Curtis-Straus Test Report

Report No	ED0037-1
Client	Ceragon Networks Ltd. 24 Raoul Wallenberg Street Tel-Aviv 69719 Israel
Phone	+972-3-645-5733
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FRN	0007407653
Models	FIBEAIR 1500-24
FCC ID	NZ4CRN-FA1500-24
Equipment Type	Low Power Communication Device Transmitter
Equipment Code	DXX
Results	As detailed within this report
Prepared by	Mairaj Hussain – Test Engineer
Authorized by	Michael Buchholz – EMC Manager
Issue Date	3/4/03
Conditions of issue	This Test Report is issued subject to the conditions stated in 'terms and conditions' section of this

Curtis-Straus LLC is accredited by the American Association for Laboratory Accreditation for the specific scope of accreditation under Certificate Number 1627-01. This report may contain data which is not covered by the A2LA accreditation.

Summary

This report is an application for certification of a transmitter operating under 47 CFR 15.249 of the FCC rules provided for operation of fixed, point-to-point operation in the frequency band of 24.05-24.25GHz. The product covered by this report is the Giganet Fibeair 1500 system which is a Digital Relay Radio System (DRRS).

The manufacture recommends following antenna to be used with Fibeair 1500.

i) Radiowave HPLP1-26

A detailed description of the above-mentioned antennas can be found in the respective antenna exhibits attached with this report.

Test Methodology

All testing was performed according to the procedures specified in ANSI C63.4 (2000). The product was tested with modulation on and peak readings were compared against the average limit presented in section CFR 15.249.

Frequency range investigated:	30MHz – 100GHz

Measurement Distance:		
Frequency (MHz)	*Distance (m)*	*Comments*
Fundamental (Two channels) 24063 MHz and 24225MHz	3 m	Radiated
30MHz – 100GHz except 24-24.25GHz band	3, 1m, 0.1m, & 0.03 m	Radiated Spurious Measurements

The EUT was maximized around three orthogonal axes. EUT antenna was maximized within there range of motion. The antenna used during the testing was manufactured by RadioWave Product. The product was evaluated at lower and upper channel of operations.

The FibeAir 1500 system consists of an in door unit and an out door unit. This report reflects the compliance of out door unit with the FCC part 15.249. Please refer to the functional description exhibit for the detailed product description.

The product can't be powered via battery. The product obtains the DC power from FibeAir 1500 (indoor unit) over coax RG 214. AC line conducted emissions were performed on AC side of DC power supply powering the IDU (in door unit).

All readings are peak unless otherwise noted.

EUT Configuration

EUT Configuration

Work Order: D0037
Company: Ceragon Networks Inc.
Company Address: 24 Raoul Wallenberg Street
Tel-Aviv 69719
Israel
Contact: Moti Bordoley
Person Present: Moti Bordoley

	MN	SN	FCC ID
EUT:	FibeAir-1500-24	-	NZ4CRN-FA1500-24
EUT Description:	Digital Relay System		
EUT Max Frequency:	24.225 GHz		

Support Equipment:	**MN**	**SN**	**FCC ID**
Power supply (SOLA CVDC)	28-2233	9001FP	9001FP
FibeAir (Indoor Unit)	1500	-	-

EUT Cables:	**Qty**	**Shielded?**	**Length**	**Ferrites**
Coax RG 214	1	Yes	12 ft	None

Unpopulated EUT Ports:	**Qty**	**Reason**
BNC	1	Diagnostic only

Software / Operating Mode Description:

The EUT was transmitting/receiving across a single 50MHz channel, STM1 payload, 16QAM modulation.

