



Test Report – FCC PART 15.236

LOW POWER LICENSED WIRELESS MICROPHONE

Prepared For: Wisycom

Approved for Release By:

Signature: Bruno Clavier

Name & Title: Bruno Clavier, General Manager

Date of Signature 7/2/2021

This test report shall not be reproduced except in full without the written and signed permission of Timco Engineering Inc. (IIA). This test report relates only to the items tested as identified and is not valid for any subsequent changes or modifications made to the equipment under test.

Table of Contents

1. CUSTOMER INFORMATION.....	4
1.1 TEST RESULT SUMMARY	4
2. LOCATION OF TESTING	5
2.1 TEST LABORATORY	5
2.2 TESTING WAS PERFORMED, REVIEWED BY	6
3. TEST SAMPLE(S) (EUT/DUT).....	7
3.1 DESCRIPTION OF THE EUT.....	7
3.2 CONFIGURATION OF EUT	8
3.3 TEST SETUP OF EUT	8
4. TEST METHODS & APPLICABLE REGULATORY LIMITS.....	9
4.1 TEST METHODS/STANDARDS/GUIDANCE	9
5. MEASUREMENT UNCERTAINTY.....	9
6. ENVIRONMENTAL CONDITIONS	9
7. LIST OF TEST EQUIPMENT AND TEST FACILITY.....	10
8. TEST RESULTS	11
8.1 RF POWER OUTPUT	12
8.1.1 Test Data: RF Power Output Measurement Table	12
8.2 OCCUPIED BANDWIDTH	16
8.2.1 Test Data: 99% Occupied Bandwidth Measurement Plot, 174 MHz.....	17
8.2.2 Test Data: 99% Occupied Bandwidth Measurement Plot, 200 MHz	18
8.2.3 Test Data: 99% Occupied Bandwidth Measurement Plot, 215 MHz.....	19
8.2.4 Test Data: 99% Occupied Bandwidth Measurement Plot, 470 MHz	20
8.2.5 Test Data: 99% Occupied Bandwidth Measurement Plot, 555 MHz.....	21
8.2.6 Test Data: 99% Occupied Bandwidth Measurement Plot, 608 MHz.....	22
8.2.1 Test Data: 99% Occupied Bandwidth Measurement Plot, 614.5 MHz	23
8.2.2 Test Data: 99% Occupied Bandwidth Measurement Plot, 657 MHz	24
8.2.3 Test Data: 99% Occupied Bandwidth Measurement Plot, 662 MHz	25
8.2.4 Test Data: 26dB Occupied Bandwidth Measurement Plot, 174 MHz.....	26
8.2.5 Test Data: 26dB Occupied Bandwidth Measurement Plot, 200 MHz	27
8.2.6 Test Data: 26dB Occupied Bandwidth Measurement Plot, 215 MHz.....	28
8.2.7 Test Data: 26dB Occupied Bandwidth Measurement Plot, 470 MHz	29
8.2.8 Test Data: 26dB Occupied Bandwidth Measurement Plot, 555 MHz.....	30
8.2.9 Test Data: 26dB Occupied Bandwidth Measurement Plot, 608 MHz.....	31
8.2.1 Test Data: 26dB Occupied Bandwidth Measurement Plot, 614.5 MHz	32
8.2.2 Test Data: 26dB Occupied Bandwidth Measurement Plot, 657 MHz	33
8.2.3 Test Data: 26dB Occupied Bandwidth Measurement Plot, 662 MHz	34
8.3 OCCUPIED BANDWIDTH (MASK)	35
8.3.1 Test Data: Emission Mask Plot, 470 MHz	36
8.3.2 Test Data: Emission Mask Plot, 555 MHz	37

8.3.3	Test Data: Emission Mask Plot, 608 MHz.....	38
8.3.1	Test Data: Emission Mask Plot, 614.5 MHz.....	39
8.3.2	Test Data: Emission Mask Plot, 657 MHz.....	40
8.3.3	Test Data: Emission Mask Plot, 662 MHz.....	41
8.4	RADIATED EMISSIONS.....	42
8.4.1	Radiated Emissions Table 174-215 MHz	43
8.4.2	Radiated Emissions Table 470-608 MHz.....	45
8.4.1	Radiated Emissions Table 614-616 MHz	47
8.4.2	Radiated Emissions Table 657-662 MHz	48
9.	ANNEX-A - PHOTOGRAPHS OF THE EUT.....	49
10.	ANNEX-B – TEST SETUP PHOTOGRAPHS.....	49
11.	HISTORY OF TEST REPORT CHANGES.....	49

1. Customer Information

Applicant: Wisycom SRL
Address: Via Tiepolo, 7E
Tombolo, 35019, Italy

1.1 Test Result Summary

The following test procedure was used ANSI C63.10. 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.

Clauses	Description of the Requirements	Result (Pass, Fail or N/A)
PART 2.1046(a), FCC Part 15.236	Conducted Power	PASS
PART 2.1046(a), FCC Part 15.236	Operating Bandwidth	PASS
FCC Part 15.236	Operating Bandwidth Emission mask	PASS
FCC Part 15.236	Radiated Emissions	PASS

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

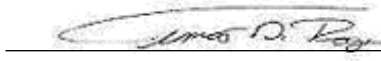
EU Notified Body # 1177

For all designations see A2LA scope # 0955.01

2.2 Testing was performed, reviewed by

Dates of Testing: 7/1/2021 – 7/2/2021

Signature:



Sr. EMC Engineer
EMC-003838-NE



Name & Title:

Tim Royer, EMC Engineer

Date of Signature

7/2/2021

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

The test sample was received: 7/1/2021

3.1 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:	POURPU500
Brief Description	Wireless Microphone
Model(s) #	RPU500
Firmware version	n/a
Software version	n/a
Serial Number	01500110

Technical Characteristics	
Technology	Wireless Microphone
Frequency Range	174-216 MHz, 470-608 MHz, 614-616 MHz, 657-663MHz
Duty Cycle	100%
Antenna Connector	BNC or TNC Type Female
Voltage Rating (AC or Batt.)	AC & Battery

Antenna Characteristics			
Antenna	Frequency Range	Mode / BW	Antenna Gain
1	n/a	n/a	0 dBi
2			

3.2 Configuration of EUT

Band	Number of Ant.
174-216 MHz 470-608 MHz 614-616 MHz 657-663 MHz	1

Operating conditions during Testing:

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

Peripherals used during Testing:

No peripherals used.

3.3 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

The measurement was performed as per ANSI C63.10. Full test results are available in this report.

Limits and Regulatory Limits:

- 1) FCC Part 15.236

5. Measurement Uncertainty

Parameter	Uncertainty (dB)
Conducted Emissions	1.42
Radiated Emissions (30 – 200 MHz)	5.49
Radiated Emissions (200 – 1000 MHz)	5.79
Radiated Emissions (1 GHz – 18 GHz)	4.37
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

Temperature & Humidity

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

Parameter	Measurement
Temperature	23 C +/- 5%
Humidity	55% +/- 5%
Barometric Pressure	30.05 in Hg

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.

List of Test Equipment

Type	Device	Manufacturer	Model	SN #	Current Cal	Cal Due
Antenna	Biconical 1057	Eaton	94455-1	1057	10/16/20	10/16/2023
Antenna, NSA	Log-Periodic 1243	Eaton	96005	1243	5/4/21	5/3/2024
Antenna	Double-Ridged Horn/ETS Horn 1	ETS-Lindgren	3117	00035923	2/25/20	2/24/2023
Antenna	Double-Ridged Horn 18-40 GHz	EMCO	3116	9011-2145	10/19/20	10/19/2023
CHAMBER	CHAMBER	Panashield	3M	N/A	3/12/19	3/11/2022
Pre-amp	Pre-amp	RF-LAMBDA	RLNA00M45GA	NA	2/27/19	2/26/2022
Receiver	EMI Test Receiver R&S ESU 40	Rohde & Schwarz	ESU 40	100320	8/28/18	8/27/2021

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.

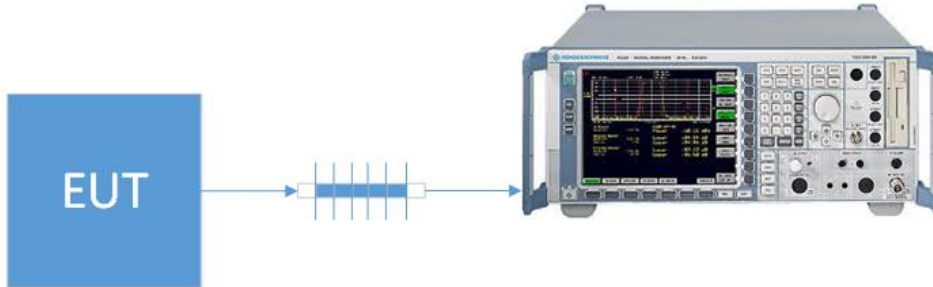
The measurement results, along with the appropriate limits for comparison, may be presented in tabular or graphical form. In addition, any variation in the measurement environment may be reported if applicable (e.g., a significant change of temperature that could affect the cable loss and amplifier response).

Units of measurement

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 RF POWER OUTPUT

Limits from Part 2.1046 ,15.236 (d) (1) and test procedure from ANSI C63.10.

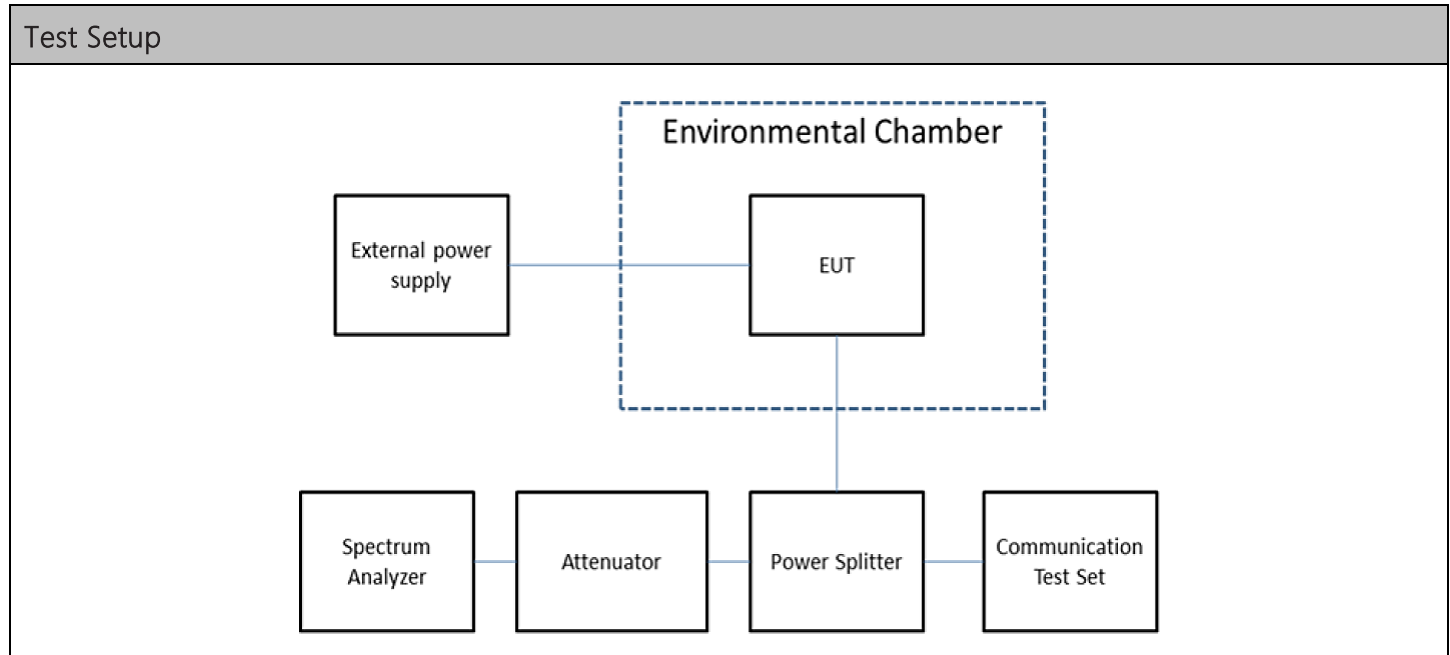


8.1.1 Test Data: RF Power Output Measurement Table

Tuned Frequency (MHz)	Power Output (dBm)	Level (mW)	Limit (mW) EIRP
174	14.74	29.79	50
200	15.00	31.62	50
215	14.96	31.33	50
470	14.78	30	50
555	14.97	31.4	50
608	14.66	29.25	50
614.5	10.57	11.4	20
657	11.38	13.74	20
662	11.36	13.68	20

8.2 Frequency Stability

Limits from Part 2.1046 ,15.236 (f 3) and test procedure from ANSI C63.10.

