

Ericsson AB

RF TEST REPORT

Report Type:

FCC Part 27 RF report

PRODUCT NAME:

Radio 4402 B66

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ISSUE DATE:

April 27, 2021

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TEST REPORT

Applicant: Ericsson AB
Isafjordsgatan 10 SE-164 80 Stockholm 16480 Sweden

Manufacturer: Ericsson AB
Isafjordsgatan 10 SE-164 80 Stockholm 16480 Sweden

FCC ID: TA8AKRC161738-1

IC: 287AB-AS1617381

SUMMARY:

The equipment complies with the requirements according to the following standard(s) or Specification:

FCC CFR 47 Part 27: MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES

ISED RSS-139 Issue 3: Advanced Wireless Services (AWS) Equipment Operating in the Bands 1710-1780 MHz and 2110-2180 MHz

ISED RSS-170 Issue 3: Mobile Earth Stations (MESs) and Ancillary Terrestrial Component (ATC) Equipment Operating in the Mobile-Satellite Service (MSS) Bands

PREPARED BY:**REVIEWED BY:**

Project Engineer
Jackson Huang

Reviewer
Edwin Xu

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Revision History

Report No.	Version	Description	Issued Date
210402862SHA-001	Rev. 01	Initial issue of report	April 27, 2021

Measurement result summary

TEST ITEM	FCC REFERENCE	IC REFERENCE	RESULT
Max Output Power and Peak to Average Power Ratio and EIRP	27.50(d)	RSS-139 4.1, 6.5; RSS-170 5.3	Pass
Occupied Bandwidth	27.53(h) 2.1049	RSS-GEN 6.7	Pass
Unwanted Emissions at Band Edge	27.53(h)	RSS-139 6.6; RSS-170 5.4	Pass
Conducted Unwanted Emission	27.53(h)	RSS-139 6.6; RSS-170 5.4	Pass
Radiated Unwanted Emissions	27.53(h)	RSS-139 6.6; RSS-170 5.4	Pass
Frequency Stability	27.54	RSS-139 6.4; RSS-170 5.2	Pass

Note: The requirement of RSS-170 Section 5.4.1.2 (2) is for implementation and is enforced at the time of licensing. Therefore results are not included in this report. For operation in the Band 66 (AWS-4) upper 20MHz (DL: 2180 – 2200MHz), operation is permitted by Industry Canada under a specific Industry Canada/Telco Licensing Agreement: P9 - AWS-4 (Ancillary Terrestrial Component) Subordinate Spectrum Licences

1 GENERAL INFORMATION

1.1 Description of Equipment Under Test (EUT)

Description:	Remote Radio Unit
Product name:	Radio 4402 B66
Product number:	KRC 161 738/1
HVIN	AS1617381
Serial Number(s)	EA8A276056
Rating:	36V DC
Software Version:	PIS: CXP9017316%7_R85LM
Hardware Version:	R1A
Sample received date:	March 17, 2021
Date of test:	March 17, 2021 ~ April 9, 2021

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1.2 Technical Specification

Frequency Range:	RX: 1710-1780 MHz, TX: 2110-2200 MHz (LTE, NR, NB-IoT) RX: 1710-1755 MHz, TX: 2110-2155 MHz (WCDMA)
Number of Antenna ports:	4 TX/RX
Supported RAT:	SR/MR: WCDMA+LTE+NB-IoT+NR
Supported other mode:	/
Max RF bandwidth (IBW):	WCDMA SR: 45MHz LTE/NR SR: 90MHz (valid for LTE BW $\geq$ 5 MHz) NB-IoT Standalone & LTE 1.4MHz,3MHz: 20MHz MR W+L+NB-IoT+NR: 90MHz
Supported Number of Carriers:	Maximum 6 carriers per port for all configuration
Supported modulation:	WCDMA: QPSK, 16QAM, 64QAM LTE&NR: QPSK, 16QAM, 64QAM, 256QAM NB-IoT: QPSK
Supported Channel Bandwidth:	WCDMA: 5 MHz LTE: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz NB-IoT Standalone: 200 kHz NR: 5MHz, 10MHz, 15MHz, 20MHz with 15kHz SCS
Declaration output power:	Maximum 37.0 dBm (5W) per port (Maximum 34.0 dBm (2.5W) for LTE 1.4MHz and 3MHz per carrier; Maximum 33.0 dBm (2W) for NB-IoT-Standalone per carrier
Antenna Gain:	KRE 105 280/1, Gain: 9.9dBi

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1.3 Description of Test Facility

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

2 TEST SPECIFICATIONS

2.1 Related documents

FCC Part 27 (2019)
FCC Part 2 (2019)
ISED RSS-139 issue 3 July 2015
ISED RSS-170 issue 3 July 2015
ISED RSS-Gen issue 5 March 2019 Amendment 1
ANSI C63.26:2015
KDB 971168 D01 v03r01
KDB 662911 D01 v02r01

2.2 Product Information

The Equipment Under Test (EUT) is an Ericsson Antenna Integrated Radio Unit working in the wireless communications services 2100MHz band which provides communication connections to network in WCDMA / LTE / NB-IoT / NR modes and MSR modes. The Radio 4402 B66 KRC 161 738/1 operates from a -48V DC or a 120V AC power supply.

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

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2.3 Configuration Description

The following settings were used to representative for all traffic scenarios when settings with different modulations, channel bandwidths, number for carriers and RF configurations have been tested to find the worst-case setting. The settings below were used for all measurements unless otherwise noted:

NR

Configuration	No. of Carriers	NR Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
NR-MIMO-1C	1NR	5	2112.5	2155	2197.5
		10	2115	2155	2195
		15	2117.5	2155	2192.5
		20	2120	2155	2190
NR-MIMO-2C	2NR	5	-	2112.5+2197.5	-
		10	-	2115+2195	-
		15	-	2117.5+2192.5	-
		20	-	2120+2190	-
NR-MIMO-6C	6NR	5	-	2112.5+2117.5+2122.5+ 2187.5+2192.5+2197.5	-
		10	-	2115+2125+2135+ 2175+2185+2195	-
		15	-	2117.5+2132.5+2147.5+ 2162.5+2177.5+2192.5	-

NB-IoT

Configuration	No. of Carriers	NB-IoT Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
NB-IB-1C	1IB	5	2112.5	2155	2197.5
		10	2115	2155	2195
		15	2117.5	2155	2192.5
		20	2120	2155	2190
NB-GB-1C	1GB	10	2115	2155	2195
		15	2117.5	2155	2192.5
		20	2120	2155	2190
NB-SA-1C	1SA	0.2	2110.2	2155	2199.8

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LTE

Configuration	No. of Carriers	LTE Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
LTE-MIMO-1C	1L	1.4	2110.7	2155	2199.3
		3	2111.5	2155	2198.5
		5	2112.5	2155	2197.5
		10	2115	2155	2195
		15	2117.5	2155	2192.5
		20	2120	2155	2190
LTE-MIMO-2C	2L	1.4	2110.7+2129.3	2145.7+2164.3	2180.7+2199.3
		3	2111.5+2128.5	2146.5+2163.5	2181.5+2198.5
		5	-	2112.5+2197.5	-
		10	-	2115+2195	-
		15	-	2117.5+2192.5	-
		20	-	2120+2190	-
LTE-MIMO-6C	6L	1.4	2110.7+2112.1+ 2113.5+2126.5+ 2127.9+2129.3	2145.7+2147.1+ 2148.5+2161.5+ 2162.9+2164.3	2180.7+2182.1+ 2183.5+2196.5+ 2197.9+2199.3
		3	2111.5+2114.5+ 2117.5+2122.5+ 2125.5+2128.5	2146.5+2149.5+ 2152.5+2157.5+ 2160.5+2163.5	2181.5+2184.5+ 2187.5+2192.5+ 2195.5+2198.5
		5	-	2122.5+2127.5+ 2132.5+2187.5+ 2192.5+2197.5	-
		10	-	2125+2135+ 2145+2175+ 2185+2195	-
		15	--	2117.5+2132.5+ 2147.5+2162.5+ 2177.5+2192.5	--

WCDMA

Configuration	No. of Carriers	WCDMA Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
WCDMA-MIMO-1C	1W	5	2112.4	2132.4	2152.6
WCDMA-MIMO-2C	2W	5	-	2112.4+2152.6	-
WCDMA-MIMO-6C	6W	5	-	2112.4+2117.4+2122.4+ 2142.6+2147.6+2152.6	-

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W+NR

Configuration	No. of Carriers	NR Carrier Bandwidth	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
W+NR-MIMO-MC-1	1W+1NR	5	-	(W)2112.4+(NR)2197.5	-
		10	-	(W)2112.4+(NR)2195	-
		15	-	(W)2112.4+(NR)2192.5	-
		20	-	(W)2112.4+(NR)2190	-
W+NR-MIMO-MC-2	2W+1NR	5	-	(W)2112.4+2117.4+(NR)2197.5	-
		10	-	(W)2112.4+2117.4+(NR)2195	-
		15	-	(W)2112.4+2117.4+(NR)2192.5	-
		20	-	(W)2112.4+2117.4+(NR)2190	-
W+NR-MIMO-MC-3	3W+3NR	5	-	(W)2112.4+2117.4+2122.4+(NR)2187.5+2192.5+2197.5	-
		10	-	(W)2112.4+2117.4+2122.4+(NR)2175+2185+2195	-
		15	-	(W)2112.4+2117.4+2122.4+(NR)2162.5+2177.5+2192.5	-
		20	-	(W)2112.4+2117.4+2122.4+(NR)2150+2170+2190	-

L+NR

Configuration	Carrier	NR Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)			LTE Carrier Bandwidth (MHz)
			Bottom	Middle	Top	
L+NR-MIMO-MC-1	1L+1NR	5	-	(NR)2112.5 + (L)2199.3	-	1.4
		5	-	(NR)2112.5 + (L)2198.5	-	3
		5	-	(NR)2112.5 + (L)2197.5	-	5
		10	-	(NR)2115 + (L)2199.3	-	1.4
		10	-	(NR)2115 + (L)2197.5	-	5
		15	-	(NR)2117.5 + (L)2199.3	-	1.4
		15	-	(NR)2117.5 + (L)2197.5	-	5
		20	-	(NR)2120 + (L)2199.3	-	1.4
L+NR-MIMO-MC-2	1L+2NR	5	-	(NR)2112.5+ 2117.5+(L)2199.3	-	1.4
		5	-	(NR)2112.5+ 2117.5+(L)2198.5	-	3
		5	-	(NR)2112.5+2117.5 +(L)2197.5	-	5
		10	-	(NR)2115+2125 + (L)2199.3	-	1.4
		10	-	(NR)2115+2125 + (L)2197.5	-	5
		15	-	(NR)2117.5+2132.5 +(L)2199.3	-	1.4
		15	-	(NR)2117.5+2132.5 +(L)2197.5	-	5
		20	-	(NR)2120+2140 + (L)2199.3	-	1.4
L+NR-MIMO-MC-3	3L+3NR	5	-	(NR)2112.5+2117.5+2122.5+(L)2196.5+2197.9+2199.3	-	1.4

