



TEST REPORT

Applicant Name : Address :

Report Number : FCC ID: Shenzhen Bao Tianhua Technology Co., Ltd. 301, Building Plant No.5 Anliang Road, Xi Keng Community, Longgang District, Shenzhen, Guangdong, China RA230525-29215E-RF-00B 2A2H6-MU01042

Test Standard (s)

FCC PART 15.247

Sample Description

Product Type:	Bluetooth headphone
Model No.:	MU01042
Multiple Model(s) No.:	N/A
Trade Mark:	N/A
Date Received:	2023/05/25
Report Date:	2023/06/01

Test Result: Pass*

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

Prepared and Checked By:

Dave Liang

Dave Liang EMC Engineer

Approved By:

Candry . Li

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

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Candy Li EMC Engineer

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision	
0	RA230525-29215E-RF-00B	Original Report	2023-06-01	

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Frequency Range	Bluetooth: 2402~2480MHz
Maximum conducted Peak output power	Bluetooth: 5.93dBm
Modulation Technique	Bluetooth: GFSK, $\pi/4$ -DQPSK, 8DPSK
Antenna Specification*	-0.68dBi (provided by the applicant)
Voltage Range	DC3.7V from battery or DC5V from USB Charging Port
Test Sample serial number	2678-2 for Conducted and Radiated Emissions Test 2678-1 for RF Conducted Test (Assigned by ATC)
Sample/EUT Status	Good condition

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.

Para	meter	Uncertainty		
Occupied Cha	nnel Bandwidth	5%		
RF Fre	equency	$0.082*10^{-7}$		
RF output por	wer, conducted	0.71dB		
Unwanted Emi	ssion, conducted	1.6dB		
AC Power Lines Conducted Emissions		2.72dB		
	9kHz - 30MHz	2.06dB		
	30MHz - 1GHz	5.08dB		
Emissions, Radiated	1GHz - 18GHz	4.96dB		
Radiated	18GHz - 26.5GHz	5.16dB		
	26.5GHz - 40GHz	4.64dB		
Temperature		1 °C		
Humidity		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 Floor 1, KuMaKe Building, Dongzhou Community, Guangming Street, Guangming District, Shenzhen, Guangdong, 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.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0016. The Registration Number is 30241.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in an engineering mode.

EUT Exercise Software

"BT_Tool V1.1.0*" exercise software was used and the power level is 7^* . The power level was provided by the manufacturer.

Special Accessories

No special accessory.

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

For Radiated Emissions:

	EUT	Í
		TI TI
Non-Conductive Table 80/150 cm above Ground Plane		
	1.5 Meters	⊢₩

Note: the support table edge was flush with the center of turntable

SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1307 (b) & §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 was powered by battery when use Bluetooth function.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date	
	Radiated Emissions 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- 18405536-J0	15964001002	2022/11/08	2023/11/07	
Schwarzbeck	Bilog Antenna	VULB9163	9163-323	2021/07/06	2024/07/05	
Schwarzbeck	Horn Antenna	BBHA9120D	837	2023/02/22	2026/02/21	
Schwarzbeck	HORN ANTENNA	BBHA9170	9170-359	2022/12/26	2025/12/25	
	Radiated En	nission Test Softw	vare: e3 19821b (V	(9)		
Unknown	RF Coaxial Cable	No.10	N050	2022/11/25	2023/11/24	
Unknown	RF Coaxial Cable	No.11	N1000	2022/11/25	2023/11/24	
Unknown	RF Coaxial Cable	No.12	N040	2022/11/25	2023/11/24	
Unknown	RF Coaxial Cable	No.13	N300	2022/11/25	2023/11/24	
Unknown	RF Coaxial Cable	No.14	N800	2022/11/25	2023/11/24	
Unknown	RF Coaxial Cable	No.15	N600	2022/11/25	2023/11/24	
Unknown	RF Coaxial Cable	No.16	N650	2022/11/25	2023/11/24	
Wainwright	High Pass Filter	WHKX3.6/18 G-10SS	5	2022/11/25	2023/11/24	

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Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date			
RF Conducted Test								
Rohde&Schwarz	Spectrum Analyzer	FSV-40	101590	2022/11/25	2023/11/24			
Tonscend	RF Control Unit	JS0806-2	19G8060182	2022/10/24	2023/10/23			
WEINSCHEL	10dB Attenuator	5324	AU 3842	2022/11/25	2023/11/24			
Unknown	RF Coaxial Cable	No.31	RF-01	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) &§2.1093 – RF EXPOSURE

Applicable Standard

According to FCC §2.1093 and §1.1307(b) (1), 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 D01 General RF Exposure Guidance

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances \leq 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] ·

 $[\sqrt{f}(GHz)] \le 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

1. f(GHz) is the RF channel transmit frequency in GHz.

2. Power and distance are rounded to the nearest mW and mm before calculation.

3. The result is rounded to one decimal place for comparison.

4. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test Exclusion.

Measurement Result

Mode	Frequency (MHz)	Max tune-up conducted power* (dBm)	Max tune-up conducted power* (mW)	Distance (mm)	Calculated value	Threshold (1-g SAR)	SAR Test Exclusion
BT	2402-2480	6.0	3.98	5	1.3	3.0	Yes

Note: The tune-up power was declared by the applicant.

Result: No Standalone SAR test is required

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 antenna arrangement, which was permanently attached, the antenna gain is -0.68dBi, fulfill the requirement of this section. Please refer to the EUT photos.

Result: Compliance.

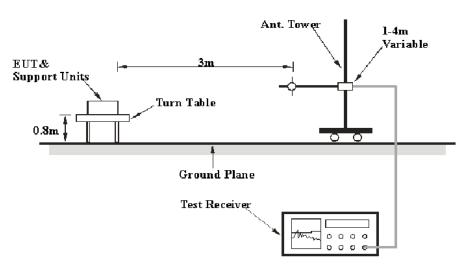
FCC §15.205, §15.209 & §15.247(d) – RADIATED EMISSIONS

Applicable Standard

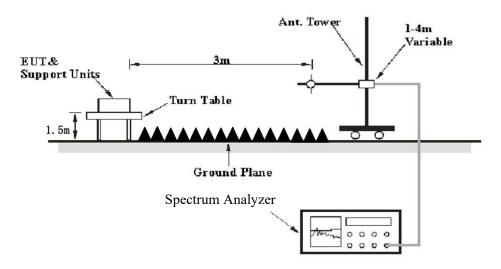
FCC §15.205; §15.209; §15.247(d)

EUT Setup

Below 1 GHz:



Above 1GHz:



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

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 or 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 margin calculation is as follows:

Margin/Over Limit = Corrected Amplitude/Level-Limit Corrected Amplitude/Level = Reading + Factor

Test Data

Environmental Conditions

Temperature:	23~25.6 ℃
Relative Humidity:	55 %
ATM Pressure:	101 kPa

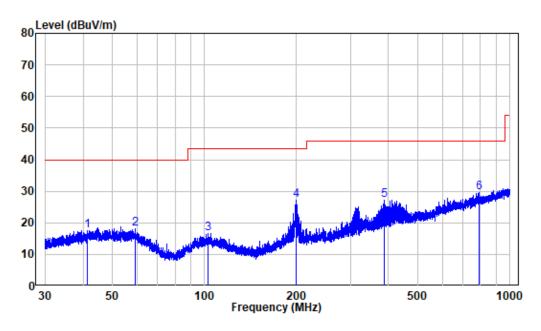
The testing was performed by Jason Liu on 2023-05-27 for below 1GHz and Jimi Zheng on 2023-05-30 for above 1GHz.

Test mode: Transmitting (Pre-scan in the X, Y and Z axes of orientation, the worst case X-axes of orientation were recorded)

30MHz-1GHz: (the worst case is 8DPSK Mode, Low channel)

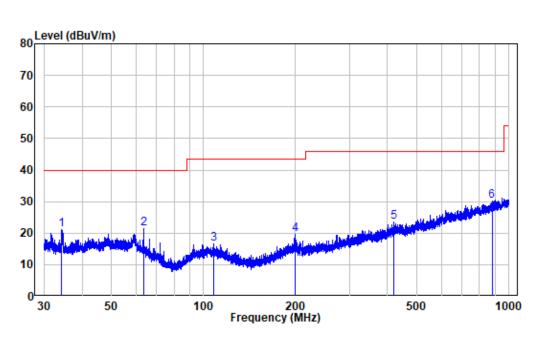
Note: When the test result of Peak was more than 6dB below the limit of QP, just the Peak value was recorded.