Statement of Conformity

The FIBEAIR 1500-24 has been found to conform with the following parts of the 47 CFR as detailed below:

47 CFR Part #	47 CFR Part #	Comments
	15.15(b)	The product contains no user accessible controls that increase transmission power above allowable levels.
2.925	15.19	The label is shown in the label exhibit. The label is permanently attached.
	15.21	Information to the user is shown in the instruction manual exhibit.
	15.27	No special accessories are required for compliance.
	15.31(e)	The input power was varied from its nominal value (48V) to 40.5V (minimum value) and 72V (maximum value). The respective radiated power was measured see table 5.
	15.203	The device utilizes antenna specific to the product.
	15.204	See attached documentation describing the antenna(s).
	15.205 15.209	The fundamental is not in a Restricted band and the spurious emissions in the Restricted bands comply with the general emission limits of 15.209.
	15.207	Unit is DC powered and drives its power from IDU (Indoor unit), therefore conducted EMI testing was performed on the AC side of DC supply powering IDU.
15.249	15.249 (a)	The EUT's operation is classified as fixed, point-to-point and limits in this paragraph do not apply.
15.249(b)	15.249 (b)(1)	The field strength of emissions in this band shall not exceed 2500mV/m (128 dBuV/m).
	15.249 (b) (2)	The frequency tolerance of the carrier signal shall be maintained within ±0.001% of the operating frequency over –20°C to 50°C at normal supply voltage, and for a variation in the primary supply voltage 85% to 115% of the rated supply voltage @ 20°C.
	15.249 (b) (3)	The antenna gain is at lest 33 dBi. See antenna exhibit.
	15.249 (d)	Spurious emissions meet the general radiated emissions limits of section 15.209.
	15.249 (e)	There were no spurious emissions found above 1GHz except fundamental. See table 2 and 3.

Test Data and Plots

Section 15.249 (b)

Band Edge 15.249 — *Curtis-Straus LLC*

Date: 20-Jan-03 **Company:** Ceragon **Table** 1 a
Engineer: Mairaj Hussain **EUT Desc:** FibeAir-1500-24 **Work Order:** D0037
Measurement Distance: 3 m

	Frequency (MHz)	Reading (dBµV)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Reading (dBµV/m)	--- Limit (dBµV/m)	--- Margin (dB)	--- Result (Pass/Fail)	FCC Class B Limit (dBµV/m)	FCC Class B Margin (dB)	FCC Class B Result (Pass/Fail)
Lower	24050.0	50.0	21.3	40.3	8.2	77.2	---	---	---	108.0	-30.8	Pass
Upper	24250.0	62.4	21.1	40.3	8.2	89.8	---	---	---	108.0	-18.2	Pass

Test Site: "T" **Pre-Amp:** 18-26.5GH **Cable:** Microflex **Analyzer:** Orange **Antenna:** 18-26.5GHz Horn

Lower Channel Restricted Band Bandedge Measurements — *Curtis-Straus LLC*

Date: 13-May-03 **Company:** Ceragon **Table** 1 b
Engineer: Mairaj Hussain **EUT Desc:** FibeAir-1500-24 **Work Order:** D0037
Measurement Distance: 0.03 m

Notes: Measurements made at 0.03 m to pass noise floor without use of pre amp

Antenna Polarization (H / V)	Frequency (MHz)	Reading (dBµV)	Distance Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Reading (dBµV/m)				47 CFR 15.209 Limit (dBµV/m)	47 CFR 15.209 Margin (dB)	47 CFR 15.209 Result (Pass/Fail)
Noise floor	24000.0	35.3	40.0	40.4	8.2	43.9				54.0	-10.1	Pass

Pre-Amp: None **Cable:** Microfles **Analyzer:** Orange **Antenna:** HF-Horn

Conclusion:	The product meets the respective limit at lower restricted band bandedge.

Sample calculation:
Adjusted Reading = reading + cable factor + antenna factor – distance factor

Section 15.249 (b) (1)

Radiated Emissions Table Fundamental @ High Channel — *Curtis-Straus LLC*

Date: 17-Jan-03 **Company:** Ceragon **Table** 2
Engineer: Mairaj Hussain **EUT Desc:** FibeAir-1500-24 **Work Order:** D0037
Frequency Range: 1 - 100 GHz **Measurement Distance:** 3 m

