

Ericsson AB

RF TEST REPORT

Report Type:
FCC Part 27 RF report

PRODUCT NAME:
Radio/AIR 4435 B41

REPORT NUMBER:
210503115SHA-001

ISSUE DATE:
May 27, 2021

DOCUMENT CONTROL NUMBER:
TTRFFCC Part 27_V1 © 2018 Intertek



TEST REPORT

Report no.: 210503115SHA-001

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

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

FCC ID: TA8AKRC161925

SUMMARY:

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

FCC CFR 47 Part 27: MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES

PREPARED BY:



Project Engineer
Jackson Huang

REVIEWED BY:



Reviewer
Edwin Xu

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

TEST REPORT

Content

REVISION HISTORY.....	4
MEASUREMENT RESULT SUMMARY	5
1 GENERAL INFORMATION	6
1.1 DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)	6
1.2 TECHNICAL SPECIFICATION	7
1.3 DESCRIPTION OF TEST FACILITY	8
2 TEST SPECIFICATIONS.....	9
2.1 RELATED DOCUMENTS	9
2.2 PRODUCT INFORMATION.....	9
2.3 CONFIGURATION DESCRIPTION.....	10
2.4 TEST SETUP.....	14
2.5 TEST ENVIRONMENT CONDITION:.....	16
2.6 INSTRUMENT LIST	17
2.7 MEASUREMENT UNCERTAINTY	18
3 MAXIMUM OUTPUT POWER AND PEAK TO AVERAGE POWER RATIO AND EIRP	19
3.1 LIMIT	19
3.2 MEASUREMENT PROCEDURE	19
3.3 MEASUREMENT RESULT	20
4 OCCUPIED BANDWIDTH	29
4.1 MEASUREMENT PROCEDURE	29
4.2 MEASUREMENT RESULT	30
5 UNWANTED EMISSIONS AT BAND EDGE	54
5.1 LIMIT	54
5.2 MEASUREMENT PROCEDURE	54
5.3 MEASUREMENT RESULT	55
6 CONDUCTED UNWANTED EMISSION	140
6.1 LIMIT	140
6.2 MEASUREMENT PROCEDURE	140
6.3 MEASUREMENT RESULT	141
7 RADIATED UNWANTED EMISSION	236
7.1 LIMIT	236
7.2 MEASUREMENT PROCEDURE	236
7.3 MEASUREMENT RESULT	237
8 FREQUENCY STABILITY.....	302
8.1 LIMIT	302
8.2 MEASUREMENT PROCEDURE	302
8.3 MEASUREMENT RESULT	303

Revision History

Report No.	Version	Description	Issued Date
210503115SHA-001	Rev. 01	Initial issue of report	May 27, 2021

Measurement result summary

TEST ITEM	FCC REFERENCE	RESULT
Max Output Power and Peak to Average Power Ratio and EIRP	27.50(h) 2.1046	Pass
Occupied Bandwidth	27.53(m) 2.1049	Pass
Unwanted Emissions at Band Edge	27.53(m) 2.1051	Pass
Conducted Unwanted Emission	27.53(m) 2.1051	Pass
Radiated Unwanted Emissions	27.53(m) 2.1053	Pass
Frequency Stability	27.54 2.1055	Pass

1 GENERAL INFORMATION

1.1 Description of Equipment Under Test (EUT)

Description:	Remote Radio Unit
Product name:	Radio/AIR 4435 B41
Product number:	Radio 4435 B41: KRC 161 925/1, KRC 161 925/2 AIR 4435 B41: KRD 901 215/1(with antenna), KRD 901 215/3(RDNB), KRD 901 215/2(with antenna), KRD 901 215/4(RDNB),
Serial Number(s)	EA8A342152 for KRC 161 925/1, EA8A416680 for KRC 161 925/2, EA8A361200 for KRD 901 215/3
Rating:	100-250VAC 50/60Hz or -48VDC
Software Version:	UP: CXP9024418/15 R24C12 PIS: CXP9017316/7 R85JK
Hardware Version:	KRC 161 925/1 R1B, KRC 161 925/2 R1A, KRD 901 215/3 R1A
Sample received date:	April 21, 2021
Date of test:	April 21, 2021 ~ May 20, 2021

TEST REPORT

1.2 Technical Specification

Frequency Range:	2496MHz - 2690MHz
Number of Antenna ports:	4 TX/RX
Supported RAT:	LTE, NR
Supported other mode:	/
Max RF bandwidth (IBW):	160MHz
Supported Number of Carriers:	SR LTE: Maximum 6 carriers SR NR: Maximum 6 carriers LTE+NR mix: Maximum 6 carriers
Supported modulation:	QPSK, 16QAM, 64QAM, 256QAM
Supported Channel Bandwidth:	LTE: 10MHz, 15MHz, 20MHz NR: 20 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 70MHz, 80MHz, 90MHz, 100MHz
Declaration output power:	Maximum 20W per port for all modes. Maximum 0.5W/MHz per port for all modes.

1.3 Description of Test Facility

Conducted testing:

Name:	Intertek Testing Services Shanghai
Address 1:	Building 86, No. 1198 Qinzhou Road(North), Shanghai 200233, P.R. China
Address 2:	No. 5 Lize East Street, Ericsson Tower, Chaoyang District, Beijing 100102 P.R.C.
Telephone:	+86 21 61278200
Telefax:	+86 21 54262353
The test facility is recognized, certified, or accredited by these organizations:	FCC Accredited Lab Designation Number: CN0175, CN1258
	IC Registration Lab CAB identifier.: CN0051
	A2LA Accreditation Lab Certificate Number: 3309.02, 3309.04

Radiated testing:

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

TEST REPORT

2 TEST SPECIFICATIONS

2.1 Related documents

FCC Part 27 (2019)
FCC Part 2 (2019)
ANSI C63.26:2015
KDB 971168 D01 v03r01
KDB 662911 D01 v02r01

2.2 Product Information

The Equipment Under Test (EUT) Radio/AIR 4435 B41 is an Ericsson Radio Unit working in the wireless communication services 2496-2690 MHz band which provides communication connections to 2496-2690 MHz network. The Radio/AIR 4435 B41 operates from a -48V DC or 120VAC 60Hz.

Radio 4435 B41 has 2 variants. Their difference is listed as below, and others are same.

KRC 161 925/1 with AC input;

KRC 161 925/2 with DC input.

AIR 4435 B41 has 4 variants. Their difference is listed as below, and others are same.

KRD 901 215/1 with AC input and RDNB board for testing purpose;

KRD 901 215/2 with DC input and RDNB board for testing purpose;

KRD 901 215/3 with AC input and antenna;

KRD 901 215/4 with DC input and antenna.

Full tests were performed on KRC 161 925/1 except that Radiated Unwanted Emissions were performed on KRC 161 925/2 and KRD 901 215/3. And Frequency stability was performed on both KRC 161 925/1 and KRC 161 925/2.

The EUT includes 4 TX/RX ports. 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.

2.3 Configuration Description

The following settings were used to represent all traffic scenarios. The output power was measured on the bottom, middle and top channel of all applicable antenna ports. By measuring the output power of QPSK, 16QAM, 64QAM and 256QAM on one of the antenna ports, it was determined that QPSK for NR and LTE were the worst case modulation schemes and were used for all testing.

Complete testing was carried out on the worst case antenna port which was established as being the highest output power from the 4 measured ports on worst case modulation scheme. This antenna port was Port B for all modes.

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

Configuration	Carrier	LTE Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
LTE-MIMO-1C	1	10	2501	2593	2685
		15	2503.5	2593	2682.5
		20	2506	2593	2680
LTE-MIMO-2C	2	10	-	2518+2668	-
		15	-	2520.5+2665.5	-
		20	-	2523+2663	-
LTE-MIMO-6C	6	10	-	2518+2528+2538+ 2648+2658+2668	-
		15	-	2520.5+2535.5+2550.5+2635 .5+2650.5+2665.5	-
		20	-	2523+2543+2563+ 2623+2643+2663	-

TEST REPORT

Configuration	Carrier	NR Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
NR-MIMO-1C	1	20	2506.02	2593.02	2680.02
		30	2511.00	2593.02	2675.01
		40	2516.01	2593.02	2670.00
		50	2521.02	2593.02	2665.02
		60	2526.00	2593.02	2660.01
		70	2531.01	2593.02	2655.00
		80	2536.02	2593.02	2650.02
		90	2541.00	2593.02	2645.01
		100	2546.01	2593.02	2640.00
NR-MIMO-2C	2	20	-	2523.00+2662.98	-
		30	-	2528.01+2658.00	-
		40	-	2533.02+2653.02	-
		50	-	2538.00+2647.98	-
		60	-	2543.01+2643.00	-
		70	-	2548.02+2638.02	-
NR-MIMO-6C	6	20	-	2523.00+2543.01+2563.02+2623.02+2643.00+2662.98	-
NR-MIMO-MC	2	100+60	-	2563.02+2643.00	-

Configuration	Carrier	NR Carrier Bandwidth (MHz)	LTE Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		
				Bottom	Middle	Top
NR+LTE-MIMO-MC-1	1NR+1LTE	20	10	-	(NR)2523.00+(L)2668	-
		100	20	-	(NR)2563.02+(L)2663	-
NR+LTE-MIMO-MC-2	1NR+2LTE	20	10	-	(NR)2523.00+(L)2658+2668	-
		100	20	-	(NR)2563.02+(L)2643+2663	-
NR+LTE-MIMO-MC-3	3NR+3LTE	20	10	-	(NR)2523.00+2543.01+2563.02+(L)2648+2658+2668	-
		20	20	-	(NR)2523.00+2543.01+2563.02+(L)2623+2643+2663	-
NR+LTE-MIMO-MC-4	4NR+2LTE	20	10	-	(NR)2523.00+2543.01+2563.02+2583.00+(L)2658+2668	-
		20	20	-	(NR)2523.00+2543.01+2563.02+2583.00+(L)2643+2663	-

TEST REPORT

Configuration	Carrier	LTE Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
LTE-MIMO-1C-UE	1	10	2501	-	2685
		15	2503.5	-	2682.5
		20	2506	-	2680
LTE-MIMO-2C-UE	2	10	2501+2511	-	2675+2685
		15	2503.5+2518.5	-	2667.5+2682.5
		20	2506+2526	-	2660+2680
LTE-MIMO-6C-UE	6	10	2501+2511+2521+2531+2541+2551	-	2635+2645+2655+2665+2675+2685
		15	2503.5+2518.5+2533.5+2548.5+2563.5+2578.5	-	2607.5+2622.5+2637.5+2652.5+2667.5+2682.5
		20	2506+2526+2546+2566+2586+2606	-	2580+2600+2620+2640+2660+2680

