Test Report No. 8312313057

For Alvarion Ltd.

Equipment Under Test:
BreezeACCESS VL System with radio redesigned

From The Standards Institution
Of Israel
Industry Division
Telematics Laboratory
EMC Section

ACCREDITED
Certificate No.1487-01

42 Chaim Levanon St. Tel-Aviv 69977 Tel: 972-3-646-7800 Fax: 972-3-646-7779 www.sii.org.il

Test Report No.: 8312313057 **Page 1 of 50 Pages**
Title: Test on BreezeACCESS VL System with radio redesigned

Order placed by:	Alvarion Ltd.
Address:	21A Habarzel str, Tel-Aviv, 69710, Israel
Sample for test selected by:	The orderer
The date of test:	18/08 - 24/08/2003

Description of Equipment Under Test (EUT): BreezeACCESS VL System with radio redesigned
Manufactured by: Alvarion Ltd.

Reference Documents:

- CFR 47 FCC: Rules and Regulations; Part 15. “Radio frequency devices”; Subpart C: “Intentional radiators” (2002)

Test Results: The EUT was found meeting with the relevant requirements of CFR 47 FCC Part 15 Sections:15.205, 15.207,15.209, 15.247.

This Test Report contains 50 pages and may be used only in full.	This Test Report applies only to the specimen tested and may not be applied to other specimens of the same product.

Table of Contents

1 Scope

This test report contains results measured on BreezeACCESS VL System with radio redesigned (permissible change) according to the relevant requirements of CFR 47 FCC Part 15 Subpart C.

2 General

2.1 Permissible change description

The BreezeAccess VL radio is based on the ATHEROS chip set that includes the MAC and the radio section. The permissive change is a modification of the front end transmit section to a low cost radio solution. The major change was in the power amplifier section were the transistor power amplifier lineup was replaced by a single MMIC giving the same operational output power and lower power consumption. There was no change in the ATHEROS chip set that contains all up and down converters and all frequency sources of the unit.

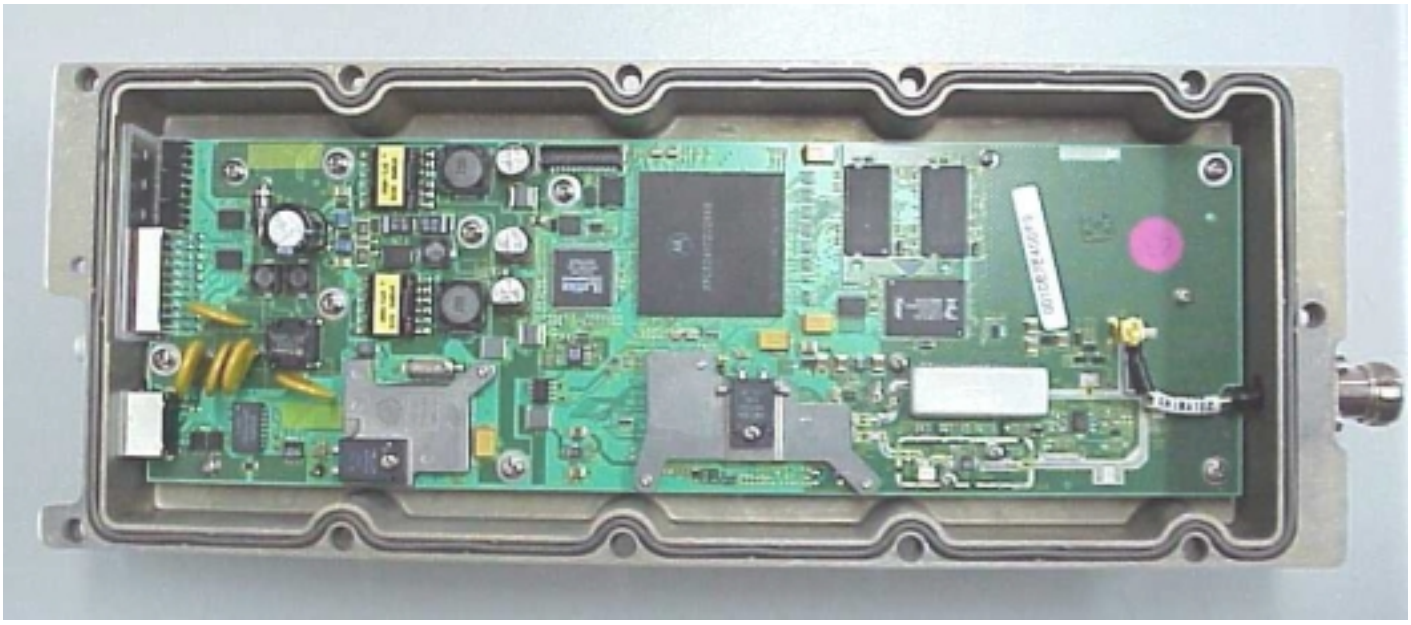


Photo 1
Radio Unit. PWB component side

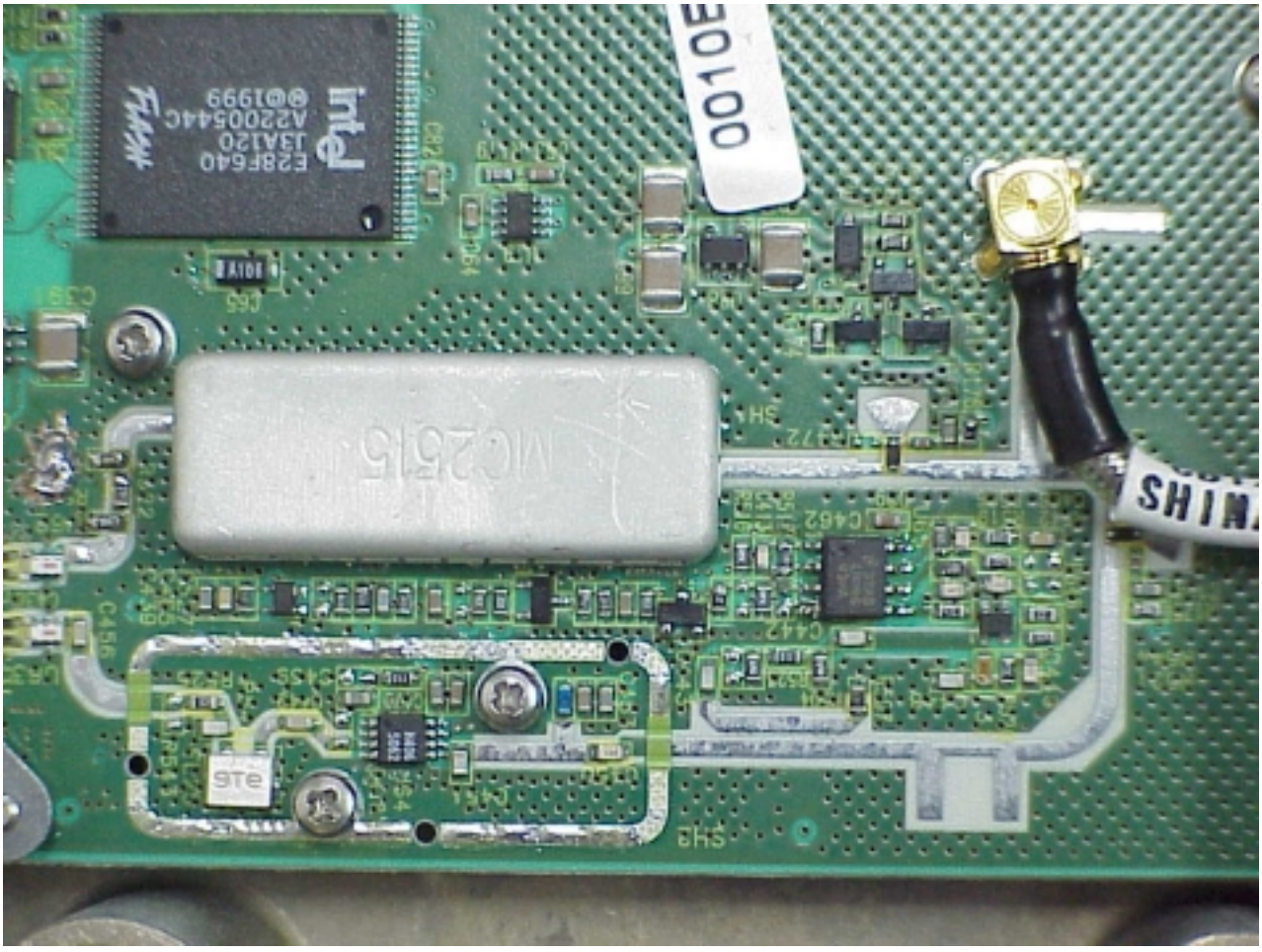


Photo 2
Radio Unit. Redesigned area (PWB component side)

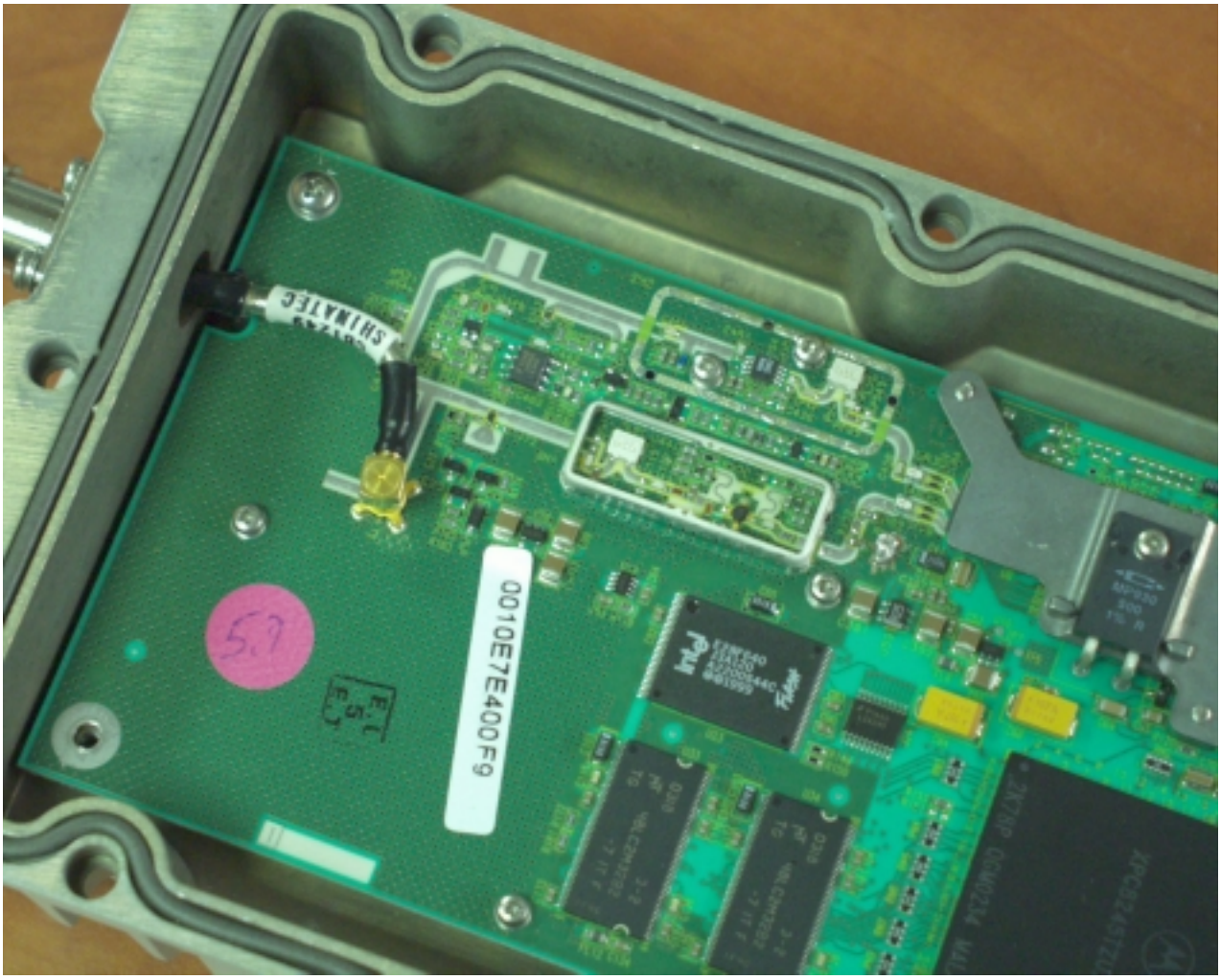


Photo 3
Radio Unit. Redesigned area (PWB printed side)

2.2 Test configuration:

1. For Radiated emission measurements per sec. 15.209 requirements the Subscriber Unit and the Base Station Unit were configured for tests as shown in Figures 1, 2.

2. For Radiated emission measurements per sec. 15.205 requirements the Radio unit was tested with four various antennas, as shown in table:

No.	Name	Freq. range	P/N or Model	Type
1	MTI	5.15-5.875 MHz	MT-484025/NV	Sector
2	Unidirectional antenna UNI-28-4	-	858109	Planar Array
3	Unidirectional antenna UNI-28-5.8	-	872811	Parabolic
4	MAXRAD	-	MFB58008	Omni

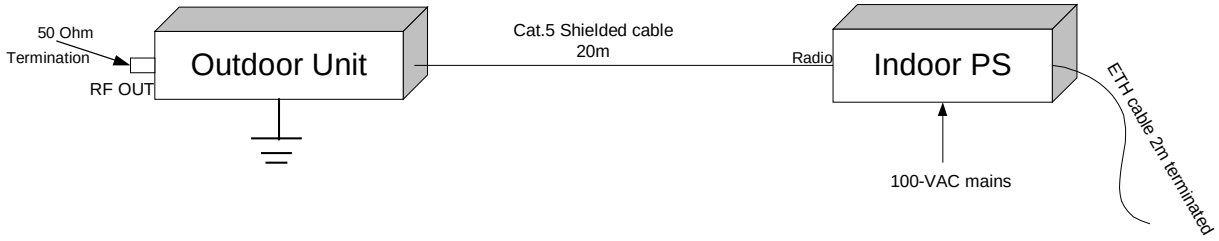


Figure 1 Subscriber Unit test setup

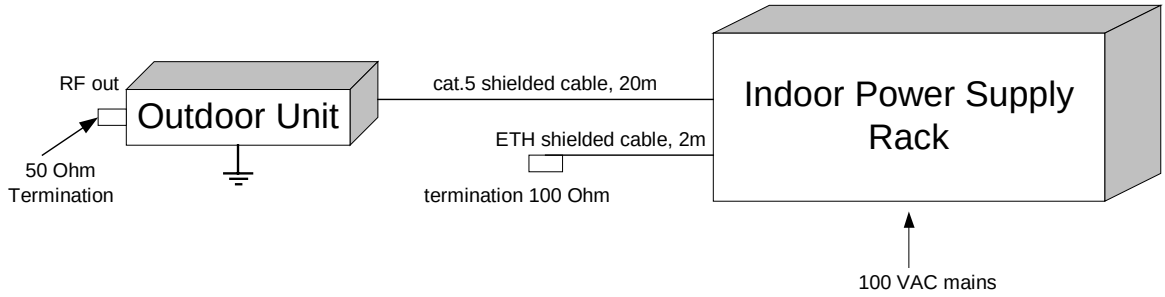


Figure 2 Base Station test setup

3 Test specification, Methods and Procedures

Test Specification:

- CFR 47 FCC: Rules and Regulations; Part 15. “Radio frequency devices”; Subpart C: “Intentional radiators” (2002)

Methods and Procedures:

- ANSI C63/4/1992: "American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz”.

4 Measurements, examinations and derived results

4.1 Location of the Test Site:

The tests were conducted in the EMC laboratory of the Standards Institution of Israel in Tel-Aviv and at open test site located at Kibbutz Native Halamed Hai in Emek HaEla, Israel.

4.2 Normal test condition:

Temperature: 22 °C
Humidity: 50 %

4.3 Conducted emission test :

4.3.1 Requirements:

EUTs conducted emission within the band 150 kHz to 30 MHz shall not exceed value required in section 15.207 (a).

4.3.2 Tested units:

The measurements were performed on:
- Subscriber Unit - on Indoor power supply
- Base Station Unit - on Universal Indoor unit AC power adaptor PS 1036.

4.3.3 Test procedure:

Each EUT was placed on a non-metallic table in a shielded chamber at a height of 80 cm from the floor and 40 cm from the nearest wall.

The EUT was operated to transmitting through the customer software.
First, initial scans were performed. Final measurements were performed at the frequencies where emission exceeded the tolerance limit.

