

47 CFR PART 15 SUBPART C TEST REPORT

for

Digital Stationary Transmitter

Model No.: DST

FCC ID: NTMDSTTX

of

Applicant: OKAYO ELECTRONICS CO., LTD.

Address: No. 2, Gongye 10th Rd., Dali Dist., Taichung 41280, Taiwan

Tested and Prepared

by

Worldwide Testing Services (Taiwan) Co., Ltd.

FCC Registration No.: TW1072, TW1140, TW1146, TW1477, TW0037

Industry Canada filed test laboratory Reg. No.: 20037, 31634



Report No.: W6M22402-23278-C-1

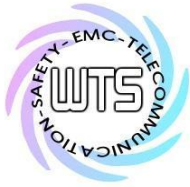
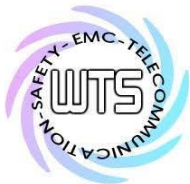


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Worldwide Testing Services(Taiwan) Co., Ltd.

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1 General Information

1.1 Notes

The purpose of conformity testing is to increase the probability of adherence to the essential requirements or conformity specifications, as appropriate.

The complexity of the technical specifications, however, means that full and thorough testing is impractical for both technical and economic reasons.

Furthermore, there is no guarantee that a test sample which has passed all the relevant tests conforms to a specification.

Neither is there any guarantee that such a test sample will interwork with other genuinely open systems.

The existence of the tests nevertheless provides the confidence that the test sample possesses the qualities as maintained and that its performance generally conforms to representative cases of communications equipment.

Laboratory disclaimer-

1. The test results of this test report relate exclusively to the item tested as specified in 1.5.
2. The test report may only be reproduced or published in full.
3. Reproduction or publication of extracts from the report requires the prior written approval of the Worldwide Testing Services(Taiwan) Co., Ltd.
4. Antenna gain is provided by applicant and laboratory issue relevant data and results.

Tester:

July 15, 2024

Rick Chen

Rick Chen.

Date

WTS-Lab.

Name

Signature

Technical responsibility for area of testing:

July 15, 2024

Kevin Wang

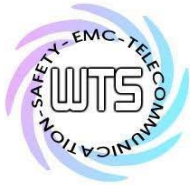
Kevin Wang

Date

WTS

Name

Signature



Worldwide Testing Services(Taiwan) Co., Ltd.

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FCC ID: NTMDSTTX

1.2 Testing laboratory

1.2.1 Location

10m OATS

No.5-1, Lishui, Shuang Sing Village, Wanli Dist.,
New Taipei City 207, Taiwan (R.O.C.)

3 meter semi-anechoic chamber

No.35, Aly. 21, Ln. 228, Ankang Rd., Neihu Dist.,
Taipei City 114, Taiwan (R.O.C.)
Tel: 886-2-6613-0228

Worldwide Testing Services (Taiwan) Co., Ltd.

6F., No. 58, Ln. 188, Ruiguang Rd., Neihu Dist.,
Taipei City 114, Taiwan (R.O.C.)
Tel: 886-2-6606-8877

1.2.2 Details of accreditation status

Accredited testing laboratory

FCC filed test laboratory Reg. No.: TW1072, TW1140, TW1146, TW1477, TW0037

Industry Canada filed test laboratory Reg. No.: 20037, 31634

Test location, where different from Worldwide Testing Services (Taiwan) Co., Ltd. :

Name: ./.

Accredited number: ./.

Street: ./.

Town: ./.

Country: ./.

1.3 Details of approval holder

Name: OKAYO ELECTRONICS CO., LTD.

Street: No. 2, Gongye 10th Rd., Dali Dist.,

Town: Taichung 41280,

Country: Taiwan

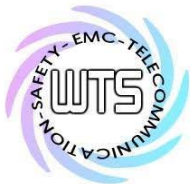
Manufacturer: (if applicable)

Name: ./.

Street: ./.

Town: ./.

Country: ./.



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1.4 Application details

Date of receipt of test item: March 22, 2024

Date of test: from March 25 2024 to July 09, 2024

1.5 General information of Test item

Type of test item: Digital Stationary Transmitter

Model no.: DST

Multi-listing model no.: DSTCON, DSTDGB, DSTOTG, DSTXXX(X=0~9, A~Z)

Brand name: OKAYO

Power supply: Battery 1.5Vd.c.*2

Technical data

Mode	Channel	Conducted Power (dBm)
920-928MHz	Ch 1 : 902.5 MHz	12.11
	Ch 3 : 915.5 MHz	11.73
	Ch 2 : 927.5 MHz	11.51
Bluetooth Normal mode	Ch 0 : 2402 MHz	2.15
	Ch 39 : 2441 MHz	1.65
	Ch 78 : 2480 MHz	1.07
Bluetooth EDR mode	Ch 0 : 2402 MHz	2.85
	Ch 39 : 2441 MHz	2.37
	Ch 78 : 2480 MHz	1.80

Type of antenna: 920-928MHz: Dipole Antenna

Bluetooth: PCB Antenna

Antenna gain: 920-928MHz: 1.5dBi

Bluetooth: -1dBi

Operation modes: Duplex

Modulation type: 920-928MHz: 4GFSK

Bluetooth: GFSK 、 $\pi/4$ DQPSK 、8DPSK

Sample no.: #01



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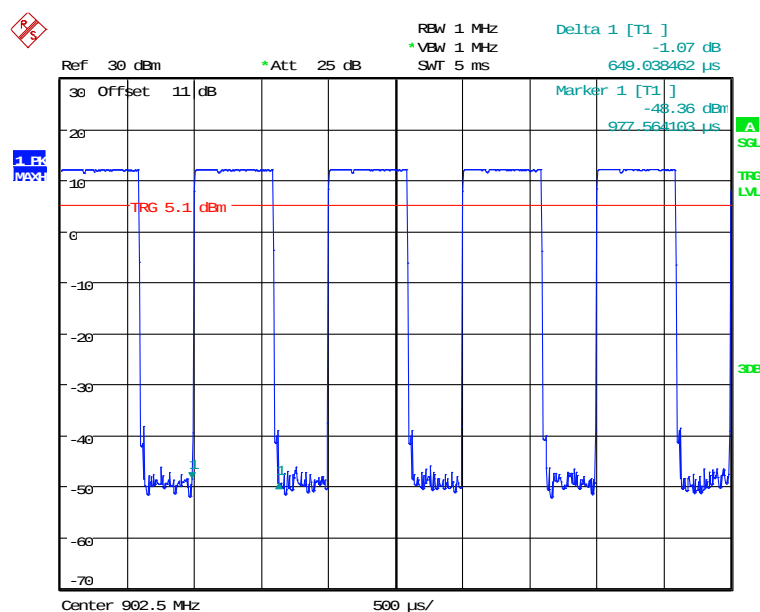
1.5 Duty cycle and factor

The duty factor is computed as $[10 \log (1 / D)]$, where D is the duty cycle.

920-928MHz

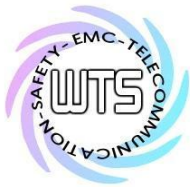
Mode	T _{on} (ms)	T _{on} +T _{off} (ms)	Duty cycle (%)	1/T - VBW (kHz)
4GFSK	0.649	1.001	64.84%	1.54

Duty cycle plot



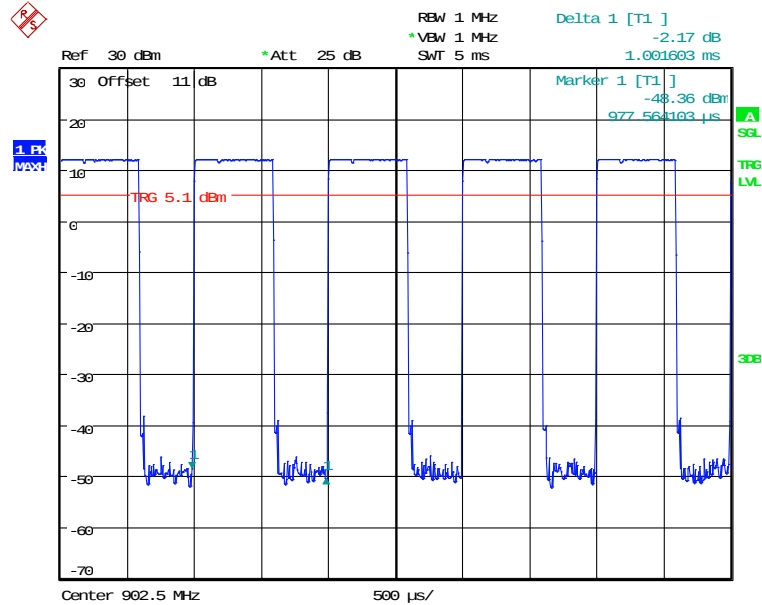
DUTY

Date: 5.JUL.2024 17:18:32



Registration number: W6M22402-23278-C-1

FCC ID: NTMDSTTX

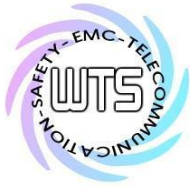


DUTY

Date: 5.JUL.2024 17:18:56

1.6 Test standards

47 CFR PART 15 SUBPART C § 15.247 (2023-10)



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2 Test configuration

2.1 Test environment

Relative humidity content: 20 ... 75 %

Air pressure: 86 ... 103 kPa

Extreme conditions parameters: ./.

2.2 Measurement uncertainty

Test item Name	Uncertainty
Estimation Result of Uncertainty of Conducted Emission (Power Line Conducted Emission)	Expanded Uncertainty : AMN : 0.94 dB Voltage probe : 0.96 dB Include Pulse Limiter : 1.5 dB
Estimation Result of Uncertainty of Radiated Emission(3M-966A) (Transmitter Radiated Emissions in Restricted Bands, Spurious Emissions (tx), Radiated Emission from Digital Part)	Expanded Uncertainty : 0.009-30 MHz : 1.88 dB 30-1000 MHz : 3.20 dB 1-18 GHz : 3.56 dB 18-40 GHz : 2.94 dB
Estimation Result of Uncertainty of Bandwidth Measurement (20 dB Bandwidth, Minimum 6 dB Bandwidth)	Expanded Uncertainty : 0.45 kHz
Estimation Result of Uncertainty of Conducted Output Power Measurement (Peak Output Power (transmitter))	Expanded Uncertainty : 1.64 dB
Estimation Result of Uncertainty of Power Density Measurement (Peak Power Spectral Density)	Expanded Uncertainty : 1.64 dB
Estimation Result of Uncertainty of Band Edge Measurement (Radiated Emission on the band edge)	Expanded Uncertainty : 0.67 dBc
Estimation Result of Uncertainty of Frequency Separation Measurement (Carrier Frequency Separation, Number of Hopping Frequencies)	Expanded Uncertainty : 554.14 Hz
Estimation Result of Uncertainty of Duty Cycle Measurement (Time of Occupancy (Dwell Time))	Expanded Uncertainty : 0.1 ms

The decision rule is: Measurement uncertainty is not included in the calculation of test results.



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2.3 Test Equipment List

Bluetooth

Max Output Power, 20DB BANDWIDTH, BANDEDGE,

FREQUENCY SEPARATION, NUMBER OF HOPPING, DWELL TIME

Code No.	Test equipment	Mode No.	Serial No.	Brand	Cal. Date	Next Cal. Date
ETSTW-RE 050	Attenuator 10dB	50HF-010-1	None	JFW	2024/2/16	2025/2/15
ETSTW-RE 055	SPECTRUM ANALYZER	FSU 26	200074	R&S	2024/3/7	2025/3/6
ETSTW-RE 099	DC Block	50DB-007-1	None	JFW	2024/2/16	2025/2/15
ETSTW-Cable 030	Microwave Cable	SUCOFLEX 104 (S_Cable 9)	279067	HUBER+SUHNER	2024/2/16	2025/2/15

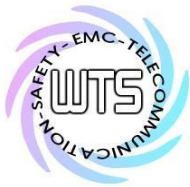
920-928MHz

Max Output Power, 6DB Bandwidth, Band edge, Power Density, Duty

Code No.	Test equipment	Mode No.	Serial No.	Brand	Cal. Date	Next Cal. Date
ETSTW-RE 050	Attenuator 10dB	50HF-010-1	None	JFW	2024/2/16	2025/2/15
ETSTW-RE 055	SPECTRUM ANALYZER	FSU 26	200074	R&S	2024/3/7	2025/3/6
ETSTW-RE 099	DC Block	50DB-007-1	None	JFW	2024/2/16	2025/2/15
ETSTW-Cable 030	Microwave Cable	SUCOFLEX 104 (S_Cable 9)	279067	HUBER+SUHNER	2024/2/16	2025/2/15

Spurious Emission (966A)

Code No.	Test equipment	Mode No.	Serial No.	Brand	Cal. Date	Next Cal. Date
ETSTW-RE 153	Signal Analyzer	FSV40	101929	R&S	2023/9/20	2024/9/19
ETSTW-RE 154	EMI Test Receiver	ESR3	102829	R&S	2024/2/16	2025/4/9
ETSTW-RE 160	Amplifier Module	CHC 3	None	WTS	2023/7/14	2024/7/13
ETSTW-RE 177	TRILOG Broadband Antenna	VULB 9168& EMCI-N-6-06	01380&AT-06007	SCHWARZBECK &EMC	2024/3/4	2025/3/3
ETSTW-RE 178	Double Ridged Guide Horn Antenna	DRH18-E	210505A18ES	RFSPIN	2024/2/29	2025/2/28
ETSTW-Cable 077	SMA type cable (10m)	EMC104-SM-SM-10000	230511	EMCI	2023/7/14	2024/7/13
ETSTW-Cable 084	SMA type cable (1m)	SF104-11SMA-1000	816477/4	HONOVA	2023/7/14	2024/7/13
ETSTW-Cable 089	SMA type cable (2m)	SF104-11SMA-2000	SN 811889/4	HUBER+SUHNER	2023/7/14	2024/7/13
WTSTW-SW 002	EMI TEST SOFTWARE	EZ_EMC	None	Farad	Version ETS-03A1 Version EMEC-3A1+	



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2.4 General Test Procedure

POWER LINE CONDUCTED INTERFERENCE: The procedure used was ANSI STANDARD C63.10-2013 6.2 using a LISN (if necessary). Both lines were observed. The bandwidth of the spectrum analyzer was 10 kHz with an appropriate sweep speed.

RADIATION INTERFERENCE: The test procedure used was according to ANSI STANDARD C63.10-2013 6.3 employing a spectrum analyzer. For investigated frequency is equal to or below 1GHz, the RBW and VBW of the spectrum analyzer was 100 kHz and 100kHz respectively with an appropriate sweep speed. For investigated frequency is above 1GHz, both of RBW and VBW of the spectrum analyzer were 1 MHz with an appropriate sweep speed. The analyzer was calibrated in dB above a microvolt at the output of the antenna.

FORMULA OF CONVERSION FACTORS: The Field Strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of dBμV) to the antenna correction factor supplied by the antenna manufacturer. The antenna correction factors are stated in terms of dB.

Example:

Freq (MHz)	METER READING + ACF + CABLE LOSS (to the receiver) = FS
33	20 dBμV + 10.36 dB + 6 dB = 36.36 dBμV/m @3m

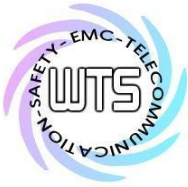
The EUT was placed on a table 80 cm high and with dimensions of 1m by 1.5m (non metallic table) and arranged according to ANSI C63.10-2013 6.2.2. The table used for radiated measurements is capable of continuous rotation. The spectrum was scanned from 30 MHz to the frequency specified as follows:

- (1) If the intentional radiator operates below 10 GHz: to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.
- (2) If the intentional radiator operates at or above 10 GHz and below 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 100 GHz, whichever is lower.
- (3) If the intentional radiator operates at or above 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 200 GHz, whichever is lower, unless specified otherwise elsewhere in the rules.
- (4) If the intentional radiator contains a digital device, regardless of whether this digital device controls the functions of the intentional radiator or the digital device is used for additional control or function purposes other than to enable the operation of the intentional radiator, the frequency range shall be investigated up to the range specified in paragraphs (a)(1)-(a)(3) of this section or the range applicable to the digital device, as shown in paragraph (b)(1) of this Section, whichever is the higher frequency range of investigation.

For hand-held devices, a exploratory test was performed with three (3) orthogonal planes to determine the highest emissions.

When an emission was found, the table was rotated to produce the maximum signal strength. At this point, the antenna was raised and lowered from 1m to 4m. The antenna was placed in both the horizontal and vertical planes.

When the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, the measurement field strength shall be determined by averaging over



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one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.

The formula is as follows:

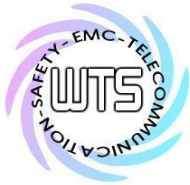
Average = Peak + Duty Factor

Duty Factor = $20 \log (\text{dwell time}/T)$

T = 100ms when the pulse train period is over 100 ms or the period of the pulse train.

Modified Limits for peak according to 15.35 (b) = Max Permitted average Limits + 20dB

ANSI STANDARD C63.10-2013 B.2.7: Any measurements that utilize special test software shall be indicated and referenced in the test report. During testing, test software 'EZ EMC' was used for setting up different operation modes.



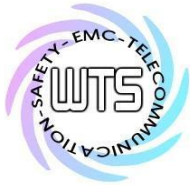
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3 Test results (enclosure)

TEST CASE	Para. Number	Required	Test passed	Test failed
Peak Output Power	15.247(b)	☒	☒	☐
Equivalent isotropically radiated Power	15.247(b)	☒	☒	☐
Spurious Emissions radiated – Transmitter operating	15.247(d):15.209	☒	☒	☐
Spurious Emissions conducted – Transmitter operating	15.247	☐	☐	☐
Carrier Frequency Separation	15.247(a) (1)	☒	☒	☐
Number of Hopping Frequencies	15.247(a) (1)(i)	☒	☒	☐
Time of Occupancy (Dwell Time)	15.247(a) (1)(i)	☒	☒	☐
20 dB Bandwidth	15.247(a) (1)(i)	☒	☒	☐
Minimum 6 dB Bandwidth	15.247(a)(2)	☒	☒	☐
Band-edge Compliance of RF Emission	15.247(d)	☒	☒	☐
Peak Power Spectral Density	15.247(e)	☒	☒	☐
Radiated Emission from Receiver Part	15.109	☒	☒	☐
Power Line Conducted Emission	15.207(a)	☐	☐	☐



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FCC ID: NTMDSTTX

3.1 Peak Output Power (transmitter)

FCC Rule: 15.247(b)(3)

This measurement applies to equipment with an integral antenna and to equipment with an antenna connector and equipped with an antenna as declared by the applicant.

The power was measured with modulation (declared by the applicant).