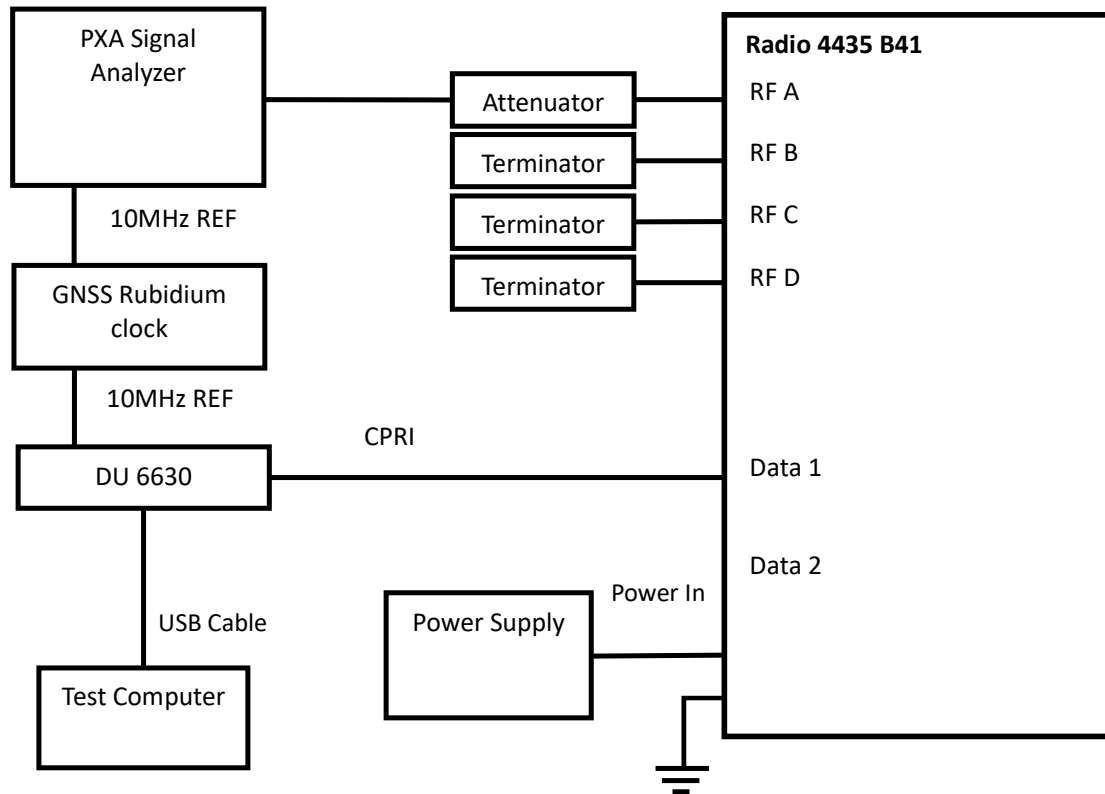
Configuration	Carrier	NR Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		
			Bottom	Middle	Top
NR-MIMO-1C-UE	1	20	2506.02	-	2680.02
		30	2511.00	-	2675.01
		40	2516.01	-	2670.00
		50	2521.02	-	2665.02
		60	2526.00	-	2660.01
		70	2531.01	-	2655.00
		80	2536.02	-	2650.02
		90	2541.00	-	2645.01
		100	2546.01	-	2640.00
NR-MIMO-2C-UE	2	20	2506.02+2526.00	-	2660.01+2680.02
		30	2511.00+2541.00	-	2645.01+2675.01
		40	2516.01+2556.00	-	2630.01+2670.00
		50	2521.02+2571.00	-	2615.01+2665.02
		60	2526.00+2586.00	-	2600.01+2660.01
		70	2531.01+2601.00	-	2585.01+2655.00
NR-MIMO-6C-UE	6	20	2506.02+2526.00+2546.01+2566.02+2586.00+2606.01	-	2580.00+2600.01+2620.02+2640.00+2660.01+2680.02
NR-MIMO-MC-UE	2	100+60	2546.01+2625.99	-	2580.00+2659.98

TEST REPORT

Configuration	Carrier	NR Carrier Bandwidth (MHz)	LTE Carrier Bandwidth (MHz)	Carrier Frequency Configuration (MHz)		
				Bottom	Middle	Top
NR+LTE- MIMO-MC-1- UE	1NR+1LTE	20	10	(NR)2506.02+ (L)2521	-	(NR)2670.00+ (L)2685
		100	20	(NR)2546.01+ (L)2606	-	(NR)2620.02+ (L)2680
NR+LTE- MIMO-MC-2	1NR+2LTE	20	10	(NR)2506.02+ (L)2521+2531	-	(NR)2660.01+ (L)2675+2685
		100	20	(NR)2546.01+ (L)2606+2626	-	(NR)2600.01+ (L)2660+2680
NR+LTE- MIMO-MC-3	3NR+3LTE	20	10	(NR)2506.02+2526.00 +2546.01+(L)2561 +2571+2581	-	(NR)2610.00+2630.01 +2650.02+(L)2665 +2675+2685
		20	20	(NR)2506.02+2526.00 +2546.01+(L)2566 +2586+2606	-	(NR)2580.00+2600.01 +2620.02+(L)2640 +2660+2680
NR+LTE- MIMO-MC-4	4NR+2LTE	20	10	(NR)2506.02+2526.00 +2546.01+2566.02 +(L)2581+2591	-	(NR)2600.01+2620.02 +2640.00+2660.01 +(L)2675+2685
		20	20	(NR)2506.02+2526.00 +2546.01+2566.02 +(L)2586+2606	-	(NR)2580.00+2600.01 +2620.02+2640.00 +(L)2660+2680

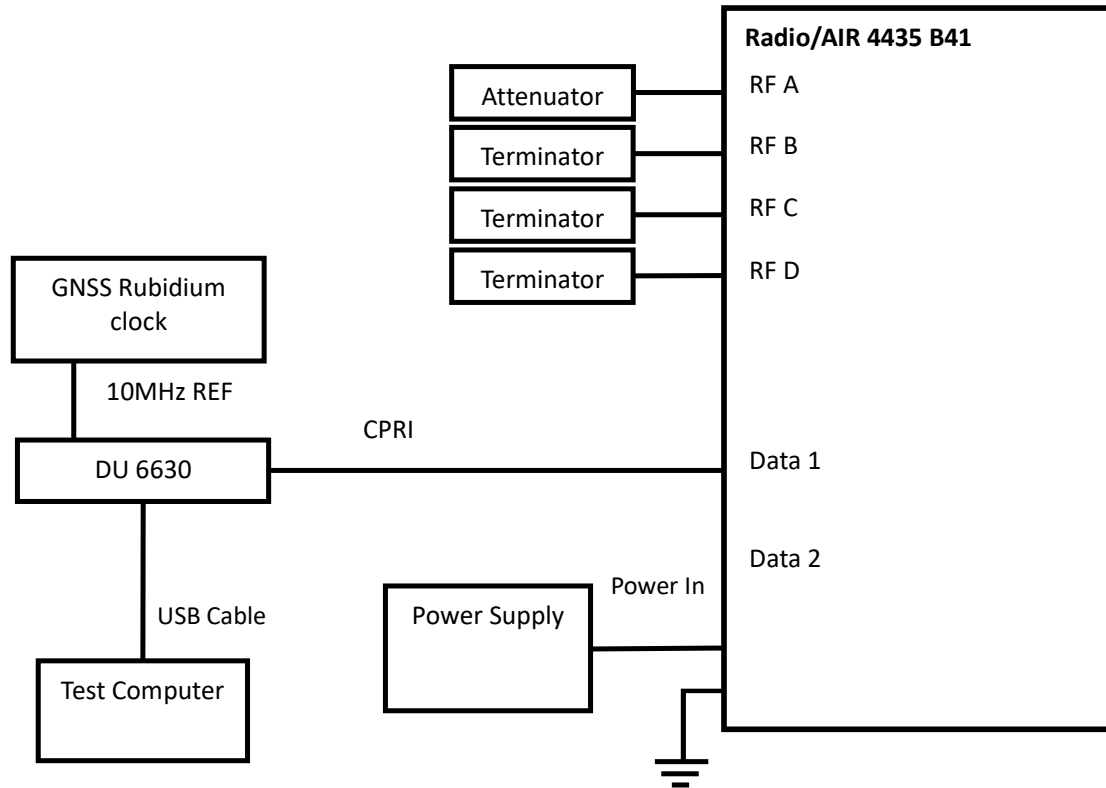
2.4 Test Setup

Conducted Measurement:



No.	Auxiliary Equipment	Product Number / Model Type	Version
1	Test computer	DELL PowerEdge R230	-
2	Baseband 6630	KDU137848/1	R2C
3	GNSS Rubidium clock	HJ5418A-V1	-
4	DC Power Supply	Chroma 62024P-100-50	-
5	Attenuator	66-40-33	-
6	Terminator	WTF50-6G-A	-

Radiated Measurement:



No.	Auxiliary Equipment	Product Number / Model Type	Version
1	Test computer	DELL PowerEdge R230	-
2	Baseband 6630	KDU137848/1	R2C
3	GNSS Rubidium clock	HJ5418A-V1	-
4	DC Power Supply	Chroma 62024P-100-50	-
5	Attenuator	66-40-33	-
6	Terminator	WTF50-6G-A	-

2.5 Test environment condition:

Test items	Temperature	Humidity
Max Output Power and Peak to Average Power Ratio and EIRP	20°C to 24°C	45%RH to 55%RH
Occupied Bandwidth		
Unwanted Emissions at Band Edge		
Conducted Unwanted Emission		
Radiated Unwanted Emissions	21°C	51% RH
Frequency Stability	Please refer to clause 8	

2.6 Instrument list

Intertek Testing Services Shanghai					
Used	Equipment	Manufacturer	Type	S/N	Due date
☒	PXA Signal Analyzer	Keysight	N9030A	MY54490502	2021.8.24
☐	Signal Generator	R&S	SMU200A	103457	2021.8.15
☒	Multi-meter	Fluke	117	93990470	2022.1.17
☒	Climatic Chamber	赛宝	CEEC-WR16H-50W	15-95	2021.9.21
☒	Humiture meter	托普	TPJ-20	TP161108085	2022.1.16

BEIJING BOOMWAVE TEST SERVICE CO. LTD.					
Used	Equipment	Manufacturer	Type	S/N	Due date
☒	EMI TEST RECERVER	R&S	ESR26	101320	2021-12-28
☒	Spectrum Analyzer	R&S	FSV40	101403	2022-01-01
☒	Hybrid antenna	SCHWARZBECK	VULB9163	01266	2021-07-03
☒	Double-Ridged Waveguide Horn Antenna	R&S	BBHA9120D	1276	2022-03-17
☒	Broad-Band Horn Antenna	SCHWARZBECK	BBHA9170	797	2022-03-17
☒	Pre-amplifier	R&S	SCU40	2046336	2022-03-17
☒	Pre-amplifier	Qualwave	QLAS-1000-18000-45-30	20255003	2021-07-01
☒	Power amplifier	Pasternack Enterprises	PE15A1009	V00140120181115E822	2022-01-01
☒	Digital display temperature and humidity recorder	DICKSON	TM320	015080	2021-08-05
☒	Aneroid barometer	Shanghai Boji	DYM3	00868	2022-05-05
☒	Semi-Anechoic Chamber	TDK	SAC03	/	2024-07-23

