

FCC RADIO TEST REPORT

FCC ID: 2BRKV-1018

Product : Stem2

Trade Mark: N/A

Model Name : 1018

Family Model : N/A

Report No. : S24101501301005

Issue Date : Oct. 31, 2025

Prepared for

AshDust UK Limited

Unit 12.1 - 12.2, 11-29 Fashion Street, LONDON, E1 6PX,
United Kingdom

Prepared by

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TEST RESULT CERTIFICATION

Applicant's name : AshDust UK Limited
Address : Unit 12.1 - 12.2, 11-29 Fashion Street, LONDON, E1 6PX,
United Kingdom
Manufacturer's Name : AshDust UK Limited
Address : Unit 12.1 - 12.2, 11-29 Fashion Street, LONDON, E1 6PX,
United Kingdom

Product description

Product name : Stem2
Trade Mark : N/A
Model and/or type reference : 1018
Family Model: N/A
Test Sample number : S241015013001

Standards : FCC Part15.225

Test procedure ANSI C63.10-2020

This device described above has been tested by NTEK, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Date of Test :

Date (s) of performance of tests : Oct. 24, 2024 ~ Oct. 31, 2025

Date of Issue : Oct. 31, 2025

Test Result : **Pass**

Prepared By : Gavan Zhang
Gavan Zhang
(Project Engineer)

Reviewed By : Aaron Cheng
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(Manager)

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Revision History

[illegible]

1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15, Subpart C (15.225)			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	Pass	
15.205(a) 15.209 15.225(abcd)	Radiated Spurious Emission	Pass	
15.215(c)	20dB Bandwidth	Pass	
-	99% Bandwidth	Pass	
15.225(e)	Frequency Tolerance	Pass	
15.203	Antenna Requirement	Pass	

NOTE:

- (1) "N/A" denotes test is not applicable in this Test Report.
- (2) The product is powered by batteries

1.1 TEST FACILITY

All measurement facilities used to collect the measurement data are located at No. 24 Xinfu East Road, Xiangshan Community, Xinqiao Street, Baoan District, Shenzhen, Guangdong, People's Republic of China.

Site Description

CNAS-Lab. : The Certificate Registration Number is L5516.

IC-Registration The Certificate Registration Number is 9270A.
CAB identifier:CN0074

FCC- Accredited Test Firm Registration Number: 463705.

Designation Number: CN1184

A2LA-Lab. The Certificate Registration Number is 4298.01

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system

(refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009).

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	Conducted Emission Test	$\pm 3.7\text{dB}$
2	RF power, conducted	$\pm 0.9\text{dB}$
3	Spurious emissions, conducted	$\pm 2.2\text{dB}$
4	All emissions, radiated(<1G)	$\pm 4.9\text{dB}$
5	All emissions, radiated(>1G)	$\pm 5.1\text{dB}$
6	Temperature	$\pm 0.5^\circ\text{C}$
7	Humidity	$\pm 2\%$
8	All emissions, radiated(9KHz~30MHz)	$\pm 4.1\text{dB}$
9	Occupied bandwidth	$\pm 1.2\%$
10	Radio Frequency	$\pm 1 \times 10^{-6}$

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	Stem2	
Trade Mark	N/A	
Model Name	1018	
Family Model	N/A	
Model Difference	N/A	
Product Description	The EUT is a Stem2	
	Operation Frequency:	13.56MHz
	Modulation Type:	ASK
	Number Of Channel	1CH.
	Antenna Designation:	Induction coil
Adapter	N/A	
Battery	DC 7.3V, 6600mAh	
Power supply	DC 7.3V from battery or DC 5V from Type-C port	
HW Version	N/A	
SW Version	N/A	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.2 DESCRIPTION OF TEST MODES

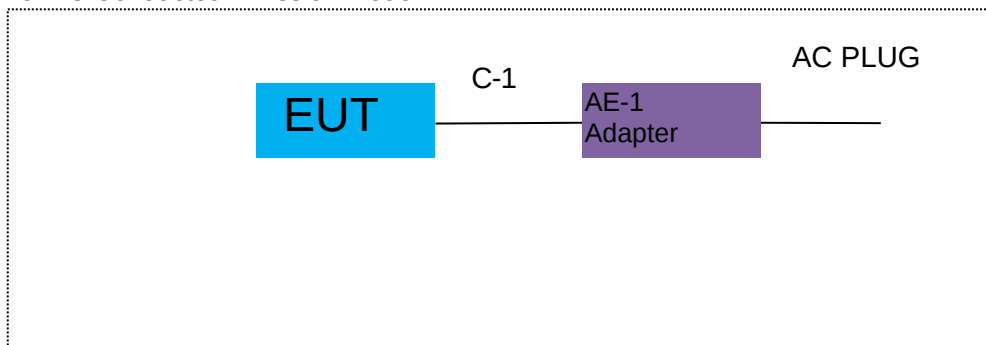
To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possibly have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	TX-13.56MHz

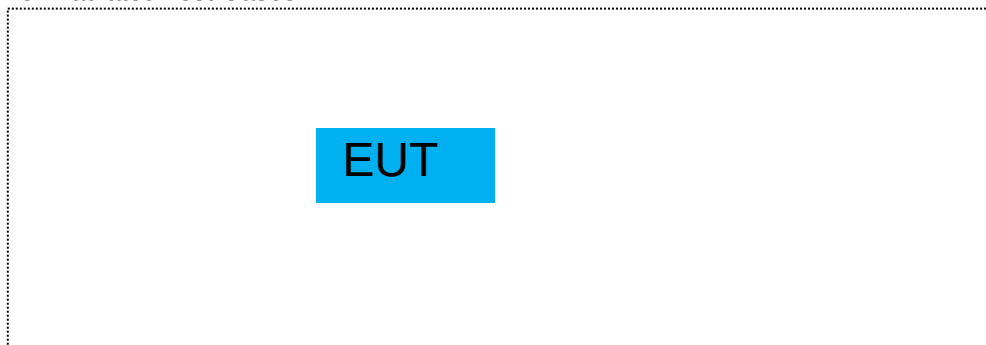
For Radiated Emission	
Final Test Mode	Description
Mode 1	TX-13.56MHz

