



Test Report - FCC PART 90 Booster Class B (B9B)

Prepared For: RF TECHNOLOGY PTY. LTD.

Approved for Release By:

Signature: Bruno Clavier

Name & Title: Bruno Clavier, General Manager

Date of Signature

(YYYY-MM-DD): 2020-12-02

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Timco Engineering, Inc., an IIA Company
849 NW State Road 45, Newberry, Florida 32669
(352) 472-5500 / testing@timcoengr.com

1. Customer Information

Applicant: RF TECHNOLOGY PTY. LTD.
Address: ABN 14 131 764 148
Unit 46, Thornleigh Technology Park
7 Sefton Road Thornleigh NEW SOUTH WALES 2120 AUSTRALIA

Contact: Mr. Frank Romanin
Telephone: 1161294841022
Email address: frank.romanin@me.com

1.1 Test Result Summary

The following test procedure and guidance were used for measuring FCC PART 90 (PRIVATE LAND MOBILE RADIO SERVICES) known as Licensed Land Mobile; ANSI C63.26-2015 and FCC KDB 935210 D05 v01r04 Industrial Signal Boosters. Full test results are available in this report.

No additions to the test methods were needed. There were no deviations, or exclusions from the test methods. No test results are from external providers or from the customer. The test results relate only to the items tested. Timco does not offer opinions and interpretations, only a pass/fail statement.

The Following is for Test item FCC ID: KRE-E2-IP-PA500AH

Applicable Clauses from Part 2		
FCC Part 2 Clauses	Description of the requirements	Result: (Pass, Fail, N/A)
2.202	Bandwidth & Emission	Pass
2.1033 (c)(8)	Power at the Final Amplifier	Pass
2.1046 (a)	RF Output Power	Pass
2.1047	Modulation characteristics	n/a
2.1049	Occupied Bandwidth	Pass
2.1051	Spurious emissions at antenna terminals	Pass
2.1053	Field strength of spurious radiation	Pass
2.1055	Frequency stability	n/a



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Applicable Clauses from Part 90 Subpart I		
FCC Part 90 Clauses	Description of the requirements	Result: (Pass, Fail, N/A)
90.205	Transmitter Power	Pass
90.207	Types of Emissions	Pass
90.209	Bandwidth limitations	Pass
90.210	Emission masks, In-band	Pass
90.210	Emission masks, Out-of-band	Pass
90.213	Frequency stability	n/a
90.214	Transient Frequency Behavior	n/a
90.219 (d)(6)(i)	ERP of intermodulation products	n/a ¹
90.219 (d)(6)(ii)	ERP of noise within the passband	n/a ¹
90.219 (d)(6)(iii)	ERP of noise on spectrum < 1 MHz outside of the passband	n/a ¹
90.219 (d)(3)(i), (e)(1)	ERP of Radiated Power	n/a ¹
90.219 (e)(2)	Noise figure	Pass
90.219 (e)(3)	Spurious emissions	Pass
90.219 (e)(4)(i)(ii)(iii)	Retransmitted Signals	Pass
90.221	Adjacent channel power limits	n/a

Note 1: Requirements in Part 90.219 (d) apply at deployment of this EUT, therefore are not applicable at certification.

KDB 935210 D05 v01r04		
FCC KDB 935210 D05 Clauses	Description of the requirements	Result: (Pass, Fail, N/A)
4.1	Test Signals for PLMRS (Input Signals)	Reported
4.2	AGC Threshold	n/a ¹
4.3	Out-of-Band Rejection	Reported
4.4	Input-versus-Output Signal Comparison	Pass
4.5	Output Power	Pass
4.5	Amplifier/Booster Gain (optional)	Reported
4.6	Noise Figure	Pass
4.7.2	Out-of-band/Out-of-block Conducted Emissions (Intermodulation Products)	n/a ²
4.7.3	EUT Spurious Conducted Emissions	Pass
4.8	Frequency Stability	n/a
4.9	Spurious Radiated Emissions	Pass

Note 1: EUT does not employ AGC.

Note 2: EUT is not designed to carry multiple signals at one time.



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2. Location of Testing

2.1 Test Laboratory

Timco Engineering Inc. is a subsidiary of Industrial Inspection & Analysis, Inc. ("IIA").

Testing was performed at Timco's permanent laboratory located at 849 NW State Road 45, Newberry, Florida 32669

FCC test firm # 578780

FCC Designation # US1070

FCC site registration is under A2LA certificate # 0955.01

ISED Canada test site registration # 2056A

EU Notified Body # 1177

For all designations see A2LA scope # 0955.01

2.2 Testing was performed, reviewed by

Dates of Testing: November 21, 2019 – November 26, 2019

Signature:

Name & Title: Franklin Rose, EMC Specialist

Date of Signature

(YYYY-MM-DD): 2020-12-02

Signature:

Sr. EMC Engineer
EMC-003838-NE



Name & Title: Tim Royer, EMC Engineer

Date of Signature

(YYYY-MM-DD): 2020-12-02



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3. Test Sample(s) (EUT/DUT)

The test sample was received: November 21, 2019

3.1 Definitions

Signal booster: A device or system that automatically receives, amplifies, and retransmits signals from wireless stations into and out of building interiors, tunnels, shielded outdoor areas and other locations where these signals would otherwise be too weak for reliable communications. Signal booster systems may contain both Class A and Class B signal boosters as components.

Class A signal booster: A signal booster designed to retransmit signals on one or more specific channels. A signal booster is deemed to be a Class A signal booster if none of its passbands exceed 75 kHz.

Class B signal booster: A signal booster designed to retransmit any signals within a wide frequency band. A signal booster is deemed to be a Class B signal booster if it has a passband that exceeds 75 kHz.



3.2 Description of the EUT

A description as well as unambiguous identification of the EUT(s) tested. Where more than one sample is required for technical reasons (such as the use of connected units for the purpose of conducted output power testing where the product units will have integral antennas), each specific test shall identify which unit was tested.

Identification	
FCC ID:	KRE-E2-IP-PA500AH
Brief Description	ECLIPSE IP POWER AMPLIFIER
Type of Modular	n/a
Model(s) #	E2-IP-PA 500AH
Hardware version	1.0.0
Firmware/Software version	IP Commander v6.14.2
Serial Number	2376

Technical Characteristics	
Technology	Amplifier/Industrial Signal Booster
Frequency Range	406.1 – 420 MHz
RF O/P Power (Max.)	50 dBm (100 W)
Modulation	n/a
Bandwidth & Emission Class	11K3F3E, 16K0F3E, 8K10F1D, 8K10F1E
Number of Channels	Variable.
Duty Cycle	100%
Antenna Connector	N
Voltage Rating (AC or Batt.)	13.8 V DC

Antenna Characteristics				
Antenna Name	Frequency Range	Antenna Type	Dimensions	Antenna Gain
n/a	n/a	n/a	n/a	n/a

Note: This EUT does not include antenna(s).



3.3 Configuration of EUT

Test Modes		
Band	Link Direction	Test Frequencies
406.1 – 420 MHz	Uplink/Downlink	406.125 MHz
		413.000 MHz
		420.000 MHz

Operating conditions during Testing:

No other modifications of the device under test (including firmware, specific software settings, and input/output signal levels to the EUT) were made.

Peripherals used during Testing:

A laptop was used to control the EUT.

3.4 Test Setup of EUT

Equipment, antenna, and cable arrangement. The setup of the equipment and cable or wire placement on the test site that produces the highest radiated and the highest ac power line conducted emissions shall be shown clearly and described. Information on the orientation of portable equipment during testing shall be included. Drawings or photographs may be used for this purpose.

Test Setups are included in the test report.



4. Test methods & Applicable Regulatory Limits

4.1 Test methods/Standards/Guidance:

Test procedures and guidance for measuring Licensed Part 90 Licensed device:

- 1) ANSI C63.26-2015
- 2) FCC KDB 935210 D05 v01r04 Industrial Signal Boosters

4.2 Applied Limits and Regulatory Limits:

- 1) FCC CFR 47 Part 90 Subpart I, 90.219

5. Measurement Uncertainty

Parameter	Uncertainty (dB)
Conducted Emissions	± 3.14 dB
Radiated Emissions (9kHz – 30 MHz)	± 3.08 dB
Radiated Emissions (30 – 200 MHz)	± 2.16 dB
Radiated Emissions (200 – 1000 MHz)	± 2.15 dB
Radiated Emissions (1 GHz – 18 GHz)	± 2.14 dB
Radiated Emissions (18 GHz – 40 GHz)	± 2.31 dB
Note: The uncertainties provided in this table represent an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of K=2.	

