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PART 27 MEASUREMENT REPORT

Applicant Name:
Microsoft Corporation
One Microsoft Way
Redmond, WA 98052
United States

Date of Testing:
12/3/2024 - 2/14/2025
Test Report Issue Date:
4/18/2025
Test Site/Location:
Element Lab., Columbia, MD, USA
Test Report Serial No.:
1M2411190103-04-R3.C3K

FCC ID:	**C3K2114**
APPLICANT:	**Microsoft Corporation**

Application Type:	Certification
Model:	2114
EUT Type:	Full Modular
FCC Classification:	PCS Licensed Transmitter (PCB)
FCC Rule Part:	27
Test Procedure(s):	ANSI C63.26-2015

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.

This revised Test Report (S/N: 1M2411190103-04-R3.C3K) supersedes and replaces the previously issued test report (S/N: 1M2411190103-04-R2.C3K) on the same subject device for the same type of testing as indicated. Please discard or destroy the previously issued test report(s) and dispose of it accordingly.

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.

RJ Ortanez
Executive Vice President

ACCREDITED
CERT #2041.01

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PART 27 MEASUREMENT REPORT

Antenna-1

Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	EIRP		Emission Designator
				Max. Power [W]	Max. Power [dBm]	
LTE Band 30	10 MHz	QPSK	2310.0	0.205	23.13	9M01G7D
		16QAM	2310.0	0.169	22.27	9M02W7D
	5 MHz	QPSK	2307.5 - 2312.5	0.202	23.05	4M52G7D
		16QAM	2307.5 - 2312.5	0.182	22.61	4M54W7D
LTE Band 41(PC2)	20 MHz	QPSK	2506.0 - 2680.0	1.549	31.90	18M0G7D
		16QAM	2506.0 - 2680.0	1.416	31.51	17M9W7D
	15 MHz	QPSK	2503.5 - 2682.5	1.514	31.80	13M5G7D
		16QAM	2503.5 - 2682.5	1.294	31.12	13M4W7D
	10 MHz	QPSK	2501.0 - 2685.0	1.600	32.04	9M03G7D
		16QAM	2501.0 - 2685.0	1.315	31.19	8M98W7D
	5 MHz	QPSK	2498.5 - 2687.5	1.585	32.00	4M53G7D
		16QAM	2498.5 - 2687.5	1.321	31.21	4M51W7D
LTE Band 41(PC3)/38	20 MHz	QPSK	2506.0 - 2680.0	1.361	31.34	18M0G7D
		16QAM	2506.0 - 2680.0	1.067	30.28	18M0W7D
	15 MHz	QPSK	2503.5 - 2682.5	1.349	31.30	13M5G7D
		16QAM	2503.5 - 2682.5	1.069	30.29	13M5W7D
	10 MHz	QPSK	2501.0 - 2685.0	1.396	31.45	9M04G7D
		16QAM	2501.0 - 2685.0	1.109	30.45	9M00W7D
	5 MHz	QPSK	2498.5 - 2687.5	1.387	31.42	4M51G7D
		16QAM	2498.5 - 2687.5	1.104	30.43	4M53W7D

Antenna-6

Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	EIRP		Emission Designator
				Max. Power [W]	Max. Power [dBm]	
LTE Band 41(PC2)	20 MHz	QPSK	2506.0 - 2680.0	1.489	31.73	18M0G7D
		16QAM	2506.0 - 2680.0	1.318	31.20	18M0W7D
	15 MHz	QPSK	2503.5 - 2682.5	1.459	31.64	13M5G7D
		16QAM	2503.5 - 2682.5	1.233	30.91	13M5W7D
	10 MHz	QPSK	2501.0 - 2685.0	1.493	31.74	8M99G7D
		16QAM	2501.0 - 2685.0	1.247	30.96	9M00W7D
	5 MHz	QPSK	2498.5 - 2687.5	1.483	31.71	4M54G7D
		16QAM	2498.5 - 2687.5	1.253	30.98	4M49W7D
LTE Band 41(PC3)/38	20 MHz	QPSK	2506.0 - 2680.0	1.327	31.23	18M0G7D
		16QAM	2506.0 - 2680.0	1.038	30.16	18M1W7D
	15 MHz	QPSK	2503.5 - 2682.5	1.309	31.17	13M5G7D
		16QAM	2503.5 - 2682.5	1.045	30.19	13M5W7D
	10 MHz	QPSK	2501.0 - 2685.0	1.312	31.18	9M01G7D
		16QAM	2501.0 - 2685.0	1.054	30.23	9M04W7D
	5 MHz	QPSK	2498.5 - 2687.5	1.315	31.19	4M52G7D
		16QAM	2498.5 - 2687.5	1.067	30.28	4M52W7D

Antenna-1						
Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	EIRP		Emission Designator
				Max. Power [W]	Max. Power [dBm]	
NR Band n30	10 MHz	π/2 BPSK	2310.0	0.203	23.07	9M01G7D
		QPSK	2310.0	0.203	23.09	9M36G7D
		16QAM	2310.0	0.176	22.47	9M34W7D
	5 MHz	π/2 BPSK	2307.5 - 2312.5	0.206	23.14	4M52G7D
		QPSK	2307.5 - 2312.5	0.197	22.94	4M52G7D
		16QAM	2307.5 - 2312.5	0.167	22.22	4M52W7D
NR Band n41(PC2)	100 MHz	π/2 BPSK	2546.0 - 2640.0	1.561	31.93	97M0G7D
		QPSK	2546.0 - 2640.0	1.591	32.02	97M2G7D
		16QAM	2546.0 - 2640.0	1.217	30.85	97M3W7D
	90 MHz	π/2 BPSK	2541.0 - 2645.0	1.553	31.91	87M2G7D
		QPSK	2541.0 - 2645.0	1.519	31.82	87M1G7D
		16QAM	2541.0 - 2645.0	1.264	31.02	87M2W7D
	80 MHz	π/2 BPSK	2536.0 - 2650.0	1.557	31.92	77M2G7D
		QPSK	2536.0 - 2650.0	1.620	32.10	77M7G7D
		16QAM	2536.0 - 2650.0	1.313	31.18	77M6W7D
	70 MHz	π/2 BPSK	2531.0 - 2655.0	1.571	31.96	64M6G7D
		QPSK	2531.0 - 2655.0	1.562	31.94	64M5G7D
		16QAM	2531.0 - 2655.0	1.279	31.07	64M7W7D
	60 MHz	π/2 BPSK	2526.0 - 2660.0	1.641	32.15	58M2G7D
		QPSK	2526.0 - 2660.0	1.710	32.33	58M1G7D
		16QAM	2526.0 - 2660.0	1.349	31.30	58M3W7D
	50 MHz	π/2 BPSK	2521.0 - 2665.0	1.667	32.22	46M0G7D
		QPSK	2521.0 - 2665.0	1.667	32.22	46M0G7D
		16QAM	2521.0 - 2665.0	1.312	31.18	46M0W7D
	40 MHz	π/2 BPSK	2516.0 - 2670.0	1.698	32.30	35M8G7D
		QPSK	2516.0 - 2670.0	1.714	32.34	35M9G7D
		16QAM	2516.0 - 2670.0	1.374	31.38	35M9W7D
	30 MHz	π/2 BPSK	2511.0 - 2675.0	1.671	32.23	27M0G7D
		QPSK	2511.0 - 2675.0	1.671	32.23	27M0G7D
		16QAM	2511.0 - 2675.0	1.271	31.04	27M0W7D
	20 MHz	π/2 BPSK	2506.0 - 2680.0	1.611	32.07	18M1G7D
		QPSK	2506.0 - 2680.0	1.626	32.11	18M0G7D
		16QAM	2506.0 - 2680.0	1.358	31.33	18M1W7D
	15 MHz	π/2 BPSK	2503.5 - 2682.5	1.656	32.19	13M0G7D
		QPSK	2503.5 - 2682.5	1.656	32.19	13M0G7D
		16QAM	2503.5 - 2682.5	1.279	31.07	13M0W7D
	10 MHz	π/2 BPSK	2501.0 - 2593.0	1.629	32.12	8M75G7D
		QPSK	2501.0 - 2593.0	1.596	32.03	8M70G7D
		16QAM	2501.0 - 2593.0	1.355	31.32	8M72W7D
NR Band n41(PC3)	100 MHz	π/2 BPSK	2546.0 - 2640.0	1.326	31.23	97M1G7D
		QPSK	2546.0 - 2640.0	1.365	31.35	97M0G7D
		16QAM	2546.0 - 2640.0	1.089	30.37	96M9W7D
	90 MHz	π/2 BPSK	2541.0 - 2645.0	1.374	31.38	87M1G7D
		QPSK	2541.0 - 2645.0	1.377	31.39	87M4G7D
		16QAM	2541.0 - 2645.0	1.072	30.30	87M4W7D
	80 MHz	π/2 BPSK	2536.0 - 2650.0	1.380	31.40	77M4G7D
		QPSK	2536.0 - 2650.0	1.406	31.48	77M4G7D
		16QAM	2536.0 - 2650.0	1.102	30.42	77M6W7D
	70 MHz	π/2 BPSK	2531.0 - 2655.0	1.387	31.42	64M4G7D
		QPSK	2531.0 - 2655.0	1.390	31.43	64M6G7D
		16QAM	2531.0 - 2655.0	1.153	30.62	64M6W7D
	60 MHz	π/2 BPSK	2526.0 - 2660.0	1.422	31.53	58M3G7D
		QPSK	2526.0 - 2660.0	1.416	31.51	58M2G7D
		16QAM	2526.0 - 2660.0	1.161	30.65	58M1W7D
	50 MHz	π/2 BPSK	2521.0 - 2665.0	1.435	31.57	46M0G7D
		QPSK	2521.0 - 2665.0	1.462	31.65	45M9G7D
		16QAM	2521.0 - 2665.0	1.178	30.71	45M8W7D
	40 MHz	π/2 BPSK	2516.0 - 2670.0	1.476	31.69	35M9G7D
		QPSK	2516.0 - 2670.0	1.469	31.67	36M0G7D
		16QAM	2516.0 - 2670.0	1.222	30.87	35M8W7D
	30 MHz	π/2 BPSK	2511.0 - 2675.0	1.459	31.64	27M0G7D
		QPSK	2511.0 - 2675.0	1.455	31.63	27M0G7D
		16QAM	2511.0 - 2675.0	1.271	31.04	27M0W7D
	20 MHz	π/2 BPSK	2506.0 - 2680.0	1.409	31.49	18M0G7D
		QPSK	2506.0 - 2680.0	1.426	31.54	18M0G7D
		16QAM	2506.0 - 2680.0	1.117	30.48	18M1W7D
	15 MHz	π/2 BPSK	2503.5 - 2682.5	1.419	31.52	13M0W7D
		QPSK	2503.5 - 2682.5	1.426	31.54	13M1W7D
		16QAM	2503.5 - 2682.5	1.140	30.57	12M9W7D
	10MHz	π/2 BPSK	2501.0 - 2593.0	1.390	31.43	8M76W7D
		QPSK	2501.0 - 2593.0	1.403	31.47	8M76W7D
		16QAM	2501.0 - 2593.0	1.175	30.70	8M75W7D

Antenna-6						
Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	EIRP		Emission Designator
				Max. Power [W]	Max. Power [dBm]	
NR Band n41(PC2)	100 MHz	π/2 BPSK	2546.0 - 2640.0	1.430	31.55	97M5G7D
		QPSK	2546.0 - 2640.0	1.504	31.77	96M9G7D
		16QAM	2546.0 - 2640.0	1.274	31.05	96M8W7D
	90 MHz	π/2 BPSK	2541.0 - 2645.0	1.507	31.78	87M5G7D
		QPSK	2541.0 - 2645.0	1.517	31.81	87M3G7D
		16QAM	2541.0 - 2645.0	1.186	30.74	87M7W7D
	80 MHz	π/2 BPSK	2536.0 - 2650.0	1.517	31.81	77M5G7D
		QPSK	2536.0 - 2650.0	1.510	31.79	77M8G7D
		16QAM	2536.0 - 2650.0	1.197	30.78	77M7W7D
	70 MHz	π/2 BPSK	2531.0 - 2655.0	1.521	31.82	64M5G7D
		QPSK	2531.0 - 2655.0	1.570	31.96	64M6G7D
		16QAM	2531.0 - 2655.0	1.169	30.68	64M8W7D
	60 MHz	π/2 BPSK	2526.0 - 2660.0	1.552	31.91	58M1G7D
		QPSK	2526.0 - 2660.0	1.607	32.06	58M0G7D
		16QAM	2526.0 - 2660.0	1.282	31.08	58M4W7D
	50 MHz	π/2 BPSK	2521.0 - 2665.0	1.581	31.99	47M2G7D
		QPSK	2521.0 - 2665.0	1.589	32.01	45M9G7D
		16QAM	2521.0 - 2665.0	1.288	31.10	45M8W7D
	40 MHz	π/2 BPSK	2516.0 - 2670.0	1.690	32.28	36M1G7D
		QPSK	2516.0 - 2670.0	1.660	32.20	36M0G7D
		16QAM	2516.0 - 2670.0	1.337	31.26	35M9W7D
	30 MHz	π/2 BPSK	2511.0 - 2675.0	1.644	32.16	26M9G7D
		QPSK	2511.0 - 2675.0	1.675	32.24	26M9G7D
		16QAM	2511.0 - 2675.0	1.358	31.33	27M0W7D
	20 MHz	π/2 BPSK	2506.0 - 2680.0	1.656	32.19	18M0G7D
		QPSK	2506.0 - 2680.0	1.660	32.20	17M9G7D
		16QAM	2506.0 - 2680.0	1.324	31.22	17M9W7D
	15 MHz	π/2 BPSK	2503.5 - 2682.5	1.644	32.16	13M0W7D
		QPSK	2503.5 - 2682.5	1.679	32.25	13M0W7D
		16QAM	2503.5 - 2682.5	1.334	31.25	13M0W7D
	10 MHz	π/2 BPSK	2501.0 - 2593.0	1.644	32.16	8M76W7D
		QPSK	2501.0 - 2593.0	1.596	32.03	8M77W7D
		16QAM	2501.0 - 2593.0	1.282	31.08	8M66W7D
NR Band n41(PC3)	100 MHz	π/2 BPSK	2546.0 - 2640.0	1.297	31.13	96M8G7D
		QPSK	2546.0 - 2640.0	1.301	31.14	96M8G7D
		16QAM	2546.0 - 2640.0	1.048	30.21	96M9W7D
	90 MHz	π/2 BPSK	2541.0 - 2645.0	1.337	31.26	87M2G7D
		QPSK	2541.0 - 2645.0	1.358	31.33	87M1G7D
		16QAM	2541.0 - 2645.0	1.159	30.64	87M2W7D
	80 MHz	π/2 BPSK	2536.0 - 2650.0	1.318	31.20	77M5G7D
		QPSK	2536.0 - 2650.0	1.400	31.46	77M4G7D
		16QAM	2536.0 - 2650.0	1.079	30.33	77M5W7D
	70 MHz	π/2 BPSK	2531.0 - 2655.0	1.377	31.39	64M6G7D
		QPSK	2531.0 - 2655.0	1.377	31.39	64M7G7D
		16QAM	2531.0 - 2655.0	1.148	30.60	64M6W7D
	60 MHz	π/2 BPSK	2526.0 - 2660.0	1.390	31.43	58M3G7D
		QPSK	2526.0 - 2660.0	1.432	31.56	58M2G7D
		16QAM	2526.0 - 2660.0	1.213	30.84	58M2W7D
	50 MHz	π/2 BPSK	2521.0 - 2665.0	1.396	31.45	46M0G7D
		QPSK	2521.0 - 2665.0	1.445	31.60	46M1G7D
		16QAM	2521.0 - 2665.0	1.186	30.74	46M0W7D
	40 MHz	π/2 BPSK	2516.0 - 2670.0	1.489	31.73	35M9G7D
		QPSK	2516.0 - 2670.0	1.449	31.61	36M0G7D
		16QAM	2516.0 - 2670.0	1.205	30.81	35M8W7D
	30 MHz	π/2 BPSK	2511.0 - 2675.0	1.462	31.65	27M0G7D
		QPSK	2511.0 - 2675.0	1.462	31.65	26M9G7D
		16QAM	2511.0 - 2675.0	1.199	30.79	27M0W7D
	20 MHz	π/2 BPSK	2506.0 - 2680.0	1.422	31.53	18M2G7D
		QPSK	2506.0 - 2680.0	1.466	31.66	18M0G7D
		16QAM	2506.0 - 2680.0	1.183	30.73	18M0W7D
	15 MHz	π/2 BPSK	2503.5 - 2682.5	1.462	31.65	13M0W7D
		QPSK	2503.5 - 2682.5	1.476	31.69	13M1W7D
		16QAM	2503.5 - 2682.5	1.222	30.87	13M0W7D
	10MHz	π/2 BPSK	2501.0 - 2593.0	1.439	31.58	8M72W7D
		QPSK	2501.0 - 2593.0	1.409	31.49	8M65W7D
		16QAM	2501.0 - 2593.0	1.164	30.66	8M65W7D

Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	EIRP	
				Max. Power [W]	Max. Power [dBm]
UL-MIMO n41(PC2) PC1.5 Ant 1+6	100 MHz	π/2 BPSK	2546.0 - 2640.0	1.726	32.37
		QPSK	2546.0 - 2640.0	1.710	32.33
		16QAM	2546.0 - 2640.0	1.409	31.49
	90 MHz	π/2 BPSK	2541.0 - 2645.0	1.710	32.33
		QPSK	2541.0 - 2645.0	1.718	32.35
		16QAM	2541.0 - 2645.0	1.413	31.50
	80 MHz	π/2 BPSK	2536.0 - 2650.0	1.762	32.46
		QPSK	2536.0 - 2650.0	1.766	32.47
		16QAM	2536.0 - 2650.0	1.429	31.55
	70 MHz	π/2 BPSK	2531.0 - 2655.0	1.702	32.31
		QPSK	2531.0 - 2655.0	1.742	32.41
		16QAM	2531.0 - 2655.0	1.449	31.61
	60 MHz	π/2 BPSK	2526.0 - 2660.0	1.770	32.48
		QPSK	2526.0 - 2660.0	1.782	32.51
		16QAM	2526.0 - 2660.0	1.400	31.46
	50 MHz	π/2 BPSK	2521.0 - 2665.0	1.746	32.42
		QPSK	2521.0 - 2665.0	1.791	32.53
		16QAM	2521.0 - 2665.0	1.416	31.51
	40 MHz	π/2 BPSK	2516.0 - 2670.0	1.778	32.50
		QPSK	2516.0 - 2670.0	1.854	32.68
		16QAM	2516.0 - 2670.0	1.524	31.83
	30 MHz	π/2 BPSK	2511.0 - 2675.0	1.754	32.44
		QPSK	2511.0 - 2675.0	1.758	32.45
		16QAM	2511.0 - 2675.0	1.426	31.54
	20 MHz	π/2 BPSK	2506.0 - 2680.0	1.730	32.38
		QPSK	2506.0 - 2680.0	1.770	32.48
		16QAM	2506.0 - 2680.0	1.439	31.58
	15 MHz	π/2 BPSK	2503.5 - 2682.5	1.683	32.26
		QPSK	2503.5 - 2682.5	1.722	32.36
		16QAM	2503.5 - 2682.5	1.426	31.54
	10 MHz	π/2 BPSK	2501.0 - 2593.0	1.660	32.20
		QPSK	2501.0 - 2593.0	1.690	32.28
		16QAM	2501.0 - 2593.0	1.340	31.27

1.0 INTRODUCTION

1.1 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.

1.2 Element Test Location

Measurements were conducted at the Element laboratory(ies) indicated in Section 1.3 below. All measurement facilities are compliant with the test site requirements specified in ANSI C63.4-2014 and KDB 414788 D01 v01r01.

1.3 Test Facility / Accreditations

Measurements were performed at Element lab located in Columbia, MD 21046, U.S.A.

- Element Washington DC LLC is an ISO 17025-2017 accredited test facility under the American Association for Laboratory Accreditation (A2LA) with Certificate number 2041.01 for Specific Absorption Rate (SAR), Hearing Aid Compatibility (HAC) testing, where applicable, and Electromagnetic Compatibility (EMC) testing for FCC and Innovation, Science, and Economic Development Canada rules.

- Element Washington DC LLC TCB is a Telecommunication Certification Body (TCB) accredited to ISO/IEC 17065-2012 by A2LA (Certificate number 2041.03) in all scopes of FCC Rules and ISED Standards (RSS).

- Element Washington DC LLC facility is a registered (2451B) test laboratory with the site description on file with ISED.

- Element Washington DC LLC is a Recognized U.S. Certification Assessment Body (CAB # US0110) for ISED Canada as designated by NIST under the U.S. and Canada Mutual Recognition Agreements (MRAs).

2.0 PRODUCT INFORMATION

2.1 Equipment Description

The Equipment Under Test (EUT) is the **Microsoft Corporation Full Modular FCC ID: C3K2114**. 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.

Test Device Serial No.: (004400152020002) EV2#48, EV2#37, EV2#41, EV2#47

2.2 Device Capabilities

This device contains the following capabilities:

850/1700/1900 WCDMA/HSPA, Multi-band LTE, Multi-band 5G NR (FR1)

2.3 Test Configuration

The EUT was tested per the guidance of ANSI C63.26-2015. See Section 7.0 of this test report for a description of the radiated and antenna port conducted emissions tests.

2.4 Software and Firmware

Testing was performed on device(s) using software/firmware version 250129-XXX-de2e260-00452-1 installed on the EUT. LTE Band 41 Antenna 6 (secondary antenna) conducted and radiated results were performed using software/firmware 241217-XXX-3bfdd71-00427-1.

2.5 EMI Suppression Device(s)/Modifications

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

3.0 DESCRIPTION OF TESTS

3.1 Evaluation Procedure

The measurement procedures described in the "American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services" (ANSI C63.26-2015) were used in the measurement of the EUT**.**

Deviation from Measurement Procedure……..None

3.2 Radiated Power and Radiated Spurious Emissions

The radiated test facilities consisted of an indoor 3 meter semi-anechoic chamber used for final measurements and exploratory measurements, when necessary. The measurement area is contained within the semi-anechoic chamber which is shielded from any ambient interference. The test site inside the chamber is a 6m x 5.2m elliptical, obstruction-free area in accordance with Figure 5.7 of Clause 5 in ANSI C63.4-2014. Absorbers are arranged on the floor between the turn table and the antenna mast in such a way so as to maximize the reduction of reflections for measurements above 1GHz. For measurements below 1GHz, the absorbers are removed. A raised turntable is used for radiated measurement. The turn table is a continuously rotatable, remote-controlled, metallic turntable and 2 meters (6.56 ft.) in diameter. The turn table is flush with the raised floor of the chamber in order to maintain its function as a ground plane. An 80cm tall test table made of Styrodur is placed on top of the turn table. A Styrodur pedestal is placed on top of the test table to bring the total table height to 1.5m.

The equipment under test was transmitting while connected to its integral antenna and is placed on a turntable 3 meters from the receive antenna. The receive antenna height is adjusted between 1 and 4 meter height, the turntable is rotated through 360 degrees, and the EUT is manipulated through all orthogonal planes representative of its typical use to achieve the highest reading on the receive spectrum analyzer.

For radiated spurious emissions measurements, the field strength conversion method is used per the formulas in Section 5.2.7 of ANSI C63.26-2015. Field Strength (EIRP) is calculated using the following formulas:

$$E_{[dB\mu V/m]} = \text{Measured amplitude level}_{[dBm]} + 107 + \text{Cable Loss}_{[dB]} + \text{Antenna Factor}_{[dB/m]}$$

And

$$EIRP_{[dBm]} = E_{[dB\mu V/m]} + 20\log D - 104.8;$$ where D is the measurement distance in meters.

All radiated measurements are performed in a chamber that meets the site requirements per ANSI C63.4-2014. Additionally, radiated emissions below 30MHz are also validated on an Open Area Test Site to assert correlation with the chamber measurements per the requirements of KDB 414788 D01 v01r01.

Radiated spurious emission levels are investigated with the receive antenna horizontally and vertically polarized per ANSI C63.26-2015.

4.0 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 (±dB)
Conducted Bench Top Measurements	1.13
Radiated Disturbance (<1GHz)	4.98
Radiated Disturbance (>1GHz)	5.07
Radiated Disturbance (>18GHz)	5.09

Table 4-1. Measurement Uncertainty Budget

5.0 TEST EQUIPMENT CALIBRATION DATA

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

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
-	LTx1	Licensed Transmitter Cable Set	4/2/2024	Annual	4/2/2025	LTx1
-	LTx2	Licensed Transmitter Cable Set	4/2/2024	Annual	4/2/2025	LTx2
-	LTx3	LIcensed Transmitter Cable Set	4/2/2024	Annual	4/2/2025	LTx3
-	WL25-1	Conducted Cable Set (25GHz)	4/2/2024	Annual	4/2/2025	WL25-1
-	WL40-1	Conducted Cable Set (40GHz)	4/2/2024	Annual	4/2/2025	WL40-1
Agilent	N9020A	MXA Signal Analyzer	3/22/2024	Annual	3/22/2025	US46470561
Agilent	N9038A	MXE EMI Receiver	9/16/2024	Annual	9/16/2025	MY51210133
Agilent	N9030A	PXA Signal Analyzer (44GHz)	4/9/2024	Annual	4/9/2025	MY52350166
Anritsu	MT8821C	Radio Communication Analyzer	N/A			6201381794
Anritsu	MT8821C	Radio Communication Analyzer	N/A			6200901190
Emco	3115	Horn Antenna (1-18GHz)	6/7/2024	Biennial	6/7/2026	150693
Espec	ESX-2CA	Environmental Chamber	7/5/2023	Annual	7/5/2025	17620
ETS Lindgren	3164-08	Quad Ridge Horn Antenna	3/29/2023	Biennial	3/29/2025	128337
Keysight Technologies	N9030A	PXA Signal Analyzer (3Hz-26.5GHz)	8/26/2024	Annual	8/26/2025	MY54490576
Keysight Technologies	N9020A	MXA Signal Analyzer	4/11/2024	Annual	4/11/2025	MY54500644
Rohde & Schwarz	CMW500	Radio Communication Tester	N/A			100976
Rohde & Schwarz	CMW500	Radio Communication Tester	N/A			112347
Rohde & Schwarz	CMW500	Radio Communication Tester	N/A			102060
Rohde & Schwarz	ESU26	EMI Test Receiver (26.5GHz)	10/16/2024	Annual	10/16/2025	100342
Rohde & Schwarz	FSW67	Signal / Spectrum Analyzer	2/15/2024	Annual	2/15/2025	103200
Sunol	DRH-118	Horn Antenna (1-18GHz)	2/21/2024	Biennial	2/21/2026	A050307
Sunol	DRH-118	Horn Antenna (1-18 GHz)	2/13/2024	Biennial	2/13/2026	A042511
Sunol	JB5	Bi-Log Antenna (30M - 5GHz)	9/11/2024	Biennial	9/11/2026	A051107

Table 5-1. Test Equipment Calibration Table

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. Equipment with a calibration date of “N/A” shown in this list was not used to make direct calibrated measurements.

6.0 SAMPLE EMISSION DESIGNATORS

QPSK Modulation

Emission Designator = 8M62G7D
LTE BW = 8.62 MHz
G = Phase Modulation
7 = Quantized/Digital Info
D = Data transmission, telemetry, telecommand

QAM Modulation

Emission Designator = 8M45W7D
LTE BW = 8.45 MHz
W = Amplitude/Angle Modulated
7 = Quantized/Digital Info
D = Data transmission, telemetry, telecommand

7.0 TEST RESULTS

7.1 Summary

Company Name: Microsoft Corporation

FCC ID: C3K2114

FCC Classification: PCS Licensed Transmitter (PCB)

Mode(s): LTE/NR/ULCA

Test Condition	Test Description	FCC Part Section(s)	Test Limit	Test Result	Reference
CONDUCTED	Transmitter Conducted Output Power*	2.1046(a), 2.1046(c)	N/A	PASS	Section 7.2
	Equivalent Isotropic Radiated Power (LTE Band 30; NR Band n30)	27.50(a)(3)	≤ 250mW / 5MHz max. EIRP	PASS	Section 7.2
	Equivalent Isotropic Radiated Power (LTE Band 38, 41; NR Band n41)	27.50(h)(2)	≤ 2 Watts max. EIRP	PASS	Section 7.2
	Occupied Bandwidth	2.1049(h)	N/A	PASS	Section 7.3
	Conducted Band Edge / Spurious Emissions (LTE Band 30; NR Band n30)	2.1051, 27.53(a)(4)	Undesirable emissions must meet the limits detailed in 27.53(a)(4)	PASS	Sections 7.4, 7.5
	Conducted Band Edge / Spurious Emissions (LTE Band 38, 41; NR Band n41)	2.1051, 27.53(m)(4)	Undesirable emissions must meet the limits detailed in 27.53(m)(4)	PASS	Sections 7.4, 7.5
	Frequency Stability	2.1055, 27.54	Fundamental emissions stay within authorized frequency block	PASS	Section 7.7
RADIATED	Radiated Spurious Emissions (LTE Band 30; NR Band n30)	2.1053, 27.53(a)(4)	Undesirable emissions must meet the limits detailed in 27.53(a)(4)	PASS	Section 7.6
	Radiated Spurious Emissions (LTE Band 38, 41; NR Band n41)	2.1053, 27.53(m)	Undesirable emissions must meet the limits detailed in 27.53(m)	PASS	Section 7.6

Table 7-1. 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. The correction table was used to account for the losses of the cables, directional couplers, and attenuators used as part of the system to maintain a link between the call box and the EUT at all frequencies of interest.
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, attenuators, and couplers.
4) All conducted emissions measurements are performed with automated test software to capture the corresponding plots necessary to show compliance. The measurement software utilized is EMC Software Tool v2.3.0.

7.2 Conducted Output Power Data and EIRP

Test Overview

All emissions are measured with a callbox connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst-case configuration. All modes of operation were investigated and the worst-case configuration results are reported in this section.

A-MPR is implemented in this device when operating at Power Class 2 in LTE Band 41 per the A-MPR specification in 3GPP TS 36.101. The conducted powers are shown herein to cover the different A-MPR levels specified in the standard. Measurement equipment was set up with triggering/gating on the spectrum analyzer such that powers were measured only during the on-time of the signal.

Test Setup

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

Figure 7-1. Test Instrument & Measurement Setup

Test Notes

1. Uplink carrier aggregation is only supported in this EUT while operating in Power Class 3.

2. Conducted power measurements were evaluated using various combinations of RB size, RB offset, modulation, and channel bandwidth. Channel bandwidth data is shown in the tables below based only on the channel bandwidths that were supported in this device.

3. EIRP is calculated using conducted power and antenna gain.

4. Conducted power was found to reduce for the higher order QAM modulations when compared to 16QAM. Due to this trend, only the worst-case QAM (16QAM) powers are included in this section.

5. For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) were investigated to determine the worst case configuration. All modes of operation were investigated and the worst-case configuration results are reported in this section.

Power State	Band	Bandwidth (PCC + SCC)	PCC					SCC					ULCA Tx. Power [dBm]
			Modulation	UL Channel	UL Frequency	UL # RB	UL RB Offset	Modulation	UL Channel	UL Frequency	UL # RB	UL RB Offset	
Max	LTE B41 (PC3)	20MHz + 20MHz	QPSK	39750	2506.0	1	99	QPSK	39948	2525.8	1	0	24.95
				40620	2593.0	1	99		40818	2612.8	1	0	25.15
				41490	2680.0	1	0		41292	2660.2	1	99	24.82
			QPSK	40620	2593	100	0	QPSK	40818	2612.8	100	0	22.59
			16-QAM	40620	2593	100	0	16-QAM	40818	2612.8	100	0	21.65
			64-QAM	40620	2593	100	0	64-QAM	40818	2612.8	100	0	21.60
			256-QAM	40620	2593	100	0	256-QAM	40818	2612.8	100	0	19.63

Table 7-2. Conducted Power Data (ULCA LTE B41(PC3) – Ant1)

Band	Bandwidth (PCC + SCC)	Test Case	PCC					SCC					MPR [dB]	MPR	A-MPR [dB]	A-MPR	Max Target Output Power [dBm]	A-MPR Measured Power [dBm]
			UL Channel	UL Frequency	Modulation	UL # RB	UL RB Offset	UL Channel	UL Frequency	Modulation	UL # RB	UL RB Offset						
LTE B41 (PC3)	20MHz + 20MHz	1	39750	2506.0	QPSK	100	0	39948	2525.8	QPSK	100	0	0	0	≤5	5	26.0	21.66
					16-QAM	100	0			16-QAM	100	0	≤1	1		5	25.0	20.56
					64-QAM	100	0			64-QAM	100	0	≤2	2		5	24.0	20.53
					256-QAM	100	0			256-QAM	100	0	≤4	4		5	22.0	19.63
		2	39750	2506.0	QPSK	1	99	39948	2525.8	QPSK	1	0	0	0	≤0	0	26.0	25.21
					16-QAM	1	99			16-QAM	1	0	≤1	1		0	25.0	23.33
					64-QAM	1	99			64-QAM	1	0	≤2	2		0	24.0	22.31
					256-QAM	1	99			256-QAM	1	0	≤4	4		0	22.0	19.63
		3	39790	2510.0	QPSK	100	0	39988	2529.8	QPSK	100	0	0	0	≤5	5	26.0	21.65
					16-QAM	100	0			16-QAM	100	0	≤1	1		5	25.0	20.60
					64-QAM	100	0			64-QAM	100	0	≤2	2		5	24.0	20.58
					256-QAM	100	0			256-QAM	100	0	≤4	4		5	22.0	19.63
		4	39790	2510.0	QPSK	1	99	39988	2529.8	QPSK	1	0	0	0	≤0	0	26.0	25.21
					16-QAM	1	99			16-QAM	1	0	≤1	1		0	25.0	23.46
					64-QAM	1	99			64-QAM	1	0	≤2	2		0	24.0	22.47
					256-QAM	1	99			256-QAM	1	0	≤4	4		0	22.0	18.98
		5	39989	2529.9	QPSK	100	0	40187	2549.7	QPSK	100	0	0	0	≤0	0	26.0	21.70
					16-QAM	100	0			16-QAM	100	0	≤1	1		0	25.0	20.70
					64-QAM	100	0			64-QAM	100	0	≤2	2		0	24.0	20.66
					256-QAM	100	0			256-QAM	100	0	≤4	4		0	22.0	19.67
		6	39989	2529.9	QPSK	1	99	40187	2549.7	QPSK	1	0	0	0	≤0	0	26.0	25.27
					16-QAM	1	99			16-QAM	1	0	≤1	1		0	25.0	23.37
					64-QAM	1	99			64-QAM	1	0	≤2	2		0	24.0	22.32
					256-QAM	1	99			256-QAM	1	0	≤4	4		0	22.0	19.27

Table 7-3. A-MPR Conducted Power Data (LTE ULCA Band 41(PC3) – Ant1)

Bandwidth	Modulation	MCC	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
10 MHz	QPSK	310	27710	2310.0	50/0	19.06
	QPSK	310	27710	2310.0	1/0	18.91
	QPSK	310	27710	2310.0	1/25	23.23
	QPSK	310	27710	2310.0	1/49	19.18

Table 7-4. A-MPR Conducted Power Data (LTE Band 30 – Ant1)

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]	Ant Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
10 MHz	QPSK	27710	2310.0	1 / 25	23.23	-0.10	23.13	0.205	23.98	-0.85
	16-QAM	27710	2310.0	1 / 25	22.37	-0.10	22.27	0.169	23.98	-1.71
5 MHz	QPSK	27685	2307.5	1 / 12	23.15	-0.10	23.05	0.202	23.98	-0.93
		27710	2310.0	1 / 12	23.12	-0.10	23.02	0.200	23.98	-0.96
		27735	2312.5	1 / 12	23.11	-0.10	23.01	0.200	23.98	-0.97
	16-QAM	27710	2310.0	1 / 12	22.71	-0.10	22.61	0.182	23.98	-1.37

Table 7-5. EIRP Data (LTE Band 30 – Ant1)