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		5	-	(NR)2112.5+2117.5+ 2122.5+(L)2192.5+ 2195.5+2198.5	-	3
		5	-	(NR)2112.5+2117.5 +2122.5+(L)2187.5+ 2192.5+2197.5	-	5
		10	-	(NR)2115+2125+ 2135+(L)2196.5+ 2197.9+2199.3	-	1.4
		10	-	(NR)2115+2125+ 2135+(L)2187.5+ 2192.5+2197.5	-	5
		15	-	(NR)2117.5+2132.5+ 2147.5+(L)2196.5+ 2197.9+2199.3	-	1.4
		15	-	(NR)2117.5+2132.5+ 2147.5+(L)2187.5+ 2192.5+2197.5	-	5
		20	-	(NR)2120+2140+ 2160+(L)2196.5+ 2197.9+2199.3	-	1.4
		20	-	(NR)2120+2140+ 2160+(L)2187.5+ 2192.5+2197.5	-	5

L+SA

Configuration	No. of Carriers	LTE Carrier Bandwidth	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
LTE+SA-MC-1	1L+1SA	1.4	(SA)2110.2+(L) 2129.3	(SA)2135.2+(L)2154.3	(SA)2160.2+(L)2 179.3
		3	(SA)2110.2+(L) 2128.5	(SA)2135.2+(L)2153.5	(SA)2160.2+(L)2 178.5
		5	-	(SA)2110.2+(L)2197.5	-
		10	-	(SA)2110.2+(L)2195	-
		15	-	(SA)2110.2+(L)2192.5	-
		20	-	(SA)2110.2+(L)2190	-
LTE+SA-MC-2	2L+1SA	1.4	(SA)2110.2+(L) 2127.9+2129.3	(SA)2135.2+(L)2152.9 +2154.3	(SA)2160.2+(L)2 177.9+2179.3
		3	(SA)2110.2+(L) 2125.5+2128.5	(SA)2135.2+(L)2150.5 +2153.5	(SA)2160.2+(L)2 175.5+2178.5
		5	-	(SA)2110.2+(L)2192.5 +2197.5	-
		10	-	(SA)2110.2+(L)2185 +2195	-
		15	-	(SA)2110.2+(L)2177.5 +2192.5	-
		20	-	(SA)2110.2+(L)2170 +2190	-

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LTE+SA-MC-3	5L+1SA	1.4	(SA)2110.2+(L)2123.7+2125.1+2126.5+2127.9+2129.3	(SA)2135.2+(L)2148.7+2150.1+2151.5+2152.9+2154.3	(SA)2160.2+(L)2173.7+2175.1+2176.5+2177.9+2179.3
		3	(SA)2110.2+(L)2116.5+2119.5+2122.5+2125.5+2128.5	(SA)2135.2+(L)2141.5+2144.5+2147.5+2150.5+2153.5	(SA)2160.2+(L)2166.5+2169.5+2172.5+2175.5+2178.5
		5	-	(SA)2110.2+(L)2177.5+2182.5+2187.5+2192.5+2197.5	-
		10	-	(SA)2110.2+(L)2155+2165+2175+2185+2195	-
		15	-	(SA)2110.2+(L)2132.5+2147.5+2162.5+2177.5+2192.5	-
LTE+SA-MC-4	4L+1SA	20	-	(SA)2110.2+(L)2130+2150+2170+2190	-

W+SA

Configuration	No. of Carriers	Carrier Channel Bandwidth	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
W+SA-MIMO-MC-1	1W+1SA	5	-	(W)2112.4+(SA)2179.8	-
W+SA-MIMO-MC-2	2W+1SA	5	-	(W)2112.4+2117.4+(SA)2179.8	-
W+SA-MIMO-MC-3	5W+1SA	5	-	(W)2112.4+2117.4+2122.4+2127.4+2132.4+(SA)2179.8	-

W+L+NR

Configuration	Carrier	NR Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)			LTE Carrier Bandwidth (MHz)
			Bottom	Middle	Top	
W+L+NR-MIMO-MC-1	1W+1L+1 NR	5	-	(NR)2112.5+(W)2152.6+(L)2199.3	-	1.4
		5	-	(NR)2112.5+(W)2152.6+(L)2198.5	-	3
		5	-	(NR)2112.5+(W)2152.6+(L)2197.5	-	5
		10	-	(NR)2115+(W)2152.6+(L)2199.3	-	1.4
		10	-	(NR)2115+(W)2152.6+(L)2197.5	-	5
		15	-	(NR)2117.5+(W)2152.6+(L)2199.3	-	1.4
		15	-	(NR)2117.5+(W)2152.6+(L)2197.5	-	5
		20	-	(NR)2120+(W)2152.6	-	1.4

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				+(L)2199.3		
		20	-	(NR)2120+(W)2152.6 +(L)2197.5	-	5
W+L+NR-MIMO-MC-2	2W+1L+1 NR	5	-	(NR)2112.5+(W)2147.6 +2152.6+(L)2199.3	-	1.4
		5	-	(NR)2112.5+(W)2147.6 +2152.6+(L)2198.5	-	3
		5	-	(NR)2112.5+(W)2147.6 +2152.6+(L)2197.5	-	5
		10	-	(NR)2115+(W)2147.6 +2152.6+(L)2199.3	-	1.4
		10	-	(NR)2115+(W)2147.6+ 2152.6+(L)2197.5	-	5
		15	-	(NR)2117.5+(W)2147.6+ 2152.6+(L)2199.3	-	1.4
		15	-	(NR)2117.5+(W)2147.6+ 2152.6+(L)2197.5	-	5
		20	-	(NR)2120+(W)2147.6+ 2152.6+(L)2199.3	-	1.4
		20	-	(NR)2120+(W)2147.6+ 2152.6+(L)2197.5	-	5
W+L+NR-MIMO-MC-3	2W+2L+2 NR	5	-	(NR)2112.5+2117.5+ (W)2147.6+2152.6+ (L)2197.9+2199.3	-	1.4
		5	-	(NR)2112.5+2117.5+ (W)2147.6+2152.6+ (L)2195.5+2198.5	-	3
		5	-	(NR)2112.5+2117.5+ (W)2147.6+2152.6+ (L)2192.5+2197.5	-	5
		10	-	(NR)2115+2125+ (W)2147.6+2152.6+ (L)2197.9+2199.3	-	1.4
		10	-	(NR)2115+2125+ (W)2147.6+2152.6+ (L)2192.5+2197.5	-	5
		15	-	(NR)2117.5+2132.5+ (W)2147.6+2152.6+ (L)2197.9+2199.3	-	1.4
		15	-	(NR)2117.5+2132.5+ (W)2147.6+2152.6+ (L)2192.5+2197.5	-	5
W+L+NR-MIMO-MC-4	1W+2L+2 NR	20	-	(NR)2120+2140+(W) 2152.6+(L)2197.9+2199.3	-	1.4
		20	-	(NR)2120+2140+(W) 2152.6+(L)2192.5+2197.5	-	5

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SA+L+NR

Configura tion	Carrier	NR Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)			LTE Carrier Bandwidth (MHz)
			Bottom	Middle	Top	
NB+L+NR -MIMO- MC-1	1NB+1 L+1NR	5	-	(NR)2112.5+(L)2199+(SA)2199.8	-	1.4
		5	-	(NR)2112.5+(L)2198.2+(SA)2199.8	-	3
		10	-	(NR)2115+(L)2199+(SA)2199.8	-	1.4
		10	-	(NR)2115+(L)2197.2+(SA)2199.8	-	5
		15	-	(NR)2117.5+(L)2199+(SA)2179.8	-	1.4
		15	-	(NR)2117.5+(L)2197.2+(SA)2199.8	-	5
		20	-	(NR)2120+(L)2199+(SA)2199.8	-	1.4
		20	-	(NR)2120+(L)2197.2+(SA)2199.8	-	5
NB+L+NR -MIMO- MC-2	1NB+2 L+1NR	5	-	(NR)2112.5+(L)2197.6+2199+ (SA)2199.8	-	1.4
		5	-	(NR)2112.5+(L)2195.2+2198.2+ (SA)2199.8	-	3
		10	-	(NR)2115+(L)2197.6+2199+ (SA)2199.8	-	1.4
		10	-	(NR)2115+(L)2192.2+2197.2+ (SA)2199.8	-	5
		15	-	(NR)2117.5+(L)2197.6+2199+ (SA)2199.8	-	1.4
		15	-	(NR)2117.5+(L)2192.2+2197.2+ (SA)2199.8	-	5
		20	-	(NR)2120+(L)2197.6+2199+ (SA)2199.8	-	1.4
		20	-	(NR)2120+(L)2192.2+2197.2+ (SA)2199.8	-	5
NB+L+NR -MIMO- MC-3	1NB+3 L+2NR	5	-	(NR)2112.5+2117.5+(L)2196.2+ 2197.6+2199+(SA)2199.8	-	1.4
		5	-	(NR)2112.5+2117.5+(L)2192.2+ 2195.2+2198.2+(SA)2199.8	-	3
		10	-	(NR)2115+2125+(L)2196.2+ 2197.6+2199+(SA)2199.8	-	1.4
		10	-	(NR)2115+2125+(L)2187.2+ 2192.2+2197.2 +(SA)2199.8	-	5
		15	-	(NR)2117.5+2132.5+(L)2196.2+ 2197.6+2199+(SA)2199.8	-	1.4
		15	-	(NR)2117.5+2132.5+(L)2187.2+ 2192.2+2197.2 +(SA)2199.8	-	5
		20	-	(NR)2120+2140+(L)2196.2+ 2197.6+2199+(SA)2199.8	-	1.4
		20	-	(NR)2120+2140+(L)2187.2+ 2192.2+2197.2+(SA)2199.8	-	5

