



TEST REPORT

Applicant Name : Address : Zeeva International Limited Suite 1007B, 10th Floor, Exchange Tower, 33 Wang Chiu Road, Kowloon Bay, Hong Kong RA221202-58678E-RF 2ADM5-HP-0722

Report Number : FCC ID:

Test Standard (s) FCC PART 15.247

Sample Description

Product Type: Test Model: Trade Mark: Date Received: Date of Test: Report Date:

BT HEADPHONE WITH REMOVABLE MIC HP-0722 N/A 2022-12-02 2022-12-06 to 2022-12-07 2022-12-09

Test Result:

Pass*

* In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By:

Roger, Ling

Roger.Ling EMC Engineer

Approved By:

Candy Li EMC Engineer

Note: This report may contain data that are not covered by the A2LA accreditation and are marked with an asterisk " \star ".

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Shenzhen Accurate Technology Co., Ltd.

GENERAL INFORMATION

Product	BT HEADPHONE WITH REMOVABLE MIC
Tested Model	HP-0722
SKU	BLACK- 7575101 PINK - 7575102 GRAY - 7575103
UPC	BLACK - 1922345600617 PINK - 1922345600624 GRAY - 1922345600631
Frequency Range	2402~2480MHz
Maximum conducted Peak output power	1.39dBm
Modulation Technique	BDR(GFSK)/EDR(1/4-DQPSK)/EDR(8DPSK)
Antenna Specification*	Internal Antenna: -0.68dBi(It is provided by the applicant)
Voltage Range	DC 3.7V from battery or DC 5.0V from USB port for charging
Sample number	RA221202-58678E-RF-S1 (Assigned by ATC, Shenzhen)
Sample/EUT Status	Good condition

Product Description for Equipment under Test (EUT)

Objective

This test report is in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communication Commission rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, section 15.203, 15.205, 15.209 and 15.247 rules.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

All emissions measurement was performed at Shenzhen Accurate Technology Co., Ltd. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Measurement Uncertainty

Para	meter	Uncertainty
Occupied Cha	nnel Bandwidth	5%
RF Fre	equency	$0.082*10^{-7}$
RF output po	wer, conducted	0.73dB
Unwanted Emi	ssion, conducted	1.6dB
AC Power Lines C	onducted Emissions	2.72dB
	9kHz - 30MHz	2.66dB
.	30MHz - 1GHz	4.28dB
Emissions, Radiated	1GHz - 18GHz	4.98dB
Radiated	18GHz - 26.5GHz	5.06dB
	26.5GHz - 40GHz	4.72dB
Temperature		1 °C
Hur	nidity	6%
Supply	voltages	0.4%

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Test Facility

The test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China.

The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No.: 708358, the FCC Designation No.: CN1189. Accredited by American Association for Laboratory Accreditation (A2LA) The Certificate Number is 429 7.01.

Listed by Innovation, Science and Economic Development Canada (ISEDC), the Registration Number is 5077A.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in an engineering mode.

EUT Exercise Software

Software "fcc assist1022 "* was used during testing and the power level was Default Power level 10*.

Special Accessories

N/A.

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
/	/	/	/

External I/O Cable

Cable Description	Length (m)	From/Port	То
/	/	/	/

Block Diagram of Test Setup

	EUT	1.0 Meter
Non-Conductive Table 80/150 cm above Ground Plane	1.5 Meters	

SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§ 15.247 (i), §1.1307 (b) (1) &§2.1093	RF EXPOSURE	Compliant
§15.203	Antenna Requirement	Compliant
§15.207(a)	AC Line Conducted Emissions	Not Applicable
§15.205, §15.209 & §15.247(d)	Radiated Emissions	Compliant
§15.247(a)(1)	20 dB Emission Bandwidth & 99% Occupied Bandwidth	Compliant
§15.247(a)(1)	Channel Separation Test	Compliant
§15.247(a)(1)(iii)	Time of Occupancy (Dwell Time)	Compliant
§15.247(a)(1)(iii)	Quantity of hopping channel Test	Compliant
§15.247(b)(1)	Peak Output Power Measurement	Compliant
§15.247(d)	Band edges	Compliant

Not Applicable- The device is powered by battery when use Bluetooth.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
		Radiated Emiss	ions Test		
Rohde & Schwarz	Test Receiver	ESR	102725	2022/11/25	2023/11/24
Rohde & Schwarz	Spectrum Analyzer	FSV40	101949	2022/11/25	2023/11/24
SONOMA INSTRUMENT	Amplifier	310 N	186131	2022/11/08	2023/11/07
A.H. Systems, inc.	Preamplifier	PAM-0118P	135	2022/11/08	2023/11/07
Quinstar	Amplifier	QLW-184055 36-J0	15964001002	2022/11/08	2023/11/07
Schwarzbeck	Bilog Antenna	VULB9163	9163-323	2021/07/06	2024/07/05
Schwarzbeck	Horn Antenna	BBHA9120D	9120D-1067	2020/01/05	2023/01/04
Schwarzbeck	HORN ANTENNA	BBHA9170	9170-359	2020/01/05	2023/01/04
Wainwright	High Pass Filter	WHKX3.6/18 G-10SS	5	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.10	N050	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.11	N1000	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.12	N040	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.13	N300	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.14	N800	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.15	N600	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.16	N650	2021/12/14	2022/12/13
Radiated Emission Test Software: e3 19821b (V9)					
		RF Conducte			
Rohde & Schwarz	Spectrum Analyzer	FSV-40	101495	2022/11/25	2023/11/24
Rohde & Schwarz	Open Switch and Control Unit	OSP120 + OSP-B157	101244 + 100866	2022/11/25	2023/11/24
WEINSCHEL	10dB Attenuator	5324	AU 3842	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.33	RF-03	Each	time

* **Statement of Traceability:** Shenzhen Accurate Technology Co., Ltd. attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC§15.247 (i), §1.1307 (b) – RF EXPOSURE

Applicable Standard

According to FCC §2.1093 and §1.1307(b), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to KDB 447498 D04 Interim General RF Exposure Guidance v01, clause 2.1.3.1-SAR-Based Exemption:

A more comprehensive exemption, considering a variable power threshold that depends on both the separation distance and power, is provided in § 1.1307(b)(3)(i)(B). This exemption is applicable to the frequency range between 300 MHz and 6 GHz, with test separation distances between 0.5 cm and 40 cm, and for all RF sources in fixed, mobile, and portable device exposure conditions.

Accordingly, a RF source is considered an RF exempt device if its available maximum time-averaged (matched conducted) power or its effective radiated power (ERP), whichever is greater, are below a specified threshold. This exemption threshold was derived based on general population 1-g SAR requirements and is detailed in Appendix C.

Test Result

For worst case:

Mode	Frequency	Maximum Tune-up Conducted Power	Antenna Gain		ERP	ERP _{20cm}	Distance	Excl	Based usion shold	SAR-Based Exclusion
	(MHz)	(dBm)	(dBi)	(dBd)	(dBm)	(mW)	(mm)	(mW)	(dBm)	
BDR/EDR	2402-2480	1.5	-0.68	-2.83	-1.33	3060	5	2.717	4.34	Yes

Note 1: The tune-up power was declared by the applicant. Note 2: 0dBd=2.15dBi.

Result: Compliant.

FCC §15.203 – ANTENNA REQUIREMENT

Applicable Standard

According to FCC § 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.

Antenna Connector Construction

The EUT has one internal on board antenna arrangement, which was permanently attached and the antenna gain is -0.68 dBi, fulfill the requirement of this section. Please refer to the EUT photos.

Result: Compliant.

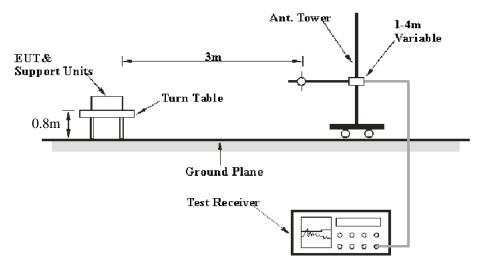
FCC §15.205, §15.209 & §15.247(d) - RADIATED EMISSIONS

Applicable Standard

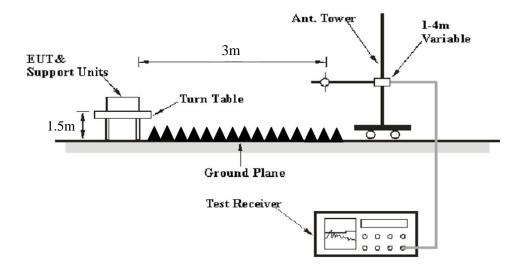
FCC §15.205; §15.209; §15.247(d)

EUT Setup

Below 1 GHz:



Above 1GHz:



The radiated emission performed in the 3 meters, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209, FCC 15.247 limits.

