



# FCC Part 74H ISED PART RSS-210 Test Report

<b>APPLICANT</b>	<b>AUDIO-TECHNICA CORPORATION</b>
	<b>2-46-1 Nishi-Naruse, Machida Tokyo 194-8666 JAPAN</b>
<b>FCC ID</b>	<b>JFZT210BI</b>
<b>IC</b>	<b>1752B-T210BI</b>
<b>MODEL NUMBER</b>	<b>ATW-T210bI</b>
<b>PRODUCT DESCRIPTION</b>	BODY-PACK WIRELESS MICROPHONE TRANSMITTER
<b>STANDARD APPLIED</b>	CFR 47 Part 74
<b>DATE SAMPLE RECEIVED</b>	1/3/2020
<b>DATE TESTED</b>	1/21/2020
<b>TESTED BY</b>	Tim Royer
<b>APPROVED BY</b>	Franklin Rose
<b>TEST RESULTS</b>	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL

Report Number	Report Version	Description	Issue Date
33AUT20TestReport		Initial Issue	2/17/2020
	Rev1	Clerical Updates	5/20/2020
	Rev2	Added Maximum Deviation Page 3	5/29/2020
	Rev3	Clerical Updates	6/2/2020
	Rev4	Clerical Updates	6/4/2020

**THE ATTACHED REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN APPROVAL OF TIMCO ENGINEERING, INC.**

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## GENERAL REMARKS

### Summary

The device under test does:

- Fulfill the general approval requirements as identified in this test report and was selected by the customer.
- Not fulfill the general approval requirements as identified in this test report

### Attestations

This equipment has been tested in accordance with the standards identified in this test report. To the best of my knowledge and belief, these tests were performed using the measurement procedures described in this report.

All instrumentation and accessories used to test products for compliance to the indicated standards are calibrated regularly in accordance with ISO 17025 requirements.

I attest that the necessary measurements were made at:

**Timco Engineering Inc.**  
**849 NW State Road 45**  
**Newberry, FL 32669**  
**Designation #: US1070**

### Tested by:



**Name and Title** Tim Royer, Project Manager / EMC Testing Engineer  
**Date** 02/17/2020

### Reviewed and Approved by:



**Name and Title** Franklin Rose, Project Manager / EMC Testing Technician  
**Date** 02/17/2020

## GENERAL INFORMATION

<b>EUT Description</b>	<b>BODY-PACK WIRELESS MICROPHONE TRANSMITTER</b>
<b>FCC ID</b>	<b>JFZT210BI</b>
<b>IC</b>	<b>1752B-T210BI</b>
<b>Model Number</b>	<b>ATW-T210bI</b>
<b>Operating Frequency</b>	487.125-506.500 MHz
<b>Test Frequencies</b>	487.13, 494.38 and 505.75 MHz
<b>Modulation</b>	FM
<b>Maximum Deviation</b>	±40kHz
<b>EUT Power Source</b>	<input type="checkbox"/> 110-120Vac/50- 60Hz
	<input type="checkbox"/> DC Power
	<input checked="" type="checkbox"/> Battery Operated Exclusively
<b>Test Item</b>	<input type="checkbox"/> Prototype
	<input checked="" type="checkbox"/> Pre-Production
	<input type="checkbox"/> Production
<b>Type of Equipment</b>	<input type="checkbox"/> Fixed
	<input type="checkbox"/> Mobile
	<input checked="" type="checkbox"/> Portable
<b>Antenna Connector</b>	UFL
<b>Test Conditions</b>	The temperature was 26°C Relative humidity of 50%.
<b>Modification to the EUT</b>	No Modification to EUT.
<b>Test Exercise</b>	The EUT was placed in continuous transmit and was operated in "Test Mode" for digital emissions tests.
<b>Applicable Standards</b>	FCC CFR 47 Part 2, & 74 KDB 971168 D01 V02R02 KDB 206256 ANSI/TIA 603-D:2010 ANSI C63.4 2014 ANSI C63.26 2015
<b>Test Facility</b>	Timco Engineering Inc. at 849 NW State Road 45 Newberry, FL 32669 USA. <b>Designation #: US1070</b>

## RESULTS SUMMARY

<b>FCC Rule Part</b>	<b>ISED Rules Part</b>	<b>Requirement</b>	<b>Test Item</b>	<b>Result</b>
2.1046(a), 74.861(e)(1)(ii)	RSS-210 G.1 RSS-GEN	Conducted Power	RF Power Output	<b>PASS</b>
2.1049(c), 74.861(e)(5)	RSS-210 G.2 RSS-GEN	Operating Bandwidth	Occupied Bandwidth	<b>PASS</b>
2.1049(c), 74.861(e)(7)	RSS-210 G.4 RSS-GEN	Unwanted Emissions	Emission Mask	<b>PASS</b>
2.1053, 74.861(e)	RSS-210 RSS-GEN	Unwanted Emissions	Field Strength of Spurious Emissions	<b>PASS</b>
2.1055, 74.861(e)(4)	RSS-210 G.3 RSS-GEN	Frequency Tolerance	Frequency Stability	<b>PASS</b>

## RF POWER OUTPUT

**Rule Part No.:** 2.1046(a), 74.861(e) (1)(ii), RSS-210

### Requirement:

(e) For low power auxiliary stations operating in the 600 MHz duplex gap and the bands allocated for TV broadcasting, the following technical requirements apply:

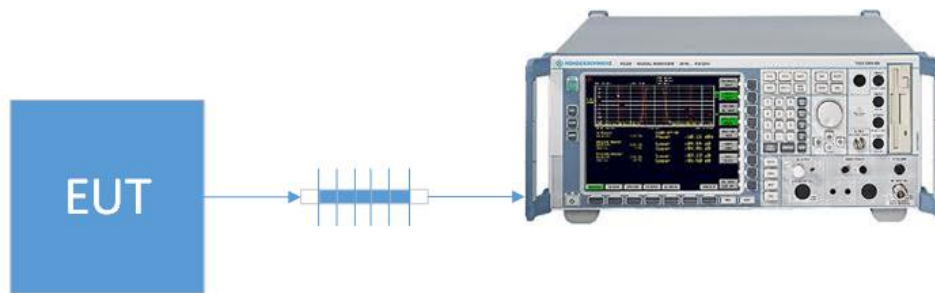
(1) The power may not exceed the following values.