TEST REPORT

W+L+SA

Configura tion	No. of Carriers	LTE Carrier Bandwidth	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
W+L+SA- MC-1	1W+1L+ 1SA	1.4	(NB)2110.2+ (W)2120+(L)2129.3	(NB)2122.7+ (W)2132.5+(L)2141.8	(NB)2135.2+ (W)2145+(L)2154.3
		3	(NB)2110.2+ (W)2120+(L)2128.5	(NB)2122.7 + (W)2132.5+(L)2141	(NB)2135.2 + (W)2145+(L)2153.5
		5	-	(NB)2110.2+ (W)2145+(L)2197.5	-
		10	-	(NB)2110.2+ (W)2145+(L)2195	-
		15	-	(NB)2110.2+ (W)2145+(L)2192.5	-
		20	-	(NB)2110.2+ (W)2145+(L)2190	-
W+L+SA- MC-2	1W+2L+ 1SA	1.4	(NB)2110.2+ (W)2117.4+ (L)2120.7+2129.3	(NB)2122.7+(W)2130 +(L)2133.2+2141.8	(NB)2135.2+ (W)2142.4+ (L)2145.7+2154.3
		3	(NB)2110.2+ (W)2117.4+ (L)2121.5+2128.5	(NB)2122.7+(W)2130 +(L)2134+2141	(NB)2135.2+ (W)2142.4+ (L)2146.5+2153.5
W+L+SA- MC-3	2W+1L+ 1SA	5	-	(NB)2110.2+(W)2130 +2135+(L)2197.5	-
		10	-	(NB)2110.2+(W)2130 +2135+(L)2195	-
		15	-	(NB)2110.2+(W)2130 +2135+(L)2192.5	-
		20	-	(NB)2110.2+(W)2127 .4+2132.4+(L)2190	-
W+L+SA- MC-4	2W+3L+ 1SA	1.4	(NB)2110.2+ (W)2117.4+2122.4 +(L)2125.7+2127.1 + 2129.3	(NB)2122.7+(W)2130 +2135+(L)2138.2 +2139.6+2141.8	(NB)2135.2+ (W)2142.6+2147.6 +(L)2150.7+2152.1+ 2154.3
		3	(NB)2110.2+ (W)2113.4+2118.4 +(L)2122.5+2125.5 + 2128.5	(NB)2122.7+(W)2126 +2131+(L)2135 + 2138+2141	(NB)2135.2+ (W)2138.6+2143.6 +(L)2147.5+2150.5+ 2153.5
W+L+SA- MC-5	3W+2L+ 1SA	5	-	(NB)2110.2+ (W)2140+2145+2150 + (L)2192.5 + 2197.5	-
		10	-	(NB)2110.2+ (W)2140+2145+2150 +(L)2192.5+2195	-
		15	-	(NB)2110.2+ (W)2135+2140+2145 + (L)2177.5+2192.5	-
		20	-	(NB)2110.2+ (W)2127.4+2132.4+	-

TEST REPORT

				2137.4+(L)2170+ 2190	
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NR

Configuration	No. of Carriers	NR Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
NR-MIMO-1C-UE	1	5	2112.5	-	2197.5
		10	2115	-	2195
		15	2117.5	-	2192.5
		20	2120	-	2190
NR-MIMO-2C-UE	2	5	2112.5+2117.5	-	2192.5+2197.5
		10	2115+2125	-	2185+2195
		15	2117.5+2132.5	-	2177.5+2192.5
		20	2120+2140	-	2170+2190

NB-IoT

Configuration	No. of Carriers	NB-IoT Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
NB-IB-1C-UE	1IB	5	2112.5	-	2197.5
		10	2115	-	2195
		15	2117.5	-	2192.5
		20	2120	-	2190
NB-GB-1C-UE	1GB	10	2115	-	2195
		15	2117.5	-	2192.5
		20	2120	-	2190
NB-SA-1C-UE	1SA	0.2	2110.2	-	2199.8

LTE

Configuration	No. of Carriers	LTE Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
LTE-MIMO-1C-UE	1L	1.4	2110.7	-	2199.3
		3	2111.5	-	2198.5
		5	2112.5	-	2197.5
		10	2115	-	2195
		15	2117.5	-	2192.5
		20	2120	-	2190
LTE-MIMO-2C-UE	2L	1.4	2110.7+2112.1	-	2197.9+2199.3
		3	2111.5+2114.5	-	2195.5+2198.5
		5	2112.5+2117.5	-	2187.5+2192.5
		10	2115+2125	-	2185+2195
		15	2117.5+2132.5	-	2177.5+2192.5
		20	2120+2140	-	2170+2190

TEST REPORT

WCDMA

Configuration	No. of Carriers	WCDMA Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
WCDMA-MIMO-1C-UE	1W	5	2112.4	-	2152.6
WCDMA-MIMO-2C-UE	2W	5	2112.4+2117.4	-	2147.6+2152.6

W+L+NR

Configuration	Carrier	NR Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		LTE Carrier Bandwidth (MHz)
			Bottom	Top	
W+L+NR-MIMO-MC-1-UE	1W+1L+1NR	5	(W)2112.4+(L)2117.5+(NR)2197.5	(W)2112.4+(L)2192.5+(N)2197.5	5

NR+W+GB

Configuration	Carrier	NR Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)	GB Carrier Bandwidth (MHz)
			Middle	
NR+W+GB-MIMO-MC-1-UE	1NR+2W+1BG	5	(NR)2112.5+(W)2117.6+2142.6+(L+NB-GB)2150	10

GB+NR+L+SA

Configuration	Carrier	NR Carrier Bandwidth (MHz)	LTE Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)	GB Carrier Bandwidth (MHz)
				Middle	
GB+NR+L+SA-MIMO-MC-1-UE	1GB+1NR+3L+1SA	5	5	(L+GB)2115+(N)2122.5+(L)2127.5+2132.5+2137.5+2199.8	10

SA+W+L

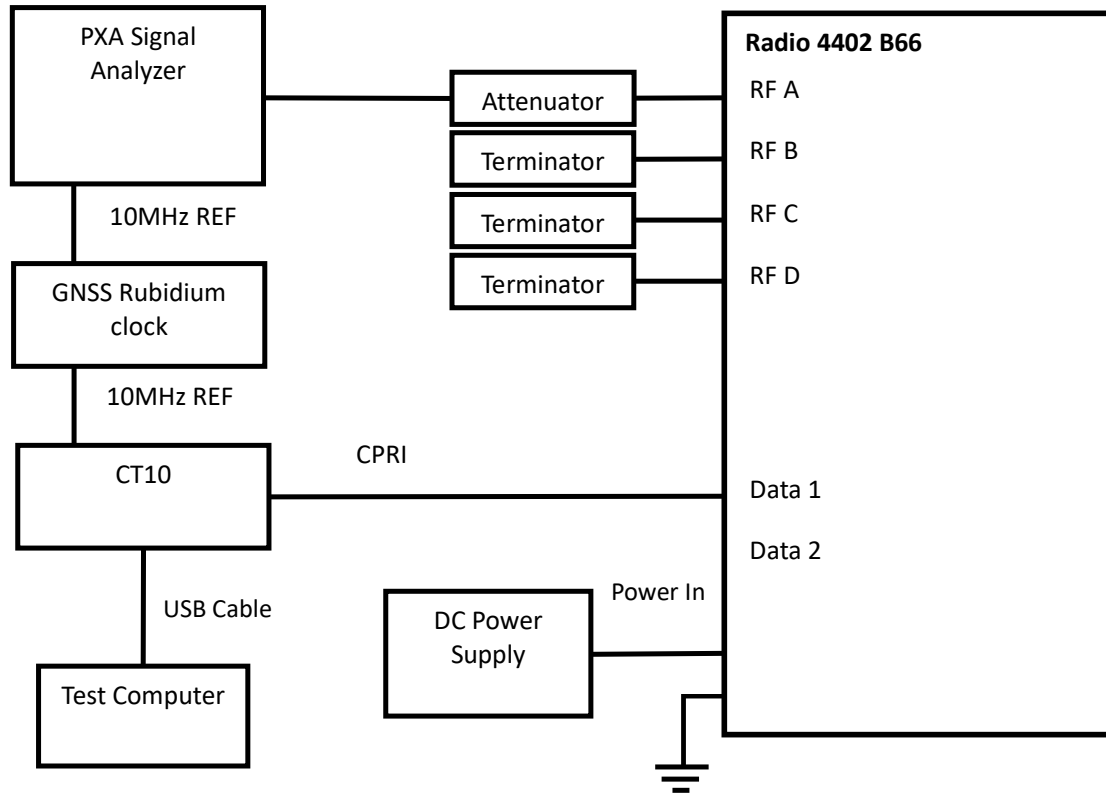
Configuration	Carrier	LTE Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)
			Middle
SA+W+L-MIMO-MC-1-UE	1SA+3W+2L	5	(NB)2110.2+(W)2142.6+2147.6+2152.6+(L)2157.5+2197.5

SA+L

Configuration	Carrier	LTE Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)
			Middle
SA+L-MIMO-MC-1-UE	1SA+5L	5	(NB)2110.2+(L)2147.5+2152.5+2157.5+2162.5+2197.5

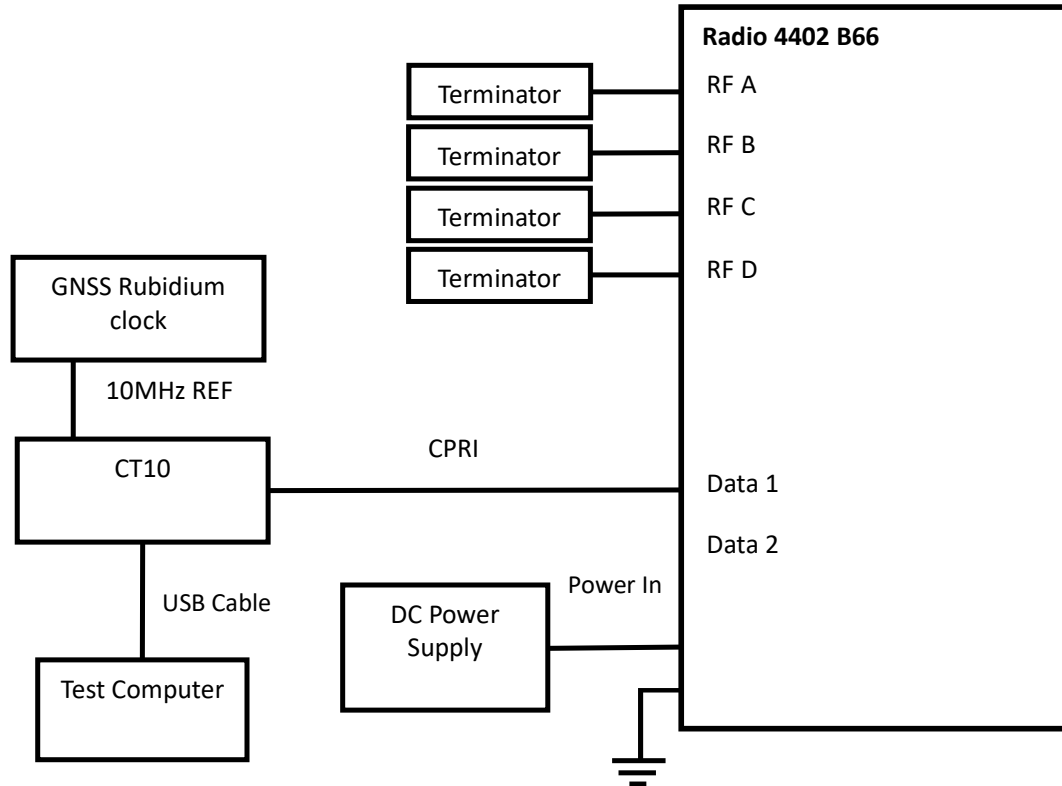
2.4 Test Setup

Conducted Measurement:



No.	Auxiliary Equipment	Product Number / Model Type	Version
1	Test computer	HP EliteBook 8470	-
2	CT10	LPC102487/1	R1C
3	GNSS Rubidium clock	HJ5418A-V1	-
4	DC Power Supply	US17N731P	-
5	Attenuator	2.4ts20-20-40G	-
6	Attenuator	TSG50-4-20N5	-
7	Terminator	WTF100-6G-A-NJ	-

Radiated Measurement:



No.	Auxiliary Equipment	Product Number / Model Type	Version
1	Test computer	HP EliteBook 8470	-
2	CT10	LPC102487/1	R1C
3	GNSS Rubidium clock	HJ5418A-V1	-
4	DC Power Supply	US17N731P	-
5	Attenuator	2.4ts20-20-40G	-
6	Terminator	TF200-4G	-
7	Terminator	TF200-4G-NK	-
8	Filter	CW-HPF-12750-16000-E11-M2	
9	Filter	CW-HPF-16000-26000-E11-M2	
10	Filter	CW-HPF-26000-40000-E11-M2	

2.5 Test environment condition:

Test items	Temperature	Humidity
Max Output Power and Peak to Average Power Ratio and EIRP	23°C	54% RH
Occupied Bandwidth		
Unwanted Emissions at Band Edge		
Conducted Unwanted Emission		
Radiated Unwanted Emissions	24°C	56% RH
Frequency Stability	Please refer to clause 8	

2.6 Instrument list

Radiated Emission					
Used	Equipment	Manufacturer	Type	Internal no.	Due date
☒	Test Receiver	R&S	ESIB 26	EC 3045	2021-09-15
☒	Bilog Antenna	TESEQ	CBL 6112D	EC 4206	2021-10-25
☒	Pre-amplifier	R&S	AFS42-00101800-25-S-42	EC5262	2021-06-11
☒	Horn antenna	R&S	HF 906	EC 3049	2022-01-17
☐	Horn antenna	ETS	3117	EC 4792-1	2022-02-25
☒	Horn antenna	TOYO	HAP18-26W	EC 4792-3	2023-07-08
☐	Active loop antenna	Schwarzbeck	FMZB1519	EC 5345	2022-03-14
RF test					
Used	Equipment	Manufacturer	Type	Internal no.	Due date
☐	PXA Signal Analyzer	Keysight	N9030A	EC 5338	2022-03-15
☐	Power sensor	Agilent	U2021XA	EC 5338-1	2022-03-15
☐	Vector Signal Generator	Agilent	N5182B	EC 5175	2022-03-15
☐	Universal Radio Communication Tester	R&S	CMW500	EC5944	2022-01-27
☐	MXG Analog Signal Generator	Agilent	N5181A	EC 5338-2	2022-03-15
☐	Mobile Test System	Litepoint	lqxel	EC 5176	2022-01-27
☐	Test Receiver	R&S	ESCI 7	EC 4501	2021-09-15
☒	Climate chamber	GWS	MT3065	EC 6021	2022-03-07
☒	Spectrum Analyzer	Keysight	N9030B	EC 6078	2021-06-10
Tet Site					
Used	Equipment	Manufacturer	Type	Internal no.	Due date
☐	Shielded room	Zhongyu	-	EC 2838	2022-01-24
☐	Shielded room	Zhongyu	-	EC 2839	2022-01-24
☒	Semi-anechoic chamber	Albatross project	-	EC 3048	2021-07-14
☐	Fully-anechoic chamber	Albatross project	-	EC 3047	2021-07-14
Additional instrument					
Used	Equipment	Manufacturer	Type	Internal no.	Due date

TEST REPORT

☐	Therom-Hygrograph	ZJ1-2A	S.M.I.F.	EC 3783	2022-03-24
☐	Therom-Hygrograph	ZJ1-2A	S.M.I.F.	EC 5198	2022-03-09
☒	Therom-Hygrograph	ZJ1-2A	S.M.I.F.	EC 3442	2022-01-04
☒	Therom-Hygrograph	ZJ1-2A	S.M.I.F.	EC 5844	2022-03-09
☐	Pressure meter	YM3	Shanghai Mengde	EC 3320	2021-07-20

2.7 Measurement uncertainty

The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Test item	Measurement uncertainty
Maximum output power	0.73dB
Occupied Bandwidth	0.88%
Unwanted Emissions at Band Edge	3.03dB
Conducted Unwanted Emission	3.03dB
Radiated Unwanted Emissions below 1GHz	4.90dB
Radiated Unwanted Emissions above 1GHz	5.02dB
Frequency stability	0.77×10^{-7}

TEST REPORT

3 Maximum Output Power and Peak to Average Power Ratio and EIRP

Test result: Pass

3.1 Limit

Output Power:

(EIRP) 1640 W(62.15dBm) or 3280W(65.16dBm) for emission bandwidth $\leq$ 1MHz
1640 W/MHz(62.15dBm/MHz) or 3280W/MHz(65.16dBm/MHz) for emission bandwidth $>$ 1MHz

Peak to Average Ratio: $\leq$ 13 dB

3.2 Measurement Procedure

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.

3.3 Measurement result

NR mode:

NR-MIMO-1C

Antenna Port	NR Modulation	NR 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	37.03	30.81	7.69	37.07	30.83	7.91	36.51	30.48	7.30
B	QPSK	5	37.10	30.92	7.76	37.08	30.87	7.91	36.82	30.78	7.30
C	QPSK	5	36.95	30.73	7.79	36.85	30.64	7.91	36.40	30.33	7.30
D	QPSK	5	36.99	30.76	7.68	37.07	30.85	7.92	36.58	30.47	7.29
Total			43.04	36.83	-	43.04	36.82	-	42.60	36.54	-
Total Power+9.9dBi			52.94	46.73	-	52.94	46.72	-	52.50	46.44	-

Antenna Port	NR Modulation	NR 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	37.05	31.11	7.71	37.05	31.21	7.95	36.53	30.72	7.26
B	16QAM	5	37.11	31.15	7.78	37.08	31.16	7.96	36.86	31.04	7.26
C	16QAM	5	36.95	31.06	7.81	36.84	30.87	7.96	36.39	30.62	7.26
D	16QAM	5	37.01	31.11	7.70	37.01	31.12	7.95	36.58	30.76	7.26
Total			43.05	37.13	-	43.02	37.11	-	42.61	36.81	-
Total Power+9.9dBi			52.95	47.03	-	52.92	47.01	-	52.51	46.71	-

Antenna Port	NR Modulation	NR 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	36.98	30.83	7.79	36.95	30.77	8.04	36.43	30.33	7.35
B	64QAM	5	37.04	30.93	7.85	36.95	30.84	8.04	36.75	30.68	7.35
C	64QAM	5	36.89	30.78	7.87	36.72	30.63	8.04	36.30	30.15	7.36
D	64QAM	5	36.94	30.83	7.78	36.94	30.81	8.04	36.50	30.32	7.36
Total			42.98	36.86	-	42.91	36.78	-	42.52	36.39	-
Total Power+9.9dBi			52.88	46.76	-	52.81	46.68	-	52.42	46.29	-

TEST REPORT

Antenna Port	NR Modulation	NR 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	37.00	30.80	7.77	36.96	30.82	8.03	36.44	30.39	7.33
B	256QAM	5	37.03	30.90	7.84	36.97	30.77	8.05	36.77	30.71	7.34
C	256QAM	5	36.89	30.67	7.88	36.86	30.51	8.04	36.33	30.27	7.35
D	256QAM	5	36.96	30.79	7.76	36.95	30.71	8.03	36.55	30.41	7.33
Total			42.99	36.81	-	42.96	36.72	-	42.55	36.47	-
Total Power+9.9dBi			52.89	46.71	-	52.86	46.62	-	52.45	46.37	-

Antenna Port	NR Modulation	NR 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	36.89	27.69	7.81	36.98	27.62	8.00	36.90	27.71	7.35
B	QPSK	10	37.05	27.79	7.85	37.03	27.65	7.98	37.12	27.90	7.35
C	QPSK	10	36.85	27.59	7.87	36.79	27.45	7.98	36.74	27.55	7.35
D	QPSK	10	36.85	27.52	7.79	36.94	27.52	7.99	36.92	27.79	7.35
Total			42.93	33.67	-	42.96	33.58	-	42.94	33.76	-
Total Power+9.9dBi			52.83	43.57	-	52.86	43.48	-	52.84	43.66	-

Antenna Port	NR Modulation	NR 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	36.92	28.35	7.87	36.93	28.24	8.07	36.90	28.38	7.36
B	16QAM	10	37.05	28.41	7.91	37.02	28.28	8.06	37.12	28.53	7.37
C	16QAM	10	36.85	28.19	7.95	36.77	28.05	8.07	36.75	28.21	7.37
D	16QAM	10	36.84	28.13	7.82	36.93	28.21	8.07	36.92	28.37	7.36
Total			42.94	34.29	-	42.93	34.22	-	42.95	34.39	-
Total Power+9.9dBi			52.84	44.19	-	52.83	44.12	-	52.85	44.29	-

Antenna Port	NR Modulation	NR 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	36.92	27.69	7.86	36.97	27.67	8.02	36.75	27.78	7.36
B	64QAM	10	37.00	27.70	7.89	36.98	27.80	8.02	37.07	27.98	7.38
C	64QAM	10	36.81	27.50	7.91	36.72	27.40	8.02	36.69	27.66	7.38
D	64QAM	10	36.79	27.46	7.83	36.88	27.62	8.01	36.88	27.89	7.38
Total			42.90	33.61	-	42.91	33.65	-	41.61	33.85	-
Total Power+9.9dBi			52.80	43.51	-	52.81	43.55	-	51.51	43.75	-

TEST REPORT

Antenna Port	NR Modulation	NR 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	10	36.98	27.80	7.84	37.01	27.68	7.95	36.88	27.80	7.33
B	256QAM	10	37.06	27.86	7.86	37.01	27.72	7.94	37.12	28.00	7.33
C	256QAM	10	36.87	27.65	7.88	36.80	27.49	7.95	36.74	27.65	7.33
D	256QAM	10	36.86	27.58	7.79	36.90	27.61	7.94	36.92	27.84	7.32
Total			42.96	33.74	-	42.95	33.65	-	42.94	33.84	-
Total Power+9.9dBi			52.86	43.64	-	52.85	43.55	-	52.84	43.74	-

