 1-1000 MHz

PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - 1-12.5 GHz

PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - 12-40 GHz Sample Setup at 1 Meter

PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - 12-40 GHz Sample Setup at 3 Meters

PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - 40-100 GHz Sample Setup Using Mixers

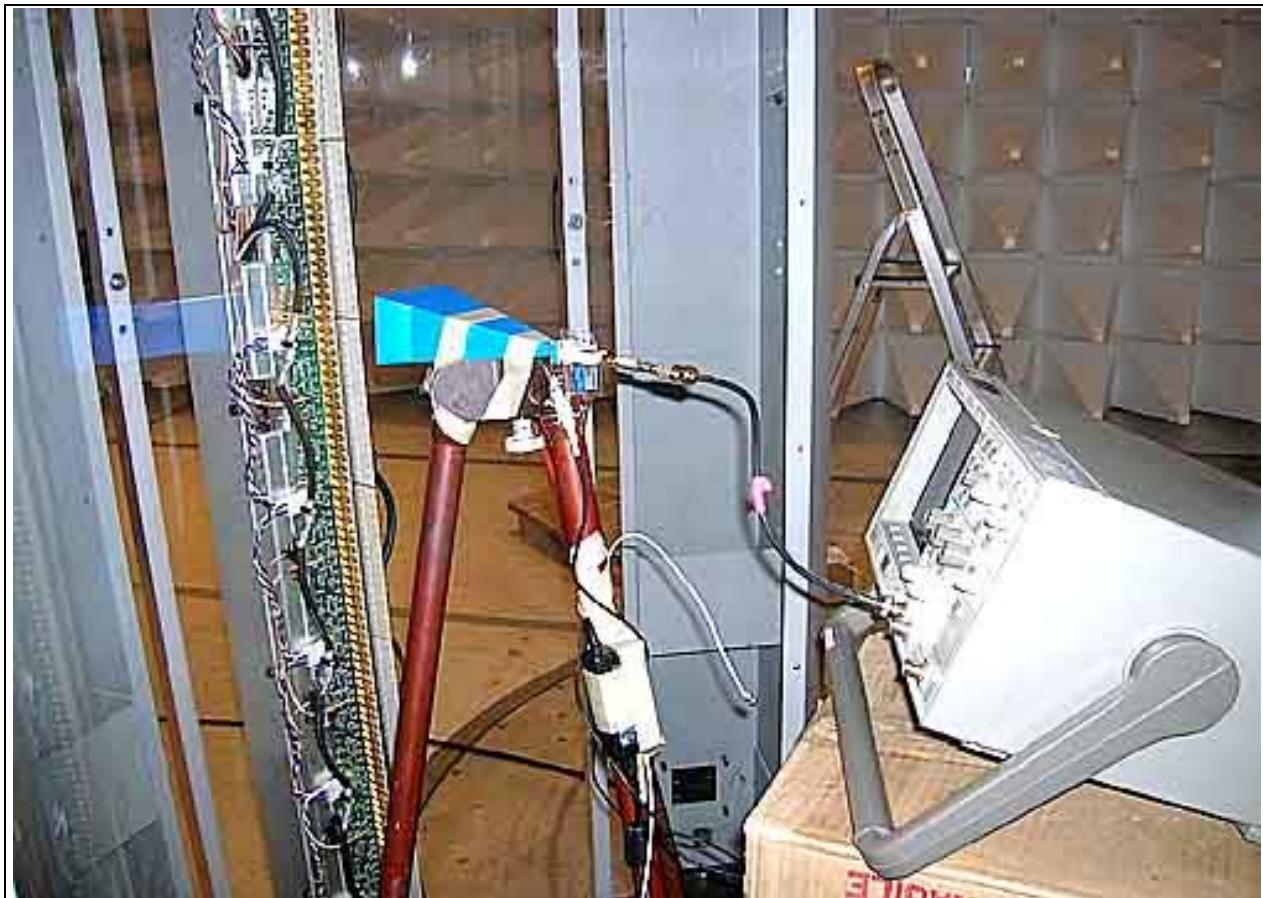
PHOTOGRAPH SHOWING OCCUPIED BANDWIDTH EQUIPMENT SETUP



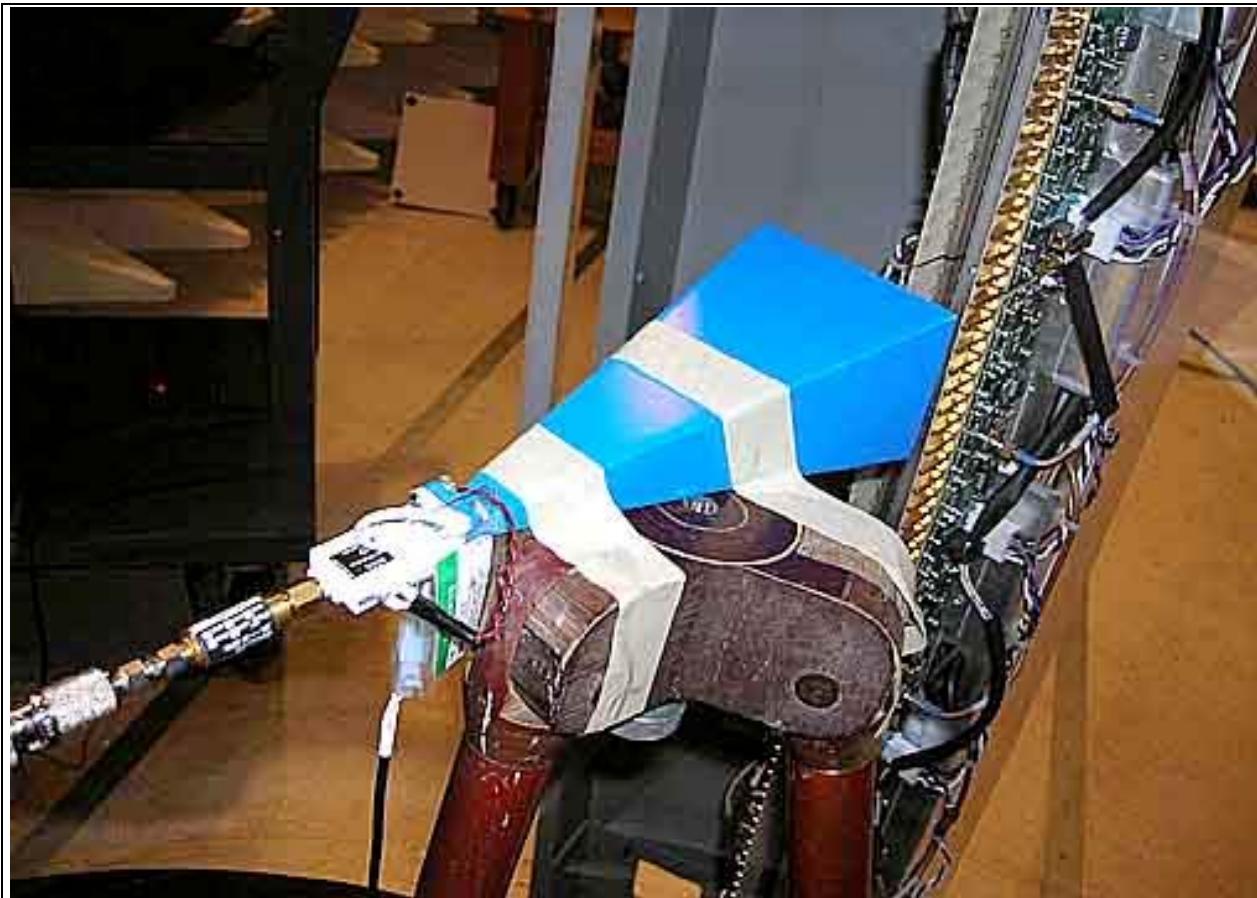
PHOTOGRAPH SHOWING OCCUPIED BANDWIDTH TEST SETUP



PHOTOGRAPH SHOWING DUTY CYCLE MEASUREMENT SETUP



PHOTOGRAPH SHOWING DUTY CYCLE MEASUREMENT CLOSEUP



APPENDIX B

TEST EQUIPMENT LIST

15.31(e)

Function	S/N	Calibration Date	Cal Due Date	Asset #
Portable Analyzer HP 8593EM	3624A00159	10/31/2004	10/31/2006	102111
Horn Antenna -AF	1087835	10/25/2005	10/25/2007	02694

15.207

Function	S/N	Calibration Date	Cal Due Date	Asset #
S.A., RF Section HP-8568B	2601A02378	06/20/2005	06/20/2007	01377
S.A., Display HP-85662A	2542A10641	06/20/2005	06/20/2007	01377A
QP Adapter HP-85650A	2043A00188	10/23/2004	10/23/2006	01508
LISN, Emco 3816/2	9408-1006	05/23/2005	05/13/2007	00493
TTE High Pass Filter	H4120	04/20/2005	04/20/2007	05258
Cable	None	06/21/2005	06/21/2007	P05296
Cable	None	06/21/2005	06/21/2007	P05300