EMI Test Receiver & Spectrum Analyzer Setup

The EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Measurement
30 MHz – 1000 MHz	100 kHz	300 kHz	120 kHz	QP
Above 1 GHz	1 MHz	3 MHz	/	РК

For average measurement:

Use the duty cycle factor correction factor method per 15.35(c). Duty cycle=On time/100milliseconds, On time=N1*L1+N2*L2+...Nn-1*Ln-1+Nn*Ln, Where N1 is number of type 1 pulses, L1 is length of type 1 pulse, etc. Average Emission Level=Peak Emission Level+20*log(Duty cycle)

Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

All final data was recorded in Quasi-peak detection mode for frequency range of 30 MHz -1 GHz and peak and Average detection modes for frequencies above 1 GHz.

If the maximized peak measured value complies with the limit, then it is unnecessary to perform QP/Average measurement.

Factor & Margin Calculation

The Factor is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain. The basic equation is as follows:

Factor = Antenna Factor + Cable Loss - Amplifier Gain

The "**Over Limit/Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over Limit/margin of -7dB means the emission is 7dB below the limit. The equation for calculation is as follows:

Over Limit/Margin = Level / Corrected Amplitude – Limit Level / Corrected Amplitude = Read Level + Factor

Test Data

Environmental Conditions

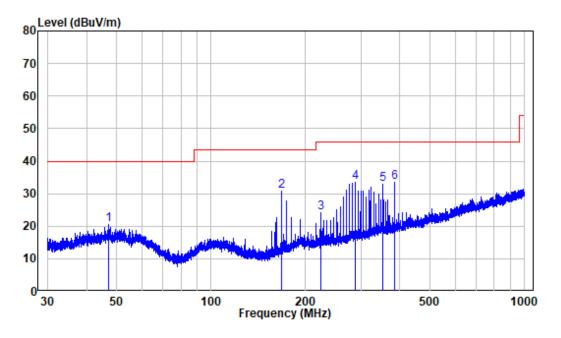
Temperature:	25°C
Relative Humidity:	56%
ATM Pressure:	101kPa

The testing was performed by Jason liu on 2022-12-07

EUT operation mode: BT Transmitting

(Scan with GFSK, $\pi/4$ -DQPSK, 8DPSK mode at X axis, Y axis, Z axis, the worst case is 8DPSK Mode at X axis)

Below 1GHz: 8DPSK, High Channel

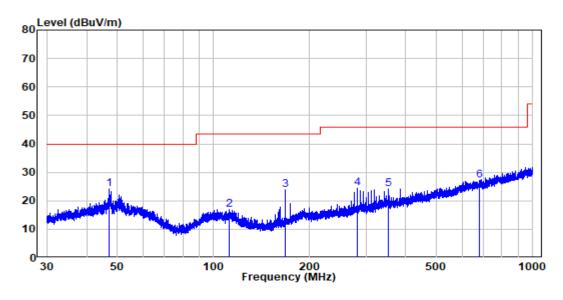


Horizontal

Site :	chamber
Condition:	3m HORIZONTAL
Job No. :	RA221202-58678E-RF
Test Mode:	BT transmitting

	Freq	Factor			Limit Line		Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	46.995	-10.00	30.50	20.50	40.00	-19.50	Peak
2	167.971	-13.78	44.64	30.86	43.50	-12.64	Peak
3	224.028	-11.29	35.33	24.04	46.00	-21.96	Peak
4	287.990	-9.36	42.75	33.39	46.00	-12.61	Peak
5	354.028	-7.46	40.33	32.87	46.00	-13.13	Peak
6	384.100	-7.08	40.51	33.43	46.00	-12.57	Peak





Site : chamber Condition: 3m Vertical Job No. : RA221202-58678E-RF Test Mode: BT transmitting

	Freq	Factor			Limit Line		Remark
-	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	47.057	-10.00	34.18	24.18	40.00	-15.82	Peak
2	111.591	-12.18	29.15	16.97	43.50	-26.53	Peak
3	167.971	-13.78	37.59	23.81	43.50	-19.69	Peak
4	281.995	-9.52	33.86	24.34	46.00	-21.66	Peak
5	354.028	-7.46	31.69	24.23	46.00	-21.77	Peak
6	678.471	-1.53	28.66	27.13	46.00	-18.87	Peak

Above 1GHz (worst case for 8DPSK):

Frequency	Receiver				Factor	Absolute Level	Limit	Margin	
(MHz)	Reading	PK/AV	Degree	Height Polar		(dB / m)	(dBuV/m)	(dBuV/m)	(dB)
	(dBuV)	ΓΛ/Αν	Degree	(m)	(H/V)		````		
2310	47.89	PK	301	1.8	Η	-7.23	40.66	74	-33.34
2310	49.35	PK	107	2.0	V	-7.23	42.12	74	-31.88
2390	49.35	PK	5	1.2	Н	-7.21	42.14	74	-31.86
2390	50.89	PK	178	2.0	V	-7.21	43.68	74	-30.32
4804	52.02	PK	193	1.3	Н	-3.52	48.5	74	-25.5
4804	49.75	РК	268	2.1	V	-3.52	46.23	74	-27.77
				Middle C	hannel				
4882	49.98	РК	27	1.4	Н	-3.37	46.61	74	-27.39
4882	48.62	PK	159	1.6	V	-3.37	45.25	74	-28.75
				High Ch	annel				
2483.5	51.54	РК	134	1.8	Н	-7.2	44.34	74	-29.66
2483.5	48.72	РК	50	1.9	V	-7.2	41.52	74	-32.48
2500	50.12	РК	62	1.9	Н	-7.18	42.94	74	-31.06
2500	47.68	РК	261	1.4	V	-7.18	40.5	74	-33.5
4960	50.83	РК	225	1.3	Н	-3.01	47.82	74	-26.18
4960	49.19	PK	38	1.3	V	-3.01	46.18	74	-27.82

Note:

Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor

Absolute Level = Factor + Reading

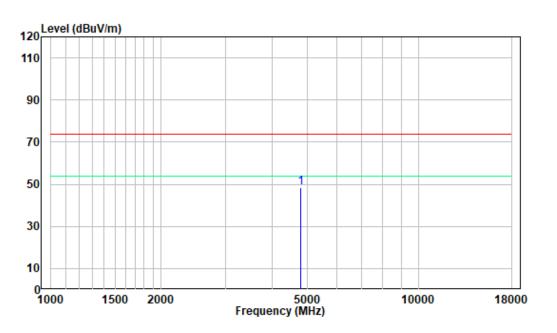
Margin = Absolute Level – Limit

The other spurious emission which is in the noise floor level was not recorded.

For above 1GHz, the test result of peak was 20dB below to the limit of peak, which can be compliant to the average limit, so just peak value was recorded.

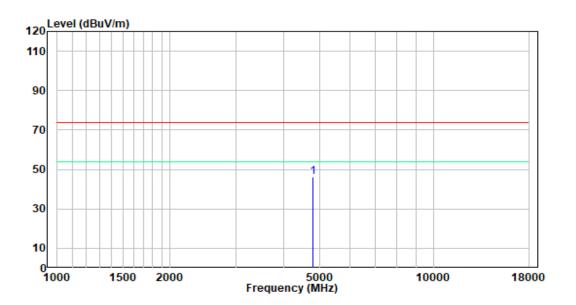
1 GHz - 18 GHz: (Pre-Scan plots)

Worst case for 8DPSK Low Channel:



Horizontal



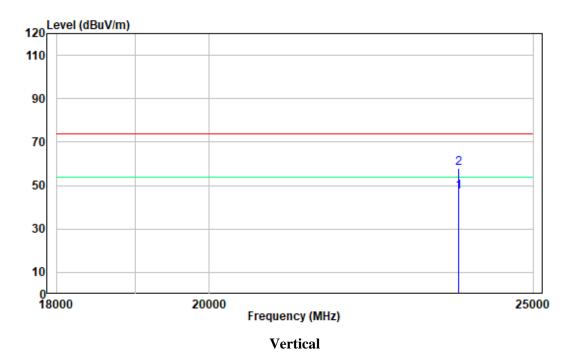


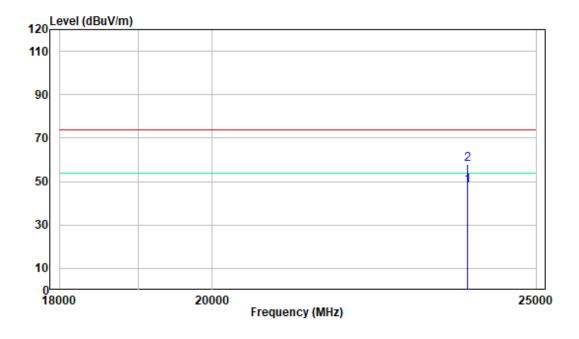
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18-25GHz: (Pre-Scan plots)

Worst case for 8DPSK Low Channel:

Horizontal





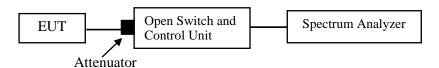
FCC §15.247(a) (1)-CHANNEL SEPATATION TEST

Applicable Standard

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. 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.