Notes: Peak Readings

Antenna Polarization (H / V)	Frequency (MHz)	Reading (dBµV)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Reading (dBµV/m)	--- Limit (dBµV/m)	--- Margin (dB)	--- Result (Pass/Fail)	FCC Part 15.249 Limit (dBµV/m)	FCC Part 15.249 Margin (dB)	FCC Part 15.249 Result (Pass/Fail)
H (w mod)	24225.0	100.6	22.0	40.4	4.1	123.1				128.0	-4.9	Pass

Table Result: Pass by -4.9 dB ***Worst Freq:*** 24225.0 MHz

Test Site: "T" **Pre-Amp:** HF **Cable:** 3m Sucoflex **Analyzer:** Orange **Antenna:** High F Horn

No emissions in the frequency range of 1-100GHz other than fundamental
Other Equipment used
Orange horn'
Microflex
Org-Blk Pre Amp
Org Spectrum Analyzer
Hi frequency Mixers

Sample calculation:

Reading = Peak reading from spectrum analyzer + 20.2 (pad factor) + 1.12dB wave guide loss

Adjusted reading = Reading + Antenna factor + Cable factor – Pre amp factor

Radiated Emissions Table -- Fundamental @ Lower channel *Curtis-Straus LLC*

Date: 20-Jan-03 **Company:** Ceragon **Table** 3

Engineer: Mairaj Hussain **EUT Desc:** FibeAir-1500-24 **Work Order:** D0037

Measurement Distance: 3 m

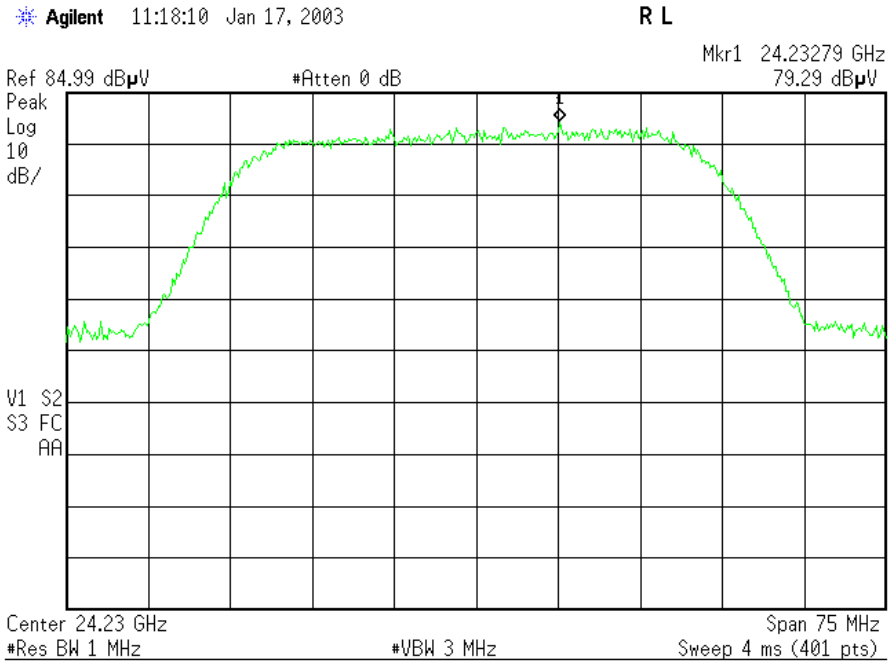
Notes: Peak Readings **EUT Max Freq:** 24.225GHz

Antenna Polarization (H / V)	Frequency (MHz)	Reading (dBµV)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Reading (dBµV/m)	--- Limit (dBµV/m)	--- Margin (dB)	--- Result (Pass/Fail)	FCC Part 15.249 Limit (dBµV/m)	FCC Part 15.249 Margin (dB)	FCC Part 15.249 Result (Pass/Fail)
H(mod)	24063.0	97.0	21.8	40.4	8.2	123.8	---	---	---	128.0	-4.2	Pass

