



No.I20Z61029-WMD02



TEST REPORT

No.I20Z61029-WMD02

for

Ericsson AB Radio 4478 B26 KRC 161 884/1

Remote Radio Unit

FCC ID: TA8AKRC161884-1

ISED: 287AB-AS1618841

In accordance with FCC CFR 47 Part 22 and

ISED RSS-132: Issue 3

Issued Date: 2020-07-13

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

Test Laboratory:

CTTL, Telecommunication Technology Labs, CAICT

No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China 100191.

Tel:+86(0)10-62304633-2512, Fax:+86(0)10-62304633-2504

Email: cttl_terminals@caict.ac.cn, website: www.caict.ac.cn

REPORT HISTORY

Report Number	Revision	Description	Issue Date
I20Z61029-WMD02	Rev.0	1 st edition	2020-07-10
I20Z61029-WMD02	Rev.1	Change the EUT Software Version	2020-07-13

Note: the latest revision of the test report supersedes all previous version.

CONTENTS

1. TEST LABORATORY	4
1.1. INTRODUCTION & ACCREDITATION.....	4
1.2. TESTING LOCATION	4
1.3. PROJECT DATE	5
1.4. SIGNATURE	5
2. CLIENT INFORMATION.....	6
2.1. APPLICANT INFORMATION	6
2.2. MANUFACTURER INFORMATION	6
3. EQUIPMENT UNDER TEST (EUT).....	7
3.1. ABOUT EUT	7
3.2. GENERAL DESCRIPTION	8
3.3. CONFIGURATION DESCRIPTION	9
4. REFERENCE DOCUMENTS.....	18
4.1. REFERENCE DOCUMENTS FOR TESTING	18
5. TEST SETUP	19
6. LABORATORY ENVIRONMENT	20
7. SUMMARY OF TEST RESULTS	21
8. TEST EQUIPMENT UTILIZED	22
9. MEASUREMENT UNCERTAINTY	22
ANNEX A: MEASUREMENT RESULTS.....	23
A.1 MAXIMUM OUTPUT POWER AND PEAK TO AVERAGE POWER RATIO - EIRP CALCULATION.....	23
A.2 OCCUPIED BANDWIDTH.....	73
A.3 SPURIOUS EMISSIONS AT BAND EDGE.....	91
A.4 CONDUCTED SPURIOUS EMISSION	134
A.5 RADIATED SPURIOUS EMISSION	167
A.6 FREQUENCY STABILITY	177
ANNEX B: ACCREDITATION CERTIFICATE.....	179

1. Test Laboratory

1.1. Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2005 accredited test laboratory under NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM (NVLAP) with lab code 600118-0, and is also an FCC accredited test laboratory (CN5017), and ISED accredited test laboratory (ISED#: 24849). The detail accreditation scope can be found on NVLAP website.

1.2. Testing Location

Location 1: CTTL(huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing,
P. R. China 100191

Location 4: CTTL(BDA)

Address: No.18A, Kangding Street, Beijing Economic-Technology
Development Area, Beijing, P. R. China 100176

1.3. Project date

Testing Start Date: 2020-06-15

Testing End Date: 2020-07-02

1.4. Signature

Dong Yuan**(Prepared this test report)**

Zhou Yu**(Reviewed this test report)**

Liu Baodian**(Approved this test report)**

2. Client Information

2.1. Applicant Information

Company Name: Ericsson (China) Communications Company Ltd.
Address /Post: Ericsson Tower, No.5 Lize East Street, Chaoyang District, Beijing
100102, P.R.China
Contact: Tingting Wang
Email: tingting.wang@ericsson.com
Telephone: +86 10 6439 4884

2.2. Manufacturer Information

Company Name: Ericsson AB
Address /Post: Isafjordsgatan 10, 164 80 Stockholm
Sweden
Contact: /
Email: /
Telephone: /

3. Equipment Under Test (EUT)

3.1. About EUT

Description	Remote Radio Unit
Product Name	Radio 4478 B26
Product Number	KRC 161 884/1
FCC ID	TA8AKRC161884-1
ISED	287AB-AS1618841
Antenna	N/A
Output power	Maximum 46.02dBm (40W) per port for all modes. Maximum 43.01dBm (20W) per carrier per port for LTE less than 5MHz and NB-IoT stand alone.
Power source	-48V DC
Serial Number	D829740620
Hardware Version	R5A
Software Version	Radio SW: CXP9017316_7-R82KM
Frequency range	RX: 814MHz-849MHz, TX: 859MHz-894MHz (LTE and NR) RX: 824-849MHz, TX: 869-894MHz (WCDMA)
Number of Antenna ports	4TX /4 RX
Maximum RF bandwidth (IBW)	35MHz (for LTE BW less than 5MHz and NB-IoT standalone, IBW should be 20MHz) 25MHz (for WCDMA)
Maximum Number of supported carriers per port	6 carriers (2 for NB-IoT stand alone)
Supported modulations	WCDMA: QPSK, 16QAM and 64QAM LTE and NR: QPSK, 16QAM, 64QAM and 256QAM NB-IoT: QPSK
Date of receipt	2020-06-15

3.2. General Description

The Equipment Under Test (EUT) Radio 4478 B26 is an Ericsson Remote Radio Unit working in 859-894MHz band which provides communication connections to network. The Radio 4478 B26 operates from a -48V DC supply.

The EUT includes 4 TX/RX ports and it can be configured to transmit in MIMO mode for WCDMA, LTE and NR carriers, 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.

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



3.3. 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 and 256QAM for NR on one of the antenna ports, it was determined that QPSK was the worst case modulation scheme and was 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 applicable measured ports on worst case modulation scheme. This antenna port was port A for all mode.

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

NR

Configuration	Carrier	Carrier Bandwidth	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
NR-MIMO-1C	1 Carrier	5.0MHz	871.5	881.5	891.5
		10.0MHz	874.0	881.5	889.0
		15.0MHz	876.5	881.5	886.5
		20.0MHz	879.0	881.5	884.0
NR-MIMO-2C	2 Carriers	5.0MHz	-	871.5+891.5	-
		10.0MHz	-	874+889	-
NR-MIMO-5C	5 Carriers	5.0MHz	-	871.5+876.5+881.5+886.5+891.5	-
NR-CA-2C	2 Carriers	5.0MHz+5.0 MHz	-	861.5+866.5	-
		5.0MHz+20.0MHz	-	871.5+884	-
NR-CA-3C	3Carriers	5.0MHz+10.0MHz+10.0 MHz	-	871.5+879+889	-
		5.0MHz+20.0MHz+10.0 MHz	-	861.5+874+889	-
NR-MIMO-1C-BE	1 Carriers	5.0MHz	871.5	N/A	891.5
		10.0MHz	874.0	N/A	889.0
		15.0MHz	876.5	N/A	886.5
		20.0MHz	879.0	N/A	884.0
NR-MIMO-2C-BE	2 Carriers	5.0MHz	871.5+876.5	N/A	886.5+891.5
		10.0MHz	874+884	N/A	879+889

WCDMA+NR

Configuration	Carrier	NR Carrier Bandwidth	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
WCDMA+NR-MIMO-MC-1	1W+1N R	5.0MHz	-	(W)871.4+(NR)891.5	-
		10.0MHz	-	(W)871.4+(NR)889	-
		15.0MHz	-	(W)871.4+(NR)886.5	-
		20.0MHz	-	(W)871.4+(NR)884	-
WCDMA+NR-MIMO-MC-2	2W+1N R	5.0MHz	-	(W)871.4+876.4+(NR)891.5	-
		10.0MHz	-	(W)871.4+876.4+(NR)889	-
		15.0MHz	-	(W)871.4+876.4+(NR)886.5	-
WCDMA+NR-MIMO-MC-3	3W+2N R	5.0MHz	-	(W)871.4+876.4+881.4+(NR)886.5+891.5	-
WCDMA+NR-MIMO-MC-4	1W+2N R	10.0MHz	-	(W)871.4+(NR)879+889	-
WCDMA+NR-MIMO-MC-1-BE	1W+1N R	5.0MHz	(W)871.4+(NR)876.5	N/A	(NR)886.5+(W)891.6
		10.0MHz	(W)871.4+(NR)879	N/A	(NR)884+(W)891.6
		15.0MHz	(W)871.4+(NR)881.5	N/A	(NR)881.5+(W)891.6
		20.0MHz	(W)871.4+(NR)884	N/A	(NR)879+(W)891.6
WCDMA+NR-MIMO-MC-2-BE	2W+1N R	5.0MHz	(W)871.4+876.4+(NR)881.5	N/A	(NR)881.5+(W)886.6+891.6
		10.0MHz	(W)871.4+876.4+(NR)884	N/A	(NR)879+(W)886.6+891.6
		15.0MHz	(W)871.4+876.4+(NR)886.5	N/A	(NR)876.5+(W)886.6+891.6

LTE+NR

Configuration	Carrier	Carrier Bandwidth	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
LTE+NR-MIMO-MC-1	1L+1NR	1.4MHz+5.0MHz	-	(NR)871.5+(L)893.3	-
		3.0MHz+5.0MHz	-	(NR)871.5+(L)892.5	-
		1.4MHz+10.0MHz	-	(NR)874+(L)893.3	-
		1.4MHz+15.0MHz	-	(NR)876.5+(L)893.3	-
		1.4MHz+20.0MHz	-	(NR)879+(L)893.3	-
		5.0MHz+5.0MHz	-	(NR)871.5+(L)891.5	-

Configuration	Carrier	Carrier Bandwidth	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
LTE+NR-MIMO-MC-1	1L+1NR	5.0MHz+10.0MHz	-	(NR)874+(L)891.5	-
		5.0MHz+15.0MHz	-	(NR)876.5+(L)891.5	-
		5.0MHz+20.0MHz	-	(NR)879+(L)891.5	-
LTE+NR-MIMO-MC-2	1L+2NR	1.4MHz+5.0MHz	-	(NR)871.5+876.5+(L)893.3	-
		3.0MHz+5.0MHz	-	(NR)871.5+876.5+(L)892.5	-
		1.4MHz+10.0MHz	-	(NR)874+884+(L)893.3	-
LTE+NR-MIMO-MC-3	2L+1NR	1.4MHz+15.0MHz	-	(NR)876.5+(L)891.9+893.3	-
		1.4MHz+20.0MHz	-	(NR)879+(L)891.9+893.3	-
LTE+NR-MIMO-MC-2	1L+2NR	5.0MHz+5.0MHz	-	(NR)871.5+876.5+(L)891.5	-
		5.0MHz+10.0MHz	-	(NR)874+884+(L)891.5	-
LTE+NR-MIMO-MC-3	2L+1NR	5.0MHz+15.0MHz	-	(NR)876.5+(L)886.5+891.5	-
LTE+NR-MIMO-MC-4	3L+3NR	1.4MHz+5.0MHz	-	(NR)871.5+876.5+881.5+(L)890.5+891.9+893.3	-
		3.0MHz+5.0MHz	-	(NR)871.5+876.5+881.5+(L)886.5+889.5+892.5	-
LTE+NR-MIMO-MC-5	3L+2NR	1.4MHz+10.0MHz	-	(NR)874+884+(L)890.5+891.9+893.3	-
LTE+NR-MIMO-MC-6	5L+1NR	1.4MHz+15.0MHz	-	(NR)876.5+(L)887.7+889.1+890.5+891.9+893.3	-
LTE+NR-MIMO-MC-7	3L+1NR	1.4MHz+20.0MHz	-	(NR)879+(L)890.5+891.9+893.3	-
LTE+NR-MIMO-MC-5	3L+2NR	5.0MHz+5.0MHz	-	(NR)871.5+876.5+(L)881.5+886.5+891.5	-
LTE+NR-MIMO-MC-7	3L+1NR	5.0MHz+10.0MHz	-	(NR)874+(L)881.5+886.5+891.5	-
LTE+NR-MIMO-MC-1-BE	1L+1NR	1.4MHz+5.0MHz	(L)869.7+(NR)872.9	N/A	(NR)890.1+(L)893.3
		3.0MHz+5.0MHz	(L)870.5+(NR)874.5	N/A	(NR)888.5+(L)892.5

Configuration	Carrier	Carrier Bandwidth	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
LTE+NR-MIMO-MC-1-BE	1L+1NR	1.4MHz+10.0MHz	(L)869.7+(NR)875.4	N/A	(NR)887.6+(L)893.3
		1.4MHz+15.0MHz	(L)869.7+(NR)877.9	N/A	(NR)885.1+(L)893.3
		1.4MHz+20.0MHz	(L)869.7+(NR)880.4	N/A	(NR)882.6+(L)893.3
		5.0MHz+5.0MHz	(L)871.5+(NR)876.5	N/A	(NR)886.5+(L)891.5
		5.0MHz+10.0MHz	(L)871.5+(NR)879	N/A	(NR)884+(L)891.5
		5.0MHz+15.0MHz	(L)871.5+(NR)881.5	N/A	(NR)881.5+(L)891.5
		5.0MHz+20.0MHz	(L)871.5+(NR)884	N/A	(NR)879+(L)891.5
LTE+NR-MIMO-MC-2-BE	2L+1NR	1.4MHz+5.0MHz	(L)869.7+871.1+(NR)874.3	N/A	(NR)888.7+(L)891.9+893.3
		3.0MHz+5.0MHz	(L)870.5+873.5+(NR)877.5	N/A	(NR)885.5+(L)889.5+892.3
		1.4MHz+10.0MHz	(L)869.7+871.1+(NR)876.8	N/A	(NR)886.2+(L)891.9+893.3
		1.4MHz+15.0MHz	(L)869.7+871.1+(NR)879.3	N/A	(NR)883.7+(L)891.9+893.3
		1.4MHz+20.0MHz	(L)869.7+871.1+(NR)881.8	N/A	(NR)881.2+(L)891.9+893.3
		5.0MHz+5.0MHz	(L)871.5+876.5+(NR)881.5	N/A	(NR)881.5+(L)886.5+891.5
		5.0MHz+10.0MHz	(L)871.5+876.5+(NR)884	N/A	(NR)879+(L)886.5+891.5
		5.0MHz+15.0MHz	(L)871.5+876.5+(NR)886.5	N/A	(NR)876.5+(L)886.5+891.5

SA+NR

Configuration	Carrier	NR Carrier Bandwidth	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
NB-IoT+NR-MC-1	1SA+1NR	5.0MHz	-	(NR)871.5+(SA)893.8	-
		10.0MHz	-	(NR)874+(SA)893.8	-
		15.0MHz	-	(NR)876.5+(SA)893.8	-
		20.0MHz	-	(NR)879+(SA)893.8	-
NB-IoT+NR-MC-2	2SA+1NR	5.0MHz	-	(NR)871.5+(SA)888.2+893.8	-

Configuration	Carrier	NR Carrier Bandwidth	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
NB-IoT+NR-MC-2	2SA+1 NR	10.0MHz	-	(NR)874+(SA)888.2+893.8	-
		15.0MHz	-	(NR)876.5+(SA)888.2+893.8	-
		20.0MHz	-	(NR)879+(SA)889.2+893.8	-
NB-IoT+NR-MC-3	2SA+4 NR	5.0MHz	-	(NR)871.5+876.5+881.5+886.5+(SA)889.2+893.8	-
NB-IoT+NR-MC-3	2SA+2 NR	10.0MHz	-	(NR)874+884+(SA)889.2+893.8	-
NB-IoT+NR-MC-1-BE	1SA+1 NR	5.0MHz	(SA)869.2+(NR)871.9	N/A	(NR)891.1+(SA)893.8
		10.0MHz	(SA)869.2+(NR)874.4	N/A	(NR)888.6+(SA)893.8
		15.0MHz	(SA)869.2+(NR)876.9	N/A	(NR)886.1+(SA)893.8
		20.0MHz	(SA)869.2+(NR)879.4	N/A	(NR)883.6+(SA)893.8
NB-IoT+NR-MC-4-BE	2SA+1 NR	5.0MHz	(SA)869.2+870.8+(NR)873.5	N/A	(NR)889.5+(SA)892.2+893.8
		10.0MHz	(SA)869.2+870.8+(NR)876	N/A	(NR)887+(SA)892.2+893.8
		15.0MHz	(SA)869.2+870.8+(NR)878.5	N/A	(NR)884.5+(SA)892.2+893.8
		20.0MHz	(SA)869.2+870.8+(NR)881	N/A	(NR)882+(SA)892.2+893.8

LTE+SA+NR

Configuration	Carrier	Carrier Bandwidth	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
LTE+NB-IoT+NR-MC-1	1L+1SA+1NR	1.4MHz+5.0MHz	-	(NR)871.5+(L)892.9+(SA)893.8	-
		3.0MHz+5.0MHz	-	(NR)871.5+(L)892.1+(SA)893.8	-
		1.4MHz+10.0MHz	-	(NR)874+(L)892.9+(SA)893.8	-
		1.4MHz+15.0MHz	-	(NR)876.5+(L)892.9+(SA)893.8	-
		1.4MHz+20.0MHz	-	(NR)879+(L)892.9+(SA)893.8	-
		5.0MHz+5.0MHz	-	(NR)871.5+(L)876.5+(SA)893.8	-
		5.0MHz+10.0MHz	-	(NR)874+(L)881.5+(SA)893.8	-

