



RF MEASUREMENT REPORT

FCC ID: 2AX5HJRN-260K
Applicant: JRC Mobility, Inc.
Product: IT Controller
Model No.: JRN-260K
Brand Name: JRC Mobility
FCC Classification: Licensed Non-Broadcast Station Transmitter (TNB)
FCC Rule Part(s): FCC CFR 47 Part 2, FCC CFR 47 Part 25
Result: Complies
Received Date: 2023-04-14
Test Date: 2023-04-20 ~ 2023-05-16

Reviewed By:

Jame Yuan

Approved By:

Robin Wu



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.26-2015. Test results reported herein relate only to the item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date	Note
2304RSU029-U1	V01	Initial Report	2023-06-26	Invalid
2304RSU029-U1	V02	Revised Information	2023-09-11	Valid

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1. General Information

1.1. Applicant

JRC Mobility, Inc.

NAKANO CENTRAL PARK EAST 10-1, Nakano 4-chome, Nakano-ku, Tokyo 164-8570, Japan

1.2. Manufacturer

JRC Mobility, Inc.

NAKANO CENTRAL PARK EAST 10-1, Nakano 4-chome, Nakano-ku, Tokyo 164-8570, Japan

1.3. Testing Facility

<input checked="" type="checkbox"/>	Test Site – MRT Suzhou Laboratory
	Laboratory Location (Suzhou - Wuzhong) D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China Laboratory Location (Suzhou - SIP) 4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China
	Laboratory Accreditations
	A2LA: 3628.01 CNAS: L10551 FCC: CN1166 ISED: CN0001 VCCI: <input type="checkbox"/> R-20025 <input type="checkbox"/> G-20034 <input type="checkbox"/> C-20020 <input type="checkbox"/> T-20020 <input type="checkbox"/> R-20141 <input type="checkbox"/> G-20134 <input type="checkbox"/> C-20103 <input type="checkbox"/> T-20104
<input type="checkbox"/>	Test Site – MRT Shenzhen Laboratory
	Laboratory Location (Shenzhen) 1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China
	Laboratory Accreditations
	A2LA: 3628.02 CNAS: L10551 FCC: CN1284 ISED: CN0105
<input type="checkbox"/>	Test Site – MRT Taiwan Laboratory
	Laboratory Location (Taiwan) No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)
	Laboratory Accreditations
	TAF: L3261-190725 FCC: 291082, TW3261 ISED: TW3261

1.4. Product Information

Product Name	IT Controller
Model No.	JRN-260K
EUT Identification No.	20230413Sample#02
Satellite Specification	1616 ~ 1626.5 MHz
Power Supply:	DC 24V
Battery Specification:	14.4V/1900mAh
Note: The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.	

1.5. Product Specification under Test

Frequency Range	1616 ~ 1626.5 MHz
Test Frequency	Low channel 1: 1616.021MHz Mid channel 121: 1620.979MHz High channel 240: 1625.979MHz
Type of Modulation	QPSK
Channel Number:	240
Antenna Type	Ceramic Patch Antenna
Antenna Gain	4.17dBi
Stated EIRP	33dBm
Authorized Bandwidth	208.33 kHz

Note: For other features of this EUT, test report will be issued separately.

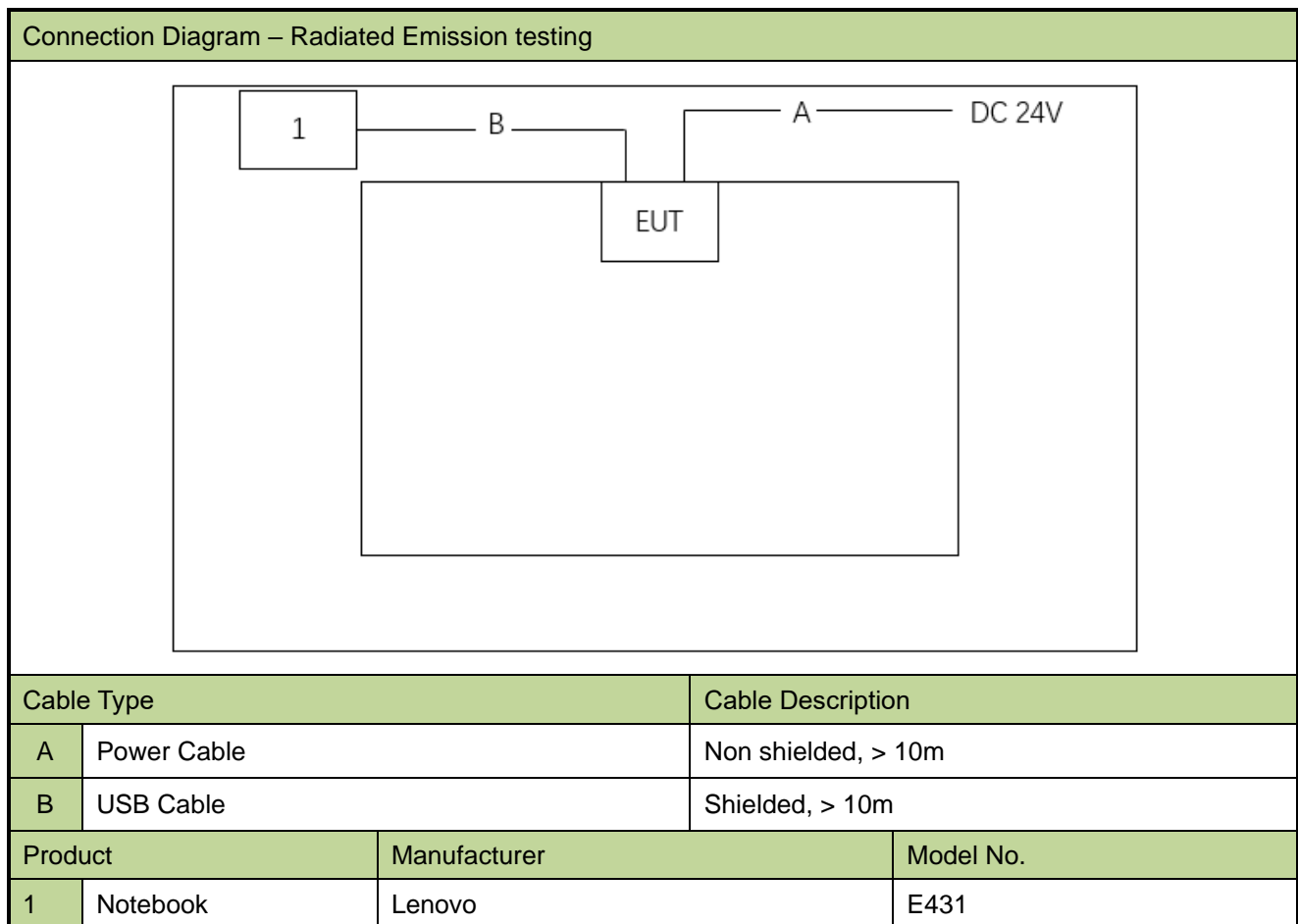
2. Test Configuration

2.1. Test Mode

Mode 1: Transmit at Channel 1616.021MHz
Mode 2: Transmit at Channel 1620.979MHz
Mode 3: Transmit at Channel 1625.979MHz

2.2. Test System Connection Diagram

The device was tested per the guidance ANSI C63.26: 2015 was used to reference the appropriate EUT setup for radiated emissions testing.



