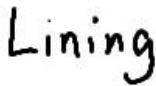


RF Test Report

Test Report Number	HME-26020362-LG-FCC-IC-BT
FCC ID ISED ID Applicant Applicant Address Product Name Model Number Date of Receipt Date of Test Report Issue Date Test Standards Test Result	BYMBP5GC1 1860A-BP5GC1 HM Electronics Inc 2848 Whiptail Loop, Carlsbad, CA 92010 USA Wireless Beltpack BP5GC1 02/03/2026 02/03/2026 – 03/02/2026 03/13/2026 47 CFR Part 15.247 RSS 247 Issue 4, July 2025 PASS
	Issued by: Vista Compliance Laboratories 1261 Puerta Del Sol, San Clemente, CA 92673 USA www.vista-compliance.com
 Lining Li (Test Engineer)	 David Zhang (Technical Manager)
This report is for the exclusive use of the applicant. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. Note that the results contained in this report pertain only to the test samples identified herein, and the results relate only to the items tested and the results that were obtained in the period between the date of initial receipt of samples and the date of issue of the report. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested and the results thereof based upon the information provided to us. The applicant has 60 days from date of issuance of this report to notify us of any material error or omission. Failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification. The report must not be used by the client to claim product certification, approval, or endorsement by any government agencies. This report is not to be reproduced by any means except in full and in any case not without the written approval of Vista Laboratories.	

Report#	HME-26020362-LG-FCC-IC-BT
----------------	---------------------------

REVISION HISTORY

Report Number	Version	Description	Issued Date
HME-26020362-LG-FCC-IC-BT	01	Initial report	03/13/2026

TABLE OF CONTENTS

1	TEST SUMMARY	4
2	GENERAL INFORMATION.....	5
2.1	Applicant.....	5
2.2	Product information.....	5
2.3	Test standard and method	7
3	TEST SITE INFORMATION.....	7
4	MODIFICATION OF EUT.....	7
5	TEST CONFIGURATION AND OPERATION	7
5.1	EUT test configuration	7
5.2	Supporting Equipment	8
6	UNCERTAINTY OF MEASUREMENT	8
7	TEST RESULTS.....	9
7.1	Antenna Requirement	9
7.2	20 dB Bandwidth.....	10
7.3	Occupied Bandwidth (99%).....	13
7.4	Number of Hopping Channel.....	16
7.5	Maximum Output Power.....	19
7.6	Channel Separation.....	23
7.7	Time of Occupancy	26
7.8	Conducted Band-Edge & Unwanted Emissions Measurement.....	29
7.9	Frequency Hopping System Requirement	33
7.10	Radiated Band-Edge & Spurious Emissions into Restricted Frequency Bands	35
7.11	Conducted Emissions.....	47
8	EUT AND TEST SETUP PHOTOS.....	51
9	TEST INSTRUMENT LIST	52

1 Test Summary

Test Item	Test Requirement	Test Method	Result
Antenna Requirement	47 CFR Part 15.247 RSS 247 Issue 4, Jul 2025	ANSI C63.10-2020	Pass
20 dB Bandwidth	47 CFR Part 15.247 RSS 247 Issue 4, Jul 2025	ANSI C63.10-2020	Pass
Occupied Bandwidth	RSS-Gen Issue 5, Feb 2021	RSS-Gen Issue 5, Feb 2021	Pass
Number of Hopping Channel	47 CFR Part 15.247 RSS 247 Issue 4, Jul 2025	ANSI C63.10-2020	Pass
Conducted Maximum Output Power	47 CFR Part 15.247 RSS 247 Issue 4, Jul 2025	ANSI C63.10-2020	Pass
Channel Separation	47 CFR Part 15.247 RSS 247 Issue 4, Jul 2025	ANSI C63.10-2020	Pass
Time of Occupancy	47 CFR Part 15.247 RSS 247 Issue 4, Jul 2025	ANSI C63.10-2020	Pass
Conducted Band-Edge	47 CFR Part 15.247 RSS 247 Issue 4, Jul 2025	ANSI C63.10-2020	Pass
Frequency Hopping System Requirement	47 CFR Part 15.247 RSS 247 Issue 4, Jul 2025	ANSI C63.10-2020	Pass
Radiated Emissions & Unwanted Emissions into Restricted Frequency Bands	47 CFR Part 15.247 RSS 247 Issue 4, Jul 2025	ANSI C63.10-2020	Pass
AC Power Line Conducted Emissions	47 CFR Part 15.247 RSS 247 Issue 4, Jul 2025	ANSI C63.10-2020	Pass

2 General Information

2.1 Applicant

Applicant	HM Electronics Inc
Applicant address	2848 Whiptail Loop, Carlsbad, CA 92010 USA
Manufacturer	HM Electronics Inc
Manufacturer Address	2848 Whiptail Loop, Carlsbad, CA 92010 USA

2.2 Product information

Product Name	Wireless Beltpack
Model Number	BP5GC1
Family Models	N/A
Serial Number	1048977
Frequency Band	Bluetooth BDR/EDR/BLE: 2402-2480MHz LTE Band 2: UL: 1850-1910MHz; DL: 1930-1990MHz LTE Band 4: UL:1710-1755MHz; DL: 2110-2155MHz LTE Band 5: UL:824-849MHz; DL: 869-894MHz LTE Band 12: UL:699-716MHz; DL: 729-746MHz LTE Band 13: UL:777-787MHz; DL:746-756MHz LTE Band 48: 3550-3700MHz LTE Band 66: UL:1710-1780MHz; DL: 2110-2200MHz 5G NR n2: UL: 1850-1910MHz; DL: 1930-1990MHz 5G NR n5: UL:824-849MHz; DL: 869-894MHz 5G NR n48: 3550-3700MHz 5G NR n66: 1710-1780MHz; DL: 2110-2200MHz 5G NR n77-L: UL:3450-3550MHz; DL: 3450-3550MHz 5G NR n77-H: UL:3700-3980MHz; DL: 3700-3980MHz
Type of modulation	Bluetooth BDR/EDR: GFSK, $\pi/4$ DQPSK, 8DPSK Bluetooth BLE: GFSK LTE: QPSK, 16QAM, 64QAM, 256QAM 5G NR: DFT-s-Pi/2-BPSK, DFT-s-QPSK, DFT-s-16QAM, DFT-s-64QAM, DFT-s-256QAM, CP-QPSK, CP-16QAM, CP-64QAM, CP-256QAM
Equipment Class	DSS, DTS, PCT, CBE

Antenna Information	Bluetooth: Integral PCB/Printed Inverted-F quarter wave antenna, 1.5 dBi peak gain				
	Cellular: Two integrated antennas but only one is used for tranmission purpose.				
	Antenna type	Antenna	Antenna Name	Band (GHz)	Peak Gain (dBi)
	Cellular antenna	1 (main TX)	FTLTEF129-LU	0.745	-0.26
				0.787	0.29
				0.821	0.31
				0.898	-1.49
				1.714	3.74
				1.884	5.49
				1.994	5.92
				2.156	4.22
				3.303	3.33
3.601	3.48				
3.898	3.94				
Clock Frequencies	N/A				
Input Power	Detachable/Rechargeable Li-ion battery, 3.7VDC				
Power Adapter Manufacturer/Model	N/A				
Power Adapter SN	N/A				
Hardware version	N/A				
Software version	N/A				
Simultaneous Transmission	BLE and Cellular can transmit simultaneously				
Additional Info	1. FreeSpeak Cell Beltpack is a battery powered wireless communication intercom “Beltpack” operating across 4G LTE and 5G Cellular Frequency Bands. The FreeSpeak Cell Beltpack will operate in conjunction with private and commercial cellular networks along with audio distribution systems (bases) that include the Arcadia and EHX products. The FreeSpeak Cell beltpack sends and receives audio over IP from/to the beltpack to/from the Central Station (i.e. Eclipse HX Frame or Arcadia Base Station) over a cell network. The Central Station can distribute the audio locally or all over the world. With many Free Speak Cell beltpacks in combination, along with a combination of other ClearCom products, hundreds of users can communicate with each other to accomplish whatever they need to do. 2. EUT integrates FCC certified cellular 4G LTE/5G NR module, Model: RG255C-GL from Quectel Wireless Solutions (FCC ID: XMR2024RG255CGL, ISSED ID: 10224A-024RG255CGL) , Bands supported : 4G LTE B2, B4, B5, B12, B13, B48, B66; 5G NR n2, n5, n48, n66, n77. 3. EUT is not sold with a dedicated power charger. For testing purpose, an Apple USB charger is used as supporting equipment for power line conducted emission testing.				

2.3 Test standard and method

Test standard	47 CFR Part 15.247 RSS 247 Issue 4, Jul 2025
Test method	ANSI C63.10-2020 RSS-Gen Issue 5, Feb 2021

3 Test site information

Lab performing tests	Vista Laboratories, Inc.
Lab Address	1261 Puerta Del Sol, San Clemente, CA 92673 USA
Phone Number	+1 (949) 393-1123
Website	www.vista-compliance.com

Test Condition	Temperature	Humidity	Atmospheric Pressure
RF Testing	23.5°C	51.5%	1005 mbar
Radiated Emission Testing	23.5°C	51.5%	1005 mbar

4 Modification of EUT

The EUT is an engineering test sample loaded with RF testing firmware specifically designed to support the RF TX measurement in different aspects.

5 Test configuration and operation

5.1 EUT test configuration

For RF conducted measurements, EUT's RF antenna port is connected to spectrum analyzer through RF test cable for direct measurement. The BLE test software is used to set EUT to different transmission mode in terms of RF power, test channel, data rate, etc. For Cellular radio, it's controlled by communication tester to switch to different mode.

The following software was used for testing:

Software	Description
EMISoft Vasona	EMC/RF Spurious emission test software used during testing
BluetTest3	Bluetooth RF testing used for sending RF command to set EUT into RF test mode

5.2 Supporting Equipment

Description	Manufacturer	Model #	Serial #
Laptop	Dell	Latitude E6440	FFF4JC2
Headphone	Clear-Com	CC-300	N/A
Apple USB charger	Apple	A1385	N/A

6 Uncertainty of Measurement

Test item	Measurement Uncertainty (dB)
RF Output Power (Conducted)	±1.2 dB
Power Spectral Density	±0.9 dB
Unwanted Emission (conducted)	±2.6 dB
Occupied Channel Bandwidth	±5 %
Radiated Emission (9KHz-30MHz)	±3.5 dB
Radiated Emission (30MHz-1GHz)	±4.6 dB
Radiated Emission (1-18GHz)	±4.9 dB
Radiated Emission (18-40GHz)	±3.5 dB

7 Test Results

7.1 Antenna Requirement

7.1.1 Requirement

Per § 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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

7.1.2 Result

Analysis:

- EUT uses integrated antenna for BT that is permanently attached and not accessible to end user. No standard RF connector is used.

Conclusion:

- EUT complies with antenna requirement in § 15.203.

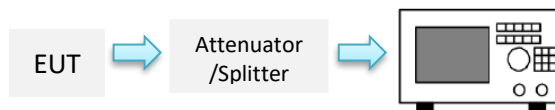
7.2 20 dB Bandwidth

7.2.1 Requirement

Per § 15.247 (a) (1) (i), RSS-247 §5.1, b)

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

7.2.2 Test setup



7.2.3 Test Procedure

According to section 6.9.2, in ANSI C63.10-2020:

Measurement is made with the occupied bandwidth measurement function incorporated in spectrum analyzer. The following setting are used per ANSI C63.10-2020.

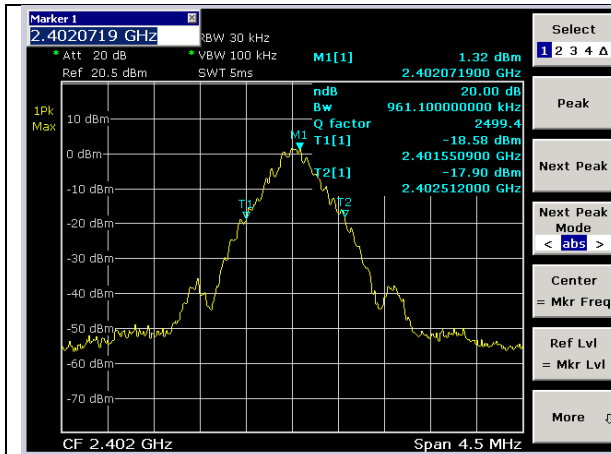
1. Set Center Frequency = Nominal EUT channel center frequency.
2. Set Span to be between two times and five times of the OBW.
3. RBW shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times RBW.
4. Set detection mode to peak and trace mode to max hold.
5. Use the occupied bandwidth measurement function to place two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the “-xx dB down amplitude” determined.
6. The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labelled. Tabular data may be reported in addition to the plot(s).

