

## **ADDENDUM TEST REPORT FC99-032**

## FOR THE

## MICROWAVE VIDEO TRANSMITTER MODULES, TX888MOD-P+/TX888MODMOD-O/TX888MOD-P

## FCC PART 90 COMPLIANCE

**DATE OF ISSUE: OCTOBER 8, 1999** 

PREPARED FOR:

Advanced Electronics Group, Inc. 12530 Beatrice Street Los Angeles, CA 90066 (P.O. Box 642057 Los Angeles, CA 90064)

P.O. No: Check W.O. No: 72515

Report No: FC99-032A

PREPARED BY:

Joyce Walker CKC Laboratories, Inc. 5473A Clouds Rest Mariposa, CA 95338

Date of test: September 13-17 & 20, 1999

Dennis Ward

**DOCUMENTATION CONTROL:** 

ragest heels

**APPROVED BY:** 

Tracy Phillips

**Documentation Control Supervisor** 

CKC Laboratories, Inc.

Dennis Ward

Director of Laboratories

CKC Laboratories, Inc.

This report contains a total of 85 pages and may be reproduced in full only. Partial reproduction may only be done with the written consent of CKC Laboratories, Inc.

Report No: FC99-032A

Page 1 of 85

## TABLE OF CONTENTS FOR CERTIFICATION TEST REPORT

Administrative Information	3
Summary Of Results	5
Equipment Under Test (EUT) Description	5
Measurement Uncertainty	
Peripheral Devices	5
2.1033(c)(4) – Type(s) of Emissions	6
2.1033(c)(5) – Frequency Range	6
2.1033(c)(6) – Range of Operating Power	6
2.1033(c)(7) – Maximum Power Rating	6
2.1033(c)(8) – DC Voltages	6
2.1033(c)(9) – Tune-Up Procedure	6
2.1033(c)(10) - Frequency Stabilization, Modulation, & Spurious Radiation	6
2.1033(c)(13) – Description of Modulation	6
2.1033(c)(14)/2.1046 - RF Power Output	7
2.1033(c)(14)/2.1047(a) - Modulation Characteristics - Audio Frequency Response	13
2.1033(c)(14)/2.1047(b) - Modulation Characteristics - Modulation Limiting Response	13
2.1033(c)(14)/2.1049 - Occupied Bandwidth	14
2.1033(c)(14)/2.1051/90.210 - Spurious Emissions at Antenna Terminal	21
2.1033(c)(14)/2.1053 - Field Strength of Spurious Radiation	28
2.1033(c)(14)/2.1055/90.213- Frequency Stability	45

Report No: FC99-032A Page 2 of 85

#### **ADMINISTRATIVE INFORMATION**

**DATE OF TEST:** Date of test: September 13-17 & 20, 1999 **PURPOSE OF TEST:** To demonstrate the compliance of the Microwave Video Transmitter Modules, TX888MOD-P+/TX888MODMOD-O/ TX888MOD-P with the requirements for FCC Part 90 devices. The addendum reflects changes to plots, more detailed device description and correction to RF Power Output calculations. **MANUFACTURER:** Advanced Electronics Group, Inc. 12530 Beatrice Street Los Angeles, CA 90066 (P.O. Box 642057 Los Angeles, CA 90064) **REPRESENTATIVE:** Richard Hirsch **TEST LOCATION:** CKC Laboratories, Inc. 22105 Wilson River Hwy Tillamook, OR 97141 **TEST PERSONNEL:** Kevin Daniel & Adam Ross **TEST METHOD:** FCC Part 2 and Part 90

Report No: FC99-032A

Page 3 of 85

## **EQUIPMENT UNDER TEST:**

**Microwave Video Transmitter Module** 

Manuf: Advanced Electronics

Group, Inc.

Model: TX888MOD-P+

Serial: 3001-P+ FCC ID: (pending)

**Microwave Video Transmitter Module** 

Manuf: Advanced Electronics

Group, Inc.

Model: TX888MOD-P

Serial: 1001-P FCC ID: (pending) **Microwave Video Transmitter Module** 

Manuf: Advanced Electronics

Group, Inc.

Model: TX888MOD-O

Serial: 1001-O FCC ID: (pending)

Report No: FC99-032A

Page 4 of 85

#### **SUMMARY OF RESULTS**

The Microwave Video Transmitter Module, TX888MOD-P+/TX888MODMOD-O/TX888MOD-P was tested in accordance with FCC Part 90 for compliance with the transmitter characteristic requirements of the FCC Rules.

As received, the above equipment was found to be fully compliant with the limits of FCC Part 90.

## **EQUIPMENT UNDER TEST (EUT) DESCRIPTION**

Microwave Video Transmitter Modules, 2.473 GHz, for transmitting video and audio signals for use primarily by Law Enforcement agencies in Security/Surveillance applications.

TX888MOD-P and TX888MOD-O are identical in circuitry. The only difference is the model ending in "P" features a permanently attached left-hand circular polarized patch antenna. The model ending in "O" features a permanent omni directional "whip" antenna.

The TX888MOD-P+ has a permanent "Patch" antenna is the same circuitry as the above models with several resistors removed and has a capacitor and a transister added, in order to boost the signal power to its current (tested) level. Otherwise, the circuitry remains the same as the others.

## **MEASUREMENT UNCERTAINTY**

Associated with data in this report is a ±4dB measurement uncertainty.

## PERIPHERAL DEVICES

The EUT was tested with the following peripheral device:

## Power Supply (12 VCD, 400 mA)

Manuf: RF Link Technology

Model: LPS-1240 Serial: None FCC ID: N/A

Report No: FC99-032A

Page 5 of 85

## 2.1033(c)(4) - Type(s) of Emissions

**65MO F8W** 

## **2.1033(c)(5) – Frequency Range**

2473 MHz + 10 MHz

## 2.1033(c)(6) –Range of Operating Power

.000022W - .041W. Operating power level is fixed in all three modules. There is no means for variation within either module.

## 2.1033(c)(7) – Maximum Power Rating

Worst case module was the TX888MOD-P+, at .041W.

## 2.1033(c)(8) - DC Voltages

All modules accept 12 VDC input. Actual voltage draw is  $8.6 \text{ volts} \pm 10\%$ . The TX888MOD-P & TX888MOD-O draws 160mA. The TX88MOD-P+ draws 220mA.

## **2.1033(c)(9) – Tune-Up Procedure**

Modules are received from the original manufacturer, RF Link Technology, pre-tuned and require no special tuning during modification by Advanced Electronics Group, Inc., or by the end user.

## 2.1033(c)(10) – Frequency Stabilization, Modulation, & Spurious Radiation

Original schematics for pre-modified modules are on file with the FCC under FCC ID#: MFEMODTX24-01 (RF Link Technology). The portion of the original transmitter modules that have been modified to boost power by Advance Electronics Group, Inc. (causing the need to resubmit for a new FCC ID#) will be uploaded to the FCC via the "Add Attachments" process.

## 2.1033(c)(13) – Description of Modulation

Not applicable to this unit.

Report No: FC99-032A

Page 6 of 85

## 2.1033(c)(14)/2.1046/90.210- RF Power Output

## **Test Data: (ERP or EIRP)**

Power Output = InvLog(dBuV-107)/10

InvLog(123.2dBuV-107)/10

InvLog(1.62)

Power Output = 41.6869mWatts

Spec Limit Per 90.205(1)
Maximum Output Power = 5 Watts

Report No: FC99-032A

Page 7 of 85

## **Test Data:**

Test Location: CKC Laboratories, Inc. • 22105 Wilson River Hwy • Tillamook, OR 97141 • 800 500-4EMC

Customer: Advanced Electronics Group, Inc.

Specification: fcc90.210

Work Order #: 72515 Date: Fri Sep-17-1999

Test Type: Maximized Emissions Time: 12:04:23 Equipment: Video Audio Transmitter Sequence#: 19

Manufacturer: Advanced Electronics Group, Inc. Tested By: Adam Ross

Model: TX888MOD-P+

S/N: SMA

#### Equipment Under Test (\* = EUT):

Function	Manufacturer	Model #	S/N
Video Audio Transmitter*	Advanced Electronics Group, Inc.	TX888MOD-P+	SMA

#### Support Devices:

Function	Manufacturer	Model #	S/N	V
Power Supply (12 VCD, 4	00 mA) RF Link Technology	У	LPS-1240	none

#### Test Conditions / Notes:

The EUT is placed on the test table with the antenna-port connected to the spectrum analyzer and the camera adjacent to the transmitter. A 2.5 kHz tone from the function generator is modulating the audio carrier. The transmitter is continuously transmitting. The frequency range of investigation is 9 kHz to 26 GHz. The temperature is 70°F. The humidity is 40%. **Note: The model "-P+" is the worst case model between the "-P+" and the "-P".** 

Meast	Measurement Data: Reading listed by frequency.				Te	st Distan	ce: None				
#	Freq MHz	Rdng dBµV	dB	dB	dB	dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	2466.400M	99.3					+0.0	99.3	144.0	-44.7	None
									Peak unmo		
2	2479.000M	99.3					+0.0	99.3	144.0	-44.7	None
									Peak unme	odulated	
									hi audio ca	arrier	

#### Test Conditions / Notes:

The EUT is placed on the test table with the antenna-port connected to the spectrum analyzer and the camera adjacent to the transmitter. The camera is providing modulation of the video carrier. The transmitter is continuously transmitting. The frequency range of investigation is 9 kHz to 26 GHz. The temperature is 70°F. The humidity is 40%.

Measu	<b>Reading listed by frequency.</b>			Te	st Distanc	e: None					
#	Freq MHz	Rdng dBµV	dB	dB	dB	dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	2472.650M	123.2					+0.0	123.2	144.0 unmodular carrier	-20.8 ted video	None

Report No: FC99-032A

Page 8 of 85

Customer: Advanced Electronics Group, Inc.

Specification: Fcc90.210

Work Order #: 72515 Date: Fri Sep-17-1999

Test Type: Maximized Emissions Time: 10:32:56
Equipment: Video Audio Transmitter Sequence#: 16

Advanced Electronics Group, Inc.

Model: TX888MOD-O

S/N: None

Manufacturer:

## Equipment Under Test (\* = EUT):

Function	Manufacturer	Model #	S/N
Video Audio Transmitter*	Advanced Electronics Group, Inc.	TX888MOD-O	none

Tested By: Adam Ross

#### Support Devices:

Function	Manufacturer	Model #	S/.	N
Power Supply (12 VCD)	, 400 mA) RF Link Techi	nology	LPS-1240	none

#### Test Conditions / Notes:

The EUT is placed on the test table with the antenna-port connected to the spectrum analyzer and the camera adjacent to the transmitter. A 2.5 kHz tone from the function generator is modulating the audio carrier. The transmitter is continuously transmitting. The frequency range of investigation is 9 kHz to 26 GHz. The temperature is 70°F. The humidity is 40%.

Me	asui	rement Data:	Rea	ding lis	ted by free	quency.		Te	st Distan	ce: None		
#	ŧ	Freq MHz	Rdng DBµV	dB	dB	dB	dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
	1	2466.450M	90.7					+0.0	90.7	144.0	-53.3	None
										Peak unmo		
	2	2479.050M	90.5					+0.0	90.5	144.0	-53.5	None
										Peak unmo	odulated	
										hi audio ca	arrier	

#### Test Conditions / Notes:

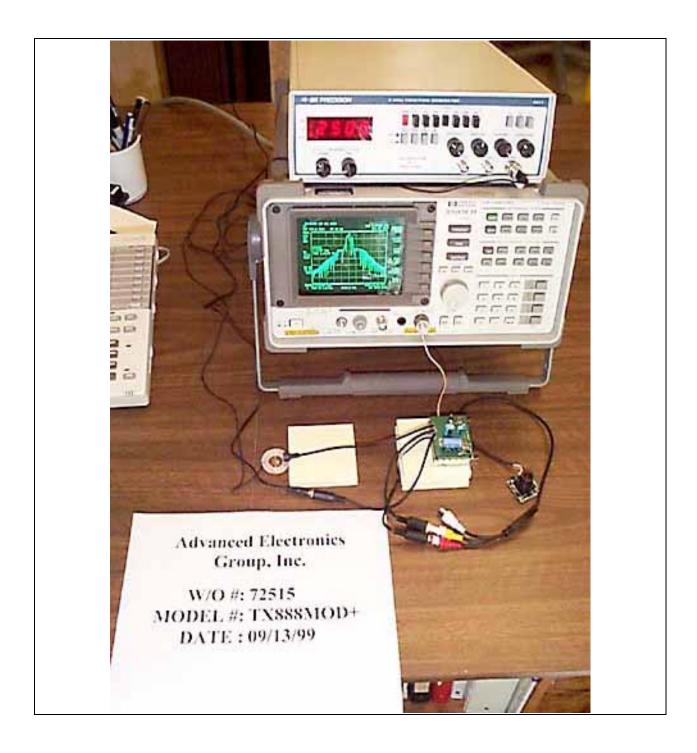
The EUT is placed on the test table with the antenna-port connected to the spectrum analyzer and the camera adjacent to the transmitter. The camera is providing modulation of the video carrier. The transmitter is continuously transmitting. The frequency range of investigation is 9 kHz to 26 GHz. The temperature is 70°F. The humidity is 40%.

Measi	urement Data:	Reading listed by frequency.				Te	st Distanc	e: None			
#	Freq MHz	Rdng DBµV	dB	dB	dB	dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	2472.670M	111.5					+0.0	111.5	144.0	-32.5	None
									unmodula	ted video	
									carrier		

Report No: FC99-032A

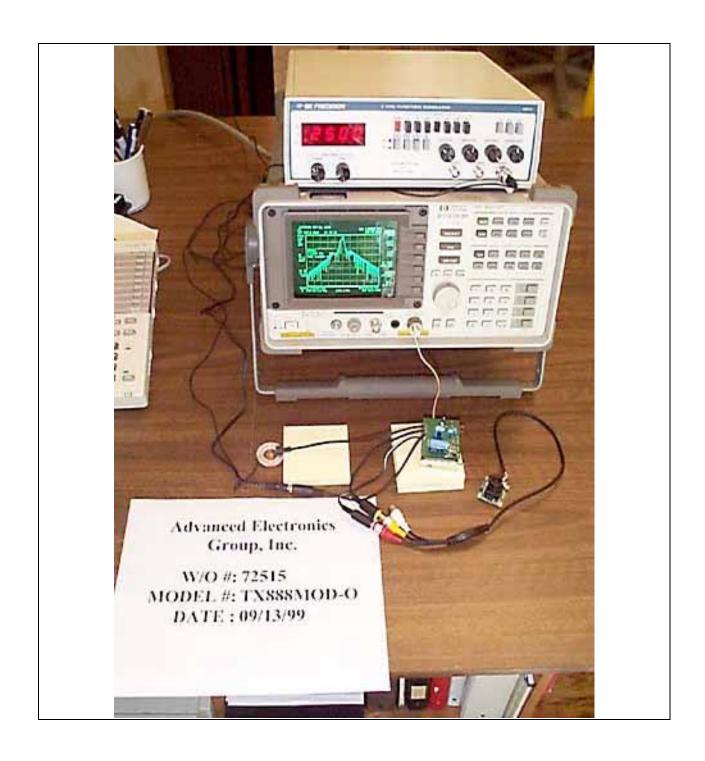
Page 9 of 85

## **Photo Of Test Setup Used for RF Power Measurement:**



Report No: FC99-032A Page 10 of 85

## **Photo Of Test Setup Used for RF Power Measurement:**



Report No: FC99-032A Page 11 of 85

## <u>Test Equipment Used</u>:

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8574A	3010A01076	07/15/1999	07/15/2000	0
HP 8593EM	3624A00159	10/12/1998	10/12/1999	2111
HP 8447D	2727A05392	02/23/1999	02/23/2000	10
HP 83017A	3123A00321	10/26/1998	10/26/1999	2114
Chase CBL6111C	2455	08/30/1999	08/30/2000	1992
EMCO 3115	9006-3414	02/24/1999	02/24/2000	327
EMCO 3301B	9101-3083	06/30/1999	06/30/2000	0
HP 84125-80008	961178-006	01/13/1999	01/13/2000	0
Cable 125 ft.	n/a	02/04/1999	02/04/2000	2086
Cable 10 ft.	n/a	02/05/1999	02/05/2000	1016
Fischer LISN	none	01/13/1999	01/13/2000	14
Fischer LISN	none	01/13/1999	01/13/2000	13

Report No: FC99-032A Page 12 of 85

## $\underline{2.1033(c)(14)/2.1047(a)} - \underline{MODULATION} \ \underline{CHARACTERISTICS} - \underline{Audio} \ \underline{Frequency} \\ \underline{Response}$

Not applicable to this unit.

# $\underline{2.1033(c)(14)/2.1047(b)} - \underline{MODULATION} \ \underline{CHARACTERISTICS} - \underline{Modulation} \ \underline{Limiting} \\ \underline{Response}$

Not applicable to this unit.

Report No: FC99-032A

Page 13 of 85

## 2.1033(c)(14)/2.1049(i) - OCCUPIED BANDWIDTH

## **Test Conditions for Video Signal:**

The EUT is placed on the test table with the antenna-port connected to the spectrum analyzer and the camera adjacent to the transmitter. The camera is providing modulation of the video carrier. The transmitter is continuously transmitting. The frequency range of investigation is 9 kHz to 26 GHz. The temperature is 70°F. The humidity is 40%.

## **Test Conditions for Audio Signal:**

The EUT is placed on the test table with the antenna-port connected to the spectrum analyzer and the camera adjacent to the transmitter. A 2.5 kHz tone from the function generator is modulating the audio carrier. The transmitter is continuously transmitting. The frequency range of investigation is 9 kHz to 26 GHz. The temperature is 70°F. The humidity is 40%.

## **Test Setup:**

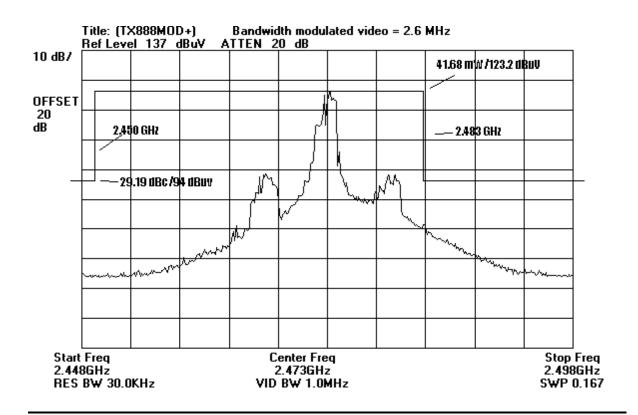
Same test setup as for 2.1033(c)(14)/2.1046/90.210 - RF Power Output. See photographs on pages 9 & 10.