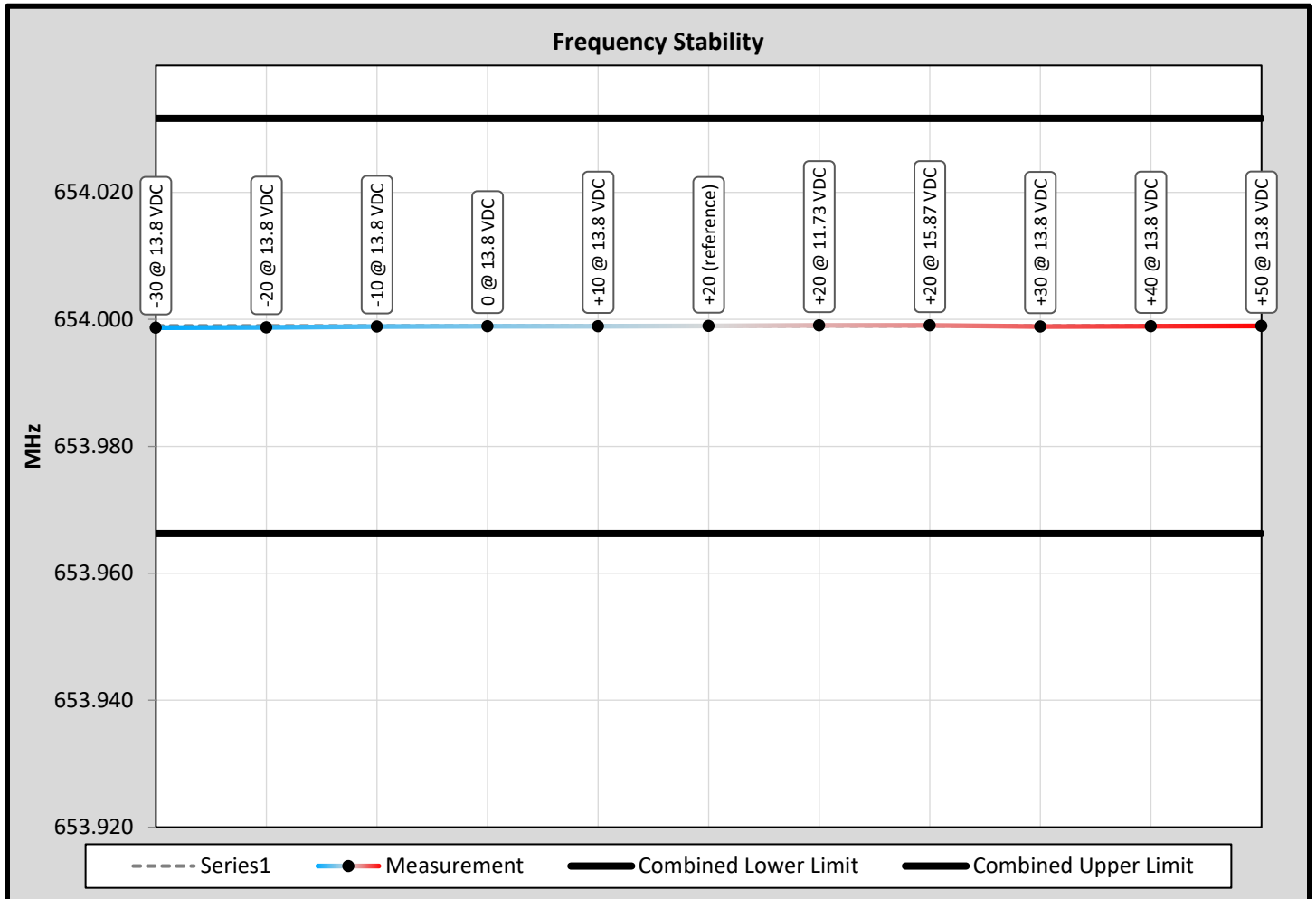


Test Results, Mode 1		
Tuned Frequency (MHz)	Max Deviation (kHz)	Limit (PPM)
654	0.280	50

8.2.1 Frequency Stability Data

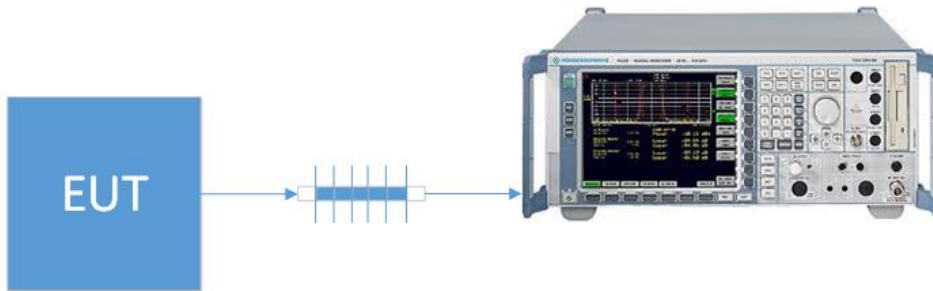
RSS 210 Limit	50.0	ppm
RSS 210 Limit, as ppb	50000	ppb (Parts per Billion)
RSS 210 Limit, as %	0.00500	%
Strictest Combined Limit, as Hz	32699.948	Hz
Combined Lower Limit	653.966260	MHz
Combined Upper Limit	654.031660	ACMH DC
Rated Supply Voltage	13.8	
Temperature / Voltage Variation		
Temperature (°C)	Supplied Voltage (V)	Frequency (MHz)
-30	13.8	653.998680
-20	13.8	653.998720
-10	13.8	653.998840
0	13.8	653.998900
+10	13.8	653.998920
+20 (reference)	13.8	653.998960
+20	11.7	653.999040
+20	15.9	653.999040
+30	13.8	653.998880
+40	13.8	653.998920
+50	13.8	653.998940

8.2.2 Frequency Stability Plot

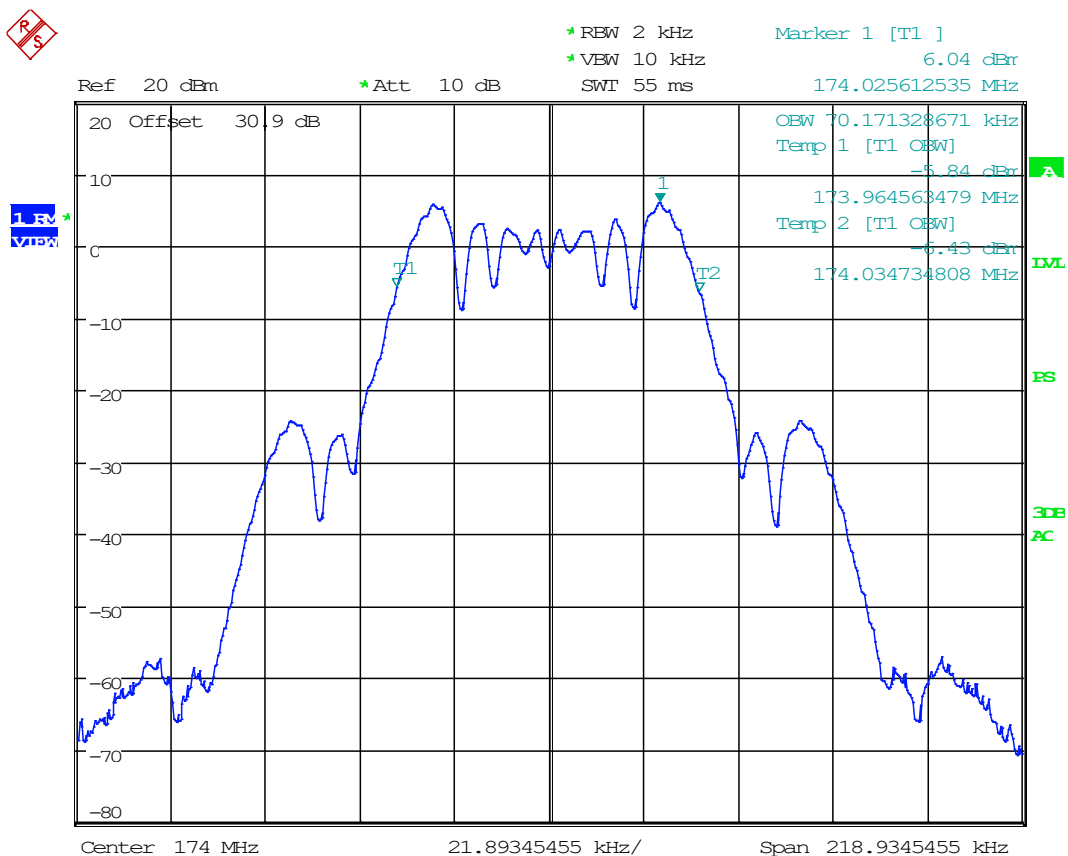


8.3 OCCUPIED BANDWIDTH

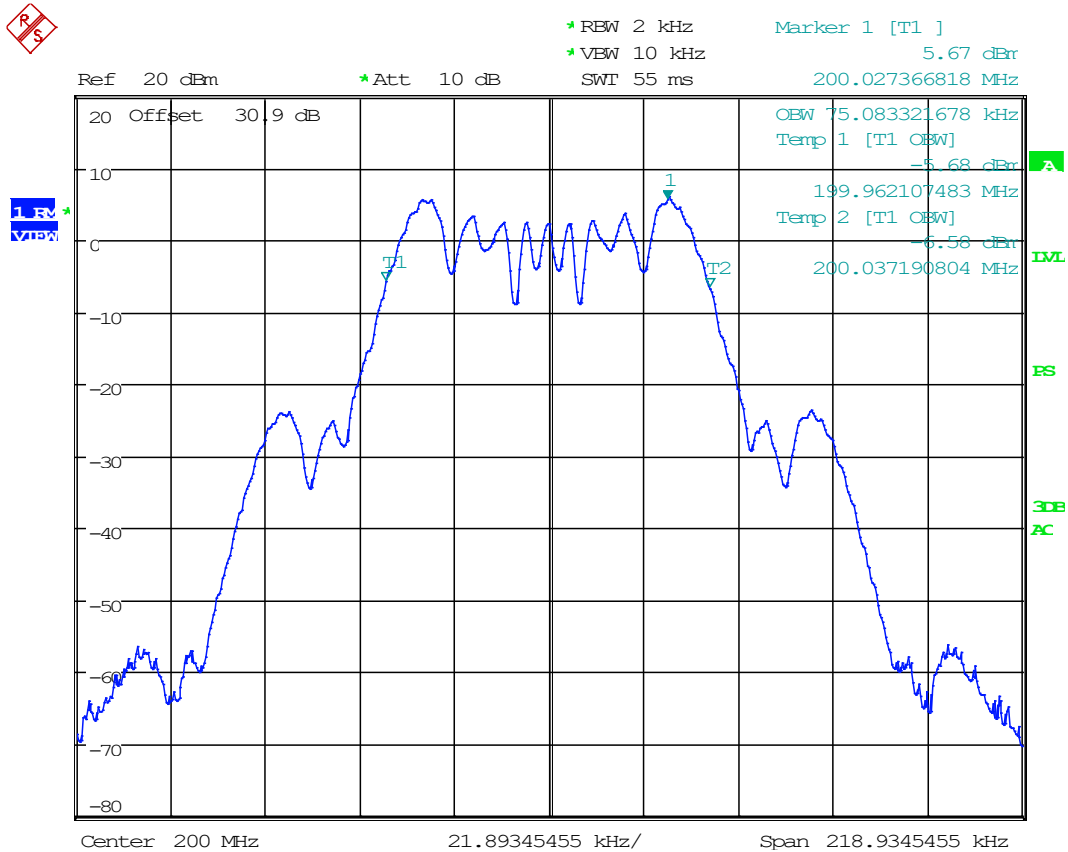
Limits from Part 2.1046, 15.236 and test procedure from ANSI C63.10.



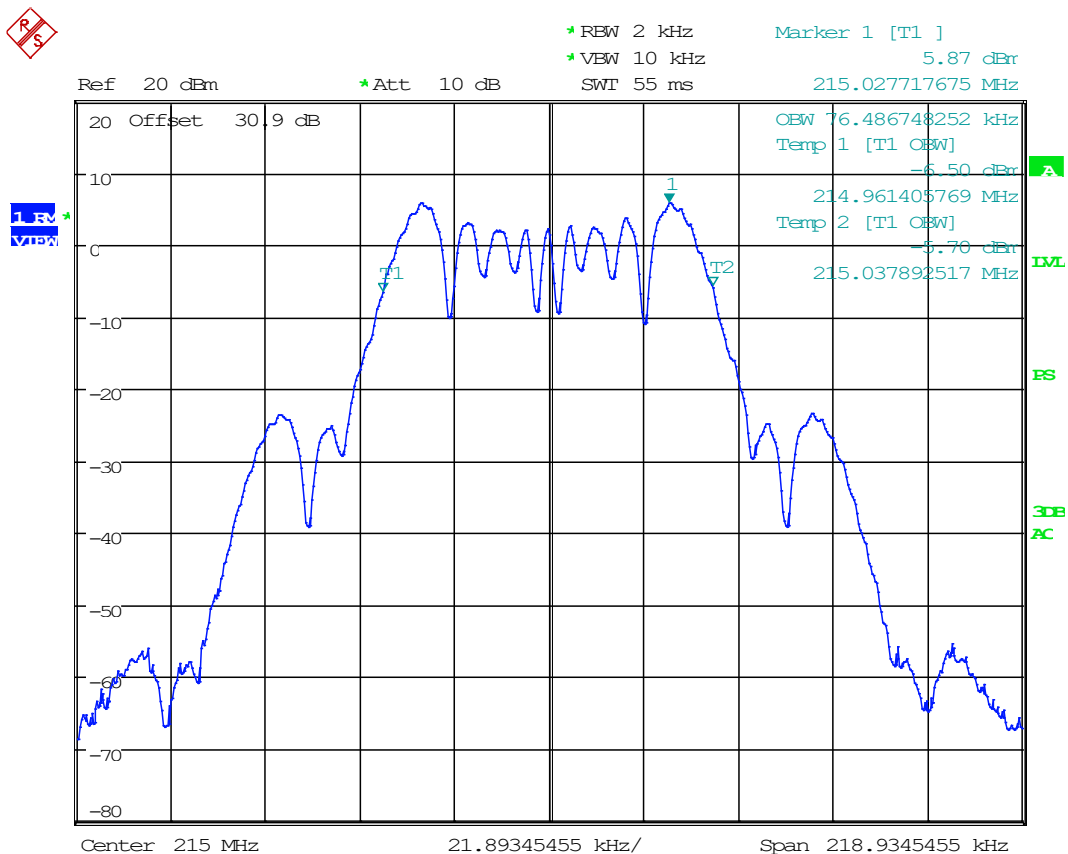
8.3.1 Test Data: 99% Occupied Bandwidth Measurement Plot, 174 MHz