(i) 54-72, 76-88, and 174-216 MHz bands: 50 mW EIRP

(ii) 470-608 and 614-698: 250 mW conducted power

**Procedure:** KDB 971168 D01 Average Power Measurements section 5.2.1  
TIA-603-E, 2.2.1

### Setup Diagram:



### Test Data: Mean Output Power Measurement Table

Tuned Freq. MHz	Power Output		
	Level (dBm)	Level (mW)	Margin (mW)
487.1300	13.98	25.0	225.0
494.3800	14.03	25.3	224.7
505.7500	14.15	26.0	224.0

### Results Meet Requirements

## OCCUPIED BANDWIDTH

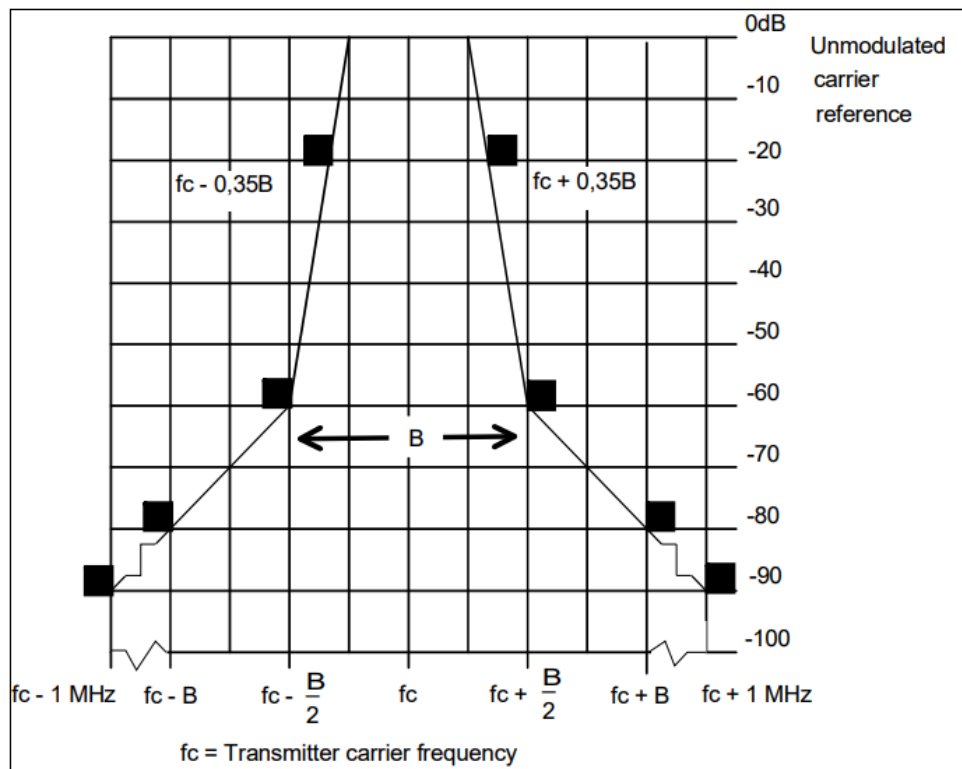
**Rule Part No.:** 2.1049(c), 74.802(c)(2), 74.861(e)(5)(7), RSS-210

### Requirement:

(e) For low power auxiliary stations operating in the 600 MHz duplex gap and the bands allocated for TV broadcasting, the following technical requirements apply:

(5) The operating bandwidth shall not exceed 200 kHz.

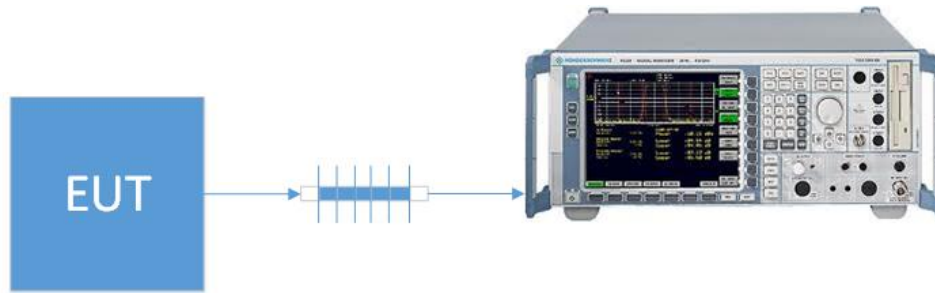
(7) Analog emissions within the band from one megahertz below to one megahertz above the carrier frequency shall comply with the emission mask in section 8.3.1.2 of the European Telecommunications Institute Standard ETSI EN 300 422-1 v1.4.2 (2011-08), Electromagnetic compatibility and Radio spectrum Matters (ERM); Wireless microphones in the 25 MHz to 3 GHz frequency range; part 1: Technical characteristics and methods of measurement. Digital emissions within the band from one megahertz below to one megahertz above the carrier frequency shall comply with the emission mask in section 8.3.2.2 (Figure 4) of the European Telecommunications Institute Standard ETSI EN 300 422-1 v1.4.2 (2011-08), Electromagnetic compatibility and Radio spectrum Matters (ERM); Wireless microphones in the 25 MHz to 3 GHz frequency range; part 1: Technical characteristics and methods of measurement. Beyond one megahertz below and above the carrier frequency, emissions shall comply with the limits specified in section 8.4 of ETSI EN 300 422-1 v1.4.2 (2011-08). The requirements of this paragraph (e)(7) shall not apply to applications for certification of equipment in these bands until nine months after release of the Commission's Channel Reassignment Public Notice, as defined in §73.3700(a)(2) of this chapter.



**Procedure:** KDB 971168 D01 Power Bandwidth 99% section 4.2  
 KDB 971168 D01 Spurious Emissions at antenna term section 6  
 ANSI C63.26, 5.4.4 (using Test Setup from TIA 603-E 2.2.11, below)

# OCCUPIED BANDWIDTH

## Setup Diagram:



## Test Data: Operating Bandwidth Measurement Table

Tuned Freq (MHz)	Measured 99% BW (KHz)	Margin (KHz)
487.13	51.1	148.9
494.38	51.1	148.9
505.75	51.1	148.9

