



TEST REPORT

PART 27 MEASUREMENT REPORT

Applicant Name:

Samsung Electronics Co., Ltd.
129, Samsung-ro,
Yeongtong-gu, Suwon-si
Gyeonggi-do, 16677, Korea

Date of Testing:

10/01/2024 - 11/29/2024

Test Site/Location:

Element Lab., Suwon,
Yongin-si, Gyeonggi-do, Korea

Test Report Serial No.:

8K24091001-00.A3L

FCC ID:

A3LRF4435D-71A

APPLICANT:

Samsung Electronics Co., Ltd.

Application Type:

Class II Permissive Change

Model:

RF4435d-71B

EUT Type:

RRU(RF4435d)

FCC Classification:

Licensed Non-Broadcast Station Transmitter

FCC Rule Part(s):

§27

Test Procedure(s):

ANSI C63.26-2015, KDB 971168 D01 v03r01, KDB 662911 D01 v02r01

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in §2.947. Test results reported herein relate only to the item(s) tested.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.



Prepared by Jonathan Jang
Test Engineer



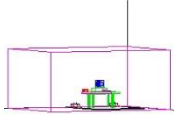
Reviewed by Jayden Kwak
Technical Manager

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T A B L E O F C O N T E N T S

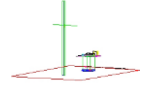
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FCC Part 27



Mode	Tx Frequency (MHz)	Total Conducted output power		Max Emission Designator	Modulation
		Max. Power (dBm)	Max. Power (W)		
B71_1C_5M	617 to 652	51.56	143.09	4M48G7D	QPSK
		51.61	144.73	4M50W7D	QAM
B71_1C_10M		54.59	287.45	8M98G7D	QPSK
		54.51	282.20	8M98W7D	QAM
B71_1C_15M		54.46	279.47	13M5G7D	QPSK
		54.49	280.90	13M5W7D	QAM
B71_2C_5M+5M		54.49	280.93	9M44G7D	QPSK
		54.37	273.65	9M45W7D	QAM
B71_2C_5M+10M		54.59	287.47	14M2G7D	QPSK
		54.58	286.89	14M2W7D	QAM
n71_1C_5M		51.72	148.44	4M50G7D	QPSK
		51.68	147.37	4M50W7D	QAM
n71_1C_10M		54.77	300.02	9M30G7D	QPSK
		54.68	293.50	9M31W7D	QAM
n71_1C_15M		54.64	290.82	14M1G7D	QPSK
		54.71	295.72	14M2W7D	QAM
n71_2C_5M+5M		54.57	286.64	9M45G7D	QPSK
		54.63	290.09	9M46W7D	QAM
n71_2C_5M+10M		54.79	301.34	14M3G7D	QPSK
		54.73	297.11	14M3W7D	QAM
B85_1C_5M	728 to 746	51.76	149.91	4M48G7D	QPSK
		51.71	148.30	4M50W7D	QAM
B85_1C_10M		54.57	286.44	8M97G7D	QPSK
		54.57	286.32	8M98W7D	QAM
B85_2C_5M+5M		54.54	284.51	9M44G7D	QPSK
		54.51	282.75	9M45W7D	QAM
B85_2C_5M+10M		54.52	283.09	14M2G7D	QPSK
		54.63	290.46	14M2W7D	QAM
n85_1C_5M		51.76	149.96	4M49G7D	QPSK
		51.82	151.96	4M49W7D	QAM
n85_1C_10M		54.66	292.47	9M29G7D	QPSK
		54.71	295.80	9M31W7D	QAM
n85_2C_5M+5M		54.55	285.13	9M44G7D	QPSK
		54.54	284.39	9M46W7D	QAM
n85_2C_5M+10M		54.58	287.01	14M3G7D	QPSK
		54.64	291.00	14M3W7D	QAM

EUT Overview

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1.0 REVISION RECORD

Issue Number	Issued Date	Revision History
8K24091001-00.A3L	12/04/2024	Initial Issue

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2.0 INTRODUCTION

2.1 Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Innovation, Science and Economic Development Canada.

2.2 Element Test Location

These measurement tests were conducted at the Element Materials Technology Suwon. Ltd. facility located at (P143) 13, Heungdeok 1-ro, Giheung-gu, Yongin-si, Gyeonggi-do 16954, Korea.

2.3 Test Facility / Accreditation

Measurements were performed at Element Materials Technology Suwon Lab located in Yongin-si, Gyeonggi, Korea.

- Element Materials Technology Suwon is an ISO 17025-2017 accredited test facility under the American Association for Laboratory Accreditation(A2LA) with Certificate number 2041.04 for Specific Absorption Rate (SAR), where applicable, and Electromagnetic Compatibility (EMC) testing for FCC and Innovation, Science, and Economic Development Canada rules.
- Element Materials Technology Suwon facility is accredited, designated, and recognized in accordance with the provision of Radio Wave Act and International Standard ISO/IEC 17025:2017 under the National Radio Research Agency.
 - Designation Number / CABID: KR0169
 - Test Firm Registration Number of FCC: 417945
 - Test Firm Registration Number of IC: 26168

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3.0 PRODUCT INFORMATION

3.1 Equipment Description

The Equipment Under Test (EUT) is the **Samsung RRU(RF4435d) FCC ID: A3LRF4435D-71A**. The test data contained in this report pertains only to the emissions due to the EUT's licensed transmitters that operate under the provisions of Part 27.

3.2 Device Capabilities

This device supports the following conditional features and filter information:

EUT Type	RRU (RF4435d)		
Model Name	RF4435d-71B		
Test Device Serial No	S618A00870		
Device Capabilities:	LTE, NR		
Operating Band/Frequency Range:	Band	Tx (Downlink)	Rx (Uplink)
	B71/n71:	617 MHz to 652 MHz	663 MHz to 698 MHz
	B85/n85:	728 MHz to 746 MHz	698 MHz to 715 MHz
Supported Modulation	QPSK, 16QAM, 64QAM, 256QAM		
B/n71 Supported Number of Carriers and Channel Bandwidth	5,10,15MHz bandwidth modes for LTE Band 71 and 5G NR n71 with up to 2CC aggregated of Max. operating Bandwidth 35 MHz		
B/n85 Supported Number of Carriers and Channel Bandwidth	5,10,15MHz bandwidth modes for LTE Band 85 and 5G NR n85 with up to 2CC aggregated of Max. operating Bandwidth 18 MHz		
Multi-Band Supported Number of Carriers and Channel Bandwidth	B71/n71 and B85/n85 with up to 4CC aggregated of Max. operating Bandwidth 53 MHz		
Maximum Output Power	B71/n71	Total 320W (80W/path x 4)	
	B85/n85	Total 320W (80W/path x 4)	
	Multi-Band B71/n71& B85/n85	Total 320W (80W/path x 4)	
Number of Antenna ports	4TX Configuration		
Supported Configurations	Single carrier, Multi-carriers, Multi-Band operation		
Input Voltage:	-48 VDC		
Antenna:	Antenna is not provided by manufacture		

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3.3 Test Configuration

The setup is as follows:

- The EUT ("RRU(RF4435d)") and a Data Unit (DU) are each powered by -48V DC power supply.
- The DU is connected to a test laptop via an ethernet cable acting as backhaul.
- DU connects to the EUT through a fiber optic cable.
- An RF cable connects the signal analyzer and the EUT Ports for respective measurement.

The EUT was tested per the guidance of ANSI C63.26-2015 and KDB 971168 D01 v03r01. See Section 8.0 of this test report for a description of the radiated and antenna port conducted emissions tests.

Distribution unit (DU) which were used in test, that authorized under the SDoC procedure.

The following information is about configurations of carrier frequency and output power per port declared by the manufacturer.

* Abbreviations:

- 2C: Contiguous 2 carriers in multi-carrier operation
- 2NC: Non-Contiguous 2 carriers in multi-carrier operation
- B: LTE Band / n: 5G NR

Test Configuration	No. of Carriers	Total Bandwidth (MHz)	Carrier Frequency Configuration (MHz)			Rated Power (W/unit)
			Lowest	Middle	Highest	
B71_1C_5M / n71_1C_5M	1	5	619.5	634.5	649.5	160
B71_1C_10M / n71_1C_10M	1	10	622.0	634.5	647.0	320
B71_1C_15M / n71_1C_15M	1	15	624.5	634.5	644.5	320
B71_2C_5M+5M / n71_2C_5M+5M	2	10	622.0	634.5	647.0	320
B71_2NC_5M+5M / n71_2NC_5M+5M			619.5 + 649.5			
B71_2C_5M+10M / n71_2C_5M+10M	2	15	624.5	634.5	644.5	320
B71_2NC_5M+10M / n71_2NC_5M+10M			619.5 + 647.0			
B85_1C_5M / n85_1C_5M	1	5	730.5	737.0	743.5	160
B85_1C_10M / n85_1C_10M	1	10	733.0	737.0	741.0	320
B85_2C_5M+5M / n85_2C_5M+5M	2	10	733.0	737.0	741.0	320
B85_2NC_5M+5M / n85_2NC_5M+5M			730.5 + 743.5			
B85_2C_5M+10M / n85_2C_5M+10M	2	15	735.5	737.0	738.5	320
B85_2NC_5M+10M / n85_2NC_5M+10M			733.5 + 741.0			
Multi band operation B71_1C_10M + B85_1C_5M	2	15	622.0 + 730.5 (240W/unit)	634.5 + 737.0 (320W/unit)	647.0 + 743.5 320W/unit)	240 to 320 (Note 3)

Notes:

- To add LTE, NR Single and Multi-carrier configuration on B/n71 and B/n85 as described in this Class II Permissive Change test report. The maximum output power rating of the original authorization does not change.
- For Class II Permissive Change test, multi-carrier was tested each worst modulation based on the Single carrier results.

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3. For operating frequency range of 637 ~ 652 MHz on Band 71, Band85 use 40W/path or 26.67W/path under Multi band operation. To support entire band of 617 ~ 652MHz, RF power should be changed into 10M 40W for Band 71 + 5M 20W for Band 85.

3.4 EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and no modifications were made during testing.

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4.0 DESCRIPTION OF TESTS

4.1 Measurement Procedure

The measurement procedures described in the document titled “American National Standard for Compliance Testing of Transmitter Used in Licensed Radio Service” (ANSI C63.26-2015) and the guidance provided in KDB 842590 D01 v01r01 were used in the measurement of the EUT.

Occupied Bandwidth:

KDB 971168 D01 v03r01 – Section 4.3
ANSI C63.26-2015 – Section 5.4.4

Conducted Power Measurement and EIRP and PSD

KDB 971168 D01 v03r01 – Section 5.3
KDB 971168 D01 v03r01 – Section 5.4
KDB 662911 D01 v02r01 – Section E)1) In-Band Power Measurements
ANSI C63.26-2015 – Section 5.2.5
ANSI C63.26-2015 – Section 5.2.4

Peak-to-Average Power Ratio:

KDB 971168 D01 v03r01 – Section 5.7
ANSI C63.26-2015 – Section 5.2.3.4

Channel Edge Emissions at Antenna Terminal

KDB 971168 D01 v03r01 – Section 6
KDB 662911 D01 v02r01 – Section E)3) Out-of-Band and Spurious Emission Measurements
a) Absolute Emission Limits
iii) Measure and add $10 \log(N_{ANT})$ dB
ANSI C63.26-2015 – Section 5.7

Spurious and Harmonic Emissions at Antenna Terminal

KDB 971168 D01 v03r01 – Section 6
KDB 662911 D01 v02r01 – Section E)3) Out-of-Band and Spurious Emission Measurements
a) Absolute Emission Limits
iii) Measure and add $10 \log(N_{ANT})$ dB
ANSI C63.26-2015 – Section 5.7

Radiated unwanted emission

KDB 971168 D01 v03r01 – Section 7
ANSI C63.26-2015 – Section 5.8

Frequency Stability / Temperature Variation

KDB 971168 D01 v03r01 – Section 9
ANSI C63.26-2015 – Section 5.6

4.2 Measurement Software

Test item	Name	Version
Conducted Measurement	Node B automation	1.0

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5.0 MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.4-2014. All measurement uncertainty values are shown with a coverage factor of $k = 2$ to indicate a 95% level of confidence. The measurement uncertainty shown below meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

Contribution	Expanded Uncertainty (\pm dB)
Conducted Bench Top Measurements	1.37
Radiated Disturbance (<1GHz)	3.94
Radiated Disturbance (>1GHz)	4.75
Radiated Disturbance (>18GHz)	4.84

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6.0 TEST EQUIPMENT CALIBRATION DATA

Test Equipment Calibration is traceable to the National Institute of Standards and Technology (NIST). Measurement antennas used during testing were calibrated in accordance to the requirements of ANSI C63.5-2017.

Manufacture	Model	Description	Cal Date	Cal interval	Cal Due	Serial Number
Keysight	N9030B	PXA Signal Analyzer	04/08/2024	Annual	04/07/2025	MY57142018
Rohde & Schwarz	ESW	EMI Test Receiver	07/09/2024	Annual	07/08/2025	101761
AC POWER KOREA	ACPD-60150	DC Power Supply	01/10/2024	Annual	01/09/2025	DC-1
Rohde & Schwarz	TS-SFUNIT-Rx	Shielded Filter Unit	01/11/2024	Annual	01/10/2025	102131
Schwarzbeck	VULB9162	Broadband TRILOG Antenna	06/01/2023	Biennial	05/31/2025	9162-217
Sunol sciences	DRH-118	Horn Antenna	07/16/2024	Biennial	07/15/2025	A102416-1
Schwarzbeck	BBHA 9170	Horn Antenna	01/16/2024	Biennial	01/15/2026	1037
K&L MICROWAVE	13SH10-1000/U1000-N/N	High Pass Filter	07/10/2024	Annual	07/09/2025	3
Reachline	250W18NN-40	Attenuator	01/10/2024	Annual	01/09/2025	PK0289
Reachline	250W18NN-40	Attenuator	01/10/2024	Annual	01/09/2025	PK0290
Reachline	250W18NN-40	Attenuator	01/10/2024	Annual	01/09/2025	PK0292
Reachline	250W18NN-40	Attenuator	01/10/2024	Annual	01/09/2025	PK0293

Table 6-1. Test Equipment

Notes:

1. For equipment listed above that has a calibration date or calibration due date that falls within the test date range, care was taken to ensure that this equipment was used after the calibration date and before the calibration due date.
2. All testing was performed before the calibration due date.

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7.0 SAMPLE CALCULATIONS

Emission Designator

QPSK Modulation

Emission Designator = 4M48G7D

Occupied Bandwidth = 4.48 MHz

G = Phase Modulation

7 = Quantized/Digital Info

D = Data transmission, telemetry, telecommand

QAM Modulation

Emission Designator = 4M50W7D

Occupied Bandwidth = 4.50 MHz

W = Amplitude/Angle Modulated

7 = Quantized/Digital Info

D = Data transmission, telemetry, telecommand

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8.0 TEST RESULTS

8.1 Summary

Company Name: SAMSUNG Electronics Co., Ltd.
 FCC ID: A3LRF4435D-71A
 FCC Classification: Licensed Non-Broadcast Station Transmitter
 Mode(s): LTE, 5G NR

FCC Part Section(s)	Test Description	Limit	Test Condition	Test Result	Reference
§ 2.1046	Conducted Average Output Power	N/A	CONDUCTED	PASS	Annex 1
§ 2.1049	Occupied Bandwidth	N/A		PASS	Section 8.2
§ 2.1046, § 27.50(c)	Equivalent Isotropic Radiated Power (Power Spectral Density)	< 1000 W/MHz		PASS	Section 8.3 (Note 4)
§ 2.1046,	Peak-to-average ratio	N/A		PASS	Section 8.4
§ 2.1051, § 27.53(g)	Band Edge Emissions and Emission Mask at Antenna Terminal	> 43 + log10(P[Watts]) at Band Edge and all out-of-band emissions		PASS	Section 8.5
§ 2.1051, § 27.53(g)	Spurious and Harmonic Emissions at Antenna Terminal			PASS	Section 8.6
§ 2.1055 § 27.54	Frequency Stability	Fundamental emissions stay within authorized frequency block		N/A	(Note 5)
§ 2.1055, § 27.53(g)	Radiated unwanted emission	> 43 + log10(P[Watts]) at Band Edge and all out-of-band emissions	RADIATED	PASS	Section 8.8

Table 8-1. Summary of Test Results

Notes:

- 1) All modes of operation and data rates were investigated. The test results shown in the following sections represent the worst case emissions.
- 2) The analyzer plots were all taken with a correction table loaded into the analyzer.
- 3) All antenna port conducted emissions testing was performed on a test bench with the antenna port of the EUT connected to the spectrum analyzer through calibrated cables and attenuators.
- 4) The maximum antenna gain is determined at the time of licensing depending on the geographical location of the base station
- 5) This is a variant report for carrier configuration added by software without hardware change. The test item does not affect those operation. And it was performed in the original report.