6. Environmental Conditions

6.1 Temperature & Humidity

Measurements performed at the test site did not exceed the following:

Temperature	23 C +/- 5%
Humidity	55% +/- 5%
Note: Specific environmental conditions that are applicable to a specific test are available in the test result section.	



7. List of Test Equipment and Test Facility

The test equipment used identified by type, manufacturer, serial number, or other identification and the date on which the next calibration or service check is due.

Description of the firmware or software used to operate EUT for testing purposes.

A complete list of all test equipment used shall be included with the test report. The manufacturer's model and serial numbers, and date of last calibration, and calibration interval shall be included. Measurement cable loss, measuring instrument bandwidth and detector function, video bandwidth, if appropriate, and antenna factors shall also be included where applicable.

7.1 List of Test Equipment

Device	Manufacturer	Model	SN	Calibration Date	Cal Due Date
EMI Test Receiver R & S ESU 40 firmware v 4.43 SP 3 BIOS v5.1-24-3	Rohde & Schwarz	ESU 40	100320	08/28/18	08/28/20
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

Software	Author	Version
ESU Firmware	Rohde & Schwarz	4.43 SP3; BIOS v5.1-24-3
RSCommander	Rohde & Schwarz	1.6.4
Field Strength	Timco	v4.10.7.0



8. Test Results

The results of the test are usually indicated in the form of tables, spectrum analyzer plots, charts, sample calculations, as appropriate for each test procedure.

A description and/or a block diagram of the test setup is usually provided.

The measurement results, along with the appropriate limits for comparison, may be presented in tabular or graphical form. In addition, any variation in the measurement environment may be reported if applicable (e.g., a significant change of temperature that could affect the cable loss and amplifier response).

Unless noted otherwise in the referenced standard, the measurements of **ac power-line conducted emissions and conducted power output** will be reported in units of dB μ V. Unless noted otherwise in the referenced standard, the measurements of **radiated emissions** will be reported in units of decibels, referenced to one microvolt per meter (dB μ V/m) for electric fields, or to one ampere per meter (dBA/m) for magnetic fields, at the distance specified in the appropriate standards or requirements. The measurements of antenna-conducted power for receivers may be reported in units of dB μ V if the impedance of the measuring instrument is also reported. Otherwise, antenna-conducted power will be reported in units of decibels referenced to one milliwatt (dBm). All formulas for data conversions and conversion factors, if used, will be included in this measurement report.



8.1 Power at the Final Amplifier

Limits from FCC Part 2.1033 (c)(8).

No method of measurement is specified. The result has been calculated based on all available information.

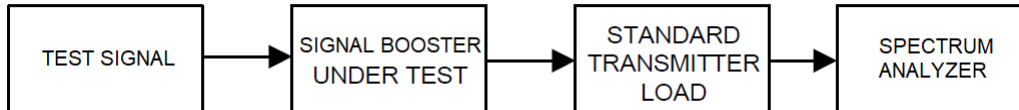
Test Results		
EUT Operating Voltage (V)	EUT Current (A)	Power at the Final Amplifier
13.8 V DC	22.0	303.6 W



8.2 RF Output Power & Gain

Limits from FCC Parts 2.1046(a), and 90.205 and test procedure from ANSI C63.26-2015 and FCC KDB 935210 D05 v01r04 Industrial Signal Boosters.

Test Setup



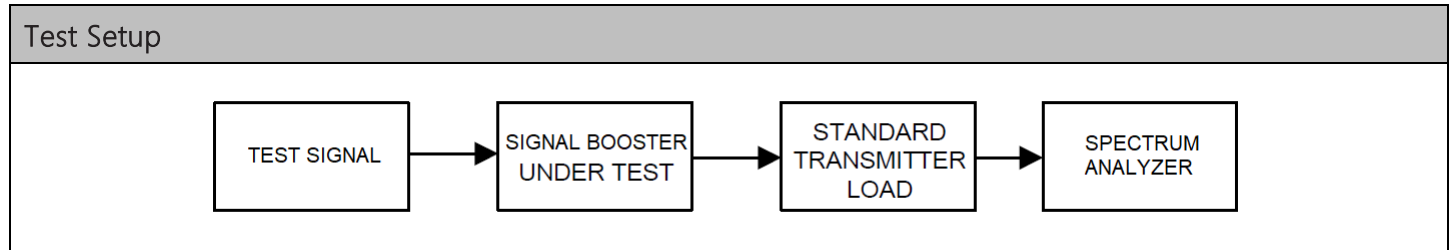
Test Results, Power Output

Frequency (MHz)	Max Power Output (dBm)	Max Power Output (W)
406.125	50.19	104.47
413.000	50.48	111.69
420.000	50.51	112.46

Rated Output Power: 100 W; Tuning Tolerance: +/- 0.8 dB

8.3 Out-of-band Rejection

Limits and test method from FCC KDB 935210 D05 v01r04 Industrial Signal Boosters.



Test Results, Out-of-band Rejection and Class of Operation			
Operating Band	Link Direction	Passband (kHz)	Class of Operation
406.1 – 420 MHz	Uplink/Downlink	> 75 kHz	Class B

Note: EUT does not reject signals out-of-band; EUT may only be employed for use with equipment which complies with FCC CFR 47 Part 90.



8.4 Bandwidth & Emission

Limits from FCC Parts 90.209 and FCC KDB 935210 D05 v01r04 Industrial Signal Boosters.

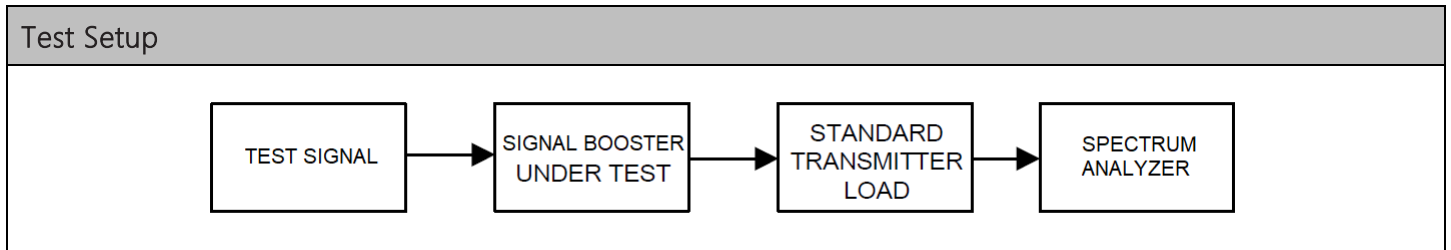
Authorized Bandwidth		
Rule Part	Operating Range	Authorized Bandwidth
Part 90	406.1 – 420 MHz	20 kHz, 11.25 kHz, 6 kHz

Applicable Input Signals		
Signal	Occupied Bandwidth (MHz)	Representative Emission Designator(s)
CW	n/a	n/a
12.5 kHz FM	11.3	11K3F3E
25 kHz FM	16.0	16K0F3E
C4FM (P25 Phase I)	8.1	8K10F1D, 8K10F1E