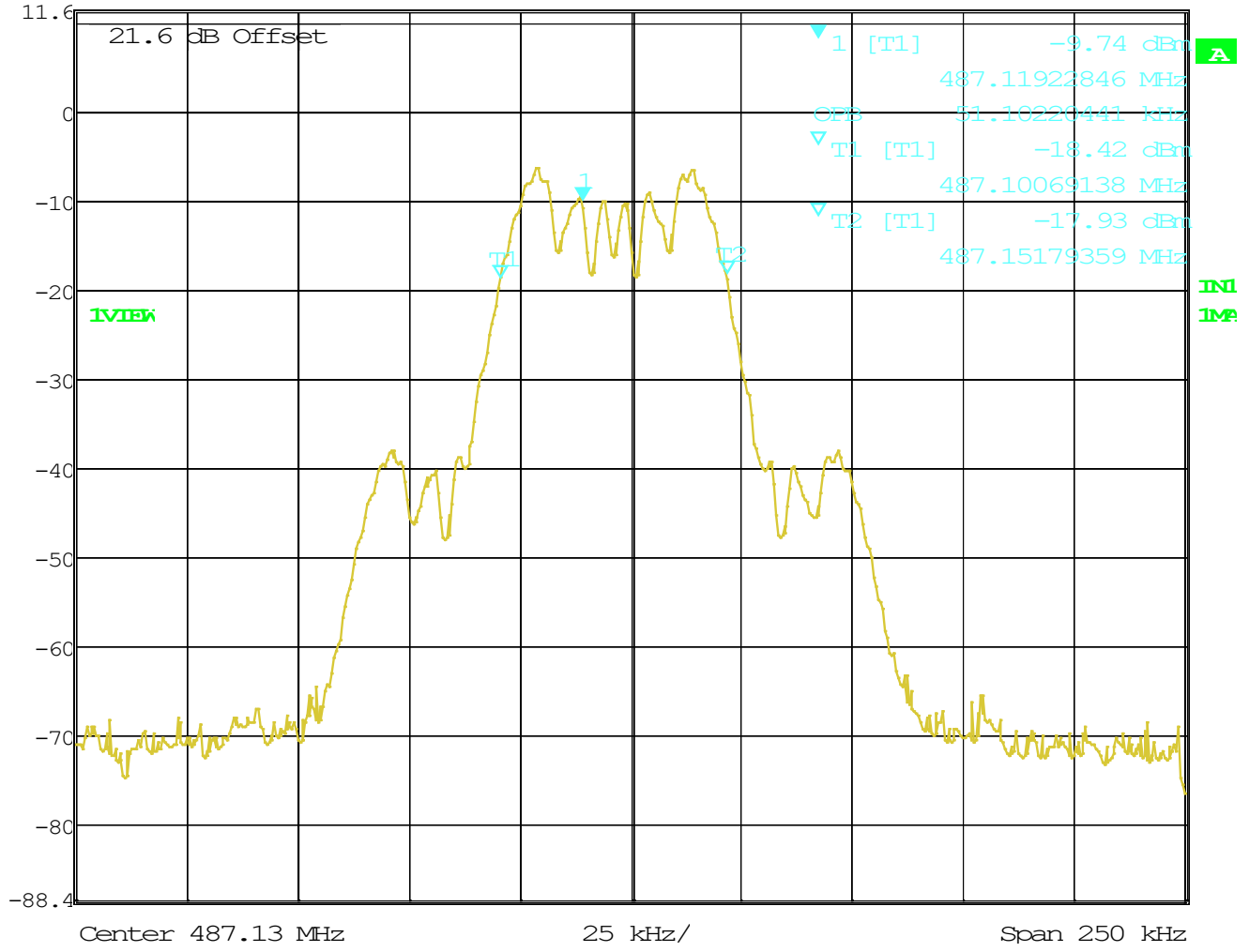
## Results Meet Requirements



# OCCUPIED BANDWIDTH

## Test Data: 487.13 MHz 99% OBW Plot

	Ref Lvl	Marker 1 [T1]	RBW	2 kHz	RF Att	20 dB
	11.6 dBm	-9.74 dBm	VBW	10 kHz		
		487.11922846 MHz	SWT	160 ms	Unit	dBm

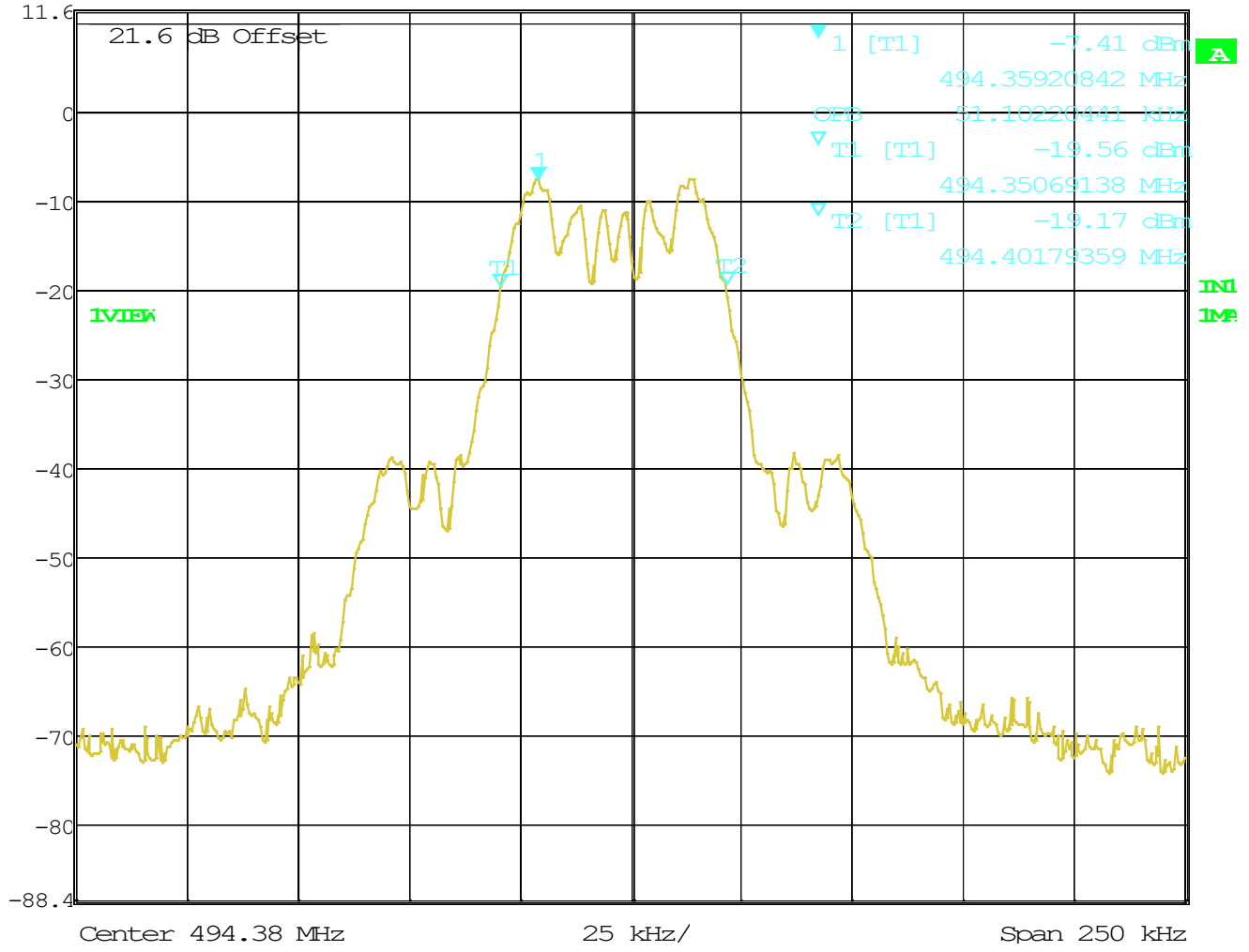


Date: 1.JAN.1997 01:14:09

# OCCUPIED BANDWIDTH

## Test Data: 494.38 MHz 99% OBW Plot

	Ref Lvl	Marker 1 [T1]	RBW	2 kHz	RF Att	20 dB
	11.6 dBm	-7.41 dBm	VBW	10 kHz		
		494.35920842 MHz	SWT	160 ms	Unit	dBm