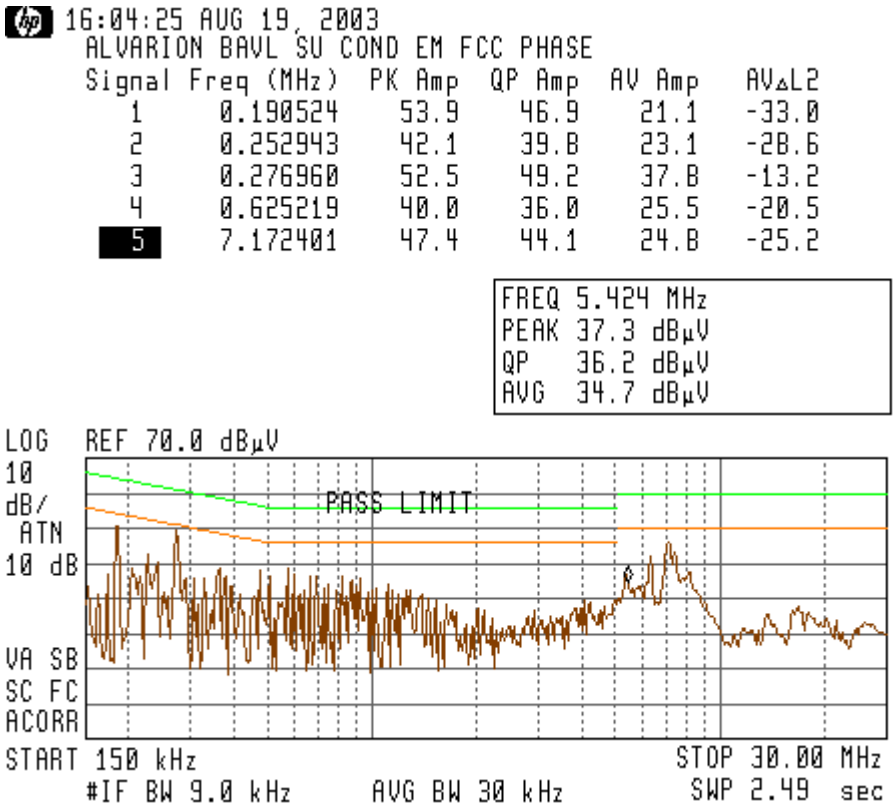
Test equipment (EMI receiver) setup was as follow:

Initial scan:	
Detector type	Peak
Mode	Max hold
Bandwidth	9 kHz
Step size	Continuous sweep
Sweep time	>100 msec
Measurements	
Detector type	Quasi-peak, Avg (CISPR)
Bandwidth	9 kHz
Measurement time	200 seconds/MHz
Observation	>15 seconds

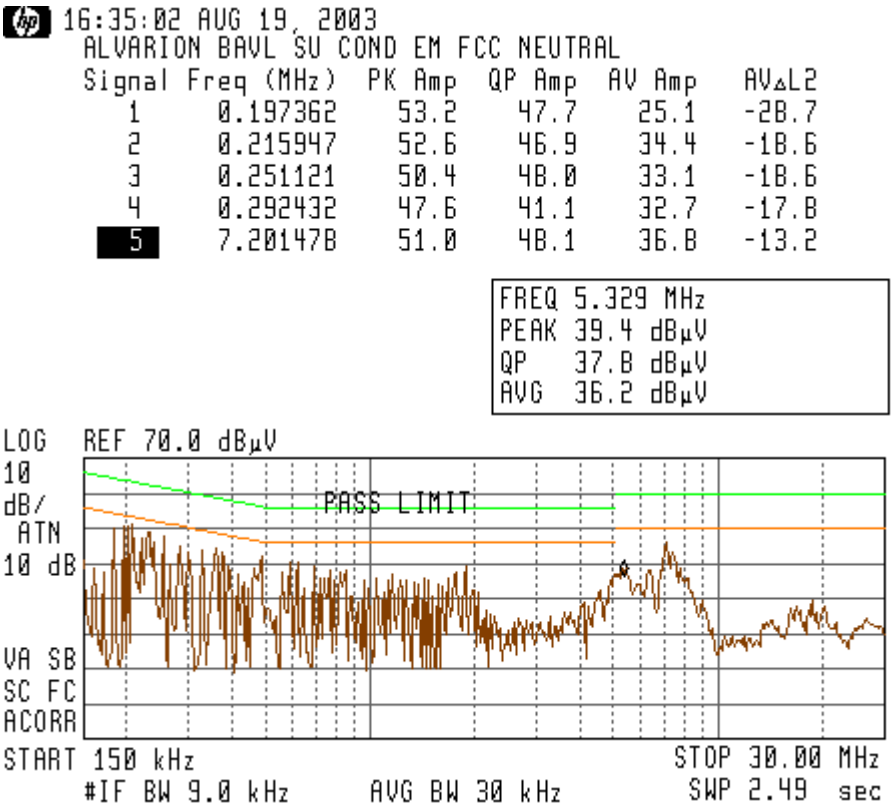
4.3.4 Test results:

Subscriber Unit. Test results are shown in Plots #1, 2.

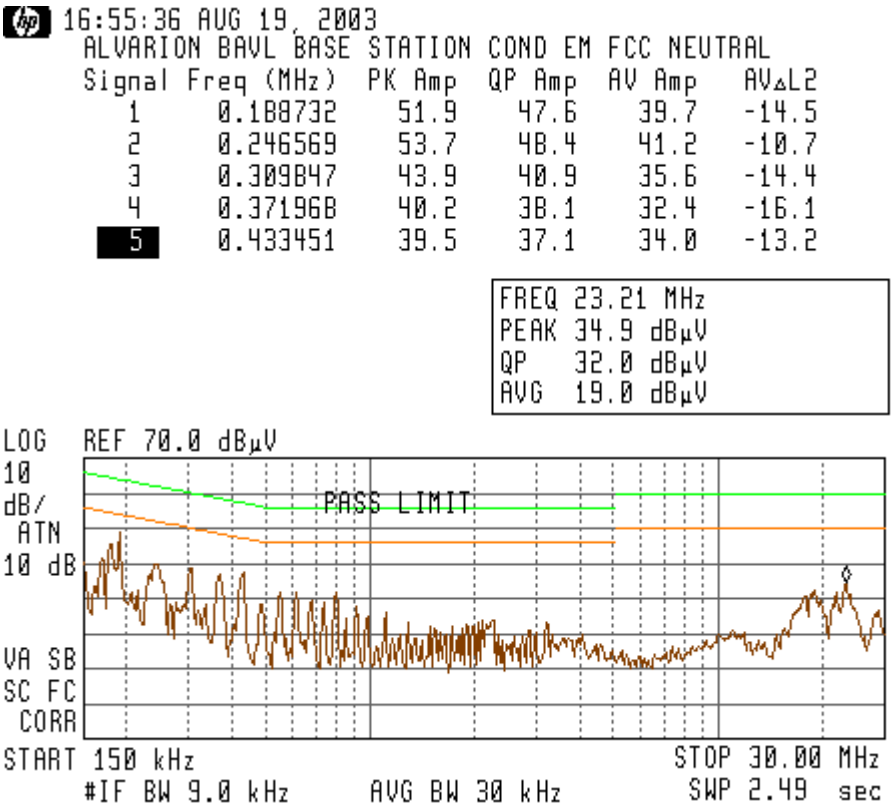
Base Station Unit. Test results are shown in Plots #3, 4.



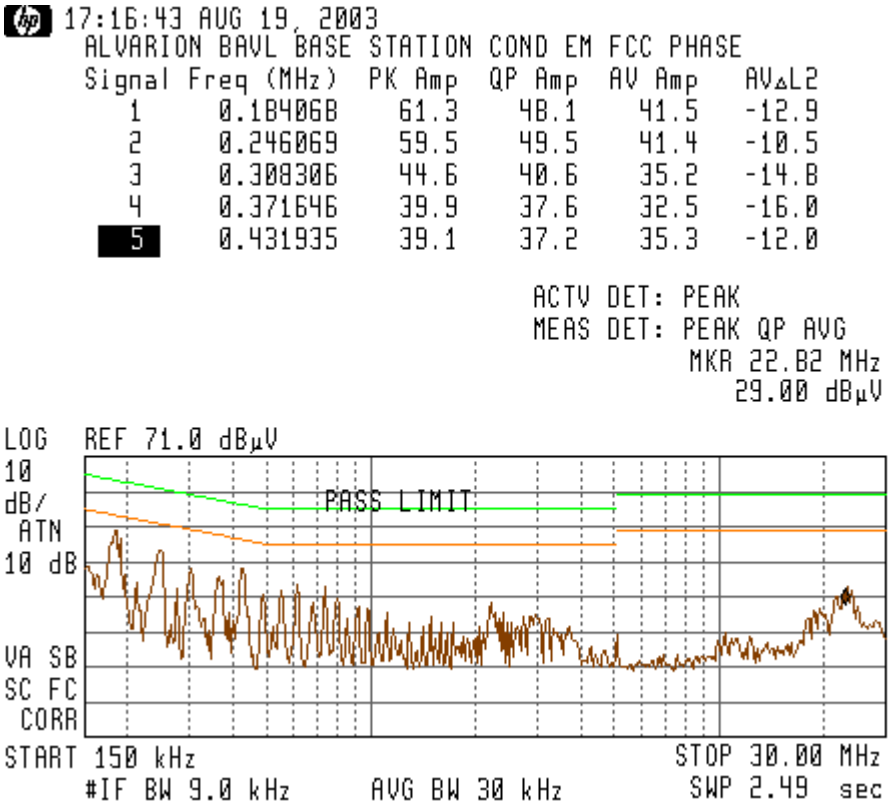
Plot 1. Subscriber Unit
Conducted emissions measurement result on 110 VAC power line: phase



Plot 2. Subscriber Unit
Conducted emissions measurement result on 110 VAC power line: neutral



Plot 3. Base Station Unit
Conducted emissions measurement result on 110 VAC power line: phase



Plot 4. Base Station Unit
Conducted emissions measurement result on 110 VAC power line: neutral

4.4 Radiated emission test, general requirements:

4.4.1 Requirements:

EUTs radiated emission shall not exceed value required in section 15.209 (a).

4.4.2 Test description:

The measurements were performed at the Open Area Test Site.
The test configuration is shown in Fig.1, 2.

The EUT was arranged on a non-metallic table 0.8 m placed on the turn-table.
The measurements were performed at a 10 m measurement distance.

The Bilog 30 MHz-2 GHz antenna was used.

The frequency range was investigated from 30 MHz to 2GHz.

The measurements were performed at each frequency at which the signal was 10 dB below the limit or less.

The level were maximized by initially rotating turntable through 360°, varying the antenna height between 1 m and 4 m, rerouting EUT cables and changing antenna polarization from vertical to horizontal. The measuring equipment settings were:

Initial scan:	
Detector type	Peak
Mode	Max hold
Bandwidth	120 kHz
Step size	Continuous sweep
Sweep time	>1 seconds/MHz
Measurements:	
Detector type	Quasi-peak (CISPR 16)
Bandwidth	120 kHz
Measurement time	20 seconds/MHz
Observation	>15 seconds

4.4.3 Radiated emission test results:

Test results are presented in Table 1.

Table 1. Radiated emission test results

EUT: BreezeACCESS VL System with radio redesigned

Frequency (MHz)	Turn-table Angle (°)	Antenna Polariz.	Antenna Height (m)	Emission Level Note 1 (dBμV/m)	Limit @ 3 m (dBμV/m)	Margin Note 2 (dB)	Results
57.4	10	V	1.8	28.0	40	12.0	Complies
68.2	256	V	2.7	29.6	40	10.4	Complies
73.1	258	V	1.6	28.2	40	11.8	Complies
80.2	270	V	1.8	31.0	40	9.0	Complies
198.7	359	V	1.3	31.8	43.5	11.7	Complies
205.7	16	V	1.2	32.7	43.5	10.8	Complies
211.7	56	V	1.6	30.8	43.5	12.7	Complies
249.5	24	V	1.3	36.8	46	9.2	Complies
255.0	40	H	3.6	34.7	46	11.3	Complies
257.8	20	V	1.4	36.6	46	9.4	Complies
282.8	199	H	2.8	33.2	46	12.8	Complies

Note 1: Emission level = E Reading (dBμV) + Cable loss (dB) + Antenna Factor (dB/m) + 10 dB

Where 10 dB is an extrapolation distance factor.
For Cable Loss and Antenna Factor refer to Appendix 2.

Note 2: Margin (dB) = Limit (dBμV/m) – Emission level (dBμV/m)

4.5 Radiated emission test on Radio Unit - spurious:

4.5.1 Requirements:

The levels of any unwanted emission shall not exceed value required in section 15.209.

4.5.2 EUT configuration:

The radio unit was tested with four various antennas (see sec.2.2)
- MTI sector antenna
- Unidirectional antenna UNI-28-4
- Unidirectional antenna UNI-28-5.8
- MAXRAD Omni antenna.

4.5.3 Test procedure:

The measurements were performed in the anechoic chamber.
The EUT was arranged on a non-metallic table 0.8 m placed on the turntable.

Measuring antennas used: Up to 18 GHz - Double Ridge **EMCO** model 3115
above 18 GHz - Alpha TRG model A361

Antenna height = 1 m.
Polarization: Vertical/Horizontal
Measurement distance = 1m.
The frequency range was investigated up to 40 GHz.
The measurements were performed in vertical and horizontal polarization, the maximum reading recorded.

Measuring detector function and bandwidths:

Detector type	Peak
Resolution bandwidth	1MHz
Video bandwidth	1 MHz
Detector type	Average
Resolution bandwidth	1MHz
Video bandwidth	3 kHz*

4.5.4 Radiated emission test results and calculation ratio:

The test results are shown in Tables ## 2-5.

The emission level was calculated as:
E Reading (dBμV) + measuring cable loss (dB) + measuring antenna factor (dB/m) + Distance correction factor
For measuring cable loss and measuring antenna factor refer to Appendix 2.
Distance correction factor = -9.5 dB (an extrapolation reading from 1 m measuring distance to 3m specified distance)

Table 2. Spurious emissions test results

Antenna used: MTI sector antenna P/N MT-484025/NV

Frequency (GHz)	Emission Level (dBμV/m)		Limit @ 3m (dBμV/m)		Margin (dB)		Results
	Average	Peak	Average	Peak	Average	Peak	
LOW 5.740 GHz							
11.48	38.9	59.6	54	74	15.1	14.4	Complies
17.22	46.3	66.7			7.7	7.3	Complies
22.96	40.4	61.1			13.6	12.9	Complies
28.70	46.1	67.4			7.9	6.6	Complies
34.44	53.5	73.0			0.5	1.0	Complies
MIDDLE 5.785 GHz							
11.57	38.5	57.1	54	74	15.5	16.9	Complies
17.36	45.6	65.1			8.4	8.9	Complies
23.14	40.2	59.3			13.8	14.7	Complies
28.93	46.1	65.7			7.9	8.3	Complies
34.71	53.0	72.7			1.0	1.3	Complies
HIGH 5.835 GHz							
11.67	37.3	57.2	54	74	16.7	16.8	Complies
17.51	45.9	66.1			8.1	7.9	Complies
23.34	39.8	60.5			14.2	13.5	Complies
29.18	44.8	65.5			9.2	8.5	Complies
35.01	52.4	72.9			1.6	1.1	Complies

Table 3. Spurious emissions test results

Antenna used: Unidirectional UNI-28-4 P/N 858109

Frequency (GHz)	Emission Level (dBμV/m)		Limit @ 3m (dBμV/m)		Margin (dB)		Results
	Average	Peak	Average	Peak	Average	Peak	
LOW 5.740 GHz							
11.48	37.4	60.1	54	74	16.6	13.9	Complies
17.22	44.8	67.2			9.2	6.8	Complies
22.96	38.9	60.8			15.1	13.2	Complies
28.70	44.4	67.8			9.6	6.2	Complies
34.44	52.6	71.6			1.4	2.4	Complies
MIDDLE 5.785 GHz							
11.57	38.5	57.6	54	74	15.5	16.4	Complies
17.36	45.6	64.4			8.4	9.6	Complies
23.14	40.2	59.6			13.8	14.4	Complies
28.93	45.8	63.3			8.2	10.7	Complies
34.71	53.2	70.4			0.8	3.6	Complies
HIGH 5.835 GHz							
11.67	37.3	57.2	54	74	16.7	16.8	Complies
17.51	45.9	66.4			8.1	7.6	Complies
23.34	39.8	59.9			14.2	14.1	Complies
29.18	44.8	62.6			9.2	11.4	Complies
35.01	52.3	72.0			1.7	2.0	Complies