2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

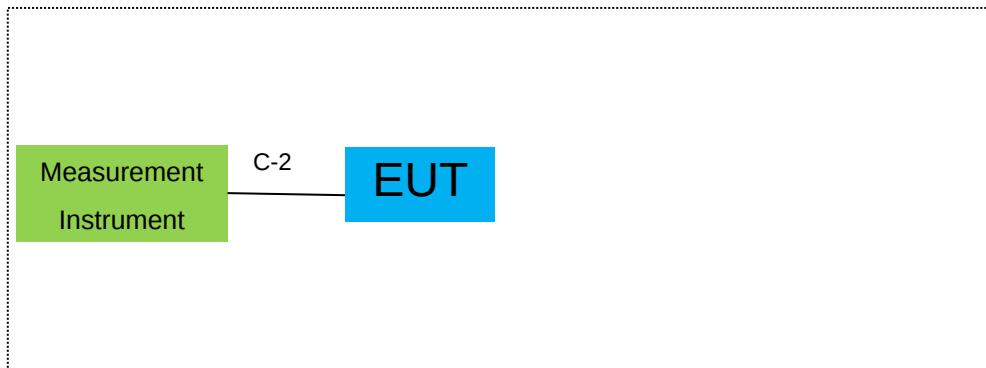
For AC Conducted Emission Mode



For Radiated Test Cases



For Conducted Test Cases



Note:1. The temporary antenna connector is soldered on the PCB board in order to perform conducted tests and this temporary antenna connector is listed in the equipment list.

2. EUT is a non battery powered device

2.4 DESCRIPTION OF SUPPORT UNITS (CONDUCTED MODE)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Model/Type No.	Series No.	Note
AE-1	Adapter	N/A	N/A	Peripherals

Item	Cable Type	Shielded Type	Ferrite Core	Length	Note
C-1	USB Cable	YES	NO	1.0m	
C-2	RF Cable	YES	NO	0.1m	

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.

2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation& Conducted Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Spectrum Analyzer	Agilent	E4440A	MY41000130	2024.04.26 2025.04.24	2025.04.25 2026.04.23	1 year
2	Spectrum Analyzer	Keysight	N9020A	MY53280244	2024.04.26 2025.04.16	2025.04.25 2026.04.15	1 year
3	Spectrum Analyzer	R&S	FSV40	101417	2024.04.26 2025.04.17	2025.04.25 2026.04.16	1 year
4	Test Receiver	R&S	ESPI3	101417	2024.07.25 2025.07.23	2025.07.24 2026.07.22	1 year
5	Log-Periodic Antenna	SCHWARZBECK	VULB 9162	675	2024.05.01 2025.04.29	2025.04.30 2026.04.28	1 year
6	50Ω Coaxial Switch	Anritsu	MP59B	6200983705	2024.04.26	2027.04.25	3 year
7	Active Loop Antenna	SCHWARZBECK	FMZB 1519B	055	2024.05.17	2027.05.16	3 year
8	Test Cable	N/A	C-02	N/A	2024.04.25	2027.04.24	3 year
9	High and Low Temperature Box	WEISS	WT 20/40 EMC Simpac	58226119460030	2022.07.04 2025.07.02	2025.07.03 2028.07.01	3year

AC Conduction Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Test Receiver	R&S	ESCI	101160	2024.04.26 2025.04.17	2025.04.25 2026.04.16	1 year
2	LISN	R&S	ENV216	101313	2024.04.26 2025.04.16	2025.04.25 2026.04.15	1 year
3	LISN	R&S	ENV216	101490	2024.04.26 2025.04.16	2025.04.25 2026.04.15	1 year
4	50Ω Coaxial Switch	ANRITSU CORP	MP59B	6200983704	2024.04.26	2027.04.25	3 year
5	Test Cable	N/A	R-03	N/A	2024.04.25	2027.04.24	3 year

Note:

- 1.We will use the temporary antenna connector (soldered on the PCB board) When conducted test And this temporary antenna connector is listed within the instrument list
2. Each piece of equipment is scheduled for calibration once a year except the Test Cable& Aux Equipment which is scheduled for calibration every 3 years.

3. ANTENNA REQUIREMENT

3.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 15.203: 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.

3.2 EUT ANTENNA

The EUT antenna is permanent attached antenna. It comply with the standard requirement.

4. EMC EMISSION TEST

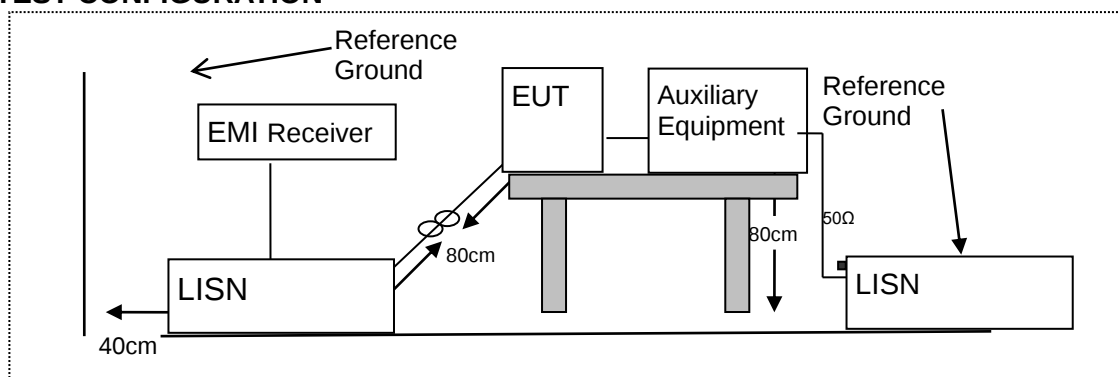
4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

Frequency(MHz)	Conducted Emission Limit	
	Quasi-peak	Average
0.15-0.5	66-56*	56-46*
0.5-5.0	56	46
5.0-30.0	60	50

Note: 1. *Decreases with the logarithm of the frequency
 2. The lower limit shall apply at the transition frequencies
 3. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

4.1.2 TEST CONFIGURATION



4.1.3 TEST PROCEDURE

According to the requirements in Section 6.2 of ANSI C63.10-2020 and ANSI C63.10-2020 + Cor.1-2023 Conducted emissions the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode.

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room.
2. The EUT was placed on a table which is 0.8m above ground plane.
3. Connect EUT to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
4. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40cm long.
5. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
6. LISN at least 80 cm from nearest part of EUT chassis.
7. The frequency range from 150KHz to 30MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth(IF bandwidth=9KHz) with Maximum Hold Mode
9. For the actual test configuration, please refer to the related Item –EUT Test Photos.

