

TEST REPORT**1.2 Technical Specification**

Frequency Range:	936.5 - 939.5 MHz
Number of Antenna ports:	2 TX/RX
Supported RAT:	LTE, NB-IoT inband, NB-IoT standalone
Supported other mode:	/
Max RF bandwidth (IBW):	3MHz
Supported Number of Carriers:	1 carrier
Supported modulation:	QPSK, 16QAM, 64QAM
Supported Channel Bandwidth:	LTE: 1.4MHz, 3MHz; NB-IoT-IB: 3MHz; NB-IoT-SA: 0.2MHz Note: 1.4MHz @ Middle of IBW
Declaration output power:	Maximum 60W per port for all modes except 20W for LTE 1.4MHz & NB-IoT-SA

TEST REPORT**1.3 Description of Test Facility**

Conducted testing:

Name:	Intertek Testing Services Shanghai
Address 1:	Building 86, No. 1198 Qinzhou Road(North), Shanghai 200233, P.R. China
Address 2:	No. 5 Lize East Street, Ericsson Tower, Chaoyang District, Beijing 100102 P.R.C.
Telephone:	+86 21 61278200
Telefax:	+86 21 54262353
The test facility is recognized, certified, or accredited by these organizations:	FCC Accredited Lab Designation Number: CN1175, CN1258
	IC Registration Lab CAB identifier.: CN0051
	A2LA Accreditation Lab Certificate Number: 3309.02, 3309.04

Radiated testing:

Name:	BEIJING BOOMWAVE TEST SERVICE CO. LTD.
Address:	EMC Building, No. 1 Wang Jing East Road Chao Yang District, Beijing, 100102 P.R.C.
Telephone:	+86 10 64711866 806
The test facility is recognized, certified, or accredited by these organizations:	FCC Accredited Lab Designation Number: CN1242
	IC Registration Lab CAB identifier.: CN0010
	A2LA Accreditation Lab Certificate Number: 4992.01

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2 TEST SPECIFICATIONS

2.1 Related documents

FCC Part 27 (2019)

FCC Part 2 (2019)

ANSI C63.26:2015

KDB 971168 D01 v03r01

KDB 662911 D01 v02r01

2.2 Product Information

The Equipment Under Test (EUT) 2212 B8C is an Ericsson Radio Unit working in the wireless communication services 936.5 - 939.5MHz band which provides communication connections to 936.5 - 939.5 network. 2212 B8C operates from a -48V DC.

The EUT includes 2 TX/RX ports. It can be configured to transmit in MIMO mode except NB-IoT-SA, and MIMO mode was used for measurements as the worst configuration. The complete testing was performed with the EUT transmitting at maximum RF power unless otherwise stated.

For Radio 2212 B8C (KRC 161 0014/1), an additional filter (KRF 102 456/1) is required for configuration with one 3 MHz LTE carrier with output power per RF port greater or equal to 40 W.

A full technical description can be found in the Manufacturer's documentation.

TEST REPORT**2.3 Configuration Description**

The following settings were used to represent all traffic scenarios. The output power was measured on the bottom, middle and top channel of all applicable antenna ports. By measuring the output power of QPSK, 16QAM, 64QAM on one of the antenna ports, it was determined that 64QAM for LTE and QPSK for NB-IoT-IB and NB-IoT-SA was the worst-case modulation schemes and were used for all testing.

Complete testing was carried out on the worst-case antenna port which was established as being the highest output power from the 2 measured ports on worst case modulation scheme. This antenna port was Port B for all modes.

