Prüfbericht-Nr.: *Test report no.*:	**CN2479N8 003**	**Auftrags-Nr.:** *Order no.*:	168493211	Seite 1 von 22 *Page 1 of 22*
Kunden-Referenz-Nr.: *Client reference no.*:	N/A	**Auftragsdatum:** *Order date:*	2024-07-08	
Auftraggeber: *Client*:	**Sensitech Inc.** 800 Cummings Center Suite 258X, Beverly MA 01915-6197 USA			
Prüfgegenstand: *Test item*:	Quarterback Gateway			
Bezeichnung / Typ-Nr.: *Identification / Type no.*:	T11013310			
Auftrags-Inhalt: *Order content*:	Test Report			
Prüfgrundlage: *Test specification*:	CFR47 FCC Part 22, CFR47 FCC Part 24, CFR47 FCC Part 27, CFR47 FCC Part 90 CFR47 FCC Part 2: Section 2.1091 RSS-130 Issue 2, RSS-132 Issue 4 RSS-133 Issue 6, RSS-139 Issue 4 RSS-Gen Issue 5			

Wareneingangsdatum: *Date of sample receipt*:	2020-05-15 2024-07-10	Please refer to photo documents
Prüfmuster-Nr.: *Test sample no:*	A002920612-001 A003791751-004/005	
Prüfzeitraum: *Testing period*:	2021-05-25 - 2024-09-27	
Ort der Prüfung: *Place of testing*:	Refer to Clause 2.1	
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland (Shenzhen) Co., Ltd.	
Prüfergebnis*: *Test result**:	Pass	

geprüft von: tested by:	X Andy Yan	**genehmigt von:** *authorized by*:	X Lin Lin
Datum: *Date:*	2024-12-05	**Ausstellungsdatum:** *Issue date:*	2024-12-06
Stellung / Position:	Sachverständige(r)/Expert	**Stellung** / Position:	Sachverständige(r)/Expert

Sonstiges / *Other*: FCC ID: SRMT11013310
IC: 6654A-T11013310 HVIN: T11013310
This report is for GPRS/EDGE/LTE-Cat M/NB-IoT transmittter.

Zustand des Prüfgegenstandes bei Anlieferung: *Condition of the test item at delivery*: Prüfmuster vollständig und unbeschädigt *Test item complete and undamaged*

* Legende:	P(ass) = entspricht o.g. Prüfgrundlage(n)	F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
* *Legend:*	*P(ass) = passed a.m. test specification(s)*	*F(ail) = failed a.m. test specification(s)*	*N/A = not applicable*	*N/T = not tested*

Anmerkungen
Remarks

1	Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben. Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden. *The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.*
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Test Summary

5.1.1 RF POWER OUTPUT
RESULT: Pass

5.1.2 MODULATION CHARACTERISTICS
RESULT: Pass

5.1.3 OCCUPIED BANDWIDTH AND 26DB BANDWIDTH
RESULT: Pass

5.1.4 SPURIOUS EMISSIONS AT ANTENNA TERMINALS
RESULT: Pass

5.1.5 SPURIOUS EMISSIONS AT ANTENNA TERMINALS – BAND EDGE
RESULT: Pass

5.1.6 FIELD STRENGTH OF SPURIOUS RADIATION
RESULT: Pass

5.1.7 FREQUENCY STABILITY
RESULT: Pass

5.1.8 PEAK TO AVERAGE RATIO
RESULT: Pass

Contents

1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Test Results of Output Power

Appendix B: Test Results of Radiated Spurious Emissions and Co-Located Emissions

2 Test Sites

2.1 Test Facilities

Location 1: TÜV Rheinland (Shenzhen) Co., Ltd.

362 Huanguan Road Middle Longhua District, Shenzhen 518110 People's Republic of China
FCC Registration No.: 694916
ISED Company Number: 25069

Location 2: Shanghai ATBL Technology Co., Ltd.

5-6/F., Unit 1, No 8, Free Trade One Life Science and Sci-Tech Industrial Park,No.160, Basheng Road, Pudong New District,Shanghai City, China

FCC Registration No.: 0031025281
ISED Company Number: 27371

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Location 1: TÜV Rheinland (Shenzhen) Co., Ltd.
Output Power

Radio Spectrum Testing (CTE6000)				
Equip. No.	Manufacturer	Model	Serial No.	Calibrated until
Shielding Room 6#	Albatross	SR6	APC17151-SR6	2025-06-20
Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	166305	2025-09-25
Signal Analyzer	Rohde & Schwarz	FSV 40	101475	2025-09-25
Vector Signal Generator	Rohde & Schwarz	SMBV100A	263466	2025-09-25
Signal Generator	Rohde & Schwarz	SMB100A	181041	2024-11-05
High Speed Power Supply	KEITHLEY	2303	4080052	2024-11-05
RF Control Unit	Tonscend	JS0806-1	19H8060192	N/A
Band Reject Filter Group	Tonscend	JS0806-F	19I8060194	2025-11-13

Location 2: Shanghai ATBL Technology Co., Ltd.
Radiated Spurious Emissions

Equipment Name	Manufacturer	Model	Serial No.	Equipment No.	Calibrated until
Signal analyzer	Agilent	N9020A	MY50200811	SHATBL-E017	2025.03.27
Amplifier	JPT	JPA0118-55-303A	1910001800055000	SHATBL-E006	2025.03.27
Amplifier	JPT	JPA-10M1G32	21010100035001	SHATBL-E005	2025.03.27
Antenna/Turn table Controller	Brilliant	N/A	N/A	SHATBL-E007	N/A
Loop Antenna(9kHz-30MHz)	Daze	ZN30900C	20077	SHATBL-E042	2025.05.16
Bilog Antenna	SCHWARZBECK	VULB 9168	01174	SHATBL-E008	2025.05.16
Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120D	02334	SHATBL-E009	2025.05.16
Horn Antenna	COM-POWER	AH-1840	10100008	SHATBL-E043	2025.07.18
Thermometer	DeLi	N/A	N/A	SHATBL-E015	2025.07.17
Test Software	FALA	EMC-RI(Ver.4A2)	N/A	N/A	N/A

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally, all equipment is verified for proper performance on a regular basics using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table.

Parameter	Uncertainty
Radio Frequency	±1 x 10-7
RF Power (conducted)	±2.5 dB
Radiated Emission of Transmitter, valid up to 26.5 GHz	±6 dB
Temperature	±1 °C
Humidity	±5 %
Voltage (DC)	±1 %
Voltage (AC, <10kHz)	±2 %

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix B of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) Co., Ltd. file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at 362 Huanguan Road Middle Longhua District, Shenzhen 518110 People's Republic of China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

The Shanghai ATBL Technology Co., Ltd. 5-6/F., Unit 1, No 8, Free Trade One Life Science and Sci- Tech Industrial Park,No.160, Basheng Road, Pudong New District,Shanghai City, China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3 General Product Information

3.1 Product Function and Intended Use

The T11013310 is a tracking device supporting LTE-M/NB-IoT/2G, WiFi&Bluetooth and 915MHz wireless technologies.

This product including a Quectel BG96 license module with FCC ID: XMR201707BG96 with report no.: RXA1706-0199RF01R1, RXA1706-0199RF02R1, RXA1706-0199RF03R1, RXA1706-0199RF04R1, RXA1706-0199RF05, RXA1706-0199RF06, RXA1706-0199RF07, RXA1706-0199RF08 issued by TA Technology (Shanghai) Co., Ltd.

This product including a Quectel BG96 license module with ISED Certification No.: 10224A-201709BG96. Report no.: R1811A0536-R7, R1811A0536-R8, R1811A0536-R9, R1811A0536-R10 and R1811A0536-R11 issued by TA Technology (Shanghai) Co., Ltd.

Since the BG96 license module has no any change from the granted one except the antenna, only recheck the output power and radiated spurious emission. Reuse all other test results in reports: RXA1706-0199RF01R1, RXA1706-0199RF02R1, RXA1706-0199RF03R1, RXA1706-0199RF04R1, RXA1706-0199RF05, RXA1706-0199RF06, RXA1706-0199RF07, RXA1706-0199RF08 and R1811A0536-R7, R1811A0536-R8, R1811A0536-R9, R1811A0536-R10 and R1811A0536-R11

This report is for LTE-M/NB-IoT/2G functions.

For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 2: Technical Specification of EUT

General Information of EUT	**Value**
Kind of Equipment	Quarterback Gateway
Type Designation	T11013310
FCC ID	SRMT11013310
ISED Certification Number	6654A-T11013310
HVIN	T11013310
Operating Voltage	AC/DC Adapter Rechargeable Battery (4.2V)
Testing Voltage	AC/DC Adapter Rechargeable Battery (4.2V)
Antenna Type	Integral Antenna
Technical Specification	
Operational Frequency Band(s):	LTE-Cat M1: Band 2, Band 4, Band 5, Band 12, Band 13, Band 26 NB-IoT: Band 2, Band 5, Band 12, Band 13, Band 26 GPRS/EDGE 850/1900
Power Class:	GPRS 900: Class 4 GPRS1800: Class 1 EGPRS 900/1800: E2 LTE Cat M1 and NB-IoT: Class 3

Modulation Type:	GMSK, 8PSK, BPSK, QPSK, 16QAM
Antenna Type:	Integral Antenna
Antenna Gain:	Max. 2.0 dBi

Table 3: RF Channel and Frequency

LTE Cat-M Frequency Band(s)	Frequency Range				Channel Bandwidth (MHz)
	Transmitting f_{UL} (MHz)		Receiving f_{DL} (MHz)		
Band 2	1850 ~ 1910		1930 ~ 1990		1.4, 3, 5, 10, 15, 20
Band 4	1710 ~ 1755		2110 ~ 2155		1.4, 3, 5, 10, 15, 20
Band 5	824 ~ 849		869 ~ 894		1.4, 3, 5, 10
Band 12	699 ~ 716		729 ~ 746		1.4, 3, 5, 10
Band 13	777 ~ 787		746 ~ 756		5, 10
Band 26	814 ~ 849		859 ~ 894		1.4, 3, 5, 10, 15
NB-IoT Frequency Band(s)	**Frequency Range**				**Subcarrier Spacing (kHz)**
	Transmitting f_{UL} (MHz)		Receiving f_{DL} (MHz)		
Band 2	1850 ~ 1910		1930 ~ 1990		3.75, 15
Band 5	824 ~ 849		869 ~ 894		3.75, 15
Band 12	699 ~ 716		729 ~ 746		3.75, 15
Band 13	777 ~ 787		746 ~ 756		3.75, 15
Band 26	814 ~ 849		859 ~ 894		3.75, 15
GPRS/EGPRS Frequency Band(s)	**Frequency Range**				**Channel Bandwidth (KHz)**
	Transmitting f_{UL} (MHz)		Receiving f_{DL} (MHz)		
GSM 850	824 ~ 849		869 ~ 894		200
PCS 1900	1850 ~ 1910		1930 ~ 1990		200

3.3 Independent Operation Modes

The basic operation modes are:

A. On, transmitting mode

1) Low Channel
2) Middle Channel
3) High Channel

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

☒ User Manual
☒ Circuit Diagram
☒ Block Diagram
☒ Schematics
☒ Rating Label
☒ PCB Layout
☒ Photo Document
☒ Parts List

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

NB-IoT Operation bands	Frequencies under Test					
	Uplink			Downlink		
	Range	EARFCN	Frequencies (MHz)	Range	EARFCN	Frequencies (MHz)
2	Low	18601	1850.1000	Low	601	1930.1000
	Mid	18900	1880.0000	Mid	900	1960.0000
	High	19199	1909.9000	High	1199	1989.9000
5	Low	20401	824.1000	Low	2401	869.1000
	Mid	20525	836.5000	Mid	2525	881.5000
	High	20649	848.9000	High	2649	893.9000
12	Low	23011	699.1000	Low	5011	729.1000
	Mid	23095	707.5000	Mid	5095	737.5000
	High	23179	715.9000	High	5179	745.9000
13	Low	23181	777.1000	Low	5181	746.1000
	Mid	23230	782.0000	Mid	5230	751.0000
	High	23279	786.9000	High	5279	755.9000
26_Lower Band (814-824 MHz)	Low	26691	814.1000	Low	8691	859.1000
	Mid	26740	819.0000	Mid	8740	864.0000
	High	26789	823.9000	High	8789	868.9000
26_Upper Band (824-849 MHz)	Low	26791	824.1000	Low	8791	869.1000
	Mid	26915	836.5000	Mid	8915	881.5000
	High	27039	848.9000	High	9039	893.9000
	High	134181	715.9000	High	70545	745.9000

