Applicant:	Andrew Corporation 108 Rand Park Drive Garner, NC 27529
Equipment Under Test: E.U.T.)	TFAM2632/4
n Accordance With:	FCC Part 90, Subpart I Transmitter
Гested By:	Nemko Dallas Inc. 802 N. Kealy Lewisville, TX 75057-3136
Authorized By:	Justin Cars
	Dustin Oaks, Account Manager
Date:	05/28/2004

4L0348RUS1

Nemko Test Report:

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Nemko Dallas

FCC PART 90, SUBPART I TRANSMITTER

EQUIPMENT: TFAM2632/4 Test Report No.: 4L0348RUS1

Summary of Test Results Section 1. Manufacturer: **Andrew Corporation** Model No.: TFAM2632/4 Serial No.: 041501104 General: All measurements are traceable to national standards. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with FCC Part 90, Subpart I. **New Submission Production Unit** Class II Permissive Change **Pre-Production Unit** THIS TEST REPORT RELATES ONLY TO THE ITEM(S) TESTED. THE FOLLOWING DEVIATIONS FROM, ADDITIONS TO, OR EXCLUSIONS FROM THE TEST

SPECIFICATIONS HAVE BEEN MADE. NONE

See "Summary of Test Data".

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Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Nemko Dallas Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report. This report applies only to the items tested.

Summary Of Test Data

NAME OF TEST	PARA. NO.	SPEC.	RESULT
RF Power Output	90.205		Complies
Audio Frequency Response	TIA EIA-603.3.2.6	N/A	N/A
Audio Low-Pass Filter Response	TIA EIA-603.3.2.6	N/A	N/A
Modulation Limiting	TIA EIA-603.3.2.6	N/A	N/A
Occupied Bandwidth	90.210	Plots	Complies
Spurious Emissions at Antenna Terminals	90.210	Mask G and H	Complies
Field Strength of Spurious Emissions	90.210		Complies
Frequency Stability	90.213		Complies
Transient Frequency Behavior	90.214	N/A	N/A

Footnotes For N/A's:

(1) Since the E.U.T. does not contain modulation circuitry modulation testing was not performed.

(2) Since the E.U.T. is not a keyed carrier system, Transient Frequency Behavior was not performed.

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Nemko Dallas

FCC PART 90, SUBPART I TRANSMITTER

EQUIPMENT: TFAM2632/4 Test Report No.: 4L0348RUS1

Section 2. General Equipment Specification

Transmitter						
Supply Voltage Input:		48 Vdc				
Frequency Range:		851.0125 to	868.9875	i		
Type(s) of Modulation:		F3E (Analog)	F1D	F2D	D7W (QAM)	Other
Gain:		18 dB				
Output Impedance:		50 Ohms				
RF Output (Rated per carrier): Number of Carriers: iDEN Analog	1 21 27	2 17 27		4 13 17		8 9 13
Operator Selection of Operating Fr	equency:	None – Full	band cov	erage		
Power Output Adjustment Capabil	ity:	None				
Frequency Translation:				-F1	F1-F2	N/A
Band Selection:			Soft	ware	Duplexer Change	Fullband Coverage

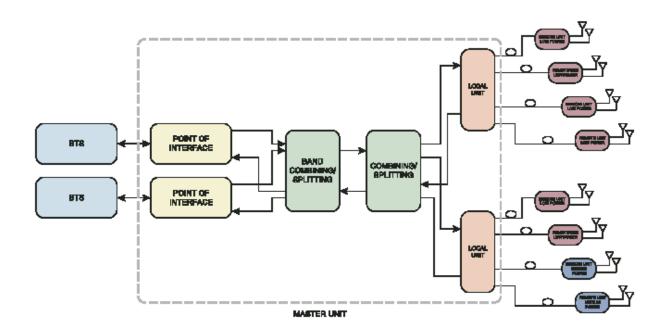
Test Report No.: 4L0348RUS1

EQUIPMENT: TFAM2632/4

Description of EUT

Britecell Plus is a radio over fiber system

System Diagram



Nemko Dallas

FCC PART 90, SUBPART I

TRANSMITTER

EQUIPMENT: TFAM2632/4 Test Report No.: 4L0348RUS1

Section 3. RF Power Output

NAME OF TEST: RF Power Output PARA. NO.: 2.985

TESTED BY: David Light DATE:5/26/04

Test Results: Complies.

Measurement Data:

Modulation Type	Single Carrier (dBm)	Per Channel Power Output (dBm)	Composite Power Output (dBm)
Analog	27	20	23
iDEN	21	17	20

Equipment Used: 1036-1029-1064

Measurement Uncertainty: +/- 1.7 dB

Temperature: 22 °C

Relative Humidity: 40 %

Nemko Dallas FCC PART 90, SUBPART I TRANSMITTER

EQUIPMENT: TFAM2632/4 Test Report No.: 4L0348RUS1

Section 4. Occupied Bandwidth

NAME OF TEST: Occupied Bandwidth PARA. NO.: 2.989

TESTED BY: David Light DATE:5/26/04

Test Results: Complies.

Test Data: See attached graph(s).