## **Test Equipment Used:**

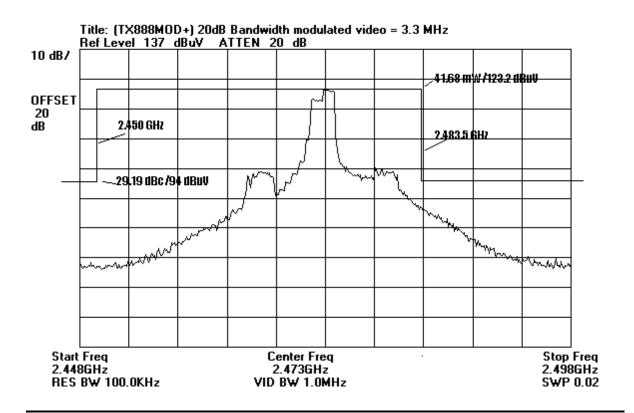
Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8593EM	3624A00159	10/12/1998	10/12/1999	2111

Report No: FC99-032A

Page 14 of 85

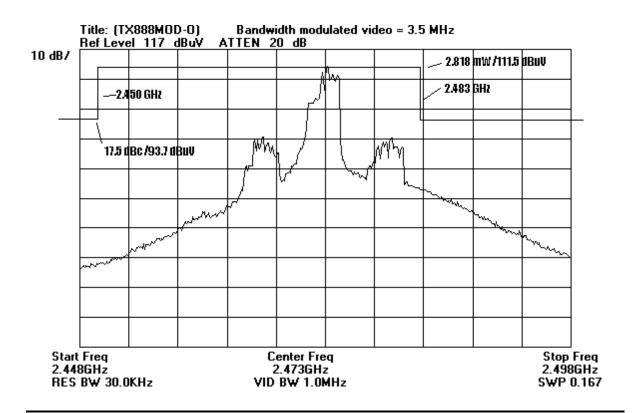


Report No: FC99-032A Page 15 of 85

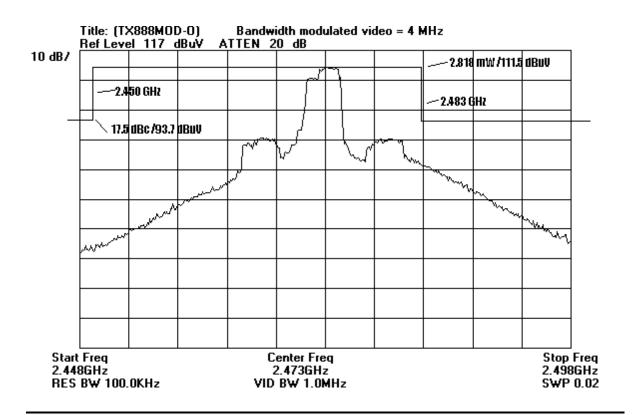


Report No: FC99-032A

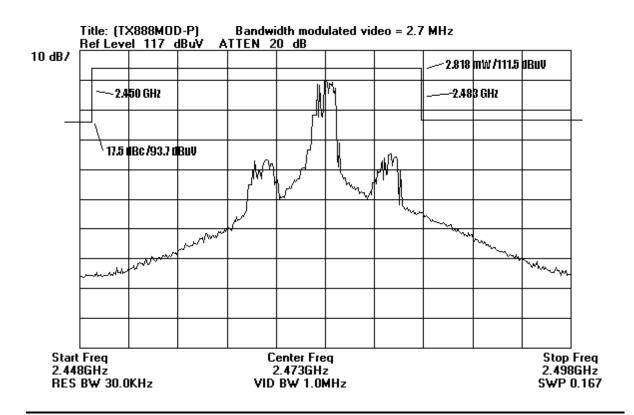
Page 16 of 85



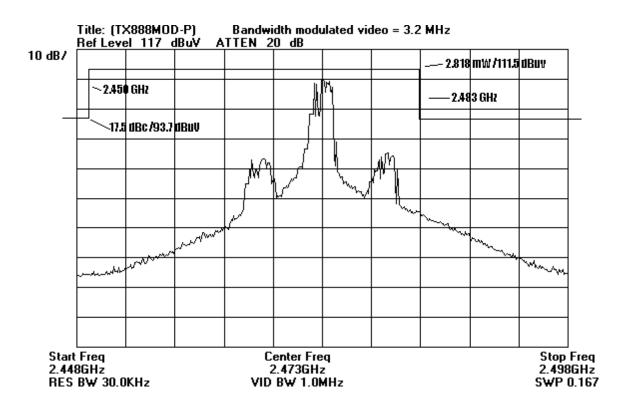
Report No: FC99-032A Page 17 of 85



Report No: FC99-032A Page 18 of 85



Report No: FC99-032A Page 19 of 85



Report No: FC99-032A

Page 20 of 85

## 2.1033(c)(14)/2.1051/90.210 - SPURIOUS EMISSIONS AT ANTENNA TERMINAL

## Video Bandwidth and Resolution Bandwidth Settings:

Frequency Range	Signal Analyzer
	VBW & RBW Setting
9kHz – 150kHz	200Hz
150kHz - 30MHz	9kHz
30MHz – 1MHz	120kHz
1GHz – 26GHz	1MHz

## **Test Setup Used for Conducted Spurious:**

Same test setup as for 2.1033(c)(14)/2.1046/90.210 - RF Power Output. See photograph on pages 9 & 10.

## **Test Equipment Used:**

Test Equipment

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8574A	3010A01076	07/15/1999	07/15/2000	0
HP 8593EM	3624A00159	10/12/1998	10/12/1999	2111
HP 8447D	2727A05392	02/23/1999	02/23/2000	10
HP 83017A	3123A00321	10/26/1998	10/26/1999	2114
Chase CBL6111C	2455	08/30/1999	08/30/2000	1992
EMCO 3115	9006-3414	02/24/1999	02/24/2000	327
EMCO 3301B	9101-3083	06/30/1999	06/30/2000	0
HP 84125-80008	961178-006	01/13/1999	01/13/2000	0
Cable 125 ft.	n/a	02/04/1999	02/04/2000	2086
Cable 10 ft.	n/a	02/05/1999	02/05/2000	1016
Fischer LISN	none	01/13/1999	01/13/2000	14
Fischer LISN	none	01/13/1999	01/13/2000	13

Report No: FC99-032A

Page 21 of 85

## **Test Data:**

Test Location: CKC Laboratories, Inc. • 22105 Wilson River Hwy • Tillamook, OR 97141 • 800 500-4EMC

Customer: Advanced Electronics Group, Inc.

Specification: FCC90.210

Work Order #: **72515** Date: Fri Sep-17-1999

Test Type: Maximized Emissions Time: 12:04:23 Equipment: Video Audio Transmitter Sequence#: 19

Manufacturer: Advanced Electronics Group, Inc. Tested By: Adam Ross

Model: TX888MOD-P+

S/N: SMA

## Equipment Under Test (\* = EUT):

Function	Manufacturer	Model #	S/N
Video Audio Transmitter*	Advanced Electronics Group, Inc.	TX888MOD-P+	SMA

#### Support Devices:

Function M	Manufacturer	Model #	S/N	
Power Supply (12 VCD, 400 n	mA) RF Link Technology	У	LPS-1240	none

## Test Conditions / Notes:

The EUT is placed on the test table with the antenna-port connected to the spectrum analyzer and the camera adjacent to the transmitter. A 2.5 kHz tone from the function generator is modulating the audio carrier. The transmitter is continuously transmitting. The frequency range of investigation is 9 kHz to 26 GHz. The temperature is 70 F. The humidity is 40%.

Measi	ırement Data:	Rea	Reading listed by frequency.			Test Distance: None					
#	Freq MHz	Rdng dBµV	dB	dB	dB	dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	2466.400M	99.3					+0.0	99.3	144.0 Peak unmolow audio		None
2	4939.150M	42.6					+0.0	42.6	94.0	-51.4	None
3	7411.850M	52.1					+0.0	52.1	94.0	-41.9	None
4	9884.250M	58.4					+0.0	58.4	94.0	-35.6	None
5	12356.950 M	61.2					+0.0	61.2	94.0	-32.8	None
6	14829.950 M	40.2					+0.0	40.2	94.0	-53.8	None
7	17302.550 M	42.6					+0.0	42.6	94.0	-51.4	None

Report No: FC99-032A Page 22 of 85

Customer: Advanced Electronics Group, Inc.

Specification: FCC90.210

Work Order #: **72515** Date: Fri Sep-17-1999

Test Type: Maximized Emissions Time: 12:03:56 Equipment: Video Audio Transmitter Sequence#: 18

Manufacturer: Advanced Electronics Group, Inc. Tested By: Adam Ross

Model: TX888MOD-P+

S/N: SMA

## Equipment Under Test (\* = EUT):

Function	Manufacturer	Model #	S/N
Video Audio Transmitter*	Advanced Electronics Group, Inc.	TX888MOD-P+	SMA

## Support Devices:

Function Ma	anufacturer	Model #	S/N	
Power Supply (12 VCD, 400 m.	A) RF Link Technology	7	LPS-1240	none

#### Test Conditions / Notes:

The EUT is placed on the test table with the antenna-port connected to the spectrum analyzer and the camera adjacent to the transmitter. A 2.5 kHz tone from the function generator is modulating the audio carrier. The transmitter is continuously transmitting. The frequency range of investigation is 9 kHz to 26 GHz. The temperature is 70°F. The humidity is 40%.

Measu	ırement Data:	Rea	ding lis	ted by fre	quency.	Test Distance: None					
#	Freq MHz	Rdng dBµV	dB	dB	dB	dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	2479.000M	99.3					+0.0	99.3	144.0 Peak unme		None
2	4951.600M	44.1					+0.0	44.1	94.0	-49.9	None
3	7424.200M	53.2					+0.0	53.2	94.0	-40.8	None
4	9896.851M	59.3					+0.0	59.3	94.0	-34.7	None
5	12369.500 M	60.9					+0.0	60.9	94.0	-33.1	None
6	14842.200 M	40.1					+0.0	40.1	94.0	-53.9	None
7	17314.600 M	43.3					+0.0	43.3	94.0	-50.7	None

Report No: FC99-032A Page 23 of 85

Customer: Advanced Electronics Group, Inc.

Specification: FCC90.210

Work Order #: **72515** Date: Fri Sep-17-1999

Test Type: Maximized Emissions Time: 12:03:29

Equipment: Video Audio Transmitter Sequence#: 17

Manufacturer: Advanced Electronics Group, Inc. Tested By: Adam Ross

Model: TX888MOD-P+

S/N: SMA

## Equipment Under Test (\* = EUT):

Function	Manufacturer	Model #	S/N
Video Audio Transmitter*	Advanced Electronics Group, Inc.	TX888MOD-P+	SMA

## Support Devices:

Function	Manufacturer	Model #	S/I	N
Power Supply (12 VCD, 40	00 mA) RF Link Technological	ogy	LPS-1240	none

#### Test Conditions / Notes:

The EUT is placed on the test table with the antenna-port connected to the spectrum analyzer and the camera adjacent to the transmitter. The camera is providing modulation of the video carrier. The transmitter is continuously transmitting. The frequency range of investigation is 9 kHz to 26 GHz. The temperature is 70°F. The humidity is 40%.

Measi	ırement Data:	Reading listed by frequency.			quency.	Test Distance: None					
#	Freq MHz	Rdng dBµV	dB	dB	dB	dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	2472.650M	123.2					+0.0	123.2	144.0 unmodula carrier	-20.8	None
2	4945.350M	62.0					+0.0	62.0	94.0	-32.0	None
3	7417.950M	68.4					+0.0	68.4	94.0	-25.6	None
4	9890.650M	72.1					+0.0	72.1	94.0	-21.9	None
5	12363.250 M	72.4					+0.0	72.4	94.0	-21.6	None
6	14835.950 M	50.4					+0.0	50.4	94.0	-43.6	None
7	17308.500 M	52.5					+0.0	52.5	94.0	-41.5	None

Report No: FC99-032A Page 24 of 85

Customer: Advanced Electronics Group, Inc.

Specification: FCC90.210 Work Order #: 72515

Work Order #: 72515 Date: Fri Sep-17-1999
Test Type: Maximized Emissions Time: 10:32:56
Equipment: Video Audio Transmitter Sequence#: 16

Manufacturer: Advanced Electronics Group, Inc. Tested By: Adam Ross

Model: TX888MOD-O

S/N: none

#### Equipment Under Test (\* = EUT):

	,			
Function	Manufacturer	Model #	S/N	
Video Audio Transmitter*	Advanced Electronics Group, Inc.	TX888MOD-O	None	

#### Support Devices:

Function	Manufacturer	Model #	S/N	N
Power Supply (12 VCD,	400 mA) RF Link Te	echnology	LPS-1240	none

#### Test Conditions / Notes:

The EUT is placed on the test table with the antenna-port connected to the spectrum analyzer and the camera adjacent to the transmitter. A 2.5 kHz tone from the function generator is modulating the audio carrier. The transmitter is continuously transmitting. The frequency range of investigation is 9 kHz to 26 GHz. The temperature is 70°F. The humidity is 40%.

Measurement Data:	Rea	ading list	ed by fre	quency.		Te	st Distanc	e: None		
# Freq MHz	Rdng dBµV	dB	dB	dB	dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1 2466.450M	90.7					+0.0	90.7	144.0	-53.3	None
								Peak unm low audio		
2 4939.190M	28.9					+0.0	28.9	94.0	-65.1	None
3 7412.040M	64.6					+0.0	64.6	94.0	-29.4	None
4 9884.690M	47.6					+0.0	47.6	94.0	-46.4	None
5 12357.390 M	47.4					+0.0	47.4	94.0	-46.6	None
6 14830.140 M	40.9					+0.0	40.9	94.0	-53.1	None
7 17302.890 M	30.4					+0.0	30.4	94.0	-63.6	None
8 19775.590 M	28.2					+0.0	28.2	94.0	-65.8	None

Report No: FC99-032A Page 25 of 85

Customer: Advanced Electronics Group, Inc.

Specification: FCC90.210
Work Order #: 72515

Work Order #: 72515 Date: Fri Sep-17-1999
Test Type: Maximized Emissions Time: 10:31:56

Equipment: Video Audio Transmitter Sequence#: 15

Manufacturer: Advanced Electronics Group, Inc. Tested By: Adam Ross

Model: TX888MOD-O

S/N: None

## Equipment Under Test (\* = EUT):

Function	Manufacturer	Model #	S/N
Video Audio Transmitter*	Advanced Electronics Group, Inc.	TX888MOD-O	None

#### Support Devices:

Function	Manufacturer	Model #	S/N	
Power Supply (12 VCD, 40	0 mA) RF Link Technology		LPS-1240	none

## Test Conditions / Notes:

The EUT is placed on the test table with the antenna-port connected to the spectrum analyzer and the camera adjacent to the transmitter. A 2.5 kHz tone from the function generator is modulating the audio carrier. The transmitter is continuously transmitting. The frequency range of investigation is 9 kHz to 26 GHz. The temperature is 70°F. The humidity is 40%.

Measu	rement Data:	Rea	ding list	ted by fre	quency.		Te	st Distanc	e: None		
#	Freq MHz	Rdng dBµV	dB	dB	dB	dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	2479.050M	90.5					+0.0	90.5	144.0	-53.5	None
									Peak unme		
2	4951.490M	30.2					+0.0	30.2	94.0	-63.8	None
3	7424.090M	64.7					+0.0	64.7	94.0	-29.3	None
4	9896.740M	48.1					+0.0	48.1	94.0	-45.9	None
5	12369.540 M	47.0					+0.0	47.0	94.0	-47.0	None
6	14842.140 M	41.1					+0.0	41.1	94.0	-52.9	None
7	17314.940 M	31.3					+0.0	31.3	94.0	-62.7	None
8	19787.590 M	28.5					+0.0	28.5	94.0	-65.5	None

Report No: FC99-032A Page 26 of 85

Customer: Advanced Electronics Group, Inc.

Specification: FCC90.210
Work Order #: 72515

Work Order #: 72515 Date: Fri Sep-17-1999
Test Type: Maximized Emissions Time: 10:31:08

Equipment: Video Audio Transmitter Sequence#: 14

Manufacturer: Advanced Electronics Group, Inc. Tested By: Adam Ross

Model: TX888MOD-O

S/N: None

## Equipment Under Test (\* = EUT):

Function	Manufacturer	Model #	S/N
Video Audio Transmitter*	Advanced Electronics Group, Inc.	TX888MOD-O	None

## Support Devices:

Function	Manufacturer	Model #	S/N	N
Power Supply (12 VCD,	400 mA) RF Link Te	echnology	LPS-1240	none

#### Test Conditions / Notes:

The EUT is placed on the test table with the antenna-port connected to the spectrum analyzer and the camera adjacent to the transmitter. The camera is providing modulation of the video carrier. The transmitter is continuously transmitting. The frequency range of investigation is 9 kHz to 26 GHz. The temperature is 70°F. The humidity is 40%.

Measurement Da	ta: Rea	ading list	ted by fre	equency.		Te	st Distanc	e: None		
# Freq MHz	Rdng dBµV	dB	dB	dB	dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1 2472.670N						+0.0	111.5	144.0 unmodula carrier	-32.5 ted video	None
2 4945.390N	M 42.7					+0.0	42.7	94.0	-51.3	None
3 7418.040N	M 80.6					+0.0	80.6	94.0	-13.4	None
4 9890.790N	M 60.1					+0.0	60.1	94.0	-33.9	None
5 12363.440 M	57.5					+0.0	57.5	94.0	-36.5	None
6 14836.140 M	49.0					+0.0	49.0	94.0	-45.0	None
7 17308.840 M	36.3					+0.0	36.3	94.0	-57.7	None
8 19781.540 M	35.1					+0.0	35.1	94.0	-58.9	None

Report No: FC99-032A

Page 27 of 85

## 2.1033(c)(14)/2.1053 - FIELD STRENGTH OF SPURIOUS RADIATION

## **Test Conditions:**

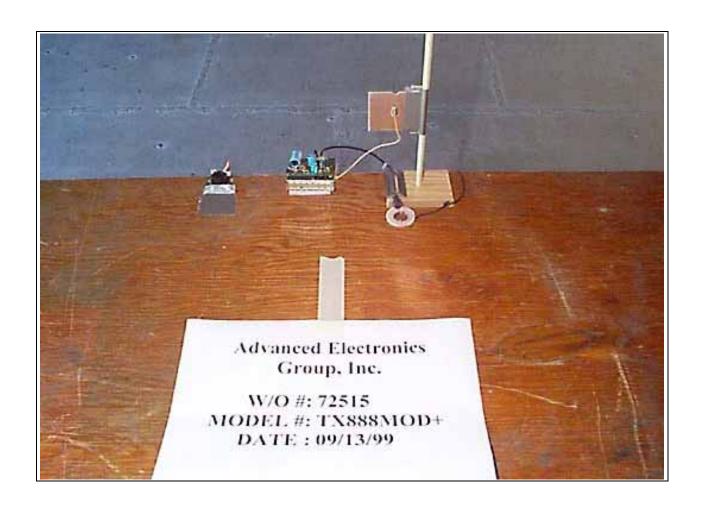
All harmonics and sub-harmonics of the carrier frequency were investigated. Measurements were also made to detect any spurious emissions that were directly radiated from the EUT under normal conditions of installation and operation. All spurious emissions which were attenuated more than 20 dB below the permissible value were not reported. The information submitted includes the relative radiated power of each spurious and harmonic emissions with reference to the rated power output of the transmitter (assuming all emissions are radiated from half-wave dipole antennas).

