TEST REPORT

Report No.:	BCTC2404334148E
Applicant:	SHENZHEN JIDING ELECTRONIC CO.,LTD
Product Name:	Smart Water Timer
Test Model:	RV13
Tested Date:	2024-04-17 to 2024-04-23
Issued Date:	2024-04-28

Shenzhen BCTC Testing Co., Ltd.

FCC ID: 2AYLS-RV13

Product Name:	Smart Water Timer
Trademark:	N/A
Model/Type Reference:	RV13 RV10, RV11, RV12, RV15, RV16, RV17, RV18, RV19, RV20, RV21, RV22, RV23, RV25, RV26, RV27, RV28, RV29
Prepared For:	SHENZHEN JIDING ELECTRONIC CO.,LTD
Address:	502, Block D, Huachuangda Technology Park, No.176, Hangcheng Avenue, Sanwei Community, Hangcheng Street, Baoan District, Shenzhen, Guangdong, China
Manufacturer:	SHENZHEN JIDING ELECTRONIC CO.,LTD
Address:	502, Block D, Huachuangda Technology Park, No.176, Hangcheng Avenue, Sanwei Community, Hangcheng Street, Baoan District, Shenzhen, Guangdong, China
Prepared By:	Shenzhen BCTC Testing Co., Ltd.
Address:	1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China
Sample Received Date:	2024-04-17
Sample Tested Date:	2024-04-17 to 2024-04-23
Issue Date:	2024-04-28
Report No.:	BCTC2404334148E
Test Standards:	FCC Part15.231e ANSI C63.10-2013
Test Results:	PASS

Tested by:

Shanshan. Zhang

Shanshan. Zhang / Project Handler

Approved by:

Zero Zhou/Reviewer

The test report is effective only with both signature and specialized stamp. This result(s) shown in this report refer only to the sample(s) tested. Without written approval of Shenzhen BCTC Testing Co., Ltd, this report can't be reproduced except in full. The tested sample(s) and the sample information are provided by the client.

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(Note: N/A Means Not Applicable)

1. Version

Report No.	Issue Date	Description	Approved
BCTC2404334148E	2024-04-28	Original	Valid

2. Test Summary

The Product has been tested according to the following specifications:

No.	Test Parameter	Clause No.	Results
1	Conducted Emission	§15.207	N/A*
2	Fundamental &Radiated Spurious Emission Measurement	15.209,15.231e	PASS
3	Occupy Bandwidth	15.231c	PASS
4	Dwell time	15.231e	PASS
5	Antenna Requirement	15.203	PASS

Note*: The EUT is powered by the DC only, the test item is not applicable.

3. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

No.	Item	Uncertainty
1	3m chamber Radiated spurious emission(9kHz-30MHz)	U=3.7dB
2	3m chamber Radiated spurious emission(30MHz-1GHz)	U=4.3dB
3	3m chamber Radiated spurious emission(1GHz-18GHz)	U=4.5dB
4	3m chamber Radiated spurious emission(18GHz-40GHz)	U=3.34dB
5	Conducted Emission(150kHz-30MHz)	U=3.20dB
6	Conducted Adjacent channel power	U=1.38dB
7	Conducted output power uncertainty Above 1G	U=1.576dB
8	Conducted output power uncertainty below 1G	U=1.28dB
9	humidity uncertainty	U=5.3%
10	Temperature uncertainty	U=0.59℃

4. Product Information And Test Setup

4.1 Product Information

Model/Type Reference:	RV13 RV10, RV11, RV12, RV15, RV16, RV17, RV18, RV19, RV20, RV21, RV22, RV23, RV25, RV26, RV27, RV28, RV29
Model Differences:	All the models are the same circuit and RF module, except model names and appearance of the color.
Operation Frequency:	437.4 MHz
Type of Modulation:	ASK
Number Of Channel	1CH
Antenna installation:	Internal antenna
Antenna Gain:	SRD: 0 dBi Remark: ☐ The antenna gain of the product comes from the antenna report provided by the customer, and the test data is affected by the customer information. ☒ The antenna gain of the product is provided by the customer, and the test data is affected by the customer information.
Ratings:	DC 6V

4.2 Test Setup Configuration

See test photographs attached in *EUT TEST SETUP PHOTOGRAPHS* for the actual connections between Product and support equipment.

Radiated Spurious Emission:

E-1
EUT

4.3 Support Equipment

Item	Shielded Type	Ferrite Core	Length	Note

Notes:
1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

4.4 Channel List

CH	Frequency (MHz)
1	437.4

4.5 Test Mode

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.

Final Test Mode	Description
Mode 1	TX

Note:
(1) The measurements are performed at the highest, middle, lowest available channels.
(2) Fully-charged battery is used during the test

5. Test Facility And Test Instrument Used

5.1 Test Facility

All measurement facilities used to collect the measurement data are located at Shenzhen BCTC Testing Co., Ltd. Address: 1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.
FCC Test Firm Registration Number: 712850
A2LA certificate registration number is: CN1212
ISED Registered No.: 23583
ISED CAB identifier: CN0017

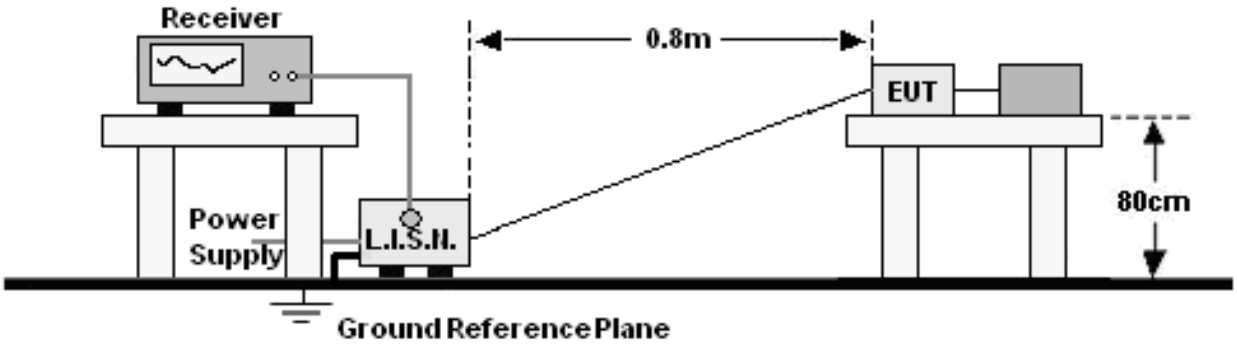
5.2 Test Instrument Used

RF Conducted Test					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
Power Metter	Keysight	E4419	\	May 15, 2023	May 14, 2024
Power Sensor (AV)	Keysight	E9300A	\	May 15, 2023	May 14, 2024
Signal Analyzer20kHz-26.5GHz	Keysight	N9020A	MY49100060	May 15, 2023	May 14, 2024
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 15, 2023	May 14, 2024

