RF TEST REPORT

Product Name: Bluetooth Speaker

Model Name: TURTLEBOXG3, TURTLEBOX

FCC ID: 2A28W-TURTLEBOXG3

Issued For : Turtlebox Audio LLC

11020 Katy Freeway Suite 202 Houston, TX 77043

Issued By : Shenzhen LGT Test Service Co., Ltd.

Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China

Report Number:	LGT25B110RF02
Sample Received Date:	Mar 06, 2025
Date of Test:	Mar 06, 2025 – April 03, 2025
Date of Issue:	April 03, 2025

TEST REPORT CERTIFICATION

Applicant:	Turtlebox Audio LLC
Address:	11020 Katy Freeway Suite 202 Houston, TX 77043
Manufacturer:	Turtlebox Audio LLC
Address:	11020 Katy Freeway Suite 202 Houston, TX 77043
Product Name:	Bluetooth Speaker
Trademark:	TURTLEBOX
Model Name:	TURTLEBOXG3, TURTLEBOX
Sample Status:	Normal

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC Part 15.247, Subpart C ANSI C63.10-2013 KDB558074 D01 15.247 Meas Guidance v05r02	PASS

Prepared by:

Zane Shan

Zane Shan
Engineer

Approved by:

Vita Li
Technical Director

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Revision History

Rev.	Issue Date	Revisions
00	April 03, 2025	Initial Issue

1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:
KDB 558074 D01 Part 15.247 Meas Guidance v05r02.

FCC Part 15.247, Subpart C			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	PASS	--
15.247 (a)(2)	6dB Bandwidth	N/A	--
15.247 (b)(3)	Output Power	N/A	--
15.209	Radiated Spurious Emission	PASS	--
15.247 (d)	Conducted Spurious & Band Edge Emission	N/A	--
15.247 (e)	Power Spectral Density	N/A	--
15.205	Restricted Band Edge Emission	PASS	--
Part 15.247(d)/ Part 15.209(a)	Band Edge Emission	PASS	--
15.203	Antenna Requirement	N/A	--

NOTE:

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

(2) All tests are according to ANSI C63.10-2013.

(3) Changes of the prototype：

A、Change the Bluetooth chip memory(U14) from JL1706C8(8Mbit Flash) to JL1706C6(16Mbit Flash), Retest part 15.207Conducted Emission/part 15.209 Radiated Spurious Emission/ part 15.205 Restricted bands of operation and Part 15.247(d) Band Edge Emission.

B、MOS tube Q10/Q20/Q17/Q21 change(Pin to pin and parameters are the same), Retest part 15.207Conducted Emission/part 15.209 Radiated Spurious Emission.

1.1 TEST FACTORY

Company Name:	Shenzhen LGT Test Service Co., Ltd.
Address:	Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China
Accreditation Certificate	A2LA Certificate No.: 6727.01
	FCC Registration No.: 746540
	CAB ID: CN0136

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement **y** ± **U**, where expended 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	All emissions, radiated 9K-30MHz	±2.84dB
2	All emissions, radiated 30M-1GHz	±4.39dB
3	All emissions, radiated 1G-6GHz	±5.10dB
4	All emissions, radiated>6G	±5.48dB
5	Conducted Emission (9KHz-150KHz)	±2.79dB
6	Conducted Emission (150KHz-30MHz)	±2.80dB

Note: The measurement uncertainty is not included in the test result.

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

Product Name:	Bluetooth Speaker
Trademark:	TURTLEBOX
Model Name:	TURTLEBOXG3
Series Model:	TURTLEBOX
Model Difference:	Only the model is different.
Product Description:	Operation Frequency: 2402~2480 MHz Modulation Type: GFSK Radio Technology: BLE Bluetooth Configuration: BLE (1M PHY, 2M PHY) Number Of Channel: 40 Antenna Designation: FPC Antenna Gain (dBi) 3.49
Channel List:	Please refer to the Note 3.
Adapter:	Input: AC 100-240V 50/60hz 1.25A Output: DC 15V 3A
Battery:	Rated Capacity: 7800mAh 86.58Wh Rated Voltage: 11.1V
Hardware Version:	N/A
Software Version:	N/A
Connecting I/O Port(s):	Please refer to the Note 1.

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User Manual.
2. The antenna information refers to the manufacturer provide report, applicable only to the tested sample identified in the report. Due to the incorrect antenna information, a series of problems such as the accuracy of the test results will be borne by the customer.
3.

Channel List							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2402	10	2422	20	2442	30	2462
01	2404	11	2424	21	2444	31	2464
02	2406	12	2426	22	2446	32	2466
03	2408	13	2428	23	2448	33	2468
04	2410	14	2430	24	2450	34	2470
05	2412	15	2432	25	2452	35	2472
06	2414	16	2434	26	2454	36	2474
07	2416	17	2436	27	2456	37	2476
08	2418	18	2438	28	2458	38	2478
09	2420	19	2440	29	2460	39	2480

2.2 DESCRIPTION OF THE TEST MODES

For conducted test items and radiated spurious emissions
Each of these EUT operation mode(s) or test configuration mode(s) mentioned below was evaluated respectively.