LTE CAT-M Operation bands	Mode	Channel Bandwidth (MHz)	Frequencies under Test					
			EARFCN	CH_{Low} (MHz)	EARFCN	CH_{Mid} (MHz)	EARFCN	CH_{High} (MHz)
2	TX	1.4	18607	1850.7	18900	1880	19193	1909.3
		3	18615	1851.5	18900	1880	19185	1908.5
		5	18625	1852.5	18900	1880	19175	1907.5
		10	18650	1855	18900	1880	19150	1905
		15	18675	1857.5	18900	1880	19125	1902.5
		20	18700	1860	18900	1880	19100	1900
	RX	1.4	607	1930.7	900	1960	1193	1989.3
		3	615	1931.5	900	1960	1185	1988.5
		5	625	1932.5	900	1960	1175	1987.5
		10	650	1935	900	1960	1150	1985
		15	675	1937.5	900	1960	1125	1982.5
		20	700	1940	900	1960	1100	1980
4	TX	1.4	19957	1710.7	20175	1732.5	20393	1754.3
		3	19965	1711.5	20175	1732.5	20385	1753.5
		5	19975	1712.5	20175	1732.5	20375	1752.5
		10	20000	1715	20175	1732.5	20350	1750
		15	20025	1717.5	20175	1732.5	20325	1747.5
		20	20050	1720	20175	1732.5	20300	1745
	RX	1.4	1957	2110.7	2175	2132.5	2393	2154.3
		3	1965	2111.5	2175	2132.5	2385	2153.5
		5	1975	2112.5	2175	2132.5	2375	2152.5
		10	2000	2115	2175	2132.5	2350	2150
		15	2025	2117.5	2175	2132.5	2325	2147.5
		20	2050	2120	2175	2132.5	2300	2145
5	TX	1.4	20407	824.7	20525	836.5	20643	848.3
		3	20415	825.5	20525	836.5	20635	847.5
		5	20425	826.5	20525	836.5	20625	846.5
		10	20450	829	20525	836.5	20600	844
	RX	1.4	2407	869.7	2525	881.5	2643	893.3
		3	2415	870.5	2525	881.5	2635	892.5
		5	2425	871.5	2525	881.5	2625	891.5
		10	2450	874	2525	881.5	2600	889
12	TX	1.4	23017	699.7	23095	707.5	23173	715.3
		3	23025	700.5	23095	707.5	23165	714.5
		5	23035	701.5	23095	707.5	23155	713.5
		10	23060	704	23095	707.5	23130	711
	RX	1.4	5017	729.7	5095	737.5	5173	745.3
		3	5025	730.5	5095	737.5	5165	744.5
		5	5035	731.5	5095	737.5	5155	743.5
		10	5060	734	5095	737.5	5130	741
13	TX	5	23205	779.5	23230	782	23255	784.5
		10	23230	782	23230	782	23230	782
	RX	5	5205	748.5	5230	751	5255	753.5
		10	5230	751	5230	751	5230	751
26_Lower Band (814-824 MHz)	TX	1.4	26697	814.7	26740	819	26783	823.3
		3	26705	815.5	26740	819	26775	822.5
		5	26715	816.5	26740	819	26765	821.5
		10	26740	819	26740	819	26740	819
	RX	1.4	8697	859.7	8740	864	8783	868.3
		3	8705	860.5	8740	864	8775	867.5
		5	8715	861.5	8740	864	8765	866.5

		10	8740	864	8740	864	8740	864
26_Upper Band (824-849 MHz)	TX	1.4	26797	824.7	26915	836.5	27033	848.3
		3	26805	825.5	26915	836.5	27025	847.5
		5	26815	826.5	26915	836.5	27015	846.5
		10	26840	829	26915	836.5	26990	844
		15	26865	831.5	26915	836.5	26965	841.5
	RX	1.4	8797	869.7	8915	881.5	9033	893.3
		3	8805	870.5	8915	881.5	9025	892.5
		5	8815	871.5	8915	881.5	9015	891.5
		10	8840	874	8915	881.5	8990	889
		15	8865	876.5	8915	881.5	8965	886.5

GSM Operation bands	TX/RX	RF Channel		
		Low (L)	Middle (M)	High (H)
GSM 850	TX	Channel 128	Channel 190	Channel 251
		824.2MHz	836.6MHz	848.8MHz
	RX	Channel 128	Channel 190	Channel 251
		869.2MHz	881.6MHz	893.8MHz
PCS 1900	TX	Channel 512	Channel 661	Channel 810
		1850.2MHz	1880.0MHz	1909.8MHz
	RX	Channel 512	Channel 661	Channel 810
		1930.2MHz	1960.0MHz	1989.8MHz

4.3 Special Accessories and Auxiliary Equipment

Table 4: Auxiliary Equipment Used during Test

Description	Manufacturer	Model	S/N	Rating
--	--	--	--	--

4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test

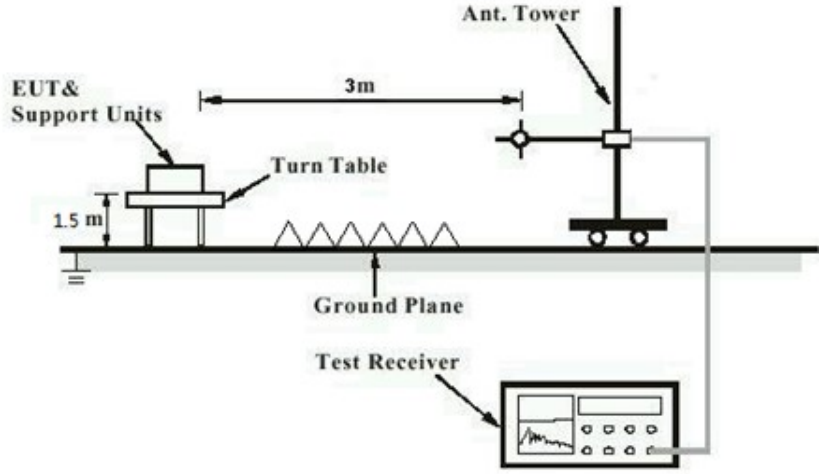
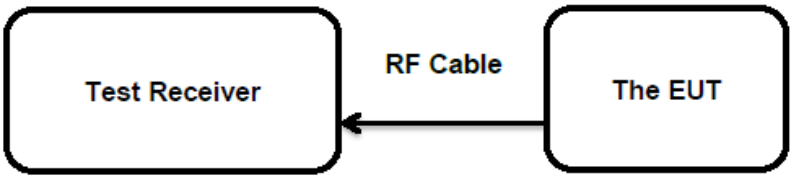


Diagram of Measurement Configuration for Conducted Transmitter Measurement



5 Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 RF Power Output

RESULT: **Pass**

Test Specification

Test standard	:	47 CFR FCC Part 22		RSS-130 Issue 2
		47 CFR FCC Part 24		RSS-132 Issue 4
		47 CFR FCC Part 27		RSS-133 Issue 6
		47 CFR FCC Part 90		RSS-139 Issue 4
		47 CFR FCC Part 2		RSS-Gen Issue 5

Limits	:	Operating band	FCC Limit	ISED Limit
		Band 2/PCS1900	EIRP 2 watts	EIRP 2 watts
		Band 4	EIRP 1 watts	EIRP 1 watts
		Band 5/GSM850 Band 26 (Upper band)	ERP 7 watts	ERP 11.5 watts
		Band 12	ERP 3 watts	ERP 3 watts
		Band 13	ERP 3 watts	ERP 3 watts
		Band 26 (Low band)	<100 watts	N/A
Test procedure	:	Clause 5.2.4.2 of ANSI C63.26		
Kind of test site	:	Shielded Room		

Test Setup

Date of testing	:	2021-05-25
Input voltage	:	Fully charged battery
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	26 ºC
Relative humidity	:	55%
Atmospheric pressure	:	101.0 kPa

For the measurement records, refer to the appendix A

Note:
ERP or EIRP = P_{Meas} + G_T
where
ERP or EIRP: effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as P_{Meas}, e.g. dBm)
P_{Meas}: measured transmitter output power, in dBm
G_T: gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)

5.1.2 MODULATION CHARACTERISTICS

RESULT: **Pass**

Test Specification

Test standard	:	47 CFR FCC Part 22	RSS-130 Issue 2
		47 CFR FCC Part 24	RSS-132 Issue 4
		47 CFR FCC Part 27	RSS-133 Issue 6
		47 CFR FCC Part 90	RSS-139 Issue 4
		47 CFR FCC Part 2	RSS-Gen Issue 5
Limits	:	"Other types of equipment", the use of higher order modulations such as OFDM or LTE or other modulation are acceptable for use	
Test procedure	:	Clause 5.2.3 of ANSI C63.26	
Kind of test site	:	Shielded Room	

Note:
The device implements digital modulation such as BPSK and QPSK, hence the EUT is deemed to comply with this requirement without additional testing.

Refer attached report RXA1706-0199RF01R1, RXA1706-0199RF02R1, RXA1706-0199RF03R1, RXA1706-0199RF04R1, RXA1706-0199RF05, RXA1706-0199RF06, RXA1706-0199RF07, RXA1706-0199RF08 and R1811A0536-R7, R1811A0536-R8, R1811A0536-R9, R1811A0536-R10 and R1811A0536-R11.

5.1.3 OCCUPIED BANDWIDTH AND 26DB BANDWIDTH

RESULT: **Pass**

Test Specification

Test standard	:	47 CFR FCC Part 22	RSS-130 Issue 2
		47 CFR FCC Part 24	RSS-132 Issue 4
		47 CFR FCC Part 27	RSS-133 Issue 6
		47 CFR FCC Part 90	RSS-139 Issue 4
		47 CFR FCC Part 2	RSS-Gen Issue 5
Test requirement	:	Section 2.1049 of 47 CFR FCC Part 2	
Limits	:	N/A	
Test procedure	:	Section 5.4.3 of ANSI C63.26	
Kind of test site	:	Shielded Room	

Refer attached report RXA1706-0199RF01R1, RXA1706-0199RF02R1, RXA1706-0199RF03R1, RXA1706-0199RF04R1, RXA1706-0199RF05, RXA1706-0199RF06, RXA1706-0199RF07, RXA1706-0199RF08 and R1811A0536-R7, R1811A0536-R8, R1811A0536-R9, R1811A0536-R10 and R1811A0536-R11.

5.1.4 SPURIOUS EMISSIONS AT ANTENNA TERMINALS

RESULT: **Pass**

Test Specification

Test standard	:	47 CFR FCC Part 22 47 CFR FCC Part 24 47 CFR FCC Part 27 47 CFR FCC Part 90 47 CFR FCC Part 2	RSS-130 Issue 2 RSS-132 Issue 4 RSS-133 Issue 6 RSS-139 Issue 4 RSS-Gen Issue 5	
Limits	:	Operating band	FCC Limit	ISED Limit
		Band 2/PCS1900	< - 13 dBm /1MHz	< - 13 dBm /1MHz
		Band 4	< - 13 dBm /1MHz	< - 13 dBm /1MHz
		Band 5/GSM850 Band 26 (High Band)	< - 13 dBm /100kHz @ < 1GHz < - 13 dBm /1MHz @ > 1GHz	< - 13 dBm /100 kHz
		Band 12	< - 13 dBm /1MHz	< - 13 dBm /1MHz
		Band 13	< - 13 dBm /1MHz	< - 13 dBm /1MHz
		Band 26 (Low band)	< - 13 dBm /1MHz < - 13 dBm /1MHz	N/A
Test procedure	:	Section 5.7.4 of ANSI C63.26		
Kind of test site	:	Shielded Room		

Refer attached report RXA1706-0199RF01R1, RXA1706-0199RF02R1, RXA1706-0199RF03R1, RXA1706-0199RF04R1, RXA1706-0199RF05, RXA1706-0199RF06, RXA1706-0199RF07, RXA1706-0199RF08 and R1811A0536-R7, R1811A0536-R8, R1811A0536-R9, R1811A0536-R10 and R1811A0536-R11.