Table 3. Spurious emissions test results

Antenna used: Unidirectional UNI-28-5.8 P/N 872811

Frequency (GHz)	Emission Level (dBμV/m)		Limit @ 3m (dBμV/m)		Margin (dB)		Results
	Average	Peak	Average	Peak	Average	Peak	
LOW 5.740 GHz							
11.48	37.3	59.4	54	74	16.7	14.6	Complies
17.22	44.7	66.2			9.3	7.8	Complies
22.96	38.8	60.6			15.2	13.4	Complies
28.70	45.6	67.6			8.4	6.4	Complies
34.44	51.9	72.4			2.1	1.6	Complies
MIDDLE 5.785 GHz							
11.57	38.4	57.4	54	74	15.6	16.6	Complies
17.36	45.4	64.8			8.6	9.2	Complies
23.14	40.0	59.4			14.0	14.6	Complies
28.93	45.9	65.3			8.1	8.7	Complies
34.71	53.6	72.6			0.4	1.4	Complies
HIGH 5.835 GHz							
11.67	37.2	56.9	54	74	16.8	17.1	Complies
17.51	45.8	66.5			8.2	7.5	Complies
23.34	39.7	60.4			14.3	13.6	Complies
29.18	45.4	65.9			8.6	8.1	Complies
35.01	52.3	72.2			1.7	1.8	Complies

Table 4. Spurious emissions test results

Antenna used: MAXRAD Omni antenna model MFB58008

Frequency (GHz)	Emission Level (dBμV/m)		Limit @ 3m (dBμV/m)		Margin (dB)		Results
	Average	Peak	Average	Peak	Average	Peak	
LOW 5.740 GHz							
11.48	37.4	57.8	54	74	16.6	16.2	Complies
17.22	44.8	64.6			9.2	9.4	Complies
22.96	38.9	59.2			15.1	14.8	Complies
28.70	45.7	65.4			8.3	8.6	Complies
34.44	53.0	72.7			1.0	1.3	Complies
MIDDLE 5.785 GHz							
11.57	38.4	57.4	54	74	15.6	16.6	Complies
17.36	45.5	64.8			8.5	9.2	Complies
23.14	40.1	59.2			13.9	14.8	Complies
28.93	45.5	65.4			8.5	8.6	Complies
34.71	52.9	70.5			1.1	3.5	Complies
HIGH 5.835 GHz							
11.67	37.4	58.6	54	74	16.6	15.4	Complies
17.51	46.0	67.1			8.0	6.9	Complies
23.34	39.8	59.9			14.2	14.1	Complies
29.18	44.9	61.9			9.1	12.1	Complies
35.01	52.4	69.5			1.6	4.5	Complies

4.6 Radiated emission test on Radio Unit - restricted bands:

4.6.1 Requirements:

Radiated emission in restricted bands should meet the requirements sec. 15.205.
The following frequency bands should be measured:

	Frequency, GHz	Restricted band to be tested
LOW 5.740 GHz	11.48	10.6 – 12.7
	22.96	22.01 – 23.12
MIDDLE 5.785 GHz	11.57	10.6 – 12.7
HIGH 5.835 GHz	11.67	10.6 – 12.7

4.6.2 EUT configuration:

The measurements were performed with four various antennas.

4.6.3 Test procedure:

The measurements were performed in the anechoic chamber.
The EUT was arranged on a non-metallic table 0.8 m placed on the turntable.
Measuring antennas used: Up to 18 GHz - Double Ridge **EMCO** model 3115
above 18 GHz - Alpha TRG model A361
Antenna height = 1 m.
Measurement distance = 1m.
Measuring detector function and bandwidths:

Detector type	Peak
RBW	1MHz
VBW	1 MHz

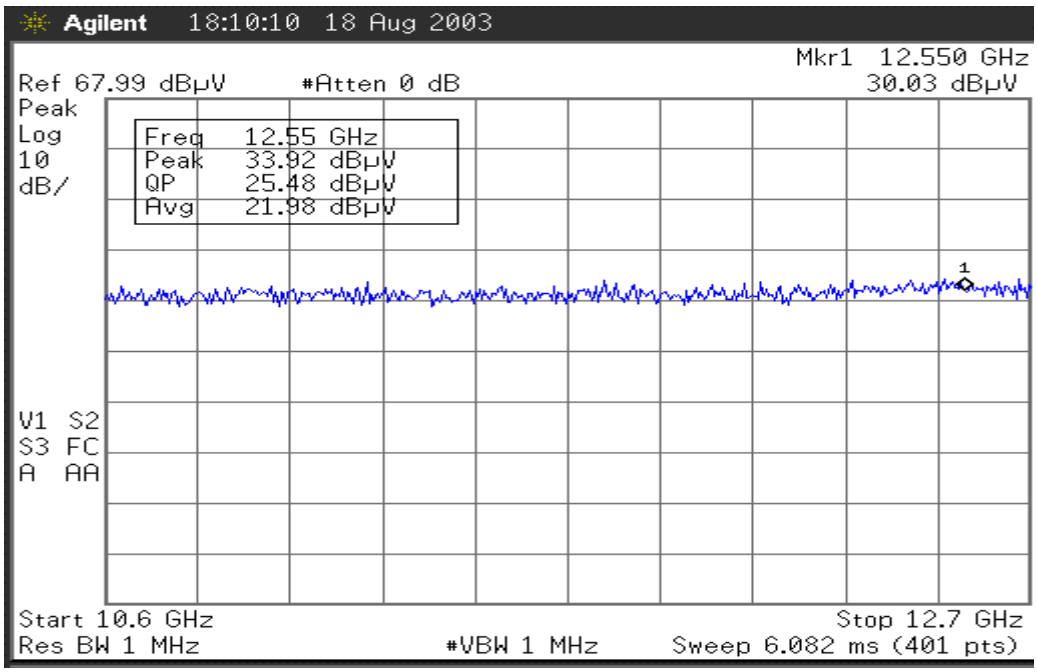
All measurements were taken with peak detector and the readings were compared with AVG limit line.

4.6.4 Test results and calculation ratio:

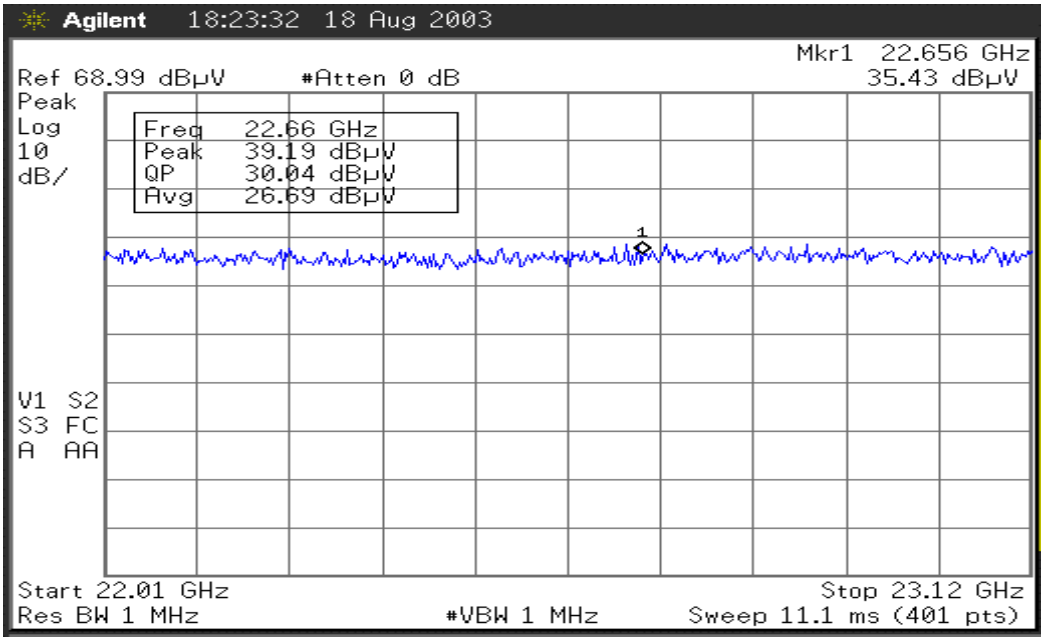
The test results are shown in Plots #5 to #20 , see table below:

	Frequency, GHz	Restricted band	Antenna name			
			MTI	UNI-28-4	UNI-28-5.8	MAXRAD
LOW 5.740 GHz	11.48	10.6 – 12.7	#5	#9	#13	#17
	22.96	22.01 – 23.12	#6	#10	#14	#18
MIDDLE 5.785 GHz	11.57	10.6 – 12.7	#7	#11	#15	#19
HIGH 5.835 GHz	11.67	10.6 – 12.7	#8	#12	#16	#20

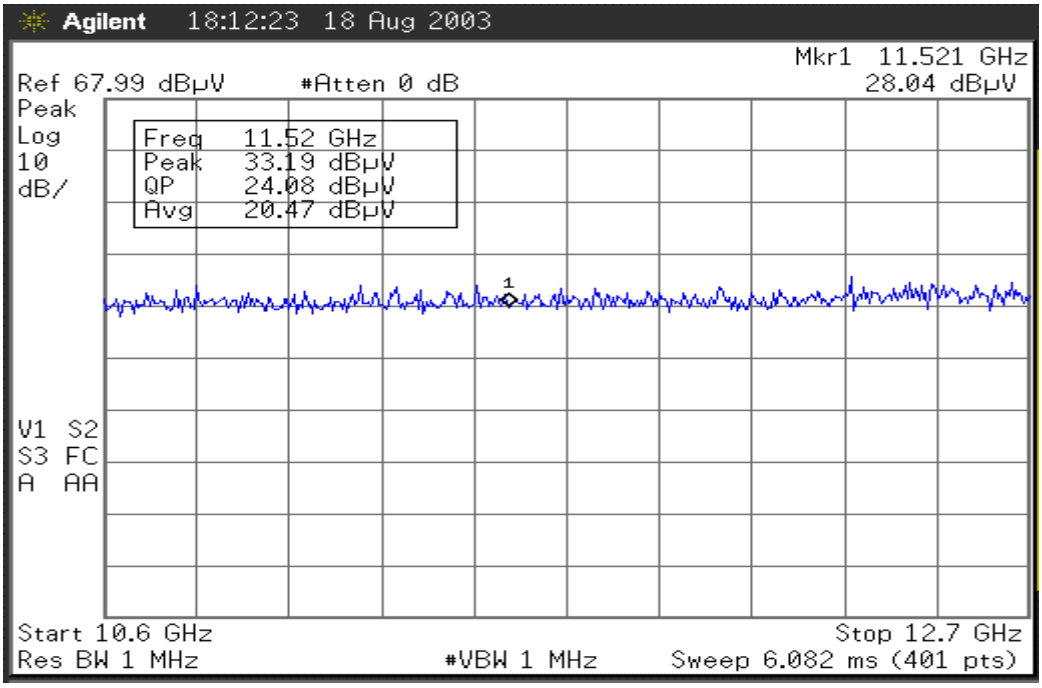
Note: The AVG limit line 64 dBµV/m (at 1m distance) is not shown in the plots.



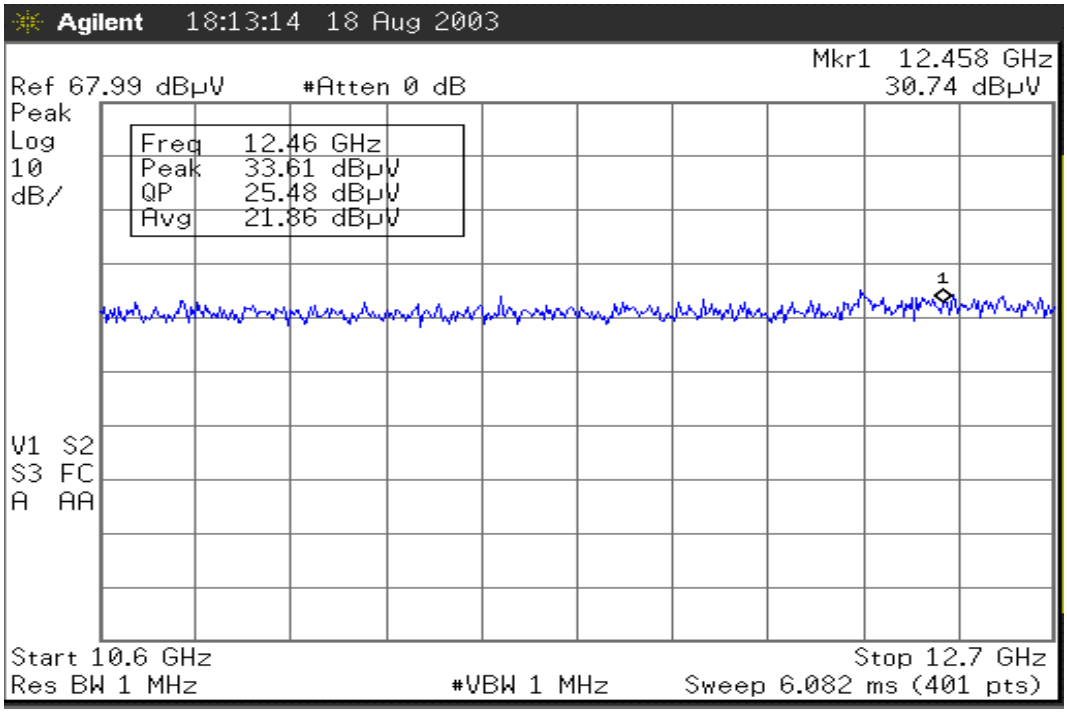
Plot #5 **Antenna:** MTI sector P/N MT-484025/NV



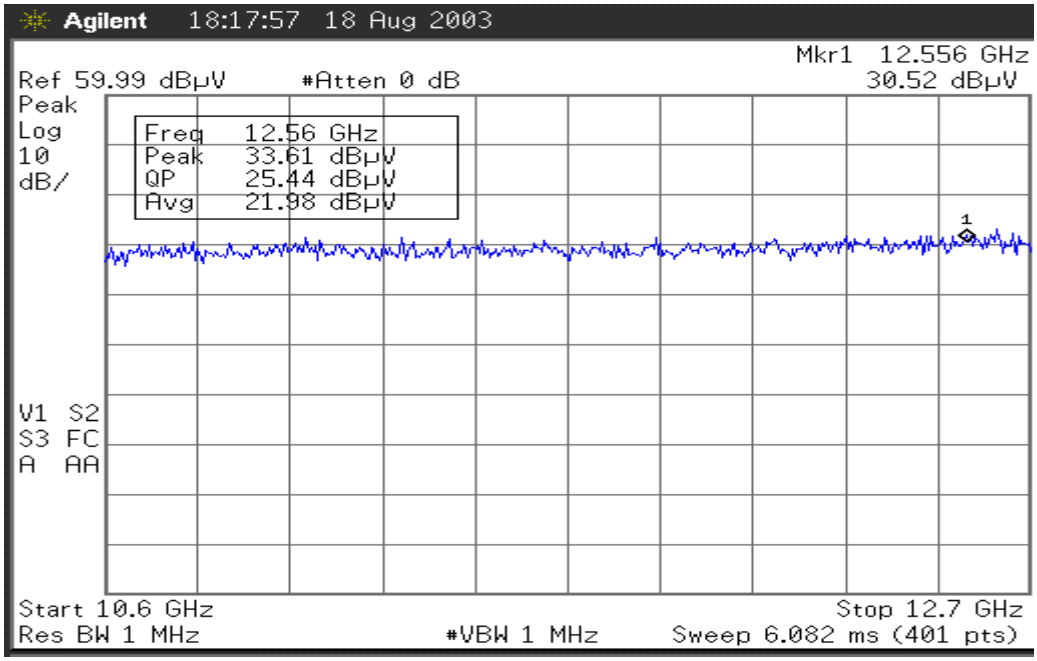
Plot #6 **Antenna:** MTI sector P/N MT-484025/NV