Worst Mode	Description	Data/Modulation
Mode 1	TX CH00(2402MHz)	1 MHz/GFSK
Mode 2	TX CH19(2440MHz)	1 MHz/GFSK
Mode 3	TX CH39(2480MHz)	1 MHz/GFSK

Worst Mode	Description	Data/Modulation
Mode 4	TX CH00(2402MHz)	2 MHz/GFSK
Mode 5	TX CH19(2440MHz)	2 MHz/GFSK
Mode 6	TX CH39(2480MHz)	2 MHz/GFSK

Note:
(1) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported.
(2) We have be tested for all avaiable U.S. voltage and frequency (For 120V,50/60Hz and 240V, 50/60Hz) for which the device is capable of operation, and the worst case of 120V/60Hz is shown in the report.
(3) The battery is fully-charged during the radited and RF conducted test.

For AC Conducted Emission

Test Case	
AC Conducted Emission	Mode 7: Keeping BLE TX

2.3 TEST SOFTWARE AND POWER LEVEL

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level.

Test software Version	Test program: BLE	
FCC_assist_1.0.0.2	Mode Or Modulation type	Power setting
	1M	Default
	2M	Default

2.4 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS

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.

Accessories Equipment

Description	Manufacturer	Model	S/N	Rating
Adapter	GS-P150300E454A	GS-P150300E454A	N/A	Input: 100-240V ~ 50/60Hz 1.25A Output: 15V, 3A

Auxiliary Equipment

Description	Manufacturer	Model	S/N	Rating
Laptop	Lenovo	HKF-16	N/A	N/A

Note:

(1) For detachable type I/O cable should be specified the length in cm in『Length』column.

(2) “YES” is means “with core”; “NO” is means “without core”.

2.5 EQUIPMENTS LIST

Conducted Emission					
Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Until
EMI Test Receiver	R&S	ESU8	100372	2025.03.06	2026.03.05
LISN	COM-POWER	LI-115	02032	2025.03.05	2026.03.04
LISN	SCHWARZBECK	NNLK 8122	00160	2025.03.05	2026.03.04
Transient Limiter	CYBERTEK	EM5010A	E2250100049	2025.03.05	2026.03.04
Temperature & Humidity	JINGCHUANG	BT-3	N.A	2025.03.10	2026.03.09
Testing Software	EMC-I_V1.4.0.3_SKET				

Radiated Test equipment					
Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Until
EMI Test Receiver	R&S	ESU8	100372	2025.03.06	2026.03.05
Active loop Antenna	ETS	6502	00049544	2025.03.11	2028.03.10
Spectrum Analyzer	Keysight	N9010B	MY60242508	2025.03.05	2026.03.04
Trilog Broadband Antenna (30M-1G)	SCHWARZBECK	VULB 9168	2705	2024.05.17	2027.05.16
Horn Antenna(1-18G)	SCHWARZBECK	3115	10SL0060	2025.03.10	2028.03.09
Horn Antenna(18-40G)	SCHWARZBECK	BBHA 9170	685	2023.10.23	2026.10.22
Pre-amplifier(30M-1G)	EMtrace	RP01A	02019	2025.03.06	2026.03.05
Pre-amplifier(1-26.5G)	Agilent	8449B	3008A4722	2025.03.06	2026.03.05
Pre-amplifier(18-40G)	SCHWARZBECK	BBV 9721	9721-019	2024.10.21	2025.10.20
Temperature& Humidity test chamber	AISRY	LX-1000L	171200018	2024.08.05	2025.08.04
Antenna Tower	SAEMC	BK-4AT-BS-D	SK2021093008	N.A	N.A
Temperature & Humidity	JINGCHUANG	BT-3	N.A	2025.03.10	2026.03.09
Testing Software	EMC-I_V1.4.0.3_SKET				

3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION LIMITS

The radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table.

FREQUENCY (MHz)	Conducted Emission limit (dBuV)	
	Quasi-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

