Safe Space Scan Technology LLC

TEST REPORT

SCOPE OF WORK
FCC TESTING–ThunderBeat

REPORT NUMBER
240704035SZN-005

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101, 201, Building B, No. 308 Wuhe Avenue, Zhangkengjing Community, GuanHu Subdistrict, LongHua District, Shenzhen.

Tel: (86 755) 8601 6288
Fax: (86 755) 8601 6751
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RF
TEST REPORT

Report No.	**: 240704035SZN-005**
Product	**: Satelite Speaker**
Model No.	**: ThunderBeat**
FCC ID	**: 2BF6V-HT512FR**

Applicant:	**Safe Space Scan Technology LLC** **9169 W ATLANTIC AVE SUITE 118 DELRAY BEACH, FL 33446 US**
Test Method/ Standard:	**FCC Part 15 Subpart E;** **KDB 789033 D02 v02r01;** **KDB 662911 D01 v02r01;** **KDB 905462 D02 v02;** **ANSI C63.10-2013**
Test By:	**Intertek Testing Services Shenzhen Ltd. Longhua Branch** **101, 201, Building B, No. 308 Wuhe Avenue, Zhangkengjing Community, GuanHu Subdistrict, LongHua District, Shenzhen, P.R. China.**

Prepared and Checked by:

Mandy

Mandy Chen
Engineer

Approved by:

Johnny Wang

Johnny Wang
Project Engineer
Date: 24 October 2024

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15.407 a (1)/(3)	Power Spectrum Density test	4	Pass
15.407 e	6dB Bandwidth	5	Pass
15.407 b, 15.205, 15.209	Radiated spurious emission test	6	Pass
15.207	AC line conducted emission test	7	Pass
15.407 g	Frequency Stability	8	Pass

1. General information

1.1 Identification of the EUT

Product:	Satelite Speaker
Model No.:	ThunderBeat
Type of Device:	N/A
Nominal Channel Bandwidth:	6MHz
Frequency range:	5155MHz~5245 MHz
Channel Number and Operating Frequency:	91 channels for 5155 MHz ~ 5245 MHz
Modulation:	GFSK
Rated Power:	AC 100-240V~ 50/60Hz 20W
Test Date(s):	04 July 2024 to 18 September 2024
Note 1:	This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.
Note 2:	When determining the test conclusion, the Measurement Uncertainty of test has been considered.

1.2 Additional information about the EUT

The equipment under test (EUT) is a Satelite Speaker with 5.2GHz function operating in 5155-5245MHz. The EUT is powered by AC 100-240V, 50/60Hz. For more detail information pls. refer to the user manual.
For more detail features, please refer to User's description as file name “descri.pdf”.

Related Submittal(s) Grants
This is an application for certification of 5G transceiver device

1.3 Antenna description (15.203)

The EUT uses PCB Antenna which in accordance to Section 15.203 is considered sufficient to comply with the provisions of this section.
Antenna1 Gain: 3.63 dBi Max for 5.2G.
Antenna2 Gain: 2.70 dBi Max for 5.2G.
(This information is provided by applicant, and the applicant is responsible for the authenticity of the provided information.)

1.4 Peripherals equipment

Description	Manufacturer	Remark
AC Power cord*1	N/A (provided by Client)	(Detachable, Length 150cm)

2. Test specifications

2.1 Test standard

The EUT was performed according to the procedures in FCC Part 15 E, Section15.203, 15.207, 15.209, 15.407 and ANSI C63.10/2013, method of measurement: KDB 789033.

The test of radiated measurements according to FCC Part15 Section 15.33(a) had been conducted and the field strength of this frequency band was all meet limit requirement, thus we evaluate the EUT pass the specified test.

The AC power conducted emissions was invested over the frequency range from 0.15 MHz to 30 MHz using a receiver bandwidth of 9 kHz (15.207 paragraph).

Radiated emissions were invested cover the frequency range from 9KHz to 30MHz using a receiver RBW of 9kHz, from 30 MHz to 1000 MHz using a receiver RBW of 120 kHz record QP reading, and the frequency over 1 GHz using a spectrum analyzer RBW of 1 MHz, VBW of 3MHz, Detector=Peak record for Peak reading, RBW of 1 MHz, VBW of 3MHz, Detector=RMS record for Average reading recorded on the report.

The EUT setup configurations please refer to the photo of radiated setup photos.pdf & conducted setup photos.pdf.

2.2 Operation mode

The EUT was supplied by and it was run in TX mode that was controlled by client provided RF testing program.

The EUT was transmitted continuously during the test. The worst case test result was showed in the report.

2.3 EUT Exercising Software

The EUT exercise program (provided by client) used during radiated and conducted testing was designed to exercise the various system components in a manner similar to a typical use. The worst case configuration is used in all specified testing.

Table for Parameters of Test Software Setting
During testing, Channel & Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

Test software: sscom.5.13.1

3. Maximum Output Power test (FCC 15.407)

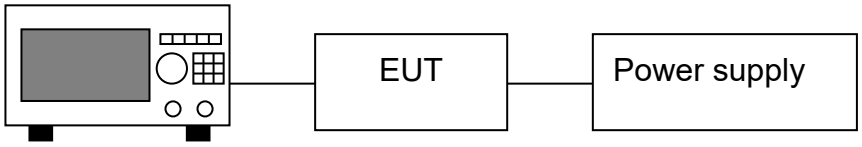
3.1 Operating environment

Temperature: 25 ℃
Relative Humidity: 55 %
Atmospheric Pressure: 1011 hPa

3.2 Test setup & procedure

The power output per FCC §15.407(a) was measured on the EUT using a 50 ohm SMA cable connected to Average Power Meter and the measurement method refer to 789033 D02. Power was read directly and cable loss correction (0.5dB) was added to the reading to obtain power at the EUT antenna terminals.

