RF MEASUREMENT REPORT

FCC ID:	2AQ8LPPA1
Application:	Parsyl
Product:	Parsyl Passport
Model No.:	PPA1
Brand Name:	Parsyl
FCC Rule Part(s):	Part 2, 22 (H), 24 (E), 27, 90(S)
Test Procedure(s):	ANSI C63.26: 2015
Result:	Complies
Test Date:	2022-03-19 ~ 2022-07-13

Reviewed By: Sunny Sun

Approved By: Robin Wu

ACCREDITED
TESTING LABORATORY
CERTIFICATE #3628.01

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.

Revision History

Report No.	Version	Description	Issue Date	Note
2203RSU047-U1	Rev. 01	Initial Report	2022-07-31	Valid

CONTENTS

1. General Information

1.1. Applicant

Parsyl

2825 Larimer Street, Denver CO 80205 USA

1.2. Manufacturer

Parsyl

2825 Larimer Street, Denver CO 80205 USA

1.3. Testing Facility

☒	**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:	☐R-20025	☐G-20034	☐C-20020	☐T-20020
		☐R-20141	☐G-20134	☐C-20103	☐T-20104
☐	**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		
☐	**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	Parsyl Passport
Model No.	PPA1
IMEI	864200052679751; 864200052648236
GSM Specification	GSM850, PCS1900
Cat M Specification	Band 2, 4, 5, 12, 13, 25, 26, 66
NB-IoT Specification	Band 2, 4, 5, 12, 13, 25, 66, 71
Wi-Fi Specification	802.11b/g/n
Bluetooth Specification	v5.0 single mode for BLE only
Antenna Information	Refer to section 1.6
Operating Temperature	-30°C ~ +55°C
Accessories	
AC/DC Adapter	Model: MKE-1202000DEXD Input: 100-240V ~ 50/60Hz, 0.8A Output: 12.0V⎓2A, 24W
Integrated License Modular Information	
Manufacturer	Quectel Wireless Solutions Co., Ltd
FCC ID	XMR201910BG95M3
Model No.	BG95-M3
Integrated Wi-Fi Modular Information	
Manufacturer	ESPRESSIF SYSTEMS (SHANGHAI) PTE LTD
FCC ID	2AC7Z-ESPWROOM32
Model No.	ESP-WROOM-32

Remark:

1. The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.
2. This report is based on the modular certification FCC ID “XMR201910BG95M3” to evaluate the radiated spurious emissions.

1.5. Radio Specification under Test

GSM Band Frequency Range	
FDD T_X Frequency Range	GSM 850: 824 ~ 849 MHz; PCS 1900: 1850 ~ 1910 MHz
FDD R_X Frequency Range	GSM 850: 869 ~ 894 MHz; PCS 1900: 1930 ~ 1990 MHz
Modulation	GMSK, 8PSK
Cat M Band Frequency Range	
FDD T_X Frequency Range	Band 2: 1850 ~ 1910 MHz; Band 4: 1710 ~ 1755 MHz Band 5: 824 ~ 849 MHz; Band 12: 699 ~ 716 MHz Band 13: 777 ~ 787 MHz; Band 25: 1850 ~ 1915 MHz; Band 26: 814 ~ 849 MHz; Band 66: 1710 ~ 1780 MHz
FDD R_X Frequency Range	Band 2: 1930 ~ 1990 MHz; Band 4: 2110 ~ 2155 MHz Band 5: 869 ~ 894 MHz; Band 12: 729 ~ 746 MHz Band 13: 746 ~ 756 MHz； Band 25: 1930 ~ 1995 MHz; Band 26: 859 ~ 894 MHz； Band 66: 2110 ~ 2200 MHz
Modulation	QPSK, 16QAM
NB-IoT Band Frequency Range	
FDD T_X Frequency Range	Band 2: 1850 ~ 1910 MHz; Band 4: 1710 ~ 1755 MHz Band 5: 824 ~ 849 MHz; Band 12: 699 ~ 716 MHz Band 13: 777 ~ 787 MHz; Band 25: 1850 ~ 1915 MHz; Band 66: 1710 ~ 1780 MHz; Band 71: 663 ~ 698 MHz
FDD R_X Frequency Range	Band 2: 1930 ~ 1990 MHz; Band 4: 2110 ~ 2155 MHz Band 5: 869 ~ 894 MHz; Band 12: 729 ~ 746 MHz Band 13: 746 ~ 756 MHz； Band 25: 1930 ~ 1995 MHz; Band 66: 2110 ~ 2200 MHz; Band 71: 617 ~ 652 MHz
Modulation	BPSK, QPSK