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8.2 Occupied Bandwidth

Test Overview

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured. All modes of operation were investigated and the worst case configuration results are reported in this section.

Test Procedures Used

KDB 971168 D01 v03r01 – Section 4.3

ANSI C63.26-2015 – Section 5.4.4

Test Setting

The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The spectrum analyzer settings were as follows:

1. The signal analyzer's automatic bandwidth measurement capability was used to perform the 99% occupied bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. RBW = 1 – 5% of the expected OBW
3. VBW $\geq 3 \times$ RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. The trace was allowed to stabilize
8. If necessary, steps 2 – 7 were repeated after changing the RBW such that it would be within 1 – 5% of the 99% occupied bandwidth observed in Step 7

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

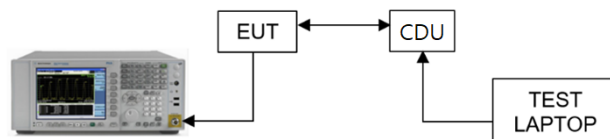


Figure 8-1. Test Instrument & Measurement Setup

Test Notes

None

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Channel	Port	OBW (MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	4.48	4.48	4.49	4.49
	1	4.48	4.47	4.50	4.49
	2	4.48	4.48	4.49	4.49
	3	4.48	4.48	4.50	4.49
Middle	0	4.48	4.48	4.49	4.49
	1	4.48	4.48	4.50	4.49
	2	4.48	4.48	4.49	4.49
	3	4.48	4.48	4.49	4.49
High	0	4.48	4.48	4.49	4.49
	1	4.48	4.48	4.49	4.49
	2	4.48	4.48	4.49	4.49
	3	4.48	4.48	4.49	4.49

Table 8-2. Occupied Bandwidth Summary Data (B71_1C_5M)

Channel	Port	OBW (MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	8.94	8.95	8.96	8.96
	1	8.96	8.96	8.95	8.95
	2	8.96	8.96	8.96	8.97
	3	8.95	8.95	8.95	8.97
Middle	0	8.98	8.97	8.98	8.96
	1	8.96	8.96	8.96	8.98
	2	8.96	8.94	8.96	8.96
	3	8.96	8.95	8.95	8.98
High	0	8.96	8.96	8.97	8.96
	1	8.94	8.94	8.95	8.94
	2	8.96	8.95	8.96	8.96
	3	8.97	8.95	8.97	8.96

Table 8-3. Occupied Bandwidth Summary Data (B71_1C_10M)

Channel	Port	OBW (MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	13.45	13.45	13.43	13.46
	1	13.44	13.44	13.43	13.46
	2	13.45	13.43	13.43	13.45
	3	13.45	13.44	13.43	13.42
Middle	0	13.43	13.44	13.42	13.45
	1	13.43	13.47	13.44	13.46
	2	13.43	13.47	13.43	13.44
	3	13.46	13.46	13.45	13.43
High	0	13.44	13.46	13.46	13.45
	1	13.40	13.43	13.43	13.44
	2	13.44	13.44	13.42	13.45
	3	13.43	13.46	13.44	13.46

Table 8-4. Occupied Bandwidth Summary Data (B71_1C_15M)

FCC ID: A3LRF4435D-71A	MEASUREMENT REPORT (Class II Permissive Change)		Approved by: Technical Manager
Test Report S/N: 8K24091001-00.A3L	Test Dates: 10/01/2024 - 11/29/2024	EUT Type: RRU(RF4435d)	Page 15 of 147

Channel	Port	OBW (MHz)	
		QPSK	16QAM
Low	0	9.43	9.42
	1	9.43	9.44
	2	9.44	9.44
	3	9.43	9.44
Middle	0	9.44	9.42
	1	9.44	9.45
	2	9.43	9.41
	3	9.43	9.45
High	0	9.43	9.42
	1	9.44	9.44
	2	9.42	9.43
	3	9.44	9.43

Table 8-5. Occupied Bandwidth Summary Data (B71_2C_5M+5M)

Channel	Port	OBW (MHz)	
		QPSK	16QAM
Low	0	14.14	14.17
	1	14.15	14.17
	2	14.13	14.17
	3	14.16	14.15
Middle	0	14.15	14.14
	1	14.15	14.16
	2	14.16	14.15
	3	14.15	14.16
High	0	14.16	14.16
	1	14.17	14.17
	2	14.14	14.16
	3	14.15	14.16

Table 8-6. Occupied Bandwidth Summary Data (B71_2C_5M+10M)

Channel	Port	OBW (MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	4.50	4.50	4.47	4.47
	1	4.49	4.50	4.47	4.47
	2	4.50	4.49	4.47	4.47
	3	4.50	4.49	4.47	4.47
Middle	0	4.48	4.48	4.47	4.48
	1	4.47	4.48	4.47	4.48
	2	4.48	4.48	4.47	4.48
	3	4.48	4.48	4.47	4.48
High	0	4.48	4.48	4.47	4.48
	1	4.47	4.48	4.48	4.48
	2	4.48	4.48	4.47	4.48
	3	4.48	4.48	4.48	4.48

Table 8-7. Occupied Bandwidth Summary Data (n71_1C_5M)

FCC ID: A3LRF4435D-71A	MEASUREMENT REPORT (Class II Permissive Change)		Approved by: Technical Manager
Test Report S/N: 8K24091001-00.A3L	Test Dates: 10/01/2024 - 11/29/2024	EUT Type: RRU(RF4435d)	Page 16 of 147

Channel	Port	OBW (MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	9.27	9.24	9.28	9.30
	1	9.29	9.23	9.28	9.29
	2	9.29	9.24	9.28	9.29
	3	9.28	9.23	9.28	9.27
Middle	0	9.27	9.23	9.28	9.28
	1	9.28	9.25	9.28	9.29
	2	9.29	9.23	9.29	9.28
	3	9.30	9.23	9.28	9.31
High	0	9.28	9.23	9.29	9.29
	1	9.29	9.23	9.28	9.30
	2	9.29	9.23	9.28	9.28
	3	9.29	9.23	9.28	9.30

Table 8-8. Occupied Bandwidth Summary Data (n71_1C_10M)

Channel	Port	OBW (MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	14.11	14.15	14.10	14.10
	1	14.12	14.16	14.10	14.10
	2	14.11	14.17	14.10	14.09
	3	14.11	14.14	14.10	14.10
Middle	0	14.11	14.14	14.11	14.10
	1	14.09	14.14	14.12	14.07
	2	14.10	14.14	14.12	14.13
	3	14.13	14.14	14.09	14.10
High	0	14.09	14.12	14.10	14.13
	1	14.10	14.15	14.09	14.09
	2	14.12	14.14	14.10	14.13
	3	14.11	14.13	14.10	14.11

Table 8-9. Occupied Bandwidth Summary Data (n71_1C_15M)

Channel	Port	OBW (MHz)	
		QPSK	16QAM
Low	0	9.42	9.44
	1	9.43	9.45
	2	9.44	9.45
	3	9.43	9.45
Middle	0	9.44	9.45
	1	9.43	9.46
	2	9.45	9.46
	3	9.43	9.46
High	0	9.43	9.46
	1	9.44	9.46
	2	9.43	9.46
	3	9.43	9.45

Table 8-10. Occupied Bandwidth Summary Data (n71_2C_5M+5M)

FCC ID: A3LRF4435D-71A	MEASUREMENT REPORT (Class II Permissive Change)		Approved by: Technical Manager
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Channel	Port	OBW (MHz)	
		QPSK	16QAM
Low	0	14.30	14.24
	1	14.31	14.26
	2	14.29	14.23
	3	14.31	14.23
Middle	0	14.32	14.24
	1	14.30	14.22
	2	14.31	14.23
	3	14.31	14.25
High	0	14.30	14.20
	1	14.29	14.24
	2	14.31	14.21
	3	14.31	14.23

Table 8-11. Occupied Bandwidth Summary Data (n71_2C_5M+10M)

Channel	Port	OBW (MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	4.48	4.47	4.49	4.49
	1	4.48	4.48	4.49	4.49
	2	4.48	4.48	4.49	4.49
	3	4.48	4.48	4.49	4.49
Middle	0	4.48	4.48	4.49	4.49
	1	4.48	4.48	4.49	4.49
	2	4.48	4.48	4.50	4.49
	3	4.48	4.48	4.49	4.49
High	0	4.48	4.47	4.49	4.49
	1	4.48	4.47	4.49	4.49
	2	4.48	4.48	4.49	4.49
	3	4.48	4.48	4.49	4.49

Table 8-12. Occupied Bandwidth Summary Data (B85_1C_5M)

Channel	Port	OBW (MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	8.96	8.94	8.97	8.95
	1	8.97	8.97	8.97	8.97
	2	8.95	8.96	8.97	8.96
	3	8.95	8.98	8.98	8.95
Middle	0	8.96	8.97	8.95	8.95
	1	8.95	8.94	8.96	8.97
	2	8.95	8.97	8.96	8.95
	3	8.95	8.96	8.96	8.96
High	0	8.96	8.97	8.97	8.95
	1	8.95	8.97	8.97	8.95
	2	8.97	8.96	8.96	8.97
	3	8.96	8.96	8.97	8.95

Table 8-13. Occupied Bandwidth Summary Data (B85_1C_10M)

FCC ID: A3LRF4435D-71A	MEASUREMENT REPORT (Class II Permissive Change)		Approved by: Technical Manager
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Channel	Port	OBW (MHz)	
		QPSK	16QAM
Low	0	9.44	9.44
	1	9.44	9.41
	2	9.42	9.43
	3	9.44	9.40
Middle	0	9.44	9.44
	1	9.44	9.44
	2	9.44	9.45
	3	9.44	9.44
High	0	9.43	9.43
	1	9.43	9.44
	2	9.43	9.45
	3	9.43	9.43

Table 8-14. Occupied Bandwidth Summary Data (B85_2C_5M+5M)

Channel	Port	OBW (MHz)	
		QPSK	16QAM
Low	0	14.13	14.18
	1	14.16	14.15
	2	14.15	14.14
	3	14.15	14.15
Middle	0	14.16	14.17
	1	14.15	14.17
	2	14.13	14.15
	3	14.15	14.17
High	0	14.16	14.18
	1	14.15	14.14
	2	14.15	14.18
	3	14.18	14.15

Table 8-15. Occupied Bandwidth Summary Data (B85_2C_5M+10M)

Channel	Port	OBW (MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	4.47	4.48	4.47	4.48
	1	4.48	4.48	4.48	4.48
	2	4.48	4.48	4.47	4.48
	3	4.48	4.48	4.47	4.48
Middle	0	4.48	4.49	4.47	4.47
	1	4.48	4.49	4.47	4.48
	2	4.48	4.49	4.47	4.47
	3	4.48	4.49	4.47	4.47
High	0	4.48	4.49	4.48	4.47
	1	4.49	4.49	4.47	4.47
	2	4.49	4.48	4.47	4.48
	3	4.49	4.49	4.48	4.47

Table 8-16. Occupied Bandwidth Summary Data (n85_1C_5M)

FCC ID: A3LRF4435D-71A	MEASUREMENT REPORT (Class II Permissive Change)		Approved by: Technical Manager
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Channel	Port	OBW (MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	9.28	9.22	9.28	9.28
	1	9.28	9.24	9.28	9.29
	2	9.28	9.24	9.28	9.28
	3	9.28	9.23	9.28	9.31
Middle	0	9.28	9.24	9.28	9.30
	1	9.28	9.24	9.27	9.29
	2	9.27	9.23	9.28	9.30
	3	9.28	9.23	9.27	9.29
High	0	9.26	9.23	9.27	9.30
	1	9.29	9.23	9.28	9.30
	2	9.28	9.22	9.28	9.29
	3	9.29	9.23	9.28	9.30

Table 8-17. Occupied Bandwidth Summary Data (n85_1C_10M)

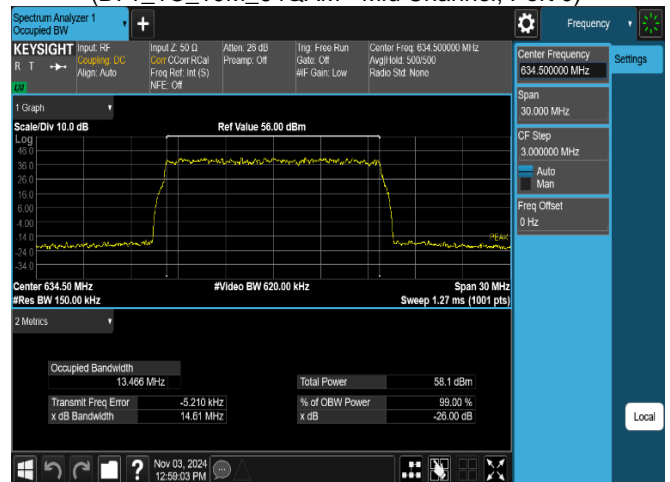
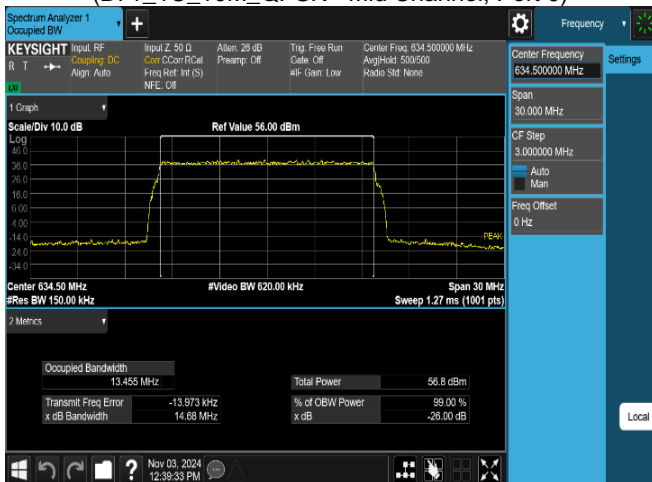
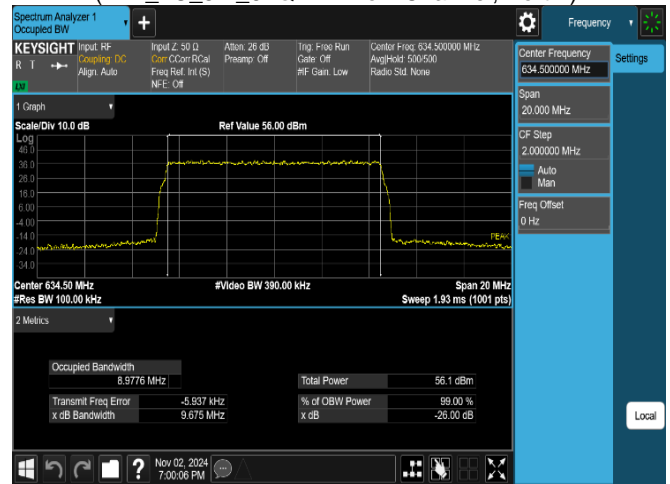
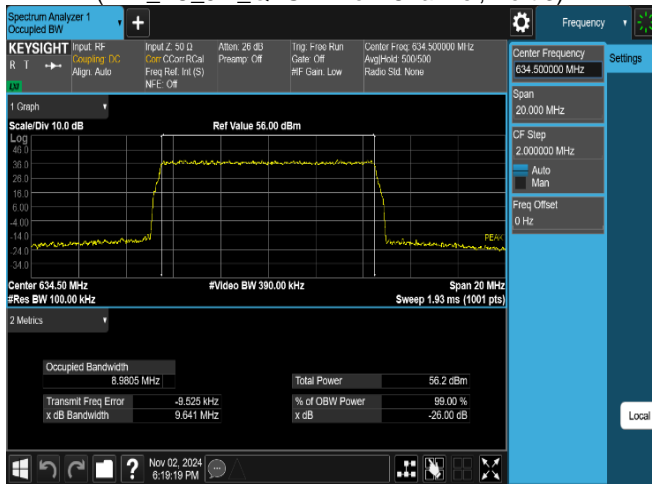
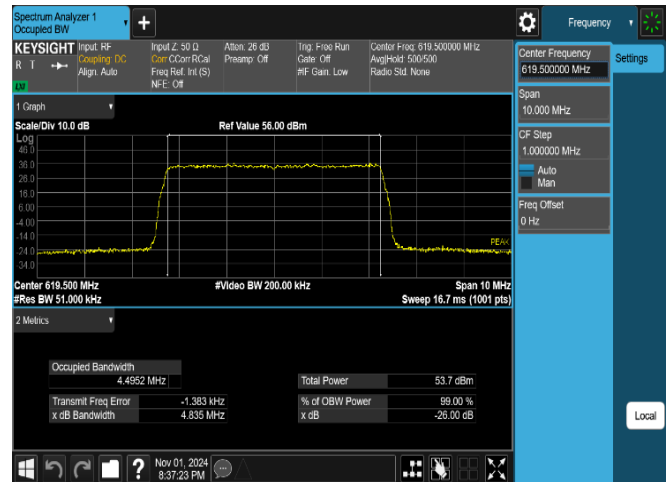
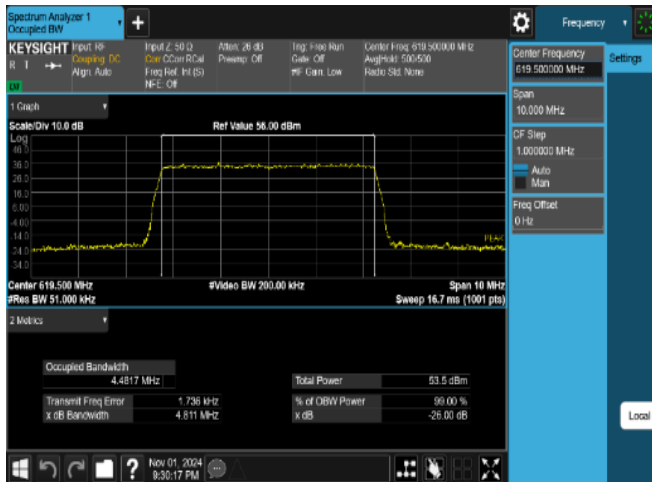
Channel	Port	OBW (MHz)	
		QPSK	16QAM
Low	0	9.43	9.46
	1	9.43	9.45
	2	9.42	9.44
	3	9.43	9.46
Middle	0	9.43	9.45
	1	9.42	9.45
	2	9.44	9.45
	3	9.44	9.45
High	0	9.42	9.44
	1	9.43	9.45
	2	9.44	9.45
	3	9.43	9.45