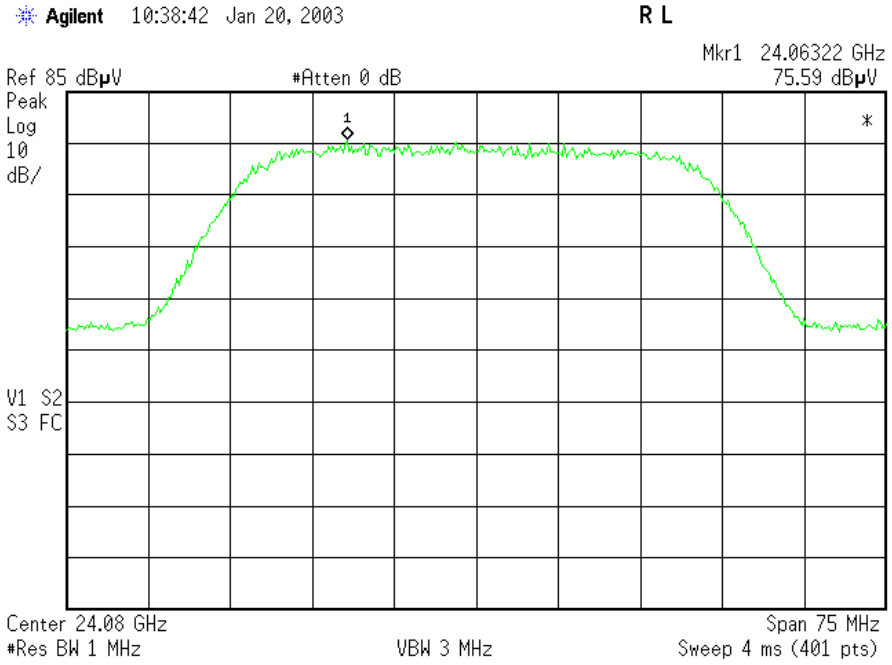
Table Result: Pass by -4.2 dB ***Worst Freq:*** 24063.0 MHz

Test Site: "T" **Pre-Amp:** HF **Cable:** 3m Microflex **Analyzer:** Orange **Antenna:** High F Horn

Other Equipment used
Orange horn'
Microflex
Org-Blk Pre Amp
Org Spectrum Analyzer
Hi frequency Mixers



Plot showing upper channel fundamental (peak reading)



Plot showing lower channel fundamental (peak reading)

Section 15.249 (b) (2)

Frequency Stability FCC Part 15.249 (b) (2)				
Work Order: D0037			**Table:** 4	
Company: Ceragon				
EUT: FibeAir-1500-24				
Date: 1/16/03				
Engineer: Mairaj Hussain				
	Hz		Hz	
Start Freq:	24225014800	**Tolerance:**	242250.148	0.001%

Temp (deg C)	**Freq** (Hz)	**Change in Freq** (Hz)	**Δ Freq Limit** (Hz)	**Result**
20	24225014800	0	242250.148	Pass
30	24225015900	-1100	242250.148	Pass
40	24225017350	-2550	242250.148	Pass
50	24225022250	-7450	242250.148	Pass
10	24225024400	-9600	242250.148	Pass
0	24225025850	-11050	242250.148	Pass
-10	24225028500	-13700	242250.148	Pass
-20	24225029850	-15050	242250.148	Pass

Conclusion:	The product meets the frequency tolerance criteria over the temperature range of -20°C to 50°C

Voltage Variation FCC Part 15.249 (b) (2) & 15.31 (e)

Work Order: D0037 **Table:** 5
Company: Ceragon
EUT: FibeAir-1500-24
Date: 1/16/03
Engineer: Mairaj Hussain

Test Equipment Used:

Analyzer: Orange **Power source for IDU:** HF Test Set

Freq (GHz)	Vol (V)	Cab Factor (db)	Pad factor (db)	Amp (dbm)	Adj Amp (dbm)	Delta
24.22501	48	8.3	20.2	-30.6	-2.1	-
24.22501	40.5	8.3	20.2	-30.4	-1.9	-0.2
24.22501	72	8.3	20.2	-30.4	-1.9	-0.2

Note: 40.5V Eut min operating voltage
72V Eut max operating voltage
Amp: Amplitude

Please not that EUT draws it power from the support indoor unit. The variation of input voltage to the indoor unit did not result in the change of carrier signal amplitude.