Test Data - Occupied Bandwidth



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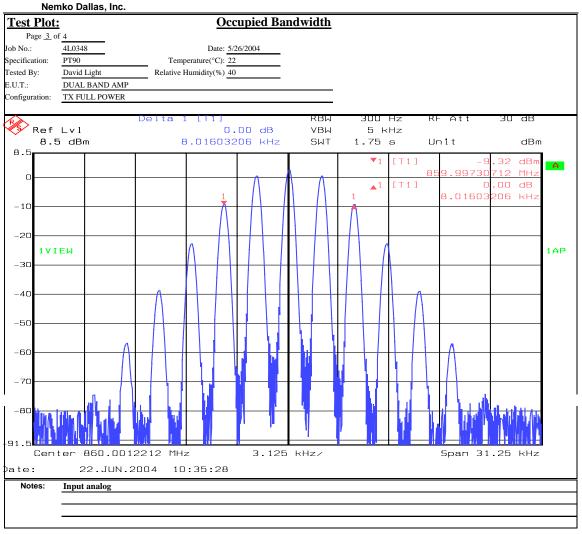
Nemko Dallas, Inc. **Data Plot Occupied Bandwidth** Page <u>1</u> of <u>2</u> Complete X Preliminary: Job No.: 4L0348 Date: ___5/26/2004 Temperature(°C): 22 Specification: PT90 Tested By: David Light Relative Humidity(%) DUAL BAND AMP E.U.T.: TX FULL POWER Configuration: Sample Number: Location: Lab 1 RBW: Refer to plots VBW: Refer to plots Distance: NA Detector Type: Peak Test Equipment Used Antenna: Directional Coupler: #N/A Pre-Amp: Cable #1: Filter: Cable #2: Receiver: Cable #3: Attenuator #1 1064 Cable #4: Attenuator #2: Mixer: Additional equipment used: Measurement Uncertainty: 300 Hz RF Att 30 dB Ref Lvl 0.01 dB VBW 5 kHz 10.02004008 kHz 1.75 s 30 dBm SWT Unit dBm 21.4 dB Offset 26 A 9.9962 248 MHz 20 0.02004 008 KH2 10 1VIEW 1MA - 1C **EXT** -20 -30 -40 -50 3.125 kHz/ 860.0012212 MHz Span 31.25 kHz Date: 26.MAY 2004 08:52:55 Notes: Analog 2.5 kHz Tone - 2 kHz Deviation

Test Data - Occupied Bandwidth



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Test Report No.: 4L0348RUS1

EQUIPMENT: TFAM2632/4

Test Data - Occupied Bandwidth



Dallas Headquarters:

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Nemko Dallas, Inc. **Occupied Bandwidth** Data Plot Page 2 of 2 Job No.: 4L0348 Date: 5/26/2004 Specification: Temperature(°C): 22 Tested By: David Light Relative Humidity(%) 40 E.U.T.: DUAL BAND AMP Configuration: TX FULL POWER Ref Lvl VBW 300 Hz -14.83 dBm 30 dBm 860.00759018 MHz SWT 1.4 s Unit dBm 30 21.4 dB Offset dBn A 018 MH2 20 352 kHz 10 1VIEW 1MA - 1 C EXT -20 -30 -40 -50 KIN WINNING! -60 Center 860 MHz 2.5 kHz/ Span 25 kHz 26.MAY 2004 10:23:04 ate: Notes: 20 dB Bandwidth

Test Data - Occupied Bandwidth



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Nemko Dallas, Inc. **Occupied Bandwidth Test Plot:** Page <u>4</u> of 4 4L0348 Job No.: Date: 5/26/2004 Specification: PT90 Temperature(°C): 22 Tested By: David Light Relative Humidity(%) 40 E.U.T.: DUAL BAND AMP Configuration: TX FULL POWER Ref Lvl 1.43 dB VBW 300 Hz 8.5 dBm -15.43086172 kHz SWT 1.4 s Unit dBm [T1] dBr Α 5.43086 172 kHz **-10** on her hard hard har the help harden -20 1VIEW 1 MA -30 -40 -50 -60 -70 Center 860.0012212 MHz 2.5 kHz/ 22.JUN.2004 ate: 10:46:09 Input iDEN Notes:

Nemko Dallas FCC PART 90, SUBPART I TRANSMITTER

EQUIPMENT: TFAM2632/4 Test Report No.: 4L0348RUS1

Section 5. Spurious Emissions at Antenna Terminals

NAME OF TEST: Spurious Emissions @ Antenna Terminals PARA. NO.: 2.991

TESTED BY: David Light DATE:5/26/04

Test Results: Complies.

Test Data: See attached graph(s).