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]	Ant Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
20 MHz	QPSK	39750	2506.0	1 / 0	25.70	6.00	31.70	1.48	33.01	-1.31
		40620	2593.0	1 / 0	25.90	6.00	31.90	1.55	33.01	-1.11
		41490	2680.0	1 / 0	25.79	6.00	31.79	1.51	33.01	-1.22
	16-QAM	41490	2680.0	1 / 50	25.51	6.00	31.51	1.42	33.01	-1.50
15 MHz	QPSK	39725	2503.5	1 / 37	25.74	6.00	31.74	1.49	33.01	-1.27
		40620	2593.0	1 / 0	25.80	6.00	31.80	1.51	33.01	-1.21
		41515	2682.5	1 / 0	25.59	6.00	31.59	1.44	33.01	-1.42
	16-QAM	40620	2593.0	1 / 37	25.12	6.00	31.12	1.29	33.01	-1.89
10 MHz	QPSK	39700	2501.0	1 / 49	25.85	6.00	31.85	1.53	33.01	-1.16
		40620	2593.0	1 / 0	26.04	6.00	32.04	1.60	33.01	-0.97
		41540	2685.0	1 / 0	25.66	6.00	31.66	1.47	33.01	-1.35
	16-QAM	40620	2593.0	1 / 25	25.19	6.00	31.19	1.32	33.01	-1.82
5 MHz	QPSK	39675	2498.5	1 / 12	25.93	6.00	31.93	1.56	33.01	-1.08
		40620	2593.0	1 / 12	26.00	6.00	32.00	1.58	33.01	-1.01
		41565	2687.5	1 / 12	25.62	6.00	31.62	1.45	33.01	-1.39
	16-QAM	40620	2593.0	1 / 12	25.21	6.00	31.21	1.32	33.01	-1.80

Table 7-6. Conducted Power and EIRP Data (LTE Band 41(PC2) – Ant1)

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]	Ant Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
20 MHz	QPSK	39750	2506.0	1 / 0	23.54	7.50	31.04	1.271	33.01	-1.97
		40620	2593.0	1 / 0	23.84	7.50	31.34	1.361	33.01	-1.67
		41490	2680.0	1 / 0	23.69	7.50	31.19	1.315	33.01	-1.82
	16-QAM	40620	2593.0	1 / 0	22.78	7.50	30.28	1.067	33.01	-2.73
15 MHz	QPSK	39725	2503.5	1 / 0	23.52	7.50	31.02	1.265	33.01	-1.99
		40620	2593.0	1 / 37	23.80	7.50	31.30	1.349	33.01	-1.71
		41515	2682.5	1 / 0	23.53	7.50	31.03	1.268	33.01	-1.98
	16-QAM	40620	2593.0	1 / 74	22.79	7.50	30.29	1.069	33.01	-2.72
10 MHz	QPSK	39700	2501.0	1 / 25	23.64	7.50	31.14	1.300	33.01	-1.87
		40620	2593.0	1 / 25	23.95	7.50	31.45	1.396	33.01	-1.56
		41540	2685.0	1 / 25	23.64	7.50	31.14	1.300	33.01	-1.87
	16-QAM	40620	2593.0	1 / 25	22.95	7.50	30.45	1.109	33.01	-2.56
5 MHz	QPSK	39675	2498.5	1 / 12	23.65	7.50	31.15	1.303	33.01	-1.86
		40620	2593.0	1 / 12	23.92	7.50	31.42	1.387	33.01	-1.59
		41565	2687.5	1 / 12	23.62	7.50	31.12	1.294	33.01	-1.89
	16-QAM	40620	2593.0	1 / 12	22.93	7.50	30.43	1.104	33.01	-2.58

Table 7-7. Conducted Power and EIRP Data (LTE Band 41(PC3)/38 – Ant1)

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]	Ant Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
10 MHz	π/2 BPSK	27710	2310.0	1 / 26	23.17	-0.10	23.07	0.203	23.98	-0.91
	QPSK	27710	2310.0	1 / 50	23.19	-0.10	23.09	0.203	23.98	-0.89
	16-QAM	27710	2310.0	1 / 50	22.57	-0.10	22.47	0.176	23.98	-1.51
5 MHz	π/2 BPSK	27685	2307.5	1 / 12	23.08	-0.10	22.98	0.198	23.98	-1.00
		27710	2310.0	1 / 1	23.24	-0.10	23.14	0.206	23.98	-0.84
		27735	2312.5	1 / 23	23.07	-0.10	22.97	0.198	23.98	-1.01
	QPSK	27685	2307.5	1 / 23	22.98	-0.10	22.88	0.194	23.98	-1.10
		27710	2310.0	1 / 1	23.04	-0.10	22.94	0.197	23.98	-1.04
		27735	2312.5	1 / 1	22.92	-0.10	22.82	0.192	23.98	-1.16
	16-QAM	27685	2307.5	1 / 23	22.32	-0.10	22.22	0.167	23.98	-1.75

Table 7-8. Conducted Power and EIRP Data (NR Band n30 – Ant1)

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]	Ant Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
100 MHz	π/2 BPSK	509202	2546.01	1 / 136	25.86	6.00	31.86	1.536	33.01	-1.15
		518598	2592.99	1 / 136	25.88	6.00	31.88	1.543	33.01	-1.13
		528000	2640.00	1 / 136	25.93	6.00	31.93	1.561	33.01	-1.08
	QPSK	509202	2546.01	1 / 136	24.43	6.00	30.43	1.104	33.01	-2.58
		518598	2592.99	1 / 136	25.63	6.00	31.63	1.456	33.01	-1.38
		528000	2640.00	1 / 136	26.02	6.00	32.02	1.591	33.01	-0.99
	16-QAM	528000	2640.00	1 / 136	24.85	6.00	30.85	1.217	33.01	-2.16
90 MHz	π/2 BPSK	508200	2541.00	1 / 122	25.85	6.00	31.85	1.531	33.01	-1.16
		518598	2592.99	1 / 122	25.73	6.00	31.73	1.490	33.01	-1.28
		528996	2644.98	1 / 122	25.91	6.00	31.91	1.553	33.01	-1.10
	QPSK	508200	2541.00	1 / 122	25.78	6.00	31.78	1.506	33.01	-1.23
		518598	2592.99	1 / 122	25.74	6.00	31.74	1.493	33.01	-1.27
		528996	2644.98	1 / 122	25.82	6.00	31.82	1.519	33.01	-1.20
	16-QAM	528996	2644.98	1 / 122	25.02	6.00	31.02	1.264	33.01	-1.99
80 MHz	π/2 BPSK	507204	2536.02	1 / 215	25.73	6.00	31.73	1.490	33.01	-1.28
		518598	2592.99	1 / 1	25.92	6.00	31.92	1.557	33.01	-1.09
		529998	2649.99	1 / 108	25.92	6.00	31.92	1.554	33.01	-1.09
	QPSK	507204	2536.02	1 / 215	25.72	6.00	31.72	1.484	33.01	-1.30
		518598	2592.99	1 / 215	25.86	6.00	31.86	1.534	33.01	-1.15
		529998	2649.99	1 / 108	26.10	6.00	32.10	1.620	33.01	-0.92
	16-QAM	518598	2592.99	1 / 1	25.18	6.00	31.18	1.313	33.01	-1.83
70 MHz	π/2 BPSK	506202	2531.01	1 / 187	25.95	6.00	31.95	1.565	33.01	-1.07
		518598	2592.99	1 / 1	25.94	6.00	31.94	1.564	33.01	-1.07
		531000	2655.00	1 / 94	25.96	6.00	31.96	1.571	33.01	-1.05
	QPSK	506202	2531.01	1 / 187	25.85	6.00	31.85	1.531	33.01	-1.16
		518598	2592.99	1 / 187	25.85	6.00	31.85	1.531	33.01	-1.16
		531000	2655.00	1 / 94	25.94	6.00	31.94	1.562	33.01	-1.07
	16-QAM	506202	2531.01	1 / 94	25.07	6.00	31.07	1.279	33.01	-1.94
60 MHz	π/2 BPSK	505200	2526.00	1 / 160	26.09	6.00	32.09	1.618	33.01	-0.92
		518598	2592.99	1 / 1	26.15	6.00	32.15	1.641	33.01	-0.86
		531996	2659.98	1 / 81	26.14	6.00	32.14	1.637	33.01	-0.87
	QPSK	505200	2526.00	1 / 160	26.11	6.00	32.11	1.626	33.01	-0.90
		518598	2592.99	1 / 1	26.24	6.00	32.24	1.675	33.01	-0.77
		531996	2659.98	1 / 81	26.33	6.00	32.33	1.710	33.01	-0.68
	16-QAM	505200	2526.00	1 / 160	25.30	6.00	31.30	1.349	33.01	-1.71
50 MHz	π/2 BPSK	504204	2521.02	1 / 131	26.09	6.00	32.09	1.618	33.01	-0.92
		518598	2592.99	1 / 1	26.07	6.00	32.07	1.611	33.01	-0.94
		532998	2664.99	1 / 66	26.22	6.00	32.22	1.667	33.01	-0.79
	QPSK	504204	2521.02	1 / 131	26.22	6.00	32.22	1.667	33.01	-0.79
		518598	2592.99	1 / 1	26.22	6.00	32.22	1.667	33.01	-0.79
		532998	2664.99	1 / 66	26.13	6.00	32.13	1.633	33.01	-0.88
	16-QAM	532998	2664.99	1 / 66	25.18	6.00	31.18	1.312	33.01	-1.83
40 MHz	π/2 BPSK	503202	2516.01	1 / 104	26.14	6.00	32.14	1.637	33.01	-0.87
		518598	2592.99	1 / 1	26.20	6.00	32.20	1.660	33.01	-0.81
		534000	2670.00	1 / 1	26.30	6.00	32.30	1.698	33.01	-0.71
	QPSK	503202	2516.01	1 / 104	26.22	6.00	32.22	1.667	33.01	-0.79
		518598	2592.99	1 / 1	26.29	6.00	32.29	1.694	33.01	-0.72
		534000	2670.00	1 / 1	26.34	6.00	32.34	1.714	33.01	-0.67
	16-QAM	534000	2670.00	1 / 1	25.38	6.00	31.38	1.374	33.01	-1.63
30 MHz	π/2 BPSK	502200	2511.00	1 / 76	26.23	6.00	32.23	1.671	33.01	-0.78
		518598	2592.99	1 / 1	26.15	6.00	32.15	1.641	33.01	-0.86
		534996	2674.98	1 / 1	26.21	6.00	32.21	1.663	33.01	-0.80
	QPSK	502200	2511.00	1 / 76	26.12	6.00	32.12	1.629	33.01	-0.89
		518598	2592.99	1 / 1	26.16	6.00	32.16	1.644	33.01	-0.85
		534996	2674.98	1 / 1	26.23	6.00	32.23	1.671	33.01	-0.78
	16-QAM	534996	2674.98	1 / 1	25.04	6.00	31.04	1.271	33.01	-1.97
20 MHz	π/2 BPSK	501204	2506.02	1 / 49	26.06	6.00	32.06	1.607	33.01	-0.95
		518598	2592.99	1 / 1	26.07	6.00	32.07	1.611	33.01	-0.94
		535998	2679.99	1 / 1	26.06	6.00	32.06	1.607	33.01	-0.95
	QPSK	501204	2506.02	1 / 49	26.11	6.00	32.11	1.626	33.01	-0.90
		518598	2592.99	1 / 25	26.08	6.00	32.08	1.614	33.01	-0.93
		535998	2679.99	1 / 1	26.11	6.00	32.11	1.626	33.01	-0.90
	16-QAM	535998	2679.99	1 / 1	25.33	6.00	31.33	1.358	33.01	-1.68
15 MHz	π/2 BPSK	500700	2503.50	1 / 36	26.15	6.00	32.15	1.641	33.01	-0.86
		518598	2592.99	1 / 36	26.19	6.00	32.19	1.656	33.01	-0.82
		536496	2682.48	1 / 1	26.05	6.00	32.05	1.603	33.01	-0.96
	QPSK	500700	2503.50	1 / 36	26.05	6.00	32.05	1.603	33.01	-0.96
		518598	2592.99	1 / 19	26.19	6.00	32.19	1.656	33.01	-0.82
		536496	2682.48	1 / 1	26.13	6.00	32.13	1.633	33.01	-0.88
	16-QAM	500700	2503.50	1 / 36	25.07	6.00	31.07	1.279	33.01	-1.94
10 MHz	π/2 BPSK	500202	2501.01	1 / 22	26.00	6.00	32.00	1.585	33.01	-1.01
		518598	2592.99	1 / 1	26.12	6.00	32.12	1.629	33.01	-0.89
		537000	2685.00	1 / 1	25.95	6.00	31.95	1.567	33.01	-1.06
	QPSK	500202	2501.01	1 / 1	25.98	6.00	31.98	1.578	33.01	-1.03
		518598	2592.99	1 / 22	26.03	6.00	32.03	1.596	33.01	-0.98
		537000	2685.00	1 / 1	25.90	6.00	31.90	1.549	33.01	-1.11
	16-QAM	537000	2685.00	1 / 12	25.32	6.00	31.32	1.355	33.01	-1.69

Table 7-9. Conducted Power and EIRP Data (NR Band n41PC2 – Ant1)

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]	Ant Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
100 MHz	π/2 BPSK	509202	2546.01	1 / 136	23.73	7.50	31.23	1.326	33.01	-1.78
		518598	2592.99	1 / 271	23.73	7.50	31.23	1.326	33.01	-1.78
		528000	2640.00	1 / 136	23.73	7.50	31.23	1.326	33.01	-1.78
	QPSK	509202	2546.01	1 / 136	23.70	7.50	31.20	1.318	33.01	-1.81
		518598	2592.99	1 / 271	23.75	7.50	31.25	1.333	33.01	-1.76
		528000	2640.00	1 / 136	23.85	7.50	31.35	1.365	33.01	-1.66
	16-QAM	528000	2640.00	1 / 136	22.87	7.50	30.37	1.089	33.01	-2.64
90 MHz	π/2 BPSK	508200	2541.00	1 / 243	23.88	7.50	31.38	1.374	33.01	-1.63
		518598	2592.99	1 / 1	23.87	7.50	31.37	1.371	33.01	-1.64
		528996	2644.98	1 / 122	23.81	7.50	31.31	1.352	33.01	-1.70
	QPSK	508200	2541.00	1 / 122	23.83	7.50	31.33	1.358	33.01	-1.68
		518598	2592.99	1 / 1	23.87	7.50	31.37	1.371	33.01	-1.64
		528996	2644.98	1 / 122	23.89	7.50	31.39	1.377	33.01	-1.62
	16-QAM	518598	2592.99	1 / 1	22.80	7.50	30.30	1.072	33.01	-2.71
80 MHz	π/2 BPSK	507204	2536.02	1 / 215	23.81	7.50	31.31	1.352	33.01	-1.70
		518598	2592.99	1 / 1	23.85	7.50	31.35	1.365	33.01	-1.66
		529998	2649.99	1 / 108	23.90	7.50	31.40	1.380	33.01	-1.61
	QPSK	507204	2536.02	1 / 215	23.77	7.50	31.27	1.340	33.01	-1.74
		518598	2592.99	1 / 1	23.95	7.50	31.45	1.396	33.01	-1.56
		529998	2649.99	1 / 108	23.98	7.50	31.48	1.406	33.01	-1.53
	16-QAM	529998	2649.99	1 / 108	22.92	7.50	30.42	1.102	33.01	-2.59
70 MHz	π/2 BPSK	506202	2531.01	1 / 187	23.75	7.50	31.25	1.334	33.01	-1.76
		518598	2592.99	1 / 1	23.92	7.50	31.42	1.387	33.01	-1.59
		531000	2655.00	1 / 94	23.87	7.50	31.37	1.371	33.01	-1.64
	QPSK	506202	2531.01	1 / 187	23.78	7.50	31.28	1.343	33.01	-1.73
		518598	2592.99	1 / 1	23.93	7.50	31.43	1.390	33.01	-1.58
		531000	2655.00	1 / 94	23.93	7.50	31.43	1.390	33.01	-1.58
	16-QAM	518598	2592.99	1 / 1	23.12	7.50	30.62	1.153	33.01	-2.39
60 MHz	π/2 BPSK	505200	2526.00	1 / 160	23.92	7.50	31.42	1.387	33.01	-1.59
		518598	2592.99	1 / 1	24.02	7.50	31.52	1.419	33.01	-1.49
		531996	2659.98	1 / 81	24.03	7.50	31.53	1.422	33.01	-1.48
	QPSK	505200	2526.00	1 / 160	23.99	7.50	31.49	1.409	33.01	-1.52
		518598	2592.99	1 / 1	24.01	7.50	31.51	1.416	33.01	-1.50
		531996	2659.98	1 / 81	23.97	7.50	31.47	1.403	33.01	-1.54
	16-QAM	531996	2659.98	1 / 81	23.15	7.50	30.65	1.161	33.01	-2.36
50 MHz	π/2 BPSK	504204	2521.02	1 / 131	23.95	7.50	31.45	1.396	33.01	-1.56
		518598	2592.99	1 / 1	24.01	7.50	31.51	1.416	33.01	-1.50
		532998	2664.99	1 / 1	24.07	7.50	31.57	1.435	33.01	-1.44
	QPSK	504204	2521.02	1 / 131	23.94	7.50	31.44	1.393	33.01	-1.57
		518598	2592.99	1 / 1	24.15	7.50	31.65	1.462	33.01	-1.36
		532998	2664.99	1 / 1	24.12	7.50	31.62	1.452	33.01	-1.39
	16-QAM	532998	2664.99	1 / 1	23.21	7.50	30.71	1.178	33.01	-2.30
40 MHz	π/2 BPSK	503202	2516.01	1 / 104	24.01	7.50	31.51	1.416	33.01	-1.50
		518598	2592.99	1 / 1	24.06	7.50	31.56	1.432	33.01	-1.45
		534000	2670.00	1 / 1	24.19	7.50	31.69	1.476	33.01	-1.32
	QPSK	503202	2516.01	1 / 104	24.04	7.50	31.54	1.426	33.01	-1.47
		518598	2592.99	1 / 1	24.11	7.50	31.61	1.449	33.01	-1.40
		534000	2670.00	1 / 1	24.17	7.50	31.67	1.469	33.01	-1.34
	16-QAM	534000	2670.00	1 / 1	23.37	7.50	30.87	1.222	33.01	-2.14
30 MHz	π/2 BPSK	502200	2511.00	1 / 76	24.10	7.50	31.60	1.445	33.01	-1.41
		518598	2592.99	1 / 1	24.01	7.50	31.51	1.416	33.01	-1.50
		534996	2674.98	1 / 1	24.14	7.50	31.64	1.459	33.01	-1.37
	QPSK	502200	2511.00	1 / 76	24.13	7.50	31.63	1.455	33.01	-1.38
		518598	2592.99	1 / 1	24.03	7.50	31.53	1.422	33.01	-1.48
		534996	2674.98	1 / 1	24.10	7.50	31.60	1.445	33.01	-1.41
	16-QAM	534996	2674.98	1 / 1	23.54	7.50	31.04	1.271	33.01	-1.97
20 MHz	π/2 BPSK	501204	2506.02	1 / 49	23.95	7.50	31.45	1.396	33.01	-1.56
		518598	2592.99	1 / 1	23.99	7.50	31.49	1.409	33.01	-1.52
		535998	2679.99	1 / 1	23.92	7.50	31.42	1.387	33.01	-1.59
	QPSK	501204	2506.02	1 / 49	23.95	7.50	31.45	1.396	33.01	-1.56
		518598	2592.99	1 / 1	24.04	7.50	31.54	1.426	33.01	-1.47
		535998	2679.99	1 / 1	23.99	7.50	31.49	1.409	33.01	-1.52
	16-QAM	501204	2506.02	1 / 49	22.98	7.50	30.48	1.117	33.01	-2.53
15 MHz	π/2 BPSK	500700	2503.50	1 / 36	23.99	7.50	31.49	1.409	33.01	-1.52
		518598	2592.99	1 / 36	23.98	7.50	31.48	1.406	33.01	-1.53
		536496	2682.48	1 / 1	24.02	7.50	31.52	1.419	33.01	-1.49
	QPSK	500700	2503.50	1 / 36	24.04	7.50	31.54	1.426	33.01	-1.47
		518598	2592.99	1 / 1	24.03	7.50	31.53	1.422	33.01	-1.48
		536496	2682.48	1 / 1	23.91	7.50	31.41	1.384	33.01	-1.60
	16-QAM	518598	2592.99	1 / 1	23.07	7.50	30.57	1.140	33.01	-2.44
10 MHz	π/2 BPSK	500202	2501.01	1 / 22	23.93	7.50	31.43	1.390	33.01	-1.58
		518598	2592.99	1 / 1	23.85	7.50	31.35	1.365	33.01	-1.66
		537000	2685.00	1 / 22	23.77	7.50	31.27	1.340	33.01	-1.74
	QPSK	500202	2501.01	1 / 22	23.97	7.50	31.47	1.403	33.01	-1.54
		518598	2592.99	1 / 12	23.86	7.50	31.36	1.368	33.01	-1.65
		537000	2685.00	1 / 1	23.85	7.50	31.35	1.365	33.01	-1.66
	16-QAM	537000	2685.00	1 / 1	23.20	7.50	30.70	1.175	33.01	-2.31

Table 7-10. Conducted Power and EIRP Data (NR Band n41PC3 – Ant1)

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]	Ant Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
20 MHz	QPSK	39750	2506.0	1 / 50	25.54	6.00	31.54	1.426	33.01	-1.47
		40620	2593.0	1 / 0	25.50	6.00	31.50	1.413	33.01	-1.51
		41490	2680.0	1 / 0	25.73	6.00	31.73	1.489	33.01	-1.28
	16-QAM	41490	2680.0	1 / 50	25.20	6.00	31.20	1.318	33.01	-1.81
15 MHz	QPSK	39725	2503.5	1 / 0	25.43	6.00	31.43	1.390	33.01	-1.58
		40620	2593.0	1 / 37	25.50	6.00	31.50	1.413	33.01	-1.51
		41515	2682.5	1 / 0	25.64	6.00	31.64	1.459	33.01	-1.37
	16-QAM	39725	2503.5	1 / 37	24.91	6.00	30.91	1.233	33.01	-2.10
10 MHz	QPSK	39700	2501.0	1 / 25	25.64	6.00	31.64	1.459	33.01	-1.37
		40620	2593.0	1 / 0	25.48	6.00	31.48	1.406	33.01	-1.53
		41540	2685.0	1 / 0	25.74	6.00	31.74	1.493	33.01	-1.27
	16-QAM	41540	2685.0	1 / 25	24.96	6.00	30.96	1.247	33.01	-2.05
5 MHz	QPSK	39675	2498.5	1 / 12	25.66	6.00	31.66	1.466	33.01	-1.35
		40620	2593.0	1 / 12	25.54	6.00	31.54	1.426	33.01	-1.47
		41565	2687.5	1 / 12	25.71	6.00	31.71	1.483	33.01	-1.30
	16-QAM	39675	2498.5	1 / 12	24.98	6.00	30.98	1.253	33.01	-2.03

Table 7-11. Conducted Power and EIRP Data (LTE Band 41(PC2) – Ant6)

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]	Ant Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
20 MHz	QPSK	39750	2506.0	1 / 50	23.53	7.50	31.03	1.268	33.01	-1.98
		40620	2593.0	1 / 0	23.45	7.50	30.95	1.245	33.01	-2.06
		41490	2680.0	1 / 0	23.73	7.50	31.23	1.327	33.01	-1.78
	16-QAM	41490	2680.0	1 / 0	22.66	7.50	30.16	1.038	33.01	-2.85
15 MHz	QPSK	39725	2503.5	1 / 37	23.51	7.50	31.01	1.262	33.01	-2.00
		40620	2593.0	1 / 74	23.41	7.50	30.91	1.233	33.01	-2.10
		41515	2682.5	1 / 0	23.67	7.50	31.17	1.309	33.01	-1.84
	16-QAM	41515	2682.5	1 / 37	22.69	7.50	30.19	1.045	33.01	-2.82
10 MHz	QPSK	39700	2501.0	1 / 25	23.68	7.50	31.18	1.312	33.01	-1.83
		40620	2593.0	1 / 25	23.57	7.50	31.07	1.279	33.01	-1.94
		41540	2685.0	1 / 25	23.64	7.50	31.14	1.300	33.01	-1.87
	16-QAM	39700	2501.0	1 / 25	22.73	7.50	30.23	1.054	33.01	-2.78
5 MHz	QPSK	39675	2498.5	1 / 12	23.67	7.50	31.17	1.309	33.01	-1.84
		40620	2593.0	1 / 12	23.59	7.50	31.09	1.285	33.01	-1.92
		41565	2687.5	1 / 12	23.69	7.50	31.19	1.315	33.01	-1.82
	16-QAM	39675	2498.5	1 / 12	22.78	7.50	30.28	1.067	33.01	-2.73

Table 7-12. Conducted Power and EIRP Data (LTE Band 41(PC3)/38 – Ant6)

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]	Ant Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
100 MHz	π/2 BPSK	509202	2546.01	1 / 136	25.55	6.00	31.55	1.430	33.01	-1.46
		518598	2592.99	1 / 136	25.55	6.00	31.55	1.430	33.01	-1.46
		528000	2640.00	1 / 136	25.55	6.00	31.55	1.428	33.01	-1.46
	QPSK	509202	2546.01	1 / 136	25.54	6.00	31.54	1.426	33.01	-1.47
		518598	2592.99	1 / 136	25.77	6.00	31.77	1.504	33.01	-1.24
		528000	2640.00	1 / 136	25.55	6.00	31.55	1.430	33.01	-1.46
	16-QAM	518598	2592.99	1 / 136	25.05	6.00	31.05	1.274	33.01	-1.96
90 MHz	π/2 BPSK	508200	2541.00	1 / 1	25.78	6.00	31.78	1.507	33.01	-1.23
		518598	2592.99	1 / 243	25.68	6.00	31.68	1.472	33.01	-1.33
		528996	2644.98	1 / 243	25.67	6.00	31.67	1.469	33.01	-1.34
	QPSK	508200	2541.00	1 / 1	25.81	6.00	31.81	1.517	33.01	-1.20
		518598	2592.99	1 / 243	25.63	6.00	31.63	1.455	33.01	-1.38
		528996	2644.98	1 / 122	25.61	6.00	31.61	1.449	33.01	-1.40
	16-QAM	508200	2541.00	1 / 1	24.74	6.00	30.74	1.186	33.01	-2.27
80 MHz	π/2 BPSK	507204	2536.02	1 / 1	25.81	6.00	31.81	1.517	33.01	-1.20
		518598	2592.99	1 / 215	25.67	6.00	31.67	1.469	33.01	-1.34
		529998	2649.99	1 / 108	25.70	6.00	31.70	1.479	33.01	-1.31
	QPSK	507204	2536.02	1 / 1	25.79	6.00	31.79	1.510	33.01	-1.22
		518598	2592.99	1 / 108	25.64	6.00	31.64	1.459	33.01	-1.37
		529998	2649.99	1 / 108	25.64	6.00	31.64	1.459	33.01	-1.37
	16-QAM	507204	2536.02	1 / 1	24.78	6.00	30.78	1.197	33.01	-2.23
70 MHz	π/2 BPSK	506202	2531.01	1 / 1	25.82	6.00	31.82	1.521	33.01	-1.19
		518598	2592.99	1 / 1	25.64	6.00	31.64	1.459	33.01	-1.37
		531000	2655.00	1 / 94	25.72	6.00	31.72	1.486	33.01	-1.29
	QPSK	506202	2531.01	1 / 1	25.96	6.00	31.96	1.570	33.01	-1.05
		518598	2592.99	1 / 1	25.66	6.00	31.66	1.466	33.01	-1.35
		531000	2655.00	1 / 94	25.73	6.00	31.73	1.489	33.01	-1.28
	16-QAM	531000	2655.00	1 / 94	24.68	6.00	30.68	1.169	33.01	-2.33
60 MHz	π/2 BPSK	505200	2526.00	1 / 81	25.91	6.00	31.91	1.552	33.01	-1.10
		518598	2592.99	1 / 1	25.87	6.00	31.87	1.538	33.01	-1.14
		531996	2659.98	1 / 81	25.91	6.00	31.91	1.552	33.01	-1.10
	QPSK	505200	2526.00	1 / 1	26.06	6.00	32.06	1.607	33.01	-0.95
		518598	2592.99	1 / 81	26.00	6.00	32.00	1.585	33.01	-1.01
		531996	2659.98	1 / 81	25.97	6.00	31.97	1.574	33.01	-1.04
	16-QAM	518598	2592.99	1 / 81	25.08	6.00	31.08	1.282	33.01	-1.93
50 MHz	π/2 BPSK	504204	2521.02	1 / 1	25.99	6.00	31.99	1.581	33.01	-1.02
		518598	2592.99	1 / 66	25.97	6.00	31.97	1.574	33.01	-1.04
		532998	2664.99	1 / 66	25.98	6.00	31.98	1.578	33.01	-1.03
	QPSK	504204	2521.02	1 / 1	26.01	6.00	32.01	1.589	33.01	-1.00
		518598	2592.99	1 / 1	25.85	6.00	31.85	1.531	33.01	-1.16
		532998	2664.99	1 / 66	26.00	6.00	32.00	1.585	33.01	-1.01
	16-QAM	532998	2664.99	1 / 66	25.10	6.00	31.10	1.288	33.01	-1.91
40 MHz	π/2 BPSK	503202	2516.01	1 / 1	26.28	6.00	32.28	1.690	33.01	-0.73
		518598	2592.99	1 / 104	26.02	6.00	32.02	1.592	33.01	-0.99
		534000	2670.00	1 / 1	26.14	6.00	32.14	1.637	33.01	-0.87
	QPSK	503202	2516.01	1 / 1	26.20	6.00	32.20	1.660	33.01	-0.81
		518598	2592.99	1 / 1	26.06	6.00	32.06	1.607	33.01	-0.95
		534000	2670.00	1 / 104	26.14	6.00	32.14	1.637	33.01	-0.87
	16-QAM	503202	2516.01	1 / 1	25.26	6.00	31.26	1.337	33.01	-1.75
30 MHz	π/2 BPSK	502200	2511.00	1 / 76	26.16	6.00	32.16	1.644	33.01	-0.85
		518598	2592.99	1 / 76	26.04	6.00	32.04	1.600	33.01	-0.97
		534996	2674.98	1 / 76	26.02	6.00	32.02	1.592	33.01	-0.99
	QPSK	502200	2511.00	1 / 1	26.24	6.00	32.24	1.675	33.01	-0.77
		518598	2592.99	1 / 76	26.11	6.00	32.11	1.626	33.01	-0.90
		534996	2674.98	1 / 1	25.99	6.00	31.99	1.581	33.01	-1.02
	16-QAM	502200	2511.00	1 / 76	25.33	6.00	31.33	1.358	33.01	-1.68
20 MHz	π/2 BPSK	501204	2506.02	1 / 25	26.19	6.00	32.19	1.656	33.01	-0.82
		518598	2592.99	1 / 49	26.10	6.00	32.10	1.622	33.01	-0.91
		535998	2679.99	1 / 25	25.94	6.00	31.94	1.563	33.01	-1.07
	QPSK	501204	2506.02	1 / 1	26.20	6.00	32.20	1.660	33.01	-0.81
		518598	2592.99	1 / 1	26.07	6.00	32.07	1.611	33.01	-0.94
		535998	2679.99	1 / 1	26.01	6.00	32.01	1.589	33.01	-1.00
	16-QAM	501204	2506.02	1 / 25	25.22	6.00	31.22	1.324	33.01	-1.79
15 MHz	π/2 BPSK	500700	2503.50	1 / 19	26.16	6.00	32.16	1.644	33.01	-0.85
		518598	2592.99	1 / 19	26.06	6.00	32.06	1.607	33.01	-0.95
		536496	2682.48	1 / 1	25.92	6.00	31.92	1.556	33.01	-1.09
	QPSK	500700	2503.50	1 / 36	26.25	6.00	32.25	1.679	33.01	-0.76
		518598	2592.99	1 / 36	26.20	6.00	32.20	1.660	33.01	-0.81
		536496	2682.48	1 / 1	25.93	6.00	31.93	1.560	33.01	-1.08
	16-QAM	500700	2503.50	1 / 36	25.25	6.00	31.25	1.334	33.01	-1.76
10 MHz	π/2 BPSK	500202	2501.01	1 / 22	26.16	6.00	32.16	1.644	33.01	-0.85
		518598	2592.99	1 / 12	25.86	6.00	31.86	1.535	33.01	-1.15
		537000	2685.00	1 / 1	25.82	6.00	31.82	1.521	33.01	-1.19
	QPSK	500202	2501.01	1 / 12	26.03	6.00	32.03	1.596	33.01	-0.98
		518598	2592.99	1 / 22	25.88	6.00	31.88	1.542	33.01	-1.13
		537000	2685.00	1 / 1	25.85	6.00	31.85	1.531	33.01	-1.16
	16-QAM	500202	2501.01	1 / 12	25.08	6.00	31.08	1.282	33.01	-1.93

Table 7-13. Conducted Power and EIRP Data (NR Band n41PC2 – Ant6)

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]	Ant Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
100 MHz	π/2 BPSK	509202	2546.01	1 / 136	23.63	7.50	31.13	1.297	33.01	-1.88
		518598	2592.99	1 / 136	23.59	7.50	31.09	1.287	33.01	-1.92
		528000	2640.00	1 / 136	23.51	7.50	31.01	1.261	33.01	-2.00
	QPSK	509202	2546.01	1 / 136	23.40	7.50	30.90	1.232	33.01	-2.11
		518598	2592.99	1 / 136	23.64	7.50	31.14	1.299	33.01	-1.87
		528000	2640.00	1 / 136	23.64	7.50	31.14	1.301	33.01	-1.87
	16-QAM	509202	2546.01	1 / 136	22.71	7.50	30.21	1.048	33.01	-2.80
90 MHz	π/2 BPSK	508200	2541.00	1 / 1	23.76	7.50	31.26	1.337	33.01	-1.75
		518598	2592.99	1 / 243	23.67	7.50	31.17	1.309	33.01	-1.84
		528996	2644.98	1 / 122	23.72	7.50	31.22	1.324	33.01	-1.79
	QPSK	508200	2541.00	1 / 1	23.83	7.50	31.33	1.358	33.01	-1.68
		518598	2592.99	1 / 122	23.65	7.50	31.15	1.303	33.01	-1.86
		528996	2644.98	1 / 122	23.69	7.50	31.19	1.315	33.01	-1.82
	16-QAM	508200	2541.00	1 / 1	23.14	7.50	30.64	1.159	33.01	-2.37
80 MHz	π/2 BPSK	507204	2536.02	1 / 1	23.70	7.50	31.20	1.318	33.01	-1.81
		518598	2592.99	1 / 108	23.69	7.50	31.19	1.315	33.01	-1.82
		529998	2649.99	1 / 108	23.64	7.50	31.14	1.300	33.01	-1.87
	QPSK	507204	2536.02	1 / 1	23.96	7.50	31.46	1.400	33.01	-1.55
		518598	2592.99	1 / 1	23.60	7.50	31.10	1.288	33.01	-1.91
		529998	2649.99	1 / 108	23.86	7.50	31.36	1.368	33.01	-1.65
	16-QAM	507204	2536.02	1 / 1	22.83	7.50	30.33	1.079	33.01	-2.68
70 MHz	π/2 BPSK	506202	2531.01	1 / 1	23.89	7.50	31.39	1.377	33.01	-1.62
		518598	2592.99	1 / 1	23.71	7.50	31.21	1.321	33.01	-1.80
		531000	2655.00	1 / 94	23.67	7.50	31.17	1.309	33.01	-1.84
	QPSK	506202	2531.01	1 / 1	23.89	7.50	31.39	1.377	33.01	-1.62
		518598	2592.99	1 / 1	23.54	7.50	31.04	1.271	33.01	-1.97
		531000	2655.00	1 / 94	23.70	7.50	31.20	1.318	33.01	-1.81
	16-QAM	518598	2592.99	1 / 1	23.10	7.50	30.60	1.148	33.01	-2.41
60 MHz	π/2 BPSK	505200	2526.00	1 / 1	23.87	7.50	31.37	1.371	33.01	-1.64
		518598	2592.99	1 / 81	23.87	7.50	31.37	1.371	33.01	-1.64
		531996	2659.98	1 / 81	23.93	7.50	31.43	1.390	33.01	-1.58
	QPSK	505200	2526.00	1 / 1	24.06	7.50	31.56	1.432	33.01	-1.45
		518598	2592.99	1 / 81	23.82	7.50	31.32	1.355	33.01	-1.69
		531996	2659.98	1 / 81	23.86	7.50	31.36	1.368	33.01	-1.65
	16-QAM	531996	2659.98	1 / 1	23.34	7.50	30.84	1.213	33.01	-2.17
50 MHz	π/2 BPSK	504204	2521.02	1 / 66	23.95	7.50	31.45	1.396	33.01	-1.56
		518598	2592.99	1 / 1	23.91	7.50	31.41	1.384	33.01	-1.60
		532998	2664.99	1 / 131	23.95	7.50	31.45	1.396	33.01	-1.56
	QPSK	504204	2521.02	1 / 66	24.10	7.50	31.60	1.445	33.01	-1.41
		518598	2592.99	1 / 66	23.83	7.50	31.33	1.358	33.01	-1.68
		532998	2664.99	1 / 131	23.90	7.50	31.40	1.380	33.01	-1.61
	16-QAM	532998	2664.99	1 / 131	23.24	7.50	30.74	1.186	33.01	-2.27
40 MHz	π/2 BPSK	503202	2516.01	1 / 1	24.23	7.50	31.73	1.489	33.01	-1.28
		518598	2592.99	1 / 104	24.01	7.50	31.51	1.416	33.01	-1.50
		534000	2670.00	1 / 1	24.11	7.50	31.61	1.449	33.01	-1.40
	QPSK	503202	2516.01	1 / 1	24.11	7.50	31.61	1.449	33.01	-1.40
		518598	2592.99	1 / 1	24.08	7.50	31.58	1.439	33.01	-1.43
		534000	2670.00	1 / 1	24.06	7.50	31.56	1.432	33.01	-1.45
	16-QAM	503202	2516.01	1 / 1	23.15	7.50	30.65	1.161	33.01	-2.36
		518598	2592.99	1 / 1	23.03	7.50	30.53	1.130	33.01	-2.48
		534000	2670.00	1 / 104	23.31	7.50	30.81	1.205	33.01	-2.20
30 MHz	π/2 BPSK	502200	2511.00	1 / 76	24.15	7.50	31.65	1.462	33.01	-1.36
		518598	2592.99	1 / 1	24.04	7.50	31.54	1.426	33.01	-1.47
		534996	2674.98	1 / 76	24.03	7.50	31.53	1.422	33.01	-1.48
	QPSK	502200	2511.00	1 / 39	24.15	7.50	31.65	1.462	33.01	-1.36
		518598	2592.99	1 / 76	24.06	7.50	31.56	1.432	33.01	-1.45
		534996	2674.98	1 / 1	24.12	7.50	31.62	1.452	33.01	-1.39
	16-QAM	502200	2511.00	1 / 1	23.20	7.50	30.70	1.175	33.01	-2.31
20 MHz	π/2 BPSK	501204	2506.02	1 / 1	24.03	7.50	31.53	1.422	33.01	-1.48
		518598	2592.99	1 / 49	24.02	7.50	31.52	1.419	33.01	-1.49
		535998	2679.99	1 / 1	23.92	7.50	31.42	1.387	33.01	-1.59
	QPSK	501204	2506.02	1 / 25	24.16	7.50	31.66	1.466	33.01	-1.35
		518598	2592.99	1 / 25	24.00	7.50	31.50	1.413	33.01	-1.51
		535998	2679.99	1 / 49	23.87	7.50	31.37	1.371	33.01	-1.64
	16-QAM	501204	2506.02	1 / 25	23.23	7.50	30.73	1.183	33.01	-2.28
15 MHz	π/2 BPSK	500700	2503.50	1 / 36	24.15	7.50	31.65	1.462	33.01	-1.36
		518598	2592.99	1 / 1	24.08	7.50	31.58	1.439	33.01	-1.43
		536496	2682.48	1 / 19	23.96	7.50	31.46	1.400	33.01	-1.55
	QPSK	500700	2503.50	1 / 36	24.19	7.50	31.69	1.476	33.01	-1.32
		518598	2592.99	1 / 36	24.09	7.50	31.59	1.442	33.01	-1.42
		536496	2682.48	1 / 1	23.96	7.50	31.46	1.400	33.01	-1.55
	16-QAM	500700	2503.50	1 / 36	23.37	7.50	30.87	1.222	33.01	-2.14
10 MHz	π/2 BPSK	500202	2501.01	1 / 12	24.08	7.50	31.58	1.439	33.01	-1.43
		518598	2592.99	1 / 22	23.96	7.50	31.46	1.400	33.01	-1.55
		537000	2685.00	1 / 1	23.87	7.50	31.37	1.371	33.01	-1.64
	QPSK	500202	2501.01	1 / 22	23.99	7.50	31.49	1.409	33.01	-1.52
		518598	2592.99	1 / 22	23.92	7.50	31.42	1.387	33.01	-1.59
		537000	2685.00	1 / 1	23.87	7.50	31.37	1.371	33.01	-1.64
	16-QAM	518598	2592.99	1 / 22	23.16	7.50	30.66	1.164	33.01	-2.35