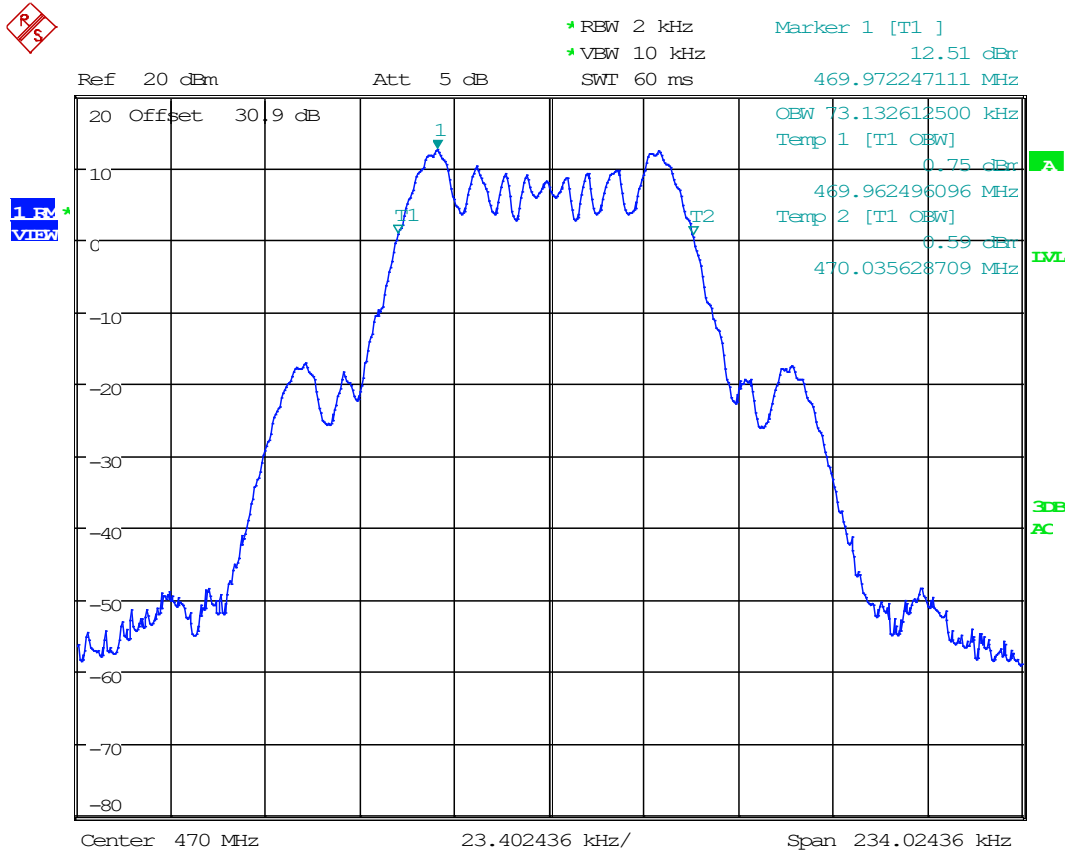
8.3.2 Test Data: 99% Occupied Bandwidth Measurement Plot, 200 MHz



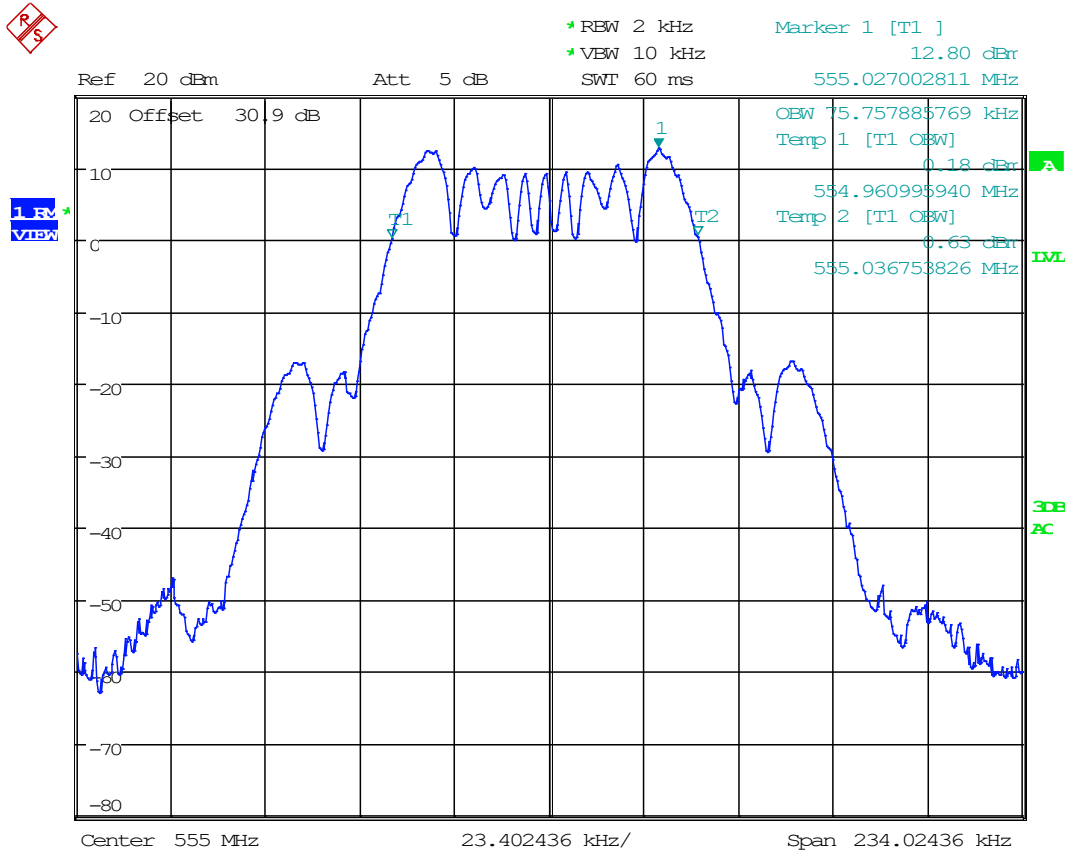
8.3.3 Test Data: 99% Occupied Bandwidth Measurement Plot, 215 MHz



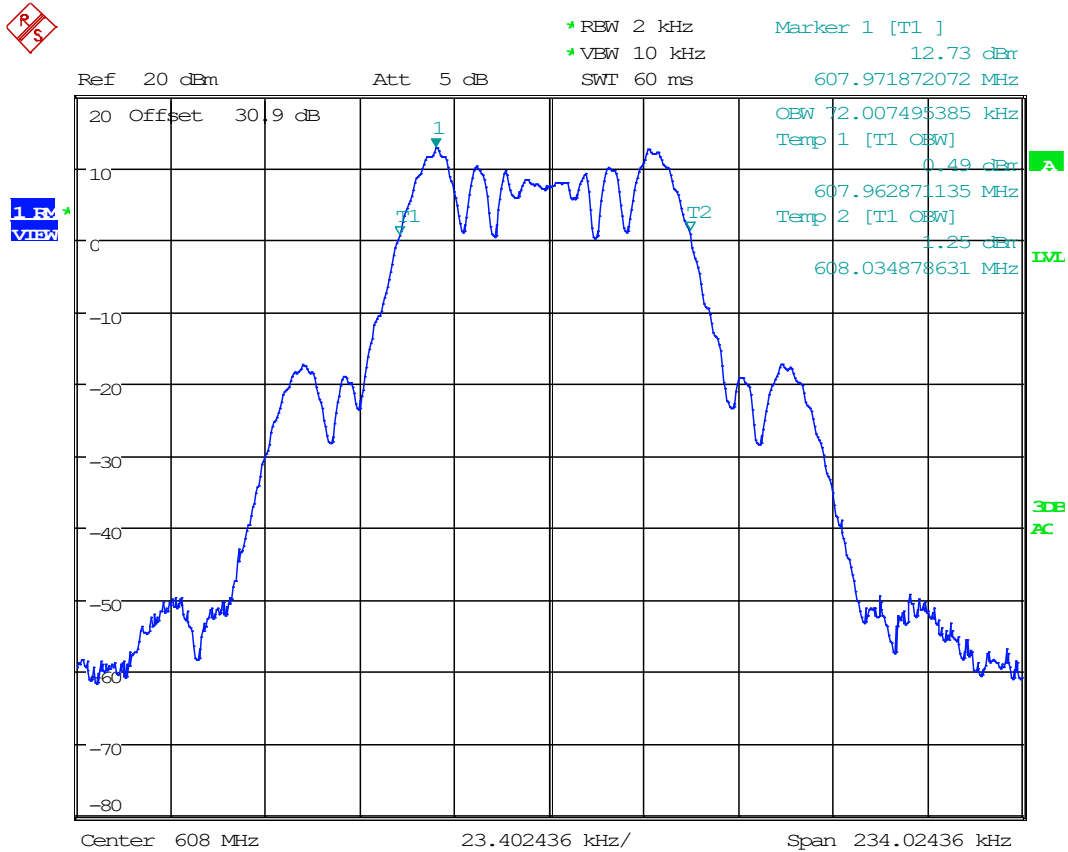
8.3.4 Test Data: 99% Occupied Bandwidth Measurement Plot, 470 MHz



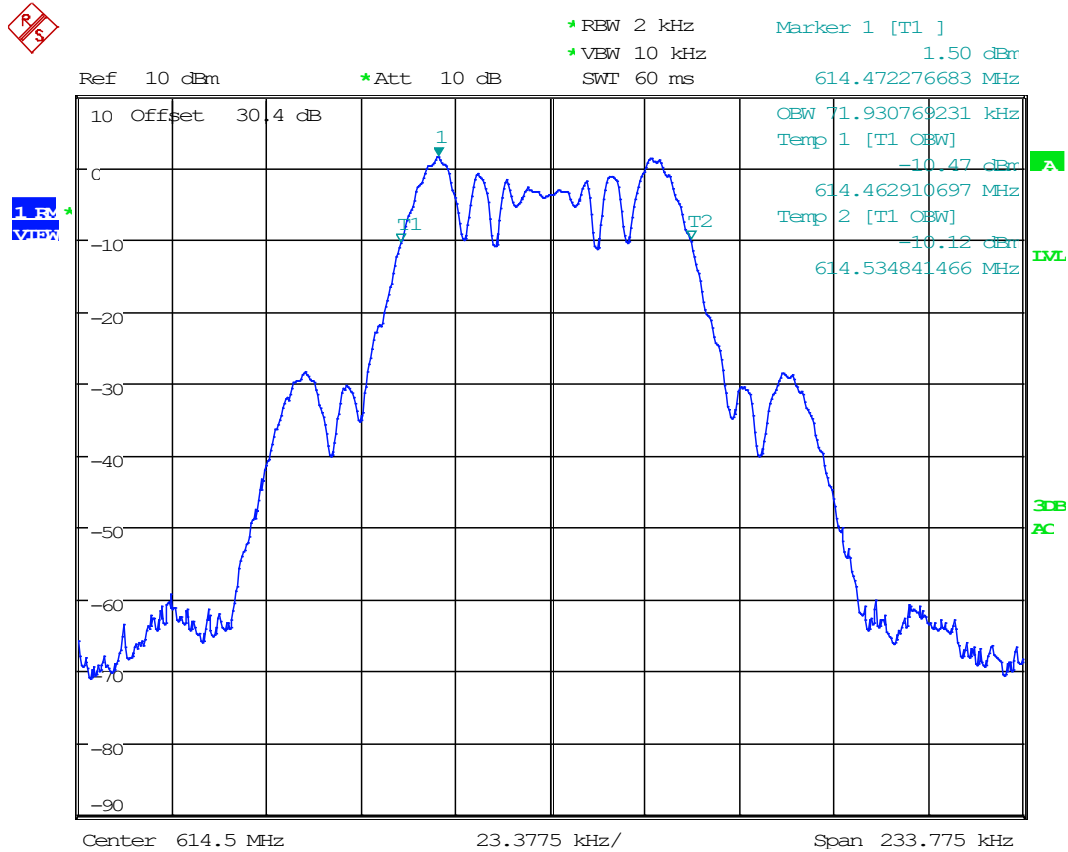
8.3.5 Test Data: 99% Occupied Bandwidth Measurement Plot, 555 MHz



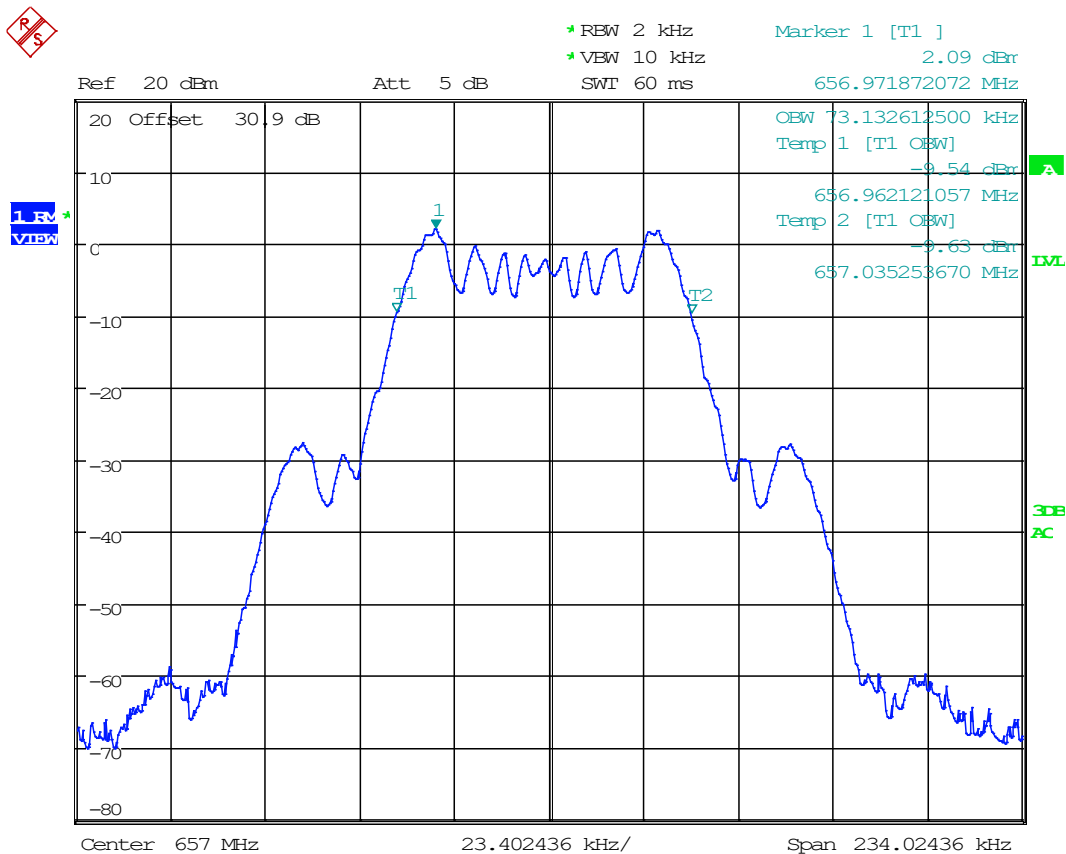
8.3.6 Test Data: 99% Occupied Bandwidth Measurement Plot, 608 MHz