1.6. Antennas Details

Radio Spec.	Antenna Type	Frequency Band (MHz)	Antenna Gain (dBi)
2.4G Wi-Fi	PCB Antenna	2400 ~ 2483.5	2
Bluetooth	Dipole Antenna	2400 ~ 2483.5	2.5
CAT M / NB-IoT Band 2/25	Dipole Antenna	1850 ~ 1915	2.8
CAT M / NB-IoT Band 4/66	Dipole Antenna	1710 ~ 1780	0.4
CAT M / NB-IoT / GSM Band 5	Dipole Antenna	824 ~ 849	-0.2
CAT M Band 26	Dipole Antenna	814 ~ 849	-0.2
CAT M / NB-IoT Band 12	Dipole Antenna	699 ~ 716	-4.5
CAT M / NB-IoT Band 13	Dipole Antenna	746 ~ 756	-4.5
NB-IoT Band 71	Dipole Antenna	617 ~ 652	-4.5

1.7. Test Methodology

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

- ANSI C63.26:2015
- FCC CFR 47 Part 2, Part 22, Part 24, Part 27, Part 90
- FCC KDB 971168 D01 v03r01: Power Meas License Digital Systems
- FCC KDB 971168 D02 v02r01: Misc Rev Approv License Devices
- FCC KDB 412172 D01 v01r01: Determining ERP and EIRP

1.8. Device Capabilities

This device contains the following capabilities:

Working on Cat M Band 2, 4, 5, 12, 13, 25, 26, 66; NB-IoT Band 2, 4, 5, 12, 13, 25, 66, 71.

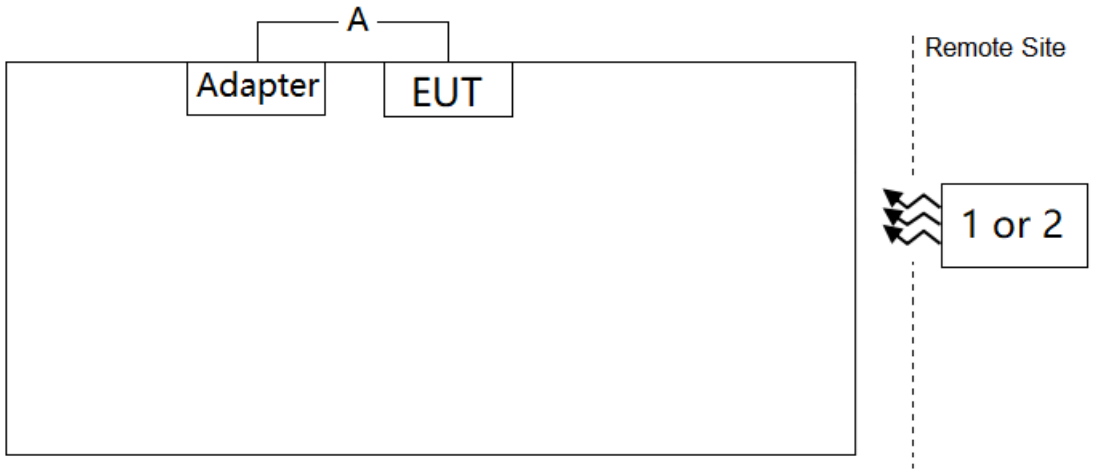
Band 66 (1710 ~ 1780 MHz) overlaps the entire frequency range of Band 4 (1710 ~ 1755 MHz). Therefore, test data provided in this report covers Band 4 as well as Band 66.