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:

$$\text{EIRP} \leq 33 \text{ dBW} + 10\log(X/Y) \text{ dBW}$$

X = actual channel bandwidth

Y = 5.5 or 6 MHz

Peak to Average Ratio: $\leq 13 \text{ dB}$

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

KRC 161 925/1:

Configuration LTE-MIMO-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	36.74	27.72	8.27	36.66	27.47	8.26	36.32	27.31	8.27
B	QPSK	10	36.65	27.61	8.40	36.71	27.40	8.42	36.47	27.51	8.42
C	QPSK	10	36.31	27.38	8.42	36.18	27.01	8.41	36.06	27.05	8.42
D	QPSK	10	36.67	27.74	8.31	36.49	27.31	8.33	36.29	27.29	8.33
Total			42.62	33.64	-	42.54	33.32	-	42.31	33.31	-

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	38.40	27.71	8.28	38.45	27.50	8.34	38.28	27.44	8.36
B	QPSK	15	38.47	27.75	8.41	38.26	27.32	8.42	38.12	27.35	8.48
C	QPSK	15	38.04	27.40	8.45	37.88	26.89	8.46	37.83	27.09	8.49
D	QPSK	15	38.37	27.66	8.33	38.45	27.51	8.41	38.13	27.37	8.47
Total			44.34	33.65	-	44.29	33.33	-	44.11	33.34	-

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	39.51	27.50	8.47	39.61	27.34	8.42	39.45	27.54	8.34
B	QPSK	20	39.54	27.57	8.39	39.54	27.36	8.36	39.35	27.43	8.35
C	QPSK	20	39.24	27.31	8.53	38.95	26.82	8.53	39.07	27.09	8.50
D	QPSK	20	39.49	27.57	8.60	39.36	27.21	8.59	39.32	27.35	8.59
Total			45.47	33.51	-	45.39	33.21	-	45.32	33.38	-

TEST REPORT

Configuration LTE-MIMO-2C

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	-	-	-	41.17	29.02	-	-	-	-
B	QPSK	10	-	-	-	39.16	26.97	-	-	-	-
C	QPSK	10	-	-	-	38.78	26.57	-	-	-	-
D	QPSK	10	-	-	-	39.01	26.79	-	-	-	-
Total			-	-	-	45.66	33.48	-	-	-	-

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	-	-	-	41.25	27.22	-	-	-	-
B	QPSK	15	-	-	-	40.77	26.89	-	-	-	-
C	QPSK	15	-	-	-	40.53	26.64	-	-	-	-
D	QPSK	15	-	-	-	40.80	26.78	-	-	-	-
Total			-	-	-	46.87	32.91	-	-	-	-

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	-	-	-	41.22	26.11	-	-	-	-
B	QPSK	20	-	-	-	41.13	26.05	-	-	-	-
C	QPSK	20	-	-	-	40.78	25.68	-	-	-	-
D	QPSK	20	-	-	-	41.00	25.90	-	-	-	-
Total			-	-	-	47.06	31.96	-	-	-	-

Configuration LTE-MIMO-6C

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	-	-	-	41.33	24.60	-	-	-	-
B	QPSK	10	-	-	-	41.36	24.54	-	-	-	-
C	QPSK	10	-	-	-	41.06	24.34	-	-	-	-
D	QPSK	10	-	-	-	41.29	24.55	-	-	-	-
Total			-	-	-	47.28	30.53	-	-	-	-

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	-	-	-	41.44	22.88	-	-	-	-
B	QPSK	15	-	-	-	41.29	22.76	-	-	-	-
C	QPSK	15	-	-	-	40.97	22.44	-	-	-	-
D	QPSK	15	-	-	-	41.20	22.64	-	-	-	-
Total			-	-	-	47.25	28.70	-	-	-	-

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	-	-	-	41.54	21.81	-	-	-	-
B	QPSK	20	-	-	-	41.40	21.79	-	-	-	-
C	QPSK	20	-	-	-	41.46	21.83	-	-	-	-
D	QPSK	20	-	-	-	41.36	21.59	-	-	-	-
Total			-	-	-	47.46	27.78	-	-	-	-

Configuration NR-MIMO-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	20	39.93	27.71	8.12	39.74	27.45	8.13	39.73	27.62	8.12
B	QPSK	20	39.91	27.67	8.11	39.72	27.42	8.13	39.56	27.54	8.08
C	QPSK	20	39.85	27.75	8.19	39.49	27.17	8.15	39.71	27.59	8.17
D	QPSK	20	39.94	27.84	8.12	39.77	27.46	8.18	39.81	27.77	8.12
Total			45.93	33.76	-	45.70	33.40	-	45.72	33.65	-

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	30	41.38	27.54	8.13	41.45	27.33	8.17	41.61	27.45	8.20
B	QPSK	30	41.35	27.53	8.08	41.47	27.36	8.18	41.23	27.31	8.19
C	QPSK	30	41.47	27.59	8.06	41.32	27.23	8.13	41.59	27.60	8.19
D	QPSK	30	41.37	27.54	8.14	41.57	27.45	8.17	41.67	27.73	8.21
Total			47.41	33.57	-	47.47	33.36	-	47.55	33.55	-

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	40	42.49	27.32	7.63	42.64	27.22	7.29	42.50	27.28	7.68
B	QPSK	40	42.45	27.29	7.64	42.61	27.17	7.30	42.40	27.16	7.69
C	QPSK	40	42.47	27.45	7.61	42.51	27.12	7.30	42.52	27.32	7.66
D	QPSK	40	43.54	27.47	7.65	42.73	27.29	7.29	42.55	27.32	7.68
Total			48.78	33.40	-	48.64	33.22	-	48.51	33.29	-

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	50	42.38	26.46	7.71	42.75	26.36	7.34	42.29	26.10	7.74
B	QPSK	50	42.32	26.39	7.75	42.80	26.39	7.35	42.26	26.06	7.76
C	QPSK	50	42.44	26.38	7.68	42.53	26.16	7.34	42.36	26.10	7.74
D	QPSK	50	42.31	26.26	7.71	42.73	26.30	7.35	42.49	26.17	7.79
Total			48.38	32.39	-	48.72	32.32	-	48.37	32.13	-

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	60	42.44	25.42	7.74	42.63	25.41	7.31	42.46	25.49	7.83
B	QPSK	60	42.33	25.42	7.73	42.60	25.38	7.32	42.40	25.44	7.83
C	QPSK	60	42.37	25.40	7.74	42.52	25.29	7.32	42.39	25.31	7.87
D	QPSK	60	42.50	25.55	7.80	42.78	25.56	7.31	42.52	25.43	7.80
Total			48.43	31.47	-	48.65	31.43	-	48.46	31.44	-

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	70	42.39	24.83	7.92	42.71	24.85	7.39	42.50	24.80	7.93
B	QPSK	70	42.50	24.82	7.92	42.67	24.73	7.40	42.41	24.70	7.90
C	QPSK	70	42.41	24.66	7.87	42.64	24.68	7.38	42.36	24.66	7.92
D	QPSK	70	42.57	24.85	7.90	42.69	24.71	7.38	42.48	24.74	7.92
Total			48.49	30.81	-	48.70	30.76	-	48.46	30.75	-

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	80	42.51	24.23	7.91	42.62	24.12	7.35	42.48	24.15	7.93
B	QPSK	80	42.47	24.18	7.91	42.58	24.08	7.32	42.43	24.10	7.95
C	QPSK	80	42.45	24.20	7.89	42.41	24.01	7.34	42.41	24.07	7.93
D	QPSK	80	42.41	24.23	7.91	42.59	24.17	7.34	42.44	24.12	7.91
Total			48.48	30.23	-	48.57	30.12	-	48.46	30.13	-

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	90	42.56	23.78	7.94	42.65	23.70	7.40	42.33	23.46	7.93
B	QPSK	90	42.34	23.64	7.91	42.69	23.76	7.39	42.34	23.48	7.98
C	QPSK	90	42.40	23.64	8.00	42.53	23.52	7.39	42.37	23.55	7.98
D	QPSK	90	42.30	23.55	7.95	42.63	23.73	7.38	42.31	23.45	7.93
Total			48.42	29.67	-	48.65	29.70	-	48.36	29.51	-

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	100	42.50	23.27	7.95	42.67	23.21	7.38	42.44	23.17	7.96
B	QPSK	100	42.61	23.32	7.96	42.72	23.24	7.38	42.48	23.21	8.01
C	QPSK	100	42.58	23.30	7.92	42.50	23.06	7.35	42.50	23.20	7.95
D	QPSK	100	42.53	23.25	7.96	42.54	23.11	7.37	42.37	23.09	7.95
Total			48.58	29.31	-	48.63	29.18	-	48.47	29.19	-

Configuration NR-MIMO-2C

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	-	-	-	41.37	26.65	-	-	-	-
B	QPSK	20	-	-	-	41.32	26.59	-	-	-	-
C	QPSK	20	-	-	-	41.32	26.54	-	-	-	-
D	QPSK	20	-	-	-	41.43	26.70	-	-	-	-
Total			-	-	-	47.38	32.64	-	-	-	-

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	30	-	-	-	41.39	24.83	-	-	-	-
B	QPSK	30	-	-	-	41.37	24.80	-	-	-	-
C	QPSK	30	-	-	-	41.19	24.54	-	-	-	-
D	QPSK	30	-	-	-	41.39	24.77	-	-	-	-
Total			-	-	-	47.36	30.76	-	-	-	-

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	40	-	-	-	41.39	23.43	-	-	-	-
B	QPSK	40	-	-	-	41.35	23.39	-	-	-	-
C	QPSK	40	-	-	-	41.15	23.11	-	-	-	-
D	QPSK	40	-	-	-	41.43	23.60	-	-	-	-
Total			-	-	-	47.35	29.41	-	-	-	-

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	50	-	-	-	41.39	22.55	-	-	-	-
B	QPSK	50	-	-	-	41.37	22.52	-	-	-	-
C	QPSK	50	-	-	-	41.25	22.32	-	-	-	-
D	QPSK	50	-	-	-	41.54	22.67	-	-	-	-
Total			-	-	-	47.41	28.54	-	-	-	-

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	60	-	-	-	41.42	21.74	-	-	-	-
B	QPSK	60	-	-	-	41.45	21.78	-	-	-	-
C	QPSK	60	-	-	-	41.34	21.70	-	-	-	-
D	QPSK	60	-	-	-	41.48	21.85	-	-	-	-
Total			-	-	-	47.44	27.79	-	-	-	-