Report#	HME-26020362-LG-FCC-IC-BT
----------------	---------------------------

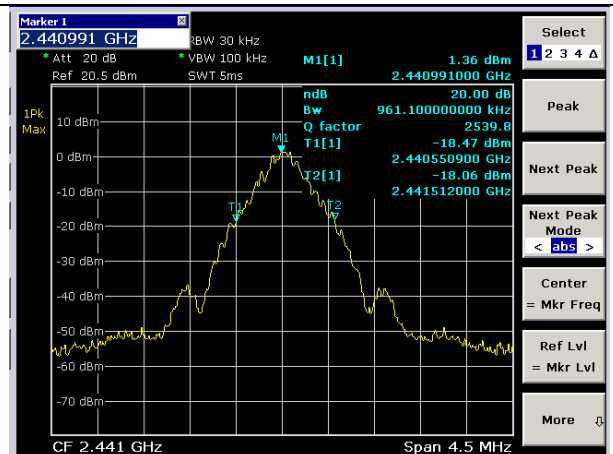
7.2.4 Test Result

Mode/ Modulation	Data rate	Packet Type	Frequency (MHz)	Measured Bandwidth (kHz)	2/3 of 20 dB Bandwidth (kHz)	Maximum Bandwidth (kHz)	Result
BDR/GFSK	1Mbps	DH5	2402	961	640.67	N/A	Pass
			2441	961	640.67	N/A	Pass
			2480	961	640.67	N/A	Pass
EDR/8DPSK	3Mbps	3DH5	2402	1356	904.00	N/A	Pass
			2441	1365	910.00	N/A	Pass
			2480	1365	910.00	N/A	Pass

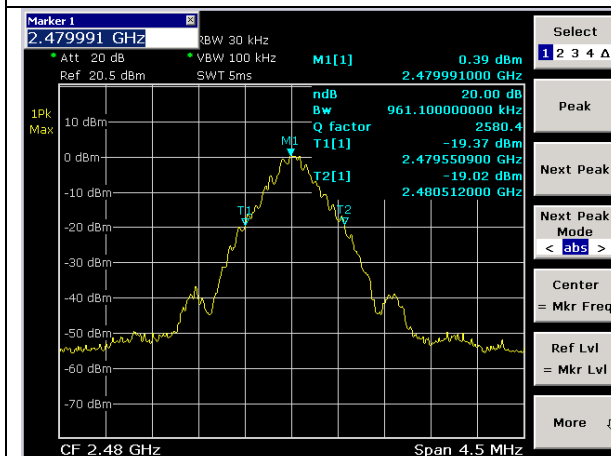
7.2.5 Test Plots



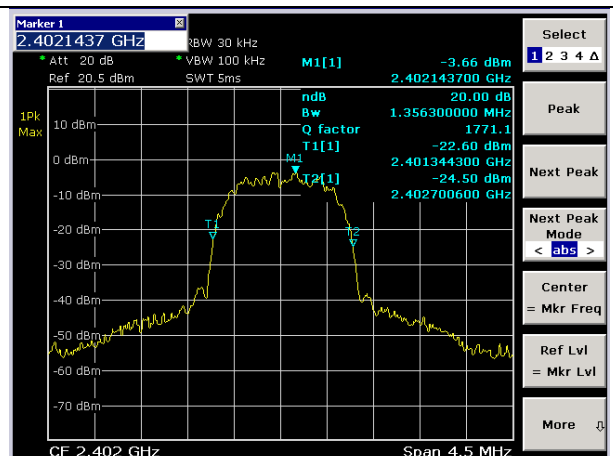
BT-GFSK-20 dB BW-Low



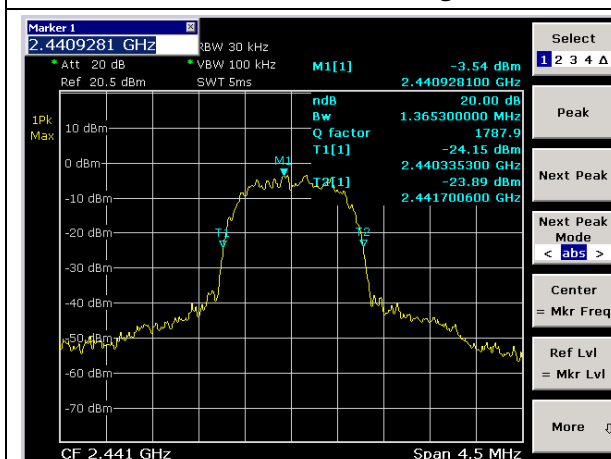
BT-GFSK-20 dB BW-Mid



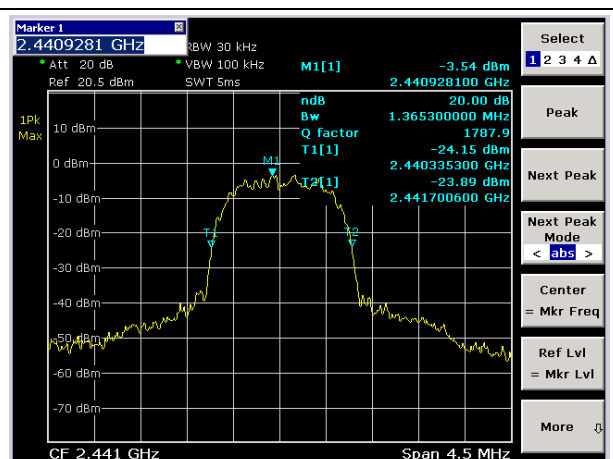
BT-GFSK-20 dB BW-High



BT-8DPSK-20 dB BW-Low



BT-8DPSK-20 dB BW-Mid



BT-8DPSK-20 dB BW-High

7.3 Occupied Bandwidth (99%)

7.3.1 Requirement

RSS-Gen §6.7

The occupied bandwidth or the “99% emission bandwidth” is defined as the frequency range between two points, one above and the other below the carrier frequency, within which 99% of the total transmitted power of the fundamental transmitted emission is contained. The occupied bandwidth shall be reported for all equipment in addition to the specified bandwidth required in the applicable RSSs.

7.3.2 Test setup



7.3.3 Test Procedure

According to section RSS-Gen §6.7

The automatic bandwidth measurement capability of an instrument may be employed using the X dB bandwidth mode with X set to 6 dB, if the functionality described above (i.e., RBW = 100 kHz, VBW $\geq 3 \times$ RBW, peak detector with maximum hold) is implemented by the instrumentation function. When using this capability, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be ≥ 6 dB.

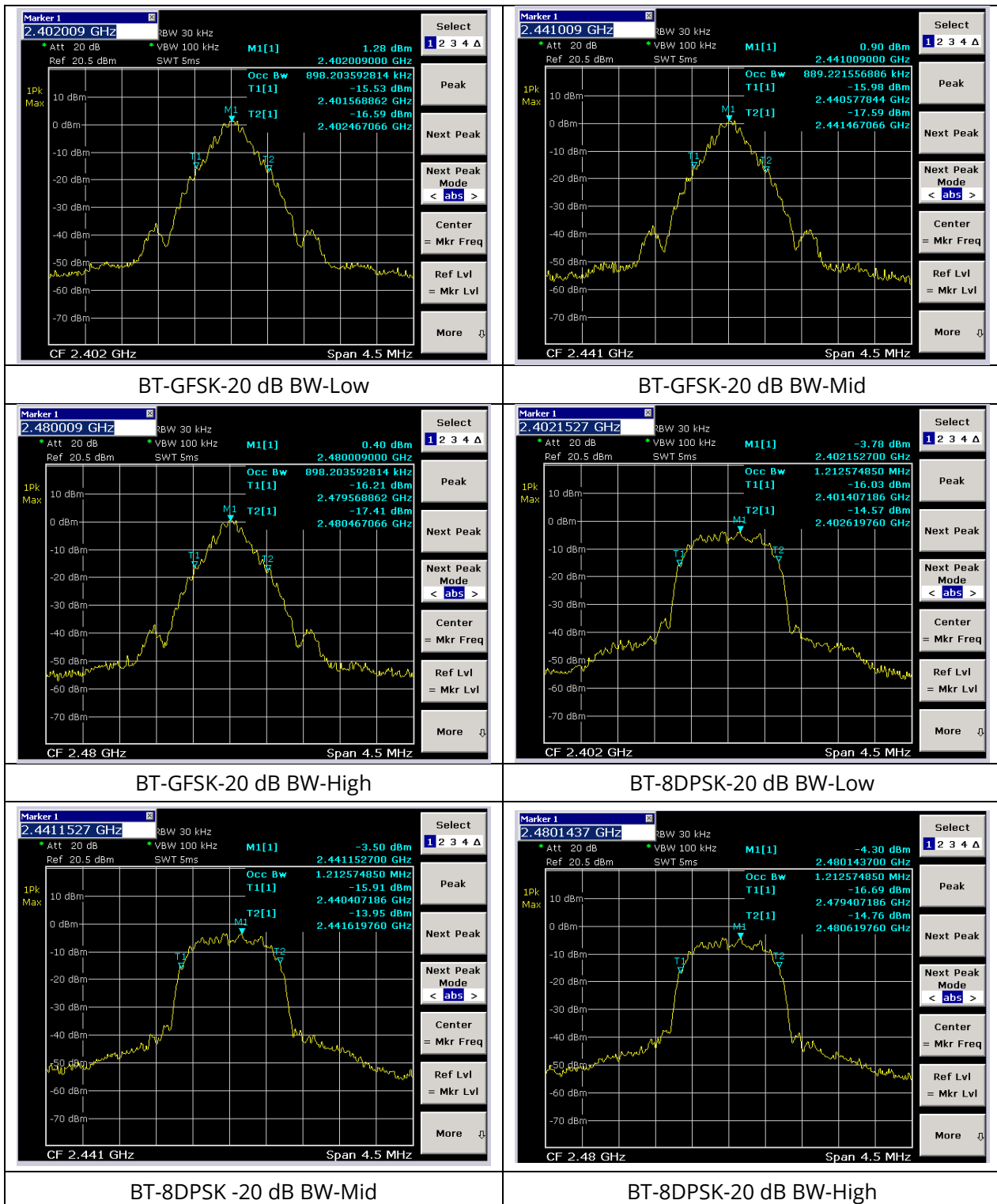
1. Set RBW = 1% to 5% of the actual occupied BW.
2. Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Span = large enough to capture all products of the modulation process
7. Allow the trace to stabilize.
8. Use automatic bandwidth measurement capability on instrument to obtain BW result.

Report#	HME-26020362-LG-FCC-IC-BT
----------------	---------------------------

7.3.4 Test Result

Mode/ Modulation	Data rate	Packet Type	Frequency (MHz)	Measured 99% OBW (kHz)	Limit (kHz)	Result
BDR/GFSK	1Mbps	DH5	2402	898.20	N/A	N/A
			2441	889.22	N/A	N/A
			2480	898.20	N/A	N/A
EDR/8DPSK	3Mbps	3DH5	2402	1212.57	N/A	N/A
			2441	1212.57	N/A	N/A
			2480	1212.57	N/A	N/A

7.3.5 Test Plots



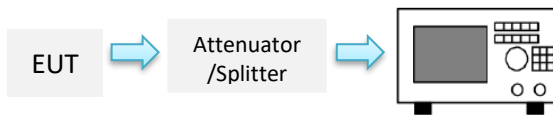
7.4 Number of Hopping Channel

7.4.1 Requirement

Per § 15.247 (a) (1) (iii), RSS-247 §5.1, d)

Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

7.4.2 Test setup



7.4.3 Test Procedure

According to section 7.8.3, in ANSI C63.10-2020:

Measurement is made with spectrum analyzer. The following setting is used.

1. Set Span to be the frequency band of operation.
2. Set RBW to less 30% of the channel spacing or the 20 dB bandwidth, whichever is smaller.
3. $VBW \geq RBW$.
4. Sweep: Auto.
5. Detector function: Peak.
6. Trace: Max hold.
7. Allow the trace to stabilize.

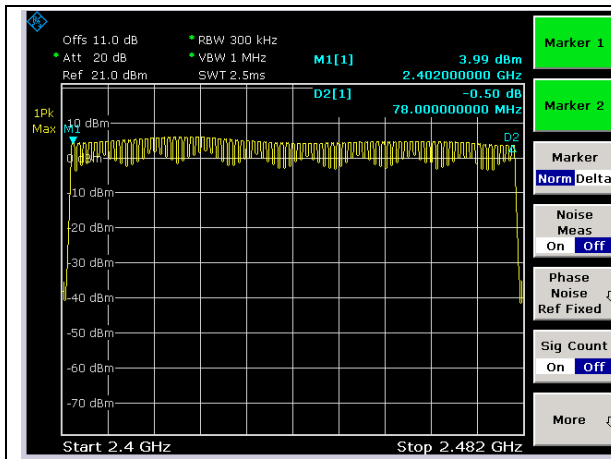
Report#	HME-26020362-LG-FCC-IC-BT
----------------	---------------------------

7.4.4 Test Result

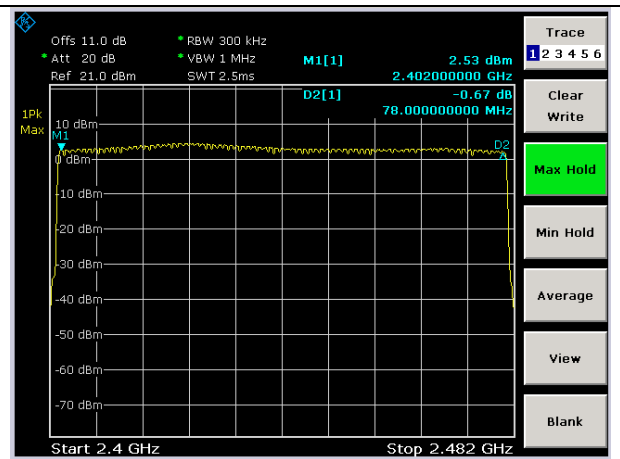
Mode/ Modulation	Data rate	Packet Type	Frequency Range (MHz)	Channel Number	Minimum Limit	Result
BDR/GFSK	1Mbps	DH5	2400-2483.5	79	15	Pass
EDR/8DPSK	3Mbps	3DH5	2400-2483.5	79	15	Pass

Report# HME-26020362-LG-FCC-IC-BT

7.4.5 Test Plots



BT-GFSK- Hopping Channel Number



BT-8DPSK - Hopping Channel Number

7.5 Maximum Output Power

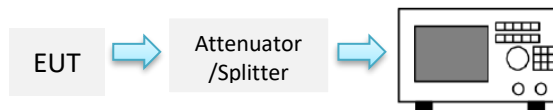
7.5.1 Requirement

Per § 15.247 (a)(1), RSS-247 §5.4, b)

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

Per § 15.247 (b)(1), For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

7.5.2 Test setup



7.5.3 Test Procedure

According to section 7.8.5 of ANSI C63.10-2020. The measurement was made with EUT directly connected to spectrum analyzer. The following setting is used.