2.3. Test Software

The test utility software used during testing was “TxTest_9602_EMC.exe”, and the commands were provided by manufacturer

2.4. Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 25
- ANSI C63.26-2015
- KDB 971168 D01v03r01
- ANSI C63.4-2014

2.5. Test Environment Condition

Ambient Temp.	15 ~ 35 °C
Relative Humidity	20 ~ 75% RH

3. Antenna Requirements

Excerpt from §25.209 of the FCC Rules/Regulations:

Except as provided in paragraph (f) of the §25.209, the co-polarization gain of any earth station antenna operating in the FSS and transmitting to a GSO satellite, including earth stations providing feeder links for satellite services other than FSS, may not exceed the specified limits.

Conclusion:

The unit complies with the requirement of §25.209, and the details refer to the “Antenna Specification” file.

4. Measuring Instrument

Instrument Name	Manufacturer	Model No.	Asset No.	Cali. Interval	Cal. Due Date	Test Site
TRILOG Antenna	Schwarzbeck	VULB 9162	MRTSUE06022	1 year	2023-05-20	WZ-AC2
EMI Test Receiver	Agilent	N9038A	MRTSUE06125	1 year	2023-06-04	WZ-AC2
Thermohygrometer	Mingle	ETH529	MRTSUE06170	1 year	2023-11-27	WZ-AC2
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06171	1 year	2023-10-13	WZ-AC2
Preamplifier	Schwarzbeck	BBV 9718	MRTSUE06176	1 year	2023-05-08	WZ-AC2
Preamplifier	Schwarzbeck	BBV 9718	MRTSUE06176	1 year	2024-05-07	WZ-AC2
Anechoic Chamber	RIKEN	WZ-AC2	MRTSUE06213	1 year	2024-04-20	WZ-AC2
Thermohygrometer	testo	608-H1	MRTSUE11038	1 year	2023-11-01	WZ-AC2
TRILOG Antenna	Schwarzbeck	VULB 9162	MRTSUE06022	1 year	2023-05-20	WZ-AC2
EMI Test Receiver	Agilent	N9038A	MRTSUE06125	1 year	2023-06-04	WZ-AC2
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2023-09-29	WZ-AC2
Temperature Chamber	BAOYT	BYH-150CL	MRTSUE06051	1 year	2023-10-08	WZ-TR3
Thermohygrometer	testo	608-H1	MRTSUE06401	1 year	2023-06-06	WZ-TR3
Signal Analyzer	Keysight	N9010B	MRTSUE06457	1 year	2023-06-04	WZ-TR3
Attenuator	SHX	SMA10-20dB-18G	MRTSUE06697	1 year	2024-03-01	WZ-TR3

Software	Version	Function
EMI Software	V3.0.0	EMI Test Software
Controller_MF 7802BS	1.02	RE Antenna & Turntable

5. Decision Rules and Measurement Uncertainty

5.1. Decision Rules

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4: 2012 Clause 8.2.
(Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

5.2. Measurement Uncertainty

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Radiated Emission Measurement	
The maximum measurement uncertainty is evaluated as:	
Coaxial:	9kHz~30MHz: 2.59dB
Coplanar:	9kHz~30MHz: 2.60dB
Horizontal:	30MHz~200MHz: 3.85dB
	200MHz~1GHz: 4.36dB
	1GHz~17GHz: 4.98dB
Vertical:	30MHz~200MHz: 4.06dB
	200MHz~1GHz: 5.28dB
	1GHz~17GHz: 4.91dB
Spurious Emissions, Conducted	
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$):	
2.3dB	
Power Spectrum Density	
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$):	
2.3dB	
Occupied Bandwidth	
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$):	
3.2%	

6. Test Result

6.1. Summary

FCC Section(s)	Test Description	Test Condition	Verdict
2.1049	Occupied Bandwidth	Conducted	Pass
2.1046(a), 25.204(a)	Power Spectral Density & Output Power		Pass
2.1055, 25.202(d)	Frequency Tolerance		Pass
2.1051, 25.202(f)	Emission limitations (Conducted emissions)		Pass
2.1053, 25.202(f)	Emission limitations (Radiated emissions)	Radiated	Pass
2.1047 (d)	Modulation Characteristics	Declared by manufacturer	Pass ^{Note 2}

Notes:

- The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
- Modulation Characteristics description: Traffic, broadcast, and ring alert channels use differentially encoded quaternary phase shift keyed (DE-QPSK) modulation with 40% square root raised cosine pulse shaping. The burst transmission rate is 25ksps or 50 kbps. The phase of the QPSK symbol states relative to the carrier phase is (Symbol State/Phase in deg): 00/0, 01/-90, 10/+90, 11/180.
The acquisition channel uses differentially encoded binary phase shift keyed (DE-BPSK) with 40% square root raised cosine pulse shaping. The burst rate on these channels is 25 kbps. The sync channel uses 25 kbps DE-BPSK on the uplink and 50 kbps DE-QPSK on the downlink. Both with 40% square root raised cosine pulse shaping.

6.2. Occupied Bandwidth

6.2.1. Test Limit

N/A

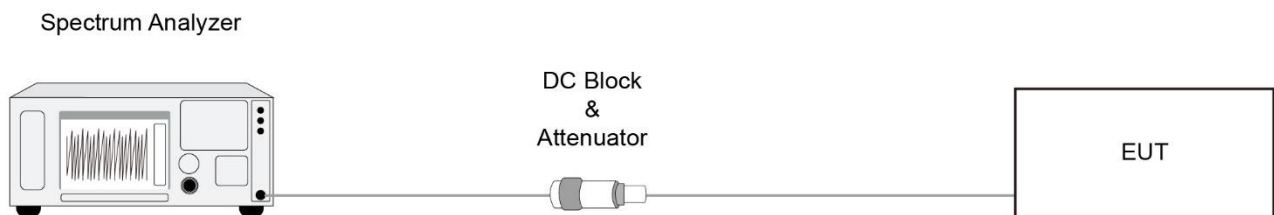
6.2.2. Test Procedure used

ANSI C63.26-2015 - Section 5.4.4

6.2.3. Test Setting

1. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts (typically a span of $1.5 \times \text{OBW}$ is sufficient)
2. Set RBW = 1% to 5% of the OBW
3. VBW $\geq 3 \times \text{RBW}$
4. Detector = Peak
5. Trace mode = Max hold
6. Sweep = Auto couple
7. Allow the trace was allowed to stabilize

6.2.4. Test Setup



6.2.5. Test Result

Refer to Appendix A.2.

6.3. Power Spectral Density & Output Power

6.3.1. Test Limit

Part 25.203(c)(2)(ix)

Maximum equivalent isotropically radiated power (e.i.r.p.) density in the main beam in any 4kHz band, (dBW/4kHz) for frequency bands below 15GHz or in any 1MHz band (dBW/MHz) for frequency band above 15GHz,

Part 25.204(a)

In bands shared coequally with terrestrial radio communication services, the equivalent isotropically radiated power transmitted in any direction towards the horizon by an earth station, other than an ESV, operating in frequency bands between 1 and 15GHz, shall not exceed the following limits except as provided for in paragraph(c) of this section:

+ 40 dBW in any 4 kHz band for $\theta \leq 0^\circ$

+ 40 + 3 θ dBW in any 4 kHz band for $0^\circ < \theta \leq 5^\circ$

where θ is the angle of elevation of the horizon viewed from the center of radiation of the antenna of the earth station and measured in degrees as positive above the horizontal plane and negative below it.

