FCC PART 95

TEST REPORT

For

BOND TELECOMMUNICATION CO., LIMITED.

FLAT A1,WZ,15/F HILLIER COMMERCIAL BUILDING,65-67, HONGKONG, China

FCC ID: X9MLT-298

Report Type:	Product Name:
Original Report	CB RADIO

Report Number:	2507T27036E-RF-01
Report Date:	2025-11-03
Reviewed By:	Ash Lin
Approved By:	Miles Chen
Prepared By:	Bay Area Compliance Laboratories Corp. (Xiamen) Unit 102, No. 902 Meifeng South Road, Binhai West Avenue, Science and Technology Innovation Park, Torch High tech Zone XiaMen Tel: +86-592-3200111 www.baclcorp.com.cn

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REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	2507T27036E-RF-01	R1V1	2025-11-03	Initial Release

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:	BOND TELECOMMUNICATION CO., LIMITED.
Product Name:	CB RADIO
Tested Model:	LT-298
Multiple Model(s):	LT-198
Trade Mark:	LUITON
Power Supply:	DC 12~24V
Maximum Output Power (ERP):	FM: 26.965-27.405MHz: 35.86dBm AM: 26.965-27.405MHz: 35.93dBm
Operation Frequency:	26.965-27.405MHz
Modulation Mode:	FM, AM
Channel Spacing:	10kHz
Emission Designator:	A3E/F3E
EUT Received Status:	Good
Note: *1. The test model is identify with the series model except for the model name, please refer to declaration letter for more detail.* *2. All measurement and test data in this report was gathered from production sample serial number: 3BI3-1 (Assigned by the BACL (Xiamen). The EUT supplied by the applicant was received on 2025-10-17).*	

Objective

This test report is prepared for *BOND TELECOMMUNICATION CO., LIMITED.* in accordance with Part 2 and Part 95, Subpart D of the Federal Communication Commissions rules.

Test Methodology

All tests and measurements indicated in this document were performed in accordance with Part 95 Subpart D of the Federal Communication Commissions rules with ANSI C63.26:2015 and TIA-EIA-382-A-1990, American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services.

Measurement Uncertainty

Item		U_{lab}
Unwanted Emissions, radiated	30MHz~200MHz	3.47dB
	200MHz~1GHz	4.86dB
Occupied Channel Bandwidth		2%
RF output power, conducted		±1.49 dB
Unwanted Emissions, conducted		±2.92 dB
Radiated RF power		±3.66 dB
Frequency Error(RF Frequency)		0.085×10^{6}
Audio Frequency		3.96%
Modulation Limiting		1.01%
Temperature		±1℃
Humidity		±5%
DC and low frequency voltages		±0.4%

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Xiamen) to collect test data is located on Unit 102, No. 902 Meifeng South Road, Binhai West Avenue, Science and Technology Innovation Park, Torch High tech Zone XiaMen.

Bay Area Compliance Laboratories Corp. (Xiamen) Lab is accredited to ISO/IEC 17025 by A2LA (Certificate Number: 7134.01) and the lab has been recognized as the FCC accredited lab under the KDB 974614 D01, the FCC Designation No. : CN1384.

SYSTEM TEST CONFIGURATION

Test Mode and Voltage

The system was configured for testing in a typical mode (as normally used by a typical user).	
Test mode:	Transmitting
Test voltage:	DC 13.8V from DC source

Description of Test Configuration

The EUT was configured for testing in an engineering mode which was provided by the manufacturer.

Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)
1	26.965	11	27.085	21	27.215	31	27.315
2	26.975	12	27.105	22	27.225	32	27.325
3	26.985	13	27.115	23	27.255	33	27.335
4	27.005	14	27.125	24	27.235	34	27.345
5	27.015	15	27.135	25	27.245	35	27.355
6	27.025	16	27.155	26	27.265	36	27.365
7	27.035	17	27.165	27	27.275	37	27.375
8	27.055	18	27.175	28	27.285	38	27.385
9	27.065	19	**27.185**	29	27.295	39	27.395
10	27.075	20	27.205	30	27.305	40	27.405
Per C63.26-2015, section 5.1, the above frequencies in bold were performed the test.							

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

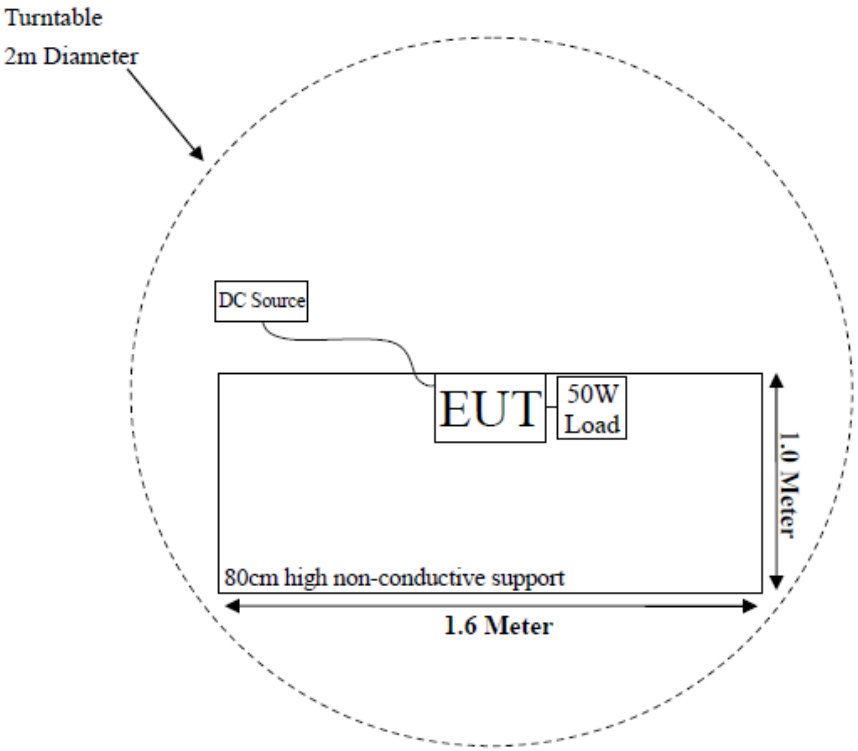
Manufacturer	Description	Model	Serial Number
MAISHENG	DC Source	MS-606DS	1027453694
Unknown	50W load	20230613	121901

External I/O Cable

Cable Description	Length(m)	From Port	To
DC Power Cable	1.0	DC Source	EUT

Block Diagram of Test Setup

For Radiated Emissions(Below 1GHz):



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Results
§2.1046, §95.967	RF Output Power	Compliant
§2.1047, §95.975	Modulation Characteristic	Compliant
§2.1049, §95.973, §95.979	Occupied Bandwidth & Emission Mask	Compliant
§2.1053, §95.979	Spurious Radiation Emission	Compliant
§2.1051, §95.979	Conducted Spurious at Antenna Terminals	Compliant
§2.1055, §95.965	Frequency Stability	Compliant
§1.1310, §2.1091	RF Exposure Evaluation	Compliant

TEST EQUIPMENT LIST

Test Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emissions					
Hybrid Antenna	Sunol Sciences	JB6	A122022-5	2023/07/27	2026/07/26
Amplifier	Sonoma	310B	120903	2025/02/20	2026/02/19
EMI Test Receiver	Rohde & Schwarz	ESR	103103	2025/02/20	2026/02/19
Coaxial Cable	XINHANGWEIBO	XH400T-N-4M	CC002	2025/02/20	2026/02/19
Coaxial Cable	XINHANGWEIBO	XH460B-N-2M	CC006	2025/02/20	2026/02/19
Coaxial Cable	XINHANGWEIBO	XH460B-N-12M	CC007	2025/02/20	2026/02/19
Dipole Antenna	COM-POWER	3121C	9209-860	N/A	N/A
Microwave Analog Signal Generator	Agilent	N5181A	MY48180319	2025/02/20	2026/02/19
RF Conducted Test					
Spectrum Analyzer	Rohde & Schwarz	FSU 26	200199	2025/04/13	2026/04/12
Coaxial Cable	WEIHE	WH316	RFCC002	Each time	Each time
Attenuator	Electronic Corporation	300-WA-FFN-30	1172435	2025/02/20	2026/02/19
DC Power Supply	MAISHENG	MS-606DS	1027453694	N/A	N/A
Multimeter	deli	DL8490	23930192	2025/02/20	2026/02/19
RF Communications test set	HP	8920A	3524A07202	2025/04/13	2026/04/12
constant temperature and humidity testing machine	BACL	BTH-150	30211	2025/02/20	2026/02/19

Statement of Traceability: Bay Area Compliance Laboratories Corp. (Xiamen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC §2.1046, §95.967 – RF OUTPUT POWER

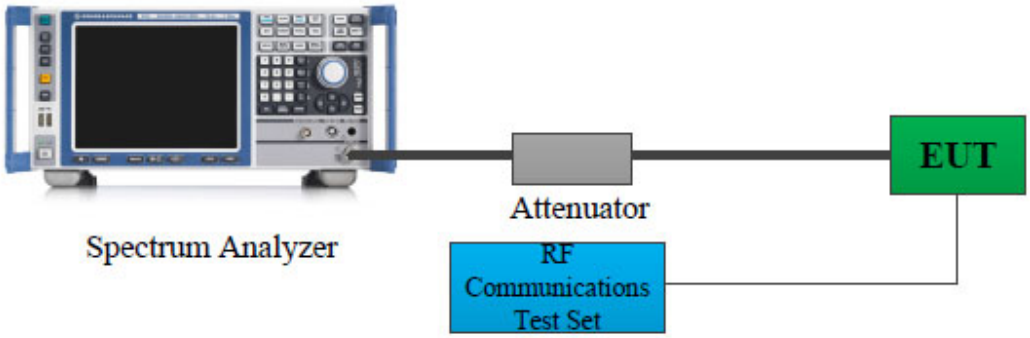
Applicable Standard

Acorrding to FCC §95.967

Each CBRS transmitter type must be designed such that the transmitter power can not exceed the following limits:

(a) When transmitting amplitude modulated (AM) voice signals or frequency modulated (FM) voice signals, the mean carrier power must not exceed 4 Watts.

EUT Setup Block Diagram



Note:The Insertion Loss of the RF cable, Attenuators was offset into the Spectrum Analyzer.