5.1.5 SPURIOUS EMISSIONS AT ANTENNA TERMINALS – BAND EDGE

RESULT: **Pass**

Test Specification

Test standard	:	47 CFR FCC Part 22	RSS-130 Issue 2	
		47 CFR FCC Part 24	RSS-132 Issue 4	
		47 CFR FCC Part 27	RSS-133 Issue 6	
		47 CFR FCC Part 90	RSS-139 Issue 4	
		47 CFR FCC Part 2	RSS-Gen Issue 5	
Limits	:	Operating band	FCC Limit	ISED Limit
		Band 2	< - 13 dBm /1%EBW	< - 13 dBm / 1%OBW
		Band 4	< - 13 dBm /1%EBW	< - 13 dBm / 1%OBW
		Band 5/GSM850 Band 26 (Low band)	< - 13 dBm /1%EBW	< - 13 dBm / 1%OBW
		Band 12	< - 13 dBm /30kHz	< - 13 dBm /30kHz
		Band 13	< - 13 dBm /30kHz	< - 13 dBm /30kHz
		Band 26 Low Band	< - 20 dBm /1%EBW	N/A
Test procedure	:	Section 5.7.4 of ANSI C63.26		
Kind of test site	:	Shielded Room		

Refer attached report RXA1706-0199RF01R1, RXA1706-0199RF02R1, RXA1706-0199RF03R1, RXA1706-0199RF04R1, RXA1706-0199RF05, RXA1706-0199RF06, RXA1706-0199RF07, RXA1706-0199RF08 and R1811A0536-R7, R1811A0536-R8, R1811A0536-R9, R1811A0536-R10 and R1811A0536-R11.

5.1.6 FIELD STRENGTH OF SPURIOUS RADIATION

RESULT: **Pass**

Test Specification

Test standard	:	47 CFR FCC Part 22	RSS-130 Issue 2	
		47 CFR FCC Part 24	RSS-132 Issue 4	
		47 CFR FCC Part 27	RSS-133 Issue 6	
		47 CFR FCC Part 90	RSS-139 Issue 4	
		47 CFR FCC Part 2	RSS-Gen Issue 5	

Limits	:	Operating band	FCC Limit	ISED Limit
		Band 2/PCS1900	< - 13 dBm /1MHz	< - 13 dBm /1MHz
		Band 4	< - 13 dBm /1MHz	< - 13 dBm /1MHz
		Band 5/GSM850 Band 26 (High band)	< - 13 dBm /100kHz @ < 1GHz < - 13 dBm /1MHz @ > 1GHz	< - 13 dBm /100 kHz
		Band 12	< - 13 dBm /1MHz	< - 13 dBm /1MHz
		Band 13	< - 13 dBm /1MHz	< - 13 dBm /1MHz
		Band 26(Low Band)	< - 13 dBm /1MHz	N/A
Test procedure	:	Section 5.5 of ANSI C63.26		
Kind of test site	:	3m Semi-anechoic Chamber		

Test Setup

Date of testing	:	2024-09-27
Input voltage	:	Fully charged battery
Test environment	:	☒ Normal test conditions
		☐ Extreme test conditions
Operation mode	:	A
Ambient temperature	:	Refer to Appendix B
Relative humidity	:	Refer to Appendix B
Atmospheric pressure	:	101.0 kPa

The limit calculation:
Limit = P_{Meas} (dBm) – [43+10log(P_{Meas})] = −13 dBm

Sweep the whole frequency band through the range from 9 kHz to the 10th harmonic of the carrier, the emissions below the noise floor will not be recorded in this report. The measurement is performed for all operational modes and both antenna polarization, only the data of the worst mode is recorded in this report.

Refer to attached Appendix B for details of test results.

5.1.7 FREQUENCY STABILITY

RESULT: **Pass**

Test Specification

Test standard	:	47 CFR FCC Part 22	RSS-130 Issue 2
		47 CFR FCC Part 24	RSS-132 Issue 4
		47 CFR FCC Part 27	RSS-133 Issue 6
		47 CFR FCC Part 90	RSS-139 Issue 4
		47 CFR FCC Part 2	RSS-Gen Issue 5
Limits	:	Section 22.355 of 47 CFR FCC Part 22 "2.5ppm for mobile ≤ 3 watts" Section 24.235 of 47 CFR FCC Part 24 "The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block." Section 27.54 of 47 CFR FCC Part 27 "The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation." Section 90.213 of 47 CFR FCC Part 90 "2.5ppm for mobile stations which the output power is less than 2 watts"	
Test procedure	:	Section 5.6.3 of ANSI C63.26	
Kind of test site	:	Shielded Room	

Refer attached report RXA1706-0199RF01R1, RXA1706-0199RF02R1, RXA1706-0199RF03R1, RXA1706-0199RF04R1, RXA1706-0199RF05, RXA1706-0199RF06, RXA1706-0199RF07, RXA1706-0199RF08 and R1811A0536-R7, R1811A0536-R8, R1811A0536-R9, R1811A0536-R10 and R1811A0536-R11.

5.1.8 PEAK TO AVERAGE RATIO

RESULT: **Pass**

Test Specification

Test standard	:	47 CFR FCC Part 22	RSS-130 Issue 2
		47 CFR FCC Part 24	RSS-132 Issue 4
		47 CFR FCC Part 27	RSS-133 Issue 6
		47 CFR FCC Part 90	RSS-139 Issue 4
		47 CFR FCC Part 2	RSS-Gen Issue 5
Limits	:	Section 22.913(d) of 47 CFR FCC Part 22 Section 24.232(d) of 47 CFR FCC Part 24 Section 27.50(d) of 47 CFR FCC Part 27 “The peak-to-average ratio (PAR) of the transmission must not exceed 13 dB”	
Test procedure	:	Section 5.2.6 of ANSI C63.26 RSS-Gen Issue 5	
Kind of test site	:	Shielded Room	

Refer attached report RXA1706-0199RF01R1, RXA1706-0199RF02R1, RXA1706-0199RF03R1, RXA1706-0199RF04R1, RXA1706-0199RF05, RXA1706-0199RF06, RXA1706-0199RF07, RXA1706-0199RF08 and R1811A0536-R7, R1811A0536-R8, R1811A0536-R9, R1811A0536-R10 and R1811A0536-R11.

6 Photographs of the Test Set-Up

For photographs of the test set-up, refer to the appendix A.

7 List of Tables

Appendix A: Test Results of Output Power

Appendix A.1 RF Power Output and Effective (Isotropic) Radiated Power Output Data

Test Results

GPRS/EDGE

Band	Modulation	Channel	Slot	Result (dBm)	ERP		Limit (watts)	Verdict
					dBm	Watts		
GPRS850	GMSK	128	1	32.21	32.06	1.607	7	PASS
GPRS850	GMSK	190	1	32.01	31.87	1.538	7	PASS
GPRS850	GMSK	251	1	31.94	31.79	1.510	7	PASS
EGPRS850	8PSK	128	1	26.52	26.37	0.434	7	PASS
EGPRS850	8PSK	190	1	26.63	26.48	0.445	7	PASS
EGPRS850	8PSK	251	1	26.75	26.22	0.419	7	PASS

Band	Modulation	Channel	Slot	Result (dBm)	EIRP		Limit (watts)	Verdict
					dBm	Watts		
GPRS1900	GMSK	512	1	29.69	31.69	1.476	2	PASS
GPRS1900	GMSK	661	1	29.45	31.45	1.396	2	PASS
GPRS1900	GMSK	810	1	29.50	31.50	1.413	2	PASS
EGPRS1900	8PSK	512	1	25.98	27.98	0.628	2	PASS
EGPRS1900	8PSK	661	1	25.79	27.79	0.601	2	PASS
EGPRS1900	8PSK	810	1	25.82	27.82	0.605	2	PASS

NB-IoT

Band	OpMode	SCS	BW	Modu	Channel	Tones	Result (dBm)	Verdict
Band2	Stand-Alone	3.75kHz	NaN	BPSK	18601	1@0	22.54	PASS
Band2	Stand-Alone	3.75kHz	NaN	BPSK	18601	1@47	22.49	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18601	1@0	22.55	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18601	1@47	22.58	PASS
Band2	Stand-Alone	3.75kHz	NaN	BPSK	18900	1@0	22.50	PASS
Band2	Stand-Alone	3.75kHz	NaN	BPSK	18900	1@47	22.44	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18900	1@0	22.56	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18900	1@47	22.49	PASS
Band2	Stand-Alone	3.75kHz	NaN	BPSK	19199	1@0	22.43	PASS
Band2	Stand-Alone	3.75kHz	NaN	BPSK	19199	1@47	22.39	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	19199	1@0	22.32	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	19199	1@47	22.48	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18601	1@0	22.11	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18601	1@11	22.12	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18601	3@3	24.15	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18601	1@0	22.18	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18601	1@11	22.19	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18601	3@3	22.82	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18900	1@0	21.08	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18900	1@11	21.18	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18900	3@3	22.98	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18900	1@0	21.24	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18900	1@11	21.24	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18900	3@3	22.59	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	19199	1@0	21.13	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	19199	1@11	21.07	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	19199	3@3	22.82	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	19199	1@0	21.22	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	19199	1@11	21.16	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	19199	3@3	22.63	PASS
Band5	Stand-Alone	3.75kHz	NaN	BPSK	20401	1@0	22.04	PASS
Band5	Stand-Alone	3.75kHz	NaN	BPSK	20401	1@47	22.33	PASS
Band5	Stand-Alone	3.75kHz	NaN	QPSK	20401	1@0	22.01	PASS
Band5	Stand-Alone	3.75kHz	NaN	QPSK	20401	1@47	22.32	PASS
Band5	Stand-Alone	3.75kHz	NaN	BPSK	20525	1@0	22.09	PASS
Band5	Stand-Alone	3.75kHz	NaN	BPSK	20525	1@47	22.36	PASS
Band5	Stand-Alone	3.75kHz	NaN	QPSK	20525	1@0	22.03	PASS
Band5	Stand-Alone	3.75kHz	NaN	QPSK	20525	1@47	22.33	PASS
Band5	Stand-Alone	3.75kHz	NaN	BPSK	20649	1@0	22.12	PASS
Band5	Stand-Alone	3.75kHz	NaN	BPSK	20649	1@47	22.36	PASS
Band5	Stand-Alone	3.75kHz	NaN	QPSK	20649	1@0	22.01	PASS
Band5	Stand-Alone	3.75kHz	NaN	QPSK	20649	1@47	22.32	PASS
Band5	Stand-Alone	15kHz	NaN	BPSK	20401	1@0	21.72	PASS
Band5	Stand-Alone	15kHz	NaN	BPSK	20401	1@11	21.71	PASS
Band5	Stand-Alone	15kHz	NaN	QPSK	20401	1@0	21.79	PASS
Band5	Stand-Alone	15kHz	NaN	QPSK	20401	1@11	21.80	PASS
Band5	Stand-Alone	15kHz	NaN	QPSK	20401	3@3	22.58	PASS
Band5	Stand-Alone	15kHz	NaN	BPSK	20525	1@0	21.68	PASS
Band5	Stand-Alone	15kHz	NaN	BPSK	20525	1@11	21.65	PASS
Band5	Stand-Alone	15kHz	NaN	BPSK	20525	3@3	22.21	PASS
Band5	Stand-Alone	15kHz	NaN	QPSK	20525	1@0	21.76	PASS
Band5	Stand-Alone	15kHz	NaN	QPSK	20525	1@11	21.74	PASS
Band5	Stand-Alone	15kHz	NaN	QPSK	20525	3@3	22.22	PASS
Band5	Stand-Alone	15kHz	NaN	BPSK	20649	1@0	21.64	PASS