Test Procedure

- 1. Set the EUT in transmitting mode, maxhold the channel.
- 2. Set the adjacent channel of the EUT and maxhold another trace.
- 3. Measure the channel separation.



Test Data

Environmental Conditions

Temperature:	24°C
Relative Humidity:	48%
ATM Pressure:	101.0 kPa

The testing was performed by Glenn Jiang on 2022-12-06.

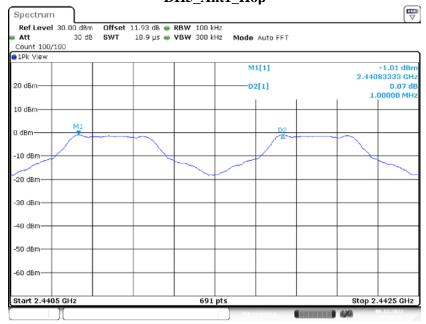
EUT operation mode: Transmitting

Test Result: Compliant.

Test Mode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Нор	1	>=0.634	PASS
2DH5	Ant1	Нор	1	>=0.872	PASS
3DH5	Ant1	Нор	1	>=0.862	PASS

Note: The limit = (2/3) * 20dB bandwidth

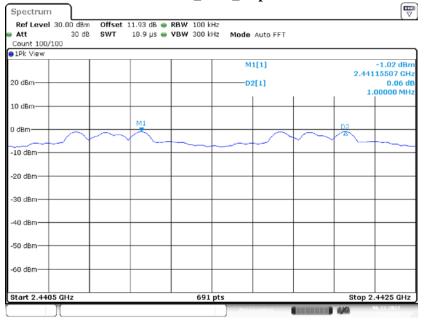
Please refer to the below plots:



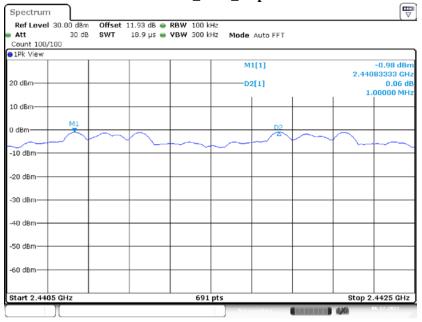
DH5_Ant1_Hop

Date: 6.DEC.2022 13:30:52

2DH5_Ant1_Hop



Date: 6.DEC.2022 13:42:00



3DH5_Ant1_Hop

Date: 6.DEC.2022 13:50:42

FCC §15.247(a) (1) – 20 dB EMISSION BANDWIDTH & 99% OCCUPIED BANDWIDTH

Applicable Standard

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.

Test Procedure

The following conditions shall be observed for measuring the occupied bandwidth and 20 dB bandwidth:

• The transmitter shall be operated at its maximum carrier power measured under normal test conditions.

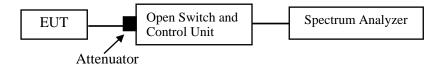
• The span of the spectrum analyzer shall be set large enough to capture all products of the modulation process, including the emission skirts, around the carrier frequency, but small enough to avoid having other emissions (e.g. on adjacent channels) within the span.

• The detector of the spectrum analyzer shall be set to "Sample". However, a peak, or peak hold, may be used in place of the sampling detector since this usually produces a wider bandwidth than the actual bandwidth (worst-case measurement). Use of a peak hold (or "Max Hold") may be necessary to determine the occupied / 20 dB bandwidth if the device is not transmitting continuously.

• The resolution bandwidth (RBW) shall be in the range of 1% to 5% of the actual occupied / 20 dB bandwidth and the video bandwidth (VBW) shall not be smaller than three times the RBW value. Video averaging is not permitted.

Note: It may be necessary to repeat the measurement a few times until the RBW and VBW are in compliance with the above requirement.

For the 99% emission bandwidth, the trace data points are recovered and directly summed in linear power level terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached, and that frequency recorded. The process is repeated for the highest frequency data points (starting at the highest frequency, at the right side of the span, and going down in frequency). This frequency is then recorded. The difference between the two recorded frequencies is the occupied bandwidth (or the 99% emission bandwidth).



Test Data

Environmental Conditions

Temperature:	24°C
Relative Humidity:	48%
ATM Pressure:	101.0 kPa

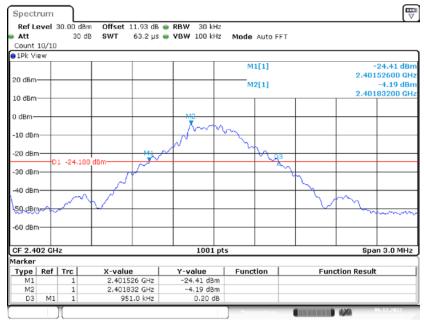
The testing was performed by Glenn Jiang on 2022-12-06.

EUT operation mode: Transmitting

Test Result: Compliant.

Test Mode	Antenna	Channel	20db EBW[MHz]	99% OCCUPIED BANDWIDTH[MHz]	Verdict
		2402	0.951	0.863	PASS
DH5	Ant1	2441	0.951	0.863	PASS
		2480	0.951	0.863	PASS
		2402	1.307	1.169	PASS
2DH5	Ant1	2441	1.301	1.169	PASS
		2480	1.308	1.172	PASS
		2402	1.293	1.175	PASS
3DH5	Ant1	2441	1.293	1.175	PASS
		2480	1.293	1.175	PASS

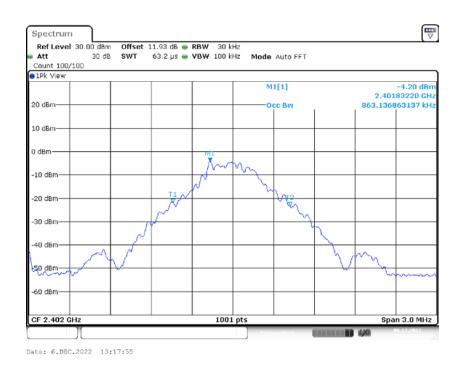
Please refer to the below plots:

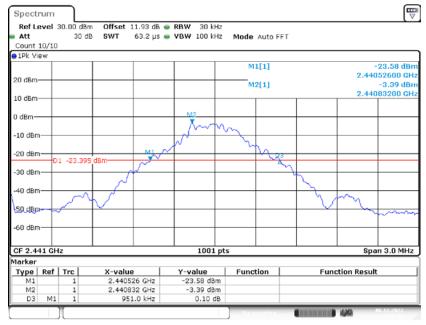


20 dB EMISSION BANDWIDTH_DH5_Ant1_2402

Date: 6.DEC.2022 13:17:38

99% OCCUPIED BANDWIDTH_DH5 _Ant1_2402

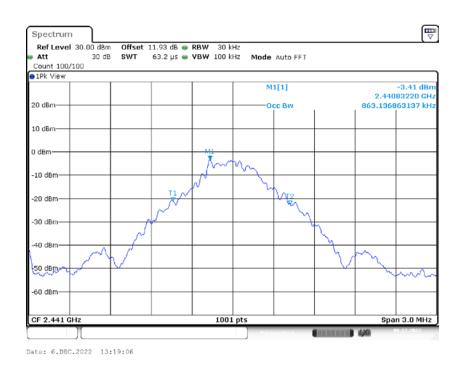


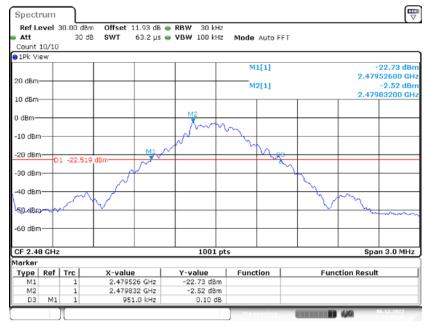


20 dB EMISSION BANDWIDTH_DH5 _Ant1_2441

Date: 6.DEC.2022 13:18:49

99% OCCUPIED BANDWIDTH_DH5 _Ant1_2441

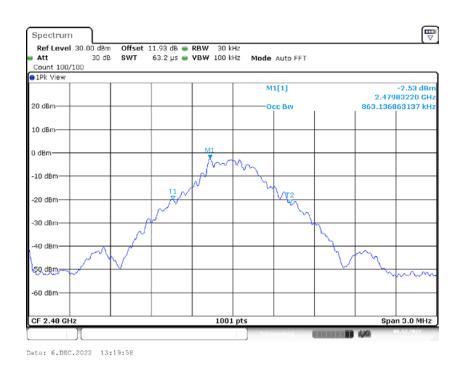


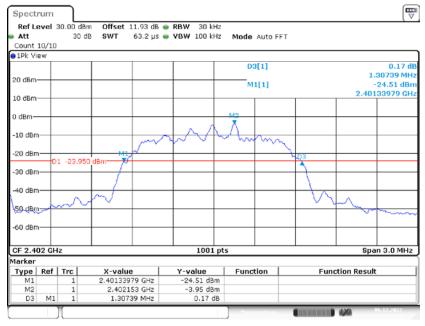


20 dB EMISSION BANDWIDTH_DH5 _Ant1_2480

Date: 6.DEC.2022 13:19:41

99% OCCUPIED BANDWIDTH_DH5 _Ant1_2480

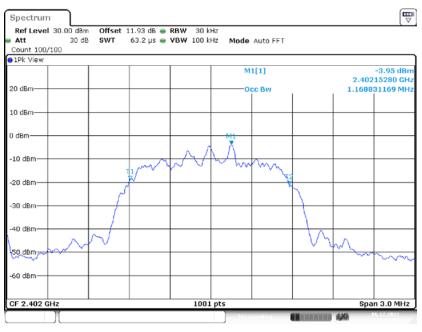




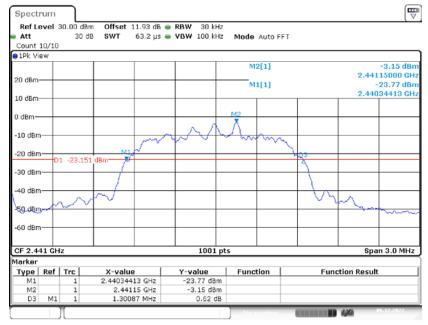
20 dB EMISSION BANDWIDTH_2DH5 _Ant1_2402