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	70	-	-	-	41.37	19.96	-	-	-	-
B	QPSK	70	-	-	-	41.30	19.88	-	-	-	-
C	QPSK	70	-	-	-	41.25	19.69	-	-	-	-
D	QPSK	70	-	-	-	41.52	19.99	-	-	-	-
Total			-	-	-	47.38	25.90	-	-	-	-

Configuration NR-MIMO-6C

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	-	-	-	41.60	22.23	-	-	-	-
B	QPSK	20	-	-	-	41.58	22.15	-	-	-	-
C	QPSK	20	-	-	-	41.36	22.00	-	-	-	-
D	QPSK	20	-	-	-	41.69	22.31	-	-	-	-
Total			-	-	-	47.58	28.19	-	-	-	-

Configuration NR-MIMO-MC

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	100+60	-	-	-	41.42	20.35	-	-	-	-
B	QPSK	100+60	-	-	-	41.47	20.43	-	-	-	-
C	QPSK	100+60	-	-	-	41.56	20.48	-	-	-	-
D	QPSK	100+60	-	-	-	41.78	20.85	-	-	-	-
Total			-	-	-	47.58	26.55	-	-	-	-

TEST REPORT

NR+LTE-MIMO-MC-1

Antenna Port	NR Modulation	LTE Modulation	NR Carrier Bandwidth (MHz)	LTE Carrier Bandwidth (MHz)	Output power / Peak-to-Average Ratio (PAR)		
					Channel position M		
					Power (dBm)	Power (dBm/MHz)	PAR (dB)
A	QPSK	QPSK	20	10	41.31	27.70	-
B	QPSK	QPSK	20	10	41.19	27.55	-
C	QPSK	QPSK	20	10	40.82	27.28	-
D	QPSK	QPSK	20	10	41.21	27.61	-
Total					47.16	33.56	-

Antenna Port	NR Modulation	LTE Modulation	NR Carrier Bandwidth (MHz)	LTE Carrier Bandwidth (MHz)	Output power / Peak-to-Average Ratio (PAR)		
					Channel position M		
					Power (dBm)	Power (dBm/MHz)	PAR (dB)
A	QPSK	QPSK	100	20	41.64	21.43	-
B	QPSK	QPSK	100	20	41.68	21.58	-
C	QPSK	QPSK	100	20	41.44	21.38	-
D	QPSK	QPSK	100	20	41.79	21.72	-
Total					47.66	27.55	-

NR+LTE-MIMO-MC-2

Antenna Port	NR Modulation	LTE Modulation	NR Carrier Bandwidth (MHz)	LTE Carrier Bandwidth (MHz)	Output power / Peak-to-Average Ratio (PAR)		
					Channel position M		
					Power (dBm)	Power (dBm/MHz)	PAR (dB)
A	QPSK	QPSK	20	10	41.28	26.48	-
B	QPSK	QPSK	20	10	41.46	26.55	-
C	QPSK	QPSK	20	10	41.12	26.40	-
D	QPSK	QPSK	20	10	41.57	26.88	-
Total					47.38	32.60	-

Antenna Port	NR Modulation	LTE Modulation	NR Carrier Bandwidth (MHz)	LTE Carrier Bandwidth (MHz)	Output power / Peak-to-Average Ratio (PAR)		
					Channel position M		
					Power (dBm)	Power (dBm/MHz)	PAR (dB)
A	QPSK	QPSK	100	20	41.33	20.59	-
B	QPSK	QPSK	100	20	41.76	20.97	-
C	QPSK	QPSK	100	20	41.33	20.72	-
D	QPSK	QPSK	100	20	41.69	20.93	-
Total					47.55	26.83	-

TEST REPORT

NR+LTE-MIMO-MC-3

Antenna Port	NR Modulation	LTE Modulation	NR Carrier Bandwidth (MHz)	LTE Carrier Bandwidth (MHz)	Output power / Peak-to-Average Ratio (PAR)		
					Channel position M		
					Power (dBm)	Power (dBm/MHz)	PAR (dB)
A	QPSK	QPSK	20	10	41.58	24.51	-
B	QPSK	QPSK	20	10	41.66	24.54	-
C	QPSK	QPSK	20	10	41.51	24.19	-
D	QPSK	QPSK	20	10	41.69	24.36	-
Total					47.63	30.42	-

Antenna Port	NR Modulation	LTE Modulation	NR Carrier Bandwidth (MHz)	LTE Carrier Bandwidth (MHz)	Output power / Peak-to-Average Ratio (PAR)		
					Channel position M		
					Power (dBm)	Power (dBm/MHz)	PAR (dB)
A	QPSK	QPSK	20	20	41.65	22.25	-
B	QPSK	QPSK	20	20	41.67	22.33	-
C	QPSK	QPSK	20	20	41.34	22.22	-
D	QPSK	QPSK	20	20	41.52	22.35	-
Total					47.57	28.31	-

NR+LTE-MIMO-MC-4

Antenna Port	NR Modulation	LTE Modulation	NR Carrier Bandwidth (MHz)	LTE Carrier Bandwidth (MHz)	Output power / Peak-to-Average Ratio (PAR)		
					Channel position M		
					Power (dBm)	Power (dBm/MHz)	PAR (dB)
A	QPSK	QPSK	20	10	41.74	24.43	-
B	QPSK	QPSK	20	10	41.62	24.18	-
C	QPSK	QPSK	20	10	41.53	24.02	-
D	QPSK	QPSK	20	10	41.82	24.38	-
Total					47.70	30.28	-

Antenna Port	NR Modulation	LTE Modulation	NR Carrier Bandwidth (MHz)	LTE Carrier Bandwidth (MHz)	Output power / Peak-to-Average Ratio (PAR)		
					Channel position M		
					Power (dBm)	Power (dBm/MHz)	PAR (dB)
A	QPSK	QPSK	20	20	41.85	22.52	-
B	QPSK	QPSK	20	20	41.75	22.38	-
C	QPSK	QPSK	20	20	41.37	22.14	-
D	QPSK	QPSK	20	20	41.63	22.45	-
Total					47.67	28.40	-

TEST REPORT

4 Occupied Bandwidth

Test result: Pass

4.1 Measurement Procedure

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 KDB 971168 4.2:

- 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 (i.e., two to five times the OBW).
- 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 $10\log(\text{OBW} / \text{RBW})$ below the reference level.
- d) Set the detection mode to peak, and the trace mode to max hold.
- e) Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

TEST REPORT

4.2 Measurement result

KRC 161 925/1:

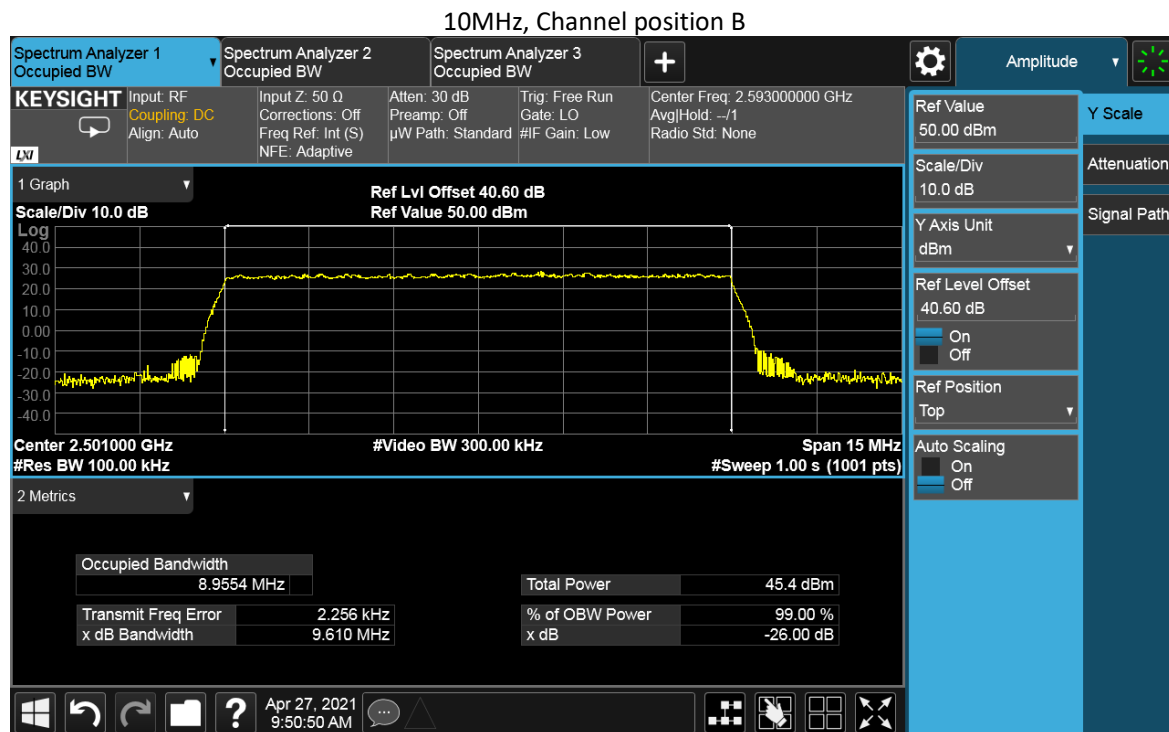
Configuration LTE-MIMO-1C

99% Occupied Bandwidth

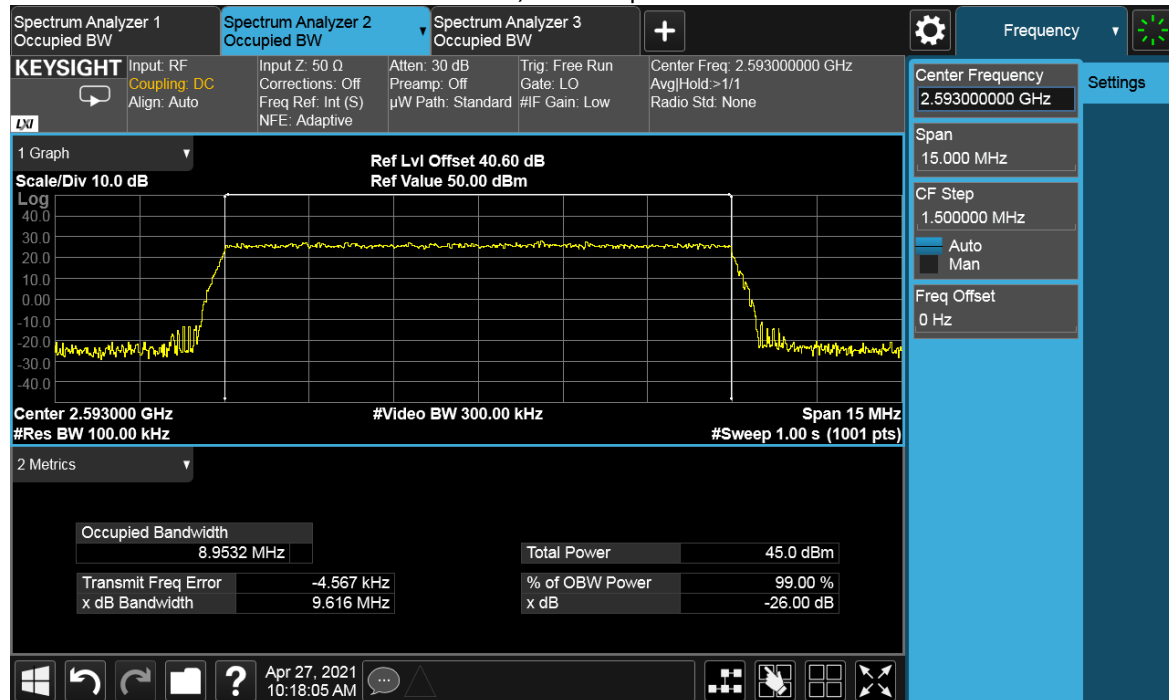
Antenna Port	Modulation	Bandwidth	Occupied Bandwidth (MHz)		
			Channel Position B	Channel Position M	Channel Position T
B	QPSK	10MHz	8.9544	8.9532	8.9470
B	QPSK	15MHz	13.441	13.454	13.432
B	QPSK	20MHz	17.874	17.862	17.867