Test Data – Spurious Emissions at Antenna Terminals



Dallas Headquarters: 802 N. Kealy Lewisville, TX 75057 Tel: (972) 436-9600 Fax: (972) 436-2667

Data Plot			<u>Spuri</u>	ious Emis	sic	ns	at A	\ nt	en	na	Τe	erminals					
Page 1 of	f <u>4</u>												Con	nplete	X		
Job No.:	4L0348	3		Date:	5/2	26/20	004						Prelimi	nary:			
Specification:	PT90		Tempe	erature(°C):		22											
Tested By:	Lance V	Walker	Relative H	umidity(%)		40											
E.U.T.:	DUAL	BAND AMP									_						
Configuration:	TX FU	LL POWER															
Sample Number:	1																
Location:	Lab	1				RE	W: R	efer t	o pl	ots			Measure	ement			
Detector Type:	Pea	ık				VE	W: R	efer t	o pl	ots	-		Dis	tance:	NA n	n	
Test Equipme	ent Use	<u>ed</u>															
Antenna:				Direction	onal	Coup	ler:				_						
Pre-Amp:					(Cable	#1:	#.	N/A		_						
Filter:					(Cable	#2:										
Receiver:	103	86			(Cable	#3:										
Attenuator #1	106	54			(Cable	#4:				_						
Attenuator #2:						Mi	xer:										
Additional equip	ment use	d:															
Measurement Un	certainty	+/-1.7 d	В								_						
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Ref				25.						'BW			Hz				
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	.4	dB Offse	e t	LI	ΜI	T/0	CHE	K	١	\ F	э _{ф.}	SSED ^{▼1}	[T1]		25	.11 dBm	A
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EQUIPMENT: TFAM2632/4

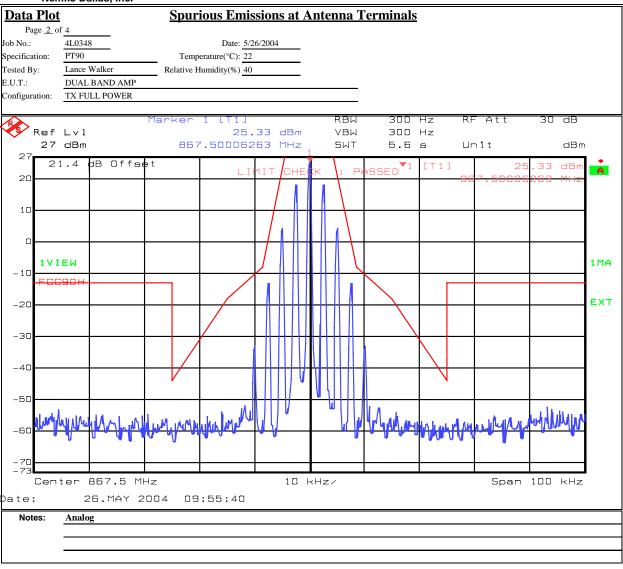
Test Report No.: 4L0348RUS1

Test Data – Spurious Emissions at Antenna Terminals



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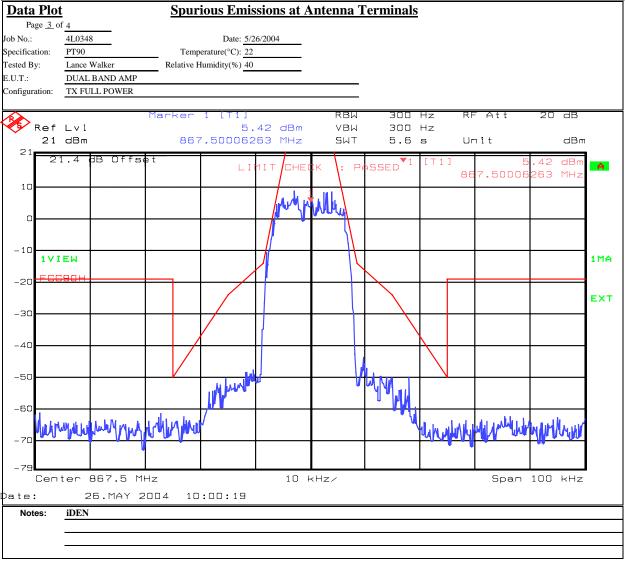


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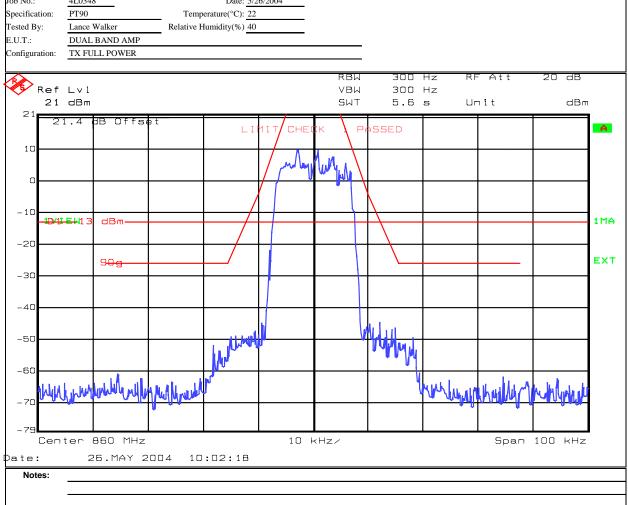
Test Data – Spurious Emissions at Antenna Terminals



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Nemko Dallas, Inc. **Test Plot: Spurious Emissions at Antenna Terminals** Page <u>4</u> of <u>4</u> Job No.: 4L0348 Date: 5/26/2004 PT90 Temperature(°C): 22 Relative Humidity(%) 40 Lance Walker DUAL BAND AMP TX FULL POWER 300 Hz



