

FCC RADIO TEST REPORT

FCC ID: 2BLHF-CT040M-B01

Product : Digital Alarm Calendar Speaker

Trade Mark : N/A

Model Name : CT040M-B01

Family Model : CT040M-B02, CT040M-B03,
CT040M-B06, CT101M-B01,
CT101M-B02, CT101M-B03,
CT101M-B06, CT070M-B01,
CT070M-B02, CT070M-B03,
CT070M-B06, OBT-100

Report No. : N26061604504E

Prepared for

Shenzhen Joyhong Tech Co.,Ltd
Building B6,101,West Industrial Zone,Tantou Community,Songgang
Street,Bao'an District,Shenzhen

Prepared by

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TEST RESULT CERTIFICATION

Applicant's name : Shenzhen Joyhong Tech Co.,Ltd

Address..... : Building B6,101,West Industrial Zone,Tantou Community,Songgang Street,Bao'an District,Shenzhen

Manufacturer's Name : Shenzhen Joyhong Tech Co.,Ltd

Address..... : Building B6,101,West Industrial Zone,Tantou Community,Songgang Street,Bao'an District,Shenzhen

Product description

Product name : Digital Alarm Calendar Speaker

Model and/or type reference : CT040M-B01

Family Model : CT040M-B02, CT040M-B03, CT040M-B06, CT101M-B01, CT101M-B02, CT101M-B03, CT101M-B06, CT070M-B01, CT070M-B02, CT070M-B03, CT070M-B06, OBT-100

Sample number S2606170281-1#

Standards : FCC Part15.407

Test procedure ANSI C63.10-2020 + Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024

KDB 905462 D03 Client Without DFS New Rules v01r02

KDB 789033 D02 General UNII Test Procedures New Rules v02r01

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/ the Industry Canada 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..... Jun. 16, 2026 ~ Jul. 27, 2026

Date of Issue Jul. 27, 2026

Test Result..... **Pass**

Prepared By : Abel Chen
Abel Chen
(Project Engineer)

Reviewed By : Aaron Cheng
Aaron Cheng
(Supervisor)

Approved By : Alex Li
Alex Li
(Manager)

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Revision History

Report No.	Version	Description	Issued Date
N26061604504E	Rev.01	Initial issue of report	Jul. 27, 2026

1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.407) , Subpart E			
Standard Section	Test Item	Judgment	Remark
15.207	AC Power Line Conducted Emissions	PASS	
15.209(a), 15.407 (b)	Spurious Radiated Emissions	PASS	
15.407 (a)	99% Emission Bandwidth	PASS	
15.407(e)	Minimum 6 dB bandwidth	PASS	
15.407 (a)	Maximum Conducted Output Power	PASS	
15.407(b)	Band Edge	PASS	
15.407 (a)	Power Spectral Density	PASS	
15.407(b)	Spurious Emissions at Antenna Terminals	PASS	
15.203	Antenna Requirement	PASS	
15.407(c)	Automatically discontinue transmission	PASS	
15.407(h)	Dynamic Frequency Selection(DFS)	N/A	

NOTE:

(1)" N/A" denotes test is not applicable in this Test Report

1.1 FACILITIES AND ACCREDITATIONS

FACILITIES

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.

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.10 and CISPR Publication 22.

LABORATORY ACCREDITATIONS AND LISTINGS

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 17025:2017 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).

Name of Firm : Shenzhen NTEK Testing Technology Co., Ltd.

Site Location : No. 24 Xinfu East Road, Xiangshan Community, Xinqiao Street, Baoan District, Shenzhen, Guangdong, People's Republic of China.

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	$\pm 2.80\text{dB}$
2	RF power, conducted	$\pm 0.16\text{dB}$
3	Spurious emissions, conducted	$\pm 0.21\text{dB}$
4	All emissions, radiated(30MHz~1GHz)	$\pm 2.64\text{dB}$
5	All emissions, radiated(1GHz~6GHz)	$\pm 2.40\text{dB}$
6	All emissions, radiated(> 6GHz)	$\pm 2.52\text{dB}$
7	Temperature	$\pm 0.5^{\circ}\text{C}$
8	Humidity	$\pm 2\%$
9	All emissions, radiated(9KHz~30MHz)	$\pm 6\text{dB}$
10	Occupied bandwidth	$\pm 4.7\%$
11	POWER SPECTRAL DENSITY	$\pm 1.21\text{dB}$

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	Digital Alarm Calendar Speaker	
Trade Mark	N/A	
Model Name	CT040M-B01	
Family Model	CT040M-B02, CT040M-B03, CT040M-B06, CT101M-B01, CT101M-B02, CT101M-B03, CT101M-B06, CT070M-B01, CT070M-B02, CT070M-B03, CT070M-B06, OBT-100	
Model Difference	All models have the same circuit and RF module, except for model names, exterior colors and exterior designs.	
FCC ID	2BLHF-CT040M-B01	
Product Description	IEEE 802.11 WLAN Mode Supported	☒ 802.11a/n20/n40/ac20/ac40/ax20/ax40
	Modulation	802.11a:OFDM (BPSK / QPSK / 16QAM/64QAM) 802.11n:OFDM (QPSK/BPSK/16QAM/64QAM) 802.11ac:OFDM (QPSK/BPSK/16QAM/64QAM/ 256QAM) 802.11ax: OFDMA (QPSK/BPSK/16QAM/64QAM /256QAM/ 1024QAM)
	Operating Frequency Range	☒ U-NII-1: 5150 MHz ~5250MHz ☒ U-NII-3: 5725 MHz ~5850 MHz
	Antenna Type	FPC Antenna
	Antenna Gain	WIFI5.2G: 4.66dBi; WIFI5.8G: 6.08dBi;
	Based on the application, features, or specification exhibited in User's Manual, More details of EUT technical specification, please refer to the User's Manual.	
Adapter	Model : XC012WH-0502000UU Input: 100-240V~50/60Hz 0.5A Output: 5.0V---2.0A 10.0W	
Battery	N/A	
Power supply	DC 5V from adapter	
Connecting I/O Port(s)	Please refer to the User's Manual	
HW Version	PCB JHA133_LPDDR3_178_CLOCK_V1.0 20260518	
FW Version	N/A	
SW Version	CT040M-B01_A133061226_V01	

Note:

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

Band	20MHz		40MHz	
	Channel	Frequency	Channel	Frequency
U-NII-1	36	5180 MHz	38	5190 MHz
	40	5200 MHz	46	5230 MHz
	44	5220 MHz		
	48	5240 MHz		
U-NII-3	149	5745 MHz	151	5755 MHz
	153	5765 MHz	159	5795 MHz
	157	5785 MHz		
	161	5805 MHz		
	165	5825 MHz		

2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible 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	Normal Link Mode
Mode 2	802.11a/n20/n40/ac20/ac40/ax20/ax40

For AC Conducted Emission	
Final Test Mode	Description
Mode 1	Normal Link Mode

For Radiated Emission	
Final Test Mode	Description
Mode 1	Normal Link Mode
Mode 2	802.11a/n20/n40/ac20/ac40/ax20/ax40

For RF Conducted Emission	
Final Test Mode	Description
Mode 2	802.11a/n20/n40/ac20/ac40/ax20/ax40

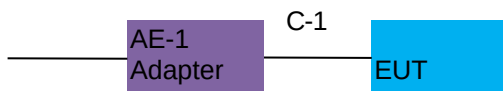
Note:

- (1) The measurements are performed at the highest, middle, lowest available channels.
- (2) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported
- (3) 802.11ax supports only full RU.
- (4) All modes have been tested and evaluated, but only the data of the worst-tested mode will be reflected in the report for Spurious Radiated Emissions test item.

2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

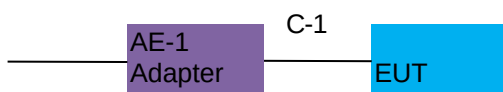
For AC Conducted Emission Mode

AC PLUG



For Radiated Test Cases

AC PLUG



For RF Conducted Test Cases



Note: 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.

2.4 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	XC012WH-0502000UU	N/A	Peripherals
AE-2	Laptop	DELL	Dell XPS 13	Peripherals

Item	Cable Type	Shielded Type	Ferrite Core	Length
C-1	DC Power Cable	NO	YES	1.0m
C-2	RF Cable	YES	NO	0.1m
C-3	USB Type-A to Type-C Cable	YES	NO	1.0m

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) "YES" is means "shielded" "with core"; "NO" is means "unshielded" "without core".

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	2026.04.15	2027.04.14	1 year
2	Spectrum Analyzer	Agilent	N9020A	MY49100060	2026.04.08	2027.04.07	1 year
3	Spectrum Analyzer	R&S	FSV40	101417	2026.04.08	2027.04.07	1 year
4	Test Receiver	R&S	ESPI7	101318	2026.04.08	2027.04.07	1 year
5	Bilog Antenna	TESEQ	CBL6111D	31216	2026.04.08	2027.04.07	1 year
6	50Ω Coaxial Switch	Anritsu	MP59B	6200983705	2024.04.26	2027.04.25	3 year
7	Horn Antenna	EM	EM-AH-10180	2011071402	2024.05.12	2027.05.11	3 year
8	Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	803	2024.05.12	2027.05.11	3 year
9	Amplifier	EMC	EMC051835SE	980246	2026.04.08	2027.04.07	1 year
10	Active Loop Antenna	SCHWARZBECK	FMZB 1519B	055	2024.05.17	2027.05.16	3 year
11	Power Meter	DARE	RPR3006W	15I00041SN084	2026.04.08	2027.04.07	1 year
12	Test Cable (9KHz-30MHz)	N/A	R-01	N/A	2024.05.06	2027.05.05	3 year
13	Test Cable (30MHz-1GHz)	N/A	R-02	N/A	2024.05.06	2027.05.05	3 year
14	High Test Cable(1G-40GHz)	N/A	R-03	N/A	2024.05.06	2027.05.05	3 year
15	Filter	TRILTHIC	2400MHz	29	2024.04.26	2027.04.25	3 year
16	temporary antenna connector (Note)	NTS	R001	N/A	N/A	N/A	N/A

Note:

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

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	2026.04.08	2027.04.07	1 year
2	LISN	R&S	ENV216	101313	2026.04.08	2027.04.07	1 year
3	LISN	SCHWARZBECK	NNLK 8129	8129245	2026.04.08	2027.04.07	1 year
4	50Ω Coaxial Switch	ANRITSU CORP	MP59B	6200983704	2024.04.26	2027.04.25	3 year
5	Test Cable (9KHz-30MHz)	N/A	C01	N/A	2024.05.06	2027.05.05	3 year
6	Test Cable (9KHz-30MHz)	N/A	C02	N/A	2024.05.06	2027.05.05	3 year
7	Test Cable (9KHz-30MHz)	N/A	C03	N/A	2024.05.06	2027.05.05	3 year

Note: 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.

Measurement Software

Item	Manufacturer	Software Name	Software Version	Description
1	MWRFtest	MTS 8310 2.4GHz/5GHz	2.0	RF Conducted Test
2	Farad	EZ-EMC_RE	AIT-03A	RadiatedTest
3	Farad	EZ-EMC_CE	AIT-03A	AC Conducted Test

3. TEST REQUIREMENTS

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 APPLICABLE STANDARD

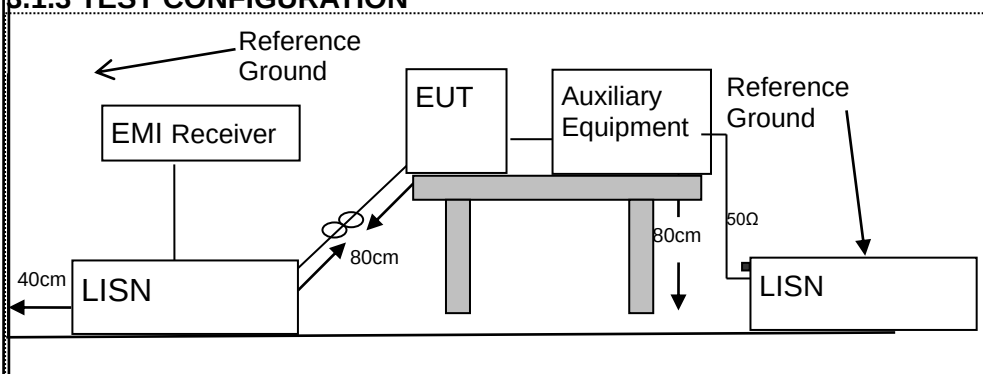
According to FCC Part 15.207(a)

3.1.2 CONFORMANCE LIMIT

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.