Block Diagram:



Power meter

3.3 Limit

Frequency range (MHz)	Max Conducted TX Power	Max EIRP
5150~5250	30dBm (1W) for master device	4W (36dBm) with 6dBi antenna
	24dBm (250mW) for client device	

Remark: 1) *Where B is the 26dB emission Bandwidth in MHz.
2) The device was declared as Slave device.
3) Tx Power Reduction (dBm-by-dBi) required when antenna exceeds 6dBi.

3.4 Measured data of Maximum Output Power test results

Max Conducted TX Power

The more detail please refer to “Appendix of 240704035SZN-005” Appendix B.

4. Power Spectrum Density test (FCC 15.407)

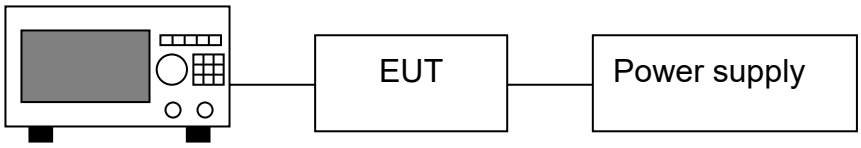
4.1 Operating environment

Temperature:	25	℃
Relative Humidity:	50	%
Atmospheric Pressure:	1013	hPa

4.2 Test setup & procedure

Method of Measurement:

The power spectrum density per FCC §15.407(a) was measured from the antenna port of the EUT using a 50 ohm spectrum analyzer with the resolution bandwidth set at 1MHz/500KHz, the video bandwidth set at 3 MHz/2MHz (measurement method refer to KDB 789033 D02). Power spectrum density was read directly and cable loss reading to obtain power at the EUT antenna terminals.
Block Diagram:



Spectrum Analyzer

4.3 Limit

Frequency range(MHz)	Max Conducted Power Spectral Density
5150~5250	*17dBm/MHz for master device
	11dBm/MHz for mobile/portable client device

Remark: 1) The device was declared as Slave device.
2) Tx Power Reduction (dBm-by-dBi) required when antenna exceeds 6dBi.

4.4 Measured data of Power Spectrum Density test results

The more detail please refer to “Appendix of 240704035SZN-005” Appendix C.

5. Minimum 6 dB RF Bandwidth (FCC 15.407)

5.1 Operating environment

Temperature:	25	℃
Relative Humidity:	50	%
Atmospheric Pressure:	1011	hPa

5.2 Test setup & procedure

The Minimum 6 dB RF Bandwidth per 789033 D02 was measured from the antenna port of the EUT using a 50 ohm spectrum analyzer with the resolution bandwidth set at 100KHz, and set the video bandwidth (VBW) ≥ 3 x RBW. For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A PEAK output reading was taken, a DISPLAY line was drawn 6 dB lower than PEAK level. The 6dB bandwidth was determined from where the channel output spectrum intersected the display line.

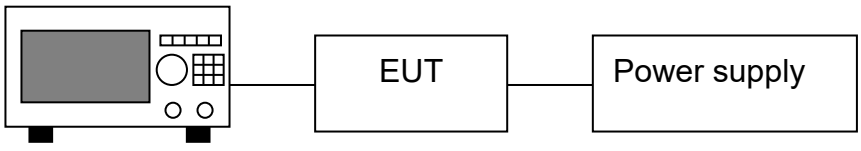
For 26dB down Emission Bandwidth

The 26dB down Emission Bandwidth per 789033 D02 was measured from the antenna port of the EUT using a 50 ohm spectrum analyzer with the resolution bandwidth set RBW = approximately 1% of the emission bandwidth. Set the VBW > RBW, Detector = Peak, Trace mode = max hold (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%).

For 99% Occupied Bandwidth

The 99% Occupied Bandwidth per 789033 D02 was measured from the antenna port of the EUT using a 50 ohm spectrum analyzer with the resolution bandwidth set center frequency to the nominal EUT channel center frequency, set span = 1.5 times to 5.0 times the OBW, set RBW = 1 % to 5 % of the OBW, set VBW ≥ 3x RBW, The 99% occupied bandwidth was determined from where the channel output spectrum intersected the display line.

Block Diagram:



Spectrum Analyzer

5.3 Limit

Frequency range(MHz)	Minimum 6 dB RF Bandwidth Limit
5150~5250	N/A

5.4 Measured data of 26dB down Emission Bandwidth test results

The more detail please refer to “Appendix of 240704035SZN-005” Appendix A1.

Note: 99% Occupied Bandwidth for reference. The more detail please refer to “Appendix of 240704035SZN-005” Appendix A2.