Horizontal:



Site :	chamber
Condition:	3m Horizontal
Job No. :	RA230525-29215E-RF
Test Mode:	BT Transmitting

	Freq	Factor			Limit Line		Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	41.440	-10.11	27.65	17.54	40.00	-22.46	Peak
2	59.207	-10.33	28.30	17.97	40.00	-22.03	Peak
3	102.584	-11.62	28.26	16.64	43.50	-26.86	Peak
4	199.810	-11.41	38.65	27.24	43.50	-16.26	Peak
5	387.312	-6.98	34.25	27.27	46.00	-18.73	Peak
6	791.659	-0.16	29.88	29.72	46.00	-16.28	Peak



Vertical

Site :	chamber
Condition:	3m VERTICAL
Job No. :	RA230525-29215E-RF
Test Mode:	BT Transmitting

	Freq	Factor			Limit Line		Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	34.351	-11.74	32.74	21.00	40.00	-19.00	Peak
2	63.619	-12.02	33.44	21.42	40.00	-18.58	Peak
3	107.982	-11.99	28.57	16.58	43.50	-26.92	Peak
4	199.986	-11.40	31.04	19.64	43.50	-23.86	Peak
5	418.191	-6.17	29.75	23.58	46.00	-22.42	Peak
6	879.477	1.24	28.96	30.20	46.00	-15.80	Peak

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Above 1GHz: (worst case is 8DPSK Mode)

F	Rece	eiver	T	Rx Ant	tenna	Ender	Corrected	T ••	M
Frequency (MHz)	Reading (dBµV)	PK/Ave	Turntable Degree	Height (m)	Polar (H/V)	Factor (dB/m)	Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
Low Channel 2402MHz									
2348.84	65.72	PK	223	1.1	Н	-10.75	54.97	74	-19.03
2350.02	66.77	PK	45	2.2	V	-10.76	56.01	74	-17.99
2390	65.42	PK	95	1.8	Н	-10.62	54.80	74	-19.20
2390	65.81	PK	132	1.7	V	-10.62	55.19	74	-18.81
4804	70.83	PK	182	2.3	Н	-5.57	65.26	74	-8.74
4804	69.34	PK	107	2.3	V	-5.57	63.77	74	-10.23
	_	_	Mi	ddle Channe	el 2441MH	[z	_		
4882	64.74	РК	205	1.7	Н	-5.22	59.52	74	-14.48
4882	63.35	РК	219	1.7	V	-5.22	58.13	74	-15.87
			Н	igh Channel	2480MHz	5			
2483.5	66.53	PK	334	1.6	Н	-10.46	56.07	74	-17.93
2483.5	66.35	PK	168	2.1	V	-10.46	55.89	74	-18.11
2484.56	67.36	PK	181	1.3	Н	-10.45	56.91	74	-17.09
2488.09	67.14	PK	60	1.9	V	-10.42	56.72	74	-17.28
4960	61.78	PK	308	1.5	Н	-4.90	56.88	74	-17.12
4960	61.04	РК	30	1.5	V	-4.90	56.14	74	-17.86

Field Strength of Average							
Frequency	Peak Measurement	Polar	Duty Cycle Correction	Corrected	FC	C Part 15.24	47
(MHz)	@3m (dBµV/m)	(H/V)	Factor (dB)	Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Comment
			Low Channel	(2402MHz)			
2348.84	54.97	Н	-24.81	30.16	54	-23.84	Bandedge
2350.02	56.01	V	-24.81	31.20	54	-22.80	Bandedge
2390	54.80	Н	-24.81	29.99	54	-24.01	Bandedge
2390	55.19	V	-24.81	30.38	54	-23.62	Bandedge
4804	65.26	Н	-24.81	40.45	54	-13.55	Harmonic
4804	63.77	V	-24.81	38.96	54	-15.04	Harmonic
			Middle Channe	el(2441MHz)			
4882	59.52	Н	-24.81	34.71	54	-19.29	Harmonic
4882	58.13	V	-24.81	33.32	54	-20.68	Harmonic
			High Channel	l(2480MHz)			
2483.5	56.07	Н	-24.81	31.26	54	-22.74	Bandedge
2483.5	55.89	V	-24.81	31.08	54	-22.92	Bandedge
2484.56	56.91	Н	-24.81	32.10	54	-21.90	Bandedge
2488.09	56.72	V	-24.81	31.91	54	-22.09	Bandedge
4960	56.88	Н	-24.81	32.07	54	-21.93	Harmonic
4960	56.14	V	-24.81	31.33	54	-22.67	Harmonic

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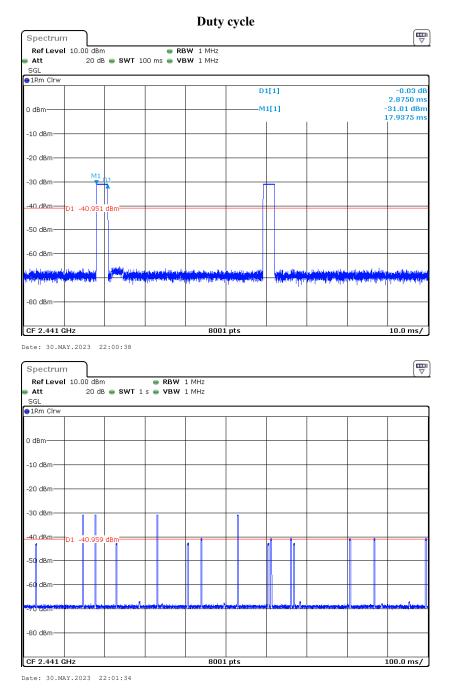
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Note:

Corrected. Amplitude = Corrected Factor + Reading Margin = Corrected. Amplitude - Limit Average level= Peak level+ Duty Cycle Corrected Factor Other emission which more than 20dB below limit was not recorded

Worst case duty cycle:

Duty cycle = Ton/100ms = 2.8750*2/100=0.0575 Duty Cycle Corrected Factor = 20lg (Duty cycle) =20lg0.0575 = -24.81



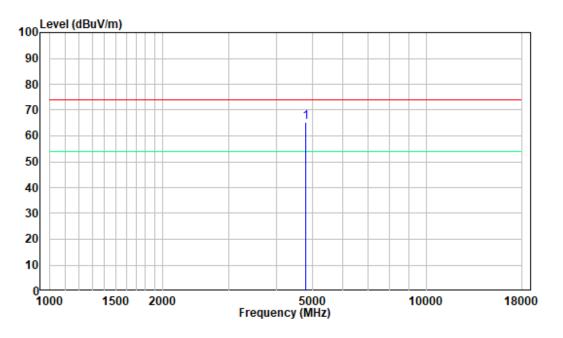
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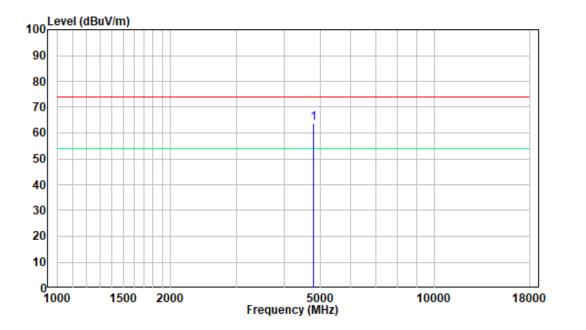
1-18GHz

Pre-scan, Low Channel (worst case)

Horizontal:

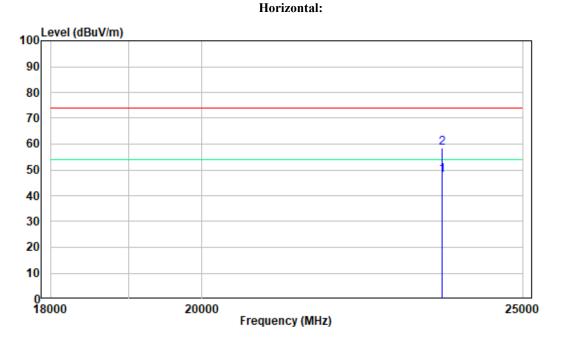


Vertical:

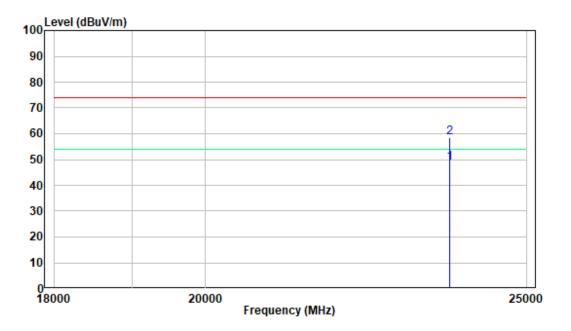


18-25GHz

Pre-scan, Low Channel (worst case)



Vertical:



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

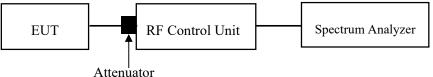
Applicable Standard

Frequency hopping systems shall have hoping 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

Test Method: ANSI C63.10-2013 Clause 7.8.2

- 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:	25 °C
Relative Humidity:	55 %
ATM Pressure:	101.0 kPa

The testing was performed by Dave Liang on 2023-05-31.