3.1.3 TEST CONFIGURATION



3.1.4 TEST PROCEDURE

According to the requirements in Section 13.1.4.1 of ANSI C63.10-2020 + Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024 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.

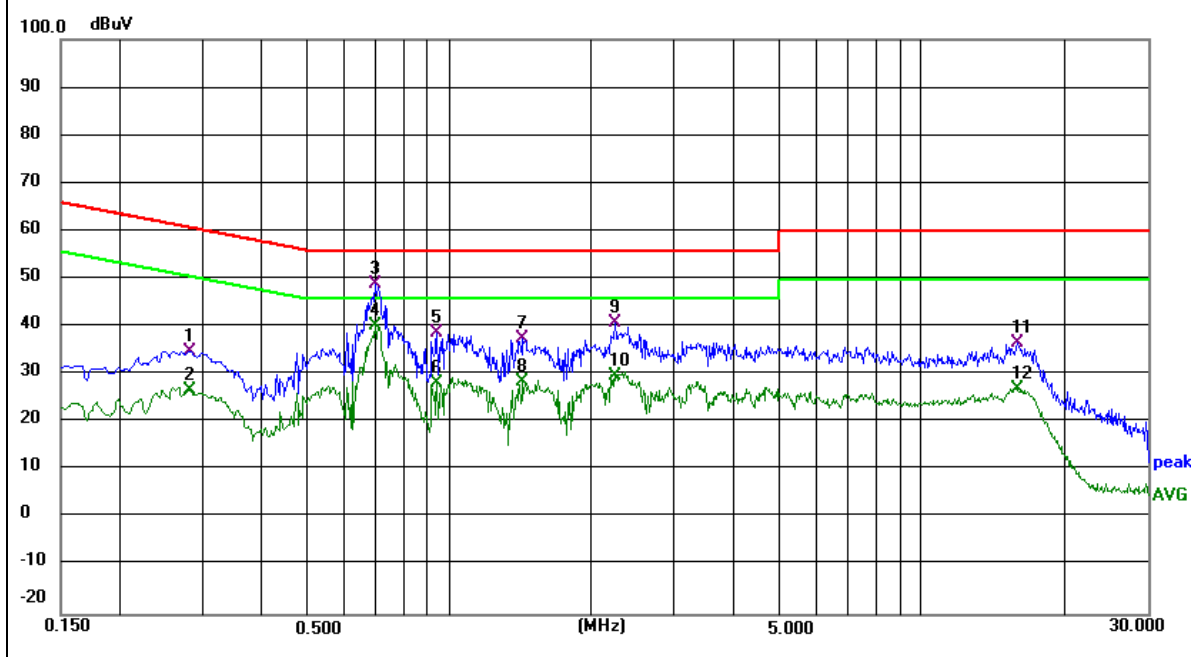
3.1.5 TEST RESULTS

EUT :	Digital Alarm Calendar Speaker	Model Name :	CT040M-B01
Temperature :	23.7℃	Relative Humidity :	53.6%
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
0.2819	14.47	20.51	34.98	60.76	-25.78	QP
0.2819	6.46	20.51	26.97	50.76	-23.79	AVG
0.6940	28.51	20.44	48.95	56.00	-7.05	QP
0.6940	20.00	20.44	40.44	46.00	-5.56	AVG
0.9420	18.54	20.33	38.87	56.00	-17.13	QP
0.9420	8.02	20.33	28.35	46.00	-17.65	AVG
1.4260	17.38	20.28	37.66	56.00	-18.34	QP
1.4260	8.42	20.28	28.70	46.00	-17.30	AVG
2.2380	20.48	20.27	40.75	56.00	-15.25	QP
2.2380	9.57	20.27	29.84	46.00	-16.16	AVG
15.9100	16.23	20.49	36.72	60.00	-23.28	QP
15.9100	6.61	20.49	27.10	50.00	-22.90	AVG

Remark:

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

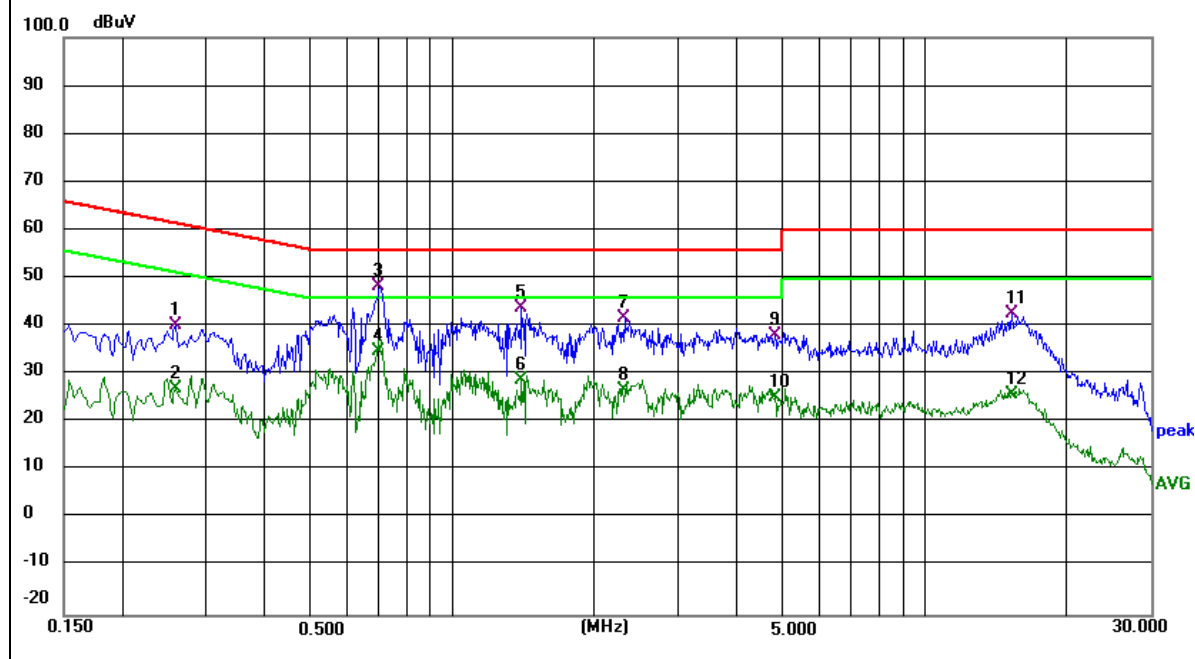


EUT :	Digital Alarm Calendar Speaker	Model Name :	CT040M-B01
Temperature :	23.7℃	Relative Humidity :	53.6%
Pressure :	1010hPa	Phase :	N
Test Voltage :	DC 5V from Adapter AC 120V/60Hz	Test Mode :	Mode 1