Table 7-14. Conducted Power and EIRP Data (NR Band n41PC3 – Ant6)

Bandwidth	Modulation	Channel	Frequency [MHz]	Ant1 Conducted Power [dBm]	Ant6 Conducted Power [dBm]	Dir. Ant Gain [dBi]	Ant1 + Ant6 EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
100 MHz	π/2 BPSK	509202	2546.01	25.63	25.89	3.00	31.77	1.503	33.01	-1.24
		518598	2592.99	26.24	26.48	3.00	32.37	1.726	33.01	-0.64
		528000	2640.00	26.13	26.19	3.00	32.17	1.648	33.01	-0.84
	QPSK	509202	2546.01	25.89	25.95	3.00	31.93	1.560	33.01	-1.08
		518598	2592.99	26.44	26.19	3.00	32.33	1.710	33.01	-0.68
		528000	2640.00	26.19	26.38	3.00	32.30	1.698	33.01	-0.71
	16-QAM	518598	2592.99	25.42	25.53	3.00	31.49	1.409	33.01	-1.52
90 MHz	π/2 BPSK	508200	2541.00	25.79	25.91	3.00	31.86	1.535	33.01	-1.15
		518598	2592.99	26.32	26.31	3.00	32.33	1.710	33.01	-0.68
		528996	2644.98	26.06	26.47	3.00	32.28	1.690	33.01	-0.73
	QPSK	508200	2541.00	25.76	26.08	3.00	31.93	1.560	33.01	-1.08
		518598	2592.99	26.33	26.34	3.00	32.35	1.718	33.01	-0.66
		528996	2644.98	26.05	26.47	3.00	32.28	1.690	33.01	-0.73
	16-QAM	528996	2644.98	25.50	25.48	3.00	31.50	1.413	33.01	-1.51
80 MHz	π/2 BPSK	507204	2536.02	26.02	26.20	3.00	32.12	1.629	33.01	-0.89
		518598	2592.99	26.19	26.43	3.00	32.32	1.706	33.01	-0.69
		529998	2649.99	26.40	26.49	3.00	32.46	1.762	33.01	-0.55
	QPSK	507204	2536.02	25.91	26.19	3.00	32.06	1.607	33.01	-0.95
		518598	2592.99	26.32	26.37	3.00	32.36	1.722	33.01	-0.65
		529998	2649.99	26.38	26.54	3.00	32.47	1.766	33.01	-0.54
	16-QAM	529998	2649.99	25.31	25.76	3.00	31.55	1.429	33.01	-1.46
70 MHz	π/2 BPSK	506202	2531.01	25.88	26.18	3.00	32.04	1.600	33.01	-0.97
		518598	2592.99	26.24	26.25	3.00	32.26	1.683	33.01	-0.75
		531000	2655.00	26.21	26.39	3.00	32.31	1.702	33.01	-0.70
	QPSK	506202	2531.01	25.80	26.20	3.00	32.01	1.589	33.01	-1.00
		518598	2592.99	26.46	26.34	3.00	32.41	1.742	33.01	-0.60
		531000	2655.00	26.19	26.47	3.00	32.34	1.714	33.01	-0.67
	16-QAM	518598	2592.99	25.68	25.51	3.00	31.61	1.449	33.01	-1.40
60 MHz	π/2 BPSK	505200	2526.00	25.98	26.31	3.00	32.16	1.644	33.01	-0.85
		518598	2592.99	26.39	26.34	3.00	32.38	1.730	33.01	-0.63
		531996	2659.98	26.33	26.60	3.00	32.48	1.770	33.01	-0.53
	QPSK	505200	2526.00	25.96	26.26	3.00	32.12	1.629	33.01	-0.89
		518598	2592.99	26.45	26.34	3.00	32.41	1.742	33.01	-0.60
		531996	2659.98	26.32	26.68	3.00	32.51	1.782	33.01	-0.50
	16-QAM	531996	2659.98	25.09	25.78	3.00	31.46	1.400	33.01	-1.55
50 MHz	π/2 BPSK	504204	2521.02	26.03	26.11	3.00	32.08	1.614	33.01	-0.93
		518598	2592.99	26.42	26.35	3.00	32.40	1.738	33.01	-0.61
		532998	2664.99	26.33	26.48	3.00	32.42	1.746	33.01	-0.59
	QPSK	504204	2521.02	25.93	26.38	3.00	32.17	1.648	33.01	-0.84
		518598	2592.99	26.37	26.33	3.00	32.36	1.722	33.01	-0.65
		532998	2664.99	26.51	26.52	3.00	32.53	1.791	33.01	-0.48
	16-QAM	532998	2664.99	25.54	25.45	3.00	31.51	1.416	33.01	-1.50
40 MHz	π/2 BPSK	503202	2516.01	26.10	26.45	3.00	32.29	1.694	33.01	-0.72
		518598	2592.99	26.36	26.38	3.00	32.38	1.730	33.01	-0.63
		534000	2670.00	26.31	26.67	3.00	32.50	1.778	33.01	-0.51
	QPSK	503202	2516.01	25.99	26.33	3.00	32.17	1.648	33.01	-0.84
		518598	2592.99	26.45	26.56	3.00	32.52	1.786	33.01	-0.49
		534000	2670.00	26.45	26.87	3.00	32.68	1.854	33.01	-0.33
	16-QAM	534000	2670.00	25.69	25.95	3.00	31.83	1.524	33.01	-1.18
30 MHz	π/2 BPSK	502200	2511.00	26.15	26.34	3.00	32.26	1.683	33.01	-0.75
		518598	2592.99	26.36	26.37	3.00	32.38	1.730	33.01	-0.63
		534996	2674.98	26.29	26.56	3.00	32.44	1.754	33.01	-0.57
	QPSK	502200	2511.00	26.04	26.39	3.00	32.23	1.671	33.01	-0.78
		518598	2592.99	26.40	26.45	3.00	32.44	1.754	33.01	-0.57
		534996	2674.98	26.23	26.64	3.00	32.45	1.758	33.01	-0.56
	16-QAM	534996	2674.98	25.14	25.88	3.00	31.54	1.426	33.01	-1.47
20 MHz	π/2 BPSK	501204	2506.02	26.00	26.39	3.00	32.21	1.663	33.01	-0.80
		518598	2592.99	26.41	26.32	3.00	32.38	1.730	33.01	-0.63
		535998	2679.99	26.00	26.70	3.00	32.37	1.726	33.01	-0.64
	QPSK	501204	2506.02	26.12	26.36	3.00	32.25	1.679	33.01	-0.76
		518598	2592.99	26.34	26.29	3.00	32.33	1.710	33.01	-0.68
		535998	2679.99	26.20	26.72	3.00	32.48	1.770	33.01	-0.53
	16-QAM	501204	2506.02	25.22	25.90	3.00	31.58	1.439	33.01	-1.43
15 MHz	π/2 BPSK	500700	2503.50	26.19	26.24	3.00	32.23	1.671	33.01	-0.78
		518598	2592.99	26.18	26.29	3.00	32.25	1.679	33.01	-0.76
		536496	2682.48	26.09	26.41	3.00	32.26	1.683	33.01	-0.75
	QPSK	500700	2503.50	26.21	26.38	3.00	32.31	1.702	33.01	-0.70
		518598	2592.99	26.31	26.38	3.00	32.36	1.722	33.01	-0.65
		536496	2682.48	26.19	26.46	3.00	32.34	1.714	33.01	-0.67
	16-QAM	536496	2682.48	25.41	25.64	3.00	31.54	1.426	33.01	-1.47
10 MHz	π/2 BPSK	500202	2501.01	25.95	26.28	3.00	32.13	1.633	33.01	-0.88
		518598	2592.99	26.27	26.10	3.00	32.20	1.660	33.01	-0.81
		537000	2685.00	25.86	26.20	3.00	32.04	1.600	33.01	-0.97
	QPSK	500202	2501.01	26.19	26.34	3.00	32.28	1.690	33.01	-0.73
		518598	2592.99	26.33	26.18	3.00	32.27	1.687	33.01	-0.74
		537000	2685.00	25.91	26.31	3.00	32.12	1.629	33.01	-0.89
	16-QAM	518598	2592.99	25.06	25.46	3.00	31.27	1.340	33.01	-1.74

Table 7-15. Conducted Power and EIRP Data (NR Band n41PC1.5 – UL MIMO Ant1 + Ant6)

7.3 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 Procedure Used

ANSI C63.26-2015 – Section 5.4.4

Test Settings

1. The signal analyzer's automatic bandwidth measurement capability was used to perform the 99% occupied bandwidth and the 26dB 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 ≥ 3 x 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.

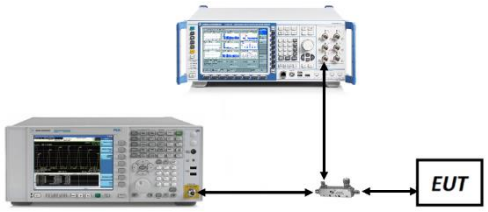


Figure 7-2. Test Instrument & Measurement Setup

Test Notes

None.

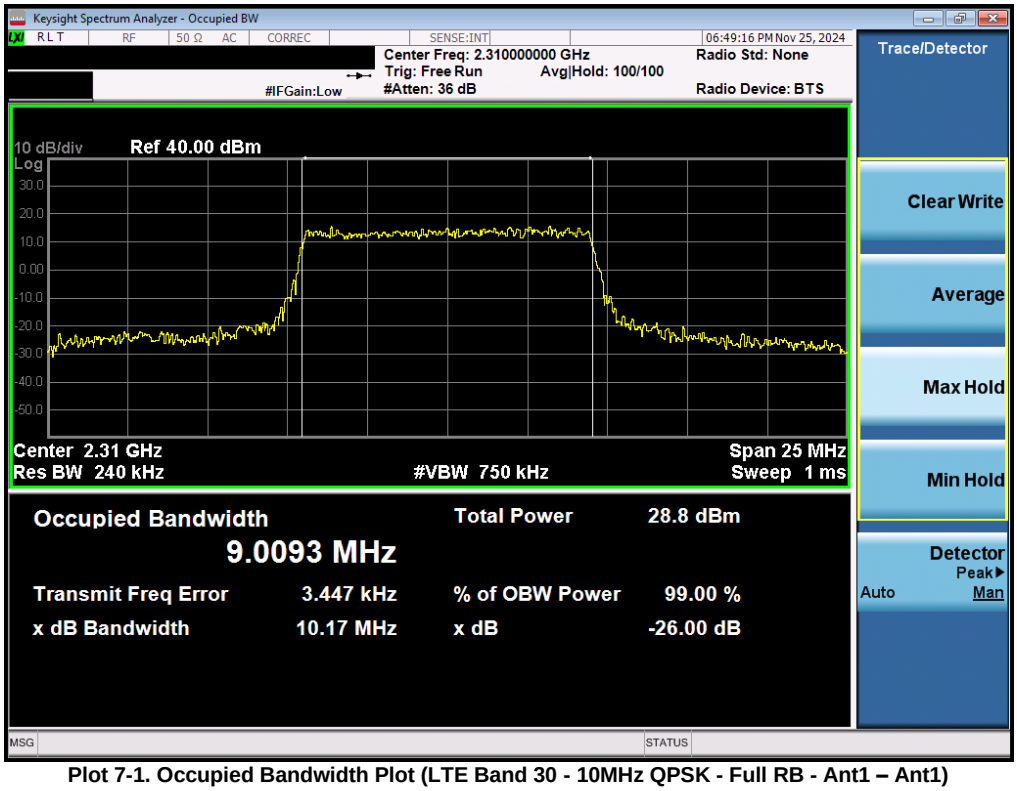
Mode	Bandwidth	Modulation	OBW [MHz]
LTE-B30	10MHz	QPSK	9.01
		16QAM	9.02
	5MHz	QPSK	4.52
		16QAM	4.54
LTE-B41PC2	20MHz	QPSK	17.96
		16QAM	17.88
	15MHz	QPSK	13.49
		16QAM	13.45
	10MHz	QPSK	9.03
		16QAM	8.98
	5MHz	QPSK	4.53
		16QAM	4.51
LTE-B41PC3/38	20MHz	QPSK	17.98
		16QAM	18.04
	15MHz	QPSK	13.47
		16QAM	13.54
	10MHz	QPSK	9.04
		16QAM	9.00
	5MHz	QPSK	4.51
		16QAM	4.53

Table 7-16. Occupied Bandwidth Test Results – Ant1

Mode	Bandwidth	Modulation	OBW [MHz]
NR-n30	10MHz	π/2 BPSK	9.01
		QPSK	9.36
		16QAM	9.34
	5MHz	π/2 BPSK	4.52
		QPSK	4.52
		16QAM	4.52
NR-n41PC2	100MHz	π/2 BPSK	97.03
		QPSK	97.16
		16QAM	97.32
	90MHz	π/2 BPSK	87.17
		QPSK	87.06
		16QAM	87.24
	80MHz	π/2 BPSK	77.24
		QPSK	77.72
		16QAM	77.59
	70MHz	π/2 BPSK	64.56
		QPSK	64.50
		16QAM	64.73
	60MHz	π/2 BPSK	58.20
		QPSK	58.05
		16QAM	58.29
	50MHz	π/2 BPSK	45.98
		QPSK	45.98
		16QAM	45.98
	40MHz	π/2 BPSK	35.81
		QPSK	35.91
		16QAM	35.89
	30MHz	π/2 BPSK	27.00
		QPSK	26.96
		16QAM	26.99
	20MHz	π/2 BPSK	18.14
		QPSK	17.97
		16QAM	18.06
	15MHz	π/2 BPSK	13.00
		QPSK	12.96
		16QAM	13.00
	10MHz	π/2 BPSK	8.75
		QPSK	8.70
		16QAM	8.72

Table 7-17. Occupied Bandwidth Test Results – Ant1

LTE Band 30 – Ant1



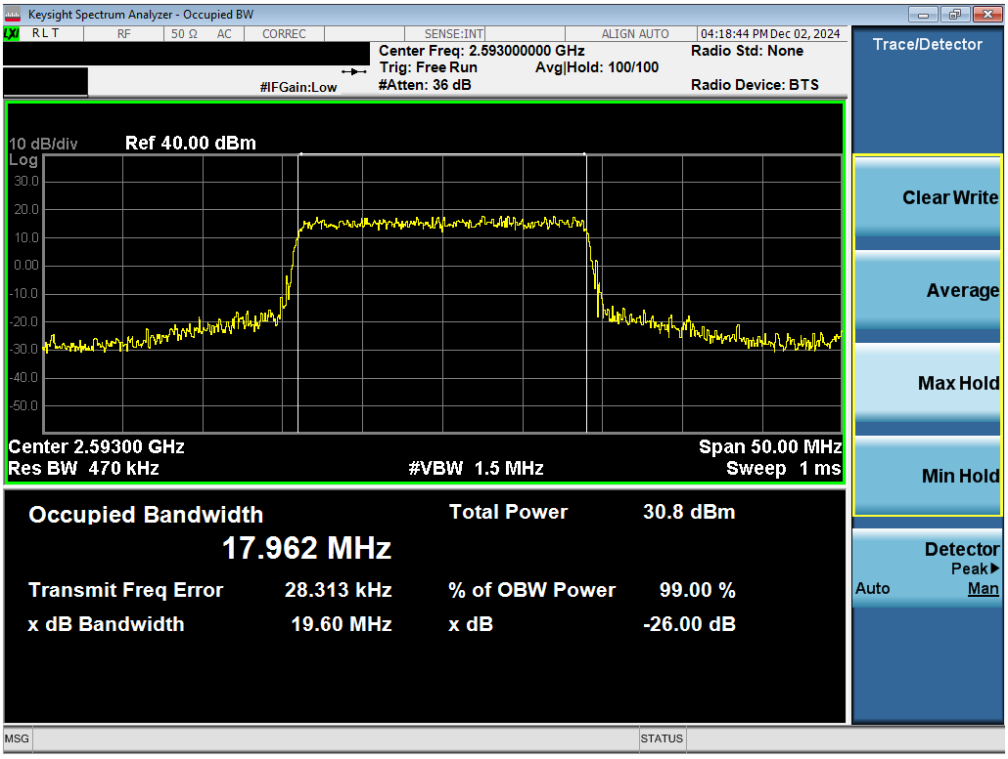
Plot 7-1. Occupied Bandwidth Plot (LTE Band 30 - 10MHz QPSK - Full RB - Ant1 – Ant1)

Plot 7-2. Occupied Bandwidth Plot (LTE Band 30 - 10MHz 16-QAM - Full RB - Ant1)

Plot 7-3. Occupied Bandwidth Plot (LTE Band 30 - 5MHz QPSK - Full RB - Ant1)

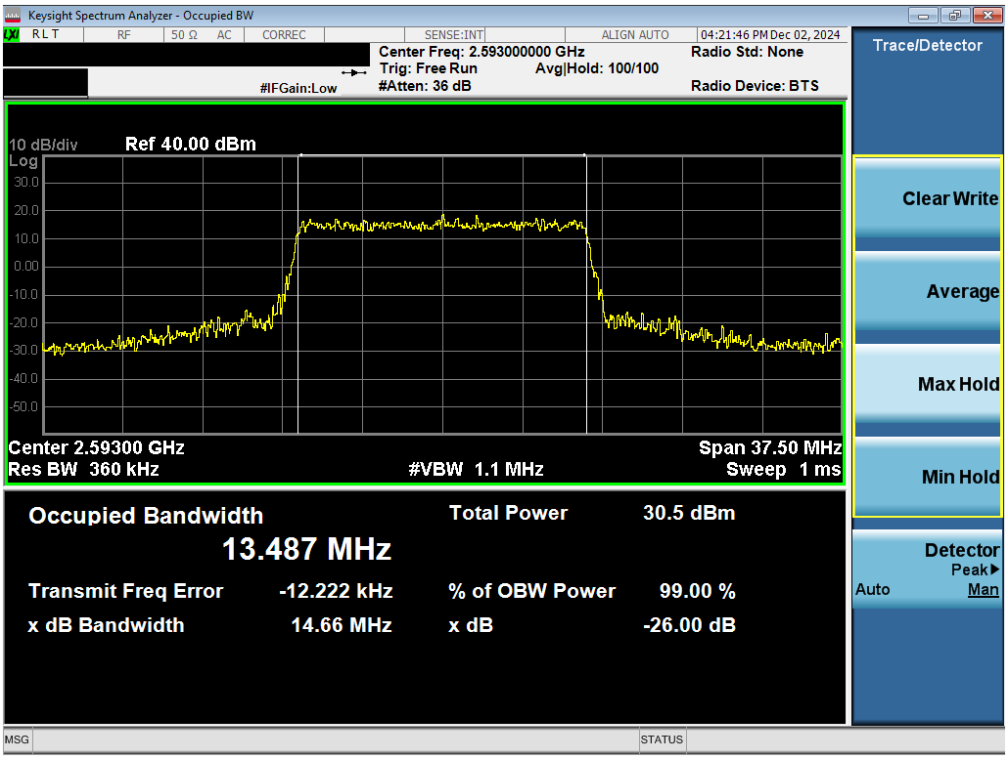
Plot 7-4. Occupied Bandwidth Plot (LTE Band 30 - 5MHz 16-QAM - Full RB - Ant1)

LTE Band 41(PC2) – Ant1

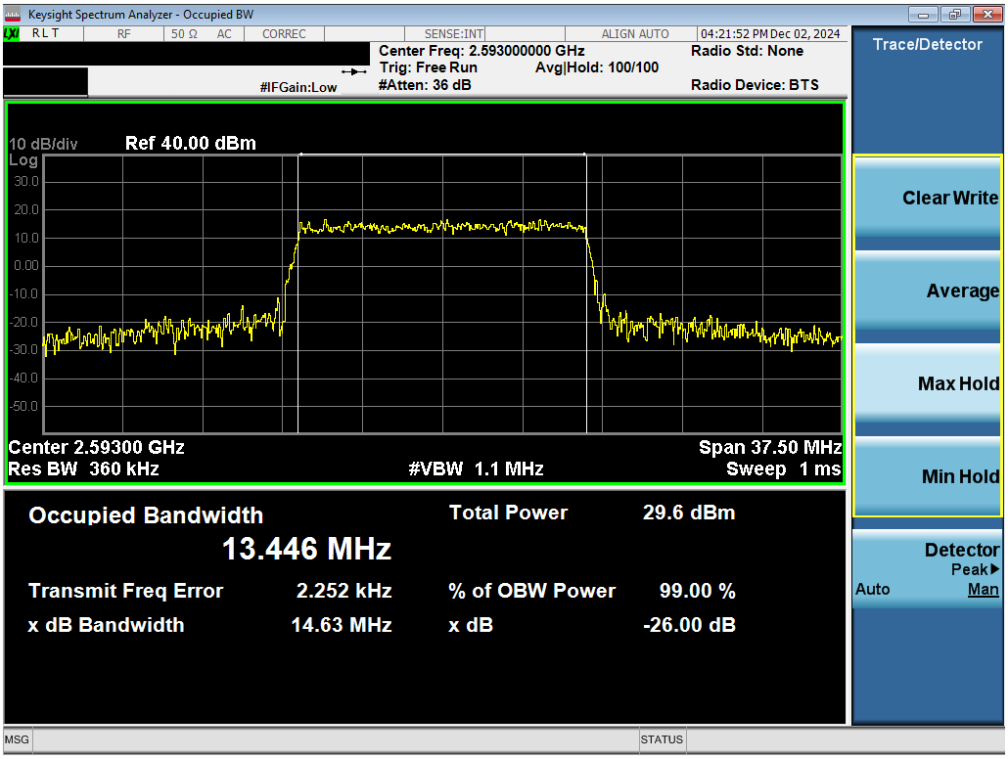


Plot 7-5. Occupied Bandwidth Plot (LTE Band 41(PC2) - 20MHz QPSK - Full RB - Ant1)

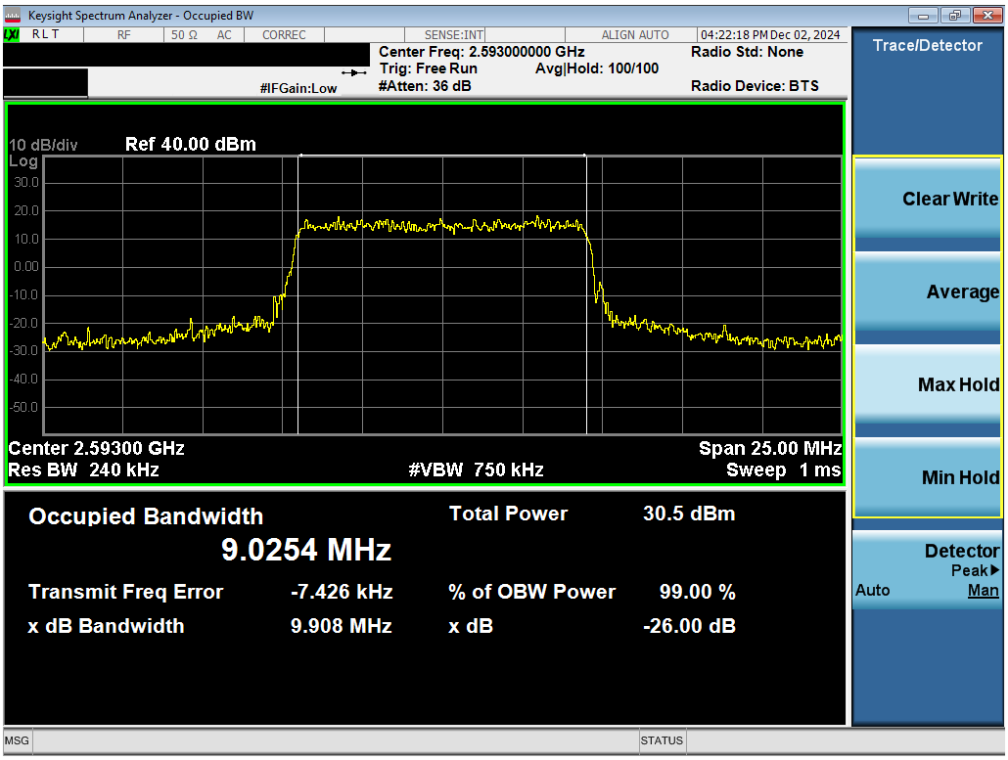
Plot 7-6. Occupied Bandwidth Plot (LTE Band 41(PC2) - 20MHz 16-QAM - Full RB - Ant1)



Plot 7-7. Occupied Bandwidth Plot (LTE Band 41(PC2) - 15MHz QPSK - Full RB - Ant1)

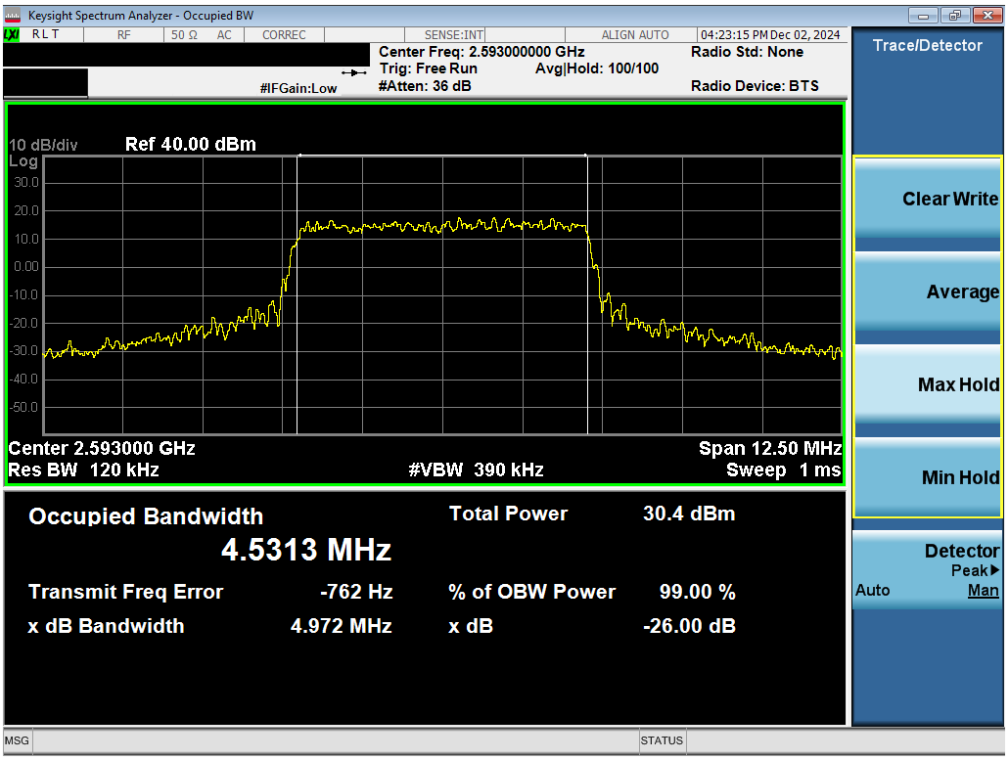


Plot 7-8. Occupied Bandwidth Plot (LTE Band 41(PC2) - 15MHz 16-QAM - Full RB - Ant1)



Plot 7-9. Occupied Bandwidth Plot (LTE Band 41(PC2) - 10MHz QPSK - Full RB - Ant1)

Plot 7-10. Occupied Bandwidth Plot (LTE Band 41(PC2) - 10MHz 16-QAM - Full RB - Ant1)

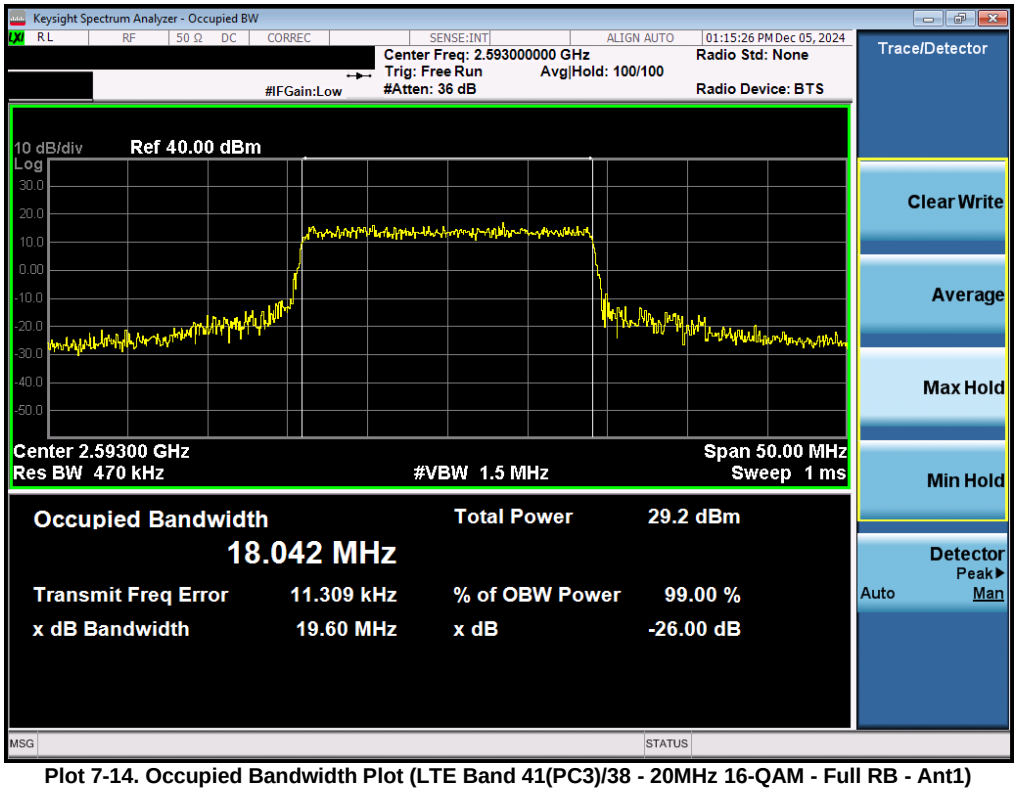


Plot 7-11. Occupied Bandwidth Plot (LTE Band 41(PC2) - 5MHz QPSK - Full RB - Ant1)

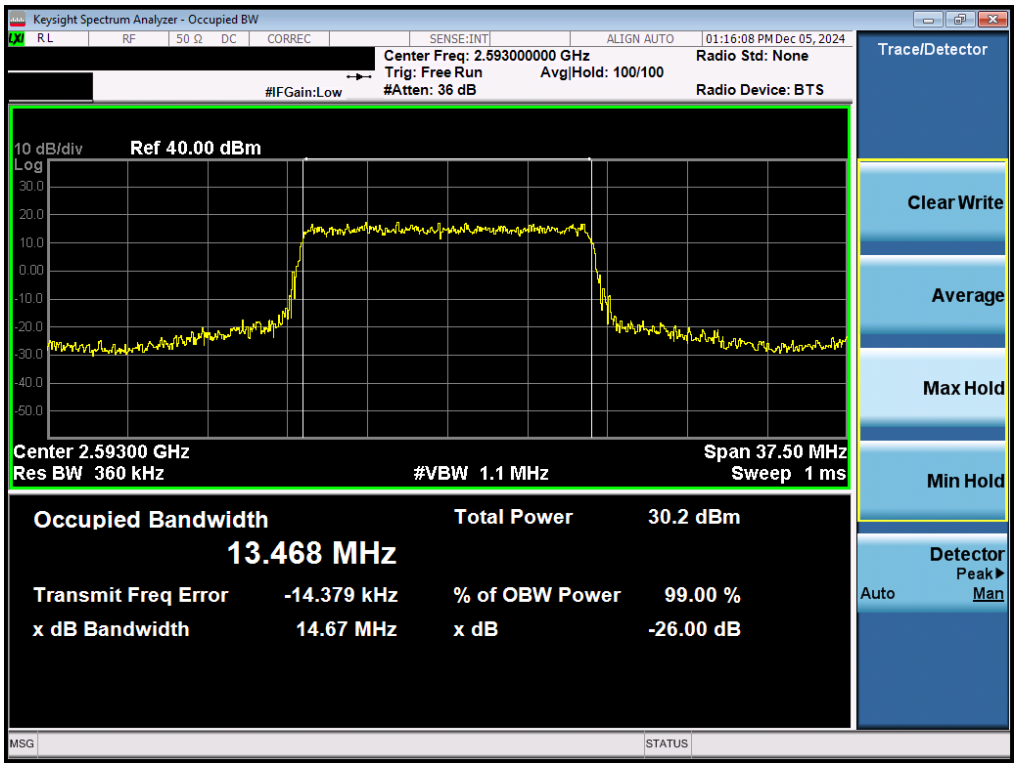
Plot 7-12. Occupied Bandwidth Plot (LTE Band 41(PC2) - 5MHz 16-QAM - Full RB - Ant1)