Test date: July 05, 2024

Temperature: 27.2 °C

Humidity: 48.5 %

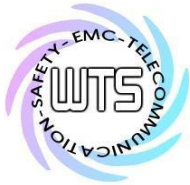
Tester: Rick

902-928MHz

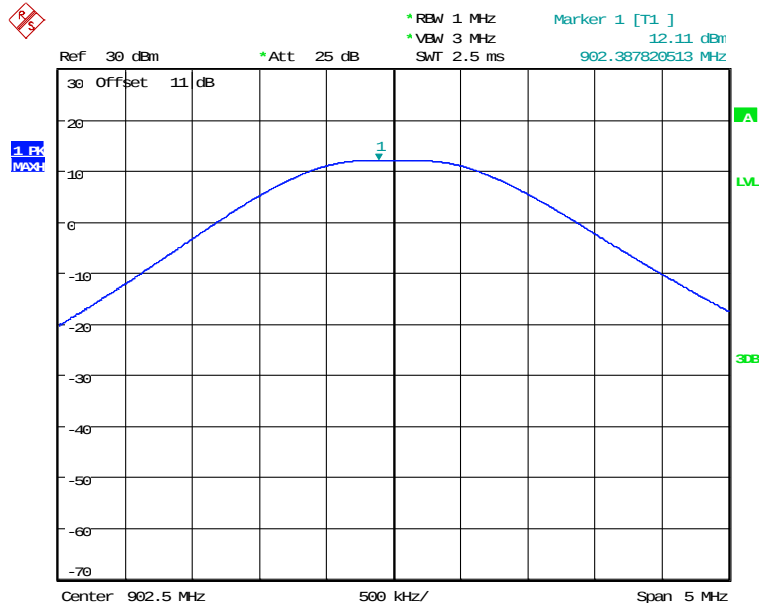
Band	Mode	Channel	Power (dBm)	Limit (dBm)
920-928MHz	4GFSK	Ch 1: 902.5 MHz	12.11	30
		Ch 3: 915.5 MHz	11.73	30
		Ch 2 : 927.5 MHz	11.51	30

Bluetooth

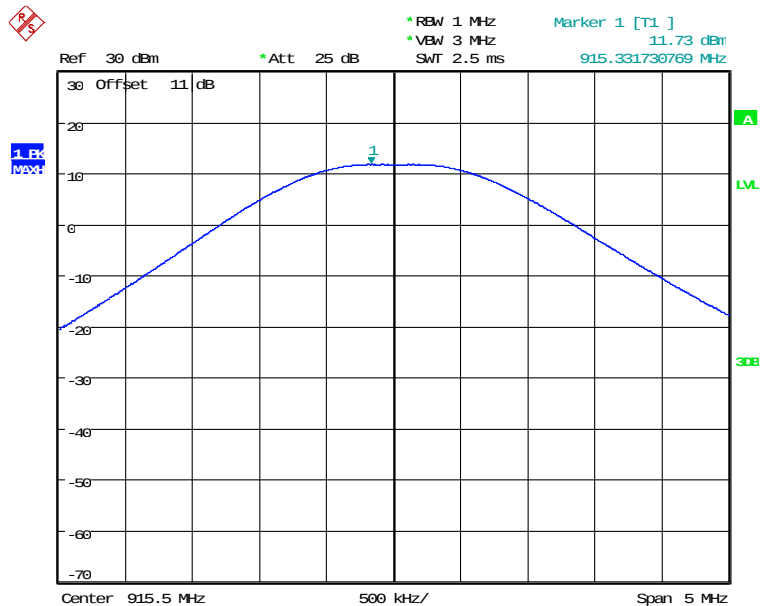
Band	Mode	Channel	Power (dBm)	Limit (dBm)
2.4GHz	Normal mode	Ch 0 : 2402 MHz	2.15	21
		Ch 39 : 2441 MHz	1.65	21
		Ch 78 : 2480 MHz	1.07	21
	EDR mode	Ch 0 : 2402 MHz	2.85	21
		Ch 39 : 2441 MHz	2.37	21
		Ch 78 : 2480 MHz	1.80	21



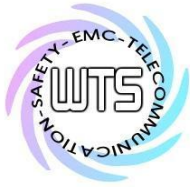
Registration number: W6M22402-23278-C-1
FCC ID: NTMDSTTX
902-928MHz



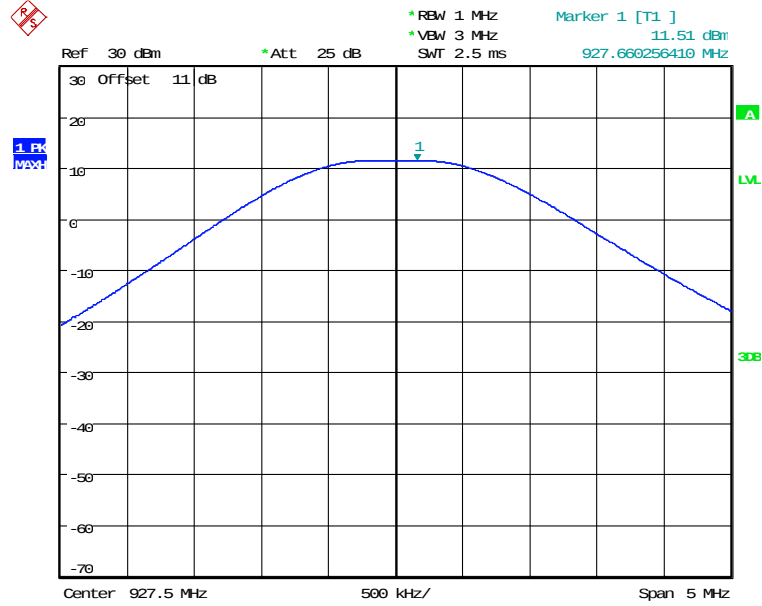
MAX OUTPUT POWER 902.5MHz
Date: 5.JUL.2024 17:07:06



MAX OUTPUT POWER 915.5MHz
Date: 5.JUL.2024 17:05:59

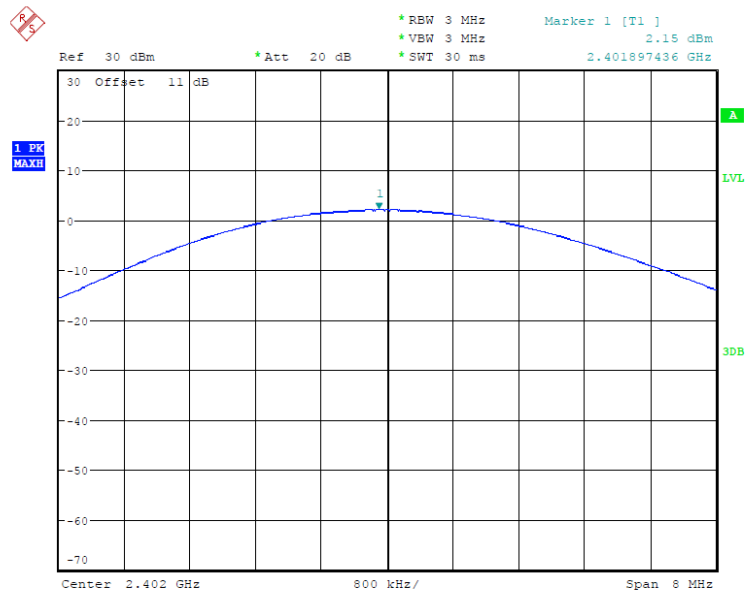


Registration number: W6M22402-23278-C-1
FCC ID: NTMDSTTX

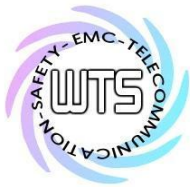


MAX OUTPUT POWER 927.5MHz
Date: 5.JUL.2024 17:06:34

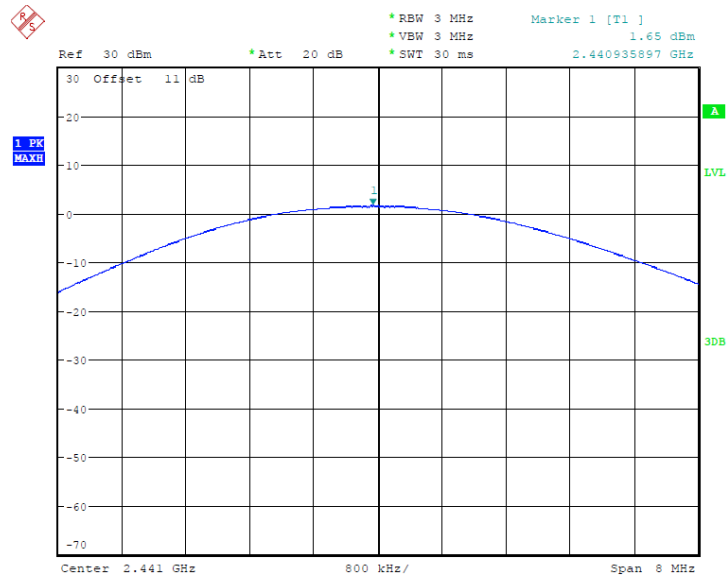
Bluetooth
Normal mode



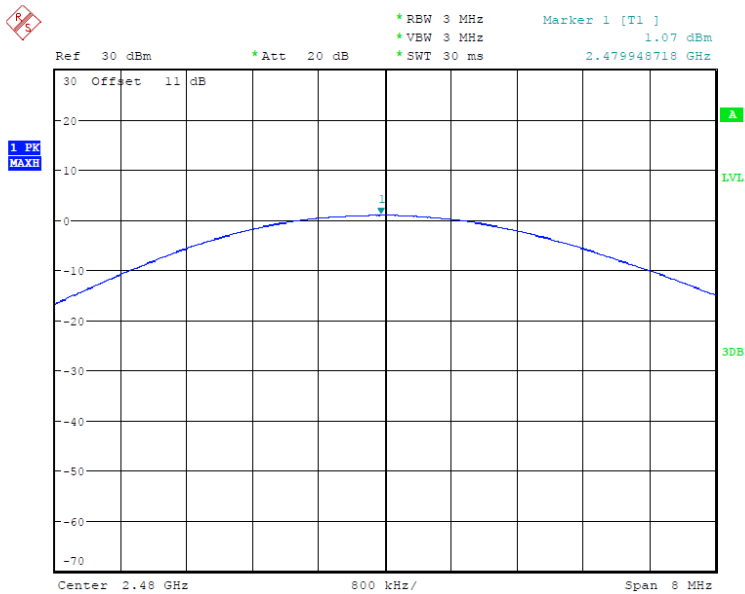
MAX OUTPUT POWER CH0
Date: 5.JUL.2024 09:32:29



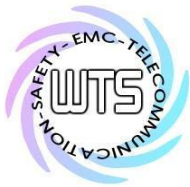
Registration number: W6M22402-23278-C-1
FCC ID: NTMDSTTX



MAX OUTPUT POWER CH39
Date: 5.JUL.2024 09:33:13



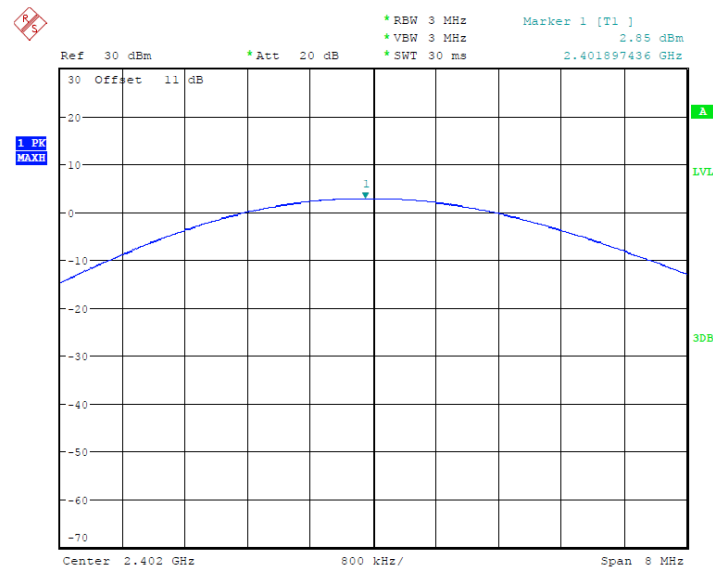
MAX OUTPUT POWER CH78
Date: 5.JUL.2024 09:34:05



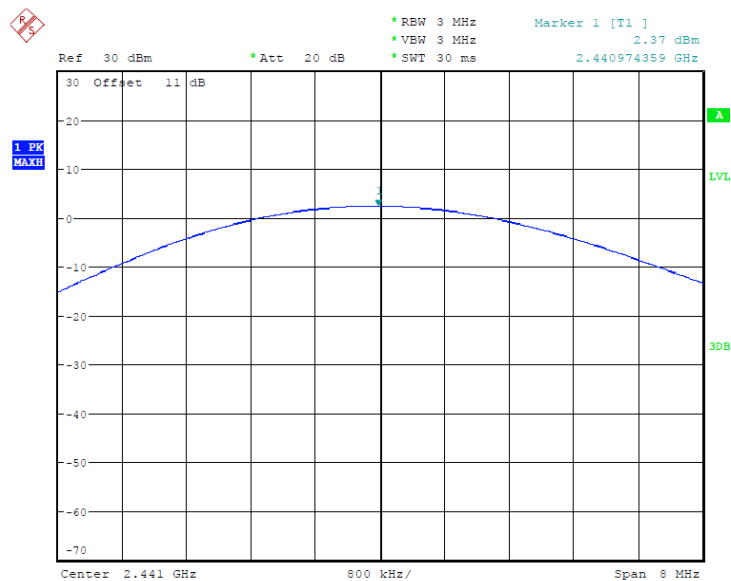
Registration number: W6M22402-23278-C-1

FCC ID: NTMDSTTX

EDR mode



MAX OUTPUT POWER CH0 EDR MODE
Date: 5.JUL.2024 09:41:45

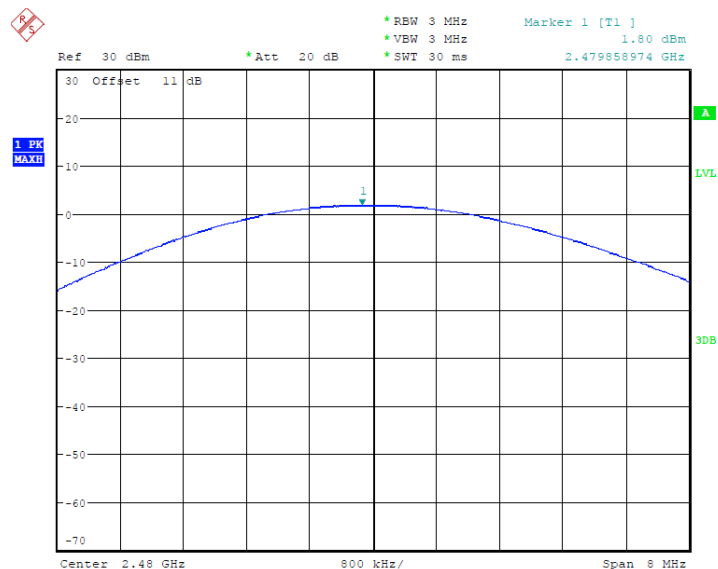


MAX OUTPUT POWER CH39 EDR MODE
Date: 5.JUL.2024 09:43:09



Registration number: W6M22402-23278-C-1

FCC ID: NTMDSTTX



MAX OUTPUT POWER CH78 EDR MODE
Date: 5.JUL.2024 09:45:13

Limits:

Frequency (MHz)	Power (dBm)
902 - 928	30
2400 – 2483.5	30
5725 – 5850	30

In case of employing transmitter antennas having antenna gain > 6 dBi and using fixed point-to point operation consider §15.247 (b)(4)



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3.2 Transmitter Radiated Emissions in Restricted Bands

FCC Rules: 15.247 (d), 15.205, 15.209, 15.35

Radiated emission measurements were performed from 30 MHz to 26500 MHz.

For radiated emission tests, the analyzer setting was as followings:

Frequency $\leq$ 1 GHz, RBW:100 kHz, VBW: 100 kHz (Peak measurements)

Frequency $>$ 1 GHz, RBW: 1 MHz, VBW: 1 MHz (Peak measurements)

Frequency $>$ 1 GHz , RBW:1 MHz , VBW: 10 Hz (Average measurements)

Limits.

For frequencies below 1GHz:

Frequency of Emission (MHz)	Field strength (microvolts/meter)	Field Strength (dB microvolts/meter)
30 - 88	100	40.0
88 - 216	150	43.5
216 - 960	200	46.0
Above	500	54.0

For frequencies above 1GHz (Average measurements).

Guidance on Measurement of Digit Transmission Systems:

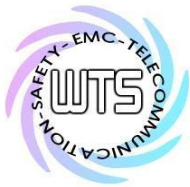
“If the emission is pulsed, modify the unit for continuous operation, use the setting shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation.”

The correction factor, based on the total channel dwell time in a 100 ms period, may be mathematically applied to a measurement made with an average detector, to further reduce the value.

Duty cycle correction = $20 \log (\text{dwell time} / 100\text{ms})$

Note: No duty cycle correction was added to the reading of this EUT.

Explanation: See attached diagrams in Appendix.



Registration number: W6M22402-23278-C-1

FCC ID: NTMDSTTX

3.3 Spurious Emissions (tx)

Spurious emission was measured with modulation (declared by manufacturer).

In any 100 kHz bandwidth outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB 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. 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))

FCC Rule: 15.247(c), 15.35

For out of band emissions that are close to or that exceed the 20 dB attenuation requirement described in the specification, radiated measurements were performed at a 3 m separation distance to determine whether these emissions complied with the general radiated emission requirement.

Limits:

For frequencies above 1GHz (Peak measurements).

Modified Limit for peak according to 15.35 (b) = Max Permitted average Limits + 20dB

For frequencies above 1GHz (Average measurements).

Max. reading – 20dB

Max. reading – 20 dB

Guidance on Measurement of Digit Transmission Systems:

“If the emission is pulsed, modify the unit for continuous operation, use the settings shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation.”

The correction factor, based on the total channel dwell time in a 100 ms period, may be mathematically applied to a measurement made with an average detector, to further reduce the value.

Duty Cycle correction = $20 \log (\text{dwell time}/100\text{ms})$

Note: No duty cycle correction was added to the reading of EUT.



Worldwide Testing Services(Taiwan) Co., Ltd.

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SAMPLE CALCULATION OF LIMIT. All results will be updated by an automatic measuring system in accordance with point 2.3.

Calculation of test results:

Such factors like antenna correction, cable loss, external attenuation etc. are already included in the provided measurement results. This is done by using validated test software and calibrated test system according the accreditation requirements.

The peak and average spurious emission plots was measured with the average limits.

In the Table being listed the critical peak and average value and exhibit the compliance with the above calculated Limits.

If in the column's correction factor states a value then the max. Field strength in the same row is corrected by a value gained from the "Correction Factor".

Summary table with radiated data of the test plots

Model: DST Date: --
Mode: -- Temperature: -- °C Engineer: --
Polarization: Horizontal Humidity: -- %

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--

- Note**
1. Correction Factor = Antenna factor + Cable loss - Preamplifier
 2. The formula of measured value as: Test Result = Reading + Correction Factor
 3. Detector function in the form : PK = Peak, QP = Quasi Peak, AV = Average
 4. All not in the table noted test results are more than 20 dB below the relevant limits.
 5. Please see attached diagrams in appendix.

