

TEST REPORT

Application No.: KSCR2604000783AT
FCC ID: 2AKW5-RONDS04
Applicant: Anhui Ronds Science & Technology Incorporated Company
Address of Applicant: #59, branch road of biomedical park, high-tech district, Hefei, Anhui, China
Manufacturer: Anhui Ronds Science & Technology Incorporated Company
Address of Manufacturer: #59, branch road of biomedical park, high-tech district, Hefei, Anhui, China
Factory: Anhui Ronds Science & Technology Incorporated Company
Address of Factory: #59, branch road of biomedical park, high-tech district, Hefei, Anhui, China
Equipment Under Test (EUT):
EUT Name: Wireless vibration temperature sensor
Model No.: RW161-AS, RW160-AS ♣
♣ Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.
Standard(s) : 47 CFR Part 15, Subpart C 15.249
Date of Receipt: 2026-04-10
Date of Test: 2026-05-11 to 2026-07-03
Date of Issue: 2026-07-07

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.

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Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Revision Record			
Version	Description	Date	Remark
00	Original	2026-07-07	/

Authorized for issue by:			
Prepared By		<i>Tommie Tang</i>	
		<u>Tommie_Tang/Project Engineer</u>	
Approved By		<i>Terry Hou</i>	
		<u>Terry Hou /Reviewer</u>	

2 Test Summary

Radio Spectrum Technical Requirement				
Item	Standard	Method	Requirement	Result
Antenna Requirement	47 CFR Part 15, Subpart C 15.249	N/A	47 CFR Part 15, Subpart C 15.203	Pass

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Radiated Emissions Below 1GHz	47 CFR Part 15, Subpart C 15.249	ANSI C63.10 (2020) Section 6.4&6.5	47 CFR Part 15, Subpart C 15.209 & 15.249 (a),(d)	Pass
Radiated Emissions Above 1GHz		ANSI C63.10 (2020) Section 6.6	47 CFR Part 15, Subpart C 15.209 & 15.249 (a),(d)	Pass
Restricted Band Around Fundamental Frequency		ANSI C63.10 (2020) Section 6.4&6.5&6.6	47 CFR Part 15, Subpart C 15.205 & 15.249(d) & 15.209	Pass
Field Strength of the Fundamental Signal(15.249(a))		ANSI C63.10 (2020) Section 6.5&6.6	47 CFR Part 15, Subpart C 15.249(a)	Pass
20dB Bandwidth		ANSI C63.10 (2020) Section 6.9	47 CFR Part 15, Subpart C 15.215	Pass

Declaration of EUT Family Grouping:

There are series models mentioned in this report and they are the Identical in electrical and electronic characters. Only the model RW161-AS was tested since their differences were the model number and software which do not affect RF parameters.

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4 General Information

4.1 Details of E.U.T.

Power supply:	DC 3.6V by battery
Operation Frequency:	915MHz, 916.8MHz, 918.6MHz, 920.4MHz, 922.2MHz, 923.0MHz, 924.8MHz
Number of Channels:	7
Modulation Type:	FSK
Antenna Type:	Chip Antenna

4.2 Power level setting using in test

Frequency (MHz)	Power setting
915	0
920.4	0
924.8	0

4.3 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Notebook	LENOVO	K27	EB24537645

4.4 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	8.4×10^{-8}
2	Timeout	2s
3	Duty Cycle	0.37%
4	Occupied Bandwidth	3%
5	RF Conducted Power	0.6dB
6	RF Power Density	2.9dB
7	Conducted Spurious Emissions	0.75dB
8	RF Radiated Power	5.2dB (Below 1GHz) 5.9dB (Above 1GHz)
9	Radiated Spurious Emission Test	4.2dB (Below 30MHz) 4.5dB (30MHz-1GHz) 5.1dB (1GHz-18GHz) 5.4dB (Above 18GHz)
10	Temperature Test	1°C
11	Humidity Test	3%
12	Supply Voltages	1.5%
13	Time	3%

Note: The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

4.5 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

Note:

1. SGS is not responsible for wrong test results due to incorrect information (e.g., max. internal working frequency, antenna gain, cable loss, etc) is provided by the applicant. (If applicable).
2. SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (If applicable).
3. Sample source: sent by customer.

4.6 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **A2LA (Certificate No. 2541.01)**

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA).

- **FCC (Designation Number: CN1172)**

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory.

- **ISED (CAB Identifier: CN0072)**

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory.

Company Number: 2324E

- **VCCI (Member No:1938)**

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600, C-11707, T-11499, G-10216 respectively.

4.7 Deviation from Standards

None

4.8 Abnormalities from Standard Conditions

None

5 Equipment List

Item	Equipment	Manufacturer	Model	Inventory No	Cal Date	Cal. Due Date
Conducted Emission at Mains Terminals						
1	EMI Test Receive	R&S	ESCI	KS301196	07/09/2025	07/08/2026
2	LISN	R&S	ENV216	KS301197	01/08/2026	01/07/2027
3	LISN	Schwarzbeck	NNLK 8129	KS301091	01/08/2026	01/07/2027
4	Pulse Limiter	R&S	ESH3-Z2	KUS1902E001	12/18/2025	12/17/2026
5	CE test Cable	Thermax	/	CZ301102	12/18/2025	12/17/2026
6	Software	Faratronic	E3	/	N.C.R	N.C.R
RF Conducted Test						
1	Spectrum Analyzer	Keysight	N9020A	KUS1911E004-2	07/09/2025	07/08/2026
2	Spectrum Analyzer	Keysight	N9020A	KUS2001M001-2	07/09/2025	07/08/2026
3	Spectrum Analyzer	Keysight	N9030B	KSEM021-1	12/17/2025	12/16/2026
4	Signal Generator	R&S	SMBV100B	KSEM032	12/17/2025	12/16/2026
5	Signal Generator	R&S	SMW200A	KSEM020-1	07/09/2025	07/08/2026
6	Signal Generator	Agilent	N5182A	KUS2001M001-1	07/08/2025	07/07/2026
7	Signal Generator	Agilent	E8257C	KS301066	07/22/2025	07/21/2026
8	Radio Communication Test Station	Anritsu	MT8000A	KSEM001-1	07/09/2025	07/08/2026
9	Radio Communication Analyzer	Anritsu	MT8821C	KSEM002-1	12/17/2025	12/16/2026
10	Universal Radio Communication Tester	R&S	CMW500	KUS1911E004-1	07/08/2025	07/07/2026
11	Switcher	TST	FY562	KUS2001M001-4	12/17/2025	12/16/2026
12	Conducted Test Cable	Thermax	RF01-RF04	CZ301111-CZ301120	12/17/2025	12/16/2026
13	Temp. / Humidity Chamber	TERCHY	MHK-120AK	KS301190	07/15/2025	07/14/2026
14	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-5	12/30/2025	12/29/2026
15	Software	BST	TST-PASS	/	NCR	NCR
RF Radiated Test						
1	Spectrum Analyzer	R&S	FSV40	KUS1806E003	07/09/2025	07/08/2026
2	Universal Radio Communication Tester	R&S	CMW500	KSEM009-1	12/17/2025	12/16/2026
3	Signal Generator	Agilent	E8257C	KS301066	07/22/2025	07/21/2026
4	Loop Antenna (9KHz-30MHz)	COM-POWER	AL-130R	KUS1806E001	07/11/2025	07/10/2026
5	Bilog Antenna (30MHz-1GHz)	TESEQ	CBL 6112D	KUS1806E005	07/12/2025	07/11/2026
6	Horn-antenna(1-18GHz)	Schwarzbeck	BBHA9120D	KS301079	01/11/2026	01/10/2028
7	Horn Antenna(18-40GHz)	Schwarzbeck	BBHA9170	CZ301058	01/11/2026	01/10/2028
8	Amplifier(30MHz~1GHz)	TST	LNA009100G30	KSEM061	12/18/2025	12/17/2026
9	Amplifier(400MHz~8GHz)	TST	LNA004080G30	KSEM062	12/18/2025	12/17/2026
10	Amplifier(1GHz~18GHz)	TST	LNA010180G45	KSEM039	07/09/2025	07/08/2026
11	Amplifier(18~40GHz)	TST	LNA180400G40	KSEM038	07/09/2025	07/08/2026
12	RF Test Cable	REBES MICROWAVE	A81-SMSM-10M	CZ301097-CZ301100	11/14/2025	11/13/2026
13	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-4	12/30/2025	12/29/2026
14	Software	ESE	E3_V 6.111221a	/	NCR	NCR
15	Measurement Software	Tonscend	JS32-RE V5.0.0.1	/	NCR	NCR
16	Measurement Software	Tonscend	JS32-RSE V5.0.0.0	/	NCR	NCR

6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203

6.1.2 Conclusion

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:

The antenna is Internal antenna and no consideration of replacement.