Table 8-18. Occupied Bandwidth Summary Data (n85_2C_5M+5M)

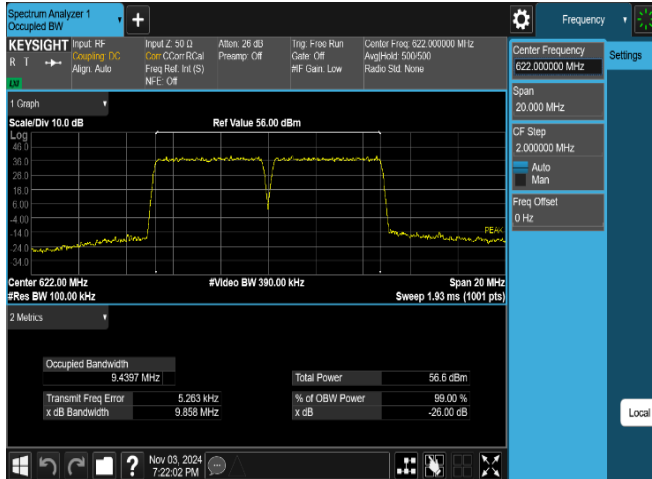
Channel	Port	OBW (MHz)	
		QPSK	16QAM
Low	0	14.31	14.24
	1	14.31	14.24
	2	14.31	14.25
	3	14.33	14.24
Middle	0	14.31	14.26
	1	14.31	14.22
	2	14.30	14.22
	3	14.31	14.24
High	0	14.29	14.24
	1	14.32	14.24
	2	14.29	14.20
	3	14.31	14.24

Table 8-19. Occupied Bandwidth Summary Data (n85_2C_5M+10M)

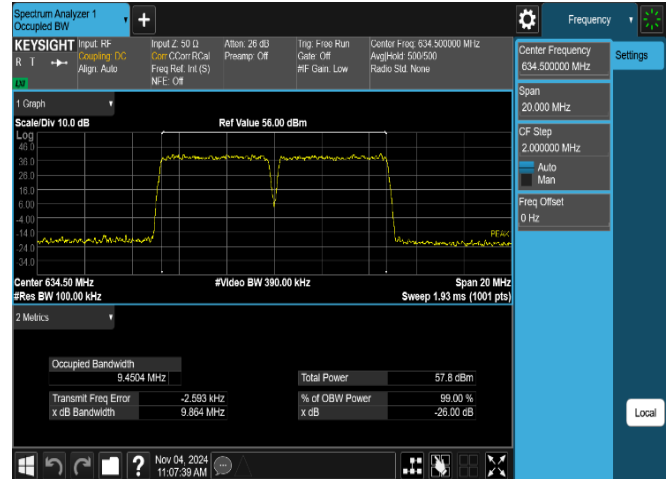
FCC ID: A3LRF4435D-71A	MEASUREMENT REPORT (Class II Permissive Change)		Approved by: Technical Manager
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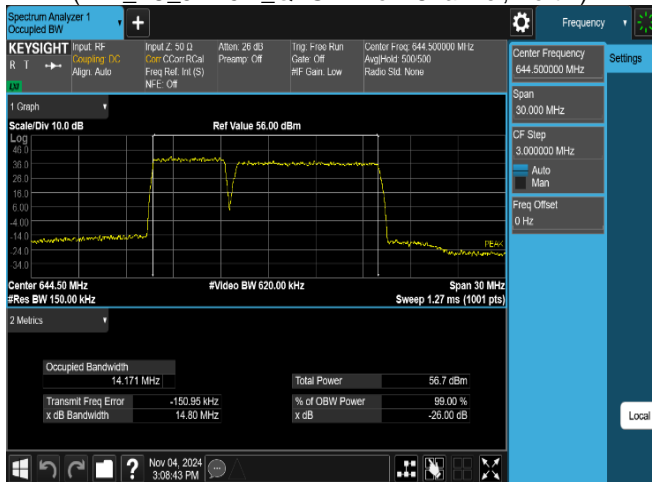
FCC ID: A3LRF4435D-71A	MEASUREMENT REPORT (Class II Permissive Change)		Approved by: Technical Manager
Test Report S/N: 8K24091001-00.A3L	Test Dates: 10/01/2024 - 11/29/2024	EUT Type: RRU(RF4435d)	Page 21 of 147



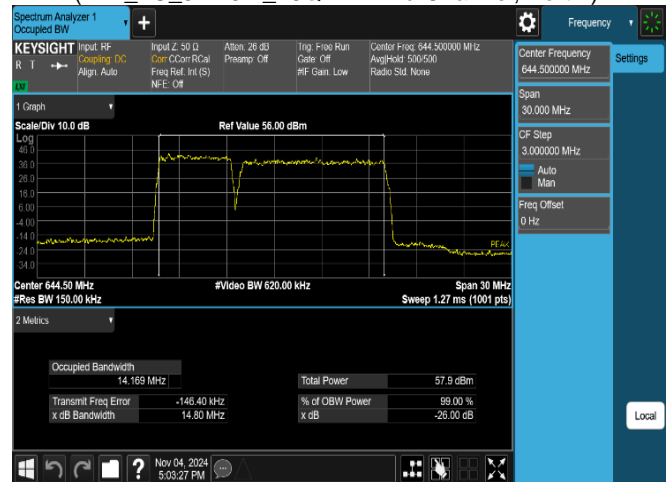
Plot 8-7. Occupied Bandwidth Plot
(B71_2C_5M+5M_QPSK - Low Channel, Port 2)



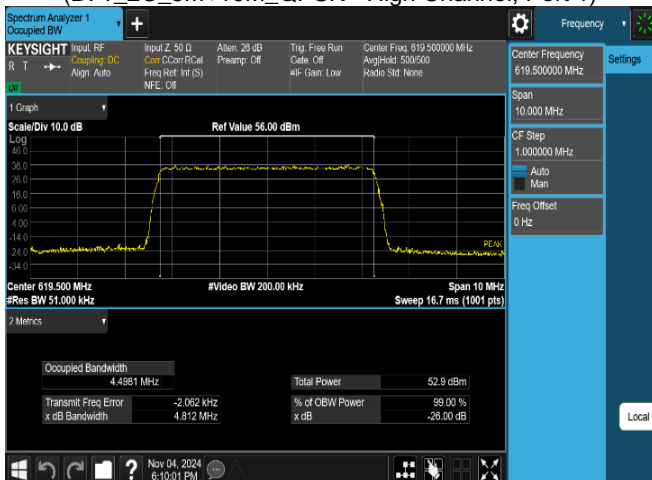
Plot 8-8. Occupied Bandwidth Plot
(B71_2C_5M+5M_16QAM - Mid Channel, Port 1)



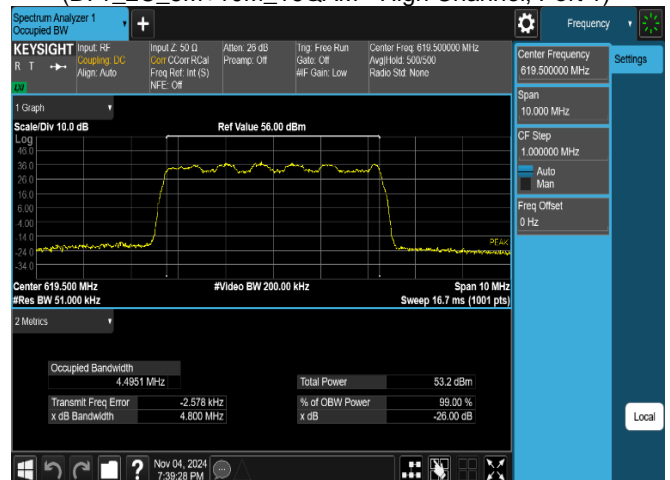
Plot 8-9. Occupied Bandwidth Plot
(B71_2C_5M+10M_QPSK - High Channel, Port 1)



Plot 8-10. Occupied Bandwidth Plot
(B71_2C_5M+10M_16QAM - High Channel, Port 1)

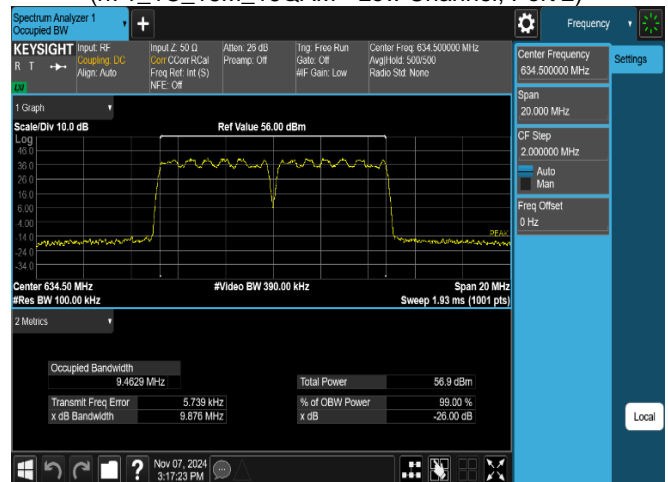
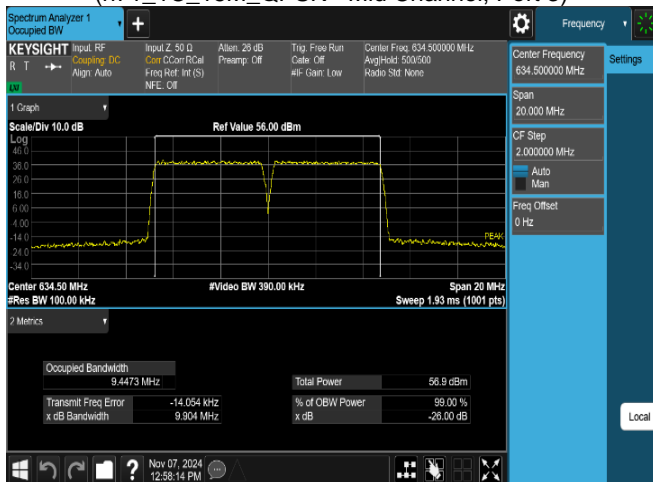
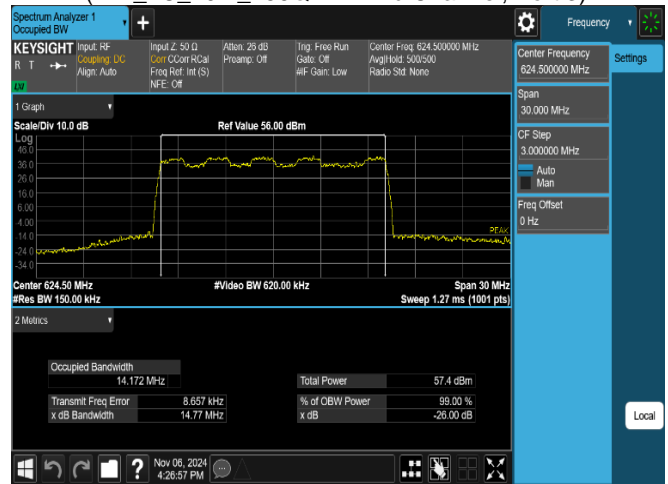
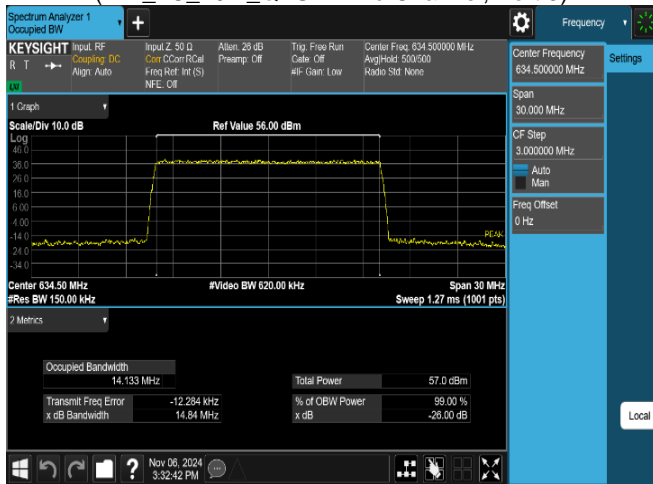
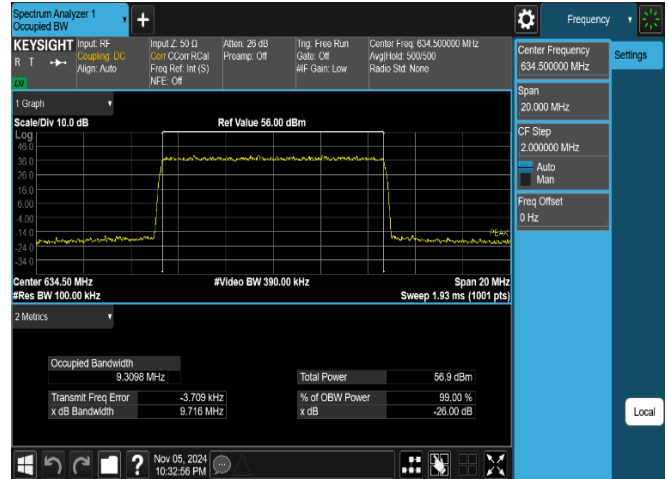
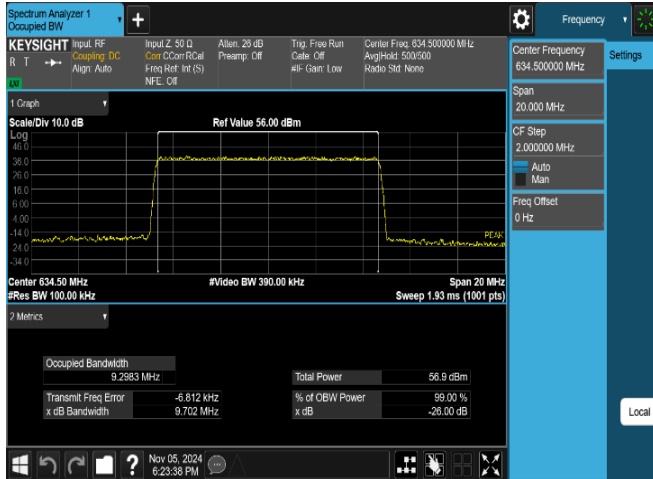