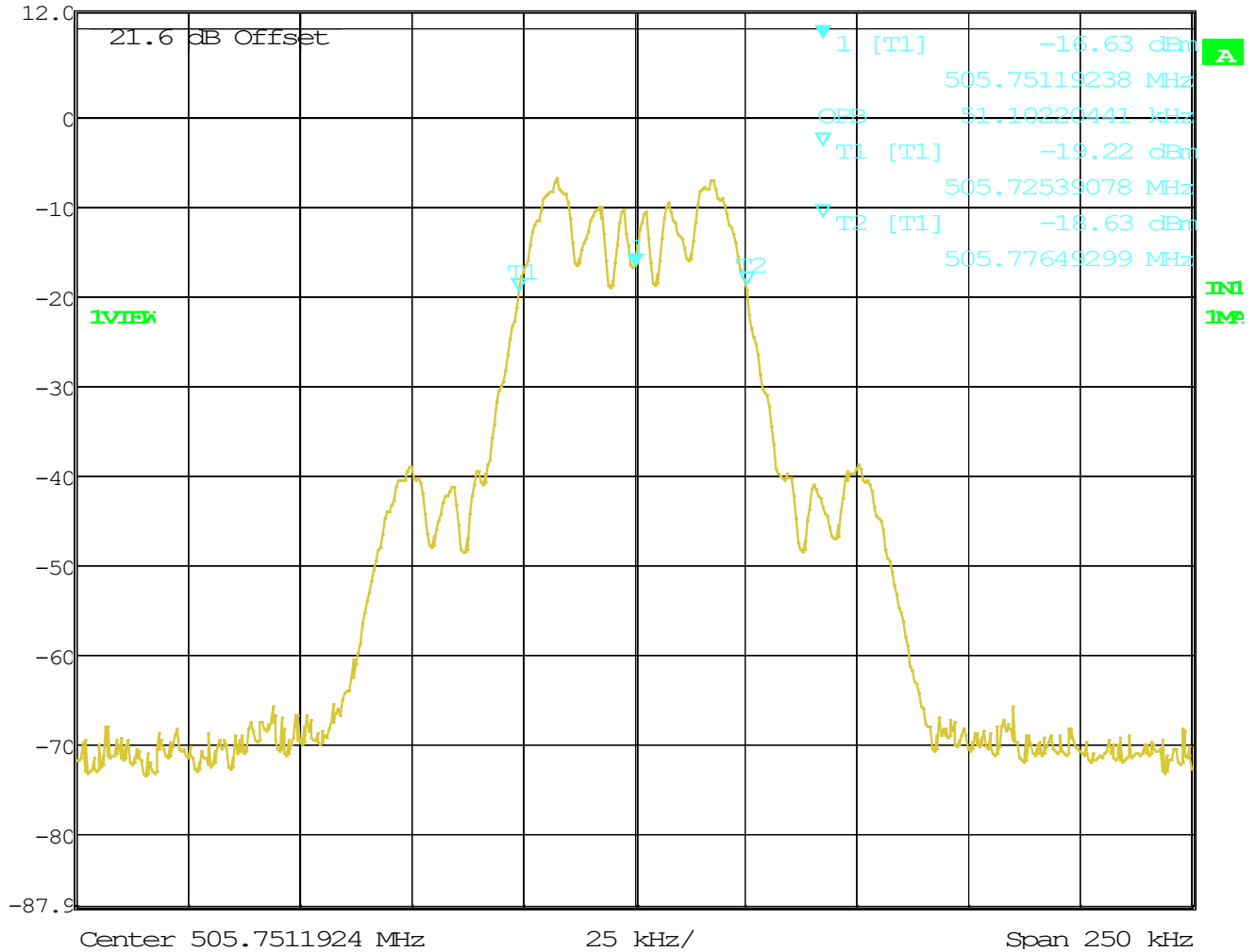


Date: 1.JAN.1997 01:15:59

# OCCUPIED BANDWIDTH

## Test Data: 505.75 MHz 99% OBW Plot

	Marker 1 [T1]	RBW	2 kHz	RF Att	20 dB
Ref Lvl	-16.63 dBm	VBW	10 kHz		
12.1 dBm	505.75119238 MHz	SWT	160 ms	Unit	dBm