Band 25 (1850 ~ 1915 MHz) overlaps the entire frequency range of Band 2 (1850 ~ 1910 MHz). Therefore, test data provided in this report covers Band 2 as well as Band 25.

Band 26 (814 ~ 849 MHz) overlaps the entire frequency range of Band 5 (824 ~ 849 MHz). Therefore, test data provided in this report covers Band 5 as well as Band 26.

2. Test Configuration

2.1. Test System Connection Diagram



No.	Cable Type	Cable Spec.	Length
A	Power Cable	unshielding	1.0m
Product		Manufacturer	Model No.
1	Radio Communication Analyzer	Anritsu	MT8821C
2	Communication Tester	R&S	CMW500

2.2. Test Environment Condition

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

3. Measuring Instrument

Instrument Name	Manufacturer	Model No.	Asset No.	Cali. Interval	Cal. Due Date	Test Site
Preamplifier	Schwarzbeck	BBV 9721	MRTSUE06121	1 year	2022-06-07	SIP-AC3
Preamplifier	Schwarzbeck	BBV 9721	MRTSUE06121	1 year	2023-06-08	SIP-AC3
Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE06598	1 year	2022-11-09	SIP-AC3
Horn Antenna	R&S	HF907	MRTSUE06611	1 year	2022-09-12	SIP-AC3
Thermohygrometer	testo	608-H1	MRTSUE06619	1 year	2022-11-02	SIP-AC3
Thermohygrometer	testo	608-H1	MRTSUE06622	1 year	2022-11-28	SIP-AC3
Preamplifier	EMCI	EMC012645SE	MRTSUE06642	1 year	2023-01-13	SIP-AC3
TRILOG Antenna	Schwarzbeck	VULB 9168	MRTSUE06646	1 year	2022-08-26	SIP-AC3
Anechoic Chamber	RIKEN	SIP-AC3	MRTSUE06782	1 year	2022-12-23	SIP-AC3
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2022-12-29	WZ-AC1
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06023	1 year	2022-09-16	WZ-AC1
Preamplifier	Agilent	83017A	MRTSUE06076	1 year	2022-11-12	WZ-AC1
TRILOG Antenna	Schwarzbeck	VULB 9168	MRTSUE06172	1 year	2022-06-20	WZ-AC1
TRILOG Antenna	Schwarzbeck	VULB 9168	MRTSUE06172	1 year	2023-06-21	WZ-AC1
Anechoic Chamber	TDK	WZ-AC1	MRTSUE06212	1 year	2022-04-20	WZ-AC1
Anechoic Chamber	TDK	WZ-AC1	MRTSUE06212	1 year	2023-04-21	WZ-AC1
Thermohygrometer	testo	608-H1	MRTSUE06403	1 year	2023-06-05	WZ-AC1
Thermohygrometer	testo	608-H1	MRTSUE06403	1 year	2023-06-06	WZ-AC1
Signal Analyzer	Keysight	N9010B	MRTSUE06607	1 year	2022-12-29	WZ-AC1
Thermohygrometer	testo	Testo 608-H1	MRTSUE11039	1 year	2022-11-11	WZ-AC1
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2022-10-28	WZ-AC1
Horn Antenna	ETS	3117	MRTSUE06257	1 year	2022-09-25	WZ-AC1
Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE06597	1 year	2022-12-01	WZ-AC1
Preamplifier	EMCI	EMC184045SE	MRTSUE06640	1 year	2023-01-13	WZ-AC1
Preamplifier	EMCI	EMC051845SE	MRTSUE06987	1 year	2022-09-09	WZ-AC1
TRILOG Antenna	Schwarzbeck	VULB 9162	MRTSUE06022	1 year	2022-05-19	WZ-AC2
TRILOG Antenna	Schwarzbeck	VULB 9162	MRTSUE06022	1 year	2023-05-20	WZ-AC2
EMI Test Receiver	Agilent	N9038A	MRTSUE06125	1 year	2022-06-03	WZ-AC2
EMI Test Receiver	Agilent	N9038A	MRTSUE06125	1 year	2023-06-04	WZ-AC2
Thermohygrometer	Mingle	ETH529	MRTSUE06170	1 year	2022-12-01	WZ-AC2
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06171	1 year	2022-10-21	WZ-AC2
Preamplifier	Schwarzbeck	BBV 9718	MRTSUE06176	1 year	2022-11-12	WZ-AC2
Anechoic Chamber	RIKEN	WZ-AC2	MRTSUE06213	1 year	2022-04-20	WZ-AC2
Anechoic Chamber	RIKEN	WZ-AC2	MRTSUE06213	1 year	2023-04-21	WZ-AC2
Thermohygrometer	testo	Testo 608-H1	MRTSUE11038	1 year	2022-11-11	WZ-AC2