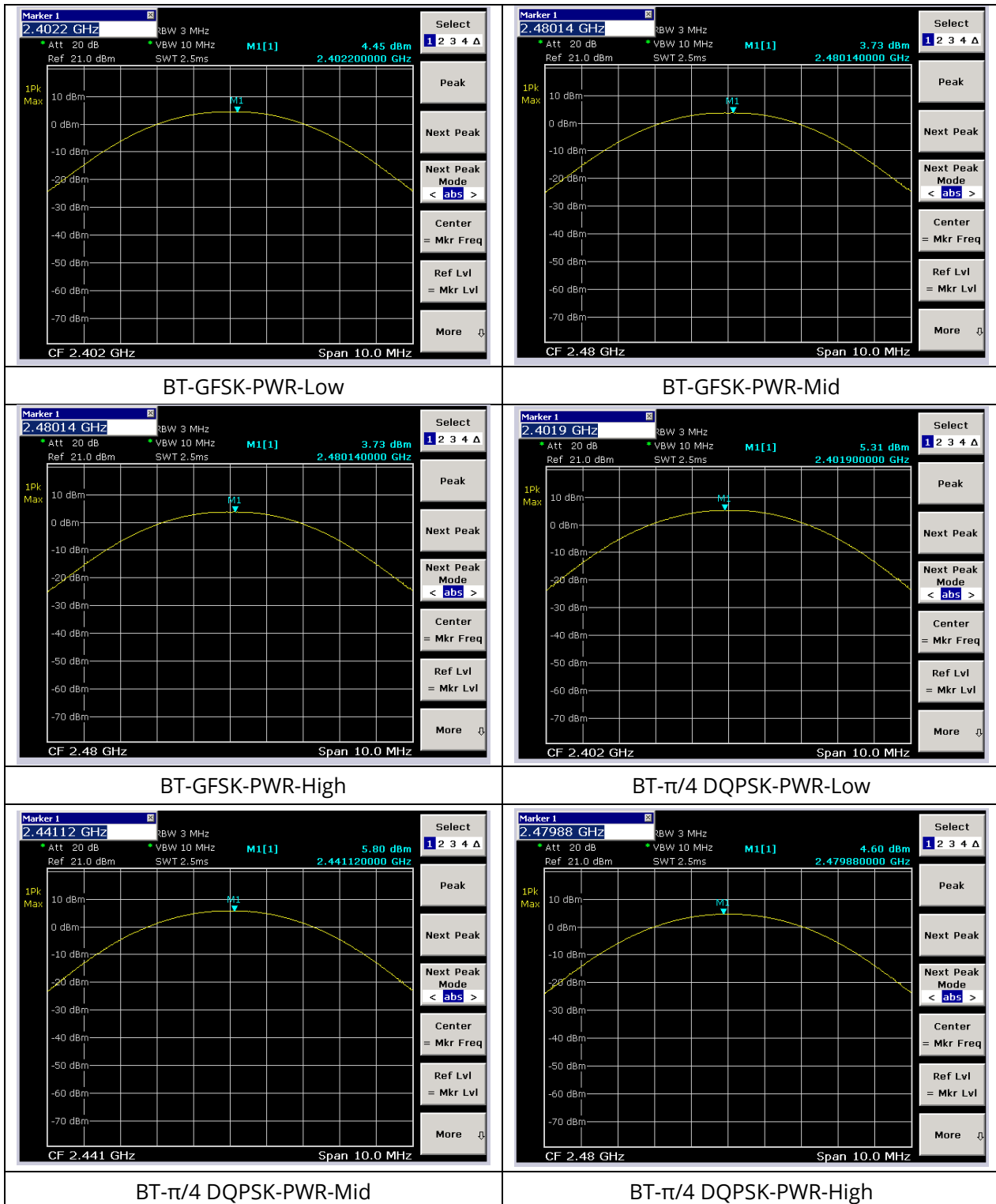
1. Set the RBW > 20 dB BW
2. Set VBW $\geq$ RBW.
3. Set span to approximately five times the 20 dB bandwidth, centered on a hopping channel.
4. Sweep time = auto couple.
5. Detector = peak.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.
8. Use peak marker function to determine the peak amplitude level.

Report#	HME-26020362-LG-FCC-IC-BT
----------------	---------------------------

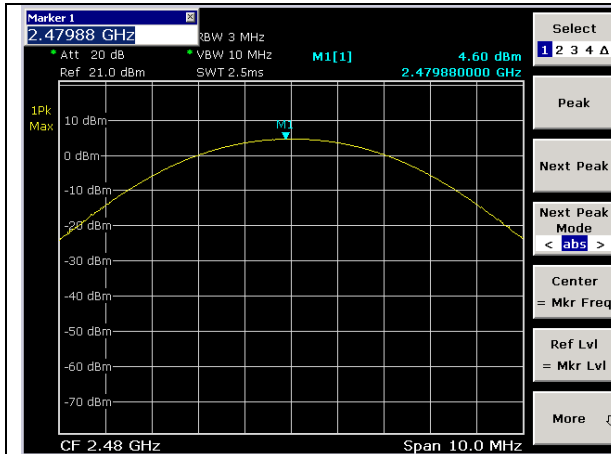
7.5.4 Test Result

Mode/ Modulation	Data rate	Packet Type	Frequency (MHz)	Measured Output Power (dBm)	Maximum Output Power (dBm)	Result
BDR/GFSK	1Mbps	DH5	2402	4.45	21	Pass
			2441	4.31	21	Pass
			2480	3.73	21	Pass
EDR/ $\pi/4$ DQPSK	2Mbps	2DH5	2402	5.31	21	Pass
			2441	5.80	21	Pass
			2480	4.60	21	Pass
EDR/8DPSK	3Mbps	3DH5	2402	6.03	21	Pass
			2441	6.29	21	Pass
			2480	5.40	21	Pass

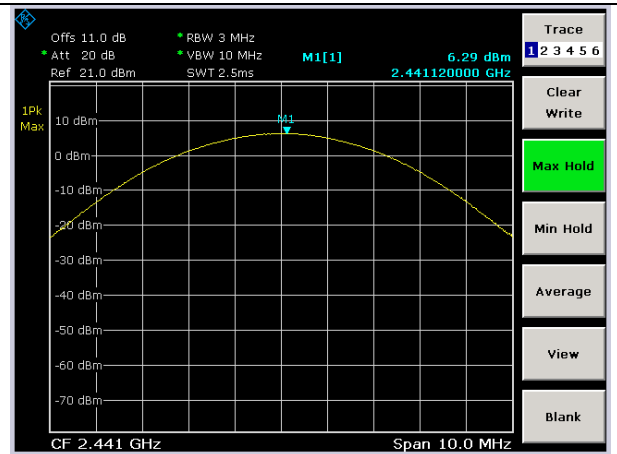
7.5.5 Test Plots



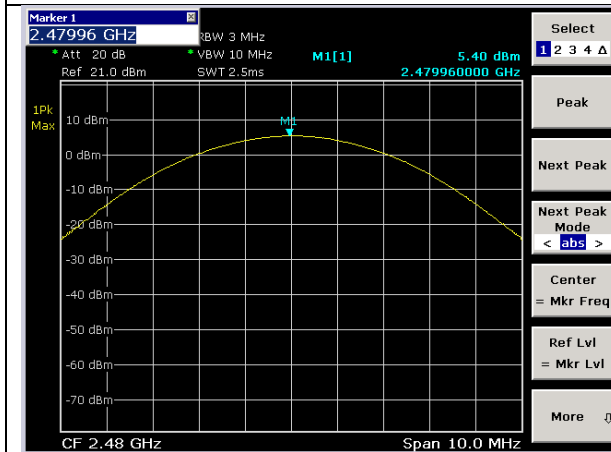
Report# HME-26020362-LG-FCC-IC-BT



BT-8DPSK-PWR-Low



BT-8DPSK-PWR-Mid



BT-8DPSK-PWR-High

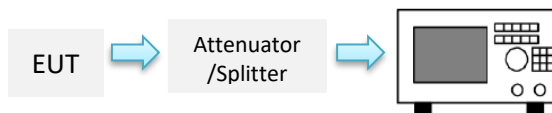
7.6 Channel Separation

7.6.1 Requirement

Per § 15.247 (a) (1), RSS-247 §5.1, b)

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

7.6.2 Test setup



7.6.3 Test Procedure

According to section 7.8.2 of ANSI C63.10-2020. The measurement was made with spectrum analyzer. The following setting is used.

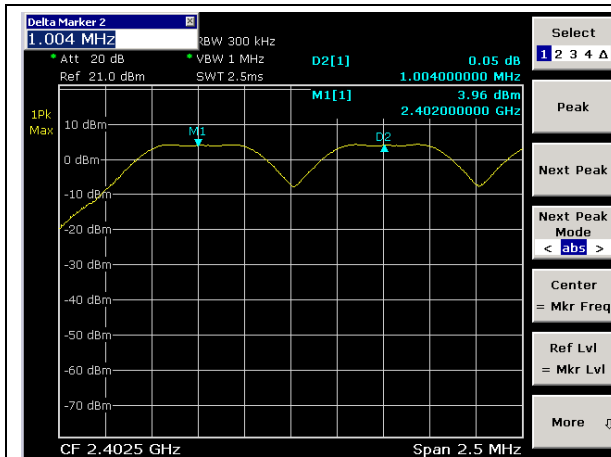
1. Set the Span wide enough to capture the peaks of two adjacent channels.
2. RBW: Start with the RBW set to approximately 30% of the channel spacing
3. VBW $\geq$ RBW.
4. Detector = peak.
5. Sweep time = auto couple.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.
8. Use the peak marker function to determine separation between the peaks of adjacent channels.

Report#	HME-26020362-LG-FCC-IC-BT
----------------	---------------------------

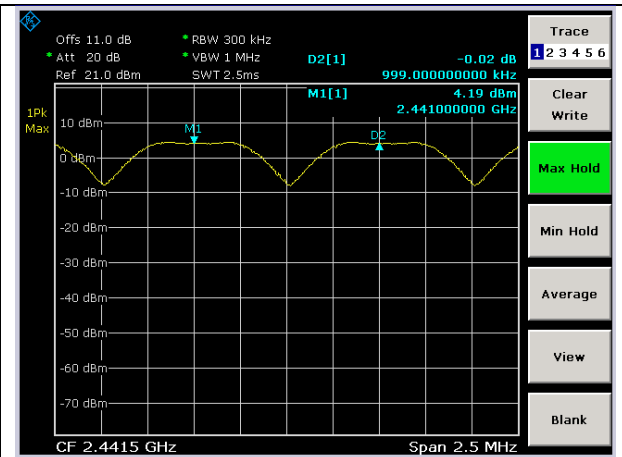
7.6.4 Test Result

Mode/ Modulation	Data rate	Packet Type	Frequency (MHz)	Channel Separation (kHz)	2/3 of 20 dB Bandwidth (kHz)	Result
BDR/GFSK	1Mbps	DH5	2402	1004	640.67	Pass
			2441	999	640.67	Pass
			2480	1004	640.67	Pass
EDR/8DPSK	3Mbps	3DH5	2402	1004	904.00	Pass
			2441	999	910.00	Pass
			2480	1004	910.00	Pass

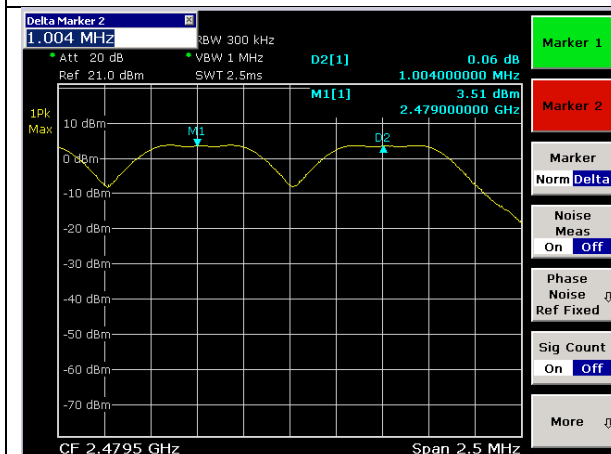
7.6.5 Test Plots



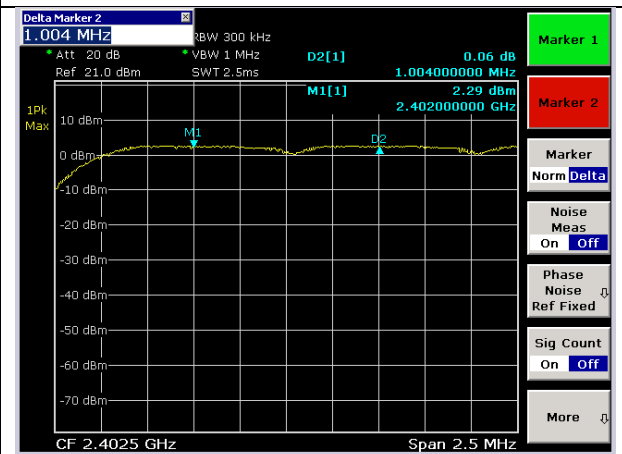
BT-GFSK-Channel Separation-Low



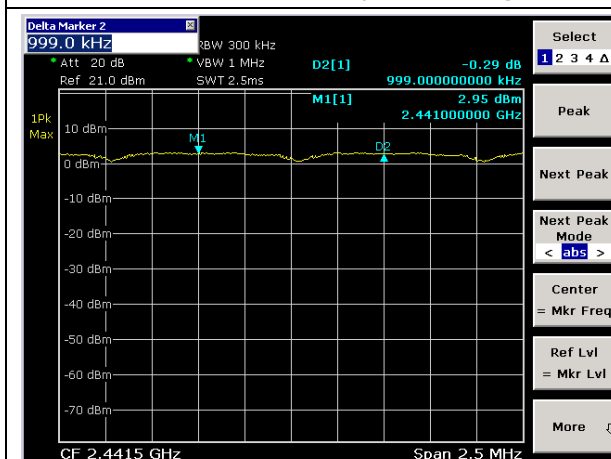
BT-GFSK-Channel Separation-Mid



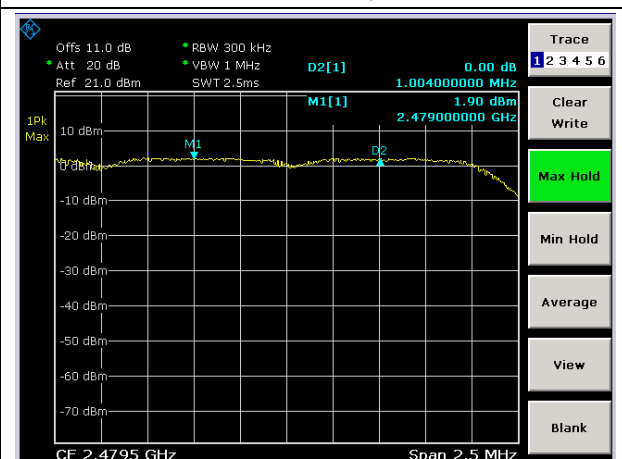
BT-GFSK-Channel Separation-High



BT-8DPSK-Channel Separation-Low



BT-8DPSK-Channel Separation-Mid



BT-8DPSK-Channel Separation-High

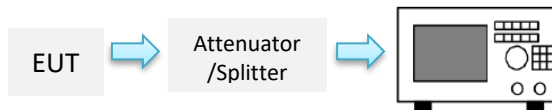
7.7 Time of Occupancy

7.7.1 Requirement

Per § 15.247 (a) (1) (iii), RSS-247 §5.1, d)

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

7.7.2 Test setup



7.7.3 Test Procedure

According to section 7.8.4 of ANSI C63.10-2020. The measurement was made with spectrum analyzer. The following setting is used.