Radiated Emissions Test (966 Chamber02)					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
966 chamber	SKET	966 Room	966	Nov. 02. 2021	Nov. 01.2024
Receiver	R&S	ESR3	102075	May 15, 2023	May 14, 2024
Receiver	R&S	ESRI7	100010	Nov. 13. 2023	Nov. 12, 2024
Amplifier	SKET	LNPA-30M01G-30	SK2021082004	Nov. 13. 2023	Nov. 12, 2024
TRILOG Broadband Antenna	Schwarzbeck	VULB9168	1323	Feb. 28, 2024	Feb. 27, 2025
Loop Antenna(9KHz-30MHz)	Schwarzbeck	FMZB1519B	00014	May 31, 2023	May 30, 2024
Amplifier	SKET	LAPA_01G18G-45dB	SK2021040901	May 15, 2023	May 14, 2024
Horn Antenna	Schwarzbeck	BBHA9120D	1541	May 31, 2023	May 30, 2024
Amplifier(18GHz-40GHz)	MITEQ	TTA1840-35-HG	2034381	May 15, 2023	May 14, 2024
Horn Antenn(18GHz-40GHz)	Schwarzbeck	BBHA9170	00822	May 31, 2023	May 30, 2024
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 15, 2023	May 14, 2024
Software	Frad	EZ-EMC	FA-03A2 RE	\	\

6. Conducted Emissions

6.1 Block Diagram Of Test Setup



6.2 Limit

Frequency (MHz)	Limit (dBuV)	
	Quas-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

Notes:
1. *Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

6.3 Test Procedure

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

a. The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).
b. The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak and AVG detector in Max Hold mode. Run the receiver's pre-scan to record the maximum disturbance generated from Product in all power lines in the full band.
c. For each frequency whose maximum record was higher or close to limit, measure its QP and AVG values and record.

6.4 EUT Operating Conditions

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

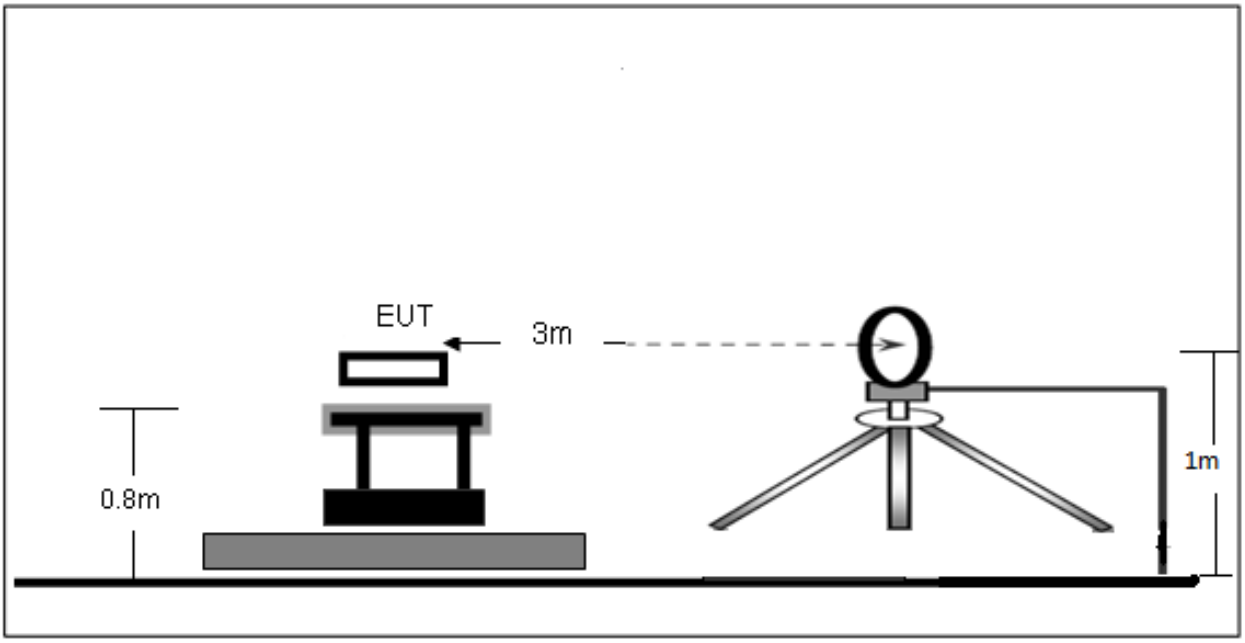
6.5 Test Result

The EUT is powered by the DC only, the test item is not applicable.

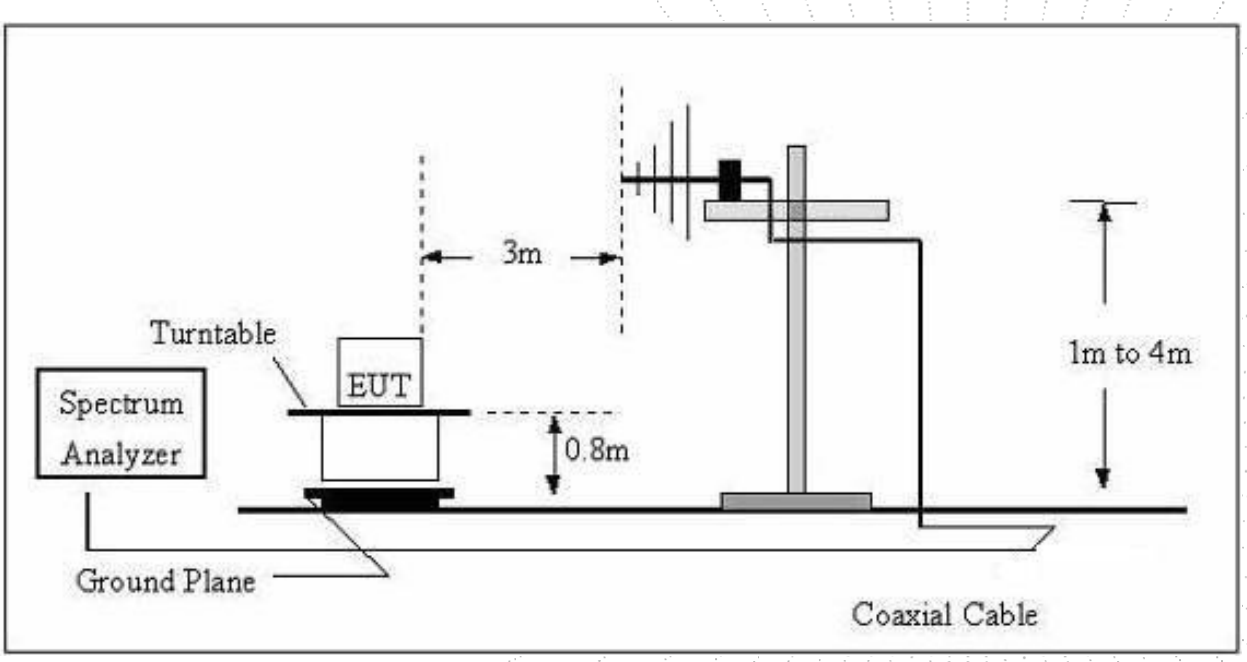
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