Antenna location: Refer to Internal photos

7 Radio Spectrum Matter Test Results

7.1 Radiated Emissions Below 1GHz

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.249 (a),(d)

Test Method: ANSI C63.10 (2020) Section 6.4&6.5

Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
960-1000	500	3

Note

1. The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.

2. At frequencies below 1GHz, measurements may be performed at a distance different to specified in the regulations.

Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor+ Aux Factor (if applicable)

The aux factor needs to be added when measurements are performed at a distance other than the limit distance provided.

EX. Below 30MHz, Aux Factor = 40 dB/decade of distance, the aux factor is $40\log(3/300) = -80\text{dB}$ (for 3m test distance).

EX. Above 30MHz, Aux Factor = 20 dB/decade of distance, the aux factor is $20\log(10/3) = 10.46\text{dB}$ (for 10m test distance).

7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 23.9 °C

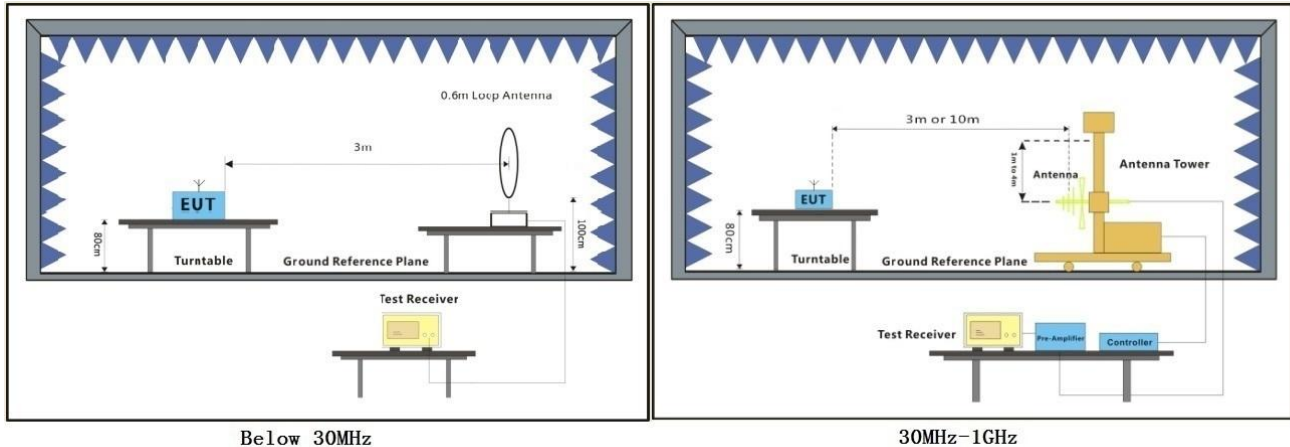
Humidity: 56.2 % RH

Atmospheric Pressure: 1010 mbar

7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	02	TX mode_Keep the EUT in transmitting with modulation mode.

7.1.3 Test Setup Diagram



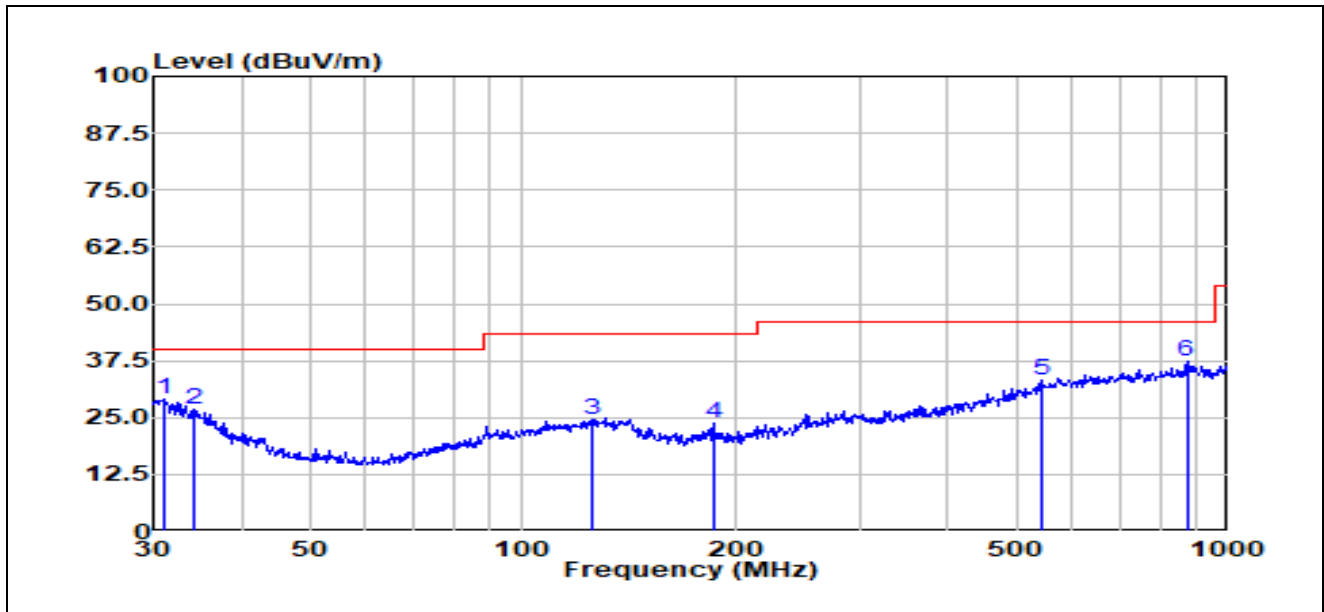
7.1.4 Measurement Procedure and Data

- For below 1GHz, the EUT was placed on the top of a rotating table 0.8m above the ground at a semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3m or 10m away from the interference-receiving antenna, which was mounted on the variable-height antenna tower.
- The antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1m to 4m (for the test frequency of below 30MHz, the antenna was tuned to heights 1m) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using quasi-peak method as specified and then reported in a data sheet.
- Test the EUT in the lowest channel, the middle channel, the Highest channel.
- The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- Repeat above procedures until all frequencies measured was complete.

Remark:

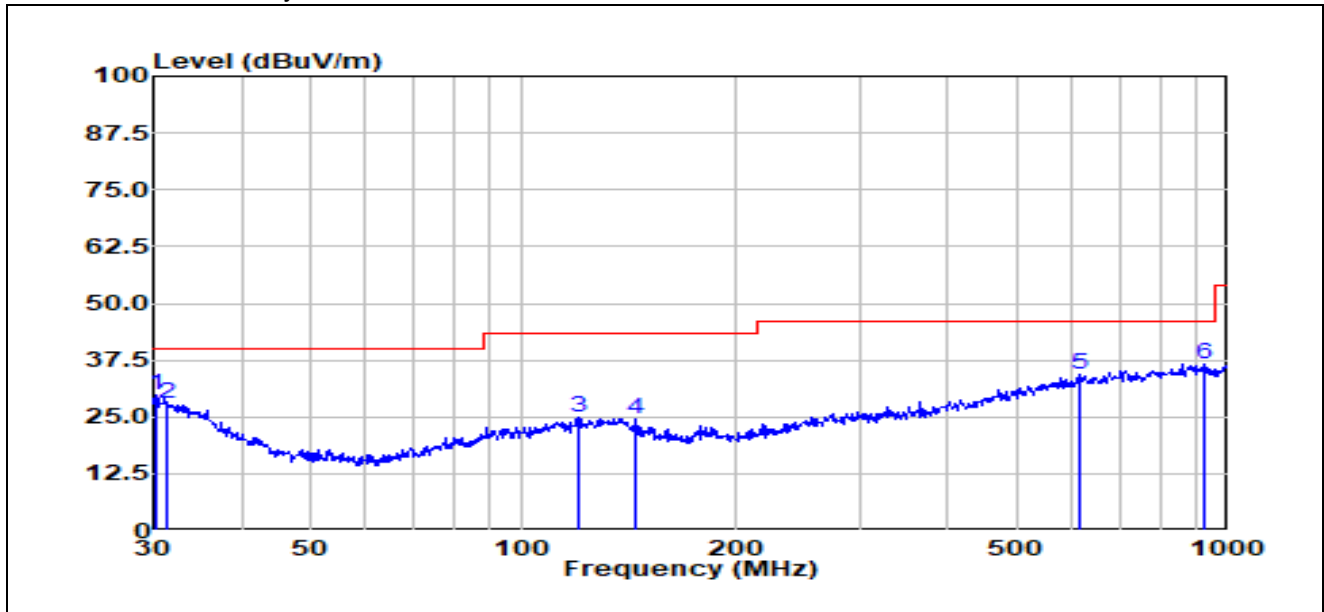
- Scan from 9kHz to 30MHz, the disturbance below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only below points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- The disturbance below 1GHz was very low and the harmonics were the highest point could be found when testing, so only the worst-case test curve is displayed.