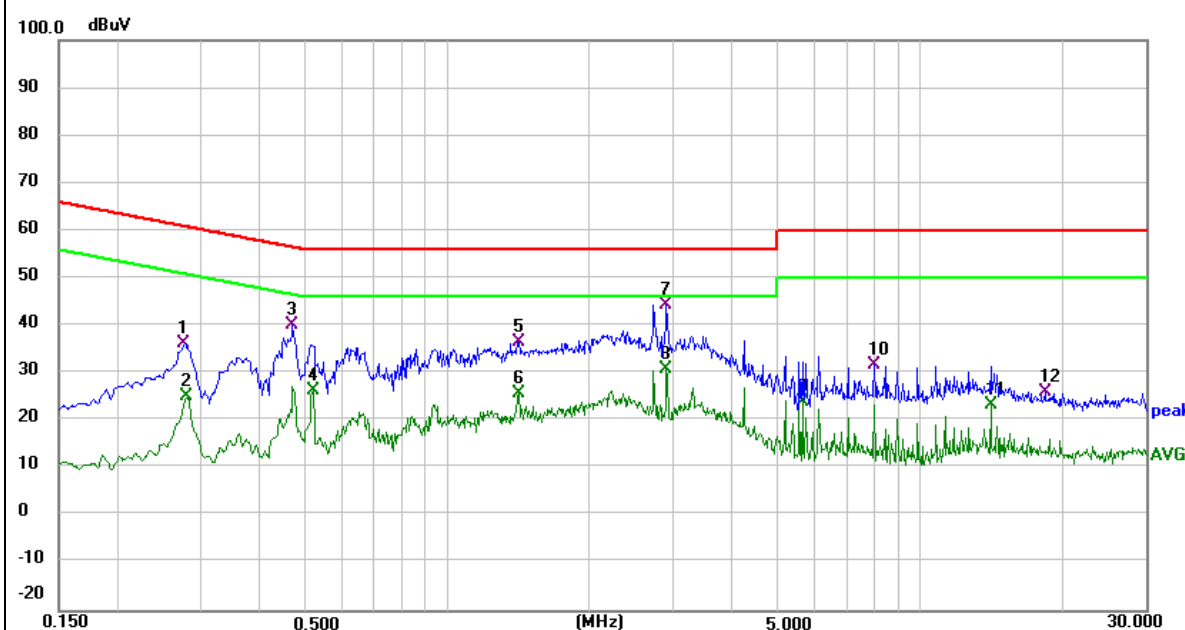
4.1.4 TEST RESULT

EUT :	Stem2	Model Name :	1018
Temperature :	25.2℃	Relative Humidity:	46%
Pressure :	1010hPa	Phase :	L
Test Voltage :	DC 5V from Adapter AC 120V/60Hz	Test Mode :	Mode 1

Frequency (MHz)	Reading Level (dBμV)	Correct Factor (dB)	Measure-ment (dBμV)	Limits (dBμV)	Margin (dB)	Remark
0.2779	25.96	10.25	36.21	60.88	-24.67	QP
0.2819	14.91	10.25	25.16	50.76	-25.60	AVG
0.4700	29.61	10.63	40.24	56.51	-16.27	QP
0.5181	15.57	10.72	26.29	46.00	-19.71	AVG
1.4140	23.96	12.58	36.54	56.00	-19.46	QP
1.4140	13.28	12.58	25.86	46.00	-20.14	AVG
2.9140	34.49	9.87	44.36	56.00	-11.64	QP
2.9140	21.08	9.87	30.95	46.00	-15.05	AVG
5.6460	13.63	10.20	23.83	50.00	-26.17	AVG
7.9980	21.28	10.55	31.83	60.00	-28.17	QP
14.1100	11.60	11.67	23.27	50.00	-26.73	AVG
18.3500	13.53	12.45	25.98	60.00	-34.02	QP

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

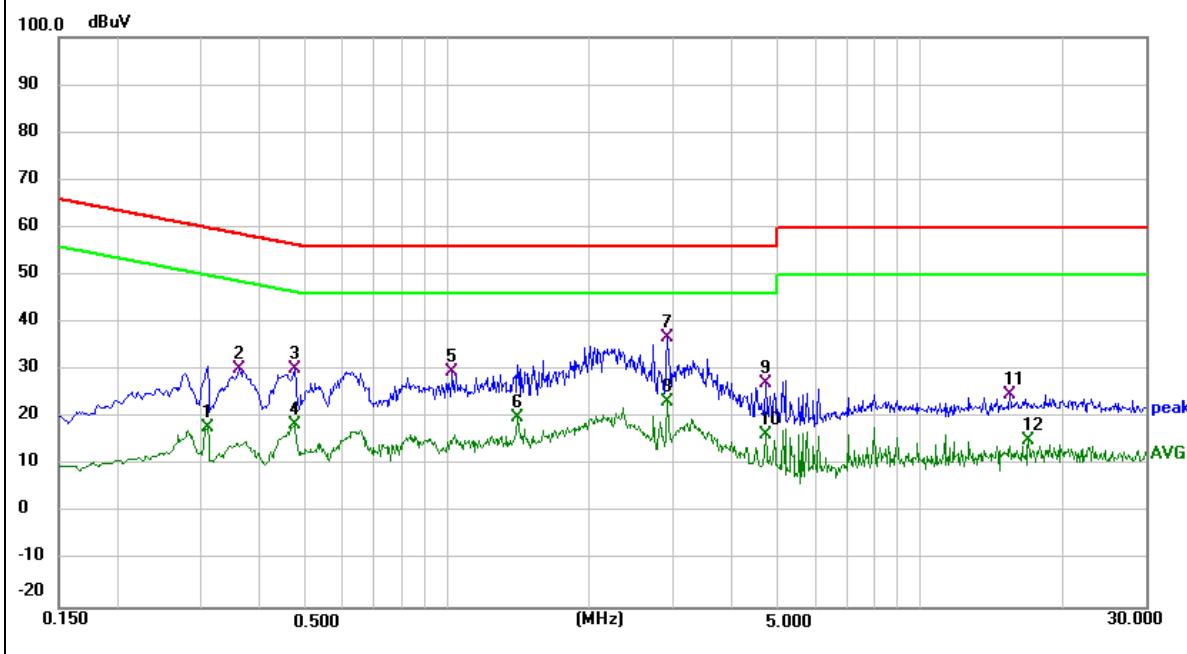


EUT :	Stem2	Model Name :	1018
Temperature :	25.2℃	Relative Humidity:	46%
Pressure :	1010hPa	Phase :	N
Test Voltage :	DC 5V from Adapter AC 120V/60Hz	Test Mode :	Mode 1