Frequency (MHz)	Reading Level (dBμV)	Correct Factor (dB)	Measure-ment (dBμV)	Limits (dBμV)	Margin (dB)	Remark
0.2580	19.71	20.49	40.20	61.50	-21.30	QP
0.2580	6.69	20.49	27.18	51.50	-24.32	AVG
0.7019	27.83	20.51	48.34	56.00	-7.66	QP
0.7019	14.38	20.51	34.89	46.00	-11.11	AVG
1.4020	23.75	20.25	44.00	56.00	-12.00	QP
1.4020	8.68	20.25	28.93	46.00	-17.07	AVG
2.3179	21.51	20.24	41.75	56.00	-14.25	QP
2.3179	6.74	20.24	26.98	46.00	-19.02	AVG
4.8060	17.81	20.26	38.07	56.00	-17.93	QP
4.8060	5.22	20.26	25.48	46.00	-20.52	AVG
15.2700	22.19	20.44	42.63	60.00	-17.37	QP
15.2700	5.50	20.44	25.94	50.00	-24.06	AVG

Remark:

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



3.2 RADIATED EMISSION MEASUREMENT

3.2.1 APPLICABLE STANDARD

According to FCC Part 15.407(b) and 15.209

3.2.2 CONFORMANCE LIMIT

According to FCC Part 15.407(b)(7): radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

According to FCC Part 15.205, Restricted bands

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
0.495-0.505	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			

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Restricted Frequency(MHz)	Field Strength (μV/m)	Field Strength (dBμV/m)	Measurement Distance
0.009-0.490	2400/F(KHz)	20 log (uV/m)	300
0.490-1.705	24000/F(KHz)	20 log (uV/m)	30
1.705-30.0	30	29.5	30
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

Limits of Radiated Emission Measurement(Above 1000MHz)

Frequency(MHz)	Class B (dBuV/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	74	54

Remark :1. Emission level in dBuV/m=20 log (uV/m)

2. Measurement was performed at an antenna to the closed point of EUT distance of meters.

3. For Frequency 9kHz~30MHz:

Distance extrapolation factor =40log(Specific distance/ test distance)(dB);

Limit line=Specific limits(dBuV) + distance extrapolation factor.

For Frequency above 30MHz:

Distance extrapolation factor =20log(Specific distance/ test distance)(dB);

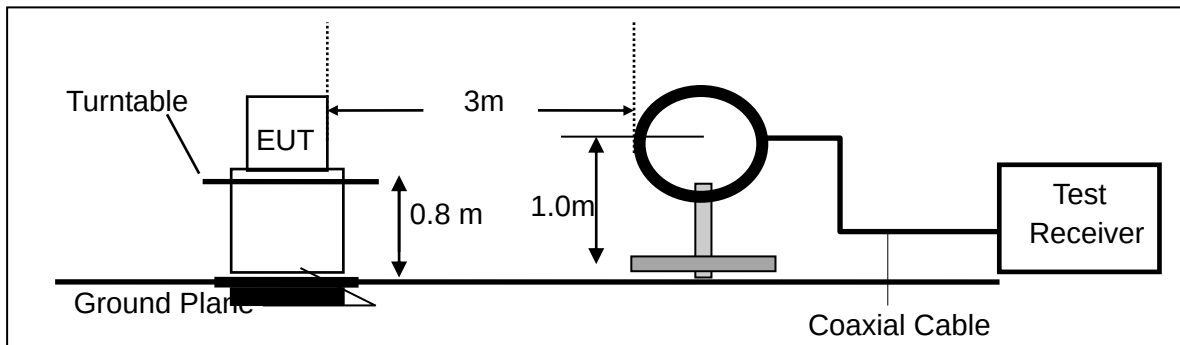
Limit line=Specific limits(dBuV) + distance extrapolation factor.

3.2.3 MEASURING INSTRUMENTS

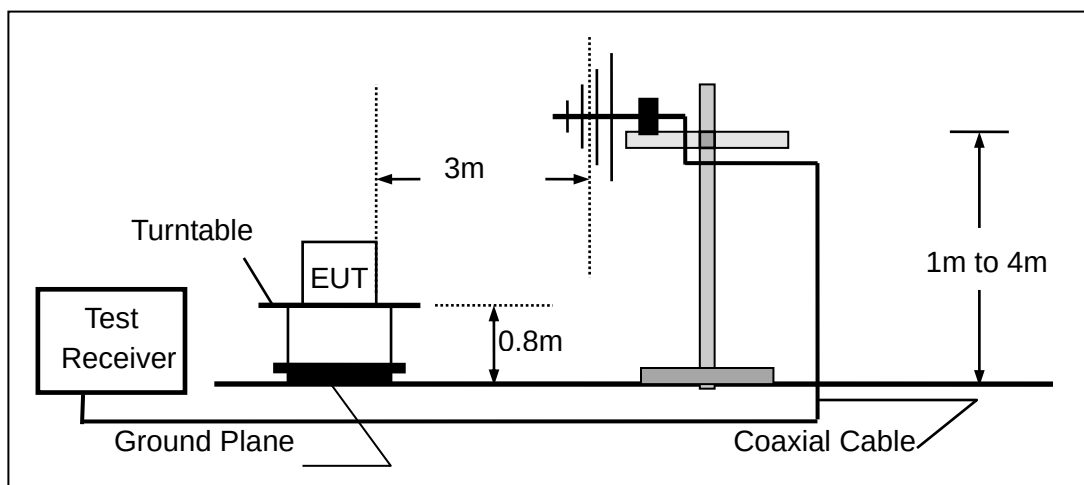
The Measuring equipment is listed in the section 6.3 of this test report.