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

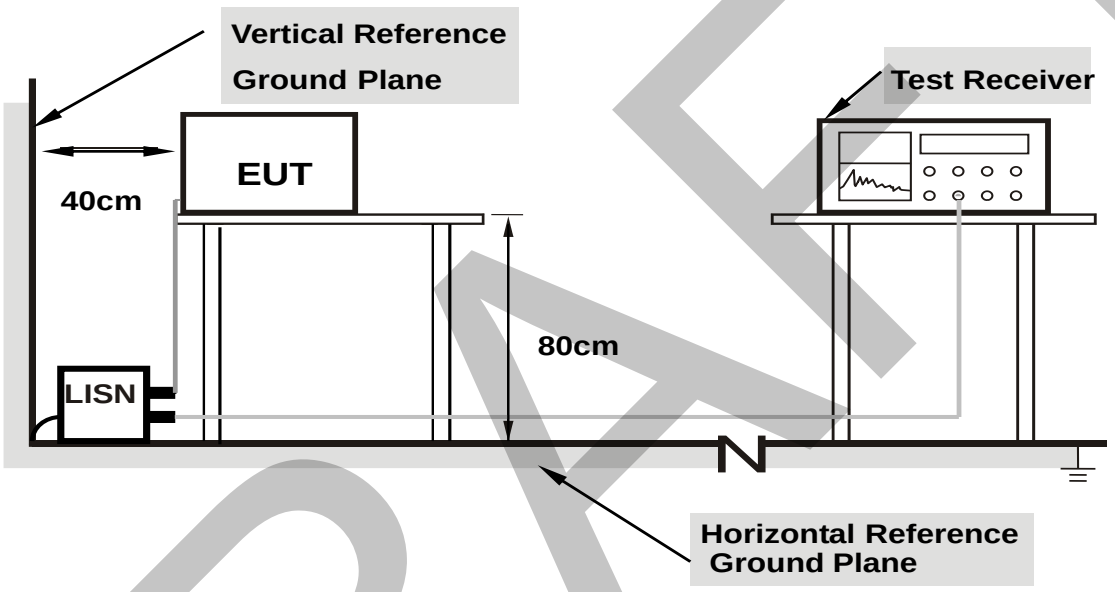
The following table is the setting of the receiver

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

3.2 TEST PROCEDURE

a. The EUT is 0.8 m from the horizontal ground plane and 0.4 m from the vertical ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments are powered from additional LISN(s). The LISN provides 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
b. 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 40 cm long.
c. 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.
d. LISN is at least 80 cm from the nearest part of EUT chassis.
e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.3 TEST SETUP



Note: 1. Support units were connected to second LISN.

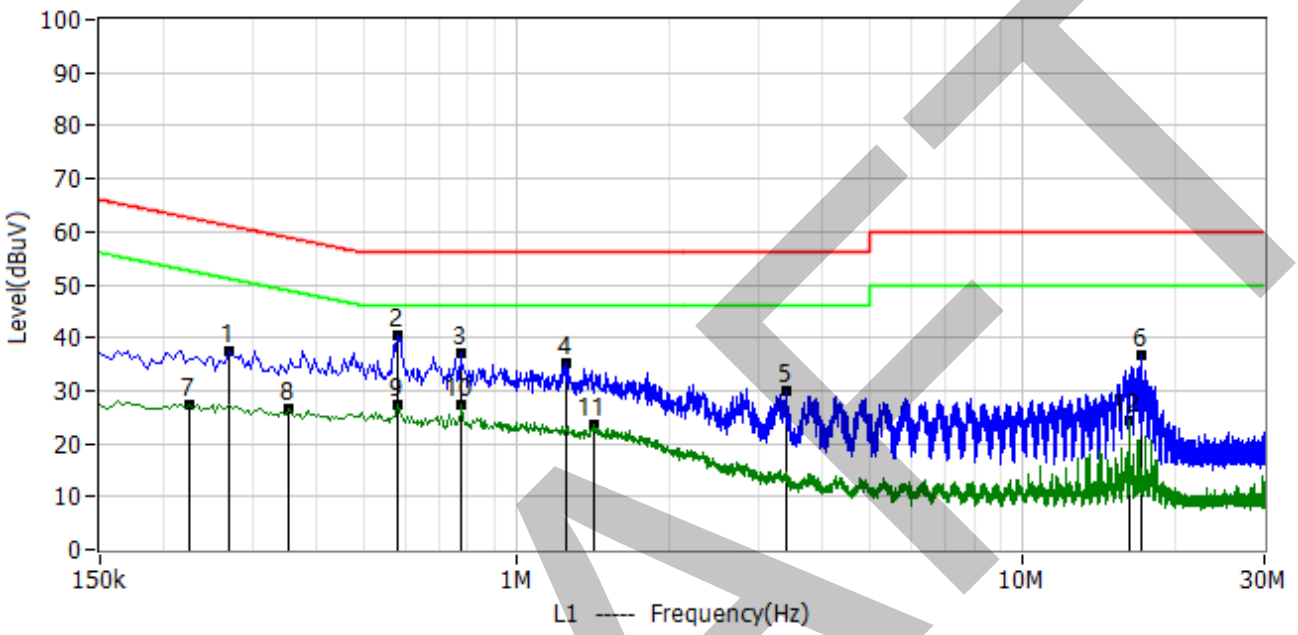
2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes support units.

3.4 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.