1. Set Span to zero, centered on a hopping channel.
2. RBW shall be $\leq$ channel spacing.
3. VBW $\geq$ RBW.
4. Detector = peak.
5. Sweep time = auto couple. As necessary to capture the entire dwell time per hopping channel; where possible use a video trigger and trigger delay so that the transmitted signal starts a little to the right of the start of the plot. The trigger level might need slight adjustment to prevent triggering when the system hops on an adjacent channel; a second plot might be needed with a longer sweep time to show two successive hops on a channel.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.
8. Use the marker-delta function to determine the transmit time per hop.

Report#	HME-26020362-LG-FCC-IC-BT
----------------	---------------------------

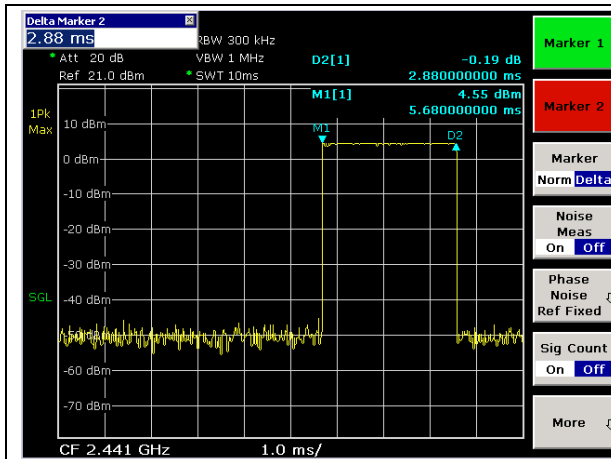
7.7.4 Test Result

Mode/ Modulation	Data Rate	Packet Type	Freq. (MHz)	Number of Hopping Freq.	Dwell Time per Hop (mS)	Observation period (S)	Number of Hopping in period	Total Dwell Time (mS)	Limit (mS)
BT-GFSK	1Mbps	DH5	2441	79	2.880	31.6	110	316.8	400
BT-8DPSK	3Mbps	3-DH5	2441	79	2.900	31.6	110	319.0	400

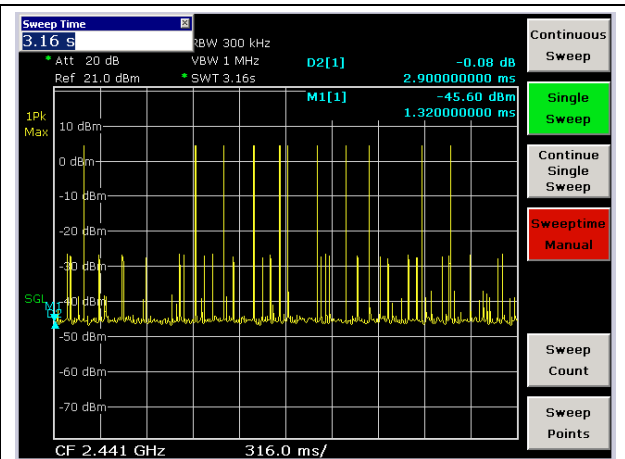
The Observation period: $T=0.4 \text{ second} * 79 \text{ channels} = 31.6 \text{ s}$

Report# HME-26020362-LG-FCC-IC-BT

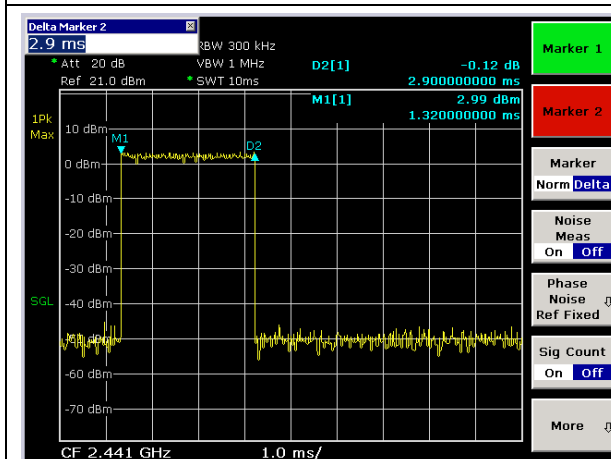
7.7.5 Test Plots



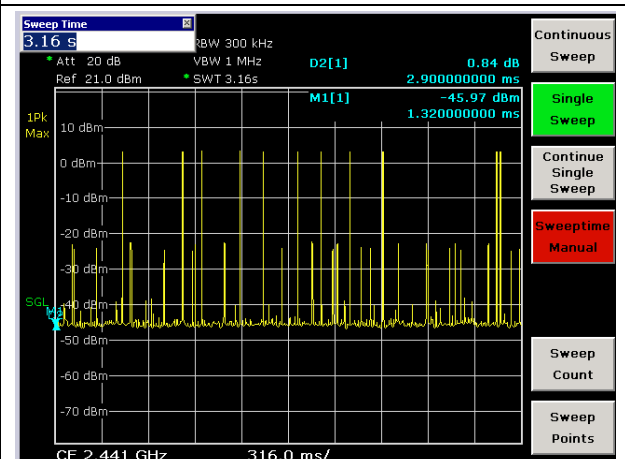
Dwell Time_BDR_GFSK_M CH_Pulse



Dwell Time_BDR_GFSK_M CH_Period



Dwell Time_EDR_8DPSK_M CH_Pulse



Dwell Time_EDR_8DPSK_M CH_Period

7.8 Conducted Band-Edge & Unwanted Emissions Measurement

7.8.1 Requirement

Per § 15.247 (d), RSS-247 §5.5

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

7.8.2 Test setup



7.8.3 Test Procedure

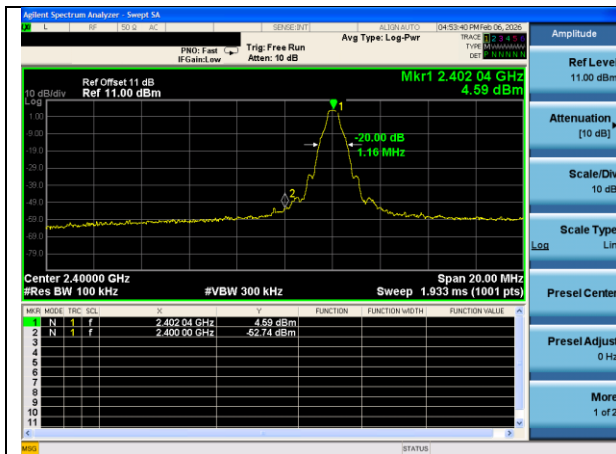
According to section 7.8.7 of ANSI C63.10-2020.

Connect the primary antenna port through an attenuator to the spectrum analyzer input; in the results, account for all losses between the unlicensed wireless device output and the spectrum analyzer. The instrument shall span 30 MHz to 10 times the operating frequency in GHz, with a resolution bandwidth of 100 kHz, video bandwidth of 300 kHz, and a coupled sweep time with a peak detector. The band 30 MHz to the highest frequency may be split into smaller spans, as long as the entire spectrum is covered. The following setting is used.