Antenna Port	NR Modulation	NR 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	15	37.03	26.04	7.94	37.01	25.84	8.06	36.96	26.05	7.47
B	QPSK	15	37.07	26.03	7.94	37.04	25.92	8.08	37.12	26.24	7.53
C	QPSK	15	36.88	25.83	8.00	36.82	25.67	8.07	36.81	25.78	7.46
D	QPSK	15	36.90	35.94	7.90	36.94	25.75	8.06	36.89	25.86	7.51
Total			42.99	37.09	-	42.97	31.82	-	42.97	32.01	-
Total Power+9.9dBi			52.89	46.99	-	52.87	41.72	-	52.87	41.91	-

Antenna Port	NR Modulation	NR 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	15	37.07	27.52	7.90	37.02	27.29	8.05	36.93	27.51	7.48
B	16QAM	15	37.12	27.58	7.93	37.02	27.38	8.08	37.13	27.73	7.54
C	16QAM	15	36.91	27.38	7.96	36.80	27.15	8.08	36.83	27.26	7.45
D	16QAM	15	36.92	27.39	7.88	36.92	27.22	8.06	36.90	27.33	7.52
Total			43.03	33.49	-	42.96	33.28	-	42.97	33.48	-
Total Power+9.9dBi			52.93	43.39	-	52.86	43.18	-	52.87	43.38	-

TEST REPORT

Antenna Port	NR Modulation	NR 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	15	36.97	26.00	7.91	36.92	25.45	8.02	36.94	26.05	7.48
B	64QAM	15	37.03	26.05	7.93	36.95	25.94	8.04	37.09	26.24	7.55
C	64QAM	15	36.86	25.88	7.97	36.74	25.62	8.02	36.77	25.81	7.45
D	64QAM	15	36.85	25.89	7.90	36.85	25.77	8.03	36.84	25.94	7.51
Total			42.95	31.98	-	42.89	31.72	-	42.93	32.03	-
Total Power+9.9dBi			52.85	41.88	-	52.79	41.62	-	52.83	41.93	-

Antenna Port	NR Modulation	NR 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	15	37.02	26.01	7.93	36.96	25.81	8.03	36.97	26.03	7.45
B	256QAM	15	37.07	26.03	7.95	37.00	25.87	8.03	37.11	26.20	7.50
C	256QAM	15	36.90	25.86	7.99	36.78	25.59	8.03	36.81	25.78	7.43
D	256QAM	15	36.87	25.90	7.89	36.89	25.80	8.03	36.89	25.90	7.50
Total			42.99	31.97	-	42.93	31.79	-	42.97	32.00	-
Total Power+9.9dBi			52.89	41.87	-	52.83	41.69	-	52.87	41.90	-

Antenna Port	NR Modulation	NR 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	20	37.07	24.72	7.94	37.04	24.57	8.04	36.77	24.57	7.63
B	QPSK	20	37.13	24.76	7.95	37.07	24.68	8.04	36.79	24.59	7.65
C	QPSK	20	36.94	24.58	7.98	36.85	24.39	8.04	36.61	24.63	7.64
D	QPSK	20	36.95	24.62	7.91	36.94	24.53	8.04	36.78	24.70	7.64
Total			43.04	30.69	-	43.00	30.56	-	42.76	30.64	-
Total Power+9.9dBi			52.94	40.59	-	52.90	40.46	-	52.66	40.54	-

TEST REPORT

Antenna Port	NR Modulation	NR 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	20	37.07	26.35	7.88	37.01	26.21	7.99	36.94	26.49	7.61
B	16QAM	20	37.10	26.39	7.91	37.05	26.36	8.00	37.07	26.54	7.66
C	16QAM	20	36.94	26.19	7.93	36.82	26.02	8.01	36.86	26.48	7.57
D	16QAM	20	36.93	26.25	7.86	36.90	26.08	7.99	36.83	26.34	7.65
Total			43.03	32.32	-	42.97	32.19	-	42.95	32.48	-
Total Power+9.9dBi			52.93	42.22	-	52.87	42.09	-	52.85	42.38	-

Antenna Port	NR Modulation	NR 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	20	37.02	24.82	7.96	36.93	24.43	7.98	36.86	24.77	7.56
B	64QAM	20	37.06	24.90	7.96	36.99	24.71	7.99	36.98	24.83	7.61
C	64QAM	20	36.91	24.73	7.99	36.79	24.51	7.98	36.85	24.89	7.53
D	64QAM	20	36.90	24.80	7.90	36.85	24.47	7.97	36.81	24.77	7.60
Total			42.99	30.83	-	42.91	30.55	-	42.90	30.84	-
Total Power+9.9dBi			52.89	40.73	-	52.81	40.45	-	52.80	40.74	-

Antenna Port	NR Modulation	NR 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	20	37.06	24.78	7.94	36.93	24.62	8.04	36.91	24.84	7.59
B	256QAM	20	37.10	24.84	7.95	37.03	24.73	8.04	37.05	24.92	7.64
C	256QAM	20	36.92	24.58	7.98	36.81	24.43	8.05	36.85	24.89	7.56
D	256QAM	20	36.92	24.66	7.91	36.91	24.60	8.04	36.83	24.79	7.63
Total			43.02	30.74	-	42.94	30.62	-	42.93	30.88	-
Total Power+9.9dBi			52.92	40.64	-	52.84	40.52	-	52.83	40.78	-

NR-MIMO-2C

Antenna Port	NR Modulation	NR 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	-	-	-	36.70	28.10	-	-	-	-
B	16QAM	5	-	-	-	37.01	28.21	-	-	-	-
C	16QAM	5	-	-	-	36.70	28.11	-	-	-	-
D	16QAM	5	-	-	-	36.92	28.17	-	-	-	-
Total			-	-	-	42.86	34.17	-	-	-	-
Total Power+9.9dBi			-	-	-	52.76	44.07	-	-	-	-

Antenna Port	NR Modulation	NR 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	-	-	-	36.88	25.35	-	-	-	-
B	16QAM	10	-	-	-	37.11	25.66	-	-	-	-
C	16QAM	10	-	-	-	36.81	25.30	-	-	-	-
D	16QAM	10	-	-	-	37.03	25.63	-	-	-	-
Total			-	-	-	42.98	31.51	-	-	-	-
Total Power+9.9dBi			-	-	-	52.88	41.41	-	-	-	-

Antenna Port	NR Modulation	NR 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	15	-	-	-	36.96	24.45	-	-	-	-
B	16QAM	15	-	-	-	37.13	24.78	-	-	-	-
C	16QAM	15	-	-	-	36.86	24.37	-	-	-	-
D	16QAM	15	-	-	-	37.06	24.65	-	-	-	-
Total			-	-	-	43.02	30.59	-	-	-	-
Total Power+9.9dBi			-	-	-	52.92	40.49	-	-	-	-

TEST REPORT

Antenna Port	NR Modulation	NR 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	20	-	-	-	36.92	23.38	-	-	-	-
B	16QAM	20	-	-	-	37.14	23.68	-	-	-	-
C	16QAM	20	-	-	-	36.89	23.46	-	-	-	-
D	16QAM	20	-	-	-	37.07	23.46	-	-	-	-
Total			-	-	-	43.03	29.52	-	-	-	-
Total Power+9.9dBi			-	-	-	52.93	39.42	-	-	-	-

NR-MIMO-6C

Antenna Port	NR Modulation	NR 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	-	-	-	36.82	23.31	-	-	-	-
B	16QAM	5	-	-	-	37.06	23.58	-	-	-	-
C	16QAM	5	-	-	-	36.79	23.29	-	-	-	-
D	16QAM	5	-	-	-	36.98	23.48	-	-	-	-
Total			-	-	-	42.93	29.44	-	-	-	-
Total Power+9.9dBi			-	-	-	52.83	39.34	-	-	-	-

Antenna Port	NR Modulation	NR 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	-	-	-	36.85	20.62	-	-	-	-
B	16QAM	10	-	-	-	37.09	20.79	-	-	-	-
C	16QAM	10	-	-	-	36.82	20.52	-	-	-	-
D	16QAM	10	-	-	-	37.02	20.72	-	-	-	-
Total			-	-	-	42.97	26.68	-	-	-	-
Total Power+9.9dBi			-	-	-	52.87	36.58	-	-	-	-

TEST REPORT

Antenna Port	NR Modulation	NR 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	15	-	-	-	36.85	19.69	-	-	-	-
B	16QAM	15	-	-	-	37.07	19.87	-	-	-	-
C	16QAM	15	-	-	-	36.82	19.58	-	-	-	-
D	16QAM	15	-	-	-	37.04	19.82	-	-	-	-
Total			-	-	-	42.97	25.76	-	-	-	-
Total Power+9.9dBi			-	-	-	52.87	35.66	-	-	-	-

NB-IoT mode:

NB-IB-1C

Antenna Port	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	36.99	31.76	7.73	36.90	31.76	7.96	36.53	31.63	7.32
B	QPSK	5	36.97	31.76	7.81	36.96	31.80	8.00	36.89	31.99	7.32
C	QPSK	5	36.78	31.64	7.82	36.70	31.47	7.99	36.42	31.45	7.32
D	QPSK	5	36.89	31.81	7.72	37.07	31.94	7.98	36.77	31.79	7.32
Total			42.93	37.76	-	42.93	37.77	-	42.68	37.74	-
Total Power+9.9dBi			52.83	47.66	-	52.83	47.67	-	52.58	47.64	-

Antenna Port	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	36.99	29.40	7.85	36.92	29.13	8.02	36.73	28.50	7.37
B	QPSK	10	37.04	29.46	7.88	37.00	29.22	8.00	37.09	28.93	7.35
C	QPSK	10	36.83	29.24	7.91	36.74	29.04	8.01	36.64	28.45	7.34
D	QPSK	10	36.99	29.44	7.81	37.04	29.23	8.02	36.99	28.85	7.35
Total			42.98	35.41	-	42.95	35.18	-	42.89	34.71	-
Total Power+9.9dBi			52.88	45.31	-	52.85	45.08	-	52.79	44.61	-

TEST REPORT

Antenna Port	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	15	36.99	27.00	7.89	36.95	27.27	8.00	37.00	27.64	7.46
B	QPSK	15	37.09	27.10	7.92	37.05	27.49	8.02	37.14	27.80	7.52
C	QPSK	15	36.86	26.89	7.96	36.76	26.08	8.02	36.81	27.32	7.44
D	QPSK	15	37.01	27.03	7.87	37.04	27.36	8.01	37.05	27.54	7.50
Total			43.01	33.03	-	42.97	33.11	-	43.02	33.60	-
Total Power+9.9dBi			52.91	42.93	-	52.87	43.01	-	52.92	43.50	-