Frequency (MHz)	Reading Level (dBμV)	Correct Factor (dB)	Measure-ment (dBμV)	Limits (dBμV)	Margin (dB)	Remark
0.3100	8.22	9.72	17.94	49.97	-32.03	AVG
0.3620	20.51	9.80	30.31	58.68	-28.37	QP
0.4740	20.23	9.94	30.17	56.44	-26.27	QP
0.4740	8.66	9.94	18.60	46.44	-27.84	AVG
1.0260	18.49	11.07	29.56	56.00	-26.44	QP
1.4100	8.16	11.85	20.01	46.00	-25.99	AVG
2.9260	27.65	9.13	36.78	56.00	-19.22	QP
2.9260	14.33	9.13	23.46	46.00	-22.54	AVG
4.7057	17.82	9.30	27.12	56.00	-28.88	QP
4.7057	7.04	9.30	16.34	46.00	-29.66	AVG
15.5297	13.64	11.14	24.78	60.00	-35.22	QP
16.9340	4.00	11.39	15.39	50.00	-34.61	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 Radiated Emission Limits (FCC 15.209)

Frequencies (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
Above 960	500	3

Note:

- (1) The tighter limit applies at the band edges.
- (2) Emission level (dBuV/m)=20log Emission level (uV/m).
- (3) The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

According to FCC Part15.205, Restricted bands

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
10.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(2)
13.36-13.41			

LIMITS OF RADIATED EMISSION MEASUREMENT (FCC 15.225)

- (a) The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters, equal to 124dBuV/m at 3 meters.
- (b) Within the bands 13.410-13.553 MHz and 13.567-13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters, equal to 90.5dBuV/m at 3 meters.
- (c) Within the bands 13.110-13.410 MHz and 13.710-14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters, equal to 80.5dBuV/m at 3 meters..
- (d) The field strength of any emissions appearing outside of the 13.110-14.010 MHz band shall not exceed the general radiated emission limits in § 15.209.

4.2.2 TEST PROCEDURE

From 9 kHz to 30MHz test procedure as below:

Applying the appropriate modulating signal to the EUT, to determine cable or wire positions of the EUT system that produce the emission with the highest amplitude relative to the limit.

The measurement antenna shall be positioned with its plane perpendicular to the ground at the specified distance. When perpendicular to the ground plane, the lowest height of the magnetic antenna shall be 1 m above the ground and shall be positioned at the specified distance from the EUT. When the EUT contains a loop antenna that can only be placed in a vertical axis, normal measurements shall be made aligning the measurement antenna along the site axis, and then orthogonal to the axis. For each measurement antenna alignment, the EUT shall be rotated through 0° to 360° on a turntable. When the EUT contains a loop antenna that can be placed in a horizontal or vertical axis, normal measurements shall be made aligning the measurement antenna along the site axis, or thogonal to the axis, and then with the measurement antenna horizontal. For each measurement antenna alignment, the EUT shall be rotated through 0° to 360° on a turntable. The report shall list the six emissions with the smallest margin relative to the limit, for each of the three antenna orientations (parallel, perpendicular, and ground parallel) unless the margin is greater than 20 dB, then the following statement shall be made: "all emissions were greater than 20 dB below the limit."

From 30 MHz to 1GHz test procedure as below:

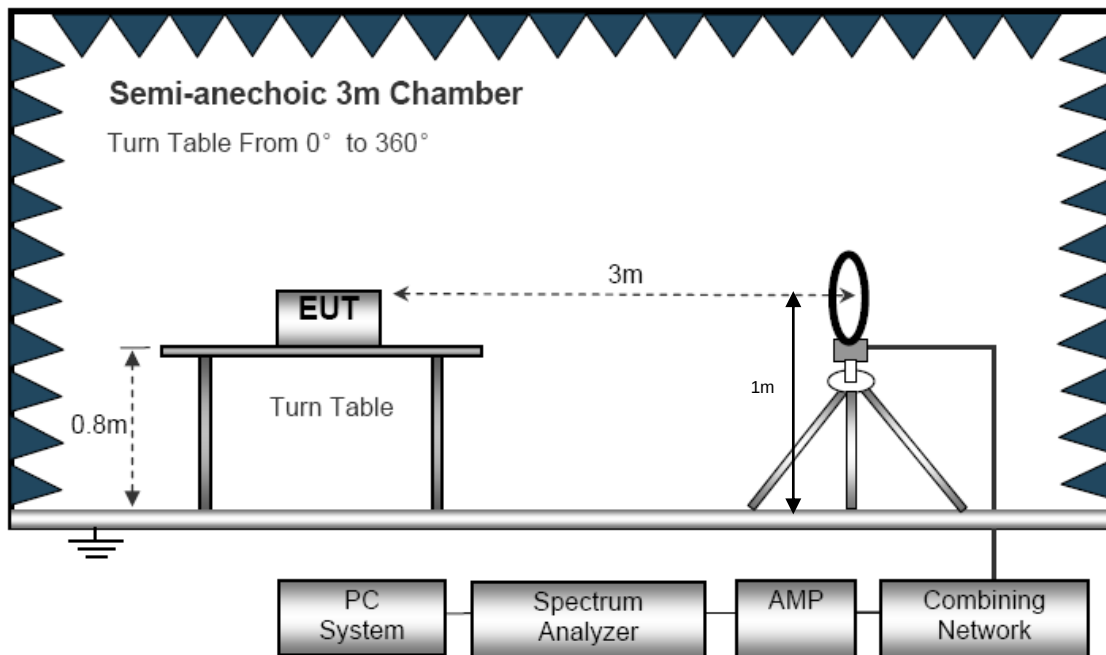
- 1) The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3-meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
- 2) The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- 3) 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.
- 4) 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.