LTE Band 41(PC3)/38 – Ant1

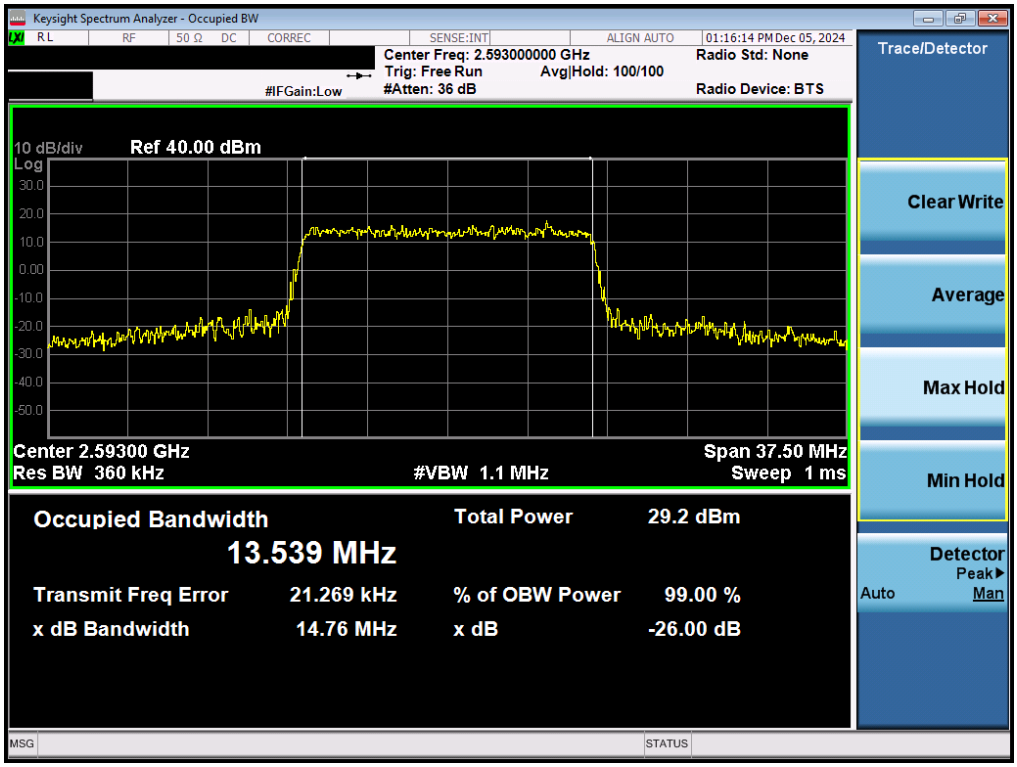
Plot 7-13. Occupied Bandwidth Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - Full RB - Ant1)



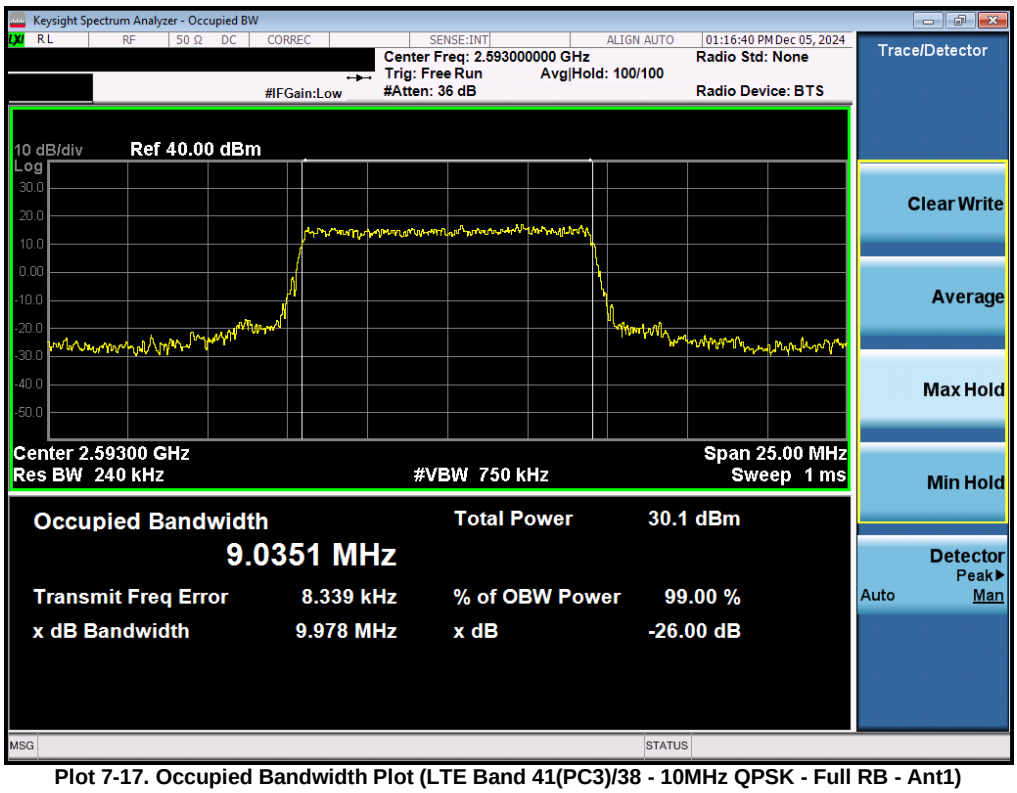
Plot 7-14. Occupied Bandwidth Plot (LTE Band 41(PC3)/38 - 20MHz 16-QAM - Full RB - Ant1)



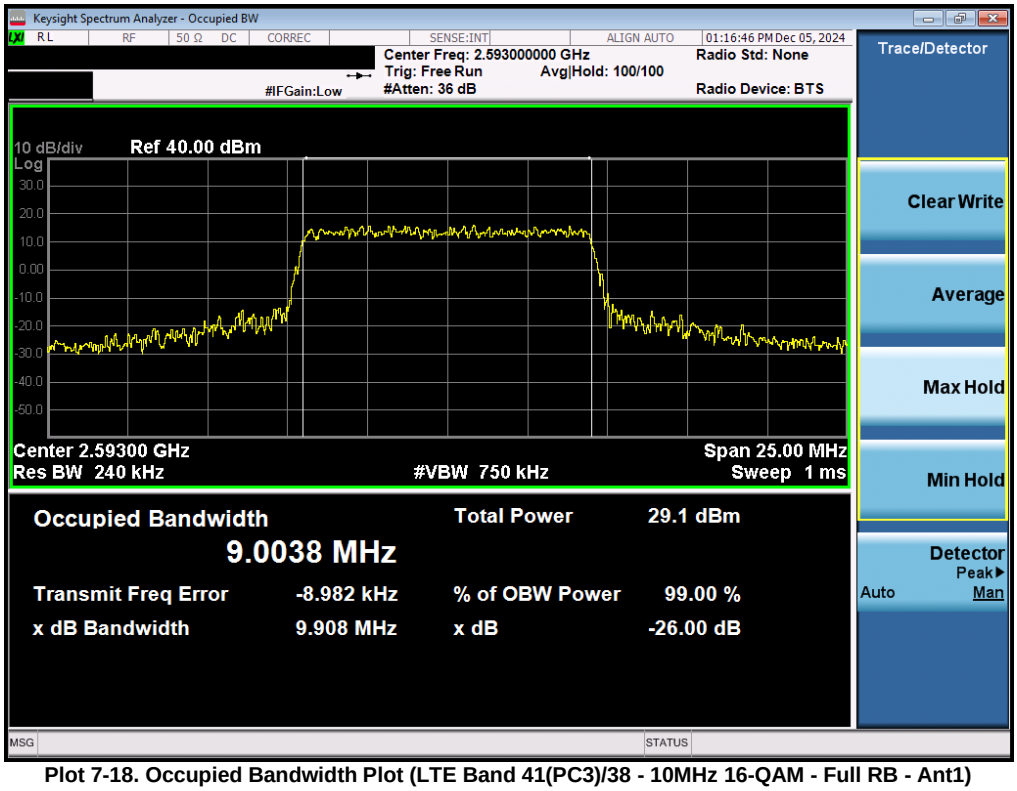
Plot 7-15. Occupied Bandwidth Plot (LTE Band 41(PC3)/38 - 15MHz QPSK - Full RB - Ant1)



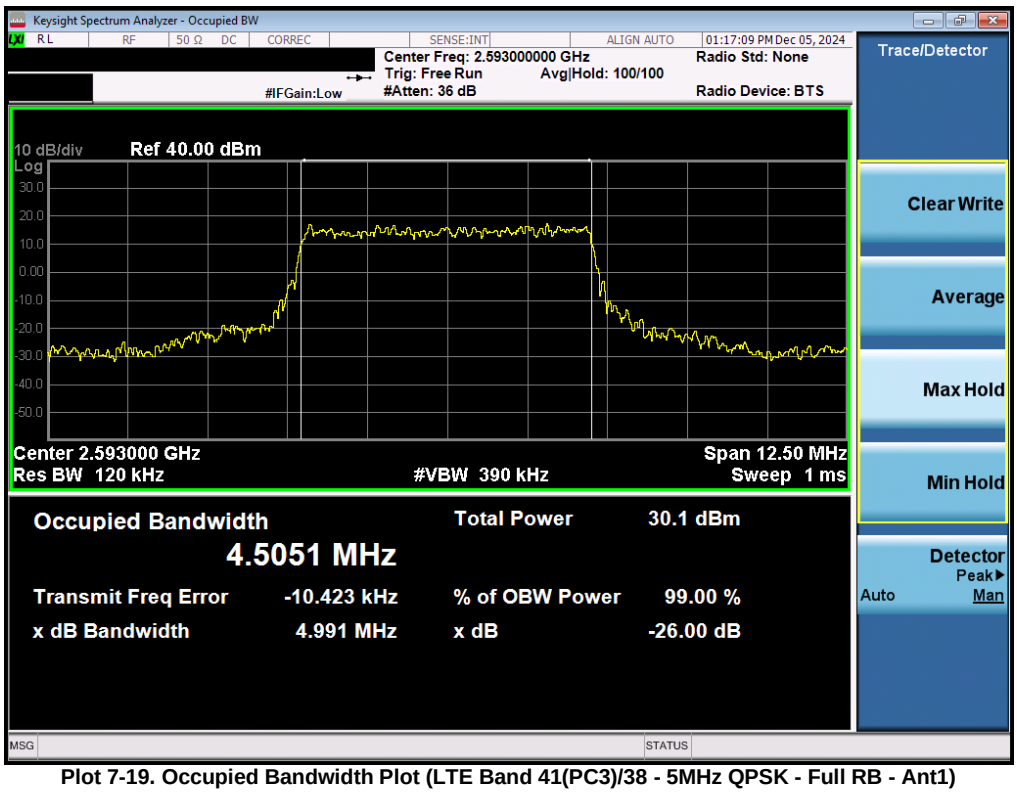
Plot 7-16. Occupied Bandwidth Plot (LTE Band 41(PC3)/38 - 15MHz 16-QAM - Full RB - Ant1)



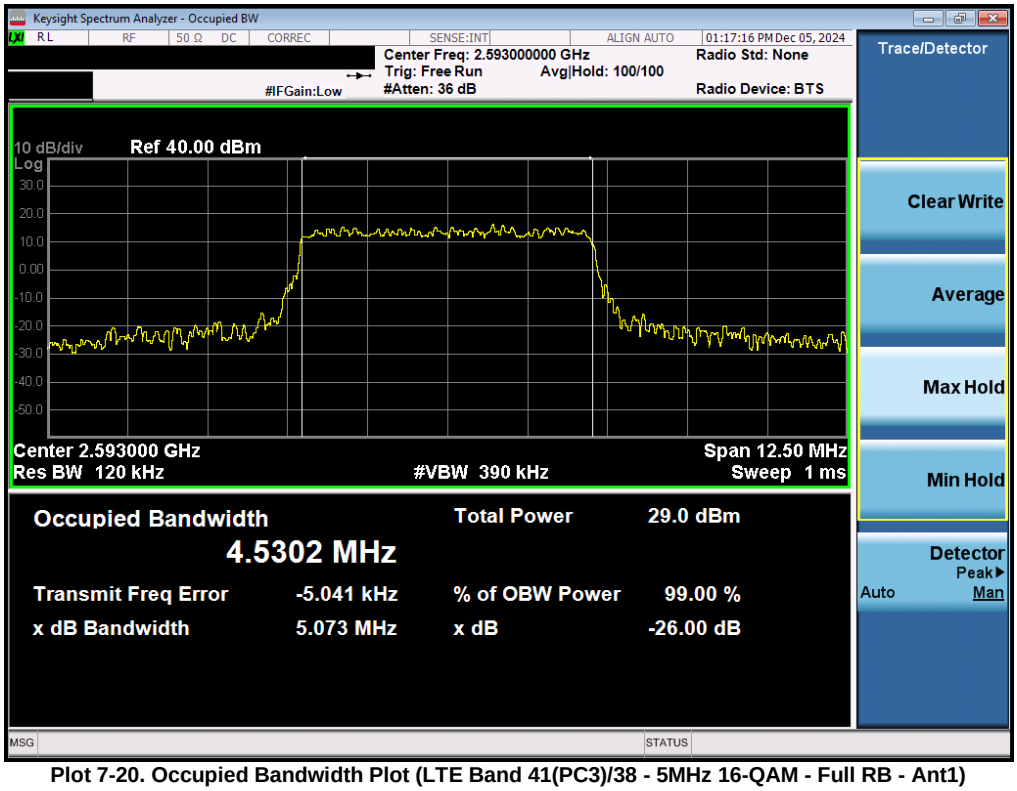
Plot 7-17. Occupied Bandwidth Plot (LTE Band 41(PC3)/38 - 10MHz QPSK - Full RB - Ant1)



Plot 7-18. Occupied Bandwidth Plot (LTE Band 41(PC3)/38 - 10MHz 16-QAM - Full RB - Ant1)

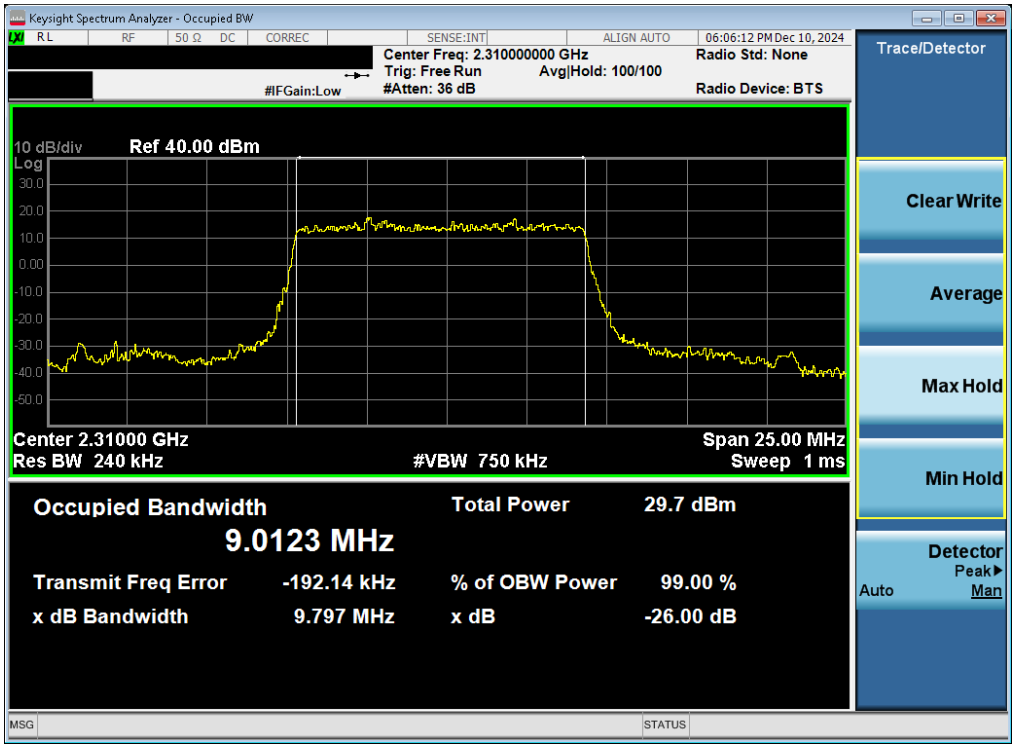


Plot 7-19. Occupied Bandwidth Plot (LTE Band 41(PC3)/38 - 5MHz QPSK - Full RB - Ant1)

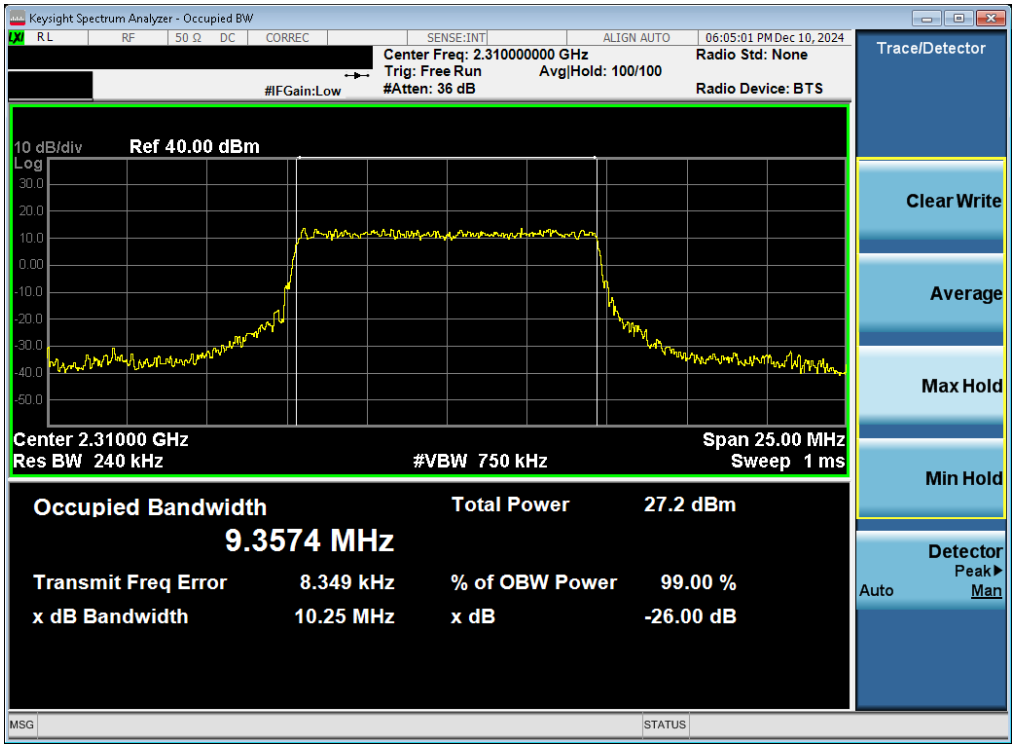


Plot 7-20. Occupied Bandwidth Plot (LTE Band 41(PC3)/38 - 5MHz 16-QAM - Full RB - Ant1)

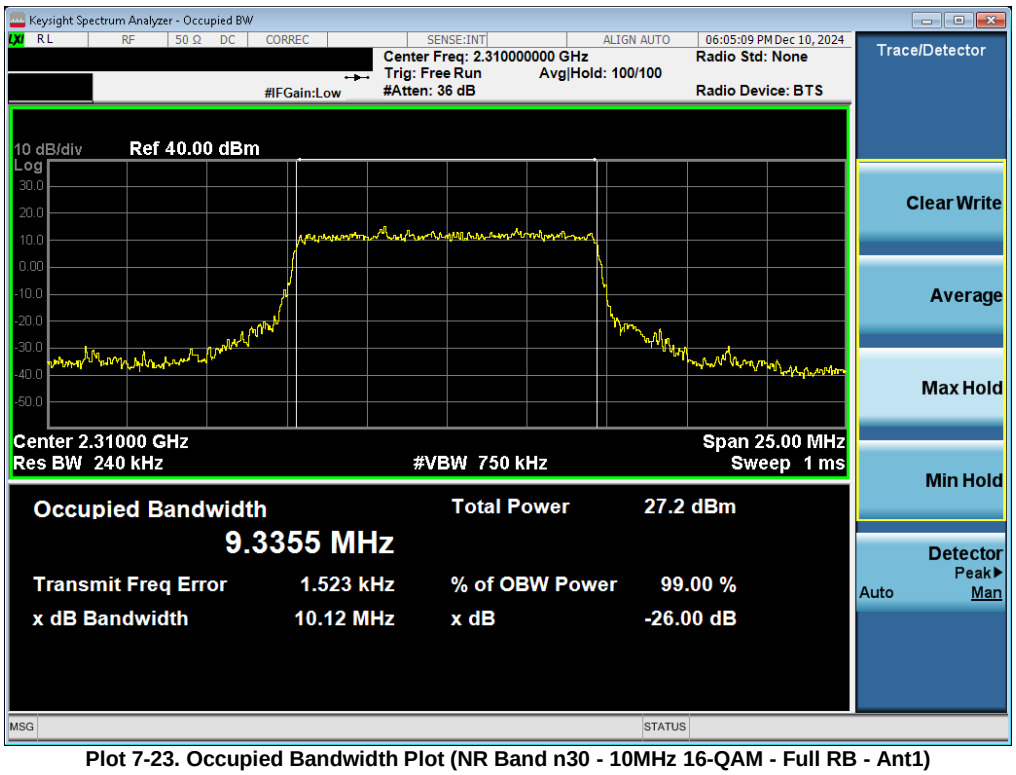
NR Band n30 – Ant1



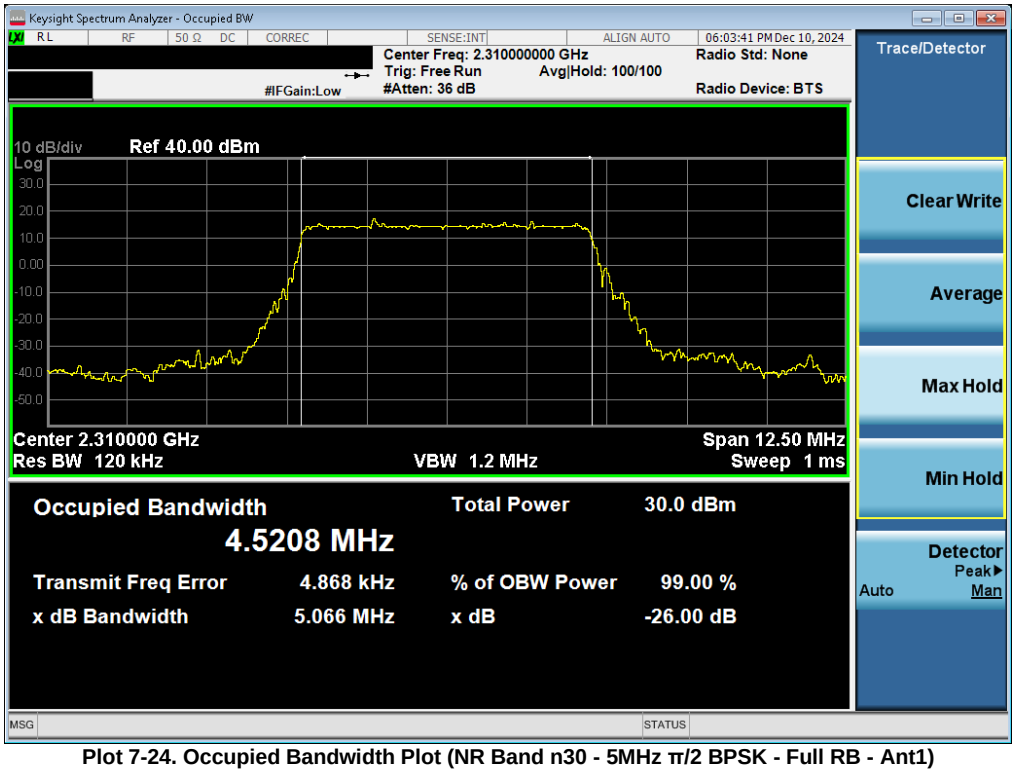
Plot 7-21. Occupied Bandwidth Plot (NR Band n30 - 10MHz π/2 BPSK - Full RB - Ant1)



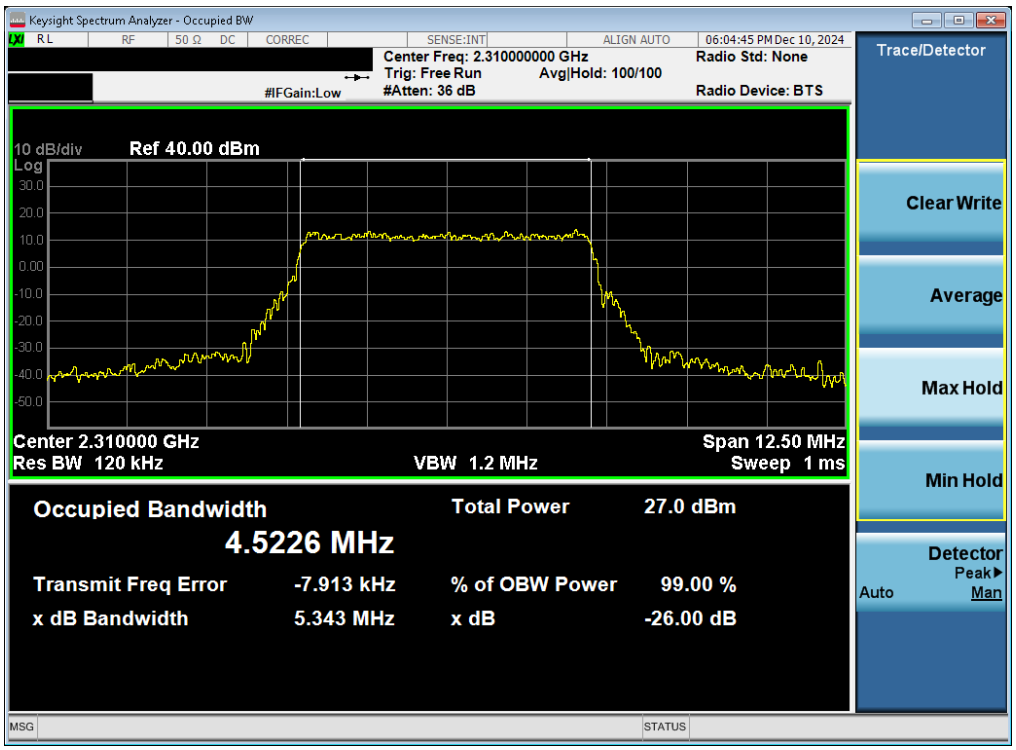
Plot 7-22. Occupied Bandwidth Plot (NR Band n30 - 10MHz QPSK - Full RB - Ant1)



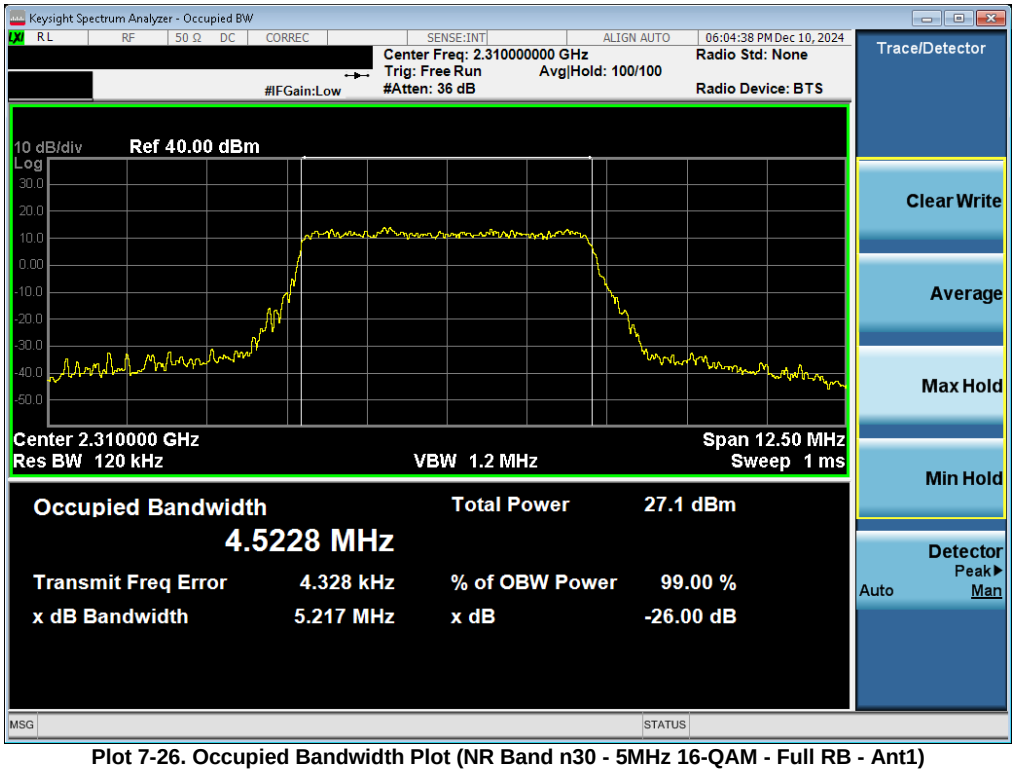
Plot 7-23. Occupied Bandwidth Plot (NR Band n30 - 10MHz 16-QAM - Full RB - Ant1)



Plot 7-24. Occupied Bandwidth Plot (NR Band n30 - 5MHz π/2 BPSK - Full RB - Ant1)

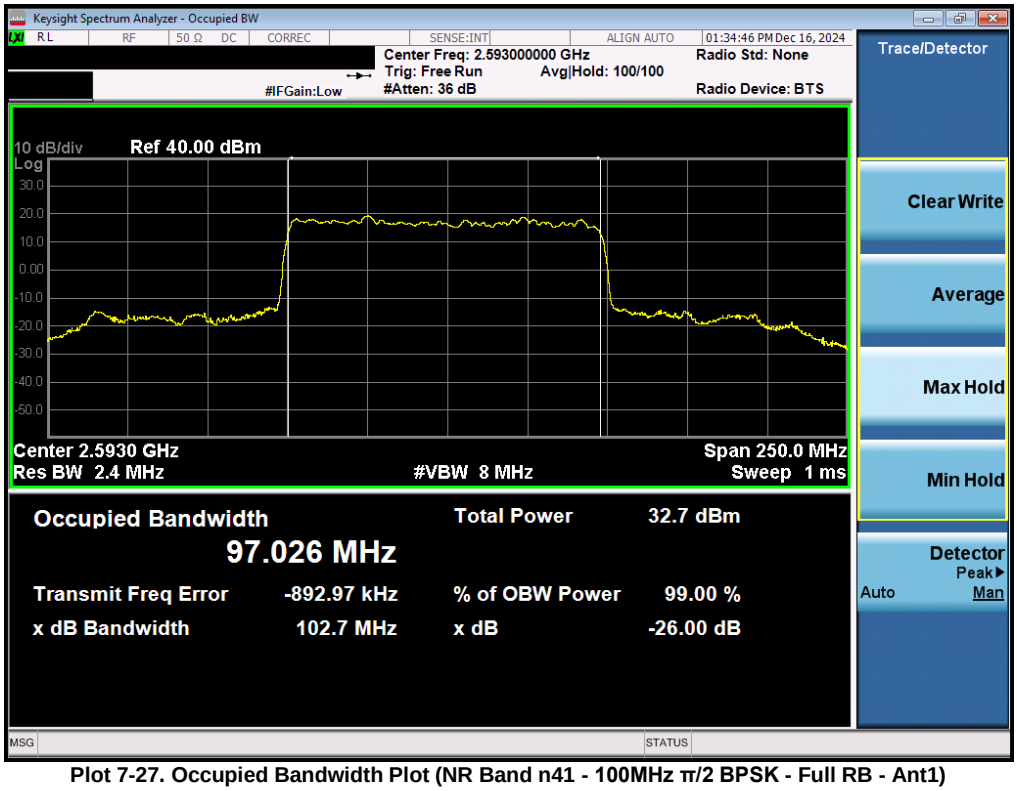


Plot 7-25. Occupied Bandwidth Plot (NR Band n30 - 5MHz QPSK - Full RB - Ant1)



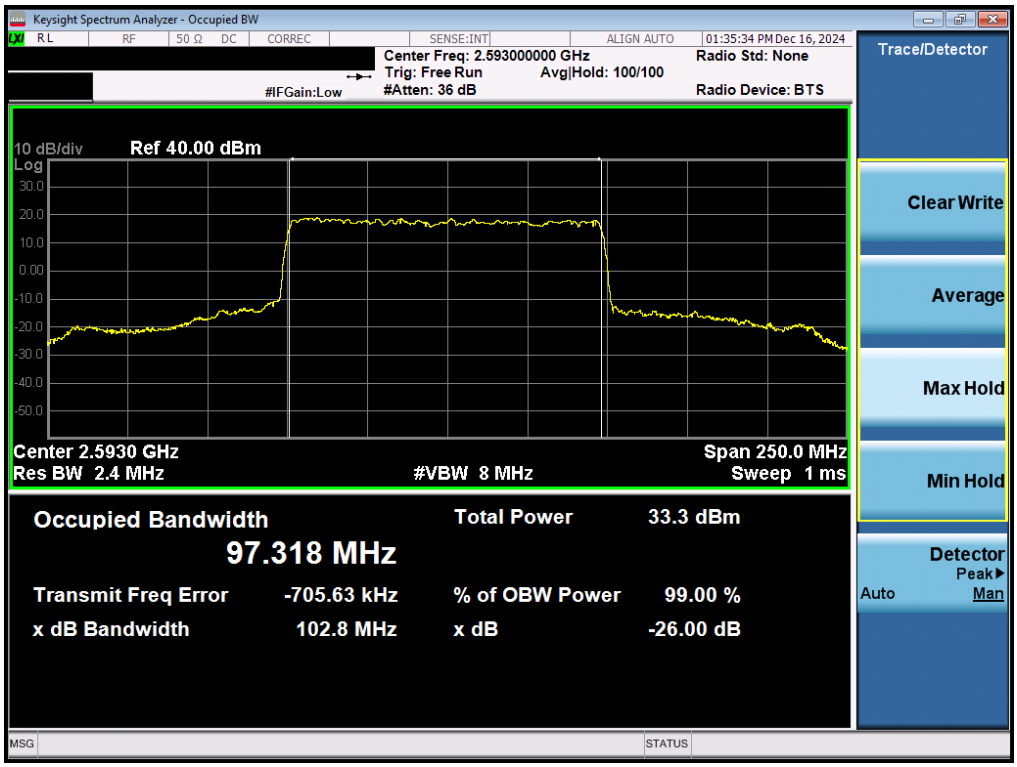
Plot 7-26. Occupied Bandwidth Plot (NR Band n30 - 5MHz 16-QAM - Full RB - Ant1)

NR Band n41 – Ant1



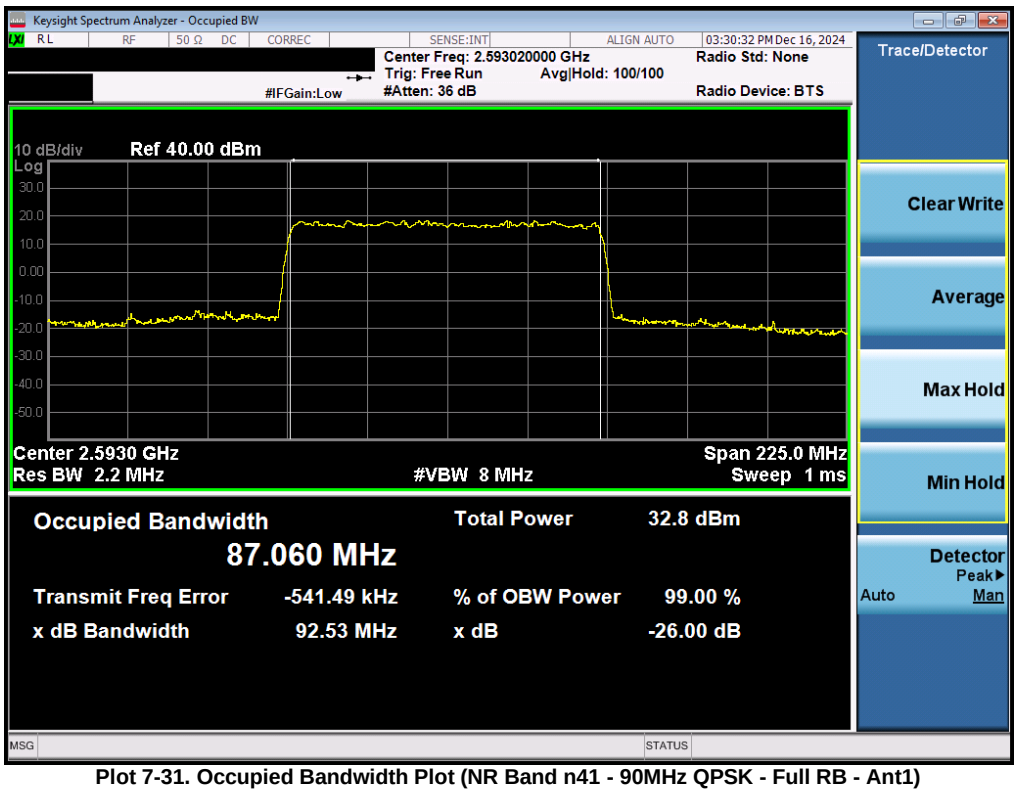
Plot 7-27. Occupied Bandwidth Plot (NR Band n41 - 100MHz π/2 BPSK - Full RB - Ant1)