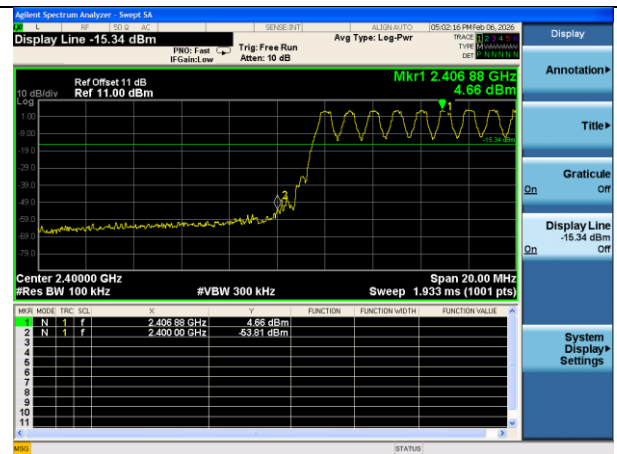
7.8.4 Test Result

See test plots

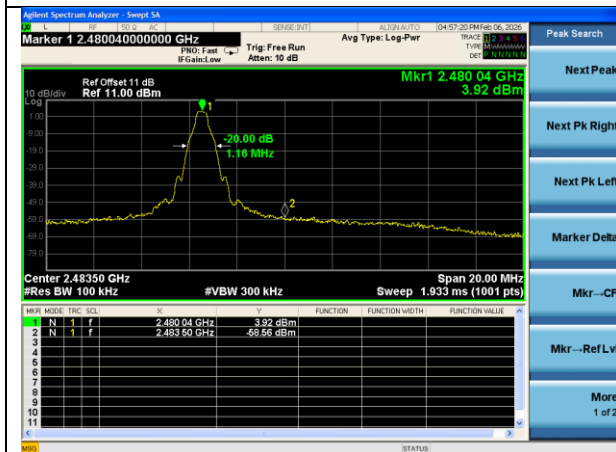
7.8.5 Test plots



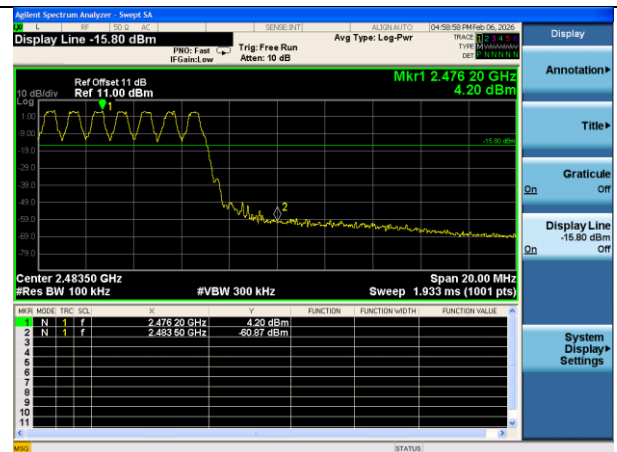
BT-GFSK-Band Edge-Low-Non hopping



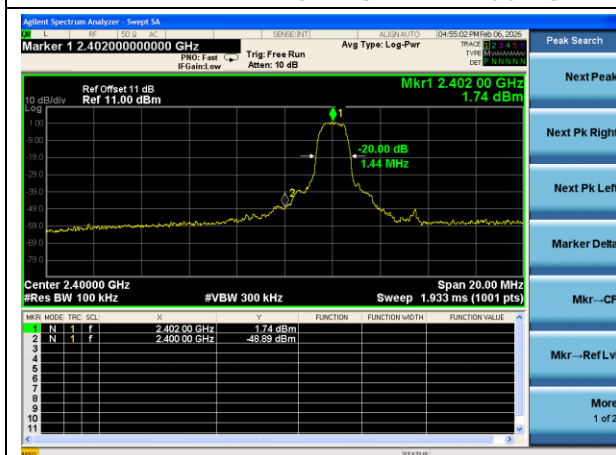
BT-GFSK-Band Edge-Low-Hopping



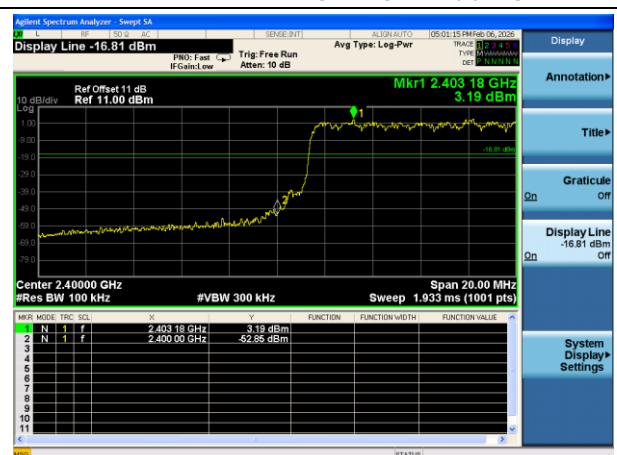
BT-GFSK-Band Edge-High-Non hopping



BT-GFSK-Band Edge-High-Hopping

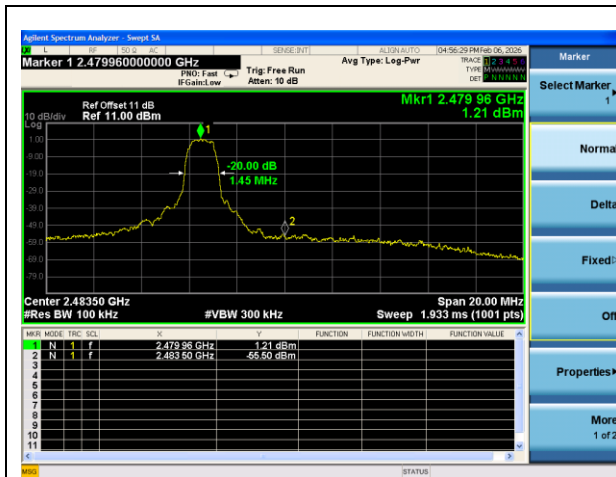


BT-8DPSK-Band Edge-Low-Non hopping

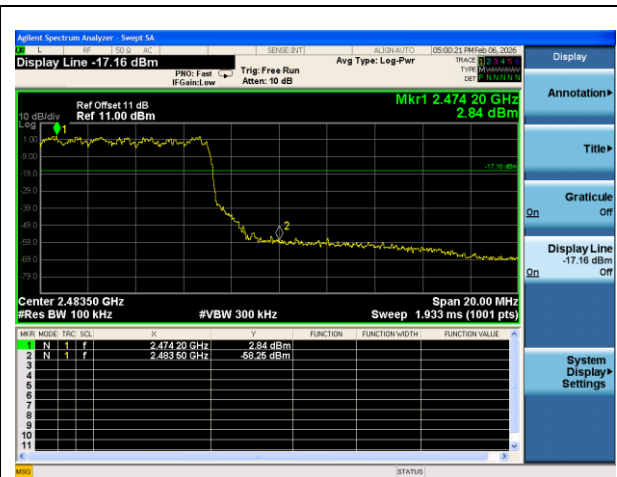


BT-8DPSK-Band Edge-Low-Hopping

Report# HME-26020362-LG-FCC-IC-BT

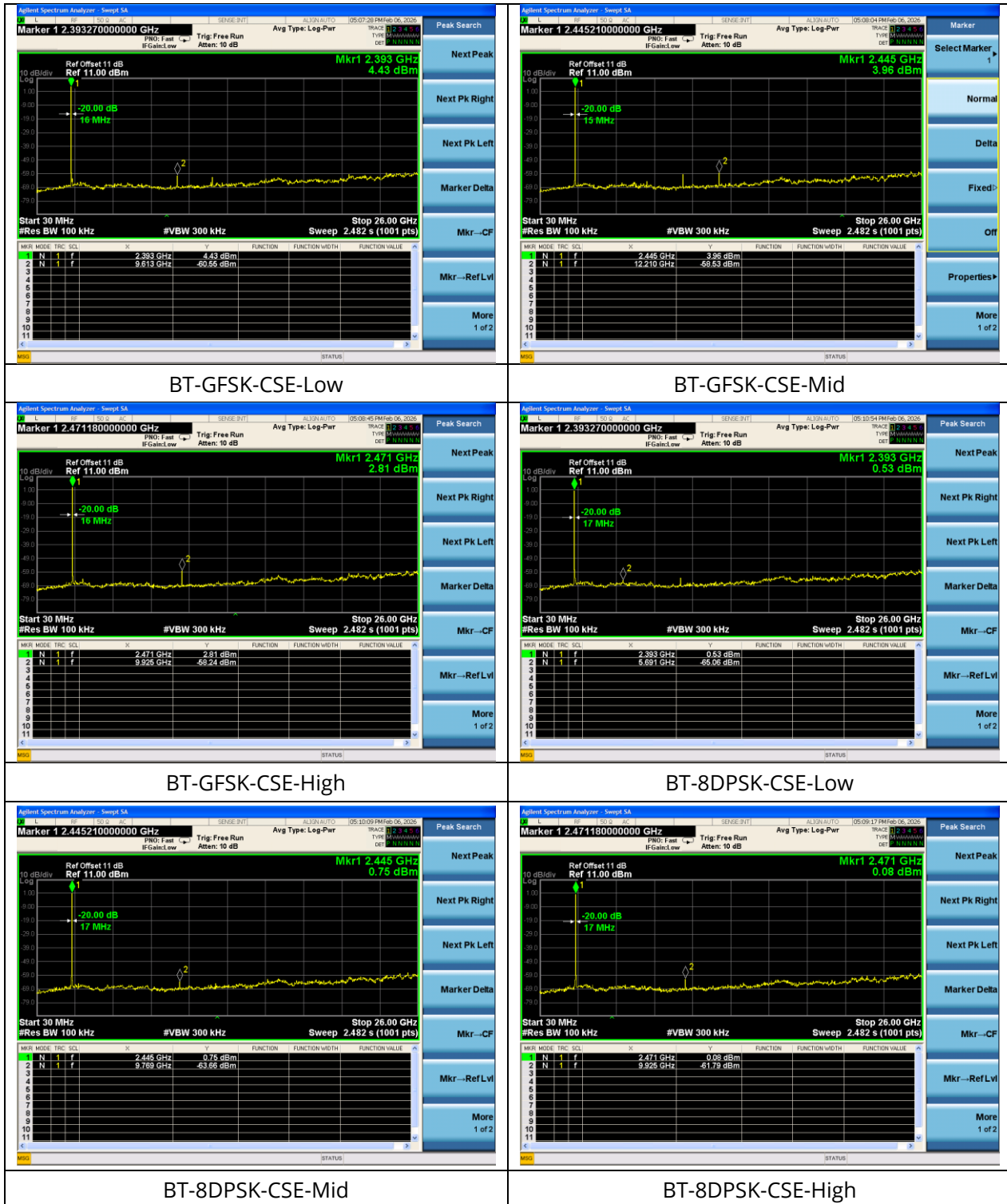


BT-8DPSK-Band Edge-High-Non hopping



BT-8DPSK-Band Edge-High-Hopping

Conducted Spurious Emission Test Result



7.9 Frequency Hopping System Requirement

7.9.1 Requirement

Per § 15.247 (a) (1), RSS-247 §5.1, a)

The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

Per § 15.247 (g), frequency hopping spread spectrum systems are not required to employ all available hopping channels during each transmission. However, the system, consisting of both the transmitter and the receiver, must be designed to comply with all of the regulations in this section should the transmitter be presented with a continuous data (or information) stream. In addition, a system employing short transmission bursts must comply with the definition of a frequency hopping system and must distribute its transmissions over the minimum number of hopping channels specified in this section.

Per § 15.247 (h), the incorporation of intelligence within a frequency hopping spread spectrum system that permits the system to recognize other users within the spectrum band so that it individually and independently chooses and adapts its hopsets to avoid hopping on occupied channels is permitted. The coordination of frequency hopping systems in any other manner for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters is not permitted.

7.9.2 Result

Analysis:

This device uses Bluetooth radio which operates in 2400-2483.5 MHz band. Bluetooth uses a radio technology called frequency-hopping spread spectrum, which chops up the data being sent and transmits chunks of it on up to 79 bands (1 MHz each; centered from 2402 to 2480MHz) in the range 2,400-2,483.5MHz. The transmitter switches hop frequencies 1,600 times per second to assure a high degree of data security. All Bluetooth devices participating in a given piconet are synchronized to the frequency-hopping channel for the piconet. The frequency hopping sequence is determined by the master's device address and the phase of the hopping sequence (the frequency to hop at a specific time) is determined by the master's internal clock. Therefore, all slaves in a piconet must know the master's device address and must synchronize their clocks with the master's clock.

Adaptive Frequency Hopping (AFH) was introduced in the Bluetooth specification to provide an effective way for a Bluetooth radio to counteract normal interference. AFH identifies "bad" channels, where either other wireless device are interfering with the Bluetooth signal or the Bluetooth signal is interfering with another device. The AFH-enabled Bluetooth device will then communicate with other devices within its piconet to share details of any identified bad channels. The devices will then switch to alternative available "good" channels, away from the areas of interference, thus having no impact on the bandwidth used.

This device was tested with an Bluetooth system receiver to check that the device maintained hopping synchronization, and the device complied with these requirements for DA 00-705 and FCC Part 15.247 rule.

An example of Pseudorandom Frequency Hopping Sequence Table as below:

08, 24, 40, 56, 40, 56, 72, 09, 01, 09, 33, 41, 33, 41, 65, 73, 53, 69, 06, 22, 04, 20, 36, 52, 38, 46, 70, 78, 68, 76, 21, 29, 10, 26, 42, 58, 44, 60, 76, 13, 03, 11, 35, 43, 37, 45, 69, 77, 55, 71, 08, 24, 08, 24, 40, 56, 40, 48, 72, 01, 72, 01, 25, 33, 12, 28, 44, 60, 42, 58, 74, 11, 05, 13, 37, 45 etc.

The system receiver has input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shift frequencies in synchronization with the transmitted signals.

Conclusion:

EUT complies with frequency hopping system requirement in § 15.247.

7.10 Radiated Band-Edge & Spurious Emissions into Restricted Frequency Bands

7.10.1 Requirement

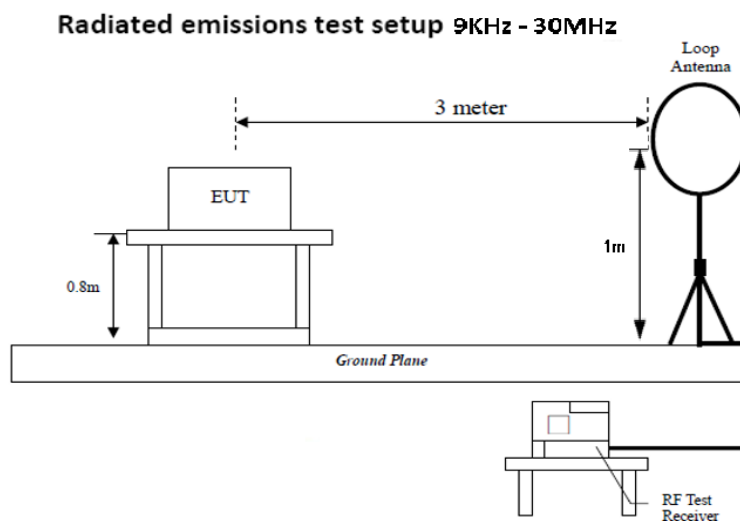
§ 15.247 (d), RSS-247 §5.5

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

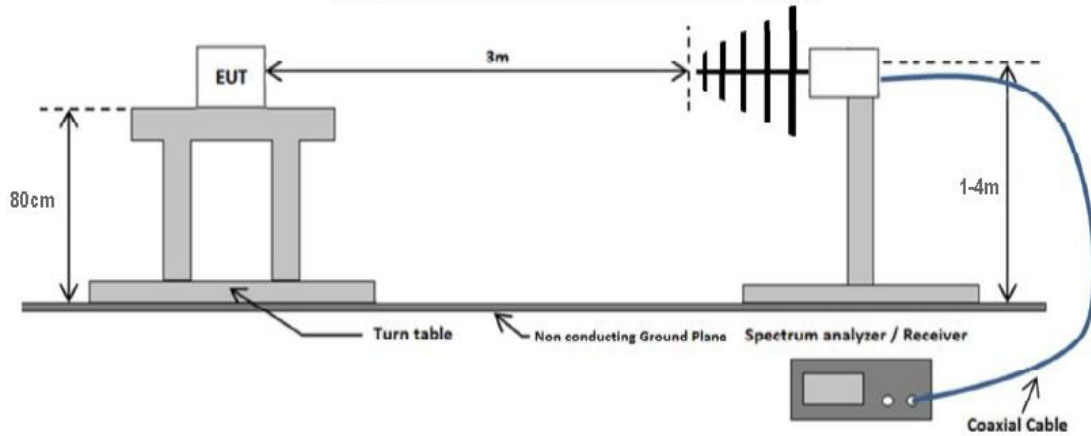
Attenuation below the general limits specified in §15.209(a) and RSS-Gen is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

Frequency range (MHz)	Field Strength (μV/m)
0.009~0.490	2400/F(KHz)
0.490~1.705	24000/F(KHz)
1.705~30.0	30
30 – 88	100
88 – 216	150
216 960	200
Above 960	500

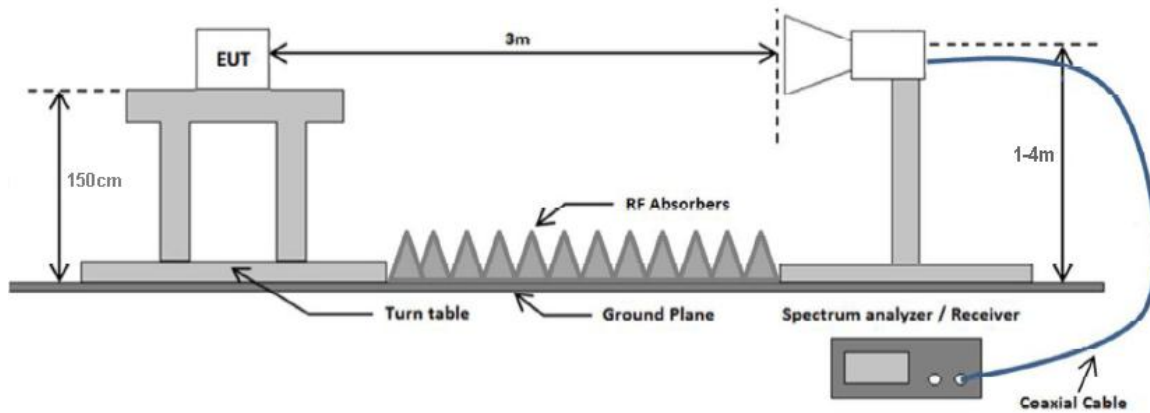
7.10.2 Test setup



Radiated emissions test setup 30 MHz - 1 GHz



Radiated emissions test setup above 1 GHz



7.10.3 Test Procedure

According to section 7.8.8 Radiated spurious emission measurements in ANSI C63.10 as well as the procedures for maximizing and measuring radiated emissions that are described in ANSI C63.10 was followed. Boresight antenna mast was used during the scanning to point to EUT to maximize the emission. The process will be repeated in 3 EUT orientations.

1. The EUT was switched on and allowed to warm up to its normal operating condition.
2. The test was carried out at the selected frequency points obtained from the EUT characterization. Maximization of the emissions, was carried out by rotating the EUT, changing the antenna polarization, and adjusting the antenna height in the following manner:
 - a) Vertical or horizontal polarization (whichever gave the higher emission level over a full rotation of the EUT) was chosen.
 - b) The EUT was then rotated to the direction that gave the maximum emission.
 - c) Finally, the antenna height was adjusted to the height that gave the maximum emission.
3. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 300 Hz for frequency below 150KHz.
4. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 10 kHz for frequency between 150KHz – 30MHz.
5. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-Peak detection at frequency between 30MHz - 1GHz.
6. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz with Peak detection for Peak and average measurement at frequency above 1GHz.
7. Steps 2 and 3 were repeated for the next frequency point, until all selected frequency points were measured.

Report#	HME-26020362-LG-FCC-IC-BT
----------------	---------------------------

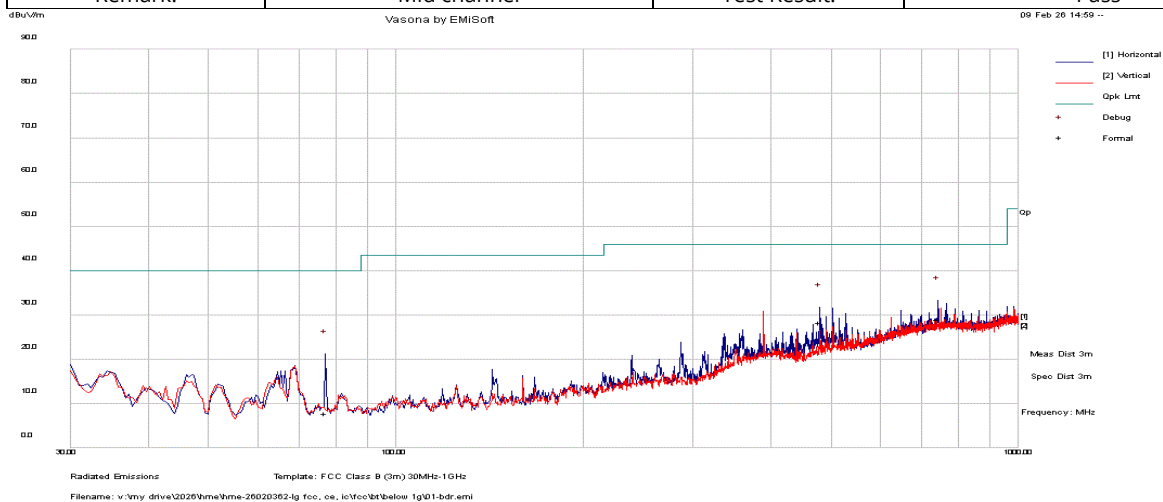
7.10.4 Test Result

Radiated Emission between 9KHz – 30MHz test result

Note: no substantial emission is found other than the noise floor. Different modes have been verified.