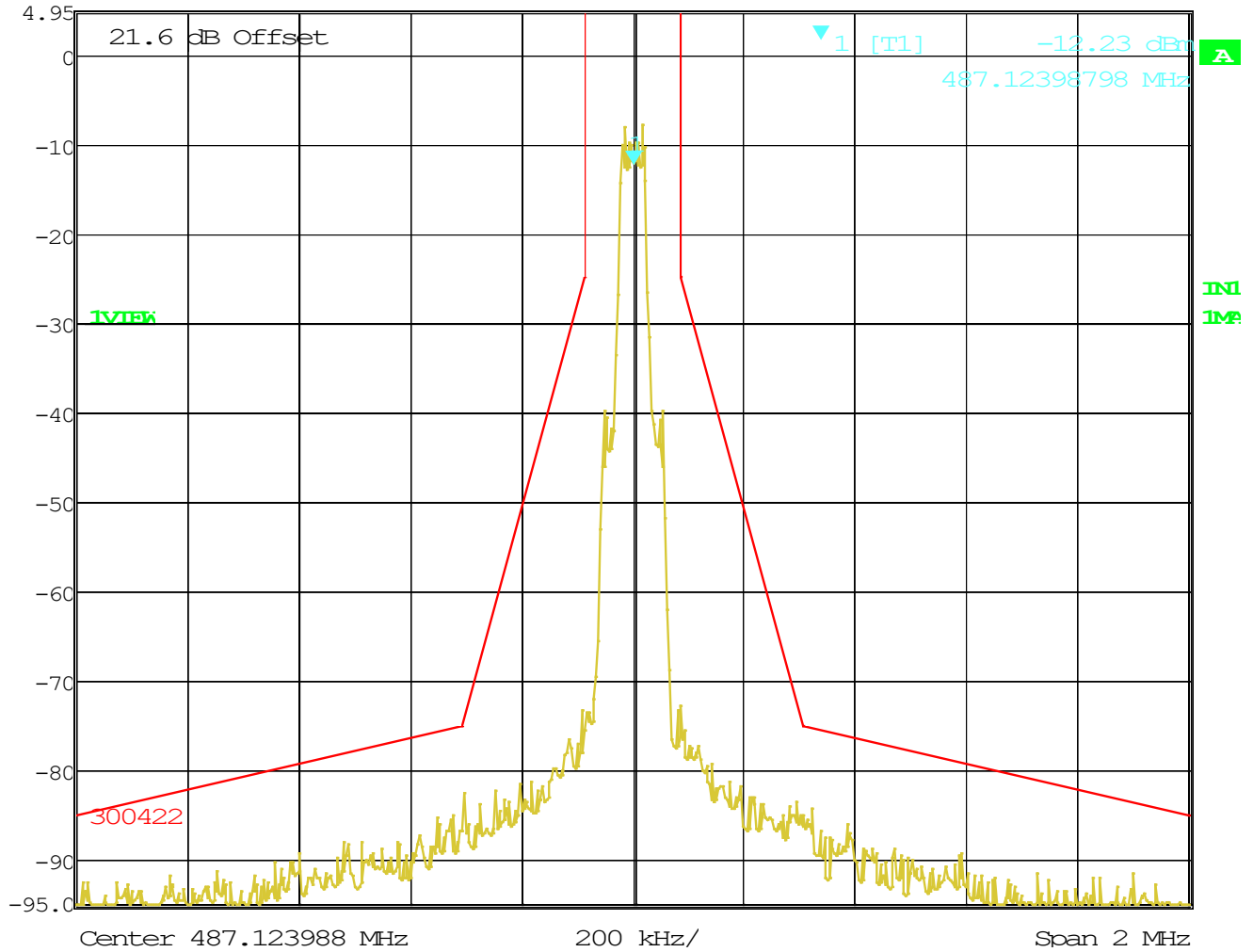


Date: 1.JAN.1997 01:18:45

# OCCUPIED BANDWIDTH

## Test Data: 487.13 MHz Emission Mask Plot

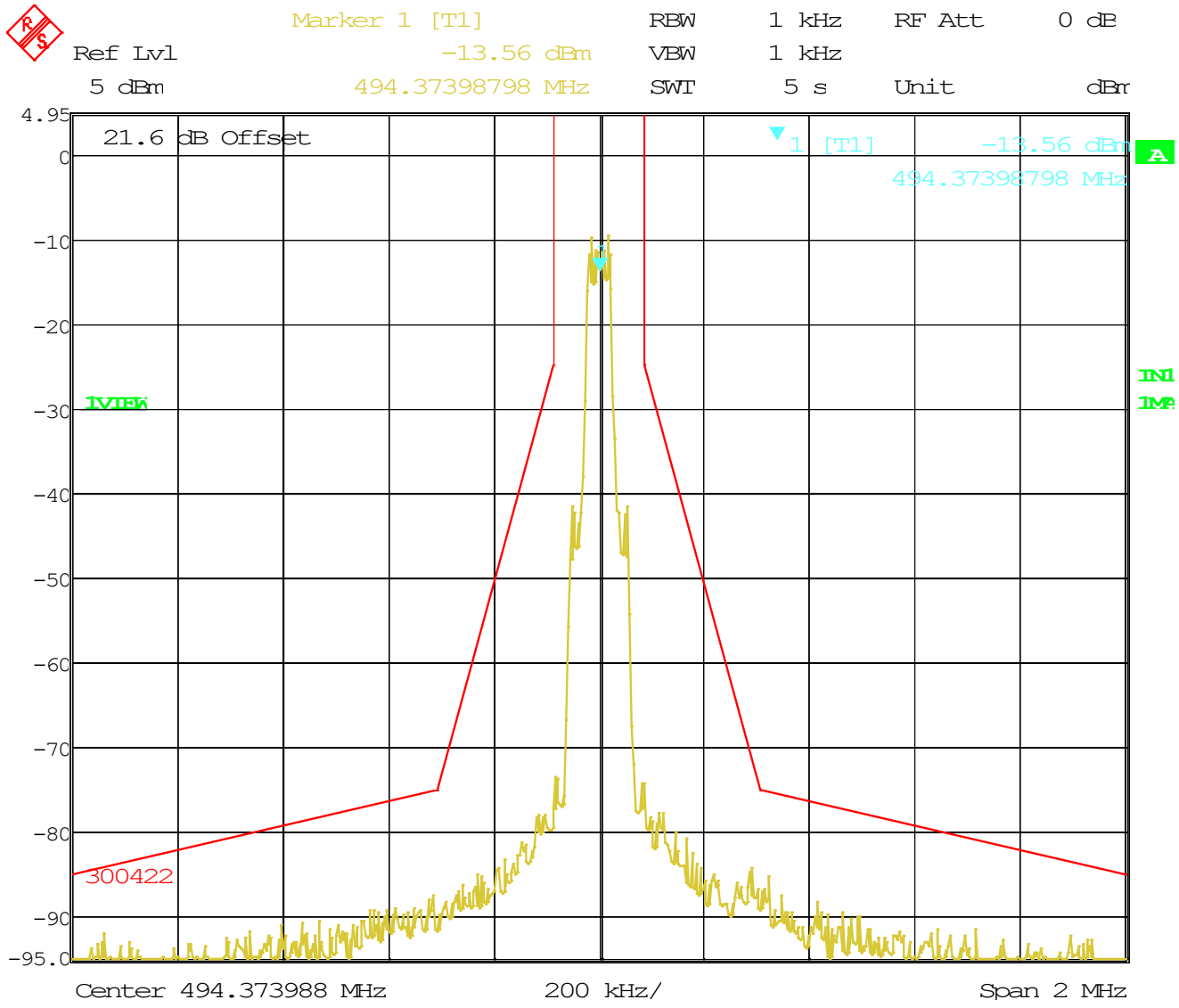
	Marker 1 [T1]	RBW	1 kHz	RF Att	0 dB
Ref Lvl	-12.23 dBm	VBW	1 kHz		
5 dBm	487.12398798 MHz	SWT	5 s	Unit	dBm