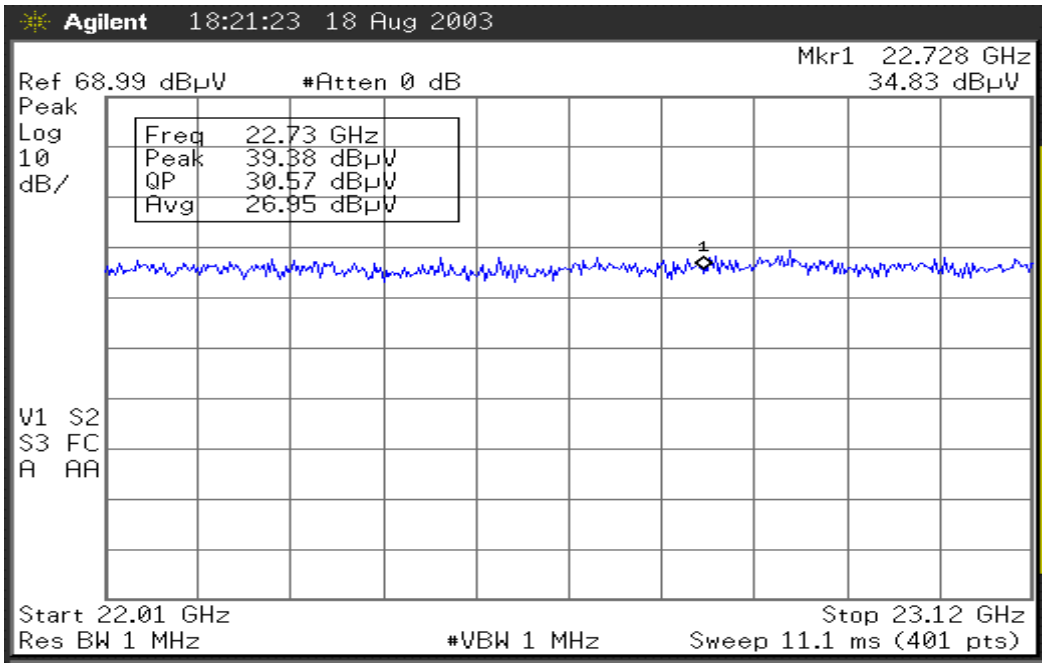
Plot #7 **Antenna:** MTI sector P/N MT-484025/NV



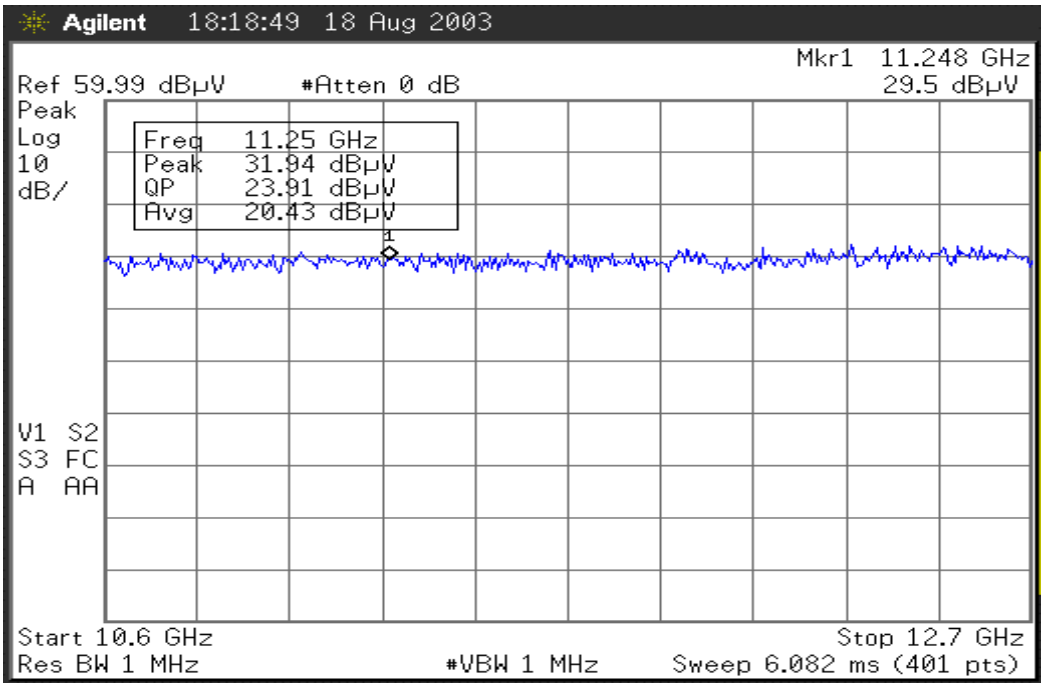
Plot #8 **Antenna:** MTI sector P/N MT-484025/NV



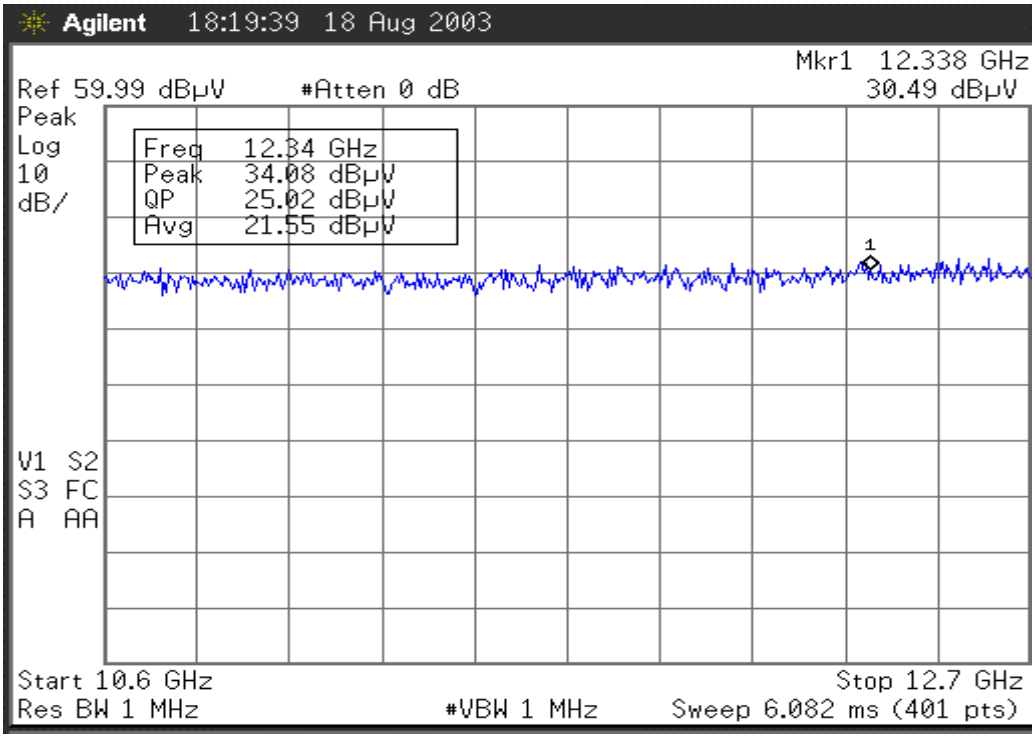
Plot #9 **Antenna:** UNI-28-4 P/N 858109



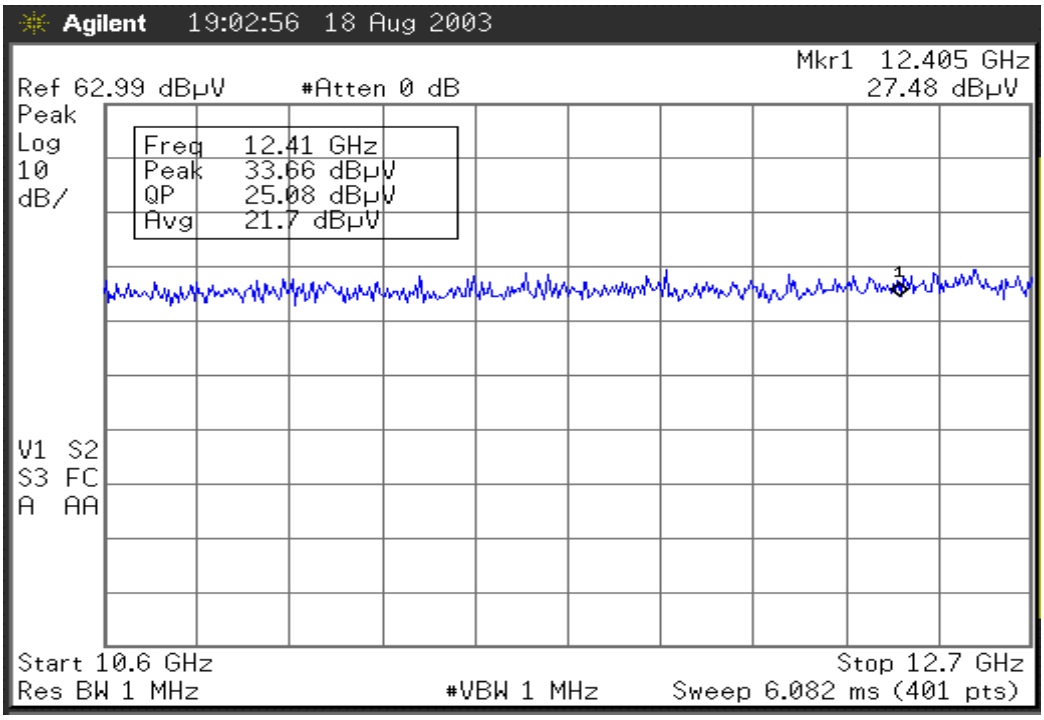
Plot #10 **Antenna:** UNI-28-4 P/N 858109



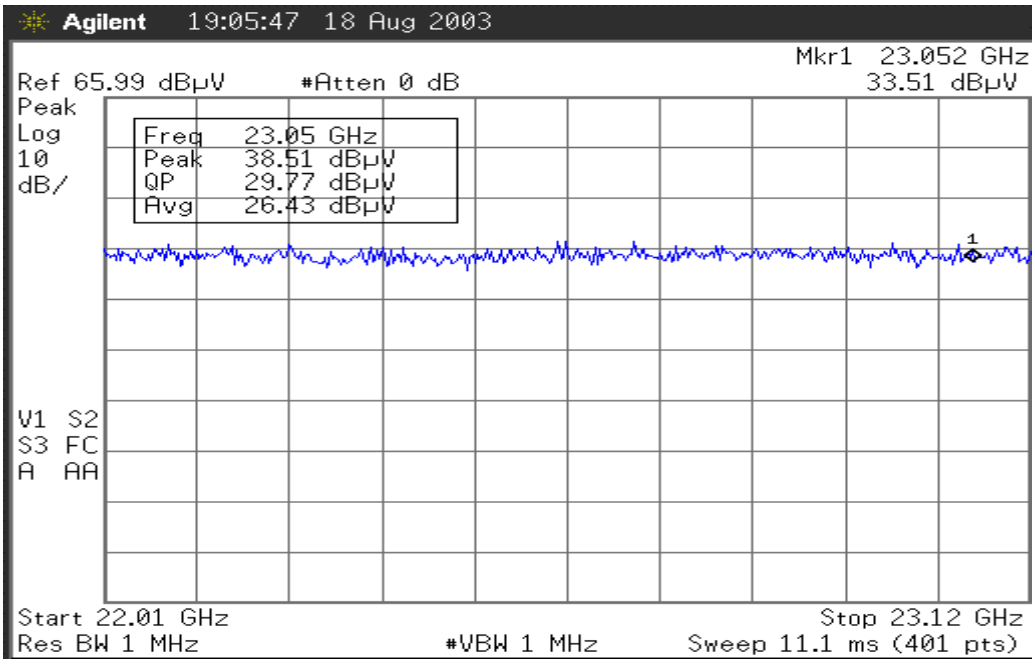
Plot #11 **Antenna:** UNI-28-4 P/N 858109



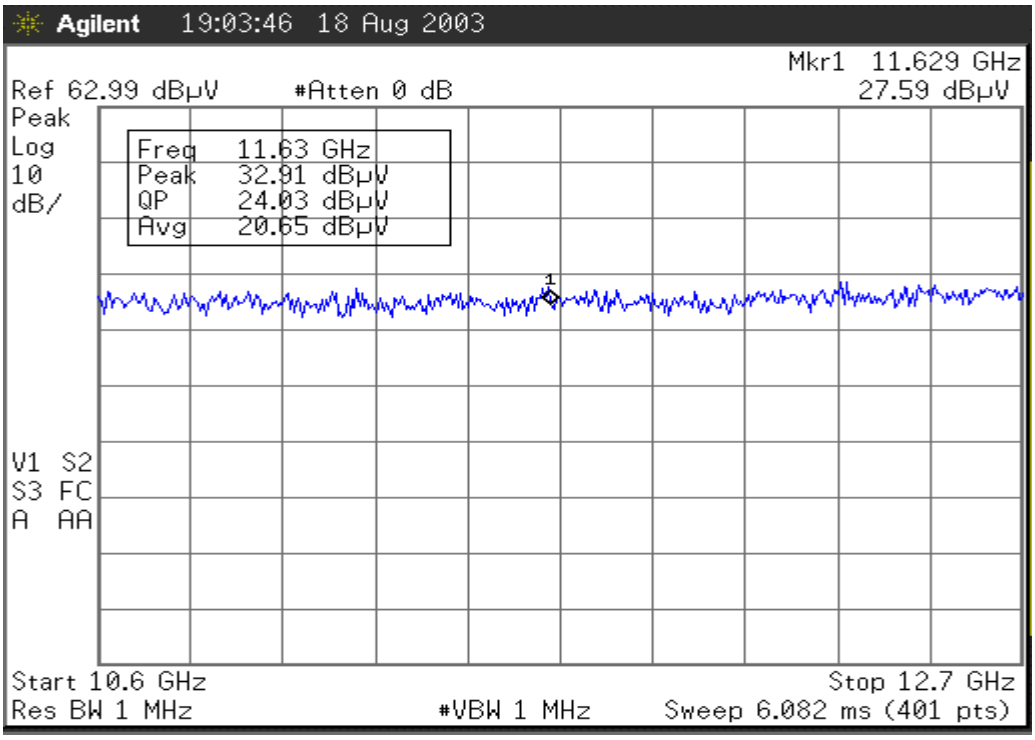
Plot #12 **Antenna:** UNI-28-4 P/N 858109



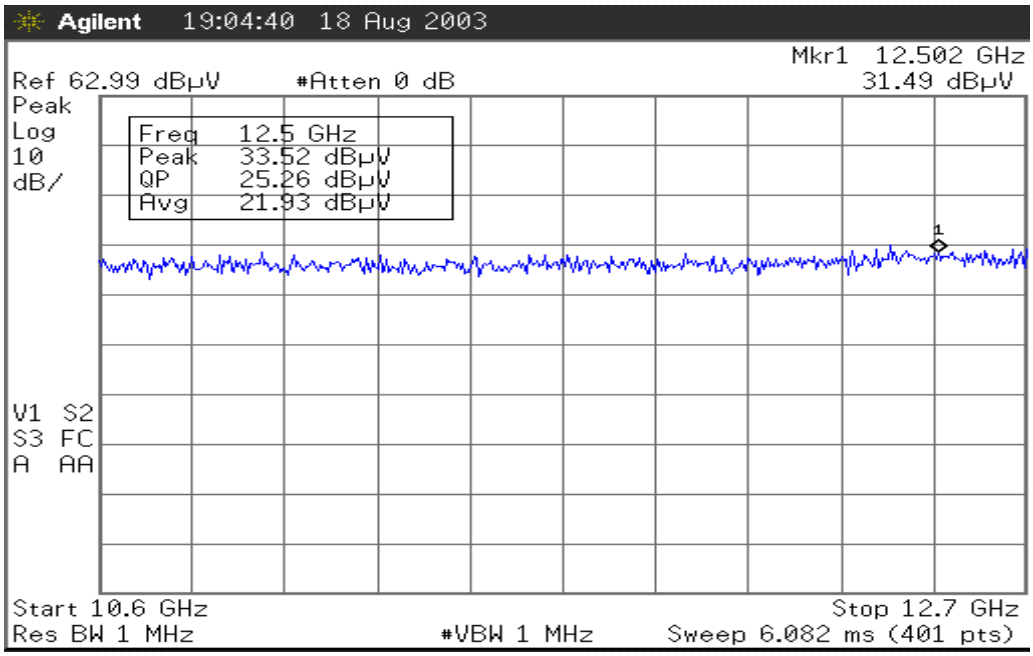
Plot #13 **Antenna:** UNI-28-5.8 P/N 872811