Test Data – Spurious Emissions at Antenna Terminals



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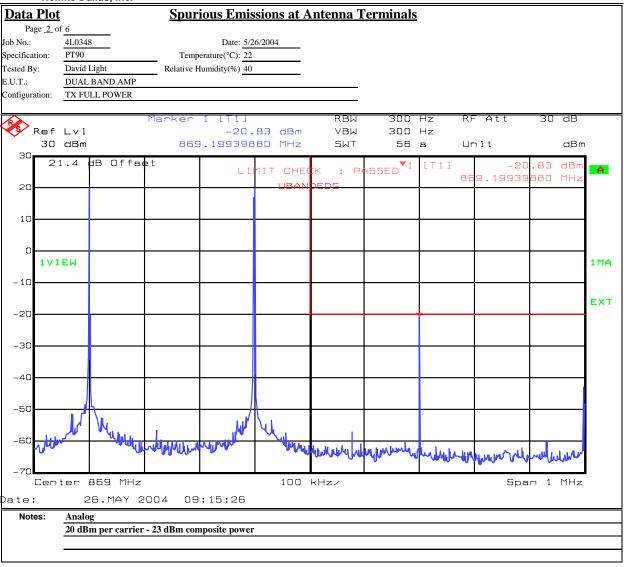
Data Plot																
Page 1 of	<u>6</u>										Con	nplete	X	_		
Job No.:	4L034	8			Date:	5/26	/2004				Prelimi	nary:		_		
Specification:	PT90			Temp	erature(°C):	22	<u> </u>									
Tested By:	David	Light		Relative I	Humidity(%)	40	<u> </u>									
E.U.T.:	DUAL	BAND AMP														
Configuration:	TX FU	LL POWER														
Sample Number:	1															
Location:	Lal	1					RBW: R	efer	to plots		Measur	ement				
Detector Type:	Pe	ak					VBW: R	efer	to plots		Dis	tance:	NA	_ m		
Test Equipme	ent Us	<u>ed</u>														
Antenna:					Direc	tional Co	oupler:									
Pre-Amp:						Ca	ble #1:	#	N/A							
Filter:																
Receiver:	10	36				Ca	ble #3:									
Attenuator #1	10	54				Ca	ble #4:									
Attenuator #2:							Mixer:									
Additional equip	nent use	ed:														
Measurement Un	certaint	y: +/-1.7	7 dB													
R)			Ma	rker	1 [T1]				RBW	300	Hz	RF	Att		30 dB	
Ref					-20	.42	dBm		VBW	300	Hz					
30	dBm			850	1.67635	271	MHz		SWT	56	s	Ur	nit		dBr	n
30	. 4	dB Offs	3 de †		I	1				▼ 1	F T 4 1		,	20	40 JP-	1
	•		7		L	IMIT	CHE	СK	: P	ASSED ^{*†}	[T1]	0 =	 0.6763		42 dBm	A
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Date:	2	6.MAY	200	4 09	:10:15											
Notes:	Analo															
		0	er - 23	dBm Co	mposite pow	er										

Test Data – Spurious Emissions at Antenna Terminals



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Test Data - Spurious Emissions at Antenna Terminals - Low Channel



Dallas Headquarters: 802 N. Kealy Lewisville, TX 75057

Tel: (972) 436-9600 Fax: (972) 436-2667

Nemko Dallas, Inc. **Spurious Emissions at Antenna Terminals Test Plot:** Page 4 of 6 Job No.: 4L0348 Specification: PT90 Temperature(°C): 22 Relative Humidity(%) 40 Tested By: David Light E.U.T.: DUAL BAND AMP TX FULL POWER Configuration: VBW 1 MHz 30 dBm SWT 90 ms dBm Un i t 30 21.5 dB Offset 20 10 1MAX 1MA - 10 -D1 -20 -30 -40 -50 -60 Start 30 MHz 897 MHz/ Stop 9 GHz 22.JUN.2004 11:08:39 ate: Notes: Analog Low channel

EQUIPMENT: TFAM2632/4

Test Report No.: 4L0348RUS1

Test Data - Spurious Emissions at Antenna Terminals - Mid Channel



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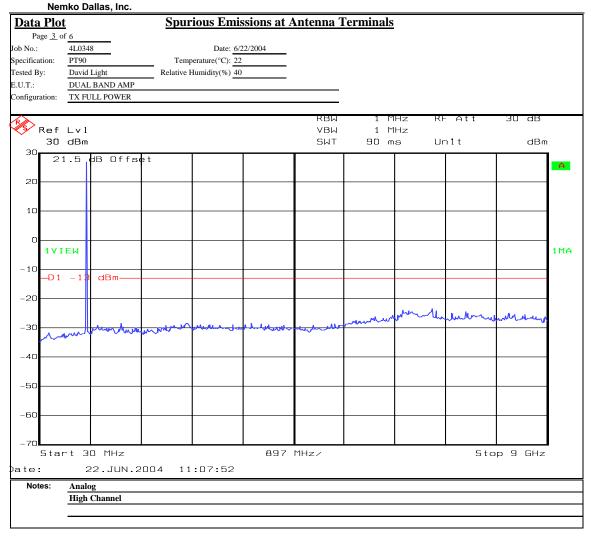
Nemko Dallas, Inc. **Data Plot Spurious Emissions at Antenna Terminals** Page <u>3</u> of <u>6</u> Job No.: 4L0348 Date: 5/26/2004 Specification: PT90 Temperature(°C): 22 Relative Humidity(%) 40 Tested By: David Light E.U.T.: DUAL BAND AMP TX FULL POWER Configuration: 30 dB 1 MHz Ref Lvl 26.75 dBm 1 MHz VBW 30 dBm 851.50000000 MHz SWT 90 ms Unit dBm 21.4 dB Offset [T1] 75 dBn A .50000 000 MHz 20 1VIEW 1MA -10 **-**D1 dBm-EXT -20 -30 -40 -50 -60 Start 30 MHz 897 MHz/ Stop 9 GHz 26.MAY 2004 09:02:16 Date: Notes: Analog