Test Procedure

C63.26-2015, Clause 5.2.3.3

This procedure can be used to measure the peak power in either a CW-like or noise-like narrowband RF signal. The measurement instrument must have a RBW that is greater than or equal to the OBW of the signal to be measured and a VBW ≥ 3 × RBW.
a) Set the RBW ≥ OBW.
b) Set VBW ≥ 3 × RBW.
c) Set span ≥ 2 × OBW.
d) Sweep time ≥ 10 × (number of points in sweep) × (transmission symbol period).
e) Detector = peak.
f) Trace mode = max hold.
g) Allow trace to fully stabilize.
h) Use the peak marker function to determine the peak amplitude level

ERP=Conducted Output Power+ Antenna Gain (dBd)

Test Data

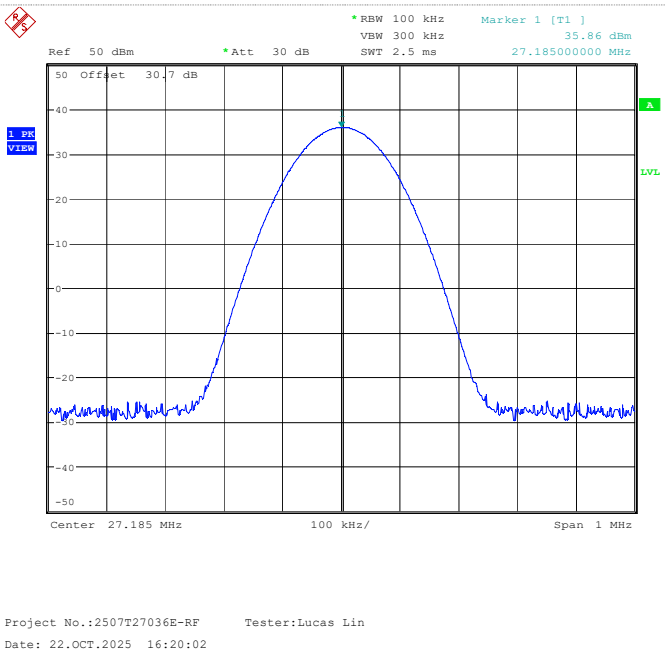
Test Mode:	Transmitting	Test Engineer:	Lucas Lin
Test Date:	2025-10-22	Test Result:	Pass

Environment Conditions:					
Temperature: (℃)	23.5	Relative Humidity: (%)	46	ATM Pressure: (kPa)	100.1

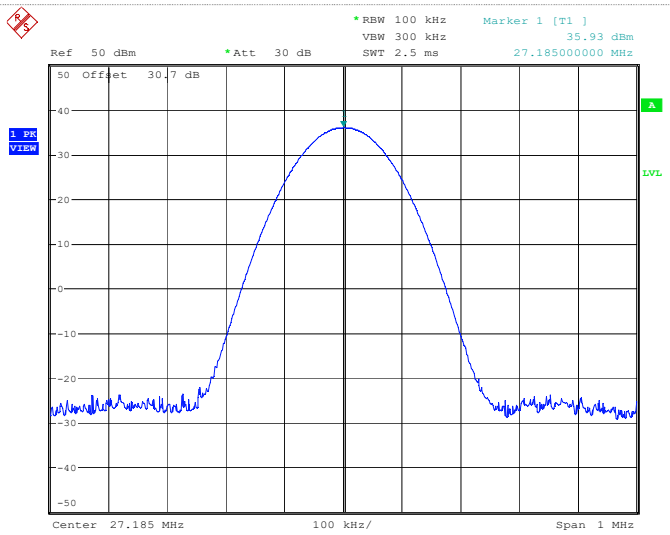
Please refer to below plots:

Test Mode	Test Frequency (MHz)	Conducted Output power (dBm)	Conducted Output Power Limit (dBm)
FM	27.185	35.86	≤36.02
AM	27.185	35.93	≤36.02

FM, 27.185 MHz



AM, 27.185 MHz



Project No.:2507T27036E-RF Tester:Lucas Lin

Date: 22.OCT.2025 16:20:40

FCC §2.1047, §95.975 – MODULATION CHARACTERISTIC

Applicable Standard

Acorrding to FCC §95.975

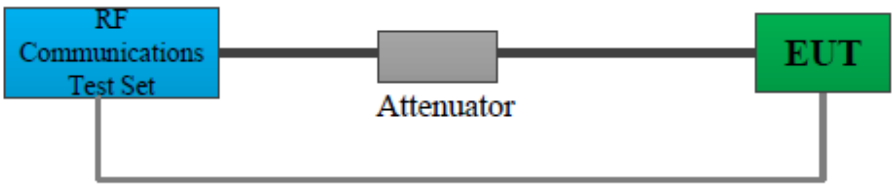
Each CBRS transmitter type must be designed such that the modulation characteristics are in compliance with the rules in this section.

(a) When emission type A3E is transmitted with voice modulation, the modulation percentage must be at least 85%, but not more than 100%.

(b) When emission type A3E is transmitted by a CBRS transmitter having a transmitter output power of more than 2.5 W, the transmitter must contain a circuit that automatically prevents the modulation percentage from exceeding 100%.

(c) When emission type F3E is transmitted the peak frequency deviation shall not exceed ±2 kHz.

Test Setup Block Diagram



Modulation limiting Test and Audio frequency response Test

Test Procedure

C63.26-2015, Clause 5.3.2 Modulation limiting test methodology

Modulation limiting is the ability of a transmitter circuit to limit the transmitter from producing deviations in excess of a rated system deviation.

a) Connect the equipment as illustrated in Figure 1.
b) Adjust the transmitter per the manufacturer's procedure for full rated system deviation.
c) Set the test receiver to measure peak positive deviation. Set the audio bandwidth for ⩽0.25 Hz to ⩾ 15000Hz. Turn the de-emphasis function off.
d) Apply a 1000 Hz modulating signal to the transmitter from the audio frequency generator, and adjust the level to obtain 60% of full rated system deviation. This is the 0 dB reference level.
e) Increase the level from the audio generator by 20 dB in 5 dB increments recording the deviation as measured from the test receiver in each step. Verify that the audio level used to make the OBW measurement is included in the sweep.
f) Repeat for step e) at 300 Hz, 2500 Hz and 3000 Hz at a minimum using the 0 dB reference level obtained in step d).
g) Set the test receiver to measure peak negative deviation and repeat step d) through step f).
h) The values recorded in step f) and step g) are the modulation limiting.
i) Plot the data set as a percentage of deviation relative to the 0 dB reference point versus input voltage.

C63.26-2015, Clause 5.3.3.2 Audio frequency response test methodology—Constant Input

a) Connect the equipment as illustrated in Figure 3.
b) Set the test receiver to measure peak positive deviation. Set the audio bandwidth for ⩽50 Hz to ⩾ 15000Hz. Turn the de-emphasis function off.
c) Adjust the transmitter per the manufacturer's procedure for full rated system deviation.
d) Apply a 1000 Hz tone and adjust the audio frequency generator to produce 20% of the rated system deviation.
e) Set the test receiver to measure rms deviation and record the deviation reading as DEVREF.
f) Set the audio frequency generator to the desired test frequency between 300 Hz and 3000 Hz.

Test Data

Test Mode:	Transmitting	**Test Engineer:**	Lucas Lin
Test Date:	2025-10-22	**Test Result:**	Pass

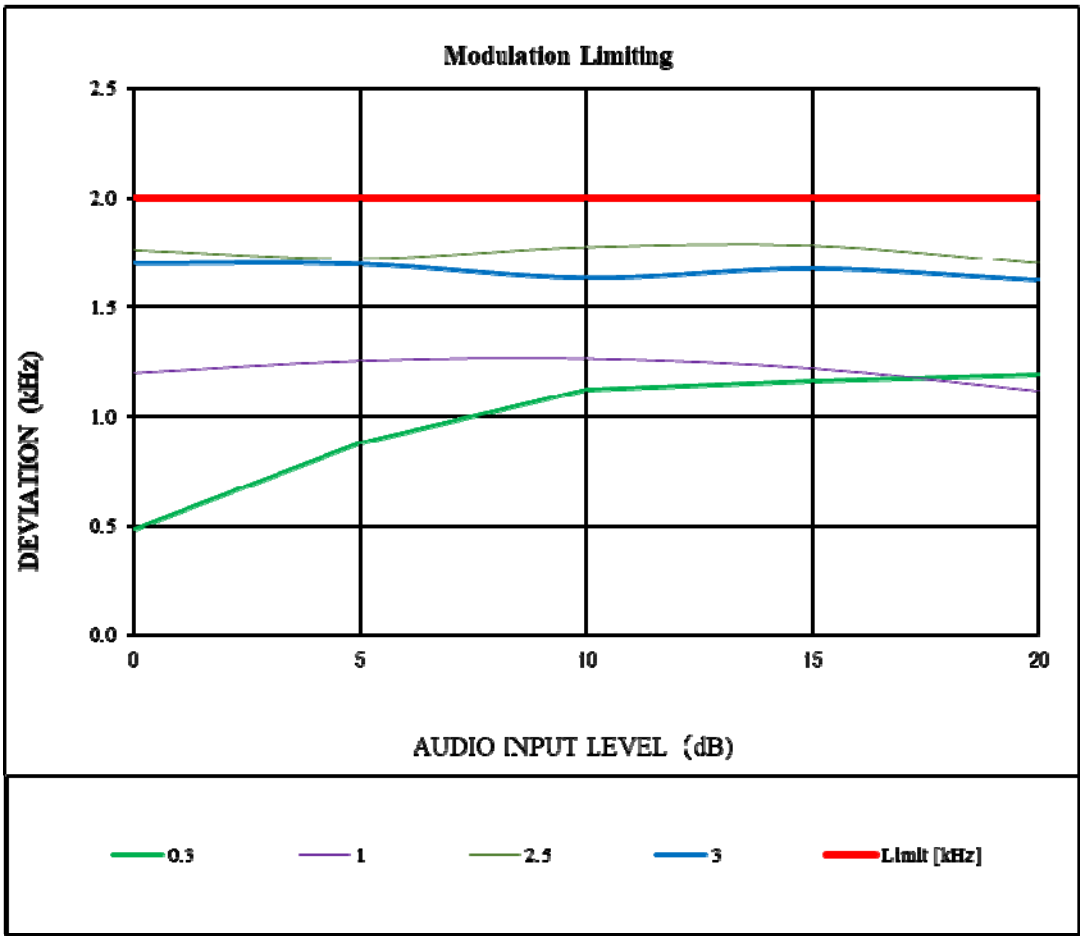
Enviroment Conditions:					
Temperature: (℃)	23.5	Relative Humidity: (%)	46	ATM Pressure: (kPa)	100.1

Please refer to below table:

Modulation Limiting

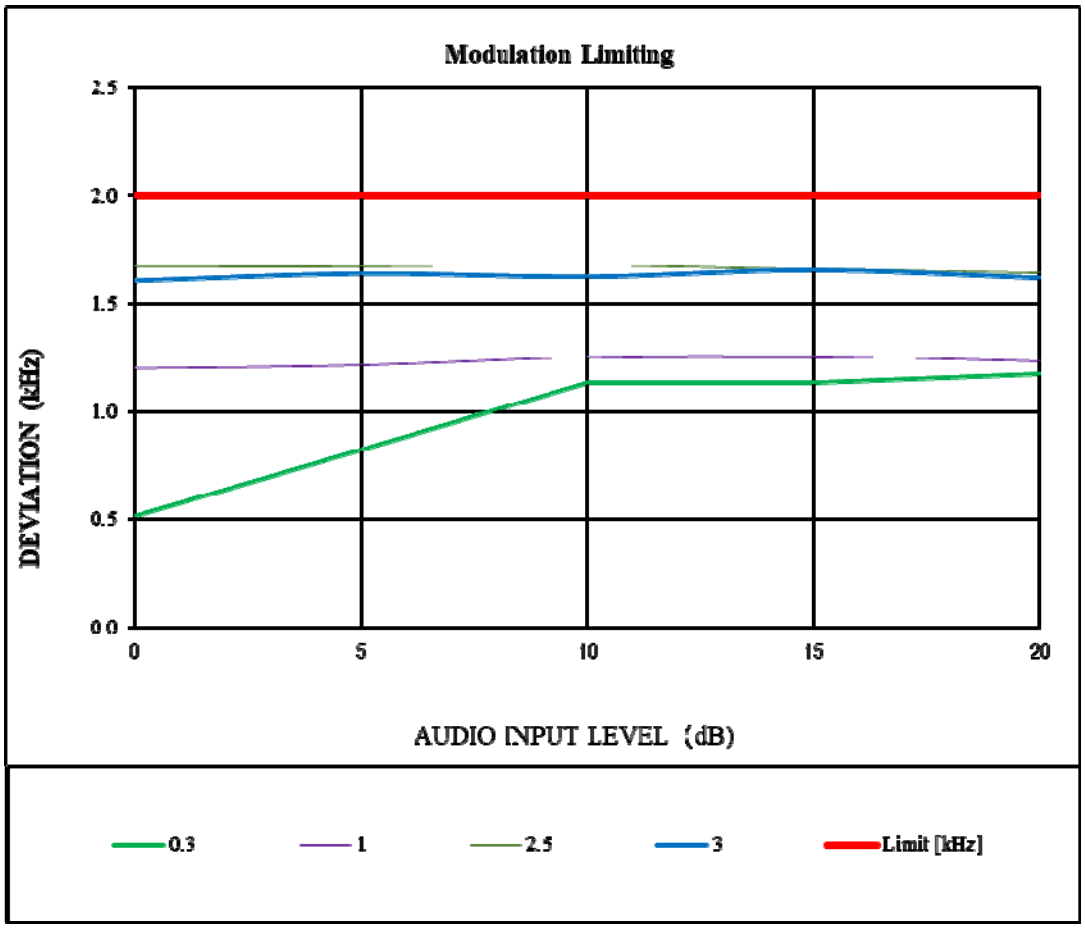
PK+

FM 10kHz	Carrier Frequency: 27.185MHz				
Audio Input Level (dB)	Deviation (kHz)				Limit (kHz)
	0.3	1.0	2.5	3.0	
20	1.193	1.119	1.702	1.625	2
15	1.165	1.221	1.783	1.677	2
10	1.124	1.264	1.776	1.635	2
5	0.879	1.254	1.724	1.698	2
0	0.485	1.200	1.763	1.701	2



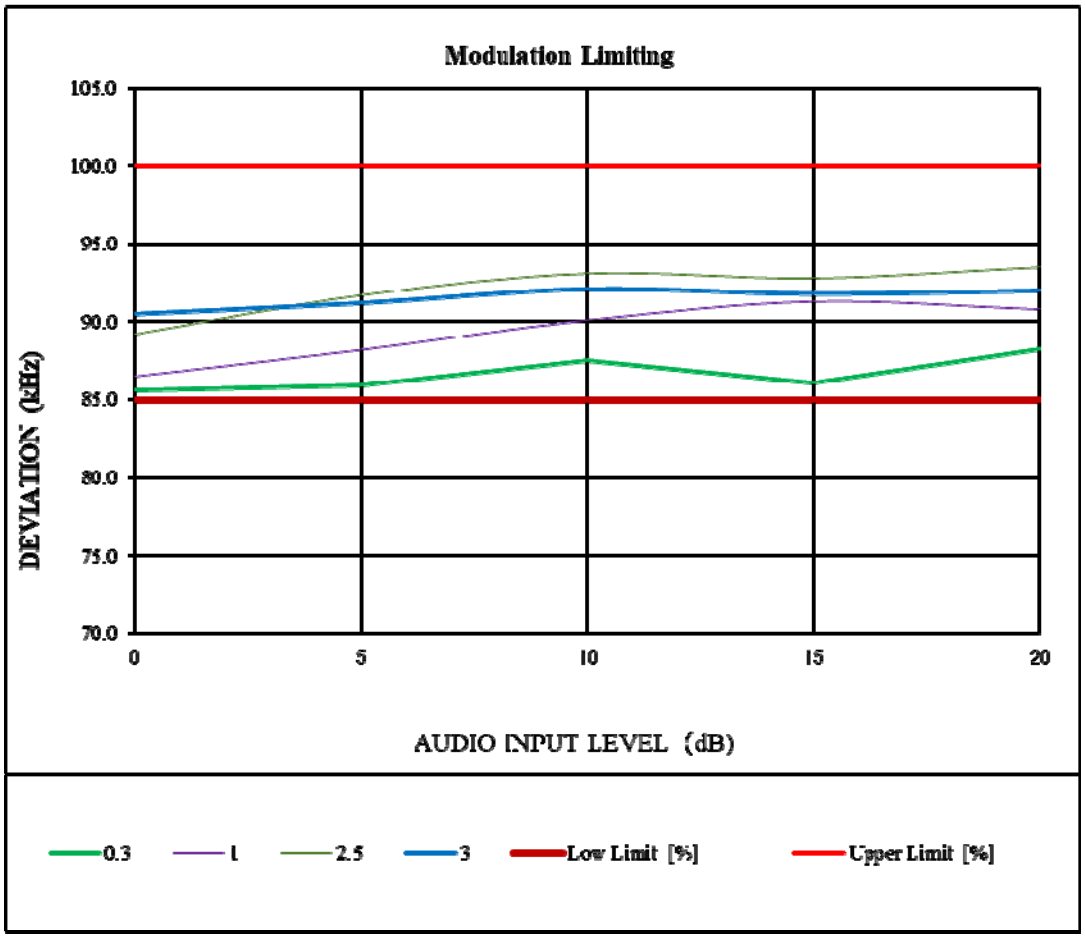
PK-

FM 10kHz	Carrier Frequency: 27.185MHz				
Audio Input Level (dB)	Deviation (kHz)				Limit (kHz)
	0.3	1.0	2.5	3.0	
20	1.175	1.233	1.642	1.618	2
15	1.134	1.256	1.658	1.654	2
10	1.133	1.252	1.677	1.623	2
5	0.821	1.214	1.672	1.638	2
0	0.515	1.200	1.669	1.605	2



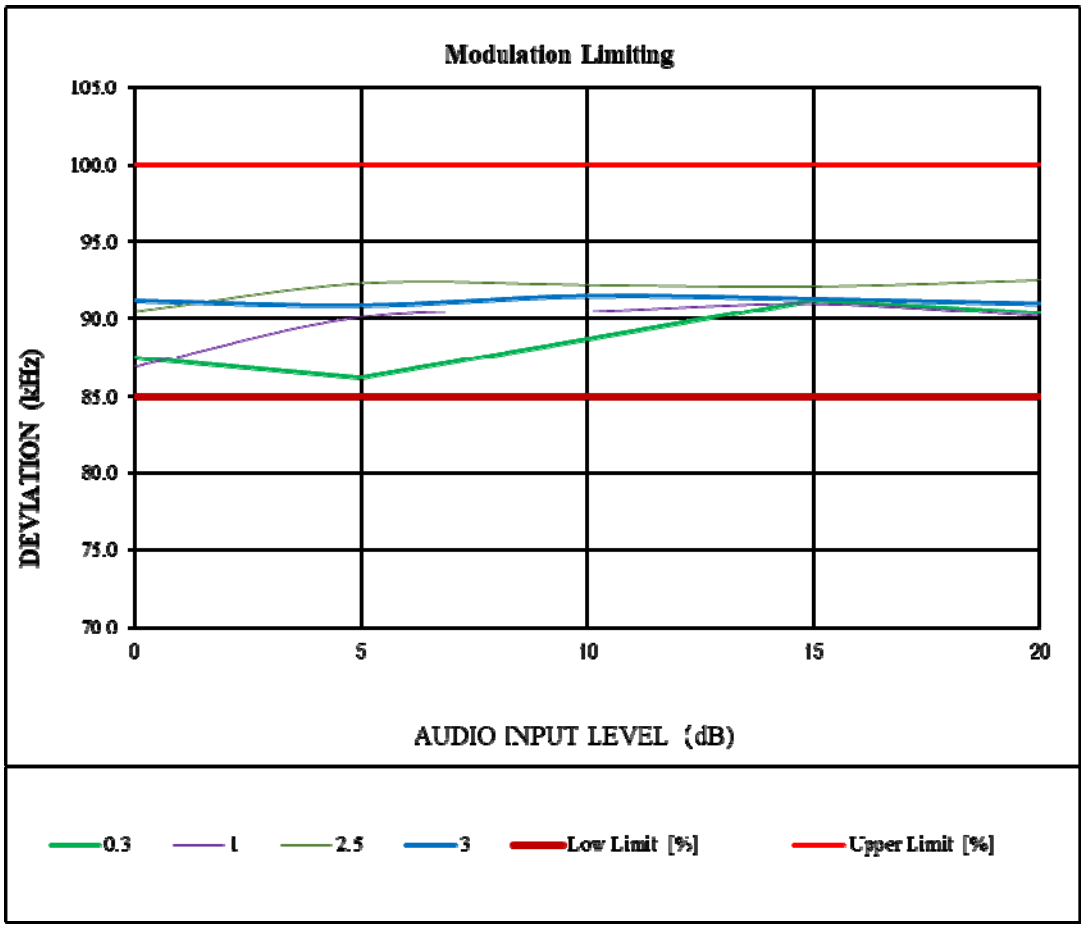
PK+

AM 10kHz	Carrier Frequency: 27.185MHz					
Audio Input Level (dB)	Deviation (%)				Low Limit [%]	Upper Limit [%]
	0.3	1.0	2.5	3.0		
20	88.2	90.8	93.5	92.0	85	100
15	86.1	91.3	92.8	91.8	85	100
10	87.5	90.1	93.1	92.1	85	100
5	85.9	88.2	91.7	91.2	85	100
0	85.6	86.5	89.2	90.5	85	100



PK-

AM 10kHz	Carrier Frequency: 27.185MHz					
Audio Input Level (dB)	Deviation (%)				Low Limit [%]	Upper Limit [%]
	0.3	1.0	2.5	3.0		
20	90.4	90.2	92.5	91	85	100
15	91.2	91	92.1	91.3	85	100
10	88.7	90.5	92.2	91.5	85	100
5	86.2	90.1	92.3	90.9	85	100
0	87.5	86.9	90.5	91.2	85	100



FCC §2.1049, §95.973, §95.979 – OCCUPIED BANDWIDTH AND EMISSION MASK

Applicable Standard

According to FCC §95.973, FCC §95.979

Each CBRS transmitter type must be designed such that the occupied bandwidth does not exceed the authorized bandwidth for the emission type under test.

(a) AM and FM. The authorized bandwidth for emission types A3E and F3E is 8 kHz.

(b) SSB. The authorized bandwidth for emission types J3E, R3E, and H3E is 4 kHz.
According to §95.979: Each CBRS transmitter type must be designed to comply with the applicable unwanted emissions limits in this section.

(a) Attenuation requirements. The power of unwanted emissions must be attenuated below the transmitter output power in Watts (P) as specified in the applicable paragraphs listed in the following table:

Emission type	Paragraph
A3E, F3E	(1), (3), (5), (6)
H3E, J3E, R3E	(2), (4), (5), (6)

(1) 25 dB (decibels) in the frequency band 4 kHz to 8 kHz removed from the channel center frequency;

(2) 25 dB in the frequency band 2 kHz to 6 kHz removed from the channel center frequency;

(3) 35 dB in the frequency band 8 kHz to 20 kHz removed from the channel center frequency;

(4) 35 dB in the frequency band 6 kHz to 10 kHz removed from the channel center frequency;

(5) 53+10 log (P) dB in any frequency band removed from the channel center frequency by more than 250% of the authorized bandwidth.

(6) 60 dB in any frequency band centered on a harmonic (i.e., an integer multiple of two or more times) of the carrier frequency.