6.3.2. Test Procedure used

ANSI C63.26-2015 - Section 5.2.4.5 & 5.2.4.4.1

ANSI C63.26-2015 - Section 5.2.4.2

6.3.3. Test Setting

Power Spectral Density Measurement using spectrum analyzer

1. Set span to 2 to 3 times the OBW

2. Set RBW = 1% to 5% of the OBW

(RBW shall set to the reference bandwidth specified by the applicable regulatory requirement, so set

RBW = 5 kHz herein for measurement)

3. Set VBW $\geq 3 \times$ RBW

4. Detector = power averaging (RMS)

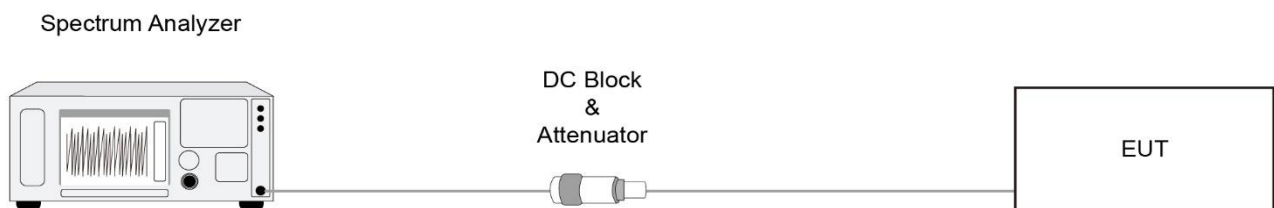
5. Trace mode = Trace average

6. Trace was allowed to stabilize

Average Power Measurement

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter.

6.3.4. Test Setup



6.3.5. Test Result

Refer to Appendix A.3.

6.4. Frequency Tolerance

6.4.1. Test Limit

FCC Part 25.202(d)

The carrier frequency of each earth station transmitter authorized in these services shall be maintained within 0.001 percent of the reference frequency.

6.4.2. Test Procedure used

ANSI C63.26-2015 - Section 5.6.3 & 5.6.4 & 5.6.5

6.4.3. Test Setting

The EUT was set to transmit a modulated carrier. The EUT was connected to a spectrum analyzer via a cable and attenuator.

Adjust the temperature and supply voltage follow below:

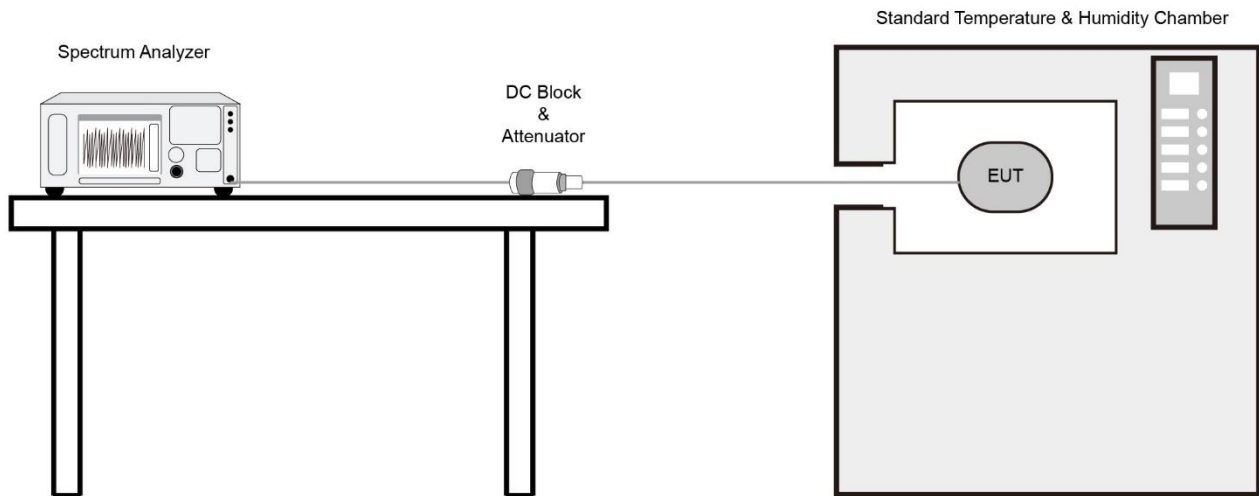
- a) At 10°C intervals of temperatures between -30°C and +50°C at the manufacturer's rated supply voltage, and
- b) At +20°C temperature and $\pm 15\%$ supply voltage variations. If a product is specified to operate over a range of input voltage then the -15% variation is applied to the lowermost voltage and the +15% is applied to the uppermost voltage.

The peak value of the power envelope shall be measured and noted. The span shall be reduced and the marker moved in a positive frequency increment until the upper, (relative to the centre frequency), -10 dBc point is reached. This value shall be noted as f1.

The marker shall then be moved in a negative frequency increment until the lower, (relative to the centre frequency), -10 dBc point is reached. This value shall be noted as f2.

The centre frequency is calculated as $(f1 + f2) / 2$.

6.4.4. Test Setup



6.4.5. Test Result

Refer to Appendix A.4.

6.5. Emission limitations (Conducted emissions)

6.5.1. Test Limit

Part 25.202(f) Emission Limitations

The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with the schedule:

- (1) In any 4kHz band, the center frequency of which is removed from the assigned frequency by more than 50 percent up to and including 100 percent of the authorized bandwidth: 25dB;
- (2) In any 4kHz band, the center frequency of which is removed from the assigned frequency by more than 100 percent up to and including 250 percent of the authorized bandwidth: 35dB;
- (3) In any 4kHz band, the center frequency of which is removed from the assigned frequency by more than 250 percent of the authorized bandwidth: An amount equal to 43dB plus 10 times the logarithm (to the base 10) of the transmitter power in watts.

6.5.2. Test Procedure used

ANSI C63.26-2015 - Section 5.7

6.5.3. Test Setting

Spurious Emission – In-Band Emission

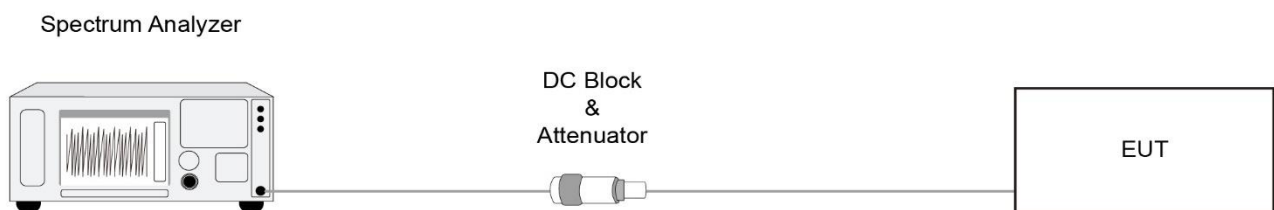
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 3kHz for in-band mask
3. VBW $\geq 3 \times$ RBW
4. Detect = power averaging (RMS)
5. sweep time > (number of points in sweep) \times (transmitter period) (i.e., the transmit on-time + the off-time).
6. Trace mode = Trace average
7. Trace was allowed to stabilize
8. $10 \times \log(4\text{kHz}/3\text{kHz}) = 1.25\text{dB}$ was added to the reference offset for in-band mask measurement to correct the result relative to any 4kHz band as per the requirement in 25.202(f)(1)&(2).

Spurious Emission – Out-of-Band Emission

1. RBW = 100kHz

Set the RBW greater than 4kHz in order to increase the measurement speed

2. VBW = 3 * RBW
3. Detector = Peak
4. Sweep time = Auto couple
5. Trace mode = Max hold
6. Trace was allowed to stabilize

6.5.4. Test Setup**6.5.5. Test Result**

Refer to Appendix A.5.