Plot 8-11. Occupied Bandwidth Plot
(n71_1C_5M_QPSK - Low Channel, Port 0)

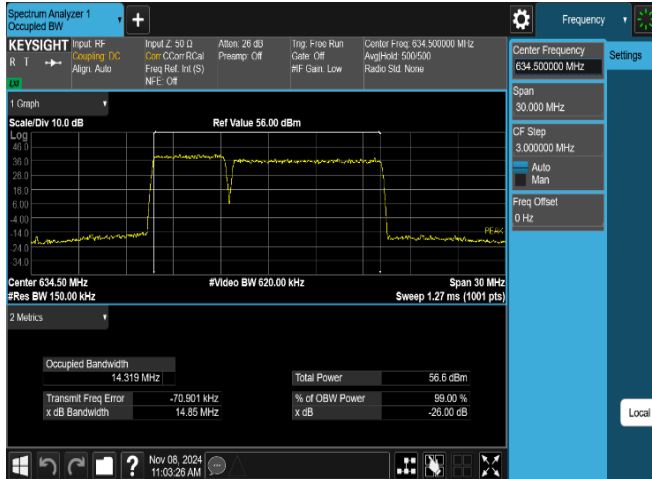


Plot 8-12. Occupied Bandwidth Plot
(n71_1C_5M_16QAM - Low Channel, Port 0)

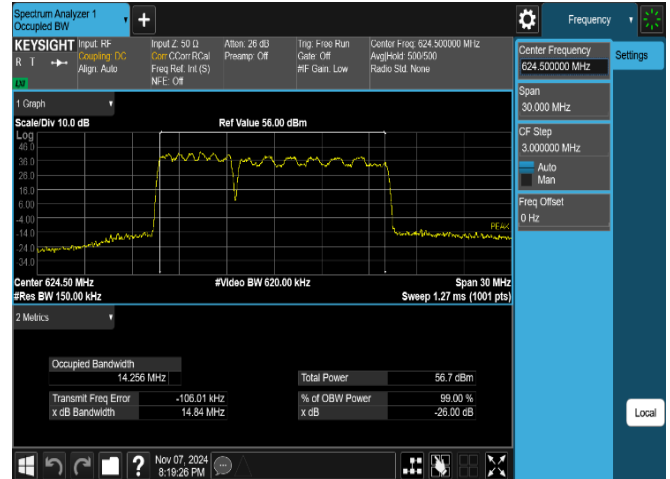
FCC ID: A3LRF4435D-71A	MEASUREMENT REPORT (Class II Permissive Change)		Approved by: Technical Manager
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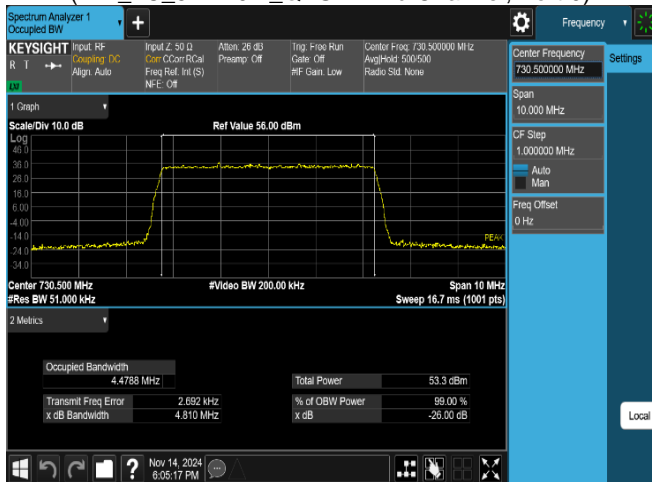
FCC ID: A3LRF4435D-71A	MEASUREMENT REPORT (Class II Permissive Change)		Approved by: Technical Manager
Test Report S/N: 8K24091001-00.A3L	Test Dates: 10/01/2024 - 11/29/2024	EUT Type: RRU(RF4435d)	Page 23 of 147



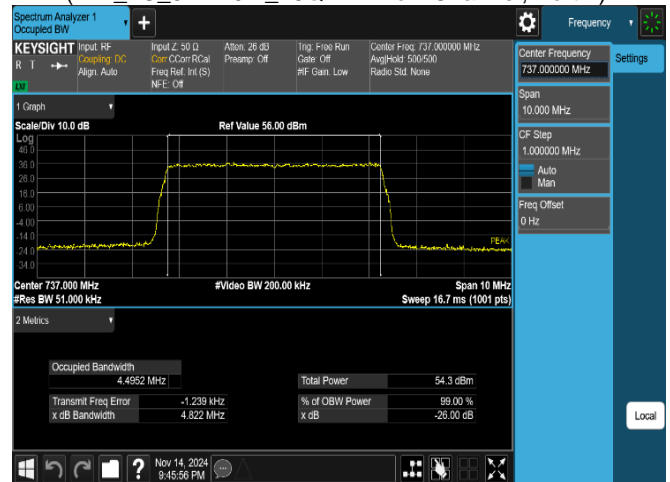
Plot 8-19. Occupied Bandwidth Plot
(n71_2C_5M+10M_QPSK - Mid Channel, Port 0)



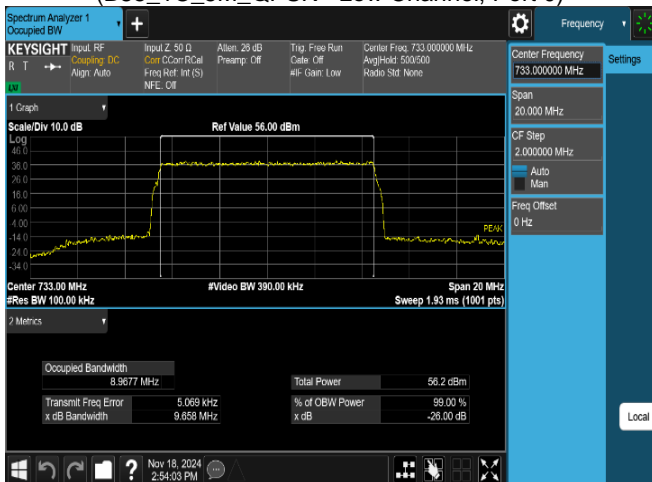
Plot 8-20. Occupied Bandwidth Plot
(n71_2C_5M+10M_16QAM - Low Channel, Port 1)



Plot 8-21. Occupied Bandwidth Plot
(B85_1C_5M_QPSK - Low Channel, Port 0)



Plot 8-22. Occupied Bandwidth Plot
(B85_1C_5M_64QAM - Mid Channel, Port 2)

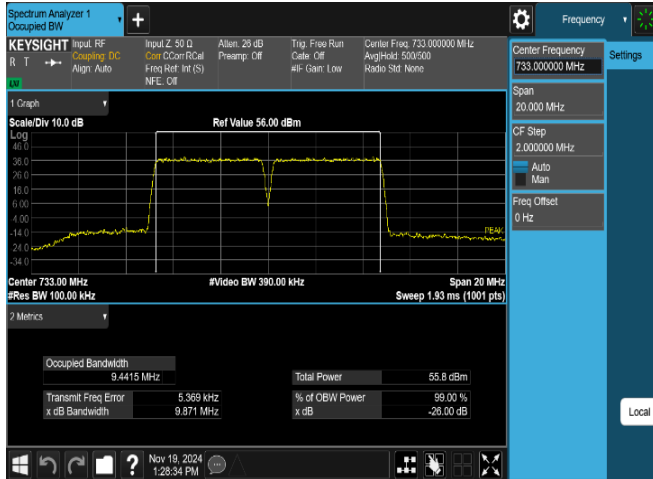


Plot 8-23. Occupied Bandwidth Plot
(B85_1C_10M_QPSK - Low Channel, Port 1)

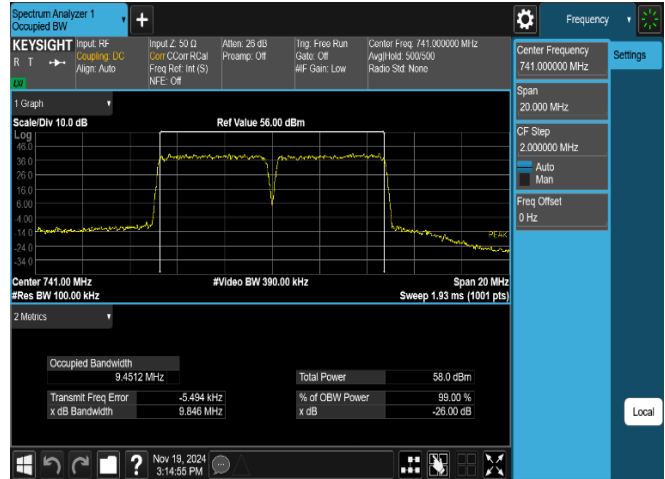


Plot 8-24. Occupied Bandwidth Plot
(B85_1C_10M_16QAM - Low Channel, Port 3)

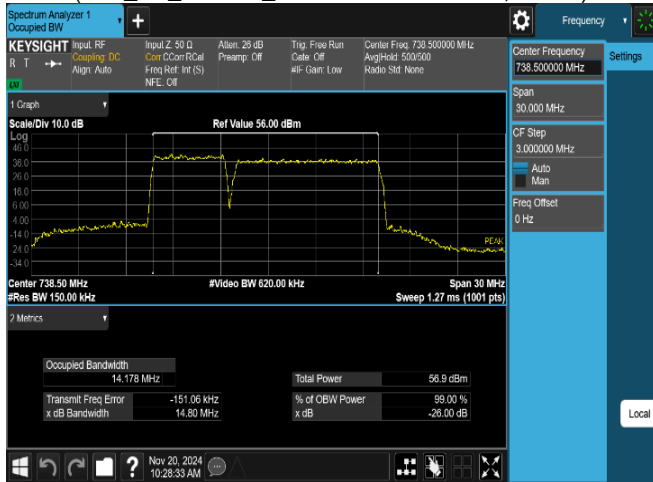
FCC ID: A3LRF4435D-71A	MEASUREMENT REPORT (Class II Permissive Change)		Approved by: Technical Manager
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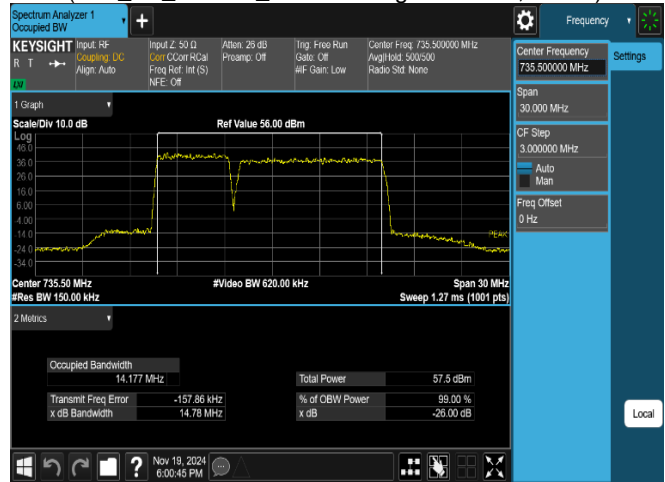
Plot 8-25. Occupied Bandwidth Plot
(B85_2C_5M+5M_QPSK - Low Channel, Port 0)



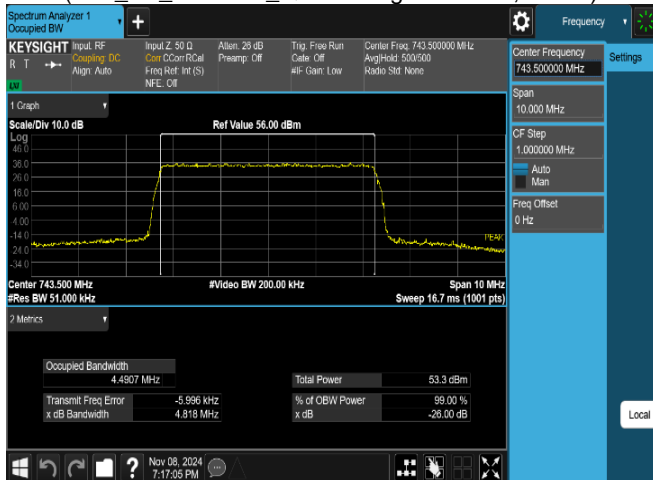
Plot 8-26. Occupied Bandwidth Plot
(B85_2C_5M+5M_16QAM - High Channel, Port 2)



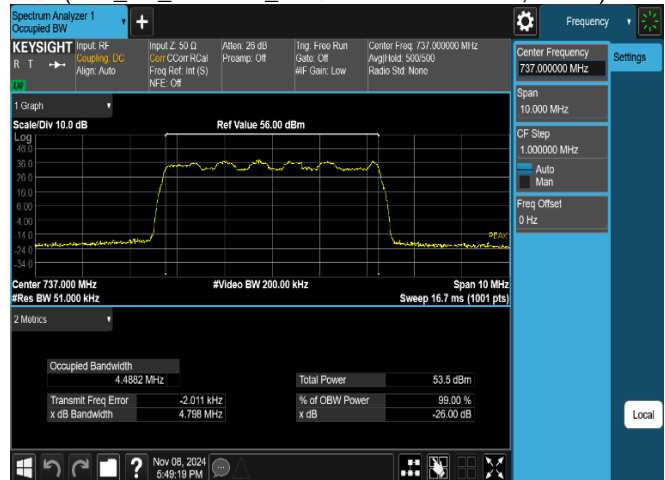
Plot 8-27. Occupied Bandwidth Plot
(B85_2C_5M+10M_QPSK - High Channel, Port 3)



Plot 8-28. Occupied Bandwidth Plot
(B85_2C_5M+10M_16QAM - Low Channel, Port 0)