Plot 7-28. Occupied Bandwidth Plot (NR Band n41 - 100MHz QPSK - Full RB - Ant1)

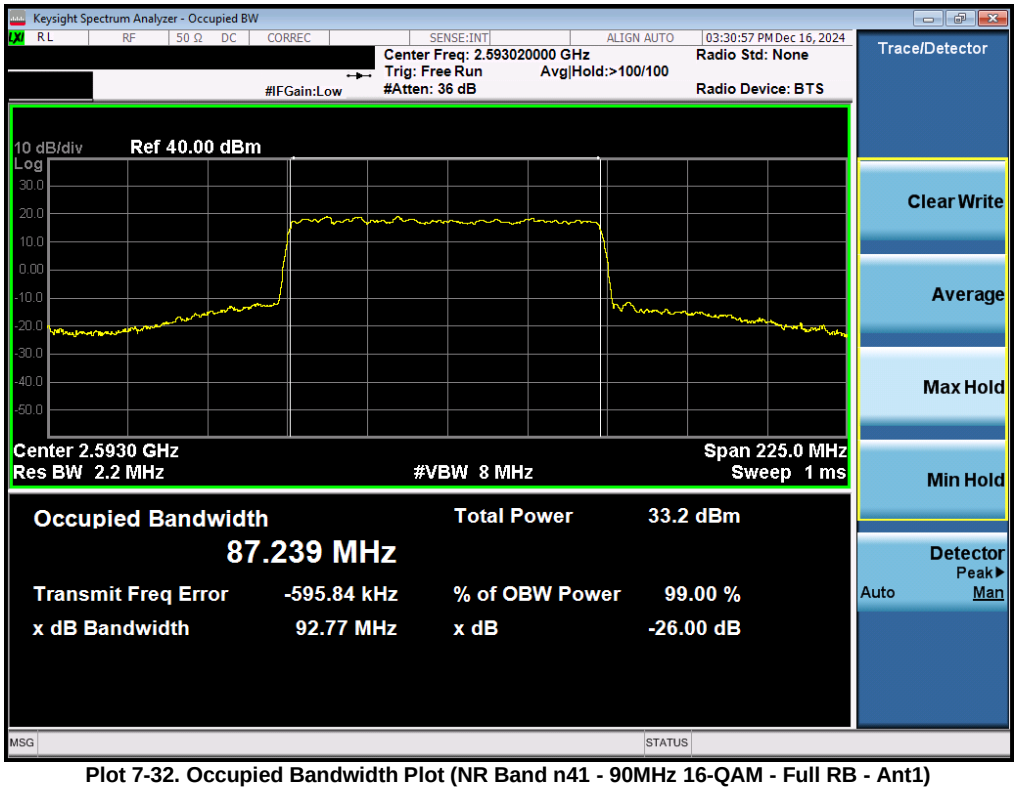


Plot 7-29. Occupied Bandwidth Plot (NR Band n41 - 100MHz 16-QAM - Full RB - Ant1)

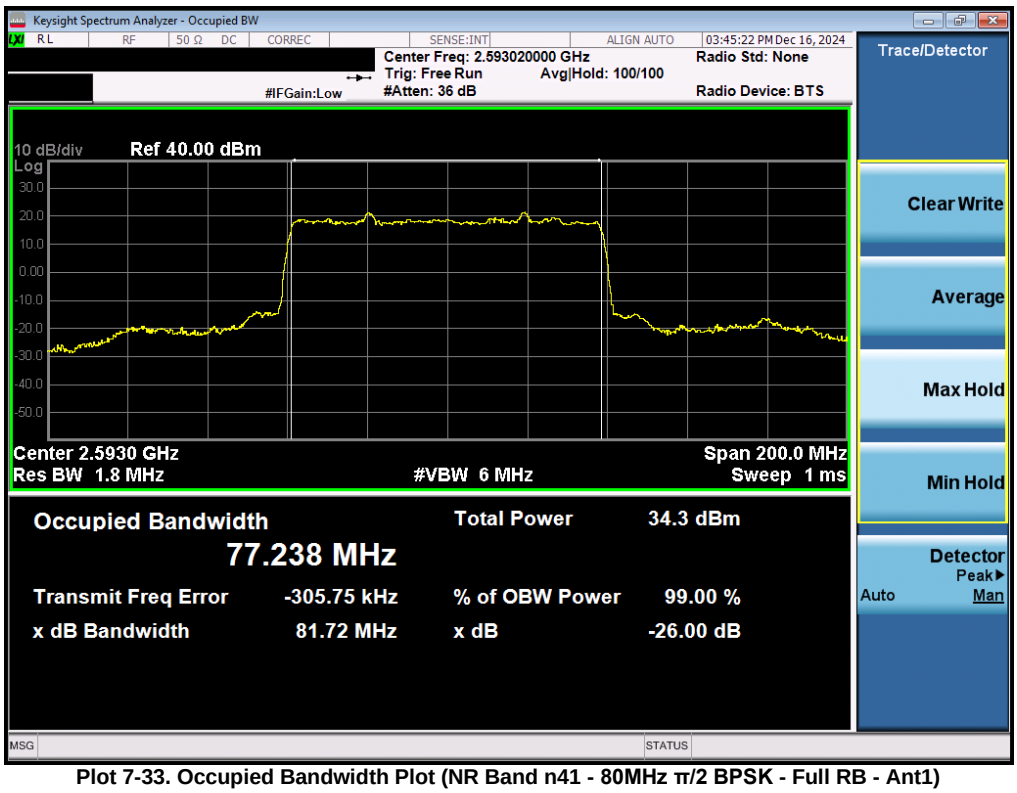
Plot 7-30. Occupied Bandwidth Plot (NR Band n41 - 90MHz π/2 BPSK - Full RB - Ant1)



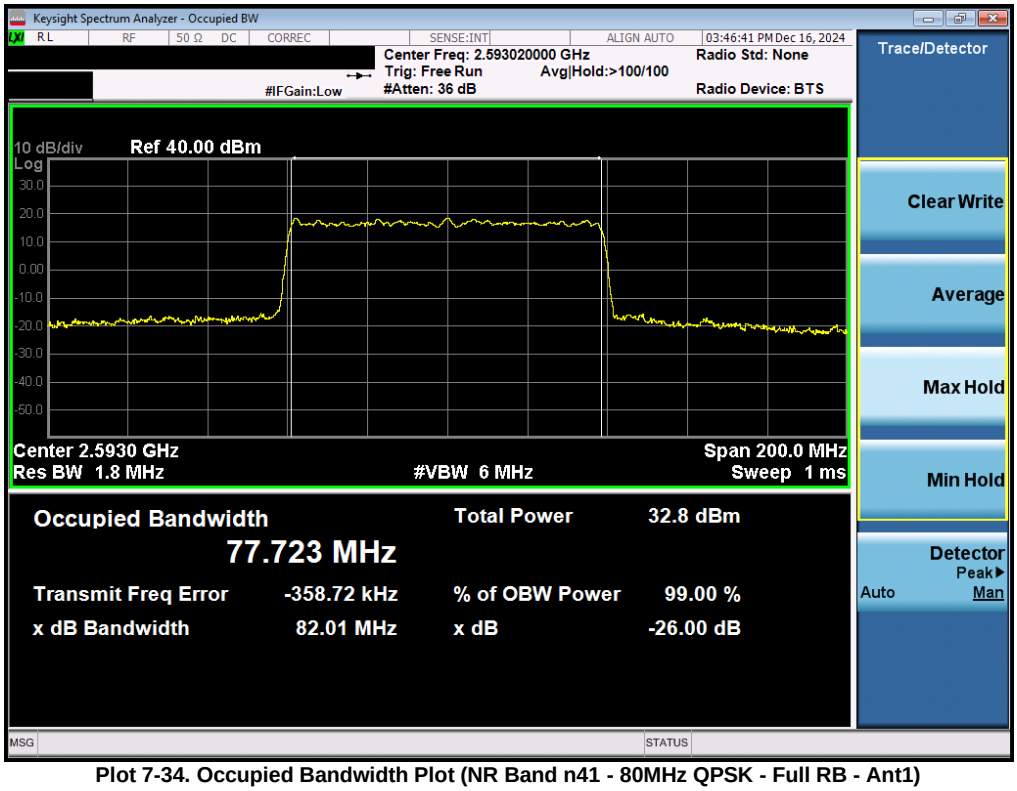
Plot 7-31. Occupied Bandwidth Plot (NR Band n41 - 90MHz QPSK - Full RB - Ant1)



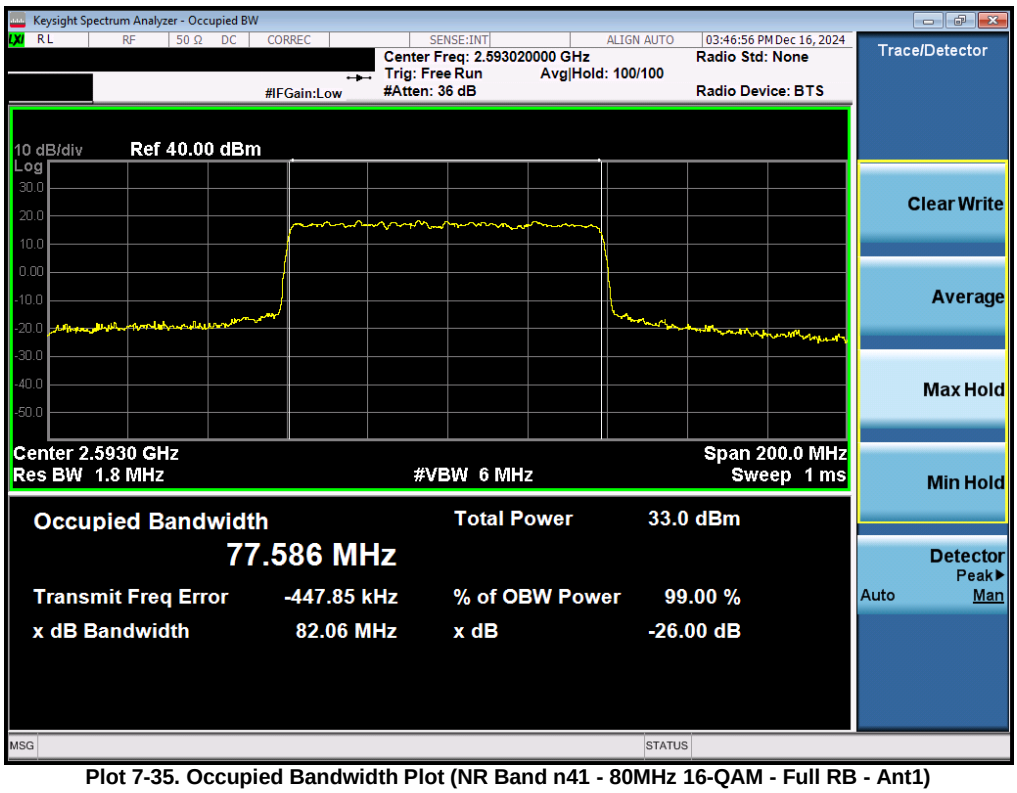
Plot 7-32. Occupied Bandwidth Plot (NR Band n41 - 90MHz 16-QAM - Full RB - Ant1)



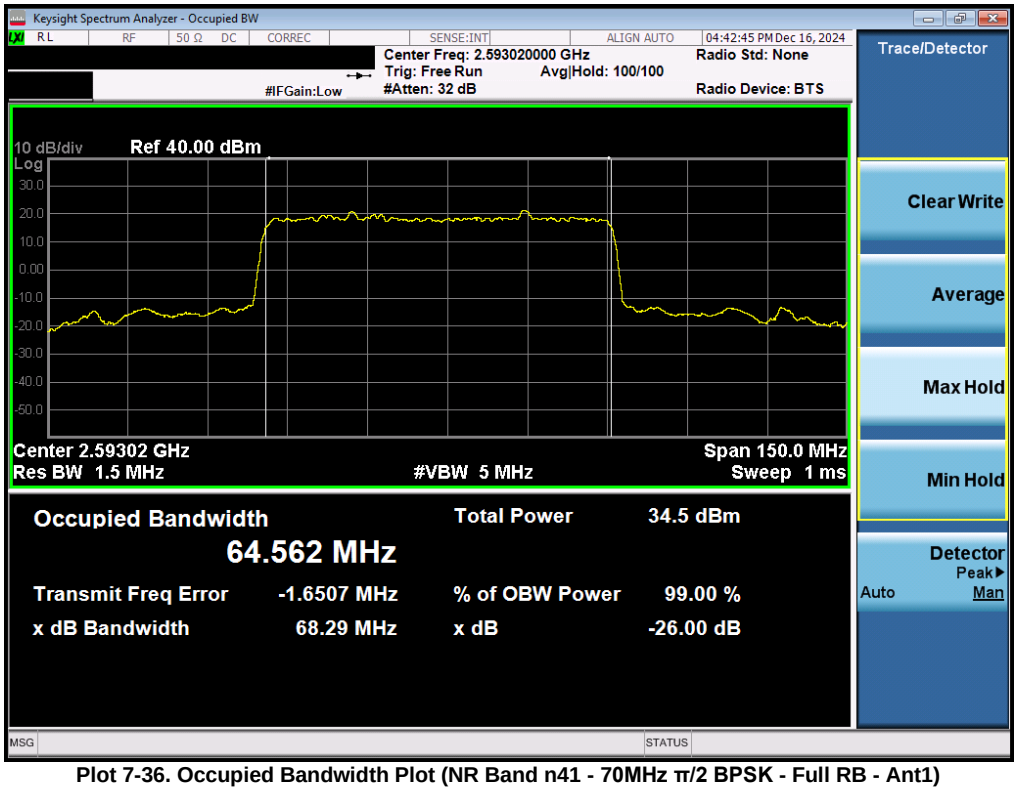
Plot 7-33. Occupied Bandwidth Plot (NR Band n41 - 80MHz π/2 BPSK - Full RB - Ant1)



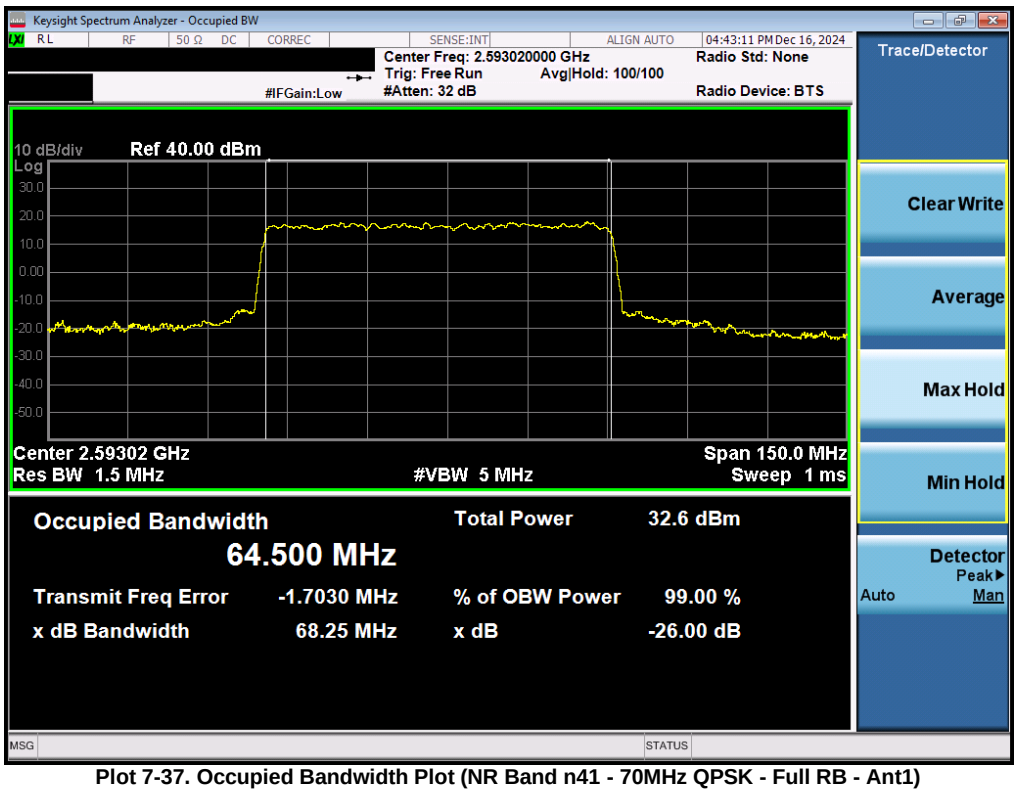
Plot 7-34. Occupied Bandwidth Plot (NR Band n41 - 80MHz QPSK - Full RB - Ant1)



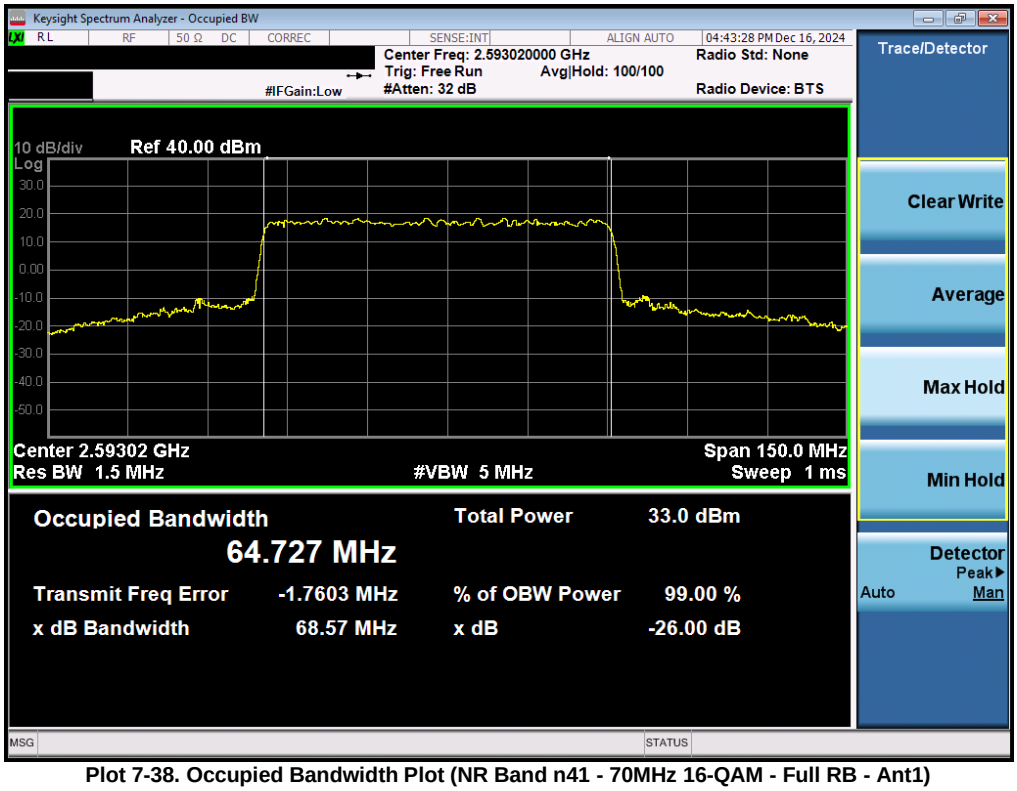
Plot 7-35. Occupied Bandwidth Plot (NR Band n41 - 80MHz 16-QAM - Full RB - Ant1)



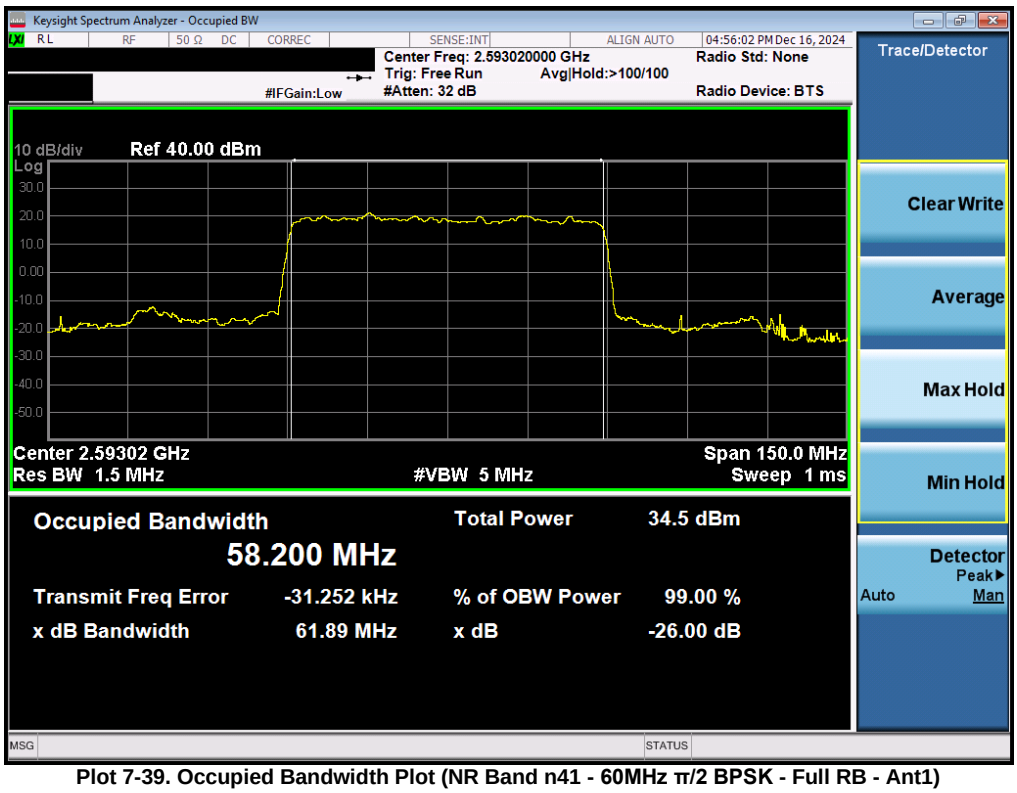
Plot 7-36. Occupied Bandwidth Plot (NR Band n41 - 70MHz π/2 BPSK - Full RB - Ant1)



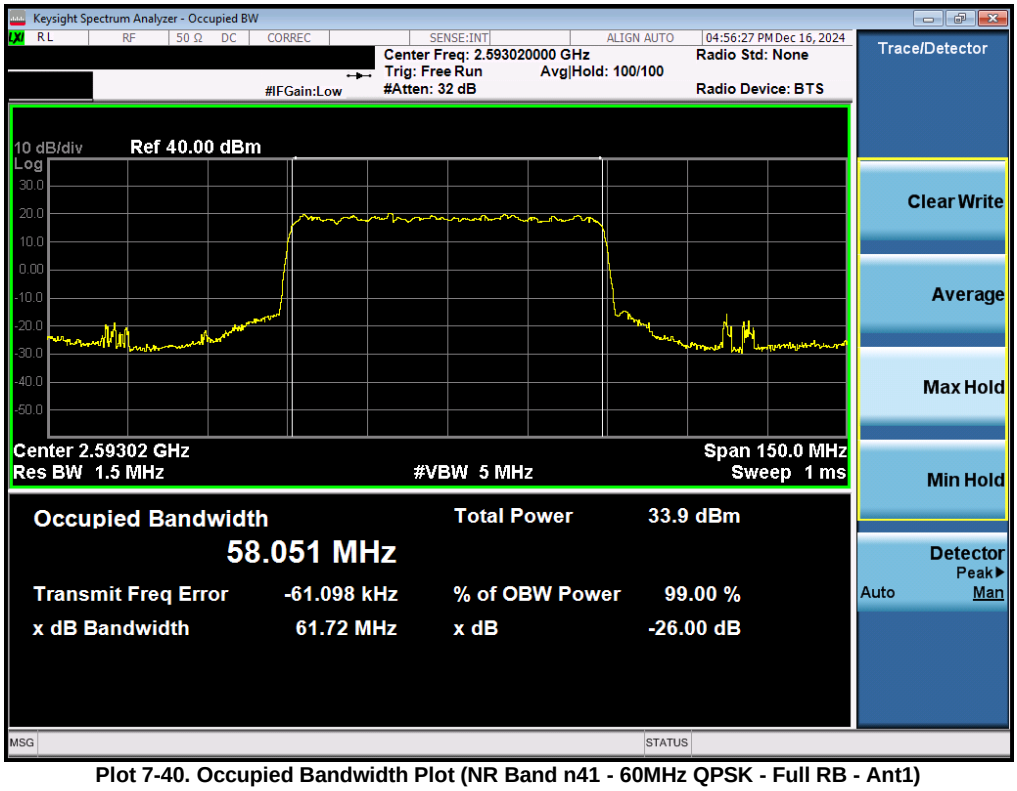
Plot 7-37. Occupied Bandwidth Plot (NR Band n41 - 70MHz QPSK - Full RB - Ant1)



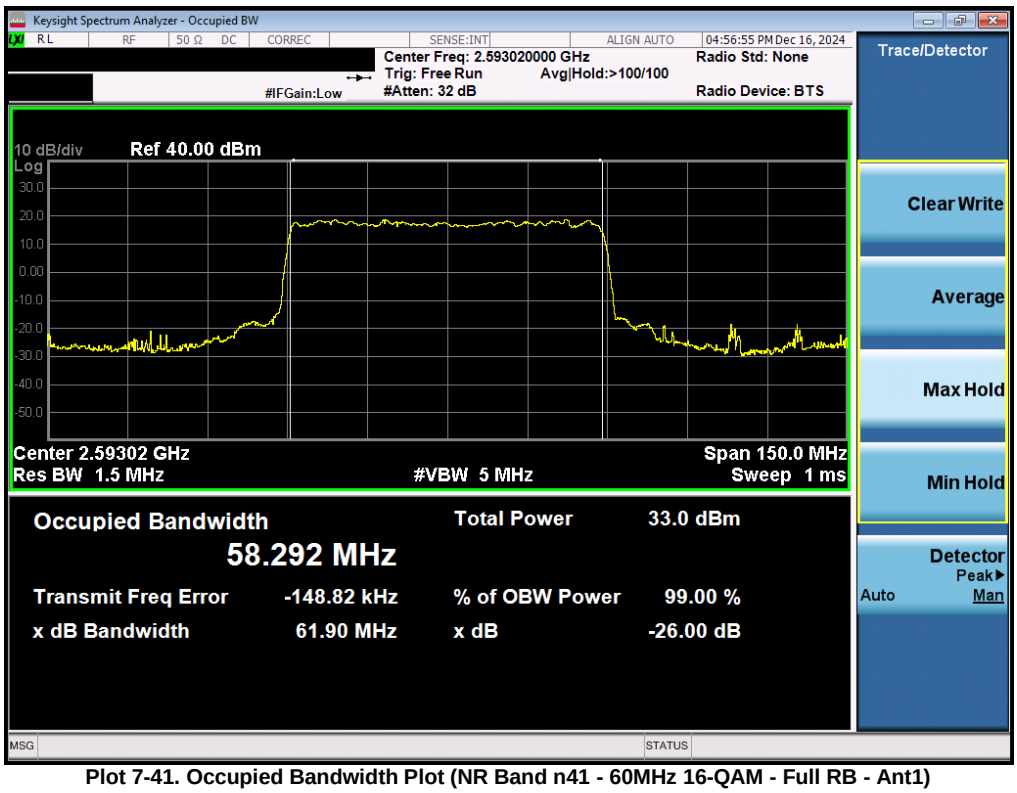
Plot 7-38. Occupied Bandwidth Plot (NR Band n41 - 70MHz 16-QAM - Full RB - Ant1)



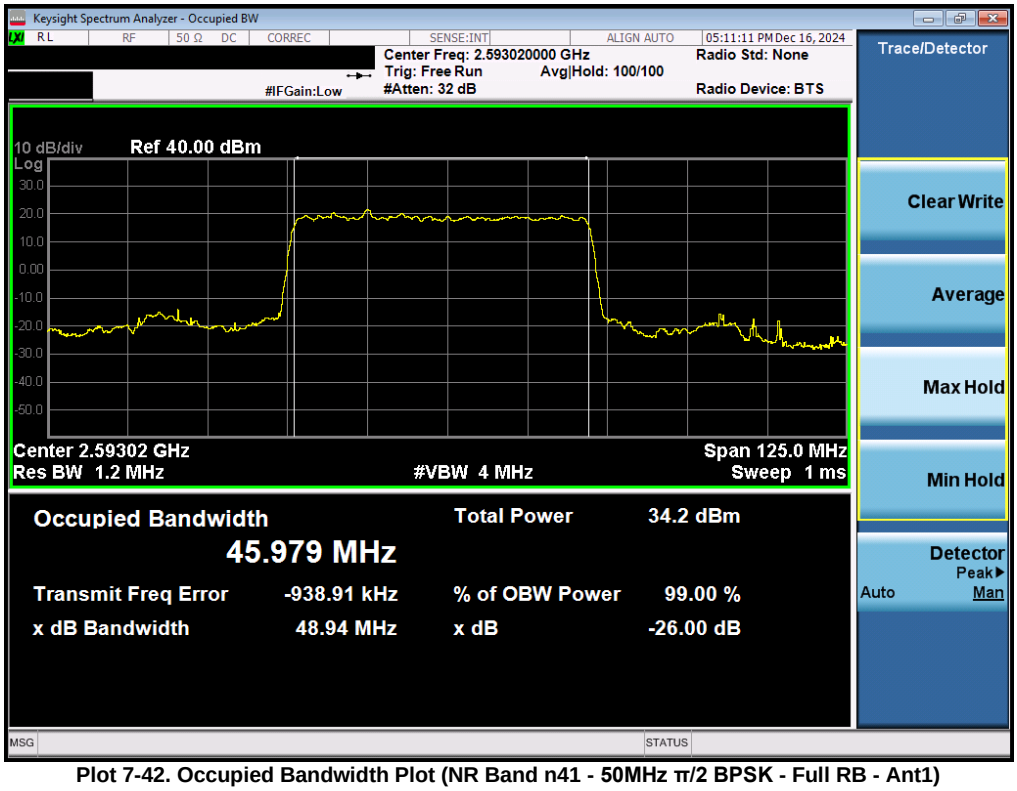
Plot 7-39. Occupied Bandwidth Plot (NR Band n41 - 60MHz π/2 BPSK - Full RB - Ant1)



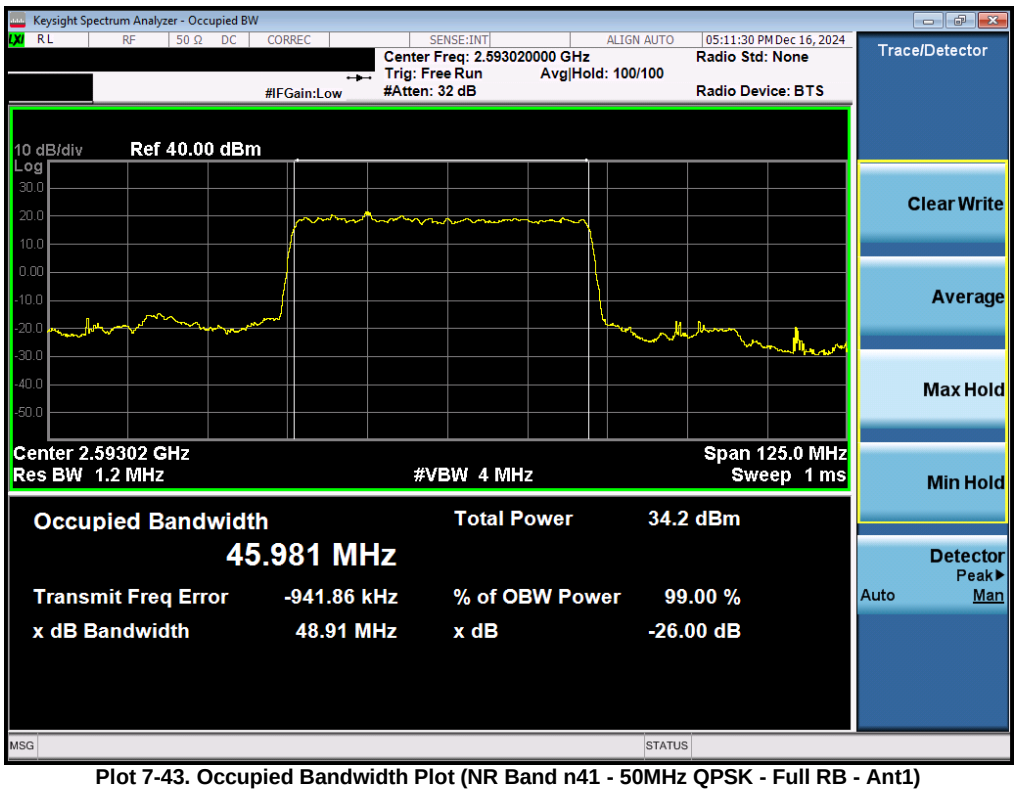
Plot 7-40. Occupied Bandwidth Plot (NR Band n41 - 60MHz QPSK - Full RB - Ant1)



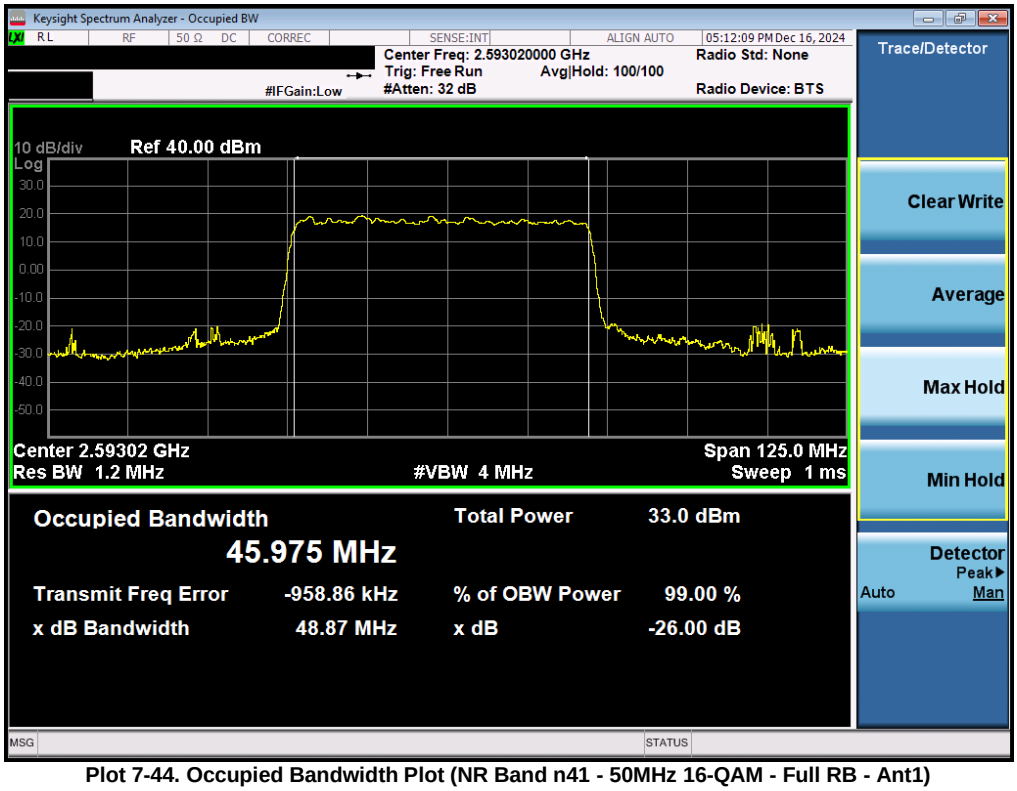
Plot 7-41. Occupied Bandwidth Plot (NR Band n41 - 60MHz 16-QAM - Full RB - Ant1)



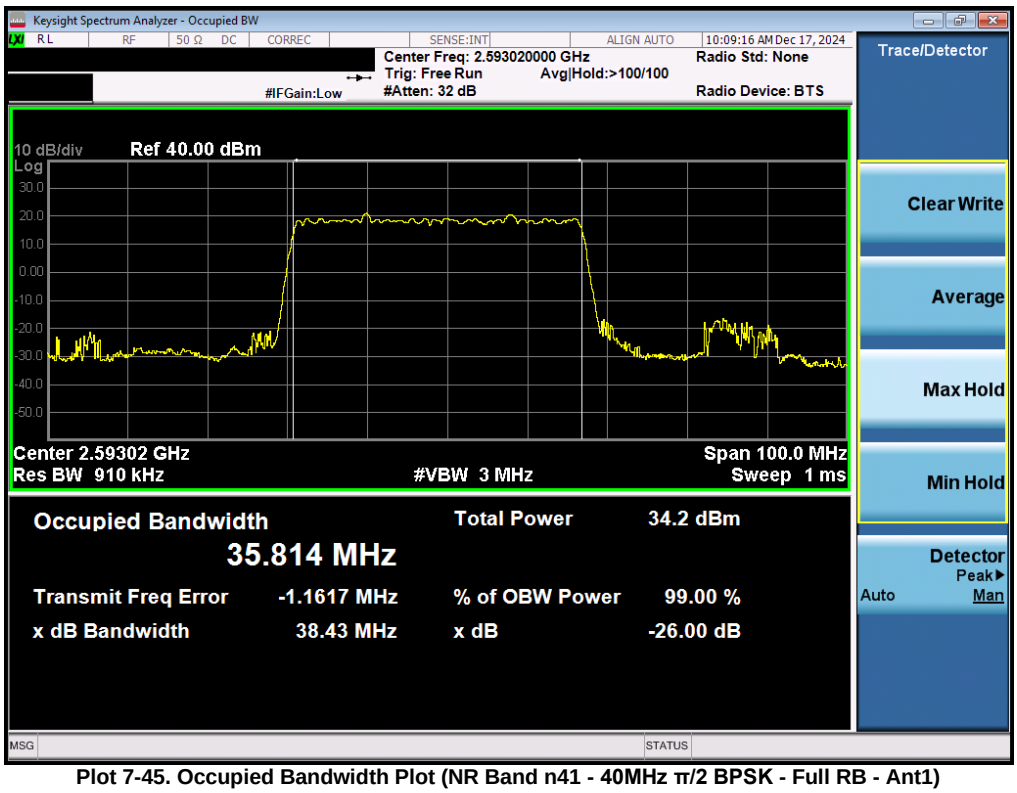
Plot 7-42. Occupied Bandwidth Plot (NR Band n41 - 50MHz π/2 BPSK - Full RB - Ant1)



