

Test Report No. 8312301366 Rev1

For Alvarion Ltd.

Equipment Under Test:
BreezeACCESS VL System

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



Certificate No.1487-01

Test Report No.: 8312301366 Rev1

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Title: Test on BreezeACCESS VL System

Order placed by:	Alvarion Ltd.
Address:	21A Habarzel str, Tel-Aviv, 69710, Israel
Sample for test selected by:	The orderer
The date of test:	15/01, 22/01, 23/01/2002

Description of Equipment

Under Test (EUT):	BreezeACCESS VL System
Manufactured by:	Alvarion Ltd.

Reference Documents:

- ❖ CFR 47 FCC: Rules and Regulations; Part 15. "Radio frequency devices";
Subpart B: "Unintentional radiators";
Subpart C: "Intentional radiators" (2002)

Test Results: The EUT was found meeting with the requirements of CFR 47 FCC Part 15
Subpart B Sec.15.109
Subpart C Sec.15.205, 15.207,15.209, 15.247.

This Test Report contains 44 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.

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1 Scope

This test report contains results of the tests, performed on BreezeACCESS VL System according to the relevant requirements of CFR 47 FCC Part 15 Subpart B/C.

2 BreezeACCESS VL System general description

2.1 BreezAccess VL description

BreezeACCESS VL is a high capacity, IP services oriented Broadband Wireless Access system. The system is digital modulated operating in the 5725MHz up to 5875MHz band. The system is an outdoor unit oriented. The installation configuration is a two-box configuration containing a power supply and an Ethernet bypass as and indoor unit and the radio as an outdoor unit.

The indoor power supply can be either a single power supply for a subscriber (CPE) configuration or a rack mounded power supply for a base station (BS) configuration. The outdoor radio unit is the same in both cases.

The subscriber unit is defined as a point-to-point unit.

The base station is defined as a point-to-point unit.

2.2 Architecture:

Tested unit BreezeACCESS VL system comprises the following:

1. The Customer Premise Equipment (CPE) – BreezeACCESS VL Subscriber Unit.
2. The Base Station Equipment (BS) – BreezeACCESS VL Access Unit.

Premise Subscriber Unit (Customer Equipment):

The Subscriber Unit (SU), installed at the customer premises, provides data connections to the Access Unit.

The Subscriber Unit is comprised of the following subparts

1. SU-NI - Indoor unit comprising RJ45 (10/100baseT) and Power connectors
2. Indoor-outdoor CAT-5 cable.
3. SU-RA – Outdoor unit with RJ45 connector (10/100BaseT) with an integrated attached antenna.

The indoor unit provides the interface to the user's equipment and is powered from the mains via its power supply unit. The indoor unit is connected to the outdoor unit via a CAT-5 cable, which also serves for transferring power, management and control signals.

Base Station Equipment:

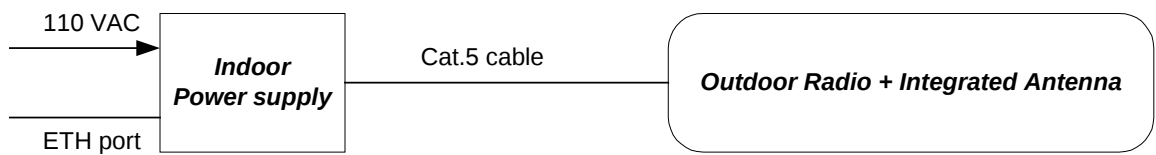
The BreezeACCESS Access Units (AU), installed at the base station site, provide all the functionality necessary to communicate with the Remote Units and to connect to the backbone of the service provider.

Each AU connects to the network through a standard IEEE 802.3 Ethernet 10/100BaseT (RJ 45) interface.

Base Station contains

1. AU-BS – Plugged-in indoor unit
2. Indoor-outdoor CAT-5 cable
3. AU-RE - Outdoor unit with RJ45 (10/100baseT) and antenna connectors
4. RF cable and External antenna (installation by professional installer).

Subscriber Unit configuration



Base Station Unit configuration

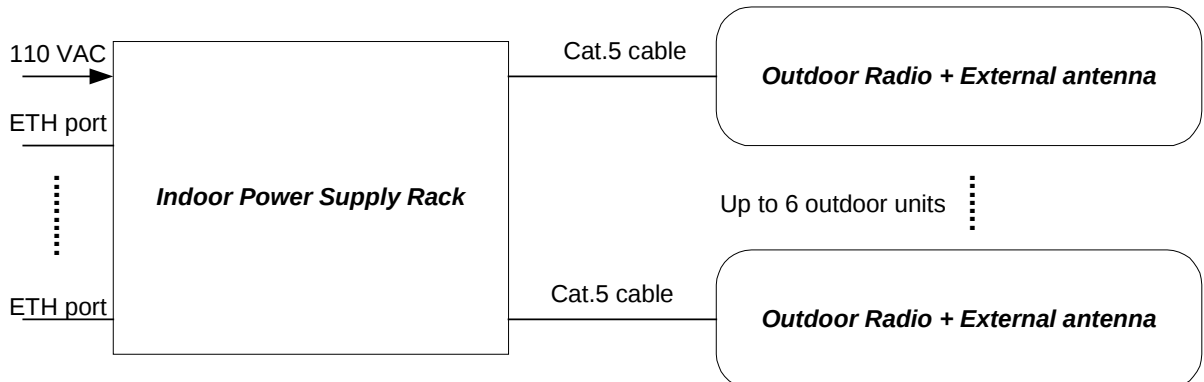


Figure 1 BreezeACCESS VL System configuration

2.3 Radio and Modem specification:

Frequency	5.725-5.850 GHz							
Operation Mode	Time Division Duplex							
Radio Access Method	OFDM							
Channel Bandwidth	20 MHz							
Antenna	SU Antenna	21dBi, 10.5° horizontal x 10.5° vertical, EN 302 085, Class TS 1,2,3,4,5 compliant						
	Sector Antenna	16dBi, 90° vertical x 6°, horizontal EN 302 085, Class CS 3 compliant						
AU Output Power (@ antenna port)	15 to 25dBm, Adjustable in 1dB steps							
SU Output Power (@ antenna port)	-17 to 25dBm, ATPC							
Modulation	BPSK, QPSK, 16QAM, 64QAM							
Gross bit rate (Mbps)	6	9	12	18	24	36	48	54
Sensitivity (dBm)	-88	-87	-86	-84	-81	-77	-72	-70

2.4 Connectors:

Subscriber Unit

Unit	Connector	Description
SU-NI	RJ45	10/100Base-T Ethernet
	RJ45	10/100Base-T Ethernet + power for outdoor connection CAT-5 shielded cable should be used
	AC IN	3 pin AC power plug
SU-RA	RJ45	10/100Base-T Ethernet

Modular Base Station Equipment

Unit		Connector	Description
AU-E-BS	AU-BS	RJ45	10/100Base-T Ethernet
		RJ45	10/100Base-T Ethernet + power for outdoor connection CAT-5 shielded cable should be used
	AU-RE	RJ45	10/100Base-T Ethernet
		ANT	N-Type jack, 50 ohm, lightning protected
BS-PS-AC		AC IN	3 pin AC power plug

2.5 Test configuration:

1. During the measurements according to sec.15.109 Subpart B and sec.15.207 Subpart C the BreezeACCESS VL System was configured as shown in Figures 2, 3.
2. The measurements according to sec.15.205, 15.209 Subpart C were performed on the Outdoor unit (ODU). The ODU was tested with two different antennas:
 - MA-WA50-1X P/N AN1165 mfr Mars Antennas
 - 5.15-5.875 GHz P/N MT-484026/NV mfr MTI Wireless Edge.

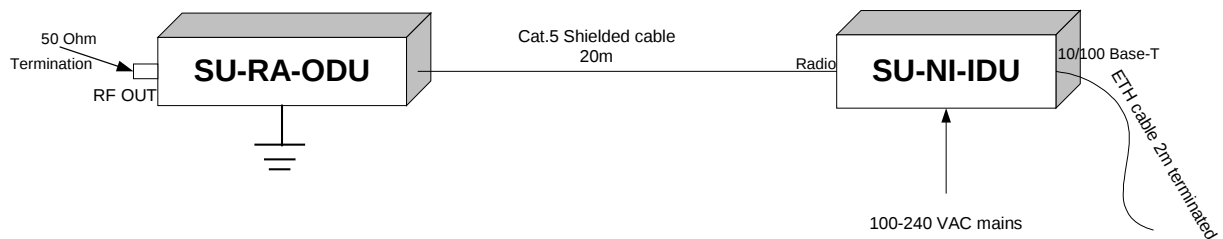


Figure 2 Subscriber Unit test setup

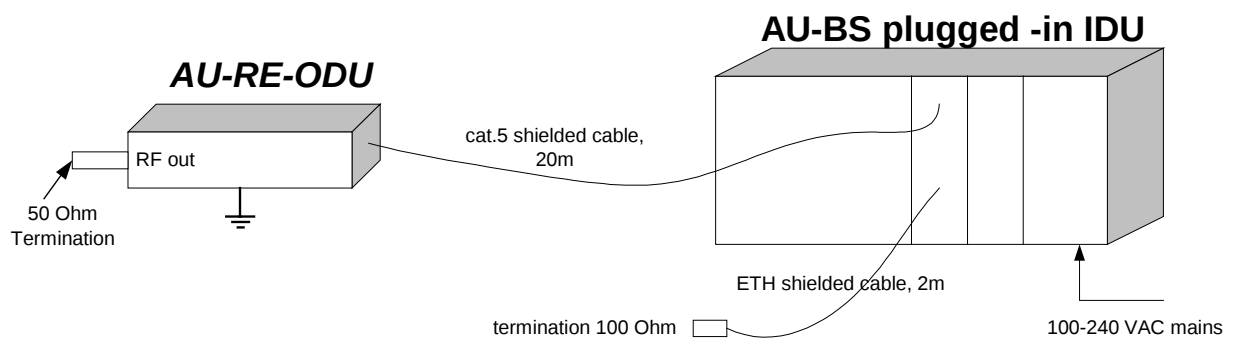


Figure 3 Base Station test setup

3 Test specification, Methods and Procedures

Test Specification:

- ❖ CFR 47 FCC: Rules and Regulations; Part 15. "Radio frequency devices";
Subpart B: "Unintentional radiators";
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 Test condition:

Temperature: 22 °C
Humidity: 50 %

4.3 Conducted emission test (Subscriber Unit, Base Station Unit):

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) Subpart C.