8.5 Input VS Output Signal Comparison

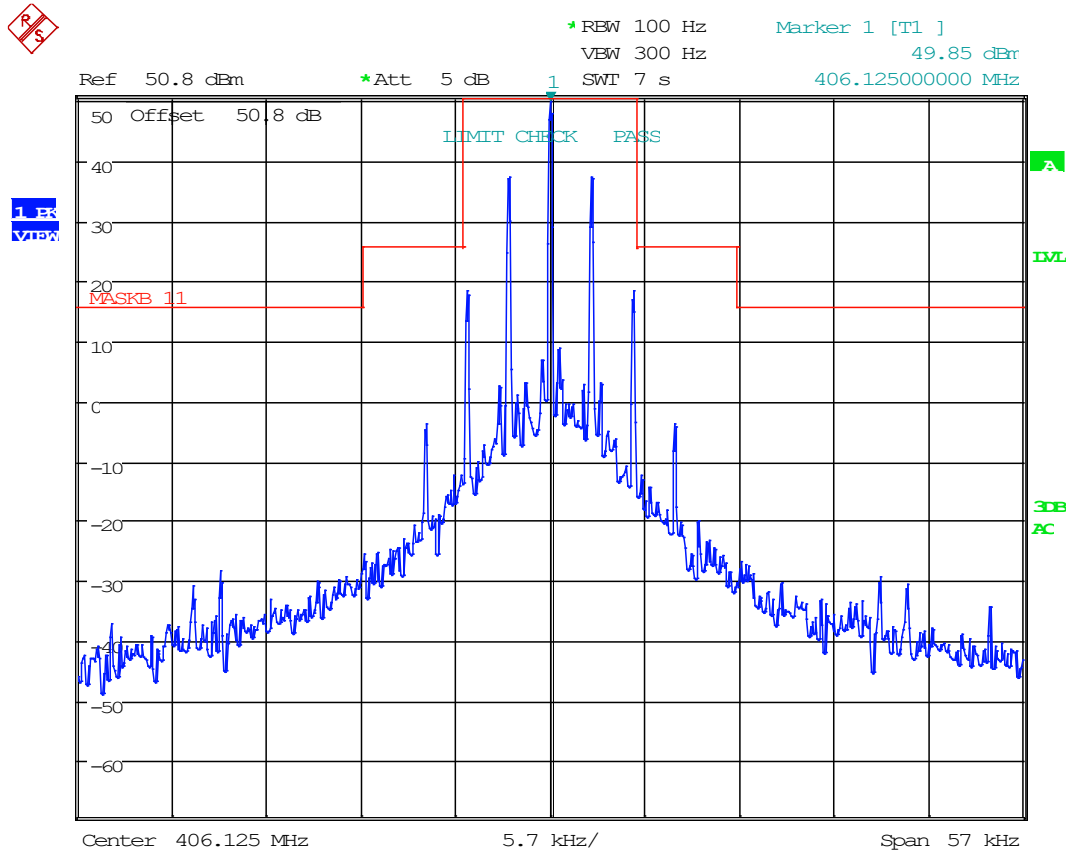
Limits from FCC Parts 90.210 and test procedure from ANSI C63.26-2015 and FCC KDB 935210 D05 v01r04 Industrial Signal Boosters.