Date: 1.JAN.1997 01:37:24

# OCCUPIED BANDWIDTH

## Test Data: 494.38 MHz Emission Mask Plot

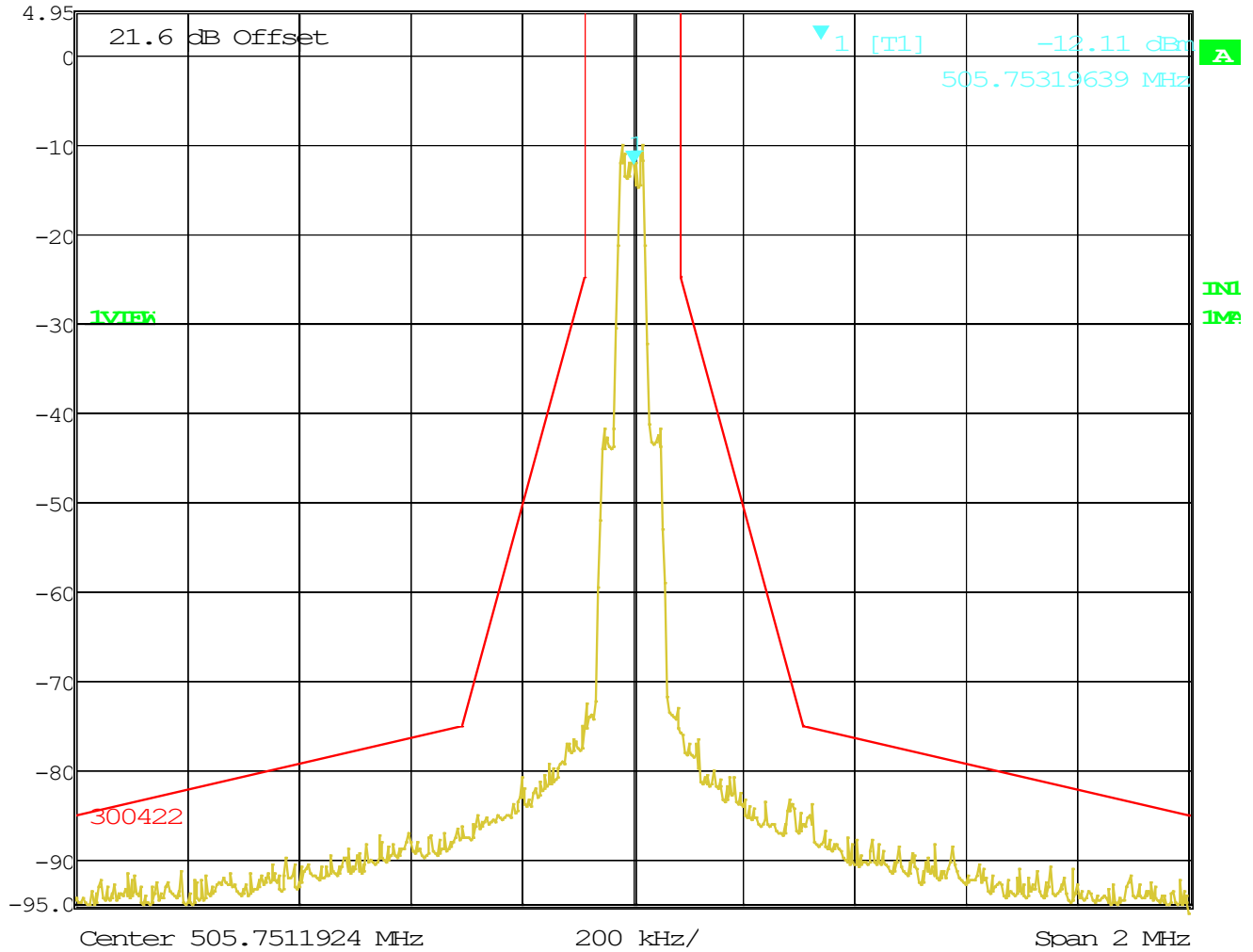


Date: 1.JAN.1997 01:36:30

# OCCUPIED BANDWIDTH

## Test Data: 505.75 MHz Emission Mask Plot

	Marker 1 [T1]	RBW	1 kHz	RF Att	0 dB
Ref Lvl	-12.11 dBm	VBW	1 kHz		
5 dBm	505.75319639 MHz	SWT	5 s	Unit	dBm



Date: 1.JAN.1997 01:35:20

## OCCUPIED BANDWIDTH

### FIELD STRENGTH OF SPURIOUS EMISSIONS

**Rule Part No.:** 2.1053, 74.861(e)(7), EN 300-422 v1.4.1 sec 8.4.3, RSS-210

#### Requirement:

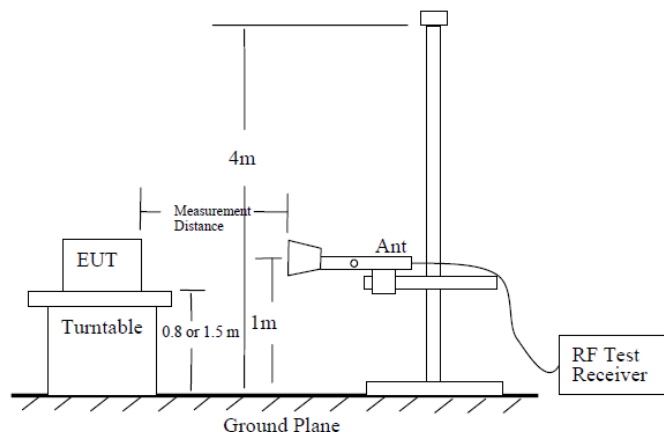
(7) Analog emissions within the band from one megahertz below to one megahertz above the carrier frequency shall comply with the emission mask in section 8.3.1.2 of the European Telecommunications Institute Standard ETSI EN 300 422-1 v1.4.2 (2011-08), Electromagnetic compatibility and Radio spectrum Matters (ERM); Wireless microphones in the 25 MHz to 3 GHz frequency range; part 1: Technical characteristics and methods of measurement. Digital emissions within the band from one megahertz below to one megahertz above the carrier frequency shall comply with the emission mask in section 8.3.2.2 (Figure 4) of the European Telecommunications Institute Standard ETSI EN 300 422-1 v1.4.2 (2011-08), Electromagnetic compatibility and Radio spectrum Matters (ERM); Wireless microphones in the 25 MHz to 3 GHz frequency range; part 1: Technical characteristics and methods of measurement. Beyond one megahertz below and above the carrier frequency, emissions shall comply with the limits specified in section 8.4 of ETSI EN 300 422-1 v1.4.2 (2011-08). The requirements of this paragraph (e)(7) shall not apply to applications for certification of equipment in these bands until nine months after release of the Commission's Channel Reassignment Public Notice, as defined in §73.3700(a)(2) of this chapter.

**Table 3: Limits for spurious emissions**

State	Frequency		
	47 MHz to 74 MHz 87,5 MHz to 137 MHz 174 MHz to 230 MHz 470 MHz to 862 MHz	Other Frequencies below 1 000 MHz	Frequencies above 1 000 MHz
Operation	4 nW	250 nW	1 µW
Standby	2 nW	2 nW	20 nW

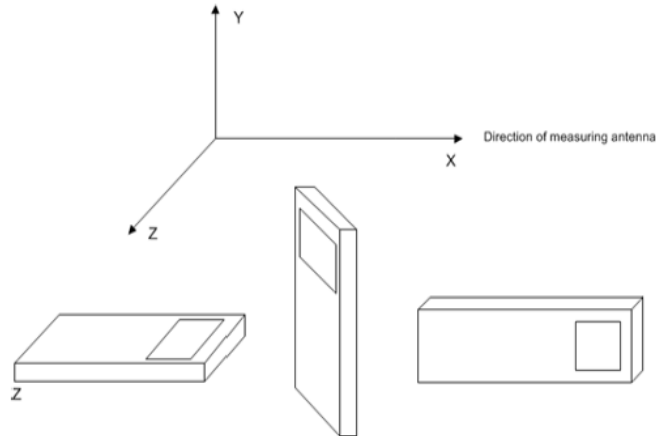
**Procedure:** KDB 971168 D01 Spurious Emissions at antenna term section 7  
ANSI C63.26, 5.5.4  
ANSI C63.4 General Radiated Testing and Site Validation

#### Test Site Setup:



## FIELD STRENGTH OF SPURIOUS EMISSIONS

### EUT Orientation(s):



**Note:** The tabulated data shows the results of the radiated field strength emissions test. The spectrum was scanned from the lowest frequency generated internally to at least the tenth harmonic of the fundamental. This test was conducted in accordance with the standard listed above using the substitution method. Measurements were made at the test site of TIMCO ENGINEERING, INC. located at 849 NW State Road 45, Newberry, FL 32669. The measurements below represent the worst case of all the frequencies tested.

**Note:** The six (6) highest emissions or more of each worst-case operational modes of the EUT are represented below. Emissions 20 dB below the limit are not required to be reported.