Sample Calculation: Adjusted Amplitude = AMP + Pad factor + Cable factor

Conclusion:	The product meets the voltage tolerance criteria.

Section 15.249 (d)

Spurious Radiated Emissions

Radiated Emissions Table *Curtis-Straus LLC*

Date: 17-Jan-03 **Company:** Ceragon **Table** 6
Engineer: Mairaj Hussain **EUT Desc:** FibeAir-1500-24 **Work Order:** D0037
Frequency Range: 30 - 1000 MHz **Measurement Distance:** 3 m
Notes: **EUT Max Freq:** 24.225 GHz

Antenna Polarization (H / V)	Frequency (MHz)	Reading (dBµV)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Reading (dBµV/m)	--- Limit (dBµV/m)	--- Margin (dB)	--- Result (Pass/Fail)	FCC Class B Part 15.249 & 15.209 Limit (dBµV/m)	FCC Class B Part 15.249 & 15.209 Margin (dB)	FCC Class B Part 15.249 & 15.209 Result (Pass/Fail)
H	40.8	39.5	21.6	13.4	0.5	31.8				40.0	-8.2	Pass
V(nf)	74.18	31.9	21.6	7.0	0.7	18.0				40.0	-22.0	Pass
V(nf)	99.98	30.7	21.8	11.4	0.9	21.2				43.5	-22.3	Pass
V(nf)	192.5	33.6	21.6	10.2	1.5	23.7				43.5	-19.8	Pass
H(nf)	225.2	27.0	21.6	11.7	1.7	18.8				46.0	-27.2	Pass
H(nf)	254.7	31.4	21.7	13.0	1.8	24.5				46.0	-21.5	Pass
H	333.9	43.0	21.8	14.7	2.1	38.0				46.0	-8.0	Pass

Table Result: Pass by -8.0 dB ***Worst Freq:*** 333.9 MHz

Test Site: "T" **Pre-Amp:** Black **Cable:** 65 ft RG8A/U **Analyzer:** Black **Antenna:** Green

Note: No spurious emissions were found 1GHz – 100 GHz except fundamental see table 2.

Section 15.207 AC Line Conducted Emission Measurements

The product runs on DC voltage. It drives its power from IDU (indoor unit which is also DC powered) therefore, conducted emissions testing was performed on the AC side of DC power supply powering the IDU.

LIMITS
Quasi-Peak: 250µV = 47.9dBµV in the range 450kHz to 30MHz
[47 CFR 15.207(a) Revised as of October 1, 2001]

Note: On July 12, 2004, FCC adopts the conducted emissions limits of the European CISPR 22 standard as outlined below

Frequency of emission (MHz)	Quasi-peak limit (dBµV)	Average limit (dBµV)
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.
[47 CFR 15.207(a) Revised as of October 1, 2002; amended by ET Docket 98-80; FCC 02-157, published in the Federal Register Vol. 67, No. 132, on Wednesday, July 10, 2002]