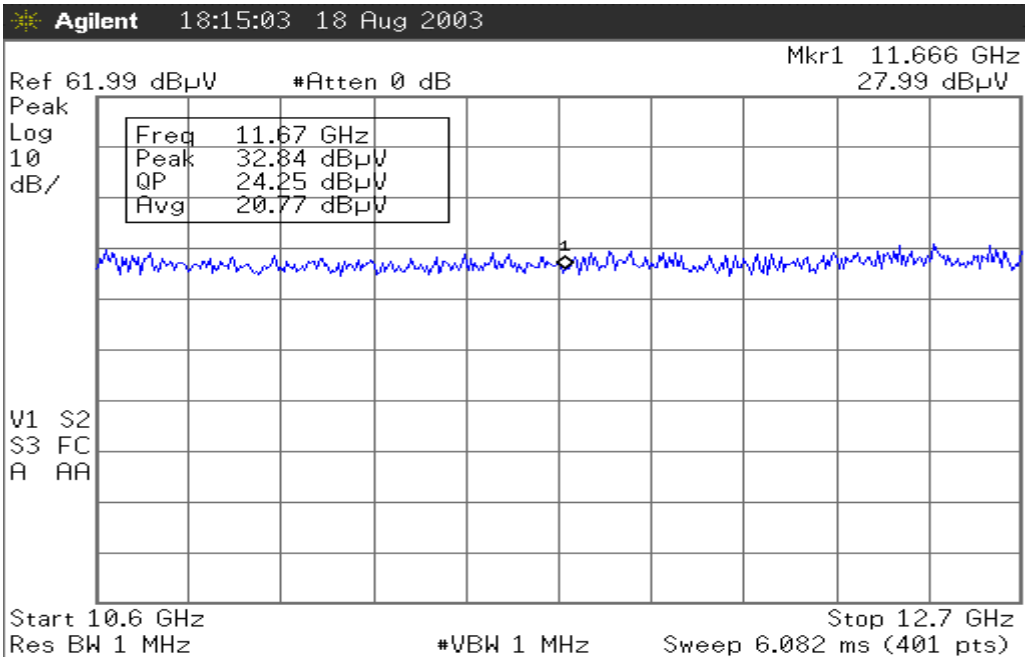
Plot #14 **Antenna:** UNI-28-5.8 P/N 872811



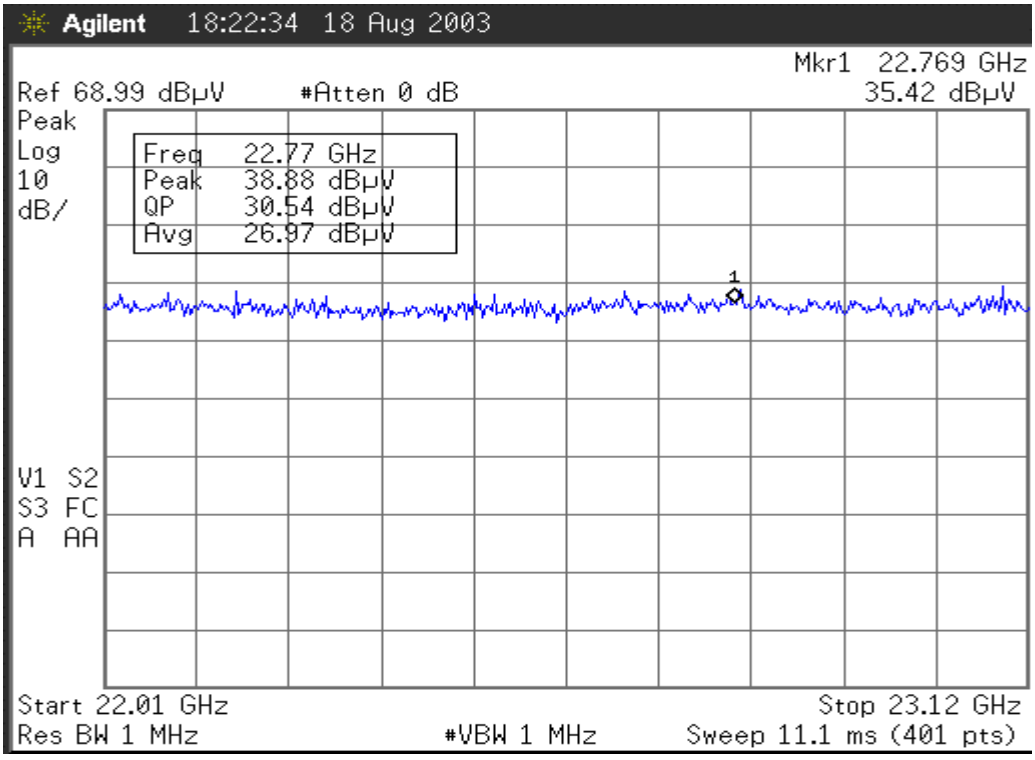
Plot #15 **Antenna:** UNI-28-5.8 P/N 872811



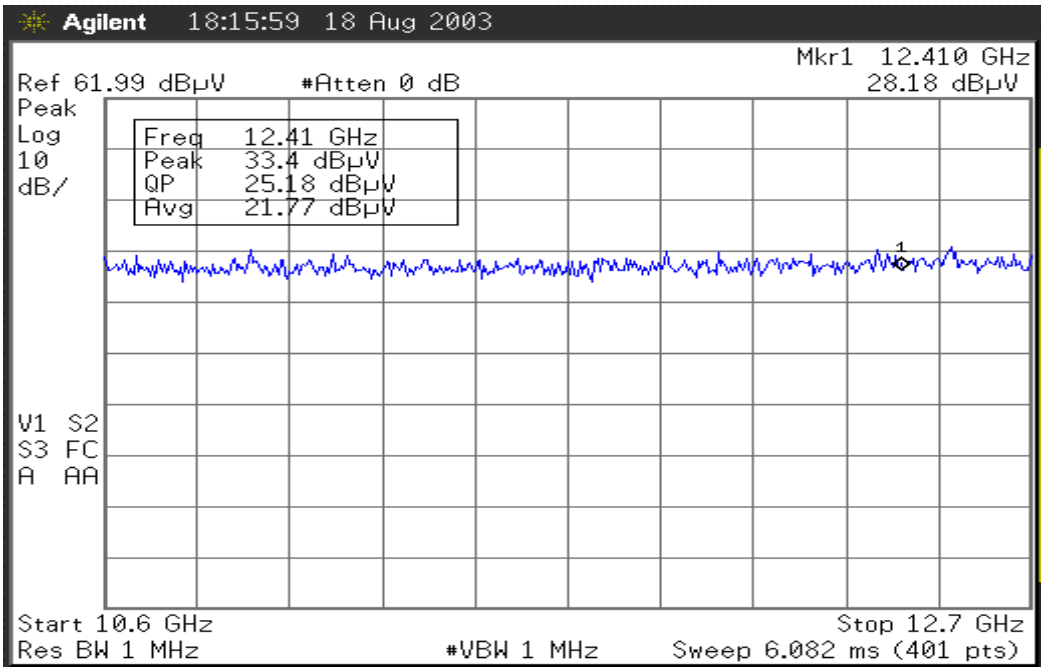
Plot #16 **Antenna:** UNI-28-5.8 P/N 872811



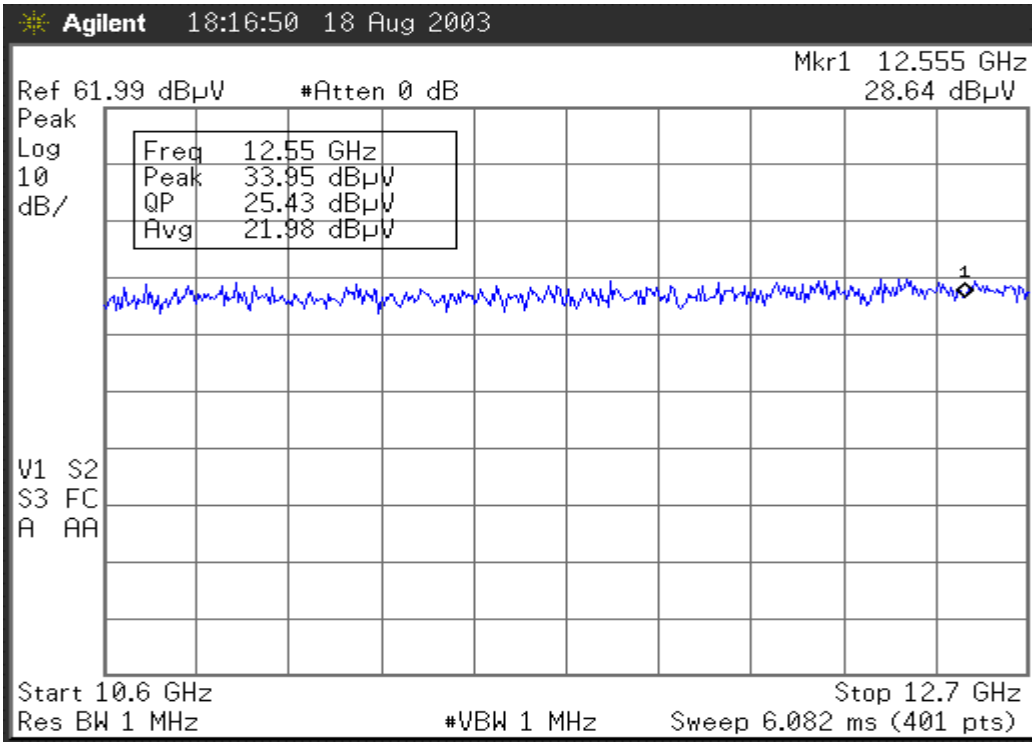
Plot #17 Antenna: MAXRAD type Omni



Plot #18 Antenna: MAXRAD type Omni



Plot #19 **Antenna:** MAXRAD type Omni



Plot #20 **Antenna:** MAXRAD type Omni

4.7 Conducted emission tests on Radio Unit:

4.7.1 Maximum peak output power

Requirements:

The maximum peak output power shall not exceed 1 Watt as required in sec. 15.247 (b) (1).

Test results:

The measurements were taken at three carrier frequencies, in the band 30 MHz – 26 GHz and in the band 26 GHz – 40 GHz.

Calculations:

1. Maximum setting of RBW=VBW is 3MHz
2. 6dB band width = 18MHz @ RBW=VBW=3MHz.
3. Peak power measured = 21.3dBm.
4. Peak power calculation = 21.3+10*log (18/3)=29dBm

The measured results are shown in Plots #21 to #29.
The maximum peak output power in range 30 MHz – 40 GHz does not exceed 30 dBm (1 Watt).

4.7.2 Spurious

Requirements:

In any 100 kHz bandwidth outside the frequency band in which the intentional radiator is operating, the RF power shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, as required in sec. 15.247 (c).

Test results:

The measured results are shown in Plots #30 to #31.

4.7.3 Peak power spectral density

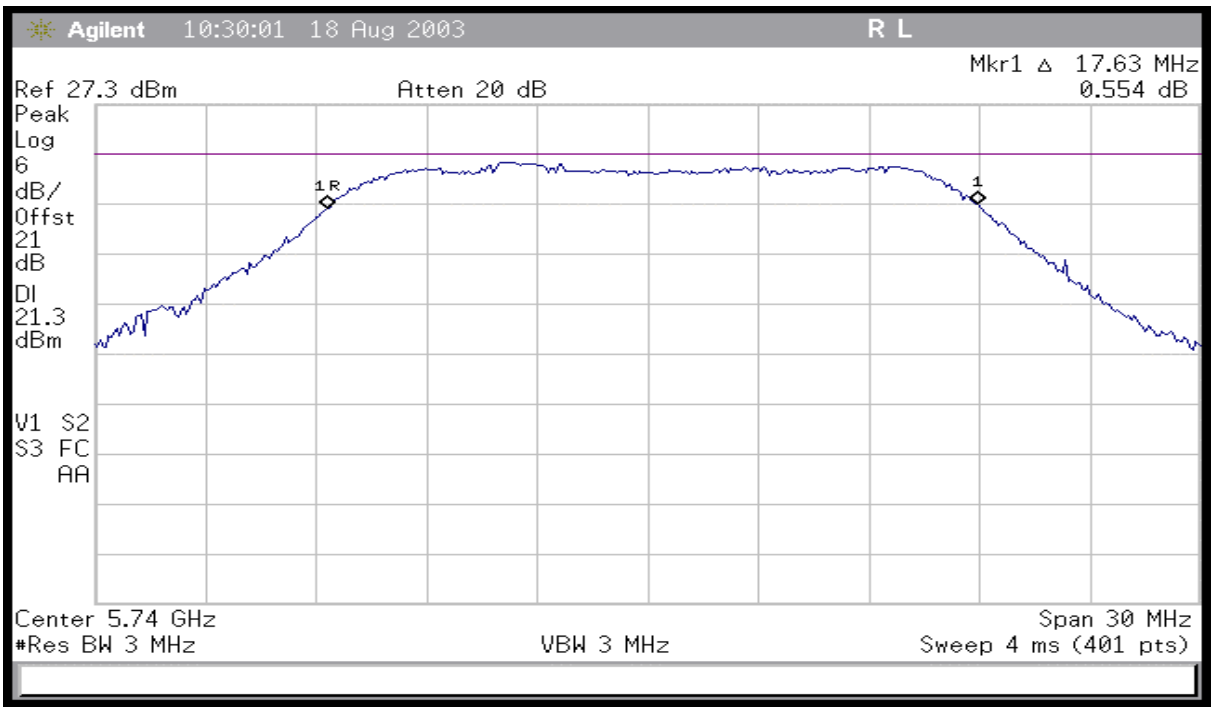
Requirements:

The peak power spectral density shall not be greater than 8dBm in any 3kHz band as required in section 15.247 (d).

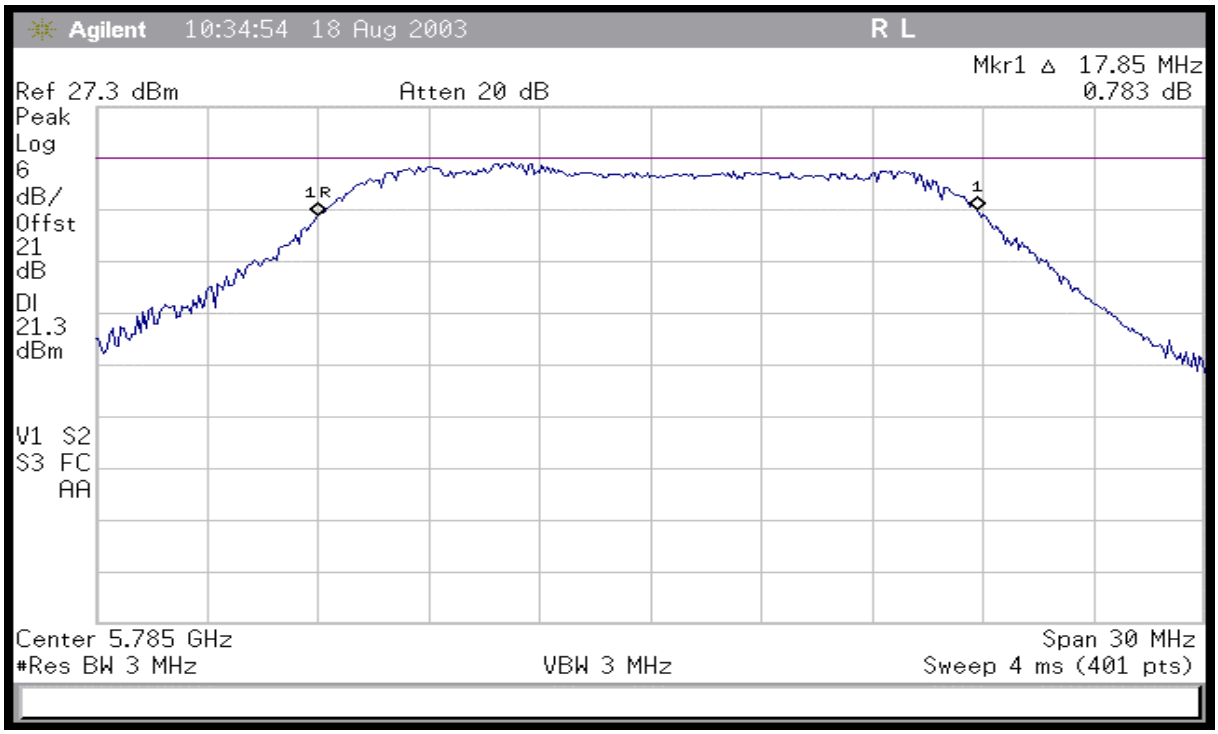
Test results:

The measured results are shown in Plots #32- #34

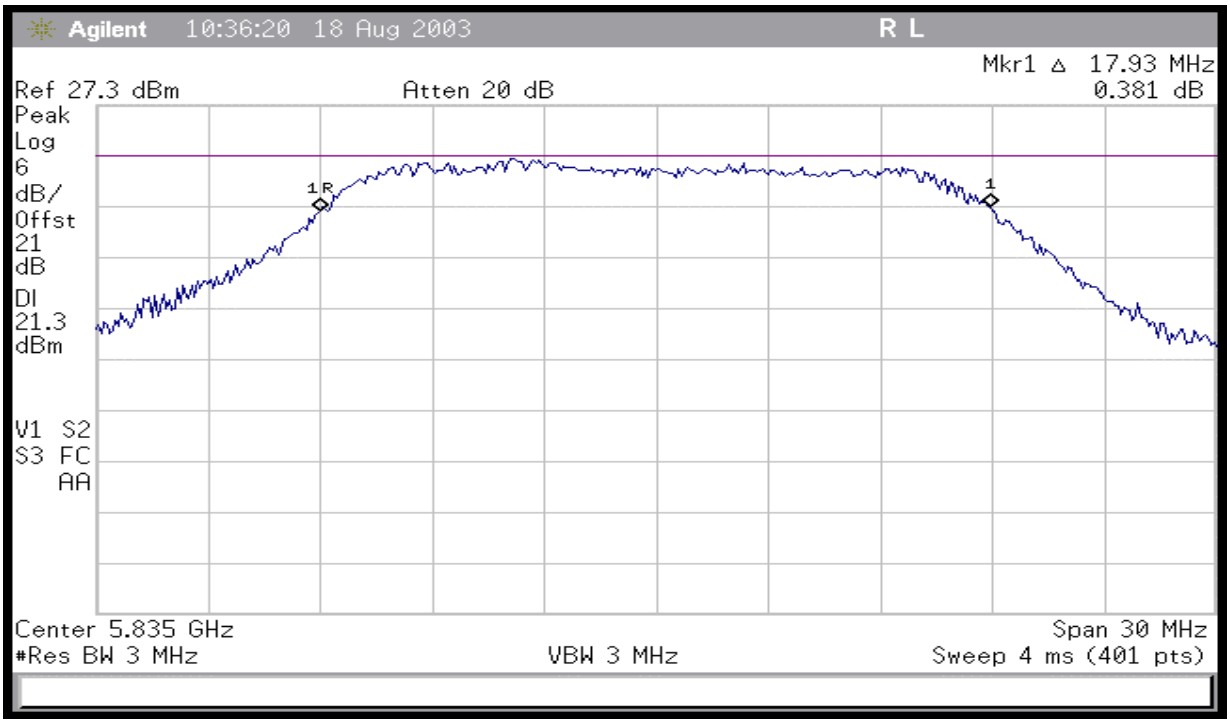
.