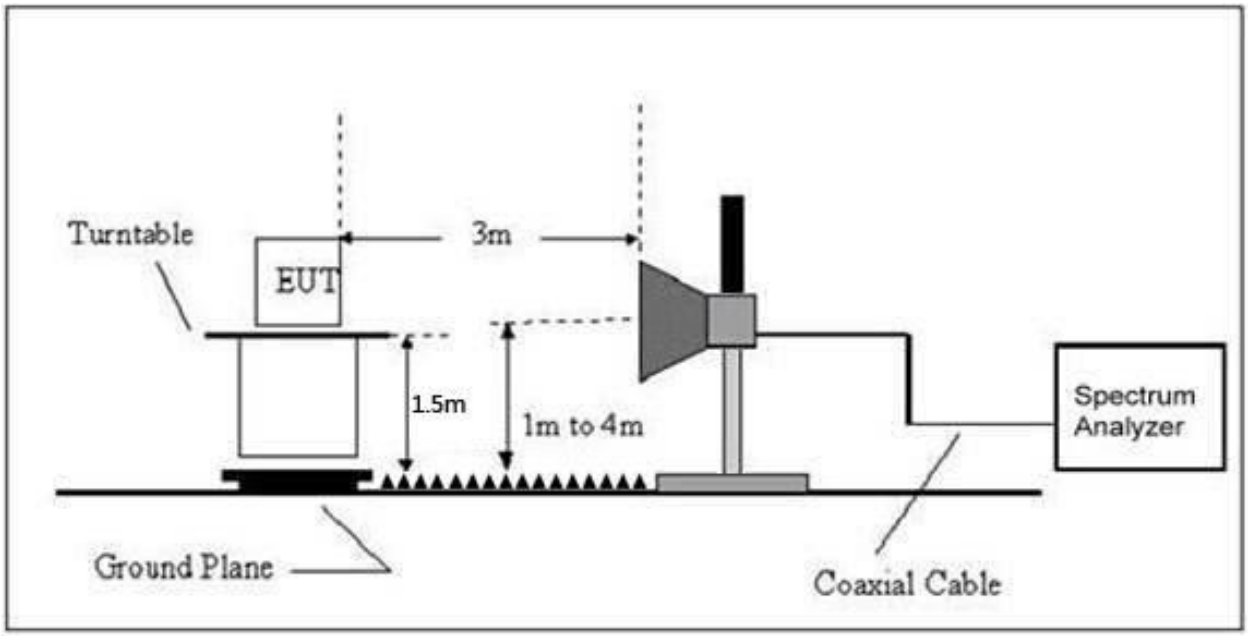
（A）Radiated Emission Test-Up Frequency Below 30MHz



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



（C）Radiated Emission Test-Up Frequency Above 1GHz



7.2 Limit

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.

Frequency (MHz)	Field Strength uV/m	Distance (m)	Field Strength Limit at 3m Distance	
			uV/m	dBuV/m
0.009 ~ 0.490	2400/F(kHz)	300	10000 * 2400/F(kHz)	$20\log^{(2400/F(kHz))} + 80$
0.490 ~ 1.705	24000/F(kHz)	30	100 * 24000/F(kHz)	$20\log^{(24000/F(kHz))} + 40$
1.705 ~ 30	30	30	100 * 30	$20\log^{(30)} + 40$
30 ~ 88	100	3	100	$20\log^{(100)}$
88 ~ 216	150	3	150	$20\log^{(150)}$
216 ~ 960	200	3	200	$20\log^{(200)}$
Above 960	500	3	500	$20\log^{(500)}$

Field Strength of Fundamental Limit (Part 15.231(e)):

Fundamental frequency (MHz)	Field Strength of Fundamental (microvolt/meter)	Field Strength of spurious emissions (microvolt/meter)
40.66-40.70	1,000	100
70-130	500	50
130-174	500 to 1,500	50 to 150
174-260	1,500	150
260-470	1,500 to 5,000	150 to 500
Above 470	5,000	500

** linear interpolations
[Where F is the frequency in MHz, the formulas for calculating the maximum permitted fundamental field strengths are as follows: for the band 130-174 MHz, uV/m at 3 meters = 22.72727(F) -2454.545; for the band 260-470 MHz, uV/m at 3 meters = 16.6667(F) - 2833.3333. The maximum permitted unwanted emission level is 20 dB below the maximum permitted fundamental level.]

Frequency (MHz)	Limit (dBuV/m) (at 3M)	
	Peak	Average
437.40	92.98	72.98

Limits Of Radiated Emission Measurement (Above 1000mhz)

Frequency (MHz)	Limit (dBuV/m) (at 3M)	
	Peak	Average
Above 1000	74	54

Notes:
(1)The limit for radiated test was performed according to FCC PART 15C.
(2)The tighter limit applies at the band edges.
(3) Emission level (dBuV/m)=20log Emission level (uV/m).

Frequency Range Of Radiated Measurement (For unintentional radiators)

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)
Below 1.705	30
1.705 – 108	1000
108 – 500	2000
500 – 1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower

7.3 Test Procedure

Receiver Parameter	Setting
Attenuation	Auto
9kHz~150kHz	RBW 200Hz for QP
150kHz~30MHz	RBW 9kHz for QP
30MHz~1000MHz	RBW 120kHz for QP

Spectrum Parameter	Setting
1-6GHz	RBW 1 MHz /VBW 1 MHz for Peak, RBW 1 MHz / VBW 10Hz for Average

Below 1GHz test procedure as below:
a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. 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.
d. 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.
e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
f. 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.
Above 1GHz test procedure as below:
g. Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 metre to 1.5 metre(Above 18GHz the distance is 1 meter and table is 1.5 metre).
h. Test the EUT in the lowest channel, the middle channel ,the Highest channel.