Software	Version	Function
EMI Software	V3.0.0	EMI Test Software
Controller_MF 7802	2.03C	RE Antenna & Turntable
Controller_MF 7802	1.02	RE Antenna & Turntable

4. Decision Rules and Measurement Uncertainty

4.1. 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.)

4.2. 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 Spurious Emissions
Measurement Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): Horizontal: 9kHz ~ 300MHz: 5.04dB 300MHz ~ 1GHz: 4.95dB 1GHz ~ 40GHz: 6.40dB Vertical: 9kHz ~ 300MHz: 5.24dB 300MHz ~ 1GHz: 6.03dB 1GHz ~ 40GHz: 6.40dB

5. Test Result

5.1. Summary

FCC Part Section(s)	Test Description	Test Condition	Verdict
2.1053, 22.917(a), 24.238(a) 27.53(c) (f) (g) (h), 90.691(a)	Spurious Emission (Band 2/25, 4/66, 5/26, 12, 13, 71)	Radiated	Pass

Remark:

1. 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.
2. For radiated emission tests, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst-case emissions.

5.2. Radiated Spurious Emissions Measurement

5.2.1. Test Limit

The power of any emission outside of theauthorized operating frequency ranges must be attenuated below the transmitting power (P) by a factorof at least 43 + 10 log(P) dB. The emission limit equal to -13dBm.

For Band 13, For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz (-40dBm/MHz) equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW (-50dBm) EIRP for discrete emissions of less than 700 Hz bandwidth.

E (dBμV/m) = EIRP (dBm) - 20 log D + 104.8; where D is the measurement distance in meters. The emission limit equal to 82.3dBμV/m or 55.3dBμV/m.