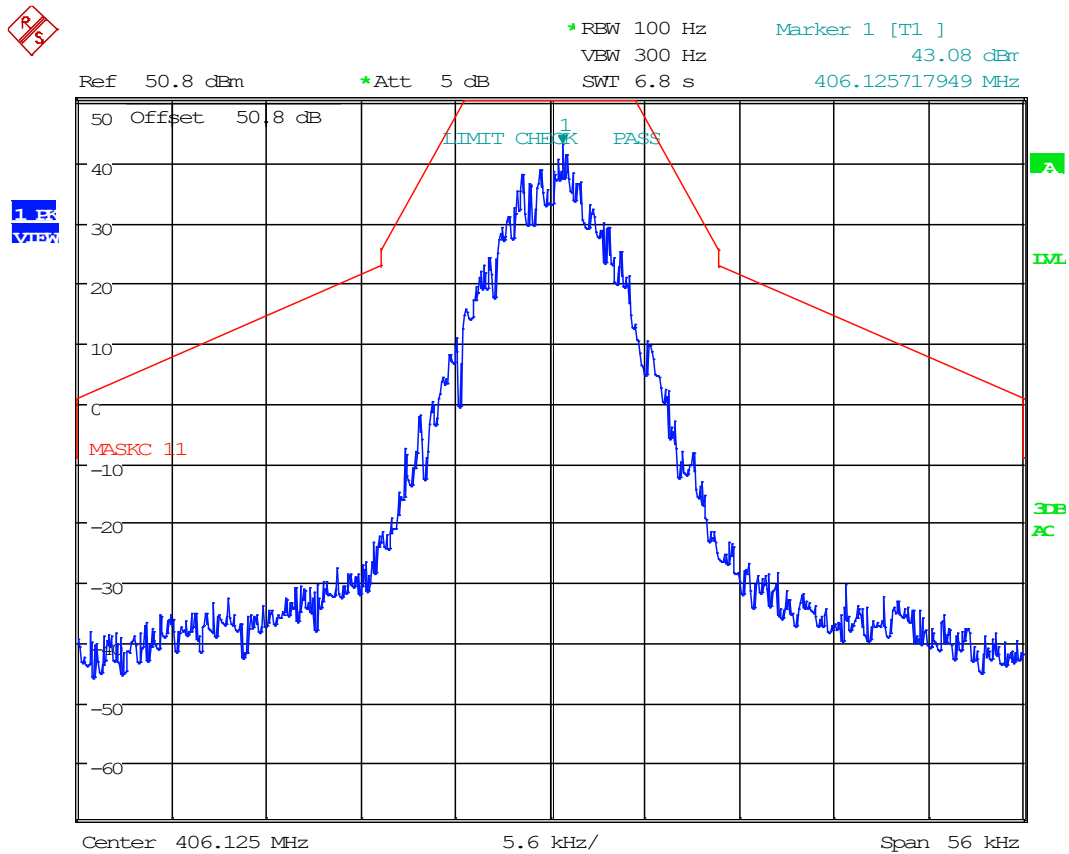
Input VS Output, Spectrum Plots

8.5.1 12.5 kHz FM, 406.125 MHz



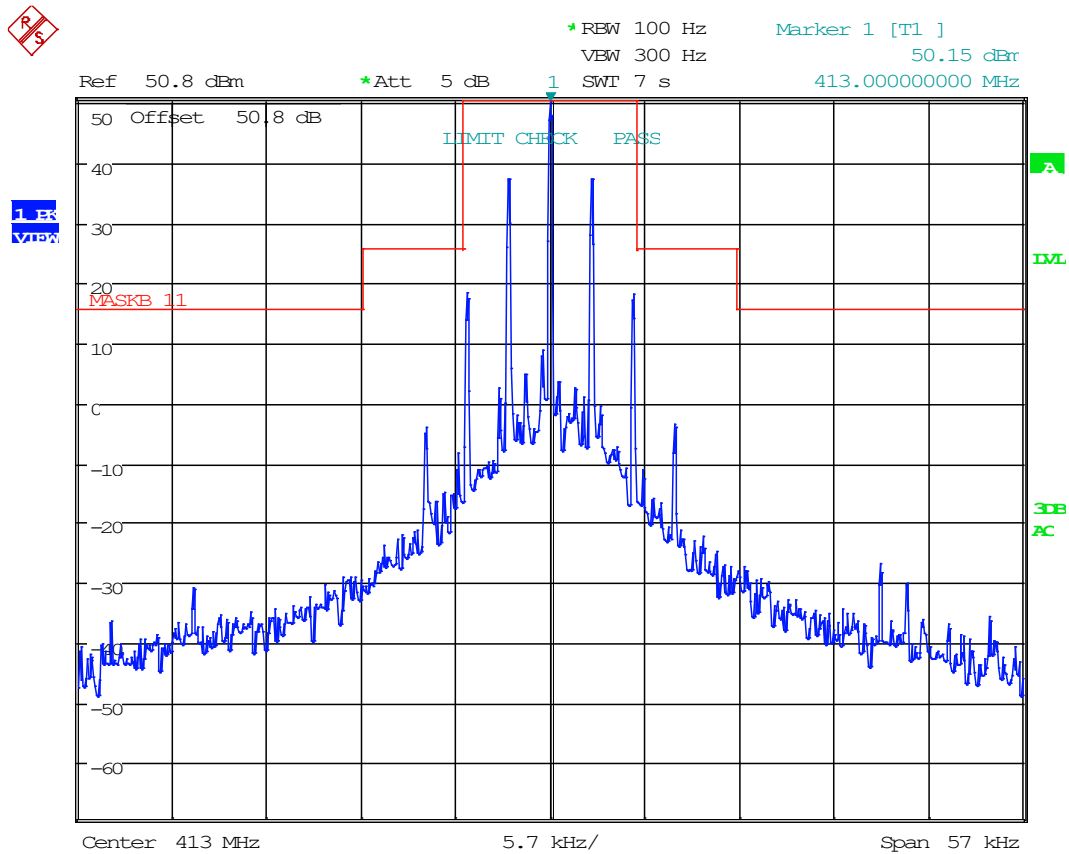
Date: 26.NOV.2019 10:48:52

8.5.2 C4FM, 406.125 MHz



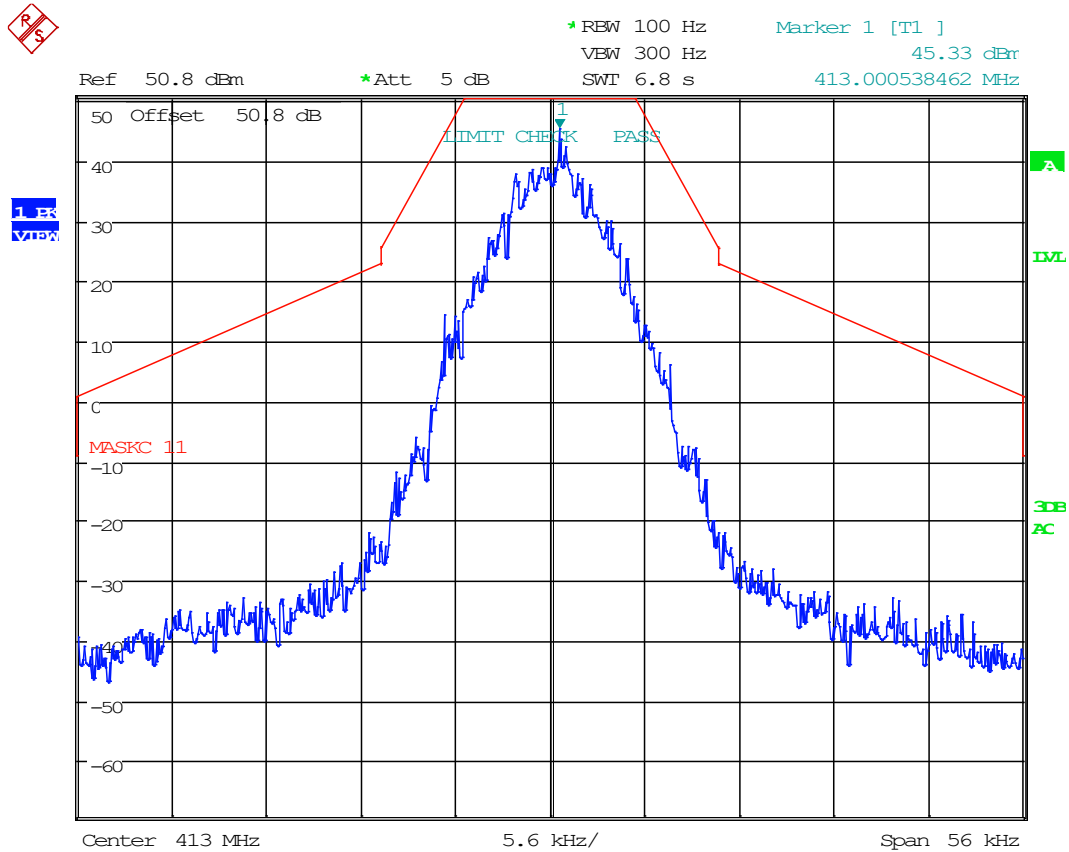
Date: 26.NOV.2019 11:27:36

8.5.3 12.5 kHz FM, 413.000 MHz, AGC



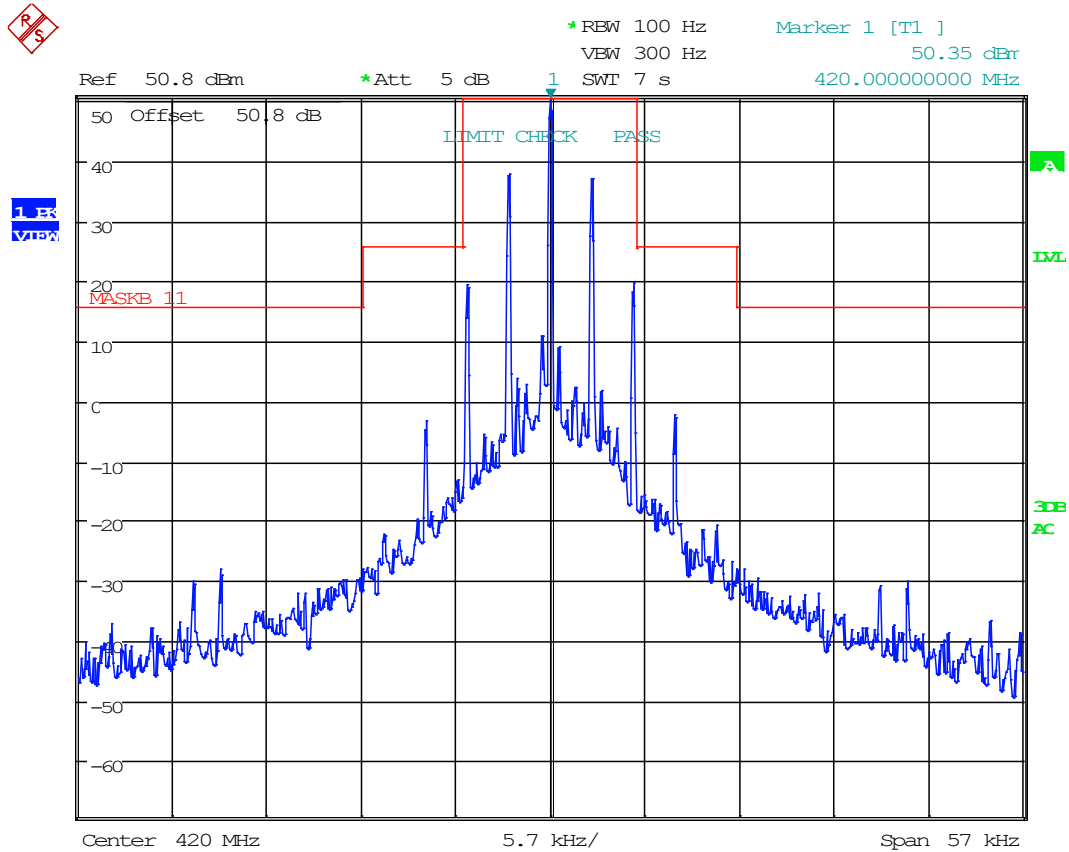
Date: 26.NOV.2019 10:47:20

8.5.4 C4FM, 413.000 MHz, AGC



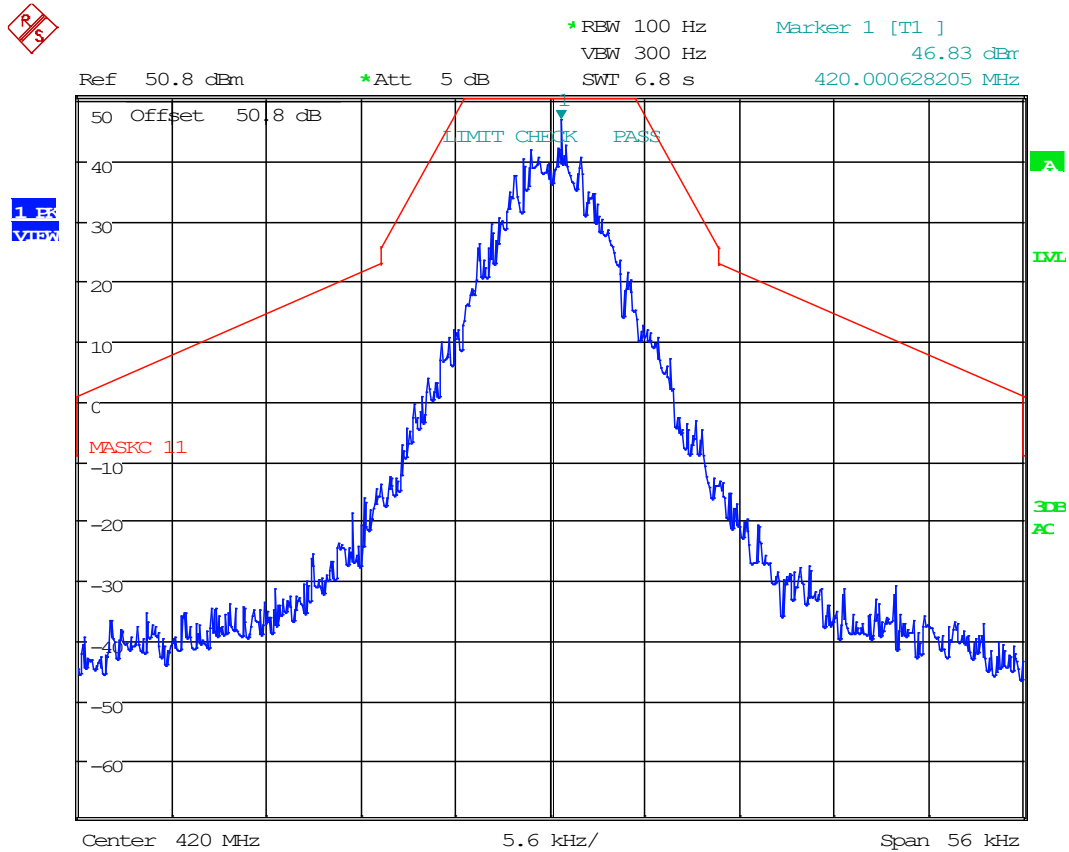
Date: 26.NOV.2019 11:29:30

8.5.5 12.5 kHz FM, 420.000 MHz, AGC



Date: 26.NOV.2019 10:43:36

8.5.6 C4FM, 420.000 MHz, AGC



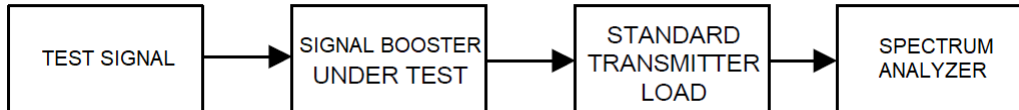
Date: 26.NOV.2019 11:34:08



8.6 Noise Figure

Limits from FCC KDB 935210 D05 v01r04 Industrial Signal Boosters. Test method from "Noise Figure Measurement Accuracy: The Y-Factor Method" by Keysight Technologies.