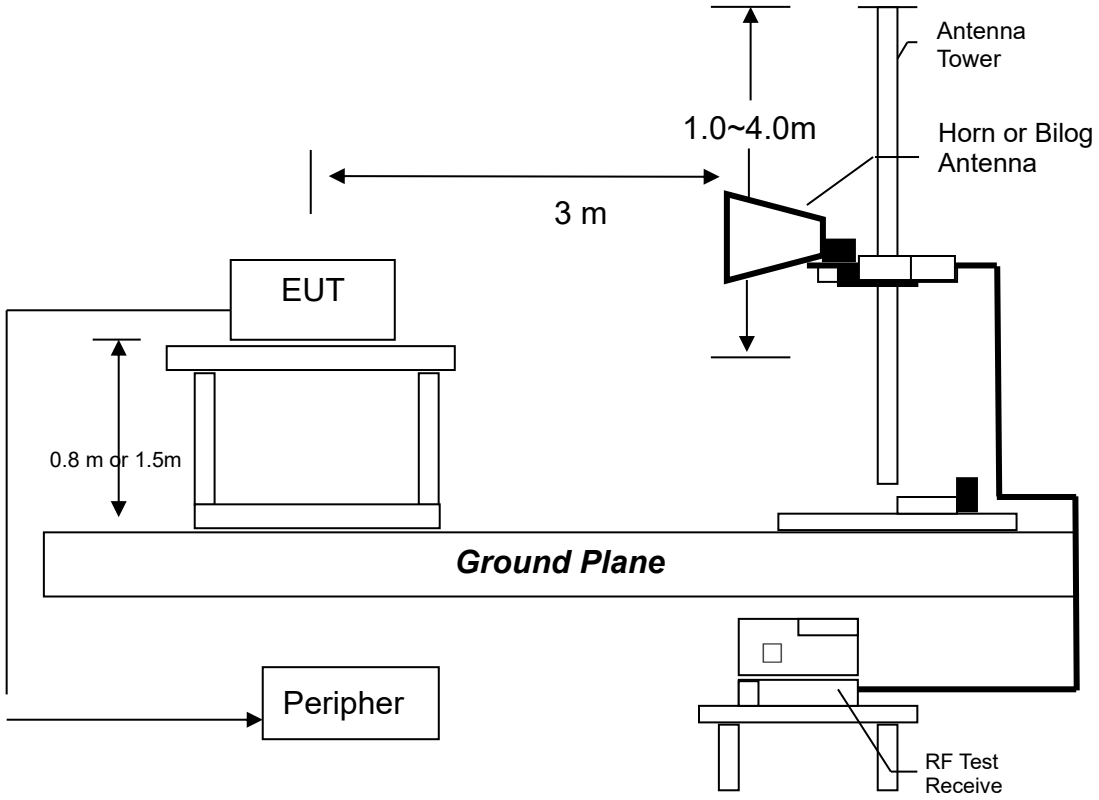
6. Radiated Emission test (FCC 15.205 & 15.209 & 15.407)

6.1 Operating environment

Temperature:	23	℃
Relative Humidity:	56	%
Atmospheric Pressure	1011	hPa

6.2 Test setup & procedure

The Diagram below shows the test setup, which is utilized to make these measurements.



Radiated emission measurements were performed from 9KHz to tenth harmonic or 40GHz.

The EUT for testing is arranged on a styrene turntable with the height of 0.8m up to 1GHz and 1.5m above 1GHz. If some peripherals apply to the EUT, the peripherals will be connected to EUT and the whole system. During the test, all cables were arranged to produce worst-case emissions. The signal is maximized through rotation. The height of antenna and polarization is changing constantly for exploring for maximum signal level. The height of antenna can be up to 4 meters and down to 1 meter.

The measurement for radiated emission will be done at the distance of three meters unless the signal level is too low to measure at that distance. In the case of the reading under noise floor, a pre-amplifier is used and/or the test is conducted at a closer distance. And then all readings are extrapolated back to the equivalent three meter reading using inverse scaling with distance.

Testing settings (refer to KDB 789033 D02)
Peak Measurements below 1GHz
1, Analyzer center frequency was set to the frequency of the radiated spurious emission.
2, Span=encompass the entire emission
3, RBW=120KHz
4, Detector=Quasi-Peak
5, Trace was allowed to stabilize

Peak Measurements above 1GHz
1, Analyzer center frequency was set to the frequency of the radiated spurious emission.
2, Span=encompass the entire emission
3, RBW=1MHz
4, VBW=3MHz
4, Detector= Peak (Max-hold)
5, Trace was allowed to stabilize

Average Measurements above 1GHz
1, Analyzer center frequency was set to the frequency of the radiated spurious emission.
2, Span=encompass the entire emission
3, RBW=1MHz
4, VBW=3MHz
4, Detector= RMS (Max-hold)
5, Trace was allowed to stabilize

6.3 Limit

The spurious Emission shall test through the 10th harmonic or 40GHz (whichever is lower). In addition, 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).

Notes:

1, All emission out-side of the 5.15-5.35GHz band shall not exceed an EIRP of -27dBm/MHz (68.2dBuV/m, test distance: 3 meter).

2, The spectrum is measured from 9KHz to the 10th harmonic of the fundamental frequency of the transmitter using QP detector below 1GHz, above 1GHz, average & peak measurements were taken using for test. The worst-case emission are reported however emission whose levels were not within 20dB of the respective limited were not reported.

3, The test was performed on EUT under GFSK continuously transmitting mode. All channel had been tested, but only the worst-case is recorded in the following graph and table.