4.3.2 Test configuration:

The measurements of Subscriber Unit were performed on Indoor power supply. The test configuration is shown in Fig.1.

The measurements of Base Station Unit were performed on Indoor power supply rack. The test configuration is shown in Fig.2.

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.

4.3.3 Test procedure:

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.

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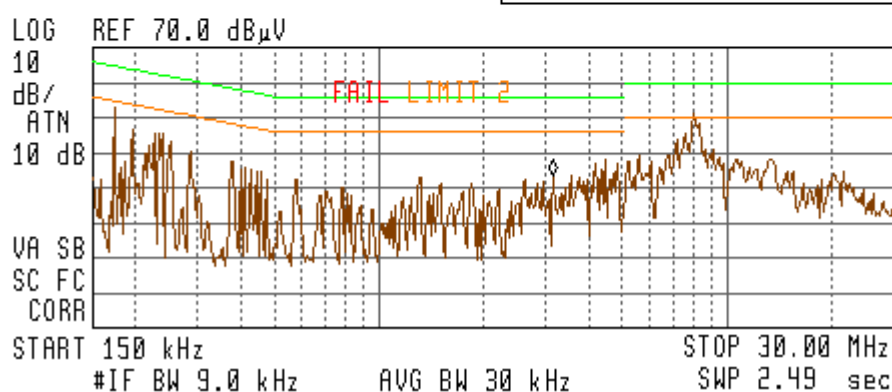
Title: Test on BreezeACCESS VL System

14:40:36 15 JAN 2003

ALVARION PHASE

Signal	Freq (MHz)	PK Amp	QP Amp	AV Amp	QP Δ1
1	0.172916	53.7	45.2	14.0	-20.0
2	0.207740	47.8	43.8	22.0	-20.2
3	0.249564	50.2	48.1	33.5	-14.9
4	7.076810	43.3	36.7	23.0	-23.3
5	8.099880	54.7	47.6	36.6	-12.4

FREQ 3.156 MHz
PEAK 35.1 dBμV
QP 31.0 dBμV
AVG 13.7 dBμV



Plot 1. Subscriber Unit

Conducted emissions measurement result on 110 VAC power

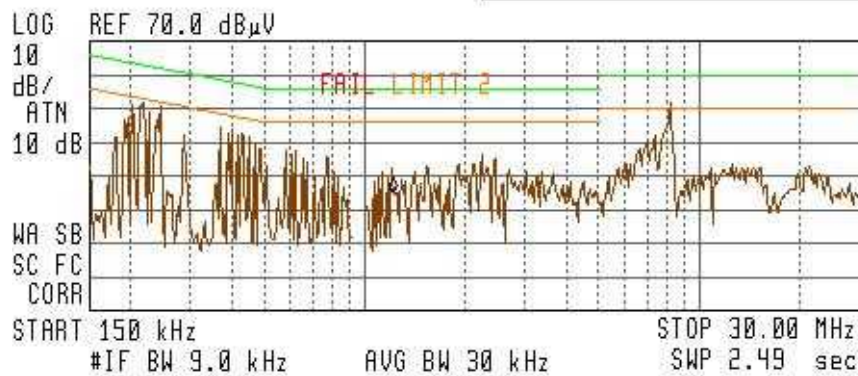
Reference standard: FCC Part 15 sec. 15.207 Sub.C

line: phase

14:29:14 15 JAN 2003
ALVARION NEUTRAL

Signal	Freq (MHz)	PK Amp	QP Amp	AV Amp	QP _Δ L1
1	0.187786	52.5	51.7	36.9	-14.3
2	0.248539	52.5	50.7	40.9	-12.3
3	0.375917	44.7	44.0	30.1	-15.0
4	0.416830	43.3	39.2	13.2	-18.8
5	0.078065	52.3	47.3	34.2	-12.7

FREQ 1.223 MHz
PEAK 36.4 dB μ V
QP 27.5 dB μ V
AVG 7.0 dB μ V



Plot 2. Subscriber Unit

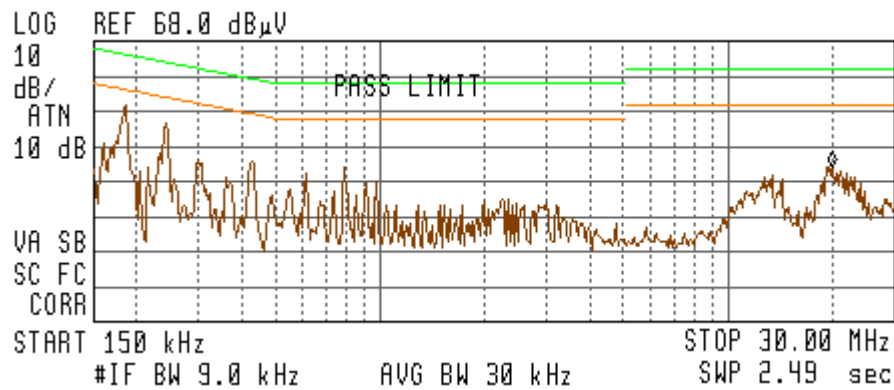
Conducted emissions measurement result on 110 VAC power
Reference standard: FCC Part 15 sec. 15.207 Sub. C
line: neutral

10:33:27 13 FEB 2003

ALVARION BREEZEACCESS VL COND EM FCC PHASE

Signal	Freq (MHz)	PK Amp	QP Amp	AV Amp	AV _Δ L2
1	0.187323	52.6	48.4	42.7	-11.5
2	0.245680	52.2	45.2	37.5	-14.4
3	0.308926	41.8	39.3	32.7	-17.3
4	0.372244	37.5	34.0	26.4	-22.1
5	0.432697	37.4	34.2	30.8	-16.4

FREQ 19.79 MHz
 PEAK 33.2 dB_μV
 QP 28.5 dB_μV
 AVG 12.6 dB_μV



Plot 3. Base Station Unit

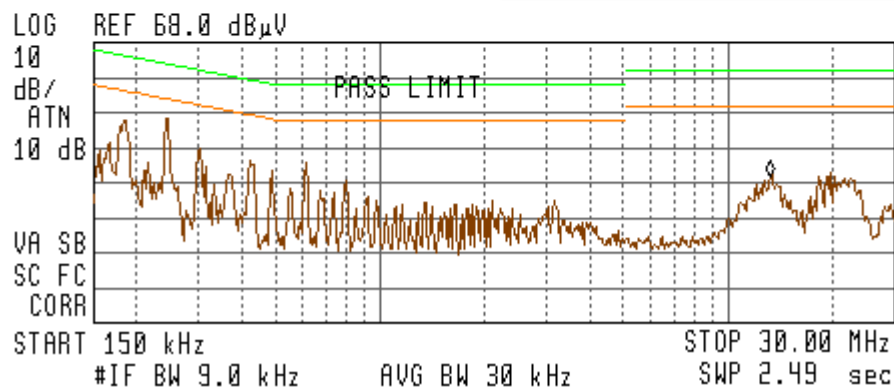
Conducted emissions measurement result on 110 VAC power
 Reference standard: FCC Part 15 sec. 15.207 Sub. C
 line: phase

10:50:03 13 FEB 2003

ALVARION BREEZEACCESS VL COND EM FCC NEUTRAL

Signal	Freq (MHz)	PK Amp	QP Amp	AV Amp	AV Δ L2
1	0.186450	50.3	48.5	42.7	-11.6
2	0.246250	52.5	46.3	37.7	-14.2
3	0.309112	40.6	39.2	33.2	-16.8
4	0.431831	35.8	33.9	31.0	-16.2
5	0.618205	34.0	31.6	28.7	-17.3

FREQ 13.21 MHz
 PEAK 30.7 dB μ V
 QP 28.4 dB μ V
 AVG 18.4 dB μ V



Plot 4. Base Station Unit

Conducted emissions measurement result on 110 VAC power
 Reference standard: FCC Part 15 sec. 15.207 Sub. C
 line: neutral

4.4 Radiated emission test on BreezeAccess VL System (Base Station + Subscriber Unit):

4.4.1 Requirements:

EUTs radiated emission shall not exceed value required in section 15.109 Subpart B.

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
Specified limit: FCC Part 15 sec.15.109 Sub. B

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
32.48	307	V	2.5	35.2	39	3.8	Complies
61.13	360	V	2.5	27.4	39	11.6	Complies
75.36	360	V	2.5	31.5	39	7.5	Complies
78.08	357	V	2.5	30.6	39	8.4	Complies
80.39	356	V	2.5	30.7	39	8.3	Complies
86.89	138	V	2.0	32.2	39	6.8	Complies
129.4	282	V	1.3	30.9	43.5	12.6	Complies
143.8	73	V	1.7	31.6	43.5	11.9	Complies
175.6	76	V	1.5	31.5	43.5	12.0	Complies
188.5	76	V	1.3	29.3	43.5	14.2	Complies
211.9	358	V	1.3	28.3	43.5	15.2	Complies
236.7	350	V	1.3	33.9	46.5	12.6	Complies
249.4	40	V	1.4	29.3	46.5	17.2	Complies
277.1	1	V	1.3	32.0	46.5	14.5	Complies
750.5	31	H	1.3	35.8	46.5	10.7	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 Outdoor Radio Unit - spurious:

4.5.1 Requirements:

EUTs radiated emission shall not exceed value required in section 15.209 Subpart C.

4.5.2 EUT configuration:

The EUT was tested with two different antennas:

1. MA-WA50-1X P/N AN1165 mfr Mars Antennas
2. 5.15-5.875 GHz P/N MT-484026/NV mfr MTI Wireless Edge.

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 radiated emission was measured from Outdoor Unit with both antennas. The difference between readings was negligible so the test results for both antennas are shown in table #2.