Antenna Port	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	20	36.94	25.83	7.92	36.81	25.59	8.02	36.80	26.551	7.60
B	QPSK	20	36.97	26.03	7.94	36.93	26.37	8.02	37.00	26.61	7.63
C	QPSK	20	36.76	25.81	7.94	36.69	26.2	8.02	36.79	26.63	7.55
D	QPSK	20	36.55	25.46	7.87	36.94	26.26	8.01	36.92	26.55	7.63
Total			42.83	31.81	-	42.86	32.14	-	42.90	32.61	-
Total Power+9.9dBi			52.73	41.71	-	52.76	42.04	-	52.80	42.51	-

NB-GB-1C

Antenna Port	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	36.64	27.6	8.02	36.60	27.82	8.11	36.53	28.05	7.50
B	QPSK	10	36.82	27.79	8.03	36.74	28.03	8.12	36.84	28.31	7.51
C	QPSK	10	36.64	27.67	8.06	36.50	27.71	8.12	36.44	27.86	7.51
D	QPSK	10	36.73	27.74	7.97	36.78	28.23	8.12	36.76	28.27	7.51
Total			42.73	33.72	-	42.68	33.97	-	42.67	34.15	-
Total Power+9.9dBi			52.63	43.62	-	52.58	43.87	-	52.57	44.05	-

TEST REPORT

Antenna Port	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	15	36.78	25.96	7.99	36.73	26.16	8.1	36.80	26.50	7.57
B	QPSK	15	36.88	25.98	8.01	36.86	26.39	8.1	36.97	26.66	7.62
C	QPSK	15	36.68	25.85	8.05	36.6	26.01	8.1	36.62	26.22	7.53
D	QPSK	15	26.84	26.02	7.97	36.88	26.23	8.1	36.84	26.39	7.60
Total			41.70	31.97	-	42.79	32.22	-	42.83	32.47	-
Total Power+9.9dBi			51.60	41.87	-	52.69	42.12	-	52.73	42.37	-

Antenna Port	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	20	36.97	25.03	7.92	36.93	25.51	8.04	36.92	25.83	7.58
B	QPSK	20	37.03	25.15	7.96	37.00	25.60	8.03	37.06	25.77	7.63
C	QPSK	20	36.84	25.06	7.97	36.75	25.35	8.04	36.80	25.86	7.54
D	QPSK	20	36.96	25.08	7.92	36.97	25.41	8.03	36.96	25.82	7.63
Total			42.97	31.10	-	42.93	31.49	-	42.96	31.84	-
Total Power+9.9dBi			52.87	41.00	-	52.83	41.39	-	52.86	41.74	-

NB-SA-1C

Antenna Port	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	0.2	32.26	32.83	7.07	32.34	33.33	7.05	32.16	32.82	7.01
B	QPSK	0.2	32.40	33.24	7.00	32.45	33.23	7.01	32.41	33.39	7.03
C	QPSK	0.2	32.24	32.71	7.03	32.17	33.12	7.00	32.04	32.74	6.96
D	QPSK	0.2	32.34	33.32	7.09	32.47	33.37	7.14	32.38	33.00	7.17
Total			38.33	39.05	-	38.38	39.28	-	38.27	39.02	-
Total Power+9.9dBi			48.23	48.95	-	48.28	49.18	-	48.17	48.92	-

TEST REPORT

LTE mode:

LTE-MIMO-1C

Antenna Port	LTE Modulation	LTE 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	1.4	34.02	33.00	8.39	33.97	32.96	8.32	33.59	32.57	8.34
B	QPSK	1.4	34.01	33.12	8.36	34.10	33.08	8.34	33.98	32.96	8.38
C	QPSK	1.4	33.94	32.97	8.37	33.87	32.84	8.39	33.56	32.56	8.35
D	QPSK	1.4	33.94	32.93	8.33	34.06	33.03	8.35	33.82	32.77	8.33
Total			40.00	39.03	-	40.02	39.00	-	39.76	38.74	-
Total Power+9.9dBi			49.90	48.93	-	49.92	48.90	-	49.66	48.64	-

Antenna Port	LTE Modulation	LTE 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	1.4	33.93	33.14	8.29	33.95	33.13	8.34	33.59	32.63	8.28
B	16QAM	1.4	34.08	33.29	8.29	34.06	33.11	8.33	33.98	33.13	8.39
C	16QAM	1.4	33.92	32.96	8.31	33.85	32.97	8.23	33.56	32.63	8.33
D	16QAM	1.4	33.93	32.98	8.20	33.04	33.10	8.24	33.76	32.81	8.34
Total			39.99	39.12	-	39.76	39.10	-	39.75	38.83	-
Total Power+9.9dBi			49.89	49.02	-	49.66	49.00	-	49.65	48.73	-

Antenna Port	LTE Modulation	LTE 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	1.4	33.95	32.94	8.26	33.96	32.89	8.32	33.53	32.50	8.25
B	64QAM	1.4	34.26	33.06	8.32	34.02	33.00	8.28	33.91	32.94	8.30
C	64QAM	1.4	33.90	32.85	8.34	33.82	32.79	8.28	33.53	32.47	8.28
D	64QAM	1.4	33.89	32.88	8.25	33.99	32.96	8.22	33.76	32.76	8.33
Total			40.02	38.95	-	39.97	38.93	-	39.71	38.69	-
Total Power+9.9dBi			49.92	48.85	-	49.87	48.83	-	49.61	48.59	-

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Antenna Port	LTE Modulation	LTE 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	1.4	33.95	32.96	8.33	33.93	32.96	8.36	33.55	32.53	8.32
B	256QAM	1.4	34.07	33.05	8.35	34.05	33.04	8.33	33.94	32.93	8.29
C	256QAM	1.4	33.92	32.90	8.35	33.82	32.87	8.38	33.53	32.55	8.32
D	256QAM	1.4	33.92	32.92	8.29	34.01	32.98	8.31	33.79	32.75	8.36
Total			39.99	38.98	-	39.97	38.98	-	39.73	38.71	-
Total Power+9.9dBi			49.89	48.88	-	49.87	48.88	-	49.63	48.61	-

Antenna Port	LTE Modulation	LTE 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	3	33.95	29.85	8.38	34.12	29.99	8036	33.70	29.69	8.335
B	QPSK	3	34.06	29.96	8.37	34.12	30.04	8.38	34.10	30.09	8.39
C	QPSK	3	33.90	29.84	8.40	33.84	29.74	8.39	33.62	29.60	8.40
D	QPSK	3	33.97	29.92	8.37	34.08	29.98	8.39	33.90	29.88	8.41
Total			39.99	35.91	-	40.06	35.96	-	39.85	35.84	-
Total Power+9.9dBi			49.89	45.81	-	49.96	45.86	-	49.75	45.74	-

Antenna Port	LTE Modulation	LTE 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	3	34.05	30.70	8.39	34.06	30.55	8.33	33.69	30.22	8.34
B	16QAM	3	33.85	30.45	8.36	34.11	30.70	8.35	34.10	30.75	8.36
C	16QAM	3	34.00	30.64	8.40	33.83	30.52	8.35	33.63	30.23	8.36
D	16QAM	3	34.02	30.71	8.35	34.08	30.67	8.33	33.88	30.54	8.31
Total			40.00	36.65	-	40.04	36.63	-	39.85	36.46	-
Total Power+9.9dBi			49.90	46.55	-	49.94	46.53	-	49.75	46.36	-

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Antenna Port	LTE Modulation	LTE 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	3	34.10	29.95	8.28	34.07	30.00	8.28	33.68	29.64	8.29
B	64QAM	3	33.88	29.77	8.30	34.13	30.30	8.23	34.11	30.03	8.24
C	64QAM	3	33.99	29.91	8.26	33.83	29.74	8.26	33.59	29.53	8.26
D	64QAM	3	34.06	29.98	8.25	34.08	29.99	8.27	33.90	29.79	8.28
Total			40.03	35.92	-	40.05	36.03	-	39.85	35.77	-
Total Power+9.9dBi			49.93	45.82	-	49.95	45.93	-	49.75	45.67	-

Antenna Port	LTE Modulation	LTE 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	3	34.05	30.00	8.35	34.07	30.01	8.35	33.67	29.59	8.33
B	256QAM	3	33.86	29.79	8.37	34.11	30.02	8.32	34.06	30.01	8.29
C	256QAM	3	33.98	29.92	8.30	33.84	29.76	8.31	33.57	29.50	8.36
D	256QAM	3	34.03	30.00	8.35	34.08	30.00	8.34	33.87	29.80	8.33
Total			40.00	35.95	-	40.05	35.97	-	39.82	35.75	-
Total Power+9.9dBi			49.90	45.85	-	49.95	45.87	-	49.72	45.65	-

Antenna Port	LTE Modulation	LTE 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	36.90	30.70	7.75	36.98	30.72	8.00	36.50	30.40	7.33
B	QPSK	5	37.02	30.82	7.80	36.96	30.72	7.98	36.82	30.72	7.33
C	QPSK	5	36.83	30.61	7.84	36.66	30.41	7.97	36.36	30.35	7.34
D	QPSK	5	36.89	30.65	7.72	36.92	30.65	7.99	36.56	30.39	7.33
Total			42.93	36.72	-	42.90	36.65	-	42.58	36.49	-
Total Power+9.9dBi			52.83	46.62	-	52.80	46.55	-	52.48	46.39	-

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Antenna Port	LTE Modulation	LTE 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	36.91	31.52	7.73	36.91	31.82	7.99	36.54	31.01	7.31
B	16QAM	5	37.02	31.81	7.78	36.97	31.65	7.99	36.85	31.39	7.31
C	16QAM	5	36.81	31.31	7.83	36.66	31.47	7.98	36.38	31.24	7.31
D	16QAM	5	36.85	31.40	7.72	36.91	31.38	7.99	36.56	31.38	7.30
Total			42.92	37.53	-	42.88	37.60	-	42.61	37.28	-
Total Power+9.9dBi			52.82	47.43	-	52.78	47.50	-	52.51	47.18	-

Antenna Port	LTE Modulation	LTE 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	36.94	30.72	7.71	36.96	30.73	7.98	36.57	30.39	7.29
B	64QAM	5	37.01	30.83	7.80	36.97	30.73	7.99	36.86	30.80	7.31
C	64QAM	5	36.81	30.61	7.84	36.64	30.41	7.99	36.37	30.34	7.30
D	64QAM	5	36.85	30.67	7.72	36.91	30.66	8.00	36.57	30.46	7.31
Total			42.92	36.73	-	42.89	36.66	-	42.62	36.52	-
Total Power+9.9dBi			52.82	46.63	-	52.79	46.56	-	52.52	46.42	-