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

Above 1GHz test procedure as below:
a. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. 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.
d. 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 and the rota 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. 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.
g. Test the EUT in the lowest channel, the Highest channel.
Note: Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

7.4 EUT Operating Conditions

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

7.5 Test Result

Below 30MHz

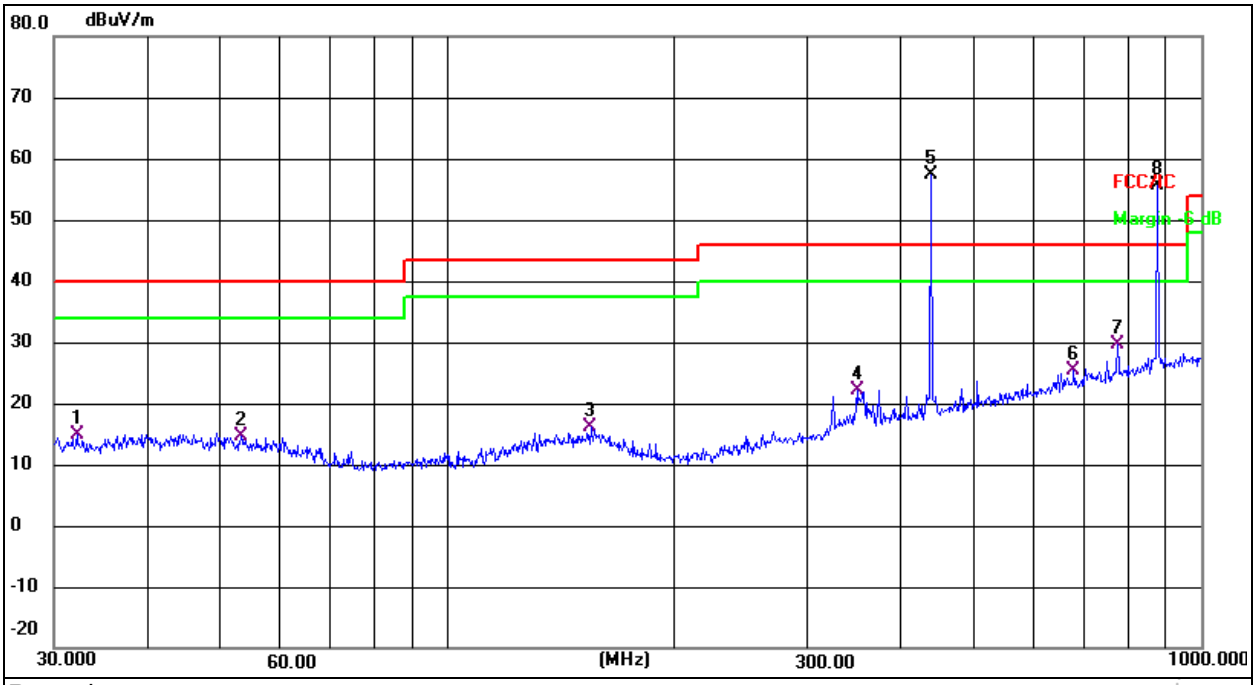
Temperature:	26℃	Relative Humidity:	24%
Pressure:	101 kPa	Test Voltage:	DC 6V
Test Mode:	Mode 1		

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

Note:
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
Distance extrapolation factor =40 log (specific distance/test distance)(dB);
Limit line = specific limits(dBuv) + distance extrapolation factor.

Between 30MHz – 1GHz

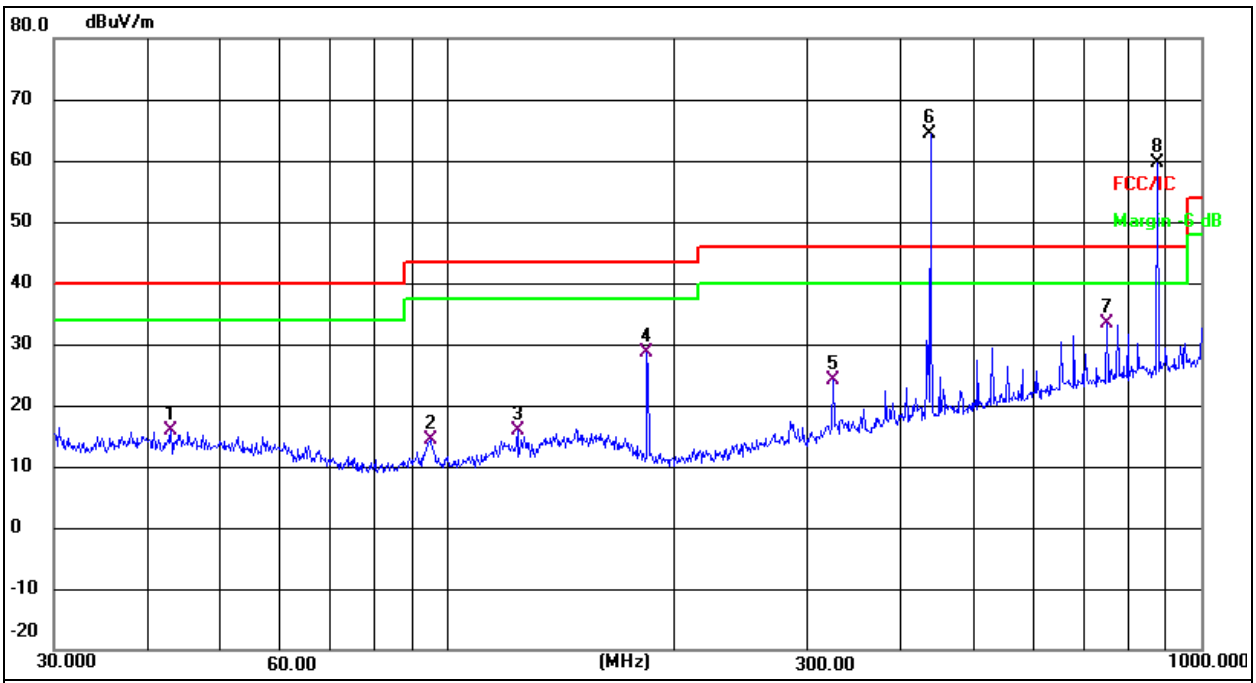
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101kPa	Phase :	Horizontal
Test Voltage :	DC 6V	Test Mode:	Mode 1