6.3.1 Field Strength Calculation

The field strength is calculated by adding the reading on the Spectrum Analyzer to the factors associated with preamplifiers (if any), antennas, cables, pulse desensitization and average factors (when specified limit is in average and measurements are made with peak detectors). A sample calculation is included below.

FS = RA + AF + CF - AG + PD

Where FS = Field Strength in dBμV/m
RA = Receiver Amplitude (including preamplifier) in dBμV
CF = Cable Attenuation Factor in dB
AF = Antenna Factor in dB
AG = Amplifier Gain in dB
PD = Pulse Desensitization in dB

In the radiated emission table which follows, the reading shown on the data table may reflect the preamplifier gain. An example of the calculations, where the reading does not reflect the preamplifier gain, follows:

FS = RA + AF + CF - AG + PD

Example

Assume a receiver reading of 62.0 dBμV is obtained. The antenna factor of 7.4 dB and cable factor of 1.6 dB is added. The amplifier gain of 29 dB is subtracted. The pulse desensitization factor of the spectrum analyzer was 0 dB. The net field strength for comparison to the appropriate emission limit is 32 dBμV/m. This value in dBμV/m was converted to its corresponding level in μV/m.

RA = 62.0 dBμV
AF = 7.4 dB
CF = 1.6 dB
AG = 29.0 dB
PD = 0 dB
FS = 62 + 7.4 + 1.6 - 29 + 0 = 42 dBμV/m

Level in mV/m = Common Antilogarithm [(42 dBμV/m)/20] = 125.9 μV/m

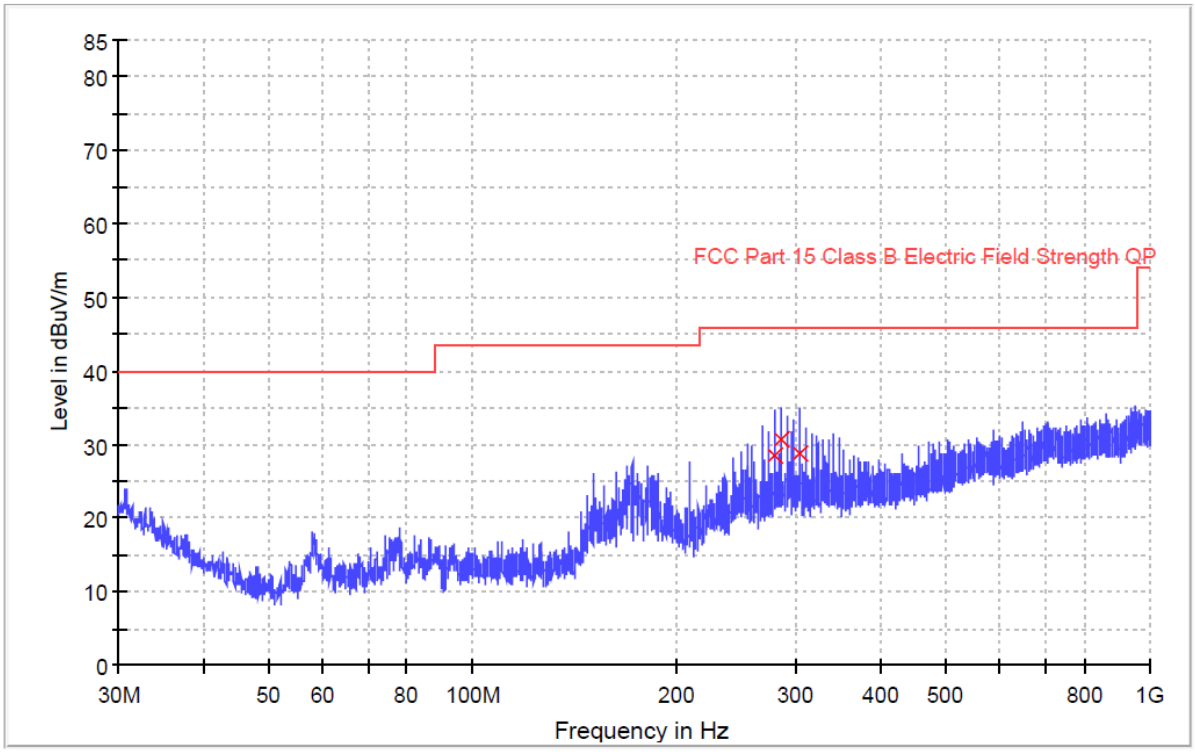
6.4 Radiated spurious emission test data

6.4.1 Measurement results: frequencies equal to or less than 1 GHz

Applicant: Safe Space Scan Technology LLC
Date of Test: 23 September 2024 Model: ThunderBeat
Worst Case Operating Mode: Transmit (5155MHz)

Radiated Emissions

ANT Polarity: Horizontal



Frequency (MHz)	QuasiPeak (dBuV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB/ m)	Margin - QPK (dB)	Limit - QPK (dBuV/m)
279.581000	28.4	1000.0	120.000	H	19.9	17.6	46.0
285.724333	30.6	1000.0	120.000	H	20.0	15.4	46.0
304.089667	28.7	1000.0	120.000	H	20.4	17.3	46.0