Antenna Port	LTE Modulation	LTE 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	36.87	30.67	7.75	36.90	30.73	8.02	36.41	30.33	7.33
B	256QAM	5	36.96	30.85	7.82	36.95	30.74	8.02	36.83	30.74	7.33
C	256QAM	5	36.75	30.59	7.87	36.63	30.44	8.01	36.36	30.32	7.34
D	256QAM	5	36.82	30.67	7.74	36.89	30.71	8.02	36.55	30.43	7.32
Total			42.87	36.72	-	42.86	36.68	-	42.56	36.48	-
Total Power+9.9dBi			52.77	46.62	-	52.76	46.58	-	52.46	46.38	-

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Antenna Port	LTE Modulation	LTE 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	36.79	27.94	7.84	36.95	27.73	8.00	36.86	27.95	7.34
B	QPSK	10	37.06	27.97	7.88	37.00	27.83	8.01	37.13	28.16	7.35
C	QPSK	10	36.85	27.70	7.91	36.74	27.50	8.00	36.65	27.68	7.34
D	QPSK	10	36.83	27.68	7.80	36.92	27.67	8.00	36.87	27.96	7.34
Total			42.90	33.85	-	42.92	33.70	-	42.90	33.96	-
Total Power+9.9dBi			52.80	43.75	-	52.82	43.60	-	52.80	43.86	-

Antenna Port	LTE Modulation	LTE 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	36.99	28.88	7.84	36.98	29.05	8.01	36.87	28.75	7.33
B	16QAM	10	37.06	28.99	7.88	37.03	28.92	8.01	37.11	28.85	7.34
C	16QAM	10	36.85	28.75	7.91	36.73	28.81	8.00	36.68	28.52	7.34
D	16QAM	10	36.82	28.71	7.80	36.91	28.74	8.00	36.89	28.84	7.33
Total			42.95	34.85	-	42.93	34.90	-	42.91	34.76	-
Total Power+9.9dBi			52.85	44.75	-	52.83	44.80	-	52.81	44.66	-

Antenna Port	LTE Modulation	LTE 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	36.93	27.97	7.83	36.98	27.79	8.02	36.84	27.83	7.34
B	64QAM	10	37.04	28.01	7.89	37.02	27.81	8.03	37.10	28.07	7.34
C	64QAM	10	36.84	27.76	7.91	36.72	27.56	8.02	36.66	27.64	7.34
D	64QAM	10	36.80	27.71	7.82	36.90	27.71	8.02	36.88	27.86	7.34
Total			42.92	33.89	-	42.93	33.74	-	42.89	33.87	-
Total Power+9.9dBi			52.82	43.79	-	52.83	43.64	-	52.79	43.77	-

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Antenna Port	LTE Modulation	LTE 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	10	36.92	27.97	7.86	36.99	27.84	8.04	36.84	27.94	7.33
B	256QAM	10	37.03	28.01	7.90	37.03	27.93	8.05	37.10	28.16	7.33
C	256QAM	10	36.82	27.71	7.94	36.73	27.58	8.04	36.66	27.64	7.34
D	256QAM	10	36.80	27.70	7.83	36.91	27.75	8.04	36.87	27.92	7.33
Total			42.91	33.87	-	42.94	33.80	-	42.89	33.94	-
Total Power+9.9dBi			52.81	43.77	-	52.84	43.70	-	52.79	43.84	-

Antenna Port	LTE Modulation	LTE 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	15	36.95	26.14	7.89	36.96	25.98	8.00	36.84	26.20	7.44
B	QPSK	15	37.10	26.26	7.90	37.03	26.13	8.01	37.12	26.43	7.51
C	QPSK	15	36.84	26.00	7.94	36.67	25.73	8.01	36.70	25.92	7.42
D	QPSK	15	36.87	26.06	7.85	36.91	25.92	8.02	36.87	26.02	7.49
Total			42.96	32.14	-	42.92	31.96	-	42.91	32.17	-
Total Power+9.9dBi			52.86	42.04	-	52.82	41.86	-	52.81	42.07	-

Antenna Port	LTE Modulation	LTE 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	15	37.01	27.30	7.90	36.92	27.15	8.01	36.92	27.48	7.41
B	16QAM	15	37.10	27.46	7.93	37.03	27.39	8.01	37.13	27.45	7.48
C	16QAM	15	36.85	27.48	7.96	36.67	26.90	8.02	36.71	27.27	7.40
D	16QAM	15	36.87	27.47	7.87	36.91	27.34	8.01	36.87	27.24	7.46
Total			42.98	33.45	-	42.91	33.22	-	42.93	33.38	-
Total Power+9.9dBi			52.88	43.35	-	52.81	43.12	-	52.83	43.28	-

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Antenna Port	LTE Modulation	LTE 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	15	37.00	26.25	7.90	36.91	25.97	8.01	36.86	25.17	7.44
B	64QAM	15	37.08	26.28	7.91	37.03	26.19	8.01	37.09	26.48	7.51
C	64QAM	15	36.76	25.95	7.95	36.67	25.77	8.02	36.68	25.92	7.43
D	64QAM	15	36.88	26.13	7.86	36.91	26.02	8.02	36.84	26.03	7.49
Total			42.95	32.18	-	42.90	32.01	-	42.89	31.95	-
Total Power+9.9dBi			52.85	42.08	-	52.80	41.91	-	52.79	41.85	-

Antenna Port	LTE Modulation	LTE 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	15	37.00	26.28	7.90	36.89	26.02	8.04	36.83	26.19	7.44
B	256QAM	15	37.07	26.33	7.92	37.03	26.24	8.03	37.07	26.47	7.51
C	256QAM	15	36.78	26.03	7.96	36.67	25.83	8.04	36.67	25.97	7.42
D	256QAM	15	36.87	26.13	7.87	36.92	26.01	8.03	36.83	26.09	7.49
Total			42.95	32.21	-	42.90	32.05	-	42.87	32.20	-
Total Power+9.9dBi			52.85	42.11	-	52.80	41.95	-	52.77	42.10	-

Antenna Port	LTE Modulation	LTE 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	20	36.96	24.88	7.93	36.99	24.78	8.01	36.85	24.98	7.59
B	QPSK	20	37.01	24.93	7.95	37.06	35.92	8.04	37.11	25.13	7.62
C	QPSK	20	36.72	24.60	7.98	36.70	24.56	8.04	36.78	25.03	7.52
D	QPSK	20	36.91	24.83	7.91	36.99	24.80	8.03	36.97	25.03	7.60
Total			42.92	30.83	-	42.96	36.81	-	42.95	31.06	-
Total Power+9.9dBi			52.82	40.73	-	52.86	46.71	-	52.85	40.96	-

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Antenna Port	LTE Modulation	LTE 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	20	37.07	26.16	7.92	36.97	25.83	8.00	37.03	25.08	7.61
B	16QAM	20	37.01	26.08	7.94	37.04	26.17	8.02	37.17	26.10	8.01
C	16QAM	20	36.74	25.76	7.97	36.69	25.78	8.03	36.80	26.04	7.52
D	16QAM	20	36.89	25.74	7.90	37.03	26.09	8.02	37.04	26.03	7.62
Total			42.95	31.96	-	42.96	31.99	-	43.03	31.85	-
Total Power+9.9dBi			52.85	41.86	-	52.86	41.89	-	52.93	41.75	-

Antenna Port	LTE Modulation	LTE 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	20	37.01	24.97	7.93	36.87	24.71	8.03	36.93	25.13	7.58
B	64QAM	20	37.08	25.02	7.95	37.02	24.90	8.02	36.75	24.79	7.64
C	64QAM	20	36.69	24.70	7.97	36.67	24.56	8.02	36.75	24.96	7.53
D	64QAM	20	36.93	24.94	7.91	36.98	24.90	8.02	37.02	25.10	7.63
Total			42.95	30.93	-	42.91	30.79	-	42.88	31.02	-
Total Power+9.9dBi			52.85	40.83	-	52.81	40.69	-	52.78	40.92	-

Antenna Port	LTE Modulation	LTE 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	20	37.00	24.95	7.95	36.88	24.74	8.05	37.04	25.17	7.58
B	256QAM	20	37.08	25.05	7.95	37.04	24.92	8.03	36.76	24.77	7.63
C	256QAM	20	36.73	24.66	7.99	36.65	24.50	8.03	36.76	24.96	7.63
D	256QAM	20	36.95	24.97	7.91	36.98	24.82	8.03	37.02	25.09	7.63
Total			42.96	30.93	-	42.91	30.77	-	42.92	31.02	-
Total Power+9.9dBi			52.86	40.83	-	52.81	40.67	-	52.82	40.92	-

TEST REPORT

LTE-MIMO-2C

Antenna Port	LTE Modulation	LTE 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	1.4	34.40	30.30	-	33.97	30.30	-	33.94	30.22	-
B	16QAM	1.4	34.22	30.46	-	34.12	30.37	-	34.20	30.46	-
C	16QAM	1.4	34.01	30.24	-	33.93	30.17	-	33.99	30.21	-
D	16QAM	1.4	34.18	30.49	-	34.12	30.35	-	34.15	30.42	-
Total			40.23	36.39	-	40.06	36.32	-	40.09	36.35	-
Total Power+9.9dBi			50.13	46.29	-	49.96	46.22	-	49.99	46.25	-

Antenna Port	LTE Modulation	LTE 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	3	34.13	27.93	-	34.08	27.89	-	34.06	28.00	-
B	16QAM	3	34.20	28.04	-	34.16	27.91	-	34.22	28.27	-
C	16QAM	3	33.99	27.90	-	33.94	27.68	-	33.97	27.91	-
D	16QAM	3	34.18	28.11	-	34.05	28.05	-	34.18	28.26	-
Total			40.15	34.02	-	40.08	33.91	-	40.13	34.13	-
Total Power+9.9dBi			50.05	43.92	-	49.98	43.81	-	50.03	44.03	-

Antenna Port	LTE Modulation	LTE 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	-	-	-	36.89	29.25	-	-	-	-
B	16QAM	5	-	-	-	37.01	29.46	-	-	-	-
C	16QAM	5	-	-	-	36.91	29.21	-	-	-	-
D	16QAM	5	-	-	-	36.86	29.53	-	-	-	-
Total			-	-	-	42.94	35.39	-	-	-	-
Total Power+9.9dBi			-	-	-	52.84	45.29	-	-	-	-

TEST REPORT

Antenna Port	LTE Modulation	LTE 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	-	-	-	36.95	25.66	-	-	-	-
B	16QAM	10	-	-	-	37.06	26.87	-	-	-	-
C	16QAM	10	-	-	-	36.76	26.04	-	-	-	-
D	16QAM	10	-	-	-	36.88	26.70	-	-	-	-
Total			-	-	-	42.93	32.37	-	-	-	-
Total Power+9.9dBi			-	-	-	52.83	42.27	-	-	-	-