4.2.3 DEVIATION FROM TEST STANDARD

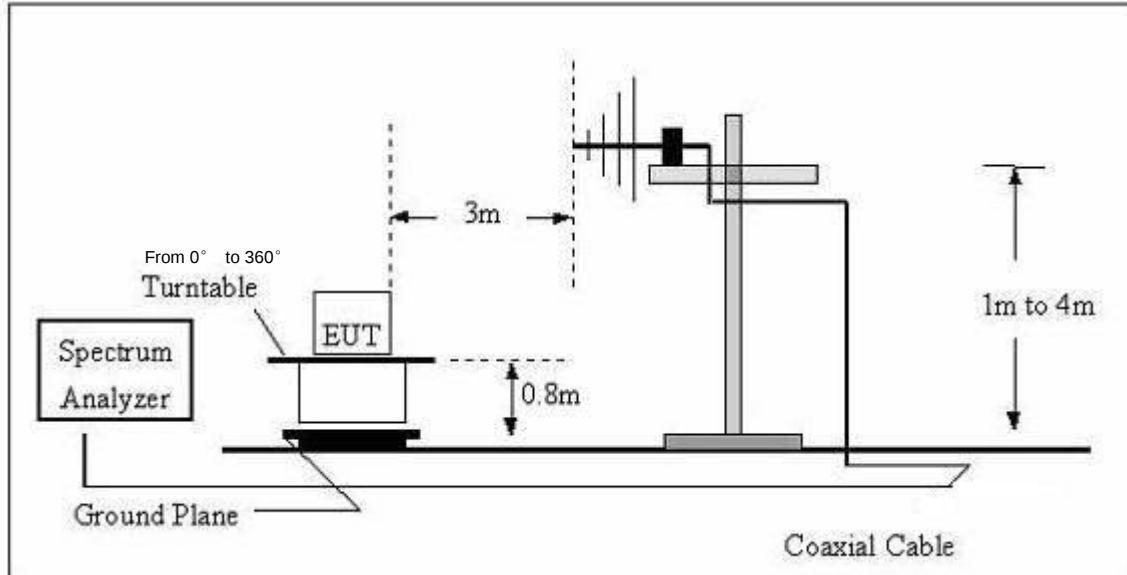
No deviation

4.2.4 TEST SETUP

(A) Radiated Emission Test-Up Frequency Below 30MHz



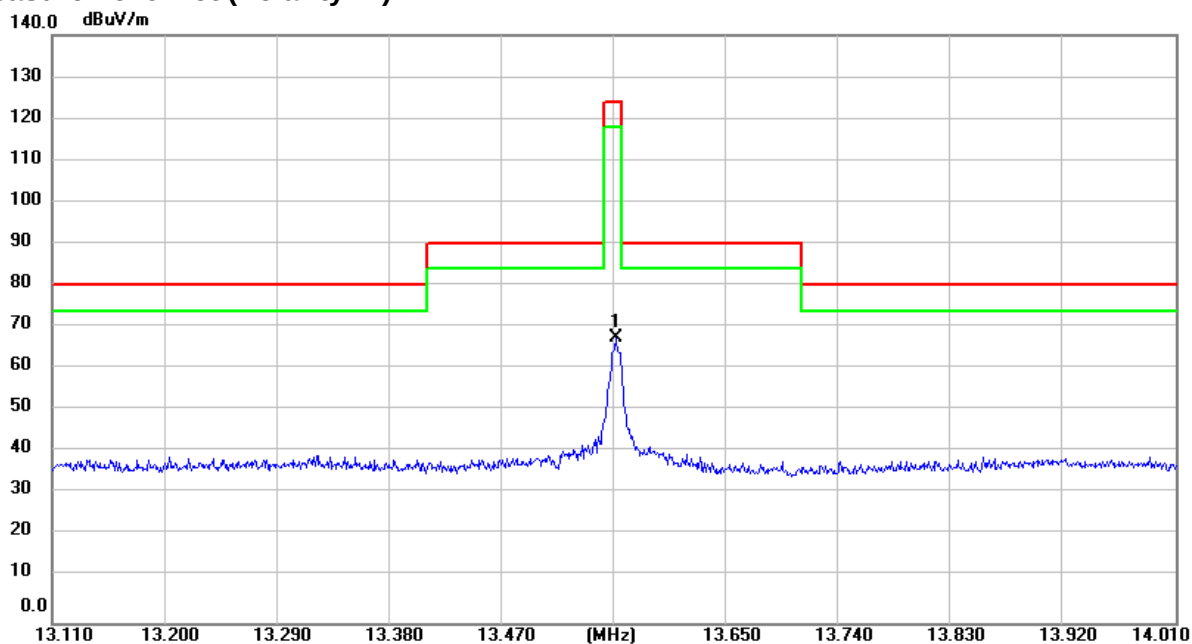
(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



4.2.5 TEST RESULTS (BELOW 30MHz)

EUT :	Stem2	Model Name. :	1018
Temperature :	20 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Voltage :	DC 7.3V
Test Mode :	Mode1		

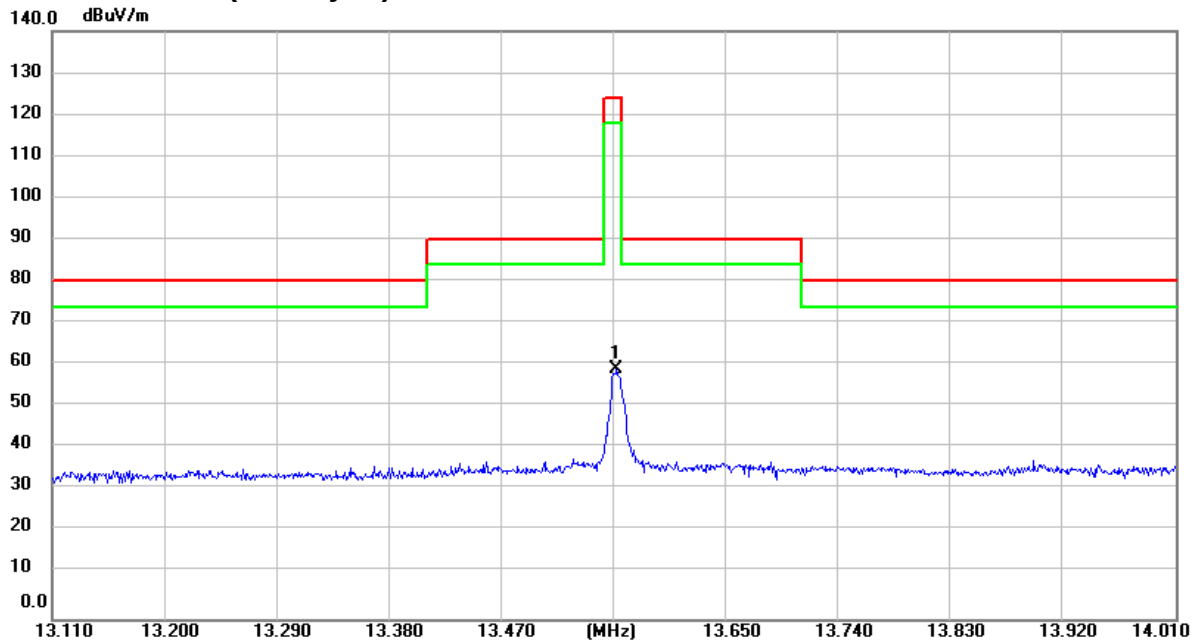
Measurement Plot (Polarity: X):