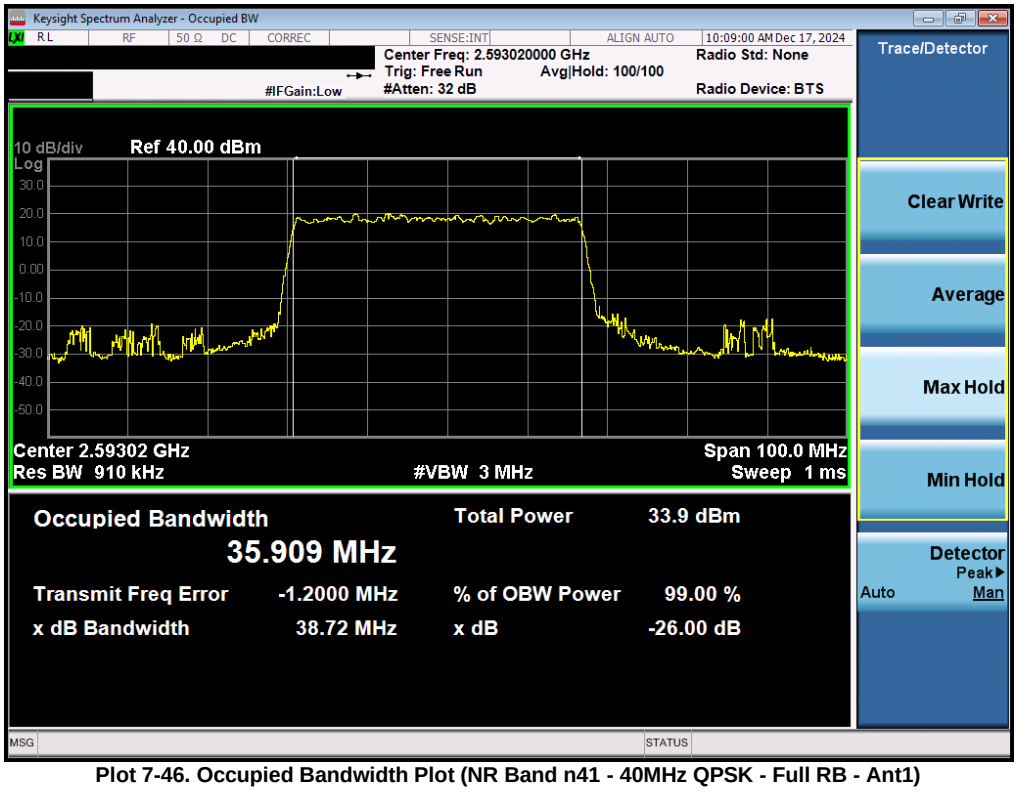
Plot 7-43. Occupied Bandwidth Plot (NR Band n41 - 50MHz QPSK - Full RB - Ant1)



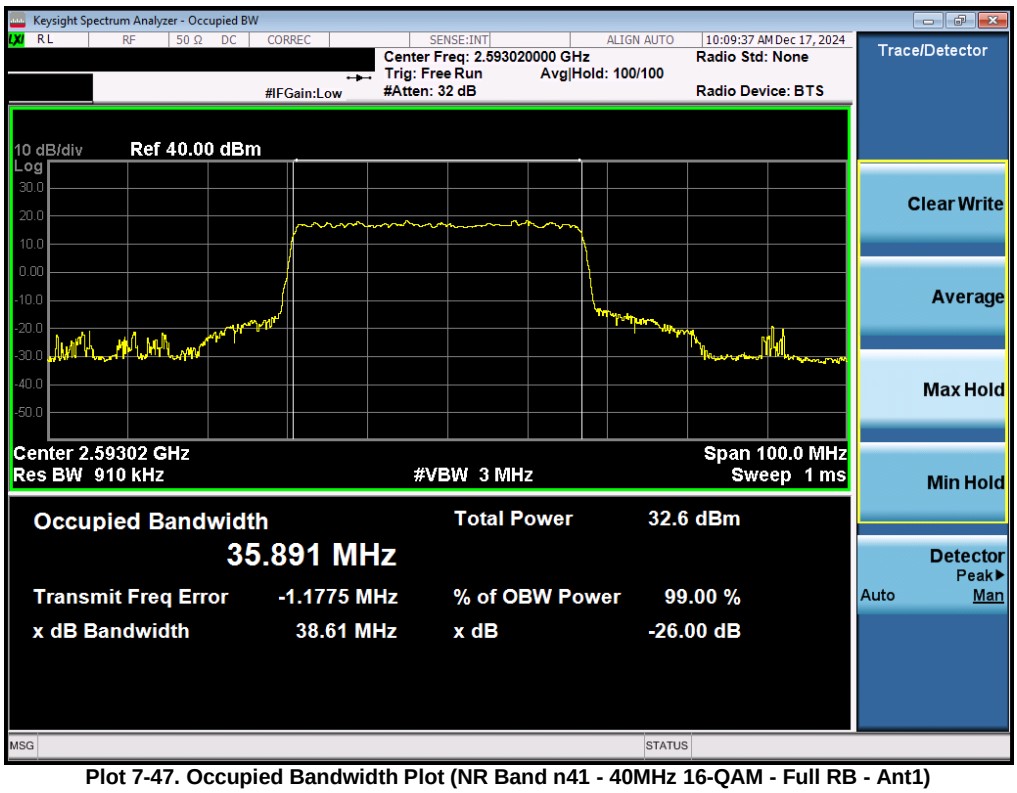
Plot 7-44. Occupied Bandwidth Plot (NR Band n41 - 50MHz 16-QAM - Full RB - Ant1)



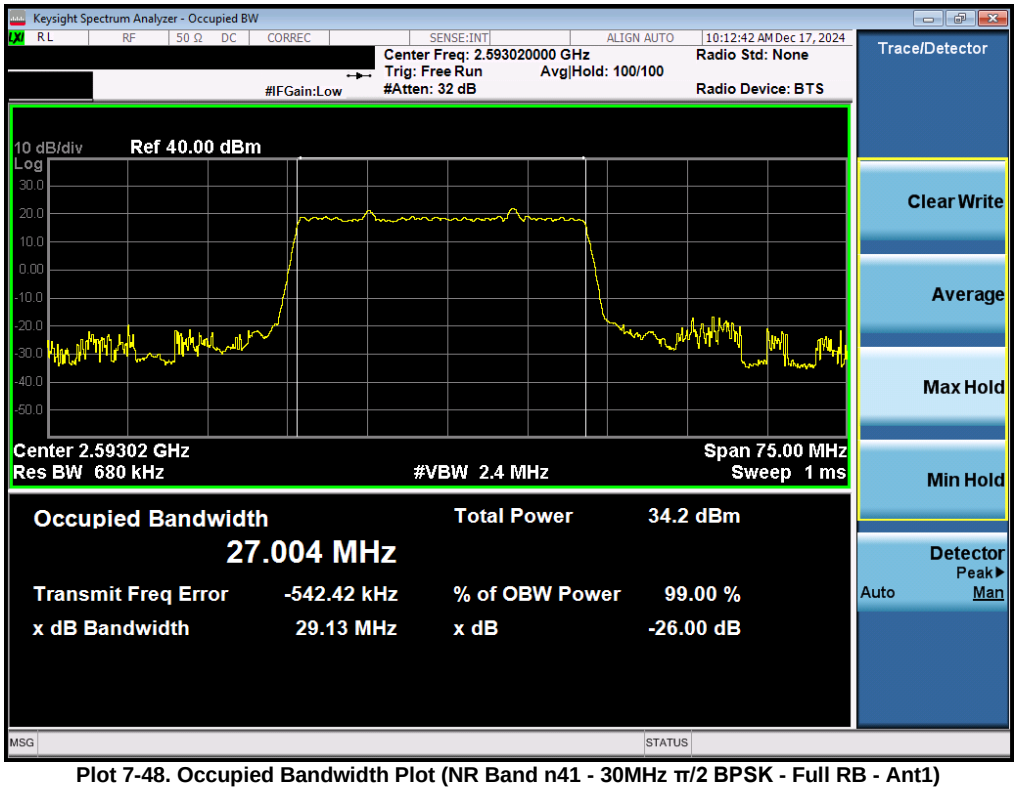
Plot 7-45. Occupied Bandwidth Plot (NR Band n41 - 40MHz π/2 BPSK - Full RB - Ant1)



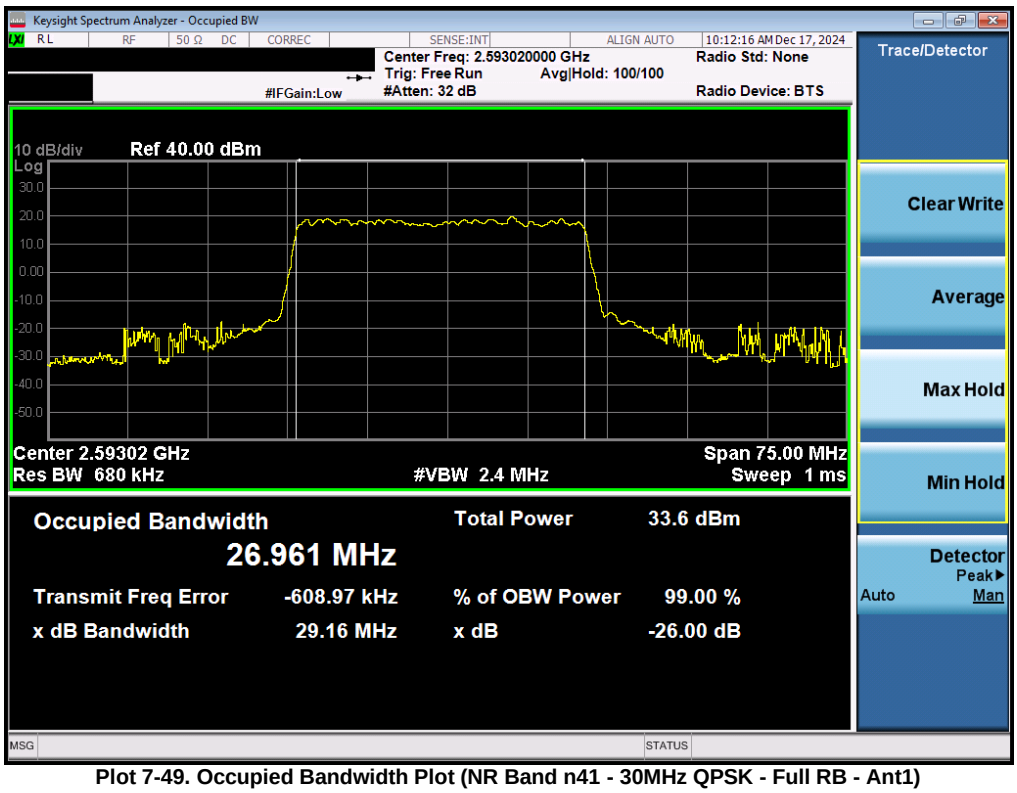
Plot 7-46. Occupied Bandwidth Plot (NR Band n41 - 40MHz QPSK - Full RB - Ant1)



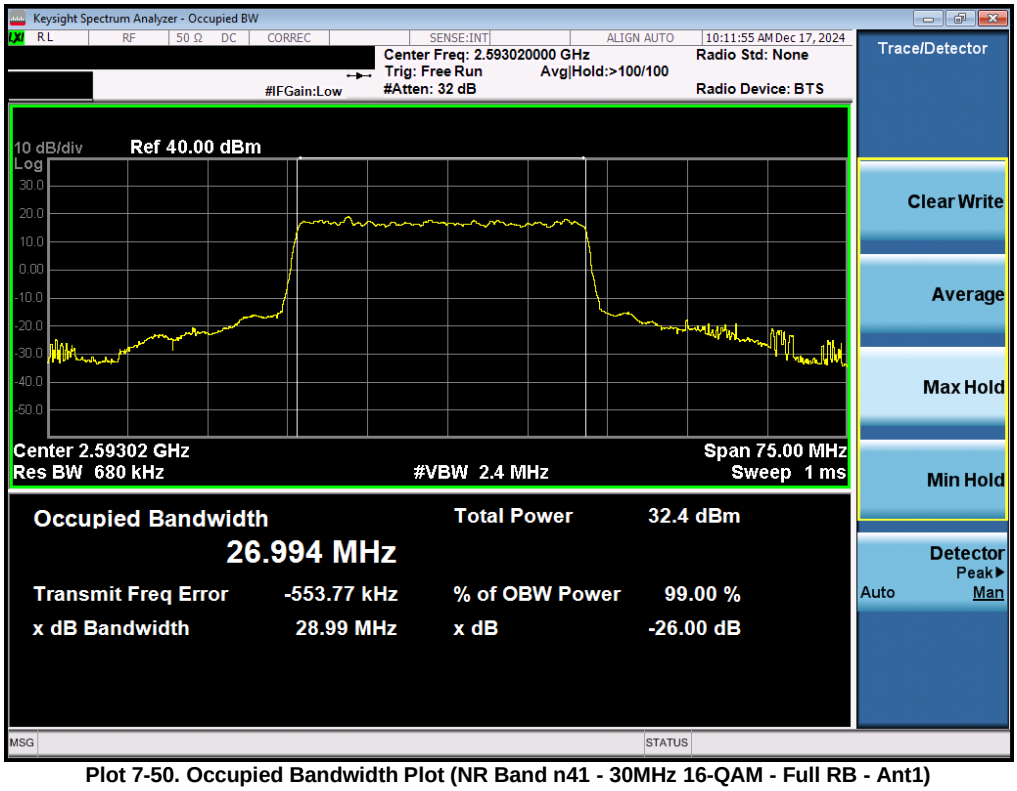
Plot 7-47. Occupied Bandwidth Plot (NR Band n41 - 40MHz 16-QAM - Full RB - Ant1)



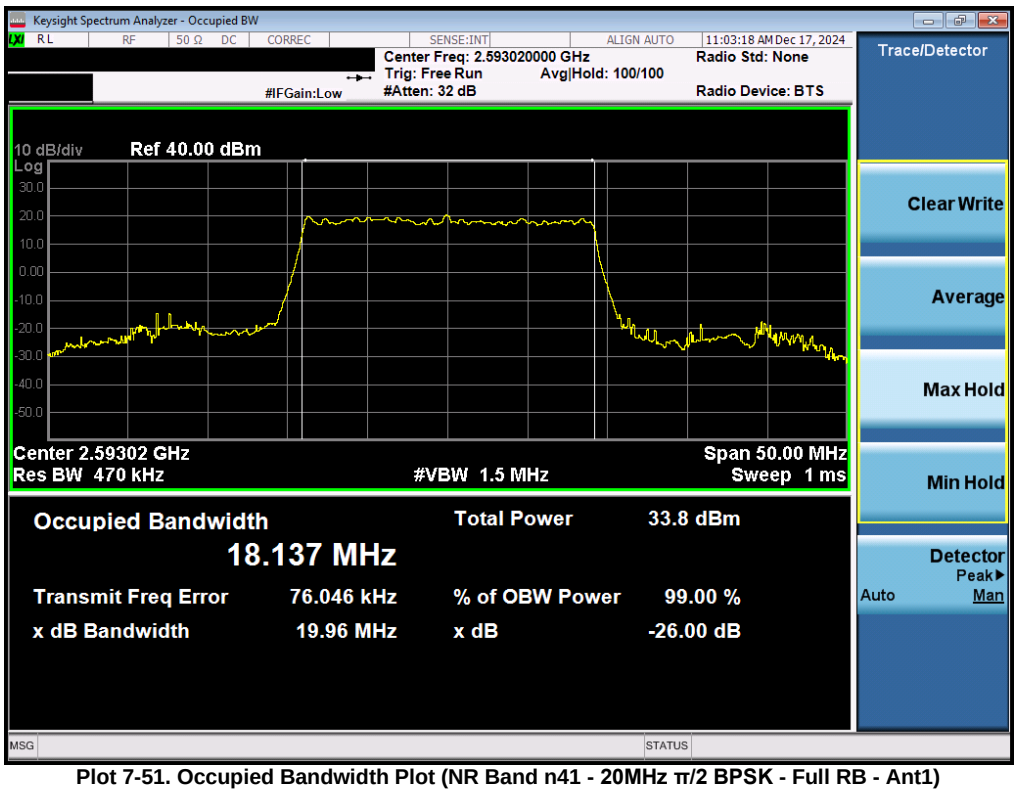
Plot 7-48. Occupied Bandwidth Plot (NR Band n41 - 30MHz π/2 BPSK - Full RB - Ant1)



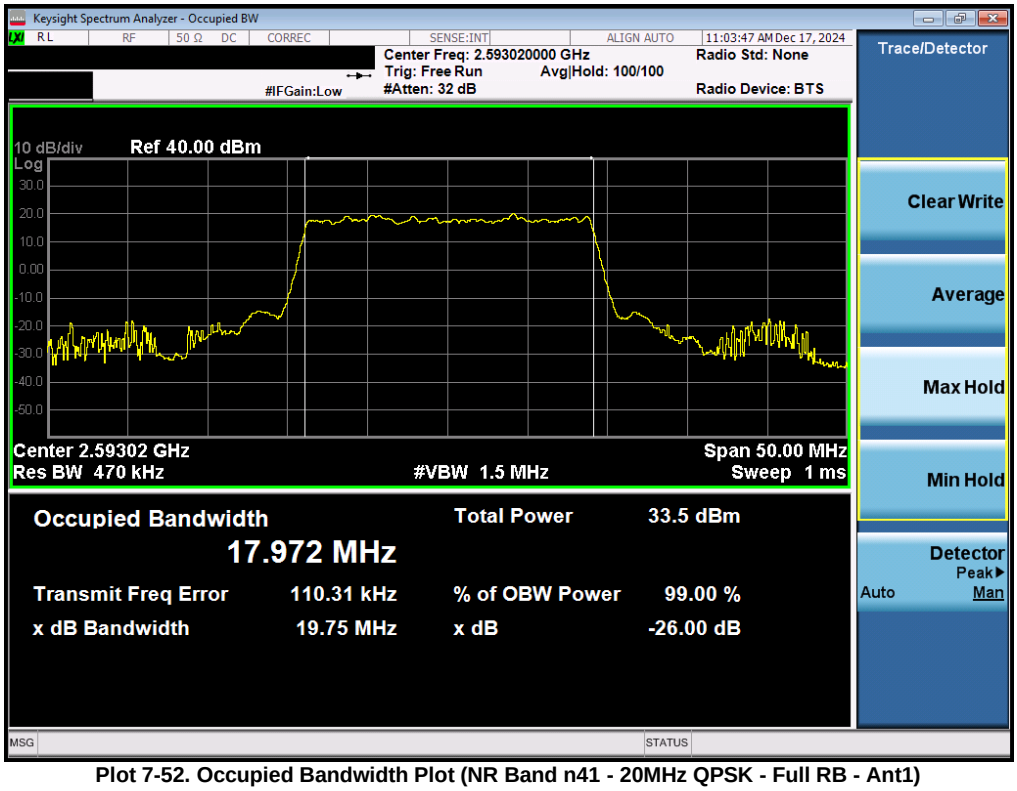
Plot 7-49. Occupied Bandwidth Plot (NR Band n41 - 30MHz QPSK - Full RB - Ant1)



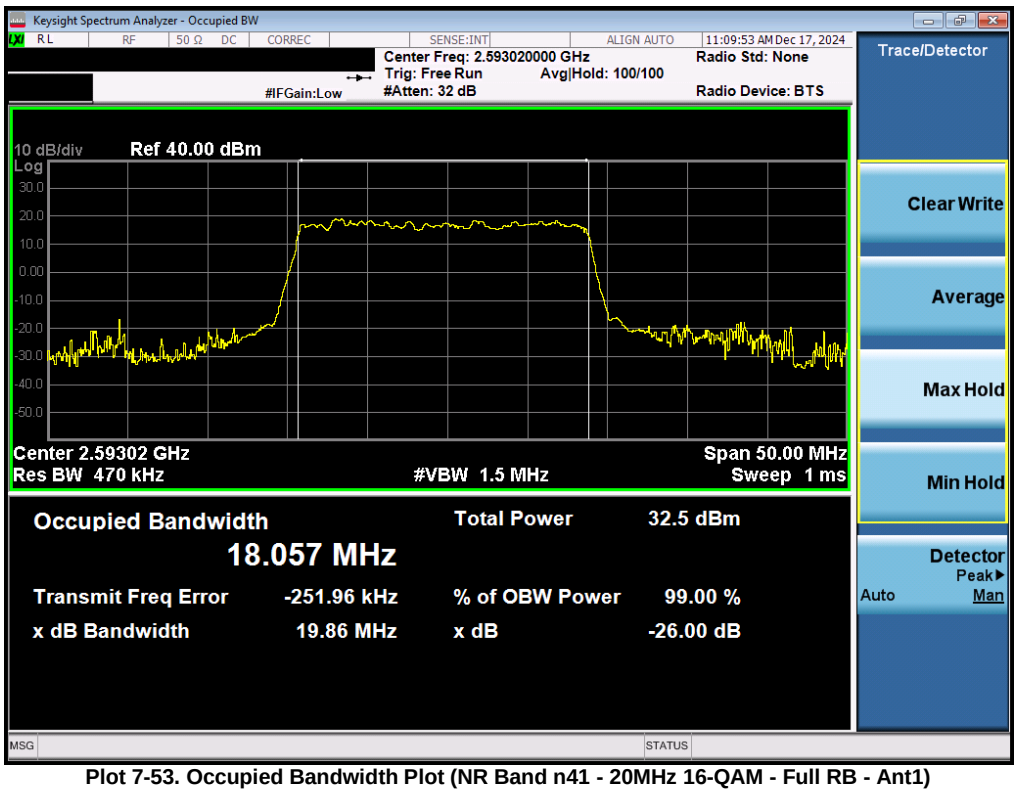
Plot 7-50. Occupied Bandwidth Plot (NR Band n41 - 30MHz 16-QAM - Full RB - Ant1)



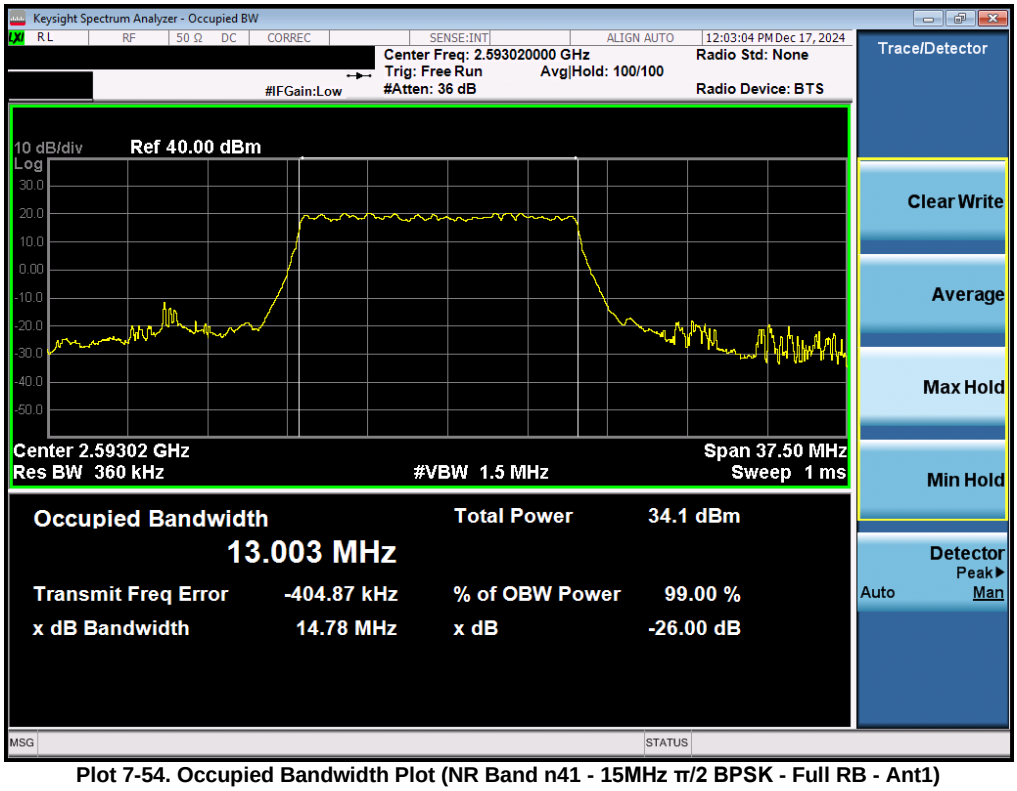
Plot 7-51. Occupied Bandwidth Plot (NR Band n41 - 20MHz π/2 BPSK - Full RB - Ant1)



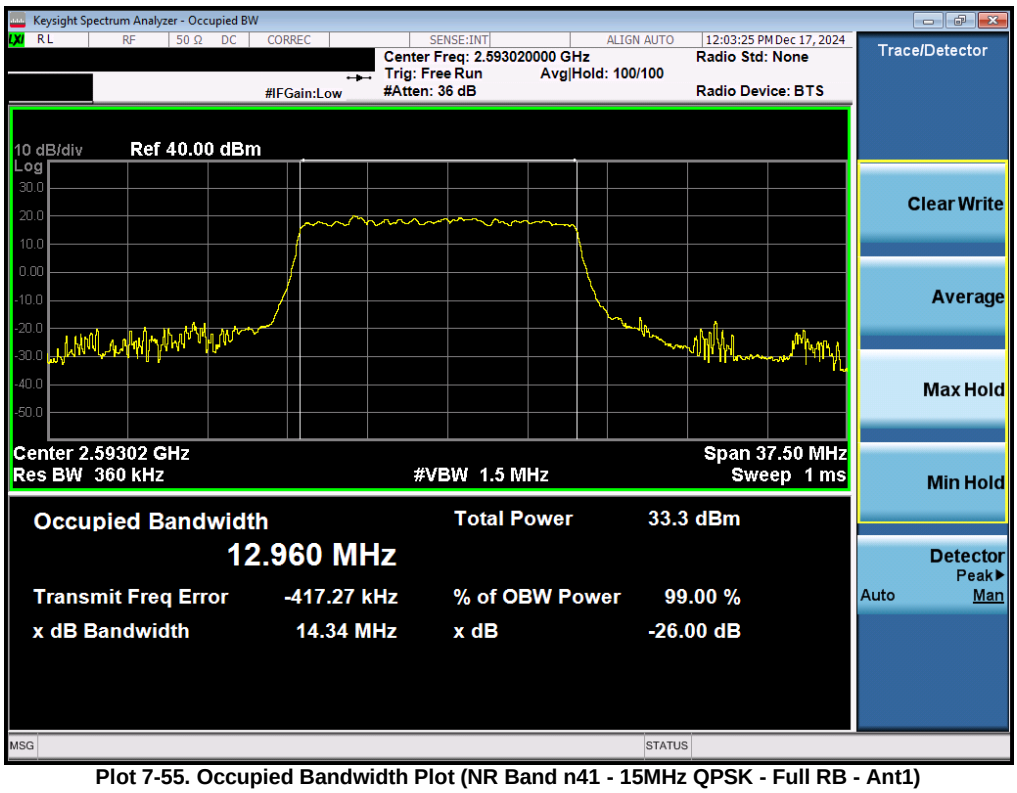
Plot 7-52. Occupied Bandwidth Plot (NR Band n41 - 20MHz QPSK - Full RB - Ant1)



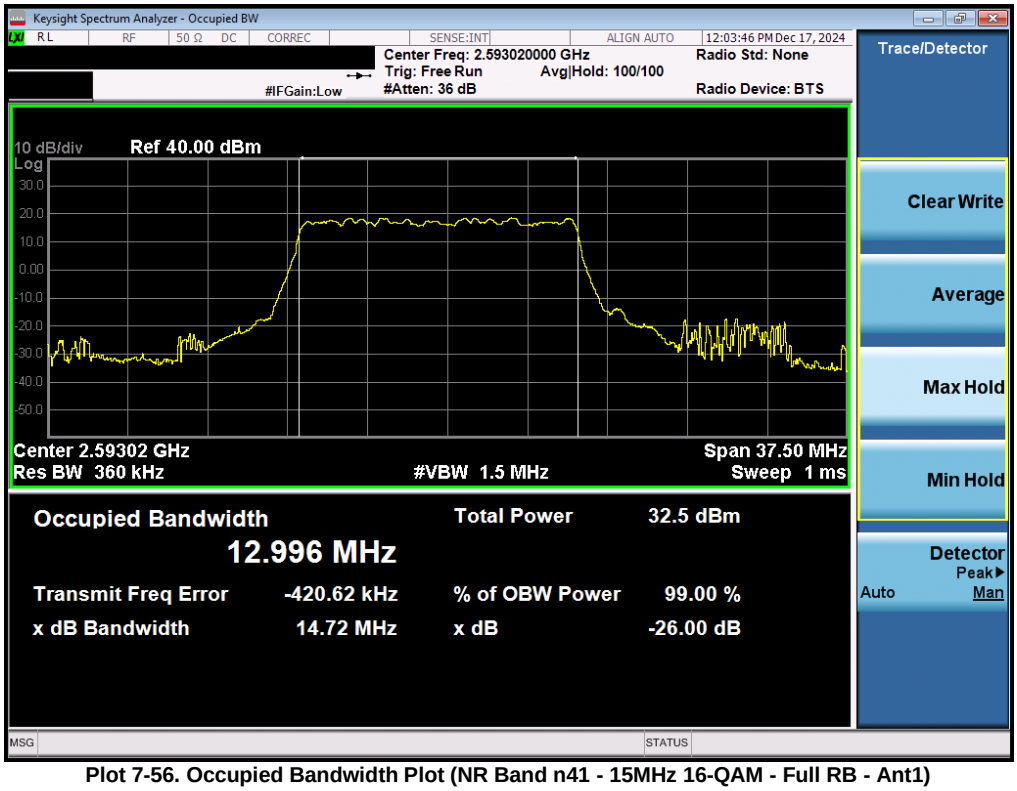
Plot 7-53. Occupied Bandwidth Plot (NR Band n41 - 20MHz 16-QAM - Full RB - Ant1)



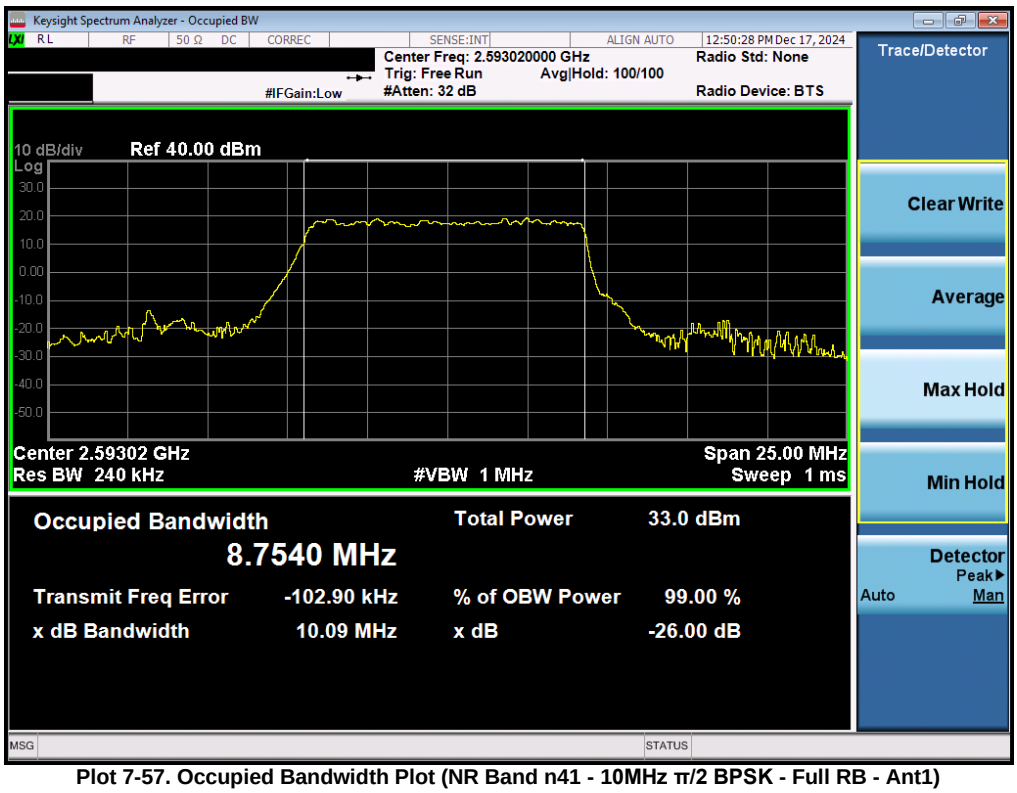
Plot 7-54. Occupied Bandwidth Plot (NR Band n41 - 15MHz π/2 BPSK - Full RB - Ant1)



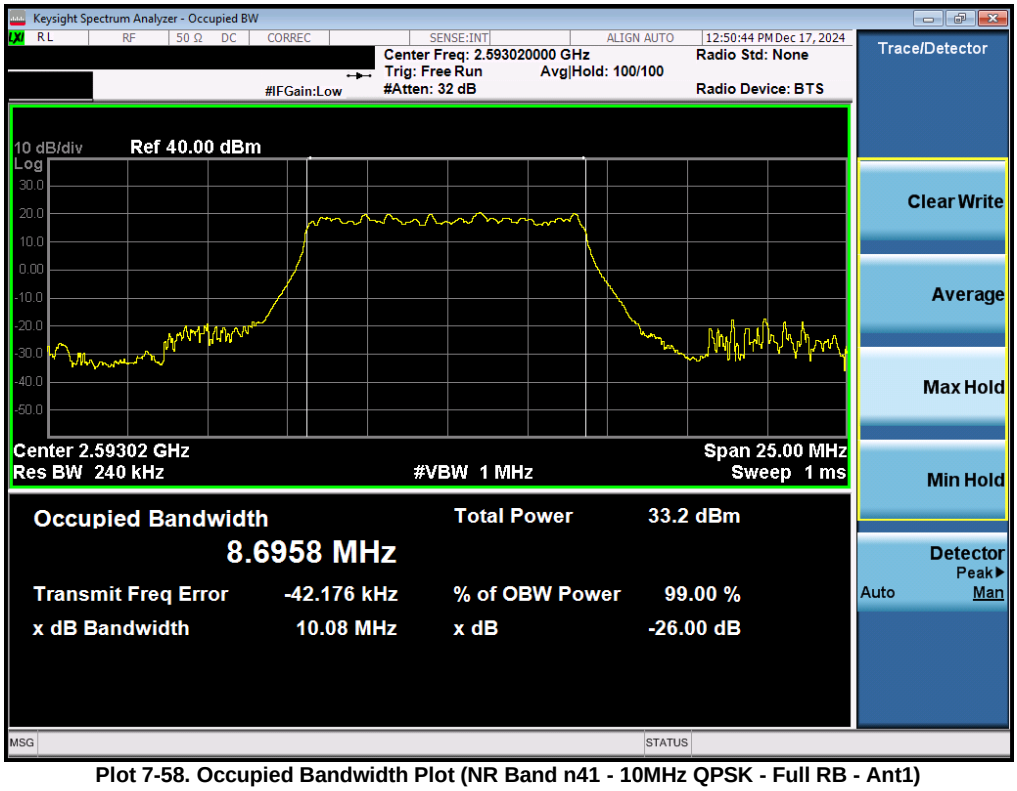
Plot 7-55. Occupied Bandwidth Plot (NR Band n41 - 15MHz QPSK - Full RB - Ant1)