Antenna Port	LTE Modulation	LTE 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	15	-	-	-	36.95	25.50	-	-	-	-
B	16QAM	15	-	-	-	37.16	25.79	-	-	-	-
C	16QAM	15	-	-	-	36.90	25.59	-	-	-	-
D	16QAM	15	-	-	-	37.02	25.73	-	-	-	-
Total			-	-	-	43.03	31.67	-	-	-	-
Total Power+9.9dBi			-	-	-	52.93	41.57	-	-	-	-

Antenna Port	LTE Modulation	LTE 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	20	-	-	-	36.98	23.75	-	-	-	-
B	16QAM	20	-	-	-	37.08	23.89	-	-	-	-
C	16QAM	20	-	-	-	36.87	23.51	-	-	-	-
D	16QAM	20	-	-	-	37.03	23.66	-	-	-	-
Total			-	-	-	43.01	29.73	-	-	-	-
Total Power+9.9dBi			-	-	-	52.91	39.63	-	-	-	-

TEST REPORT

LTE-MIMO-6C

Antenna Port	LTE Modulation	LTE 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	1.4	36.86	28.82	-	36.84	28.71	-	36.60	28.41	-
B	16QAM	1.4	36.99	28.84	-	36.95	28.77	-	36.80	28.60	-
C	16QAM	1.4	36.75	28.66	-	36.74	28.58	-	36.52	28.42	-
D	16QAM	1.4	36.94	28.74	-	36.89	28.75	-	36.74	28.60	-
Total			42.91	34.79	-	42.88	34.72	-	42.69	34.53	-
Total Power+9.9dBi			52.81	44.69	-	52.78	44.62	-	52.59	44.43	-

Antenna Port	LTE Modulation	LTE 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	3	37.01	26.26	-	36.94	26.27	-	36.92	26.17	-
B	16QAM	3	37.05	26.35	-	37.03	26.38	-	37.10	26.34	-
C	16QAM	3	36.85	26.15	-	36.74	26.02	-	36.78	26.10	-
D	16QAM	3	37.00	26.28	-	37.00	26.31	-	36.93	26.18	-
Total			43.00	32.28	-	42.95	32.27	-	42.95	32.22	-
Total Power+9.9dBi			52.90	42.18	-	52.85	42.17	-	52.85	42.12	-

Antenna Port	LTE Modulation	LTE 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	-	-	-	36.95	24.86	-	-	-	-
B	16QAM	5	-	-	-	37.13	25.01	-	-	-	-
C	16QAM	5	-	-	-	36.80	24.66	-	-	-	-
D	16QAM	5	-	-	-	36.94	24.88	-	-	-	-
Total			-	-	-	42.98	30.87	-	-	-	-
Total Power+9.9dBi			-	-	-	52.88	40.77	-	-	-	-

TEST REPORT

Antenna Port	LTE Modulation	LTE 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	-	-	-	36.94	21.79	-	-	-	-
B	16QAM	10	-	-	-	37.09	21.98	-	-	-	-
C	16QAM	10	-	-	-	36.81	21.65	-	-	-	-
D	16QAM	10	-	-	-	37.00	21.83	-	-	-	-
Total			-	-	-	42.98	27.83	-	-	-	-
Total Power+9.9dBi			-	-	-	52.88	37.73	-	-	-	-

Antenna Port	LTE Modulation	LTE 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	15	-	-	-	37.02	20.93	-	-	-	-
B	16QAM	15	-	-	-	37.11	21.02	-	-	-	-
C	16QAM	15	-	-	-	36.84	20.76	-	-	-	-
D	16QAM	15	-	-	-	37.04	20.96	-	-	-	-
Total			-	-	-	43.02	26.94	-	-	-	-
Total Power+9.9dBi			-	-	-	52.92	36.84	-	-	-	-

WCDMA mode:
WCDMA-MIMO-1C

Antenna Port	WCDMA Modulation	WCDMA 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	37.20	31.91	7.33	37.14	31.78	7.32	37.16	31.71	7.30
B	QPSK	5	37.26	31.94	7.34	37.26	31.92	7.32	37.21	31.83	7.31
C	QPSK	5	37.05	31.81	7.34	37.03	31.77	7.32	36.76	31.38	7.32
D	QPSK	5	37.07	31.74	7.35	37.10	31.84	7.31	37.09	31.77	7.32
Total			43.17	37.87	-	43.15	37.85	-	43.08	37.70	-
Total Power+9.9dBi			53.07	47.77	-	53.05	47.75	-	52.98	47.60	-

TEST REPORT

Antenna Port	WCDMA Modulation	WCDMA 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	37.25	31.84	7.30	37.19	31.81	7.28	37.16	31.73	7.28
B	16QAM	5	37.24	31.86	7.31	37.18	31.89	7.28	37.21	31.84	7.29
C	16QAM	5	37.05	31.75	7.31	37.07	31.70	7.27	36.78	31.46	7.29
D	16QAM	5	36.93	31.58	7.31	37.07	31.76	7.28	37.11	31.76	7.30
Total			43.14	37.78	-	43.15	37.81	-	43.09	37.72	-
Total Power+9.9dBi			53.04	47.68	-	53.05	47.71	-	52.99	47.62	-

Antenna Port	WCDMA Modulation	WCDMA 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	37.22	31.86	7.29	37.20	31.78	7.28	37.17	31.85	7.29
B	64QAM	5	37.11	31.91	7.31	37.27	31.88	7.28	37.18	31.86	7.29
C	64QAM	5	37.12	31.85	7.30	37.07	31.72	7.29	36.87	31.53	7.29
D	64QAM	5	36.94	31.84	7.31	37.10	31.71	7.28	37.13	31.78	7.29
Total			43.12	37.89	-	43.18	37.79	-	43.11	37.78	-
Total Power+9.9dBi			53.02	47.79	-	53.08	47.69	-	53.01	47.68	-

WCDMA-MIMO-2C

Antenna Port	WCDMA Modulation	WCDMA 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	-	-	-	37.20	28.89	-	-	-	-
B	16QAM	5	-	-	-	37.15	28.80	-	-	-	-
C	16QAM	5	-	-	-	36.96	28.61	-	-	-	-
D	16QAM	5	-	-	-	37.08	28.77	-	-	-	-
Total			-	-	-	43.12	34.79	-	-	-	-
Total Power+9.9dBi			-	-	-	53.02	44.69	-	-	-	-

TEST REPORT

WCDMA-MIMO-6C

Antenna Port	WCDMA Modulation	WCDMA 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	-	-	-	37.02	23.96	-	-	-	-
B	16QAM	5	-	-	-	37.13	24.10	-	-	-	-
C	16QAM	5	-	-	-	36.86	23.82	-	-	-	-
D	16QAM	5	-	-	-	37.06	23.96	-	-	-	-
Total			-	-	-	43.04	29.98	-	-	-	-
Total Power+9.9dBi			-	-	-	52.94	39.88	-	-	-	-

WCDMA+NR mode:

W+NR-MIMO-MC-1

Antenna Port	NR Modulation	NR 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	-	-	-	36.87	28.54	-	-	-	-
B	16QAM	5	-	-	-	36.82	28.45	-	-	-	-
C	16QAM	5	-	-	-	36.73	28.42	-	-	-	-
D	16QAM	5	-	-	-	36.53	28.24	-	-	-	-
Total			-	-	-	42.76	34.43	-	-	-	-
Total Power+9.9dBi			-	-	-	52.66	44.33	-	-	-	-

Antenna Port	NR Modulation	NR 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	-	-	-	36.92	28.47	-	-	-	-
B	16QAM	10	-	-	-	36.88	28.39	-	-	-	-
C	16QAM	10	-	-	-	26.93	28.44	-	-	-	-
D	16QAM	10	-	-	-	36.70	28.23	-	-	-	-
Total			-	-	-	41.75	34.40	-	-	-	-
Total Power+9.9dBi			-	-	-	51.65	44.30	-	-	-	-

TEST REPORT

Antenna Port	NR Modulation	NR 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	15	-	-	-	36.88	28.46	-	-	-	-
B	16QAM	15	-	-	-	36.83	28.28	-	-	-	-
C	16QAM	15	-	-	-	36.87	28.41	-	-	-	-
D	16QAM	15	-	-	-	36.67	28.20	-	-	-	-
Total			-	-	-	42.83	34.36	-	-	-	-
Total Power+9.9dBi			-	-	-	52.73	44.26	-	-	-	-

Antenna Port	NR Modulation	NR 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	20	-	-	-	36.97	28.43	-	-	-	-
B	16QAM	20	-	-	-	36.79	28.21	-	-	-	-
C	16QAM	20	-	-	-	36.96	28.40	-	-	-	-
D	16QAM	20	-	-	-	36.83	28.33	-	-	-	-
Total			-	-	-	42.91	34.36	-	-	-	-
Total Power+9.9dBi			-	-	-	52.81	44.26	-	-	-	-

W+NR-MIMO-MC-2

Antenna Port	NR Modulation	NR 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	-	-	-	36.86	26.81	-	-	-	-
B	16QAM	5	-	-	-	36.73	26.51	-	-	-	-
C	16QAM	5	-	-	-	36.79	26.65	-	-	-	-
D	16QAM	5	-	-	-	36.72	26.58	-	-	-	-
Total			-	-	-	42.80	32.66	-	-	-	-
Total Power+9.9dBi			-	-	-	52.70	42.56	-	-	-	-

TEST REPORT

Antenna Port	NR Modulation	NR 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	-	-	-	37.03	26.83	-	-	-	-
B	16QAM	10	-	-	-	36.76	26.48	-	-	-	-
C	16QAM	10	-	-	-	36.86	26.69	-	-	-	-
D	16QAM	10	-	-	-	36.80	26.55	-	-	-	-
Total			-	-	-	42.88	32.66	-	-	-	-
Total Power+9.9dBi			-	-	-	52.78	42.56	-	-	-	-

Antenna Port	NR Modulation	NR 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	15	-	-	-	36.96	26.81	-	-	-	-
B	16QAM	15	-	-	-	36.78	26.48	-	-	-	-
C	16QAM	15	-	-	-	36.76	26.53	-	-	-	-
D	16QAM	15	-	-	-	36.93	26.71	-	-	-	-
Total			-	-	-	42.88	32.66	-	-	-	-
Total Power+9.9dBi			-	-	-	52.78	42.56	-	-	-	-

Antenna Port	NR Modulation	NR 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	20	-	-	-	36.94	26.78	-	-	-	-
B	16QAM	20	-	-	-	36.80	26.64	-	-	-	-
C	16QAM	20	-	-	-	36.94	26.68	-	-	-	-
D	16QAM	20	-	-	-	36.83	26.57	-	-	-	-
Total			-	-	-	42.90	32.69	-	-	-	-
Total Power+9.9dBi			-	-	-	52.80	42.59	-	-	-	-