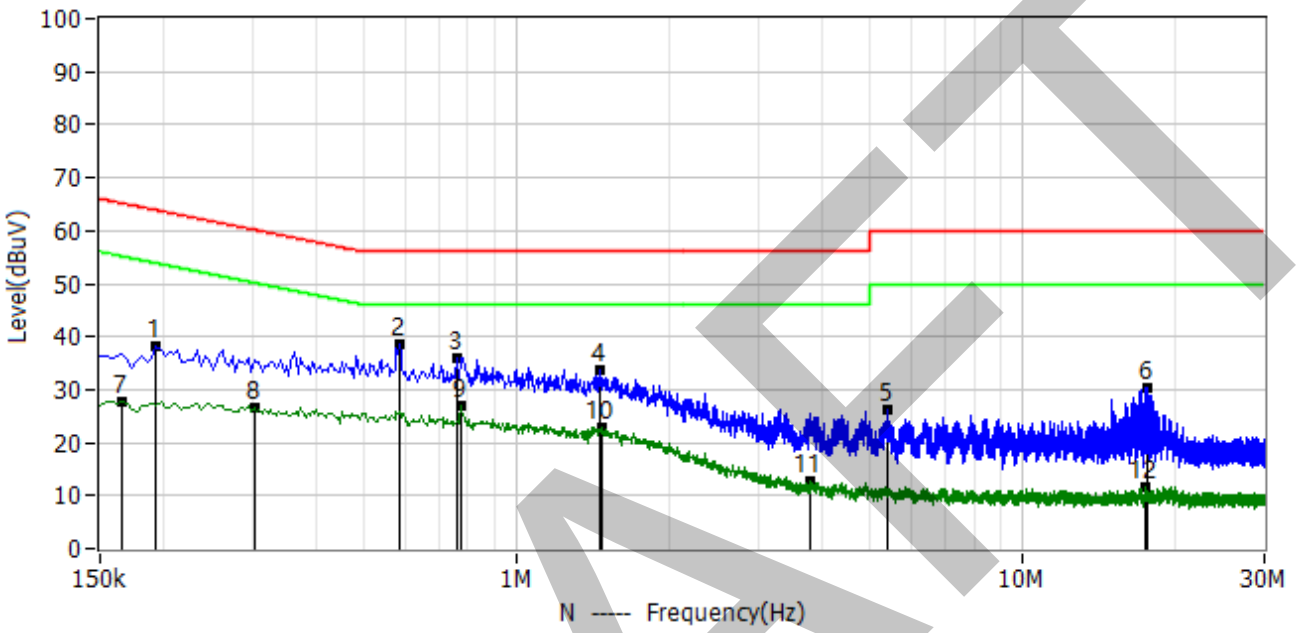
3.5 TEST RESULTS

Project: LGT25B110	Test Engineer: LiuH
EUT: Bluetooth Speaker	Temperature: 21℃
M/N: TURTLEBOX	Humidity: 60%RH
Test Voltage: AC 120V/60Hz	Test Data: 2025-04-02
Test Mode: TX BLE 2402	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB	Level dBuV	Limit dBuV	Margin dB	Detector	Polar
1*	0.270	26.88	10.59	37.47	61.12	-23.65	QP	L1
2*	0.582	29.80	10.57	40.37	56.00	-15.63	QP	L1
3*	0.774	26.57	10.60	37.17	56.00	-18.83	QP	L1
4*	1.246	24.61	10.76	35.37	56.00	-20.63	QP	L1
5*	3.398	18.72	11.17	29.89	56.00	-26.11	QP	L1
6*	17.098	25.20	11.49	36.69	60.00	-23.31	QP	L1
7*	0.226	16.85	10.61	27.46	52.60	-25.14	AV	L1
8*	0.354	16.04	10.57	26.61	48.87	-22.26	AV	L1
9*	0.582	16.87	10.57	27.44	46.00	-18.56	AV	L1
10*	0.778	16.56	10.60	27.16	46.00	-18.84	AV	L1
11*	1.418	12.62	10.82	23.44	46.00	-22.56	AV	L1
12*	16.166	13.00	11.45	24.45	50.00	-25.55	AV	L1

Project: LGT25B110	Test Engineer: LiuH
EUT: Bluetooth Speaker	Temperature: 21℃
M/N: TURTLEBOX	Humidity: 60%RH
Test Voltage: AC 120V/60Hz	Test Data: 2025-04-02
Test Mode: TX BLE 2402	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB	Level dBuV	Limit dBuV	Margin dB	Detector	Polar
1*	0.194	27.60	10.56	38.16	63.86	-25.71	QP	N
2*	0.586	28.08	10.55	38.63	56.00	-17.37	QP	N
3*	0.762	25.44	10.56	36.00	56.00	-20.00	QP	N
4*	1.462	23.04	10.64	33.68	56.00	-22.32	QP	N
5*	5.390	15.27	10.83	26.10	60.00	-33.90	QP	N
6*	17.554	18.70	11.51	30.21	60.00	-29.79	QP	N
7*	0.166	17.31	10.56	27.87	55.16	-27.29	AV	N
8*	0.302	16.12	10.59	26.71	50.19	-23.48	AV	N
9*	0.774	16.31	10.56	26.87	46.00	-19.13	AV	N
10*	1.474	12.15	10.64	22.79	46.00	-23.21	AV	N
11*	3.798	1.92	10.81	12.73	46.00	-33.27	AV	N
12*	17.530	0.01	11.51	11.52	50.00	-38.48	AV	N

4. RADIATED EMISSION MEASUREMENT

4.1 RADIATED EMISSION LIMITS

In case the emission fall within the Restricted band specified on Part15.205 (a)&209(a) limit in the table and according to ANSI C63.10-2013 below has to be followed.