Remark:
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. Measurement=Reading Level+ Correct Factor
3. Over= Measurement-Limit

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	32.1795	27.54	-12.55	14.99	40.00	-25.01	QP
2	53.1313	27.13	-12.53	14.60	40.00	-25.40	QP
3	154.8204	27.43	-11.29	16.14	43.50	-27.36	QP
4	349.2500	31.39	-9.37	22.02	46.00	-23.98	QP
5 *	437.1200	64.39	-7.04	57.35	92.98	-35.63	peak
6	677.5798	26.79	-1.50	25.29	46.00	-20.71	QP
7	774.1584	29.94	-0.19	29.75	46.00	-16.25	QP
8 X	875.2468	54.55	1.07	55.62	72.98	-17.36	peak

Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101kPa	Phase :	Vertical
Test Voltage :	DC 6V	Test Mode:	Mode 1



Remark:
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. Measurement=Reading Level+ Correct Factor
3. Over= Measurement-Limit

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	42.8998	27.98	-12.15	15.83	40.00	-24.17	QP
2	94.7601	29.87	-15.60	14.27	43.50	-29.23	QP
3	123.6985	28.74	-12.87	15.87	43.50	-27.63	QP
4	183.8440	42.38	-13.86	28.52	43.50	-14.98	QP
5	324.4561	34.12	-10.08	24.04	46.00	-21.96	QP
6 *	437.1199	71.44	-7.04	64.40	92.98	-28.58	peak
7	750.1083	33.78	-0.47	33.31	46.00	-12.69	QP
8 X	875.2470	58.51	1.07	59.58	72.98	-13.4	peak

For average Emission

Frequency MHz	Peak Level dBuV/m	Duty cycle factor	Average Level dBuV/m	Limit AV	Margin	Polarization
437.40	57.35	-7.98	49.37	72.98	-23.61	Horizontal
874.80	55.62	-7.98	47.64	52.98	-5.34	Horizontal

Notes: 1. Average emission Level = Peak Level + Duty cycle factor
2.Duty cycle level please see clause 9.

Frequency MHz	Peak Level dBuV/m	Duty cycle factor	Average Level dBuV/m	Limit AV	Margin	Polarization
437.40	64.4	-7.98	56.42	72.98	-16.56	Vertical
874.80	59.58	-7.98	51.6	52.98	-1.38	Vertical

Notes: 1. Average emission Level = Peak Level + Duty cycle factor
2. Duty cycle level please see clause 9.

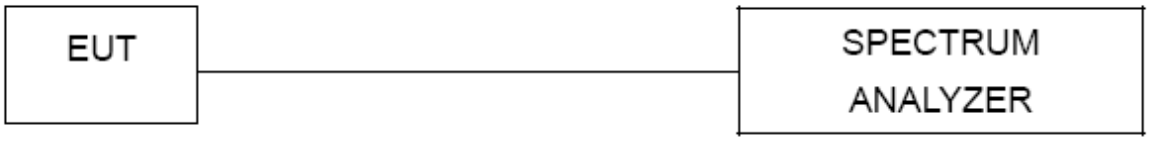
Radiated Spurious Emission (1GHz to 10th harmonics)

Frequency MHz	Peak Level dBuV/m	Duty cycle factor	Average Level dBuV/m	Limit		Margin dB		Polarization
				PK	AV	PK	AV	
1312.2	56.86	-7.98	48.88	74	54	-17.14	-5.12	Vertical
1749.6	55.25	-7.98	47.27	74	54	-18.75	-6.73	Vertical
2624.4	53.86	-7.98	45.88	74	54	-20.14	-8.12	Vertical
3061.8	57.18	-7.98	49.2	74	54	-16.82	-4.8	Vertical
3499.2	56.75	-7.98	48.77	74	54	-17.25	-5.23	Vertical
3936.6	52.29	-7.98	44.31	74	54	-21.71	-9.69	Vertical
1312.2	54.60	-7.98	46.62	74	54	-19.4	-7.38	Horizontal
1749.6	56.18	-7.98	48.2	74	54	-17.82	-5.8	Horizontal
2624.4	58.06	-7.98	50.08	74	54	-15.94	-3.92	Horizontal
3061.8	56.30	-7.98	48.32	74	54	-17.7	-5.68	Horizontal
3499.2	52.44	-7.98	44.46	74	54	-21.56	-9.54	Horizontal
3936.6	57.03	-7.98	49.05	74	54	-16.97	-4.95	Horizontal

Notes: 1.Average emission Level = Peak Level + Duty cycle factor
2.Duty cycle level please see clause 9.
3. Pulse Desensitization Correction Factor
Pulse Width (PW) =100ms
RBW=1 MHz
PW(100ms) > 1/RBW (1us)
Therefore PDCF is not needed
4.Other harmonics emissions are lower than 20dB below the allowable limit.

8. Bandwidth Test

8.1 Block Diagram Of Test Setup



8.2 Limit

According to FCC 15.231(c) requirement:
The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating between 70 MHz to 900 MHz. Those devices operating above 900 MHz, the emission spurious shall be no wider than 0.5% of the center frequency. Bandwidth is determined at the points 20 dB down from the modulated carrier.
B.W (20dBc) Limit = 0.25% * f(MHz) = 0.25% * 437.4MHz = 1.0935MHz

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> Measurement Bandwidth or Channel Separation
RB	1% to 5% of the OBW
VB	≥RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

8.3 Test Procedure

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
b. Spectrum Setting : RBW= 1% to 5% of the OBW, VBW≥ RBW, Sweep time = Auto.