Band5	Stand-Alone	15kHz	NaN	BPSK	20649	1@11	21.71	PASS
Band5	Stand-Alone	15kHz	NaN	BPSK	20649	3@3	22.53	PASS
Band5	Stand-Alone	15kHz	NaN	QPSK	20649	1@0	21.80	PASS
Band5	Stand-Alone	15kHz	NaN	QPSK	20649	1@11	21.78	PASS
Band5	Stand-Alone	15kHz	NaN	QPSK	20649	3@3	22.57	PASS
Band12	Stand-Alone	3.75kHz	NaN	BPSK	23011	1@0	22.25	PASS
Band12	Stand-Alone	3.75kHz	NaN	BPSK	23011	1@47	22.34	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23011	1@0	22.14	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23011	1@47	22.28	PASS
Band12	Stand-Alone	3.75kHz	NaN	BPSK	23095	1@0	22.46	PASS
Band12	Stand-Alone	3.75kHz	NaN	BPSK	23095	1@47	22.51	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@0	22.44	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@47	22.41	PASS
Band12	Stand-Alone	3.75kHz	NaN	BPSK	23179	1@0	22.39	PASS
Band12	Stand-Alone	3.75kHz	NaN	BPSK	23179	1@47	22.47	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23179	1@0	22.41	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23179	1@47	22.40	PASS
Band12	Stand-Alone	15kHz	NaN	BPSK	23011	1@0	21.78	PASS
Band12	Stand-Alone	15kHz	NaN	BPSK	23011	1@11	21.76	PASS
Band12	Stand-Alone	15kHz	NaN	BPSK	23011	3@3	23.10	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23011	1@0	21.93	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23011	1@11	22.25	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23011	3@3	23.12	PASS
Band12	Stand-Alone	15kHz	NaN	BPSK	23095	1@0	21.80	PASS
Band12	Stand-Alone	15kHz	NaN	BPSK	23095	1@11	21.67	PASS
Band12	Stand-Alone	15kHz	NaN	BPSK	23095	3@3	23.10	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@0	21.93	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@11	21.80	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	3@3	23.22	PASS
Band12	Stand-Alone	15kHz	NaN	BPSK	23179	1@0	21.72	PASS
Band12	Stand-Alone	15kHz	NaN	BPSK	23179	1@11	21.73	PASS
Band12	Stand-Alone	15kHz	NaN	BPSK	23179	3@3	22.94	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23179	1@0	21.83	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23179	1@11	21.80	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23179	3@3	23.18	PASS
Band13	Stand-Alone	3.75kHz	NaN	BPSK	23181	1@0	23.67	PASS
Band13	Stand-Alone	3.75kHz	NaN	BPSK	23181	1@47	22.68	PASS
Band13	Stand-Alone	3.75kHz	NaN	QPSK	23181	1@0	22.57	PASS
Band13	Stand-Alone	3.75kHz	NaN	QPSK	23181	1@47	22.59	PASS
Band13	Stand-Alone	3.75kHz	NaN	BPSK	23230	1@0	22.81	PASS
Band13	Stand-Alone	3.75kHz	NaN	BPSK	23230	1@47	22.84	PASS
Band13	Stand-Alone	3.75kHz	NaN	QPSK	23230	1@0	22.76	PASS
Band13	Stand-Alone	3.75kHz	NaN	QPSK	23230	1@47	22.78	PASS
Band13	Stand-Alone	3.75kHz	NaN	BPSK	23279	1@0	22.63	PASS
Band13	Stand-Alone	3.75kHz	NaN	BPSK	23279	1@47	22.61	PASS
Band13	Stand-Alone	3.75kHz	NaN	QPSK	23279	1@0	22.51	PASS
Band13	Stand-Alone	3.75kHz	NaN	QPSK	23279	1@47	22.51	PASS
Band13	Stand-Alone	15kHz	NaN	BPSK	23181	1@0	22.07	PASS
Band13	Stand-Alone	15kHz	NaN	BPSK	23181	1@11	22.01	PASS
Band13	Stand-Alone	15kHz	NaN	BPSK	23181	3@3	23.28	PASS
Band13	Stand-Alone	15kHz	NaN	QPSK	23181	1@0	22.19	PASS
Band13	Stand-Alone	15kHz	NaN	QPSK	23181	1@11	22.05	PASS
Band13	Stand-Alone	15kHz	NaN	QPSK	23181	3@3	23.29	PASS
Band13	Stand-Alone	15kHz	NaN	BPSK	23230	1@0	22.02	PASS
Band13	Stand-Alone	15kHz	NaN	BPSK	23230	1@11	22.09	PASS
Band13	Stand-Alone	15kHz	NaN	BPSK	23230	3@3	23.32	PASS
Band13	Stand-Alone	15kHz	NaN	QPSK	23230	1@0	22.10	PASS

Band13	Stand-Alone	15kHz	NaN	QPSK	23230	1@11	22.12	PASS
Band13	Stand-Alone	15kHz	NaN	QPSK	23230	3@3	23.30	PASS
Band13	Stand-Alone	15kHz	NaN	BPSK	23279	1@0	22.00	PASS
Band13	Stand-Alone	15kHz	NaN	BPSK	23279	1@11	22.01	PASS
Band13	Stand-Alone	15kHz	NaN	BPSK	23279	3@3	23.28	PASS
Band13	Stand-Alone	15kHz	NaN	QPSK	23279	1@0	22.08	PASS
Band13	Stand-Alone	15kHz	NaN	QPSK	23279	1@11	22.04	PASS
Band13	Stand-Alone	15kHz	NaN	QPSK	23279	3@3	23.30	PASS
Band26	Stand-Alone	3.75kHz	NaN	BPSK	26039	1@0	23.05	PASS
Band26	Stand-Alone	3.75kHz	NaN	BPSK	26039	1@47	23.09	PASS
Band26	Stand-Alone	3.75kHz	NaN	QPSK	26039	1@0	23.05	PASS
Band26	Stand-Alone	3.75kHz	NaN	QPSK	26039	1@47	23.15	PASS
Band26	Stand-Alone	3.75kHz	NaN	BPSK	26691	1@0	23.14	PASS
Band26	Stand-Alone	3.75kHz	NaN	BPSK	26691	1@47	23.08	PASS
Band26	Stand-Alone	3.75kHz	NaN	QPSK	26691	1@0	23.01	PASS
Band26	Stand-Alone	3.75kHz	NaN	QPSK	26691	1@47	23.01	PASS
Band26	Stand-Alone	3.75kHz	NaN	BPSK	26740	1@0	23.22	PASS
Band26	Stand-Alone	3.75kHz	NaN	BPSK	26740	1@47	23.15	PASS
Band26	Stand-Alone	3.75kHz	NaN	QPSK	26740	1@0	23.15	PASS
Band26	Stand-Alone	3.75kHz	NaN	QPSK	26740	1@47	23.06	PASS
Band26	Stand-Alone	3.75kHz	NaN	BPSK	26789	1@0	23.09	PASS
Band26	Stand-Alone	3.75kHz	NaN	BPSK	26789	1@47	23.11	PASS
Band26	Stand-Alone	3.75kHz	NaN	QPSK	26789	1@0	23.08	PASS
Band26	Stand-Alone	3.75kHz	NaN	QPSK	26789	1@47	23.13	PASS
Band26	Stand-Alone	3.75kHz	NaN	BPSK	26791	1@0	23.09	PASS
Band26	Stand-Alone	3.75kHz	NaN	BPSK	26791	1@47	23.07	PASS
Band26	Stand-Alone	3.75kHz	NaN	QPSK	26791	1@0	23.08	PASS
Band26	Stand-Alone	3.75kHz	NaN	QPSK	26791	1@47	23.00	PASS
Band26	Stand-Alone	3.75kHz	NaN	BPSK	26915	1@0	23.13	PASS
Band26	Stand-Alone	3.75kHz	NaN	BPSK	26915	1@47	23.12	PASS
Band26	Stand-Alone	3.75kHz	NaN	QPSK	26915	1@0	23.10	PASS
Band26	Stand-Alone	3.75kHz	NaN	QPSK	26915	1@47	23.13	PASS
Band26	Stand-Alone	15kHz	NaN	BPSK	26691	1@0	21.59	PASS
Band26	Stand-Alone	15kHz	NaN	BPSK	26691	1@11	21.63	PASS
Band26	Stand-Alone	15kHz	NaN	BPSK	26691	3@3	22.29	PASS
Band26	Stand-Alone	15kHz	NaN	QPSK	26691	1@0	21.69	PASS
Band26	Stand-Alone	15kHz	NaN	QPSK	26691	1@11	21.69	PASS
Band26	Stand-Alone	15kHz	NaN	QPSK	26691	3@3	22.31	PASS
Band26	Stand-Alone	15kHz	NaN	BPSK	26740	1@0	21.69	PASS
Band26	Stand-Alone	15kHz	NaN	BPSK	26740	1@11	21.71	PASS
Band26	Stand-Alone	15kHz	NaN	BPSK	26740	3@3	22.30	PASS
Band26	Stand-Alone	15kHz	NaN	QPSK	26740	1@0	21.79	PASS
Band26	Stand-Alone	15kHz	NaN	QPSK	26740	1@11	21.76	PASS
Band26	Stand-Alone	15kHz	NaN	QPSK	26740	3@3	22.41	PASS
Band26	Stand-Alone	15kHz	NaN	BPSK	26789	1@0	21.77	PASS
Band26	Stand-Alone	15kHz	NaN	BPSK	26789	1@11	21.77	PASS
Band26	Stand-Alone	15kHz	NaN	BPSK	26789	3@3	22.52	PASS
Band26	Stand-Alone	15kHz	NaN	QPSK	26789	1@0	21.76	PASS
Band26	Stand-Alone	15kHz	NaN	QPSK	26789	1@11	21.78	PASS
Band26	Stand-Alone	15kHz	NaN	QPSK	26789	3@3	22.33	PASS
Band26	Stand-Alone	15kHz	NaN	BPSK	26791	1@0	21.73	PASS
Band26	Stand-Alone	15kHz	NaN	BPSK	26791	1@11	21.67	PASS
Band26	Stand-Alone	15kHz	NaN	BPSK	26791	3@3	22.30	PASS
Band26	Stand-Alone	15kHz	NaN	QPSK	26791	1@0	21.82	PASS
Band26	Stand-Alone	15kHz	NaN	QPSK	26791	1@11	21.73	PASS
Band26	Stand-Alone	15kHz	NaN	QPSK	26791	3@3	22.49	PASS
Band26	Stand-Alone	15kHz	NaN	BPSK	26915	1@0	21.70	PASS

Band26	Stand-Alone	15kHz	NaN	BPSK	26915	1@11	21.73	PASS
Band26	Stand-Alone	15kHz	NaN	BPSK	26915	3@3	22.52	PASS
Band26	Stand-Alone	15kHz	NaN	QPSK	26915	1@0	21.76	PASS
Band26	Stand-Alone	15kHz	NaN	QPSK	26915	1@11	21.75	PASS
Band26	Stand-Alone	15kHz	NaN	QPSK	26915	3@3	22.44	PASS
Band26	Stand-Alone	15kHz	NaN	BPSK	27039	1@0	21.79	PASS
Band26	Stand-Alone	15kHz	NaN	BPSK	27039	1@11	21.80	PASS
Band26	Stand-Alone	15kHz	NaN	BPSK	27039	3@3	22.12	PASS
Band26	Stand-Alone	15kHz	NaN	QPSK	27039	1@0	21.87	PASS
Band26	Stand-Alone	15kHz	NaN	QPSK	27039	1@11	21.85	PASS
Band26	Stand-Alone	15kHz	NaN	QPSK	27039	3@3	22.11	PASS