Test Setup



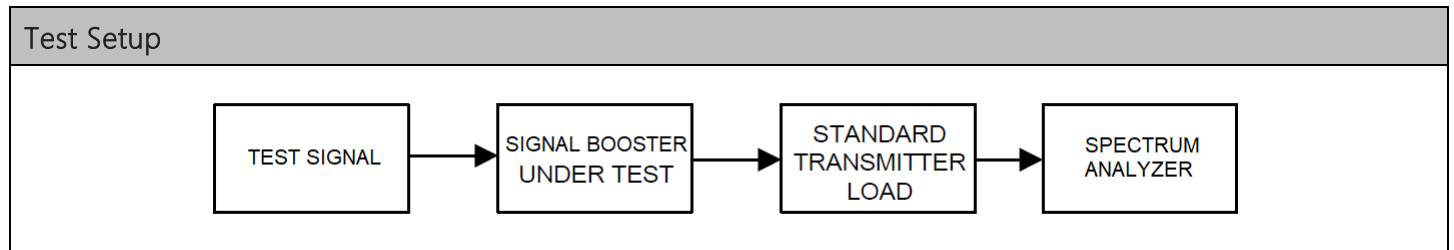
Test Results, Out-of-band Rejection and Class of Operation

Operating Band	Link Direction	Noise Figure	Limit
406.1 – 420 MHz	Uplink/Downlink	2.27	< 9 dB



8.7 Out-of-Band/Out-of-Block Emissions (Intermodulation Products)

Limits from FCC Parts 2.1051, 90.210 and test procedure from ANSI C63.26-2015 and FCC KDB 935210 D05 v01r04 Industrial Signal Boosters.



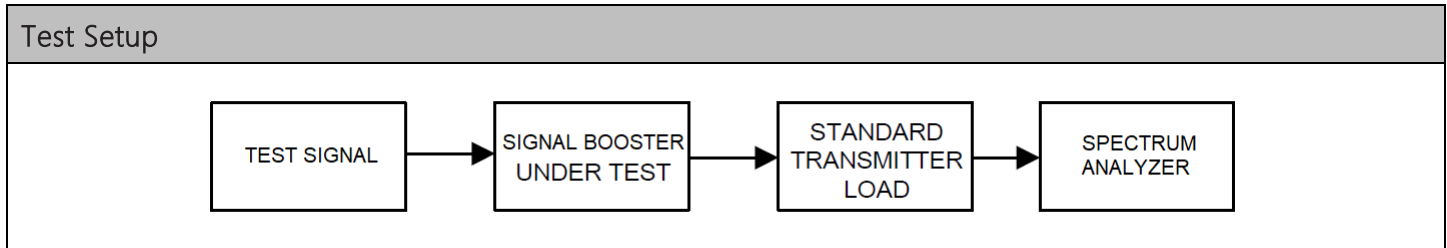
N/A. The EUT does not carry multiple signals simultaneously.



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8.8 Emission Mask, Out-of-Band

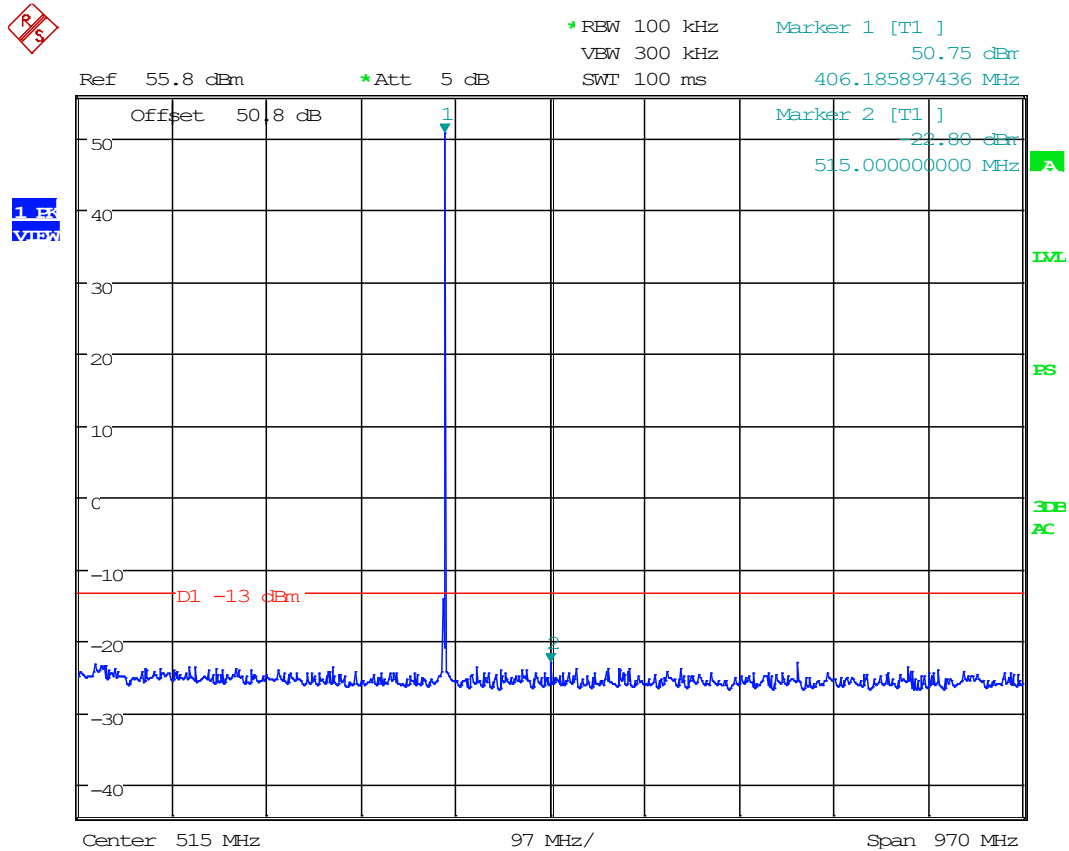
Limits from FCC Parts 2.1051, 90.210 and test procedure from ANSI C63.26-2015 and FCC KDB 935210 D05 v01r04 Industrial Signal Boosters.