Configuration	Carrier	Carrier Bandwidth	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
LTE+NB-IoT+NR-MC-1	1L+1SA +1NR	5.0MHz+15.0MHz	-	(NR)876.5+(L)886.5+(SA)893.8	-
LTE+NB-IoT+NR-MC-2	2L+1SA +1NR	1.4MHz+5.0MHz	-	(NR)871.5+(L)891.5+892.9+(SA)893.8	-
		3.0MHz+5.0MHz	-	(NR)871.5+(L)889.1+892.1+(SA)893.8	-
		1.4MHz+10.0MHz	-	(NR)874+(L)891.5+892.9+(SA)893.8	-
		1.4MHz+15.0MHz	-	(NR)876.5+(L)891.5+892.9+(SA)893.8	-
		1.4MHz+20.0MHz	-	(NR)879+(L)891.5+892.9+(SA)893.8	-
		5.0MHz+5.0MHz	-	(NR)871.5+(L)876.5+881.5+(SA)893.8	-
		5.0MHz+10.0MHz	-	(NR)874+(L)881.5+886.5+(SA)893.8	-
LTE+NB-IoT+NR-MC-3	1L+2SA +1NR	5.0MHz+15.0MHz	-	(NR)876.5+(L)886.5+(SA)889.2+893.8	-
LTE+NB-IoT+NR-MC-4	3L+1SA +2NR	1.4MHz+5.0MHz	-	(NR)871.5+876.5+(L)890.1+891.5+892.9+(SA)893.8	-
		3.0MHz+5.0MHz	-	(NR)871.5+876.5+(L)886.1+889.1+892.1+(SA)893.8	-
		1.4MHz+10.0MHz	-	(NR)874+884+(L)890.1+891.5+892.9+(SA)893.8	-
LTE+NB-IoT+NR-MC-5	3L+2SA +1NR	1.4MHz+15.0MHz	-	(NR)876.5+(L)884.7+886.1+887.5+(SA)888.4+893.8	-
		1.4MHz+20.0MHz	-	(NR)879+(L)889.7+891.1+892.5+(SA)893.4+893.8	-
LTE+NB-IoT+NR-MC-6	2L+2SA +2NR	5.0MHz+5.0MHz	-	(NR)871.5+876.5+(L)881.5+886.5+(SA)889.2+893.8	-
LTE+NB-IoT+NR-MC-2	2L+2SA +1NR	5.0MHz+10.0MHz	-	(NR)874+(L)881.5+886.5+(SA)889.2+893.8	-
LTE+NB-IoT+NR-MC-1-BE	1L+1SA +1NR	1.4MHz+5.0MHz	(SA)869.2+(L)870.1+(NR)873.3	N/A	(NR)889.7+(L)892.9+(SA)893.8
		3.0MHz+5.0MHz	(SA)869.2+(L)870.9+(NR)874.9	N/A	(NR)888.1+(L)892.1+(SA)893.8

Configuration	Carrier	Carrier Bandwidth	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
LTE+NB-IoT+NR-MC-1-BE	1L+1SA +1NR	1.4MHz+10.0MHz	(SA)869.2+(L)870.1+(NR)875.8	N/A	(NR)887.2+(L)892.9+(SA)893.8
		1.4MHz+15.0MHz	(SA)869.2+(L)870.1+(NR)878.3	N/A	(NR)884.7+(L)892.9+(SA)893.8
		1.4MHz+20.0MHz	(SA)869.2+(L)870.1+(NR)880.8	N/A	(NR)882.2+(L)892.9+(SA)893.8
		5.0MHz+5.0MHz	(SA)869.2+(L)871.9+(NR)876.9	N/A	(NR)886.1+(L)891.1+(SA)893.8
		5.0MHz+10.0MHz	(SA)869.2+(L)871.9+(NR)879.4	N/A	(NR)883.6+(L)891.1+(SA)893.8
		5.0MHz+15.0MHz	(SA)869.2+(L)871.9+(NR)881.9	N/A	(NR)881.1+(L)891.1+(SA)893.8
LTE+NB-IoT+NR-MC-2-BE	1L+2SA +1NR	1.4MHz+5.0MHz	(SA)869.2+870.8+(L)871.7+(NR)874.9	N/A	(NR)888.1+(L)891.3+(SA)892.2+893.8
		3.0MHz+5.0MHz	(SA)869.2+870.8+(L)872.5+(NR)876.5	N/A	(NR)886.5+(L)890.5+(SA)892.2+893.8
		1.4MHz+10.0MHz	(SA)869.2+870.8+(L)871.7+(NR)877.4	N/A	(NR)885.6+(L)891.3+(SA)892.2+893.8
		1.4MHz+15.0MHz	(SA)869.2+870.8+(L)871.7+(NR)879.9	N/A	(NR)883.1+(L)891.3+(SA)892.2+893.8
		1.4MHz+20.0MHz	(SA)869.2+870.8+(L)871.7+(NR)882.4	N/A	(NR)880.6+(L)891.3+(SA)892.2+893.8
		5.0MHz+5.0MHz	(SA)869.2+870.8+(L)873.5+(NR)878.5	N/A	(NR)884.5+(L)889.5+(SA)892.2+893.8
		5.0MHz+10.0MHz	(SA)869.2+870.8+(L)873.5+(NR)881	N/A	(NR)882+(L)889.5+(SA)892.2+893.8
		5.0MHz+15.0MHz	(SA)869.2+870.8+(L)873.5+(NR)883.5	N/A	(NR)879.5+(L)889.5+(SA)892.2+893.8

WCDMA+LTE+NR

Configuration	Carrier	Carrier Bandwidth	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
WCDMA+LTE+NR-MIMO-MC-1	1W+1L +1NR	1.4MHz+5.0MHz	-	(NR)871.5+(W)890.2+(L)893.3	-
		3.0MHz+5.0MHz	-	(NR)871.5+(W)888.6+(L)892.5	-
		1.4MHz+10.0MHz	-	(NR)874+(W)890.2+(L)893.3	-
		1.4MHz+15.0MHz	-	(NR)876.5+(W)890.2+(L)893.3	-

Configuration	Carrier	Carrier Bandwidth	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
WCDMA+LTE+N R-MIMO-MC-1	1W+1L +1NR	5.0MHz+5.0 MHz	-	(NR)871.5+(W)886.6+(L) 891.5	-
		5.0MHz+10. 0MHz	-	(NR)874+(W)886.6+(L)89 1.5	-
		5.0MHz+15. 0MHz	-	(NR)876.5+(W)886.6+(L) 891.5	-
WCDMA+LTE+N R-MIMO-MC-2	1W+2L +1NR	1.4MHz+5.0 MHz	-	(NR)871.5+(W)888.8+(L) 891.9+893.3	-
		3.0MHz+5.0 MHz	-	(NR)871.5+(W)885.6+(L) 889.5+892.5	-
		1.4MHz+10. 0MHz	-	(NR)874+(W)888.8+(L)89 1.9+893.3	-
		1.4MHz+15. 0MHz	-	(NR)876.5+(W)888.8+(L) 891.9+893.3	-
		5.0MHz+5.0 MHz	-	(NR)871.5+(W)881.6+(L) 886.5+891.5	-
		5.0MHz+10. 0MHz	-	(NR)874+(W)881.6+(L)88 6.5+891.5	-
WCDMA+LTE+N R-MIMO-MC-3	2W+2L +2NR	1.4MHz+5.0 MHz	-	(NR)871.5+876.5+(W)88 3.8+888.8+(L)891.9+893. 3	-
WCDMA+LTE+N R-MIMO-MC-4	2W+3L +1NR	3.0MHz+5.0 MHz	-	(NR)871.5+(W)877.6+88 2.6+(L)886.5+889.5+892. 5	-
		1.4MHz+10. 0MHz	-	(NR)874+(W)882.4+887. 4+(L)890.5+891.9+893.3	-
WCDMA+LTE+N R-MIMO-MC-5	1W+3L +1NR	1.4MHz+15. 0MHz	-	(NR)876.5+(W)887.4+(L) 890.5+891.9+893.3	-
WCDMA+LTE+N R-MIMO-MC-6	1W+2L +2NR	5.0MHz+5.0 MHz	-	(NR)871.5+876.5+(W)88 1.6+(L)886.5+891.5	-
WCDMA+LTE+N R-MIMO-MC-1- BE	1W+1L +1NR	1.4MHz+5.0 MHz	(L)869.7+(W)872.8+(NR) 877.9	N/A	(NR)885.1+(W)890.2+(L) 893.3
		3.0MHz+5.0 MHz	(L)870.5+(W)874.4+(NR) 879.5	N/A	(NR)883.5+(W)888.6+(L) 892.5
		1.4MHz+10. 0MHz	(L)869.7+(W)872.8+(NR) 880.4	N/A	(NR)882.6+(W)890.2+(L) 893.3
		1.4MHz+15. 0MHz	(L)869.7+(W)872.8+(NR) 882.9	N/A	(NR)880.1+(W)890.2+(L) 893.3
		5.0MHz+5.0 MHz	(W)871.4+(L)876.5+(NR) 881.5	N/A	(NR)881.5+(L)886.5+(W) 891.6

Configuration	Carrier	Carrier Bandwidth	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
WCDMA+LTE+N R-MIMO-MC-1- BE	1W+1L +1NR	5.0MHz+10. 0MHz	(W)871.4+(L)876.5+(NR) 884	N/A	(NR)879+(L)886.5+(W)89 1.6
		5.0MHz+15. 0MHz	(W)871.4+(L)876.5+(NR) 886.5	N/A	(NR)876.5+(L)886.5+(W) 891.6
WCDMA+LTE+N R-MIMO-MC-2- BE	1W+2L +1NR	1.4MHz+5.0 MHz	(L)869.7+871.1+(W)874. 2+(NR)879.3	N/A	(NR)883.7+(W)888.8+(L) 891.9+893.3
		3.0MHz+5.0 MHz	(L)870.5+873.5+(W)877. 4+(NR)882.5	N/A	(NR)880.5+(W)885.6+(L) 889.5+892.5
		1.4MHz+10. 0MHz	(L)869.7+871.1+(W)874. 2+(NR)881.8	N/A	(NR)881.2+(W)888.8+(L) 891.9+893.3
		1.4MHz+15. 0MHz	(L)869.7+871.1+(W)874. 2+(NR)884.3	N/A	(NR)878.7+(W)888.8+(L) 891.9+893.3
		5.0MHz+5.0 MHz	(W)871.4+(L)876.5+881. 5+(NR)886.5	N/A	(NR)876.5+(L)881.5+886. 5+(W)891.6
		5.0MHz+10. 0MHz	(W)871.4+(L)876.5+881. 5+(NR)889	N/A	(NR)874+(L)881.5+886.5 +(W)891.6

N/A – Not Applicable

4. Reference Documents

4.1. Reference Documents for testing

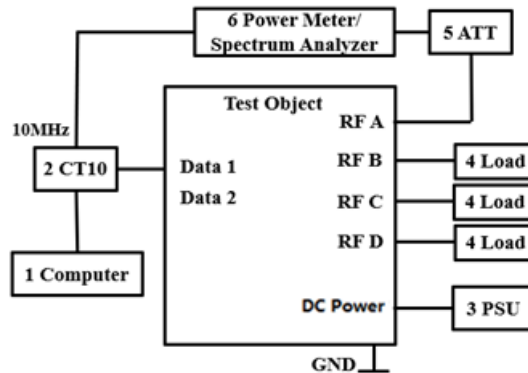
The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC Part 22	PUBLIC MOBILE SERVICES	10-1-19 Edition
FCC Part 2	FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS	10-1-19 Edition
RSS-GEN	General Requirements for Compliance of Radio Apparatus	Issue 5 Amendment 1
RSS-132	Cellular Telephones Employing New Technologies Operating in the Bands 824 - 849 MHz and 869 - 894 MHz	Issue 3
ANSI 63.26	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services	2015
TIA-102.CAAA-E	DIGITAL C4FMCQPSK TRANSCEIVER MEASUREMENT METHODS	2016
KDB 971168 D01	MEASUREMENT GUIDANCE FOR CERTIFICATION OF LICENSED DIGITAL TRANSMITTERS	v03r01
KDB 662911 D01	Emissions Testing of Transmitters with Multiple Outputs in the Same Band	v02r01

Note: RSS-GEN Issue 5 Amendment 1 is not in the scope of ISO 17025 accreditation by NVLAP.

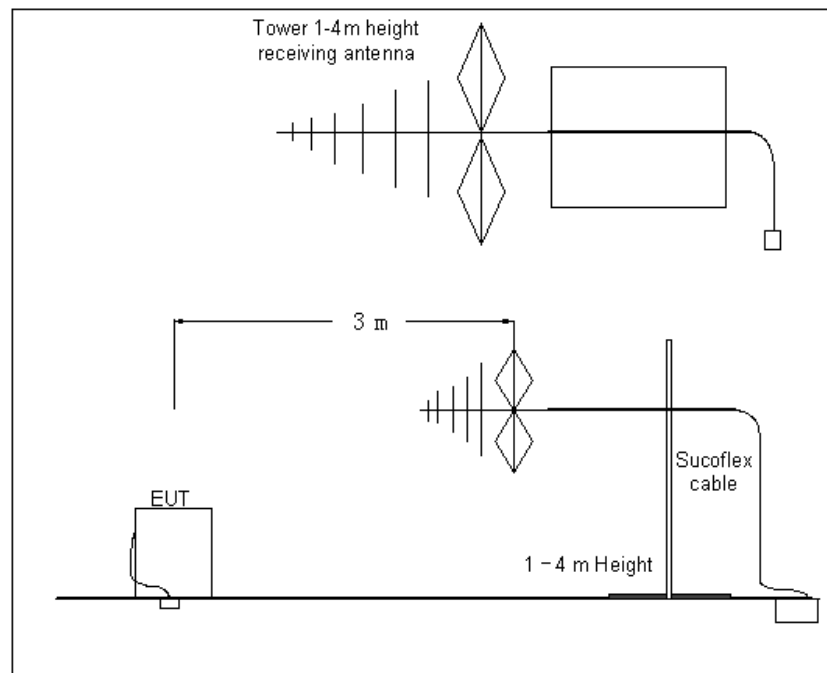
5. TEST SETUP

Test Setup, Conducted Measurement:



No.	Auxiliary Equipment	Model Type	Version
1	Test Computer	HP EliteBook 8540w	-
2	CT10	LPC 102 487/1	R1C
3	Power supply unit	-	-
4	Load	TF150	-
5	40dB Attenuator	Aeroflex / Weinschel	-

Test Setup, Radiated Measurement:



6. LABORATORY ENVIRONMENT

Control room / conducted chamber did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. =20 %, Max. = 80 %
Shielding effectiveness	> 110 dB
Electrical insulation	>2 M Ω
Ground system resistance	< 0.5 Ω

Semi-anechoic chamber(10 meters×6.7 meters×6.15 meters) did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 30 °C
Relative humidity	Min. = 35 %, Max. = 60 %
Shielding effectiveness	> 100 dB
Electrical insulation	>2 M Ω
Ground system resistance	< 0.5 Ω
Normalised site attenuation (NSA)	< $\pm$ 3.5 dB, 3 m distance
Site voltage standing-wave ratio (S_{VSWR})	Between 0 and 6 dB, from 1GHz to 18GHz
Uniformity of field strength	Between 0 and 6 dB, from 80 to 3000 MHz

7. SUMMARY OF TEST RESULTS

Items	Test Name	Clause in FCC rules	Clause in ISSED rules	Verdict
1	Maximum Output Power and Peak to Average Power Ratio - EIRP calculation	22.913(a), 2.1046	RSS-132 5.4	Pass
2	Occupied Bandwidth	22.917(b) 2.1049	RSS-GEN 6.7	Pass
3	Spurious Emissions at Band Edge	22.917, 2.1051	RSS-132 5.5	Pass
4	Conducted Spurious Emission	22.917, 2.1051	RSS-132 5.5	Pass
5	Radiated Spurious Emission	22.917 2.1051	RSS-132 5.5	Pass
6	Frequency Stability	22.355, 2.1055	RSS-132 5.3	Pass

8. Test Equipment Utilized

NO.	Description	TYPE	series number	MANUFACTURE	CAL DUE DATE
1	AC Power Supply	PAS20-18	UH000694	Kikusui	2020-07-05
2	40dB Attenuator	66-40-33	CD4019	Aeroflex / Weinschel	-
3	40dB Attenuator	TSG150R-4-40N11	1511040001	Nanjing Jiexi Technologies	-
4	Spectrum Analyzer	N9030	MY57142378	Keysight	2021-02-25
5	Climate Chamber	KTHG-415TBS	7353K	QINGSHENG	2020-08-07
6	Antenna	3117	00139065	ETS	2020-11-10
7	Power Amplifier	MY39500449	83006A	Agilent	-
8	Antenna	VULB9163	9163-482	Schwarzbeck	2020-09-16
9	Power Amplifier	SCU18	102249	R&S	-
10	Test Receiver	ESU26	100376	R&S	2020-10-30
11	Test Receiver	FSV40	101047	R&S	2021-05-18
12	Power Amplifier	SCU40	1707/1708	R&S	-
13	Antenna	3116	2661	ETS	2020-10-08
14	Spectrum Analyzer	FSW	104038-dC	R&S	2021-07-01

9. MEASUREMENT UNCERTAINTY

For a 95% confidence level, the measurement uncertainties for defined systems are:

Test Discipline	Measurement Uncertainty
Conducted Maximum Peak Output Power	0.5dB
Occupied Bandwidth	1.1Hz
Conducted Spurious Emissions	2.3dB
Band Edge	2.3dB
Radiated Spurious Emissions	5.4dB
Frequency Stability	$<\pm 1 \times 10^{-7}$

ANNEX A: MEASUREMENT RESULTS

A.1 Maximum Output Power and Peak to Average Power Ratio - EIRP calculation

A.1.1 Reference

FCC CFR 47 Part 2, Clause 2.1046

FCC CFR 47 Part 22, Clause 22.913(a)

RSS-132, Clause 5.4

A.1.2 Method of Measurements

During the process of testing, the EUT was configured to transmit on maximum power and proper modulation. The transmitter power shall be measured in terms of a root-mean-square (RMS) average value. In case of the EUT was configured to MIMO mode, since the EUT transmits on all antennas simultaneously in the same frequency range, using the Measure-and-Sum approach, the output power at all antennas were tested, and the total output power were then summed mathematically in linear power units according to FCC KDB 662911 D01.