## **Video Bandwidth and Resolution Bandwidth Settings:**

Frequency Range	Signal Analyzer
	VBW & RBW Setting
9kHz – 150kHz	200Hz
150kHz - 30MHz	9kHz
30MHz – 1MHz	120kHz
1GHz – 26GHz	1MHz

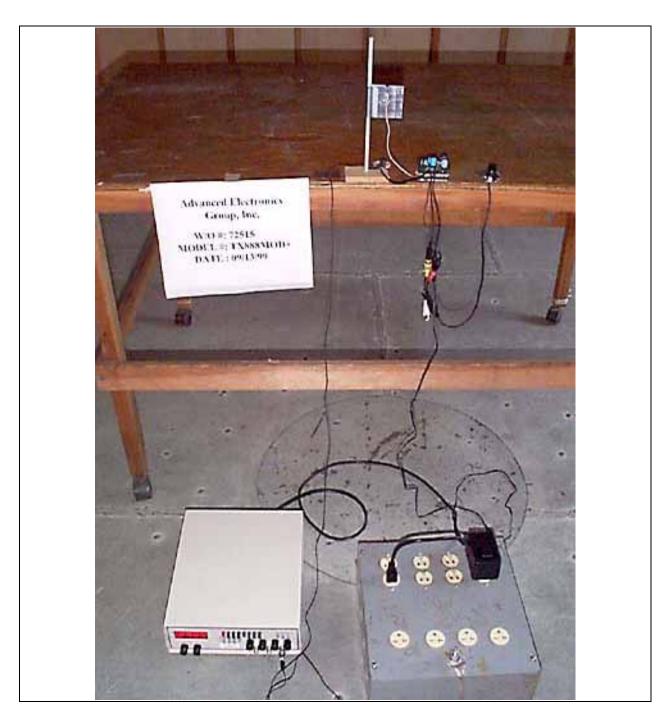
Report No: FC99-032A

Page 28 of 85



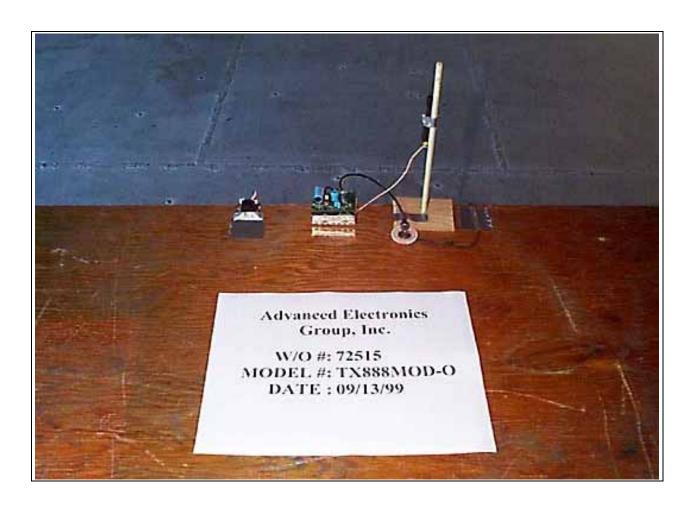
Front View - TX888MOD-P+

Report No: FC99-032A Page 29 of 85



Back View - TX888MOD-P+

Report No: FC99-032A Page 30 of 85



Front View - TX888MOD-O

Report No: FC99-032A Page 31 of 85



Back View - TX888MOD-O

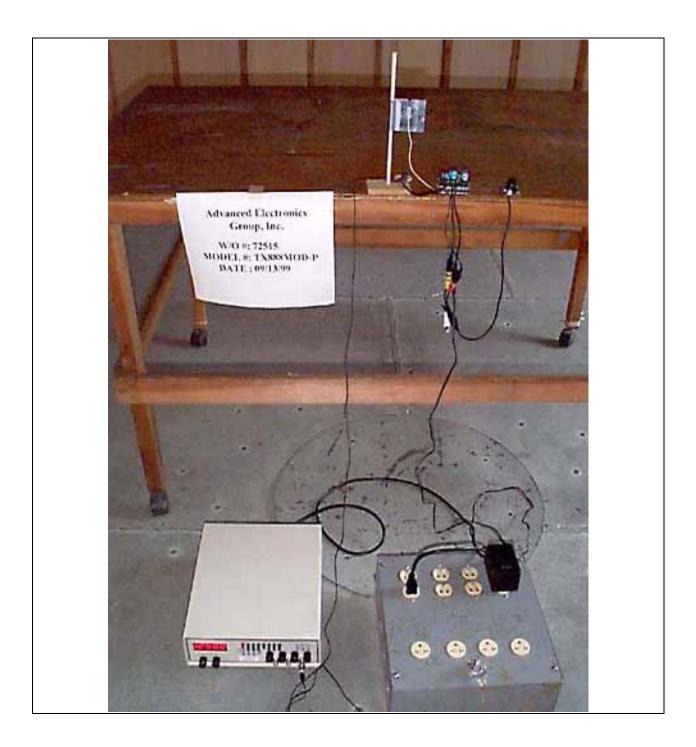
Report No: FC99-032A Page 32 of 85



Front View - TX888MOD-P

Report No: FC99-032A

Page 33 of 85



Back View - TX888MOD-P

Report No: FC99-032A

Page 34 of 85

## **Test Equipment Used:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8574A	3010A01076	07/15/1999	07/15/2000	0
HP 8593EM	3624A00159	10/12/1998	10/12/1999	2111
HP 8447D	2727A05392	02/23/1999	02/23/2000	10
HP 83017A	3123A00321	10/26/1998	10/26/1999	2114
Chase CBL6111C	2455	08/30/1999	08/30/2000	1992
EMCO 3115	9006-3414	02/24/1999	02/24/2000	327
EMCO 3301B	9101-3083	06/30/1999	06/30/2000	0
HP 84125-80008	961178-006	01/13/1999	01/13/2000	0
Cable 125 ft.	n/a	02/04/1999	02/04/2000	2086
Cable 10 ft.	n/a	02/05/1999	02/05/2000	1016
Fischer LISN	none	01/13/1999	01/13/2000	14
Fischer LISN	none	01/13/1999	01/13/2000	13

## **Test Data On Following Pages:**

Report No: FC99-032A Page 35 of 85

Module 1 X388MOD-P+ FCC Part 2.1053 Measurements required: Operating Channel - 2468 MH+	MODU-	•		20220000000		adion				
Dografing Ch.	2011100	aurements req	200	Field strength of spurious radiation	spundus radi	enone.				
Singer of	- jauue	Operating Channel - 2466 MHz	STILL STORY	ALIENCE DE LA CONTRACTION DE L			0.0000000000000000000000000000000000000	CONTROL OF THE R. P.	11-000190303030100001	
Polarity F	Freq (MHz)	Reading in dBuV/m	PreAmp Factor	Cable Factor	Horn Antenna	Corrected E (dBuV/M)	VW	ERP (Watts)	Spec Limit Watts	Pass or Fall
Vertical 74	7411,79	60.40	-34.00	5.3	35.7	67.40	0.002344229	0.000001005	0.000050000	Pass
Notes: Frequency range investigated was from 1 20dB below the permissible value were reported	ancy ran	ge investigate ssible value w	d was from ere reported	9 kHz to 26	GHz. All spu	ribus and harmo	onic emissions v	were investigated	. All emissions de	Notes: Frequency range investigated was from 9 kHz to 26 GHz. All spurious and harmonic emissions were investigated. All emissions detected that were less than 20dB below the permissible value were reported.
						CALCULATIONS	SNC			
Note: The data The 43+10log()	a taken P) dB 'c	is relative to the	he radiated i	power of eaquates to a :	ich spurious er 50 uW limit for	mission with reference of the following the	erence to the ra Towing equation	Note: The data taken is relative to the radiated power of each spurious emission with reference to the rated power output of the transmitter. The 43+10log(P) dB fout of band" attenuation equates to a 50 dM limit for any P. The following equations establish this amplitude limit for	of the transmitter mpitude limit for s	Note: The data taken is relative to the radiated power of each spurious emission with reference to the rated power output of the transmitter.  The 43+10log(P) dB fout of bandfattenuation equates to a 50 uW limit for any P. The following equations establish this amplitude limit for spurious emissions.
Spurious Emissions Limit (dBW) = $10\log P \cdot (43 + 10\log P) = -43 dBW.$ Spurious Emissions Limit (W) = $10^{\circ}(-43/10) = 50^{\circ}\cdot 10^{\circ}-6$ W.	Sions Li	mit (dBW) = 1 mit (M) = 10*(	OlogP - (43+ (-43/10) = 50	-10logP] = .	43 dBW.					
ERP Calculations ERP = (Ed) <sup>2</sup> /30(G) E = V/m	ions 0(G)							Conversion of dBuV/m to V/m [invlog(Reading in dBuV/m/20)]*	Conversion of dBuV/m to V/m [invlog(Reading in dBuV/m/20]]*.000001 = V/m	30051 = Vim
d= distance G = Gain of An	llenna (	numencal gar	n of half war	ve oʻppic an	tenna 1.64) p	d= distance G = Gain of Antenna ( numencal gain of half wave dipole antenna 1.64) per Part 2.1053(a)	9			

Report No: FC99-032A Page 36 of 85

FCC Part 2.1053	53										
Module TX888MOD-P+	8MOD-P	*									
FCC Part 2, 1053 Measurements required. Field strength of spurious radiation	53 Meas	surements req	uired: Field	strength of	spurious radi	ation					
Operating Channel - 2473 MHz	annel -	2473 MHz									
Polarity (	Freq (MHz)	Reading in dBuV/m	PreAmp Factor	Cable Factor	Horn Antenna	Corrected E (dBuV/M)	Ν/Λ	ERP (Watts)	Spec Limit Watts	Pass or Fail	
Vertical 74	7418.10	73.60	34.00	5.3	35.6	90.50	0.010592537	0.000020525	0.000050000	Pass	
Horizontal 74	7418.10	64.10	-34.00	53	35.6	71.00	0.003548134	0.000002303	0.000050000	Pass	
Notes: Frequency range investigated was from \$ 2068 below the permissible value were reported.	e permis	ge investigate isible value we	d was from	9 kHz to 26	GHz. All spu	rious and harm	onic emissions v	were investigated	All emissions d	Notes: Frequency range investigated was from 9 kHz to 26 GHz. All spurious and harmonic emissions were investigated. All emissions detected that were less than 2008 below the permissible value were reported.	ess than
						CALCULATIONS	ONS			7	
Note: The data taken is relative to The 43+10log(P) dB "out of band"	a taken P) dB 'o	is relative to the	ne radiated tenuation ex	power of ea quates to a	ich spurious ei 50 uW limit fo	mission with ref	ference to the ra flowing equation	Note: The data taken is relative to the radiated power of each spurious emission with reference to the raled power output of the transmitter. The 43+10iog/P) dB "out of band" attenuation equates to a 50 uW limit for any P. The following equations establish this amplitude limit for a	of the transmitter mplitude limit for:	the radiated power of each spurious emission with reference to the rated power output of the transmitter. attenuation equates to a 50 uW limit for any P. The following equations establish this emplitude limit for spurious emissions	
Sourious Emissions Limit (dBW) = 10)aaP - (43+10laaP) = -43 dBW.	sions Li	mit (dBW) = 1)	DiooP - (43+	-10laqP) = .	43 dBW.						
Spurious Emissions Limit (W) = 1	sions Li	mit (M) = 10°(	0^(-43/10) = 50 · 10^-5 W	0.10~6W							
ERP Calculations	ions	į.						Conversion of dBuV/m to V/m	IBuV/m to V/m		
ERP = (Ed)*/30(G)	(6)							Jinvlog(Reading	jinvlog(Reading in dBuV/m/Z0)]*.000001 = V/m	00001 = Vim	
G = V/III											
G = Gain of An	) euuatu	numerical gail	n of half wa	ve dipole ar	q (191) p	G = Gain of Antenna (numerical gain of half wave dipole antenna 1.64) per Part 2.1053(a)	(e				
	2										

Report No: FC99-032A Page 37 of 85

FCC P8R 2.1055	2										
Module TX888MOD-P+	MOD-P+										
FCC Part 2:1053 Measurements required: Field strength of spurious radiation	3 Measu	rements req	juired: Field	strength of	spurious radi	ation					
Operating Channel - 2479 MHz	nnel - 2	2HW 629				000000000000000000000000000000000000000	2	CONTRACTOR	United and State of the Control	CONTRACTOR STREET	
Polarity F	Freq (MHz)	Reading in dBuV/m	PreAmp Factor	Cable Factor	Horn	Corrected E (dBuV/M)	V/M	ERP (Watts)	Spec Limit Watts	Pass or Fail	
Vertical 742	7424.39	59.80	-34,00	5.3	35.6	66.70	0.002152719	0,0000000856	0.0000000000	Pass	
	T										
Notes: Frequency range investigated was from 2008 below the permissible value were reported	ncy railg permiss	e investigate	d was from ere reported	9 kHz to 26	GHz. All spt	rious and harm	onic emissions	were investigated	. All emissions d	Notes: Frequency range investigated was from 9 kHz to 26 GHz. All spurious and harmonic emissions were investigated. All emissions detected that were less than 2008 below the permissible value were reported.	ess than
						CALCULATIONS	SNO				
Note: The data The 43+10log(P	laken is	relative to that of band" at	he radiated (	power of ea	ich spurious e 50 uW limit fo	mission with ref	erence to the ra	ted power output is establish this a	Note: The data taken is relative to the radiated pawer of each spurious emission with reference to the rated power output of the transmitter. The 43+10log(P) dB fout of band" attenuation equales to a 50 dW limit for any P. The following equations establish this amplitude limit for any experience of the following equations establish this amplitude limit for any experience of the following equations are provided in the following equations are provided equati	Note: The data taken is relative to the radiated power of each spurious emission with reference to the rated power output of the transmitter.  The 43+10log(P) dB "but of band" attenuation equales to a 50 uW limit for any P. The following equations establish this amplitude limit for spurious emissions.	S. ako
Spurious Emissions Limit (dBM) = 10logP - (43+10logP) = -43 dBM.	ions Lin	iit $(dBW) = 1$	OlogP - (43+	- (43+10logP) = -	43 dBW.						
sound coolings		21 (12)	5								
ERP Calculations ERP = (Ed) <sup>2</sup> /30(G)	(G)				*:			Conversion of dBuV/m to V/m [invlog(Reading in dBuV/m/20)]*	Conversion of dBuV/m to V/m [invlog(Reading in dBuV/m/20)]*.00001 = V/m	00001 = V/m	
E = V/m											
d= distance											
G = Gain of Antenna ( numerical gain of half wave dipole antenna 1.64) per Part 2,1053(a)	euna (	umerical gai	n of half way	ve dipole ar	denna 1,64) p	er Part 2,1053(	a)				

Report No: FC99-032A Page 38 of 85

Operating Charmol - 2466 MHz  Polarity Freq Reading in Pradum Cable Horn Corrected E V/IM ERP (Watts) Spec Limit Pass or Fall Polarity Freq Reading in Pactor Factor Antenna (GBUVIM) Watts  Verifical 741174 5790 -34.00 5.3 38.7 64.90 0.001757924 0.000000565 0.0005000 Pass Nortical 741174 57.90 -34.00 15.3 38.7 64.90 0.001757924 0.000000565 0.00055000 Pass Nortical 741174 57.90 -34.00 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3	COLUMN TOTAL TOTAL	FCC Part 2.1053 Measurements required:		strength of	Field strength of spurious radiation	ation				
Polarity   Freq   Reading in   ProAmp   Cable   Horn   Corrected E   VIM   ERP (Watts)   Spot Limit   Pass or Fail	perating Channel	2466 MHz								
Vertical         7411.74         57.50         -34.00         5.3         35.7         64.90         0.001757924         0.000000565         0.00005000         Pass           Notes: Frequency range investigated was from 9 kHz to 26 GHz. All spurious and harmonic emissions were investigated. All emissions detected that were fess than 20dB below the permissible value were reported.         CALCULATIONS           Note: The data taken is selative to the radiated power of each spurious emission with reference to the rated power output of the transmitter.         CALCULATIONS           Note: The data taken is selative to the radiated power of each spurious emission with reference to the rated power output of the transmitter.         CALCULATIONS           Spurious Emissions Limit (W) = 10Y(-43/10) = 50 * 10^4-5 W.         Spurious equations establish this amplitude limit for spurious emissions.           ERP = (Ep)*/30(G)         Conversion of dBuV/m to V/m           E = V/m         Calistance           G = Gain of Antenna ( numerical gain of half wave dipole antenna 1.64) per Part 2.1053(s)         Conversion of dBuV/m to V/m	olarity Freq (MHz)	Reading in dBuV/m	PreAmp Factor	Cable Factor	Horn	Corrected E (dBuV/M)	N/W	ERP (Watts)	Spec Limit Watts	Pass or Fail
Notes: Frequency range investigated was from 9 kHz to 26 GHz. All spurious and harmonic emissions were investigated. All emissions detected that were less than 20dB below the permissible value were reported.  CALCULATIONS  Note: The data taken is relative to the radiated power of each spurious emission with reference to the rated power output of the transmitter.  The 43×10log(P) dB "but of band" attenuation equates to a 50 uW limit for any P. The following equations establish this amplitude limit for spurious emissions.  Spurious Emissions Limit (W) = 10^4 (43/10) = 50 * 10^4 5 W.  ERP Calculations  ERP = {Edy_230(3)}  E = V/m  d= distance  G = Gain of Antenna { numerical gain of half wave dipple antenna 1.64} per Part 2.1053(a)		92.30	-34.00	5.3	35.7	64.90	0.001757924	0.000000565	0.00050000	
CALCULATIONS  Note: The data taken is relative to the radiated power of each spurious emission with reference to the rated power output of the transmitter.  The 43+10log(P) dB "out of band" attenuation equates to a 50 uW limit for any P. The following equations establish this amplitude limit for spurious emissions.  Spurious Emissions Limit (dBW) = 10x(-43/10) = .43 dBW.  Spurious Emissions Limit (W) = 10x(-43/10) = .50 * 10x-6 W.  ERP Calculations  ERP Calculations  E = V/m  d= distance  G = Gain of Antenna { numerical gain of half wave dipole antenna 1.64} per Part 2.1053(a)	lotes: Frequency ra	nge investigate ssible value w	ere reported	9 KHz to 26	GHz. All spu	irious and hamx	anic emissions	vere investigated	All emissions d	etected that were is
Note: The data taken is relative to the radiated power of each spurious emission with reference to the rated power output of the transmitter.  The 43+10log(P) dB fout of band" attenuation equates to a 50 uW limit for any P. The following equations establish this amplitude limit for spurious emissions.  Spurious Emissions Limit (W) = 10^4 (43+10) applications are selected to a 50 uW limit for any P. The following equations emissions Limit (W) = 10^4 (43+10) applications are selected to a 50 uW limit for any P. The following equations are selected to a 50 uW limit for any P. The following equations are selected to a 50 uW limit for any P. The following equations are selected to any P. The following equations are selected to any P. The following equations of a 43+10 uwing for a										
Note: The data taken is relative to the radiated power of each spurious emission with reference to the rated power output of the transmitter.  The 43+10log(P) dB "out of band" attenuation equates to a 50 uW limit for any P. The following equations establish this amplitude limit for spurious emissions.  Spurious Emissions Limit (dBW) = 10x(43x10) = 43 dBW.  Spurious Emissions Limit (W) = 10x(43x10) = 50 * 10x-6 W.  ERP Calculations  ERP Calculations  ERP = (Ed)²/30(G)  E = V/m  d= distance  G = Gain of Antenna (numerical gain of half wave dipole antenna 1.64) per Part 2.1053(a)						CALCULATION	SNO	200		
	Note: The data taker The 43+10log(P) dB	ris relative to l	he radiated p	power of ea quates to a	ch spurious e 50 uW limit fo	mission with ref	erence to the ra llowing equation	ted power output is establish this a	of the transmitter mplitude limit for	r. spurious emissions
	purious Emissions I	imit (dBW) = 1	DlogP - (43+	-10logP) = .	43 dBW.					
	Spurious Emissions I	imit (W) = 10^	(-43/10) = 50	0.10^6 W						
	RP Calculations							Conversion of c	IBuV/m to V/m	100
d= distance G= Gain of Antenna ( numerical gain of half wave dipole antenna 1.64) per Part 2.1053(a)	:RP = (Ed)7/30(G)							(inviog/Reading	n deuvimzoji	mo = 100000
G = Gain of Antenna ( numerical gain of half wave dipole antenna 1.64) per Part 2.1053(a)	= distance									
	s = Gain of Antenna	( numerical gai	in of half was	ve dipole an	itenna 1.64) p	er Part 2.1053(	(8)			

Report No: FC99-032A Page 39 of 85

a manage anaboli	2								
FCC Part 2.1053 Messurements required: Field strength of spurious radiation Operation Channel - 2473 MHz	easurements ret	prired: Field	strength of	spurious radi	ation				
Polarity Freq (MHz)	Reading in dBuV/m	PreAmp Factor	Cable	Horn	Corrected E (dBuV/M)	N/A	ERP (Watts)	Spec Limit Watts	Pass or Fail
Vertical 7418.04	4 67.70	-34.00	5.3	36.6	74.60	0.005370318	0.000005276	0.000050000	Pass
Horizontal 7418.09	9 61.50	-34.00	5.3	35.6	68,40	0.002630268	0.000001266	0.000600000	Pass
Notes: Frequency range investigated was from 3 20dB below the permissible value were reported	ange investigate missible value w	d was from the reported	9 kHz to 26	GHz. All spu	nious and hamic	onic emissions	were investigated.	. All emissions de	Notes: Frequency range investigated was from 9 kHz to 26 GHz. All spurious and harmonic emissions were investigated. All emissions detected that were less than 20dB below the permissible value were reported.
					CALCULATIONS	SNO			
Note: The data taken is relative to the The 43+10log(P) dB "out of band" atter	en is relative to t	he radiated g	power of ea justes to a	ch spurious e 50 uW limit fo	mission with refi r any P. The fol	erence to the ra llowing equation	radiated power of each spurious emission with reference to the rated power output of the transmitter, nuation equates to a 50 uW limit for any P. The following equations establish this amplitude limit for a	of the transmitter. mplitude limit for s	Note: The data taken is relative to the radiated power of each spurious emission with reference to the rated power output of the transmitter.  The 43+10log(P) dB "out of band" attenuation equates to a 50 uW limit for any P. The following equations establish this amplitude limit for spurious emissions.
Spurious Emissions Limit (dB/V) = 10logP - (43+10logP) = -43 dBW. Spurious Emissions Limit (M) = $10^{\circ}(-43/10) = 50^{\circ}\cdot10^{\circ}\cdot5$ W.	: Limit (48VV) = 1 : Limit (VV) = 10^1	0logP - (43+ (-43/10) = 50	-10logP) = .	43 dBW.					
ERP Calculations ERP = (Ed) <sup>2</sup> /30(G) E = V/m							Conversion of dBuV/m to V/m [invlog(Reading in dBuV/m/20)]*	Conversion of dBuV/m to V/m (Invlog(Resding in dBuV/m/20)]* 000001 = V/m	)0001 = V/m
d= distance G = Gain of Antenna ( numerical gain of half wave dipole antenna 1.64) per Part 2.1053(a)	a ( numerical ga	in of half wav	re dipole an	itenna 1.64) p	er Part 2.1053(s	<b>a</b>			