EUT operation mode: Transmitting

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

Test Method: ANSI C63.10-2013 Clause 7.8.7 & Clause 6.9.2

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.

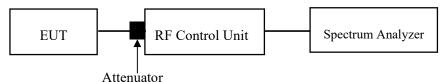
• The span of the spectrum analyzer shall be set large enough to capture all products of the modulation process, including the emission skirts, around the carrier frequency, but small enough to avoid having other emissions (e.g. on adjacent channels) within the span.

• 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:	25 °C	
Relative Humidity:	55 %	
ATM Pressure:	101.0 kPa	

The testing was performed by Dave Liang on 2023-05-31.

EUT operation mode: Transmitting

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

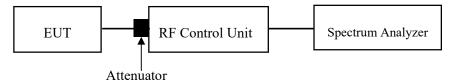
Applicable Standard

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

Test Method: ANSI C63.10-2013 Clause 7.8.3

- 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:	25 °C		
Relative Humidity:	55 %		
ATM Pressure:	101.0 kPa		

The testing was performed by Dave Liang on 2023-05-31.

EUT operation mode: Transmitting

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

Test Method: ANSI C63.10-2013 Clause 7.8.4

- 1. The EUT was worked in channel hopping.
- 2. Set the RBW to: 1MHz.
- 3. Set the VBW $\geq 3 \times RBW$.
- 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



Attenuator

Test Data

Environmental Conditions

Temperature:	25 °C		
Relative Humidity:	55 %		
ATM Pressure:	101.0 kPa		

The testing was performed by Dave Liang on 2023-05-31.

EUT operation mode: Transmitting

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

Test Method: ANSI C63.10-2013 Clause 7.8.5

- 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.



Attenuator

Test Data

Environmental Conditions

Temperature:	25 °C		
Relative Humidity:	55 %		
ATM Pressure:	101.0 kPa		

The testing was performed by Dave Liang on 2023-05-31.

EUT operation mode: Transmitting

FCC §15.247(d) & RSS-247 § 5.5 - BAND EDGES TESTING

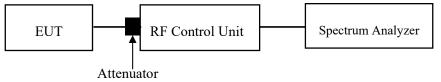
Applicable Standard

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

Test Method: ANSI C63.10-2013 Clause 7.8.6 & Clause 6.10

- 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:	25 °C	
Relative Humidity:	55 %	
ATM Pressure:	101.0 kPa	

The testing was performed by Dave Liang on 2023-05-31.

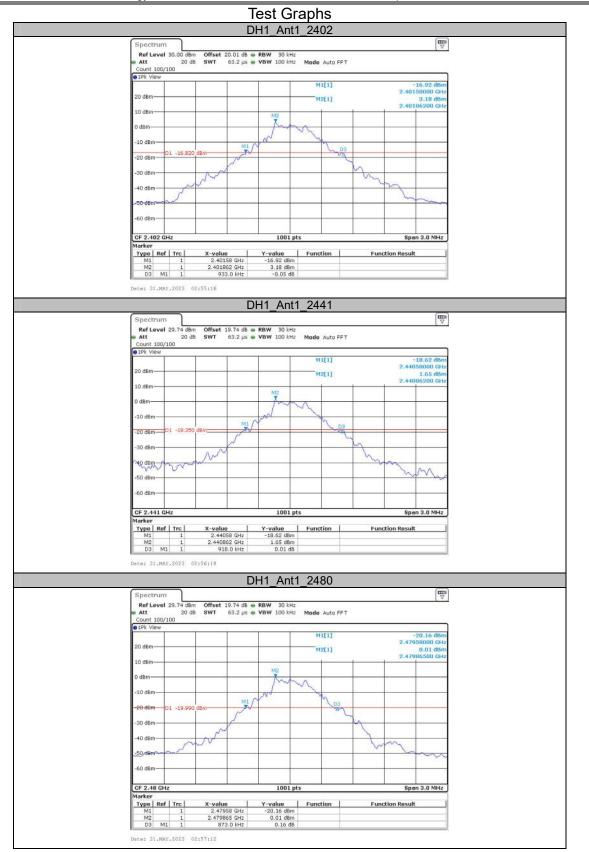
EUT operation mode: Transmitting

APPENDIX

Appendix A: 20dB Emission Bandwidth Test Result

Test Mode	Antenna	Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1 Ant1		2402	0.93	2401.58	2402.51		
	2441	0.92	2440.58	2441.50			
		2480	0.87	2479.58	2480.45		
2DH1 Ant1		2402	1.24	2401.40	2402.63		
	Ant1	2441	1.24	2440.40	2441.64		
		2480	1.24	2479.40	2480.64		
3DH1	Ant1	2402	1.22	2401.43	2402.65		
		2441	1.22	2440.43	2441.65		
		2480	1.21	2479.43	2480.65		

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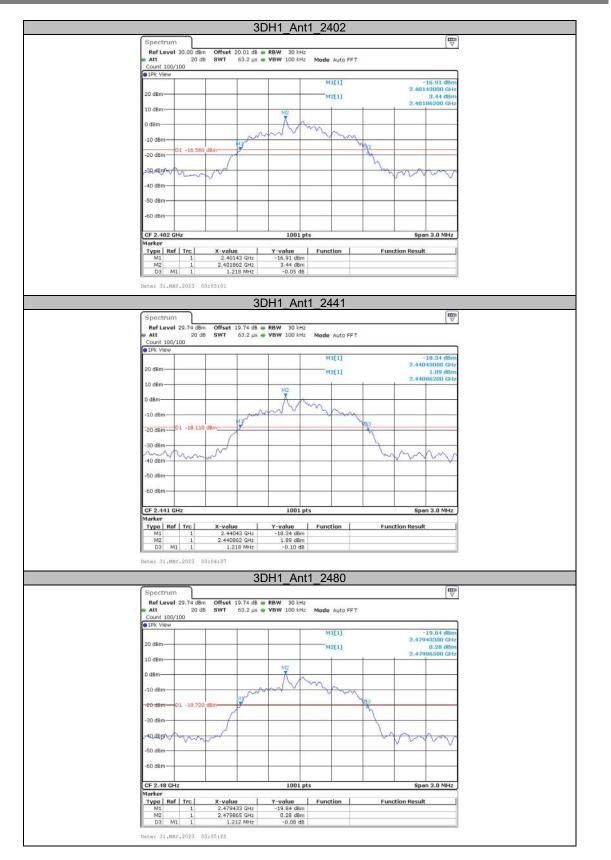
FCC-BT