Test Data – Spurious Emissions at Antenna Terminals – High Channel



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Fax: (972) 436-2667



Test Report No.: 4L0348RUS1

EQUIPMENT: TFAM2632/4

Test Data – Spurious Emissions at Antenna Terminals



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Nemko Dallas, Inc. Test Plot: **Spurious Emissions at Antenna Terminals** Page $\underline{4}$ of $\underline{6}$ Job No.: 4L0348 Date: 5/26/2004 Temperature(°C): 22 Specification: PT90 Tested By: Relative Humidity(%) 40 David Light ент. DUAL BAND AMP Configuration: TX FULL POWER Ref Lvl -25.90 dBm VBW 30 kHz 30 dBm 850.84268537 MHz SWT 5 ms Unit dBm 21.5 dB Offset 90 dBr SSED Α IIT CHE 850.84268 537 MHz 10 1MA 1VIEW - 1C OBNDE -20 -30 -40 -50 -60 Span 1 MHz 100 kHz/ Center 851 MHz 22.JUN.2004 ate: 10:14:25 iDEN Notes: 17 dBm per carrier - 20 dBm Composite

Test Data – Spurious Emissions at Antenna Terminals



Nemko Dallas, Inc.

Dallas Headquarters: 802 N. Kealy

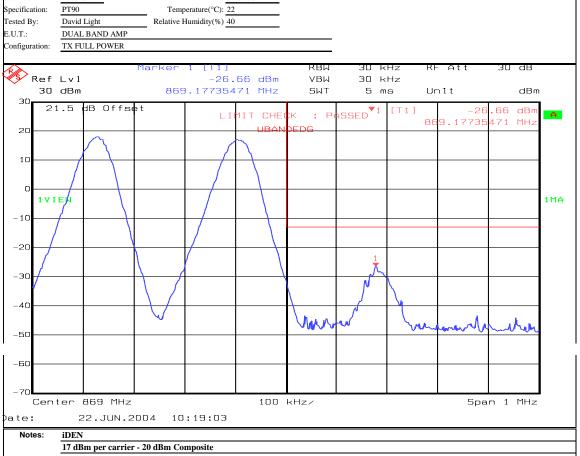
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 Test Plot:
 Spurious Emissions at Antenna Terminals

 Page 5 of 6
 Job No.: 4L0348
 Date: 5/26/2004

 Specification:
 PT90
 Temperature(°C): 22

 Tested By:
 David Light
 Relative Humidity(%) 40



Test Data - Spurious Emissions at Antenna Terminals Low Channel



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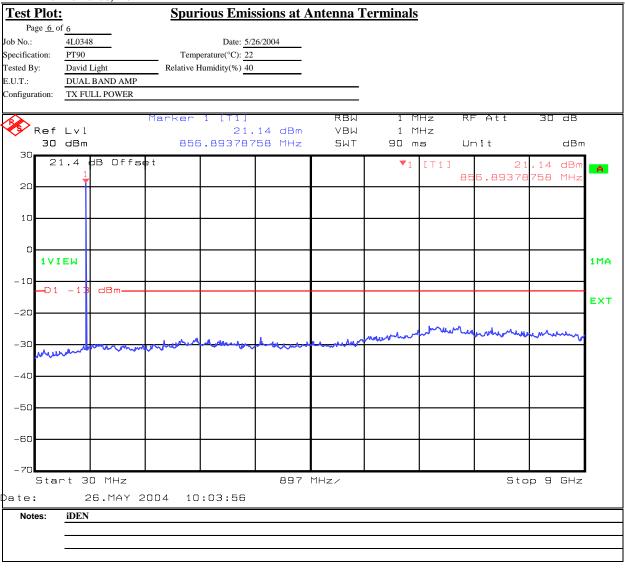
Data Plot		Spui	rious Emis	ssions at	Antenna [Fermina	ls			
Page 1 of	<u>6</u>							nplete X		
Job No.:	4L0348		Date:	6/22/2004			Prelimi		_	
Specification:	PT90	Tem	perature(°C):	22					_	
Tested By:	David Light	Relative	Humidity(%)	40						
E.U.T.:	DUAL BAND AN									
Configuration:	TX FULL POWE	R								
Sample Number:	1									
Location:	Lab 1			RBW:	Refer to plots		Measur	ement		
Detector Type:	Peak			VBW:	Refer to plots		Dis	tance: NA	_m	
Test Equipme	ent Used									
Antenna:			Directi	onal Coupler:						
Pre-Amp:				Cable #1:	#N/A					
Filter:				Cable #2:						
Receiver:	1036			Cable #3:						
Attenuator #1	1478			Cable #4:						
Attenuator #2:				Mixer:						
Additional equipi										
Measurement Un	certainty: +/-	-1.7 dB								
<u> </u>		Marker	1 [T1]		RBW	1	MHz	RF Att	30 dB	
Ref	Lvl	rigi ito:		43 dBm	VBW		MHz		00 00	
*	dBm	838	3.91783E		SWT	90		Unit	dBm	n
30-	.5 dB Of		I	1	T	T _		<u> </u>	عر مداد	1
21	.5 65 01	1561				▼:	[T1]		0.43 dBm	A
20	÷							838.9178	3567 MHz	
10			1		1		+			1
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1 V I	EΜ									1MA
4.6										
-10 D1	-13 dBm-									
-20			ļ							-
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-30			<u> </u>			mound	M. M	mount	Morrowan	٨
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-60			Ì							1
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-70										J
Star	t 30 MHz			897	MHz/			St	op 9 GHz	
Date:	22.JUN	1.2004 11	:04:21							
Notes:	iDEN									
NOIGS.	Low channel									
	LOW CHAIRIEI									