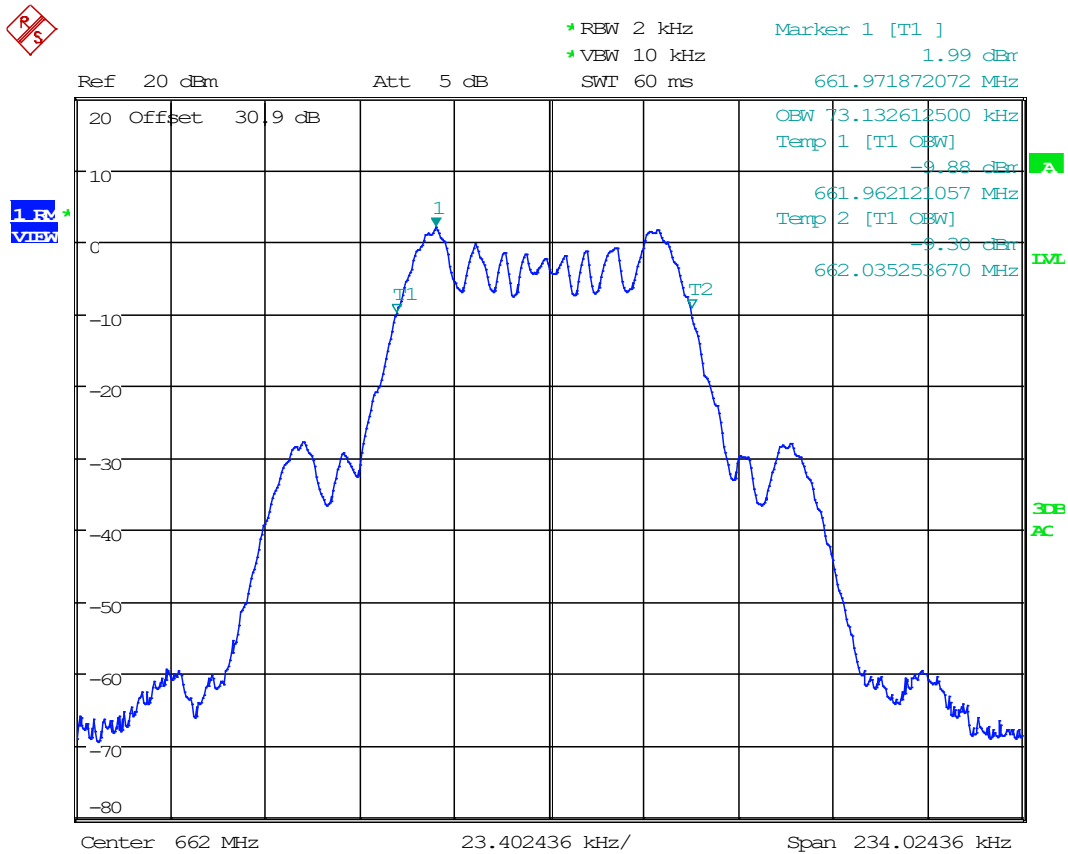
8.3.1 Test Data: 99% Occupied Bandwidth Measurement Plot, 614.5 MHz



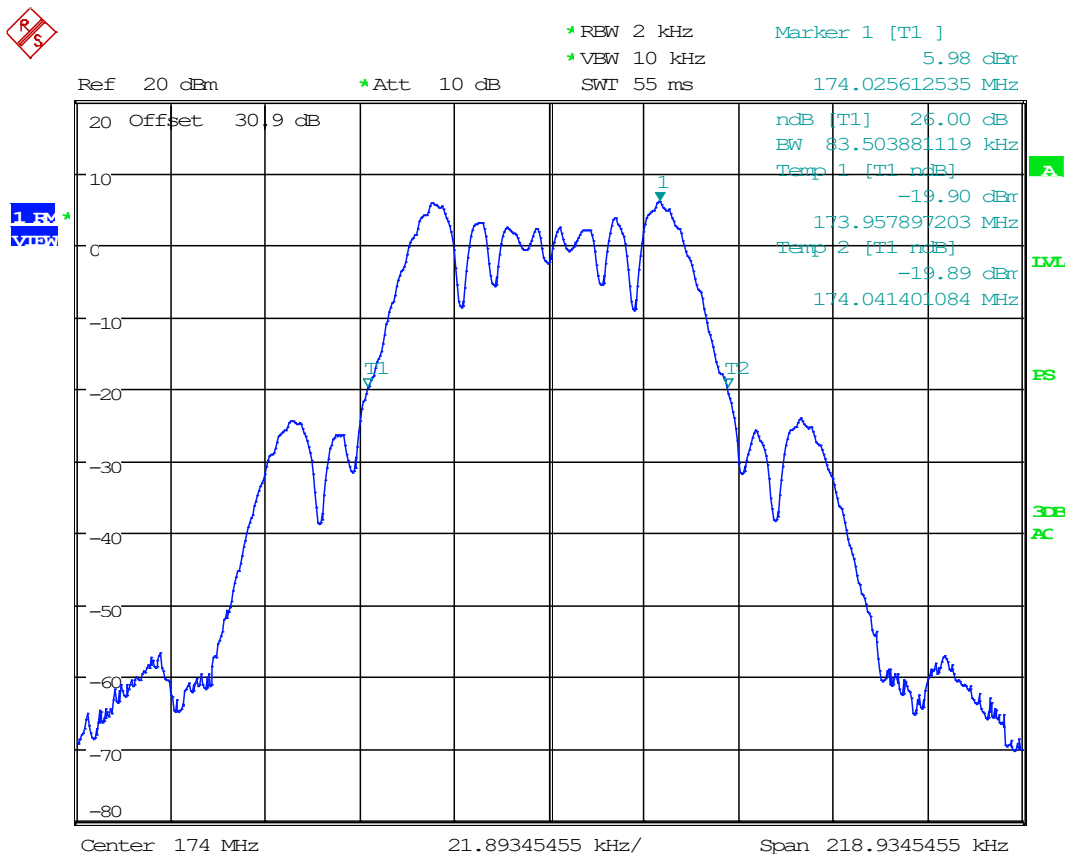
8.3.2 Test Data: 99% Occupied Bandwidth Measurement Plot, 657 MHz



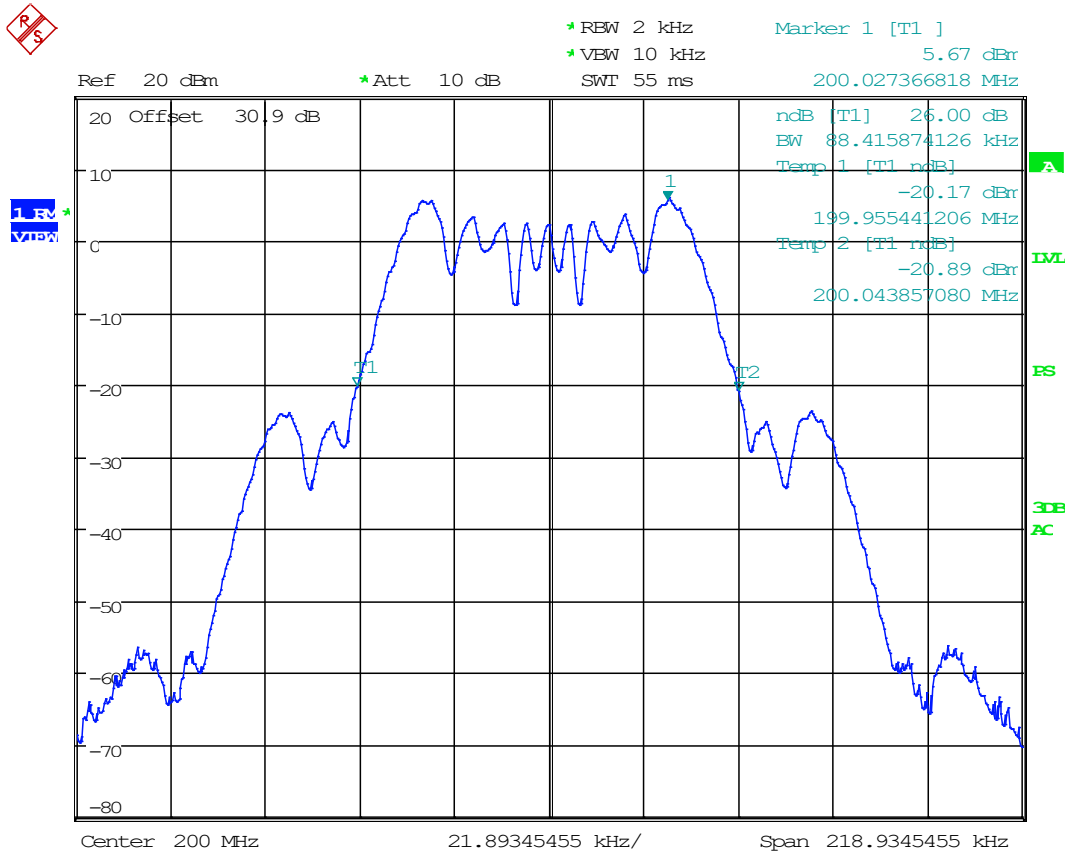
8.3.3 Test Data: 99% Occupied Bandwidth Measurement Plot, 662 MHz



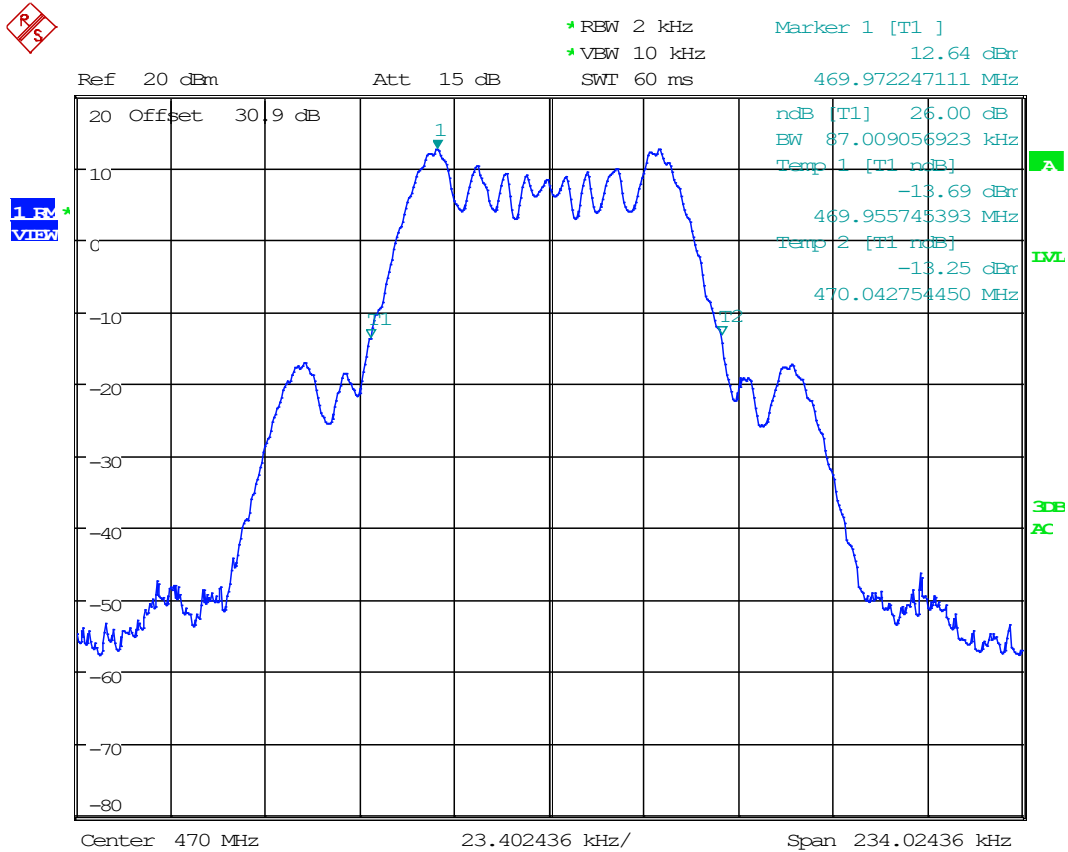
8.3.4 Test Data: 26dB Occupied Bandwidth Measurement Plot, 174 MHz