Table 7

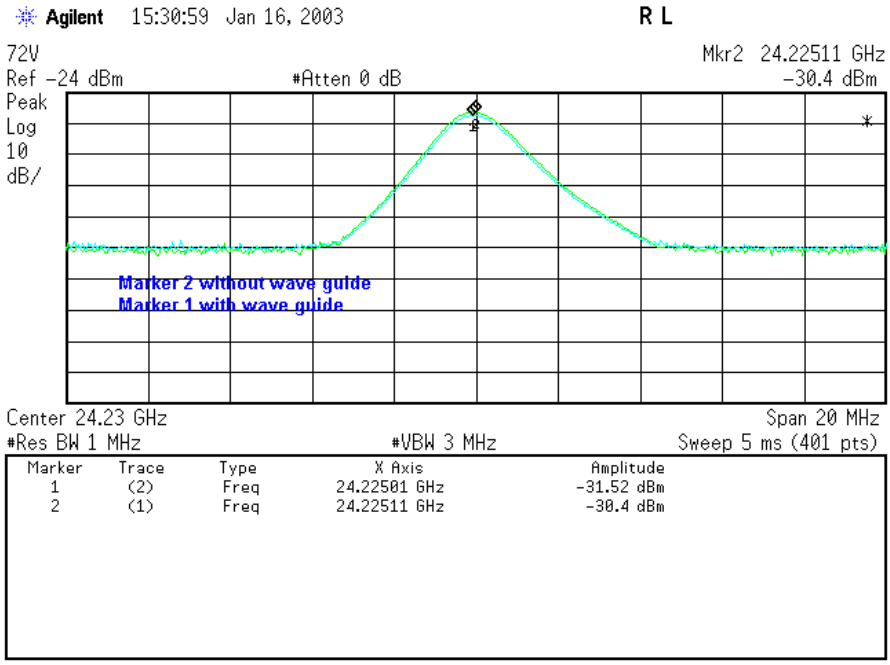
AC Mains Conducted Emissions — *Curtis-Straus LLC*

Date: 07-May-04 **Company:** Ceragon Networks Ltd. **Work Order:** D0037
Engineer: Mairaj Hussain **EUT Desc:** FIBEAIR 1500-24 Test Site: EMI1
Notes: AC side of dc power supply powering IDU.
LISN(s): Yellow-Black
Range: 0.15-30Mhz **Other Equipment:** --- **Spectrum Analyzer:** White

	Q.P. Readings		Ave. Readings		Impedance Factor	---		FCC/CISPR B		FCC/CISPR B		Overall Result
Frequency (MHz)	QP1 (dBµV)	QP2 (dBµV)	AV1 (dBµV)	AV2 (dBµV)	(dB)	Limit (dBµV)	Margin dB	qp Limit (dBµV)	qp Margin dB	AVE Limit (dBµV)	AVE Margin dB	(Pass/Fail)
0.15	28.5	28.4			20.0	---	---	66.0	-17.5	56.0	-7.5	Pass
0.16	31.3	31.0			20.0	---	---	65.3	-14.0	55.3	-4.0	Pass
0.20	30.4	31.4			20.0	---	---	63.6	-12.2	53.6	-2.2	Pass
0.21	30.7	30.0			20.0	---	---	63.2	-12.5	53.2	-2.5	Pass
0.28	22.0	23.2			20.0	---	---	60.8	-17.6	50.8	-7.6	Pass
0.96	25.5	27.5	1.0	-0.5	20.0	---	---	56.0	-8.5	46.0	-25.0	Pass
5.66	8.2	-1.0			20.0	---	---	60.0	-31.8	50.0	-21.8	Pass
7.70	7.3	-1.8			20.0	---	---	60.0	-32.7	50.0	-22.7	Pass

Table Result: Pass by -2.20 dB ***Worst Freq:*** 0.20 MHz

Wave Guide Loss Calibration



Above plot shows that wave guide loss factor being 1.12dB at 24.23GHz.

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Test Equipment Used

REV. 1/15/03
REV. 1/28/03

SPECTRUM ANALYZERS	RANGE	MN	MFR	SN	ASSET	CALIBRATION DUE
BLACK	9kHz-12.8GHz	8596E	HP	3710A00944	00337	08-JUL-2003
ORANGE	9kHz-26.5GHz	E4407B	HP	US39440975	00394	07-JUN-2003