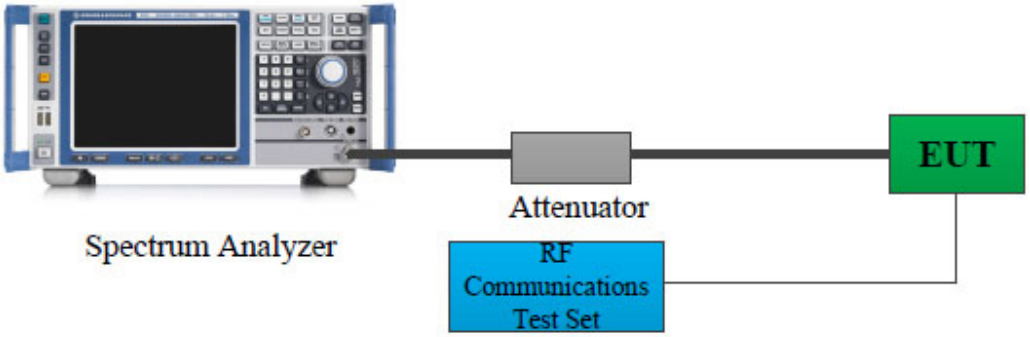
(b) Measurement bandwidths. The power of unwanted emissions in the frequency bands specified in paragraphs (a)(1) through (4) of this section is measured with a reference bandwidth of 300 Hz. The power of unwanted emissions in the frequency ranges specified in paragraphs (a)(5) and (6) of this section is measured with a reference bandwidth of at least 30 kHz.

(c) Measurement conditions and procedures. Subject to additional measurement standards and procedures established pursuant to part 2, subpart J, the following conditions and procedures must be used.

(1) The unwanted emissions limits requirements in this section must be met both with and without the connection of permitted attachments, such as external speakers, microphones, power cords and/or antennas.

(2) Either mean power output or peak envelope power output may be used for measurements, as appropriate for the emission type under test, provided that the same type of power measurement is used for both the transmitter output power and the power of the unwanted emissions.

EUT Setup Block Diagram



Note:The Insertion Loss of the RF cable, Attenuators was offset into the Spectrum Analyzer.

Test Procedure

C63.26-2015, Clause 5.4.4

The OBW is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission.

The following procedure shall be used for measuring (99%) power bandwidth:

a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts (typically a span of 1.5 × OBW is sufficient).

b) The nominal IF filter 3 dB bandwidth (RBW) shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set ≥ 3 × RBW.

c) Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation. See guidance provided in 4.2.3.

NOTE—Step a), step b), and step c) may require iteration to adjust within the specified tolerances.

d) Set the detection mode to peak, and the trace mode to max-hold.

e) If the instrument does not have a 99% OBW function, recover the trace data points and sum directly in linear power terms. Place the recovered amplitude data points, beginning at the lowest frequency, in a running sum until 0.5% of the total is reached. Record that frequency as the lower OBW frequency. Repeat the process until 99.5% of the total is reached and record that frequency as the upper OBW frequency. The 99% power OBW can be determined by computing the difference these two frequencies.

f) The OBW shall be reported and plot(s) of the measuring instrument display shall be provided with the test report. The frequency and amplitude axis and scale shall be clearly labeled. Tabular data can be reported in addition to the plot(s).

According to ANSI C63.26-2015 Section 5.7.3:

f) See Annex I for example emission mask plots.

Test Data

Test Mode:	Transmitting	**Test Engineer:**	Lucas Lin
Test Date:	2025-10-23	**Test Result:**	Pass

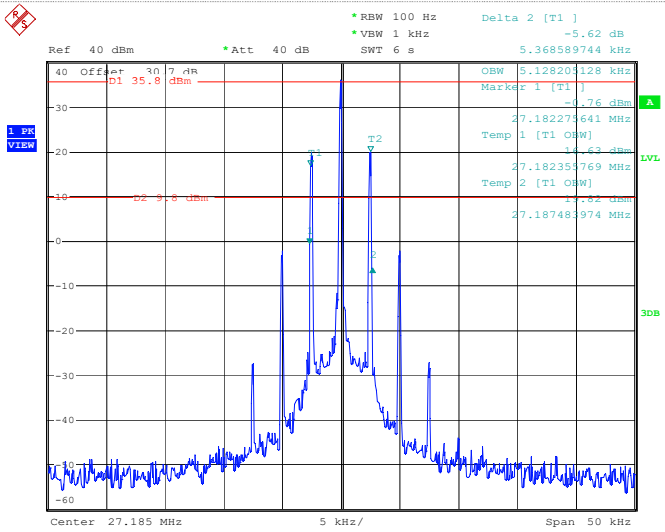
Enviroment Conditions:					
Temperature: (℃)	23.8	Relative Humidity: (%)	46	ATM Pressure: (kPa)	100.2

Please refer to below table:

Test Mode	Test Frequency (MHz)	99% Occupied Bandwidth (kHz)	Limit (kHz)
FM	27.185	5.128	≤8
AM	27.185	5.208	≤8

FM, 27.185MHz

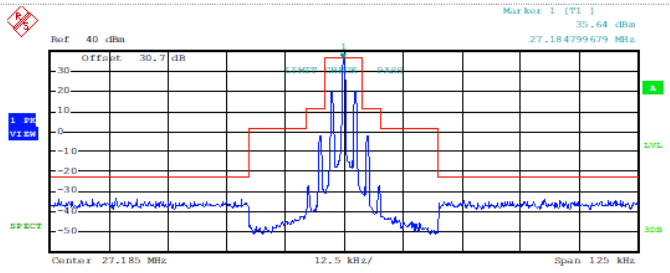
99% Occupied Bandwidth



Project No.:2507T27036E-RF Tester:Lucas Lin

Date: 23.OCT.2025 16:55:02

Emission Mask



Tx Channel

Bandwidth 10 kHz Power 37.98 dBm

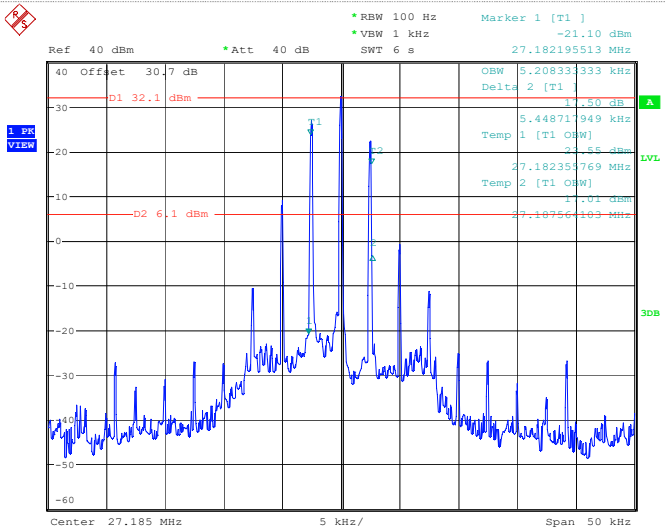
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	PwrRel [dBc]	ΔLimit [dB]
-62.500 k	-20.000 k	30.00 k	27.136322 M	-33.95	-71.93	-10.95
-20.000 k	-8.000 k	300.00	27.176787 M	-41.63	-79.60	-42.49
-8.000 k	-4.000 k	300.00	27.179992 M	-2.65	-40.63	-13.51
4.000 k	8.000 k	300.00	27.190008 M	-2.64	-40.62	-13.50
8.000 k	20.000 k	300.00	27.193413 M	-42.46	-80.44	-43.32
20.000 k	62.500 k	30.00 k	27.227668 M	-34.32	-72.30	-11.32

Project No.:2507T27036E-RF Tester:Lucas Lin

Date: 23.OCT.2025 17:41:32

AM, 27.185MHz

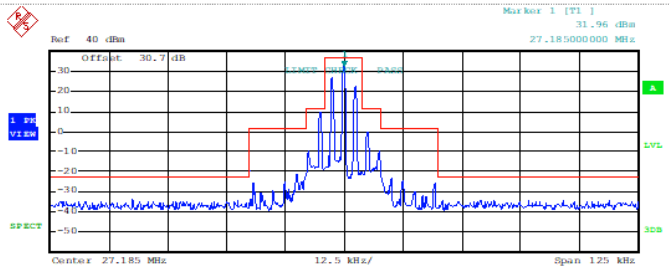
99% Occupied Bandwidth



Project No.:2507T27036E-RF Tester:Lucas Lin

Date: 23.OCT.2025 17:18:55

Emission Mask



Tx Channel
Bandwidth 10 kHz Power 35.56 dBm

Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	PwrRel [dBc]	ΔLimit [dB]
-62.500 k	-20.000 k	30.00 k	27.139928 M	-34.55	-77.11	-11.55
-20.000 k	-8.000 k	300.00	27.174984 M	-22.33	-57.88	-23.26
-8.000 k	-4.000 k	300.00	27.179992 M	9.18	-26.38	-1.75
4.000 k	8.000 k	300.00	27.190008 M	-0.41	-35.97	-11.34
8.000 k	20.000 k	300.00	27.193013 M	-22.26	-57.82	-23.19
20.000 k	62.500 k	30.00 k	27.241290 M	-34.79	-70.35	-11.79

Project No.:2507T27036E-RF Tester:Lucas Lin

Date: 23.OCT.2025 17:38:50

FCC §2.1053, §95.979 - SPURIOUS RADIATED EMISSION

Applicable Standard

FCC §2.1053 and FCC §95.979

Each CBRS transmitter type must be designed to comply with the applicable unwanted emissions limits in this section.

(a) Attenuation requirements. The power of unwanted emissions must be attenuated below the transmitter output power in Watts (P) as specified in the applicable paragraphs listed in the following table:

Emission type	Paragraph
A3E, F3E	(1), (3), (5), (6)
H3E, J3E, R3E	(2), (4), (5), (6)

(1) 25 dB (decibels) in the frequency band 4 kHz to 8 kHz removed from the channel center frequency;

(2) 25 dB in the frequency band 2 kHz to 6 kHz removed from the channel center frequency;

(3) 35 dB in the frequency band 8 kHz to 20 kHz removed from the channel center frequency;

(4) 35 dB in the frequency band 6 kHz to 10 kHz removed from the channel center frequency;

(5) 53+10 log (P) dB in any frequency band removed from the channel center frequency by more than 250% of the authorized bandwidth.

(6) 60 dB in any frequency band centered on a harmonic (i.e., an integer multiple of two or more times) of the carrier frequency.

(b) Measurement bandwidths. The power of unwanted emissions in the frequency bands specified in paragraphs (a)(1) through (4) of this section is measured with a reference bandwidth of 300 Hz. The power of unwanted emissions in the frequency ranges specified in paragraphs (a)(5) and (6) of this section is measured with a reference bandwidth of at least 30 kHz.

(c) Measurement conditions and procedures. Subject to additional measurement standards and procedures established pursuant to part 2, subpart J, the following conditions and procedures must be used.

(1) The unwanted emissions limits requirements in this section must be met both with and without the connection of permitted attachments, such as external speakers, microphones, power cords and/or antennas.

(2) Either mean power output or peak envelope power output may be used for measurements, as appropriate for the emission type under test, provided that the same type of power measurement is used for both the transmitter output power and the power of the unwanted emissions.