TEST RESULT (Transmitter): The unit DOES meet the FCC requirements.



FCC ID: NTMDSTTX

Carrier Frequency Separation was measured with modulation (declared by manufacturer).

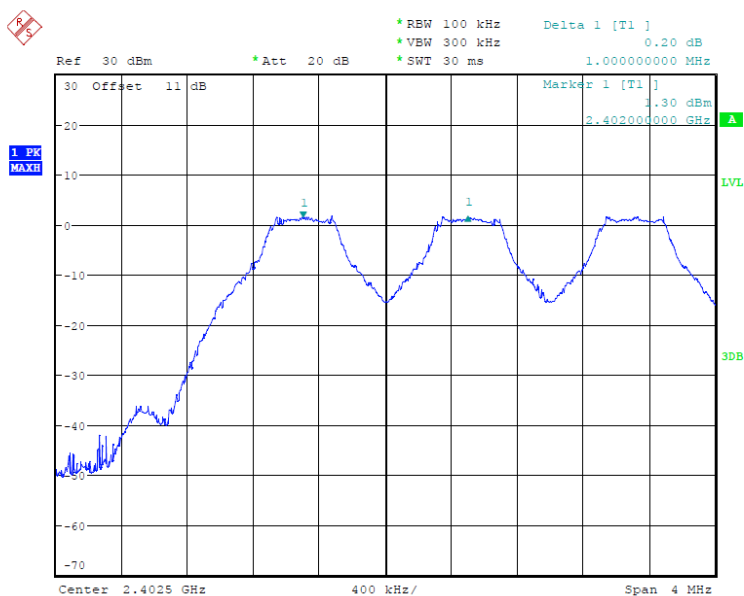
According to FCC rules part 15 subpart C §15.247 frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or 20 dB bandwidth of the hopping channel, whichever is greater.

Temperature: 27.2 °C

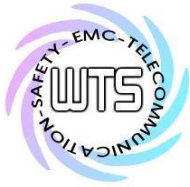
Humidity: 48.5 %

Tester: Rick

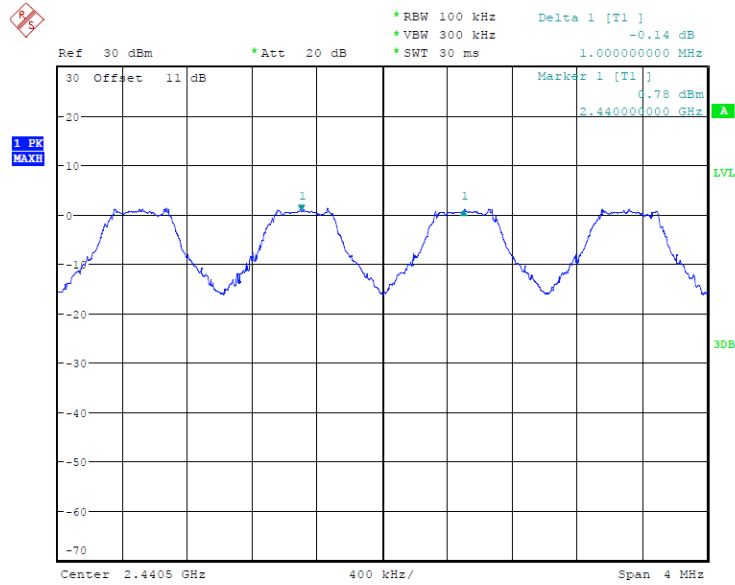
Bluetooth



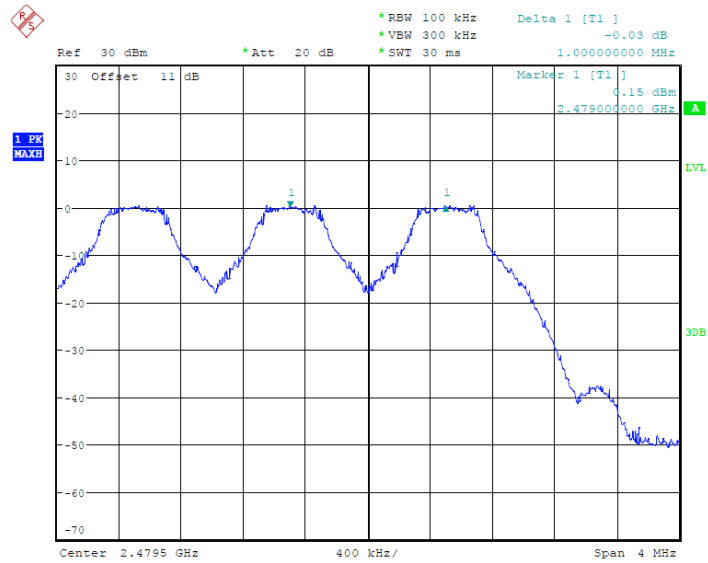
FREQUENCY SEPARATION CH0
Date: 5.JUL.2024 09:39:09



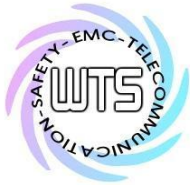
Registration number: W6M22402-23278-C-1
FCC ID: NTMDSTTX



FREQUENCY SEPARATION CH39
Date: 5.JUL.2024 09:40:01



FREQUENCY SEPARATION CH78
Date: 5.JUL.2024 09:40:57



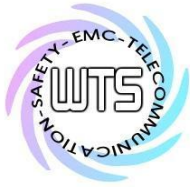
Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22402-23278-C-1

FCC ID: NTMDSTTX

Limits:

Frequency Range MHz	Limits	
	20 dB bandwidth < 25 kHz	20 dB bandwidth > 25 kHz
902-928	25 kHz	20 dB bandwidth
2400-2483.5 5725-5850.0	25 kHz	20 dB bandwidth



Registration number: W6M22402-23278-C-1
FCC ID: NTMDSTTX

3.5 Number of Hopping Frequencies

According to FCC rules part 15 subpart C §15.247 frequency hopping systems operating in the 2400-2483.5 MHz band shall use at least 15 hopping frequencies. Frequency hopping systems in 5725-5850 MHz bands shall use least 75 hopping frequencies.

For frequency hopping systems operating in the 902-928 MHz band: if the 20dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies; if the 20dB bandwidth of the hopping channel 250 kHz or greater, the system shall use at least 25 hopping frequencies.

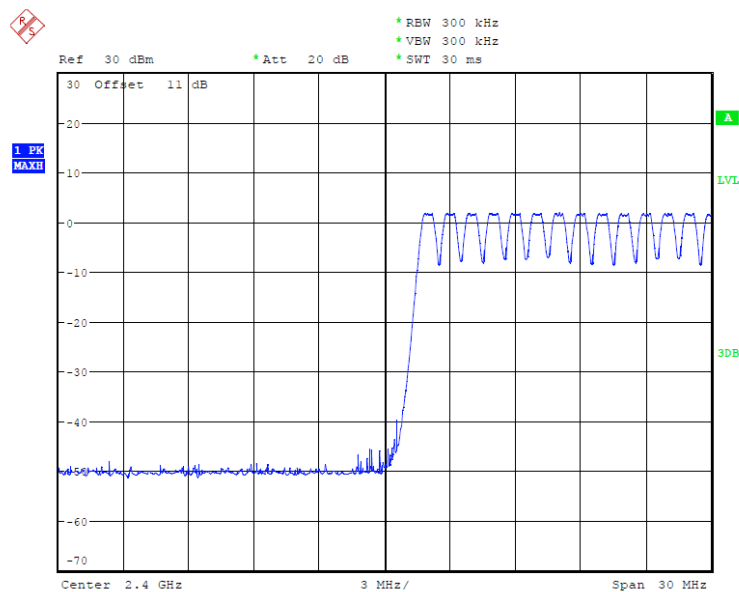
Test date: July 05, 2024

Temperature: 27.2 °C

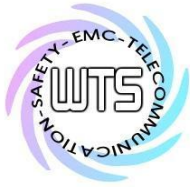
Humidity: 48.5 %

Tester: Rick

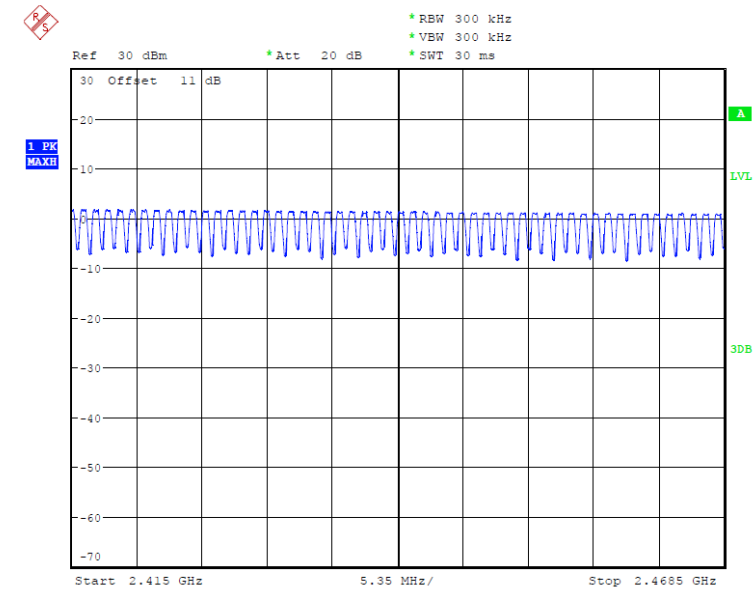
Bluetooth



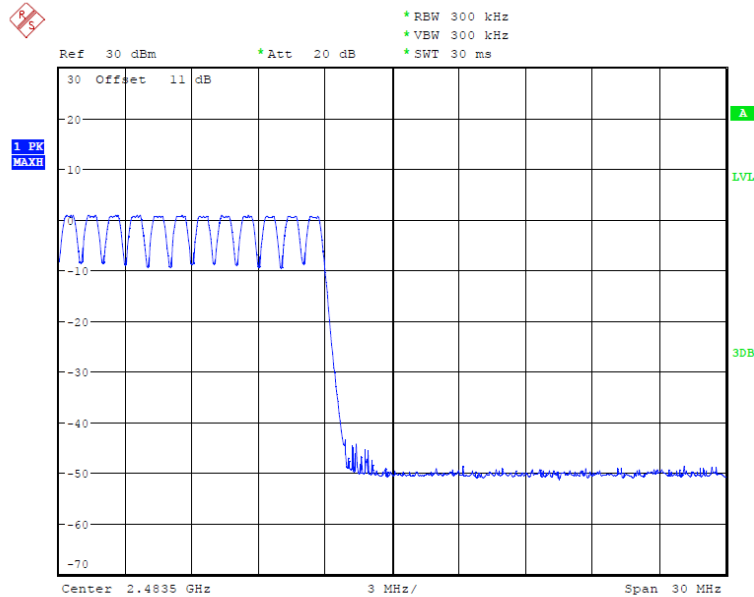
NUMBER OF HOPPING CH0-13
Date: 5.JUL.2024 09:36:05



Registration number: W6M22402-23278-C-1
FCC ID: NTMDSTTX



NUMBER OF HOPPING CH14-66
Date: 5.JUL.2024 09:38:09



NUMBER OF HOPPING CH67-78
Date: 5.JUL.2024 09:36:53



Registration number: W6M22402-23278-C-1

FCC ID: NTMDSTTX

Limits:

Frequency Range (MHz)	Limit	
	20dB Bandwidth	Number of Channels
902-928	Bandwidth < 250 kHz	≥ 50
	Bandwidth ≥ 250 kHz	≥ 25
2400-2483.5	not defined	15
5725-5850.0	1 MHz	75

3.5.1 Pseudorandom Frequency Hopping Sequence

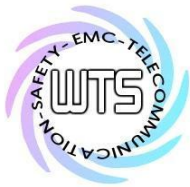
The generation of the hopping sequence is determined by the Bluetooth core specification and complies with the FCC requirements.

3.5.2 Coordination of hopping sequences to other transmitters

According to the Bluetooth core specification such a coordination is not possible. During scatternet function only one of the two hopping sequences will be used at a definite moment.

3.5.3 System Receiver Hopping Capability

According to the Bluetooth core specification. The system receivers shift frequencies in synchronization with the transmitted signals.



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3.6 Time of Occupancy (Dwell Time)

Frequency hopping systems operating in the 5725-5850 MHz band shall use an average time of occupancy on any frequency not greater than 0.4 seconds within a 30 second period.

In 2400-2483.5 MHz band the average time of occupancy on any channel shall not be greater than 0.4 seconds multiplied by the number of hopping channels employed.

For frequency hopping systems operating in the 902-928 MHz band: if the 20dB bandwidth of the hopping channel is less than 250 kHz, the average time of occupancy on any frequency shall not greater than 0.4 seconds within a 20 second period; if the 20dB bandwidth of the hopping channel is 250 kHz or greater, the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period.

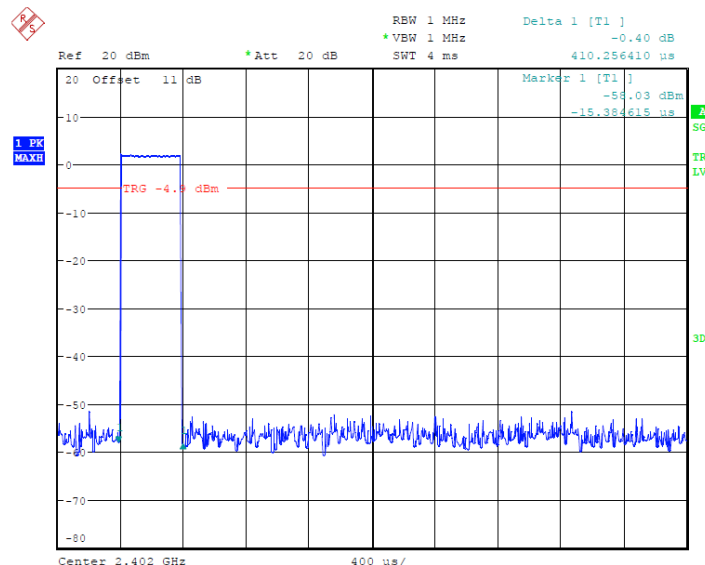
Test date: July 05, 2024

Temperature: 27.2 °C

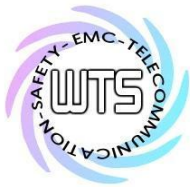
Humidity: 48.5 %

Tester: Rick

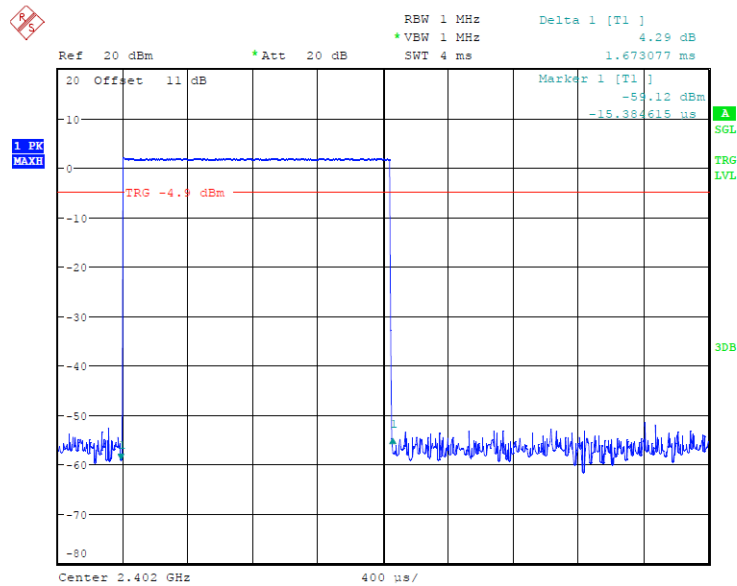
Bluetooth



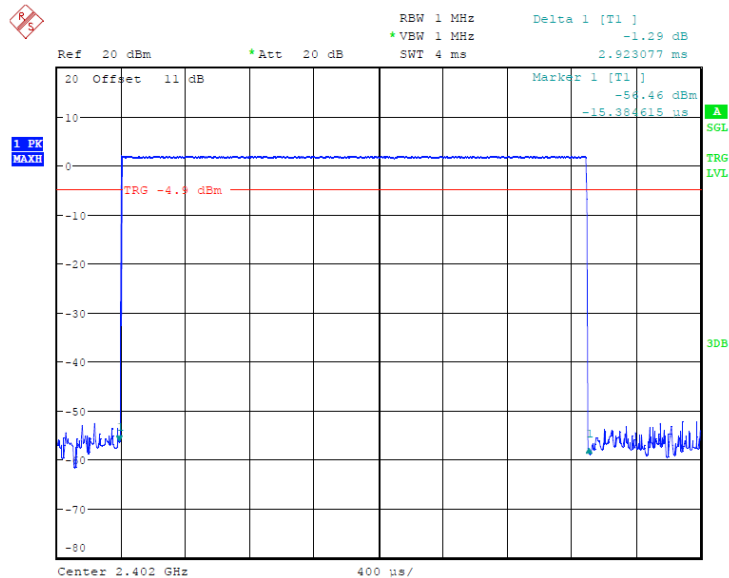
DWELL TIME CH0 DH1 (0.41ms * 320events = 131.2ms)
Date: 5.JUL.2024 09:56:36



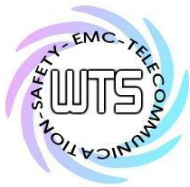
Registration number: W6M22402-23278-C-1
FCC ID: NTMDSTTX



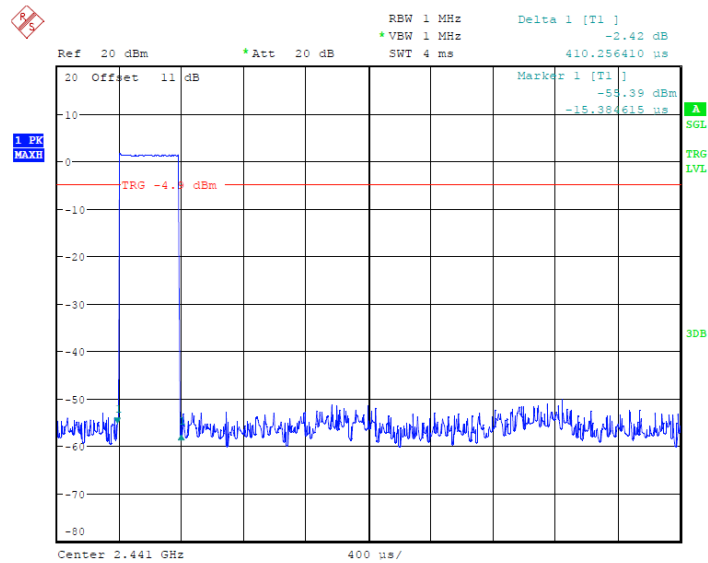
DWELL TIME CH0 DH3 (1.673ms * 160events = 267.68ms)
Date: 5.JUL.2024 09:59:02