5.2.2. Test Procedure

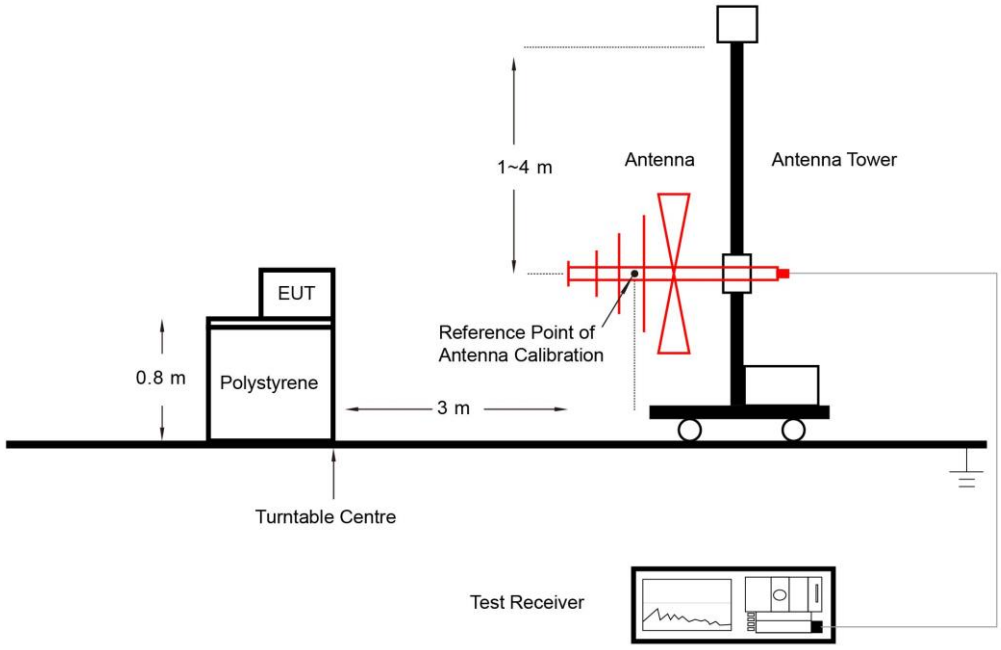
ANSI C63.26-2015 - Section 5.2.7 & 5.5

5.2.3. Test Setting

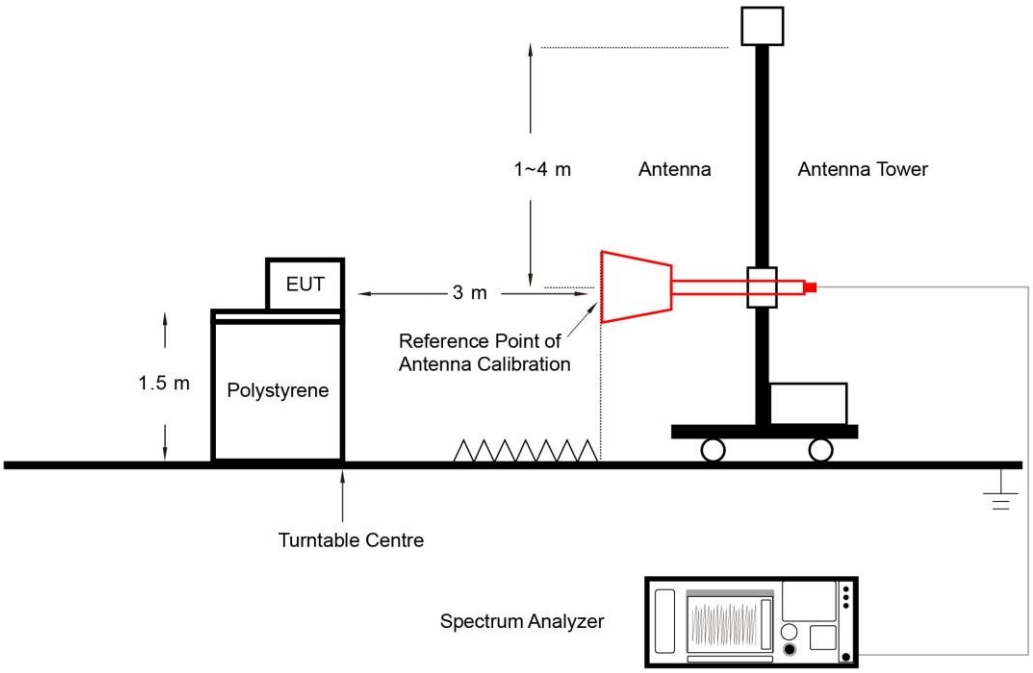
1. RBW = 1MHz
2. VBW ≥ 3*RBW
3. Sweep time ≥ 10 × (number of points in sweep) × (transmission symbol period)
4. Detector = Peak
5. Trace mode = max hold
6. The trace was allowed to stabilize

5.2.4. Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



5.2.5. Test Result

Refer to Appendix A.1.

Appendix A - Test Result

A.1 Radiated Spurious Emissions Test Result

Test Site	WZ-AC2	Test Engineer	Hyde Yu
Test Date	2022-03-20 ~ 2022-06-08	Test Band	NB-IoT Band 2/25, 1RB, QPSK

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
258.9	7.6	16.6	24.2	82.3	-58.1	Peak	Horizontal
918.5	4.3	29.8	34.1	82.3	-48.2	Peak	Horizontal
124.1	15.3	15.7	31.0	82.3	-51.3	Peak	Vertical
908.3	6.8	29.5	36.3	82.3	-46.0	Peak	Vertical
3218.5	44.1	-1.1	43.0	82.3	-39.3	Peak	Horizontal
13316.5	36.7	13.5	50.2	82.3	-32.1	Peak	Horizontal
3703.0	41.0	-0.1	40.9	82.3	-41.4	Peak	Vertical
13826.5	36.7	13.5	50.2	82.3	-32.1	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB).							