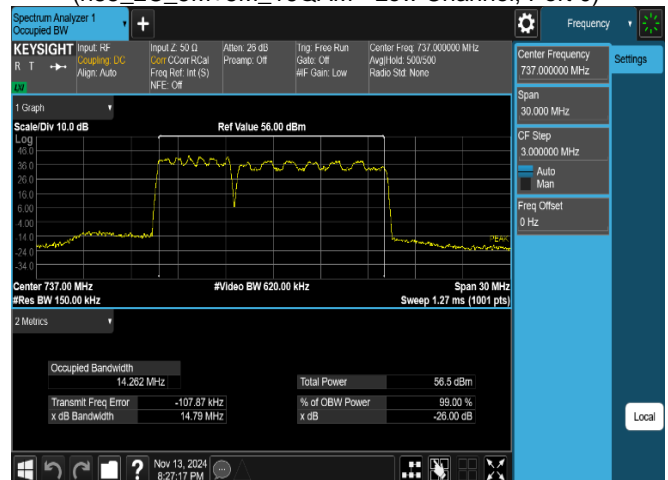
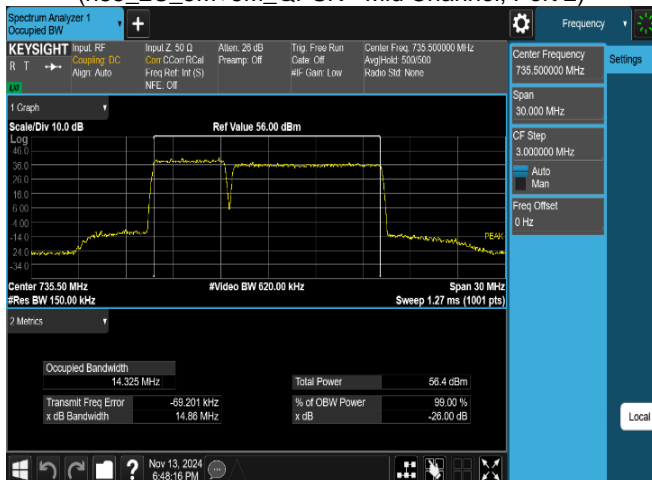
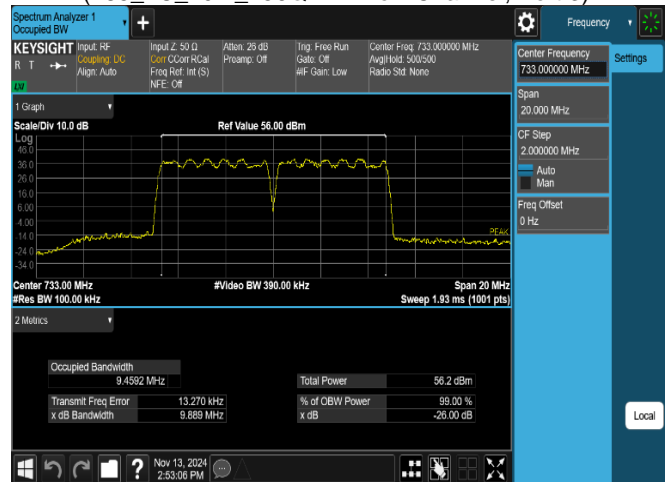
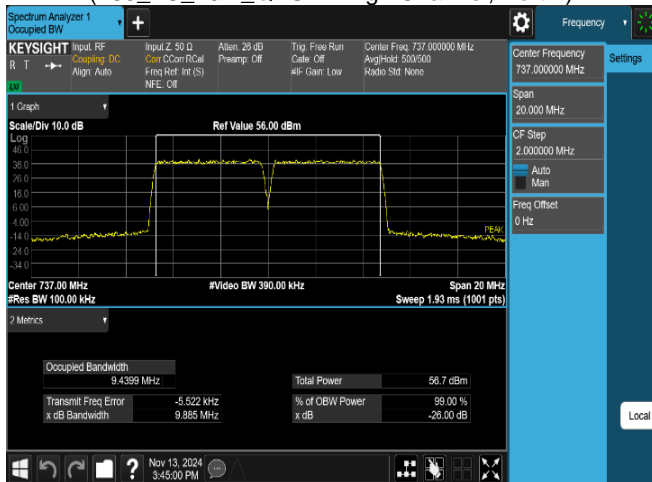
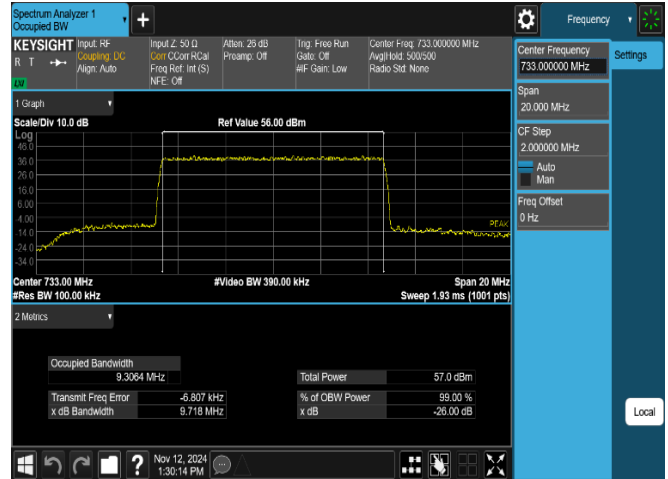
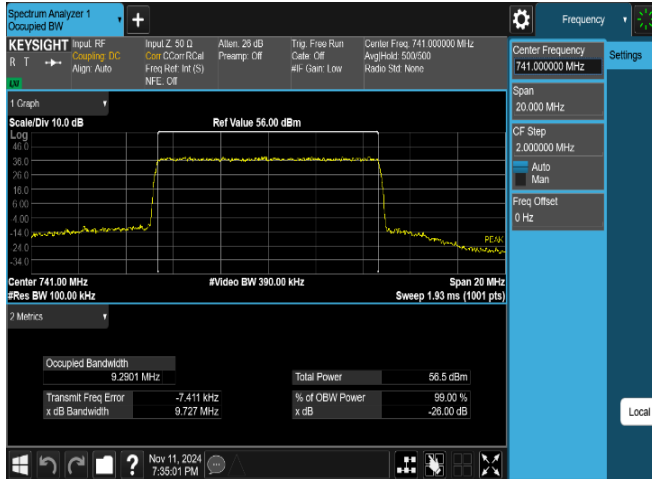


Plot 8-29. Occupied Bandwidth Plot
(n85_1C_5M_QPSK - High Channel, Port 3)



Plot 8-30. Occupied Bandwidth Plot
(n85_1C_5M_16QAM - Mid Channel, Port 0)

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8.3 Equivalent Isotropic Radiated Power (Power Spectral Density)

Test Overview

A transmitter port of EUT is connected to the input of a signal analyzer. All measurements are performed as RMS average measurements while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies.

Test Procedure Used

KDB 971168 D01 v03r01 – Section 5.2
KDB 662911 D01 v02r01 – Section E1) In-Band Power Measurements
ANSI C63.26-2015 – Section 5.2.4

Test Setting

The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The spectrum analyzer settings were as follows:

1. Conducted average output power measurements are performed using the signal analyzer's "channel power mode" measurement capability for signals with continuous operation.
2. Set span to $2 \times$ to $3 \times$ the OBW.
3. Set RBW = set to reference bandwidth specified by the applicable regulatory requirement
4. Set VBW $\geq 3 \times$ RBW.
5. Set number of measurement points in sweep $\geq 2 \times$ span / RBW.
6. Sweep time: auto-couple
7. Detector = power averaging (rms).
8. Set sweep trigger to "free run."
9. The integration bandwidth was set equal to transmission bandwidth i.e. 20MHz for 2CC and 40MHz for 1CC measurements.
10. Trace average at least 100 traces in power averaging (rms) mode if sweep is set to auto-couple. To accurately determine the average power over the on and off time of the transmitter, it can be necessary to increase the number of traces to be averaged above 100, or if using a manually configured sweep time, increase the sweep time.
11. Compute the power by integrating the spectrum across the OBW of the signal using the instrument's band or channel power measurement function, with the band/channel limits set equal to the OBW band edges.

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

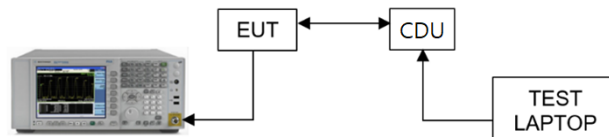


Figure 8-2. Test Instrument & Measurement Setup

Limit

§ 27.50(c)

Fixed and base stations transmitting a signal with an emission bandwidth greater than 1 MHz must not exceed an ERP of 1000 watts/MHz

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Test Notes

1. Consider the following factors for MIMO:
The output power per each port is measured as dBm/MHz or dBm, the output powers are summed up in linear using the measure-and-sum technique defined in KDB 971168 D01 v03r01 - Section E) 2).
2. The EIRP Limit is determined at the time of licensing depending on the geographical location of the base station.
3. The output power per port (dBm/MHz or dBm) is converted to a linear value (mW). A summation of linear powers for all ports gives us the total MIMO Conducted Power (mW). We convert this back to logarithmic scale for further output power calculations.
4. All transmit signals from different antennas are completely uncorrelated with each other. So the maximum output power shall be calculated based on the aggregate power conducted across all antennas.
5. Sample Calculation:
Let us assume the following numbers:
 - a) Total MIMO Conducted Power as 34078.54 milliWatts
 - b)

	Factors	Value	Unit
Summed MIMO Conducted Power (linear sum)		34078.54	mW/MHz
Summed MIMO Conducted Power (dBm)	$= 10 * \log (34078.54) =$	45.32	dBm/MHz

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Channel	Port	PSD Power (dBm/MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	38.79	39.11	38.68	38.81
	1	39.17	39.50	39.20	39.14
	2	39.69	40.22	39.77	39.73
	3	39.52	40.07	39.64	39.54
Total MIMO PSD Power (mW)		34078.54	37730.21	34383.51	34171.37
Total MIMO PSD Power (dBm)		45.32	45.77	45.36	45.34
Middle	0	38.85	39.27	39.05	39.00
	1	39.23	39.57	39.27	39.24
	2	39.63	39.94	39.64	39.61
	3	39.55	39.77	39.46	39.36
Total MIMO PSD Power (mW/MHz)		34261.21	36844.45	34515.85	34104.79
Total MIMO PSD Power (dBm/MHz)		45.35	45.66	45.38	45.33
High	0	39.31	39.14	39.06	38.98
	1	39.26	39.36	39.26	39.19
	2	39.59	39.74	39.66	39.66
	3	39.39	39.56	39.39	39.32
Total MIMO PSD Power (mW/MHz)		34731.28	35289.00	34422.10	34008.61
Total MIMO PSD Power (dBm/MHz)		45.41	45.48	45.37	45.32

Table 8-20. Peak Power Spectral Density Table (B71_1C_5M)

Channel	Port	PSD Power (dBm/MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	39.27	39.18	39.14	39.29
	1	39.33	39.27	39.15	39.20
	2	39.82	39.68	39.60	39.57
	3	39.61	39.69	39.61	39.70
Total MIMO PSD Power (mW)		35738.53	35340.73	34663.23	35203.34
Total MIMO PSD Power (dBm)		45.53	45.48	45.40	45.47
Middle	0	39.33	39.26	39.17	39.11
	1	39.37	39.44	39.33	39.52
	2	39.87	39.86	39.81	39.71
	3	39.69	39.72	39.75	39.73
Total MIMO PSD Power (mW/MHz)		36219.65	36273.23	35863.36	35850.78
Total MIMO PSD Power (dBm/MHz)		45.59	45.60	45.55	45.54
High	0	39.15	39.15	39.10	39.19
	1	39.50	39.42	39.36	39.34
	2	39.89	39.78	39.82	39.72
	3	39.66	39.65	39.64	39.69
Total MIMO PSD Power (mW/MHz)		36122.15	35694.43	35557.66	35549.30
Total MIMO PSD Power (dBm/MHz)		45.58	45.53	45.51	45.51

Table 8-21. Peak Power Spectral Density Table (B71_1C_10M)

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Channel	Port	PSD Power (dBm/MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	37.29	37.33	37.35	37.32
	1	37.47	37.53	37.53	37.51
	2	37.89	37.88	37.97	37.93
	3	37.89	37.90	37.94	37.83
Total MIMO PSD Power (mW)		23249.70	23363.09	23583.76	23304.89
Total MIMO PSD Power (dBm)		43.66	43.69	43.73	43.67
Middle	0	37.36	38.49	37.40	37.41
	1	37.66	38.42	37.72	37.71
	2	37.96	38.87	38.10	38.00
	3	37.92	38.56	37.94	37.99
Total MIMO PSD Power (mW/MHz)		23728.14	28888.28	24100.65	24022.69
Total MIMO PSD Power (dBm/MHz)		43.75	44.61	43.82	43.81
High	0	37.40	38.24	37.44	37.38
	1	37.59	38.20	37.62	37.63
	2	37.89	38.78	37.89	37.94
	3	37.83	38.58	37.81	37.72
Total MIMO PSD Power (mW/MHz)		23458.01	28035.81	23515.60	23400.50
Total MIMO PSD Power (dBm/MHz)		43.70	44.48	43.71	43.69

Table 8-22. Peak Power Spectral Density Table (B71_1C_15M)

Channel	Port	PSD Power (dBm/MHz)	
		QPSK	16QAM
Low	0	39.24	39.58
	1	39.28	39.53
	2	39.63	39.89
	3	39.65	39.78
Total MIMO PSD Power (mW)		35264.63	37280.69
Total MIMO PSD Power (dBm)		45.47	45.71
Middle	0	39.14	39.34
	1	39.38	39.64
	2	39.65	39.95
	3	39.72	39.91
Total MIMO PSD Power (mW/MHz)		35480.07	37457.09
Total MIMO PSD Power (dBm/MHz)		45.50	45.74
High	0	39.13	39.39
	1	39.27	39.68
	2	39.60	39.96
	3	39.56	39.57
Total MIMO PSD Power (mW/MHz)		34784.45	36947.78
Total MIMO PSD Power (dBm/MHz)		45.41	45.68

Table 8-23. Peak Power Spectral Density Table (B71_2C_5M+5M)

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Channel	Port	PSD Power (dBm/MHz)	
		QPSK	16QAM
Low	0	38.99	39.24
	1	39.29	39.54
	2	39.46	39.76
	3	39.52	39.77
Total MIMO PSD Power (mW)		34221.17	36335.21
Total MIMO PSD Power (dBm)		45.34	45.60
Middle	0	39.25	39.46
	1	39.41	39.82
	2	39.64	40.03
	3	39.76	39.98
Total MIMO PSD Power (mW/MHz)		35812.33	38455.36
Total MIMO PSD Power (dBm/MHz)		45.54	45.85
High	0	39.15	39.31
	1	39.46	39.58
	2	39.70	39.98
	3	39.65	39.85
Total MIMO PSD Power (mW/MHz)		35608.24	37203.58
Total MIMO PSD Power (dBm/MHz)		45.52	45.71

Table 8-24. Peak Power Spectral Density Table (B71_2C_5M+10M)

Channel	Port	PSD Power (dBm/MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	39.08	39.44	39.27	39.13
	1	39.28	39.47	39.25	39.26
	2	39.65	39.82	39.58	39.72
	3	39.64	39.74	39.58	39.62
Total MIMO PSD Power (mW)		34984.74	36650.61	35015.06	35142.06
Total MIMO PSD Power (dBm)		45.44	45.64	45.44	45.46
Middle	0	39.23	39.46	39.18	39.08
	1	39.43	39.64	39.40	39.40
	2	39.68	39.90	39.76	39.80
	3	39.61	39.76	39.78	39.70
Total MIMO PSD Power (mW/MHz)		35586.49	37257.68	35957.86	35680.97
Total MIMO PSD Power (dBm/MHz)		45.51	45.71	45.56	45.52
High	0	39.22	39.44	39.03	39.02
	1	39.37	39.50	39.26	39.31
	2	39.69	39.87	39.63	39.67
	3	39.57	39.73	39.59	39.56
Total MIMO PSD Power (mW/MHz)		35380.02	36795.62	34712.53	34825.11
Total MIMO PSD Power (dBm/MHz)		45.49	45.66	45.40	45.42

Table 8-25. Peak Power Spectral Density Table (n71_1C_5M)

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Channel	Port	PSD Power (dBm/MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	38.80	39.75	39.20	39.11
	1	39.23	40.18	39.29	39.30
	2	39.97	40.79	39.75	39.83
	3	39.62	40.54	39.77	39.79
Total MIMO PSD Power (mW)		35046.49	43189.81	35726.51	35799.24
Total MIMO PSD Power (dBm)		45.45	46.35	45.53	45.54
Middle	0	38.79	39.74	39.04	39.15
	1	39.39	40.25	39.44	39.43
	2	40.36	40.70	39.91	39.82
	3	39.70	40.58	39.83	39.76
Total MIMO PSD Power (mW/MHz)		36438.03	43172.57	36217.98	36031.25
Total MIMO PSD Power (dBm/MHz)		45.62	46.35	45.59	45.57
High	0	38.96	39.76	39.15	39.26
	1	39.43	40.36	39.53	39.48
	2	40.20	40.68	39.96	39.88
	3	39.71	40.58	39.78	39.59
Total MIMO PSD Power (mW/MHz)		36470.27	43445.28	36609.83	36116.04
Total MIMO PSD Power (dBm/MHz)		45.62	46.38	45.64	45.58