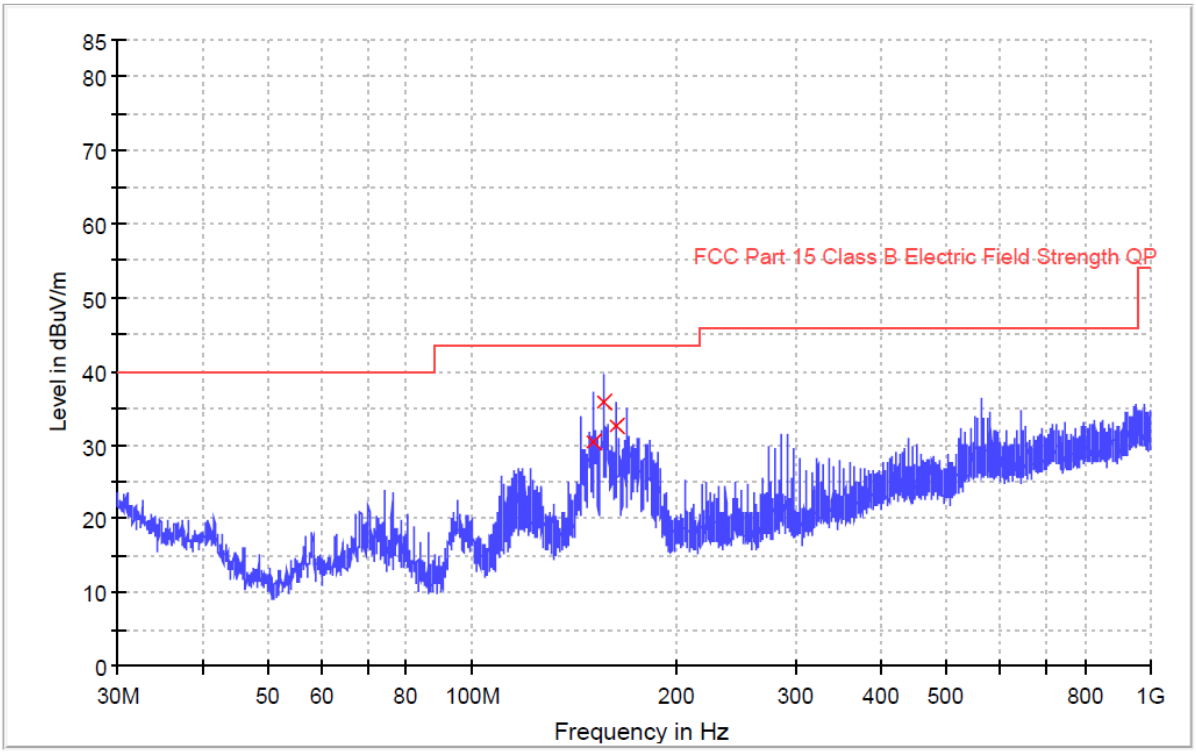
NOTES:

1. Quasi-Peak detector is used for frequency below 1GHz.
2. All measurements were made at 3 meters. Harmonic emissions not detected at the 3-meter distances were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other harmonic emissions than those reported were detected at a test distance of 0.3-meter.
3. Negative value in the margin column shows emission below limit.
4. All emissions are below the QP limit.

Applicant: Safe Space Scan Technology LLC
Date of Test: 23 September 2024 Model: ThunderBeat
Worst Case Operating Mode: Transmit (5155MHz)

Radiated Emissions

ANT Polarity: Vertical



Frequency (MHz)	QuasiPeak (dBuV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Corr. (dB/ m)	Margin - QPK (dB)	Limit - QPK (dBuV/m)
150.538667	30.4	1000.0	120.000	V	16.4	13.1	43.5
156.649667	35.8	1000.0	120.000	V	16.9	7.7	43.5
162.825333	32.6	1000.0	120.000	V	17.0	10.9	43.5

NOTES:

1. Quasi-Peak detector is used for frequency below 1GHz.
2. All measurements were made at 3 meters. Harmonic emissions not detected at the 3-meter distances were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other harmonic emissions than those reported were detected at a test distance of 0.3-meter.
3. Negative value in the margin column shows emission below limit.
4. All emissions are below the QP limit.

6.4.2 Measurement results: frequency above 1GHz

The worst case Ant1

Channel 5155MHz

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBμV/m)	Peak Limit at 3m (dBμV/m)	Margin (dB)
Horizontal	10310.000	54.4	36.3	38.9	57.0	68.2	-11.2
Horizontal	15465.000	54.2	34.7	41.0	60.5	68.2	-7.7
Horizontal	5150.000	61.8	33.5	32.9	61.2	68.2	-7.0

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBμV/m)	Average Limit at 3m (dBμV/m)	Margin (dB)
Horizontal	10310.000	41.2	36.3	38.9	43.8	54.0	-10.2
Horizontal	15465.000	41.5	34.7	41.0	47.8	54.0	-6.2

Channel 5195MHz

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBμV/m)	Peak Limit at 3m (dBμV/m)	Margin (dB)
Horizontal	10390.000	53.2	36.3	38.9	55.8	68.2	-12.4
Horizontal	15585.000	54.7	34.7	41.0	61.0	68.2	-7.2

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBμV/m)	Average Limit at 3m (dBμV/m)	Margin (dB)
Horizontal	10390.000	40.4	36.3	38.9	43.0	54.0	-11.0
Horizontal	15585.000	41.5	34.7	41.0	47.8	54.0	-6.2