OPEN AREA TEST SITE (OATS)	FCC CODE	IC CODE	VCCI CODE	CALIBRATION DUE
SITE T	93448	IC 2762-T	R-905	04-FEB-2004

ANTENNAS	RANGE	MN	MFR	SN	ASSET	CALIBRATION DUE
GREEN BILOG	30MHz-2GHz	CBL6112B	CHASE	2742	00620	26-FEB-2003
ORANGE HORN	1-18GHz	3115	EMCO	0004-6123	00390	27-MAY-2003
WHITE HORN	18-26.5GHz	3160-09	EMCO	9610-1068	00758	26-JUN-2003
MIXERS/DIPLEXERS	RANGE	MN	MFR	SN	ASSET	CALIBRATION DUE
MIXER / HORN	26.5-40 GHz	11970A/28-442-6	HP/ATM	2332A00900/A046903-01	00369	09-JUL-2003
MIXER / HORN	40-60 GHz	M19HW/A	OML	U30110-1	00821	03-JAN-2005
MIXER / HORN	60-90 GHz	M12HW/A	OML	E30110-1	00822	03-JAN-2005
MIXER / HORN	90-140 GHz	MO8HW/A	OML	F21206-1	00811	05-DEC-2004
MIXER / HORN	140-220 GHz	MO5HW/A	OML	G21206-1	00812	05-DEC-2004
DIPLEXER		DPL.26	OML	N/A	00813	05-DEC-2004

PREAMPS / ATTENUATORS / FILTERS	RANGE	MN	MFR	SN	ASSET	CALIBRATION DUE
BLACK	0.01-2000MHz	ZFL-1000-LN	C-S	N/A	00799	22-MAR-2003
ORANGE-BLACK	1-20GHz	SMC-12A	C-S	690639	00761	27-AUG-2003
20DB ATTENUATOR	0.03-20 GHz	PE 7019-20	PASTERNACK	01	00791	13-JUN-2003

CHAMBERS AND STRIPLINE	MN	MFR	SN	ASSET	CALIBRATION DUE
ENVIRONMENTAL (SAFETY)	SGTH-31S	B-M-A INC.	2245	00321	07-JUN-2003

Unless otherwise noted the calibration interval is one year. All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.

Terms And Conditions

Paragraph 1. SERVICES. LABORATORY will:

1.1 Use the degree of care and skill ordinarily exercised by and consistent with the standards of the profession.
1.2 Perform all technical services in substantial accordance with the generally accepted laboratory principles and practices.
1.3 Retain all pertinent records relating to the services performed for a period of three (3) years following submission of the report describing such services, during which period the records will be made available to CLIENT upon reasonable request.

Paragraph 2. CLIENT'S RESPONSIBILITIES. CLIENT or his authorized representative will:

2.1 Provide LABORATORY with all plans, schematics, specifications, addenda, change orders, drawings and other information for the proper performance of technical services.
2.2 Designate a person to act as CLIENT's representative with respect to LABORATORY's services to be performed on behalf of the CLIENT; such person or firm to have complete authority to transmit instructions, receive information and data, interpret and define CLIENT's policies and decisions with respect to the LABORATORY's work on behalf of the CLIENT and to order, at CLIENT's expense, such technical services as may be required.
2.3 Designate a person who is authorized to receive copies of LABORATORY's reports.
2.4 Undertake the following:
(a) Secure and deliver to LABORATORY, without cost to LABORATORY, preliminary representative samples of the equipment proposed to require technical services, together with any relevant data.
(b) Furnish such labor and equipment needed by LABORATORY to handle samples at the LABORATORY and to facilitate the specified technical services.

Paragraph 3. GENERAL CONDITIONS:

3.1 LABORATORY, by the performance of services covered hereunder, does not in any way assume any of those duties or responsibilities customarily vested in the CLIENT, its employees, or any other party, agency or authority.
3.2 LABORATORY shall not be responsible for acts of omissions of any other party or parties involved in the design, manufacture or maintenance of the equipment or the failure of any employee, contractor or subcontractor to undertake any aspect of equipment's design, manufacture or maintenance.
3.3 LABORATORY is not authorized to revoke, alter, release, enlarge or release any requirement of the equipment's design, manufacture or maintenance unless specifically authorized by CLIENT or his authorized representative.
3.4 THE ONLY WARRANTY MADE BY LABORATORY IN CONNECTION WITH ITS SERVICE PERFORMED HEREUNDER IS THAT IT WILL USE THAT DEGREE OF CARE AND SKILL AS SET FORTH IN PARAGRAPH 1 ABOVE. NO OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE OR INTENDED FOR SERVICES PROVIDED HEREUNDER.
3.5 Where the LABORATORY indicates that additional testing is advisable to obtain more valid or useful data, and where such testing has not been authorized, CLIENT agrees to view such test reports as inconclusive and preliminary.
3.6 The LABORATORY will supply technical service and prepare a report based solely on the sample submitted to the LABORATORY by the CLIENT. The CLIENT understands that application of the data to other devices is highly speculative and should be applied with extreme caution.
3.7 The LABORATORY agrees to exercise ordinary care in receiving, preserving and shipping (F.O.B. Littleton, MA) any sample to be tested, but assumes no responsibility for damages, either direct or consequential, which arise from loss, damage or destruction of the samples due to the act of examination, modification or testing, or technical services or circumstances beyond LABORATORY's control.
3.8 The LABORATORY will hold samples for thirty (30) days after tests are completed, or until the CLIENT's outstanding debts to the LABORATORY are satisfied, whichever is later.
3.9 The CLIENT recognizes that generally accepted error variances apply and agrees to consider such error variances in its use of test data.
3.10 It is agreed between LABORATORY and CLIENT that no distribution of any tests, reports or analysis other than that described below shall be made to any third party without the prior written consent of both parties unless such distribution is mandated by operation of law. It is agreed that tests, reports, or analysis results may be disclosed to third party auditors of the laboratory at the laboratory facility in the course of accreditation maintenance audits. No reference to reports or technical services of the LABORATORY shall be made in any advertising or promotional literature without the express written permission of the LABORATORY.
3.11 The CLIENT acknowledges that all employees of LABORATORY operate under employment contracts with the LABORATORY and CLIENT agrees not to solicit employment of such employees or to solicit information related to other clients from said employees.
3.12 In recognition of the relative risks and benefits of the project to both CLIENT and LABORATORY, the risks have been allocated such that the CLIENT agrees, to the fullest extent permitted by law, to limit the liability of the LABORATORY to the CLIENT for any and all claims, losses, costs, damages of any nature whatsoever or claims expenses from any cause or causes, including attorneys' fees and costs and expert witness fees and costs, so that the total aggregate liability of the LABORATORY to the CLIENT shall not exceed $100,000, or the LABORATORY'S total fee for services rendered on this project, whichever is greater. It is intended that this limitation apply to any and all liability or cause of action however alleged or arising, unless otherwise prohibited by law.

Paragraph 4. INSURANCE:

4.1 LABORATORY shall secure and maintain throughout the full period of the services provided to the CLIENT adequate insurance to protect it from claims under applicable Workmen's Compensation Acts and also shall maintain one million dollars of general liability coverage to cover claims for bodily injury, death or property damage as may arise from the performance of its services.
4.2 The CLIENT hereby warrants that it has sufficient insurance to protect its employees adequately under applicable Workmen's Compensation Acts and for bodily injury, death, or property damage.

4.3 No insurance of whatever kind or type, which may be carried by either party is to be considered as in any way limiting any other party's responsibility for damages resulting from their operations or for furnishing work and materials.

Paragraph 5. PAYMENT:

5.1 CLIENT shall pay to LABORATORY such fees for services as previously agreed, orally or in writing, within 30 days of presentment of a bill for such services performed. In the event CLIENT ordered, orally or in writing, services but such services were not assigned a rate for billing, such services shall be billed at the LABORATORY's reasonable and customary rate.
5.2 CLIENT shall be responsible for all shipping, customs and other expenses related to services provided by LABORATORY to the CLIENT, and shall fully insure any test sample or other equipment provided to LABORATORY by the CLIENT.
5.3 Amounts overdue from CLIENT to LABORATORY shall be charged interest at a rate of 1½% per month.

Paragraph 6. ISO/IEC GUIDE 17025 ADDITIONS:

6.1 CLIENT agrees that this test report will not be reproduced except in full, without written approval from the LABORATORY.
6.2 CLIENT agrees that this test report shall not be used to claim product endorsement by A2LA or ANSI or any agency of the U.S. Government.
6.3 CLIENT agrees that test results presented herein relate only to the sample tested by the LABORATORY.