Report No.: RA230525-29215E-RF-00B



FCC-BT

Report No.: RA230525-29215E-RF-00B

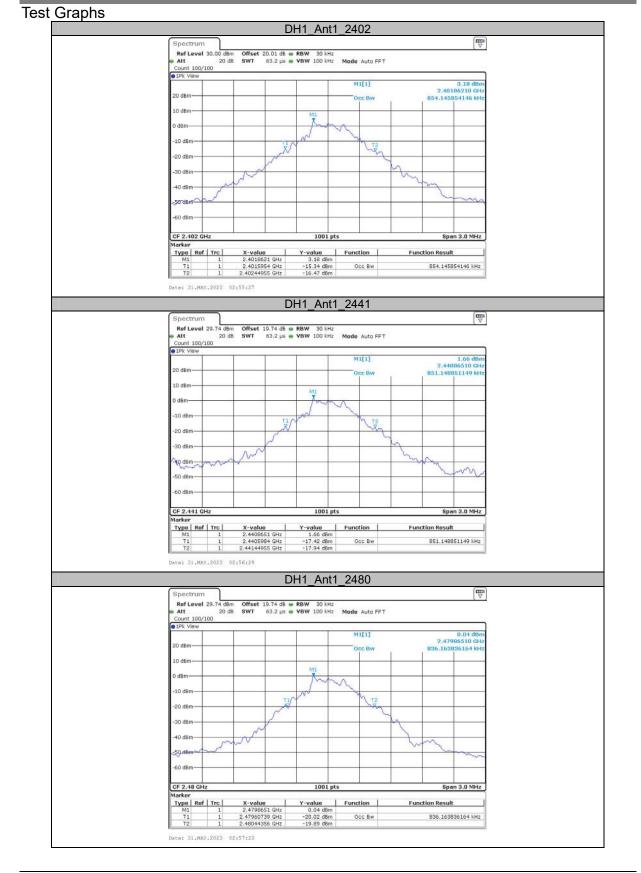


FCC-BT

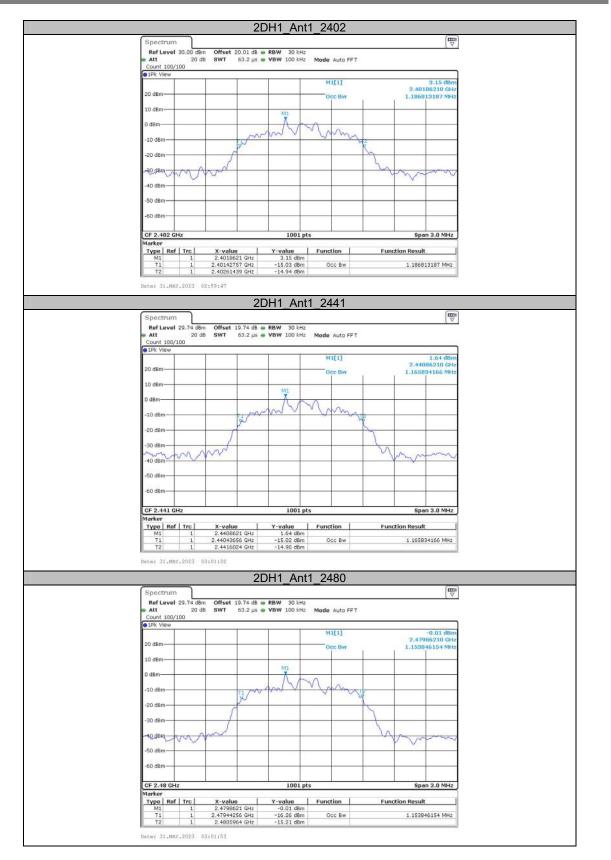
Appendix B: Occupied Channel Bandwidth Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	Limit[MHz]	Verdict
DH1	Ant1	2402	0.854		
		2441	0.851		
		2480	0.836		
2DH1	Ant1	2402	1.187		
		2441	1.166		
		2480	1.154		
3DH1	Ant1	2402	1.175		
		2441	1.160		
		2480	1.142		

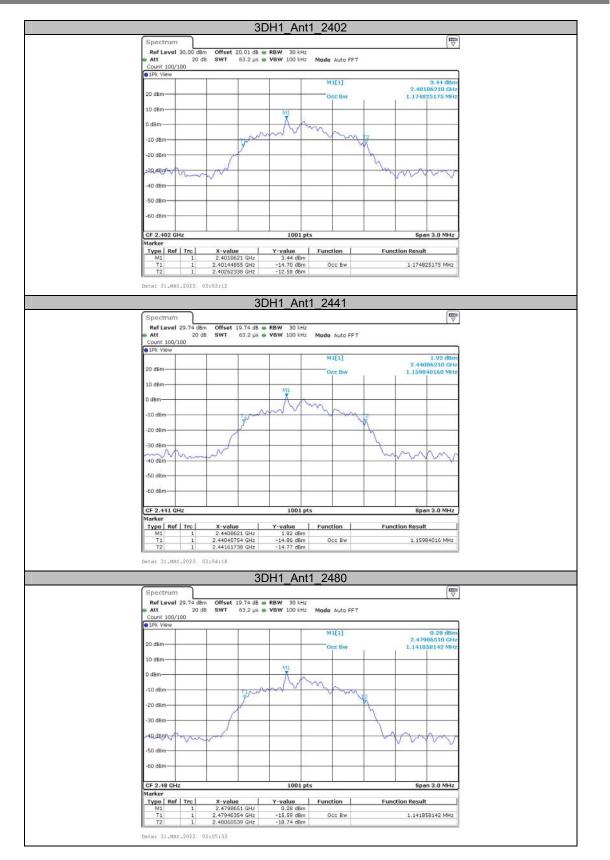
Report No.: RA230525-29215E-RF-00B



Report No.: RA230525-29215E-RF-00B



Report No.: RA230525-29215E-RF-00B



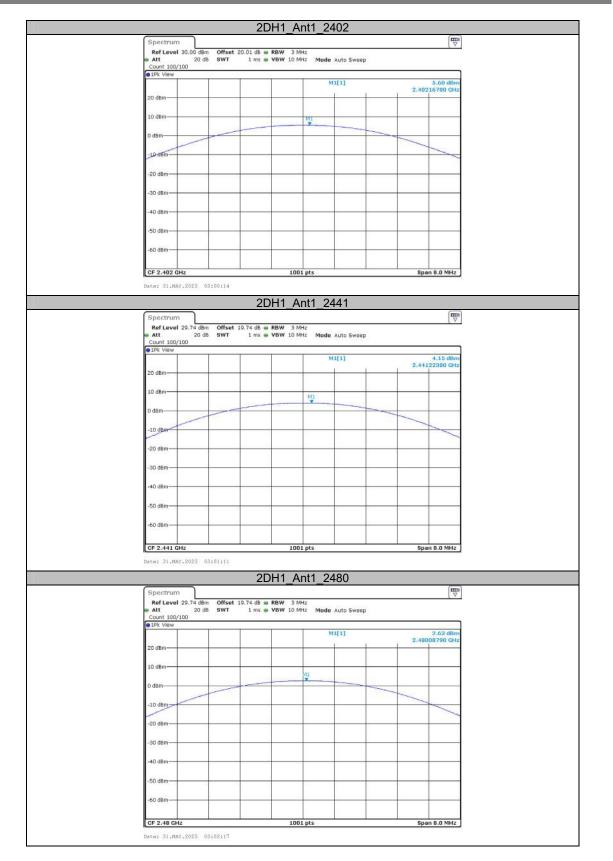
Appendix C: Maximum conducted output power Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
		2402	5.18	≤20.97	PASS
DH1	Ant1	2441	3.91	≤20.97	PASS
		2480	2.18	≤20.97	PASS
		2402	5.60	≤20.97	PASS
2DH1	Ant1	2441	4.15	≤20.97	PASS
		2480	2.63	≤20.97	PASS
		2402	5.93	≤20.97	PASS
3DH1	Ant1	2441	4.56	≤20.97	PASS
		2480	3.12	≤20.97	PASS