Table 8-26. Peak Power Spectral Density Table (n71_1C_10M)

Channel	Port	PSD Power (dBm/MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	37.24	39.01	37.37	37.36
	1	37.47	39.07	37.52	37.59
	2	37.85	39.71	38.03	38.02
	3	37.77	39.47	37.94	37.89
Total MIMO PSD Power (mW)		22947.72	34204.06	23682.02	23680.30
Total MIMO PSD Power (dBm)		43.61	45.34	43.74	43.74
Middle	0	37.31	38.98	37.37	37.24
	1	37.56	39.15	37.60	37.55
	2	38.11	39.53	37.98	38.11
	3	37.85	39.54	37.89	37.86
Total MIMO PSD Power (mW/MHz)		23634.72	34090.74	23641.31	23561.40
Total MIMO PSD Power (dBm/MHz)		43.74	45.33	43.74	43.72
High	0	37.14	38.87	37.27	37.33
	1	37.68	39.30	37.64	37.49
	2	38.25	39.37	38.04	37.95
	3	37.87	39.51	37.75	37.91
Total MIMO PSD Power (mW/MHz)		23836.71	33812.31	23457.71	23440.00
Total MIMO PSD Power (dBm/MHz)		43.77	45.29	43.70	43.70

Table 8-27. Peak Power Spectral Density Table (n71_1C_15M)

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Channel	Port	PSD Power (dBm/MHz)	
		QPSK	16QAM
Low	0	39.21	39.59
	1	39.36	39.59
	2	39.99	40.07
	3	39.68	39.69
Total MIMO PSD Power (mW)		36232.03	37643.87
Total MIMO PSD Power (dBm)		45.59	45.76
Middle	0	39.19	39.37
	1	39.40	39.66
	2	39.91	40.22
	3	39.72	39.87
Total MIMO PSD Power (mW/MHz)		36162.70	38117.22
Total MIMO PSD Power (dBm/MHz)		45.58	45.81
High	0	39.28	39.28
	1	39.54	39.62
	2	40.03	40.05
	3	39.81	39.80
Total MIMO PSD Power (mW/MHz)		37098.98	37323.66
Total MIMO PSD Power (dBm/MHz)		45.69	45.72

Table 8-28. Peak Power Spectral Density Table (n71_2C_5M+5M)

Channel	Port	PSD Power (dBm/MHz)	
		QPSK	16QAM
Low	0	39.20	39.46
	1	39.49	39.59
	2	40.09	40.08
	3	39.98	39.77
Total MIMO PSD Power (mW)		37377.90	37588.89
Total MIMO PSD Power (dBm)		45.73	45.75
Middle	0	39.41	39.49
	1	39.44	39.69
	2	40.07	40.16
	3	39.75	40.07
Total MIMO PSD Power (mW/MHz)		37106.81	38754.51
Total MIMO PSD Power (dBm/MHz)		45.69	45.88
High	0	39.27	39.43
	1	39.35	39.61
	2	39.85	40.08
	3	39.69	39.76
Total MIMO PSD Power (mW/MHz)		36048.49	37550.76
Total MIMO PSD Power (dBm/MHz)		45.57	45.75

Table 8-29. Peak Power Spectral Density Table (n71_2C_5M+10M)

FCC ID: A3LRF4435D-71A	MEASUREMENT REPORT (Class II Permissive Change)		Approved by: Technical Manager
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Channel	Port	PSD Power (dBm/MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	39.38	39.67	39.40	39.42
	1	39.43	39.74	39.38	39.40
	2	39.83	40.12	39.71	39.74
	3	39.51	39.86	39.52	39.47
Total MIMO PSD Power (mW)		35973.83	38659.35	35679.15	35707.64
Total MIMO PSD Power (dBm)		45.56	45.87	45.52	45.53
Middle	0	39.42	39.73	39.41	39.45
	1	39.29	39.62	39.35	39.36
	2	39.71	40.07	39.74	39.79
	3	39.56	39.86	39.52	39.55
Total MIMO PSD Power (mW/MHz)		35613.39	38431.36	35718.63	35983.78
Total MIMO PSD Power (dBm/MHz)		45.52	45.85	45.53	45.56
High	0	39.34	39.55	39.38	39.33
	1	39.32	39.60	39.35	39.29
	2	39.69	39.98	39.68	39.62
	3	39.48	39.74	39.52	39.48
Total MIMO PSD Power (mW/MHz)		35333.15	37489.02	35526.65	35088.12
Total MIMO PSD Power (dBm/MHz)		45.48	45.74	45.51	45.45

Table 8-30. Peak Power Spectral Density Table (B85_1C_5M)

Channel	Port	PSD Power (dBm/MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	39.45	39.84	39.60	39.56
	1	39.41	40.13	39.64	39.65
	2	39.62	40.31	40.01	40.04
	3	39.82	40.07	39.88	39.75
Total MIMO PSD Power (mW)		36287.91	40848.73	38063.92	37811.04
Total MIMO PSD Power (dBm)		45.60	46.11	45.81	45.78
Middle	0	39.38	39.88	39.37	39.49
	1	39.57	39.81	39.24	39.70
	2	39.89	39.99	39.62	39.60
	3	39.73	40.15	39.61	39.77
Total MIMO PSD Power (mW/MHz)		36849.19	39609.62	35347.16	36837.15
Total MIMO PSD Power (dBm/MHz)		45.66	45.98	45.48	45.66
High	0	39.65	39.80	39.40	39.51
	1	39.29	39.63	39.51	39.19
	2	39.56	39.81	39.87	39.54
	3	39.63	39.83	39.61	39.68
Total MIMO PSD Power (mW/MHz)		35935.61	37903.85	36491.31	35505.45
Total MIMO PSD Power (dBm/MHz)		45.56	45.79	45.62	45.50

Table 8-31. Peak Power Spectral Density Table (B85_1C_10M)

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Channel	Port	PSD Power (dBm/MHz)	
		QPSK	16QAM
Low	0	39.33	39.51
	1	39.26	39.82
	2	39.63	39.80
	3	39.43	39.65
Total MIMO PSD Power (mW)		34943.52	37298.70
Total MIMO PSD Power (dBm)		45.43	45.72
Middle	0	39.15	39.64
	1	39.48	39.88
	2	39.66	39.86
	3	39.72	39.92
Total MIMO PSD Power (mW/MHz)		35706.80	38440.90
Total MIMO PSD Power (dBm/MHz)		45.53	45.85
High	0	39.57	39.87
	1	39.51	39.56
	2	39.66	39.99
	3	39.41	39.77
Total MIMO PSD Power (mW/MHz)		35973.31	38196.61
Total MIMO PSD Power (dBm/MHz)		45.56	45.82

Table 8-32. Peak Power Spectral Density Table (B85_2C_5M+5M)

Channel	Port	PSD Power (dBm/MHz)	
		QPSK	16QAM
Low	0	39.11	39.27
	1	39.22	39.47
	2	39.44	39.59
	3	39.42	39.53
Total MIMO PSD Power (mW)		34039.29	35365.03
Total MIMO PSD Power (dBm)		45.32	45.49
Middle	0	39.39	39.70
	1	39.52	39.73
	2	39.61	40.04
	3	39.39	39.67
Total MIMO PSD Power (mW/MHz)		35484.28	38087.73
Total MIMO PSD Power (dBm/MHz)		45.50	45.81
High	0	39.47	39.43
	1	39.19	39.65
	2	39.38	39.81
	3	39.67	39.64
Total MIMO PSD Power (mW/MHz)		35101.64	36763.15
Total MIMO PSD Power (dBm/MHz)		45.45	45.65

Table 8-33. Peak Power Spectral Density Table (B85_2C_5M+10M)

FCC ID: A3LRF4435D-71A	MEASUREMENT REPORT (Class II Permissive Change)		Approved by: Technical Manager
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Channel	Port	PSD Power (dBm/MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	39.50	39.65	39.41	39.48
	1	39.46	39.64	39.40	39.44
	2	39.77	39.96	39.77	39.69
	3	39.47	39.73	39.59	39.61
Total MIMO PSD Power (mW)		36085.39	37741.89	35997.70	36103.46
Total MIMO PSD Power (dBm)		45.57	45.77	45.56	45.58
Middle	0	39.52	39.63	39.47	39.44
	1	39.37	39.53	39.37	39.37
	2	39.77	39.87	39.74	39.75
	3	39.61	39.77	39.59	39.69
Total MIMO PSD Power (mW/MHz)		36211.53	37344.33	36017.21	36192.54
Total MIMO PSD Power (dBm/MHz)		45.59	45.72	45.57	45.59
High	0	39.37	39.70	39.45	39.42
	1	39.31	39.49	39.35	39.40
	2	39.54	39.76	39.67	39.67
	3	39.51	39.81	39.56	39.58
Total MIMO PSD Power (mW/MHz)		35128.71	37233.41	35725.28	35797.55
Total MIMO PSD Power (dBm/MHz)		45.46	45.71	45.53	45.54

Table 8-34. Peak Power Spectral Density Table (n85_1C_5M)

Channel	Port	PSD Power (dBm/MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	39.34	40.35	39.29	39.26
	1	39.47	40.17	39.44	39.50
	2	39.86	40.82	39.90	39.90
	3	39.60	40.55	39.66	39.70
Total MIMO PSD Power (mW)		36260.87	44647.67	36298.86	36432.26
Total MIMO PSD Power (dBm)		45.59	46.50	45.60	45.61
Middle	0	39.30	40.18	39.35	39.53
	1	39.38	40.27	39.39	39.41
	2	39.84	40.73	40.06	39.82
	3	39.71	40.36	39.72	39.72
Total MIMO PSD Power (mW/MHz)		36177.24	43745.53	36819.76	36692.88
Total MIMO PSD Power (dBm/MHz)		45.58	46.41	45.66	45.65
High	0	39.16	40.02	39.36	39.16
	1	39.42	40.10	39.35	39.21
	2	39.69	40.32	39.63	39.41
	3	39.54	40.25	39.53	39.59
Total MIMO PSD Power (mW/MHz)		35275.80	41640.50	35389.11	34386.72
Total MIMO PSD Power (dBm/MHz)		45.47	46.20	45.49	45.36

Table 8-35. Peak Power Spectral Density Table (n85_1C_10M)

FCC ID: A3LRF4435D-71A	MEASUREMENT REPORT (Class II Permissive Change)		Approved by: Technical Manager
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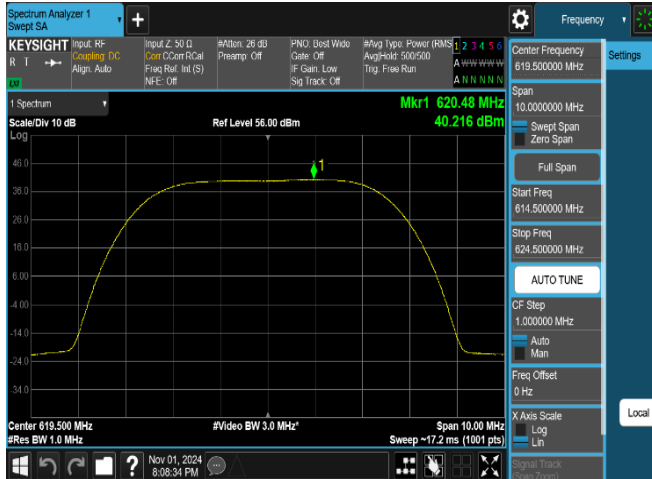
Channel	Port	PSD Power (dBm/MHz)	
		QPSK	16QAM
Low	0	39.31	39.50
	1	39.35	39.43
	2	39.63	39.98
	3	39.78	39.61
Total MIMO PSD Power (mW)		35799.14	36790.48
Total MIMO PSD Power (dBm)		45.54	45.66
Middle	0	39.25	39.55
	1	39.35	39.52
	2	39.81	40.13
	3	39.50	39.65
Total MIMO PSD Power (mW/MHz)		35514.33	37491.76
Total MIMO PSD Power (dBm/MHz)		45.50	45.74
High	0	39.04	39.26
	1	39.06	39.34
	2	39.57	39.85
	3	39.23	39.39
Total MIMO PSD Power (mW/MHz)		33496.33	35356.33
Total MIMO PSD Power (dBm/MHz)		45.25	45.48

Table 8-36. Peak Power Spectral Density Table (n85_2C_5M+5M)

Channel	Port	PSD Power (dBm/MHz)	
		QPSK	16QAM
Low	0	38.92	39.27
	1	39.27	39.80
	2	39.39	39.72
	3	39.25	39.52
Total MIMO PSD Power (mW)		33343.10	36320.75
Total MIMO PSD Power (dBm)		45.23	45.60
Middle	0	39.30	39.39
	1	39.50	39.64
	2	39.81	39.84
	3	39.55	39.81
Total MIMO PSD Power (mW/MHz)		35998.78	37094.76
Total MIMO PSD Power (dBm/MHz)		45.56	45.69
High	0	39.33	39.82
	1	39.40	39.49
	2	39.65	39.75
	3	39.47	39.79
Total MIMO PSD Power (mW/MHz)		35347.18	37447.63
Total MIMO PSD Power (dBm/MHz)		45.48	45.73

Table 8-37. Peak Power Spectral Density Table (n85_2C_5M+10M)

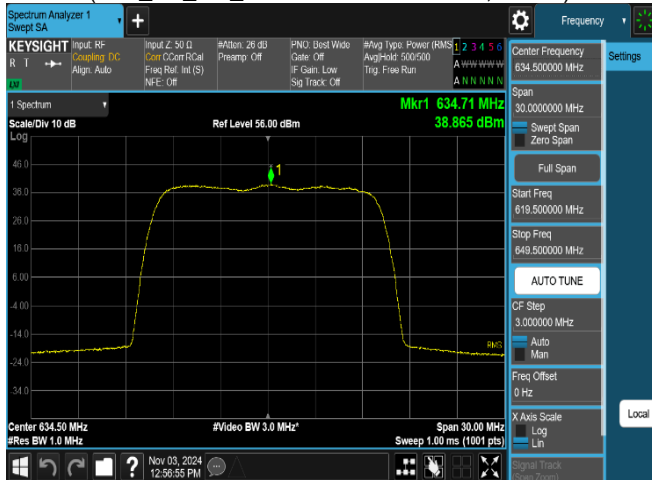
FCC ID: A3LRF4435D-71A	MEASUREMENT REPORT (Class II Permissive Change)		Approved by: Technical Manager
Test Report S/N: 8K24091001-00.A3L	Test Dates: 10/01/2024 - 11/29/2024	EUT Type: RRU(RF4435d)	Page 37 of 147



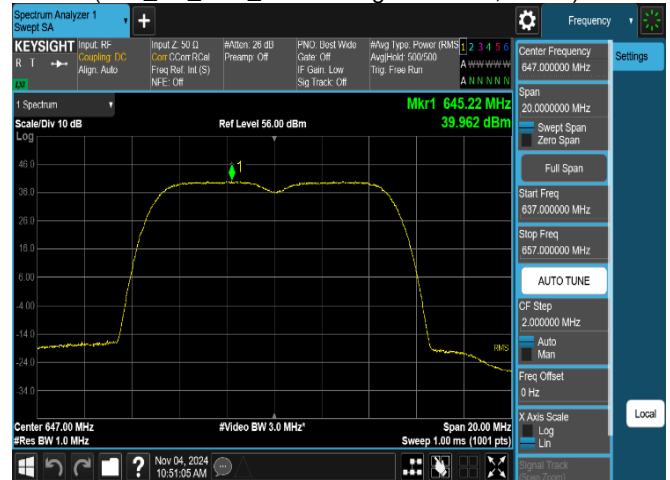
Plot 8-37. Power Spectral Density Plot
(B71_1C_5M_16QAM - Low Channel, Port 2)