Date: 6.DEC.2022 13:22:18

99% OCCUPIED BANDWIDTH_2DH5 _Ant1_2402



Date: 6.DEC.2022 13:22:35

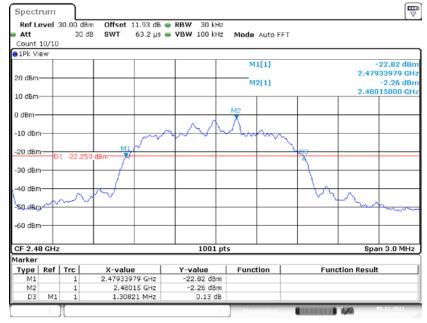


20 dB EMISSION BANDWIDTH_2DH5 _Ant1_2441

Date: 6.DEC.2022 13:23:57

99% OCCUPIED BANDWIDTH_2DH5 _Ant1_2441

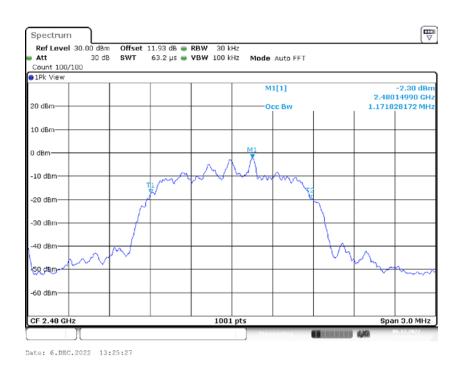


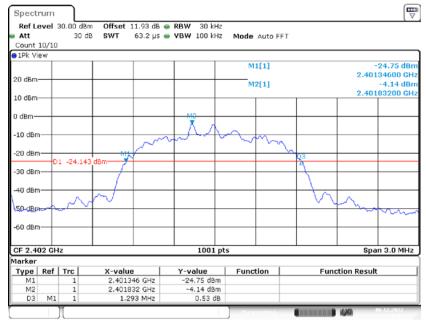


20 dB EMISSION BANDWIDTH _2DH5_Ant1_2480

Date: 6.DEC.2022 13:25:11

99% OCCUPIED BANDWIDTH _2DH5_Ant1_2480

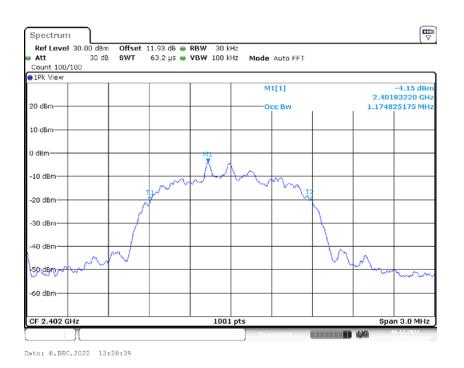


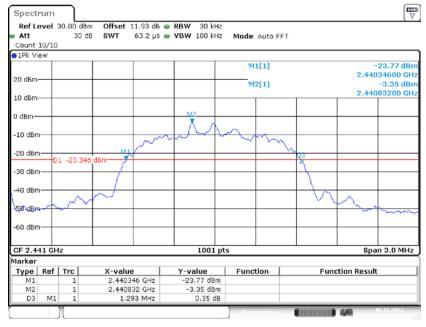


20 dB EMISSION BANDWIDTH_3DH5_Ant1_2402

Date: 6.DEC.2022 13:26:23

99% OCCUPIED BANDWIDTH_3DH5_Ant1_2402



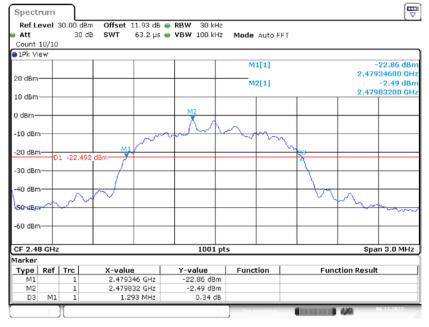


20 dB EMISSION BANDWIDTH_3DH5_Ant1_2441

Date: 6.DEC.2022 13:27:32

99% OCCUPIED BANDWIDTH_3DH5_Ant1_2441

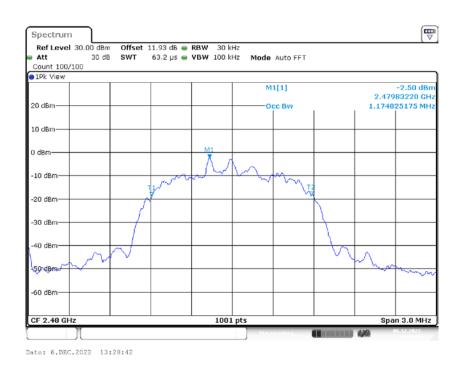




20 dB EMISSION BANDWIDTH_3DH5_Ant1_2480

Date: 6.DEC.2022 13:28:26

99% OCCUPIED BANDWIDTH_3DH5_Ant1_2480



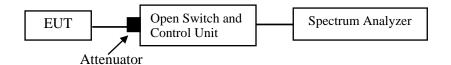
FCC §15.247(a) (1) (iii)-QUANTITY OF HOPPING CHANNEL TEST

Applicable Standard

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.

Test Procedure

- 1. Check the calibration of the measuring instrument (SA) using either an internal calibrator or a known signal from an external generator.
- 2. Set the EUT in hopping mode from first channel to last.
- 3. By using the max-hold function record the quantity of the channel.



Test Data

Environmental Conditions

Temperature:	24°C
Relative Humidity:	48%
ATM Pressure:	101.0 kPa

The testing was performed by Glenn Jiang on 2022-12-06.

EUT operation mode: Transmitting

Test Result: Compliant.

Test Mode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Нор	79	>=15	PASS
2DH5	Ant1	Нор	79	>=15	PASS
3DH5	Ant1	Нор	79	>=15	PASS

Please refer to the below plots:

Spectrum		Offeret	11 02 40 -	DD14 100 L					
Att	30.00 dBm 30 dB		11.93 dB 👄 1 ms 👄	VBW 300 k		Auto Swee	D		
●1Pk View									
20 dBm									
Lo dom									
10 dBm									
0 dBm		and bland a	a h a d a a a b b		nnashobal	a k o b 6 a B B	0.0.0.0.0.0.0	sphereth	1 h A h H H
- DI KIMUY	UINHIN	HUMBAU/A	KAJIKAKU	NUMPE	HIMAUM	INNUNU	MIRAU	n an	UDAH
-10 (Bm	TO THE	40ANM	WARUAR	YUTYUT	hillinden	UYYUYYU	701100	NUMBER	111111
Dallhad	where at		A	1		11.000	1		
-20 dBm									
-30 dBm									
bo della									
40 dBm									
P									"
-50 dBm									
-60 dBm									
ate: 6.DEC	.2022 13:	:32:26	21)U5 A	ntl H			6/6	06.12.2022
ate: 6.DEC	_	:32:26	21	OH5_A	nt1_H	op		98	06.12.2022
Spectrum						op		φe	06,12,2022
Spectrum Ref Level Att	_	Offset	11.93 dB 👄		Hz	op Auto Swee	ρ	ejte	06.12.2022
Spectrum Ref Level	30.00 dBm	Offset	11.93 dB 👄	RBW 100 k	Hz		p	6,68	(
Spectrum Ref Level Att	30.00 dBm	Offset	11.93 dB 👄	RBW 100 k	Hz		p		(
Spectrum Ref Level Att	30.00 dBm	Offset	11.93 dB 👄	RBW 100 k	Hz		p		(E
Spectrum Ref Level Att 1Pk View 20 dBm	30.00 dBm	Offset	11.93 dB 👄	RBW 100 k	Hz		p		
Spectrum Ref Level Att 1Pk View	30.00 dBm	Offset	11.93 dB 👄	RBW 100 k	Hz		p		
Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm	30.00 dBm 30 dB	Offset : SWT	11.93 dB 🖷 1 ms 🖷	RBW 100 k VBW 300 k	Hz Mode	Auto Swee		5,00	
Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm	30.00 dBm 30 dB	Offset : SWT	11.93 dB 🖷 1 ms 🖷	RBW 100 k VBW 300 k	Hz Mode	Auto Swee			
Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm	30.00 dBm 30 dB	Offset : SWT	11.93 dB 👄	RBW 100 k VBW 300 k	Hz Mode	Auto Swee			
Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm	30.00 dBm 30 dB	Offset : SWT	11.93 dB 🖷 1 ms 🖷	RBW 100 k VBW 300 k	Hz Mode	Auto Swee			
Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm	30.00 dBm 30 dB	Offset : SWT	11.93 dB 🖷 1 ms 🖷	RBW 100 k VBW 300 k	Hz Mode	Auto Swee		ngan TWANAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	
Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm	30.00 dBm 30 dB	Offset : SWT	11.93 dB 🖷 1 ms 🖷	RBW 100 k VBW 300 k	Hz Mode	Auto Swee		ngan TWANAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	
Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm	30.00 dBm 30 dB	Offset : SWT	11.93 dB 🖷 1 ms 🖷	RBW 100 k VBW 300 k	Hz Mode	Auto Swee		ngan PWWWWW	
Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm	30.00 dBm 30 dB	Offset : SWT	11.93 dB 🖷 1 ms 🖷	RBW 100 k VBW 300 k	Hz Mode	Auto Swee		ngan PWWWWW PWWWWW	
Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm	30.00 dBm 30 dB	Offset : SWT	11.93 dB 🖷 1 ms 🖷	RBW 100 k VBW 300 k	Hz Mode	Auto Swee			
Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm	30.00 dBm 30 dB	Offset : SWT	11.93 dB 🖷 1 ms 🖷	RBW 100 k VBW 300 k	Hz Mode	Auto Swee			
Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -20 dBm -30 dBm 40 dBm	30.00 dBm 30 dB	Offset : SWT	11.93 dB 🖷 1 ms 🖷	RBW 100 k VBW 300 k	Hz Mode	Auto Swee			
Spectrum Ref Level Att 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -20 dBm -30 dBm 40 dBm	30.00 dBm 30 dB	Offset : SWT	11.93 dB 🖷 1 ms 🖷	RBW 100 k VBW 300 k	Hz Mode	Auto Swee			
Spectrum Ref Level Att 10 dBm 10 dBm 0 dBm -20 dBm -20 dBm -30 dBm -30 dBm -50 dBm	30.00 dBm 30 dB	Offset : SWT	11.93 dB 🖷 1 ms 🖷	RBW 100 k VBW 300 k	Hz Mode	Auto Swee			

DH5_Ant1_Hop

Date: 6.DEC.2022 13:43:21

100

Att	30 dE	SWT	1 ms 👄	VBW 30	0 kHz Mo	de Auto Swe	ер		
1Pk View	1								
20 dBm		<u> </u>			_				
10 dBm					_				
) dBm มีปไม้เป็	MUNIM	unum	umun	ww	annan	MANNA	1 maria	mmu	um
10 dBm						-		, in the second	
20 dBm									
30 dBm									
40 dBm									
50 dBm									
60 dBm—									

3DH5_Ant1_Hop

Date: 6.DEC.2022 13:51:53

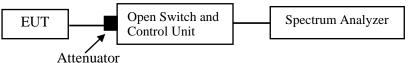
FCC §15.247(a) (1) (iii) - TIME OF OCCUPANCY (DWELL TIME)

Applicable Standard

Frequency hopping systems in the 2400-2483.5 MHz 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.

Test Procedure

- 1. The EUT was worked in channel hopping.
- 2. Set the RBW to: 1MHz.
- 3. Set the VBW \geq 3×RBW.
- 4. Set the span to 0Hz.
- 5. Detector = peak.
- 6. Sweep time = auto couple.
- 7. Trace mode = max hold.
- 8. Allow trace to fully stabilize.
- 9. Recorded the time of single pulses



Test Data

Environmental Conditions

Temperature:	24°C
Relative Humidity:	48%
ATM Pressure:	101.0 kPa

The testing was performed by Glenn Jiang on 2022-12-06.

EUT operation mode: Transmitting

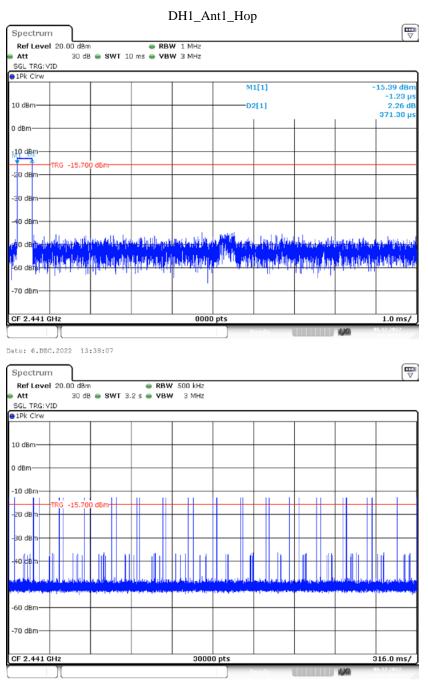
Test Result: Compliant.

Test Mode	Antenna	Channel	Burst Width [ms]	Total Hops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Нор	0.37	320	0.119	<=0.4	PASS
DH3	Ant1	Нор	1.62	170	0.275	<=0.4	PASS
DH5	Ant1	Нор	2.86	130	0.372	<=0.4	PASS
2DH1	Ant1	Нор	0.38	320	0.122	<=0.4	PASS
2DH3	Ant1	Нор	1.63	170	0.277	<=0.4	PASS
2DH5	Ant1	Нор	2.87	110	0.315	<=0.4	PASS
3DH1	Ant1	Нор	0.38	320	0.123	<=0.4	PASS
3DH3	Ant1	Нор	1.63	160	0.26	<=0.4	PASS
3DH5	Ant1	Нор	2.87	130	0.373	<=0.4	PASS

Note 1: A period time=0.4*79=31.6(s), Result=Burst Width*Total Hops

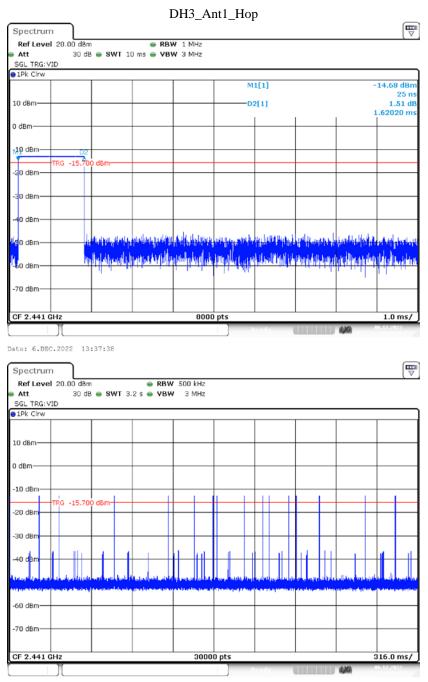
Note 2: Total Hops =Hopping Number in 3.16s*10

Note 3: Hoping Number in 3.16s=Total of highest signals in 3.16s (Second high signals were other channel)