A peak to average ratio measurement is performed at the conducted ports of the EUT for single carrier for single RAT mode. The spectrum analyzers Complementary Cumulative Distribution Function (CCDF) was used and 0.1% probability value recorded.

A.1.3 Limit

Output Power:

$$\text{EIRP} \leq 500 \text{ watts}(57\text{dBm}) \text{ per emission}$$

Peak to Average Ratio: 13 dB

A.1.4 Measurement result

Configuration NR-MIMO-1C

Maximum Output Power 46.02dBm per port

Antenna	Modulation/ Carrier	Output Power / Peak to Average Ratio (PAR)								
	Bandwidth (MHz)	Channel position B			Channel position M			Channel position T		
		POWER	POWER	PAR	POWER	POWER	PAR	POWER	POWER	PAR
		(dBm)	(dBm/MHz)	(db)	(dBm)	(dBm/MHz)	(db)	(dBm)	(dBm/MHz)	(db)
A	QPSK/5.0	46.36	40.42	7.40	46.40	40.78	7.41	46.14	40.42	7.49
B		46.07	40.37	7.40	46.15	40.51	7.40	45.88	40.17	7.49
C		46.28	40.43	7.39	46.27	40.46	7.41	45.95	40.19	7.49
D		46.12	40.35	7.40	46.13	40.40	7.40	45.84	40.16	7.49
Total		52.23	46.41	-	52.26	46.56	-	51.97	46.26	-

Antenna	Modulation/ Carrier	Output Power / Peak to Average Ratio (PAR)								
	Bandwidth (MHz)	Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	16QAM/5.0	-	-	-	46.29	40.70	7.39	-	-	-
B		-	-	-	46.12	40.51	7.38	-	-	-
C		-	-	-	46.27	40.78	7.40	-	-	-
D		-	-	-	46.13	40.53	7.39	-	-	-
Total		-	-	-	52.22	46.65	-	-	-	-

Antenna	Modulation/ Carrier	Output Power / Peak to Average Ratio (PAR)								
	Bandwidth (MHz)	Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	64QAM/5.0	-	-	-	46.30	40.65	7.47	-	-	-
B		-	-	-	46.13	40.44	7.47	-	-	-
C		-	-	-	46.22	40.55	7.48	-	-	-
D		-	-	-	46.05	40.27	7.48	-	-	-
Total		-	-	-	52.20	46.50	-	-	-	-

Antenna	Modulation/ Carrier	Output Power / Peak to Average Ratio (PAR)								
	Bandwidth (MHz)	Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	256QAM/5.0	-	-	-	46.35	40.63	7.45	-	-	-
B		-	-	-	46.11	40.41	7.45	-	-	-
C		-	-	-	46.25	40.58	7.46	-	-	-
D		-	-	-	46.13	40.37	7.45	-	-	-
Total		-	-	-	52.23	46.52	-	-	-	-

Maximum Output Power 46.02dBm per port

Antenna	Modulation/ Carrier	Output Power / Peak to Average Ratio (PAR)								
	Bandwidth (MHz)	Channel position B			Channel position M			Channel position T		
		POWER	POWER	PAR	POWER	POWER	PAR	POWER	POWER	PAR
		(dBm)	(dBm/MHz)	(db)	(dBm)	(dBm/MHz)	(db)	(dBm)	(dBm/MHz)	(db)
A	QPSK/10.0	46.40	37.70	7.40	46.40	37.67	7.42	46.30	37.42	7.59
B		46.18	37.49	7.41	46.21	37.47	7.40	46.09	37.21	7.52
C		46.25	37.52	7.42	46.30	37.49	7.41	46.17	37.43	7.50
D		46.13	37.32	7.44	46.18	37.45	7.42	46.10	37.25	7.53
Total		52.26	43.53	-	52.29	43.54	-	52.19	43.35	-

Antenna	Modulation/ Carrier Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	16QAM/10. 0	-	-	-	46.40	38.05	7.43	-	-	-
B		-	-	-	46.18	37.88	7.41	-	-	-
C		-	-	-	46.31	38.10	7.42	-	-	-
D		-	-	-	46.22	37.91	7.44	-	-	-
Total		-	-	-	52.30	44.01	-	-	-	-

Antenna	Modulation/ Carrier Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	64QAM/10.0	-	-	-	46.38	37.69	7.45	-	-	-
B		-	-	-	46.15	37.37	7.43	-	-	-
C		-	-	-	46.27	37.63	7.48	-	-	-
D		-	-	-	46.21	37.59	7.47	-	-	-
Total		-	-	-	52.27	43.59	-	-	-	-

Antenna	Modulation/ Carrier Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	256QAM/1 0.0	-	-	-	46.40	37.71	7.41	-	-	-
B		-	-	-	46.14	37.28	7.45	-	-	-
C		-	-	-	46.28	37.63	7.48	-	-	-
D		-	-	-	46.16	37.47	7.42	-	-	-
Total		-	-	-	52.27	43.55	-	-	-	-

Maximum Output Power 46.02dBm per port

Antenna	Modulation/ Carrier	Output Power / Peak to Average Ratio (PAR)								
	Bandwidth (MHz)	Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK/15.0	46.36	35.75	7.45	46.37	35.79	7.47	46.35	35.72	7.66
B		46.20	35.63	7.44	46.17	35.63	7.44	46.14	35.62	7.61
C		46.21	35.59	7.46	46.26	35.76	7.48	46.20	35.60	7.66
D		46.08	35.45	7.43	46.13	35.53	7.46	46.09	35.47	7.75
Total		52.23	41.63	-	52.25	41.70	-	52.22	41.62	-

Antenna	Modulation/ Carrier	Output Power / Peak to Average Ratio (PAR)								
	Bandwidth (MHz)	Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	16QAM/15. 0	-	-	-	46.34	36.96	7.46	-	-	-
B		-	-	-	46.19	36.79	7.46	-	-	-
C		-	-	-	46.17	36.73	7.45	-	-	-
D		-	-	-	46.13	36.71	7.46	-	-	-
Total		-	-	-	52.23	42.82	-	-	-	-

Antenna	Modulation/ Carrier	Output Power / Peak to Average Ratio (PAR)								
	Bandwidth	Channel position B			Channel position M			Channel position T		
	(MHz)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	64QAM/15. 0	-	-	-	46.36	35.79	7.49	-	-	-
B		-	-	-	46.18	35.56	7.47	-	-	-
C		-	-	-	46.20	35.52	7.50	-	-	-
D		-	-	-	46.13	35.39	7.49	-	-	-
Total		-	-	-	52.24	41.59	-	-	-	-

Antenna	Modulation/ Carrier	Output Power / Peak to Average Ratio (PAR)								
	Bandwidth (MHz)	Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	256QAM/1 5.0	-	-	-	46.36	35.78	7.45	-	-	-
B		-	-	-	46.14	35.57	7.48	-	-	-
C		-	-	-	46.23	35.68	7.50	-	-	-
D		-	-	-	46.15	35.49	7.47	-	-	-
Total		-	-	-	52.24	41.65	-	-	-	-

Maximum Output Power 46.02dBm per port

Antenna	Modulation/ Carrier	Output Power / Peak to Average Ratio (PAR)								
	Bandwidth (MHz)	Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK/20.0	46.41	34.61	7.44	46.37	34.55	7.51	46.35	34.45	7.69
B		46.19	34.34	7.42	46.16	34.31	7.48	46.18	34.28	7.64
C		46.24	34.42	7.43	46.30	34.44	7.48	46.27	34.45	7.65
D		46.19	34.34	7.44	46.19	34.33	7.53	46.20	34.36	7.70
Total		52.28	40.45	-	52.28	40.43	-	52.27	40.41	-

Antenna	Modulation/ Carrier	Output Power / Peak to Average Ratio (PAR)								
	Bandwidth (MHz)	Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	16QAM/ 20.0	-	-	-	46.35	35.85	7.52	-	-	-
B		-	-	-	46.19	35.61	7.49	-	-	-
C		-	-	-	46.31	35.74	7.50	-	-	-
D		-	-	-	46.26	35.71	7.50	-	-	-
Total		-	-	-	52.30	41.75	-	-	-	-

Antenna	Modulation/ Carrier	Output Power / Peak to Average Ratio (PAR)								
	Bandwidth	Channel position B			Channel position M			Channel position T		
	(MHz)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	64QAM/ 20.0	-	-	-	46.33	34.50	7.50	-	-	-
B		-	-	-	46.14	34.28	7.54	-	-	-
C		-	-	-	46.29	34.46	7.53	-	-	-
D		-	-	-	46.21	34.30	7.56	-	-	-
Total		-	-	-	52.26	40.41	-	-	-	-

Antenna	Modulation/ Carrier	Output Power / Peak to Average Ratio (PAR)								
	Bandwidth (MHz)	Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	256QAM/2 0.0	-	-	-	46.35	34.56	7.52	-	-	-
B		-	-	-	46.15	34.30	7.55	-	-	-
C		-	-	-	46.32	34.49	7.50	-	-	-
D		-	-	-	46.20	34.38	7.52	-	-	-
Total		-	-	-	52.28	40.45	-	-	-	-

Configuration NR-MIMO-2C

Maximum Output Power 46.02dBm per port

Antenna	Modulation / Carrier Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK/5.0	-	-	-	46.04	37.65	-	-	-	-
B		-	-	-	45.85	37.36	-	-	-	-
C		-	-	-	45.99	37.45	-	-	-	-
D		-	-	-	45.82	37.33	-	-	-	-
Total		-	-	-	51.95	43.47	-	-	-	-

Antenna	Modulation/	Output Power / Peak to Average Ratio (PAR)								
	Carrier	Channel position B			Channel position M			Channel position T		
	Bandwidth	POWER	POWER	PAR	POWER	POWER	PAR	POWER	POWER	PAR
	(MHz)	(dBm)	(dBm/MHz)	(db)	(dBm)	(dBm/MHz)	(db)	(dBm)	(dBm/MHz)	(db)
A	16QAM/5.0	-	-	-	46.03	37.68	-	-	-	-
B		-	-	-	45.83	37.51	-	-	-	-
C		-	-	-	45.99	37.76	-	-	-	-
D		-	-	-	45.86	37.59	-	-	-	-
Total		-	-	-	51.95	43.66	-	-	-	-

Antenna	Modulation / Carrier Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR(db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	64QAM/5.0	-	-	-	45.95	37.58	-	-	-	-
B		-	-	-	45.78	37.35	-	-	-	-
C		-	-	-	45.92	37.53	-	-	-	-
D		-	-	-	45.75	37.30	-	-	-	-
Total		-	-	-	51.87	43.46	-	-	-	-

Antenna	Modulation / Carrier Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	256QAM/5.0	-	-	-	45.96	37.40	-	-	-	-
B		-	-	-	45.76	37.25	-	-	-	-
C		-	-	-	45.93	37.36	-	-	-	-
D		-	-	-	45.76	37.23	-	-	-	-



No.I20Z61029-WMD02

Total	-	-	-	51.87	43.33	-	-	-	-
-------	---	---	---	-------	-------	---	---	---	---

Maximum Output Power 46.02dBm per port

Antenna	Modulation/ Carrier Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
	A	QPSK/ 10.0	-	-	-	46.09	34.35	-	-	-
B	-		-	-	45.90	34.09	-	-	-	-
C	-		-	-	46.09	34.39	-	-	-	-
D	-		-	-	45.92	34.15	-	-	-	-
Total		-	-	-	52.02	40.27	-	-	-	-

Antenna	Modulation/ Carrier Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
	A	16QAM/ 10.0	-	-	-	46.04	34.94	-	-	-
B	-		-	-	45.83	34.71	-	-	-	-
C	-		-	-	46.08	34.87	-	-	-	-
D	-		-	-	45.91	34.70	-	-	-	-
Total		-	-	-	51.99	40.83	-	-	-	-

Antenna	Modulation/ Carrier Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	64QAM/ 10.0	-	-	-	46.04	34.43	-	-	-	-
B		-	-	-	45.84	34.23	-	-	-	-
C		-	-	-	46.03	34.52	-	-	-	-
D		-	-	-	45.90	34.46	-	-	-	-
Total		-	-	-	51.97	40.43	-	-	-	-

Antenna	Modulation/ Carrier	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
	Bandwidth (MHz)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	256QAM /10.0	-	-	-	46.07	34.42	-	-	-	-
B		-	-	-	45.80	34.10	-	-	-	-
C		-	-	-	46.05	34.39	-	-	-	-
D		-	-	-	45.93	34.25	-	-	-	-
Total		-	-	-	51.98	40.31	-	-	-	-

Configuration NR-MIMO-5C

Maximum Output Power 46.02dBm per port

Antenna	Modulation/ Carrier Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK/5.0	-	-	-	46.09	33.59	-	-	-	-
B		-	-	-	45.90	33.26	-	-	-	-
C		-	-	-	46.09	33.61	-	-	-	-
D		-	-	-	45.95	33.29	-	-	-	-
Total		-	-	-	52.03	39.46	-	-	-	-

Antenna	Modulation/ Carrier Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	16QAM/5.0	-	-	-	46.12	34.06	-	-	-	-
B		-	-	-	45.90	33.62	-	-	-	-
C		-	-	-	46.03	33.80	-	-	-	-
D		-	-	-	45.94	33.67	-	-	-	-
Total		-	-	-	52.02	39.81	-	-	-	-

Antenna	Modulation/ Carrier Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
	A	64QAM/5.0	-	-	-	46.06	33.60	-	-	-
B	-		-	-	45.84	33.31	-	-	-	-
C	-		-	-	45.99	33.52	-	-	-	-
D	-		-	-	45.91	33.34	-	-	-	-
Total		-	-	-	51.97	39.46	-	-	-	-

Antenna	Modulation/ Carrier Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
	A	256QAM /5.0	-	-	-	46.03	33.58	-	-	-
B	-		-	-	45.84	33.21	-	-	-	-
C	-		-	-	46.01	33.55	-	-	-	-
D	-		-	-	45.89	33.26	-	-	-	-
Total		-	-	-	51.96	39.42	-	-	-	-

Configuration NR-CA-2C

Maximum Output Power 46.02dBm per port

Antenna	NR Mod./	Output Power / Peak to Average Ratio (PAR)								
	NR Mod.	Channel position B			Channel position M			Channel position T		
	Bandwidth (MHz)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK5.0/ QPSK 5.0	-	-	-	45.97	37.52	-	-	-	-
B	QPSK5.0/ QPSK 5.0	-	-	-	45.77	37.27	-	-	-	-
C	QPSK5.0/ QPSK 5.0	-	-	-	45.86	37.40	-	-	-	-
D	QPSK5.0/ QPSK 5.0	-	-	-	45.68	37.06	-	-	-	-
Total		-	-	-	51.84	43.34	-	-	-	-

Antenna	NR Mod./	Output Power / Peak to Average Ratio (PAR)								
	NR Mod.	Channel position B			Channel position M			Channel position T		
	Bandwidth (MHz)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK5.0/ QPSK 20.0	-	-	-	46.14	37.46	-	-	-	-
B	QPSK5.0/ QPSK 20.0	-	-	-	45.94	37.12	-	-	-	-
C	QPSK5.0/ QPSK 20.0	-	-	-	45.90	37.23	-	-	-	-
D	QPSK5.0/ QPSK 20.0	-	-	-	45.75	36.97	-	-	-	-
Total		-	-	-	51.96	43.22	-	-	-	-

Configuration NR-CA-3C

Maximum Output Power 46.02dBm per port

Antenna	NR Mod./	Output Power / Peak to Average Ratio (PAR)								
	NR Mod.	Channel position B			Channel position M			Channel position T		
	Bandwidth (MHz)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK5.0/ QPSK 10.0/ QPSK 10.0	-	-	-	46.06	35.55	-	-	-	-
B	QPSK5.0/ QPSK 10.0/ QPSK 10.0	-	-	-	45.88	35.31	-	-	-	-
C	QPSK5.0/ QPSK 10.0/ QPSK 10.0	-	-	-	45.99	35.48	-	-	-	-
D	QPSK5.0/ QPSK 10.0/ QPSK 10.0	-	-	-	45.76	35.18	-	-	-	-
Total		-	-	-	51.94	41.40	-	-	-	-

Antenna	NR Mod./	Output Power / Peak to Average Ratio (PAR)								
	NR Mod.	Channel position B			Channel position M			Channel position T		
	Bandwidth (MHz)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK5.0/ QPSK 20.0/ QPSK 10.0	-	-	-	45.96	35.22	-	-	-	-
B	QPSK5.0/ QPSK 20.0/ QPSK 10.0	-	-	-	45.76	34.83	-	-	-	-
C	QPSK5.0/ QPSK 20.0/ QPSK 10.0	-	-	-	45.78	34.94	-	-	-	-
D	QPSK5.0/ QPSK 20.0/ QPSK 10.0	-	-	-	45.60	34.68	-	-	-	-
Total		-	-	-	51.80	40.94	-	-	-	-

Configuration WCDMA+NR-MIMO-MC-1 (1WCDMA+1NR)

Maximum Output Power 46.02dBm per port

Antenna	WCDMA Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK5.0/ QPSK 5.0	-	-	-	45.88	37.84	-	-	-	-
B	QPSK5.0/ QPSK 5.0	-	-	-	45.65	37.64	-	-	-	-
C	QPSK5.0/ QPSK 5.0	-	-	-	45.79	37.81	-	-	-	-
D	QPSK5.0/ QPSK 5.0	-	-	-	45.58	37.61	-	-	-	-
Total		-	-	-	51.75	43.75	-	-	-	-