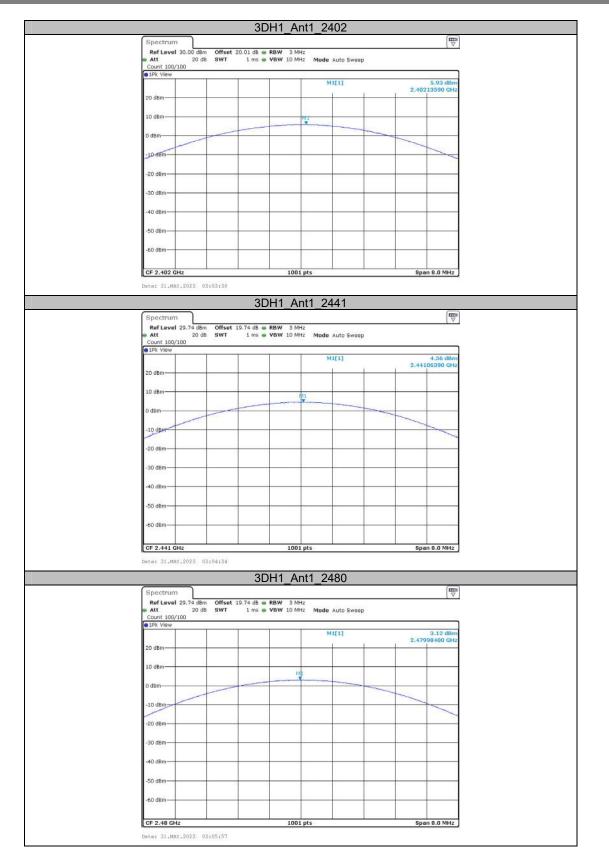
Report No.: RA230525-29215E-RF-00B

Test Graphs DH1_Ant1_2402 Spectrum Ref Level 30.00 dBm Offset 20.01 dB RBW 3 MHz Att 20 dB SWT 1 ms VBW 10 MHz Count 100/100 1Pk View 10 MHz 10 MHz 10 MHz Mode Auto Sweep 5.18 dBr 2.40196800 GH 20 dBm 10 dBm 0 dBm 10 dBm--20 dBn 30 dBr 40 dBm 50 dBm 60 dBm 1001 pts Span 8.0 MHz CF 2.402 GHz Date: 31.MAY.2023 02:55:45 DH1_Ant1_2441 Att 20 dB SWT 1 ms YBW 10 MHz Mode Auto Sweep Count 100/100 FWW 1 ms YBW 10 MHz Mode Auto Sweep M1[1] 3.91 dB 2.44111990 GH 20 dBm 10 dBm M1) dBr -10 dBr -20 dBm -30 dBm 40 dBm -50 dBr -60 dBm-CF 2.441 GHz 1001 pts Span 8.0 MHz Date: 31.MAY.2023 02:56:43 DH1_Ant1_2480 Spectrum RefLevel 29.74 dBm Offset 10.74 dB ⊕ RBW 3 MHz Att 20 dB SWT 1 ms ⊕ VBW 10 MHz Mode Auto Sweep Count 100/100 2.18 dBn 2.48005590 GH M1[1] 20 dBm 10 dBm) dBm -10 d8m--20 dBm -30 dBm 40 df 50 dBm 60 dBm CF 2.48 GHz 1001 pts Span 8.0 MHz Date: 31.MAY.2023 02:57:39

Report No.: RA230525-29215E-RF-00B



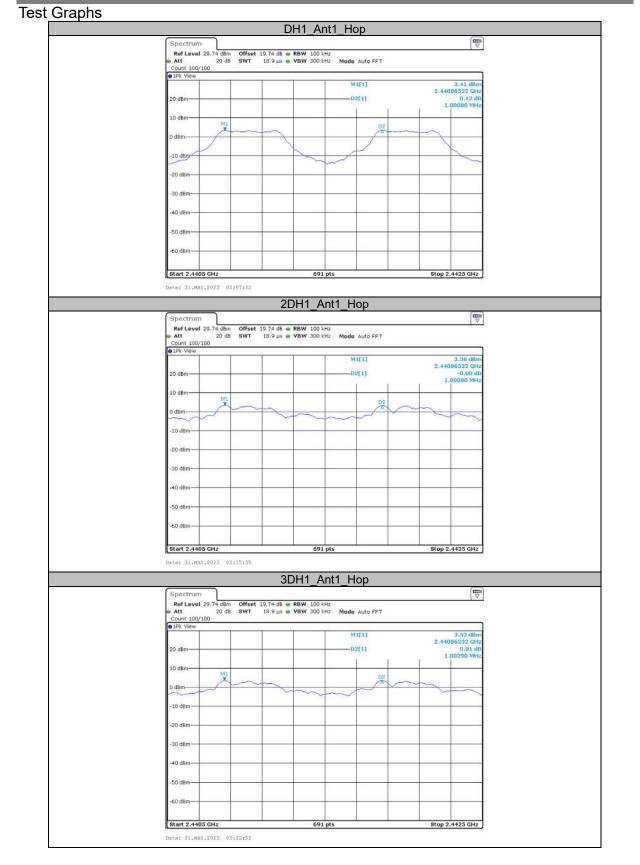
Report No.: RA230525-29215E-RF-00B



Appendix D: Carrier frequency separation Test Result

Test Mode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH1	Ant1	Нор	1.000	≥0.620	PASS
2DH1	Ant1	Нор	1.000	≥0.827	PASS
3DH1	Ant1	Нор	1.003	≥0.813	PASS

Report No.: RA230525-29215E-RF-00B



Appendix E: Time of occupancy Test Result

Test Mode	Antenna	Frequency[MHz]	Burst Width [ms]	Total Hops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Нор	0.39	320	0.125	≤0.4	PASS
DH3	Ant1	Нор	1.64	160	0.262	≤0.4	PASS
DH5	Ant1	Нор	2.88	110	0.317	≤0.4	PASS
2DH1	Ant1	Нор	0.40	330	0.132	≤0.4	PASS
2DH3	Ant1	Нор	1.65	180	0.297	≤0.4	PASS
2DH5	Ant1	Нор	2.89	130	0.376	≤0.4	PASS
3DH1	Ant1	Нор	0.40	330	0.132	≤0.4	PASS
3DH3	Ant1	Нор	1.65	150	0.248	≤0.4	PASS
3DH5	Ant1	Нор	2.89	130	0.376	≤0.4	PASS

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

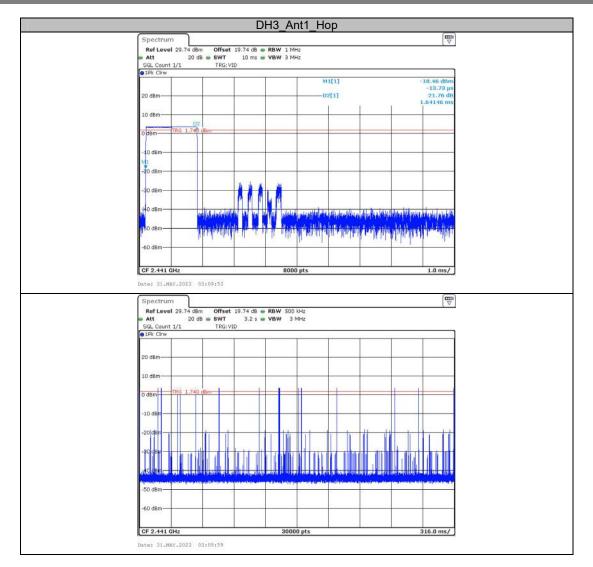
Note 2: Total hops=Hopping Number in 3.16s*10