-26dBc Occupied Bandwidth

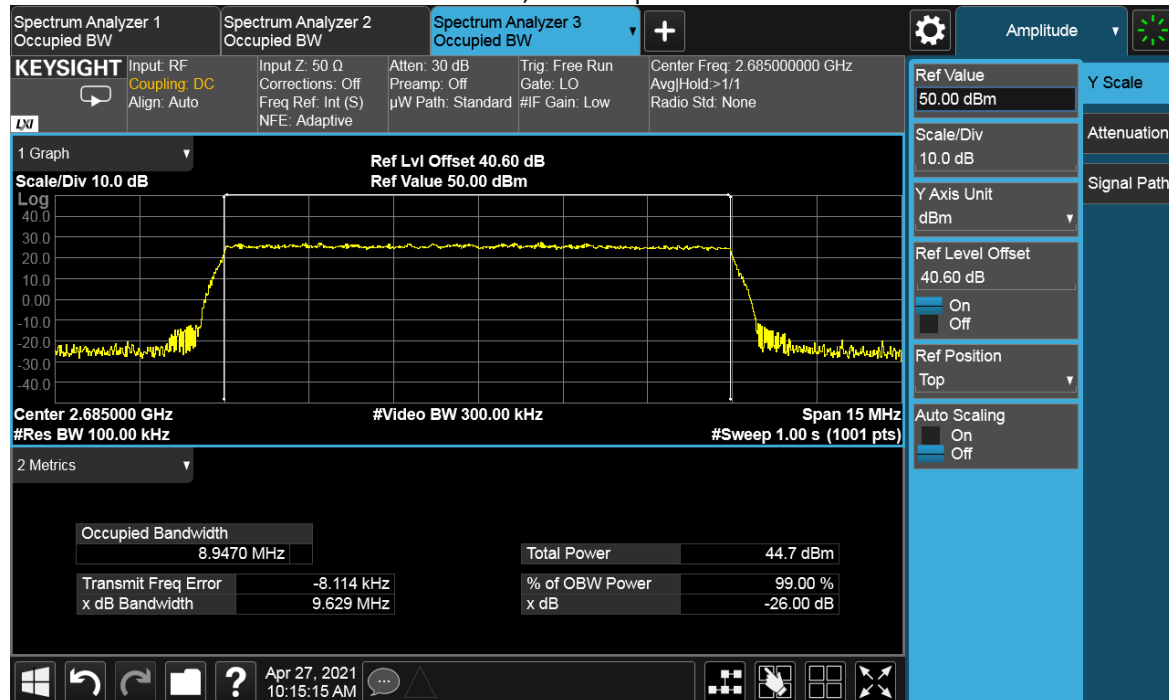
Antenna Port	Modulation	Bandwidth	Occupied Bandwidth (MHz)		
			Channel Position B	Channel Position M	Channel Position T
B	QPSK	10MHz	9.610	9.616	9.629
B	QPSK	15MHz	14.44	14.43	14.41
B	QPSK	20MHz	18.90	18.95	18.95