RADIATED EMISSIONS BELOW 1 GHZ

Test Standard:	FCC15.247, 15.209, RSS-247	Mode:	BDR Cont-TX
Frequency Range:	30 MHz - 1 GHz	Test Date:	02/09/2026
Antenna Type/Polarity:	Bi-Log/Hor & Ver	Test Personnel:	Lining
Remark:	Mid channel	Test Result:	Pass



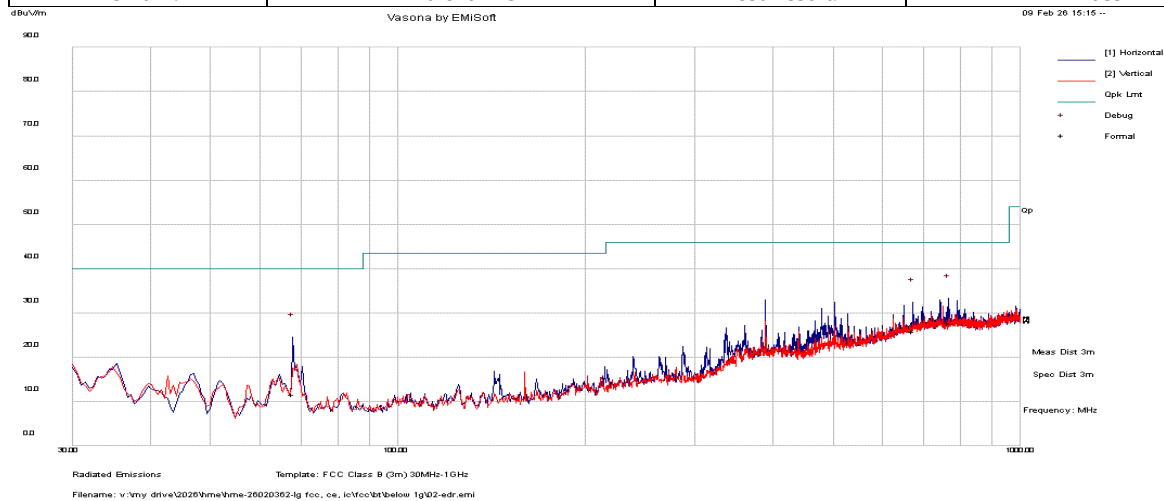
No.	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass/Fail
1	743.19	18.44	7.28	3.43	29.15	Quasi Max	H	109	360	46.00	-16.85	Pass
2	479.23	24.10	6.13	-1.88	28.35	Quasi Max	H	162	306	46.00	-17.65	Pass
3	77.20	17.84	3.28	-13.19	7.93	Quasi Max	H	209	340	40.00	-32.07	Pass

Remarks:

1. Level (dBuV) = Raw (dBuV) + Cable loss(dB) + AF (dB).
2. AF(dB) = Antenna Factor (dB) - Preamplifier Gain (dB)
3. Margin = Level (dBuV/m) - Limit value(dBuV/m)

Report#	HME-26020362-LG-FCC-IC-BT
----------------	---------------------------

Test Standard:	FCC15.247, 15.209, RSS-247	Mode:	EDR Cont-TX
Frequency Range:	30 MHz - 1 GHz	Test Date:	02/09/2026
Antenna Type/Polarity:	Bi-Log/Hor & Ver	Test Personnel:	Lining
Remark:	Mid channel	Test Result:	Pass



No.	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass/Fail
1	767.19	16.96	7.27	3.71	27.94	Quasi Max	H	183	0	46.00	-18.06	Pass
2	671.17	16.34	7.27	2.30	25.91	Quasi Max	H	282	89	46.00	-20.09	Pass
3	67.92	21.69	3.13	-13.10	11.72	Quasi Max	H	100	206	40.00	-28.28	Pass

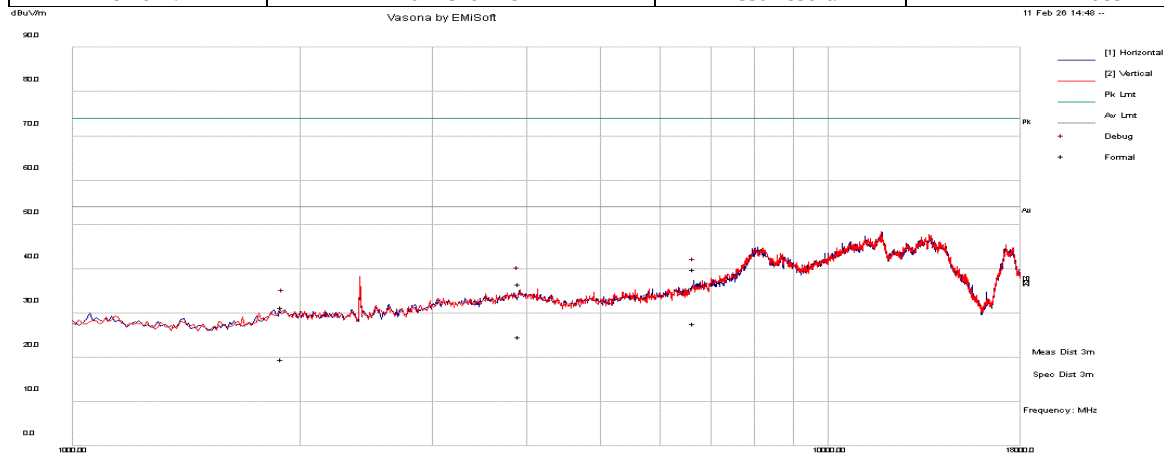
Remarks:

1. Level (dBuV) = Raw (dBuV) + Cable loss(dB) + AF (dB).
2. AF(dB) = Antenna Factor (dB) - Preamplifier Gain (dB)
3. Margin = Level (dBuV/m) - Limit value(dBuV/m)

Report# HME-26020362-LG-FCC-IC-BT

RADIATED EMISSIONS 1 - 18 GHZ

Test Standard:	FCC15.247, 15.209, RSS-247	Mode:	BDR Cont-TX
Frequency Range:	1 GHz - 18 GHz	Test Date:	02/11/2026
Antenna Type/Polarity:	Horn/Hor & Ver	Test Personnel:	Lining
Remark:	Low Channel	Test Result:	Pass



Radiated Emissions
Template: FCC 15.209 (3m) 1-18GHz
Filename: v:\my drive\2026\time\time-26020362-lg fcc, ce, ic\fcc\table\lg01-BT-BDR-LOWW.eml

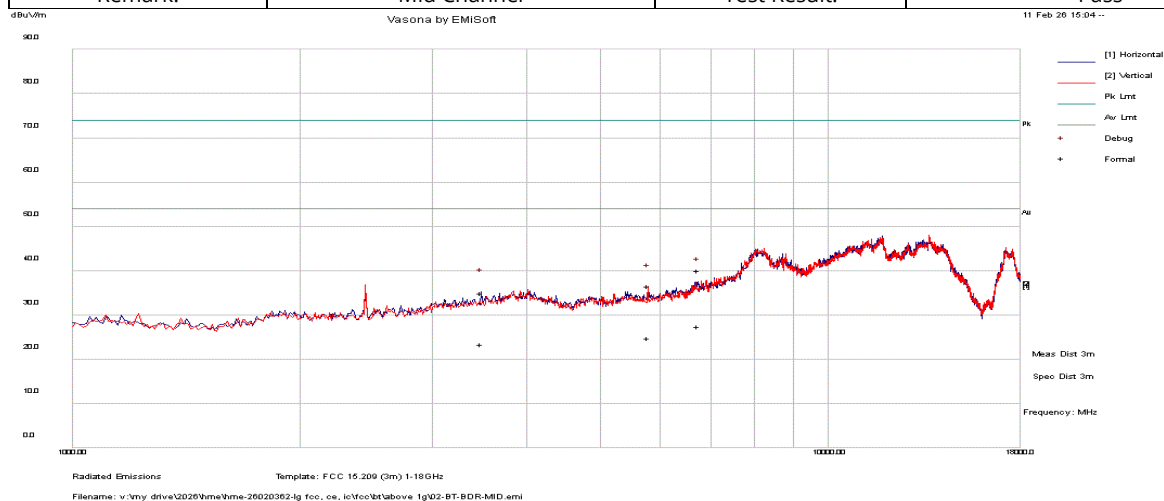
No.	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass/Fail
1	6654.88	19.98	12.10	7.89	39.97	Peak Max	H	160	58	74.00	-34.03	Pass
2	3902.69	21.59	9.52	5.52	36.63	Peak Max	V	103	158	74.00	-37.37	Pass
3	1897.84	24.88	6.21	0.34	31.43	Peak Max	V	165	181	74.00	-42.57	Pass
4	6654.88	7.65	12.10	7.89	27.64	Average Max	H	160	58	54.00	-26.36	Pass
5	3902.69	9.71	9.52	5.52	24.75	Average Max	V	103	158	54.00	-29.25	Pass
6	1897.84	13.10	6.21	0.34	19.65	Average Max	V	165	181	54.00	-34.35	Pass

Remarks:

1. Level (dBuV) = Raw (dBuV) + Cable loss(dB) + AF (dB).
2. AF(dB) = Antenna Factor (dB) - Preamplifier Gain (dB)
3. Margin = Level (dBuV/m) - Limit value(dBuV/m)

Report#	HME-26020362-LG-FCC-IC-BT
----------------	---------------------------

Test Standard:	FCC15.247, 15.209, RSS-247	Mode:	BDR Cont-TX
Frequency Range:	1 GHz - 18 GHz	Test Date:	02/11/2026
Antenna Type/Polarity:	Horn/Hor & Ver	Test Personnel:	Lining
Remark:	Mid Channel	Test Result:	Pass



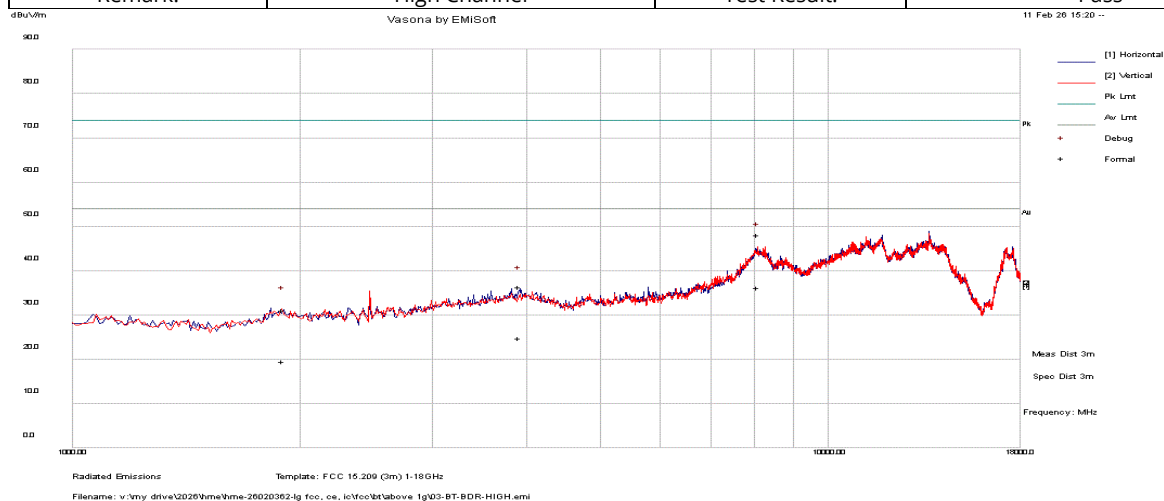
No.	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass/Fail
1	6735.91	19.91	12.01	8.27	40.19	Peak Max	H	100	18	74.00	-33.81	Pass
2	5782.80	19.16	11.48	5.99	36.63	Peak Max	V	166	101	74.00	-37.37	Pass
3	3478.84	22.72	8.19	4.08	34.99	Peak Max	H	174	0	74.00	-39.01	Pass
4	6735.91	7.30	12.01	8.27	27.58	Average Max	H	100	18	54.00	-26.42	Pass
5	5782.80	7.42	11.48	5.99	24.89	Average Max	V	166	101	54.00	-29.11	Pass
6	3478.84	11.24	8.19	4.08	23.51	Average Max	H	174	0	54.00	-30.49	Pass

Remarks:

1. Level (dBuV) = Raw (dBuV) + Cable loss(dB) + AF (dB).
2. AF(dB) = Antenna Factor (dB) - Preamplifier Gain (dB)
3. Margin = Level (dBuV/m) - Limit value(dBuV/m)

Report#	HME-26020362-LG-FCC-IC-BT
----------------	---------------------------

Test Standard:	FCC15.247, 15.209, RSS-247	Mode:	BDR Cont-TX
Frequency Range:	1 GHz - 18 GHz	Test Date:	02/11/2026
Antenna Type/Polarity:	Horn/Hor & Ver	Test Personnel:	Lining
Remark:	High Channel	Test Result:	Pass