Test Mode: 02; Polarity: Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	31.18	5.08	24.15	29.23	40.00	-10.77	100	248	QP
2	34.28	4.45	22.23	26.68	40.00	-13.32	100	348	QP
3	125.89	4.42	20.23	24.65	43.50	-18.85	100	209	QP
4	186.44	5.45	18.18	23.63	43.50	-19.87	100	360	QP
5	543.27	5.48	27.64	33.12	46.00	-12.88	100	358	QP
6	872.18	6.29	31.01	37.30	46.00	-8.70	100	356	QP

Test Mode: 02; Polarity: Vertical



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	30.32	4.93	24.87	29.80	40.00	-10.20	100	67	QP
2	31.29	3.70	24.04	27.74	40.00	-12.26	100	128	QP
3	119.86	4.39	20.34	24.73	43.50	-18.77	100	26	QP
4	144.84	5.87	18.80	24.67	43.50	-18.83	100	360	QP
5	616.37	5.48	28.69	34.17	46.00	-11.83	100	191	QP
6	925.76	5.27	31.23	36.50	46.00	-9.50	100	47	QP

7.2 Radiated Emissions Above 1GHz

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.249 (a),(d)

Test Method: ANSI C63.10 (2020) Section 6.6

Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
Above 1000	500	3

Note:

At Above 18GHz, measurements may be performed at a distance shorter than that specified in the regulations

Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor+ Aux Factor (if applicable)

The aux factor needs to be added when measurements are performed at a distance other than the limit distance provided.

EX. Above 18GHz, Aux Factor = 20 dB/decade of distance, the aux factor is $20\log(1/3) = -9.54\text{dB}$ (for 1m test distance).

7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 23.9 °C

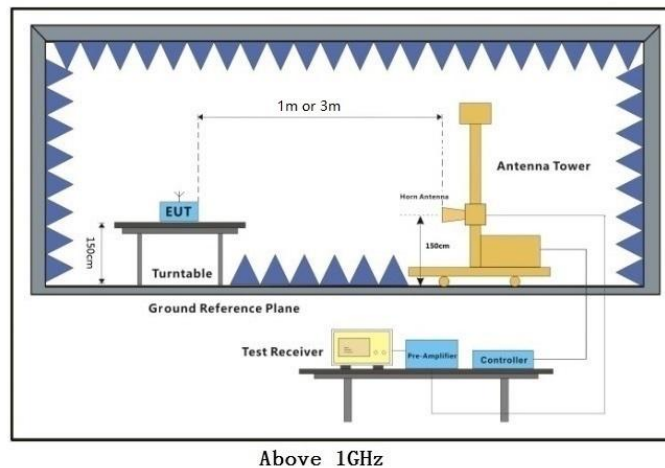
Humidity: 56.2 % RH

Atmospheric Pressure: 1010 mbar

7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	02	TX mode_Keep the EUT in transmitting with modulation mode.

7.2.3 Test Setup Diagram



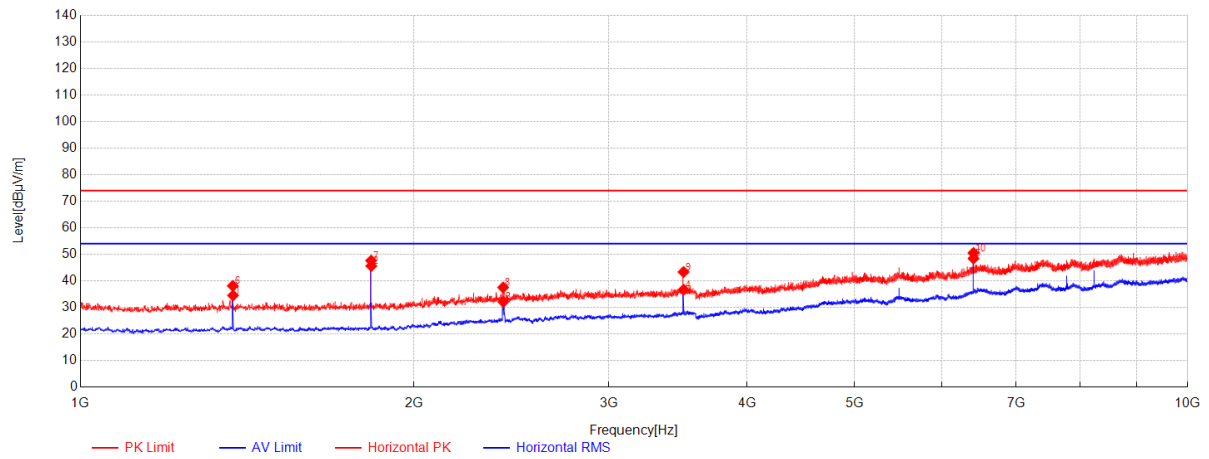
7.2.4 Measurement Procedure and Data

- a. For above 1GHz, the EUT was placed on the top of a rotating table 1.5m above the ground at a 3m fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. The EUT was set 3m away from the interference-receiving antenna from 1GHz to 10GHz.
- b. The interference-receiving antenna was mounted on the variable-height antenna tower, with its boresight facing the EUT throughout the test.
- c. The antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1m to 4m and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- g. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- h. Repeat above procedures until all frequencies measured was complete.

Remark:

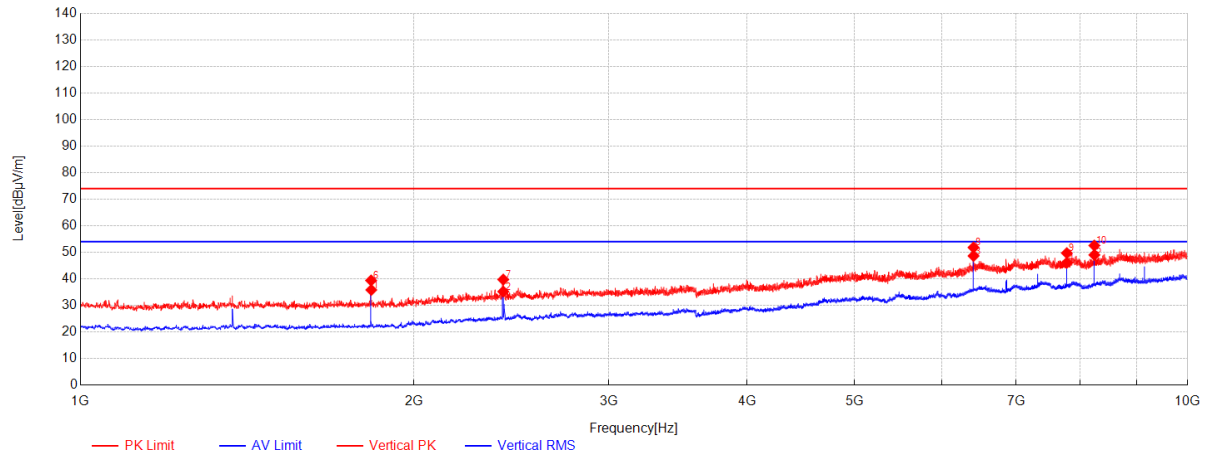
1. Scan from 1GHz to 10th harmonic of the highest frequency or 40 GHz, whichever is lower.
2. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.
3. For devices with multiple operating modes, measurements on the middle channel is used to determine the worst-case mode(s). Only the worst-case mode with the highest output power and the mode with the highest output power spectral density for each modulation family (e.g., OFDM and direct sequence spread spectrum) is recorded in the test report.

TX_915MHz_Horizontal



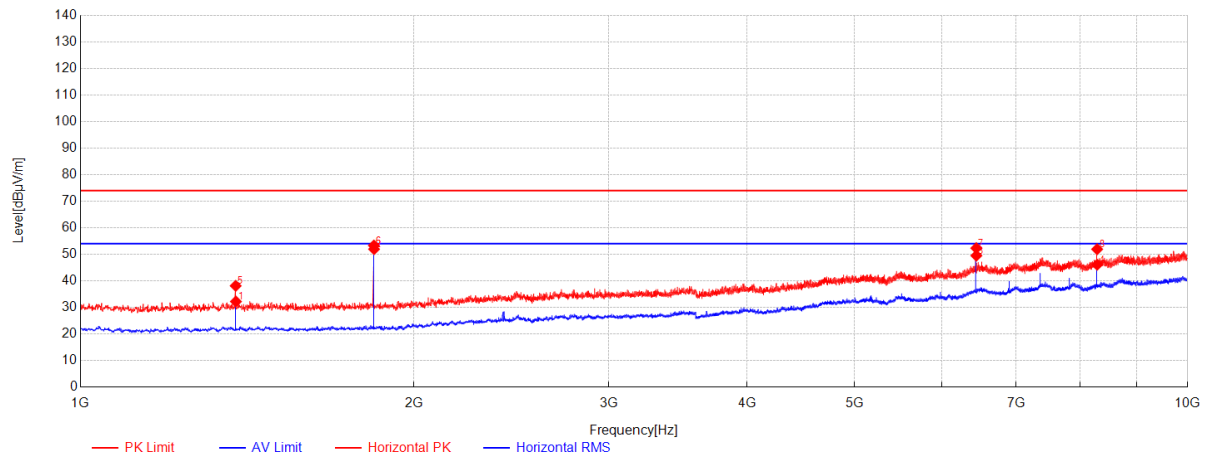
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1373.5	65.45	23.77	-54.71	34.51	54.00	19.49	Horizontal
2	1831	75.88	24.08	-54.35	45.61	54.00	8.39	Horizontal
3	2409.25	59.07	26.67	-53.63	32.11	54.00	21.89	Horizontal
4	3505.75	59.85	28.43	-51.61	36.67	54.00	17.33	Horizontal
5	6405.25	60.77	33.93	-46.28	48.42	54.00	5.58	Horizontal
6	1372.75	69.04	23.77	-54.71	38.10	74.00	35.90	Horizontal
7	1830.25	77.86	24.10	-54.34	47.62	74.00	26.38	Horizontal
8	2408.5	64.51	26.64	-53.63	37.52	74.00	36.48	Horizontal
9	3505	66.51	28.43	-51.60	43.34	74.00	30.66	Horizontal
10	6404.5	62.86	33.93	-46.29	50.50	74.00	23.50	Horizontal