3.2.4 TEST CONFIGURATION

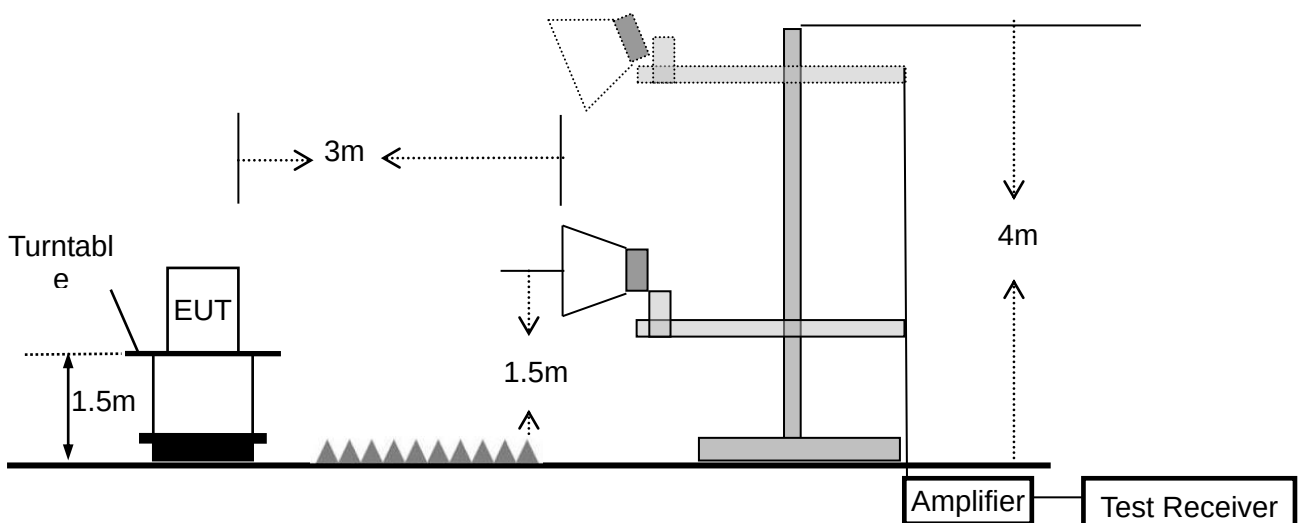
(a) For radiated emissions below 30MHz



(b) For radiated emissions from 30MHz to 1000MHz



(c) For radiated emissions above 1000MHz



3.2.5 TEST PROCEDURE

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10-2020 + Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024. The test distance is 3m. The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.10-2020 + Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024 and CAN/CSA-CEI/IEC CISPR 22.

This test is required for any spurious emission that falls in a Restricted Band, as defined in Section 15.205. It must be performed with the highest gain of each type of antenna proposed for use with the EUT.

Use the following spectrum analyzer settings:

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / 1MHz for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

- The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- The EUT was placed on the top of a rotating table 0.8 m for below 1GHz and 1.5m for above 1GHz the ground at a 3 meter. The table was rotated 360 degrees to determine the position of the highest radiation.
- The height of the equipment or of the substitution antenna shall be 0.8 m for below 1GHz and 1.5m for above 1GHz; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

During the radiated emission test, the Spectrum Analyzer was set with the following configurations:

Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	QP	120 kHz	300 kHz
Above 1000	Peak	1 MHz	1 MHz
	Average	1 MHz	1 MHz

Note: for the frequency ranges below 30 MHz, a narrower RBW is used for these ranges but the measured value should add a RBW correction factor (RBWCF) where $RBWCF [dB] = 10 \cdot \lg(100 [kHz] / \text{narrower RBW [kHz]})$. , the narrower RBW is 1 kHz and RBWCF is 20 dB for the frequency 9 kHz to 150 kHz, and the narrower RBW is 10 kHz and RBWCF is 10 dB for the frequency 150 kHz to 30 MHz.

3.2.6 TEST RESULTS (9KHz – 30 MHz)

EUT:	Digital Alarm Calendar Speaker	Model Name. :	CT040M-B01
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 5V from Adapter AC 120V/60Hz
Test Mode :	Mode1	Polarization :	--

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	N/A
--	--	--	--	N/A

NOTE:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

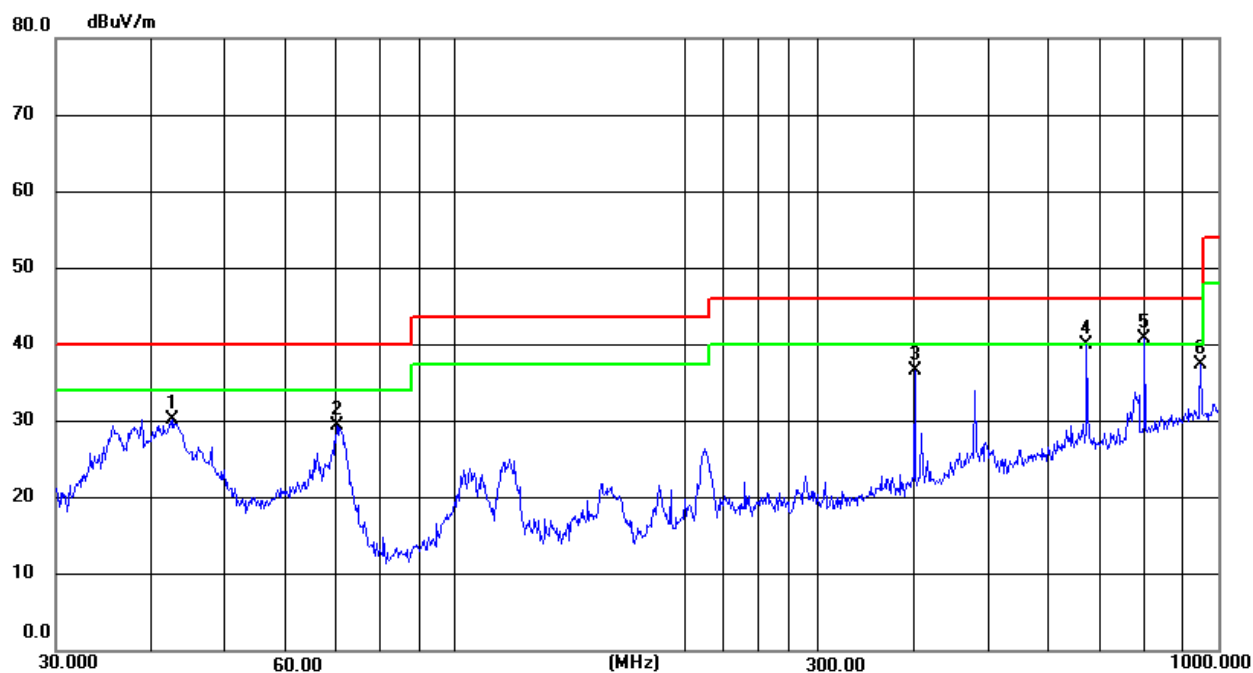
3.2.7 TEST RESULTS (30MHz – 1GHz)