Measurement Result:

FREQUENCY (MHZ)	LEVEL (DBUV/M)	LIMIT (DBUV/M)	MARGIN (DB)	DET.	POLAR
13.5610	67.98	124.00	-56.02	PEAK	X

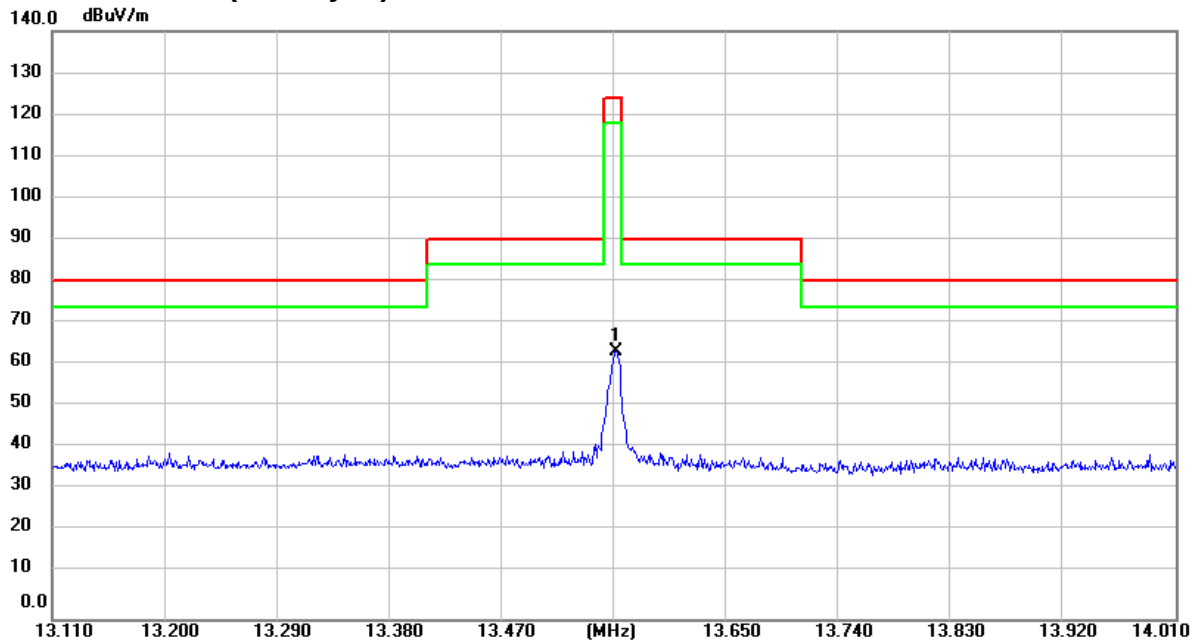
Measurement Plot (Polarity: Y):



Measurement Result:

FREQUENCY (MHZ)	LEVEL (DBUV/M)	LIMIT (DBUV/M)	MARGIN (DB)	DET.	POLAR
13.5622	59.60	124.00	-64.40	PEAK	Y

Measurement Plot (Polarity: Z):



Measurement Result:

FREQUENCY (MHZ)	LEVEL (DBUV/M)	LIMIT (DBUV/M)	MARGIN (DB)	DET.	POLAR
13.5610	63.98	124.00	-60.02	PEAK	Z

Spurious emissions at 9KHz~13.110MHz & 14.010MHz~30MHz

Frequency(MHz)	Ant.Pol.	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
0.069	X	41.57	110.83	-69.26	Avg
0.084	X	42.58	109.12	-66.54	Avg
0.136	X	67.98	104.93	-36.95	Avg(fundamental frequency)
0.667	X	43.26	71.12	-27.86	QP
1.695	X	39.58	63.02	-23.44	QP
10.824	X	43.58	69.54	-25.96	QP

Note:

Below 30MHz, Pre-test the X, Y, Z axis to find X axis is worst case, so only record X axis test data.

X: Field strength which this device generates since the position of the charging coil and loop antenna differ by 0 degrees.

Y: Field strength which this device generates since the position of the charging coil and loop antenna differ by 90 degrees.

Z: Field strength which this device generates since the position of the charging coil and loop antenna differ by 180 degrees

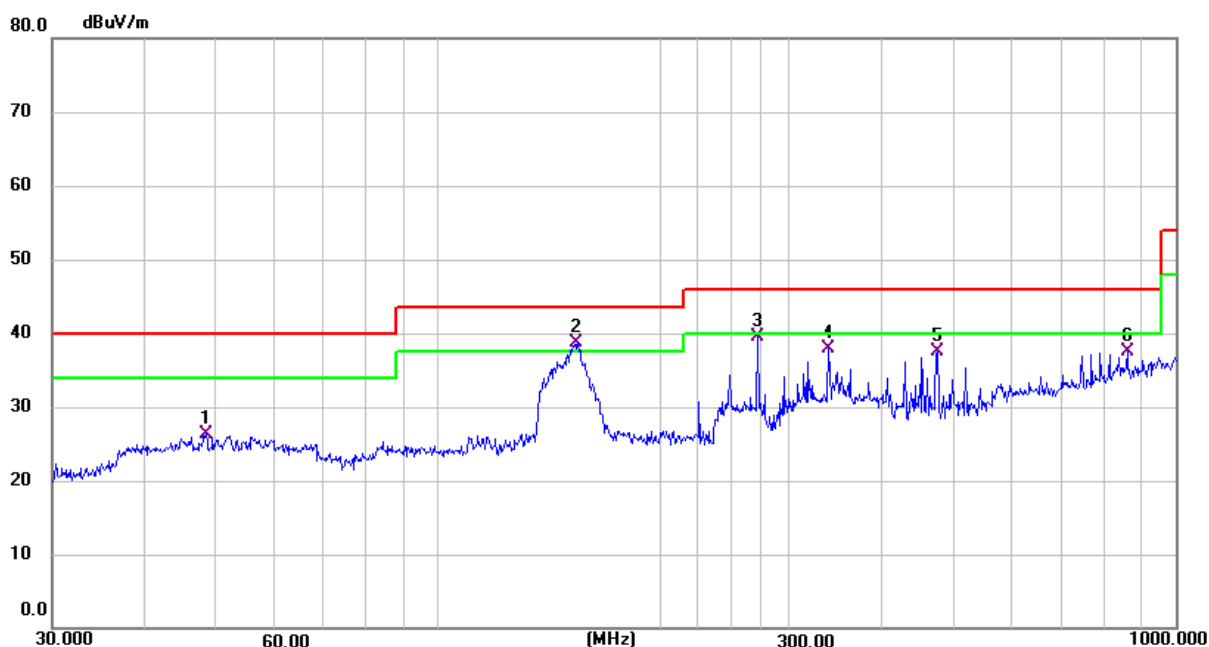
4.2.6 TEST RESULTS (BETWEEN 30 – 1000 MHZ)