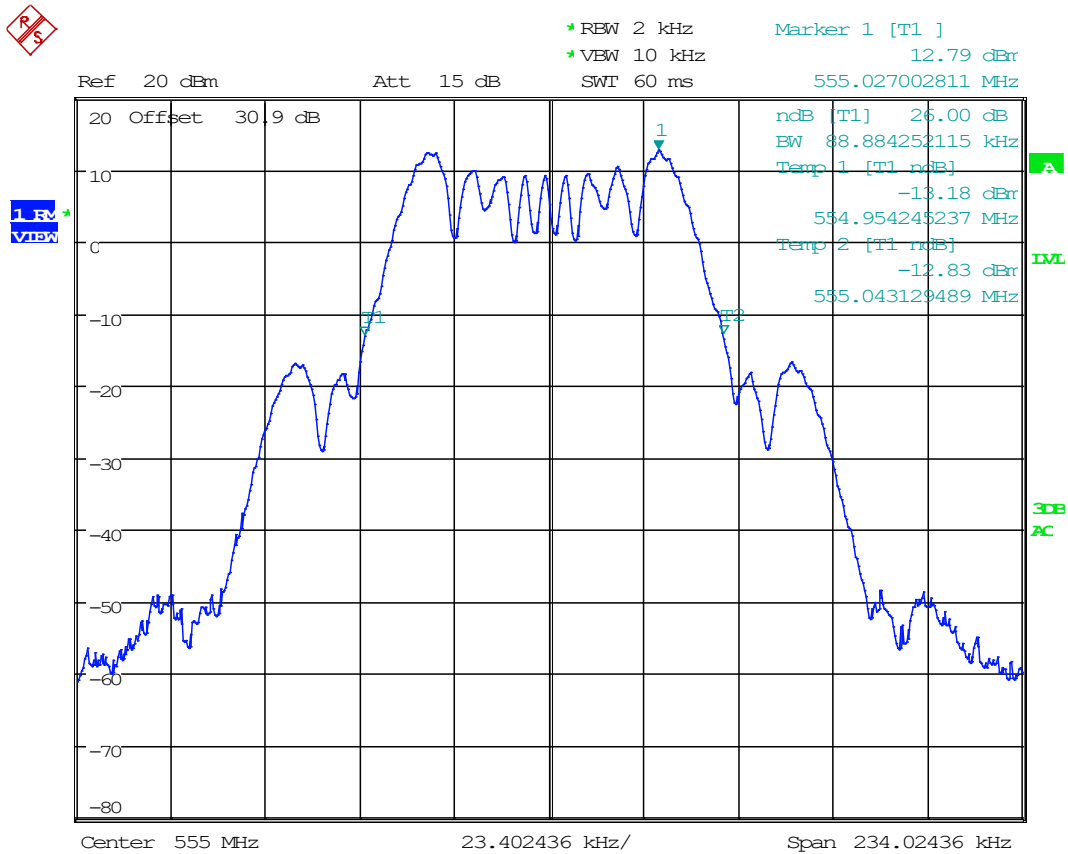
8.3.5 Test Data: 26dB Occupied Bandwidth Measurement Plot, 200 MHz



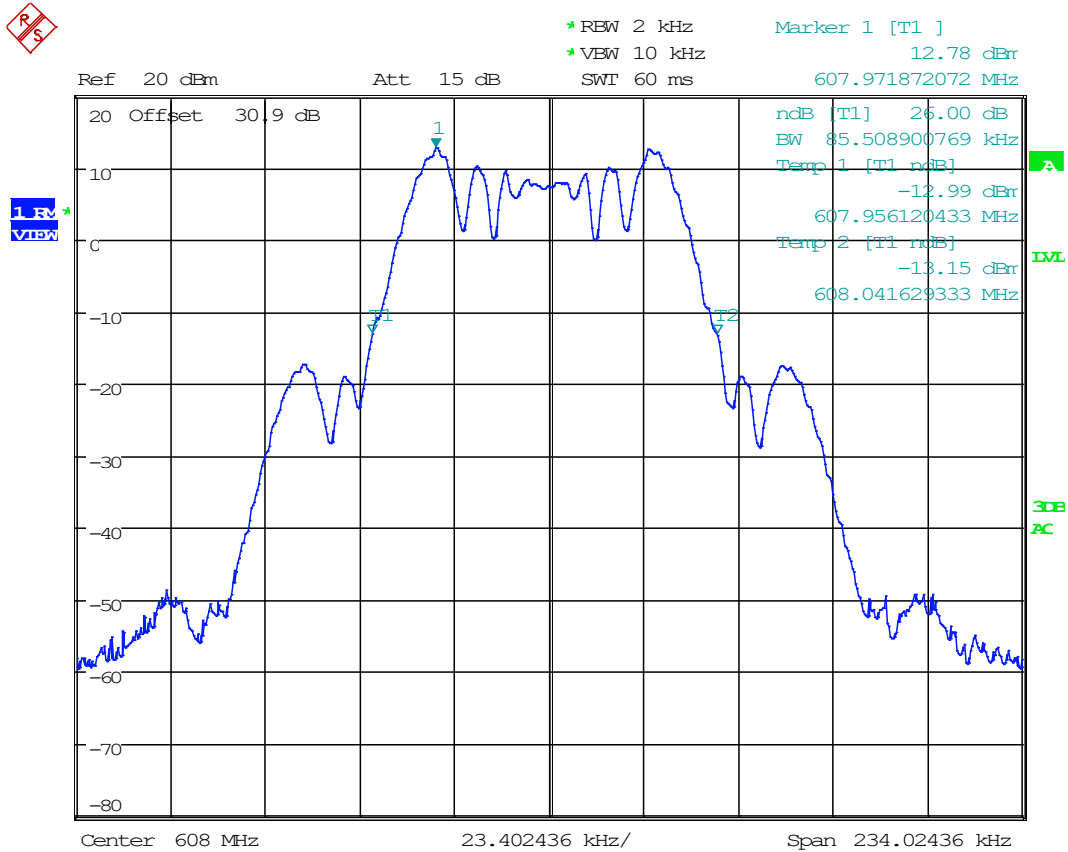
8.3.7 Test Data: 26dB Occupied Bandwidth Measurement Plot, 470 MHz



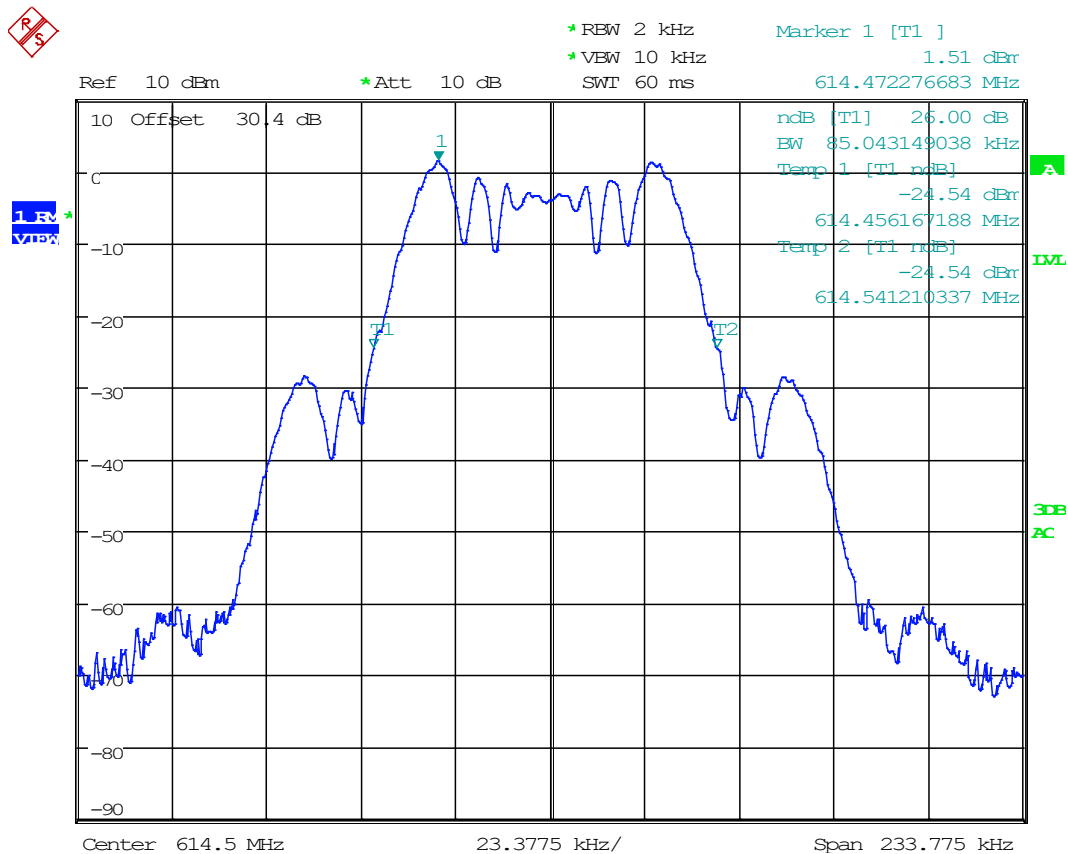
8.3.8 Test Data: 26dB Occupied Bandwidth Measurement Plot, 555 MHz



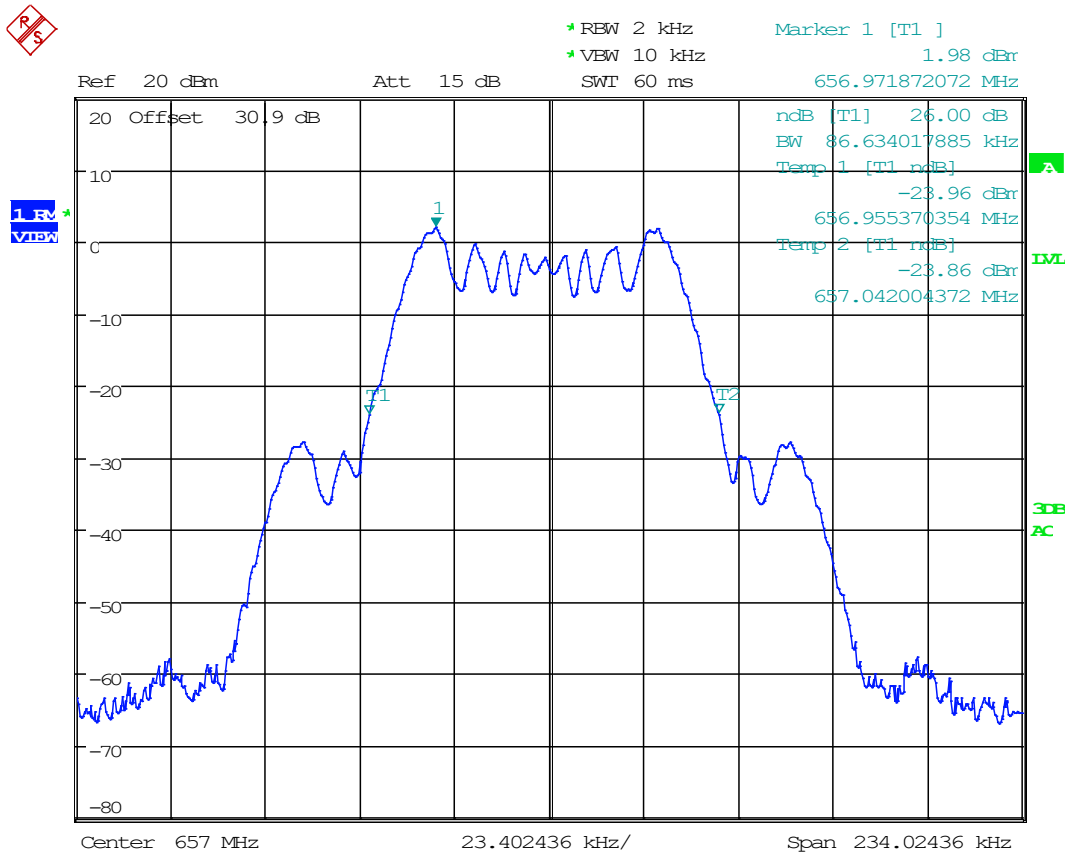
8.3.9 Test Data: 26dB Occupied Bandwidth Measurement Plot, 608 MHz



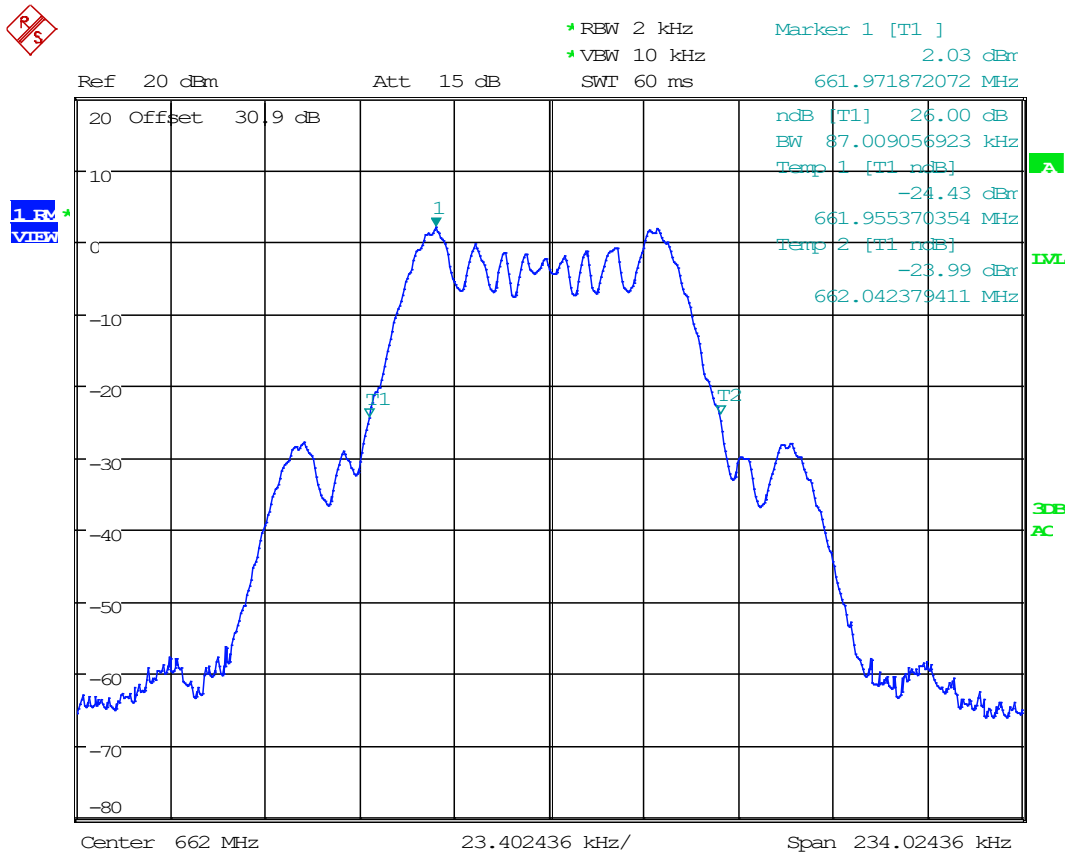
8.3.1 Test Data: 26dB Occupied Bandwidth Measurement Plot, 614.5 MHz