6.6. Emission limitations (Radiated emissions)

6.6.1. Test Limit

Part 25.202(f) Emission Limitations

In any 4kHz band, the center frequency of which is removed from the assigned frequency by more than 250 percent of the authorized bandwidth: An amount equal to 43dB plus 10 times the logarithm (to the base 10) of the transmitter power in watts.

For Out-Of-Band Emission, The emission limit equal to 82.3dBμV/m.

$E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} - 20 \log D + 104.8$; where D is the measurement distance in meters.

6.6.2. Test Procedure used

ANSI C63.26-2015 - Section 5.2.7 & 5.5

6.6.3. Test Setting

Spurious Emission – Out-of-Band Emission

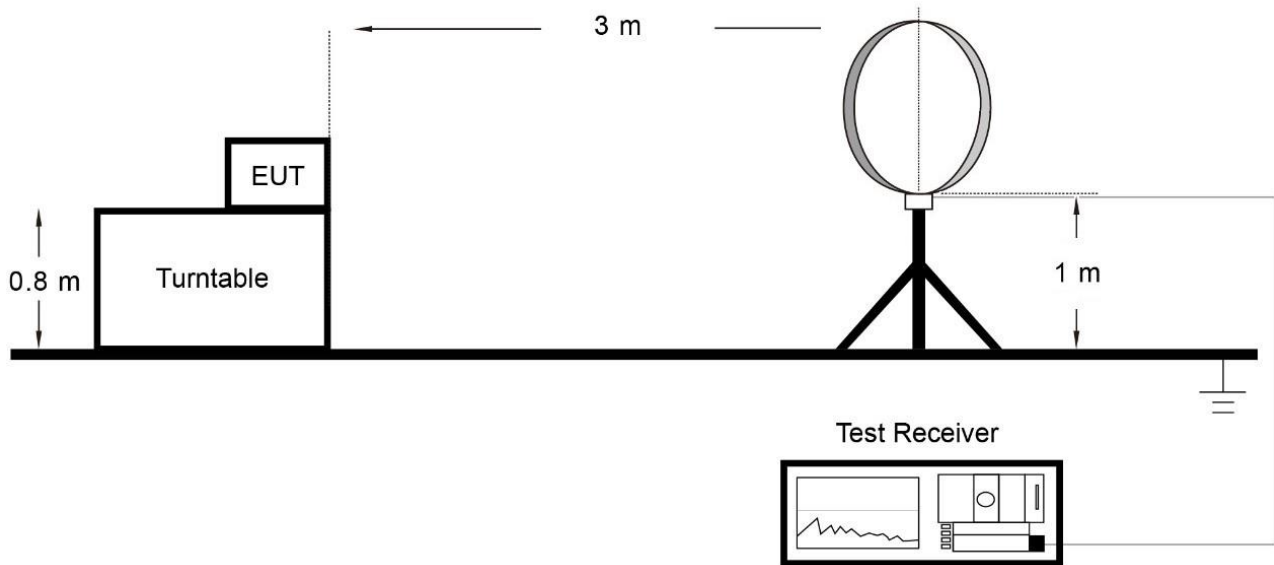
1. RBW = 100kHz for below 1GHz or 1MHz for above 1GHz

Set the RBW greater than 4kHz in order to increase the measurement speed

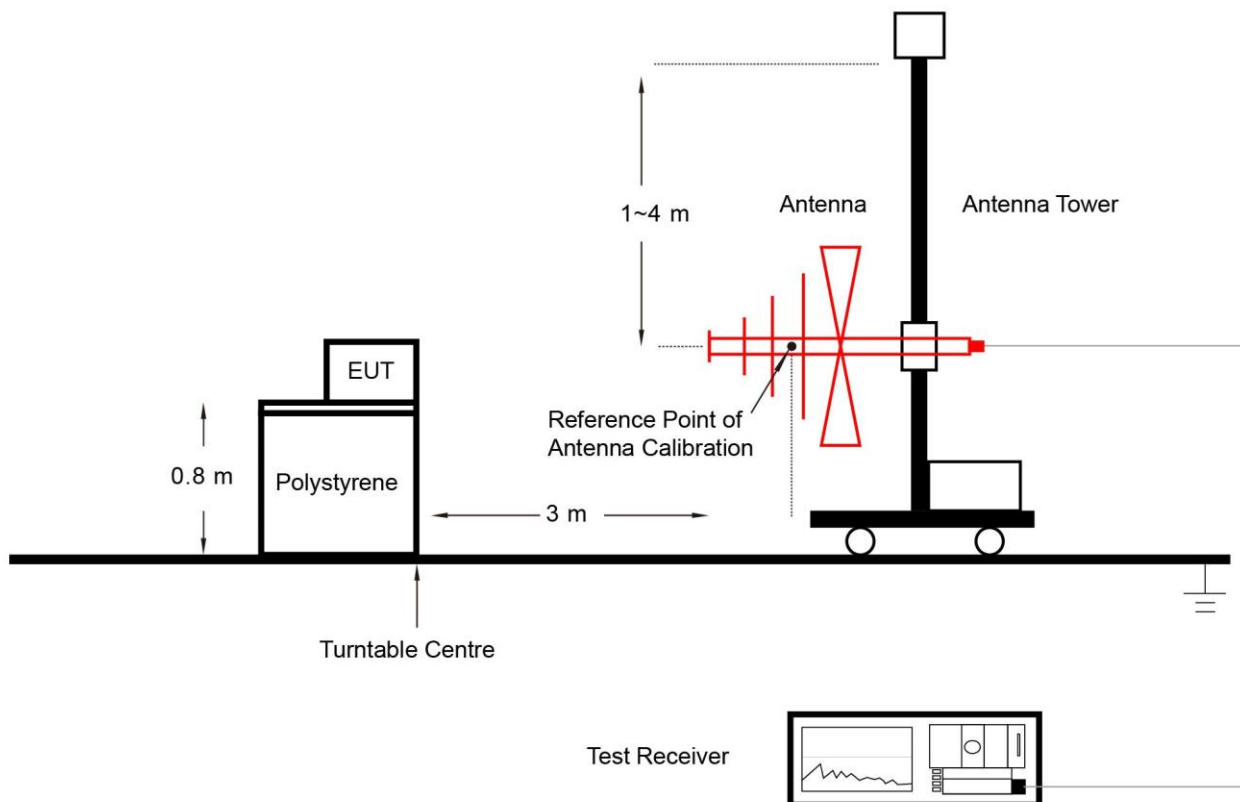
2. VBW = 3 * RBW
3. Detector = Peak
4. Sweep time = Auto couple
5. Trace mode = Max hold
6. Trace was allowed to stabilize