Test Prosedure:

ANSI C63.26-2015 Section 5.5.3

a) Place the EUT in the center of the turntable. The EUT shall be configured to transmit into the standard non-radiating load (for measuring radiated spurious emissions), connected with cables of minimal length unless specified otherwise. If the EUT uses an adjustable antenna, the antenna shall be positioned to the length that produces the worst case emission at the fundamental operating frequency.

b) Each emission under consideration shall be evaluated:

1) Raise and lower the measurement antenna in accordance 5.5.2, as necessary to enable detection of the maximum emission amplitude relative to measurement antenna height.

2) Rotate the EUT through 360° to determine the maximum emission level relative to the axial position.

3) Return the turntable to the azimuth where the highest emission amplitude level was observed.

4) Vary the measurement antenna height again through 1 m to 4 m again to find the height associated with the maximum emission amplitude.

5) Record the measured emission amplitude level and frequency using the appropriate RBW.

c) Repeat step b) for each emission frequency with the measurement antenna oriented in both the horizontal and vertical polarizations to determine the orientation that gives the maximum emissions amplitude.

d) Set-up the substitution measurement with the reference point of the substitution antenna located as near as possible to where the center of the EUT radiating element was located during the initial EUT measurement.

e) Maintain the previous measurement instrument settings and test set-up, with the exception that the EUT is removed and replaced by the substitution antenna.

f) Connect a signal generator to the substitution antenna; locate the signal generator so as to minimize any potential influences on the measurement results. Set the signal generator to the frequency where emissions are detected, and set an output power level such that the radiated signal can be detected by the measurement instrument, with sufficient dynamic range relative to the noise floor.

g) For each emission that was detected and measured in the initial test [i.e., in step b) and step c)]:

1) Vary the measurement antenna height between 1 m to 4 m to maximize the received (measured) signal amplitude.

2) Adjust the signal generator output power level until the amplitude detected by the measurement instrument equals the amplitude level of the emission previously measured directly in step b) and step c).

3) Record the output power level of the signal generator when equivalence is achieved in step 2).

h) Repeat step e) through step g) with the measurement antenna oriented in the opposite polarization.

i) Calculate the emission power in dBm referenced to a half-wave dipole using the following equation:

$$Pe = Ps(dBm) - \text{cable loss (dB)} + \text{antenna gain (dBd)}$$

where

Pe = equivalent emission power in dBm
Ps = source (signal generator) power in dBm

NOTE—dBd refers to the measured antenna gain in decibels relative to a half-wave dipole.

j) Correct the antenna gain of the substitution antenna if necessary to reference the emission power to a half-wave dipole. When using measurement antennas with the gain specified in dBi, the equivalent dipole-referenced gain can be determined from: gain (dBd) = gain (dBi) − 2.15 dB. If necessary, the antenna gain can be calculated from calibrated antenna factor information

k) Provide the complete measurement results as a part of the test report.

EUT Setup Block Diagram

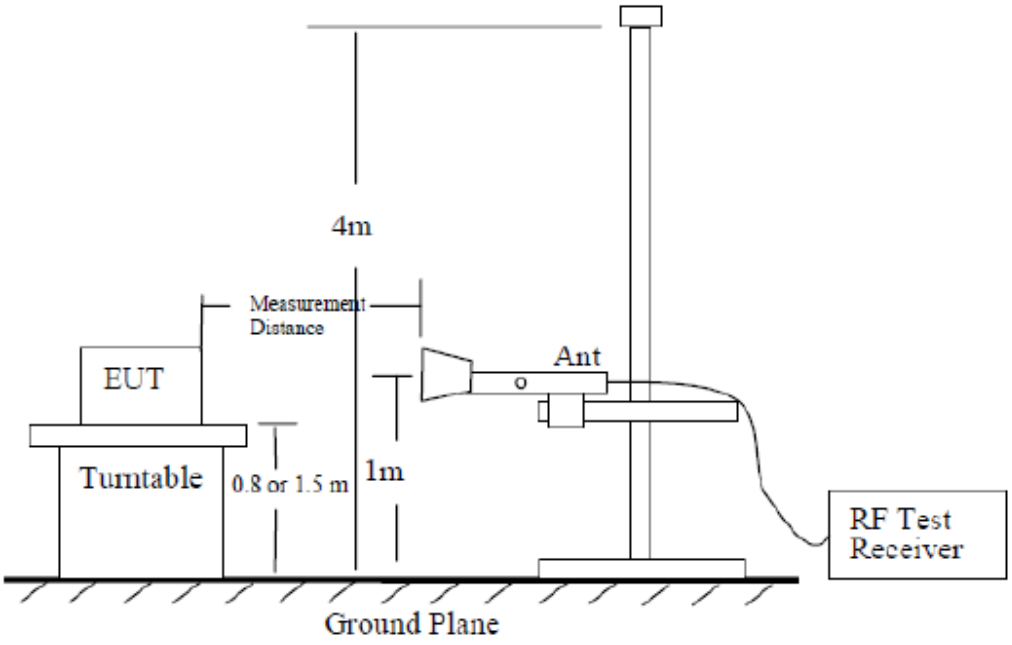


Figure 6 —Test site-up for radiated ERP and/or EIRP measurements

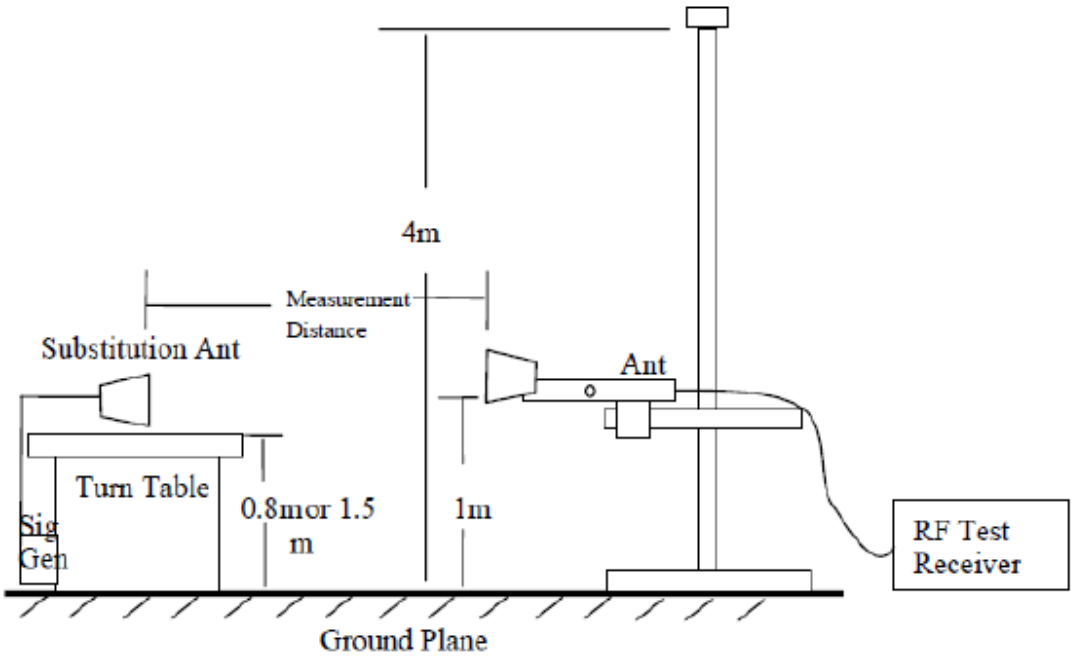


Figure 7 —Substitution method set-up for radiated emission

Test Data

Test Mode:	Transmitting	Test Engineer:	Apollo Luo
Test Date:	2025-10-22	Test Result:	Pass

Enviroment Conditions:					
Temperature: (°C)	23.5	Relative Humidity: (%)	55	ATM Pressure: (kPa)	100.5

Please refer to below table:

After pre-scan in the X, Y and Z axes of orientation, the worst case is below:

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
FM 10kHz, Frequency: 27.185MHz								
54.37	H	56.43	-54.52	0.00	0.14	-54.66	-24.00	30.66
54.37	V	67.14	-43.40	0.00	0.14	-43.54	-24.00	19.54
81.56	H	70.54	-43.80	0.00	0.17	-43.97	-24.00	19.97
81.56	V	77.68	-36.45	0.00	0.17	-36.62	-24.00	12.62
108.74	H	62.05	-52.13	0.00	0.21	-52.34	-24.00	28.34
108.74	V	68.23	-45.50	0.00	0.21	-45.71	-24.00	21.71
135.93	H	58.84	-53.73	0.00	0.22	-53.95	-24.00	29.95
135.93	V	59.16	-52.95	0.00	0.22	-53.17	-24.00	29.17
163.11	H	66.87	-43.76	0.00	0.24	-44.00	-24.00	20.00
163.11	V	70.42	-39.84	0.00	0.24	-40.08	-24.00	16.08
190.30	H	50.47	-57.87	0.00	0.25	-58.12	-24.00	34.12
190.30	V	52.56	-55.62	0.00	0.25	-55.87	-24.00	31.87
217.48	H	58.76	-44.08	0.00	0.26	-44.34	-24.00	20.34
217.48	V	54.12	-48.50	0.00	0.26	-48.76	-24.00	24.76
244.67	H	60.15	-35.41	0.00	0.28	-35.69	-24.00	11.69
244.67	V	58.47	-36.64	0.00	0.28	-36.92	-24.00	12.92
271.85	H	52.73	-47.84	0.00	0.28	-48.12	-24.00	24.12
271.85	V	51.42	-48.68	0.00	0.28	-48.96	-24.00	24.96
299.04	H	53.33	-55.26	0.00	0.29	-55.55	-24.00	31.55
299.04	V	50.97	-57.17	0.00	0.29	-57.46	-24.00	33.46
326.22	H	51.02	-57.54	0.00	0.30	-57.84	-24.00	33.84
326.22	V	52.58	-55.58	0.00	0.30	-55.88	-24.00	31.88
353.41	H	54.57	-53.57	0.00	0.31	-53.88	-24.00	29.88
353.41	V	51.89	-55.91	0.00	0.31	-56.22	-24.00	32.22
380.59	H	51.75	-55.38	0.00	0.32	-55.70	-24.00	31.70
380.59	V	53.33	-53.50	0.00	0.32	-53.82	-24.00	29.82
407.78	H	59.95	-45.07	0.00	0.33	-45.40	-24.00	21.40