Test Data - Spurious Emissions at Antenna Terminals - Mid Channel



Dallas Headquarters:

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EQUIPMENT: TFAM2632/4

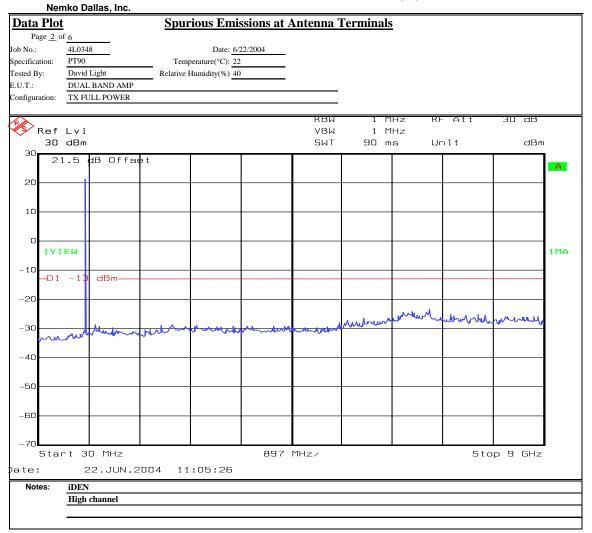
Test Report No.: 4L0348RUS1

Test Data - Spurious Emissions at Antenna Terminals - High Channel



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Nemko Dallas

FCC PART 90, SUBPART I TRANSMITTER

EQUIPMENT: TFAM2632/4 Test Report No.: 4L0348RUS1

Section 6. Field Strength of Spurious Emissions

NAME OF TEST: Field Strength of Spurious Emissions PARA. NO.: 2.993

TESTED BY: David Light DATE:5/26/04

Test Results: Complies.

Test Data: There were no emissions detected above the noise floor, which was

more than 20 dB below the specification limit of -13 dBm.

The device was tested at 3 frequencies, Low, Mid and High

Note: See page A5 for applicable limit.

Equipment Used: 1464-1484-1485-1016-1304

Measurement Uncertainty: +/-1.7 dB

Temperature: 20 °C

Relative Humidity: 40 %

Photographs of Test Setup





Nemko Dallas FCC PART 90, SUBPART I TRANSMITTER

EQUIPMENT: TFAM2632/4 Test Report No.: 4L0348RUS1

Section 7. Frequency Stability

NAME OF TEST: Frequency Stability PARA. NO.: 2.995

TESTED BY: David Light DATE:5/27/04

Test Results: Complies.

Measurement Data: See attached tables.

Nemko Dallas

FCC PART 90, SUBPART I TRANSMITTER

EQUIPMENT: TFAM2632/4 Test Report No.: 4L0348RUS1

Test Data - Frequency Stability



Nemko Dallas, Inc.

Dallas Headquarters:

802 N. Kealy Lewisville, TX 75057 Tel: (972) 436-9600 Fax: (972) 436-2667

		Frequency Stability	
Page 1 of	f <u>1</u>		
Job No.:	4L0347	Date: 5/27/2004	
Specification:	PT24	Temperature(°C): 20	
Tested By:	David Light	Relative Humidity(%) 45	
E.U.T.:		Dual Band Amp	
Configuration:		TX CENTER BAND	
Sample Number:	1		
		Test Equipment Used	
Antenna:		Directional Coupler:	
Pre-Amp:		Cable #1: 1042	
Filter:		Cable #2:	
Receiver:	1026		
Attenuator #1	1064		
Attenuator #2:			
Measurement	17		
Uncertainty:	1x10 ⁻¹⁷ ppm	Standard Test Frequency 860.000000	MHz