Report No: FC99-032A Page 40 of 85

Operating Channel - 2479 MHz Polarity Freq Reading in Factor Factor Antenna (dBuVIM) Spec Limit Pass or Fail Watts  (MHz) dBuVIM Factor Factor Antenna (dBuVIM) Natts  Vertical 7424.23 57.90 -34.00 5.3 35.6 84.80 0.001737801 0.00000552 0.0005000 Pass  Notes: Frequency range investigated was from 9 kHz to 26 GHz. All spurious and harmonic emissions were investigated. All emissions detected that were legated was from 9 kHz to 26 GHz. All spurious and harmonic emissions were investigated. All emissions detected that were legated was from 9 kHz to 26 GHz. All spurious and harmonic emissions were investigated. All emissions detected that were legated spurious emission with reference to the ratio power of each spurious emission with reference to the ratio power of each spurious emission with reference to the ratio power of each spurious emissions.  Spurious Emissions Limit (VM) = 10f/43/10gP) = 43 dBW.  Spurious Emissions Limit (VM) = 10f/43/10gP) = 50 * 10*-6 W.	Cable Factor 5.3 9 kHz to 28 pawer of each	Horn 35.6 35.6 GHz All spur	Corrected E (dBuV/M) 64.80 0.0 fous and harmonic acacculations rission with reference any P. The following	0.001737801 Omic erressions varies to the rail	0.000000552  o.000000552  vere investigated tod power output	Spec Limit Watts 0.000050000 0.000050000	Pass or Fail Pass or Fail
Polarity Freq Reading in PreAmp Cab  (MHz) dBuV/m Factor Fact  Vertical 7424.29 57.90 -34.00 5.3  Notes: Frequency range investigated was from 9 kHz 1  20dB below the permissible value were reported.  The 43+10log(P) dB "aut of band" attenuation equales  Spurious Emissions Limit (dBW) = 100(-43/10) = 50 * 10^4.	5.3 5.3 9 kHz to 26 power of each	Antenna 35.6 35.6 GHz All spur ch spurious en	Corrected E (4BuV/M) 64.80 64.80 calculation with reference of the correction of the	0.001737801 Omic emissions voluce to the ra	0.000000552  Nere investigated tod power output	Spec Limit Watts 0.000050000 0.000050000 0.000050000	Pass or Fail Pass or Fail
Vertical 7424.29 57.90 -34.00 5.3  Notes: Frequency range investigated was from 9 kHz 1 20dB below the permissible value were reported.  Note: The data taken is rotative to the radiated power of the 43+10log(P) dB "aut of band" attenuation equales.  Spurious Emissions Limit (VV) = 10°(-43/10) = 50 * 10°.	9 kHz to 26 gower of each	35.6 GHz All spur Gh spurious en	64.80 Ious and harmo CALCULATK Ission with refe	0.001737801 mic emissions v	0.000000552 Nere investigated tod power output	0.000050000  . All emissions d	Pass
Notes: Frequency range investigated was from 9 kHz 1 20dB below the permissible value were reported.  Note: The data taken is relative to the radiated power of the 43+10log(P) dB "aut of band" attenuation equales Spurious Emissions Limit (dBW) = 10f(cgP - (43+10log) Spurious Emissions Limit (W) = 10f(-43/10) = 50 *	9 kHz to 26 power of each	GHz. All spur ch spurious en	ious and harmo CALCULATK ission with refe	mic emissions v	were investigated to be a power output	. All emissions d	Selected that were In
Note: The data taken is relative to the radiated power of the 43+10log(P) dB "aut of band" alternation equates. Spurious Emissions Limit (dBW) = 10logP - (43+10logs Spurious Emissions Limit (W) = 10^(-43/10) = 50 * 10^-	power of eac	ch spurious en	CALCULATIC nission with refe	ONS erence to the ra	ted power output	of the transmitte	
Note: The data taken is relative to the radiated power of the 43+10log(P) dB "aut of band" attenuation equates Spurious Emissions Limit (dBW) = 10logP - (43+10logF Spurious Emissions Limit (W) = 10^(-43/10) = 50 * 10^4.	power of eac quales to a (	ch spurious en	CALCULATIC nission with refe any P. The fol	ONS arenos to the ra lowing coupling	ted power output	of the transmitter	
Note: The data taken is relative to the radiated power of the 43+10log(P) dB "aut of band" attenuation equales Spurious Emissions Limit (dBW) = 10f(c43/10) = 50 * 10f).	power of eac quales to a (	oh spurious en 50 uW limit for	ission with reference and P. The follows	renos to the ral	ted power output	of the transmitter	
Spurious Emissions Limit (dBW) = $10\log P \cdot (43*10logF)$ Spurious Emissions Limit (W) = $10^{\circ}(-43/10) = 50^{\circ} \cdot 10^{\circ}$ .	470cotts -		TOTAL MOSSI			implitude limit for	r. : spurious emission:
	0.10%6 W.	43 dBW.					
ERP Calculations			5		Conversion of dBuV/m to V/m	3BuV/m to V/m	
ERP = $(Ed)^2/30(G)$					[invlog(Reading	[invlog(Reading in dBuV/m/20)]*.000001 = V/m	000001 = V/m
E = Vm d= distance							
G = Gain of Antenna ( numerical gain of half wave dipole antenna 1.64) per Part 2,1053(a)	ve dipole an	tenna 1.64) pe	r Part 2,1053(a	0			

Report No: FC99-032A Page 41 of 85

FCC Part 2.1053 Measurements required: Field strength of spurious radiation  Operating Channel - 2466 MHz  Polarity (MHz)	FCC Part 2,1053 Module TXB88M	FCC Part 2,1053 Module TXB88MOD-P	4									
Opporating Channel - 2466 MHzz Polarity Freq Reading in PreAmp Cable Horn (dBuVin) Freq (AM12) Polarity Freq Gallowin Factor Antenna (dBuVin) Freq (AM12) Polarity Freq Gallowin Factor Factor Antenna (dBuVin) Freq (AM12) Polarity Freq (AM14) Reading in PreAmp Cable Antenna (dBuVin) Factor Factor Antenna (dBuVin) Factor Factor Factor Antenna (dBuVin) Force Cable Cab	FCC Part	2.1053 Mea	saurements rec	quired: Field	strength of	f spurious radi	ation					
Polarity Freq Reading in PreAmp Cable Horn Corrected E VIM ERP (Watts) Spec Limit Pass or Fall Vertical (ABUVim Factor Factor Factor Factor Antenna (GBUVIM) Pass of Fall Factor	Operating	Channel -	. 2466 MHz									
Verticul         7411.70         64.50         -34.00         5.3         35.7         71.50         0.003768374         0.00002694         0.000050000         Pass           Notes: Frequency range investigated was from 9 kHz to 26 GHz. All spurious and harmonic emissions were investigated.         All emissions delected that were regorded.         All spurious and harmonic emissions were investigated. All emissions delected that were regorded.           Shource: The data taken is relative to the radiated power of each spurious emission with reference to the rated power output of the transmitter.         CALCULATIONS           Spurious Emissions Limit (dBW) = 100cgP - (43+10cgP) = .43 dBW.         Spurious emissions establish this amplitude limit for spurious emissions.           ERP Calculations         ERP Calculations         Conversion of dBuVim to Vim (invious data taken a) and hard wave dipote antenna 1.64) per Part 2.1593(a)         Conversion of dBuVim 2017 000001 = Vim (invious data a) and hard wave dipote antenna 1.64) per Part 2.1593(a)	Polarity	Freq (MHz)	Reading in dBuV/m	-	Cable	Horn	Corrected E (dBuV/M)	VIM	ERP (Watts)	Spec Limit Watts	Pass or Fail	
Notes: Frequency range investigated was from 9 kHz to 26 GHz. All spurious and harmonic emissions were investigated. All emissions detected that were less the 20d8 below the permissible value were reported.  CALCULATIONS  Note: The data taken is relative to the radiated power of each spurious emission with reference to the rated power output of the transmitter.  The 43+10og(P) d8 "out of band" attenuation equates to a 50 uW limit for any P. The following equations establish this amplifude limit for spurious emissions.  Spurious Emissions Limit (d8W) = 10°(-43/10) = 50 * 10°-6 W.  ERP Calculations  E = V/m  d= distance  G = Gain of Antenna (numerical gain of half wave dipole anlenna 1.64) per Part 2.1053(a)	Vertical	7411.70		-34.00	5,3	35.7	71.50	0.003758374	-	0.000050000		8
Notes: Frequency range investigated was from 9 kHz to 26 GHz. All spuribus and harmonic emissions were investigated. All emissions detected that were less the 20dB below the permissible value were reported.  CALCULATIONS  Note: The data taken is relative to the radiated power of each spuribus emission with reference to the rated power output of the transmitter.  The 43+10tog(P) dB "out of band" attenuation equates to a 50 uW limit for any P. The following equations establish this amplitude limit for spuribus emissions.  Spurious Emissions Limit (M)= 10*(-43*10) = 50*10*6 W.  Spurious Emissions Limit (M)= 10*(-43*10) = 50*10*6 W.  ERP = (Eq.)*30(G)  E = V/m  d= distance  G = Gain of Antenna (numerical gain of half wave dipole antenna 1.54) per Part 2.1053(a)												
Note: The data taken is relative to the radiated power of each spurious emission with reference to the rated power output of the transmitter.  The 43+10tog(P) dB "aut of band" attenuation equates to a 50 uW limit for any P. The following equations establish this amplitude limit for spurious emissions. Spurious Emissions Limit (48W) = 10^4(-43/10) = 50 * 10^4-5 W.  ERP Calculations  ERP = (Ed)*/30(G)  E = V/m  [Invlog(Reading in dBuV/m/20)]*, 000001 = V/m  [Invlog(Reading in dBuV/m/20)]*, 000001 = V/m  G = Gain of Antenna (numerical gain of half wave dipole antenna 1.64) per Part 2.1053(a)	Notes: Fn 20dB belov	equency rail	nge investigate issible value w	ed was from rere reported	9 KHz to 26	GHz. All spu	urious and harm	onic emissions	were investigated	f. All emissions d	elected that were les	s than
CALCULATIONS  Note: The data taken is relative to the radiated power of each spurious emission with reference to the rated power output of the transmitter.  The 43+10iog/P) dB "out of band" attenuation equates to a 50 uW limit for any P. The following equations establish this amplitude limit for spurious emissions.  Spurious Emissions Limit (dBW) = 10V(43/10) = 50 * 10*-6 W.  ERP Calculations  ERP Calculations  ERP Calculations  ERP = (Ed) <sup>2</sup> /30(G)  E = V/m  d = distance  G = Gain of Antenna ( numerical gain of half wave dipole anlerina 1.64) per Part 2.1053(a)												
Note: The data taken is relative to the radiated power of each spurious emission with reference to the rated power output of the transmitter.  The 43+10log(P) dB "out of band" attenuation equates to a 50 uW limit for any P. The following equations establish this amplitude limit for spurious emissions.  Spurious Emissions Limit (400M) = 10P(-43/10) = 50 * 10P-6 W.  ERP Calculations  ERP Calculations  ERP = (Ed)*130(G)  d= distance  G = Gain of Antonna (numerical gain of half wave dipole antenna 1.64) per Part 2.1053(a)							CALCULATI	ONS				
4) per Part 2.1053(a)	Nate: The The 43+10	data taken llog(P) dB "	is relative to t	the radiated Ittenuation ex	power of ea quates to a	ich spurious e 50 uW limit fo	mission with ref rany P. The fo	erence to the ra llowing equation	ated power output ns establish this a	of the transmitter mplitude limit for	spurious emissions.	
lerina 1.54) per Part 2.1053(a)	Spurious E	Emissions L	1 = (VBW) = 1 -01 = (W) fimi.	10logP - (434 (-43/10) = 50	+10logP) = .	-43 dBW.						
of half wave dipole antenna 1.64) per Part 2.1053(a)												
	ERP Calo ERP = (Ed	ulations () <sup>2</sup> /30(G)							Conversion of c [invlog(Reading)	iBuV/m to V/m in dBuV/m/20)[*.0	00001 = V/m	
	E = V/m											
	d* distanc	a)										
	G = Gain	Antenna	( numerical ga		ve dipole ar	nlenna 1.54) p	er Part 2.1053(a	(8				

Report No: FC99-032A Page 42 of 85

	Operating Channel - 2473 MHz	2473 MHz	The second second		The property of the					
Polarity	Freq (MHz)	Reading in dBuV/m	PreAmp Factor	Cable Factor	Hom Antenna	Corrected E (dBuV/M)	VIM	ERP (Watts)	Spec Limit Watts	Pass or Fail
Vertical	7418.05	77.20	-34.00	5.3	35.6	84.10	0.016032454	0.000047019	0.000000000	Pass
Horizontal	7417.97	66.30	-34.00	5.3	35.6	73.20	0.004570882	0.000003822	0.000200000	Pass
Notes: Fre	equency rail w the permi	Notes: Frequency range investigated w 20dB below the permissible value were	d was from 9 are reported.	9 kHz to 26	GHz. All spu	crious and harmo	onic emissions	were investigated.	All emissions de	Notes: Frequency range investigated was from 9 kHz to 25 GHz. All spurious and harmonic emissions were investigated. All emissions detected that were less than 20dB below the permissible value were reported.
						CALCULATIONS	SNO			
Vote: The	Mog(P) dB '	Note: The data taken is relative to the radiated power of each spurio The 43+10log(P) dB "out of band" attenuation equates to a 50 uW lin Spurious Emissions Limit (dBW) = 10logP - (43+10logP) = -43 dBW.	ne radiated p tenuation eq OlogP - (43+	justes to a 10logP) = -	ch spurious e 50 uW limit fo 43 dBW.	mission with refi c any P. The fo	erence to the ra	radiated power of each spurious emission with reference to the rated power output of the transmitter, nuation equates to a 50 uW limit for any P. The following equations establish this amplitude limit for agP - (43+10logP) = -43 dBW.	of the transmitter, mplitude limit for a	Note: The data taken is relative to the radiated power of each spurious emission with reference to the rated power output of the transmitter.  The 43+10log(P) dB "out of band" attenuation equates to a 50 uW limit for any P. The following equations establish this amplitude limit for spurious emissions.  Spurious Emissions Limit (dBW) = 10logP - (43+10logP) = -43 dBW.
spurious E	Emissions	Spurious Emissions Limit (W) = 10^(.43/10) = 50 * 10^-5 W	(43/10) = 50	. 10^6 W						
ERP Calculations ERP = (Ed) <sup>2</sup> /30(G) E = V/m d= distance	ulations s)²/30(G)							Cenversion of dBuV/m to V/m [inviog(Reading in dBuV/m/20]]*	Conversion of dBuV/m to V/m [Invlog(Reading in dBuV/m/20)]*.000001 = V/m	00001 = V/m
3 = Gain	of Antenna	( numerical gail	n of half was	re dipole an	tenna 1.64) p	G = Gain of Antenna ( numerical gain of half wave dipole antenna 1.64) per Part 2.1053(a)	9)			

Report No: FC99-032A Page 43 of 85

FCC Part 2.1053 Measurements required. Field strength of spurious radiation	FCC Part 2, 1053 Measurements req	uired: Field	strength of	f spurious radi	ation					
Operating Channel - 2479 MHz	- 2479 MHz	100000		0.000	CONTRACTOR					
Polarity Freq (MHz)	Reading in dBuV/m	ProAmp Factor	Cable Factor	Hom Antenna	Corrected E (dBuV/M)	VIN	ERP (Watts)	Spec Limit Watts	Pass or Fail	
Vertical 7424.30	64.90	34.00	5.3	35.6	71.80	0.003890451	0.000002769	0.00050000	Pass	
Notes: Frequency range investigated was from 9 kHz to 26 GHz. All spurious and harmonic emissions were investigated. All emissions detected that were less than 20d8 below the germissble value were reported.	inge investigate issble value w	d was from ere reported	9 kHz to 26	I 3 GHz. All spu	nous and hamic	onic emissions	were investigated	. All emissions de	slected that were le	ss Ihan
					CALCULATIONS	SNO				
Note: The data taken is relative to the radiated power of each spurious emission with reference to the rated power output of the transmitter.  The 43+10log(P) dB fout of band" attenuation equates to a 50 uW limit for any P. The following equations establish this amplitude limit for spunous emissions.	n is relative to t "out of band" at	he radiated the restron or	power of ea	sch spurious e 50 uW limit fo	mission with refi r any P. The fol	erence to the ra llowing equation	ited power output is establish this a	of the transmitler mplitude limit for s	spurious emissions	
Spurious Emissions Limit (dBW) = $10\log P \cdot (43+10\log P) = -43$ dBW. Spurious Emissions Limit (M) = $10^{\circ}(-43/10) = 50^{\circ} \cdot 10^{\circ} \cdot 6$ W.	Limit (dBW) = 1 Limit (W) = 10^	OlogP - (43+ (-43/10) = 5(	-10logP) = 0	43 dBW.						
ERP Calculations							Conversion of dBuV/m to V/m	Conversion of dBuV/m to V/m	- 100000	
ERP = (Ed) 130(G) E = V/m							Supresc) Forward	or frozenska nam tr	1000	
d= distance G = Gain of Antenna ( numerical gain of	( numerical ga	in of half war	ve dipole a	nlenna 1.64) p	half wave dipole anienna 1.64) per Part 2.1053(a)	(e)				

Report No: FC99-032A Page 44 of 85

# 2.1033(c)(14)/2.1055/90.213 - FREQUENCY STABILITY

# **Test Conditions:**

The EUT is placed in the temperature chamber with the antenna-port connected to the spectrum analyzer. The transmitter is continuously transmitting unmodulated audio and video carriers. The humidity is 40%.

# **Photo of Test Setup Used for Test:**



Temperature Testing - 888MOD+

Report No: FC99-032A Page 45 of 85

# **Photo of Test Setup Used for Test:**



Temperature Testing - 888MOD-O

# **Test Equipment Used:**

- 1. Spectrum Analyzer, HP, Model 8593E, S/N 3624A00159. Calibration date: December 10, 1998. Calibration due date: December 10, 1999.
- 2. Thermotron Temperature Chamber, Model S1.2 Mini-Max. Calibration date: August 6, 1999. Calibration due date: August 6, 2000.
- 3. Mini Hygrothermograph, Oaktron, Model 8369-70, S/N 031155. Calibration date: January 28, 1999. Calibration due date: January 28, 2000.
- 4. Multimeter, Fluke, Model 70 Series II, S/N 55230270. Calibration date: November 9, 1998. Calibration due date: November 9, 1999.

Report No: FC99-032A Page 46 of 85

# **Test Data:**

Frequency in GHz

			rrequen	y m Gnz		
		TX888MOD-O		7	TX888MOD-P+	-
	video channel	left audio channel	right audio channel	video channel	left audio channel	right audio channel
Ambient 120 VAC	2.47265	2.46666	2.47866	2.47265	2.46664	2.47865
Ambient 102 VAC	2.47266	2.46666	2.47867	2.47265	2.46664	2.47865
Ambient 138 VAC	2.47265	2.46665	2.47866	2.47266	2.46665	2.47866
-30°C	2.47267	2.46665	2.47868	2.47264	2.46664	2.47866
-20°C	2.47267	2.46664	2.47869	2.47265	2.46668	2.47864
-10°C	2.47268	2.46664	2.47867	2.47265	2.46666	2.47868
0°C	2.47261	2.46665	2.47868	2.47266	2.46669	2.47867
10°C	2.47266	2.46664	2.47866	2.47266	2.46665	2.47866
20°C	2.47266	2.46664	2.47866	2.47265	2.46665	2.47866
30°C	2.47265	2.46664	2.47869	2.47264	2.46664	2.47866
40°C	2.47266	2.46664	2.47869	2.47266	2.46664	2.47866
50°C	2.47266	2.46665	2.47868	2.47265	2.46665	2.47867

Report No: FC99-032A Page 47 of 85

# PART 15 SUBPART B CLASS B VERIFICATION FOR THE DIGITAL PORTION OF THE EUT

# **Test Equipment Used:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8574A	3010A01076	07/15/1999	07/15/2000	0
HP 8593EM	3624A00159	10/12/1998	10/12/1999	2111
HP 8447D	2727A05392	02/23/1999	02/23/2000	10
HP 83017A	3123A00321	10/26/1998	10/26/1999	2114
Chase CBL6111C	2455	08/30/1999	08/30/2000	1992
EMCO 3115	9006-3414	02/24/1999	02/24/2000	327
EMCO 3301B	9101-3083	06/30/1999	06/30/2000	0
HP 84125-80008	961178-006	01/13/1999	01/13/2000	0
Cable 125 ft.	n/a	02/04/1999	02/04/2000	2086
Cable 10 ft.	n/a	02/05/1999	02/05/2000	1016
Fischer LISN	none	01/13/1999	01/13/2000	14

### **Test Data Sheets:**

Test Location: CKC Laboratories, Inc. • 22105 Wilson River Hwy • Tillamook, OR 97141 • 800 500-4EMC

Customer: Advanced Electronics Group, Inc.