TX_915MHz_ Vertical



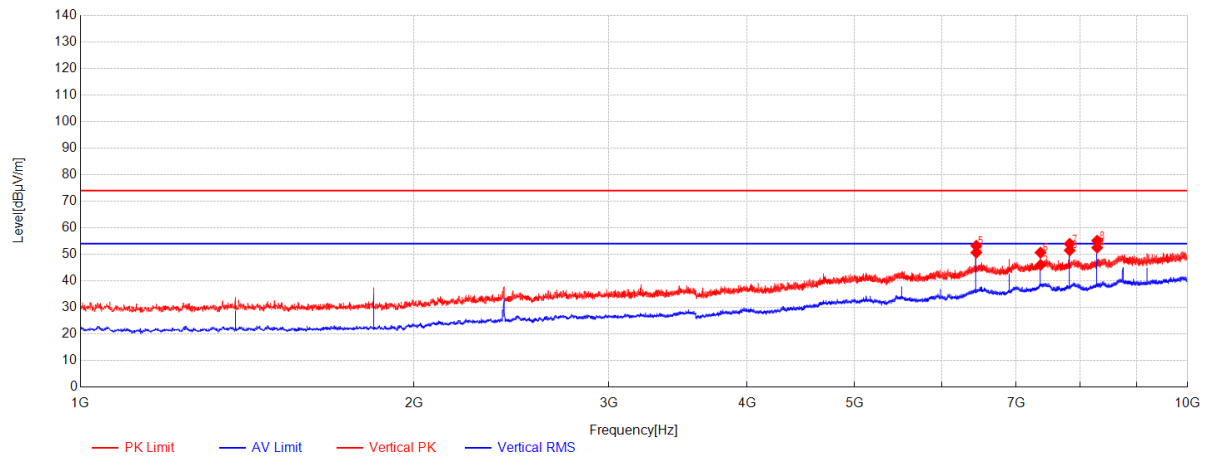
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1831	66.11	24.08	-54.35	35.84	54.00	18.16	Vertical
2	2409.25	62.17	26.67	-53.63	35.21	54.00	18.79	Vertical
3	6406	60.96	33.94	-46.28	48.62	54.00	5.38	Vertical
4	7778.5	56.64	36.30	-46.86	46.08	54.00	7.92	Vertical
5	8236	58.50	36.84	-46.34	49.00	54.00	5.00	Vertical
6	1830.25	69.64	24.10	-54.34	39.40	74.00	34.60	Vertical
7	2409.25	66.69	26.67	-53.63	39.73	74.00	34.27	Vertical
8	6405.25	64.15	33.93	-46.28	51.80	74.00	22.20	Vertical
9	7777.75	60.27	36.29	-46.86	49.70	74.00	24.30	Vertical
10	8235.25	62.05	36.84	-46.34	52.55	74.00	21.45	Vertical

TX_920.4MHz_Horizontal



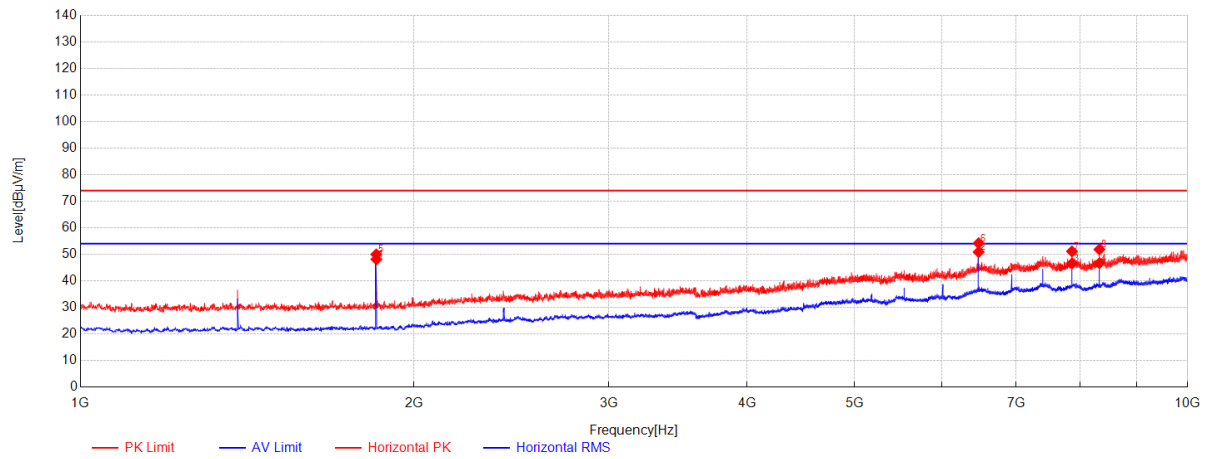
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1381.75	63.16	23.70	-54.65	32.21	54.00	21.79	Horizontal
2	1841.5	82.33	23.96	-54.37	51.92	54.00	2.08	Horizontal
3	6443.5	61.40	34.16	-46.08	49.48	54.00	4.52	Horizontal
4	8284.75	55.46	36.90	-46.30	46.06	54.00	7.94	Horizontal
5	1381	69.08	23.70	-54.66	38.12	74.00	35.88	Horizontal
6	1840.75	83.74	23.93	-54.37	53.30	74.00	20.70	Horizontal
7	6442.75	64.25	34.16	-46.09	52.32	74.00	21.68	Horizontal
8	8284	61.30	36.90	-46.30	51.90	74.00	22.10	Horizontal

TX_920.4MHz_ Vertical



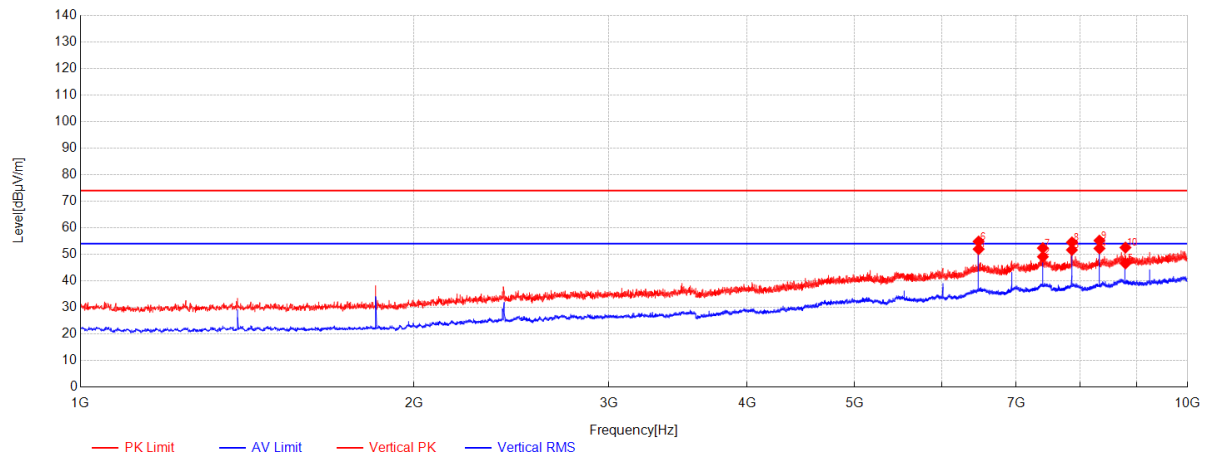
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	6443.5	62.57	34.16	-46.08	50.65	54.00	3.35	Vertical
2	7363.75	55.82	36.37	-46.21	45.98	54.00	8.02	Vertical
3	7824.25	61.32	36.65	-46.49	51.48	54.00	2.52	Vertical
4	8284.75	61.89	36.90	-46.30	52.49	54.00	1.51	Vertical
5	6442.75	65.15	34.16	-46.09	53.22	74.00	20.78	Vertical
6	7363.75	60.47	36.37	-46.21	50.63	74.00	23.37	Vertical
7	7823.5	63.78	36.65	-46.50	53.93	74.00	20.07	Vertical
8	8284	64.51	36.90	-46.30	55.11	74.00	18.89	Vertical