Tamp (00)	Measured	Rho	Test	Freqeuncy	Limit	Error	
Temp (°C)	Frequency (MHz)		Voltage	Error (Hz)	(+/-Hz)	(ppm)	Comment
20	860.000000		-48	0	860.0	0.0	
20	860.000000		-56.2	0	860.0	0.0	
20	860.000000		-40.8	0	860.0	0.0	
50	860.000000		-48	0	860.0	0.0	
40	860.000000		-48	0	860.0	0.0	
30	860.000000		-48	0	860.0	0.0	
10	860.000000		-48	0	860.0	0.0	
0	860.000000		-48	0	860.0	0.0	
-10	860.000000		-48	0	860.0	0.0	
-20	860.000000		-48	0	860.0	0.0	
-30	860.000000		-48	0	860.0	0.0	
Notes:			•		•		

Section 8. Test Equipment List

Nemko ID	Description .	Manufacturer. Model Number	Serial Number	Calibration Date	Calibration Due
1036	SPECTRUM ANALYZER	ROHDE & SCHWARZ FSEK30	830844/006	03/26/04	03/26/05
1042	CABLE, 4M	STORM PR90-010-144	N/A	09/02/03	09/01/04
1064	ATTENUATOR	NARDA 776B-20	NONE	CBU	N/A
1464	Spectrum analyzer	Hewlett Packard 8563E	3551A04428	02/11/03	02/11/05
1484	Cable 2.0-18.0 Ghz	Storm PR90-010-072	N/A	07/24/03	07/23/04
1485	Cable 2.0-18.0 Ghz	Storm PR90-010-216	N/A	07/24/03	07/23/04
1304	HORN ANTENNA	ELECTRO METRICS RGA-60	6151	09/22/03	09/22/05
1016	Pre-Amp	HEWLETT PACKARD 8449A	2749A00159	10/27/03	10/26/04
283	Environmental Chamber with controller # 1189006	ENVIROTRONICS SH27 & 2030-22844	129010083	05/06/04	05/06/05

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FCC PART 90, SUBPART I TRANSMITTER

EQUIPMENT: TFAM2632/4 Test Report No.: 4L0348RUS1

ANNEX A - TEST METHODOLOGIES

Nemko Dallas FCC PART 90, SUBPART I TRANSMITTER

EQUIPMENT: TFAM2632/4 Test Report No.: 4L0348RUS1

NAME OF TEST: RF Power Output PARA. NO.: 2.985

Minimum Standard: Para. No. 90.205(a). The maximum allowable station ERP is

dependent upon the stations HAAT and required service area and

will be authorized in accordance with Table 1 of 90.205(d).

Test Method: TIA/EIA-603-1992, Section 2.2.12

The antenna substitution method was used to determine the equivalent radiated power at spurious frequencies. The spurious emissions were measured at a distance of 3 meters. The EUT was then replaced with a reference substitution antenna with a known gain referenced to a dipole. This antenna was fed with a signal at the spurious frequency. The level of the signal was adjusted to repeat the previously measured level. The resulting erp is the signal level fed to the reference antenna corrected for gain referenced to a dipole.

Nemko Dallas FCC PART 90, SUBPART I TRANSMITTER

EQUIPMENT: TFAM2632/4 Test Report No.: 4L0348RUS1

NAME OF TEST: Spurious Emissions at Antenna Terminals PARA. NO.: 2.991

Test Method: RBW: 1% of emission bandwidth in the 0 - 1 GHz range.

1 MHz at frequencies above 1 GHz.

 $VBW: \Rightarrow RBW$

The spectrum is searched up to 10 times the fundamental frequency.

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FCC PART 90, SUBPART I TRANSMITTER

EQUIPMENT: TFAM2632/4 Test Report No.: 4L0348RUS1

NAME OF TEST: Occupied Bandwidth PARA. NO.: 2.989

Minimum Standard: Para. No. 90.210, see table 1 below for applicable mask.

Table 1

Frequency Band (MHz)	Mask for equipment with Low Pass Filter	Mask for equipment without Low Pass Filter
Below 25	A or B	A or C
25 - 50	В	С
72 - 76	В	С
150 - 174	B, D or E	C, D or E
150 Paging only	В	С
220 - 222	F	F
421 - 512	B, D or E	C, D or E
450 paging only	В	Н
806 - 821/851 - 866	В	G
821 - 824/ 866 - 869	В	Н
896 - 901/ 935 - 940	I	J
902 - 928	K	K
929 - 930	В	G
Above 940	В	С
All other bands	В	С

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Nemko Dallas FCC PART 90, SUBPART I TRANSMITTER

EQUIPMENT: TFAM2632/4 Test Report No.: 4L0348RUS1

NAME OF TEST: Field Strength of Spurious PARA. NO.: 2.993

Minimum Standard: Para. No. 90.210, see table 1 for applicable mask.

Test Method: TIA/EIA-603-1992, Section 2.2.12

The antenna substitution method was used to determine the equivalent radiated power at spurious frequencies. The spurious emissions were measured at a distance of 3 meters. The EUT was then replaced with a reference substitution antenna with a known gain referenced to a dipole. This antenna was fed with a signal at the spurious frequency. The level of the signal was adjusted to repeat the previously measured level. The resulting erp is the signal level fed to the reference antenna corrected for gain referenced to a dipole.