EUT :	Stem2	Model Name :	1018
Temperature :	25.6 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Voltage :	DC 7.3V
Test Mode :	Mode1	Polarization :	Horizontal

Freq. (MHz)	Reading (dBμV/m)	Factor (dB)	Measurement (dBμV/m)	Limit (dBμV/m)	Over (dB)	Detector
48.5015	6.55	19.69	26.24	40.00	-13.76	QP
154.8204	24.00	14.67	38.67	43.50	-4.83	QP
271.3245	20.40	19.07	39.47	46.00	-6.53	QP
338.4000	16.93	20.92	37.85	46.00	-8.15	QP
475.4990	13.28	24.20	37.48	46.00	-8.52	QP
860.0351	7.82	29.64	37.46	46.00	-8.54	QP

Remark:

Factor = Antenna Factor + Cable Loss.

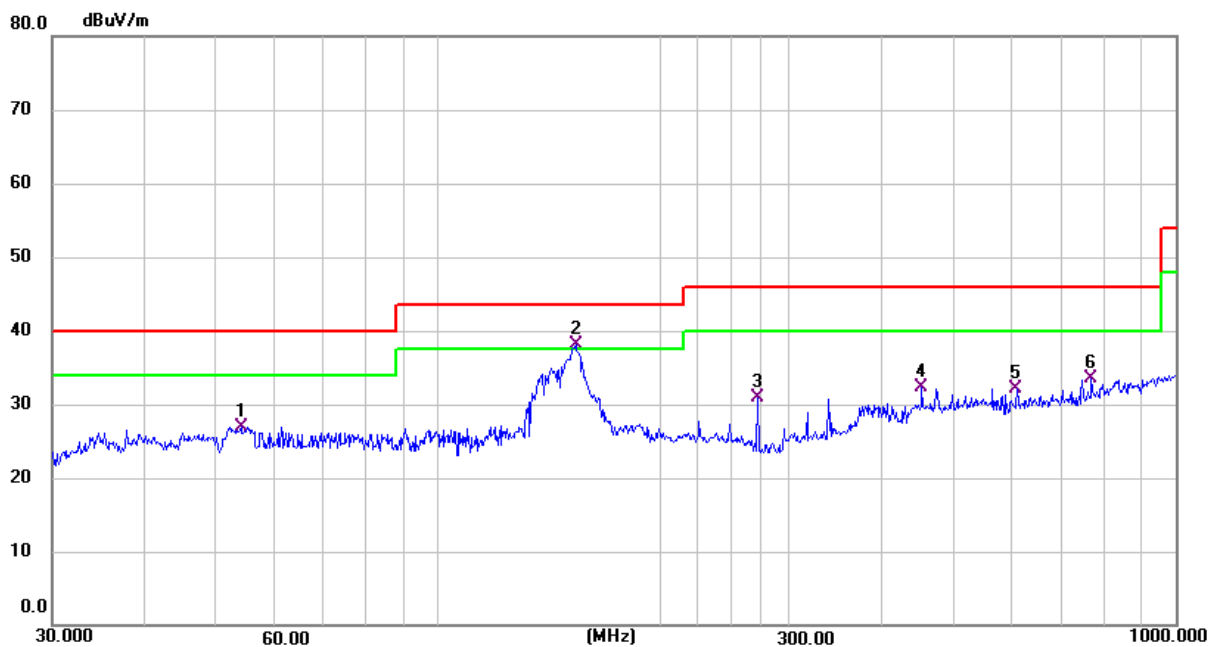


EUT :	Stem2	Model Name :	1018
Temperature :	25.6 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Voltage :	DC 7.3V
Test Mode :	Mode1	Polarization :	Vertical

Freq. (MHz)	Reading (dBμV/m)	Factor (dB)	Measurement (dBμV/m)	Limit (dBμV/m)	Over (dB)	Detector
54.0710	7.39	19.58	26.97	40.00	-13.03	QP
153.7384	23.47	14.54	38.01	43.50	-5.49	QP
271.3245	11.76	19.07	30.83	46.00	-15.17	QP
452.7196	9.16	23.19	32.35	46.00	-13.65	QP
609.9215	5.75	26.39	32.14	46.00	-13.86	QP
768.7481	5.00	28.59	33.59	46.00	-12.41	QP

Remark:

Factor = Antenna Factor + Cable Loss.



5. BANDWIDTH TEST

5.1 TEST PROCEDURE

For 99% Bandwidth

The testing follows ANSI C63.10-2020 clause 6.9.3

Use the following spectrum analyzer settings:

Span = 1.5 to 5 times the OBW

Set RBW = 1% to 5% of the OBW

Set VBW $\geq 3 \times$ RBW

Set Detector = Peak.

Set Trace mode = max hold.