TX_924.8MHz_Horizontal



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	1850.5	78.18	24.30	-54.39	48.09	54.00	5.91	Horizontal
2	6474.25	62.57	34.20	-45.92	50.85	54.00	3.15	Horizontal
3	7861.75	55.89	36.75	-46.08	46.56	54.00	7.44	Horizontal
4	8323.75	56.08	36.76	-46.17	46.67	54.00	7.33	Horizontal
5	1849.75	80.05	24.29	-54.38	49.96	74.00	24.04	Horizontal
6	6473.5	65.88	34.20	-45.93	54.15	74.00	19.85	Horizontal
7	7861	60.44	36.74	-46.09	51.09	74.00	22.91	Horizontal
8	8323	61.24	36.76	-46.17	51.83	74.00	22.17	Horizontal

TX_924.8MHz_ Vertical



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	6474.25	63.66	34.20	-45.92	51.94	54.00	2.06	Vertical
2	7399.75	58.45	36.30	-45.68	49.07	54.00	4.93	Vertical
3	7861	60.98	36.74	-46.09	51.63	54.00	2.37	Vertical
4	8323.75	61.60	36.76	-46.17	52.19	54.00	1.81	Vertical
5	8786.5	53.89	37.53	-44.87	46.55	54.00	7.45	Vertical
6	6473.5	66.55	34.20	-45.93	54.82	74.00	19.18	Vertical
7	7399	61.73	36.30	-45.69	52.34	74.00	21.66	Vertical
8	7860.25	63.84	36.74	-46.10	54.48	74.00	19.52	Vertical
9	8323	64.56	36.76	-46.17	55.15	74.00	18.85	Vertical
10	8785.75	59.86	37.53	-44.86	52.53	74.00	21.47	Vertical

7.3 Restricted Band Around Fundamental Frequency

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.249(d) & 15.209

Test Method: ANSI C63.10 (2013) Section 6.4&6.5&6.6

Limit:

Frequency	Limit (dBuV/m @3m)	Remark
30MHz-88MHz	40.0	Quasi-peak Value
88MHz-216MHz	43.5	Quasi-peak Value
216MHz-960MHz	46.0	Quasi-peak Value
960MHz-1GHz	54.0	Quasi-peak Value
Above 1GHz	54.0	Average Value
Above 1GHz	74.0	Peak Value

Emission radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

7.3.1 E.U.T. Operation

Operating Environment:

Temperature: 23.9 °C

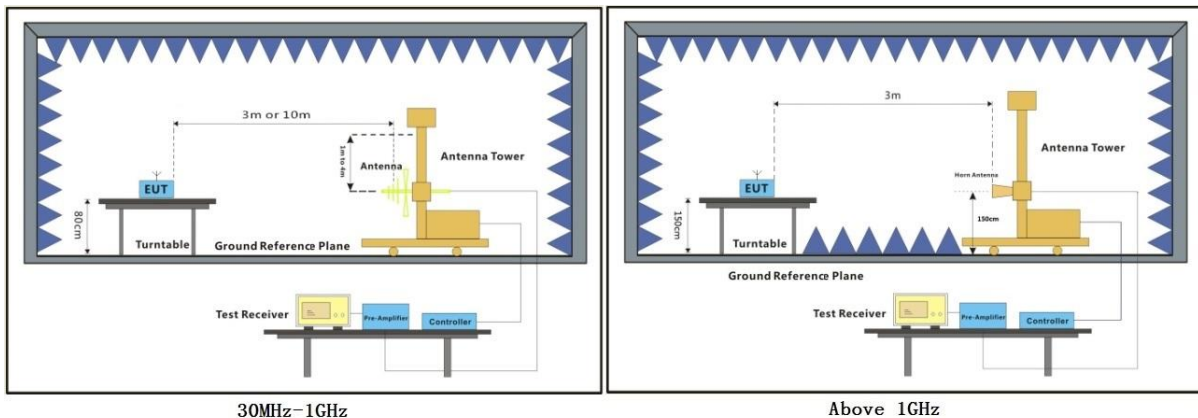
Humidity: 56.2 % RH

Atmospheric Pressure: 1010 mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	02	TX mode_Keep the EUT in transmitting with modulation mode.

7.3.3 Test Setup Diagram

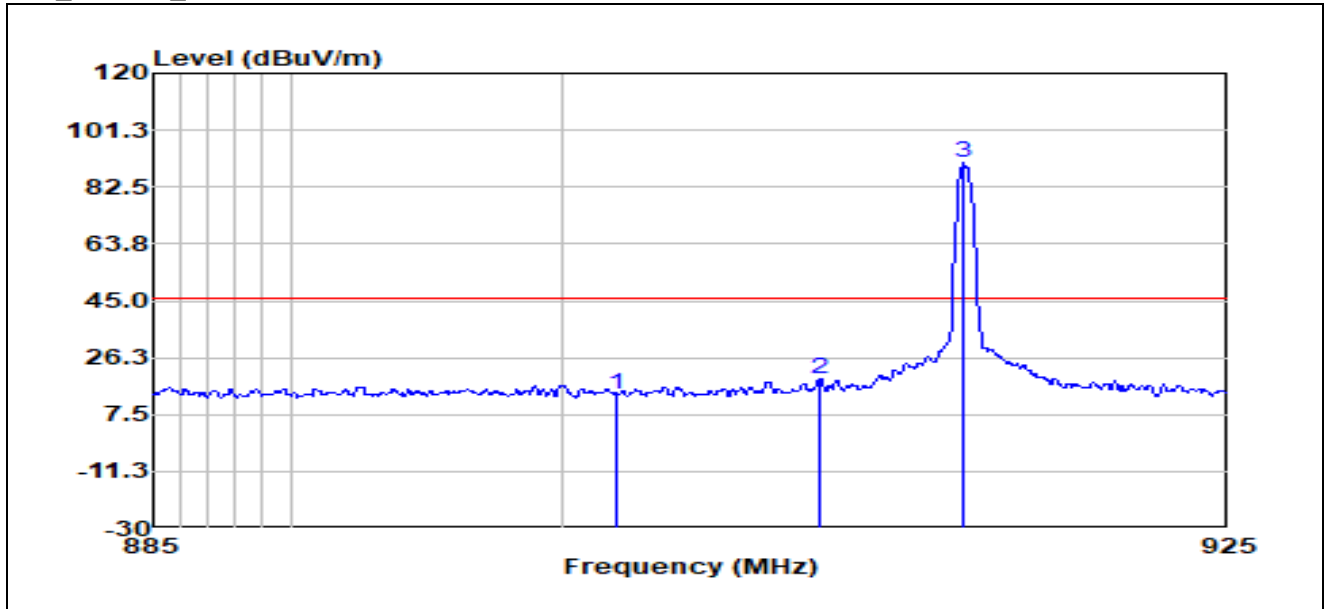


7.3.4 Measurement Procedure and Data

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

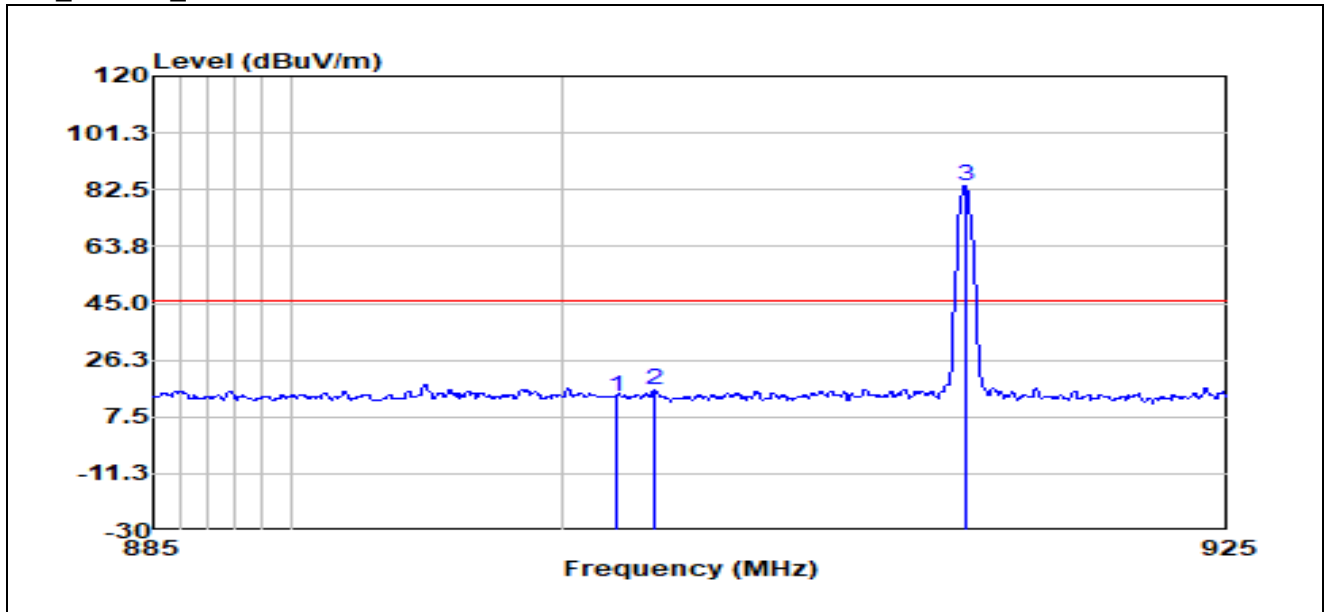
Remark 1: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