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Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result(dBm)	Verdict
Band2	1.4MHz	18607	QPSK	1	0	Low	22.70	PASS
Band2	1.4MHz	18607	QPSK	6	0	Low	22.68	PASS
Band2	1.4MHz	18607	16QAM	1	0	Low	22.64	PASS
Band2	1.4MHz	18607	16QAM	6	0	Low	22.67	PASS
Band2	1.4MHz	18900	QPSK	1	0	Low	22.43	PASS
Band2	1.4MHz	18900	QPSK	6	0	Low	22.70	PASS
Band2	1.4MHz	18900	16QAM	1	0	Low	22.23	PASS
Band2	1.4MHz	18900	16QAM	6	0	Low	22.69	PASS
Band2	1.4MHz	19193	QPSK	1	5	Low	22.42	PASS
Band2	1.4MHz	19193	QPSK	6	0	Low	22.62	PASS
Band2	1.4MHz	19193	16QAM	1	5	Low	22.05	PASS
Band2	1.4MHz	19193	16QAM	6	0	Low	22.62	PASS
Band2	3MHz	18615	QPSK	1	0	Low	22.46	PASS
Band2	3MHz	18615	QPSK	6	0	Low	22.70	PASS
Band2	3MHz	18615	16QAM	1	0	Low	22.74	PASS
Band2	3MHz	18615	16QAM	6	0	Low	22.69	PASS
Band2	3MHz	18900	QPSK	1	0	Low	22.76	PASS
Band2	3MHz	18900	QPSK	6	0	Low	22.67	PASS
Band2	3MHz	18900	16QAM	1	0	Low	22.67	PASS
Band2	3MHz	18900	16QAM	6	0	Low	22.66	PASS
Band2	3MHz	19185	QPSK	1	5	High	22.37	PASS
Band2	3MHz	19185	QPSK	6	0	High	22.63	PASS
Band2	3MHz	19185	16QAM	1	5	High	23.02	PASS
Band2	3MHz	19185	16QAM	6	0	High	22.65	PASS
Band2	5MHz	18625	QPSK	1	0	Low	22.63	PASS
Band2	5MHz	18625	QPSK	6	0	Low	22.59	PASS
Band2	5MHz	18625	16QAM	1	0	Low	23.02	PASS
Band2	5MHz	18625	16QAM	6	0	Low	22.61	PASS
Band2	5MHz	18900	QPSK	1	0	Low	22.61	PASS
Band2	5MHz	18900	QPSK	6	0	Low	22.59	PASS
Band2	5MHz	18900	16QAM	1	0	Low	22.53	PASS
Band2	5MHz	18900	16QAM	6	0	Low	22.59	PASS
Band2	5MHz	19175	QPSK	1	5	High	22.61	PASS
Band2	5MHz	19175	QPSK	3	3	High	22.63	PASS
Band2	5MHz	19175	16QAM	1	5	High	23.08	PASS
Band2	5MHz	19175	16QAM	3	3	High	22.37	PASS
Band2	10MHz	18650	QPSK	1	0	Low	22.62	PASS
Band2	10MHz	18650	QPSK	5	0	Low	22.60	PASS
Band2	10MHz	18650	16QAM	1	0	Low	23.05	PASS
Band2	10MHz	18650	16QAM	5	0	Low	22.59	PASS
Band2	10MHz	18900	QPSK	1	0	Low	22.48	PASS
Band2	10MHz	18900	QPSK	5	0	Low	22.58	PASS
Band2	10MHz	18900	16QAM	1	0	Low	23.02	PASS
Band2	10MHz	18900	16QAM	5	0	Low	22.56	PASS
Band2	10MHz	19150	QPSK	1	5	High	22.85	PASS
Band2	10MHz	19150	QPSK	5	1	High	22.56	PASS
Band2	10MHz	19150	16QAM	1	5	High	22.49	PASS
Band2	10MHz	19150	16QAM	5	1	High	22.75	PASS
Band2	15MHz	18675	QPSK	1	0	Low	22.64	PASS
Band2	15MHz	18675	QPSK	6	0	Low	22.58	PASS
Band2	15MHz	18675	16QAM	1	0	Low	23.04	PASS
Band2	15MHz	18675	16QAM	6	0	Low	22.60	PASS
Band2	15MHz	18900	QPSK	1	0	Low	22.71	PASS

Band2	15MHz	18900	QPSK	6	0	Low	22.49	PASS
Band2	15MHz	18900	16QAM	1	0	Low	22.56	PASS
Band2	15MHz	18900	16QAM	6	0	Low	22.55	PASS
Band2	15MHz	19125	QPSK	1	5	High	22.41	PASS
Band2	15MHz	19125	QPSK	6	0	High	22.38	PASS
Band2	15MHz	19125	16QAM	1	5	High	23.14	PASS
Band2	15MHz	19125	16QAM	6	0	High	22.52	PASS
Band2	20MHz	18700	QPSK	1	0	Low	22.62	PASS
Band2	20MHz	18700	QPSK	6	0	Low	22.68	PASS
Band2	20MHz	18700	16QAM	1	0	Low	23.05	PASS
Band2	20MHz	18700	16QAM	6	0	Low	22.60	PASS
Band2	20MHz	18900	QPSK	1	0	Low	22.48	PASS
Band2	20MHz	18900	QPSK	6	0	Low	22.48	PASS
Band2	20MHz	18900	16QAM	1	0	Low	22.97	PASS
Band2	20MHz	18900	16QAM	6	0	Low	22.58	PASS
Band2	20MHz	19100	QPSK	1	5	High	22.66	PASS
Band2	20MHz	19100	QPSK	6	0	High	22.38	PASS
Band2	20MHz	19100	16QAM	1	5	High	23.18	PASS
Band2	20MHz	19100	16QAM	6	0	High	22.58	PASS
Band4	1.4MHz	19957	QPSK	1	0	Low	22.34	PASS
Band4	1.4MHz	19957	QPSK	6	0	Low	22.29	PASS
Band4	1.4MHz	19957	16QAM	1	0	Low	22.09	PASS
Band4	1.4MHz	19957	16QAM	6	0	Low	22.10	PASS
Band4	1.4MHz	20175	QPSK	1	0	Low	22.09	PASS
Band4	1.4MHz	20175	QPSK	6	0	Low	22.05	PASS
Band4	1.4MHz	20175	16QAM	1	0	Low	22.13	PASS
Band4	1.4MHz	20175	16QAM	6	0	Low	22.15	PASS
Band4	1.4MHz	20393	QPSK	1	5	Low	22.04	PASS
Band4	1.4MHz	20393	QPSK	6	0	Low	22.07	PASS
Band4	1.4MHz	20393	16QAM	1	5	Low	22.00	PASS
Band4	1.4MHz	20393	16QAM	6	0	Low	22.30	PASS
Band4	3MHz	19965	QPSK	1	0	Low	22.19	PASS
Band4	3MHz	19965	QPSK	6	0	Low	22.14	PASS
Band4	3MHz	19965	16QAM	1	0	Low	22.07	PASS
Band4	3MHz	19965	16QAM	6	0	Low	22.17	PASS
Band4	3MHz	20175	QPSK	1	0	Low	22.21	PASS
Band4	3MHz	20175	QPSK	6	0	Low	22.17	PASS
Band4	3MHz	20175	16QAM	1	0	Low	21.94	PASS
Band4	3MHz	20175	16QAM	6	0	Low	22.08	PASS
Band4	3MHz	20385	QPSK	1	5	High	22.13	PASS
Band4	3MHz	20385	QPSK	6	0	High	22.11	PASS
Band4	3MHz	20385	16QAM	1	5	High	22.29	PASS
Band4	3MHz	20385	16QAM	6	0	High	22.37	PASS
Band4	5MHz	19975	QPSK	1	0	Low	22.21	PASS
Band4	5MHz	19975	QPSK	6	0	Low	22.38	PASS
Band4	5MHz	19975	16QAM	1	0	Low	22.29	PASS
Band4	5MHz	19975	16QAM	6	0	Low	22.28	PASS
Band4	5MHz	20175	QPSK	1	0	Low	22.11	PASS
Band4	5MHz	20175	QPSK	6	0	Low	22.47	PASS
Band4	5MHz	20175	16QAM	1	0	Low	22.37	PASS
Band4	5MHz	20175	16QAM	6	0	Low	22.06	PASS
Band4	5MHz	20375	QPSK	1	5	High	22.13	PASS
Band4	5MHz	20375	QPSK	3	3	High	22.32	PASS
Band4	5MHz	20375	16QAM	1	5	High	22.35	PASS
Band4	5MHz	20375	16QAM	3	3	High	22.21	PASS
Band4	10MHz	20000	QPSK	1	0	Low	22.43	PASS
Band4	10MHz	20000	QPSK	5	0	Low	22.18	PASS

Band4	10MHz	20000	16QAM	1	0	Low	22.24	PASS
Band4	10MHz	20000	16QAM	5	0	Low	22.12	PASS
Band4	10MHz	20175	QPSK	1	0	Low	22.27	PASS
Band4	10MHz	20175	QPSK	5	0	Low	22.23	PASS
Band4	10MHz	20175	16QAM	1	0	Low	22.32	PASS
Band4	10MHz	20175	16QAM	5	0	Low	22.30	PASS
Band4	10MHz	20350	QPSK	1	5	High	22.27	PASS
Band4	10MHz	20350	QPSK	5	1	High	22.37	PASS
Band4	10MHz	20350	16QAM	1	5	High	22.25	PASS
Band4	10MHz	20350	16QAM	5	1	High	22.34	PASS
Band4	15MHz	20025	QPSK	1	0	Low	22.16	PASS
Band4	15MHz	20025	QPSK	6	0	Low	22.39	PASS
Band4	15MHz	20025	16QAM	1	0	Low	22.14	PASS
Band4	15MHz	20025	16QAM	6	0	Low	22.35	PASS
Band4	15MHz	20175	QPSK	1	0	Low	22.14	PASS
Band4	15MHz	20175	QPSK	6	0	Low	22.08	PASS
Band4	15MHz	20175	16QAM	1	0	Low	22.03	PASS
Band4	15MHz	20175	16QAM	6	0	Low	22.26	PASS
Band4	15MHz	20325	QPSK	1	5	High	22.67	PASS
Band4	15MHz	20325	QPSK	6	0	High	22.36	PASS
Band4	15MHz	20325	16QAM	1	5	High	22.11	PASS
Band4	15MHz	20325	16QAM	6	0	High	22.25	PASS
Band4	20MHz	20050	QPSK	1	0	Low	22.03	PASS
Band4	20MHz	20050	QPSK	6	0	Low	21.86	PASS
Band4	20MHz	20050	16QAM	1	0	Low	21.95	PASS
Band4	20MHz	20050	16QAM	6	0	Low	21.92	PASS
Band4	20MHz	20175	QPSK	1	0	Low	21.52	PASS
Band4	20MHz	20175	QPSK	6	0	Low	21.83	PASS
Band4	20MHz	20175	16QAM	1	0	Low	21.85	PASS
Band4	20MHz	20175	16QAM	6	0	Low	21.92	PASS
Band4	20MHz	20300	QPSK	1	5	High	21.99	PASS
Band4	20MHz	20300	QPSK	6	0	High	21.86	PASS
Band4	20MHz	20300	16QAM	1	5	High	22.04	PASS
Band4	20MHz	20300	16QAM	6	0	High	21.81	PASS
Band5	1.4MHz	20407	QPSK	1	0	Low	22.93	PASS
Band5	1.4MHz	20407	QPSK	6	0	Low	22.81	PASS
Band5	1.4MHz	20407	16QAM	1	0	Low	22.29	PASS
Band5	1.4MHz	20407	16QAM	6	0	Low	22.80	PASS
Band5	1.4MHz	20525	QPSK	1	0	Low	22.94	PASS
Band5	1.4MHz	20525	QPSK	6	0	Low	22.76	PASS
Band5	1.4MHz	20525	16QAM	1	0	Low	22.36	PASS
Band5	1.4MHz	20525	16QAM	6	0	Low	22.84	PASS
Band5	1.4MHz	20643	QPSK	1	5	Low	23.06	PASS
Band5	1.4MHz	20643	QPSK	6	0	Low	22.62	PASS
Band5	1.4MHz	20643	16QAM	1	5	Low	23.02	PASS
Band5	1.4MHz	20643	16QAM	6	0	Low	22.79	PASS
Band5	3MHz	20415	QPSK	1	0	Low	22.80	PASS
Band5	3MHz	20415	QPSK	6	0	Low	22.82	PASS
Band5	3MHz	20415	16QAM	1	0	Low	22.27	PASS
Band5	3MHz	20415	16QAM	6	0	Low	22.82	PASS
Band5	3MHz	20525	QPSK	1	0	Low	22.58	PASS
Band5	3MHz	20525	QPSK	6	0	Low	22.76	PASS
Band5	3MHz	20525	16QAM	1	0	Low	22.99	PASS
Band5	3MHz	20525	16QAM	6	0	Low	22.78	PASS
Band5	3MHz	20635	QPSK	1	5	High	22.54	PASS
Band5	3MHz	20635	QPSK	6	0	High	22.63	PASS
Band5	3MHz	20635	16QAM	1	5	High	23.29	PASS