LIMITS OF RADIATED EMISSION MEASUREMENT (0.009MHz - 1000MHz)

Frequencies (MHz)	Field Strength (micorvolts/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

LIMITS OF RADIATED EMISSION MEASUREMENT (1GHz-25 GHz)

FREQUENCY (MHz)	(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).

LIMITS OF RESTRICTED FREQUENCY BANDS

FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (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	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	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	Above 38.6
13.36-13.41			

For Radiated Emission

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak/QP/AV
Start Frequency	9 KHz/150KHz (Peak/QP/AV)
Stop Frequency	150KHz/30MHz (Peak/QP/AV)
RB / VB (emission in restricted band)	200Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz); 200Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz)

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak/QP
Start Frequency	30 MHz (Peak/QP)
Stop Frequency	1000 MHz (Peak/QP)
RB / VB (emission in restricted band)	120 KHz / 300 KHz

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak
Start Frequency	1000 MHz (Peak/AV)
Stop Frequency	10th carrier hamonic (Peak/AV)
RB / VB (emission in restricted band)	1 MHz / 3 MHz(Peak) 1 MHz/1/T MHz(AVG)

For Restricted band

Spectrum Parameter	Setting
Detector	Peak
Start/Stop Frequency	Lower Band Edge: 2310 to 2410 MHz Upper Band Edge: 2475 to 2500 MHz
RB / VB	1 MHz / 3 MHz(Peak) 1 MHz/1/T MHz(AVG)

Receiver Parameter	**Setting**
Start ~ Stop Frequency	9kHz~90kHz / RB 200Hz for PK & AV
Start ~ Stop Frequency	90kHz~110kHz / RB 200Hz for QP
Start ~ Stop Frequency	110kHz~490kHz / RB 200Hz for PK & AV
Start ~ Stop Frequency	490kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

4.2 TEST PROCEDURE

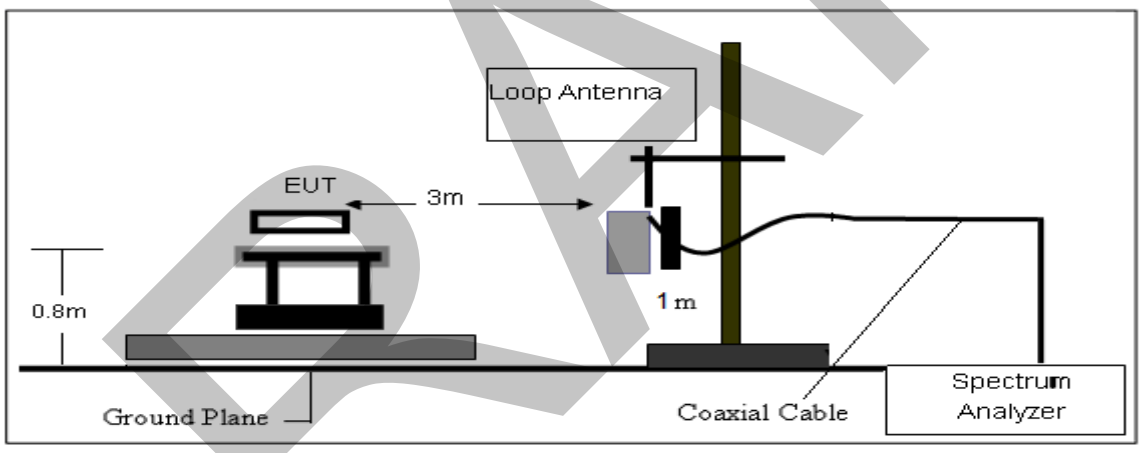
a. The measuring distance at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz, and above 1GHz.
b. The EUT was placed on the top of a rotating table 0.8 m (above 1GHz is 1.5 m) above the ground at a 3 m anechoic chamber test site. The table was rotated 360 degree to determine the position of the highest radiation.
c. The height of the equipment shall be 0.8 m(above 1GHz is 1.5 m); the height of the test antenna shall vary between 1 m to 4 m. Horizontal and vertical polarization of the antenna are set to make the measurement.
d. 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 QuasiPeak detector mode will be re-measured.
e. If the Peak Mode measured value is compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and no additional QP Mode measurement was performed.
f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