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

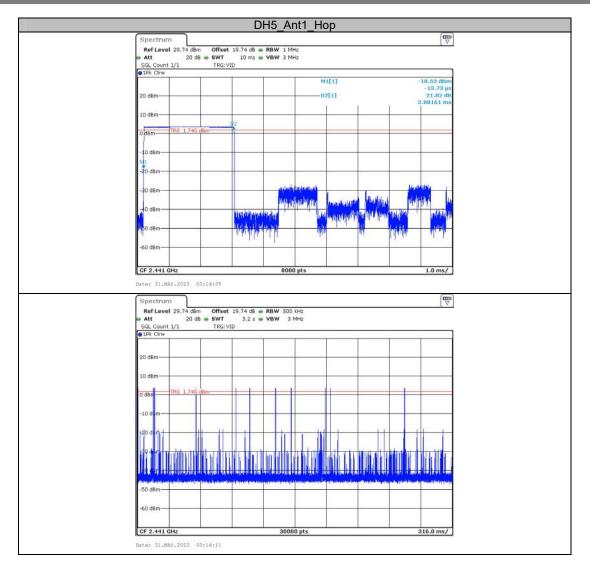
Report No.: RA230525-29215E-RF-00B

DH1_Ant1_Hop	
Spectrum	DB 7
RefLevel 29.74 d8m Offset 19.74 d8 RBW 1 MHz Att 20 d8 SWT 10 ms VBW 3 MHz	
SGL Count 1/1 TRG:VID PIPK Claw	h
M1[1] -19.94 dBm -13.73 µs	23
20 dBm D2[1] 23.24 dB 393.00 us	в
10 dBm	
0/dtm TRG 1.740 dEm	
D /dBm	1
-10 dBm	-
M1 -20 dBm	_
-30 dBm	
	η
and a fill and the second state of the second	4
-60 dBm	1
CF 2.441 GHz 8000 pts 1.0 ms/	-
Spectrum fm Ref Level 29.74 dBm Offset 19.74 dB = RBW 500 kHz att 20 dB = SWT 3.2 s = VBW 3 MHz SGL Count 1/J TRG:VID	2
Ref Level 29.74 dBm Offset 19.74 dB B BW 500 kHz Att 20 dB SWT 3.2 s VBW 3 MHz	<u></u>
RefLevel 29.74 dBm Offset 19.74 dB RBW S00 kHz att 20 dB SWT 3.2 s VBW 3 MHz SGL Count 1/1 TRG:VID	^{pr} /
Ref Level 20.74 dBm Offset 10.74 dB = RBW S00 kHz Att 20 dB = SWT 3.2 s = VBW 3 MHz SQL Count 1/1 TRG: VID 1 MHz 1Pk: Cirw 20 dBm 20 dBm 20 dBm	P
Ref Level 29.74 GBm Offset 19.74 dB RBW S00.14z Att 20 dB SW 3.2 s VBW 3 MHz SQL Count 1/1 TRG:VID If R: VID If R: VID If R: VID 10 dBm 10 dBm If R: VID If R: VID If R: VID If R: VID	P
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Ref Level 29.74 GBm Offset 19.74 dB RBW S00.14z Att 20 dB SW 3.2 s VBW 3 MHz SQL Count 1/1 TRG:VID If R: VID If R: VID If R: VID 10 dBm 10 dBm If R: VID If R: VID If R: VID If R: VID	P
Ref Level 20.74 dBm Offset 10.74 dB m RBW 500 kHz Att 20 dB § \$W 3.2 s @ VBW 3 MHz SQL Count 1/1 TRG:VID IPF Cfrw 20 dBm 10 dBm 10 dBm -L0 dBm 10 dBm	P
Ref Level 29.74 dB offset 19.74 dB @ RBW 500 kHz Att 20 dB @ SWT 3.2 s @ VBW 3 MHz SQL Count 1/1 TRG: VID ●15% CPw	P
Ref Level 20.74 dBm Offset 10.74 dB m RBW 500 kHz Att 20 dB § \$W 3.2 s @ VBW 3 MHz SQL Count 1/1 TRG:VID IPF Cfrw 20 dBm 10 dBm 10 dBm -L0 dBm 10 dBm	P)
Ref Level 29.74 dBm Offset 19.74 dB @ RBW 500 kHz Att 20 dB @ SWT 3.2 s @ VBW 3 MHz SGL Count 1/1 TRG: VID ●15% CPw	P)
Ref Level 20.74 dBm Offset 10.74 dB = RBW 500 Hz Att 20 dB = SWT 3.2 s = VBW 3 MHz SQL Count 1/1 TRG:VID 91% Chrw 10 dBm 10 dBm 10 dBm -20 dBm 10 dBm -30 dBm 10 dBm -30 dBm 10 dBm -30 dBm 10 dBm	P)
Ref Level 29.74 dBm Offset 19.74 dB @ RBW 500 kHz Att 20 dB @ SWT 3.2 s @ VBW 3 MHz SGL Count 1/1 TRG: VID ●15% CPw	
Ref Level 20.74 dBm Offset 10.74 dB = RBW 500 Hz Att 20 dB = SWT 3.2 s = VBW 3 MHz SQL Count 1/1 TRG:VID 91% Chrw 10 dBm 10 dBm 10 dBm -20 dBm 10 dBm -30 dBm 10 dBm -30 dBm 10 dBm -30 dBm 10 dBm	

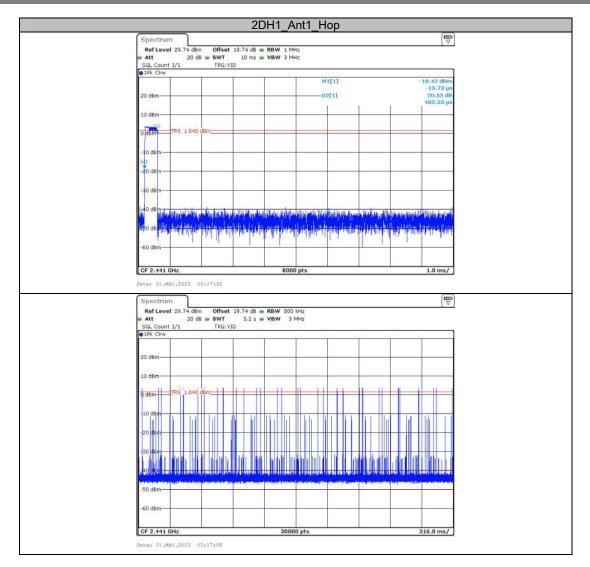
Report No.: RA230525-29215E-RF-00B



Report No.: RA230525-29215E-RF-00B



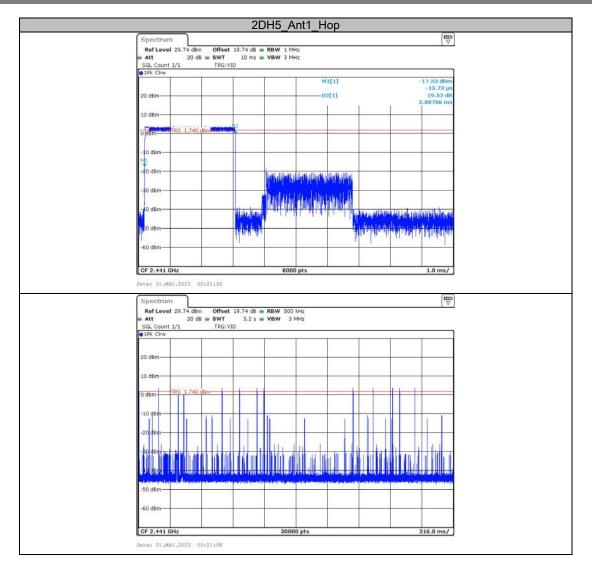
Report No.: RA230525-29215E-RF-00B



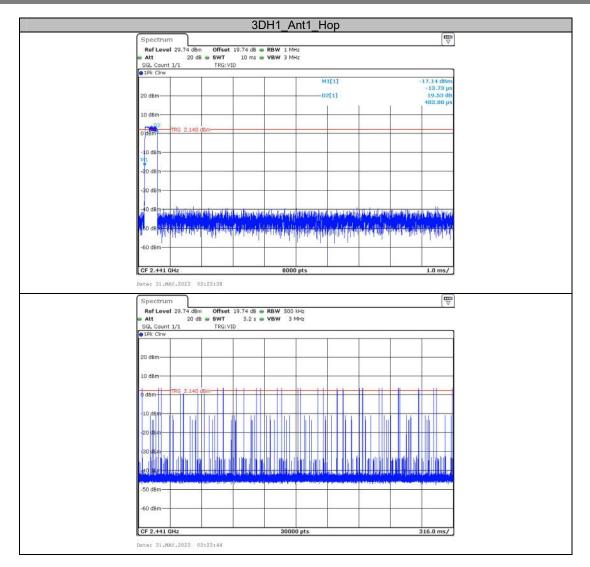
Report No.: RA230525-29215E-RF-00B

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SGL Count		s:VID	VBW 3 MHz				
1Pk Clrw		- 13 77					
				M1[1]	6	-1	6.92 dBm
20 dBm				D2[1]			-12.48 µs 18.89 dB
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Report No.: RA230525-29215E-RF-00B



Report No.: RA230525-29215E-RF-00B

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		8000 pcs		1.0 (1137)	
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Pofiqual 20					
Ref Level 29.	20 dB 🖶 SWT 3.1	2 s 🖷 VBW 3 MHz			
SGL Count 1/1	20 dB . SWT 3. TRG: VID	2 s 🖷 VBW 3 MHz			1
👄 Att		2 s 🖷 VBW 3 MHz			
SGL Count 1/1		2 s 🖶 VBW 3 MHz			[
SGL Count 1/1		2 s e VBW 3 MHz			
SGL Count 1/1 PIPk Clrw		2 s e VBW 3 MHz			
SGL Count 1/1 PIPk Cirw		2 s • VBW 3 MHz			
Att SGL Count 1/1 P1Pk Cirw 20 dBm 10 dBm	TRG: VID	2 s e VBW 3 MHz			
Att SGL Count 1/1 SPR Clrw 20 dBm 10 dBm		2 s VBW 3 MHz			
Att SGL Count J/1 O 19k Chw 20 dBm 10 dBm 0 dBm	TRG: VID	2 s VBW 3 MHz			
Att SGL Count 1/1 19k Cirw 20 dBm 10 dBm	TRG: VID				
Att SGL Count 1/1 SGL Count 1/1 PIPk Cirw 20 dBm 10 dBm 7Rc 0 dBm -10 dBm	TRG: VID				
Att SGL Count J/1 @19k Chw 20 dBm 10 dBm 0 dBm	TRG: VID				
Att SGL Count 1/1 SGL Count 1/1 PIPk Chw 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm	TRG: VID				
Att SGL Count 1/1 SGL Count 1/1 PIPK Cirw 20 dBm 10 dBm 7R0 0 dBm -10 dBm	TRG: VID				
● Att SGL Count 1/1 ● 19k Chw 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm	TRG: VID				
● Att SGL Count 1/1 ● 19% Chw 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm	TRG: VID				
Att SQL Count J/1 SQL Count J/1 P1Pk: Chw 20 dBm 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm -20 dBm -21 dBm -21 dBm -21 dBm -22 d	TRG: VID				
Att SQL Count 1/1 SQL Count 2/1 20 dBm 10 dBm -10 dBm -20 dBm	TRG: VID				
Att SGL Count 1/1 SGL Count 2/1 D 1Pic Chw 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -30 dBm -50	TRG: VID				
Att SGL Count 1/1 SGL Count 1/1 PIPK Cirw 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm -20 dBm -20 dBm -20 dBm	TRG: VID				
Att SGL Count 1/1 ● 19% Chw 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm	TRG: VID				