Band5	3MHz	20635	16QAM	6	0	High	22.64	PASS
Band5	5MHz	20425	QPSK	1	0	Low	22.69	PASS
Band5	5MHz	20425	QPSK	6	0	Low	22.50	PASS
Band5	5MHz	20425	16QAM	1	0	Low	22.33	PASS
Band5	5MHz	20425	16QAM	6	0	Low	22.50	PASS
Band5	5MHz	20525	QPSK	1	0	Low	22.67	PASS
Band5	5MHz	20525	QPSK	6	0	Low	22.74	PASS
Band5	5MHz	20525	16QAM	1	0	Low	23.03	PASS
Band5	5MHz	20525	16QAM	6	0	Low	22.74	PASS
Band5	5MHz	20625	QPSK	1	5	High	22.94	PASS
Band5	5MHz	20625	QPSK	3	3	High	22.37	PASS
Band5	5MHz	20625	16QAM	1	5	High	22.47	PASS
Band5	5MHz	20625	16QAM	3	3	High	22.44	PASS
Band5	10MHz	20450	QPSK	1	0	Low	22.82	PASS
Band5	10MHz	20450	QPSK	5	0	Low	22.67	PASS
Band5	10MHz	20450	16QAM	1	0	Low	22.53	PASS
Band5	10MHz	20450	16QAM	5	0	Low	22.51	PASS
Band5	10MHz	20525	QPSK	1	0	Low	22.53	PASS
Band5	10MHz	20525	QPSK	5	0	Low	22.45	PASS
Band5	10MHz	20525	16QAM	1	0	Low	23.12	PASS
Band5	10MHz	20525	16QAM	5	0	Low	22.68	PASS
Band5	10MHz	20600	QPSK	1	5	High	22.95	PASS
Band5	10MHz	20600	QPSK	5	1	High	22.49	PASS
Band5	10MHz	20600	16QAM	1	5	High	22.58	PASS
Band5	10MHz	20600	16QAM	5	1	High	22.48	PASS
Band12	1.4MHz	23017	QPSK	1	0	Low	22.58	PASS
Band12	1.4MHz	23017	QPSK	6	0	Low	22.94	PASS
Band12	1.4MHz	23017	16QAM	1	0	Low	22.60	PASS
Band12	1.4MHz	23017	16QAM	6	0	Low	22.84	PASS
Band12	1.4MHz	23095	QPSK	1	0	Low	22.91	PASS
Band12	1.4MHz	23095	QPSK	6	0	Low	22.69	PASS
Band12	1.4MHz	23095	16QAM	1	0	Low	22.94	PASS
Band12	1.4MHz	23095	16QAM	6	0	Low	22.78	PASS
Band12	1.4MHz	23173	QPSK	1	5	Low	22.94	PASS
Band12	1.4MHz	23173	QPSK	6	0	Low	22.74	PASS
Band12	1.4MHz	23173	16QAM	1	5	Low	22.87	PASS
Band12	1.4MHz	23173	16QAM	6	0	Low	22.93	PASS
Band12	3MHz	23025	QPSK	1	0	Low	22.66	PASS
Band12	3MHz	23025	QPSK	6	0	Low	22.98	PASS
Band12	3MHz	23025	16QAM	1	0	Low	22.62	PASS
Band12	3MHz	23025	16QAM	6	0	Low	22.80	PASS
Band12	3MHz	23095	QPSK	1	0	Low	22.94	PASS
Band12	3MHz	23095	QPSK	6	0	Low	22.69	PASS
Band12	3MHz	23095	16QAM	1	0	Low	22.89	PASS
Band12	3MHz	23095	16QAM	6	0	Low	22.94	PASS
Band12	3MHz	23165	QPSK	1	5	High	22.55	PASS
Band12	3MHz	23165	QPSK	6	0	High	22.70	PASS
Band12	3MHz	23165	16QAM	1	5	High	22.89	PASS
Band12	3MHz	23165	16QAM	6	0	High	22.89	PASS
Band12	5MHz	23035	QPSK	1	0	Low	22.74	PASS
Band12	5MHz	23035	QPSK	6	0	Low	22.50	PASS
Band12	5MHz	23035	16QAM	1	0	Low	22.71	PASS
Band12	5MHz	23035	16QAM	6	0	Low	23.07	PASS
Band12	5MHz	23095	QPSK	1	0	Low	23.08	PASS
Band12	5MHz	23095	QPSK	6	0	Low	23.15	PASS
Band12	5MHz	23095	16QAM	1	0	Low	22.65	PASS
Band12	5MHz	23095	16QAM	6	0	Low	23.15	PASS

Band12	5MHz	23155	QPSK	1	5	High	22.50	PASS
Band12	5MHz	23155	QPSK	3	3	High	23.08	PASS
Band12	5MHz	23155	16QAM	1	5	High	23.20	PASS
Band12	5MHz	23155	16QAM	3	3	High	23.02	PASS
Band12	10MHz	23060	QPSK	1	0	Low	23.38	PASS
Band12	10MHz	23060	QPSK	5	0	Low	23.10	PASS
Band12	10MHz	23060	16QAM	1	0	Low	22.86	PASS
Band12	10MHz	23060	16QAM	5	0	Low	22.87	PASS
Band12	10MHz	23095	QPSK	1	0	Low	23.09	PASS
Band12	10MHz	23095	QPSK	5	0	Low	23.10	PASS
Band12	10MHz	23095	16QAM	1	0	Low	23.14	PASS
Band12	10MHz	23095	16QAM	5	0	Low	23.41	PASS
Band12	10MHz	23130	QPSK	1	5	High	23.06	PASS
Band12	10MHz	23130	QPSK	5	1	High	23.07	PASS
Band12	10MHz	23130	16QAM	1	5	High	23.13	PASS
Band12	10MHz	23130	16QAM	5	1	High	23.04	PASS
Band13	5MHz	23205	QPSK	1	0	Low	22.79	PASS
Band13	5MHz	23205	QPSK	6	0	Low	23.12	PASS
Band13	5MHz	23205	16QAM	1	0	Low	23.10	PASS
Band13	5MHz	23205	16QAM	6	0	Low	23.03	PASS
Band13	5MHz	23230	QPSK	1	0	Low	23.15	PASS
Band13	5MHz	23230	QPSK	6	0	Low	23.09	PASS
Band13	5MHz	23230	16QAM	1	0	Low	23.12	PASS
Band13	5MHz	23230	16QAM	6	0	Low	23.14	PASS
Band13	5MHz	23255	QPSK	1	5	High	23.04	PASS
Band13	5MHz	23255	QPSK	3	3	High	23.37	PASS
Band13	5MHz	23255	16QAM	1	5	High	23.37	PASS
Band13	5MHz	23255	16QAM	3	3	High	23.27	PASS
Band13	10MHz	23230	QPSK	1	0	Low	23.29	PASS
Band13	10MHz	23230	QPSK	1	5	High	23.18	PASS
Band13	10MHz	23230	QPSK	5	0	Low	23.08	PASS
Band13	10MHz	23230	QPSK	5	1	High	23.10	PASS
Band13	10MHz	23230	16QAM	1	0	Low	23.44	PASS
Band13	10MHz	23230	16QAM	1	5	High	23.08	PASS
Band13	10MHz	23230	16QAM	5	0	Low	23.27	PASS
Band13	10MHz	23230	16QAM	5	1	High	23.18	PASS
Band26	1.4MHz	26697	QPSK	1	0	Low	22.61	PASS
Band26	1.4MHz	26697	QPSK	6	0	Low	22.33	PASS
Band26	1.4MHz	26697	16QAM	1	0	Low	21.83	PASS
Band26	1.4MHz	26697	16QAM	6	0	Low	22.42	PASS
Band26	1.4MHz	26740	QPSK	1	0	Low	22.22	PASS
Band26	1.4MHz	26740	QPSK	6	0	Low	22.51	PASS
Band26	1.4MHz	26740	16QAM	1	0	Low	22.78	PASS
Band26	1.4MHz	26740	16QAM	6	0	Low	22.32	PASS
Band26	1.4MHz	26783	QPSK	1	5	Low	22.68	PASS
Band26	1.4MHz	26783	QPSK	6	0	Low	22.42	PASS
Band26	1.4MHz	26783	16QAM	1	5	Low	22.04	PASS
Band26	1.4MHz	26783	16QAM	6	0	Low	22.41	PASS
Band26	1.4MHz	26797	QPSK	1	0	Low	22.72	PASS
Band26	1.4MHz	26797	QPSK	6	0	Low	22.47	PASS
Band26	1.4MHz	26797	16QAM	1	0	Low	21.92	PASS
Band26	1.4MHz	26797	16QAM	6	0	Low	22.36	PASS
Band26	1.4MHz	26915	QPSK	1	0	Low	22.21	PASS
Band26	1.4MHz	26915	QPSK	6	0	Low	22.36	PASS
Band26	1.4MHz	26915	16QAM	1	0	Low	22.43	PASS
Band26	1.4MHz	26915	16QAM	6	0	Low	22.36	PASS
Band26	1.4MHz	27033	QPSK	1	5	Low	22.34	PASS

Band26	1.4MHz	27033	QPSK	6	0	Low	22.49	PASS
Band26	1.4MHz	27033	16QAM	1	5	Low	23.12	PASS
Band26	1.4MHz	27033	16QAM	6	0	Low	22.41	PASS
Band26	3MHz	26705	QPSK	1	0	Low	22.41	PASS
Band26	3MHz	26705	QPSK	6	0	Low	22.31	PASS
Band26	3MHz	26705	16QAM	1	0	Low	22.82	PASS
Band26	3MHz	26705	16QAM	6	0	Low	22.30	PASS
Band26	3MHz	26740	QPSK	1	0	Low	22.60	PASS
Band26	3MHz	26740	QPSK	6	0	Low	22.44	PASS
Band26	3MHz	26740	16QAM	1	0	Low	22.42	PASS
Band26	3MHz	26740	16QAM	6	0	Low	22.44	PASS
Band26	3MHz	26775	QPSK	1	5	High	22.93	PASS
Band26	3MHz	26775	QPSK	6	0	High	22.36	PASS
Band26	3MHz	26775	16QAM	1	5	High	22.09	PASS
Band26	3MHz	26775	16QAM	6	0	High	22.35	PASS
Band26	3MHz	26805	QPSK	1	0	Low	22.47	PASS
Band26	3MHz	26805	QPSK	6	0	Low	22.38	PASS
Band26	3MHz	26805	16QAM	1	0	Low	21.88	PASS
Band26	3MHz	26805	16QAM	6	0	Low	22.45	PASS
Band26	3MHz	26915	QPSK	1	0	Low	22.17	PASS
Band26	3MHz	26915	QPSK	6	0	Low	22.44	PASS
Band26	3MHz	26915	16QAM	1	0	Low	22.52	PASS
Band26	3MHz	26915	16QAM	6	0	Low	22.43	PASS
Band26	3MHz	27025	QPSK	1	5	High	22.74	PASS
Band26	3MHz	27025	QPSK	6	0	High	22.40	PASS
Band26	3MHz	27025	16QAM	1	5	High	22.04	PASS
Band26	3MHz	27025	16QAM	6	0	High	22.39	PASS
Band26	5MHz	26715	QPSK	1	0	Low	22.19	PASS
Band26	5MHz	26715	QPSK	6	0	Low	22.27	PASS
Band26	5MHz	26715	16QAM	1	0	Low	22.85	PASS
Band26	5MHz	26715	16QAM	6	0	Low	22.27	PASS
Band26	5MHz	26740	QPSK	1	0	Low	22.56	PASS
Band26	5MHz	26740	QPSK	6	0	Low	22.23	PASS
Band26	5MHz	26740	16QAM	1	0	Low	22.09	PASS
Band26	5MHz	26740	16QAM	6	0	Low	22.23	PASS
Band26	5MHz	26765	QPSK	1	5	High	22.46	PASS
Band26	5MHz	26765	QPSK	3	3	High	22.39	PASS
Band26	5MHz	26765	16QAM	1	5	High	21.88	PASS
Band26	5MHz	26765	16QAM	3	3	High	22.16	PASS
Band26	5MHz	26815	QPSK	1	0	Low	22.60	PASS
Band26	5MHz	26815	QPSK	6	0	Low	22.32	PASS
Band26	5MHz	26815	16QAM	1	0	Low	22.17	PASS
Band26	5MHz	26815	16QAM	6	0	Low	22.34	PASS
Band26	5MHz	26915	QPSK	1	0	Low	22.35	PASS
Band26	5MHz	26915	QPSK	6	0	Low	22.32	PASS
Band26	5MHz	26915	16QAM	1	0	Low	22.95	PASS
Band26	5MHz	26915	16QAM	6	0	Low	22.34	PASS
Band26	5MHz	27015	QPSK	1	5	High	22.70	PASS
Band26	5MHz	27015	QPSK	3	3	High	22.27	PASS
Band26	5MHz	27015	16QAM	1	5	High	22.24	PASS
Band26	5MHz	27015	16QAM	3	3	High	22.20	PASS
Band26	10MHz	26740	QPSK	1	0	Low	22.17	PASS
Band26	10MHz	26740	QPSK	1	5	High	22.27	PASS
Band26	10MHz	26740	QPSK	5	0	Low	22.19	PASS
Band26	10MHz	26740	QPSK	5	1	High	22.19	PASS
Band26	10MHz	26740	16QAM	1	0	Low	22.83	PASS
Band26	10MHz	26740	16QAM	1	5	High	22.22	PASS