Specification: FCC 15.207

Work Order #: 72515 Date: Sat Sep-18-1999

Test Type: Conducted Emissions Time: 16:44:09
Equipment: Video Audio Transmitter Sequence#: 21

Manufacturer: Advanced Electronics Group, Inc. Tested By: Adam Ross

Model: TX888MOD-P+

S/N: none

Fischer LISN none 01/13/1999 01/13/2000 13

### Equipment Under Test (\* = EUT):

Function	Manufacturer	Model #	S/N
Video Audio Transmitter*	Advanced Electronics Group, Inc.	TX888MOD-P+	none

#### Support Devices:

Function	Manufacturer	Model #	S/I	N	
Power Supply (12)	VCD, 400 mA) RF Link Tech	nology	LPS-1240	none	

# Test Conditions / Notes:

The EUT is placed on the test table with the antenna-port connected to the spectrum analyzer and the camera adjacent to the transmitter. The camera is providing modulation of the video carrier. A 2.5 kHz tone from the function generator is modulating the audio carrier. The transmitter is continuously transmitting. The frequency range of investigation is 9 kHz to 26 GHz. The temperature is 70°F. The humidity is 40%.

Report No: FC99-032A Page 48 of 85

# Freq Rdng MHz dBμV dB dB dB dB dB Table dBμV/m dBμV/m dB dB 1 28.492M 34.2 +1.0 +0.3 +0.0 35.5 48.0 -12.  2 28.758M 33.6 +1.0 +0.3 +0.0 34.9 48.0 -13.  3 26.452M 33.8 +0.8 +0.3 +0.0 34.9 48.0 -13.  5 14.832M 34.0 +0.5 +0.3 +0.0 34.8 48.0 -13.  6 21.751M 33.6 +0.8 +0.3 +0.0 34.7 48.0 -13.  7 27.605M 33.2 +1.0 +0.3 +0.0 34.5 48.0 -13.	Ant White
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Ant White
2       28.758M       33.6       +1.0       +0.3       +0.0       34.9       48.0       -13.         3       26.452M       33.6       +0.9       +0.4       +0.0       34.9       48.0       -13.         4       21.351M       33.8       +0.8       +0.3       +0.0       34.9       48.0       -13.         5       14.832M       34.0       +0.5       +0.3       +0.0       34.8       48.0       -13.         6       21.751M       33.6       +0.8       +0.3       +0.0       34.7       48.0       -13.	White White White White White White White White
3       26.452M       33.6       +0.9       +0.4       +0.0       34.9       48.0       -13.         4       21.351M       33.8       +0.8       +0.3       +0.0       34.9       48.0       -13.         5       14.832M       34.0       +0.5       +0.3       +0.0       34.8       48.0       -13.         6       21.751M       33.6       +0.8       +0.3       +0.0       34.7       48.0       -13.	White White White White White White
4       21.351M       33.8       +0.8       +0.3       +0.0       34.9       48.0       -13.         5       14.832M       34.0       +0.5       +0.3       +0.0       34.8       48.0       -13.         6       21.751M       33.6       +0.8       +0.3       +0.0       34.7       48.0       -13.	White White White White White
5     14.832M     34.0     +0.5     +0.3     +0.0     34.8     48.0     -13.       6     21.751M     33.6     +0.8     +0.3     +0.0     34.7     48.0     -13.	White White White
6 21.751M 33.6 +0.8 +0.3 +0.0 34.7 48.0 -13.	White White
	5 White
7 27.605M 33.2 +1.0 +0.3 +0.0 34.5 48.0 -13.	
	5 White
8 7.281M 33.9 +0.3 +0.2 +0.0 34.4 48.0 -13.	
9 24.766M 33.1 +0.9 +0.3 +0.0 34.3 48.0 -13.	7 White
10 15.630M 33.6 +0.5 +0.2 +0.0 34.3 48.0 -13.	7 White
11 5.671M 34.0 +0.2 +0.1 +0.0 34.3 48.0 -13.	White
12 26.807M 32.9 +0.9 +0.4 +0.0 34.2 48.0 -13.	3 White
13 25.476M 32.9 +0.9 +0.4 +0.0 34.2 48.0 -13.	3 White
14 17.759M 33.3 +0.6 +0.3 +0.0 34.2 48.0 -13.	3 White
15 1.082M 34.1 +0.1 +0.0 +0.0 34.2 48.0 -13.	3 White
16 29.778M 32.8 +1.0 +0.3 +0.0 34.1 48.0 -13.	White
17 29.290M 32.8 +1.0 +0.3 +0.0 34.1 48.0 -13.	) White
18 27.960M 32.8 +1.0 +0.3 +0.0 34.1 48.0 -13.	White
19 26.008M 32.8 +0.9 +0.4 +0.0 34.1 48.0 -13.	White
20 22.682M 33.0 +0.8 +0.3 +0.0 34.1 48.0 -13.	White
21 13.146M 33.3 +0.5 +0.3 +0.0 34.1 48.0 -13.	) White
22 6.092M 33.8 +0.2 +0.1 +0.0 34.1 48.0 -13.	White
23 1.206M 33.9 +0.1 +0.1 +0.0 34.1 48.0 -13.	White

Report No: FC99-032A Page 49 of 85

24	1.168M	33.9	+0.1	+0.1	+0.0	34.1	48.0	-13.9	White
25	25.654M	32.6	+0.9	+0.4	+0.0	33.9	48.0	-14.1	White
26	25.299M	32.6	+0.9	+0.4	+0.0	33.9	48.0	-14.1	White
27	21.085M	32.9	+0.7	+0.3	+0.0	33.9	48.0	-14.1	White
28	16.739M	33.1	+0.6	+0.2	+0.0	33.9	48.0	-14.1	White
29	15.453M	33.2	+0.5	+0.2	+0.0	33.9	48.0	-14.1	White
30	10.154M	33.3	+0.4	+0.2	+0.0	33.9	48.0	-14.1	White
31	23.259M	32.7	+0.8	+0.3	+0.0	33.8	48.0	-14.2	White
32	20.243M	32.7	+0.7	+0.4	+0.0	33.8	48.0	-14.2	White
33	17.182M	32.9	+0.6	+0.3	+0.0	33.8	48.0	-14.2	White
34	10.922M	33.2	+0.4	+0.2	+0.0	33.8	48.0	-14.2	White
35	6.662M	33.4	+0.2	+0.2	+0.0	33.8	48.0	-14.2	White
36	2.314M	33.7	+0.1	+0.0	+0.0	33.8	48.0	-14.2	White
37	27.161M	32.5	+0.9	+0.3	+0.0	33.7	48.0	-14.3	White
38	22.105M	32.6	+0.8	+0.3	+0.0	33.7	48.0	-14.3	White
39	1.187M	33.5	+0.1	+0.1	+0.0	33.7	48.0	-14.3	White
40	15.275M	32.9	+0.5	+0.2	+0.0	33.6	48.0	-14.4	White
41	14.920M	32.8	+0.5	+0.3	+0.0	33.6	48.0	-14.4	White
42	14.566M	32.8	+0.5	+0.3	+0.0	33.6	48.0	-14.4	White
43	11.913M	33.0	+0.4	+0.2	+0.0	33.6	48.0	-14.4	White
44	11.392M	33.0	+0.4	+0.2	+0.0	33.6	48.0	-14.4	White
45	10.699M	33.0	+0.4	+0.2	+0.0	33.6	48.0	-14.4	White
46	8.123M	33.2	+0.3	+0.1	+0.0	33.6	48.0	-14.4	White

Report No: FC99-032A Page 50 of 85

1									
47	6.340M	33.3	+0.2	+0.1	+0.0	33.6	48.0	-14.4	White
48	3.739M	33.3	+0.1	+0.2	+0.0	33.6	48.0	-14.4	White
49	497.545k	33.6	+0.0	+0.0	+0.0	33.6	48.0	-14.4	White
50	23.791M	32.3	+0.9	+0.3	+0.0	33.5	48.0	-14.5	White
51	20.065M	32.4	+0.7	+0.4	+0.0	33.5	48.0	-14.5	White
52	19.400M	32.4	+0.7	+0.4	+0.0	33.5	48.0	-14.5	White
53	19.178M	32.4	+0.7	+0.4	+0.0	33.5	48.0	-14.5	White
54	18.690M	32.5	+0.7	+0.3	+0.0	33.5	48.0	-14.5	White
55	17.537M	32.6	+0.6	+0.3	+0.0	33.5	48.0	-14.5	White
56	12.111M	32.9	+0.4	+0.2	+0.0	33.5	48.0	-14.5	White
57	11.095M	32.9	+0.4	+0.2	+0.0	33.5	48.0	-14.5	White
58	9.386M	32.9	+0.4	+0.2	+0.0	33.5	48.0	-14.5	White
59	9.213M	32.9	+0.4	+0.2	+0.0	33.5	48.0	-14.5	White
60	2.024M	33.4	+0.1	+0.0	+0.0	33.5	48.0	-14.5	White
61	630.672k	33.4	+0.1	+0.0	+0.0	33.5	48.0	-14.5	White
62	16.207M	32.6	+0.6	+0.2	+0.0	33.4	48.0	-14.6	White
63	12.792M	32.7	+0.5	+0.2	+0.0	33.4	48.0	-14.6	White
64	10.377M	32.8	+0.4	+0.2	+0.0	33.4	48.0	-14.6	White
65	9.634M	32.8	+0.4	+0.2	+0.0	33.4	48.0	-14.6	White
66	9.039M	32.8	+0.4	+0.2	+0.0	33.4	48.0	-14.6	White
67	7.157M	32.9	+0.3	+0.2	+0.0	33.4	48.0	-14.6	White
68	4.284M	33.1	+0.1	+0.2	+0.0	33.4	48.0	-14.6	White
69	2.347M	33.3	+0.1	+0.0	+0.0	33.4	48.0	-14.6	White

Report No: FC99-032A Page 51 of 85

70	2.219M	33.2	+0.1	+0.1	+0.0	33.4	48.0	-14.6	White
71	1.572M	33.3	+0.1	+0.0	+0.0	33.4	48.0	-14.6	White
72	1.282M	33.2	+0.1	+0.1	+0.0	33.4	48.0	-14.6	White
73	792.325k	33.3	+0.1	+0.0	+0.0	33.4	48.0	-14.6	White
74	18.912M	32.3	+0.7	+0.3	+0.0	33.3	48.0	-14.7	White
75	15.940M	32.6	+0.5	+0.2	+0.0	33.3	48.0	-14.7	White
76	13.767M	32.5	+0.5	+0.3	+0.0	33.3	48.0	-14.7	White
77	12.392M	32.6	+0.5	+0.2	+0.0	33.3	48.0	-14.7	White
78	12.259M	32.6	+0.5	+0.2	+0.0	33.3	48.0	-14.7	White
79	9.436M	32.7	+0.4	+0.2	+0.0	33.3	48.0	-14.7	White
80	8.891M	32.8	+0.3	+0.2	+0.0	33.3	48.0	-14.7	White
81	6.909M	32.9	+0.2	+0.2	+0.0	33.3	48.0	-14.7	White
82	6.785M	32.9	+0.2	+0.2	+0.0	33.3	48.0	-14.7	White
83	5.869M	33.0	+0.2	+0.1	+0.0	33.3	48.0	-14.7	White
84	2.166M	33.1	+0.1	+0.1	+0.0	33.3	48.0	-14.7	White
85	1.933M	33.1	+0.1	+0.1	+0.0	33.3	48.0	-14.7	White
86	1.853M	33.1	+0.1	+0.1	+0.0	33.3	48.0	-14.7	White
87	1.120M	33.2	+0.1	+0.0	+0.0	33.3	48.0	-14.7	White
88	611.653k	33.2	+0.1	+0.0	+0.0	33.3	48.0	-14.7	White
89	606.899k	33.2	+0.1	+0.0	+0.0	33.3	48.0	-14.7	White
90	6.959M	32.8	+0.2	+0.2	+0.0	33.2	48.0	-14.8	White
91	3.887M	32.9	+0.1	+0.2	+0.0	33.2	48.0	-14.8	White
92	3.392M	33.0	+0.1	+0.1	+0.0	33.2	48.0	-14.8	White
93	3.367M	33.0	+0.1	+0.1	+0.0	33.2	48.0	-14.8	White
94	1.491M	33.1	+0.1	+0.0	+0.0	33.2	48.0	-14.8	White
95	1.358M	33.1	+0.1	+0.0	+0.0	33.2	48.0	-14.8	White
L									

Report No: FC99-032A Page 52 of 85

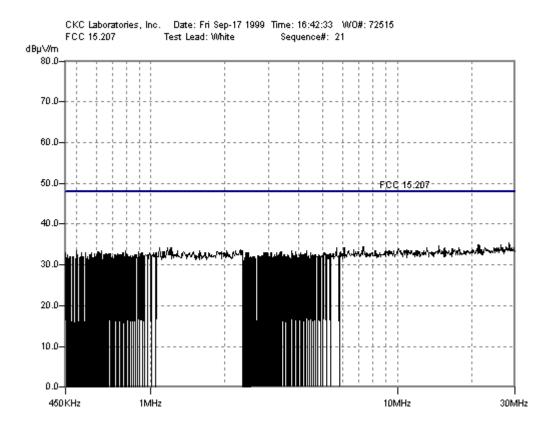
96	1.230M	33.0	+0.1	+0.1	+0.0	33.2	48.0	-14.8	White

Report No: FC99-032A

Page 53 of 85

97	1.144M	33.1	+0.1	+0.0	+0.0	33.2	48.0	-14.8	White
98	887.415k	33.1	+0.1	+0.0	+0.0	33.2	48.0	-14.8	White
99	768.552k	33.0	+0.1	+0.0	+0.0	33.1	48.0	-14.9	White
100	573.617k	33.0	+0.1	+0.0	+0.0	33.1	48.0	-14.9	White

Report No: FC99-032A Page 54 of 85



Report No: FC99-032A Page 55 of 85 Test Location: CKC Laboratories, Inc. • 22105 Wilson River Hwy • Tillamook, OR 97141 • 800 500-4EMC

Customer: Advanced Electronics Group, Inc.

Specification: FCC 15.207

Work Order #: 72515 Date: Sat Sep-18-1999

Test Type: Conducted Emissions Time: 16:41:45
Equipment: Video Audio Transmitter Sequence#: 20

Manufacturer: Advanced Electronics Group, Inc. Tested By: Adam Ross

Model: TX888MOD-P+

S/N: none

### Equipment Under Test (\* = EUT):

Function	Manufacturer	Model #	S/N
Video Audio Transmitter*	Advanced Electronics Group, Inc.	TX888MOD-P+	none

#### Support Devices:

Function	Manufacturer	Model #	S/I	N
Power Supply (12 VCD	, 400 mA) RF Link Tec	chnology	LPS-1240	none

### Test Conditions / Notes:

The EUT is placed on the test table with the antenna-port connected to the spectrum analyzer and the camera adjacent to the transmitter. The camera is providing modulation of the video carrier. A 2.5 kHz tone from the function generator is modulating the audio carrier. The transmitter is continuously transmitting. The frequency range of investigation is 9 kHz to 26 GHz. The temperature is 70°F. The humidity is 40%.

ement Data:	Re	eading lis	ted by 1	margin.			Test Lead	d: Black		
		L373b		cb0c						
		475		475		Dist	Corr	Spec		Polar
			dB		dB	Table				Ant
29.778M	33.4	+1.1		+0.3		+0.0	34.8	48.0	-13.2	Black
26.807M	33.4	+0.9		+0.4		+0.0	34.7	48.0	-13.3	Black
25.299M	33.5	+0.7		+0.4		+0.0	34.6	48.0	-13.4	Black
20.597M	33.7	+0.5		+0.4		+0.0	34.6	48.0	-13.4	Black
14.344M	33.8	+0.5		+0.3		+0.0	34.6	48.0	-13.4	Black
10.327M	34.1	+0.2		+0.2		+0.0	34.5	48.0	-13.5	Black
3.243M	34.3	+0.1		+0.1		+0.0	34.5	48.0	-13.5	Black
3.219M	34.3	+0.1		+0.1		+0.0	34.5	48.0	-13.5	Black
23.259M	33.5	+0.6		+0.3		+0.0	34.4	48.0	-13.6	Black
29.423M	32.9	+1.1		+0.3		+0.0	34.3	48.0	-13.7	Black
27.161M	33.1	+0.9		+0.3		+0.0	34.3	48.0	-13.7	Black
	Freq MHz 29.778M 26.807M 25.299M 20.597M 14.344M 10.327M 3.243M 3.219M 23.259M	Freq MHz         Rdng dBμV           29.778M         33.4           26.807M         33.4           25.299M         33.5           20.597M         33.7           14.344M         33.8           10.327M         34.1           3.243M         34.3           3.219M         34.3           23.259M         33.5           29.423M         32.9	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	L373b         Freq MHz       Rdng dBμV       dB       dB         29.778M       33.4       +1.1         26.807M       33.4       +0.9         25.299M       33.5       +0.7         20.597M       33.7       +0.5         14.344M       33.8       +0.5         10.327M       34.1       +0.2         3.243M       34.3       +0.1         23.259M       33.5       +0.6         29.423M       32.9       +1.1	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Freq MHz         Rdng MHz         dB µV         dB dB         dB dB         dB dB         dB Table           29.778M         33.4         +1.1         +0.3         +0.0           26.807M         33.4         +0.9         +0.4         +0.0           25.299M         33.5         +0.7         +0.4         +0.0           20.597M         33.7         +0.5         +0.4         +0.0           14.344M         33.8         +0.5         +0.3         +0.0           10.327M         34.1         +0.2         +0.2         +0.0           3.243M         34.3         +0.1         +0.1         +0.0           23.259M         33.5         +0.6         +0.3         +0.0           29.423M         32.9         +1.1         +0.3         +0.0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Freq MHz         Rdng MBμV         dB         dB         dB         dB         dB         dB         dB MB V/m         Dist Table dBμV/m dBμV/m dBμV/m         Spec dBμV/m dBμV/m           29.778M         33.4         +1.1         +0.3         +0.0         34.8         48.0           26.807M         33.4         +0.9         +0.4         +0.0         34.7         48.0           25.299M         33.5         +0.7         +0.4         +0.0         34.6         48.0           20.597M         33.7         +0.5         +0.4         +0.0         34.6         48.0           14.344M         33.8         +0.5         +0.3         +0.0         34.5         48.0           10.327M         34.1         +0.2         +0.2         +0.0         34.5         48.0           3.243M         34.3         +0.1         +0.1         +0.0         34.5         48.0           23.259M         33.5         +0.6         +0.3         +0.0         34.4         48.0           29.423M         32.9         +1.1         +0.3         +0.0         34.3         48.0	Freq MHz MHz         Rdng MBμV         dB         dB         dB         dB         dB         dB         dB         Dist Table dBμV/m dBμV/m dBμV/m dBμV/m dB         Margin dBμ           29.778M         33.4         +1.1         +0.3         +0.0         34.8         48.0         -13.2           26.807M         33.4         +0.9         +0.4         +0.0         34.7         48.0         -13.3           25.299M         33.5         +0.7         +0.4         +0.0         34.6         48.0         -13.4           20.597M         33.7         +0.5         +0.4         +0.0         34.6         48.0         -13.4           14.344M         33.8         +0.5         +0.3         +0.0         34.6         48.0         -13.4           10.327M         34.1         +0.2         +0.2         +0.0         34.5         48.0         -13.5           3.243M         34.3         +0.1         +0.1         +0.0         34.5         48.0         -13.5           23.259M         33.5         +0.6         +0.3         +0.0         34.4         48.0         -13.6           29.423M         32.9         +1.1         +0.3         +0.0         34.3