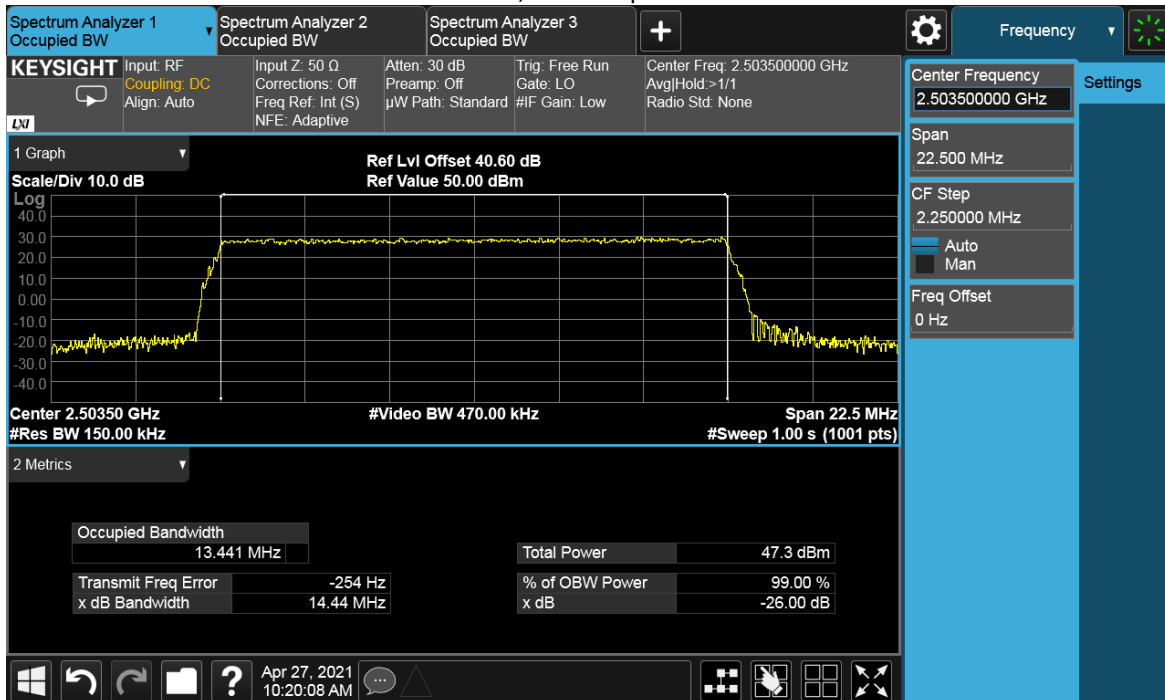
10MHz, Channel position M



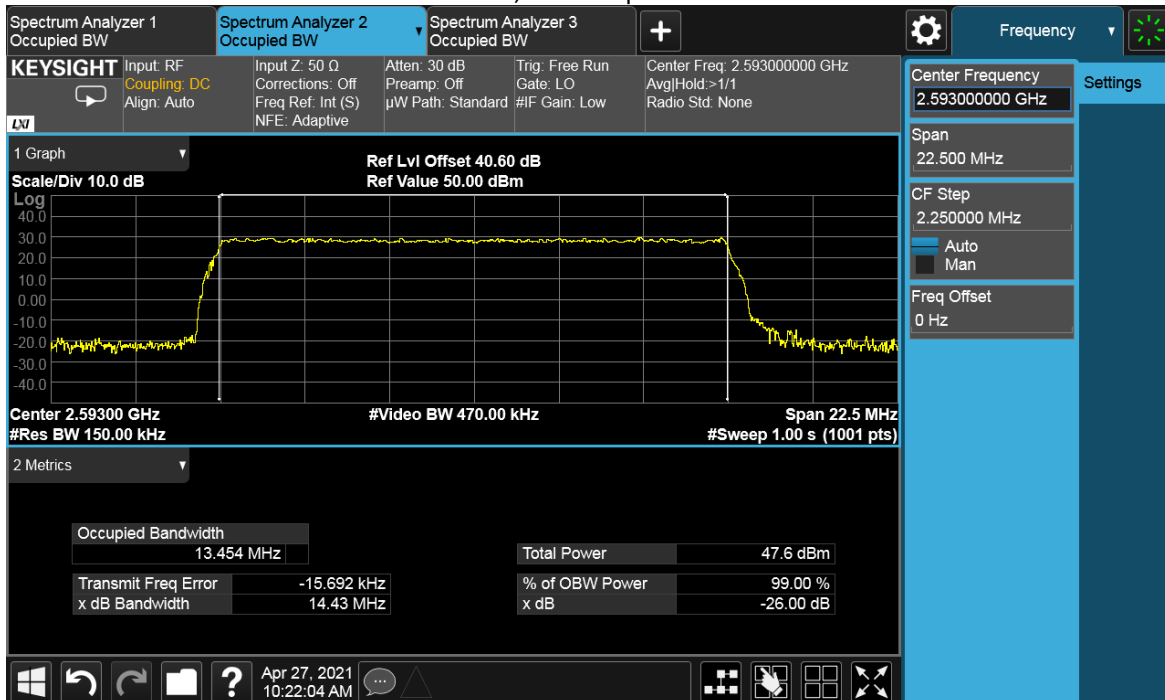
10MHz, Channel position T



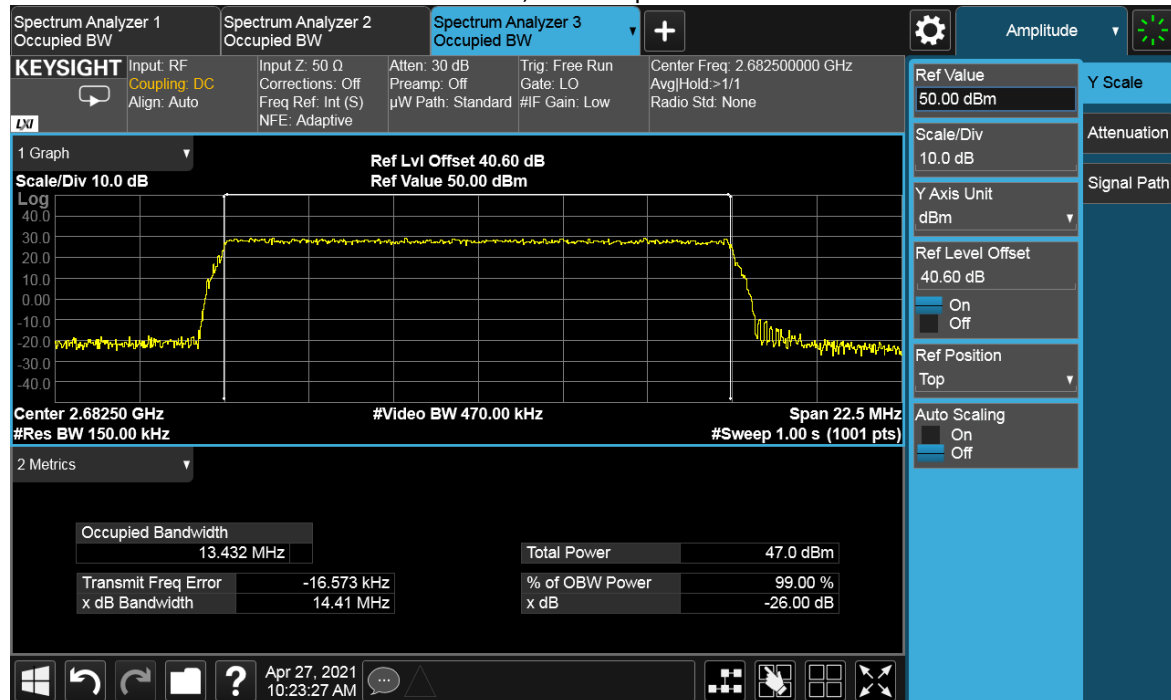
15MHz, Channel position B



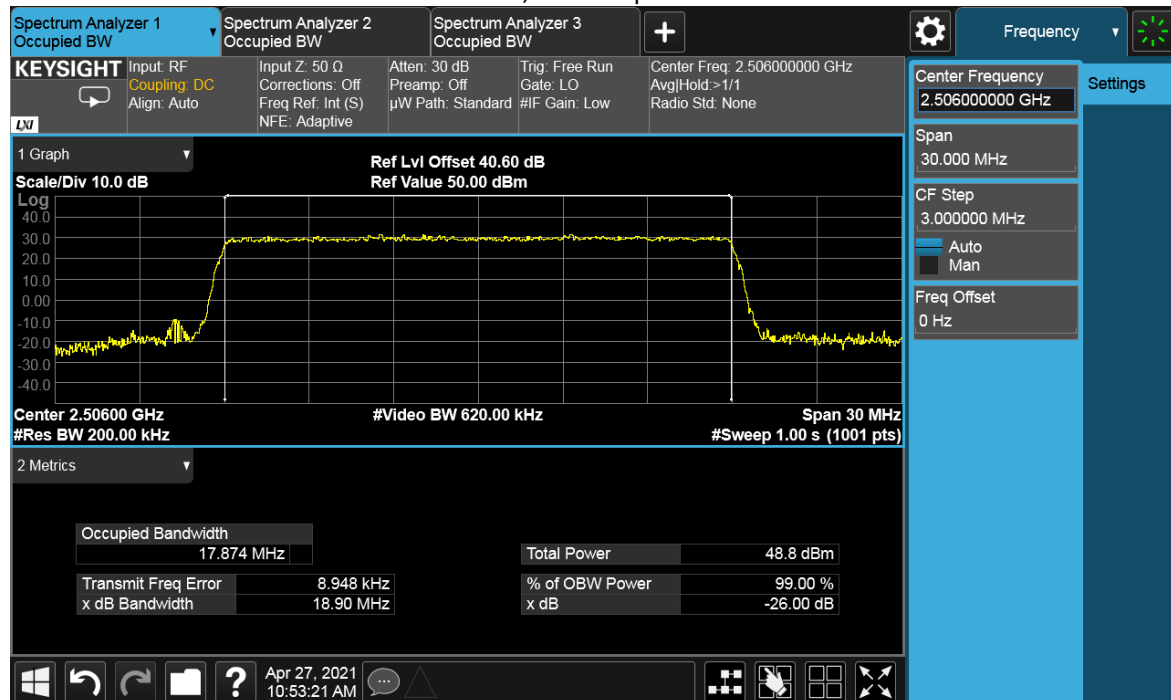
15MHz, Channel position M



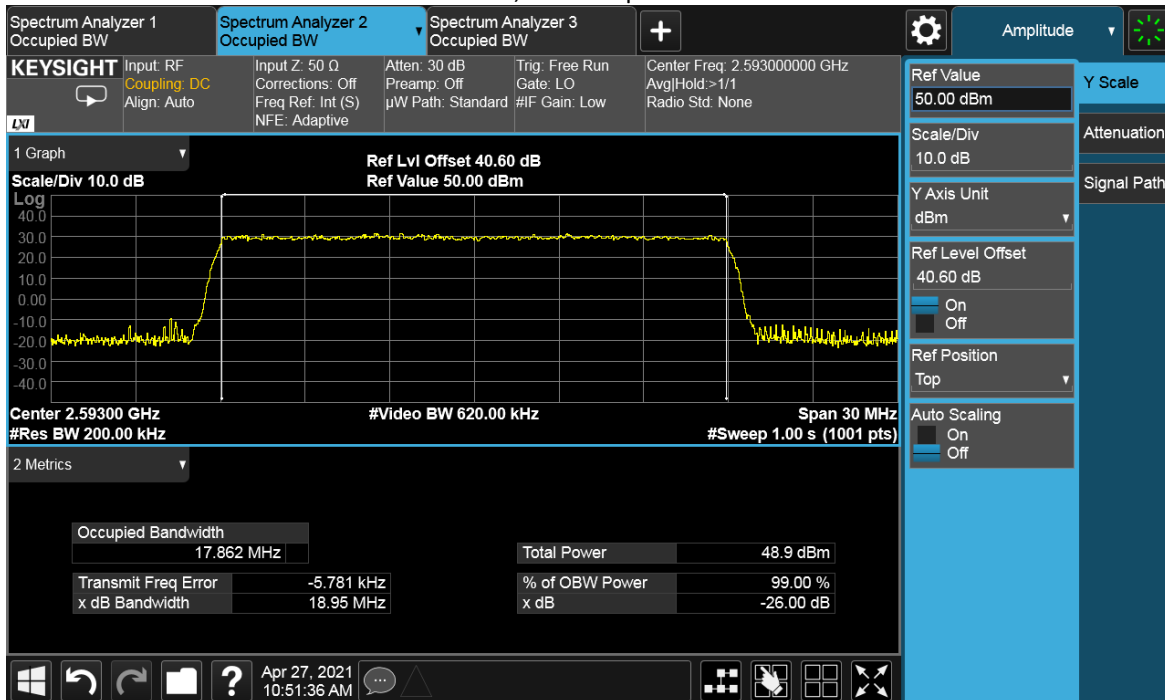
15MHz, Channel position T



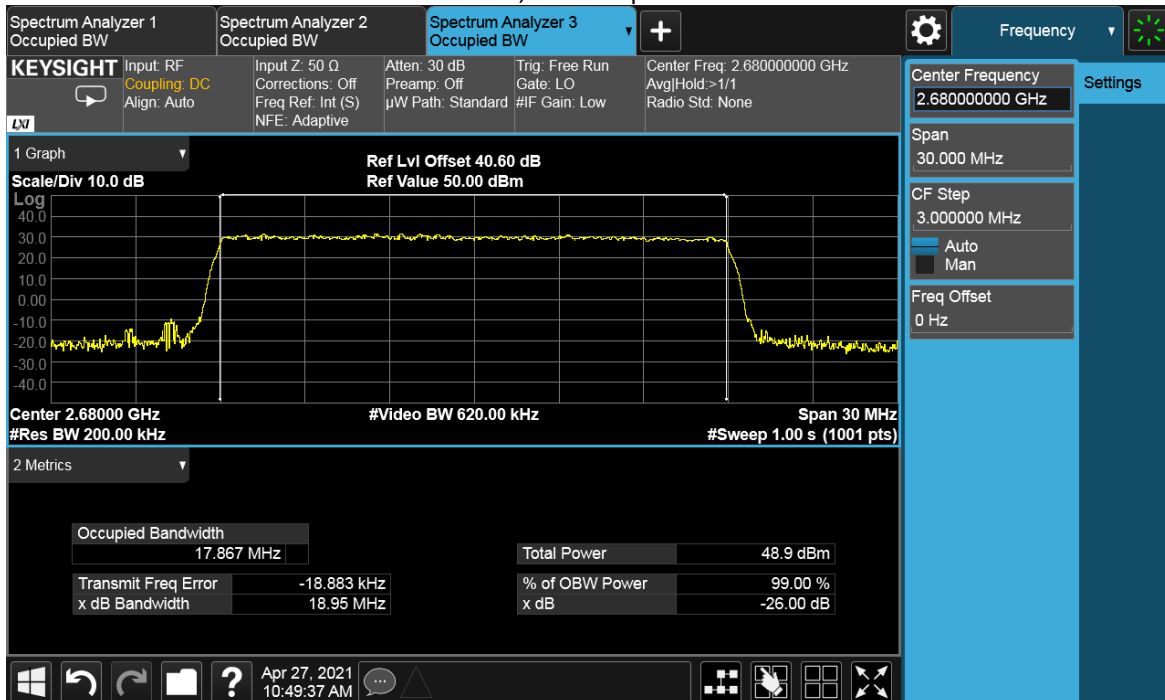
20MHz, Channel position B



20MHz, Channel position M



20MHz, Channel position T



TEST REPORT

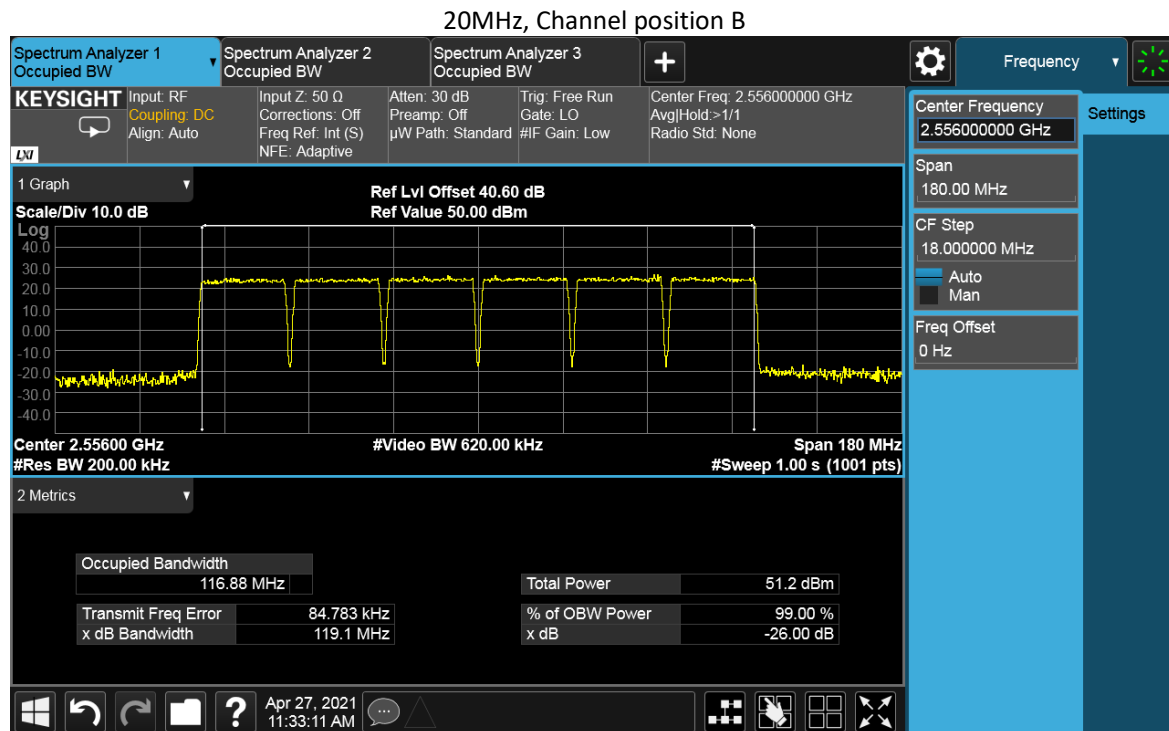
Configuration LTE-MIMO-6C

99% Occupied Bandwidth

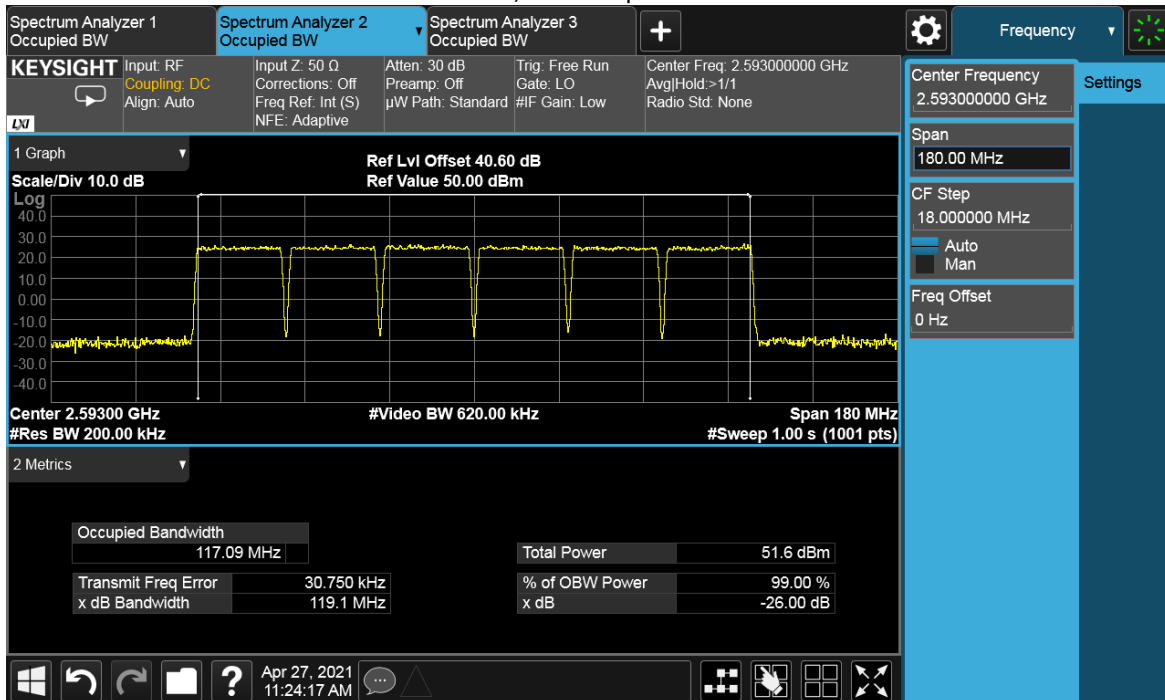
Antenna Port	Modulation	Bandwidth	Occupied Bandwidth (MHz)		
			Channel Position B	Channel Position M	Channel Position T
B	QPSK	20MHz	116.88	117.09	116.91

-26dBc Occupied Bandwidth