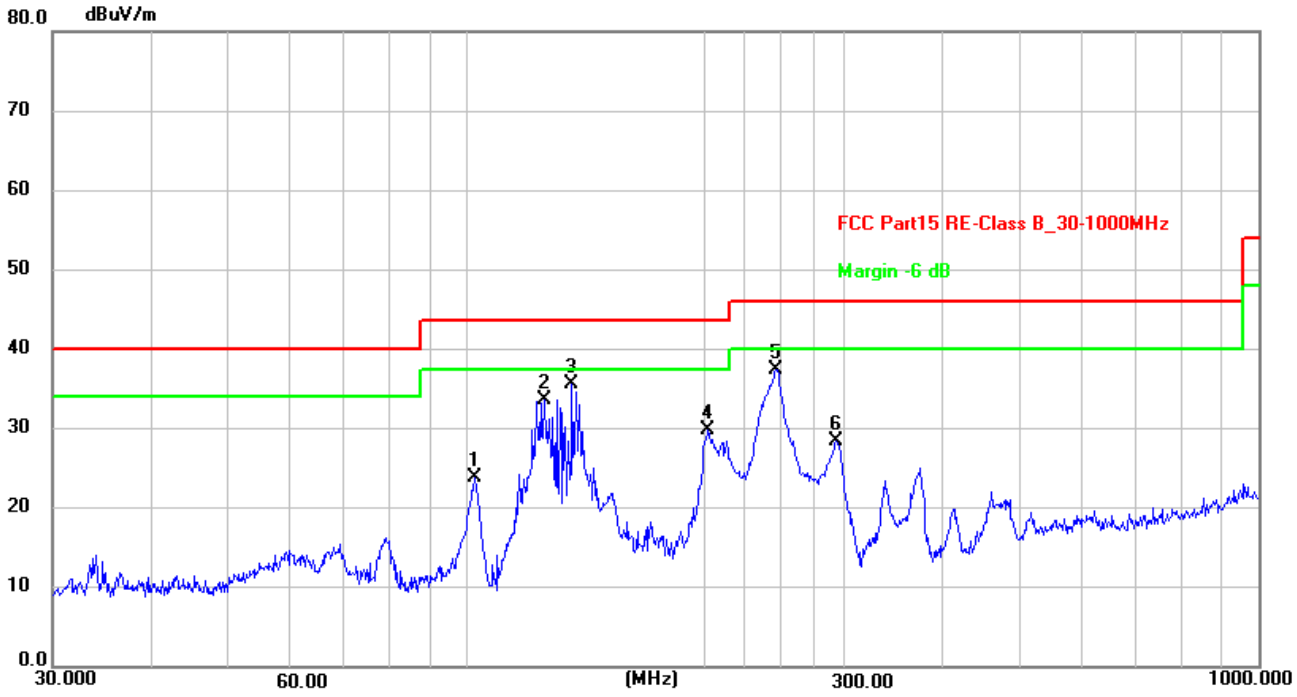
Band26	10MHz	26740	16QAM	5	0	Low	22.52	PASS
Band26	10MHz	26740	16QAM	5	1	High	22.59	PASS
Band26	10MHz	26840	QPSK	1	0	Low	22.64	PASS
Band26	10MHz	26840	QPSK	5	0	Low	22.39	PASS
Band26	10MHz	26840	16QAM	1	0	Low	22.25	PASS
Band26	10MHz	26840	16QAM	5	0	Low	22.33	PASS
Band26	10MHz	26915	QPSK	1	0	Low	22.28	PASS
Band26	10MHz	26915	QPSK	5	0	Low	22.22	PASS
Band26	10MHz	26915	16QAM	1	0	Low	22.77	PASS
Band26	10MHz	26915	16QAM	5	0	Low	22.48	PASS
Band26	10MHz	26990	QPSK	1	5	High	22.56	PASS
Band26	10MHz	26990	QPSK	5	1	High	22.31	PASS
Band26	10MHz	26990	16QAM	1	5	High	22.36	PASS
Band26	10MHz	26990	16QAM	5	1	High	22.32	PASS
Band26	15MHz	26865	QPSK	1	0	Low	22.69	PASS
Band26	15MHz	26865	QPSK	6	0	Low	22.34	PASS
Band26	15MHz	26865	16QAM	1	0	Low	22.19	PASS
Band26	15MHz	26865	16QAM	6	0	Low	22.34	PASS
Band26	15MHz	26915	QPSK	1	0	Low	22.26	PASS
Band26	15MHz	26915	QPSK	6	0	Low	22.36	PASS
Band26	15MHz	26915	16QAM	1	0	Low	22.87	PASS
Band26	15MHz	26915	16QAM	6	0	Low	22.34	PASS
Band26	15MHz	26965	QPSK	1	5	High	22.88	PASS
Band26	15MHz	26965	QPSK	6	0	High	22.41	PASS
Band26	15MHz	26965	16QAM	1	5	High	22.33	PASS
Band26	15MHz	26965	16QAM	6	0	High	22.41	PASS

Table of Contents

1. Co-located Radiated Spurious Emissions

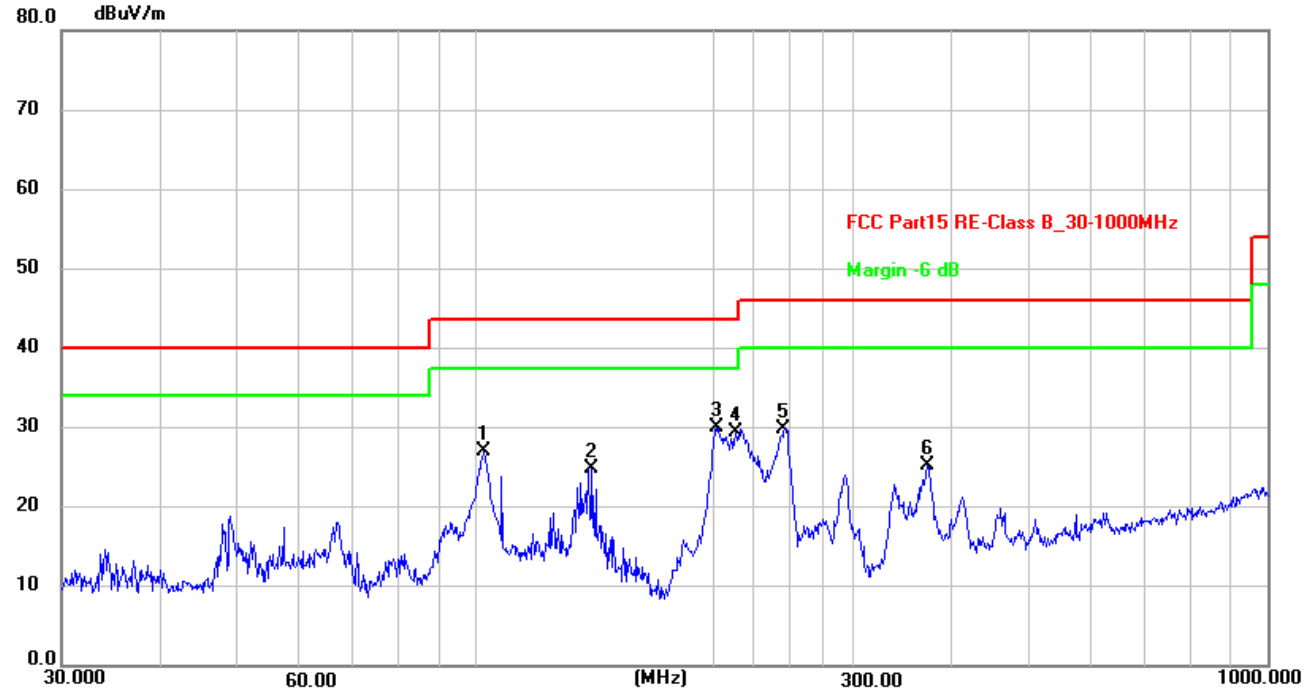
Only the worst configuration mode are reported. The emissions exceed the limit are fundamental emissions.

30MHz - 1GHz



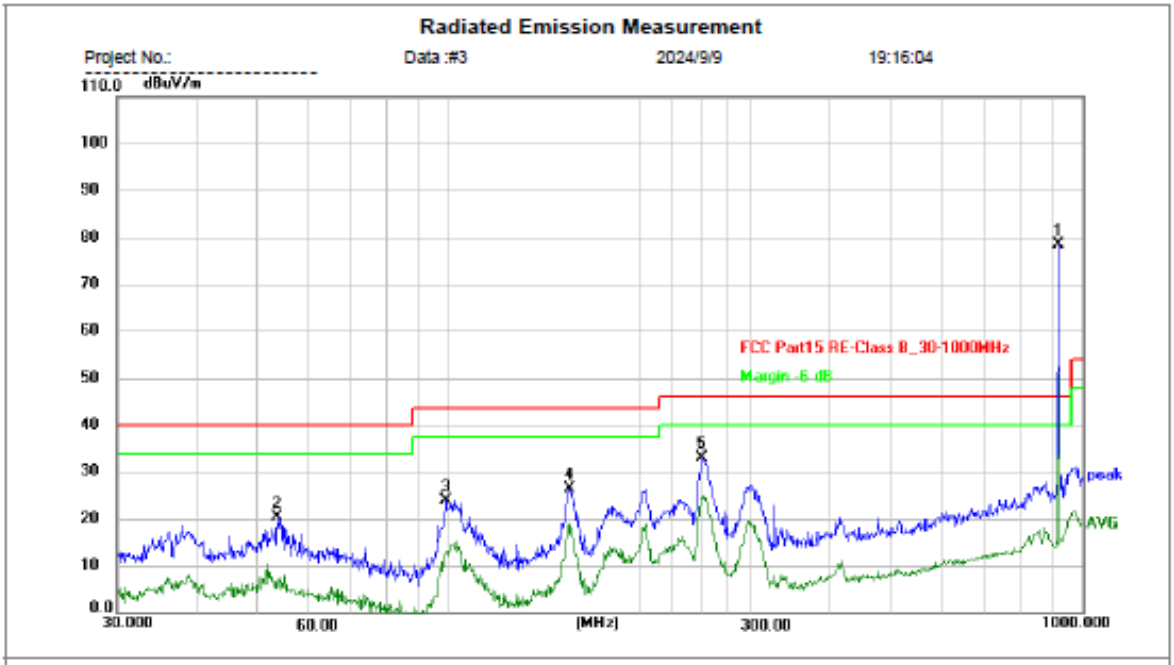
Site:		**Antenna:Horizontal**	**Temperature(℃):23(℃)**
Limit:	**FCC Part15 RE-Class B_30-1000MHz**		**Humidity(%):53%**
EUT:	**Quarterback Gateway**	**Test Time:**	**2024/9/27 15:39:25**
M/N.:	**Gateway**	**Power Rating:**	**AC120V/60Hz**
Mode:	**Bluetooth+4G+915MHz**	**Test Engineer:**	**Bosco**
Note:			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	102.3596	57.02	-33.27	23.75	43.50	-19.75	peak	200	172
2	125.4457	65.13	-31.54	33.59	43.50	-9.91	peak	200	343
3 *	135.9822	65.66	-30.08	35.58	43.50	-7.92	peak	200	0
4	202.1005	62.32	-32.53	29.79	43.50	-13.71	peak	200	307
5	246.8149	68.07	-30.57	37.50	46.00	-8.50	peak	200	316
6	293.0842	57.10	-28.67	28.43	46.00	-17.57	peak	200	13



Site:		**Antenna:Vertical**	**Temperature(℃):23(℃)**
Limit:	**FCC Part15 RE-Class B_30-1000MHz**		**Humidity(%):53%**
EUT:	**Quarterback Gateway**	**Test Time:**	**2024/9/27 15:41:14**
M/N.:	**Gateway**	**Power Rating:**	**AC120V/60Hz**
Mode:	**Bluetooth+4G+915MHz**	**Test Engineer:**	**Bosco**
Note:			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	102.3597	60.29	-33.27	27.02	43.50	-16.48	peak	100	351
2	140.3421	54.58	-29.66	24.92	43.50	-18.58	peak	100	251
3 *	202.1005	62.55	-32.53	30.02	43.50	-13.48	peak	100	106
4	213.0151	62.26	-32.85	29.41	43.50	-14.09	peak	100	88
5	245.9509	60.39	-30.54	29.85	46.00	-16.15	peak	100	337
6	372.0045	52.14	-26.88	25.26	46.00	-20.74	peak	100	165