TX_915MHz_Horizontal



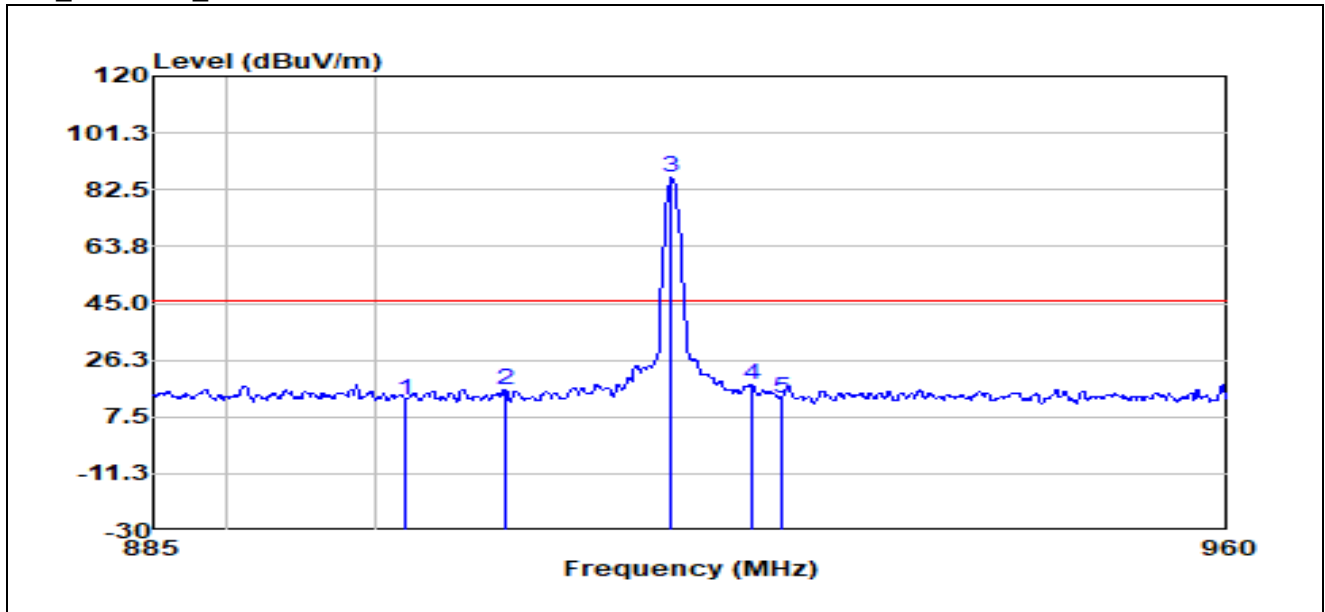
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	902.00	-17.46	31.62	14.16	46.00	-31.84	QP
2	909.60	-12.18	31.51	19.33	46.00	-26.67	QP
3	915.00	59.06	31.38	90.44	46.00	44.44	QP

TX_915MHz_Verical



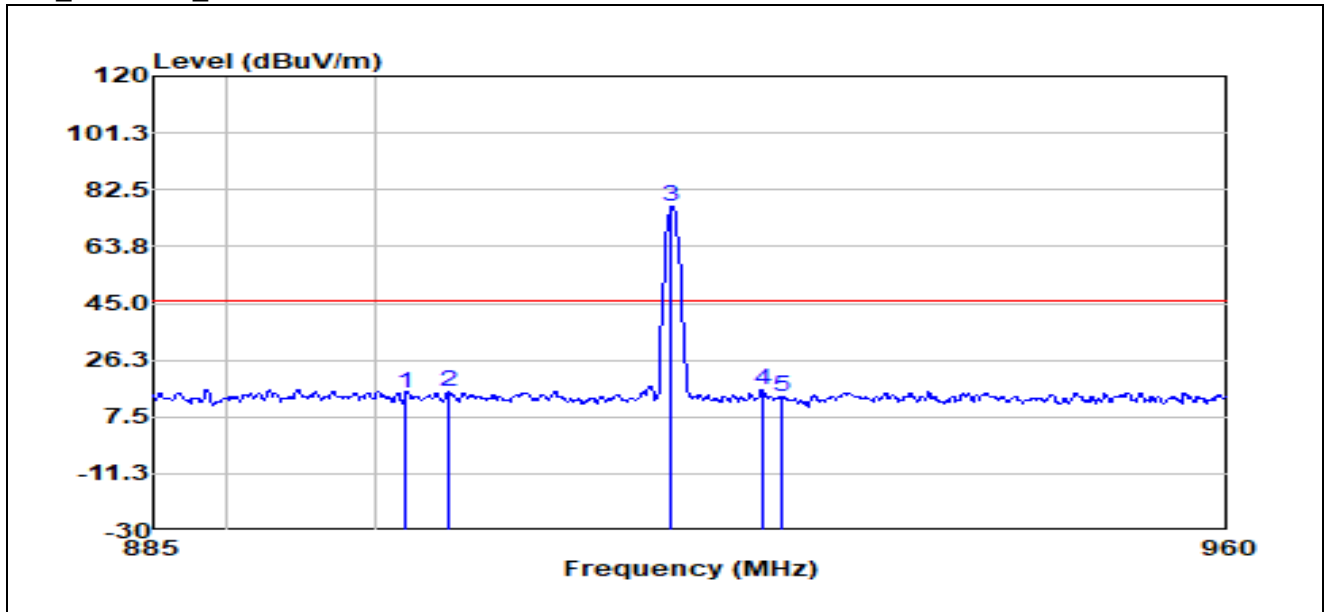
No.	Frequency (MHz)	Reading (dBUV)	Correct Factor(dB/m)	Result (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Remark
1	902.00	-17.35	31.62	14.27	46.00	-31.73	QP
2	903.40	-15.04	31.34	16.30	46.00	-29.70	QP
3	915.04	52.20	31.38	83.58	46.00	37.58	QP

TX_920.4MHz_Horizontal



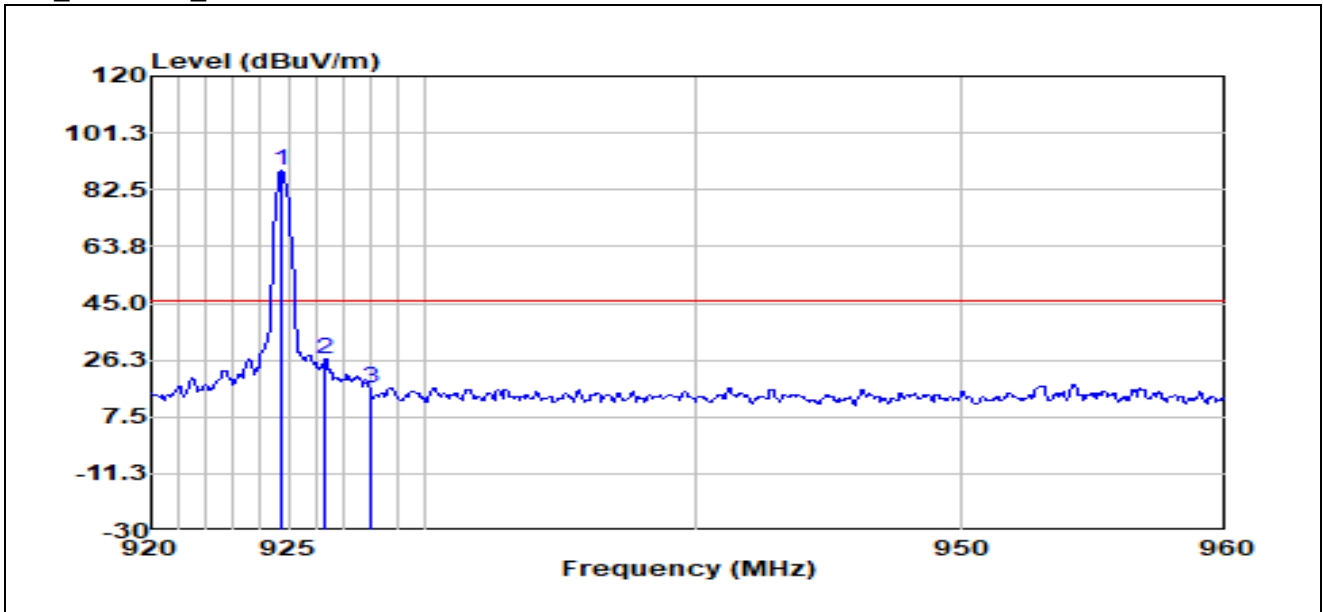
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	902.00	-18.51	31.62	13.11	46.00	-32.89	QP
2	908.85	-14.92	31.47	16.55	46.00	-29.45	QP
3	920.40	55.16	31.20	86.36	46.00	40.36	QP
4	925.95	-13.22	31.24	18.02	46.00	-27.98	QP
5	928.00	-17.73	31.04	13.31	46.00	-32.69	QP