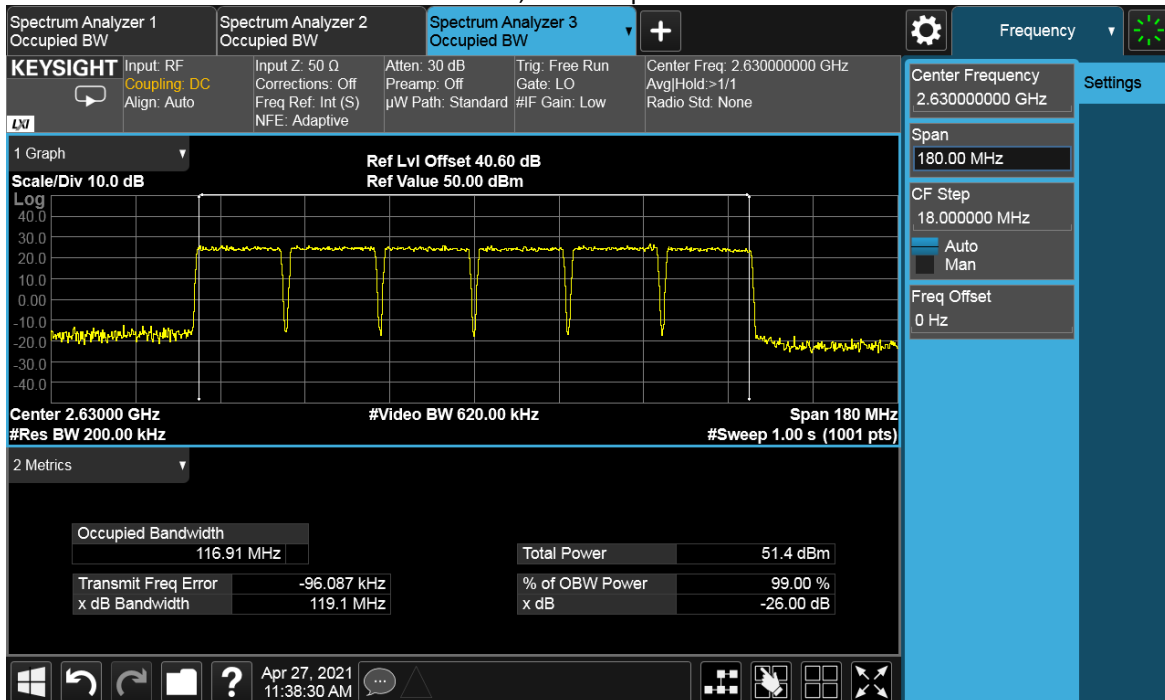
Antenna Port	Modulation	Bandwidth	Occupied Bandwidth (MHz)		
			Channel Position B	Channel Position M	Channel Position T
B	QPSK	20MHz	119.1	119.1	119.1



20MHz, Channel position M



20MHz, Channel position T



TEST REPORT

Configuration NR-MIMO-1C

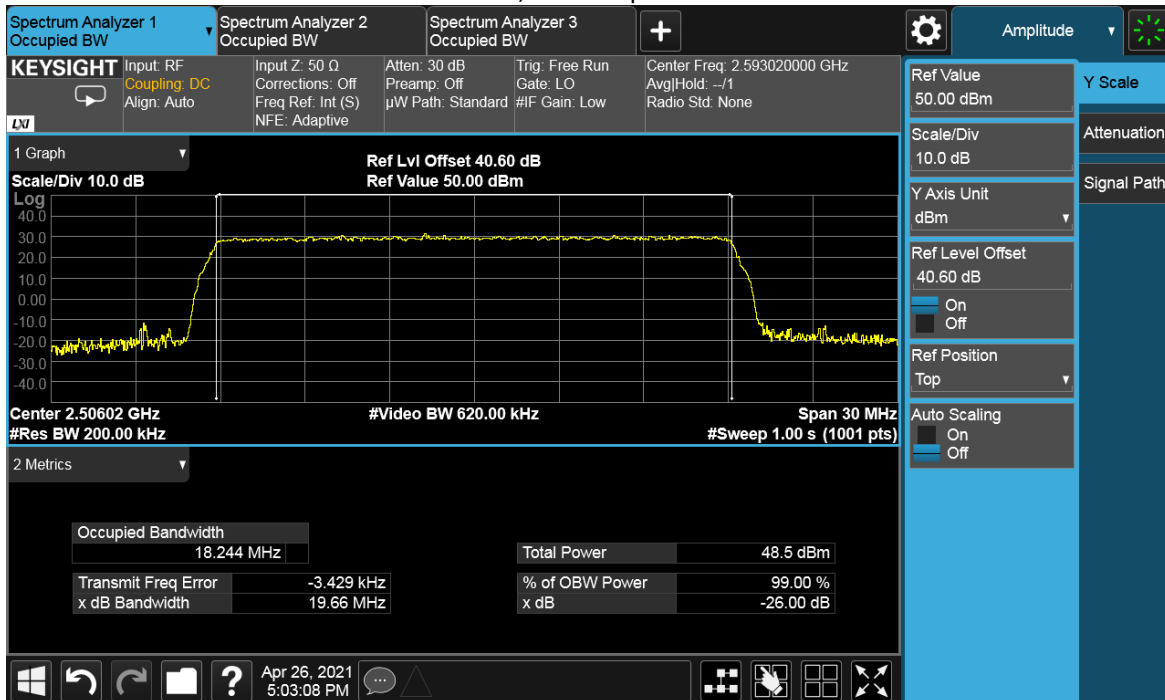
99% Occupied Bandwidth

Antenna Port	Modulation	Bandwidth	Occupied Bandwidth (MHz)		
			Channel Position B	Channel Position M	Channel Position T
B	QPSK	20MHz	18.244	18.222	18.225
B	QPSK	30MHz	27.823	27.864	27.817
B	QPSK	40MHz	37.863	37.820	37.764
B	QPSK	50MHz	47.495	47.477	47.448
B	QPSK	60MHz	57.721	57.823	57.649
B	QPSK	70MHz	67.323	67.426	67.391
B	QPSK	80MHz	77.334	77.344	77.312
B	QPSK	90MHz	87.222	87.450	87.291
B	QPSK	100MHz	97.178	97.341	97.272