6.6.4. Test Setup

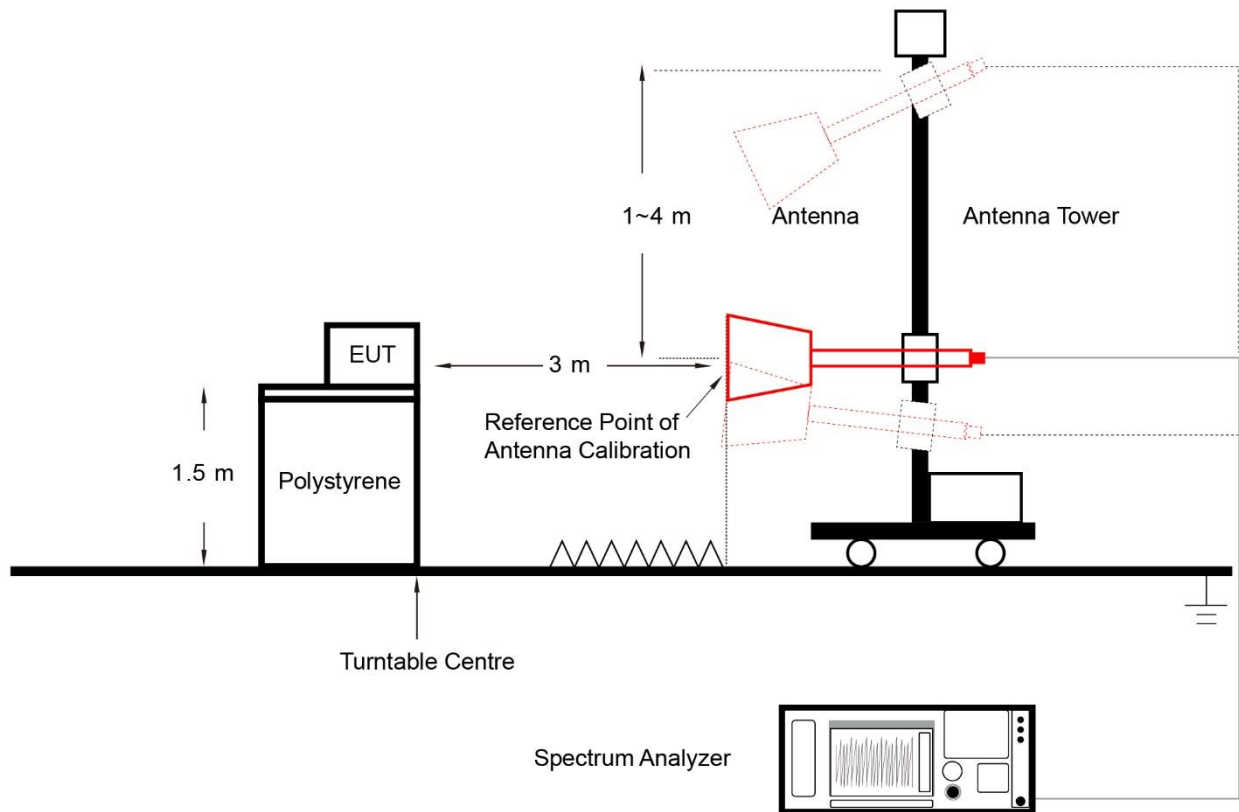
9kHz ~ 30MHz Test Setup



30MHz ~ 1GHz Test Setup



1GHz ~ 17GHz Test Setup



The tests were performed with antenna port terminated.

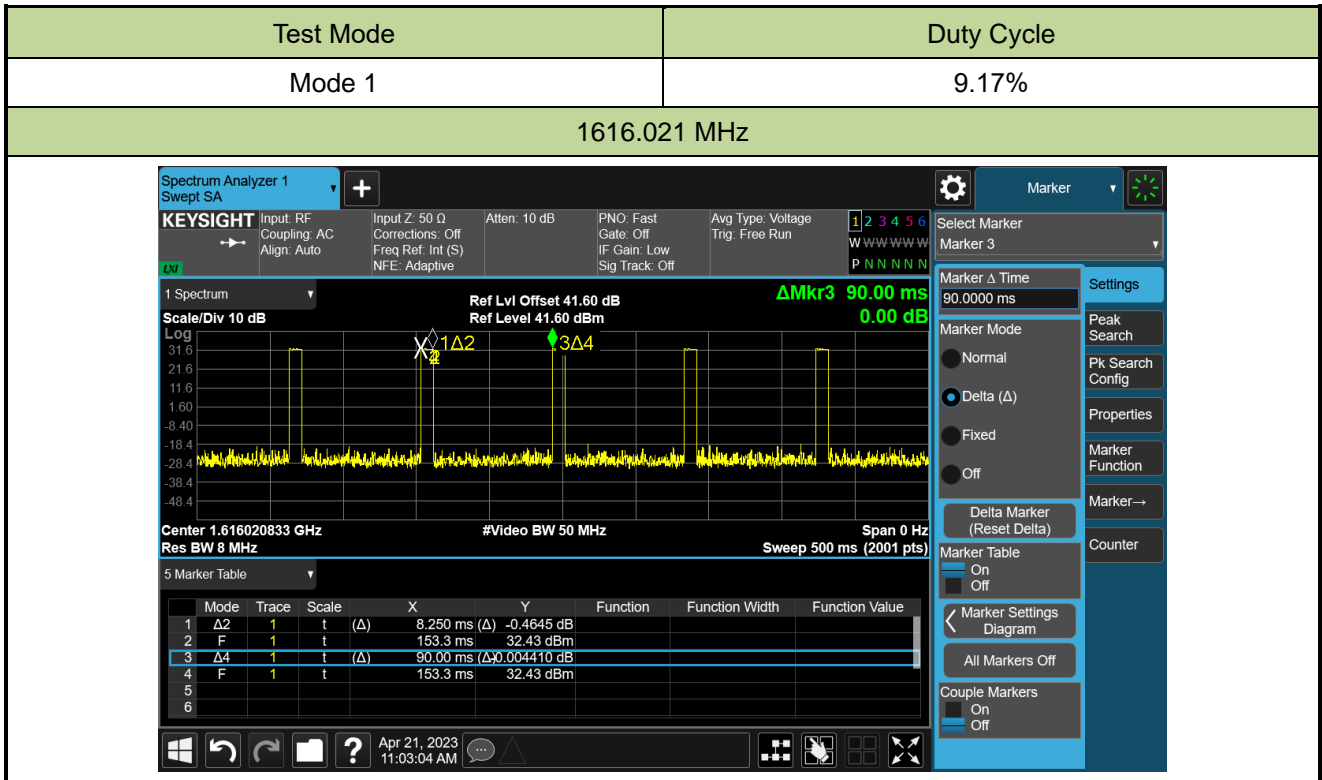
6.6.5. Test Result

Refer to Appendix A.6.