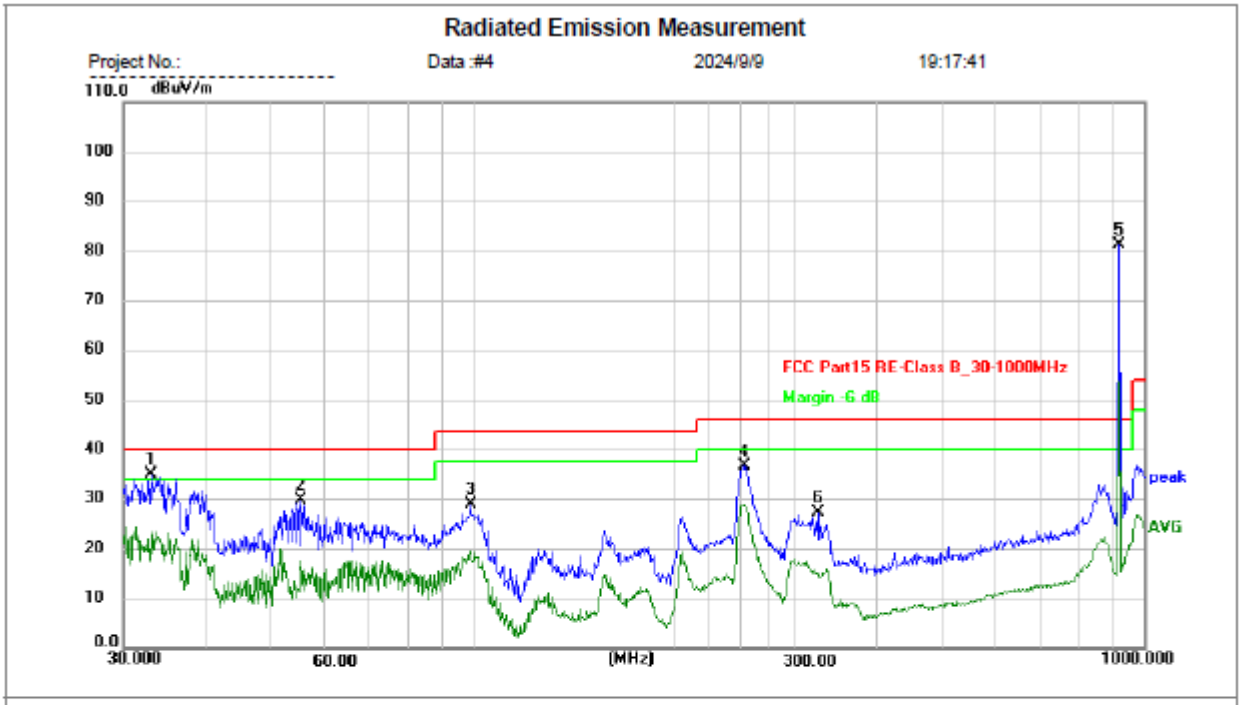
Site
Limit: FCC Part15 RE-Class B_30-1000MHz
EUT: Quarterback Gateway
M/N: T11013310
Mode: NBIOT+WIFI+915M
Note:

Polarization: *Horizontal*
Power: Full battery
Distance: 3 m

Temperature: 22 ℃
Humidity: 47 %RH

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	916.0687	95.26	-16.69	78.57	46.00	32.57	peak	150	360	F	
2	53.6932	49.45	-29.04	20.41	40.00	-19.59	peak	150	360	P	
3	98.8326	57.79	-33.72	24.07	43.50	-19.43	peak	150	360	P	
4	155.3644	55.46	-28.93	26.53	43.50	-16.97	peak	150	360	P	
5	251.1804	63.80	-30.67	33.13	46.00	-12.87	peak	150	360	P	

Field strength exceeds the limit is fundamental emission.



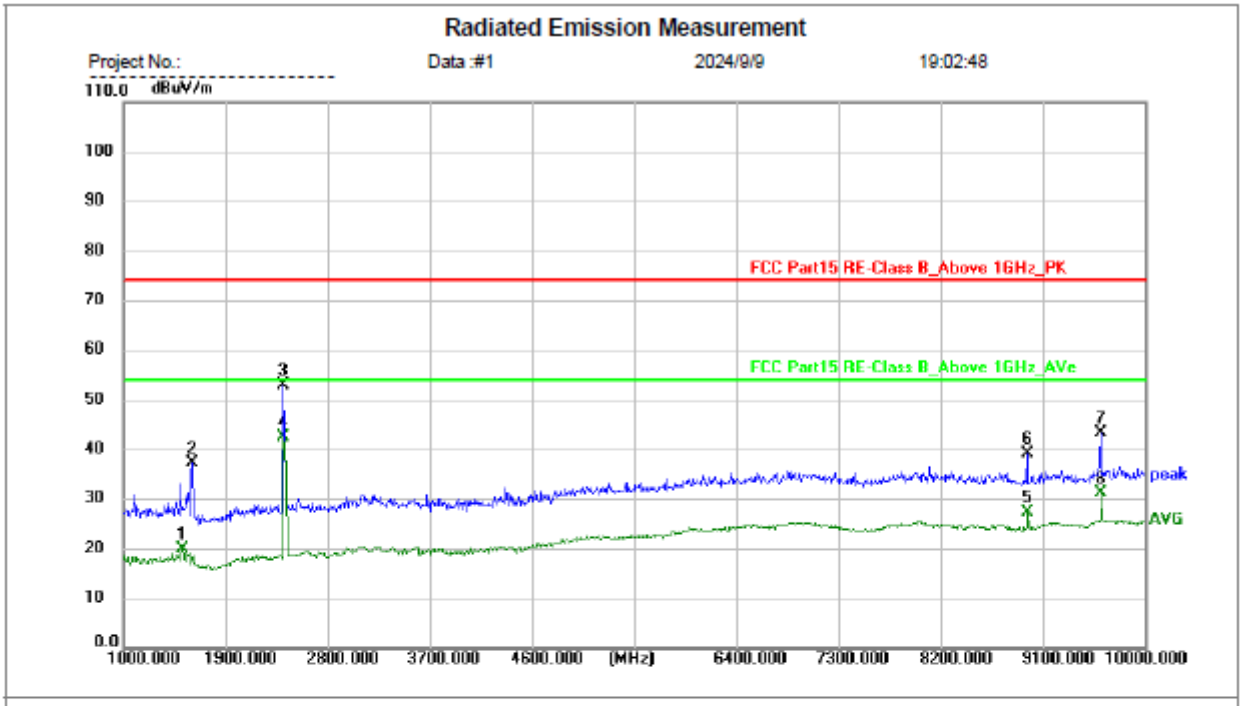
Site
Limit: FCC Part15 RE-Class B_30-1000MHz
EUT: Quarterback Gateway
M/N: T11013310
Mode: NBIOT+WIFI+915M
Note:

Polarization: *Vertical*
Power: Full battery
Distance: 3 m

Temperature: 22 ℃
Humidity: 47 %RH

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 !	32.9791	64.83	-29.67	35.16	40.00	-4.84	peak	150	360	P	
2	55.2207	58.84	-28.90	29.94	40.00	-10.06	peak	150	360	P	
3	98.8326	62.60	-33.72	28.88	43.50	-14.62	peak	150	360	P	
4	252.9482	67.34	-30.66	36.68	46.00	-9.32	peak	150	360	P	
5 *	916.0687	97.82	-16.69	81.13	46.00	35.13	peak	150	360	F	
6	326.7395	55.03	-27.72	27.31	46.00	-18.69	peak	150	360	P	

Field strength exceeds the limit is fundamental emission.

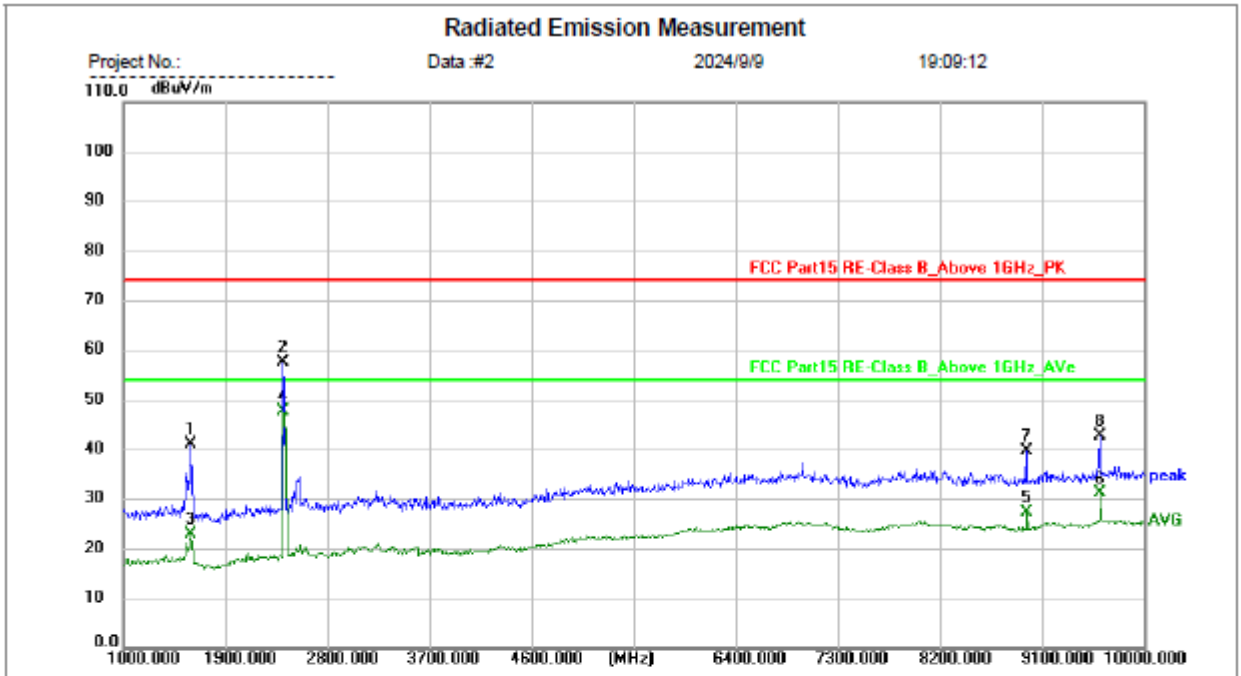


Site
Limit: FCC Part15 RE-Class B_Above 1GHz_PK
EUT: Quarterback Gateway
M/N: T11013310
Mode: NBIOT+WIFI+915M
Note:

Polarization: *Horizontal*
Power: Full battery
Distance: 3 m

Temperature: 22 ℃
Humidity: 47 %RH

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	1522.000	45.82	-25.80	20.02	54.00	-33.98	AVG	150	360	P	
2	1603.000	63.22	-26.00	37.22	74.00	-36.78	peak	150	360	P	
3	2404.000	76.46	-23.58	52.88	74.00	-21.12	peak	150	360	P	
4 *	2413.000	66.03	-23.54	42.49	54.00	-11.51	AVG	150	360	P	
5	8965.000	38.70	-11.25	27.45	54.00	-26.55	AVG	150	360	P	
6	8956.000	50.45	-11.27	39.18	74.00	-34.82	peak	150	360	P	
7	9604.000	54.23	-10.93	43.30	74.00	-30.70	peak	150	360	P	
8	9613.000	42.10	-10.93	31.17	54.00	-22.83	AVG	150	360	P	



Site
Limit: FCC Part15 RE-Class B_Above 1GHz_PK
EUT: Quarterback Gateway
M/N: T11013310
Mode: NBIOT+WIFI+915M
Note:

Polarization: *Vertical*
Power: Full battery
Distance: 3 m

Temperature: 22 ℃
Humidity: 47 %RH

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	1594.000	66.98	-25.98	41.00	74.00	-33.00	peak	150	360	P	
2	2404.000	81.14	-23.58	57.56	74.00	-16.44	peak	150	360	P	
3	1594.000	48.88	-25.98	22.90	54.00	-31.10	AVG	150	360	P	
4 *	2413.000	71.20	-23.54	47.66	54.00	-6.34	AVG	150	360	P	
5	8965.000	38.49	-11.25	27.24	54.00	-26.76	AVG	150	360	P	
6	9613.000	42.12	-10.93	31.19	54.00	-22.81	AVG	150	360	P	
7	8956.000	50.93	-11.27	39.66	74.00	-34.34	peak	150	360	P	
8	9604.000	53.57	-10.93	42.64	74.00	-31.36	peak	150	360	P	