Antenna	WCDMA Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK5.0/ QPSK 10.0	-	-	-	45.94	37.92	-	-	-	-
B	QPSK5.0/ QPSK 10.0	-	-	-	45.75	37.69	-	-	-	-
C	QPSK5.0/ QPSK 10.0	-	-	-	45.93	37.83	-	-	-	-
D	QPSK5.0/ QPSK 10.0	-	-	-	45.64	37.54	-	-	-	-
Total		-	-	-	51.84	43.77	-	-	-	-

Antenna	WCDMA Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK5.0/ QPSK 15	-	-	-	45.96	37.95	-	-	-	-
B	QPSK5.0/ QPSK 15	-	-	-	45.77	37.68	-	-	-	-
C	QPSK5.0/ QPSK 15	-	-	-	45.96	37.97	-	-	-	-
D	QPSK5.0/ QPSK 15	-	-	-	45.71	37.51	-	-	-	-
Total		-	-	-	51.87	43.80	-	-	-	-

Antenna	WCDMA Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK5.0/ QPSK 20	-	-	-	46.01	38.12	-	-	-	-
B	QPSK5.0/ QPSK 20	-	-	-	45.78	37.71	-	-	-	-
C	QPSK5.0/ QPSK 20	-	-	-	45.95	37.92	-	-	-	-
D	QPSK5.0/ QPSK 20	-	-	-	45.72	37.64	-	-	-	-
Total		-	-	-	51.89	43.87	-	-	-	-

Configuration WCDMA+NR-MIMO-MC-2 (2WCDMA+1NR)

Maximum Output Power 46.02dBm per port

Antenna	WCDMA Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK5.0/ QPSK 5.0	-	-	-	45.97	36.25	-	-	-	-
B	QPSK5.0/ QPSK 5.0	-	-	-	45.78	36.06	-	-	-	-
C	QPSK5.0/ QPSK 5.0	-	-	-	45.95	36.24	-	-	-	-
D	QPSK5.0/ QPSK 5.0	-	-	-	45.68	36.04	-	-	-	-
Total		-	-	-	51.87	42.17	-	-	-	-

Antenna	WCDMA Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK5.0/ QPSK 10.0	-	-	-	45.97	36.27	-	-	-	-
B	QPSK5.0/ QPSK 10.0	-	-	-	45.79	36.07	-	-	-	-
C	QPSK5.0/ QPSK 10.0	-	-	-	45.94	36.23	-	-	-	-
D	QPSK5.0/ QPSK 10.0	-	-	-	45.70	35.98	-	-	-	-
Total		-	-	-	51.87	42.16	-	-	-	-

Antenna	WCDMA Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK5.0/ QPSK 15.0	-	-	-	46.02	36.21	-	-	-	-
B	QPSK5.0/ QPSK 15.0	-	-	-	45.79	36.00	-	-	-	-
C	QPSK5.0/ QPSK 15.0	-	-	-	45.99	36.19	-	-	-	-
D	QPSK5.0/ QPSK 15.0	-	-	-	45.71	35.98	-	-	-	-
Total		-	-	-	51.90	42.12	-	-	-	-

Configuration WCDMA+NR-MIMO-MC-3 (3WCDMA+2NR)

Maximum Output Power 46.02dBm per port

Antenna	WCDMA Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK5.0/ QPSK 5.0	-	-	-	45.98	34.20	-	-	-	-
B	QPSK5.0/ QPSK 5.0	-	-	-	45.74	33.99	-	-	-	-
C	QPSK5.0/ QPSK 5.0	-	-	-	45.92	34.13	-	-	-	-
D	QPSK5.0/ QPSK 5.0	-	-	-	45.69	33.89	-	-	-	-
Total		-	-	-	51.85	40.07	-	-	-	-

Configuration WCDMA+NR-MIMO-MC-4 (1WCDMA+2NR)

Antenna	WCDMA Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK5.0/ QPSK 10	-	-	-	45.97	36.13	-	-	-	-
B	QPSK5.0/ QPSK 10	-	-	-	45.78	35.94	-	-	-	-
C	QPSK5.0/ QPSK 10	-	-	-	45.97	36.14	-	-	-	-
D	QPSK5.0/ QPSK 10	-	-	-	45.70	35.79	-	-	-	-
Total		-	-	-	51.88	42.02	-	-	-	-

Configuration LTE+NR-MIMO-MC-1 (1L+1NR)

Maximum Output Power 46.02dBm per port

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK1.4/ QPSK 5.0	-	-	-	45.78	41.57	-	-	-	-
B	QPSK1.4/ QPSK 5.0	-	-	-	45.57	41.26	-	-	-	-
C	QPSK1.4/ QPSK 5.0	-	-	-	45.76	41.55	-	-	-	-
D	QPSK1.4/ QPSK 5.0	-	-	-	45.46	41.10	-	-	-	-
Total		-	-	-	51.67	47.40	-	-	-	-

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK3.0/ QPSK 5.0	-	-	-	45.87	38.90	-	-	-	-
B	QPSK3.0/ QPSK 5.0	-	-	-	45.63	38.69	-	-	-	-
C	QPSK3.0/ QPSK 5.0	-	-	-	45.81	38.82	-	-	-	-
D	QPSK3.0/ QPSK 5.0	-	-	-	45.53	38.39	-	-	-	-
Total		-	-	-	51.73	44.72	-	-	-	-

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK1.4/ QPSK 10.0	-	-	-	45.81	41.30	-	-	-	-
B	QPSK1.4/ QPSK 10.0	-	-	-	45.60	41.17	-	-	-	-
C	QPSK1.4/ QPSK 10.0	-	-	-	45.76	41.28	-	-	-	-
D	QPSK1.4/ QPSK 10.0	-	-	-	45.52	41.03	-	-	-	-
Total		-	-	-	51.69	47.22	-	-	-	-

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK1.4/ QPSK 15.0	-	-	-	45.77	41.26	-	-	-	-
B	QPSK1.4/ QPSK 15.0	-	-	-	45.56	41.07	-	-	-	-
C	QPSK1.4/ QPSK 15.0	-	-	-	45.78	41.40	-	-	-	-
D	QPSK1.4/ QPSK 15.0	-	-	-	45.52	41.05	-	-	-	-
Total		-	-	-	51.68	47.22	-	-	-	-

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK1.4/ QPSK 20.0	-	-	-	45.88	41.69	-	-	-	-
B	QPSK1.4/ QPSK 20.0	-	-	-	45.61	41.44	-	-	-	-
C	QPSK1.4/ QPSK 20.0	-	-	-	45.78	41.60	-	-	-	-
D	QPSK1.4/ QPSK 20.0	-	-	-	45.52	41.39	-	-	-	-
Total		-	-	-	51.72	47.55	-	-	-	-

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK5.0/ QPSK 5.0	-	-	-	45.95	37.39	-	-	-	-
B	QPSK5.0/ QPSK 5.0	-	-	-	45.68	37.07	-	-	-	-
C	QPSK5.0/ QPSK 5.0	-	-	-	45.87	37.29	-	-	-	-
D	QPSK5.0/ QPSK 5.0	-	-	-	45.58	37.00	-	-	-	-
Total		-	-	-	51.79	43.21	-	-	-	-

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK5.0/ QPSK 10.0	-	-	-	45.97	36.94	-	-	-	-
B	QPSK5.0/ QPSK 10.0	-	-	-	45.72	36.65	-	-	-	-
C	QPSK5.0/ QPSK 10.0	-	-	-	45.94	36.86	-	-	-	-
D	QPSK5.0/ QPSK 10.0	-	-	-	45.67	36.43	-	-	-	-
Total		-	-	-	51.85	42.75	-	-	-	-

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK5.0/ QPSK 15.0	-	-	-	46.00	37.10	-	-	-	-
B	QPSK5.0/ QPSK 15.0	-	-	-	45.77	36.78	-	-	-	-
C	QPSK5.0/ QPSK 15.0	-	-	-	45.96	36.96	-	-	-	-
D	QPSK5.0/ QPSK 15.0	-	-	-	45.70	36.67	-	-	-	-
Total		-	-	-	51.88	42.90	-	-	-	-

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK5.0/ QPSK 20.0	-	-	-	45.99	37.08	-	-	-	-
B	QPSK5.0/ QPSK 20.0	-	-	-	45.75	36.84	-	-	-	-
C	QPSK5.0/ QPSK 20.0	-	-	-	45.97	37.03	-	-	-	-
D	QPSK5.0/ QPSK 20.0	-	-	-	45.71	36.82	-	-	-	-
Total		-	-	-	51.88	42.96	-	-	-	-

Configuration LTE+NR-MIMO-MC-2 (1LTE +2NR)

Maximum Output Power 46.02dBm per port

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK1.4/ QPSK 5.0	-	-	-	45.90	39.66	-	-	-	-
B	QPSK1.4/ QPSK 5.0	-	-	-	45.66	39.27	-	-	-	-
C	QPSK1.4/ QPSK 5.0	-	-	-	45.91	39.76	-	-	-	-
D	QPSK1.4/ QPSK 5.0	-	-	-	45.64	39.22	-	-	-	-
Total		-	-	-	51.80	45.50	-	-	-	-

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK3.0/ QPSK 5.0	-	-	-	45.94	37.32	-	-	-	-
B	QPSK3.0/ QPSK 5.0	-	-	-	45.69	37.02	-	-	-	-
C	QPSK3.0/ QPSK 5.0	-	-	-	45.98	37.26	-	-	-	-
D	QPSK3.0/ QPSK 5.0	-	-	-	45.69	36.95	-	-	-	-
Total		-	-	-	51.85	43.16	-	-	-	-

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK1.4/ QPSK 10.0	-	-	-	45.87	39.85	-	-	-	-
B	QPSK1.4/ QPSK 10.0	-	-	-	45.67	39.31	-	-	-	-
C	QPSK1.4/ QPSK 10.0	-	-	-	45.91	39.94	-	-	-	-
D	QPSK1.4/ QPSK 10.0	-	-	-	45.66	39.34	-	-	-	-
Total		-	-	-	51.80	45.64	-	-	-	-

Configuration LTE+NR-MIMO-MC-3 (2LTE+1NR)

Maximum Output Power 46.02dBm per port

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK1.4/ QPSK 15.0	-	-	-	45.75	40.25	-	-	-	-
B	QPSK1.4/ QPSK 15.0	-	-	-	45.55	40.01	-	-	-	-
C	QPSK1.4/ QPSK 15.0	-	-	-	45.81	40.36	-	-	-	-
D	QPSK1.4/ QPSK 15.0	-	-	-	45.54	40.03	-	-	-	-
Total		-	-	-	51.68	46.19	-	-	-	-

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK1.4/ QPSK 20.0	-	-	-	45.88	40.47	-	-	-	-
B	QPSK1.4/ QPSK 20.0	-	-	-	45.61	39.94	-	-	-	-
C	QPSK1.4/ QPSK 20.0	-	-	-	45.79	40.31	-	-	-	-
D	QPSK1.4/ QPSK 20.0	-	-	-	45.59	39.82	-	-	-	-
Total		-	-	-	51.74	46.16	-	-	-	-

Configuration LTE+NR-MIMO-MC-2 (1LTE +2NR)

Maximum Output Power 46.02dBm per port

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK5.0/ QPSK 5.0	-	-	-	46.08	35.76	-	-	-	-
B	QPSK5.0/ QPSK 5.0	-	-	-	45.83	35.53	-	-	-	-
C	QPSK5.0/ QPSK 5.0	-	-	-	45.97	35.60	-	-	-	-
D	QPSK5.0/ QPSK 5.0	-	-	-	45.73	35.47	-	-	-	-
Total		-	-	-	51.93	41.61	-	-	-	-

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK5.0/ QPSK 10.0	-	-	-	46.06	35.32	-	-	-	-
B	QPSK5.0/ QPSK 10.0	-	-	-	45.80	35.07	-	-	-	-
C	QPSK5.0/ QPSK 10.0	-	-	-	45.96	35.26	-	-	-	-
D	QPSK5.0/ QPSK 10.0	-	-	-	45.74	35.06	-	-	-	-
Total		-	-	-	51.91	41.20	-	-	-	-

Configuration LTE+NR-MIMO-MC-3 (2LTE +1NR)

Maximum Output Power 46.02dBm per port

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK5.0/ QPSK 15.0	-	-	-	46.06	35.58	-	-	-	-
B	QPSK5.0/ QPSK 15.0	-	-	-	45.78	35.27	-	-	-	-
C	QPSK5.0/ QPSK 15.0	-	-	-	45.97	35.54	-	-	-	-
D	QPSK5.0/ QPSK 15.0	-	-	-	45.71	35.12	-	-	-	-
Total		-	-	-	51.90	41.40	-	-	-	-

Configuration LTE+NR-MIMO-MC-4 (3LTE +3NR)

Maximum Output Power 46.02dBm per port

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK1.4/ QPSK 5.0	-	-	-	45.92	38.33	-	-	-	-
B	QPSK1.4/ QPSK 5.0	-	-	-	45.67	38.08	-	-	-	-
C	QPSK1.4/ QPSK 5.0	-	-	-	45.84	38.15	-	-	-	-
D	QPSK1.4/ QPSK 5.0	-	-	-	45.63	37.96	-	-	-	-
Total		-	-	-	51.79	44.15	-	-	-	-

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK3.0/ QPSK 5.0	-	-	-	45.97	35.21	-	-	-	-
B	QPSK3.0/ QPSK 5.0	-	-	-	45.75	34.99	-	-	-	-
C	QPSK3.0/ QPSK 5.0	-	-	-	45.94	35.16	-	-	-	-
D	QPSK3.0/ QPSK 5.0	-	-	-	45.60	34.89	-	-	-	-
Total		-	-	-	51.84	41.09	-	-	-	-

Configuration LTE+NR-MIMO-MC-5 (3LTE +2NR)

Maximum Output Power 46.02dBm per port

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK1.4/ QPSK 10.0	-	-	-	45.85	38.30	-	-	-	-
B	QPSK1.4/ QPSK 10.0	-	-	-	45.61	38.11	-	-	-	-
C	QPSK1.4/ QPSK 10.0	-	-	-	45.85	38.26	-	-	-	-
D	QPSK1.4/ QPSK10.0	-	-	-	45.57	37.99	-	-	-	-
Total		-	-	-	51.74	44.19	-	-	-	-

Configuration LTE+NR-MIMO-MC-6 (5LTE +1NR)

Maximum Output Power 46.02dBm per port

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK1.4/ QPSK 15.0	-	-	-	45.84	38.06	-	-	-	-
B	QPSK1.4/ QPSK 15.0	-	-	-	45.63	37.86	-	-	-	-
C	QPSK1.4/ QPSK 15.0	-	-	-	45.83	38.01	-	-	-	-
D	QPSK1.4/ QPSK15.0	-	-	-	45.58	37.80	-	-	-	-
Total		-	-	-	51.74	43.95	-	-	-	-

Configuration LTE+NR-MIMO-MC-7 (3LTE +1NR)

Maximum Output Power 46.02dBm per port

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK1.4/ QPSK 20.0	-	-	-	45.83	39.33	-	-	-	-
B	QPSK1.4/ QPSK 20.0	-	-	-	45.63	39.05	-	-	-	-
C	QPSK1.4/ QPSK 20.0	-	-	-	45.83	39.29	-	-	-	-
D	QPSK1.4/ QPSK 20.0	-	-	-	45.60	39.05	-	-	-	-
Total		-	-	-	51.74	45.20	-	-	-	-

Configuration LTE+NR-MIMO-MC-5 (3LTE +2NR)

Maximum Output Power 46.02dBm per port

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK5.0/ QPSK 5.0	-	-	-	46.04	33.41	-	-	-	-
B	QPSK5.0/ QPSK 5.0	-	-	-	45.80	33.26	-	-	-	-
C	QPSK5.0/ QPSK 5.0	-	-	-	45.97	33.30	-	-	-	-
D	QPSK5.0/ QPSK 5.0	-	-	-	45.75	33.24	-	-	-	-
Total		-	-	-	51.91	39.32	-	-	-	-

Configuration LTE+NR-MIMO-MC-7 (3LTE +1NR)

Maximum Output Power 46.02dBm per port

Antenna	LTE Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK5.0/ QPSK 10.0	-	-	-	46.05	34.35	-	-	-	-
B	QPSK5.0/ QPSK 10.0	-	-	-	45.77	34.13	-	-	-	-
C	QPSK5.0/ QPSK 10.0	-	-	-	45.98	34.23	-	-	-	-
D	QPSK5.0/ QPSK 10.0	-	-	-	45.72	34.02	-	-	-	-
Total		-	-	-	51.90	40.20	-	-	-	-

Configuration NB-IoT+NR-MC-1(1SA+1NR)

Maximum Output Power 46.02dBm per port

Antenna	SA Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK /QPSK5.0	-	-	-	45.60	41.98	-	-	-	-
B	QPSK /QPSK5.0	-	-	-	45.37	41.22	-	-	-	-
C	QPSK /QPSK5.0	-	-	-	45.46	41.89	-	-	-	-
D	QPSK /QPSK5.0	-	-	-	45.30	41.20	-	-	-	-
Total		-	-	-	51.45	47.61	-	-	-	-

Antenna	SA Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK /QPSK10.0	-	-	-	45.64	42.03	-	-	-	-
B	QPSK /QPSK10.0	-	-	-	45.42	41.42	-	-	-	-
C	QPSK /QPSK10.0	-	-	-	45.54	41.95	-	-	-	-
D	QPSK /QPSK10.0	-	-	-	45.38	41.36	-	-	-	-
Total		-	-	-	51.52	47.72	-	-	-	-