Set Sweep = auto couple

For 20dB Bandwidth

The testing follows ANSI C63.10-2020 clause 6.9.2

Use the following spectrum analyzer settings:

Span = 2 to 5 times the OBW

RBW = 1% to 5% of the OBW

VBW $\geq 3 \times$ RBW

Sweep = auto

Detector function = peak

Trace = max hold

FCC Part 15.215

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

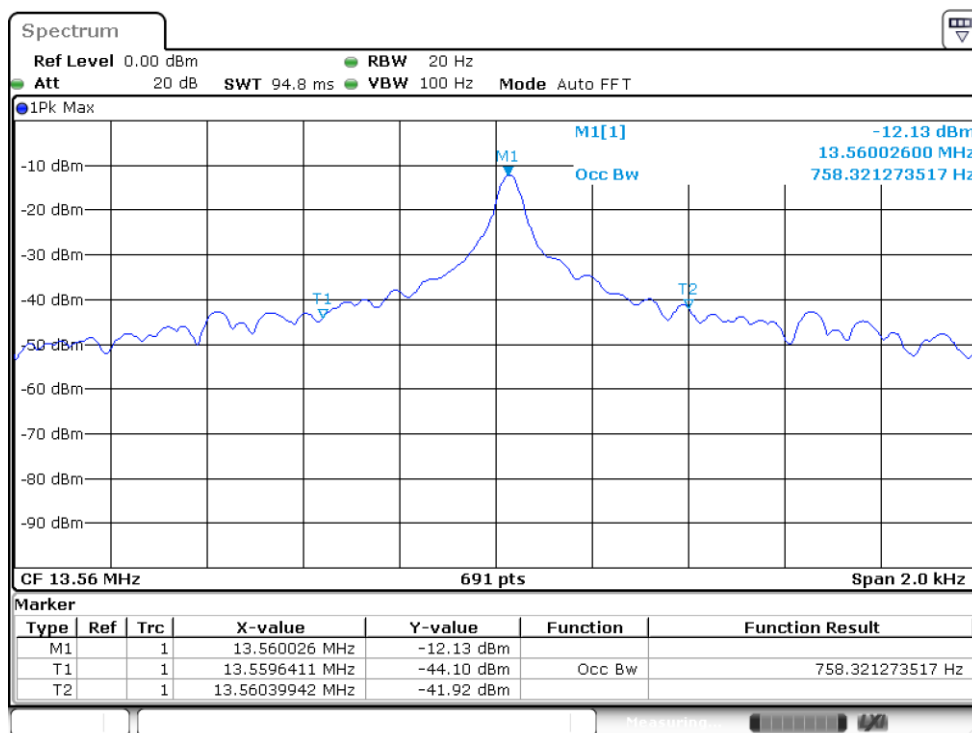
5.2 TEST SETUP



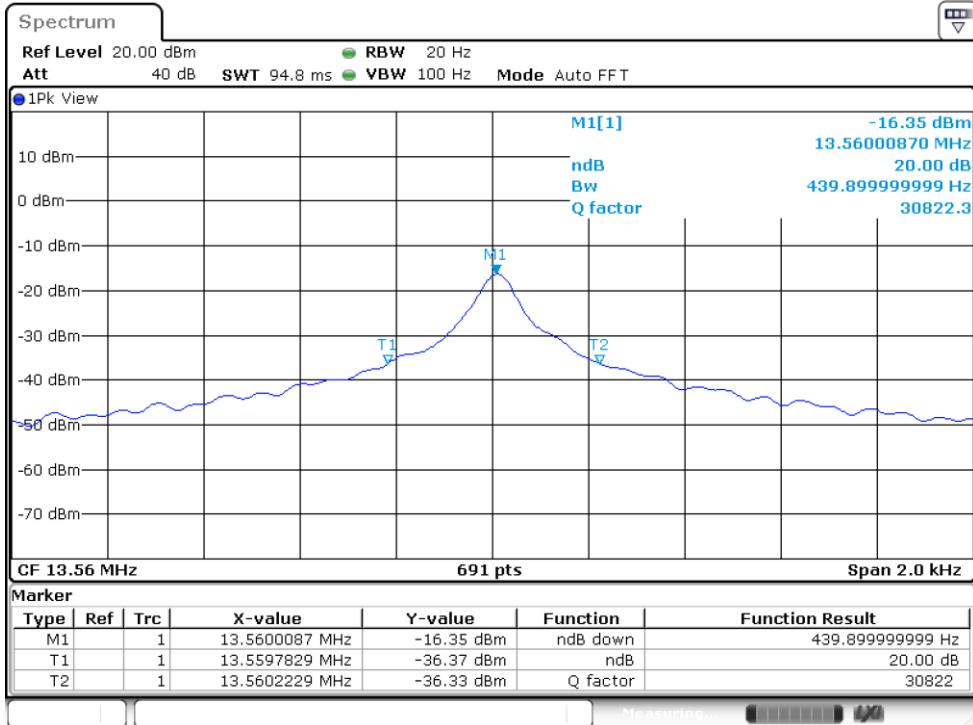
5.3 TEST RESULTS

EUT :	Stem2	Model Name :	1018
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1020 hPa	Test Power :	DC 7.3V
Test Mode :	Mode1		

Test Channel	Frequency (MHz)	99% Bandwidth (kHz)
CH01	13.56	0.7583



Test Channel	Frequency (MHz)	20 dBc Bandwidth (kHz)
CH01	13.56	0.440



6. FREQUENCY TOLERANCE

6.1 Requirement:

Test Requirement: FCC Part 15.225(e)

Test Method: ANSI C63.10-2020 clause 6.8

Requirement: The frequency tolerance of the carrier signal shall be maintained within $\pm 0.01\%$ of the operating frequency over a temperature variation of -20 degrees to $+ 50$ degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

6.2 Test Procedure

1. Couple the EUT output to the measuring instrument by connecting a dummy load to the measuring instrument.
2. Turn the EUT OFF and place it inside the environmental temperature chamber.
3. Set the temperature control on the chamber to the highest and allow the chamber temperature to stabilize.
4. Supply the EUT with nominal voltage. Turn ON the EUT until test were complete.
5. Repeat the above procedure at the lowest temperature and nominal temperature.
6. Supply the EUT with 85% and 115% of the nominal supply voltage.
7. Turn ON the EUT and place it inside the nominal environmental until test were complete.

Test Result

Power Supply	Temperature (°C)	Measured Frequency (MHz)	Frequency Error (MHz)	Result (ppm)	Part 15.225 Limit
DC 8.4V	20	13.55998	-0.00002	-1.4749263	+/(100ppm)
DC 7.3V	-20	13.55994	-0.00006	-4.4247788	+/(100ppm)
	20	13.55997	-0.00003	-2.2123894	+/(100ppm)
	50	13.56006	0.00006	4.4247788	+/(100ppm)
DC 6.21V	20	13.55995	-0.00005	-3.6873156	+/(100ppm)

END REPORT