407.78	V	62.32	-42.46	0.00	0.33	-42.79	-24.00	18.79
434.96	H	57.71	-42.48	0.00	0.34	-42.82	-24.00	18.82
434.96	V	55.43	-44.61	0.00	0.34	-44.95	-24.00	20.95
434.96	H	60.06	-40.13	0.00	0.34	-40.47	-24.00	16.47
434.96	V	58.87	-41.17	0.00	0.34	-41.51	-24.00	17.51
462.15	H	55.43	-43.11	0.00	0.35	-43.46	-24.00	19.46
462.15	V	57.78	-40.66	0.00	0.35	-41.01	-24.00	17.01
489.33	H	51.15	-49.66	0.00	0.36	-50.02	-24.00	26.02
489.33	V	53.34	-47.37	0.00	0.36	-47.73	-24.00	23.73
516.52	H	54.78	-48.03	0.00	0.37	-48.40	-24.00	24.40
516.52	V	52.12	-50.57	0.00	0.37	-50.94	-24.00	26.94
543.70	H	50.49	-54.16	0.00	0.38	-54.54	-24.00	30.54
543.70	V	50.47	-53.99	0.00	0.38	-54.37	-24.00	30.37
570.89	H	48.35	-55.72	0.00	0.38	-56.10	-24.00	32.10
570.89	V	50.23	-53.62	0.00	0.38	-54.00	-24.00	30.00
598.07	H	48.83	-53.94	0.00	0.38	-54.32	-24.00	30.32
598.07	V	47.12	-55.40	0.00	0.38	-55.78	-24.00	31.78
625.26	H	52.51	-47.57	0.00	0.39	-47.96	-24.00	23.96
625.26	V	50.78	-49.04	0.00	0.39	-49.43	-24.00	25.43
652.44	H	55.45	-41.96	0.00	0.39	-42.35	-24.00	18.35
652.44	V	53.61	-43.55	0.00	0.39	-43.94	-24.00	19.94
679.63	H	52.78	-43.33	0.00	0.40	-43.73	-24.00	19.73
679.63	V	54.16	-41.81	0.00	0.40	-42.21	-24.00	18.21
706.81	H	51.97	-43.80	0.00	0.40	-44.20	-24.00	20.20
706.81	V	55.68	-40.03	0.00	0.40	-40.43	-24.00	16.43
734.00	H	58.84	-39.44	0.00	0.41	-39.85	-24.00	15.85
734.00	V	52.65	-45.58	0.00	0.41	-45.99	-24.00	21.99
761.18	H	53.05	-46.79	0.00	0.41	-47.20	-24.00	23.20
761.18	V	54.87	-44.83	0.00	0.41	-45.24	-24.00	21.24
788.37	H	51.24	-48.80	0.00	0.41	-49.21	-24.00	25.21
788.37	V	49.75	-49.91	0.00	0.41	-50.32	-24.00	26.32
815.55	H	46.31	-52.24	0.00	0.42	-52.66	-24.00	28.66
815.55	V	44.27	-53.88	0.00	0.42	-54.30	-24.00	30.30
842.74	H	51.23	-44.57	0.00	0.43	-45.00	-24.00	21.00
842.74	V	49.73	-45.81	0.00	0.43	-46.24	-24.00	22.24
869.92	H	53.31	-38.94	0.00	0.43	-39.37	-24.00	15.37
869.92	V	50.82	-41.22	0.00	0.43	-41.65	-24.00	17.65
897.11	H	48.76	-39.64	0.00	0.42	-40.06	-24.00	16.06
897.11	V	47.31	-40.90	0.00	0.42	-41.32	-24.00	17.32
924.29	H	50.11	-38.91	0.00	0.42	-39.33	-24.00	15.33
924.29	V	47.77	-41.07	0.00	0.42	-41.49	-24.00	17.49
951.48	H	42.15	-48.03	0.00	0.43	-48.46	-24.00	24.46
951.48	V	43.61	-46.39	0.00	0.43	-46.82	-24.00	22.82
978.66	H	42.97	-48.37	0.00	0.43	-48.80	-24.00	24.80
978.66	V	44.58	-46.58	0.00	0.43	-47.01	-24.00	23.01

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
AM 10kHz, Frequency: 27.185MHz								
54.37	H	52.41	-58.54	0.00	0.14	-58.68	-24.00	34.68
54.37	V	64.95	-45.59	0.00	0.14	-45.73	-24.00	21.73
81.56	H	71.55	-42.79	0.00	0.17	-42.96	-24.00	18.96
81.56	V	78.34	-35.79	0.00	0.17	-35.96	-24.00	11.96
108.74	H	61.98	-52.20	0.00	0.21	-52.41	-24.00	28.41
108.74	V	67.43	-46.30	0.00	0.21	-46.51	-24.00	22.51
135.93	H	57.52	-55.05	0.00	0.22	-55.27	-24.00	31.27
135.93	V	58.43	-53.68	0.00	0.22	-53.90	-24.00	29.90
163.11	H	67.79	-42.84	0.00	0.24	-43.08	-24.00	19.08
163.11	V	71.83	-38.43	0.00	0.24	-38.67	-24.00	14.67
190.30	H	48.79	-59.55	0.00	0.25	-59.80	-24.00	35.80
190.30	V	54.26	-53.92	0.00	0.25	-54.17	-24.00	30.17
217.48	H	57.14	-45.70	0.00	0.26	-45.96	-24.00	21.96
217.48	V	54.63	-47.99	0.00	0.26	-48.25	-24.00	24.25
244.67	H	61.35	-34.21	0.00	0.28	-34.49	-24.00	10.49
244.67	V	59.79	-35.32	0.00	0.28	-35.60	-24.00	11.60
271.85	H	54.12	-46.45	0.00	0.28	-46.73	-24.00	22.73
271.85	V	51.85	-48.25	0.00	0.28	-48.53	-24.00	24.53
299.04	H	53.39	-55.20	0.00	0.29	-55.49	-24.00	31.49
299.04	V	51.46	-56.68	0.00	0.29	-56.97	-24.00	32.97
326.22	H	51.52	-57.04	0.00	0.30	-57.34	-24.00	33.34
326.22	V	54.51	-53.65	0.00	0.30	-53.95	-24.00	29.95
353.41	H	53.36	-54.78	0.00	0.31	-55.09	-24.00	31.09
353.41	V	52.25	-55.55	0.00	0.31	-55.86	-24.00	31.86
380.59	H	51.46	-55.67	0.00	0.32	-55.99	-24.00	31.99
380.59	V	54.87	-51.96	0.00	0.32	-52.28	-24.00	28.28
407.78	H	57.57	-47.45	0.00	0.33	-47.78	-24.00	23.78
407.78	V	60.63	-44.15	0.00	0.33	-44.48	-24.00	20.48
434.96	H	59.94	-40.25	0.00	0.34	-40.59	-24.00	16.59
434.96	V	53.03	-47.01	0.00	0.34	-47.35	-24.00	23.35
434.96	H	58.72	-41.47	0.00	0.34	-41.81	-24.00	17.81
434.96	V	55.64	-44.40	0.00	0.34	-44.74	-24.00	20.74
462.15	H	53.12	-45.42	0.00	0.35	-45.77	-24.00	21.77
462.15	V	55.76	-42.68	0.00	0.35	-43.03	-24.00	19.03
489.33	H	51.45	-49.36	0.00	0.36	-49.72	-24.00	25.72
489.33	V	53.67	-47.04	0.00	0.36	-47.40	-24.00	23.40
516.52	H	51.43	-51.38	0.00	0.37	-51.75	-24.00	27.75
516.52	V	50.16	-52.53	0.00	0.37	-52.90	-24.00	28.90
543.70	H	47.55	-57.10	0.00	0.38	-57.48	-24.00	33.48

543.70	V	49.25	-55.21	0.00	0.38	-55.59	-24.00	31.59
570.89	H	46.67	-57.40	0.00	0.38	-57.78	-24.00	33.78
570.89	V	50.18	-53.67	0.00	0.38	-54.05	-24.00	30.05
598.07	H	46.72	-56.05	0.00	0.38	-56.43	-24.00	32.43
598.07	V	46.04	-56.48	0.00	0.38	-56.86	-24.00	32.86
625.26	H	51.72	-48.36	0.00	0.39	-48.75	-24.00	24.75
625.26	V	50.29	-49.53	0.00	0.39	-49.92	-24.00	25.92
652.44	H	51.25	-46.16	0.00	0.39	-46.55	-24.00	22.55
652.44	V	52.53	-44.63	0.00	0.39	-45.02	-24.00	21.02
679.63	H	51.87	-44.24	0.00	0.40	-44.64	-24.00	20.64
679.63	V	52.99	-42.98	0.00	0.40	-43.38	-24.00	19.38
706.81	H	51.52	-44.25	0.00	0.40	-44.65	-24.00	20.65
706.81	V	52.16	-43.55	0.00	0.40	-43.95	-24.00	19.95
734.00	H	57.46	-40.82	0.00	0.41	-41.23	-24.00	17.23
734.00	V	54.41	-43.82	0.00	0.41	-44.23	-24.00	20.23
761.18	H	52.17	-47.67	0.00	0.41	-48.08	-24.00	24.08
761.18	V	53.36	-46.34	0.00	0.41	-46.75	-24.00	22.75
788.37	H	50.49	-49.55	0.00	0.41	-49.96	-24.00	25.96
788.37	V	50.11	-49.55	0.00	0.41	-49.96	-24.00	25.96
815.55	H	47.75	-50.80	0.00	0.42	-51.22	-24.00	27.22
815.55	V	46.56	-51.59	0.00	0.42	-52.01	-24.00	28.01
842.74	H	53.34	-42.46	0.00	0.43	-42.89	-24.00	18.89
842.74	V	50.19	-45.35	0.00	0.43	-45.78	-24.00	21.78
869.92	H	52.76	-39.49	0.00	0.43	-39.92	-24.00	15.92
869.92	V	51.44	-40.60	0.00	0.43	-41.03	-24.00	17.03
897.11	H	46.66	-41.74	0.00	0.42	-42.16	-24.00	18.16
897.11	V	44.73	-43.48	0.00	0.42	-43.90	-24.00	19.90
924.29	H	49.97	-39.05	0.00	0.42	-39.47	-24.00	15.47
924.29	V	47.03	-41.81	0.00	0.42	-42.23	-24.00	18.23
951.48	H	43.51	-46.67	0.00	0.43	-47.10	-24.00	23.10
951.48	V	45.76	-44.24	0.00	0.43	-44.67	-24.00	20.67
978.66	H	43.12	-48.22	0.00	0.43	-48.65	-24.00	24.65
978.66	V	45.73	-45.43	0.00	0.43	-45.86	-24.00	21.86

Note 1: The unit of antenna gain is dBd for frequency below 1GHz and is dBi for frequency above 1GHz.
Note 2: Absolute Level = Substituted Level - Cable loss + Antenna Gain
Margin = Limit- Absolute Level.

FCC §2.1051, §95.979 – CONDUCTED SPURIOUS AT ANTENNA TERMINALS

Applicable Standard

FCC §2.1051 and FCC §95.979

Each CBRS transmitter type must be designed to comply with the applicable unwanted emissions limits in this section.

(a) Attenuation requirements. The power of unwanted emissions must be attenuated below the transmitter output power in Watts (P) as specified in the applicable paragraphs listed in the following table:

Emission type	Paragraph
A3E, F3E	(1), (3), (5), (6)
H3E, J3E, R3E	(2), (4), (5), (6)

(1) 25 dB (decibels) in the frequency band 4 kHz to 8 kHz removed from the channel center frequency;
(2) 25 dB in the frequency band 2 kHz to 6 kHz removed from the channel center frequency;
(3) 35 dB in the frequency band 8 kHz to 20 kHz removed from the channel center frequency;
(4) 35 dB in the frequency band 6 kHz to 10 kHz removed from the channel center frequency;
(5) 53+10 log (P) dB in any frequency band removed from the channel center frequency by more than 250% of the authorized bandwidth.
(6) 60 dB in any frequency band centered on a harmonic (i.e., an integer multiple of two or more times) of the carrier frequency.

(b) Measurement bandwidths. The power of unwanted emissions in the frequency bands specified in paragraphs (a)(1) through (4) of this section is measured with a reference bandwidth of 300 Hz. The power of unwanted emissions in the frequency ranges specified in paragraphs (a)(5) and (6) of this section is measured with a reference bandwidth of at least 30 kHz.

(c) Measurement conditions and procedures. Subject to additional measurement standards and procedures established pursuant to part 2, subpart J, the following conditions and procedures must be used.