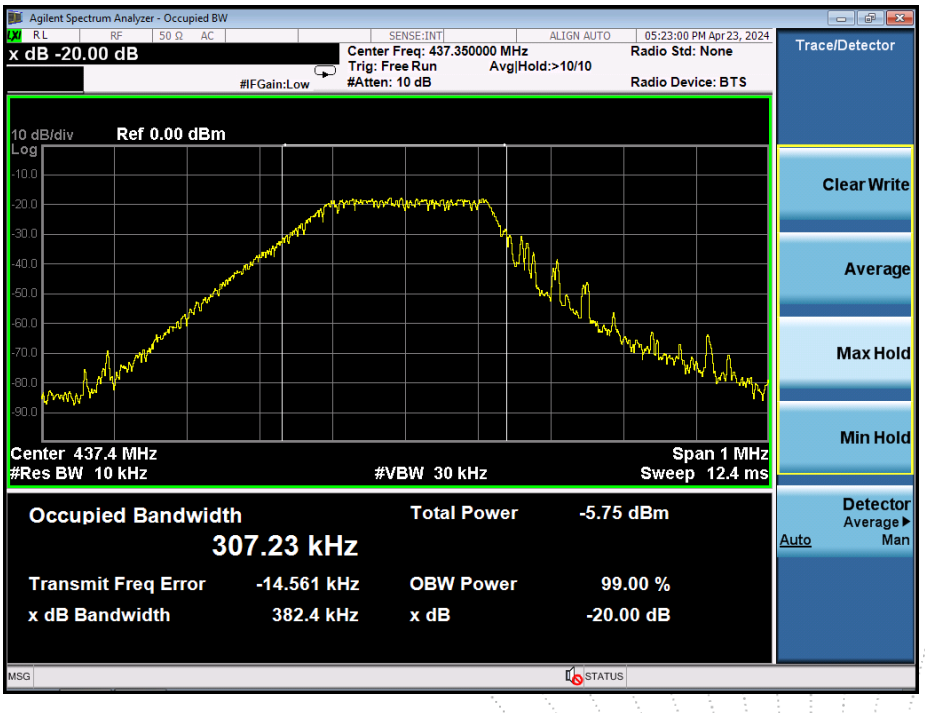
8.4 EUT Operating Conditions

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.

8.5 Test Result

Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage:	DC 6V
Test Mode:	Mode 1		

Frequency	20dB Bandwidth (MHz)	Limit (MHz)	Result
437.4 MHz	0.382	1.0935	PASS

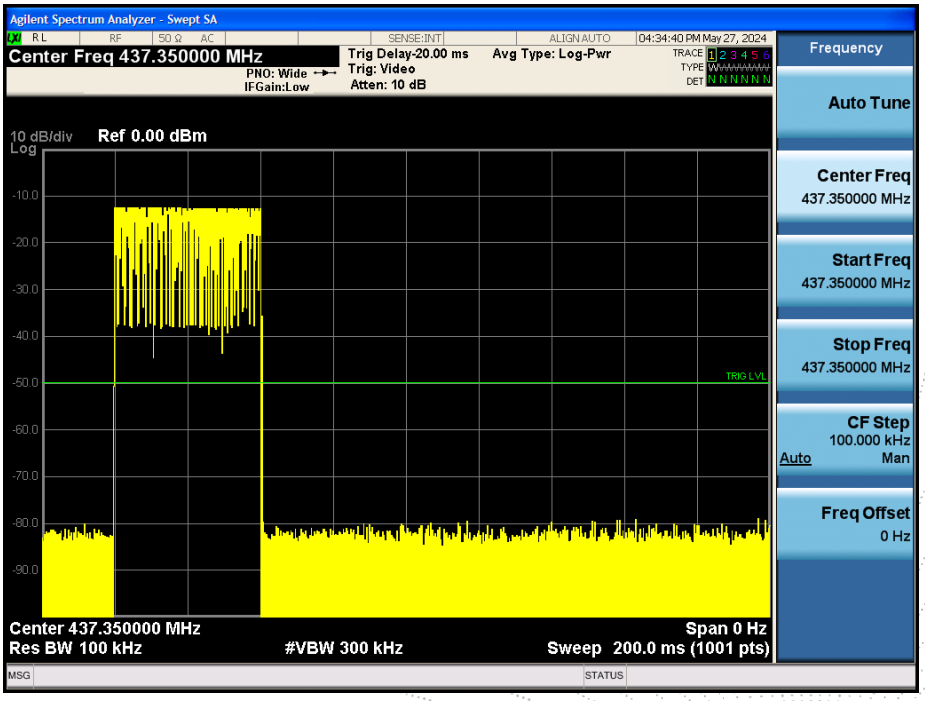


9. Calculation Of Average Factor

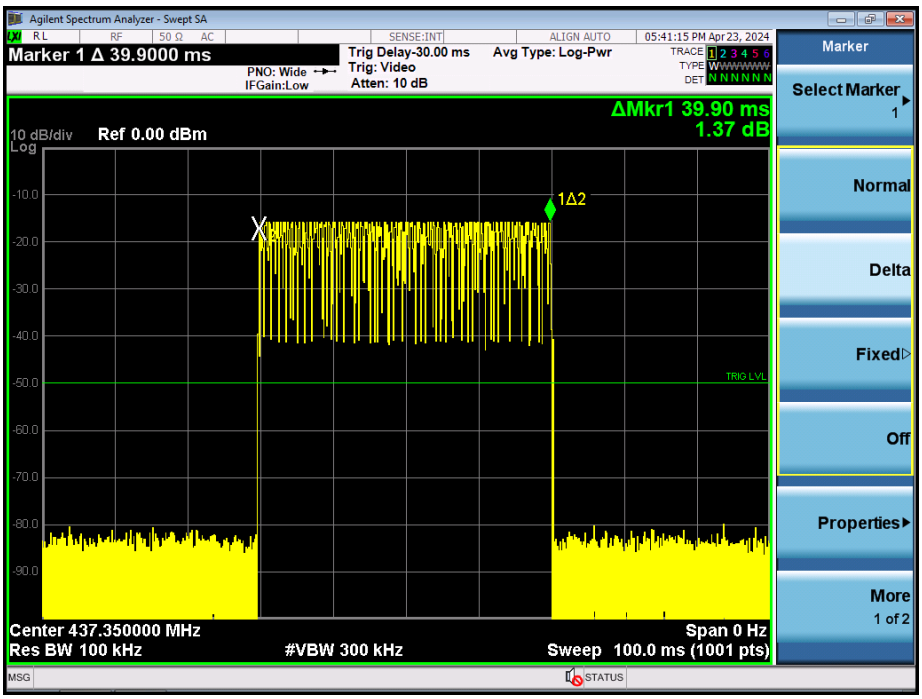
The output field strengths of specification in accordance with the FCC rules specify measurements with an average detector. During the test, a spectrum analyzer incorporating a peak detector was used. Therefore, a reduction factor can be applied to the resultant peak signal level and compared to the limit for measurement instrumentation incorporating an average detector.
The duty cycle is measured in 100 ms or the repetition cycle period, whichever is a shorter time frame. The duty cycle is measured by placing the spectrum analyzer to set zero span at 100kHz resolution bandwidth.
Averaging factor in dB =20log (duty cycle)

The duration of one cycle =206ms
The duty cycle is simply the on-time divided the duration of one cycle
Duty Cycle = 39.9/100ms
=0.399
Therefore, the averaging factor is found by 20log0.399= -7.98 dB
Test plot as follows:
Note: During the 100ms, the amount of pulse and on-time of pulse are the same for every pulse train.