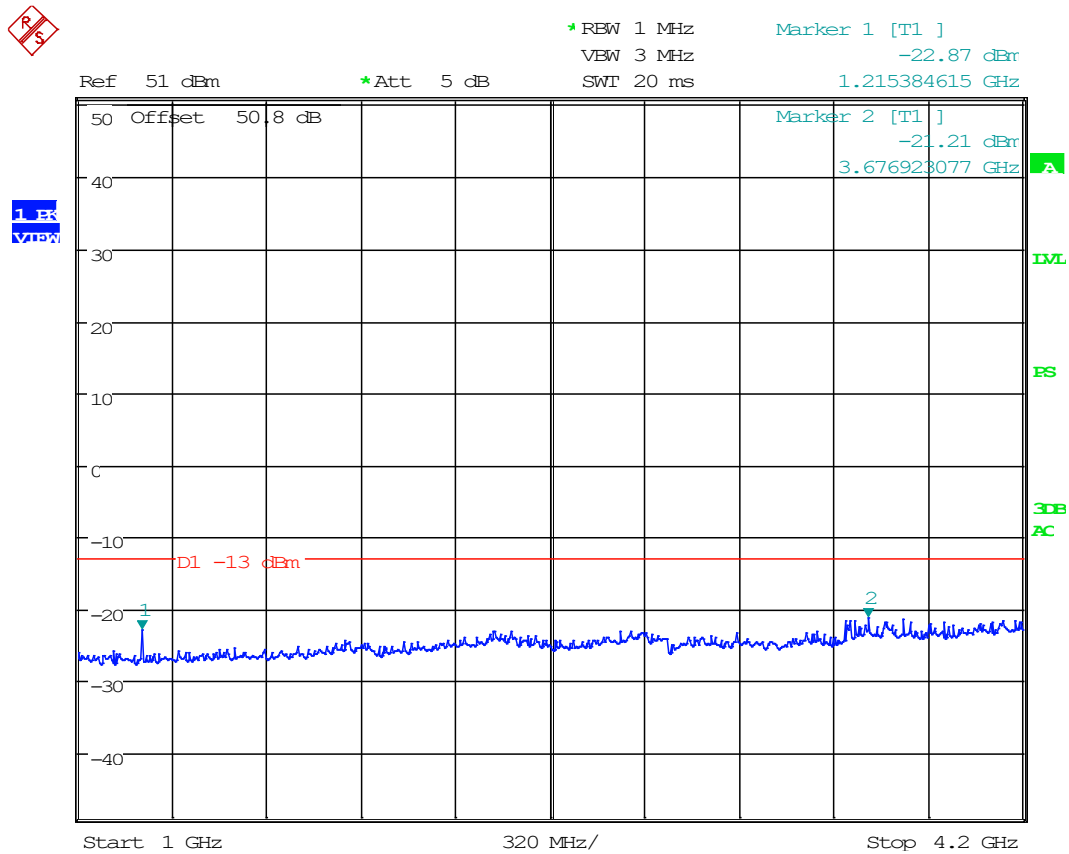
Conducted Emissions Spectrum Plots

8.8.1 30 MHz to 1 GHz, 406.125 MHz



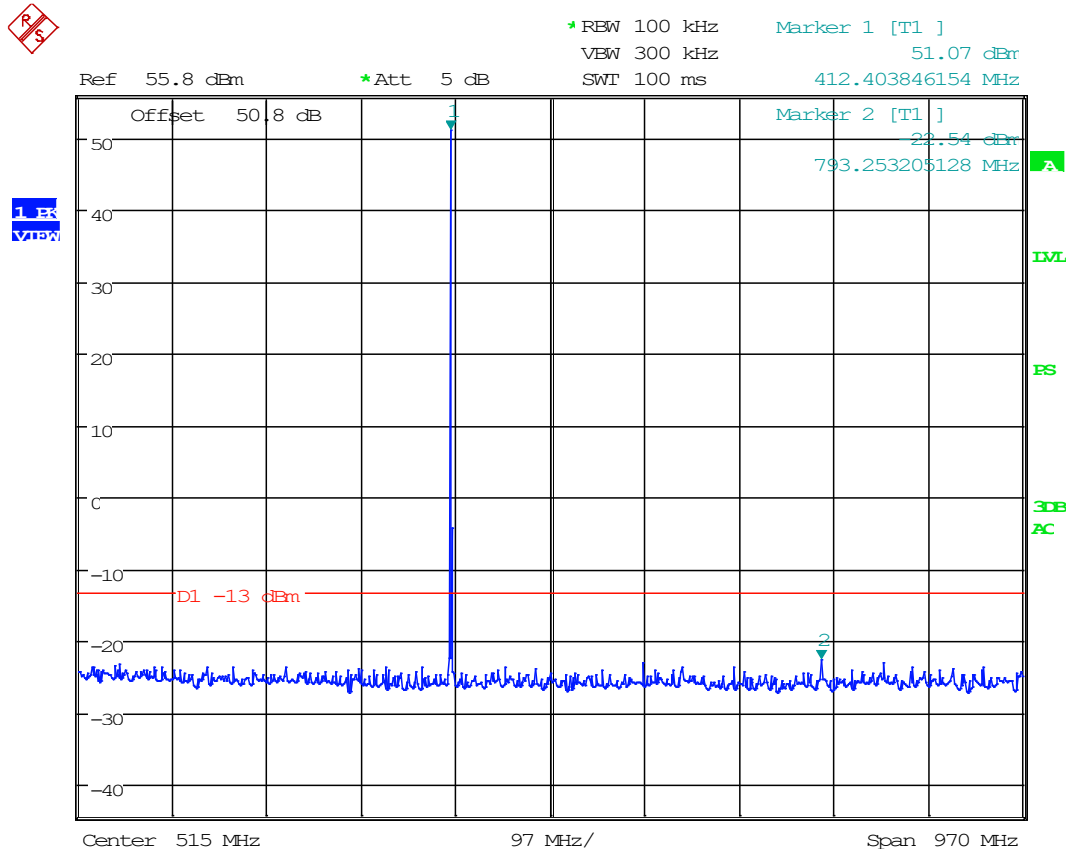
Date: 26.NOV.2019 11:42:43

8.8.2 1 GHz to 10th Harmonic, 406.125 MHz



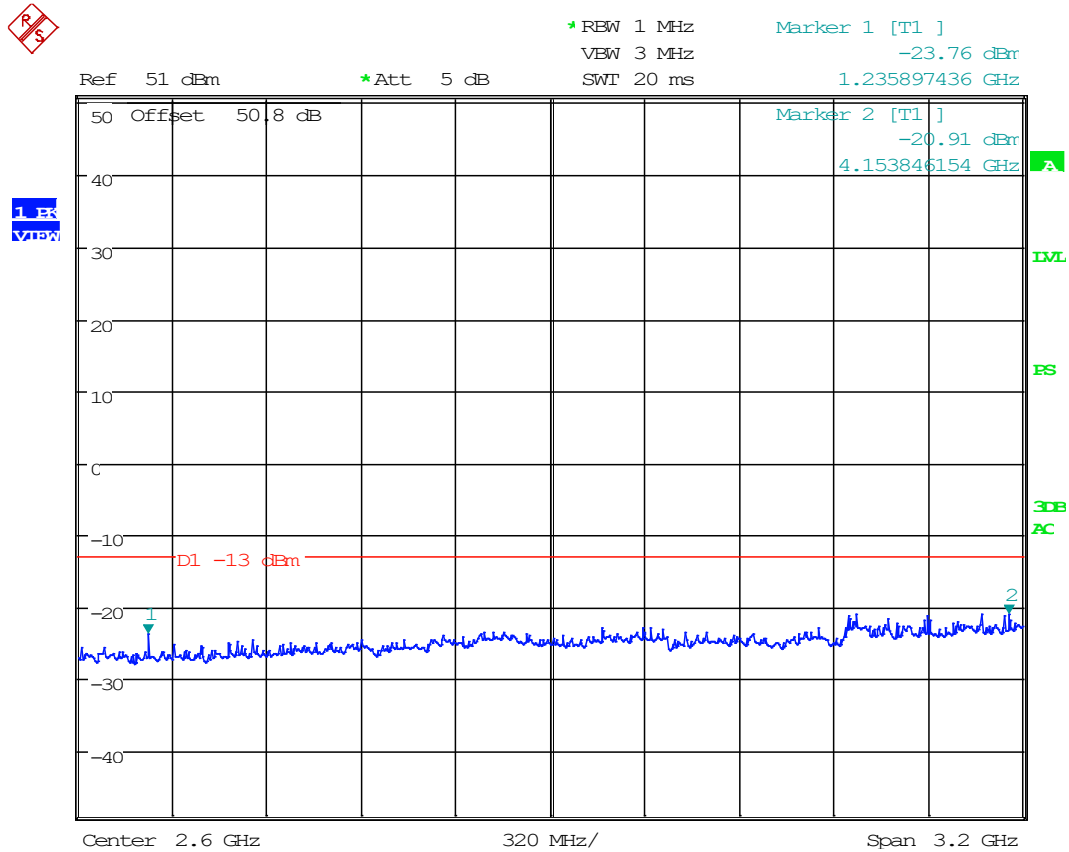
Date: 26.NOV.2019 11:49:46

8.8.3 30 MHz to 1 GHz, 413.000 MHz

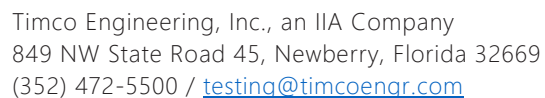


Date: 26.NOV.2019 11:44:00

8.8.4 1 GHz to 10th Harmonic, 413.000 MHz



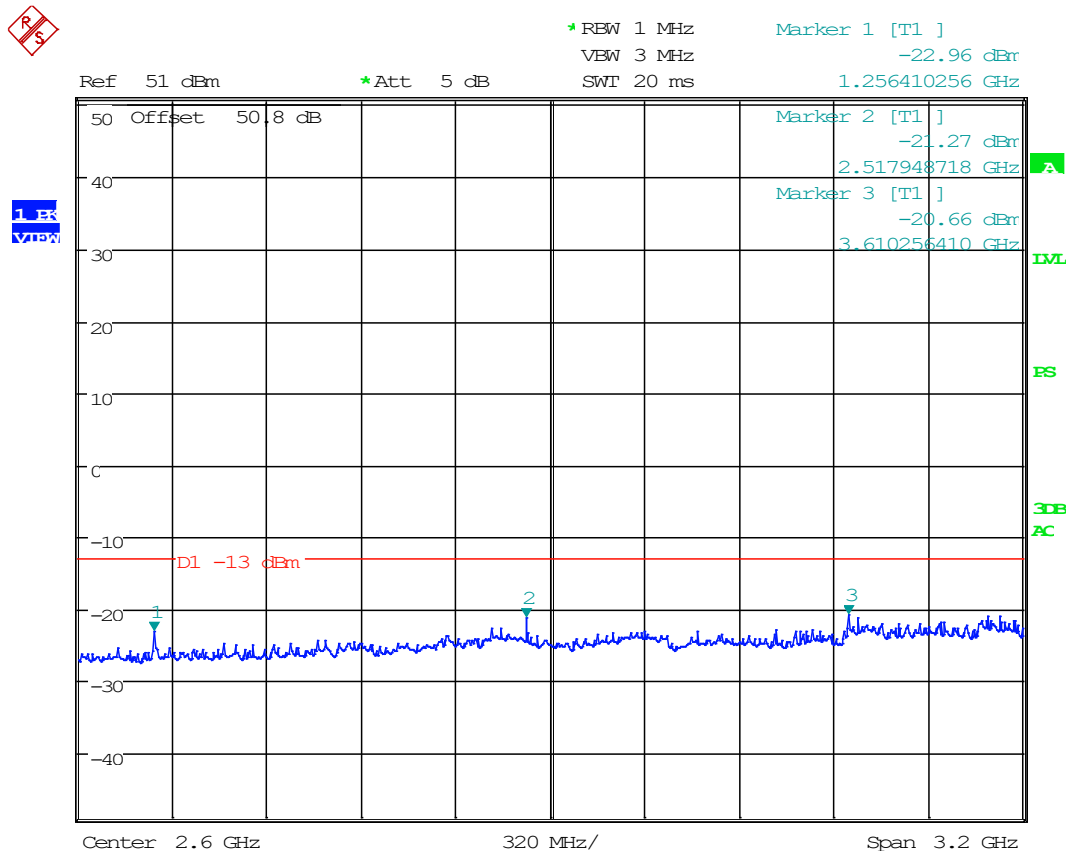
Date: 26.NOV.2019 11:50:50



8.8.5 30 MHz to 1 GHz, 420.000 MHz



8.8.6 1 GHz to 10th Harmonic, 420.000 MHz

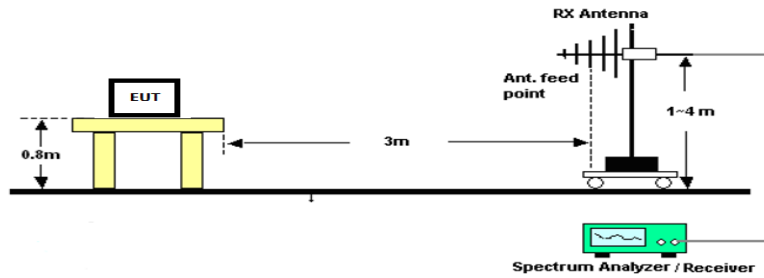


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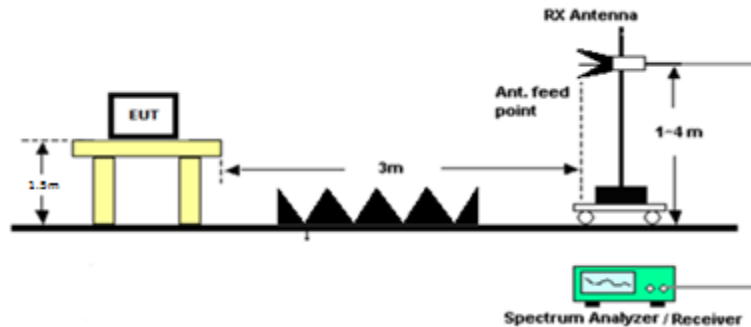
8.9 Spurious Radiated Emissions

Limits from FCC Parts 2.1053, 90.210 and test procedure from ANSI C63.26-2015 and FCC KDB 935210 D05 v01r04 Industrial Signal Boosters.

Radiated Test Setup, 30 – 1000 MHz



Radiated Test Setup, Above 1000 MHz





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Radiated Emissions, Tabular Data

8.9.1 406.125 MHz

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBμV)	Antenna Polarity	Coax Loss (dB)	Correction Factor (dB/m)	Distance (m)	Field Strength (dBμV/m)	ERP (dBm)	Limit (dBm)	Margin (dB)
406.12	812.25	PK	33.47	H	3.38	20.45	3.00	57.30	-40.07	-13.00	27.07
406.12	812.25	PK	37.42	H	3.38	20.45	3.00	61.25	-36.12	-13.00	23.12
406.12	1218.38	PK	24.05	H	3.97	28.18	3.00	56.20	-41.18	-13.00	28.18
406.12	1218.38	PK	22.57	V	3.97	28.18	3.00	54.72	-42.66	-13.00	29.66
406.12	1624.50	PK	17.06	H	4.70	28.33	3.00	50.09	-47.29	-13.00	34.29
406.12	1624.50	PK	19.56	V	4.70	28.33	3.00	52.59	-44.79	-13.00	31.79
406.12	2030.63	PK	19.64	H	5.21	31.11	3.00	55.96	-41.41	-13.00	28.41
406.12	2030.63	PK	17.27	V	5.21	31.11	3.00	53.59	-43.78	-13.00	30.78
406.12	2436.75	PK	18.86	H	5.62	31.85	3.00	56.33	-41.05	-13.00	28.05
406.12	2436.75	PK	18.11	V	5.62	31.85	3.00	55.58	-41.80	-13.00	28.80