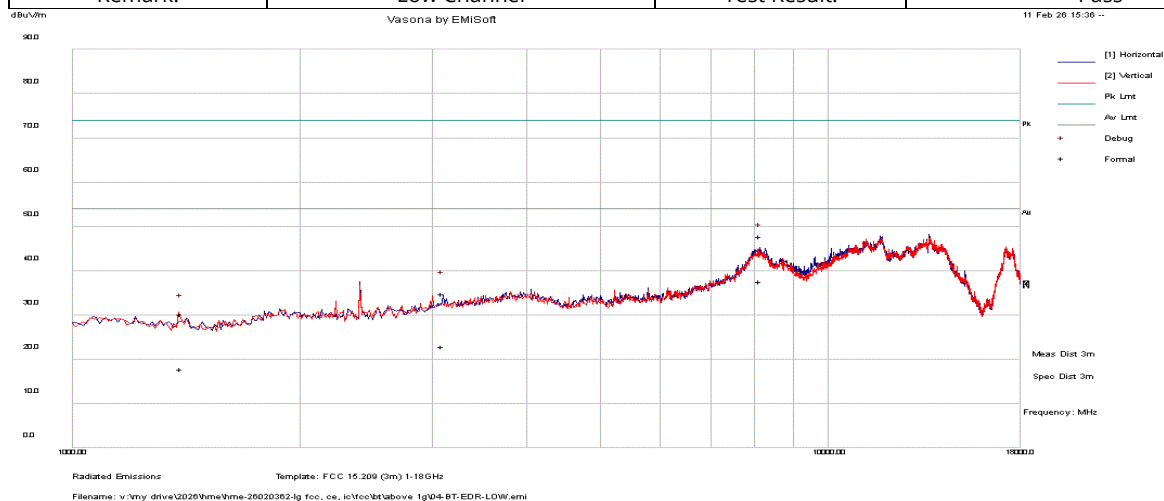
No.	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass/Fail
1	8085.64	18.16	14.23	15.75	48.14	Peak Max	V	144	149	74.00	-25.86	Pass
2	3912.71	21.35	9.57	5.49	36.41	Peak Max	H	195	137	74.00	-37.59	Pass
3	1899.36	24.60	6.22	0.34	31.16	Peak Max	H	152	15	74.00	-42.84	Pass
4	8085.64	6.31	14.23	15.75	36.29	Average Max	V	144	149	54.00	-17.71	Pass
5	3912.71	9.82	9.57	5.49	24.88	Average Max	H	195	137	54.00	-29.12	Pass
6	1899.36	13.00	6.22	0.34	19.56	Average Max	H	152	15	54.00	-34.44	Pass

Remarks:

1. Level (dBuV) = Raw (dBuV) + Cable loss(dB) + AF (dB).
2. AF(dB) = Antenna Factor (dB) - Preamplifier Gain (dB)
3. Margin = Level (dBuV/m) - Limit value(dBuV/m)

Report#	HME-26020362-LG-FCC-IC-BT
----------------	---------------------------

Test Standard:	FCC15.247, 15.209, RSS-247	Mode:	EDR Cont-TX
Frequency Range:	1 GHz - 18 GHz	Test Date:	02/11/2026
Antenna Type/Polarity:	Horn/Hor & Ver	Test Personnel:	Lining
Remark:	Low Channel	Test Result:	Pass



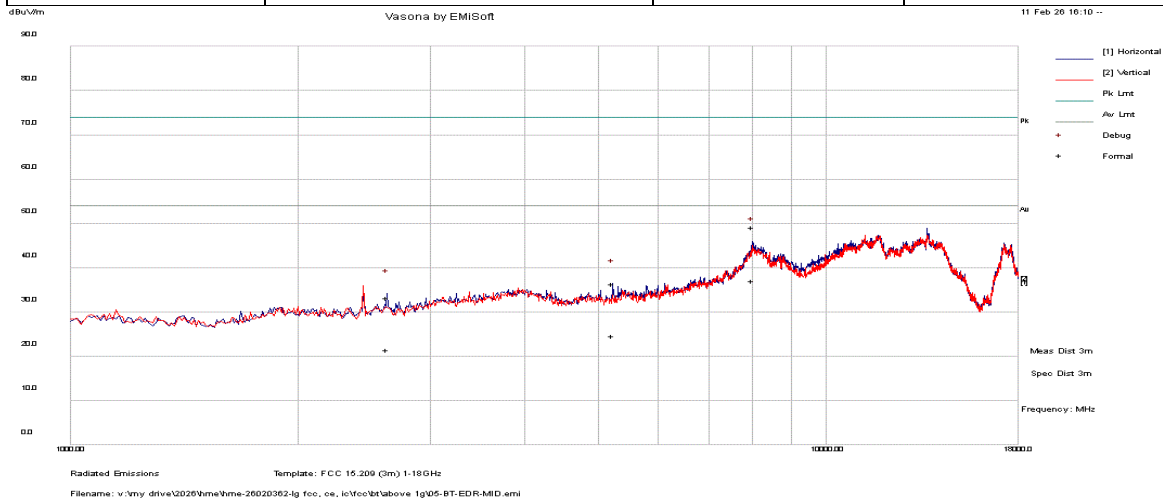
No.	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass/Fail
1	8130.47	17.94	14.21	15.67	47.82	Peak Max	H	171	31	74.00	-26.18	Pass
2	3094.15	24.10	7.71	3.14	34.95	Peak Max	H	136	112	74.00	-39.05	Pass
3	1393.18	26.53	5.05	-1.22	30.36	Peak Max	V	183	180	74.00	-43.64	Pass
4	8130.47	7.71	14.21	15.67	37.59	Average Max	H	171	31	54.00	-16.41	Pass
5	3094.15	12.11	7.71	3.14	22.96	Average Max	H	136	112	54.00	-31.04	Pass
6	1393.18	14.03	5.05	-1.22	17.86	Average Max	V	183	180	54.00	-36.14	Pass

Remarks:

1. Level (dBuV) = Raw (dBuV) + Cable loss(dB) + AF (dB).
2. AF(dB) = Antenna Factor (dB) - Preamplifier Gain (dB)
3. Margin = Level (dBuV/m) - Limit value(dBuV/m)

Report#	HME-26020362-LG-FCC-IC-BT
----------------	---------------------------

Test Standard:	FCC15.247, 15.209, RSS-247	Mode:	EDR Cont-TX
Frequency Range:	1 GHz - 18 GHz	Test Date:	02/11/2026
Antenna Type/Polarity:	Horn/Hor & Ver	Test Personnel:	Lining
Remark:	Mid Channel	Test Result:	Pass



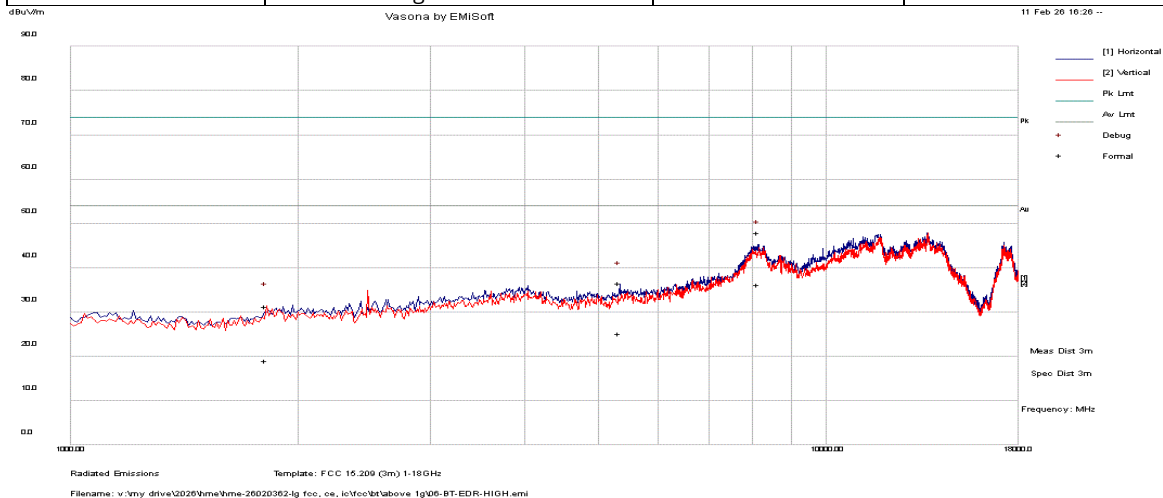
No.	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass/Fail
1	8000.41	19.03	14.27	15.86	49.16	Peak Max	H	100	71	74.00	-24.84	Pass
2	5229.33	20.30	9.97	6.16	36.43	Peak Max	H	126	1	74.00	-37.57	Pass
3	2625.48	25.02	7.06	1.17	33.25	Peak Max	H	117	11	74.00	-40.75	Pass
4	8000.41	7.02	14.27	15.86	37.15	Average Max	H	100	71	54.00	-16.85	Pass
5	5229.33	8.50	9.97	6.16	24.63	Average Max	H	126	1	54.00	-29.37	Pass
6	2625.48	13.40	7.06	1.17	21.63	Average Max	H	117	11	54.00	-32.37	Pass

Remarks:

1. Level (dBuV) = Raw (dBuV) + Cable loss(dB) + AF (dB).
2. AF(dB) = Antenna Factor (dB) - Preamplifier Gain (dB)
3. Margin = Level (dBuV/m) - Limit value(dBuV/m)

Report#	HME-26020362-LG-FCC-IC-BT
----------------	---------------------------

Test Standard:	FCC15.247, 15.209, RSS-247	Mode:	EDR Cont-TX
Frequency Range:	1 GHz - 18 GHz	Test Date:	02/11/2026
Antenna Type/Polarity:	Horn/Hor & Ver	Test Personnel:	Lining
Remark:	High Channel	Test Result:	Pass



No.	Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass/Fail
1	8127.77	18.04	14.21	15.67	47.92	Peak Max	H	117	30	74.00	-26.08	Pass
2	5334.43	20.04	10.28	6.31	36.63	Peak Max	H	122	69	74.00	-37.37	Pass
3	1815.75	25.34	6.09	-0.07	31.36	Peak Max	V	160	13	74.00	-42.64	Pass
4	8127.77	6.32	14.21	15.67	36.20	Average Max	H	117	30	54.00	-17.80	Pass
5	5334.43	8.59	10.28	6.31	25.18	Average Max	H	122	69	54.00	-28.82	Pass
6	1815.75	13.13	6.09	-0.07	19.15	Average Max	V	160	13	54.00	-34.85	Pass

Remarks:

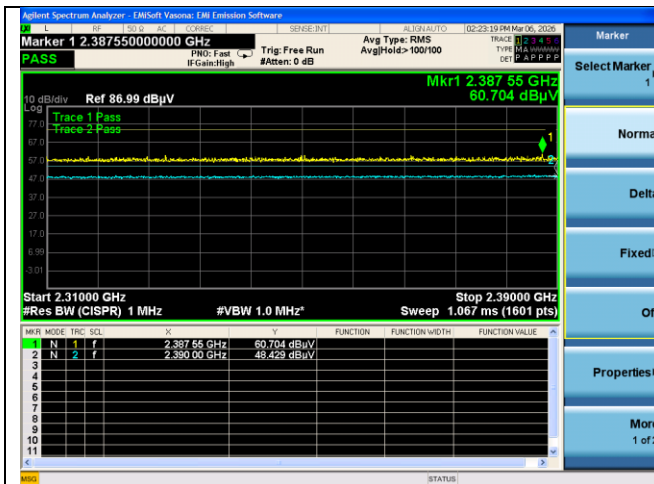
1. Level (dBuV) = Raw (dBuV) + Cable loss(dB) + AF (dB).
2. AF(dB) = Antenna Factor (dB) - Preamplifier Gain (dB)
3. Margin = Level (dBuV/m) - Limit value(dBuV/m)

18GHz – 40GHz test result

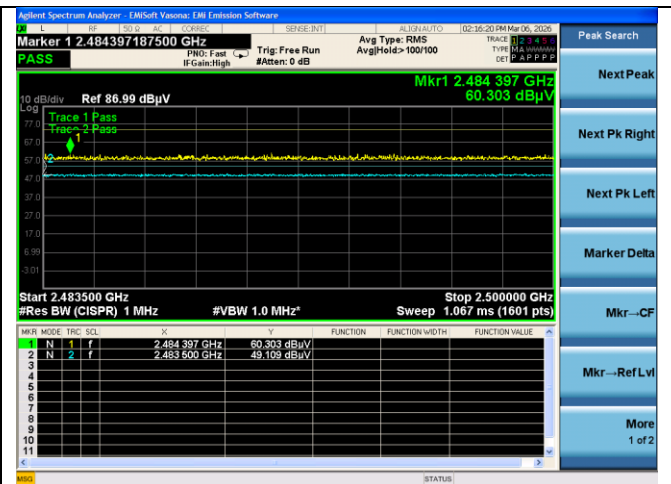
Note: no substantial emission is found other than the noise floor. Different modes have been verified.

Report# HME-26020362-LG-FCC-IC-BT

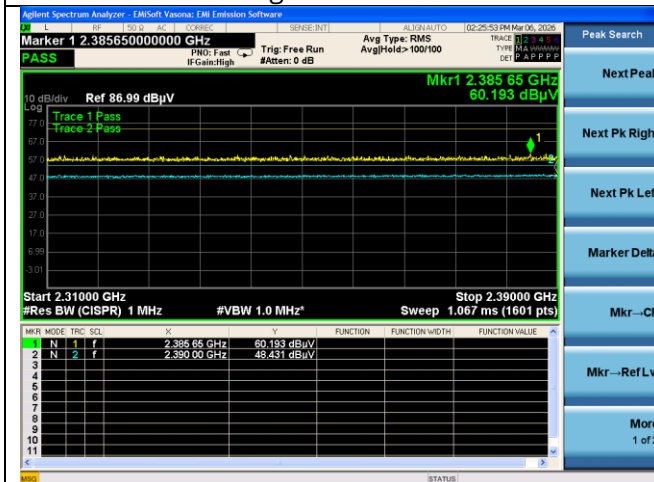
Restricted Band Measurement Plots:



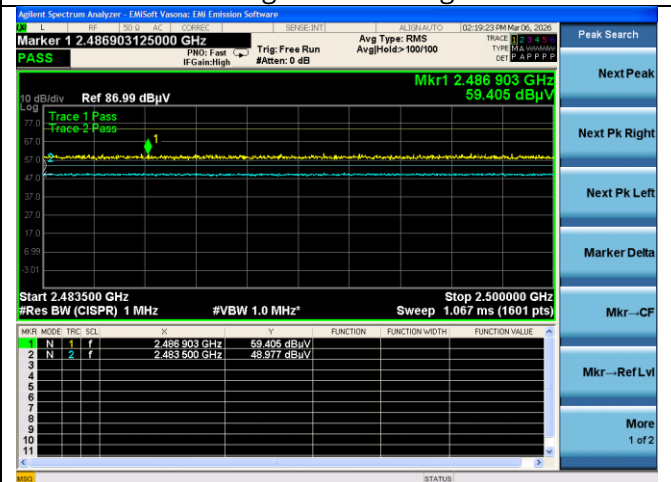
Band Edge - BT BDR Low CH



Band Edge - BT BDR High CH



Band Edge - BT EDR Low CH



Band Edge - BT EDR High CH

7.11 Conducted Emissions

7.11.1 Requirement

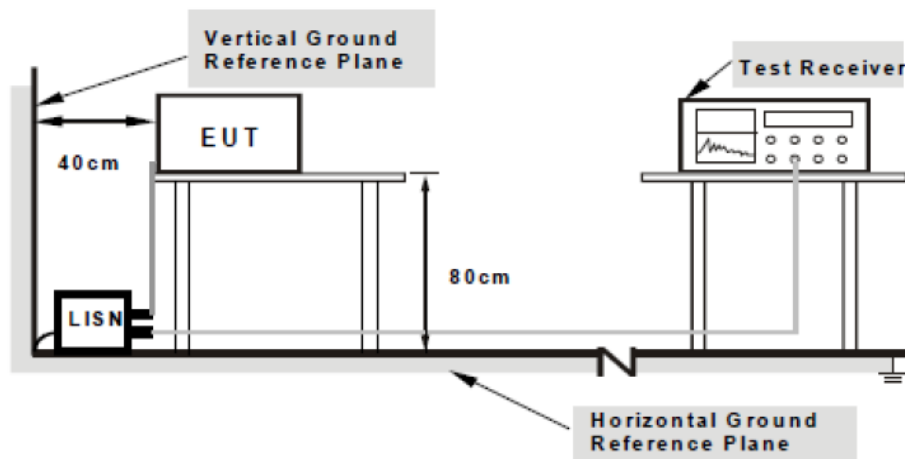
Per § 15.207 (a), an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Limits for Conducted Emissions at the Mains Ports

Section	Frequency ranges (MHz)	Limit (dBuV)	
		QP	Average
Class B devices	0.15 – 0.5	66 – 56	56 – 46
	0.5 – 5	56	46
	5 – 30	60	50

NOTE 1 The lower limit shall apply at the transition frequencies.