Report No: FC99-032A Page 56 of 85

12	24.057M	33.2	+0.7	+0.3	+0.0	34.2	48.0	-13.8	Black
13	26.274M	32.9	+0.8	+0.4	+0.0	34.1	48.0	-13.9	Black
14	23.525M	33.2	+0.6	+0.3	+0.0	34.1	48.0	-13.9	Black
15	20.730M	33.2	+0.5	+0.4	+0.0	34.1	48.0	-13.9	Black
16	20.154M	33.2	+0.5	+0.4	+0.0	34.1	48.0	-13.9	Black
17	19.178M	33.2	+0.5	+0.4	+0.0	34.1	48.0	-13.9	Black
18	11.219M	33.6	+0.3	+0.2	+0.0	34.1	48.0	-13.9	Black
19	3.343M	33.9	+0.1	+0.1	+0.0	34.1	48.0	-13.9	Black
20	28.492M	32.7	+1.0	+0.3	+0.0	34.0	48.0	-14.0	Black
21	22.194M	33.1	+0.6	+0.3	+0.0	34.0	48.0	-14.0	Black
22	19.356M	33.1	+0.5	+0.4	+0.0	34.0	48.0	-14.0	Black
23	14.477M	33.2	+0.5	+0.3	+0.0	34.0	48.0	-14.0	Black
24	2.599M	33.8	+0.1	+0.1	+0.0	34.0	48.0	-14.0	Black
25	2.575M	33.8	+0.1	+0.1	+0.0	34.0	48.0	-14.0	Black
26	1.391M	34.0	+0.0	+0.0	+0.0	34.0	48.0	-14.0	Black
27	925.451k	33.9	+0.1	+0.0	+0.0	34.0	48.0	-14.0	Black
28	911.188k	33.9	+0.1	+0.0	+0.0	34.0	48.0	-14.0	Black
29	27.516M	32.7	+0.9	+0.3	+0.0	33.9	48.0	-14.1	Black
30	24.678M	32.9	+0.7	+0.3	+0.0	33.9	48.0	-14.1	Black
31	21.928M	33.0	+0.6	+0.3	+0.0	33.9	48.0	-14.1	Black
32	18.380M	33.1	+0.5	+0.3	+0.0	33.9	48.0	-14.1	Black
33	17.670M	33.1	+0.5	+0.3	+0.0	33.9	48.0	-14.1	Black
34	15.896M	33.2	+0.5	+0.2	+0.0	33.9	48.0	-14.1	Black
35	13.590M	33.2	+0.4	+0.3	+0.0	33.9	48.0	-14.1	Black

Report No: FC99-032A Page 57 of 85

36	8.420M	33.6	+0.2	+0.1	+0.0	33.9	48.0	-14.1	Black
37	8.172M	33.6	+0.2	+0.1	+0.0	33.9	48.0	-14.1	Black
38	6.860M	33.6	+0.1	+0.2	+0.0	33.9	48.0	-14.1	Black
39	16.207M	33.1	+0.5	+0.2	+0.0	33.8	48.0	-14.2	Black
40	13.412M	33.1	+0.4	+0.3	+0.0	33.8	48.0	-14.2	Black
41	13.191M	33.1	+0.4	+0.3	+0.0	33.8	48.0	-14.2	Black
42	7.083M	33.4	+0.2	+0.2	+0.0	33.8	48.0	-14.2	Black
43	1.268M	33.7	+0.0	+0.1	+0.0	33.8	48.0	-14.2	Black
44	28.226M	32.4	+1.0	+0.3	+0.0	33.7	48.0	-14.3	Black
45	24.855M	32.7	+0.7	+0.3	+0.0	33.7	48.0	-14.3	Black
46	21.085M	32.9	+0.5	+0.3	+0.0	33.7	48.0	-14.3	Black
47	12.570M	33.1	+0.4	+0.2	+0.0	33.7	48.0	-14.3	Black
48	10.971M	33.2	+0.3	+0.2	+0.0	33.7	48.0	-14.3	Black
49	9.956M	33.3	+0.2	+0.2	+0.0	33.7	48.0	-14.3	Black
50	7.206M	33.3	+0.2	+0.2	+0.0	33.7	48.0	-14.3	Black
51	4.903M	33.4	+0.1	+0.2	+0.0	33.7	48.0	-14.3	Black
52	1.025M	33.7	+0.0	+0.0	+0.0	33.7	48.0	-14.3	Black
53	992.015k	33.7	+0.0	+0.0	+0.0	33.7	48.0	-14.3	Black
54	22.460M	32.7	+0.6	+0.3	+0.0	33.6	48.0	-14.4	Black
55	19.666M	32.7	+0.5	+0.4	+0.0	33.6	48.0	-14.4	Black
56	17.404M	32.8	+0.5	+0.3	+0.0	33.6	48.0	-14.4	Black
57	17.182M	32.8	+0.5	+0.3	+0.0	33.6	48.0	-14.4	Black
58	17.049M	32.8	+0.5	+0.3	+0.0	33.6	48.0	-14.4	Black
59	16.517M	32.9	+0.5	+0.2	+0.0	33.6	48.0	-14.4	Black
60	11.021M	33.1	+0.3	+0.2	+0.0	33.6	48.0	-14.4	Black
61	4.011M	33.3	+0.1	+0.2	+0.0	33.6	48.0	-14.4	Black

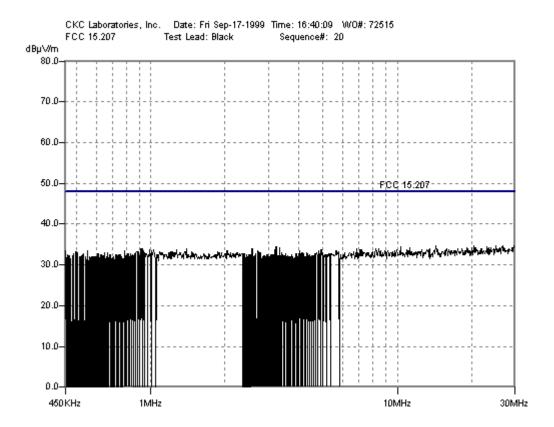
Report No: FC99-032A Page 58 of 85

62	2.038M	33.6	+0.0	+0.0	+0.0	33.6	48.0	-14.4	Black
63	22.859M	32.6	+0.6	+0.3	+0.0	33.5	48.0	-14.5	Black
64	21.751M	32.6	+0.6	+0.3	+0.0	33.5	48.0	-14.5	Black
65	18.912M	32.7	+0.5	+0.3	+0.0	33.5	48.0	-14.5	Black
66	16.694M	32.8	+0.5	+0.2	+0.0	33.5	48.0	-14.5	Black
67	5.646M	33.3	+0.1	+0.1	+0.0	33.5	48.0	-14.5	Black
68	2.699M	33.3	+0.1	+0.1	+0.0	33.5	48.0	-14.5	Black
69	782.816k	33.3	+0.2	+0.0	+0.0	33.5	48.0	-14.5	Black
70	450.000k	33.4	+0.1	+0.0	+0.0	33.5	48.0	-14.5	Black
71	15.630M	32.7	+0.5	+0.2	+0.0	33.4	48.0	-14.6	Black
72	14.166M	32.6	+0.5	+0.3	+0.0	33.4	48.0	-14.6	Black
73	9.832M	33.0	+0.2	+0.2	+0.0	33.4	48.0	-14.6	Black
74	9.188M	33.0	+0.2	+0.2	+0.0	33.4	48.0	-14.6	Black
75	8.916M	33.0	+0.2	+0.2	+0.0	33.4	48.0	-14.6	Black
76	8.594M	33.0	+0.2	+0.2	+0.0	33.4	48.0	-14.6	Black
77	4.829M	33.1	+0.1	+0.2	+0.0	33.4	48.0	-14.6	Black
78	1.006M	33.4	+0.0	+0.0	+0.0	33.4	48.0	-14.6	Black
79	554.599k	33.4	+0.0	+0.0	+0.0	33.4	48.0	-14.6	Black
80	15.320M	32.6	+0.5	+0.2	+0.0	33.3	48.0	-14.7	Black
81	15.187M	32.6	+0.5	+0.2	+0.0	33.3	48.0	-14.7	Black
82	12.185M	32.8	+0.3	+0.2	+0.0	33.3	48.0	-14.7	Black
83	11.913M	32.8	+0.3	+0.2	+0.0	33.3	48.0	-14.7	Black

Report No: FC99-032A Page 59 of 85

84	6.711M	33.0	+0.1	+0.2	+0.0	33.3	48.0	-14.7	Black
85	5.795M	33.1	+0.1	+0.1	+0.0	33.3	48.0	-14.7	Black
86	2.748M	33.1	+0.1	+0.1	+0.0	33.3	48.0	-14.7	Black
87	2.723M	33.1	+0.1	+0.1	+0.0	33.3	48.0	-14.7	Black
88	1.082M	33.3	+0.0	+0.0	+0.0	33.3	48.0	-14.7	Black
89	11.392M	32.7	+0.3	+0.2	+0.0	33.2	48.0	-14.8	Black
90	9.584M	32.8	+0.2	+0.2	+0.0	33.2	48.0	-14.8	Black
91	7.999M	32.9	+0.2	+0.1	+0.0	33.2	48.0	-14.8	Black
92	1.857M	33.1	+0.0	+0.1	+0.0	33.2	48.0	-14.8	Black
93	1.467M	33.2	+0.0	+0.0	+0.0	33.2	48.0	-14.8	Black
94	1.368M	33.2	+0.0	+0.0	+0.0	33.2	48.0	-14.8	Black
95	1.215M	33.1	+0.0	+0.1	+0.0	33.2	48.0	-14.8	Black
96	1.201M	33.1	+0.0	+0.1	+0.0	33.2	48.0	-14.8	Black
97	887.415k	33.1	+0.1	+0.0	+0.0	33.2	48.0	-14.8	Black
98	873.152k	33.1	+0.1	+0.0	+0.0	33.2	48.0	-14.8	Black
99	497.545k	33.1	+0.1	+0.0	+0.0	33.2	48.0	-14.8	Black
100	492.791k	33.1	+0.1	+0.0	+0.0	33.2	48.0	-14.8	Black

Report No: FC99-032A Page 60 of 85



Report No: FC99-032A Page 61 of 85 Test Location: CKC Laboratories, Inc. • 22105 Wilson River Hwy • Tillamook, OR 97141 • 800 500-4EMC

Customer: Advanced Electronics Group, Inc.

Specification: FCC 15.207

Work Order #: 72515 Date: Sat Sep-18-1999

Test Type: Conducted Emissions Time: 16:53:10
Equipment: Video Audio Transmitter Sequence#: 24

Manufacturer: Advanced Electronics Group, Inc. Tested By: Adam Ross

Model: TX888MOD-O

S/N: none

### Equipment Under Test (\* = EUT):

Function	Manufacturer	Model #	S/N
Video Audio Transmitter*	Advanced Electronics Group, Inc.	TX888MOD-O	none

#### Support Devices:

Function	Manufacturer	Model #	S/N	N
Power Supply (12 VCD,	400 mA) RF Link Te	echnology	LPS-1240	none

#### Test Conditions / Notes:

The EUT is placed on the test table with the antenna-port connected to the spectrum analyzer and the camera adjacent to the transmitter. The camera is providing modulation of the video carrier. A 2.5 kHz tone from the function generator is modulating the audio carrier. The transmitter is continuously transmitting. The frequency range of investigation is 9 kHz to 26 GHz. The temperature is 70°F. The humidity is 40%.

Measure	ement Data:	Re	eading lis	ted by 1	nargin			Test Lead	d: Black		
			L373b		cb0c						
#	Freq	Rdng					Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m$	dBµV/m	dB	Ant
1	30.000M	34.3	+1.1		+0.3		+0.0	35.7	48.0	-12.3	Black
2	14.033M	34.0	+0.5		+0.3		+0.0	34.8	48.0	-13.2	Black
3	27.871M	33.4	+0.9		+0.3		+0.0	34.6	48.0	-13.4	Black
4	6.315M	34.3	+0.1		+0.1		+0.0	34.5	48.0	-13.5	Black
5	23.658M	33.4	+0.7		+0.3		+0.0	34.4	48.0	-13.6	Black
6	22.283M	33.5	+0.6		+0.3		+0.0	34.4	48.0	-13.6	Black
7	25.742M	33.1	+0.8		+0.4		+0.0	34.3	48.0	-13.7	Black
8	24.766M	33.3	+0.7		+0.3		+0.0	34.3	48.0	-13.7	Black
9	17.404M	33.5	+0.5		+0.3		+0.0	34.3	48.0	-13.7	Black
10	29.556M	32.8	+1.1		+0.3		+0.0	34.2	48.0	-13.8	Black
11	29.024M	32.9	+1.0		+0.3		+0.0	34.2	48.0	-13.8	Black
12	28.093M	32.9	+1.0		+0.3		+0.0	34.2	48.0	-13.8	Black

Report No: FC99-032A Page 62 of 85

13	22.593M	33.3	+0.6	+0.3	+0.0	34.2	48.0	-13.8	Black
14	16.251M	33.5	+0.5	+0.2	+0.0	34.2	48.0	-13.8	Black
15	15.364M	33.5	+0.5	+0.2	+0.0	34.2	48.0	-13.8	Black
16	13.146M	33.5	+0.4	+0.3	+0.0	34.2	48.0	-13.8	Black
17	28.581M	32.8	+1.0	+0.3	+0.0	34.1	48.0	-13.9	Black
18	14.832M	33.3	+0.5	+0.3	+0.0	34.1	48.0	-13.9	Black
19	11.615M	33.6	+0.3	+0.2	+0.0	34.1	48.0	-13.9	Black
20	27.516M	32.8	+0.9	+0.3	+0.0	34.0	48.0	-14.0	Black
21	25.476M	32.9	+0.7	+0.4	+0.0	34.0	48.0	-14.0	Black
22	24.323M	33.0	+0.7	+0.3	+0.0	34.0	48.0	-14.0	Black
23	20.154M	33.1	+0.5	+0.4	+0.0	34.0	48.0	-14.0	Black
24	17.138M	33.2	+0.5	+0.3	+0.0	34.0	48.0	-14.0	Black
25	15.630M	33.3	+0.5	+0.2	+0.0	34.0	48.0	-14.0	Black
26	14.566M	33.2	+0.5	+0.3	+0.0	34.0	48.0	-14.0	Black
27	9.039M	33.6	+0.2	+0.2	+0.0	34.0	48.0	-14.0	Black
28	20.686M	33.0	+0.5	+0.4	+0.0	33.9	48.0	-14.1	Black
29	18.202M	33.1	+0.5	+0.3	+0.0	33.9	48.0	-14.1	Black
30	21.662M	32.9	+0.6	+0.3	+0.0	33.8	48.0	-14.2	Black
31	12.969M	33.1	+0.4	+0.3	+0.0	33.8	48.0	-14.2	Black
32	11.442M	33.3	+0.3	+0.2	+0.0	33.8	48.0	-14.2	Black
33	6.711M	33.5	+0.1	+0.2	+0.0	33.8	48.0	-14.2	Black
34	469.018k	33.7	+0.1	+0.0	+0.0	33.8	48.0	-14.2	Black
35	459.509k	33.7	+0.1	+0.0	+0.0	33.8	48.0	-14.2	Black
36	454.755k	33.7	+0.1	+0.0	+0.0	33.8	48.0	-14.2	Black

Report No: FC99-032A Page 63 of 85

37	26.895M	32.4	+0.9	+0.4	+0.0	33.7	48.0	-14.3	Black
38	26.496M	32.5	+0.8	+0.4	+0.0	33.7	48.0	-14.3	Black
39	21.839M	32.8	+0.6	+0.3	+0.0	33.7	48.0	-14.3	Black
40	20.775M	32.8	+0.5	+0.4	+0.0	33.7	48.0	-14.3	Black
41	16.473M	33.0	+0.5	+0.2	+0.0	33.7	48.0	-14.3	Black
42	9.659M	33.3	+0.2	+0.2	+0.0	33.7	48.0	-14.3	Black
43	6.959M	33.4	+0.1	+0.2	+0.0	33.7	48.0	-14.3	Black
44	5.770M	33.5	+0.1	+0.1	+0.0	33.7	48.0	-14.3	Black
45	2.171M	33.6	+0.0	+0.1	+0.0	33.7	48.0	-14.3	Black
46	19.666M	32.7	+0.5	+0.4	+0.0	33.6	48.0	-14.4	Black
47	19.089M	32.7	+0.5	+0.4	+0.0	33.6	48.0	-14.4	Black
48	18.469M	32.8	+0.5	+0.3	+0.0	33.6	48.0	-14.4	Black
49	12.703M	33.0	+0.4	+0.2	+0.0	33.6	48.0	-14.4	Black
50	10.600M	33.2	+0.2	+0.2	+0.0	33.6	48.0	-14.4	Black
51	10.426M	33.2	+0.2	+0.2	+0.0	33.6	48.0	-14.4	Black
52	3.887M	33.3	+0.1	+0.2	+0.0	33.6	48.0	-14.4	Black
53	644.935k	33.6	+0.0	+0.0	+0.0	33.6	48.0	-14.4	Black
54	19.267M	32.6	+0.5	+0.4	+0.0	33.5	48.0	-14.5	Black
55	16.828M	32.8	+0.5	+0.2	+0.0	33.5	48.0	-14.5	Black
56	14.255M	32.7	+0.5	+0.3	+0.0	33.5	48.0	-14.5	Black
57	13.590M	32.8	+0.4	+0.3	+0.0	33.5	48.0	-14.5	Black
58	12.061M	33.0	+0.3	+0.2	+0.0	33.5	48.0	-14.5	Black
59	10.253M	33.1	+0.2	+0.2	+0.0	33.5	48.0	-14.5	Black
60	7.306M	33.1	+0.2	+0.2	+0.0	33.5	48.0	-14.5	Black

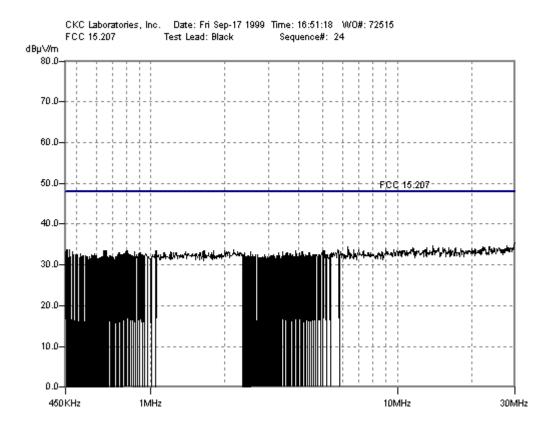
Report No: FC99-032A Page 64 of 85

61	5.027M	33.2	+0.1	+0.2	+0.0	33.5	48.0	-14.5	Black
62	5.002M	33.2	+0.1	+0.2	+0.0	33.5	48.0	-14.5	Black
63	2.000M	33.5	+0.0	+0.0	+0.0	33.5	48.0	-14.5	Black
64	1.810M	33.5	+0.0	+0.0	+0.0	33.5	48.0	-14.5	Black
65	1.643M	33.5	+0.0	+0.0	+0.0	33.5	48.0	-14.5	Black
66	1.049M	33.5	+0.0	+0.0	+0.0	33.5	48.0	-14.5	Black
67	1.044M	33.5	+0.0	+0.0	+0.0	33.5	48.0	-14.5	Black
68	10.922M	32.9	+0.3	+0.2	+0.0	33.4	48.0	-14.6	Black
69	9.956M	33.0	+0.2	+0.2	+0.0	33.4	48.0	-14.6	Black
70	801.834k	33.2	+0.2	+0.0	+0.0	33.4	48.0	-14.6	Black
71	797.079k	33.2	+0.2	+0.0	+0.0	33.4	48.0	-14.6	Black
72	659.199k	33.4	+0.0	+0.0	+0.0	33.4	48.0	-14.6	Black
73	654.444k	33.4	+0.0	+0.0	+0.0	33.4	48.0	-14.6	Black
74	20.509M	32.4	+0.5	+0.4	+0.0	33.3	48.0	-14.7	Black
75	16.074M	32.6	+0.5	+0.2	+0.0	33.3	48.0	-14.7	Black
76	13.767M	32.6	+0.4	+0.3	+0.0	33.3	48.0	-14.7	Black
77	9.114M	32.9	+0.2	+0.2	+0.0	33.3	48.0	-14.7	Black
78	2.550M	33.1	+0.1	+0.1	+0.0	33.3	48.0	-14.7	Black
79	2.076M	33.3	+0.0	+0.0	+0.0	33.3	48.0	-14.7	Black
80	1.629M	33.3	+0.0	+0.0	+0.0	33.3	48.0	-14.7	Black
81	1.382M	33.3	+0.0	+0.0	+0.0	33.3	48.0	-14.7	Black
82	1.201M	33.2	+0.0	+0.1	+0.0	33.3	48.0	-14.7	Black
83	478.527k	33.2	+0.1	+0.0	+0.0	33.3	48.0	-14.7	Black
84	11.913M	32.7	+0.3	+0.2	+0.0	33.2	48.0	-14.8	Black

Report No: FC99-032A Page 65 of 85

85	11.813M	32.7	+0.3	+0.2	+0.0	33.2	48.0	-14.8	Black
86	8.693M	32.8	+0.2	+0.2	+0.0	33.2	48.0	-14.8	Black
87	7.256M	32.8	+0.2	+0.2	+0.0	33.2	48.0	-14.8	Black
88	5.869M	33.0	+0.1	+0.1	+0.0	33.2	48.0	-14.8	Black
89	4.110M	32.9	+0.1	+0.2	+0.0	33.2	48.0	-14.8	Black
90	3.417M	33.0	+0.1	+0.1	+0.0	33.2	48.0	-14.8	Black
91	2.257M	33.1	+0.1	+0.0	+0.0	33.2	48.0	-14.8	Black
92	2.024M	33.2	+0.0	+0.0	+0.0	33.2	48.0	-14.8	Black
93	858.888k	33.1	+0.1	+0.0	+0.0	33.2	48.0	-14.8	Black
94	450.000k	33.1	+0.1	+0.0	+0.0	33.2	48.0	-14.8	Black
95	1.596M	33.1	+0.0	+0.0	+0.0	33.1	48.0	-14.9	Black
96	1.582M	33.1	+0.0	+0.0	+0.0	33.1	48.0	-14.9	Black
97	1.277M	33.0	+0.0	+0.1	+0.0	33.1	48.0	-14.9	Black
98	1.130M	33.1	+0.0	+0.0	+0.0	33.1	48.0	-14.9	Black
99	744.780k	33.0	+0.1	+0.0	+0.0	33.1	48.0	-14.9	Black
100	740.025k	33.0	+0.1	+0.0	+0.0	33.1	48.0	-14.9	Black

Report No: FC99-032A Page 66 of 85



Report No: FC99-032A Page 67 of 85 Test Location: CKC Laboratories, Inc. • 22105 Wilson River Hwy • Tillamook, OR 97141 • 800 500-4EMC

Customer: Advanced Electronics Group, Inc.