Antenna	SA Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK /QPSK15.0	-	-	-	45.64	42.10	-	-	-	-
B	QPSK /QPSK15.0	-	-	-	45.43	41.79	-	-	-	-
C	QPSK /QPSK15.0	-	-	-	45.58	42.05	-	-	-	-
D	QPSK /QPSK15.0	-	-	-	45.35	41.50	-	-	-	-
Total		-	-	-	51.52	47.89	-	-	-	-

Antenna	SA Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK /QPSK20.0	-	-	-	45.59	42.09	-	-	-	-
B	QPSK /QPSK20.0	-	-	-	45.34	41.61	-	-	-	-
C	QPSK /QPSK20.0	-	-	-	45.52	41.94	-	-	-	-
D	QPSK /QPSK20.0	-	-	-	45.31	41.58	-	-	-	-
Total		-	-	-	51.46	47.83	-	-	-	-

Configuration NB-IoT+NR-MC-2(2SA+1NR)

Maximum Output Power 46.02dBm per port

Antenna	SA Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK /QPSK5.0	-	-	-	45.29	40.61	-	-	-	-
B	QPSK /QPSK5.0	-	-	-	45.07	40.27	-	-	-	-
C	QPSK /QPSK5.0	-	-	-	45.21	40.58	-	-	-	-
D	QPSK /QPSK5.0	-	-	-	45.05	40.15	-	-	-	-
Total		-	-	-	51.18	46.43	-	-	-	-

Antenna	SA Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK /QPSK10.0	-	-	-	45.34	40.67	-	-	-	-
B	QPSK /QPSK10.0	-	-	-	45.05	40.20	-	-	-	-
C	QPSK /QPSK10.0	-	-	-	45.33	40.62	-	-	-	-
D	QPSK /QPSK10.0	-	-	-	45.04	40.12	-	-	-	-
Total		-	-	-	51.21	46.43	-	-	-	-

Antenna	SA Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK /QPSK15.0	-	-	-	45.35	40.71	-	-	-	-
B	QPSK /QPSK15.0	-	-	-	45.10	40.58	-	-	-	-
C	QPSK /QPSK15.0	-	-	-	45.30	40.63	-	-	-	-
D	QPSK /QPSK15.0	-	-	-	45.09	40.53	-	-	-	-
Total		-	-	-	51.23	46.63	-	-	-	-

Antenna	SA Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK /QPSK20.0	-	-	-	45.29	40.84	-	-	-	-
B	QPSK /QPSK20.0	-	-	-	45.09	40.19	-	-	-	-
C	QPSK /QPSK20.0	-	-	-	45.18	40.64	-	-	-	-
D	QPSK /QPSK20.0	-	-	-	45.05	40.10	-	-	-	-
Total		-	-	-	51.17	46.47	-	-	-	-

Configuration NB-IoT+NR-MC-3(2SA+4NR)

Maximum Output Power 46.02dBm per port

Antenna	SA Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK /QPSK5.0	-	-	-	45.58	37.89	-	-	-	-
B	QPSK /QPSK5.0	-	-	-	45.41	37.64	-	-	-	-
C	QPSK /QPSK5.0	-	-	-	45.51	37.83	-	-	-	-
D	QPSK /QPSK5.0	-	-	-	45.32	37.47	-	-	-	-
Total		-	-	-	51.48	43.73	-	-	-	-

Configuration NB-IoT+NR-MC-3(2SA+2NR)

Maximum Output Power 46.02dBm per port

Antenna	SA Mod./ NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK /QPSK10.0	-	-	-	45.53	39.61	-	-	-	-
B	QPSK /QPSK10.0	-	-	-	45.25	39.18	-	-	-	-
C	QPSK /QPSK10.0	-	-	-	45.43	39.51	-	-	-	-
D	QPSK /QPSK10.0	-	-	-	45.10	39.06	-	-	-	-
Total		-	-	-	51.35	45.37	-	-	-	-

Configuration LTE+NB-IoT+NR-MC-1(1LTE +1SA+1NR)

Maximum Output Power 46.02dBm per port

Antenna	LTE Mod./ SA Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK 1.4 /QPSK/QP SK5.0	-	-	-	45.49	41.67	-	-	-	-
B	QPSK 1.4 /QPSK/QP SK5.0	-	-	-	45.37	41.22	-	-	-	-
C	QPSK 1.4 /QPSK/QP SK5.0	-	-	-	45.47	41.51	-	-	-	-
D	QPSK 1.4 /QPSK/QP SK5.0	-	-	-	45.27	41.06	-	-	-	-
Total		-	-	-	51.42	47.39	-	-	-	-

Antenna	LTE Mod./ SA Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK 3.0 /QPSK/QP SK5.0	-	-	-	45.63	40.42	-	-	-	-
B	QPSK 3.0 /QPSK/QP SK5.0	-	-	-	45.44	40.16	-	-	-	-
C	QPSK 3.0 /QPSK/QP SK5.0	-	-	-	45.56	40.36	-	-	-	-
D	QPSK 3.0 /QPSK/QP SK5.0	-	-	-	45.34	40.01	-	-	-	-
Total		-	-	-	51.51	46.26	-	-	-	-

Antenna	LTE Mod./ SA Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK 1.4 /QPSK/QP SK10.0	-	-	-	45.58	41.71	-	-	-	-
B	QPSK 1.4 /QPSK/QP SK10.0	-	-	-	45.35	41.27	-	-	-	-
C	QPSK 1.4 /QPSK/QP SK10.0	-	-	-	45.49	41.68	-	-	-	-
D	QPSK 1.4 /QPSK/QP SK10.0	-	-	-	45.22	41.14	-	-	-	-
Total		-	-	-	51.43	47.48	-	-	-	-

Antenna	LTE Mod./ SA Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK 1.4 /QPSK/QP SK15.0	-	-	-	45.58	41.54	-	-	-	-
B	QPSK 1.4 /QPSK/QP SK15.0	-	-	-	45.36	41.11	-	-	-	-
C	QPSK 1.4 /QPSK/QP SK15.0	-	-	-	45.46	41.38	-	-	-	-
D	QPSK 1.4 /QPSK/QP SK15.0	-	-	-	45.29	41.06	-	-	-	-
Total		-	-	-	51.44	47.30	-	-	-	-

Antenna	LTE Mod./ SA Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK 1.4 /QPSK/QP SK20.0	-	-	-	45.65	41.55	-	-	-	-
B	QPSK 1.4 /QPSK/QP SK20.0	-	-	-	45.44	41.26	-	-	-	-
C	QPSK 1.4 /QPSK/QP SK20.0	-	-	-	45.42	41.25	-	-	-	-
D	QPSK 1.4 /QPSK/QP SK20.0	-	-	-	45.32	41.09	-	-	-	-
Total		-	-	-	51.48	47.31	-	-	-	-

Antenna	LTE Mod./ SA Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK 5.0 /QPSK/QP SK5.0	-	-	-	45.76	40.22	-	-	-	-
B	QPSK 5.0 /QPSK/QP SK5.0	-	-	-	45.54	40.06	-	-	-	-
C	QPSK 5.0 /QPSK/QP SK5.0	-	-	-	45.73	40.12	-	-	-	-
D	QPSK 5.0 /QPSK/QP SK5.0	-	-	-	45.48	39.89	-	-	-	-
Total		-	-	-	51.65	46.09	-	-	-	-

Antenna	LTE Mod./ SA Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK 5.0 /QPSK/QP SK10.0	-	-	-	45.84	40.46	-	-	-	-
B	QPSK 5.0 /QPSK/QP SK10.0	-	-	-	45.57	40.10	-	-	-	-
C	QPSK 5.0 /QPSK/QP SK10.0	-	-	-	45.76	40.39	-	-	-	-
D	QPSK 5.0 /QPSK/QP SK10.0	-	-	-	45.55	40.02	-	-	-	-
Total		-	-	-	51.70	46.27	-	-	-	-

Antenna	LTE Mod./ SA Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK 5.0 /QPSK/QP SK15.0	-	-	-	45.81	40.53	-	-	-	-
B	QPSK 5.0 /QPSK/QP SK15.0	-	-	-	45.55	40.06	-	-	-	-
C	QPSK 5.0 /QPSK/QP SK15.0	-	-	-	45.75	40.41	-	-	-	-
D	QPSK 5.0 /QPSK/QP SK15.0	-	-	-	45.52	40.03	-	-	-	-
Total		-	-	-	51.68	46.28	-	-	-	-

Configuration LTE+NB-IoT+NR-MC-2(2LTE +1SA+1NR)

Maximum Output Power 46.02dBm per port

Antenna	LTE Mod./ SA Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK 1.4 /QPSK/QP SK5.0	-	-	-	45.66	40.41	-	-	-	-
B	QPSK 1.4 /QPSK/QP SK5.0	-	-	-	45.43	40.11	-	-	-	-
C	QPSK 1.4 /QPSK/QP SK5.0	-	-	-	45.63	40.30	-	-	-	-
D	QPSK 1.4 /QPSK/QP SK5.0	-	-	-	45.37	40.05	-	-	-	-
Total		-	-	-	51.54	46.24	-	-	-	-

Antenna	LTE Mod./ SA Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK 3.0 /QPSK/QP SK5.0	-	-	-	45.76	39.45	-	-	-	-
B	QPSK 3.0 /QPSK/QP SK5.0	-	-	-	45.50	39.28	-	-	-	-
C	QPSK 3.0 /QPSK/QP SK5.0	-	-	-	45.68	39.43	-	-	-	-
D	QPSK 3.0 /QPSK/QP SK5.0	-	-	-	45.45	39.22	-	-	-	-
Total		-	-	-	51.62	45.37	-	-	-	-

Antenna	LTE Mod./ SA Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK 1.4 /QPSK/QP SK10.0	-	-	-	45.69	40.30	-	-	-	-
B	QPSK 1.4 /QPSK/QP SK10.0	-	-	-	45.42	39.98	-	-	-	-
C	QPSK 1.4 /QPSK/QP SK10.0	-	-	-	45.64	40.19	-	-	-	-
D	QPSK 1.4 /QPSK/QP SK10.0	-	-	-	45.35	39.92	-	-	-	-
Total		-	-	-	51.55	46.12	-	-	-	-

Antenna	LTE Mod./ SA Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK 1.4 /QPSK/QP SK15.0	-	-	-	45.71	40.55	-	-	-	-
B	QPSK 1.4 /QPSK/QP SK15.0	-	-	-	45.46	40.30	-	-	-	-
C	QPSK 1.4 /QPSK/QP SK15.0	-	-	-	45.64	40.37	-	-	-	-
D	QPSK 1.4 /QPSK/QP SK15.0	-	-	-	45.42	40.18	-	-	-	-
Total		-	-	-	51.58	46.37	-	-	-	-

Antenna	LTE Mod./ SA Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK 1.4 /QPSK/QP SK20.0	-	-	-	45.68	40.46	-	-	-	-
B	QPSK 1.4 /QPSK/QP SK20.0	-	-	-	45.46	40.23	-	-	-	-
C	QPSK 1.4 /QPSK/QP SK20.0	-	-	-	45.61	40.39	-	-	-	-
D	QPSK 1.4 /QPSK/QP SK20.0	-	-	-	45.39	40.18	-	-	-	-
Total		-	-	-	51.56	46.34	-	-	-	-

Antenna	LTE Mod./ SA Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK 5.0 /QPSK/QP SK5.0	-	-	-	45.89	39.14	-	-	-	-
B	QPSK 5.0 /QPSK/QP SK5.0	-	-	-	45.66	38.73	-	-	-	-
C	QPSK 5.0 /QPSK/QP SK5.0	-	-	-	45.81	39.02	-	-	-	-
D	QPSK 5.0 /QPSK/QP SK5.0	-	-	-	45.58	38.57	-	-	-	-
Total		-	-	-	51.76	44.89	-	-	-	-

Antenna	LTE Mod./ SA Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK 5.0 /QPSK/QP SK10.0	-	-	-	45.87	39.13	-	-	-	-
B	QPSK 5.0 /QPSK/QP SK10.0	-	-	-	45.65	38.71	-	-	-	-
C	QPSK 5.0 /QPSK/QP SK10.0	-	-	-	45.85	39.11	-	-	-	-
D	QPSK 5.0 /QPSK/QP SK10.0	-	-	-	45.61	38.67	-	-	-	-
Total		-	-	-	51.77	44.93	-	-	-	-

Configuration LTE+NB-IoT+NR-MC-3(1LTE+2SA+1NR)

Maximum Output Power 46.02dBm per port

Antenna	LTE Mod./ SA Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK 5.0 /QPSK/QP SK15.0	-	-	-	45.56	39.58	-	-	-	-
B	QPSK 5.0 /QPSK/QP SK15.0	-	-	-	45.28	39.20	-	-	-	-
C	QPSK 5.0 /QPSK/QP SK15.0	-	-	-	45.50	39.50	-	-	-	-
D	QPSK 5.0 /QPSK/QP SK15.0	-	-	-	45.26	39.06	-	-	-	-
Total		-	-	-	51.42	45.36	-	-	-	-

Configuration LTE+NB-IoT+NR-MC-4(3LTE+1SA+2NR)

Maximum Output Power 46.02dBm per port

Antenna	LTE Mod./ SA Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK 1.4 /QPSK/QP SK5.0	-	-	-	45.76	39.33	-	-	-	-
B	QPSK 1.4 /QPSK/QP SK5.0	-	-	-	45.48	38.89	-	-	-	-
C	QPSK 1.4 /QPSK/QP SK5.0	-	-	-	45.67	39.28	-	-	-	-
D	QPSK 1.4 /QPSK/QP SK5.0	-	-	-	45.43	38.72	-	-	-	-
Total		-	-	-	51.61	45.08	-	-	-	-

Antenna	LTE Mod./ SA Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK 3.0 /QPSK/QP SK5.0	-	-	-	45.78	38.55	-	-	-	-
B	QPSK 3.0 /QPSK/QP SK5.0	-	-	-	45.54	38.26	-	-	-	-
C	QPSK 3.0 /QPSK/QP SK5.0	-	-	-	45.77	38.36	-	-	-	-
D	QPSK 3.0 /QPSK/QP SK5.0	-	-	-	45.50	38.17	-	-	-	-
Total		-	-	-	51.67	44.36	-	-	-	-

Antenna	LTE Mod./ SA Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK 1.4 /QPSK/QP SK10.0	-	-	-	45.71	39.24	-	-	-	-
B	QPSK 1.4 /QPSK/QP SK10.0	-	-	-	45.50	39.04	-	-	-	-
C	QPSK 1.4 /QPSK/QP SK10.0	-	-	-	45.69	39.15	-	-	-	-
D	QPSK 1.4 /QPSK/QP SK10.0	-	-	-	45.44	38.94	-	-	-	-
Total		-	-	-	51.61	45.11	-	-	-	-

Configuration LTE+NB-IoT+NR-MC-5(3LTE+2SA+1NR)

Maximum Output Power 46.02dBm per port

Antenna	LTE Mod./ SA Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK 1.4 /QPSK/QP SK15.0	-	-	-	45.61	39.40	-	-	-	-
B	QPSK 1.4 /QPSK/QP SK15.0	-	-	-	45.35	39.11	-	-	-	-
C	QPSK 1.4 /QPSK/QP SK15.0	-	-	-	45.60	39.39	-	-	-	-
D	QPSK 1.4 /QPSK/QP SK15.0	-	-	-	45.33	39.06	-	-	-	-
Total		-	-	-	51.50	45.26	-	-	-	-

Antenna	LTE Mod./ SA Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK 1.4 /QPSK/QP SK20.0	-	-	-	45.52	40.66	-	-	-	-
B	QPSK 1.4 /QPSK/QP SK20.0	-	-	-	45.25	40.23	-	-	-	-
C	QPSK 1.4 /QPSK/QP SK20.0	-	-	-	45.39	40.39	-	-	-	-
D	QPSK 1.4 /QPSK/QP SK20.0	-	-	-	45.15	40.15	-	-	-	-
Total		-	-	-	51.35	46.38	-	-	-	-

Configuration LTE+NB-IoT+NR-MC-6(2LTE+2SA+2NR)

Maximum Output Power 46.02dBm per port

Antenna	LTE Mod./ SA Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK 5.0 /QPSK/QP SK5.0	-	-	-	45.69	38.73	-	-	-	-
B	QPSK 5.0 /QPSK/QP SK5.0	-	-	-	45.42	38.37	-	-	-	-
C	QPSK 5.0 /QPSK/QP SK5.0	-	-	-	45.58	38.40	-	-	-	-
D	QPSK 5.0 /QPSK/QP SK5.0	-	-	-	45.31	38.05	-	-	-	-
Total		-	-	-	51.52	44.41	-	-	-	-

Configuration LTE+NB-IoT+NR-MC-2(2LTE+2SA+1NR)

Maximum Output Power 46.02dBm per port

Antenna	LTE Mod./ SA Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK 5.0 /QPSK/QP SK10.0	-	-	-	45.66	39.11	-	-	-	-
B	QPSK 5.0 /QPSK/QP SK10.0	-	-	-	45.45	38.82	-	-	-	-
C	QPSK 5.0 /QPSK/QP SK10.0	-	-	-	45.61	38.98	-	-	-	-
D	QPSK 5.0 /QPSK/QP SK10.0	-	-	-	45.36	38.57	-	-	-	-
Total		-	-	-	51.54	44.90	-	-	-	-

Configuration WCDMA+LTE+NR-MIMO-MC-1 (1WCDMA+1LTE+1NR)

Maximum Output Power 46.02dBm per port

Antenna	WCDMA Mod./ LTE Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK/ QPSK 1.4/ QPSK5.0	-	-	-	45.77	39.94	-	-	-	-
B	QPSK/ QPSK 1.4/ QPSK5.0	-	-	-	45.52	39.44	-	-	-	-
C	QPSK/ QPSK 1.4/ QPSK5.0	-	-	-	45.63	39.76	-	-	-	-
D	QPSK/ QPSK 1.4/ QPSK5.0	-	-	-	45.49	39.40	-	-	-	-
Total		-	-	-	51.62	45.66	-	-	-	-