Appendix A - Test Result

A.1 Duty Cycle Test Result

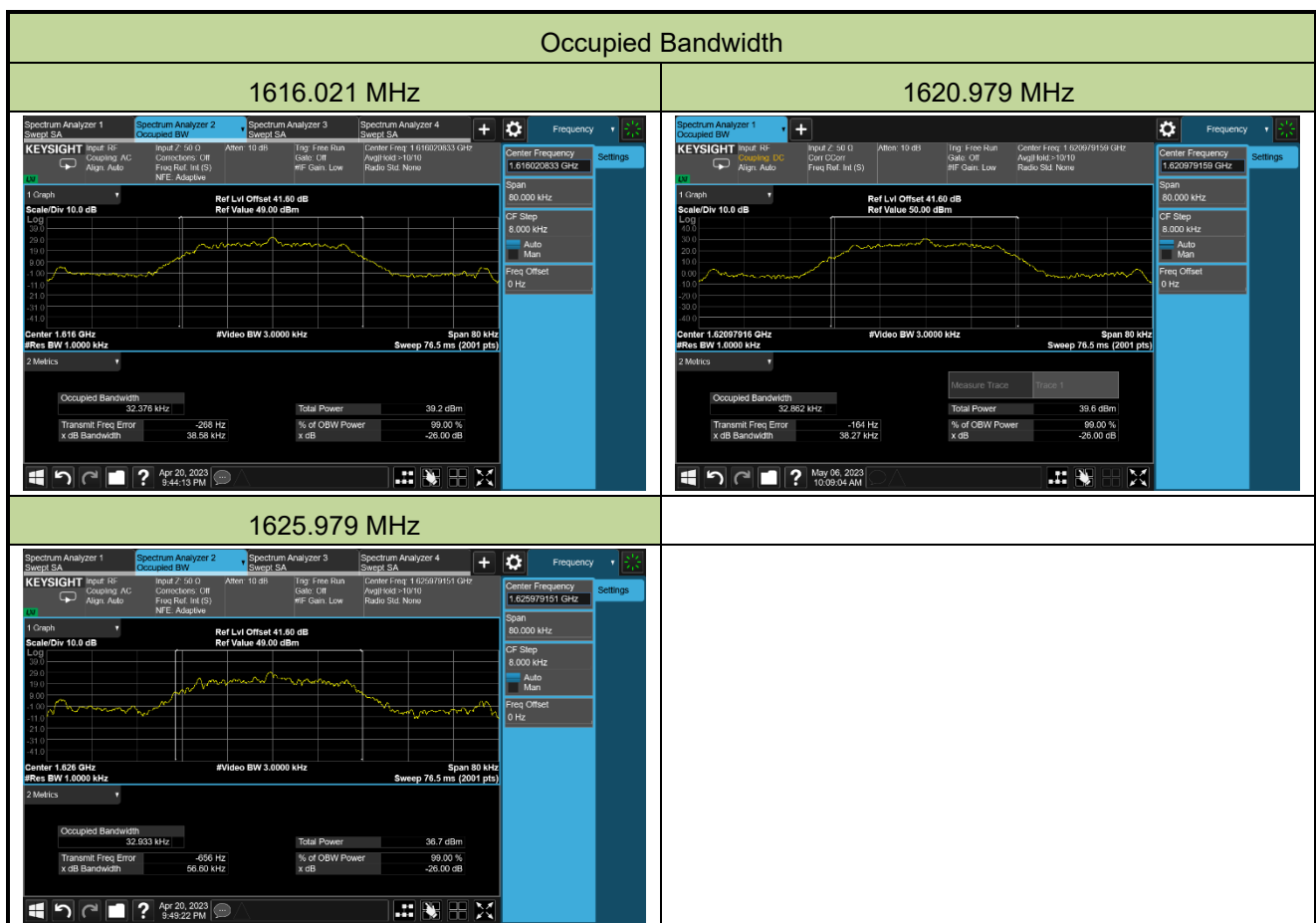
Test Site	WZ-TR3	Test Engineer	Dandy Li
Test Date	2023-04-21		



A.2 Occupied Bandwidth Test Result

Test Site	WZ-TR3	Test Engineer	Dandy Li
Test Date	2023-04-20 ~ 2023-05-06		

Test Mode	Test Channel	Test Frequency (MHz)	99% Bandwidth (kHz)
QPSK	Low	1616.021	32.376
	Mid	1620.979	32.862
	High	1625.979	32.933



A.3 Power Spectral Density & Output Power Test Result

Test Site	WZ-TR3	Test Engineer	Dandy Li
Test Date	2023-05-16		

Test Mode	Test Channel	Test Freq. (MHz)	AVPSD (dBm/5kHz)	Duty Cycle (%)	Final AVPSD (dBm/5kHz)	EIRP PSD (dBW/5kHz)	Limit (dBW/4kHz)	Result
QPSK	Low	1616.021	16.076	9.17	26.452	0.622	≤ 40	Pass
	Mid	1620.979	18.464	9.17	28.840	3.010	≤ 40	Pass
	High	1625.979	16.125	9.17	26.501	0.671	≤ 40	Pass

Note 1: Final AVPSD (dBm/5kHz) = AVPSD (dBm/5kHz) + 10*log (1/Duty cycle)

Note 2: EIRP PSD (dBW/5kHz) = Final AVPSD (dBm/5kHz) + Antenna Gain (dBi) - 30.

Note 3: The max EIRP PSD is less than the limit for $\theta \leq 0^\circ$, so the requirement is complied.



Test Site	WZ-TR3	Test Engineer	Dandy Li
Test Date	2023-05-06		

Test Mode	Test Channel	Test Freq. (MHz)	Average Power (dBm)	EIRP (dBm)
QPSK	Low	1616.021	29.31	33.48
	Mid	1620.979	30.23	34.40
	High	1625.979	30.13	34.30

Note: EIRP (dBm) = Average Power (dBm) + Antenna Gain (dBi).

A.4 Frequency Tolerance Test Result

Test Site	WZ-TR3	Test Engineer	Dandy Li
Test Date	2023-05-04	Temperature	-30 ~ 50 °C

Test Freq. (MHz)	Voltage (V _{DC})	Temp. (°C)	Measured Freq. (MHz)	Freq. Tolerance (ppm)	Limit (ppm)	Result
1616.021	24	-30	1616.016	-3.094	-10 ~ +10	Pass
		-20	1616.011	-6.188	-10 ~ +10	Pass
		-10	1616.016	-3.094	-10 ~ +10	Pass
		0	1616.016	-3.094	-10 ~ +10	Pass
		+10	1616.011	-6.188	-10 ~ +10	Pass
		+20	1616.019	-1.547	-10 ~ +10	Pass
		+30	1616.014	-4.641	-10 ~ +10	Pass
		+40	1616.014	-4.641	-10 ~ +10	Pass
		+50	1616.011	-6.188	-10 ~ +10	Pass
	20.4	+20	1616.016	-3.094	-10 ~ +10	Pass
	27.6	+20	1616.021	0.000	-10 ~ +10	Pass

Note: Frequency Tolerance (ppm) = {[Measured Frequency (MHz) - Test Frequency (MHz)] / Test Frequency (MHz)} * 10⁶.

A.5 Emission limitations (Conducted emissions) Test Result

Test Site	WZ-TR3	Test Engineer	Dandy Li
Test Date	2023-05-06	Test Item	In-band Mask

Authorization Bandwidth = 208.33kHz

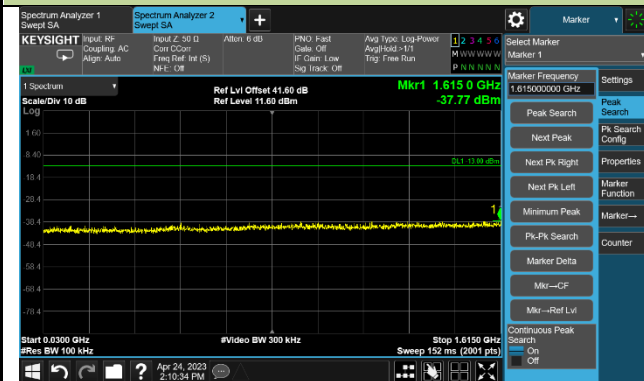


Test Site	WZ-TR3	Test Engineer	Dandy Li
Test Date	2023-04-24	Test Item	Out-of-Band Emission