406.12	2842.88	PK	22.40	H	6.17	32.34	3.00	60.91	-36.47	-13.00	23.47
406.12	2842.88	PK	20.29	V	6.17	32.34	3.00	58.80	-38.58	-13.00	25.58
406.12	3249.00	PK	16.06	H	6.65	32.68	3.00	55.39	-41.99	-13.00	28.99
406.12	3249.00	PK	14.09	V	6.65	32.68	3.00	53.42	-43.96	-13.00	30.96
406.12	3655.13	PK	10.55	H	6.57	33.20	3.00	50.32	-47.05	-13.00	34.05
406.12	3655.13	PK	13.99	V	6.57	33.20	3.00	53.76	-43.61	-13.00	30.61
406.12	4061.25	PK	14.40	H	7.17	33.38	3.00	54.95	-42.43	-13.00	29.43
406.12	4061.25	PK	10.08	V	7.17	33.38	3.00	50.63	-46.75	-13.00	33.75

8.9.1 413.000 MHz

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBμV)	Antenna Polarity	Coax Loss (dB)	Correction Factor (dB/m)	Distance (m)	Field Strength (dBμV/m)	ERP (dBm)	Limit (dBm)	Margin (dB)
413.00	826.00	PK	33.33	H	3.40	20.94	3.00	57.67	-39.71	-13.00	26.71
413.00	826.00	PK	26.14	V	3.40	20.94	3.00	50.48	-46.90	-13.00	33.90
413.00	1239.00	PK	23.11	H	3.99	28.34	3.00	55.44	-41.94	-13.00	28.94
413.00	1239.00	PK	22.14	V	3.99	28.34	3.00	54.47	-42.91	-13.00	29.91
413.00	1652.00	PK	22.27	H	4.73	28.62	3.00	55.62	-41.76	-13.00	28.76
413.00	1652.00	PK	24.24	V	4.73	28.62	3.00	57.59	-39.79	-13.00	26.79
413.00	2065.00	PK	21.11	H	5.26	31.00	3.00	57.37	-40.00	-13.00	27.00
413.00	2065.00	PK	18.82	V	5.26	31.00	3.00	55.08	-42.29	-13.00	29.29
413.00	2478.00	PK	22.23	H	5.62	32.09	3.00	59.94	-37.44	-13.00	24.44
413.00	2478.00	PK	24.11	V	5.62	32.09	3.00	61.82	-35.56	-13.00	22.56
413.00	2891.00	PK	18.32	H	6.22	32.23	3.00	56.77	-40.61	-13.00	27.61
413.00	2891.00	PK	19.48	V	6.22	32.23	3.00	57.93	-39.45	-13.00	26.45
413.00	3304.00	PK	11.40	H	6.68	32.62	3.00	50.70	-46.67	-13.00	33.67
413.00	3304.00	PK	12.34	V	6.68	32.62	3.00	51.64	-45.73	-13.00	32.73
413.00	3717.00	PK	10.20	H	6.50	33.17	3.00	49.87	-47.51	-13.00	34.51
413.00	3717.00	PK	10.22	V	6.50	33.17	3.00	49.89	-47.49	-13.00	34.49
413.00	4130.00	PK	10.17	H	7.07	33.41	3.00	50.65	-46.72	-13.00	33.72
413.00	4130.00	PK	14.23	V	7.07	33.41	3.00	54.71	-42.66	-13.00	29.66