The emission level was calculated as:

E Reading (dB μ V) + 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

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	35.1	47.3	54	74	18.9	26.7	Complies
17.22	39.8	52.6			14.2	21.4	Complies
22.96	44.1	56.3			9.9	17.7	Complies
28.700	38.6	50.8			5.4	23.2	Complies
34.440	45.2	57.8			8.8	16.2	Complies
MIDDLE 5.785 GHz							
11.57	36.2	48.1	54	74	17.8	25.9	Complies
17.35	39.8	51.4			14.2	22.6	Complies
23.14	44.4	56.7			9.6	17.3	Complies
28.925	38.2	51.8			15.8	22.2	Complies
34.710	44.9	57.3			9.1	16.7	Complies
HIGH 5.835 GHz							
11.67	36.4	48.8	54	74	17.6	25.2	Complies
17.51	39.6	51.5			14.4	22.5	Complies
23.34	44.8	56.8			9.2	29.2	Complies
29.175	39.2	48.2			14.8	25.8	Complies
35.010	45.9	57.6			8.1	16.4	Complies

4.6 Radiated emission test on Outdoor Radio Unit - restricted bands:

4.6.1 Requirements:

Radiated emission in restricted bands should meet the requirements sec. 15.205 Subpart C.

4.6.2 EUT configuration:

The EUT was tested with two 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: Double Ridge **EMCO** model 3115

Antenna height = 1 m.

Measurement distance = 1m.

Measuring detector function and bandwidths:

Detector type	Peak
Resolution bandwidth	1MHz
Video bandwidth	1 MHz

4.6.4 Test results and calculation ratio:

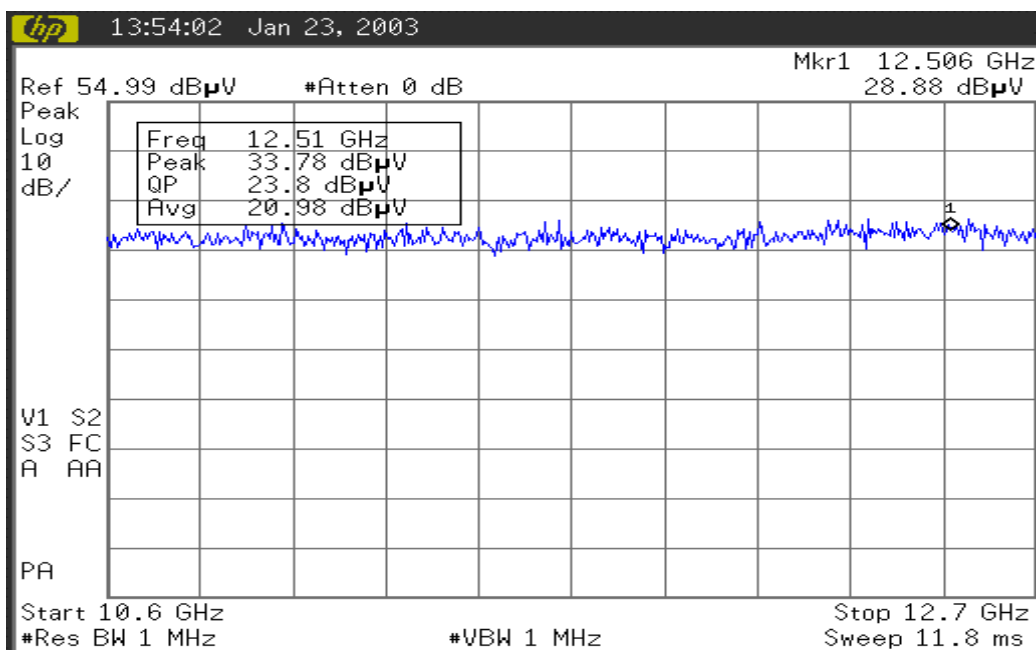
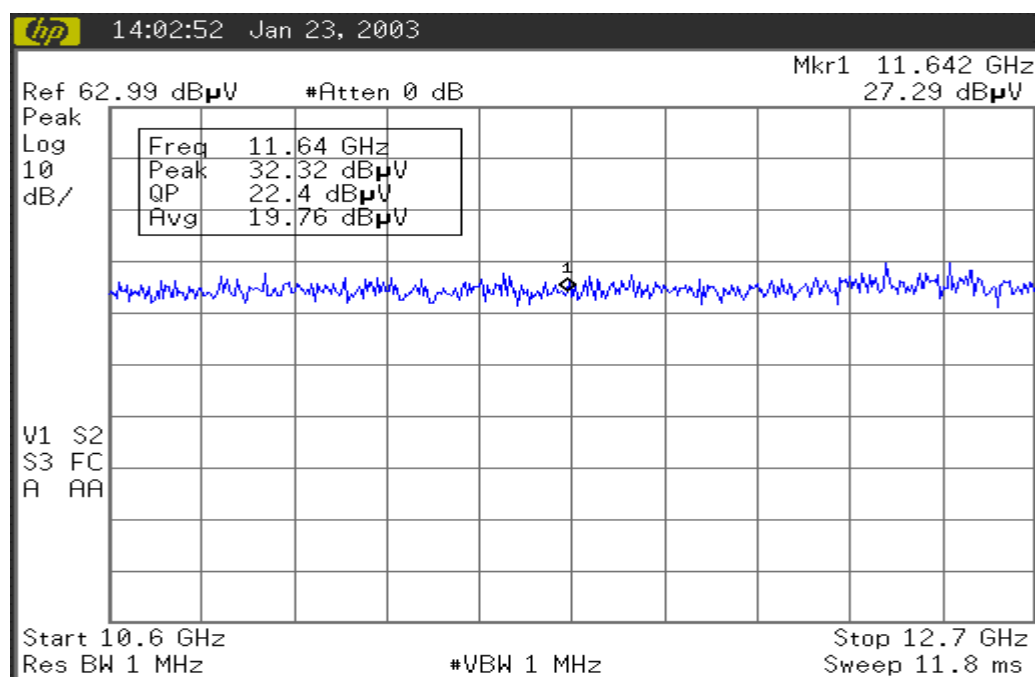
The spurious emissions were found in the band - 10.6-12.7 GHz.

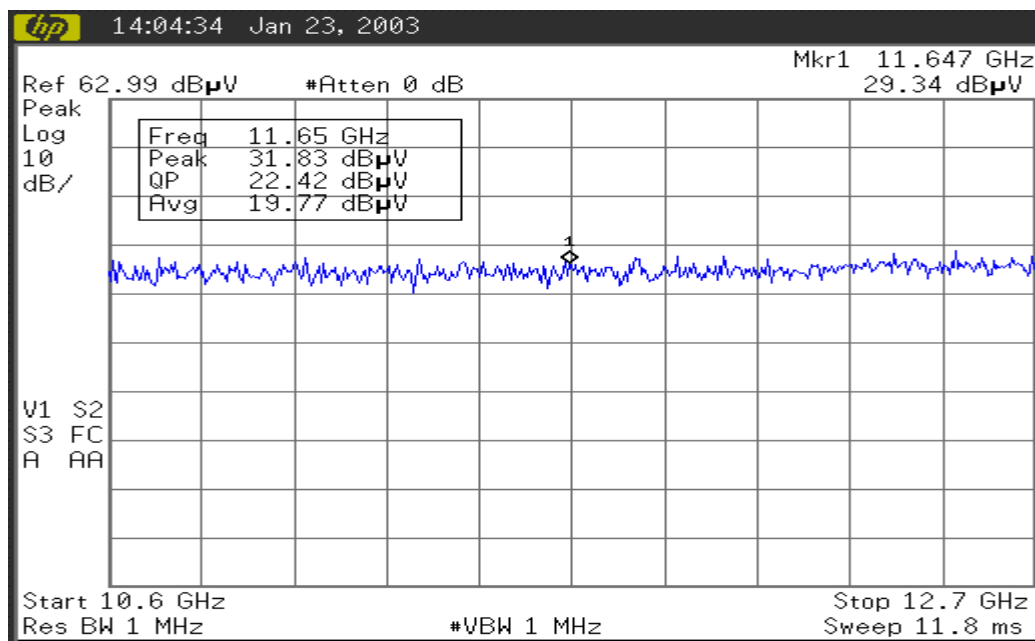
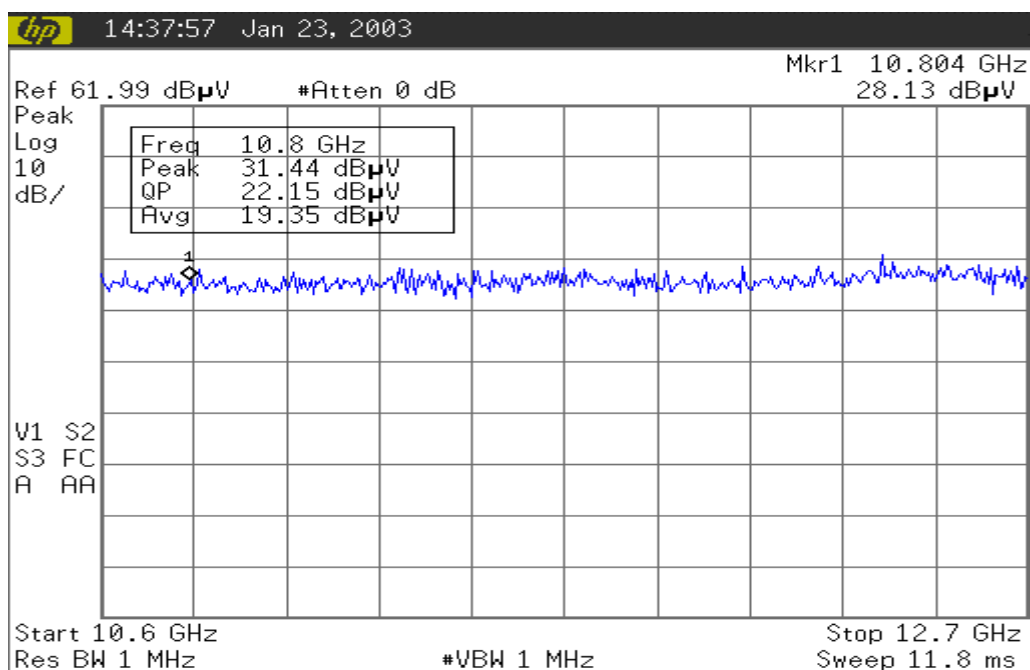
The test results for MA-WA50-1X P/N AN1165 antenna are shown in Plots #5 to # 7.