Antenna	WCDMA Mod./ LTE Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK/ QPSK 3.0/ QPSK5.0	-	-	-	45.92	37.37	-	-	-	-
B	QPSK/ QPSK 3.0/ QPSK5.0	-	-	-	45.66	36.92	-	-	-	-
C	QPSK/ QPSK 3.0/ QPSK5.0	-	-	-	45.77	37.11	-	-	-	-
D	QPSK/ QPSK 3.0/ QPSK5.0	-	-	-	45.64	36.83	-	-	-	-
Total		-	-	-	51.77	43.08	-	-	-	-

Antenna	WCDMA Mod./ LTE Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK/ QPSK 1.4/ QPSK10.0	-	-	-	45.87	39.98	-	-	-	-
B	QPSK/ QPSK 1.4/ QPSK10.0	-	-	-	45.61	39.73	-	-	-	-
C	QPSK/ QPSK 1.4/ QPSK10.0	-	-	-	45.65	39.80	-	-	-	-
D	QPSK/ QPSK 1.4/ QPSK10.0	-	-	-	45.58	39.63	-	-	-	-
Total		-	-	-	51.70	45.81	-	-	-	-

Antenna	WCDMA Mod./ LTE Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK/ QPSK 1.4/ QPSK15.0	-	-	-	45.88	39.85	-	-	-	-
B	QPSK/ QPSK 1.4/ QPSK15.0	-	-	-	45.62	39.52	-	-	-	-
C	QPSK/ QPSK 1.4/ QPSK15.0	-	-	-	45.68	39.73	-	-	-	-
D	QPSK/ QPSK 1.4/ QPSK15.0	-	-	-	45.60	39.51	-	-	-	-
Total		-	-	-	51.72	45.68	-	-	-	-

Antenna	WCDMA Mod./ LTE Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK/ QPSK 5.0/ QPSK5.0	-	-	-	45.99	36.41	-	-	-	-
B	QPSK/ QPSK 5.0/ QPSK5.0	-	-	-	45.74	36.02	-	-	-	-
C	QPSK/ QPSK 5.0/ QPSK5.0	-	-	-	45.76	36.21	-	-	-	-
D	QPSK/ QPSK 5.0/ QPSK5.0	-	-	-	45.69	35.94	-	-	-	-
Total		-	-	-	51.82	42.17	-	-	-	-

Antenna	WCDMA Mod./ LTE Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK/ QPSK 5.0/ QPSK10.0	-	-	-	46.04	36.20	-	-	-	-
B	QPSK/ QPSK 5.0/ QPSK10.0	-	-	-	45.77	35.94	-	-	-	-
C	QPSK/ QPSK 5.0/ QPSK10.0	-	-	-	45.78	35.94	-	-	-	-
D	QPSK/ QPSK 5.0/ QPSK10.0	-	-	-	45.71	35.83	-	-	-	-
Total		-	-	-	51.85	42.00	-	-	-	-

Antenna	WCDMA Mod./ LTE Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK/ QPSK 5.0/ QPSK15.0	-	-	-	46.06	36.27	-	-	-	-
B	QPSK/ QPSK 5.0/ QPSK15.0	-	-	-	45.81	35.89	-	-	-	-
C	QPSK/ QPSK 5.0/ QPSK15.0	-	-	-	45.81	36.13	-	-	-	-
D	QPSK/ QPSK 5.0/ QPSK15.0	-	-	-	45.74	35.72	-	-	-	-
Total		-	-	-	51.88	42.03	-	-	-	-

Configuration WCDMA+LTE+NR-MIMO-MC-2 (1WCDMA+2LTE +1NR)

Maximum Output Power 46.02dBm per port

Antenna	WCDMA Mod./ LTE Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK/ QPSK 1.4/ QPSK5.0	-	-	-	45.89	39.29	-	-	-	-
B	QPSK/ QPSK 1.4/ QPSK5.0	-	-	-	45.65	38.89	-	-	-	-
C	QPSK/ QPSK 1.4/ QPSK5.0	-	-	-	45.66	38.91	-	-	-	-
D	QPSK/ QPSK 1.4/ QPSK5.0	-	-	-	45.62	38.87	-	-	-	-
Total		-	-	-	51.73	45.01	-	-	-	-

Antenna	WCDMA Mod./ LTE Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK/ QPSK 3.0/ QPSK5.0	-	-	-	45.96	36.27	-	-	-	-
B	QPSK/ QPSK 3.0/ QPSK5.0	-	-	-	45.75	35.99	-	-	-	-
C	QPSK/ QPSK 3.0/ QPSK5.0	-	-	-	45.80	36.12	-	-	-	-
D	QPSK/ QPSK 3.0/ QPSK5.0	-	-	-	45.71	35.90	-	-	-	-
Total		-	-	-	51.83	42.09	-	-	-	-

Antenna	WCDMA Mod./ LTE Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK/ QPSK 1.4/ QPSK10.0	-	-	-	45.88	39.16	-	-	-	-
B	QPSK/ QPSK 1.4/ QPSK10.0	-	-	-	45.64	38.93	-	-	-	-
C	QPSK/ QPSK 1.4/ QPSK10.0	-	-	-	45.71	38.97	-	-	-	-
D	QPSK/ QPSK 1.4/ QPSK10.0	-	-	-	45.63	38.92	-	-	-	-
Total		-	-	-	51.74	45.02	-	-	-	-

Antenna	WCDMA Mod./ LTE Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK/ QPSK 1.4/ QPSK15.0	-	-	-	45.89	39.06	-	-	-	-
B	QPSK/ QPSK 1.4/ QPSK15.0	-	-	-	45.65	38.87	-	-	-	-
C	QPSK/ QPSK 1.4/ QPSK15.0	-	-	-	45.69	38.92	-	-	-	-
D	QPSK/ QPSK 1.4/ QPSK15.0	-	-	-	45.63	38.78	-	-	-	-
Total		-	-	-	51.74	44.93	-	-	-	-

Antenna	WCDMA Mod./ LTE Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK/ QPSK 5.0/ QPSK5.0	-	-	-	46.02	35.05	-	-	-	-
B	QPSK/ QPSK 5.0/ QPSK5.0	-	-	-	45.79	34.70	-	-	-	-
C	QPSK/ QPSK 5.0/ QPSK5.0	-	-	-	45.82	35.01	-	-	-	-
D	QPSK/ QPSK 5.0/ QPSK5.0	-	-	-	45.77	34.71	-	-	-	-
Total		-	-	-	51.87	40.89	-	-	-	-

Antenna	WCDMA Mod./ LTE Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK/ QPSK 5.0/ QPSK10.0	-	-	-	46.04	35.16	-	-	-	-
B	QPSK/ QPSK 5.0/ QPSK10.0	-	-	-	45.81	34.81	-	-	-	-
C	QPSK/ QPSK 5.0/ QPSK10.0	-	-	-	45.90	34.98	-	-	-	-
D	QPSK/ QPSK 5.0/ QPSK10.0	-	-	-	45.82	34.83	-	-	-	-
Total		-	-	-	51.91	40.97	-	-	-	-

Configuration WCDMA+LTE+NR-MIMO-MC-3 (2WCDMA+2LTE +2NR)

Maximum Output Power 46.02dBm per port

Antenna	WCDMA Mod./ LTE Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK/ QPSK 1.4/ QPSK5.0	-	-	-	45.90	38.07	-	-	-	-
B	QPSK/ QPSK 1.4/ QPSK5.0	-	-	-	45.67	37.60	-	-	-	-
C	QPSK/ QPSK 1.4/ QPSK5.0	-	-	-	45.73	37.98	-	-	-	-
D	QPSK/ QPSK 1.4/ QPSK5.0	-	-	-	45.68	37.64	-	-	-	-
Total		-	-	-	51.77	43.85	-	-	-	-

Configuration WCDMA+LTE+NR-MIMO-MC-4 (2WCDMA+3LTE+1NR)

Maximum Output Power 46.02dBm per port

Antenna	WCDMA Mod./ LTE Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK/ QPSK 3.0/ QPSK5.0	-	-	-	45.99	34.35	-	-	-	-
B	QPSK/ QPSK 3.0/ QPSK5.0	-	-	-	45.80	33.94	-	-	-	-
C	QPSK/ QPSK 3.0/ QPSK5.0	-	-	-	45.87	34.10	-	-	-	-
D	QPSK/ QPSK 3.0/ QPSK5.0	-	-	-	45.78	33.90	-	-	-	-
Total		-	-	-	51.88	40.10	-	-	-	-

Antenna	WCDMA Mod./ LTE Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK/ QPSK 1.4/ QPSK10.0	-	-	-	45.66	37.26	-	-	-	-
B	QPSK/ QPSK 1.4/ QPSK10.0	-	-	-	45.42	36.93	-	-	-	-
C	QPSK/ QPSK 1.4/ QPSK10.0	-	-	-	45.49	37.15	-	-	-	-
D	QPSK/ QPSK 1.4/ QPSK10.0	-	-	-	45.41	36.90	-	-	-	-
Total		-	-	-	51.52	43.08	-	-	-	-

Configuration WCDMA+LTE+NR-MIMO-MC-5 (1WCDMA+3LTE+1NR)

Maximum Output Power 46.02dBm per port

Antenna	WCDMA Mod./ LTE Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK/ QPSK 1.4/ QPSK15.0	-	-	-	45.86	38.15	-	-	-	-
B	QPSK/ QPSK 1.4/ QPSK15.0	-	-	-	45.63	38.02	-	-	-	-
C	QPSK/ QPSK 1.4/ QPSK15.0	-	-	-	45.71	38.06	-	-	-	-
D	QPSK/ QPSK 1.4/ QPSK15.0	-	-	-	45.67	38.03	-	-	-	-
Total		-	-	-	51.74	44.09	-	-	-	-

Configuration WCDMA+LTE+NR-MIMO-MC-6 (1WCDMA+2LTE+2NR)

Maximum Output Power 46.02dBm per port

Antenna	WCDMA Mod./ LTE Mod. / NR Mod. Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
A	QPSK/ QPSK 5.0/ QPSK5.0	-	-	-	46.02	33.93	-	-	-	-
B	QPSK/ QPSK 5.0/ QPSK5.0	-	-	-	45.80	33.71	-	-	-	-
C	QPSK/ QPSK 5.0/ QPSK5.0	-	-	-	45.93	33.87	-	-	-	-
D	QPSK/ QPSK 5.0/ QPSK5.0	-	-	-	45.78	33.67	-	-	-	-
Total		-	-	-	51.90	39.82	-	-	-	-



NOTE:

The DUT is tested without antenna. ERP/EIRP compliance is addressed at the time of licensing, as required by the responsible FCC/ISED Bureau(s). Licensee's are required to take into account maximum allowed antenna gain used in combination with above power settings to prevent the radiated output power to exceed the limits.

A.2 Occupied Bandwidth

A.2.1 Reference

FCC CFR 47 Part 2, Clause 2.1049

FCC CFR 47 Part 22, Clause 22.917(b)

RSS-GEN, Clause 6.7

A.2.2 Method of Measurements

The EUT was set to transmit at maximum power and testing was carried out on bottom, middle and top channels. Using the Occupied Bandwidth measurement function in the spectrum analyzer, the 26dB bandwidth was measured in accordance with FCC KDB 971168 D01 Clause 4.2.

The measurement method is from ANSI C63.26:

- a) 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.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
- c) Set the reference level of the instrument as required to keep the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope must be at least $10\log (OBW / RBW)$ below the reference level.
- d) Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

A.2.3 Measurement result

Configuration NR-MIMO-1C

-26dBc Occupied Bandwidth

Modulation/ Bandwidth	Occupied Bandwidth (MHz)		
	Channel position B	Channel position M	Channel position T
QPSK/ 5.0MHz	4.750	4.744	4.745
QPSK/ 10.0MHz	9.665	9.674	9.665
QPSK/ 15.0MHz	14.63	14.62	14.62
QPSK/ 20.0MHz	19.62	19.62	19.61

-26dBc Occupied Bandwidth

Bandwidth	Occupied Bandwidth (MHz)		
	Modulation 16QAM/ Channel position M	Modulation 64QAM/ Channel position M	Modulation 256QAM/ Channel position M
5.0MHz	4.702	4.749	4.711
10.0MHz	9.623	9.666	9.654
15.0MHz	14.59	14.64	14.62
20.0MHz	19.57	19.62	19.61

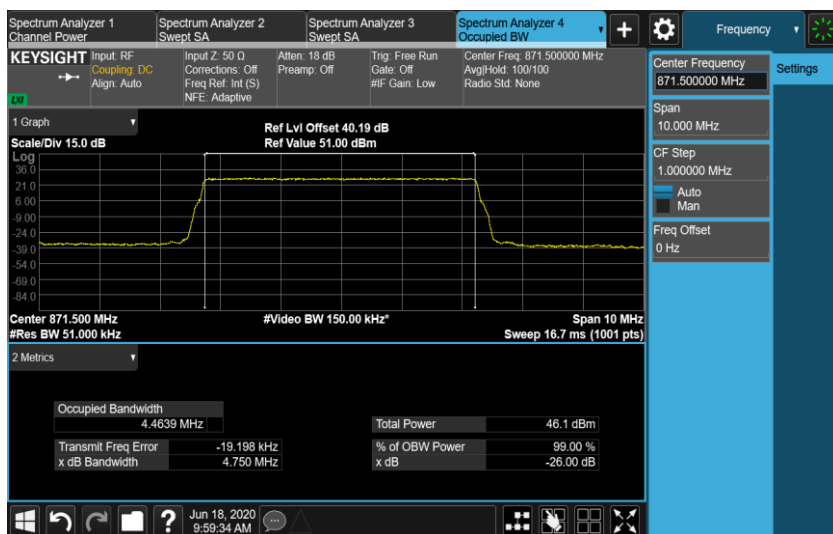
99% Occupied Bandwidth

Modulation/ Bandwidth	Occupied Bandwidth (MHz)		
	Channel position B	Channel position M	Channel position T
QPSK/ 5.0MHz	4.4639	4.4657	4.4637
QPSK/ 10.0MHz	9.2803	9.2779	9.2782
QPSK/ 15.0MHz	14.096	14.095	14.093
QPSK/ 20.0MHz	18.927	18.903	18.900

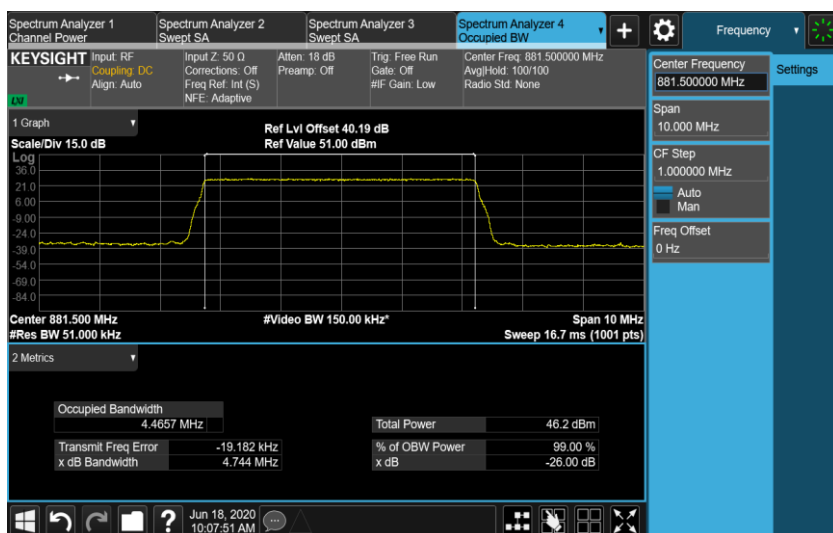
99% Occupied Bandwidth

Bandwidth	Occupied Bandwidth (MHz)		
	Modulation 16QAM/ Channel position M	Modulation 64QAM/ Channel position M	Modulation 256QAM/ Channel position M
5.0MHz	4.4572	4.4638	4.4603
10.0MHz	9.1809	9.2766	9.2781
15.0MHz	14.052	14.093	14.092
20.0MHz	18.869	18.917	18.889