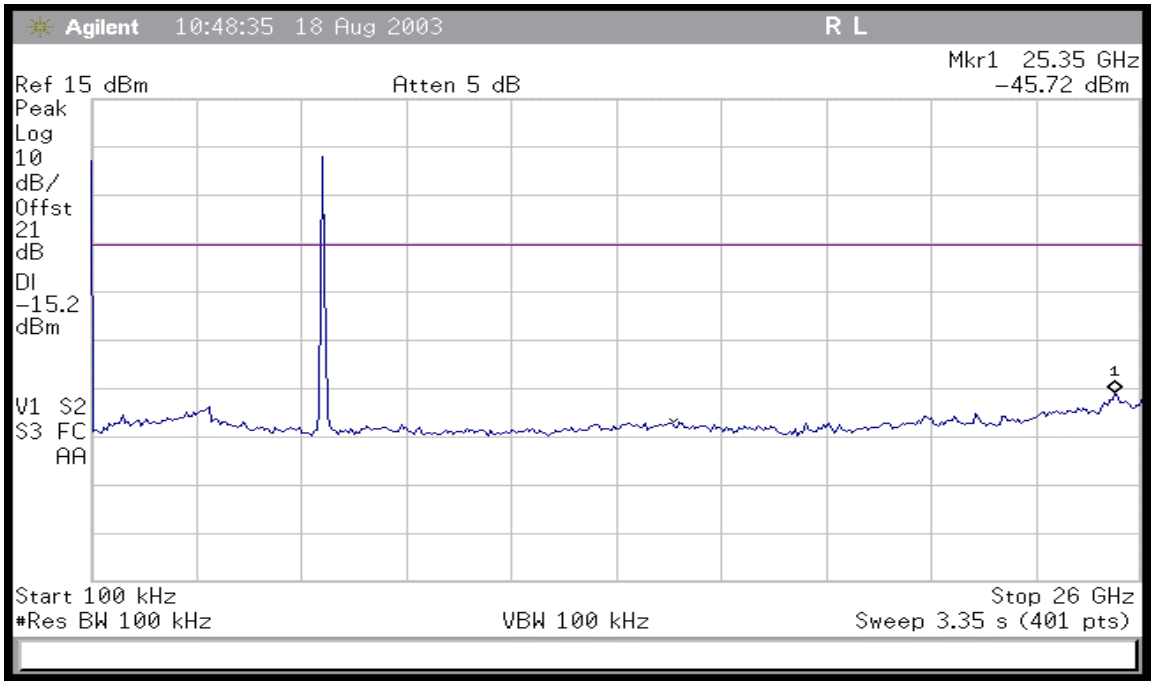
Plot # 21 Maximum peak output power. Freq. - LOW



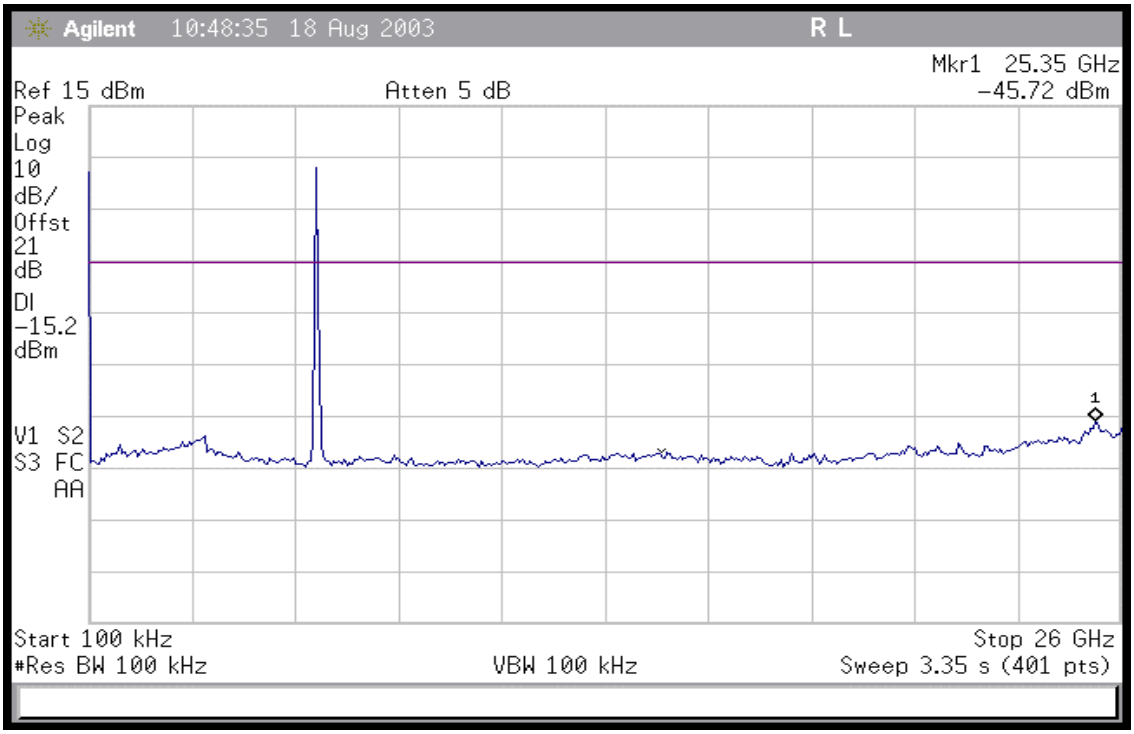
Plot # 22 Maximum peak output power. Freq. – MID



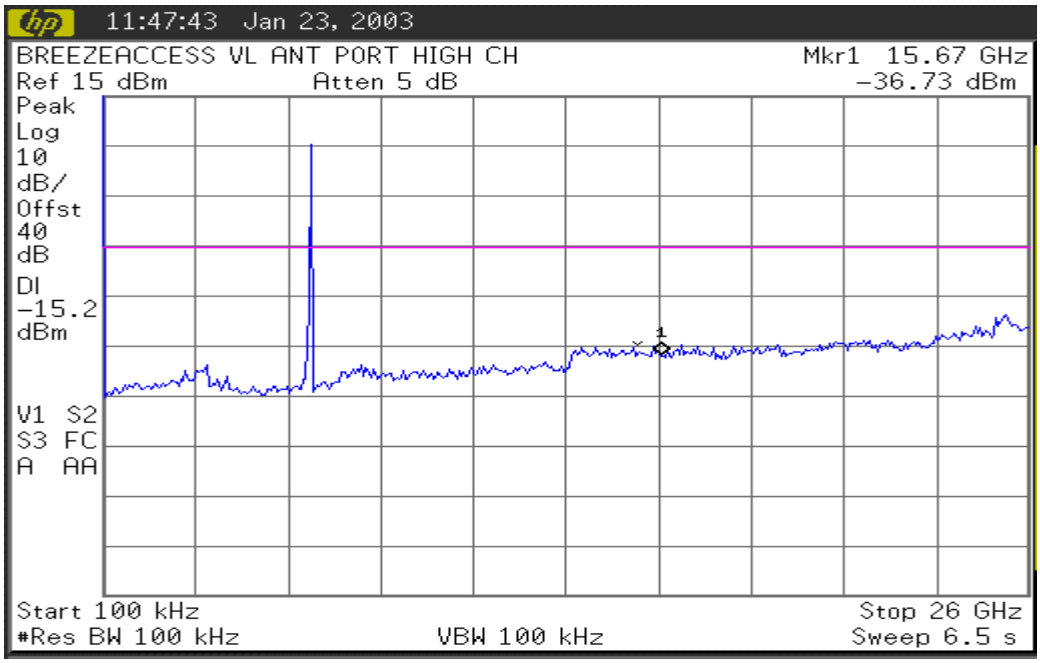
Plot # 23 Maximum peak output power. Freq. – HIGH



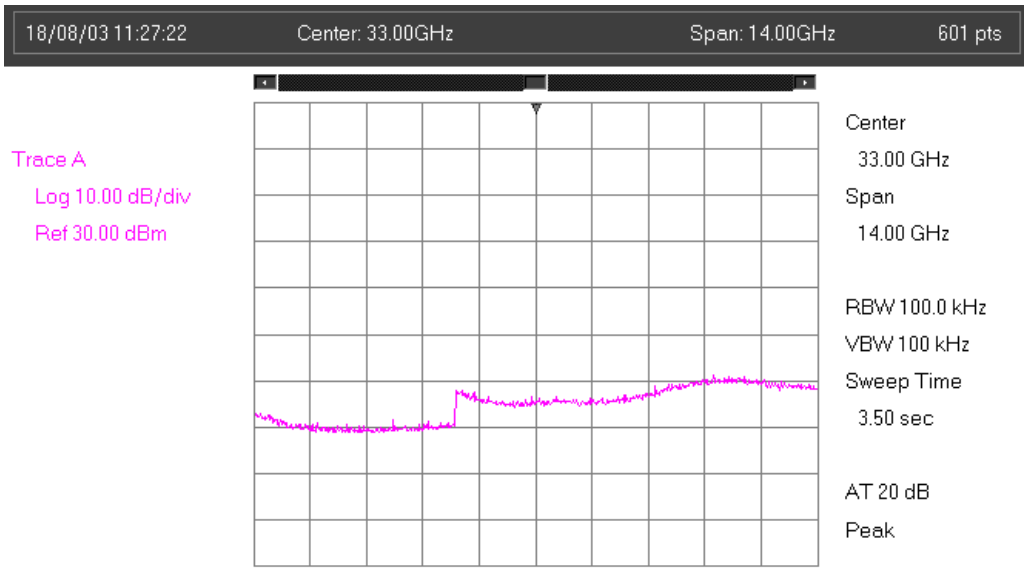
Plot # 24 Conducted emission in freq. range 100 kHz – 26 GHz/Freq. - LOW



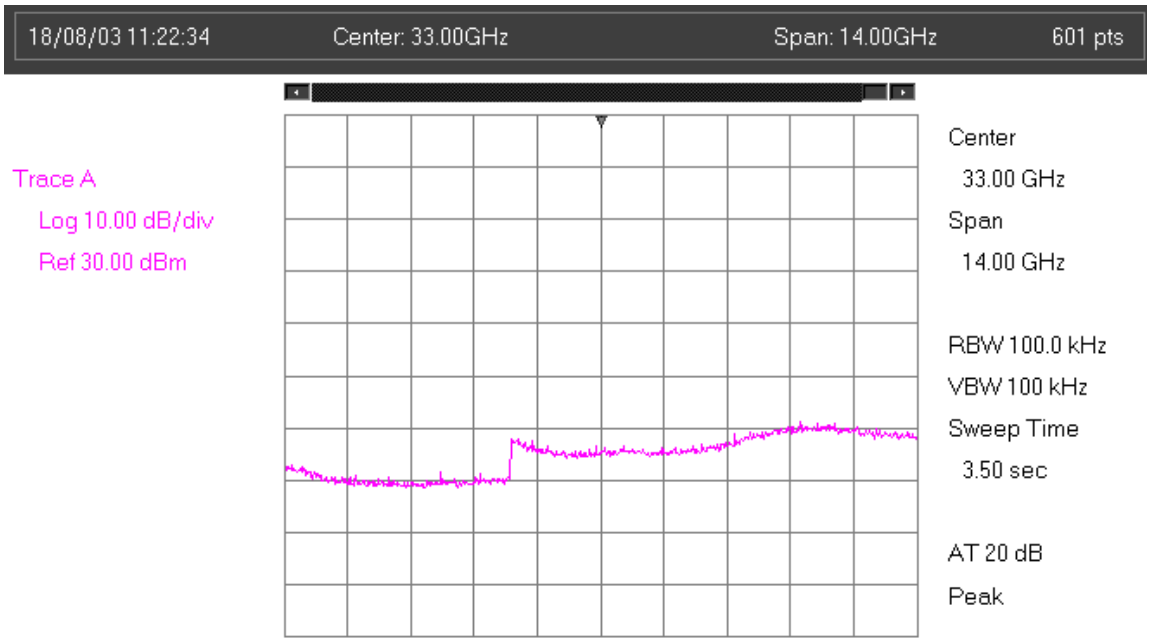
Plot # 25 Conducted emission in freq. range 100 kHz – 26 GHz/Freq. - MID



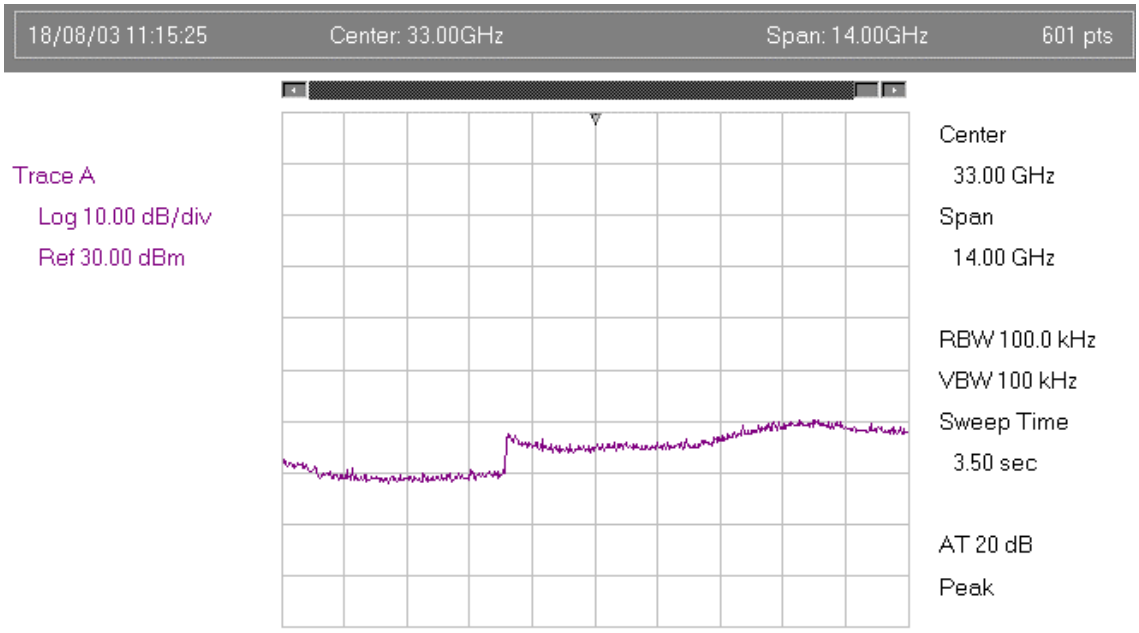
Plot # 26 Conducted emission in freq. range 100 kHz – 26 GHz/Freq. - HIGH