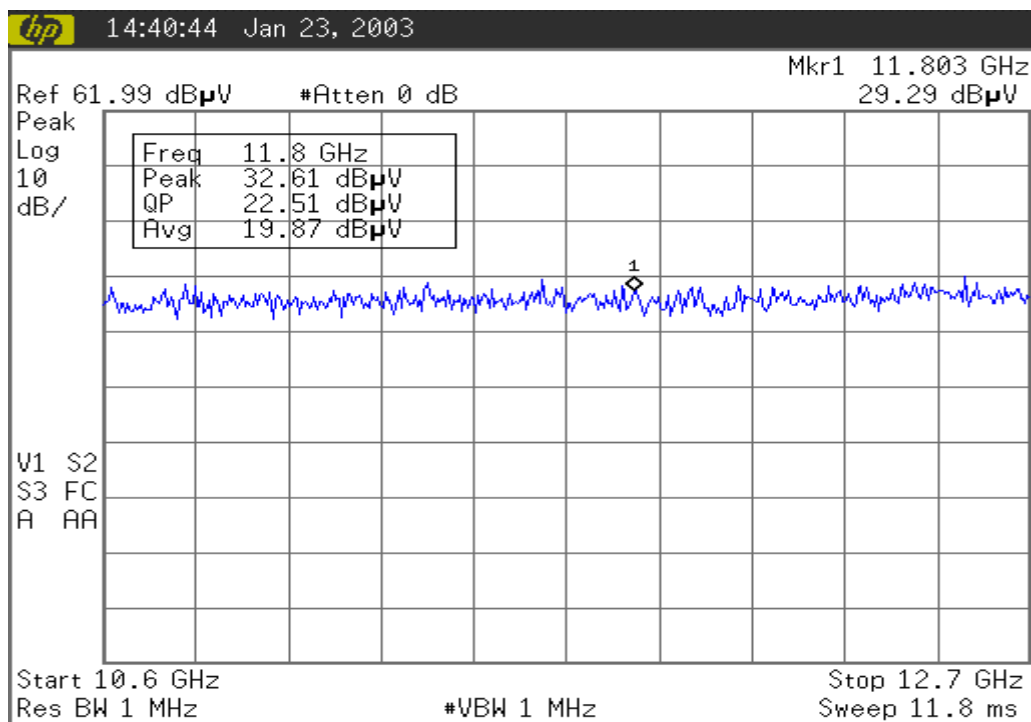
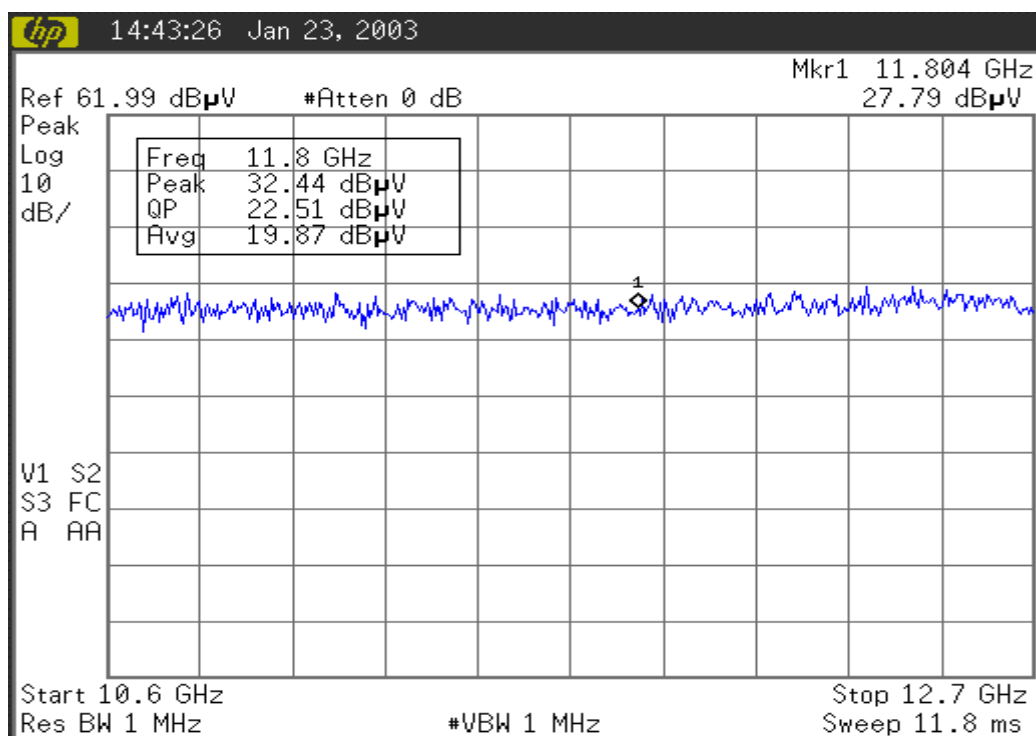
The test results for 5.15-5.875 GHz P/N MT-484026/NV antenna are shown in Plots #8 to #10.

**Radiated emissions measured in restricted band 10.6-12.7 GHz**

Antenna: MA-WA50-1X P/N AN1165

**Plot #5 LOW frequency****Plot #6 MID frequency**

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4.7 Conducted emission tests on Outdoor Radio Unit:

4.7.1 Minimum bandwidth

Requirements:

The minimum 6dB bandwidth shall be at least 500 kHz as required in sec. 15.247 (a) (2) Subpart C.

Test result:

The measured minimum bandwidth is shown in Plot #11.
Measured: 16.65MHz.

4.7.2 Maximum peak output power

Requirements:

The maximum peak output power shall not exceed 1 Watt as required in sec. 15.247 (b) (3) Subpart C.

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 = $21.3 + 10 \cdot \log(18/3) = 29\text{dBm}$

The measured results are shown in Plots #12 to #20. The maximum peak output power in range 30 MHz – 40 GHz does not exceed 30 dBm (1 Watt).

4.7.3 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) Subpart C.

Test results:

The measured results are shown in Plots #21 to #22.

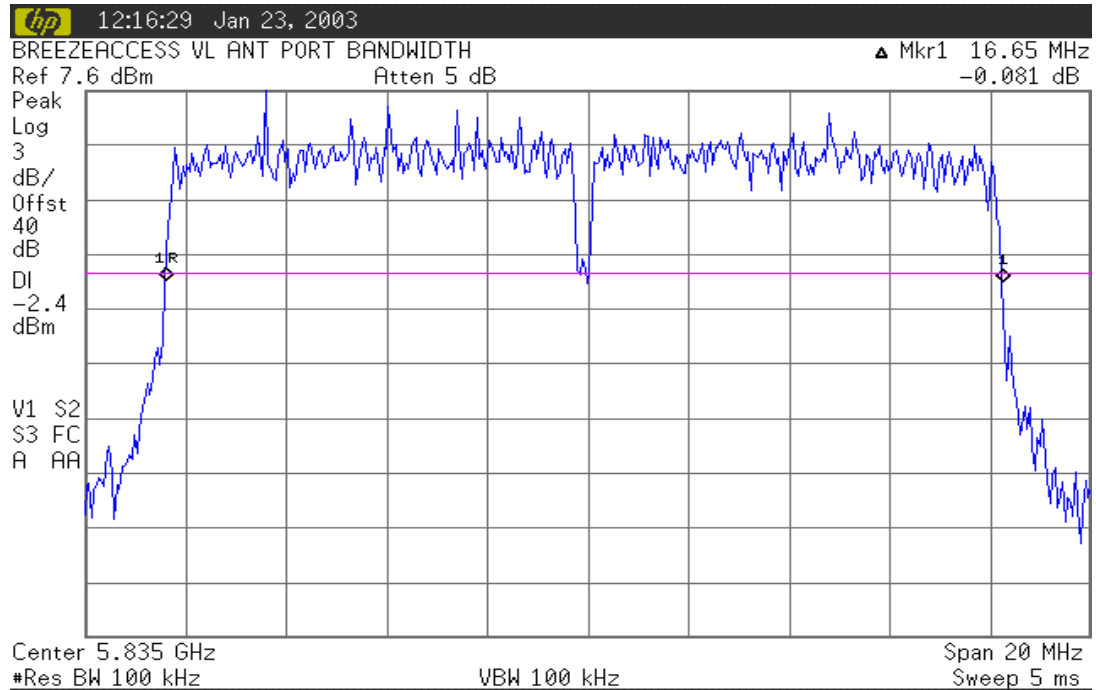
4.7.4 Peak power spectral density

Requirements:

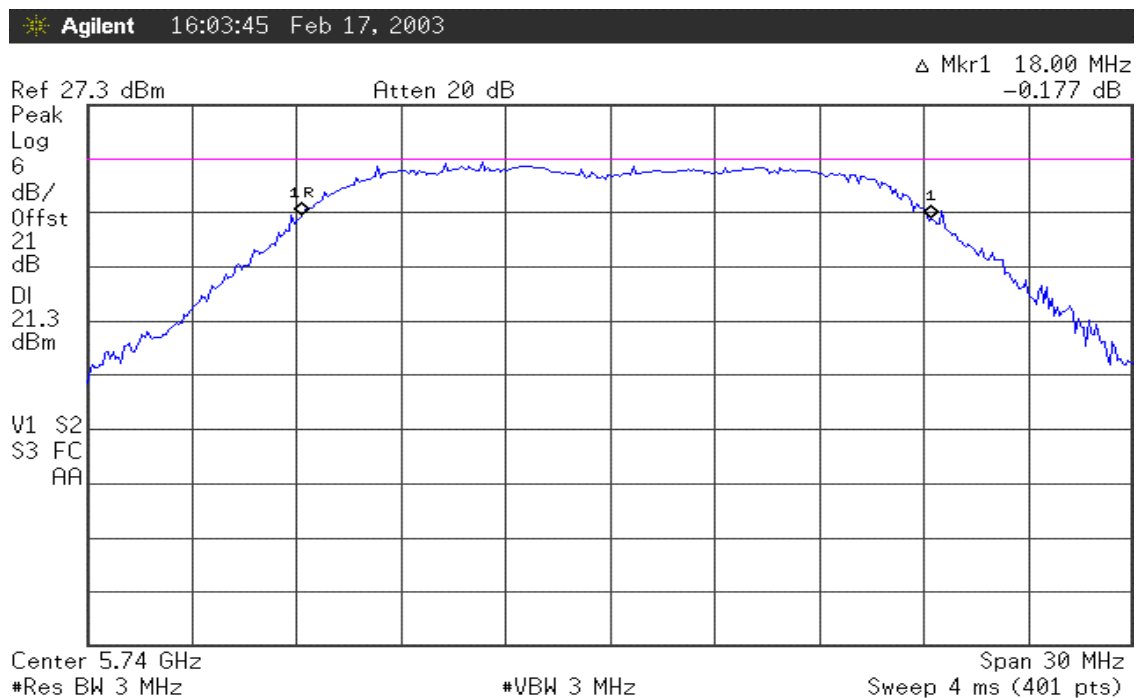
The peak power spectral density shall not be greater than 8dBm in any 3kHz band as required in section 15.247 (d).