MASK	Spurious Limit	FS Limit Below 1 GHz	FS Limit Above 1 GHz
A,B,C,G,H,I	-13dBm	84.4 dBµV/m@3m	82.2 dBµV/m@3m
D,J	-20dBm	77.4 dBµV/m@3m	75.2 dBµV/m@3m
E,F,K	-25dBm	72.4 dBµV/m@3m	70.2 dBµV/m@3m

NAME OF TEST: Frequency Stability PARA. NO.: 2.995

Minimum Standard: Para. No. 990.213. The transmitter carrier frequency shall remain

within the assigned frequency below in ppm.

Table 2

Frequency Band	Fixed And Base	Mobile Stations	
(MHz)	Stations	> 2 Watts o/p pwr	< 2 Watts o/p pwr
Below 25	100	100	200
25 - 50	20	20	50
72 - 76	5	-	50
150 - 174	5	5	5
220 - 222	0.1	1.5	1.5
421 - 512	2.5	5	5
806 - 821	1.5	2.5	2.5
821 - 824	1.0	1.5	15
851 - 866	1.5	2.5	2.5
866 - 869	1.0	1.5	1.5
869 - 901	0.1	1.5	1.5
902 - 928	2.5	2.5	2.5
929 - 930	1.5	-	-
935 - 940	0.1	1.5	1.5
1427 - 1435	300	300	300
Above 2450	-	-	=

Nemko Dallas

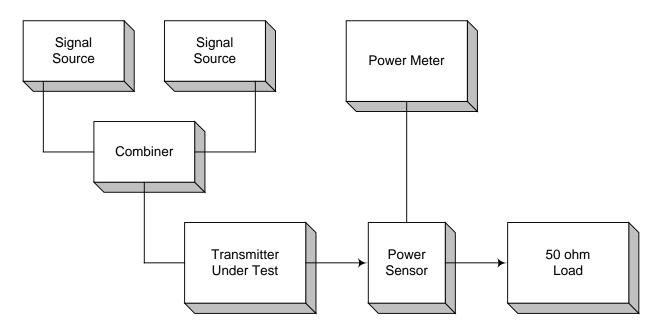
FCC PART 90, SUBPART I TRANSMITTER

EQUIPMENT: TFAM2632/4 Test Report No.: 4L0348RUS1

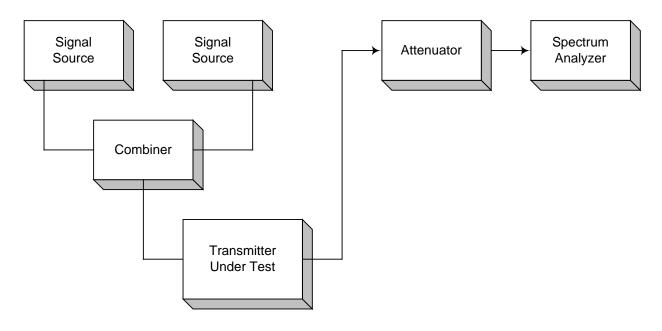
ANNEX B - TEST DIAGRAMS

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Para. No. 2.985 - R.F. Power Output



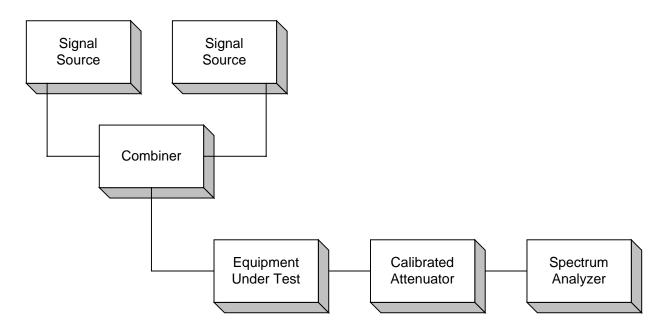
Para. No. 2.989 - Occupied Bandwidth



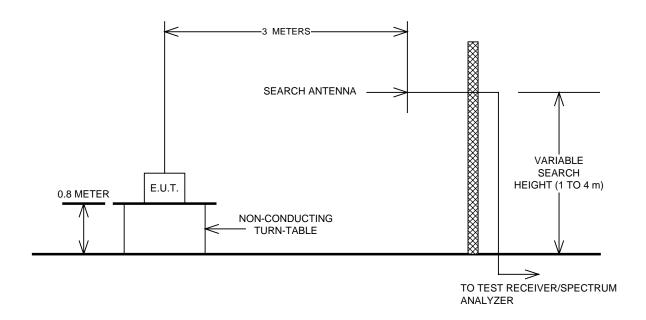
Test Report No.: 4L0348RUS1

EQUIPMENT: TFAM2632/4

Para. No. 2.991 - Spurious Emissions at Antenna Terminals



Para. No. 2.993 - Field Strength of Spurious Radiation



Test Report No.: 4L0348RUS1

Para. No. 2.995 - Frequency Stability

EQUIPMENT: TFAM2632/4