Test Site	WZ-AC2	Test Engineer	Hyde Yu
Test Date	2022-03-20 ~ 2022-06-08	Test Band	NB-IoT Band 4/66, 1RB, QPSK

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
144.5	5.5	17.8	23.3	82.3	-59.0	Peak	Horizontal
254.6	6.6	16.5	23.1	82.3	-59.2	Peak	Horizontal
38.7	10.3	17.5	27.8	82.3	-54.5	Peak	Vertical
123.6	15.4	15.7	31.1	82.3	-51.2	Peak	Vertical
3218.5	44.6	-1.1	43.5	82.3	-38.8	Peak	Horizontal
3422.5	58.0	-1.0	57.0	82.3	-25.3	Peak	Horizontal
3422.5	49.1	-1.0	48.1	82.3	-34.2	Peak	Vertical
13350.5	36.5	13.4	49.9	82.3	-32.4	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB).							

Test Site	WZ-AC2	Test Engineer	Hyde Yu
Test Date	2022-03-20 ~ 2022-06-08	Test Band	NB-IoT Band 5, 1RB, QPSK

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
175.0	6.9	17.0	23.9	82.3	-58.4	Peak	Horizontal
631.9	14.3	25.6	39.9	82.3	-42.4	Peak	Horizontal
129.4	14.4	16.3	30.7	82.3	-51.6	Peak	Vertical
555.3	11.0	23.8	34.8	82.3	-47.5	Peak	Vertical
2470.5	54.7	-3.6	51.1	82.3	-31.2	Peak	Horizontal
3473.5	46.1	-0.8	45.3	82.3	-37.0	Peak	Horizontal
3473.5	40.2	-0.8	39.4	82.3	-42.9	Peak	Vertical
11004.5	36.7	12.8	49.5	82.3	-32.8	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB).							

Test Site	WZ-AC2	Test Engineer	Hyde Yu
Test Date	2022-03-20 ~ 2022-06-08	Test Band	NB-IoT Band 12, 1RB, QPSK

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
276.4	14.2	17.6	31.8	82.3	-50.5	Peak	Horizontal
814.2	9.1	28.6	37.7	82.3	-44.6	Peak	Horizontal
123.6	15.1	15.7	30.8	82.3	-51.5	Peak	Vertical
353.5	12.7	19.4	32.1	82.3	-50.2	Peak	Vertical
2096.5	57.8	-4.5	53.3	82.3	-29.0	Peak	Horizontal
2793.5	47.0	-2.5	44.5	82.3	-37.8	Peak	Horizontal
1399.5	47.9	-6.4	41.5	82.3	-40.8	Peak	Vertical
2096.5	47.3	-4.5	42.8	82.3	-39.5	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB).							

Test Site	WZ-AC2	Test Engineer	Hyde Yu
Test Date	2022-03-20 ~ 2022-06-08	Test Band	NB-IoT Band 13, 1RB, QPSK

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
474.7	10.6	22.6	33.2	82.3	-49.1	Peak	Horizontal
513.1	14.3	23.4	37.7	82.3	-44.6	Peak	Horizontal
123.6	15.6	15.7	31.3	82.3	-51.0	Peak	Vertical
513.1	17.9	23.4	41.3	82.3	-41.0	Peak	Vertical
1561.0	49.5	-6.7	42.8	55.3	-12.5	Peak	Horizontal
2343.0	55.6	-3.8	51.8	82.3	-30.5	Peak	Horizontal
1561.0	47.3	-6.7	40.6	55.3	-14.7	Peak	Vertical
2343.0	43.8	-3.8	40.0	82.3	-42.3	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB).							