8.3.2 Test Data: 26dB Occupied Bandwidth Measurement Plot, 657 MHz

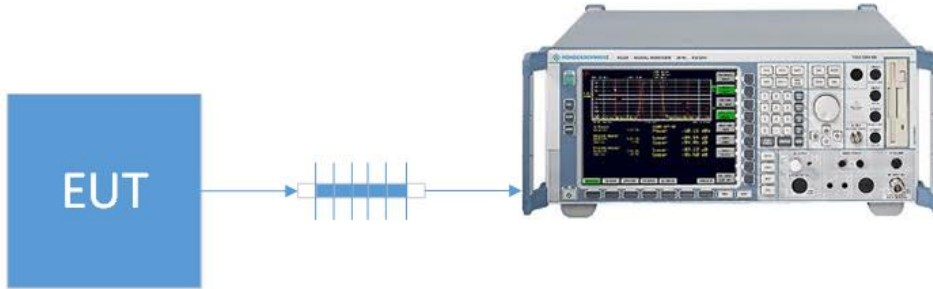


8.3.3 Test Data: 26dB Occupied Bandwidth Measurement Plot, 662 MHz

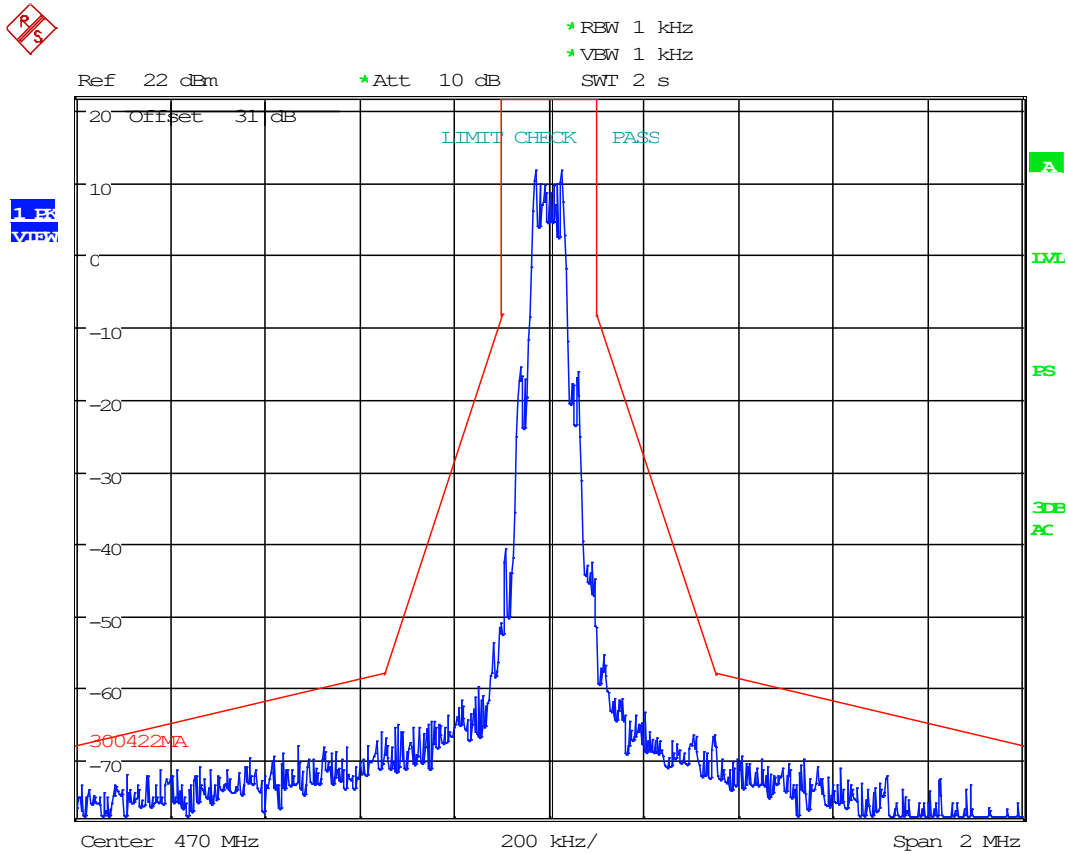


8.4 OCCUPIED BANDWIDTH (Mask)

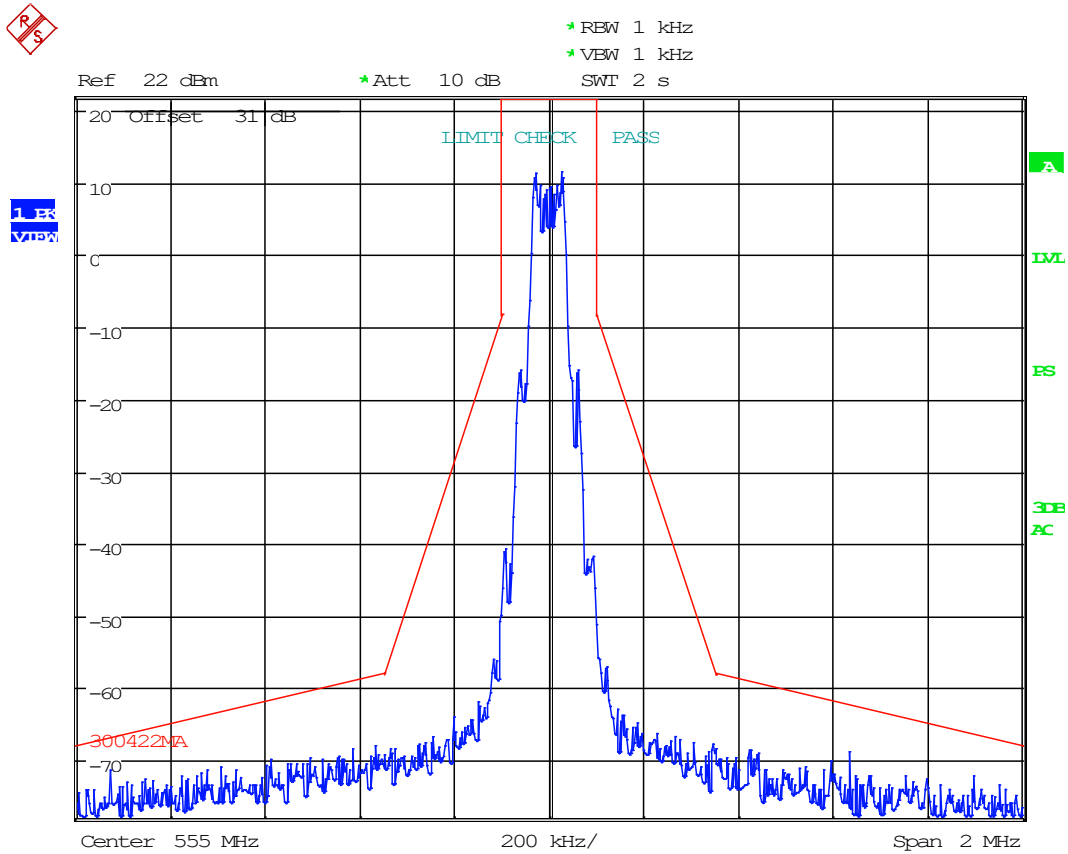
Limits from Part FCC Part 15.236 (g) and test procedure from ANSI C63.10.



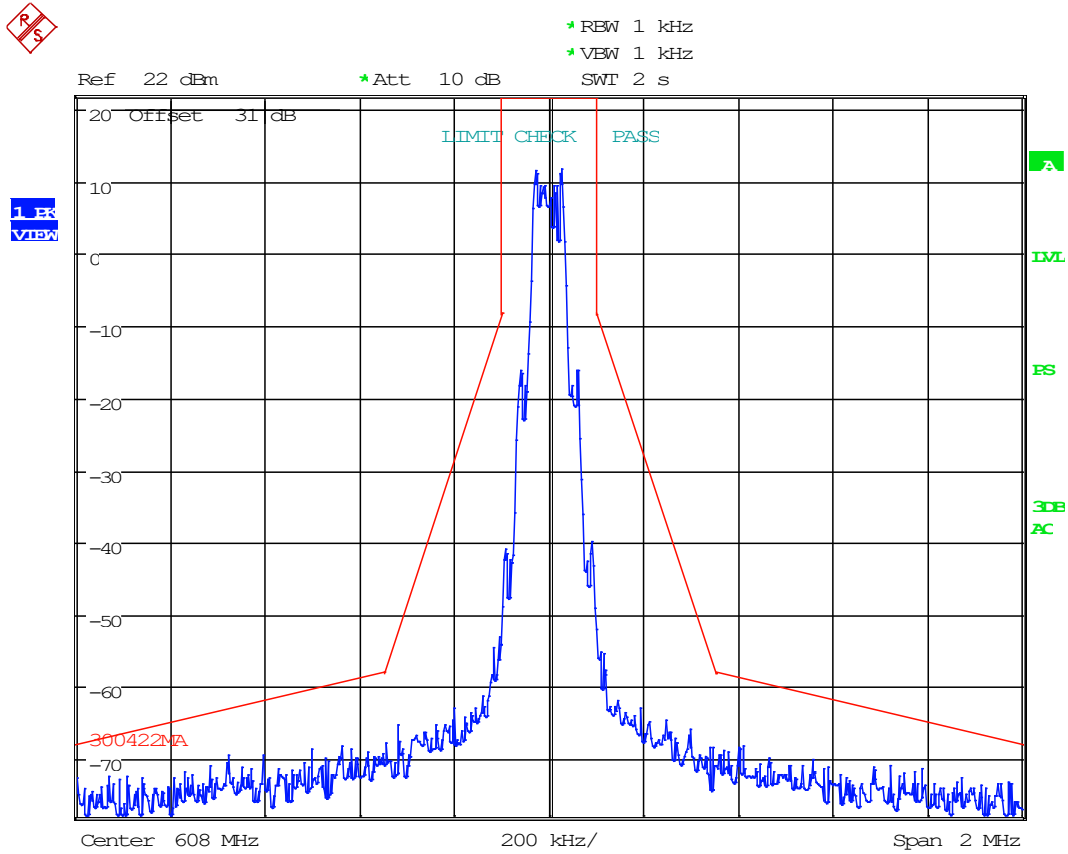
8.4.1 Test Data: Emission Mask Plot, 470 MHz



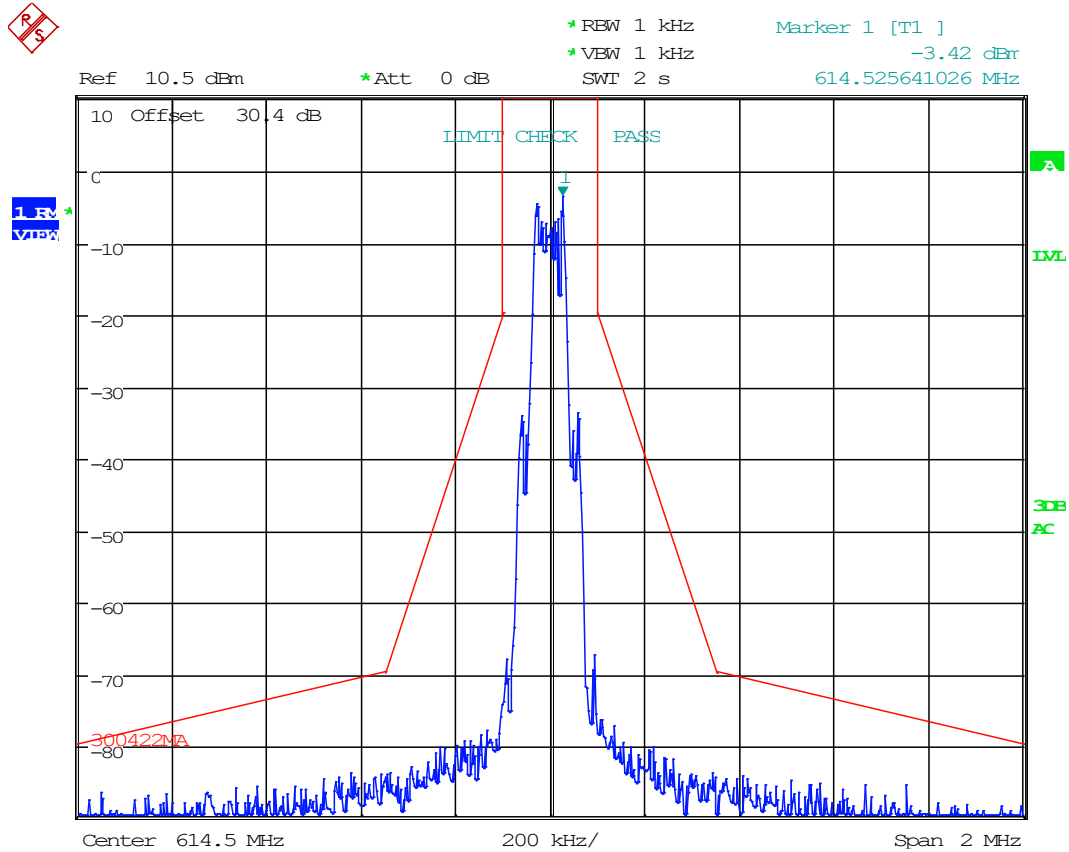
8.4.2 Test Data: Emission Mask Plot, 555 MHz