Cycle

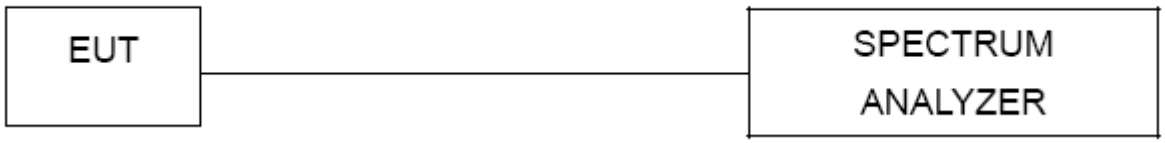


On-time


Agilent Spectrum Analyzer - Swept SA
Marker 1 Δ 39.9000 ms
PNO: Wide
IFGain:Low
Trig Delay-30.00 ms
Trig: Video
Atten: 10 dB
Avg Type: Log-Pwr
05:41:15 PM Apr 23, 2024
ΔMkr1 39.90 ms
1.37 dB
10 dB/div
Log
Ref 0.00 dBm
1Δ2
TRIG LVL
Center 437.350000 MHz
Res BW 100 kHz
#VBW 300 kHz
Span 0 Hz
Sweep 100.0 ms (1001 pts)
Marker
Select Marker
Normal
Delta
Fixed
Off
Properties
More
1 of 2

10. DWELL TIME

10.1 Block Diagram Of Test Setup



10.2 Limit

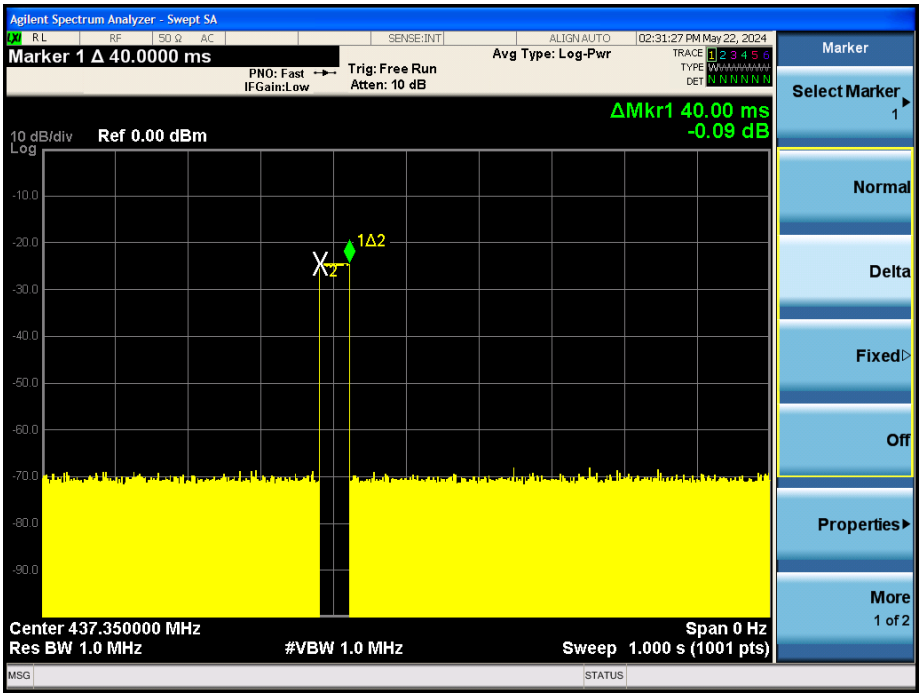
According to FCC 15.231(e) requirement: The duration of each transmission shall not be greater than one second and the silent period between transmissions shall be at least 30 times the duration of the transmission but in no case less than 10 seconds.

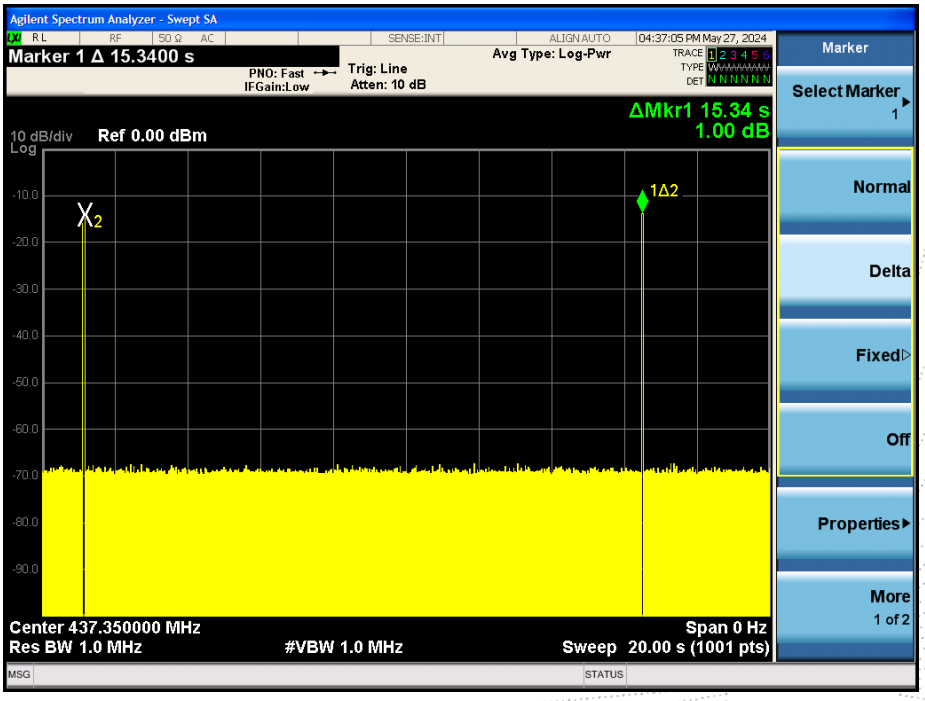
10.3 Test Procedure

a) Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
b) 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.
c) Set RBW to 1 MHz and VBW of spectrum analyzer to 1 MHz, Span 0 Hz.
d) 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.
e) Repeat above procedures until all measured frequencies were complete.