Test Site	WZ-AC2	Test Engineer	Hyde Yu
Test Date	2022-03-20 ~ 2022-06-08	Test Band	NB-IoT Band 71, 1RB, QPSK

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
278.8	16.5	17.7	34.2	82.3	-48.1	Peak	Horizontal
802.6	13.6	28.4	42.0	82.3	-40.3	Peak	Horizontal
355.9	14.8	19.5	34.3	82.3	-48.0	Peak	Vertical
652.3	11.2	26.1	37.3	82.3	-45.0	Peak	Vertical
1986.0	57.1	-5.6	51.5	82.3	-30.8	Peak	Horizontal
3312.0	47.7	-1.2	46.5	82.3	-35.8	Peak	Horizontal
1986.0	53.4	-5.6	47.8	82.3	-34.5	Peak	Vertical
6151.0	37.7	5.5	43.2	82.3	-39.1	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB).							

Test Site	WZ-AC1	Test Engineer	Charles Zhang
Test Date	2022-03-20 ~ 2022-06-08	Test Band	CAT M Band 2/25, 1RB, QPSK

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
171.1	6.8	17.4	24.2	82.3	-58.1	Peak	Horizontal
268.6	7.5	17.1	24.6	82.3	-57.7	Peak	Horizontal
39.2	11.0	17.6	28.6	82.3	-53.7	Peak	Vertical
121.7	13.5	15.5	29.0	82.3	-53.3	Peak	Vertical
4833.5	38.3	3.1	41.4	82.3	-40.9	Peak	Horizontal
11234.0	37.2	12.3	49.5	82.3	-32.8	Peak	Horizontal
5496.5	36.7	4.2	40.9	82.3	-41.4	Peak	Vertical
11047.0	36.4	13.1	49.5	82.3	-32.8	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB).							

Test Site	WZ-AC1	Test Engineer	Charles Zhang
Test Date	2022-03-20 ~ 2022-06-08	Test Band	CAT M Band 4/66, 1RB, QPSK

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
123.6	8.1	15.7	23.8	82.3	-58.5	Peak	Horizontal
171.1	6.3	17.4	23.7	82.3	-58.6	Peak	Horizontal
39.7	10.2	17.7	27.9	82.3	-54.4	Peak	Vertical
122.2	14.8	15.5	30.3	82.3	-52.0	Peak	Vertical
3422.5	53.1	-1.0	52.1	82.3	-30.2	Peak	Horizontal
10613.5	36.6	12.9	49.5	82.3	-32.8	Peak	Horizontal
3422.5	42.8	-1.0	41.8	82.3	-40.5	Peak	Vertical
10163.0	36.0	12.6	48.6	82.3	-33.7	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB).							

Test Site	WZ-AC1	Test Engineer	Charles Zhang
Test Date	2022-03-20 ~ 2022-06-08	Test Band	CAT M Band 5/26, 1RB, QPSK

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
168.2	6.9	17.7	24.6	82.3	-57.7	Peak	Horizontal
516.9	11.4	23.4	34.8	82.3	-47.5	Peak	Horizontal
122.6	14.3	15.6	29.9	82.3	-52.4	Peak	Vertical
555.7	14.3	23.8	38.1	82.3	-44.2	Peak	Vertical
1646.0	50.8	-6.8	44.0	82.3	-38.3	Peak	Horizontal
2470.5	57.2	-3.6	53.6	82.3	-28.7	Peak	Horizontal
1646.0	47.4	-6.8	40.6	82.3	-41.7	Peak	Vertical
2470.5	44.9	-3.6	41.3	82.3	-41.0	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB).							

Test Site	WZ-AC1	Test Engineer	Charles Zhang
Test Date	2022-03-20 ~ 2022-06-08	Test Band	CAT M Band 26, 1RB, QPSK

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level(dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
120.2	7.5	15.4	22.9	82.3	-59.4	Peak	Horizontal
167.7	5.7	17.7	23.4	82.3	-58.9	Peak	Horizontal
38.7	10.1	17.5	27.6	82.3	-54.7	Peak	Vertical
122.2	13.8	15.5	29.3	82.3	-53.0	Peak	Vertical
1629.0	52.4	-6.8	45.6	82.3	-36.7	Peak	Horizontal
2445.0	58.0	-3.7	54.3	82.3	-28.0	Peak	Horizontal
1629.0	43.8	-6.8	37.0	82.3	-45.3	Peak	Vertical
2445.0	46.6	-3.7	42.9	82.3	-39.4	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB).							