(1) The unwanted emissions limits requirements in this section must be met both with and without the connection of permitted attachments, such as external speakers, microphones, power cords and/or antennas.
(2) Either mean power output or peak envelope power output may be used for measurements, as appropriate for the emission type under test, provided that the same type of power measurement is used for both the transmitter output power and the power of the unwanted emissions.

Test Prosedure:

C63.26-2015, Clause 5.7.4 Spurious unwanted emission measurements

a) Set the spectrum analyzer start frequency to the lowest frequency generated by the EUT, without going below 9 kHz, and the stop frequency to the lower frequency covered by the measurements previously performed in 5.7.3. As an alternative, the stop frequency can be set to the value specified in 5.1.1, depending on the EUT operating range, if the resulting plot can clearly demonstrate compliance for all frequencies not addressed by the out-of-band emissions measurements performed as per 5.7.3.

b) When using an average power (rms) detector, ensure that the number of points in the sweep $\geqslant 2 \times$ (span/ RBW). This may require that the measurement range defined by the start and stop frequencies be subdivided, depending on the spectrum analyzer capabilities. This requirement does not apply to peakdetected power measurements. When average power is specified by the applicable regulation, a peakdetector can be utilized for preliminary measurements to accommodate wider frequency spans. Any

emissions found in the preliminary measurement to exceed the applicable limit(s) shall be further examined using a power averaging (rms) detector with the minimum number of measurement points as defined above.

c) The sweep time should be set to auto-couple for performing peak-detector measurements. For measurements that use a power averaging (rms) detector, the sweep time shall be set as described for out of-band emissions measurements in item d) of 5.7.3.

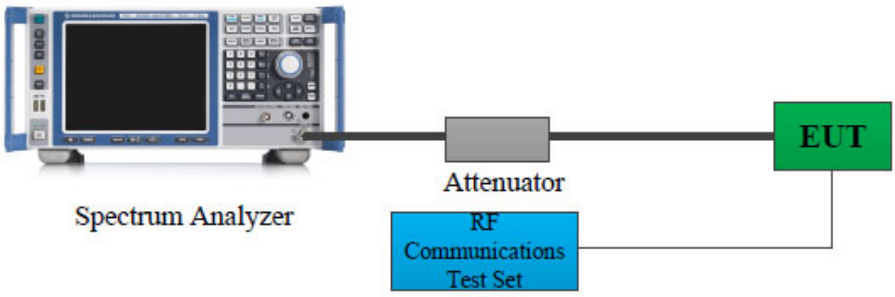
d) Identify and measure the highest spurious emission levels in each frequency range. It is not necessary to re-measure the out-of-band emissions as a part of this test. Record the frequencies and amplitudes corresponding to the measured emissions and capture the data plots.

e) Repeat step b) through step d) for the upper spurious emission frequency range if not already captured by a wide span measurement performed as per the alternative provided in step a). The upper frequency for this measurement is defined in 5.1.1 as a function of the EUT operating range.

f) Compare the results with the corresponding limit in the applicable regulation.

g) The test report shall include the data plots of the measuring instrument display and the measured data.

EUT Setup Block Diagram



Test Data

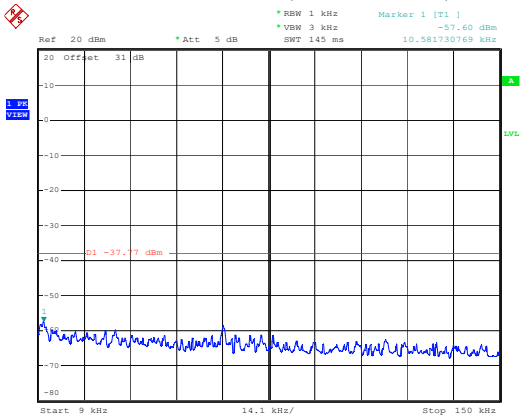
Test Mode:	Transmitting	**Test Engineer:**	Lucas Lin
Test Date:	2025-10-23	**Test Result:**	Pass

Enviroment Conditions:					
Temperature: (℃)	23.8	Relative Humidity: (%)	46	ATM Pressure: (kPa)	100.2

Please refer to the below plots.

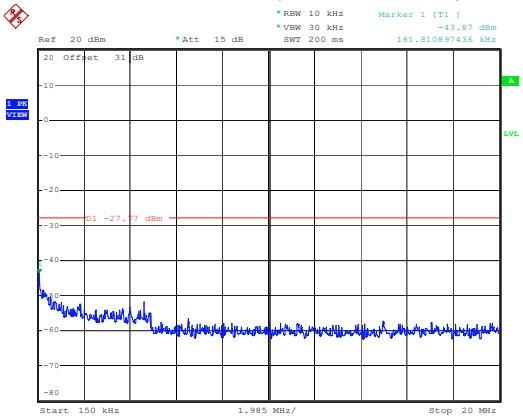
FM 10kHz

27.185 MHz (9kHz-150kHz)



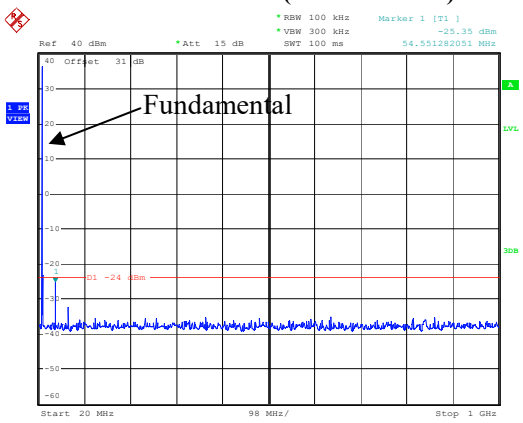
Project No.:2507T27036E-RF Tester:Lucas Lin
Date: 23.OCT.2025 17:51:30

27.185 MHz (150kHz-20MHz)



Project No.:2507T27036E-RF Tester:Lucas Lin
Date: 23.OCT.2025 17:57:46

27.185 MHz (20MHz-1GHz)

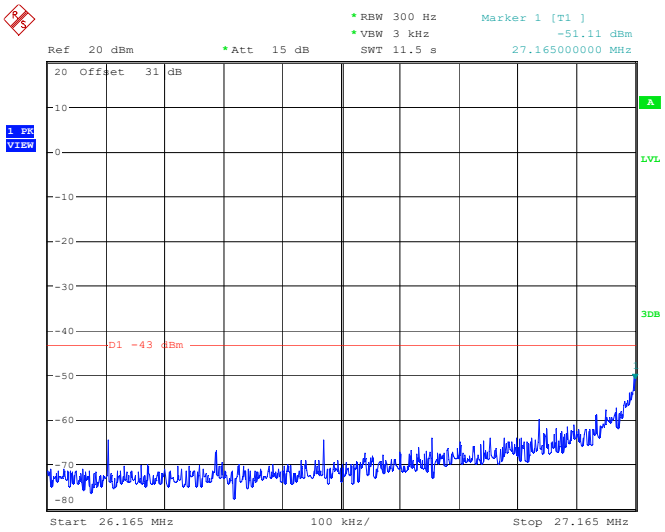


Project No.:2507T27036E-RF Tester:Lucas Lin
Date: 23.OCT.2025 18:00:00

Note:
1. Limit for frequencies other than harmonic (exclude fc ±250% authorized bandwidth): 53 + 10 log (P) dB below the rated power=-23dBm
2. The limit is -23dBm/30kHz for 9kHz to 150kHz, a 1kHz RBW was used for the test, so the limit was reduce by a factor of 10*log(30kHz/1kHz)=14.77dB. Therefore, the limit -37.77dBm was used.
3. The limit is -23dBm/30kHz for 150kHz to 20MHz, a 10kHz RBW was used for the test, so the limit was reduce by a factor of 10*log(30kHz/10kHz)=4.77dB. Therefore, the limit -27.77dBm was used.
4. The limit is -23dBm/30kHz for 20MHz to 1000MHz, a 100kHz RBW was used for the test, so the limit was reduce by a factor of 10*log(30kHz/100kHz)=-5.23dB. And limit for harmonic: 60dB below the rated power=36dBm-60dB=-24dBm. Therefore, the tighter limit -24dBm was used.

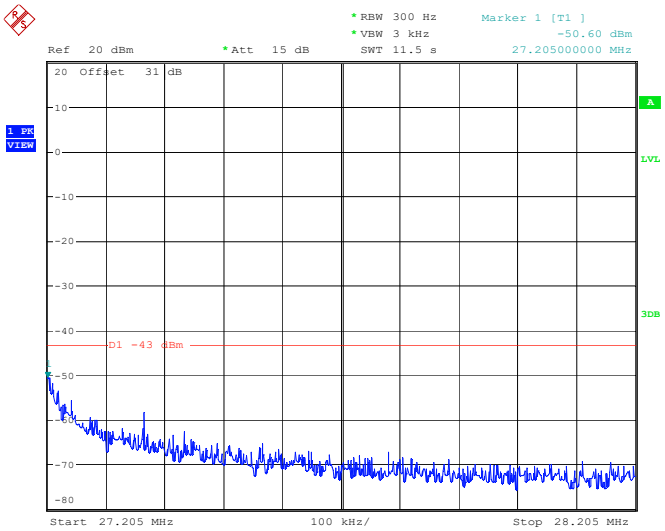
Emissions from the channel center frequency by more than 250% of the authorized bandwidth

26.165MHz-27.165MHz



Project No.:2507T27036E-RF Tester:Lucas Lin
Date: 23.OCT.2025 18:06:05

27.205MHz-28.205MHz

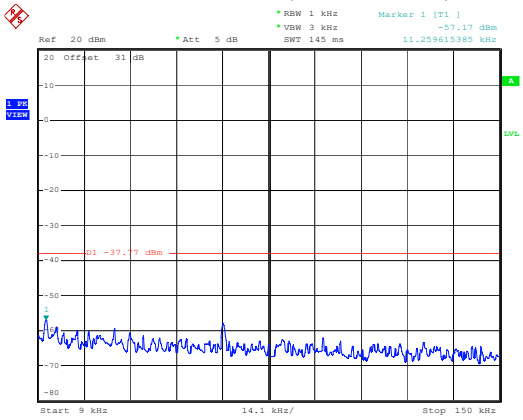


Project No.:2507T27036E-RF Tester:Lucas Lin
Date: 23.OCT.2025 18:09:43

Note: the limit is -23dBm/30kHz for the range, a 300Hz RBW was used for the test, so the limit was reduce by a factor of 10*log(30kHz/300Hz)=20dB.