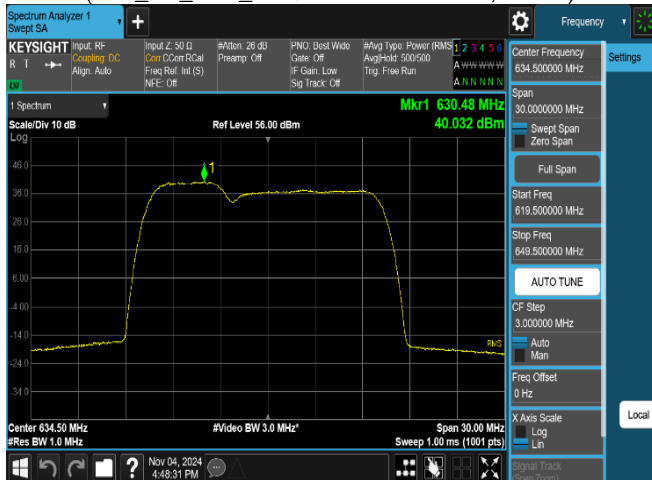
Plot 8-38. Power Spectral Density Plot
(B71_1C_10M_QPSK - High Channel, Port 2)



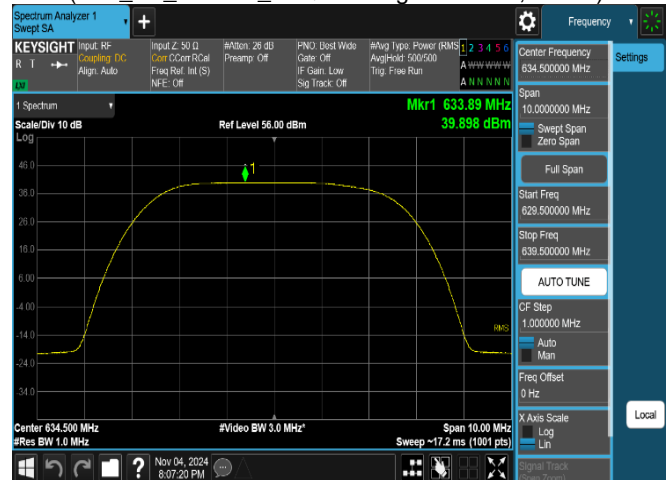
Plot 8-39. Power Spectral Density Plot
(B71_1C_15M_16QAM - Mid Channel, Port 2)



Plot 8-40. Power Spectral Density Plot
(B71_2C_5M+5M_16QAM - High Channel, Port 2)



Plot 8-41. Power Spectral Density Plot
(B71_2C_5M+10M_16QAM - Mid Channel, Port 2)

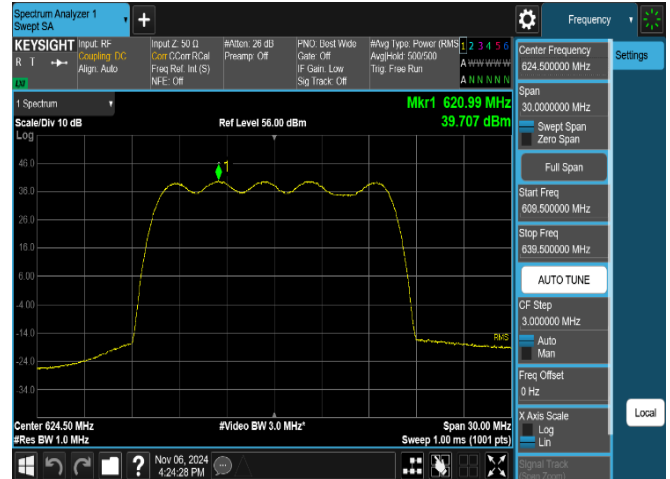


Plot 8-42. Power Spectral Density Plot
(n71_1C_5M_16QAM - Mid Channel, Port 2)

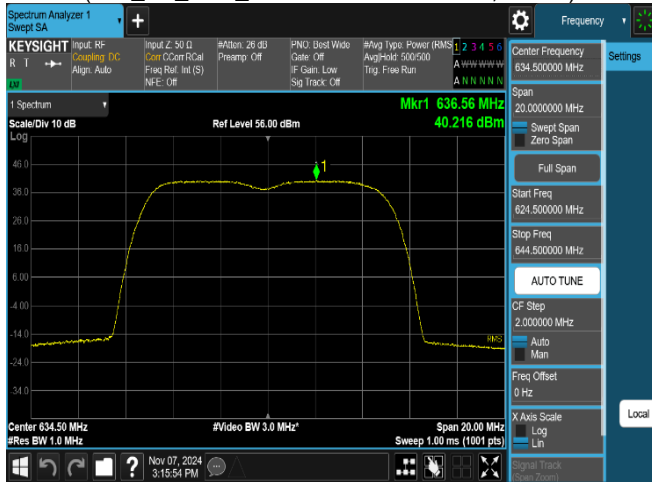
FCC ID: A3LRF4435D-71A	MEASUREMENT REPORT (Class II Permissive Change)		Approved by: Technical Manager
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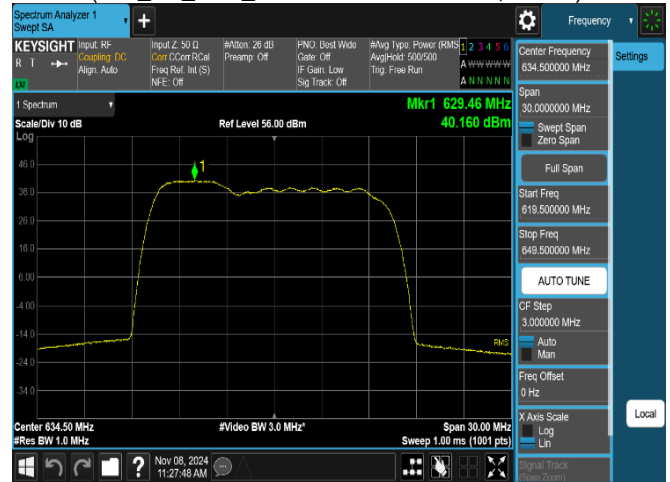
Plot 8-43. Power Spectral Density Plot
(n71_1C_10M_16QAM - Low Channel, Port 2)



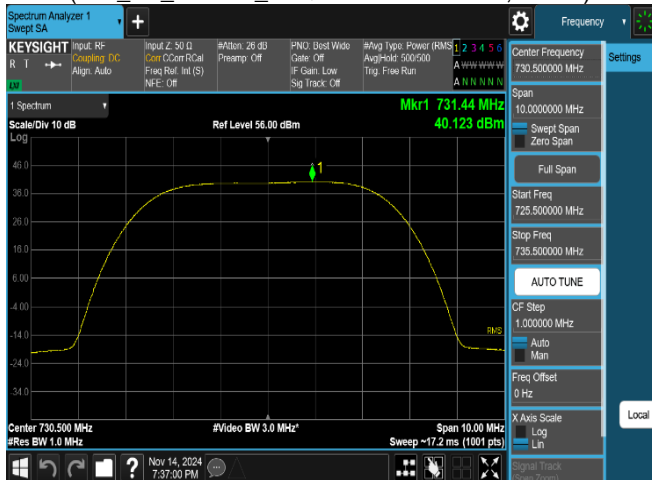
Plot 8-44. Power Spectral Density Plot
(n71_1C_15M_16QAM - Low Channel, Port 2)



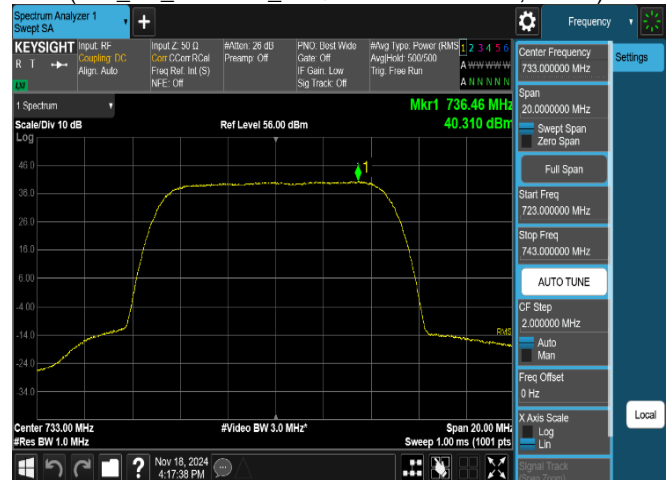
Plot 8-45. Power Spectral Density Plot
(n71_2C_5M+5M_16QAM - Mid Channel, Port 2)



Plot 8-46. Power Spectral Density Plot
(n71_2C_5M+10M_16QAM - Mid Channel, Port 2)



Plot 8-47. Power Spectral Density Plot
(B85_1C_5M_16QAM - Low Channel, Port 2)



Plot 8-48. Power Spectral Density Plot
(B85_1C_10M_16QAM - Low Channel, Port 2)

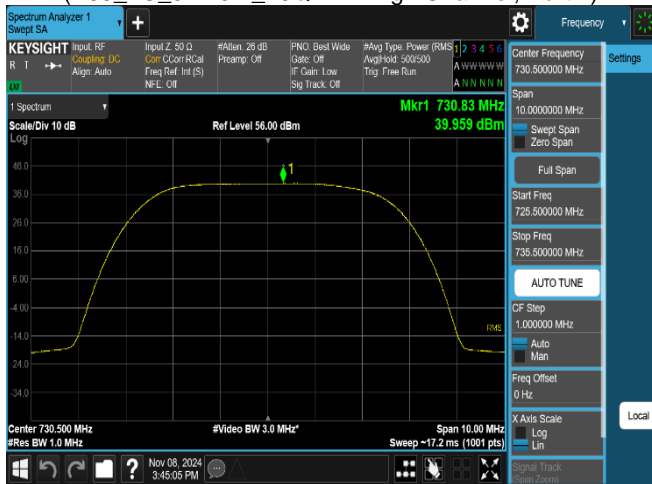
FCC ID: A3LRF4435D-71A	MEASUREMENT REPORT (Class II Permissive Change)		Approved by: Technical Manager
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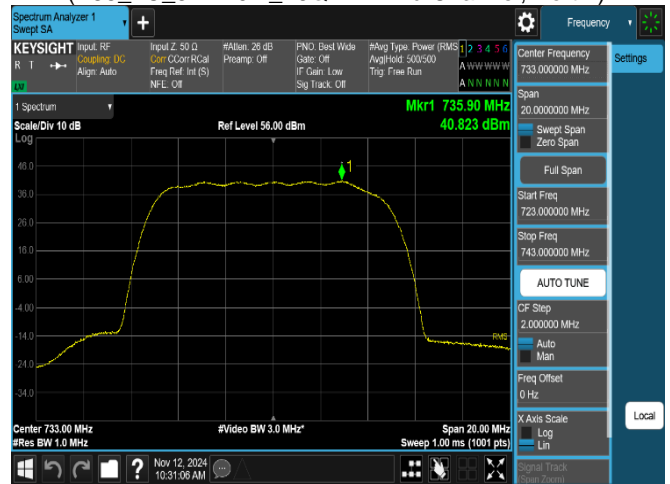
Plot 8-49. Power Spectral Density Plot
(B85_2C_5M+5M_16QAM - High Channel, Port 2)



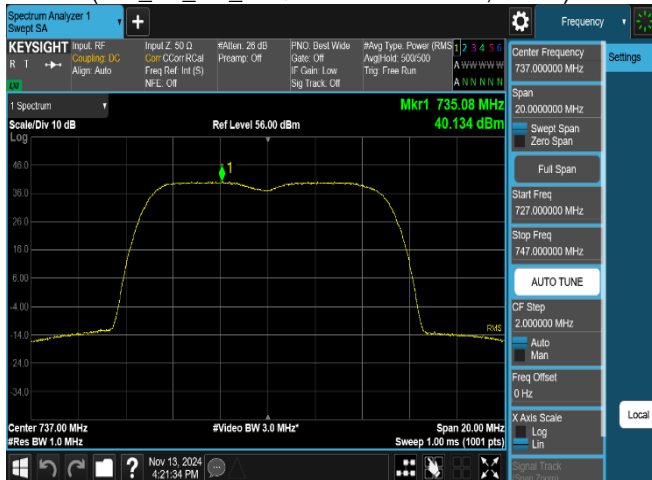
Plot 8-50. Power Spectral Density Plot
(B85_2C_5M+10M_16QAM - Mid Channel, Port 2)



Plot 8-51. Power Spectral Density Plot
(n85_1C_5M_16QAM - Low Channel, Port 2)



Plot 8-52. Power Spectral Density Plot
(n85_1C_10M_16QAM - Low Channel, Port 2)



Plot 8-53. Power Spectral Density Plot
(n85_2C_5M+5M_16QAM - Mid Channel, Port 2)



Plot 8-54. Power Spectral Density Plot
(n85_2C_5M+10M_16QAM - Mid Channel, Port 2)

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8.4 Peak To Average Power Ratio

Test Overview

The peak to average ratio measurement is performed at the conducted port of the EUT. The spectrum analyzers Complementary Cumulative Distribution Function (CCDF) measurement profile is used to determine the largest deviation between the average and the peak power of the EUT in a given bandwidth. The CCDF curve shows how much time the peak waveform spends at or above a given average power level. The percent of time the signal spends at or above the level defines the probability for that particular power level.

Test Procedure Used

KDB 971168 D01 v03r01 – Section 5.7

ANSI C63.26-2015 – Section 5.2.3.4

Test Setting

The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The spectrum analyzer settings were as follows:

1. The signal analyzer's CCDF function is enabled.
2. Frequency = carrier center frequency
3. Measurement BW \geq OBW or specified reference bandwidth
4. The signal analyzer was set to collect one million samples to generate the CCDF curve
5. The measurement interval was set depending on the type of signal analyzed. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms.

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

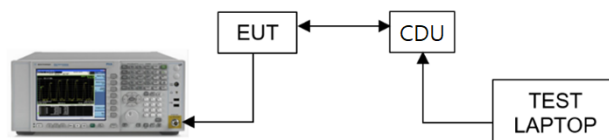


Figure 8-3. Test Instrument & Measurement Setup

Limit

N/A

FCC ID: A3LRF4435D-71A	MEASUREMENT REPORT (Class II Permissive Change)		Approved by: Technical Manager
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Channel	Port	PAPR (dB)				Limit (dB)
		QPSK	16QAM	64QAM	256QAM	
Low	0	8.25	8.27	8.20	8.24	N/A
	1	8.27	8.25	8.21	8.26	
	2	8.25	8.24	8.21	8.26	
	3	8.24	8.23	8.20	8.22	
Middle	0	8.24	8.27	8.21	8.25	
	1	8.21	8.24	8.18	8.25	
	2	8.29	8.26	8.19	8.24	
	3	8.25	8.23	8.22	8.25	
High	0	8.28	8.24	8.21	8.25	
	1	8.27	8.21	8.20	8.26	
	2	8.26	8.24	8.21	8.25	
	3	8.23	8.22	8.18	8.23	

Table 8-38. Peak To Average Power Ratio Summary Data (B71_1C_5M)

Channel	Port	PAPR (dB)				Limit (dB)
		QPSK	16QAM	64QAM	256QAM	
Low	0	7.58	7.60	7.60	7.60	N/A
	1	7.59	7.58	7.59	7.60	
	2	7.59	7.59	7.56	7.59	
	3	7.60	7.63	7.61	7.63	
Middle	0	7.62	7.64	7.66	7.65	
	1	7.63	7.60	7.60	7.63	
	2	7.65	7.61	7.63	7.63	
	3	7.62	7.61	7.61	7.63	
High	0	7.65	7.67	7.68	7.67	
	1	7.66	7.66	7.64	7.65	
	2	7.66	7.64	7.64	7.64	
	3	7.68	7.66	7.66	7.66	

Table 8-39. Peak To Average Power Ratio Summary Data (B71_1C_10M)

Channel	Port	PAPR (dB)				Limit (dB)
		QPSK	16QAM	64QAM	256QAM	
Low	0	7.69	7.65	7.65	7.66	N/A
	1	7.67	7.64	7.64	7.65	
	2	7.65	7.66	7.64	7.65	
	3	7.63	7.63	7.63	7.65	
Middle	0	7.68	7.63	7.68	7.66	
	1	7.65	7.68	7.69	7.65	
	2	7.65	7.66	7.69	7.67	
	3	7.68	7.66	7.65	7.63	
High	0	7.81	7.71	7.76	7.74	
	1	7.76	7.72	7.76	7.73	
	2	7.76	7.72	7.79	7.76	
	3	7.75	7.73	7.77	7.75	