EUT :	Digital Alarm Calendar Speaker	Model Name. :	CT040M-B01
Temperature :	22.1℃	Relative Humidity :	53.2%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter AC 120V/60Hz
Test Mode :	802.11ax-5785		

Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark
	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
V	42.7494	11.06	19.08	30.14	40.00	-9.86	peak
V	70.0901	13.37	16.05	29.42	40.00	-10.58	peak
V	400.4318	14.04	22.59	36.63	46.00	-9.37	peak
V	672.8442	13.51	26.48	39.99	46.00	-6.01	peak
V	801.7862	12.14	28.74	40.88	46.00	-5.12	peak
V	948.7610	7.23	30.21	37.44	46.00	-8.56	peak

Remark:

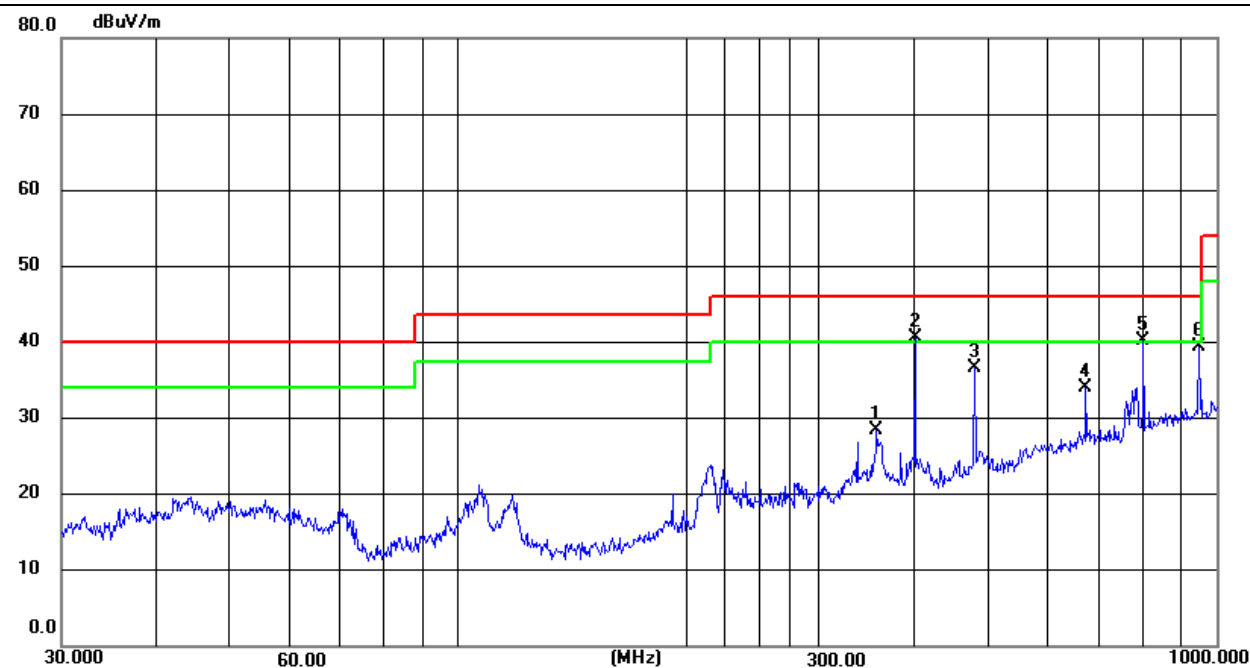
Emission Level = Meter Reading + Factor, Margin= Emission Level - Limit



Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark
	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
H	356.6757	7.20	21.29	28.49	46.00	-17.51	peak
H	400.4318	18.07	22.59	40.66	46.00	-5.34	peak
H	480.5276	12.55	24.00	36.55	46.00	-9.45	peak
H	672.8442	7.48	26.48	33.96	46.00	-12.04	peak
H	801.7862	11.39	28.74	40.13	46.00	-5.87	peak
H	948.7610	9.12	30.21	39.33	46.00	-6.67	peak

Remark:

Emission Level = Meter Reading + Factor, Margin= Emission Level - Limit



Note (1) All modes have been tested, just the worst mode has been recorded in the report.

3.2.8 TEST RESULTS (1GHz-40GHz)

EUT :	Digital Alarm Calendar Speaker	Model Name. :	CT040M-B01
Temperature :	24 °C	Relative Humidity :	58.9%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter AC 120V/60Hz
Test Mode :	WIFI 5.2G		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector	Polar
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	Type	(H/V)
802.11a-5180							
10360.000	47.36	1.27	48.63	68.20	-19.57	peak	Vertical
15540.000	44.27	5.01	49.28	74.00	-24.72	peak	Vertical
10360.000	48.31	1.27	49.58	68.20	-18.62	peak	Horizontal
15540.000	43.42	5.01	48.43	74.00	-25.57	peak	Horizontal
802.11a-5200							
10400.000	45.18	1.16	46.34	68.20	-21.86	peak	Vertical
15600.000	43.11	5.21	48.32	74.00	-25.68	peak	Vertical
10400.000	46.70	1.16	47.86	68.20	-20.34	peak	Horizontal
15600.000	43.10	5.21	48.31	74.00	-25.69	peak	Horizontal
802.11a-5240							
10480.000	45.56	1.66	47.22	68.20	-20.98	peak	Vertical
15720.000	42.37	4.47	46.84	74.00	-27.16	peak	Vertical
10480.000	46.66	1.66	48.32	68.20	-19.88	peak	Horizontal
15720.000	43.23	4.47	47.70	74.00	-26.30	peak	Horizontal

Note:

- (1) All the modulation modes have been tested, and the worst case mode(802.11a) result was report.
- (2) For emissions in 18GHz-40GHz range, all emissions were investigated and in the noise floor level. The emission levels lower than the limit 20dB not show in test report.