Specification: FCC 15.207

Work Order #: 72515 Date: Sat Sep-18-1999

Test Type: Conducted Emissions Time: 16:55:19
Equipment: Video Audio Transmitter Sequence#: 25

Manufacturer: Advanced Electronics Group, Inc. Tested By: Adam Ross

Model: TX888MOD-O

S/N: none

### Equipment Under Test (\* = EUT):

Function	Manufacturer	Model #	S/N
Video Audio Transmitter*	Advanced Electronics Group, Inc.	TX888MOD-O	none

#### Support Devices:

Function	Manufacturer	Model #	S/I	N	
Power Supply (12 VCD	, 400 mA) RF Link Tec	chnology	LPS-1240	none	

#### Test Conditions / Notes:

The EUT is placed on the test table with the antenna-port connected to the spectrum analyzer and the camera adjacent to the transmitter. The camera is providing modulation of the video carrier. A 2.5 kHz tone from the function generator is modulating the audio carrier. The transmitter is continuously transmitting. The frequency range of investigation is 9 kHz to 26 GHz. The temperature is 70°F. The humidity is 40%.

Measur	ement Data:	Re	eading 1	isted by m	argin.			Test Lead	d: White		
				L373w	cb0c						
#	Freq	Rdng					Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	14.521M	34.6		+0.5	+0.3		+0.0	35.4	48.0	-12.6	White
2	29.911M	33.7		+1.0	+0.3		+0.0	35.0	48.0	-13.0	White
3	27.028M	33.7		+0.9	+0.3		+0.0	34.9	48.0	-13.1	White
4	4.234M	34.6		+0.1	+0.2		+0.0	34.9	48.0	-13.1	White
5	15.586M	34.1		+0.5	+0.2		+0.0	34.8	48.0	-13.2	White
6	28.403M	33.4		+1.0	+0.3		+0.0	34.7	48.0	-13.3	White
7	23.259M	33.5		+0.8	+0.3		+0.0	34.6	48.0	-13.4	White
8	29.157M	33.2		+1.0	+0.3		+0.0	34.5	48.0	-13.5	White
9	17.404M	33.6		+0.6	+0.3		+0.0	34.5	48.0	-13.5	White
10	20.730M	33.3		+0.7	+0.4		+0.0	34.4	48.0	-13.6	White
11	2.176M	34.2		+0.1	+0.1		+0.0	34.4	48.0	-13.6	White

Report No: FC99-032A Page 68 of 85

12	26.629M	33.0	+0.9	+0.4	+0.0	34.3	48.0	-13.7	White
13	25.920M	33.0	+0.9	+0.4	+0.0	34.3	48.0	-13.7	White
14	17.582M	33.4	+0.6	+0.3	+0.0	34.3	48.0	-13.7	White
15	12.836M	33.6	+0.5	+0.2	+0.0	34.3	48.0	-13.7	White
16	830.361k	34.2	+0.1	+0.0	+0.0	34.3	48.0	-13.7	White
17	22.948M	33.1	+0.8	+0.3	+0.0	34.2	48.0	-13.8	White
18	21.573M	33.1	+0.8	+0.3	+0.0	34.2	48.0	-13.8	White
19	5.027M	33.9	+0.1	+0.2	+0.0	34.2	48.0	-13.8	White
20	28.226M	32.8	+1.0	+0.3	+0.0	34.1	48.0	-13.9	White
21	25.387M	32.8	+0.9	+0.4	+0.0	34.1	48.0	-13.9	White
22	13.501M	33.3	+0.5	+0.3	+0.0	34.1	48.0	-13.9	White
23	10.154M	33.5	+0.4	+0.2	+0.0	34.1	48.0	-13.9	White
24	1.368M	34.0	+0.1	+0.0	+0.0	34.1	48.0	-13.9	White
25	545.090k	34.1	+0.0	+0.0	+0.0	34.1	48.0	-13.9	White
26	29.556M	32.7	+1.0	+0.3	+0.0	34.0	48.0	-14.0	White
27	24.678M	32.8	+0.9	+0.3	+0.0	34.0	48.0	-14.0	White
28	24.057M	32.8	+0.9	+0.3	+0.0	34.0	48.0	-14.0	White
29	21.174M	32.9	+0.8	+0.3	+0.0	34.0	48.0	-14.0	White
30	602.144k	33.9	+0.1	+0.0	+0.0	34.0	48.0	-14.0	White
31	597.390k	33.9	+0.1	+0.0	+0.0	34.0	48.0	-14.0	White
32	27.694M	32.6	+1.0	+0.3	+0.0	33.9	48.0	-14.1	White
33	22.105M	32.8	+0.8	+0.3	+0.0	33.9	48.0	-14.1	White
34	21.928M	32.8	+0.8	+0.3	+0.0	33.9	48.0	-14.1	White
35	20.597M	32.8	+0.7	+0.4	+0.0	33.9	48.0	-14.1	White

Report No: FC99-032A Page 69 of 85

36	13.191M	33.1	+0.5	+0.3	+0.0	33.9	48.0	-14.1	White
37	2.280M	33.8	+0.1	+0.0	+0.0	33.9	48.0	-14.1	White
38	19.356M	32.7	+0.7	+0.4	+0.0	33.8	48.0	-14.2	White
39	18.114M	32.9	+0.6	+0.3	+0.0	33.8	48.0	-14.2	White
40	16.207M	33.0	+0.6	+0.2	+0.0	33.8	48.0	-14.2	White
41	14.832M	33.0	+0.5	+0.3	+0.0	33.8	48.0	-14.2	White
42	10.501M	33.2	+0.4	+0.2	+0.0	33.8	48.0	-14.2	White
43	583.126k	33.7	+0.1	+0.0	+0.0	33.8	48.0	-14.2	White
44	19.799M	32.6	+0.7	+0.4	+0.0	33.7	48.0	-14.3	White
45	18.779M	32.7	+0.7	+0.3	+0.0	33.7	48.0	-14.3	White
46	18.469M	32.8	+0.6	+0.3	+0.0	33.7	48.0	-14.3	White
47	14.211M	32.9	+0.5	+0.3	+0.0	33.7	48.0	-14.3	White
48	13.723M	32.9	+0.5	+0.3	+0.0	33.7	48.0	-14.3	White
49	13.412M	32.9	+0.5	+0.3	+0.0	33.7	48.0	-14.3	White
50	12.703M	33.0	+0.5	+0.2	+0.0	33.7	48.0	-14.3	White
51	10.080M	33.1	+0.4	+0.2	+0.0	33.7	48.0	-14.3	White
52	8.767M	33.2	+0.3	+0.2	+0.0	33.7	48.0	-14.3	White
53	8.445M	33.3	+0.3	+0.1	+0.0	33.7	48.0	-14.3	White
54	5.894M	33.4	+0.2	+0.1	+0.0	33.7	48.0	-14.3	White
55	2.500M	33.6	+0.1	+0.0	+0.0	33.7	48.0	-14.3	White
56	2.476M	33.6	+0.1	+0.0	+0.0	33.7	48.0	-14.3	White
57	1.933M	33.5	+0.1	+0.1	+0.0	33.7	48.0	-14.3	White
58	1.800M	33.6	+0.1	+0.0	+0.0	33.7	48.0	-14.3	White
59	1.696M	33.6	+0.1	+0.0	+0.0	33.7	48.0	-14.3	White

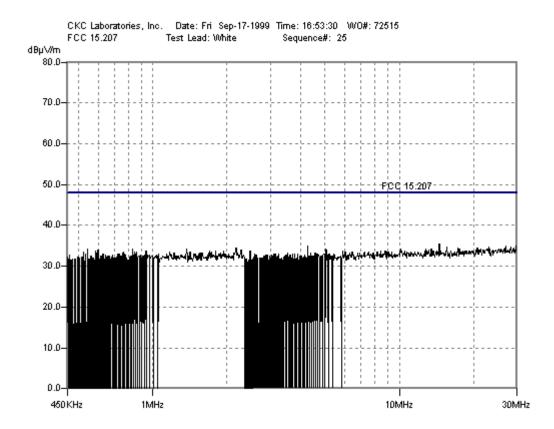
Report No: FC99-032A Page 70 of 85

	60	944.469k	33.6	+0.1	+0.0	+0.0	33.7	48.0	-14.3	White
	61	939.715k	33.6	+0.1	+0.0	+0.0	33.7	48.0	-14.3	White
	62	18.291M	32.7	+0.6	+0.3	+0.0	33.6	48.0	-14.4	White
	63	14.344M	32.8	+0.5	+0.3	+0.0	33.6	48.0	-14.4	White
	64	11.169M	33.0	+0.4	+0.2	+0.0	33.6	48.0	-14.4	White
	65	9.386M	33.0	+0.4	+0.2	+0.0	33.6	48.0	-14.4	White
	66	8.123M	33.2	+0.3	+0.1	+0.0	33.6	48.0	-14.4	White
	67	7.231M	33.1	+0.3	+0.2	+0.0	33.6	48.0	-14.4	White
	68	6.042M	33.3	+0.2	+0.1	+0.0	33.6	48.0	-14.4	White
	69	1.168M	33.4	+0.1	+0.1	+0.0	33.6	48.0	-14.4	White
	70	526.072k	33.6	+0.0	+0.0	+0.0	33.6	48.0	-14.4	White
	71	521.318k	33.6	+0.0	+0.0	+0.0	33.6	48.0	-14.4	White
	72	17.759M	32.6	+0.6	+0.3	+0.0	33.5	48.0	-14.5	White
	73	11.962M	32.9	+0.4	+0.2	+0.0	33.5	48.0	-14.5	White
	74	11.615M	32.9	+0.4	+0.2	+0.0	33.5	48.0	-14.5	White
	75	8.940M	32.9	+0.4	+0.2	+0.0	33.5	48.0	-14.5	White
	76	7.553M	33.1	+0.3	+0.1	+0.0	33.5	48.0	-14.5	White
	77	6.488M	33.1	+0.2	+0.2	+0.0	33.5	48.0	-14.5	White
	78	6.389M	33.2	+0.2	+0.1	+0.0	33.5	48.0	-14.5	White
	79	1.415M	33.4	+0.1	+0.0	+0.0	33.5	48.0	-14.5	White
	80	858.888k	33.4	+0.1	+0.0	+0.0	33.5	48.0	-14.5	White
	81	839.870k	33.4	+0.1	+0.0	+0.0	33.5	48.0	-14.5	White
	82	16.872M	32.6	+0.6	+0.2	+0.0	33.4	48.0	-14.6	White
	83	10.773M	32.8	+0.4	+0.2	+0.0	33.4	48.0	-14.6	White
L										

Report No: FC99-032A Page 71 of 85

84	9.089M	32.8	+0.4	+0.2	+0.0	33.4	48.0	-14.6	White
85	1.734M	33.3	+0.1	+0.0	+0.0	33.4	48.0	-14.6	White
86	763.798k	33.3	+0.1	+0.0	+0.0	33.4	48.0	-14.6	White
87	14.965M	32.5	+0.5	+0.3	+0.0	33.3	48.0	-14.7	White
88	11.863M	32.7	+0.4	+0.2	+0.0	33.3	48.0	-14.7	White
89	6.909M	32.9	+0.2	+0.2	+0.0	33.3	48.0	-14.7	White
90	6.290M	33.0	+0.2	+0.1	+0.0	33.3	48.0	-14.7	White
91	2.138M	33.2	+0.1	+0.0	+0.0	33.3	48.0	-14.7	White
92	1.895M	33.1	+0.1	+0.1	+0.0	33.3	48.0	-14.7	White
93	1.215M	33.1	+0.1	+0.1	+0.0	33.3	48.0	-14.7	White
94	4.556M	32.9	+0.1	+0.2	+0.0	33.2	48.0	-14.8	White
95	4.383M	32.9	+0.1	+0.2	+0.0	33.2	48.0	-14.8	White
96	3.516M	32.9	+0.1	+0.2	+0.0	33.2	48.0	-14.8	White
97	2.219M	33.0	+0.1	+0.1	+0.0	33.2	48.0	-14.8	White
98	1.586M	33.1	+0.1	+0.0	+0.0	33.2	48.0	-14.8	White
99	1.553M	33.1	+0.1	+0.0	+0.0	33.2	48.0	-14.8	White
100	754.289k	33.1	+0.1	+0.0	+0.0	33.2	48.0	-14.8	White
1									

Report No: FC99-032A Page 72 of 85



Report No: FC99-032A Page 73 of 85 Test Location: CKC Laboratories, Inc. • 22105 Wilson River Hwy • Tillamook, OR 97141 • 800 500-4EMC

Customer: Advanced Electronics Group, Inc.

Specification: FCC 15.207

Work Order #: 72515 Date: Sat Sep-18-1999

Test Type: Conducted Emissions Time: 16:48:23
Equipment: Video Audio Transmitter Sequence#: 22

Manufacturer: Advanced Electronics Group, Inc. Tested By: Adam Ross

Model: TX888MOD-P

S/N: none

# Equipment Under Test (\* = EUT):

Function	Manufacturer	Model #	S/N
Video Audio Transmitter*	Advanced Electronics Group, Inc.	TX888MOD-P	none

### Support Devices:

Function	Manufacturer	Model #	S/I	N
Power Supply (12 VCD	, 400 mA) RF Link Tec	chnology	LPS-1240	none

## Test Conditions / Notes:

The EUT is placed on the test table with the antenna-port connected to the spectrum analyzer and the camera adjacent to the transmitter. The camera is providing modulation of the video carrier. A 2.5 kHz tone from the function generator is modulating the audio carrier. The transmitter is continuously transmitting. The frequency range of investigation is 9 kHz to 26 GHz. The temperature is 70°F. The humidity is 40%.

Measur	ement Data:	Re	eading	listed by m	argin.			Test Lead	d: White		
#	Freq MHz	Rdng dBµV	dB	L373w dB	cb0c dB	dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	14.832M	34.3		+0.5	+0.3		+0.0	35.1	48.0	-12.9	White
2	2.550M	34.8		+0.1	+0.1		+0.0	35.0	48.0	-13.0	White
3	21.662M	33.8		+0.8	+0.3		+0.0	34.9	48.0	-13.1	White
4	19.710M	33.8		+0.7	+0.4		+0.0	34.9	48.0	-13.1	White
5	2.525M	34.8		+0.1	+0.0		+0.0	34.9	48.0	-13.1	White
6	28.137M	33.3		+1.0	+0.3		+0.0	34.6	48.0	-13.4	White
7	27.738M	33.3		+1.0	+0.3		+0.0	34.6	48.0	-13.4	White
8	23.436M	33.5		+0.8	+0.3		+0.0	34.6	48.0	-13.4	White
9	22.194M	33.5		+0.8	+0.3		+0.0	34.6	48.0	-13.4	White
10	24.367M	33.3		+0.9	+0.3		+0.0	34.5	48.0	-13.5	White
11	23.613M	33.4		+0.8	+0.3		+0.0	34.5	48.0	-13.5	White

Report No: FC99-032A Page 74 of 85

12	20.509M	33.4	+0.7	+0.4	+0.0	34.5	48.0	-13.5	White
13	17.759M	33.6	+0.6	+0.3	+0.0	34.5	48.0	-13.5	White
14	6.117M	34.2	+0.2	+0.1	+0.0	34.5	48.0	-13.5	White
15	25.299M	33.0	+0.9	+0.4	+0.0	34.3	48.0	-13.7	White
16	19.400M	33.2	+0.7	+0.4	+0.0	34.3	48.0	-13.7	White
17	29.645M	32.9	+1.0	+0.3	+0.0	34.2	48.0	-13.8	White
18	26.452M	32.9	+0.9	+0.4	+0.0	34.2	48.0	-13.8	White
19	20.243M	33.1	+0.7	+0.4	+0.0	34.2	48.0	-13.8	White
20	23.037M	33.0	+0.8	+0.3	+0.0	34.1	48.0	-13.9	White
21	13.412M	33.3	+0.5	+0.3	+0.0	34.1	48.0	-13.9	White
22	9.510M	33.5	+0.4	+0.2	+0.0	34.1	48.0	-13.9	White
23	28.936M	32.7	+1.0	+0.3	+0.0	34.0	48.0	-14.0	White
24	28.403M	32.7	+1.0	+0.3	+0.0	34.0	48.0	-14.0	White
25	26.895M	32.7	+0.9	+0.4	+0.0	34.0	48.0	-14.0	White
26	26.186M	32.7	+0.9	+0.4	+0.0	34.0	48.0	-14.0	White
27	19.178M	32.9	+0.7	+0.4	+0.0	34.0	48.0	-14.0	White
28	13.634M	33.2	+0.5	+0.3	+0.0	34.0	48.0	-14.0	White
29	11.343M	33.4	+0.4	+0.2	+0.0	34.0	48.0	-14.0	White
30	1.187M	33.8	+0.1	+0.1	+0.0	34.0	48.0	-14.0	White
31	22.371M	32.8	+0.8	+0.3	+0.0	33.9	48.0	-14.1	White
32	21.085M	32.9	+0.7	+0.3	+0.0	33.9	48.0	-14.1	White
33	19.001M	32.8	+0.7	+0.4	+0.0	33.9	48.0	-14.1	White
34	18.646M	32.9	+0.7	+0.3	+0.0	33.9	48.0	-14.1	White
35	18.380M	33.0	+0.6	+0.3	+0.0	33.9	48.0	-14.1	White
36	10.625M	33.3	+0.4	+0.2	+0.0	33.9	48.0	-14.1	White
37	9.262M	33.3	+0.4	+0.2	+0.0	33.9	48.0	-14.1	White
L									