10.4 Test Result

Release Time	Limit	Result
0.040s	<1s	Pass
Silent period	Limit	Result
15.34s	>10s	Pass
Note: 30* Release Time=1.2s		


Agilent Spectrum Analyzer - Swept SA
Marker 1 Δ 40.0000 ms
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
02:31:27 PM May 22, 2024
ΔMkr1 40.00 ms
-0.09 dB
10 dB/div
Log
Ref 0.00 dBm
1Δ2
Center 437.350000 MHz
Res BW 1.0 MHz
#VBW 1.0 MHz
Span 0 Hz
Sweep 1.000 s (1001 pts)
Marker
Select Marker
Normal
Delta
Fixed
Off
Properties
More
1 of 2


Agilent Spectrum Analyzer - Swept SA
Marker 1 Δ 15.3400 s
PNO: Fast
IFGain:Low
Trig: Line
Atten: 10 dB
Avg Type: Log-Pwr
04:37:05 PM May 27, 2024
ΔMkr1 15.34 s
1.00 dB
10 dB/div
Log
Ref 0.00 dBm
1Δ2
Center 437.350000 MHz
Res BW 1.0 MHz
#VBW 1.0 MHz
Span 0 Hz
Sweep 20.00 s (1001 pts)
Marker
Select Marker
Normal
Delta
Fixed
Off
Properties
More
1 of 2

11. Antenna Requirement

11.1 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.

11.2 EUT Antenna

The EUT antenna is the permanent welding Internal antenna. It complies with the standard requirement.

12. EUT Photographs

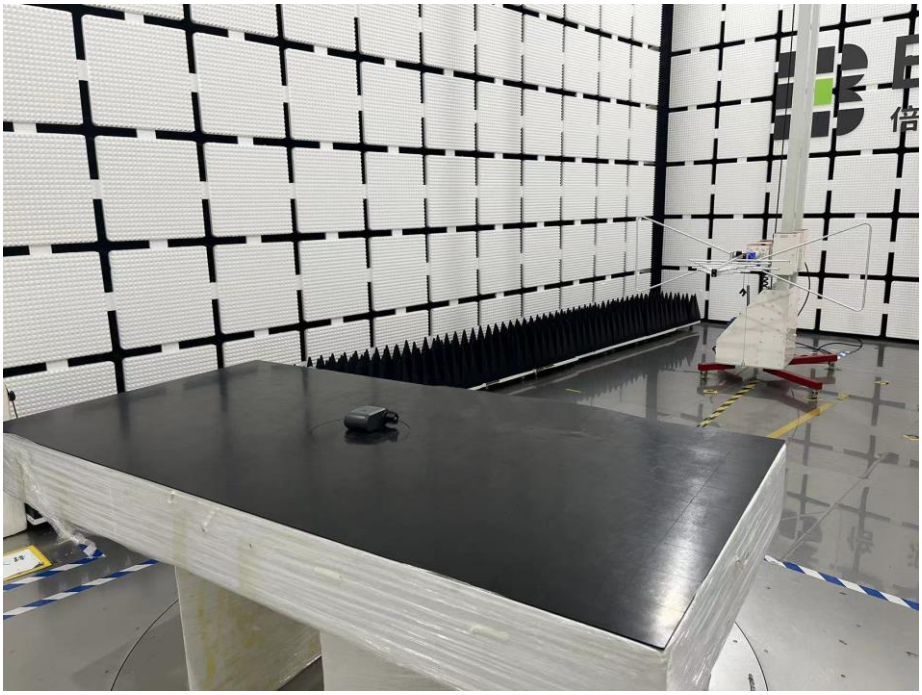
EUT Photo 1

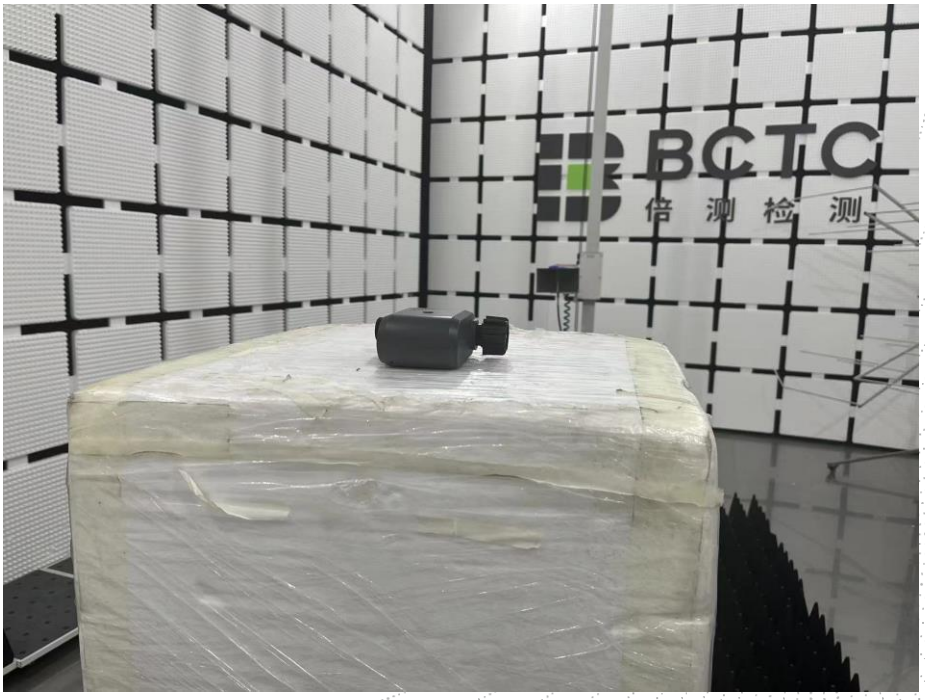
EUT Photo 2

NOTE: Appendix-Photographs Of EUT Constructional Details

13. EUT Test Setup Photographs

Radiated Measurement Photos





STATEMENT

1. The equipment lists are traceable to the national reference standards.

2. The test report can not be partially copied unless prior written approval is issued from our lab.

3. The test report is invalid without the "special seal for inspection and testing".

4. The test report is invalid without the signature of the approver.

5. The test process and test result is only related to the Unit Under Test.

6. Sample information is provided by the client and the laboratory is not responsible for its authenticity.

7. The quality system of our laboratory is in accordance with ISO/IEC17025.

8. If there is any objection to this test report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

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Complaint/Advice E-mail: advice@bctc-lab.com.cn

※※※※※ END ※※※※※