Test results:

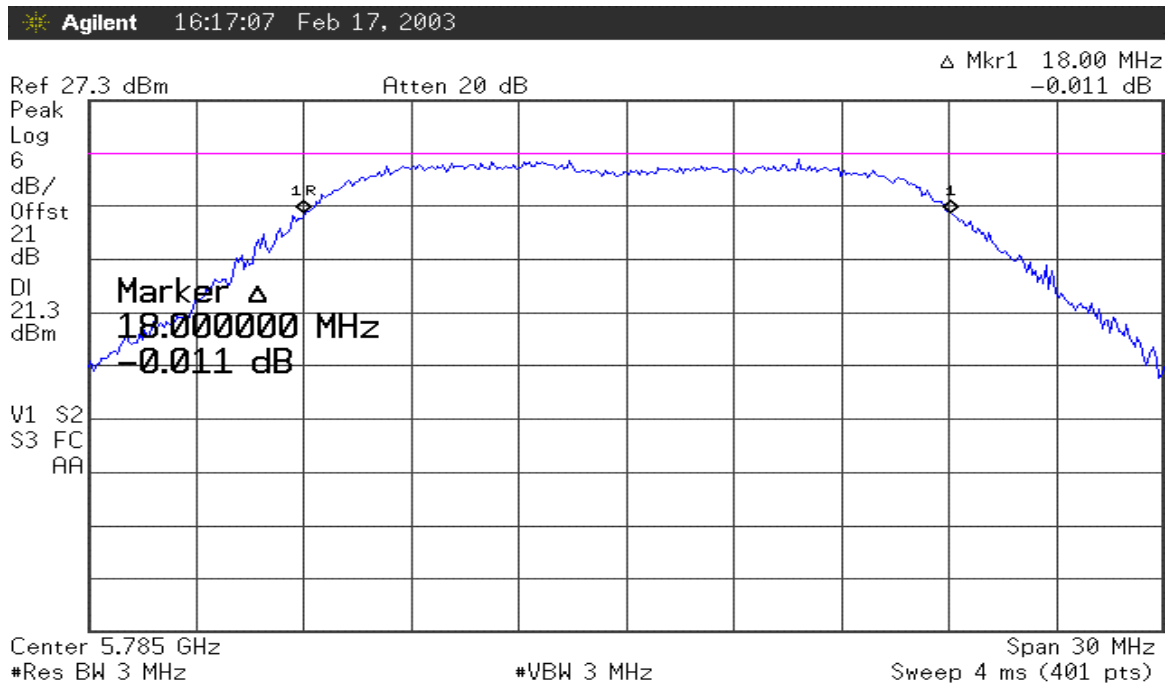
The measured results are shown in Plots #23- #25.