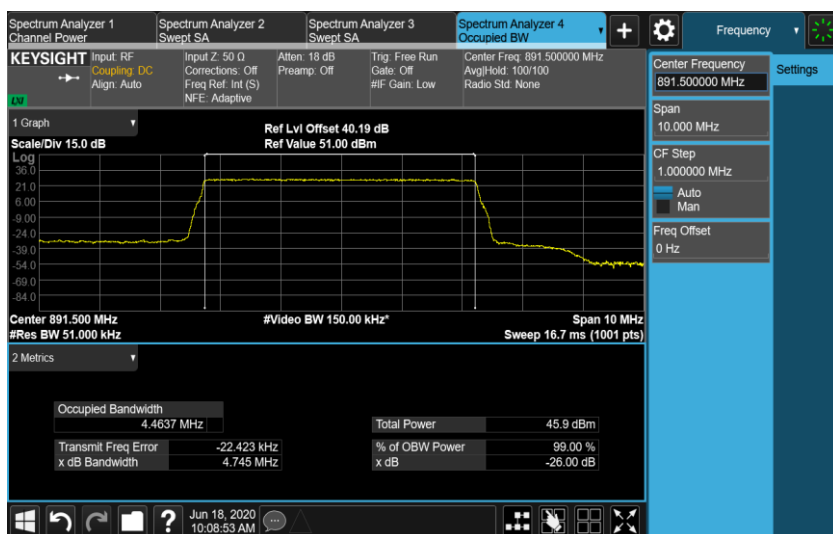
Port A, QPSK/5.0MHz Channel Position B



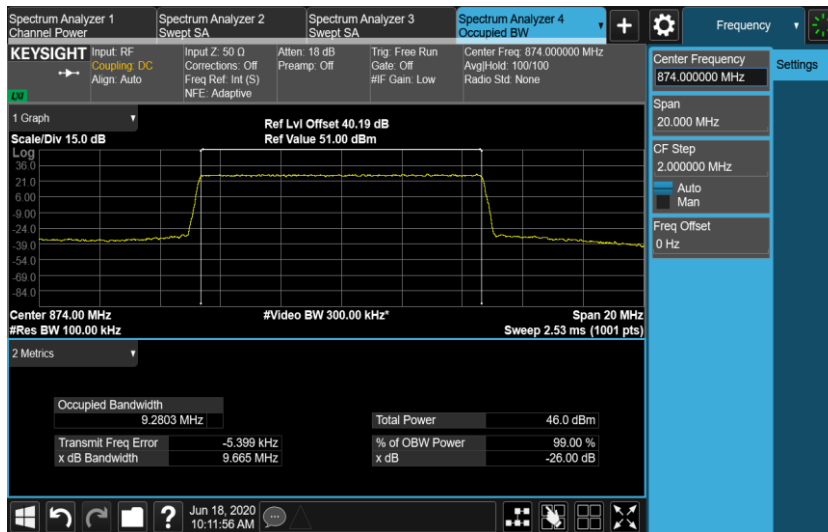
Port A, QPSK/5.0MHz Channel Position M



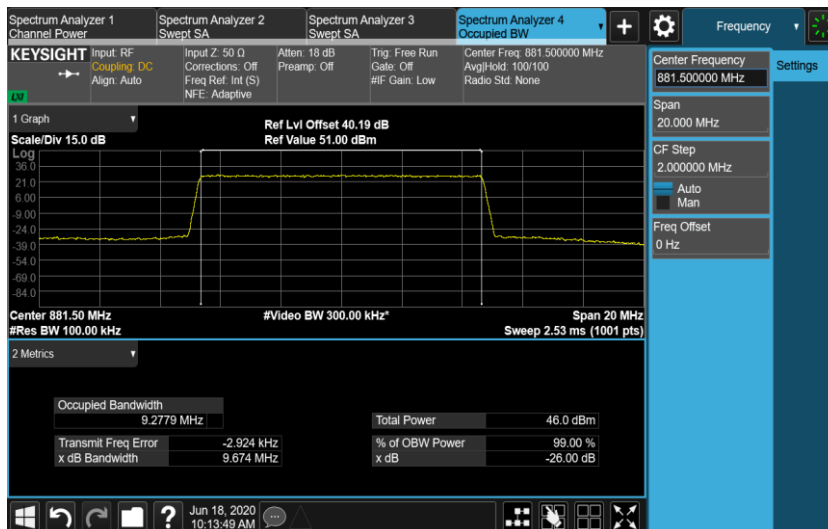
Port A, QPSK/5.0MHz Channel Position T



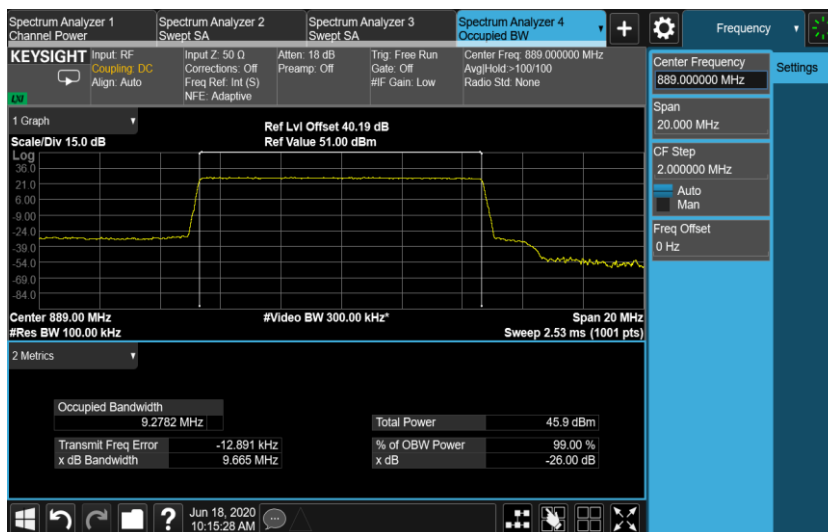
Port A, QPSK/10.0MHz Channel Position B



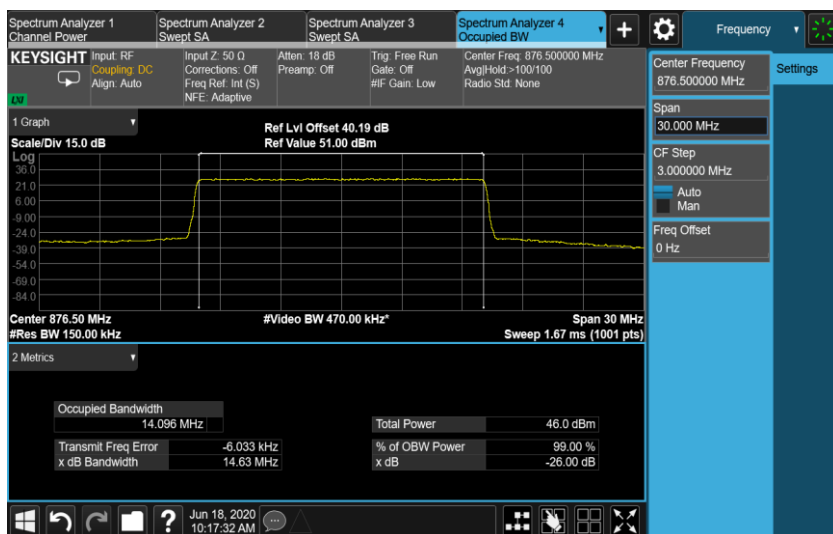
Port A, QPSK/10.0MHz Channel Position M



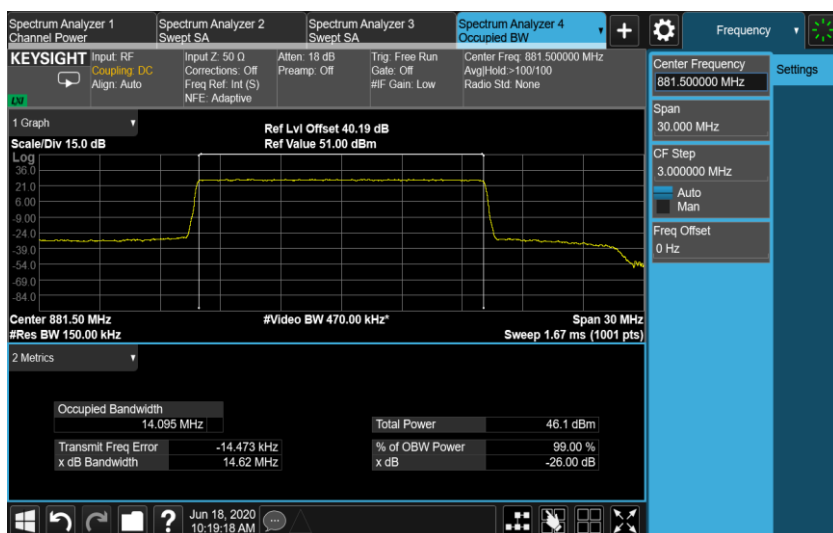
Port A, QPSK/10.0MHz Channel Position T



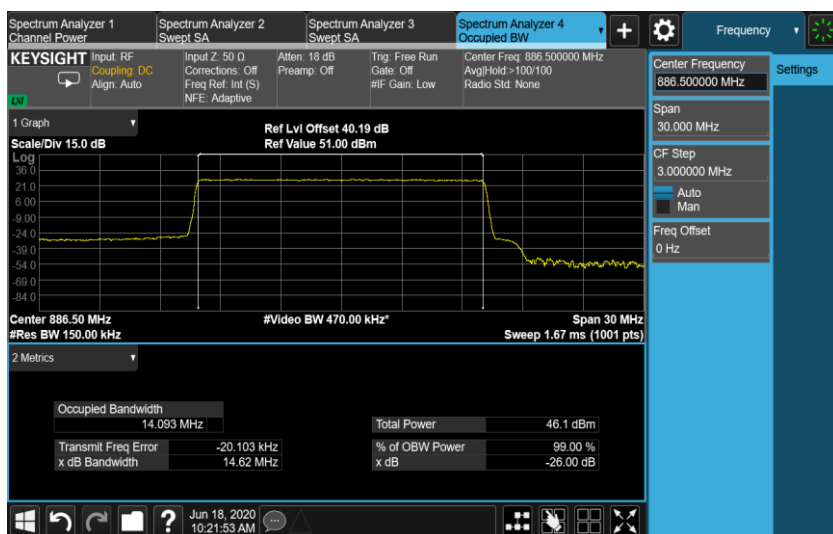
Port A, QPSK/15.0MHz Channel Position B



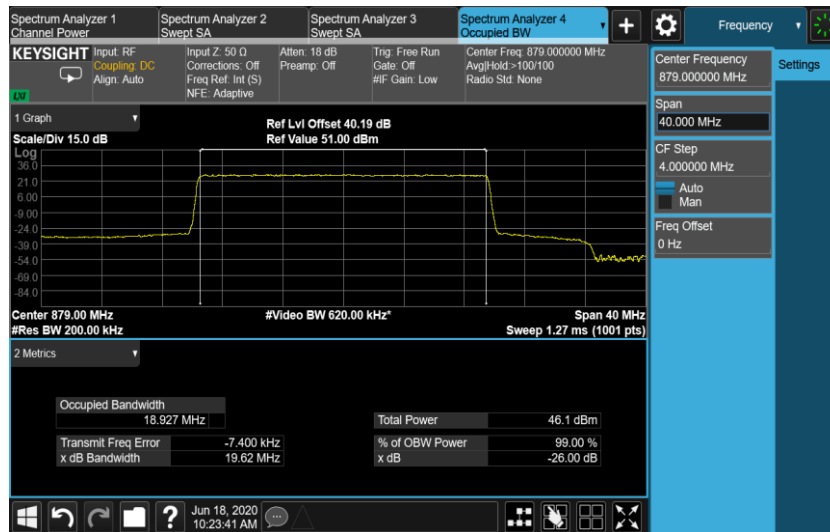
Port A, QPSK/15.0MHz Channel Position M



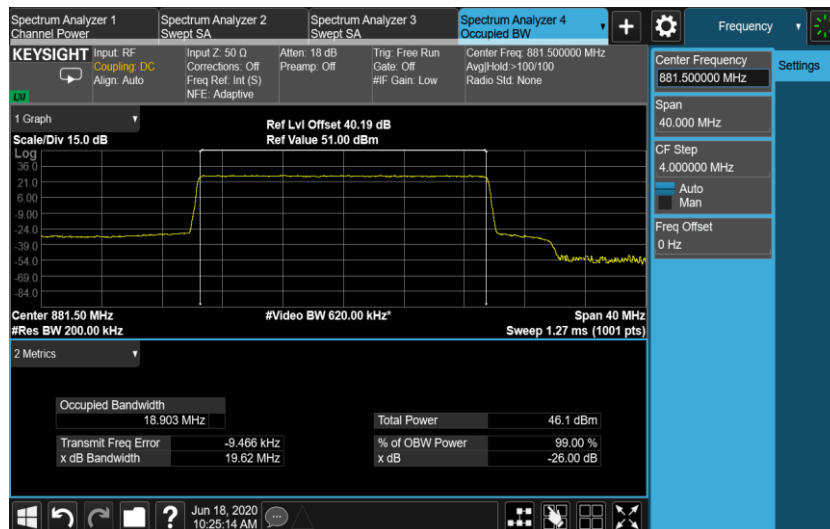
Port A, QPSK/15.0MHz Channel Position T



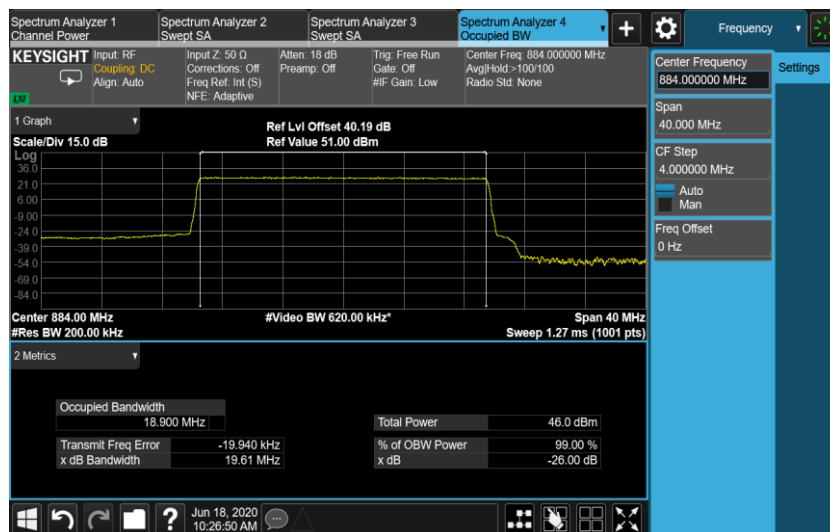
Port A, QPSK/20.0MHz Channel Position B



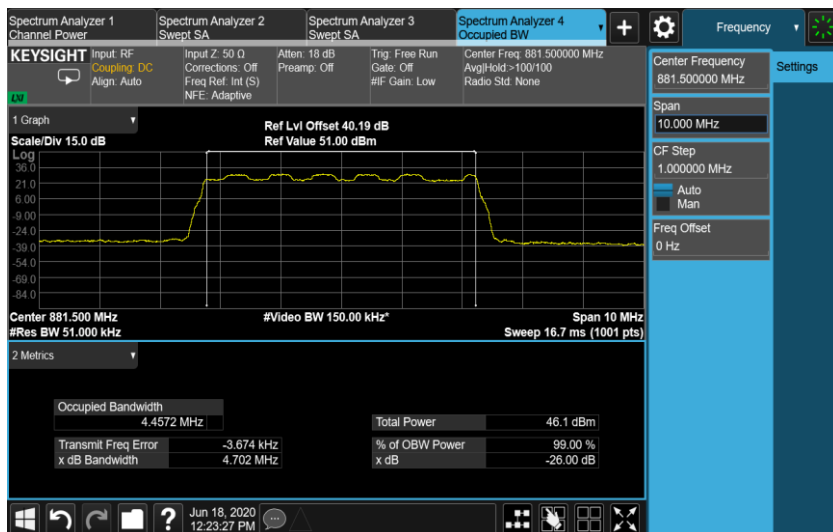
Port A, QPSK/20.0MHz Channel Position M



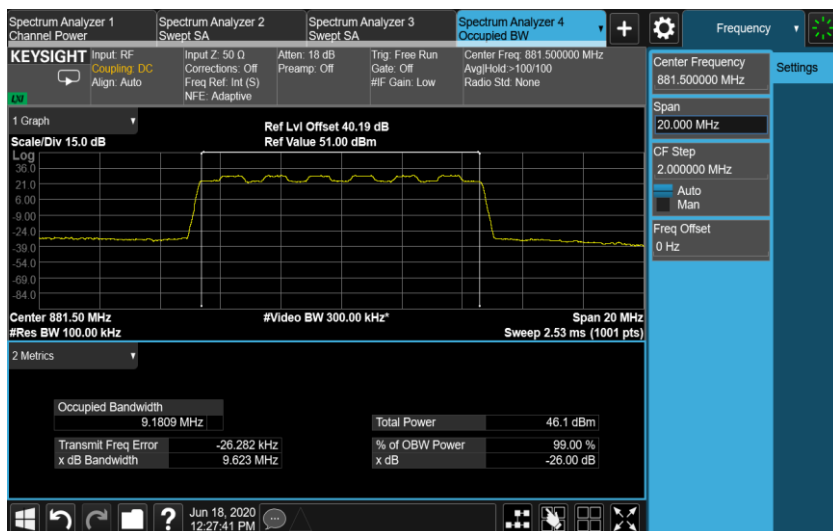
Port A, QPSK/20.0MHz Channel Position T



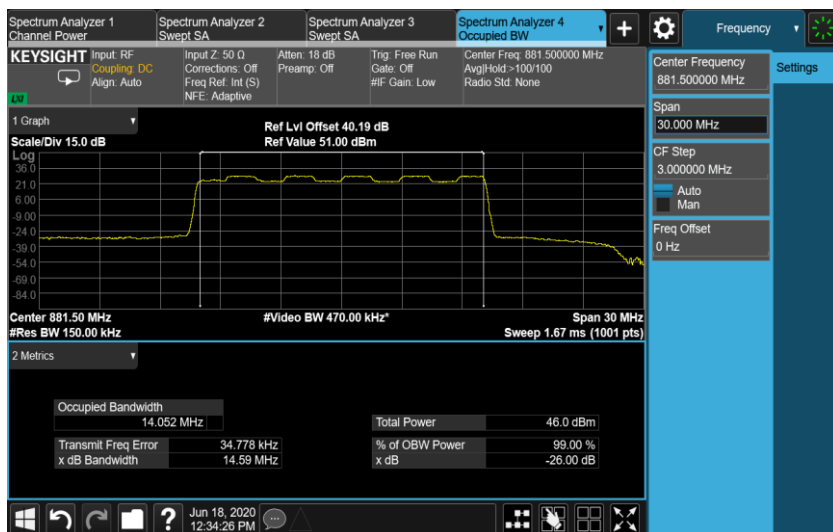
Port A, 16QAM/5.0MHz Channel Position M



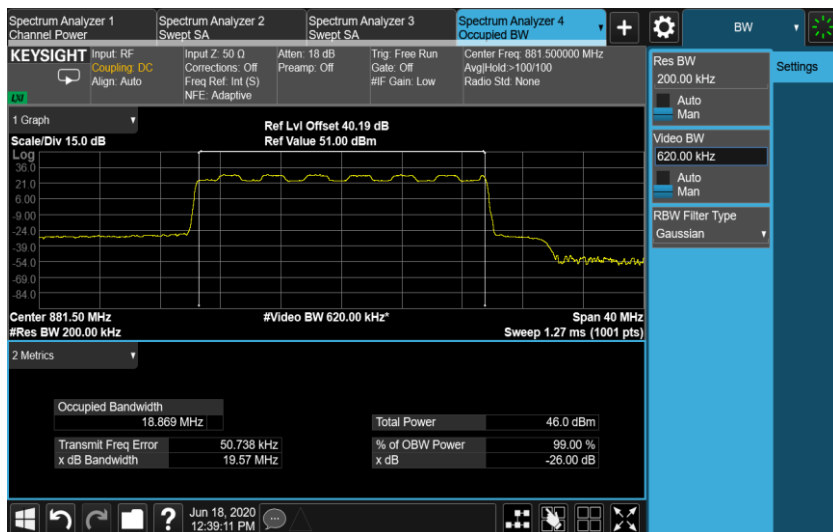
Port A, 16QAM/10.0MHz Channel Position M