Report No: FC99-032A Page 75 of 85

38	26.008M	32.5	+0.9	+0.4	+0.0	33.8	48.0	-14.2	White
39	17.493M	32.9	+0.6	+0.3	+0.0	33.8	48.0	-14.2	White
40	16.783M	33.0	+0.6	+0.2	+0.0	33.8	48.0	-14.2	White
41	15.541M	33.1	+0.5	+0.2	+0.0	33.8	48.0	-14.2	White
42	13.191M	33.0	+0.5	+0.3	+0.0	33.8	48.0	-14.2	White
43	12.880M	33.1	+0.5	+0.2	+0.0	33.8	48.0	-14.2	White
44	20.686M	32.6	+0.7	+0.4	+0.0	33.7	48.0	-14.3	White
45	16.074M	33.0	+0.5	+0.2	+0.0	33.7	48.0	-14.3	White
46	8.494M	33.2	+0.3	+0.2	+0.0	33.7	48.0	-14.3	White
47	4.135M	33.4	+0.1	+0.2	+0.0	33.7	48.0	-14.3	White
48	2.209M	33.5	+0.1	+0.1	+0.0	33.7	48.0	-14.3	White
49	23.791M	32.4	+0.9	+0.3	+0.0	33.6	48.0	-14.4	White
50	18.823M	32.6	+0.7	+0.3	+0.0	33.6	48.0	-14.4	White
51	17.315M	32.7	+0.6	+0.3	+0.0	33.6	48.0	-14.4	White
52	15.098M	32.9	+0.5	+0.2	+0.0	33.6	48.0	-14.4	White
53	12.525M	32.9	+0.5	+0.2	+0.0	33.6	48.0	-14.4	White
54	7.330M	33.1	+0.3	+0.2	+0.0	33.6	48.0	-14.4	White
55	2.946M	33.4	+0.1	+0.1	+0.0	33.6	48.0	-14.4	White
56	2.105M	33.5	+0.1	+0.0	+0.0	33.6	48.0	-14.4	White
57	1.952M	33.5	+0.1	+0.0	+0.0	33.6	48.0	-14.4	White
58	1.762M	33.5	+0.1	+0.0	+0.0	33.6	48.0	-14.4	White
59	1.035M	33.5	+0.1	+0.0	+0.0	33.6	48.0	-14.4	White

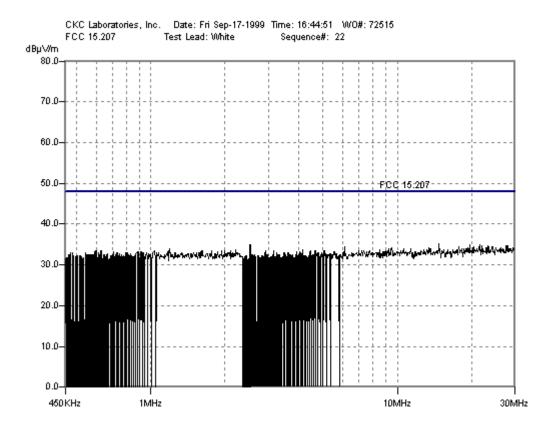
Report No: FC99-032A Page 76 of 85

60	602.144k	33.5	+0.1	+0.0	+0.0	33.6	48.0	-14.4	White
61	597.390k	33.5	+0.1	+0.0	+0.0	33.6	48.0	-14.4	White
62	14.477M	32.7	+0.5	+0.3	+0.0	33.5	48.0	-14.5	White
63	8.990M	32.9	+0.4	+0.2	+0.0	33.5	48.0	-14.5	White
64	7.206M	33.0	+0.3	+0.2	+0.0	33.5	48.0	-14.5	White
65	6.984M	33.1	+0.2	+0.2	+0.0	33.5	48.0	-14.5	White
66	4.457M	33.2	+0.1	+0.2	+0.0	33.5	48.0	-14.5	White
67	2.000M	33.4	+0.1	+0.0	+0.0	33.5	48.0	-14.5	White
68	625.917k	33.4	+0.1	+0.0	+0.0	33.5	48.0	-14.5	White
69	10.377M	32.8	+0.4	+0.2	+0.0	33.4	48.0	-14.6	White
70	9.188M	32.8	+0.4	+0.2	+0.0	33.4	48.0	-14.6	White
71	7.727M	33.0	+0.3	+0.1	+0.0	33.4	48.0	-14.6	White
72	5.052M	33.1	+0.1	+0.2	+0.0	33.4	48.0	-14.6	White
73	4.680M	33.1	+0.1	+0.2	+0.0	33.4	48.0	-14.6	White
74	4.655M	33.1	+0.1	+0.2	+0.0	33.4	48.0	-14.6	White
75	3.144M	33.2	+0.1	+0.1	+0.0	33.4	48.0	-14.6	White
76	1.615M	33.3	+0.1	+0.0	+0.0	33.4	48.0	-14.6	White
77	14.388M	32.5	+0.5	+0.3	+0.0	33.3	48.0	-14.7	White
78	10.823M	32.7	+0.4	+0.2	+0.0	33.3	48.0	-14.7	White
79	10.129M	32.7	+0.4	+0.2	+0.0	33.3	48.0	-14.7	White
80	9.931M	32.7	+0.4	+0.2	+0.0	33.3	48.0	-14.7	White
81	8.742M	32.8	+0.3	+0.2	+0.0	33.3	48.0	-14.7	White
82	7.652M	32.9	+0.3	+0.1	+0.0	33.3	48.0	-14.7	White
83	7.553M	32.9	+0.3	+0.1	+0.0	33.3	48.0	-14.7	White

Report No: FC99-032A Page 77 of 85

84	5.547M	33.1	+0.1	+0.1	+0.0	33.3	48.0	-14.7	White
85	3.912M	33.0	+0.1	+0.2	+0.0	33.3	48.0	-14.7	White
86	1.168M	33.1	+0.1	+0.1	+0.0	33.3	48.0	-14.7	White
87	16.473M	32.4	+0.6	+0.2	+0.0	33.2	48.0	-14.8	White
88	16.340M	32.4	+0.6	+0.2	+0.0	33.2	48.0	-14.8	White
89	11.863M	32.6	+0.4	+0.2	+0.0	33.2	48.0	-14.8	White
90	11.764M	32.6	+0.4	+0.2	+0.0	33.2	48.0	-14.8	White
91	8.841M	32.7	+0.3	+0.2	+0.0	33.2	48.0	-14.8	White
92	4.036M	32.9	+0.1	+0.2	+0.0	33.2	48.0	-14.8	White
93	1.862M	33.0	+0.1	+0.1	+0.0	33.2	48.0	-14.8	White
94	1.591M	33.1	+0.1	+0.0	+0.0	33.2	48.0	-14.8	White
95	911.188k	33.1	+0.1	+0.0	+0.0	33.2	48.0	-14.8	White
96	887.415k	33.1	+0.1	+0.0	+0.0	33.2	48.0	-14.8	White
97	882.661k	33.1	+0.1	+0.0	+0.0	33.2	48.0	-14.8	White
98	706.744k	33.1	+0.1	+0.0	+0.0	33.2	48.0	-14.8	White
99	4.928M	32.8	+0.1	+0.2	+0.0	33.1	48.0	-14.9	White
100	4.061M	32.8	+0.1	+0.2	+0.0	33.1	48.0	-14.9	White
1									

Report No: FC99-032A Page 78 of 85



Report No: FC99-032A Page 79 of 85 Test Location: CKC Laboratories, Inc. • 22105 Wilson River Hwy • Tillamook, OR 97141 • 800 500-4EMC

Customer: Advanced Electronics Group, Inc.

Specification: FCC 15.207

Work Order #: 72515 Date: Sat Sep-18-1999

Test Type: Conducted Emissions Time: 16:50:45
Equipment: Video Audio Transmitter Sequence#: 23

Manufacturer: Advanced Electronics Group, Inc. Tested By: Adam Ross

Model: TX888MOD-P

S/N: none

# Equipment Under Test (\* = EUT):

Function	Manufacturer	Model #	S/N
Video Audio Transmitter*	Advanced Electronics Group, Inc.	TX888MOD-P	none

### Support Devices:

Function	Manufacturer	Model #	S/I	N
Power Supply (12 VCD	, 400 mA) RF Link Tec	chnology	LPS-1240	none

## Test Conditions / Notes:

The EUT is placed on the test table with the antenna-port connected to the spectrum analyzer and the camera adjacent to the transmitter. The camera is providing modulation of the video carrier. A 2.5 kHz tone from the function generator is modulating the audio carrier. The transmitter is continuously transmitting. The frequency range of investigation is 9 kHz to 26 GHz. The temperature is 70°F. The humidity is 40%.

Measur	ement Data:	R	eading lis	ted by 1	nargin.			Test Lead	d: Black		
#	Emag	Ddna	L373b		cb0c		Diat	Com	Cmaa	Monoin	Polar
#	Freq MHz	Rdng dBµV	dB	dB	dB	dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Ant
1	22.105M	33.9	+0.6		+0.3		+0.0	34.8	48.0	-13.2	Black
2	30.000M	33.3	+1.1		+0.3		+0.0	34.7	48.0	-13.3	Black
3	29.024M	33.4	+1.0		+0.3		+0.0	34.7	48.0	-13.3	Black
4	16.517M	34.0	+0.5		+0.2		+0.0	34.7	48.0	-13.3	Black
5	29.734M	33.2	+1.1		+0.3		+0.0	34.6	48.0	-13.4	Black
6	25.387M	33.5	+0.7		+0.4		+0.0	34.6	48.0	-13.4	Black
7	23.525M	33.7	+0.6		+0.3		+0.0	34.6	48.0	-13.4	Black
8	19.888M	33.7	+0.5		+0.4		+0.0	34.6	48.0	-13.4	Black
9	29.468M	33.1	+1.1		+0.3		+0.0	34.5	48.0	-13.5	Black
10	20.908M	33.6	+0.5		+0.4		+0.0	34.5	48.0	-13.5	Black
11	26.718M	33.2	+0.8		+0.4		+0.0	34.4	48.0	-13.6	Black

Report No: FC99-032A Page 80 of 85

12	2 1.634M	34.4	+0.0	+0.0	+0.0	34.4	48.0	-13.6	Black
13	3 28.049M	33.0	+1.0	+0.3	+0.0	34.3	48.0	-13.7	Black
14	4 26.274M	33.1	+0.8	+0.4	+0.0	34.3	48.0	-13.7	Black
1:	5 23.702M	33.3	+0.7	+0.3	+0.0	34.3	48.0	-13.7	Black
10	6 17.094M	33.5	+0.5	+0.3	+0.0	34.3	48.0	-13.7	Black
1'	7 15.719M	33.6	+0.5	+0.2	+0.0	34.3	48.0	-13.7	Black
13	8 14.078M	33.5	+0.5	+0.3	+0.0	34.3	48.0	-13.7	Black
19	9 23.037M	33.2	+0.6	+0.3	+0.0	34.1	48.0	-13.9	Black
20	0 22.549M	33.2	+0.6	+0.3	+0.0	34.1	48.0	-13.9	Black
2	1 20.243M	33.2	+0.5	+0.4	+0.0	34.1	48.0	-13.9	Black
22	2 15.187M	33.4	+0.5	+0.2	+0.0	34.1	48.0	-13.9	Black
2:	3 14.433M	33.3	+0.5	+0.3	+0.0	34.1	48.0	-13.9	Black
2	4 11.046M	33.6	+0.3	+0.2	+0.0	34.1	48.0	-13.9	Black
2:	5 7.454M	33.7	+0.2	+0.2	+0.0	34.1	48.0	-13.9	Black
20	6 3.318M	33.9	+0.1	+0.1	+0.0	34.1	48.0	-13.9	Black
2'	7 28.669M	32.7	+1.0	+0.3	+0.0	34.0	48.0	-14.0	Black
2	8 20.686M	33.1	+0.5	+0.4	+0.0	34.0	48.0	-14.0	Black
25	9 13.679M	33.3	+0.4	+0.3	+0.0	34.0	48.0	-14.0	Black
30	0 10.971M	33.5	+0.3	+0.2	+0.0	34.0	48.0	-14.0	Black
3	1 27.782M	32.7	+0.9	+0.3	+0.0	33.9	48.0	-14.1	Black
32	2 27.383M	32.7	+0.9	+0.3	+0.0	33.9	48.0	-14.1	Black
33	3 19.089M	33.0	+0.5	+0.4	+0.0	33.9	48.0	-14.1	Black
34	4 12.703M	33.3	+0.4	+0.2	+0.0	33.9	48.0	-14.1	Black
3:	5 27.073M	32.6	+0.9	+0.3	+0.0	33.8	48.0	-14.2	Black

Report No: FC99-032A Page 81 of 85

							10.0		
36	21.662M	32.9	+0.6	+0.3	+0.0	33.8	48.0	-14.2	Black
37	19.223M	32.9	+0.5	+0.4	+0.0	33.8	48.0	-14.2	Black
38	15.453M	33.1	+0.5	+0.2	+0.0	33.8	48.0	-14.2	Black
39	6.711M	33.5	+0.1	+0.2	+0.0	33.8	48.0	-14.2	Black
40	6.340M	33.6	+0.1	+0.1	+0.0	33.8	48.0	-14.2	Black
41	1.605M	33.8	+0.0	+0.0	+0.0	33.8	48.0	-14.2	Black
42	24.234M	32.7	+0.7	+0.3	+0.0	33.7	48.0	-14.3	Black
43	17.848M	32.9	+0.5	+0.3	+0.0	33.7	48.0	-14.3	Black
44	10.773M	33.2	+0.3	+0.2	+0.0	33.7	48.0	-14.3	Black
45	10.129M	33.3	+0.2	+0.2	+0.0	33.7	48.0	-14.3	Black
46	4.680M	33.4	+0.1	+0.2	+0.0	33.7	48.0	-14.3	Black
47	4.655M	33.4	+0.1	+0.2	+0.0	33.7	48.0	-14.3	Black
48	1.748M	33.7	+0.0	+0.0	+0.0	33.7	48.0	-14.3	Black
49	1.353M	33.7	+0.0	+0.0	+0.0	33.7	48.0	-14.3	Black
50	24.589M	32.6	+0.7	+0.3	+0.0	33.6	48.0	-14.4	Black
51	18.025M	32.8	+0.5	+0.3	+0.0	33.6	48.0	-14.4	Black
52	10.674M	33.2	+0.2	+0.2	+0.0	33.6	48.0	-14.4	Black
53	7.999M	33.3	+0.2	+0.1	+0.0	33.6	48.0	-14.4	Black
54	4.036M	33.3	+0.1	+0.2	+0.0	33.6	48.0	-14.4	Black
55	830.361k	33.4	+0.2	+0.0	+0.0	33.6	48.0	-14.4	Black
56	20.065M	32.6	+0.5	+0.4	+0.0	33.5	48.0	-14.5	Black
57	18.646M	32.7	+0.5	+0.3	+0.0	33.5	48.0	-14.5	Black
58	18.291M	32.7	+0.5	+0.3	+0.0	33.5	48.0	-14.5	Black
59	13.812M	32.8	+0.4	+0.3	+0.0	33.5	48.0	-14.5	Black

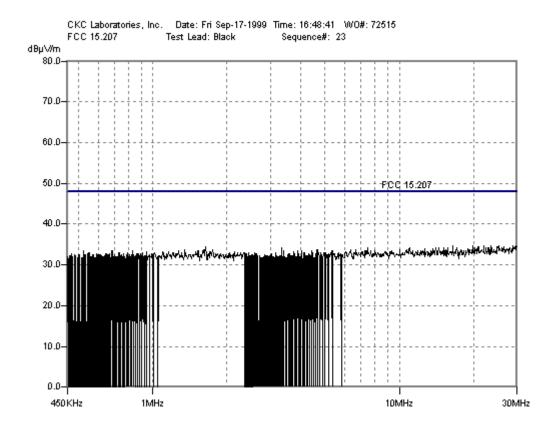
Report No: FC99-032A Page 82 of 85

60	13.412M	32.8	+0.4	+0.3	+0.0	33.5	48.0	-14.5	Black
61	12.481M	32.9	+0.4	+0.2	+0.0	33.5	48.0	-14.5	Black
62	11.863M	33.0	+0.3	+0.2	+0.0	33.5	48.0	-14.5	Black
63	7.281M	33.1	+0.2	+0.2	+0.0	33.5	48.0	-14.5	Black
64	5.374M	33.2	+0.1	+0.2	+0.0	33.5	48.0	-14.5	Black
65	5.349M	33.2	+0.1	+0.2	+0.0	33.5	48.0	-14.5	Black
66	1.529M	33.5	+0.0	+0.0	+0.0	33.5	48.0	-14.5	Black
67	687.726k	33.5	+0.0	+0.0	+0.0	33.5	48.0	-14.5	Black
68	682.971k	33.5	+0.0	+0.0	+0.0	33.5	48.0	-14.5	Black
69	12.210M	32.9	+0.3	+0.2	+0.0	33.4	48.0	-14.6	Black
70	11.368M	32.9	+0.3	+0.2	+0.0	33.4	48.0	-14.6	Black
71	9.386M	33.0	+0.2	+0.2	+0.0	33.4	48.0	-14.6	Black
72	7.702M	33.1	+0.2	+0.1	+0.0	33.4	48.0	-14.6	Black
73	4.432M	33.1	+0.1	+0.2	+0.0	33.4	48.0	-14.6	Black
74	3.887M	33.1	+0.1	+0.2	+0.0	33.4	48.0	-14.6	Black
75	3.392M	33.2	+0.1	+0.1	+0.0	33.4	48.0	-14.6	Black
76	1.277M	33.3	+0.0	+0.1	+0.0	33.4	48.0	-14.6	Black
77	526.072k	33.3	+0.1	+0.0	+0.0	33.4	48.0	-14.6	Black
78	16.340M	32.6	+0.5	+0.2	+0.0	33.3	48.0	-14.7	Black
79	16.118M	32.6	+0.5	+0.2	+0.0	33.3	48.0	-14.7	Black
80	13.013M	32.6	+0.4	+0.3	+0.0	33.3	48.0	-14.7	Black
81	12.348M	32.7	+0.4	+0.2	+0.0	33.3	48.0	-14.7	Black
82	11.665M	32.8	+0.3	+0.2	+0.0	33.3	48.0	-14.7	Black
83	9.188M	32.9	+0.2	+0.2	+0.0	33.3	48.0	-14.7	Black

Report No: FC99-032A Page 83 of 85

84	8.742M	32.9	+0.2	+0.2	+0.0	33.3	48.0	-14.7	Black
85	7.083M	32.9	+0.2	+0.2	+0.0	33.3	48.0	-14.7	Black
86	1.724M	33.3	+0.0	+0.0	+0.0	33.3	48.0	-14.7	Black
87	1.496M	33.3	+0.0	+0.0	+0.0	33.3	48.0	-14.7	Black
88	1.158M	33.2	+0.0	+0.1	+0.0	33.3	48.0	-14.7	Black
89	17.582M	32.4	+0.5	+0.3	+0.0	33.2	48.0	-14.8	Black
90	16.828M	32.5	+0.5	+0.2	+0.0	33.2	48.0	-14.8	Black
91	14.920M	32.4	+0.5	+0.3	+0.0	33.2	48.0	-14.8	Black
92	9.238M	32.8	+0.2	+0.2	+0.0	33.2	48.0	-14.8	Black
93	6.067M	33.0	+0.1	+0.1	+0.0	33.2	48.0	-14.8	Black
94	3.739M	32.9	+0.1	+0.2	+0.0	33.2	48.0	-14.8	Black
95	2.143M	33.2	+0.0	+0.0	+0.0	33.2	48.0	-14.8	Black
96	1.705M	33.2	+0.0	+0.0	+0.0	33.2	48.0	-14.8	Black
97	1.092M	33.2	+0.0	+0.0	+0.0	33.2	48.0	-14.8	Black
98	944.469k	33.1	+0.1	+0.0	+0.0	33.2	48.0	-14.8	Black
99	5.671M	32.9	+0.1	+0.1	+0.0	33.1	48.0	-14.9	Black
100	1.206M	33.0	+0.0	+0.1	+0.0	33.1	48.0	-14.9	Black

Report No: FC99-032A Page 84 of 85



Report No: FC99-032A Page 85 of 85