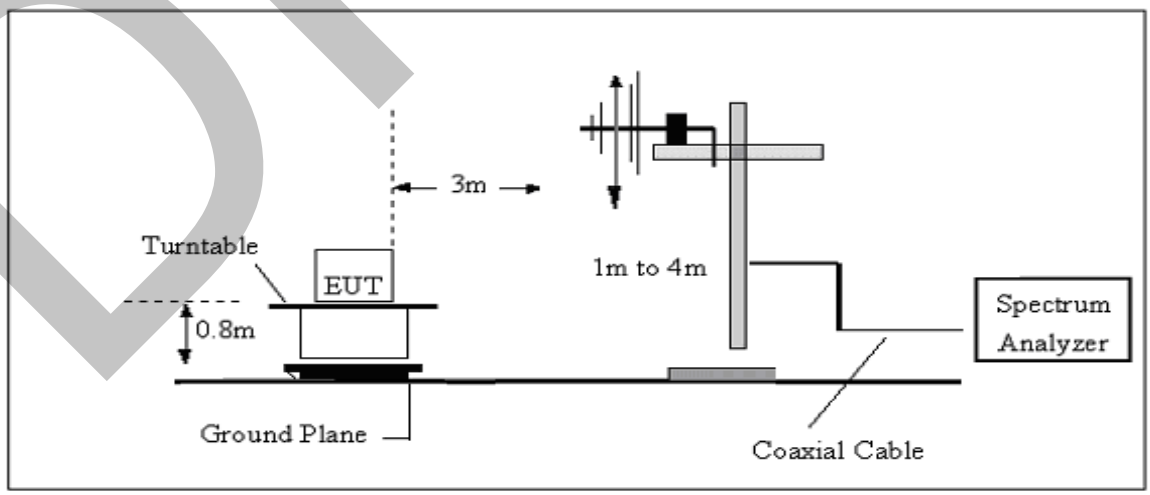
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

4.3 TEST SETUP

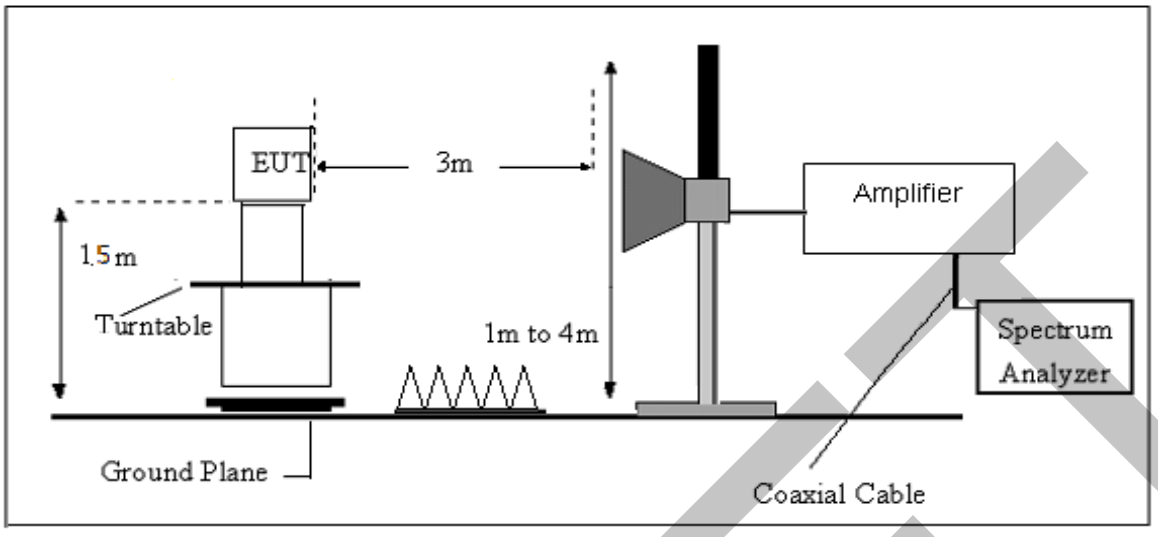
(A) Radiated Emission Test-Up Frequency Below 30MHz



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



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



4.4 EUT OPERATING CONDITIONS

Please refer to section 3.4 of this report.

4.5 FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

FS = RA + AF + CL - AG

Where

FS = Field Strength

CL = Cable Attenuation Factor (Cable Loss)

RA = Reading Amplitude

AG = Amplifier Gain

AF = Antenna Factor

For example

Frequency	FS	RA	AF	CL	AG	Factor
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dB)	(dB)	(dB)
300	40	58.1	12.2	1.6	31.9	-18.1

Factor=AF+CL-AG

4.6 TEST RESULTS

Results of Radiated Emissions (9 KHz~30MHz)

No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Remark
1*	-	-	-	-	-	-	-	See Note

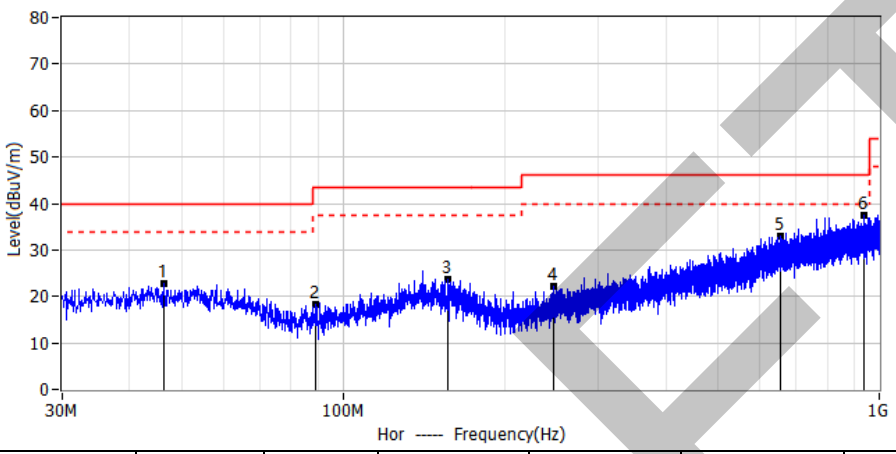
Note:

The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and the permissible value has no need to be reported.