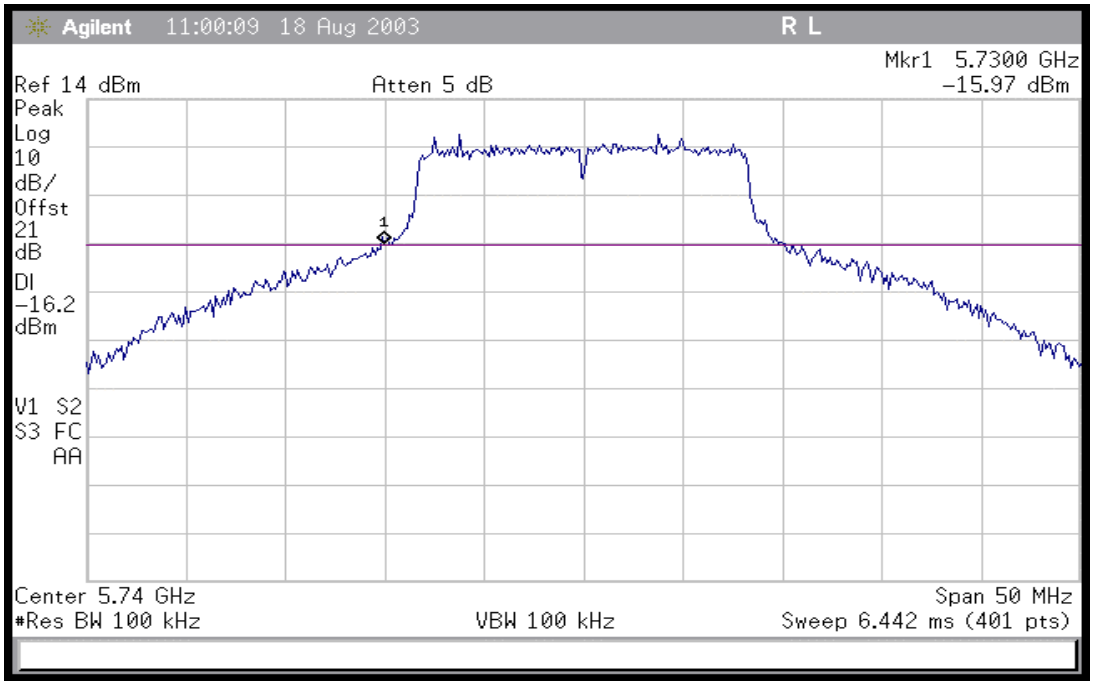
Plot # 27 Conducted emission in freq. range 26- 40 GHz/Freq. - LOW



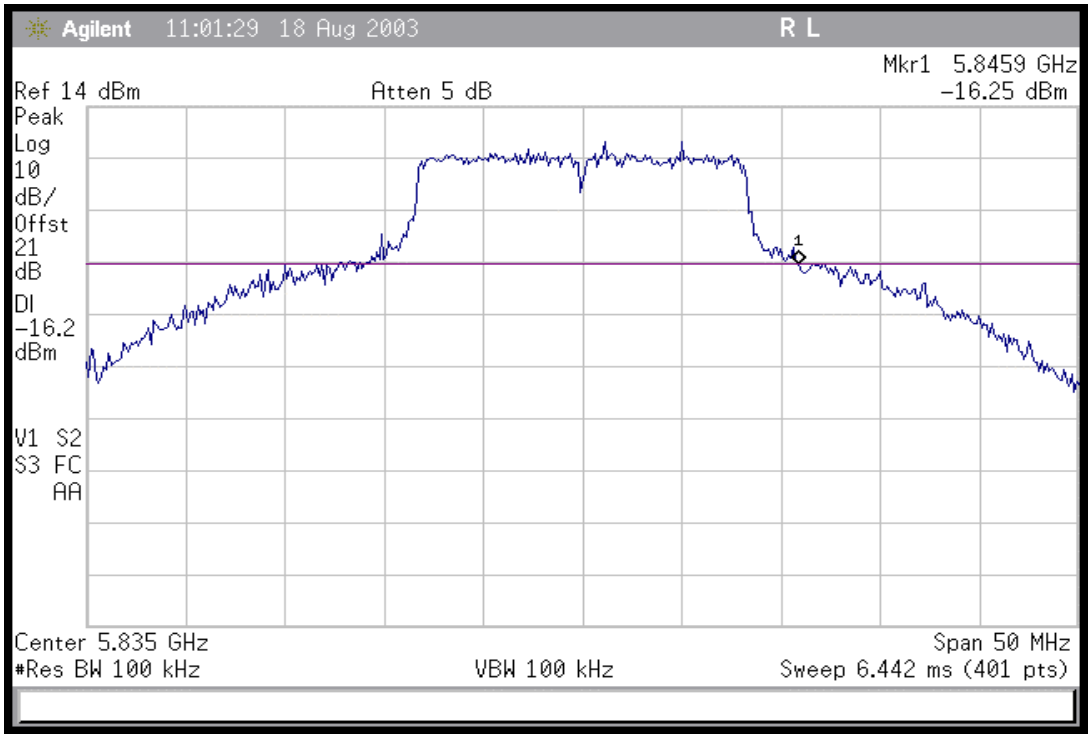
Plot # 28 Conducted emission in freq. range 26- 40 GHz/Freq. - MID



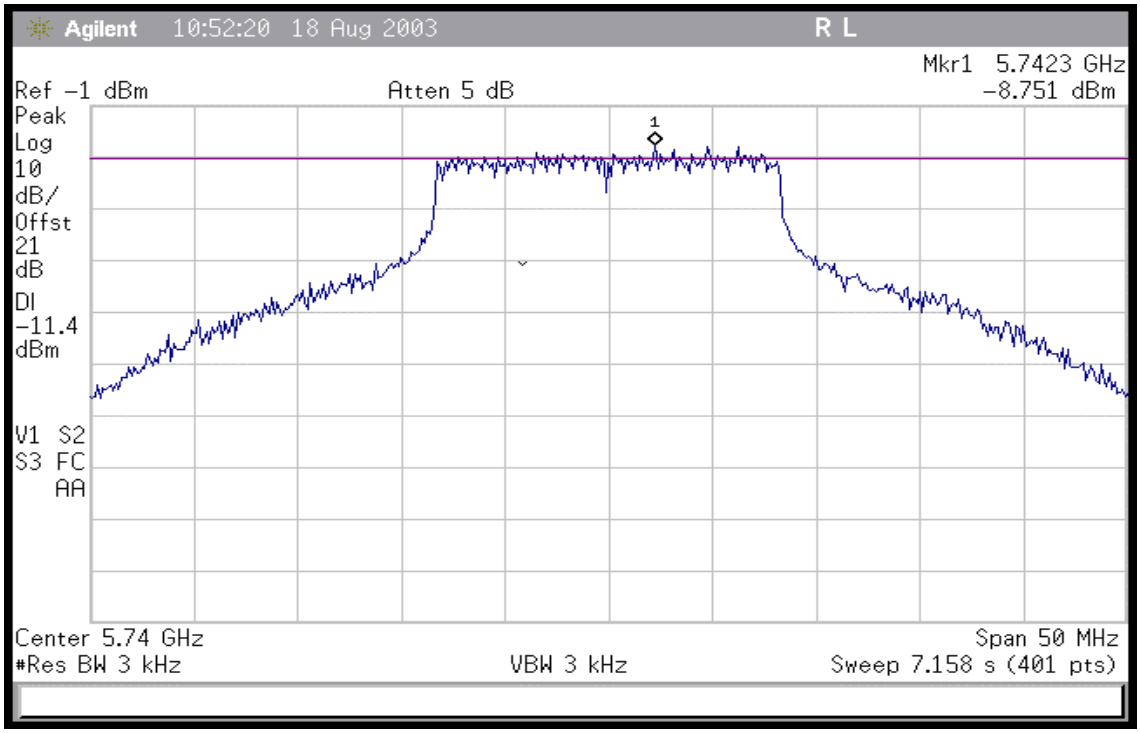
Plot # 29 Conducted emission in freq. range 26- 40 GHz/Freq. - HIGH



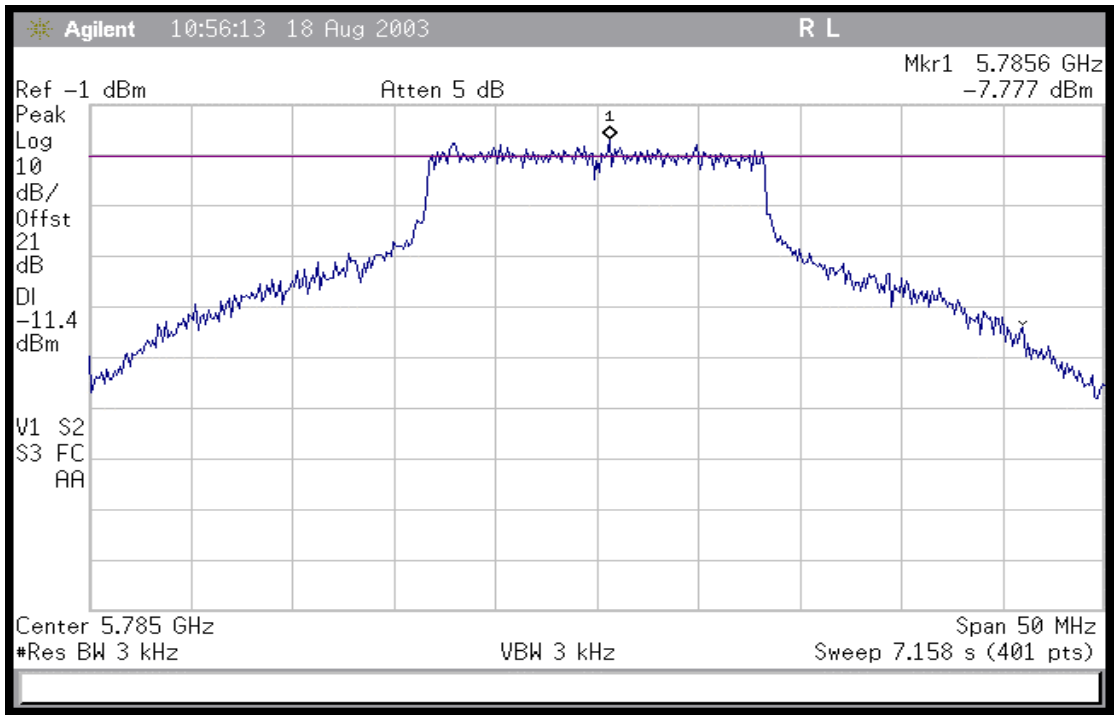
Plot # 30 Conducted RF power 20dB below/Freq. - LOW



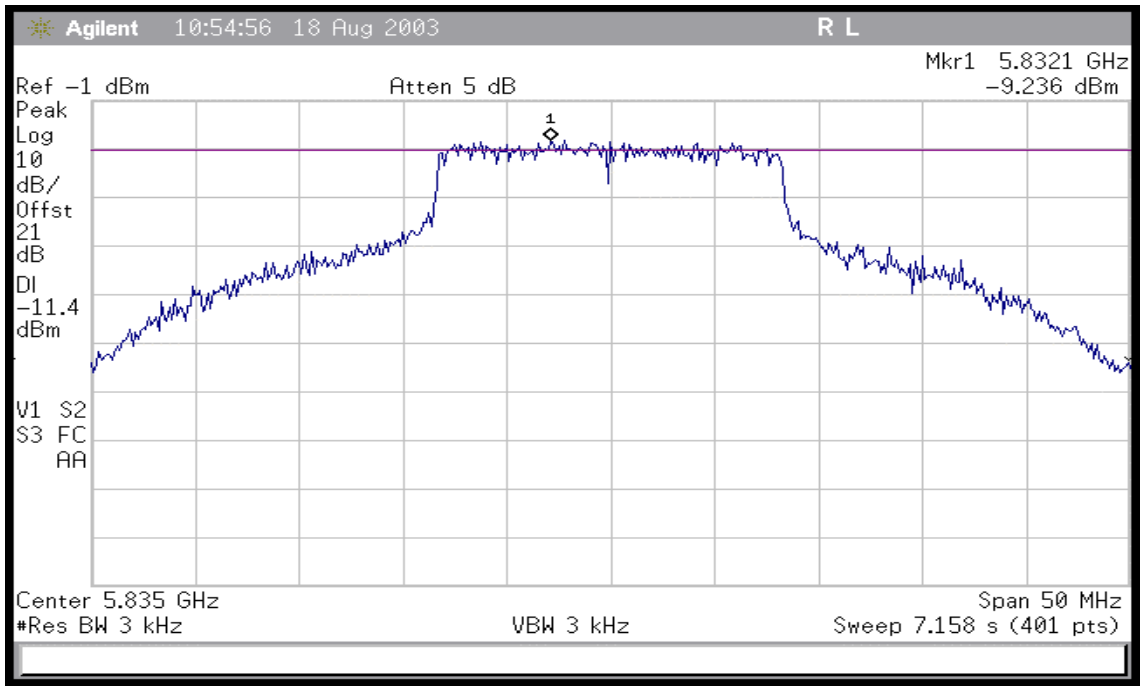
Plot # 31 Conducted RF power 20dB below/Freq. - HIGH



Plot # 32 Peak power spectral density/Freq. – LOW



Plot # 33 Peak power spectral density/Freq. - MID



Plot # 34 Peak power spectral density/Freq. - HIGH

5 Compliance with specification

Test	FCC Part 15	Test result
Radiated emissions in restricted bands	Sec.15.205	Complies
Conducted emission	Sec.15.207	Complies
Radiated emission – general requirements	Sec.15.209	Complies
Maximum peak output power	Sec.15.247 (b) (1)	Complies
Conducted spurious	Sec.15.247 (c)	Complies
Peak power density	Sec.15.247 (d)	Complies

Telematics Laboratory
August 28, 2003

Approved by: Galit Grodetsky
Standard Engineer

Tested by: Albert Herzenshtein
Testing Engineer

6 Appendix 1: Test equipment used

All measurements equipment is on SII calibration schedule with a recalibration interval not exceeding one year.

Instrument	Manufac-turer	Model	Serial No.	Last calibration date	Next calibration date
Spectrum analyzer 10 KHz-26.5 GHz	HP	E7405a	SII 4944	04/03	04/04
Spectrum analyzer 9 KHz-50 GHz	HP	8565E	3517A00347	07/03	07/04
Antenna Double Ridge 1-18 GHz	EMCO	3115	SII4873	03/03	03/04
Antenna Standard Gain Horn 18-40 GHz	WILTRON	Alpha TRG A361	861A/590	01/03	01/04
LISN 9 kHz – 30 MHz	FCC	LISN-50/250-32-4-16	SII 5023	05/03	05/04
Transient limiter 0.009-200 MHz	HP	11947A	31074A3105	05/03	05/04
Attenuator 20 dB	HP	8491B	3929M50394	05/03	05/04

7 Appendix 2: Antenna Factor and Cable Loss

Antenna Factor
Standard Gain Horn 26 – 40 GHz Alpha TRG Model A361

Point	Frequency (MHz)	Antenna Factor (dB/m)
1	26000	35.22
2	27000	35.40
3	28000	35.52
4	29000	35.64
5	30000	35.76
6	31000	35.90
7	32000	36.07
8	33000	36.16
9	34000	36.31
10	35000	36.46
11	36000	36.60
12	37000	36.74
13	38000	36.93
14	39000	37.21
15	40000	37.28

ETS

Gain and Antenna Factors for Double Ridged Guide Antenna
Manufactured by EMC Test Systems
Model Number: 3115 Serial Number: 5802
1.0 Meter Calibration Polarization: Horizontal

Frequency (MHz)	Antenna Factor (dB/m)	Gain Numeric	Gain dBi
1000	24.3	3.86	5.9
1500	25.6	6.48	8.1
2000	27.9	6.83	8.3
2500	28.9	8.43	9.3
3000	30.7	7.97	9.0
3500	32.0	8.06	9.1
4000	33.0	8.38	9.2
4500	32.9	10.91	10.4
5000	34.1	10.16	10.1
5500	34.8	10.51	10.2
6000	35.2	11.38	10.6
6500	35.4	12.79	11.1
7000	36.4	11.83	10.7
7500	37.3	10.90	10.4
8000	37.5	12.05	10.8
8500	37.9	12.36	10.9
9000	38.2	12.86	11.1
9500	38.3	14.04	11.5
10000	38.7	14.25	11.5
10500	38.5	16.26	12.1
11000	38.8	16.87	12.3
11500	39.5	15.41	11.9
12000	39.3	17.96	12.5
12500	39.1	20.03	13.0
13000	40.2	16.83	12.3
13500	41.2	14.53	11.6
14000	41.9	13.20	11.2
14500	41.3	16.27	12.1
15000	39.6	26.07	14.2
15500	38.1	39.49	16.0
16000	38.4	39.12	15.9
16500	39.8	29.81	14.7
17000	41.6	20.97	13.2
17500	44.8	10.55	10.2
18000	46.5	7.57	8.8

Specification compliance testing factor (1.0 meter spacing) to be added to receiver meter reading in dBV to convert to field intensity in dBV/meter. Calibrated 07 Oct 02 (DD/MM/YYYY). Calibration per ARP 958.