Channel 5245MHz

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBμV/m)	Peak Limit at 3m (dBμV/m)	Margin (dB)
Horizontal	10490.000	53.8	36.3	38.9	56.4	68.2	-11.8
Horizontal	15735.000	53.0	34.7	41.0	59.3	68.2	-8.9
Horizontal	5350.000	57.8	33.4	33.2	57.6	68.2	-10.6

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBμV/m)	Average Limit at 3m (dBμV/m)	Margin (dB)
Horizontal	10490.000	40.7	36.3	38.9	43.3	54.0	-10.7
Horizontal	15735.000	40.2	34.7	41.0	46.5	54.0	-7.5

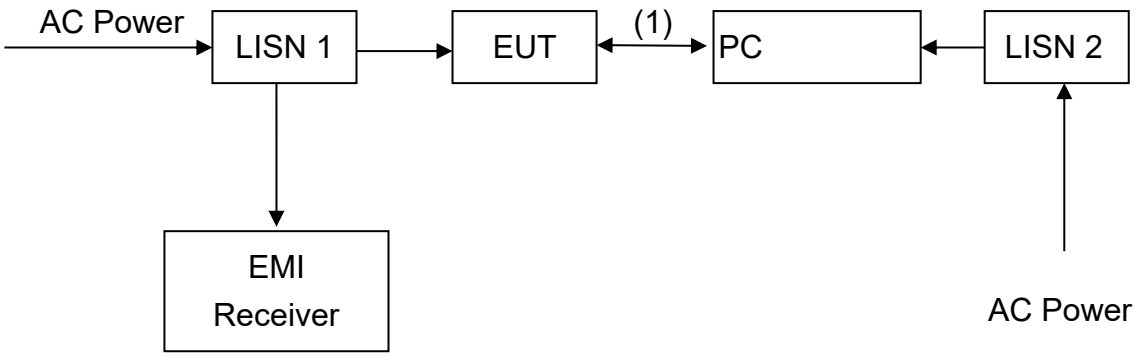
* Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function. All unwanted emissions outside of the 5.15-5.35GHz band are complied with the limit.

7. Power Line Conducted Emission test

7.1 Operating environment

Temperature:	24	℃
Relative Humidity:	55	%
Atmospheric Pressure	1011	hPa

7.2 Test setup & procedure



The EUT are connected to the main power through a line impedance stabilization network (LISN). This provides a 50 ohm/50 uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50 ohm/50 uH coupling impedance with 50 ohm termination.

Both sides (Line and Neutral) of AC line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10/2013 on conducted measurement.

The bandwidth of the field strength meter (R & S Test Receiver ESCI 30) is set at 9 kHz.

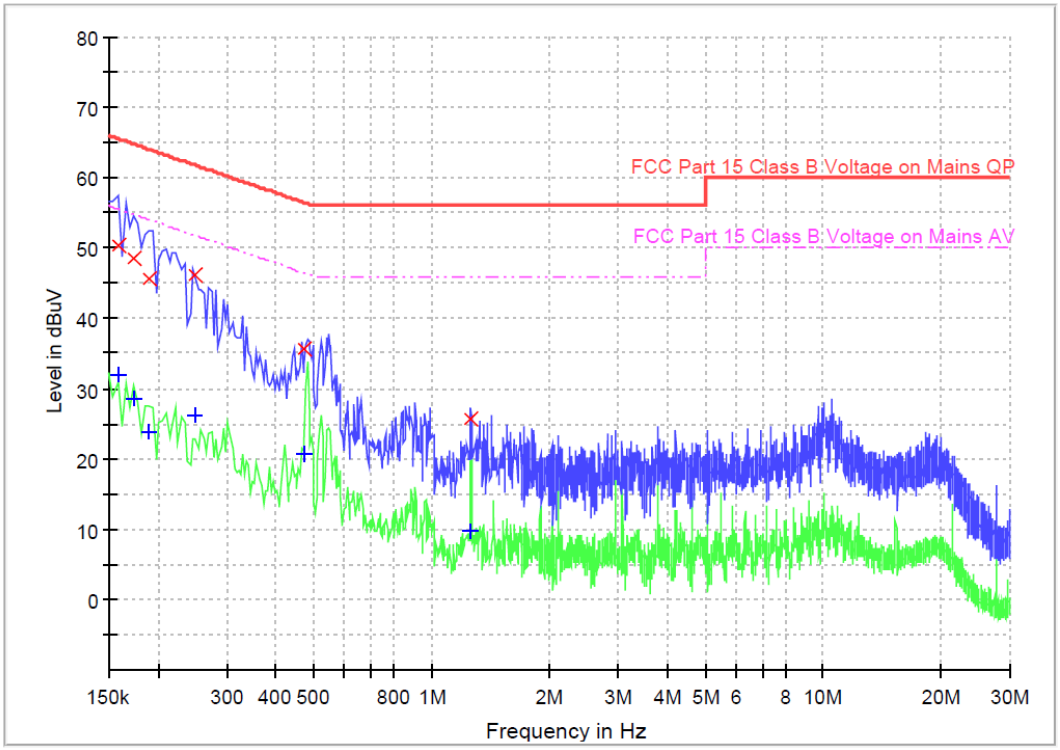
7.3 Limit

Frequency (MHz)	Conducted Limit (dBuV)	
	Q.P.	Ave.
0.15~0.50	66 – 56*	56 – 46*
0.50~5.00	56	46
5.00~30.0	60	50

*Decreases with the logarithm of the frequency.