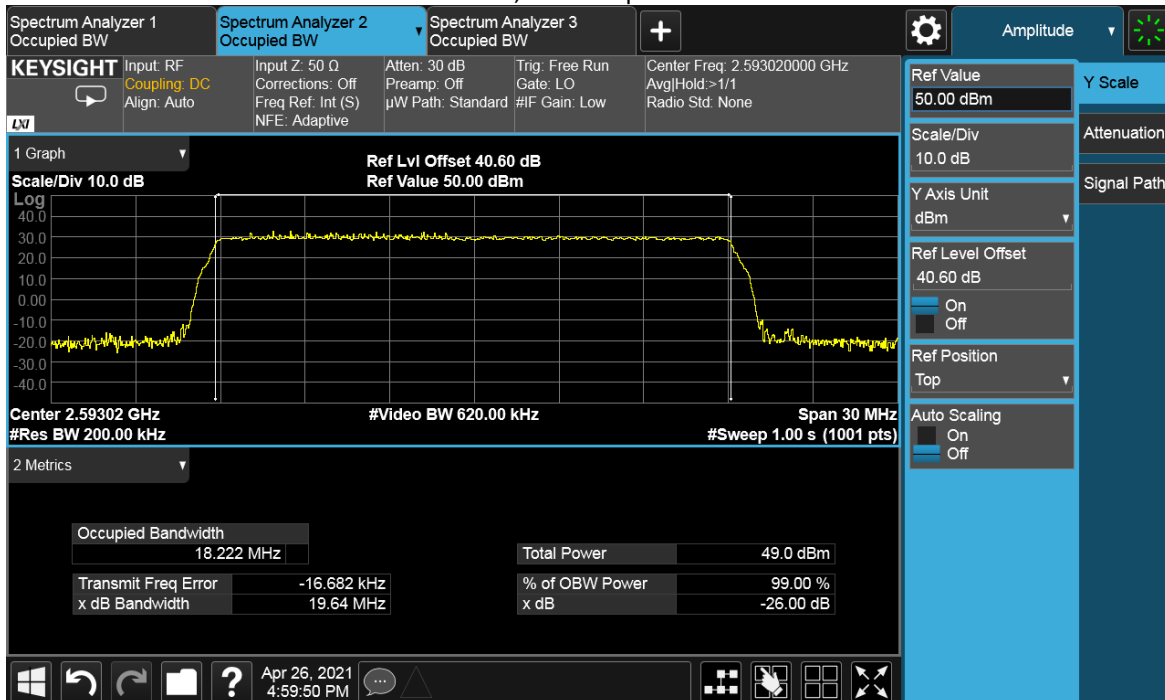
-26dBc Occupied Bandwidth

Antenna Port	Modulation	Bandwidth	Occupied Bandwidth (MHz)		
			Channel Position B	Channel Position M	Channel Position T
B	QPSK	20MHz	19.66	19.64	19.72
B	QPSK	30MHz	29.66	29.68	29.63
B	QPSK	40MHz	39.89	39.69	39.78
B	QPSK	50MHz	49.77	49.83	49.82
B	QPSK	60MHz	60.16	60.21	60.06
B	QPSK	70MHz	70.18	70.19	70.18
B	QPSK	80MHz	80.05	80.05	79.99
B	QPSK	90MHz	90.29	90.35	90.57
B	QPSK	100MHz	100.5	100.6	100.4

20MHz, Channel position B

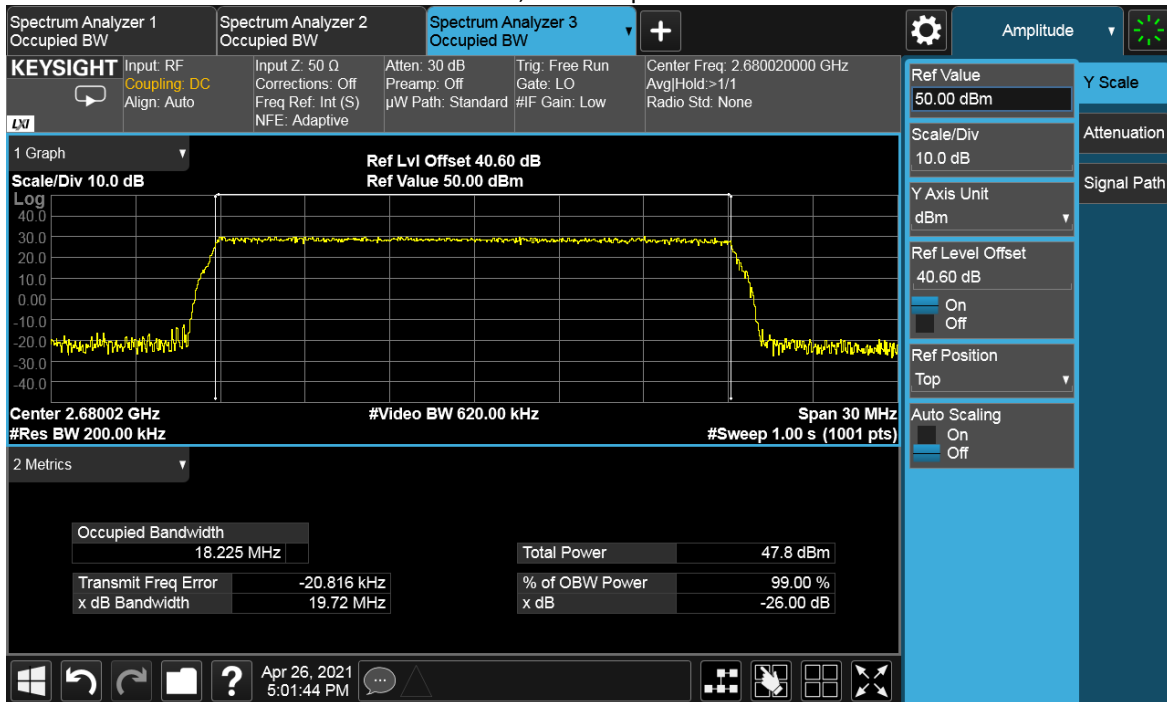


20MHz, Channel position M

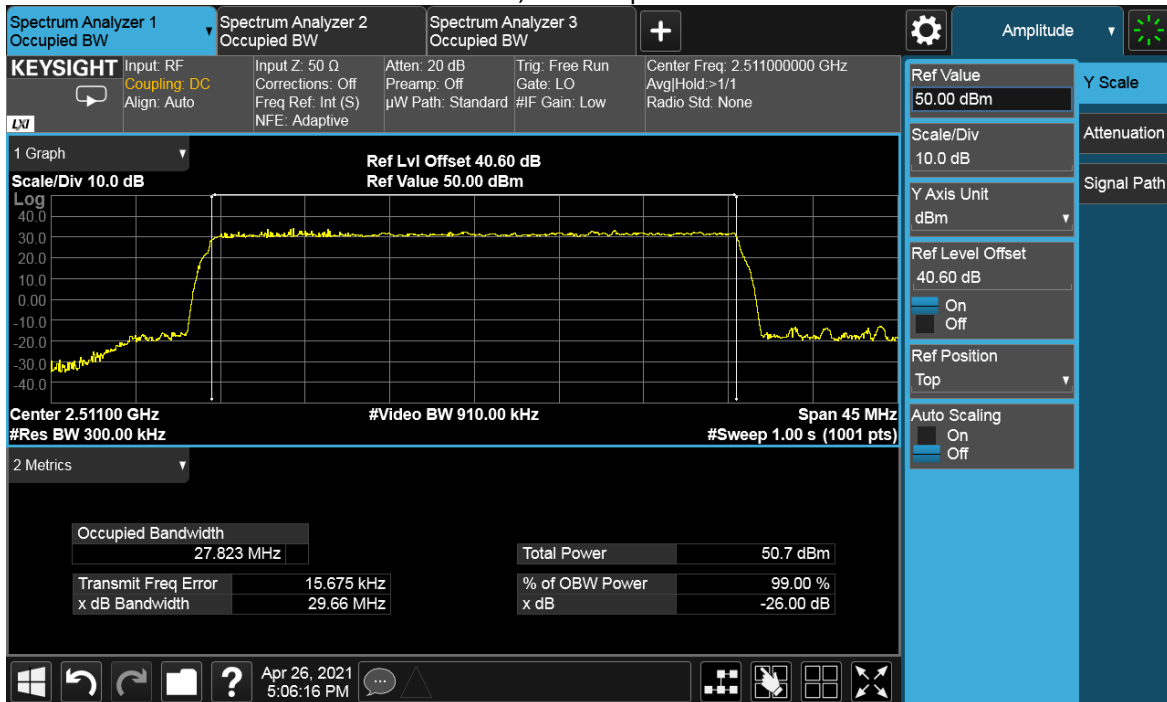


TEST REPORT

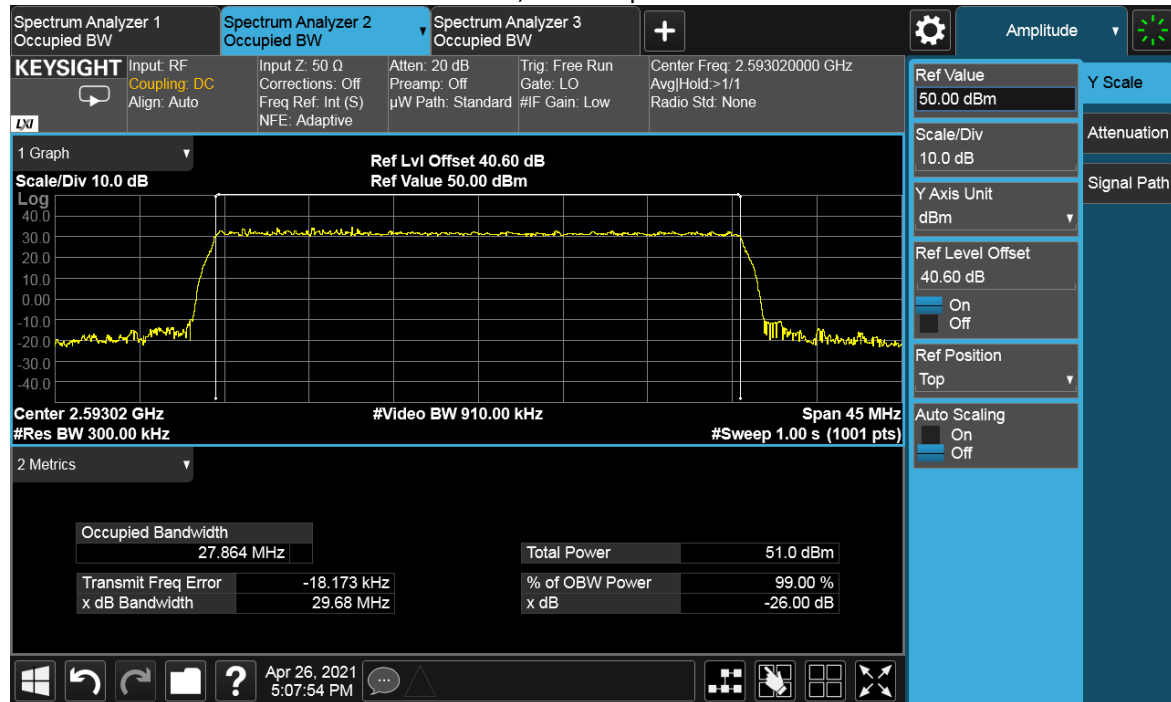
20MHz, Channel position T



30MHz, Channel position B



30MHz, Channel position M



30MHz, Channel position T