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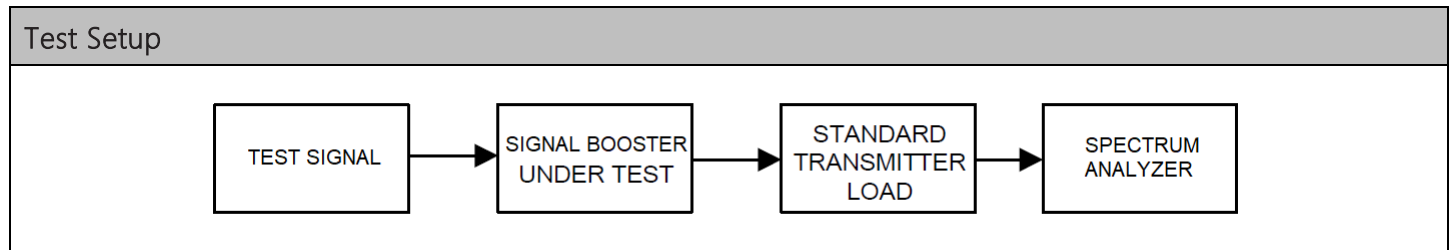
8.9.1 420.000 MHz

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBμV)	Antenna Polarity	Coax Loss (dB)	Correction Factor (dB/m)	Distance (m)	Field Strength (dBμV/m)	ERP (dBm)	Limit (dBm)	Margin (dB)
420.00	840.00	PK	34.78	H	3.45	22.10	3.00	60.33	-37.05	-13.00	24.05
420.00	840.00	PK	33.53	V	3.45	22.10	3.00	59.08	-38.30	-13.00	25.30
420.00	1260.00	PK	24.48	H	4.02	28.47	3.00	56.97	-40.40	-13.00	27.40
420.00	1260.00	PK	23.42	V	4.02	28.47	3.00	55.91	-41.46	-13.00	28.46
420.00	1680.00	PK	23.17	H	4.76	28.88	3.00	56.81	-40.57	-13.00	27.57
420.00	1680.00	PK	22.37	V	4.76	28.88	3.00	56.01	-41.37	-13.00	28.37
420.00	2100.00	PK	26.95	H	5.31	31.04	3.00	63.30	-34.07	-13.00	21.07
420.00	2100.00	PK	24.95	V	5.31	31.04	3.00	61.30	-36.07	-13.00	23.07
420.00	2520.00	PK	26.18	H	5.66	32.41	3.00	64.25	-33.13	-13.00	20.13
420.00	2940.00	PK	17.14	H	6.26	32.31	3.00	55.71	-41.66	-13.00	28.66
420.00	2940.00	PK	26.64	V	6.26	32.31	3.00	65.21	-32.16	-13.00	19.16
420.00	3360.00	PK	14.04	H	6.72	32.64	3.00	53.40	-43.98	-13.00	30.98
420.00	3360.00	PK	16.31	V	6.72	32.64	3.00	55.67	-41.71	-13.00	28.71
420.00	3780.00	PK	11.76	H	8.42	33.14	3.00	53.32	-44.06	-13.00	31.06
420.00	3780.00	PK	13.30	V	8.42	33.14	3.00	54.86	-42.52	-13.00	29.52
420.00	4200.00	PK	11.40	H	7.14	33.32	3.00	51.86	-45.52	-13.00	32.52
420.00	4200.00	PK	12.79	V	7.14	33.32	3.00	53.25	-44.13	-13.00	31.13



8.10 Modulation Characteristics

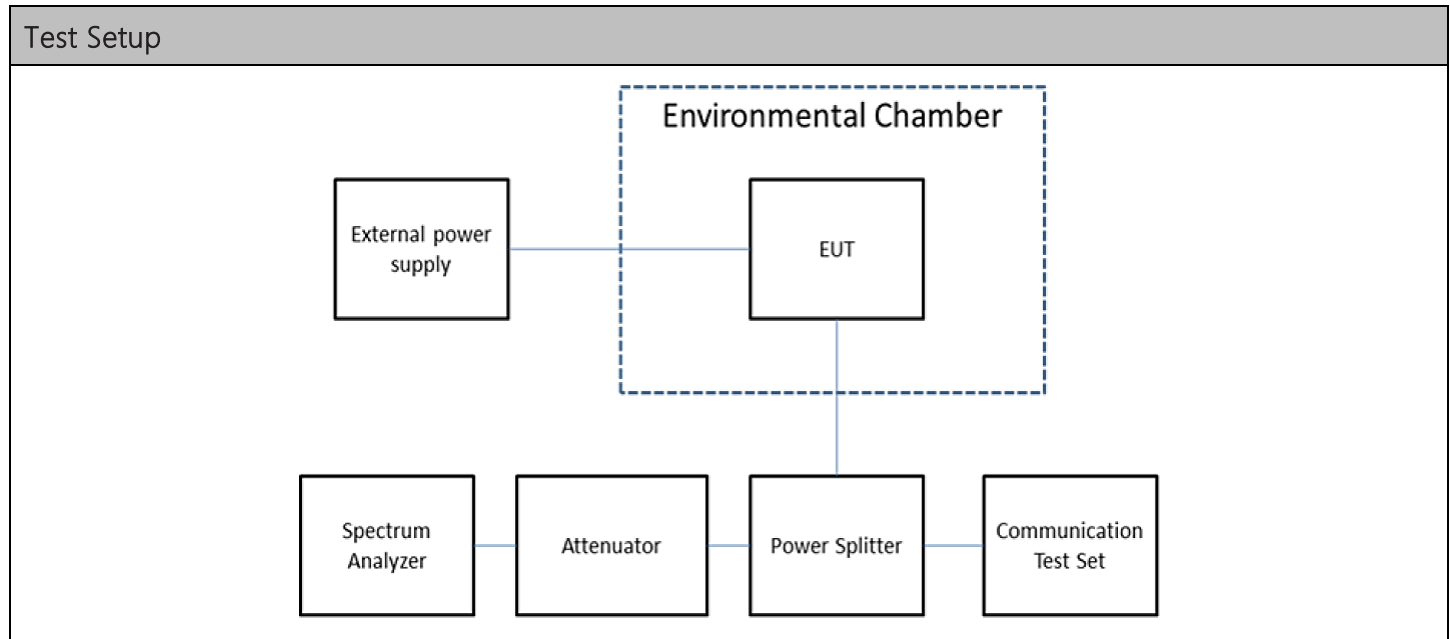
Limits from FCC Parts 2.1047, and test procedure from ANSI C63.26-2015.



N/A. The EUT does not have any means to modulate the incoming signal.

8.11 Frequency Stability

Limits from FCC Parts 2.1055, 90.213 (a); and test procedure from ANSI C63.26-2015 and FCC KDB 935210 D05 v01r04 Industrial Signal Boosters.



Test Results, Mode 1		
Tuned Frequency (MHz)	Max Deviation (ppm)	Limit (ppm)
n/a	n/a	n/a

N/A. The EUT does not alter the input signal in any way.



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8.12 Transient Frequency Behavior

Limits from FCC Part 90.214; and test procedure from ANSI C63.26-2015.

N/A. The EUT does not "key-on" or "key off", and instead transmits indefinitely.



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8.13 Adjacent channel power limits

Limits from FCC Part 90.221, and test procedure from ANSI C63.26-2015.

N/A. Device does not operate in a band requiring ACP measurement.



9. ANNEX-A - Photographs of the EUT

Photographs of the EUT and any manufacturer supplied accessories to be used with the EUT are in separate supplementary documents labelled EXTERNAL PHOTOS and INTERNAL PHOTOS.

10. ANNEX-B – Test Setup Photographs

Test setup photographs are located in a separate supplementary ANNEX-B document.

11. History of Test Report Changes

Test Report #	Revision #	Description	Date of Issue
TR_3167UT19_FCC_PT90_Booster Class B_1	1	Initial release	December 2, 2020



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END OF TEST REPORT