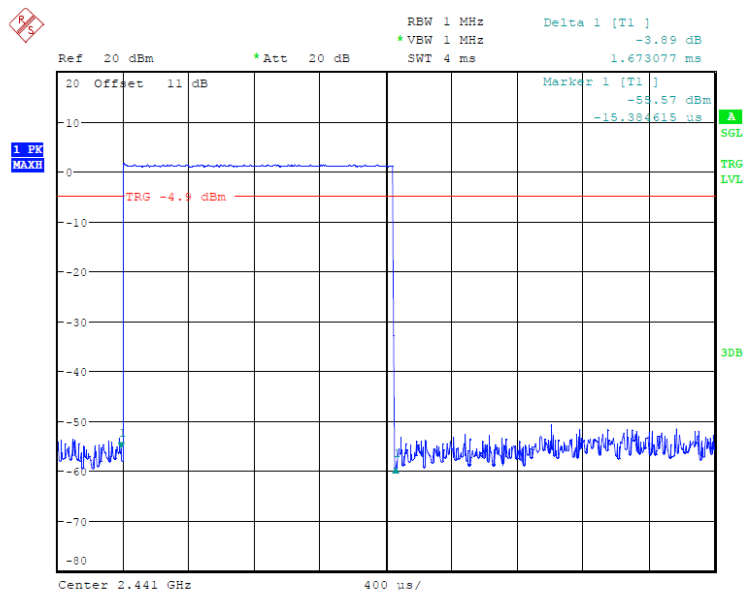
DWELL TIME CH0 DH5 (2.923ms * 106events = 309.838ms)
Date: 5.JUL.2024 10:00:07



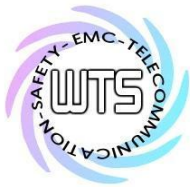
Registration number: W6M22402-23278-C-1
FCC ID: NTMDSTTX



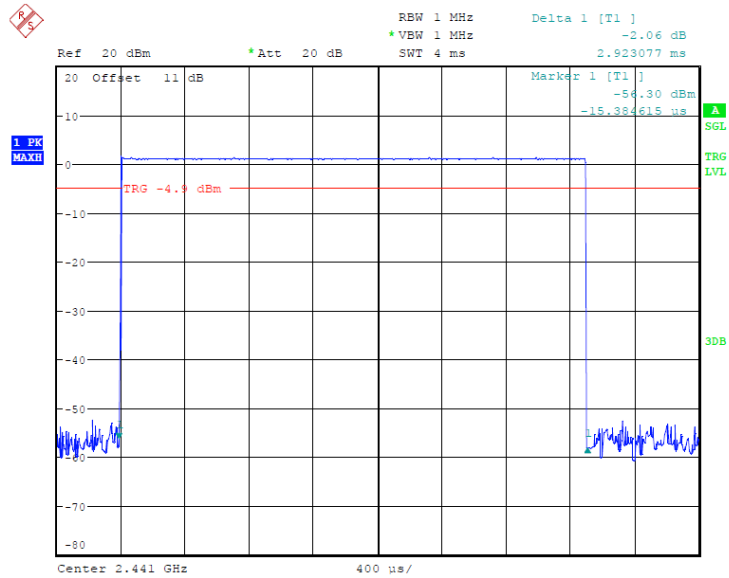
DWELL TIME CH39 DH1 (0.41ms * 320events = 131.2ms)
Date: 5.JUL.2024 09:56:55



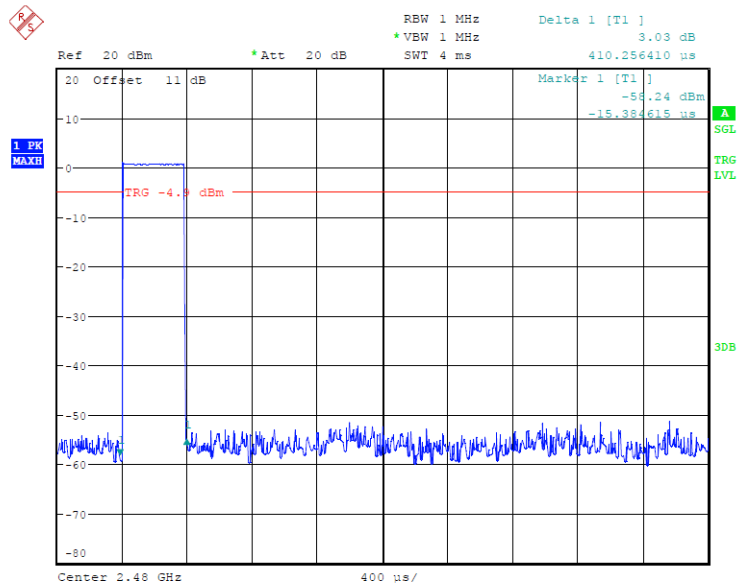
DWELL TIME CH39 DH3 (1.673ms * 160events = 267.68ms)
Date: 5.JUL.2024 09:58:41



Registration number: W6M22402-23278-C-1
FCC ID: NTMDSTTX



DWELL TIME CH39 DH5 (2.923ms * 106events = 309.838ms)
Date: 5.JUL.2024 10:01:49

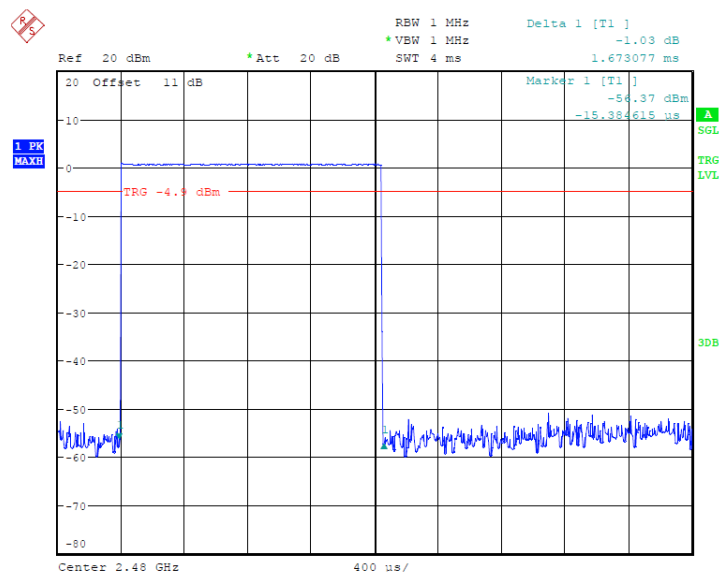


DWELL TIME CH78 DH1 (0.41ms * 320events = 131.2ms)
Date: 5.JUL.2024 09:57:13



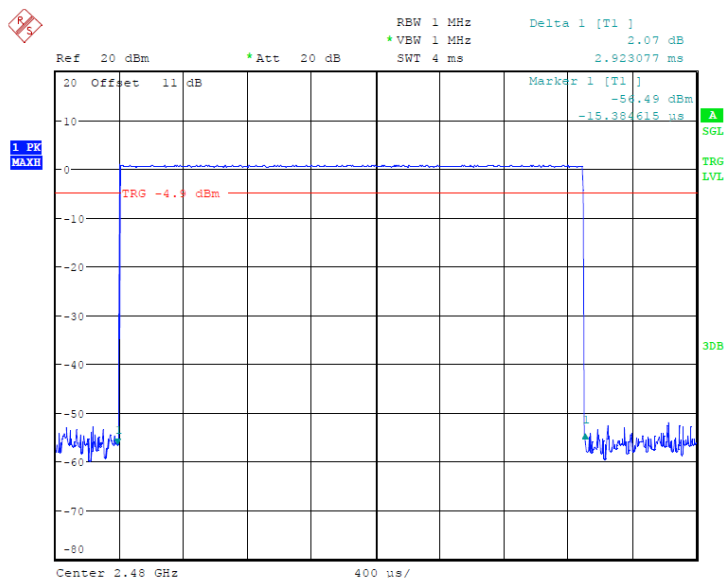
Registration number: W6M22402-23278-C-1

FCC ID: NTMDSTTX



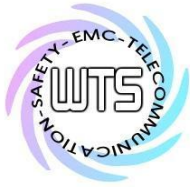
DWELL TIME CH78 DH3 (1.673ms * 160events = 267.68ms)

Date: 5.JUL.2024 09:58:19



DWELL TIME CH78 DH5 (2.923ms * 106events = 309.838ms)

Date: 5.JUL.2024 10:00:51



Registration number: W6M22402-23278-C-1

FCC ID: NTMDSTTX

Limits:

Frequency MHz	Number of channels	Measurement Period	Limit
902 – 928	≥ 50	20 s	0.4 s
	$49 \geq 25$	10 s	0.4 s
2400 – 2483.5	≥ 15	0.4 s * number of used channels	0.4 s
5725- 5850	≥ 75	30 s	0.4s



Registration number: W6M22402-23278-C-1

FCC ID: NTMDSTTX

3.7 20dB Bandwidth

Frequency hopping systems operating in the 5725-5850 MHz bands shall use a maximum 20dB bandwidth of 1 MHz.

The 20dB bandwidth is measured on the lowest, middle and highest hopping channel.

For frequency hopping systems operating in the 902-928 MHz band the maximum 20dB bandwidth of the hopping channel is 500 kHz.

Test date: July 05, 2024

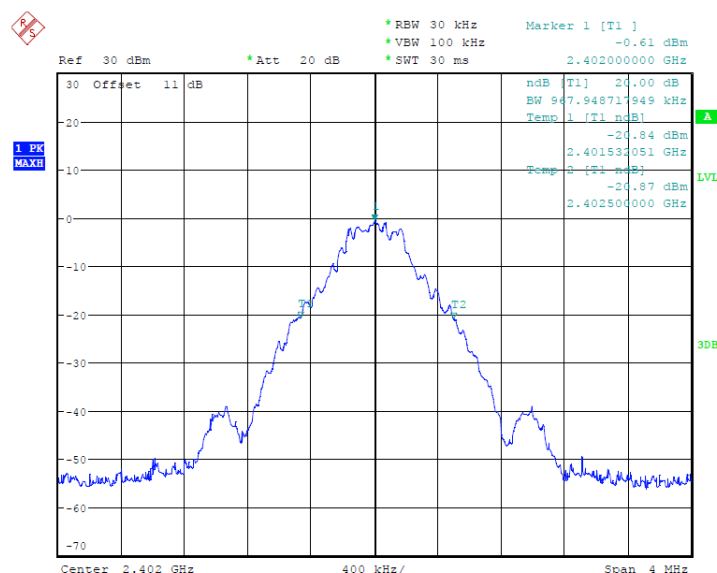
Temperature: 27.2 °C

Humidity: 48.5 %

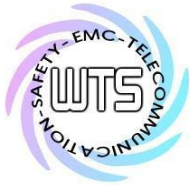
Tester: Rick

Bluetooth

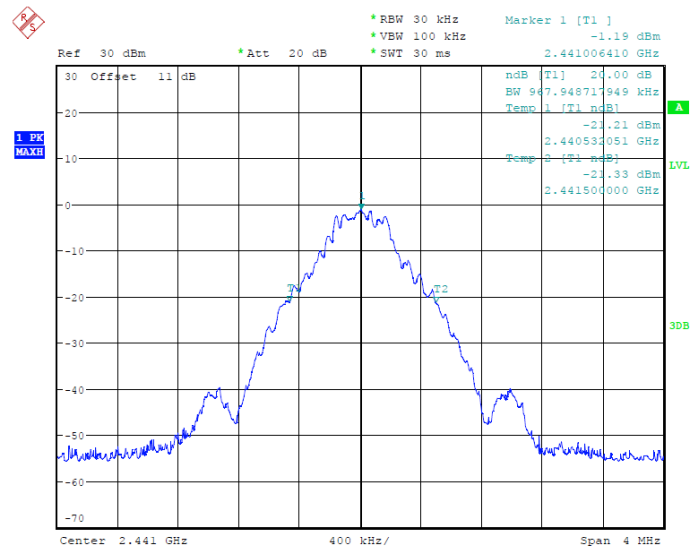
Normal mode



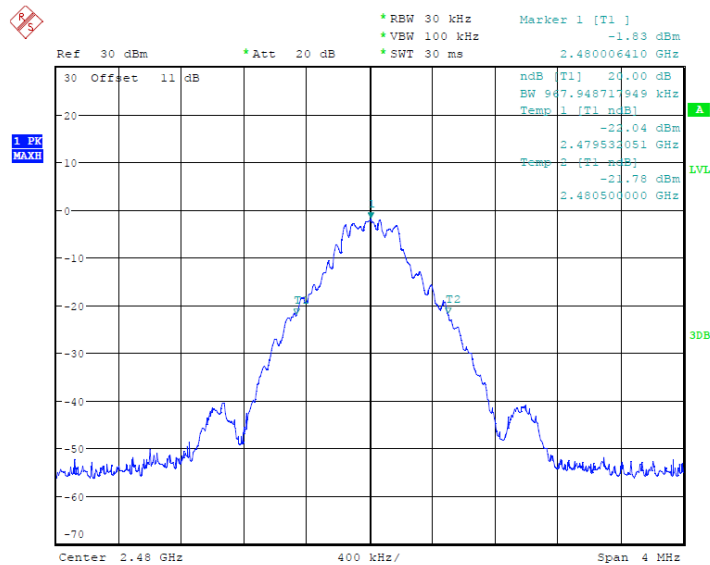
20DB BANDWIDTH CH0
Date: 5.JUL.2024 09:32:37



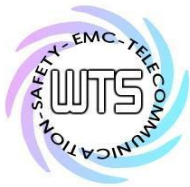
Registration number: W6M22402-23278-C-1
FCC ID: NTMDSTTX



20DB BANDWIDTH CH39
Date: 5.JUL.2024 09:33:21



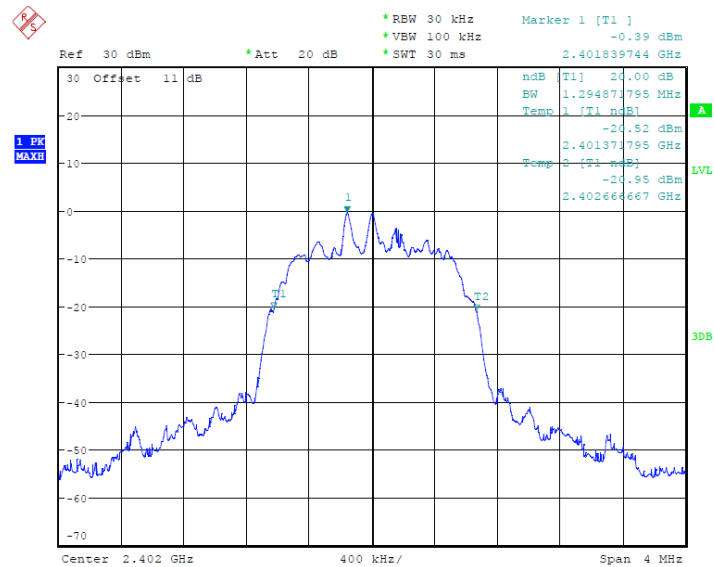
20DB BANDWIDTH CH78
Date: 5.JUL.2024 09:34:13



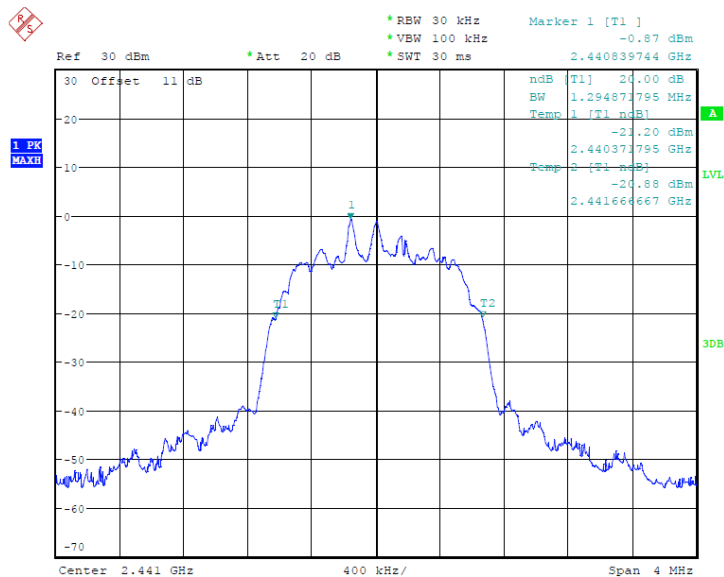
Registration number: W6M22402-23278-C-1

FCC ID: NTMDSTTX

EDR mode

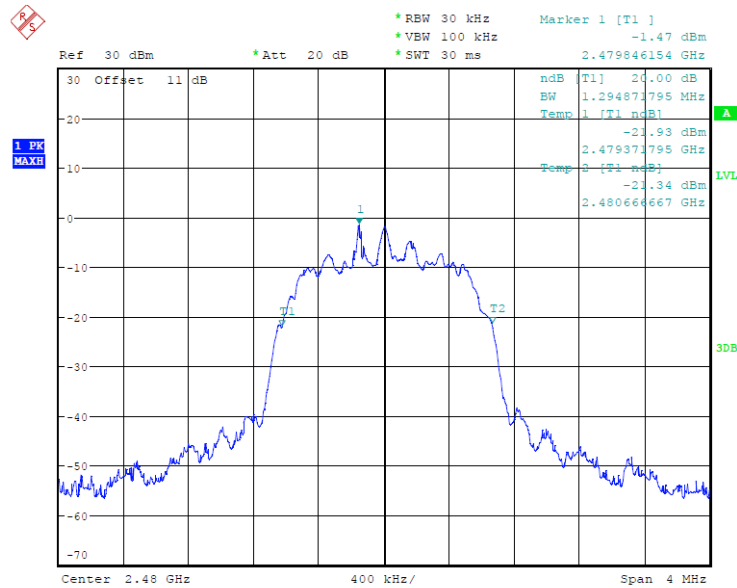


20DB BANDWIDTH CH0 EDR MODE
Date: 5.JUL.2024 09:41:53



20DB BANDWIDTH CH39 EDR MODE
Date: 5.JUL.2024 09:43:17

Registration number: W6M22402-23278-C-1
FCC ID: NTMDSTTX



20DB BANDWIDTH CH78 EDR MODE
Date: 5.JUL.2024 09:45:21

Limits:

Frequency Range (MHz)	Limit
902-928	≤ 500 kHz
2400-2483.5	not defined
5725-5850	≤ 1 MHz

3.7.1 System Receiver Input Bandwidth

It is determined in the Bluetooth core specification. The value matches to the bandwidth of transmitter signal.



Registration number: W6M22402-23278-C-1

FCC ID: NTMDSTTX

3.8 Minimum 6 dB Bandwidth

The analyzer ResBW was set to 100 kHz. For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A PEAK reading was taken, two markers were set 6 dB below the maximum level on the right and the left side of the emission. The 6 dB bandwidth is the frequency difference between the two markers.