7.4 Power Line Conducted Emission test data

Applicant: Safe Space Scan Technology LLC
Date of Test: 16 July 2024 Model: ThunderBeat
Worst Case Operating Mode: Transmit (5155MHz)
Phase: Live



Limit and Margin QP

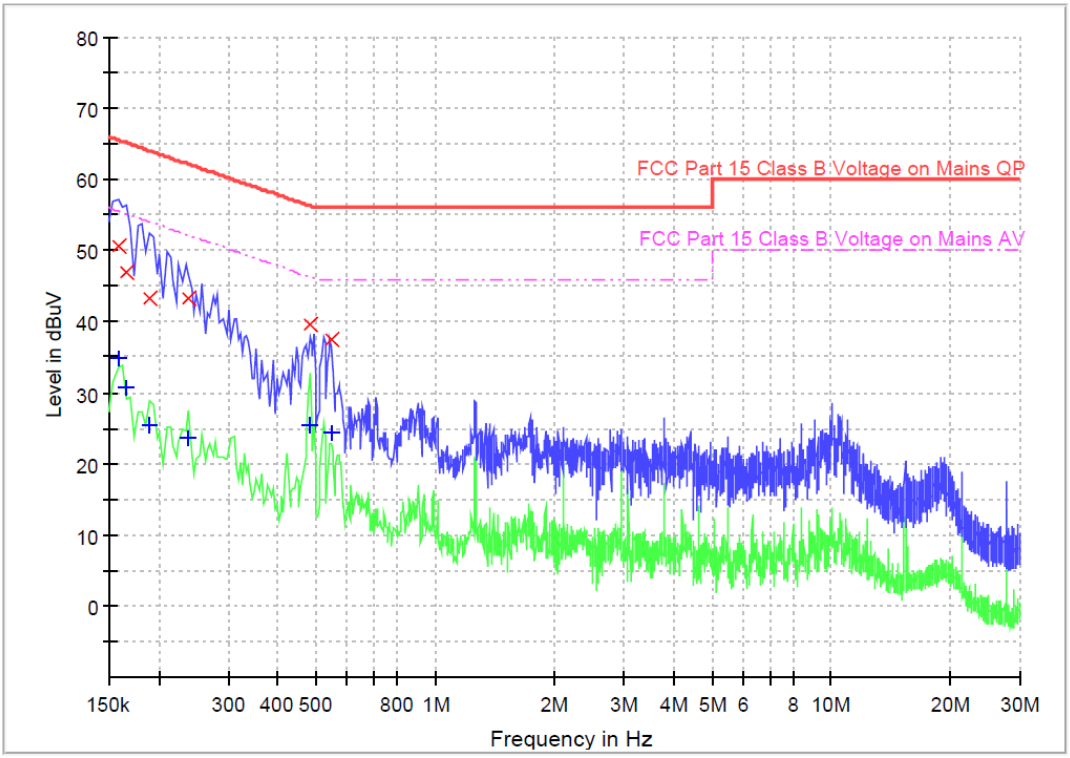
Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.158000	50.3	9.000	L1	9.6	15.3	65.6
0.174000	48.6	9.000	L1	9.6	16.2	64.8
0.190000	45.6	9.000	L1	9.6	18.4	64.0
0.250000	46.2	9.000	L1	9.6	15.6	61.8
0.474000	35.6	9.000	L1	9.6	20.8	56.4
1.262000	25.6	9.000	L1	9.6	30.4	56.0

Limit and Margin AV

Frequency (MHz)	Average (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.158000	32.0	9.000	L1	9.6	23.6	55.6
0.174000	28.6	9.000	L1	9.6	26.2	54.8
0.190000	23.9	9.000	L1	9.6	30.1	54.0
0.250000	26.1	9.000	L1	9.6	25.7	51.8
0.474000	20.6	9.000	L1	9.6	25.8	46.4
1.262000	9.6	9.000	L1	9.6	36.4	46.0

Remark:
1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
2. Margin (dB) = Limit (dBuV) – Level (dBuV)

Applicant: Safe Space Scan **Technology LLC**
Date of Test: 16 July 2024 Model: ThunderBeat
Worst Case Operating Mode: Transmit (5155MHz)
Phase: Neutral



Limit and Margin QP

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.158000	50.6	9.000	N	9.6	15.0	65.6
0.166000	46.9	9.000	N	9.6	18.3	65.2
0.190000	43.2	9.000	N	9.6	20.8	64.0
0.238000	43.2	9.000	N	9.6	19.0	62.2
0.482000	39.5	9.000	N	9.6	16.8	56.3
0.546000	37.6	9.000	N	9.6	18.4	56.0