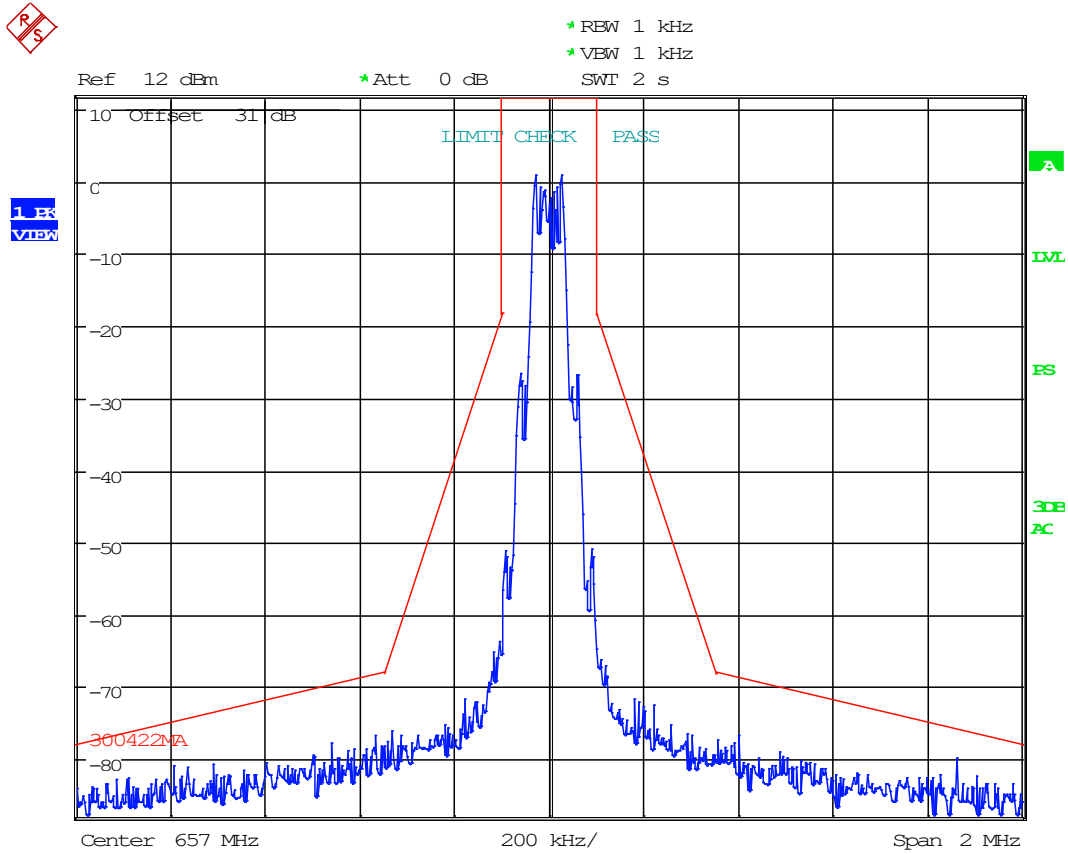
8.4.3 Test Data: Emission Mask Plot, 608 MHz



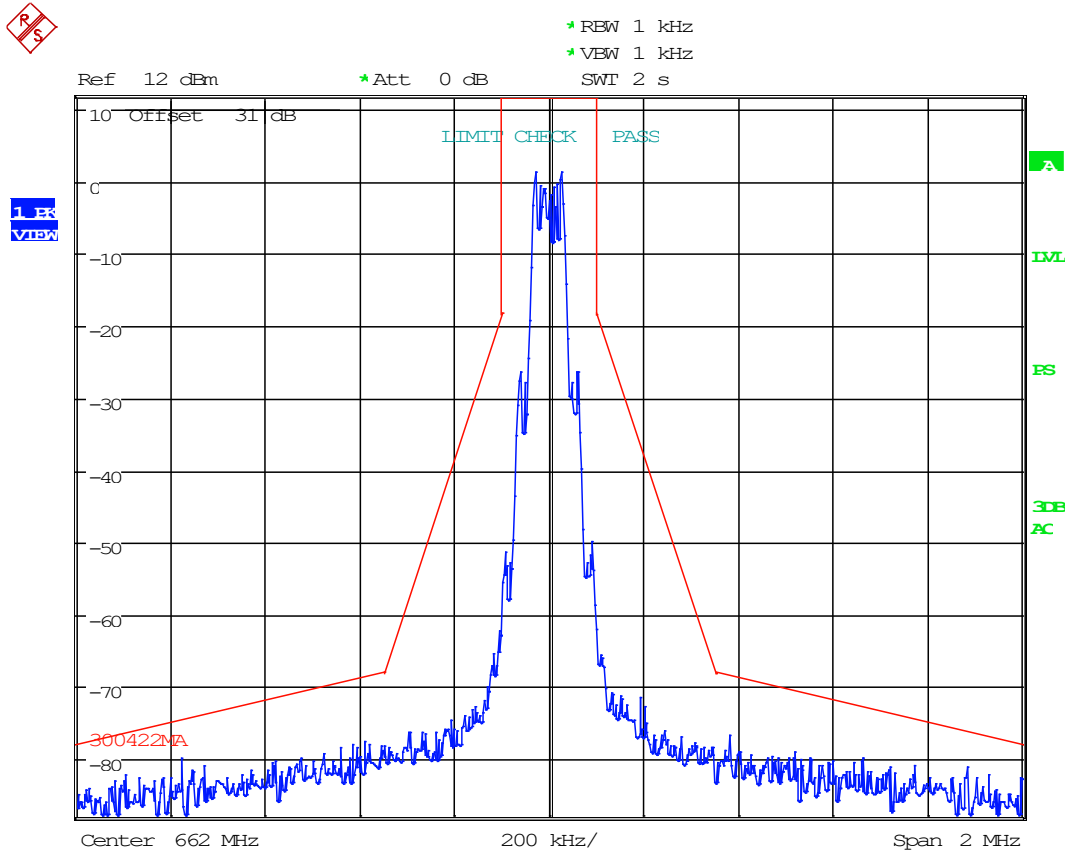
8.4.1 Test Data: Emission Mask Plot, 614.5 MHz



8.4.2 Test Data: Emission Mask Plot, 657 MHz



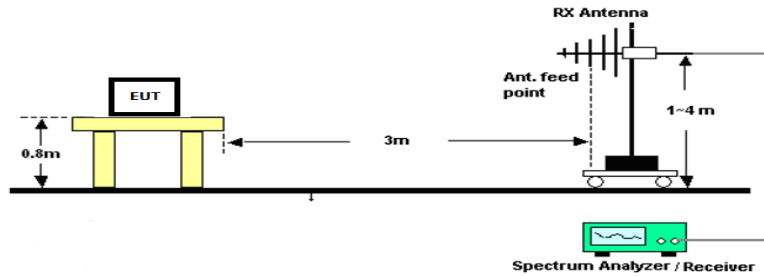
8.4.3 Test Data: Emission Mask Plot, 662 MHz



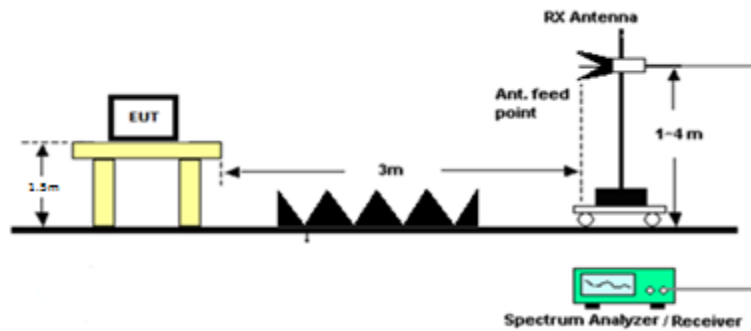
8.5 Radiated Emissions

Limits from FCC Part 15.236 (g) and test procedure from ANSI C63.10.

Radiated Test Setup, 30 – 1000 MHz



Radiated Test Setup, Above 1000 MHz



8.5.1 Radiated Emissions Table 174-215 MHz

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBuV)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dBuV/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dB)
174.00	348.00	PK	0.79	H	2.11	13.88	3.00	16.78	-80.60	-36.00	44.60
174.00	348.00	PK	1.12	V	2.11	13.88	3.00	17.11	-80.27	-36.00	44.27
174.00	522.00	PK	0.20	H	2.74	17.12	3.00	20.06	-77.32	-54.00	23.32
174.00	522.00	PK	0.11	V	2.74	17.12	3.00	19.97	-77.41	-54.00	23.41
174.00	696.00	PK	1.48	H	3.09	20.44	3.00	25.01	-72.37	-54.00	18.37
174.00	696.00	PK	0.64	V	3.09	20.44	3.00	24.17	-73.21	-54.00	19.21
174.00	870.00	PK	0.29	H	3.52	22.70	3.00	26.51	-70.87	-54.00	16.87
174.00	870.00	PK	1.21	V	3.52	22.70	3.00	27.43	-69.95	-54.00	15.95
174.00	1044.00	PK	13.17	H	3.77	26.79	3.00	43.73	-53.64	-30.00	23.64
174.00	1044.00	PK	11.59	V	3.77	26.79	3.00	42.15	-55.22	-30.00	25.22
174.00	1218.00	PK	11.67	H	4.03	28.18	3.00	43.88	-53.50	-30.00	23.50
174.00	1218.00	PK	11.44	V	4.03	28.18	3.00	43.65	-53.73	-30.00	23.73
174.00	1392.00	PK	10.87	H	4.31	28.51	3.00	43.69	-53.69	-30.00	23.69
174.00	1392.00	PK	12.49	V	4.31	28.51	3.00	45.31	-52.07	-30.00	22.07
174.00	1566.00	PK	12.25	H	4.59	27.86	3.00	44.70	-52.68	-30.00	22.68
174.00	1566.00	PK	11.89	V	4.59	27.86	3.00	44.34	-53.04	-30.00	23.04
174.00	1740.00	PK	13.07	H	4.83	29.59	3.00	47.50	-49.88	-30.00	19.88
174.00	1740.00	PK	12.44	V	4.83	29.59	3.00	46.87	-50.51	-30.00	20.51

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBuV)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dBuV/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dB)
200.00	400.00	PK	0.90	H	2.29	14.70	3.00	17.89	-79.49	-36.00	43.49
200.00	400.00	PK	0.25	V	2.29	14.70	3.00	17.24	-80.14	-36.00	44.14
200.00	600.00	PK	0.99	H	2.86	18.40	3.00	22.25	-75.13	-54.00	21.13
200.00	600.00	PK	0.48	V	2.86	18.40	3.00	21.74	-75.64	-54.00	21.64
200.00	800.00	PK	0.43	H	3.34	20.30	3.00	24.07	-73.31	-54.00	19.31
200.00	800.00	PK	0.70	V	3.34	20.30	3.00	24.34	-73.04	-54.00	19.04
200.00	1000.00	PK	10.69	H	3.70	27.11	3.00	41.50	-55.87	-30.00	25.87
200.00	1000.00	PK	10.35	V	3.70	27.11	3.00	41.16	-56.21	-30.00	26.21
200.00	1200.00	PK	10.24	H	4.00	28.05	3.00	42.29	-55.08	-30.00	25.08
200.00	1200.00	PK	11.08	V	4.00	28.05	3.00	43.13	-54.24	-30.00	24.24
200.00	1400.00	PK	11.98	H	4.31	28.47	3.00	44.75	-52.62	-30.00	22.62
200.00	1400.00	PK	10.86	V	4.31	28.47	3.00	43.63	-53.74	-30.00	23.74
200.00	1600.00	PK	11.61	H	4.65	28.07	3.00	44.34	-53.04	-30.00	23.04
200.00	1600.00	PK	12.41	V	4.65	28.07	3.00	45.14	-52.24	-30.00	22.24
200.00	1800.00	PK	11.22	H	4.90	30.29	3.00	46.41	-50.97	-30.00	20.97
200.00	1800.00	PK	11.91	V	4.90	30.29	3.00	47.10	-50.28	-30.00	20.28
200.00	2000.00	PK	10.25	H	5.18	31.31	3.00	46.74	-50.64	-30.00	20.64
200.00	2000.00	PK	11.71	V	5.18	31.31	3.00	48.20	-49.18	-30.00	19.18

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBuV)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dBuV/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dB)
215.00	430.00	PK	0.19	H	2.38	16.00	3.00	18.57	-78.81	-36.00	42.81
215.00	430.00	PK	0.51	V	2.38	16.00	3.00	18.89	-78.49	-36.00	42.49
215.00	645.00	PK	0.70	H	2.96	19.90	3.00	23.56	-73.82	-54.00	19.82
215.00	645.00	PK	1.07	V	2.96	19.90	3.00	23.93	-73.45	-54.00	19.45
215.00	860.00	PK	1.81	H	3.49	22.20	3.00	27.50	-69.88	-54.00	15.88
215.00	860.00	PK	0.58	V	3.49	22.20	3.00	26.27	-71.11	-54.00	17.11
215.00	1075.00	PK	10.83	H	3.82	26.96	3.00	41.61	-55.77	-30.00	25.77
215.00	1075.00	PK	10.97	V	3.82	26.96	3.00	41.75	-55.63	-30.00	25.63
215.00	1290.00	PK	11.89	H	4.15	28.63	3.00	44.67	-52.71	-30.00	22.71
215.00	1290.00	PK	10.69	V	4.15	28.63	3.00	43.47	-53.91	-30.00	23.91
215.00	1505.00	PK	10.70	H	4.50	27.77	3.00	42.97	-54.41	-30.00	24.41
215.00	1505.00	PK	12.30	V	4.50	27.77	3.00	44.57	-52.81	-30.00	22.81
215.00	1720.00	PK	10.85	H	4.81	29.33	3.00	44.99	-52.39	-30.00	22.39
215.00	1720.00	PK	11.54	V	4.81	29.33	3.00	45.68	-51.70	-30.00	21.70
215.00	1935.00	PK	11.63	H	5.11	31.21	3.00	47.96	-49.42	-30.00	19.42
215.00	1935.00	PK	12.86	V	5.11	31.21	3.00	49.19	-48.19	-30.00	18.19
215.00	2150.00	PK	12.48	H	5.35	31.24	3.00	49.07	-48.30	-30.00	18.30
215.00	2150.00	PK	12.60	V	5.35	31.24	3.00	49.19	-48.18	-30.00	18.18