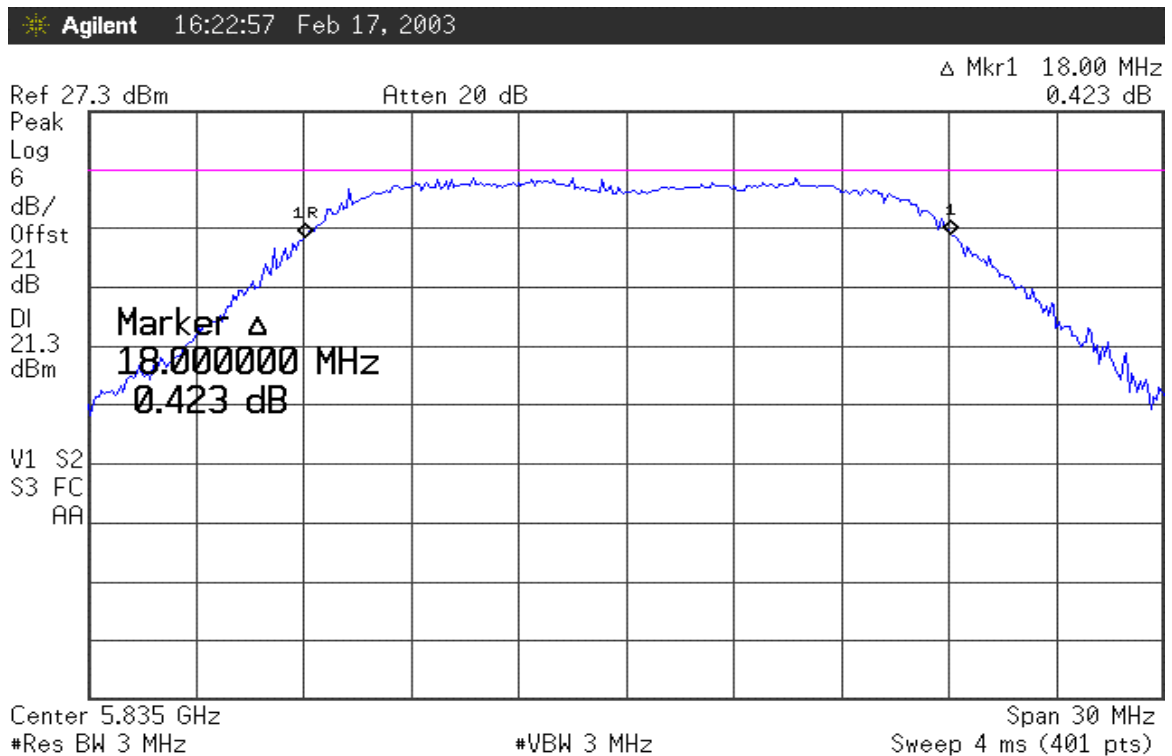
Plot # 11 Minimum 6dB bandwidth



Plot # 12 Maximum peak output power. Freq. - LOW



Plot # 13 Maximum peak output power. Freq. – MID

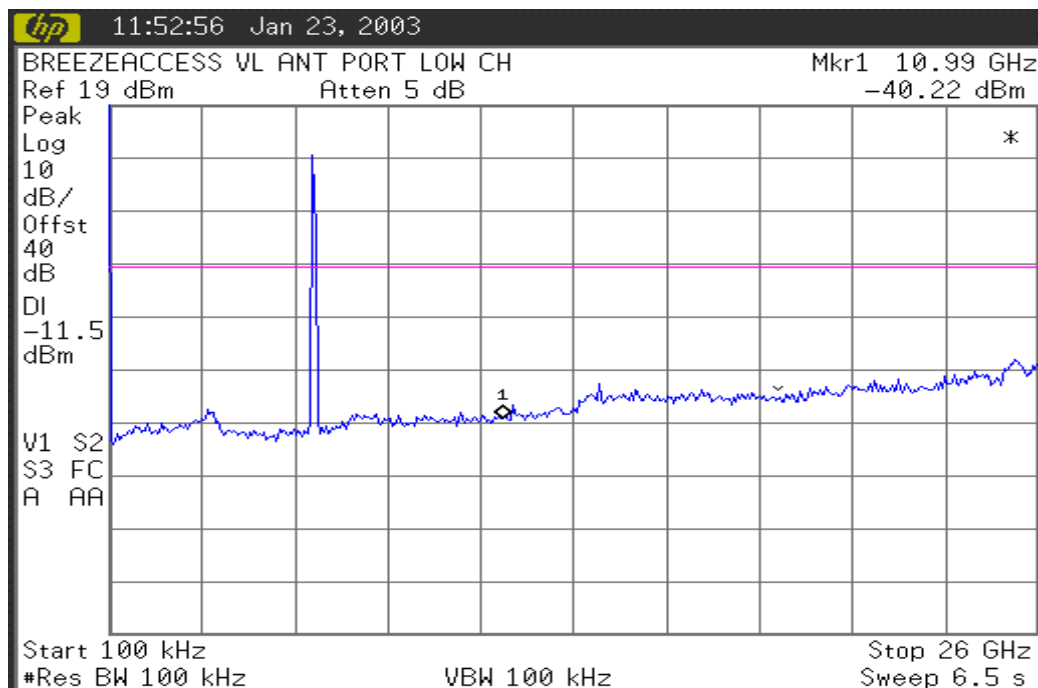


Plot # 14 Maximum peak output power. Freq. - HIGH

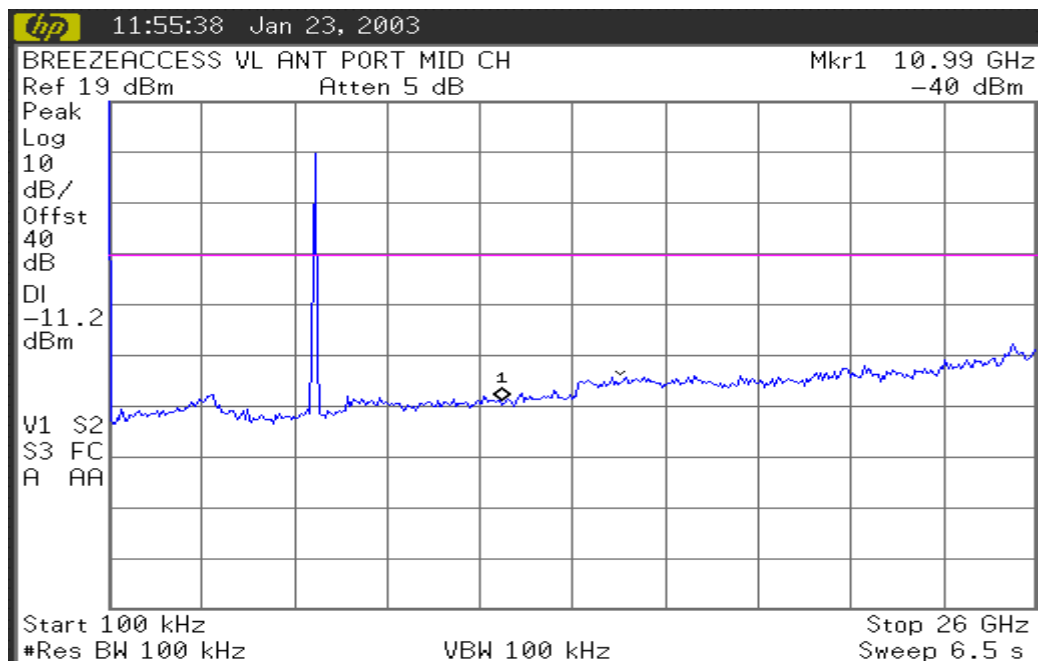
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Plot # 15 Conducted emission in freq. range 100 kHz – 26 GHz/Freq. - LOW



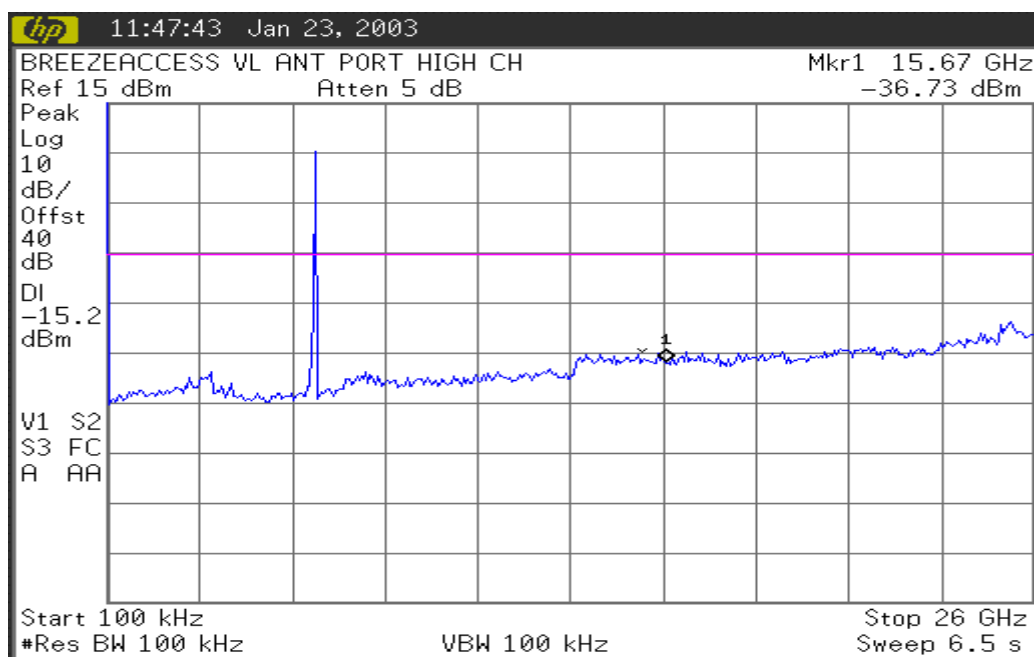
Plot # 16 Conducted emission in freq. range 100 kHz – 26 GHz/Freq. - MID



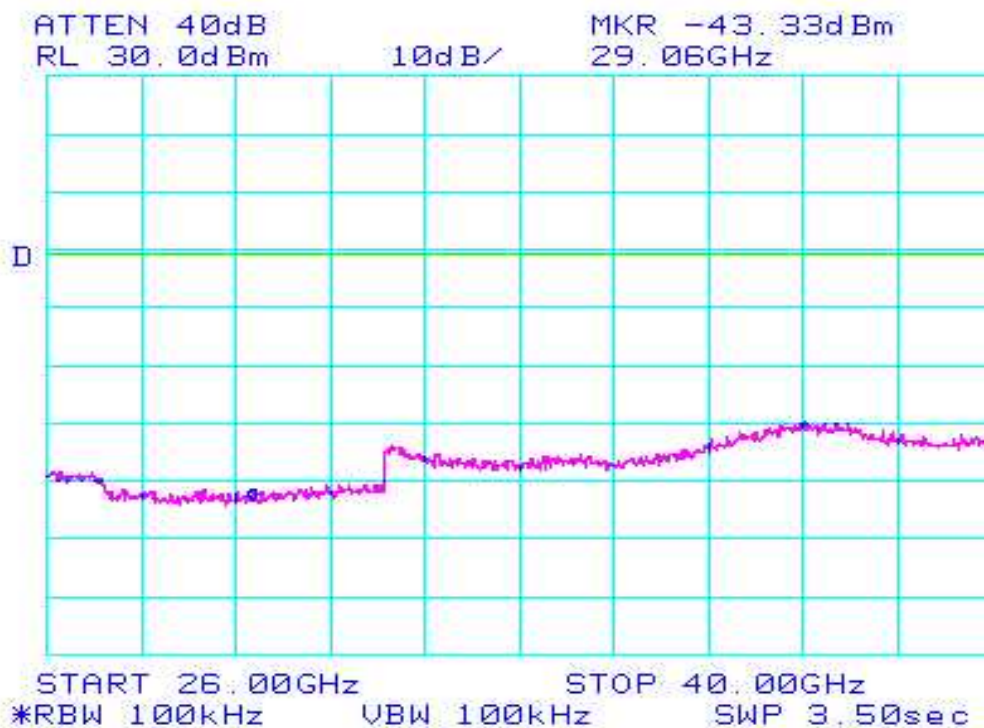
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Plot # 17 Conducted emission in freq. range 100 kHz – 26 GHz/Freq. - HIGH

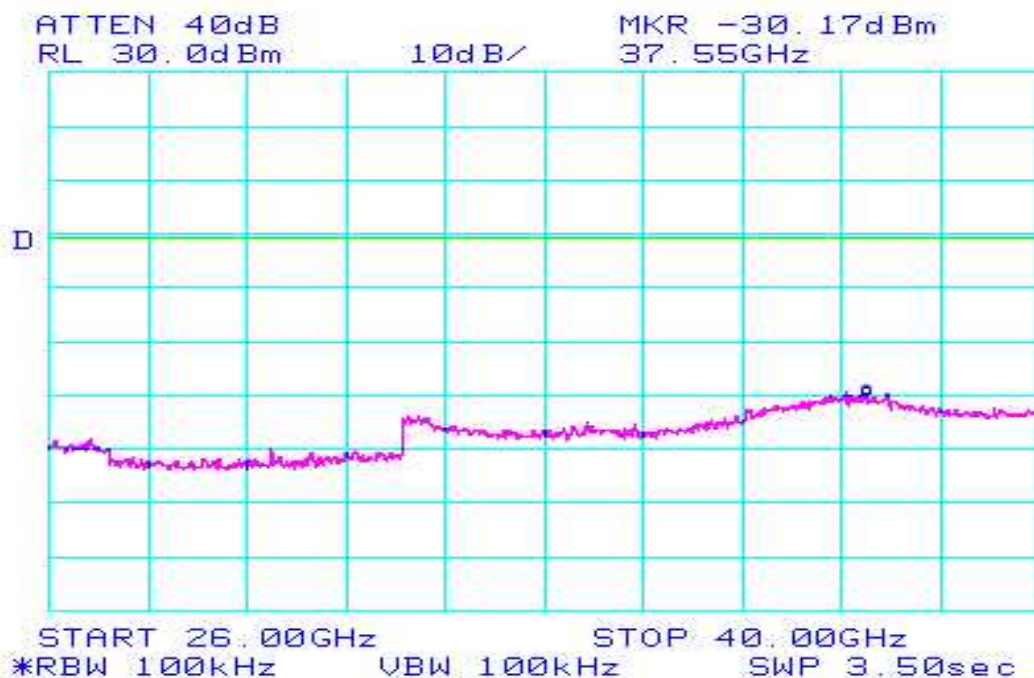


Plot # 18 Conducted emission in freq. range 26- 40 GHz/Freq. - LOW

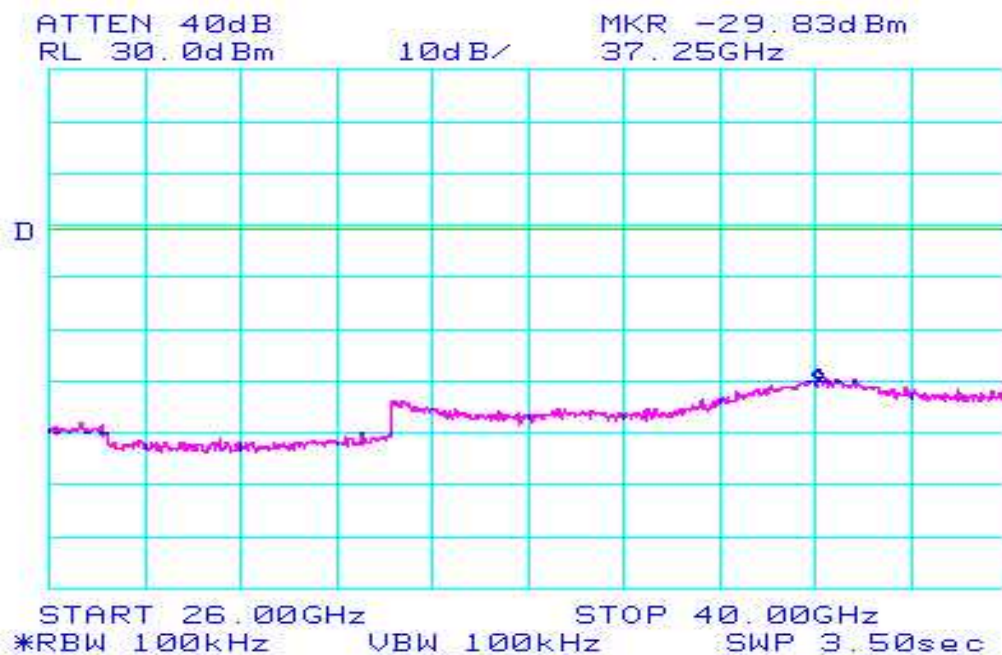
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Plot # 19 Conducted emission in freq. range 26- 40 GHz/Freq. - MID