7.11.2 Test setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) are 80cm from EUT and at least 80cm from other units and other metal planes support units.

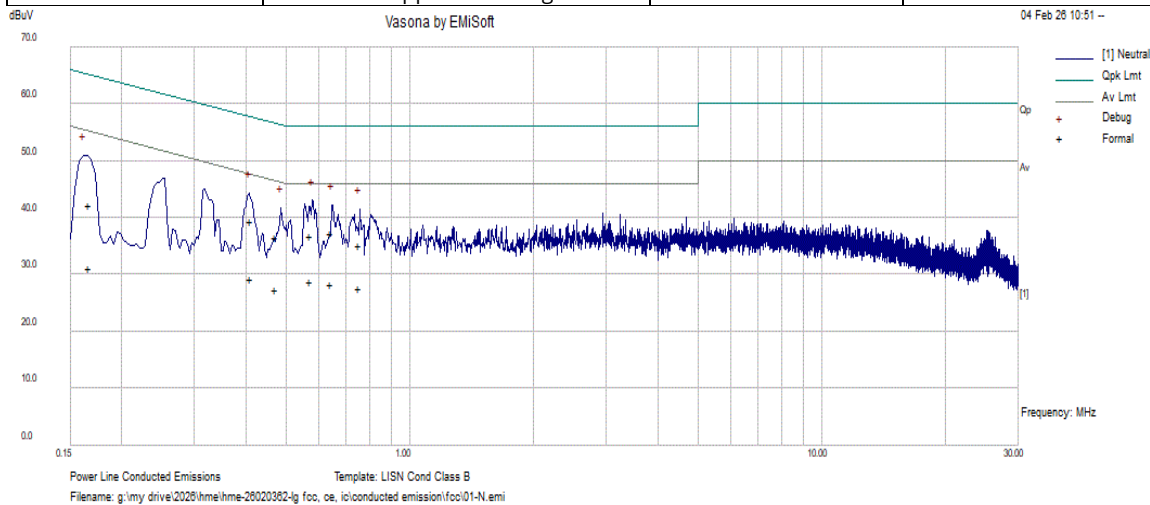
7.11.3 Test Procedure

1. The EUT and supporting equipment were set up in accordance with the requirements of the standard on top of a 1.5m x 1m x 0.8m high, non-metallic table.
2. The power supply for the EUT was fed through a 50 Ω /50 μ H EUT LISN, connected to filtered mains.
3. The RF OUT of the EUT LISN was connected to the EMI test receiver via a low-loss coaxial cable.
4. All other supporting equipment was powered separately from another main supply.
5. The EUT was switched on and allowed to warm up to its normal operating condition.
6. A scan was made on the NEUTRAL line (for AC mains) or Earth line (for DC power) over the required frequency range using an EMI test receiver.
7. High peaks, relative to the limit line, were then selected.
8. The EMI test receiver was then tuned to the selected frequencies and the necessary measurements made with a receiver bandwidth setting of 10 kHz. For FCC tests, only Quasi-peak measurements were made; while for CISPR/EN tests, both Quasi-peak and Average measurements were made
9. All possible modes of operation were investigated. Only the worst case emissions were measured and reported. All other emissions were relatively insignificant.

Report#	HME-26020362-LG-FCC-IC-BT
----------------	---------------------------

7.11.4 Test Result

Test Standard:	LISN B Cond Class B	Mode:	Charging mode
Frequency Range:	0.15 - 30MHz	Test Date:	02/04/2026
Line:	Neutral	Test Personnel:	Lining
Remark:	With apple USB charger	Test Result:	Pass



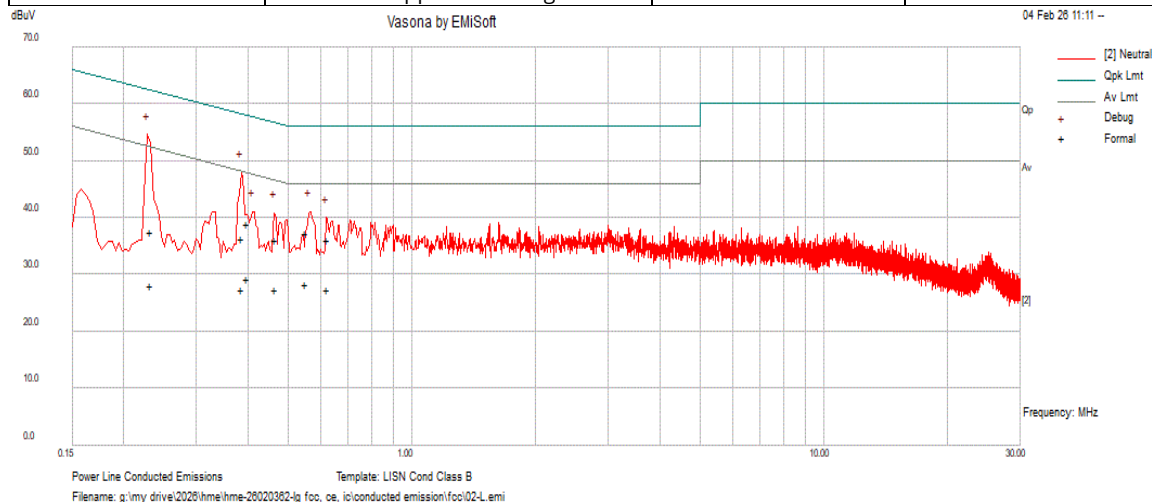
No.	Frequency MHz	Raw dBuV	Cable Loss	Factors dB	Level dBuV	Measurement Type	Line	Limit dBuV	Margin dB	Pass/Fail
1	0.57	26.76	10.05	0.10	36.91	Quasi Peak	Neutral	56.00	-19.09	Pass
2	0.41	29.39	10.04	0.12	39.55	Quasi Peak	Neutral	57.64	-18.09	Pass
3	0.64	27.15	10.05	0.10	37.30	Quasi Peak	Neutral	56.00	-18.70	Pass
4	0.17	31.95	10.03	0.23	42.21	Quasi Peak	Neutral	65.12	-22.91	Pass
5	0.47	26.52	10.04	0.11	36.67	Quasi Peak	Neutral	56.49	-19.82	Pass
6	0.75	24.99	10.05	0.10	35.14	Quasi Peak	Neutral	56.00	-20.86	Pass
7	0.57	18.58	10.05	0.10	28.73	Average	Neutral	46.00	-17.27	Pass
8	0.41	19.13	10.04	0.12	29.29	Average	Neutral	47.64	-18.35	Pass
9	0.64	18.20	10.05	0.10	28.35	Average	Neutral	46.00	-17.65	Pass
10	0.17	21.04	10.03	0.23	31.30	Average	Neutral	55.12	-23.82	Pass
11	0.47	17.39	10.04	0.11	27.54	Average	Neutral	46.49	-18.95	Pass
12	0.75	17.61	10.05	0.10	27.76	Average	Neutral	46.00	-18.24	Pass

Remarks:

1. The emission levels of other frequencies were very low against the limit.
2. Factor = Inert loss of LISN
3. Margin value = Emission level - Limit value
4. Emission Level = Raw Value + Cable loss + Factors Value.

Report#	HME-26020362-LG-FCC-IC-BT
----------------	---------------------------

Test Standard:	LISN B Cond Class B	Mode:	Charging mode
Frequency Range:	0.15 - 30MHz	Test Date:	02/04/2026
Line:	Live	Test Personnel:	Lining
Remark:	With apple USB charger	Test Result:	Pass



No.	Frequency MHz	Raw dBuV	Cable Loss	Factors dB	Level dBuV	Measurement Type	Line	Limit dBuV	Margin dB	Pass/Fail
1	0.23	27.35	10.04	0.16	37.55	Quasi Peak	Live	62.34	-24.79	Pass
2	0.39	26.11	10.04	0.12	36.27	Quasi Peak	Live	58.12	-21.85	Pass
3	0.55	27.17	10.04	0.11	37.32	Quasi Peak	Live	56.00	-18.68	Pass
4	0.47	25.93	10.04	0.11	36.08	Quasi Peak	Live	56.57	-20.49	Pass
5	0.62	25.95	10.05	0.10	36.10	Quasi Peak	Live	56.00	-19.90	Pass
6	0.40	28.85	10.04	0.11	39.00	Quasi Peak	Live	57.90	-18.90	Pass
7	0.23	17.88	10.04	0.16	28.08	Average	Live	52.34	-24.26	Pass
8	0.39	17.28	10.04	0.12	27.44	Average	Live	48.12	-20.68	Pass
9	0.55	18.17	10.04	0.11	28.32	Average	Live	46.00	-17.68	Pass
10	0.47	17.18	10.04	0.11	27.33	Average	Live	46.57	-19.24	Pass
11	0.62	17.27	10.05	0.10	27.42	Average	Live	46.00	-18.58	Pass
12	0.40	19.13	10.04	0.11	29.28	Average	Live	47.90	-18.62	Pass

Remarks:

1. The emission levels of other frequencies were very low against the limit.
2. Factor = Inert loss of LISN
3. Margin value = Emission level - Limit value
4. Emission Level = Raw Value + Cable loss + Factors Value.

8 EUT and Test Setup Photos

See FCC exhibits

9 Test instrument list

Equipment	Manufacturer	Model	Instrument Number	Cal. Date	Cal. Due
Semi-Anechoic Chamber	ETS-Lindgren	10M	VL001	05/24/2024	05/24/2027
Spectrum Analyzer	Keysight	N9020A	MY50110074	05/15/2024	05/15/2026
EMC Test Receiver	R&S	ESL6	100230	05/14/2024	05/14/2026
LISN (9KHz – 30MHz)	EMCO	3816/2	9705-1066	05/28/2024	05/28/2026
Bi-Log Antenna	ETS-Lindgren	3142E	217921	07/25/2024	07/25/2026
Horn Antenna (1-18GHz)	Electro-Metrics	EM-6961	6292	07/22/2024	07/22/2026
Horn Antenna (18-40GHz)	Com-Power	AH-840	101109	07/22/2024	07/22/2026
Temp / Humidity / Pressure Meter	PCE Instruments	PCE-THB 40	R062028	05/17/2024	05/17/2026
RF Attenuator	Pasternack	PE7005-3	VL061	07/29/2024	07/29/2026
Boresight Antenna Tower	ETS-Lindgren	2171B	VL003	N/A1)	N/A1)
Loop Antenna (9k-30MHz)	Com-Power	AL-130	121012	06/13/2024	06/13/2026
RE test cable (below 6GHz)	Vista	RE-6GHz-01	RE-6GHz-01	07/29/2024	07/29/2026
RE test cable (1-18GHz)	PhaseTrack	II-240	RE-18GHz-01	07/29/2024	07/29/2026
RE test cable (>18GHz)	Sucoflex	104	344903/4	07/29/2024	07/29/2026
Pulse limiter	Com-Power	LIT-930A	531727	07/29/2024	07/29/2026
CE test cable #1	FIRST RF	FRF-C-1002-001	CE-6GHz-01	07/29/2024	07/29/2026
CE test cable#2	FIRST RF	FRF-C-1002-001	CE-6GHz-02	07/29/2024	07/29/2026
USB RF Power Sensor	ETS-Lindgren	7002-006	SN 00151268	05/14/2024	05/14/2026
Power Splitter/Combiner	Mini-Circuits	ZFSC-2-9G+	VL052	N/A1)	N/A1)
Power Splitter/Combiner	Mini-Circuits	ZFSC-2-9G+	VL053	N/A1)	N/A1)
Power Splitter/Combiner	Mini-Circuits	ZFSC-2-9G+	VL054	N/A1)	N/A1)
Power Splitter/Combiner	Mini-Circuits	ZFSC-2-9G+	VL055	N/A1)	N/A1)
2.4GHz Notch Filter	Micro-Tronics	BRM50702	VL063	N/A1)	N/A1)
5GHz Notch Filter	Micro-Tronics	BRM50716	VL064	N/A1)	N/A1)
Horn Antenna (1-18GHz)	FT-RF	HA-07M18G-NF	180010HA	N/A1)	N/A1)
Wideband Communication	R&S	CMW500	147508	05/15/2023	05/15/2026
Wideband Communication	Anritsu	MT8000a	6262261939	06/22/2024	06/22/2026
Spectrum Analyser (9kHz-43GHz)	Anritsu	MS2830A	6201145210	05/16/2024	05/16/2026

Note:

1) This equipment is not for measurement purpose and only require functional verification. Calibration is not required.

---END---