TX_920.4MHz_Vertical



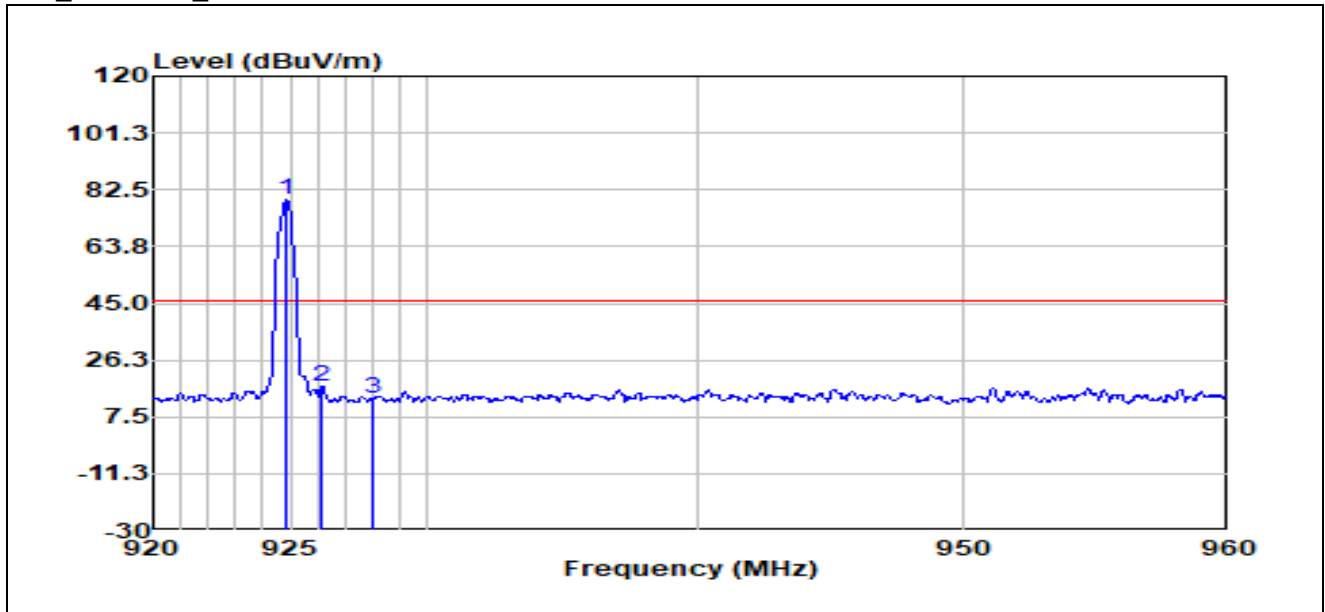
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	902.03	-16.43	31.62	15.19	46.00	-30.81	QP
2	905.03	-15.46	31.22	15.76	46.00	-30.24	QP
3	920.40	45.97	31.20	77.17	46.00	31.17	QP
4	926.70	-14.92	31.17	16.25	46.00	-29.75	QP
5	928.00	-17.13	31.04	13.91	46.00	-32.09	QP

TX_924.8MHz_Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	924.72	57.56	31.18	88.74	46.00	42.74	QP
2	926.36	-4.78	31.21	26.43	46.00	-19.57	QP
3	928.00	-14.18	31.04	16.86	46.00	-29.14	QP

TX_924.8MHz_Vertical



No.	Frequency (MHz)	Reading (dBUV)	Correct Factor(dB/m)	Result (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Remark
1	924.84	48.17	31.18	79.35	46.00	33.35	QP
2	926.16	-13.59	31.22	17.63	46.00	-28.37	QP
3	928.00	-17.46	31.04	13.58	46.00	-32.42	QP

7.4 Field Strength of the Fundamental Signal(15.249(a))

Test Requirement 47 CFR Part 15, Subpart C 15.249(a)

Test Method: ANSI C63.10 (2020) Section 6.5&6.6

Fundamental frequency(MHz)	Field strength of fundamental(millivolts/meter)	Field strength of harmonics(microvolts/meter)
902-928	50	500
2400-2483.5	50	500
5725-5875	50	500
24000-24250	250	2500

Remark: The frequencies above 1000MHz are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

For fundamental frequency in "902-928MHz", the field strength of fundamental is based on Quasi-Peak.

7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 23.9 °C

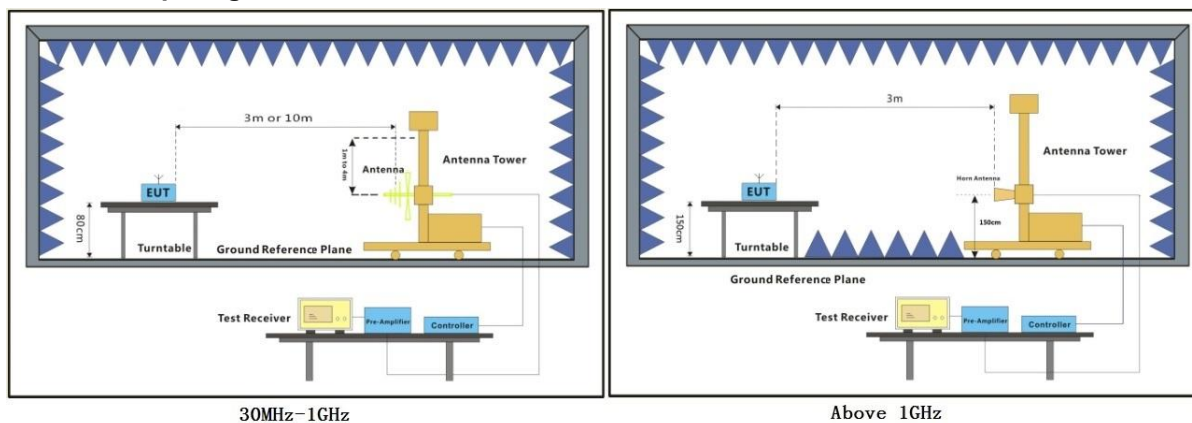
Humidity: 56.2 % RH

Atmospheric Pressure: 1010 mbar

7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	02	TX mode_Keep the EUT in transmitting with modulation mode.

7.4.3 Test Setup Diagram



7.4.4 Measurement Procedure and Data

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Detector	Polarization
915	90.44	94.00	-3.56	QP	Horizontal
	83.58	94.00	-10.42	QP	Vertical
920.4	86.36	94.00	-7.64	QP	Horizontal
	77.17	94.00	-16.83	QP	Vertical
924.8	88.74	94.00	-5.26	QP	Horizontal
	79.35	94.00	-14.65	QP	Vertical