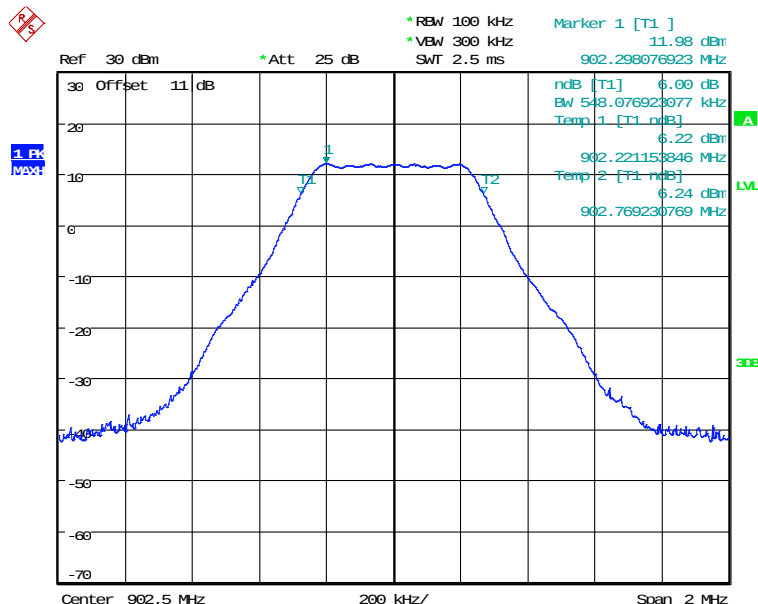
Test date: July 05, 2024

Temperature: 27.2 °C

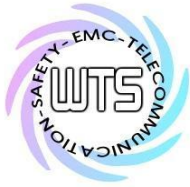
Humidity: 48.5 %

Tester: Rick

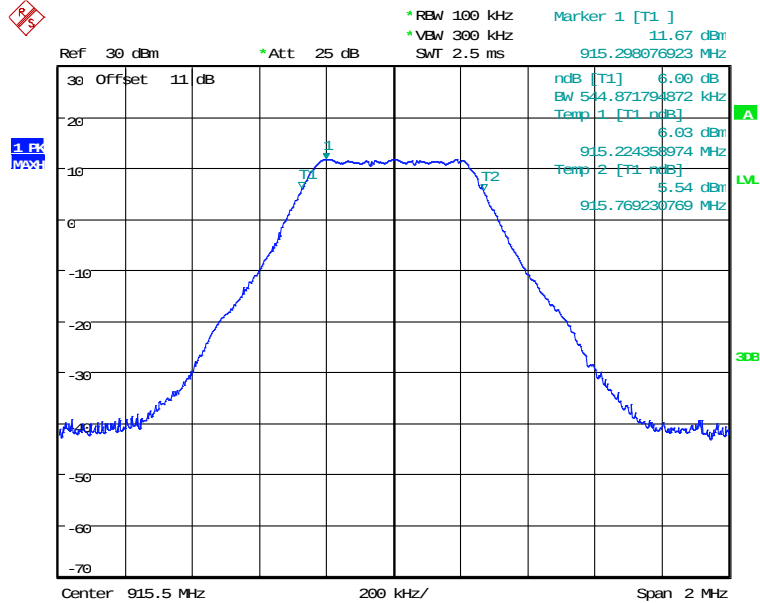
902-928MHz



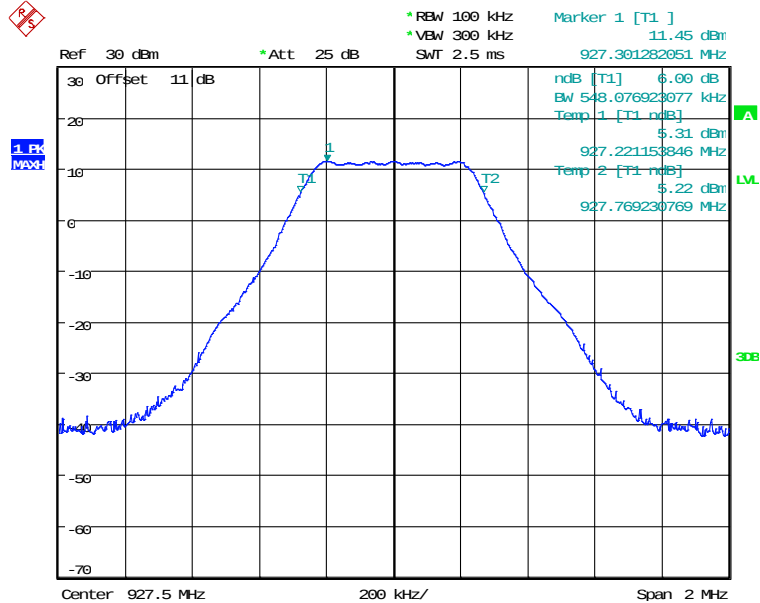
6DB BANDWIDTH 902.5MHZ
Date: 5.JUL.2024 17:08:17



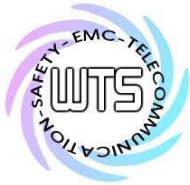
Registration number: W6M22402-23278-C-1
FCC ID: NTMDSTTX



6DB BANDWIDTH 915.5MHz
Date: 5.JUL.2024 17:09:30



6DB BANDWIDTH 927.5MHz
Date: 5.JUL.2024 17:09:00

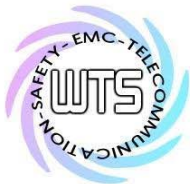


Registration number: W6M22402-23278-C-1

FCC ID: NTMDSTTX

Limits:

Frequency Range (MHz)	Limits
902-928	min 500 kHz
2400-2483.5	min 500 kHz
5725-5850	min 500 kHz



Registration number: W6M22402-23278-C-1

FCC ID: NTMDSTTX

3.9 Radiated Emission on the band edge

According to FCC rules part 15 subpart C §15.247(d) in any 100 kHz bandwidth outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB 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. Attenuation below the general limits specified in § 15.209(a) is not required.

In addition radiated emission which fall in the restricted bands, as defined in section 15.205(a), must also with the radiated emission limits.

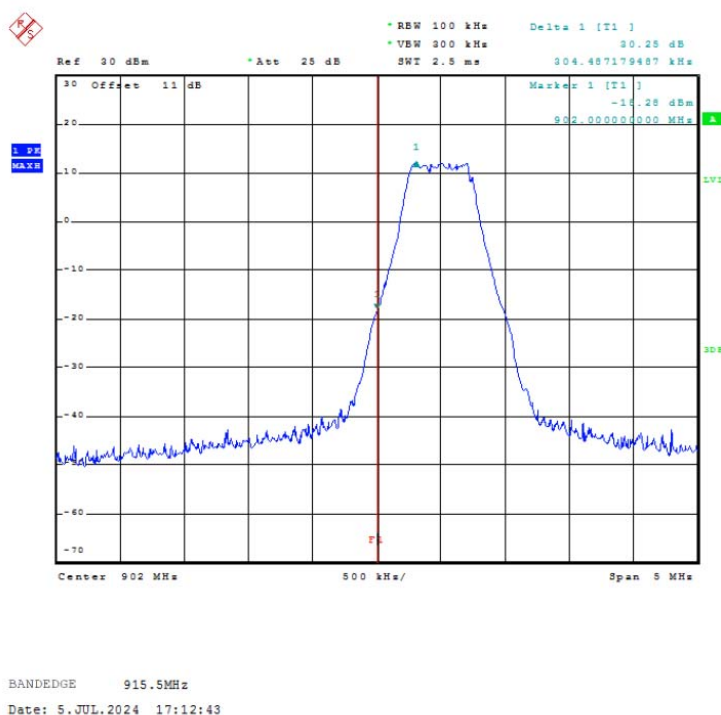
Test date: July 05, 2024

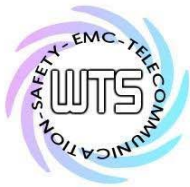
Temperature: 27.2 °C

Humidity: 48.5 %

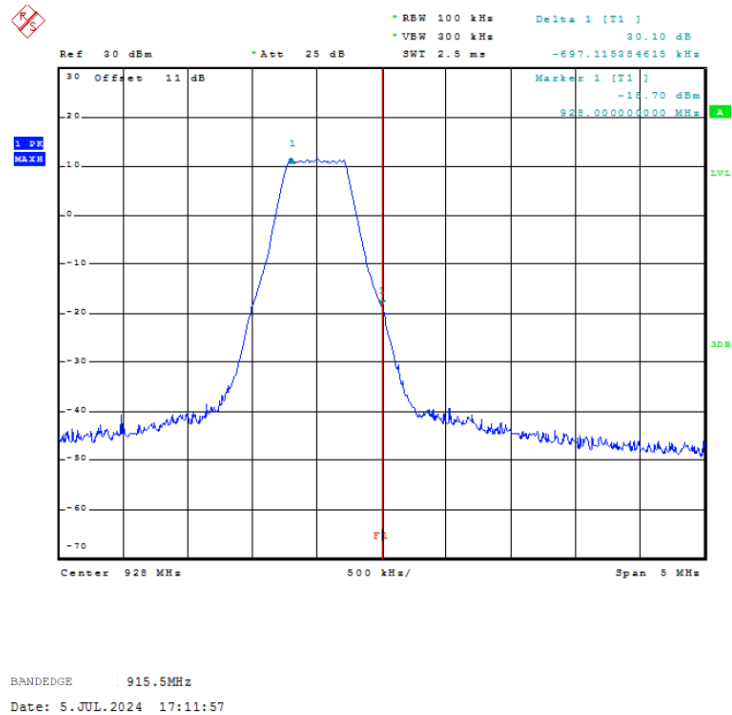
Tester: Rick

902-928MHz

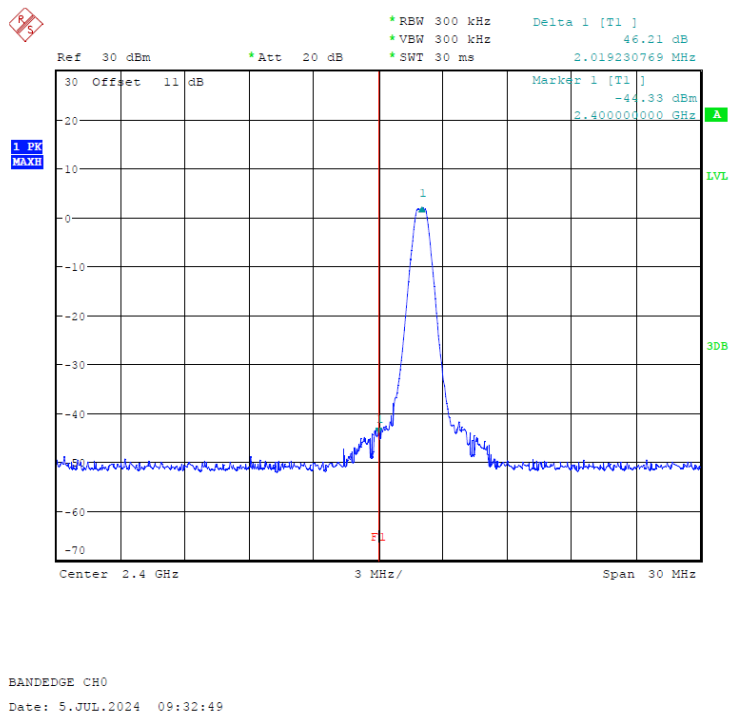


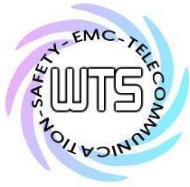


Registration number: W6M22402-23278-C-1
FCC ID: NTMDSTTX

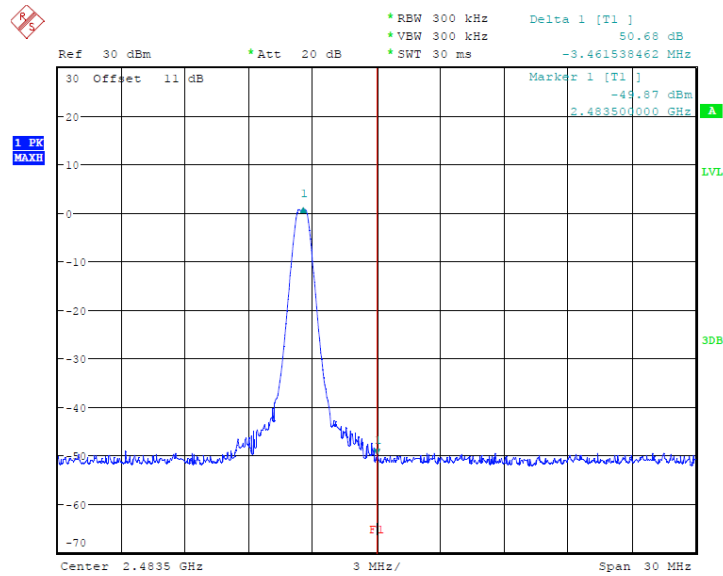


Bluetooth
Normal mode

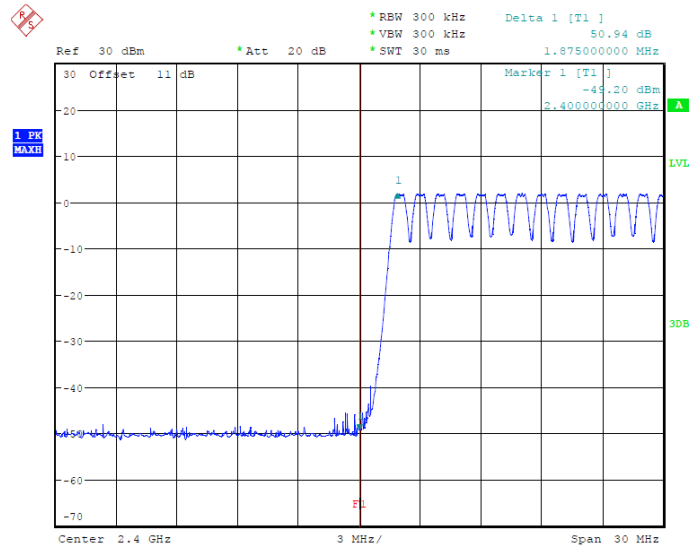




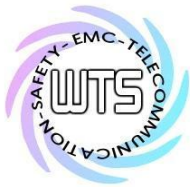
Registration number: W6M22402-23278-C-1
FCC ID: NTMDSTTX



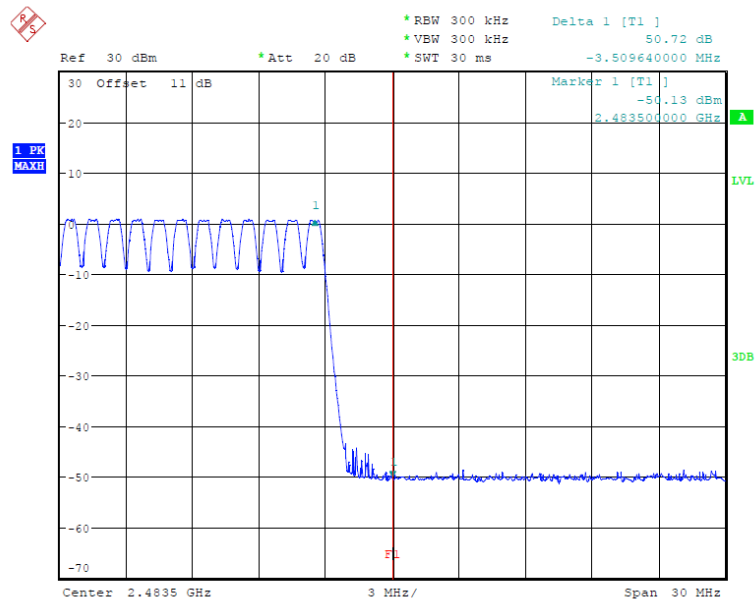
BANDEDGE CH78
Date: 5.JUL.2024 09:34:21



BANDEDGE CH0 HOPPING MODE
Date: 5.JUL.2024 09:36:05

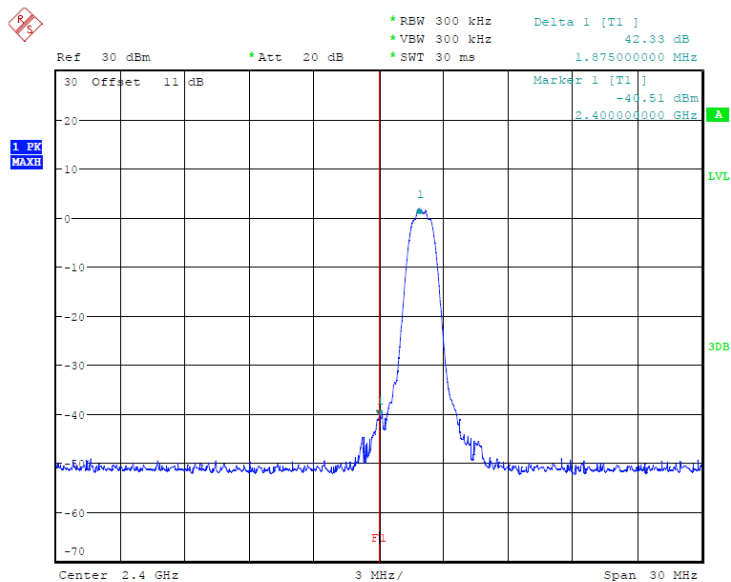


Registration number: W6M22402-23278-C-1
FCC ID: NTMDSTTX

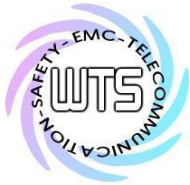


BANDEDGE CH78 HOPPING MODE
Date: 5.JUL.2024 09:36:53

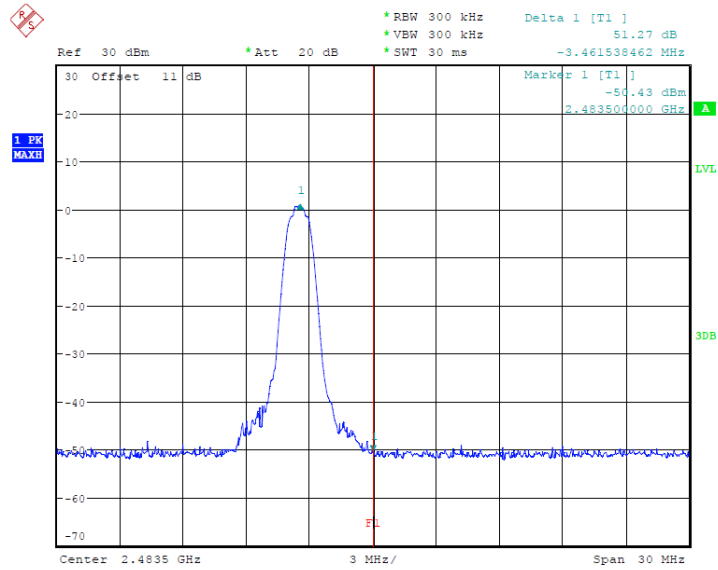
EDR mode



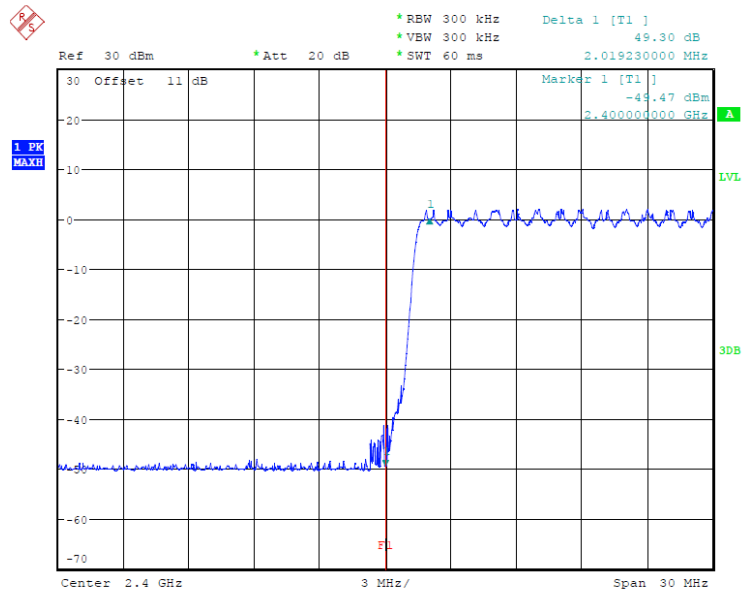
BANDEDGE CH0 EDR MODE
Date: 5.JUL.2024 09:42:01



Registration number: W6M22402-23278-C-1
FCC ID: NTMDSTTX



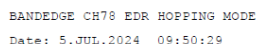
BANDEDGE CH78 EDR MODE
Date: 5.JUL.2024 09:45:33



BANDEDGE CH0 EDR HOPPING MODE
Date: 5.JUL.2024 09:48:37



FCC ID: NTMDSTTX



Frequency Range (MHz)	Limit
902 –928 2400 – 2483.5 5725 - 5850	- 20 dB



Registration number: W6M22402-23278-C-1

FCC ID: NTMDSTTX

3.10 Peak Power Spectral Density

Peak Power Spectral density is a measured at low, middle and high channel.