## FIELD STRENGTH OF SPURIOUS EMISSIONS

Test Data: 487.13 MHz

Tuned Frequency (MHz)	Emission Frequency (MHz)	Meter Reading (dBμV)	Antenna Polarity	Coax Loss (dB)	Correction Factor (dB/m)	Field Strength (dBμV/m)	Distance (m)	Field Strength (dBμV/m)	ERP (dBm)	Margin (dB)	Limit
487.13	974.30	12.18	H	3.67	23.50	39.35	3.00	39.35	-58.03	22.01	-36.02
487.13	974.30	16.78	V	3.67	23.50	43.95	3.00	43.95	-53.43	17.41	-36.02
487.13	1461.40	28.88	V	4.43	28.01	61.32	3.00	61.32	-36.06	6.06	-30.00
487.13	1461.40	26.79	H	4.43	28.01	59.23	3.00	59.23	-38.15	8.15	-30.00
487.13	1948.50	25.04	H	5.11	31.30	61.45	3.00	61.45	-35.93	5.93	-30.00
487.13	1948.50	27.71	V	5.11	31.30	64.12	3.00	64.12	-33.26	3.26	-30.00
487.13	2435.70	27.90	V	5.62	31.85	65.37	3.00	65.37	-32.01	2.01	-30.00
487.13	2435.70	29.04	H	5.62	31.85	66.51	3.00	66.51	-30.87	0.87	-30.00
487.13	2922.80	24.23	H	6.25	32.27	62.75	3.00	62.75	-34.63	4.63	-30.00
487.13	2922.80	24.42	V	6.25	32.27	62.94	3.00	62.94	-34.44	4.44	-30.00
487.13	3409.90	25.12	V	6.78	32.64	64.54	3.00	64.54	-32.84	2.84	-30.00
487.13	3409.90	24.12	H	6.78	32.64	63.54	3.00	63.54	-33.84	3.84	-30.00
487.13	3897.00	25.60	H	6.82	33.23	65.65	3.00	65.65	-31.72	1.72	-30.00
487.13	3897.00	24.63	V	6.82	33.23	64.68	3.00	64.68	-32.69	2.69	-30.00
487.13	4384.20	26.02	V	7.31	33.64	66.97	3.00	66.97	-30.41	0.41	-30.00
487.13	4384.20	24.13	H	7.31	33.64	65.08	3.00	65.08	-32.30	2.30	-30.00
487.13	4871.30	24.43	H	7.27	33.93	65.63	3.00	65.63	-31.75	1.75	-30.00
487.13	4871.30	24.04	V	7.27	33.93	65.24	3.00	65.24	-32.14	2.14	-30.00

## FIELD STRENGTH OF SPURIOUS EMISSIONS

Test Data: 494.38 MHz

Tuned Frequency (MHz)	Emission Frequency (MHz)	Meter Reading (dBµV)	Antenna Polarity	Coax Loss (dB)	Correction Factor (dB/m)	Field Strength (dBµV/m)	Distance (m)	Field Strength (dBµV/m)	ERP (dBm)	Margin (dB)	Limit
494.40	988.90	12.81	V	3.73	23.11	39.65	3.00	39.65	-57.72	21.70	-36.02
494.40	988.90	18.27	H	3.73	23.11	45.11	3.00	45.11	-52.26	16.24	-36.02
494.40	1483.30	28.48	H	4.46	27.87	60.81	3.00	60.81	-36.56	6.56	-30.00
494.40	1483.30	25.89	V	4.46	27.87	58.22	3.00	58.22	-39.15	9.15	-30.00
494.40	1977.80	24.26	V	5.14	31.31	60.71	3.00	60.71	-36.66	6.66	-30.00
494.40	1977.80	24.59	H	5.14	31.31	61.04	3.00	61.04	-36.33	6.33	-30.00
494.40	2472.20	28.61	H	5.62	32.03	66.26	3.00	66.26	-31.12	1.12	-30.00
494.40	2472.20	26.79	V	5.62	32.03	64.44	3.00	64.44	-32.94	2.94	-30.00
494.40	2966.60	25.24	V	6.29	32.40	63.93	3.00	63.93	-33.45	3.45	-30.00
494.40	2966.60	24.98	H	6.29	32.40	63.67	3.00	63.67	-33.71	3.71	-30.00
494.40	3461.10	25.04	H	6.85	32.62	64.51	3.00	64.51	-32.86	2.86	-30.00
494.40	3461.10	24.35	V	6.85	32.62	63.82	3.00	63.82	-33.55	3.55	-30.00
494.40	3955.50	24.29	V	7.07	33.37	64.73	3.00	64.73	-32.65	2.65	-30.00
494.40	3955.50	25.63	H	7.07	33.37	66.07	3.00	66.07	-31.31	1.31	-30.00
494.40	4450.00	25.11	H	7.32	33.79	66.22	3.00	66.22	-31.16	1.16	-30.00
494.40	4450.00	25.67	V	7.32	33.79	66.78	3.00	66.78	-30.60	0.60	-30.00
494.40	4944.40	25.32	V	7.45	33.94	66.71	3.00	66.71	-30.67	0.67	-30.00
494.40	4944.40	24.40	H	7.45	33.94	65.79	3.00	65.79	-31.59	1.59	-30.00

## FIELD STRENGTH OF SPURIOUS EMISSIONS

Test Data: 505.75 MHz

Tuned Frequency (MHz)	Emission Frequency (MHz)	Meter Reading (dBµV)	Antenna Polarity	Coax Loss (dB)	Correction Factor (dB/m)	Field Strength (dBµV/m)	Distance (m)	Field Strength (dBµV/m)	ERP (dBm)	Margin (dB)	Limit
506.50	1013.00	24.15	H	3.72	27.02	54.89	3.00	54.89	-42.49	12.49	-30.00
506.50	1013.00	23.20	V	3.72	27.02	53.94	3.00	53.94	-43.44	13.44	-30.00
506.50	1519.50	22.11	V	4.52	27.76	54.39	3.00	54.39	-42.98	12.98	-30.00
506.50	1519.50	26.79	H	4.52	27.76	59.07	3.00	59.07	-38.30	8.30	-30.00
506.50	2026.00	25.73	H	5.21	31.14	62.08	3.00	62.08	-35.30	5.30	-30.00
506.50	2026.00	24.15	V	5.21	31.14	60.50	3.00	60.50	-36.88	6.88	-30.00
506.50	2532.50	28.20	V	5.68	32.49	66.37	3.00	66.37	-31.01	1.01	-30.00
506.50	2532.50	25.68	H	5.68	32.49	63.85	3.00	63.85	-33.53	3.53	-30.00
506.50	3039.00	25.19	H	6.36	32.61	64.16	3.00	64.16	-33.21	3.21	-30.00
506.50	3039.00	24.05	V	6.36	32.61	63.02	3.00	63.02	-34.35	4.35	-30.00
506.50	3545.50	23.57	V	6.80	32.93	63.30	3.00	63.30	-34.08	4.08	-30.00
506.50	3545.50	23.79	H	6.80	32.93	63.52	3.00	63.52	-33.86	3.86	-30.00
506.50	4052.00	24.58	H	7.18	33.38	65.14	3.00	65.14	-32.24	2.24	-30.00
506.50	4052.00	24.86	V	7.18	33.38	65.42	3.00	65.42	-31.96	1.96	-30.00
506.50	4558.50	24.42	V	7.43	34.01	65.86	3.00	65.86	-31.51	1.51	-30.00
506.50	4558.50	25.21	H	7.43	34.01	66.65	3.00	66.65	-30.72	0.72	-30.00
506.50	5065.00	23.99	H	7.68	34.07	65.74	3.00	65.74	-31.64	1.64	-30.00
506.50	5065.00	24.64	V	7.68	34.07	66.39	3.00	66.39	-30.99	0.99	-30.00