7.5 20dB Bandwidth

Test Requirement 47 CFR Part 15, Subpart C 15.215

Test Method: ANSI C63.10 (2020) Section 6.9

Measurement Distance: 3m

7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 23.9 °C

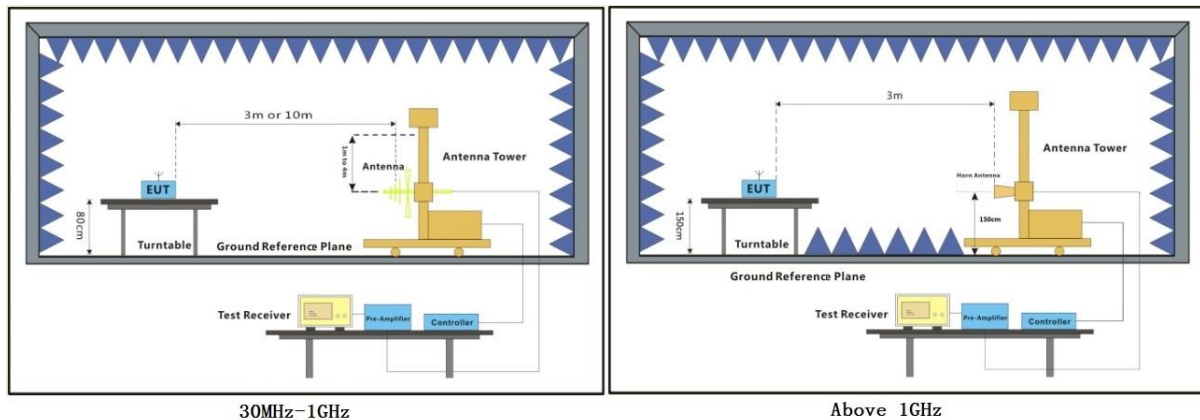
Humidity: 56.2 % RH

Atmospheric Pressure: 1010 mbar

7.5.2 Test Mode Description

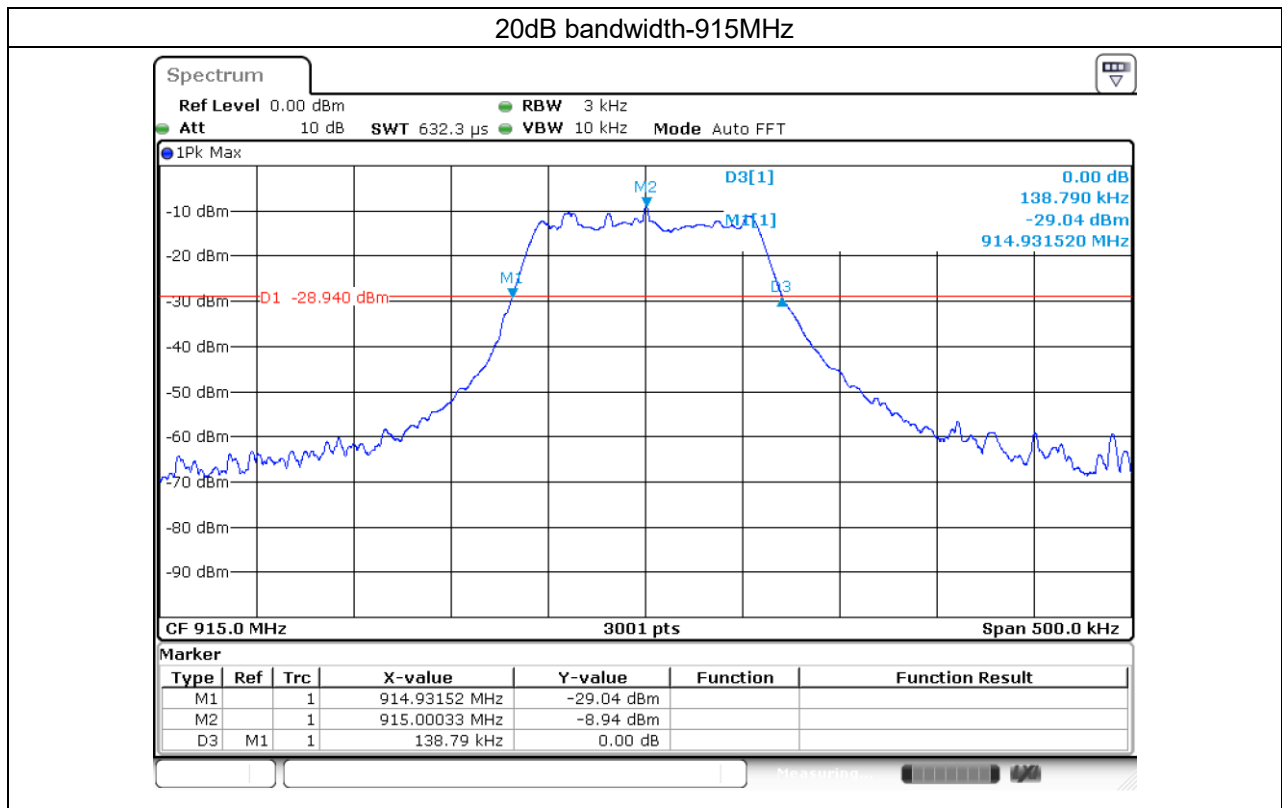
Pre-scan / Final test	Mode Code	Description
Final test	02	TX mode_Keep the EUT in transmitting with modulation mode.

7.5.3 Test Setup Diagram

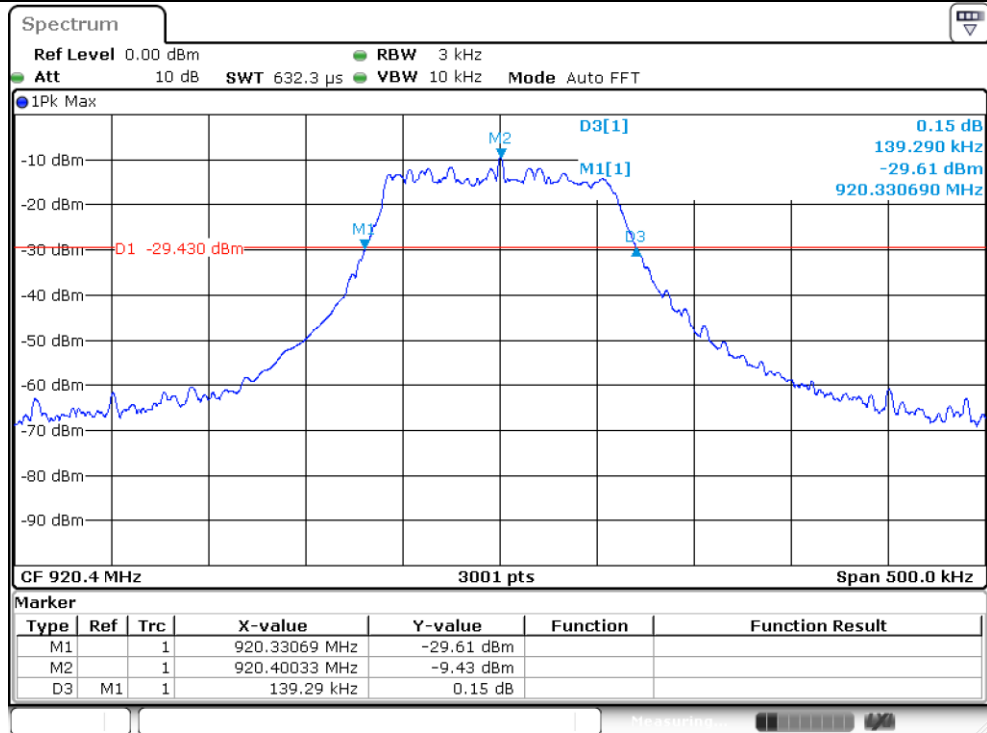


7.5.4 Measurement Procedure and Data

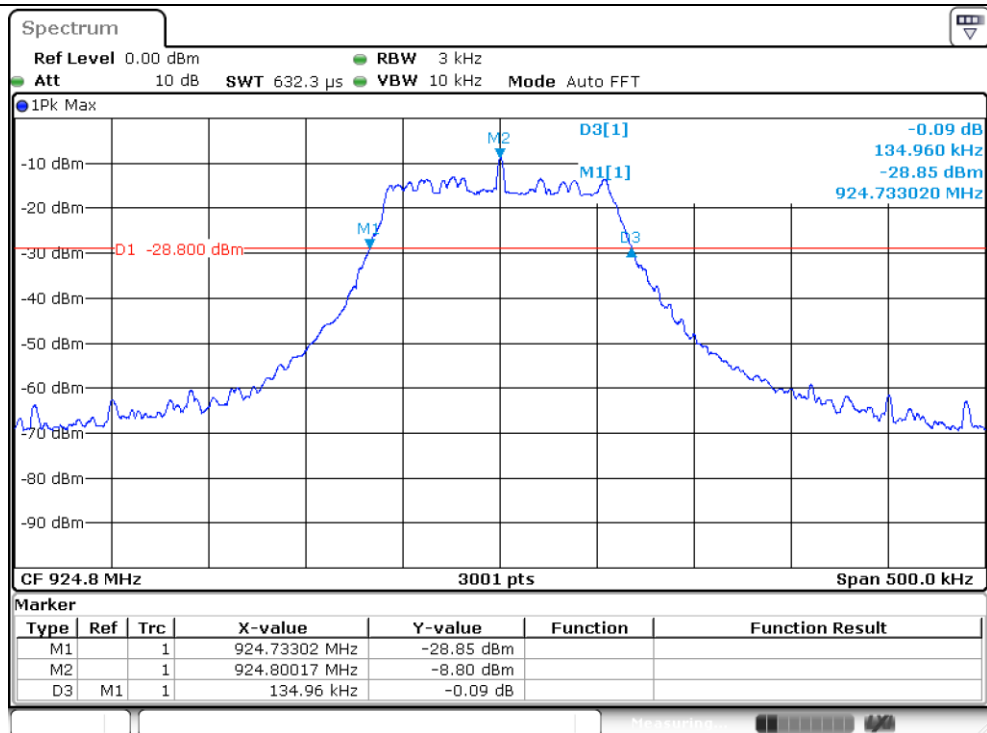
Frequency (MHz)	20dB bandwidth (KHz)	Results
915	138.79	Pass
920.4	139.29	Pass
924.8	134.96	Pass



20dB bandwidth-920.4MHz



20dB bandwidth-924.8MHz



8 Test Setup Photo

Refer to Appendix - Test Setup Photo for KSCR2604000783AT

9 EUT Constructional Details (EUT Photos)

Refer to Appendix_Photographs of EUT Constructional Details for KSCR2604000783AT

- End of the Report -