The peak output power is measured with a measurement bandwidth of 10 MHz and displayed on diagram together with Peak Power Spectral Density result which was measured with a bandwidth of 3 kHz, appreciate frequency span and sweep time.

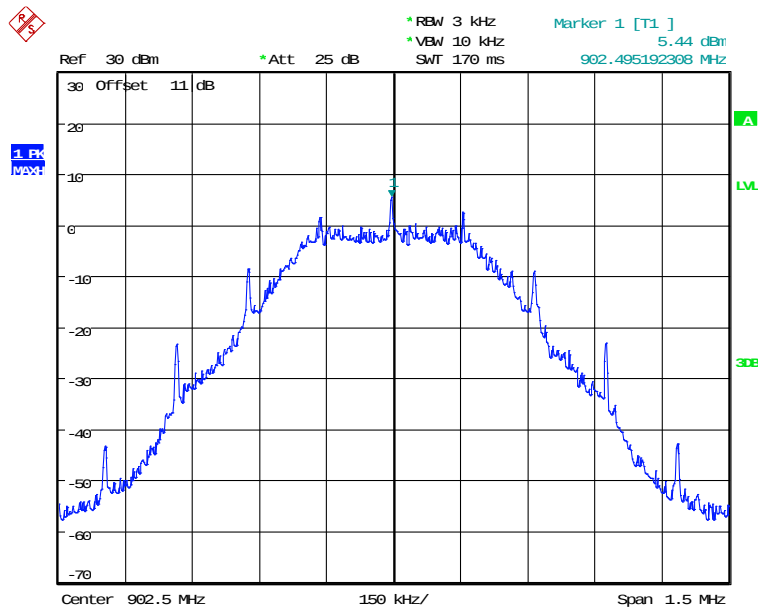
Test date: July 05, 2024

Temperature: 27.2 °C

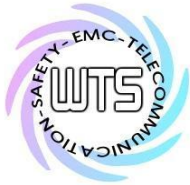
Humidity: 48.5 %

Tester: Rick

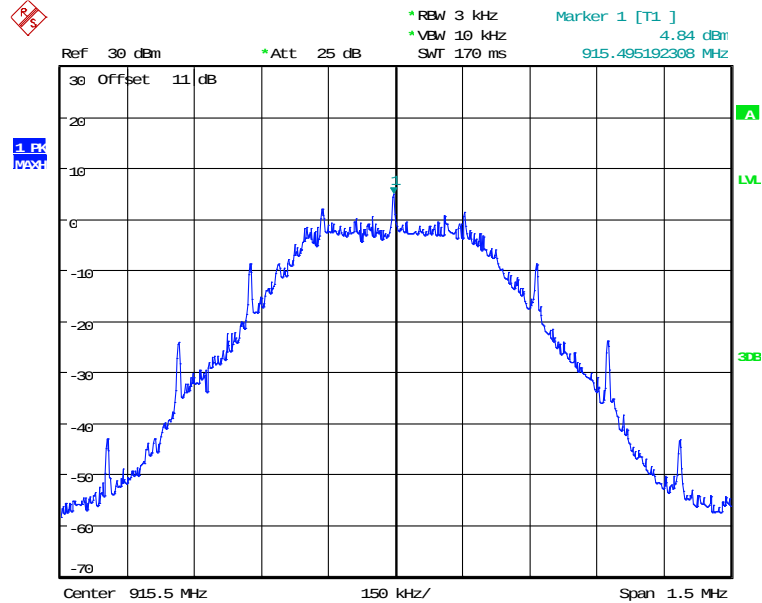
902-928MHz



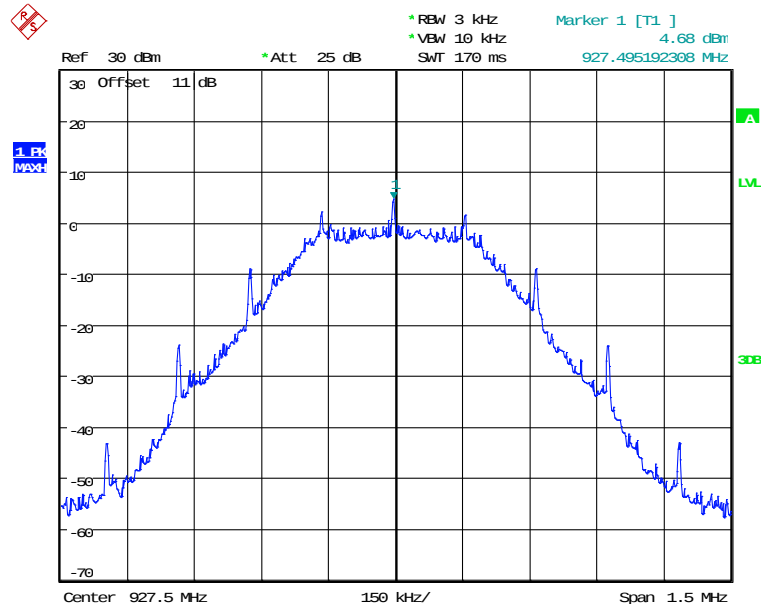
POWER DENSITY 902.5MHz
Date: 5.JUL.2024 17:04:27



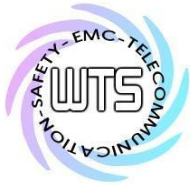
Registration number: W6M22402-23278-C-1
FCC ID: NTMDSTTX



POWER DENSITY 915.5MHz
Date: 5.JUL.2024 17:05:13



POWER DENSITY 927.5MHz
Date: 5.JUL.2024 17:03:43

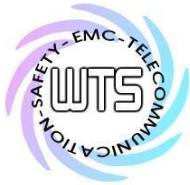


Registration number: W6M22402-23278-C-1

FCC ID: NTMDSTTX

Limits:

Frequency Range (MHz)	Limit (dBm)
902-928	8
2400-2483.5	8
5725-5850	8



Registration number: W6M22402-23278-C-1

FCC ID: NTMDSTTX

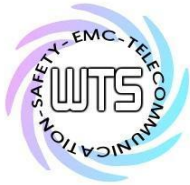
3.11 Radiated Emission from Receiver Part

FCC Rule: 15.109

Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency of Emission (MHz)	Field Strength (microvolts/meter)	Field Strength (dBmicrovolts/meter)
30 – 88	100	40.0
88 – 216	150	43.5
216 – 960	200	46.0
Above 960	500	54.0

Explanation: Please refer to separated test report no.: W6M22402-23278-P-15B.



Registration number: W6M22402-23278-C-1

FCC ID: NTMDSTTX

3.12 Power Line Conducted Emission

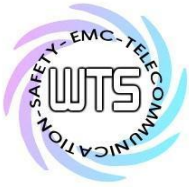
For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the table bellows with this provision shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminals.

This measurement was transact first with instrumentation using an average and peak detector and a 10 kHz bandwidth. If the peak detector achieves a calculated level, the measurement is repeated by an instrumentation using a quasi-peak detector.

- Note:**
- 1. The formula of measured value as: Test Result = Reading + Correction Factor**
 - 2. The Correction Factor = Cable Loss + LISN Insertion Loss + Pulse Limit Loss**
 - 3. Detector function in the form : PK = Peak, QP = Quasi Peak, AV = Average**
 - 4. All not in the table noted test results are more than 20 dB below the relevant limits.**
 - 5. Up Line: QP Limit Line, Down Line: Ave Limit Line.**
 - 6. This test is not required because the EUT is powered by battery.**

Limits:

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi Peak	Average
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50



Registration number: W6M22402-23278-C-1
FCC ID: NTMDSTTX

Appendix

Measurement diagrams

Spurious Emissions radiated



Radiated Emission Measurement

Operator: Jeff

File :1

Data :#1

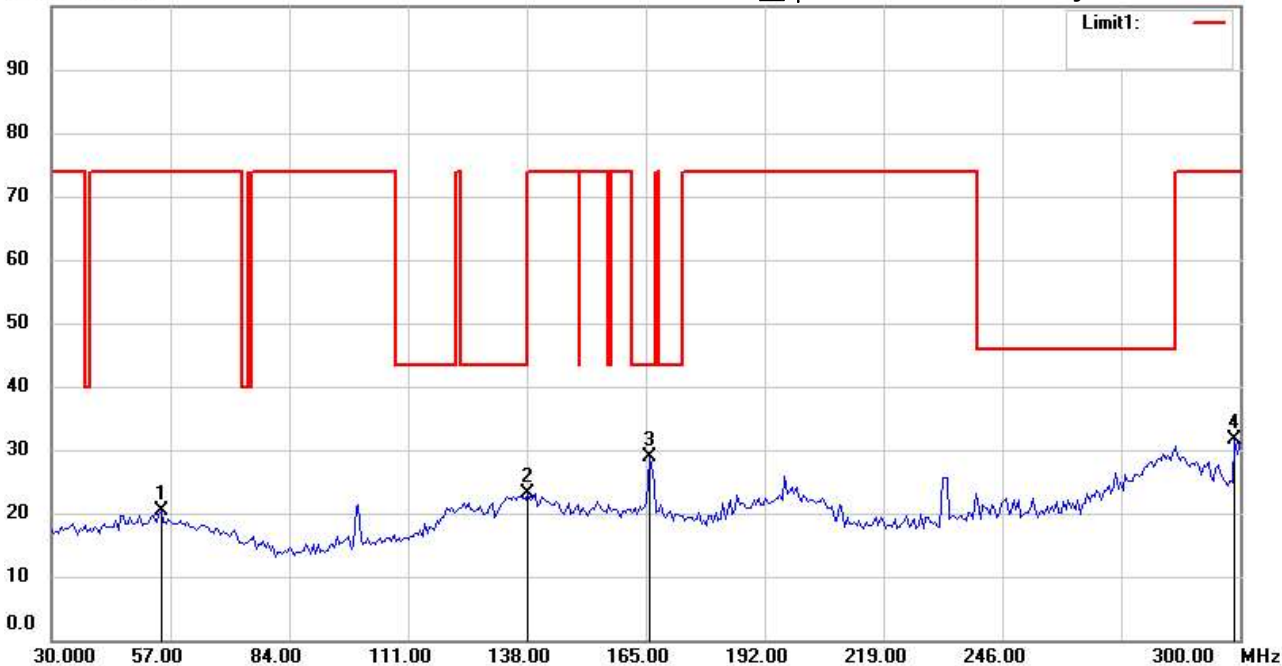
Date: 2024/4/24

Temperature:26.1 °C

100.0 dBuV/m

Time: 上午 11:57:07

Humidity:69.3 %



Site : 966A Chamber

Condition : FCC Restriction Band 30-300

EUT : W6M22402-23278

M/N:

Test Mode : TX 902.5MHz

Note :

Polarization: Horizontal

Power : 120 Va.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	54.8898	28.50	peak	-8.04	20.46	74.00	100	207	-53.54	
	138.2164	31.40	peak	-8.32	23.08	74.00	100	136	-50.92	
*	165.8116	36.25	peak	-7.47	28.78	43.50	100	83	-14.72	
	298.9178	37.71	peak	-6.11	31.60	74.00	100	254	-42.40	



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Radiated Emission Measurement

Operator: Jeff

File :1

Data :#3

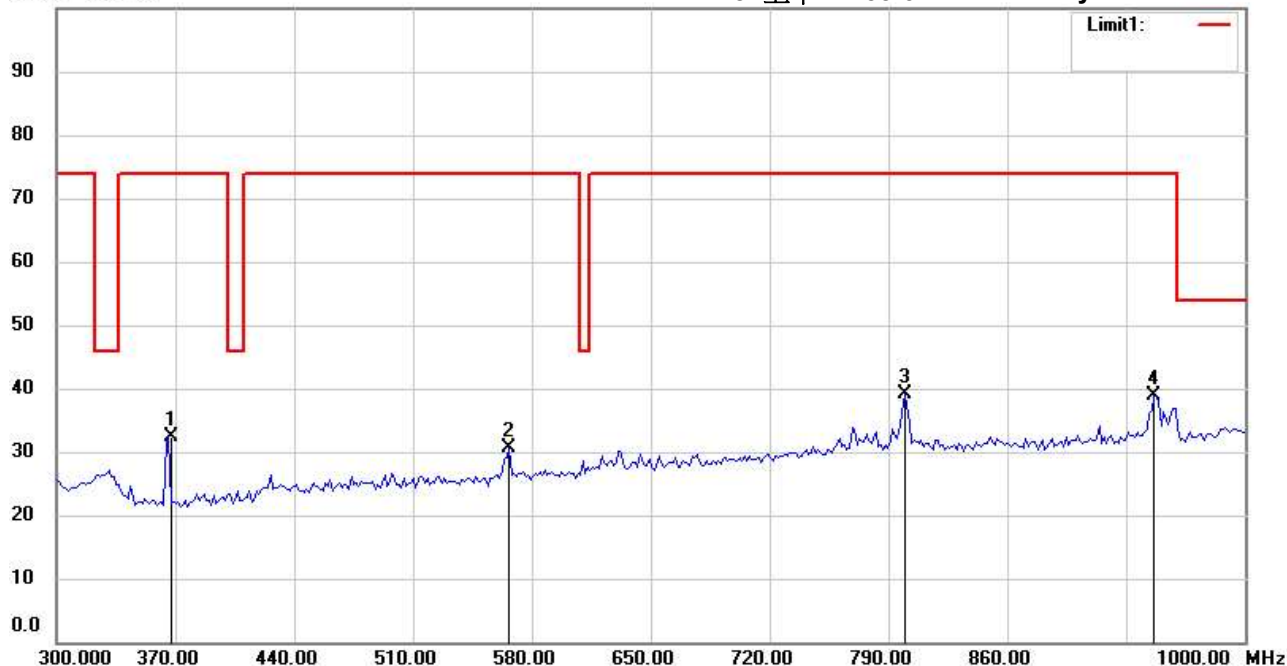
Date: 2024/4/24

Temperature: 26.1 °C

100.0 dBuV/m

Time: 上午 11:58:34

Humidity: 69.3 %



Site : 966A Chamber

Condition : FCC Restriction Band 300-1000

EUT : W6M22402-23278

M/N:

Test Mode : TX 902.5MHz

Note :

Polarization: **Horizontal**

Power : 120 Va.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	365.9320	37.43	peak	-4.97	32.46	74.00	100	154	-41.54	
	566.5331	31.74	peak	-1.07	30.67	74.00	100	29	-43.33	
*	799.3988	35.36	peak	3.76	39.12	74.00	100	313	-34.88	
	946.6933	32.63	peak	6.15	38.78	74.00	100	134	-35.22	

*:Maximum data x:Over limit !:over margin



Radiated Emission Measurement

Operator: Jeff

File :1

Data :#2

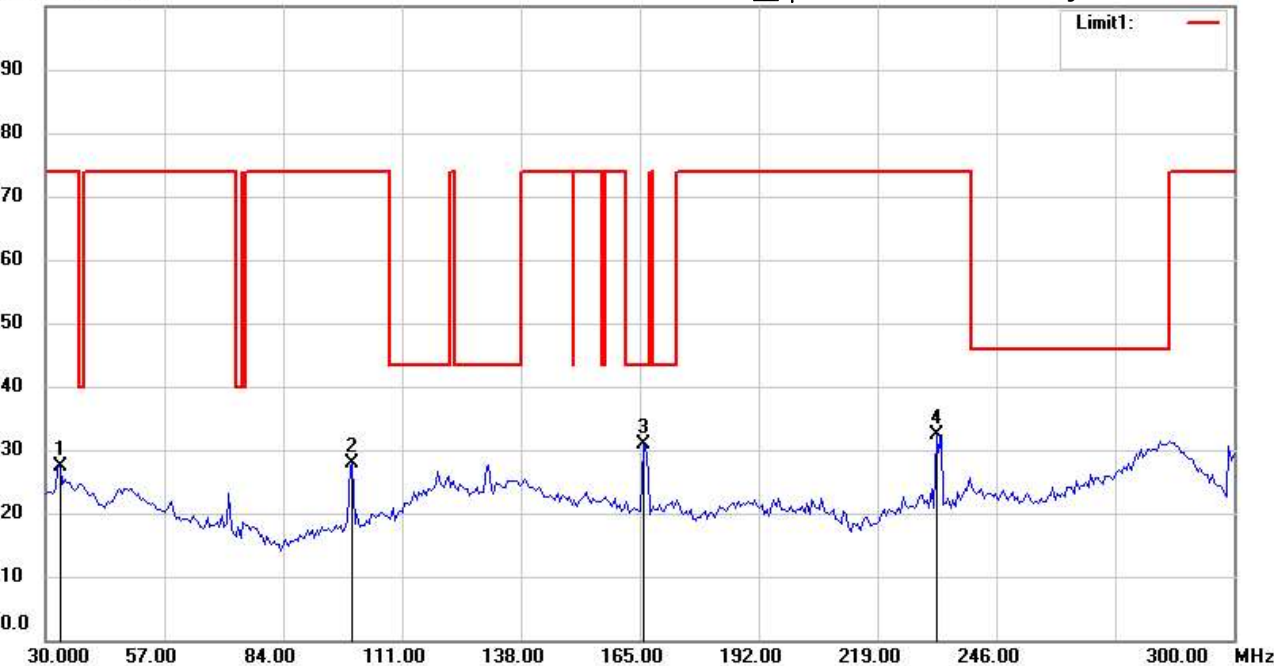
Date: 2024/4/24

Temperature:26.1 °C

100.0 dBuV/m

Time: 上午 11:57:50

Humidity:69.3 %



Site : 966A Chamber

Condition : FCC Restriction Band 30-300

EUT : W6M22402-23278

M/N:

Test Mode : TX 902.5MHz

Note :

Polarization: Vertical

Power : 120 Va.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	33.2465	37.25	peak	-9.83	27.42	74.00	100	182	-46.58	
	99.7996	40.42	peak	-12.63	27.79	74.00	100	37	-46.21	
*	165.8116	38.47	peak	-7.47	31.00	43.50	100	203	-12.50	
	232.3647	41.58	peak	-9.12	32.46	74.00	100	311	-41.54	



Radiated Emission Measurement

Operator: Jeff

File :1

Data :#4

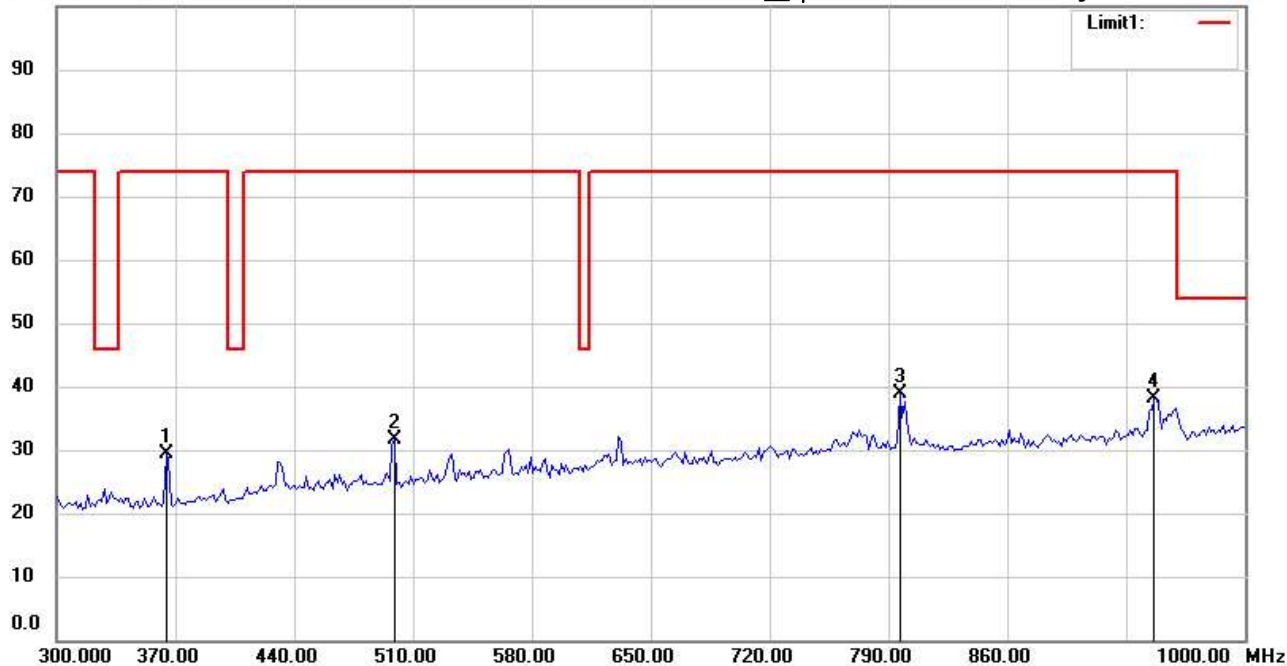
Date: 2024/4/24

Temperature:26.1 °C

100.0 dBuV/m

Time: 上午 11:59:18

Humidity:69.3 %



Site : 966A Chamber

Condition : FCC Restriction Band 300-1000

EUT : W6M22402-23278

M/N:

Test Mode : TX 902.5MHz

Note :

Polarization: Vertical

Power : 120 Va.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	364.5290	34.32	peak	-5.02	29.30	74.00	100	162	-44.70	
	499.1984	34.17	peak	-2.43	31.74	74.00	100	39	-42.26	
*	796.5932	35.09	peak	3.74	38.83	74.00	100	134	-35.17	
	946.6933	32.05	peak	6.15	38.20	74.00	100	207	-35.80	



Radiated Emission Measurement

Operator: Jeff

File :3

Data :#1

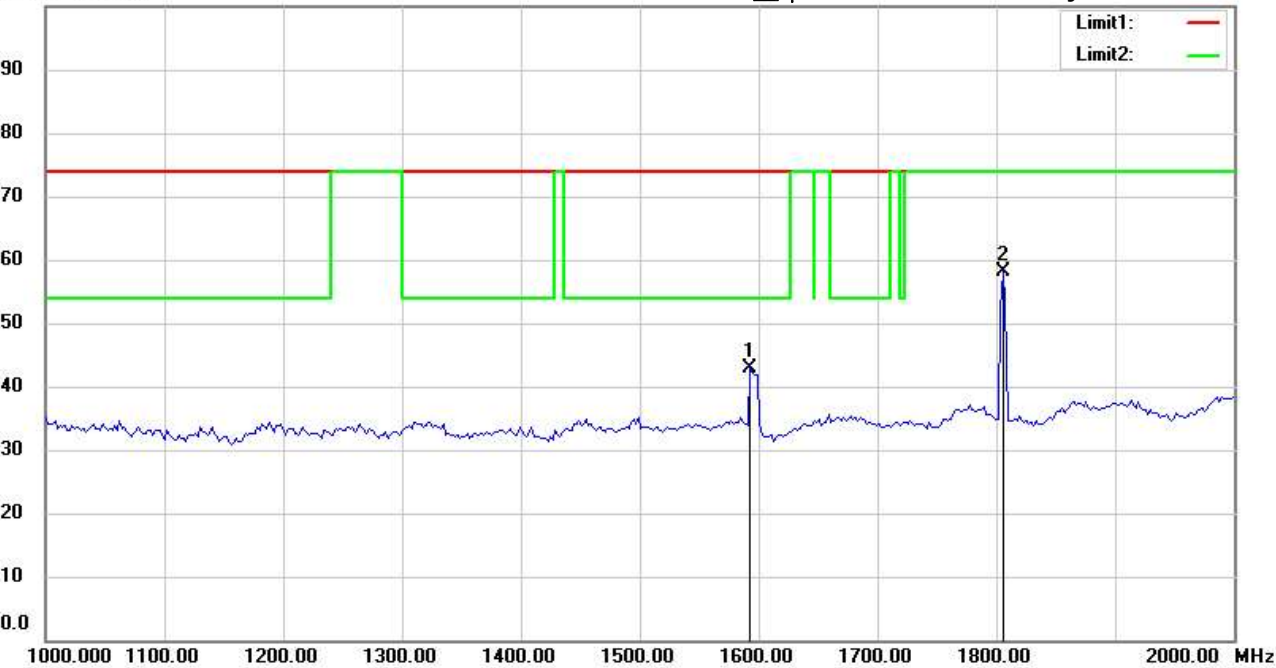
Date: 2024/4/24

Temperature:26.1 °C

100.0 dBuV/m

Time: 上午 11:18:17

Humidity:69.3 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22402-23278

M/N:

Test Mode : TX 902.5MHz

Note :

Polarization: **Horizontal**

Power : 120 Va.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	1593.186	52.03	peak	-9.14	42.89	74.00	150	138	-31.11	
*	1805.611	65.74	peak	-7.62	58.12	74.00	150	43	-15.88	



Radiated Emission Measurement

Operator: Jeff

File :3

Data :#5

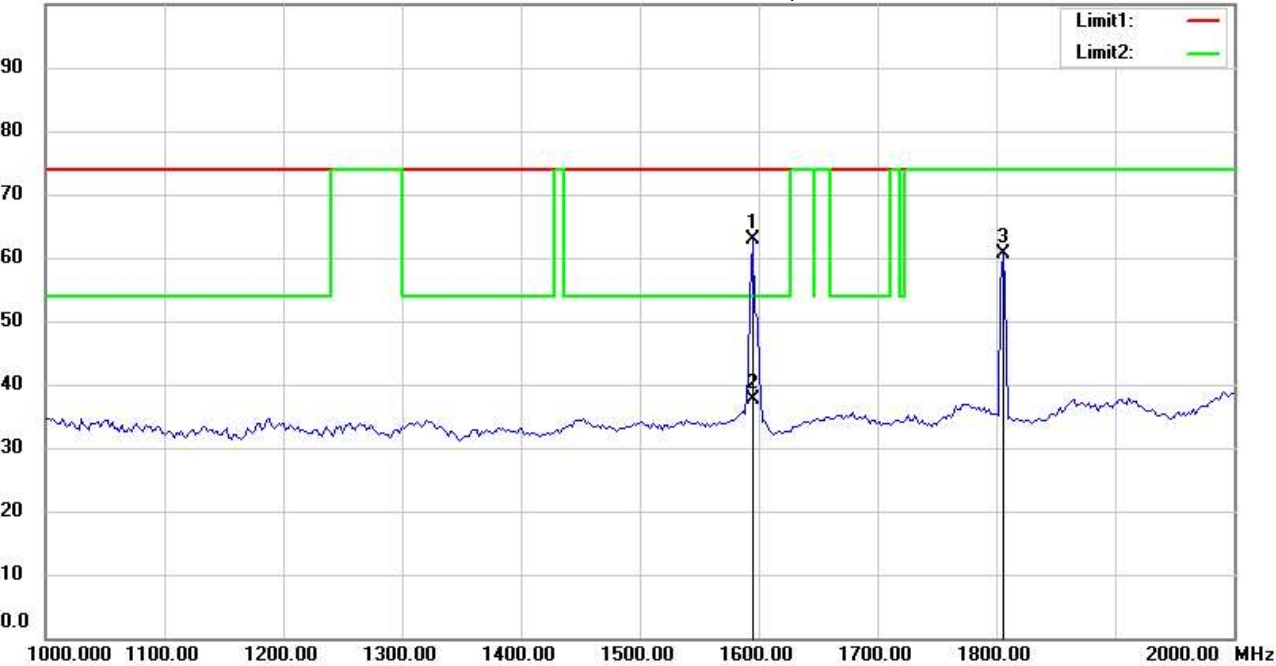
Date: 2024/4/24

Temperature:26.1 °C

100.0 dBuV/m

Time: 上午 11:22:20

Humidity:69.3 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22402-23278

M/N:

Test Mode : TX 902.5MHz

Note :

Polarization: **Vertical**

Power : 120 Va.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	1595.190	72.08	peak	-9.15	62.93	74.00	150	166	-11.07	
	1595.190	46.80	AVG	-9.15	37.65	54.00	150	166	-16.35	
	1805.611	68.31	peak	-7.62	60.69	74.00	150	207	-13.31	



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Radiated Emission Measurement

Operator: Jeff

File :3

Data :#2

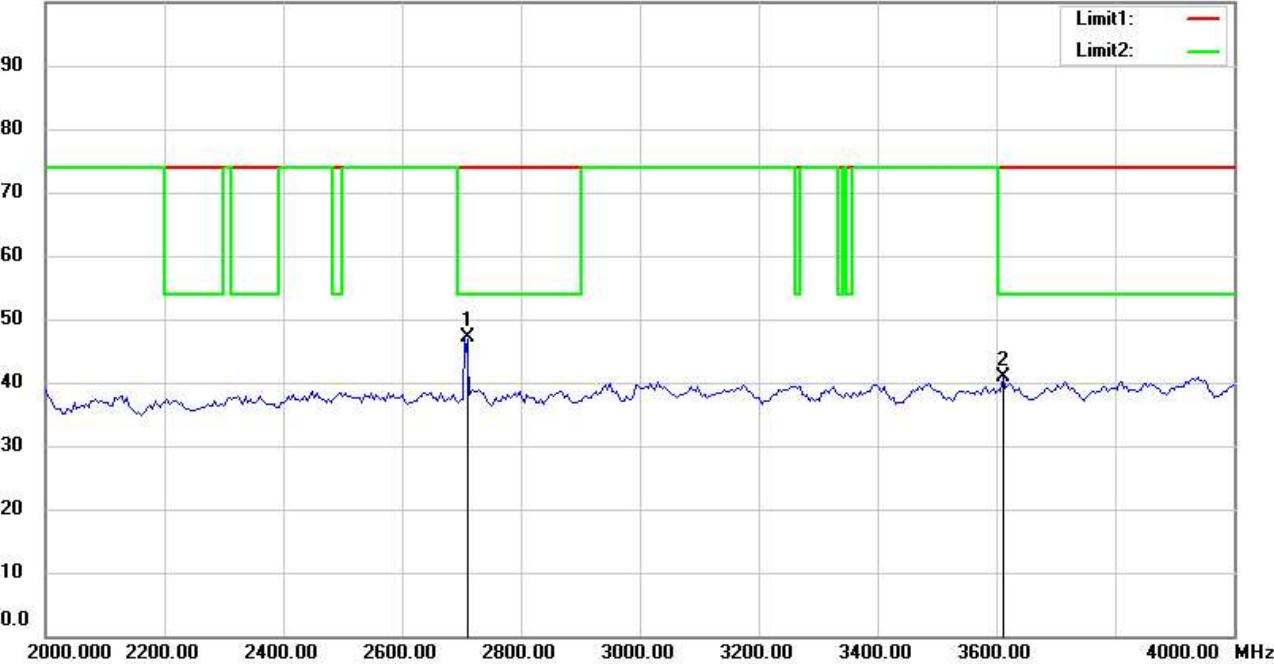
Date: 2024/4/24

Temperature:26.1 °C

100.0 dBuV/m

Time: 上午 11:19:00

Humidity:69.3 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22402-23278

M/N:

Test Mode : TX 902.5MHz

Note :

Polarization: Horizontal

Power : 120 Va.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2705.411	51.59	peak	-4.47	47.12	74.00	150	207	-26.88	
	3610.000	43.22	peak	-2.40	40.82	74.00	150	134	-33.18	

*:Maximum data x:Over limit !:over margin



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Radiated Emission Measurement

Operator: Jeff

File :3

Data :#6

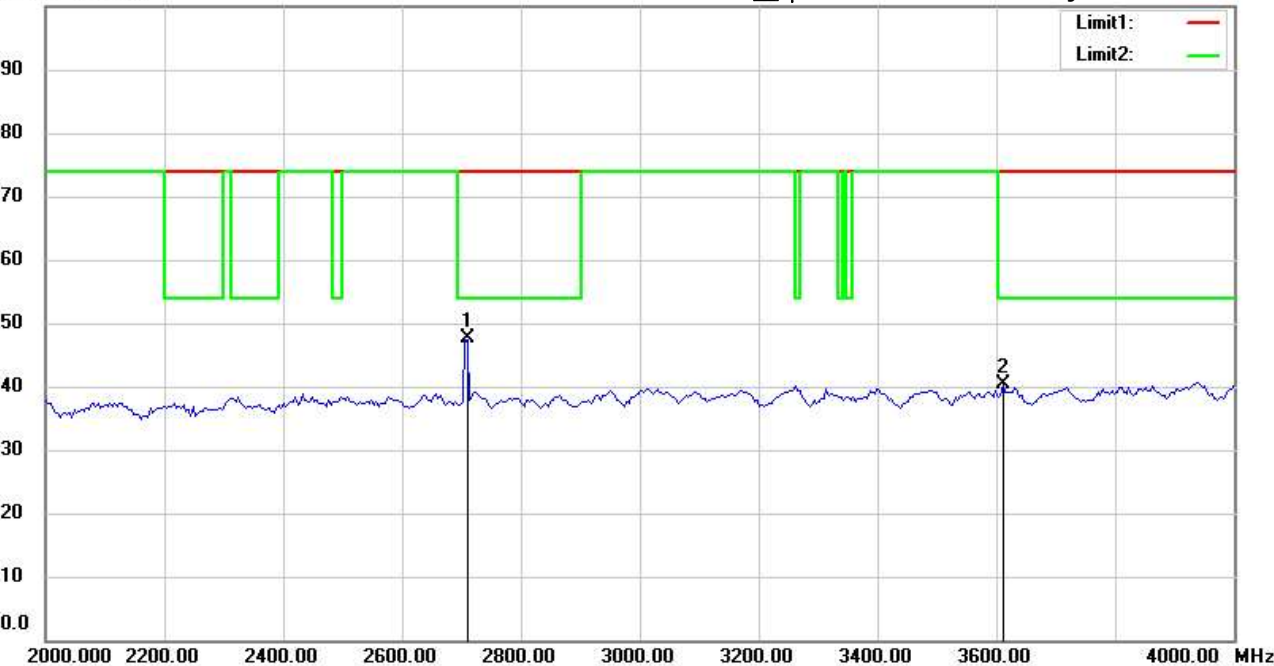
Date: 2024/4/24

Temperature:26.1 °C

100.0 dBuV/m

Time: 上午 11:23:05

Humidity:69.3 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22402-23278

M/N:

Test Mode : TX 902.5MHz

Note :

Polarization: Vertical

Power : 120 Va.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2705.411	52.06	peak	-4.47	47.59	74.00	150	273	-26.41	
	3610.000	42.74	peak	-2.40	40.34	74.00	150	84	-33.66	

*:Maximum data x:Over limit !:over margin



Radiated Emission Measurement

Operator: Jeff

File :3

Data :#3

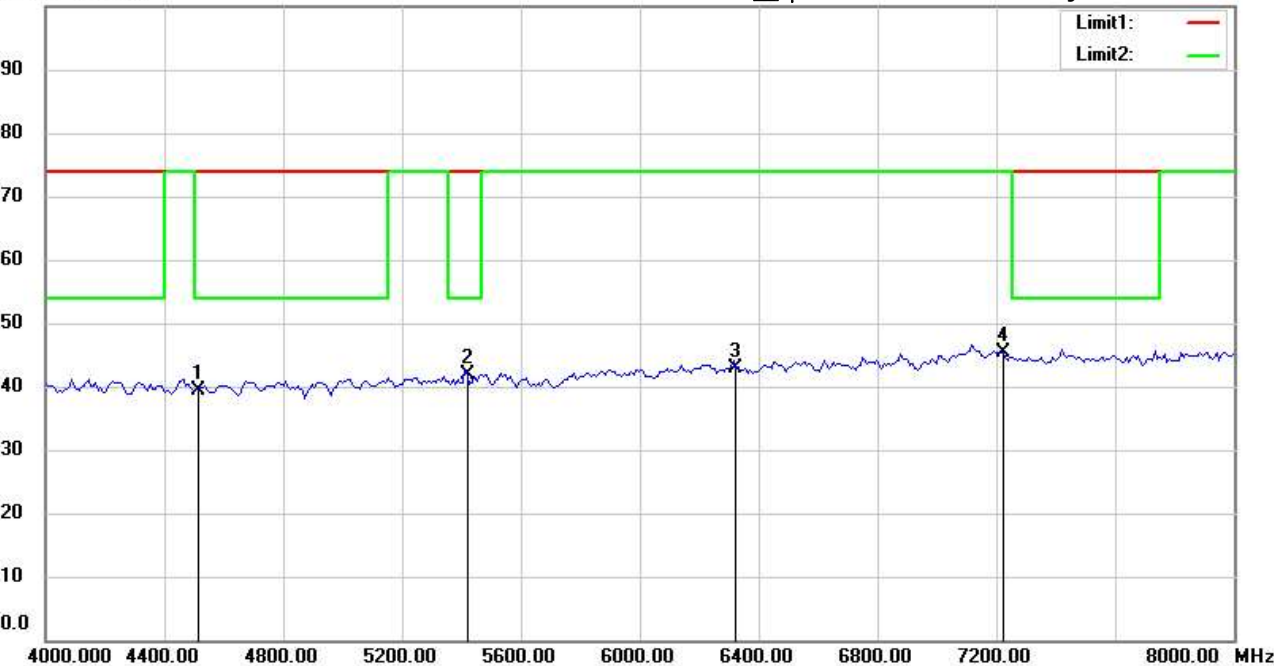
Date: 2024/4/24

Temperature:26.1 °C

100.0 dBuV/m

Time: 上午 11:19:44

Humidity:69.3 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22402-23278

M/N:

Test Mode : TX 902.5MHz

Note :

Polarization: **Horizontal**

Power : 120 Va.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	4512.500	41.20	peak	-1.82	39.38	74.00	150	220	-34.62	
	5415.000	41.47	peak	0.48	41.95	74.00	150	138	-32.05	
	6317.500	39.94	peak	2.92	42.86	74.00	150	63	-31.14	
*	7220.000	40.93	peak	4.39	45.32	74.00	150	219	-28.68	



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Radiated Emission Measurement

Operator: Jeff

File :3

Data :#7

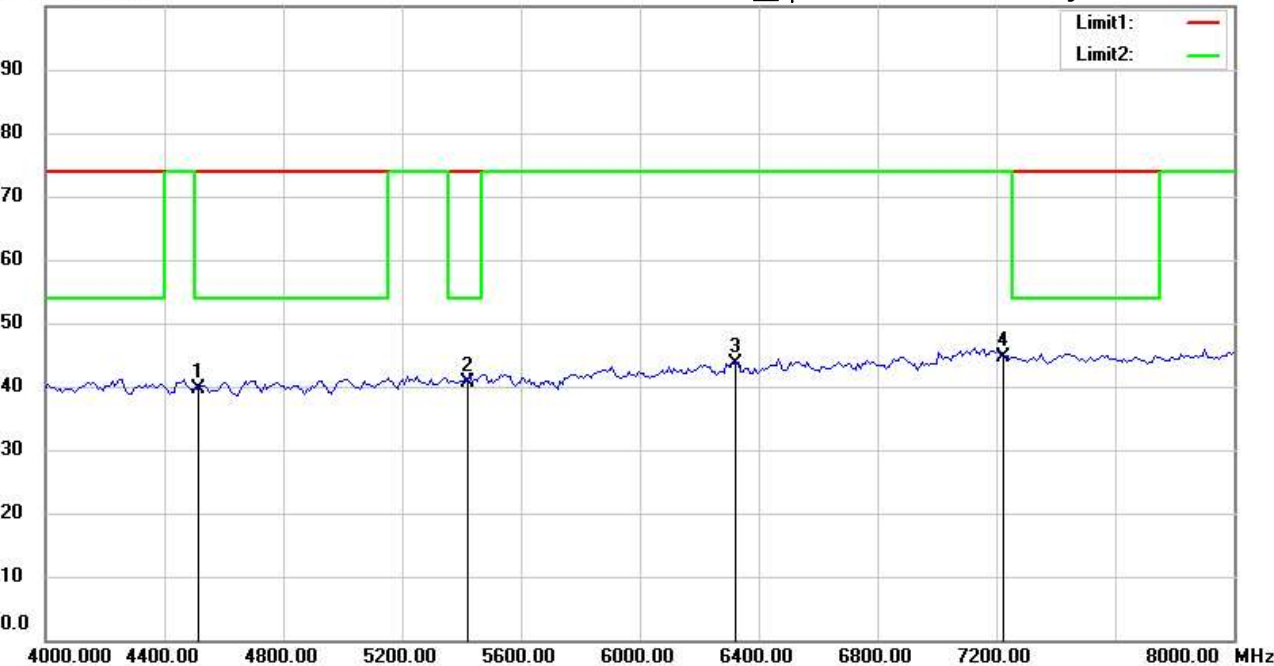
Date: 2024/4/24

Temperature:26.1 °C

100.0 dBuV/m

Time: 上午 11:23:49

Humidity:69.3 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22402-23278

M/N:

Test Mode : TX 902.5MHz

Note :

Polarization: Vertical

Power : 120 Va.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	4512.500	41.49	peak	-1.82	39.67	74.00	150	136	-34.33	
	5415.000	40.05	peak	0.48	40.53	74.00	150	83	-33.47	
	6317.500	40.81	peak	2.92	43.73	74.00	150	207	-30.27	
*	7220.000	40.23	peak	4.39	44.62	74.00	150	118	-29.38	

*:Maximum data x:Over limit !:over margin



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Fax:+886-2-2646-1533

Radiated Emission Measurement

Operator: Jeff

File :3

Data :#4

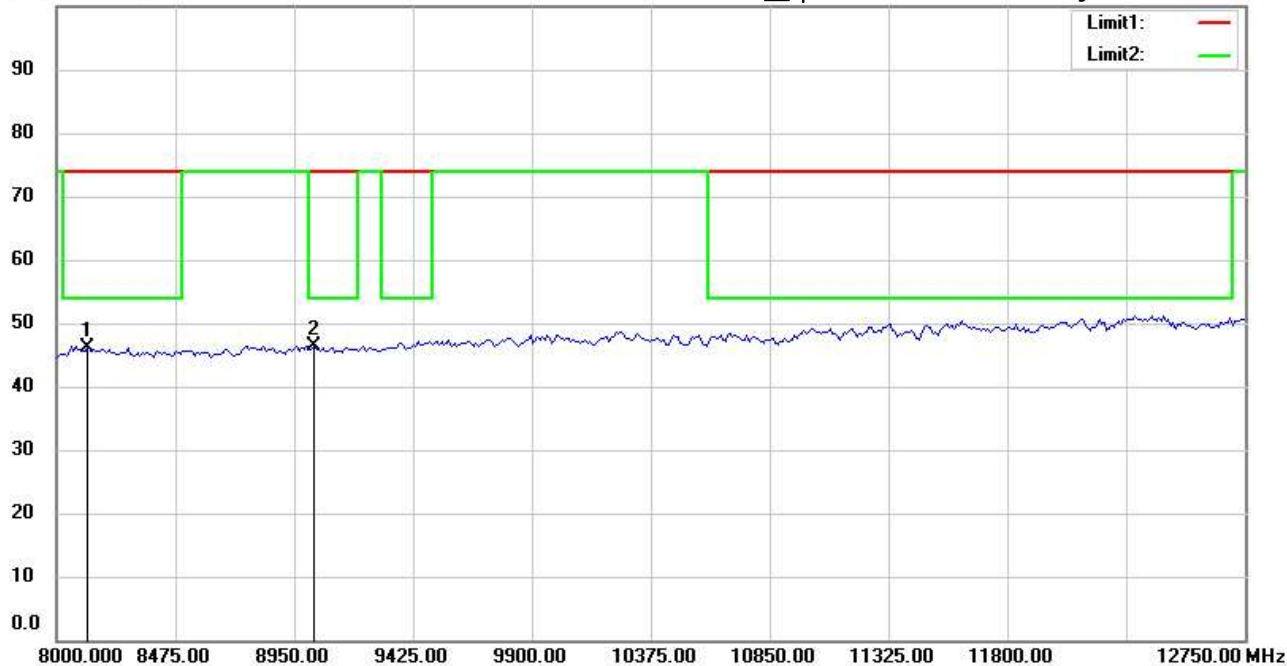
Date: 2024/4/24

Temperature:26.1 °C

100.0 dBuV/m

Time: 上午 11:21:33

Humidity:69.3 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22402-23278

M/N:

Test Mode : TX 902.5MHz

Note :

Polarization: **Horizontal**

Power : 120 Va.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	8122.500	40.75	peak	5.32	46.07	74.00	150	136	-27.93	
*	9025.000	40.25	peak	6.08	46.33	74.00	150	83	-27.67	

*:Maximum data x:Over limit !:over margin



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Fax: +886-2-2646-1533

Radiated Emission Measurement

Operator: Jeff

File : 3

Data : #8

Date: 2024/4/24

Temperature: 26.1 °C

100.0 dBuV/m

Time: 上午 11:24:35

Humidity: 69.3 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22402-23278

M/N:

Test Mode : TX 902.5MHz

Note :

Polarization: Vertical

Power : 120 Va.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	8122.500	40.32	peak	5.32	45.64	74.00	150	163	-28.36	
*	9025.000	40.19	peak	6.08	46.27	74.00	150	84	-27.73	

*:Maximum data x:Over limit !:over margin



Radiated Emission Measurement

Operator: Jeff

File :3

Data :#1

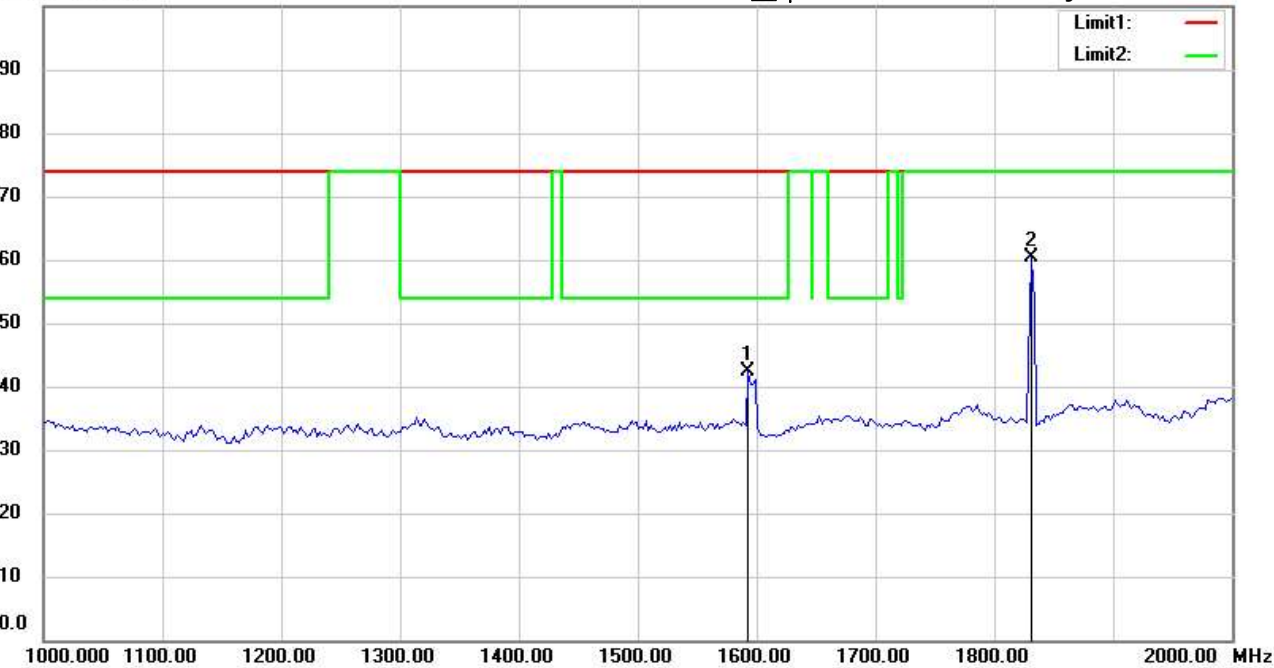
Date: 2024/4/24

Temperature:26.1 °C

100.0 dBuV/m

Time: 上午 11:31:23

Humidity:69.3 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22402-23278

M/N:

Test Mode : TX 915.5MHz

Note :

Polarization: **Horizontal**

Power : 120 V.a.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	1593.186	51.45	peak	-9.14	42.31	74.00	150	207	-31.69	
*	1831.663	67.59	peak	-7.20	60.39	74.00	150	136	-13.61	



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Radiated Emission Measurement

Operator: Jeff

File : 3

Data : #5

Date: 2024/4/24

Temperature: 26.1 °C

100.0 dBuV/m

Time: 上午 11:34:49

Humidity: 69.3 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22402-23278

M/N:

Test Mode : TX 915.5MHz

Note :

Polarization: Vertical

Power : 120 V.a.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	1595.190	59.60	peak	-9.15	50.45	74.00	150	136	-23.55	
*	1831.663	73.34	peak	-7.20	66.14	74.00	150	73	-7.86	

*:Maximum data x:Over limit !:over margin



Radiated Emission Measurement

Operator: Jeff

File :3

Data :#2

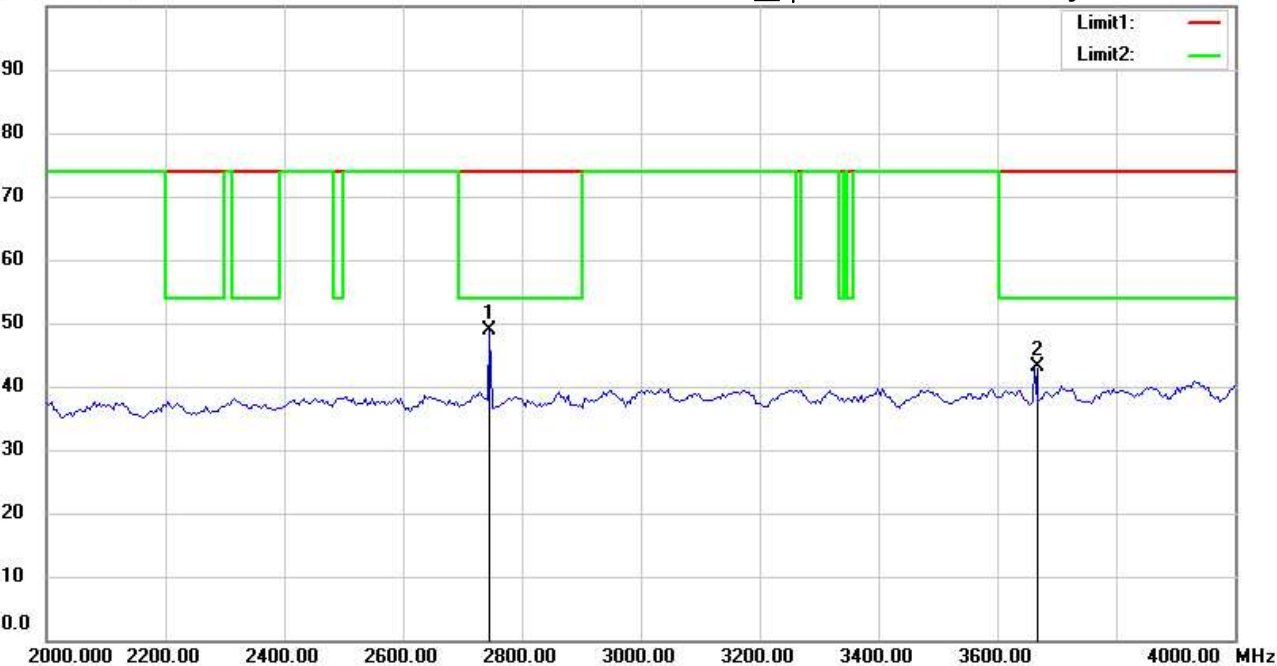
Date: 2024/4/24

Temperature:26.1 °C

100.0 dBuV/m

Time: 上午 11:32:06

Humidity:69.3 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22402-23278

M/N:

Test Mode : TX 915.5MHz

Note :

Polarization: Horizontal

Power : 120 Va.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2745.491	53.29	peak	-4.52	48.77	74.00	150	183	-25.23	
	3663.327	45.65	peak	-2.43	43.22	74.00	150	29	-30.78	



Radiated Emission Measurement

Operator: Jeff

File :3

Data :#6

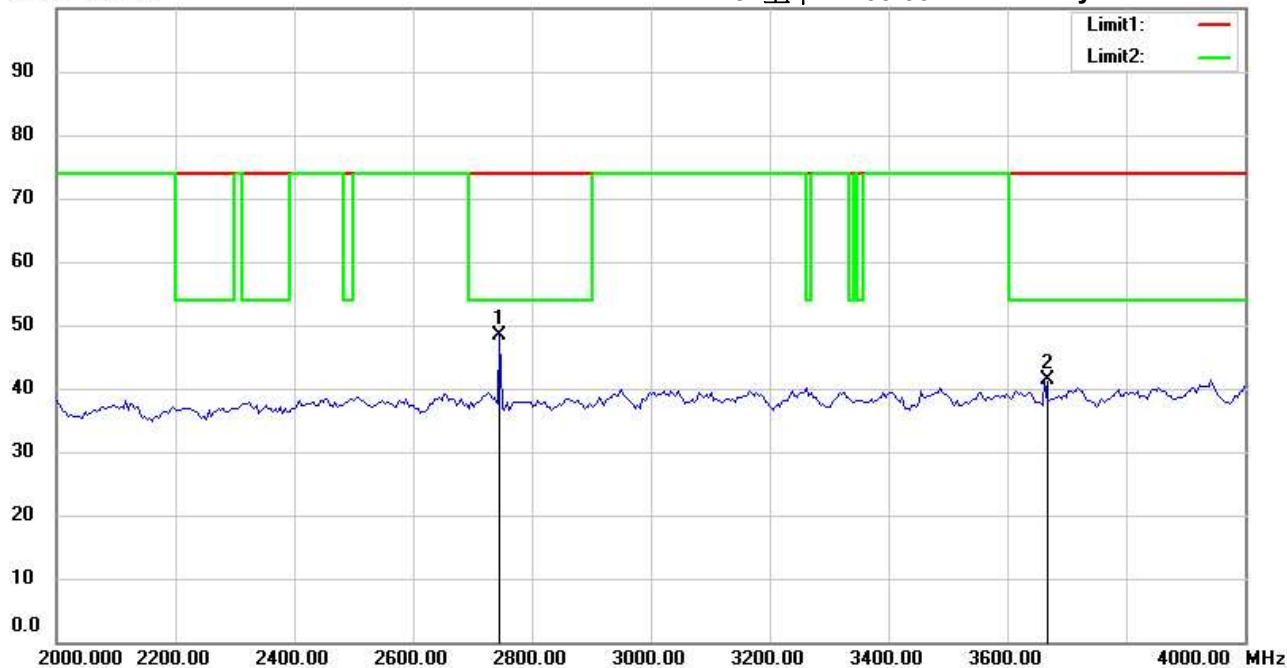
Date: 2024/4/24

Temperature:26.1 °C

100.0 dBuV/m

Time: 上午 11:35:33

Humidity:69.3 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22402-23278

M/N:

Test Mode : TX 915.5MHz

Note :

Polarization: Vertical

Power : 120 Va.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2745.491	52.96	peak	-4.52	48.44	74.00	150	163	-25.56	
	3663.327	43.70	peak	-2.43	41.27	74.00	150	83	-32.73	