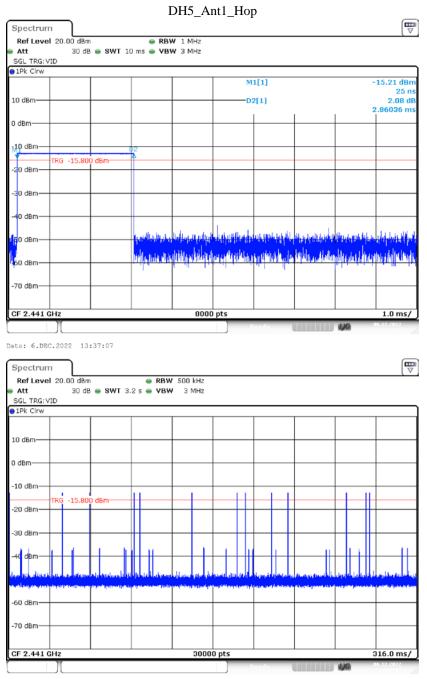


Date: 6.DEC.2022 13:38:12

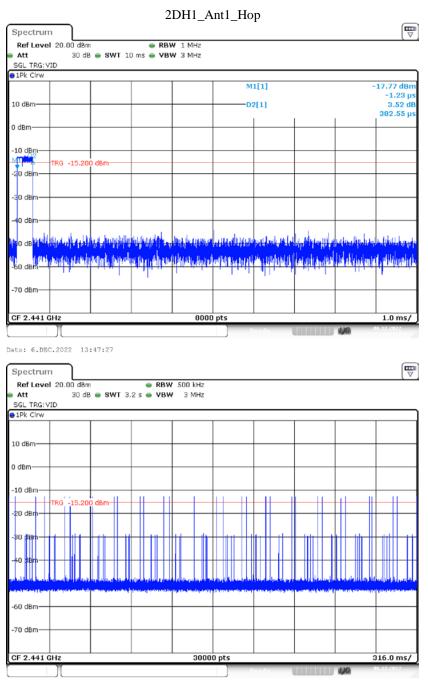
Report No.: RA221202-58678E-RF



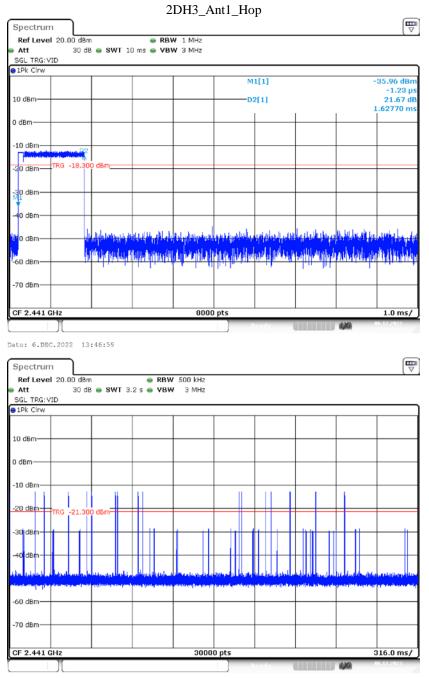
Date: 6.DEC.2022 13:37:44



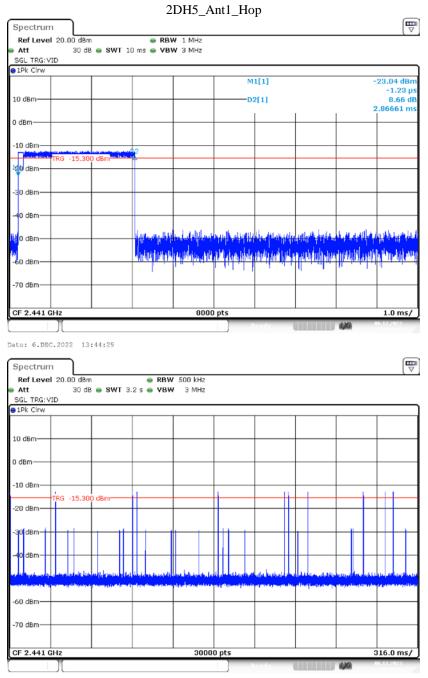
Date: 6.DEC.2022 13:37:12



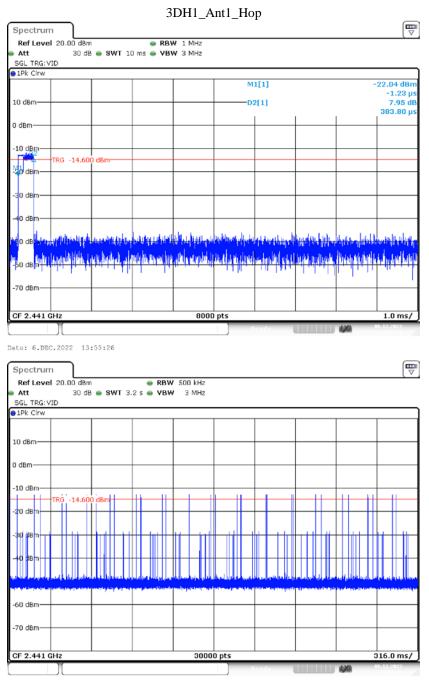
Date: 6.DEC.2022 13:47:33



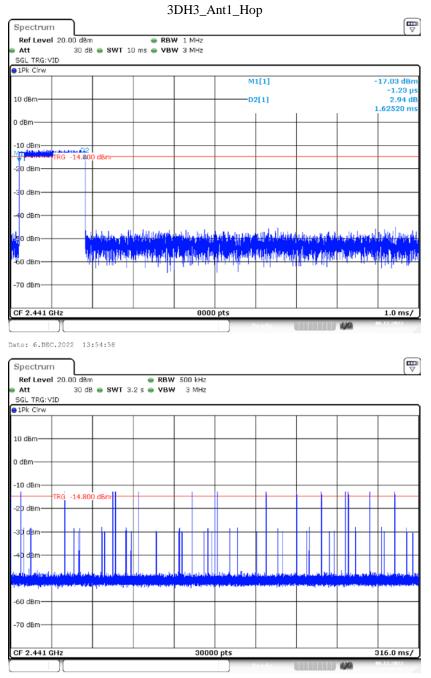
Date: 6.DEC.2022 13:47:05



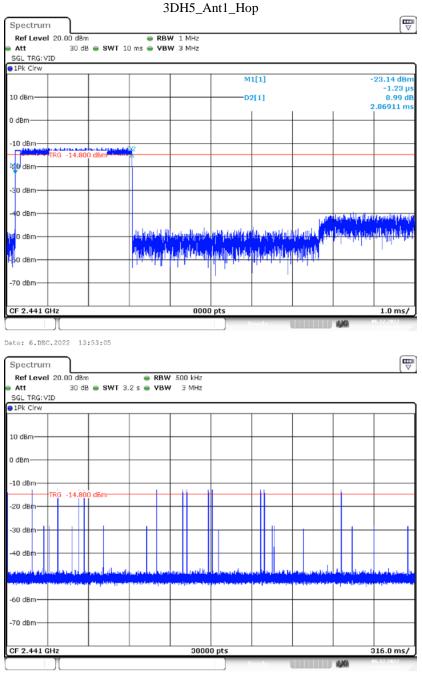
Date: 6.DEC.2022 13:44:35



Date: 6.DEC.2022 13:55:31



Date: 6.DEC.2022 13:55:03



Date: 6.DEC.2022 13:53:10

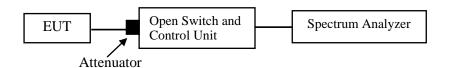
FCC §15.247(b) (1) - PEAK OUTPUT POWER MEASUREMENT

Applicable Standard

According to §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. And for all other frequency hopping systems in the 2400–2483.5 MHz band: 0.125 watts.

Test Procedure

- 1. Place the EUT on a bench and set in transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.
- 3. Add a correction factor to the display.



Test Data

Environmental Conditions

Temperature:	24°C
Relative Humidity:	48%
ATM Pressure:	101.0 kPa

The testing was performed by Glenn Jiang on 2022-12-06.

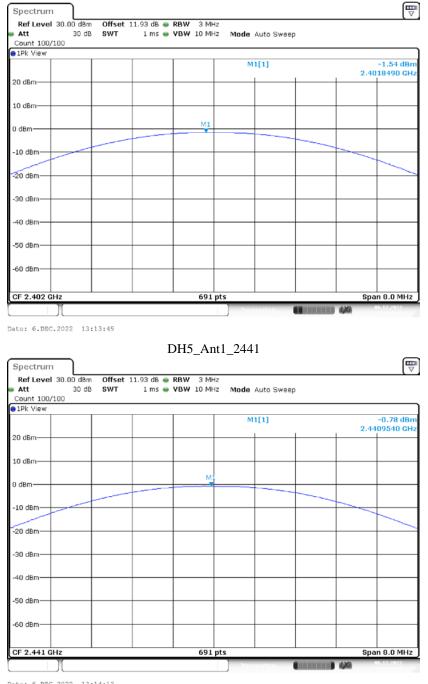
EUT operation mode: Transmitting

Test Result: Compliant.

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
		2402	-1.54	<=20.97	PASS
DH5	Ant1	2441	-0.78	<=20.97	PASS
		2480	0.08	<=20.97	PASS
		2402	-0.62	<=20.97	PASS
2DH5	Ant1	2441	0.14	<=20.97	PASS
		2480	0.98	<=20.97	PASS
		2402	-0.20	<=20.97	PASS
3DH5	Ant1	2441	0.55	<=20.97	PASS
		2480	1.39	<=20.97	PASS

Please refer to the below plots:

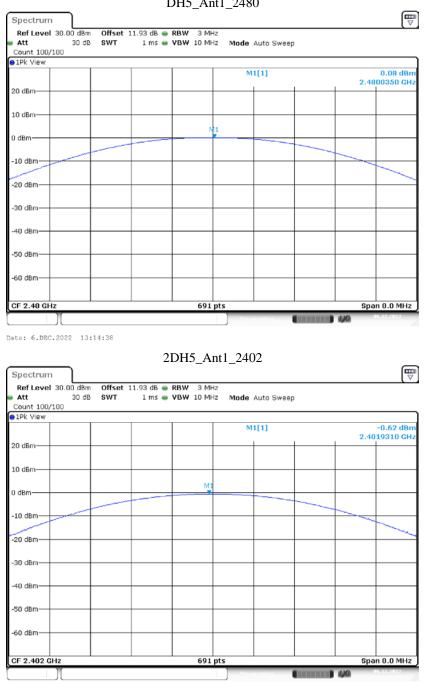
Report No.: RA221202-58678E-RF



DH5_Ant1_2402

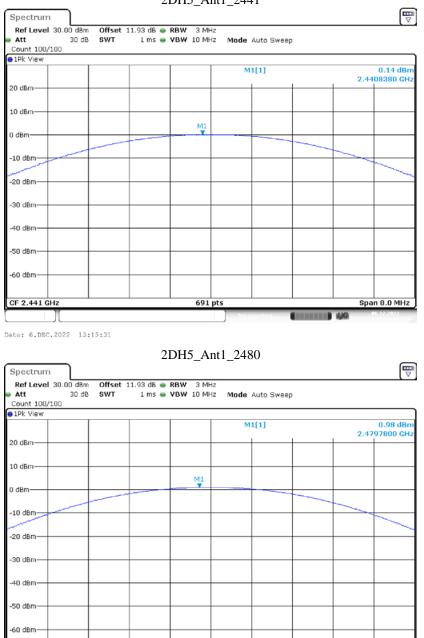
Date: 6.DEC.2022 13:14:13

Report No.: RA221202-58678E-RF



DH5_Ant1_2480

Date: 6.DEC.2022 13:15:09



2DH5_Ant1_2441

Date: 6.DEC.2022 13:15:48

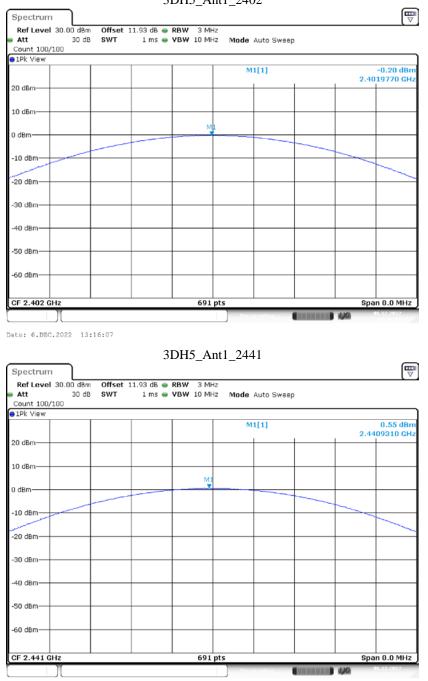
CF 2.48 GHz

691 pts

Span 8.0 MHz

4,4

Report No.: RA221202-58678E-RF



3DH5_Ant1_2402

Date: 6.DEC.2022 13:16:22

Report No.: RA221202-58678E-RF

Count 100/100 1Pk View			Auto Sweep		
		м	1[1]	 2 47	1.39 dBr 99190 GH
20 dBm					
10 dBm					
0 dBm		M1			
-10 dBm					
-20 dBm					
-30 dBm					
-40 dBm					
-50 dBm					
-60 dBm					

3DH5_Ant1_2480

Date: 6.DEC.2022 13:16:36

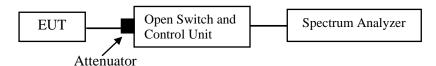
FCC §15.247(d) - BAND EDGES TESTING

Applicable Standard

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, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) 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)).

Test Procedure

- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 2. Remove the antenna from the EUT and then connect to a low loss RF cable from the antenna port to a EMI test receiver, then turn on the EUT and make it operate in transmitting mode. Then set it to Low Channel and High Channel within its operating range, and make sure the instrument is operated in its linear range.
- 3. Set RBW of spectrum analyzer to 100 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
- 4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
- 5. Repeat above procedures until all measured frequencies were complete.



Test Data

Environmental Conditions

Temperature:	24°C
Relative Humidity:	48%
ATM Pressure:	101.0 kPa

The testing was performed by Glenn Jiang on 2022-12-06.

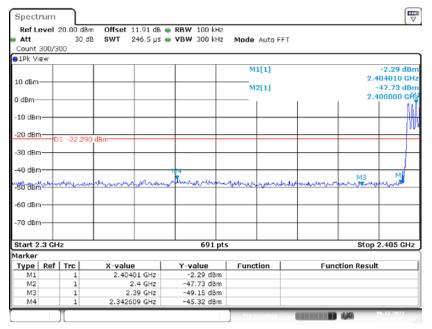
EUT operation mode: Transmitting

Test Result: Compliant

Please refer to the below plots:

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Version 11: 2021-11-09
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DH5: Band Edge-Left Side Hopping



Date: 6.DEC.2022 13:30:09

Single

Ref Le	evel :	20.00 dB	m Offset 11.93 dB	RBW 100 kHz			
Att		30 d	iB SWT 246.5 μs	🖷 VBW 300 kHz	Mode Auto F	FT	
Count 3		00					
●1Pk Vie	9W						
					M1[1]		-2.19 dB
10 dBm-					M2[1]		2.402190 GF -48.91 dB
					mz[1]		2.400000
0 dBm—						1	2.400000 0
-10 dBm							
-10 UBII							
-20 dBm	\rightarrow						
	-	1 -22.19	U dBm				
-30 dBm	+						
-40 dBm	+			1/14			M3 M
-50 88m	Mart	in the second	man and a marked and the second second	andreamy	harmonepus	manaphoneneth	montherapt
-00 0011	·						
-60 dBm	+			_			
-70 dBm	+						
Start 2	3 GH	z		691 pt	s		Stop 2.405 GHz
Marker							
Туре	Ref	Trc	X-value	Y-value	Function	Fun	ction Result
M1	1 2.40219 GHz			-2.19 dBm			
M2		1	2.4 GHz	-48.91 dBm			
M3		1	2.39 GHz 2.344587 GHz	-49.04 dBm -45.17 dBm			

Date: 6.DEC.2022 13:18:10

DH5: Band Edge- Right Side Hopping

Spectrum						
Ref Level					_	
Att Count 300/3	30 d	B SWT 1.1 ms	VBW 300 kHz	Mode Auto S	sweep	
1Pk View	500					
JIFK HEH				M1[1]		-0.26 dBr
				out the		2.477810 GH
10 dBm				M2[1]		-44.27 dBr
0 dBm						2.483500 GH
TUDUQUA	MA					
-10 c8/n						
1888 DATA A	U					
20 dBm (01 -20.260	D dBm				
-30 dBm						
-30 dBm						
-40 dBm	4 M2	M			M4	
	han	o wanter and a second	houldonthin	mouthern	wannuboh	manapatrations
-50 dBm						
-60 dBm						
-70 dBm						
, 0 0011						
Start 2.47 (GHz		691 pt	s		Stop 2.55 GHz
Marker						
Type Ref	Trc	X-value	Y-value	Function	Fund	tion Result
M1			-0.26 dBm			
M2	1	2.4835 GHz	-44.27 dBm			
	1	2.5 GHz	-43.58 dBm			
M3 M4	1	2.531449 GHz	-41.27 dBm			

Date: 6.DEC.2022 13:38:48

Single

	evel :	20.00 dBm		RBW 100 kHz			
Att Count	200/3	30 dB	3 SWT 1.1 ms	🖷 VBW 300 kHz	Mode Auto S	Sweep	
1Pk Vi		00					
					M1[1]		-0.14 dBr
10 dBm	_						2.479900 GH
	N	41			M2[1]		-39.65 dBr
0 dBm-		X				1	2.483500 GH
-10 dBm							
-10 GBU		Π					
20 d8m		1 -20.140	dBm	_			
-30 dBm	·-+-						
-40 dBm		M2		13			Ma
-40 UBI		1, Marsh	mercanina	Jennow www.	man man	menorthing	and a second second and the second
-50 dBm				_			
-60 dBrr	·+-						
-70 dBm							
-70 060	'						
Start 2	47.0	42		691 pts			Stop 2.55 GHz
Marker	.47 0	112		091 pts	•		3100 2.33 412
Type	Ref	Tre	X-value	Y-value	Function	Eun	ction Result
M1		1	2.4799 GHz	-0.14 dBm			
M2		1	2.4835 GHz	-39.65 dBm			
M3 M4		1	2.5 GHz	-42.97 dBm			
		1	2.541768 GHz	-41.61 dBm			

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2DH5: Band Edge-Left Side Hopping