ETS

Gain and Antenna Factors for Double Ridged Guide Antenna
Manufactured by EMC Test Systems
Model Number: 3115 Serial Number: 5802
1.0 Meter Calibration Polarization: Vertical

Frequency (MHz)	Antenna Factor (dB/m)	Gain Numeric	Gain dBi
1000	24.1	4.11	6.1
1500	25.6	6.48	8.1
2000	27.9	6.83	8.3
2500	28.9	8.47	9.3
3000	30.6	8.18	9.1
3500	31.9	8.24	9.2
4000	33.0	8.45	9.3
4500	32.8	11.14	10.5
5000	34.0	10.34	10.1
5500	34.8	10.40	10.2
6000	35.1	11.67	10.7
6500	35.4	12.86	11.1
7000	36.3	11.92	10.8
7500	37.3	10.95	10.4
8000	37.4	12.15	10.8
8500	37.8	12.58	11.0
9000	38.2	13.01	11.1
9500	38.2	14.21	11.5
10000	38.5	14.79	11.7
10500	38.6	16.05	12.1
11000	38.8	16.93	12.3
11500	39.3	16.19	12.1
12000	39.1	18.46	12.7
12500	39.1	20.28	13.1
13000	40.1	17.19	12.4
13500	41.1	14.85	11.7
14000	41.8	13.55	11.3
14500	41.3	16.25	12.1
15000	39.6	25.78	14.1
15500	38.0	39.54	16.0
16000	38.3	39.73	16.0
16500	39.6	31.52	15.0
17000	41.3	22.72	13.6
17500	44.5	11.49	10.6
18000	46.5	7.69	8.9

Specification compliance testing factor (1.0 meter spacing) to be added to receiver meter reading in dBV to conv
to field intensity in dBV/meter. Calibrated 07 Oct 02 (DD/MM/YYYY). Calibration per ARP 958.

8 Appendix 3: Test configuration illustration

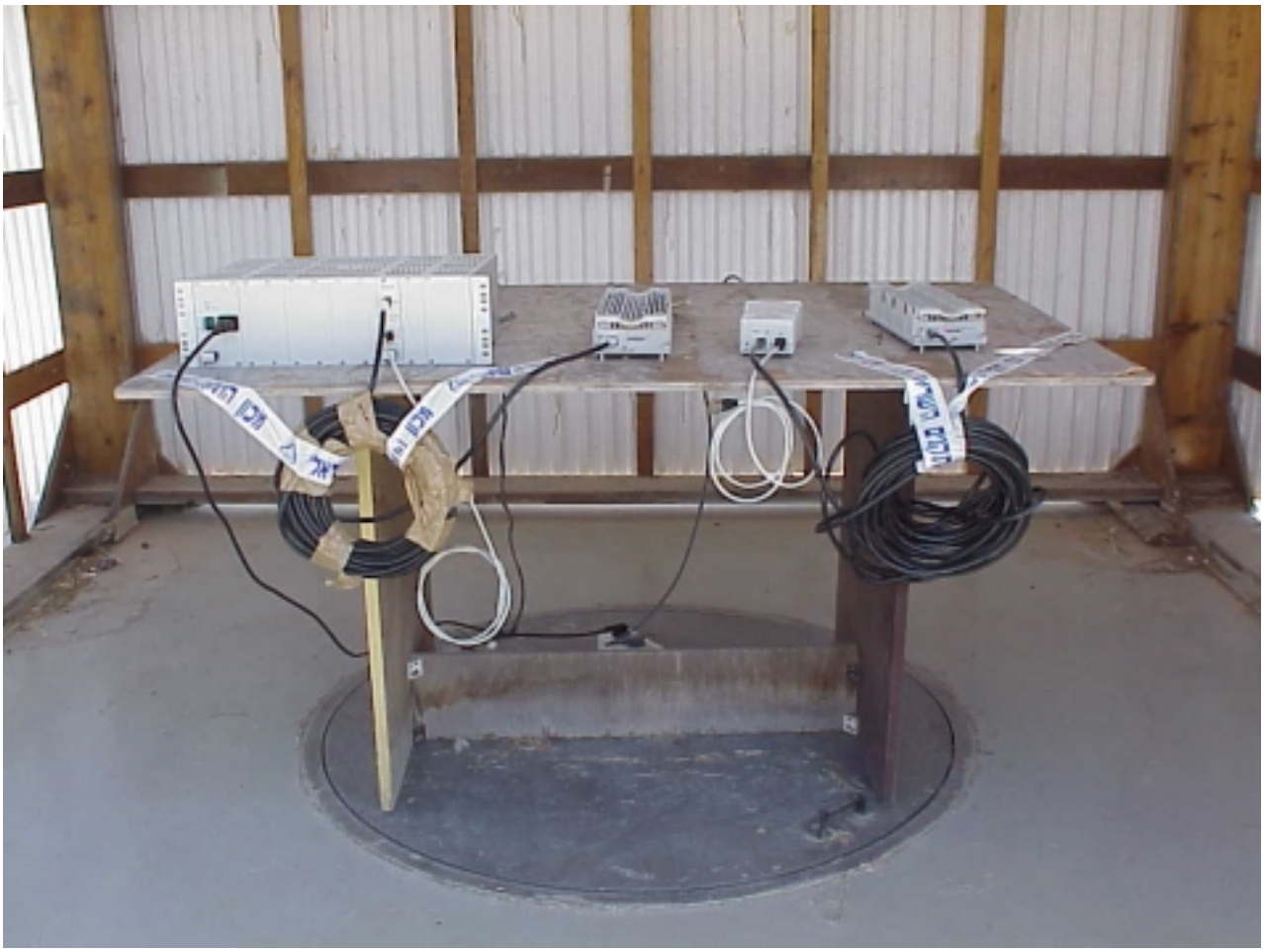


Photo #3.
Base Station + Subscriber Unit
Radiated emission test on open site

Photo #4.
Base Station + Subscriber Unit
Radiated emission test on open site

Photo #5
Radio unit with MTI sector antenna P/N MT-484025/NV.
Spurious emission test

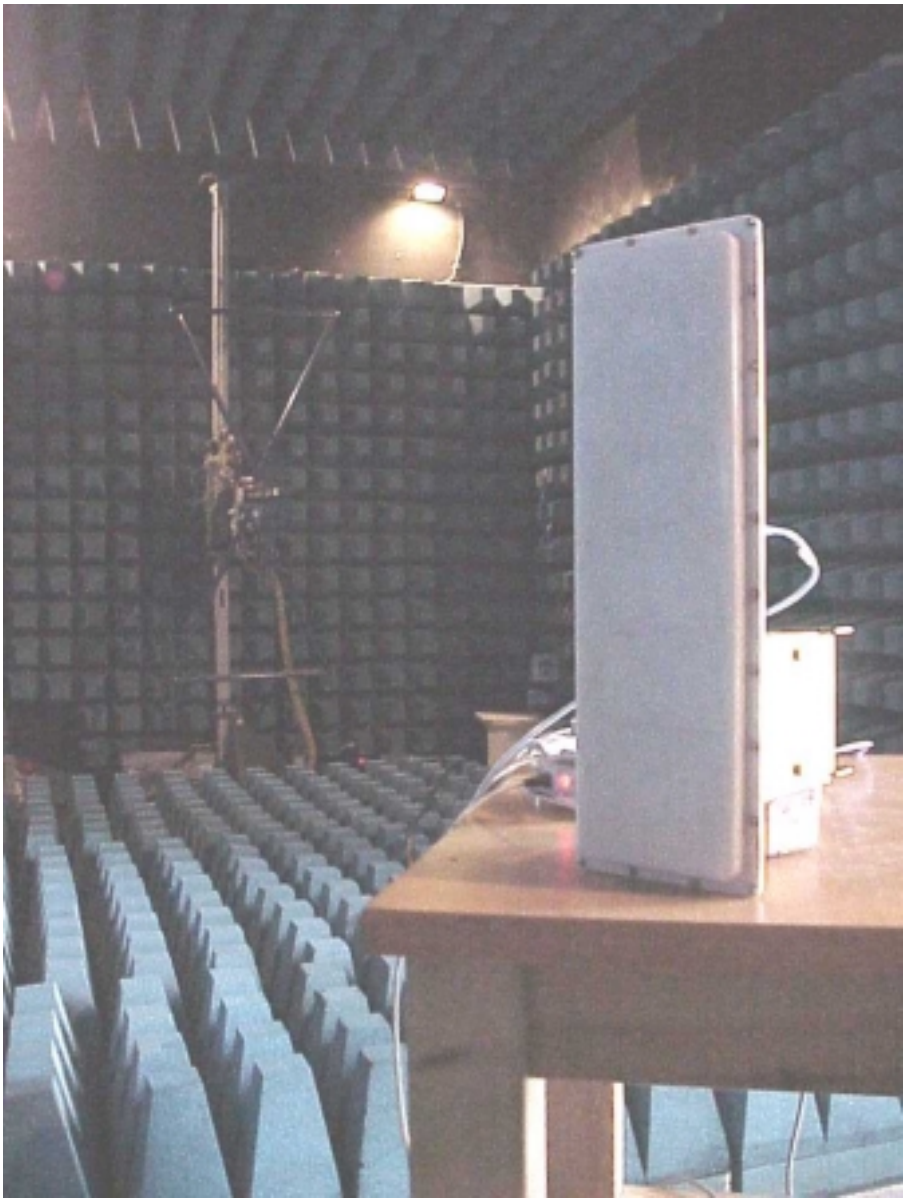


Photo #6.
Radio unit with MTI sector antenna P/N MT-484025/NV.
Spurious emission test

Photo #7.
Radio unit with Unidirectional antenna UNI-28-4 P/N 858109
Spurious emission test

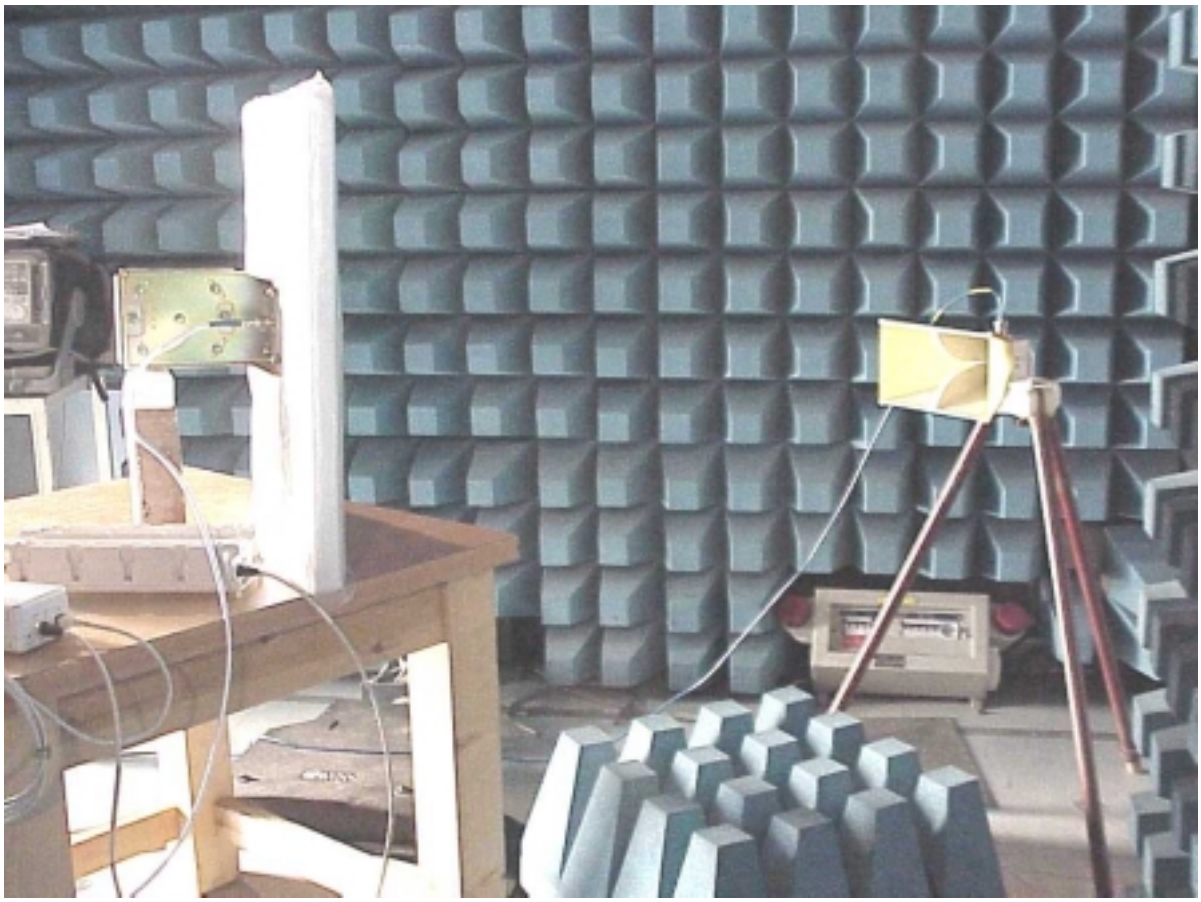


Photo #8.
Radio unit with Unidirectional antenna UNI-28-4 P/N 858109
Spurious emission test

Photo #9
Radio unit with Unidirectional antenna UNI-28-5.8 P/N 872811
Spurious emission test

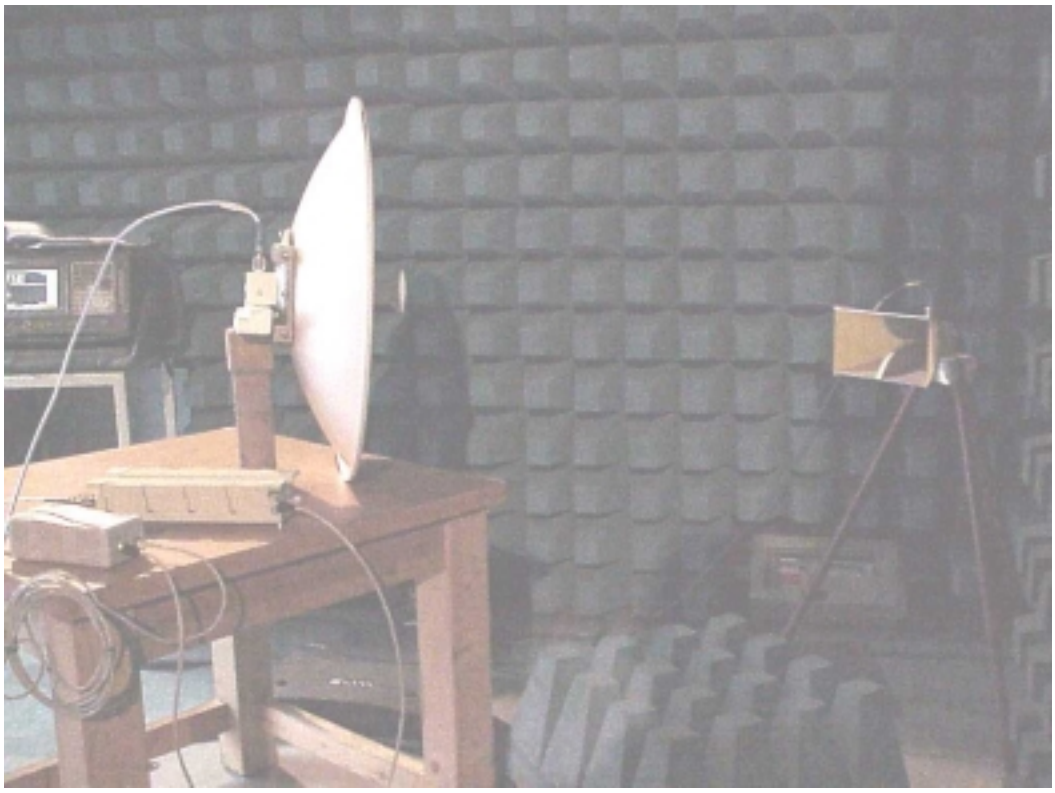


Photo #10
Radio unit with Unidirectional antenna UNI-28-5.8 P/N 872811
Spurious emission test

Photo #11
Radio unit with MAXRAD Omni antenna model MFB58008
Spurious emission test