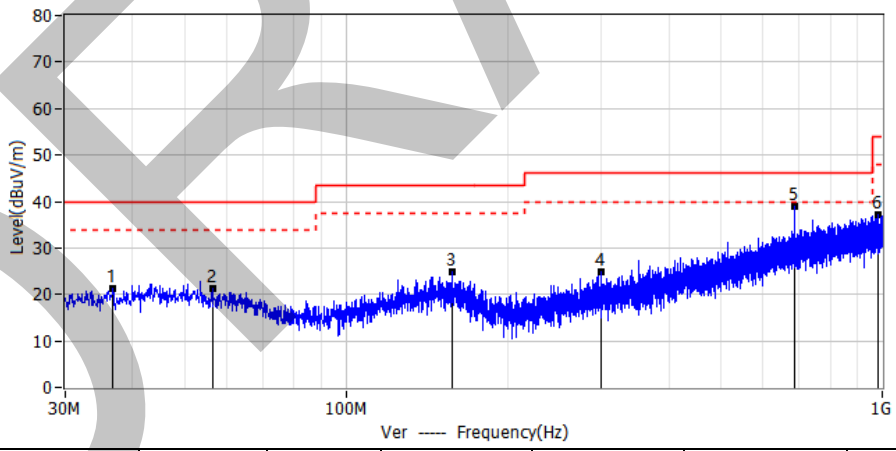
Distance extrapolation factor = 40 log (specific distance / test distance) (dB);
Limit line = specific limits (dBuV) + distance extrapolation factor.

Results of Radiated Emissions (30MHz~1000MHz)

Project: LGT25B110	Test Engineer: LiuH
EUT: Bluetooth Speaker	Temperature: 21℃
M/N: TURTLEBOX	Humidity: 60%RH
Test Voltage: Battery	Test Data: 2025-04-02
Test Mode: TX BLE 2402	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	46.490	2.32	20.43	22.75	40.00	-17.25	QP	Hor
2*	88.928	2.08	16.25	18.33	43.50	-25.17	QP	Hor
3*	157.191	1.93	21.87	23.80	43.50	-19.70	QP	Hor
4*	246.431	2.53	19.59	22.12	46.00	-23.88	QP	Hor
5*	655.529	3.18	29.85	33.03	46.00	-12.97	QP	Hor
6*	939.133	4.25	33.29	37.54	46.00	-8.46	QP	Hor



No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	36.790	1.27	19.88	21.15	40.00	-18.85	QP	Ver
2*	56.433	1.39	19.78	21.17	40.00	-18.83	QP	Ver
3*	157.434	2.98	21.80	24.78	43.50	-18.72	QP	Ver
4*	298.569	3.48	21.35	24.83	46.00	-21.17	QP	Ver
5*	687.539	8.86	30.09	38.95	46.00	-7.05	QP	Ver
6*	983.025	3.08	34.10	37.18	54.00	-16.82	QP	Ver

Results of Radiated Emissions (Above 1000MHz)

Above 1000 MHz							
Frequency (MHz)	Reading (dBμV)	Corrected Factor (dB)	Result (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector	Polarity
Low Channel (2402 MHz)							
3264.65	56.26	-8.45	47.81	74.00	-26.19	PK	Vertical
3264.65	46.04	-8.45	37.59	54.00	-16.41	AV	Vertical
3264.65	56.17	-8.45	47.72	74.00	-26.28	PK	Horizontal
3264.65	45.63	-8.45	37.18	54.00	-16.82	AV	Horizontal
4804.28	55.34	-6.09	49.25	74.00	-24.75	PK	Vertical
4804.28	44.64	-6.09	38.55	54.00	-15.45	AV	Vertical
4804.56	54.13	-6.09	48.04	74.00	-25.96	PK	Horizontal
4804.56	44.17	-6.09	38.08	54.00	-15.92	AV	Horizontal
5359.74	56.73	-6.68	50.05	74.00	-23.95	PK	Vertical
5359.74	47.34	-6.68	40.66	54.00	-13.34	AV	Vertical
5359.70	56.89	-6.68	50.21	74.00	-23.79	PK	Horizontal
5359.70	47.66	-6.68	40.98	54.00	-13.02	AV	Horizontal
7205.77	60.45	-8.13	52.32	74.00	-21.68	PK	Vertical
7205.77	50.72	-8.13	42.59	54.00	-11.41	AV	Vertical
7205.71	60.47	-8.13	52.34	74.00	-21.66	PK	Horizontal
7205.71	50.03	-8.13	41.90	54.00	-12.10	AV	Horizontal
Middle Channel (2440 MHz)							
3264.82	56.40	-8.45	47.95	74.00	-26.05	PK	Vertical
3264.82	45.71	-8.45	37.26	54.00	-16.74	AV	Vertical
3264.77	55.39	-8.45	46.94	74.00	-27.06	PK	Horizontal
3264.77	45.44	-8.45	36.99	54.00	-17.01	AV	Horizontal
4880.35	54.66	-6.09	48.57	74.00	-25.43	PK	Vertical
4880.35	44.76	-6.09	38.67	54.00	-15.33	AV	Vertical
4880.49	54.11	-6.09	48.02	74.00	-25.98	PK	Horizontal
4880.49	44.50	-6.09	38.41	54.00	-15.59	AV	Horizontal
5359.69	56.70	-6.68	50.02	74.00	-23.98	PK	Vertical
5359.69	47.09	-6.68	40.41	54.00	-13.59	AV	Vertical
5359.64	57.04	-6.68	50.36	74.00	-23.64	PK	Horizontal
5359.64	47.60	-6.68	40.92	54.00	-13.08	AV	Horizontal
7310.88	60.29	-8.13	52.16	74.00	-21.84	PK	Vertical
7310.88	50.37	-8.13	42.24	54.00	-11.76	AV	Vertical
7310.82	60.41	-8.13	52.28	74.00	-21.72	PK	Horizontal
7310.82	50.60	-8.13	42.47	54.00	-11.53	AV	Horizontal