The settings below were used for all measurements unless otherwise noted:

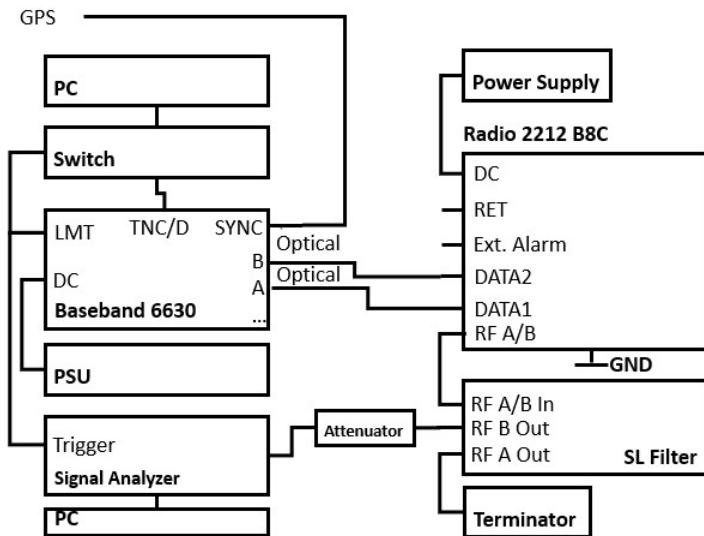
Configuration	Carrier	NR Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
LTE-1C	1	1.4	-	938	-
		3	-	938	-
NB-IoT-IB-1C	1	3	-	938	-
NB-IoT-SA-1C	1	0.2	936.7	938	939.3

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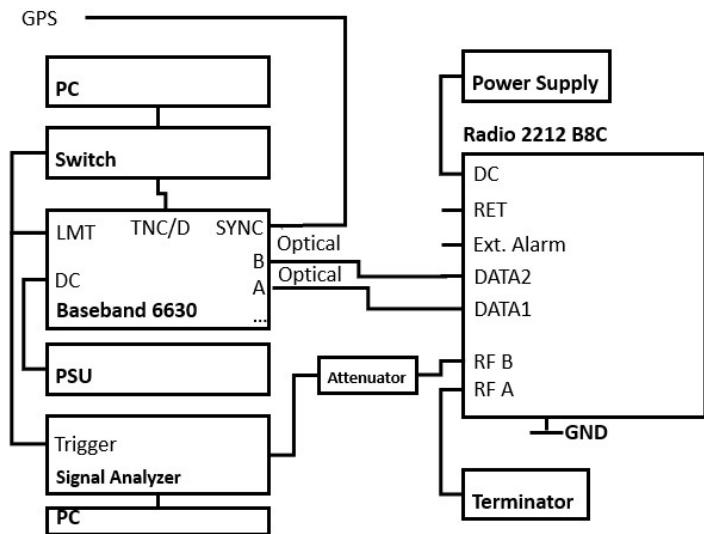
2.4 Test Setup

Conducted Measurement:

2212 B8C with Filter Unit



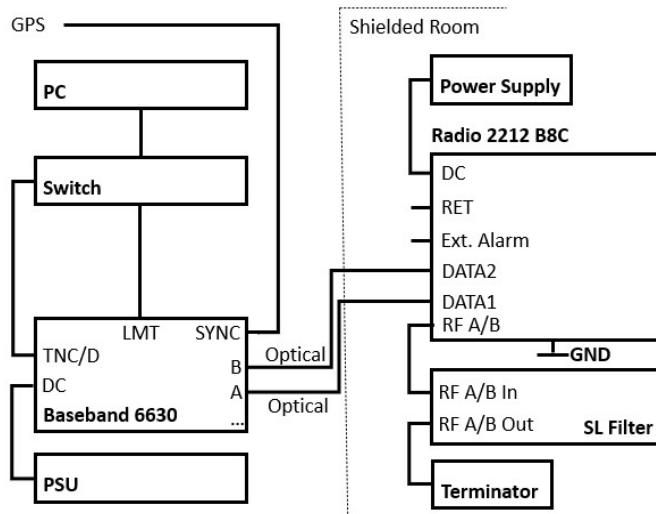
2212 B8C without Filter Unit



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Radiated Measurement:

2212 B8C with Filter Unit



2212 B8C without Filter Unit