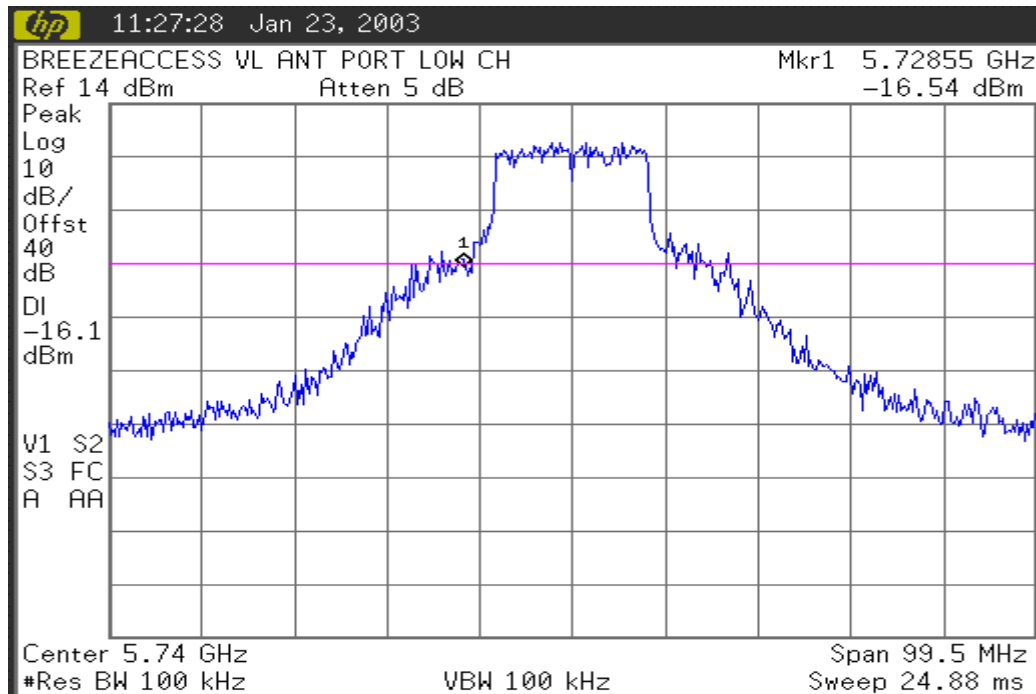


Plot # 20 Conducted emission in freq. range 26- 40 GHz/Freq. - HIGH

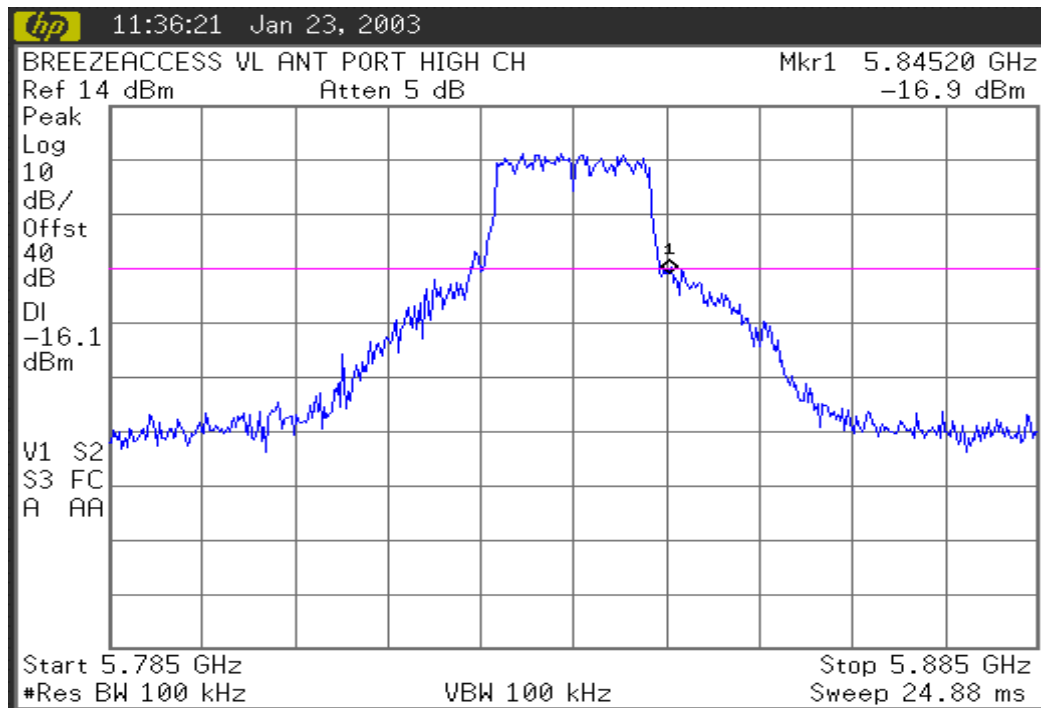
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Plot # 21 Conducted RF power 20dB below/Freq. - LOW

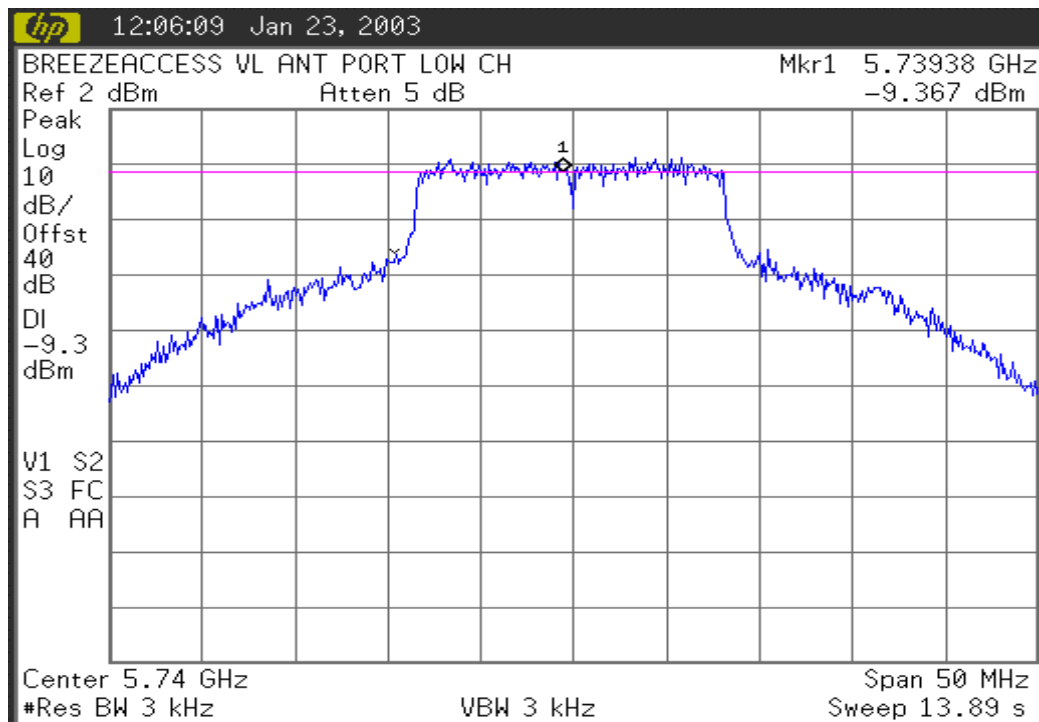


Plot # 22 Conducted RF power 20dB below/Freq. - HIGH

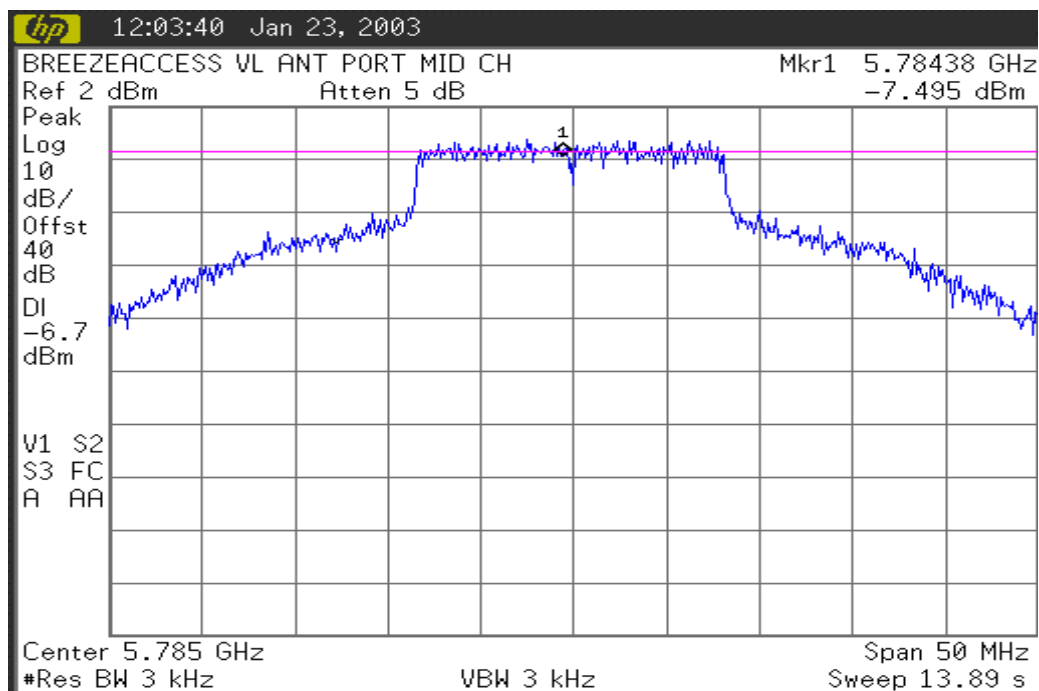
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Plot # 23 Peak power spectral density/Freq. - LOW