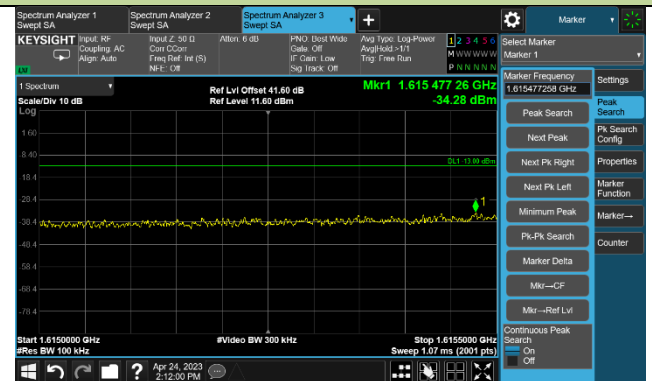
Test Channel	Frequency Range (MHz)	Measured Freq (MHz)	Max Reading Level (dBm/4kHz or dBm/100kHz)	Limit (dBm/4kHz)	Result
1616.021 MHz	30 ~ 1615	1615.000	-37.77	-13	Pass
	1615 ~ 1615.5	1615.477	-34.28	-13	Pass
	1616.5 ~ 1700	1616.630	-36.36	-13	Pass
	1700 ~ 17000	16778.150	-29.85	-13	Pass
1620.979 MHz	30 ~ 1620	1620.000	-36.13	-13	Pass
	1620 ~ 1620.5	1620.488	-33.88	-13	Pass
	1621.5 ~ 1700	1621.540	-34.60	-13	Pass
	1700 ~ 17000	15401.150	-30.83	-13	Pass
1625.979 MHz	30 ~ 1625	1623.400	-35.35	-13	Pass
	1625 ~ 1625.5	1625.449	-32.72	-13	Pass
	1626.5 ~ 1700	1626.610	-36.53	-13	Pass
	1700 ~ 17000	15515.900	-30.68	-13	Pass

1616.021 MHz

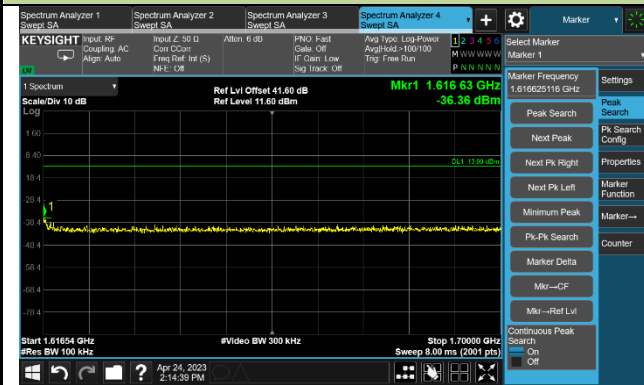
30 ~ 1615 MHz



1615 ~ 1615.5 MHz



1616.5 ~ 1700 MHz

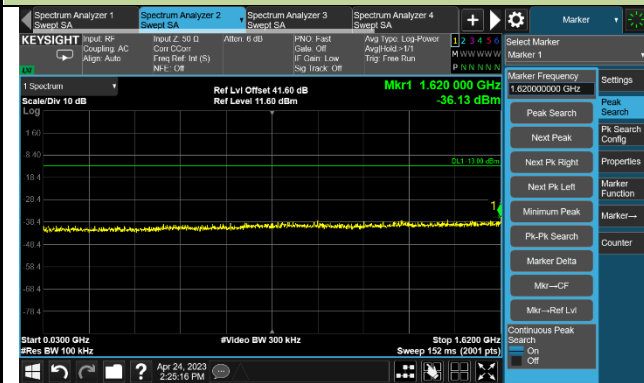


1700 ~ 17000 MHz

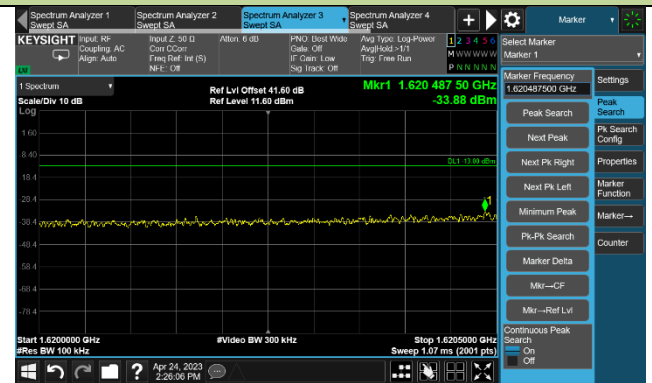


1620.979 MHz

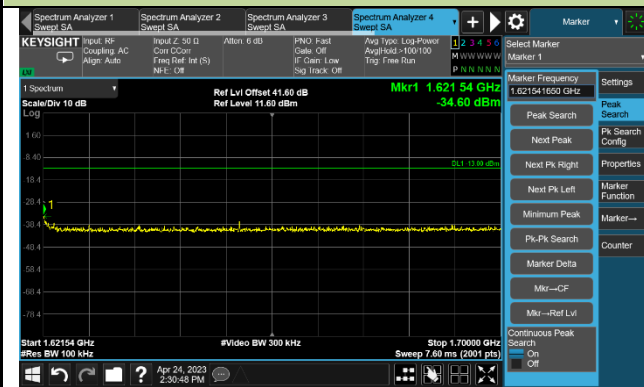
30 ~ 1620 MHz



1620 ~ 1620.5 MHz



1621.5 ~ 1700 MHz

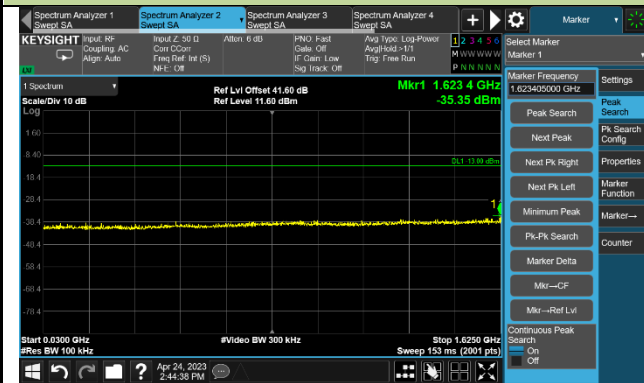


1700 ~ 17000 MHz

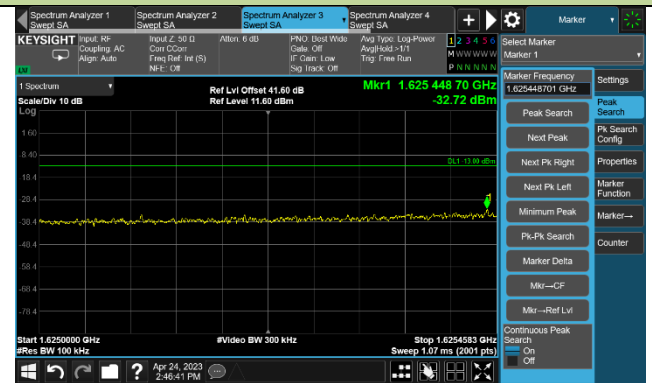


1625.979 MHz

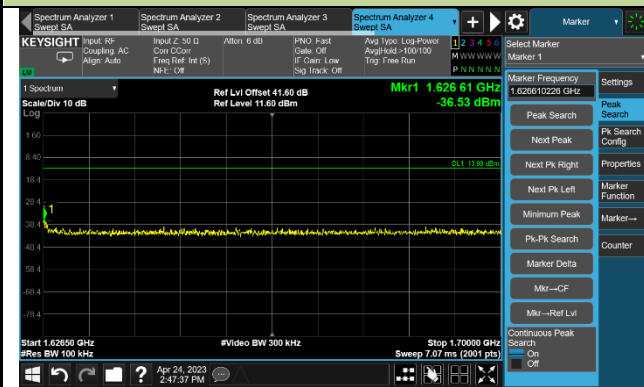
30 ~ 1625 MHz



1625 ~ 1625.5 MHz



1626.5 ~ 1700 MHz



1700 ~ 17000 MHz



A.6 Emission limitations (Radiated emissions) Test Result

Test Site	WZ-AC2	Test Engineer	Edith Yu
Test Date	2023-04-25	Test Channel	1616.021MHz
Test Mode	Out-of-Band Emission – 1G ~ 17G		
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 9kHz to 30MHz, there is not show in the report.		