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	_	31	0H5_A		Jh			(=)
Spectrum								
Ref Level 29	20 dB = SWT		RBW 1 MH					
SGL Count 1/1			VBW 3 MA	6				
1Pk Clrw				2				
				M	[1]		7	17.66 dBm -13.73 µs
20 dBm				D2	[1]			20.16 dB
10000000						Е I	1	2.89036 ms
10 dBm							· · · · · ·	-
TRO	2.040 dBm	2					-	
0 OBIN								
~10 dBm								
MIL								
-20 dBm						-		
-30 dBm								
dBm								1
A CORN		in such	ophic prime	Manager	Wheel hu	the Manus	a and details	all and the
50 dBm		dillar interest		H. H. H. di	and the star	the attent who	e teletelite	Local de la la
21		a danati	at the late of	in dalla da	denotes a	de l'adult	by state the	a dalat sete
-60 dBm			-					
CF 2.441 GHz	8		8000	pts				1.0 ms/
Date: 31.MAY.S	023 03:26:57							
	-							
Spectrum								
Ref Level 29	20 dB = SWT		RBW 500					
SGL Count 1/1		D	0.00100.000	2630				
SGL Count 1/1 @ 1Pk Clrw		D		x				
SGL Count 1/1		D						
SGL Count 1/1 IPk Clrw 20 dBm-		0						
SGL Count 1/1 @ 1Pk Clrw		0						
SGL Count 1/1 ● 1Pk Clrw 20 dBm					+-+			
SGL Count 1/1 1Pk Clrw 20 dBm 10 dBm	TRG:VI							
SGL Count 1/1 1Pk Clrw 20 dBm 10 dBm	TRG:VI							
SGL Count 1/1	TRG:VI							
SQL Count 1/1 @19k Cirw 20 dBm 10 dBm 0 dBm 7PC	TRG:VI							
SGL Count 1/3 ●19k Chrw 20 dBm 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm	TRG:VI							
SGL Count 1/1	TRG:VI							
SGL Count 1/3 ●19k Chrw 20 dBm 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm	TRG:VI							
SGL Count 1/3 ●19k Chrw 20 dBm 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm	TRG:VI							
SGL Count 1/3 ●19k Chrw 20 dBm 10 dBm 10 dBm -10 dBm -20 dBm -20 dBm	TRG:VI							
SGL Count 1/1 ●1Pk Clrw 20 dBm 10 dBm -10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -30 dBm -30 dBm	TRG:VI							
SGL Count 1/1 ● 19k Clrw 20 dBm 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -31 dBm -31 dBm	TRG:VI							
SGL Count 1/1 ●1Pk Clrw 20 dBm 10 dBm -10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -30 dBm -30 dBm	2,040 dBm							316.0 ms/

Appendix F: Number of hopping channels Test Result

Test Mode	Antenna	Frequency[MHz]	Result[Num]	Limit[Num]	Verdict
DH1	Ant1	Нор	79	≥15	PASS
2DH1	Ant1	Нор	79	≥15	PASS
3DH1	Ant1	Нор	79	≥15	PASS

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Test Graphs DH1_Ant1_Hop Ref Level 30.00 dBm Offset 20.01 dB RBW 100 kHz Att 20 dB SWT 1 ms VBW 300 kHz Mode Auto Sweep Count 1000/1000 1 Pk View 100 kHz 1 ms 1 20 dBm 10 dBm 0 dBr 50 dBn 60 dBr Start 2.4 GHz 691 pts Stop 2.4835 GHz Date: 31.MAY.2023 03:07:55 2DH1_Ant1_Hop Opectrum Offset 20.01 dB RBW 100 kHz Att 20 dB SWT 1 ms VBW 300 kHz Mode Auto Sweep Count 1000/1000 JPK View JPK View J JPK View 20 dBn 10 dBm norman and a second and a second a second and a 20 dBm 30 dBm 40 dBm 50 dBr -60 dBm Stop 2.4835 GHz Start 2.4 GHz 691 pts Date: 31.MAY.2023 03:15:59 3DH1_Ant1_Hop Spectrum RefLevel 30.00 dBm Offset 20.01 dB @ RBW 100 kHz Att 20 dB SWT 1 ms @ VBW 300 kHz Mode Auto Sweep Count 1000/1000 1Pk View 20 dBm 10 dBm-Area and a second and a second the second and a 0 dBm dBr O dBr 50 dBm 60 dBm Start 2.4 GHz 691 pts Stop 2.4835 GHz Date: 31.MAY.2023 03:23:24