## FIELD STRENGTH OF SPURIOUS EMISSIONS

### FREQUENCY STABILITY

**Rule Part No.:** 2.1053, 74.861(e) (4), RSS-210

**Requirement:** The frequency tolerance of the transmitter shall be 0.005 percent.

**Procedure:** KDB 971168 D01 Spurious Emissions at antenna term section 9  
TIA 603-D Carrier Frequency Stability 2.2.2

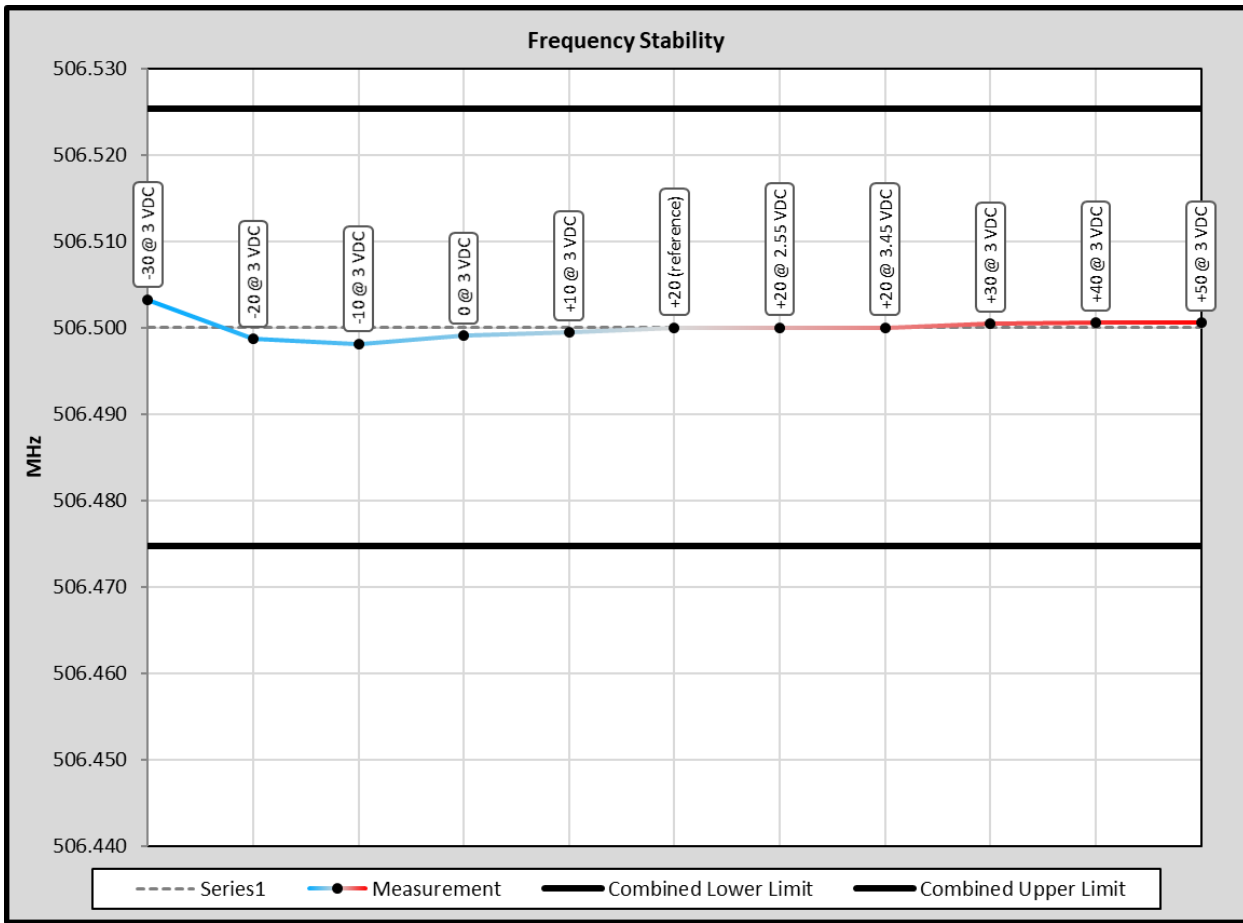
#### Test Data: Measurement Table

FCC Part 90 Limit	50.0	ppm	
FCC Part 90 Limit, as ppb	50000	ppb (Parts per Billion)	
FCC Part 90 Limit, as %	0.00500	%	
Strictest Combined Limit, as Hz	25325.000	Hz	
Combined Lower Limit	506.474675	MHz	
Combined Upper Limit	506.525325	MHz	
Rated Supply Voltage	3.0	<input type="radio"/> AC <input checked="" type="radio"/> DC	
Temperature / Voltage Variation			
Temperature (°C)	Supplied Voltage (V)	Frequency (MHz)	Deviation (kHz)
-30	3.0	506.503220	-3.220
-20	3.0	506.498680	1.320
-10	3.0	506.498100	1.900
0	3.0	506.499060	0.940
+10	3.0	506.499460	0.540
+20 (reference)	3.0	506.500000	0.000
+20	2.6	506.500000	0.000
+20	3.5	506.500000	0.000
+30	3.0	506.500410	-0.410
+40	3.0	506.500554	-0.554
+50	3.0	506.500538	-0.538

#### Results Meet Requirements

# FREQUENCY STABILITY

## Test Data: Measurement Graph



**Results Meet Requirements**

## STATEMENT OF MEASUREMENT UNCERTAINTY

The data and results referenced in this document are true and accurate. The measurement uncertainty was calculated for all measurements listed in this test report according To CISPR 16-4 or ENTR 100-028 Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: “Uncertainty in EMC Measurements” and is documented in the Timco Engineering, Inc. quality system according to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Timco Engineering, Inc. is reported:

Test Items	Measurement Uncertainty	Notes
RF Frequency Accuracy	± 49.5 Hz	(1)
RF Conducted Power	±0.93dB	(1)
Conducted spurious emission of transmitter valid up to 40GHz	±1.86dB	
Occupied Bandwidth	±2.65%	
Audio Frequency Response	±1.86dB	
Modulation limiting	±1.88%	
Radiated RF Power	±1.4dB	
Maximum frequency deviation: Within 300 Hz and 6kHz of audio freq.	±1.88%	
Within 6kHz and 25kHz of audio Freq.	±2.04%	
Rad Emissions Sub Meth up to 26.5GHz	±2.14dB	
Adjacent channel power	±1.47dB	(1)
Transient Frequency Response	±1.88%	
Temperature	±1.0°C	(1)
Humidity	±5.0%	

Notes: (1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

## EMC EQUIPMENT LIST

Device	Manufacturer	Model	SN	Calibration Date	Cal Due Date
EMI Test Receiver R & S ESIB 40 firmware v 4.34.3 BIOS v3.3	Rohde & Schwarz	ESIB 40	100274	07/22/19	07/22/21
Software: Field Strength Program	Timco	N/A	Version 4.10.7.0	N/A	N/A
Coaxial Cable - Chamber 3 cable set (backup)	Micro-Coax	Chamber 3 cable set (backup)	KMKM-0244-02 KMKM-0670-01 KFKF-0197-00	02/27/19	02/27/21
CHAMBER	Panashield	3M	N/A	03/15/19	03/15/21
Antenna: Active Loop	ETS-Lindgren	6502	00062529	12/11/17	12/11/20
Antenna: Biconical 1096	Eaton	94455-1	1096	08/01/17	08/01/20
Antenna: Log-Periodic 1122	Electro-Metrics	LPA-25	1122	07/26/17	07/26/20
Ant: Double-Ridged Horn/ETS Horn 1	ETS-Lindgren	3117	00035923	01/30/17	01/30/20
Temperature Chamber LARGE	Tenney Engineering	TTRC	11717-7	N/A	N/A
Type K J Thermometer	Martel	303	080504494	11/06/17	11/06/20

### \*EMI RECEIVER SOFTWARE VERSION

The receiver firmware used was version 4.43 Service Pack 3

**END OF TEST REPORT**