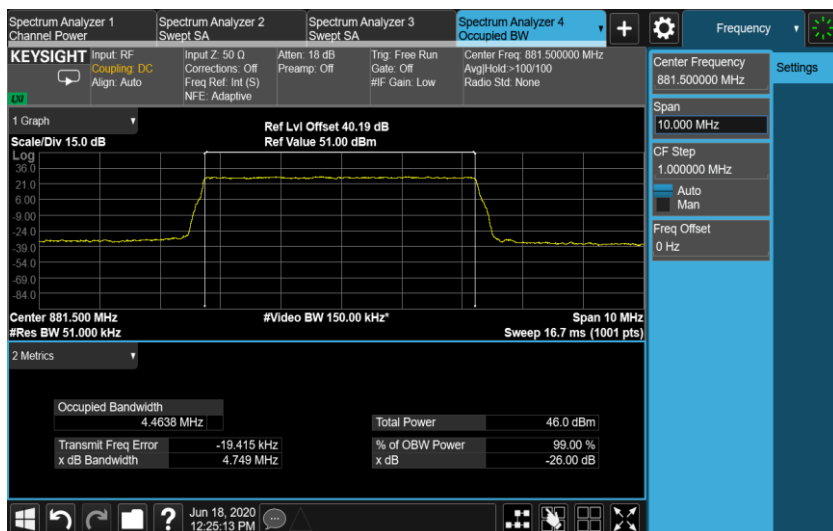
Port A, 16QAM/15.0MHz Channel Position M



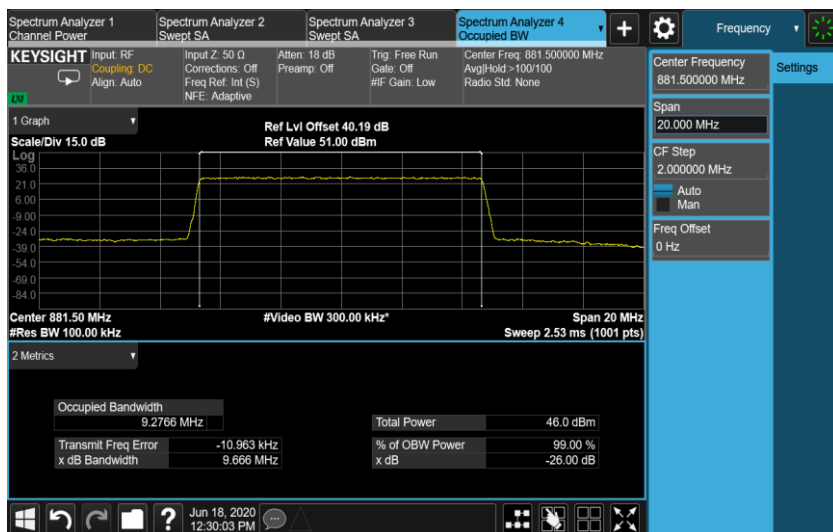
Port A, 16QAM/20.0MHz Channel Position M



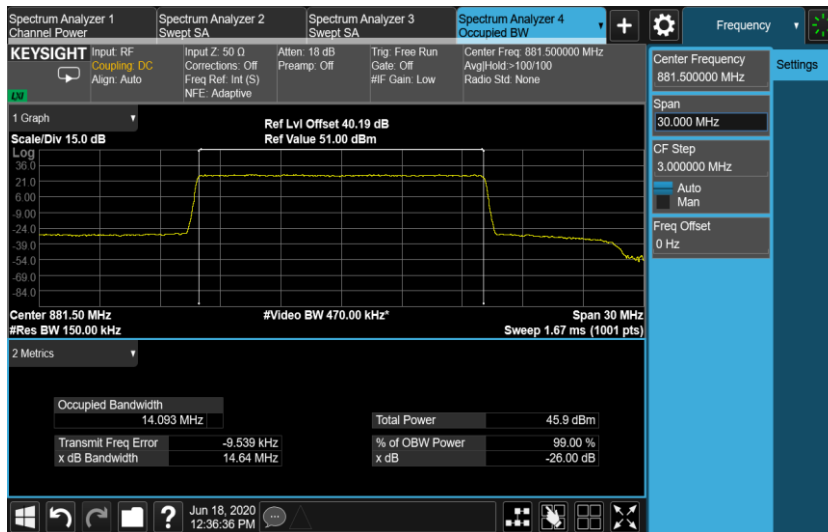
Port A, 64QAM/5.0MHz Channel Position M



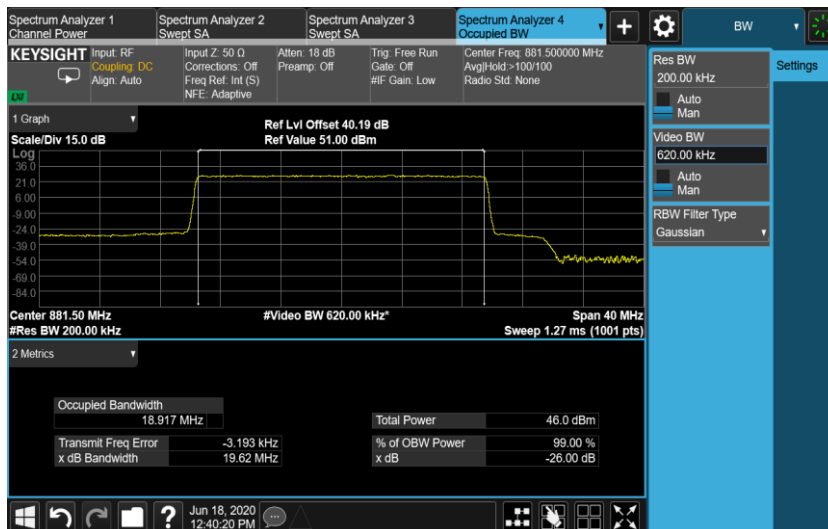
Port A, 64QAM/10.0MHz Channel Position M



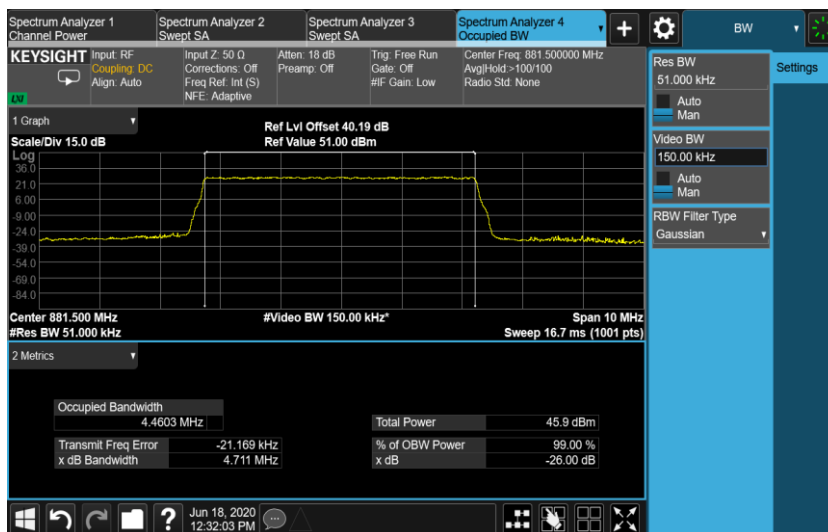
Port A, 64QAM/15.0MHz Channel Position M



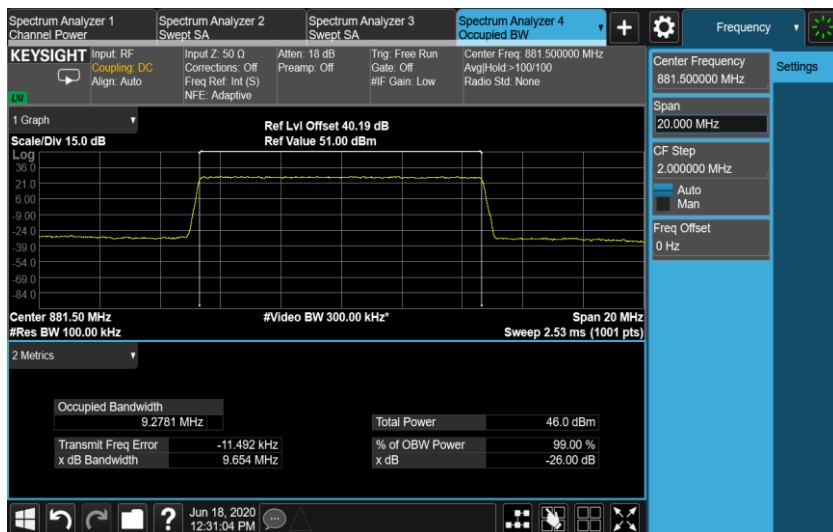
Port A, 64QAM/20.0MHz Channel Position M



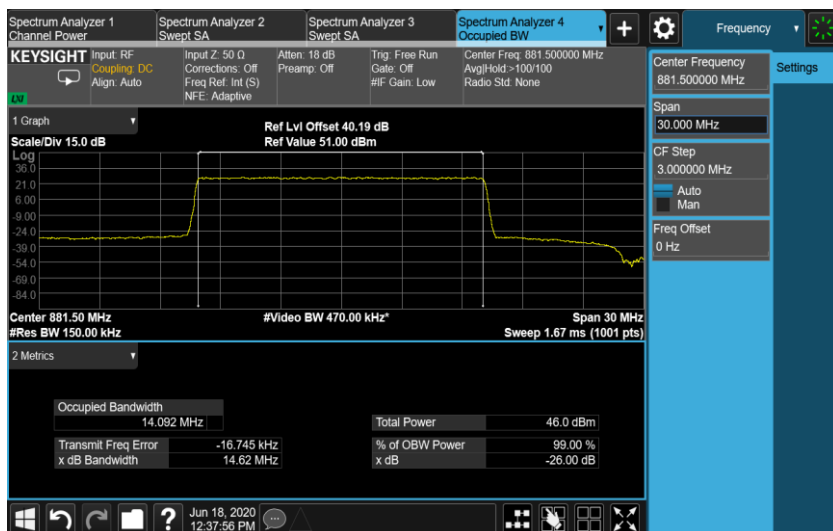
Port A, 256QAM/5.0MHz Channel Position M



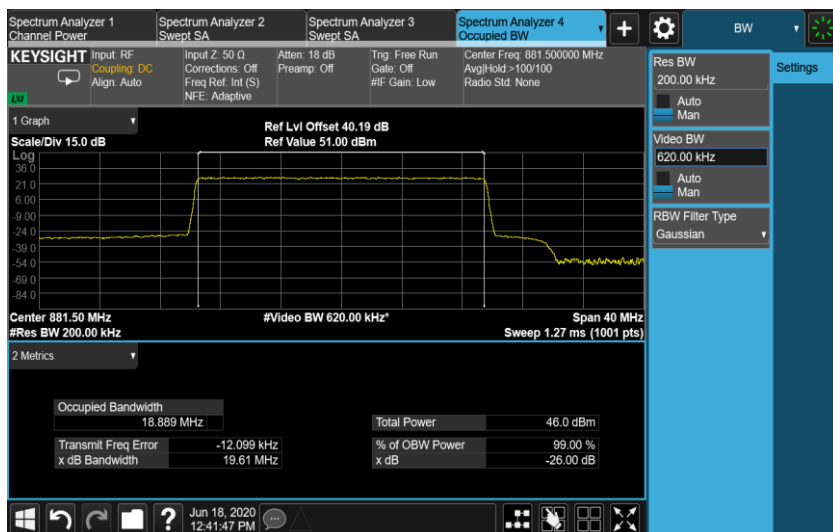
Port A, 256QAM/10.0MHz Channel Position M



Port A, 256QAM/15.0MHz Channel Position M



Port A, 256QAM/20.0MHz Channel Position M



Configuration NR-CA-2C

-26dBc Occupied Bandwidth

Modulation/ Bandwidth	Occupied Bandwidth (MHz)		
	Channel position B	Channel position M	Channel position T
QPSK5.0MHz / QPSK5.0MHz	-	9.747	-
QPSK5.0MHz / QPSK20.0MHz	-	24.49	-

-26dBc Occupied Bandwidth

Bandwidth	Occupied Bandwidth (MHz)		
	Modulation 16QAM/ Channel position M	Modulation 64QAM/ Channel position M	Modulation 256QAM/ Channel position M
5.0MHz/5.0MHz	9.688	9.745	9.711
5.0MHz/20.0MHz	24.47	24.50	24.49

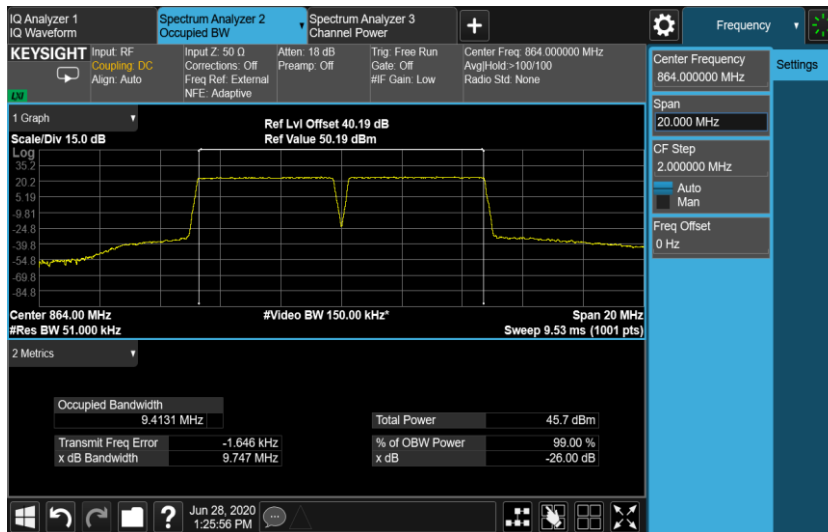
99% Occupied Bandwidth

Modulation/ Bandwidth	Occupied Bandwidth (MHz)		
	Channel position B	Channel position M	Channel position T
QPSK5.0MHz / QPSK5.0MHz	-	9.4131	-
QPSK5.0MHz / QPSK20.0MHz	-	24.027	-

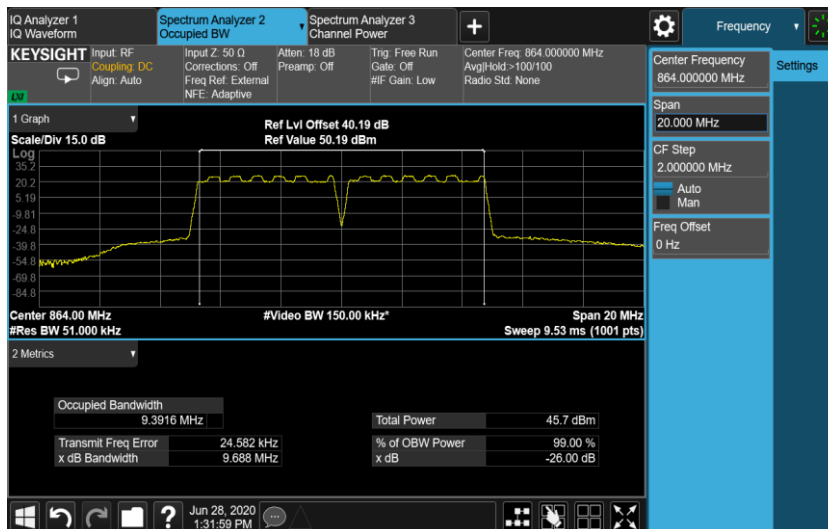
99% Occupied Bandwidth

Bandwidth	Occupied Bandwidth (MHz)		
	Modulation 16QAM/ Channel position M	Modulation 64QAM/ Channel position M	Modulation 256QAM/ Channel position M
5.0MHz/5.0MHz	9.3916	9.4165	9.4117
5.0MHz/20.0MHz	24.081	24.039	24.020

Port A, QPSK5.0MHz /QPSK5.0MHz Channel Position M



Port A, 16QAM5.0MHz /16QAM5.0MHz Channel Position M



Port A, 64QAM5.0MHz /64QAM5.0MHz Channel Position M