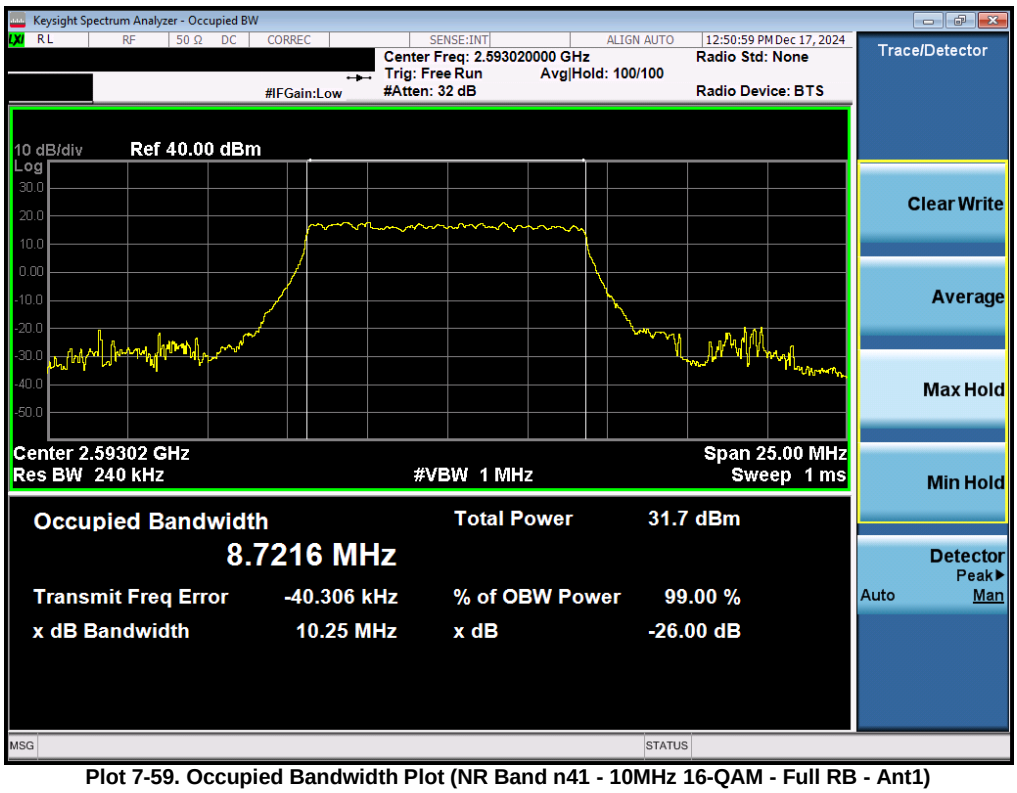
Plot 7-56. Occupied Bandwidth Plot (NR Band n41 - 15MHz 16-QAM - Full RB - Ant1)



Plot 7-57. Occupied Bandwidth Plot (NR Band n41 - 10MHz π/2 BPSK - Full RB - Ant1)



Plot 7-58. Occupied Bandwidth Plot (NR Band n41 - 10MHz QPSK - Full RB - Ant1)



Plot 7-59. Occupied Bandwidth Plot (NR Band n41 - 10MHz 16-QAM - Full RB - Ant1)

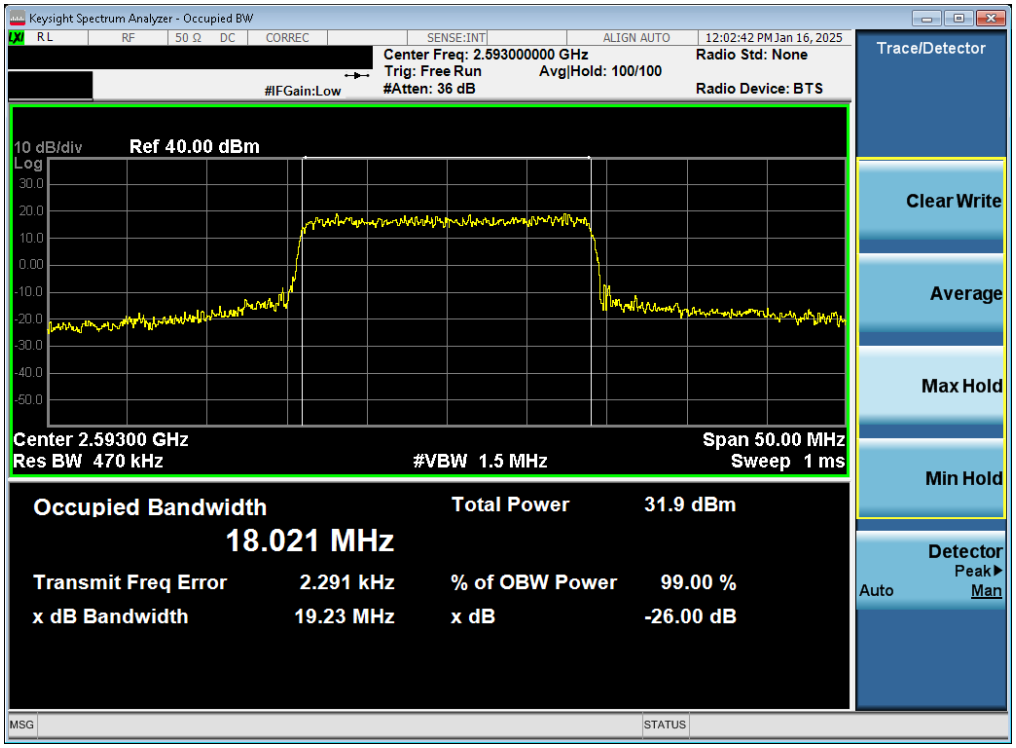
Mode	Bandwidth	Modulation	OBW [MHz]
LTE-B41PC2	20MHz	QPSK	18.02
		16QAM	18.00
	15MHz	QPSK	13.50
		16QAM	13.47
	10MHz	QPSK	8.99
		16QAM	9.00
	5MHz	QPSK	4.54
		16QAM	4.49
LTE-B41/38 PC3	20MHz	QPSK	18.01
		16QAM	18.06
	15MHz	QPSK	13.51
		16QAM	13.51
	10MHz	QPSK	9.01
		16QAM	9.04
	5MHz	QPSK	4.52
		16QAM	4.52

Table 7-18. Occupied Bandwidth Test Results – Ant6

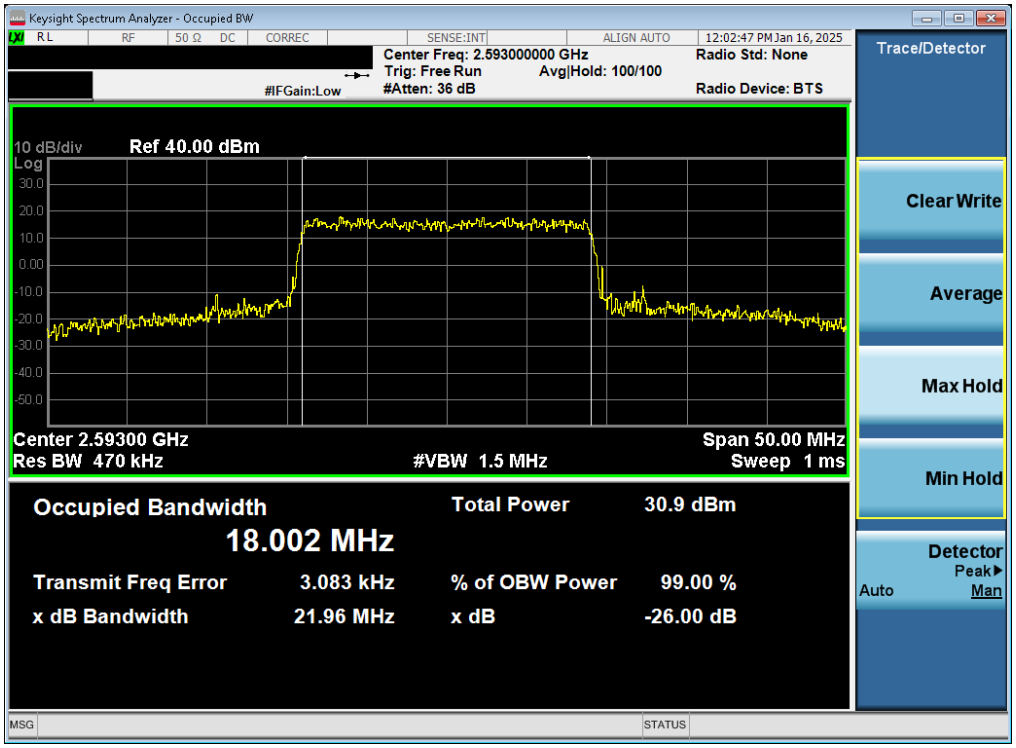
Mode	Bandwidth	Modulation	OBW [MHz]
NR-n41PC2	100MHz	π/2 BPSK	97.47
		QPSK	96.88
		16QAM	96.80
	90MHz	π/2 BPSK	87.47
		QPSK	87.33
		16QAM	87.73
	80MHz	π/2 BPSK	77.47
		QPSK	77.78
		16QAM	77.73
	70MHz	π/2 BPSK	64.51
		QPSK	64.61
		16QAM	64.79
	60MHz	π/2 BPSK	58.12
		QPSK	57.99
		16QAM	58.36
	50MHz	π/2 BPSK	47.18
		QPSK	45.89
		16QAM	45.82
	40MHz	π/2 BPSK	36.06
		QPSK	36.03
		16QAM	35.92
	30MHz	π/2 BPSK	26.92
		QPSK	26.94
		16QAM	27.05
	20MHz	π/2 BPSK	17.98
		QPSK	17.94
		16QAM	17.95
	15MHz	π/2 BPSK	13.04
		QPSK	12.97
		16QAM	13.02
	10MHz	π/2 BPSK	8.76
		QPSK	8.77
		16QAM	8.66

Table 7-19. Occupied Bandwidth Test Results – Ant6

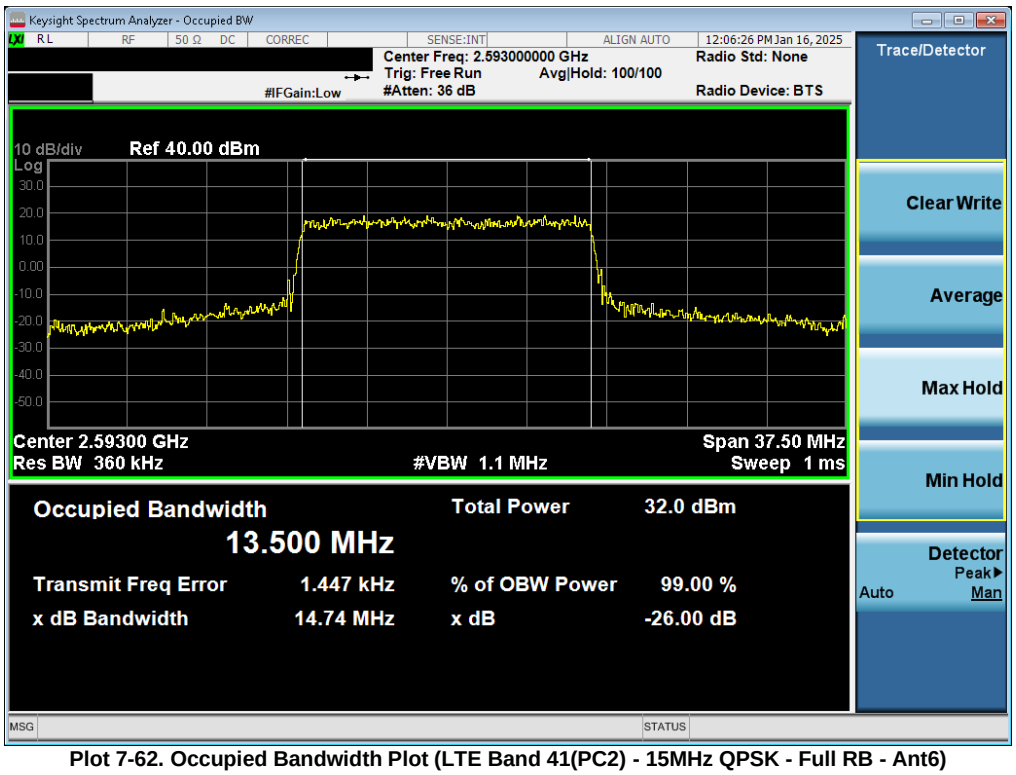
LTE Band 41(PC2) – Ant6



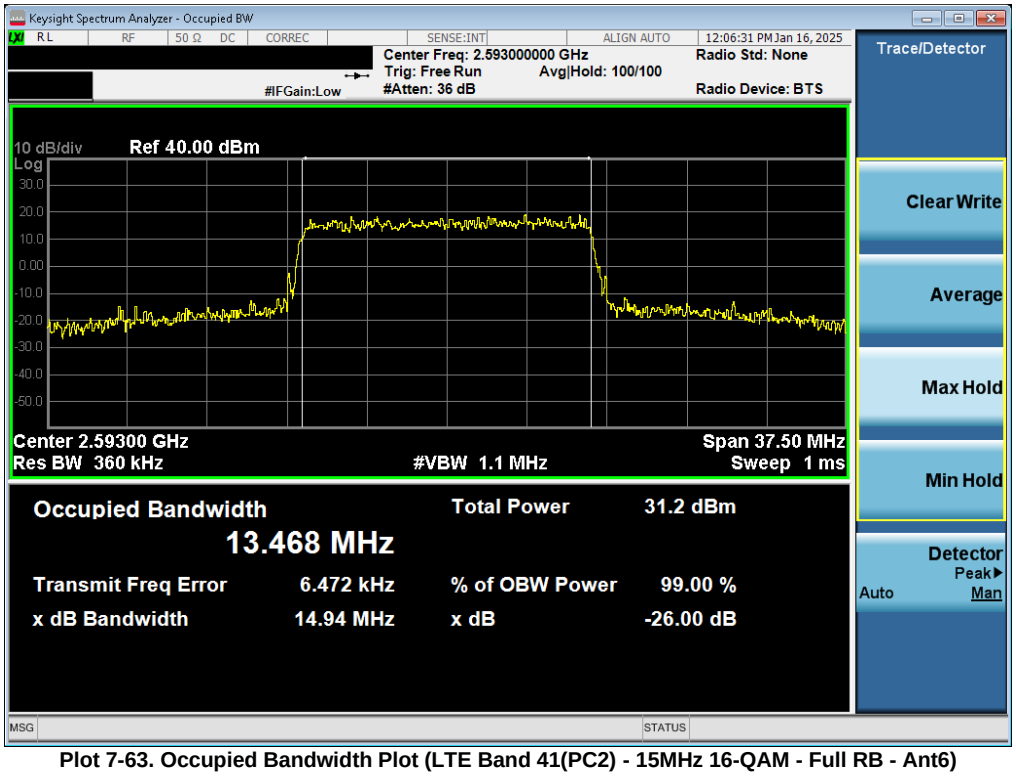
Plot 7-60. Occupied Bandwidth Plot (LTE Band 41(PC2) - 20MHz QPSK - Full RB - Ant6)



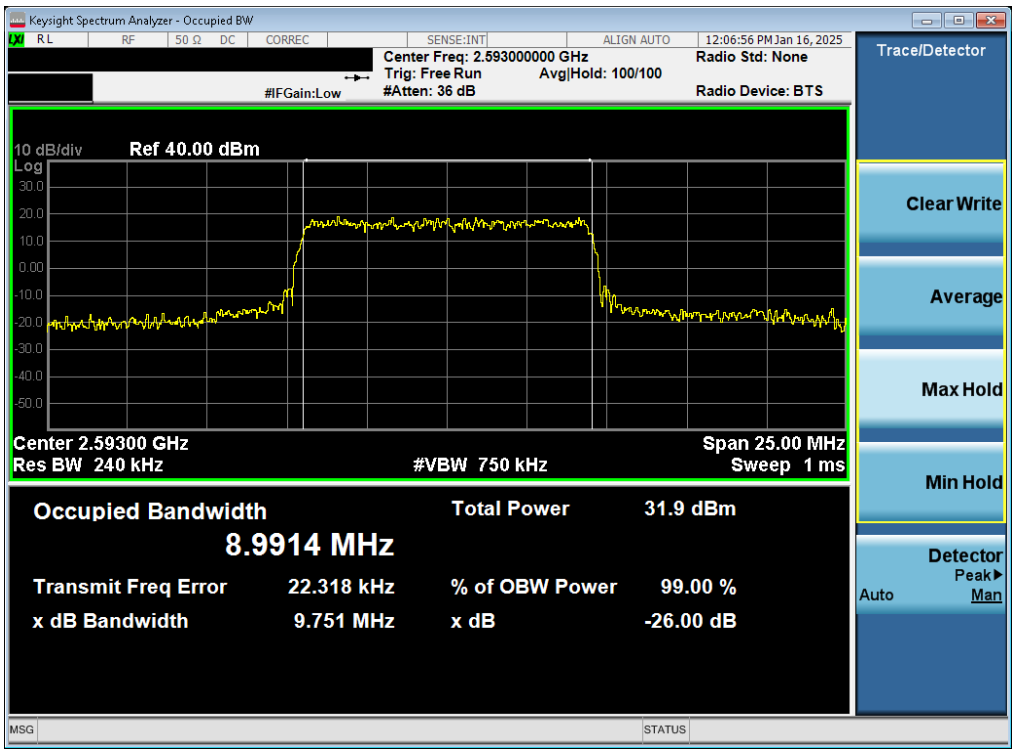
Plot 7-61. Occupied Bandwidth Plot (LTE Band 41(PC2) - 20MHz 16-QAM - Full RB - Ant6)



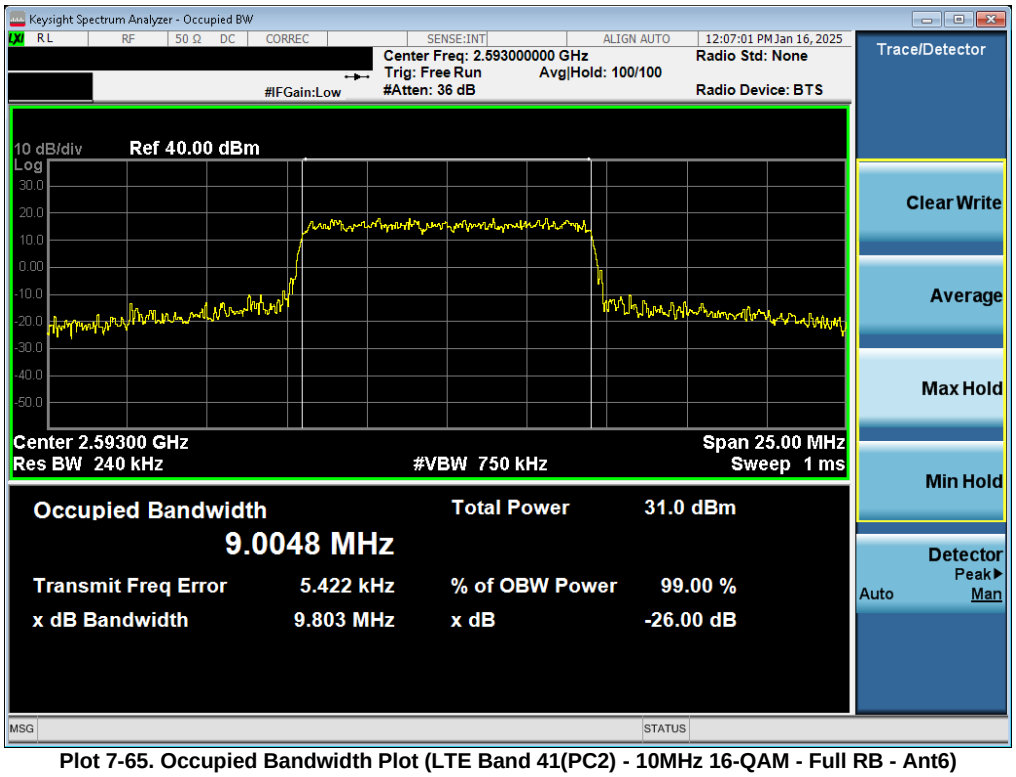
Plot 7-62. Occupied Bandwidth Plot (LTE Band 41(PC2) - 15MHz QPSK - Full RB - Ant6)



Plot 7-63. Occupied Bandwidth Plot (LTE Band 41(PC2) - 15MHz 16-QAM - Full RB - Ant6)

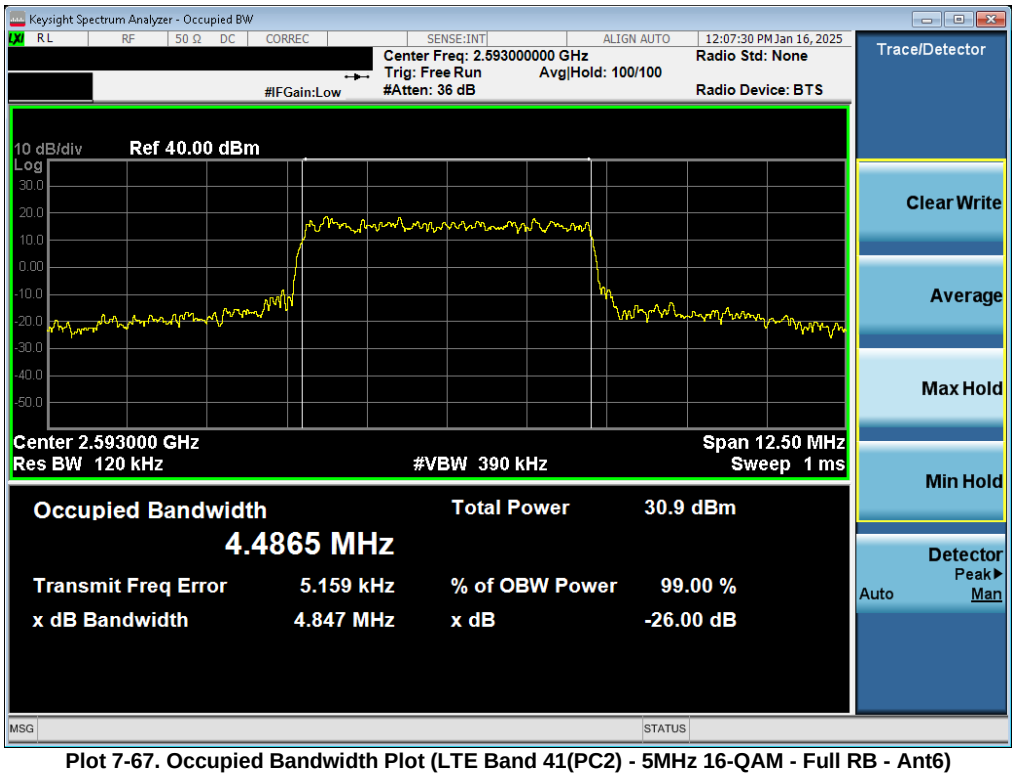


Plot 7-64. Occupied Bandwidth Plot (LTE Band 41(PC2) - 10MHz QPSK - Full RB - Ant6)



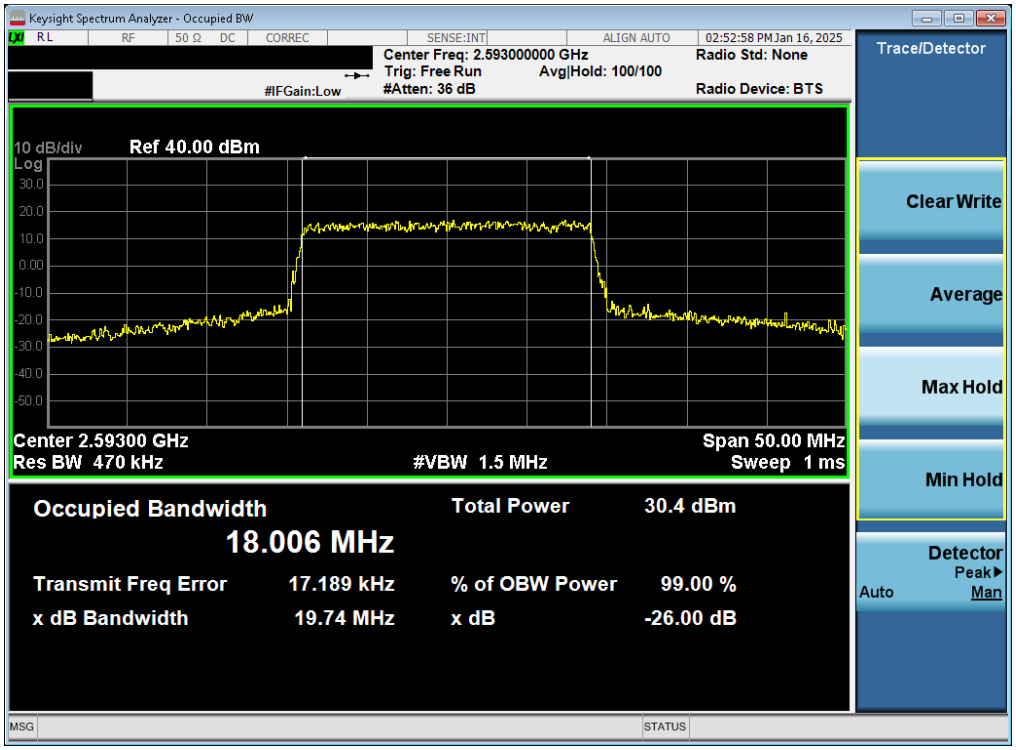
Plot 7-65. Occupied Bandwidth Plot (LTE Band 41(PC2) - 10MHz 16-QAM - Full RB - Ant6)

Plot 7-66. Occupied Bandwidth Plot (LTE Band 41(PC2) - 5MHz QPSK - Full RB - Ant6)

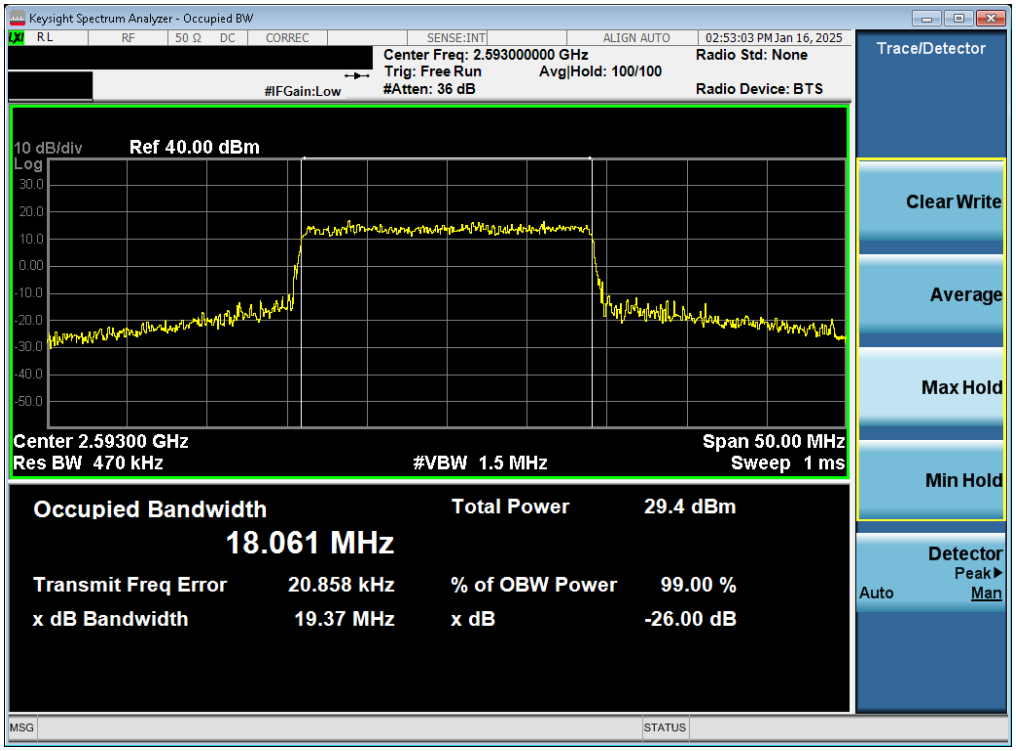


Plot 7-67. Occupied Bandwidth Plot (LTE Band 41(PC2) - 5MHz 16-QAM - Full RB - Ant6)

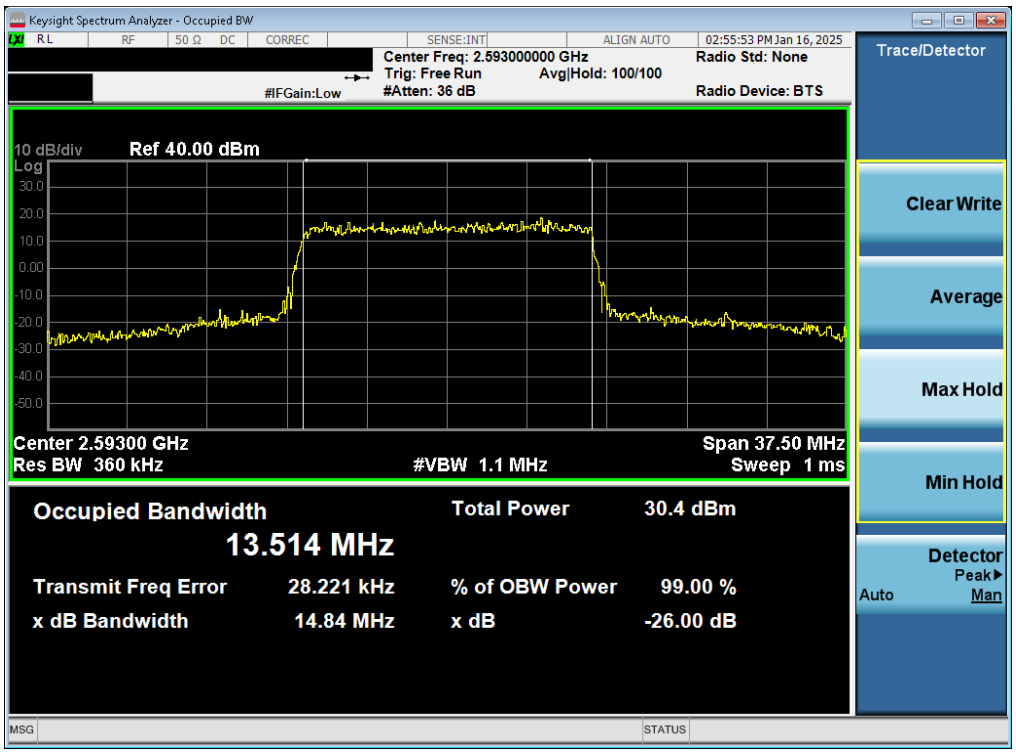
LTE Band 41(PC3)/38 – Ant6



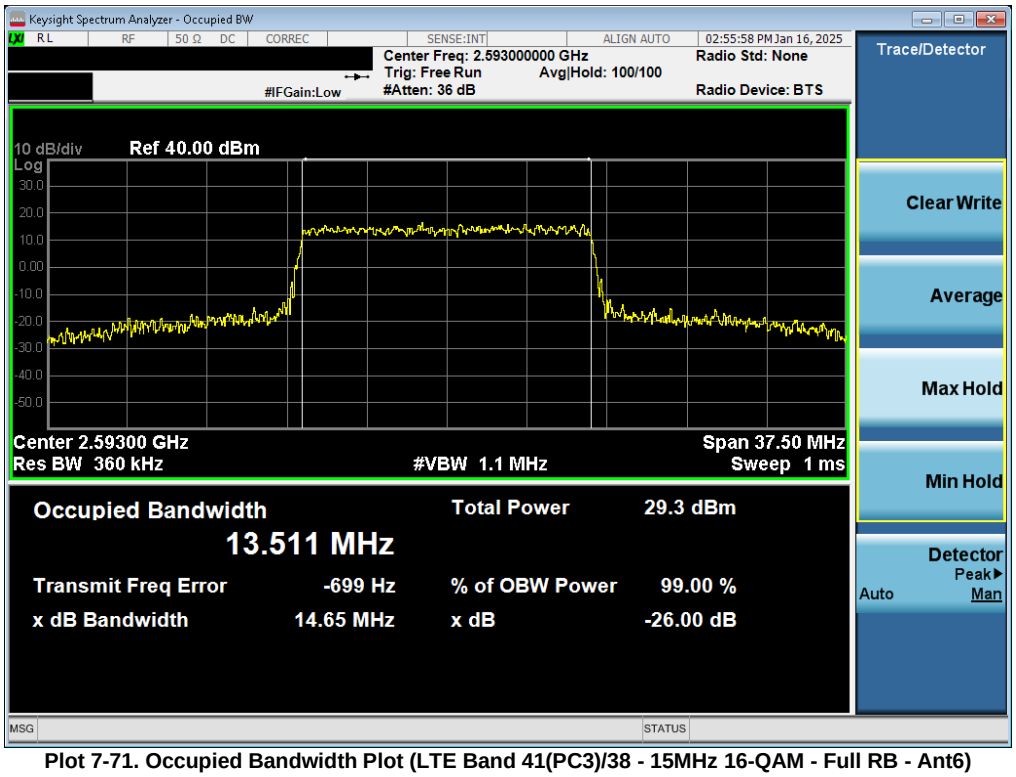
Plot 7-68. Occupied Bandwidth Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - Full RB - Ant6)



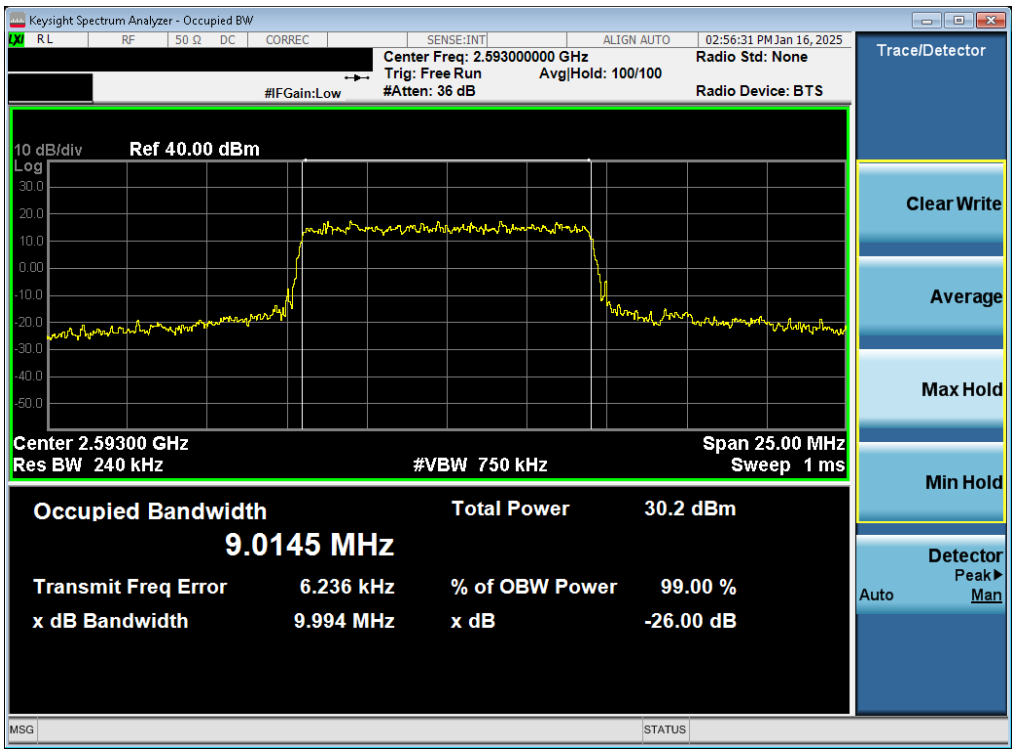
Plot 7-69. Occupied Bandwidth Plot (LTE Band 41(PC3)/38 - 20MHz 16-QAM - Full RB - Ant6)