Test Site	WZ-AC1	Test Engineer	Charles Zhang
Test Date	2022-03-20 ~ 2022-06-08	Test Band	CAT M Band 12, 1RB, QPSK

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
122.6	7.9	15.6	23.5	82.3	-58.8	Peak	Horizontal
276.9	9.6	17.6	27.2	82.3	-55.1	Peak	Horizontal
39.2	10.9	17.6	28.5	82.3	-53.8	Peak	Vertical
121.7	13.6	15.5	29.1	82.3	-53.2	Peak	Vertical
1399.5	51.5	-6.4	45.1	82.3	-37.2	Peak	Horizontal
2096.5	53.7	-4.5	49.2	82.3	-33.1	Peak	Horizontal
1399.5	48.1	-6.4	41.7	82.3	-40.6	Peak	Vertical
2096.5	45.5	-4.5	41.0	82.3	-41.3	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB).							

Test Site	WZ-AC1	Test Engineer	Charles Zhang
Test Date	2022-03-20 ~ 2022-06-08	Test Band	CAT M Band 13, 1RB, QPSK

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
167.3	6.4	17.7	24.1	82.3	-58.2	Peak	Horizontal
511.1	15.3	23.4	38.7	82.3	-43.6	Peak	Horizontal
38.7	11.3	17.5	28.8	82.3	-53.5	Peak	Vertical
117.8	14.0	15.1	29.1	82.3	-53.2	Peak	Vertical
1561.0	51.2	-6.7	44.5	55.3	-10.8	Peak	Horizontal
2343.0	55.3	-3.8	51.5	82.3	-30.8	Peak	Horizontal
1561.0	50.2	-6.7	43.5	55.3	-11.8	Peak	Vertical
2343.0	43.3	-3.8	39.5	82.3	-42.8	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB).							

Test Site	SIP-AC3	Test Engineer	Wayen Wang
Test Date	2022-03-20 ~ 2022-06-08	Test Band	GSM 850

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
146.9	13.3	18.1	31.4	82.3	-50.9	Peak	Horizontal
472.3	10.6	22.7	33.3	82.3	-49.0	Peak	Horizontal
121.2	14.7	15.9	30.6	82.3	-51.7	Peak	Vertical
559.6	6.9	24.4	31.3	82.3	-51.0	Peak	Vertical
2424.0	62.1	-14.6	47.5	82.3	-34.8	Peak	Horizontal
5088.0	52.3	-8.3	44.0	82.3	-38.3	Peak	Horizontal
2428.0	59.7	-14.6	45.1	82.3	-37.2	Peak	Vertical
4324.0	51.9	-8.8	43.1	82.3	-39.2	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB).							

Test Site	SIP-AC3	Test Engineer	Wayen Wang
Test Date	2022-03-20 ~ 2022-06-08	Test Band	PCS 1900

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
768.2	15.1	28.4	43.5	82.3	-38.8	Peak	Horizontal
844.8	15.7	28.2	43.9	82.3	-38.4	Peak	Horizontal
63.0	16.7	16.8	33.5	82.3	-48.8	Peak	Vertical
122.6	16.2	16.1	32.3	82.3	-50.0	Peak	Vertical
3703.0	64.3	-10.1	54.2	82.3	-28.1	Peak	Horizontal
9253.5	62.0	-3.0	59.0	82.3	-23.3	Peak	Horizontal
3703.0	62.9	-10.1	52.8	82.3	-29.5	Peak	Vertical
9253.5	62.6	-3.0	59.6	82.3	-22.7	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB).							

Appendix B - Test Setup Photograph

Refer to “2203RSU047-UT” file.

Appendix C - EUT Photograph

Refer to “2203RSU047-UE” file.

The End