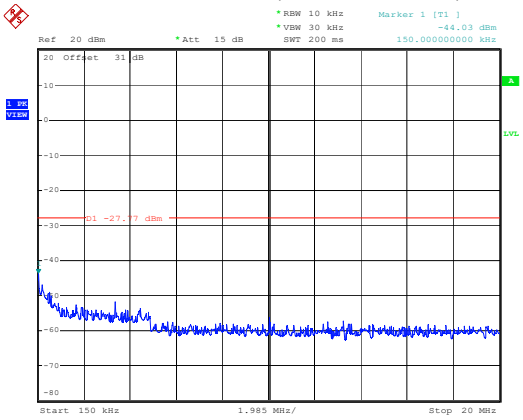
AM 10kHz

27.185 MHz (9kHz-150kHz)



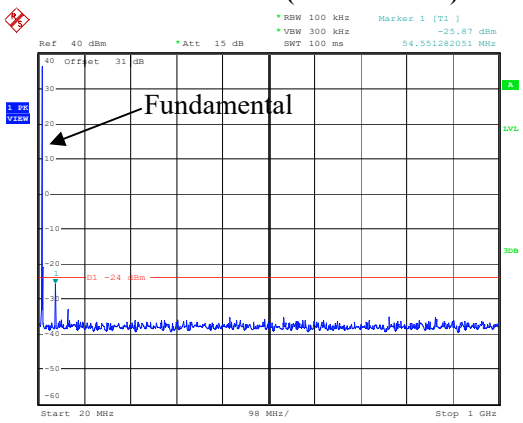
Project No.:2507T27036E-RF Tester:Lucas Lin
Date: 23.OCT.2025 17:56:14

27.185 MHz (150kHz-20MHz)



Project No.:2507T27036E-RF Tester:Lucas Lin
Date: 23.OCT.2025 17:56:41

27.185 MHz (20MHz-1GHz)

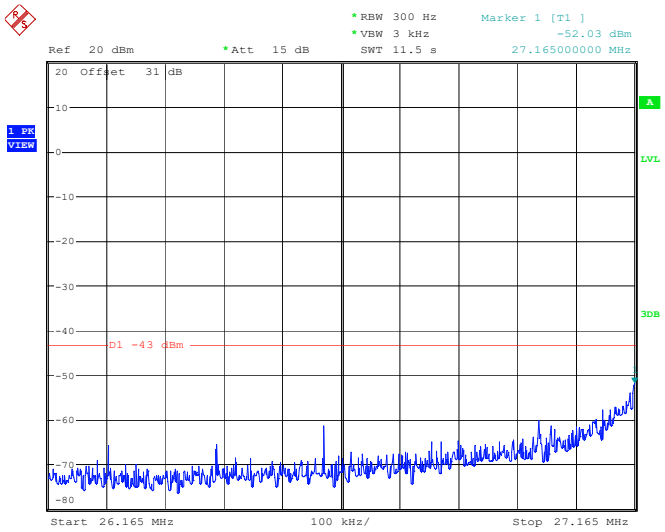


Project No.:2507T27036E-RF Tester:Lucas Lin
Date: 23.OCT.2025 18:00:37

Note:
1. Limit for frequencies other than harmonic (exclude fc ±250% authorized bandwidth): 53 + 10 log (P) dB below the rated power=-23dBm
2. The limit is -23dBm/30kHz for 9kHz to 150kHz, a 1kHz RBW was used for the test, so the limit was reduce by a factor of 10*log(30kHz/1kHz)=14.77dB. Therefore, the limit -37.77dBm was used.
3. The limit is -23dBm/30kHz for 150kHz to 20MHz, a 10kHz RBW was used for the test, so the limit was reduce by a factor of 10*log(30kHz/10kHz)=4.77dB. Therefore, the limit -27.77dBm was used.
4. The limit is -23dBm/30kHz for 20MHz to 1000MHz, a 100kHz RBW was used for the test, so the limit was reduce by a factor of 10*log(30kHz/100kHz)=-5.23dB. And limit for harmonic: 60dB below the rated power=36dBm-60dB=-24dBm. Therefore, the tighter limit -24dBm was used.

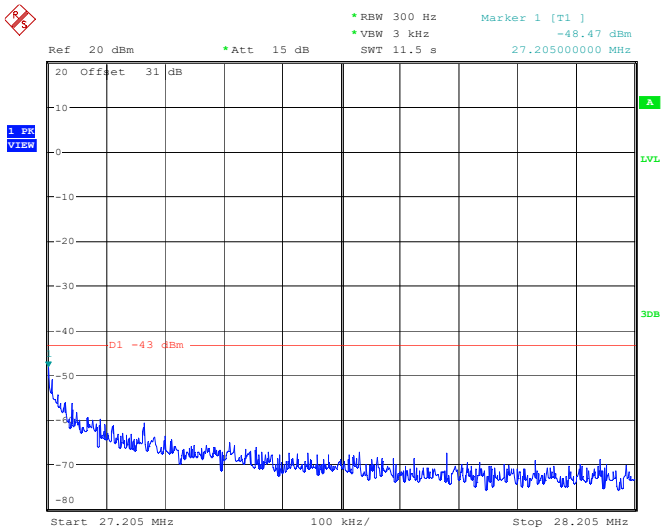
Emissions from the channel center frequency by more than 250% of the authorized bandwidth

26.165MHz-27.165MHz



Project No.:2507T27036E-RF Tester:Lucas Lin
Date: 23.OCT.2025 18:07:30

27.205MHz-28.205MHz



Project No.:2507T27036E-RF Tester:Lucas Lin
Date: 23.OCT.2025 18:08:38

Note: the limit is -23dBm/30kHz for the range, a 300Hz RBW was used for the test, so the limit was reduce by a factor of 10*log(30kHz/300Hz)=20dB.

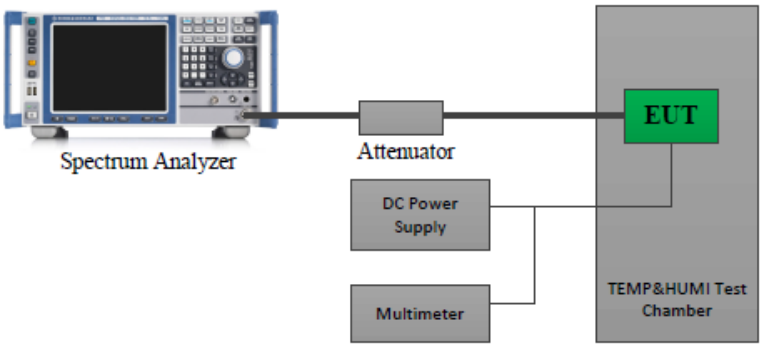
FCC §2.1055, §95.965 – FREQUENCY STABILITY

Applicable Standard

According to FCC §95.965

Each CBRS transmitter type must be designed such that the transmit carrier frequencies (or in the case of SSB transmissions, the reference frequency) remain within 50 parts-per-million of the channel center frequencies specified in § 95.963 under all normal operating conditions.

EUT Setup Block Diagram



Test Procedure

C63.26-2015, Clause 5.6

Frequency stability is a measure of the frequency drift due to temperature and supply voltage variations, with reference to the frequency measured at +20°C and rated supply voltage. The operating carrier frequency shall be set up in accordance with the manufacturer's published operation and instruction manual prior to the commencement of these tests. No adjustment of any frequency determining circuit element shall be made subsequent to this initial set-up. Frequency stability is tested:

a) At 10°C intervals of temperatures between −30°C and +50°C at the manufacturer's rated supply voltage, and

b) At +20°C temperature and ±15% supply voltage variations. If a product is specified to operate over a range of input voltage then the −15% variation is applied to the lowermost voltage and the +15% is applied to the uppermost voltage. During the test all necessary settings, adjustments and control of the EUT have to be performed without disturbing the test environment, i.e., without opening the environmental chamber. The frequency stabilities can be maintained to a lesser temperature range provided that the transmitter is automatically inhibited from operating outside the lesser temperature range. For handheld equipment that is only capable of operating from internal batteries and the supply voltage cannot be varied, the frequency stability tests shall be performed at the nominal battery voltage and the battery end point voltage specified by the manufacturer. An external supply voltage can be used and set at the internal battery nominal voltage, and again at the battery operating end point voltage which shall be specified by the equipment manufacturer.

If an unmodulated carrier is not available, the mean frequency of a modulated carrier can be obtained by using a frequency counter with gating time set to an appropriately large multiple of bit periods (gating time depending on the required accuracy). Full details on the choice of values shall be included in the test report.

Test Data

Test Mode:	Transmitting	Test Engineer:	Lucas Lin
Test Date:	2025-10-22	Test Result:	Pass

Enviroment Conditions:					
Temperature: (℃)	23.5	Relative Humidity: (%)	46	ATM Pressure: (kPa)	100.1

Please refer to test table:

Test Mode	Test Frequency (MHz)	Temperature (℃)	Voltage (V_{DC})	Measured Frequency (MHz)	Frequency Error (ppm)	limit (ppm)
FM	27.185	-30	13.8	27.1850551	2.03	≤50
		-20	13.8	27.1850498	1.83	≤50
		-10	13.8	27.1850472	1.74	≤50
		0	13.8	27.1850401	1.48	≤50
		10	13.8	27.1850363	1.34	≤50
		20	13.8	27.1850315	1.16	≤50
		30	13.8	27.1850332	1.22	≤50
		40	13.8	27.1850476	1.75	≤50
		50	13.8	27.1850502	1.85	≤50
		20	12.0	27.1850426	1.57	≤50
		20	24.0	27.1850349	1.28	≤50

Test Mode	Test Frequency (MHz)	Temperature (℃)	Voltage (V_{DC})	Measured Frequency (MHz)	Frequency Error (ppm)	limit (ppm)
AM	27.185	-30	13.8	27.1850487	1.79	≤50
		-20	13.8	27.1850442	1.63	≤50
		-10	13.8	27.1850403	1.48	≤50
		0	13.8	27.1850353	1.30	≤50
		10	13.8	27.1850324	1.19	≤50
		20	13.8	27.1850309	1.14	≤50
		30	13.8	27.1850389	1.43	≤50
		40	13.8	27.1850425	1.56	≤50
		50	13.8	27.1850535	1.97	≤50
		20	12.0	27.1850433	1.59	≤50
		20	24.0	27.1850412	1.52	≤50

Note: the voltage range was declared by manufacturer.

FCC §1.1310, §2.1091 – RF EXPOSURE EVALUATION

Applicable Standard

According to FCC §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)	Averaging Time (minutes)
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f^2)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

f = frequency in MHz; * = Plane-wave equivalent power density;
According to §1.1310 & §2.1091 RF exposure is calculated.

Calculated Formulary:

Predication of MPE limit at a given distance
$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm^2);
P = power input to the antenna (in appropriate units, e.g., mW);
G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

Calculated Data:

Mode	Frequency (MHz)	★Antenna Gain		★Tune-up Output Power		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limt (mW/cm^2)
		(dBi)	(numeric)	(dBm)	(mW)			
CB Radio	26.965-27.405	0	1	36	3981.07	36.5	0.2378	0.24

Note: The Antenna Gain and Tune-up output power was declared by the Manufacturer.

Result: The device meets MPE at distance 36.5cm.

EUT PHOTOGRAPHS

Please refer to the attachment 2507T27036E-RF-EXP EUT EXTERNAL PHOTOGRAPHS and 2507T27036E-RF-INP EUT INTERNAL PHOTOGRAPHS.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2507T27036E-RF-TSP TEST SETUP PHOTOGRAPHS.

Declarations

1. Bay Area Compliance Laboratories Corp. (Xiamen) is not responsible for authenticity of any information provided by the applicant. Information from the applicant that may affect test results are marked with an asterisk "★".

2. Unless otherwise stated, the results shown in this test report refer only to the sample(s) tested.

3. Unless required by the rule provided by the applicant or product regulations, then decision rule in this report did not consider the uncertainty.

4. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor k=2 with the 95% confidence interval.

5. This report cannot be reproduced except in full, without prior written approval of Bay Area Compliance Laboratories Corp. (Xiamen).

6. This report is valid only with a valid digital signature. The digital signature may be available only under the adobe software above version 7.0.

******* END OF REPORT*******