FCC 15.209 Carrier Emissions

Function	S/N	Calibration Date	Cal Due Date	Asset #
E4446A Spectrum Analyzer	US44300408	01/13/2005	01/13/2007	02668
Cable, HF 48"	n/a	02/08/2005	02/08/2007	P05201
Cable, HF 72"	n/a	07/12/2005	07/12/2007	P05315
Preamplifier Miteq 18-26 GHz		04/30/2005	04/30/2007	02694
Horn 18-26 GHz HP 84125-80008		04/30/2005	04/30/2007	01413
Horn 26.5-40 GHz HP 84125-80001		11/05/2004	11/05/2006	01414
Preamplifier Miteq 26-40 GHz		09/30/2005	09/30/2007	02695
E4446A Spectrum Analyzer	US44300408	01/13/2005	01/13/2007	02668
Cable, HF 48"	n/a	02/08/2005	02/08/2007	P05201
Cable, HF 72"	n/a	07/12/2005	07/12/2007	P05315
Preamplifier Miteq 18-26 GHz		04/30/2005	04/30/2007	02694
Horn 18-26 GHz HP 84125-80008		04/30/2005	04/30/2007	01413
Horn 26.5-40 GHz HP 84125-80001		11/05/2004	11/05/2006	01414
Preamplifier Miteq 26-40 GHz		09/30/2005	09/30/2007	02695

15.209 9 kHz - 30 MHz

Function	S/N	Calibration Date	Cal Due Date	Asset #
Mag Loop 6502	2078	05/13/2005	05/13/2007	00432
S.A., RF Section HP-8568B	2601A02378	06/20/2005	06/20/2007	01377
S.A., Display HP-85662A	2542A10641	06/20/2005	06/20/2007	01377A
QP Adapter HP-85650A	2043A00188	10/23/2004	10/23/2006	01508
Cable - RG 214	none	06/21/2005	06/21/2007	P05296
Cable - RG 214	none	06/21/2005	06/21/2007	P05299
Cable - RG 214	none	06/21/2005	06/21/2007	P05300

15.209 30-1000 MHz

Function	S/N	Calibration Date	Cal Due Date	Asset #
Chase Bilog CBL6111C	2630	01/24/2005	01/24/2007	00852
S.A., RF Section HP-8568B	2601A02378	06/20/2005	06/20/2007	01377
S.A., Display HP-85662A	2542A10641	06/20/2005	06/20/2007	01377A
QP Adapter HP-85650A	2043A00188	10/23/2004	10/23/2006	01508
HP8447F opt H64 preamp	2944A03850	03/05/2005	03/05/2007	00501

15.209 >1 GHz

Function	S/N	Calibration Date	Cal Due Date	Asset #
Antenna, Horn	9901-5655	03/08/2005	03/08/2007	02157
12-18GHz Active Horn	n/a	09/22/2005	09/22/2007	02693
Horn 18-26 GHz HP 84125-80008		04/30/2005	04/30/2007	01413
Preamplifier Miteq 18-26 GHz		04/30/2005	04/30/2007	02694
Preamplifier, HP83017A	3123A00283	05/09/2005	05/09/2007	00785
E4446A Spectrum Analyzer	US44300408	01/13/2005	01/13/2007	02668
Cable, HF 72"	n/a	07/12/2005	07/12/2007	P05315
Cable, 30'	n/a	05/27/2004	05/27/2006	P04240
Cable, HF 48"	n/a	02/08/2005	02/08/2007	P05201
Horn 26.5-40 GHz HP 84125-80001		11/05/2004	11/05/2006	01414
Preamplifier Miteq 26-40 GHz		09/30/2005	09/30/2007	02695
Preamplifier, HP83051A	3331A00238	04/01/2005	04/01/2007	00941A
SMA Cable	none	07/11/2005	07/07/2007	P01403
S.A. HP 8564E	3623A00539	07/02/2004	07/02/2006	01406
Mixer, 40-60GHz	U91211-1	05/10/2004	05/10/2006	02347
Mixer, 60-90GHz	E91211-1	05/10/2004	05/10/2006	02348
Mixer, 90-110GHz	F91211-2	05/10/2004	05/10/2006	02349

Carrier Measurements – Pulse Timing

Function	S/N	Calibration Date	Cal Due Date	Asset #
Diode Detector HP 8474C	2905A00025	NCR	NCR	NA
Oscilloscope HP 54615B	US35420829	08/31/2005	08/31/2007	00697

NCR = No Cal Required