EUT :	Digital Alarm Calendar Speaker	Model Name. :	CT040M-B01
Temperature :	24 °C	Relative Humidity :	58.9%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter AC 120V/60Hz
Test Mode :	WIFI 5.8G		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type	Polar
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)		(H/V)
802.11n40-5755							
11510.000	45.31	3.10	48.41	74.00	-25.59	peak	Vertical
17265.000	42.50	6.68	49.18	68.20	-19.02	peak	Vertical
11510.000	46.04	3.10	49.14	74.00	-24.86	peak	Horizontal
17265.000	43.19	6.68	49.87	68.20	-18.33	peak	Horizontal
802.11n40-5795							
11590.000	44.81	2.63	47.44	74.00	-26.56	peak	Vertical
17385.000	41.34	7.40	48.74	68.20	-19.46	peak	Vertical
11590.000	44.45	2.63	47.08	74.00	-26.92	peak	Horizontal
17385.000	42.13	7.40	49.53	68.20	-18.67	peak	Horizontal

Note:

- (1) All the modulation modes have been tested, and the worst case mode(802.11n40) result was report.
- (2) For emissions in 18GHz-40GHz range, all emissions were investigated and in the noise floor level. The emission levels lower than the limit 20dB not show in test report.

3.2.10 Spurious Emission in Restricted Band and Band Edge

EUT :	Digital Alarm Calendar Speaker	Model Name. :	CT040M-B01
Temperature :	24 °C	Relative Humidity :	58.9%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter AC 120V/60Hz
Test Mode :	5.2G-802.11a		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector	Polar
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	Type	(H/V)
802.11a-5180							
5150.000	23.03	38.51	61.54	74.00	-12.46	peak	Vertical
5150.000	11.00	38.51	49.51	54.00	-4.49	AVG	Vertical
5150.000	25.75	38.51	64.26	74.00	-9.74	peak	Horizontal
5150.000	9.65	38.51	48.16	54.00	-5.84	AVG	Horizontal
802.11a-5240							
5350.000	12.10	37.64	49.74	74.00	-24.26	peak	Vertical
5350.000	1.77	37.64	39.41	54.00	-14.59	AVG	Vertical
5350.000	11.99	37.64	49.63	74.00	-24.37	peak	Horizontal
5350.000	1.58	37.64	39.22	54.00	-14.78	AVG	Horizontal

Note:

(1)All the modulation modes have been tested, and the worst case mode(802.11a) result was report.

EUT :	Digital Alarm Calendar Speaker	Model Name. :	CT040M-B01
Temperature :	24 °C	Relative Humidity :	58.9%
Pressure :	1010 hPa	Test Voltage :	DC 5V from Adapter AC 120V/60Hz
Test Mode :	5.8G -802.11n40		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector	Polar
(MHz)	(dBm)	(dB)	(dBm/m)	(dBm/m)	(dB)	Type	(H/V)
802.11n40 5745							
5604.567	-99.01	50.39	-48.62	-27.00	-21.62	peak	Vertical
5600.980	-98.97	50.37	-48.60	-27.00	-21.60	peak	Horizontal
802.11n40 5825							
5949.324	-99.39	51.91	-47.48	-27.00	-20.48	peak	Vertical
5950.749	-100.36	51.91	-48.45	-27.00	-21.45	peak	Horizontal

Note:

(1)All the modulation modes have been tested, and the worst case mode(802.11n40) result was report.

3.3 POWER SPECTRAL DENSITY TEST

3.3.1 Applied procedures / limit

According to FCC §15.407(a)(3)

For the band 5.15-5.25 GHz,

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(3) For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.3.2 TEST PROCEDURE

For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 KHz bandwidth, the following adjustments to the procedures apply:

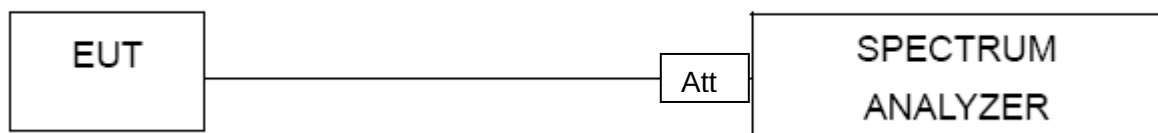
- a) Set $RBW \geq 1/T$, where T is defined in section II.B.I.a).
- b) Set $VBW \geq 3 RBW$.
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10\log(500\text{kHz}/RBW)$ to the measured result, whereas $RBW (< 500 \text{ KHz})$ is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10\log(1\text{MHz}/RBW)$ to the measured result, whereas $RBW (< 1 \text{ MHz})$ is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100 KHz for the sections 5.c) and 5.d) above, since $RBW=100 \text{ KHz}$ is available on nearly all spectrum analyzers.

3.3.3 DEVIATION FROM STANDARD

No deviation.

3.3.4 TEST SETUP



3.3.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.1 Unless otherwise a special operating condition is specified in the follows during the testing.

3.3.6 TEST RESULTS

EUT :	Digital Alarm Calendar Speaker	Model Name. :	CT040M-B01
Temperature :	25 °C	Relative Humidity :	56%
Pressure :	1015 hPa	Test Voltage :	DC 5V
Test Mode :	Mode 2		

Test data reference attachment.

3.4 26DB & 99% EMISSION BANDWIDTH

3.4.1 Applied procedures / limit

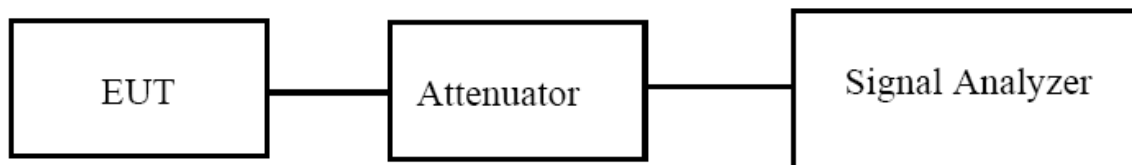
The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band are made over a reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the device, whichever is less. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

3.4.2 TEST PROCEDURE

- a) Set RBW = approximately 1 % to 5 % of the emission bandwidth.
- b) Set the VBW > RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

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

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW $\geq 3 \cdot$ RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.



3.4.3 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

3.4.4 TEST RESULTS

EUT :	Digital Alarm Calendar Speaker	Model Name. :	CT040M-B01
Temperature :	25 °C	Relative Humidity :	56%
Pressure :	1012 hPa	Test Voltage :	DC 5V
Test Mode :	Mode 2		

Test data reference attachment.