Appendix G: Band edge measurements Test Graphs

			וחס	_Ant1_	LOW_2	2402			(2
Spectru										1
Ref Lev Att	el 30.00 dBr 20 d			RBW 100 kH		uto FET				
Count 30	0/300	53 5235.0 33		0230.502.003	- risus r					2
1Pk View	1 ₁	-							n no. 40.	
					M1[11		2.40	5.06 dBn 18560 GH:	
20 dBm-		-			MZ	[1]		-	49.13 dBn	
10 dBm-						<u></u>	-	2.40	00000 GH:	4
									ħ	
0 dBm										1
-10 dBm-				-	-		2		-11-	
no do-	01 -14.940) dBm							11	1
-20 dBm-										1
-30 dBm-	-	9				-	-		11	-
-40 dBm-				-						
-++D dBiii-				M4		-	M3		nd I	
*50 dam-	للاسلس خليم مع	and and the second	-	- en relan	- shalpine	anyu	a shall a	and all	n h	1
-60 dBm-]
-00 0011										1
Start 2.3	5 GHz			691 p	its			Stop 2	.405 GHz	1
Marker										í
Type R		X-value		Y-value	Function	on	Fun	ction Result		1
M1 M2	1	2.4018	56 GHz	5.06 dBm -49.13 dBm						
M3	1	2.3	39. GHz	-48.75 dBm						
M4	1] MAY.2023 (2,37590		-46.91 dBm	High_2	2480				
M4	MAY.2023 (1	2480			[Ⅲ	1
M4 Date: 31, Spectru Ref Lev	MAY.2023 (m el 29.74 dBr	02:55:37 m Offset 1	DH1	_Ant1_I	High_2					<u>]</u>
M4 Date: 31. Spectru Ref Lev Att	MAY.2023 (m el 29.74 dBr 20 d	02:55:37 m Offset 1	DH1	_Ant1_I	High_2		P		(m V	
M4 Date: 31, Spectru Ref Lev	MAY.2023 (m el 29.74 dBr 20 d 0/300	02:55:37 m Offset 1	DH1	_Ant1_I	High_2		P		(m]]]
M4 Date: 31, Spectru Ref Lev Att Count 30	MAY.2023 (m el 29.74 dBr 20 d 0/300	02:55:37 m Offset 1	DH1	_Ant1_I	High_2	luto Sweej	P		1.86 dBn]
M4 Date: 31, Spectru Ref Lev Att Count 30	MAY.2023 (m el 29.74 dBr 20 d 0/300	02:55:37 m Offset 1	DH1	_Ant1_I	High_2	Auto Sweej	P		1.86 dBn 79900 GH:	-
M4 Date: 31, Ref Lev Att Count 30 1Pk View 20 dBm-	MAY.2023 (m el 29.74 dBr 20 d 0/300	02:55:37 m Offset 1	DH1	_Ant1_I	High_2	Auto Sweej	P	-	1.86 dBn	
M4 Date: 31, Spectru Ref Lev Att Count 30 1Pk View	MAY.2023 (m el 29.74 dBr 20 d 0/300	02:55:37 m Offset 1	DH1	_Ant1_I	High_2	Auto Sweej	P	-	1.86 dBn 79900 GH: 49.00 dBn	
M4 Date: 31, Ref Lev Att Count 30 1Pk View 20 dBm-	m el 29.74 der 20 d	02:55:37 m Offset 1	DH1	_Ant1_I	High_2	Auto Sweej	P	-	1.86 dBn 79900 GH: 49.00 dBn	
M4 Date: 31. Ref Lev Att Count 30 IPK View 20 dBm 10 dBm 0 dBm	m el 29.74 der 20 d	02:55:37 m Offset 1	DH1	_Ant1_I	High_2	Auto Sweej	P	-	1.86 dBn 79900 GH: 49.00 dBn	
M4 Date: 31. Ref Lev Att Count 30 IPk View 20 dBm— 10 dBm— -10 dBm—	MAT.2023 (m	n Offset 1 B SWT	DH1	_Ant1_I	High_2	Auto Sweej	P	-	1.86 dBn 79900 GH: 49.00 dBn	
M4 Date: 31. Ref Lev Att Count 30 IPK View 20 dBm 10 dBm 0 dBm	m el 29.74 der 20 d	n Offset 1 B SWT	DH1	_Ant1_I	High_2	Auto Sweej	P	-	1.86 dBn 79900 GH: 49.00 dBn	
M4 Date: 31. Ref Lev Att Count 30 IPK View 20 dBm— 10 dBm— 0 dBm— -10 dBm— -20 dBm—	MAT.2023 (m el 29.74 dBr 20 dl 0/300 // M1	n Offset 1 B SWT	DH1	_Ant1_I	High_2	Auto Sweej	P	-	1.86 dBn 79900 GH: 49.00 dBn	
M4 Date: 31. Ref Lev Att Count 30 IPK View 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm-	MAT.2023 (m el 29.74 dBr 20 dl 0/300 // M1	n Offset 1 B SWT	DH1	_Ant1_I	High_2	Auto Sweej	P	-	1.86 dBn 79900 GH: 49.00 dBn	
M4 Date: 31. Ref Lev Att Count 30 91Pk View 20 dBm— 10 dBm— 0 dBm— -10 dBm— -20 dBm—	MAY.2023 (m 20 di 0/300 M1 0.1 -18.14(n Offset 2 B SWT	DH1		High_2	Auto Sweej	P	-	1.86 dBn 79900 GH: 49.00 dBn	
M4 Date: 31. Spectru Ref Lev ● Att Count 30 ● IPk View 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm-	MAT.2023 (m el 29.74 dBr 20 dl 0/300 // M1	n Offset 2 B SWT	DH1		High_2 z Mode A M1[Auto Sweej		-	1.86 dBn 79900 GH 9,00 dBn 83500 GH;	
M4 Date: 31. Ref Lev Att Count 30 IPK View 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm-	MAY.2023 (m 20 di 0/300 M1 0.1 -18.14(n Offset 2 B SWT	DH1		High_2 z Mode A M1[Auto Sweep [1]		2.4	1.86 dBn 79900 GH 9,00 dBn 83500 GH;	
M4 Date: 31. Spectru Ref Lev ● Att Count 30 ● IPk View 20 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm-	MAY.2023 (m 20 di 0/300 M1 0.1 -18.14(n Offset 2 B SWT	DH1		High_2 z Mode A M1[Auto Sweep [1]		2.4	1.86 dBn 79900 GH 9,00 dBn 83500 GH;	
M4 Date: 31. Spectru Ref Lev Att Count 30 P1Pk View 20 dBm- 10 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -50 dBm- -60 dBm-	MAY, 2023 (m) el 29,74 dBr 0/300 M1 M1 0/3 -18.14(M2 M2 M2 M2 M3	n Offset 2 B SWT	DH1	Ant1_I	High_2	Auto Sweep [1]		2,4	1.86 dBn 79900 GH 19.00 dBn 83500 GH 83500 GH	
M4 Date: 31. Ref Lev Att Count 30 Ifk View 20 dBm- 10 dBm- -20 dBm- -20 dBm- -30 dBm- -30 dBm- -50 dBm- -60 dBm- Btort 2.4	MAY, 2023 (m) el 29,74 dBr 0/300 M1 M1 0/3 -18.14(M2 M2 M2 M2 M3	n Offset 2 B SWT	DH1		High_2	Auto Sweeg [1] [1]		2,4	1.86 dBn 79900 GH 9,00 dBn 83500 GH	
M4 Date: 31. Ref Lev Att Count 30 10 dBm- 10 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -30 dBm- -40 dBm- -60 dBm- Btart 2.4 Marker	HAY, 2023 (m el 29,74 dBr 0/300 / M1 M1 0,1 -18.14(M2 0,7 GHz	n Offset 3 B SWT	DH1 10.74 dB 1.1 ms 1.1 ms 1.1 ms	Ant1_I	High_2	11]		2.4	1.86 dBn 79900 GH 19.00 dBn 83500 GH 83500 GH	
M4 Date: 31. Ref Lev Att Count 30 10 dBm- 10 dBm- 10 dBm- -10 dBm- -20 dBm- -30 dBm- -30 dBm- -50 dBm-	HAY, 2023 (m el 29.74 dBr 0/300 M1 M1 01 -18.14(M2 01 -18.14(M2 0	n Offset 1 B SWT	DH1 10.74 dB = 1.1 ms = 99 GHz	Ant1_I RBW 100 HH VBW 300 HH 0 0 0 0 0 0 0 0 0 0 0 0 0	High_2	11]		2,4	1.86 dBn 79900 GH 19.00 dBn 83500 GH 83500 GH	
M4 Date: 31. Spectru Ref Lee Att Count 30 I 1/k Viev 20 dBm- 10 dBm- 0 dBm- 20 dBm- 20 dBm- -0 dBm- -20 dBm- -30 dBm- -50 dBm- -60 dBm- Btart 2.4 Marker Type I R M1 M2	MAX.2023 C	2:55:37	DH1 10.74 dB 1.1 ms 1.1 ms	Ant1_I RBW 100 KH VBW 300 kH 0 0 0 0 0 0 0 0 0 0 0 0 0	High_2	11]		2.4	1.86 dBn 79900 GH 19.00 dBn 83500 GH 83500 GH	
M4 Date: 31. Ref Lew Att Count 30 ● 1Pk View 20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -60 dBm -60 dBm Btart 2.4 Marker Type IR M1	HAY, 2023 (m el 29.74 dBr 0/300 M1 M1 01 -18.14(M2 01 -18.14(M2 0	2:55:37	DH1 10.74 dB 1.1 ms 1.1 ms 99 GHz 99 GHz 99 GHz 99 GHz 99 GHz	Ant1_I RBW 100 HH VBW 300 HH 0 0 0 0 0 0 0 0 0 0 0 0 0	High_2	11]		2.4	1.86 dBn 79900 GH 19.00 dBn 83500 GH 83500 GH	

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FCC-BT

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Spectrum						
Ref Level	29.74 dt	m Offset 19.74 dB e	RBW 100 kHz			1
att	20	dB SWT 1.1 ms	VBW 300 kHz	Mode Auto Sw	reep	
Count 300/	300	558 978-000 105-0-0208-0		SC 5446 (SSEE) - 264 (CALLO		
1Pk View				1 10 1 1		
				M1[1]		2.11 dBr
20 dBm						2.472840 GH -48.28 dBr
				M2[1]		2,483500 GH
10 dBm			-		-	2.404400 GH
MI						
2,45,24,14,1	hh.	8 8				
-10 dBm	14					
-10 GBM						
-20 dBm-	01 -17.89	i0 dBm				0
-20 dBill						
-30 dBm	_	-				
	1					
-40 dBm	-	-			-	M4
195.747	MI2	multipermet	and the second s	Same a summer		M4 T
-50 dBm	Wida		A A A A A A A A A A A A A A A A A A A	-3-1 Mariana	Contraction of the	ar an great part part of a great
10000000						
-60 dBm						· · · · · · · · · · · · · · · · · · ·
		2 0	8			
Start 2.47	GHz		691 pts	i		Stop 2.55 GHz
Marker						
Type Ref		X-value	Y-value	Function	Func	tion Result
M1 M2	1	2.47284 GHz 2.4835 GHz	2.11 dBm -48.28 dBm			
M2 M3	1	2.4835 GHz	-48.28 dBm			
M4	1	2.536203 GHz	-46.80 dBm			

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