Refl	evel	20.00 d	Bm Offset	11.91 dB	RBW 100 kH;	,			
Att	CVCI	20.00 G 30				Z Mode Auto F	FFT		
Count	300/3					- House Hater			
1Pk V	iew								
						M1[1]			-1.70 dB
10 dBm								2	.404160 GH
20 0011	'					M2[1]			-46.40 dB
) dBm-					_			2.	.400000 GI
									N
-10 dBr	n		-						
-20 dBr									
20 001	P	1 -21.7	00 dBm						
30 dBr	n—				_				+ +
								мз	ма
40 dBr	n	man		in mene	1944	muun		M3	
-40 dBr	n	magal	unazinte	in menor		muun			
40 dBr	n 	mannah	monegnialed	ynen		mulanyan			
-40 dBn -50 dBn -60 dBn	n	manad	uperation	byrnense		Mulange			
-30 dBr -40 dBr -50 dBr -60 dBr -70 dBr	n	mayat	uprezniceto	by providence		-Myintenny peter			
-40 dBn -50 dBn -60 dBn	n	mara	un protection of the second se	lang pananakan		-Mjulancy Mar			
-40 dBn -50 dBn -60 dBn	n	iz	ungent gentral ha					una mitar	
-40 dBr -50 dBr -60 dBr -70 dBr	n n n 2.3 GH	maryanti Iz	under and a second seco	lan panetinational				una mitar	Murium
40 dBr 50 dBr 60 dBr 70 dBr Start 2 Jarker	n n n 2.3 GH		X-valu		691 p Y-value	ts		una mitar	2.405 GHz
40 dBr 50 dBr 60 dBr 70 dBr 70 dBr Start 2 1arker Type M1	n n n 2.3 GH	Trc 1	2.40	416 GHz	691 p <u>Y-value</u> -1.70 dBm	ts Function		Stop	2.405 GHz
40 dBr 50 dBr 60 dBr 70 dBr Start 2 Iarker Type	n n n 2.3 GH	Trc	2.40		691 p Y-value	ts		Stop	2.405 GHz

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Single

Ref Le	evel	20.00 dE	3m Offset 1	1.93 dB (• RBW 100 kHz				(.
Att		30	dB SWT 2	246.5 µs	• VBW 300 kHz	Mode Auto	FFT		
Count 3		00							
∋1Pk Vi	ew								
						M1[1]			78 dBn
10 dBm-								2.4021	
						M2[1]		-50.0	02 dBn
0 dBm—	-		-		+ +		1	2.4000	00 (
-10 dBm									- Λ
TO OBI									
-20 dBm		1 -21.78							
		1 -21.76	so asm						
-30 dBm	+				+ +				-11
-40 dBm								Ma	MIL
sol dem	un an	ampte	standy denne	hollow	Malandrahand	Maplemberry	aland anna	M3	Ji li
-60 dBm	·+-								
-70 dBm	'								
Start 2	2.01	1.2			691 pt			Stop 2.40	E CUa
larker	.3 GF	2			parh	5		5tup 2.40	3 GHZ
Type	Dof	Trol	X-value	. 1	Y-value	Function	1 5	unction Result	
M1	Rel	1		19 GHz	-1.78 dBm	Function		inction result	
M2		1		.4 GHz	-50.02 dBm				
MЗ		1		39 GHz	-49.67 dBm				
M4		1	2 22	85 GHz	-45.08 dBm				

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2DH5: Band Edge- Right Side Hopping

Att		30 d	iB SWT 1.1 ms	: 👄 VBW 300 kHz	Mode Auto S	Sweep	
Count	<u> </u>	00					
DIPK VI	ew				M1[1]		-0.13 dBr
10 dBm							2.480130 GH
		41			M2[1]		-44.00 dBr
9 dBm-	h R. J.S.	¥.					2.483500 GH
		4					
-10 dBr	-						
20 dBm		1 -20.13	0 dem				
LO GDI	- P.	20.13	o dom				
-30 dBm							
-40 dBm		1 MO		мз		M4	
-40 aBn		more	ment marken when when the own	-	man the second	monen	and marked and and and and and and and and and an
-50 dBm							
-60 dBr	-						
-70 dBr							
	.						
Start 2	.47 GI	Hz		691 pt	ts		Stop 2.55 GHz
Marker							
Type	Ref	Trc	X-value	Y-value	Function	Fun	iction Result
M1		1	2.48013 GHz	-0.13 dBm			
M2		1	2.4835 GHz	-44.00 dBm -43.31 dBm			
M3		1	2.5 GHz				

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Single

Ref Le	evel 2	0.00 dB		11.93 dB	🖷 RBW 100 kH	z				
Att		30 0	IB SWT	1.1 ms	👄 VBW 300 kH	z Mode	Auto S	Sweep		
Count : 1Pk Vie		U								
						N	11[1]			-0.14 dBr
10 dBm-									2	.479900 GH
to abin	м	1				N	12[1]			-42.12 dBr
0 dBm—		í –							. 2	.483500 GH
		1								
-10 dBm	-++	1	-				-		-	
			1							
20 dBm	- D 1	-20.14	0 dBm							
-30 dBm										
56 451		1							14	
-40 dBm	- H	M2		м						
Moham		unu	a mar a dalar	monor	Edminikanow	ng-colored and	manna	Marially-articles	hundred	manun
-50 dBm	-						-			
-60 dBm										
-00 ubii										
-70 dBm					_					_
							1			
Start 2	47 GH	12			691 p	nts			St	op 2.55 GHz
larker					0.01				00	op 2.00 di 12
Type	Ref	Tre	X-value		Y-value	Fund	tion	Eur	ction Res	ult
M1	Ref Trc X-value 1 2.4799 GHz			-0.14 dBn			1 41	etteri Kest		
M2		1		35 GHz	-42.12 dBn					
MЗ		1	2	.5 GHz	-44.02 dBn	n				
M4		1	2 5 2 2	42 GHz	-40.91 dBn	0				

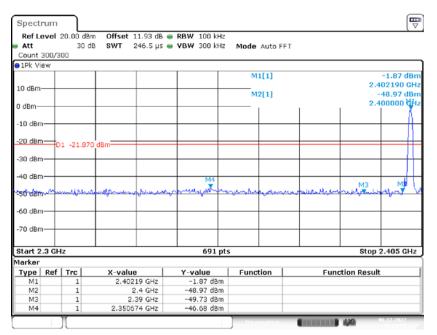
Date: 6.DEC.2022 13:25:42

3DH5: Band Edge-Left Side Hopping

-	um											T
	evel 2	20.00 dB			• RBW 10				-			
Att Count		30 (dB SWT	246.5 µs	• VBW 30	U KHZ	Mode	Auto F	+1			
1Pk Vi	, -	00										
JIPK VI	ew		1	1	-	_	5.4	1[1]				-2.12 dBr
							141	1[1]			2	403100 GH
10 dBm			-			_	M	2[1]				-47.95 dBr
0 dBm—								~[~]				100000 df
U UBIII-									1			1 1
-10 dBm						\rightarrow						
-20 dBm		1 -22.12	0 dBm			+						
00 40-												
-30 dBm	'											
-40 dBm					N14	\rightarrow		<u> </u>				
		mela	amouna	a la harran	mange	-					M3	M
-50 dBn	1-1-1-1		and and a second	a part and a second			A worder	- and	- Mary Mary			and have
-60 dBm												
-00 UBI	'											
-70 dBm						\rightarrow						
Start 2	.3 GH	z			6	91 pts					Stop	2.405 GHz
larker												
Type	Ref	Trc	X-valu	e	Y-valu	e	Func	tion		Func	tion Resul	t
M1		1	2.40	31 GHz	-2.12	dBm						
M2		1		2.4 GHz	-47.95							
MЗ		1		39 GHz	-47.98							
M4		1	2.3426	09 GHz	-45.36	dBm						

Date: 6.DEC.2022 13:49:35

Single



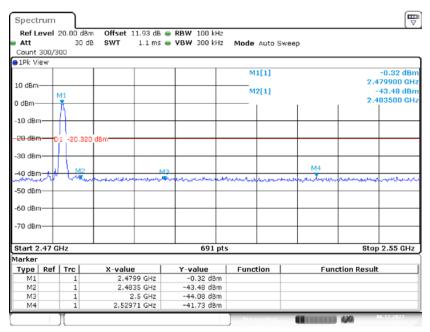
Date: 6.DEC.2022 13:26:54

3DH5: Band Edge- Right Side Hopping

Spect		0.00 dBn	Offset 11.93 dB				(
Att	evel 2	0.00 aBn 30 dE		RBW 100 kHz	••		
Count	200 /20		SWI LIMS	- VBW 300 KHZ	Mode Auto S	sweep	
● 1Pk Vi	<u> </u>	10					
JIPK VI	ew			_	141[1]		-0.09 dBr
					M1[1]		
10 dBm					M2[1]		2.479900 GH -42.99 dBr
		MI					2.483500 GHz
RAR	MAM.	h				1	
-10 dBm							
10 081							
20 dBm		-20.090	dBm				
-30 dBm							
		M2		13		M4	
-40 dBm		henter	menning		- mar all and a second and and a second and a	mandran	and a second and a second second
-50 dBm							
-50 UBI	-						
-60 dBm	<u> </u>						
-70 dBm							
Start 2	.47 GI	lz		691 pts			Stop 2.55 GHz
Marker							
Type	Ref	Tre	X-value	Y-value	Function	Eu	nction Result
M1		1	2.4799 GHz	-0.09 dBm			
M2		1	2.4835 GHz	-42.99 dBm			
MЗ		1	2.5 GHz	-43.23 dBm			
M4		1	2.527159 GHz	-40.90 dBm			
		1					05.12.2022

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Single



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***** END OF REPORT *****