8.5.2 Radiated Emissions Table 470–608 MHz

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBuV)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dBuV/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dB)
470.00	940.00	PK	0.20	H	3.59	22.60	3.00	26.39	-70.99	-36.00	34.99
470.00	940.00	PK	0.82	V	3.59	22.60	3.00	27.01	-70.37	-36.00	34.37
470.00	1410.00	PK	11.72	H	4.31	28.39	3.00	44.42	-52.96	-30.00	22.96
470.00	1410.00	PK	11.95	V	4.31	28.39	3.00	44.65	-52.73	-30.00	22.73
470.00	1880.00	PK	11.37	H	5.03	30.94	3.00	47.34	-50.03	-30.00	20.03
470.00	1880.00	PK	11.97	V	5.03	30.94	3.00	47.94	-49.43	-30.00	19.43
470.00	2350.00	PK	12.53	H	5.58	31.93	3.00	50.03	-47.35	-30.00	17.35
470.00	2350.00	PK	13.06	V	5.58	31.93	3.00	50.56	-46.82	-30.00	16.82
470.00	2820.00	PK	11.97	H	6.21	32.43	3.00	50.61	-46.77	-30.00	16.77
470.00	2820.00	PK	14.76	V	6.21	32.43	3.00	53.40	-43.98	-30.00	13.98
470.00	3290.00	PK	12.51	H	6.70	32.63	3.00	51.84	-45.54	-30.00	15.54
470.00	3290.00	PK	12.94	V	6.70	32.63	3.00	52.27	-45.11	-30.00	15.11
470.00	3760.00	PK	10.73	H	6.45	33.13	3.00	50.30	-47.07	-30.00	17.07
470.00	3760.00	PK	10.23	V	6.45	33.13	3.00	49.80	-47.57	-30.00	17.57
470.00	4230.00	PK	10.60	H	7.10	33.33	3.00	51.03	-46.35	-30.00	16.35
470.00	4230.00	PK	9.53	V	7.10	33.33	3.00	49.96	-47.42	-30.00	17.42
470.00	4700.00	PK	11.54	H	7.20	33.88	3.00	52.62	-44.76	-30.00	14.76
470.00	4700.00	PK	11.24	V	7.20	33.88	3.00	52.32	-45.06	-30.00	15.06

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBuV)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dBuV/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dB)
555.00	1110.00	PK	11.23	H	3.86	27.20	3.00	42.29	-55.08	-30.00	25.08
555.00	1110.00	PK	10.04	V	3.86	27.20	3.00	41.10	-56.27	-30.00	26.27
555.00	1665.00	PK	12.00	H	4.74	28.75	3.00	45.49	-51.89	-30.00	21.89
555.00	1665.00	PK	11.90	V	4.74	28.75	3.00	45.39	-51.99	-30.00	21.99
555.00	2220.00	PK	12.08	H	5.39	31.28	3.00	48.75	-48.62	-30.00	18.62
555.00	2220.00	PK	12.27	V	5.39	31.28	3.00	48.94	-48.43	-30.00	18.43
555.00	2775.00	PK	12.68	H	6.14	32.45	3.00	51.27	-46.11	-30.00	16.11
555.00	2775.00	PK	12.84	V	6.14	32.45	3.00	51.43	-45.95	-30.00	15.95
555.00	3330.00	PK	11.60	H	6.72	32.63	3.00	50.96	-46.42	-30.00	16.42
555.00	3330.00	PK	12.89	V	6.72	32.63	3.00	52.25	-45.13	-30.00	15.13
555.00	3885.00	PK	11.41	H	6.82	33.22	3.00	51.45	-45.93	-30.00	15.93
555.00	3885.00	PK	10.51	V	6.82	33.22	3.00	50.55	-46.83	-30.00	16.83
555.00	4440.00	PK	11.29	H	7.28	33.76	3.00	52.33	-45.05	-30.00	15.05
555.00	4440.00	PK	11.11	V	7.28	33.76	3.00	52.15	-45.23	-30.00	15.23
555.00	4995.00	PK	10.19	H	7.61	34.01	3.00	51.81	-45.57	-30.00	15.57
555.00	4995.00	PK	10.21	V	7.61	34.01	3.00	51.83	-45.55	-30.00	15.55
555.00	5550.00	PK	11.46	H	8.06	34.40	3.00	53.92	-43.46	-30.00	13.46
555.00	5550.00	PK	10.89	V	8.06	34.40	3.00	53.35	-44.03	-30.00	14.03

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBuV)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dBuV/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dB)
608.00	1216.00	PK	10.74	H	4.03	28.17	3.00	42.93	-54.45	-30.00	24.45
608.00	1216.00	PK	11.70	V	4.03	28.17	3.00	43.89	-53.49	-30.00	23.49
608.00	1824.00	PK	11.80	H	4.93	30.58	3.00	47.30	-50.07	-30.00	20.07
608.00	1824.00	PK	11.30	V	4.93	30.58	3.00	46.80	-50.57	-30.00	20.57
608.00	2432.00	PK	12.69	H	5.61	31.85	3.00	50.15	-47.22	-30.00	17.22
608.00	2432.00	PK	11.25	V	5.61	31.85	3.00	48.71	-48.66	-30.00	18.66
608.00	3040.00	PK	12.73	H	6.39	32.61	3.00	51.73	-45.65	-30.00	15.65
608.00	3040.00	PK	12.64	V	6.39	32.61	3.00	51.64	-45.74	-30.00	15.74
608.00	3648.00	PK	10.40	H	6.62	33.19	3.00	50.21	-47.17	-30.00	17.17
608.00	3648.00	PK	10.16	V	6.62	33.19	3.00	49.97	-47.41	-30.00	17.41
608.00	4256.00	PK	9.81	H	7.22	33.35	3.00	50.39	-46.99	-30.00	16.99
608.00	4256.00	PK	11.33	V	7.22	33.35	3.00	51.91	-45.47	-30.00	15.47
608.00	4864.00	PK	10.38	H	7.26	33.94	3.00	51.58	-45.80	-30.00	15.80
608.00	4864.00	PK	10.48	V	7.26	33.94	3.00	51.68	-45.70	-30.00	15.70
608.00	5472.00	PK	11.69	H	8.10	34.47	3.00	54.26	-43.12	-30.00	13.12
608.00	5472.00	PK	10.28	V	8.10	34.47	3.00	52.85	-44.53	-30.00	14.53
608.00	6080.00	PK	9.07	H	8.63	35.21	3.00	52.91	-44.46	-30.00	14.46
608.00	6080.00	PK	9.37	V	8.63	35.21	3.00	53.21	-44.16	-30.00	14.16

8.5.1 Radiated Emissions Table 614–616 MHz

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBuV)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dBuV/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dB)
614.08	1228.15	PK	11.99	H	4.04	28.26	3.00	44.29	-53.09	-30.00	23.09
614.08	1228.15	PK	11.88	V	4.04	28.26	3.00	44.18	-53.20	-30.00	23.20
614.08	1842.23	PK	12.60	H	4.96	30.79	3.00	48.35	-49.02	-30.00	19.02
614.08	1842.23	PK	10.65	V	4.96	30.79	3.00	46.40	-50.97	-30.00	20.97
614.08	2456.30	PK	13.96	H	5.61	31.89	3.00	51.47	-45.91	-30.00	15.91
614.08	2456.30	PK	12.53	V	5.61	31.89	3.00	50.04	-47.34	-30.00	17.34
614.08	3070.38	PK	13.44	H	6.43	32.69	3.00	52.55	-44.82	-30.00	14.82
614.08	3070.38	PK	12.26	V	6.43	32.69	3.00	51.37	-46.00	-30.00	16.00
614.08	3684.45	PK	11.06	H	6.63	33.19	3.00	50.88	-46.50	-30.00	16.50
614.08	3684.45	PK	10.87	V	6.63	33.19	3.00	50.69	-46.69	-30.00	16.69
614.08	4298.53	PK	11.58	H	7.47	33.46	3.00	52.51	-44.87	-30.00	14.87
614.08	4298.53	PK	11.41	V	7.47	33.46	3.00	52.34	-45.04	-30.00	15.04
614.08	4912.60	PK	11.42	H	7.59	33.92	3.00	52.93	-44.44	-30.00	14.44
614.08	4912.60	PK	12.32	V	7.59	33.92	3.00	53.83	-43.54	-30.00	13.54
614.08	5526.68	PK	11.62	H	8.06	34.43	3.00	54.11	-43.26	-30.00	13.26
614.08	5526.68	PK	12.38	V	8.06	34.43	3.00	54.87	-42.50	-30.00	12.50
614.08	6140.75	PK	11.18	H	8.61	35.32	3.00	55.12	-42.26	-30.00	12.26
614.08	6140.75	PK	12.57	V	8.61	35.32	3.00	56.51	-40.87	-30.00	10.87

8.5.2 Radiated Emissions Table 657-662 MHz

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBuV)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dBuV/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dB)
657.00	1314.00	PK	10.75	H	4.21	28.70	3.00	43.65	-53.72	-30.00	23.72
657.00	1314.00	PK	9.94	V	4.21	28.70	3.00	42.84	-54.53	-30.00	24.53
657.00	1971.00	PK	11.84	H	5.15	31.31	3.00	48.30	-49.08	-30.00	19.08
657.00	1971.00	PK	11.49	V	5.15	31.31	3.00	47.95	-49.43	-30.00	19.43
657.00	2628.00	PK	12.81	H	5.85	32.42	3.00	51.07	-46.30	-30.00	16.30
657.00	2628.00	PK	11.72	V	5.85	32.42	3.00	49.98	-47.39	-30.00	17.39
657.00	3285.00	PK	11.94	H	6.69	32.64	3.00	51.27	-46.11	-30.00	16.11
657.00	3285.00	PK	13.43	V	6.69	32.64	3.00	52.76	-44.62	-30.00	14.62
657.00	3942.00	PK	10.05	H	7.27	33.35	3.00	50.66	-46.71	-30.00	16.71
657.00	3942.00	PK	11.31	V	7.27	33.35	3.00	51.92	-45.45	-30.00	15.45
657.00	4599.00	PK	9.71	H	7.55	34.06	3.00	51.31	-46.06	-30.00	16.06
657.00	4599.00	PK	10.36	V	7.55	34.06	3.00	51.96	-45.41	-30.00	15.41
657.00	5256.00	PK	9.72	H	7.78	34.29	3.00	51.78	-45.59	-30.00	15.59
657.00	5256.00	PK	10.10	V	7.78	34.29	3.00	52.16	-45.21	-30.00	15.21
657.00	5913.00	PK	9.82	H	8.46	35.03	3.00	53.31	-44.07	-30.00	14.07
657.00	5913.00	PK	10.27	V	8.46	35.03	3.00	53.76	-43.62	-30.00	13.62
657.00	6570.00	PK	10.60	H	9.21	35.60	3.00	55.42	-41.96	-30.00	11.96
657.00	6570.00	PK	10.21	V	9.21	35.60	3.00	55.03	-42.35	-30.00	12.35

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBuV)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dBuV/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dB)
662.00	1324.00	PK	11.84	H	4.22	28.72	3.00	44.78	-52.60	-30.00	22.60
662.00	1324.00	PK	10.98	V	4.22	28.72	3.00	43.92	-53.46	-30.00	23.46
662.00	1986.00	PK	12.68	H	5.16	31.31	3.00	49.16	-48.22	-30.00	18.22
662.00	1986.00	PK	11.88	V	5.16	31.31	3.00	48.36	-49.02	-30.00	19.02
662.00	2648.00	PK	12.23	H	5.88	32.42	3.00	50.53	-46.84	-30.00	16.84
662.00	2648.00	PK	13.15	V	5.88	32.42	3.00	51.45	-45.92	-30.00	15.92
662.00	3310.00	PK	12.58	H	6.72	32.63	3.00	51.93	-45.45	-30.00	15.45
662.00	3310.00	PK	11.69	V	6.72	32.63	3.00	51.04	-46.34	-30.00	16.34
662.00	3972.00	PK	10.65	H	7.26	33.38	3.00	51.30	-46.08	-30.00	16.08
662.00	3972.00	PK	11.37	V	7.26	33.38	3.00	52.02	-45.36	-30.00	15.36
662.00	4634.00	PK	9.81	H	7.52	33.95	3.00	51.29	-46.09	-30.00	16.09
662.00	4634.00	PK	10.07	V	7.52	33.95	3.00	51.55	-45.83	-30.00	15.83
662.00	5296.00	PK	10.38	H	7.89	34.28	3.00	52.55	-44.83	-30.00	14.83
662.00	5296.00	PK	10.69	V	7.89	34.28	3.00	52.86	-44.52	-30.00	14.52
662.00	5958.00	PK	11.29	H	8.55	35.06	3.00	54.89	-42.49	-30.00	12.49
662.00	5958.00	PK	9.57	V	8.55	35.06	3.00	53.17	-44.21	-30.00	14.21
662.00	6620.00	PK	11.11	H	9.18	35.66	3.00	55.94	-41.43	-30.00	11.43
662.00	6620.00	PK	10.36	V	9.18	35.66	3.00	55.19	-42.18	-30.00	12.18

9. ANNEX-A - Photographs of the EUT

Photographs of the EUT and any manufacturer supplied accessories to be used with the EUT are in a separate document.

10. ANNEX-B – Test Setup Photographs

Test setup photographs are located in a separate document.

11. History of Test Report Changes

Test Report #	Revision #	Description	Date of Issue
TR_2949-21_PT 15.236_1	1	Initial release	7/2/2021
TR_2949-21_PT 15.236_2	2	Updated pages 13-15	9/2/2021

END OF TEST REPORT