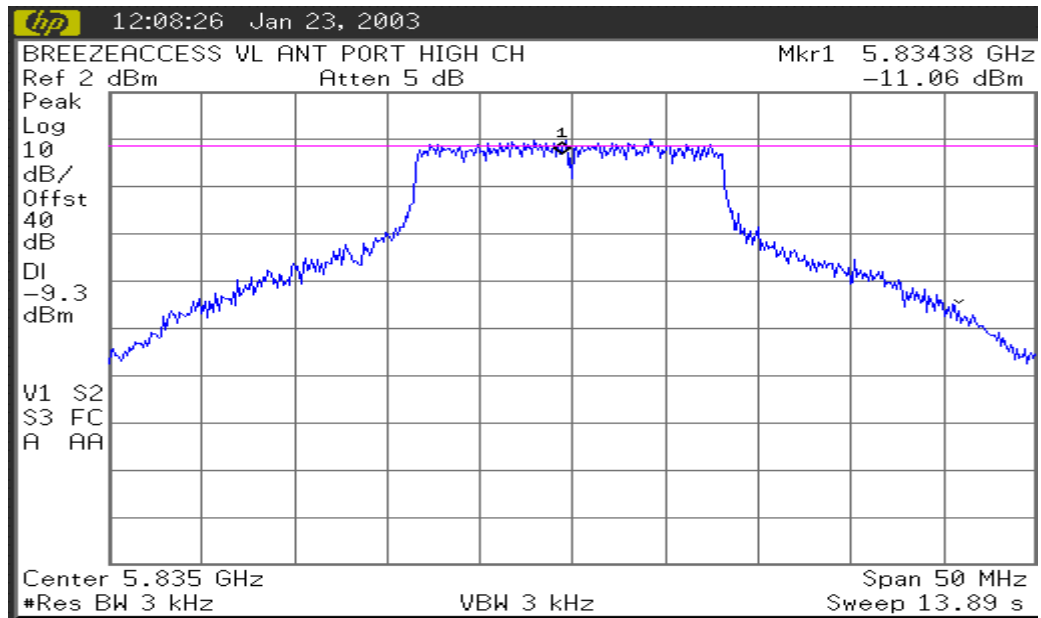


Plot # 24 Peak power spectral density/Freq. - MID

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Plot # 25 Peak power spectral density/Freq. - HIGH

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5 Compliance with specification

Test	FCC Part 15	Test result
Radiated emission	Sec.15.109	Complies
Radiated emissions in restricted bands	Sec.15.205	Complies
Conducted emission	Sec.15.207	Complies
Spurious radiated emission	Sec.15.209	Complies
Minimum bandwidth	Sec.15.247 (a) (2)	Complies
Maximum peak output power	Sec.15.247 (b) (3)	Complies
Conducted spurious	Sec.15.247 (c)	Complies
Peak power density	Sec.15.247 (d)	Complies



Name: Eng. Yuri Rozenberg
Position: Head of EMC Branch

Telematics Laboratory
18 February, 2003



Name Albert Herzenshtein
Position: Testing Engineer



Test report written by:
Galit Grodetsky

6 Appendix 1: Test equipment used

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

Instrument	Manufacturer	Model	Serial No.	Last calibration date	Next calibration date
Spectrum analyzer 10 KHz-26.5 GHz	HP	E7405a	SII 4944	04/02	04/03
Spectrum analyzer 9 KHz-50 GHz	HP	8565E	3517A00347	07/02	07/03
Antenna Double Ridge 1-18 GHz	EMCO	3115	SII4873	03/02	03/03
Antenna Standard Gain Horn 18-40 GHz	WILTRON	Alpha TRG A361	861A/590	01/02	01/03
LISN 9 kHz – 30 MHz	FCC	LISN- 50/250-32-4- 16	SII 5023	05/02	05/03
Transient limiter 0.009-200 MHz	HP	11947A	31074A3105	05/02	05/03
Attenuator 20 dB	HP	8491B	3929M50394	05/02	05/03

7 Appendix 2: Antenna Factor and Cable Loss

Antenna Factor Double Ridged Guide Antenna mfr EMCO model 3115

Point	Frequency (MHz)	Antenna Factor (dB/m)
1	2000	27.4
2	2500	28.9
3	3000	31.0
4	4000	33.1
5	4500	32.5
6	5000	32.4
7	6000	53.7
8	6500	35.6
9	7000	36.4
10	7500	36.9
11	8000	37.0
12	8500	38.0
13	9000	38.6
14	9500	38.4
15	10000	38.4
16	10500	38.4
17	11000	38.9
18	11500	39.6
19	12000	39.4
20	12500	39.2
21	13000	40.3
22	13500	41.0
23	14000	41.2
24	14500	41.3
25	15000	40.0
26	15500	38.0
27	16000	38.1
28	16500	40.3
29	17000	42.2
30	17500	44.6
31	18000	46.2

Antenna Factor Standard Gain Horn 2600 – 4000 MHz 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

8 Appendix 3: Test configuration illustration



Photo #1.
BreezeAccess VL System: Base Station + Subscriber Unit
Radiated emission test



Photo #2.
BreezeAccess VL System: Base Station
Radiated emission test



Photo #3
BreezeAccess VL System Subscriber Unit
Radiated emission test



Photo #4.
BreezeAccess VL System: Base Station + Subscriber Unit
Radiated emission test



Photo #5.
BreezeAccess VL System: Subscriber Unit
Conducted emission test



Photo #6
Spurious emissions test. Antenna 5.15-5.875 GHz P/N MT-484026/NV



Photo #7
Spurious emission test, antenna MA-WA50-1X P/N AN1165 mfr Mars Antennas



Photo #8
Spurious emission test, antenna MA-WA50-1X P/N AN1165 mfr Mars Antennas



Photo #9
Spurious emissions test. Antenna .15-5.875 GHz P/N MT-484026/NV

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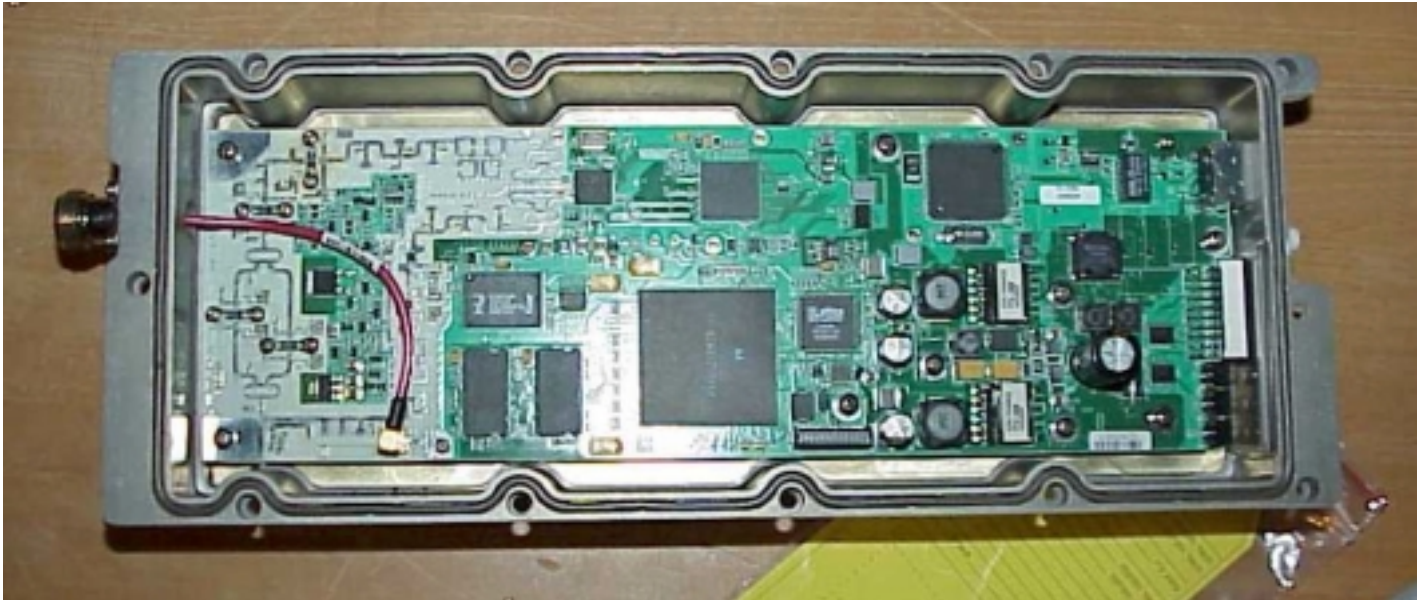


Photo #10
Outdoor unit. PCB component side



Photo #11
Outdoor unit. PCB printed side



Photo # 12
AU-BS – Plugged-in indoor unit

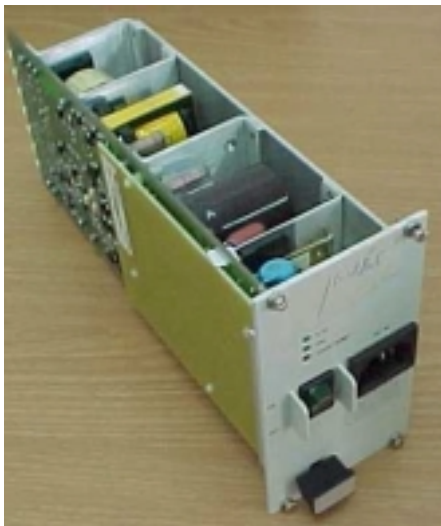


Photo #13
AU-BS Power supply
PC-2700



Photo #14
AU-IDU PC-1270