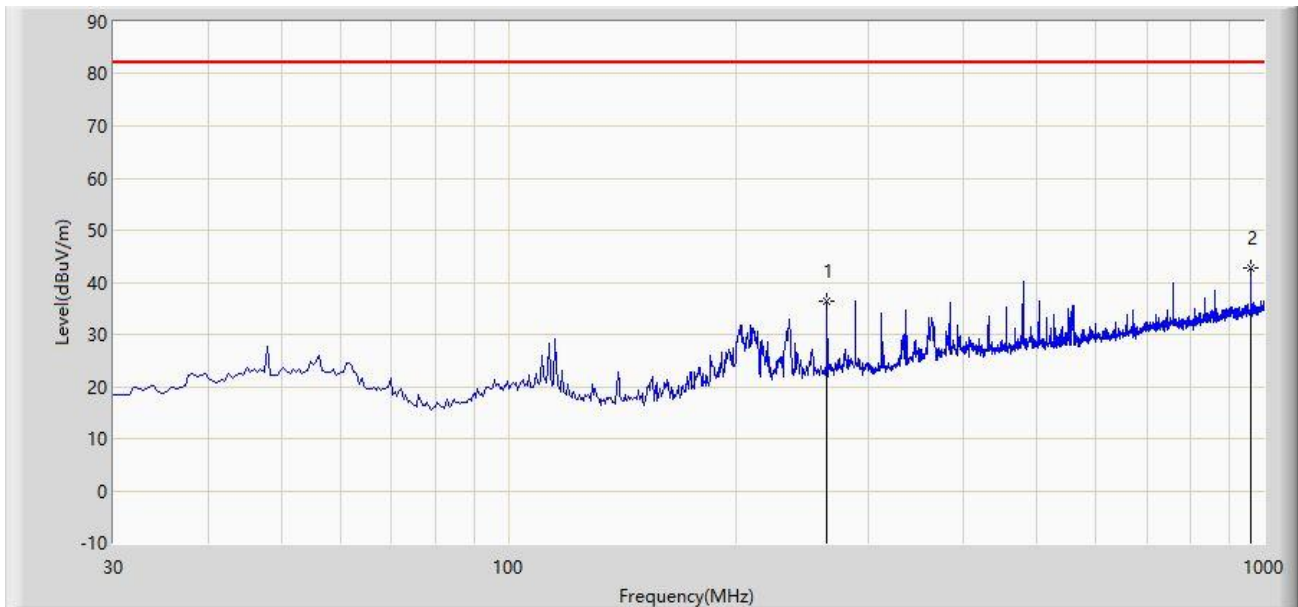
Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
1194.0	40.7	-6.1	34.6	82.3	-47.7	Peak	Horizontal
2325.0	37.5	-2.2	35.3	82.3	-47.0	Peak	Horizontal
5256.0	42.6	3.2	45.8	82.3	-36.5	Peak	Horizontal
14568.0	33.6	20.6	54.2	82.3	-28.1	Peak	Horizontal
1237.0	39.1	-5.3	33.8	82.3	-48.5	Peak	Vertical
2781.0	38.9	-2.7	36.2	82.3	-46.1	Peak	Vertical
5304.0	39.5	3.2	42.7	82.3	-39.6	Peak	Vertical
14936.0	32.2	20.1	52.3	82.3	-30.0	Peak	Vertical

Note 1: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 2: Average measurement was not performed when peak measure level was lower than the average limit.

Radiated Spurious Emission For below 1GHz:

Site: WZ-AC2	Test Date: 2023-04-25
Limit: FCC_Part 25_RE (3m)	Engineer: Edith Yu
Probe: VULB9162_30-7000MHz	Polarity: Horizontal
EUT: IT Controller	Power: DC 24V
Note: Transmit at 1616.021MHz	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB/m)	Type
1		263.770	36.245	16.020	-46.055	82.300	20.225	PK
2	*	961.685	42.747	11.075	-39.553	82.300	31.671	PK

Note 1: " * ", means this data is the worst emission level.

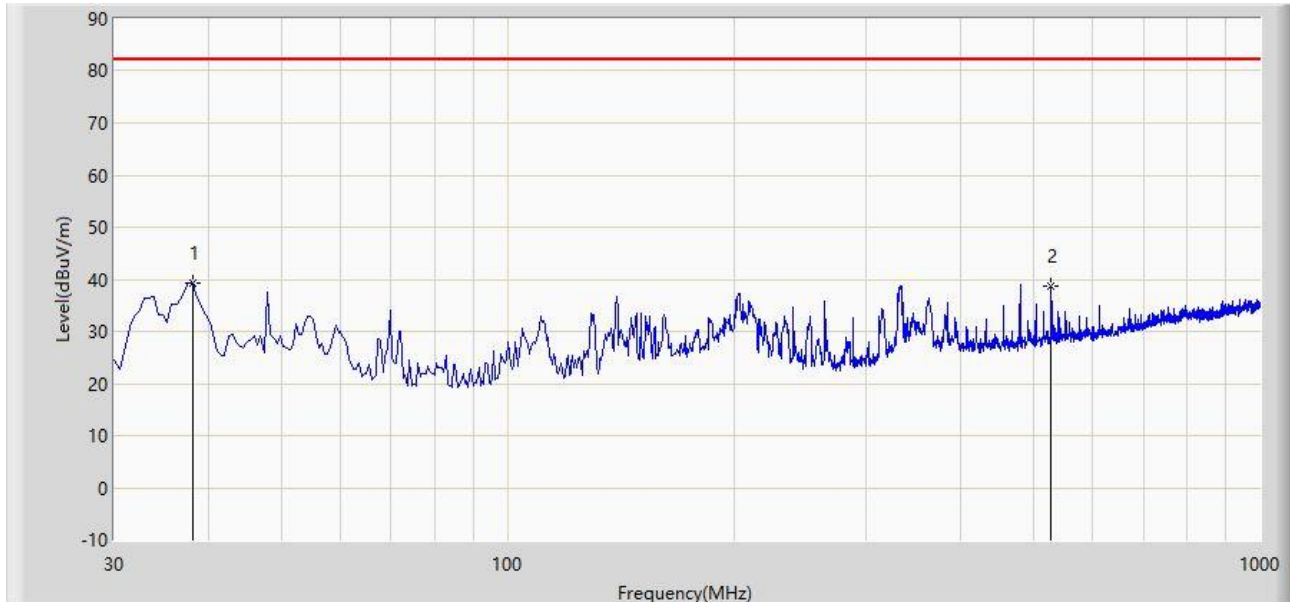
Note 2: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: Average measurement was not performed when peak measure level was lower than the average limit.

Note 5: The amplitude of radiated emissions (frequency range from 9kHz to 30MHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

Site: WZ-AC2	Test Date: 2023-04-25
Limit: FCC_Part 25_RE (3m)	Engineer: Edith Yu
Probe: VULB9162_30-7000MHz	Polarity: Vertical
EUT: IT Controller	Power: DC 24V
Note: Transmit at 1616.021MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	38.245	39.309	21.131	-42.991	82.300	18.178	PK
2		528.095	38.706	13.292	-43.594	82.300	25.413	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: Average measurement was not performed when peak measure level was lower than the average limit.

Note 5: The amplitude of radiated emissions (frequency range from 9kHz to 30MHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

Appendix B - Test Setup Photograph

Refer to “2304RSU029-UT” file.

Appendix C - EUT Photograph

Refer to “2304RSU029-UE” file.

The End