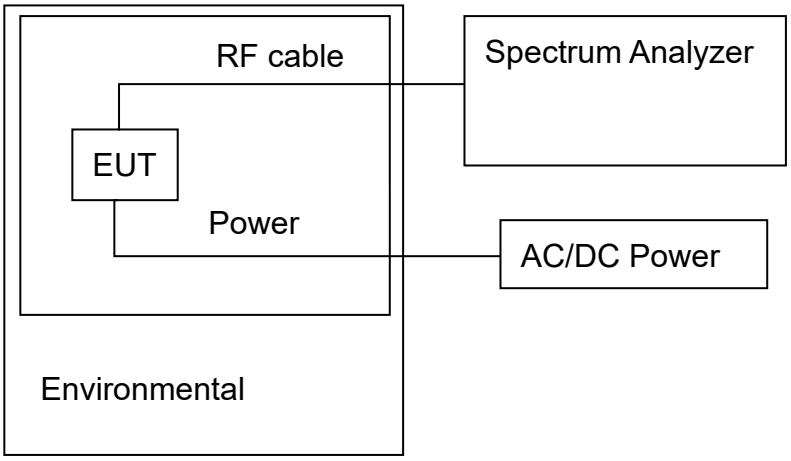
Limit and Margin AV

Frequency (MHz)	Average (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.158000	34.9	9.000	N	9.6	20.7	55.6
0.166000	30.6	9.000	N	9.6	24.6	55.2
0.190000	25.4	9.000	N	9.6	28.6	54.0
0.238000	23.6	9.000	N	9.6	28.6	52.2
0.482000	25.4	9.000	N	9.6	20.9	46.3
0.546000	24.3	9.000	N	9.6	21.7	46.0

Remark:
1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
2. Margin (dB) = Limit (dBuV) – Level (dBuV)

8. Frequency Stability Test

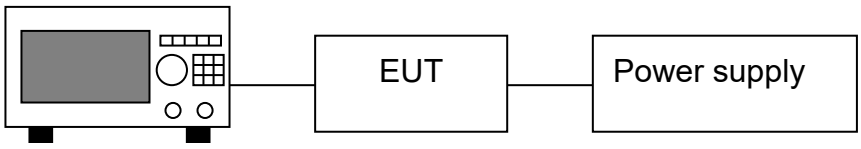
8.1 Test setup & procedure



Note1: The frequency stability is measured with the temperature variation range of -20℃ to +70℃, and voltage supply variation range of 85% to 115% of nominal AC supply voltage.

Note2: To ensure emission at the band-edge is maintained within the authorized band, the frequency channel 0-90 are selected to test and the worst case was reported.

Block Diagram:



Spectrum Analyzer

8.2 Frequency Stability Test Data

20℃ is taken as temperature in normal condition (NT).

120.0 VAC is normal voltage (NV)

102.0 VAC is low voltage (LV)

138 VAC is high voltage (HV)

The more detail please refer to “Appendix of 240704035SZN-005” Appendix D.

Note: All emissions are maintained within the band of operation under all conditions of normal operation as specified in the user manual. It fulfills the requirement of 15.407(g).

Appendix A: Test equipment list

Equipment No.	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due Date
SZ182-02	RF Power Meter	Anritsu	ML2496A	1302005	2024-04-22	2025-04-22
SZ182-02-01	Pulse Power Sensor	Anritsu	MA2411B	1207429	2024-04-22	2025-04-22
SZ070-20	Combiner	Mini-Circuits	ZN2PD-63-S+	---	2024-04-23	2025-04-23
SZ070-21	Combiner	Mini-Circuits	ZN2PD-63-S+	---	2024-04-23	2025-04-23
SZ056-05	Spectrum Analyzer	Agilent	E4407B	US40522113	2023-12-13	2024-12-13
SZ180-13	MXG Vector Signal Generator	Keysight	N5182B	MY53051328	2023-09-25	2024-09-25
SZ061-03	BiConiLog Antenna	ETS	3142E	00217919	2021-07-07 2024-07-07	2024-07-07 2027-07-07
SZ061-06	Active Loop Antenna	Electro-Metrics	EM-6876	217	2024-05-05	2027-05-05
SZ061-09	Horn Antenna	ETS	3115	00092346	2022-10-14	2025-10-14
SZ061-07	Pyramidal Horn Antenna	ETS	3160-09	00083067	2022-08-31	2025-05-31
SZ185-03	EMI Receiver	R&S	ESR7	101975	2024-04-23	2025-04-23
SZ056-07	Signal Analyzer	R&S	FSV40	101214	2023-12-13	2024-12-13
SZ181-04	Preamplifier	Agilent	8449B	3008A02474	2024-04-22	2025-04-22
SZ188-01	Anechoic Chamber	ETS	RFD-F/A-100	4102	2021-12-12	2024-12-12
SZ062-02	RF Cable	RADIALL	RG 213U	--	2024-05-10	2024-11-10
SZ062-05	RF Cable	RADIALL	0.04-26.5GHz	--	2024-05-10	2024-11-10
SZ062-12	RF Cable	RADIALL	0.04-26.5GHz	--	2024-05-10	2024-11-10
SZ067-25	Notch Filter	Micro-Tronics	BRM50716	--	2024-02-28	2025-02-28
SZ067-04	Notch Filter	Micro-Tronics	BRM50702-02	--	2024-04-23	2025-04-23
SZ185-02	EMI Test Receiver	R&S	ESCI	100692	2023-07-11 2024-07-09	2024-07-11 2025-07-09
SZ187-02	Two-Line V-Network	R&S	ENV216	100073	2022-12-20	2025-12-20
SZ188-03	Shielding Room	ETS	RFD-100	4100	2022-12-20	2025-12-20
SZ016-12	Programmable Temperature & Humidity Chamber	Taili	MHK-120NK	AB0105	2023-12-14	2024-12-14

Expanded uncertainty of radiated emission measurement is ±4.9 dB.

Expanded uncertainty of conducted emission measurement is ±3.6 dB.

********** End of Report**********