High Channel (2480 MHz)							
3264.65	55.32	-8.45	46.87	74.00	-27.13	PK	Vertical
3264.65	45.15	-8.45	36.70	54.00	-17.30	AV	Vertical
3264.72	56.02	-8.45	47.57	74.00	-26.43	PK	Horizontal
3264.72	46.09	-8.45	37.64	54.00	-16.36	AV	Horizontal
4960.28	54.83	-6.09	48.74	74.00	-25.26	PK	Vertical
4960.28	44.20	-6.09	38.11	54.00	-15.89	AV	Vertical
4960.50	55.37	-6.09	49.28	74.00	-24.72	PK	Horizontal
4960.50	45.17	-6.09	39.08	54.00	-14.92	AV	Horizontal
5359.70	57.60	-6.68	50.92	74.00	-23.08	PK	Vertical
5359.70	47.83	-6.68	41.15	54.00	-12.85	AV	Vertical
5359.67	57.80	-6.68	51.12	74.00	-22.88	PK	Horizontal
5359.67	47.49	-6.68	40.81	54.00	-13.19	AV	Horizontal
7439.88	60.38	-8.13	52.25	74.00	-21.75	PK	Vertical
7439.88	50.71	-8.13	42.58	54.00	-11.42	AV	Vertical
7439.77	60.59	-8.13	52.46	74.00	-21.54	PK	Horizontal
7439.77	50.60	-8.13	42.47	54.00	-11.53	AV	Horizontal

Remark:
In frequency ranges 18~25GHz no any other harmonic emissions detected which are tested to compliance with the limit. No recording in the test report. No any other emissions level which are attenuated less than 20dB below the limit. No recording in the test report.

4.6 TEST RESULTS (BAND EDGE REQUIREMENTS)

Frequency (MHz)	Reading (dBμV)	Corrected Factor (dB）	Result (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector	Polarity
GFSK							
2390.00	12.76	34.10	46.86	74.00	-27.14	PK	Vertical
2390.00	1.08	34.10	35.18	54.00	-18.82	AV	Vertical
2400.00	13.21	34.11	47.32	74.00	-26.68	PK	Vertical
2400.00	1.03	34.11	35.14	54.00	-18.86	AV	Vertical
2390.00	13.72	34.10	47.82	74.00	-26.18	PK	Horizontal
2390.00	0.74	34.10	34.84	54.00	-19.16	AV	Horizontal
2400.00	12.74	34.11	46.85	74.00	-27.15	PK	Horizontal
2400.00	1.63	34.11	35.74	54.00	-18.26	AV	Horizontal
2483.50	13.17	34.44	47.61	74.00	-26.39	PK	Vertical
2483.50	1.04	34.44	35.48	54.00	-18.52	AV	Vertical
2500.00	13.53	34.46	47.99	74.00	-26.01	PK	Vertical
2500.00	1.95	34.46	36.41	54.00	-17.59	AV	Vertical
2483.50	12.26	34.44	46.70	74.00	-27.30	PK	Horizontal
2483.50	1.79	34.44	36.23	54.00	-17.77	AV	Horizontal
2500.00	12.33	34.46	46.79	74.00	-27.21	PK	Horizontal
2500.00	1.36	34.46	35.82	54.00	-18.18	AV	Horizontal
Low measurement frequencies is range from 2310 to 2404 MHz, high measurement frequencies is range from 2478 to 2500 MHz.							

APPENDIX I - MEASUREMENT PHOTOS

Note: Please see the attached RF_Test Setup photos for FCC ID & IC.

APPENDIX II - PHOTOGRAPHS OF EUT CONSTRUCTIONAL DETAILS

Note: Please see the attached TURTLEBOX_External Photos and TURTLEBOX_Internal Photos.

※※※※※END OF THE REPORT※※※※※