Table 8-40. Peak To Average Power Ratio Summary Data (B71_1C_15M)

FCC ID: A3LRF4435D-71A	MEASUREMENT REPORT (Class II Permissive Change)		Approved by: Technical Manager
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Channel	Port	PAPR (dB)		Limit (dB)
		B71_2C_5M+5M	B71_2C_5M+10M	
Low	0	8.05	7.98	N/A
	1	8.01	7.97	
	2	8.02	8.01	
	3	8.03	7.97	
Middle	0	8.04	8.02	
	1	8.04	8.00	
	2	8.02	8.00	
	3	8.01	7.98	
High	0	8.05	7.97	
	1	8.05	7.98	
	2	8.00	7.99	
	3	7.98	8.02	

Table 8-41. Peak To Average Power Ratio Summary Data (B71_Multi-carrier)

Channel	Port	PAPR (dB)				Limit (dB)
		QPSK	16QAM	64QAM	256QAM	
Low	0	8.23	8.22	8.20	8.18	N/A
	1	8.22	8.24	8.21	8.25	
	2	8.24	8.20	8.20	8.21	
	3	8.22	8.21	8.22	8.24	
Middle	0	8.21	8.22	8.21	8.25	
	1	8.23	8.23	8.19	8.24	
	2	8.23	8.24	8.20	8.24	
	3	8.20	8.23	8.18	8.23	
High	0	8.24	8.21	8.18	8.23	
	1	8.24	8.21	8.18	8.22	
	2	8.23	8.20	8.19	8.24	
	3	8.24	8.20	8.19	8.22	

Table 8-42. Peak To Average Power Ratio Summary Data (n71_1C_5M)

Channel	Port	PAPR (dB)				Limit (dB)
		QPSK	16QAM	64QAM	256QAM	
Low	0	7.56	7.58	7.62	7.63	N/A
	1	7.56	7.59	7.57	7.61	
	2	7.61	7.57	7.57	7.61	
	3	7.58	7.58	7.56	7.58	
Middle	0	7.60	7.61	7.62	7.62	
	1	7.61	7.57	7.61	7.62	
	2	7.57	7.56	7.58	7.62	
	3	7.58	7.56	7.55	7.63	
High	0	7.65	7.63	7.67	7.70	
	1	7.62	7.60	7.65	7.67	
	2	7.65	7.59	7.63	7.68	
	3	7.66	7.61	7.64	7.65	

Table 8-43. Peak To Average Power Ratio Summary Data (n71_1C_10M)

FCC ID: A3LRF4435D-71A	MEASUREMENT REPORT (Class II Permissive Change)		Approved by: Technical Manager
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Channel	Port	PAPR (dB)				Limit (dB)
		QPSK	16QAM	64QAM	256QAM	
Low	0	7.60	7.61	7.62	7.61	N/A
	1	7.56	7.61	7.57	7.60	
	2	7.58	7.59	7.59	7.58	
	3	7.60	7.62	7.56	7.58	
Middle	0	7.63	7.64	7.61	7.60	
	1	7.60	7.61	7.57	7.57	
	2	7.57	7.61	7.58	7.56	
	3	7.59	7.60	7.55	7.57	
High	0	7.78	7.80	7.73	7.72	
	1	7.78	7.77	7.70	7.71	
	2	7.77	7.77	7.73	7.71	
	3	7.76	7.76	7.74	7.72	

Table 8-44. Peak To Average Power Ratio Summary Data (n71_1C_15M)

Channel	Port	PAPR (dB)		Limit (dB)
		n71_2C_5M+5M	n71_2C_5M+10M	
Low	0	8.03	7.98	N/A
	1	7.96	7.99	
	2	8.00	7.97	
	3	8.03	7.98	
Middle	0	8.01	8.00	
	1	7.99	7.96	
	2	8.01	7.94	
	3	8.01	7.98	
High	0	7.97	7.98	
	1	8.00	7.97	
	2	7.98	7.93	
	3	7.97	7.96	

Table 8-45. Peak To Average Power Ratio Summary Data (n71_Multi-carrier)

Channel	Port	PAPR (dB)				Limit (dB)
		QPSK	16QAM	64QAM	256QAM	
Low	0	8.21	8.20	8.17	8.23	N/A
	1	8.18	8.20	8.21	8.23	
	2	8.23	8.22	8.20	8.25	
	3	8.21	8.20	8.18	8.22	
Middle	0	8.23	8.18	8.17	8.22	
	1	8.22	8.22	8.22	8.25	
	2	8.21	8.22	8.21	8.24	
	3	8.21	8.22	8.18	8.24	
High	0	8.19	8.24	8.18	8.21	
	1	8.24	8.24	8.19	8.24	
	2	8.22	8.21	8.16	8.22	
	3	8.27	8.21	8.19	8.22	

Table 8-46. Peak To Average Power Ratio Summary Data (B85_1C_5M)

FCC ID: A3LRF4435D-71A	MEASUREMENT REPORT (Class II Permissive Change)		Approved by: Technical Manager
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Channel	Port	PAPR (dB)				Limit (dB)
		QPSK	16QAM	64QAM	256QAM	
Low	0	7.60	7.58	7.60	7.58	N/A
	1	7.62	7.60	7.60	7.60	
	2	7.64	7.59	7.58	7.60	
	3	7.61	7.57	7.58	7.56	
Middle	0	7.58	7.58	7.57	7.58	
	1	7.58	7.58	7.57	7.60	
	2	7.57	7.61	7.57	7.57	
	3	7.59	7.57	7.56	7.59	
High	0	7.59	7.57	7.55	7.56	
	1	7.66	7.60	7.54	7.62	
	2	7.57	7.65	7.56	7.64	
	3	7.59	7.57	7.53	7.58	

Table 8-47. Peak To Average Power Ratio Summary Data (B85_1C_10M)

Channel	Port	PAPR (dB)		Limit (dB)
		B85_2C_5M+5M	B85_2C_5M+10M	
Low	0	8.01	7.97	N/A
	1	8.04	7.97	
	2	7.99	7.92	
	3	8.02	7.91	
Middle	0	7.91	8.01	
	1	7.90	7.89	
	2	7.90	7.94	
	3	7.93	7.95	
High	0	8.08	7.98	
	1	8.04	7.95	
	2	8.01	7.98	
	3	8.04	7.92	

Table 8-48. Peak To Average Power Ratio Summary Data (B85_Multi-carrier)

Channel	Port	PAPR (dB)				Limit (dB)
		QPSK	16QAM	64QAM	256QAM	
Low	0	8.18	8.24	8.15	8.22	N/A
	1	8.16	8.21	8.19	8.18	
	2	8.20	8.21	8.17	8.21	
	3	8.18	8.19	8.14	8.20	
Middle	0	8.20	8.22	8.19	8.21	
	1	8.21	8.25	8.18	8.18	
	2	8.17	8.18	8.17	8.21	
	3	8.19	8.20	8.14	8.21	
High	0	8.22	8.15	8.19	8.21	
	1	8.22	8.16	8.18	8.22	
	2	8.22	8.20	8.16	8.20	
	3	8.23	8.14	8.19	8.20	

Table 8-49. Peak To Average Power Ratio Summary Data (n85_1C_5M)

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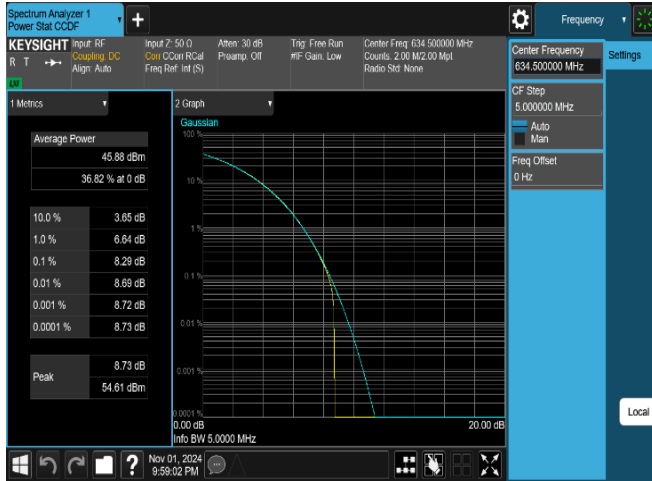
Channel	Port	PAPR (dB)				Limit (dB)
		QPSK	16QAM	64QAM	256QAM	
Low	0	7.54	7.56	7.57	7.60	N/A
	1	7.52	7.56	7.60	7.57	
	2	7.63	7.57	7.57	7.60	
	3	7.56	7.55	7.54	7.59	
Middle	0	7.53	7.53	7.56	7.52	
	1	7.55	7.55	7.57	7.55	
	2	7.52	7.55	7.52	7.59	
	3	7.52	7.51	7.56	7.56	
High	0	7.56	7.52	7.57	7.57	
	1	7.56	7.50	7.64	7.60	
	2	7.63	7.58	7.58	7.60	
	3	7.54	7.50	7.58	7.55	

Table 8-50. Peak To Average Power Ratio Summary Data (n85_1C_10M)

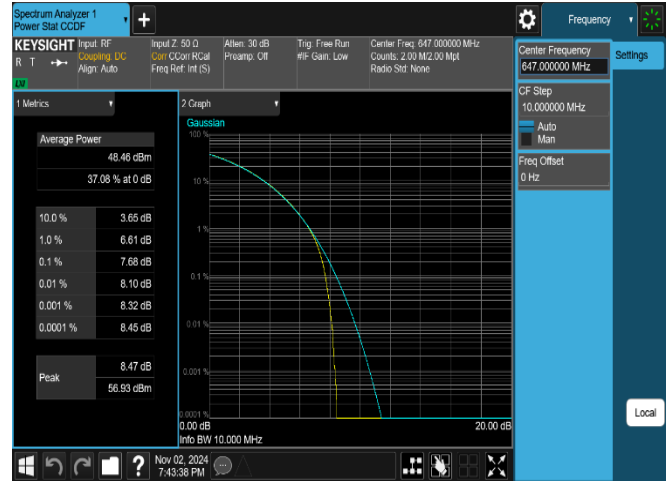
Channel	Port	PAPR (dB)		Limit (dB)
		n85_2C_5M+5M	n85_2C_5M+10M	
Low	0	7.98	7.97	N/A
	1	7.90	7.97	
	2	7.98	7.92	
	3	7.96	7.95	
Middle	0	7.95	7.88	
	1	7.99	7.93	
	2	7.98	7.87	
	3	7.96	7.94	
High	0	7.99	7.96	
	1	7.99	7.90	
	2	8.04	7.95	
	3	7.98	7.96	

Table 8-51. Peak To Average Power Ratio Summary Data (n85_Multi-carrier)

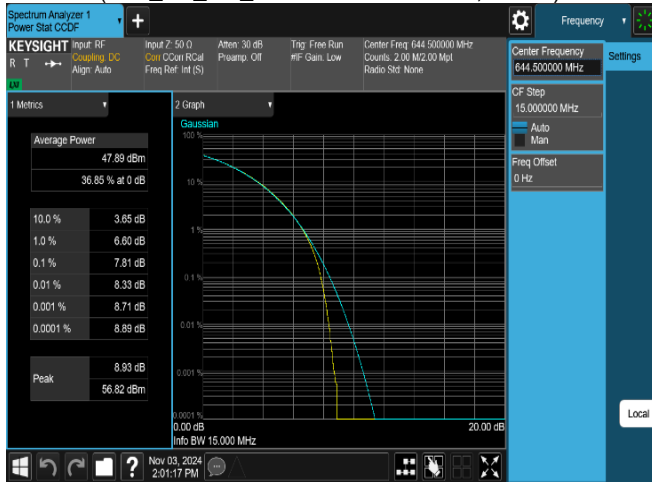
FCC ID: A3LRF4435D-71A	MEASUREMENT REPORT (Class II Permissive Change)		Approved by: Technical Manager
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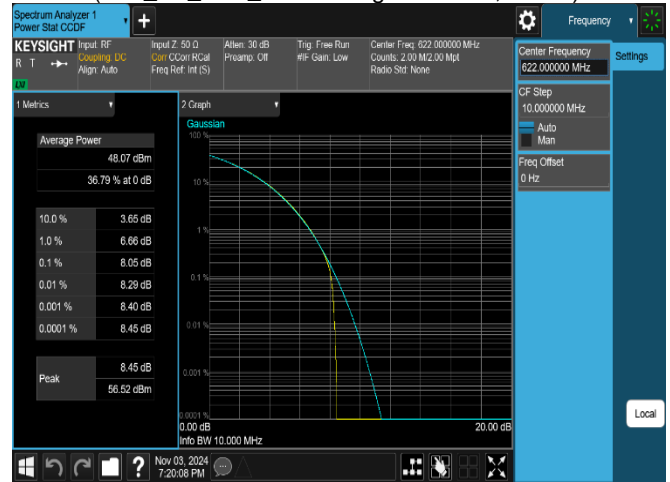
Plot 8-55. Peak To Average Power Ratio Plot
(B71_1C_5M_QPSK - Mid Channel, Port 2)



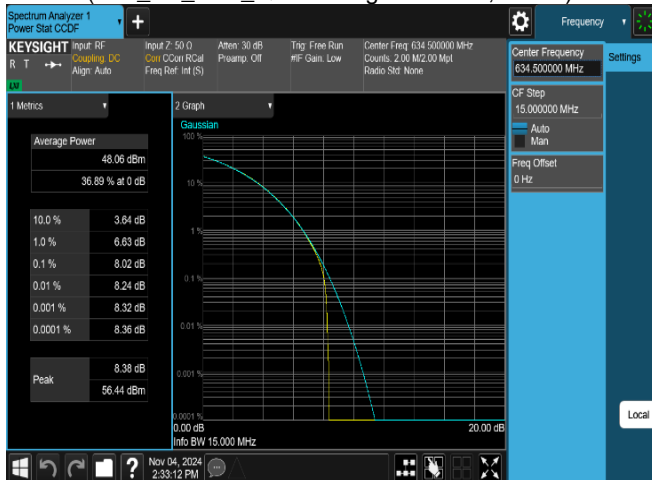
Plot 8-56. Peak To Average Power Ratio Plot
(B71_1C_10M_QPSK - High Channel, Port 3)



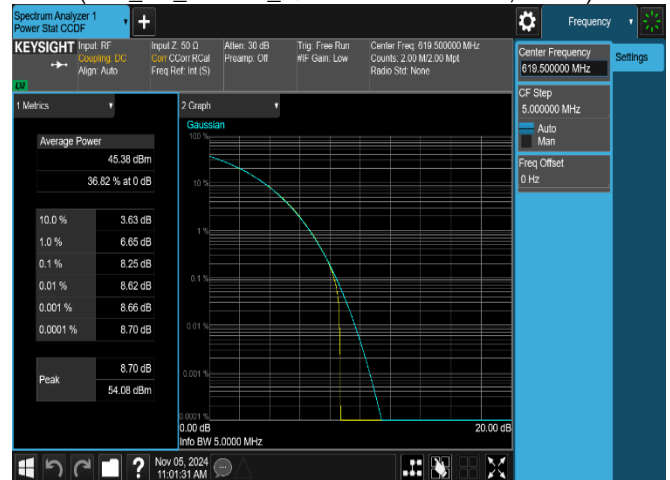
Plot 8-57. Peak To Average Power Ratio Plot
(B71_1C_15M_QPSK - High Channel, Port 0)



Plot 8-58. Peak To Average Power Ratio Plot
(B71_2C_5M+5M_QPSK - Low Channel, Port 0)



Plot 8-59. Peak To Average Power Ratio Plot
(B71_2C_5M+10M_QPSK - Mid Channel, Port 0)



Plot 8-60. Peak To Average Power Ratio Plot
(n71_1C_5M_256QAM - Low Channel, Port 1)

FCC ID: A3LRF4435D-71A	MEASUREMENT REPORT (Class II Permissive Change)		Approved by: Technical Manager
Test Report S/N: 8K24091001-00.A3L	Test Dates: 10/01/2024 - 11/29/2024	EUT Type: RRU(RF4435d)	Page 47 of 147