3.5 MINIMUM 6 DB BANDWIDTH

3.5.1 Applied procedures / limit

According to FCC §15.407(e)

(e) Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

3.5.2 TEST PROCEDURE

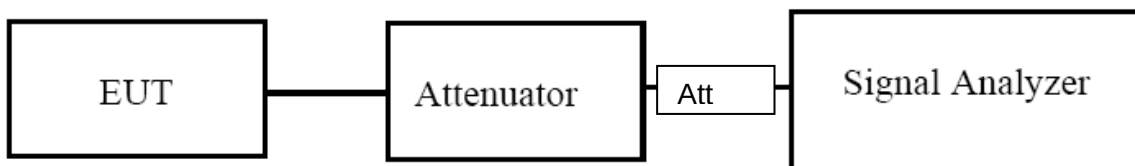
Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.715-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

3.5.3 DEVIATION FROM STANDARD

No deviation.

3.5.4 TEST SETUP



3.5.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

3.5.6 TEST RESULTS

EUT :	Digital Alarm Calendar Speaker	Model Name. :	CT040M-B01
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC 5V
Test Mode :	Mode 2		

Test data reference attachment.

3.6 MAXIMUM CONDUCTED OUTPUT POWER

3.6.1 PPLIED PROCEDURES / LIMIT

According to FCC §15.407

The maximum conducted output power should not exceed:

Frequency Band(MHz)	Limit
5150~5250	250mW
5725~5850	1W

3.6.2 TEST PROCEDURE

- Maximum conducted output power may be measured using a spectrum analyzer/EMI receiver or an RF power meter.

1. Device Configuration

If possible, configure or modify the operation of the EUT so that it transmits continuously at its maximum power control level (see section II.B.).

a) The intent is to test at 100 percent duty cycle; however a small reduction in duty cycle (to no lower than 98 percent) is permitted if required by the EUT for amplitude control purposes. Manufacturers are expected to provide software to the test lab to permit such continuous operation.

b) If continuous transmission (or at least 98 percent duty cycle) cannot be achieved due to hardware limitations (e.g., overheating), the EUT shall be operated at its maximum power control level with the transmit duration as long as possible and the duty cycle as high as possible.

2. Measurement using a Spectrum Analyzer or EMI Receiver (SA)

Measurement of maximum conducted output power using a spectrum analyzer requires integrating the spectrum across a frequency span that encompasses, at a minimum, either the EBW or the 99-percent occupied bandwidth of the signal.¹ However, the EBW must be used to determine bandwidth dependent limits on maximum conducted output power in accordance with § 15.407(a).

a) The test method shall be selected as follows: (i) Method SA-1 or SA-1 Alternative (averaging with the EUT transmitting at full power throughout each sweep) shall be applied if either of the following conditions can be satisfied:

- The EUT transmits continuously (or with a duty cycle ≥ 98 percent).
- Sweep triggering or gating can be implemented in a way that the device transmits at the maximum power control level throughout the duration of each of the instrument sweeps to be averaged. This condition can generally be achieved by triggering the instrument's sweep if the duration of the sweep (with the analyzer configured as in Method SA-1, below) is equal to or shorter than the duration T of each transmission from the EUT and if those transmissions exhibit full power throughout their durations.

(ii) Method SA-2 or SA-2 Alternative (averaging across on and off times of the EUT transmissions, followed by duty cycle correction) shall be applied if the conditions of (i) cannot be achieved and the transmissions exhibit a constant duty cycle during the measurement duration. Duty cycle will be considered to be constant if variations are less than ± 2 percent.

(iii) Method SA-3 (RMS detection with max hold) or SA-3 Alternative (reduced VBW with max hold) shall be applied if the conditions of (i) and (ii) cannot be achieved.

b) Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep): (i) Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.

(ii) Set RBW = 1 MHz.

(iii) Set VBW ≥ 3 MHz.

(iv) Number of points in sweep ≥ 2 Span / RBW. (This ensures that bin-to-bin spacing is $\leq$ RBW/2, so that narrowband signals are not lost between frequency bins.)

(v) Sweep time = auto.

(vi) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.

(vii) If transmit duty cycle < 98 percent, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle ≥ 98 percent, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run".

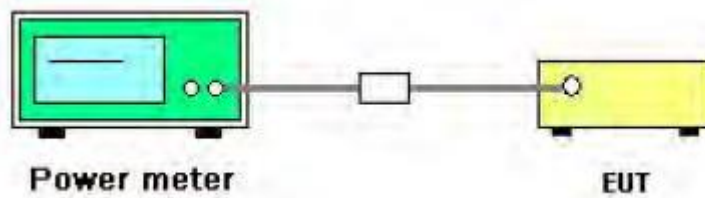
(viii) Trace average at least 100 traces in power averaging (i.e., RMS) mode.

(ix) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum

3.6.3 DEVIATION FROM STANDARD

No deviation.

3.6.4 TEST SETUP



3.6.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

3.6.6 TEST RESULTS

EUT :	Digital Alarm Calendar Speaker	Model Name. :	CT040M-B01
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC 5V
Test Mode :	Mode 2		

Test data reference attachment.

3.7 OUT OF BAND EMISSIONS

3.7.1 Applicable Standard

According to FCC §15.407(b)

Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band:
 - (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
 - (ii) Devices certified before March 2, 2017 with antenna gain greater than 10 dBi may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease by March 2, 2018. Devices certified before March 2, 2018 with antenna gain of 10 dBi or less may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease before March 2, 2020.

3.7.2 Test Procedure

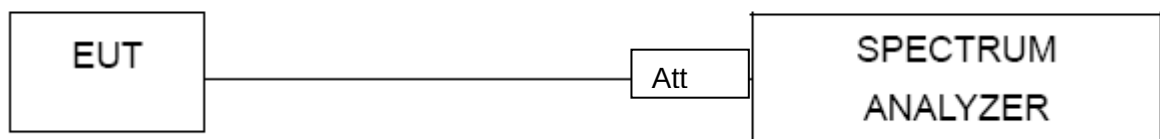
1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW of spectrum analyzer to 1 MHz with a convenient frequency span.

4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

3.7.3 DEVIATION FROM STANDARD

No deviation.

3.7.4 TEST SETUP



3.7.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

3.7.6 TEST RESULTS

EUT :	Digital Alarm Calendar Speaker	Model Name. :	CT040M-B01
Temperature :	25 °C	Relative Humidity :	56%
Pressure :	1012 hPa	Test Voltage :	DC 5V

Test data reference attachment.

4. ANTENNA REQUIREMENT

4.1 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.

4.2 EUT ANTENNA

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

END OF REPORT