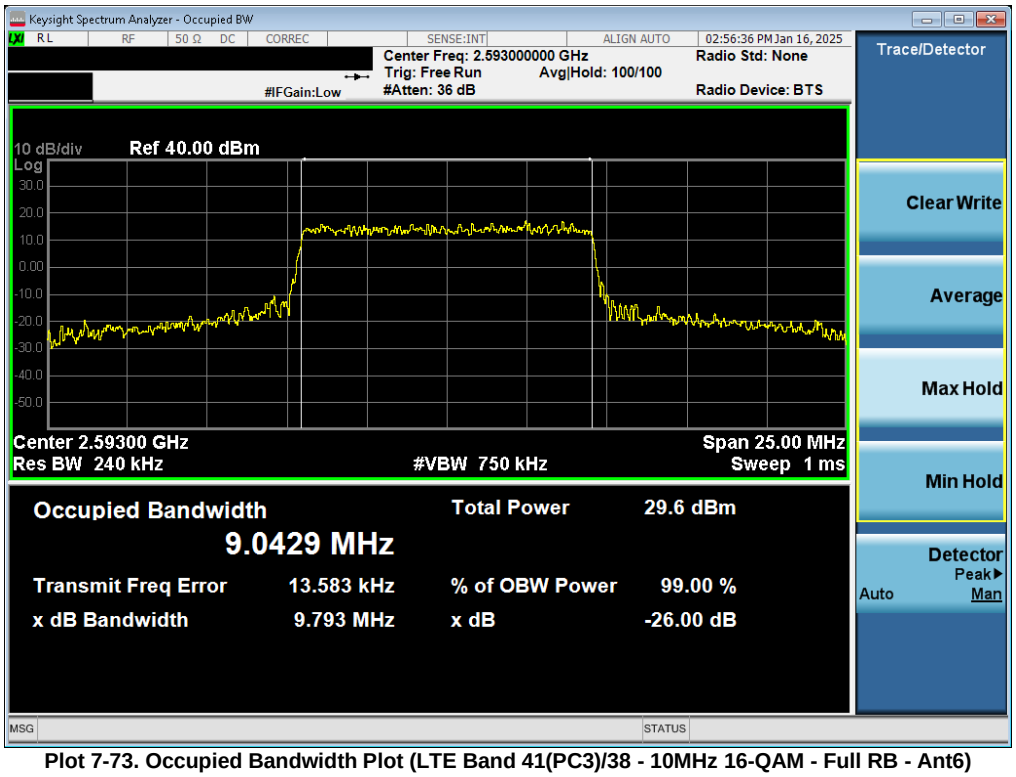
Plot 7-70. Occupied Bandwidth Plot (LTE Band 41(PC3)/38 - 15MHz QPSK - Full RB - Ant6)



Plot 7-71. Occupied Bandwidth Plot (LTE Band 41(PC3)/38 - 15MHz 16-QAM - Full RB - Ant6)

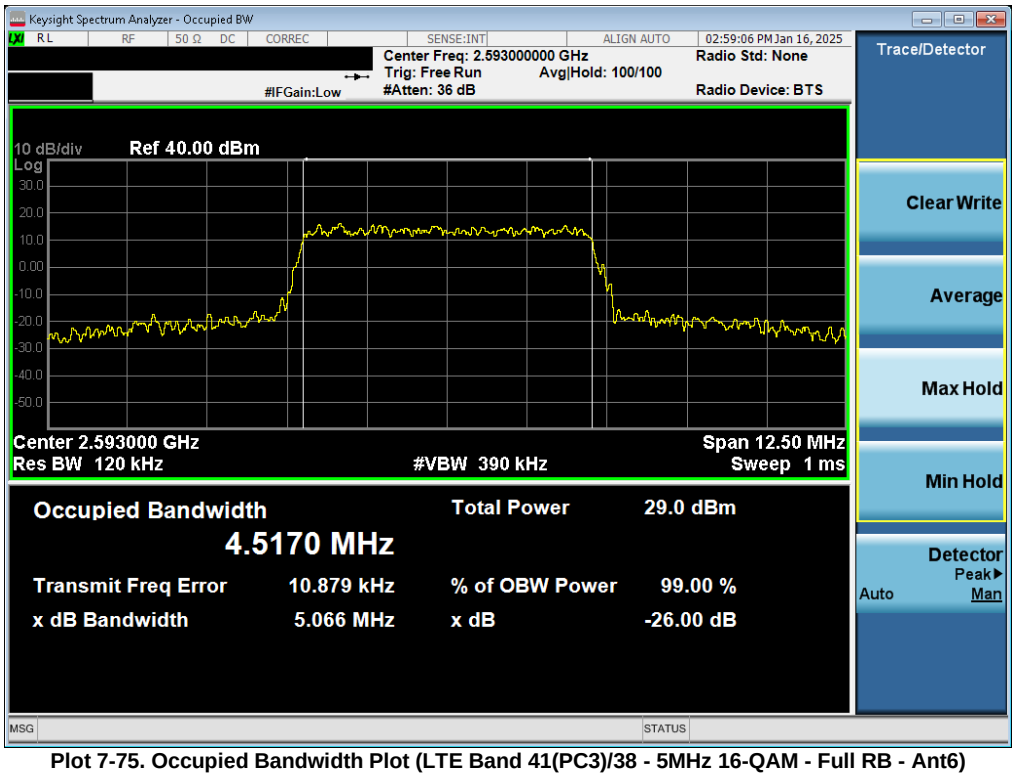


Plot 7-72. Occupied Bandwidth Plot (LTE Band 41(PC3)/38 - 10MHz QPSK - Full RB - Ant6)



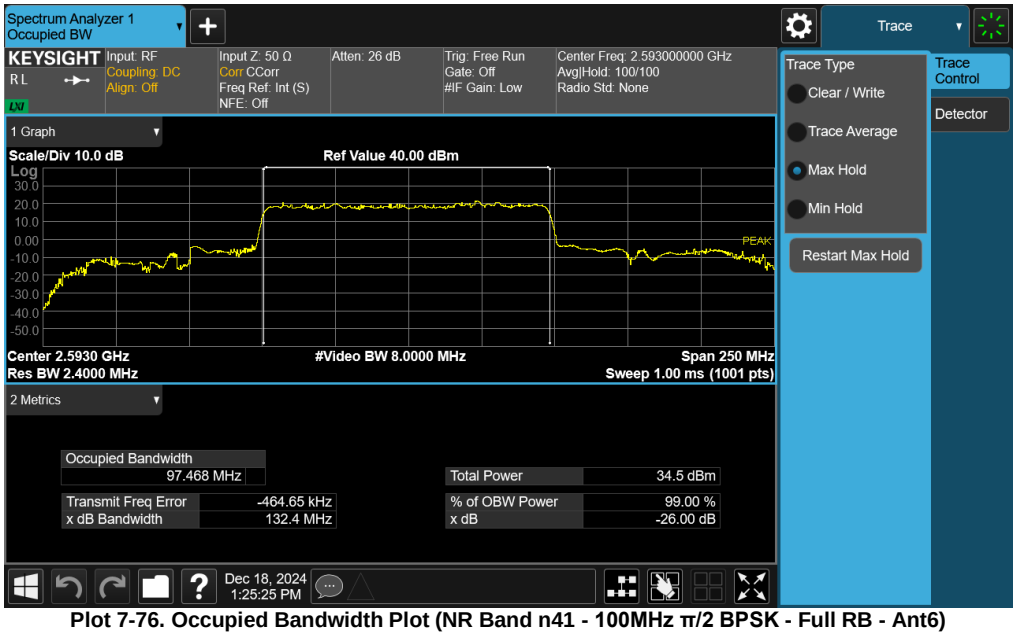
Plot 7-73. Occupied Bandwidth Plot (LTE Band 41(PC3)/38 - 10MHz 16-QAM - Full RB - Ant6)

Plot 7-74. Occupied Bandwidth Plot (LTE Band 41(PC3)/38 - 5MHz QPSK - Full RB - Ant6)

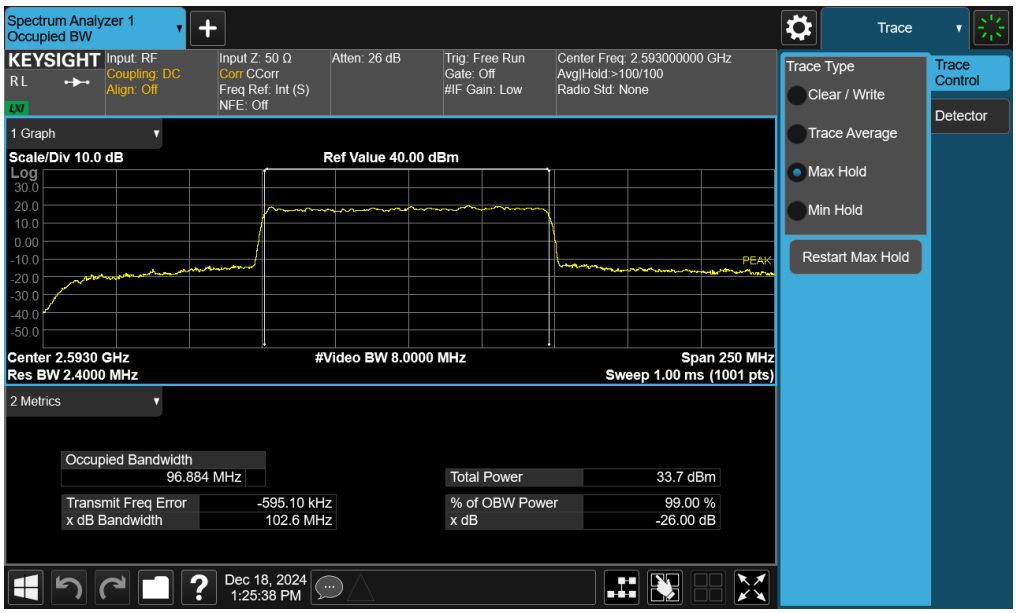


Plot 7-75. Occupied Bandwidth Plot (LTE Band 41(PC3)/38 - 5MHz 16-QAM - Full RB - Ant6)

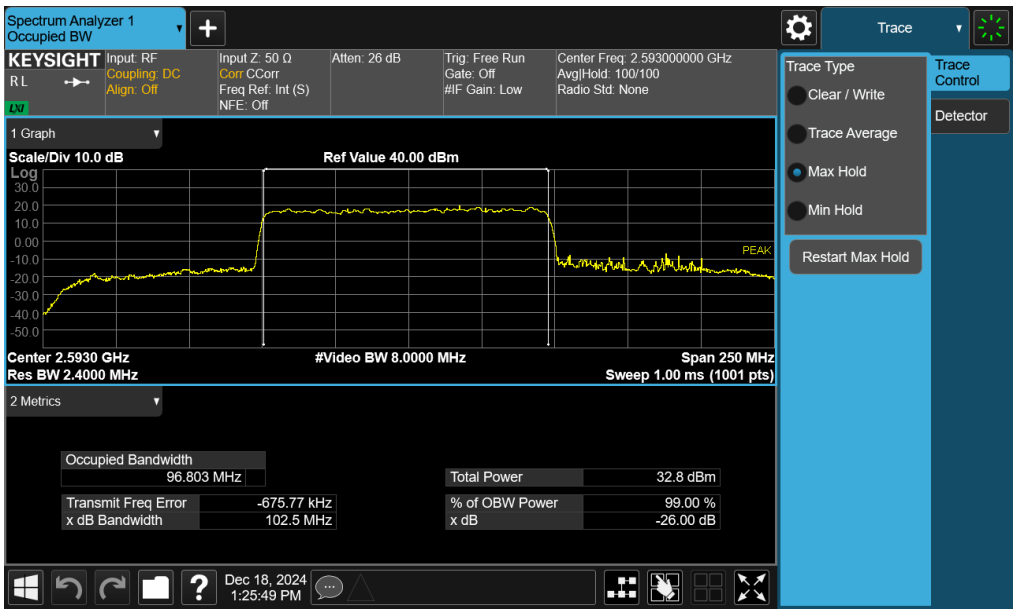
NR Band n41 – Ant6



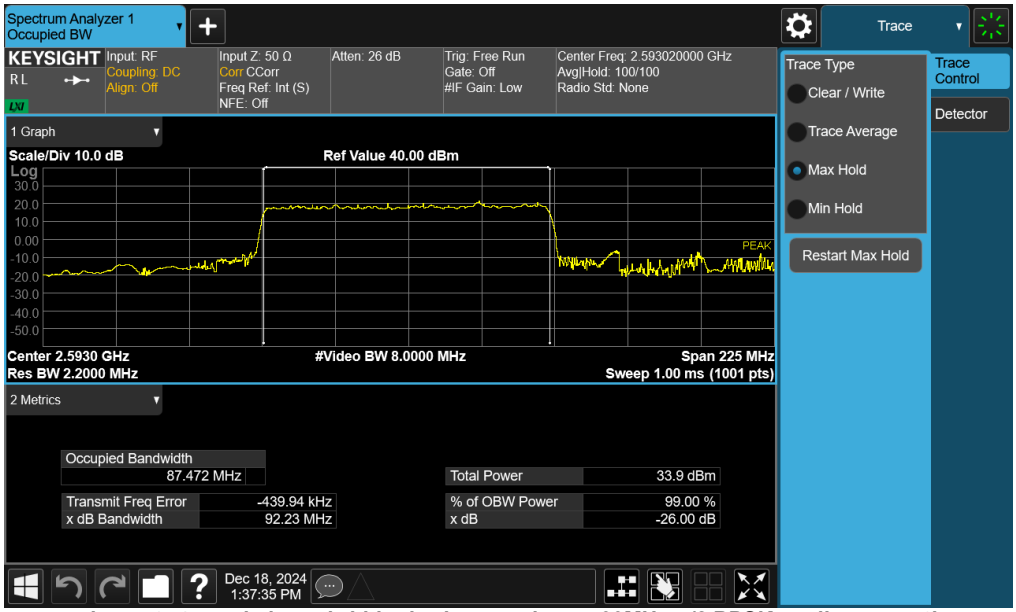
Plot 7-76. Occupied Bandwidth Plot (NR Band n41 - 100MHz π/2 BPSK - Full RB - Ant6)



Plot 7-77. Occupied Bandwidth Plot (NR Band n41 - 100MHz QPSK - Full RB - Ant6)

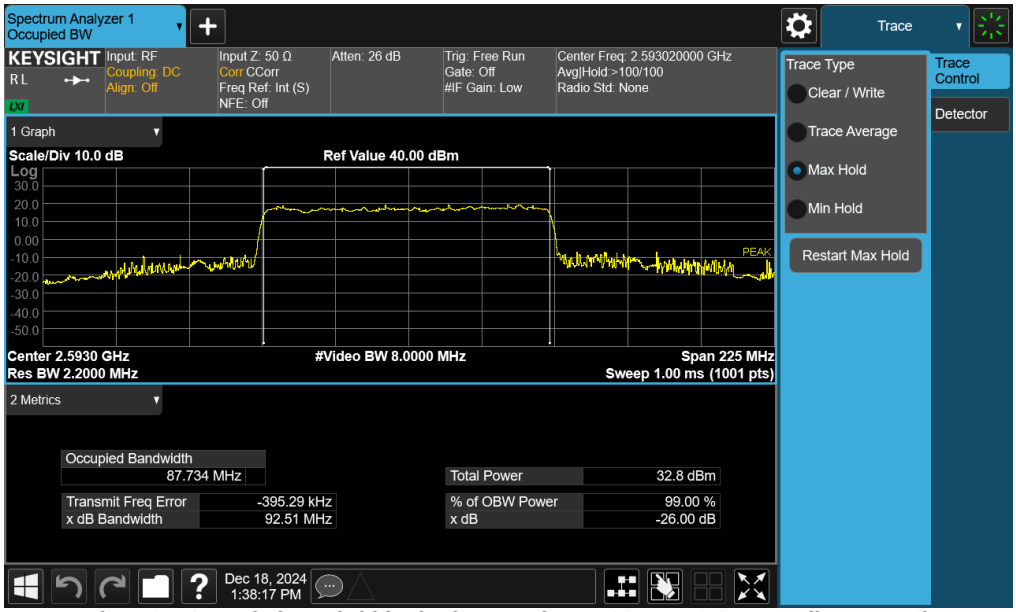


Plot 7-78. Occupied Bandwidth Plot (NR Band n41 - 100MHz 16-QAM - Full RB - Ant6)



Plot 7-79. Occupied Bandwidth Plot (NR Band n41 - 90MHz π/2 BPSK - Full RB - Ant6)

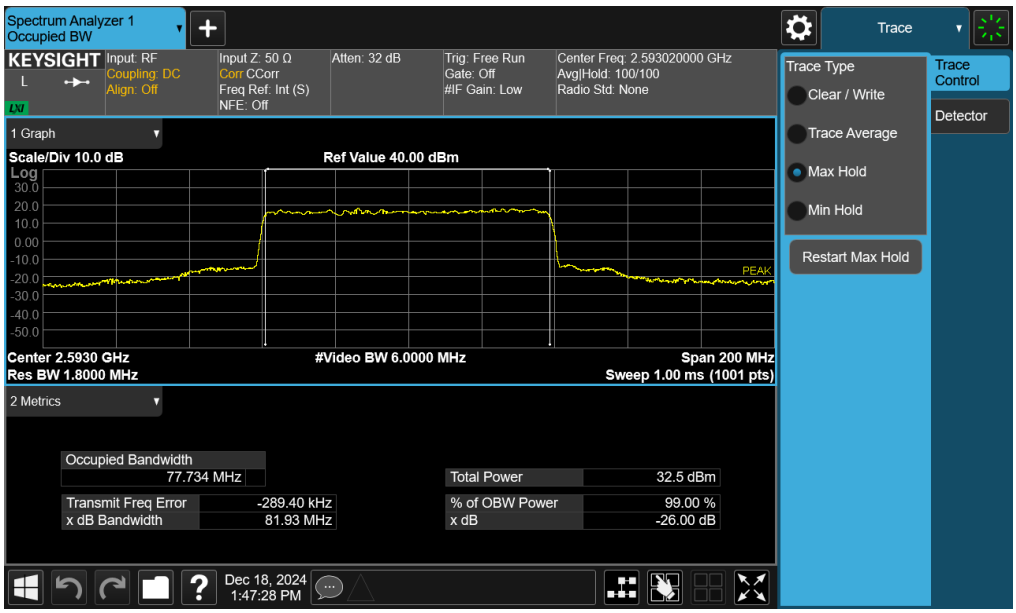
Plot 7-80. Occupied Bandwidth Plot (NR Band n41 - 90MHz QPSK - Full RB - Ant6)



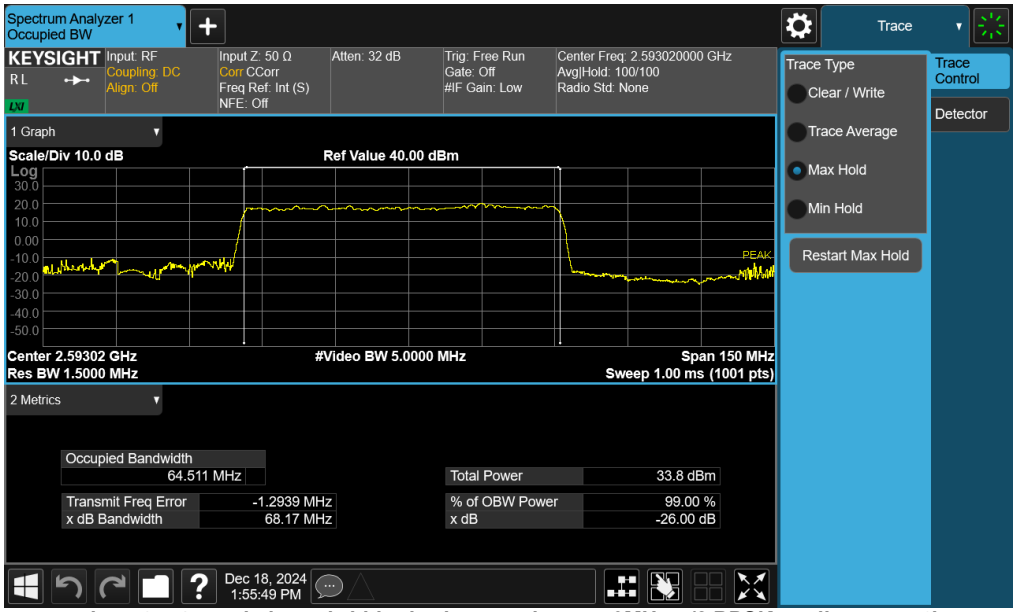
Plot 7-81. Occupied Bandwidth Plot (NR Band n41 - 90MHz 16-QAM - Full RB - Ant6)

Plot 7-82. Occupied Bandwidth Plot (NR Band n41 - 80MHz π/2 BPSK - Full RB - Ant6)

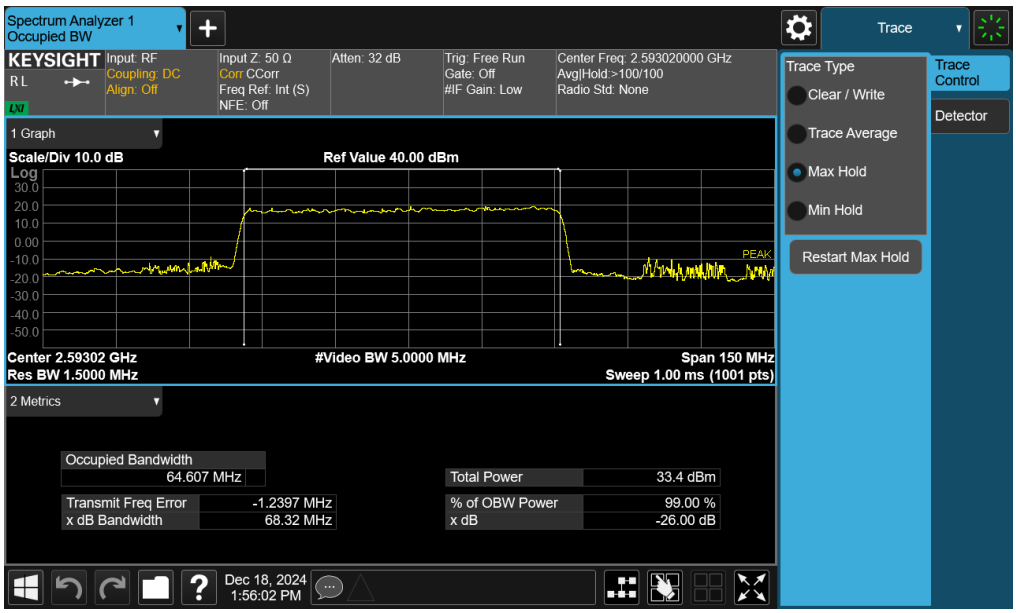
Plot 7-83. Occupied Bandwidth Plot (NR Band n41 - 80MHz QPSK - Full RB - Ant6)



Plot 7-84. Occupied Bandwidth Plot (NR Band n41 - 80MHz 16-QAM - Full RB - Ant6)

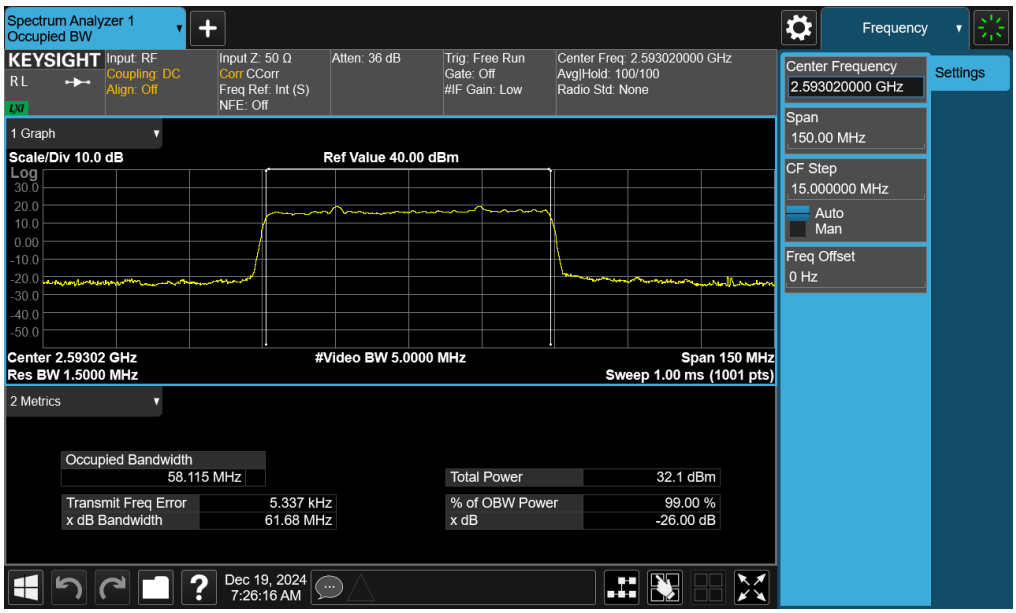


Plot 7-85. Occupied Bandwidth Plot (NR Band n41 - 70MHz π/2 BPSK - Full RB - Ant6)

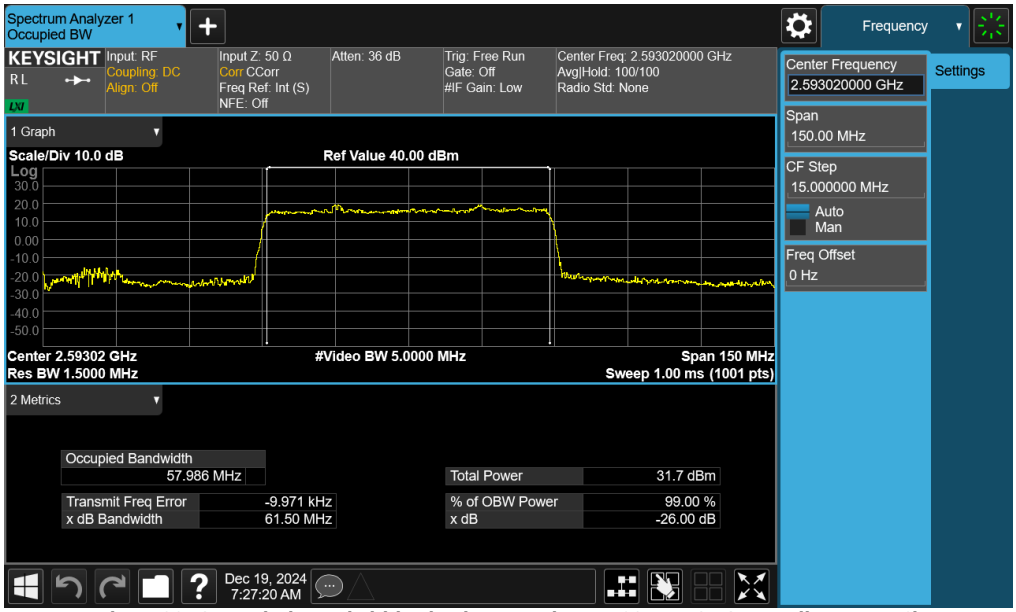


Plot 7-86. Occupied Bandwidth Plot (NR Band n41 - 70MHz QPSK - Full RB - Ant6)

Plot 7-87. Occupied Bandwidth Plot (NR Band n41 - 70MHz 16-QAM - Full RB - Ant6)

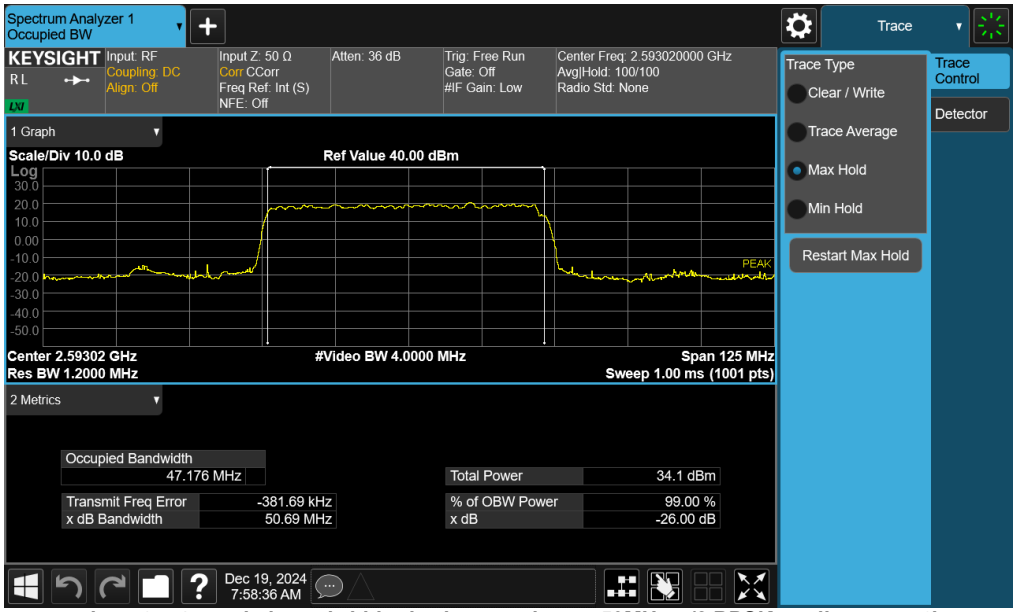


Plot 7-88. Occupied Bandwidth Plot (NR Band n41 - 60MHz π/2 BPSK - Full RB - Ant6)

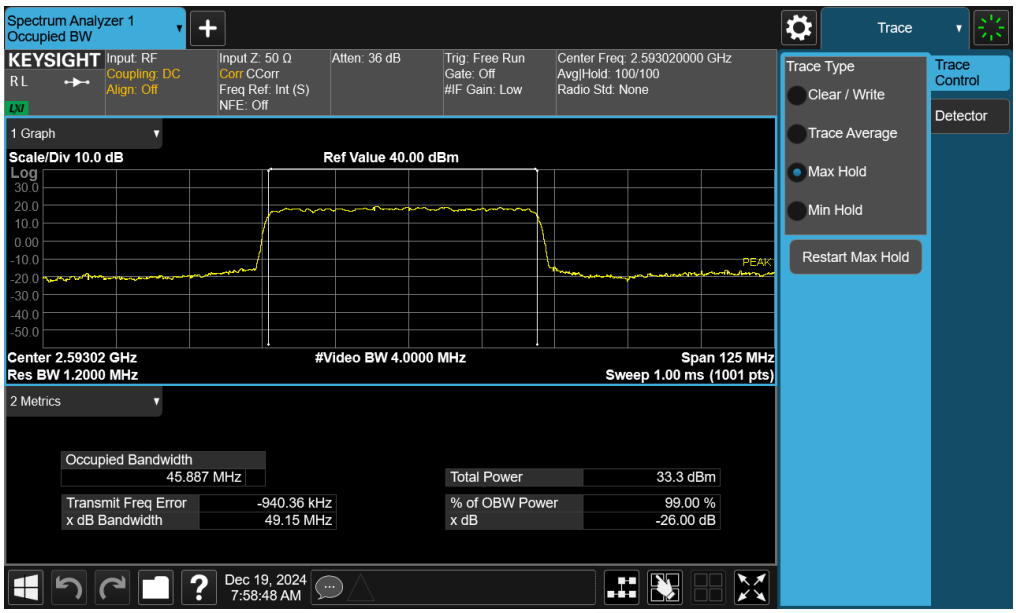


Plot 7-89. Occupied Bandwidth Plot (NR Band n41 - 60MHz QPSK - Full RB - Ant6)

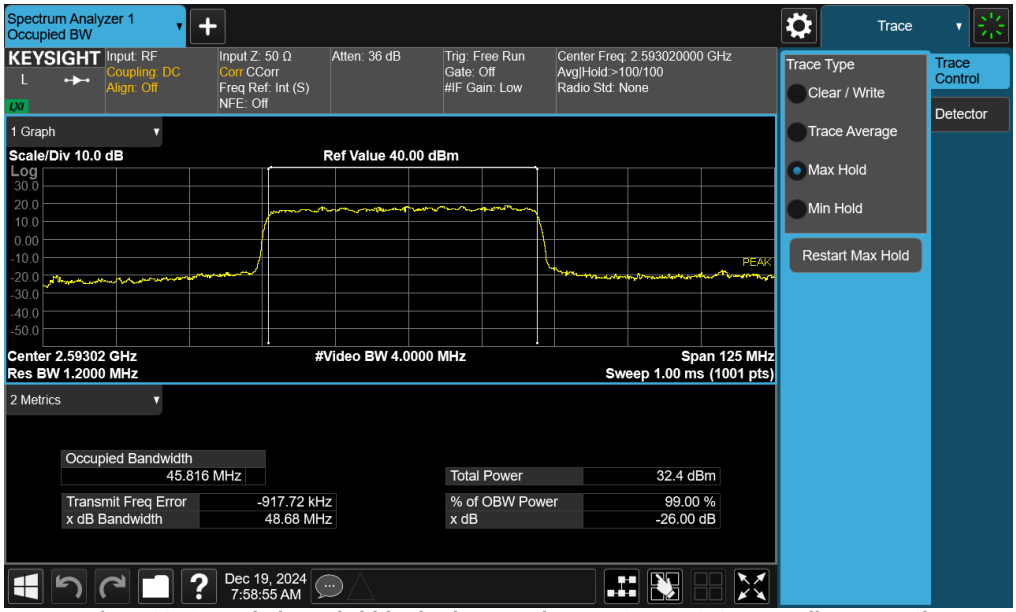
Plot 7-90. Occupied Bandwidth Plot (NR Band n41 - 60MHz 16-QAM - Full RB - Ant6)



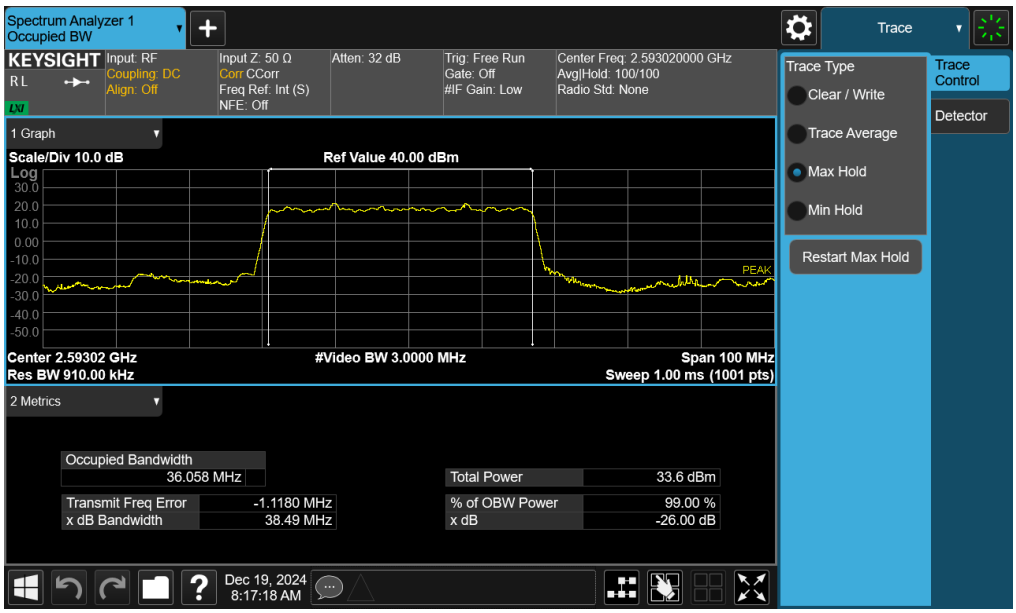
Plot 7-91. Occupied Bandwidth Plot (NR Band n41 - 50MHz π/2 BPSK - Full RB - Ant6)



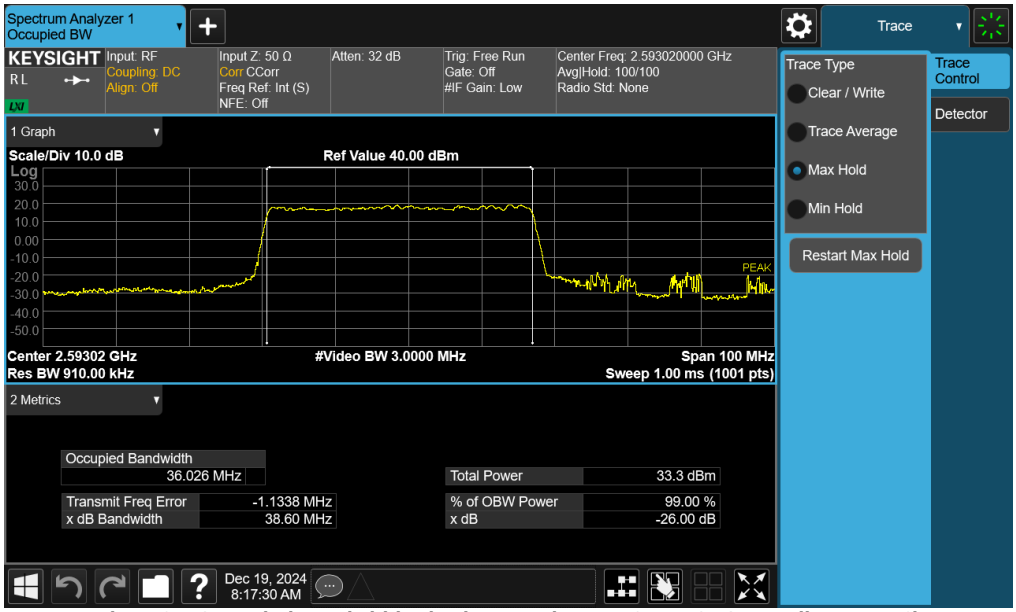
Plot 7-92. Occupied Bandwidth Plot (NR Band n41 - 50MHz QPSK - Full RB - Ant6)



Plot 7-93. Occupied Bandwidth Plot (NR Band n41 - 50MHz 16-QAM - Full RB - Ant6)



Plot 7-94. Occupied Bandwidth Plot (NR Band n41 - 40MHz π/2 BPSK - Full RB - Ant6)



Plot 7-95. Occupied Bandwidth Plot (NR Band n41 - 40MHz QPSK - Full RB - Ant6)